TEST REPORT

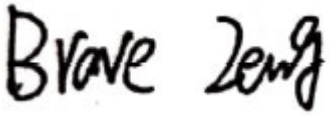
Report No.:	BCTC2307919155-4E
Applicant:	SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Product Name:	Smart Phone
Model/Type reference:	C35
Tested Date:	2023-07-18 to 2023-07-26
Issued Date:	2023-07-27

Shenzhen BCTC Testing Co., Ltd.

FCC ID: 2ANMU-C35SPUT

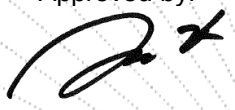
Product Name:	Smart Phone
Trademark:	OUKITEL
Model/Type reference:	C35 C35 S, C35 Pro, C35 Ultra
Prepared For:	SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Address:	A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE, GUANLAN, LONGHUA SHENZHEN, 518XXX China
Manufacturer:	SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Address:	A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE, GUANLAN, LONGHUA SHENZHEN, 518XXX China
Prepared By:	Shenzhen BCTC Testing Co., Ltd.
Address:	1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Sample Received Date:	2023-07-18
Sample tested Date:	2023-07-18 to 2023-07-26
Issue Date:	2023-07-27
Report No.:	BCTC2307919155-4E
Test Standards:	FCC Part15 15.407 ANSI C63.10-2013 KDB 662911 D01 v02r01 KDB 789033 D02 v02r01
Test Results:	PASS

Tested by:



Brave Zeng/ Project Handler

Approved by:



Zero Zhou/Reviewer

Table Of Content

(Note: N/A Means Not Applicable)

1. Version

Report No.	Issue Date	Description	Approved
BCTC2307919155-4E	2023-07-27	Original	Valid

2. Test Summary

The Product has been tested according to the following specifications:

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

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	Conducted output power uncertainty Above 1G	U=1.576dB
8	Conducted output power uncertainty below 1G	U=1.28dB
9	humidity uncertainty	U=5.3%
10	Temperature uncertainty	U=0.59℃

4. Product Information And Test Setup

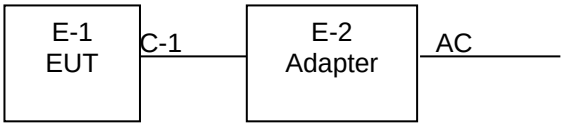
4.1 Product Information

Model/Type Ref.:	C35 C35 S, C35 Pro, C35 Ultra
Model differences:	Only the model names are different.
Hardware Version:	FS311-MB-V1.0
Software Version:	OUKITEL_C35_EEA_V02_19062023
IEEE 802.11 WLAN Mode Supported	802.11a/n/ac(20MHz channel bandwidth) 802.11n/ac(40MHz channel bandwidth) 802.11ac(80MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n(HT20); 5190-5230MHz for 802.11n(HT40); 5210MHz for 802.11 ac80; 5745-5825 MHz for 802.11a/n(HT20); 5755-5795 MHz for 802.11n(HT40); 5775MHz for 802.11 ac80;
Data Rate	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac(VHT20): NSS1, MCS0-MCS8 802.11ac(VHT40/VHT80):NSS1, MCS0-MCS
Type of Modulation:	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac;
Number Of Channel	4 channels for 802.11a/n20 in the 5180-5240MHz band ; 2 channels for 802.11 n40 in the 5190-5230MHz band ; 1 channels for 802.11 ac80 in the 5210MHz band ; 5 channels for 802.11a/n20 in the 5745-5825MHz band ; 2 channels for 802.11 n40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band
Antenna installation:	Internal antenna
Antenna Gain:	0.05 dBi
Ratings:	DC 5V from adapter/DC 3.87V from battery
Adapter Information:	Model: HJ-0502000N2-US Input: 100-240V~50/60Hz 0.3A Output: 5.0V ⎓ 2.0A

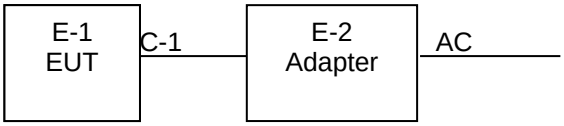
4.2 Test Setup Configuration

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

Conducted Emission:



Radiated Spurious Emission



4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	Smart Phone	OUKITEL	C35	N/A	EUT
E-2	Adapter	N/A	HJ-0502000N2-US	N/A	Auxiliary

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

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.4 Channel List

5.1G

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

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

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

5.8G

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

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

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

4.5 Test Mode

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

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

Conducted Emission	
Final Test Mode	Description
Mode 4	Link Mode

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

Note:

(1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.

(2) We're testing antenna A data.

4.6 Table Of Parameters Of Text Software Setting

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

Test software Version	**CMD**		
Parameters	DEF	DEF	DEF

5. Test Facility And Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.
FCC Test Firm Registration Number: 712850
A2LA certificate registration number is: CN1212
ISED Registered No.: 23583
ISED CAB identifier: CN0017

5.2 Test Instrument Used

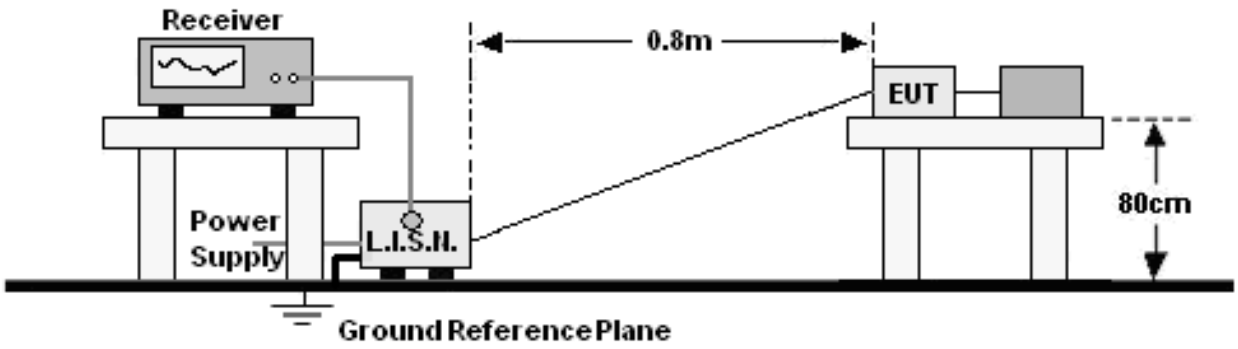
Conducted Emissions Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
LISN	R&S	ENV216	101375	May 15, 2023	May 14, 2024
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Attenuator	\	10dB DC-6GHz	1650	May 15, 2023	May 14, 2024

RF Conducted Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Power Metter	Keysight	E4419	\	May 15, 2023	May 14, 2024
Power Sensor (AV)	Keysight	E9300A	\	May 15, 2023	May 14, 2024
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 15, 2023	May 14, 2024
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 15, 2023	May 14, 2024
Communication test set	R&S	CMW500	126173	Nov. 08, 2022	Nov. 07, 2023
Radio frequency control box	MAIWEI	MW200-RFCB	\	\	\
Software	MAIWEI	MTS 8200	\	\	\

Radiated Emissions Test (966 Chamber01)					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
966 chamber	ChengYu	966 Room	966	May 15, 2023	May 14, 2026
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
Receiver	R&S	ESRP	101154	May 15, 2023	May 14, 2024
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 15, 2023	May 14, 2024
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 29, 2023	May 28, 2024
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 31, 2023	May 30, 2024
Amplifier	SKET	LAPA_01G18 G-45dB	\	May 15, 2023	May 14, 2024
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 31, 2023	May 30, 2024
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 15, 2023	May 14, 2024
Horn Antenna(18G Hz-40GHz)	Schwarzbeck	BBHA9170	00822	May 31, 2023	May 30, 2024
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 15, 2023	May 14, 2024
Communication test set	R&S	CMW500	126173	Nov. 08, 2022	Nov. 07, 2023
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

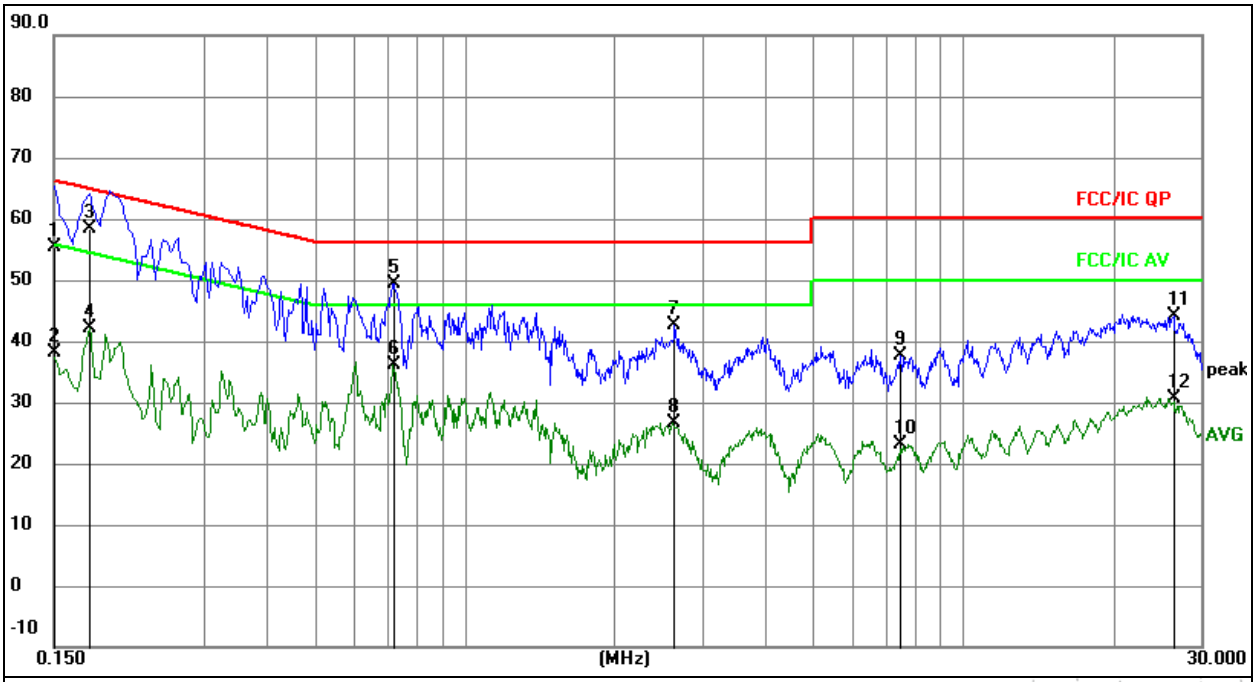
a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak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

6.5 Test Result

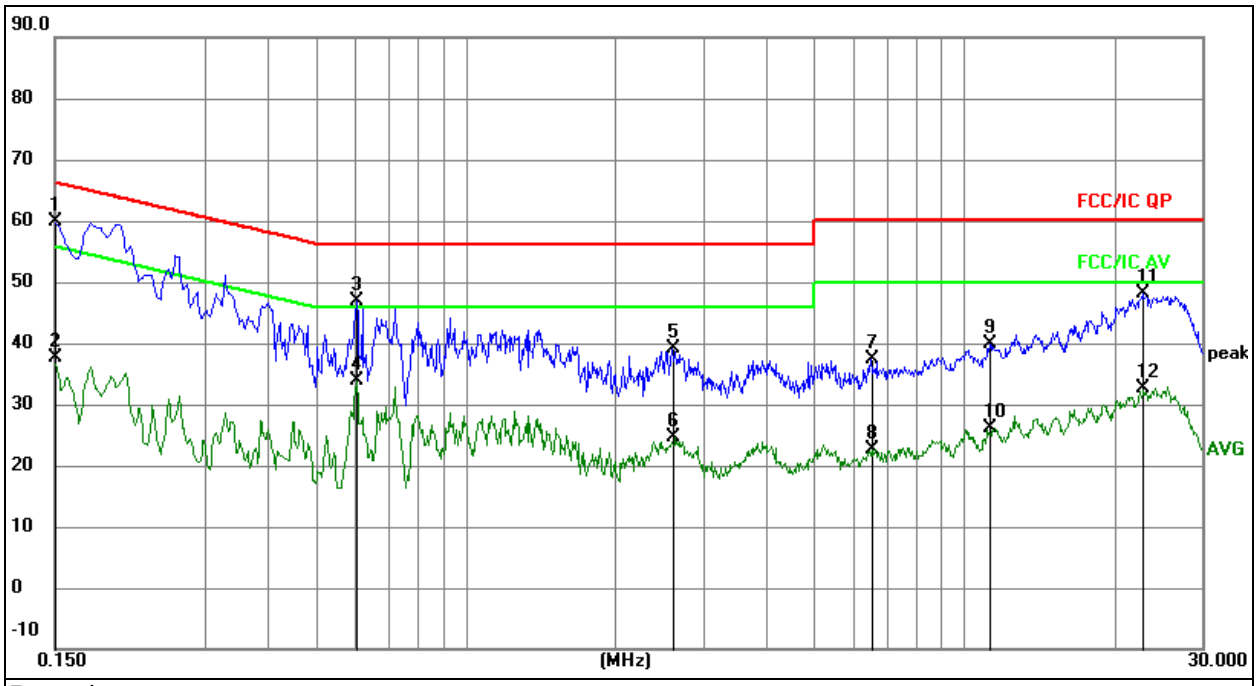
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz



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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1500	45.95	9.51	55.46	66.00	-10.54	QP
2		0.1500	28.50	9.51	38.01	56.00	-17.99	AVG
3	*	0.1760	48.77	9.56	58.33	64.67	-6.34	QP
4		0.1760	32.45	9.56	42.01	54.67	-12.66	AVG
5		0.7160	39.83	9.63	49.46	56.00	-6.54	QP
6		0.7160	26.46	9.63	36.09	46.00	-9.91	AVG
7		2.6360	32.87	9.76	42.63	56.00	-13.37	QP
8		2.6360	16.77	9.76	26.53	46.00	-19.47	AVG
9		7.4860	27.98	9.73	37.71	60.00	-22.29	QP
10		7.4860	13.31	9.73	23.04	50.00	-26.96	AVG
11		26.4178	34.29	9.73	44.02	60.00	-15.98	QP
12		26.4178	20.85	9.73	30.58	50.00	-19.42	AVG

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



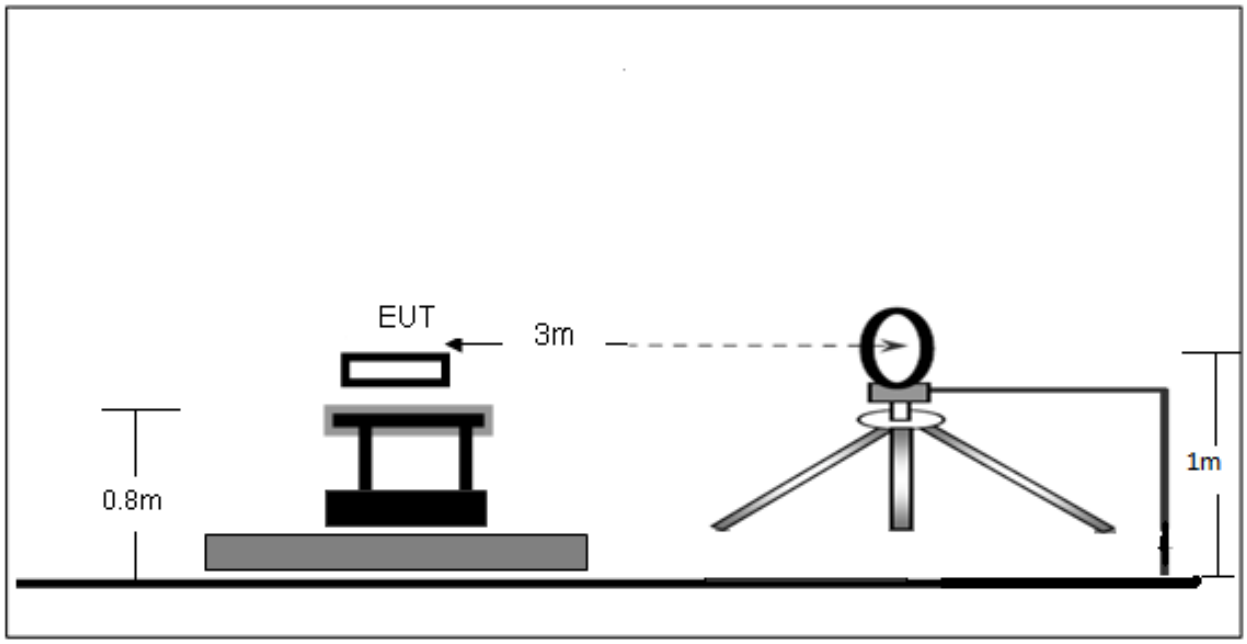
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over1 Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1	*	0.1500	50.32	9.51	59.83	66.00	-6.17	QP
2		0.1500	28.19	9.51	37.70	56.00	-18.30	AVG
3		0.6043	37.21	9.62	46.83	56.00	-9.17	QP
4		0.6043	24.35	9.62	33.97	46.00	-12.03	AVG
5		2.5945	29.33	9.76	39.09	56.00	-16.91	QP
6		2.5945	14.85	9.76	24.61	46.00	-21.39	AVG
7		6.4882	27.52	9.76	37.28	60.00	-22.72	QP
8		6.4882	12.81	9.76	22.57	50.00	-27.43	AVG
9		11.2572	30.19	9.66	39.85	60.00	-20.15	QP
10		11.2572	16.50	9.66	26.16	50.00	-23.84	AVG
11		22.7755	38.42	9.76	48.18	60.00	-11.82	QP
12		22.7755	22.89	9.76	32.65	50.00	-17.35	AVG

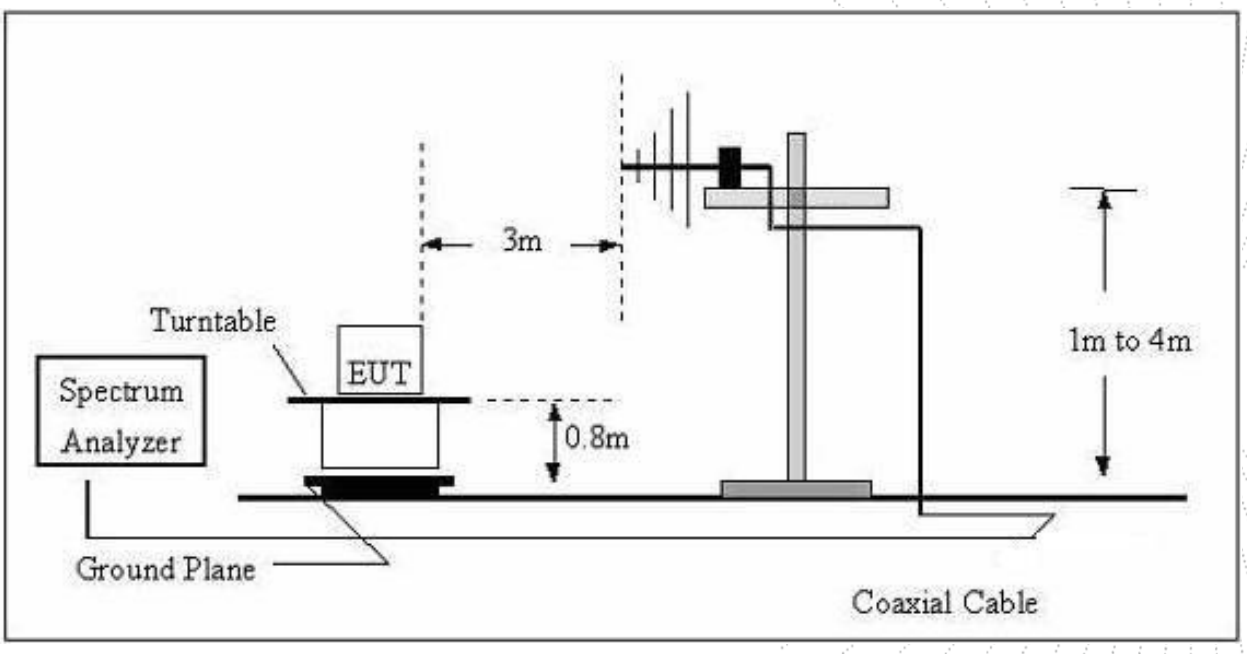
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

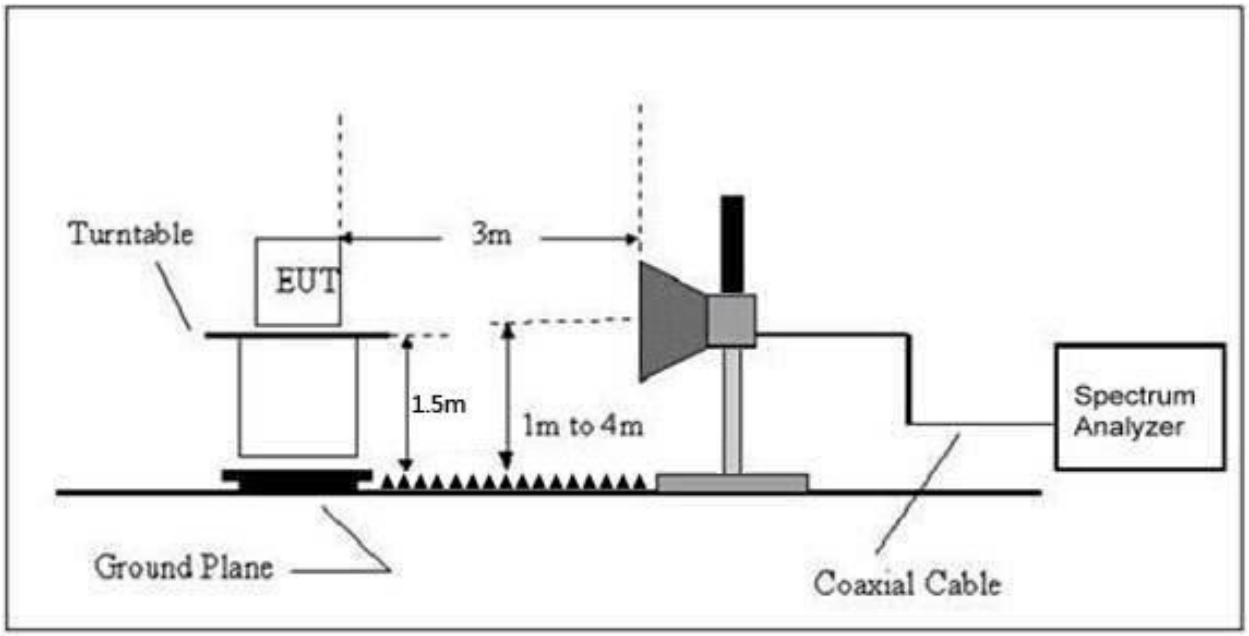
（A）Radiated Emission Test-Up Frequency Below 30MHz



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



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



7.2 Limit

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

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

Limits Of Radiated Emission Measurement (Above 1000MHz)

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

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

7.3 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m.The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.
This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205.
It must be performed with the highest gain of each type of antenna proposed for use with the EUT.
Use the following spectrum analyzer settings:

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

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

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

Note:

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

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

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

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

7.4 EUT Operating Conditions

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

7.5 Test Result

Below 30MHz

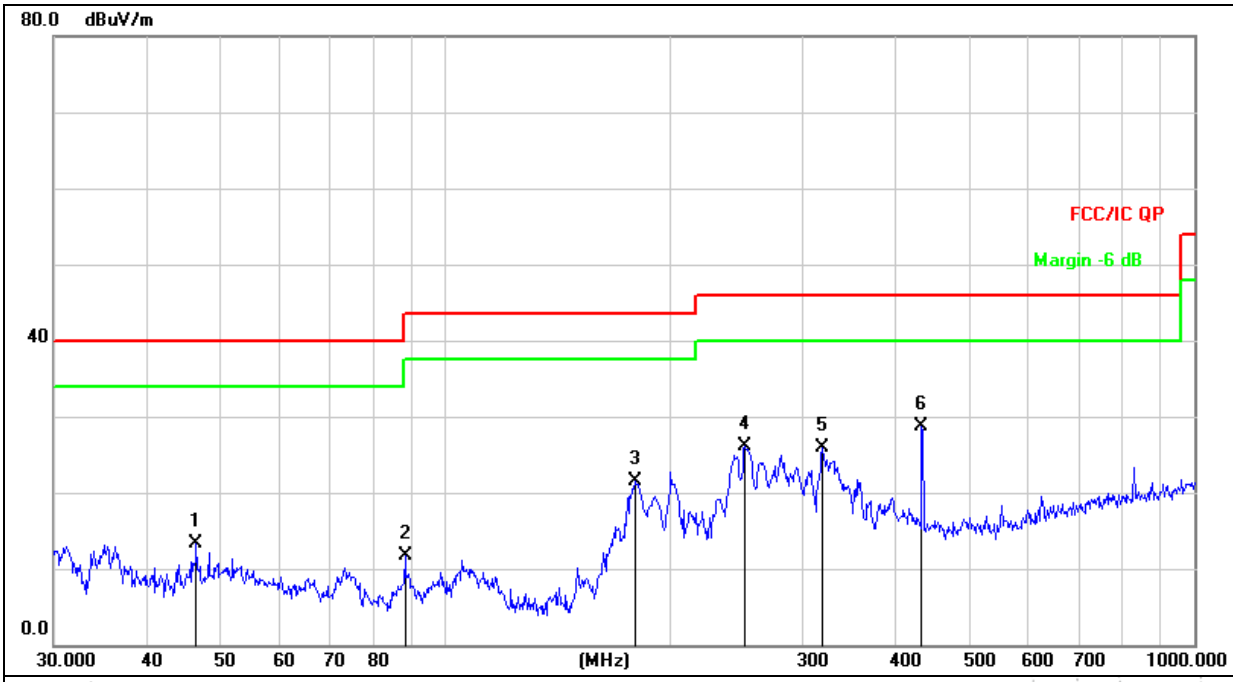
Temperature:	26℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 4	Polarization :	--

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

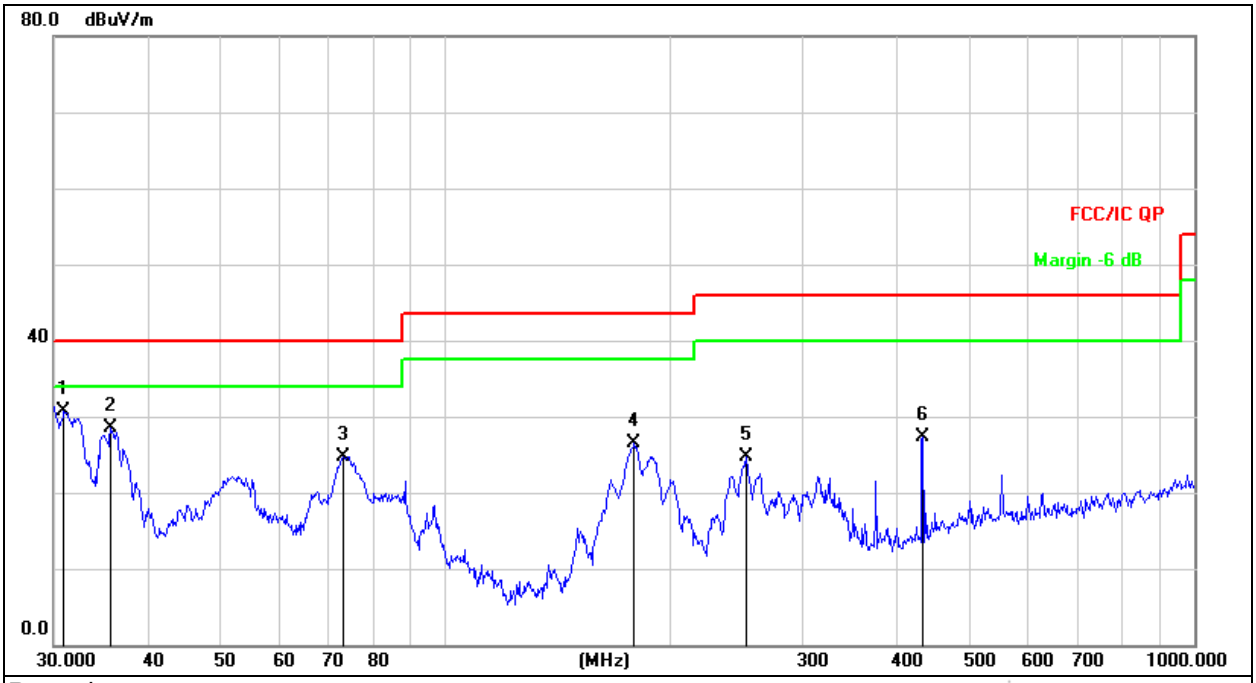
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz



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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		46.5030	29.22	-15.99	13.23	40.00	-26.77	QP
2		88.3421	31.35	-19.62	11.73	43.50	-31.77	QP
3		179.3863	40.42	-18.89	21.53	43.50	-21.97	QP
4		251.1804	41.81	-15.80	26.01	46.00	-19.99	QP
5		318.8170	39.87	-13.91	25.96	46.00	-20.04	QP
6	*	432.5457	40.38	-11.74	28.64	46.00	-17.36	QP

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



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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	30.9619	48.87	-18.22	30.65	40.00	-9.35	QP
2		35.7490	45.93	-17.43	28.50	40.00	-11.50	QP
3		73.1025	45.17	-20.45	24.72	40.00	-15.28	QP
4		178.7584	45.34	-18.93	26.41	43.50	-17.09	QP
5		252.0627	40.51	-15.78	24.73	46.00	-21.27	QP
6		434.0651	39.00	-11.72	27.28	46.00	-18.72	QP

Between 1GHz – 40GHz

Test Mode:	TX(5.1G) - 802.11a

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G									
V	4434.046	61.12	5.94	35.40	44.00	58.46	68.2	-9.74	PK
V	4434.046	43.20	5.94	35.40	44.00	40.54	54	-13.46	AV
V	10360.106	61.33	8.46	39.75	44.50	65.04	68.2	-3.16	PK
V	10360.106	43.95	8.46	39.75	44.50	47.66	54	-6.34	AV
V	15540.132	60.27	10.12	38.80	44.10	65.09	74	-8.91	PK
V	15540.132	43.14	10.12	38.80	42.70	49.36	54	-4.64	AV
H	4434.187	64.03	5.94	35.18	44.00	61.15	68.2	-7.05	PK
H	4434.187	43.05	5.94	35.18	44.00	40.17	54	-13.83	AV
H	10360.158	54.02	8.46	38.71	44.50	56.69	68.2	-11.51	PK
H	10360.158	42.43	8.46	38.71	44.50	45.10	54	-8.90	AV
H	15540.008	52.42	10.12	38.38	44.10	56.82	74	-17.18	PK
H	15540.008	41.47	10.12	38.38	44.10	45.87	54	-8.13	AV
middle Channel (5200 MHz)-Above 1G									
V	4592.145	60.52	6.48	36.35	44.05	59.30	74	-14.70	PK
V	4592.145	43.06	6.48	36.35	44.05	41.84	54	-12.16	AV
V	10400.067	60.96	8.47	37.88	44.51	62.80	68.2	-5.40	PK
V	10400.067	43.72	8.47	37.88	44.51	45.56	54	-8.44	AV
V	15600.097	60.93	10.12	38.80	44.10	65.75	74	-8.25	PK
V	15600.097	43.52	10.12	38.80	42.70	49.74	54	-4.26	AV
H	4592.081	60.84	6.48	36.37	44.05	59.64	74	-14.36	PK
H	4592.081	43.08	6.48	36.37	44.05	41.88	54	-12.12	AV
H	10400.108	53.18	8.47	38.64	44.50	55.79	68.2	-12.41	PK
H	10400.108	42.45	8.47	38.64	44.50	45.06	54	-8.94	AV
H	15600.129	50.34	10.12	38.38	44.10	54.74	74	-19.26	PK
H	15600.129	44.61	10.12	38.38	44.10	49.01	54	-4.99	AV
High Channel (5240 MHz)-Above 1G									
V	4739.067	64.66	7.10	37.24	43.50	65.50	74	-8.50	PK
V	4739.067	43.73	7.10	37.24	43.50	44.57	54	-9.43	AV
V	10480.141	62.63	8.46	37.68	44.50	64.27	68.2	-3.93	PK
V	10480.141	43.77	8.46	37.68	44.50	45.41	54	-8.59	AV
V	15720.068	60.76	10.12	38.80	44.10	65.58	74	-8.42	PK
V	15720.068	43.10	10.12	38.80	42.70	49.32	54	-4.68	AV
H	4739.109	63.13	7.10	37.24	43.50	63.97	74	-10.03	PK
H	4739.109	43.30	7.10	37.24	43.50	44.14	54	-9.86	AV
H	10480.113	54.26	8.46	38.57	44.50	56.79	68.2	-11.41	PK
H	10480.113	44.83	8.46	38.57	44.50	47.36	54	-6.64	AV
H	15720.082	50.87	10.12	38.38	44.10	55.27	74	-18.73	PK
H	15720.082	44.73	10.12	38.38	44.10	49.13	54	-4.87	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)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G									
V	4434.058	63.66	5.94	35.40	44.00	61.00	68.2	-7.20	PK
V	4434.058	43.21	5.94	35.40	44.00	40.55	54	-13.45	AV
V	10360.131	63.07	8.46	39.75	44.50	66.78	68.2	-1.42	PK
V	10360.131	43.95	8.46	39.75	44.50	47.66	54	-6.34	AV
V	15540.151	60.73	10.12	38.80	44.10	65.55	74	-8.45	PK
V	15540.151	43.16	10.12	38.80	42.70	49.38	54	-4.62	AV
H	4434.011	62.89	5.94	35.18	44.00	60.01	68.2	-8.19	PK
H	4434.011	43.67	5.94	35.18	44.00	40.79	54	-13.21	AV
H	10360.039	54.87	8.46	38.71	44.50	57.54	68.2	-10.66	PK
H	10360.039	41.21	8.46	38.71	44.50	43.88	54	-10.12	AV
H	15540.080	54.07	10.12	38.38	44.10	58.47	74	-15.53	PK
H	15540.080	42.88	10.12	38.38	44.10	47.28	54	-6.72	AV
middle Channel (5200 MHz)-Above 1G									
V	4592.174	64.10	6.48	36.35	44.05	62.88	74	-11.12	PK
V	4592.174	43.82	6.48	36.35	44.05	42.60	54	-11.40	AV
V	10400.109	62.11	8.47	37.88	44.51	63.95	68.2	-4.25	PK
V	10400.109	43.54	8.47	37.88	44.51	45.38	54	-8.62	AV
V	15600.003	61.76	10.12	38.80	44.10	66.58	74	-7.42	PK
V	15600.003	43.33	10.12	38.80	42.70	49.55	54	-4.45	AV
H	4592.088	62.56	6.48	36.37	44.05	61.36	74	-12.64	PK
H	4592.088	43.19	6.48	36.37	44.05	41.99	54	-12.01	AV
H	10400.095	53.29	8.47	38.64	44.50	55.90	68.2	-12.30	PK
H	10400.095	44.73	8.47	38.64	44.50	47.34	54	-6.66	AV
H	15600.031	52.81	10.12	38.38	44.10	57.21	74	-16.79	PK
H	15600.031	43.01	10.12	38.38	44.10	47.41	54	-6.59	AV
High Channel (5240 MHz)-Above 1G									
V	4739.174	64.13	7.10	37.24	43.50	64.97	74	-9.03	PK
V	4739.174	43.40	7.10	37.24	43.50	44.24	54	-9.76	AV
V	10480.091	60.49	8.46	37.68	44.50	62.13	68.2	-6.07	PK
V	10480.091	43.06	8.46	37.68	44.50	44.70	54	-9.30	AV
V	15720.025	61.50	10.12	38.80	44.10	66.32	74	-7.68	PK
V	15720.025	43.85	10.12	38.80	42.70	50.07	54	-3.93	AV
H	4739.032	64.77	7.10	37.24	43.50	65.61	74	-8.39	PK
H	4739.032	43.64	7.10	37.24	43.50	44.48	54	-9.52	AV
H	10480.176	51.77	8.46	38.57	44.50	54.30	68.2	-13.90	PK
H	10480.176	41.73	8.46	38.57	44.50	44.26	54	-9.74	AV
H	15720.114	54.83	10.12	38.38	44.10	59.23	74	-14.77	PK
H	15720.114	40.85	10.12	38.38	44.10	45.25	54	-8.75	AV

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

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

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5190 MHz)-Above 1G									
V	4434.088	62.12	5.94	35.40	44.00	59.46	68.2	-8.74	PK
V	4434.088	43.25	5.94	35.40	44.00	40.59	54	-13.41	AV
V	10380.157	63.19	8.46	39.75	44.50	66.90	68.2	-1.30	PK
V	10380.157	43.75	8.46	39.75	44.50	47.46	54	-6.54	AV
V	15570.116	62.05	10.12	38.80	44.10	66.87	74	-7.13	PK
V	15570.116	43.05	10.12	38.80	42.70	49.27	54	-4.73	AV
H	4434.187	64.01	5.94	35.18	44.00	61.13	74	-12.87	PK
H	4434.187	43.06	5.94	35.18	44.00	40.18	54	-13.82	AV
H	10380.061	53.38	8.46	38.71	44.50	56.05	68.2	-12.15	PK
H	10380.061	42.68	8.46	38.71	44.50	45.35	54	-8.65	AV
H	15570.065	50.44	10.12	38.38	44.10	54.84	74	-19.16	PK
H	15570.065	44.73	10.12	38.38	44.10	49.13	54	-4.87	AV
middle Channel (5230 MHz)-Above 1G									
V	4739.172	64.37	6.48	36.35	44.05	63.15	68.2	-5.05	PK
V	4739.172	43.12	6.48	36.35	44.05	41.90	54	-12.10	AV
V	10460.122	63.57	8.47	37.88	44.51	65.41	68.2	-2.79	PK
V	10460.122	43.19	8.47	37.88	44.51	45.03	54	-8.97	AV
V	15690.020	62.67	10.12	38.80	44.10	67.49	74	-6.51	PK
V	15690.020	43.80	10.12	38.80	42.70	50.02	54	-3.98	AV
H	4739.066	60.14	6.48	36.37	44.05	58.94	68.2	-9.26	PK
H	4739.066	43.90	6.48	36.37	44.05	42.70	54	-11.30	AV
H	10460.120	52.08	8.47	38.64	44.50	54.69	68.2	-13.51	PK
H	10460.120	44.02	8.47	38.64	44.50	46.63	54	-7.37	AV
H	15690.009	50.14	10.12	38.38	44.10	54.54	74	-19.46	PK
H	15690.009	41.81	10.12	38.38	44.10	46.21	54	-7.79	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)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G									
V	4434.015	60.68	5.94	35.40	44.00	58.02	68.2	-10.18	PK
V	4434.015	43.51	5.94	35.40	44.00	40.85	54	-13.15	AV
V	10360.009	62.50	8.46	39.75	44.50	66.21	68.2	-1.99	PK
V	10360.009	43.23	8.46	39.75	44.50	46.94	54	-7.06	AV
V	15540.146	63.98	10.12	38.80	44.10	68.80	74	-5.20	PK
V	15540.146	43.65	10.12	38.80	42.70	49.87	54	-4.13	AV
H	4434.021	60.81	5.94	35.18	44.00	57.93	68.2	-10.27	PK
H	4434.021	43.11	5.94	35.18	44.00	40.23	54	-13.77	AV
H	10360.014	54.94	8.46	38.71	44.50	57.61	68.2	-10.59	PK
H	10360.014	41.23	8.46	38.71	44.50	43.90	54	-10.10	AV
H	15540.197	52.78	10.12	38.38	44.10	57.18	74	-16.82	PK
H	15540.197	43.49	10.12	38.38	44.10	47.89	54	-6.11	AV
middle Channel (5200 MHz)-Above 1G									
V	4592.105	62.20	6.48	36.35	44.05	60.98	74	-13.02	PK
V	4592.105	43.39	6.48	36.35	44.05	42.17	54	-11.83	AV
V	10400.167	64.76	8.47	37.88	44.51	66.60	68.2	-1.60	PK
V	10400.167	43.08	8.47	37.88	44.51	44.92	54	-9.08	AV
V	15600.190	62.36	10.12	38.80	44.10	67.18	74	-6.82	PK
V	15600.190	43.55	10.12	38.80	42.70	49.77	54	-4.23	AV
H	4592.030	64.18	6.48	36.37	44.05	62.98	74	-11.02	PK
H	4592.030	43.97	6.48	36.37	44.05	42.77	54	-11.23	AV
H	10400.047	52.67	8.47	38.64	44.50	55.28	68.2	-12.92	PK
H	10400.047	44.25	8.47	38.64	44.50	46.86	54	-7.14	AV
H	15600.019	53.54	10.12	38.38	44.10	57.94	74	-16.06	PK
H	15600.019	41.29	10.12	38.38	44.10	45.69	54	-8.31	AV
High Channel (5240 MHz)-Above 1G									
V	4739.089	62.05	7.10	37.24	43.50	62.89	74	-11.11	PK
V	4739.089	43.76	7.10	37.24	43.50	44.60	54	-9.40	AV
V	10480.132	60.84	8.46	37.68	44.50	62.48	68.2	-5.72	PK
V	10480.132	43.68	8.46	37.68	44.50	45.32	54	-8.68	AV
V	15720.147	64.68	10.12	38.80	44.10	69.50	74	-4.50	PK
V	15720.147	43.09	10.12	38.80	42.70	49.31	54	-4.69	AV
H	4739.075	61.22	7.10	37.24	43.50	62.06	74	-11.94	PK
H	4739.075	43.19	7.10	37.24	43.50	44.03	54	-9.97	AV
H	10480.135	54.16	8.46	38.57	44.50	56.69	68.2	-11.51	PK
H	10480.135	42.16	8.46	38.57	44.50	44.69	54	-9.31	AV
H	15720.152	51.97	10.12	38.38	44.10	56.37	74	-17.63	PK
H	15720.152	40.45	10.12	38.38	44.10	44.85	54	-9.15	AV

