TEST REPORT

Report No.:	BCTC2306728642-4E
Applicant:	SHENZHEN NST INDUSTRY AND TRADE CO., LTD
Product Name:	17.3 inch laptop
Model/Type Reference:	X17
Tested Date:	2023-08-05 to 2023-08-15
Issued Date:	2023-08-15

Shenzhen BCTC Testing Co., Ltd.

FCC ID:2AAMS-SGINX17

Product Name:	17.3 inch laptop
Trademark:	N/A
Model/Type Reference:	X17 M173CH
Prepared For:	SHENZHEN NST INDUSTRY AND TRADE CO., LTD
Address:	3-4/F, Bldg 1, Hongbang Intelligent Technology Park,No.30 Cuibao Road, Baolong Street, Longgang District, Shenzhen China
Manufacturer:	SHENZHEN NST INDUSTRY AND TRADE CO., LTD
Address:	3-4/F, Bldg 1, Hongbang Intelligent Technology Park,No.30 Cuibao Road, Baolong Street, Longgang District, Shenzhen China
Prepared By:	Shenzhen BCTC Testing Co., Ltd.
Address:	1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Sample Received Date:	2023-08-05
Sample tested Date:	2023-08-05 to 2023-08-15
Issue Date:	2023-08-15
Report No.:	BCTC2306728642-4E
Test Standards:	FCC Part15 15.407 ANSI C63.10-2013 KDB 662911 D01 v02r01 KDB 789033 D02 v02r01
Test Results:	PASS
Remark:	This is WIFI-5GHz band radio test report.

Tested by:

Brave Zeng/ Project Handler

Approved by:

Zero Zhou/Reviewer

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

Table Of Content

(Note: N/A Means Not Applicable)

1. Version

Report No.	Issue Date	Description	Approved
BCTC2306728642-4E	2023-08-15	Original	Valid

2. Test Summary

The Product has been tested according to the following specifications:

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

3. Measurement Uncertainty

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

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

4. Product Information And Test Setup

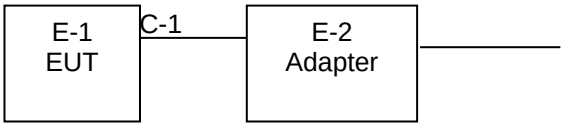
4.1 Product Information

Model/Type Reference:	X17 M173CH
Model differences:	All the model are the same circuit and RF module, except model names.
Hardware Version:	N/A
Software Version:	N/A
IEEE 802.11 WLAN Mode Supported:	802.11a/n/ac(20MHz channel bandwidth) 802.11n/ac(40MHz channel bandwidth) 802.11ac(80MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n(HT20)/ac20; 5190-5230MHz for 802.11n(HT40)/ac40; 5210MHz for 802.11 ac80; 5745-5825 MHz for 802.11a/n(HT20)/ac20; 5755-5795 MHz for 802.11a/n(HT40)/ac40; 5775MHz for 802.11 ac80;
Data Rate:	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac(VHT20): NSS1, MCS0-MCS8 802.11ac(VHT40/VHT80):NSS1, MCS0-MCS
Type of Modulation:	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac;
Number Of Channel:	4 channels for 802.11a/n20 in the 5180-5240MHz band ; 2 channels for 802.11 n40 in the 5190-5230MHz band ; 1 channels for 802.11 ac80 in the 5210MHz band ; 5 channels for 802.11a/n20 in the 5745-5825MHz band ; 2 channels for 802.11 n40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band ;
Antenna installation:	Internal antenna*2
Antenna Gain:	Antenna A Gain: 2.85 dBi Antenna B Gain:2.67 dBi
Ratings:	DC 12V from adapter
Adapter:	MODEL: JHD-AP036U-120300BA-A INOUT:100-240V~50/60Hz 1.2A OUTPUT:12.0V ⎓ 3.0A

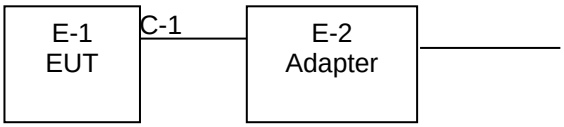
4.2 Test Setup Configuration

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	17.3 inch laptop	N/A	X17	M173CH	EUT
E-2	Adapter	N/A	JHD-AP036U-120300BA-A	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C-1	N/A	N/A	0.3M	DC cable unshielded

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.4 Channel List

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

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

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

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

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

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

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

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

4.5 Test Mode

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

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

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

4.6 Table Of Parameters Of Text Software Setting

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

Test software Version	CMD		
Parameters	DEF	DEF	DEF

4.7 Antenna

Table for Internal antenna

Ant.	Brand	Model Name	Antenna Type	Gain (dBi)	NOTE
A	N/A	N/A	Internal antenna	2.67	N/A
B	N/A	N/A	Internal antenna	2.67	N/A

EUT has two Internal antennas with Max antenna A gain GANT 2.67dBi and antenna B gain 2.67dBi on every antenna, CDD device with one spatial streams, also can operat with one spatial streams according to KDB662911 D01 v02r01,

Directional gain= GANT + Array Gain, where Array Gain is as follows.

1)For power spectral density(PSD) measurements,
Array Gain=10log(NANT/NSS)dB=10log(2/1)=3.01 dBi,
So the directional gain for PSD is 5.68 dBi

2)For power measurements,
The Array gain=0 for NANT≤4,
So the directional gain for Power measurements is 2.67 dBi

Directional gain may be calculated by using the formulas applicable to equal gain antennaswith GANT set equal to the gain of the antenna having the highest gain.

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
FCC Designation Number: CN1212
ISED Registered No.: 23583
ISED CAB identifier: CN0017

5.2 Test Instrument Used

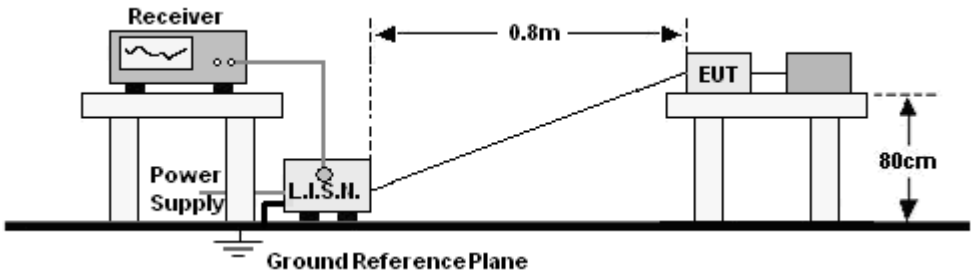
Conducted Emissions Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
LISN	R&S	ENV216	101375	May 15, 2023	May 14, 2024
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Attenuator	\	10dB C-6GHz	1650	May 15, 2023	May 14, 2024

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
Radio frequency control box	MAIWEI	MW100-RFCB	\	\	\
Software	MAIWEI	MTS 8310	\	\	\

Radiated Emissions Test (966 Chamber01)					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
966 chamber	ChengYu	966 Room	966	May 15, 2023	May 14, 2026
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
Receiver	R&S	ESRP	101154	May 15, 2023	May 14, 2024
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 15, 2023	May 14, 2024
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 29, 2023	May 28, 2024
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 31, 2023	May 30, 2024
Amplifier	SKET	LAPA_01G18G-45dB	\	May 15, 2023	May 14, 2024
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 31, 2023	May 30, 2024
Amplifier(18GHz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 15, 2023	May 14, 2024
Horn Antenn(18GHz-40GHz)	Schwarzbeck	BBHA9170	00822	May 31, 2023	May 30, 2024
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 15, 2023	May 14, 2024
Software	Frad	EZ-EMC	FA-03A2 RE	\	\

6. Conducted Emissions

6.1 Block Diagram Of Test Setup



6.2 Limit

Frequency (MHz)	Limit (dBuV)	
	Quas-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00
Notes: 1. *Decreasing linearly with logarithm of frequency. 2. The lower limit shall apply at the transition frequencies.		

6.3 Test procedure

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

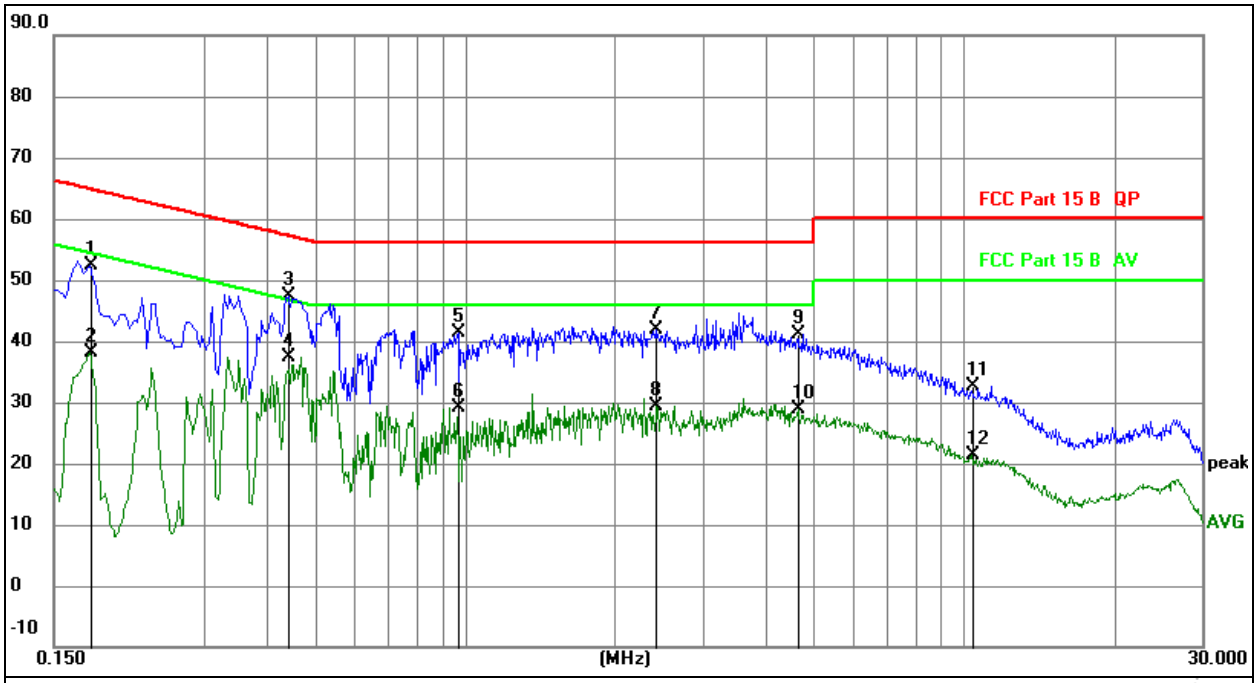
a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak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

6.4 EUT operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.
We pretest AC 120V and AC 240V, the worst voltage was AC 120V and the data recording in the report.

6.5 Test Result

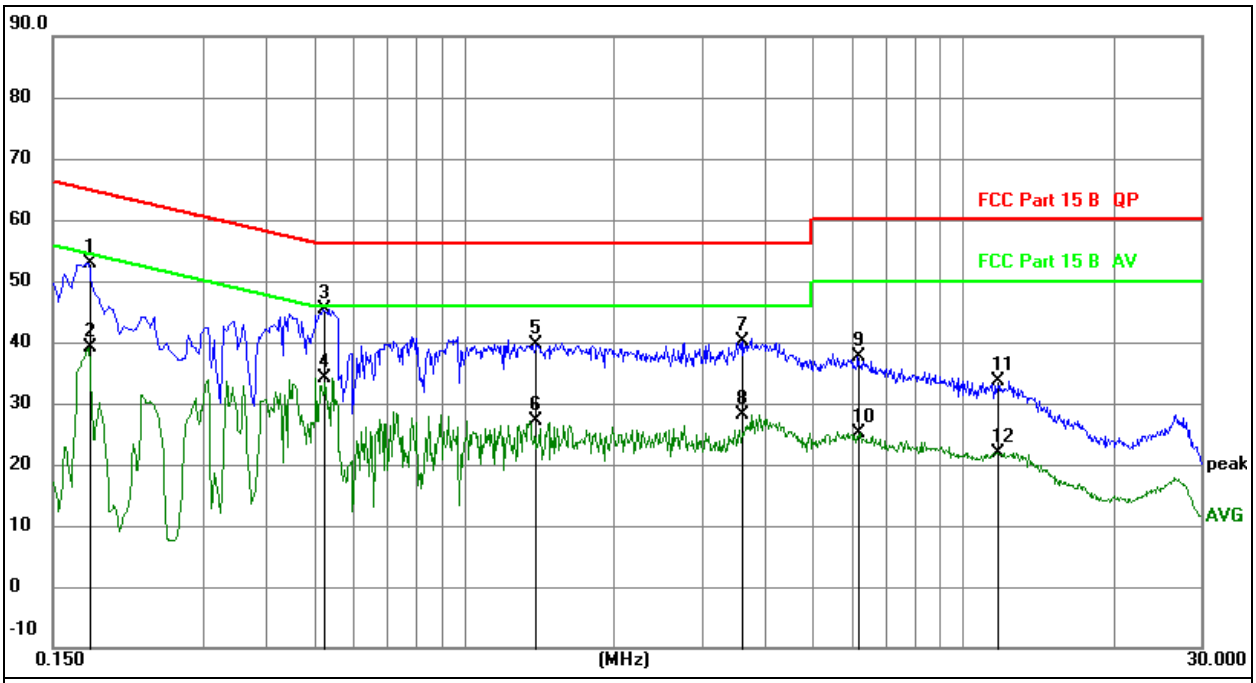
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 4	Test Voltage :	AC 120V/60Hz



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		0.1770	42.84	9.56	52.40	64.63	-12.23	QP
2		0.1770	28.56	9.56	38.12	54.63	-16.51	AVG
3	*	0.4425	37.69	9.62	47.31	57.01	-9.70	QP
4		0.4425	27.65	9.62	37.27	47.01	-9.74	AVG
5		0.9735	31.57	9.72	41.29	56.00	-14.71	QP
6		0.9735	19.34	9.72	29.06	46.00	-16.94	AVG
7		2.4135	32.10	9.75	41.85	56.00	-14.15	QP
8		2.4135	19.60	9.75	29.35	46.00	-16.65	AVG
9		4.6635	31.40	9.82	41.22	56.00	-14.78	QP
10		4.6635	19.00	9.82	28.82	46.00	-17.18	AVG
11		10.3515	22.99	9.66	32.65	60.00	-27.35	QP
12		10.3515	11.78	9.66	21.44	50.00	-28.56	AVG

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



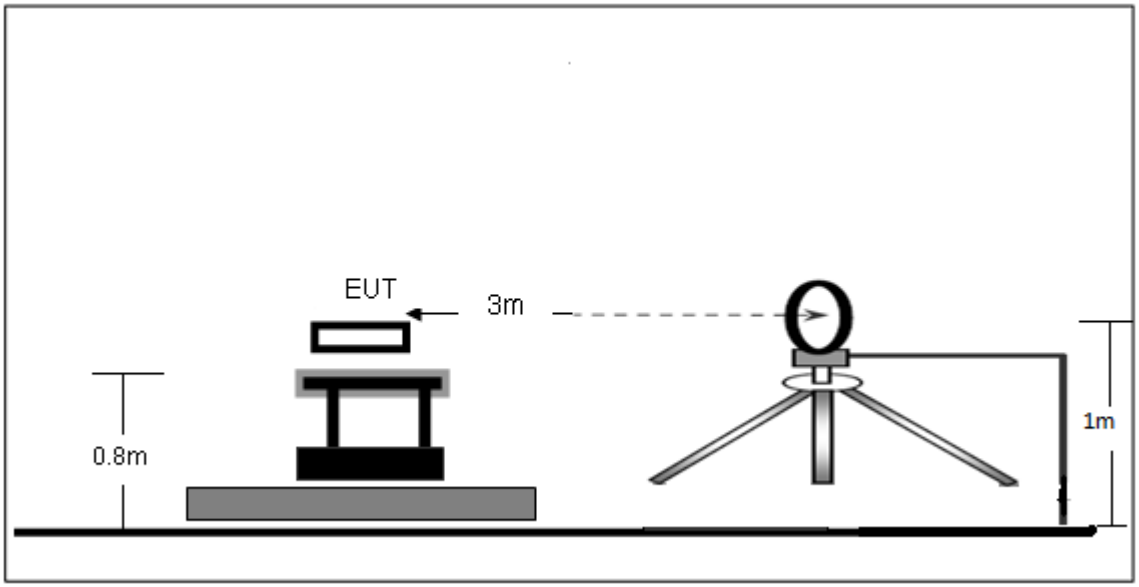
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1768	43.42	9.56	52.98	64.63	-11.65	QP
2		0.1768	29.57	9.56	39.13	54.63	-15.50	AVG
3	*	0.5210	35.73	9.62	45.35	56.00	-10.65	QP
4		0.5210	24.44	9.62	34.06	46.00	-11.94	AVG
5		1.3958	29.98	9.73	39.71	56.00	-16.29	QP
6		1.3958	17.45	9.73	27.18	46.00	-18.82	AVG
7		3.6225	30.22	9.82	40.04	56.00	-15.96	QP
8		3.6225	18.20	9.82	28.02	46.00	-17.98	AVG
9		6.1534	27.82	9.77	37.59	60.00	-22.41	QP
10		6.1534	15.27	9.77	25.04	50.00	-24.96	AVG
11		11.6826	23.99	9.66	33.65	60.00	-26.35	QP
12		11.6826	12.27	9.66	21.93	50.00	-28.07	AVG

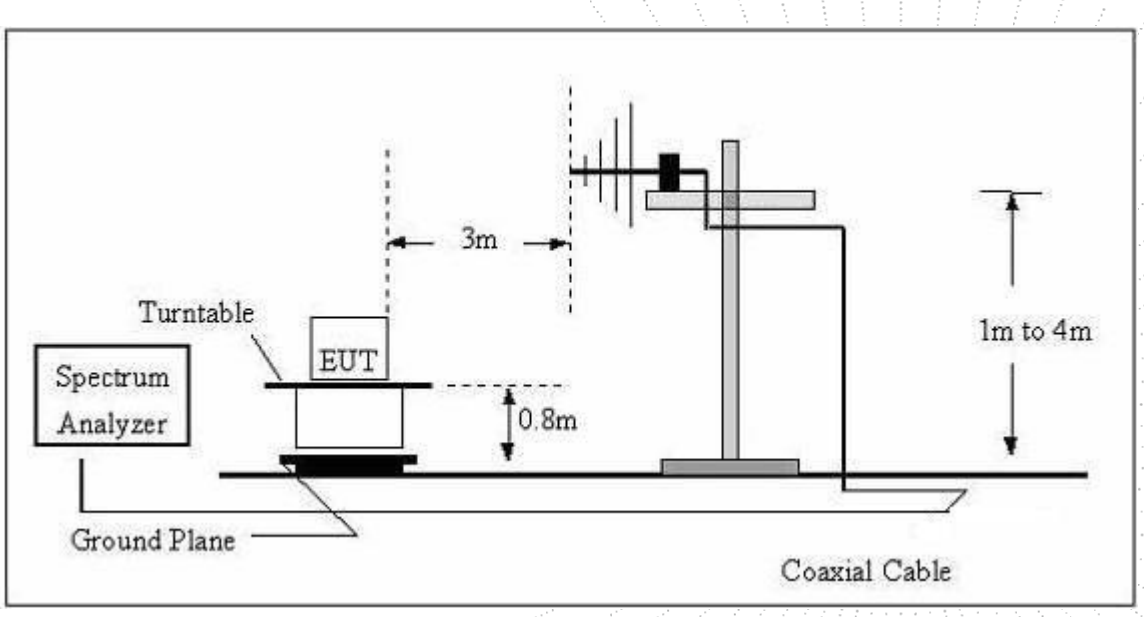
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

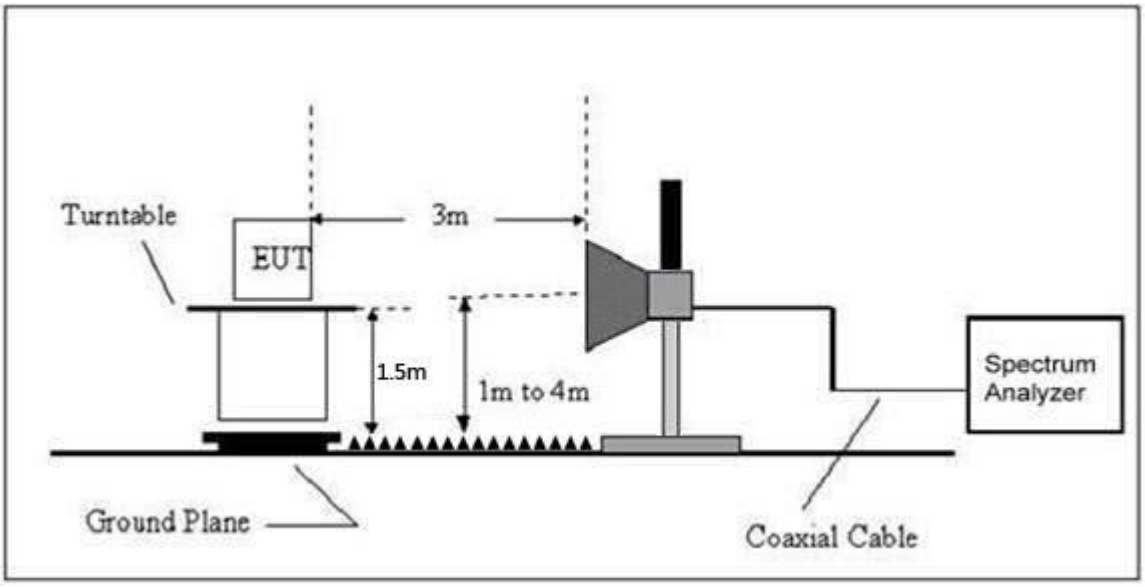
（A）Radiated Emission Test-Up Frequency Below 30MHz



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



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



7.2 Limit

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

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

Limits Of Radiated Emission Measurement (Above 1000MHz)

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

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

7.3 Test procedure

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

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

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

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

Note:

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

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

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

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

7.4 EUT operating Conditions

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

7.5 Test Result

Below 30MHz

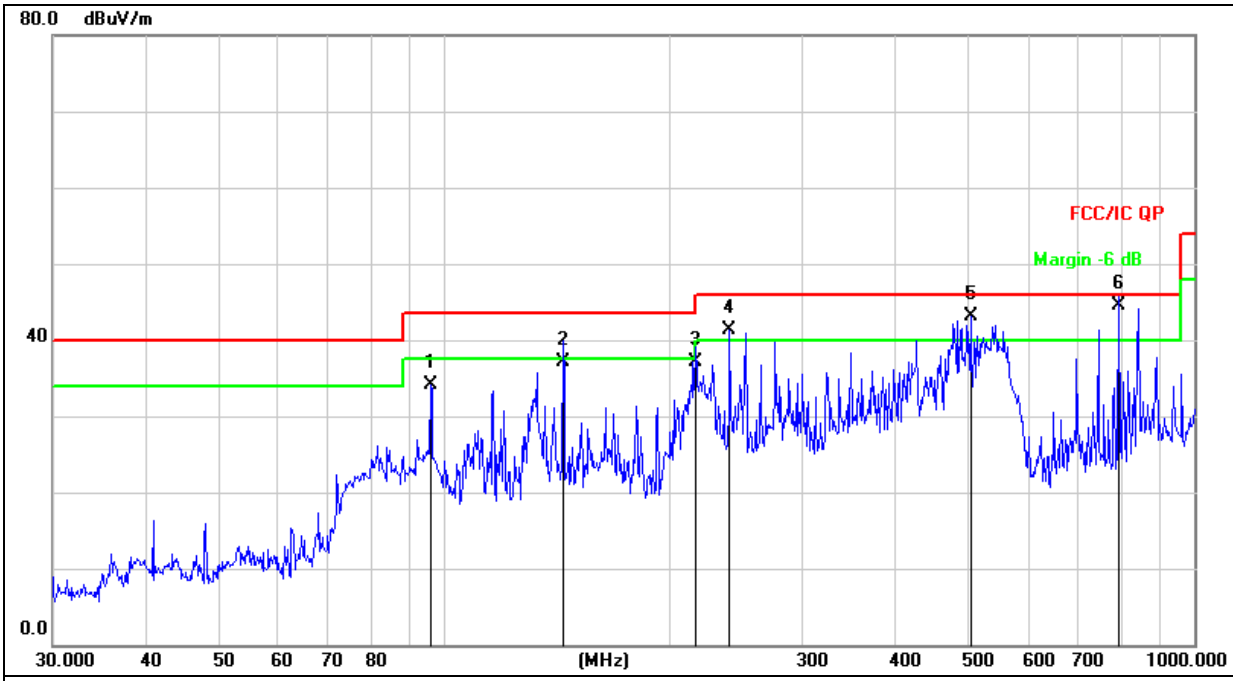
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage ：	AC 120V/60Hz
Test Mode:	Mode 4	Polarization :	---

