TEST REPORT

Report No.:	BCTC2508634234E
Applicant:	Ugreen Group Limited
Product Name:	Wireless Extender Transmitter
Test Model:	CM737
Tested Date:	2025-08-13 to 2025-09-03
Issued Date:	2025-09-03

Shenzhen BCTC Testing Co., Ltd.

FCC ID: 2AQI5-CM737T

Product Name:	Wireless Extender Transmitter
Trademark:	UGREEN
Model/Type Reference:	CM737
Prepared For:	Ugreen Group Limited
Address:	Ugreen Building, Longcheng Industrial Park, Longguanxi Road, Longhua, ShenZhen, China
Manufacturer:	Ugreen Group Limited
Address:	Ugreen Building, Longcheng Industrial Park, Longguanxi Road, Longhua, ShenZhen, China
Factory:	Shenzhen Haiying Zhilian Industrial Co., Ltd.
Address:	1-3F, #4 Factory Bld, 2-5F, #8 Factory Bld, Yu'an Factory Area, Longcheng Industry Park, 39 Longguan West Road Gaofeng Community, Dalang Street, Longhua District, Shenzhen, Guangdong, 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:	2025-08-13
Sample Tested Date:	2025-08-13 to 2025-09-03
Issue Date:	2025-09-03
Report No.:	BCTC2508634234E
Test Standards:	FCC Part15C 15.407 ANSI C63.10:2013
Reference document:	KDB 662911 D01 v02r01 KDB 789033 D02 v02r01
Test Results:	PASS
Remark:	This is WIFI-5GHz band radio test report.

Tested by:

Kelsey Tan

Kelsey Tan/ 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
BCTC2508634234E	2025-09-03	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(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	Power Spectral Density	U=1.19dB
8	Conducted output power uncertainty Above 1G	U=1.576dB
9	Conducted output power uncertainty below 1G	U=1.28dB
10	Conducted spurious emissions	U=0.55dB
11	Occupied Bandwidth/Frequency Range	U=3.46%
12	humidity uncertainty	U=5.3%
13	Temperature uncertainty	U=0.59℃
14	Frequency Error	U=53.50Hz
15	Frequency Drift	U=0.64kHz

4. Product Information And Test Setup

4.1 Product Information

Model/Type Reference:	CM737
P/N code Differences:	All the P/N code and test models are the same circuit and RF module, except for the sales platform.
Hardware Version:	N/A
Software Version:	N/A
IEEE 802.11 WLAN Mode Supported:	802.11a/n/ac (20MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n/ac (HT20); 5745-5825 MHz for 802.11a/n/ac (HT20).
Data Rate:	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20): MCS0-MCS15; 802.11ac (VHT20): NSS1, MCS0-MCS8
Type of Modulation:	OFDM with BPSK/QPSK/16QAM/64QAM for 802.11a/n/a;
Number Of Channel:	4 channels for 802.11a/n/ac20 in the 5180-5240MHz band ; 5 channels for 802.11a/n/ac20 in the 5745-5825MHz band .
Antenna installation:	Internal antenna
Antenna Gain:	WIFI (5.1GHz):2.65 dBi WIFI (5.8GHz):3.93 dBi 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:	INPUT:5V⎓1A MAX

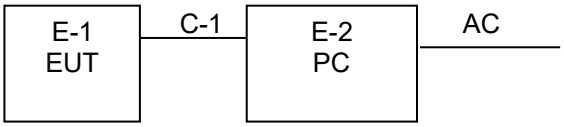
Remark:
- P/N code in the below table, for marketing purpose, will be marked on the marking plate.

35031A	35031	35031EU	35031UK	35031US	35031JP	35031CN	35031KC
35031B	35031C	35031P	35031X	35031U	KC-35031		

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	Wireless Extender Transmitter	UGREEN	CM737	N/A	EUT
E-2	PC	Lenovo	Thinkpad E15 Gen 2	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

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	-	-	-	-	-	-

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	Link Mode

Note: 1. The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
2. This product does not support RU mode.

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	SecureCRT		
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

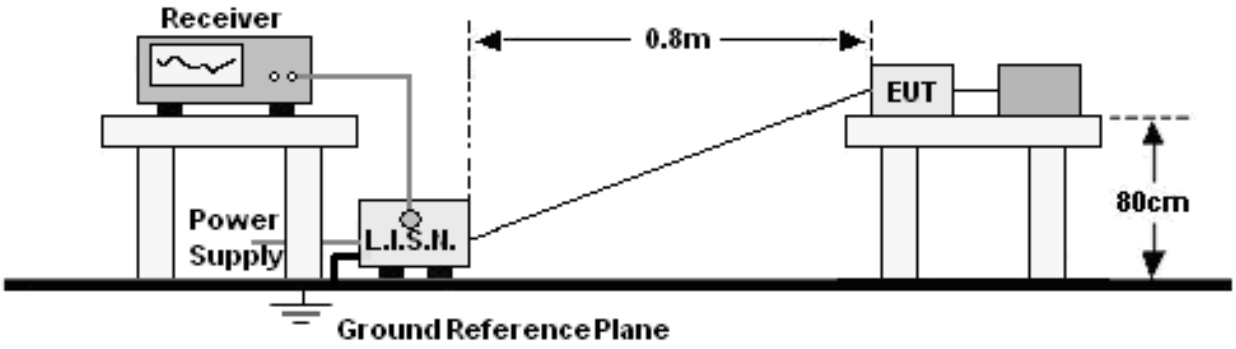
Conducted Emissions Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Receiver	R&S	ESR3	102075	May 08 2025	May 07, 2026
LISN	R&S	ENV216	101375	May 14, 2025	May 13, 2026
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Pulse limiter	Schwarzbeck	VTSD9561-F	01323	May 14, 2025	May 13, 2026

RF Conducted Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Power Meter	Keysight	E4419	\	May 14, 2025	May 13, 2026
Power Sensor (AV)	Keysight	E9300A	\	May 14, 2025	May 13, 2026
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 14, 2025	May 13, 2026
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 14, 2025	May 13, 2026
Radio frequency control box	MAIWEI	MW100-RFCB	\	\	\
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 08, 2025	May 07, 2026
Receiver	R&S	ESR3I7	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 24, 2025	May 23, 2026
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 24, 2025	May 23, 2026
Amplifier	SKET	LAPA_01G1 8G-45dB	SK202104090 1	May 14, 2025	May 13, 2026
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 24, 2025	May 23, 2026
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 14, 2025	May 13, 2026
Horn Antenna(18G Hz-40GHz)	Schwarzbeck	BBHA9170	00822	May 24, 2025	May 23, 2026
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 14, 2025	May 13, 2026
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

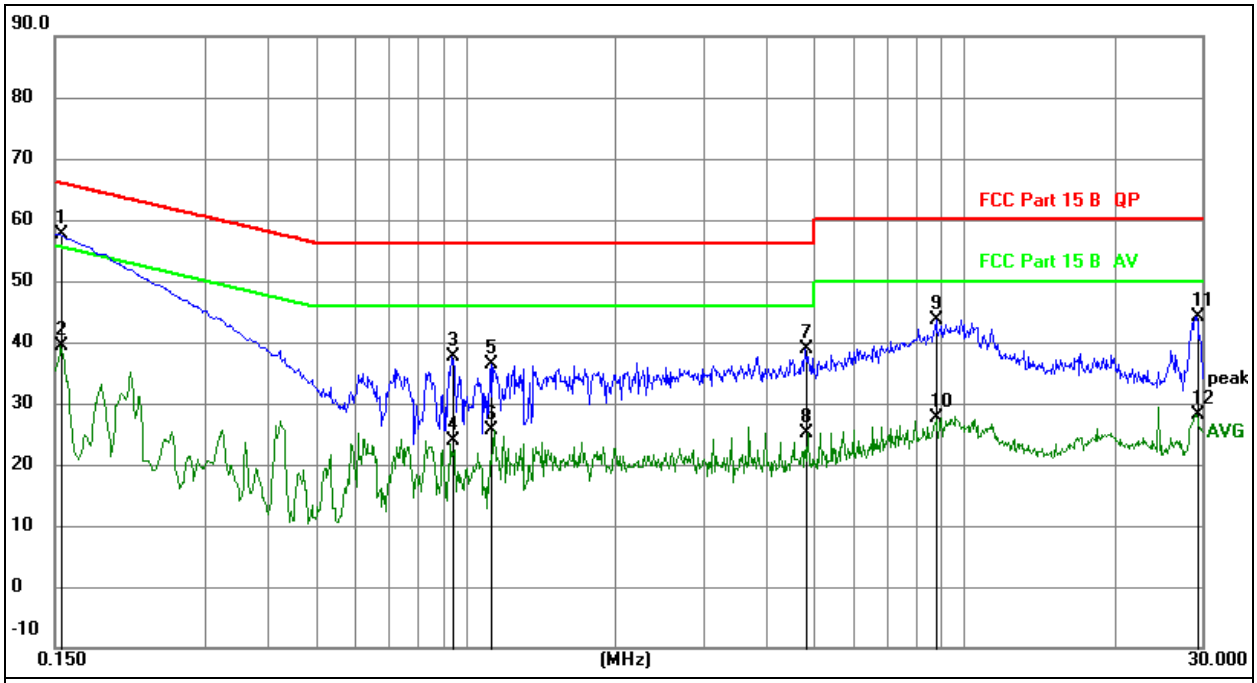
a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak 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

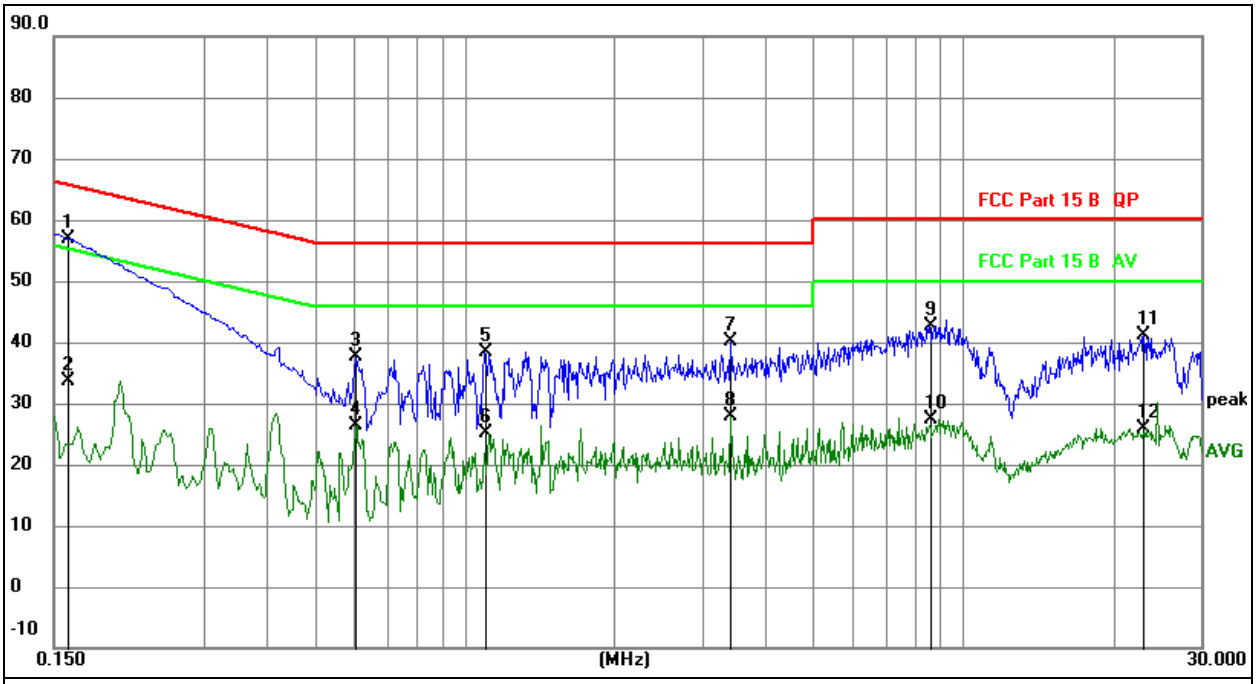
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 2	Polarization :	L



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	*	0.1545	37.56	20.04	57.60	65.75	-8.15	QP
2		0.1545	19.38	20.04	39.42	55.75	-16.33	AVG
3		0.9420	17.26	20.27	37.53	56.00	-18.47	QP
4		0.9420	3.73	20.27	24.00	46.00	-22.00	AVG
5		1.1265	16.20	20.26	36.46	56.00	-19.54	QP
6		1.1265	5.38	20.26	25.64	46.00	-20.36	AVG
7		4.8029	18.07	20.70	38.77	56.00	-17.23	QP
8		4.8029	4.51	20.70	25.21	46.00	-20.79	AVG
9		8.8080	22.54	21.18	43.72	60.00	-16.28	QP
10		8.8080	6.39	21.18	27.57	50.00	-22.43	AVG
11		29.2740	19.43	24.71	44.14	60.00	-15.86	QP
12		29.2740	3.39	24.71	28.10	50.00	-21.90	AVG

Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 2	Polarization:	N



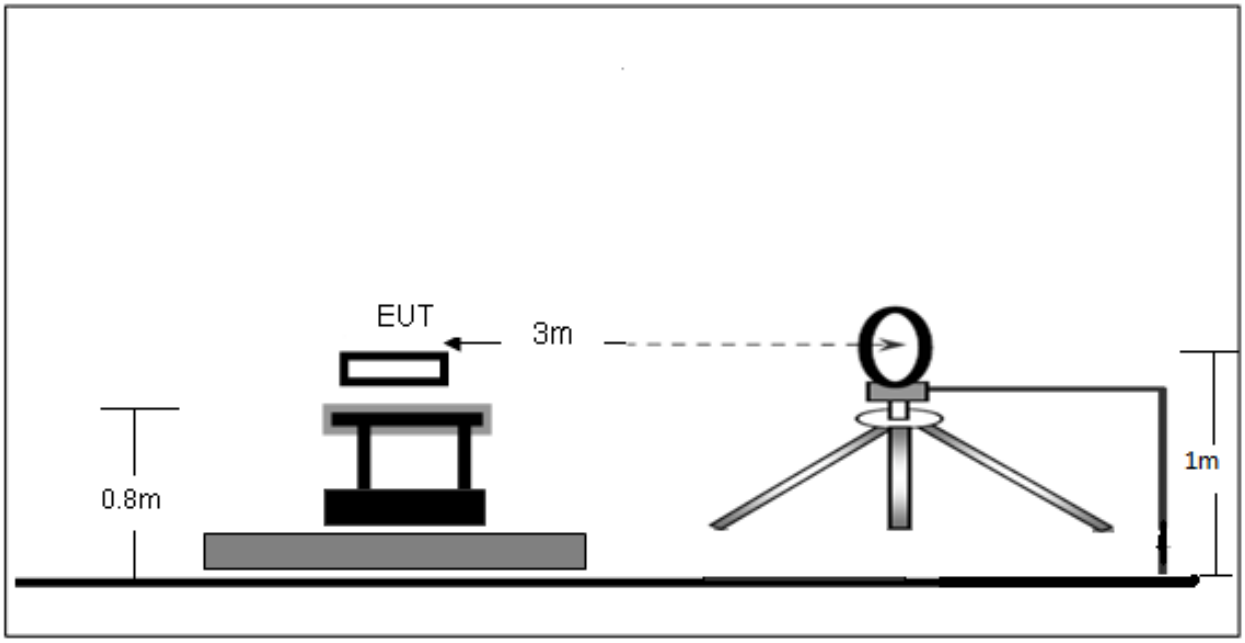
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1	*	0.1598	36.80	20.04	56.84	65.47	-8.63	QP
2		0.1598	13.49	20.04	33.53	55.47	-21.94	AVG
3		0.6043	17.39	20.16	37.55	56.00	-18.45	QP
4		0.6043	6.32	20.16	26.48	46.00	-19.52	AVG
5		1.0939	18.12	20.26	38.38	56.00	-17.62	QP
6		1.0939	4.98	20.26	25.24	46.00	-20.76	AVG
7		3.4174	19.75	20.48	40.23	56.00	-15.77	QP
8		3.4174	7.47	20.48	27.95	46.00	-18.05	AVG
9		8.5463	21.51	21.15	42.66	60.00	-17.34	QP
10		8.5463	6.28	21.15	27.43	50.00	-22.57	AVG
11		23.0181	17.24	23.96	41.20	60.00	-18.80	QP
12		23.0181	2.00	23.96	25.96	50.00	-24.04	AVG

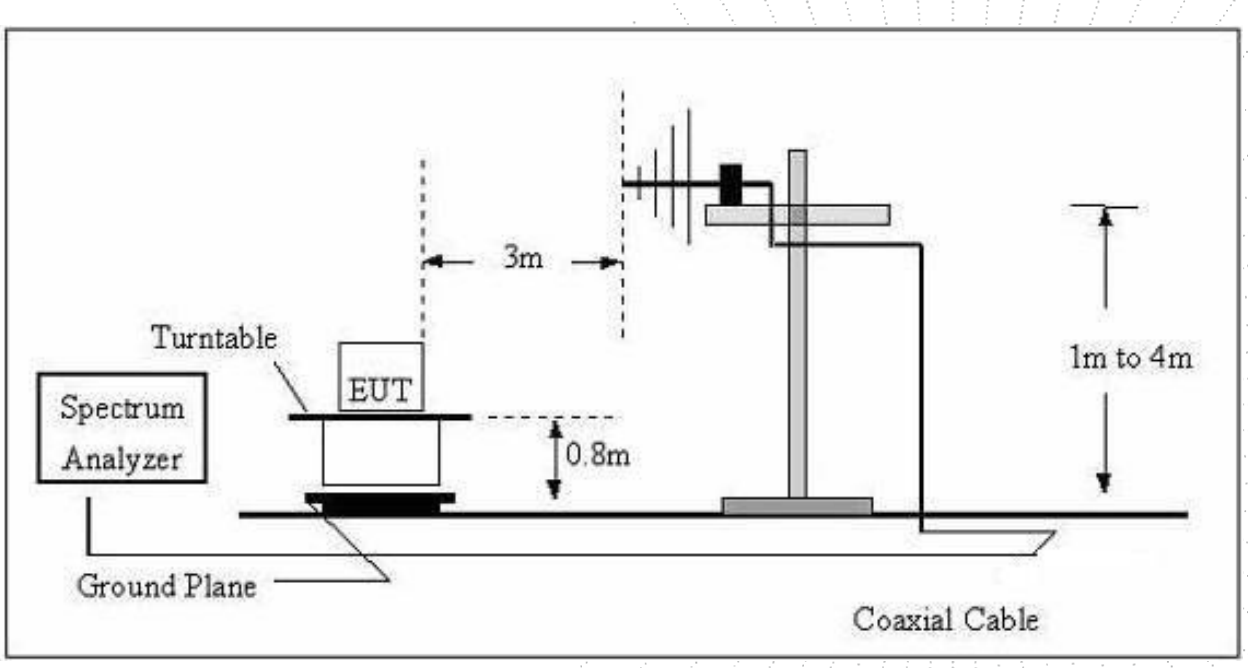
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

