TEST REPORT

Report No.:	BCTC2207035521-4E
Applicant:	SHENZHEN NST INDUSTRY AND TRADE CO., LTD
Product Name:	15.6 inch laptop
Model/Type reference:	X15/M156NN
Tested Date:	2022-07-28 to 2022-08-05
Issued Date:	2022-08-05

Shenzhen BCTC Testing Co., Ltd.

FCC ID: 2AAMS-SGIGX15S

Product Name:	15.6 inch laptop
Trademark:	N/A
Model/Type reference:	X15/M156NN
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
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
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:	2022-07-28
Sample tested Date:	2022-07-28 to 2022-08-05
Issue Date:	2022-08-05
Report No.:	BCTC2207035521-4E
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

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
BCTC2207035521-4E	2022-08-05	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

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

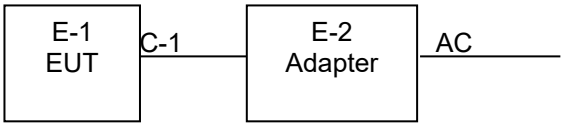
4.1 Product Information

Model/Type Ref.:	X15/M156NN
Model differences:	N/A
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); 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:	5.1G: Antenna A: 2.5dBi Antenna B: 2.5dBi 5.8G: Antenna A: 2.5dBi Antenna B: 2.5dBi
Ratings:	AC 120V/60Hz/DC 7.4V from battery
Adapter:	MODEL: J302-1203000UX INPUT: 100-240V~50/60Hz 1.5A OUTPUT: DC 12V 3.0A 36.0W

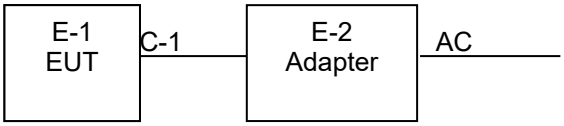
4.2 Test Setup Configuration

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	15.6 inch laptop	N/A	X15/M156NN	N/A	EUT
E-2	Adapter	N/A	J302-1203000UX	N/A	Auxiliary

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

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

4.7 Antenna

5.1G
1)For power spectral density(PSD) measurements,
Array Gain=10log(NANT/NSS)dB=10log(2/1)=3.01dB,
So the directional gain for PSD is 5.51dBi
2)For power measurements,
The Array gain=0 dB for NANT≤4,
So the directional gain for Power measurements is 2.5dBi

Antenna	Brand	Model Name	Antenna Type	Gain (dBi)	NOTE
A	N/A	N/A	Internal antenna	2.5	
B	N/A	N/A	Internal antenna	2.5	

5.8G
For power spectral density(PSD) measurements,
Array Gain=10log(NANT/NSS)dB=10log(2/1)=3.01dB,
So the directional gain for PSD is 5.51dB
2)For power measurements,
The Array gain=0 dB for NANT≤4,
So the directional gain for Power measurements is 2.5dBi

Antenna	Brand	Model Name	Antenna Type	Gain (dBi)	NOTE
A	N/A	N/A	Internal antenna	2.5	
B	N/A	N/A	Internal antenna	2.5	

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
IC Registered No.: 23583

5.2 Test Instrument Used

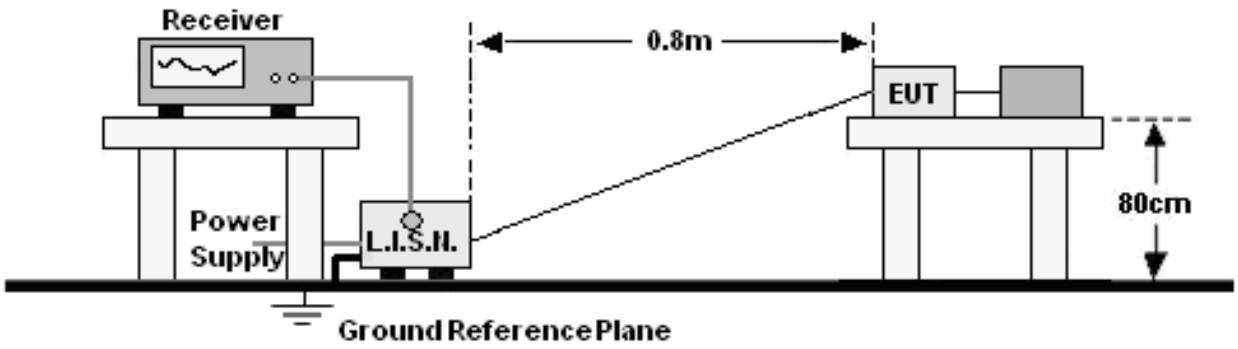
Conducted Emissions Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Receiver	R&S	ESR3	102075	May 24, 2022	May 23, 2023
LISN	R&S	ENV216	101375	May 24, 2022	May 23, 2023
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Attenuator	\	10dB DC-6GHz	1650	May 24, 2022	May 23, 2023

RF Conducted Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Power Metter	Keysight	E4419	\	May 24, 2022	May 23, 2023
Power Sensor (AV)	Keysight	E9300A	\	May 24, 2022	May 23, 2023
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 24, 2022	May 23, 2023
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	\	May 24, 2022	May 23, 2023

Radiated Emissions Test (966 Chamber)					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
966 chamber	ChengYu	966 Room	966	Jun. 06. 2020	Jun. 05, 2023
Receiver	R&S	ESR3	102075	May 24, 2022	May 23, 2023
Receiver	R&S	ESRP	101154	May 24, 2022	May 23, 2023
Amplifier	SKET	LAPA_01G18G-45dB	\	May 24, 2022	May 23, 2023
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 24, 2022	May 23, 2023
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 26, 2022	May 25, 2023
Horn Antenna	Schwarzbeck	BBHA9120D	1541	Jun. 06, 2022	Jun. 05, 2023
Horn Antenn(18GHz-40GHz)	Schwarzbeck	BBHA9170	00822	Jun. 06, 2022	Jun. 05, 2023
Amplifier(18GHz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 26, 2022	May 25, 2023
Loop Antenna(9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	May 26, 2022	May 25, 2023
RF cables1(9kHz-30MHz)	Huber+Suhnar	9kHz-30MHz	B1702988-0008	May 26, 2022	May 25, 2023
RF cables2(30MHz-1GHz)	Huber+Suhnar	30MHz-1GHz	1486150	May 26, 2022	May 25, 2023
RF cables3(1GHz-40GHz)	Huber+Suhnar	1GHz-40GHz	1607106	May 26, 2022	May 25, 2023
Power Metter	Keysight	E4419	\	May 26, 2022	May 25, 2023
Power Sensor (AV)	Keysight	E9300A	\	May 26, 2022	May 25, 2023
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 26, 2022	May 25, 2023
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	\	May 26, 2022	May 25, 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

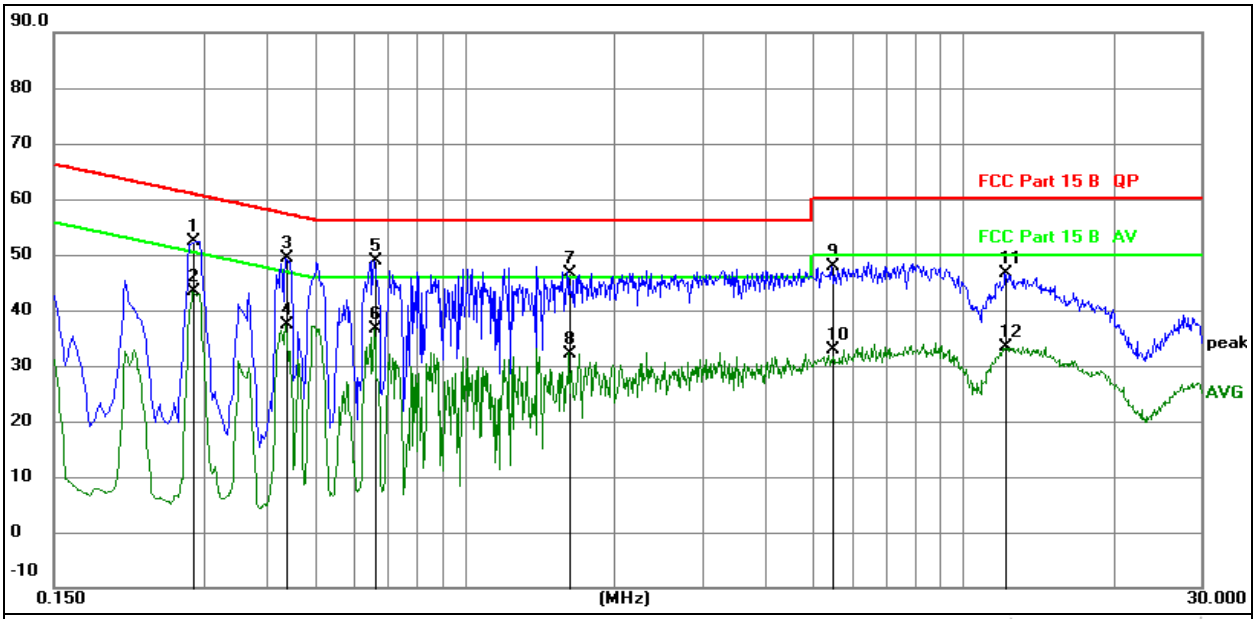
a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak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

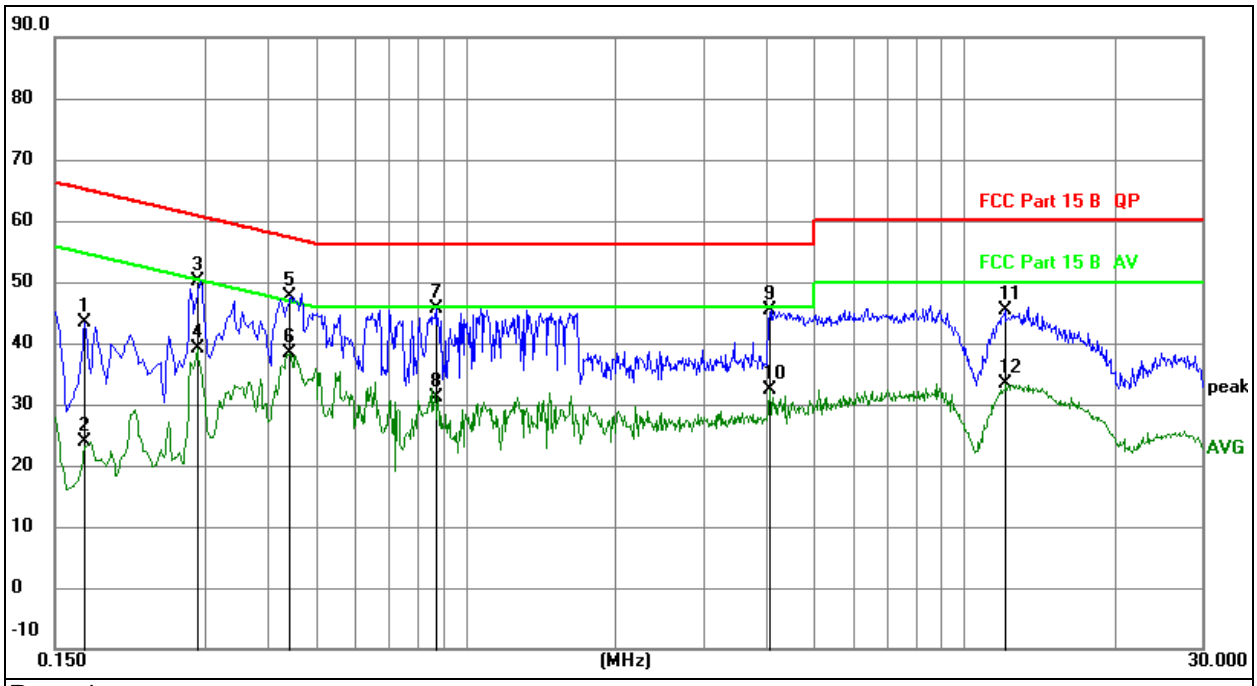
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz



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		0.2850	32.61	19.78	52.39	60.67	-8.28	QP
2		0.2850	23.62	19.78	43.40	50.67	-7.27	AVG
3		0.4380	29.66	19.74	49.40	57.10	-7.70	QP
4		0.4380	17.74	19.74	37.48	47.10	-9.62	AVG
5	*	0.6584	29.23	19.74	48.97	56.00	-7.03	QP
6		0.6584	16.85	19.74	36.59	46.00	-9.41	AVG
7		1.6214	26.83	19.83	46.66	56.00	-9.34	QP
8		1.6214	12.42	19.83	32.25	46.00	-13.75	AVG
9		5.4600	27.85	20.14	47.99	60.00	-12.01	QP
10		5.4600	12.79	20.14	32.93	50.00	-17.07	AVG
11		12.1650	26.30	20.28	46.58	60.00	-13.42	QP
12		12.1650	13.11	20.28	33.39	50.00	-16.61	AVG

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



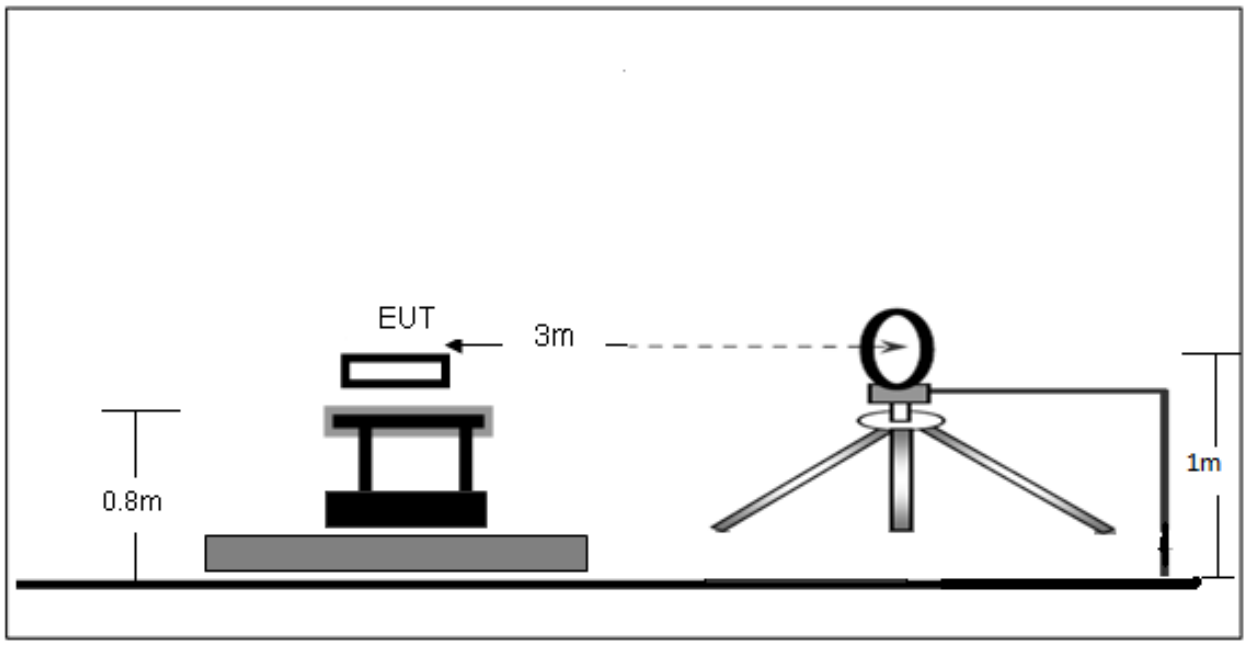
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over+ Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1720	23.66	19.73	43.39	64.86	-21.47	QP
2		0.1720	4.16	19.73	23.89	54.86	-30.97	AVG
3		0.2893	30.30	19.78	50.08	60.54	-10.46	QP
4		0.2893	19.23	19.78	39.01	50.54	-11.53	AVG
5		0.4420	27.95	19.74	47.69	57.02	-9.33	QP
6	*	0.4420	18.64	19.74	38.38	47.02	-8.64	AVG
7		0.8710	25.83	19.75	45.58	56.00	-10.42	QP
8		0.8710	11.47	19.75	31.22	46.00	-14.78	AVG
9		4.0703	25.25	20.10	45.35	56.00	-10.65	QP
10		4.0703	12.27	20.10	32.37	46.00	-13.63	AVG
11		12.0600	25.15	20.28	45.43	60.00	-14.57	QP
12		12.0600	13.12	20.28	33.40	50.00	-16.60	AVG

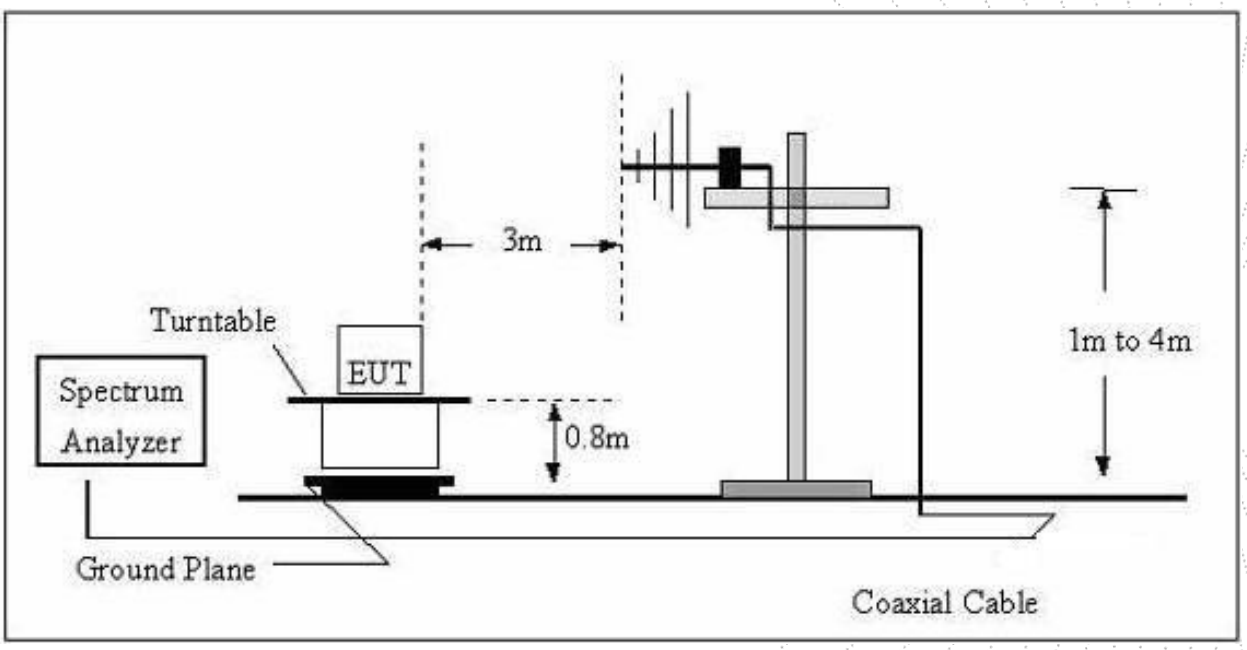
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

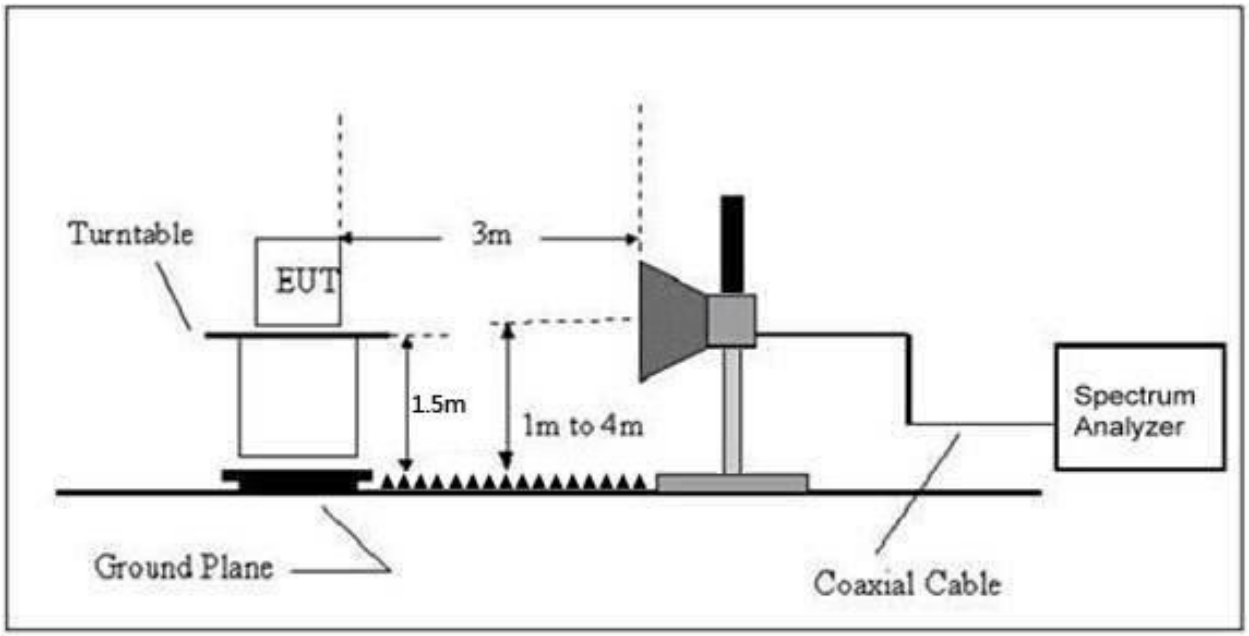
（A）Radiated Emission Test-Up Frequency Below 30MHz



（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

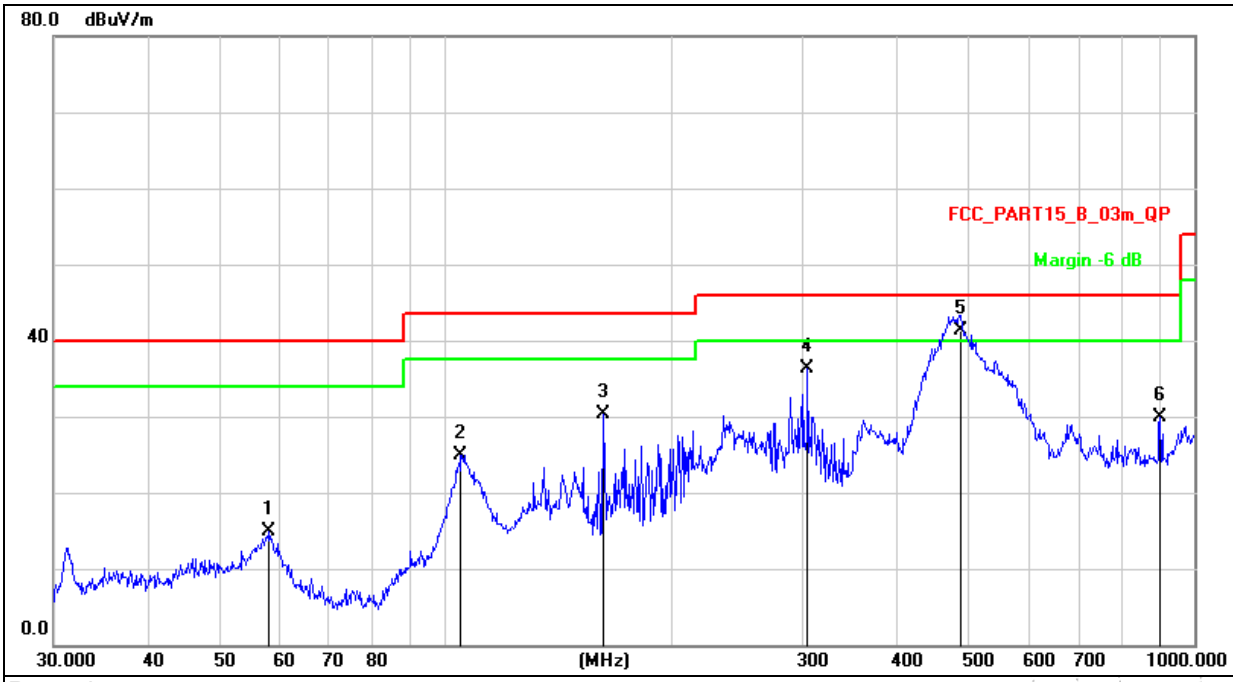
Temperature:	26℃	Relative Humidity:	24%
Pressure:	101 kPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 4	Polarization:	--

