TEST REPORT

Report No.:	BCTC2508942296E
Applicant:	Ugreen Group Limited
Product Name:	Wireless Extender Receiver
Test Model:	CM737(RX)
Tested Date:	2025-08-13 to 2025-09-03
Issued Date:	2025-09-03

Shenzhen BCTC Testing Co., Ltd.

FCC ID: 2AQI5-CM737R

Product Name:	Wireless Extender Receiver
Trademark:	UGREEN
Model/Type Reference:	CM737(RX)
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.:	BCTC2508942296E
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
BCTC2508942296E	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(RX)
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):2.12 dBi WIFI (5.8GHz):2.45 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

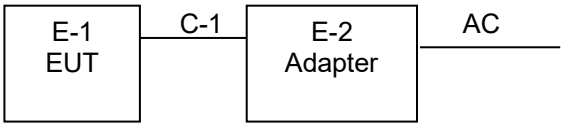
Remark:
- P/N code in the below table, for marketing purpose, will be marked on the marking plate.

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 Receiver	UGREEN	CM737(RX)	N/A	EUT
E-2	Adapter	UGREEN	CD289	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

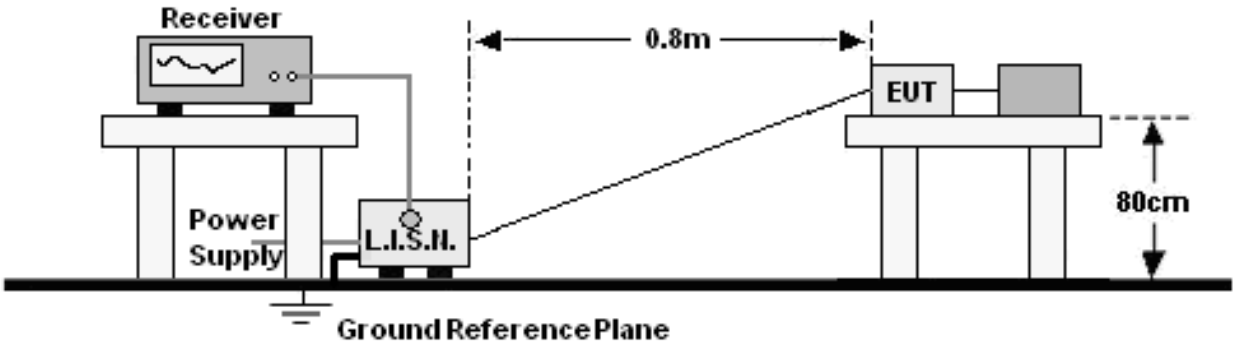
Conducted Emissions Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Receiver	R&S	ESR3	102075	May 08 2025	May 07, 2026
LISN	R&S	ENV216	101375	May 14, 2025	May 13, 2026
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Pulse limiter	Schwarzbeck	VTSD9561-F	01323	May 14, 2025	May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

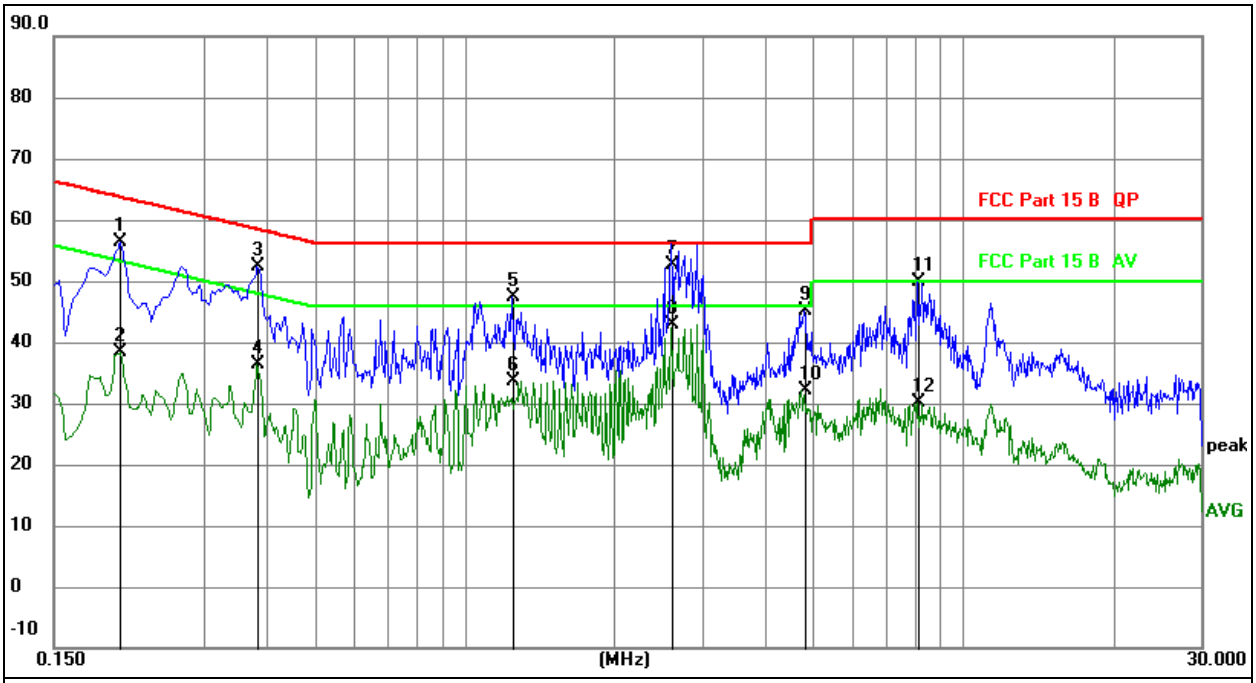
a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak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

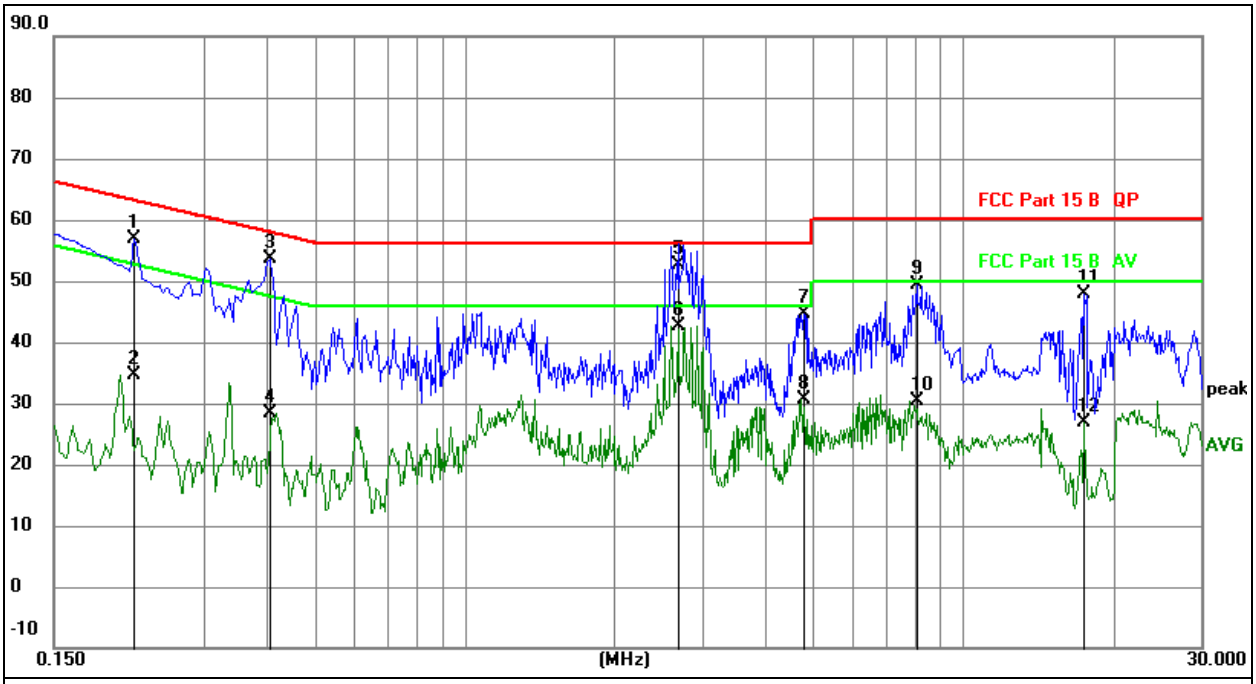
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 2	Polarization :	L



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		0.2038	36.26	20.04	56.30	63.45	-7.15	QP
2		0.2038	18.30	20.04	38.34	53.45	-15.11	AVG
3		0.3840	32.24	20.05	52.29	58.19	-5.90	QP
4		0.3840	16.37	20.05	36.42	48.19	-11.77	AVG
5		1.2434	27.19	20.25	47.44	56.00	-8.56	QP
6		1.2434	13.32	20.25	33.57	46.00	-12.43	AVG
7		2.6070	32.37	20.31	52.68	56.00	-3.32	QP
8	*	2.6070	22.55	20.31	42.86	46.00	-3.14	AVG
9		4.8075	24.46	20.70	45.16	56.00	-10.84	QP
10		4.8075	11.38	20.70	32.08	46.00	-13.92	AVG
11		8.1105	28.68	21.09	49.77	60.00	-10.23	QP
12		8.1105	9.08	21.09	30.17	50.00	-19.83	AVG

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



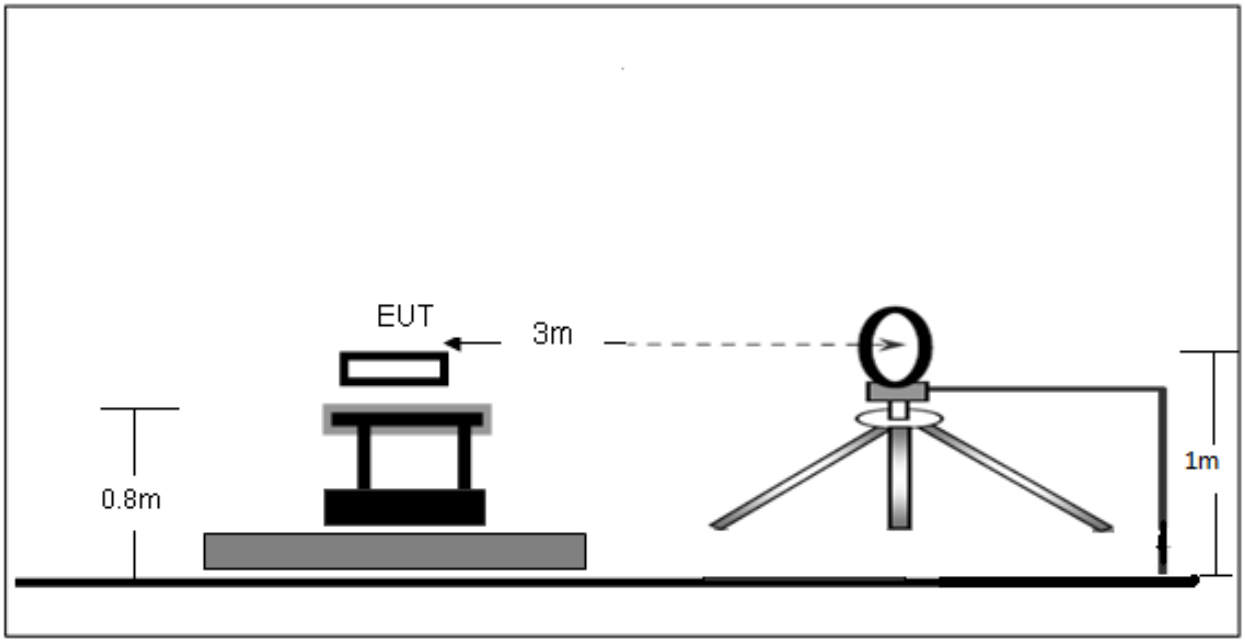
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.2173	36.77	20.04	56.81	62.92	-6.11	QP
2		0.2173	14.68	20.04	34.72	52.92	-18.20	AVG
3		0.4061	33.62	20.05	53.67	57.73	-4.06	QP
4		0.4061	8.35	20.05	28.40	47.73	-19.33	AVG
5		2.6781	32.23	20.33	52.56	56.00	-3.44	QP
6	*	2.6781	22.42	20.33	42.75	46.00	-3.25	AVG
7		4.7969	23.90	20.69	44.59	56.00	-11.41	QP
8		4.7969	9.82	20.69	30.51	46.00	-15.49	AVG
9		8.0624	28.25	21.08	49.33	60.00	-10.67	QP
10		8.0624	9.32	21.08	30.40	50.00	-19.60	AVG
11		17.4748	24.74	23.03	47.77	60.00	-12.23	QP
12		17.4748	3.73	23.03	26.76	50.00	-23.24	AVG

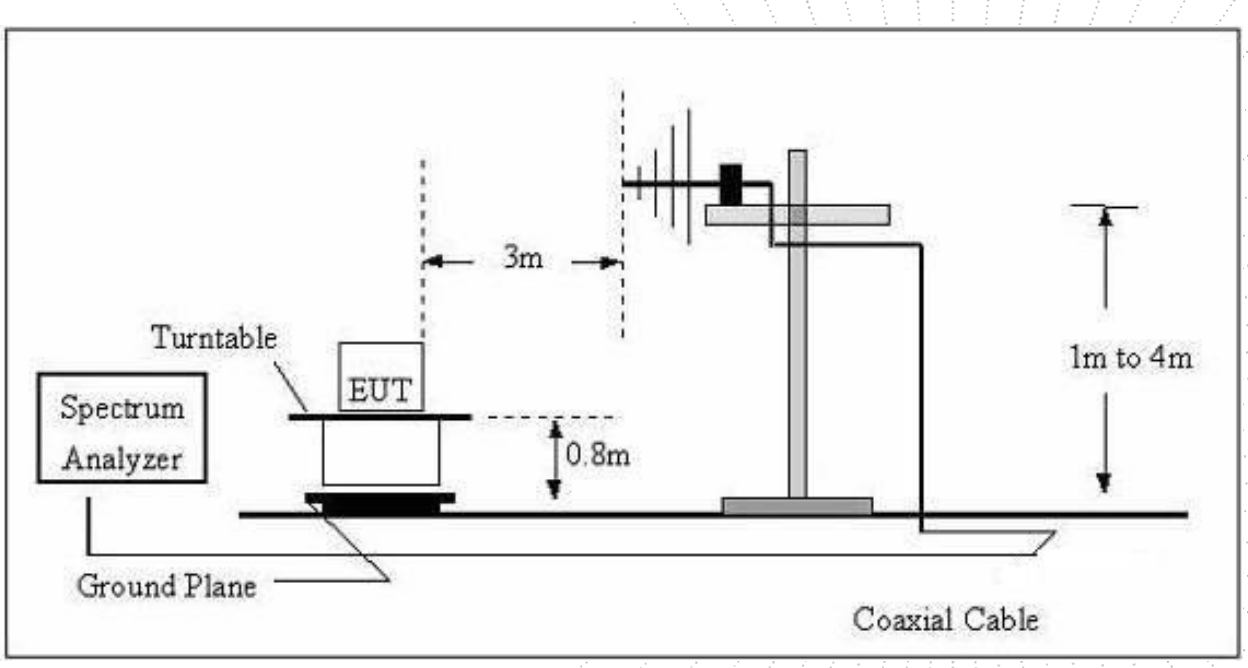
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

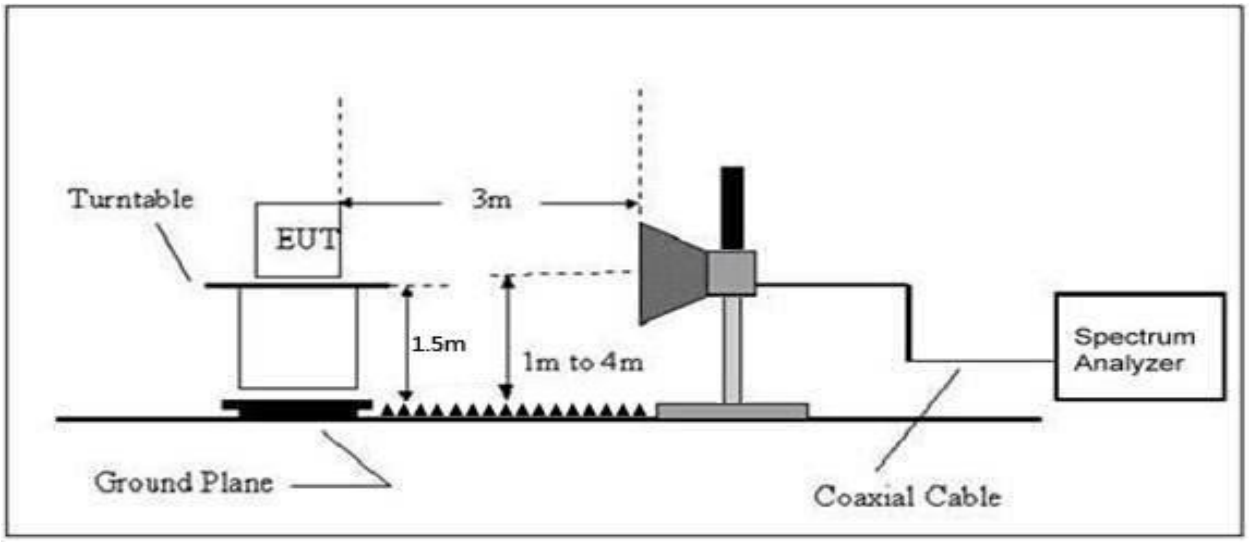
（A）Radiated Emission Test-Up Frequency Below 30MHz