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

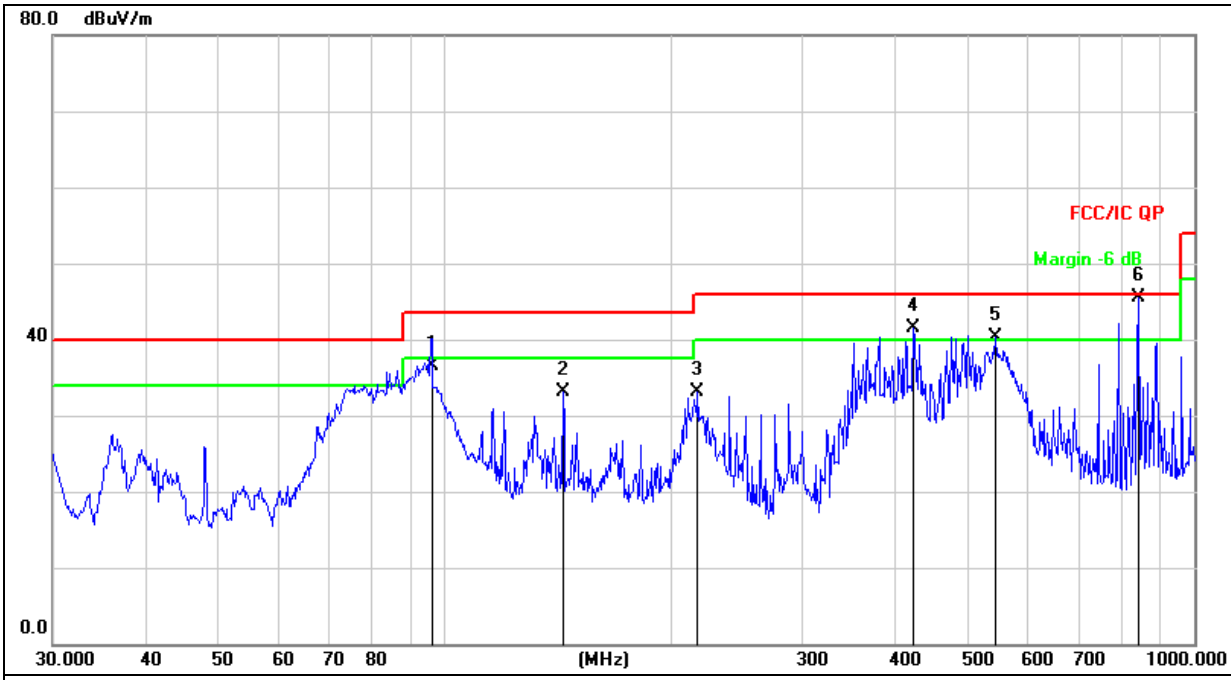
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 4	Test Voltage :	AC 120V/60Hz



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		95.7622	52.57	-18.38	34.19	43.50	-9.31	QP
2		144.0695	57.77	-20.66	37.11	43.50	-6.39	QP
3		216.0240	53.98	-16.88	37.10	46.00	-8.90	QP
4	!	239.9874	57.38	-16.14	41.24	46.00	-4.76	QP
5	!	502.9395	53.39	-10.21	43.18	46.00	-2.82	QP
6	*	793.3958	50.23	-5.68	44.55	46.00	-1.45	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		95.9786	54.88	-18.35	36.53	43.50	-6.97	QP
2		143.8291	53.82	-20.64	33.18	43.50	-10.32	QP
3		217.5440	49.96	-16.83	33.13	46.00	-12.87	QP
4	!	422.0577	53.38	-11.89	41.49	46.00	-4.51	QP
5	!	543.2740	49.88	-9.62	40.26	46.00	-5.74	QP
6	*	842.1295	50.64	-5.22	45.42	46.00	-0.58	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	4434.142	62.45	5.94	35.40	44.00	59.79	68.2	-8.41	PK
V	4434.142	43.05	5.94	35.40	44.00	40.39	54	-13.61	AV
V	10360.116	63.13	8.46	39.75	44.50	66.84	68.2	-1.36	PK
V	10360.116	43.73	8.46	39.75	44.50	47.44	54	-6.56	AV
V	15540.091	63.40	10.12	38.80	44.10	68.22	74	-5.78	PK
V	15540.091	43.03	10.12	38.80	42.70	49.25	54	-4.75	AV
H	4434.200	61.15	5.94	35.18	44.00	58.27	68.2	-9.93	PK
H	4434.200	43.26	5.94	35.18	44.00	40.38	54	-13.62	AV
H	10360.054	52.39	8.46	38.71	44.50	55.06	68.2	-13.14	PK
H	10360.054	43.66	8.46	38.71	44.50	46.33	54	-7.67	AV
H	15540.094	50.47	10.12	38.38	44.10	54.87	74	-19.13	PK
H	15540.094	41.35	10.12	38.38	44.10	45.75	54	-8.25	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.045	61.79	6.48	36.35	44.05	60.57	74	-13.43	PK
V	4592.045	43.25	6.48	36.35	44.05	42.03	54	-11.97	AV
V	10400.149	60.28	8.47	37.88	44.51	62.12	68.2	-6.08	PK
V	10400.149	43.38	8.47	37.88	44.51	45.22	54	-8.78	AV
V	15600.066	62.72	10.12	38.80	44.10	67.54	74	-6.46	PK
V	15600.066	43.40	10.12	38.80	42.70	49.62	54	-4.38	AV
H	4592.030	61.13	6.48	36.37	44.05	59.93	74	-14.07	PK
H	4592.030	43.75	6.48	36.37	44.05	42.55	54	-11.45	AV
H	10400.113	51.25	8.47	38.64	44.50	53.86	68.2	-14.34	PK
H	10400.113	43.80	8.47	38.64	44.50	46.41	54	-7.59	AV
H	15600.110	53.65	10.12	38.38	44.10	58.05	74	-15.95	PK
H	15600.110	41.16	10.12	38.38	44.10	45.56	54	-8.44	AV
High Channel (5240 MHz)-Above 1G									
V	4739.151	63.44	7.10	37.24	43.50	64.28	74	-9.72	PK
V	4739.151	43.08	7.10	37.24	43.50	43.92	54	-10.08	AV
V	10480.047	60.90	8.46	37.68	44.50	62.54	68.2	-5.66	PK
V	10480.047	43.42	8.46	37.68	44.50	45.06	54	-8.94	AV
V	15720.007	61.14	10.12	38.80	44.10	65.96	74	-8.04	PK
V	15720.007	43.80	10.12	38.80	42.70	50.02	54	-3.98	AV
H	4739.041	60.70	7.10	37.24	43.50	61.54	74	-12.46	PK
H	4739.041	43.76	7.10	37.24	43.50	44.60	54	-9.40	AV
H	10480.013	53.11	8.46	38.57	44.50	55.64	68.2	-12.56	PK
H	10480.013	41.50	8.46	38.57	44.50	44.03	54	-9.97	AV
H	15720.055	51.99	10.12	38.38	44.10	56.39	74	-17.61	PK
H	15720.055	44.55	10.12	38.38	44.10	48.95	54	-5.05	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.
The worst case is Antenna A.

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	4434.168	61.33	5.94	35.40	44.00	58.67	68.2	-9.53	PK
V	4434.168	43.10	5.94	35.40	44.00	40.44	54	-13.56	AV
V	10360.197	63.00	8.46	39.75	44.50	66.71	68.2	-1.49	PK
V	10360.197	43.73	8.46	39.75	44.50	47.44	54	-6.56	AV
V	15540.097	61.05	10.12	38.80	44.10	65.87	74	-8.13	PK
V	15540.097	43.31	10.12	38.80	42.70	49.53	54	-4.47	AV
H	4434.145	60.76	5.94	35.18	44.00	57.88	68.2	-10.32	PK
H	4434.145	43.28	5.94	35.18	44.00	40.40	54	-13.60	AV
H	10360.185	51.66	8.46	38.71	44.50	54.33	68.2	-13.87	PK
H	10360.185	43.50	8.46	38.71	44.50	46.17	54	-7.83	AV
H	15540.195	50.35	10.12	38.38	44.10	54.75	74	-19.25	PK
H	15540.195	43.25	10.12	38.38	44.10	47.65	54	-6.35	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.103	64.87	6.48	36.35	44.05	63.65	74	-10.35	PK
V	4592.103	43.39	6.48	36.35	44.05	42.17	54	-11.83	AV
V	10400.154	60.09	8.47	37.88	44.51	61.93	68.2	-6.27	PK
V	10400.154	43.38	8.47	37.88	44.51	45.22	54	-8.78	AV
V	15600.122	62.32	10.12	38.80	44.10	67.14	74	-6.86	PK
V	15600.122	43.57	10.12	38.80	42.70	49.79	54	-4.21	AV
H	4592.093	63.69	6.48	36.37	44.05	62.49	74	-11.51	PK
H	4592.093	43.56	6.48	36.37	44.05	42.36	54	-11.64	AV
H	10400.171	50.12	8.47	38.64	44.50	52.73	68.2	-15.47	PK
H	10400.171	42.44	8.47	38.64	44.50	45.05	54	-8.95	AV
H	15600.163	50.61	10.12	38.38	44.10	55.01	74	-18.99	PK
H	15600.163	44.40	10.12	38.38	44.10	48.80	54	-5.20	AV
High Channel (5240 MHz)-Above 1G									
V	4739.189	61.34	7.10	37.24	43.50	62.18	74	-11.82	PK
V	4739.189	43.05	7.10	37.24	43.50	43.89	54	-10.11	AV
V	10480.044	61.51	8.46	37.68	44.50	63.15	68.2	-5.05	PK
V	10480.044	43.27	8.46	37.68	44.50	44.91	54	-9.09	AV
V	15720.050	64.48	10.12	38.80	44.10	69.30	74	-4.70	PK
V	15720.050	43.10	10.12	38.80	42.70	49.32	54	-4.68	AV
H	4739.075	61.56	7.10	37.24	43.50	62.40	74	-11.60	PK
H	4739.075	43.58	7.10	37.24	43.50	44.42	54	-9.58	AV
H	10480.047	52.91	8.46	38.57	44.50	55.44	68.2	-12.76	PK
H	10480.047	44.06	8.46	38.57	44.50	46.59	54	-7.41	AV
H	15720.108	50.50	10.12	38.38	44.10	54.90	74	-19.10	PK
H	15720.108	43.14	10.12	38.38	44.10	47.54	54	-6.46	AV

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

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	4434.032	60.93	5.94	35.40	44.00	58.27	68.2	-9.93	PK
V	4434.032	43.38	5.94	35.40	44.00	40.72	54	-13.28	AV
V	10380.149	63.16	8.46	39.75	44.50	66.87	68.2	-1.33	PK
V	10380.149	43.88	8.46	39.75	44.50	47.59	54	-6.41	AV
V	15570.125	62.99	10.12	38.80	44.10	67.81	74	-6.19	PK
V	15570.125	43.45	10.12	38.80	42.70	49.67	54	-4.33	AV
H	4434.187	63.60	5.94	35.18	44.00	60.72	74	-13.28	PK
H	4434.187	43.53	5.94	35.18	44.00	40.65	54	-13.35	AV
H	10380.096	53.05	8.46	38.71	44.50	55.72	68.2	-12.48	PK
H	10380.096	41.56	8.46	38.71	44.50	44.23	54	-9.77	AV
H	15570.132	52.22	10.12	38.38	44.10	56.62	74	-17.38	PK
H	15570.132	41.84	10.12	38.38	44.10	46.24	54	-7.76	AV
High Channel (5230 MHz)-Above 1G									
V	4739.091	62.67	6.48	36.35	44.05	61.45	68.2	-6.75	PK
V	4739.091	43.67	6.48	36.35	44.05	42.45	54	-11.55	AV
V	10460.190	60.96	8.47	37.88	44.51	62.80	68.2	-5.40	PK
V	10460.190	43.21	8.47	37.88	44.51	45.05	54	-8.95	AV
V	15690.021	62.39	10.12	38.80	44.10	67.21	74	-6.79	PK
V	15690.021	43.92	10.12	38.80	42.70	50.14	54	-3.86	AV
H	4739.094	63.55	6.48	36.37	44.05	62.35	68.2	-5.85	PK
H	4739.094	43.68	6.48	36.37	44.05	42.48	54	-11.52	AV
H	10460.108	53.64	8.47	38.64	44.50	56.25	68.2	-11.95	PK
H	10460.108	42.46	8.47	38.64	44.50	45.07	54	-8.93	AV
H	15690.188	54.99	10.12	38.38	44.10	59.39	74	-14.61	PK
H	15690.188	41.20	10.12	38.38	44.10	45.60	54	-8.40	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 is MIMO Mode.

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	4434.082	62.55	5.94	35.40	44.00	59.89	68.2	-8.31	PK
V	4434.082	43.90	5.94	35.40	44.00	41.24	54	-12.76	AV
V	10360.125	62.70	8.46	39.75	44.50	66.41	68.2	-1.79	PK
V	10360.125	43.52	8.46	39.75	44.50	47.23	54	-6.77	AV
V	15540.019	62.10	10.12	38.80	44.10	66.92	74	-7.08	PK
V	15540.019	43.75	10.12	38.80	42.70	49.97	54	-4.03	AV
H	4434.068	61.23	5.94	35.18	44.00	58.35	68.2	-9.85	PK
H	4434.068	43.67	5.94	35.18	44.00	40.79	54	-13.21	AV
H	10360.107	52.05	8.46	38.71	44.50	54.72	68.2	-13.48	PK
H	10360.107	42.44	8.46	38.71	44.50	45.11	54	-8.89	AV
H	15540.185	54.55	10.12	38.38	44.10	58.95	74	-15.05	PK
H	15540.185	40.93	10.12	38.38	44.10	45.33	54	-8.67	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.114	62.01	6.48	36.35	44.05	60.79	74	-13.21	PK
V	4592.114	43.62	6.48	36.35	44.05	42.40	54	-11.60	AV
V	10400.088	64.18	8.47	37.88	44.51	66.02	68.2	-2.18	PK
V	10400.088	43.26	8.47	37.88	44.51	45.10	54	-8.90	AV
V	15600.016	60.46	10.12	38.80	44.10	65.28	74	-8.72	PK
V	15600.016	43.72	10.12	38.80	42.70	49.94	54	-4.06	AV
H	4592.027	63.63	6.48	36.37	44.05	62.43	74	-11.57	PK
H	4592.027	43.51	6.48	36.37	44.05	42.31	54	-11.69	AV
H	10400.134	52.83	8.47	38.64	44.50	55.44	68.2	-12.76	PK
H	10400.134	43.30	8.47	38.64	44.50	45.91	54	-8.09	AV
H	15600.004	52.21	10.12	38.38	44.10	56.61	74	-17.39	PK
H	15600.004	42.12	10.12	38.38	44.10	46.52	54	-7.48	AV
High Channel (5240 MHz)-Above 1G									
V	4739.018	60.67	7.10	37.24	43.50	61.51	74	-12.49	PK
V	4739.018	44.00	7.10	37.24	43.50	44.84	54	-9.16	AV
V	10480.009	62.93	8.46	37.68	44.50	64.57	68.2	-3.63	PK
V	10480.009	43.88	8.46	37.68	44.50	45.52	54	-8.48	AV
V	15720.100	63.01	10.12	38.80	44.10	67.83	74	-6.17	PK
V	15720.100	43.89	10.12	38.80	42.70	50.11	54	-3.89	AV
H	4739.116	62.56	7.10	37.24	43.50	63.40	74	-10.60	PK
H	4739.116	43.75	7.10	37.24	43.50	44.59	54	-9.41	AV
H	10480.167	52.01	8.46	38.57	44.50	54.54	68.2	-13.66	PK
H	10480.167	44.26	8.46	38.57	44.50	46.79	54	-7.21	AV
H	15720.115	54.73	10.12	38.38	44.10	59.13	74	-14.87	PK
H	15720.115	41.05	10.12	38.38	44.10	45.45	54	-8.55	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 is MIMO Mode.

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	4434.041	60.24	5.94	35.40	44.00	57.58	68.2	-10.62	PK
V	4434.041	43.31	5.94	35.40	44.00	40.65	54	-13.35	AV
V	10380.141	60.84	8.46	39.75	44.50	64.55	68.2	-3.65	PK
V	10380.141	43.07	8.46	39.75	44.50	46.78	54	-7.22	AV
V	15570.158	63.84	10.12	38.80	44.10	68.66	74	-5.34	PK
V	15570.158	43.10	10.12	38.80	42.70	49.32	54	-4.68	AV
H	4434.192	64.80	5.94	35.18	44.00	61.92	74	-12.08	PK
H	4434.192	43.63	5.94	35.18	44.00	40.75	54	-13.25	AV
H	10380.156	50.53	8.46	38.71	44.50	53.20	68.2	-15.00	PK
H	10380.156	42.95	8.46	38.71	44.50	45.62	54	-8.38	AV
H	15570.160	52.66	10.12	38.38	44.10	57.06	74	-16.94	PK
H	15570.160	41.20	10.12	38.38	44.10	45.60	54	-8.40	AV
High Channel (5230 MHz)-Above 1G									
V	4739.179	64.08	6.48	36.35	44.05	62.86	68.2	-5.34	PK
V	4739.179	43.39	6.48	36.35	44.05	42.17	54	-11.83	AV
V	10460.148	64.78	8.47	37.88	44.51	66.62	68.2	-1.58	PK
V	10460.148	43.60	8.47	37.88	44.51	45.44	54	-8.56	AV
V	15690.063	61.65	10.12	38.80	44.10	66.47	74	-7.53	PK
V	15690.063	43.95	10.12	38.80	42.70	50.17	54	-3.83	AV
H	4739.161	62.84	6.48	36.37	44.05	61.64	68.2	-6.56	PK
H	4739.161	43.13	6.48	36.37	44.05	41.93	54	-12.07	AV
H	10460.163	52.88	8.47	38.64	44.50	55.49	68.2	-12.71	PK
H	10460.163	44.07	8.47	38.64	44.50	46.68	54	-7.32	AV
H	15690.062	50.24	10.12	38.38	44.10	54.64	74	-19.36	PK
H	15690.062	43.12	10.12	38.38	44.10	47.52	54	-6.48	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 is MIMO Mode.

Test Mode:	TX(5.1G) - 802.11ac-HT80

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
(5210 MHz)-Above 1G									
V	4434.072	64.94	5.94	35.40	44.00	62.28	68.2	-5.92	PK
V	4434.072	43.83	5.94	35.40	44.00	41.17	54	-12.83	AV
V	10420.100	61.98	8.46	39.75	44.50	65.69	68.2	-2.51	PK
V	10420.100	43.63	8.46	39.75	44.50	47.34	54	-6.66	AV
V	15630.170	64.84	10.12	38.80	44.10	69.66	74	-4.34	PK
V	15630.170	43.97	10.12	38.80	42.70	50.19	54	-3.81	AV
H	4434.135	63.20	5.94	35.18	44.00	60.32	68.2	-7.88	PK
H	4434.135	43.74	5.94	35.18	44.00	40.86	54	-13.14	AV
H	10420.191	52.89	8.46	38.71	44.50	55.56	68.2	-12.64	PK
H	10420.191	43.81	8.46	38.71	44.50	46.48	54	-7.52	AV
H	15630.143	54.20	10.12	38.38	44.10	58.60	74	-15.40	PK
H	15630.143	44.68	10.12	38.38	44.10	49.08	54	-4.92	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 is MIMO Mode.

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	4679.142	55.92	5.94	35.40	44.00	53.26	74	-20.74	PK
V	4679.142	43.50	5.94	35.40	44.00	40.84	54	-13.16	AV
V	11490.165	57.22	8.46	39.75	44.50	60.93	68.2	-7.27	PK
V	11490.165	43.86	8.46	39.75	44.50	47.57	54	-6.43	AV
V	17235.004	56.49	10.12	38.80	44.10	61.31	68.2	-6.89	PK
V	17235.004	43.78	10.12	38.80	42.70	50.00	54	-4.00	AV
H	4679.104	55.32	5.94	35.18	44.00	52.44	74	-21.56	PK
H	4679.104	43.38	5.94	35.18	44.00	40.50	54	-13.50	AV
H	11490.161	53.81	8.46	38.71	44.50	56.48	68.2	-11.72	PK
H	11490.161	40.78	8.46	38.71	44.50	43.45	54	-10.55	AV
H	17235.029	52.11	10.12	38.38	44.10	56.51	68.2	-11.69	PK
H	17235.029	43.30	10.12	38.38	44.10	47.70	54	-6.30	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.071	58.36	6.48	36.35	44.05	57.14	74	-16.86	PK
V	4592.071	43.76	6.48	36.35	44.05	42.54	54	-11.46	AV
V	11570.101	56.14	8.47	37.88	44.51	57.98	68.2	-10.22	PK
V	11570.101	43.26	8.47	37.88	44.51	45.10	54	-8.90	AV
V	17355.078	56.42	10.12	38.80	44.10	61.24	68.2	-6.96	PK
V	17355.078	39.46	10.12	38.80	42.70	45.68	54	-8.32	AV
H	4592.157	56.91	6.48	36.37	44.05	55.71	74	-18.29	PK
H	4592.157	43.61	6.48	36.37	44.05	42.41	54	-11.59	AV
H	11570.001	52.82	8.47	38.64	44.50	55.43	68.2	-12.77	PK
H	11570.001	41.81	8.47	38.64	44.50	44.42	54	-9.58	AV
H	17355.069	53.37	10.12	38.38	44.10	57.77	68.2	-10.43	PK
H	17355.069	41.71	10.12	38.38	44.10	46.11	54	-7.89	AV
High Channel (5825 MHz)-Above 1G									
V	6039.125	60.03	7.10	37.24	43.50	60.87	68.2	-7.33	PK
V	6039.125	43.91	7.10	37.24	43.50	44.75	54	-9.25	AV
V	11650.007	61.84	8.46	37.68	44.50	63.48	74	-10.52	PK
V	11650.007	43.24	8.46	37.68	44.50	44.88	54	-9.12	AV
V	17475.196	55.95	10.12	38.80	44.10	60.77	68.2	-7.43	PK
V	17475.196	43.08	10.12	38.80	42.70	49.30	54	-4.70	AV
H	6039.162	55.69	7.10	37.24	43.50	56.53	68.2	-11.67	PK
H	6039.162	43.47	7.10	37.24	43.50	44.31	54	-9.69	AV
H	11650.142	51.61	8.46	38.57	44.50	54.14	74	-19.86	PK
H	11650.142	44.48	8.46	38.57	44.50	47.01	54	-6.99	AV
H	17475.142	54.71	10.12	38.38	44.10	59.11	68.2	-9.09	PK
H	17475.142	42.43	10.12	38.38	44.10	46.83	54	-7.17	AV

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

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	4679.143	57.60	5.94	35.40	44.00	54.94	74	-19.06	PK
V	4679.143	43.37	5.94	35.40	44.00	40.71	54	-13.29	AV
V	11490.039	55.00	8.46	39.75	44.50	58.71	68.2	-9.49	PK
V	11490.039	43.23	8.46	39.75	44.50	46.94	54	-7.06	AV
V	17235.168	57.09	10.12	38.80	44.10	61.91	68.2	-6.29	PK
V	17235.168	43.13	10.12	38.80	42.70	49.35	54	-4.65	AV
H	4679.077	58.00	5.94	35.18	44.00	55.12	74	-18.88	PK
H	4679.077	43.78	5.94	35.18	44.00	40.90	54	-13.10	AV
H	11490.025	49.66	8.46	38.71	44.50	52.33	68.2	-15.87	PK
H	11490.025	41.82	8.46	38.71	44.50	44.49	54	-9.51	AV
H	17235.021	52.03	10.12	38.38	44.10	56.43	68.2	-11.77	PK
H	17235.021	43.00	10.12	38.38	44.10	47.40	54	-6.60	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.189	60.08	6.48	36.35	44.05	58.86	74	-15.14	PK
V	4592.189	43.40	6.48	36.35	44.05	42.18	54	-11.82	AV
V	11570.119	58.56	8.47	37.88	44.51	60.40	68.2	-7.80	PK
V	11570.119	43.16	8.47	37.88	44.51	45.00	54	-9.00	AV
V	17355.098	59.73	10.12	38.80	44.10	64.55	68.2	-3.65	PK
V	17355.098	43.68	10.12	38.80	42.70	49.90	54	-4.10	AV
H	4592.194	58.24	6.48	36.37	44.05	57.04	74	-16.96	PK
H	4592.194	43.08	6.48	36.37	44.05	41.88	54	-12.12	AV
H	11570.184	54.15	8.47	38.64	44.50	56.76	68.2	-11.44	PK
H	11570.184	42.88	8.47	38.64	44.50	45.49	54	-8.51	AV
H	17355.142	50.67	10.12	38.38	44.10	55.07	68.2	-13.13	PK
H	17355.142	41.43	10.12	38.38	44.10	45.83	54	-8.17	AV
High Channel (5825 MHz)-Above 1G									
V	6039.080	58.37	7.10	37.24	43.50	59.21	68.2	-8.99	PK
V	6039.080	43.61	7.10	37.24	43.50	44.45	54	-9.55	AV
V	11650.131	57.85	8.46	37.68	44.50	59.49	74	-14.51	PK
V	11650.131	43.97	8.46	37.68	44.50	45.61	54	-8.39	AV
V	17475.053	58.34	10.12	38.80	44.10	63.16	68.2	-5.04	PK
V	17475.053	43.28	10.12	38.80	42.70	49.50	54	-4.50	AV
H	6039.002	57.73	7.10	37.24	43.50	58.57	68.2	-9.63	PK
H	6039.002	43.27	7.10	37.24	43.50	44.11	54	-9.89	AV
H	11650.099	52.16	8.46	38.57	44.50	54.69	74	-19.31	PK
H	11650.099	43.38	8.46	38.57	44.50	45.91	54	-8.09	AV
H	17475.023	52.44	10.12	38.38	44.10	56.84	68.2	-11.36	PK
H	17475.023	44.11	10.12	38.38	44.10	48.51	54	-5.49	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 is MIMO Mode.