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

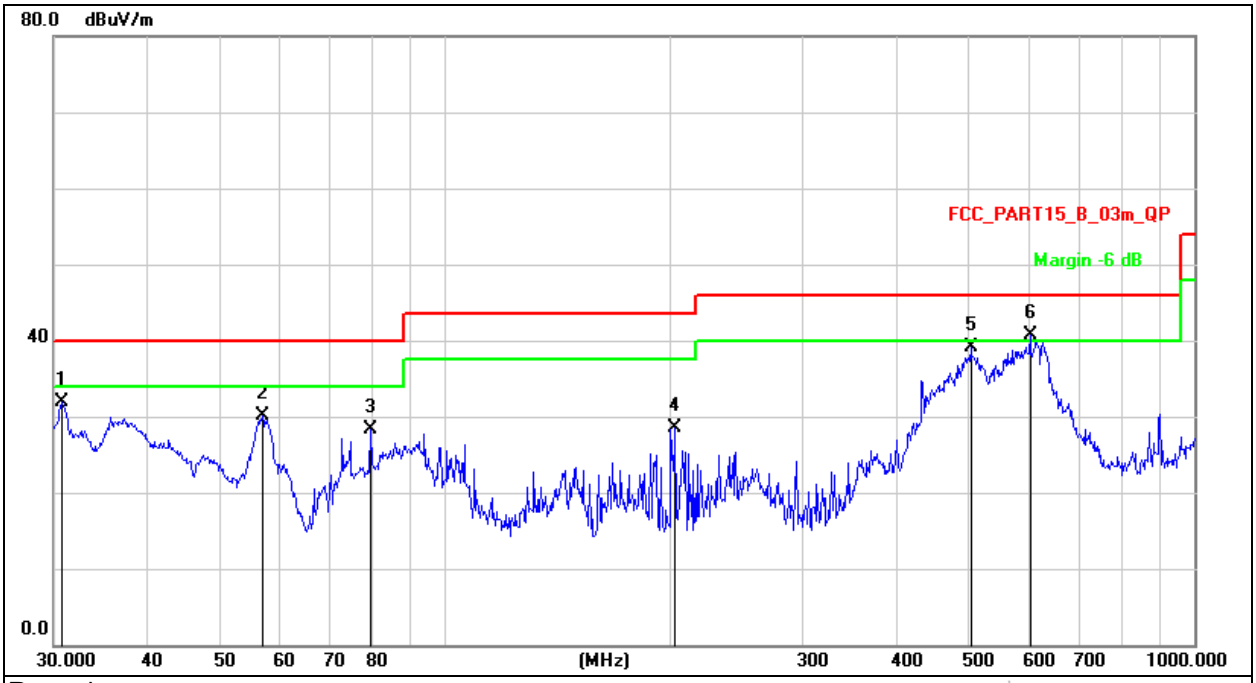
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz



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		58.2030	31.25	-16.26	14.99	40.00	-25.01	QP
2		104.9033	41.98	-17.04	24.94	43.50	-18.56	QP
3		162.6106	49.14	-18.87	30.27	43.50	-13.23	QP
4		304.6099	49.05	-12.77	36.28	46.00	-9.72	QP
5	*	487.3151	49.45	-8.19	41.26	46.00	-4.74	QP
6		900.1474	30.64	-0.81	29.83	46.00	-16.17	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		30.7455	49.90	-18.02	31.88	40.00	-8.12	QP
2		56.9912	46.16	-16.08	30.08	40.00	-9.92	QP
3		79.5209	48.90	-20.67	28.23	40.00	-11.77	QP
4		202.8104	44.26	-15.85	28.41	43.50	-15.09	QP
5		502.9395	46.81	-7.77	39.04	46.00	-6.96	QP
6	*	603.5392	46.21	-5.46	40.75	46.00	-5.25	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	4434.156	60.75	5.94	35.40	44.00	58.09	68.2	-10.11	PK
V	4434.156	43.86	5.94	35.40	44.00	41.20	54	-12.80	AV
V	10360.125	61.96	8.46	39.75	44.50	65.67	68.2	-2.53	PK
V	10360.125	43.02	8.46	39.75	44.50	46.73	54	-7.27	AV
V	15540.001	63.62	10.12	38.80	44.10	68.44	74	-5.56	PK
V	15540.001	43.54	10.12	38.80	42.70	49.76	54	-4.24	AV
H	4434.049	62.42	5.94	35.18	44.00	59.54	68.2	-8.66	PK
H	4434.049	43.35	5.94	35.18	44.00	40.47	54	-13.53	AV
H	10360.064	51.60	8.46	38.71	44.50	54.27	68.2	-13.93	PK
H	10360.064	43.15	8.46	38.71	44.50	45.82	54	-8.18	AV
H	15540.118	54.54	10.12	38.38	44.10	58.94	74	-15.06	PK
H	15540.118	41.75	10.12	38.38	44.10	46.15	54	-7.85	AV
middle Channel (5200 MHz)-Above 1G									
V	4592.070	62.35	6.48	36.35	44.05	61.13	74	-12.87	PK
V	4592.070	43.04	6.48	36.35	44.05	41.82	54	-12.18	AV
V	10400.058	64.49	8.47	37.88	44.51	66.33	68.2	-1.87	PK
V	10400.058	43.16	8.47	37.88	44.51	45.00	54	-9.00	AV
V	15600.064	63.44	10.12	38.80	44.10	68.26	74	-5.74	PK
V	15600.064	43.45	10.12	38.80	42.70	49.67	54	-4.33	AV
H	4592.190	60.79	6.48	36.37	44.05	59.59	74	-14.41	PK
H	4592.190	43.98	6.48	36.37	44.05	42.78	54	-11.22	AV
H	10400.128	53.23	8.47	38.64	44.50	55.84	68.2	-12.36	PK
H	10400.128	44.11	8.47	38.64	44.50	46.72	54	-7.28	AV
H	15600.054	50.87	10.12	38.38	44.10	55.27	74	-18.73	PK
H	15600.054	42.54	10.12	38.38	44.10	46.94	54	-7.06	AV
High Channel (5240 MHz)-Above 1G									
V	4739.081	60.90	7.10	37.24	43.50	61.74	74	-12.26	PK
V	4739.081	43.71	7.10	37.24	43.50	44.55	54	-9.45	AV
V	10480.135	62.13	8.46	37.68	44.50	63.77	68.2	-4.43	PK
V	10480.135	43.01	8.46	37.68	44.50	44.65	54	-9.35	AV
V	15720.024	61.29	10.12	38.80	44.10	66.11	74	-7.89	PK
V	15720.024	43.60	10.12	38.80	42.70	49.82	54	-4.18	AV
H	4739.126	62.48	7.10	37.24	43.50	63.32	74	-10.68	PK
H	4739.126	43.78	7.10	37.24	43.50	44.62	54	-9.38	AV
H	10480.088	54.16	8.46	38.57	44.50	56.69	68.2	-11.51	PK
H	10480.088	44.71	8.46	38.57	44.50	47.24	54	-6.76	AV
H	15720.151	53.65	10.12	38.38	44.10	58.05	74	-15.95	PK
H	15720.151	42.64	10.12	38.38	44.10	47.04	54	-6.96	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
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	4434.189	64.92	5.94	35.40	44.00	62.26	68.2	-5.94	PK
V	4434.189	43.64	5.94	35.40	44.00	40.98	54	-13.02	AV
V	10360.048	63.62	8.46	39.75	44.50	67.33	68.2	-0.87	PK
V	10360.048	43.79	8.46	39.75	44.50	47.50	54	-6.50	AV
V	15540.163	64.91	10.12	38.80	44.10	69.73	74	-4.27	PK
V	15540.163	43.17	10.12	38.80	42.70	49.39	54	-4.61	AV
H	4434.091	63.27	5.94	35.18	44.00	60.39	68.2	-7.81	PK
H	4434.091	43.36	5.94	35.18	44.00	40.48	54	-13.52	AV
H	10360.074	50.68	8.46	38.71	44.50	53.35	68.2	-14.85	PK
H	10360.074	43.63	8.46	38.71	44.50	46.30	54	-7.70	AV
H	15540.127	54.23	10.12	38.38	44.10	58.63	74	-15.37	PK
H	15540.127	41.36	10.12	38.38	44.10	45.76	54	-8.24	AV
middle Channel (5200 MHz)-Above 1G									
V	4592.018	63.08	6.48	36.35	44.05	61.86	74	-12.14	PK
V	4592.018	43.69	6.48	36.35	44.05	42.47	54	-11.53	AV
V	10400.079	64.57	8.47	37.88	44.51	66.41	68.2	-1.79	PK
V	10400.079	43.37	8.47	37.88	44.51	45.21	54	-8.79	AV
V	15600.107	60.87	10.12	38.80	44.10	65.69	74	-8.31	PK
V	15600.107	43.04	10.12	38.80	42.70	49.26	54	-4.74	AV
H	4592.170	64.00	6.48	36.37	44.05	62.80	74	-11.20	PK
H	4592.170	43.09	6.48	36.37	44.05	41.89	54	-12.11	AV
H	10400.184	50.79	8.47	38.64	44.50	53.40	68.2	-14.80	PK
H	10400.184	43.69	8.47	38.64	44.50	46.30	54	-7.70	AV
H	15600.053	54.49	10.12	38.38	44.10	58.89	74	-15.11	PK
H	15600.053	40.97	10.12	38.38	44.10	45.37	54	-8.63	AV
High Channel (5240 MHz)-Above 1G									
V	4739.001	63.26	7.10	37.24	43.50	64.10	74	-9.90	PK
V	4739.001	43.80	7.10	37.24	43.50	44.64	54	-9.36	AV
V	10480.081	61.16	8.46	37.68	44.50	62.80	68.2	-5.40	PK
V	10480.081	43.10	8.46	37.68	44.50	44.74	54	-9.26	AV
V	15720.033	60.62	10.12	38.80	44.10	65.44	74	-8.56	PK
V	15720.033	43.70	10.12	38.80	42.70	49.92	54	-4.08	AV
H	4739.096	61.37	7.10	37.24	43.50	62.21	74	-11.79	PK
H	4739.096	43.57	7.10	37.24	43.50	44.41	54	-9.59	AV
H	10480.160	51.13	8.46	38.57	44.50	53.66	68.2	-14.54	PK
H	10480.160	44.44	8.46	38.57	44.50	46.97	54	-7.03	AV
H	15720.038	52.80	10.12	38.38	44.10	57.20	74	-16.80	PK
H	15720.038	41.77	10.12	38.38	44.10	46.17	54	-7.83	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	4434.120	61.54	5.94	35.40	44.00	58.88	68.2	-9.32	PK
V	4434.120	43.37	5.94	35.40	44.00	40.71	54	-13.29	AV
V	10380.010	62.07	8.46	39.75	44.50	65.78	68.2	-2.42	PK
V	10380.010	43.43	8.46	39.75	44.50	47.14	54	-6.86	AV
V	15570.169	61.66	10.12	38.80	44.10	66.48	74	-7.52	PK
V	15570.169	43.83	10.12	38.80	42.70	50.05	54	-3.95	AV
H	4434.010	60.72	5.94	35.18	44.00	57.84	74	-16.16	PK
H	4434.010	43.77	5.94	35.18	44.00	40.89	54	-13.11	AV
H	10380.005	50.14	8.46	38.71	44.50	52.81	68.2	-15.39	PK
H	10380.005	42.09	8.46	38.71	44.50	44.76	54	-9.24	AV
H	15570.169	54.33	10.12	38.38	44.10	58.73	74	-15.27	PK
H	15570.169	40.12	10.12	38.38	44.10	44.52	54	-9.48	AV
middle Channel (5230 MHz)-Above 1G									
V	4739.132	62.26	6.48	36.35	44.05	61.04	68.2	-7.16	PK
V	4739.132	43.69	6.48	36.35	44.05	42.47	54	-11.53	AV
V	10460.146	62.07	8.47	37.88	44.51	63.91	68.2	-4.29	PK
V	10460.146	43.35	8.47	37.88	44.51	45.19	54	-8.81	AV
V	15690.154	60.83	10.12	38.80	44.10	65.65	74	-8.35	PK
V	15690.154	43.37	10.12	38.80	42.70	49.59	54	-4.41	AV
H	4739.089	61.98	6.48	36.37	44.05	60.78	68.2	-7.42	PK
H	4739.089	43.05	6.48	36.37	44.05	41.85	54	-12.15	AV
H	10460.015	53.20	8.47	38.64	44.50	55.81	68.2	-12.39	PK
H	10460.015	44.38	8.47	38.64	44.50	46.99	54	-7.01	AV
H	15690.178	52.31	10.12	38.38	44.10	56.71	74	-17.29	PK
H	15690.178	44.01	10.12	38.38	44.10	48.41	54	-5.59	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	4434.120	64.93	5.94	35.40	44.00	62.27	68.2	-5.93	PK
V	4434.120	43.05	5.94	35.40	44.00	40.39	54	-13.61	AV
V	10360.192	63.19	8.46	39.75	44.50	66.90	68.2	-1.30	PK
V	10360.192	43.47	8.46	39.75	44.50	47.18	54	-6.82	AV
V	15540.099	62.00	10.12	38.80	44.10	66.82	74	-7.18	PK
V	15540.099	43.72	10.12	38.80	42.70	49.94	54	-4.06	AV
H	4434.183	60.41	5.94	35.18	44.00	57.53	68.2	-10.67	PK
H	4434.183	43.12	5.94	35.18	44.00	40.24	54	-13.76	AV
H	10360.181	51.42	8.46	38.71	44.50	54.09	68.2	-14.11	PK
H	10360.181	41.93	8.46	38.71	44.50	44.60	54	-9.40	AV
H	15540.039	51.91	10.12	38.38	44.10	56.31	74	-17.69	PK
H	15540.039	44.58	10.12	38.38	44.10	48.98	54	-5.02	AV
middle Channel (5200 MHz)-Above 1G									
V	4592.044	61.28	6.48	36.35	44.05	60.06	74	-13.94	PK
V	4592.044	43.47	6.48	36.35	44.05	42.25	54	-11.75	AV
V	10400.002	61.42	8.47	37.88	44.51	63.26	68.2	-4.94	PK
V	10400.002	43.77	8.47	37.88	44.51	45.61	54	-8.39	AV
V	15600.176	64.88	10.12	38.80	44.10	69.70	74	-4.30	PK
V	15600.176	43.64	10.12	38.80	42.70	49.86	54	-4.14	AV
H	4592.163	63.19	6.48	36.37	44.05	61.99	74	-12.01	PK
H	4592.163	43.81	6.48	36.37	44.05	42.61	54	-11.39	AV
H	10400.092	51.93	8.47	38.64	44.50	54.54	68.2	-13.66	PK
H	10400.092	44.71	8.47	38.64	44.50	47.32	54	-6.68	AV
H	15600.107	50.23	10.12	38.38	44.10	54.63	74	-19.37	PK
H	15600.107	44.52	10.12	38.38	44.10	48.92	54	-5.08	AV
High Channel (5240 MHz)-Above 1G									
V	4739.081	61.70	7.10	37.24	43.50	62.54	74	-11.46	PK
V	4739.081	43.60	7.10	37.24	43.50	44.44	54	-9.56	AV
V	10480.191	64.73	8.46	37.68	44.50	66.37	68.2	-1.83	PK
V	10480.191	43.09	8.46	37.68	44.50	44.73	54	-9.27	AV
V	15720.146	62.61	10.12	38.80	44.10	67.43	74	-6.57	PK
V	15720.146	43.06	10.12	38.80	42.70	49.28	54	-4.72	AV
H	4739.104	61.67	7.10	37.24	43.50	62.51	74	-11.49	PK
H	4739.104	43.76	7.10	37.24	43.50	44.60	54	-9.40	AV
H	10480.059	51.47	8.46	38.57	44.50	54.00	68.2	-14.20	PK
H	10480.059	42.53	8.46	38.57	44.50	45.06	54	-8.94	AV
H	15720.067	50.14	10.12	38.38	44.10	54.54	74	-19.46	PK
H	15720.067	41.03	10.12	38.38	44.10	45.43	54	-8.57	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	4434.044	61.70	5.94	35.40	44.00	59.04	68.2	-9.16	PK
V	4434.044	43.94	5.94	35.40	44.00	41.28	54	-12.72	AV
V	10380.038	63.23	8.46	39.75	44.50	66.94	68.2	-1.26	PK
V	10380.038	43.25	8.46	39.75	44.50	46.96	54	-7.04	AV
V	15570.162	62.53	10.12	38.80	44.10	67.35	74	-6.65	PK
V	15570.162	43.19	10.12	38.80	42.70	49.41	54	-4.59	AV
H	4434.041	60.60	5.94	35.18	44.00	57.72	74	-16.28	PK
H	4434.041	43.54	5.94	35.18	44.00	40.66	54	-13.34	AV
H	10380.147	50.27	8.46	38.71	44.50	52.94	68.2	-15.26	PK
H	10380.147	41.29	8.46	38.71	44.50	43.96	54	-10.04	AV
H	15570.135	54.78	10.12	38.38	44.10	59.18	74	-14.82	PK
H	15570.135	40.00	10.12	38.38	44.10	44.40	54	-9.60	AV
middle Channel (5230 MHz)-Above 1G									
V	4739.031	60.43	6.48	36.35	44.05	59.21	68.2	-8.99	PK
V	4739.031	43.67	6.48	36.35	44.05	42.45	54	-11.55	AV
V	10460.104	60.82	8.47	37.88	44.51	62.66	68.2	-5.54	PK
V	10460.104	43.17	8.47	37.88	44.51	45.01	54	-8.99	AV
V	15690.009	64.20	10.12	38.80	44.10	69.02	74	-4.98	PK
V	15690.009	43.31	10.12	38.80	42.70	49.53	54	-4.47	AV
H	4739.115	63.55	6.48	36.37	44.05	62.35	68.2	-5.85	PK
H	4739.115	43.14	6.48	36.37	44.05	41.94	54	-12.06	AV
H	10460.116	54.72	8.47	38.64	44.50	57.33	68.2	-10.87	PK
H	10460.116	43.22	8.47	38.64	44.50	45.83	54	-8.17	AV
H	15690.104	53.48	10.12	38.38	44.10	57.88	74	-16.12	PK
H	15690.104	43.66	10.12	38.38	44.10	48.06	54	-5.94	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 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	4434.198	63.07	5.94	35.40	44.00	60.41	68.2	-7.79	PK
V	4434.198	43.11	5.94	35.40	44.00	40.45	54	-13.55	AV
V	10420.042	63.51	8.46	39.75	44.50	67.22	68.2	-0.98	PK
V	10420.042	43.01	8.46	39.75	44.50	46.72	54	-7.28	AV
V	15630.042	64.49	10.12	38.80	44.10	69.31	74	-4.69	PK
V	15630.042	43.73	10.12	38.80	42.70	49.95	54	-4.05	AV
H	4434.059	63.37	5.94	35.18	44.00	60.49	68.2	-7.71	PK
H	4434.059	43.37	5.94	35.18	44.00	40.49	54	-13.51	AV
H	10420.157	50.74	8.46	38.71	44.50	53.41	68.2	-14.79	PK
H	10420.157	42.56	8.46	38.71	44.50	45.23	54	-8.77	AV
H	15630.131	50.58	10.12	38.38	44.10	54.98	74	-19.02	PK
H	15630.099	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 (5.8G) -- 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	4679.162	59.05	5.94	35.40	44.00	56.39	74	-17.61	PK
V	4679.162	43.48	5.94	35.40	44.00	40.82	54	-13.18	AV
V	11490.177	57.90	8.46	39.75	44.50	61.61	68.2	-6.59	PK
V	11490.177	43.83	8.46	39.75	44.50	47.54	54	-6.46	AV
V	17235.173	57.07	10.12	38.80	44.10	61.89	68.2	-6.31	PK
V	17235.173	43.84	10.12	38.80	42.70	50.06	54	-3.94	AV
H	4679.013	55.98	5.94	35.18	44.00	53.10	74	-20.90	PK
H	4679.013	43.90	5.94	35.18	44.00	41.02	54	-12.98	AV
H	11490.141	53.96	8.46	38.71	44.50	56.63	68.2	-11.57	PK
H	11490.141	40.54	8.46	38.71	44.50	43.21	54	-10.79	AV
H	17235.167	50.64	10.12	38.38	44.10	55.04	68.2	-13.16	PK
H	17235.167	42.93	10.12	38.38	44.10	47.33	54	-6.67	AV
middle Channel (5785 MHz)-Above 1G									
V	4592.160	54.24	6.48	36.35	44.05	53.02	74	-20.98	PK
V	4592.160	43.57	6.48	36.35	44.05	42.35	54	-11.65	AV
V	11570.031	56.94	8.47	37.88	44.51	58.78	68.2	-9.42	PK
V	11570.031	43.08	8.47	37.88	44.51	44.92	54	-9.08	AV
V	17355.121	58.58	10.12	38.80	44.10	63.40	68.2	-4.80	PK
V	17355.121	39.13	10.12	38.80	42.70	45.35	54	-8.65	AV
H	4592.110	59.25	6.48	36.37	44.05	58.05	74	-15.95	PK
H	4592.110	43.42	6.48	36.37	44.05	42.22	54	-11.78	AV
H	11570.142	53.31	8.47	38.64	44.50	55.92	68.2	-12.28	PK
H	11570.142	44.48	8.47	38.64	44.50	47.09	54	-6.91	AV
H	17355.085	54.27	10.12	38.38	44.10	58.67	68.2	-9.53	PK
H	17355.085	43.95	10.12	38.38	44.10	48.35	54	-5.65	AV
High Channel (5825 MHz)-Above 1G									
V	6039.142	59.46	7.10	37.24	43.50	60.30	68.2	-7.90	PK
V	6039.142	43.86	7.10	37.24	43.50	44.70	54	-9.30	AV
V	11650.180	61.90	8.46	37.68	44.50	63.54	74	-10.46	PK
V	11650.180	43.45	8.46	37.68	44.50	45.09	54	-8.91	AV
V	17475.167	55.31	10.12	38.80	44.10	60.13	68.2	-8.07	PK
V	17475.167	43.56	10.12	38.80	42.70	49.78	54	-4.22	AV
H	6039.137	58.25	7.10	37.24	43.50	59.09	68.2	-9.11	PK
H	6039.137	43.30	7.10	37.24	43.50	44.14	54	-9.86	AV
H	11650.025	50.63	8.46	38.57	44.50	53.16	74	-20.84	PK
H	11650.025	42.15	8.46	38.57	44.50	44.68	54	-9.32	AV
H	17475.004	52.29	10.12	38.38	44.10	56.69	68.2	-11.51	PK
H	17475.004	42.20	10.12	38.38	44.10	46.60	54	-7.40	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.
The Worst mode is Antenna A.