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

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

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5190 MHz)-Above 1G									
V	4434.089	60.84	5.94	35.40	44.00	58.18	68.2	-10.02	PK
V	4434.089	43.66	5.94	35.40	44.00	41.00	54	-13.00	AV
V	10380.150	60.83	8.46	39.75	44.50	64.54	68.2	-3.66	PK
V	10380.150	43.29	8.46	39.75	44.50	47.00	54	-7.00	AV
V	15570.100	60.57	10.12	38.80	44.10	65.39	74	-8.61	PK
V	15570.100	43.86	10.12	38.80	42.70	50.08	54	-3.92	AV
H	4434.044	62.24	5.94	35.18	44.00	59.36	74	-14.64	PK
H	4434.044	43.63	5.94	35.18	44.00	40.75	54	-13.25	AV
H	10380.197	50.04	8.46	38.71	44.50	52.71	68.2	-15.49	PK
H	10380.197	41.62	8.46	38.71	44.50	44.29	54	-9.71	AV
H	15570.190	51.61	10.12	38.38	44.10	56.01	74	-17.99	PK
H	15570.190	41.38	10.12	38.38	44.10	45.78	54	-8.22	AV
middle Channel (5230 MHz)-Above 1G									
V	4739.102	62.88	6.48	36.35	44.05	61.66	68.2	-6.54	PK
V	4739.102	43.55	6.48	36.35	44.05	42.33	54	-11.67	AV
V	10460.165	61.63	8.47	37.88	44.51	63.47	68.2	-4.73	PK
V	10460.165	43.70	8.47	37.88	44.51	45.54	54	-8.46	AV
V	15690.193	61.88	10.12	38.80	44.10	66.70	74	-7.30	PK
V	15690.193	43.05	10.12	38.80	42.70	49.27	54	-4.73	AV
H	4739.149	61.61	6.48	36.37	44.05	60.41	68.2	-7.79	PK
H	4739.149	43.44	6.48	36.37	44.05	42.24	54	-11.76	AV
H	10460.059	54.83	8.47	38.64	44.50	57.44	68.2	-10.76	PK
H	10460.059	43.53	8.47	38.64	44.50	46.14	54	-7.86	AV
H	15690.133	54.36	10.12	38.38	44.10	58.76	74	-15.24	PK
H	15690.133	42.56	10.12	38.38	44.10	46.96	54	-7.04	AV

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

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

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5210 MHz)-Above 1G									
V	4434.148	61.24	5.94	35.40	44.00	58.58	68.2	-9.62	PK
V	4434.148	43.47	5.94	35.40	44.00	40.81	54	-13.19	AV
V	10420.139	60.68	8.46	39.75	44.50	64.39	68.2	-3.81	PK
V	10420.139	43.69	8.46	39.75	44.50	47.40	54	-6.60	AV
V	15630.188	64.92	10.12	38.80	44.10	69.74	74	-4.26	PK
V	15630.188	43.43	10.12	38.80	42.70	49.65	54	-4.35	AV
H	4434.153	64.25	5.94	35.18	44.00	61.37	68.2	-6.83	PK
H	4434.153	43.45	5.94	35.18	44.00	40.57	54	-13.43	AV
H	10420.190	53.95	8.46	38.71	44.50	56.62	68.2	-11.58	PK
H	10420.190	40.67	8.46	38.71	44.50	43.34	54	-10.66	AV
H	15630.022	50.80	10.12	38.38	44.10	55.20	74	-18.80	PK
H	15630.022	41.00	10.12	38.38	44.10	45.40	54	-8.60	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)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5745 MHz)-Above 1G									
V	4679.151	55.26	5.94	35.40	44.00	52.60	74	-21.40	PK
V	4679.151	43.86	5.94	35.40	44.00	41.20	54	-12.80	AV
V	11490.101	57.69	8.46	39.75	44.50	61.40	68.2	-6.80	PK
V	11490.101	43.18	8.46	39.75	44.50	46.89	54	-7.11	AV
V	17235.011	60.51	10.12	38.80	44.10	65.33	68.2	-2.87	PK
V	17235.011	43.60	10.12	38.80	42.70	49.82	54	-4.18	AV
H	4679.086	54.21	5.94	35.18	44.00	51.33	74	-22.67	PK
H	4679.086	43.22	5.94	35.18	44.00	40.34	54	-13.66	AV
H	11490.100	53.34	8.46	38.71	44.50	56.01	68.2	-12.19	PK
H	11490.100	43.74	8.46	38.71	44.50	46.41	54	-7.59	AV
H	17235.031	51.52	10.12	38.38	44.10	55.92	68.2	-12.28	PK
H	17235.031	42.20	10.12	38.38	44.10	46.60	54	-7.40	AV
middle Channel (5785 MHz)-Above 1G									
V	4592.097	56.68	6.48	36.35	44.05	55.46	74	-18.54	PK
V	4592.097	43.79	6.48	36.35	44.05	42.57	54	-11.43	AV
V	11570.089	55.31	8.47	37.88	44.51	57.15	68.2	-11.05	PK
V	11570.089	43.75	8.47	37.88	44.51	45.59	54	-8.41	AV
V	17355.105	58.47	10.12	38.80	44.10	63.29	68.2	-4.91	PK
V	17355.105	39.54	10.12	38.80	42.70	45.76	54	-8.24	AV
H	4592.134	59.22	6.48	36.37	44.05	58.02	74	-15.98	PK
H	4592.134	43.50	6.48	36.37	44.05	42.30	54	-11.70	AV
H	11570.187	52.81	8.47	38.64	44.50	55.42	68.2	-12.78	PK
H	11570.187	43.46	8.47	38.64	44.50	46.07	54	-7.93	AV
H	17355.069	50.25	10.12	38.38	44.10	54.65	68.2	-13.55	PK
H	17355.069	41.23	10.12	38.38	44.10	45.63	54	-8.37	AV
High Channel (5825 MHz)-Above 1G									
V	6039.136	60.11	7.10	37.24	43.50	60.95	68.2	-7.25	PK
V	6039.136	43.53	7.10	37.24	43.50	44.37	54	-9.63	AV
V	11650.143	62.64	8.46	37.68	44.50	64.28	74	-9.72	PK
V	11650.143	43.32	8.46	37.68	44.50	44.96	54	-9.04	AV
V	17475.025	53.57	10.12	38.80	44.10	58.39	68.2	-9.81	PK
V	17475.025	43.54	10.12	38.80	42.70	49.76	54	-4.24	AV
H	6039.072	55.53	7.10	37.24	43.50	56.37	68.2	-11.83	PK
H	6039.072	43.87	7.10	37.24	43.50	44.71	54	-9.29	AV
H	11650.113	53.85	8.46	38.57	44.50	56.38	74	-17.62	PK
H	11650.113	42.47	8.46	38.57	44.50	45.00	54	-9.00	AV
H	17475.076	52.48	10.12	38.38	44.10	56.88	68.2	-11.32	PK
H	17475.076	41.41	10.12	38.38	44.10	45.81	54	-8.19	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)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5745 MHz)-Above 1G									
V	4679.080	56.56	5.94	35.40	44.00	53.90	74	-20.10	PK
V	4679.080	43.75	5.94	35.40	44.00	41.09	54	-12.91	AV
V	11490.057	56.59	8.46	39.75	44.50	60.30	68.2	-7.90	PK
V	11490.057	43.21	8.46	39.75	44.50	46.92	54	-7.08	AV
V	17235.170	58.63	10.12	38.80	44.10	63.45	68.2	-4.75	PK
V	17235.170	43.44	10.12	38.80	42.70	49.66	54	-4.34	AV
H	4679.132	56.98	5.94	35.18	44.00	54.10	74	-19.90	PK
H	4679.132	43.62	5.94	35.18	44.00	40.74	54	-13.26	AV
H	11490.060	50.15	8.46	38.71	44.50	52.82	68.2	-15.38	PK
H	11490.060	42.49	8.46	38.71	44.50	45.16	54	-8.84	AV
H	17235.113	52.28	10.12	38.38	44.10	56.68	68.2	-11.52	PK
H	17235.113	43.41	10.12	38.38	44.10	47.81	54	-6.19	AV
middle Channel (5785 MHz)-Above 1G									
V	4592.038	60.26	6.48	36.35	44.05	59.04	74	-14.96	PK
V	4592.038	43.84	6.48	36.35	44.05	42.62	54	-11.38	AV
V	11570.193	56.02	8.47	37.88	44.51	57.86	68.2	-10.34	PK
V	11570.193	43.84	8.47	37.88	44.51	45.68	54	-8.32	AV
V	17355.054	58.77	10.12	38.80	44.10	63.59	68.2	-4.61	PK
V	17355.054	43.19	10.12	38.80	42.70	49.41	54	-4.59	AV
H	4592.190	56.65	6.48	36.37	44.05	55.45	74	-18.55	PK
H	4592.190	43.38	6.48	36.37	44.05	42.18	54	-11.82	AV
H	11570.047	53.55	8.47	38.64	44.50	56.16	68.2	-12.04	PK
H	11570.047	42.98	8.47	38.64	44.50	45.59	54	-8.41	AV
H	17355.111	50.24	10.12	38.38	44.10	54.64	68.2	-13.56	PK
H	17355.111	40.50	10.12	38.38	44.10	44.90	54	-9.10	AV
High Channel (5825 MHz)-Above 1G									
V	6039.061	59.87	7.10	37.24	43.50	60.71	68.2	-7.49	PK
V	6039.061	43.61	7.10	37.24	43.50	44.45	54	-9.55	AV
V	11650.050	58.96	8.46	37.68	44.50	60.60	74	-13.40	PK
V	11650.050	43.71	8.46	37.68	44.50	45.35	54	-8.65	AV
V	17475.102	56.09	10.12	38.80	44.10	60.91	68.2	-7.29	PK
V	17475.102	43.52	10.12	38.80	42.70	49.74	54	-4.26	AV
H	6039.055	55.74	7.10	37.24	43.50	56.58	68.2	-11.62	PK
H	6039.055	43.83	7.10	37.24	43.50	44.67	54	-9.33	AV
H	11650.149	53.60	8.46	38.57	44.50	56.13	74	-17.87	PK
H	11650.149	42.21	8.46	38.57	44.50	44.74	54	-9.26	AV
H	17475.025	53.38	10.12	38.38	44.10	57.78	68.2	-10.42	PK
H	17475.025	42.75	10.12	38.38	44.10	47.15	54	-6.85	AV

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

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

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5755 MHz)-Above 1G									
V	4679.137	57.04	5.94	35.40	44.00	54.38	74	-19.62	PK
V	4679.137	43.15	5.94	35.40	44.00	40.49	54	-13.51	AV
V	11510.089	56.80	8.46	39.75	44.50	60.51	74	-13.49	PK
V	11510.089	43.26	8.46	39.75	44.50	46.97	54	-7.03	AV
V	17265.117	59.06	10.12	38.80	44.10	63.88	68.2	-4.32	PK
V	17265.117	43.57	10.12	38.80	42.70	49.79	54	-4.21	AV
H	4679.001	58.88	5.94	35.18	44.00	56.00	74	-18.00	PK
H	4679.001	43.42	5.94	35.18	44.00	40.54	54	-13.46	AV
H	11510.023	50.27	8.46	38.71	44.50	52.94	74	-21.06	PK
H	11510.023	42.98	8.46	38.71	44.50	45.65	54	-8.35	AV
H	17265.010	53.93	10.12	38.38	44.10	58.33	68.2	-9.87	PK
H	17265.010	40.26	10.12	38.38	44.10	44.66	54	-9.34	AV
middle Channel (5795 MHz)-Above 1G									
V	6039.141	60.87	6.48	36.35	44.05	59.65	68.2	-8.55	PK
V	6039.141	43.88	6.48	36.35	44.05	42.66	54	-11.34	AV
V	11590.177	56.73	8.47	37.88	44.51	58.57	74	-15.43	PK
V	11590.177	43.32	8.47	37.88	44.51	45.16	54	-8.84	AV
V	17385.191	55.93	10.12	38.80	44.10	60.75	68.2	-7.45	PK
V	17385.191	41.18	10.12	38.80	42.70	47.40	54	-6.60	AV
H	6039.192	60.38	6.48	36.37	44.05	59.18	68.2	-9.02	PK
H	6039.192	43.89	6.48	36.37	44.05	42.69	54	-11.31	AV
H	11590.136	53.37	8.47	38.64	44.50	55.98	74	-18.02	PK
H	11590.136	40.74	8.47	38.64	44.50	43.35	54	-10.65	AV
H	17385.007	51.29	10.12	38.38	44.10	55.69	68.2	-12.51	PK
H	17385.007	40.49	10.12	38.38	44.10	44.89	54	-9.11	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 (5.8G) --802.11ac-HT20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5745 MHz)-Above 1G									
V	4679.060	56.17	5.94	35.40	44.00	53.51	74	-20.49	PK
V	4679.060	43.05	5.94	35.40	44.00	40.39	54	-13.61	AV
V	11490.005	55.46	8.46	39.75	44.50	59.17	68.2	-9.03	PK
V	11490.005	43.76	8.46	39.75	44.50	47.47	54	-6.53	AV
V	17235.198	57.65	10.12	38.80	44.10	62.47	68.2	-5.73	PK
V	17235.198	43.05	10.12	38.80	42.70	49.27	54	-4.73	AV
H	4679.134	56.08	5.94	35.18	44.00	53.20	74	-20.80	PK
H	4679.134	43.53	5.94	35.18	44.00	40.65	54	-13.35	AV
H	11490.004	49.24	8.46	38.71	44.50	51.91	68.2	-16.29	PK
H	11490.004	41.56	8.46	38.71	44.50	44.23	54	-9.77	AV
H	17235.134	50.74	10.12	38.38	44.10	55.14	68.2	-13.06	PK
H	17235.134	42.66	10.12	38.38	44.10	47.06	54	-6.94	AV
middle Channel (5785 MHz)-Above 1G									
V	4592.063	58.43	6.48	36.35	44.05	57.21	74	-16.79	PK
V	4592.063	43.04	6.48	36.35	44.05	41.82	54	-12.18	AV
V	11570.143	57.81	8.47	37.88	44.51	59.65	68.2	-8.55	PK
V	11570.143	43.31	8.47	37.88	44.51	45.15	54	-8.85	AV
V	17355.029	61.44	10.12	38.80	44.10	66.26	68.2	-1.94	PK
V	17355.029	43.63	10.12	38.80	42.70	49.85	54	-4.15	AV
H	4592.151	60.22	6.48	36.37	44.05	59.02	74	-14.98	PK
H	4592.151	43.02	6.48	36.37	44.05	41.82	54	-12.18	AV
H	11570.045	50.25	8.47	38.64	44.50	52.86	68.2	-15.34	PK
H	11570.045	42.14	8.47	38.64	44.50	44.75	54	-9.25	AV
H	17355.068	54.59	10.12	38.38	44.10	58.99	68.2	-9.21	PK
H	17355.068	44.53	10.12	38.38	44.10	48.93	54	-5.07	AV
High Channel (5825 MHz)-Above 1G									
V	6039.190	55.95	7.10	37.24	43.50	56.79	68.2	-11.41	PK
V	6039.190	43.39	7.10	37.24	43.50	44.23	54	-9.77	AV
V	11650.068	57.03	8.46	37.68	44.50	58.67	74	-15.33	PK
V	11650.068	43.56	8.46	37.68	44.50	45.20	54	-8.80	AV
V	17475.160	55.16	10.12	38.80	44.10	59.98	68.2	-8.22	PK
V	17475.160	43.67	10.12	38.80	42.70	49.89	54	-4.11	AV
H	6039.130	58.91	7.10	37.24	43.50	59.75	68.2	-8.45	PK
H	6039.130	43.88	7.10	37.24	43.50	44.72	54	-9.28	AV
H	11650.117	53.45	8.46	38.57	44.50	55.98	74	-18.02	PK
H	11650.117	42.53	8.46	38.57	44.50	45.06	54	-8.94	AV
H	17475.084	52.21	10.12	38.38	44.10	56.61	68.2	-11.59	PK
H	17475.084	42.91	10.12	38.38	44.10	47.31	54	-6.69	AV

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

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

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5755 MHz)-Above 1G									
V	4679.056	59.63	5.94	35.40	44.00	56.97	74	-17.03	PK
V	4679.056	43.36	5.94	35.40	44.00	40.70	54	-13.30	AV
V	11510.019	56.25	8.46	39.75	44.50	59.96	74	-14.04	PK
V	11510.019	43.69	8.46	39.75	44.50	47.40	54	-6.60	AV
V	17265.167	55.15	10.12	38.80	44.10	59.97	68.2	-8.23	PK
V	17265.167	43.42	10.12	38.80	42.70	49.64	54	-4.36	AV
H	4679.074	58.13	5.94	35.18	44.00	55.25	74	-18.75	PK
H	4679.074	43.32	5.94	35.18	44.00	40.44	54	-13.56	AV
H	11510.051	50.38	8.46	38.71	44.50	53.05	74	-20.95	PK
H	11510.051	41.78	8.46	38.71	44.50	44.45	54	-9.55	AV
H	17265.036	53.18	10.12	38.38	44.10	57.58	68.2	-10.62	PK
H	17265.036	44.79	10.12	38.38	44.10	49.19	54	-4.81	AV
middle Channel (5795 MHz)-Above 1G									
V	6039.182	58.85	6.48	36.35	44.05	57.63	68.2	-10.57	PK
V	6039.182	43.43	6.48	36.35	44.05	42.21	54	-11.79	AV
V	11590.136	55.03	8.47	37.88	44.51	56.87	74	-17.13	PK
V	11590.136	43.64	8.47	37.88	44.51	45.48	54	-8.52	AV
V	17385.166	55.78	10.12	38.80	44.10	60.60	68.2	-7.60	PK
V	17385.166	41.65	10.12	38.80	42.70	47.87	54	-6.13	AV
H	6039.175	56.92	6.48	36.37	44.05	55.72	68.2	-12.48	PK
H	6039.175	43.24	6.48	36.37	44.05	42.04	54	-11.96	AV
H	11590.003	51.01	8.47	38.64	44.50	53.62	74	-20.38	PK
H	11590.003	42.24	8.47	38.64	44.50	44.85	54	-9.15	AV
H	17385.014	54.26	10.12	38.38	44.10	58.66	68.2	-9.54	PK
H	17385.014	44.86	10.12	38.38	44.10	49.26	54	-4.74	AV

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

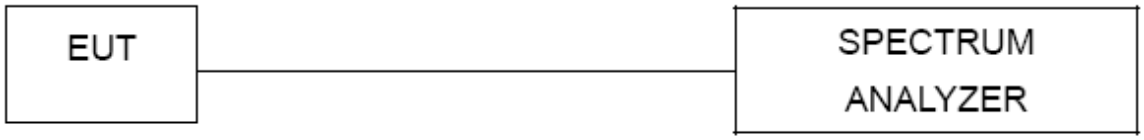
Test Mode ：	TX (5.8G) -- 802.11ac 80

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5775 MHz)-Above 1G									
V	4679.119	57.44	5.94	35.40	44.00	54.78	74	-19.22	PK
V	4679.119	43.33	5.94	35.40	44.00	40.67	54	-13.33	AV
V	11550.108	58.44	8.46	39.75	44.50	62.15	74	-11.85	PK
V	11550.108	43.16	8.46	39.75	44.50	46.87	54	-7.13	AV
V	17325.125	59.90	10.12	38.80	44.10	64.72	68.2	-3.48	PK
V	17325.125	41.52	10.12	38.80	42.70	47.74	54	-6.26	AV
H	4679.061	58.54	5.94	35.18	44.00	55.66	74	-18.34	PK
H	4679.061	43.56	5.94	35.18	44.00	40.68	54	-13.32	AV
H	11550.139	52.11	8.46	38.71	44.50	54.78	74	-19.22	PK
H	11550.139	44.61	8.46	38.71	44.50	47.28	54	-6.72	AV
H	17325.146	52.36	10.12	38.38	44.10	56.76	68.2	-11.44	PK
H	17325.146	42.78	10.12	38.38	44.10	47.18	54	-6.82	AV

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

8. Power Spectral Density Test

8.1 Block Diagram Of Test Setup



8.2 Limit

For the band 5.15-5.25 GHz,

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

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

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

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

For the band 5.725-5.85 GHz

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

8.3 Test Procedure

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

a) Set RBW ≥ 1/T, where T is defined in section II.B.l.a).

b) Set VBW ≥ 3 RBW.

c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10log(1MHz/RBW) to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.

e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

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

8.4 EUT Operating Conditions

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

8.5 Test Result

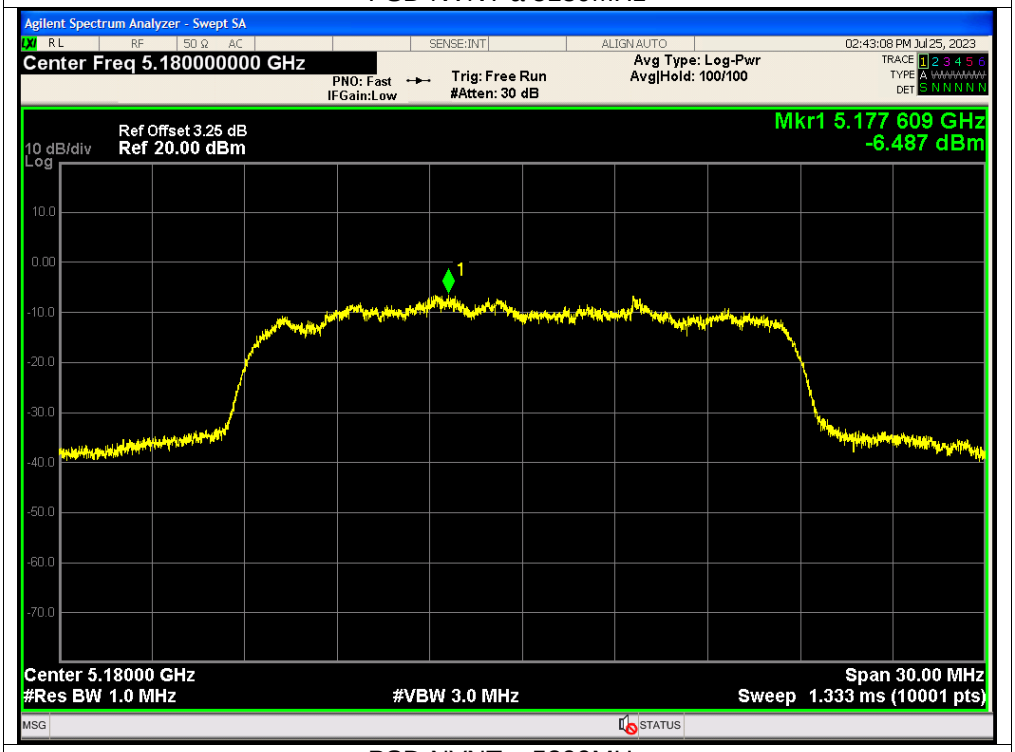
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	DC 5V
Test Mode ：	(5180-5240MHz); (5745-5825MHz)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/1MHz)	Limit (dBm/1MHz)	Verdict
NVNT	a	5180	-6.49	11	Pass
NVNT	a	5200	-6.18	11	Pass
NVNT	a	5240	-7.84	11	Pass
NVNT	n20	5180	-8.32	11	Pass
NVNT	n20	5200	-7.71	11	Pass
NVNT	n20	5240	-8.74	11	Pass
NVNT	n40	5190	-14.37	11	Pass
NVNT	n40	5230	-13.76	11	Pass
NVNT	ac20	5180	-7.11	11	Pass
NVNT	ac20	5200	-8.87	11	Pass
NVNT	ac20	5240	-7.96	11	Pass
NVNT	ac40	5190	-13.78	11	Pass
NVNT	ac40	5230	-14.59	11	Pass
NVNT	ac80	5210	-25.24	11	Pass

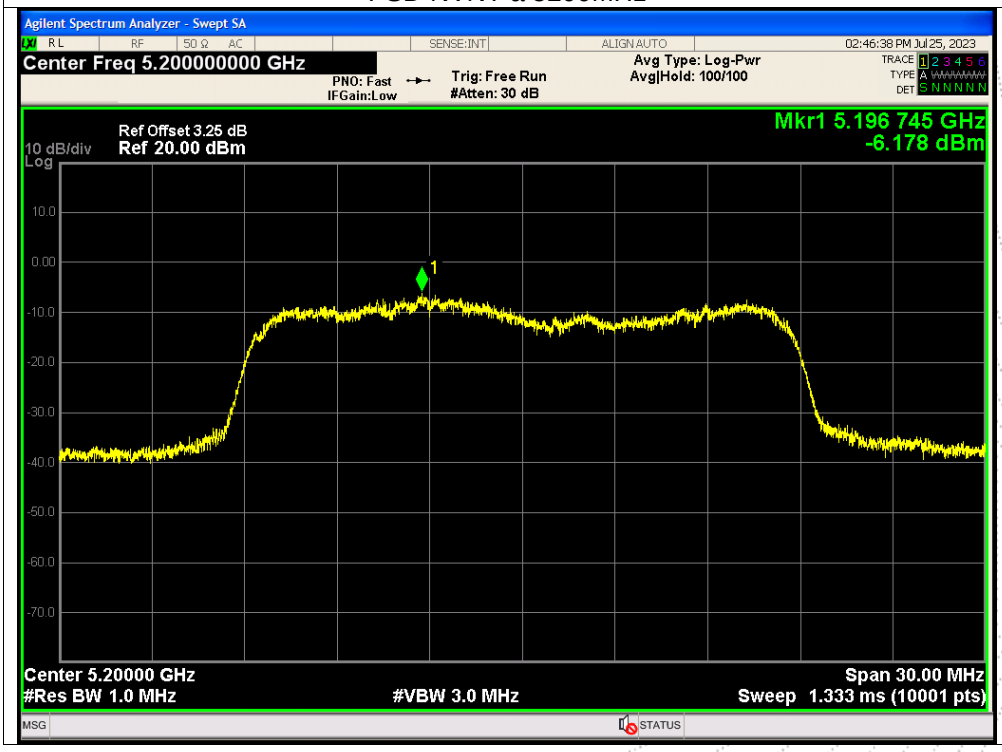
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
NVNT	a	5745	-7.91	30	Pass
NVNT	a	5785	-8.46	30	Pass
NVNT	a	5825	-9.37	30	Pass
NVNT	n20	5745	-10.94	30	Pass
NVNT	n20	5785	-10.8	30	Pass
NVNT	n20	5825	-10.24	30	Pass
NVNT	n40	5755	-17.84	30	Pass
NVNT	n40	5795	-16.73	30	Pass
NVNT	ac20	5745	-6.66	30	Pass
NVNT	ac20	5785	-9.99	30	Pass
NVNT	ac20	5825	-8.82	30	Pass
NVNT	ac40	5755	-16.98	30	Pass
NVNT	ac40	5795	-17.73	30	Pass
NVNT	ac80	5775	-27.64	30	Pass