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	4679.090	58.07	5.94	35.40	44.00	55.41	74	-18.59	PK
V	4679.090	43.09	5.94	35.40	44.00	40.43	54	-13.57	AV
V	11510.004	56.90	8.46	39.75	44.50	60.61	74	-13.39	PK
V	11510.004	43.47	8.46	39.75	44.50	47.18	54	-6.82	AV
V	17265.055	55.15	10.12	38.80	44.10	59.97	68.2	-8.23	PK
V	17265.055	43.16	10.12	38.80	42.70	49.38	54	-4.62	AV
H	4679.074	56.03	5.94	35.18	44.00	53.15	74	-20.85	PK
H	4679.074	43.27	5.94	35.18	44.00	40.39	54	-13.61	AV
H	11510.122	53.49	8.46	38.71	44.50	56.16	74	-17.84	PK
H	11510.122	41.99	8.46	38.71	44.50	44.66	54	-9.34	AV
H	17265.081	52.91	10.12	38.38	44.10	57.31	68.2	-10.89	PK
H	17265.081	43.88	10.12	38.38	44.10	48.28	54	-5.72	AV
High Channel (5795 MHz)-Above 1G									
V	6039.055	57.67	6.48	36.35	44.05	56.45	68.2	-11.75	PK
V	6039.055	43.03	6.48	36.35	44.05	41.81	54	-12.19	AV
V	11590.131	55.84	8.47	37.88	44.51	57.68	74	-16.32	PK
V	11590.131	43.69	8.47	37.88	44.51	45.53	54	-8.47	AV
V	17385.041	55.94	10.12	38.80	44.10	60.76	68.2	-7.44	PK
V	17385.041	41.61	10.12	38.80	42.70	47.83	54	-6.17	AV
H	6039.171	57.58	6.48	36.37	44.05	56.38	68.2	-11.82	PK
H	6039.171	43.39	6.48	36.37	44.05	42.19	54	-11.81	AV
H	11590.063	52.64	8.47	38.64	44.50	55.25	74	-18.75	PK
H	11590.063	40.07	8.47	38.64	44.50	42.68	54	-11.32	AV
H	17385.056	54.18	10.12	38.38	44.10	58.58	68.2	-9.62	PK
H	17385.056	42.95	10.12	38.38	44.10	47.35	54	-6.65	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 is MIMO Mode.

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	4679.140	58.38	5.94	35.40	44.00	55.72	74	-18.28	PK
V	4679.140	43.49	5.94	35.40	44.00	40.83	54	-13.17	AV
V	11490.119	55.11	8.46	39.75	44.50	58.82	68.2	-9.38	PK
V	11490.119	43.58	8.46	39.75	44.50	47.29	54	-6.71	AV
V	17235.059	60.53	10.12	38.80	44.10	65.35	68.2	-2.85	PK
V	17235.059	43.83	10.12	38.80	42.70	50.05	54	-3.95	AV
H	4679.032	58.89	5.94	35.18	44.00	56.01	74	-17.99	PK
H	4679.032	43.53	5.94	35.18	44.00	40.65	54	-13.35	AV
H	11490.160	48.70	8.46	38.71	44.50	51.37	68.2	-16.83	PK
H	11490.160	42.24	8.46	38.71	44.50	44.91	54	-9.09	AV
H	17235.192	54.48	10.12	38.38	44.10	58.88	68.2	-9.32	PK
H	17235.192	42.15	10.12	38.38	44.10	46.55	54	-7.45	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.014	58.28	6.48	36.35	44.05	57.06	74	-16.94	PK
V	4592.014	43.56	6.48	36.35	44.05	42.34	54	-11.66	AV
V	11570.119	58.35	8.47	37.88	44.51	60.19	68.2	-8.01	PK
V	11570.119	43.24	8.47	37.88	44.51	45.08	54	-8.92	AV
V	17355.172	61.26	10.12	38.80	44.10	66.08	68.2	-2.12	PK
V	17355.172	43.93	10.12	38.80	42.70	50.15	54	-3.85	AV
H	4592.192	59.84	6.48	36.37	44.05	58.64	74	-15.36	PK
H	4592.192	43.57	6.48	36.37	44.05	42.37	54	-11.63	AV
H	11570.133	52.04	8.47	38.64	44.50	54.65	68.2	-13.55	PK
H	11570.133	42.38	8.47	38.64	44.50	44.99	54	-9.01	AV
H	17355.087	53.37	10.12	38.38	44.10	57.77	68.2	-10.43	PK
H	17355.087	43.58	10.12	38.38	44.10	47.98	54	-6.02	AV
High Channel (5825 MHz)-Above 1G									
V	6039.164	57.19	7.10	37.24	43.50	58.03	68.2	-10.17	PK
V	6039.164	43.45	7.10	37.24	43.50	44.29	54	-9.71	AV
V	11650.064	56.96	8.46	37.68	44.50	58.60	74	-15.40	PK
V	11650.064	43.89	8.46	37.68	44.50	45.53	54	-8.47	AV
V	17475.006	57.75	10.12	38.80	44.10	62.57	68.2	-5.63	PK
V	17475.006	43.75	10.12	38.80	42.70	49.97	54	-4.03	AV
H	6039.127	55.21	7.10	37.24	43.50	56.05	68.2	-12.15	PK
H	6039.127	43.38	7.10	37.24	43.50	44.22	54	-9.78	AV
H	11650.183	53.61	8.46	38.57	44.50	56.14	74	-17.86	PK
H	11650.183	44.27	8.46	38.57	44.50	46.80	54	-7.20	AV
H	17475.098	50.83	10.12	38.38	44.10	55.23	68.2	-12.97	PK
H	17475.098	44.58	10.12	38.38	44.10	48.98	54	-5.02	AV

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

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	4679.111	58.88	5.94	35.40	44.00	56.22	74	-17.78	PK
V	4679.111	43.48	5.94	35.40	44.00	40.82	54	-13.18	AV
V	11510.138	55.20	8.46	39.75	44.50	58.91	74	-15.09	PK
V	11510.138	43.82	8.46	39.75	44.50	47.53	54	-6.47	AV
V	17265.039	58.64	10.12	38.80	44.10	63.46	68.2	-4.74	PK
V	17265.039	43.16	10.12	38.80	42.70	49.38	54	-4.62	AV
H	4679.056	57.17	5.94	35.18	44.00	54.29	74	-19.71	PK
H	4679.056	43.16	5.94	35.18	44.00	40.28	54	-13.72	AV
H	11510.140	52.19	8.46	38.71	44.50	54.86	74	-19.14	PK
H	11510.140	40.33	8.46	38.71	44.50	43.00	54	-11.00	AV
H	17265.171	53.79	10.12	38.38	44.10	58.19	68.2	-10.01	PK
H	17265.171	43.75	10.12	38.38	44.10	48.15	54	-5.85	AV
High Channel (5795 MHz)-Above 1G									
V	6039.140	58.49	6.48	36.35	44.05	57.27	68.2	-10.93	PK
V	6039.140	43.70	6.48	36.35	44.05	42.48	54	-11.52	AV
V	11590.043	55.40	8.47	37.88	44.51	57.24	74	-16.76	PK
V	11590.043	43.84	8.47	37.88	44.51	45.68	54	-8.32	AV
V	17385.154	55.51	10.12	38.80	44.10	60.33	68.2	-7.87	PK
V	17385.154	41.17	10.12	38.80	42.70	47.39	54	-6.61	AV
H	6039.139	57.17	6.48	36.37	44.05	55.97	68.2	-12.23	PK
H	6039.139	43.63	6.48	36.37	44.05	42.43	54	-11.57	AV
H	11590.036	52.24	8.47	38.64	44.50	54.85	74	-19.15	PK
H	11590.036	41.05	8.47	38.64	44.50	43.66	54	-10.34	AV
H	17385.105	52.44	10.12	38.38	44.10	56.84	68.2	-11.36	PK
H	17385.105	42.84	10.12	38.38	44.10	47.24	54	-6.76	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 is MIMO Mode.

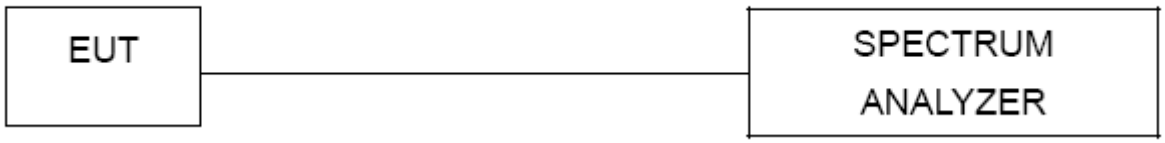
Test Mode:	TX(5.8G) - 802.11ac-HT80

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
(5775 MHz)-Above 1G									
V	4679.091	58.73	5.94	35.40	44.00	56.07	74	-17.93	PK
V	4679.091	43.12	5.94	35.40	44.00	40.46	54	-13.54	AV
V	11550.023	57.48	8.46	39.75	44.50	61.19	74	-12.81	PK
V	11550.023	42.50	8.46	39.75	44.50	46.21	54	-7.79	AV
V	17325.018	59.14	10.12	38.80	44.10	63.96	68.2	-4.24	PK
V	17325.018	41.94	10.12	38.80	42.70	48.16	54	-5.84	AV
H	4679.178	59.41	5.94	35.18	44.00	56.53	74	-17.47	PK
H	4679.178	43.62	5.94	35.18	44.00	40.74	54	-13.26	AV
H	11550.144	53.25	8.46	38.71	44.50	55.92	74	-18.08	PK
H	11550.144	40.90	8.46	38.71	44.50	43.57	54	-10.43	AV
H	17325.139	54.18	10.12	38.38	44.10	58.58	68.2	-9.62	PK
H	17325.139	41.12	10.12	38.38	44.10	45.52	54	-8.48	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 is MIMO Mode.

8. Power Spectral Density Test

8.1 Block Diagram Of Test Setup



8.2 Limit

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

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

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

(iv) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional
gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
For the band 5.725-5.85 GHz

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

8.3 Test procedure

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:
a) Set RBW ≥ 1/T, where T is defined in section II.B.I.a).
b) Set VBW ≥ 3 RBW.
c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10log(1MHz/RBW) to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

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

8.4 EUT operating Conditions

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

8.5 Test Result

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(5180-5240MHz); (5745-5825MHz)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)		Total (dBm/MHz)	Limit (dBm/MHz)	Verdict
			Ant A	Ant B			
NVNT	a	5180	-5.86	-8.60	/	10	Pass
NVNT	a	5200	-5.63	-10.33	/	10	Pass
NVNT	a	5240	-6.05	-7.19	/	10	Pass
NVNT	n20	5180	-7.25	-9.27	-5.13	10	Pass
NVNT	n20	5200	-7.20	-9.17	-5.06	10	Pass
NVNT	n20	5240	-7.06	-10.94	-5.57	10	Pass
NVNT	n40	5190	-11.71	-12.74	-9.18	10	Pass
NVNT	n40	5230	-11.74	-15.02	-10.07	10	Pass
NVNT	ac20	5180	-6.83	-11.10	-5.45	10	Pass
NVNT	ac20	5200	-7.23	-8.05	-4.61	10	Pass
NVNT	ac20	5240	-7.22	-9.80	-5.31	10	Pass
NVNT	ac40	5190	-11.65	-14.97	-9.99	10	Pass
NVNT	ac40	5230	-11.73	-14.87	-10.01	10	Pass
NVNT	ac80	5210	-14.04	-18.86	-12.80	10	Pass

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/500KHz)		Total (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
			Ant A	Ant B			
NVNT	a	5745	-11.58	-10.57	/	30	Pass
NVNT	a	5785	-11.42	-12.64	/	30	Pass
NVNT	a	5825	-11.95	-11.90	/	30	Pass
NVNT	n20	5745	-12.83	-12.26	-9.53	30	Pass
NVNT	n20	5785	-12.82	-12.60	-9.70	30	Pass
NVNT	n20	5825	-12.90	-13.38	-10.12	30	Pass
NVNT	n40	5755	-18.72	-16.94	-14.73	30	Pass
NVNT	n40	5795	-17.79	-16.54	-14.11	30	Pass
NVNT	ac20	5745	-14.70	-13.78	-11.21	30	Pass
NVNT	ac20	5785	-11.67	-13.94	-9.65	30	Pass
NVNT	ac20	5825	-13.20	-13.45	-10.31	30	Pass
NVNT	ac40	5755	-17.53	-18.50	-14.98	30	Pass
NVNT	ac40	5795	-16.31	-18.11	-14.11	30	Pass
NVNT	ac80	5775	-22.59	-22.15	-19.35	30	Pass

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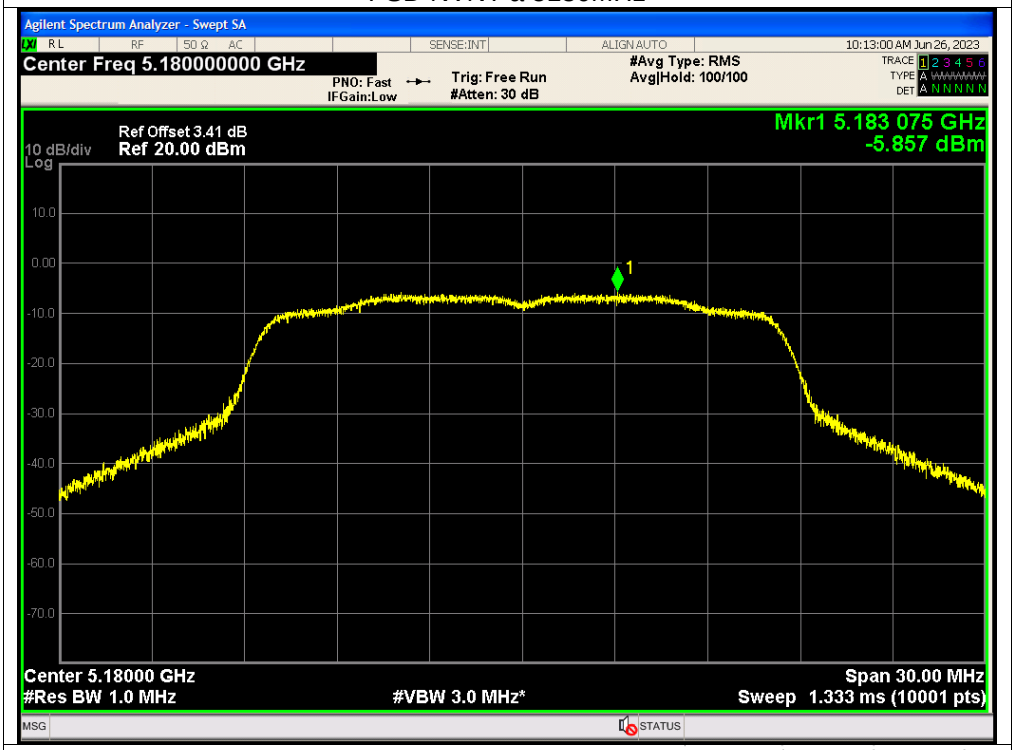
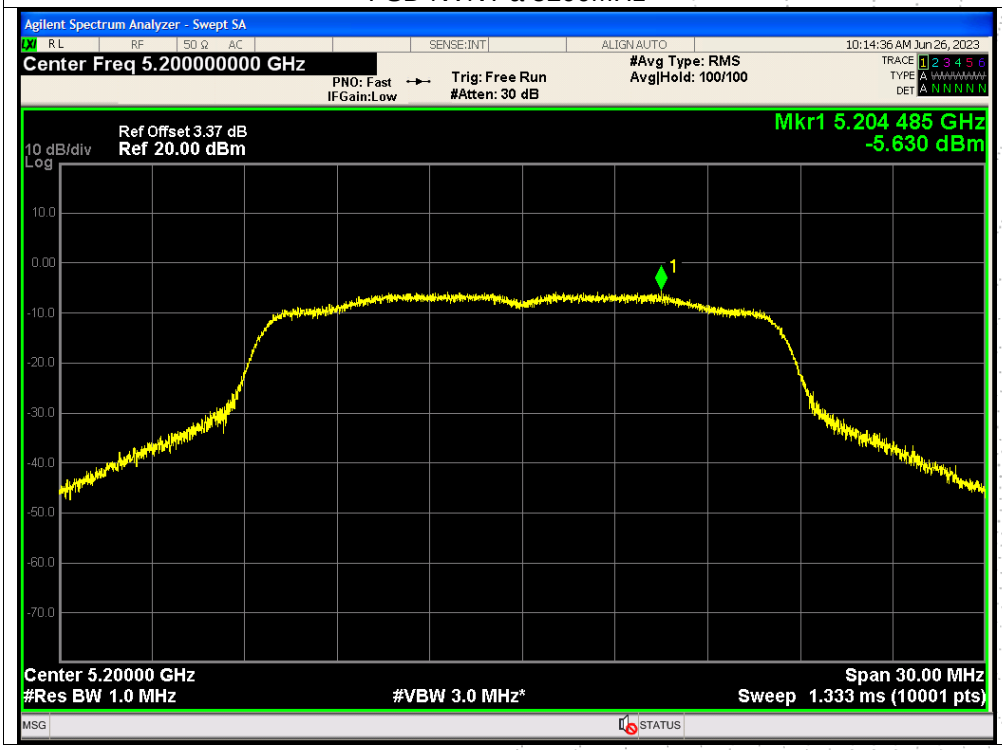
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

