

TEST REPORT

Report No.: BCTC2409250146-2E

Applicant: Ositech Communications, Inc.

Product Name: 5G Cellular WiFi-6 Router

Test Model: EXPLORER II

Tested Date: 2024-09-05 to 2024-09-30

Issued Date: 2025-01-02

Shenzhen BCTC Testing Co., Ltd.

FCC ID:IOQ-EXPLORERII

Product Name: 5G Cellular WiFi-6 Router

Trademark: ROUTICA

Model/Type Ref.: EXPLORER II, RTC15924-X

Prepared For: Ositech Communications, Inc.

Address: 5-430 Laird Road, Guelph, Ontario, N1G 3X7, Canada

Manufacturer: SHENZHEN ZHIBOTONG ELECTRONICS CO.,LTD

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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: 2024-09-05

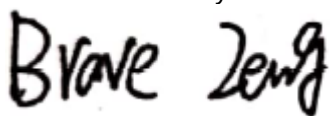
Sample tested Date: 2024-09-05 to 2024-09-30

Report No.: BCTC2409250146-2E

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:



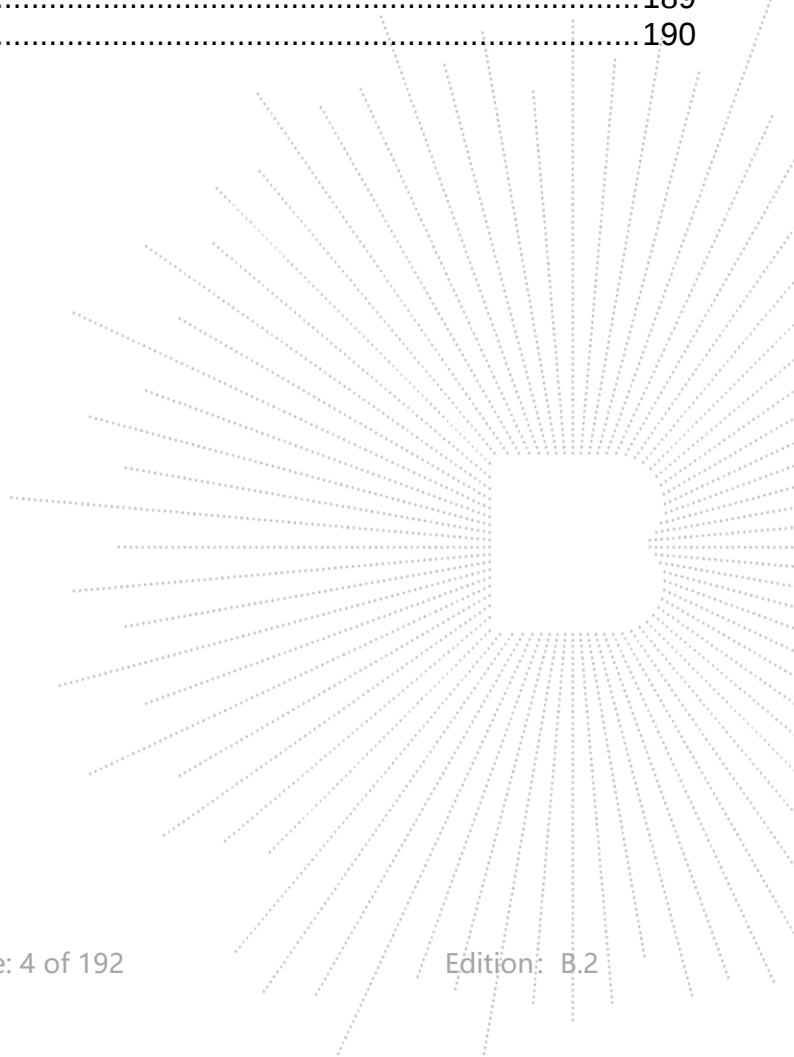
Zero Zhou/Reviewer

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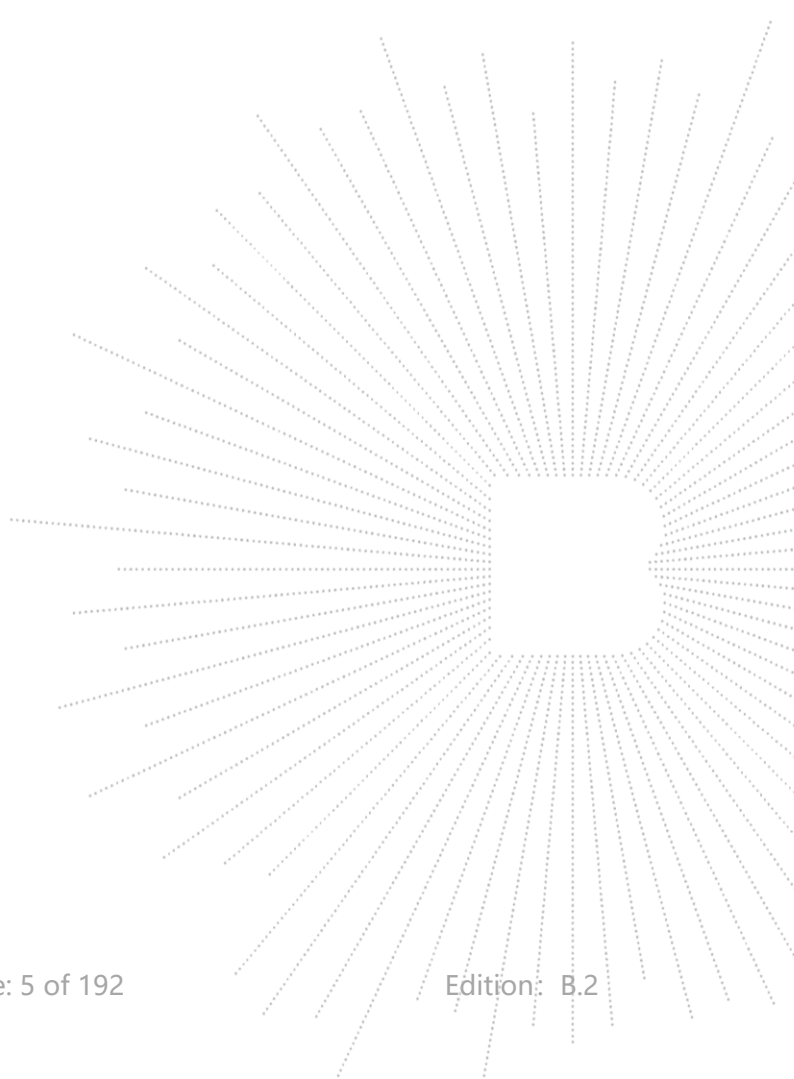
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1. Version

Report No.	Issue Date	Description	Approved
BCTC2409250146-2E	2025-01-02	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)	PASS
2	Conducted Emission	15.207	PASS
3	26 dB and 99% Emission Bandwidth	15.407 (a)	PASS
4	Minimum 6 dB bandwidth	15.407(e)	PASS
5	Maximum Conducted Output Power	15.407 (a)	PASS
6	Band Edge	15.407(b)	PASS
7	Power Spectral Density	15.407 (a)	PASS
8	Spurious Emissions at Antenna Terminals	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°C

4. Product Information and Test Setup

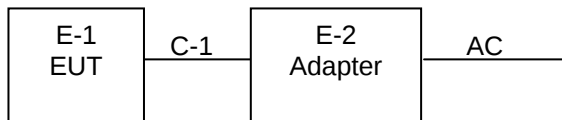
4.1 Product Information

Model/Type Ref.:	EXPLORER II, RTC15924-X
Model differences:	The following models of units we produce are identical in electrical, mechanical and physical structure; The difference is only in the model name and Different Shape, we finally have EXPLORER II as test model.
Hardware Version:	N/A
Software Version:	N/A
IEEE 802.11 WLAN Mode Supported	☒ 802.11a ☒ 802.11n(20MHz channel bandwidth) ☒ 802.11n(40MHz channel bandwidth) ☒ 802.11ac(20MHz channel bandwidth) ☒ 802.11ac(40MHz channel bandwidth) ☒ 802.11ac(80MHz channel bandwidth) ☒ 802.11ax(20MHz channel bandwidth) ☒ 802.11ax(40MHz channel bandwidth) ☒ 802.11ax(80MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n/ac(HT20)/ax(HE20); 5190-5230MHz for 802.11n/ac(HT40)/ax(HE40); 5210MHz for 802.11 ac/ax80; 5745-5825 MHz for 802.11a/n/ac(HT20)/ax(HE20); 5755-5795 MHz for 802.11n/ac(HT40)/ax(HE40); 5775MHz for 802.11 ac/ax80
Data Rate	☒ 802.11a:54/48/36/24/18/12/9/6Mbps ☒ 802.11n:up to 300 Mbps ☒ 802.11ac:up to 867 Mbps ☒ 802.11ax:up to 1201 Mbps
Type of Modulation:	☒ OFDM with BPSK/QPSK/16QAM/64QAM for 802.11a/n ☒ OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11ac ☒ OFDMA with 1024QAM for 802.11AX HE
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:	External antenna*2
Antenna Gain:	Antenna A & B: 4.65dBi
Power supply:	DC12V

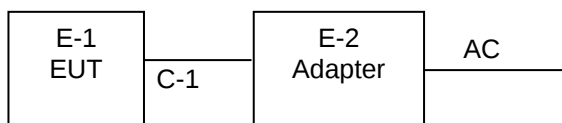
4.2 Test Setup Configuration

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	5G Cellular WiFi-6 Router	N/A	EXPLORER II	N/A	EUT
E-2	Adapter	N/A	N/A	N/A	Auxiliary

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

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/ax(20 MHz) band I (5180-5240MHz):

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

802.11ac/ax (80MHz) Carrier Frequency Channel							
---	--	--	--	--	--	--	--

Channel	Frequency (MHz)
42	5210

Frequency and Channel list for 802.11a/n/ac/ax(20 MHz) band IV (5745-5825MHz):

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

802.11ac/ax 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/ ax 20 CH36/ CH40/ CH 48 802.11a /n/ ac/ax 20 CH149/ CH157/ CH 165
Mode 2	802.11n/ ac/ ax40 CH38/ CH 46 802.11n/ ac/ax40 CH 151 / CH 159
Mode 3	802.11 ac/ax80 CH 42/CH 155
Mode 4	Link Mode

4.6 Table Of Parameters Of Text Software Setting

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

Test software Version	CMD		
Parameters	DEF	DEF	DEF

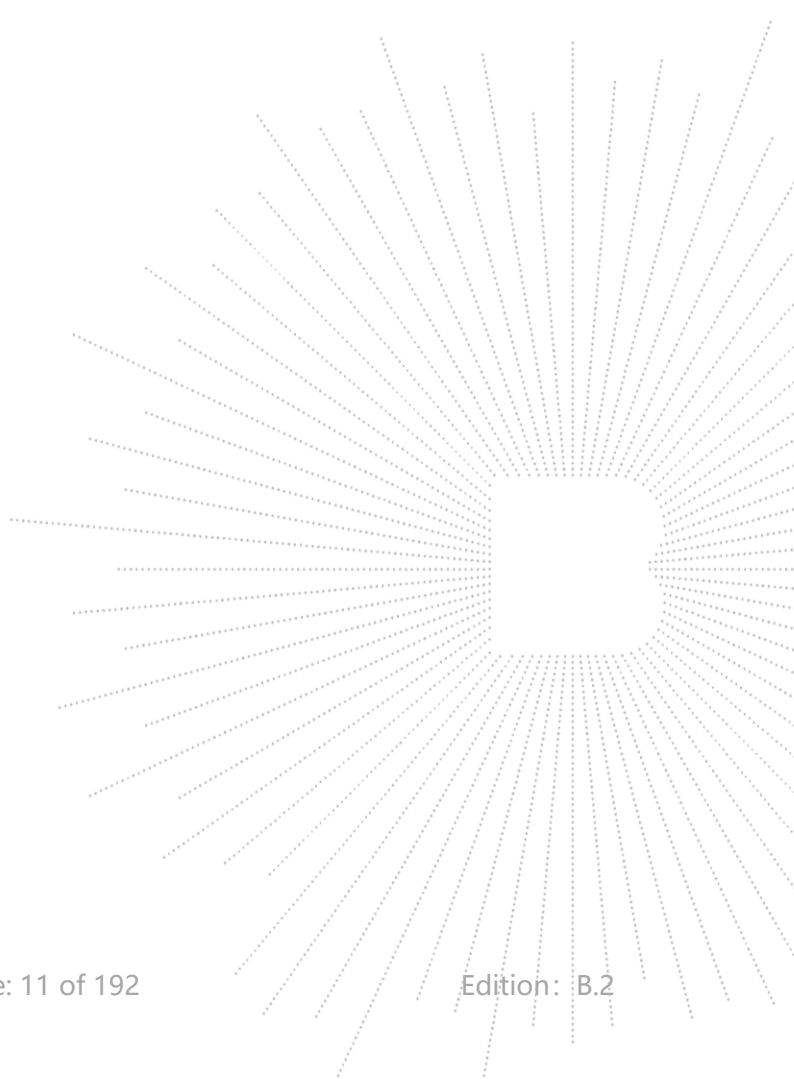
4.7 Antenna

Table for External antenna

Ant.	Brand	Model Name	Antenna Type	Gain (dBi)	NOTE
A	N/A	N/A	External antenna	4.65	N/A
B	N/A	N/A	External antenna	4.65	N/A

EUT has two External antennas with Max gain GANT 4.65dBi on every antenna, CDD device with one spatial streams, also can operat with one spatial streams according to KDB662911 D01 v02r01,

Directional gain = GANT + 10 log (NANT) dBi=4.65+10log (2) =7.66dBi



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, Fuha i Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

FCC Test Firm Registration Number: 712850

A2LA certificate registration number is: CN1212

ISED Registered No.: 23583

ISED CAB identifier: CN0017

5.2 Test Instrument Used

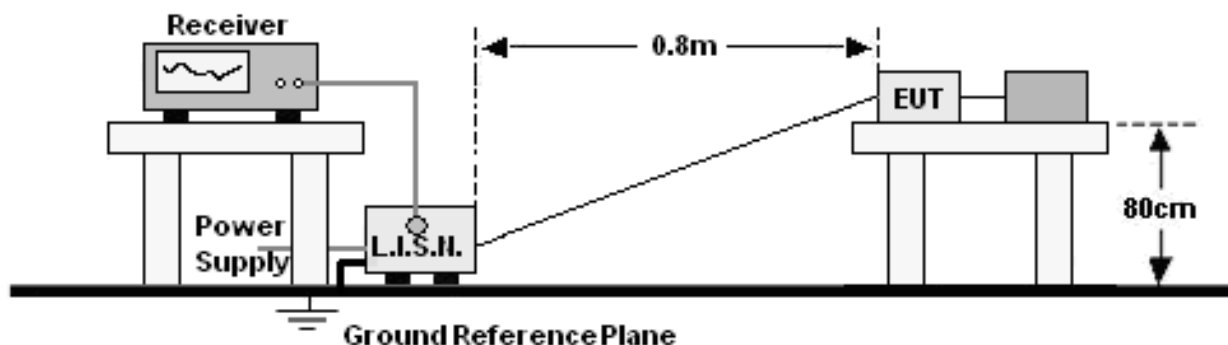
Conducted Emissions Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
LISN	R&S	ENV216	101375	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Pulse limiter	Schwarzbeck	VTSD 9561-F	01323	May 16, 2024	May 15, 2025

Continuous RF Electromagnetic Field Disturbances Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power meter	Keysight	E4419	A00065	May 16, 2024	May 15, 2025
Power sensor	Keysight	E9300A	US39211659	May 16, 2024	May 15, 2025
Power sensor	Keysight	E9300A	US39211305	May 16, 2024	May 15, 2025
Amplifier	SKET	HAP_801000 -250W	21201805013	May 16, 2024	May 15, 2025
Amplifier	SKET	HAP_0103-7 5W	21201805014	May 16, 2024	May 15, 2025
Amplifier	SKET	HAP_0306-5 0W	21201805015	May 16, 2024	May 15, 2025
Stacked double Log.-Per. Antenna	Schwarzbeck	STLP 9129	00077	\	\
Field Probe	Narda	EP-601	611WX80256	May 25, 2024	May 24, 2025
Signal Generator	Agilent	N5181A	MY50143748	May 16, 2024	May 15, 2025
Software	SKET	EMC-S	1.2.0.18	\	\

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 16, 2024	May 15, 2025
Receiver	R&S	ESRP	101154	May 16, 2024	May 15, 2025
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 16, 2024	May 15, 2025
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 21, 2024	May 20, 2025
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 21, 2024	May 20, 2025
Amplifier	SKET	LAPA_01G1 8G-45dB	SK2021040901	May 16, 2024	May 15, 2025
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 21, 2024	May 20, 2025
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 16, 2024	May 15, 2025
Horn Antenn(18GHz-40GHz)	Schwarzbeck	BBHA9170	00822	May 21, 2024	May 20, 2025
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
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:

- *Decreasing linearly with logarithm of frequency.
- The lower limit shall apply at the transition frequencies.

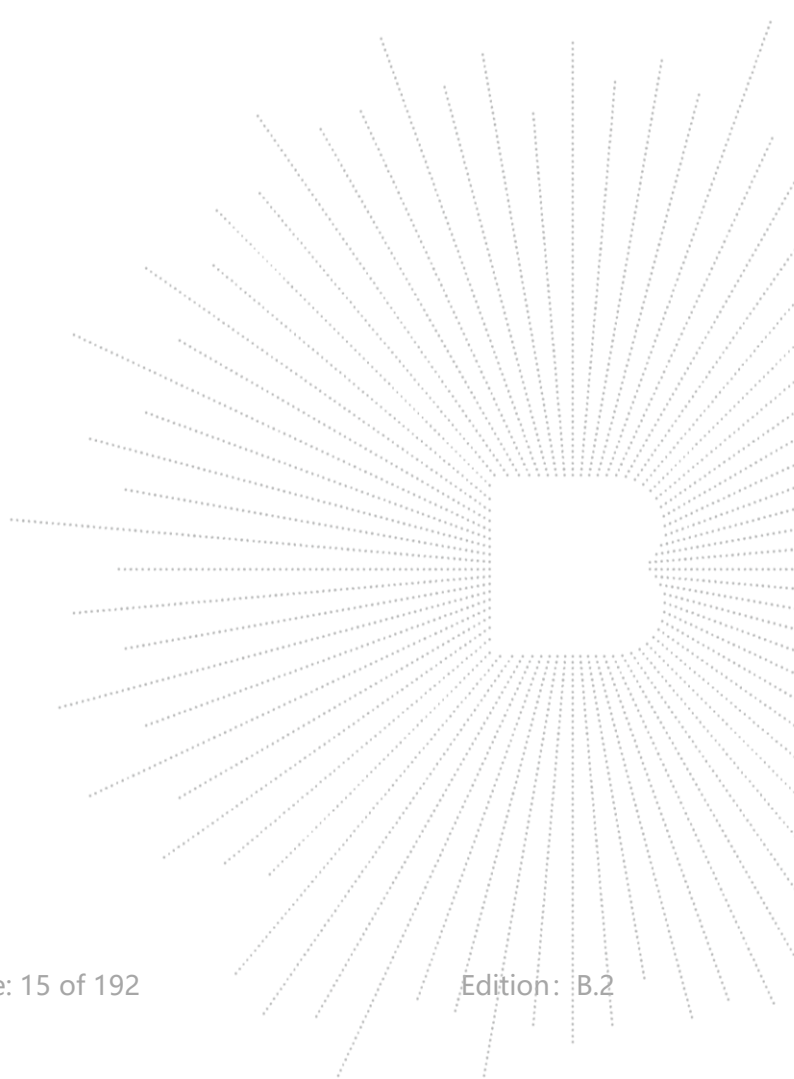
6.3 Test Procedure

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

- 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).
- 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.
- For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

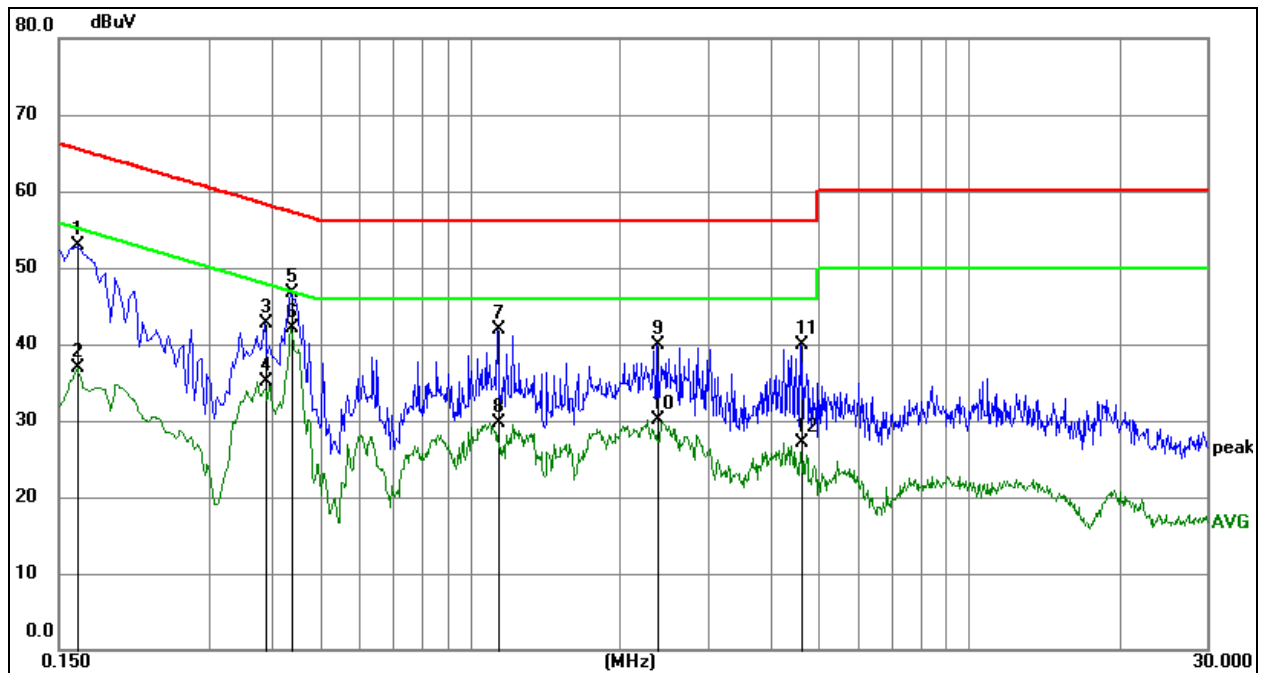
6.4 EUT Operating Conditions

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 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	AC120/60Hz
Test Mode:	Mode 4	Polarization :	L

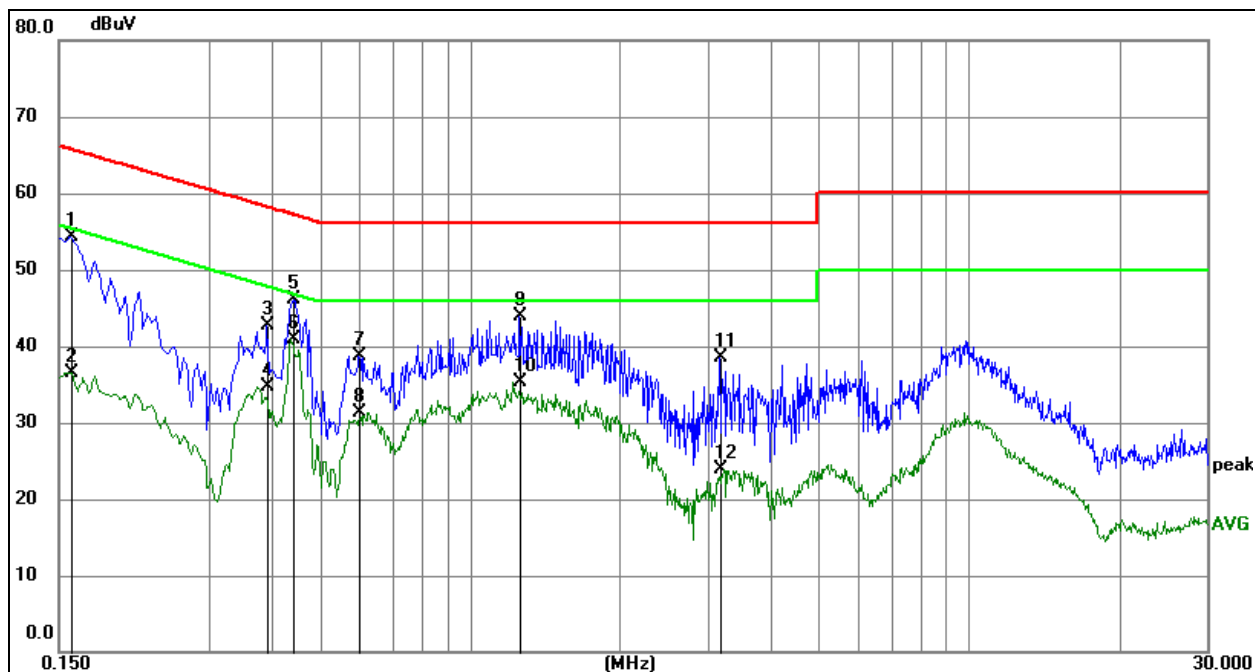


Remark:

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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1635	42.55	10.26	52.81	65.28	-12.47	QP
2	0.1635	26.63	10.26	36.89	55.28	-18.39	AVG
3	0.3885	32.42	10.29	42.71	58.10	-15.39	QP
4	0.3885	24.76	10.29	35.05	48.10	-13.05	AVG
5	0.4380	36.44	10.30	46.74	57.10	-10.36	QP
6 *	0.4380	31.75	10.30	42.05	47.10	-5.05	AVG
7	1.1400	31.54	10.28	41.82	56.00	-14.18	QP
8	1.1400	19.49	10.28	29.77	46.00	-16.23	AVG
9	2.3820	29.52	10.42	39.94	56.00	-16.06	QP
10	2.3820	19.67	10.42	30.09	46.00	-15.91	AVG
11	4.6005	29.16	10.70	39.86	56.00	-16.14	QP
12	4.6005	16.46	10.70	27.16	46.00	-18.84	AVG

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	AC120/60Hz
Test Mode:	Mode 4	Polarization :	N


Remark:

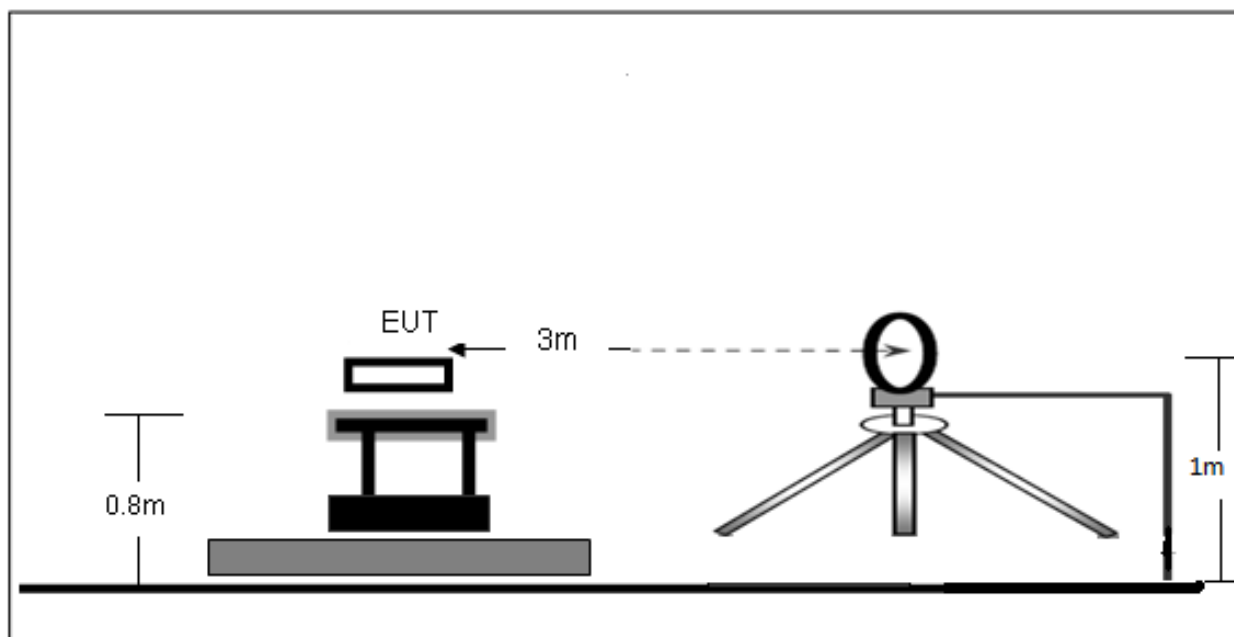
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over= Measurement-Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1590	44.13	10.25	54.38	65.52	-11.14	QP
2	0.1590	26.33	10.25	36.58	55.52	-18.94	AVG
3	0.3930	32.33	10.29	42.62	58.00	-15.38	QP
4	0.3930	24.49	10.29	34.78	48.00	-13.22	AVG
5	0.4425	35.73	10.30	46.03	57.01	-10.98	QP
6 *	0.4425	30.51	10.30	40.81	47.01	-6.20	AVG
7	0.6000	28.44	10.34	38.78	56.00	-17.22	QP
8	0.6000	21.02	10.34	31.36	46.00	-14.64	AVG
9	1.2615	33.55	10.30	43.85	56.00	-12.15	QP
10	1.2615	24.95	10.30	35.25	46.00	-10.75	AVG
11	3.1650	28.02	10.51	38.53	56.00	-17.47	QP
12	3.1650	13.39	10.51	23.90	46.00	-22.10	AVG

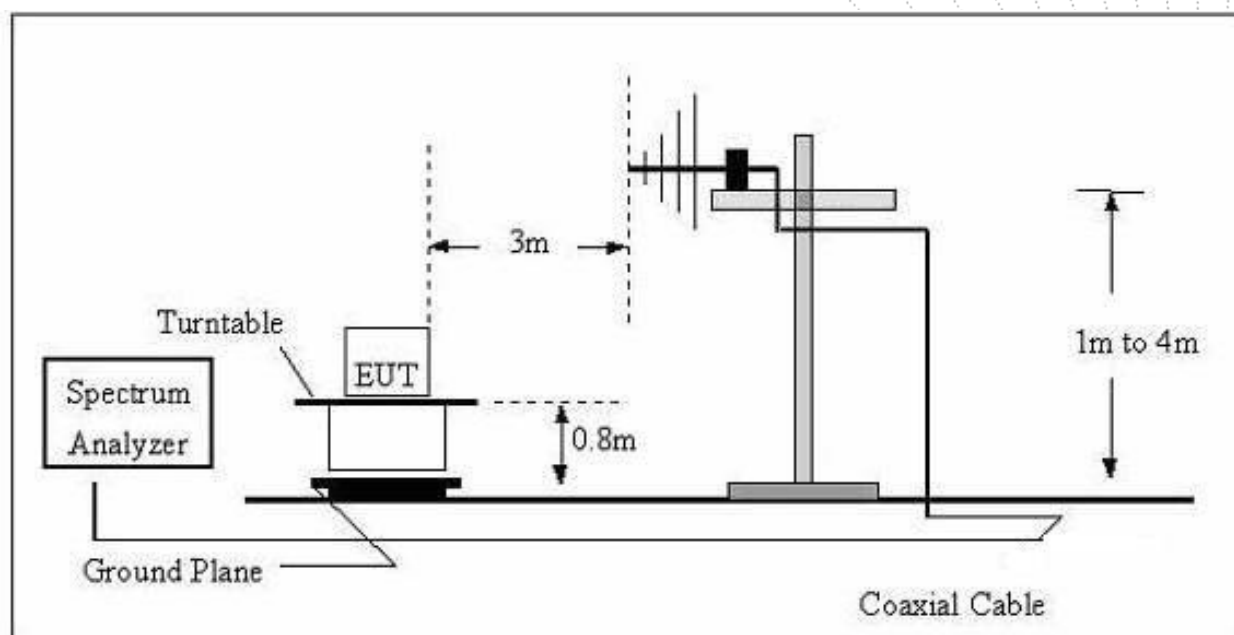
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

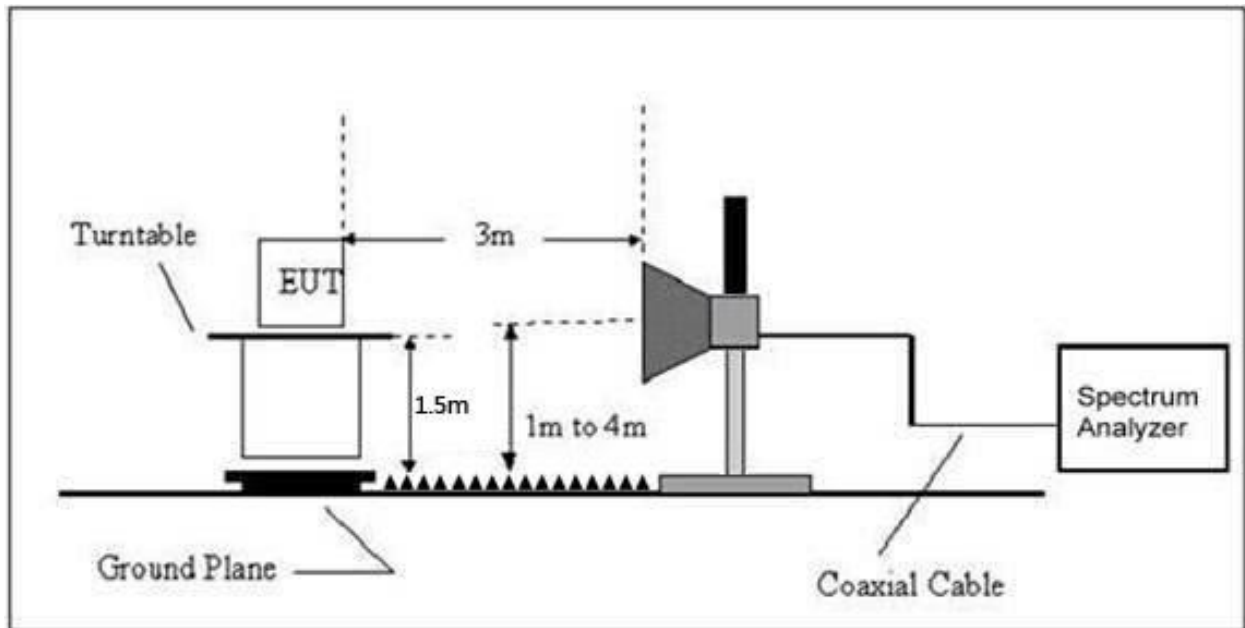
(A) Radiated Emission Test-Up Frequency Below 30MHz



(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 (MHz)	Field Strength uV/m	Distance (m)	Field Strength Limit at 3m Distance	
			uV/m	dBuV/m
0.009 ~ 0.490	$2400/F(\text{kHz})$	300	$10000 * 2400/F(\text{kHz})$	$20\log^{(2400/F(\text{kHz}))} + 80$
0.490 ~ 1.705	$24000/F(\text{kHz})$	30	$100 * 24000/F(\text{kHz})$	$20\log^{(24000/F(\text{kHz}))} + 40$
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 $RBWCF [dB] = 10 \cdot \lg(100 [kHz] / \text{narrower RBW} [kHz])$. , 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°C	Relative Humidity:	24%
Pressure:	101 kPa	Test Voltage:	AC120/60Hz
Test Mode:	Mode 4	Polarization:	--

Freq. (MHz)	Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	State P/F
--	--	--	--	PASS
--	--	--	--	PASS

Note:

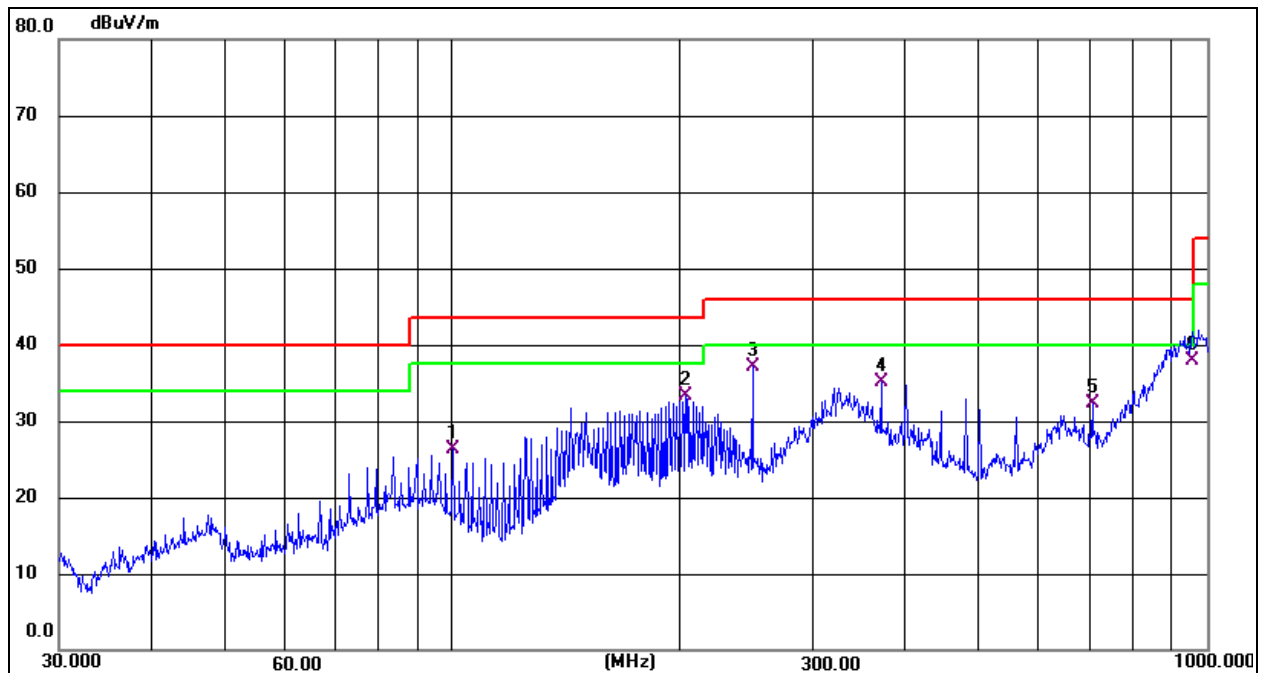
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance/test distance}) (dB)$;

Limit line = specific limits(dBuV) + distance extrapolation factor.

Between 30MHz – 1GHz

Temperature:	26°C	Relative Humidity:	54%
Pressure:	101 kPa	Test Voltage :	AC120/60Hz
Test Mode :	Mode 4	Polarization :	Horizontal

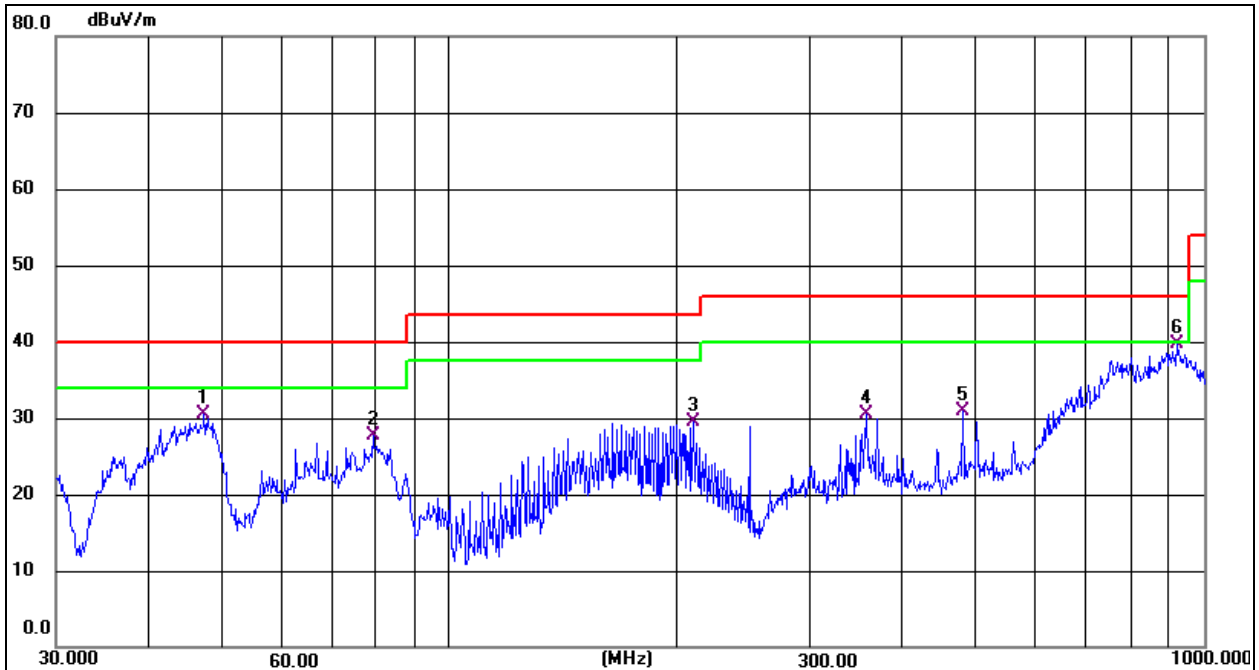


Remark:

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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	100.0092	44.88	-18.65	26.23	43.50	-17.27	QP
2	204.1482	50.65	-17.39	33.26	43.50	-10.24	QP
3	250.0819	52.66	-15.65	37.01	46.00	-8.99	QP
4	370.7023	46.44	-11.33	35.11	46.00	-10.89	QP
5	705.4619	34.95	-2.69	32.26	46.00	-13.74	QP
6 *	958.3740	35.95	1.95	37.90	46.00	-8.10	QP

Temperature:	26°C	Relative Humidity:	54%
Pressure:	101 kPa	Test Voltage :	AC120/60Hz
Test Mode :	Mode 4	Polarization :	Vertical



Remark:

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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	47.1805	47.40	-16.84	30.56	40.00	-9.44	QP
2	79.1385	47.21	-19.60	27.61	40.00	-12.39	QP
3	210.4168	46.69	-17.16	29.53	43.50	-13.97	QP
4	356.6758	42.28	-11.73	30.55	46.00	-15.45	QP
5	480.1065	38.97	-8.15	30.82	46.00	-15.18	QP
6 *	921.7074	38.38	1.27	39.65	46.00	-6.35	QP

Between 1GHz – 40GHz

Test Mode :	TX(5.1G) - 802.11a
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.051	74.10	-20.73	53.36	68.2	-14.84	Pk
Vertical	4434.051	59.26	-20.73	38.53	54	-15.47	AV
Vertical	10360.156	61.47	-9.36	52.11	68.2	-16.09	Pk
Vertical	10360.156	49.17	-9.36	39.81	54	-14.19	AV
Vertical	15540.093	63.26	-7.84	55.42	74	-18.58	Pk
Vertical	15540.093	49.53	-7.84	41.69	54	-12.31	AV
Horizontal	4434.107	74.87	-20.73	54.14	68.2	-14.06	Pk
Horizontal	4434.107	59.76	-20.73	39.03	54	-14.97	AV
Horizontal	10360.057	60.90	-9.36	51.54	68.2	-16.66	Pk
Horizontal	10360.057	49.79	-9.36	40.43	54	-13.57	AV
Horizontal	15540.044	63.64	-7.84	55.80	74	-18.20	Pk
Horizontal	15540.044	49.63	-7.84	41.79	54	-12.21	AV
middle Channel (5200 MHz)-Above 1G							
Vertical	4592.066	71.84	-20.42	51.43	74	-22.57	Pk
Vertical	4592.066	59.06	-20.42	38.64	54	-15.36	AV
Vertical	10400.148	62.84	-9.30	53.54	68.2	-14.66	Pk
Vertical	10400.148	49.21	-9.30	39.91	54	-14.09	AV
Vertical	15600.119	61.63	-7.82	53.81	74	-20.19	Pk
Vertical	15600.119	49.48	-7.82	41.66	54	-12.34	AV
Horizontal	4592.104	74.79	-20.42	54.37	74	-19.63	Pk
Horizontal	4592.104	59.09	-20.42	38.68	54	-15.32	AV
Horizontal	10400.183	63.40	-9.30	54.10	68.2	-14.10	Pk
Horizontal	10400.183	49.83	-9.30	40.53	54	-13.47	AV
Horizontal	15600.062	64.86	-7.82	57.04	74	-16.96	Pk
Horizontal	15600.062	49.57	-7.82	41.75	54	-12.25	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.164	70.90	-20.12	50.78	74	-23.22	Pk
Vertical	4739.164	59.10	-20.12	38.98	54	-15.02	AV
Vertical	10480.013	60.97	-9.18	51.79	68.2	-16.41	Pk
Vertical	10480.013	49.57	-9.18	40.39	54	-13.61	AV
Vertical	15720.066	63.72	-7.78	55.94	74	-18.06	Pk
Vertical	15720.066	49.96	-7.78	42.18	54	-11.82	AV
Horizontal	4739.194	72.26	-20.12	52.14	74	-21.86	Pk
Horizontal	4739.194	59.93	-20.12	39.81	54	-14.19	AV
Horizontal	10480.066	61.53	-9.18	52.35	68.2	-15.85	Pk
Horizontal	10480.066	49.34	-9.18	40.16	54	-13.84	AV
Horizontal	15720.016	64.34	-7.78	56.56	74	-17.44	Pk
Horizontal	15720.016	49.69	-7.78	41.91	54	-12.09	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
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.048	74.92	-20.73	54.19	68.2	-14.01	Pk
Vertical	4434.048	59.51	-20.73	38.78	54	-15.22	AV
Vertical	10360.133	61.63	-9.36	52.27	68.2	-15.93	Pk
Vertical	10360.133	49.48	-9.36	40.12	54	-13.88	AV
Vertical	15540.069	61.07	-7.84	53.23	74	-20.77	Pk
Vertical	15540.069	49.69	-7.84	41.85	54	-12.15	AV
Horizontal	4434.177	71.14	-20.73	50.41	68.2	-17.79	Pk
Horizontal	4434.177	59.46	-20.73	38.73	54	-15.27	AV
Horizontal	10360.130	64.32	-9.36	54.96	68.2	-13.24	Pk
Horizontal	10360.130	49.56	-9.36	40.20	54	-13.80	AV
Horizontal	15540.040	61.17	-7.84	53.33	74	-20.67	Pk
Horizontal	15540.040	49.63	-7.84	41.79	54	-12.21	AV
middle Channel (5200 MHz)-Above 1G							
Vertical	4592.036	70.32	-20.42	49.90	74	-24.10	Pk
Vertical	4592.036	59.49	-20.42	39.07	54	-14.93	AV
Vertical	10400.059	63.33	-9.30	54.03	68.2	-14.17	Pk
Vertical	10400.059	49.57	-9.30	40.27	54	-13.73	AV
Vertical	15600.017	63.65	-7.82	55.83	74	-18.17	Pk
Vertical	15600.017	49.48	-7.82	41.66	54	-12.34	AV
Horizontal	4592.193	72.67	-20.42	52.25	74	-21.75	Pk
Horizontal	4592.193	59.78	-20.42	39.36	54	-14.64	AV
Horizontal	10400.173	62.60	-9.30	53.30	68.2	-14.90	Pk
Horizontal	10400.173	49.87	-9.30	40.57	54	-13.43	AV
Horizontal	15600.014	60.76	-7.82	52.94	74	-21.06	Pk
Horizontal	15600.014	49.83	-7.82	42.01	54	-11.99	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.159	71.06	-20.12	50.94	74	-23.06	Pk
Vertical	4739.159	59.32	-20.12	39.19	54	-14.81	AV
Vertical	10480.136	63.65	-9.18	54.47	68.2	-13.73	Pk
Vertical	10480.136	49.39	-9.18	40.21	54	-13.79	AV
Vertical	15720.157	62.67	-7.78	54.89	74	-19.11	Pk
Vertical	15720.157	49.92	-7.78	42.14	54	-11.86	AV
Horizontal	4739.157	70.46	-20.12	50.34	74	-23.66	Pk
Horizontal	4739.157	59.64	-20.12	39.52	54	-14.48	AV
Horizontal	10480.093	61.68	-9.18	52.50	68.2	-15.70	Pk
Horizontal	10480.093	49.34	-9.18	40.16	54	-13.84	AV
Horizontal	15720.195	61.56	-7.78	53.78	74	-20.22	Pk
Horizontal	15720.195	49.15	-7.78	41.37	54	-12.63	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(antenna A+ antenna B) Mode.