（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

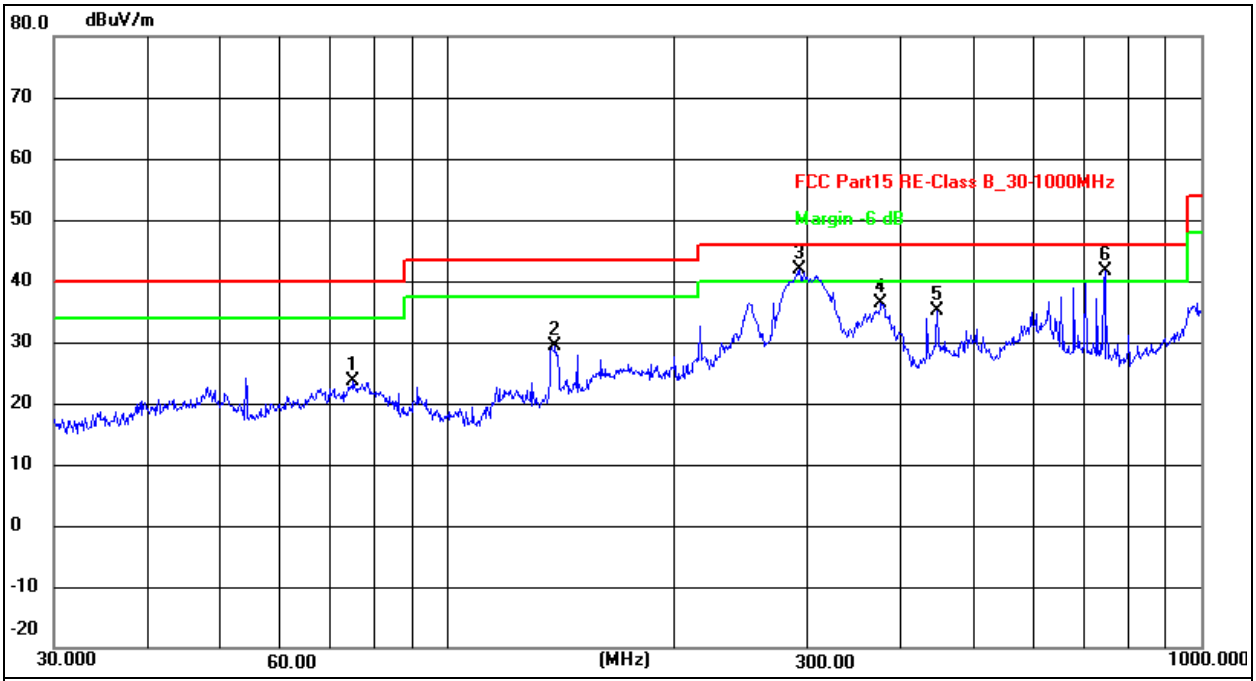
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 2		

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

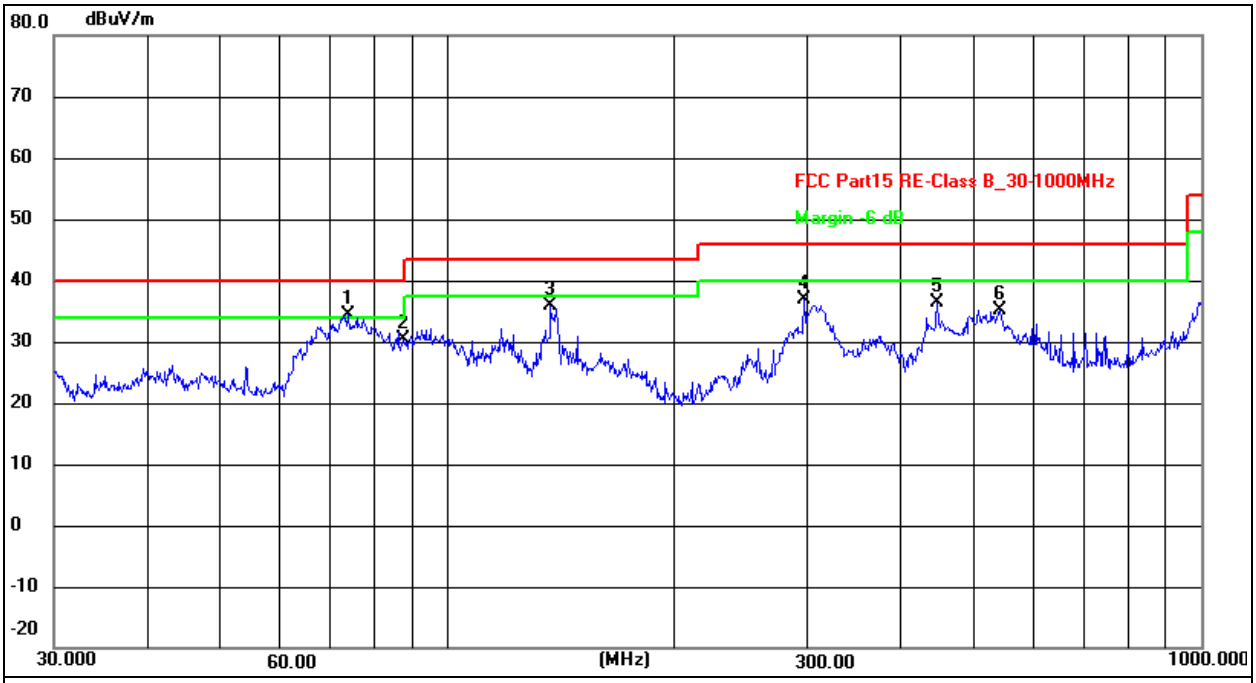
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 2	Polarization :	Horizontal



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	74.9191	38.21	-14.58	23.63	40.00	-16.37	QP
2	138.8735	40.94	-11.64	29.30	43.50	-14.20	QP
3 *	293.0842	52.70	-10.94	41.76	46.00	-4.24	QP
4	375.9385	45.17	-8.73	36.44	46.00	-9.56	QP
5	446.4141	41.24	-6.20	35.04	46.00	-10.96	QP
6 !	744.8661	42.37	-0.65	41.72	46.00	-4.28	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 *	73.6170	49.00	-14.53	34.47	40.00	-5.53	QP
2	87.4177	45.40	-15.04	30.36	40.00	-9.64	QP
3	136.9391	47.61	-11.77	35.84	43.50	-7.66	QP
4	297.2241	47.59	-10.79	36.80	46.00	-9.20	QP
5	446.4141	42.56	-6.20	36.36	46.00	-9.64	QP
6	541.3725	38.80	-3.67	35.13	46.00	-10.87	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	4434.105	73.50	-20.73	52.76	68.20	-15.44	PK
V	4434.105	59.26	-20.73	38.53	54.00	-15.47	AV
V	10360.103	63.10	-9.36	53.74	68.20	-14.46	PK
V	10360.103	49.56	-9.36	40.20	54.00	-13.80	AV
V	15540.149	62.27	-7.84	54.43	74.00	-19.57	PK
V	15540.149	49.98	-7.84	42.14	54.00	-11.86	AV
H	4434.050	72.65	-20.73	51.92	68.20	-16.28	PK
H	4434.050	59.82	-20.73	39.09	54.00	-14.91	AV
H	10360.155	64.58	-9.36	55.22	68.20	-12.98	PK
H	10360.155	49.70	-9.36	40.34	54.00	-13.66	AV
H	15540.023	61.75	-7.84	53.91	74.00	-20.09	PK
H	15540.023	49.80	-7.84	41.96	54.00	-12.04	AV
Middle Channel (5200 MHz)-Above 1G							
V	4592.149	70.20	-20.42	49.78	74.00	-24.22	PK
V	4592.149	59.68	-20.42	39.26	54.00	-14.74	AV
V	10400.109	60.70	-9.30	51.40	68.20	-16.80	PK
V	10400.109	49.82	-9.30	40.52	54.00	-13.48	AV
V	15600.004	64.27	-7.82	56.45	74.00	-17.55	PK
V	15600.004	49.39	-7.82	41.57	54.00	-12.43	AV
H	4592.015	74.68	-20.42	54.26	74.00	-19.74	PK
H	4592.015	59.41	-20.42	38.99	54.00	-15.01	AV
H	10400.105	61.07	-9.30	51.77	68.20	-16.43	PK
H	10400.105	49.67	-9.30	40.37	54.00	-13.63	AV
H	15600.093	63.20	-7.82	55.38	74.00	-18.62	PK
H	15600.093	49.84	-7.82	42.02	54.00	-11.98	AV
High Channel (5240 MHz)-Above 1G							
V	4739.166	74.02	-20.12	53.90	74.00	-20.10	PK
V	4739.166	59.00	-20.12	38.88	54.00	-15.12	AV
V	10480.037	61.51	-9.18	52.33	68.20	-15.87	PK
V	10480.037	49.76	-9.18	40.58	54.00	-13.42	AV
V	15720.035	61.37	-7.78	53.59	74.00	-20.41	PK
V	15720.035	49.53	-7.78	41.75	54.00	-12.25	AV
H	4739.159	72.39	-20.12	52.27	74.00	-21.73	PK
H	4739.159	59.20	-20.12	39.08	54.00	-14.92	AV
H	10480.144	63.30	-9.18	54.12	68.20	-14.08	PK
H	10480.144	49.87	-9.18	40.69	54.00	-13.31	AV
H	15720.107	61.94	-7.78	54.16	74.00	-19.84	PK
H	15720.107	49.82	-7.78	42.04	54.00	-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-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	4434.101	73.69	-20.73	52.96	68.20	-15.24	PK
V	4434.101	59.66	-20.73	38.93	54.00	-15.07	AV
V	10360.066	60.80	-9.36	51.44	68.20	-16.76	PK
V	10360.066	49.04	-9.36	39.68	54.00	-14.32	AV
V	15540.123	61.52	-7.84	53.68	74.00	-20.32	PK
V	15540.123	49.78	-7.84	41.94	54.00	-12.06	AV
H	4434.198	70.51	-20.73	49.78	68.20	-18.42	PK
H	4434.198	59.00	-20.73	38.27	54.00	-15.73	AV
H	10360.178	64.12	-9.36	54.76	68.20	-13.44	PK
H	10360.178	49.86	-9.36	40.50	54.00	-13.50	AV
H	15540.002	64.18	-7.84	56.34	74.00	-17.66	PK
H	15540.002	49.67	-7.84	41.83	54.00	-12.17	AV
Middle Channel (5200 MHz)-Above 1G							
V	4592.110	71.60	-20.42	51.19	74.00	-22.81	PK
V	4592.110	59.85	-20.42	39.43	54.00	-14.57	AV
V	10400.033	61.59	-9.30	52.29	68.20	-15.91	PK
V	10400.033	49.71	-9.30	40.41	54.00	-13.59	AV
V	15600.020	63.41	-7.82	55.59	74.00	-18.41	PK
V	15600.020	49.79	-7.82	41.97	54.00	-12.03	AV
H	4592.084	74.16	-20.42	53.74	74.00	-20.26	PK
H	4592.084	59.49	-20.42	39.08	54.00	-14.92	AV
H	10400.022	60.15	-9.30	50.85	68.20	-17.35	PK
H	10400.022	49.23	-9.30	39.93	54.00	-14.07	AV
H	15600.086	60.25	-7.82	52.43	74.00	-21.57	PK
H	15600.086	49.82	-7.82	42.00	54.00	-12.00	AV
High Channel (5240 MHz)-Above 1G							
V	4739.155	70.66	-20.12	50.53	74.00	-23.47	PK
V	4739.155	59.23	-20.12	39.10	54.00	-14.90	AV
V	10480.127	61.42	-9.18	52.24	68.20	-15.96	PK
V	10480.127	49.83	-9.18	40.65	54.00	-13.35	AV
V	15720.020	64.57	-7.78	56.79	74.00	-17.21	PK
V	15720.020	49.91	-7.78	42.13	54.00	-11.87	AV
H	4739.190	73.28	-20.12	53.16	74.00	-20.84	PK
H	4739.190	59.51	-20.12	39.39	54.00	-14.61	AV
H	10480.196	60.54	-9.18	51.36	68.20	-16.84	PK
H	10480.196	49.48	-9.18	40.30	54.00	-13.70	AV
H	15720.153	64.81	-7.78	57.03	74.00	-16.97	PK
H	15720.153	49.67	-7.78	41.89	54.00	-12.11	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	4434.043	73.05	-20.73	52.32	68.20	-15.88	PK
V	4434.043	59.16	-20.73	38.42	54.00	-15.58	AV
V	10360.162	64.74	-9.36	55.38	68.20	-12.82	PK
V	10360.162	49.72	-9.36	40.36	54.00	-13.64	AV
V	15540.146	63.23	-7.84	55.39	74.00	-18.61	PK
V	15540.146	49.22	-7.84	41.38	54.00	-12.62	AV
H	4434.063	70.34	-20.73	49.61	68.20	-18.59	PK
H	4434.063	59.74	-20.73	39.00	54.00	-15.00	AV
H	10360.178	64.25	-9.36	54.89	68.20	-13.31	PK
H	10360.178	49.79	-9.36	40.43	54.00	-13.57	AV
H	15540.029	62.22	-7.84	54.38	74.00	-19.62	PK
H	15540.029	49.66	-7.84	41.82	54.00	-12.18	AV
Middle Channel (5200 MHz)-Above 1G							
V	4592.194	70.02	-20.42	49.60	74.00	-24.40	PK
V	4592.194	59.64	-20.42	39.22	54.00	-14.78	AV
V	10400.168	64.87	-9.30	55.57	68.20	-12.63	PK
V	10400.168	49.75	-9.30	40.45	54.00	-13.55	AV
V	15600.091	61.76	-7.82	53.94	74.00	-20.06	PK
V	15600.091	49.17	-7.82	41.35	54.00	-12.65	AV
H	4592.105	70.07	-20.42	49.66	74.00	-24.34	PK
H	4592.105	59.67	-20.42	39.25	54.00	-14.75	AV
H	10400.171	60.77	-9.30	51.47	68.20	-16.73	PK
H	10400.171	49.93	-9.30	40.63	54.00	-13.37	AV
H	15600.095	64.96	-7.82	57.14	74.00	-16.86	PK
H	15600.095	49.55	-7.82	41.73	54.00	-12.27	AV
High Channel (5240 MHz)-Above 1G							
V	4739.078	70.18	-20.12	50.06	74.00	-23.94	PK
V	4739.078	59.95	-20.12	39.83	54.00	-14.17	AV
V	10480.158	63.47	-9.18	54.29	68.20	-13.91	PK
V	10480.158	49.07	-9.18	39.89	54.00	-14.11	AV
V	15720.049	61.97	-7.78	54.19	74.00	-19.81	PK
V	15720.049	49.10	-7.78	41.32	54.00	-12.68	AV
H	4739.196	72.73	-20.12	52.61	74.00	-21.39	PK
H	4739.196	59.47	-20.12	39.35	54.00	-14.65	AV
H	10480.067	64.28	-9.18	55.10	68.20	-13.10	PK
H	10480.067	49.80	-9.18	40.62	54.00	-13.38	AV
H	15720.172	62.00	-7.78	54.22	74.00	-19.78	PK
H	15720.172	49.40	-7.78	41.62	54.00	-12.38	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	4679.028	72.36	-20.24	52.11	74.00	-21.89	PK
V	4679.028	59.34	-20.24	39.09	54.00	-14.91	AV
V	11490.046	60.15	-8.79	51.36	68.20	-16.84	PK
V	11490.046	49.46	-8.79	40.67	54.00	-13.33	AV
V	17235.062	57.27	-3.18	54.09	68.20	-14.11	PK
V	17235.062	44.38	-3.18	41.20	54.00	-12.80	AV
H	4679.152	72.63	-20.24	52.39	74.00	-21.61	PK
H	4679.152	59.79	-20.24	39.55	54.00	-14.45	AV
H	11490.142	63.24	-8.79	54.45	68.20	-13.75	PK
H	11490.142	49.33	-8.79	40.54	54.00	-13.46	AV
H	17235.027	56.47	-3.18	53.29	68.20	-14.91	PK
H	17235.027	44.91	-3.18	41.73	54.00	-12.27	AV
Middle Channel (5785 MHz)-Above 1G							
V	4592.068	72.09	-20.42	51.68	74.00	-22.32	PK
V	4592.068	59.60	-20.42	39.19	54.00	-14.81	AV
V	11570.079	64.92	-8.86	56.06	68.20	-12.14	PK
V	11570.079	49.81	-8.86	40.95	54.00	-13.05	AV
V	17355.021	59.18	-2.52	56.66	68.20	-11.54	PK
V	17355.021	44.28	-2.52	41.76	54.00	-12.24	AV
H	4592.072	71.60	-20.42	51.18	74.00	-22.82	PK
H	4592.072	59.63	-20.42	39.21	54.00	-14.79	AV
H	11570.137	63.86	-8.86	55.00	68.20	-13.20	PK
H	11570.137	49.64	-8.86	40.78	54.00	-13.22	AV
H	17355.030	58.27	-2.52	55.75	68.20	-12.45	PK
H	17355.030	44.28	-2.52	41.76	54.00	-12.24	AV
High Channel (5825 MHz)-Above 1G							
V	6039.033	72.34	-18.93	53.41	68.20	-14.79	PK
V	6039.033	59.41	-18.93	40.47	54.00	-13.53	AV
V	11650.025	63.61	-8.92	54.69	74.00	-19.31	PK
V	11650.025	49.17	-8.92	40.25	54.00	-13.75	AV
V	17475.075	59.99	-1.86	58.13	68.20	-10.07	PK
V	17475.075	44.30	-1.86	42.44	54.00	-11.56	AV
H	6039.096	70.23	-18.93	51.30	68.20	-16.90	PK
H	6039.096	59.44	-18.93	40.50	54.00	-13.50	AV
H	11650.180	64.00	-8.92	55.08	74.00	-18.92	PK
H	11650.180	49.63	-8.92	40.71	54.00	-13.29	AV
H	17475.084	55.49	-1.86	53.63	68.20	-14.57	PK
H	17475.084	44.30	-1.86	42.44	54.00	-11.56	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	4679.101	70.22	-20.24	49.97	74.00	-24.03	PK
V	4679.101	59.66	-20.24	39.42	54.00	-14.58	AV
V	11490.117	60.49	-8.79	51.70	68.20	-16.50	PK
V	11490.117	49.72	-8.79	40.93	54.00	-13.07	AV
V	17235.017	56.07	-3.18	52.89	68.20	-15.31	PK
V	17235.017	44.80	-3.18	41.62	54.00	-12.38	AV
H	4679.102	72.90	-20.24	52.65	74.00	-21.35	PK
H	4679.102	59.98	-20.24	39.74	54.00	-14.26	AV
H	11490.090	60.38	-8.79	51.59	68.20	-16.61	PK
H	11490.090	49.01	-8.79	40.22	54.00	-13.78	AV
H	17235.068	56.10	-3.18	52.92	68.20	-15.28	PK
H	17235.068	44.22	-3.18	41.04	54.00	-12.96	AV
Middle Channel (5785 MHz)-Above 1G							
V	4592.012	73.35	-20.42	52.93	74.00	-21.07	PK
V	4592.012	59.08	-20.42	38.67	54.00	-15.33	AV
V	11570.002	63.00	-8.86	54.14	68.20	-14.06	PK
V	11570.002	49.25	-8.86	40.39	54.00	-13.61	AV
V	17355.196	56.47	-2.52	53.95	68.20	-14.25	PK
V	17355.196	44.24	-2.52	41.72	54.00	-12.28	AV
H	4592.157	71.53	-20.42	51.12	74.00	-22.88	PK
H	4592.157	59.84	-20.42	39.43	54.00	-14.57	AV
H	11570.166	61.80	-8.86	52.94	68.20	-15.26	PK
H	11570.166	49.08	-8.86	40.22	54.00	-13.78	AV
H	17355.160	58.22	-2.52	55.70	68.20	-12.50	PK
H	17355.160	44.82	-2.52	42.30	54.00	-11.70	AV
High Channel (5825 MHz)-Above 1G							
V	6039.021	70.51	-18.93	51.57	68.20	-16.63	PK
V	6039.021	59.93	-18.93	41.00	54.00	-13.00	AV
V	11650.199	61.26	-8.92	52.34	74.00	-21.66	PK
V	11650.199	49.13	-8.92	40.21	54.00	-13.79	AV
V	17475.130	57.45	-1.86	55.59	68.20	-12.61	PK
V	17475.130	44.96	-1.86	43.10	54.00	-10.90	AV
H	6039.007	71.71	-18.93	52.78	68.20	-15.42	PK
H	6039.007	59.44	-18.93	40.51	54.00	-13.49	AV
H	11650.199	60.29	-8.92	51.37	74.00	-22.63	PK
H	11650.199	49.81	-8.92	40.89	54.00	-13.11	AV
H	17475.116	56.96	-1.86	55.10	68.20	-13.10	PK
H	17475.116	44.43	-1.86	42.57	54.00	-11.43	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.