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	4679.070	57.64	5.94	35.40	44.00	54.98	74	-19.02	PK
V	4679.070	43.41	5.94	35.40	44.00	40.75	54	-13.25	AV
V	11490.092	56.18	8.46	39.75	44.50	59.89	68.2	-8.31	PK
V	11490.092	43.07	8.46	39.75	44.50	46.78	54	-7.22	AV
V	17235.159	57.51	10.12	38.80	44.10	62.33	68.2	-5.87	PK
V	17235.159	43.24	10.12	38.80	42.70	49.46	54	-4.54	AV
H	4679.199	57.79	5.94	35.18	44.00	54.91	74	-19.09	PK
H	4679.199	43.29	5.94	35.18	44.00	40.41	54	-13.59	AV
H	11490.200	48.44	8.46	38.71	44.50	51.11	68.2	-17.09	PK
H	11490.200	40.14	8.46	38.71	44.50	42.81	54	-11.19	AV
H	17235.085	50.84	10.12	38.38	44.10	55.24	68.2	-12.96	PK
H	17235.085	42.36	10.12	38.38	44.10	46.76	54	-7.24	AV
middle Channel (5785 MHz)-Above 1G									
V	4592.048	61.70	6.48	36.35	44.05	60.48	74	-13.52	PK
V	4592.048	43.67	6.48	36.35	44.05	42.45	54	-11.55	AV
V	11570.149	58.80	8.47	37.88	44.51	60.64	68.2	-7.56	PK
V	11570.149	43.24	8.47	37.88	44.51	45.08	54	-8.92	AV
V	17355.008	61.28	10.12	38.80	44.10	66.10	68.2	-2.10	PK
V	17355.008	43.25	10.12	38.80	42.70	49.47	54	-4.53	AV
H	4592.142	58.52	6.48	36.37	44.05	57.32	74	-16.68	PK
H	4592.142	43.70	6.48	36.37	44.05	42.50	54	-11.50	AV
H	11570.083	50.35	8.47	38.64	44.50	52.96	68.2	-15.24	PK
H	11570.083	41.55	8.47	38.64	44.50	44.16	54	-9.84	AV
H	17355.044	51.18	10.12	38.38	44.10	55.58	68.2	-12.62	PK
H	17355.044	42.61	10.12	38.38	44.10	47.01	54	-6.99	AV
High Channel (5825 MHz)-Above 1G									
V	6039.095	58.55	7.10	37.24	43.50	59.39	68.2	-8.81	PK
V	6039.095	43.70	7.10	37.24	43.50	44.54	54	-9.46	AV
V	11650.200	59.68	8.46	37.68	44.50	61.32	74	-12.68	PK
V	11650.200	43.15	8.46	37.68	44.50	44.79	54	-9.21	AV
V	17475.051	57.10	10.12	38.80	44.10	61.92	68.2	-6.28	PK
V	17475.051	43.44	10.12	38.80	42.70	49.66	54	-4.34	AV
H	6039.058	57.30	7.10	37.24	43.50	58.14	68.2	-10.06	PK
H	6039.058	43.75	7.10	37.24	43.50	44.59	54	-9.41	AV
H	11650.136	52.77	8.46	38.57	44.50	55.30	74	-18.70	PK
H	11650.136	44.33	8.46	38.57	44.50	46.86	54	-7.14	AV
H	17475.039	51.39	10.12	38.38	44.10	55.79	68.2	-12.41	PK
H	17475.039	40.90	10.12	38.38	44.10	45.30	54	-8.70	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	4679.194	58.98	5.94	35.40	44.00	56.32	74	-17.68	PK
V	4679.194	43.44	5.94	35.40	44.00	40.78	54	-13.22	AV
V	11510.144	55.84	8.46	39.75	44.50	59.55	74	-14.45	PK
V	11510.144	43.17	8.46	39.75	44.50	46.88	54	-7.12	AV
V	17265.196	57.02	10.12	38.80	44.10	61.84	68.2	-6.36	PK
V	17265.196	2.00	10.12	38.80	42.70	8.22	54	-45.78	AV
H	4679.022	56.47	5.94	35.18	44.00	53.59	74	-20.41	PK
H	4679.022	43.21	5.94	35.18	44.00	40.33	54	-13.67	AV
H	11510.168	51.19	8.46	38.71	44.50	53.86	74	-20.14	PK
H	11510.168	44.05	8.46	38.71	44.50	46.72	54	-7.28	AV
H	17265.128	50.11	10.12	38.38	44.10	54.51	68.2	-13.69	PK
H	17265.128	43.54	10.12	38.38	44.10	47.94	54	-6.06	AV
middle Channel (5795 MHz)-Above 1G									
V	6039.158	58.66	6.48	36.35	44.05	57.44	68.2	-10.76	PK
V	6039.158	43.45	6.48	36.35	44.05	42.23	54	-11.77	AV
V	11590.159	59.31	8.47	37.88	44.51	61.15	74	-12.85	PK
V	11590.159	43.49	8.47	37.88	44.51	45.33	54	-8.67	AV
V	17385.038	55.63	10.12	38.80	44.10	60.45	68.2	-7.75	PK
V	17385.038	41.49	10.12	38.80	42.70	47.71	54	-6.29	AV
H	6039.184	56.72	6.48	36.37	44.05	55.52	68.2	-12.68	PK
H	6039.184	43.52	6.48	36.37	44.05	42.32	54	-11.68	AV
H	11590.030	52.85	8.47	38.64	44.50	55.46	74	-18.54	PK
H	11590.030	41.30	8.47	38.64	44.50	43.91	54	-10.09	AV
H	17385.108	54.41	10.12	38.38	44.10	58.81	68.2	-9.39	PK
H	17385.108	41.90	10.12	38.38	44.10	46.30	54	-7.70	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	4679.100	58.83	5.94	35.40	44.00	56.17	74	-17.83	PK
V	4679.100	43.50	5.94	35.40	44.00	40.84	54	-13.16	AV
V	11490.070	54.11	8.46	39.75	44.50	57.82	68.2	-10.38	PK
V	11490.070	43.70	8.46	39.75	44.50	47.41	54	-6.59	AV
V	17235.187	57.56	10.12	38.80	44.10	62.38	68.2	-5.82	PK
V	17235.187	43.73	10.12	38.80	42.70	49.95	54	-4.05	AV
H	4679.076	56.74	5.94	35.18	44.00	53.86	74	-20.14	PK
H	4679.076	43.68	5.94	35.18	44.00	40.80	54	-13.20	AV
H	11490.066	48.47	8.46	38.71	44.50	51.14	68.2	-17.06	PK
H	11490.066	43.49	8.46	38.71	44.50	46.16	54	-7.84	AV
H	17235.128	53.06	10.12	38.38	44.10	57.46	68.2	-10.74	PK
H	17235.128	43.78	10.12	38.38	44.10	48.18	54	-5.82	AV
middle Channel (5785 MHz)-Above 1G									
V	4592.148	61.08	6.48	36.35	44.05	59.86	74	-14.14	PK
V	4592.148	43.50	6.48	36.35	44.05	42.28	54	-11.72	AV
V	11570.041	55.37	8.47	37.88	44.51	57.21	68.2	-10.99	PK
V	11570.041	43.48	8.47	37.88	44.51	45.32	54	-8.68	AV
V	17355.040	59.29	10.12	38.80	44.10	64.11	68.2	-4.09	PK
V	17355.040	43.31	10.12	38.80	42.70	49.53	54	-4.47	AV
H	4592.072	57.06	6.48	36.37	44.05	55.86	74	-18.14	PK
H	4592.072	43.41	6.48	36.37	44.05	42.21	54	-11.79	AV
H	11570.068	54.73	8.47	38.64	44.50	57.34	68.2	-10.86	PK
H	11570.068	41.55	8.47	38.64	44.50	44.16	54	-9.84	AV
H	17355.060	52.85	10.12	38.38	44.10	57.25	68.2	-10.95	PK
H	17355.060	41.66	10.12	38.38	44.10	46.06	54	-7.94	AV
High Channel (5825 MHz)-Above 1G									
V	6039.080	56.35	7.10	37.24	43.50	57.19	68.2	-11.01	PK
V	6039.080	43.99	7.10	37.24	43.50	44.83	54	-9.17	AV
V	11650.026	59.25	8.46	37.68	44.50	60.89	74	-13.11	PK
V	11650.026	43.17	8.46	37.68	44.50	44.81	54	-9.19	AV
V	17475.168	57.34	10.12	38.80	44.10	62.16	68.2	-6.04	PK
V	17475.168	43.84	10.12	38.80	42.70	50.06	54	-3.94	AV
H	6039.099	59.89	7.10	37.24	43.50	60.73	68.2	-7.47	PK
H	6039.099	43.71	7.10	37.24	43.50	44.55	54	-9.45	AV
H	11650.071	53.17	8.46	38.57	44.50	55.70	74	-18.30	PK
H	11650.071	44.81	8.46	38.57	44.50	47.34	54	-6.66	AV
H	17475.189	54.23	10.12	38.38	44.10	58.63	68.2	-9.57	PK
H	17475.189	43.46	10.12	38.38	44.10	47.86	54	-6.14	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	4679.075	59.50	5.94	35.40	44.00	56.84	74	-17.16	PK
V	4679.075	43.37	5.94	35.40	44.00	40.71	54	-13.29	AV
V	11510.197	55.47	8.46	39.75	44.50	59.18	74	-14.82	PK
V	11510.197	43.99	8.46	39.75	44.50	47.70	54	-6.30	AV
V	17265.131	58.54	10.12	38.80	44.10	63.36	68.2	-4.84	PK
V	17265.131	2.00	10.12	38.80	42.70	8.22	54	-45.78	AV
H	4679.179	58.43	5.94	35.18	44.00	55.55	74	-18.45	PK
H	4679.179	43.61	5.94	35.18	44.00	40.73	54	-13.27	AV
H	11510.181	53.54	8.46	38.71	44.50	56.21	74	-17.79	PK
H	11510.181	40.80	8.46	38.71	44.50	43.47	54	-10.53	AV
H	17265.098	54.41	10.12	38.38	44.10	58.81	68.2	-9.39	PK
H	17265.098	42.94	10.12	38.38	44.10	47.34	54	-6.66	AV
middle Channel (5795 MHz)-Above 1G									
V	6039.018	60.11	6.48	36.35	44.05	58.89	68.2	-9.31	PK
V	6039.018	43.35	6.48	36.35	44.05	42.13	54	-11.87	AV
V	11590.186	57.46	8.47	37.88	44.51	59.30	74	-14.70	PK
V	11590.186	43.65	8.47	37.88	44.51	45.49	54	-8.51	AV
V	17385.062	55.75	10.12	38.80	44.10	60.57	68.2	-7.63	PK
V	17385.062	41.62	10.12	38.80	42.70	47.84	54	-6.16	AV
H	6039.060	59.10	6.48	36.37	44.05	57.90	68.2	-10.30	PK
H	6039.060	43.11	6.48	36.37	44.05	41.91	54	-12.09	AV
H	11590.024	52.10	8.47	38.64	44.50	54.71	74	-19.29	PK
H	11590.024	44.89	8.47	38.64	44.50	47.50	54	-6.50	AV
H	17385.156	51.31	10.12	38.38	44.10	55.71	68.2	-12.49	PK
H	17385.156	41.80	10.12	38.38	44.10	46.20	54	-7.80	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.

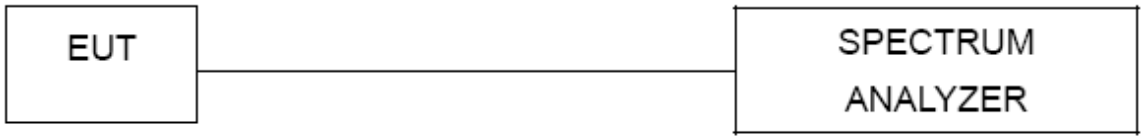
Test Mode :	TX (5.8G) -- 802.11ac 80

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	4679.030	56.09	5.94	35.40	44.00	53.43	74	-20.57	PK
V	4679.030	43.65	5.94	35.40	44.00	40.99	54	-13.01	AV
V	11550.046	56.04	8.46	39.75	44.50	59.75	74	-14.25	PK
V	11550.046	42.65	8.46	39.75	44.50	46.36	54	-7.64	AV
V	17325.024	60.45	10.12	38.80	44.10	65.27	68.2	-2.93	PK
V	17325.024	41.84	10.12	38.80	42.70	48.06	54	-5.94	AV
H	4679.108	56.20	5.94	35.18	44.00	53.32	74	-20.68	PK
H	4679.108	43.03	5.94	35.18	44.00	40.15	54	-13.85	AV
H	11550.051	52.57	8.46	38.71	44.50	55.24	74	-18.76	PK
H	11550.051	41.08	8.46	38.71	44.50	43.75	54	-10.25	AV
H	17325.065	51.56	10.12	38.38	44.10	55.96	68.2	-12.24	PK
H	17325.065	42.27	10.12	38.38	44.10	46.67	54	-7.33	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 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.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

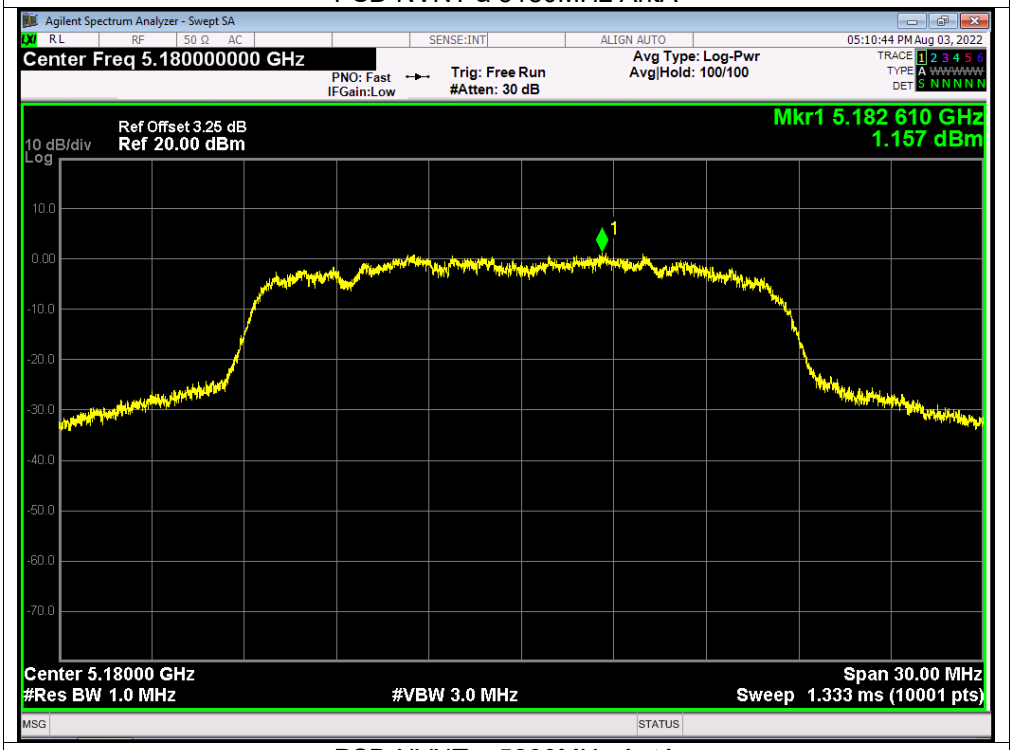
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX Frequency U-NII-1 (5180-5240MHz)		

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

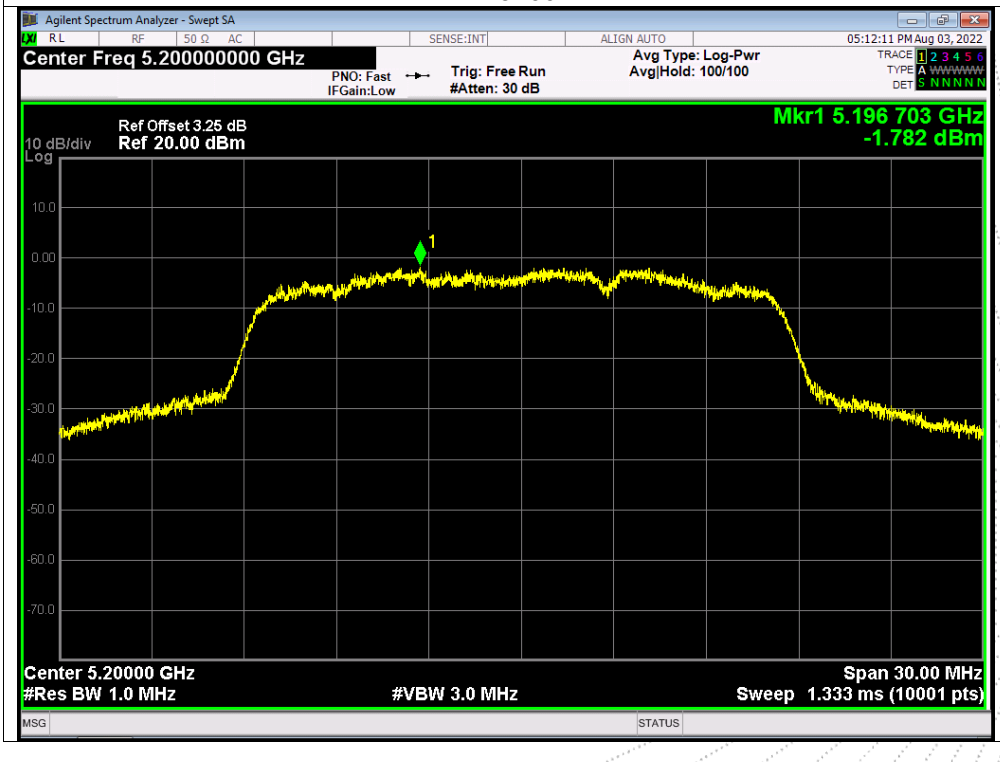
Mode	Frequency	Measured Power Density (dBm/MHz)			Limit (dBm/MHz)	Result
		ANT A	ANT B	Total		
802.11 a	5180 MHz	**1.16**	-0.36	/	11	PASS
	5200 MHz	-1.78	-0.56	/	11	PASS
	5240 MHz	-0.25	-0.48	/	11	PASS
802.11 n20	5180 MHz	-1.94	-1.2	1.46	11	PASS
	5200 MHz	-0.68	-2.79	1.40	11	PASS
	5240 MHz	-3.01	-2.81	0.10	11	PASS
802.11 n40	5190 MHz	-4.67	-6.26	-2.38	11	PASS
	5230 MHz	-7.17	-6.42	-3.77	11	PASS
802.11 ac20	5180 MHz	-0.41	-1.34	2.16	11	PASS
	5200 MHz	-1.75	-2.29	1.00	11	PASS
	5240 MHz	-1.08	-4.01	0.71	11	PASS
802.11 ac40	5190 MHz	-6.42	-7.37	-3.86	11	PASS
	5230 MHz	-6.81	-6.82	-3.80	11	PASS
802.11 AC80	5210 MHz	-8.65	-13.19	-7.34	11	PASS