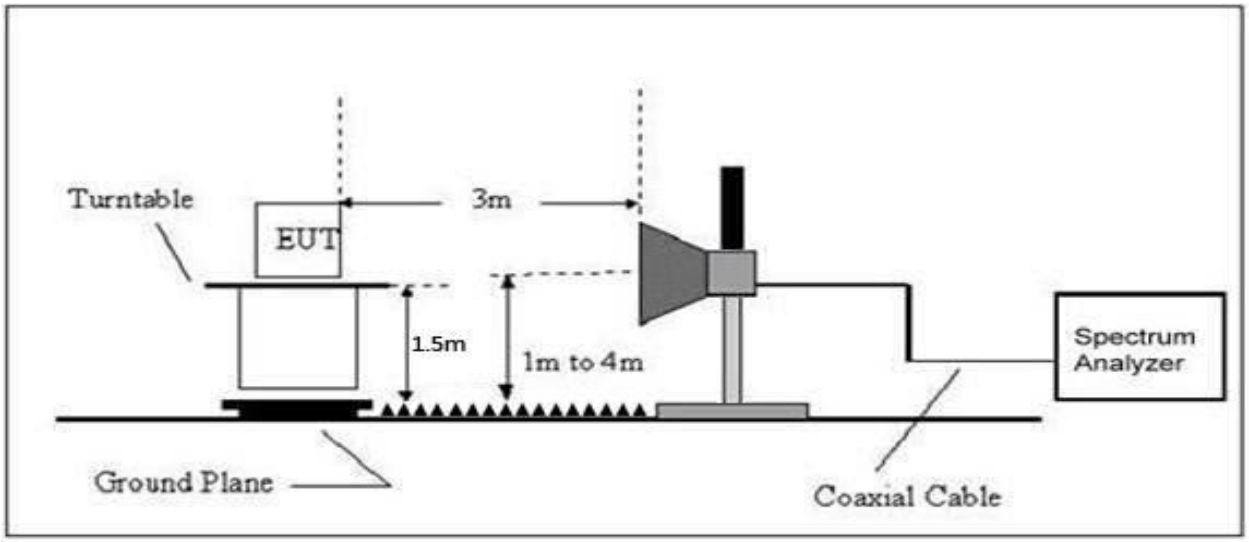
（A）Radiated Emission Test-Up Frequency Below 30MHz



（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

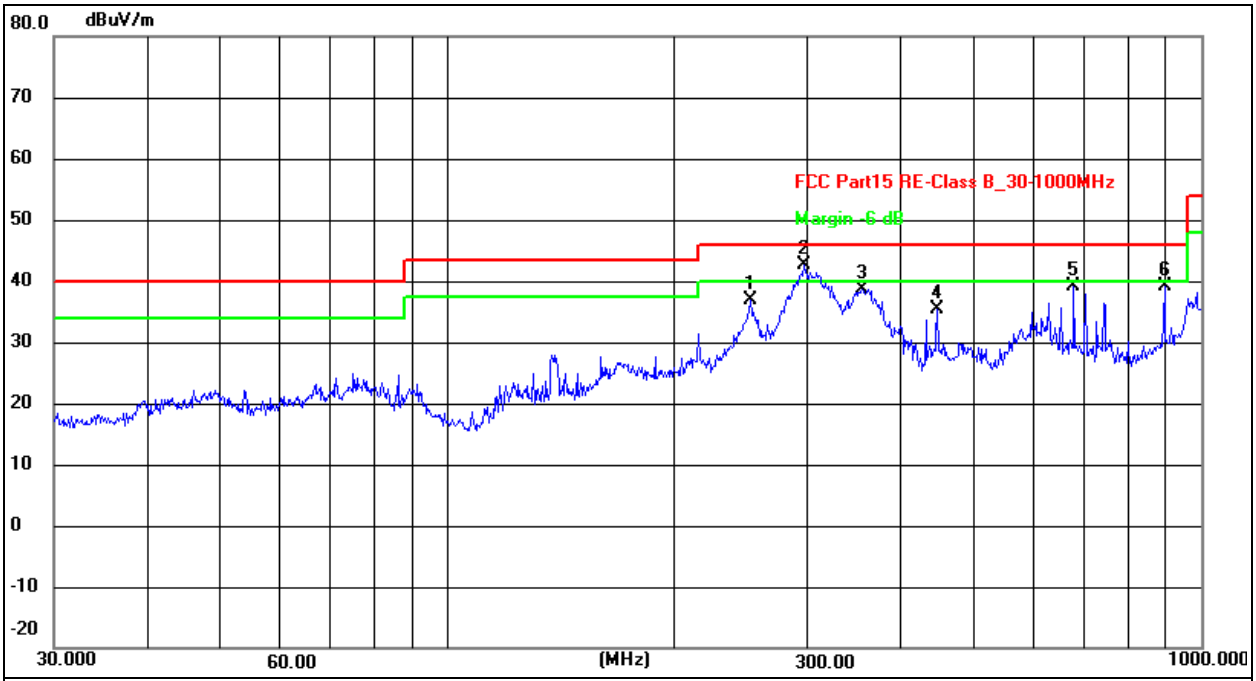
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 2		

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

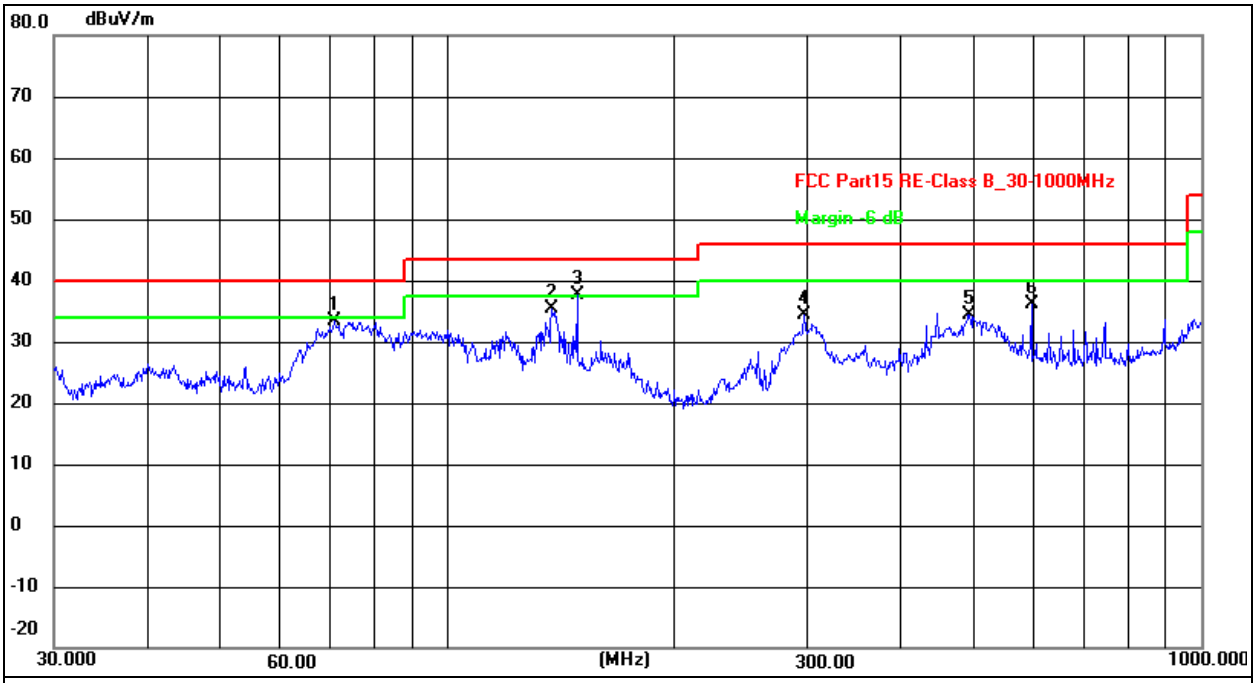
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 2	Polarization :	Horizontal



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	252.0627	49.21	-12.33	36.88	46.00	-9.12	QP
2 *	297.2241	53.30	-10.79	42.51	46.00	-3.49	QP
3	355.4273	47.95	-9.26	38.69	46.00	-7.31	QP
4	446.4141	41.65	-6.20	35.45	46.00	-10.55	QP
5	677.5798	40.80	-1.57	39.23	46.00	-6.77	QP
6	893.8567	37.03	2.15	39.18	46.00	-6.82	QP

Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 2	Polarization:	Vertical



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	70.8315	47.84	-14.43	33.41	40.00	-6.59	QP
2	137.4202	47.17	-11.74	35.43	43.50	-8.07	QP
3 *	148.4410	48.53	-11.00	37.53	43.50	-5.97	QP
4	297.2241	45.22	-10.79	34.43	46.00	-11.57	QP
5	492.4685	38.65	-4.31	34.34	46.00	-11.66	QP
6	595.1329	39.46	-3.24	36.22	46.00	-9.78	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	4434.005	71.10	-20.73	50.37	68.20	-17.83	PK
V	4434.005	59.42	-20.73	38.69	54.00	-15.31	AV
V	10360.039	64.05	-9.36	54.69	68.20	-13.51	PK
V	10360.039	49.36	-9.36	40.00	54.00	-14.00	AV
V	15540.187	61.80	-7.84	53.96	74.00	-20.04	PK
V	15540.187	49.55	-7.84	41.71	54.00	-12.29	AV
H	4434.108	73.32	-20.73	52.59	68.20	-15.61	PK
H	4434.108	59.80	-20.73	39.07	54.00	-14.93	AV
H	10360.041	63.39	-9.36	54.03	68.20	-14.17	PK
H	10360.041	49.20	-9.36	39.84	54.00	-14.16	AV
H	15540.123	61.47	-7.84	53.63	74.00	-20.37	PK
H	15540.123	49.18	-7.84	41.34	54.00	-12.66	AV
Middle Channel (5200 MHz)-Above 1G							
V	4592.190	74.20	-20.42	53.79	74.00	-20.21	PK
V	4592.190	59.78	-20.42	39.37	54.00	-14.63	AV
V	10400.174	64.02	-9.30	54.72	68.20	-13.48	PK
V	10400.174	49.18	-9.30	39.88	54.00	-14.12	AV
V	15600.133	61.97	-7.82	54.15	74.00	-19.85	PK
V	15600.133	49.15	-7.82	41.33	54.00	-12.67	AV
H	4592.031	74.00	-20.42	53.59	74.00	-20.41	PK
H	4592.031	59.67	-20.42	39.25	54.00	-14.75	AV
H	10400.142	63.31	-9.30	54.01	68.20	-14.19	PK
H	10400.142	49.02	-9.30	39.72	54.00	-14.28	AV
H	15600.042	62.16	-7.82	54.34	74.00	-19.66	PK
H	15600.042	49.60	-7.82	41.78	54.00	-12.22	AV
High Channel (5240 MHz)-Above 1G							
V	4739.028	71.58	-20.12	51.46	74.00	-22.54	PK
V	4739.028	59.69	-20.12	39.57	54.00	-14.43	AV
V	10480.008	63.61	-9.18	54.43	68.20	-13.77	PK
V	10480.008	49.34	-9.18	40.16	54.00	-13.84	AV
V	15720.124	63.20	-7.78	55.42	74.00	-18.58	PK
V	15720.124	49.20	-7.78	41.42	54.00	-12.58	AV
H	4739.009	71.21	-20.12	51.08	74.00	-22.92	PK
H	4739.009	59.99	-20.12	39.87	54.00	-14.13	AV
H	10480.185	61.62	-9.18	52.44	68.20	-15.76	PK
H	10480.185	49.11	-9.18	39.93	54.00	-14.07	AV
H	15720.144	61.35	-7.78	53.57	74.00	-20.43	PK
H	15720.144	49.66	-7.78	41.88	54.00	-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(5.1G) - 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	4434.104	72.45	-20.73	51.72	68.20	-16.48	PK
V	4434.104	59.19	-20.73	38.45	54.00	-15.55	AV
V	10360.033	60.54	-9.36	51.18	68.20	-17.02	PK
V	10360.033	49.80	-9.36	40.44	54.00	-13.56	AV
V	15540.088	60.13	-7.84	52.29	74.00	-21.71	PK
V	15540.088	49.53	-7.84	41.69	54.00	-12.31	AV
H	4434.145	71.32	-20.73	50.58	68.20	-17.62	PK
H	4434.145	59.86	-20.73	39.13	54.00	-14.87	AV
H	10360.047	64.94	-9.36	55.58	68.20	-12.62	PK
H	10360.047	49.33	-9.36	39.97	54.00	-14.03	AV
H	15540.137	64.86	-7.84	57.02	74.00	-16.98	PK
H	15540.137	49.38	-7.84	41.54	54.00	-12.46	AV
Middle Channel (5200 MHz)-Above 1G							
V	4592.146	73.71	-20.42	53.29	74.00	-20.71	PK
V	4592.146	59.73	-20.42	39.31	54.00	-14.69	AV
V	10400.062	61.33	-9.30	52.03	68.20	-16.17	PK
V	10400.062	49.63	-9.30	40.33	54.00	-13.67	AV
V	15600.176	63.16	-7.82	55.34	74.00	-18.66	PK
V	15600.176	49.24	-7.82	41.42	54.00	-12.58	AV
H	4592.138	72.35	-20.42	51.94	74.00	-22.06	PK
H	4592.138	59.61	-20.42	39.19	54.00	-14.81	AV
H	10400.125	60.63	-9.30	51.33	68.20	-16.87	PK
H	10400.125	49.33	-9.30	40.03	54.00	-13.97	AV
H	15600.025	63.64	-7.82	55.82	74.00	-18.18	PK
H	15600.025	50.00	-7.82	42.18	54.00	-11.82	AV
High Channel (5240 MHz)-Above 1G							
V	4739.188	70.74	-20.12	50.61	74.00	-23.39	PK
V	4739.188	59.84	-20.12	39.72	54.00	-14.28	AV
V	10480.094	62.78	-9.18	53.60	68.20	-14.60	PK
V	10480.094	49.13	-9.18	39.95	54.00	-14.05	AV
V	15720.133	63.29	-7.78	55.51	74.00	-18.49	PK
V	15720.133	49.92	-7.78	42.14	54.00	-11.86	AV
H	4739.165	71.21	-20.12	51.09	74.00	-22.91	PK
H	4739.165	59.38	-20.12	39.26	54.00	-14.74	AV
H	10480.184	63.02	-9.18	53.84	68.20	-14.36	PK
H	10480.184	49.09	-9.18	39.91	54.00	-14.09	AV
H	15720.073	62.22	-7.78	54.44	74.00	-19.56	PK
H	15720.073	49.54	-7.78	41.76	54.00	-12.24	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	4434.078	70.28	-20.73	49.55	68.20	-18.65	PK
V	4434.078	59.80	-20.73	39.07	54.00	-14.93	AV
V	10360.027	60.89	-9.36	51.53	68.20	-16.67	PK
V	10360.027	49.40	-9.36	40.04	54.00	-13.96	AV
V	15540.081	60.40	-7.84	52.56	74.00	-21.44	PK
V	15540.081	49.20	-7.84	41.36	54.00	-12.64	AV
H	4434.071	73.36	-20.73	52.62	68.20	-15.58	PK
H	4434.071	59.55	-20.73	38.81	54.00	-15.19	AV
H	10360.082	60.83	-9.36	51.47	68.20	-16.73	PK
H	10360.082	49.99	-9.36	40.63	54.00	-13.37	AV
H	15540.196	64.84	-7.84	57.00	74.00	-17.00	PK
H	15540.196	49.97	-7.84	42.13	54.00	-11.87	AV
Middle Channel (5200 MHz)-Above 1G							
V	4592.068	71.02	-20.42	50.60	74.00	-23.40	PK
V	4592.068	59.75	-20.42	39.33	54.00	-14.67	AV
V	10400.070	60.05	-9.30	50.75	68.20	-17.45	PK
V	10400.070	49.69	-9.30	40.39	54.00	-13.61	AV
V	15600.077	61.91	-7.82	54.09	74.00	-19.91	PK
V	15600.077	49.21	-7.82	41.39	54.00	-12.61	AV
H	4592.087	71.41	-20.42	50.99	74.00	-23.01	PK
H	4592.087	59.33	-20.42	38.91	54.00	-15.09	AV
H	10400.125	63.30	-9.30	54.00	68.20	-14.20	PK
H	10400.125	49.99	-9.30	40.69	54.00	-13.31	AV
H	15600.059	63.02	-7.82	55.20	74.00	-18.80	PK
H	15600.059	49.15	-7.82	41.33	54.00	-12.67	AV
High Channel (5240 MHz)-Above 1G							
V	4739.040	73.03	-20.12	52.91	74.00	-21.09	PK
V	4739.040	59.88	-20.12	39.76	54.00	-14.24	AV
V	10480.003	60.06	-9.18	50.88	68.20	-17.32	PK
V	10480.003	49.01	-9.18	39.83	54.00	-14.17	AV
V	15720.030	60.71	-7.78	52.93	74.00	-21.07	PK
V	15720.030	49.22	-7.78	41.44	54.00	-12.56	AV
H	4739.161	71.54	-20.12	51.42	74.00	-22.58	PK
H	4739.161	59.35	-20.12	39.23	54.00	-14.77	AV
H	10480.144	62.61	-9.18	53.43	68.20	-14.77	PK
H	10480.144	49.26	-9.18	40.08	54.00	-13.92	AV
H	15720.006	65.00	-7.78	57.22	74.00	-16.78	PK
H	15720.006	49.81	-7.78	42.03	54.00	-11.97	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	4679.119	72.70	-20.24	52.46	74.00	-21.54	PK
V	4679.119	59.36	-20.24	39.12	54.00	-14.88	AV
V	11490.010	63.47	-8.79	54.68	68.20	-13.52	PK
V	11490.010	49.50	-8.79	40.71	54.00	-13.29	AV
V	17235.159	58.15	-3.18	54.97	68.20	-13.23	PK
V	17235.159	44.60	-3.18	41.42	54.00	-12.58	AV
H	4679.197	71.09	-20.73	50.36	74.00	-23.64	PK
H	4679.197	59.03	-20.73	38.30	54.00	-15.70	AV
H	11490.146	60.45	-8.79	51.66	68.20	-16.54	PK
H	11490.146	49.92	-8.79	41.13	54.00	-12.87	AV
H	17235.069	56.99	-3.18	53.81	68.20	-14.39	PK
H	17235.069	44.87	-3.18	41.69	54.00	-12.31	AV
Middle Channel (5785 MHz)-Above 1G							
V	4592.122	74.51	-20.42	54.09	74.00	-19.91	PK
V	4592.122	59.40	-20.42	38.99	54.00	-15.01	AV
V	11570.183	60.80	-8.86	51.94	68.20	-16.26	PK
V	11570.183	49.96	-8.86	41.10	54.00	-12.90	AV
V	17355.122	59.43	-2.52	56.91	68.20	-11.29	PK
V	17355.122	44.35	-2.52	41.83	54.00	-12.17	AV
H	4592.027	71.22	-20.42	50.81	74.00	-23.19	PK
H	4592.027	59.49	-20.42	39.07	54.00	-14.93	AV
H	11570.119	61.00	-8.86	52.14	68.20	-16.06	PK
H	11570.119	49.25	-8.86	40.39	54.00	-13.61	AV
H	17355.056	55.25	-2.52	52.73	68.20	-15.47	PK
H	17355.056	44.70	-2.52	42.18	54.00	-11.82	AV
High Channel (5825 MHz)-Above 1G							
V	6039.009	74.99	-18.93	56.06	68.20	-12.14	PK
V	6039.009	59.40	-18.93	40.47	54.00	-13.53	AV
V	11650.093	64.26	-8.92	55.34	74.00	-18.66	PK
V	11650.093	49.26	-8.92	40.34	54.00	-13.66	AV
V	17475.121	57.25	-1.86	55.39	68.20	-12.81	PK
V	17475.121	44.23	-1.86	42.37	54.00	-11.63	AV
H	6039.149	71.97	-18.93	53.04	68.20	-15.16	PK
H	6039.149	59.90	-18.93	40.97	54.00	-13.03	AV
H	11650.151	63.23	-8.92	54.31	74.00	-19.69	PK
H	11650.151	49.85	-8.92	40.93	54.00	-13.07	AV
H	17475.100	59.84	-1.86	57.98	68.20	-10.22	PK
H	17475.100	44.24	-1.86	42.38	54.00	-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) - 802.11n-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	4679.138	71.36	-20.24	51.12	74.00	-22.88	PK
V	4679.138	59.99	-20.24	39.75	54.00	-14.25	AV
V	11490.128	64.38	-8.79	55.59	68.20	-12.61	PK
V	11490.128	49.22	-8.79	40.43	54.00	-13.57	AV
V	17235.150	55.00	-3.18	51.82	68.20	-16.38	PK
V	17235.150	44.98	-3.18	41.80	54.00	-12.20	AV
H	4679.192	74.22	-20.24	53.97	74.00	-20.03	PK
H	4679.192	59.04	-20.24	38.79	54.00	-15.21	AV
H	11490.045	61.07	-8.79	52.28	68.20	-15.92	PK
H	11490.045	49.60	-8.79	40.81	54.00	-13.19	AV
H	17235.115	56.89	-3.18	53.71	68.20	-14.49	PK
H	17235.115	44.65	-3.18	41.47	54.00	-12.53	AV
Middle Channel (5785 MHz)-Above 1G							
V	4592.159	72.49	-20.42	52.07	74.00	-21.93	PK
V	4592.159	59.88	-20.42	39.46	54.00	-14.54	AV
V	11570.003	62.47	-8.86	53.61	68.20	-14.59	PK
V	11570.003	49.18	-8.86	40.32	54.00	-13.68	AV
V	17355.125	58.29	-2.52	55.77	68.20	-12.43	PK
V	17355.125	44.41	-2.52	41.89	54.00	-12.11	AV
H	4592.119	70.16	-20.42	49.75	74.00	-24.25	PK
H	4592.119	59.30	-20.42	38.88	54.00	-15.12	AV
H	11570.150	60.55	-8.86	51.69	68.20	-16.51	PK
H	11570.150	49.84	-8.86	40.98	54.00	-13.02	AV
H	17355.184	58.59	-2.52	56.07	68.20	-12.13	PK
H	17355.184	44.52	-2.52	42.00	54.00	-12.00	AV
High Channel (5825 MHz)-Above 1G							
V	6039.196	70.86	-18.93	51.93	68.20	-16.27	PK
V	6039.196	59.86	-18.93	40.93	54.00	-13.07	AV
V	11650.136	62.49	-8.92	53.57	74.00	-20.43	PK
V	11650.136	49.19	-8.92	40.27	54.00	-13.73	AV
V	17475.118	56.36	-1.86	54.50	68.20	-13.70	PK
V	17475.118	44.34	-1.86	42.48	54.00	-11.52	AV
H	6039.083	70.00	-18.93	51.07	68.20	-17.13	PK
H	6039.083	59.47	-18.93	40.54	54.00	-13.46	AV
H	11650.157	63.29	-8.92	54.37	74.00	-19.63	PK
H	11650.157	49.25	-8.92	40.33	54.00	-13.67	AV
H	17475.143	58.09	-1.86	56.23	68.20	-11.97	PK
H	17475.143	44.39	-1.86	42.53	54.00	-11.47	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.