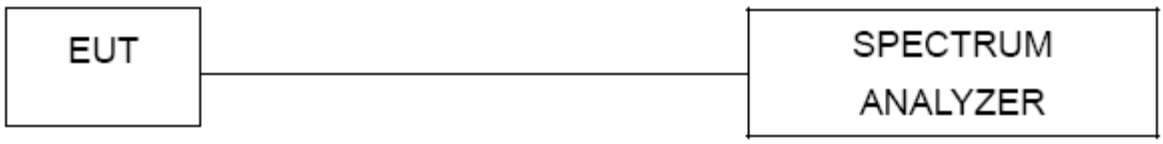
Test Mode:	TX(5.8G) - 802.11ac-HT20

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	4679.020	74.08	-20.24	53.84	74.00	-20.16	PK
V	4679.020	59.65	-20.24	39.41	54.00	-14.59	AV
V	11490.185	64.64	-8.79	55.85	68.20	-12.35	PK
V	11490.185	49.71	-8.79	40.92	54.00	-13.08	AV
V	17235.195	56.59	-3.18	53.41	68.20	-14.79	PK
V	17235.195	44.11	-3.18	40.93	54.00	-13.07	AV
H	4679.167	72.78	-20.24	52.54	74.00	-21.46	PK
H	4679.167	59.14	-20.24	38.90	54.00	-15.10	AV
H	11490.015	63.87	-8.79	55.08	68.20	-13.12	PK
H	11490.015	49.52	-8.79	40.73	54.00	-13.27	AV
H	17235.054	59.71	-3.18	56.53	68.20	-11.67	PK
H	17235.054	44.74	-3.18	41.56	54.00	-12.44	AV
Middle Channel (5785 MHz)-Above 1G							
V	4592.031	72.56	-20.42	52.14	74.00	-21.86	PK
V	4592.031	59.84	-20.42	39.42	54.00	-14.58	AV
V	11570.009	63.37	-8.86	54.51	68.20	-13.69	PK
V	11570.009	49.67	-8.86	40.81	54.00	-13.19	AV
V	17355.072	55.63	-2.52	53.11	68.20	-15.09	PK
V	17355.072	44.37	-2.52	41.85	54.00	-12.15	AV
H	4592.049	74.51	-20.42	54.10	74.00	-19.90	PK
H	4592.049	59.30	-20.42	38.89	54.00	-15.11	AV
H	11570.196	60.41	-8.86	51.55	68.20	-16.65	PK
H	11570.196	49.69	-8.86	40.83	54.00	-13.17	AV
H	17355.101	58.05	-2.52	55.53	68.20	-12.67	PK
H	17355.101	44.76	-2.52	42.24	54.00	-11.76	AV
High Channel (5825 MHz)-Above 1G							
V	6039.029	70.82	-18.93	51.89	68.20	-16.31	PK
V	6039.029	59.77	-18.93	40.84	54.00	-13.16	AV
V	11650.160	61.21	-8.92	52.29	74.00	-21.71	PK
V	11650.160	49.47	-8.92	40.55	54.00	-13.45	AV
V	17475.164	58.46	-1.86	56.60	68.20	-11.60	PK
V	17475.164	44.87	-1.86	43.01	54.00	-10.99	AV
H	6039.031	71.02	-18.93	52.09	68.20	-16.11	PK
H	6039.031	59.11	-18.93	40.18	54.00	-13.82	AV
H	11650.191	61.09	-8.92	52.17	74.00	-21.83	PK
H	11650.191	49.70	-8.92	40.78	54.00	-13.22	AV
H	17475.053	58.11	-1.86	56.25	68.20	-11.95	PK
H	17475.053	44.71	-1.86	42.85	54.00	-11.15	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.

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.

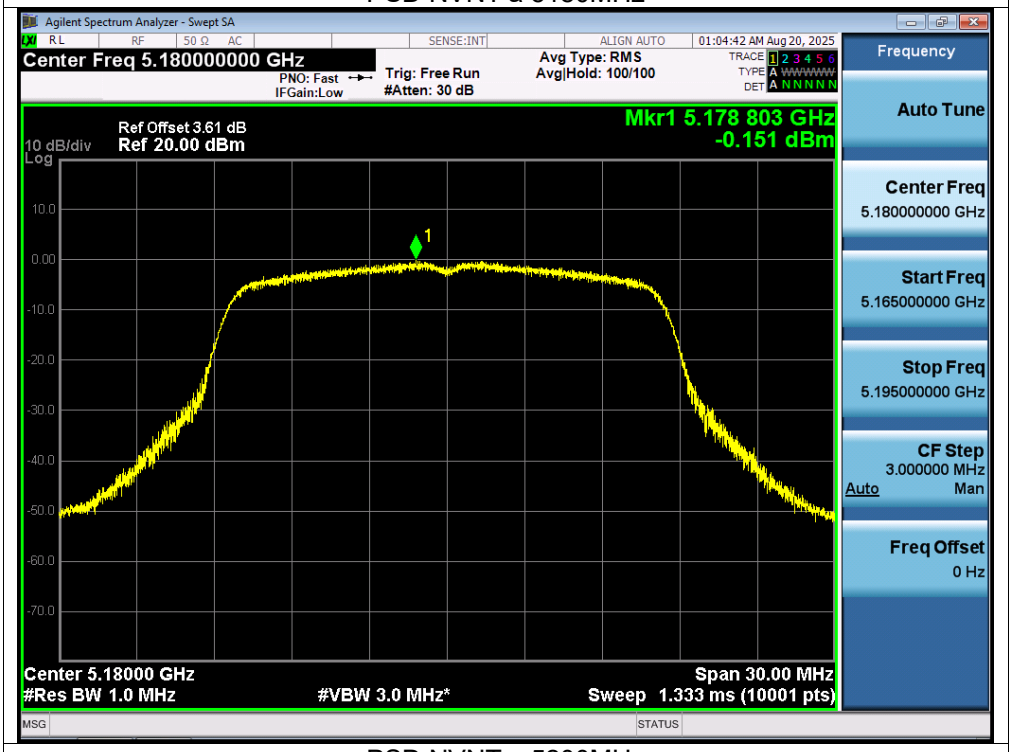
8.5 Test Result

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

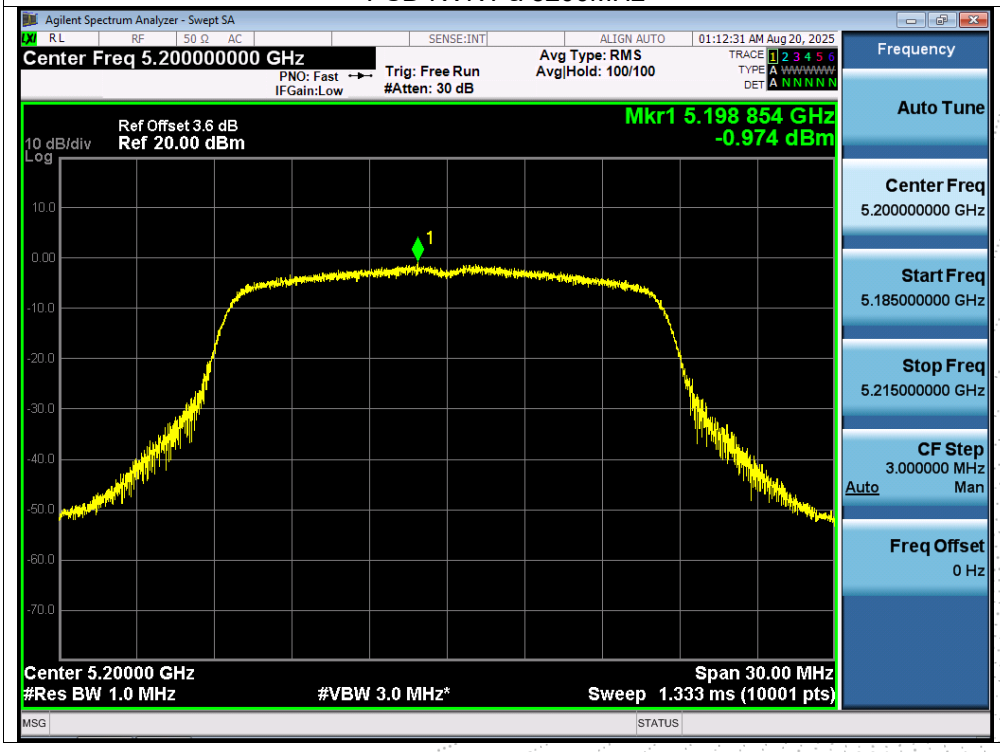
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	-0.15	11	Pass
NVNT	a	5200	-0.97	11	Pass
NVNT	a	5240	-1.59	11	Pass
NVNT	n20	5180	-1.63	11	Pass
NVNT	n20	5200	-2.50	11	Pass
NVNT	n20	5240	-2.62	11	Pass
NVNT	ac20	5180	-1.88	11	Pass
NVNT	ac20	5200	-3.05	11	Pass
NVNT	ac20	5240	-2.86	11	Pass