Test Graphs

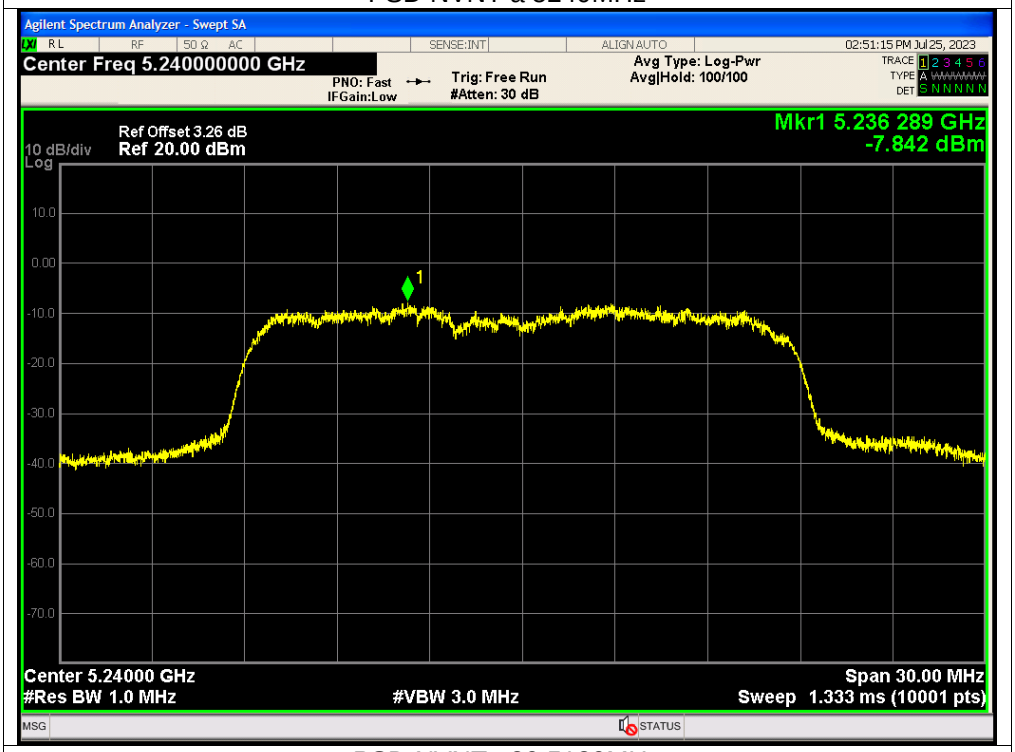
PSD NVNT a 5180MHz



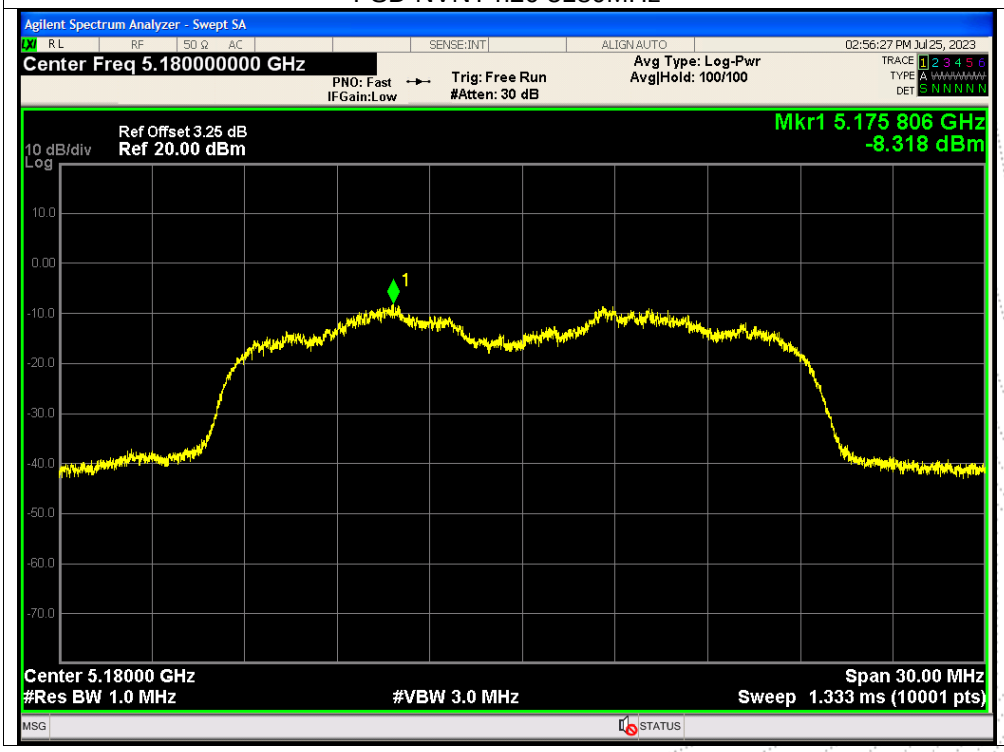
PSD NVNT a 5200MHz



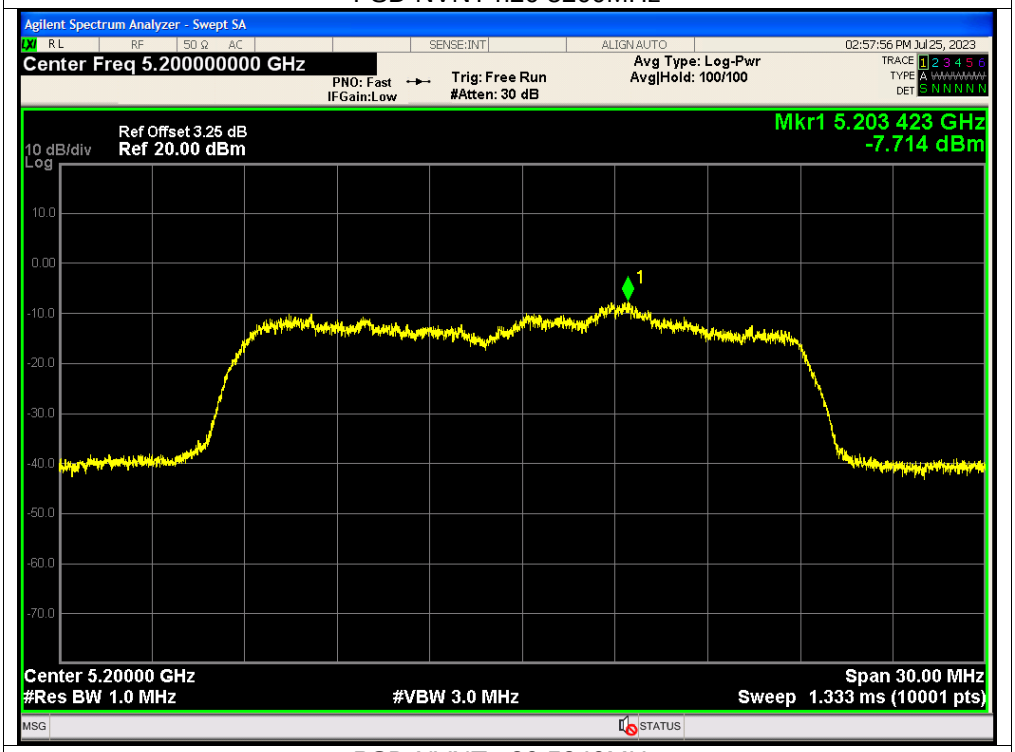
PSD NVNT a 5240MHz



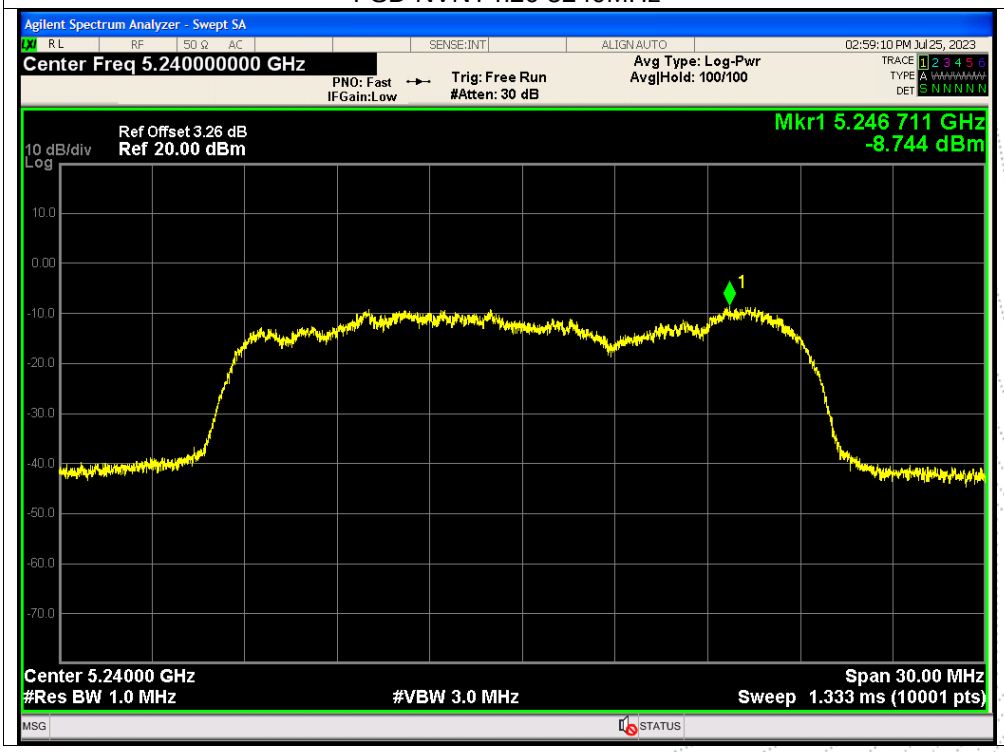
PSD NVNT n20 5180MHz



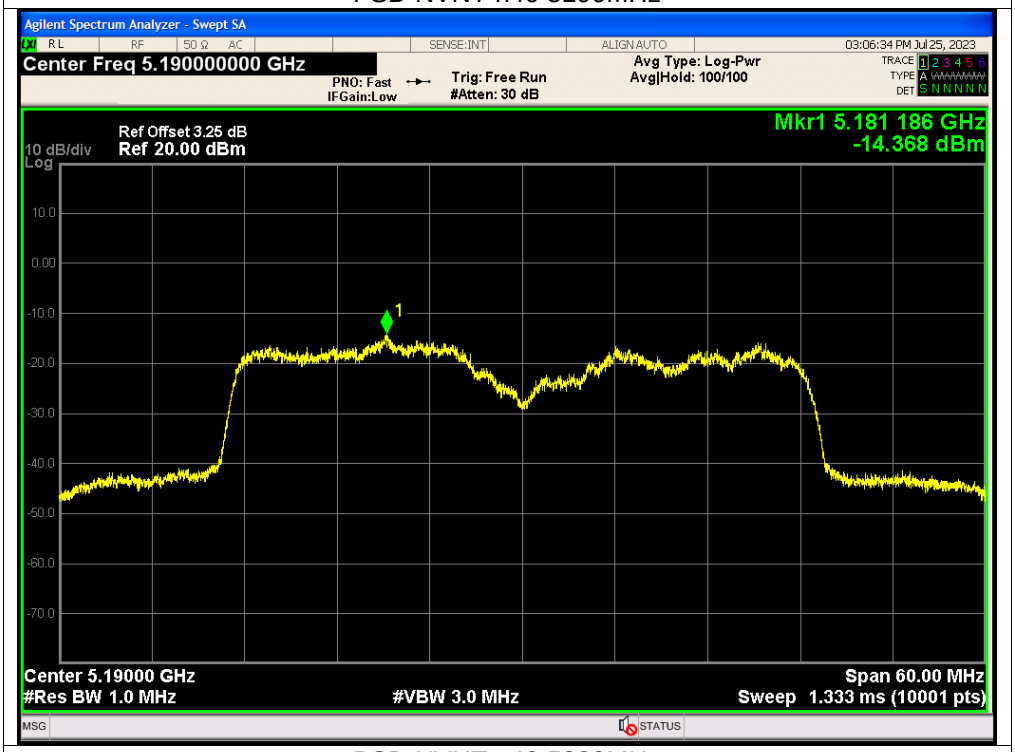
PSD NVNT n20 5200MHz



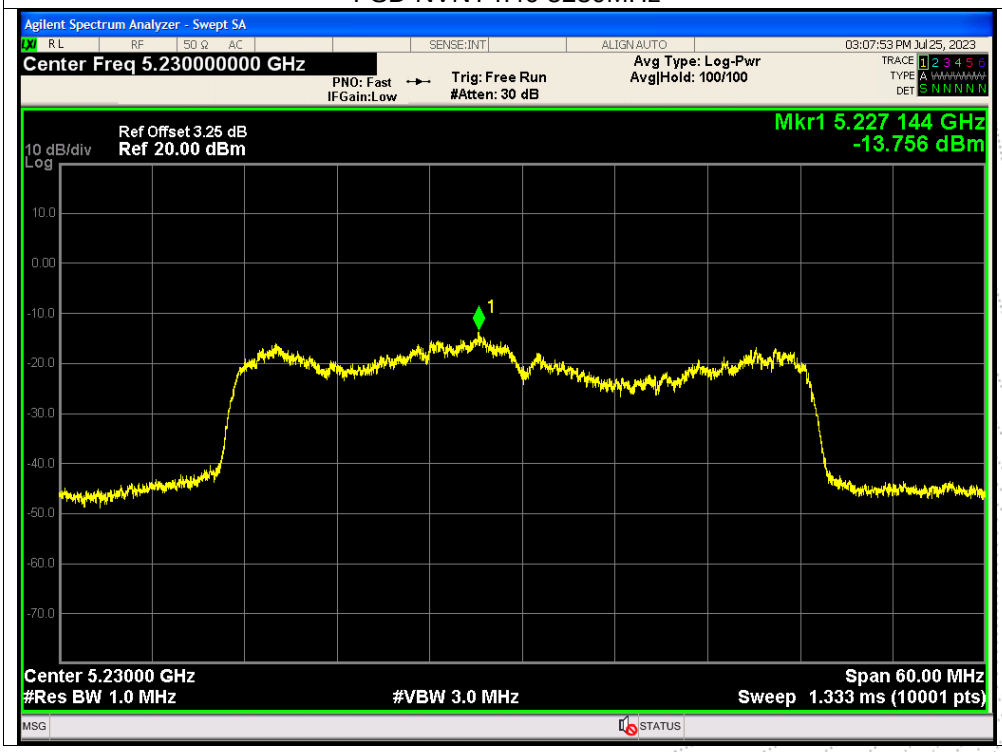
PSD NVNT n20 5240MHz



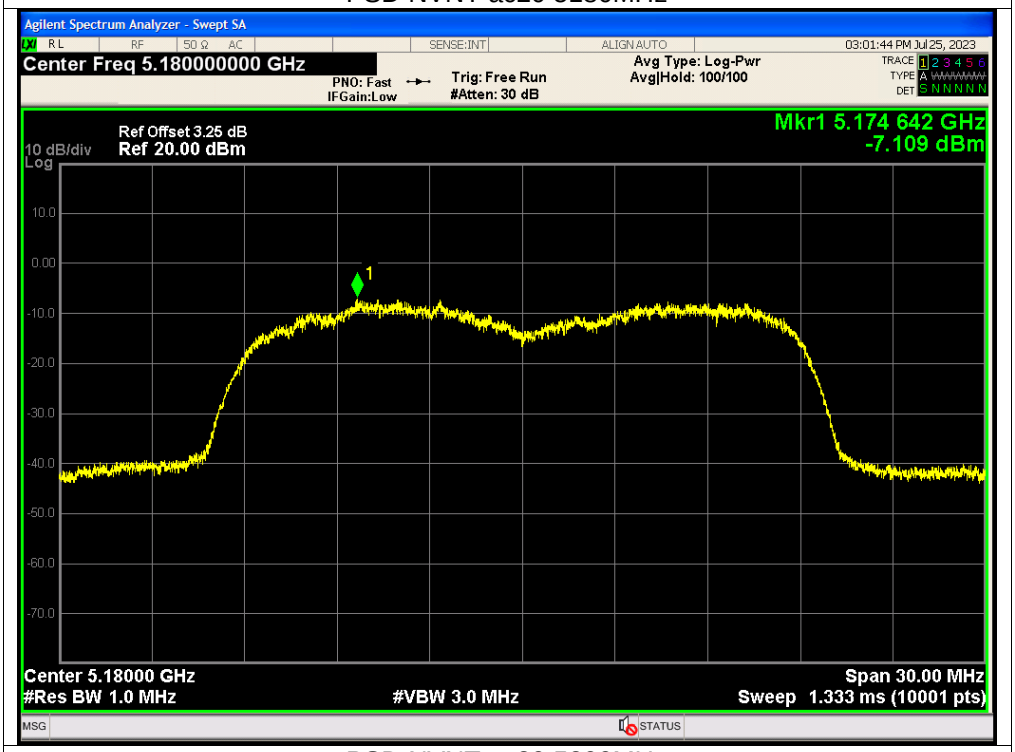
PSD NVNT n40 5190MHz



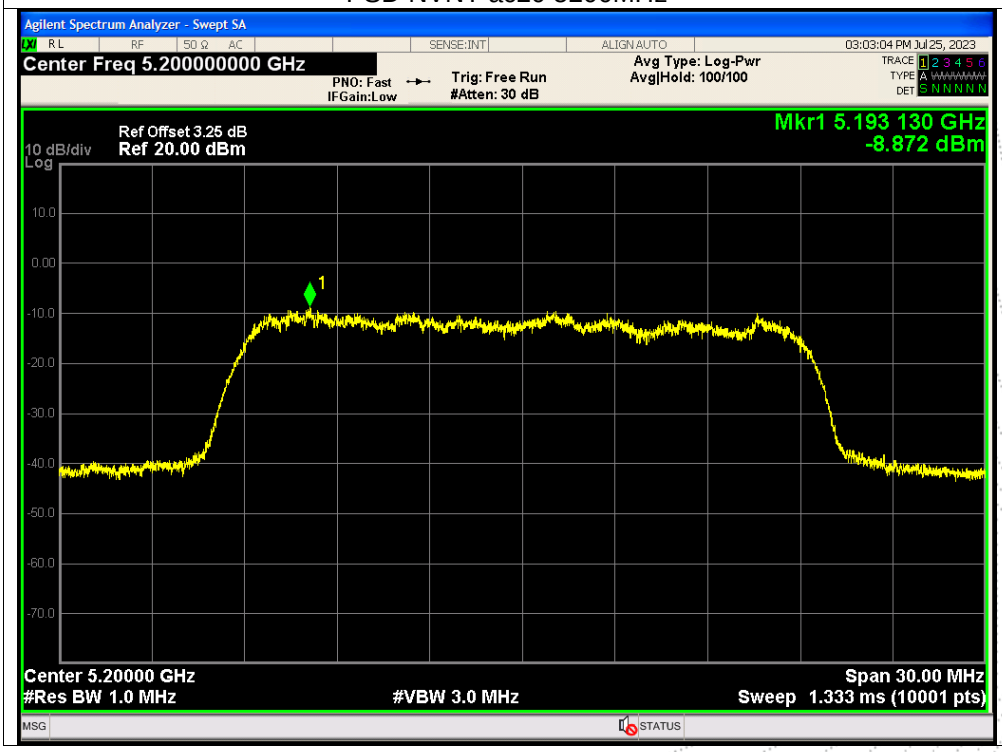
PSD NVNT n40 5230MHz



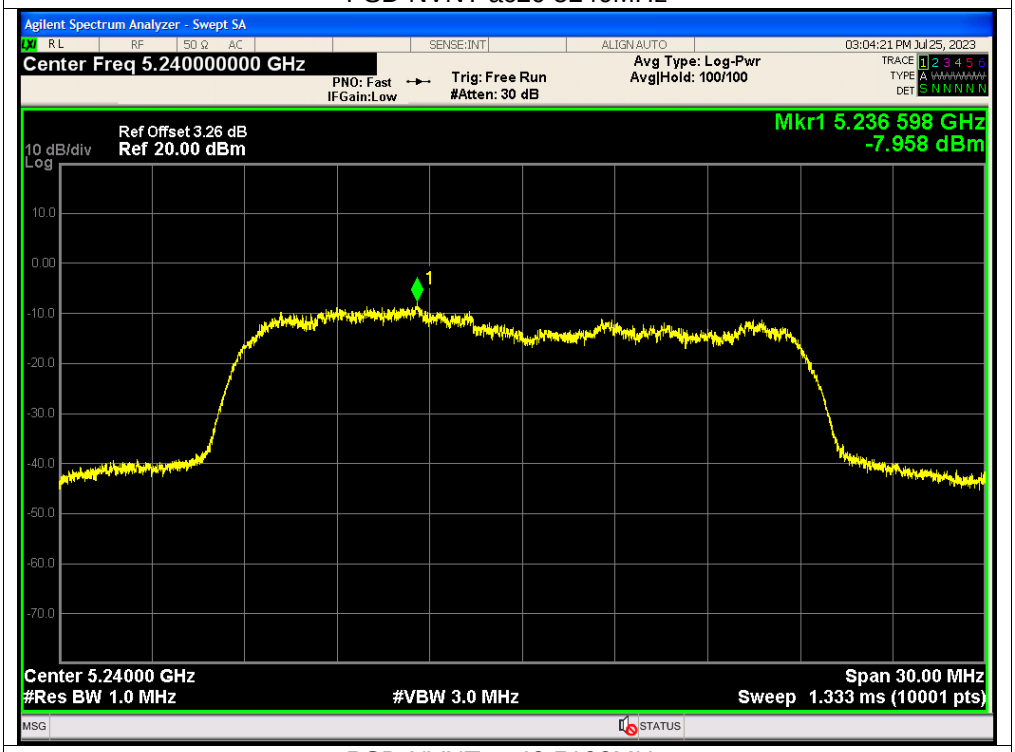
PSD NVNT ac20 5180MHz



PSD NVNT ac20 5200MHz



PSD NVNT ac20 5240MHz



PSD NVNT ac40 5190MHz

PSD NVNT ac40 5230MHz

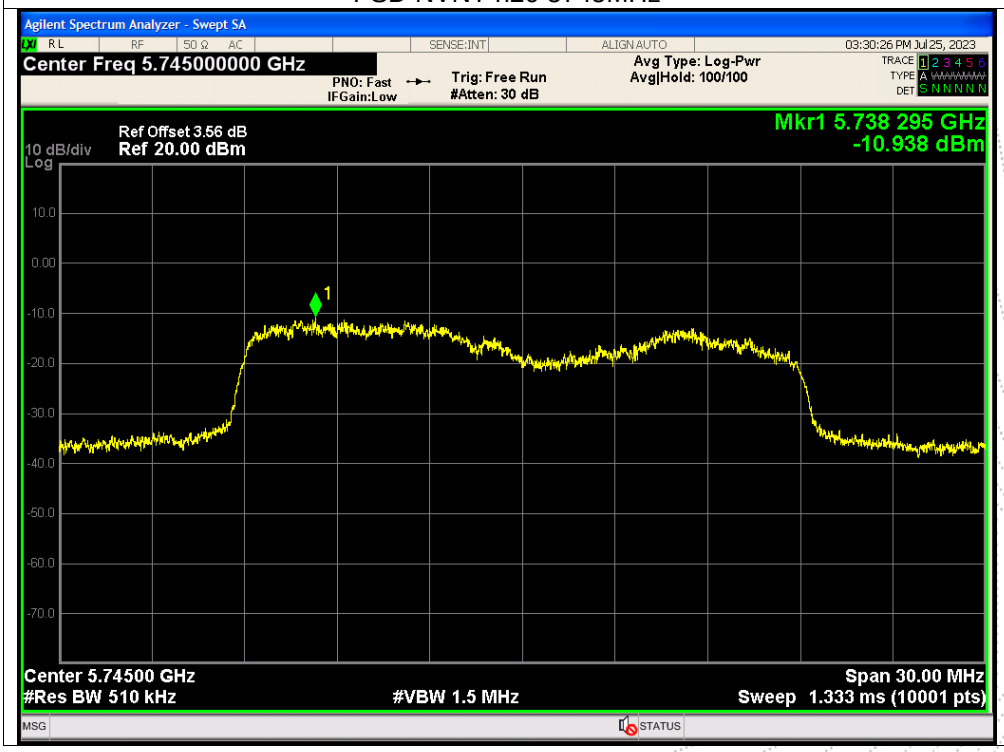
PSD NVNT ac80 5210MHz

Test Graphs
PSD NVNT a 5745MHz

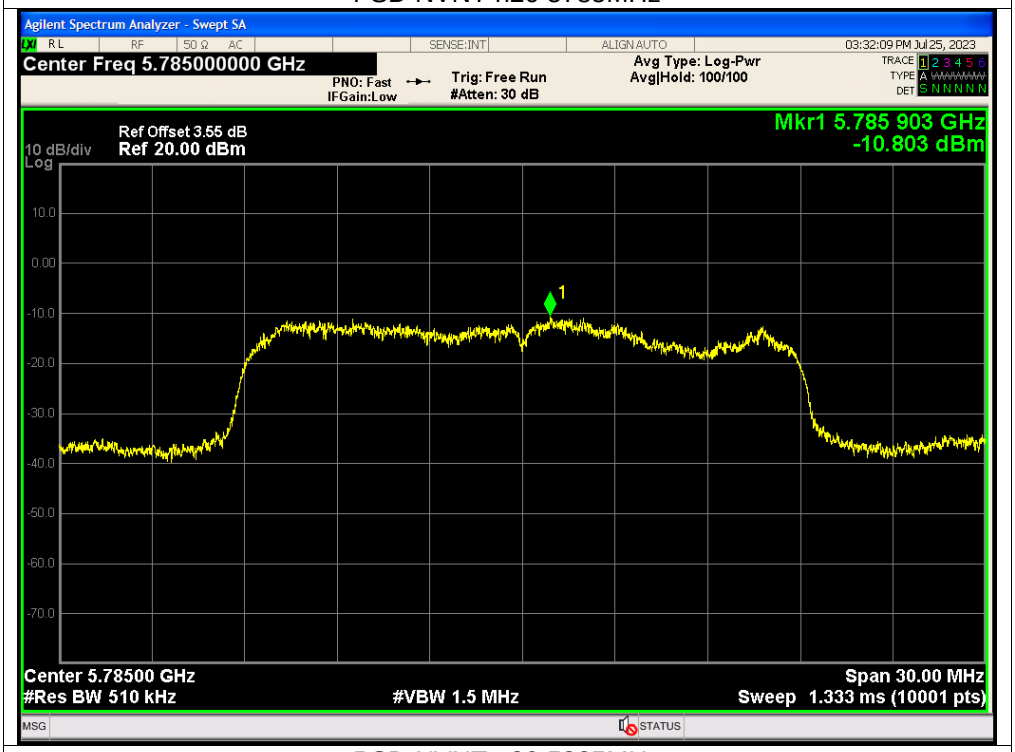
PSD NVNT a 5785MHz

PSD NVNT a 5825MHz

PSD NVNT n20 5745MHz



PSD NVNT n20 5785MHz



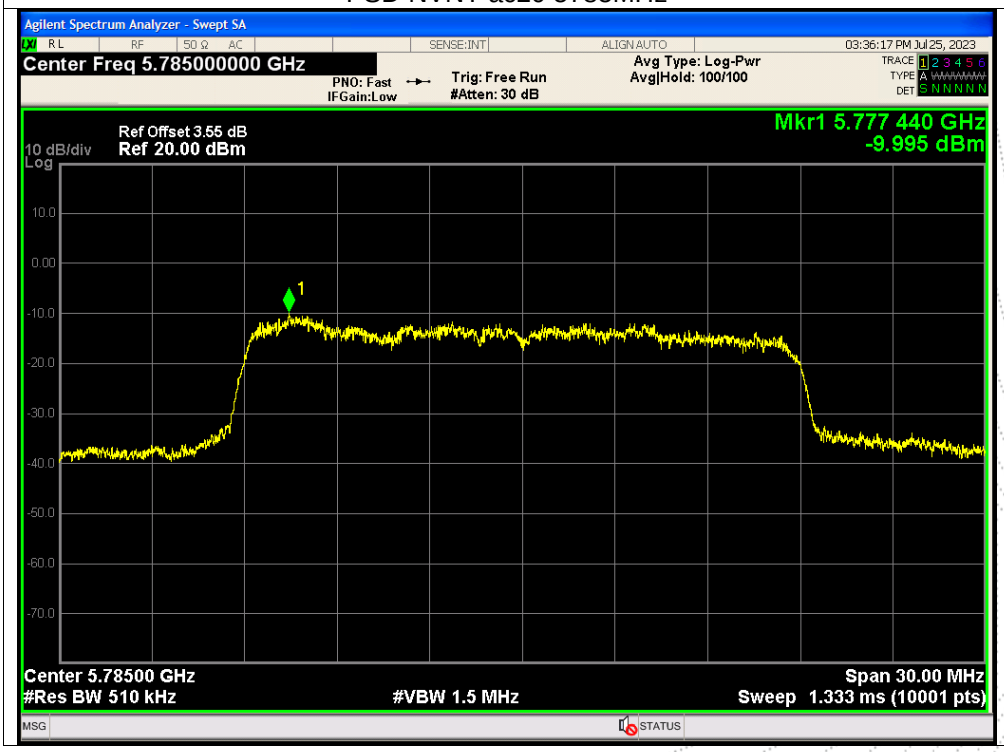
PSD NVNT n20 5825MHz

PSD NVNT n40 5755MHz

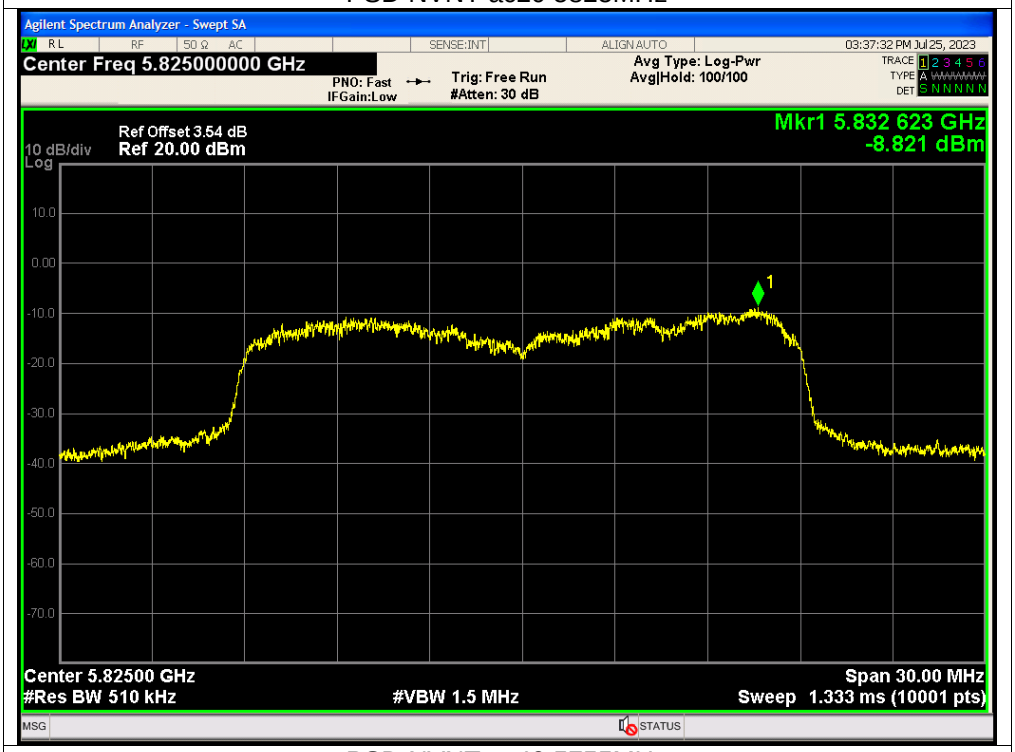
PSD NVNT n40 5795MHz

PSD NVNT ac20 5745MHz

PSD NVNT ac20 5785MHz



PSD NVNT ac20 5825MHz



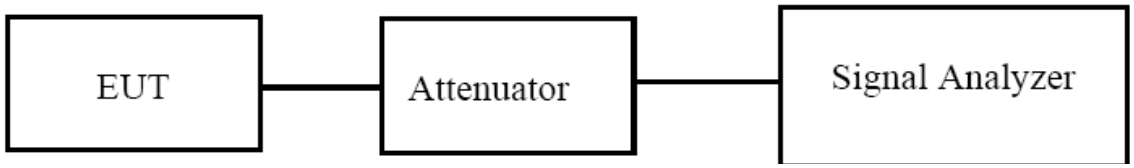
PSD NVNT ac40 5755MHz

PSD NVNT ac40 5795MHz

PSD NVNT ac80 5775MHz

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

9.1 Block Diagram Of Test Setup



9.2 Limit

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

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.

6dB
1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 x RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.

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

9.4 EUT Operating Conditions

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

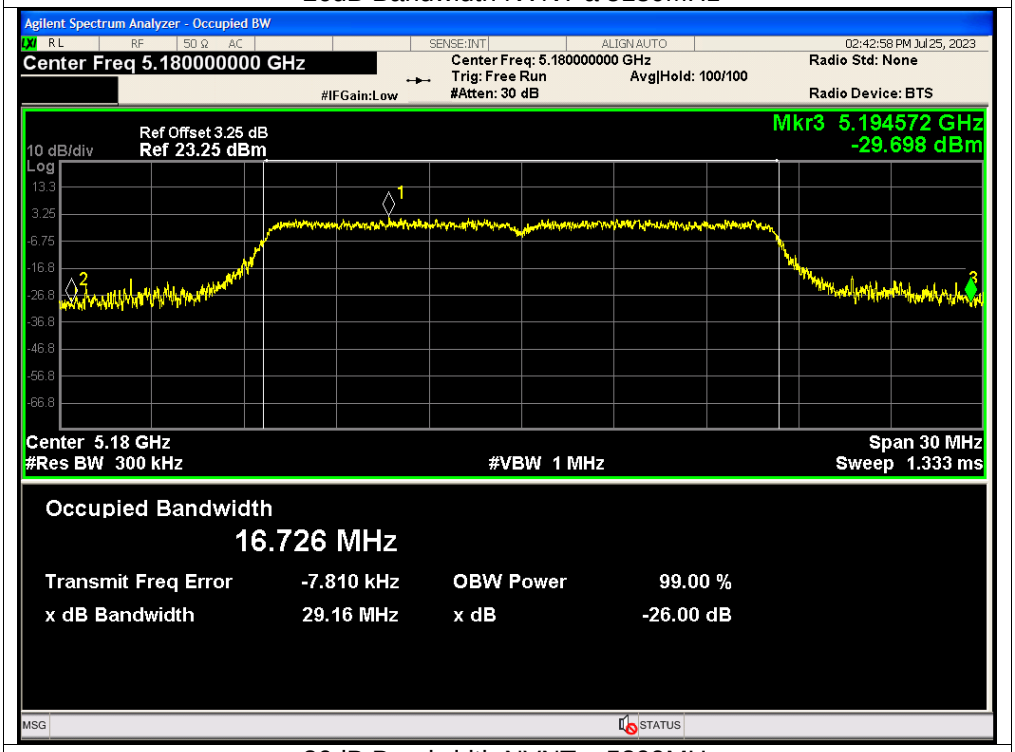
9.5 Test Result

Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	DC 5V
Test Mode ：	TX Frequency U-NII-1 (5180-5240MHz)		

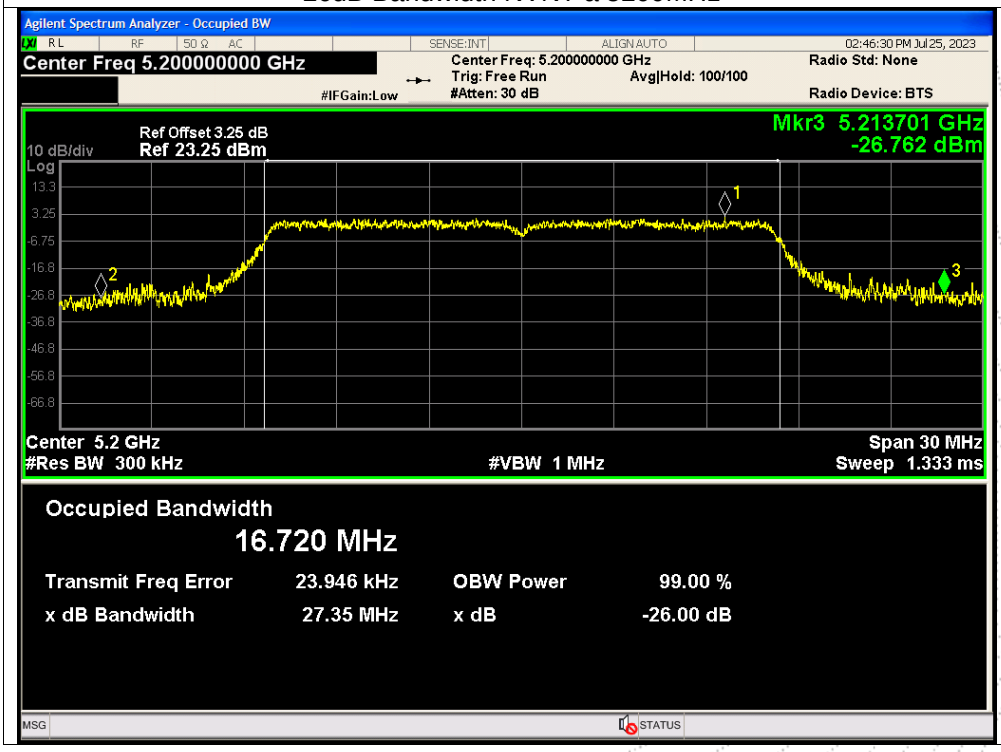
Condition	Mode	**Frequency (MHz)**	**99% bandwidth (MHz)**	**-26dB bandwidth (MHz)**	**Result**
NVNT	a	5180	16.584	29.159	Pass
NVNT	a	5200	16.562	27.355	Pass
NVNT	a	5240	16.608	28.679	Pass
NVNT	n20	5180	17.625	26.668	Pass
NVNT	n20	5200	17.63	24.879	Pass
NVNT	n20	5240	17.608	27.797	Pass
NVNT	n40	5190	36.148	51.21	Pass
NVNT	n40	5230	36.148	50.817	Pass
NVNT	ac20	5180	17.61	26.874	Pass
NVNT	ac20	5200	17.608	25.731	Pass
NVNT	ac20	5240	17.6	27.501	Pass
NVNT	ac40	5190	36.14	50.19	Pass
NVNT	ac40	5230	36.093	52.086	Pass
NVNT	ac80	5210	75.539	86.734	Pass