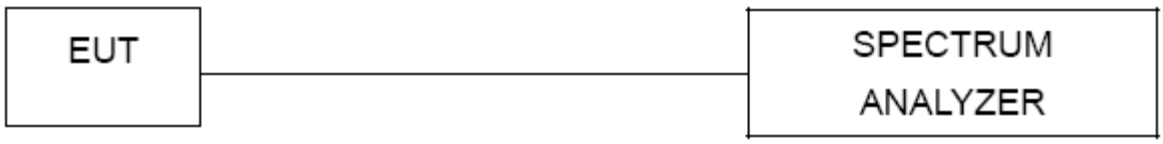
Test Mode:	TX(5.8G) - 802.11ac-HT20

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	4679.198	74.34	-20.24	54.09	74.00	-19.91	PK
V	4679.198	59.58	-20.24	39.34	54.00	-14.66	AV
V	11490.090	63.02	-8.79	54.23	68.20	-13.97	PK
V	11490.090	50.00	-8.79	41.21	54.00	-12.79	AV
V	17235.155	59.83	-3.18	56.65	68.20	-11.55	PK
V	17235.155	44.81	-3.18	41.63	54.00	-12.37	AV
H	4679.114	71.84	-20.24	51.60	74.00	-22.40	PK
H	4679.114	59.06	-20.24	38.82	54.00	-15.18	AV
H	11490.132	62.80	-8.79	54.01	68.20	-14.19	PK
H	11490.132	49.95	-8.79	41.16	54.00	-12.84	AV
H	17235.185	56.00	-3.18	52.82	68.20	-15.38	PK
H	17235.185	44.51	-3.18	41.33	54.00	-12.67	AV
Middle Channel (5785 MHz)-Above 1G							
V	4592.075	72.42	-20.42	52.01	74.00	-21.99	PK
V	4592.075	59.35	-20.42	38.93	54.00	-15.07	AV
V	11570.004	60.62	-8.86	51.76	68.20	-16.44	PK
V	11570.004	49.01	-8.86	40.15	54.00	-13.85	AV
V	17355.142	55.96	-2.52	53.44	68.20	-14.76	PK
V	17355.142	44.38	-2.52	41.86	54.00	-12.14	AV
H	4592.135	74.03	-20.42	53.61	74.00	-20.39	PK
H	4592.135	59.81	-20.42	39.40	54.00	-14.60	AV
H	11570.140	60.00	-8.86	51.14	68.20	-17.06	PK
H	11570.140	49.56	-8.86	40.70	54.00	-13.30	AV
H	17355.039	57.97	-2.52	55.45	68.20	-12.75	PK
H	17355.039	44.70	-2.52	42.18	54.00	-11.82	AV
High Channel (5825 MHz)-Above 1G							
V	6039.161	72.18	-18.93	53.25	68.20	-14.95	PK
V	6039.161	59.03	-18.93	40.09	54.00	-13.91	AV
V	11650.040	61.09	-8.92	52.17	74.00	-21.83	PK
V	11650.040	49.47	-8.92	40.55	54.00	-13.45	AV
V	17475.179	55.63	-1.86	53.77	68.20	-14.43	PK
V	17475.179	44.14	-1.86	42.28	54.00	-11.72	AV
H	6039.074	70.36	-18.93	51.42	68.20	-16.78	PK
H	6039.074	59.62	-18.93	40.68	54.00	-13.32	AV
H	11650.008	62.76	-8.92	53.84	74.00	-20.16	PK
H	11650.008	49.21	-8.92	40.29	54.00	-13.71	AV
H	17475.193	57.57	-1.86	55.71	68.20	-12.49	PK
H	17475.193	44.84	-1.86	42.98	54.00	-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.

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

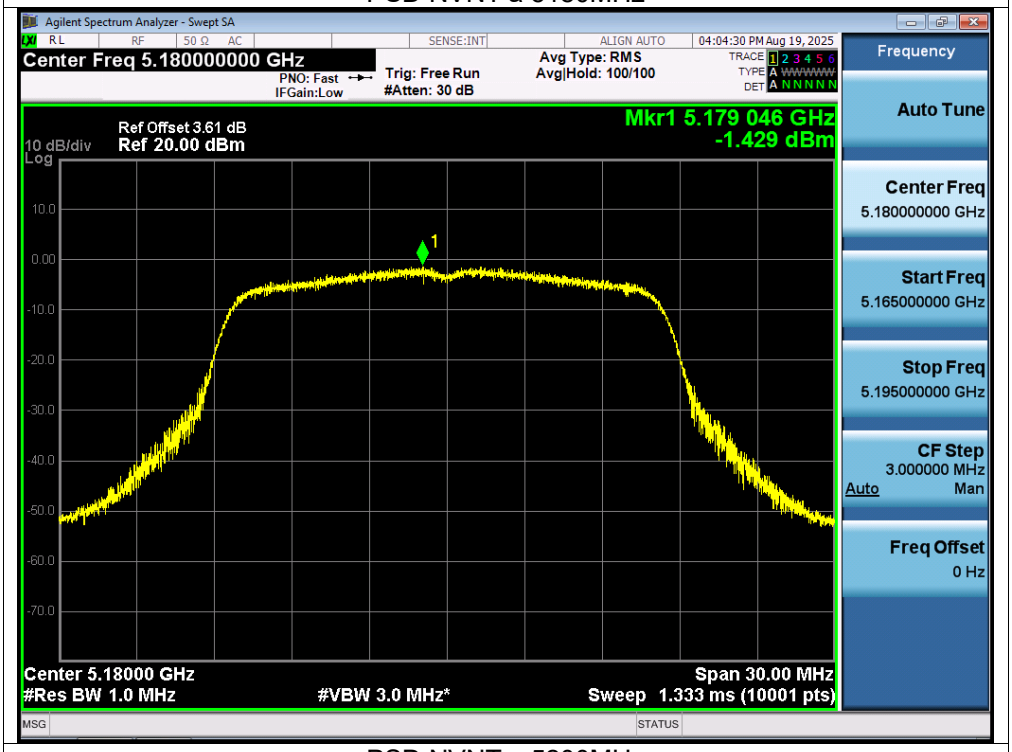
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

8.5 Test Result

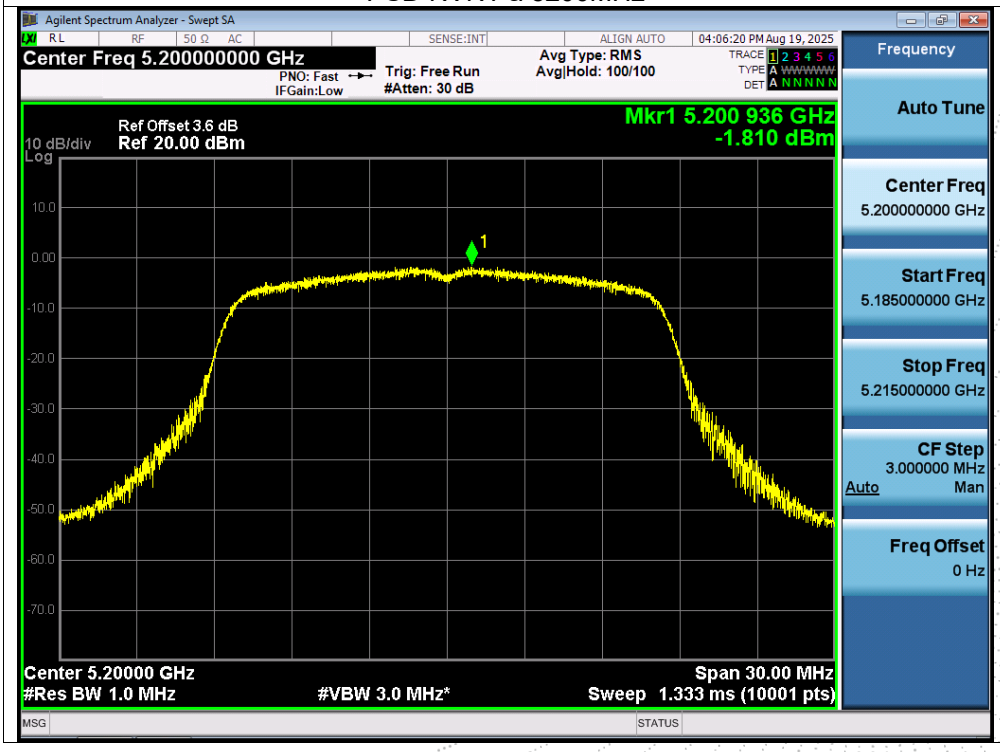
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	DC 5V
Test Mode:	(5180-5240MHz)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	-1.43	11	Pass
NVNT	a	5200	-1.81	11	Pass
NVNT	a	5240	-2.25	11	Pass
NVNT	n20	5180	-2.59	11	Pass
NVNT	n20	5200	-3.25	11	Pass
NVNT	n20	5240	-3.52	11	Pass
NVNT	ac20	5180	-1.90	11	Pass
NVNT	ac20	5200	-2.62	11	Pass
NVNT	ac20	5240	-1.88	11	Pass