Test Graphs

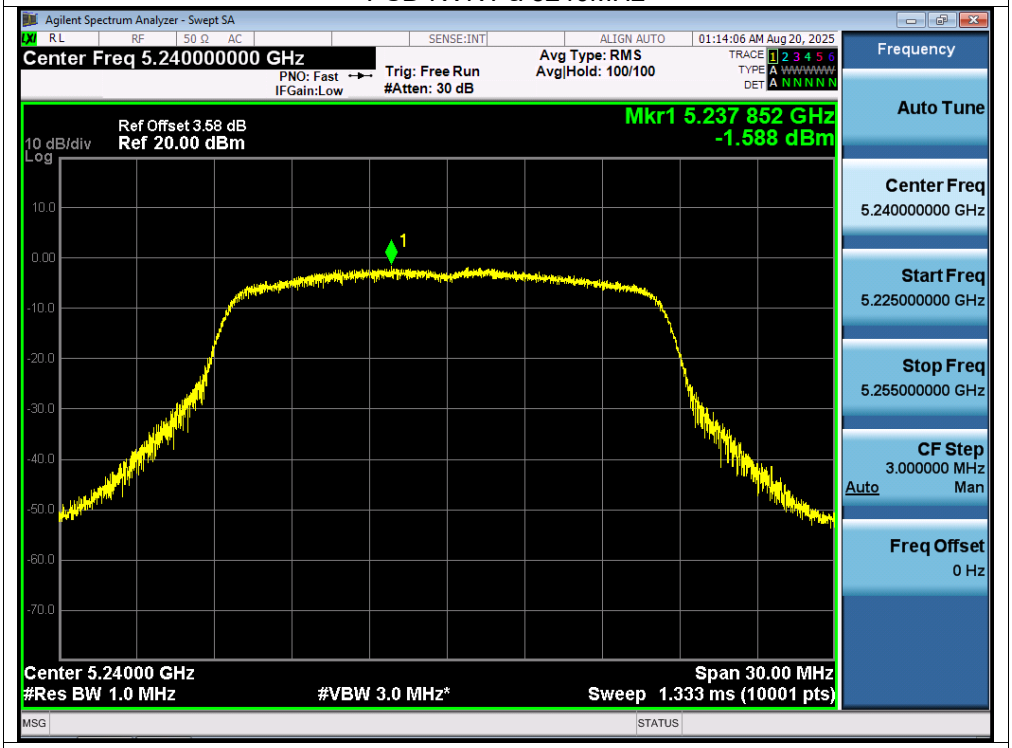
PSD NVNT a 5180MHz



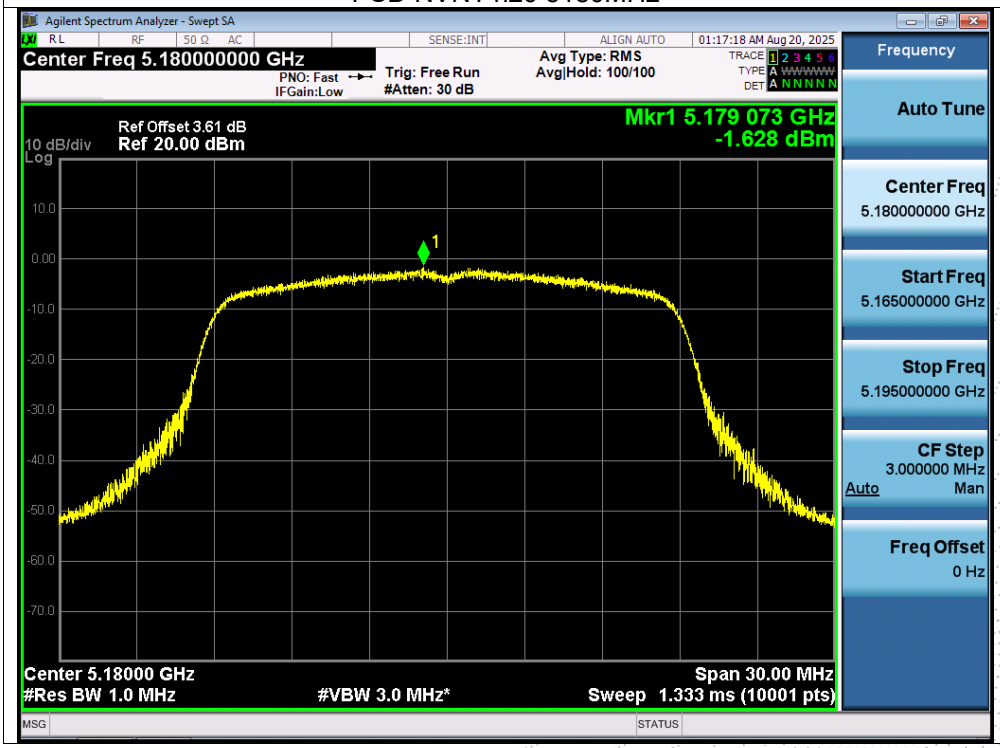
PSD NVNT a 5200MHz



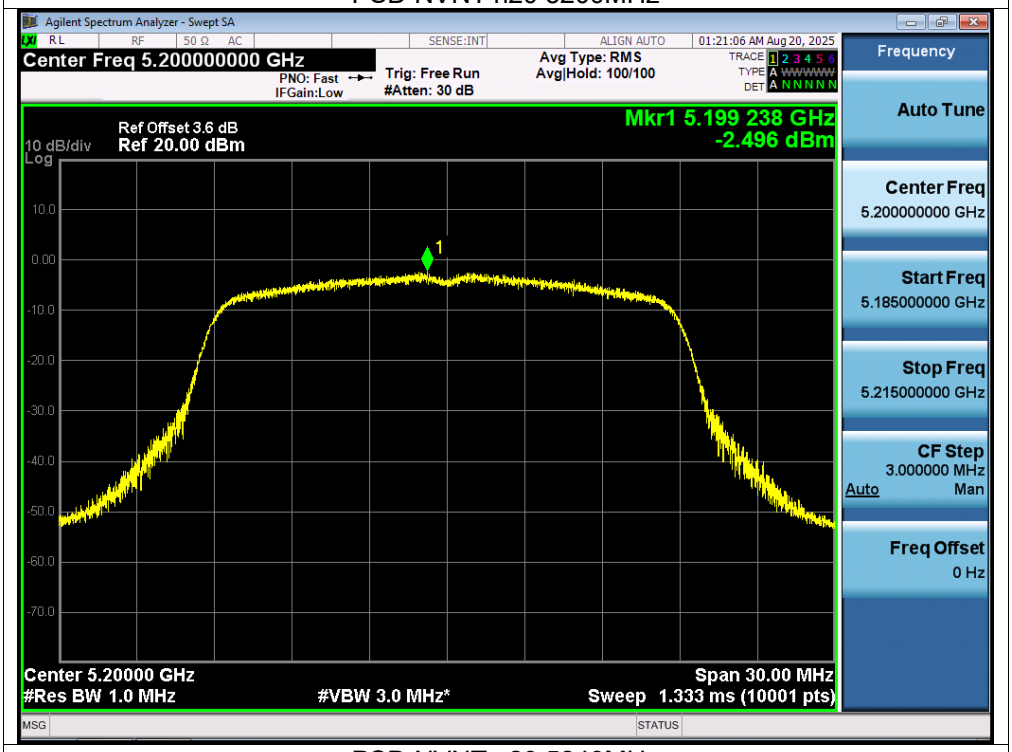
PSD NVNT a 5240MHz



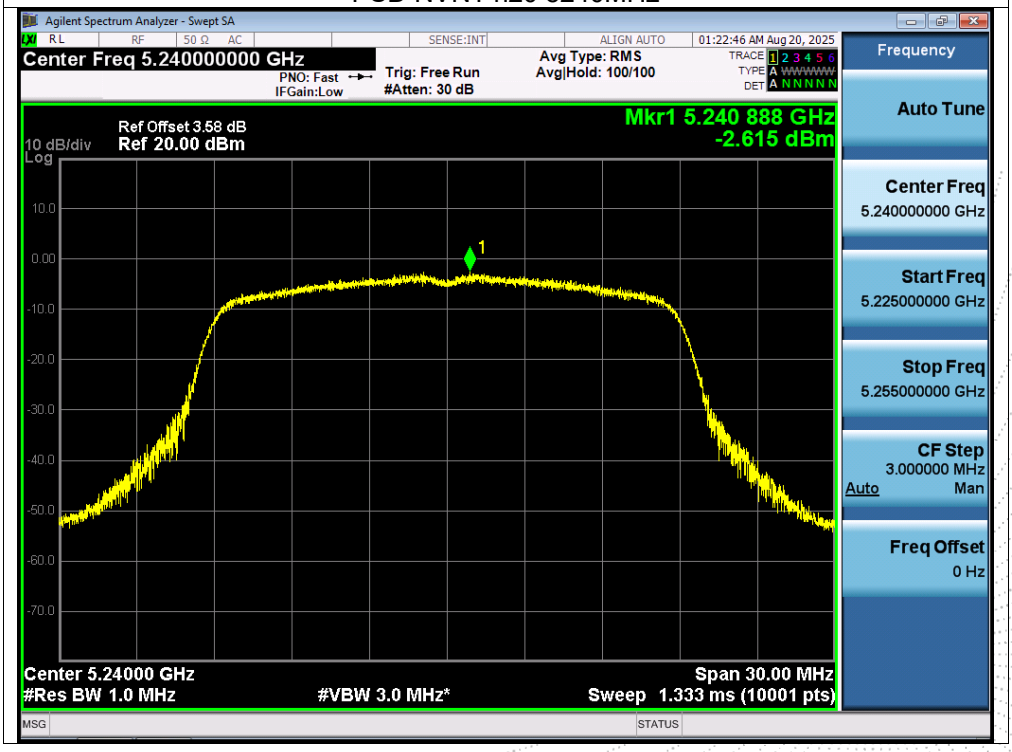
PSD NVNT n20 5180MHz



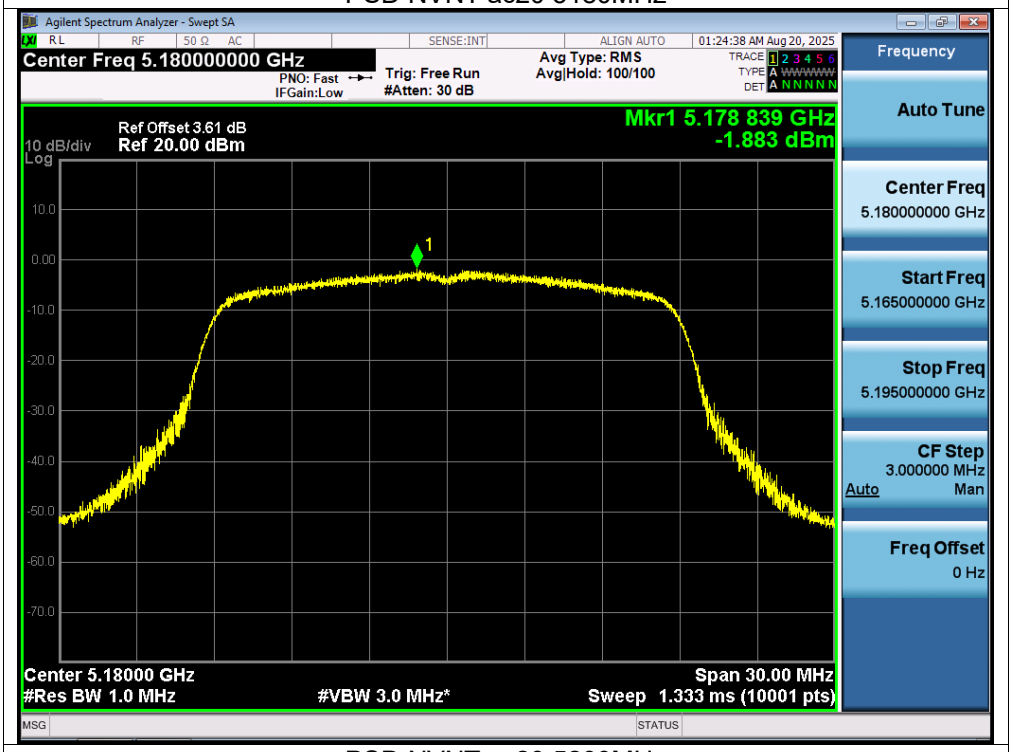
PSD NVNT n20 5200MHz



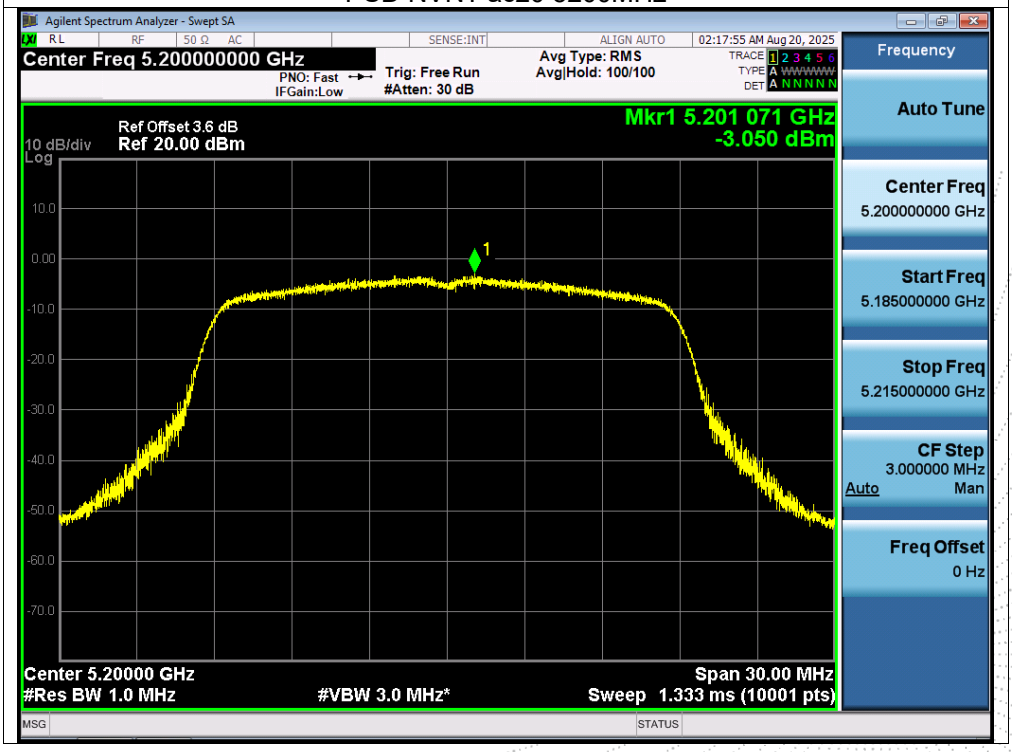
PSD NVNT n20 5240MHz



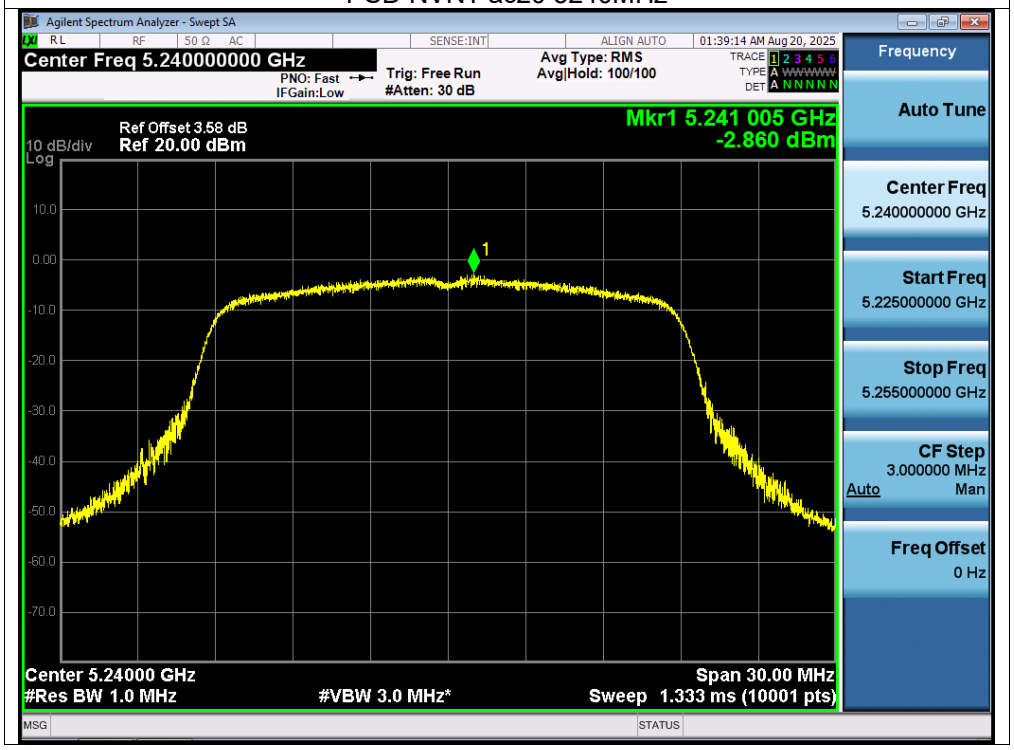
PSD NVNT ac20 5180MHz



PSD NVNT ac20 5200MHz



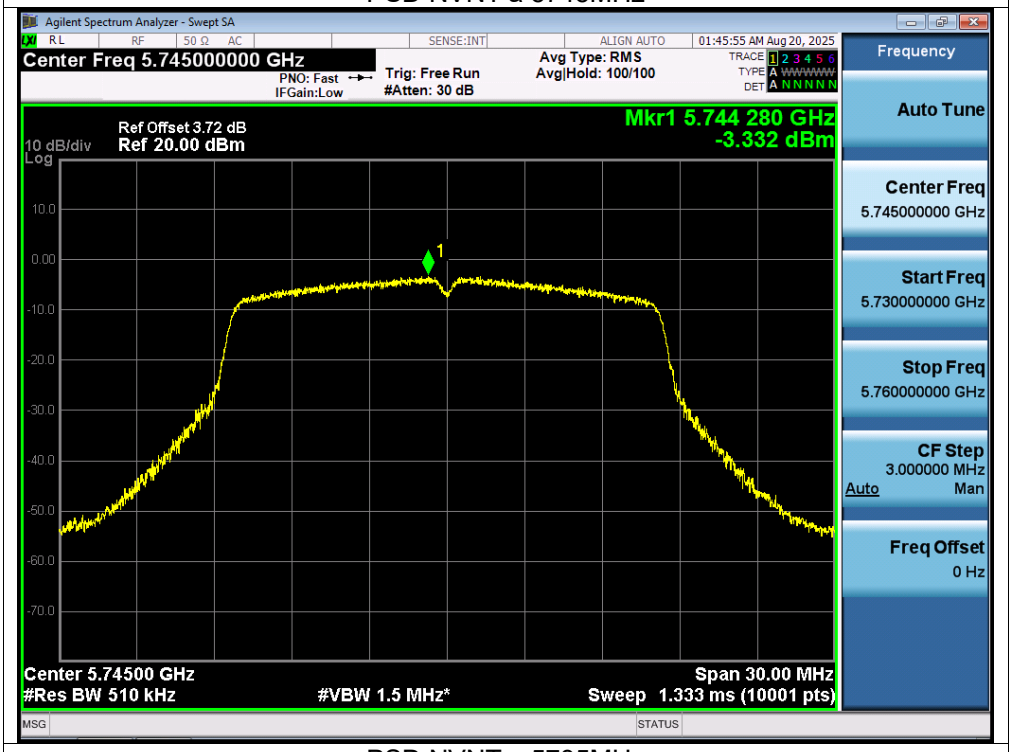
PSD NVNT ac20 5240MHz



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

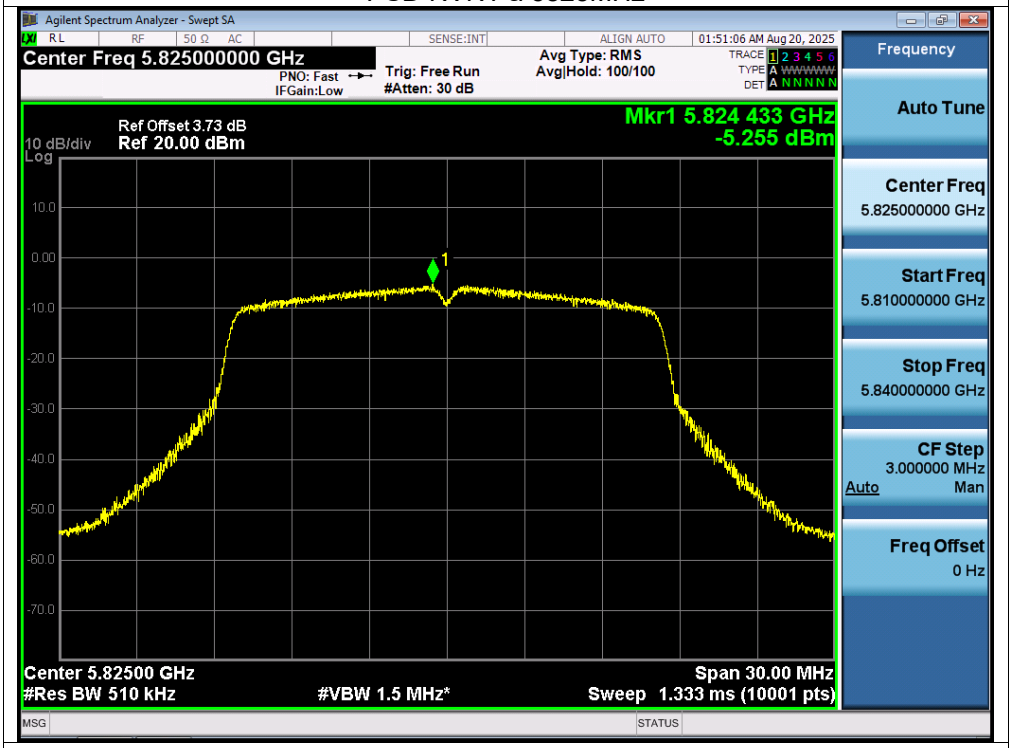
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	-3.33	30	Pass
NVNT	a	5785	-4.25	30	Pass
NVNT	a	5825	-5.26	30	Pass
NVNT	n20	5745	-4.79	30	Pass
NVNT	n20	5785	-5.37	30	Pass
NVNT	n20	5825	-6.86	30	Pass
NVNT	ac20	5745	-4.75	30	Pass
NVNT	ac20	5785	-5.80	30	Pass
NVNT	ac20	5825	-6.43	30	Pass

Test Graphs
PSD NVNT a 5745MHz

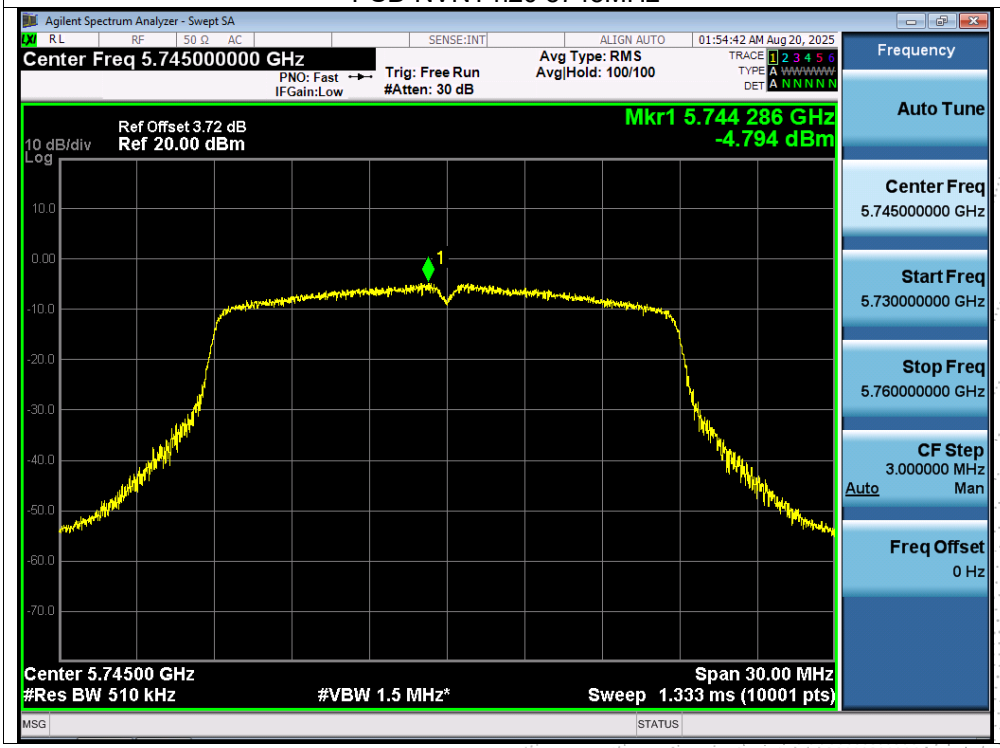