Test Graphs

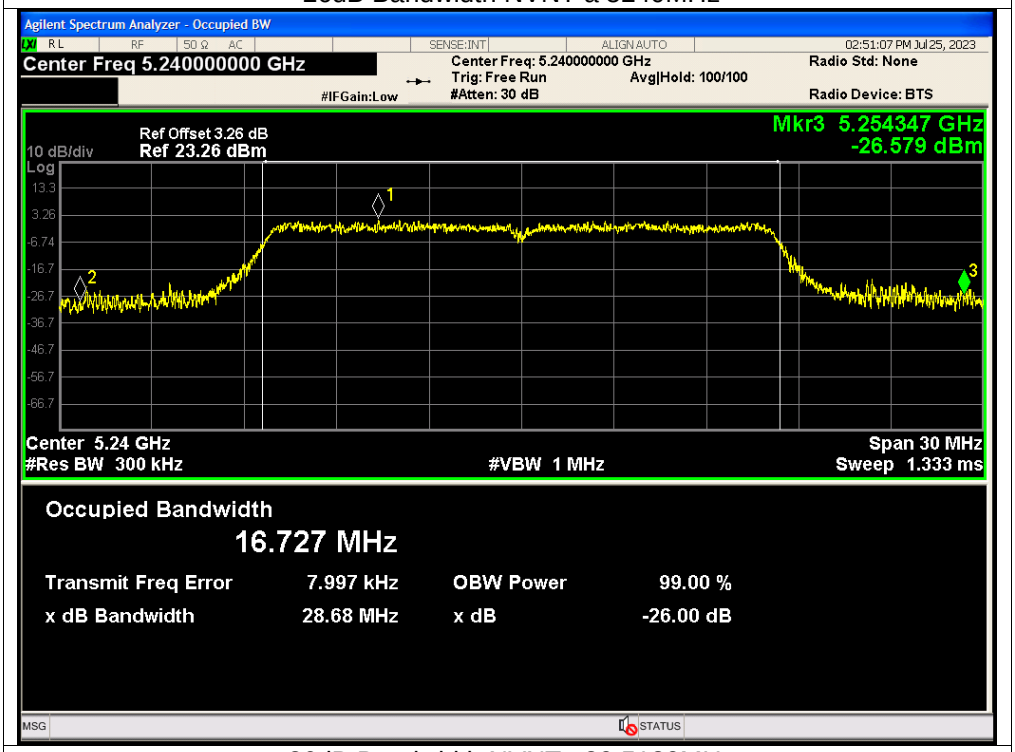
-26dB Bandwidth NVNT a 5180MHz



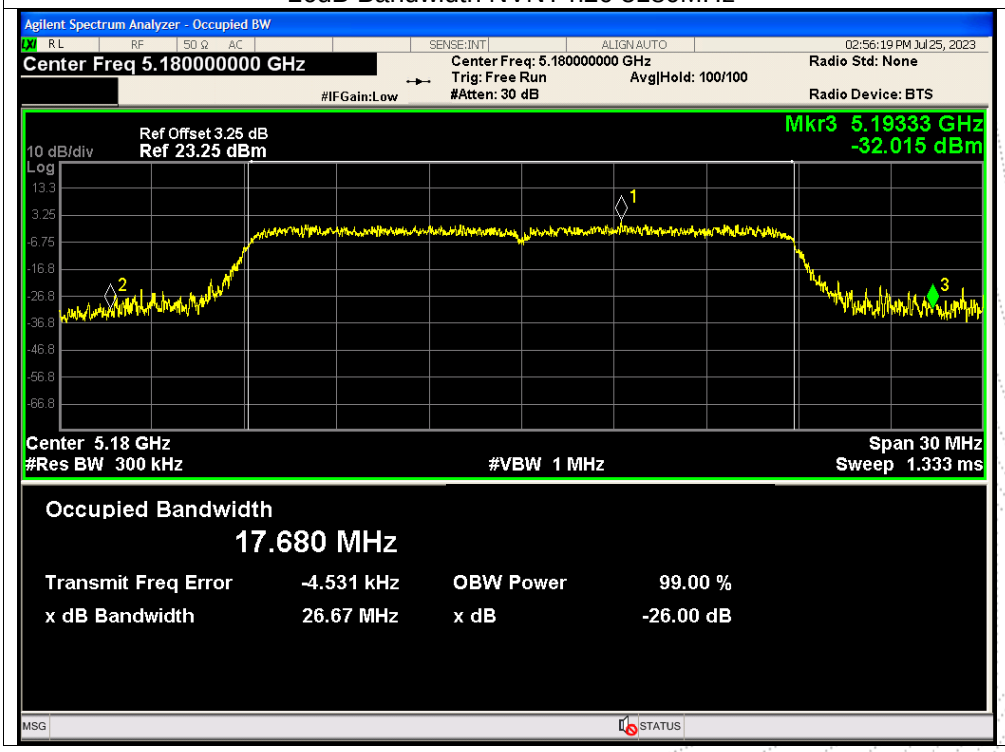
-26dB Bandwidth NVNT a 5200MHz



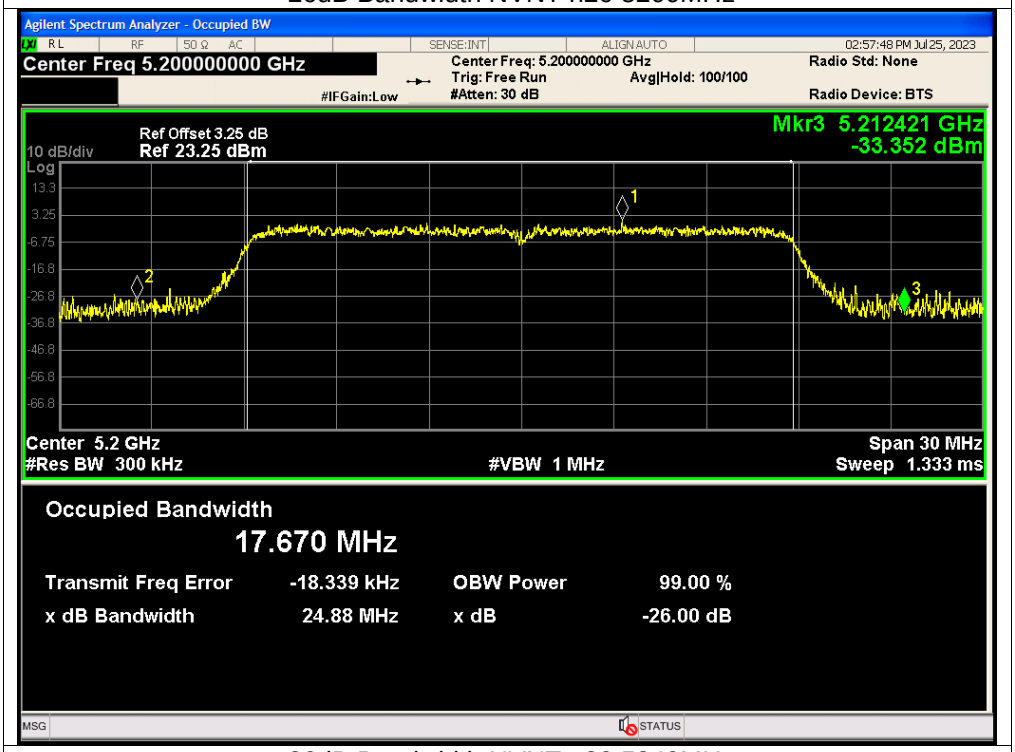
-26dB Bandwidth NVNT a 5240MHz



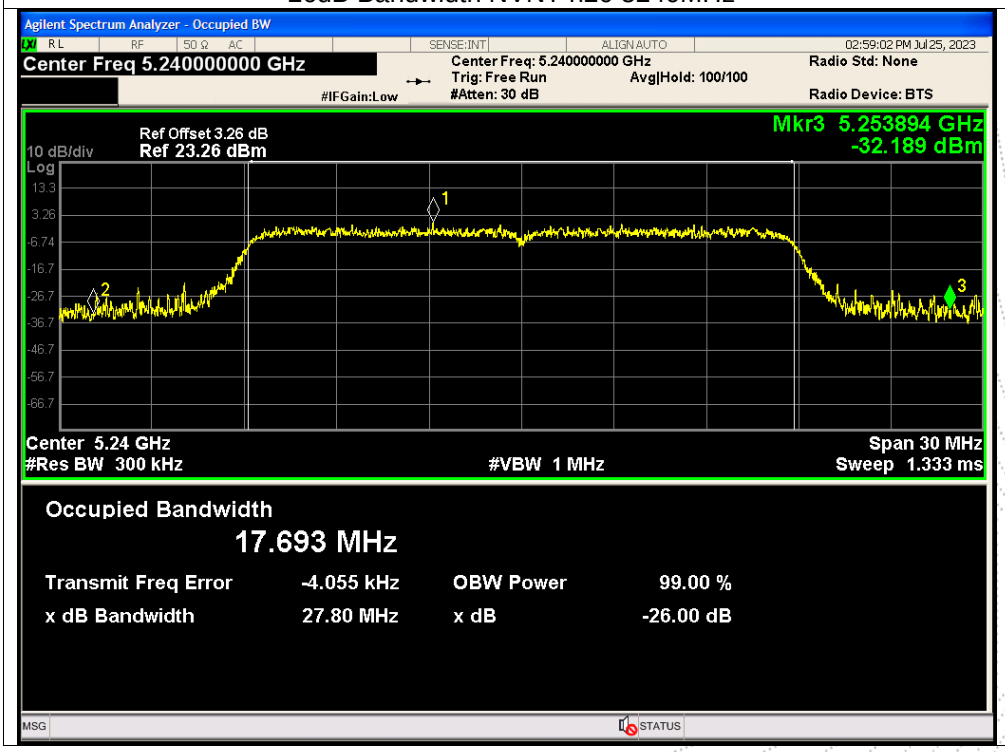
-26dB Bandwidth NVNT n20 5180MHz



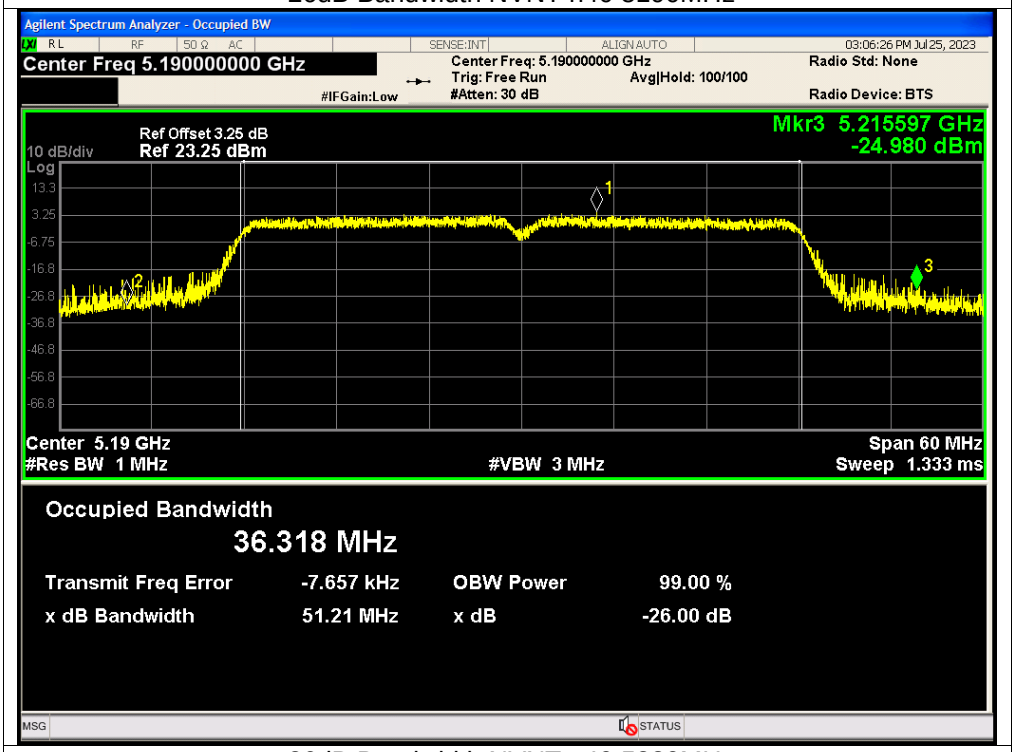
-26dB Bandwidth NVNT n20 5200MHz



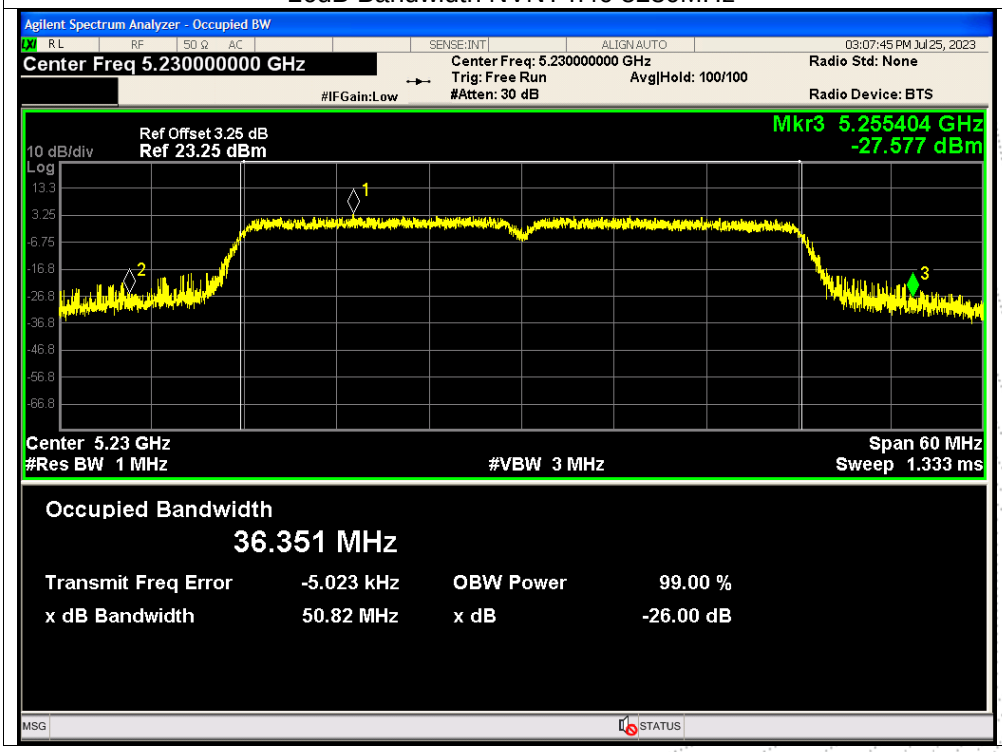
-26dB Bandwidth NVNT n20 5240MHz



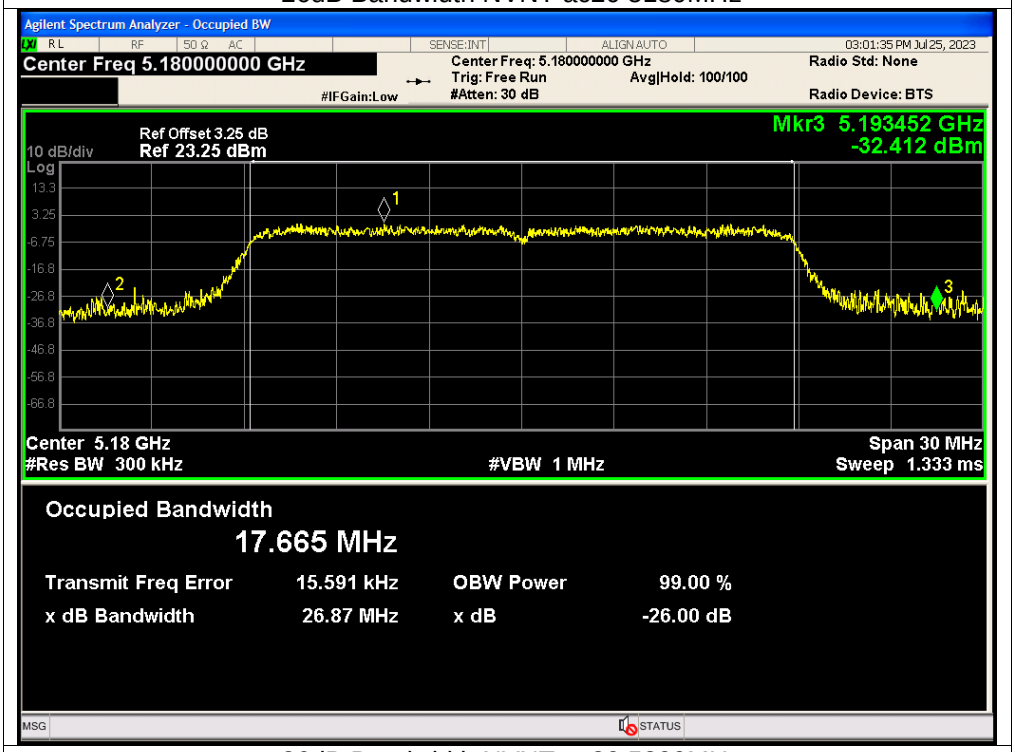
-26dB Bandwidth NVNT n40 5190MHz



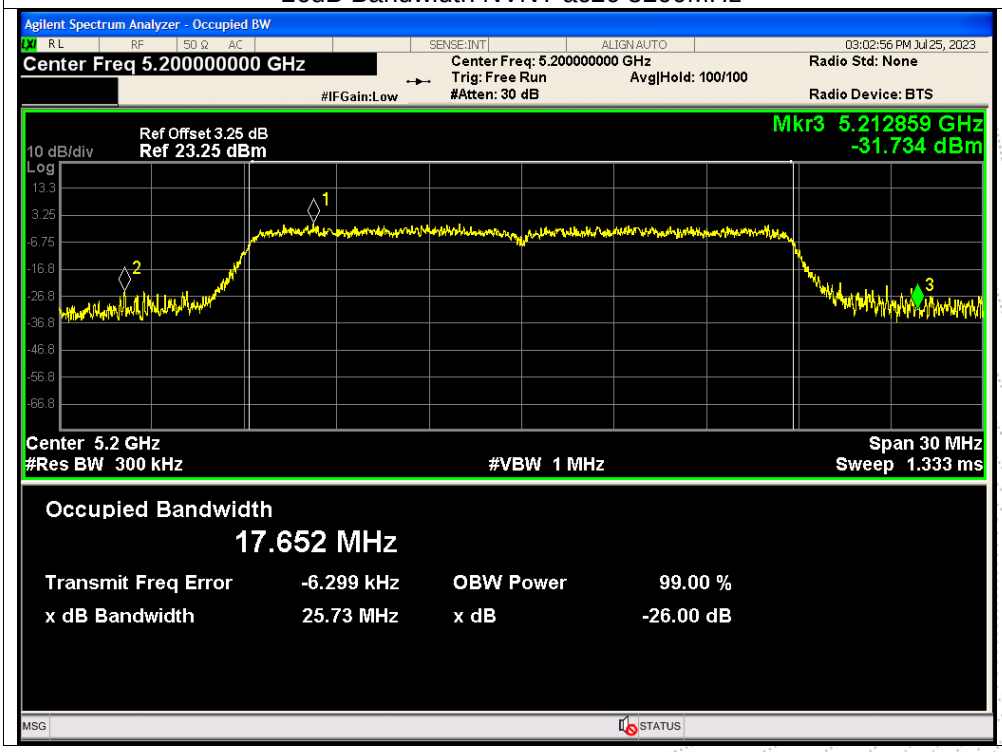
-26dB Bandwidth NVNT n40 5230MHz



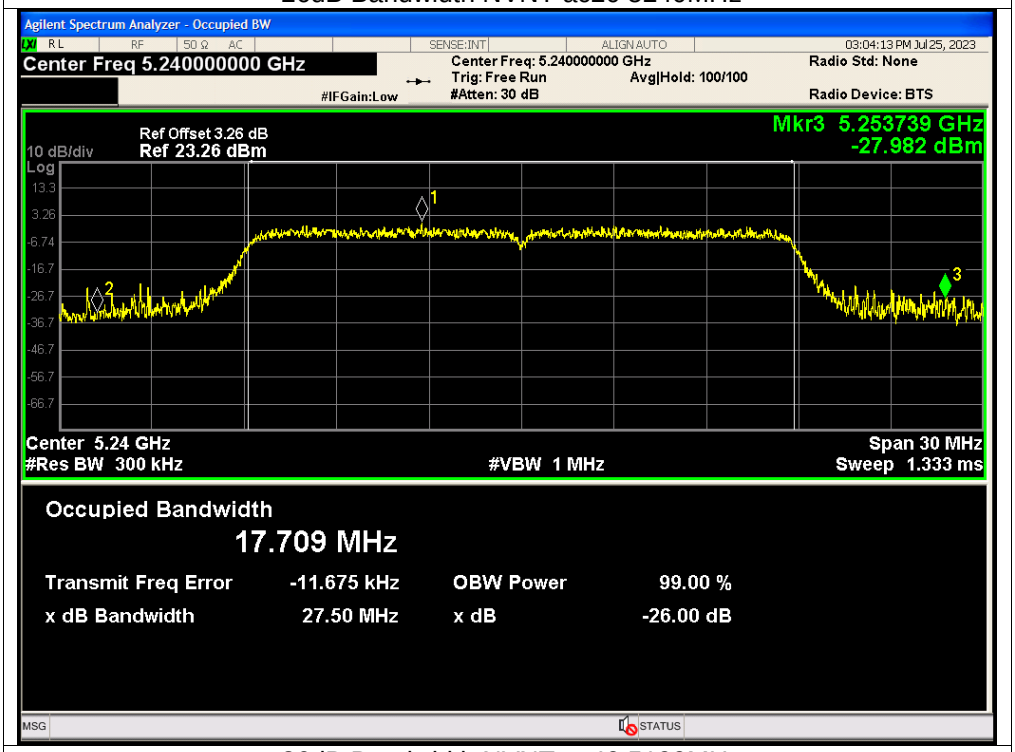
-26dB Bandwidth NVNT ac20 5180MHz



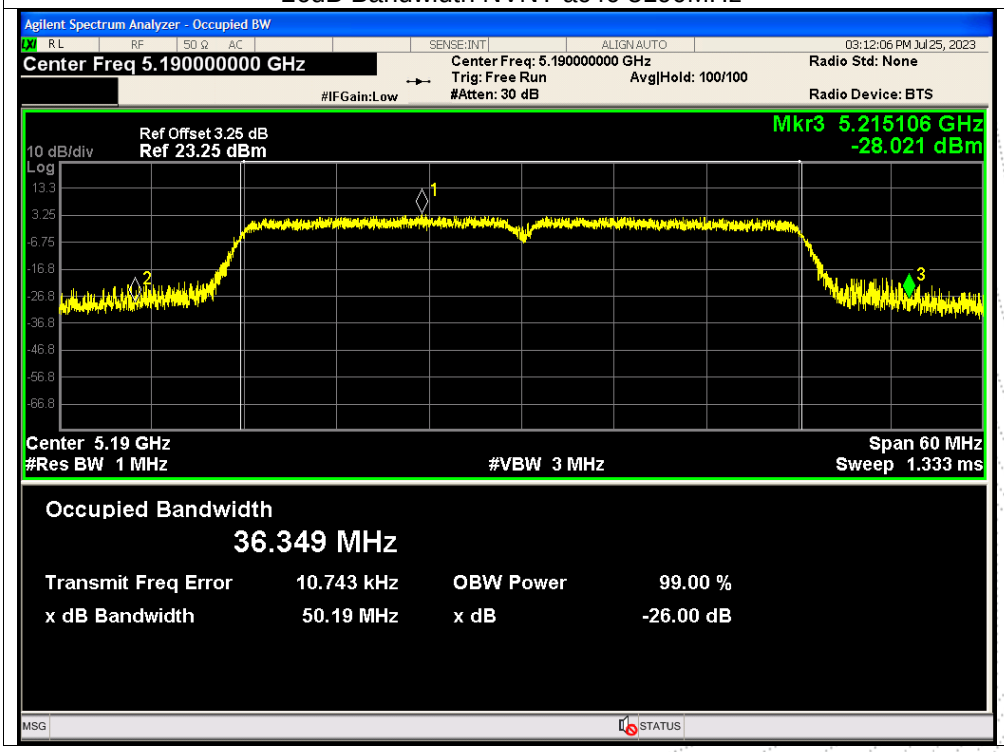
-26dB Bandwidth NVNT ac20 5200MHz



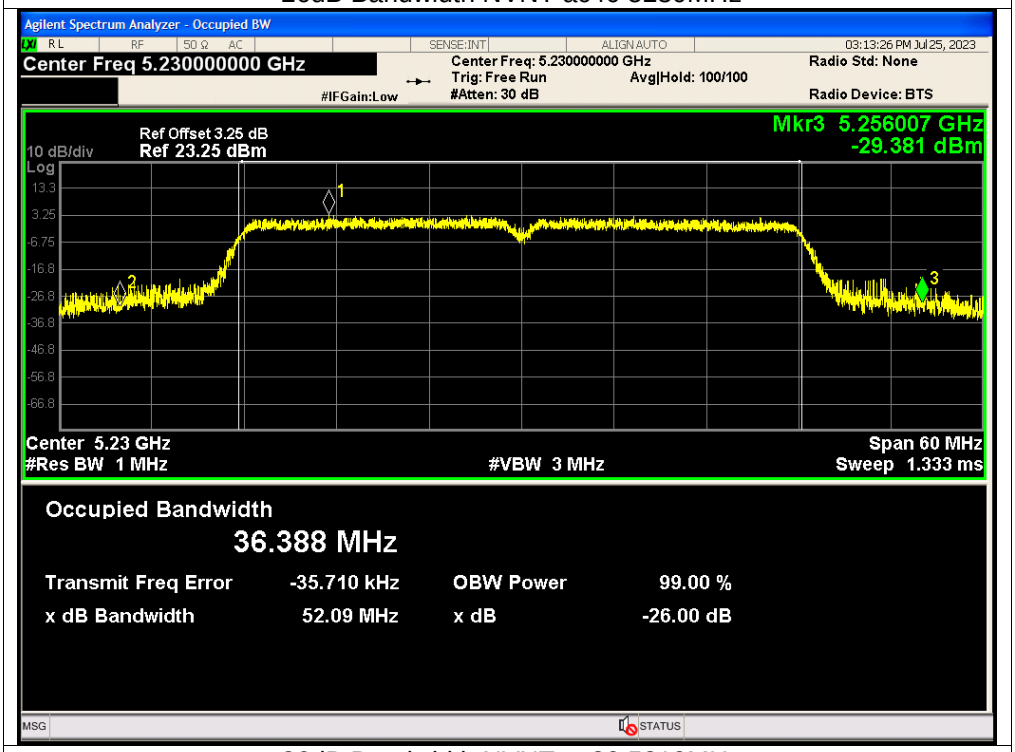
-26dB Bandwidth NVNT ac20 5240MHz



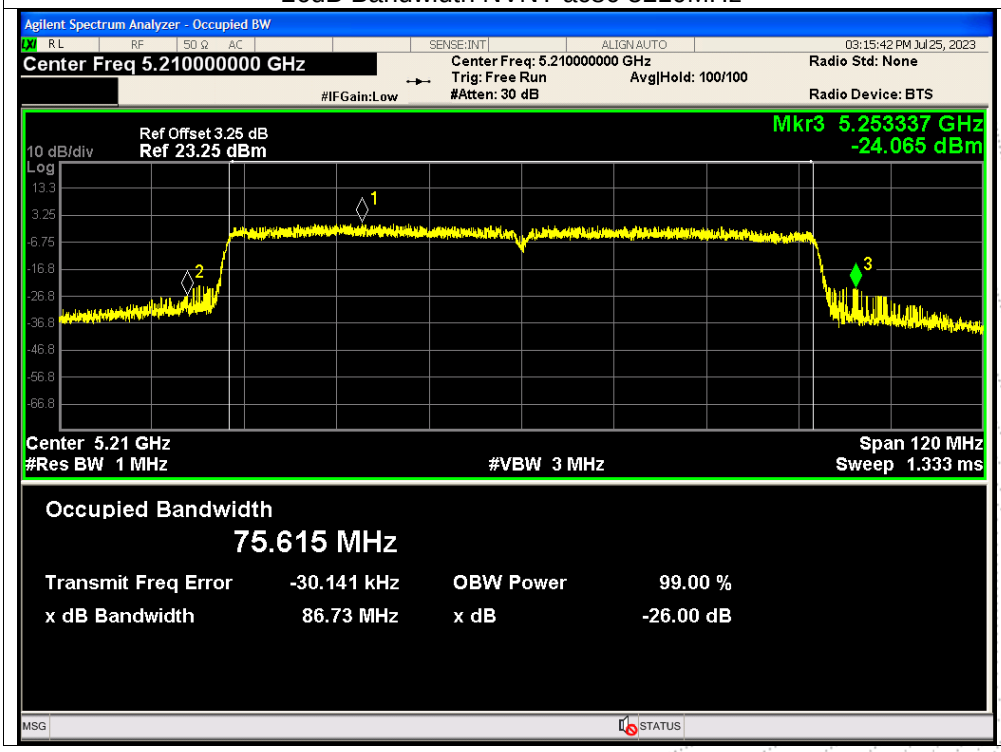
-26dB Bandwidth NVNT ac40 5190MHz



-26dB Bandwidth NVNT ac40 5230MHz

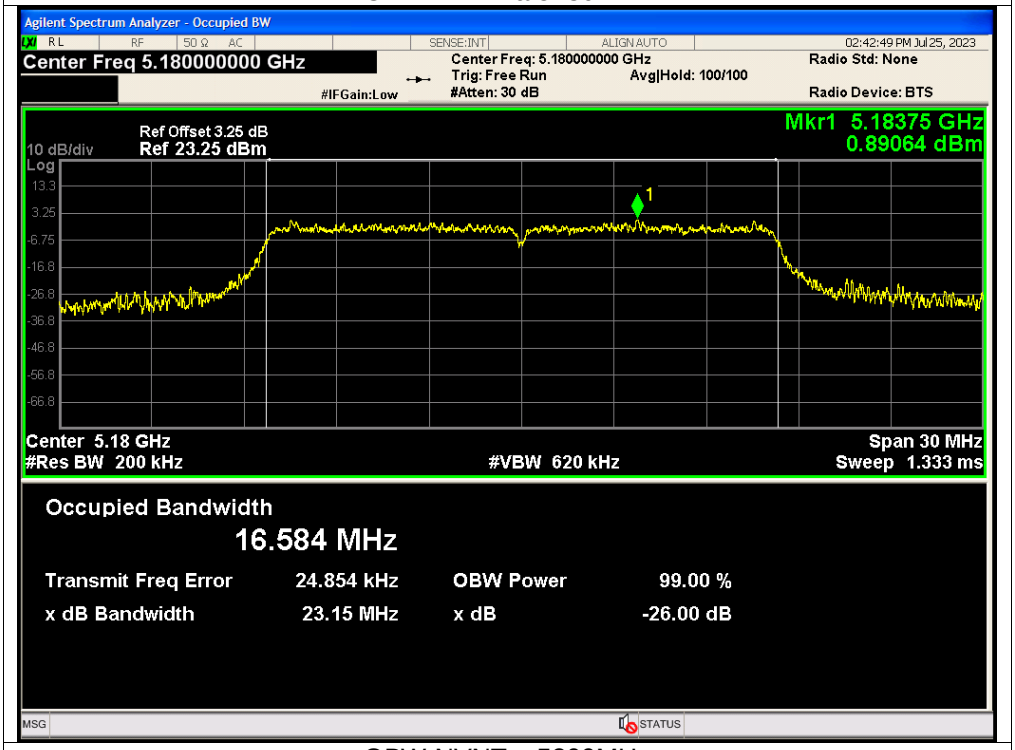


-26dB Bandwidth NVNT ac80 5210MHz

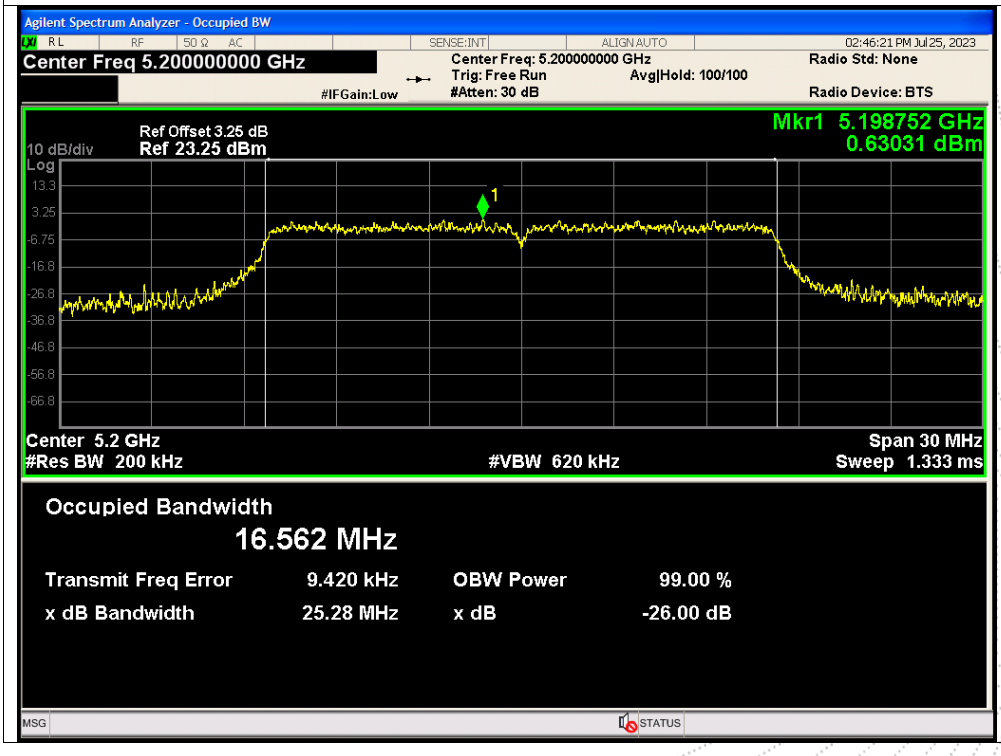


Test Graphs

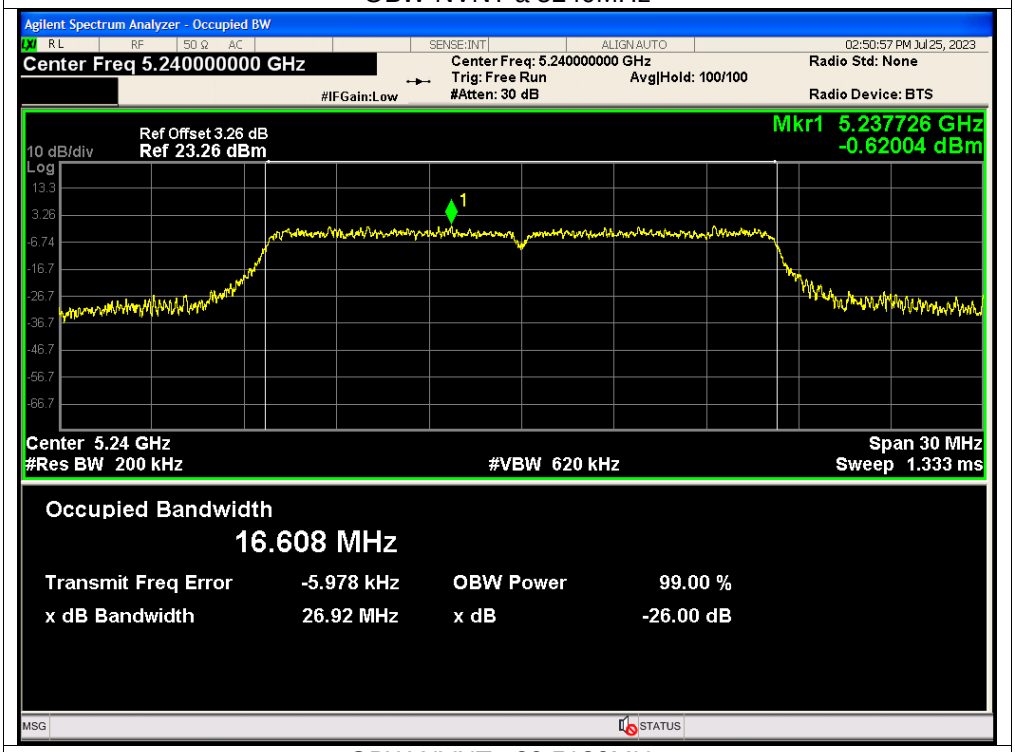
OBW NVNT a 5180MHz



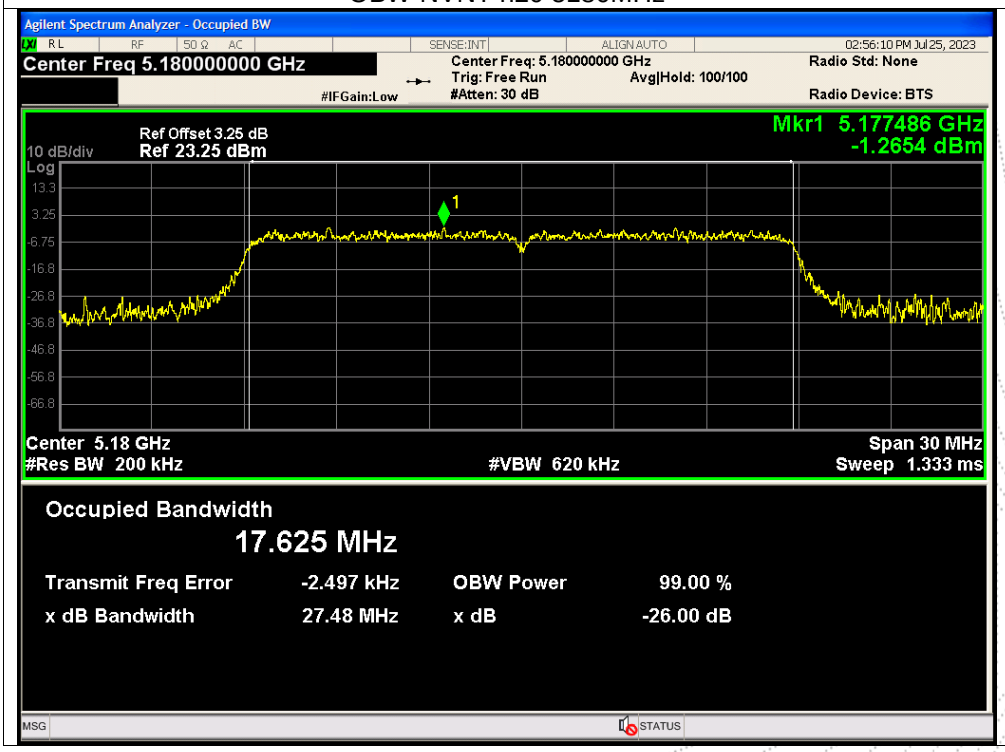
OBW NVNT a 5200MHz



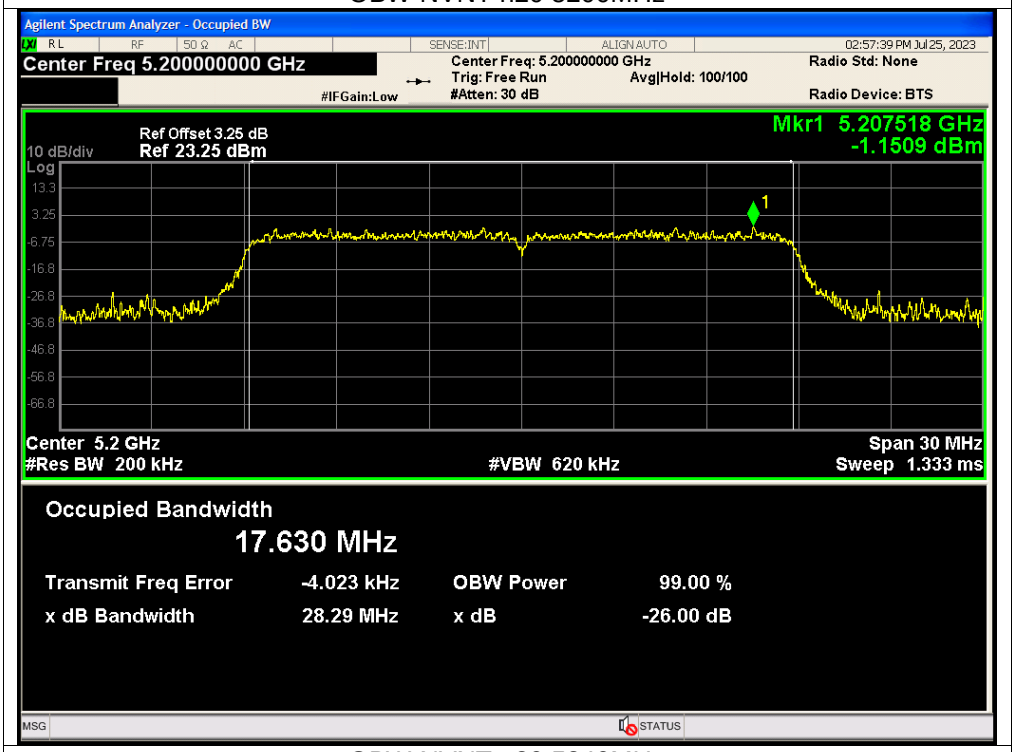
OBW NVNT a 5240MHz



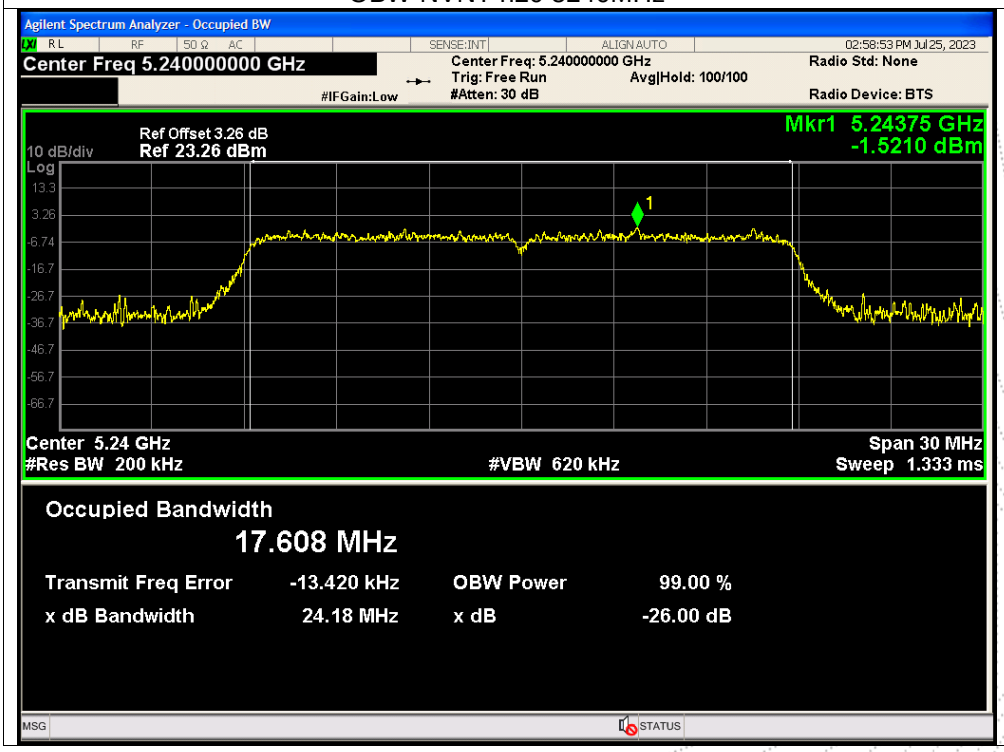
OBW NVNT n20 5180MHz