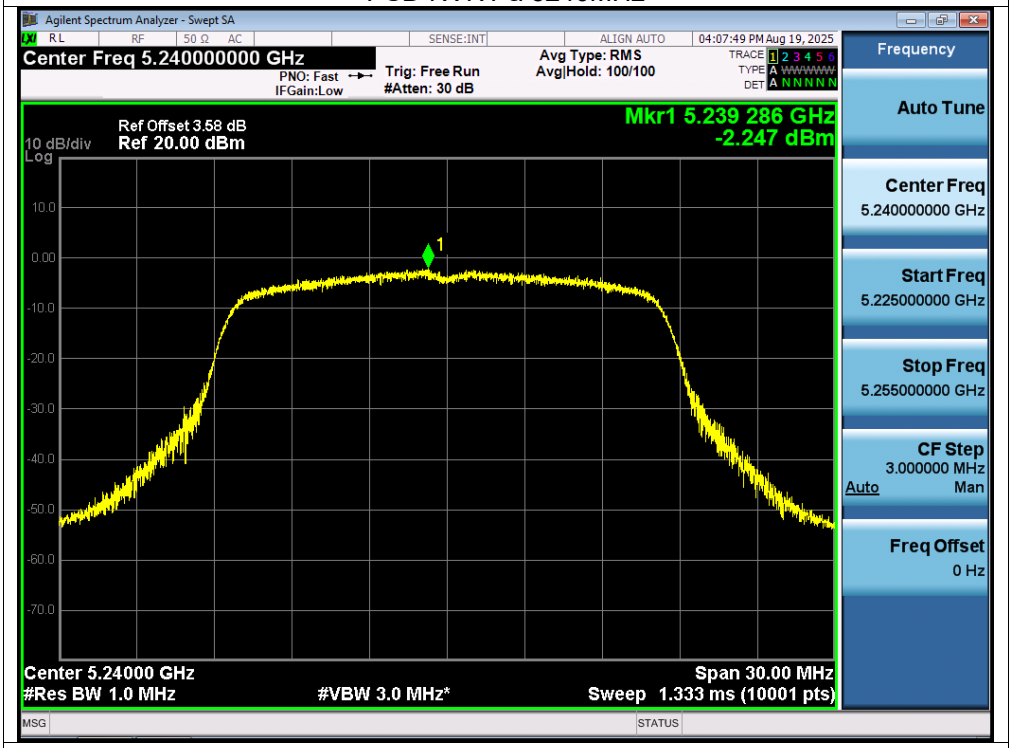
Test Graphs
PSD NVNT a 5180MHz



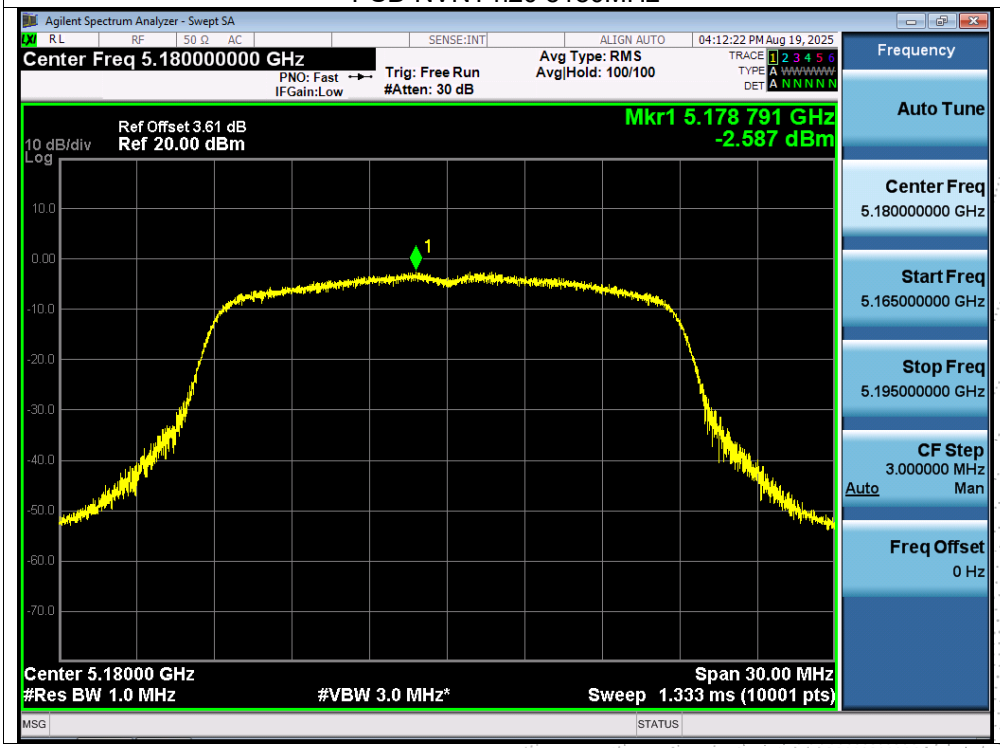
PSD NVNT a 5200MHz



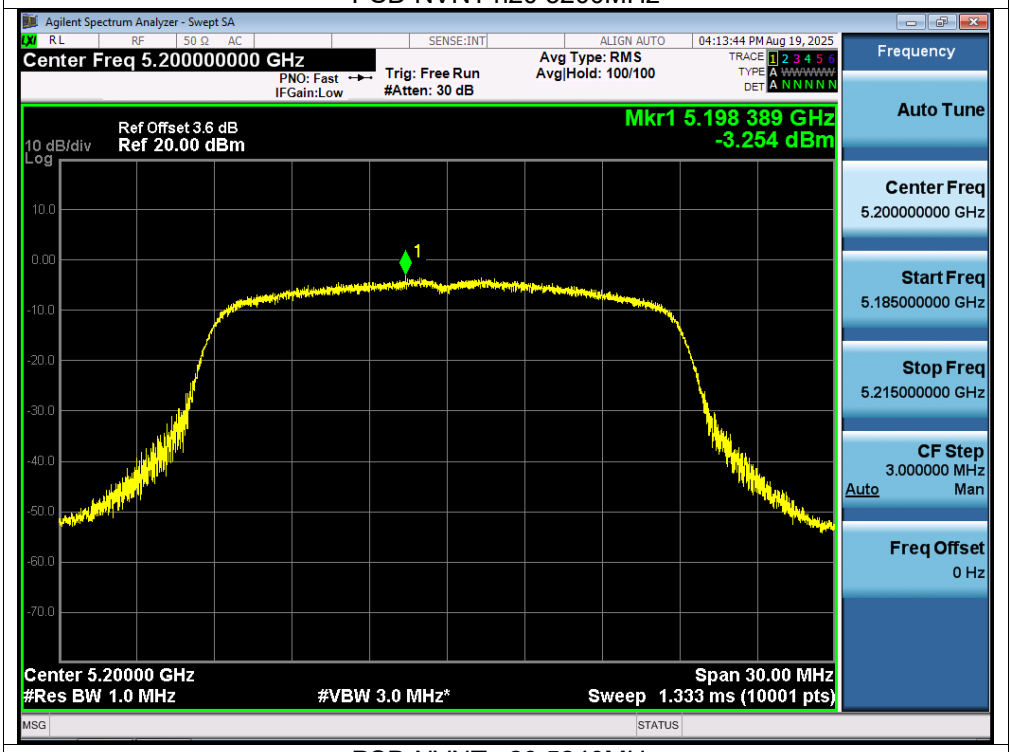
PSD NVNT a 5240MHz



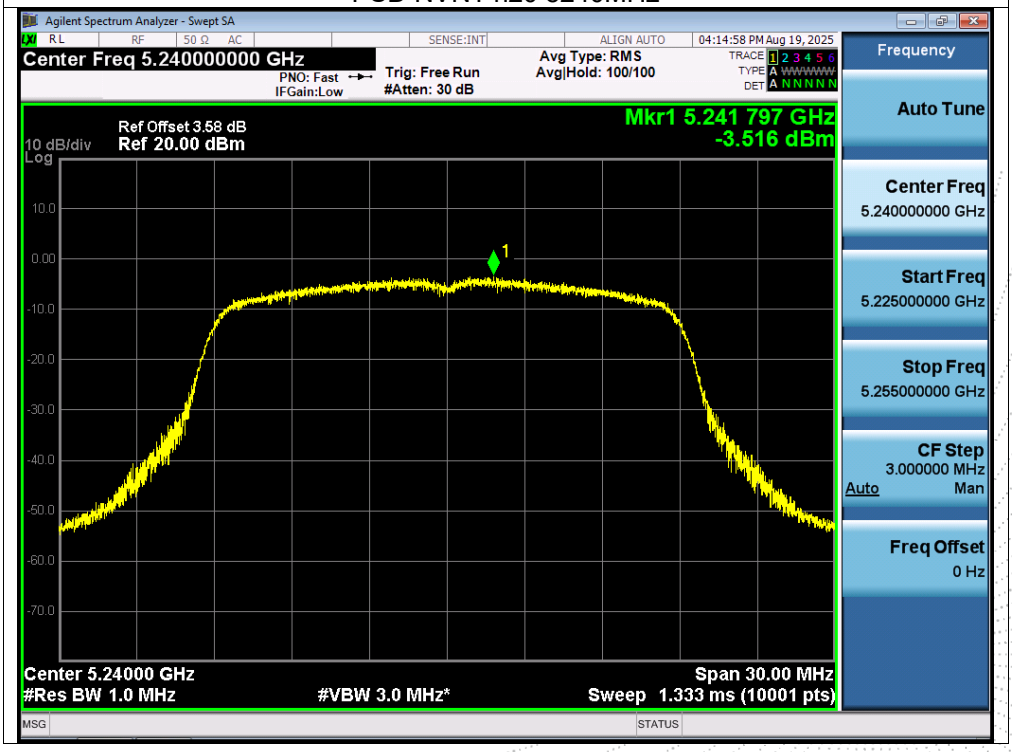
PSD NVNT n20 5180MHz



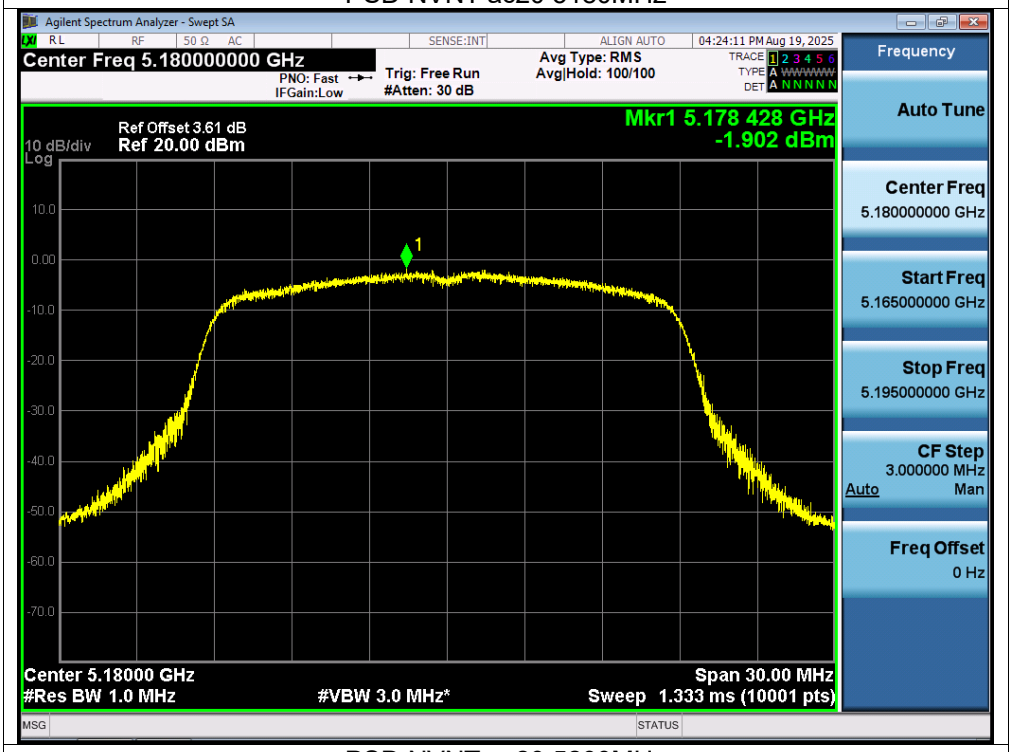
PSD NVNT n20 5200MHz



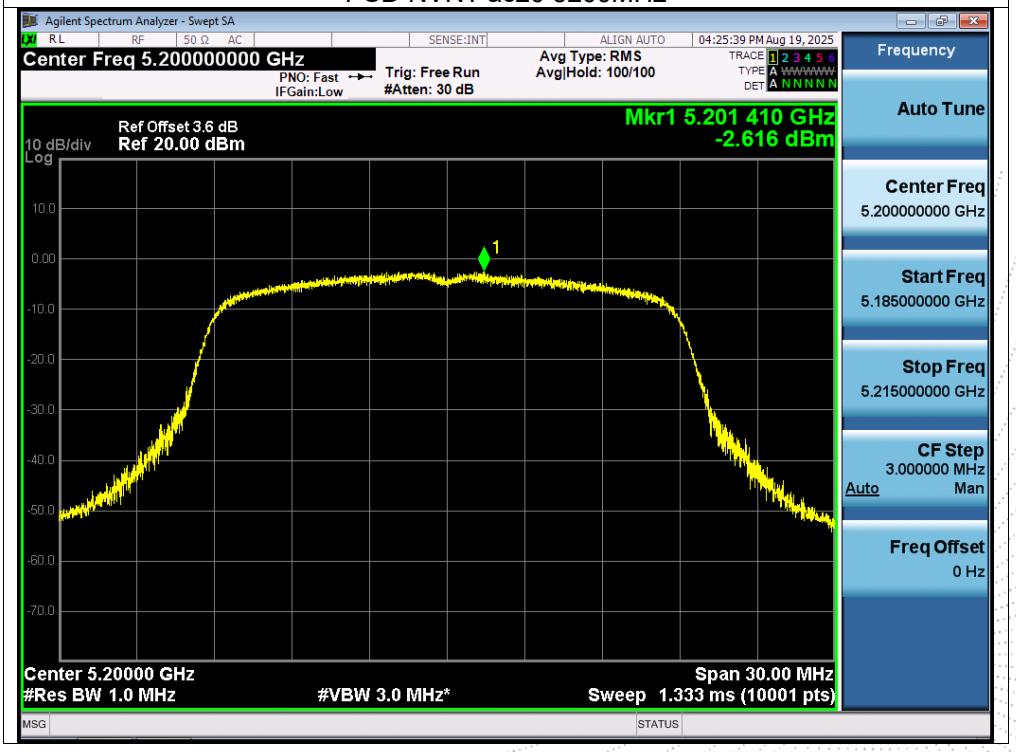
PSD NVNT n20 5240MHz



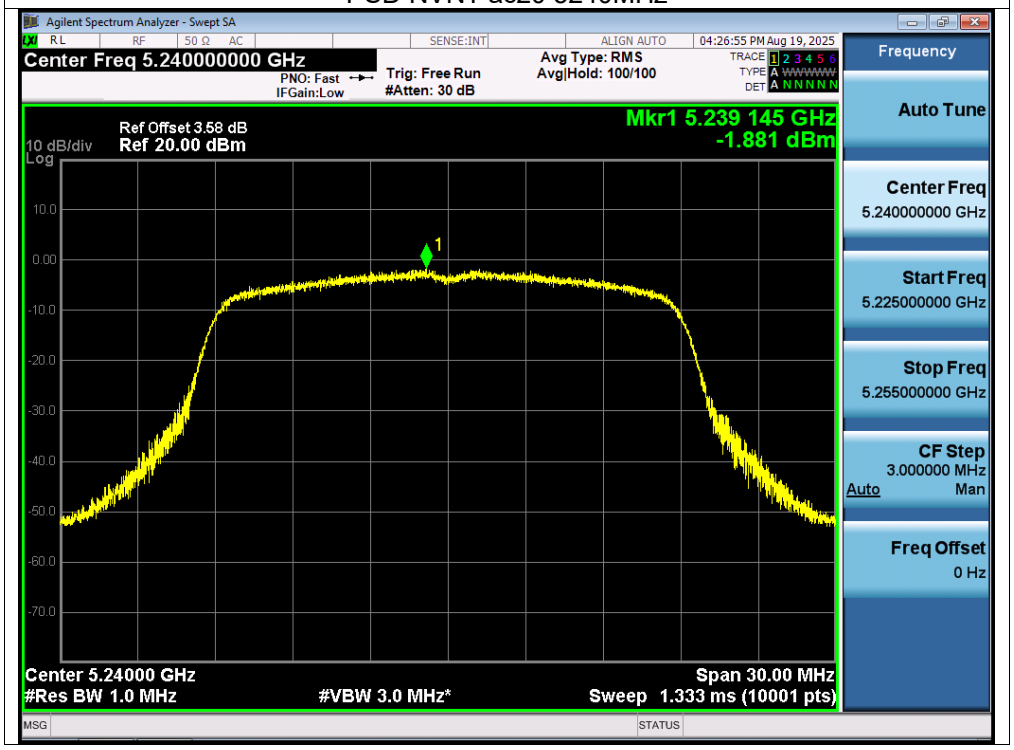
PSD NVNT ac20 5180MHz



PSD NVNT ac20 5200MHz



PSD NVNT ac20 5240MHz

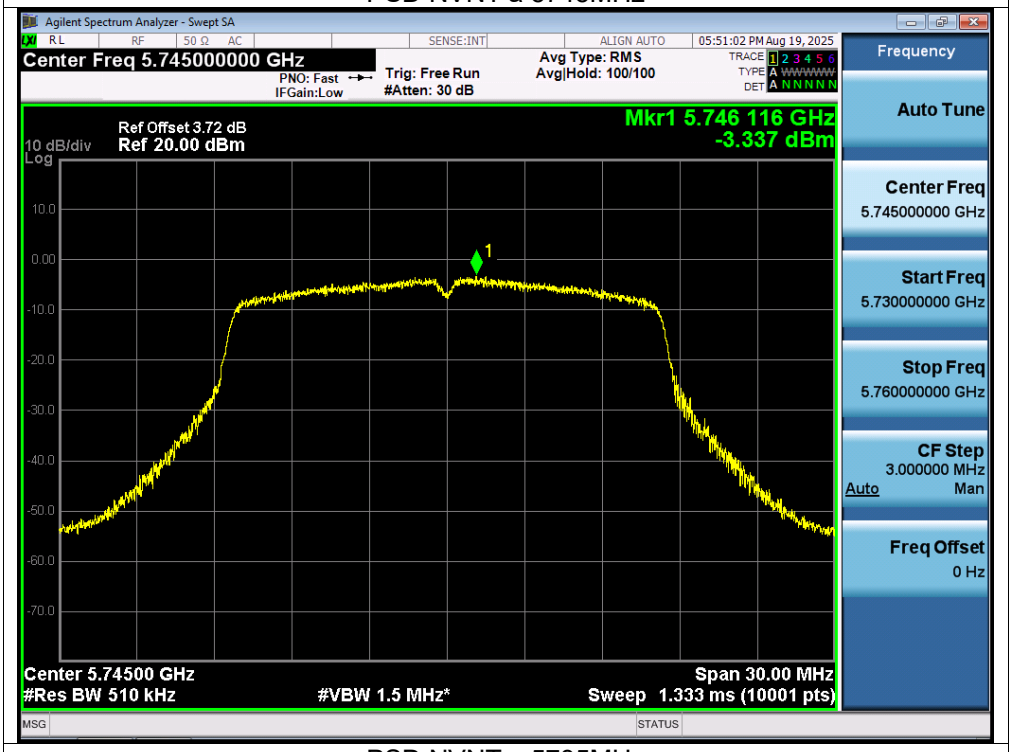


Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	DC 5V
Test Mode:	(5745-5825MHz)		

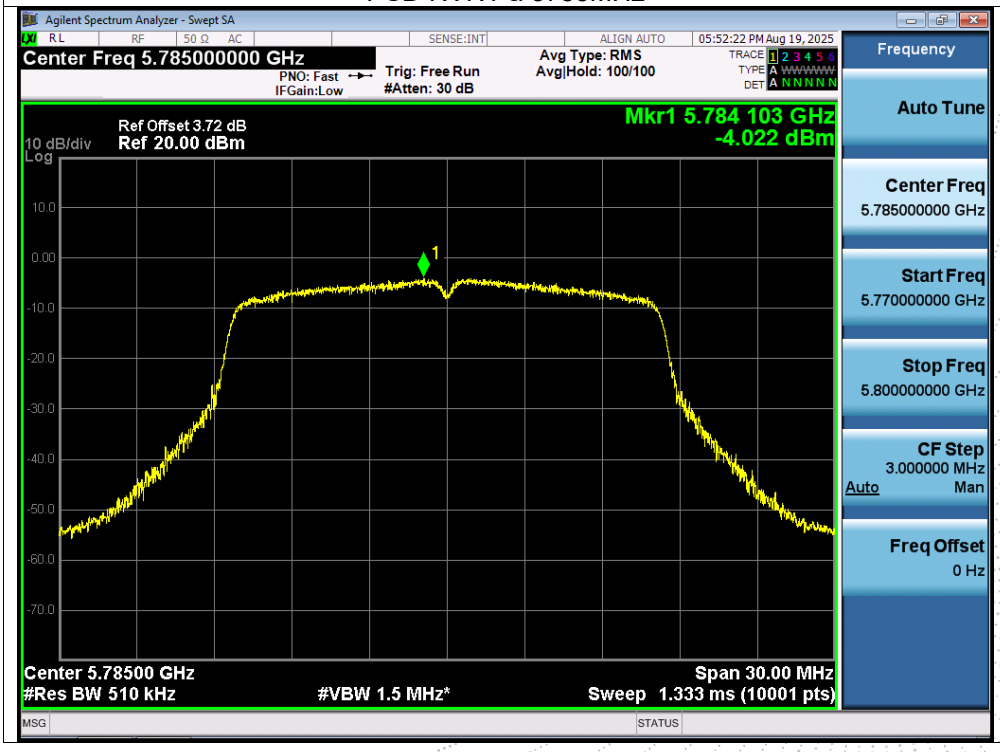
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	-3.34	30	Pass
NVNT	a	5785	-4.02	30	Pass
NVNT	a	5825	-4.34	30	Pass
NVNT	n20	5745	-4.61	30	Pass
NVNT	n20	5785	-5.29	30	Pass
NVNT	n20	5825	-5.46	30	Pass
NVNT	ac20	5745	-4.61	30	Pass
NVNT	ac20	5785	-5.18	30	Pass
NVNT	ac20	5825	-5.53	30	Pass