PSD NVNT a 5785MHz

PSD NVNT a 5825MHz



PSD NVNT n20 5745MHz

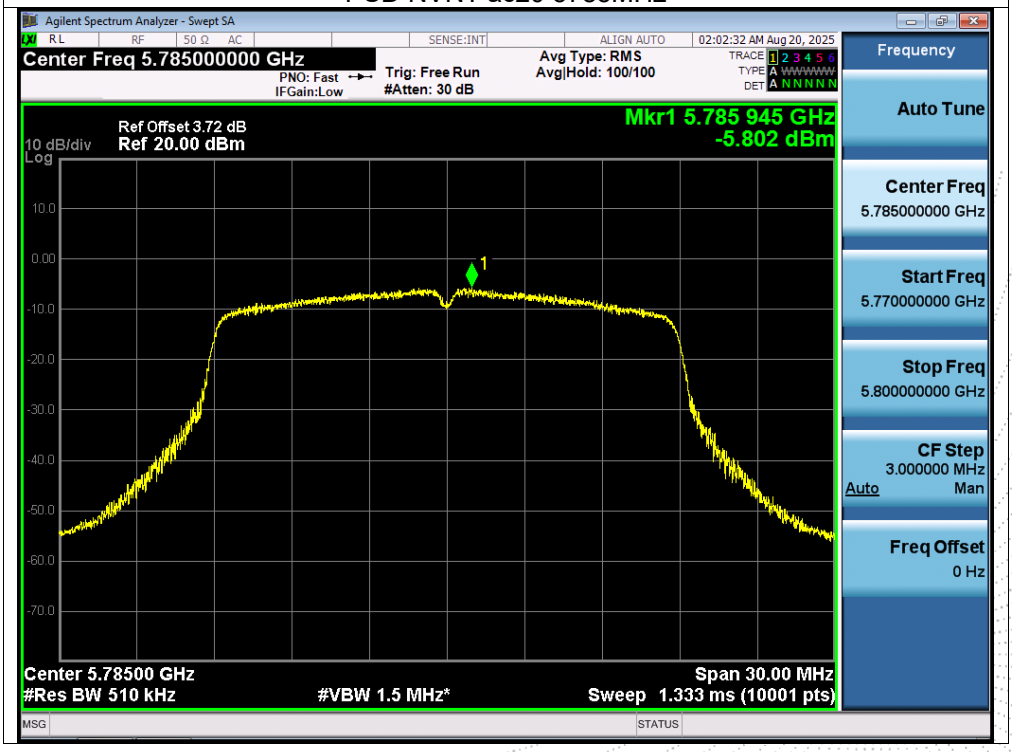


PSD NVNT n20 5785MHz

PSD NVNT n20 5825MHz

PSD NVNT ac20 5745MHz

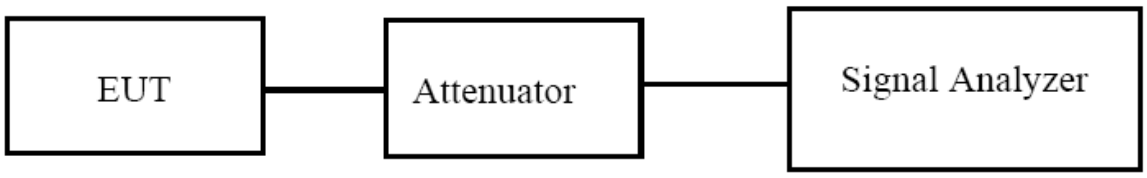
PSD NVNT ac20 5785MHz



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

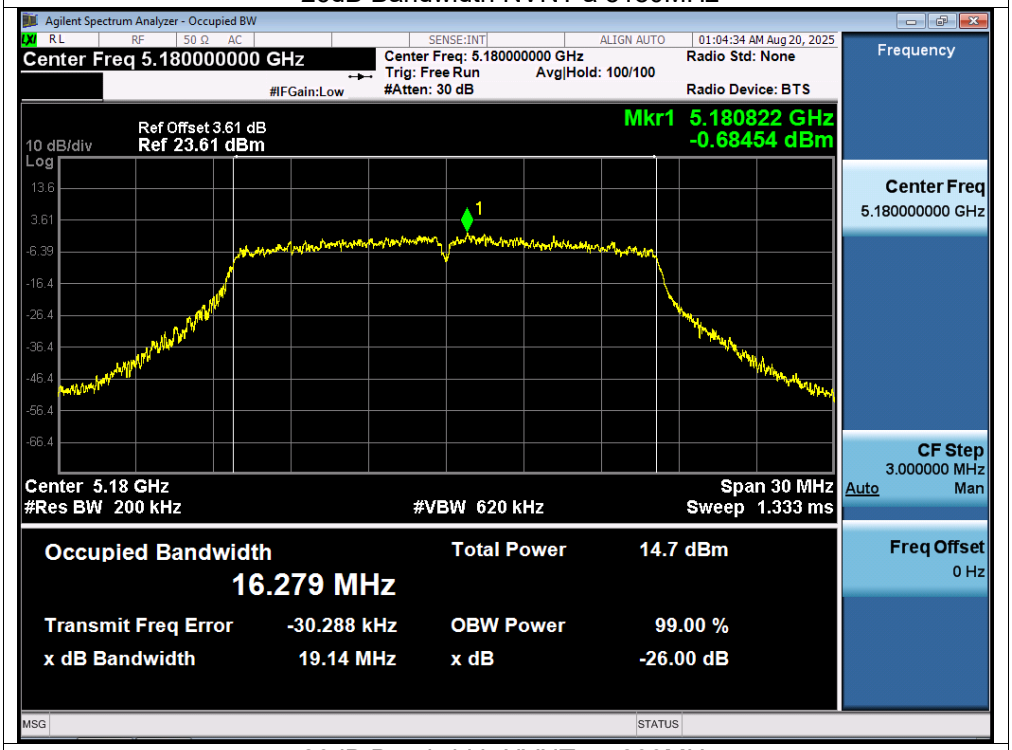
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

9.5 Test Result

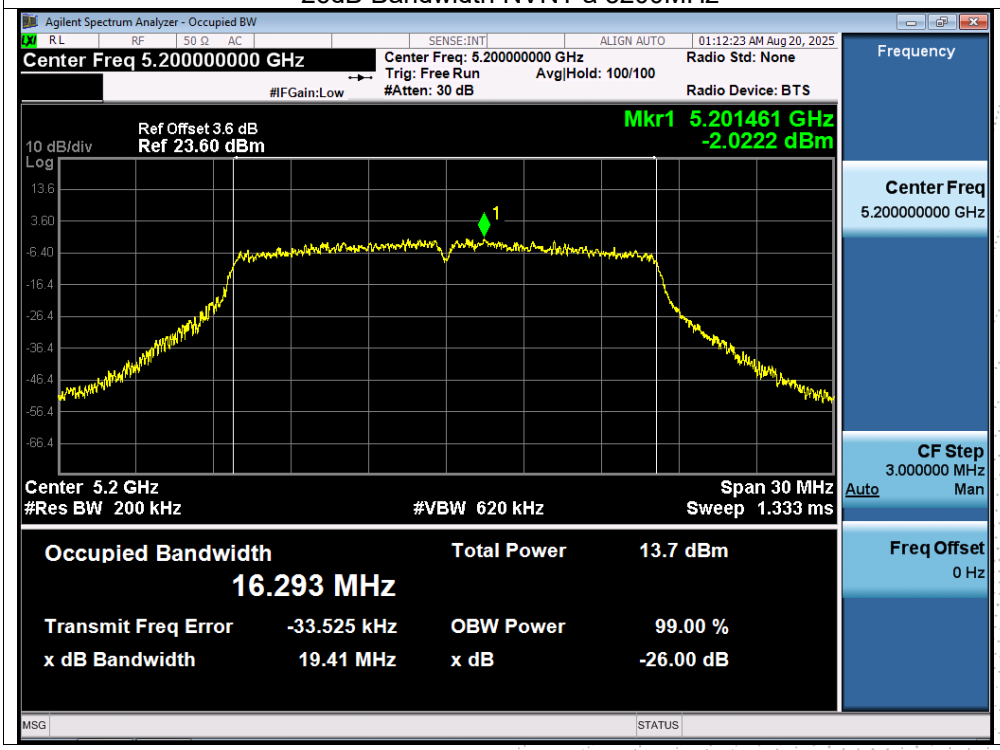
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	DC 5V
Test Mode:	(5180-5240MHz)		

Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)	99% OBW (MHz)	Verdict
NVNT	a	5180	19.141	16.289	Pass
NVNT	a	5200	19.406	16.282	Pass
NVNT	a	5240	19.452	16.333	Pass
NVNT	n20	5180	20.306	17.399	Pass
NVNT	n20	5200	20.130	17.429	Pass
NVNT	n20	5240	20.368	17.429	Pass
NVNT	ac20	5180	20.456	17.427	Pass
NVNT	ac20	5200	20.681	17.487	Pass
NVNT	ac20	5240	20.653	17.474	Pass

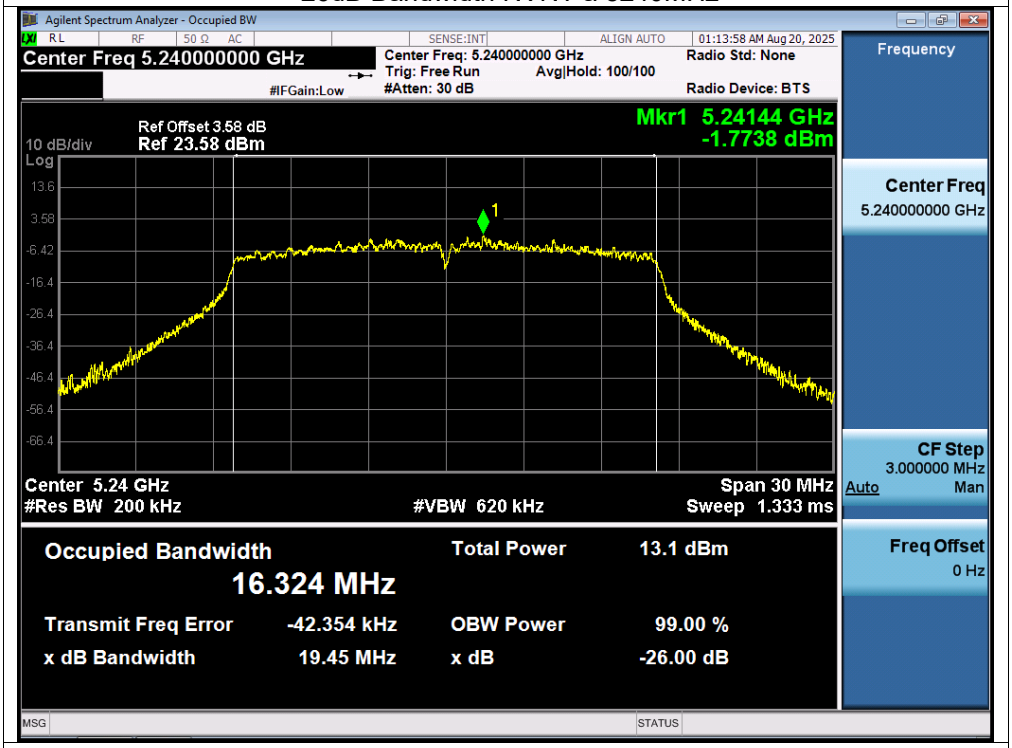
Test Graphs
-26dB Bandwidth NVNT a 5180MHz