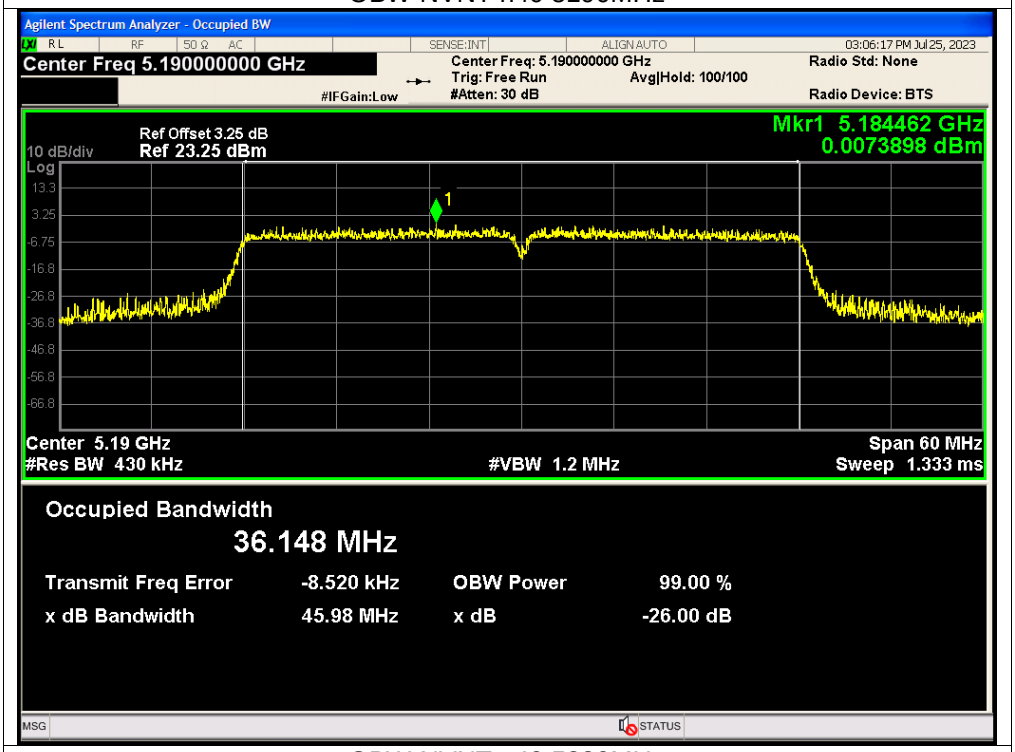
OBW NVNT n20 5200MHz



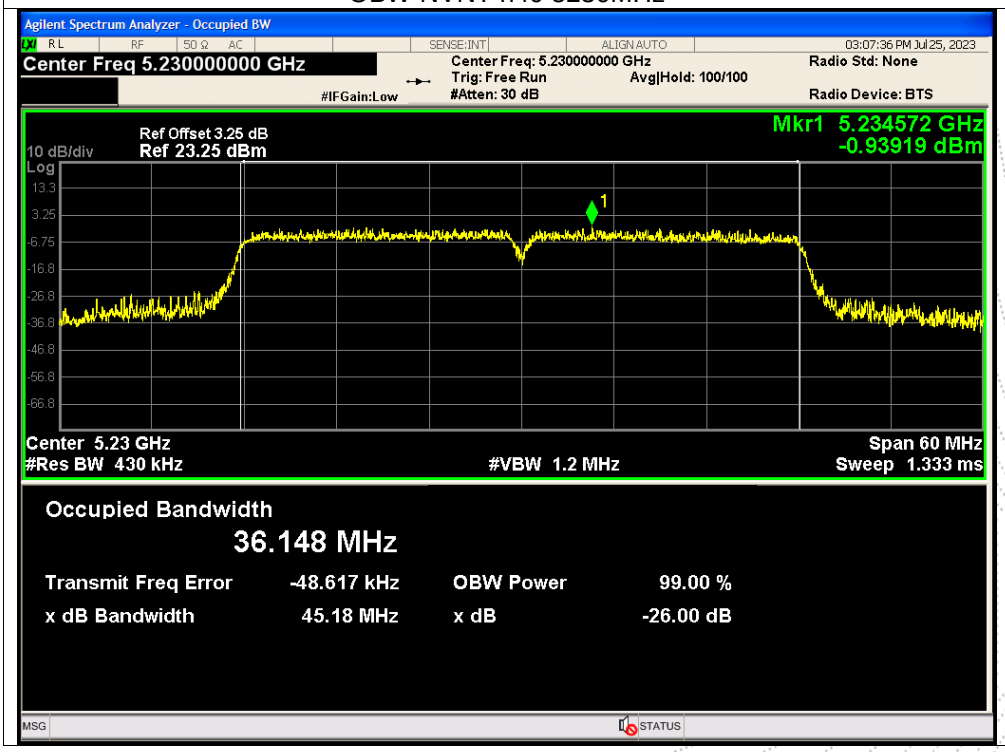
OBW NVNT n20 5240MHz



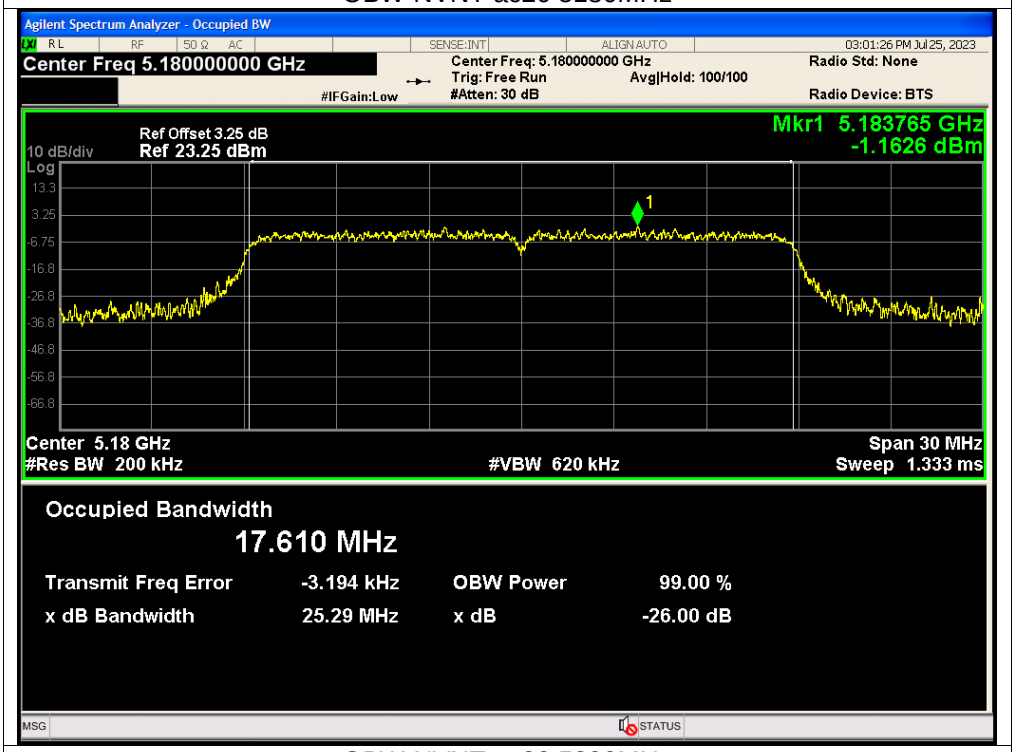
OBW NVNT n40 5190MHz



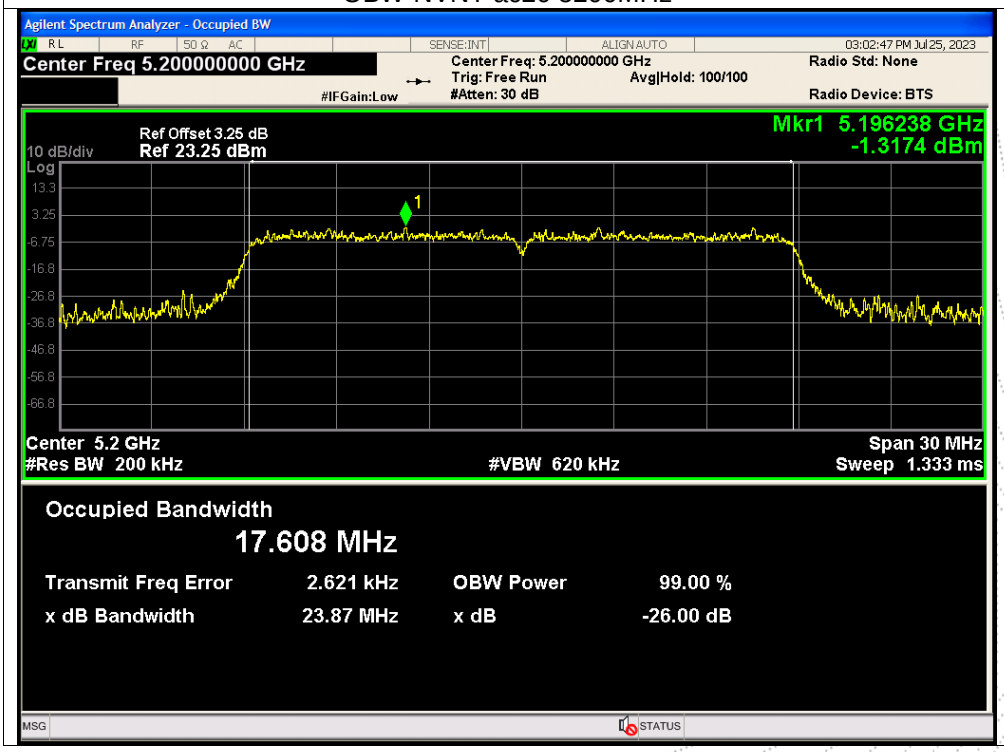
OBW NVNT n40 5230MHz



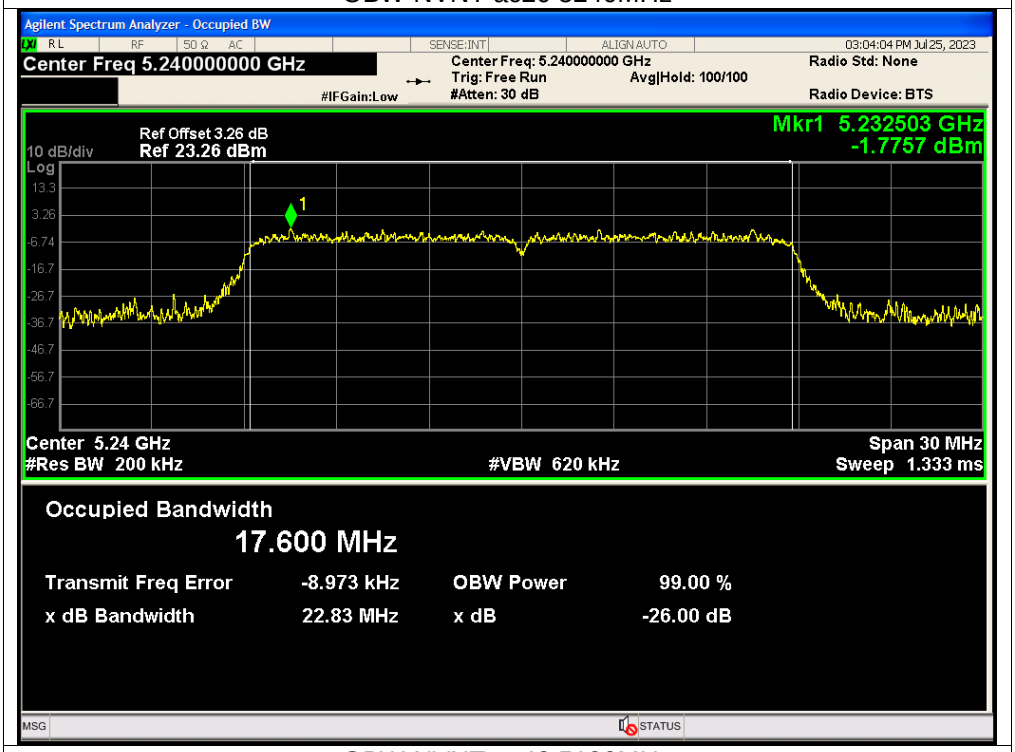
OBW NVNT ac20 5180MHz



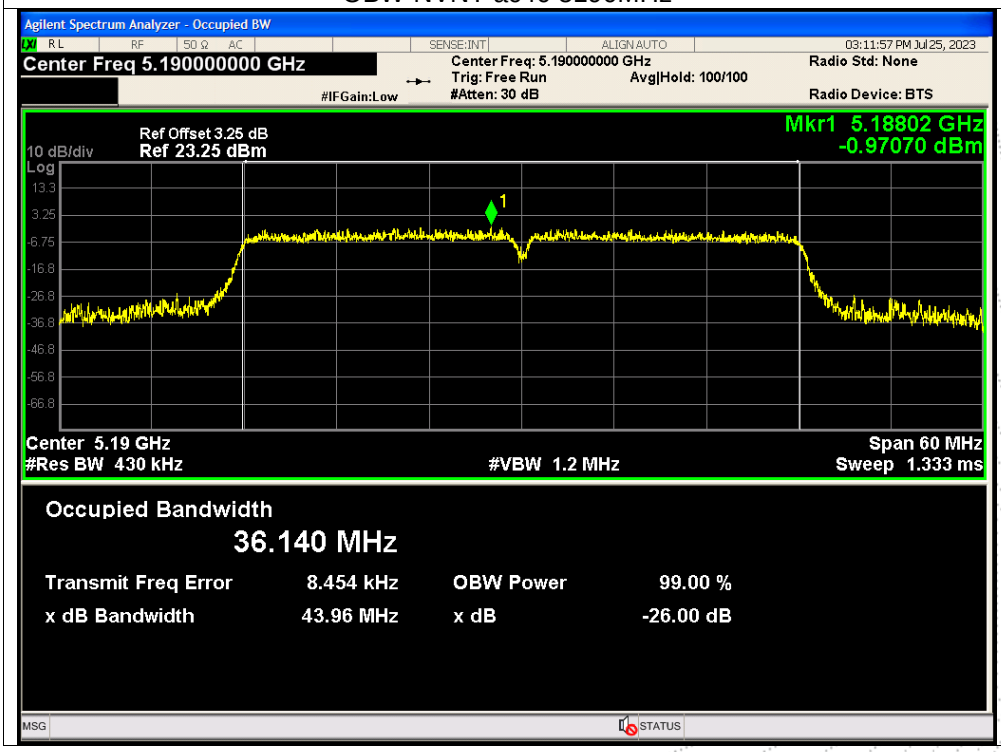
OBW NVNT ac20 5200MHz



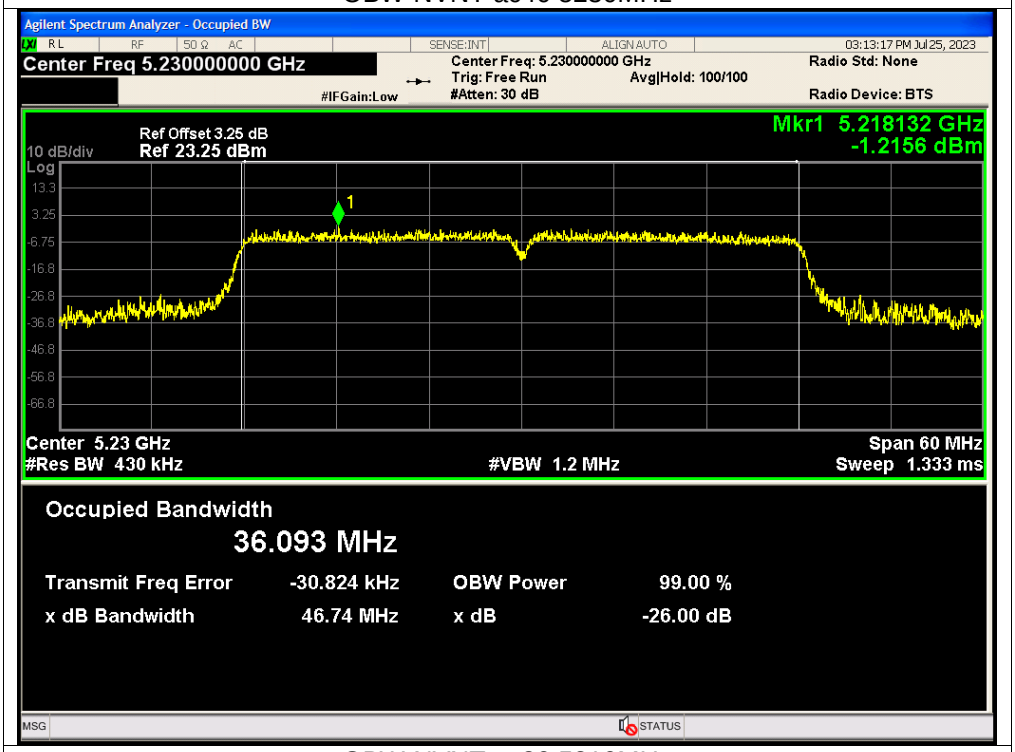
OBW NVNT ac20 5240MHz



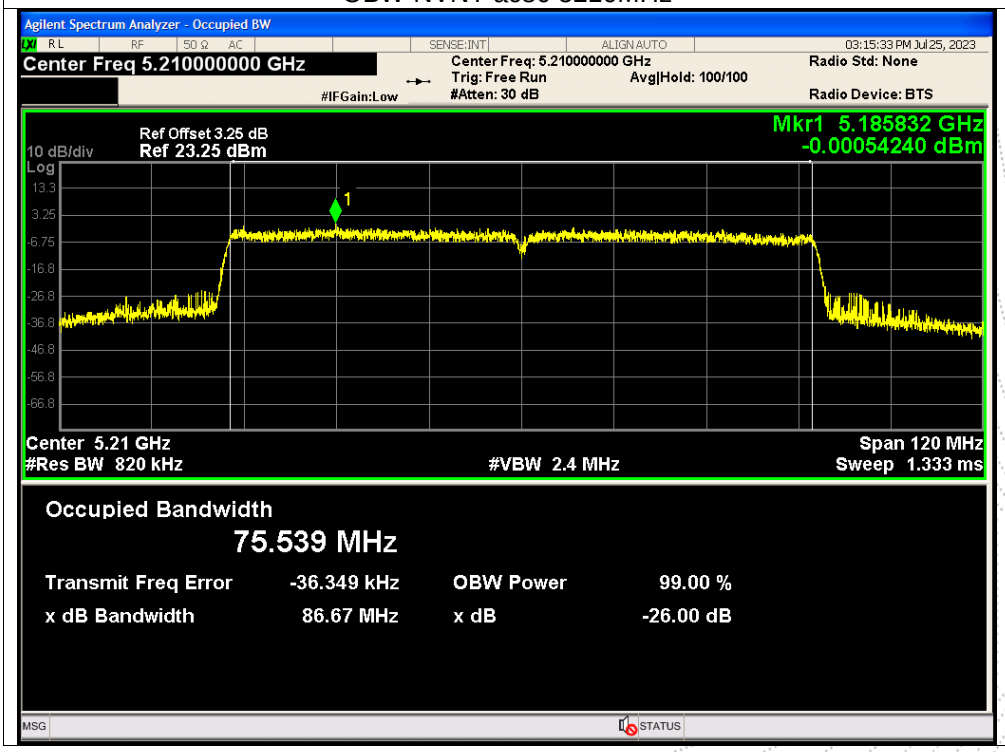
OBW NVNT ac40 5190MHz



OBW NVNT ac40 5230MHz



OBW NVNT ac80 5210MHz

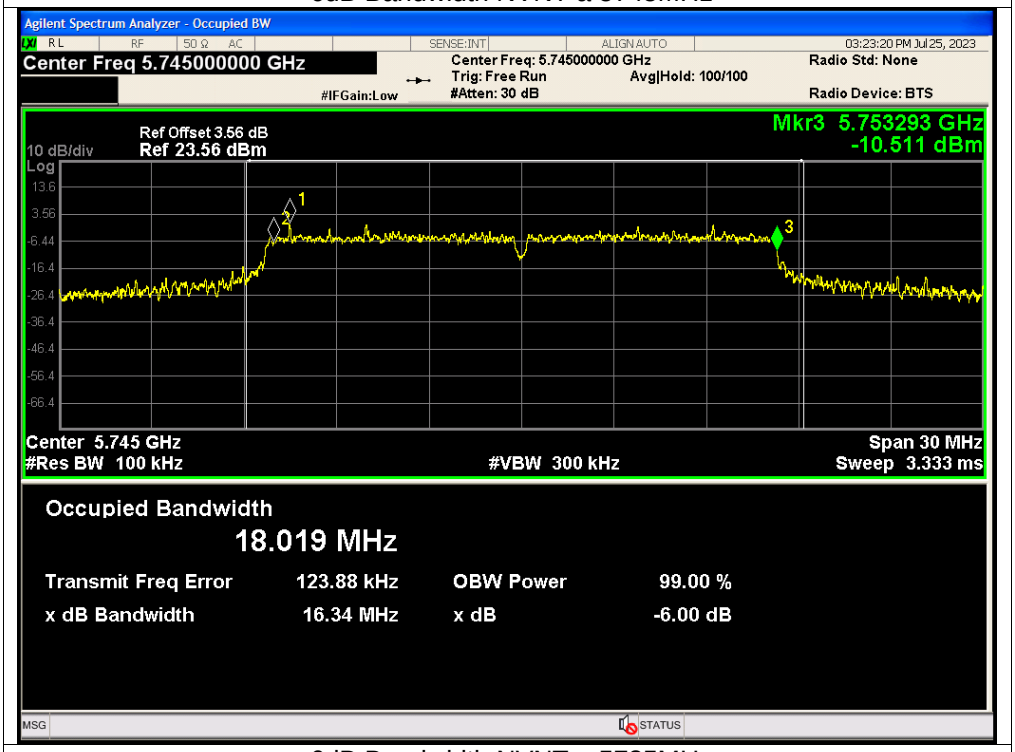


Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	DC 5V
Test Mode ：	TX Frequency U-NII-3(5745-5825MHz)		

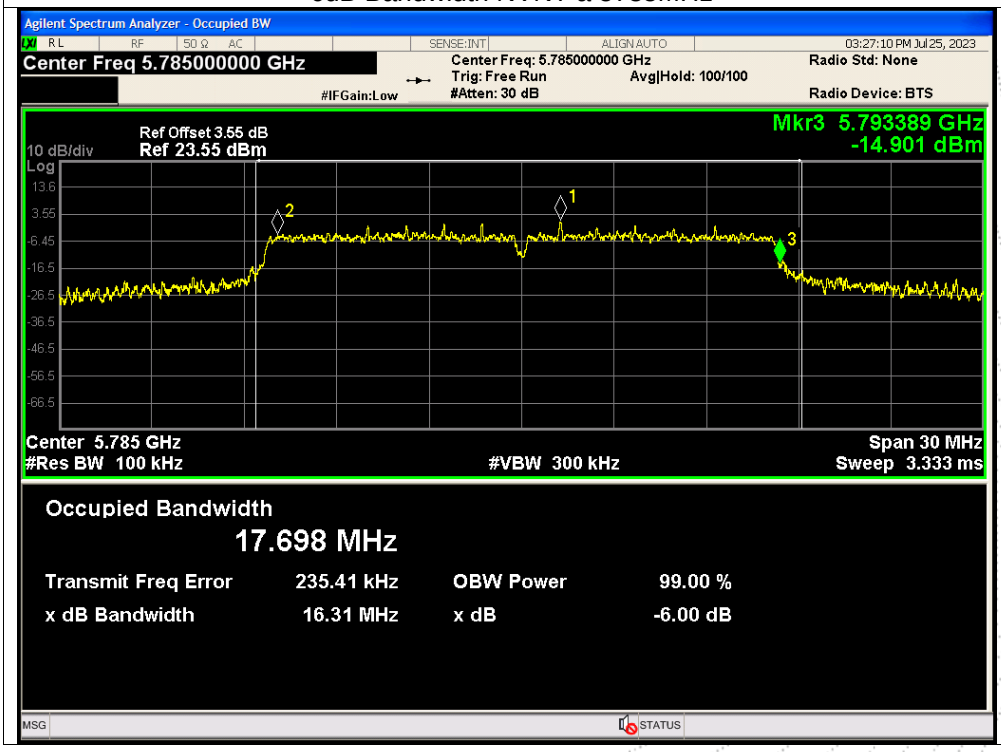
Condition	Mode	Frequency (MHz)	99% bandwidth (MHz)	-6dB bandwidth (MHz)	Limit -6dB bandwidth MHz	Result
NVNT	a	5745	17.917	16.338	≥500	Pass
NVNT	a	5785	18.076	16.307	≥500	Pass
NVNT	a	5825	17.964	16.328	≥500	Pass
NVNT	n20	5745	17.836	17.044	≥500	Pass
NVNT	n20	5785	17.791	17	≥500	Pass
NVNT	n20	5825	17.841	17.21	≥500	Pass
NVNT	n40	5755	36.295	35.322	≥500	Pass
NVNT	n40	5795	36.354	35.656	≥500	Pass
NVNT	ac20	5745	17.834	17.251	≥500	Pass
NVNT	ac20	5785	17.789	17.049	≥500	Pass
NVNT	ac20	5825	17.809	17.013	≥500	Pass
NVNT	ac40	5755	36.244	35.204	≥500	Pass
NVNT	ac40	5795	36.318	35.522	≥500	Pass
NVNT	ac80	5775	75.647	75.364	≥500	Pass