Test Graphs

PSD NVNT a 5745MHz

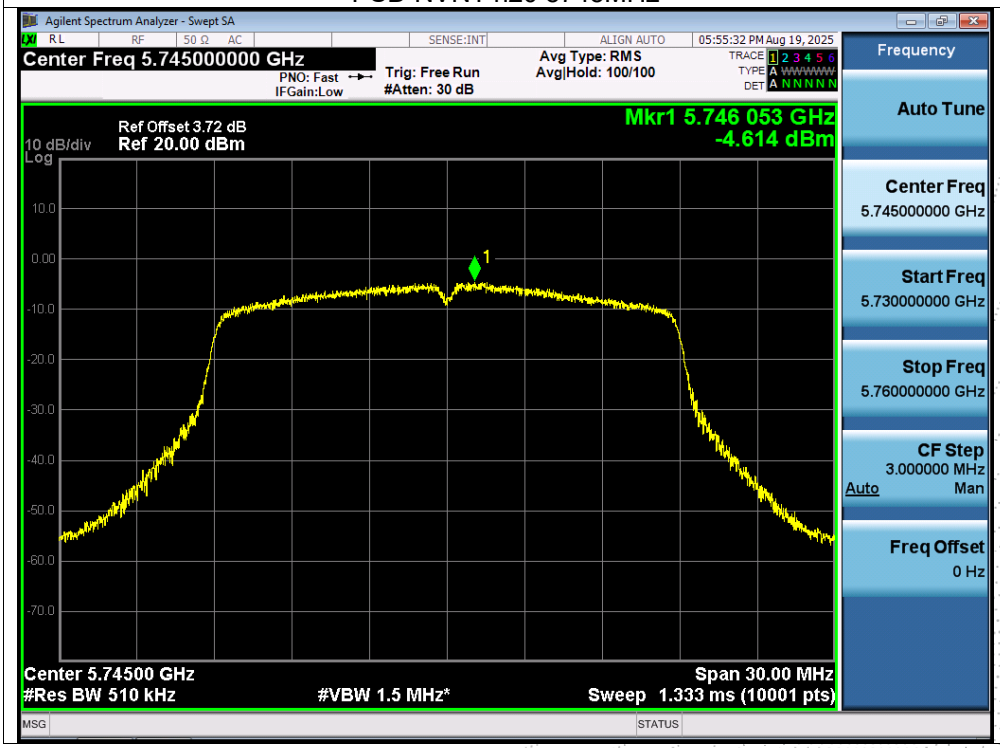


PSD NVNT a 5785MHz

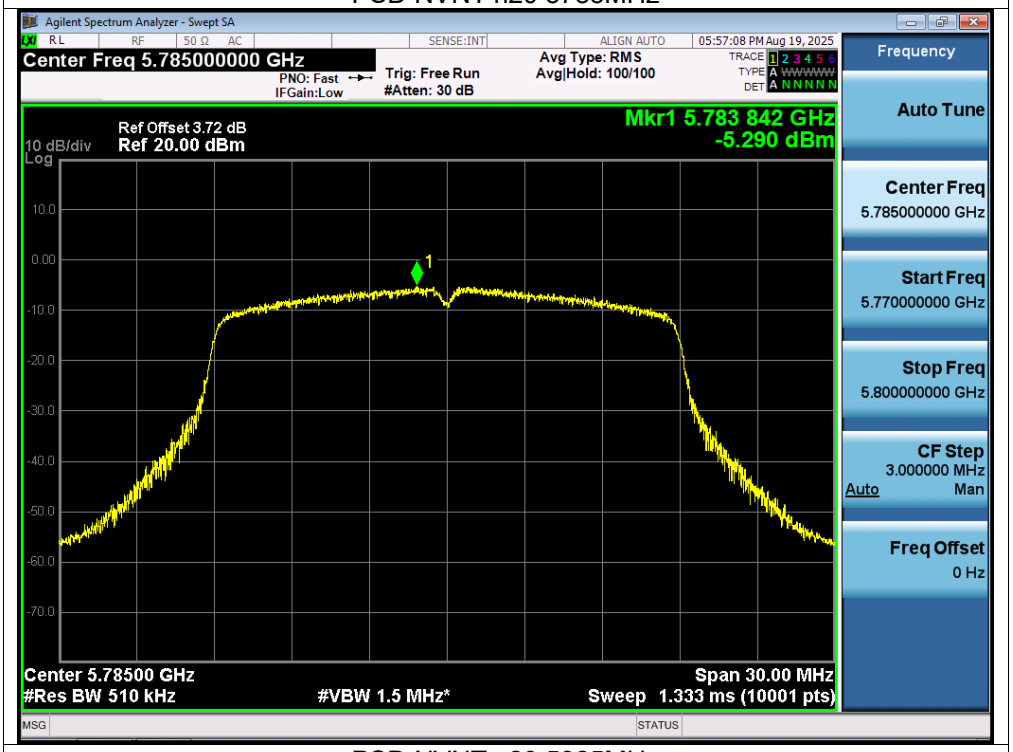


PSD NVNT a 5825MHz

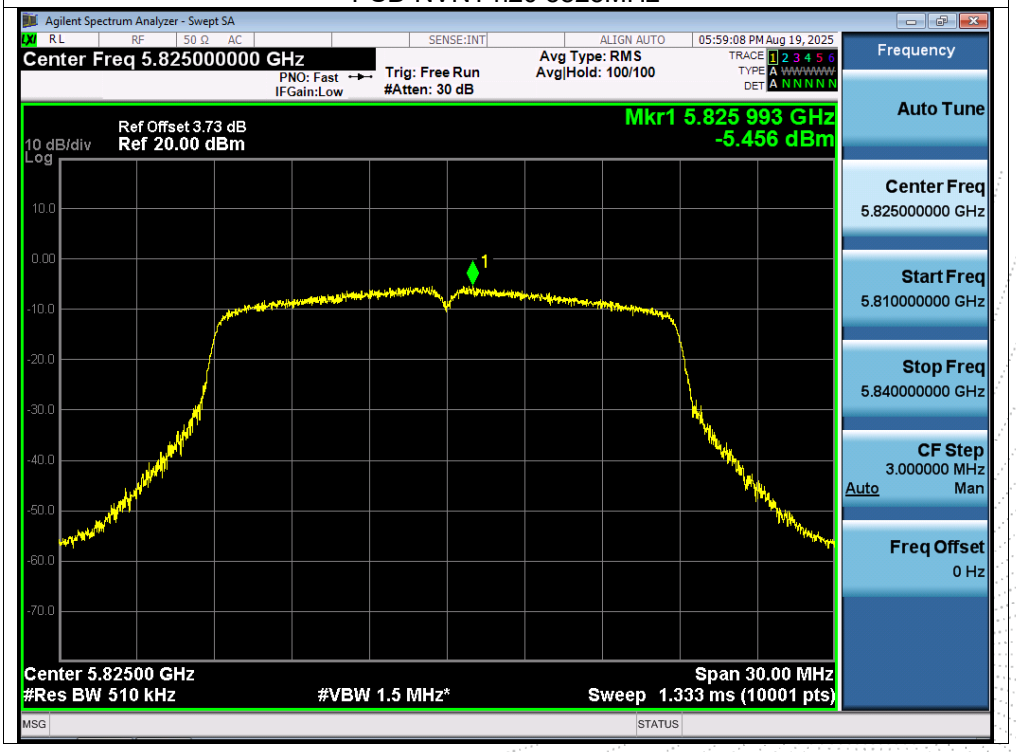
PSD NVNT n20 5745MHz



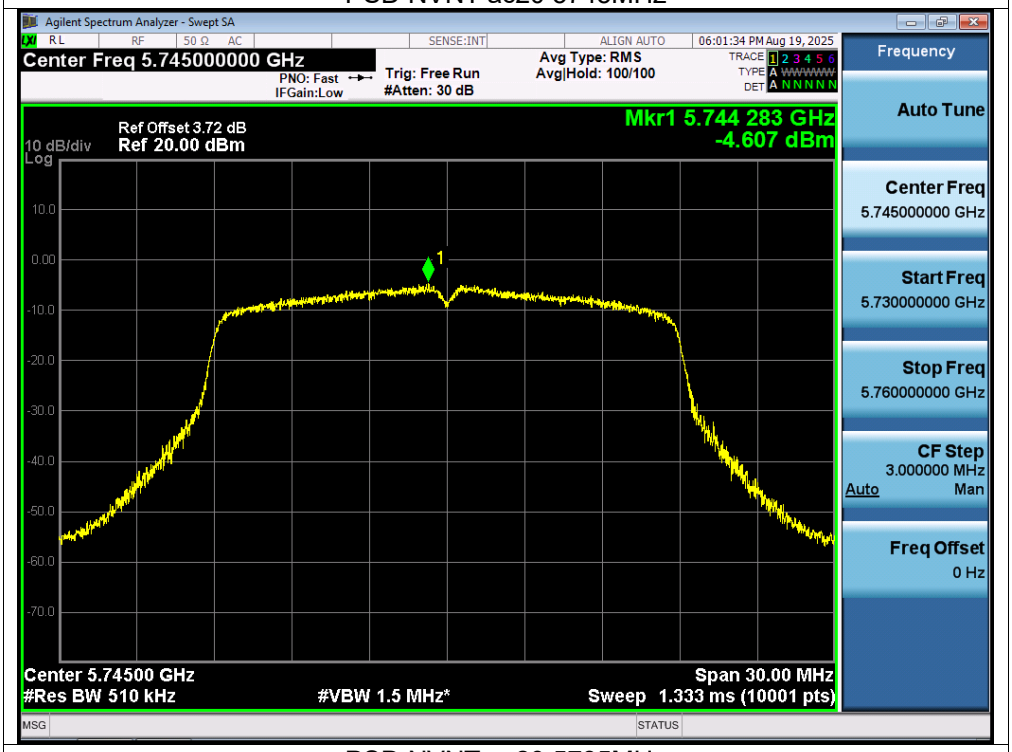
PSD NVNT n20 5785MHz



PSD NVNT n20 5825MHz

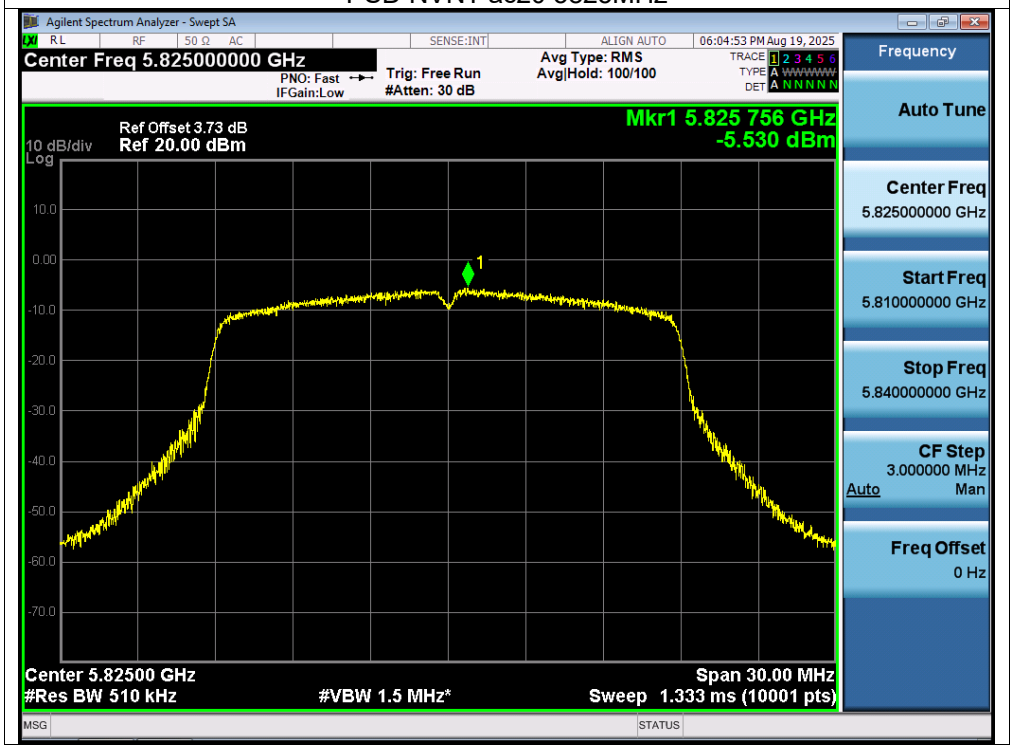


PSD NVNT ac20 5745MHz



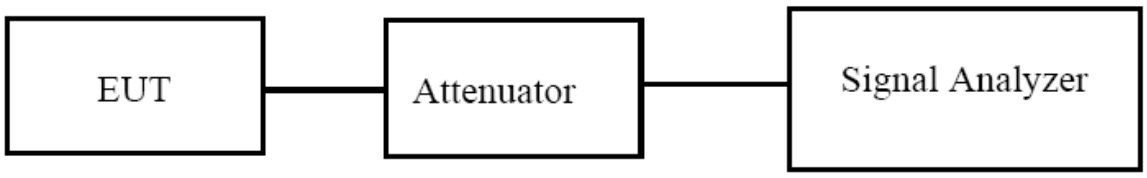
PSD NVNT ac20 5785MHz

PSD NVNT ac20 5825MHz



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.

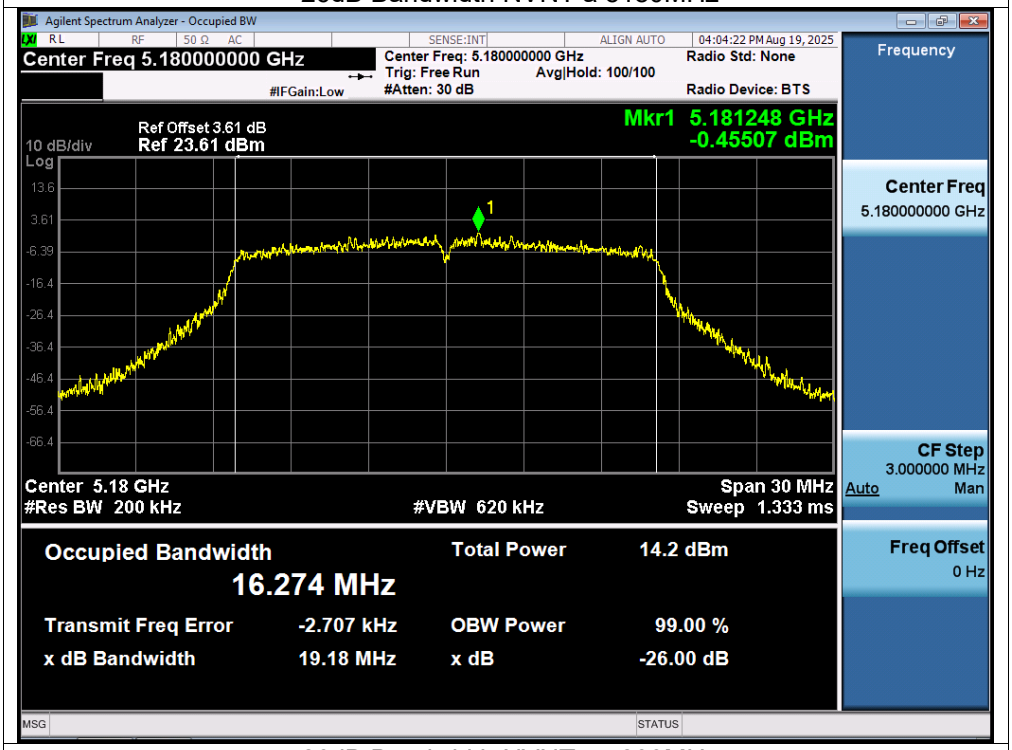
9.5 Test Result

Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	DC 5V
Test Mode:	(5180-5240MHz)		