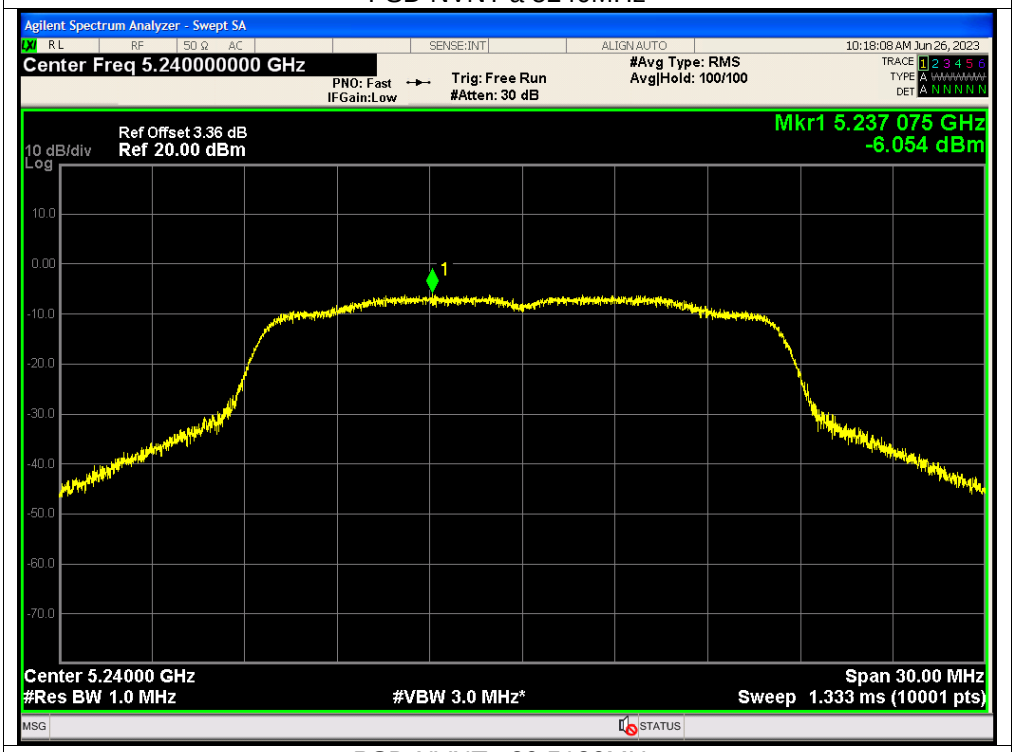
Test Graphs
PSD NVNT a 5180MHz



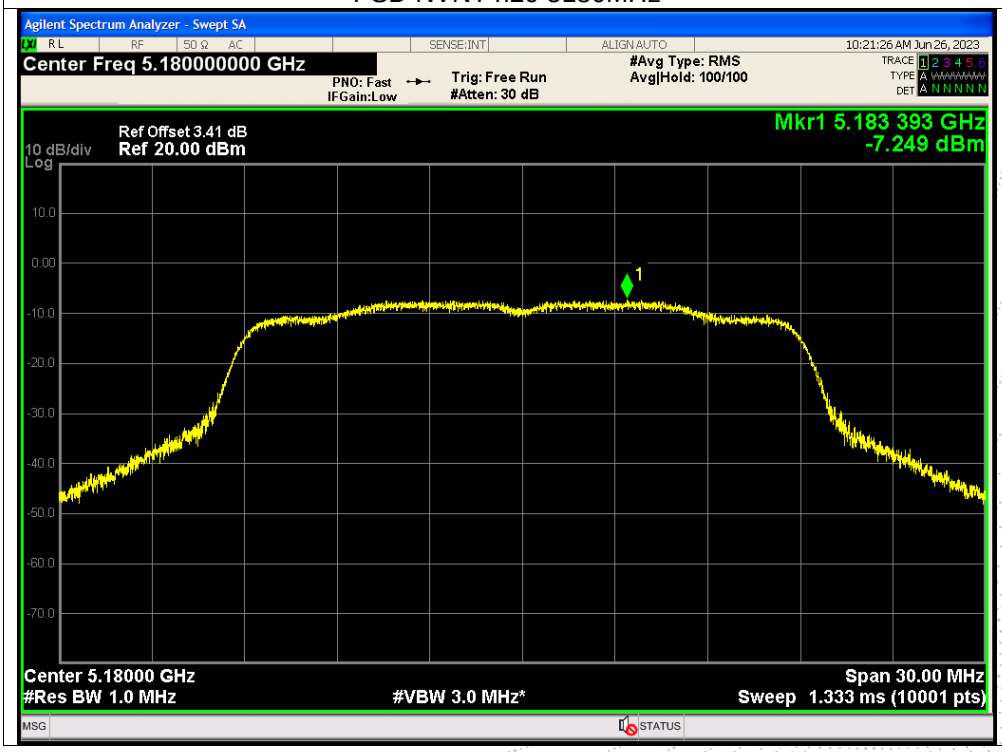
PSD NVNT a 5200MHz



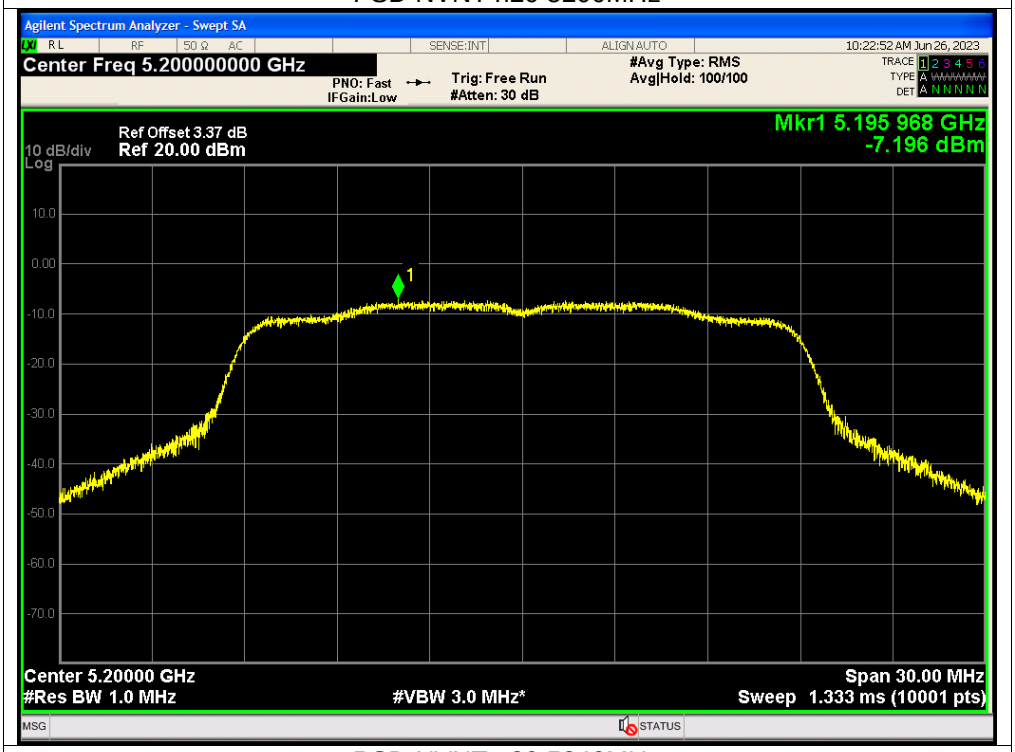
PSD NVNT a 5240MHz



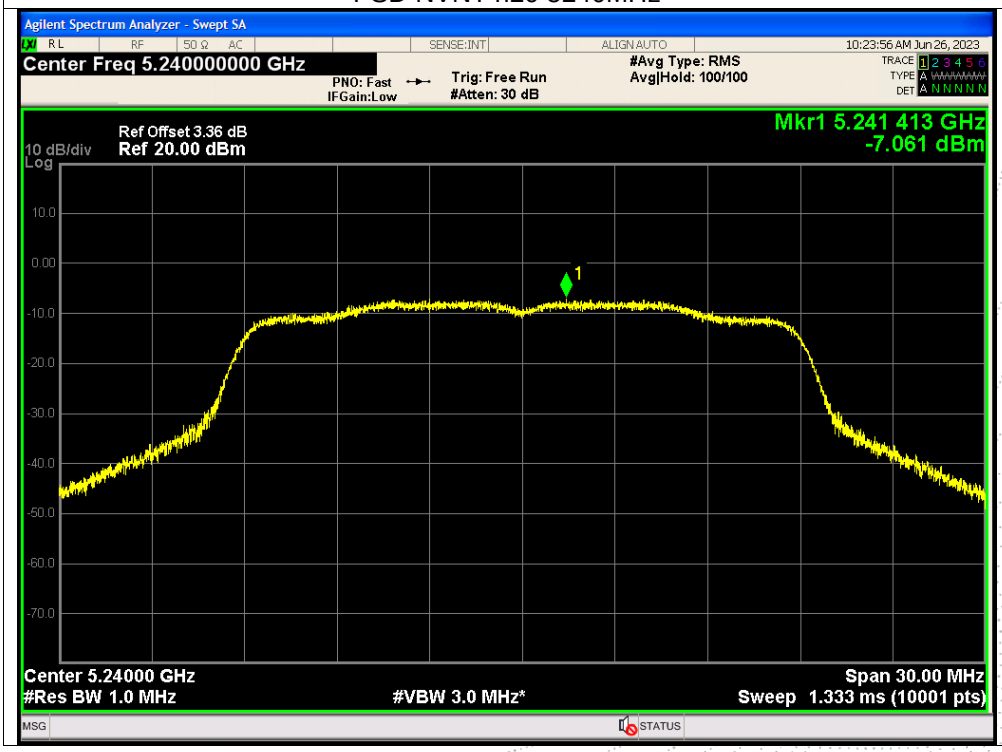
PSD NVNT n20 5180MHz



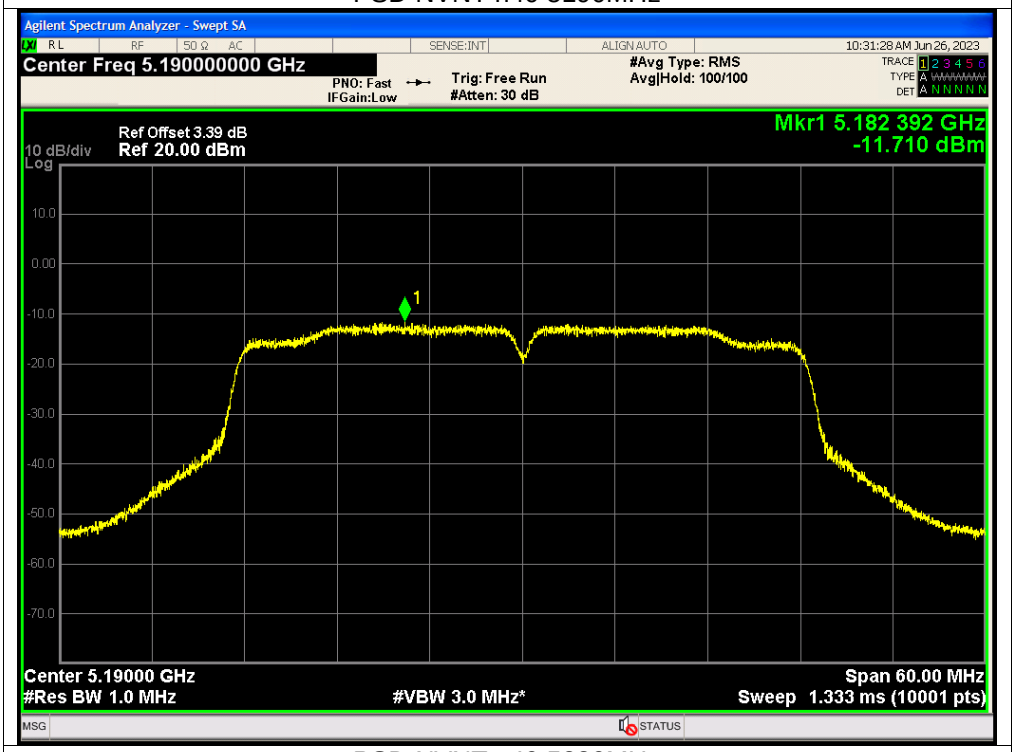
PSD NVNT n20 5200MHz



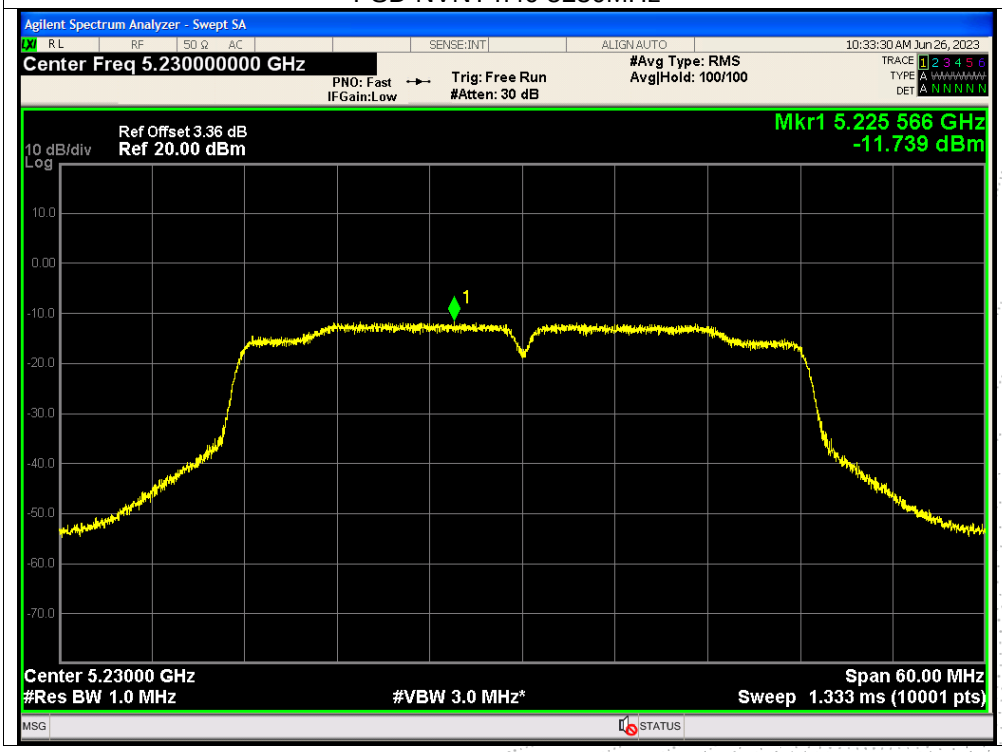
PSD NVNT n20 5240MHz



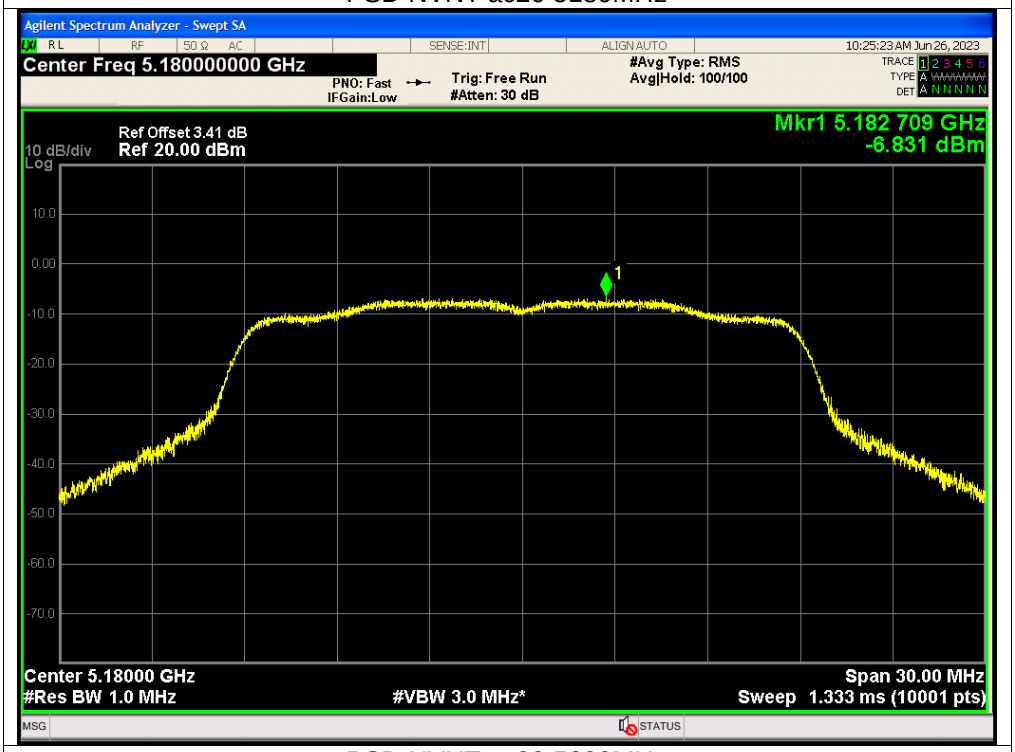
PSD NVNT n40 5190MHz



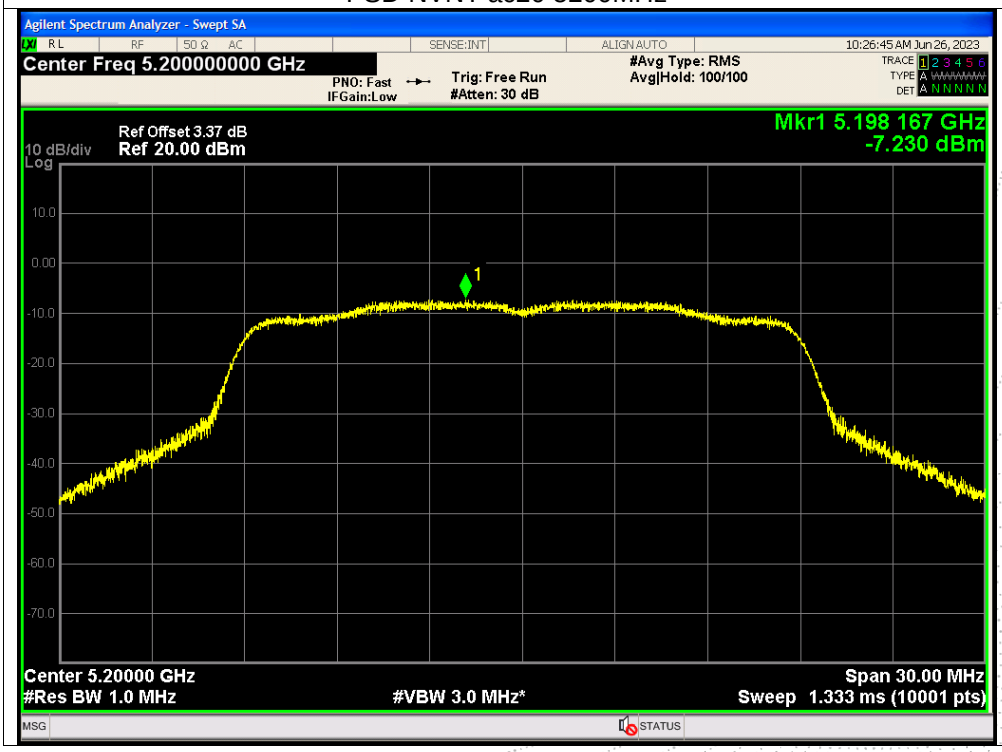
PSD NVNT n40 5230MHz



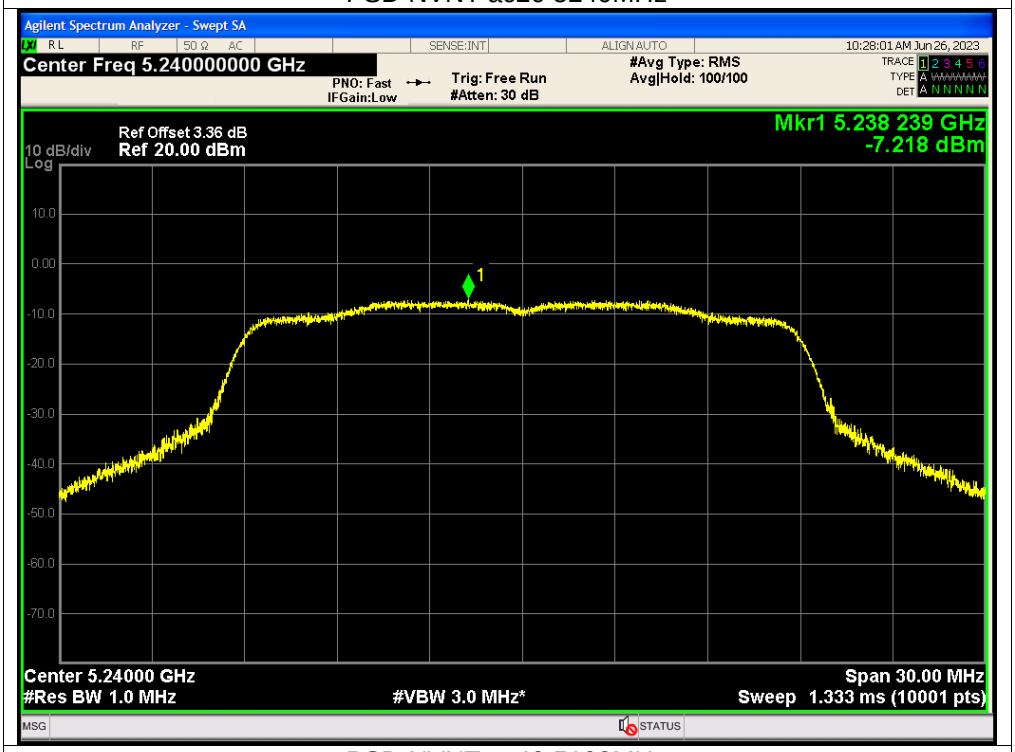
PSD NVNT ac20 5180MHz



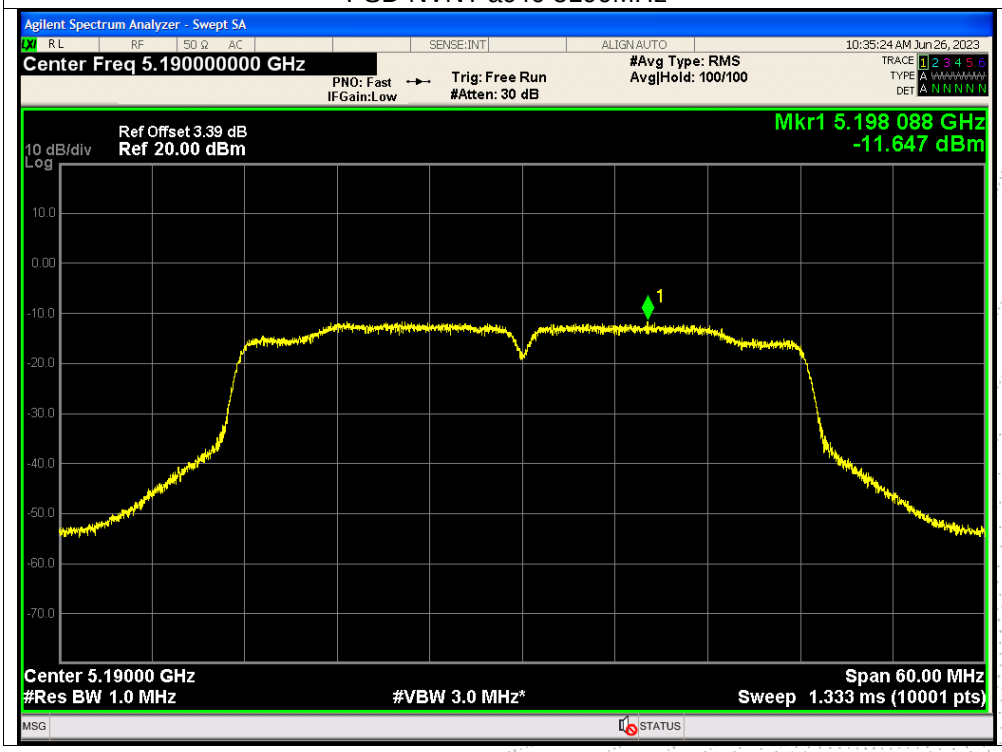
PSD NVNT ac20 5200MHz



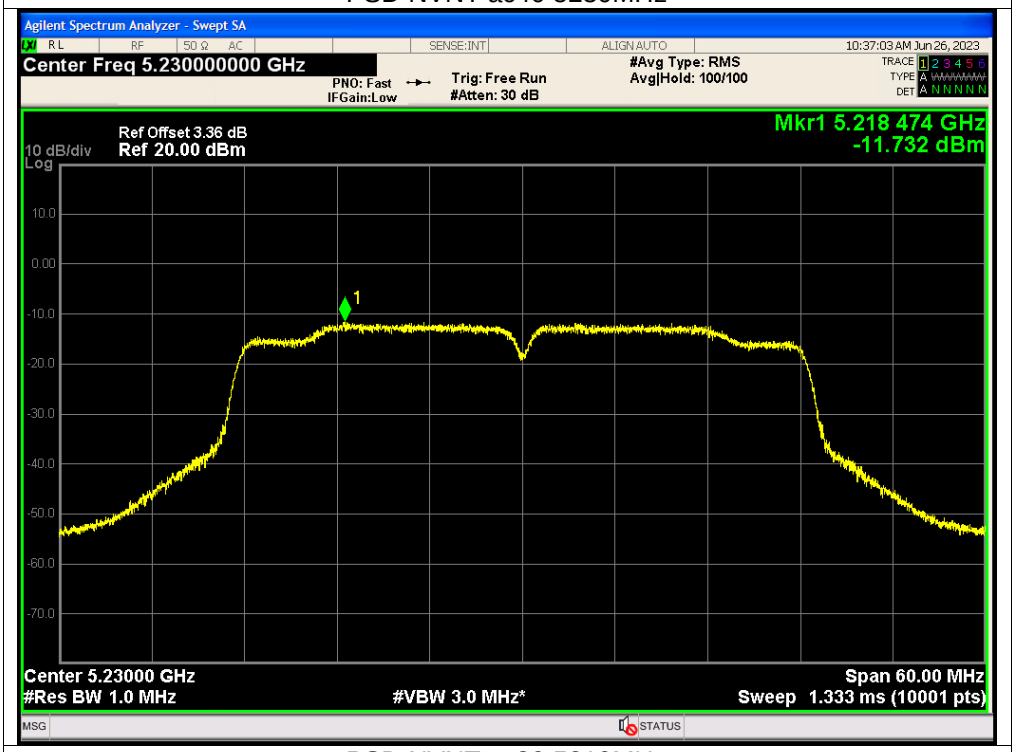
PSD NVNT ac20 5240MHz



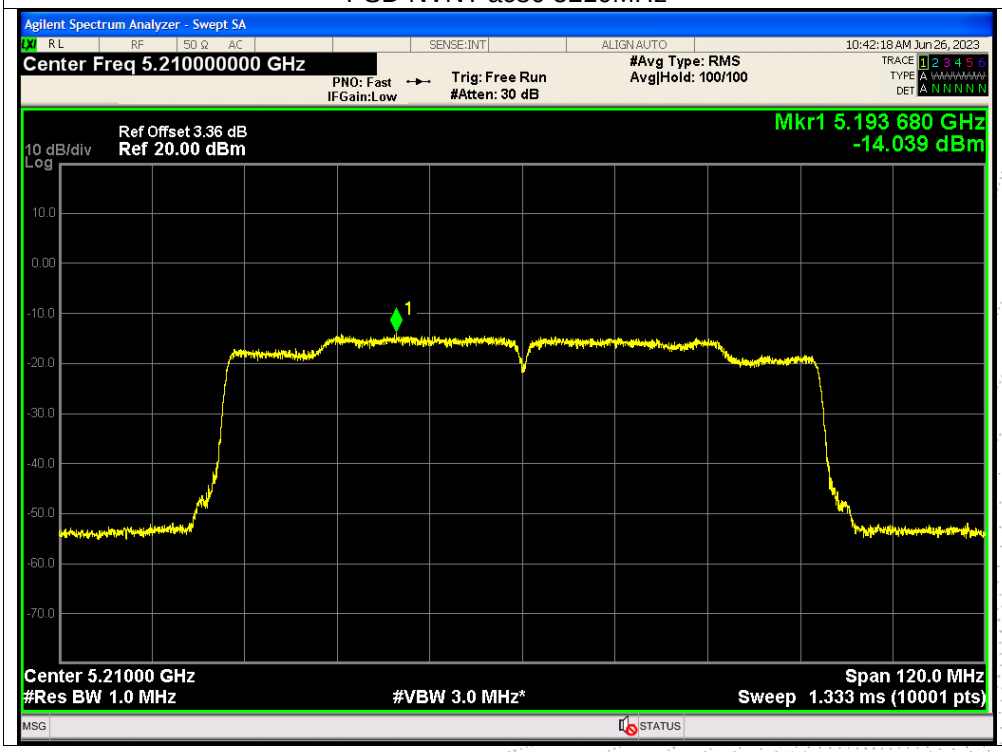
PSD NVNT ac40 5190MHz



PSD NVNT ac40 5230MHz



PSD NVNT ac80 5210MHz



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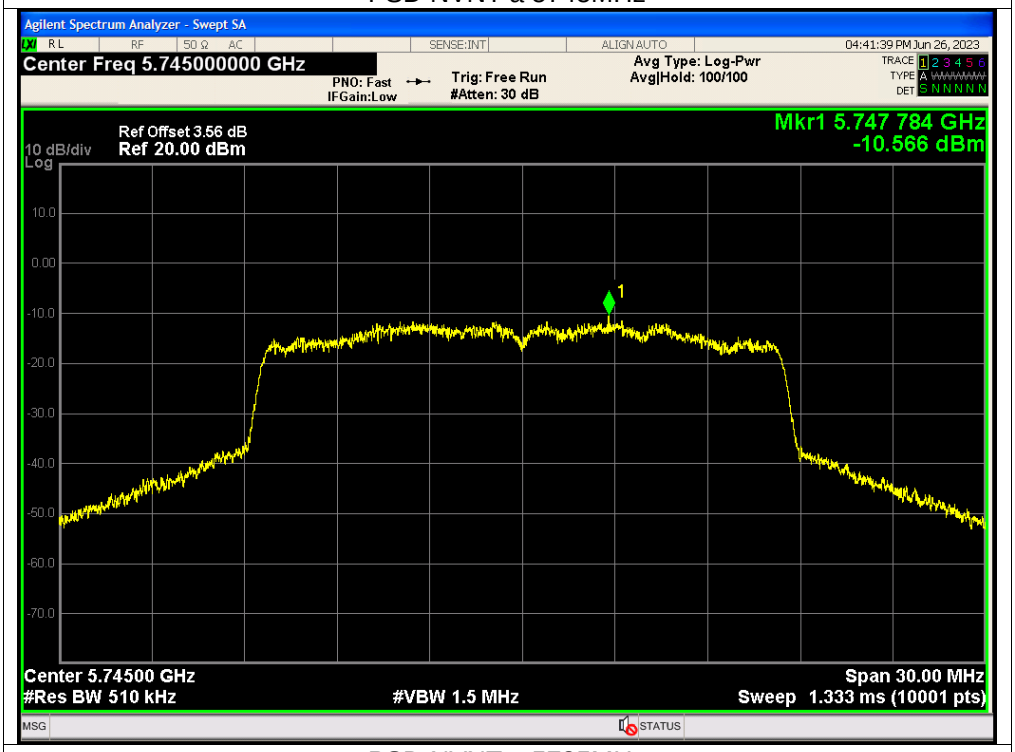
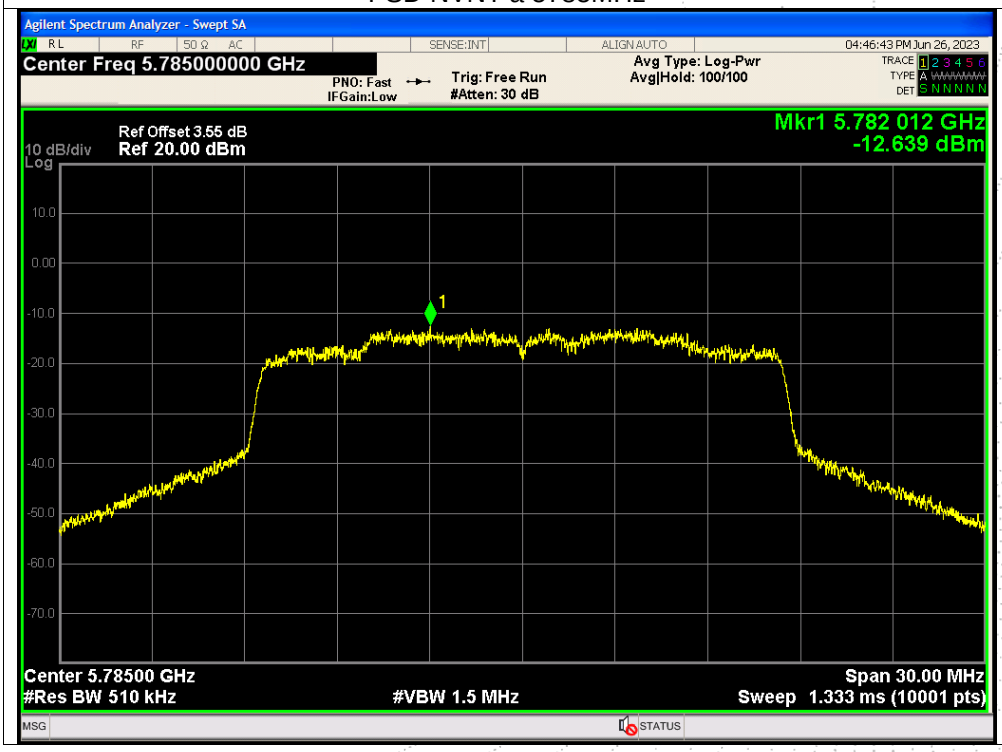
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