Test Graphs

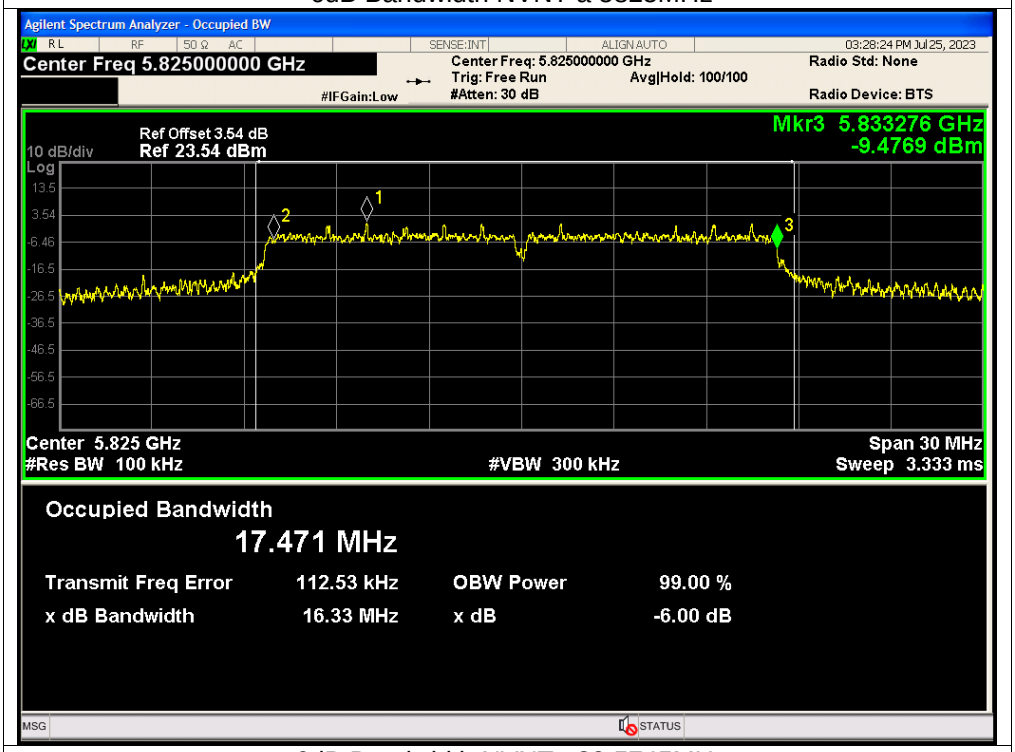
-6dB Bandwidth NVNT a 5745MHz



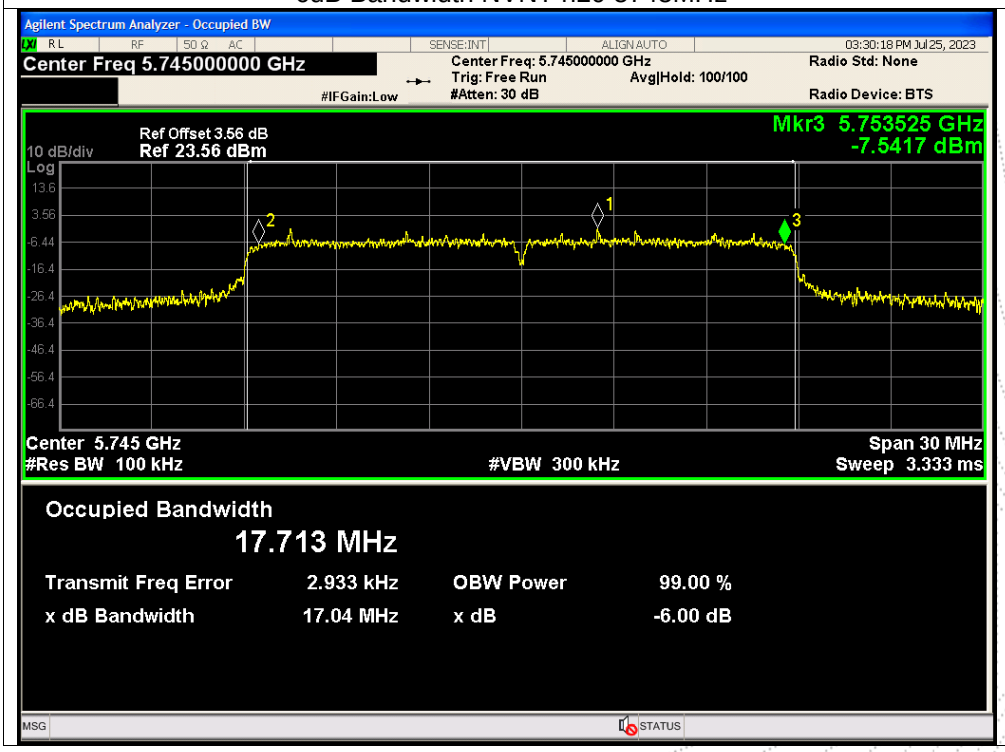
-6dB Bandwidth NVNT a 5785MHz



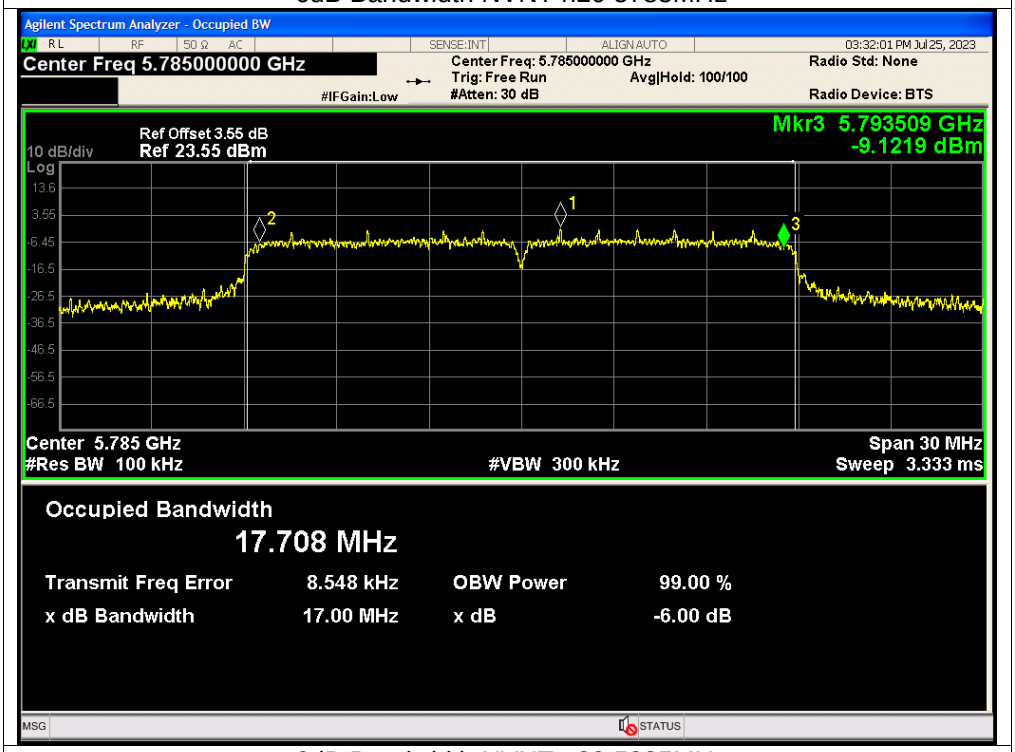
-6dB Bandwidth NVNT a 5825MHz



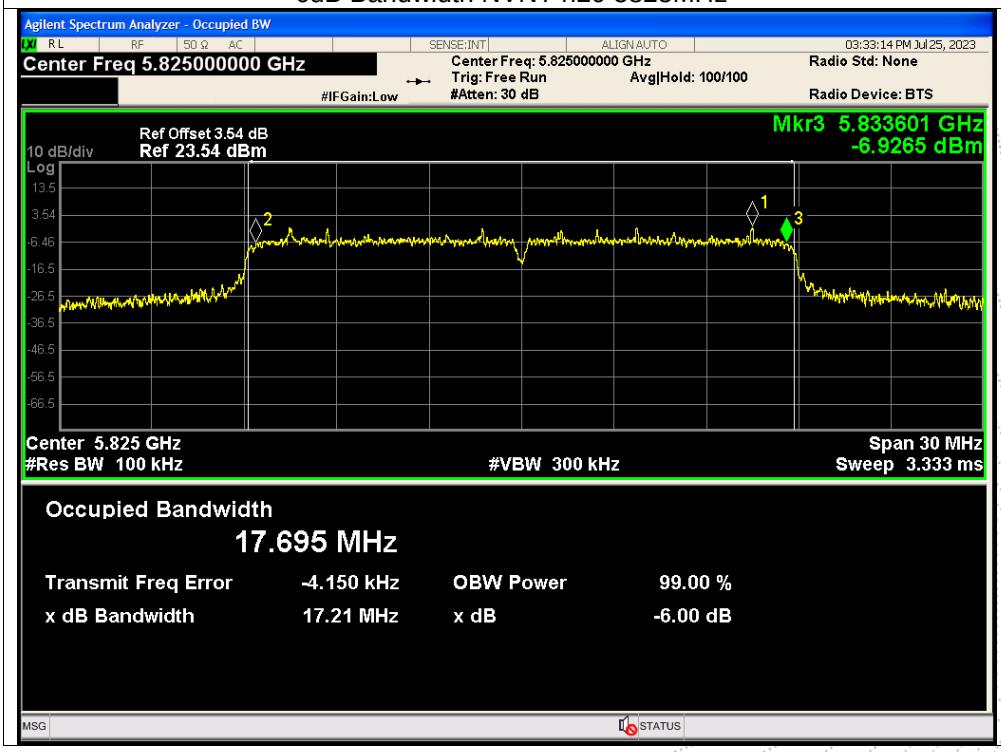
-6dB Bandwidth NVNT n20 5745MHz



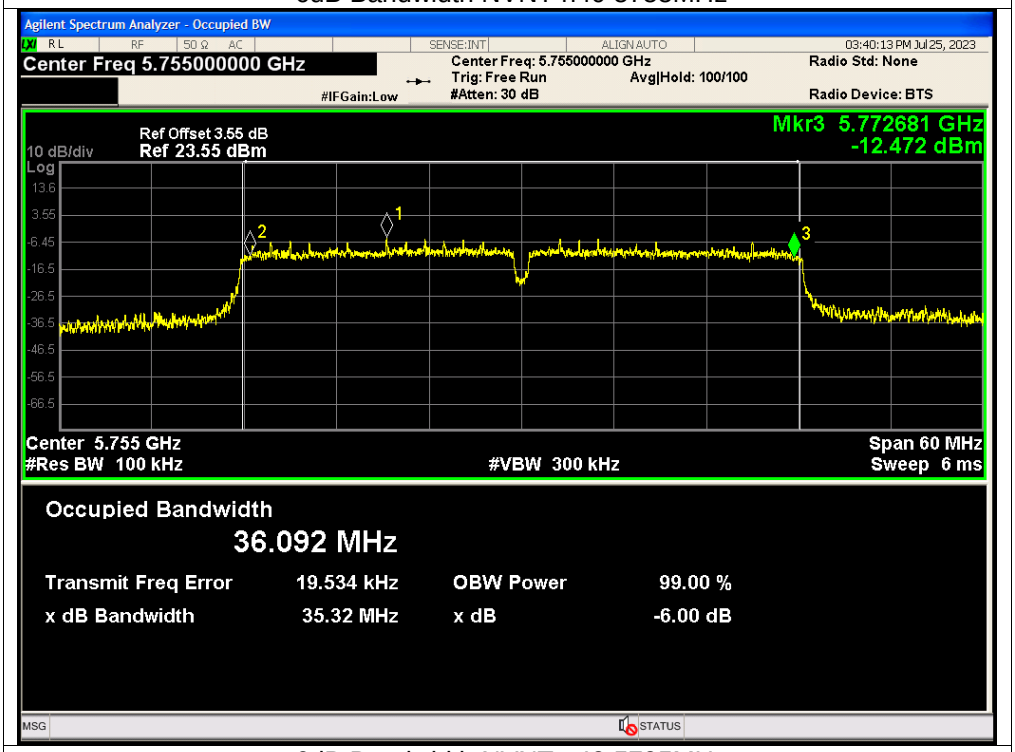
-6dB Bandwidth NVNT n20 5785MHz



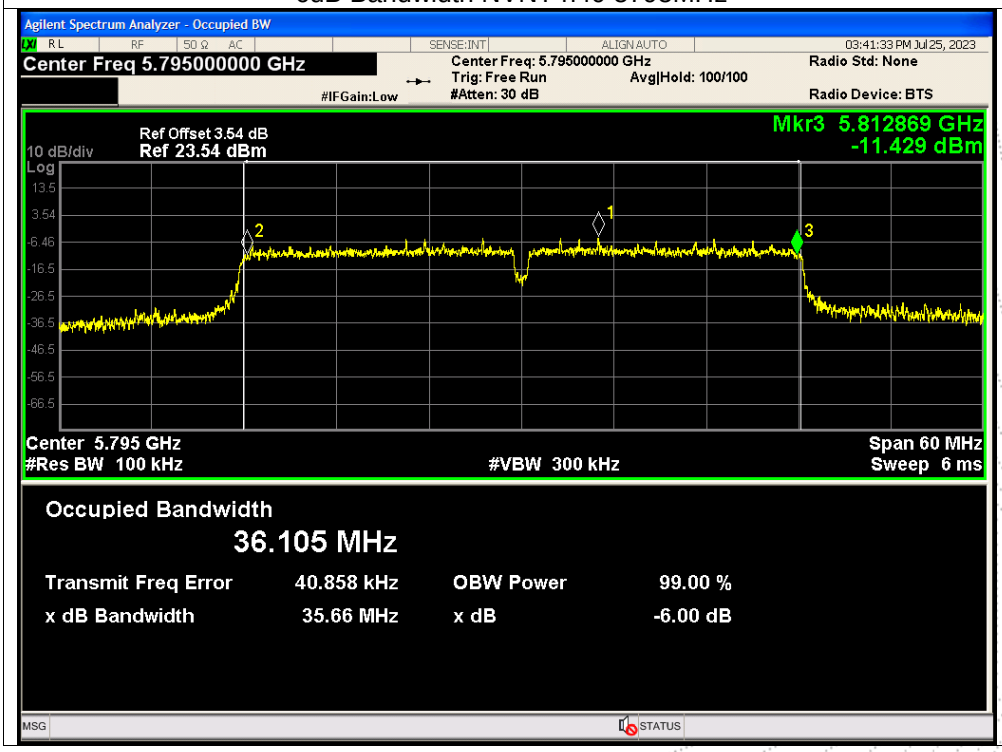
-6dB Bandwidth NVNT n20 5825MHz



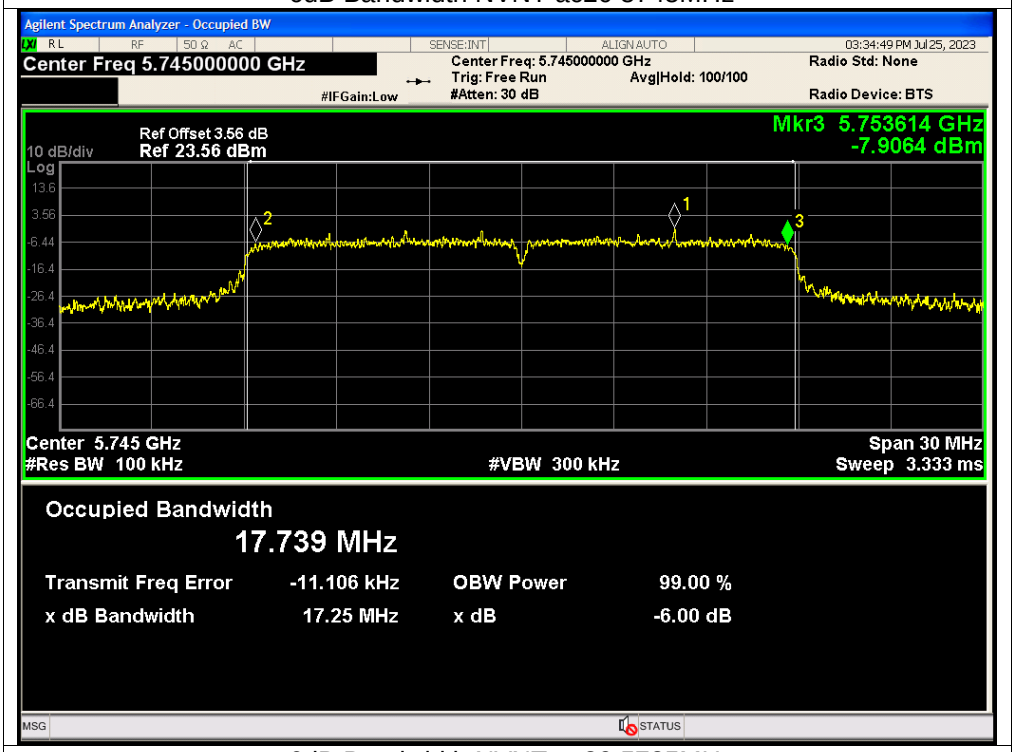
-6dB Bandwidth NVNT n40 5755MHz



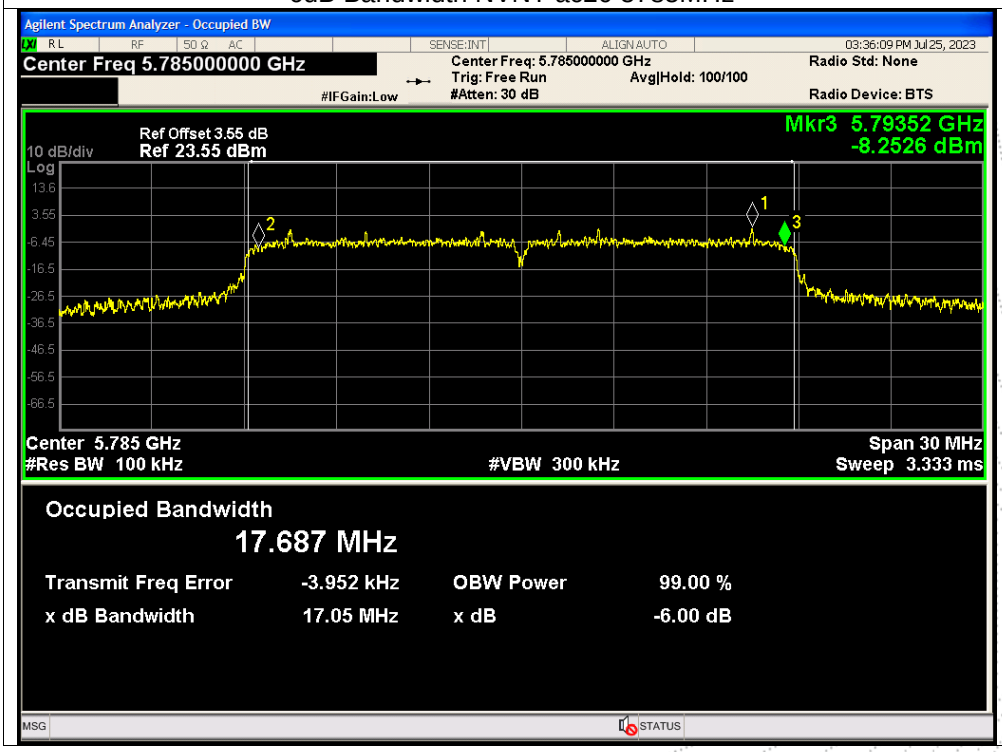
-6dB Bandwidth NVNT n40 5795MHz



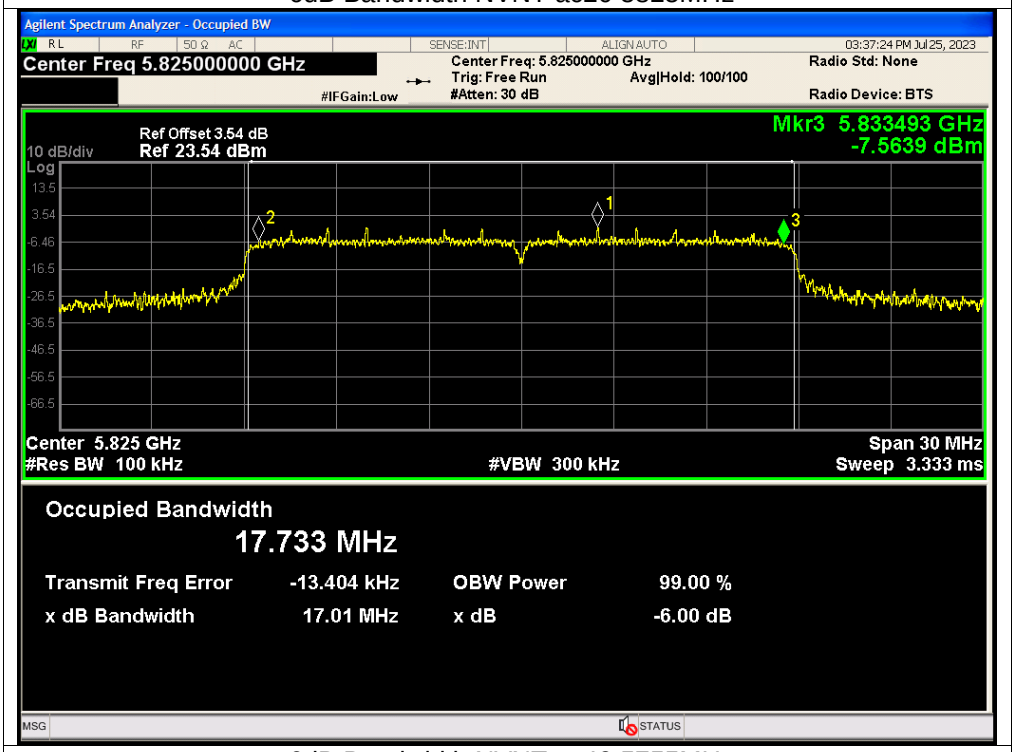
-6dB Bandwidth NVNT ac20 5745MHz



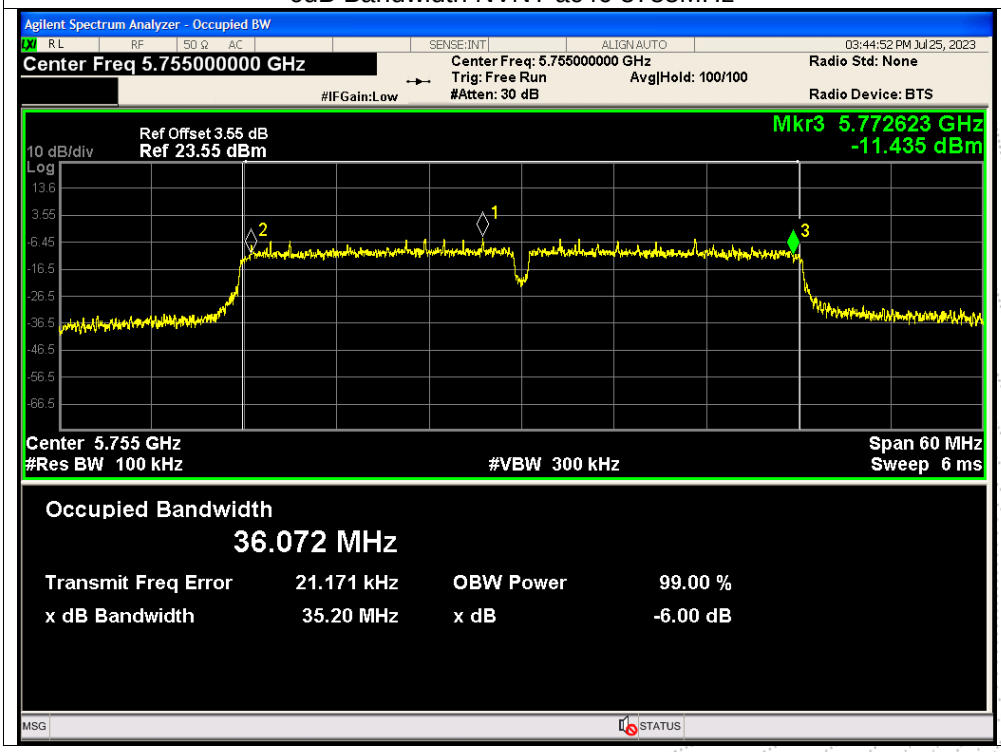
-6dB Bandwidth NVNT ac20 5785MHz



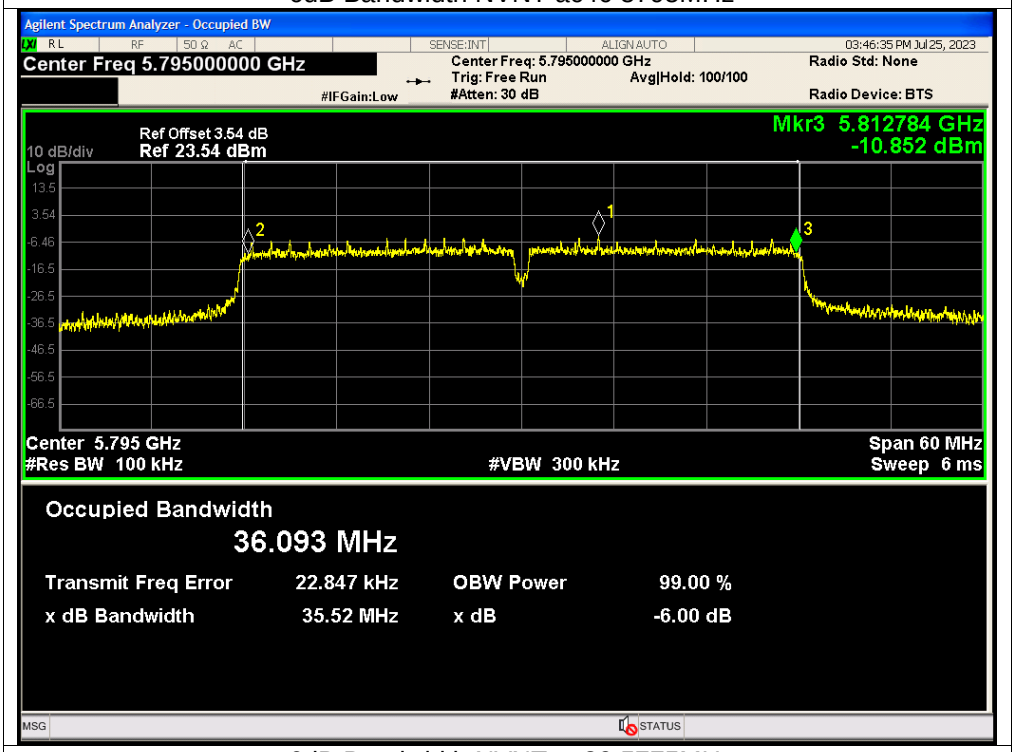
-6dB Bandwidth NVNT ac20 5825MHz



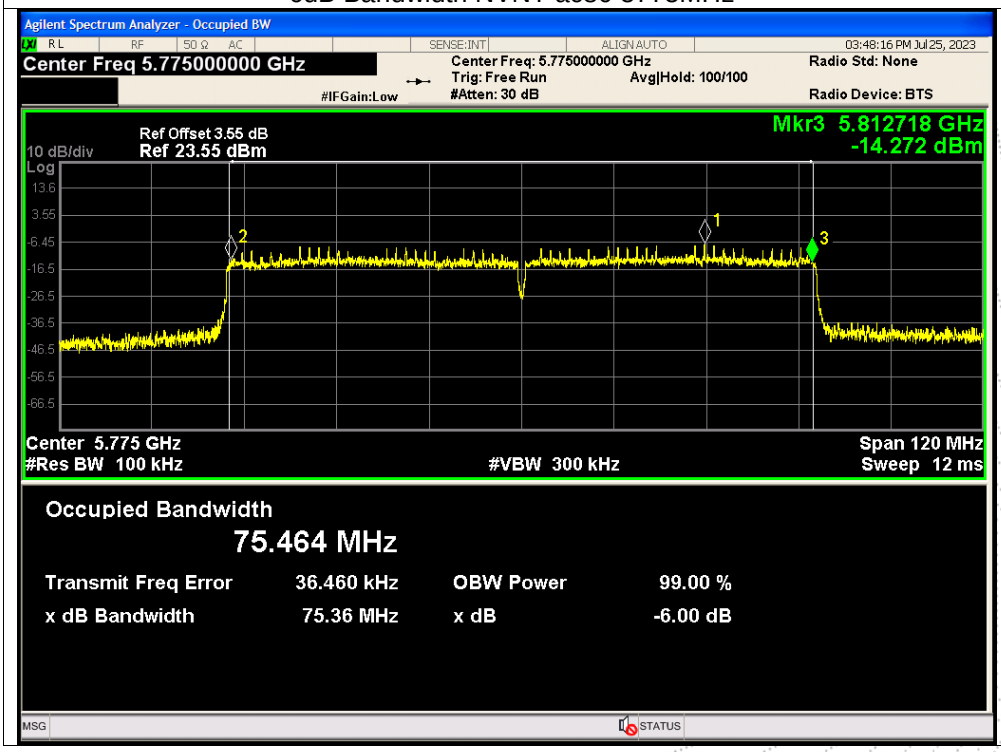
-6dB Bandwidth NVNT ac40 5755MHz



-6dB Bandwidth NVNT ac40 5795MHz

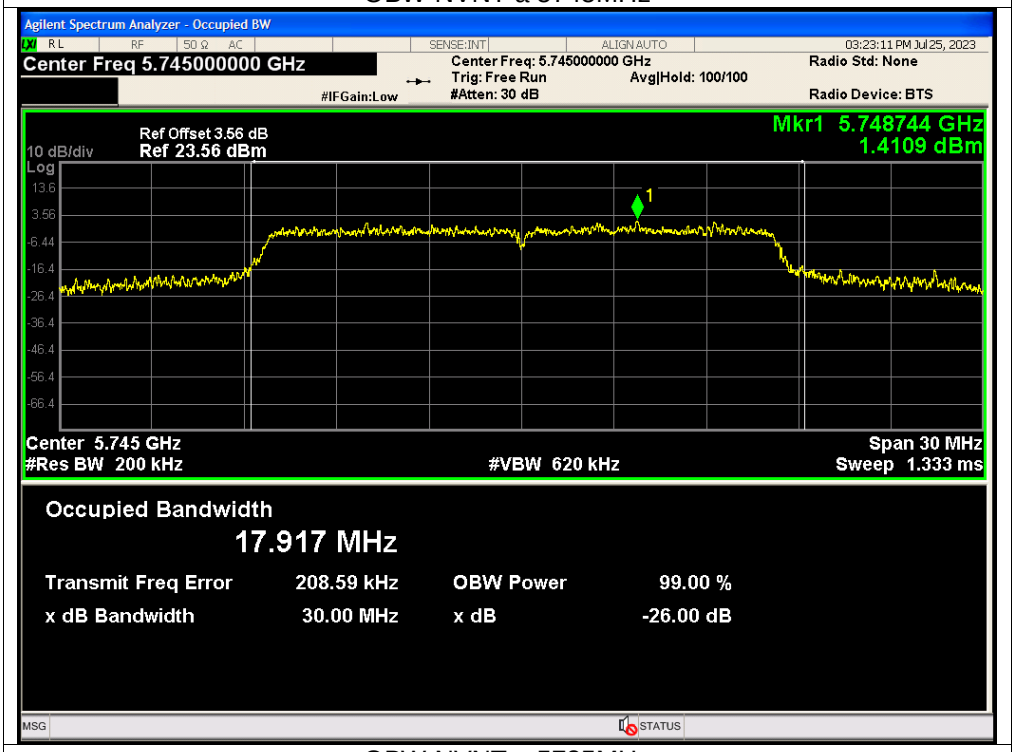


-6dB Bandwidth NVNT ac80 5775MHz

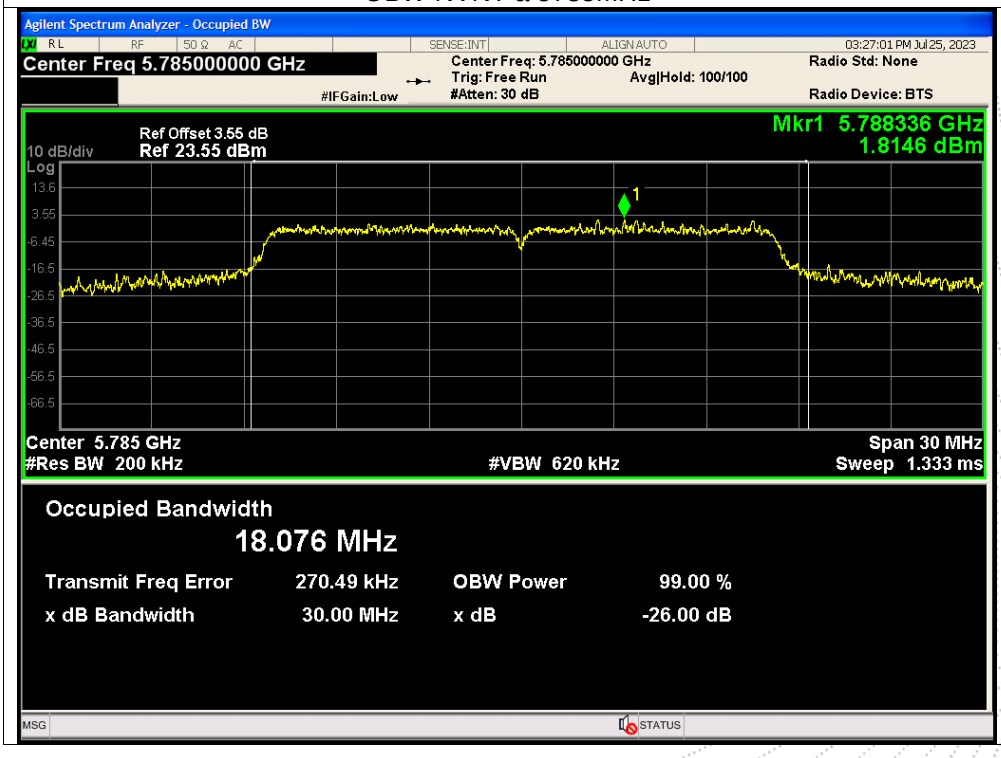


Test Graphs

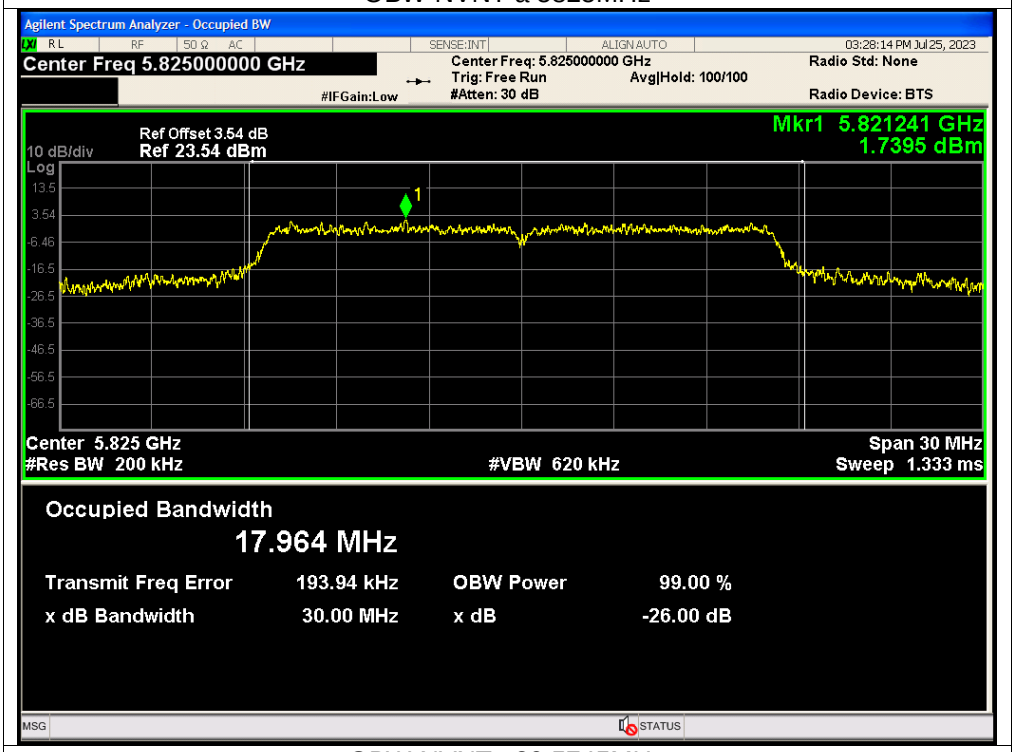
OBW NVNT a 5745MHz



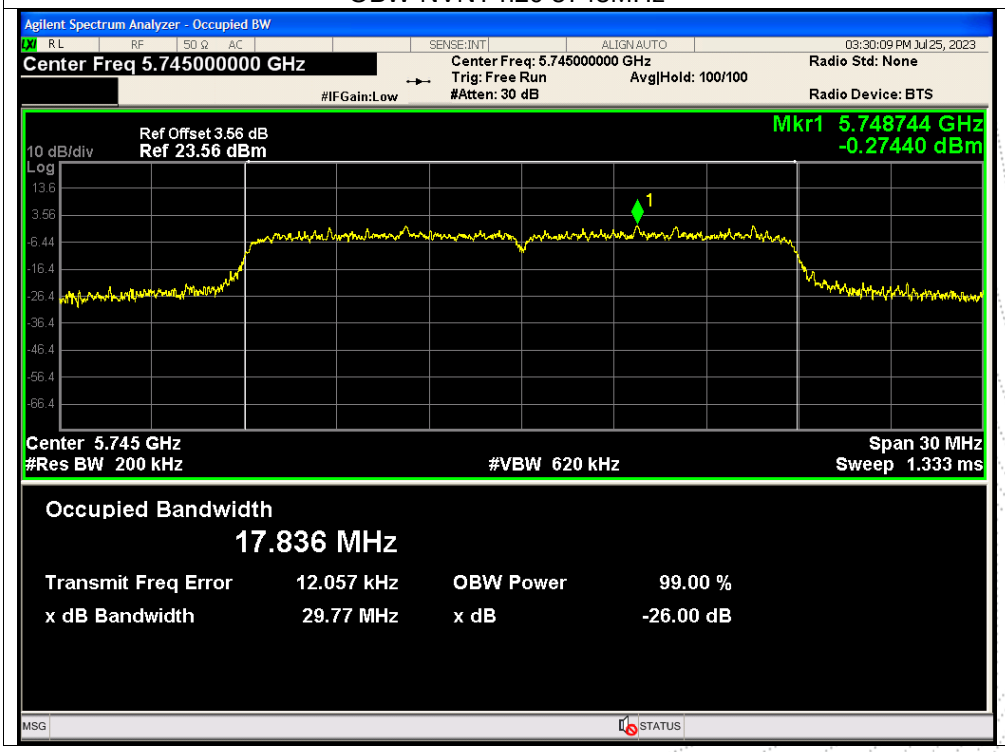
OBW NVNT a 5785MHz



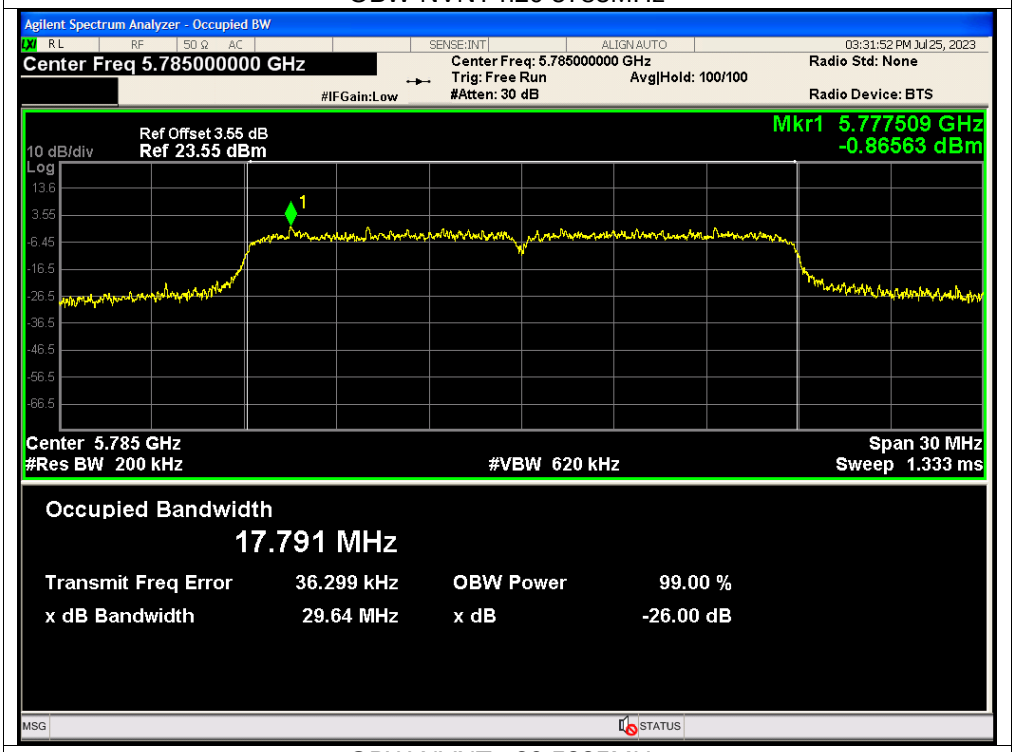
OBW NVNT a 5825MHz



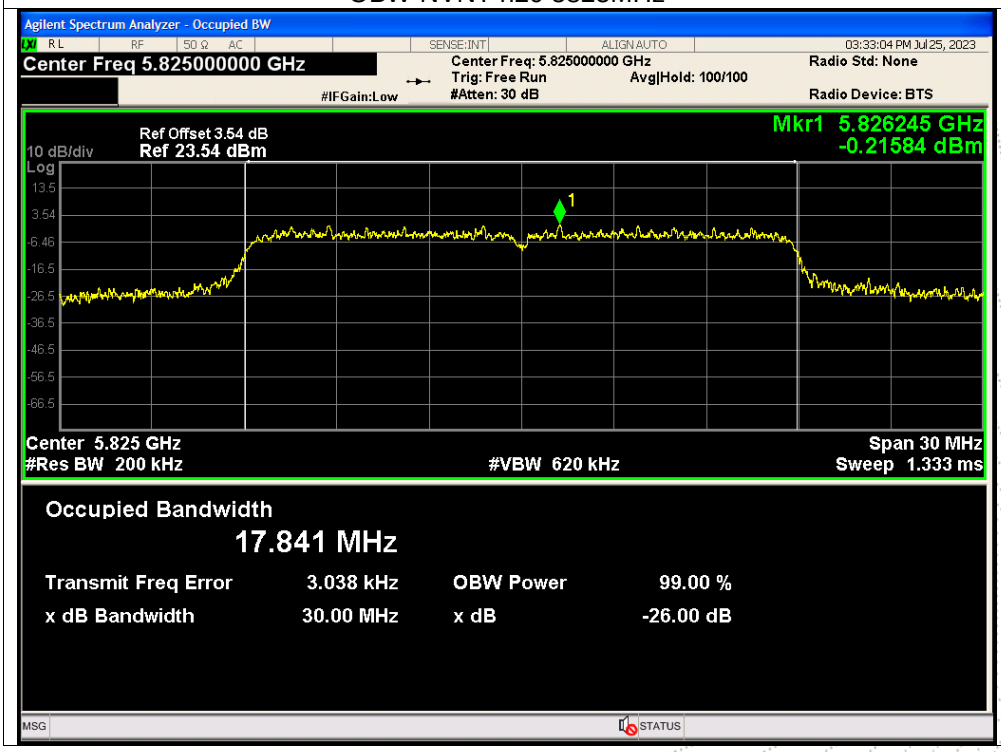
OBW NVNT n20 5745MHz



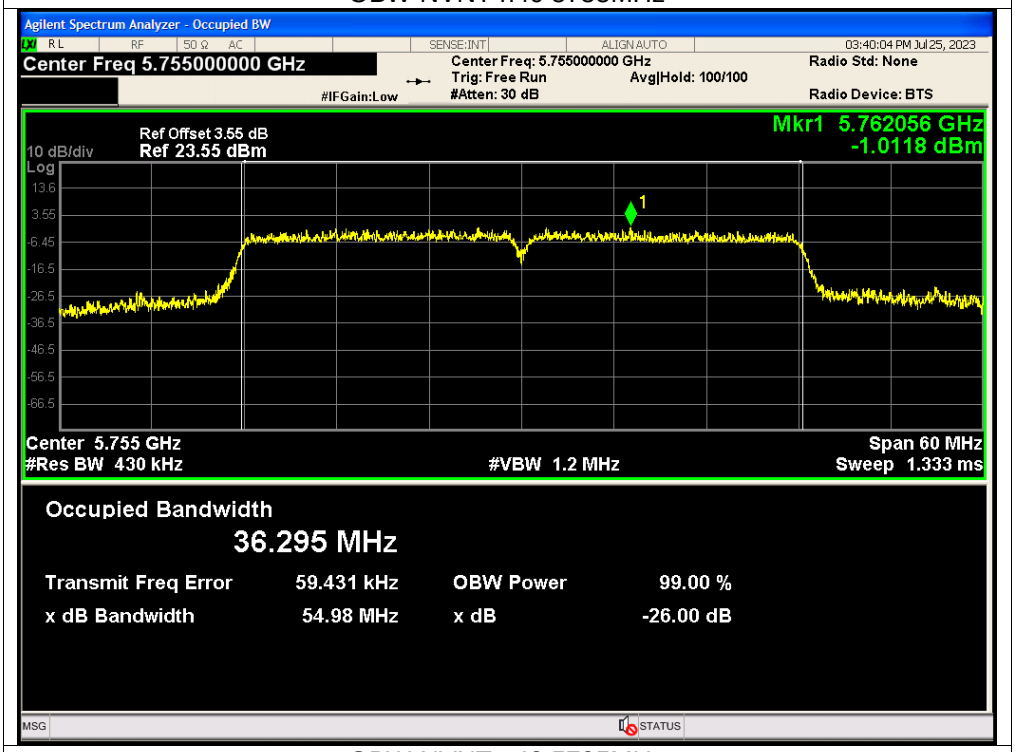
OBW NVNT n20 5785MHz



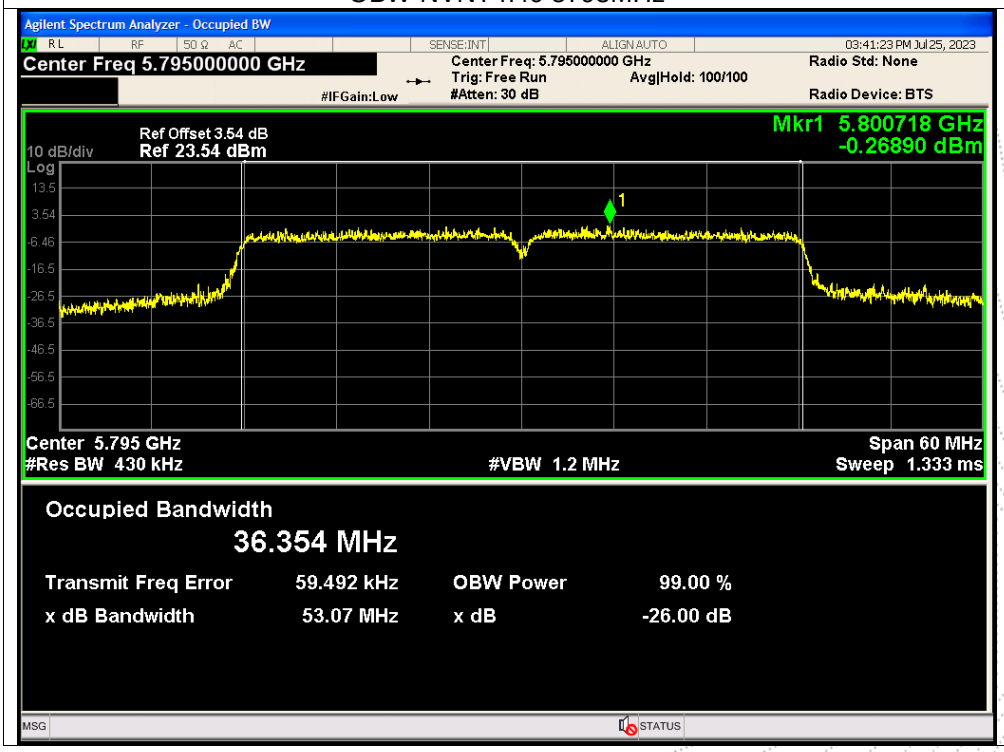
OBW NVNT n20 5825MHz



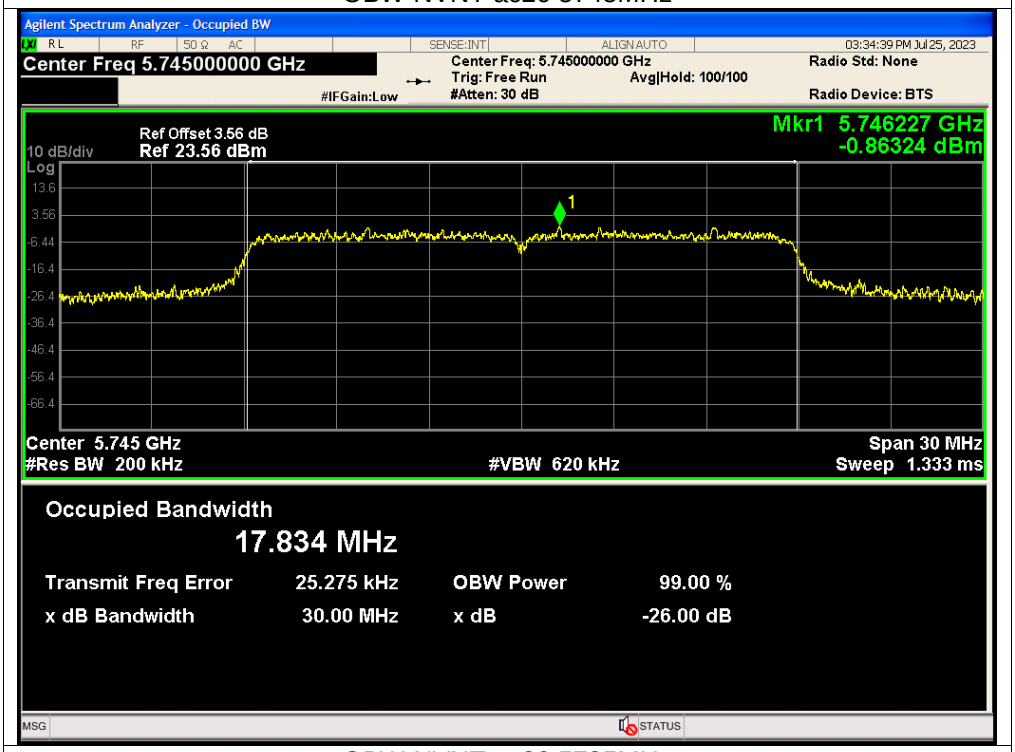
OBW NVNT n40 5755MHz



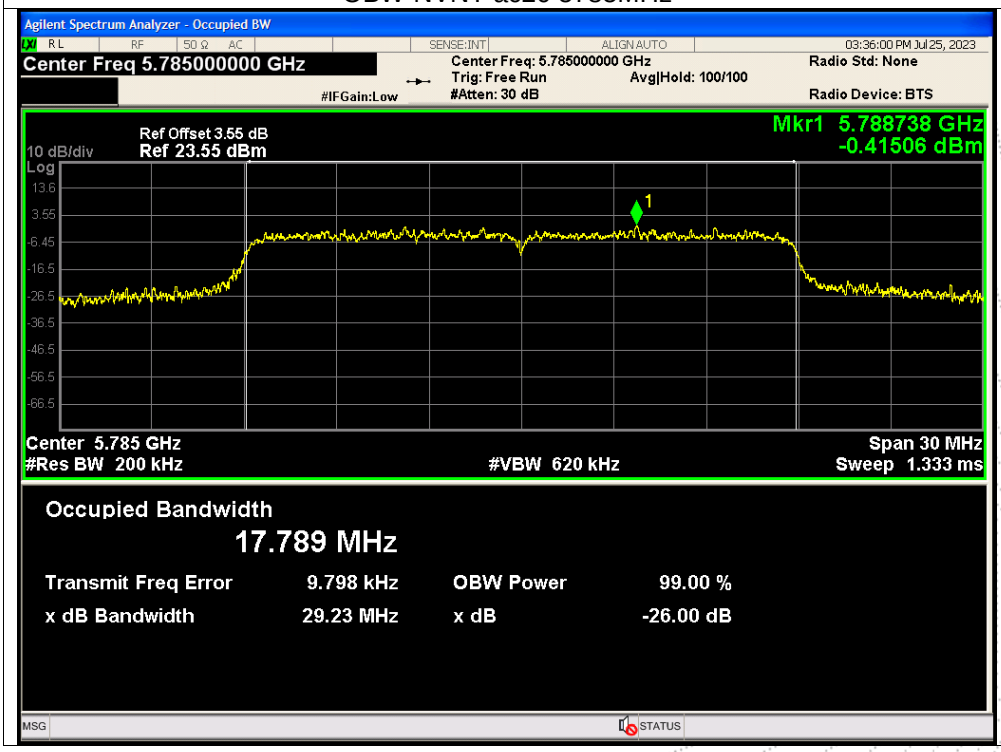
OBW NVNT n40 5795MHz



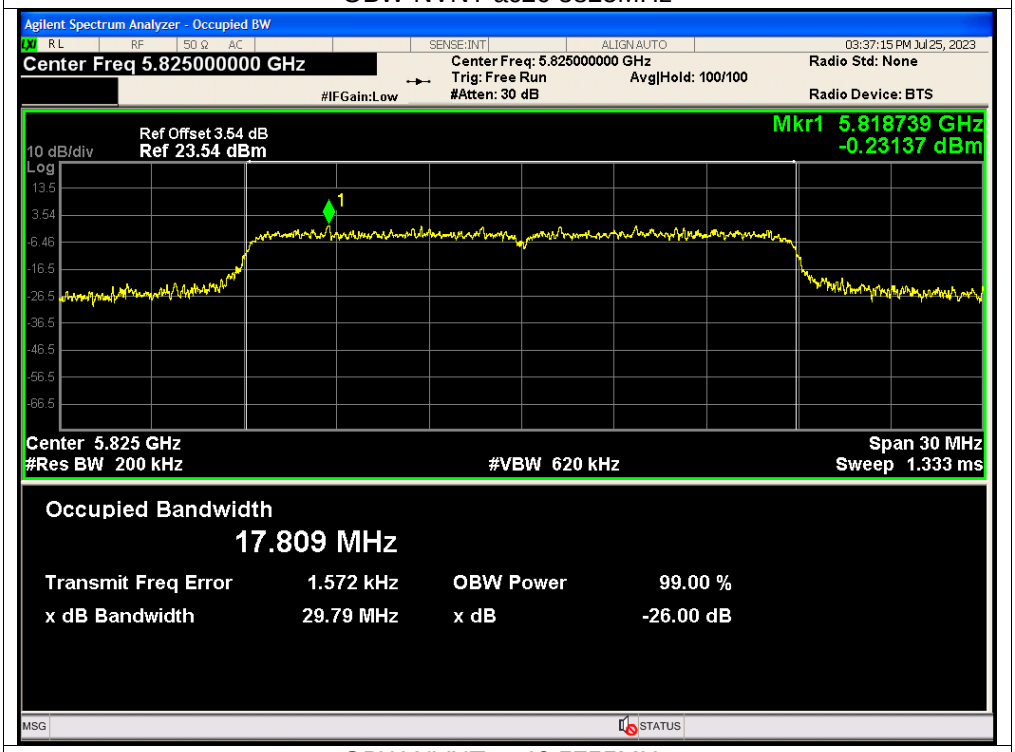
OBW NVNT ac20 5745MHz



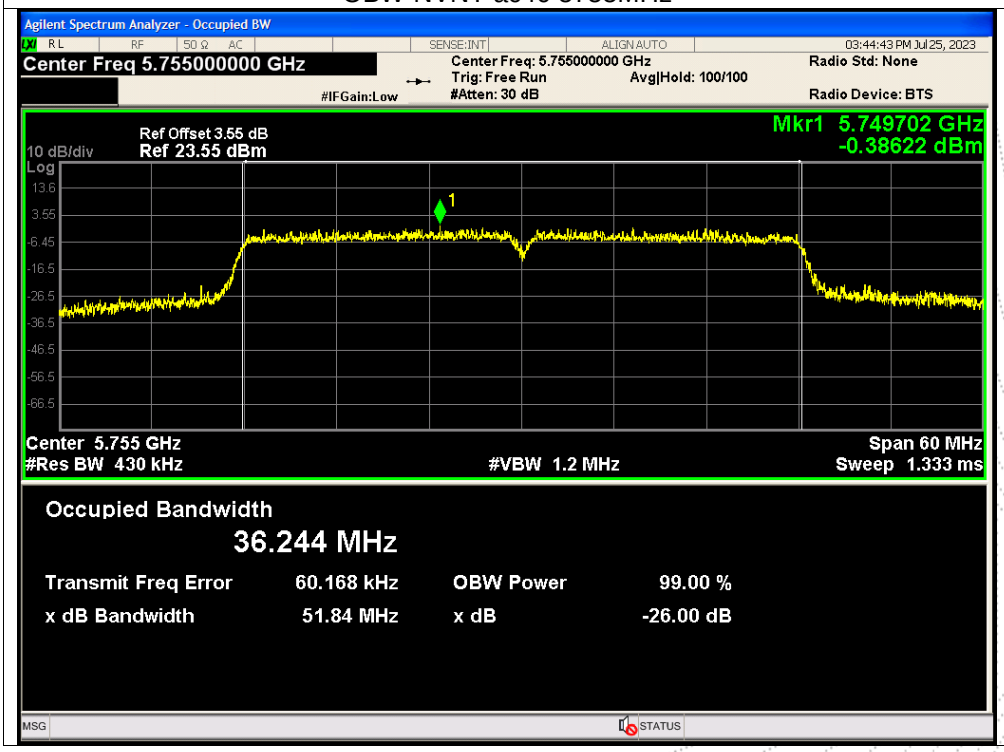
OBW NVNT ac20 5785MHz



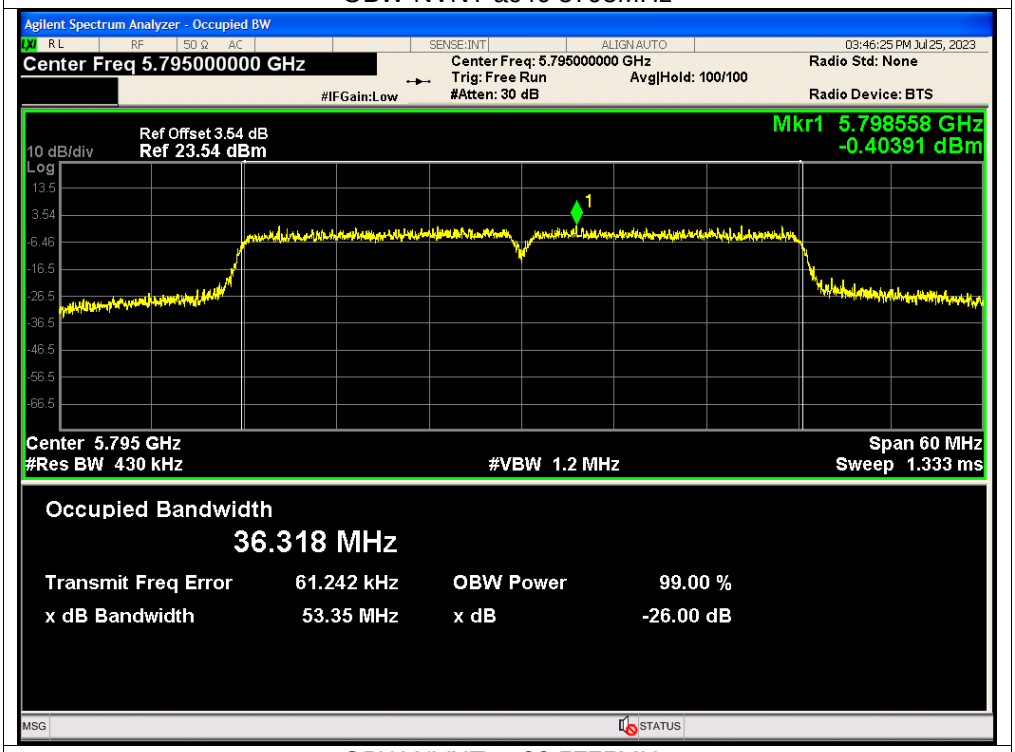
OBW NVNT ac20 5825MHz



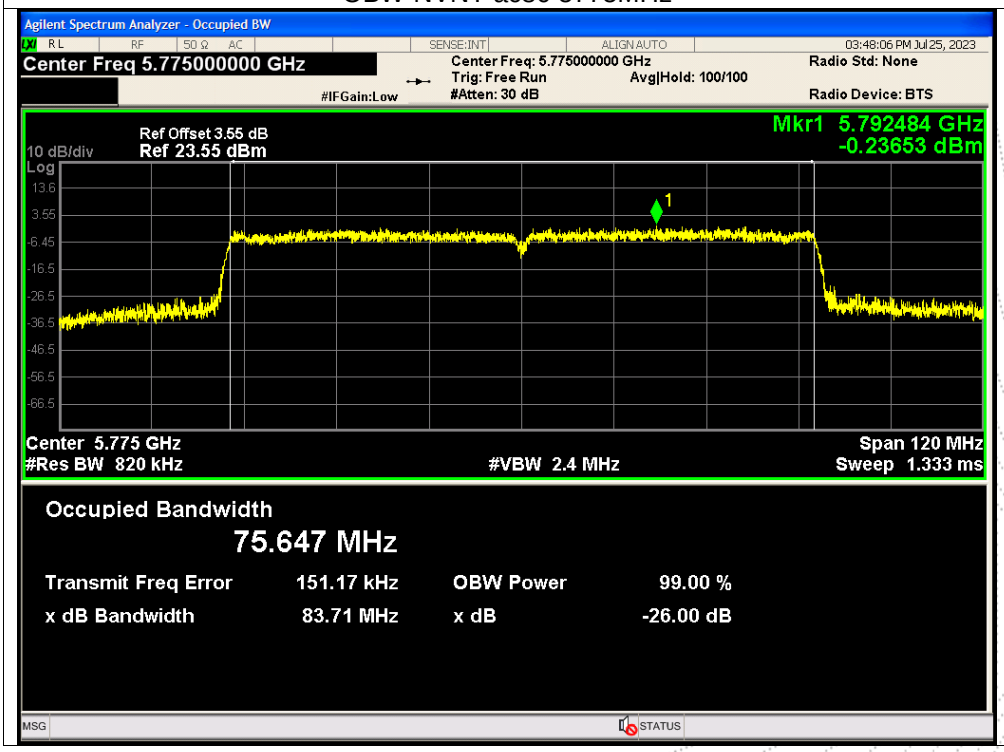
OBW NVNT ac40 5755MHz



OBW NVNT ac40 5795MHz

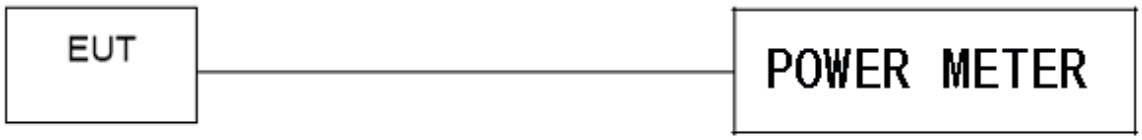


OBW NVNT ac80 5775MHz



10. Maximum Conducted Output Power

10.1 Block Diagram Of Test Setup



10.2 Limit

According to FCC §15.407

The maximum conduced output power should not exceed:

Frequency Band(MHz)	Limit
5150~5250	250mW
5725~5850	1W

10.3 Test Procedure

Maximum conducted output power may be measured using a spectrum analyzer/EMI receiver or an RF power meter.