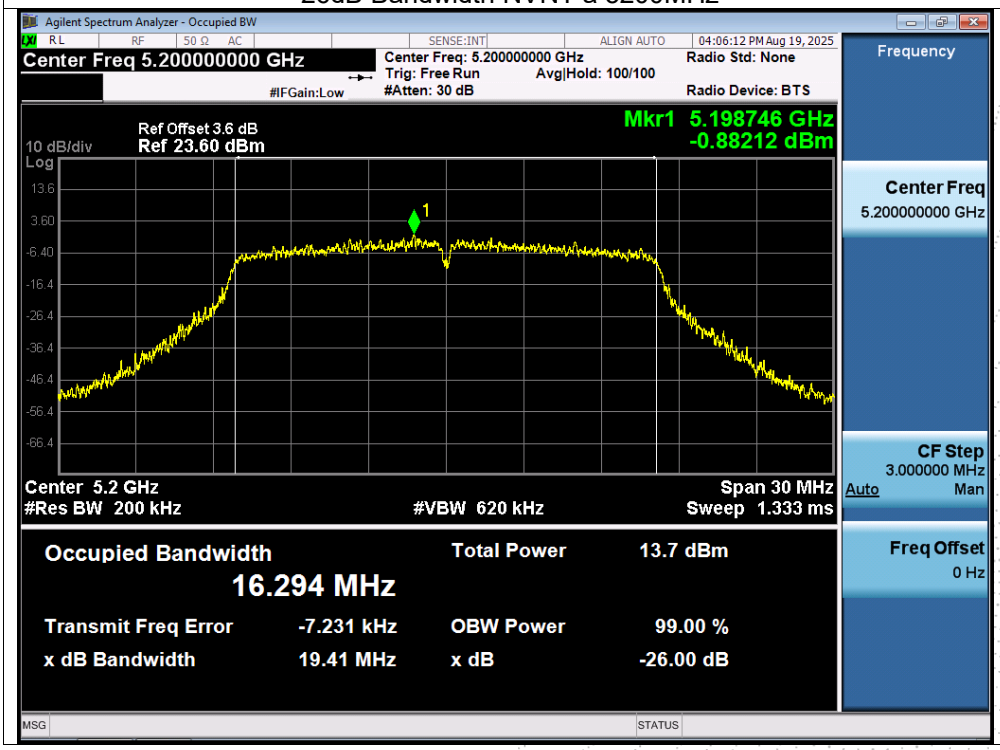
Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)	99% OBW (MHz)	Verdict
NVNT	a	5180	19.180	16.306	Pass
NVNT	a	5200	19.406	16.262	Pass
NVNT	a	5240	18.871	16.292	Pass
NVNT	n20	5180	20.050	17.374	Pass
NVNT	n20	5200	20.127	17.415	Pass
NVNT	n20	5240	19.699	17.389	Pass
NVNT	ac20	5180	20.364	17.391	Pass
NVNT	ac20	5200	19.854	17.428	Pass
NVNT	ac20	5240	20.103	17.407	Pass