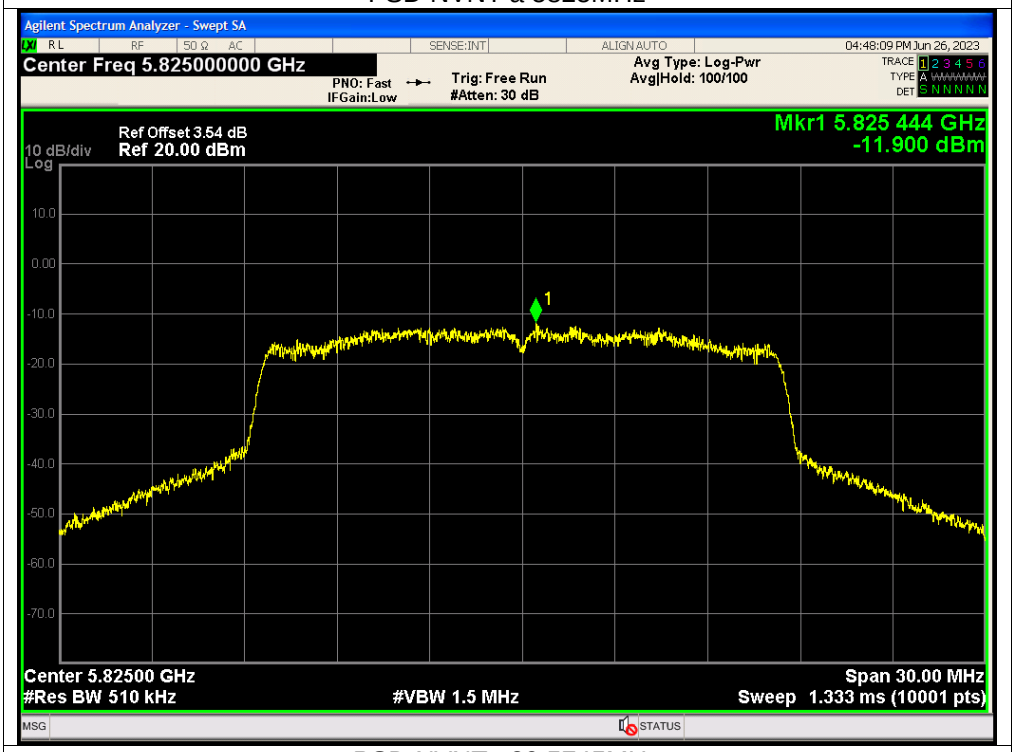
Test Graphs
PSD NVNT a 5745MHz



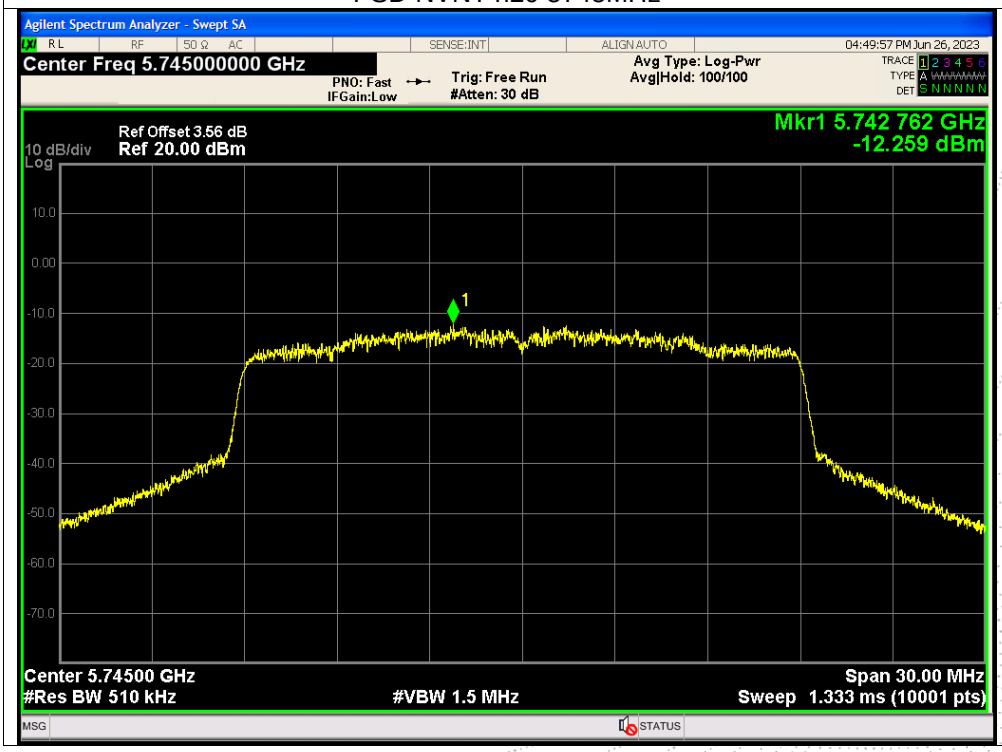
PSD NVNT a 5785MHz



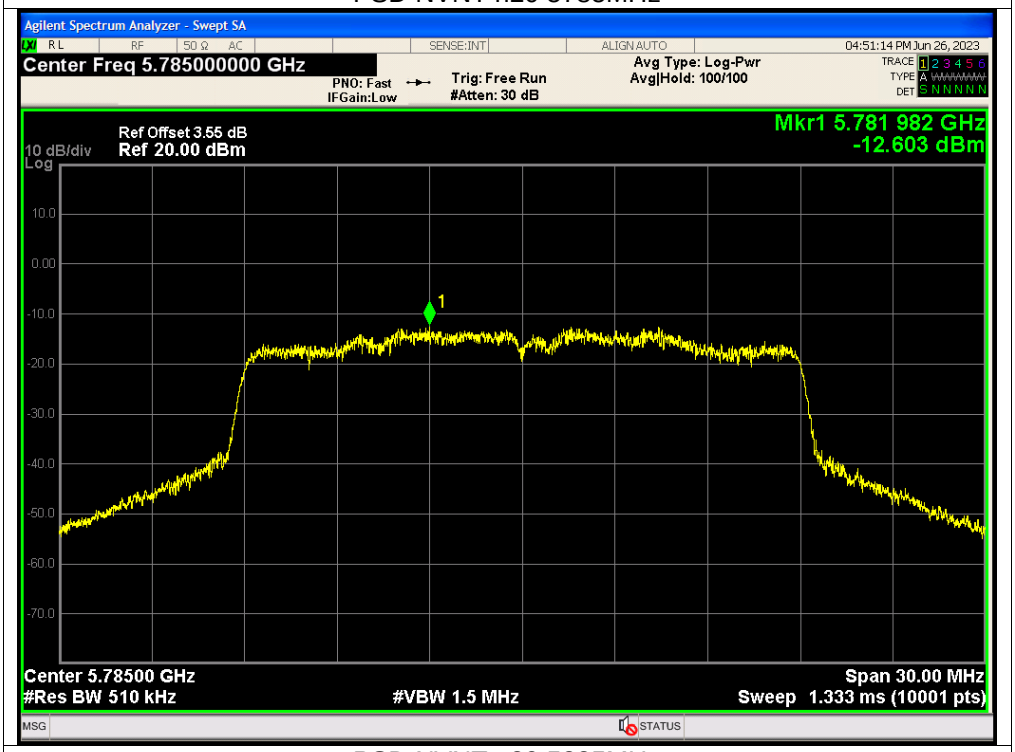
PSD NVNT a 5825MHz



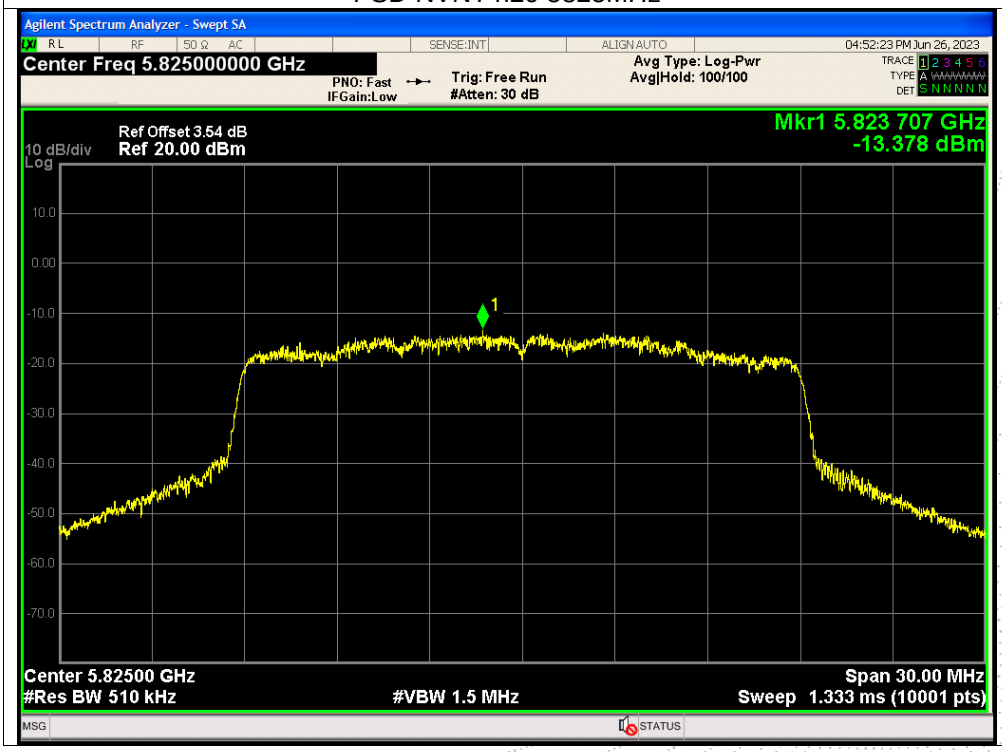
PSD NVNT n20 5745MHz



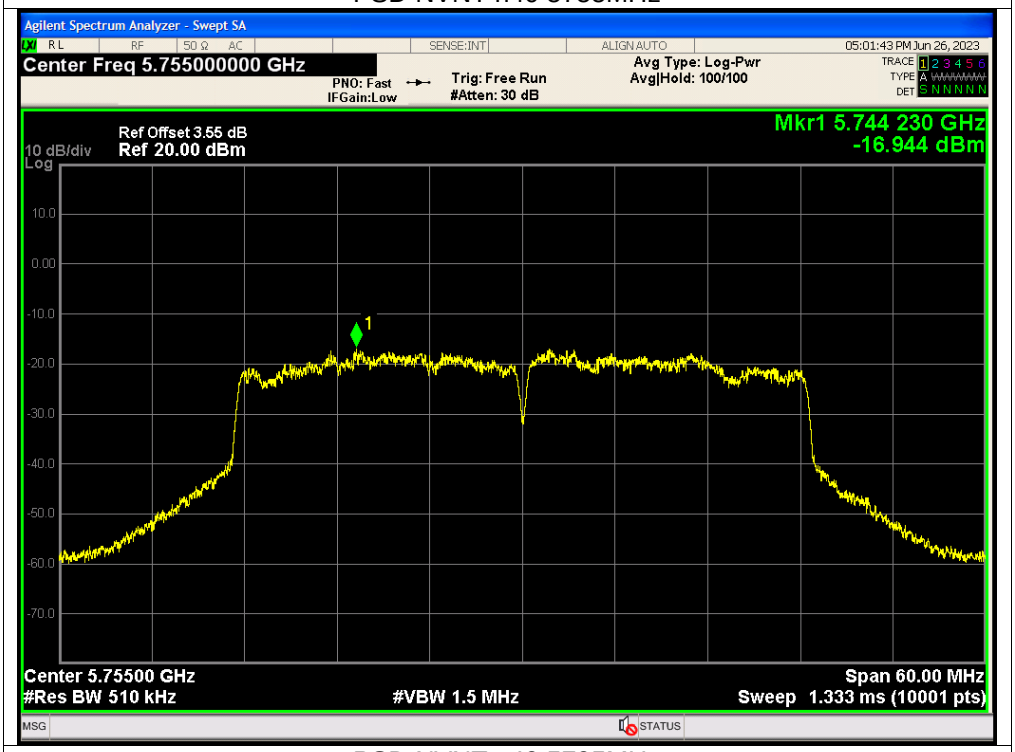
PSD NVNT n20 5785MHz



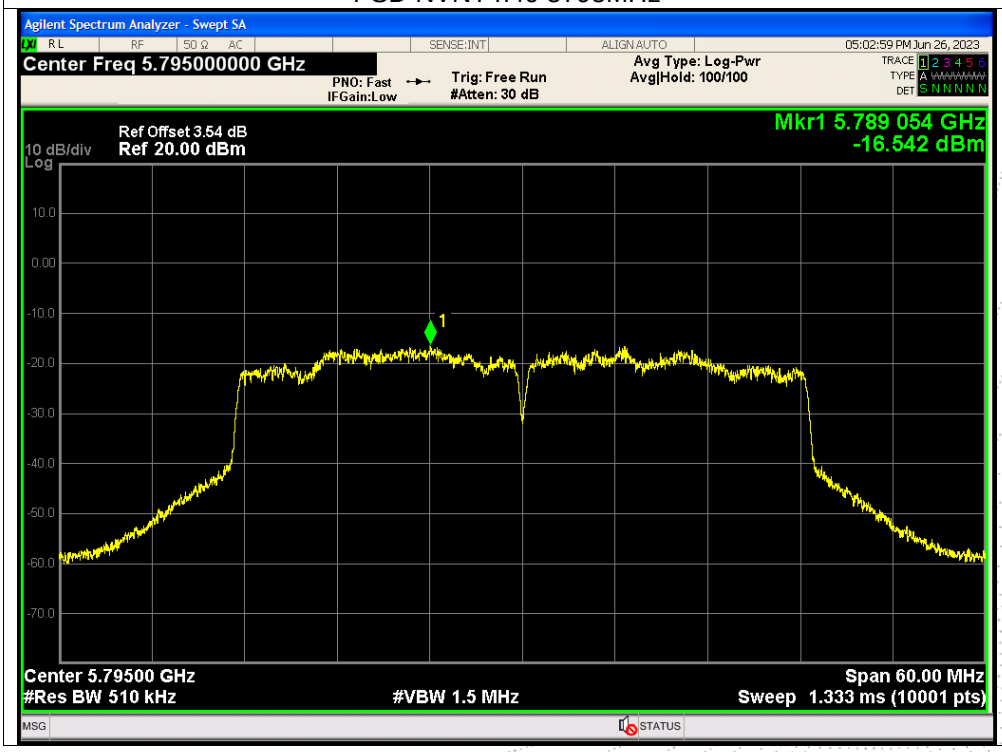
PSD NVNT n20 5825MHz



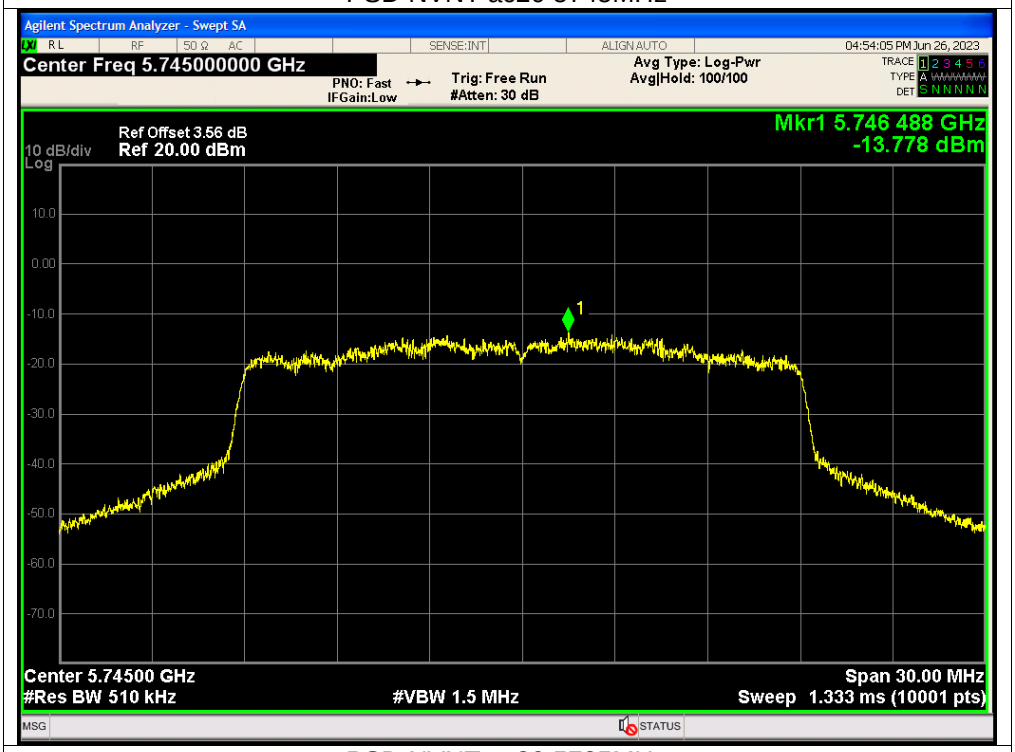
PSD NVNT n40 5755MHz



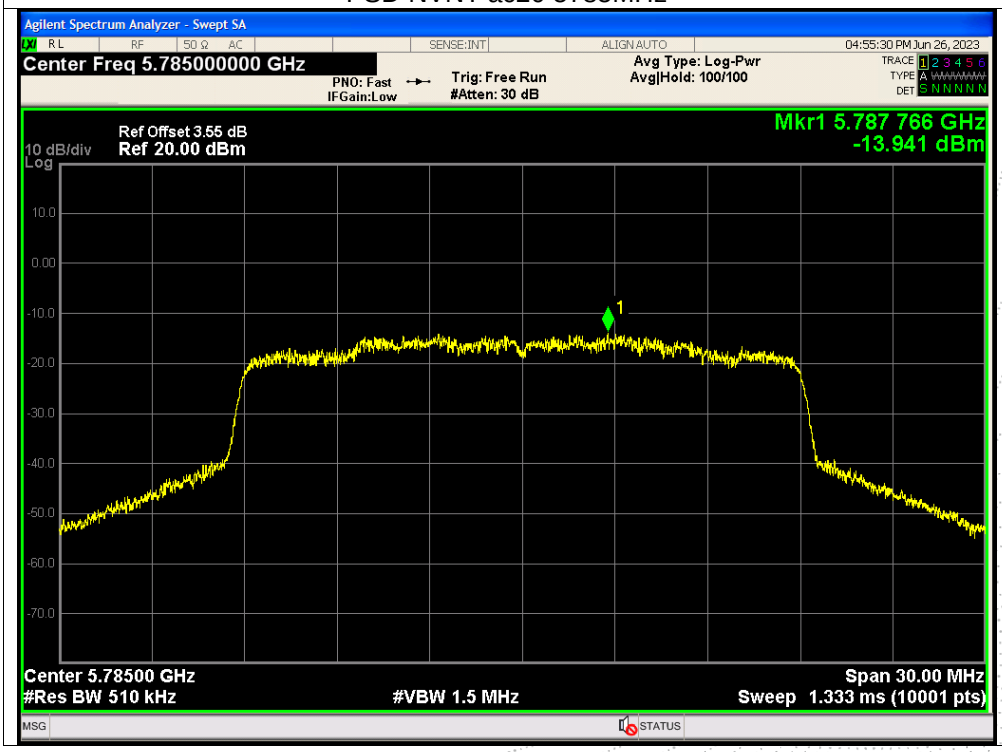
PSD NVNT n40 5795MHz



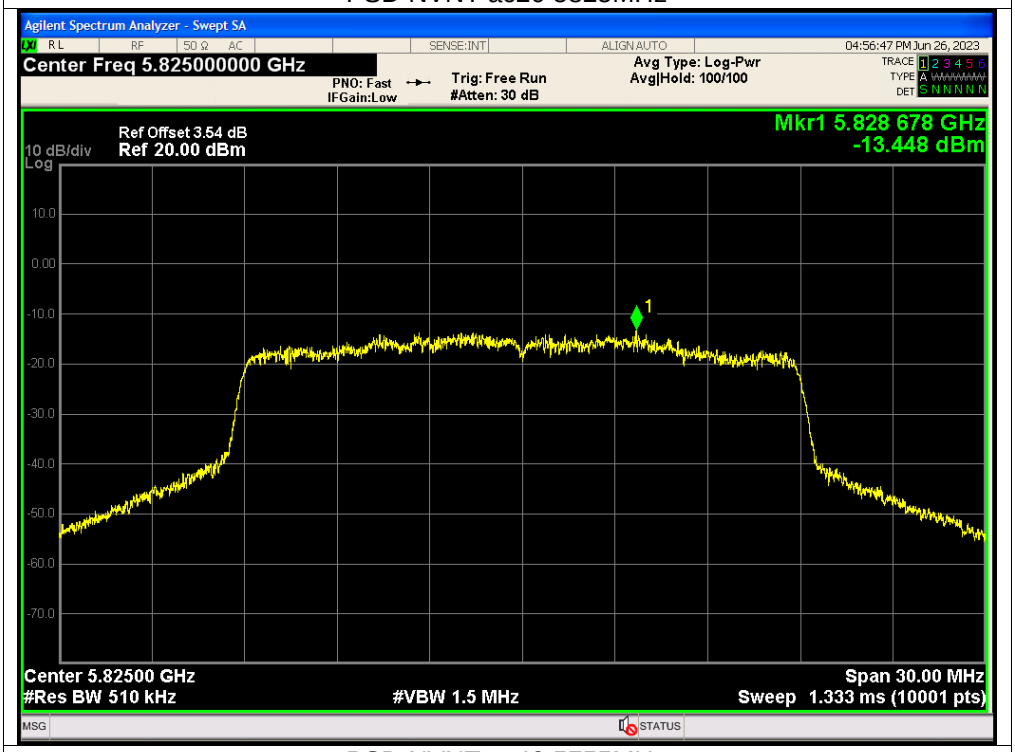
PSD NVNT ac20 5745MHz



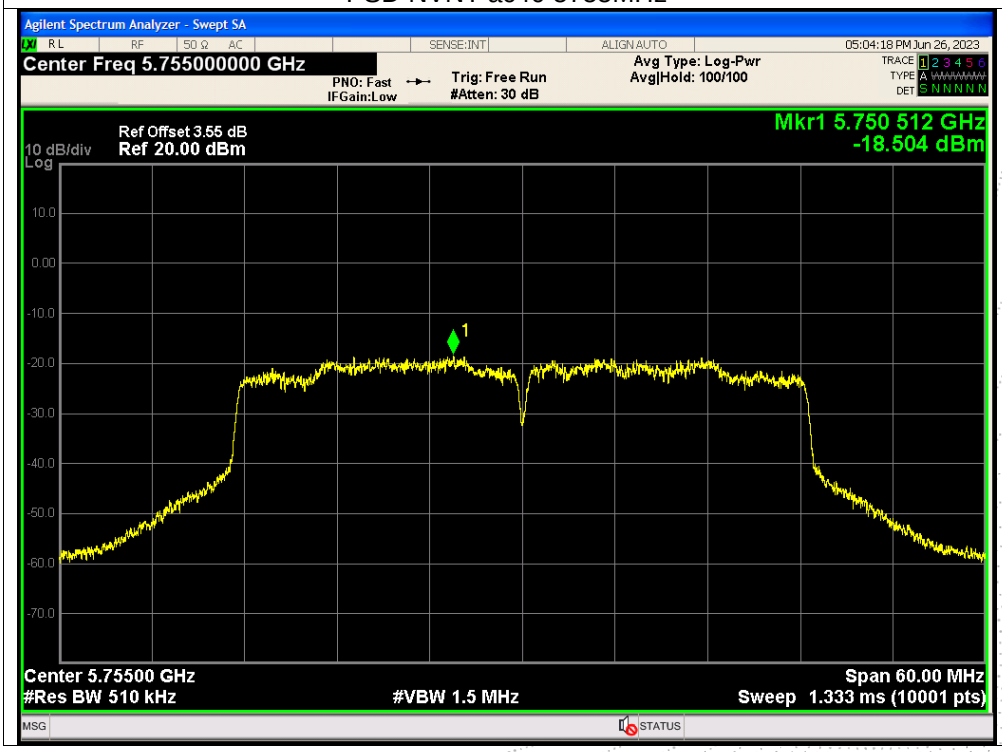
PSD NVNT ac20 5785MHz



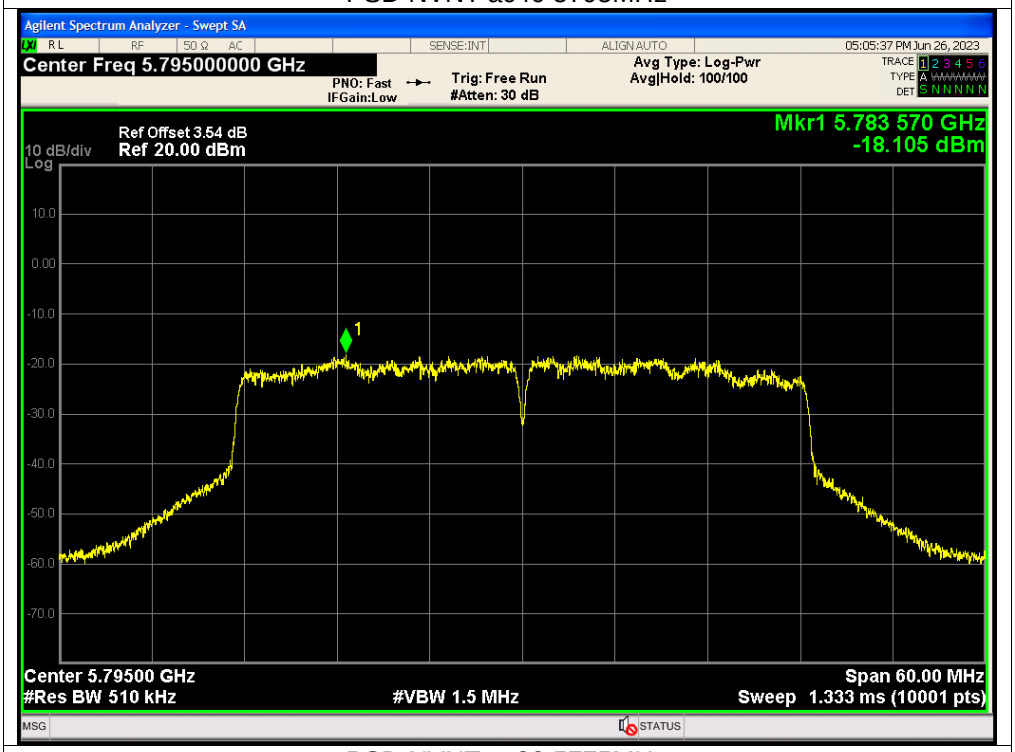
PSD NVNT ac20 5825MHz



PSD NVNT ac40 5755MHz



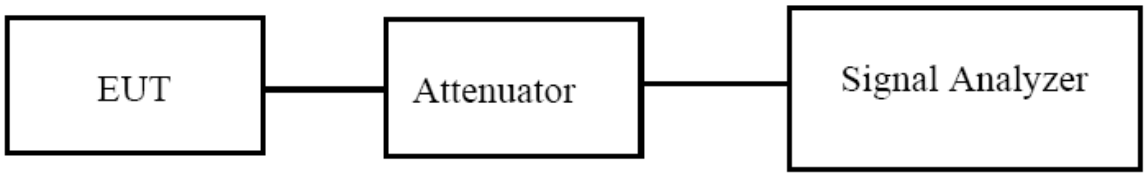
PSD NVNT ac40 5795MHz



PSD NVNT ac80 5775MHz

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

9.1 Block Diagram Of Test Setup



9.2 Limit

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

9.3 Test procedure

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

b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
The following procedure shall be used for measuring (99 %) power bandwidth:
1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 · RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

9.4 EUT operating Conditions

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

9.5 Test Result

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(5180-5240MHz)		

Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)		Limit -26 dB Bandwidth (MHz)	Verdict
			Ant A	Ant B		
NVNT	a	5180	23.254	23.135	/	Pass
NVNT	a	5200	22.651	22.938	/	Pass
NVNT	a	5240	23.714	24.342	/	Pass
NVNT	n20	5180	23.774	22.984	/	Pass
NVNT	n20	5200	23.802	23.388	/	Pass
NVNT	n20	5240	24.106	24.180	/	Pass
NVNT	n40	5190	44.241	43.832	/	Pass
NVNT	n40	5230	42.420	43.538	/	Pass
NVNT	ac20	5180	23.676	23.196	/	Pass