1. Device Configuration

If possible, configure or modify the operation of the EUT so that it transmits continuously at its maximum power control level (see section II.B.).

a) The intent is to test at 100 percent duty cycle; however a small reduction in duty cycle (to no lower than 98 percent) is permitted if required by the EUT for amplitude control purposes. Manufacturers are expected to provide software to the test lab to permit such continuous operation.

b) If continuous transmission (or at least 98 percent duty cycle) cannot be achieved due to hardware limitations (e.g., overheating), the EUT shall be operated at its maximum power control level with the transmit duration as long as possible and the duty cycle as high as possible.

2. Measurement using a Spectrum Analyzer or EMI Receiver (SA)

Measurement of maximum conducted output power using a spectrum analyzer requires integrating the spectrum across a frequency span that encompasses, at a minimum, either the EBW or the 99-percent occupied bandwidth of the signal.1 However, the EBW must be used to determine bandwidth dependent limits on maximum conducted output power in accordance with § 15.407(a).

a) The test method shall be selected as follows: (i) Method SA-1 or SA-1 Alternative (averaging with the EUT transmitting at full power throughout each sweep) shall be applied if either of the following conditions can be satisfied:

• The EUT transmits continuously (or with a duty cycle ≥ 98 percent).

• Sweep triggering or gating can be implemented in a way that the device transmits at the maximum power control level throughout the duration of each of the instrument sweeps to be averaged. This condition can generally be achieved by triggering the instrument's sweep if the duration of the sweep (with the analyzer configured as in Method SA-1, below) is equal to or shorter than the duration T of each transmission from the EUT and if those transmissions exhibit full power throughout their durations.

(ii) Method SA-2 or SA-2 Alternative (averaging across on and off times of the EUT transmissions, followed by duty cycle correction) shall be applied if the conditions of (i) cannot be achieved and the transmissions exhibit a constant duty cycle during the measurement duration. Duty cycle will be considered to be constant if variations are less than ± 2 percent.

(iii) Method SA-3 (RMS detection with max hold) or SA-3 Alternative (reduced VBW with max hold) shall be applied if the conditions of (i) and (ii) cannot be achieved.

b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep): (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.

(ii) Set RBW = 1 MHz.

(iii) Set VBW ≥ 3 MHz.

(iv) Number of points in sweep ≥ 2 Span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

(vi) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.

(vii) If transmit duty cycle < 98 percent, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98 percent, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to “free run”.

(viii) Trace average at least 100 traces in power averaging (i.e., RMS) mode.

(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum

10.4 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.

10.5 Test Result

Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	DC 5V
Test Mode ：	TX (5.1G) Mode Frequency U-NII-1 (5180-5240MHz)		

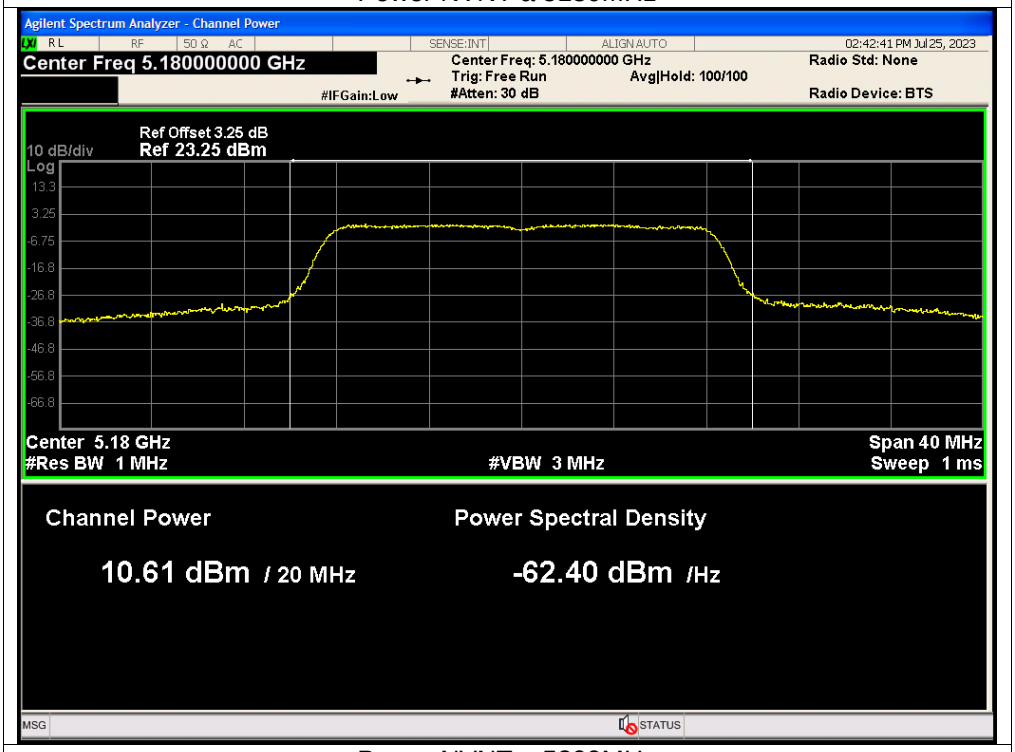
Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	10.61	24	Pass
NVNT	a	5200	10.81	24	Pass
NVNT	a	5240	9.64	24	Pass
NVNT	n20	5180	8.91	24	Pass
NVNT	n20	5200	9.01	24	Pass
NVNT	n20	5240	8.46	24	Pass
NVNT	n40	5190	8.16	24	Pass
NVNT	n40	5230	7.64	24	Pass
NVNT	ac20	5180	9.25	24	Pass
NVNT	ac20	5200	8.63	24	Pass
NVNT	ac20	5240	8.09	24	Pass
NVNT	ac40	5190	8.19	24	Pass
NVNT	ac40	5230	7.47	24	Pass
NVNT	ac80	5210	7.31	24	Pass

Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	DC 5V
Test Mode ：	TX (5.8G) Mode Frequency U-NII-3 (5745-5825MHz)		

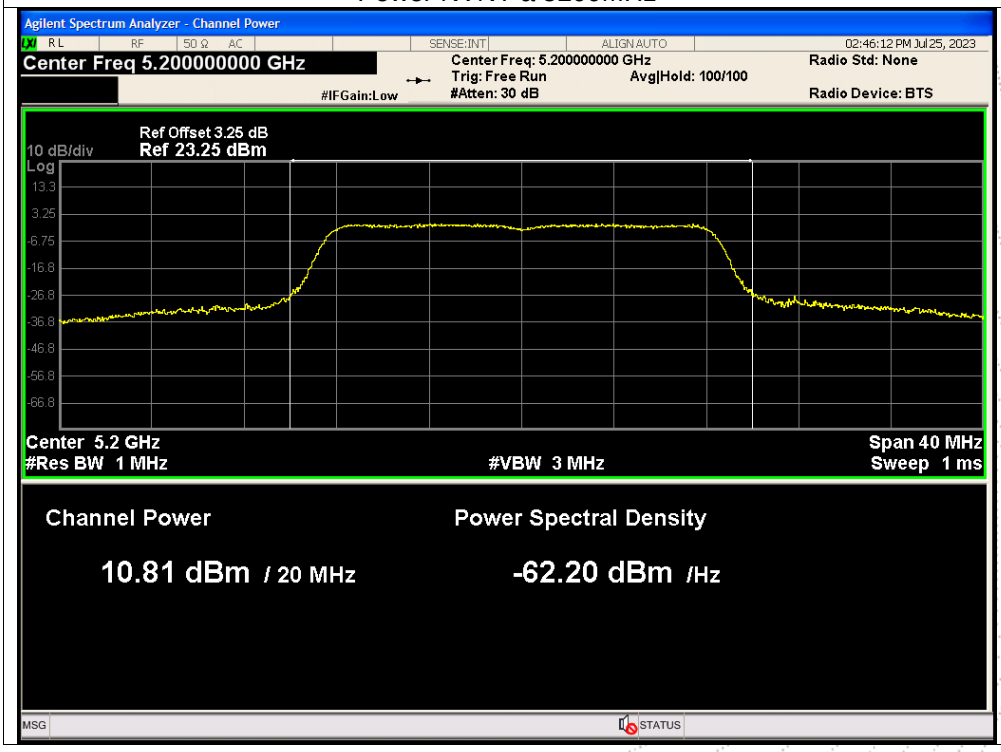
Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	10.39	30	Pass
NVNT	a	5785	10.78	30	Pass
NVNT	a	5825	11.13	30	Pass
NVNT	n20	5745	8.76	30	Pass
NVNT	n20	5785	9.16	30	Pass
NVNT	n20	5825	9.37	30	Pass
NVNT	n40	5755	8.06	30	Pass
NVNT	n40	5795	8.72	30	Pass
NVNT	ac20	5745	9.18	30	Pass
NVNT	ac20	5785	9.22	30	Pass
NVNT	ac20	5825	9.52	30	Pass
NVNT	ac40	5755	8.1	30	Pass
NVNT	ac40	5795	8.86	30	Pass
NVNT	ac80	5775	7.45	30	Pass