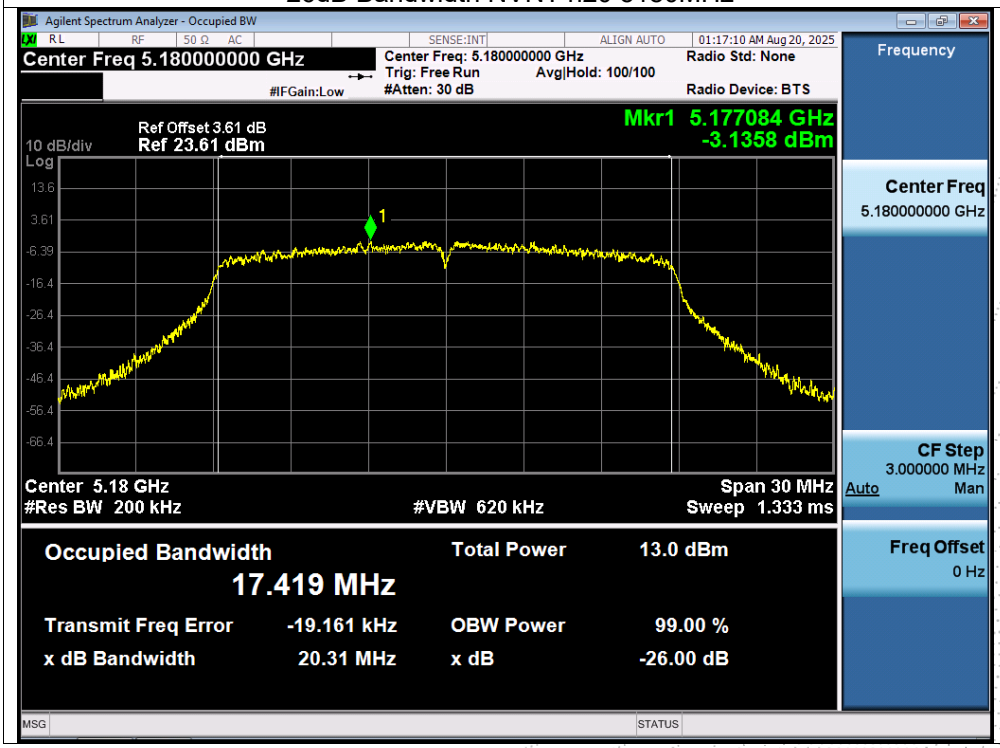
-26dB Bandwidth NVNT a 5200MHz



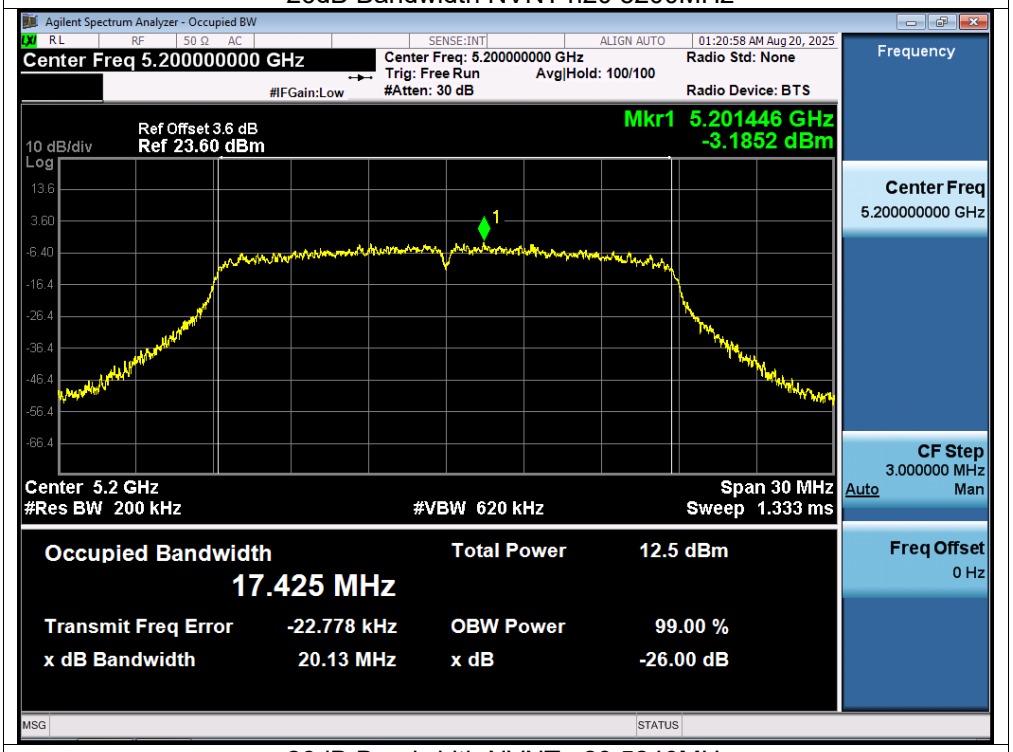
-26dB Bandwidth NVNT a 5240MHz



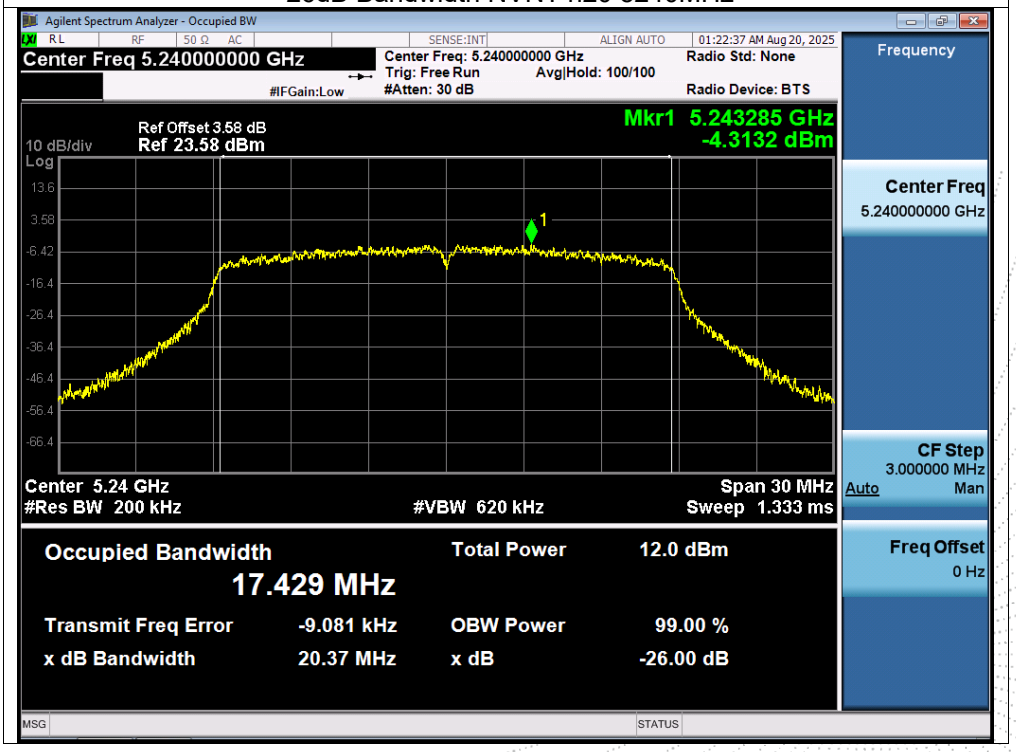
-26dB Bandwidth NVNT n20 5180MHz



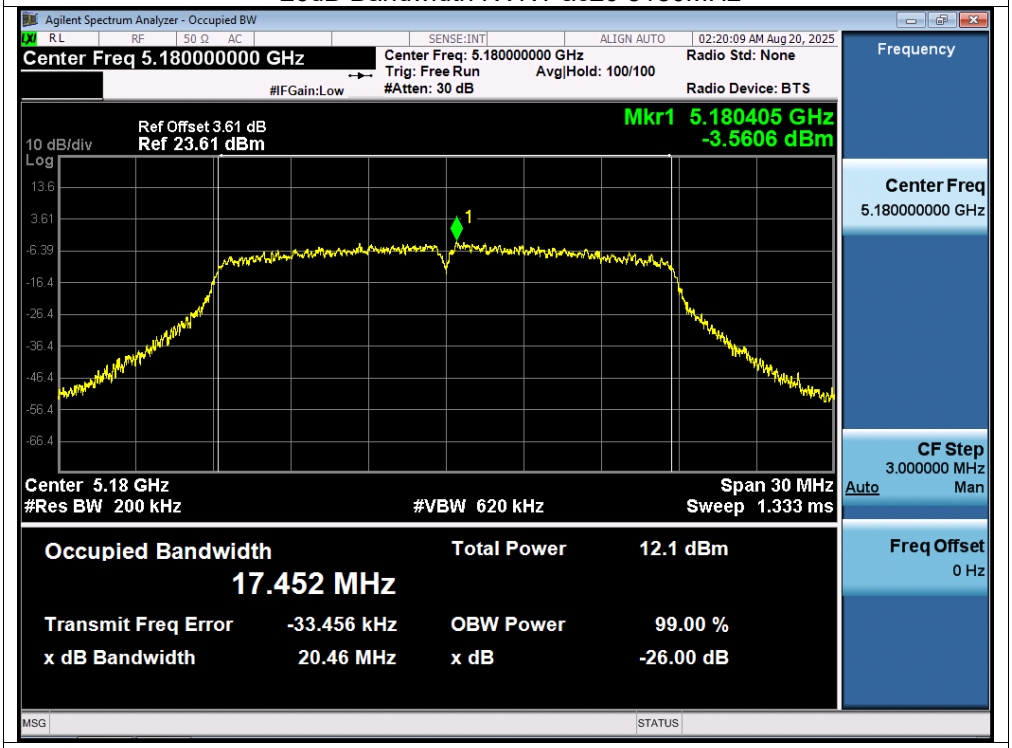
-26dB Bandwidth NVNT n20 5200MHz



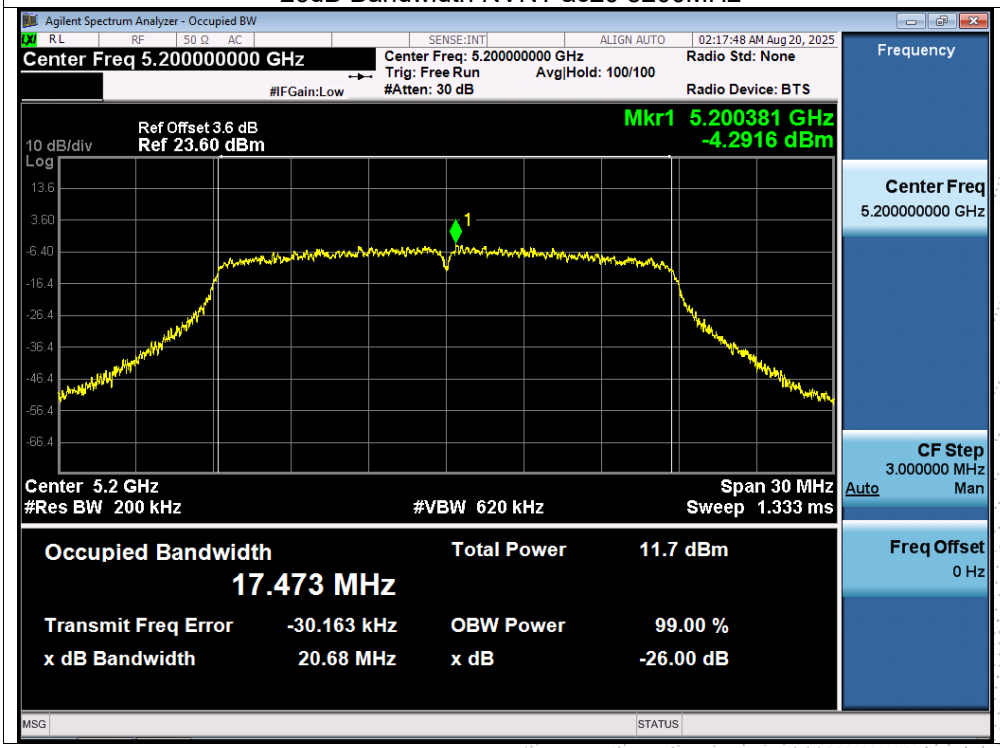
-26dB Bandwidth NVNT n20 5240MHz



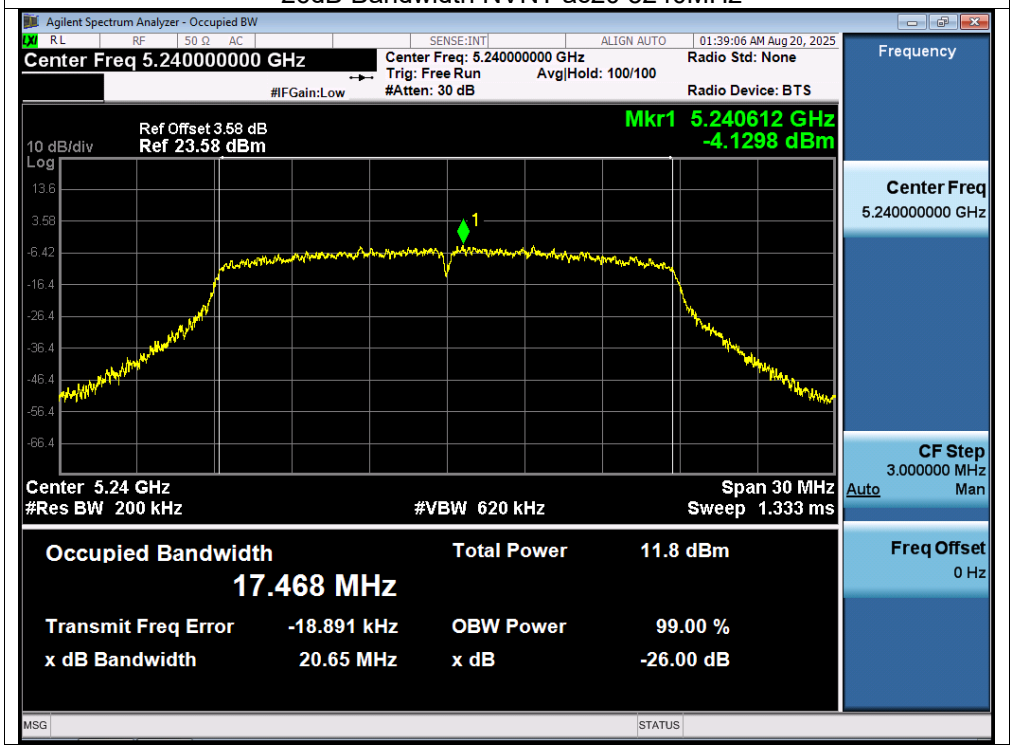
-26dB Bandwidth NVNT ac20 5180MHz



-26dB Bandwidth NVNT ac20 5200MHz

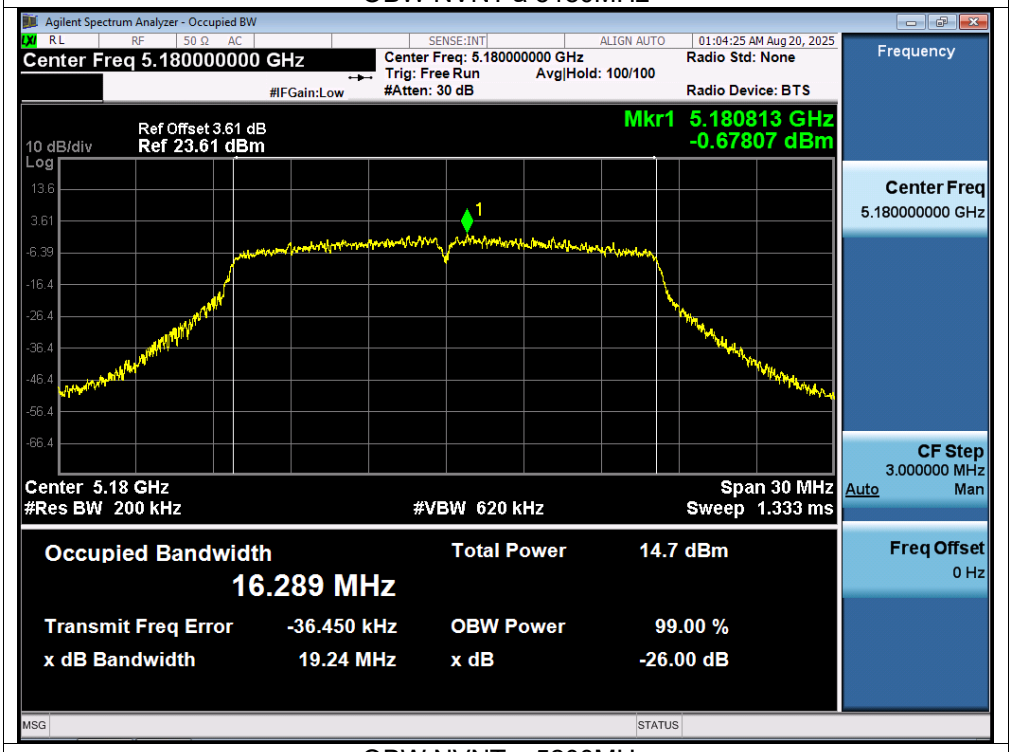


-26dB Bandwidth NVNT ac20 5240MHz

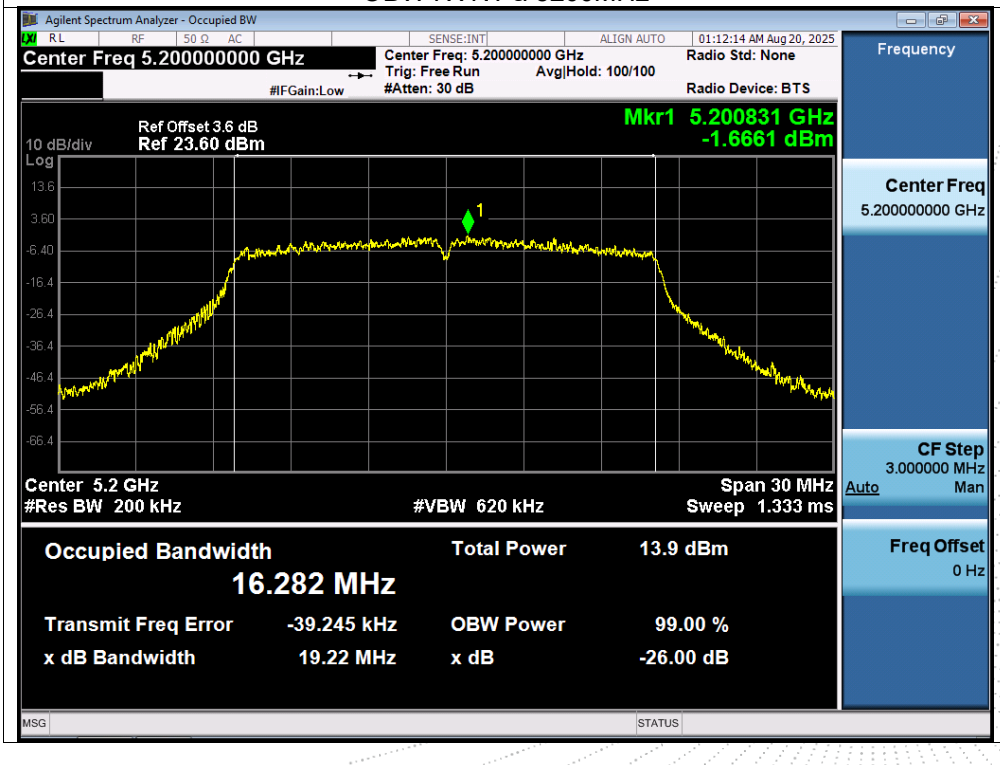


Test Graphs

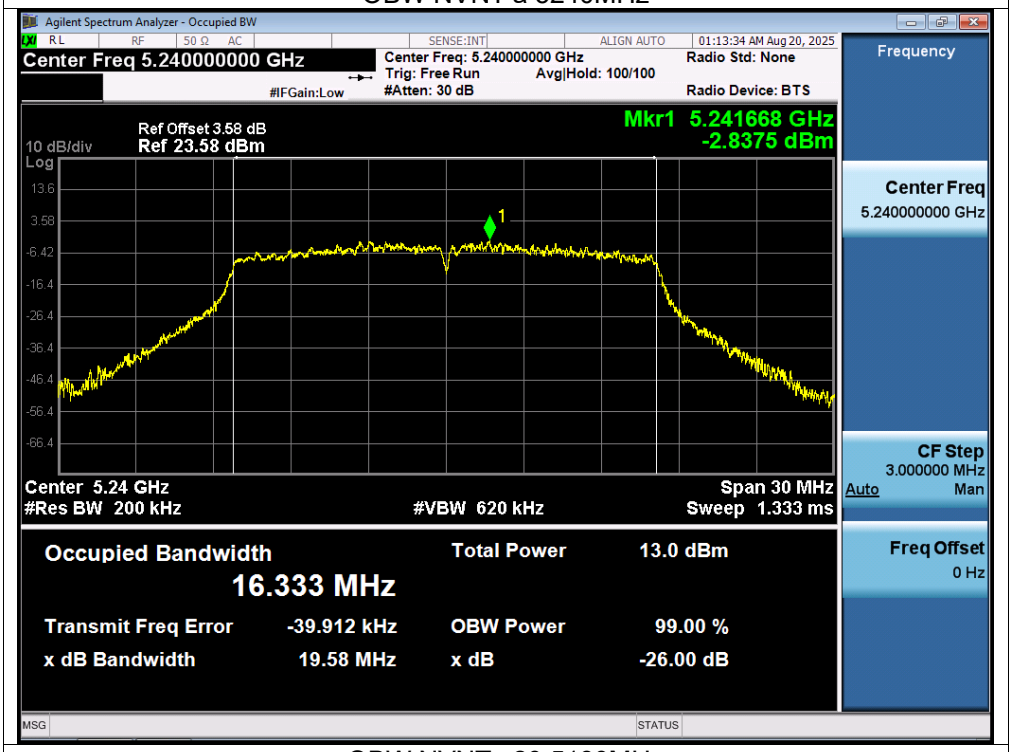
OBW NVNT a 5180MHz