NVNT	ac20	5200	23.320	23.281	/	Pass
NVNT	ac20	5240	23.650	23.083	/	Pass
NVNT	ac40	5190	43.553	43.718	/	Pass
NVNT	ac40	5230	43.324	42.862	/	Pass
NVNT	ac80	5210	81.214	81.383	/	Pass

Condition	Mode	Frequency (MHz)	99% OBW (MHz)	
			Ant A	Ant B
NVNT	a	5180	16.406	16.464
NVNT	a	5200	16.480	16.483
NVNT	a	5240	16.443	16.462
NVNT	n20	5180	17.617	17.633
NVNT	n20	5200	17.618	17.636
NVNT	n20	5240	17.645	17.662
NVNT	n40	5190	36.019	36.059
NVNT	n40	5230	36.075	36.037
NVNT	ac20	5180	17.615	17.649
NVNT	ac20	5200	17.636	17.622
NVNT	ac20	5240	17.630	17.651
NVNT	ac40	5190	35.990	36.018
NVNT	ac40	5230	36.021	36.034

NVNT	ac80	5210	75.194	75.251

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(5745-5825MHz)		

Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)		Limit -6 dB Bandwidth (MHz)	Verdict
			Ant A	Ant B		
NVNT	a	5745	15.074	13.485	0.5	Pass
NVNT	a	5785	15.077	15.075	0.5	Pass
NVNT	a	5825	13.774	12.359	0.5	Pass
NVNT	n20	5745	15.078	15.259	0.5	Pass
NVNT	n20	5785	14.554	11.977	0.5	Pass
NVNT	n20	5825	13.797	15.028	0.5	Pass
NVNT	n40	5755	35.005	32.598	0.5	Pass
NVNT	n40	5795	35.042	35.070	0.5	Pass
NVNT	ac20	5745	15.078	13.832	0.5	Pass
NVNT	ac20	5785	14.987	14.374	0.5	Pass
NVNT	ac20	5825	15.940	14.416	0.5	Pass
NVNT	ac40	5755	35.025	33.798	0.5	Pass
NVNT	ac40	5795	35.104	35.072	0.5	Pass
NVNT	ac80	5775	75.126	75.094	0.5	Pass

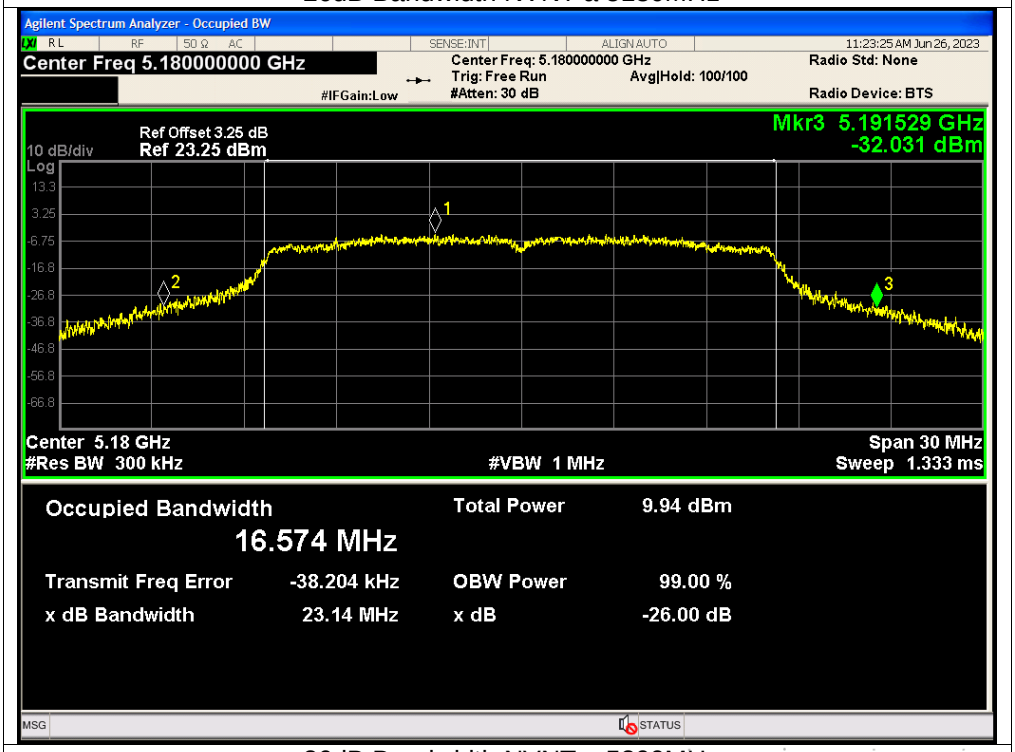
Condition	Mode	Frequency (MHz)	99% OBW (MHz)	
			Ant A	Ant B
NVNT	a	5745	16.460	16.424
NVNT	a	5785	16.451	16.443
NVNT	a	5825	16.410	16.427
NVNT	n20	5745	17.647	17.613
NVNT	n20	5785	17.634	17.632
NVNT	n20	5825	17.614	17.623
NVNT	n40	5755	36.087	36.086
NVNT	n40	5795	36.030	36.038
NVNT	ac20	5745	17.615	17.594
NVNT	ac20	5785	17.629	17.590
NVNT	ac20	5825	17.599	17.610
NVNT	ac40	5755	36.059	36.060
NVNT	ac40	5795	35.968	35.983
NVNT	ac80	5775	75.149	75.175

U-NII-1

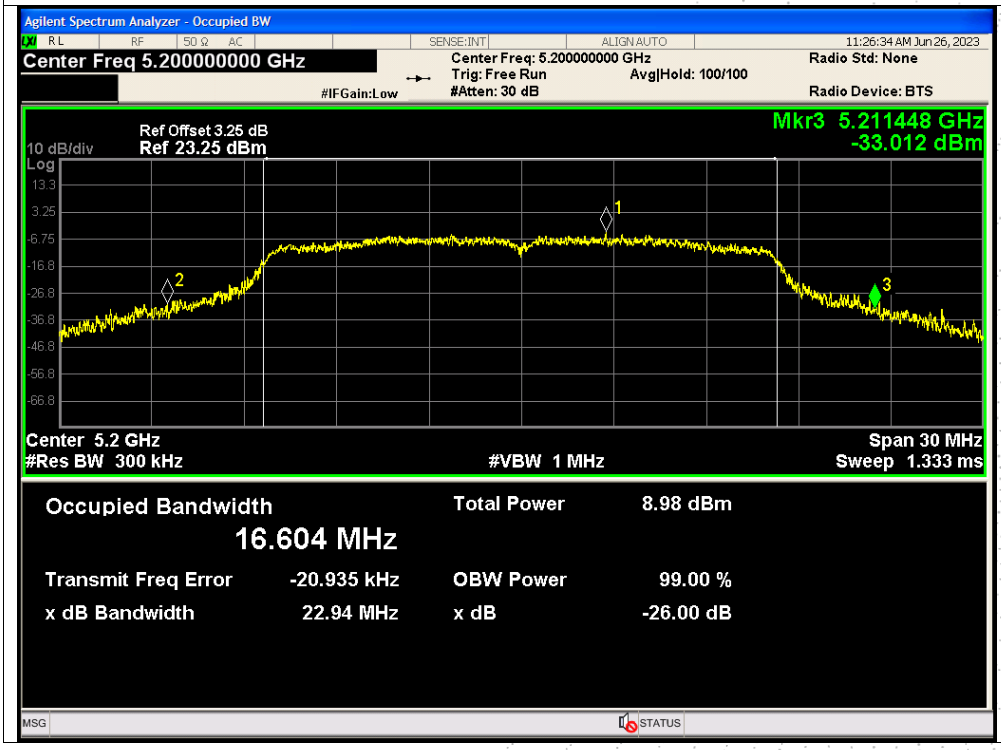
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