Test Graphs

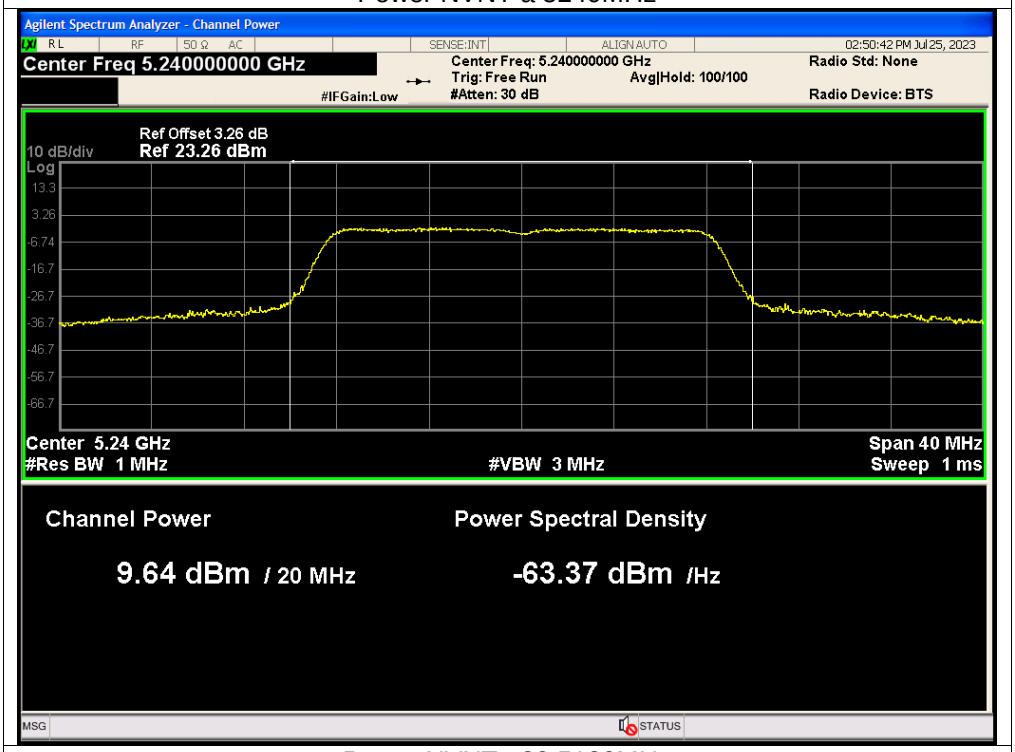
Power NVNT a 5180MHz



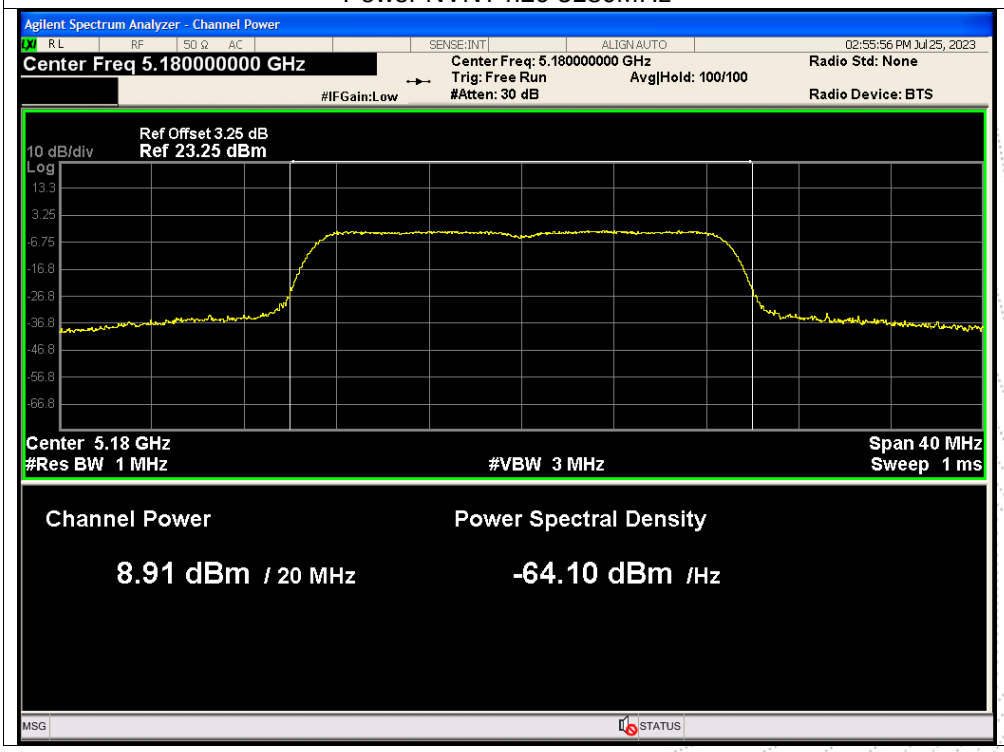
Power NVNT a 5200MHz



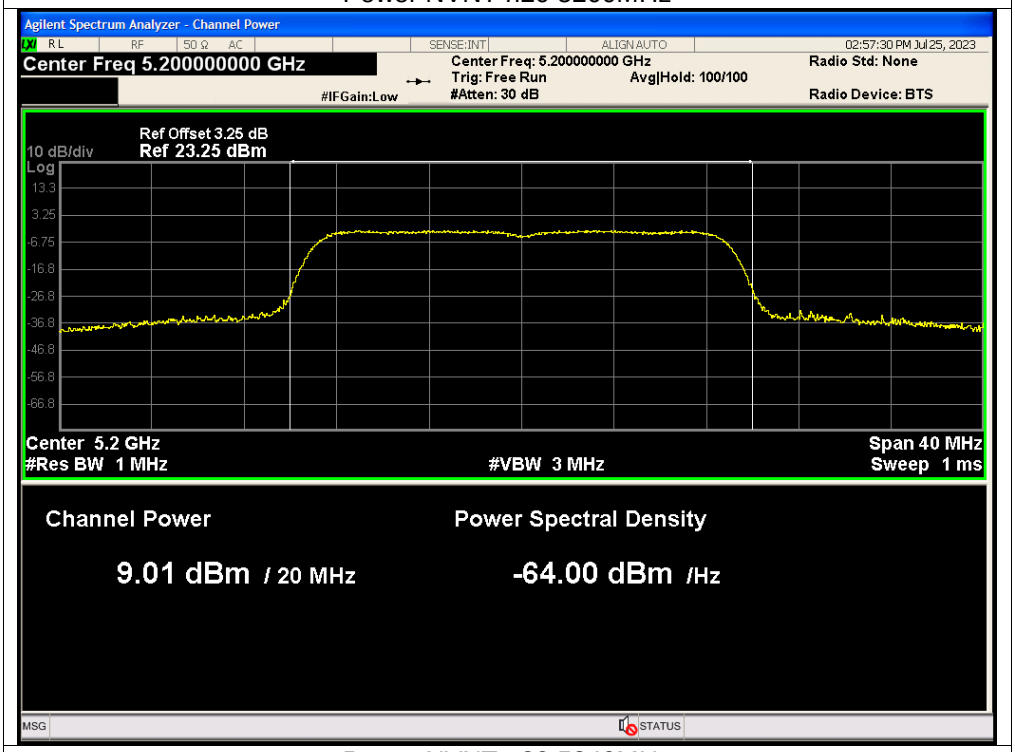
Power NVNT a 5240MHz



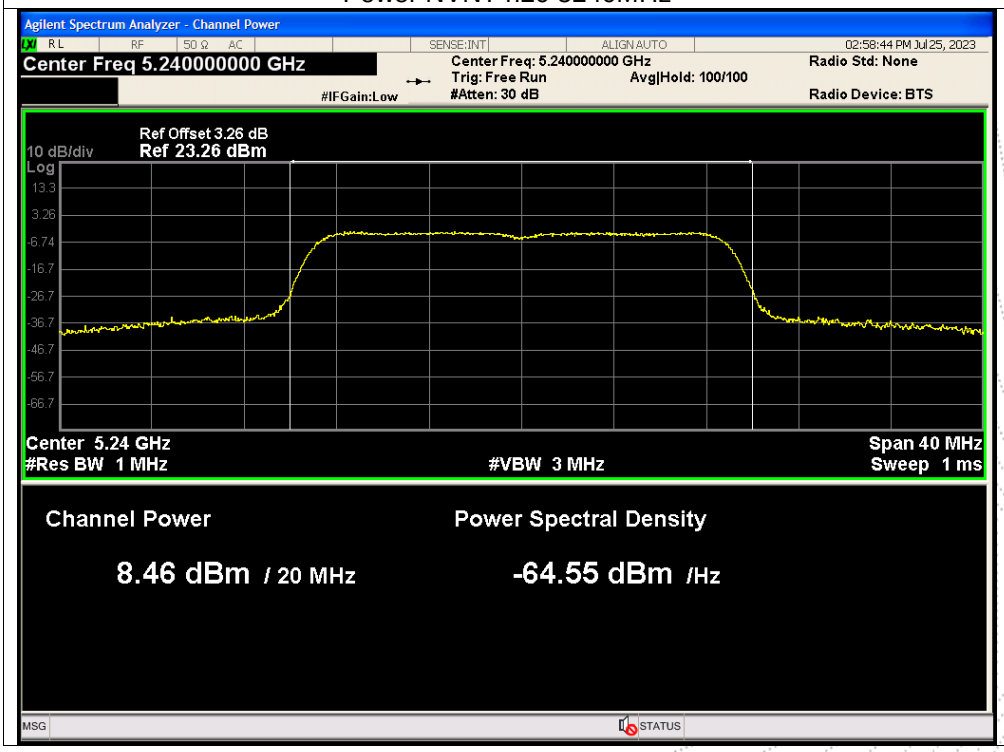
Power NVNT n20 5180MHz



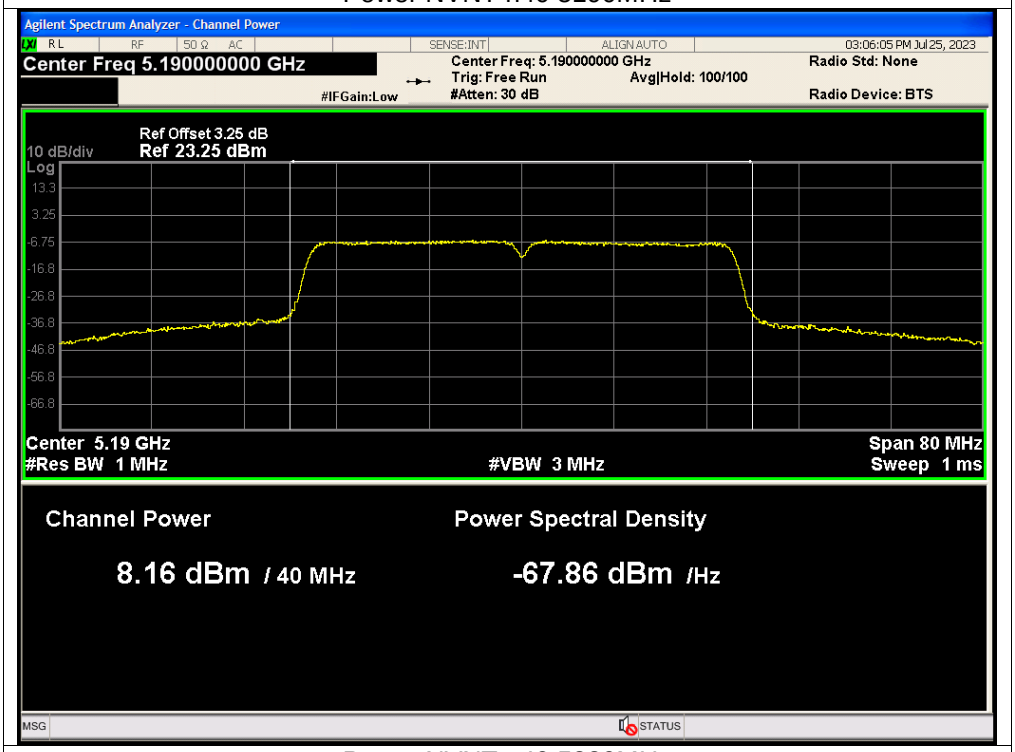
Power NVNT n20 5200MHz



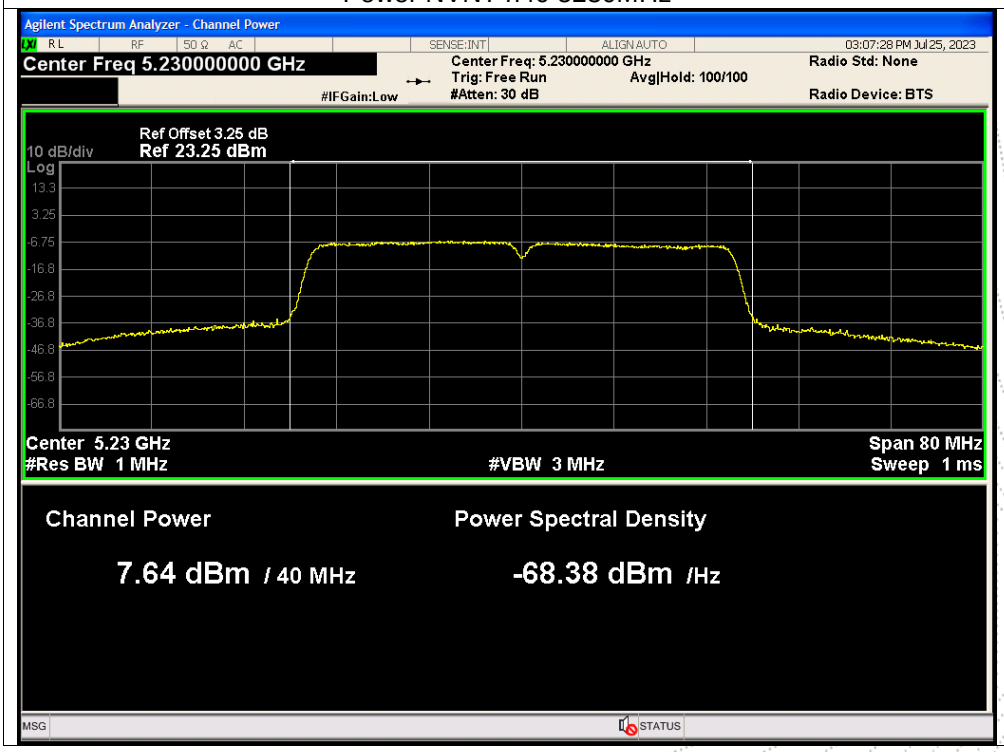
Power NVNT n20 5240MHz



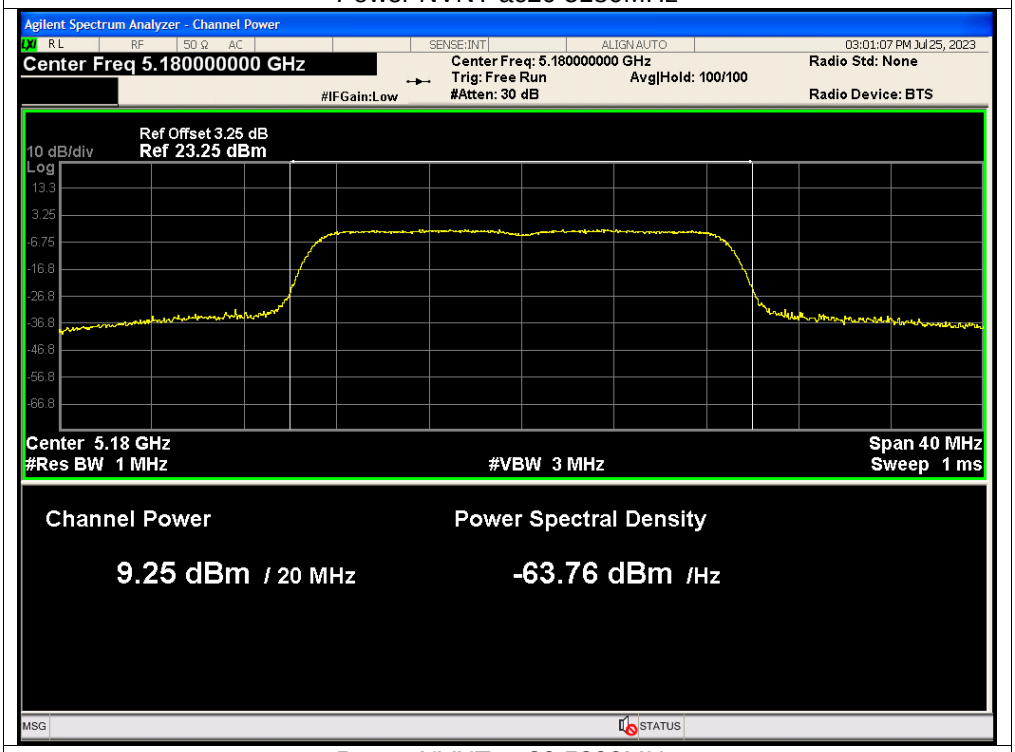
Power NVNT n40 5190MHz



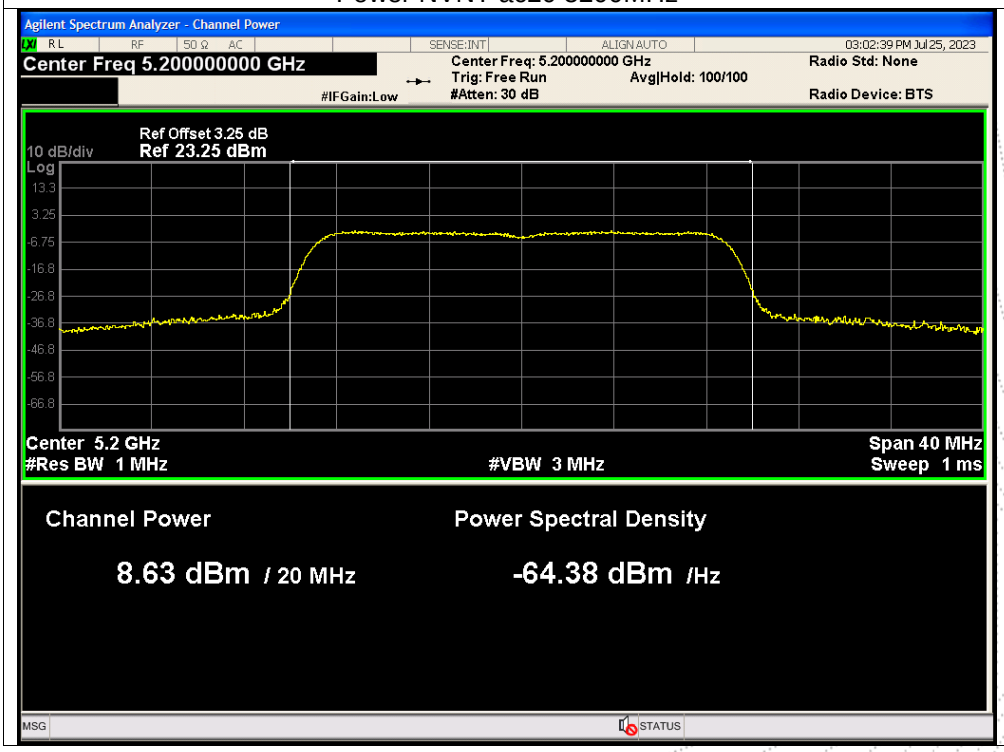
Power NVNT n40 5230MHz



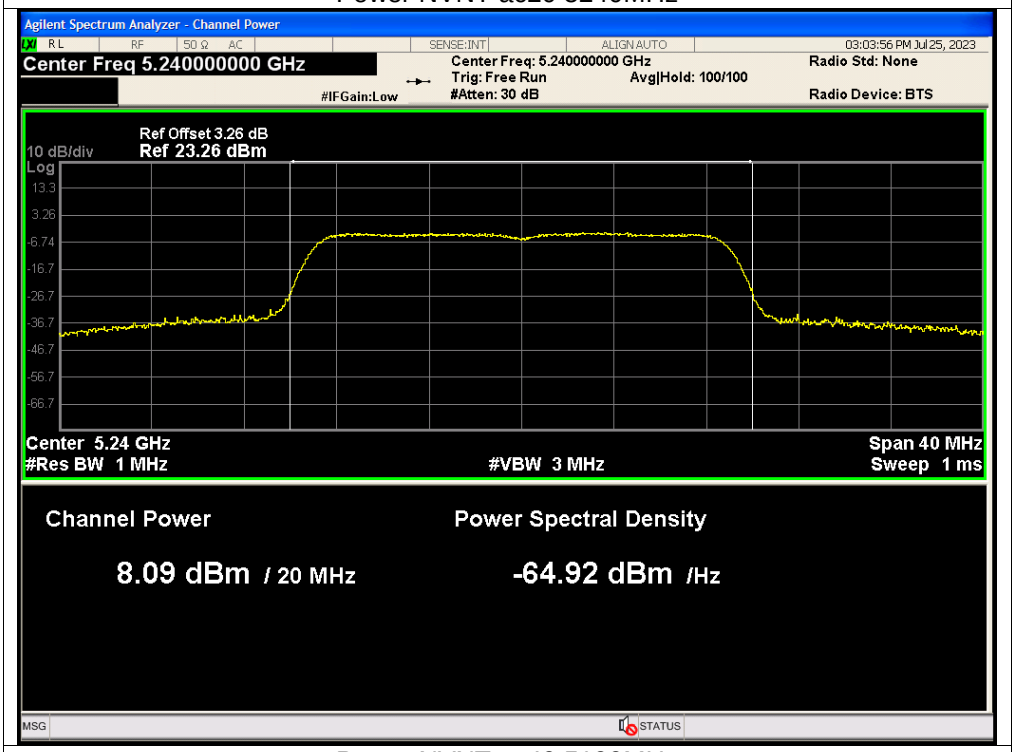
Power NVNT ac20 5180MHz



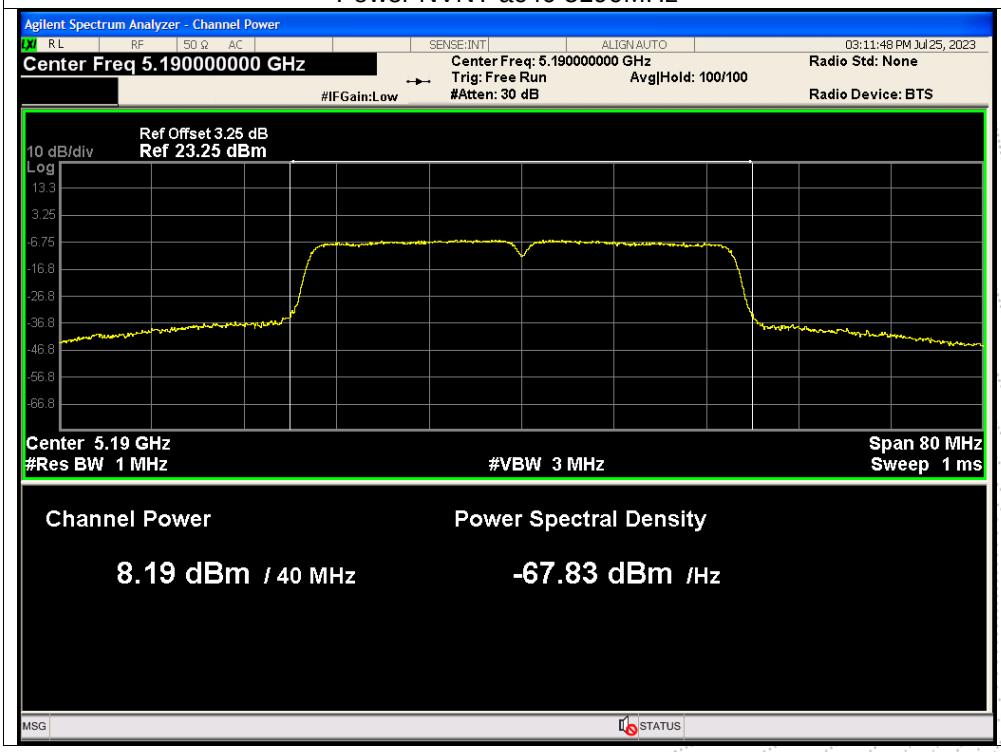
Power NVNT ac20 5200MHz



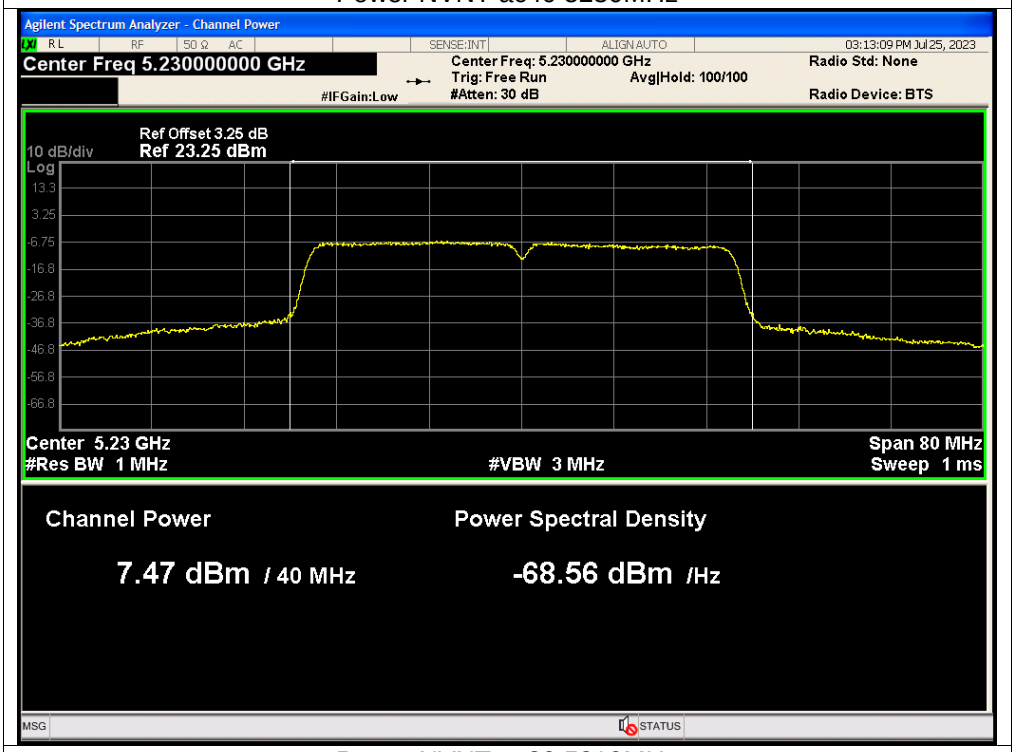
Power NVNT ac20 5240MHz



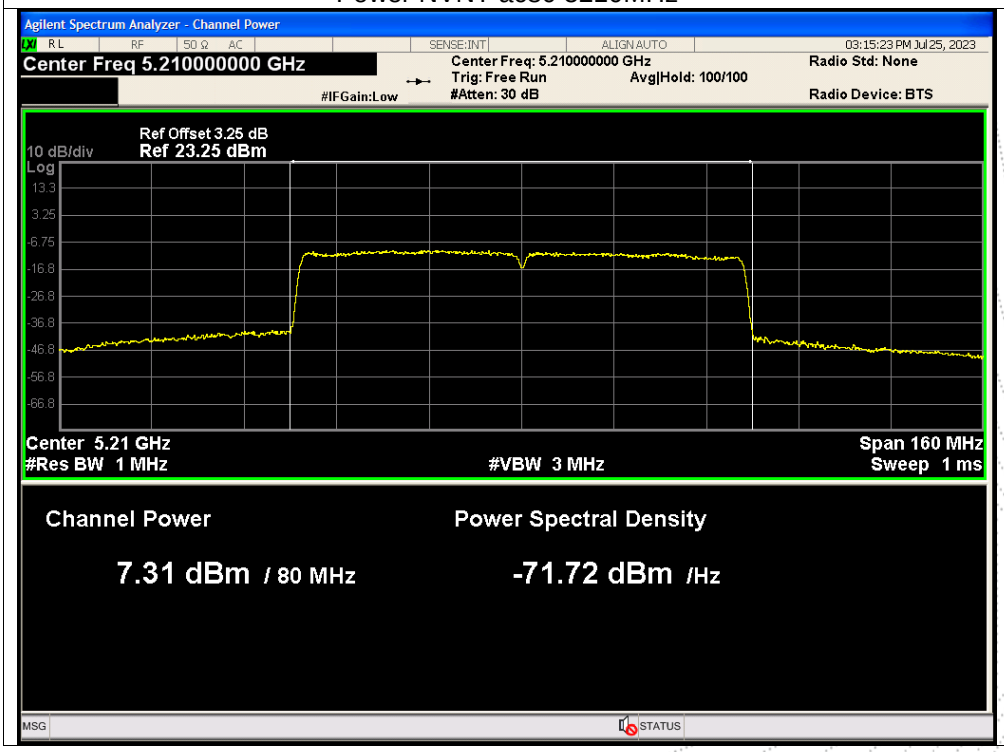
Power NVNT ac40 5190MHz



Power NVNT ac40 5230MHz

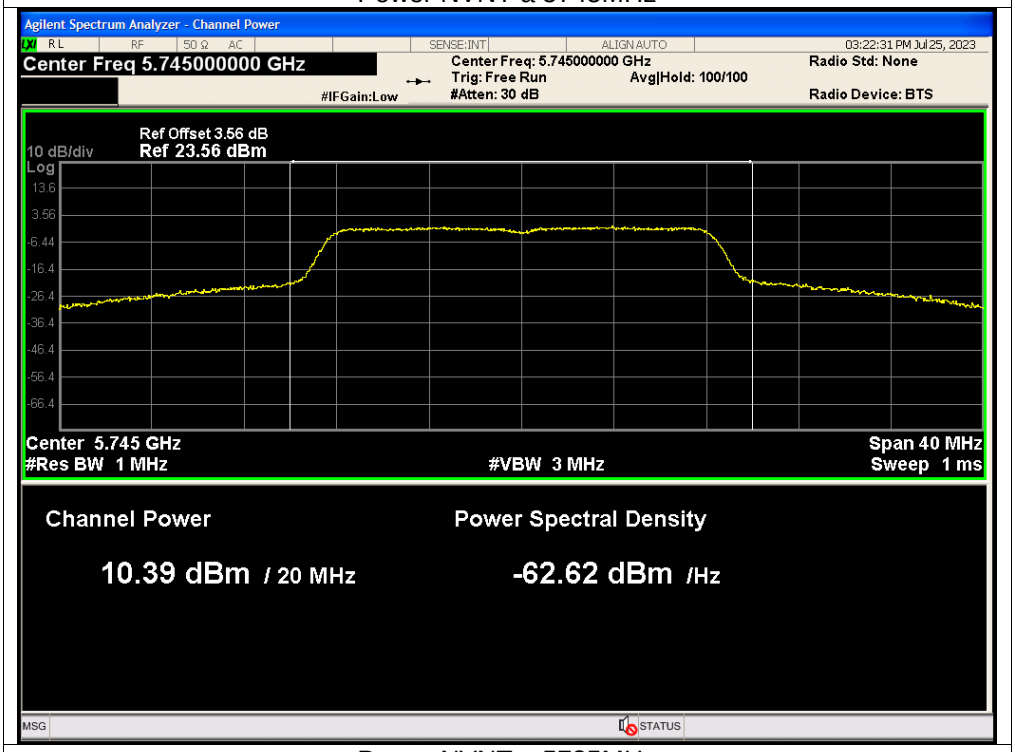


Power NVNT ac80 5210MHz

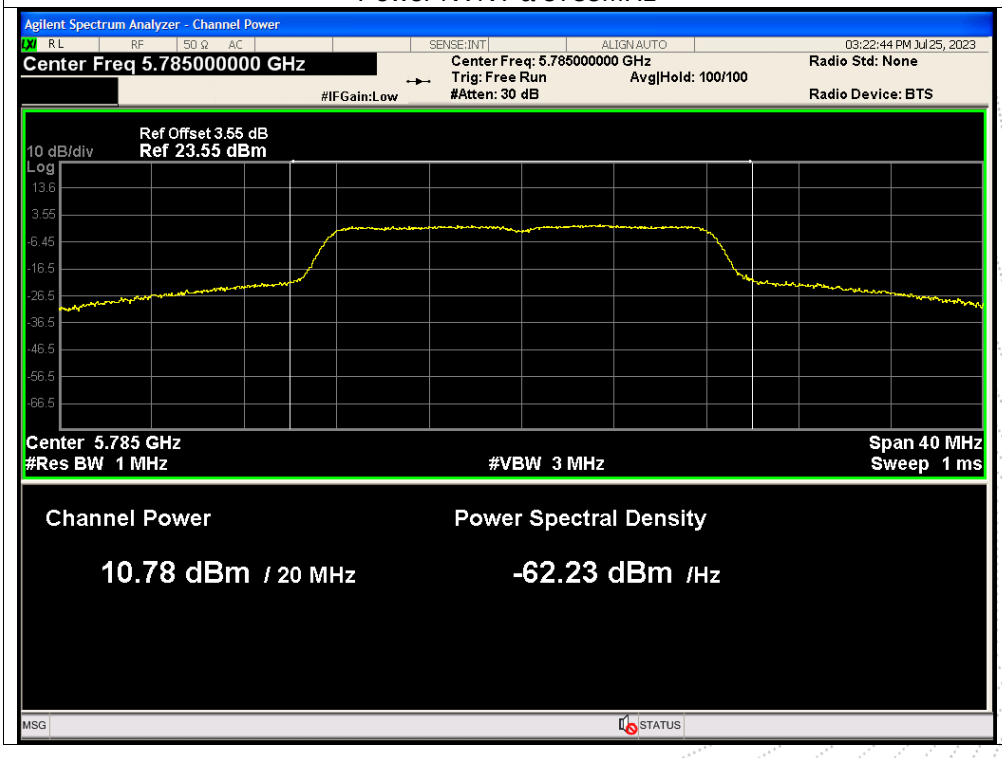


Test Graphs

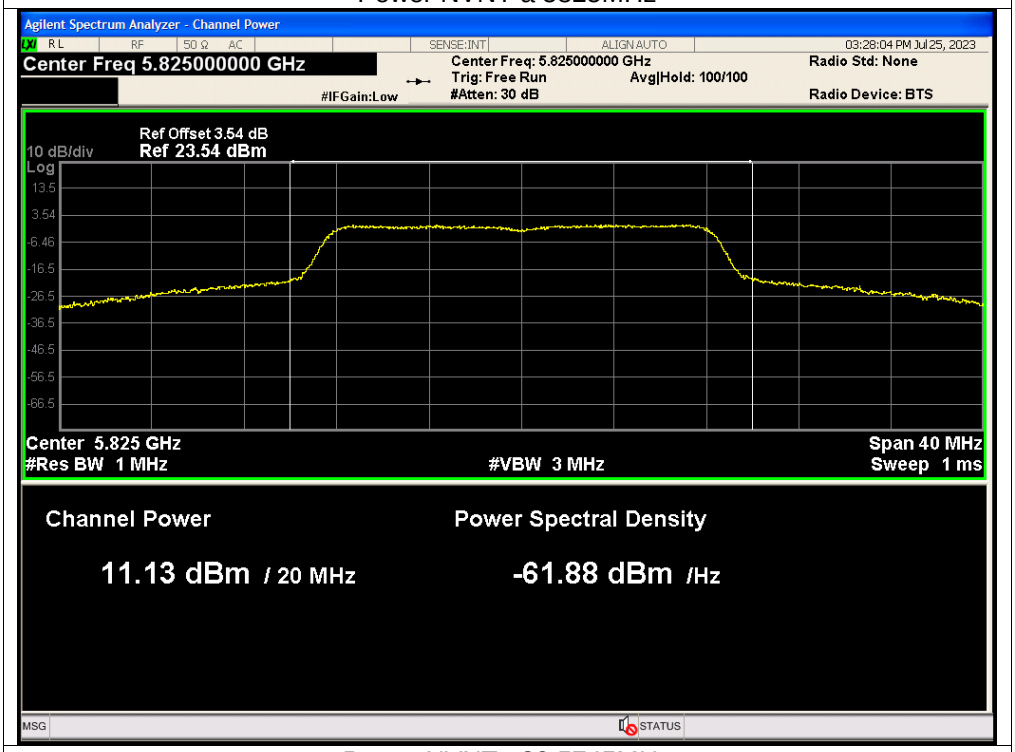
Power NVNT a 5745MHz



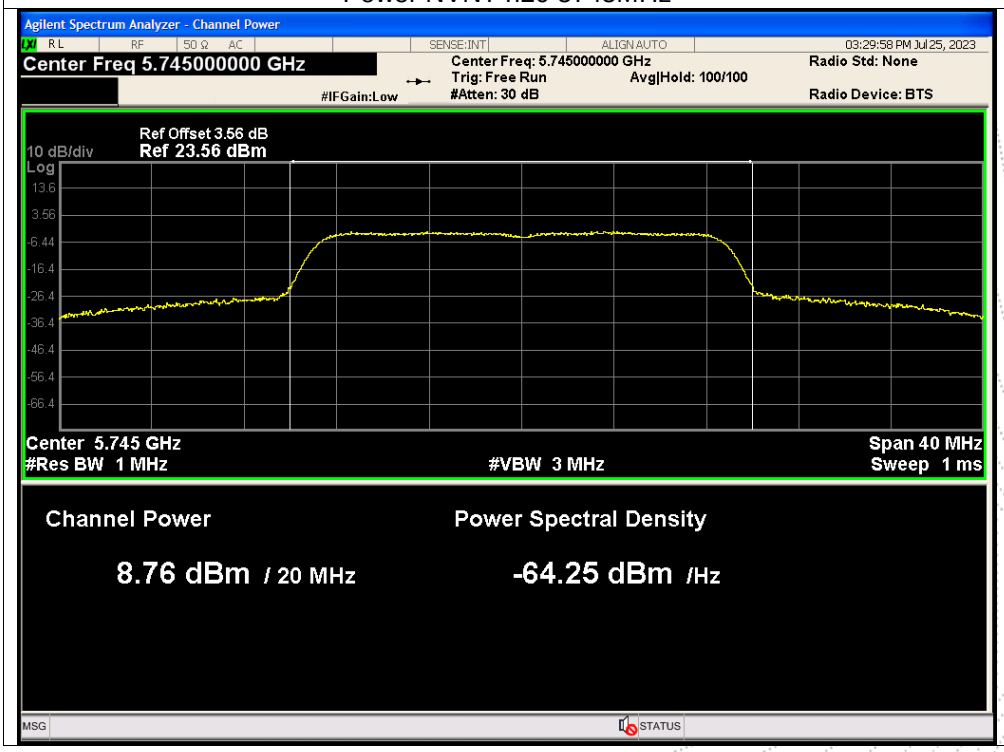
Power NVNT a 5785MHz



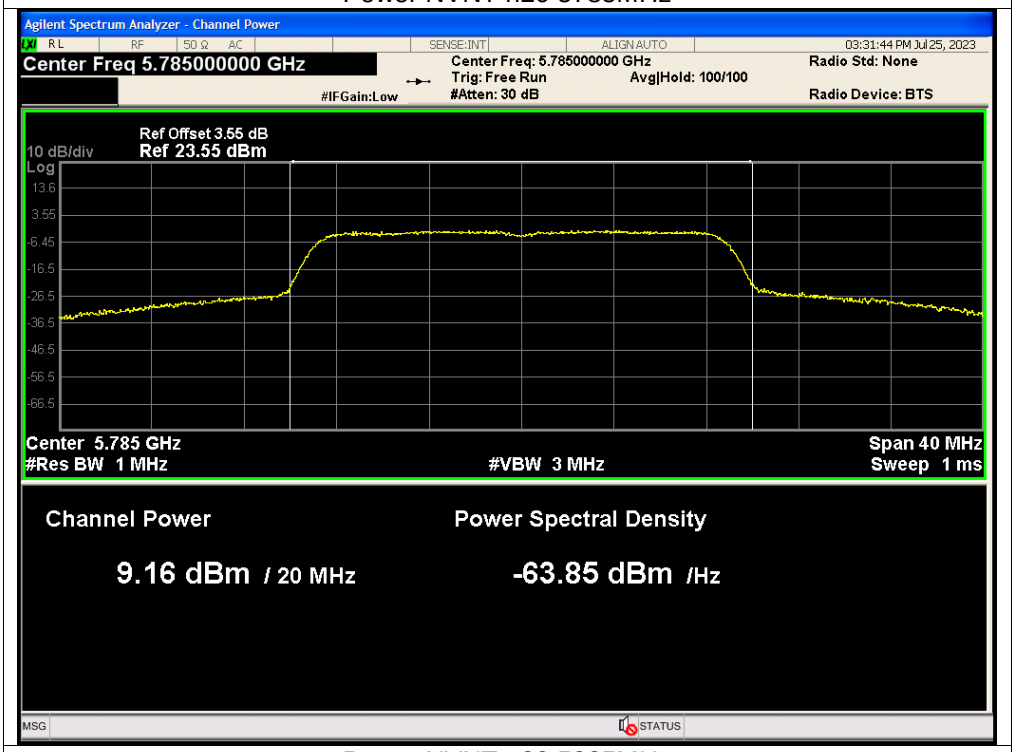
Power NVNT a 5825MHz



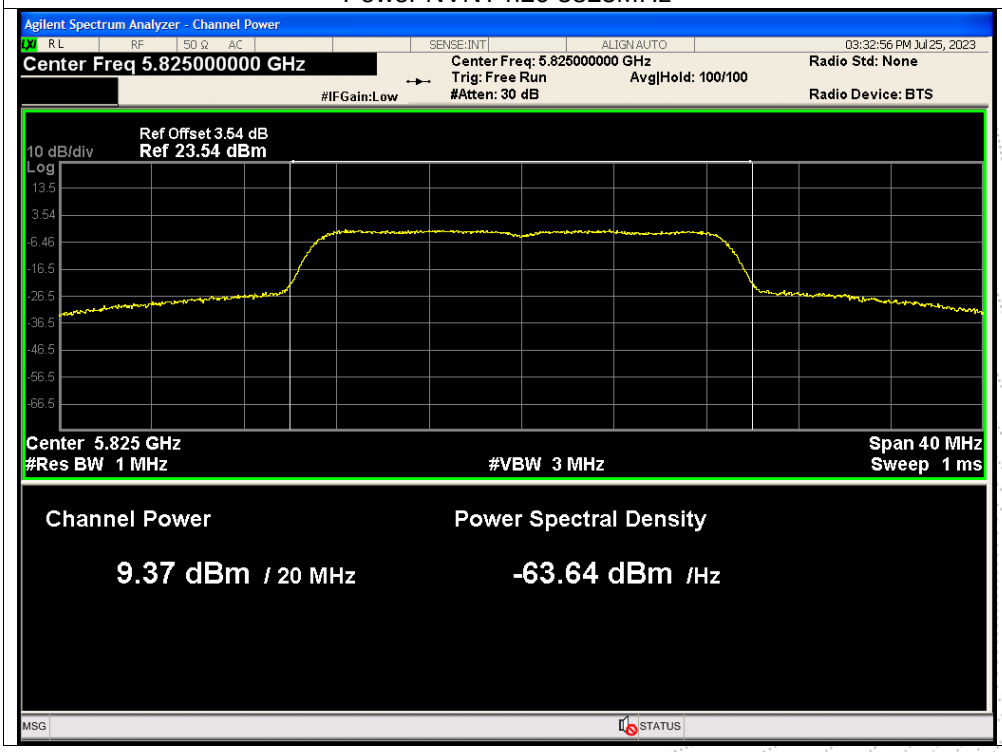
Power NVNT n20 5745MHz



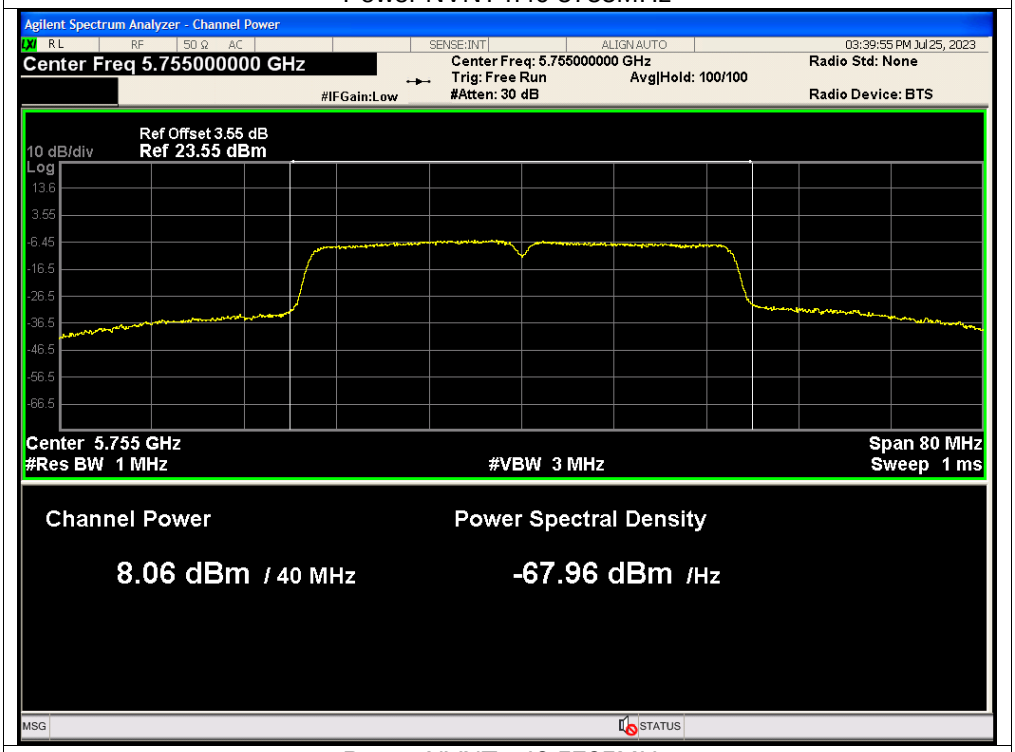
Power NVNT n20 5785MHz



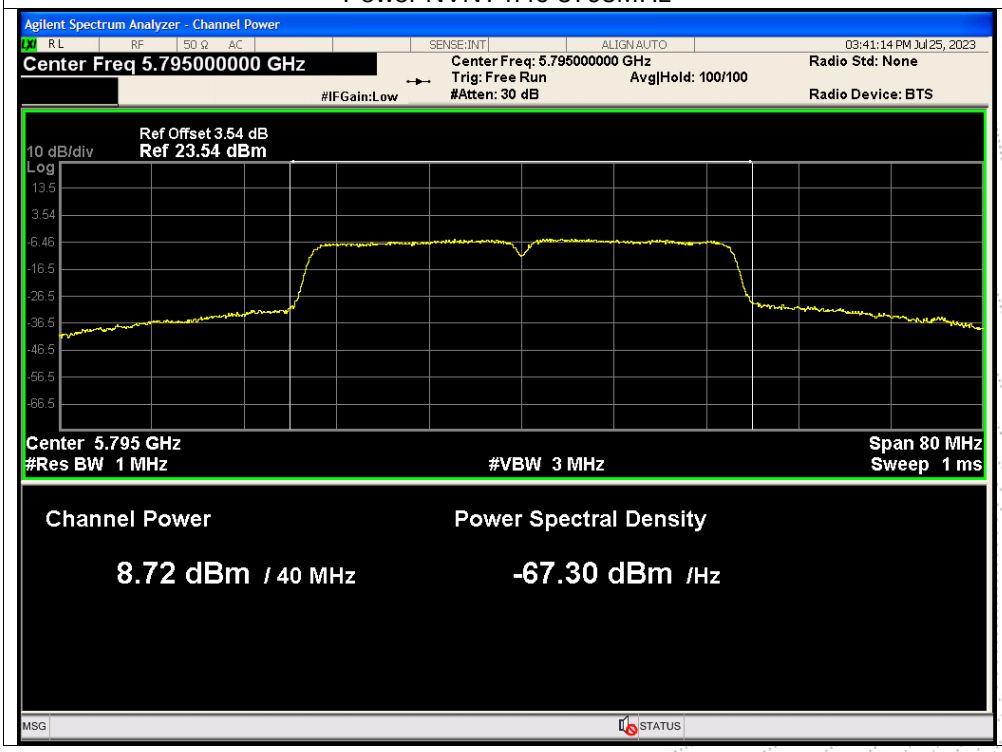
Power NVNT n20 5825MHz



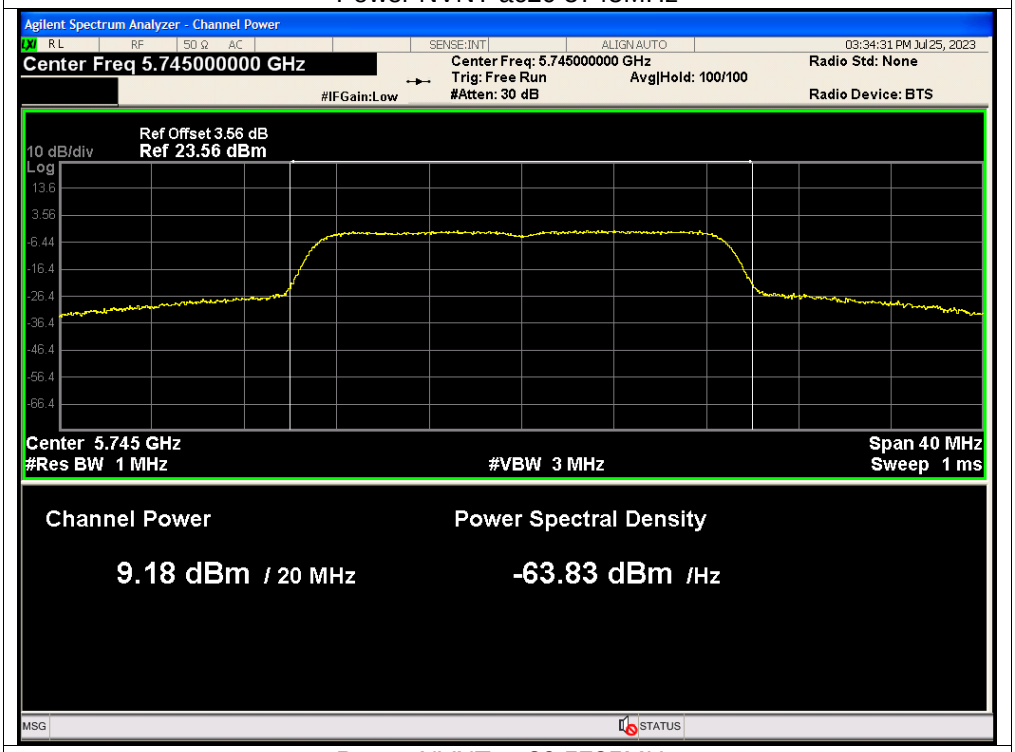
Power NVNT n40 5755MHz



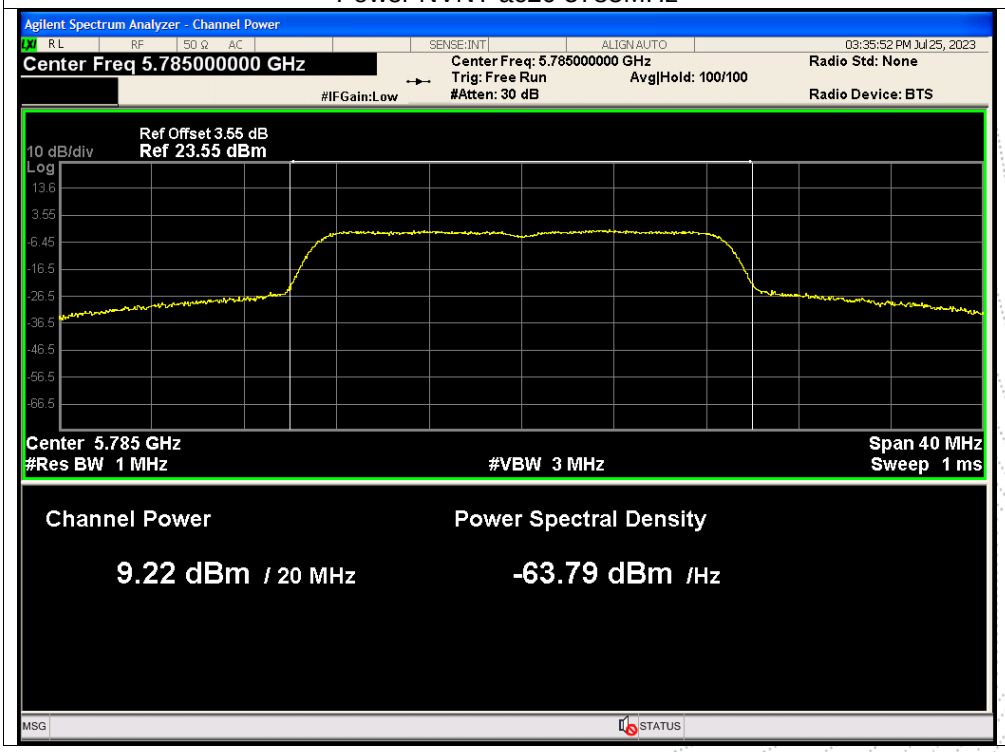
Power NVNT n40 5795MHz



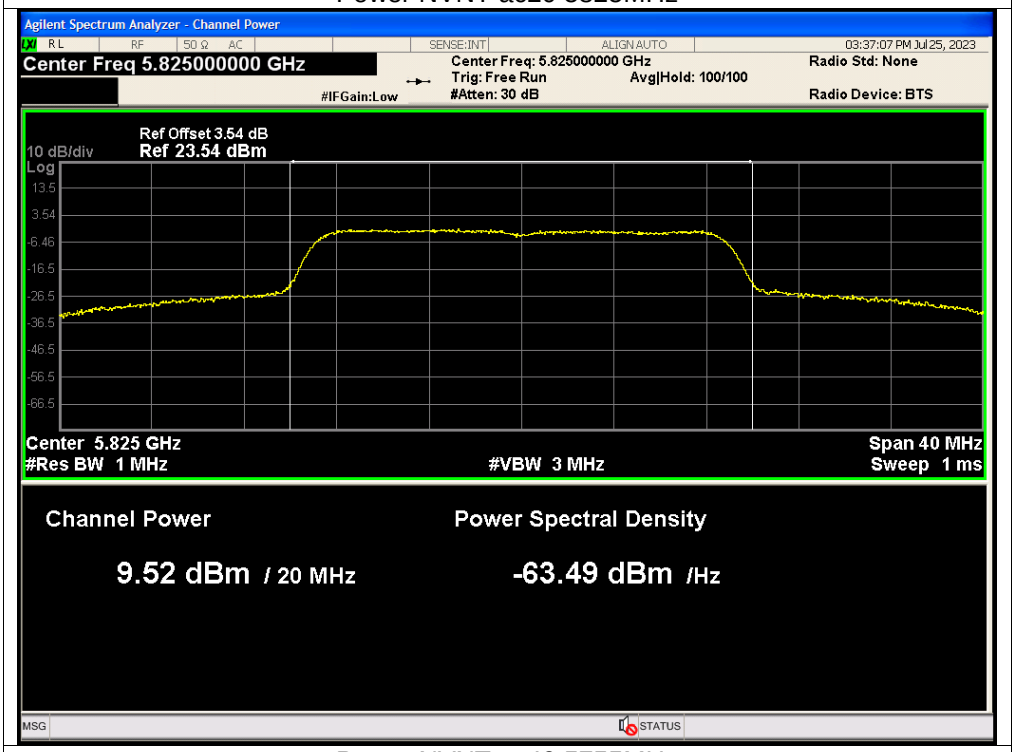
Power NVNT ac20 5745MHz



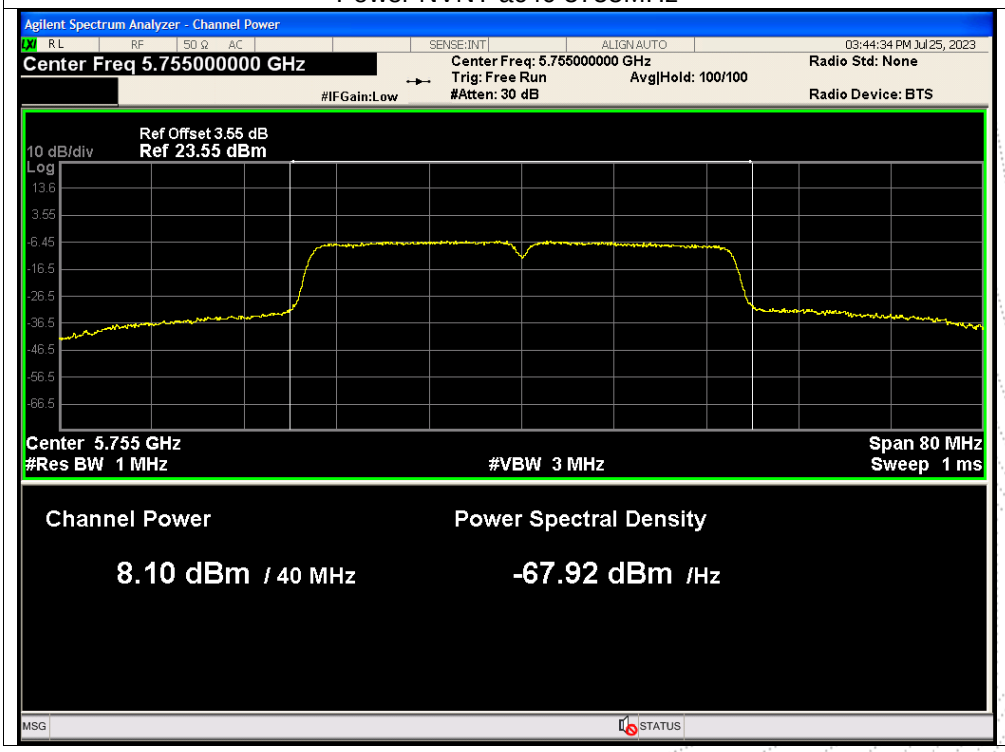
Power NVNT ac20 5785MHz



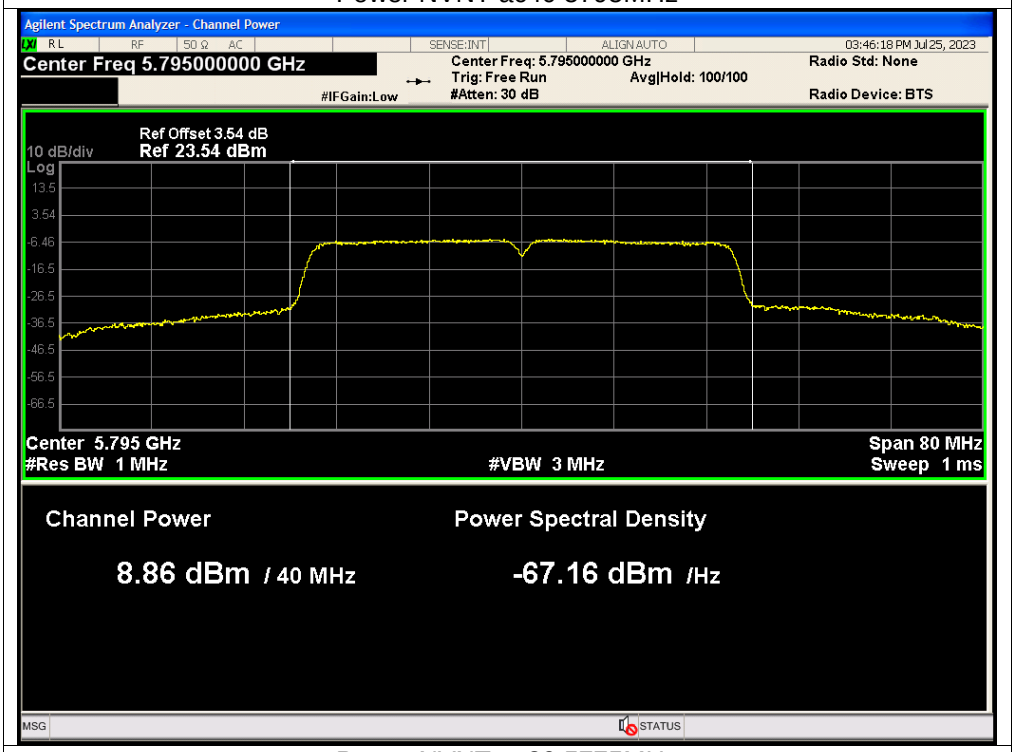
Power NVNT ac20 5825MHz



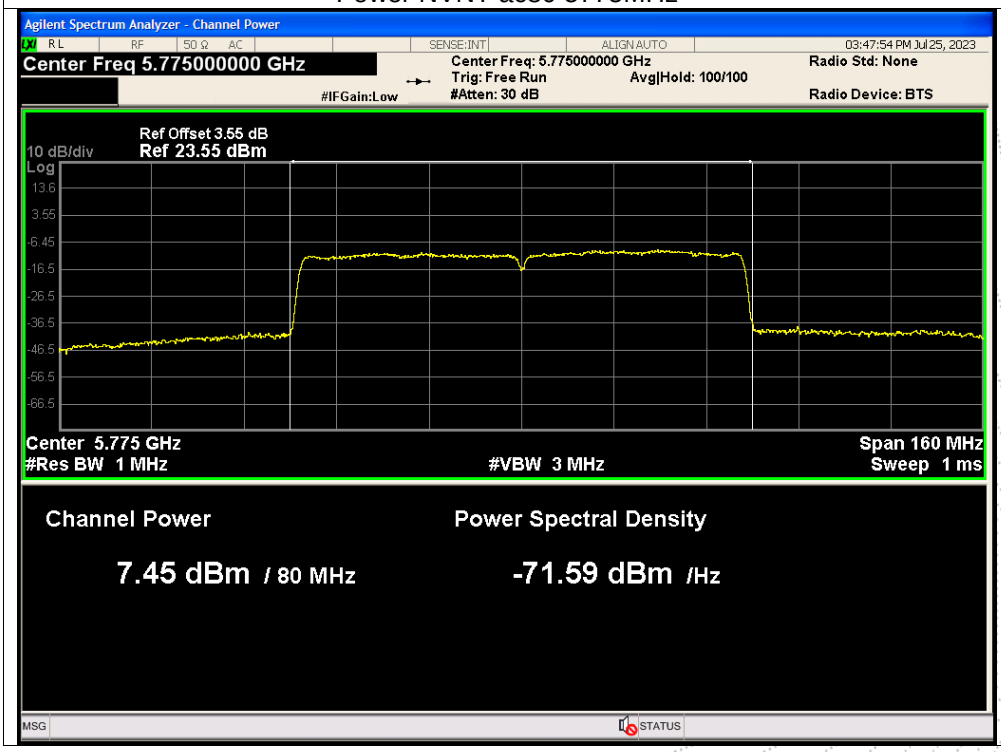
Power NVNT ac40 5755MHz



Power NVNT ac40 5795MHz

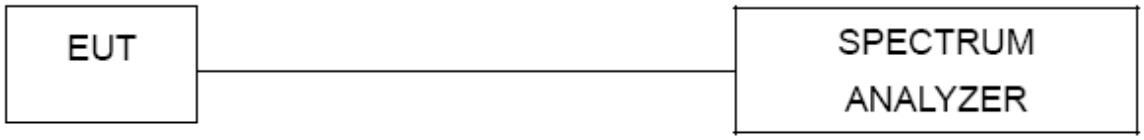


Power NVNT ac80 5775MHz



11. Out Of Band Emissions

11.1 Block Diagram Of Test Setup



11.2 Limit

According to FCC §15.407(b)
Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
(2) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

11.3 Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

11.4 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