Test Mode :	TX(5.1G) - 802.11n-HT40
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.012	74.05	-20.73	53.31	68.2	-14.89	Pk
Vertical	4434.012	59.08	-20.73	38.35	54	-15.65	AV
Vertical	10380.124	64.26	-9.33	54.93	68.2	-13.27	Pk
Vertical	10380.124	49.97	-9.33	40.64	54	-13.36	AV
Vertical	15570.144	64.08	-7.83	56.25	74	-17.75	Pk
Vertical	15570.144	49.55	-7.83	41.72	54	-12.28	AV
Horizontal	4434.127	73.04	-20.73	52.31	74	-21.69	Pk
Horizontal	4434.127	59.73	-20.73	39.00	54	-15.00	AV
Horizontal	10380.108	63.26	-9.33	53.93	68.2	-14.27	Pk
Horizontal	10380.108	49.69	-9.33	40.36	54	-13.64	AV
Horizontal	15570.065	61.06	-7.83	53.23	74	-20.77	Pk
Horizontal	15570.065	49.95	-7.83	42.12	54	-11.88	AV
High Channel (5230 MHz)-Above 1G							
Vertical	4739.071	73.46	-20.12	53.34	68.2	-14.86	Pk
Vertical	4739.071	59.53	-20.12	39.41	54	-14.59	AV
Vertical	10460.165	61.08	-9.21	51.87	68.2	-16.33	Pk
Vertical	10460.165	49.81	-9.21	40.60	54	-13.40	AV
Vertical	15690.076	60.85	-7.79	53.06	74	-20.94	Pk
Vertical	15690.076	49.70	-7.79	41.91	54	-12.09	AV
Horizontal	4739.031	70.37	-20.12	50.25	68.2	-17.95	Pk
Horizontal	4739.031	59.07	-20.12	38.95	54	-15.05	AV
Horizontal	10460.143	64.16	-9.21	54.95	68.2	-13.25	Pk
Horizontal	10460.143	49.99	-9.21	40.78	54	-13.22	AV
Horizontal	15690.118	60.63	-7.79	52.84	74	-21.16	Pk
Horizontal	15690.118	49.10	-7.79	41.31	54	-12.69	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO(antenna A+ antenna B) Mode.

Test Mode:	TX(5.1G) - 802.11ac-HT20
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.079	74.98	-20.73	54.24	68.2	-13.96	Pk
Vertical	4434.079	59.76	-20.73	39.03	54	-14.97	AV
Vertical	10360.079	64.89	-9.36	55.53	68.2	-12.67	Pk
Vertical	10360.079	49.83	-9.36	40.47	54	-13.53	AV
Vertical	15540.198	62.25	-7.84	54.41	74	-19.59	Pk
Vertical	15540.198	49.98	-7.84	42.14	54	-11.86	AV
Horizontal	4434.180	71.64	-20.73	50.91	68.2	-17.29	Pk
Horizontal	4434.180	59.05	-20.73	38.32	54	-15.68	AV
Horizontal	10360.033	63.96	-9.36	54.60	68.2	-13.60	Pk
Horizontal	10360.033	49.32	-9.36	39.96	54	-14.04	AV
Horizontal	15540.131	61.80	-7.84	53.96	74	-20.04	Pk
Horizontal	15540.131	49.87	-7.84	42.03	54	-11.97	AV
middle Channel (5200 MHz)-Above 1G							
Vertical	4592.167	73.37	-20.42	52.96	74	-21.04	Pk
Vertical	4592.167	59.29	-20.42	38.87	54	-15.13	AV
Vertical	10400.029	64.74	-9.30	55.44	68.2	-12.76	Pk
Vertical	10400.029	49.59	-9.30	40.29	54	-13.71	AV
Vertical	15600.158	60.76	-7.82	52.94	74	-21.06	Pk
Vertical	15600.158	49.38	-7.82	41.56	54	-12.44	AV
Horizontal	4592.119	71.93	-20.42	51.51	74	-22.49	Pk
Horizontal	4592.119	59.84	-20.42	39.42	54	-14.58	AV
Horizontal	10400.179	64.89	-9.30	55.59	68.2	-12.61	Pk
Horizontal	10400.179	49.34	-9.30	40.04	54	-13.96	AV
Horizontal	15600.094	64.24	-7.82	56.42	74	-17.58	Pk
Horizontal	15600.094	49.57	-7.82	41.75	54	-12.25	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.051	70.82	-20.12	50.70	74	-23.30	Pk
Vertical	4739.051	59.39	-20.12	39.26	54	-14.74	AV
Vertical	10480.114	64.04	-9.18	54.86	68.2	-13.34	Pk
Vertical	10480.114	49.22	-9.18	40.04	54	-13.96	AV
Vertical	15720.077	61.73	-7.78	53.95	74	-20.05	Pk
Vertical	15720.077	49.51	-7.78	41.73	54	-12.27	AV
Horizontal	4739.122	75.00	-20.12	54.88	74	-19.12	Pk
Horizontal	4739.122	59.68	-20.12	39.56	54	-14.44	AV
Horizontal	10480.140	63.25	-9.18	54.07	68.2	-14.13	Pk
Horizontal	10480.140	49.04	-9.18	39.86	54	-14.14	AV
Horizontal	15720.119	61.37	-7.78	53.59	74	-20.41	Pk
Horizontal	15720.119	49.40	-7.78	41.62	54	-12.38	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO(antenna A+ antenna B) Mode.

Test Mode:	TX(5.1G) - 802.11ac-HT40
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.117	73.64	-20.73	52.91	68.2	-15.29	Pk
Vertical	4434.117	59.43	-20.73	38.70	54	-15.30	AV
Vertical	10380.134	60.84	-9.33	51.51	68.2	-16.69	Pk
Vertical	10380.134	49.77	-9.33	40.44	54	-13.56	AV
Vertical	15570.126	60.51	-7.83	52.68	74	-21.32	Pk
Vertical	15570.126	49.93	-7.83	42.10	54	-11.90	AV
Horizontal	4434.081	73.64	-20.73	52.91	74	-21.09	Pk
Horizontal	4434.081	59.96	-20.73	39.23	54	-14.77	AV
Horizontal	10380.121	63.03	-9.33	53.70	68.2	-14.50	Pk
Horizontal	10380.121	49.28	-9.33	39.95	54	-14.05	AV
Horizontal	15570.185	61.09	-7.83	53.26	74	-20.74	Pk
Horizontal	15570.185	49.53	-7.83	41.70	54	-12.30	AV
middle Channel (5230 MHz)-Above 1G							
Vertical	4739.162	71.35	-20.12	51.23	68.2	-16.97	Pk
Vertical	4739.162	59.05	-20.12	38.93	54	-15.07	AV
Vertical	10460.012	63.91	-9.21	54.70	68.2	-13.50	Pk
Vertical	10460.012	49.55	-9.21	40.34	54	-13.66	AV
Vertical	15690.147	62.68	-7.79	54.89	74	-19.11	Pk
Vertical	15690.147	49.66	-7.79	41.87	54	-12.13	AV
Horizontal	4739.116	72.20	-20.12	52.07	68.2	-16.13	Pk
Horizontal	4739.116	59.81	-20.12	39.68	54	-14.32	AV
Horizontal	10460.011	60.42	-9.21	51.21	68.2	-16.99	Pk
Horizontal	10460.011	49.78	-9.21	40.57	54	-13.43	AV
Horizontal	15690.091	60.75	-7.79	52.96	74	-21.04	Pk
Horizontal	15690.091	49.99	-7.79	42.20	54	-11.80	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(antenna A+ antenna B) Mode.

Test Mode:	TX(5.1G) - 802.11ac-HT80
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
(5210 MHz)-Above 1G							
Vertical	4434.001	72.18	-20.73	51.45	68.2	-16.75	Pk
Vertical	4434.001	59.55	-20.73	38.82	54	-15.18	AV
Vertical	10420.192	60.48	-9.27	51.21	68.2	-16.99	Pk
Vertical	10420.192	49.85	-9.27	40.58	54	-13.42	AV
Vertical	15630.005	64.02	-7.81	56.21	74	-17.79	Pk
Vertical	15630.005	49.80	-7.81	41.99	54	-12.01	AV
Horizontal	4434.146	72.83	-20.73	52.10	68.2	-16.10	Pk
Horizontal	4434.146	59.92	-20.73	39.19	54	-14.81	AV
Horizontal	10420.121	64.91	-9.27	55.64	68.2	-12.56	Pk
Horizontal	10420.121	49.66	-9.27	40.39	54	-13.61	AV
Horizontal	15630.168	63.82	-7.81	56.01	74	-17.99	Pk
Horizontal	15630.168	49.99	-7.81	42.18	54	-11.82	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO(antenna A+ antenna B) Mode.

Test Mode:	TX(5.1G) - 802.11ax-HE20
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.001	70.26	-20.73	49.53	68.2	-18.67	Pk
Vertical	4434.001	59.42	-20.73	38.69	54	-15.31	AV
Vertical	10360.004	62.79	-9.36	53.43	68.2	-14.77	Pk
Vertical	10360.004	49.94	-9.36	40.58	54	-13.42	AV
Vertical	15540.191	64.38	-7.84	56.54	74	-17.46	Pk
Vertical	15540.191	49.82	-7.84	41.98	54	-12.02	AV
Horizontal	4434.091	72.72	-20.73	51.99	68.2	-16.21	Pk
Horizontal	4434.091	59.63	-20.73	38.90	54	-15.10	AV
Horizontal	10360.001	64.21	-9.36	54.85	68.2	-13.35	Pk
Horizontal	10360.001	49.10	-9.36	39.74	54	-14.26	AV
Horizontal	15540.027	63.38	-7.84	55.54	74	-18.46	Pk
Horizontal	15540.027	49.24	-7.84	41.40	54	-12.60	AV
middle Channel (5200 MHz)-Above 1G							
Vertical	4592.198	74.51	-20.42	54.09	74	-19.91	Pk
Vertical	4592.198	59.29	-20.42	38.87	54	-15.13	AV
Vertical	10400.154	63.19	-9.30	53.89	68.2	-14.31	Pk
Vertical	10400.154	49.83	-9.30	40.53	54	-13.47	AV
Vertical	15600.176	63.75	-7.82	55.93	74	-18.07	Pk
Vertical	15600.176	49.47	-7.82	41.65	54	-12.35	AV
Horizontal	4592.152	71.26	-20.42	50.85	74	-23.15	Pk
Horizontal	4592.152	59.19	-20.42	38.78	54	-15.22	AV
Horizontal	10400.059	64.61	-9.30	55.31	68.2	-12.89	Pk
Horizontal	10400.059	49.23	-9.30	39.93	54	-14.07	AV
Horizontal	15600.127	61.76	-7.82	53.94	74	-20.06	Pk
Horizontal	15600.127	49.61	-7.82	41.79	54	-12.21	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.022	71.40	-20.12	51.28	74	-22.72	Pk
Vertical	4739.022	59.78	-20.12	39.65	54	-14.35	AV
Vertical	10480.180	61.30	-9.18	52.12	68.2	-16.08	Pk
Vertical	10480.180	49.81	-9.18	40.63	54	-13.37	AV
Vertical	15720.157	63.81	-7.78	56.03	74	-17.97	Pk
Vertical	15720.157	49.50	-7.78	41.72	54	-12.28	AV
Horizontal	4739.040	74.35	-20.12	54.22	74	-19.78	Pk
Horizontal	4739.040	59.05	-20.12	38.93	54	-15.07	AV
Horizontal	10480.072	62.55	-9.18	53.37	68.2	-14.83	Pk
Horizontal	10480.072	49.28	-9.18	40.10	54	-13.90	AV
Horizontal	15720.060	63.17	-7.78	55.39	74	-18.61	Pk
Horizontal	15720.060	49.79	-7.78	42.01	54	-11.99	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(antenna A+ antenna B) Mode.

Test Mode:	TX(5.1G) - 802.11ax-HE40
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.040	73.24	-20.73	52.51	68.2	-15.69	Pk
Vertical	4434.040	59.86	-20.73	39.13	54	-14.87	AV
Vertical	10380.067	61.64	-9.33	52.31	68.2	-15.89	Pk
Vertical	10380.067	49.57	-9.33	40.24	54	-13.76	AV
Vertical	15570.155	60.15	-7.83	52.32	74	-21.68	Pk
Vertical	15570.155	49.62	-7.83	41.79	54	-12.21	AV
Horizontal	4434.187	73.33	-20.73	52.59	74	-21.41	Pk
Horizontal	4434.187	59.90	-20.73	39.17	54	-14.83	AV
Horizontal	10380.083	61.56	-9.33	52.23	68.2	-15.97	Pk
Horizontal	10380.083	49.08	-9.33	39.75	54	-14.25	AV
Horizontal	15570.166	62.03	-7.83	54.20	74	-19.80	Pk
Horizontal	15570.166	49.38	-7.83	41.55	54	-12.45	AV
High Channel (5230 MHz)-Above 1G							
Vertical	4739.086	74.93	-20.12	54.81	68.2	-13.39	Pk
Vertical	4739.086	59.81	-20.12	39.69	54	-14.31	AV
Vertical	10460.138	60.12	-9.21	50.91	68.2	-17.29	Pk
Vertical	10460.138	49.24	-9.21	40.03	54	-13.97	AV
Vertical	15690.158	64.90	-7.79	57.11	74	-16.89	Pk
Vertical	15690.158	49.32	-7.79	41.53	54	-12.47	AV
Horizontal	4739.142	71.20	-20.12	51.08	68.2	-17.12	Pk
Horizontal	4739.142	59.77	-20.12	39.65	54	-14.35	AV
Horizontal	10460.133	62.73	-9.21	53.52	68.2	-14.68	Pk
Horizontal	10460.133	49.92	-9.21	40.71	54	-13.29	AV
Horizontal	15690.106	61.71	-7.79	53.92	74	-20.08	Pk
Horizontal	15690.106	49.67	-7.79	41.88	54	-12.12	AV

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

Test Mode:	TX(5.1G) - 802.11ax-HE80
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
(5210 MHz)-Above 1G							
Vertical	4434.024	71.39	-20.73	50.66	68.2	-17.54	Pk
Vertical	4434.024	59.16	-20.73	38.43	54	-15.57	AV
Vertical	10420.033	60.23	-9.27	50.96	68.2	-17.24	Pk
Vertical	10420.033	49.90	-9.27	40.63	54	-13.37	AV
Vertical	15630.058	64.41	-7.81	56.60	74	-17.40	Pk
Vertical	15630.058	49.94	-7.81	42.13	54	-11.87	AV
Horizontal	4434.175	74.47	-20.73	53.74	68.2	-14.46	Pk
Horizontal	4434.175	59.20	-20.73	38.47	54	-15.53	AV
Horizontal	10420.167	64.51	-9.27	55.24	68.2	-12.96	Pk
Horizontal	10420.167	49.87	-9.27	40.60	54	-13.40	AV
Horizontal	15630.042	62.18	-7.81	54.37	74	-19.63	Pk
Horizontal	15630.042	49.94	-7.81	42.13	54	-11.87	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO(antenna A+ antenna B) Mode.

- ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge
- All the modes 802.11a/n/ac has been tested and the worst result 802.11n20 recorded as below:

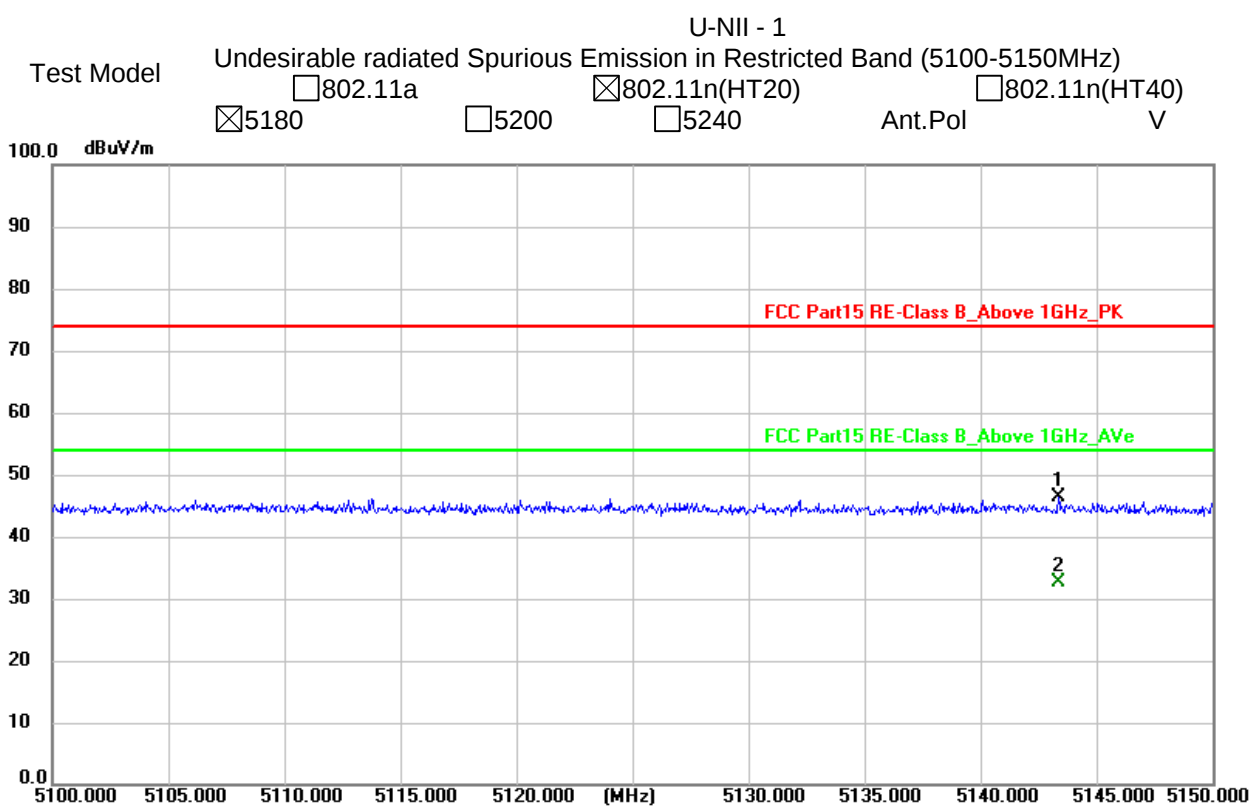
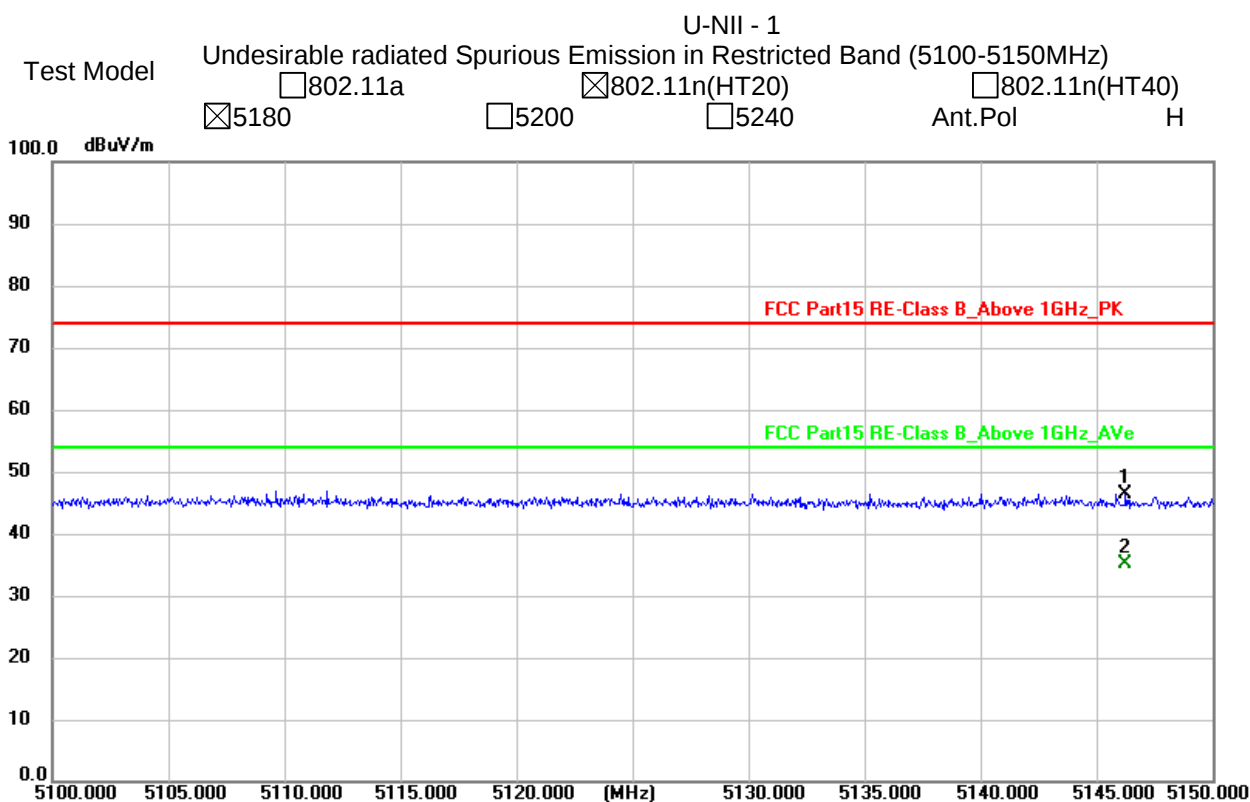
Test mode: 802.11n20 Frequency(MHz): 5180