Test Graphs

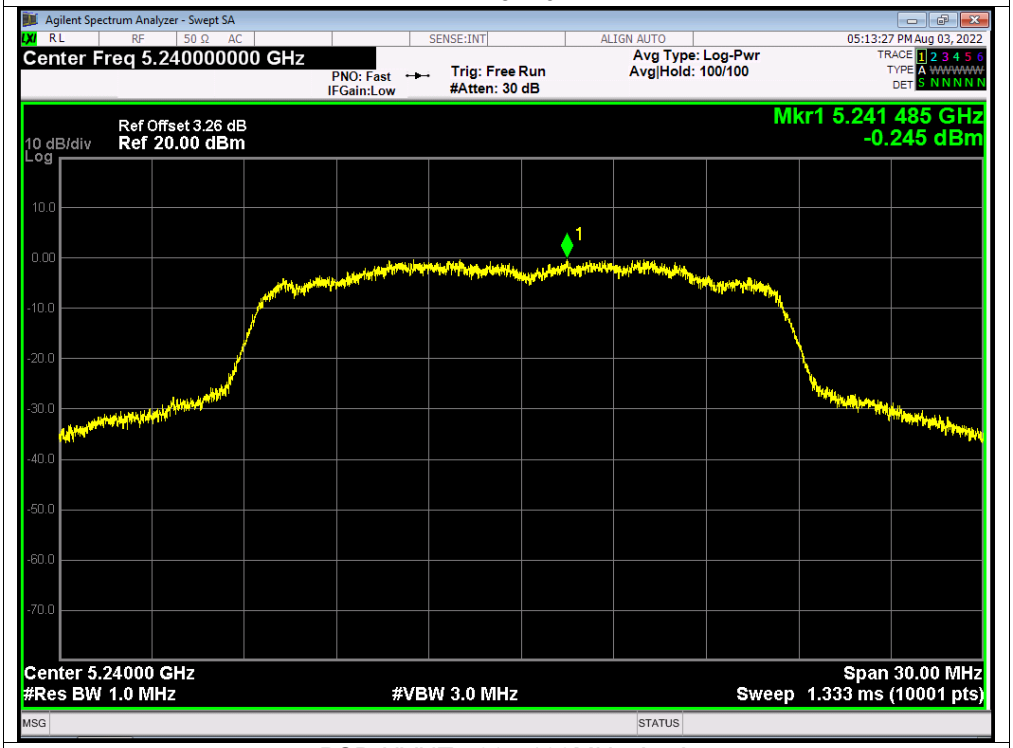
PSD NVNT a 5180MHz AntA



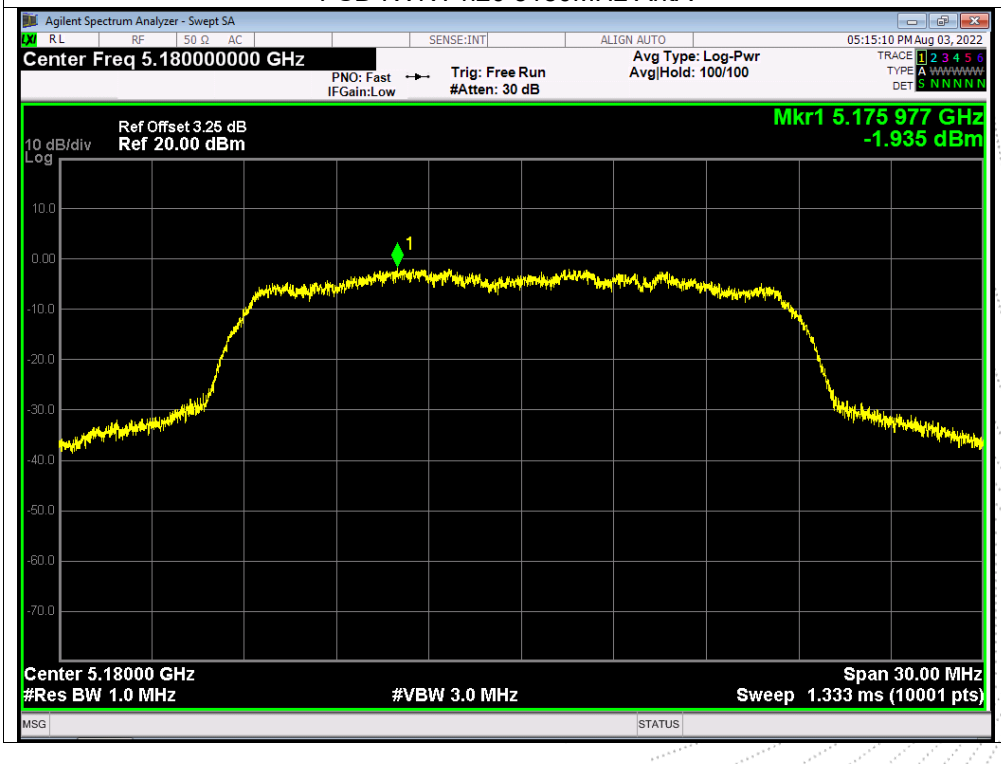
PSD NVNT a 5200MHz AntA



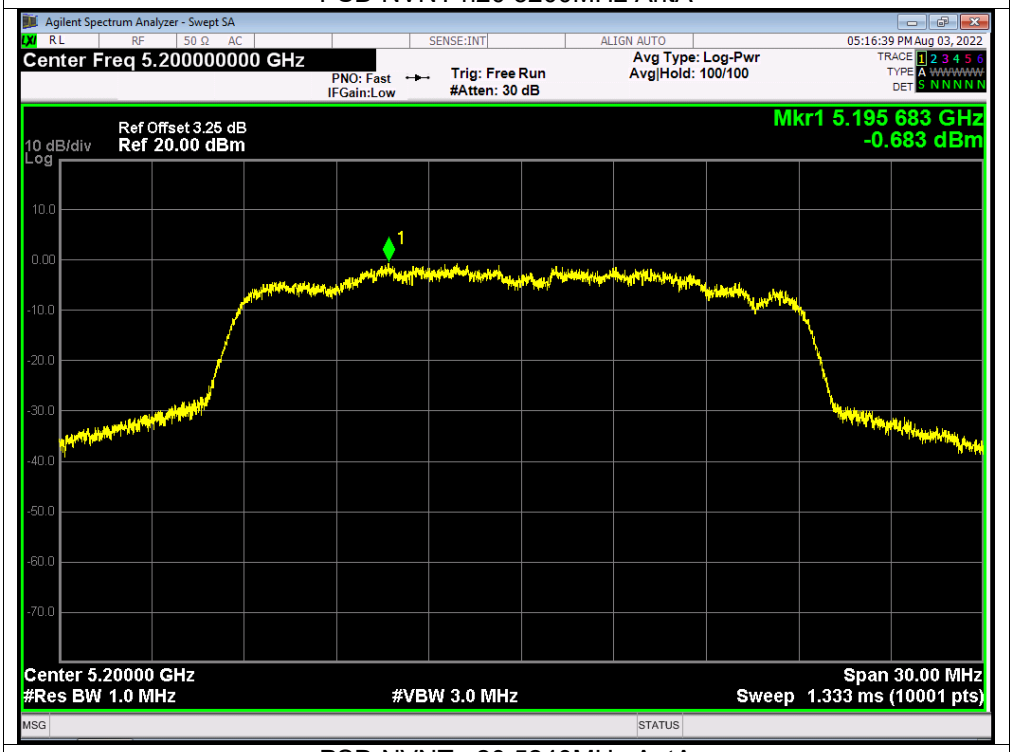
PSD NVNT a 5240MHz AntA



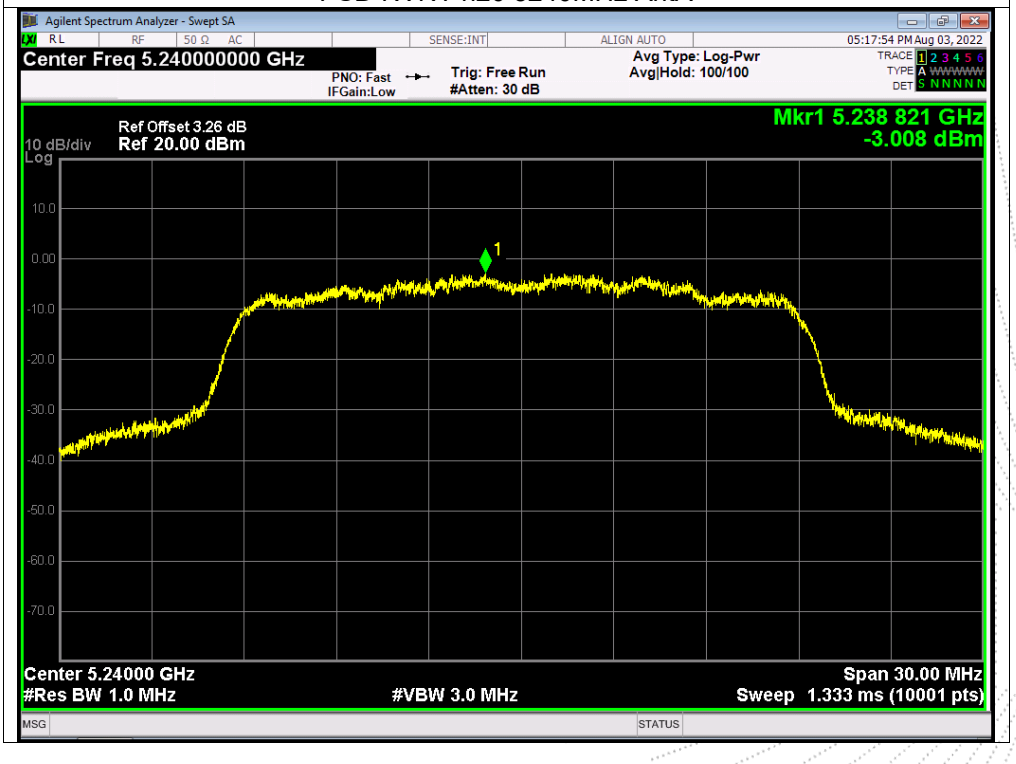
PSD NVNT n20 5180MHz AntA



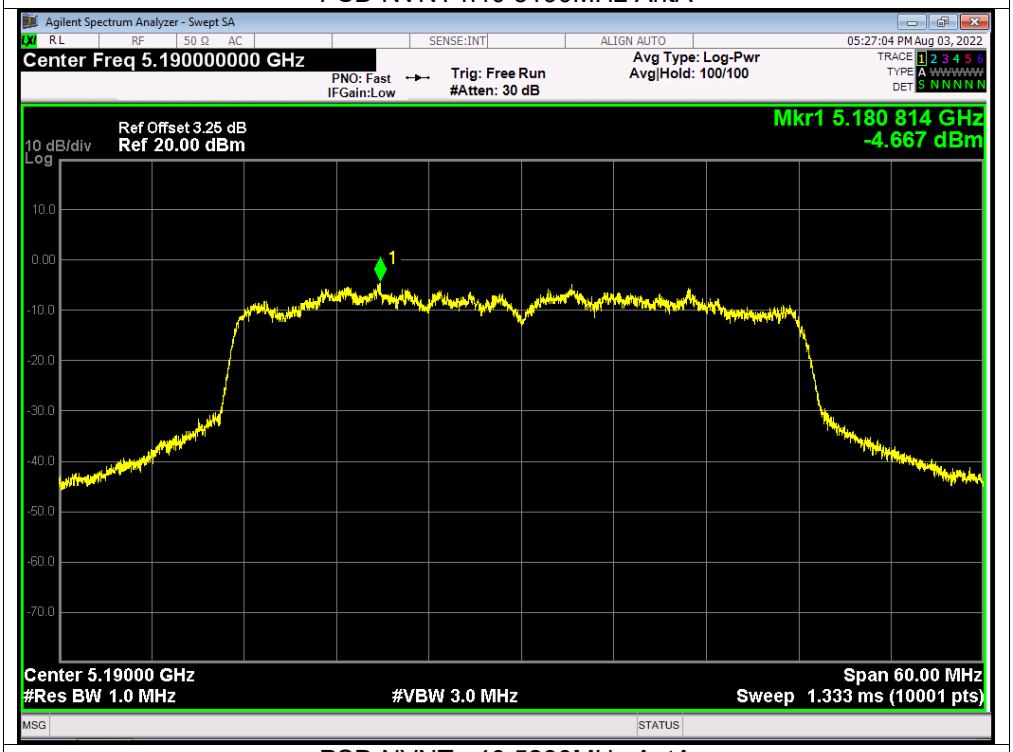
PSD NVNT n20 5200MHz AntA



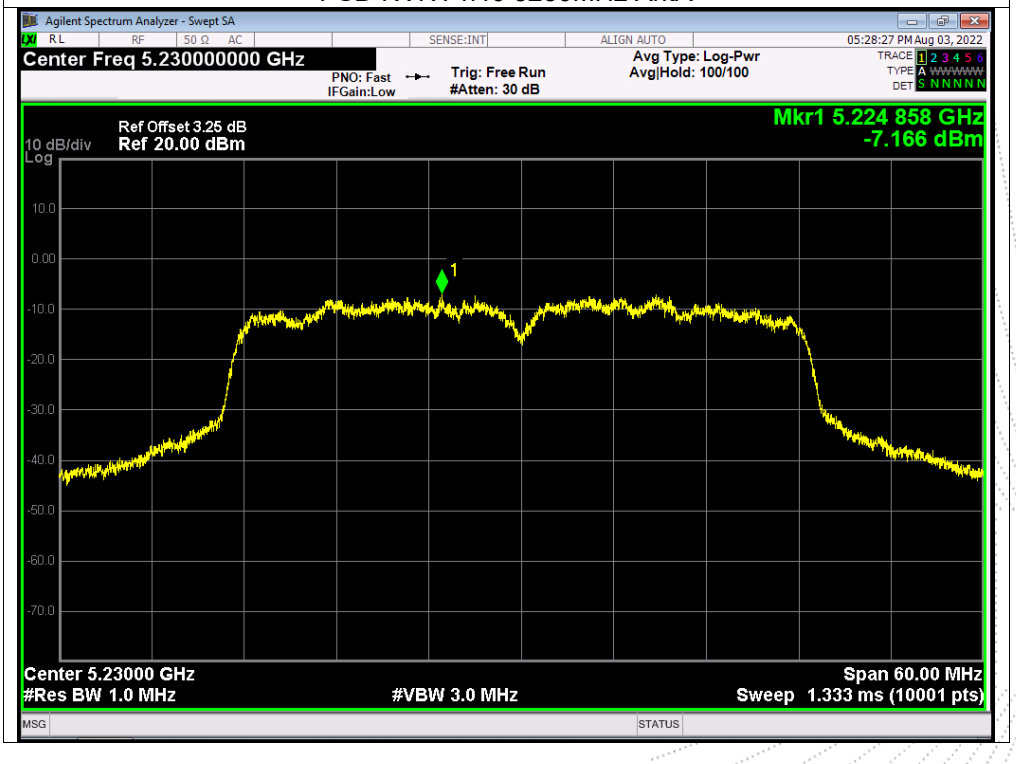
PSD NVNT n20 5240MHz AntA



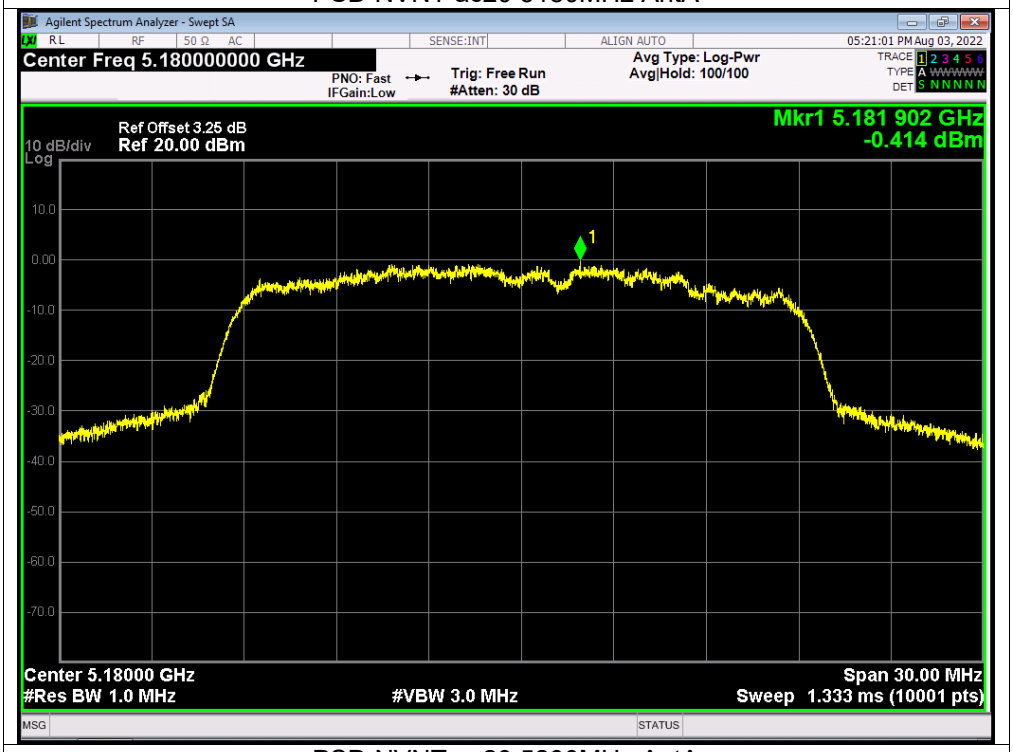
PSD NVNT n40 5190MHz AntA



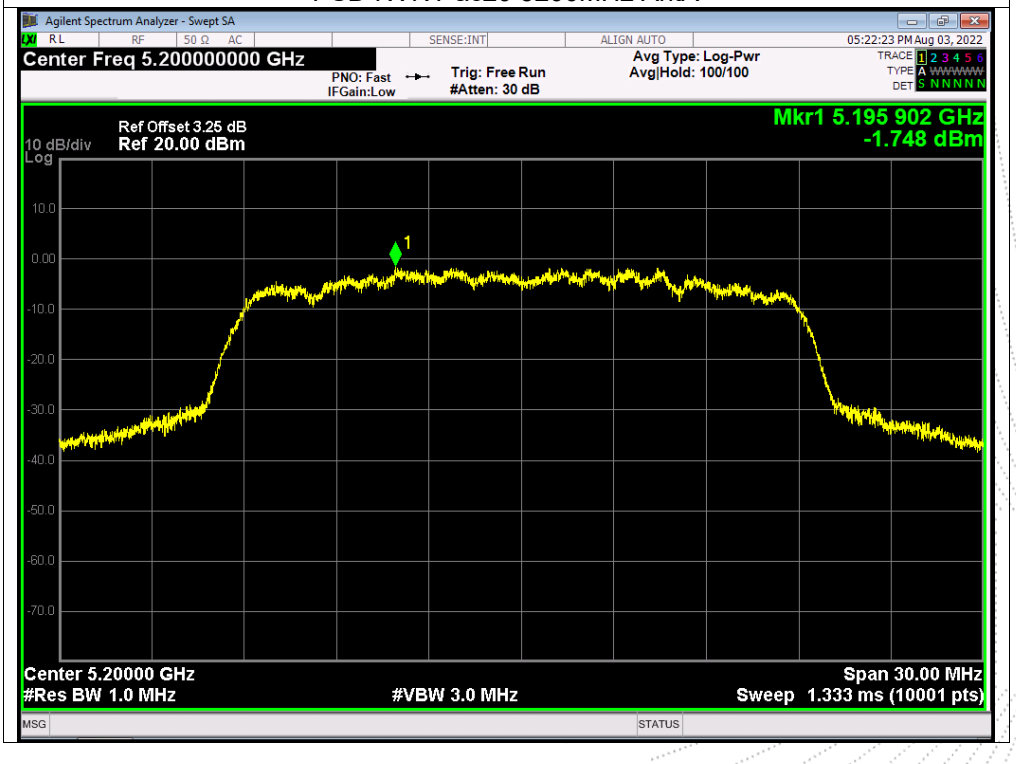
PSD NVNT n40 5230MHz AntA



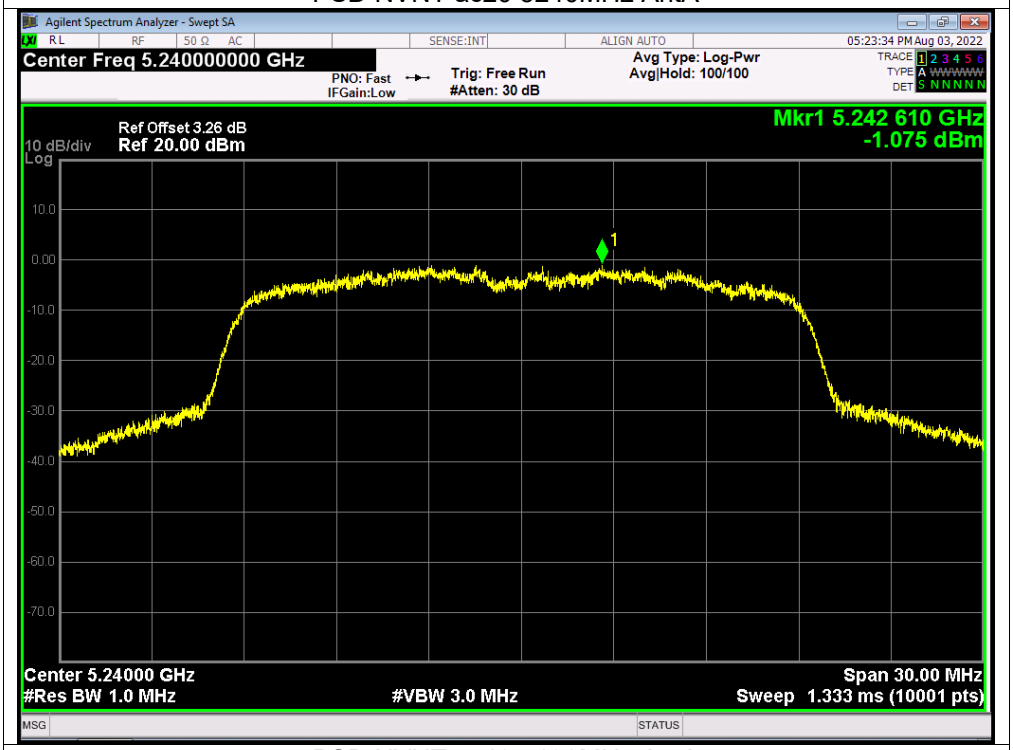
PSD NVNT ac20 5180MHz AntA



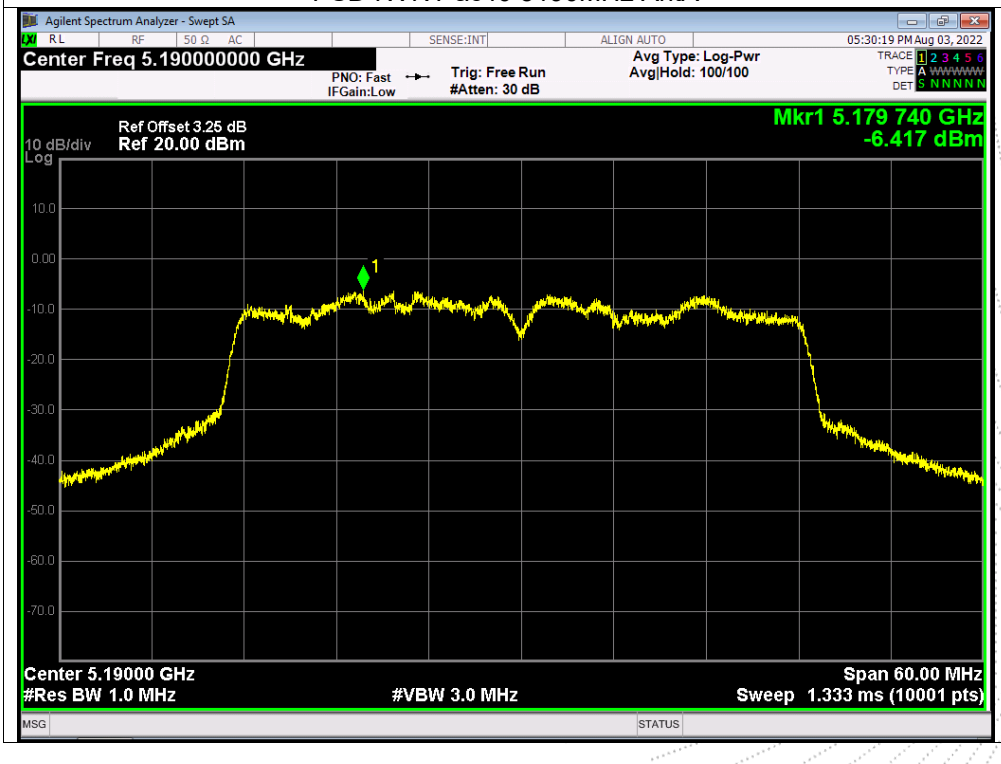
PSD NVNT ac20 5200MHz AntA



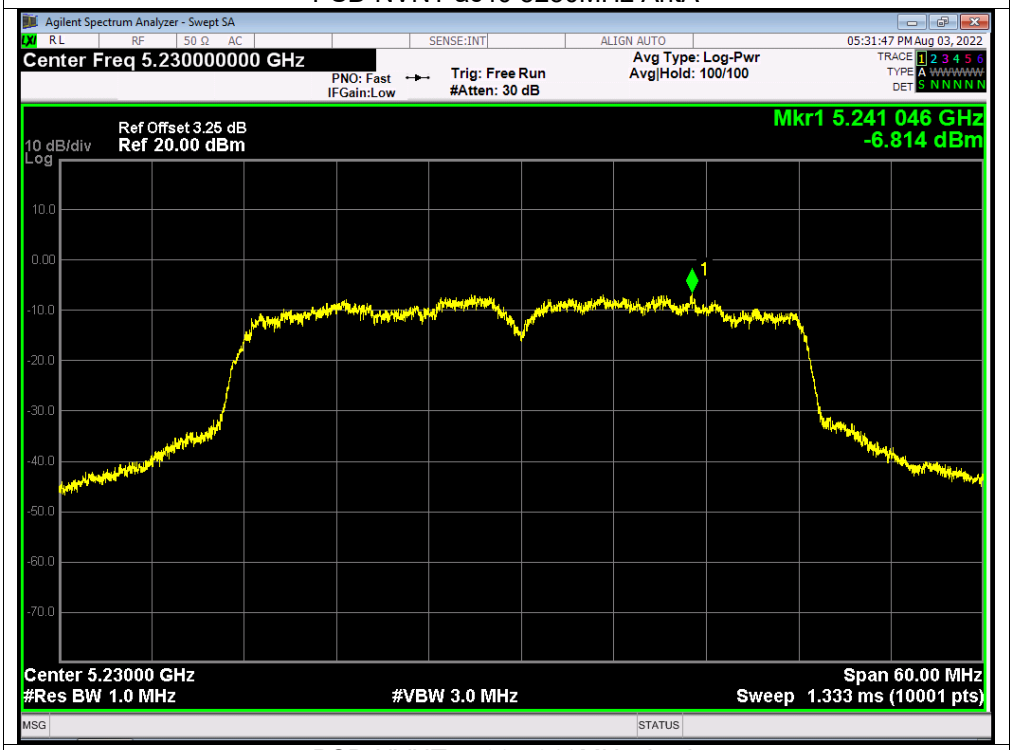
PSD NVNT ac20 5240MHz AntA



PSD NVNT ac40 5190MHz AntA



PSD NVNT ac40 5230MHz AntA



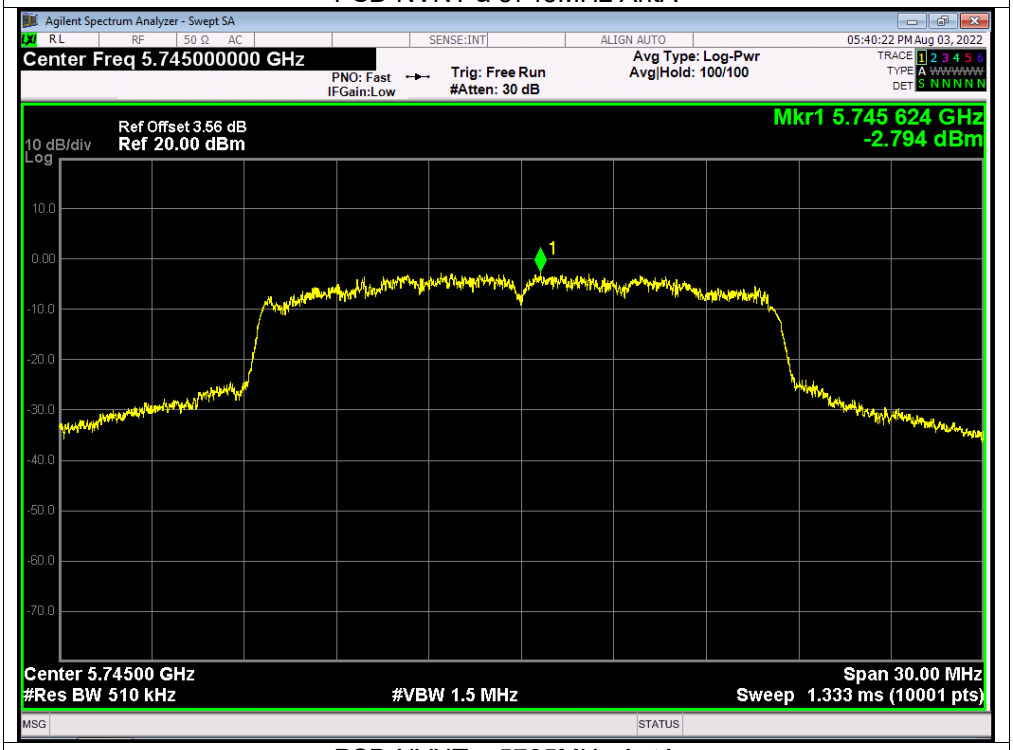
PSD NVNT ac80 5210MHz AntA

Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX Frequency U-NII-3 (5745-5825MHz)		

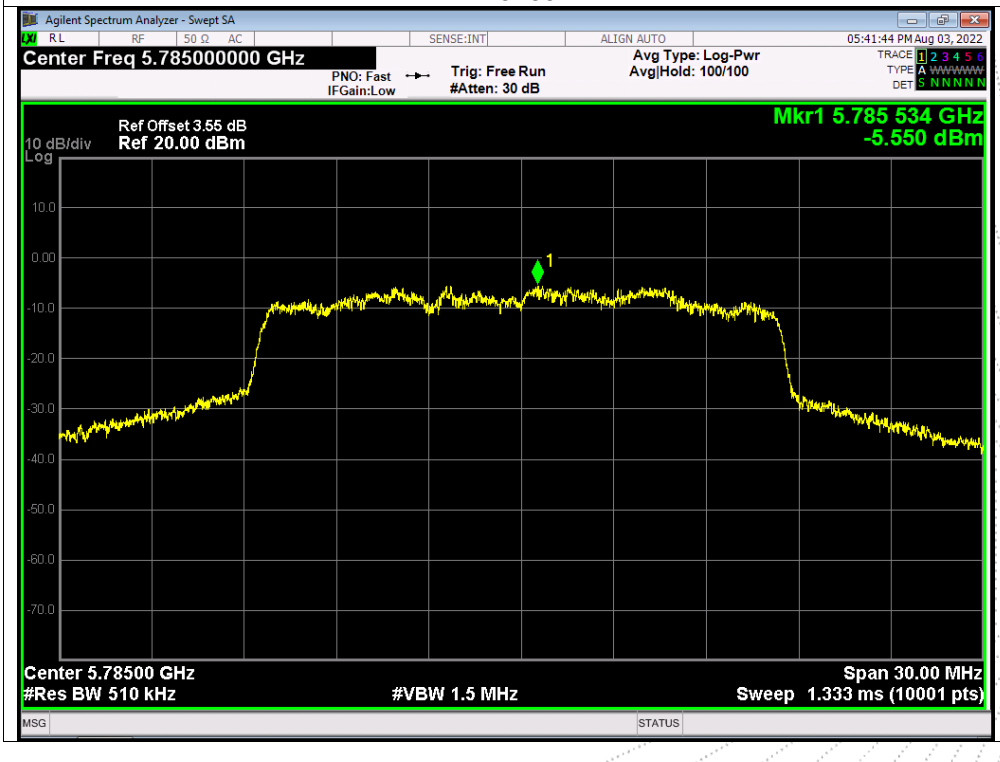
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