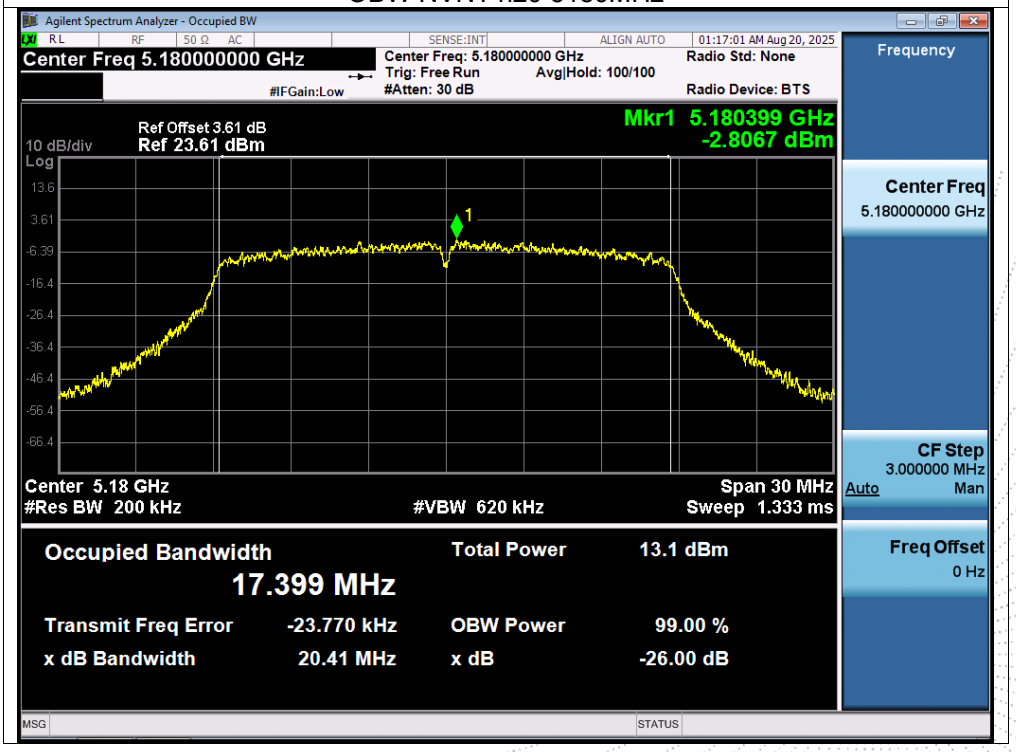
OBW NVNT a 5200MHz



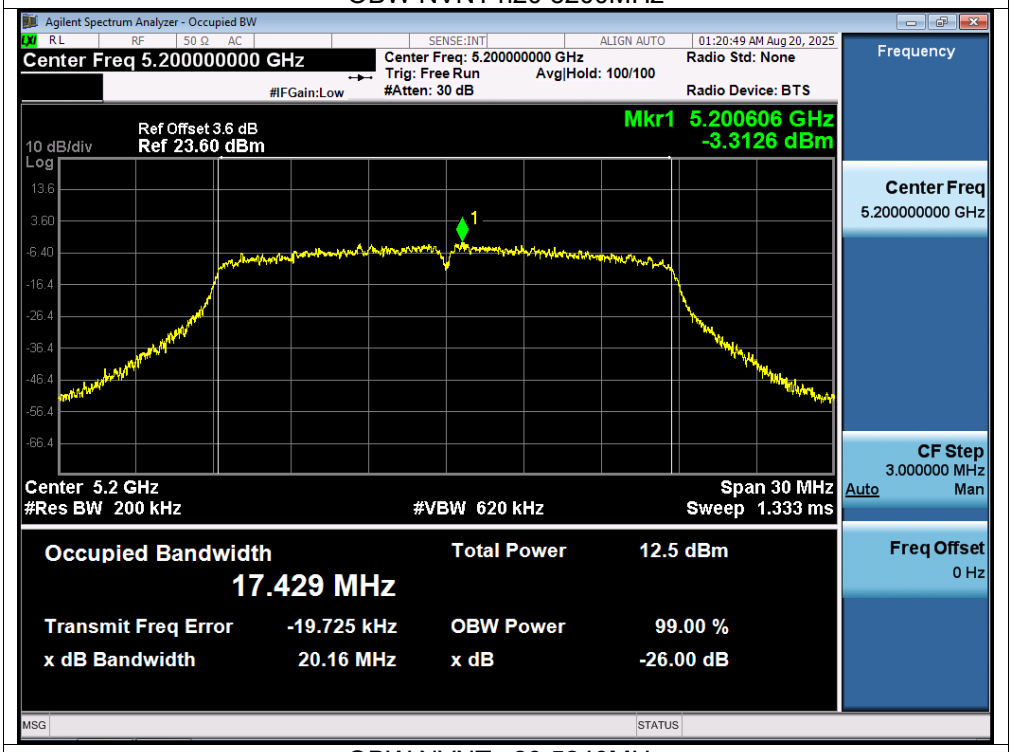
OBW NVNT a 5240MHz



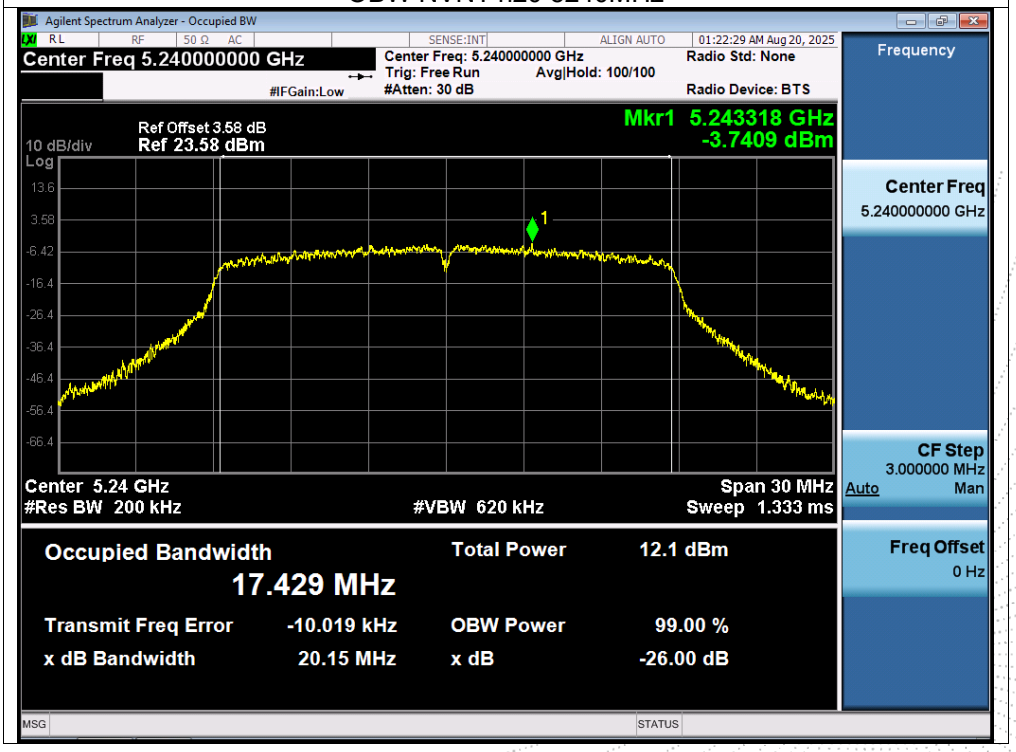
OBW NVNT n20 5180MHz



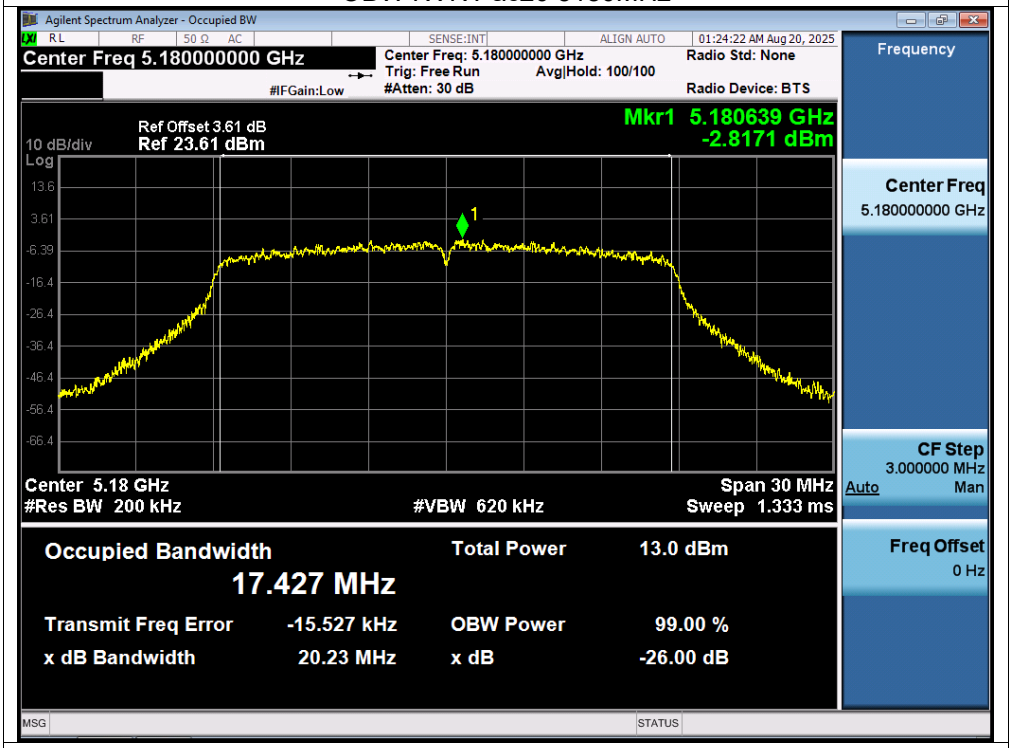
OBW NVNT n20 5200MHz



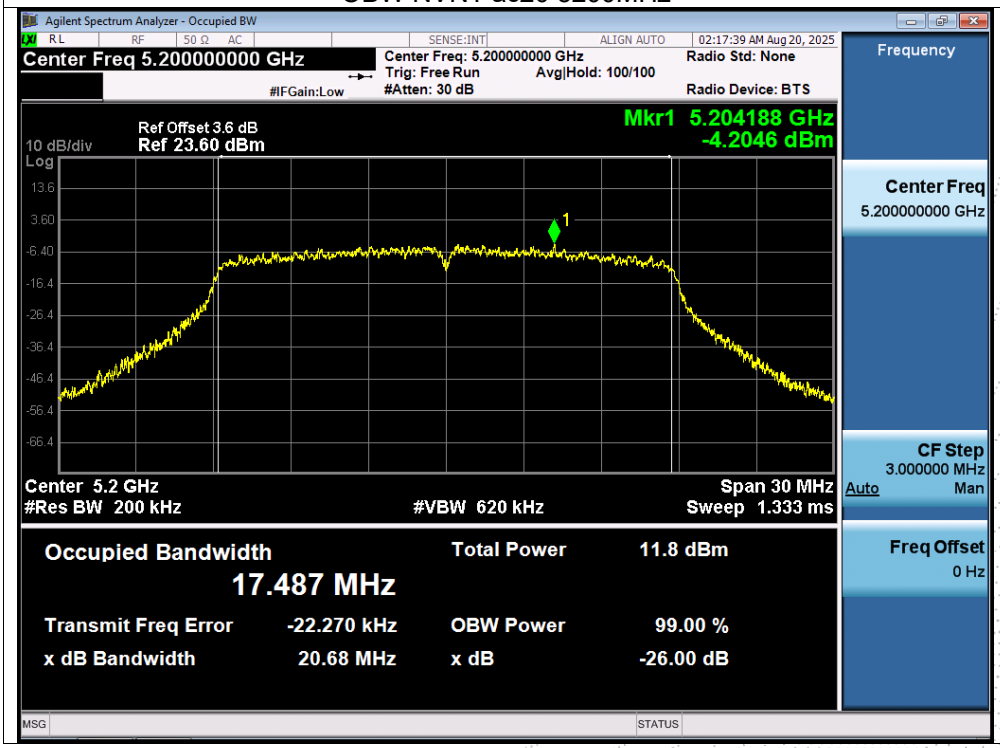
OBW NVNT n20 5240MHz



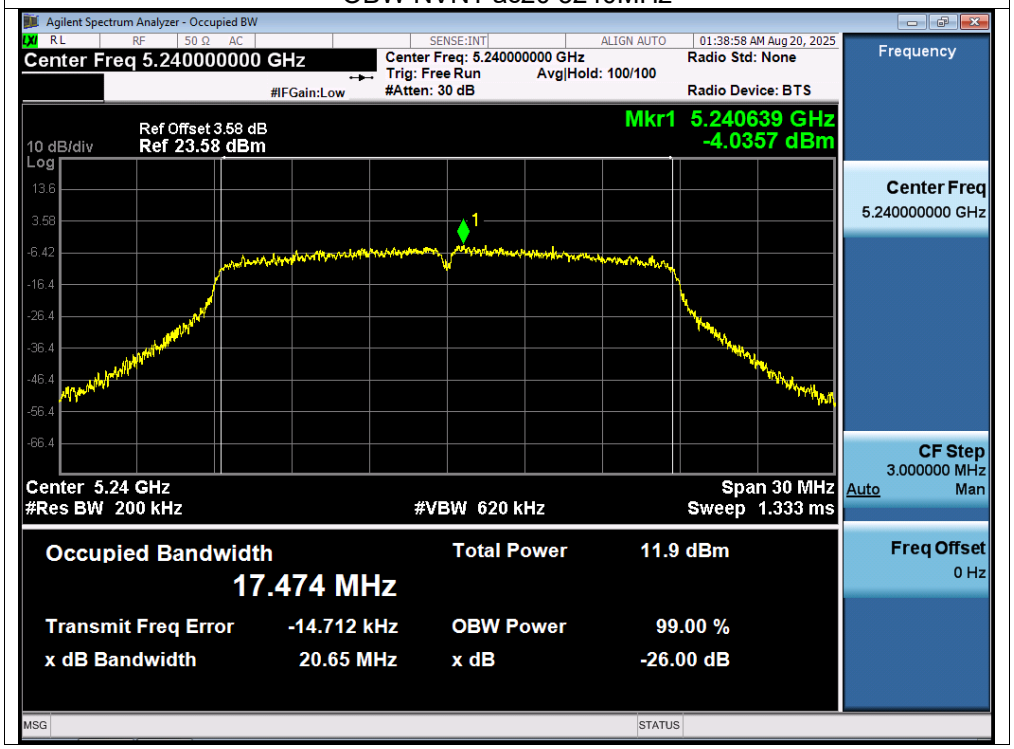
OBW NVNT ac20 5180MHz



OBW NVNT ac20 5200MHz



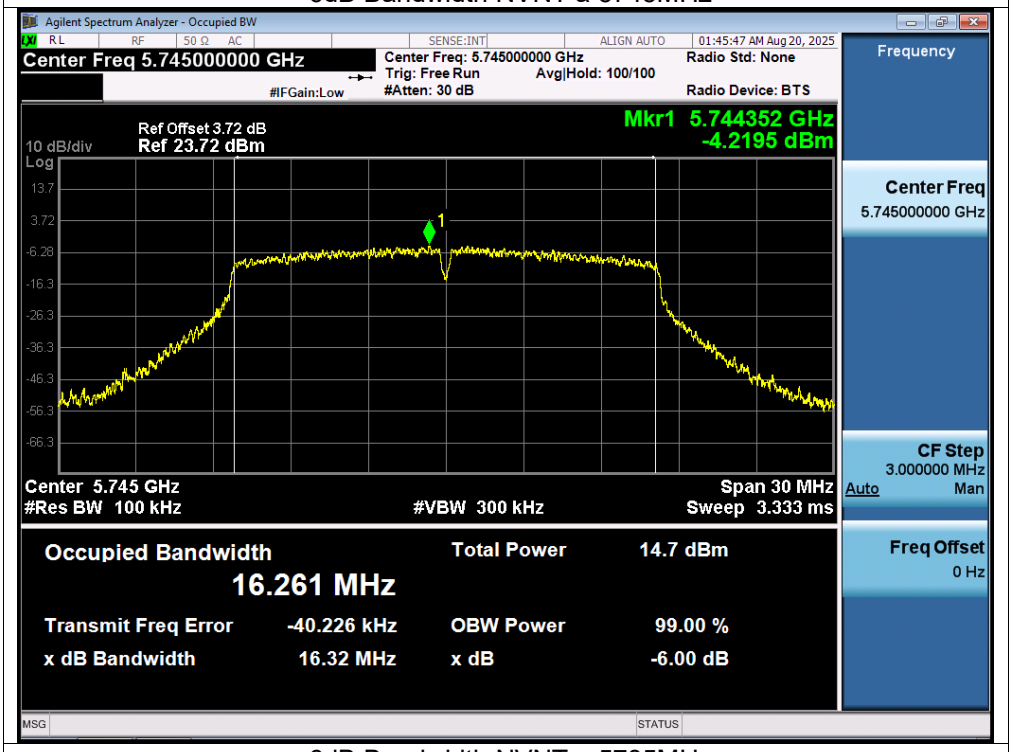
OBW NVNT ac20 5240MHz



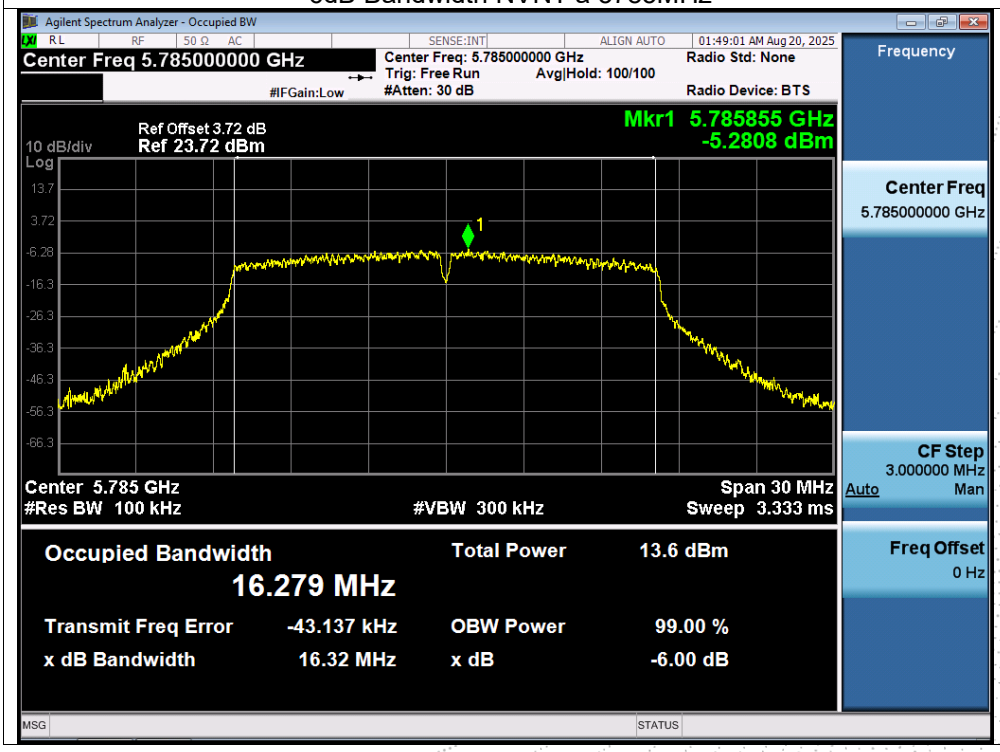
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	DC 5V
Test Mode:	(5745-5825MHz)		

Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	99% OBW (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	16.319	16.280	0.5	Pass