Test Graphs

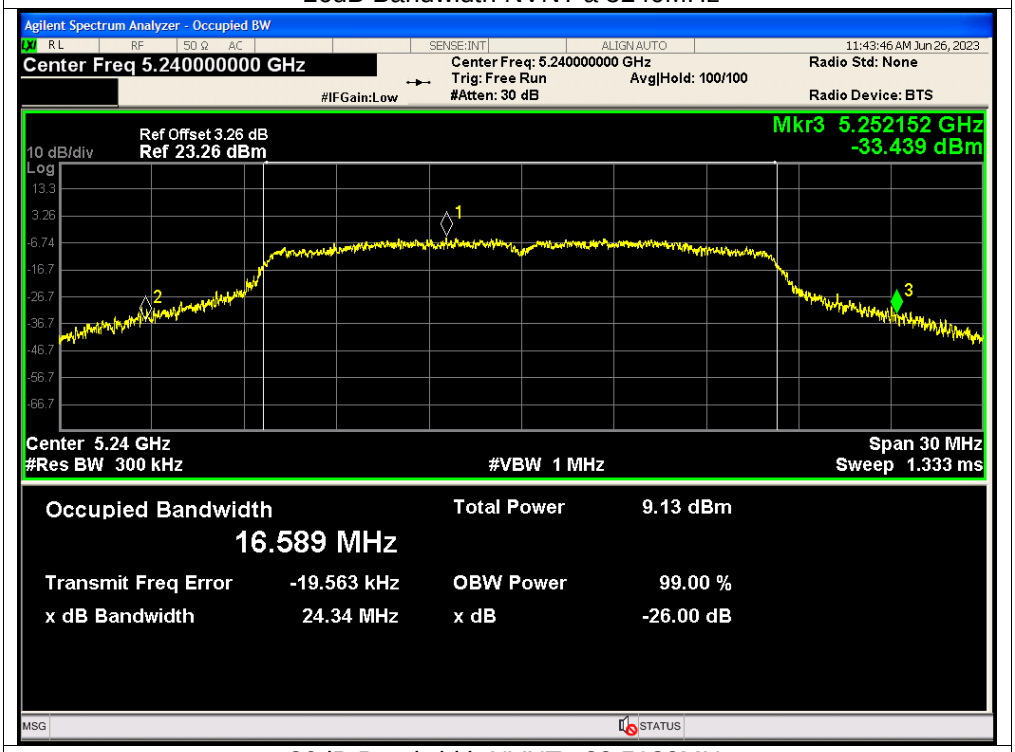
-26dB Bandwidth NVNT a 5180MHz



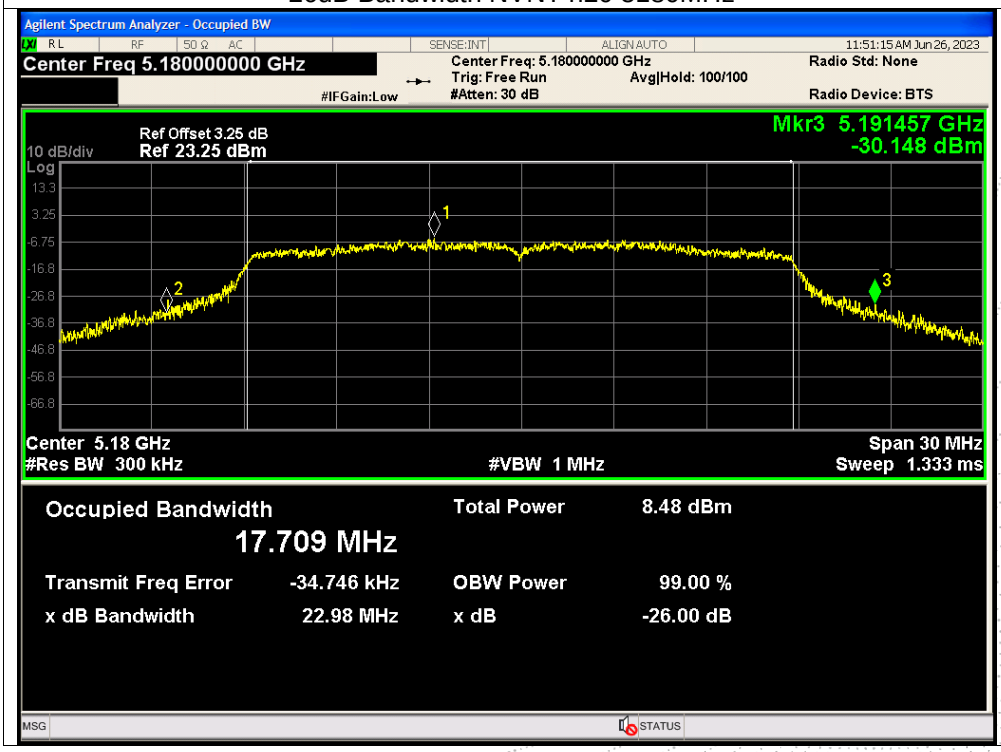
-26dB Bandwidth NVNT a 5200MHz



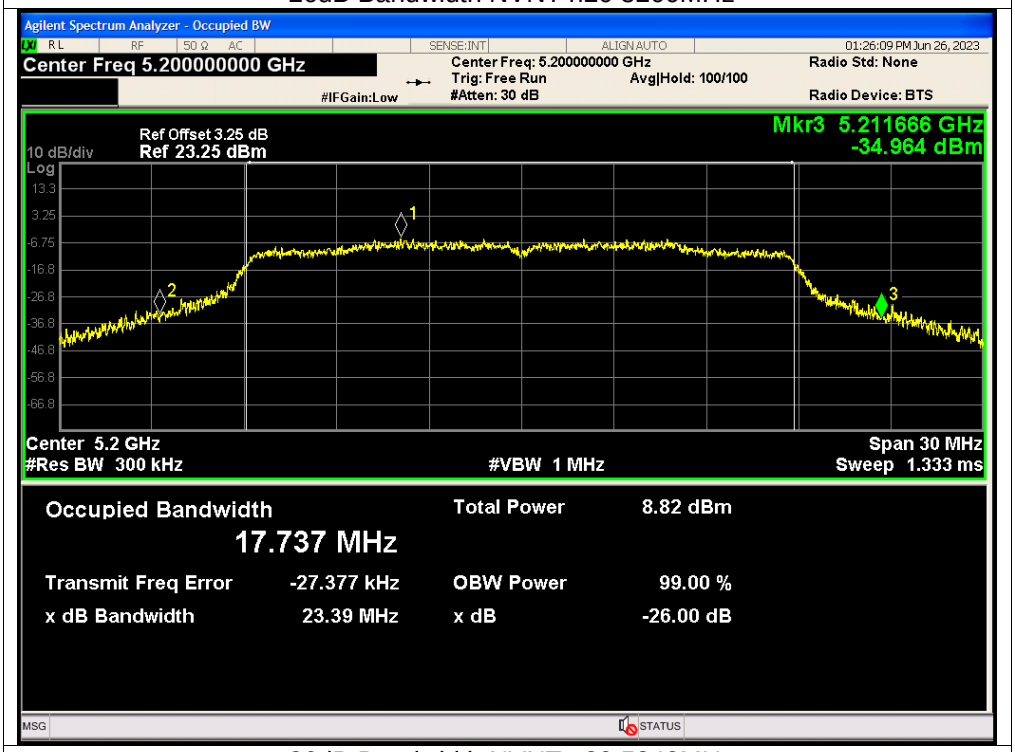
-26dB Bandwidth NVNT a 5240MHz



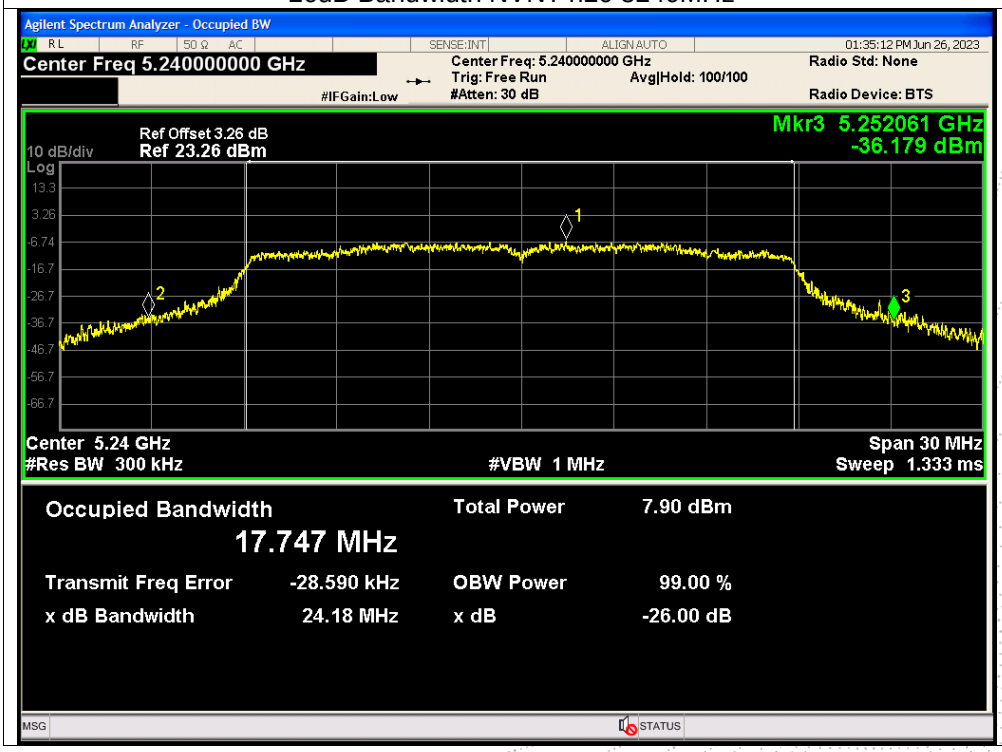
-26dB Bandwidth NVNT n20 5180MHz



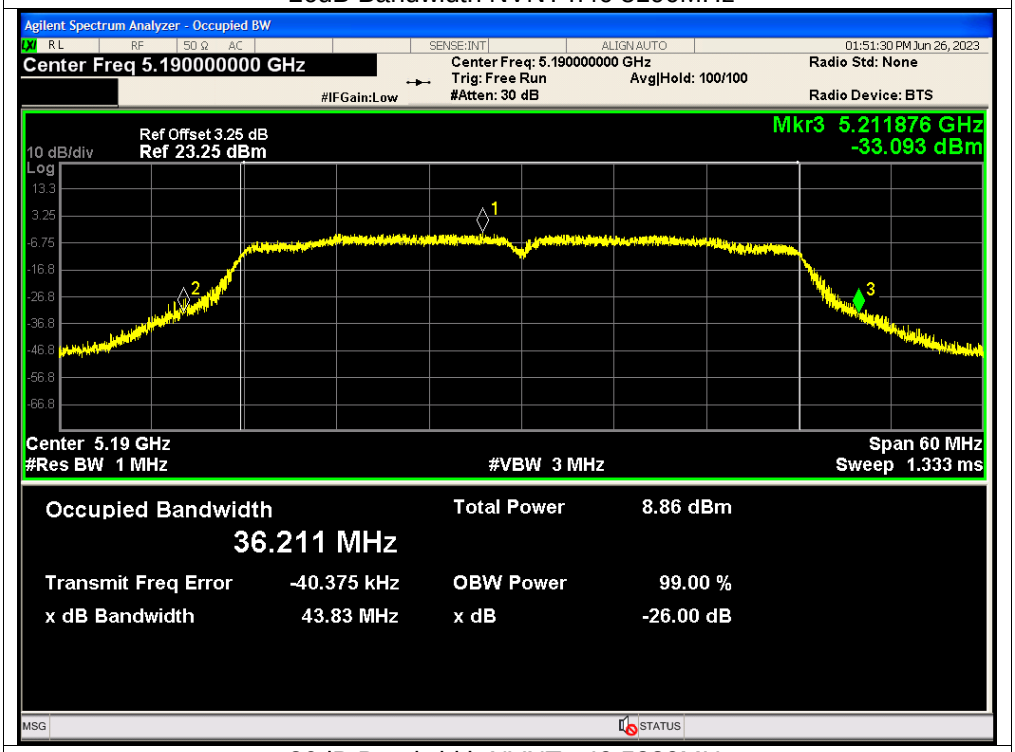
-26dB Bandwidth NVNT n20 5200MHz



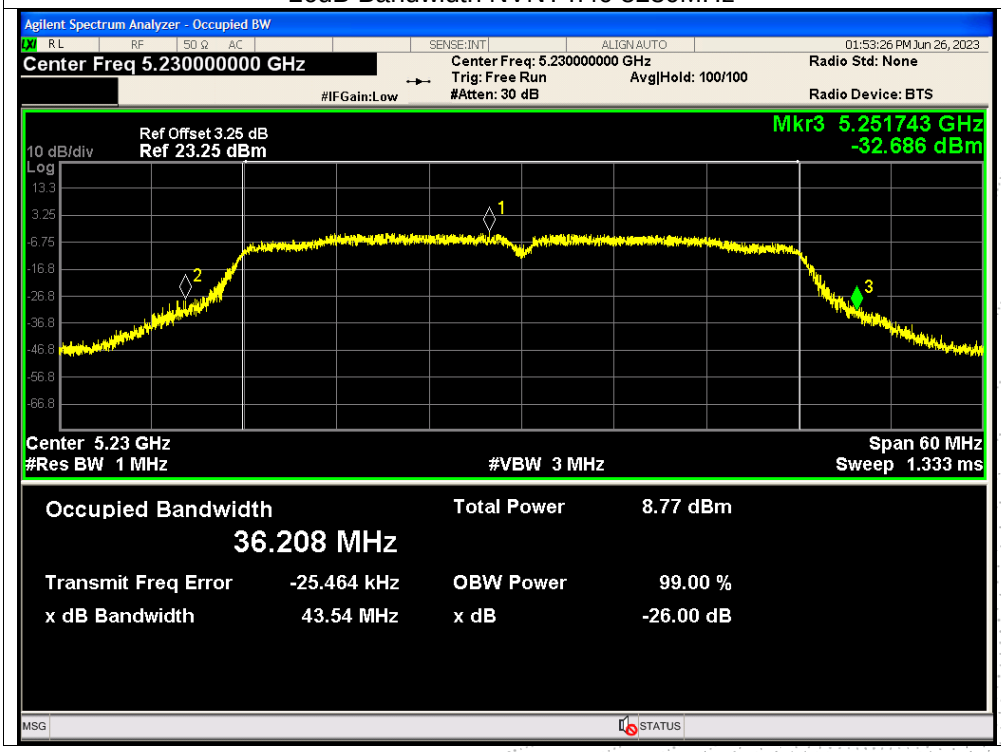
-26dB Bandwidth NVNT n20 5240MHz



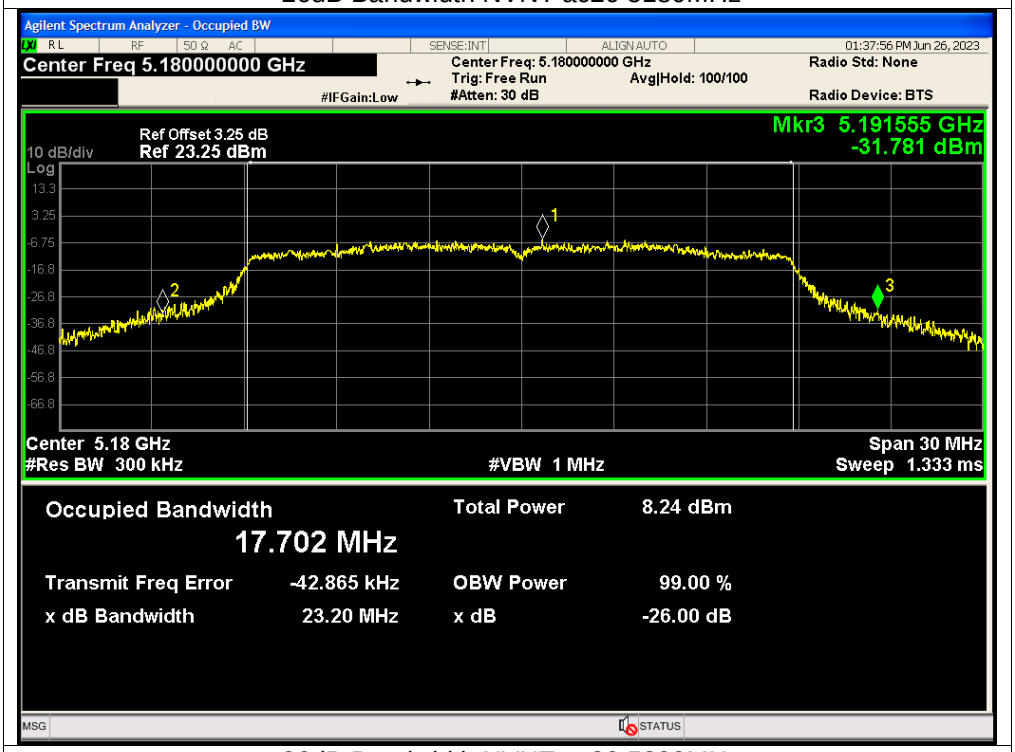
-26dB Bandwidth NVNT n40 5190MHz



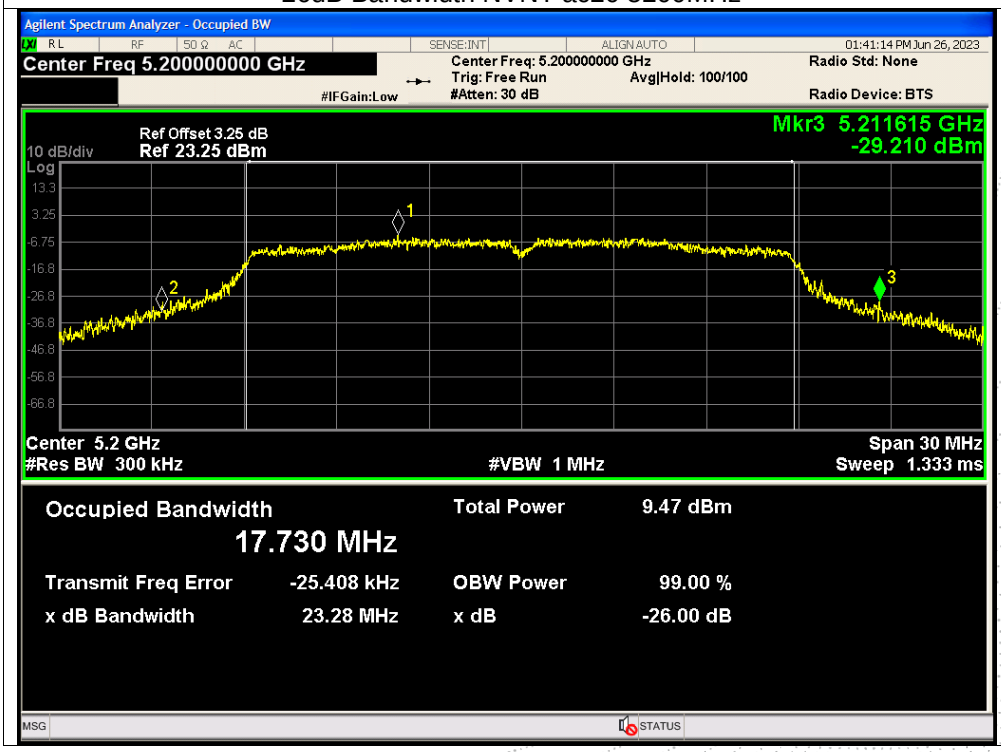
-26dB Bandwidth NVNT n40 5230MHz



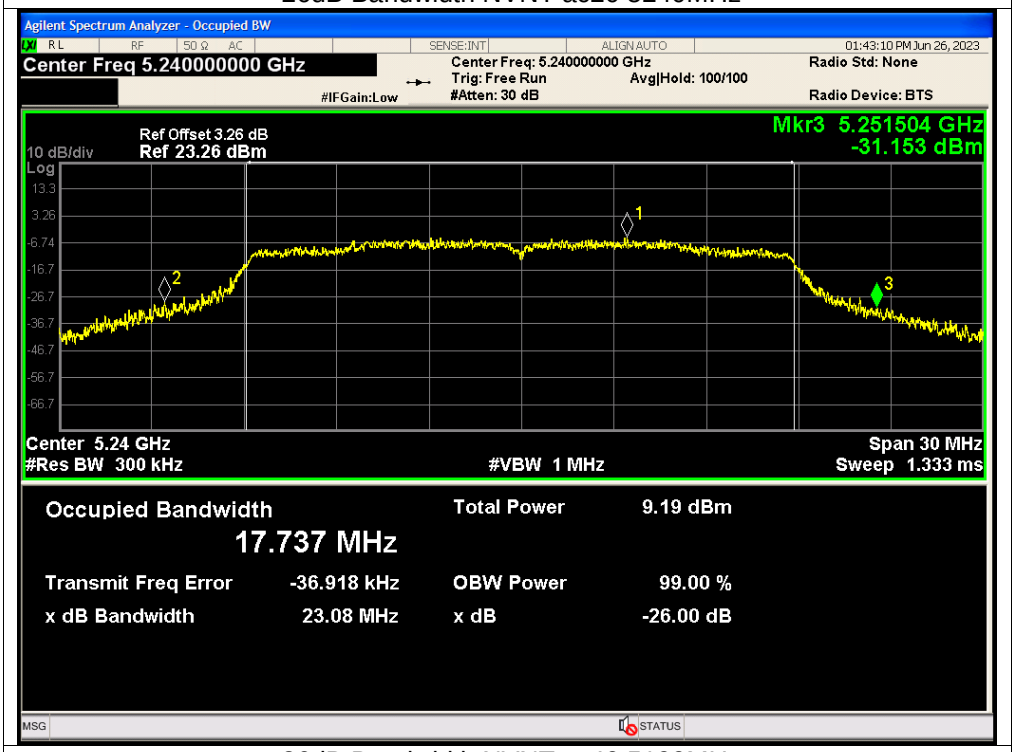
-26dB Bandwidth NVNT ac20 5180MHz



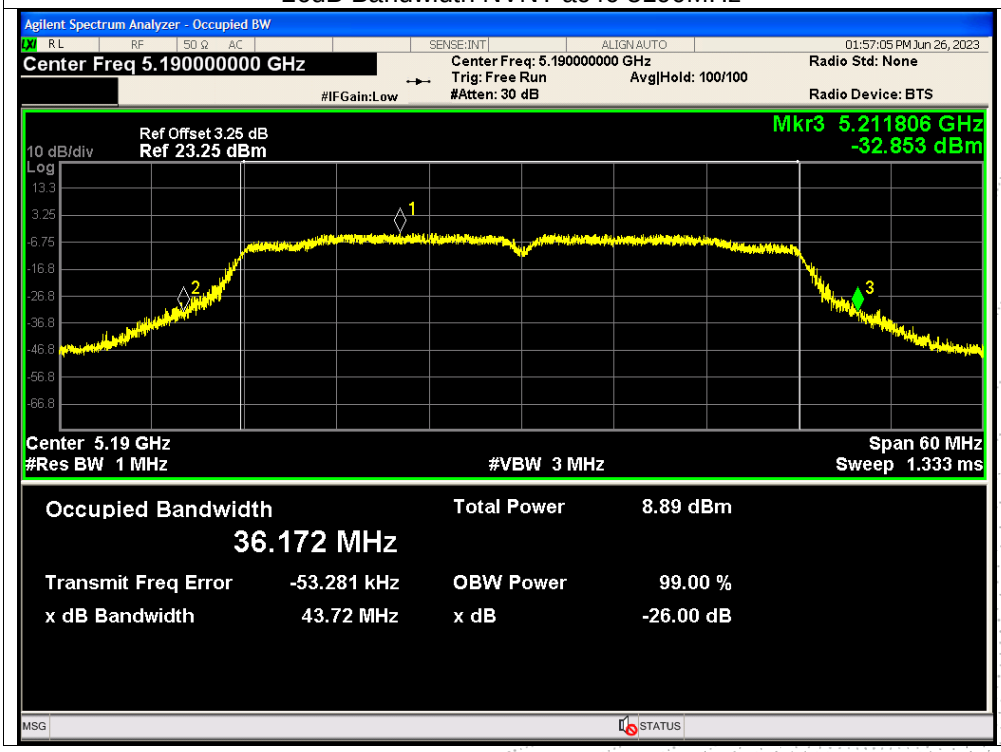
-26dB Bandwidth NVNT ac20 5200MHz



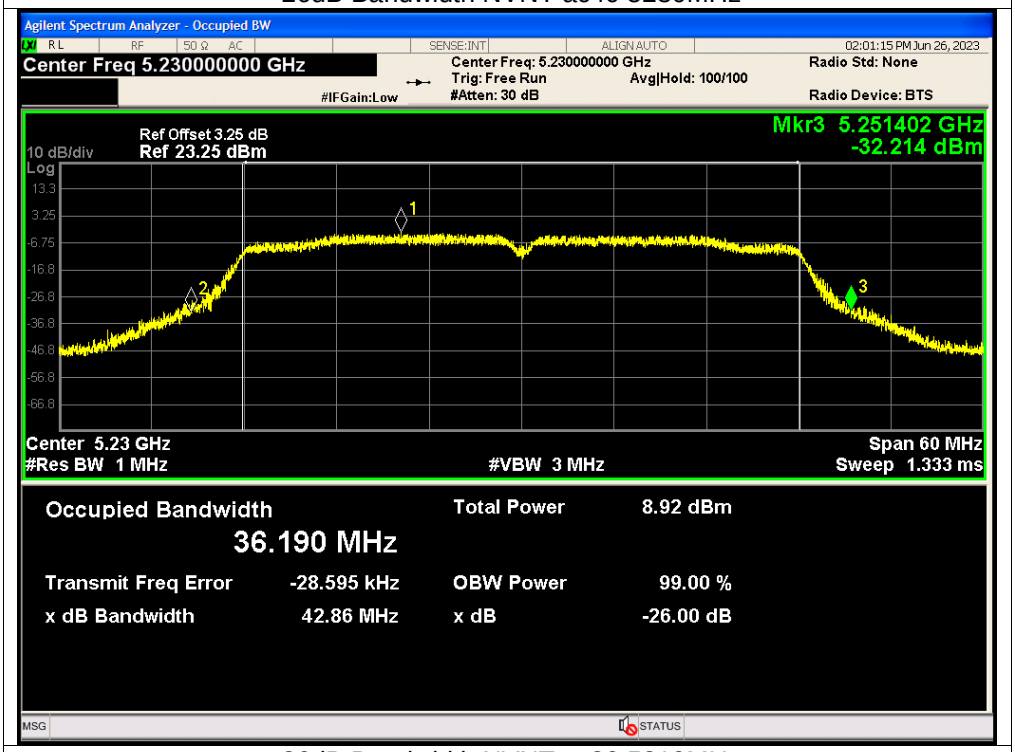
-26dB Bandwidth NVNT ac20 5240MHz