Mode	Frequency	Measured Power Density (dBm/500KHz)			Limit (dBm/500kHz)	Result
		ANT A	ANT B	Total		
802.11 a	5745 MHz	-2.79	-5.16	/	30	PASS
	5785 MHz	-5.55	-3.99	/	30	PASS
	5825 MHz	-5.9	-7.15	/	30	PASS
802.11 n20	5745 MHz	-4.86	-4.36	-1.59	30	PASS
	5785 MHz	-5.97	-4.84	-2.36	30	PASS
	5825 MHz	-4.84	-5.97	-2.36	30	PASS
802.11 n40	5755 MHz	-7.26	-9.49	-5.22	30	PASS
	5795 MHz	-9.88	-9.75	-6.80	30	PASS
802.11 ac20	5745 MHz	**-2.12**	-4.94	-0.29	30	PASS
	5785 MHz	-6.59	-5.25	-2.86	30	PASS
	5825 MHz	-6.84	-8.03	-4.38	30	PASS
802.11 ac40	5755 MHz	-7.51	-9.52	-5.39	30	PASS
	5795 MHz	-8.12	-10.72	-6.22	30	PASS
802.11 AC80	5775 MHz	-12.84	-14.17	-10.44	30	PASS

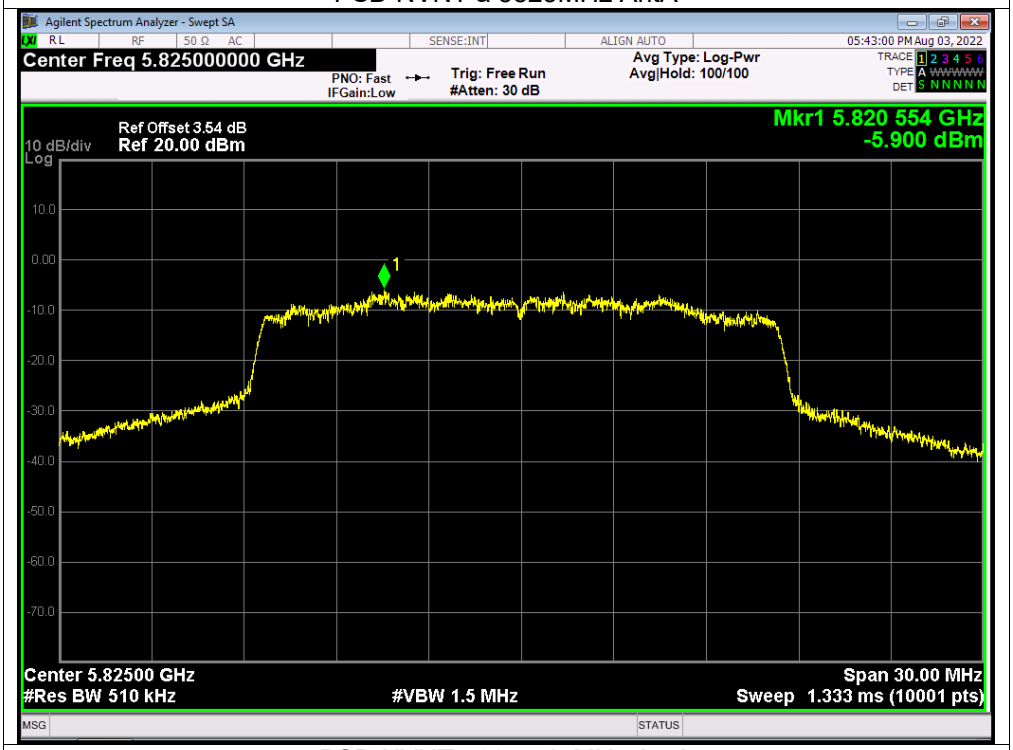
Test Graphs
PSD NVNT a 5745MHz AntA



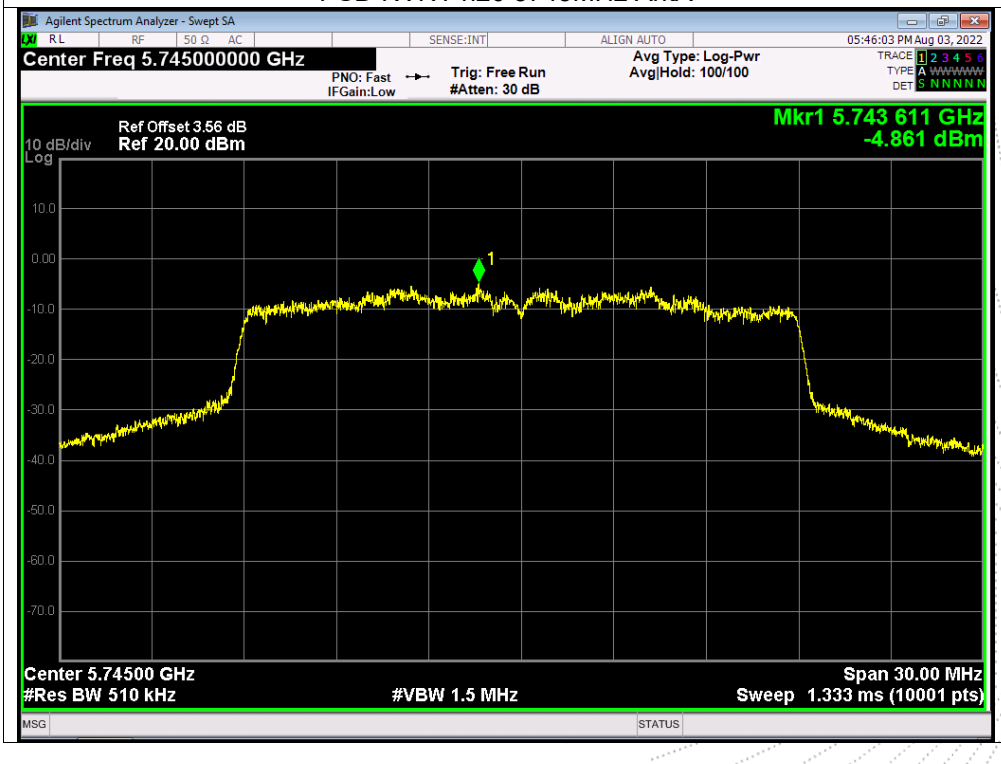
PSD NVNT a 5785MHz AntA



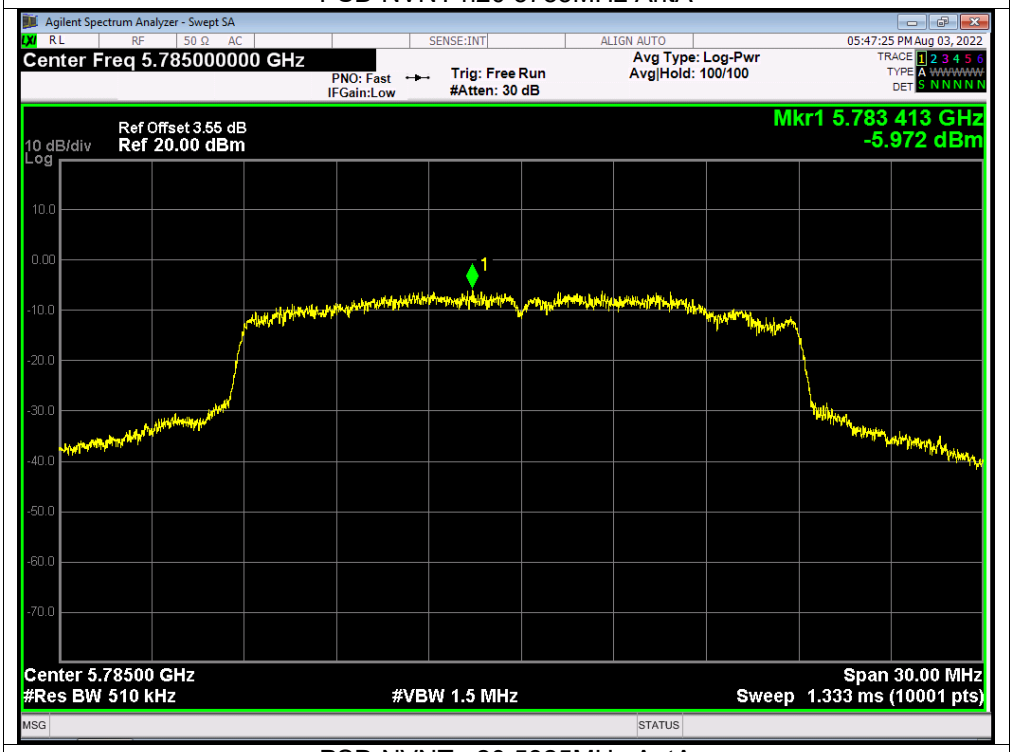
PSD NVNT a 5825MHz AntA



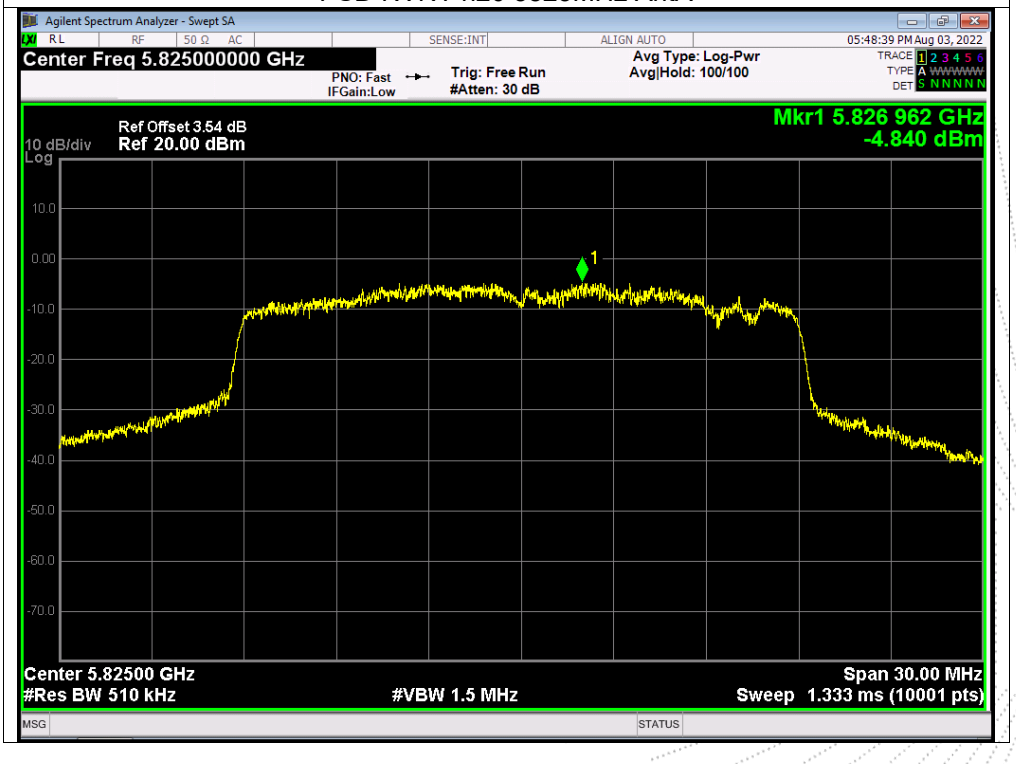
PSD NVNT n20 5745MHz AntA



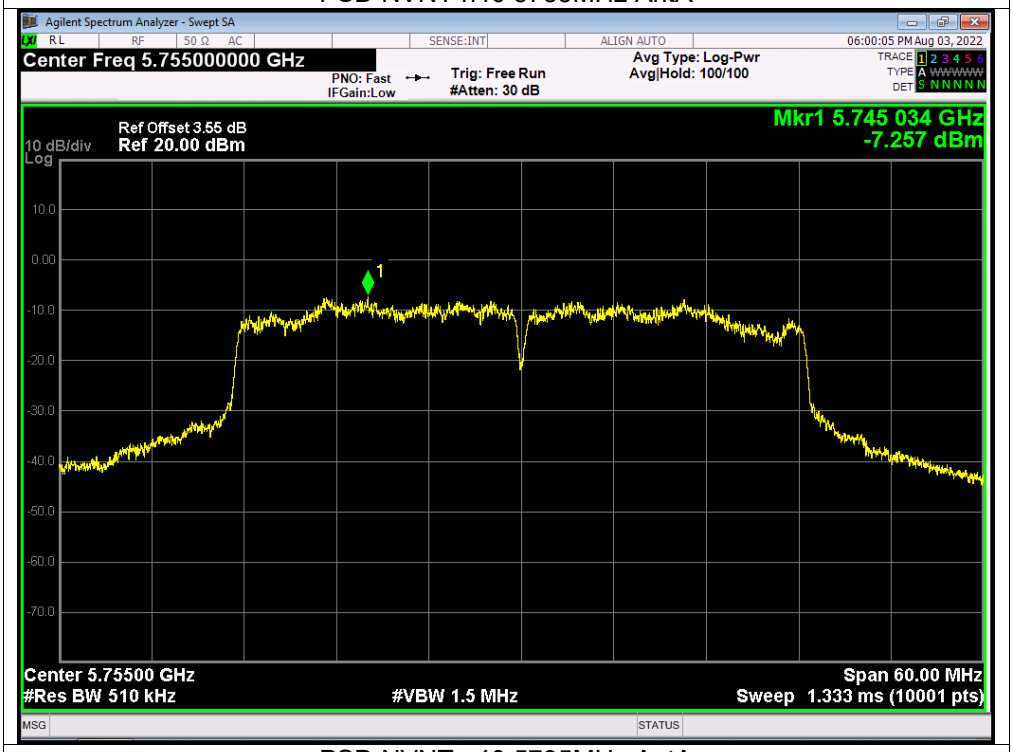
PSD NVNT n20 5785MHz AntA



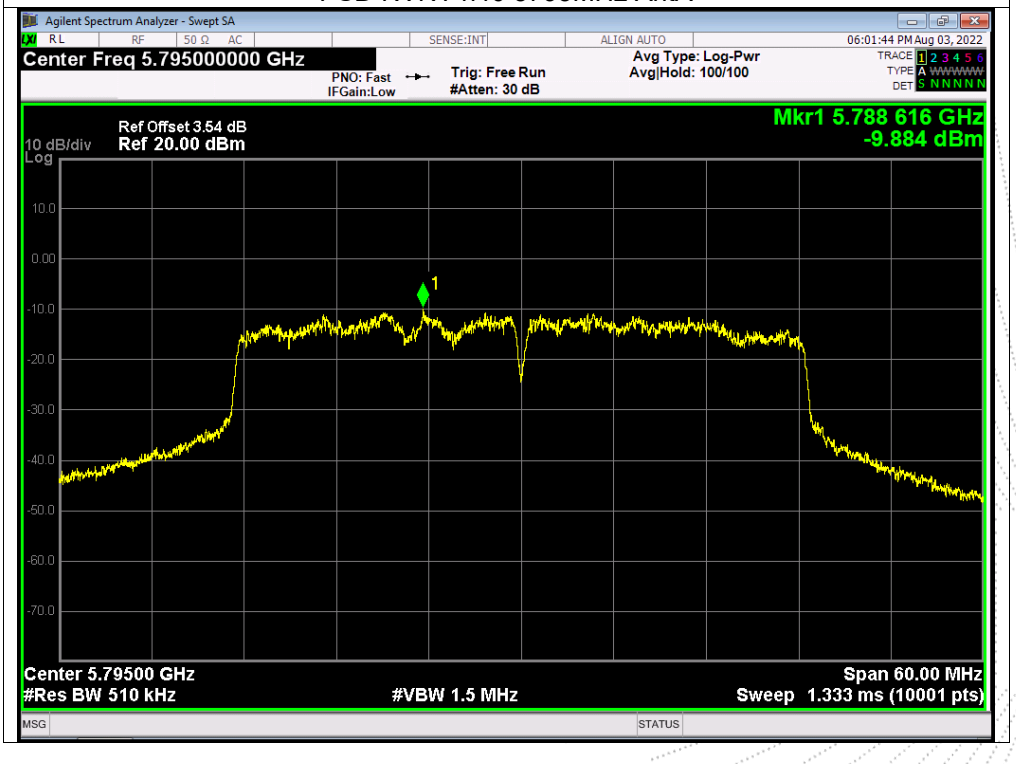
PSD NVNT n20 5825MHz AntA



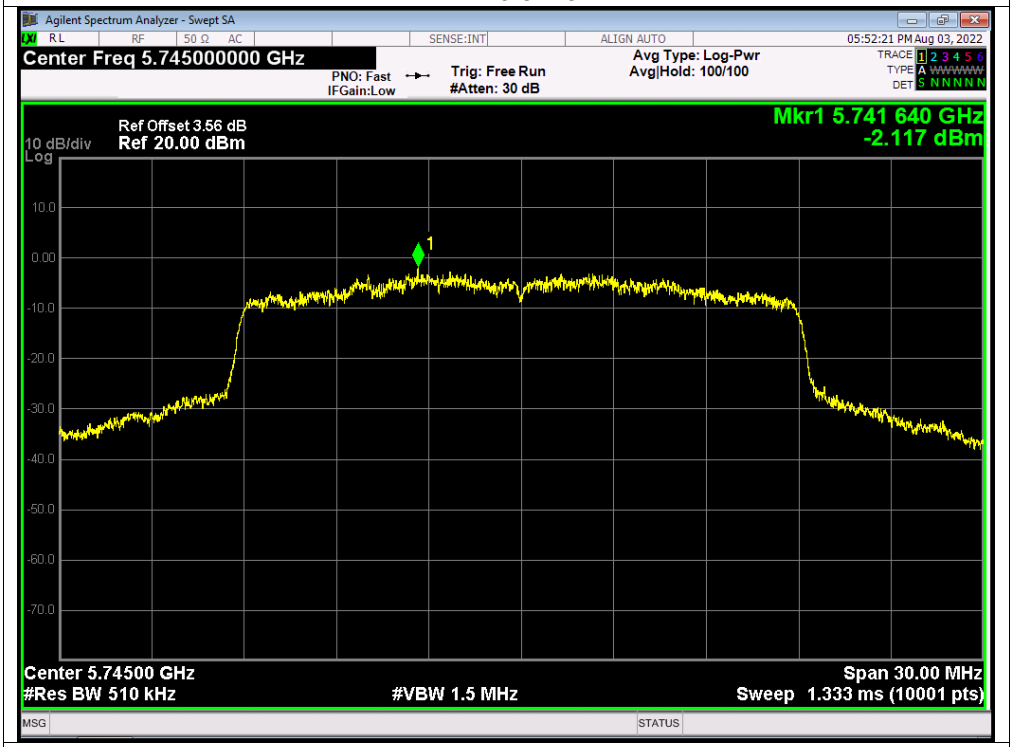
PSD NVNT n40 5755MHz AntA



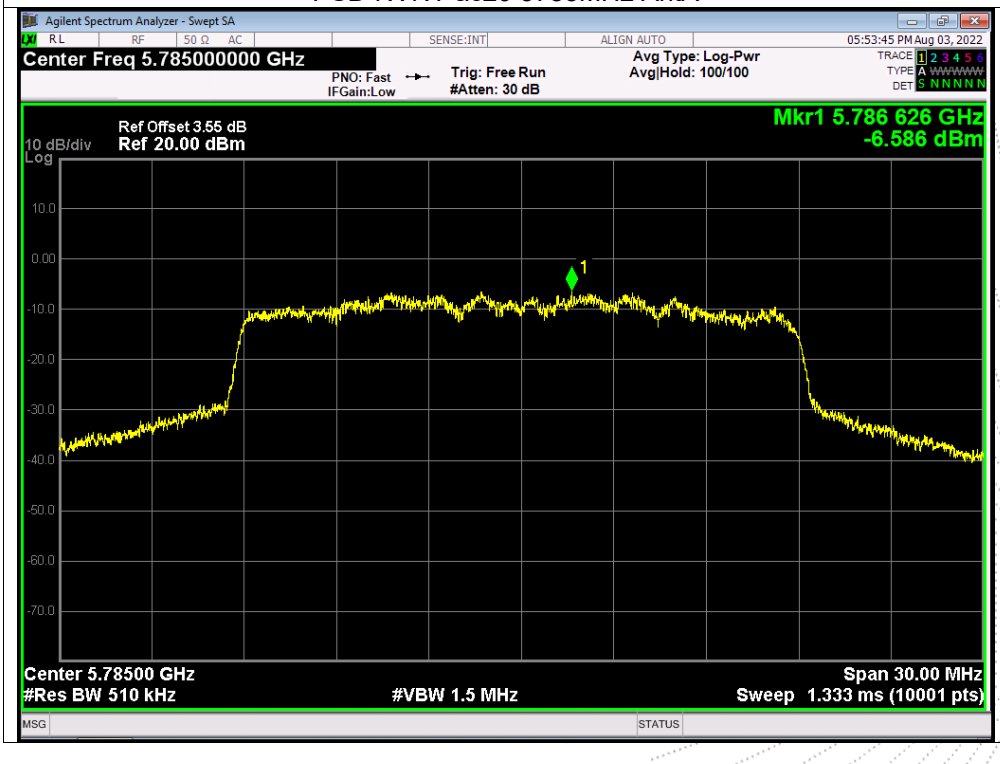
PSD NVNT n40 5795MHz AntA



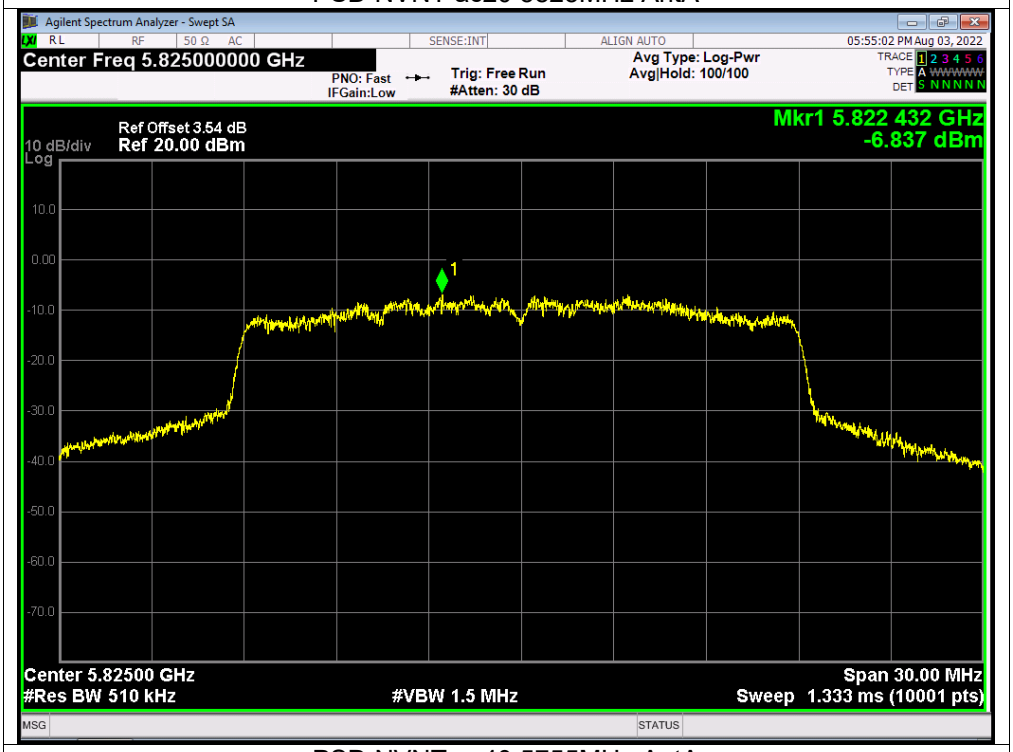
PSD NVNT ac20 5745MHz AntA



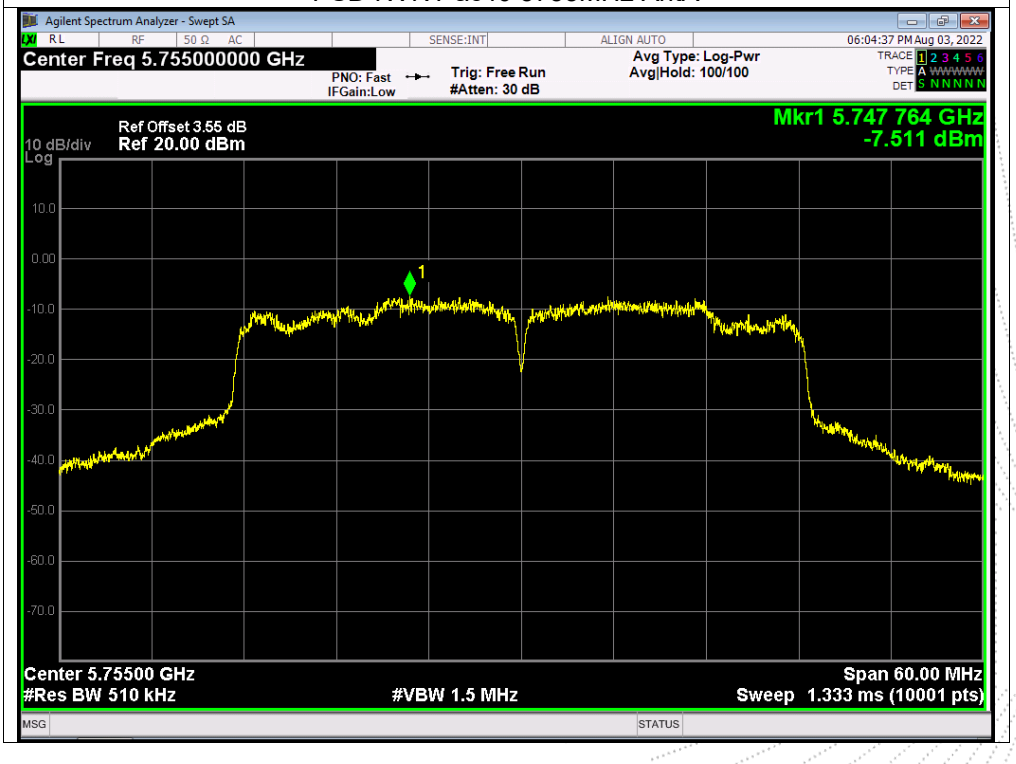
PSD NVNT ac20 5785MHz AntA



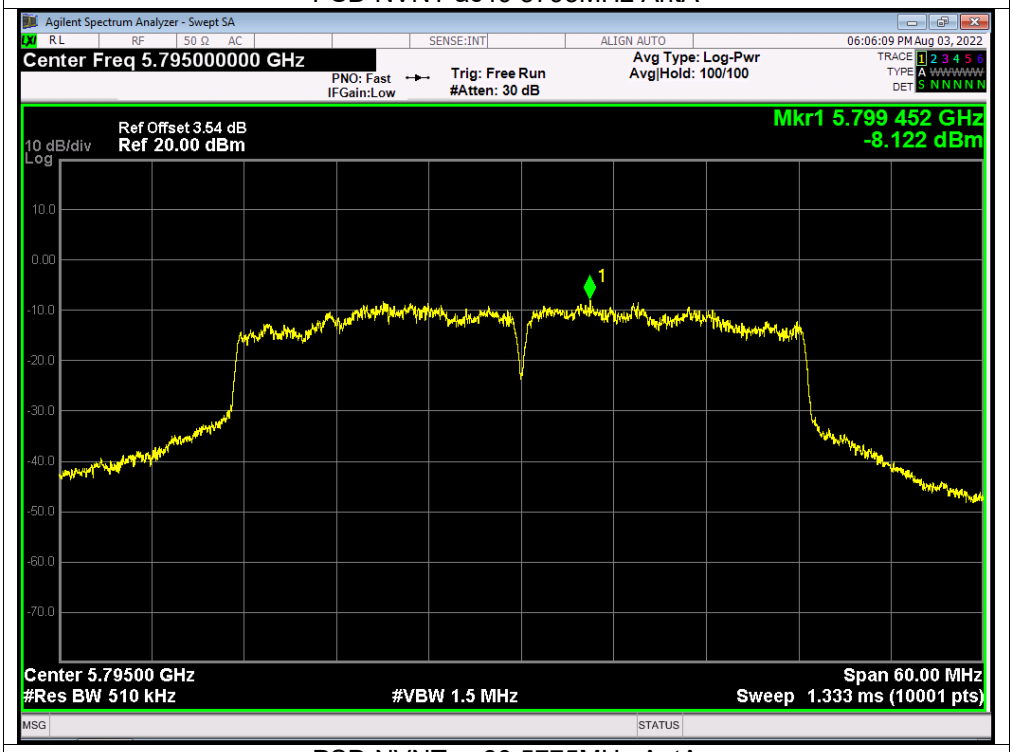
PSD NVNT ac20 5825MHz AntA



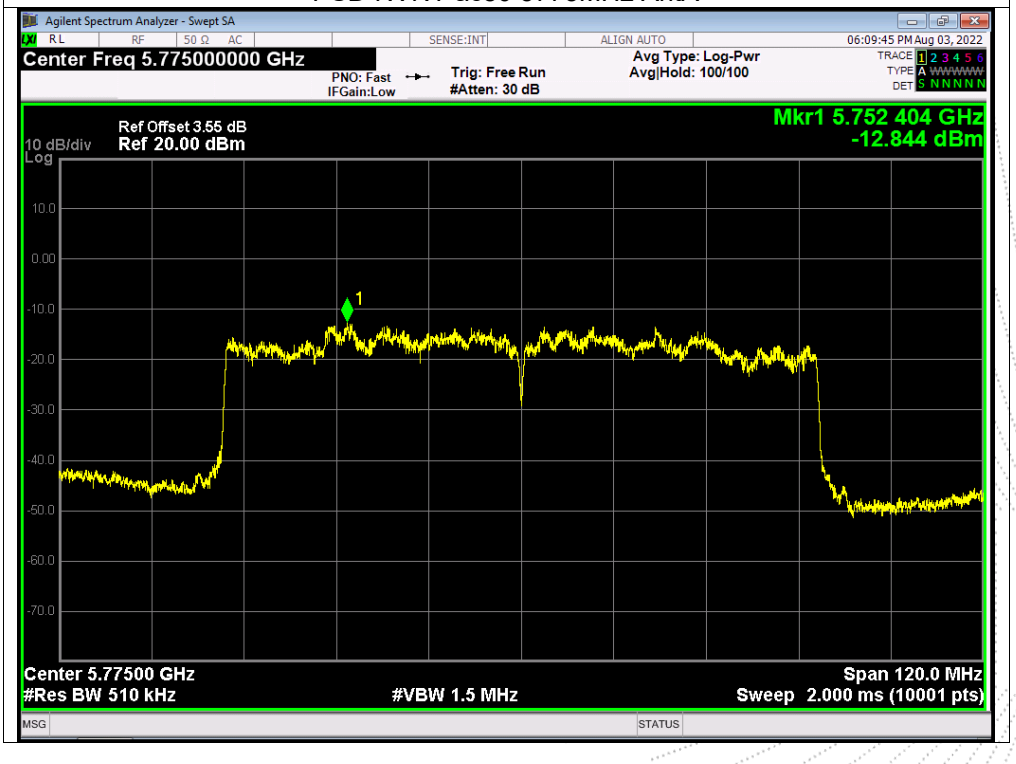
PSD NVNT ac40 5755MHz AntA



PSD NVNT ac40 5795MHz AntA

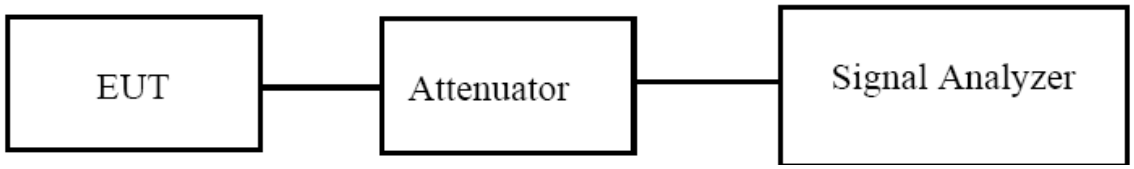


PSD NVNT ac80 5775MHz AntA