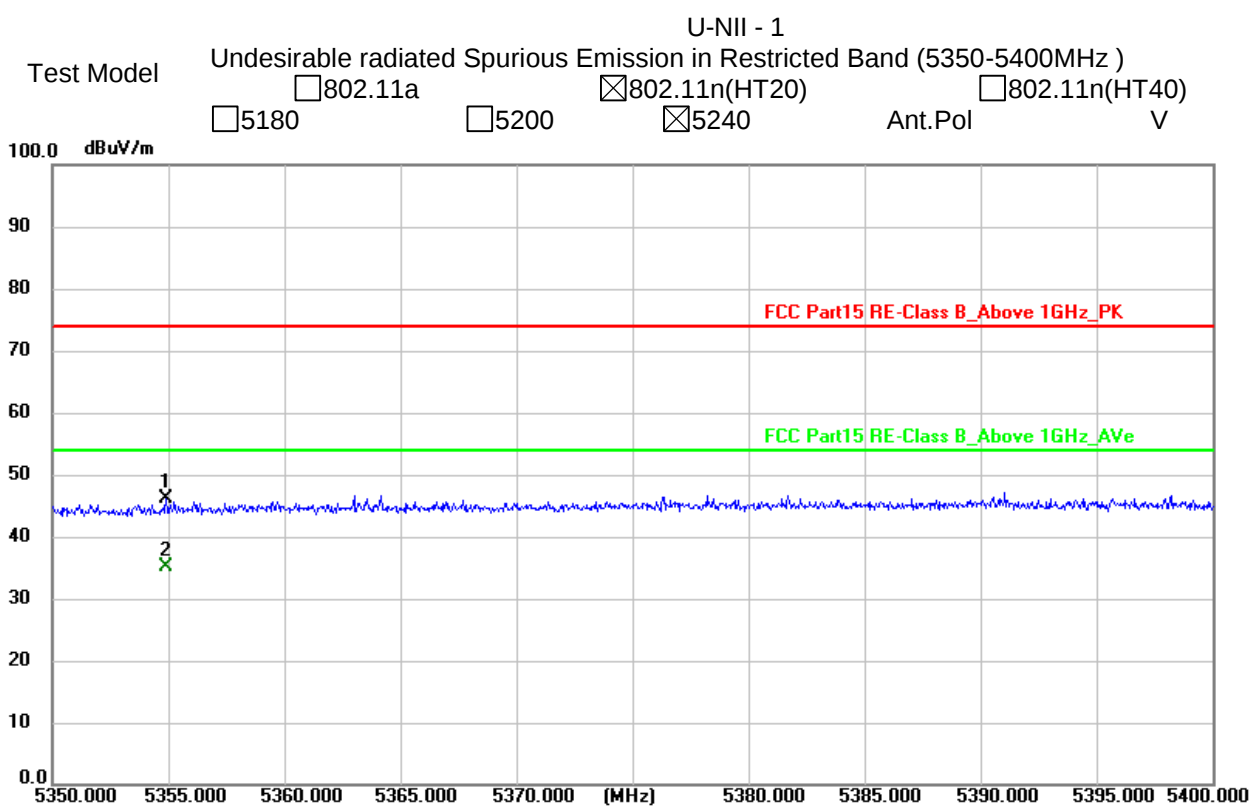
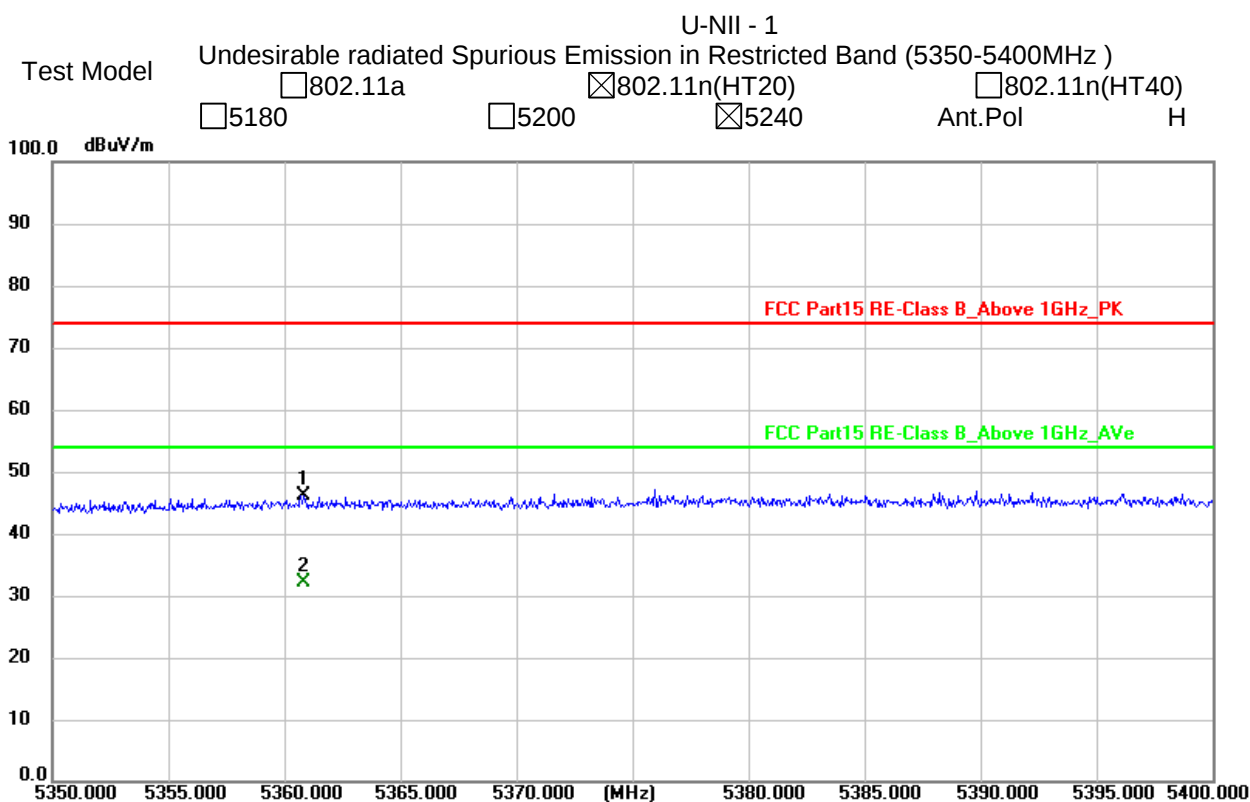
Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)
5146.25	H	46.42	74	35.18	54
5143.35	V	46.50	74	32.74	54

Test mode: 802.11n20 Frequency(MHz): 5240

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)
5360.80	H	46.22	74	32.25	54
5354.90	V	46.02	74	35.13	54

Note: (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp





Test Mode:	TX(5.8G) - 802.11a
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.123	72.98	-20.24	52.74	74	-21.26	Pk
Vertical	4679.123	59.24	-20.24	39.00	54	-15.00	AV
Vertical	11490.021	64.79	-8.79	56.00	68.2	-12.20	Pk
Vertical	11490.021	49.43	-8.79	40.64	54	-13.36	AV
Vertical	17235.021	56.77	-3.18	53.59	68.2	-14.61	Pk
Vertical	17235.021	44.45	-3.18	41.27	54	-12.73	AV
Horizontal	4679.073	74.99	-20.73	54.26	74	-19.74	Pk
Horizontal	4679.073	59.67	-20.73	38.94	54	-15.06	AV
Horizontal	11490.084	62.11	-8.79	53.32	68.2	-14.88	Pk
Horizontal	11490.084	49.27	-8.79	40.48	54	-13.52	AV
Horizontal	17235.014	56.79	-3.18	53.61	68.2	-14.59	Pk
Horizontal	17235.014	44.55	-3.18	41.37	54	-12.63	AV
middle Channel (5785 MHz)-Above 1G							
Vertical	4592.146	74.97	-20.42	54.56	74	-19.44	Pk
Vertical	4592.146	59.82	-20.42	39.40	54	-14.60	AV
Vertical	11570.174	60.54	-8.86	51.68	68.2	-16.52	Pk
Vertical	11570.174	49.05	-8.86	40.19	54	-13.81	AV
Vertical	17355.004	55.94	-2.52	53.42	68.2	-14.78	Pk
Vertical	17355.004	44.55	-2.52	42.03	54	-11.97	AV
Horizontal	4592.090	74.10	-20.42	53.68	74	-20.32	Pk
Horizontal	4592.090	59.32	-20.42	38.90	54	-15.10	AV
Horizontal	11570.082	64.73	-8.86	55.87	68.2	-12.33	Pk
Horizontal	11570.082	49.62	-8.86	40.76	54	-13.24	AV
Horizontal	17355.195	58.07	-2.52	55.55	68.2	-12.65	Pk
Horizontal	17355.195	44.96	-2.52	42.44	54	-11.56	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.086	72.89	-18.93	53.96	68.2	-14.24	Pk
Vertical	6039.086	59.38	-18.93	40.44	54	-13.56	AV
Vertical	11650.083	64.04	-8.92	55.12	74	-18.88	Pk
Vertical	11650.083	49.53	-8.92	40.61	54	-13.39	AV
Vertical	17475.033	58.43	-1.86	56.57	68.2	-11.63	Pk
Vertical	17475.033	44.28	-1.86	42.42	54	-11.58	AV
Horizontal	6039.082	72.36	-18.93	53.43	68.2	-14.77	Pk
Horizontal	6039.082	59.36	-18.93	40.43	54	-13.57	AV
Horizontal	11650.073	61.70	-8.92	52.78	74	-21.22	Pk
Horizontal	11650.073	49.91	-8.92	40.99	54	-13.01	AV
Horizontal	17475.069	56.98	-1.86	55.12	68.2	-13.08	Pk
Horizontal	17475.069	44.09	-1.86	42.23	54	-11.77	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(5.8G) - 802.11n-HT20

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.068	74.31	-20.24	54.07	74	-19.93	Pk
Vertical	4679.068	59.23	-20.24	38.99	54	-15.01	AV
Vertical	11490.006	61.76	-8.79	52.97	68.2	-15.23	Pk
Vertical	11490.006	49.26	-8.79	40.47	54	-13.53	AV
Vertical	17235.001	57.41	-3.18	54.23	68.2	-13.97	Pk
Vertical	17235.001	44.16	-3.18	40.98	54	-13.02	AV
Horizontal	4679.046	72.81	-20.24	52.57	74	-21.43	Pk
Horizontal	4679.046	59.70	-20.24	39.46	54	-14.54	AV
Horizontal	11490.178	61.50	-8.79	52.71	68.2	-15.49	Pk
Horizontal	11490.178	49.50	-8.79	40.71	54	-13.29	AV
Horizontal	17235.134	57.26	-3.18	54.08	68.2	-14.12	Pk
Horizontal	17235.134	44.74	-3.18	41.56	54	-12.44	AV
middle Channel (5785 MHz)-Above 1G							
Vertical	4592.002	73.89	-20.42	53.47	74	-20.53	Pk
Vertical	4592.002	59.61	-20.42	39.19	54	-14.81	AV
Vertical	11570.196	61.82	-8.86	52.96	68.2	-15.24	Pk
Vertical	11570.196	49.81	-8.86	40.95	54	-13.05	AV
Vertical	17355.125	57.14	-2.52	54.62	68.2	-13.58	Pk
Vertical	17355.125	44.35	-2.52	41.83	54	-12.17	AV
Horizontal	4592.050	72.29	-20.42	51.87	74	-22.13	Pk
Horizontal	4592.050	59.56	-20.42	39.14	54	-14.86	AV
Horizontal	11570.077	63.17	-8.86	54.31	68.2	-13.89	Pk
Horizontal	11570.077	49.67	-8.86	40.81	54	-13.19	AV
Horizontal	17355.023	58.08	-2.52	55.56	68.2	-12.64	Pk
Horizontal	17355.023	44.05	-2.52	41.53	54	-12.47	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.200	71.46	-18.93	52.53	68.2	-15.67	Pk
Vertical	6039.200	59.71	-18.93	40.78	54	-13.22	AV
Vertical	11650.008	63.43	-8.92	54.51	74	-19.49	Pk
Vertical	11650.008	49.52	-8.92	40.60	54	-13.40	AV
Vertical	17475.108	56.55	-1.86	54.69	68.2	-13.51	Pk
Vertical	17475.108	44.87	-1.86	43.01	54	-10.99	AV
Horizontal	6039.032	71.39	-18.93	52.46	68.2	-15.74	Pk
Horizontal	6039.032	59.73	-18.93	40.80	54	-13.20	AV
Horizontal	11650.153	60.34	-8.92	51.42	74	-22.58	Pk
Horizontal	11650.153	49.07	-8.92	40.15	54	-13.85	AV
Horizontal	17475.109	55.62	-1.86	53.76	68.2	-14.44	Pk
Horizontal	17475.109	44.16	-1.86	42.30	54	-11.70	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(antenna A+ antenna B) Mode.

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

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.034	71.46	-20.24	51.22	74	-22.78	AV
Vertical	4679.034	59.51	-20.24	39.27	54	-14.73	Pk
Vertical	11510.076	64.67	-8.81	55.86	74	-18.14	AV
Vertical	11510.076	49.15	-8.81	40.34	54	-13.66	Pk
Vertical	17265.021	55.31	-3.01	52.30	68.2	-15.90	AV
Vertical	17265.021	44.36	-3.01	41.35	54	-12.65	Pk
Horizontal	4679.003	74.10	-20.24	53.86	74	-20.14	AV
Horizontal	4679.003	59.62	-20.24	39.38	54	-14.62	Pk
Horizontal	11510.123	64.22	-8.81	55.41	74	-18.59	AV
Horizontal	11510.123	49.71	-8.81	40.90	54	-13.10	Pk
Horizontal	17265.108	57.88	-3.01	54.87	68.2	-13.33	AV
Horizontal	17265.108	44.36	-3.01	41.35	54	-12.65	AV
middle Channel (5795 MHz)-Above 1G							
Vertical	6039.123	71.47	-18.93	52.53	68.2	-15.67	Pk
Vertical	6039.123	59.70	-18.93	40.77	54	-13.23	AV
Vertical	11590.166	63.45	-8.87	54.58	74	-19.42	Pk
Vertical	11590.166	49.14	-8.87	40.27	54	-13.73	AV
Vertical	17385.170	55.12	-2.35	52.77	68.2	-15.43	Pk
Vertical	17385.170	44.92	-2.35	42.57	54	-11.43	AV
Horizontal	6039.055	74.57	-18.93	55.64	68.2	-12.56	Pk
Horizontal	6039.055	59.37	-18.93	40.44	54	-13.56	AV
Horizontal	11590.071	62.84	-8.87	53.97	74	-20.03	Pk
Horizontal	11590.071	49.14	-8.87	40.27	54	-13.73	AV
Horizontal	17385.014	55.53	-2.35	53.18	68.2	-15.02	Pk
Horizontal	17385.014	44.62	-2.35	42.27	54	-11.73	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(antenna A+ antenna B) Mode.

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

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.062	74.28	-20.24	54.04	74	-19.96	Pk
Vertical	4679.062	59.83	-20.24	39.59	54	-14.41	AV
Vertical	11490.142	60.84	-8.79	52.05	68.2	-16.15	Pk
Vertical	11490.142	49.52	-8.79	40.73	54	-13.27	AV
Vertical	17235.132	59.53	-3.18	56.35	68.2	-11.85	Pk
Vertical	17235.132	44.26	-3.18	41.08	54	-12.92	AV
Horizontal	4679.092	73.05	-20.24	52.81	74	-21.19	Pk
Horizontal	4679.092	59.01	-20.24	38.77	54	-15.23	AV
Horizontal	11490.154	61.82	-8.79	53.03	68.2	-15.17	Pk
Horizontal	11490.154	49.49	-8.79	40.70	54	-13.30	AV
Horizontal	17235.124	58.98	-3.18	55.80	68.2	-12.40	Pk
Horizontal	17235.124	44.04	-3.18	40.86	54	-13.14	AV
middle Channel (5785 MHz)-Above 1G							
Vertical	4592.037	70.70	-20.42	50.29	74	-23.71	Pk
Vertical	4592.037	59.95	-20.42	39.53	54	-14.47	AV
Vertical	11570.086	60.31	-8.86	51.45	68.2	-16.75	Pk
Vertical	11570.086	49.45	-8.86	40.59	54	-13.41	AV
Vertical	17355.079	58.71	-2.52	56.19	68.2	-12.01	Pk
Vertical	17355.079	44.65	-2.52	42.13	54	-11.87	AV
Horizontal	4592.131	72.79	-20.42	52.38	74	-21.62	Pk
Horizontal	4592.131	59.34	-20.42	38.92	54	-15.08	AV
Horizontal	11570.019	62.18	-8.86	53.32	68.2	-14.88	Pk
Horizontal	11570.019	49.86	-8.86	41.00	54	-13.00	AV
Horizontal	17355.143	59.13	-2.52	56.61	68.2	-11.59	Pk
Horizontal	17355.143	44.49	-2.52	41.97	54	-12.03	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.040	73.07	-18.93	54.14	68.2	-14.06	Pk
Vertical	6039.040	59.06	-18.93	40.13	54	-13.87	AV
Vertical	11650.009	62.08	-8.92	53.16	74	-20.84	Pk
Vertical	11650.009	49.82	-8.92	40.90	54	-13.10	AV
Vertical	17475.101	57.30	-1.86	55.44	68.2	-12.76	Pk
Vertical	17475.101	44.42	-1.86	42.56	54	-11.44	AV
Horizontal	6039.151	71.45	-18.93	52.52	68.2	-15.68	Pk
Horizontal	6039.151	59.65	-18.93	40.72	54	-13.28	AV
Horizontal	11650.065	60.52	-8.92	51.60	74	-22.40	Pk
Horizontal	11650.065	49.99	-8.92	41.07	54	-12.93	AV
Horizontal	17475.068	56.20	-1.86	54.34	68.2	-13.86	Pk
Horizontal	17475.068	44.06	-1.86	42.20	54	-11.80	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(antenna A+ antenna B) Mode.

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

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.194	72.81	-20.24	52.57	74	-21.43	AV
Vertical	4679.194	59.85	-20.24	39.60	54	-14.40	Pk
Vertical	11510.010	60.09	-8.81	51.28	74	-22.72	AV
Vertical	11510.010	49.85	-8.81	41.04	54	-12.96	Pk
Vertical	17265.044	57.81	-3.01	54.80	68.2	-13.40	AV
Vertical	17265.044	44.84	-3.01	41.83	54	-12.17	Pk
Horizontal	4679.197	72.65	-20.24	52.41	74	-21.59	AV
Horizontal	4679.197	59.98	-20.24	39.74	54	-14.26	Pk
Horizontal	11510.184	63.08	-8.81	54.27	74	-19.73	AV
Horizontal	11510.184	49.98	-8.81	41.17	54	-12.83	Pk
Horizontal	17265.083	58.27	-3.01	55.26	68.2	-12.94	AV
Horizontal	17265.083	44.45	-3.01	41.44	54	-12.56	AV
middle Channel (5795 MHz)-Above 1G							
Vertical	6039.103	72.04	-18.93	53.10	68.2	-15.10	Pk
Vertical	6039.103	59.68	-18.93	40.75	54	-13.25	AV
Vertical	11590.003	60.92	-8.87	52.05	74	-21.95	Pk
Vertical	11590.003	49.30	-8.87	40.43	54	-13.57	AV
Vertical	17385.177	57.20	-2.35	54.85	68.2	-13.35	Pk
Vertical	17385.177	44.58	-2.35	42.23	54	-11.77	AV
Horizontal	6039.167	71.01	-18.93	52.08	68.2	-16.12	Pk
Horizontal	6039.167	59.86	-18.93	40.93	54	-13.07	AV
Horizontal	11590.165	61.66	-8.87	52.79	74	-21.21	Pk
Horizontal	11590.165	49.64	-8.87	40.77	54	-13.23	AV
Horizontal	17385.077	55.62	-2.35	53.27	68.2	-14.93	Pk
Horizontal	17385.077	44.74	-2.35	42.39	54	-11.61	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(antenna A+ antenna B) Mode.

Test Mode:	TX(5.8G) - 802.11ac-HT80
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
(5775 MHz)-Above 1G							
Vertical	4679.098	72.21	-20.24	51.96	74	-22.04	Pk
Vertical	4679.098	59.05	-20.24	38.81	54	-15.19	AV
Vertical	11550.142	61.16	-8.84	52.32	74	-21.68	Pk
Vertical	11550.142	49.06	-8.84	40.22	54	-13.78	AV
Vertical	17325.029	59.41	-2.68	56.73	68.2	-11.47	Pk
Vertical	17325.029	44.54	-2.68	41.86	54	-12.14	AV
Horizontal	4679.094	70.66	-20.24	50.42	74	-23.58	Pk
Horizontal	4679.094	59.43	-20.24	39.19	54	-14.81	AV
Horizontal	11550.132	62.73	-8.84	53.89	74	-20.11	Pk
Horizontal	11550.132	49.26	-8.84	40.42	54	-13.58	AV
Horizontal	17325.019	56.10	-2.68	53.42	68.2	-14.78	Pk
Horizontal	17325.019	44.07	-2.68	41.39	54	-12.61	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(antenna A+ antenna B) Mode.

Test Mode: TX(5.8G) - 802.11ax-HE20

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.078	70.08	-20.24	49.84	74	-24.16	Pk
Vertical	4679.078	59.28	-20.24	39.04	54	-14.96	AV
Vertical	11490.045	64.09	-8.79	55.30	68.2	-12.90	Pk
Vertical	11490.045	49.58	-8.79	40.79	54	-13.21	AV
Vertical	17235.072	57.38	-3.18	54.20	68.2	-14.00	Pk
Vertical	17235.072	44.28	-3.18	41.10	54	-12.90	AV
Horizontal	4679.182	73.45	-20.24	53.21	74	-20.79	Pk
Horizontal	4679.182	59.43	-20.24	39.19	54	-14.81	AV
Horizontal	11490.022	64.88	-8.79	56.09	68.2	-12.11	Pk
Horizontal	11490.022	49.82	-8.79	41.03	54	-12.97	AV
Horizontal	17235.076	56.45	-3.18	53.27	68.2	-14.93	Pk
Horizontal	17235.076	44.43	-3.18	41.25	54	-12.75	AV
middle Channel (5785 MHz)-Above 1G							
Vertical	4592.040	72.28	-20.42	51.86	74	-22.14	Pk
Vertical	4592.040	59.15	-20.42	38.73	54	-15.27	AV
Vertical	11570.088	61.02	-8.86	52.16	68.2	-16.04	Pk
Vertical	11570.088	49.10	-8.86	40.24	54	-13.76	AV
Vertical	17355.168	56.20	-2.52	53.68	68.2	-14.52	Pk
Vertical	17355.168	44.95	-2.52	42.43	54	-11.57	AV
Horizontal	4592.050	73.30	-20.42	52.88	74	-21.12	Pk
Horizontal	4592.050	59.99	-20.42	39.58	54	-14.42	AV
Horizontal	11570.010	64.72	-8.86	55.86	68.2	-12.34	Pk
Horizontal	11570.010	49.62	-8.86	40.76	54	-13.24	AV
Horizontal	17355.140	58.83	-2.52	56.31	68.2	-11.89	Pk
Horizontal	17355.140	44.87	-2.52	42.35	54	-11.65	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.048	70.24	-18.93	51.30	68.2	-16.90	Pk
Vertical	6039.048	59.38	-18.93	40.45	54	-13.55	AV
Vertical	11650.033	61.69	-8.92	52.77	74	-21.23	Pk
Vertical	11650.033	49.99	-8.92	41.07	54	-12.93	AV
Vertical	17475.041	56.59	-1.86	54.73	68.2	-13.47	Pk
Vertical	17475.041	44.98	-1.86	43.12	54	-10.88	AV
Horizontal	6039.097	71.89	-18.93	52.96	68.2	-15.24	Pk
Horizontal	6039.097	59.95	-18.93	41.02	54	-12.98	AV
Horizontal	11650.182	62.02	-8.92	53.10	74	-20.90	Pk
Horizontal	11650.182	49.77	-8.92	40.85	54	-13.15	AV
Horizontal	17475.135	56.80	-1.86	54.94	68.2	-13.26	Pk
Horizontal	17475.135	44.20	-1.86	42.34	54	-11.66	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(antenna A+ antenna B) Mode.

Test Mode: TX(5.8G) - 802.11ax-HE40

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.130	71.05	-20.24	50.81	74	-23.19	AV
Vertical	4679.130	59.11	-20.24	38.87	54	-15.13	Pk
Vertical	11510.036	63.31	-8.81	54.50	74	-19.50	AV
Vertical	11510.036	49.19	-8.81	40.38	54	-13.62	Pk
Vertical	17265.195	58.01	-3.01	55.00	68.2	-13.20	AV
Vertical	17265.195	44.88	-3.01	41.87	54	-12.13	Pk
Horizontal	4679.114	74.05	-20.24	53.80	74	-20.20	AV
Horizontal	4679.114	59.11	-20.24	38.87	54	-15.13	Pk
Horizontal	11510.152	64.45	-8.81	55.64	74	-18.36	AV
Horizontal	11510.152	49.84	-8.81	41.03	54	-12.97	Pk
Horizontal	17265.034	55.58	-3.01	52.57	68.2	-15.63	AV
Horizontal	17265.034	44.03	-3.01	41.02	54	-12.98	AV
middle Channel (5795 MHz)-Above 1G							
Vertical	6039.025	71.85	-18.93	52.92	68.2	-15.28	Pk
Vertical	6039.025	59.41	-18.93	40.48	54	-13.52	AV
Vertical	11590.027	61.87	-8.87	53.00	74	-21.00	Pk
Vertical	11590.027	49.52	-8.87	40.65	54	-13.35	AV
Vertical	17385.166	55.73	-2.35	53.38	68.2	-14.82	Pk
Vertical	17385.166	44.08	-2.35	41.73	54	-12.27	AV
Horizontal	6039.146	71.10	-18.93	52.16	68.2	-16.04	Pk
Horizontal	6039.146	59.79	-18.93	40.85	54	-13.15	AV
Horizontal	11590.070	62.90	-8.87	54.03	74	-19.97	Pk
Horizontal	11590.070	49.20	-8.87	40.33	54	-13.67	AV
Horizontal	17385.121	58.26	-2.35	55.91	68.2	-12.29	Pk
Horizontal	17385.121	44.08	-2.35	41.73	54	-12.27	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(antenna A+ antenna B) Mode.