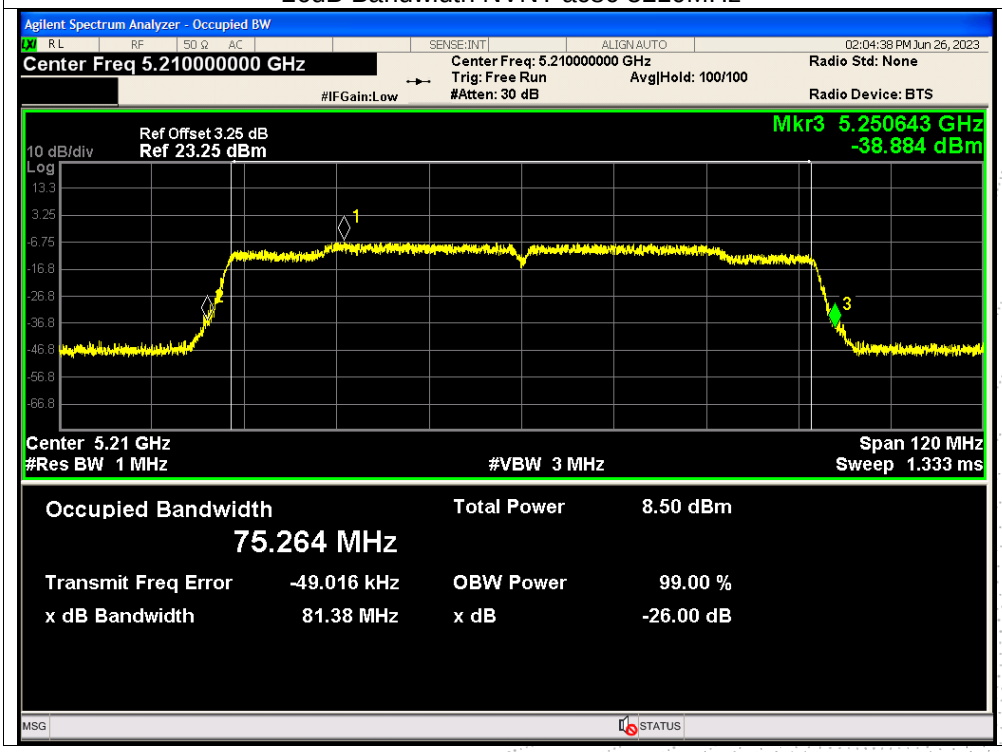
-26dB Bandwidth NVNT ac40 5190MHz



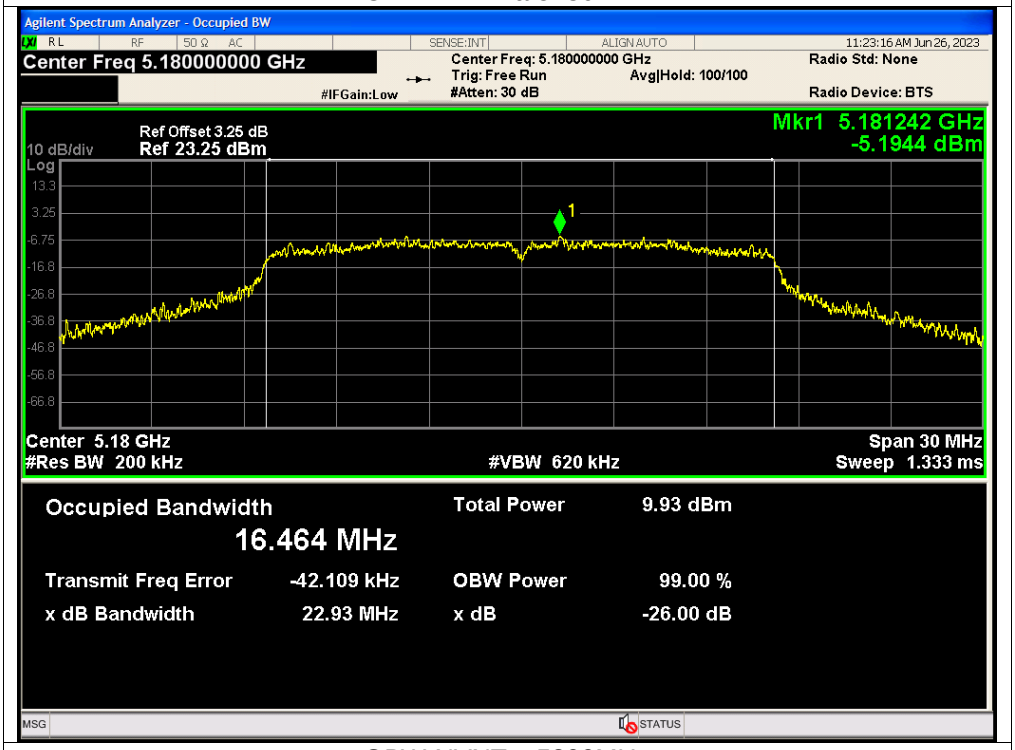
-26dB Bandwidth NVNT ac40 5230MHz



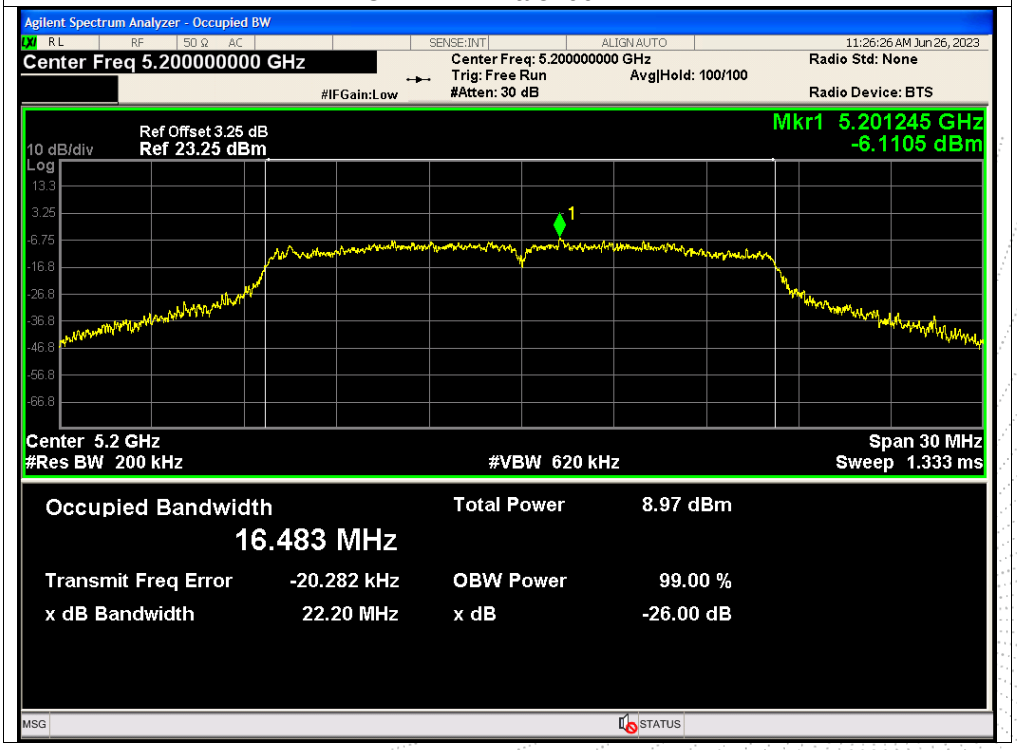
-26dB Bandwidth NVNT ac80 5210MHz



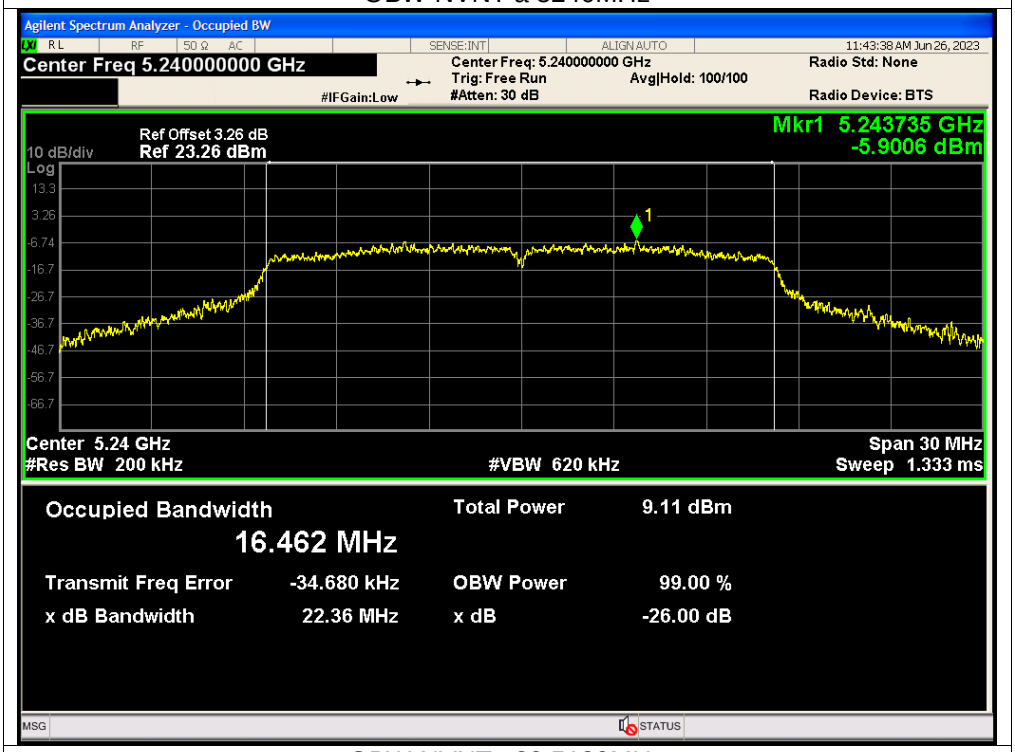
Test Graphs
OBW NVNT a 5180MHz



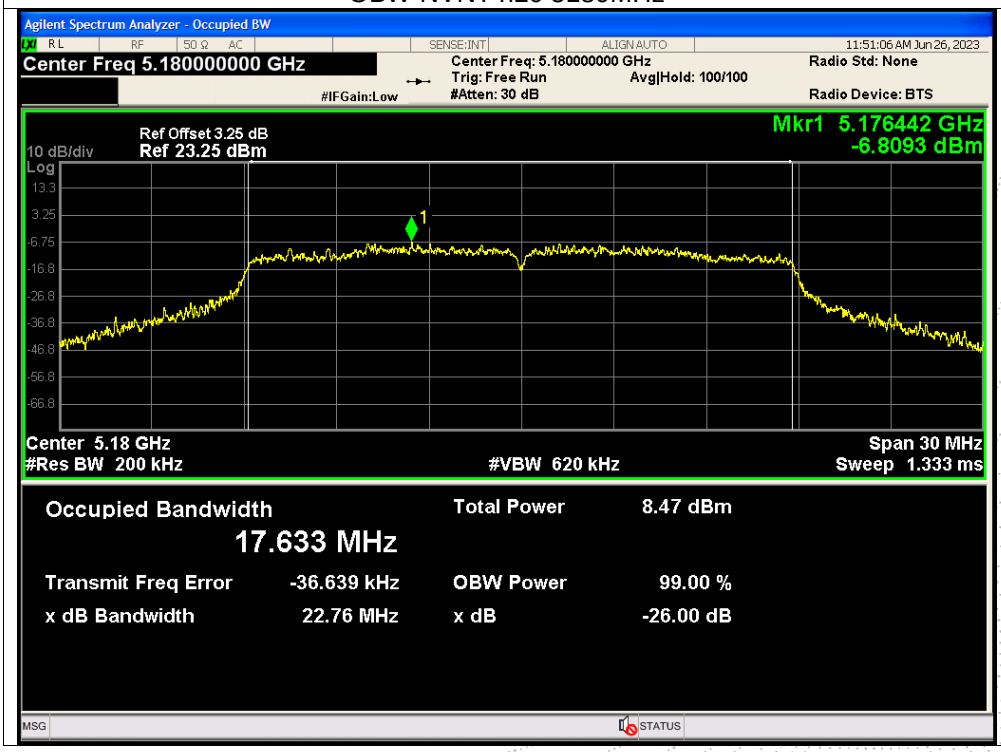
OBW NVNT a 5200MHz



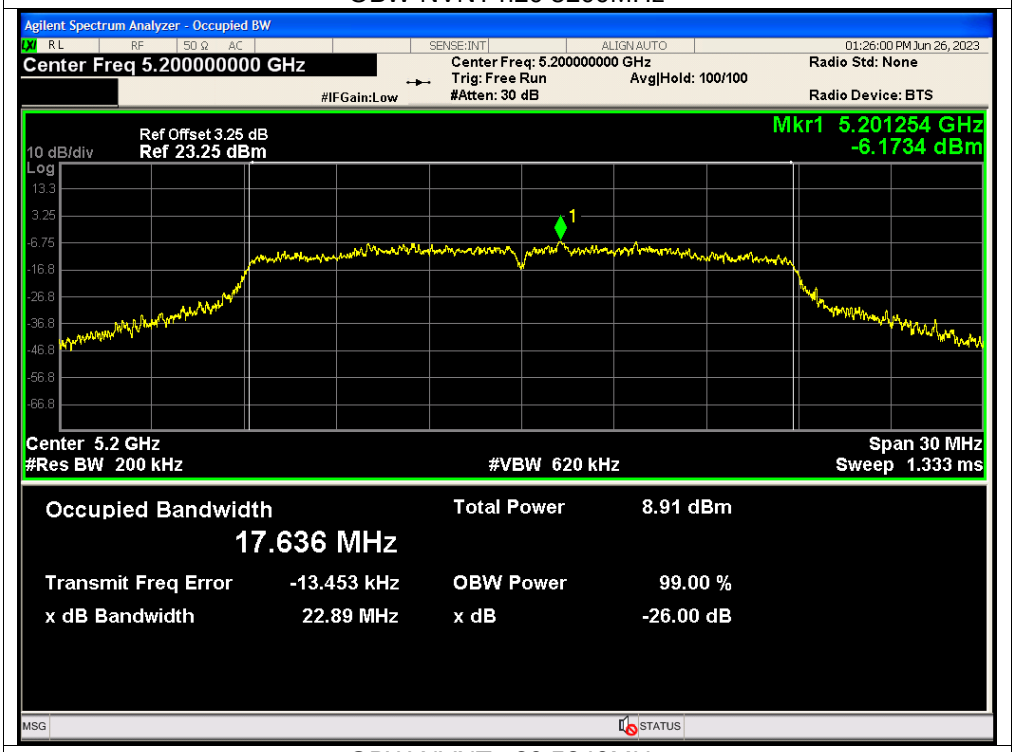
OBW NVNT a 5240MHz



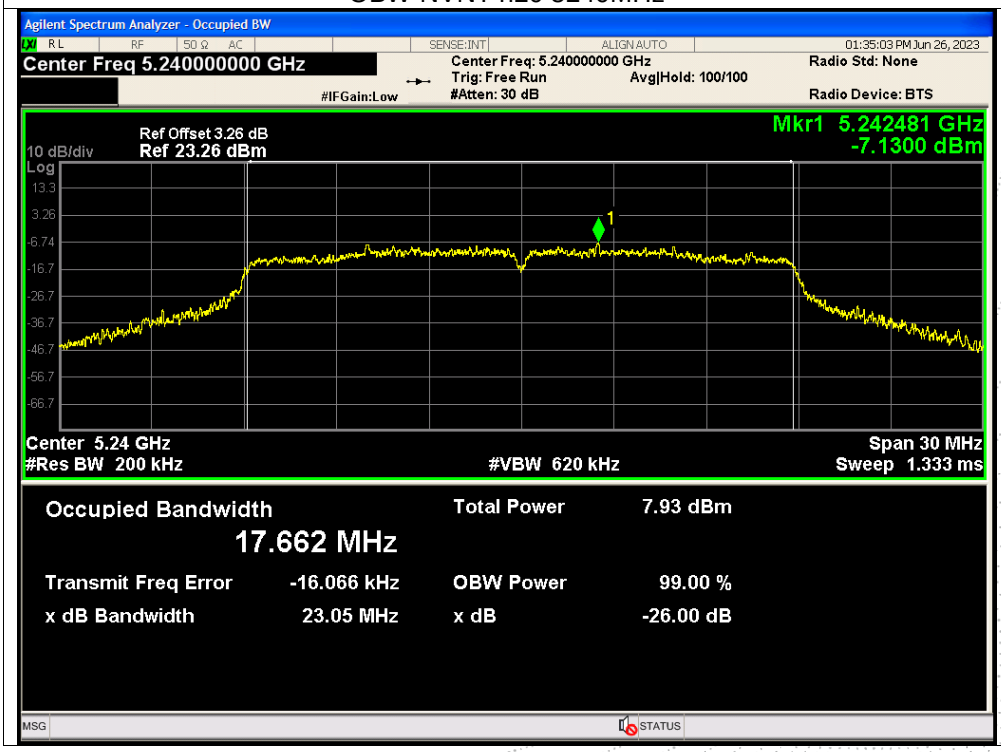
OBW NVNT n20 5180MHz



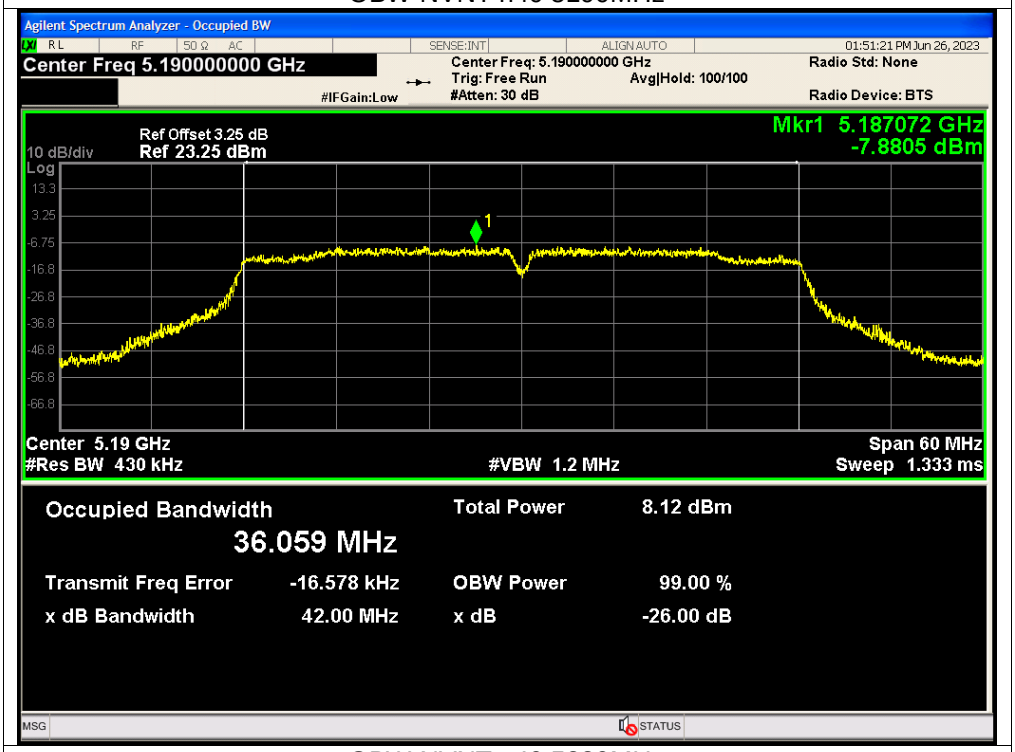
OBW NVNT n20 5200MHz



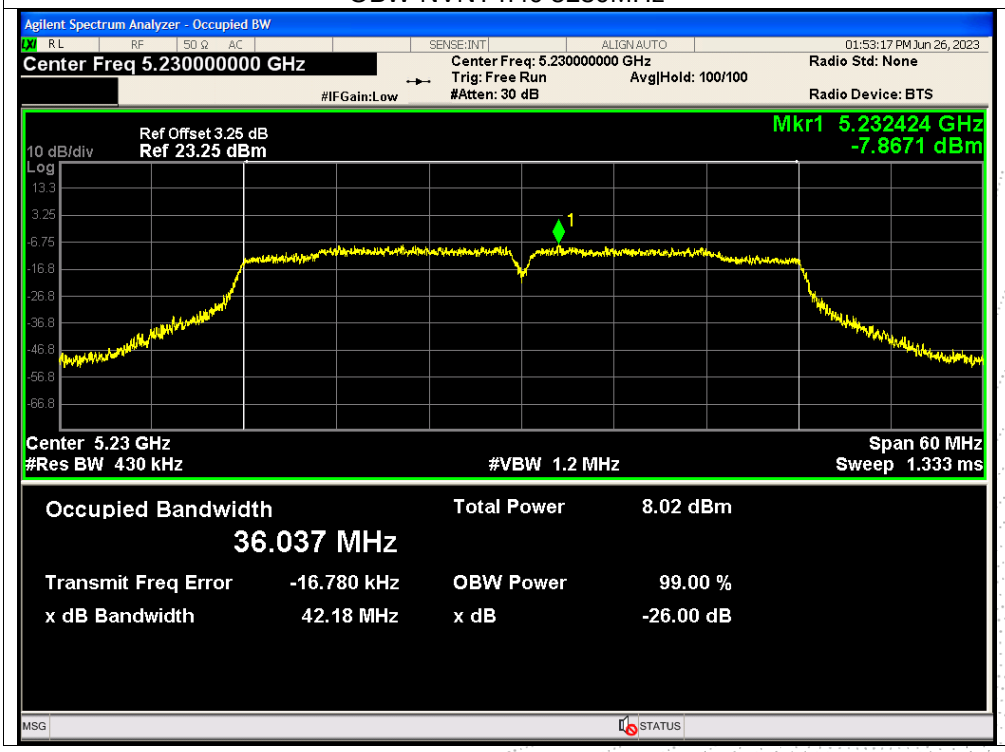
OBW NVNT n20 5240MHz



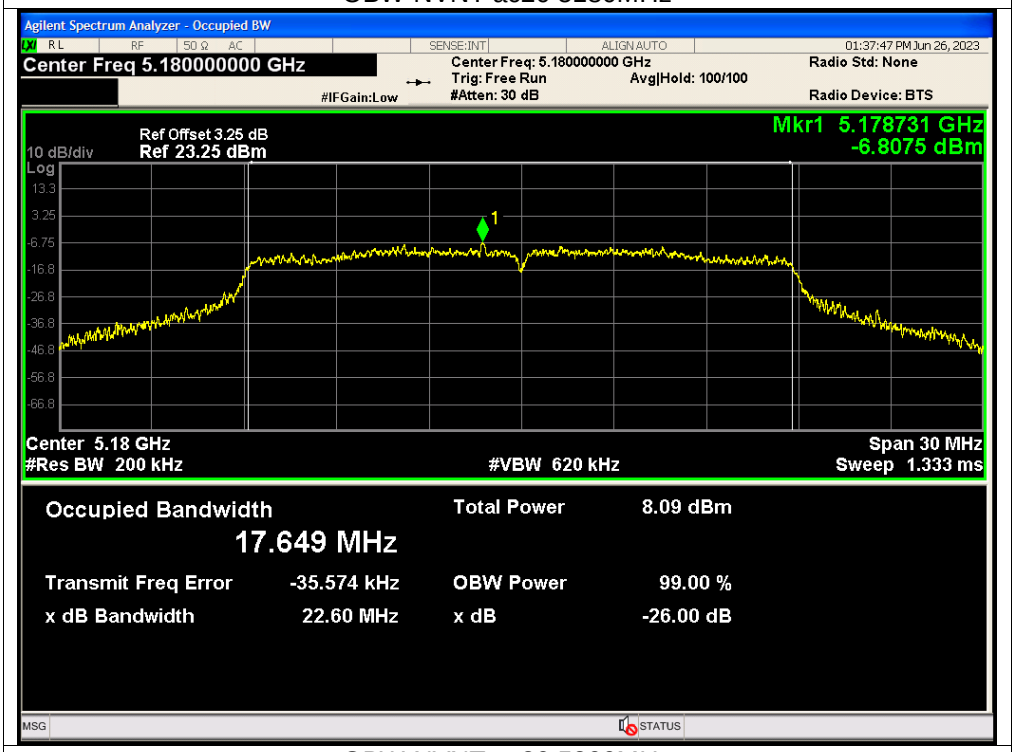
OBW NVNT n40 5190MHz



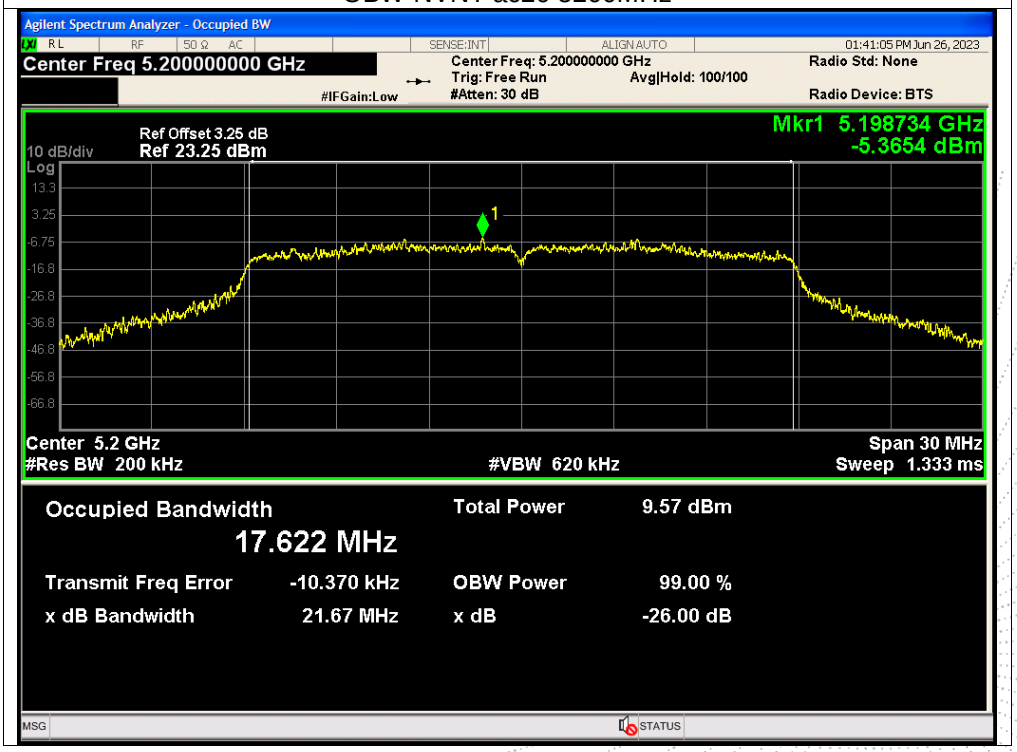
OBW NVNT n40 5230MHz



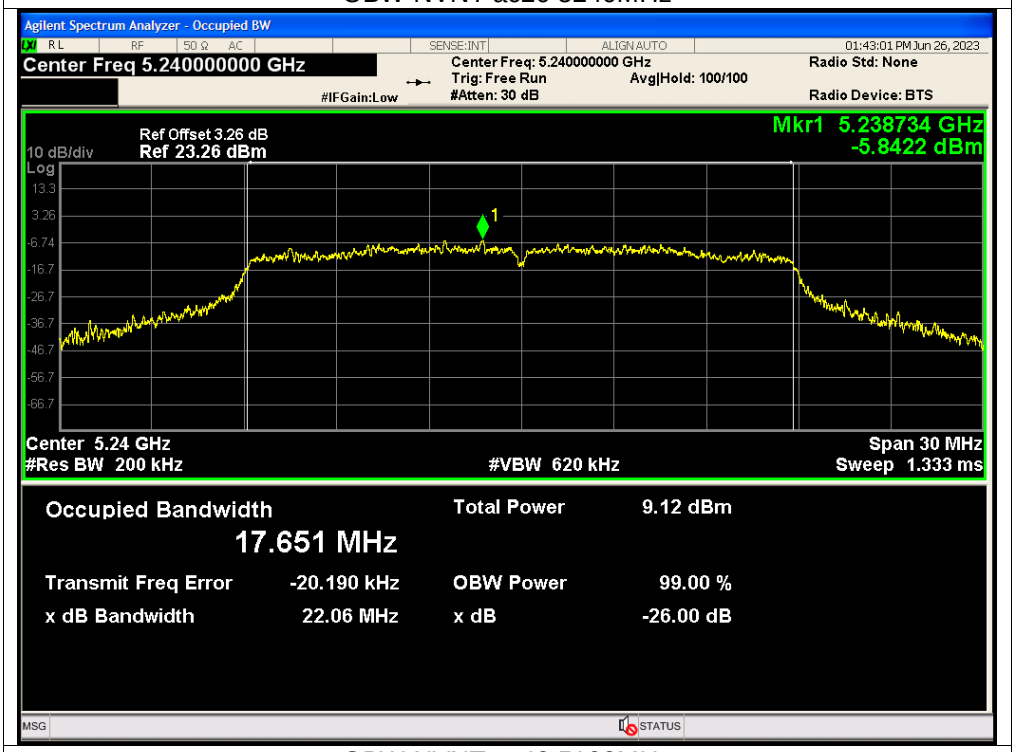
OBW NVNT ac20 5180MHz



OBW NVNT ac20 5200MHz



OBW NVNT ac20 5240MHz



OBW NVNT ac40 5190MHz