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 ：	AC 120V/60Hz
Test Mode ：	TX Frequency U-NII-1 (5180-5240MHz)		

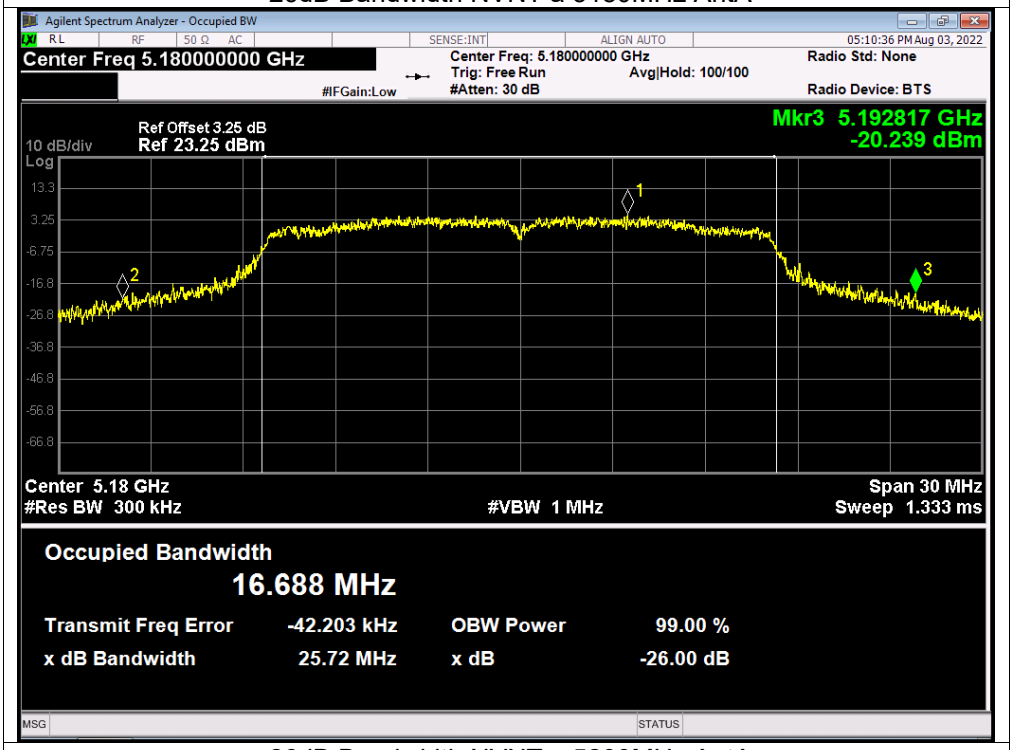
Note: A(B) Represent the value of antenna A and B. The worst data is Antenna A, only shown Antenna A Plot.

Mode	Channel	Frequency (MHz)	99% bandwidth (MHz)	26dB bandwidth (MHz)	Limit -26 dB Bandwidth	Result
			ANT A	ANT A		
802.11a	CH36	5180	16.472	25.718	0.5	Pass
	CH40	5200	16.479	25.188	0.5	Pass
	CH48	5240	16.476	25.438	0.5	Pass
802.11 n20	CH36	5180	17.635	25.591	0.5	Pass
	CH40	5200	17.695	24.676	0.5	Pass
	CH48	5240	17.654	25.399	0.5	Pass
802.11 n40	CH 38	5190	36.15	44.751	0.5	Pass
	CH 46	5230	36.094	45.896	0.5	Pass
802.11 ac20	CH36	5180	17.64	27.143	0.5	Pass
	CH40	5200	17.634	25.331	0.5	Pass
	CH48	5240	17.673	24.776	0.5	Pass
802.11 ac40	CH 38	5190	36.078	44.58	0.5	Pass
	CH 46	5230	36.051	44.901	0.5	Pass
802.11 AC80	CH 42	5210	75.297	**81.771**	0.5	Pass

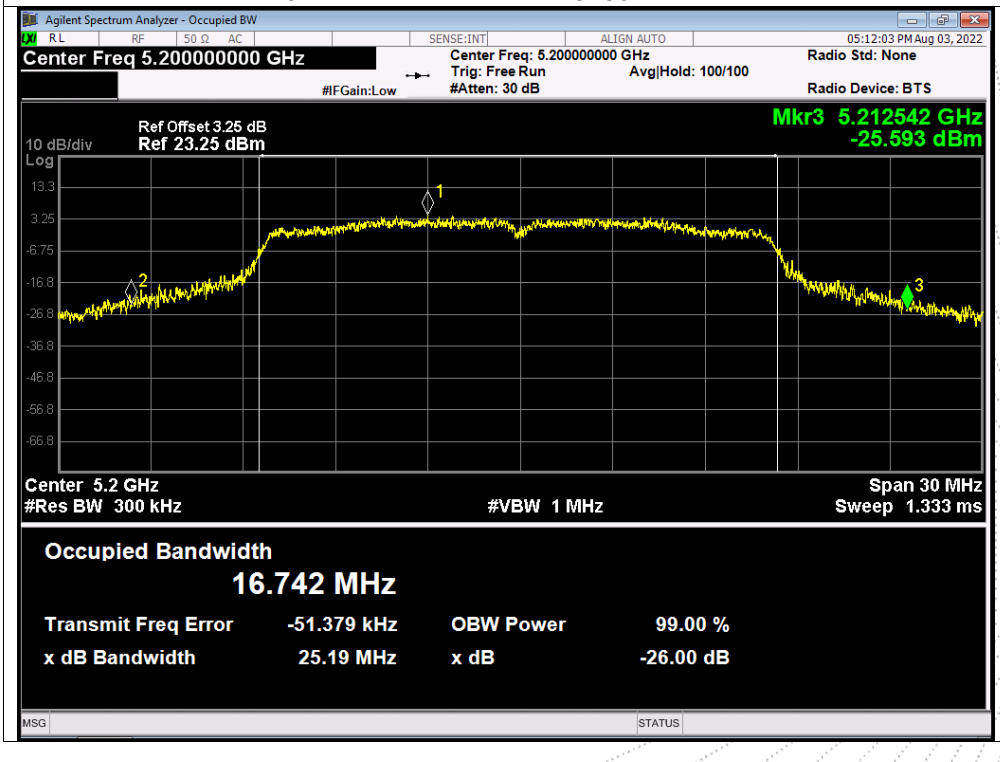
Mode	Channel	Frequency (MHz)	99% bandwidth (MHz)	26dB bandwidth (MHz)	Limit -26 dB Bandwidth	Result
			ANT B	ANT B		
802.11a	CH36	5180	16.552	26.129	0.5	Pass
	CH40	5200	16.46	24.716	0.5	Pass
	CH48	5240	16.535	25.292	0.5	Pass
802.11 n20	CH36	5180	17.727	25.839	0.5	Pass
	CH40	5200	17.649	26.583	0.5	Pass
	CH48	5240	17.635	26.051	0.5	Pass
802.11 n40	CH 38	5190	36.032	44.834	0.5	Pass
	CH 46	5230	36.088	44.46	0.5	Pass
802.11 ac20	CH36	5180	17.659	24.831	0.5	Pass
	CH40	5200	17.64	23.368	0.5	Pass
	CH48	5240	17.632	24.69	0.5	Pass
802.11 ac40	CH 38	5190	35.99	44.408	0.5	Pass
	CH 46	5230	36.072	44.508	0.5	Pass
802.11 AC80	CH 42	5210	75.313	81.446	0.5	Pass