NVNT	a	5785	16.321	16.293	0.5	Pass
NVNT	a	5825	16.324	16.279	0.5	Pass
NVNT	n20	5745	17.063	17.465	0.5	Pass
NVNT	n20	5785	17.166	17.463	0.5	Pass
NVNT	n20	5825	16.921	17.448	0.5	Pass
NVNT	ac20	5745	16.694	17.468	0.5	Pass
NVNT	ac20	5785	17.154	17.445	0.5	Pass
NVNT	ac20	5825	16.931	17.464	0.5	Pass

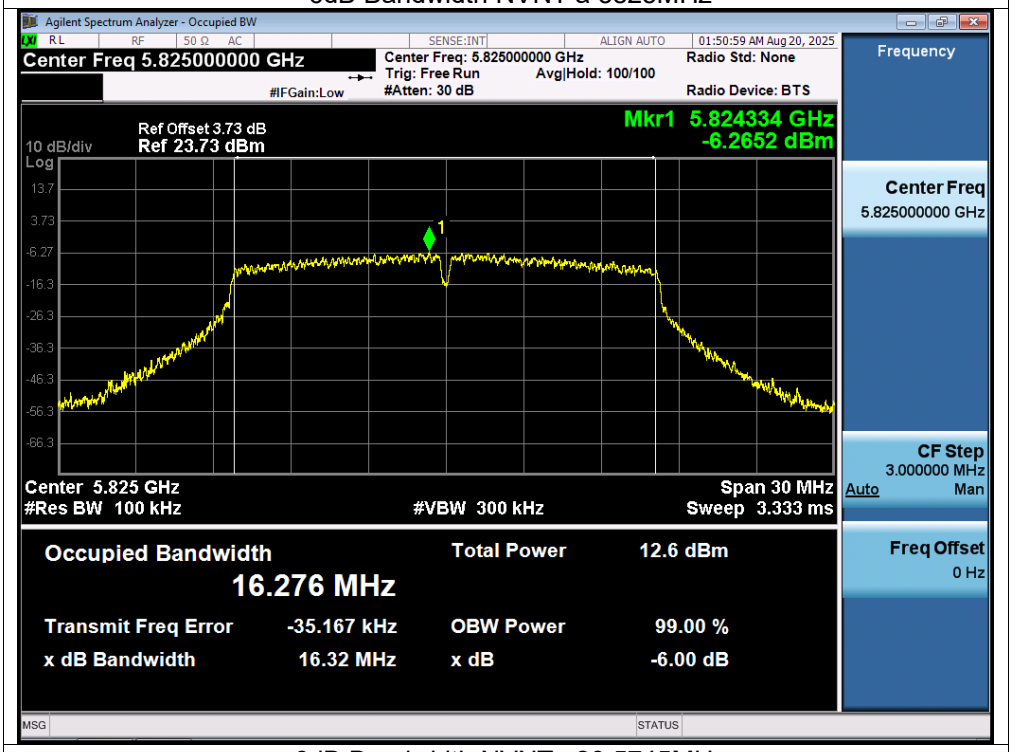
Test Graphs
-6dB Bandwidth NVNT a 5745MHz



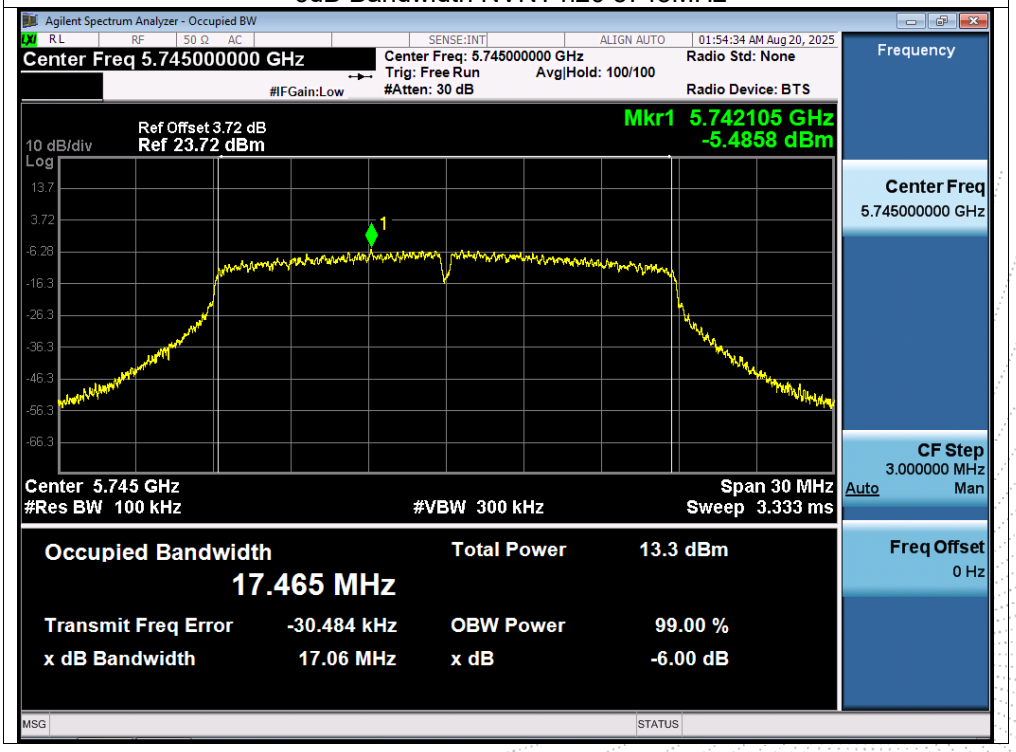
-6dB Bandwidth NVNT a 5785MHz



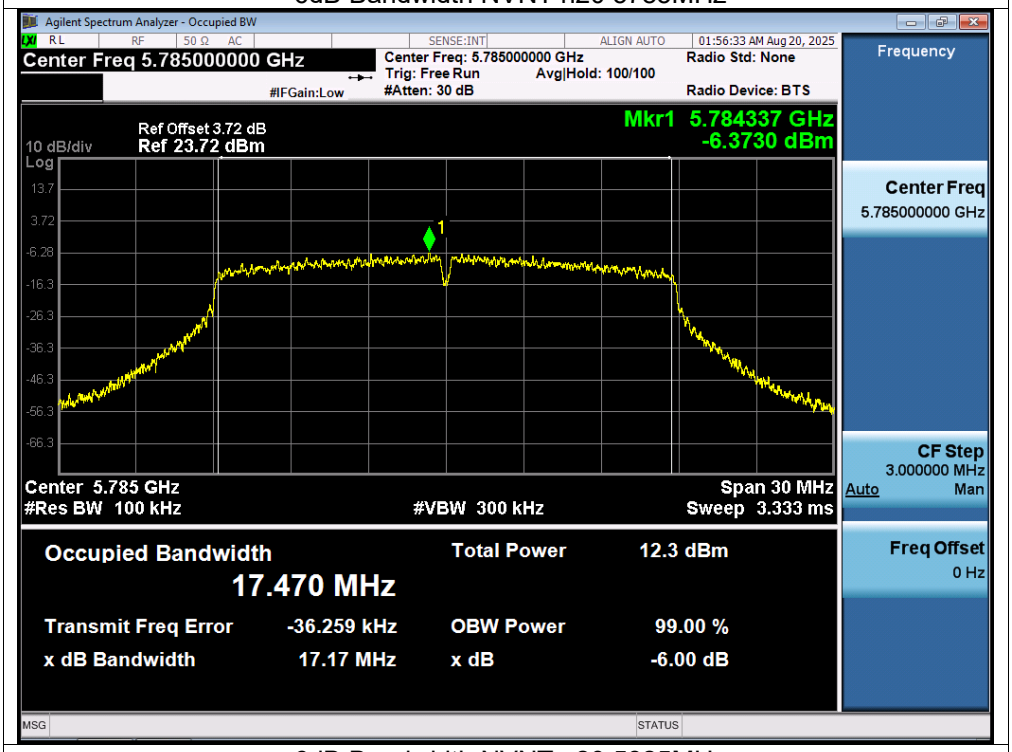
-6dB Bandwidth NVNT a 5825MHz



-6dB Bandwidth NVNT n20 5745MHz



-6dB Bandwidth NVNT n20 5785MHz



-6dB Bandwidth NVNT n20 5825MHz