Test Graphs

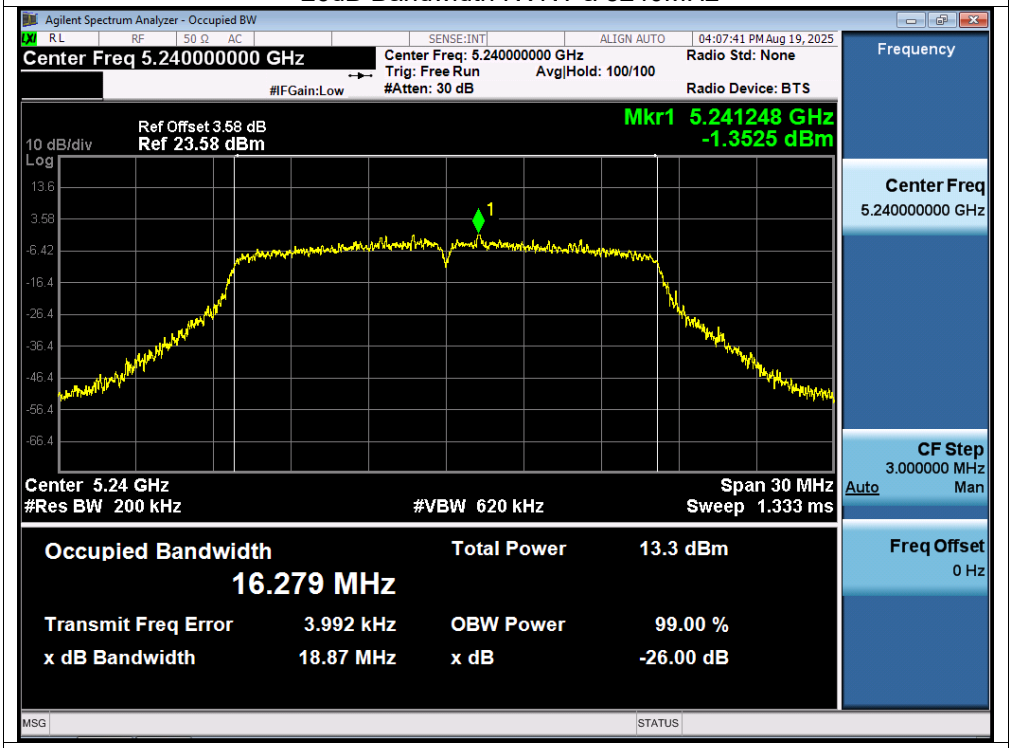
-26dB Bandwidth NVNT a 5180MHz



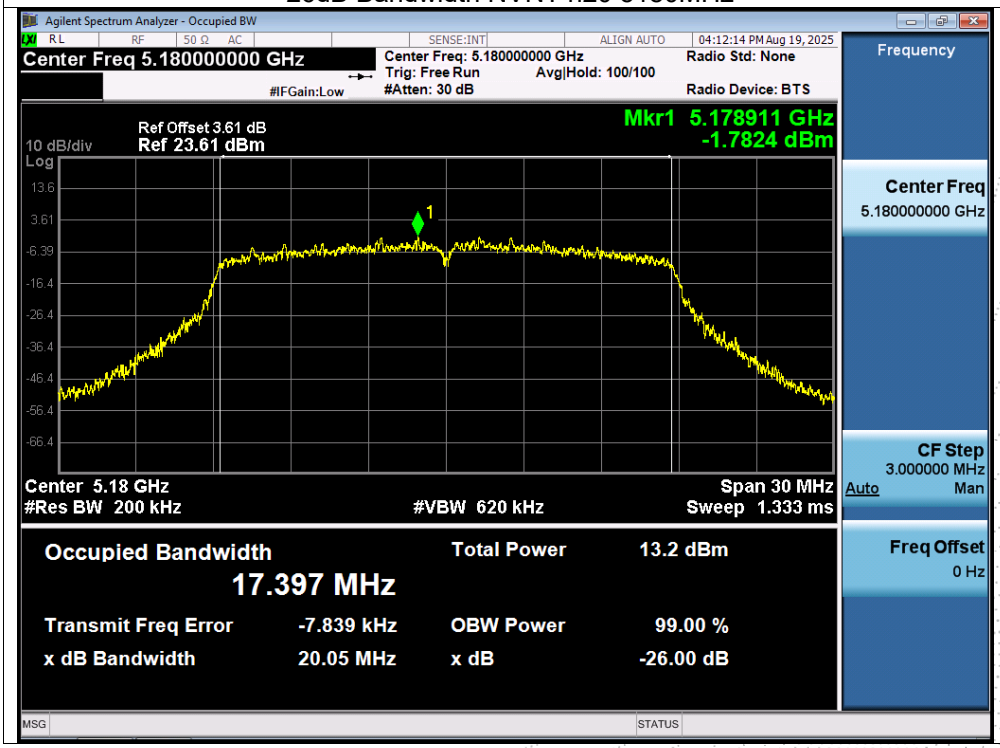
-26dB Bandwidth NVNT a 5200MHz



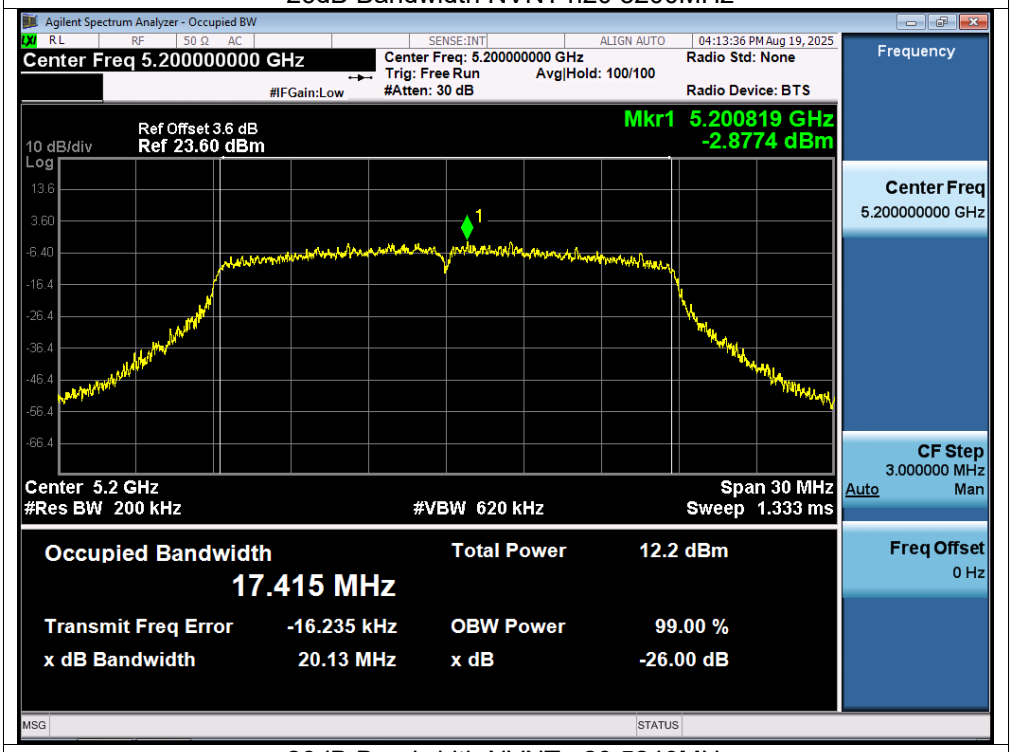
-26dB Bandwidth NVNT a 5240MHz



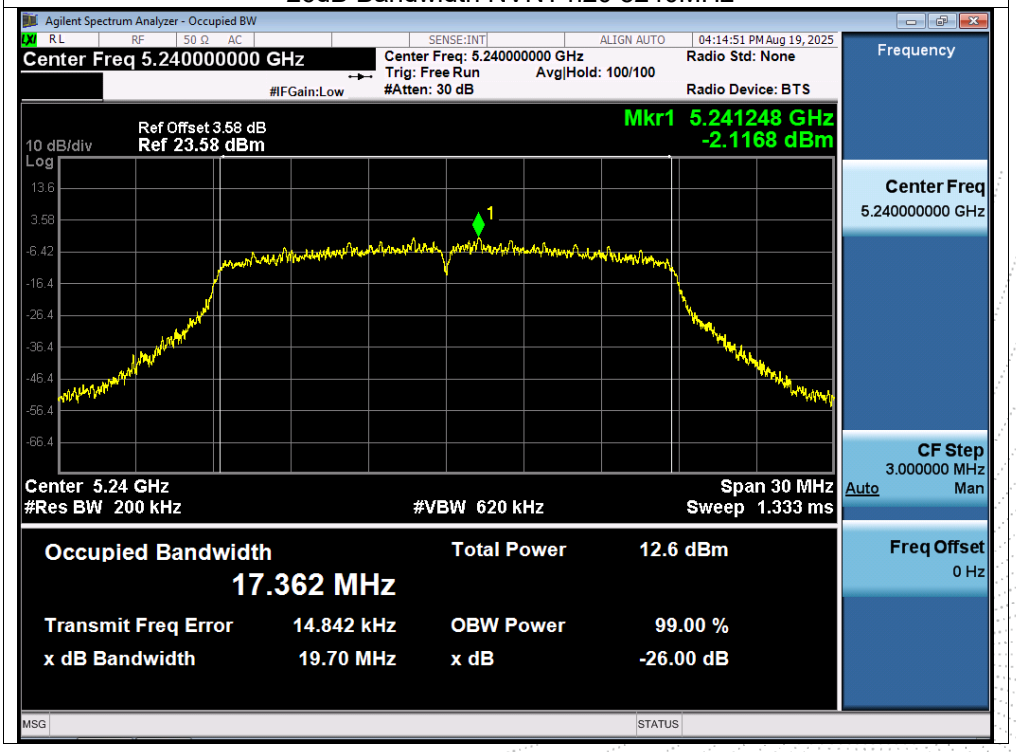
-26dB Bandwidth NVNT n20 5180MHz



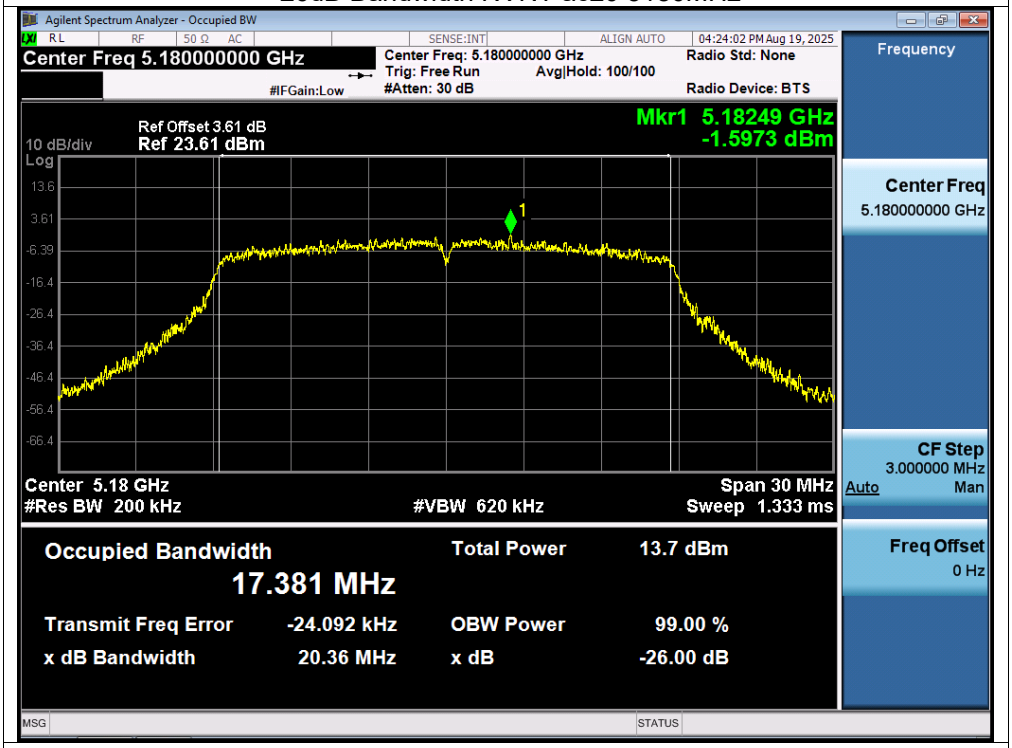
-26dB Bandwidth NVNT n20 5200MHz



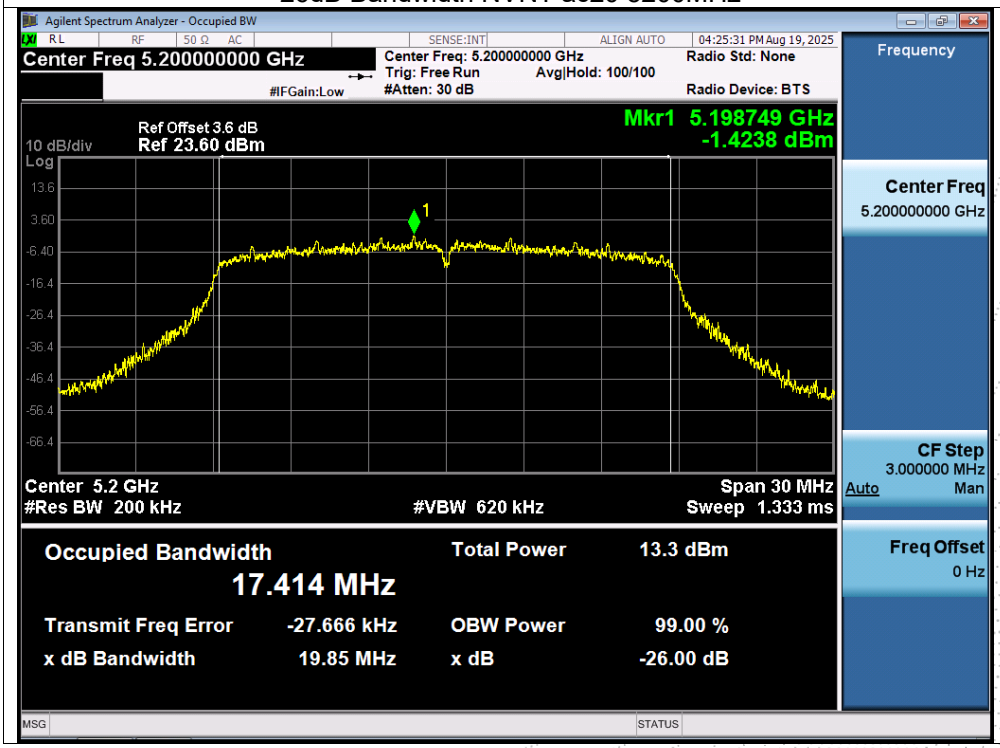
-26dB Bandwidth NVNT n20 5240MHz



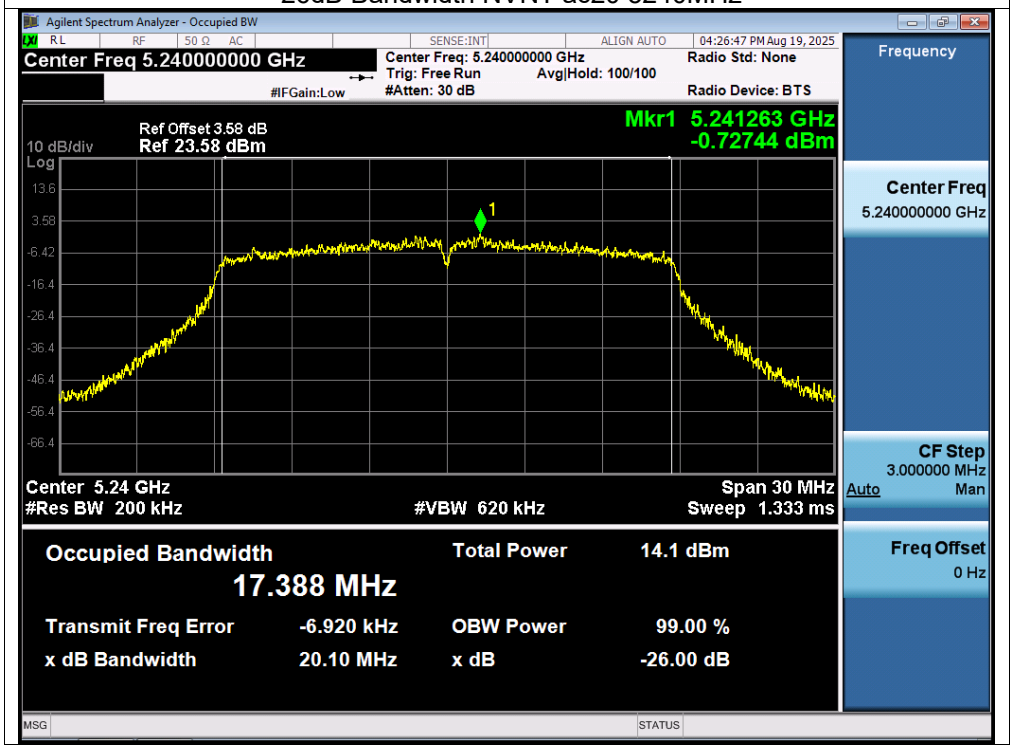
-26dB Bandwidth NVNT ac20 5180MHz



-26dB Bandwidth NVNT ac20 5200MHz

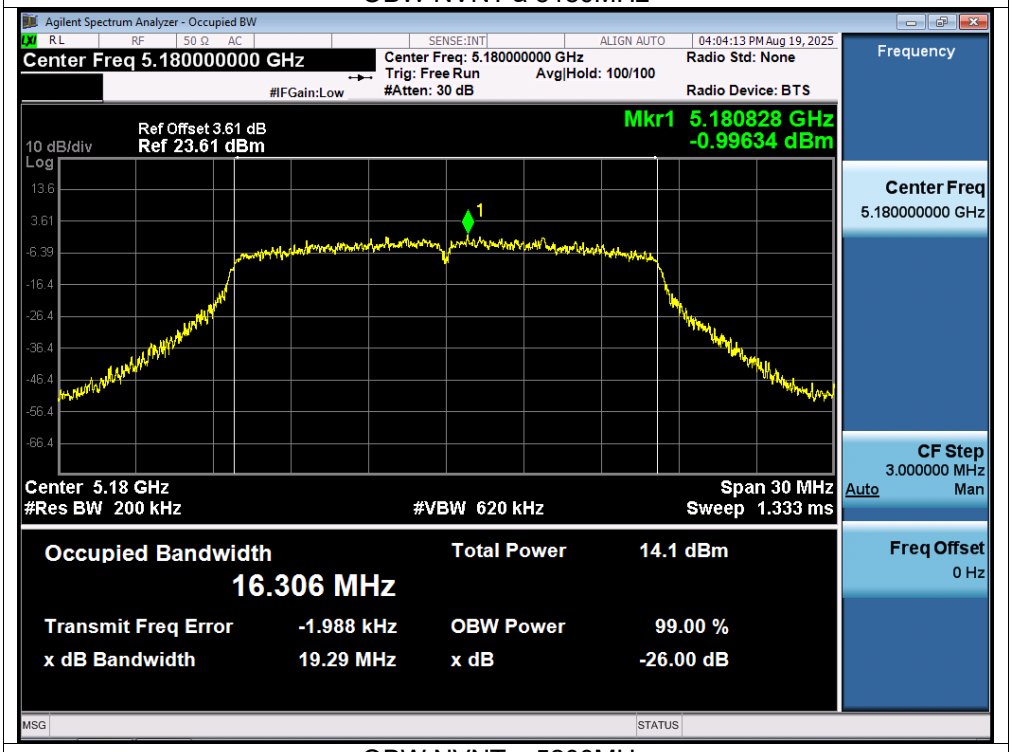


-26dB Bandwidth NVNT ac20 5240MHz

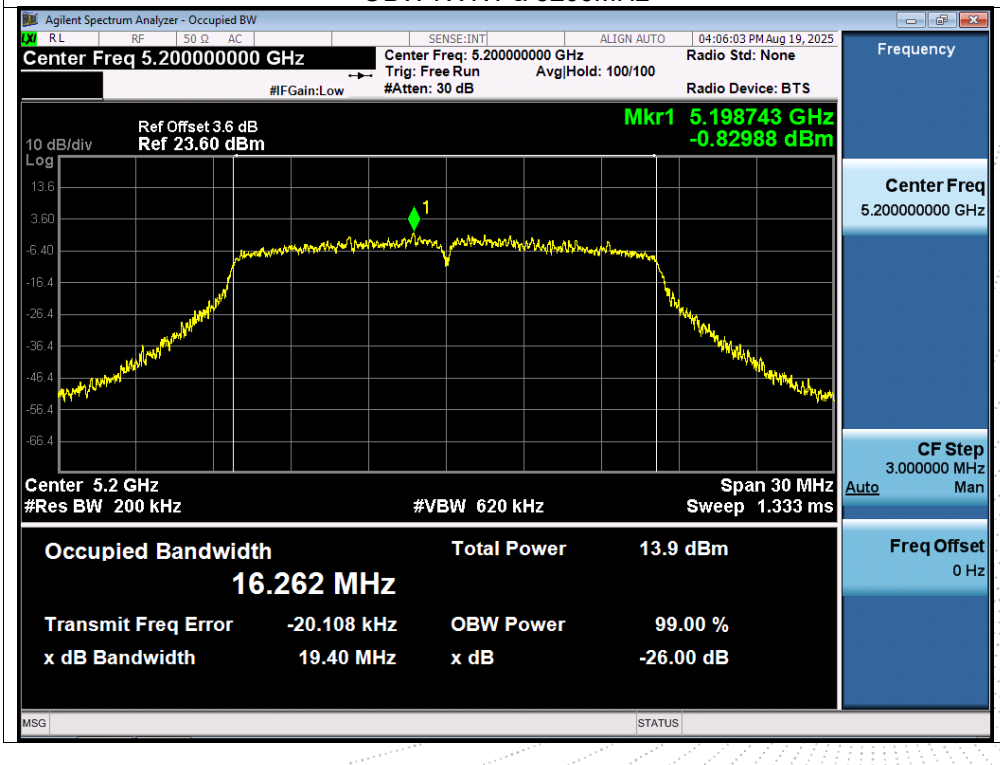


Test Graphs

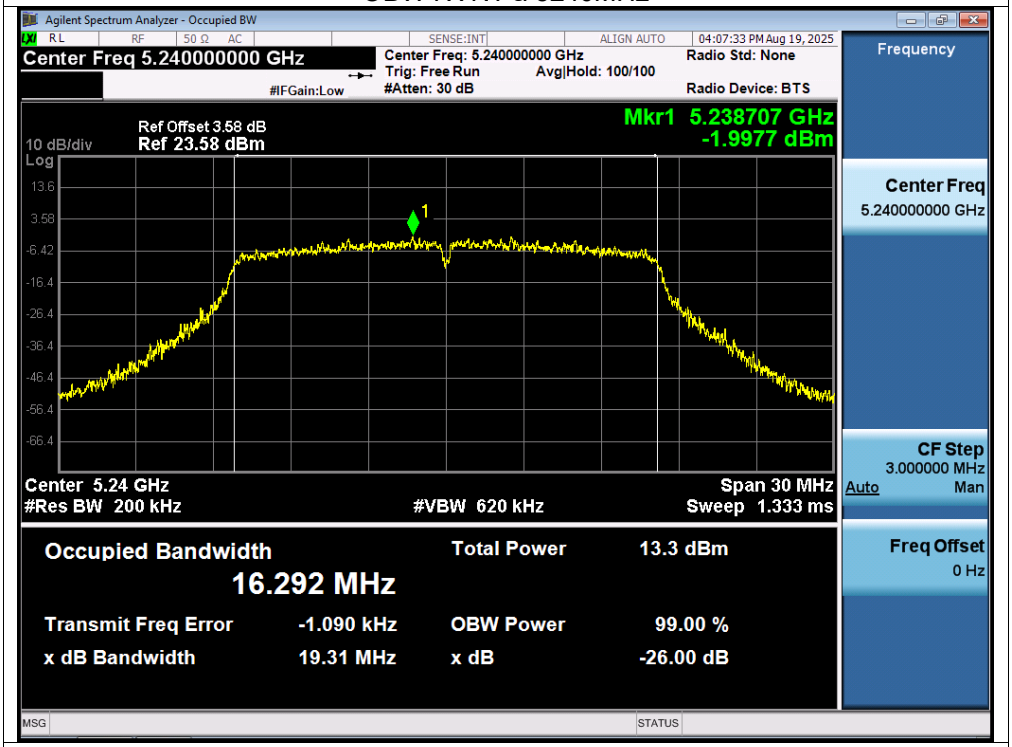
OBW NVNT a 5180MHz



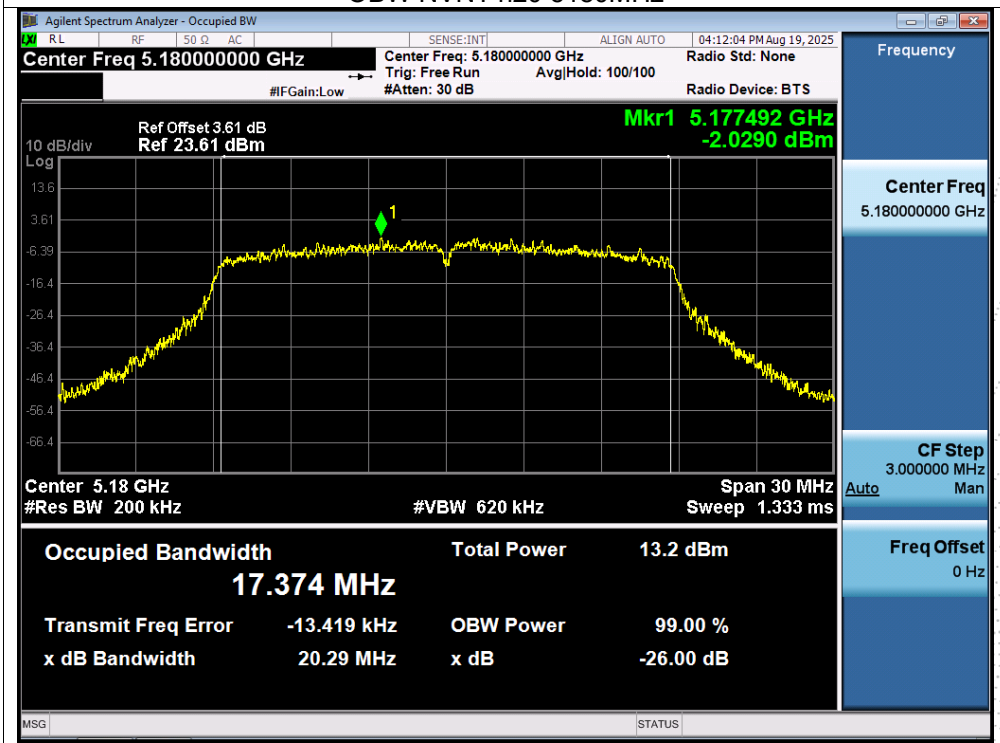
OBW NVNT a 5200MHz



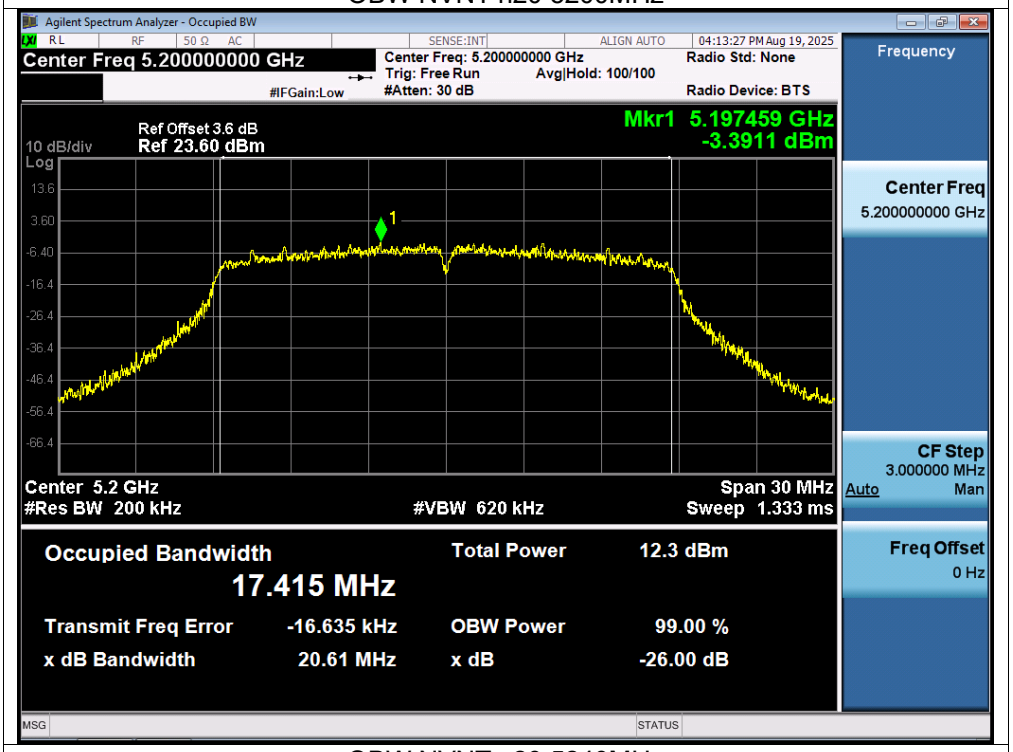
OBW NVNT a 5240MHz



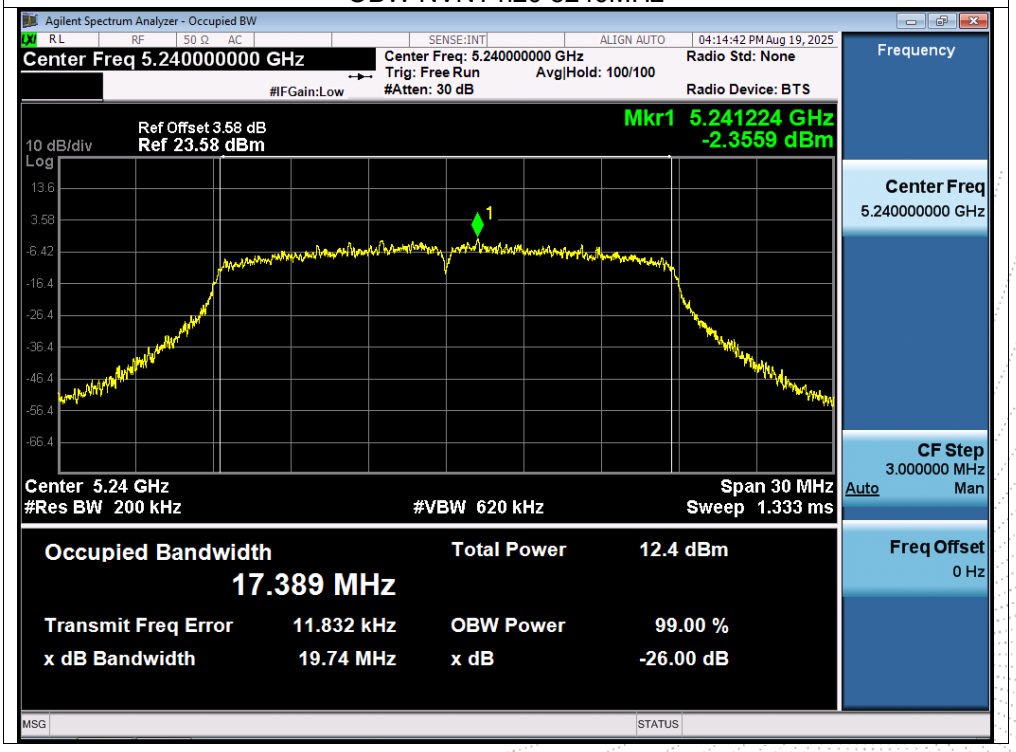
OBW NVNT n20 5180MHz



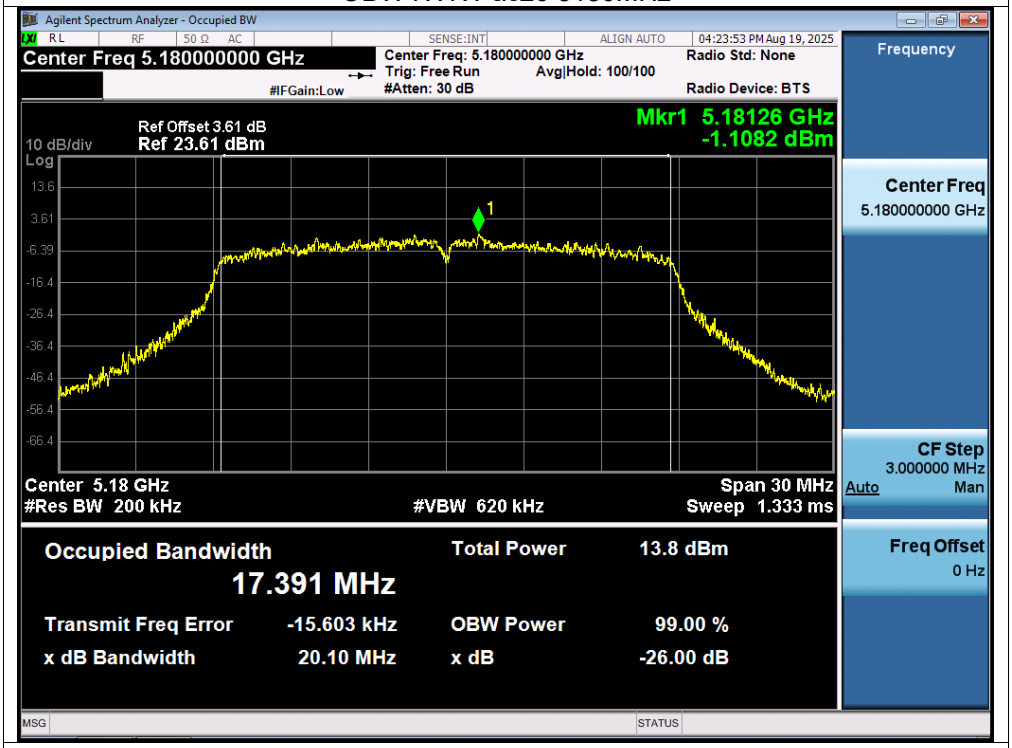
OBW NVNT n20 5200MHz



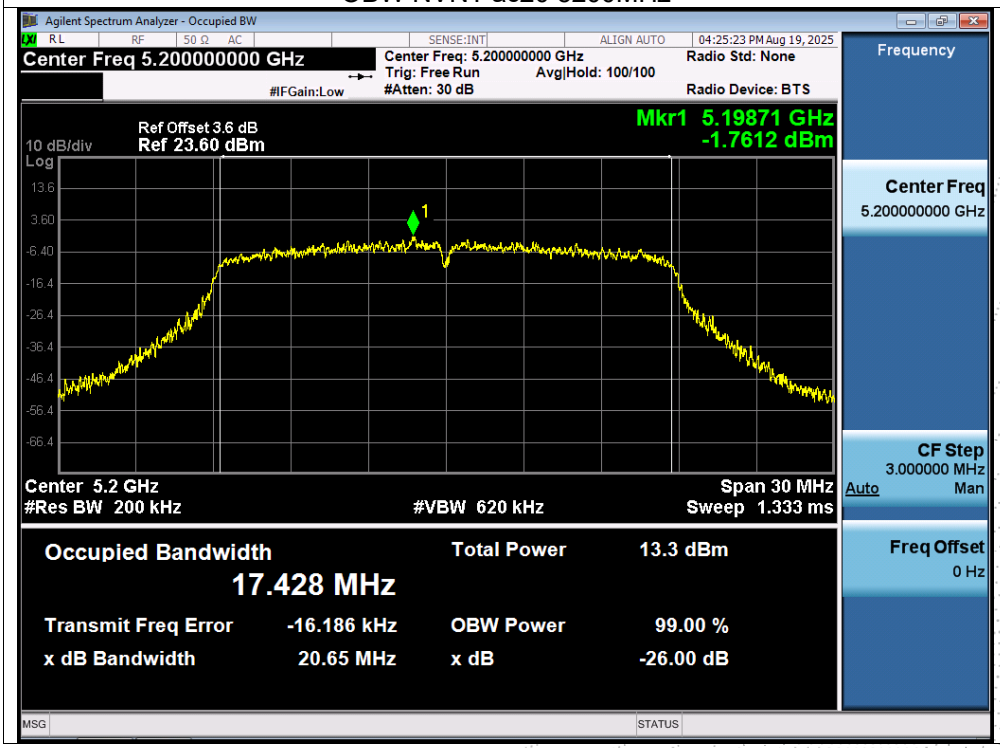