Test Graphs

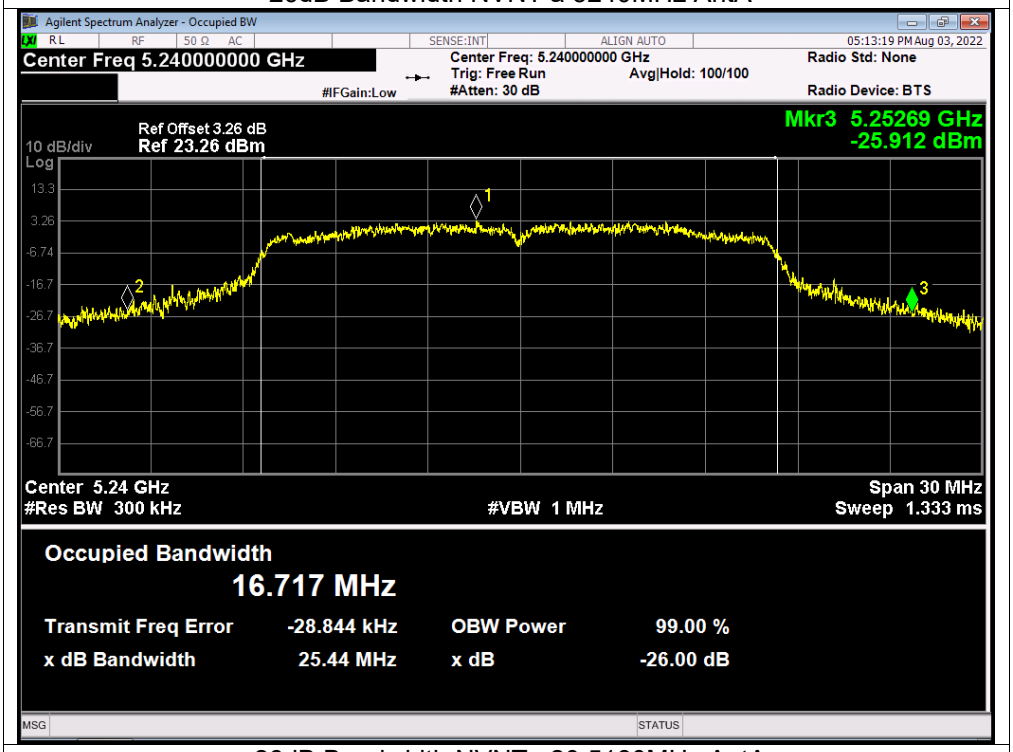
-26dB Bandwidth NVNT a 5180MHz AntA



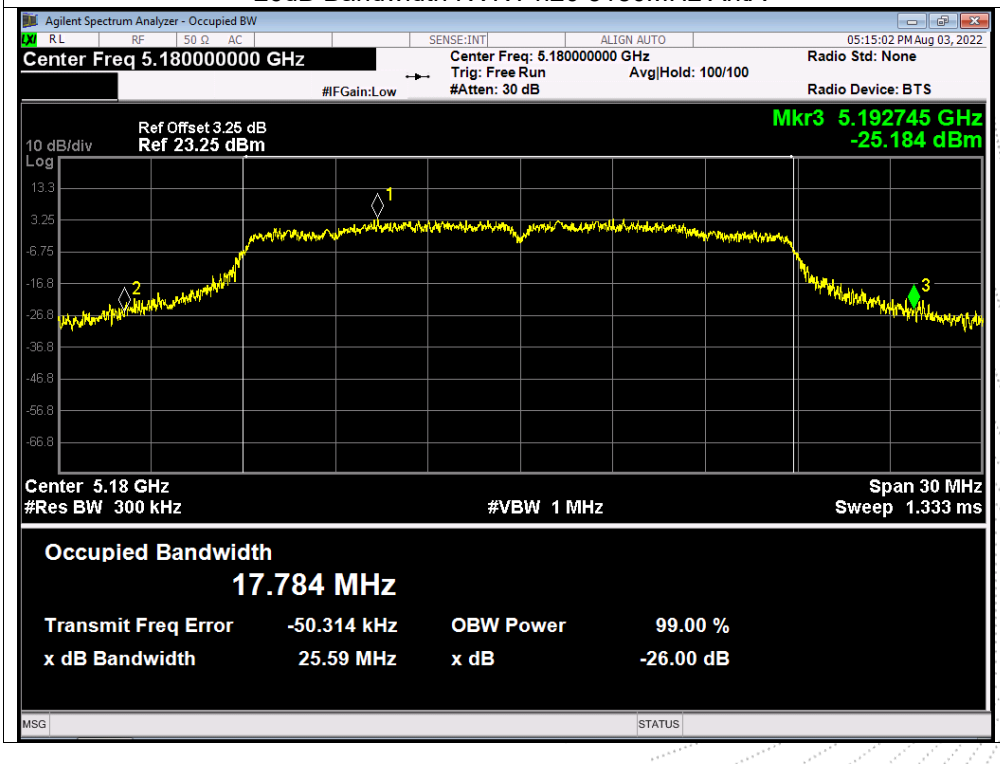
-26dB Bandwidth NVNT a 5200MHz AntA



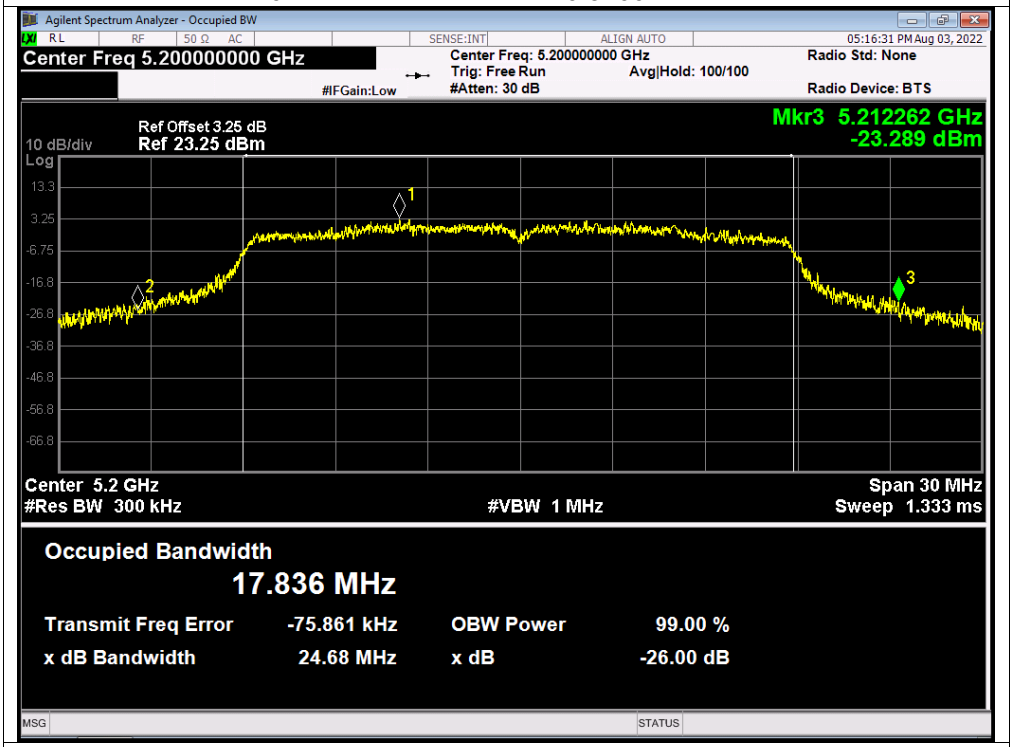
-26dB Bandwidth NVNT a 5240MHz AntA



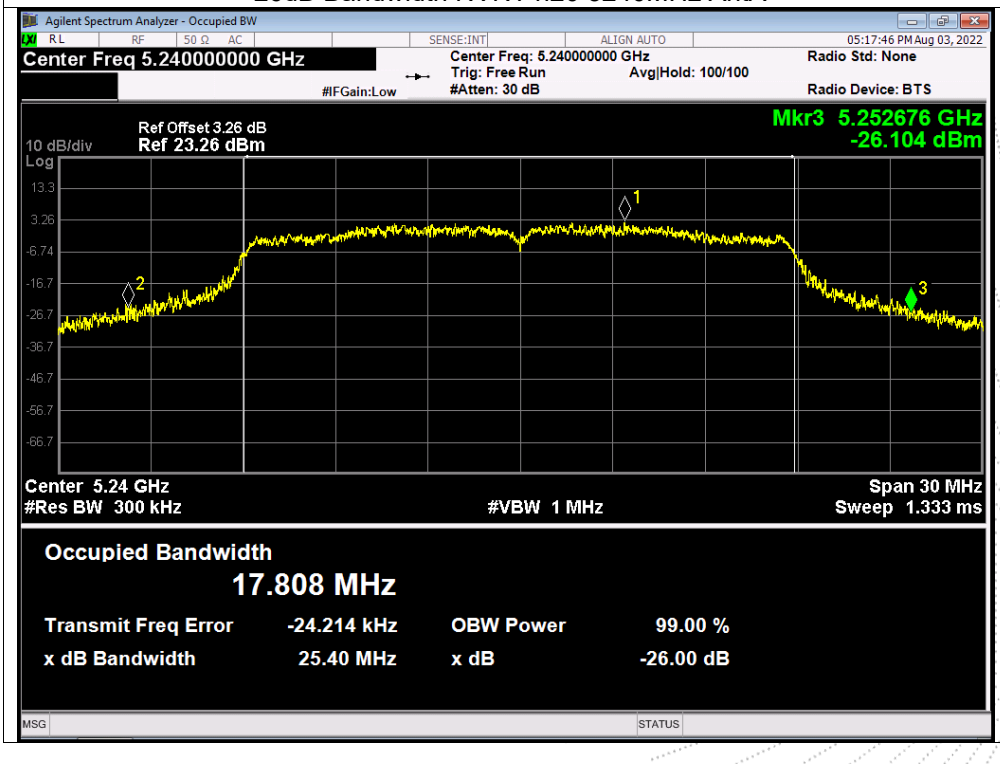
-26dB Bandwidth NVNT n20 5180MHz AntA



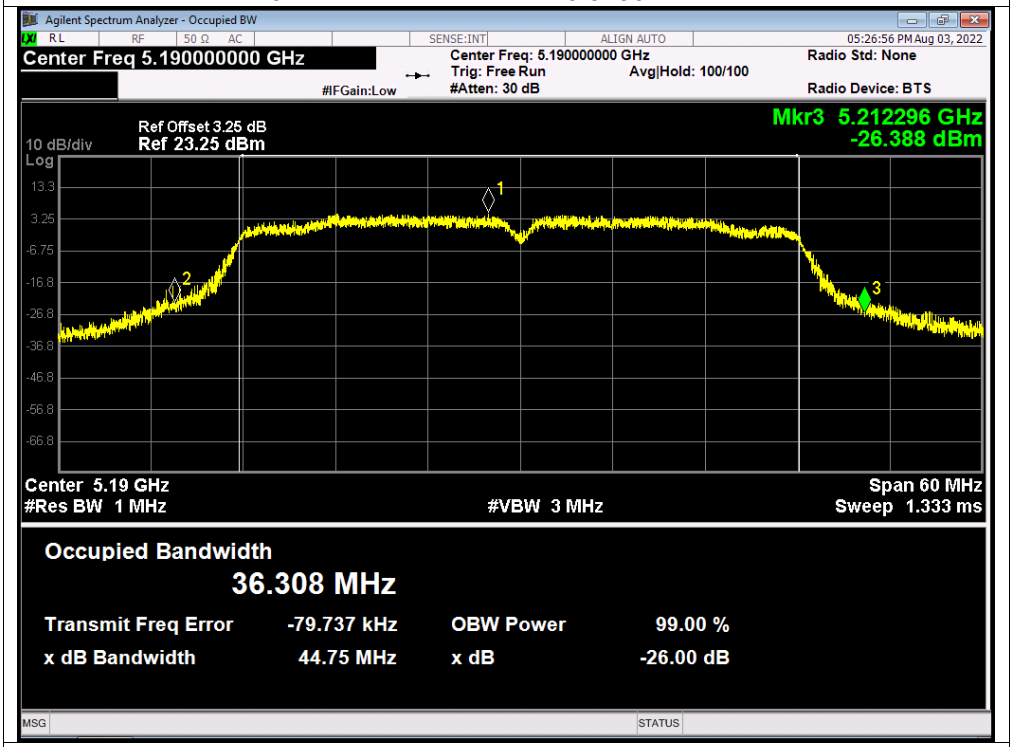
-26dB Bandwidth NVNT n20 5200MHz AntA



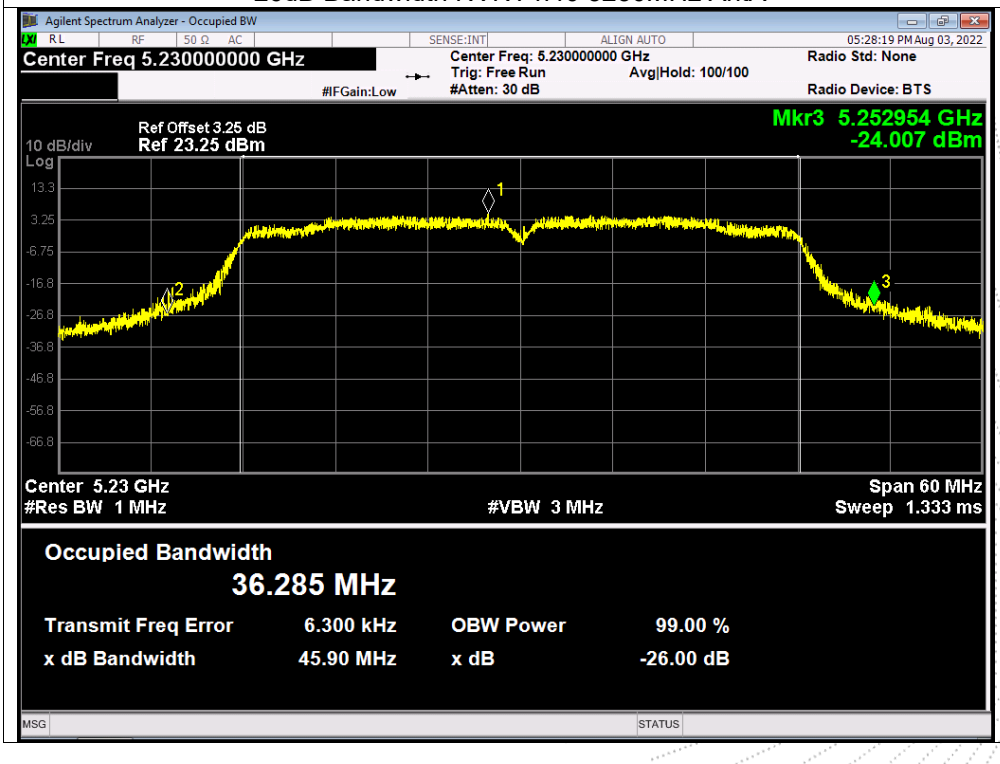
-26dB Bandwidth NVNT n20 5240MHz AntA



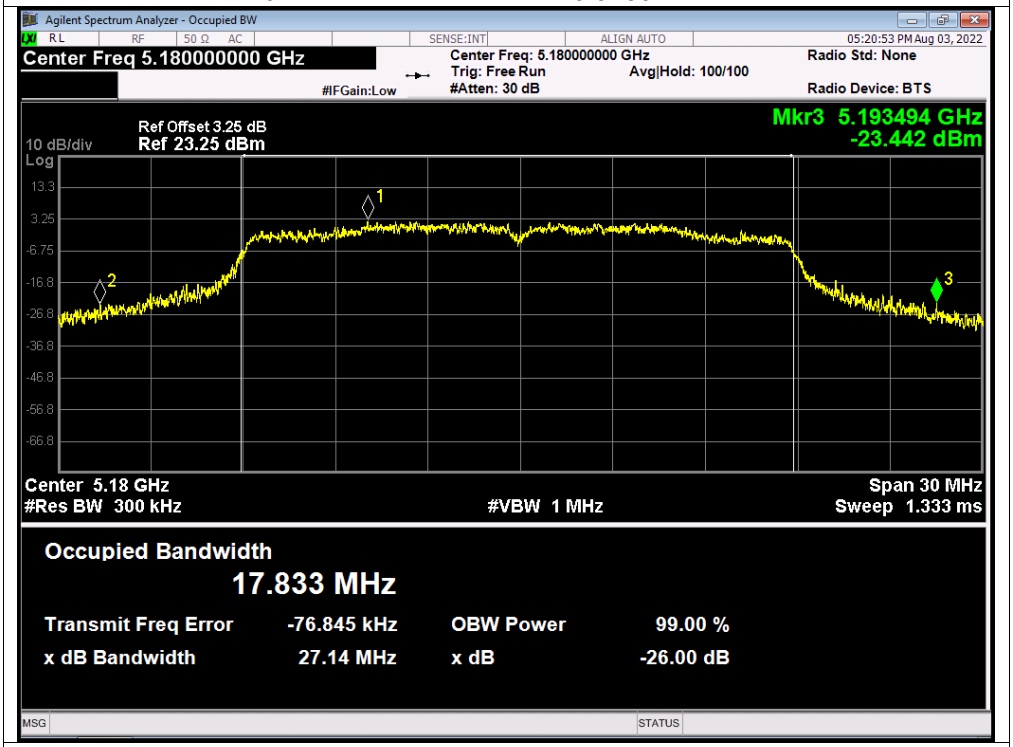
-26dB Bandwidth NVNT n40 5190MHz AntA



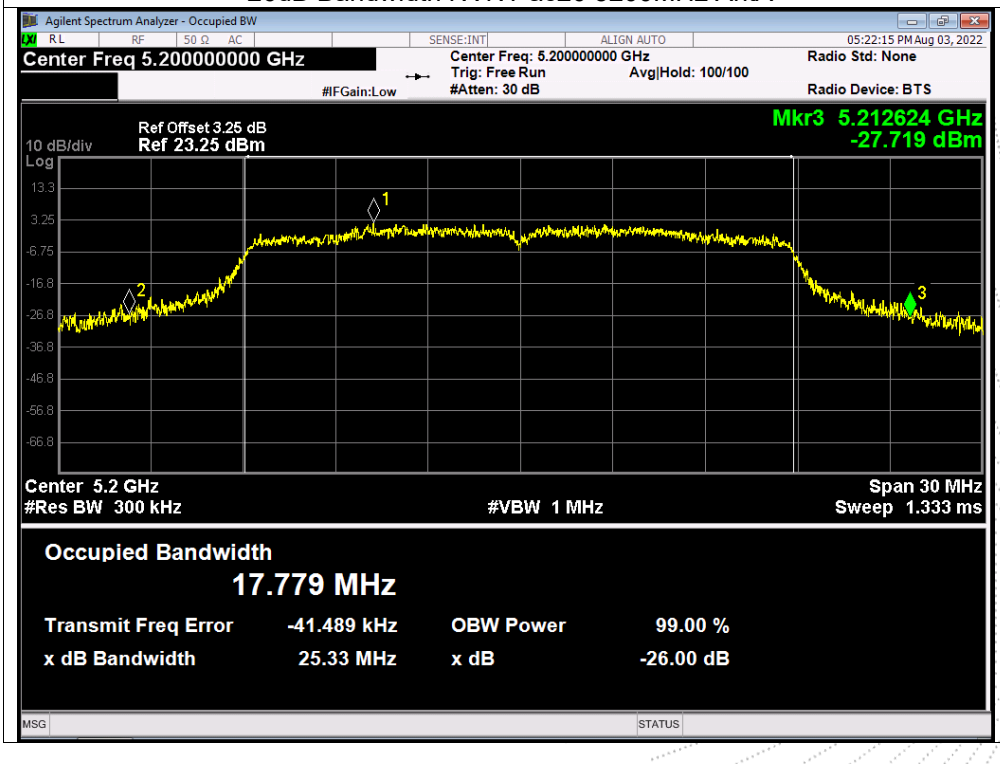
-26dB Bandwidth NVNT n40 5230MHz AntA



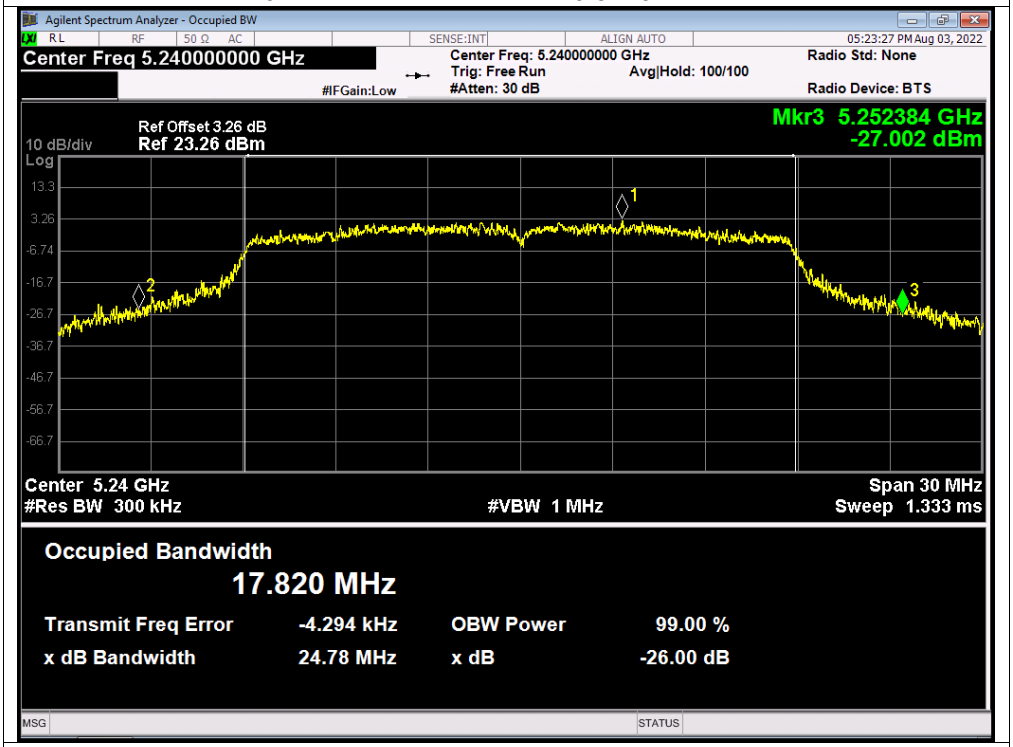
-26dB Bandwidth NVNT ac20 5180MHz AntA



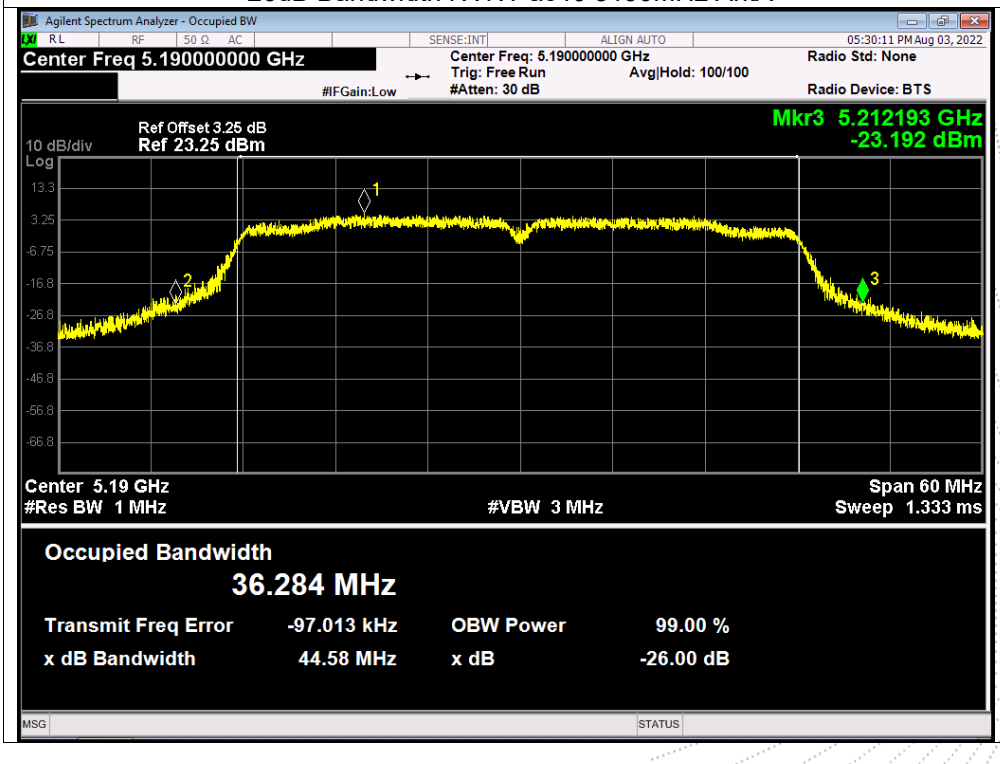
-26dB Bandwidth NVNT ac20 5200MHz AntA



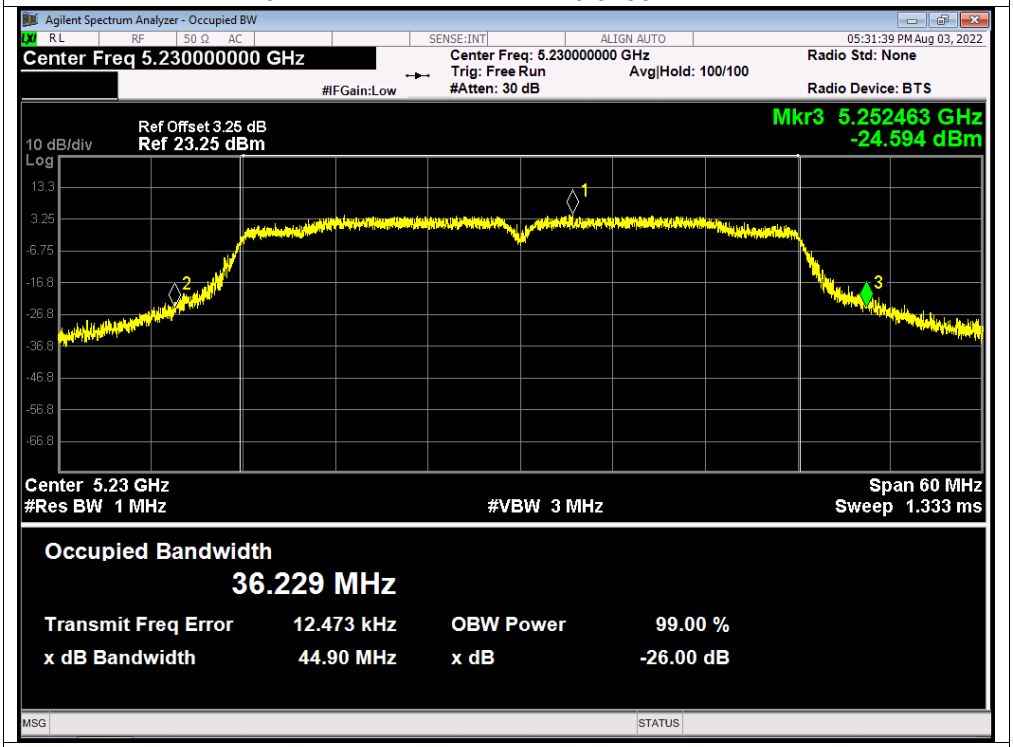
-26dB Bandwidth NVNT ac20 5240MHz AntA



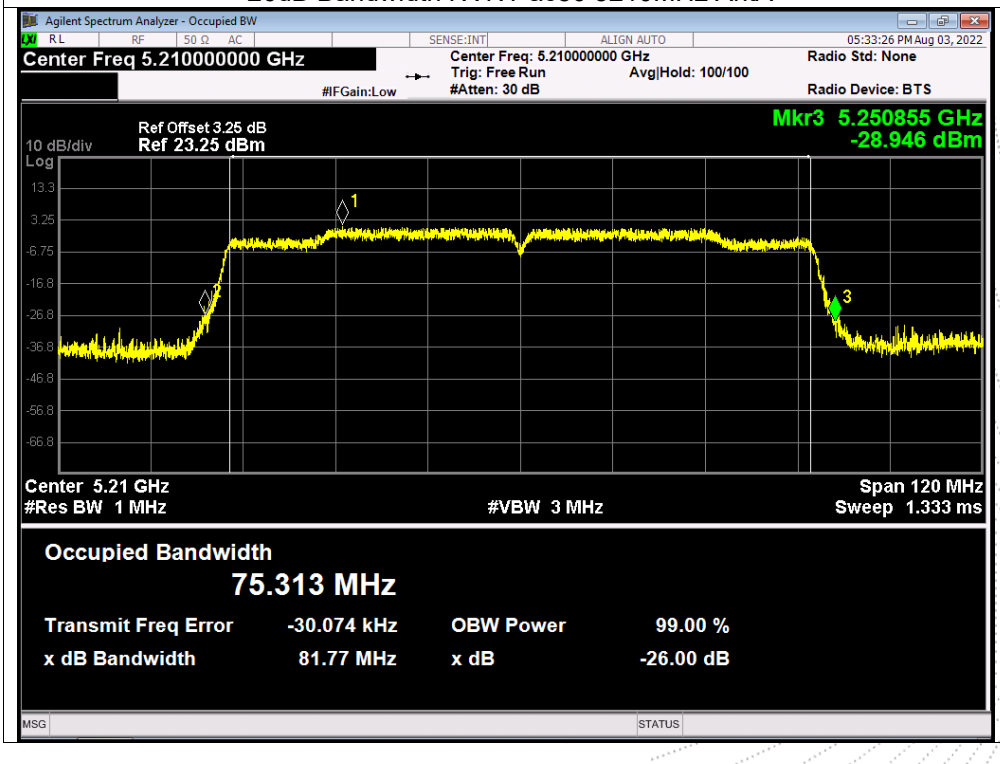
-26dB Bandwidth NVNT ac40 5190MHz AntA



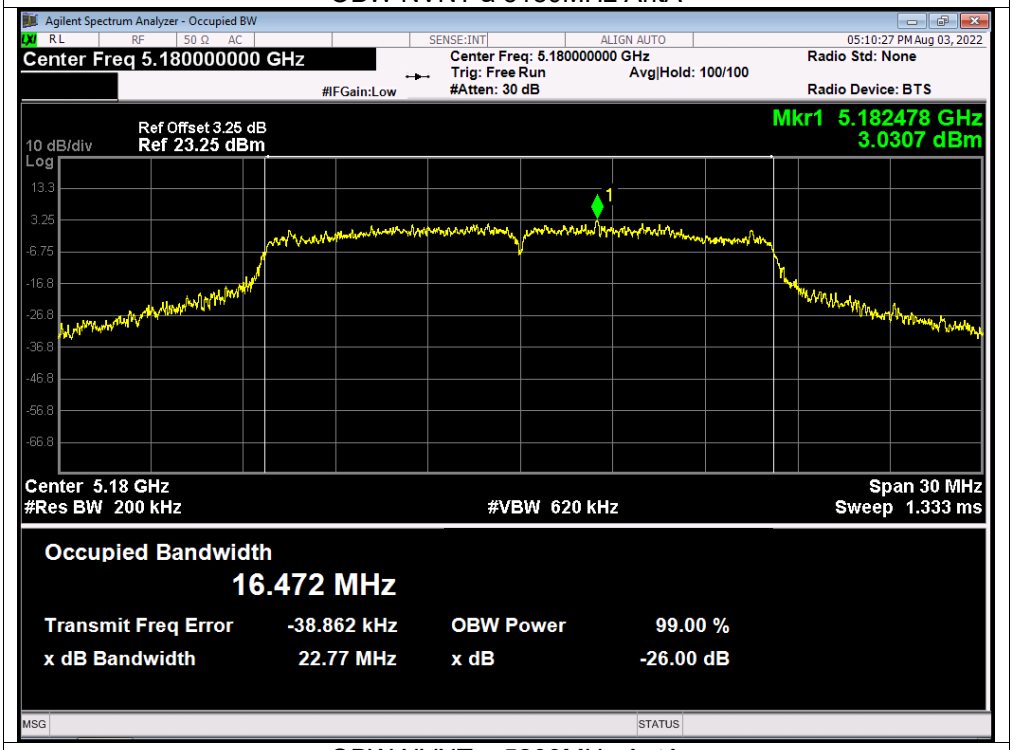
-26dB Bandwidth NVNT ac40 5230MHz AntA



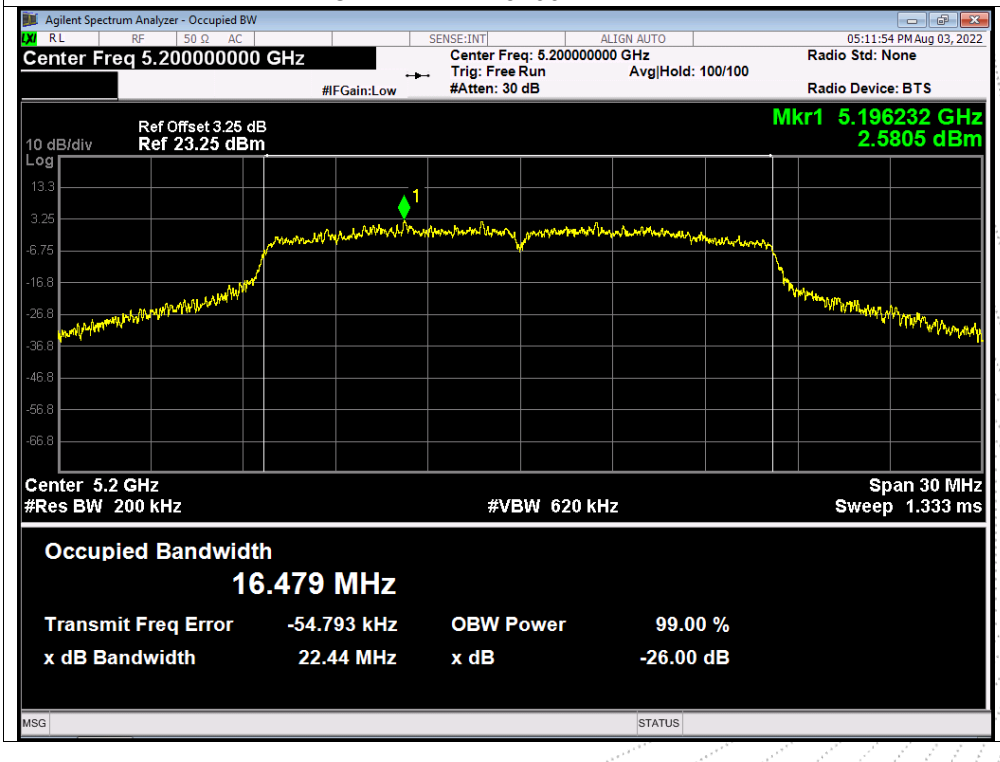
-26dB Bandwidth NVNT ac80 5210MHz AntA



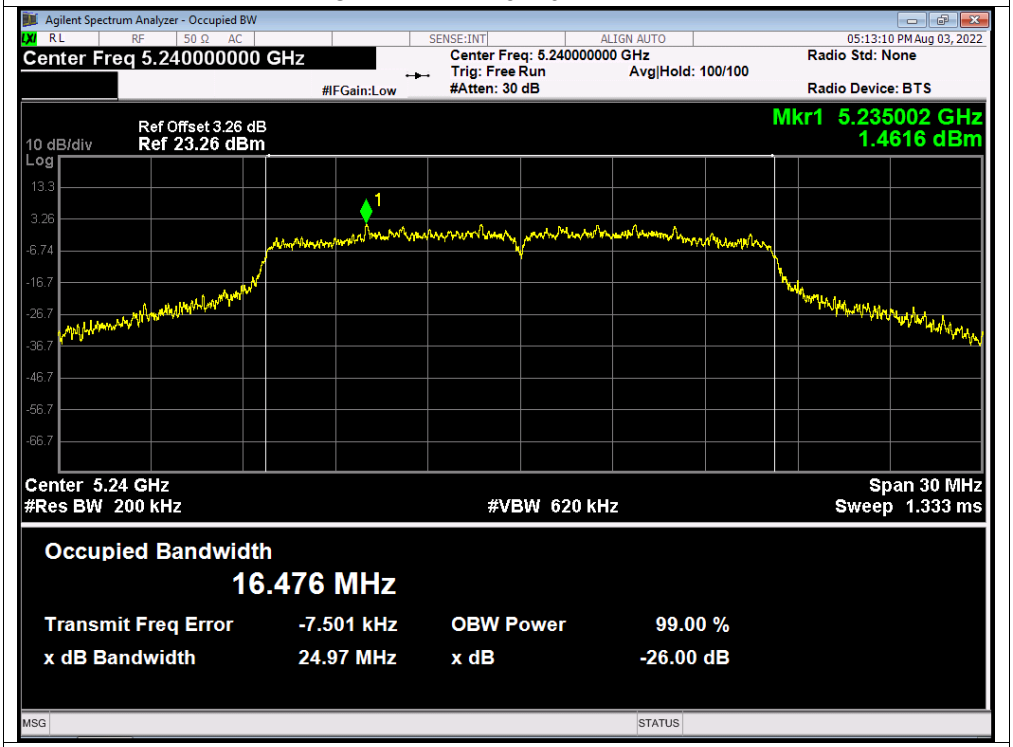
Test Graphs
OBW NVNT a 5180MHz AntA



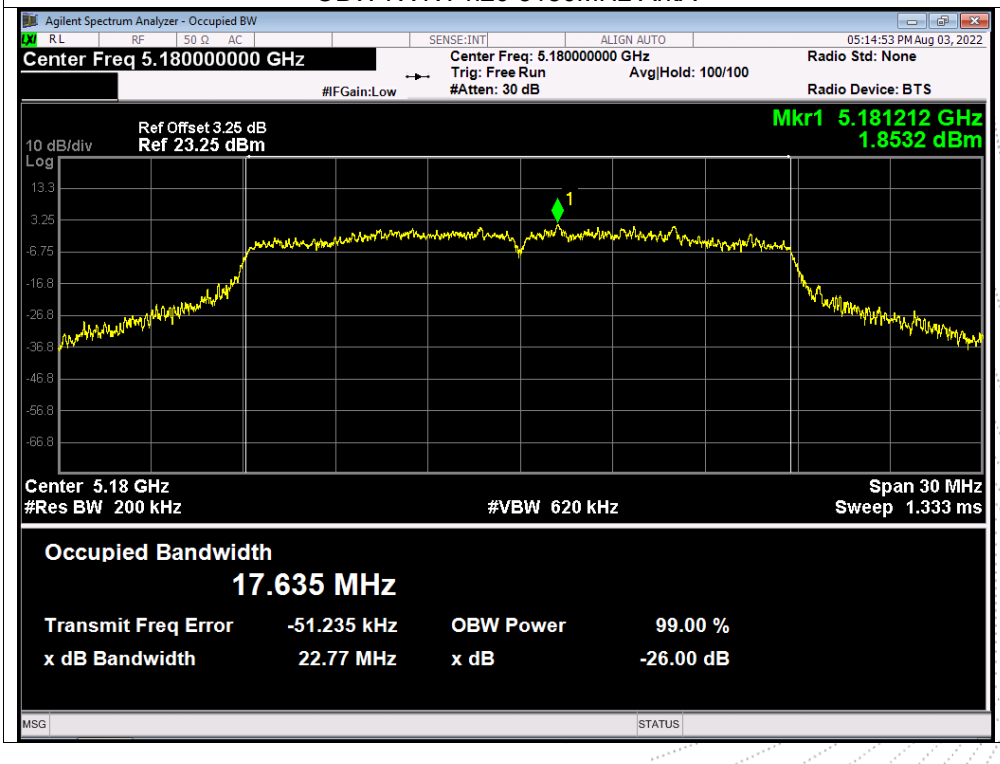
OBW NVNT a 5200MHz AntA



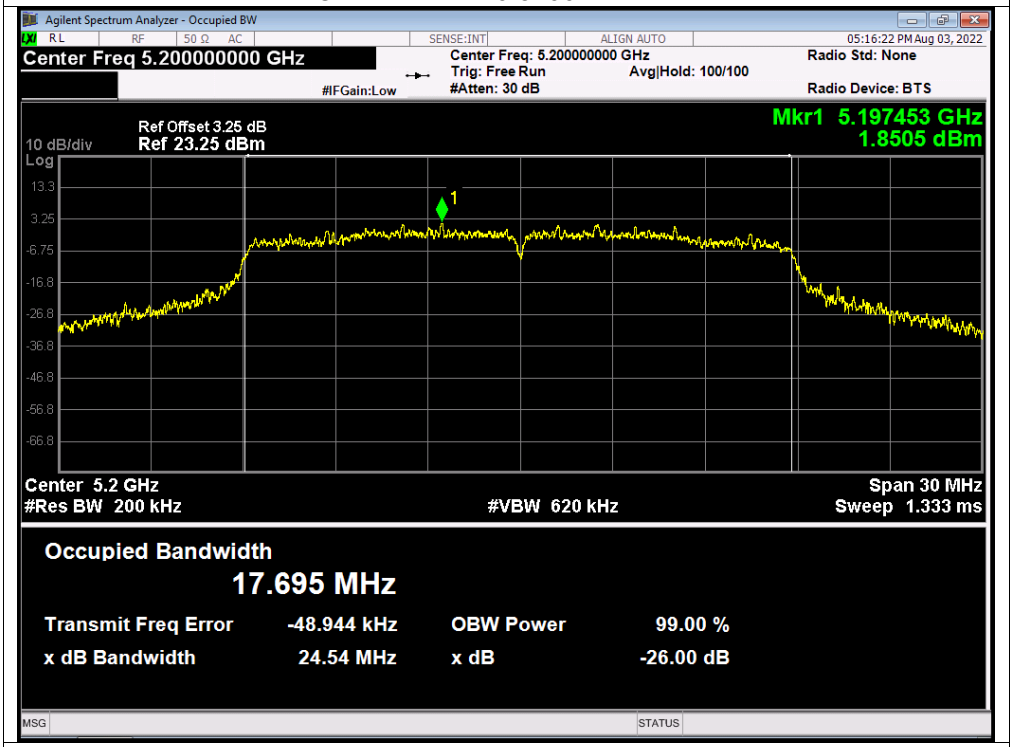
OBW NVNT a 5240MHz AntA



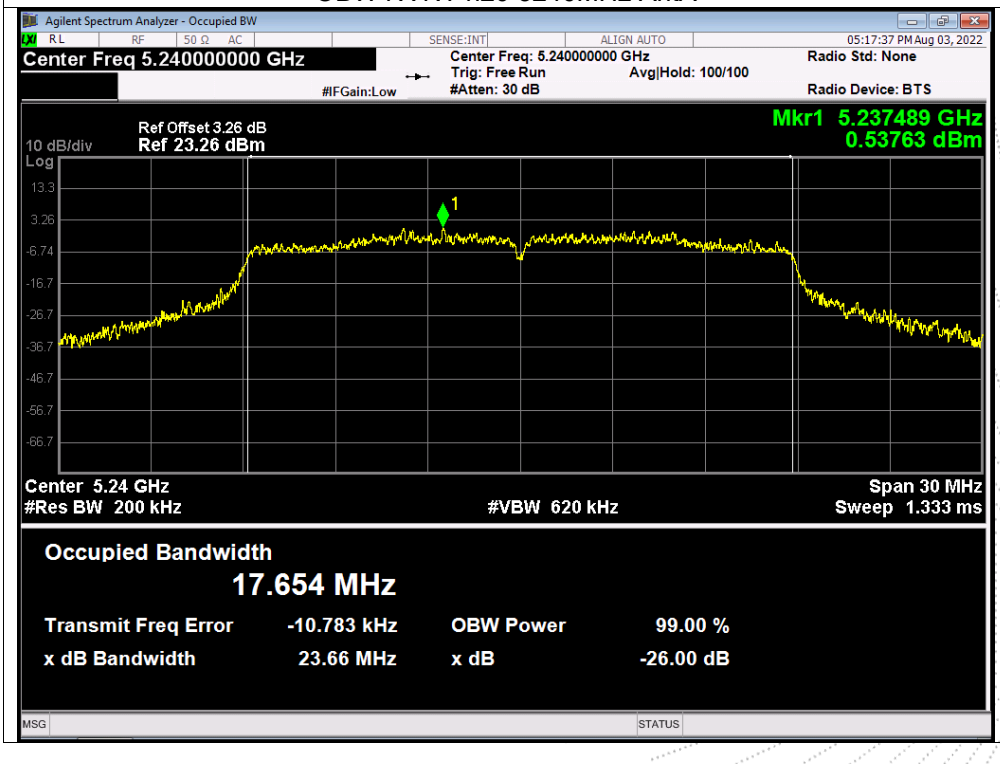
OBW NVNT n20 5180MHz AntA



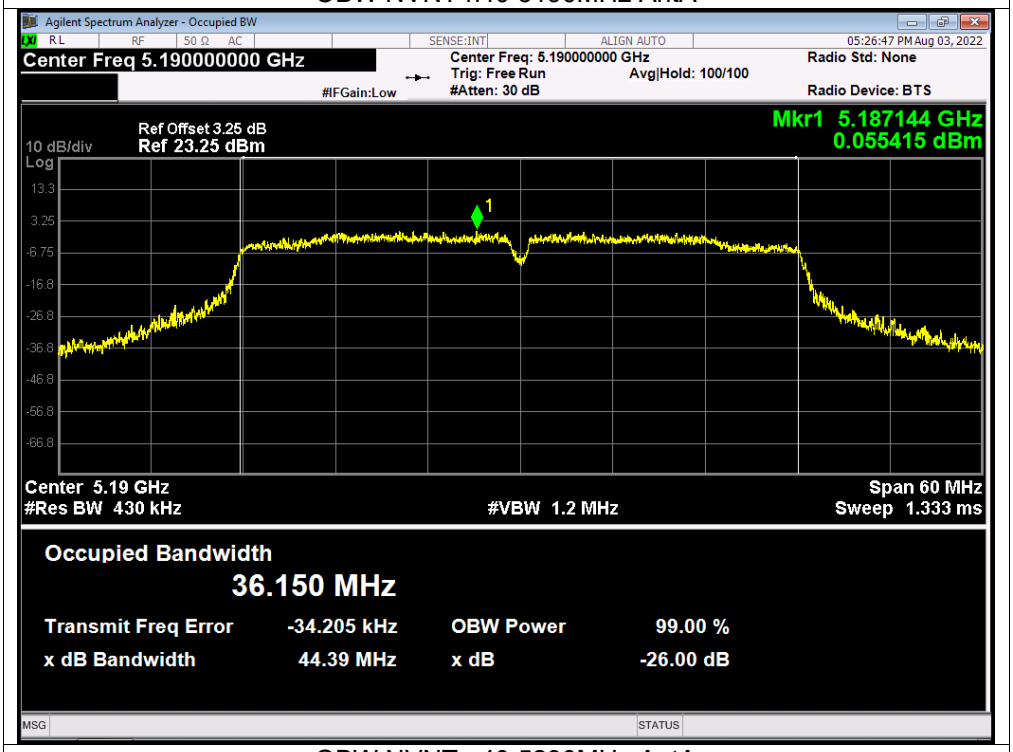
OBW NVNT n20 5200MHz AntA



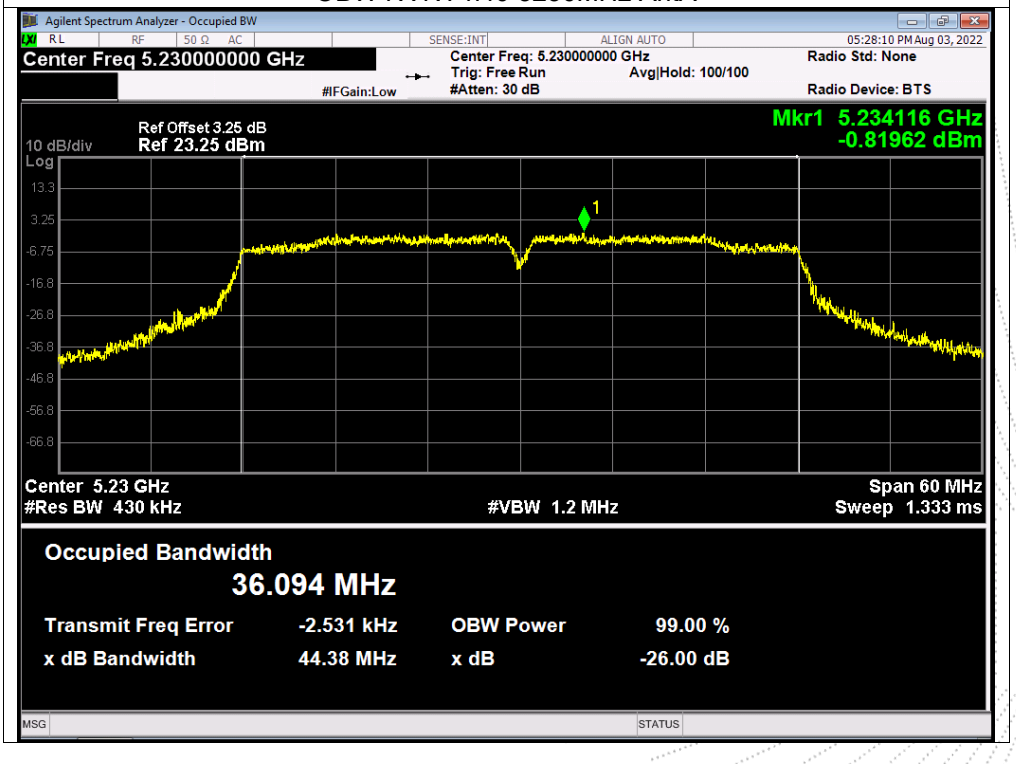
OBW NVNT n20 5240MHz AntA



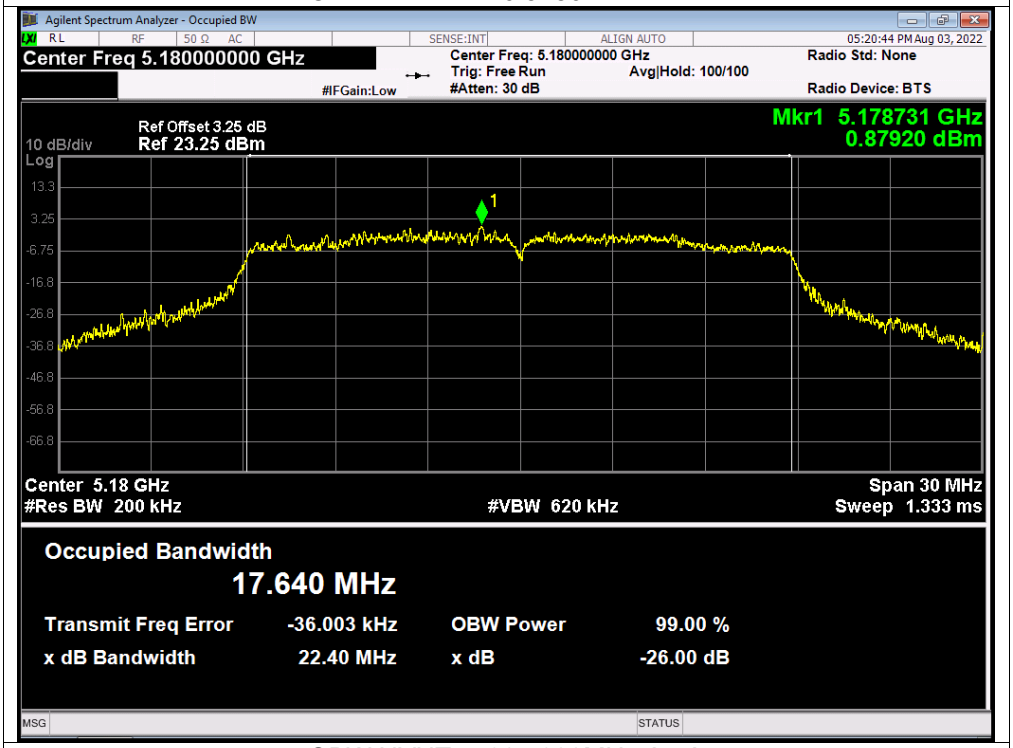
OBW NVNT n40 5190MHz AntA



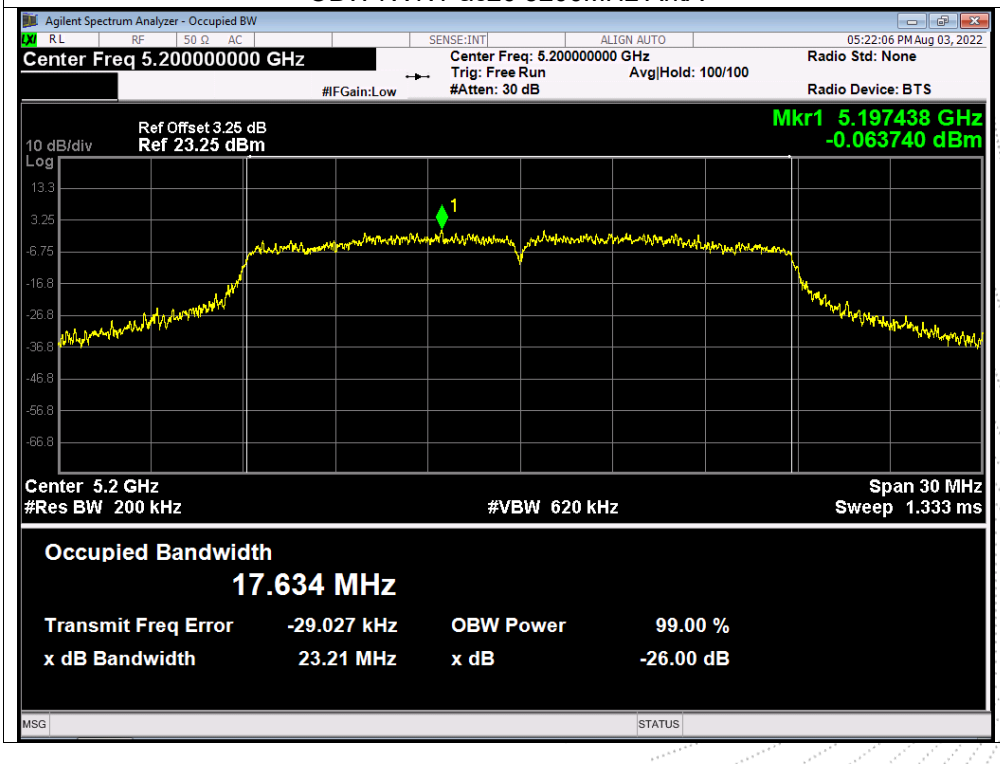
OBW NVNT n40 5230MHz AntA



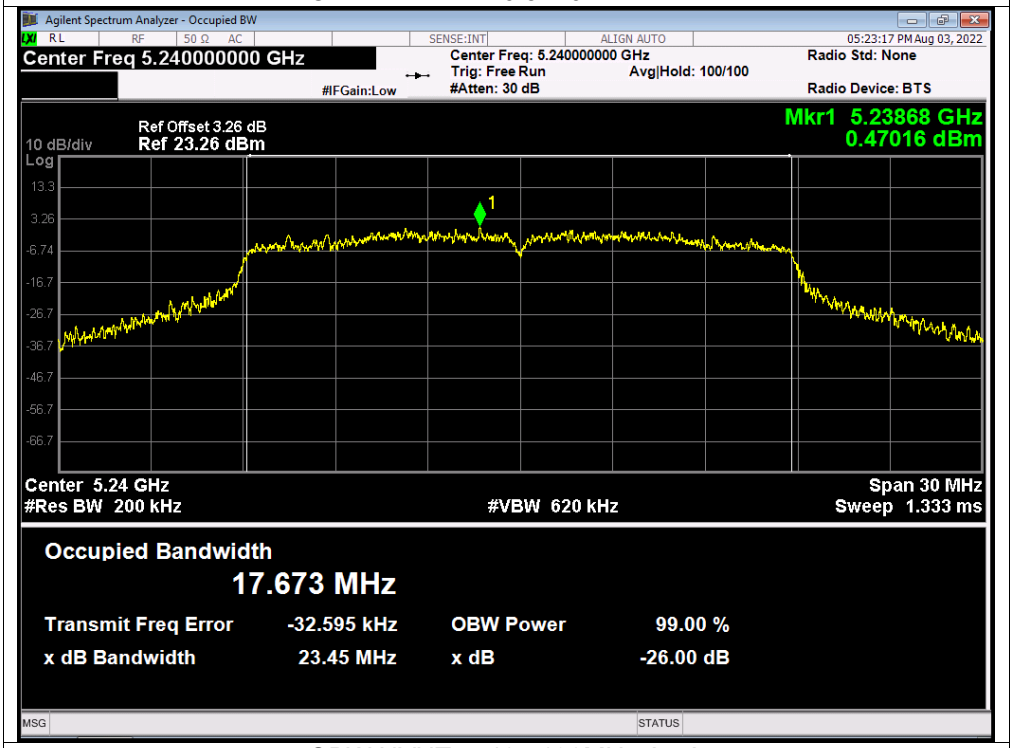
OBW NVNT ac20 5180MHz AntA



OBW NVNT ac20 5200MHz AntA



OBW NVNT ac20 5240MHz AntA



OBW NVNT ac40 5190MHz AntA