Test Mode:	TX(5.8G) - 802.11ax-HE80
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
(5775 MHz)-Above 1G							
Vertical	4679.115	73.80	-20.24	53.55	74	-20.45	Pk
Vertical	4679.115	59.29	-20.24	39.04	54	-14.96	AV
Vertical	11550.129	62.58	-8.84	53.74	74	-20.26	Pk
Vertical	11550.129	49.67	-8.84	40.83	54	-13.17	AV
Vertical	17325.092	57.43	-2.68	54.75	68.2	-13.45	Pk
Vertical	17325.092	44.60	-2.68	41.92	54	-12.08	AV
Horizontal	4679.004	71.24	-20.24	51.00	74	-23.00	Pk
Horizontal	4679.004	59.02	-20.24	38.78	54	-15.22	AV
Horizontal	11550.148	60.45	-8.84	51.61	74	-22.39	Pk
Horizontal	11550.148	49.42	-8.84	40.58	54	-13.42	AV
Horizontal	17325.148	58.45	-2.68	55.77	68.2	-12.43	Pk
Horizontal	17325.148	44.74	-2.68	42.06	54	-11.94	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(antenna A+ antenna B) 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

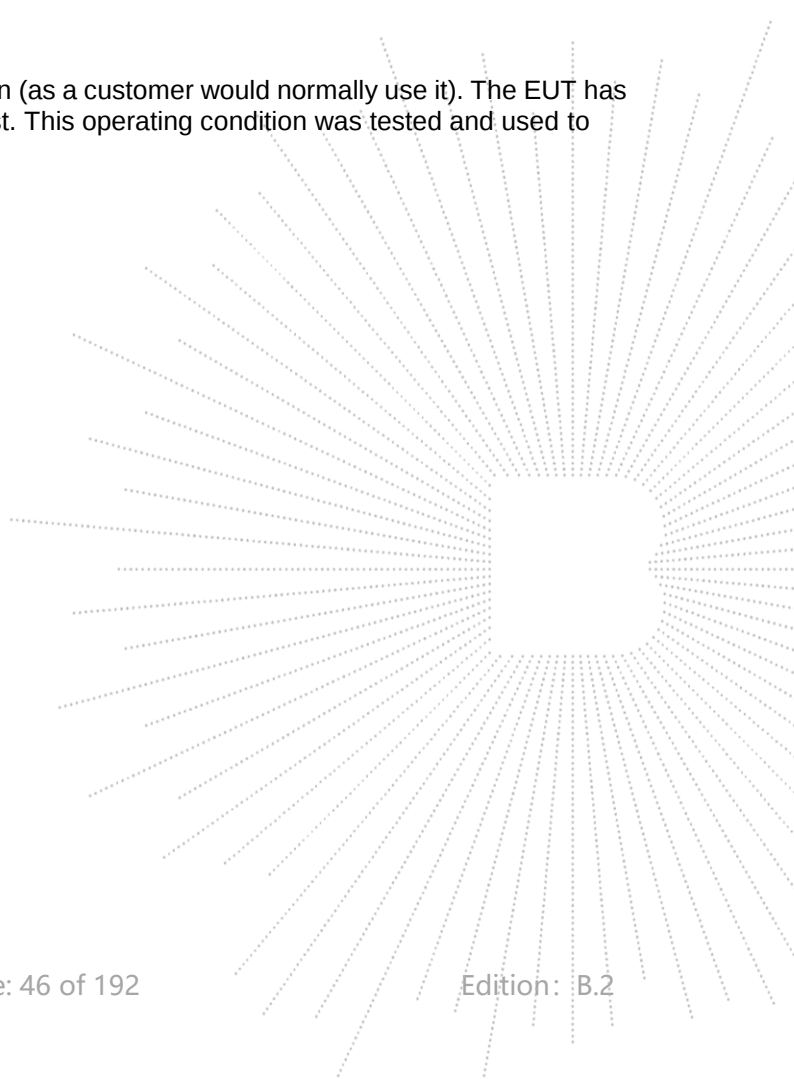
For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 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 $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ 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 $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ 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 $RBW=100 \text{ KHz}$ 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

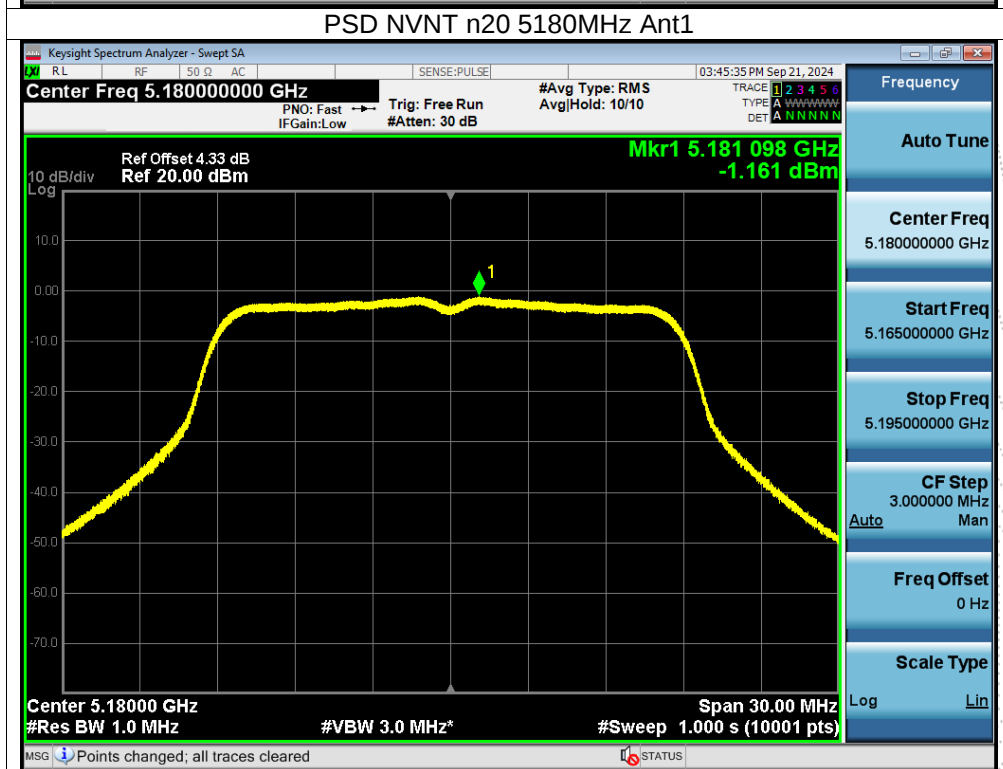
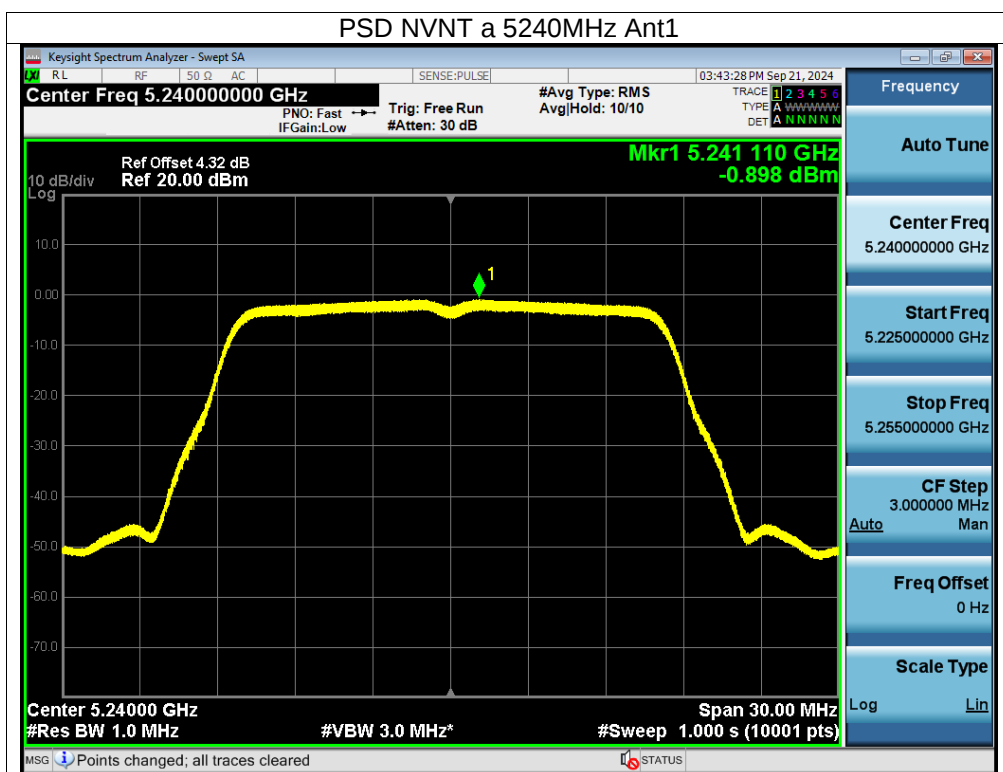
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120/60Hz
Test Mode:	(5180-5240MHz)		

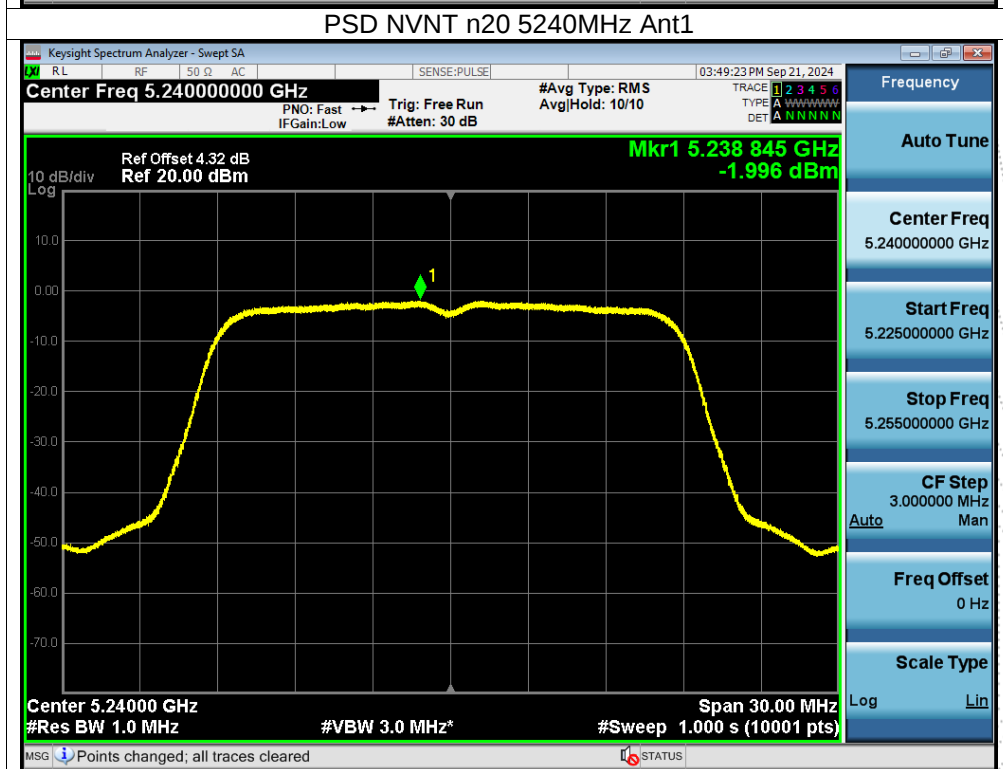
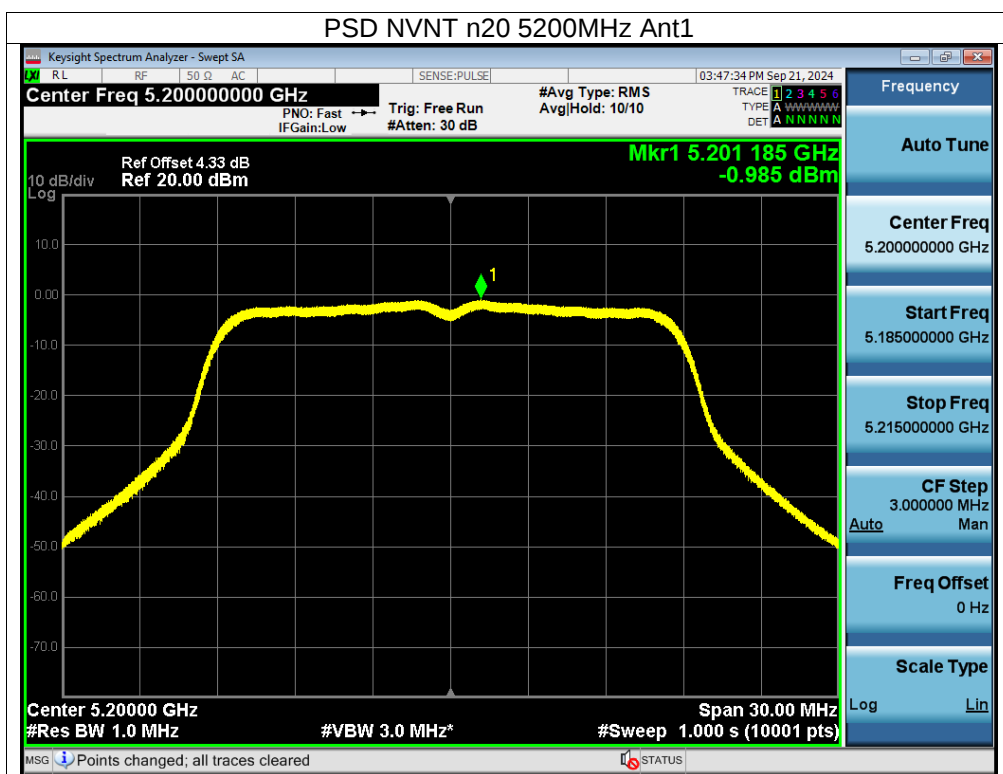
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)		Total (dBm/MHz)	Limit (dBm/MHz)	Verdict
			Ant A	Ant B			
NVNT	a	5180	0	-0.64	/	17	Pass
NVNT	a	5200	-0.81	-0.66	/	17	Pass
NVNT	a	5240	-0.9	-1.18	/	17	Pass
NVNT	n20	5180	-1.16	-0.73	2.07	15.34	Pass
NVNT	n20	5200	-0.99	-1.3	1.87	15.34	Pass
NVNT	n20	5240	-2	-1.12	1.47	15.34	Pass
NVNT	n40	5190	-4.59	-4.92	-1.74	15.34	Pass
NVNT	n40	5230	-2.56	-3.18	0.15	15.34	Pass
NVNT	ac20	5180	-2.25	-2.74	0.52	15.34	Pass
NVNT	ac20	5200	-2.15	-2.83	0.53	15.34	Pass
NVNT	ac20	5240	-2.45	-2.84	0.37	15.34	Pass
NVNT	ac40	5190	-5.92	-5.91	-2.90	15.34	Pass
NVNT	ac40	5230	-5.99	-6.4	-3.18	15.34	Pass
NVNT	ac80	5210	-9.9	-9.89	-6.88	15.34	Pass
NVNT	ax20	5180	-2.17	-1.93	0.96	15.34	Pass
NVNT	ax20	5200	-2.13	-2.06	0.92	15.34	Pass
NVNT	ax20	5240	-2.42	-1.95	0.83	15.34	Pass
NVNT	ax40	5190	-6.2	-6.62	-3.39	15.34	Pass
NVNT	ax40	5230	-6.4	-6.71	-3.54	15.34	Pass
NVNT	ax80	5210	-7	-10.29	-5.33	15.34	Pass

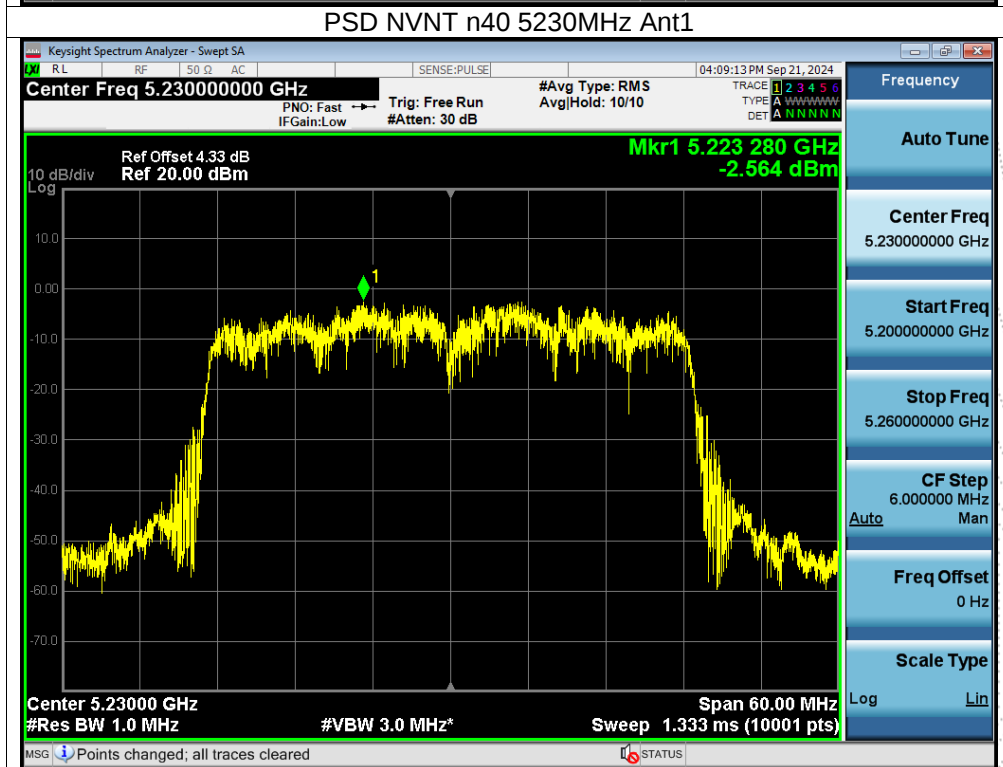
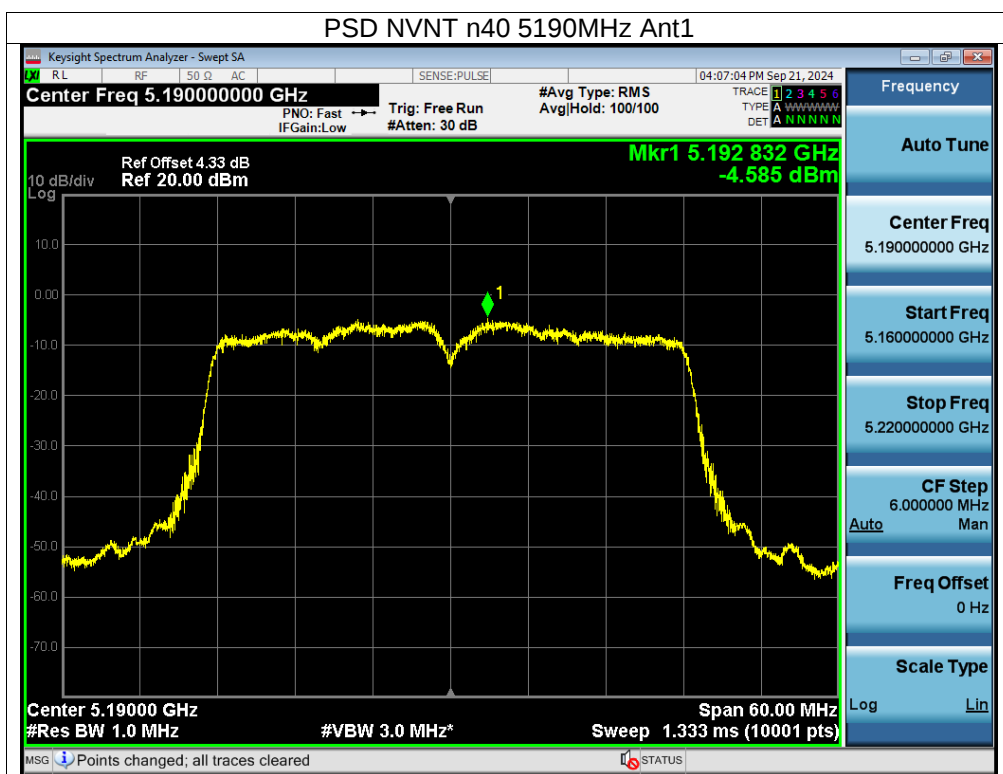
Total: antenna A+ antenna B

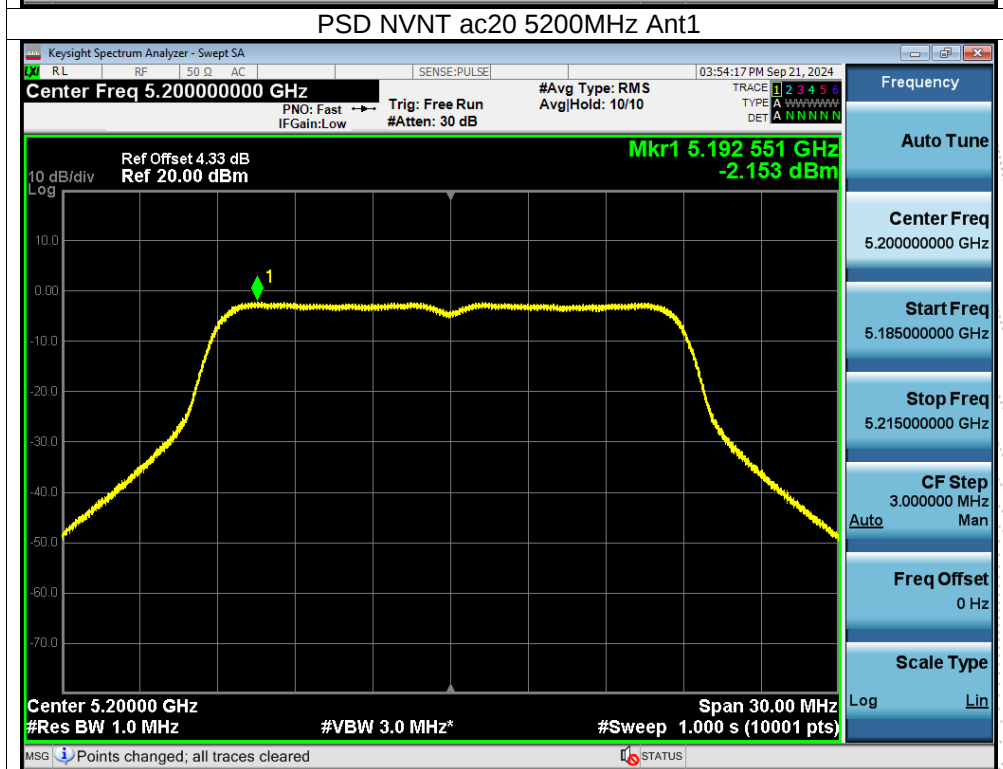
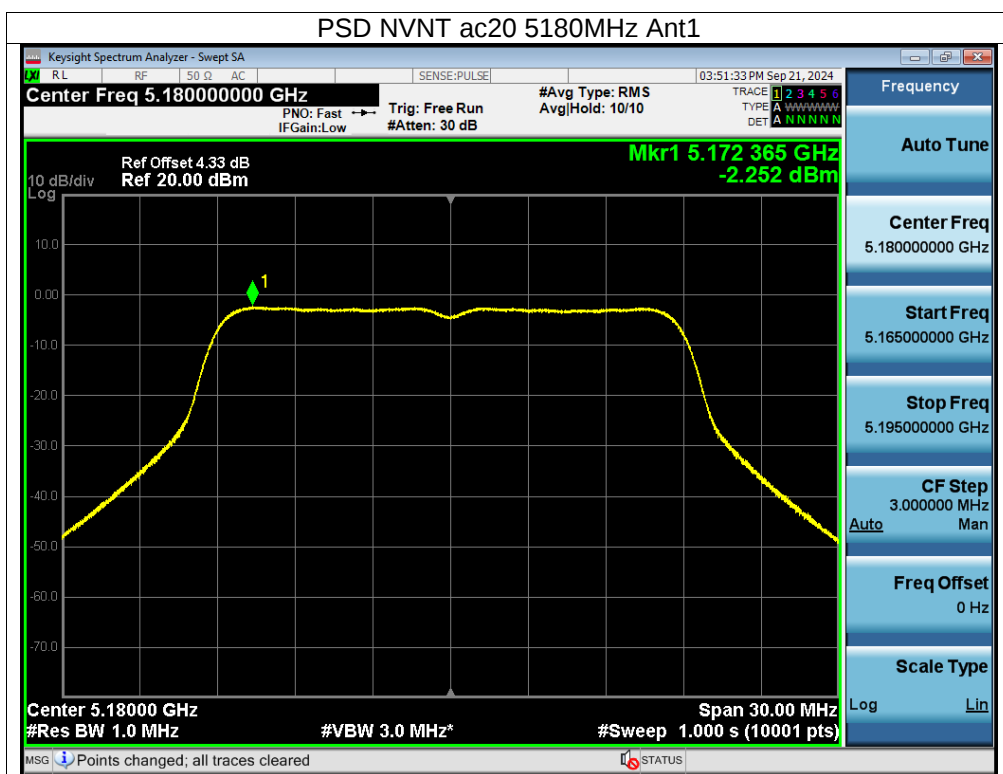
Ant A:

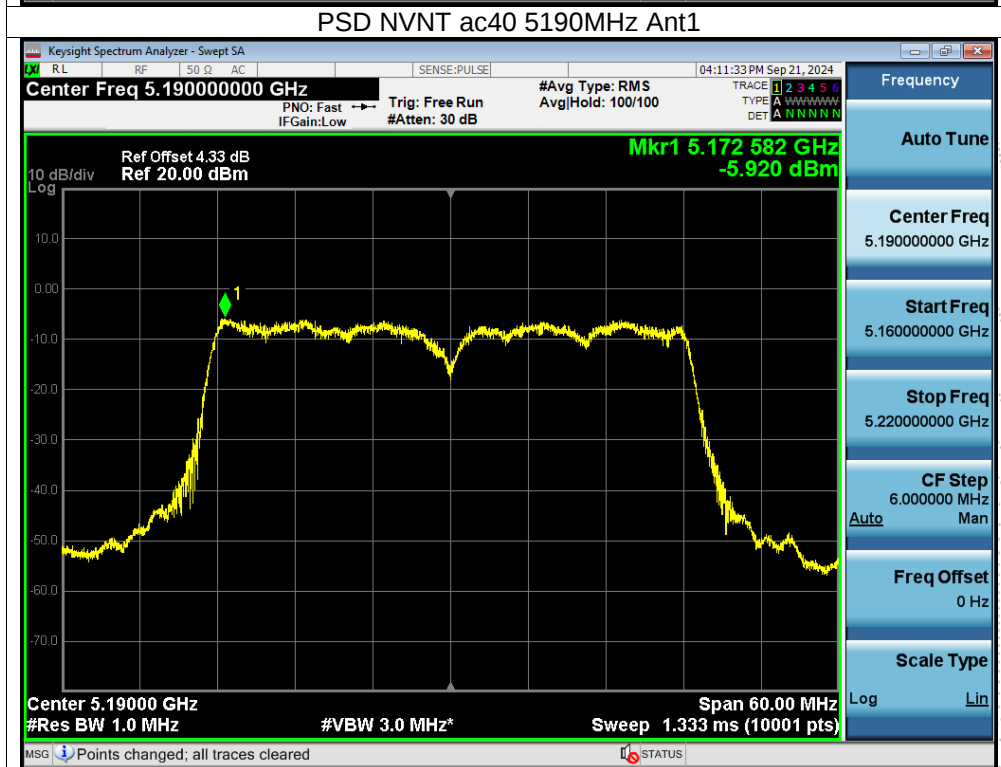
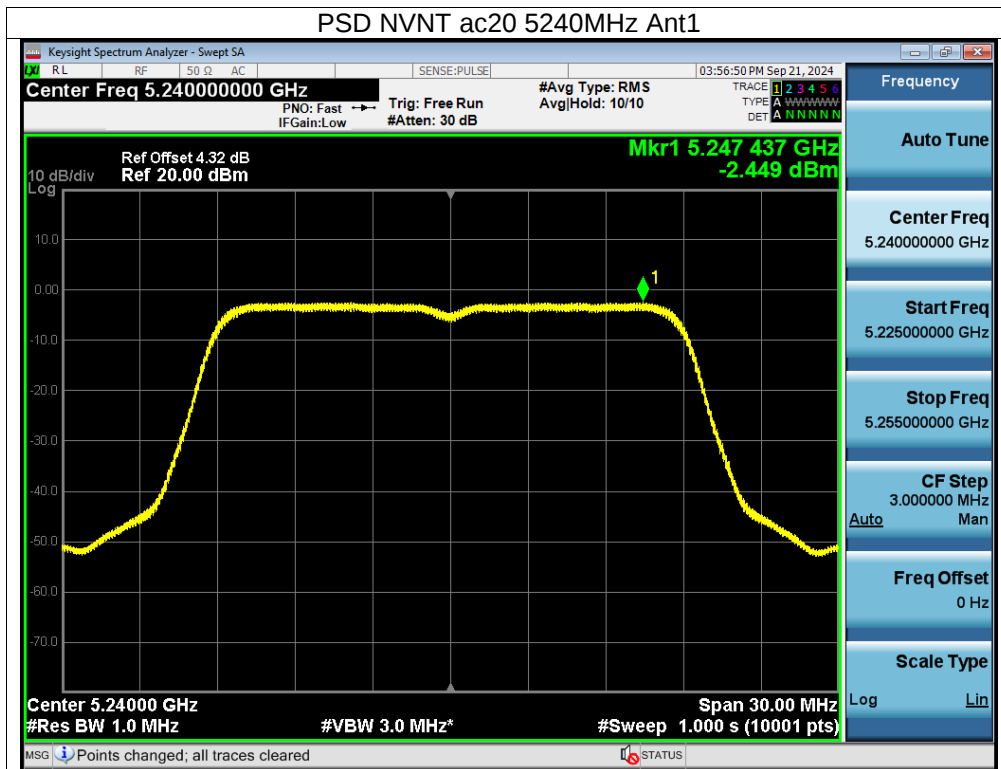


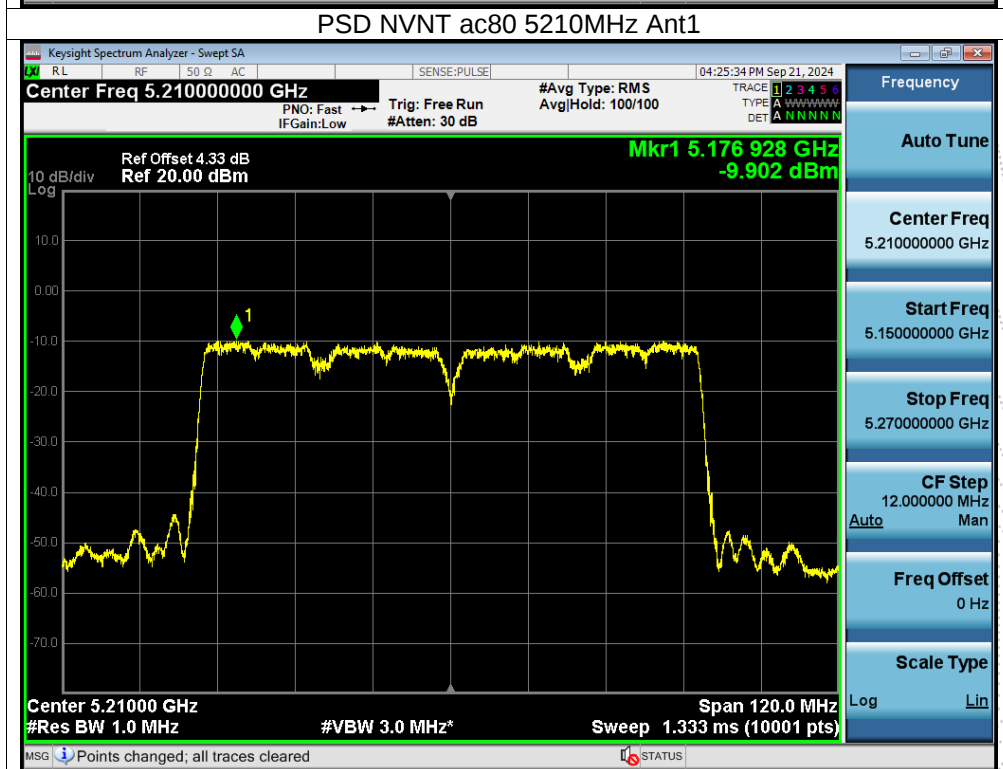
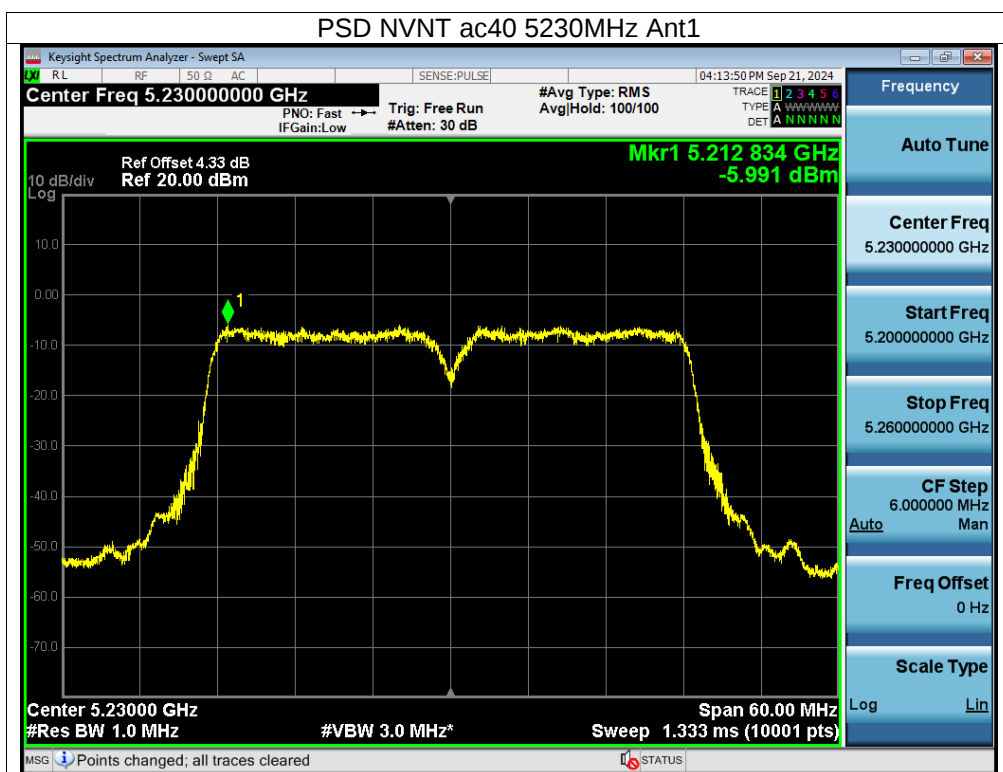


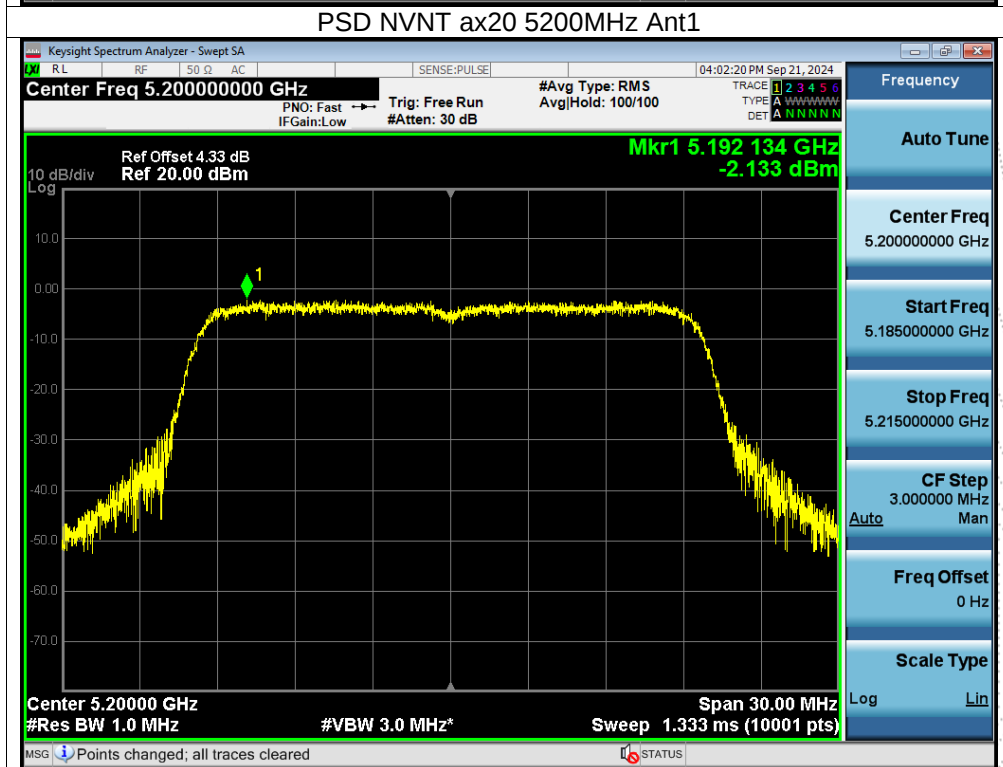
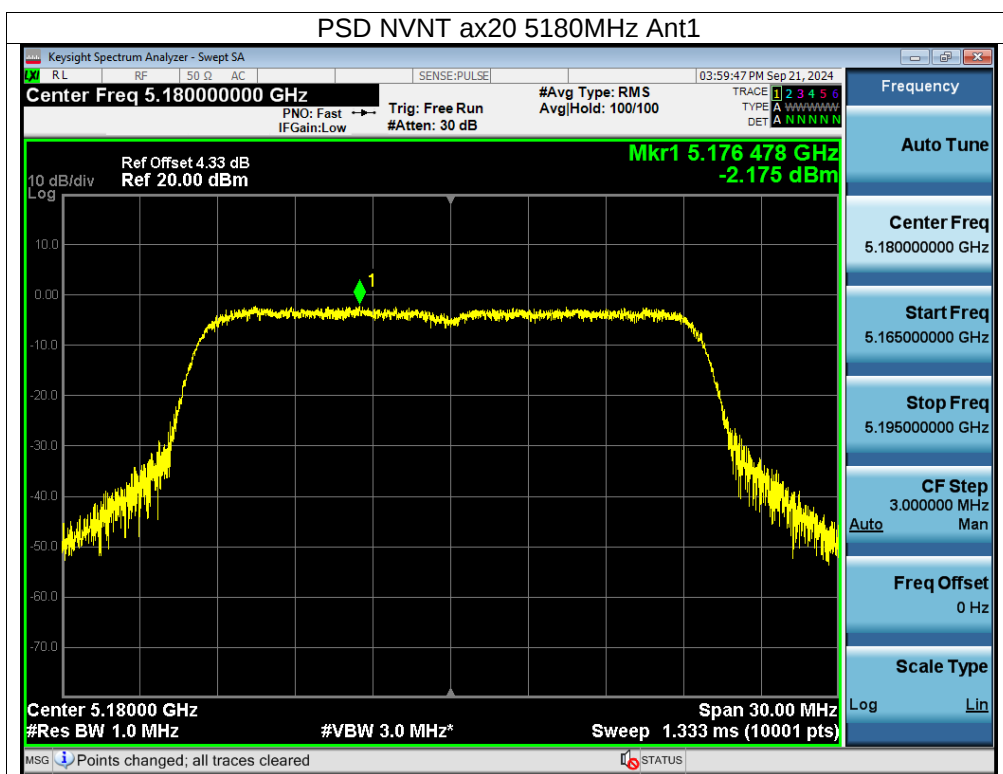


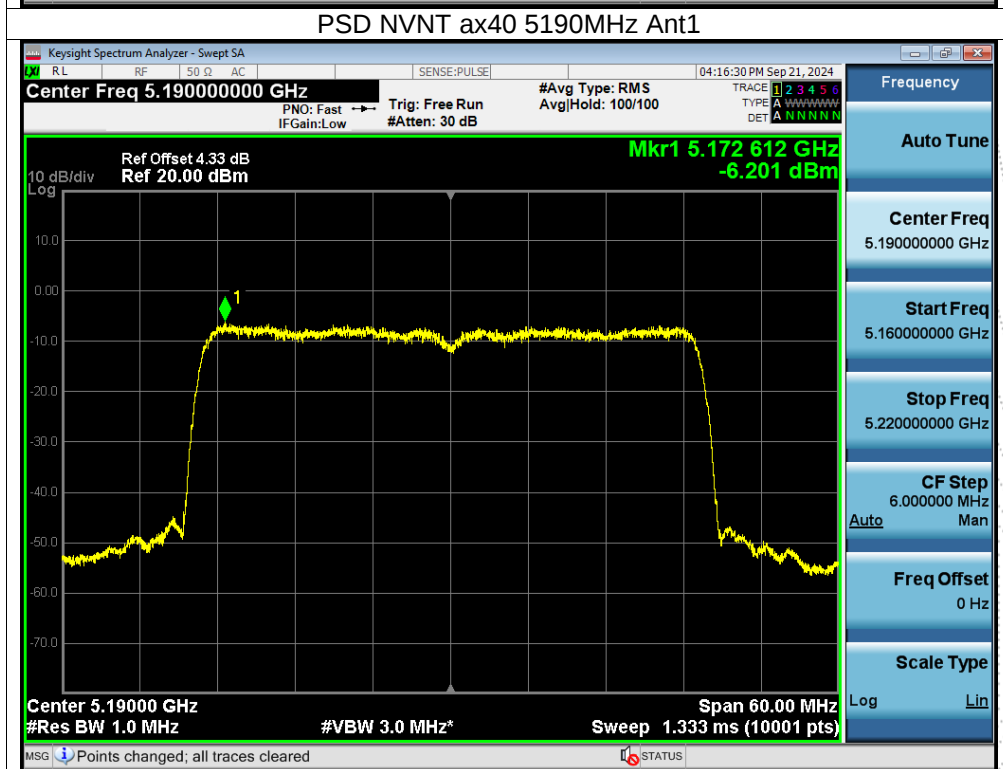
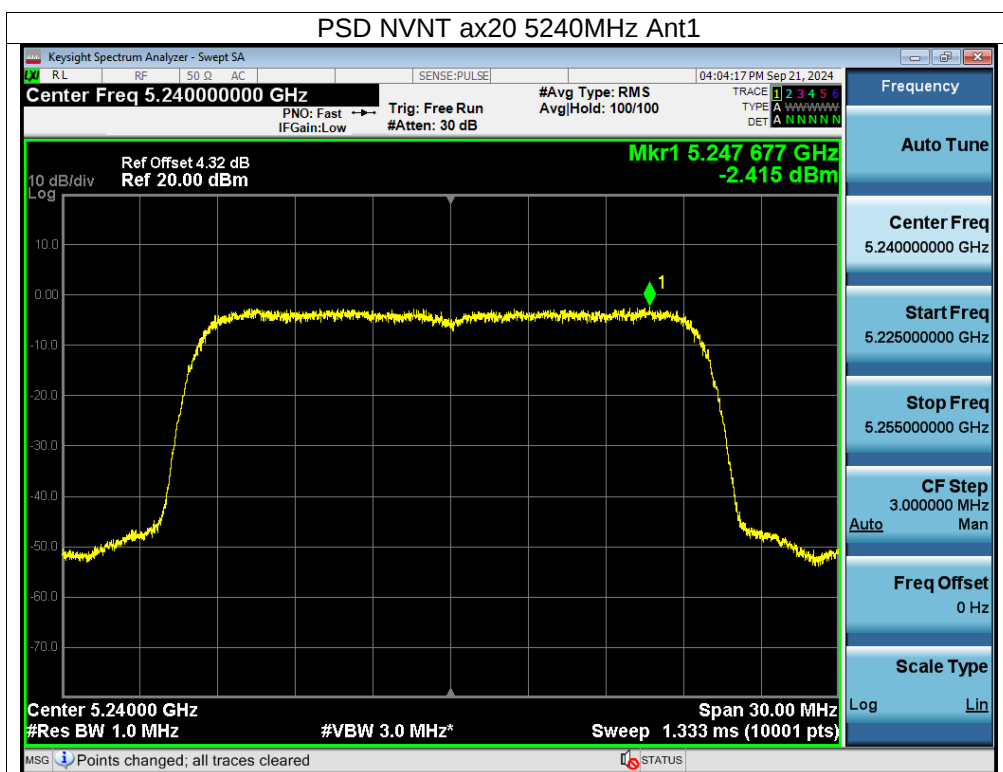


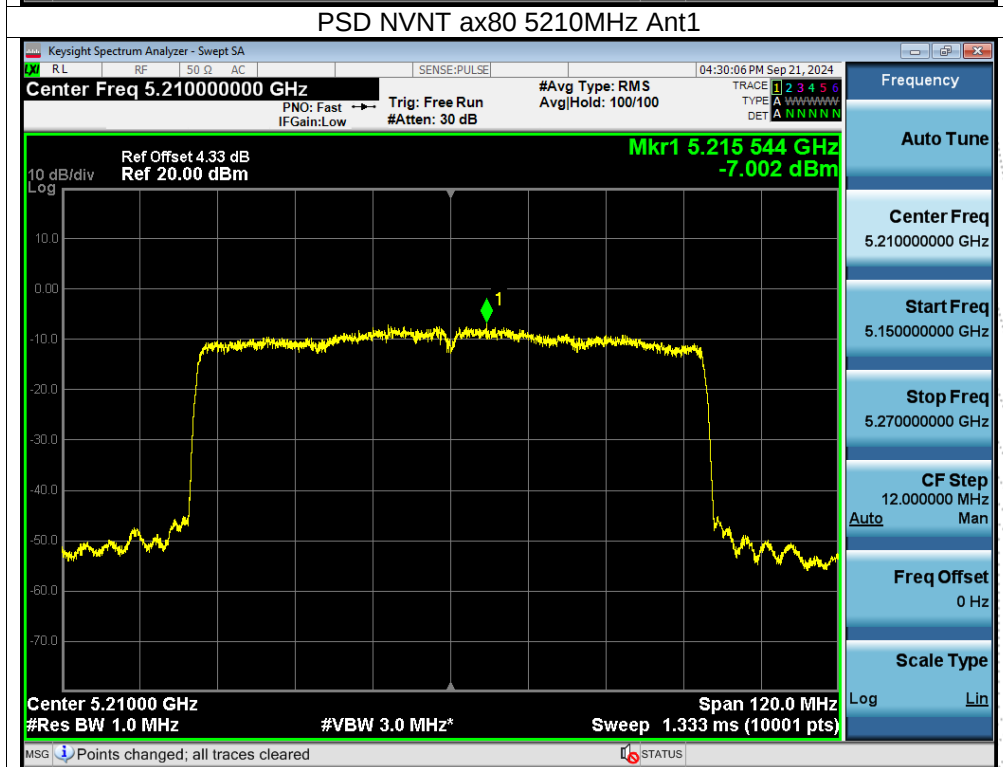
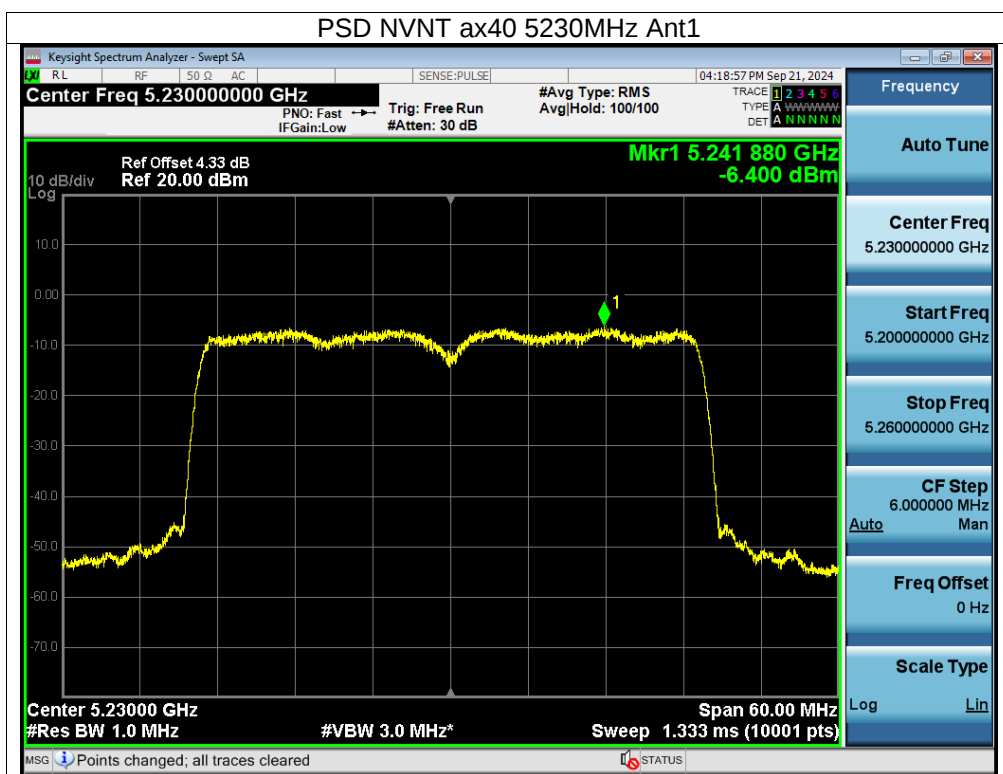