OBW NVNT n20 5240MHz



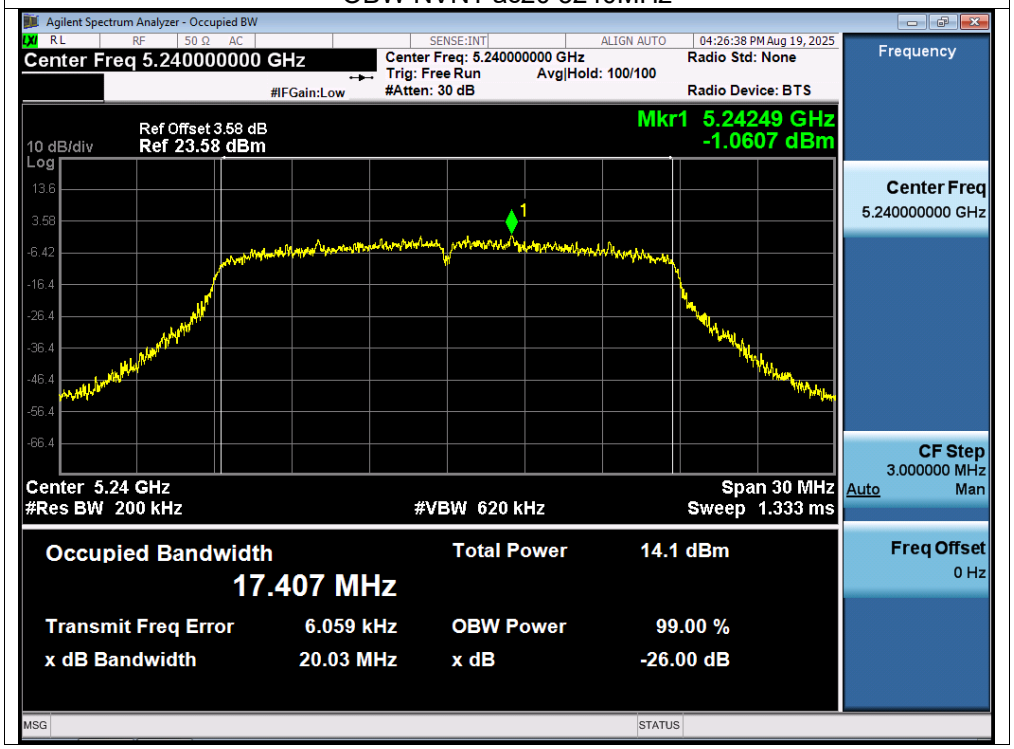
OBW NVNT ac20 5180MHz



OBW NVNT ac20 5200MHz



OBW NVNT ac20 5240MHz

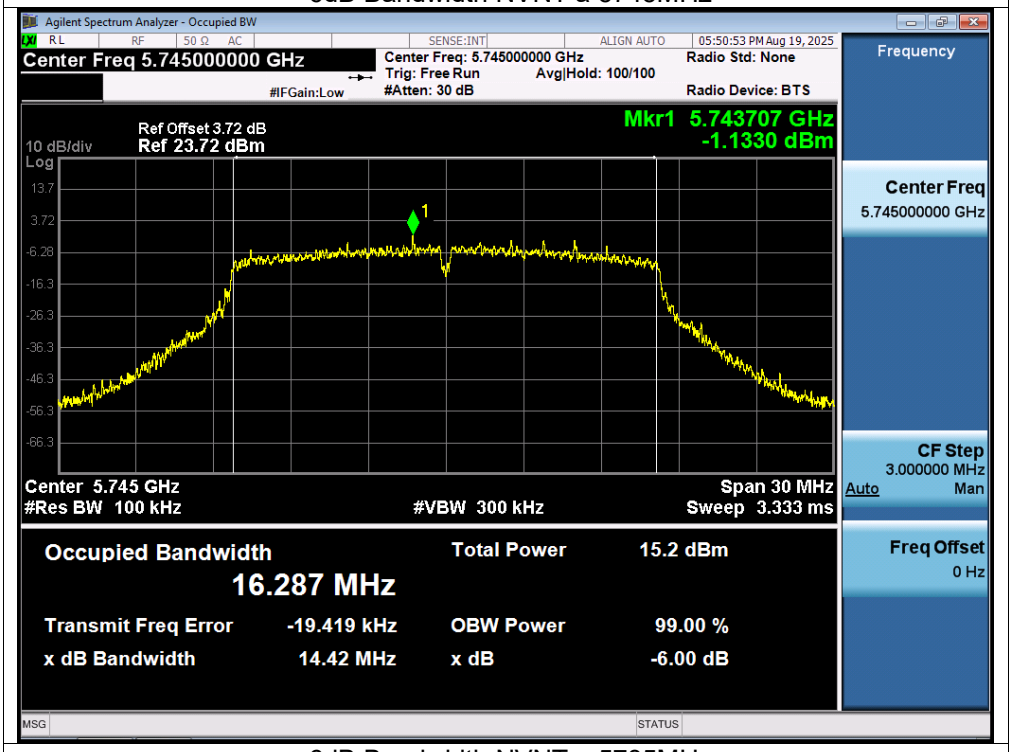


Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	DC 5V
Test Mode:	(5745-5825MHz)		

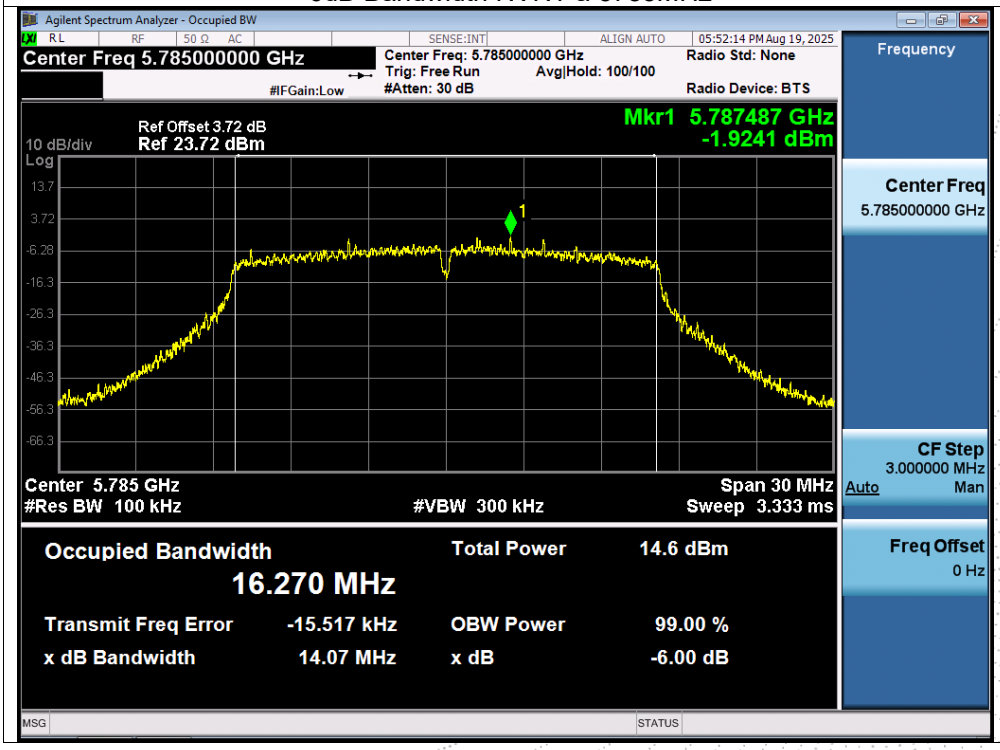
Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	99% OBW (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	14.422	16.279	0.5	Pass
NVNT	a	5785	14.074	16.289	0.5	Pass
NVNT	a	5825	14.368	16.281	0.5	Pass
NVNT	n20	5745	15.147	17.406	0.5	Pass
NVNT	n20	5785	15.060	17.408	0.5	Pass
NVNT	n20	5825	15.020	17.392	0.5	Pass
NVNT	ac20	5745	14.987	17.405	0.5	Pass
NVNT	ac20	5785	15.046	17.378	0.5	Pass
NVNT	ac20	5825	13.754	17.404	0.5	Pass

Test Graphs

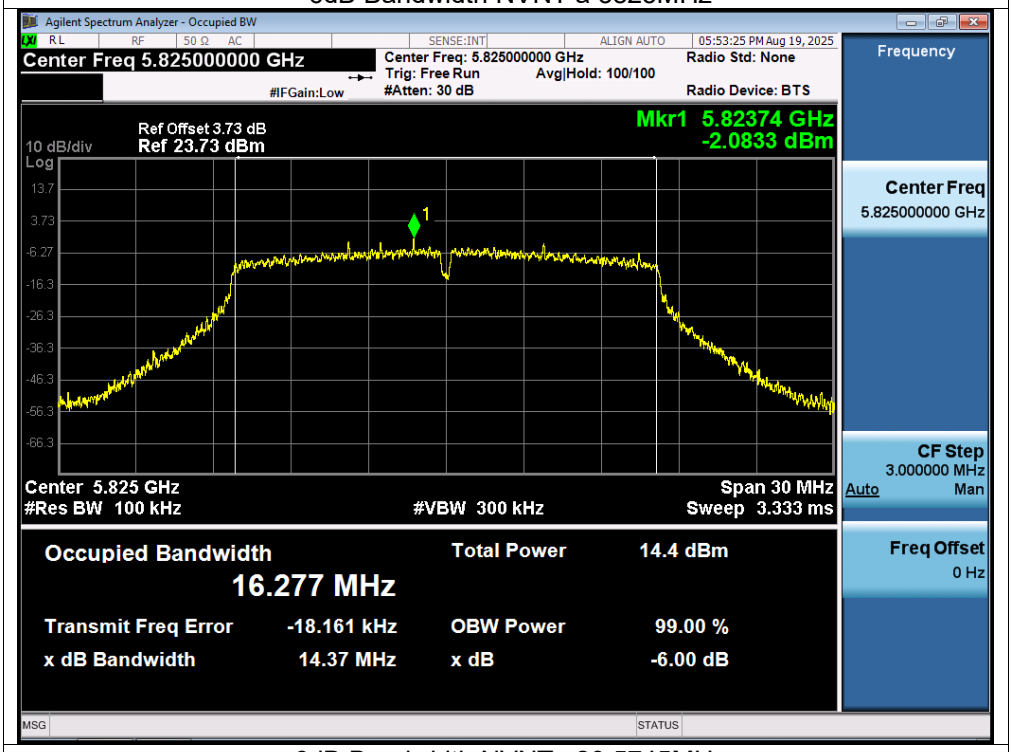
-6dB Bandwidth NVNT a 5745MHz



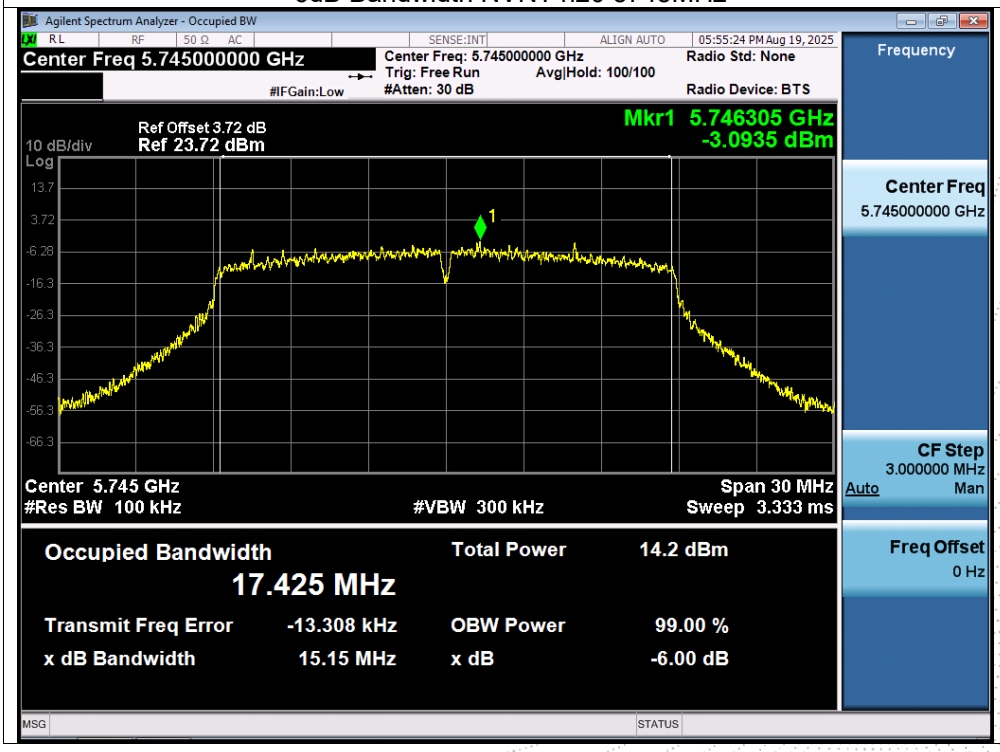
-6dB Bandwidth NVNT a 5785MHz



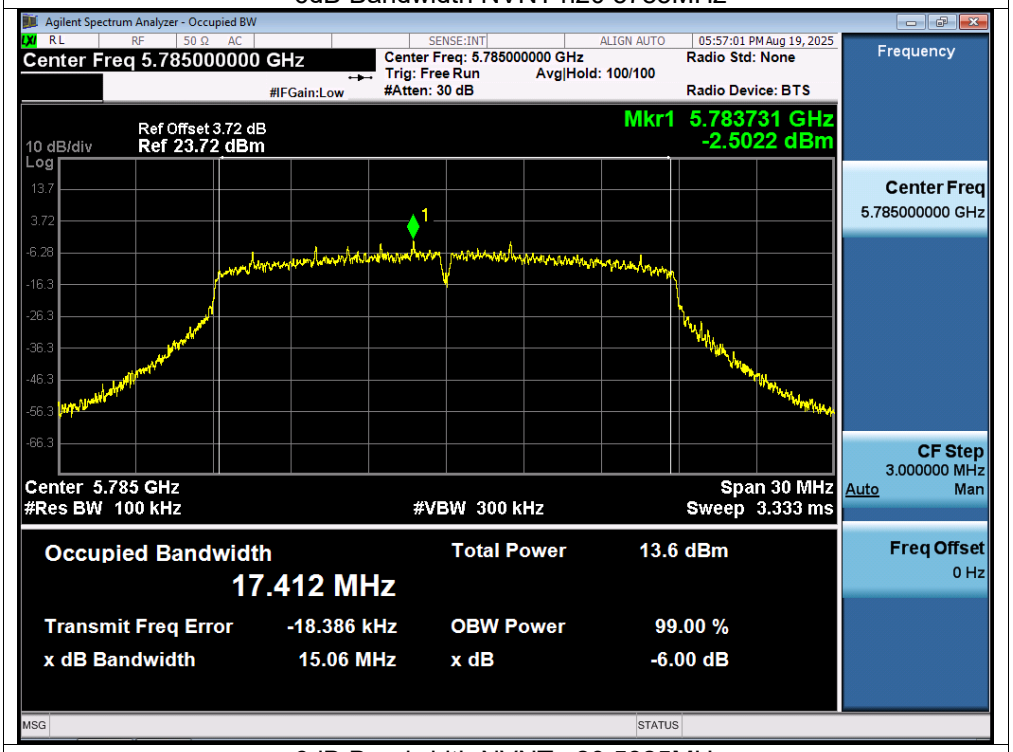
-6dB Bandwidth NVNT a 5825MHz



-6dB Bandwidth NVNT n20 5745MHz



-6dB Bandwidth NVNT n20 5785MHz



-6dB Bandwidth NVNT n20 5825MHz