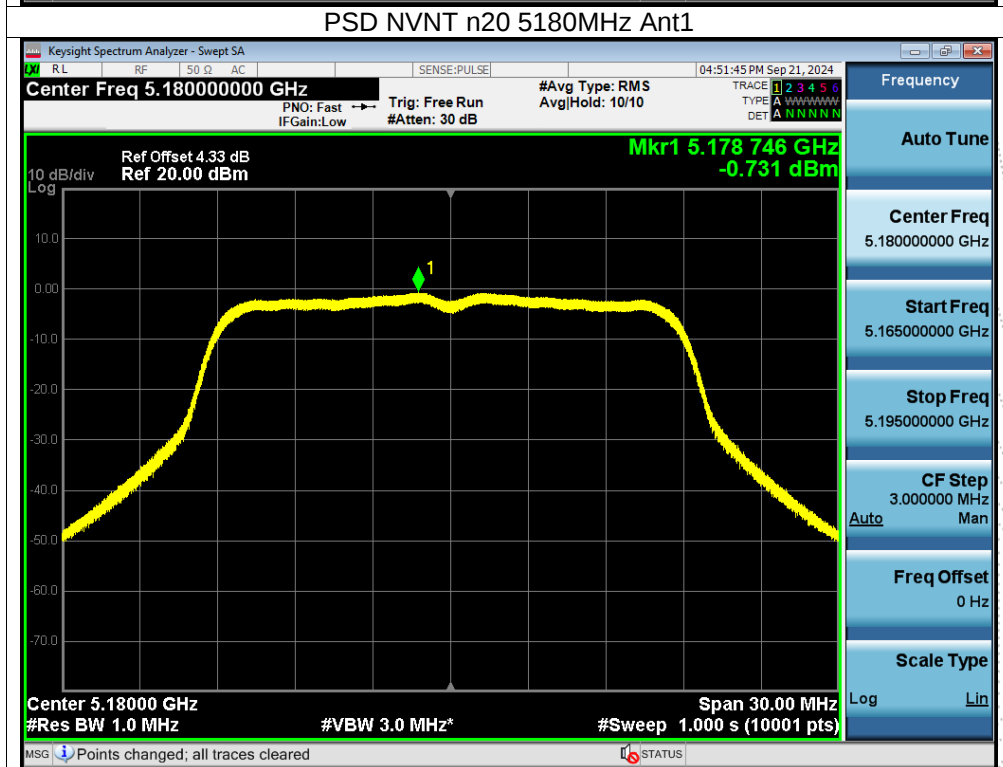
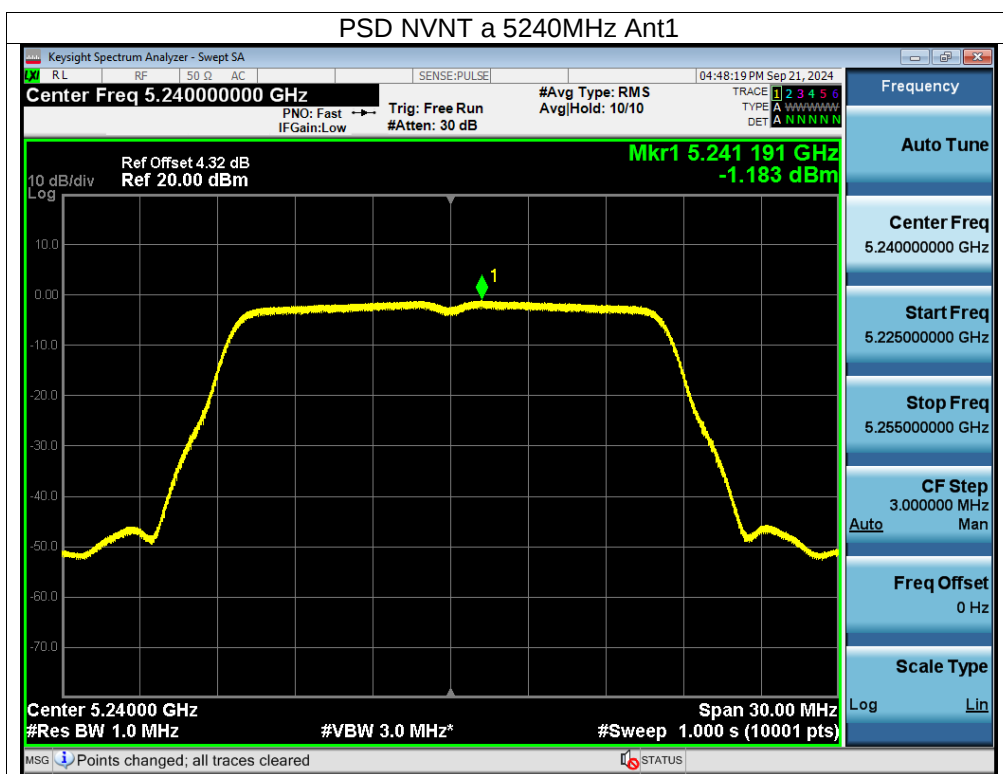


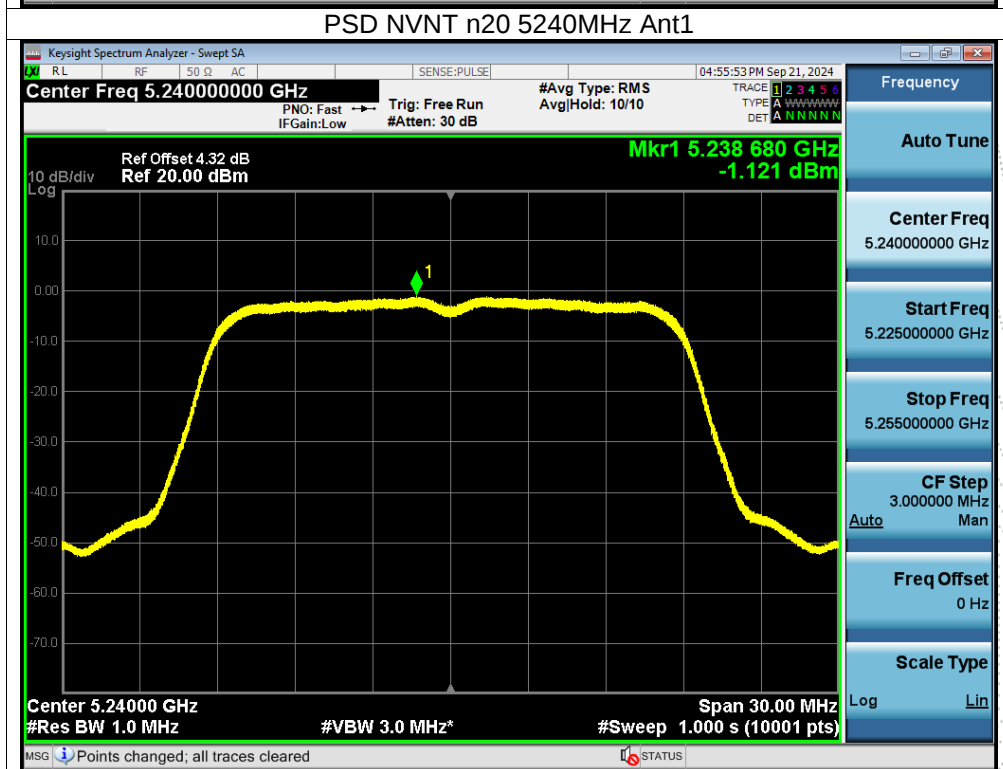
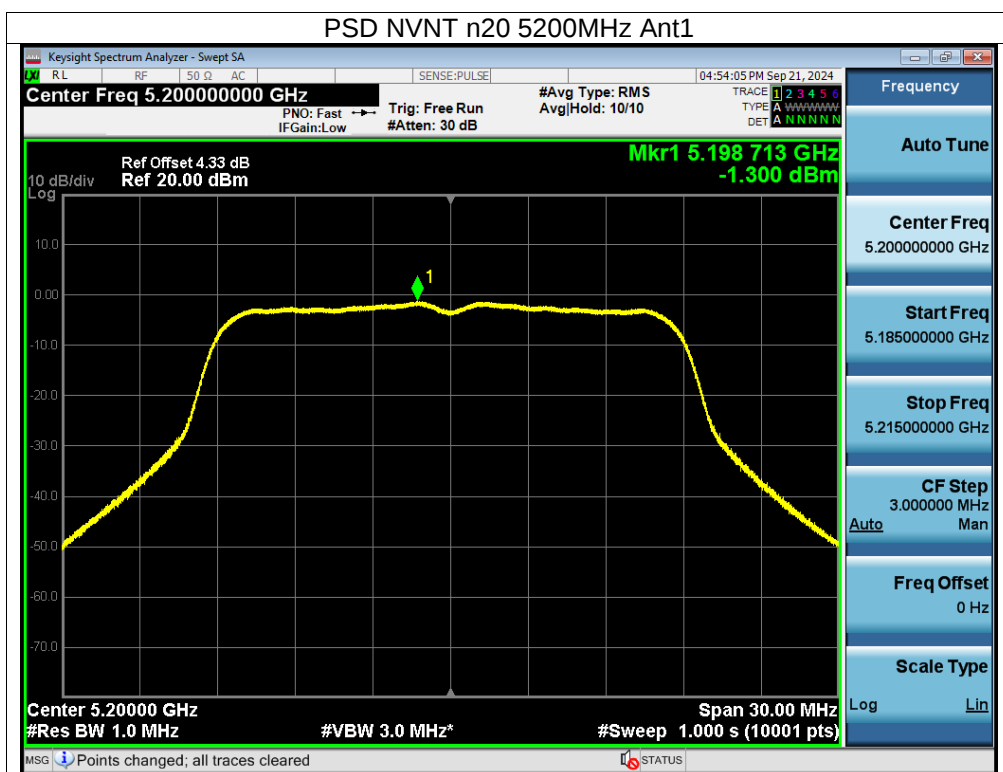


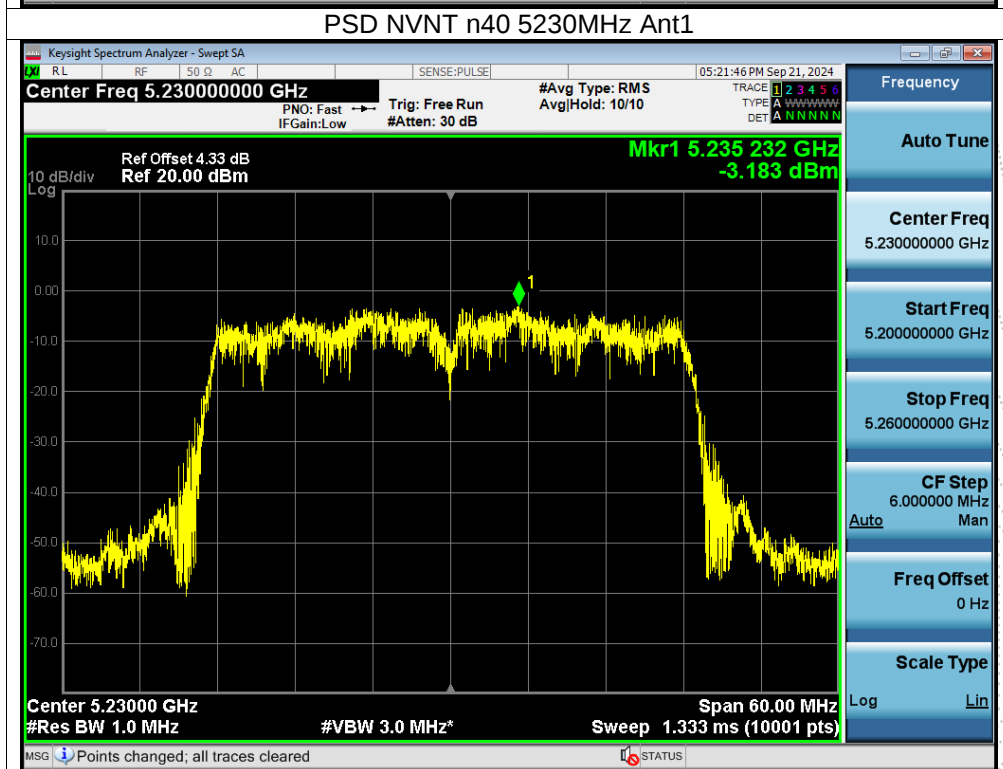
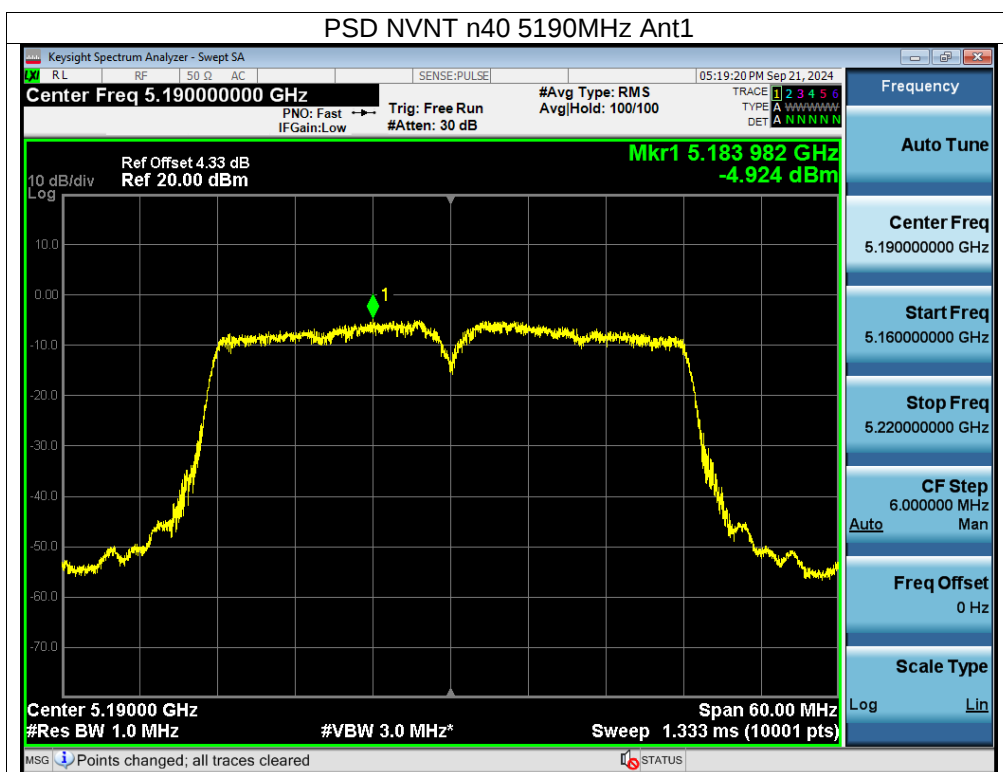


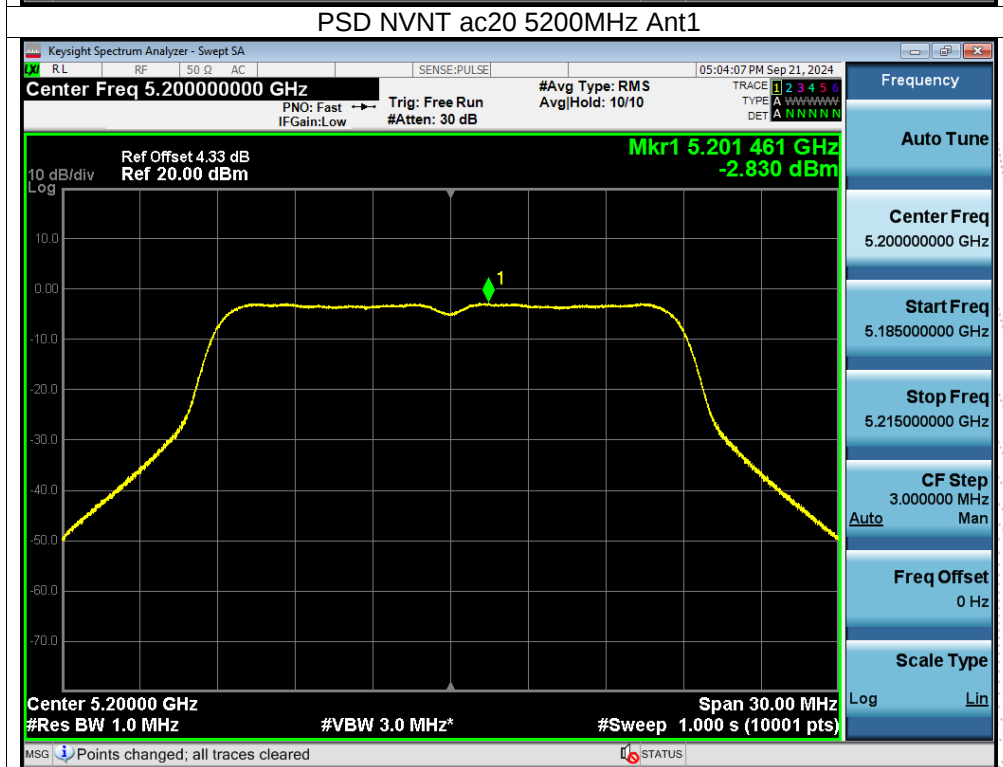
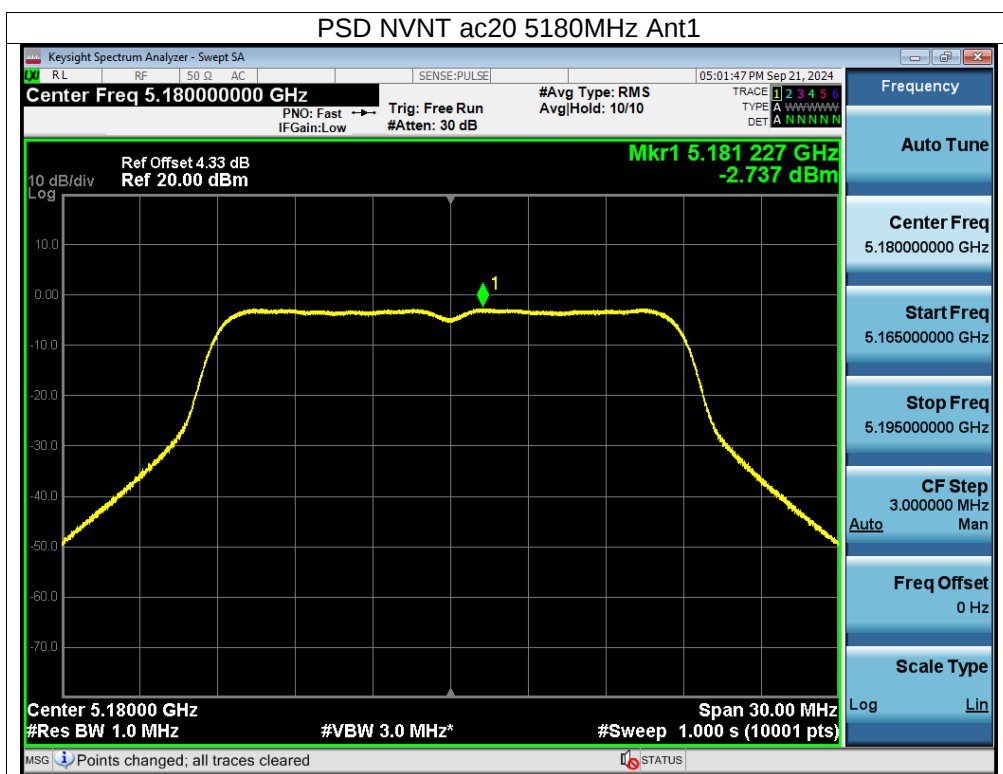
Ant B:

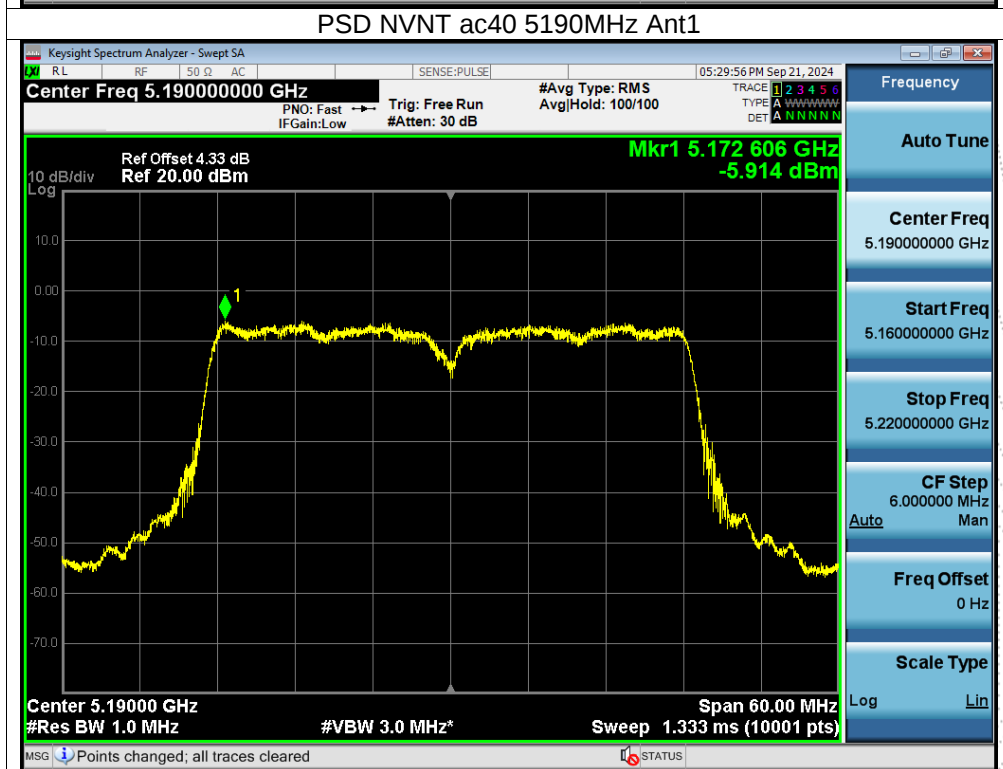
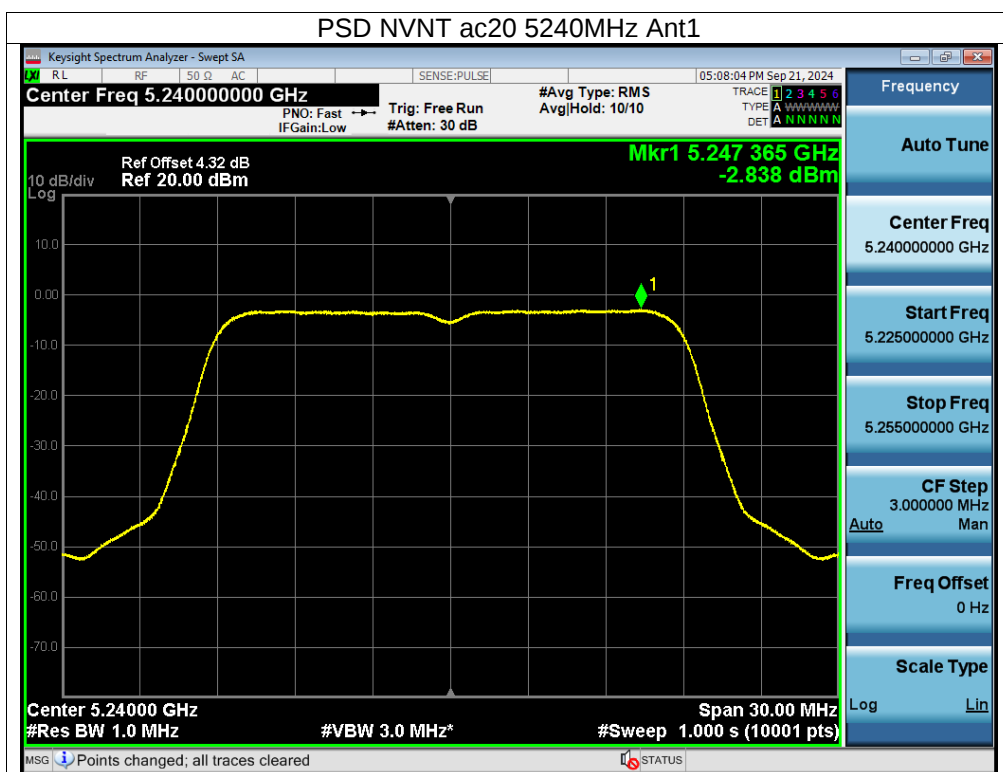


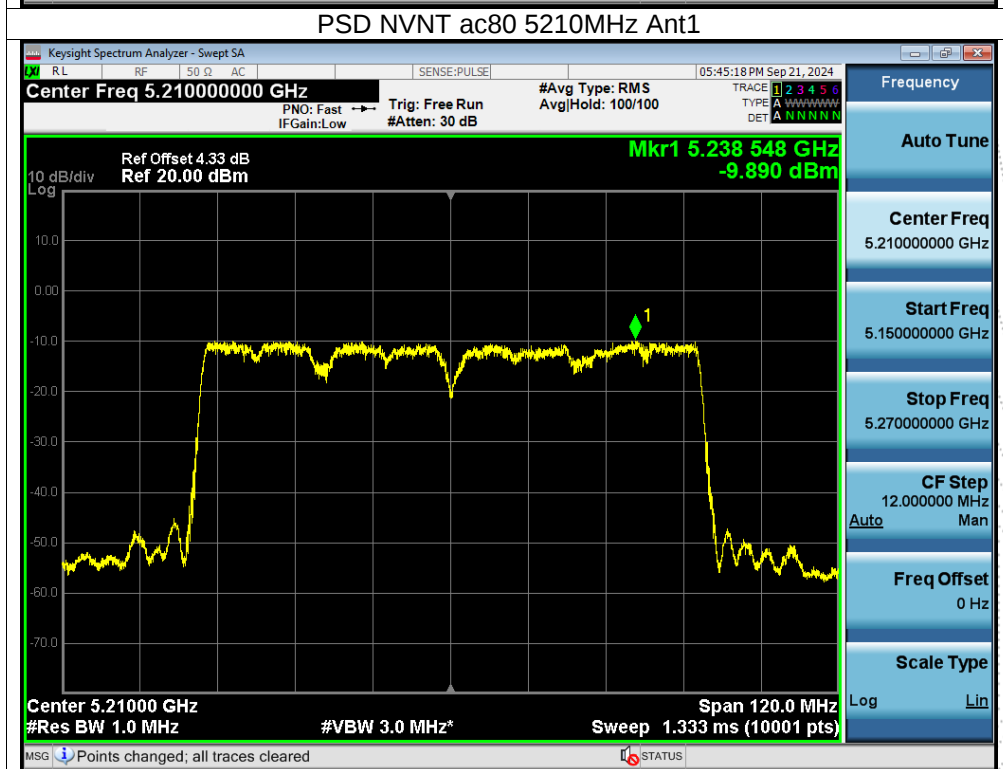
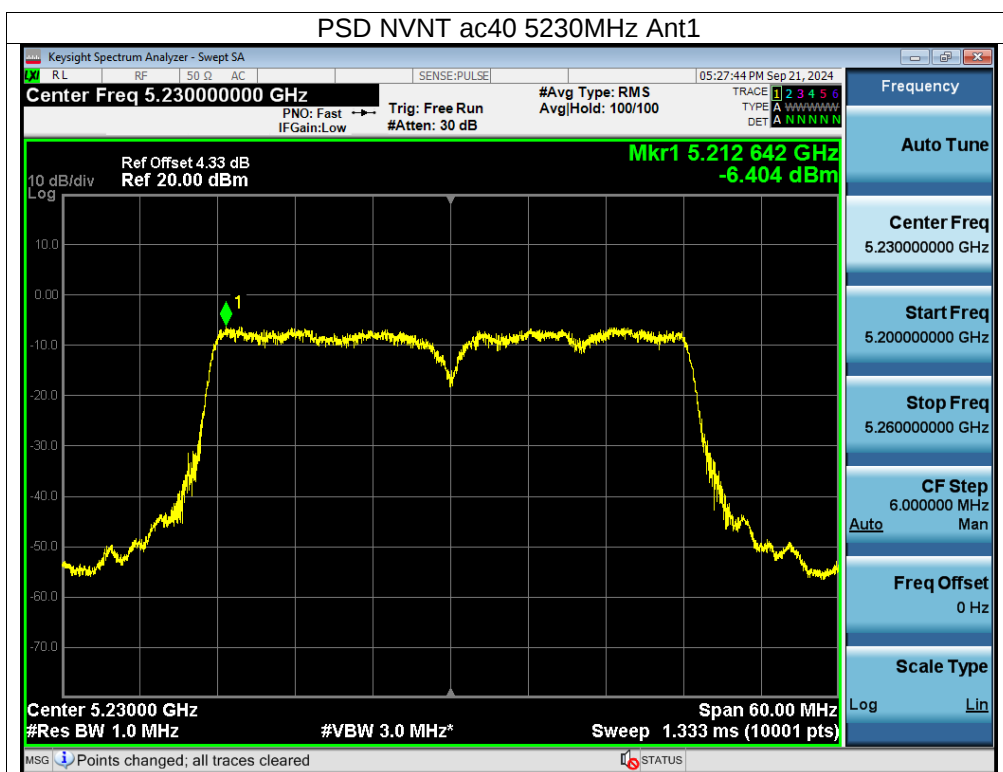


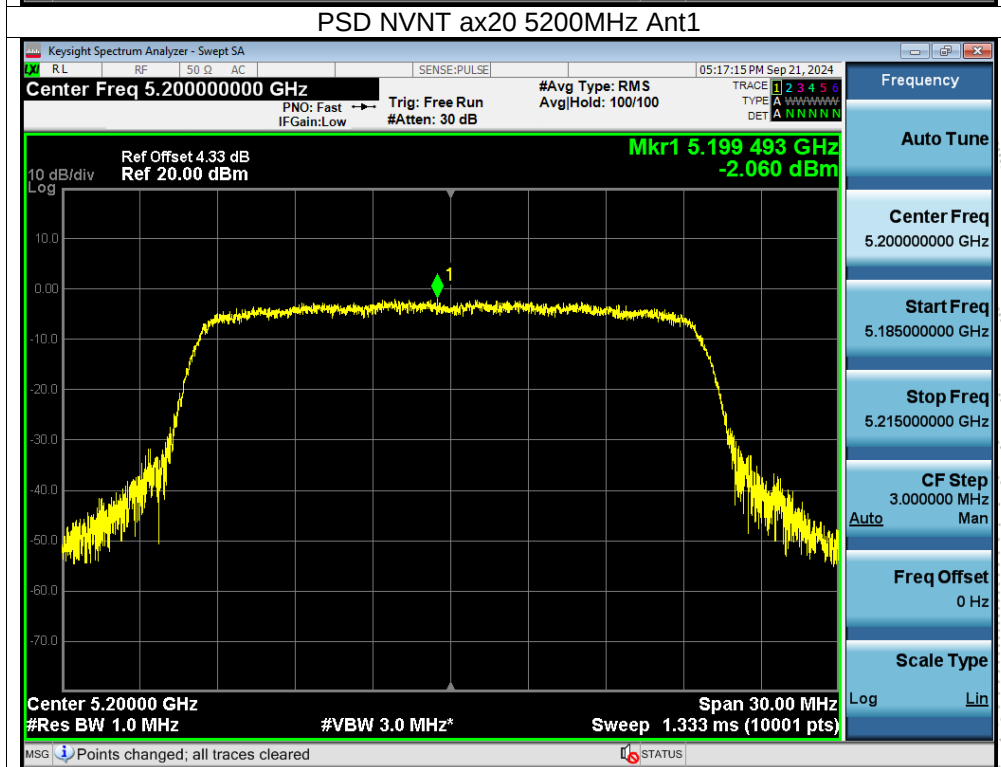
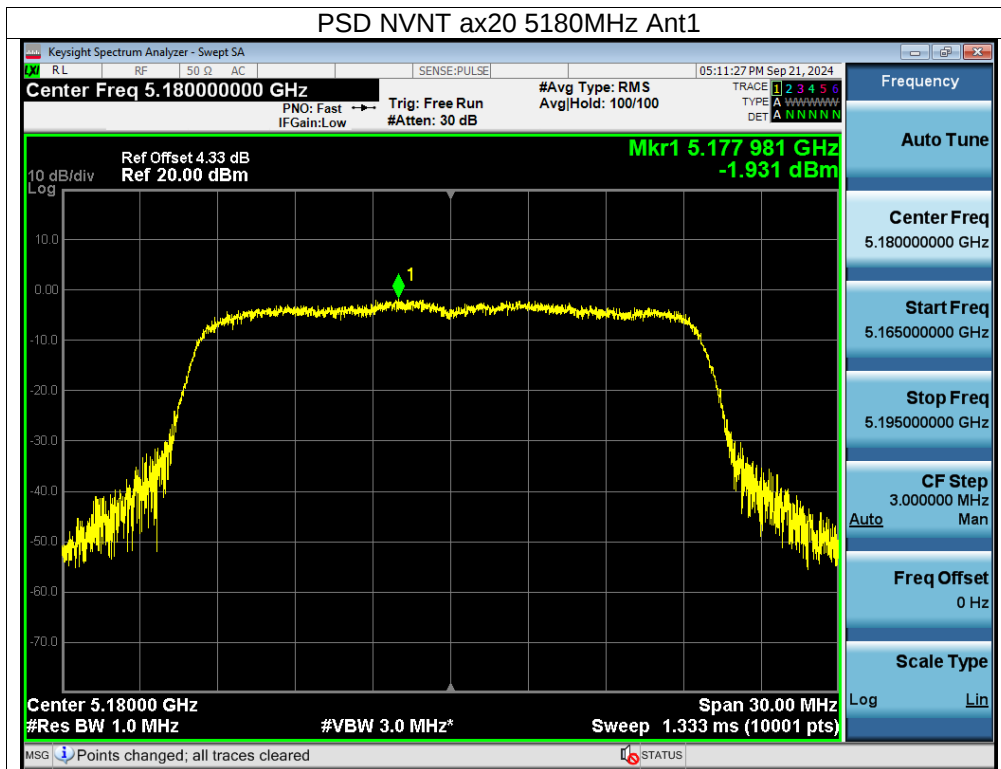


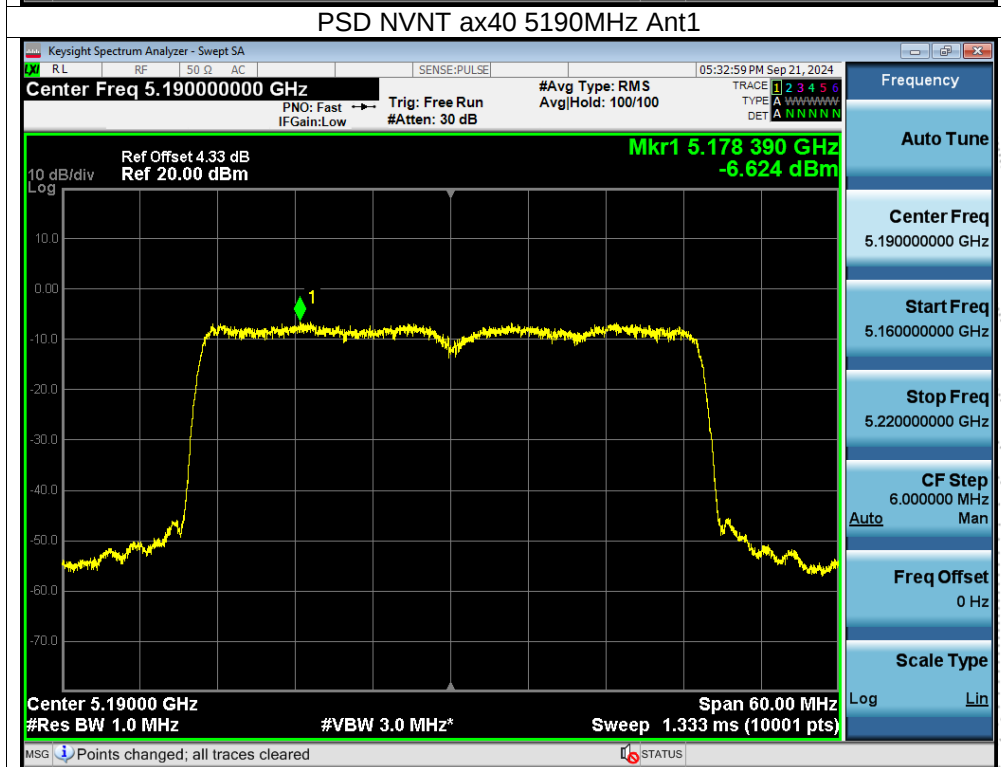
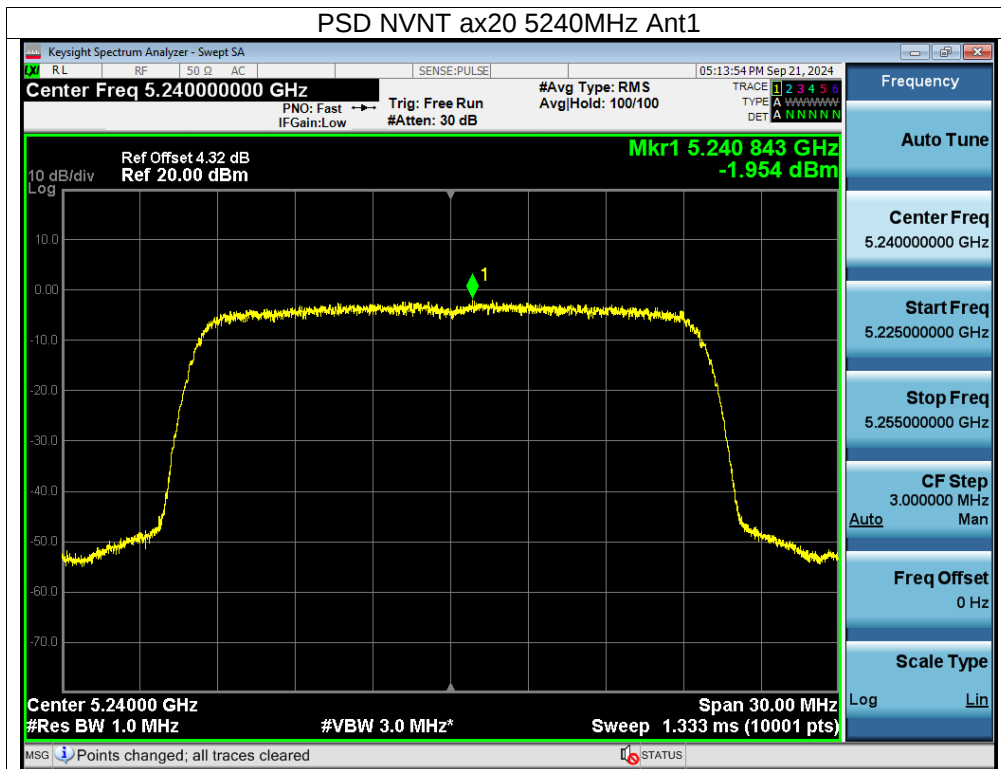


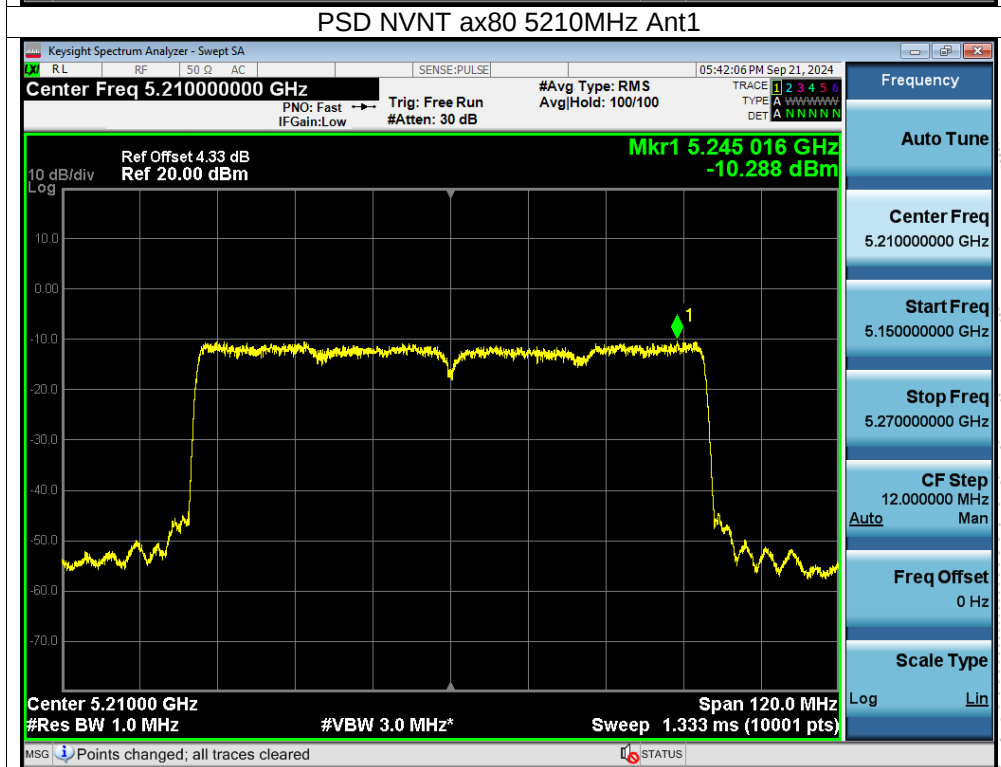
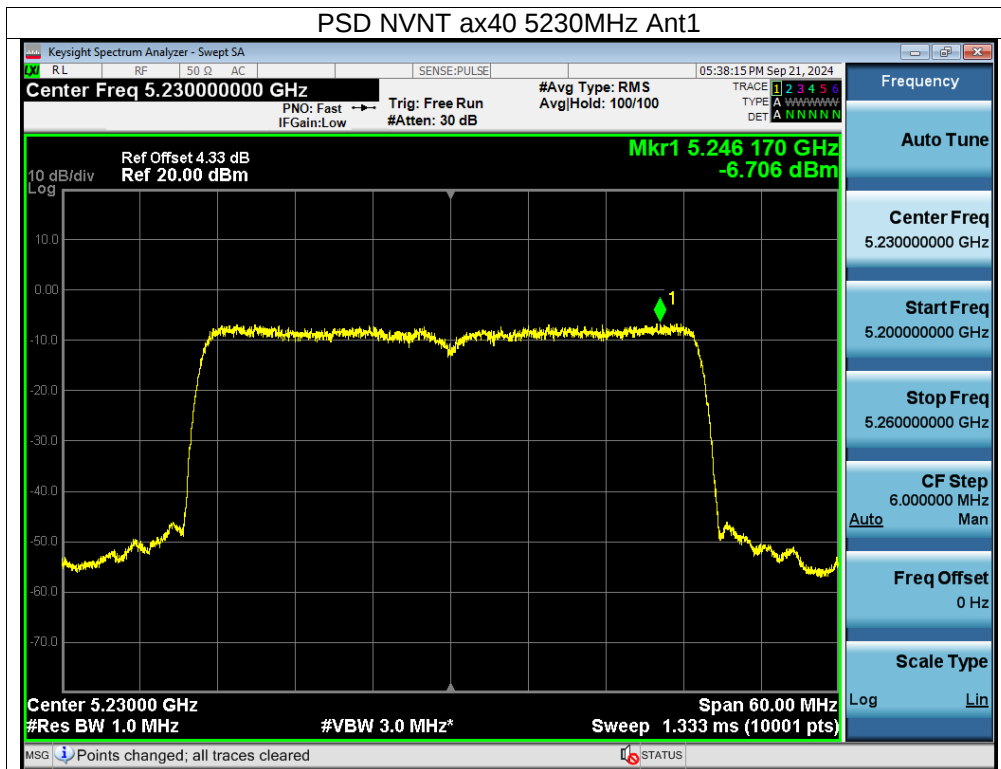












Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120/60Hz
Test Mode:	(5745-5825MHz)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)		Total (dBm/MHz)	Limit (dBm/MHz)	Verdict
			Ant A	Ant B			
NVNT	a	5745	-2.19	-3.45	/	30	Pass
NVNT	a	5785	-3	-3.93	/	30	Pass
NVNT	a	5825	-2.96	-3.58	/	30	Pass
NVNT	n20	5745	-2.51	-4.04	-0.20	28.34	Pass
NVNT	n20	5785	-2.54	-4.07	-0.23	28.34	Pass
NVNT	n20	5825	-2.68	-4.04	-0.30	28.34	Pass
NVNT	n40	5755	-7.96	-7.16	-4.53	28.34	Pass
NVNT	n40	5795	-6.95	-6.97	-3.95	28.34	Pass
NVNT	ac20	5745	-4.65	-4.75	-1.69	28.34	Pass
NVNT	ac20	5785	-4.9	-5.33	-2.10	28.34	Pass
NVNT	ac20	5825	-4.99	-5.2	-2.08	28.34	Pass
NVNT	ac40	5755	-6.82	-6.7	-3.75	28.34	Pass
NVNT	ac40	5795	-8.77	-8.3	-5.52	28.34	Pass
NVNT	ac80	5775	-12.23	-11.36	-8.76	28.34	Pass
NVNT	ax20	5745	-5.29	-5.21	-2.24	28.34	Pass
NVNT	ax20	5785	-4.34	-4.85	-1.58	28.34	Pass
NVNT	ax20	5825	-5.23	-4.79	-1.99	28.34	Pass
NVNT	ax40	5755	-8.26	-8.56	-5.40	28.34	Pass
NVNT	ax40	5795	-8.05	-8.78	-5.39	28.34	Pass
NVNT	ax80	5775	-12.23	-13.14	-9.65	28.34	Pass

Total: antenna A+ antenna B

Ant A:



