

TEST REPORT

Report No.: BCTC2410523796-4E

Applicant: SHENZHEN NST INDUSTRY AND TRADE CO.,LTD

Product Name: laptop

Test Model: S18

Tested Date: 2024-10-23 to 2024-12-26

Issued Date: 2024-12-27

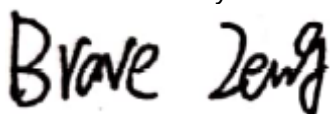
Shenzhen BCTC Testing Co., Ltd.



FCC ID: 2AAMS-24S1801

Product Name: laptop
Trademark: N/A
Model/Type reference: S18
M185AH,S18 PRO,S18 Plus,S18D,S18P
Prepared For: SHENZHEN NST INDUSTRY AND TRADE CO.,LTD
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Manufacturer: SHENZHEN NST INDUSTRY AND TRADE CO.,LTD
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Sample Received Date: 2024-10-23
Sample tested Date: 2024-10-23 to 2024-12-26
Issue Date: 2024-12-27
Report No.: BCTC2410523796-4E
FCC Part15 15.407
Test Standards: 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

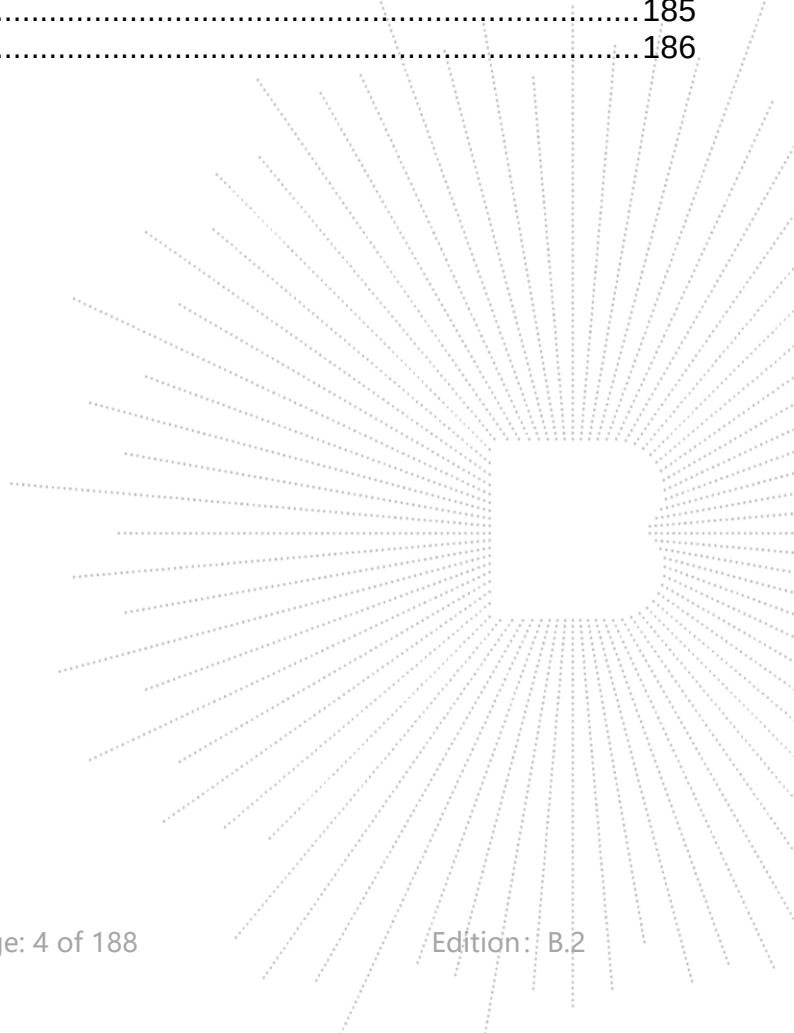
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(Note: N/A Means Not Applicable)



1. Version

Report No.	Issue Date	Description	Approved
BCTC2410523796-4E	2024-12-27	Original	Valid

2. Test Summary

The Product has been tested according to the following specifications:

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

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 reference:	S18 M185AH,S18 PRO,S18 Plus,S18D,S18P
Model differences:	All the model are the same circuit and RF module, except model names.
Hardware Version:	S8_J_141R100
Software Version:	NSD-BI-18.5-S8_J_141R100-G06B-XXX
IEEE 802.11 WLAN Mode Supported	802.11a/n/ac/ax(20MHz channel bandwidth) 802.11n/ac/ax(40MHz channel bandwidth) 802.11ac/ax(80MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n/ac(HT20)/ax(HT20); 5190-5230MHz for 802.11n/ac(HT40)/ax(HT40); 5210MHz for 802.11 ac(HT80)/ax(HT80); 5745-5825 MHz for 802.11a/n/ac(HT20)/ax(HT20); 5755-5795 MHz for 802.11n/ac(HT40)/ax(HT40); 5775MHz for 802.11 ac(HT80)/ax(HT80);
Data Rate	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac/ax(VHT20): NSS1, MCS0-MCS8 802.11ac/ax(VHT40/VHT80):NSS1, MCS0-MCS9
Type of Modulation:	OFDM/OFDMA
Number Of Channel	Internal antenna
Antenna installation:	Antenna A: 2.72 dBi, Antenna B: 2.64 dBi
Antenna Gain:	Remark: ☒ The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information. ☐ The antenna gain of the product is provided by the customer, and the test data is affected by the customer information. Remark: ☒ The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information. ☐ The antenna gain of the product is provided by the customer, and the test data is affected by the customer information.
Ratings:	DC 7.6V from adapter/DC 7.6V from battery
Adapter Information:	MODEL: J302-1203000UX INPUT: 100-240V~50/60Hz 1.5A OUTPUT: DC 12.0V 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.

4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
1.	Adapter	---	J302-1203000UX	---	---
2.	HDMI Cable	Belkin	HDMI2.0	---	---
3.	TF card	SanDisk	128G	---	---
4.	U disk	SanDisk	32G	---	---
5.	Earphone	SONY	IER-M7	---	---
6.	Display	ChangHong	55DBK	---	---

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.

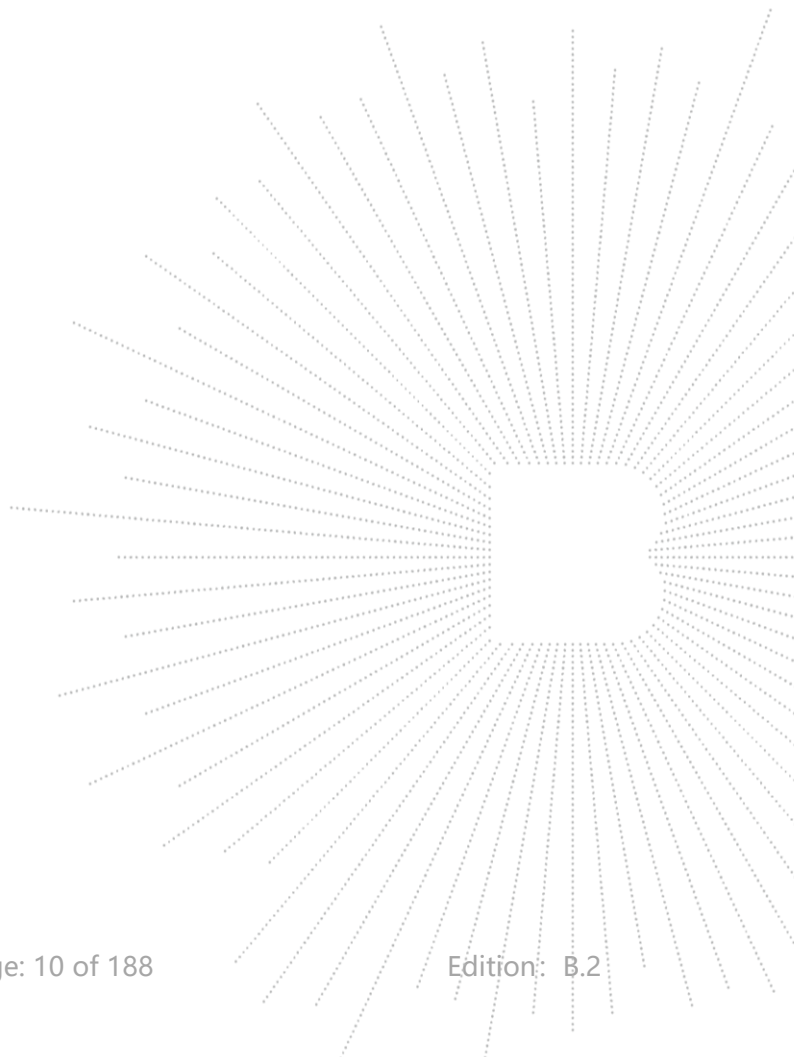
4.4 Channel List

5.1G

802.11a/n/ac/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



5.8G

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 20/ ax 20 CH36/ CH40/ CH 48 802.11a /n/ ac 20/ ax 20 CH149/ CH157/ CH 165
Mode 2	802.11n/ ac40/ ax 40 CH38/ CH 46 802.11n/ ac40/ ax 40 CH 151 / CH 159
Mode 3	802.11 ac80/ ax80 CH 42/CH 155
Mode 4	Transmitting (Conducted emission & Radiated emission)

The product does not support RU mode.

Note:

- (1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
- (2) We're testing antenna A data.

4.6 Table Of Parameters Of Text Software Setting

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

Test software Version	CMD		
Parameters	DEF	DEF	DEF

4.7 Antenna

5G

1)For power spectral density(PSD) measurements,
 $\text{Array Gain} = 10\log(\text{NANT}/\text{NSS})\text{dB} = 10\log(2/1) = 3.01\text{dB}$,

So the directional gain for PSD is 5.73 dBi

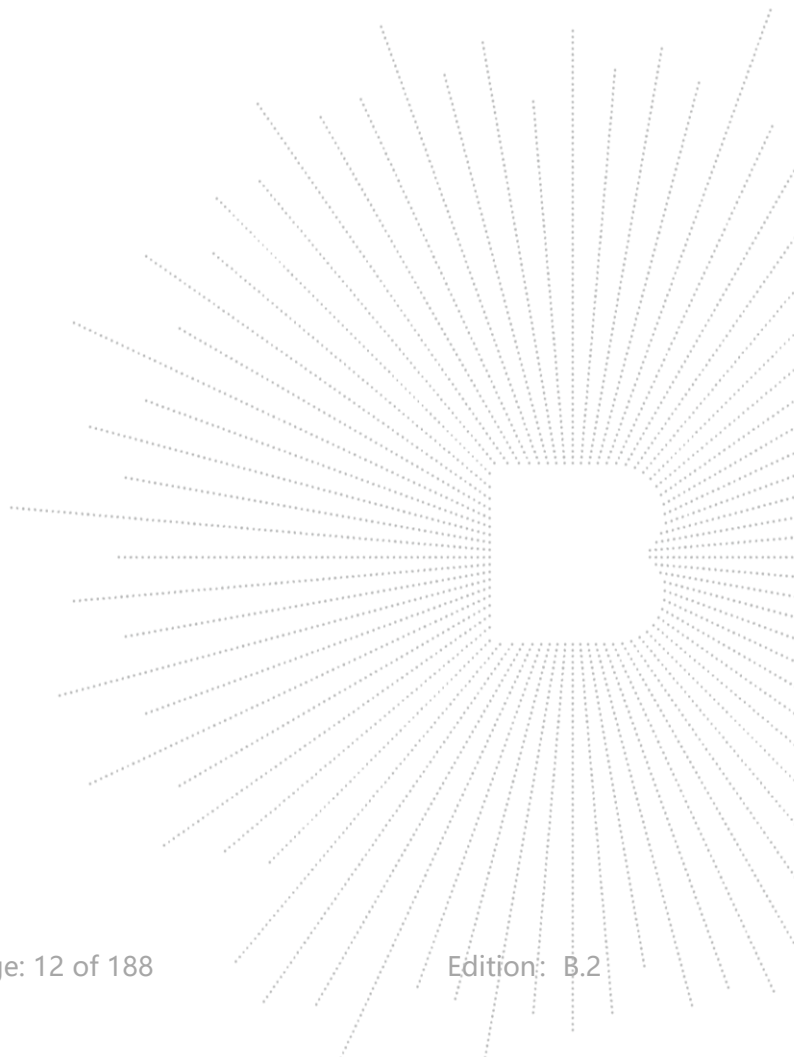
2)For power measurements,

The Array gain=0 dB for $\text{NANT} \leq 4$,

So the directional gain for Power measurements is 2.72 dBi

Antenna	Brand	Model Name	Antenna Type	Gain (dBi)	NOTE
A	N/A	N/A	Internal antenna	2.72	N/A
B	N/A	N/A	Internal antenna	2.64	N/A

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



5. Test Facility And Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

FCC Test Firm Registration Number: 712850

A2LA certificate registration number is: CN1212

ISED Registered No.: 23583

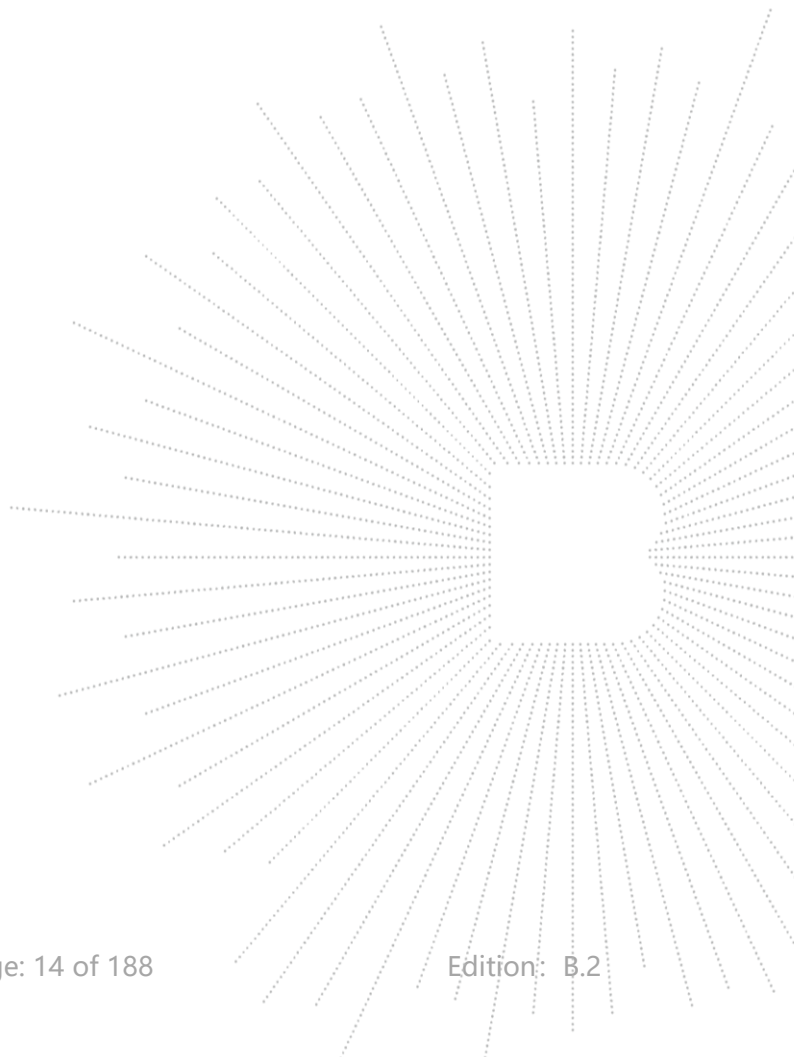
ISED CAB identifier: CN0017

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	VTSD9561-F	01323	May 16, 2024	May 15, 2025

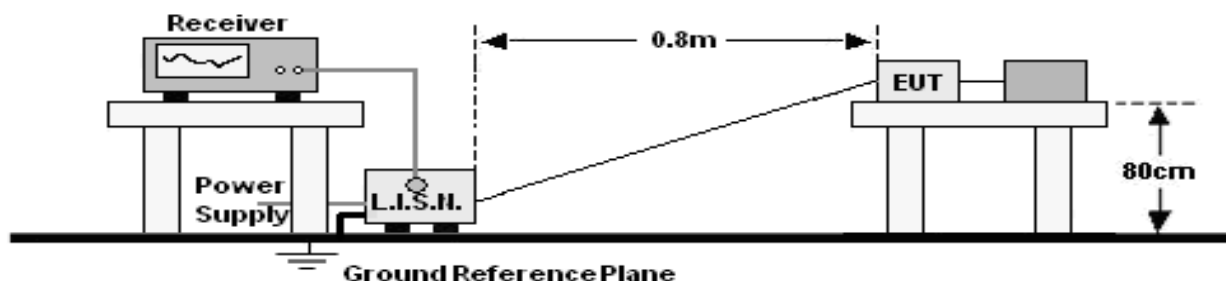
RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power meter	Keysight	E4419	\	May 16, 2024	May 15, 2025
Power Sensor (AV)	Keysight	E9300A	\	May 16, 2024	May 15, 2025
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 16, 2024	May 15, 2025
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
Radio frequency control box	MAIWEI	MW100-RFC B	\	\	\
Software	MAIWEI	MTS 8310	\	\	\

Radiated Emissions Test (966 Chamber01)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	May 16, 2024	May 15, 2025
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_01G18 G-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 Antenna(18G Hz-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

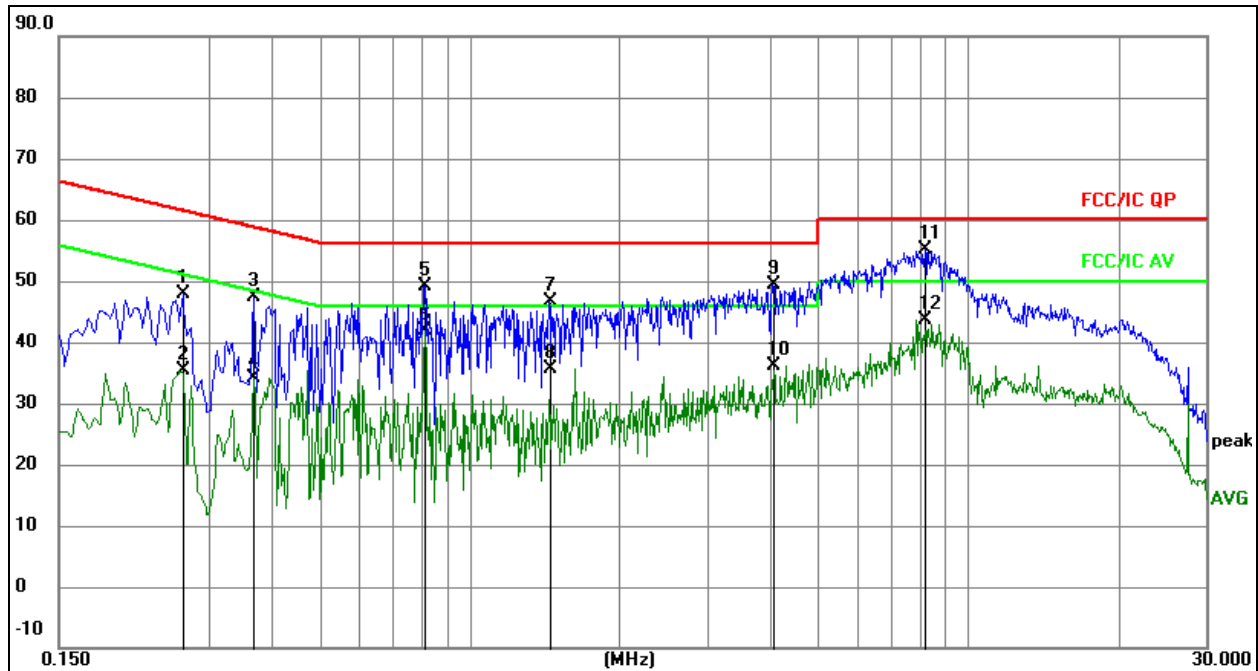
- The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
- The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak 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	Phase :	L
Test Mode:	Mode 4	Test Voltage :	AC 120V/60Hz

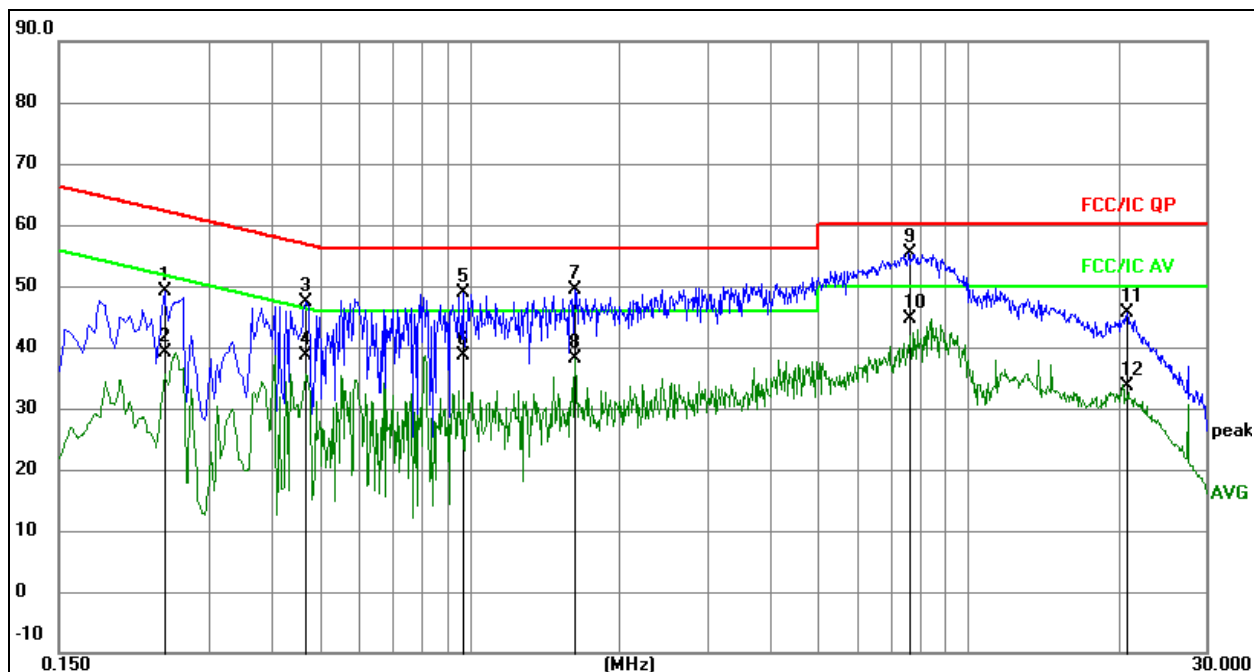


Remark:

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

No.	Mk.	Freq. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.2658	27.85	20.07	47.92	61.25	-13.33	QP
2		0.2658	15.20	20.07	35.27	51.25	-15.98	AVG
3		0.3692	27.20	20.08	47.28	58.52	-11.24	QP
4		0.3692	13.98	20.08	34.06	48.52	-14.46	AVG
5		0.8088	28.97	20.09	49.06	56.00	-6.94	QP
6	*	0.8088	21.86	20.09	41.95	46.00	-4.05	AVG
7		1.4409	26.61	20.09	46.70	56.00	-9.30	QP
8		1.4409	15.62	20.09	35.71	46.00	-10.29	AVG
9		4.0489	29.14	20.14	49.28	56.00	-6.72	QP
10		4.0489	16.06	20.14	36.20	46.00	-9.80	AVG
11		8.1916	34.98	20.16	55.14	60.00	-4.86	QP
12		8.1916	23.46	20.16	43.62	50.00	-6.38	AVG

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



Remark:

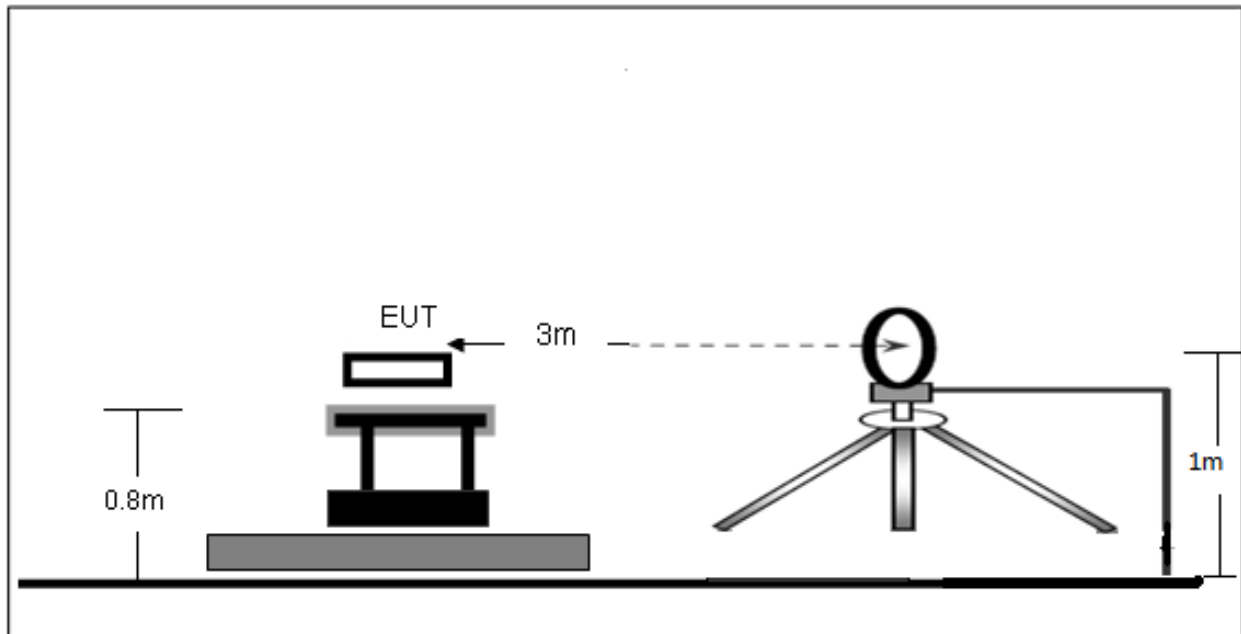
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over=Measurement-Limit

No.	Mk.	Freq. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.2442	29.17	20.07	49.24	61.95	-12.71	QP
2		0.2442	18.97	20.07	39.04	51.95	-12.91	AVG
3		0.4686	27.40	20.08	47.48	56.54	-9.06	QP
4		0.4686	18.65	20.08	38.73	46.54	-7.81	AVG
5		0.9684	28.67	20.09	48.76	56.00	-7.24	QP
6		0.9684	18.60	20.09	38.69	46.00	-7.31	AVG
7		1.6276	29.24	20.10	49.34	56.00	-6.66	QP
8		1.6276	17.96	20.10	38.06	46.00	-7.94	AVG
9	*	7.6060	35.25	20.16	55.41	60.00	-4.59	QP
10		7.6060	24.53	20.16	44.69	50.00	-5.31	AVG
11		20.8137	25.34	20.32	45.66	60.00	-14.34	QP
12		20.8137	13.43	20.32	33.75	50.00	-16.25	AVG

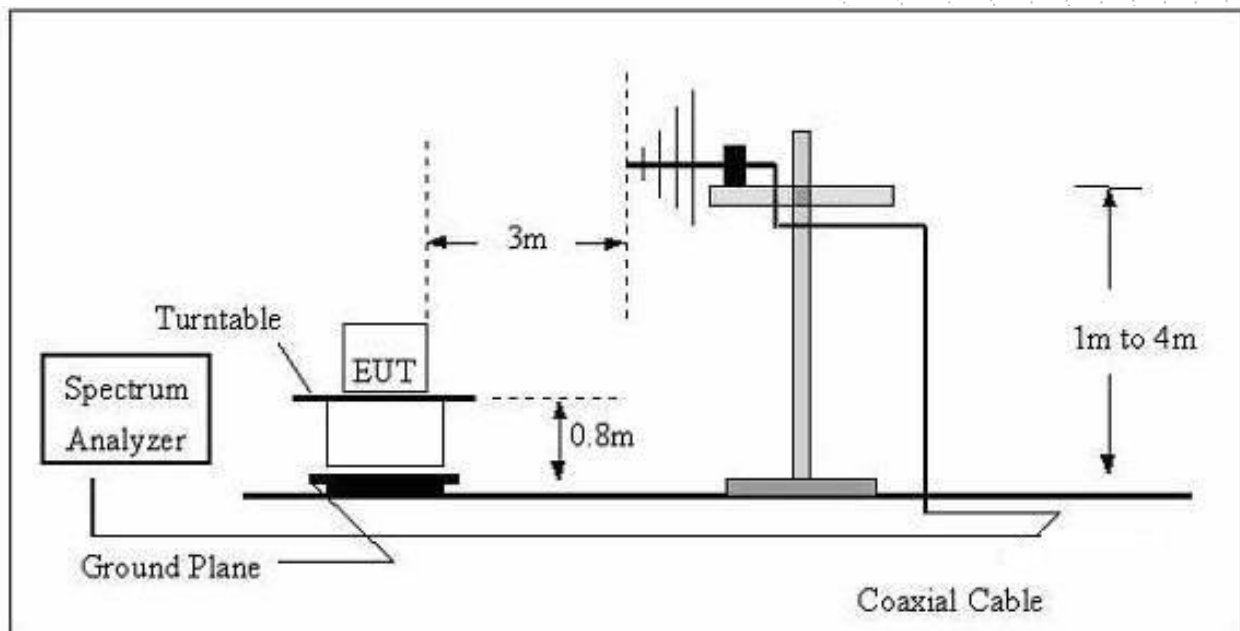
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

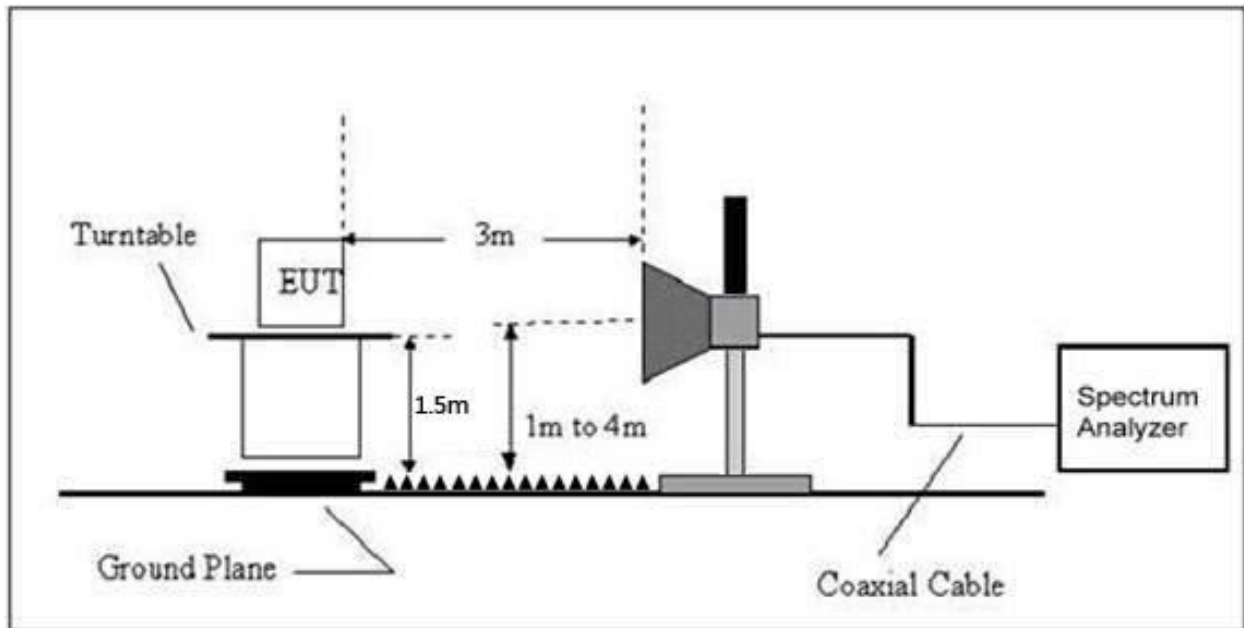
(A) Radiated Emission Test-Up Frequency Below 30MHz



(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

- 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.
- 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.
- 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.
- 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.
- 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.
- 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:	101KPa	Test Voltage :	AC 120V/60Hz
Test Mode:	Mode 4	Polarization :	--

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

Note:

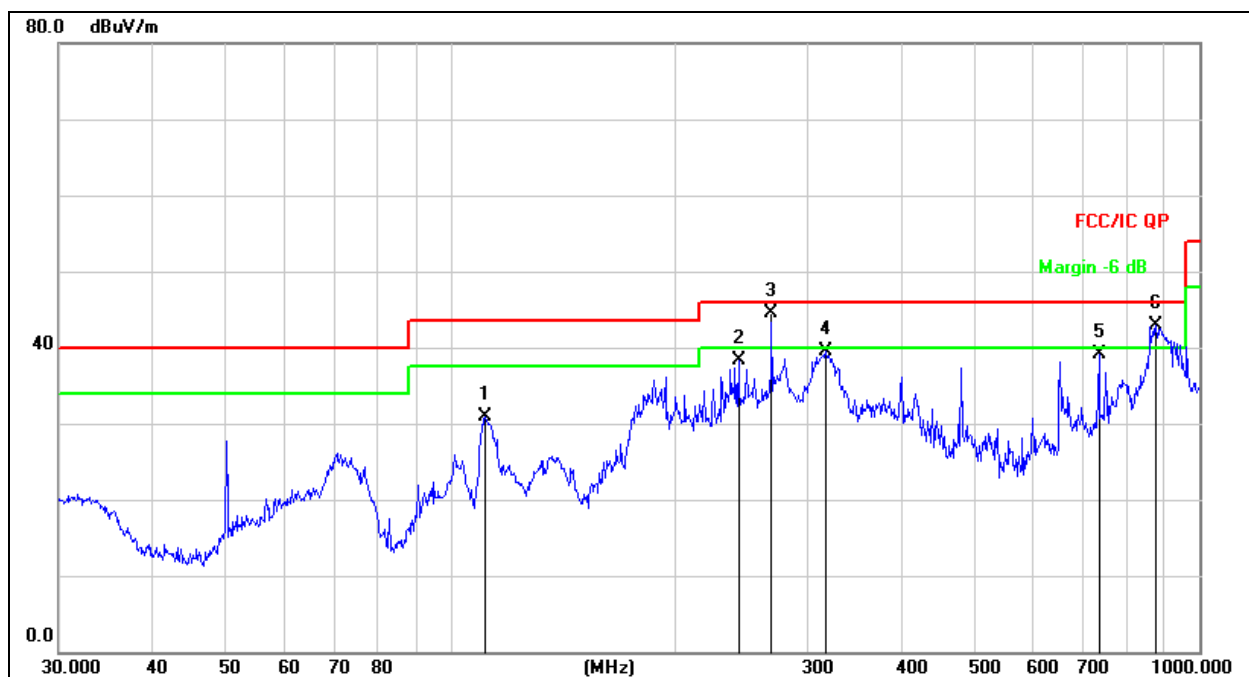
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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:	101KPa	Phase :	Horizontal
Test Mode:	Mode 4	Test Voltage :	AC 120V/60Hz

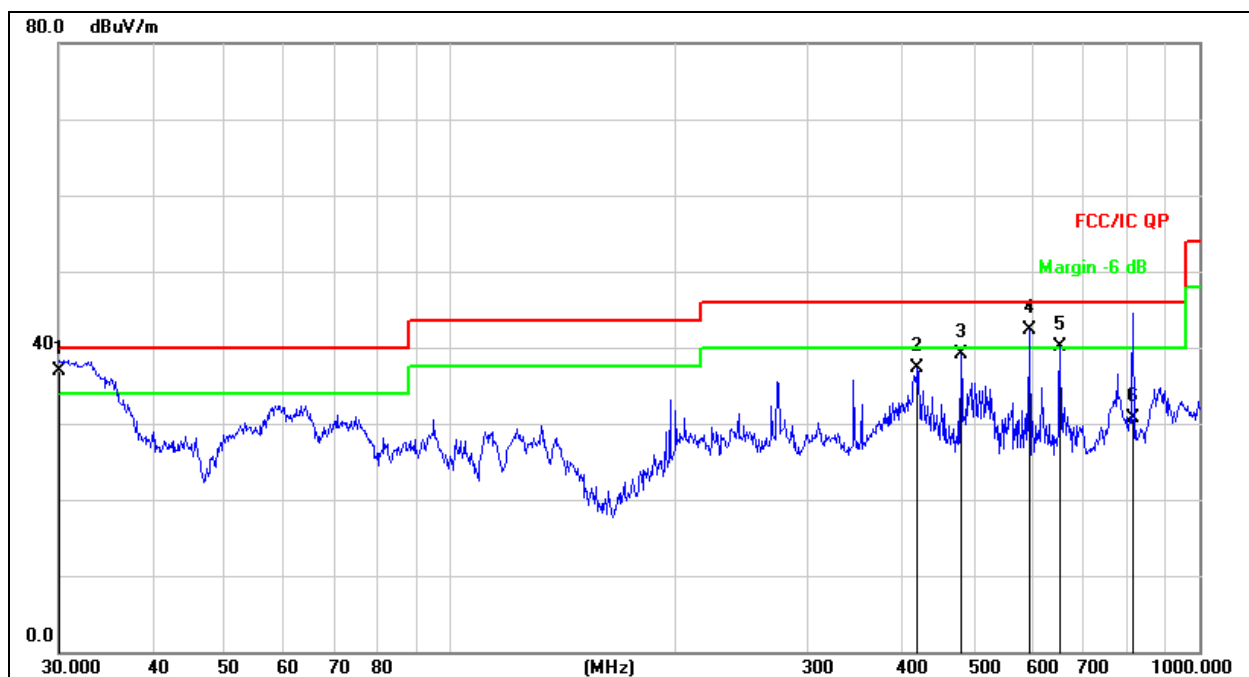


Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		111.3468	47.70	-16.72	30.98	43.50	-12.52	QP
2		242.5253	52.90	-14.50	38.40	46.00	-7.60	QP
3	*	268.3052	58.33	-13.91	44.42	46.00	-1.58	QP
4		316.5890	52.25	-12.66	39.59	46.00	-6.41	QP
5		734.4913	44.27	-5.21	39.06	46.00	-6.94	QP
6	!	875.2470	46.54	-3.55	42.99	46.00	-3.01	QP

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



Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	30.1030	53.59	-16.63	36.96	40.00	-3.04	QP
2		420.5803	47.75	-10.44	37.31	46.00	-8.69	QP
3		480.5276	48.25	-9.10	39.15	46.00	-6.85	QP
4	!	593.0497	49.83	-7.49	42.34	46.00	-3.66	QP
5	!	651.9416	46.28	-6.14	40.14	46.00	-5.86	QP
6		815.4878	35.00	-4.27	30.73	46.00	-15.27	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	4434.085	73.97	-20.73	53.23	68.2	-14.97	PK
Vertical	4434.085	59.22	-20.73	38.49	54	-15.51	AV
Vertical	10360.160	61.48	-9.36	52.12	68.2	-16.08	PK
Vertical	10360.160	49.22	-9.36	39.86	54	-14.14	AV
Vertical	15540.009	62.47	-7.84	54.63	74	-19.37	PK
Vertical	15540.009	49.78	-7.84	41.94	54	-12.06	AV
Horizontal	4434.153	71.03	-20.73	50.30	68.2	-17.90	PK
Horizontal	4434.153	59.61	-20.73	38.88	54	-15.12	AV
Horizontal	10360.166	61.71	-9.36	52.35	68.2	-15.85	PK
Horizontal	10360.166	49.53	-9.36	40.17	54	-13.83	AV
Horizontal	15540.063	62.69	-7.84	54.85	74	-19.15	PK
Horizontal	15540.063	49.47	-7.84	41.63	54	-12.37	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.195	70.81	-20.42	50.40	74	-23.60	PK
Vertical	4592.195	59.51	-20.42	39.10	54	-14.90	AV
Vertical	10400.110	63.15	-9.30	53.85	68.2	-14.35	PK
Vertical	10400.110	49.27	-9.30	39.97	54	-14.03	AV
Vertical	15600.158	62.05	-7.82	54.23	74	-19.77	PK
Vertical	15600.158	49.77	-7.82	41.95	54	-12.05	AV
Horizontal	4592.047	72.62	-20.42	52.20	74	-21.80	PK
Horizontal	4592.047	59.48	-20.42	39.06	54	-14.94	AV
Horizontal	10400.110	61.43	-9.30	52.13	68.2	-16.07	PK
Horizontal	10400.110	49.43	-9.30	40.13	54	-13.87	AV
Horizontal	15600.124	61.26	-7.82	53.44	74	-20.56	PK
Horizontal	15600.124	49.45	-7.82	41.63	54	-12.37	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.014	73.51	-20.12	53.38	74	-20.62	PK
Vertical	4739.014	59.90	-20.12	39.78	54	-14.22	AV
Vertical	10480.110	63.20	-9.18	54.02	68.2	-14.18	PK
Vertical	10480.110	49.03	-9.18	39.85	54	-14.15	AV
Vertical	15720.004	60.18	-7.78	52.40	74	-21.60	PK
Vertical	15720.004	49.72	-7.78	41.94	54	-12.06	AV
Horizontal	4739.009	74.71	-20.12	54.58	74	-19.42	PK
Horizontal	4739.009	59.99	-20.12	39.87	54	-14.13	AV
Horizontal	10480.129	63.42	-9.18	54.24	68.2	-13.96	PK
Horizontal	10480.129	49.04	-9.18	39.86	54	-14.14	AV
Horizontal	15720.098	64.04	-7.78	56.26	74	-17.74	PK
Horizontal	15720.098	49.13	-7.78	41.35	54	-12.65	AV

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

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

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

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

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	4434.072	71.71	-20.73	50.98	68.2	-17.22	PK
Vertical	4434.072	59.03	-20.73	38.29	54	-15.71	AV
Vertical	10360.032	63.94	-9.36	54.58	68.2	-13.62	PK
Vertical	10360.032	49.63	-9.36	40.27	54	-13.73	AV
Vertical	15540.006	61.96	-7.84	54.12	74	-19.88	PK
Vertical	15540.006	49.10	-7.84	41.26	54	-12.74	AV
Horizontal	4434.061	73.54	-20.73	52.81	68.2	-15.39	PK
Horizontal	4434.061	59.16	-20.73	38.43	54	-15.57	AV
Horizontal	10360.106	64.41	-9.36	55.05	68.2	-13.15	PK
Horizontal	10360.106	49.14	-9.36	39.78	54	-14.22	AV
Horizontal	15540.103	64.96	-7.84	57.12	74	-16.88	PK
Horizontal	15540.103	49.30	-7.84	41.46	54	-12.54	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.157	71.20	-20.42	50.78	74	-23.22	PK
Vertical	4592.157	59.52	-20.42	39.11	54	-14.89	AV
Vertical	10400.006	63.03	-9.30	53.73	68.2	-14.47	PK
Vertical	10400.006	49.62	-9.30	40.32	54	-13.68	AV
Vertical	15600.011	60.77	-7.82	52.95	74	-21.05	PK
Vertical	15600.011	49.45	-7.82	41.63	54	-12.37	AV
Horizontal	4592.148	70.54	-20.42	50.12	74	-23.88	PK
Horizontal	4592.148	59.56	-20.42	39.15	54	-14.85	AV
Horizontal	10400.167	62.06	-9.30	52.76	68.2	-15.44	PK
Horizontal	10400.167	49.45	-9.30	40.15	54	-13.85	AV
Horizontal	15600.178	63.71	-7.82	55.89	74	-18.11	PK
Horizontal	15600.178	49.03	-7.82	41.21	54	-12.79	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.110	73.86	-20.12	53.74	74	-20.26	PK
Vertical	4739.110	59.72	-20.12	39.59	54	-14.41	AV
Vertical	10480.008	62.08	-9.18	52.90	68.2	-15.30	PK
Vertical	10480.008	49.10	-9.18	39.92	54	-14.08	AV
Vertical	15720.094	61.30	-7.78	53.52	74	-20.48	PK
Vertical	15720.094	49.61	-7.78	41.83	54	-12.17	AV
Horizontal	4739.045	71.84	-20.12	51.72	74	-22.28	PK
Horizontal	4739.045	59.71	-20.12	39.59	54	-14.41	AV
Horizontal	10480.102	61.24	-9.18	52.06	68.2	-16.14	PK
Horizontal	10480.102	49.66	-9.18	40.48	54	-13.52	AV
Horizontal	15720.090	60.77	-7.78	52.99	74	-21.01	PK
Horizontal	15720.090	49.56	-7.78	41.78	54	-12.22	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
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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	4434.064	74.76	-20.73	54.03	68.2	-14.17	PK
Vertical	4434.064	59.09	-20.73	38.36	54	-15.64	AV
Vertical	10380.197	60.16	-9.33	50.83	68.2	-17.37	PK
Vertical	10380.197	49.74	-9.33	40.41	54	-13.59	AV
Vertical	15570.156	64.38	-7.83	56.55	74	-17.45	PK
Vertical	15570.156	49.32	-7.83	41.49	54	-12.51	AV
Horizontal	4434.098	70.69	-20.73	49.96	74	-24.04	PK
Horizontal	4434.098	59.18	-20.73	38.45	54	-15.55	AV
Horizontal	10380.169	62.00	-9.33	52.67	68.2	-15.53	PK
Horizontal	10380.169	49.93	-9.33	40.60	54	-13.40	AV
Horizontal	15570.128	63.18	-7.83	55.35	74	-18.65	PK
Horizontal	15570.128	49.25	-7.83	41.42	54	-12.58	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.141	72.54	-20.12	52.42	68.2	-15.78	PK
Vertical	4739.141	59.55	-20.12	39.43	54	-14.57	AV
Vertical	10460.145	63.33	-9.21	54.12	68.2	-14.08	PK
Vertical	10460.145	49.98	-9.21	40.77	54	-13.23	AV
Vertical	15690.020	60.36	-7.79	52.57	74	-21.43	PK
Vertical	15690.020	49.99	-7.79	42.20	54	-11.80	AV
Horizontal	4739.070	70.83	-20.12	50.71	68.2	-17.49	PK
Horizontal	4739.070	59.95	-20.12	39.83	54	-14.17	AV
Horizontal	10460.041	63.00	-9.21	53.79	68.2	-14.41	PK
Horizontal	10460.041	49.54	-9.21	40.33	54	-13.67	AV
Horizontal	15690.151	63.69	-7.79	55.90	74	-18.10	PK
Horizontal	15690.151	49.59	-7.79	41.80	54	-12.20	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
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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	4434.130	70.42	-20.73	49.69	68.2	-18.51	PK
Vertical	4434.130	59.51	-20.73	38.78	54	-15.22	AV
Vertical	10360.137	64.09	-9.36	54.73	68.2	-13.47	PK
Vertical	10360.137	49.65	-9.36	40.29	54	-13.71	AV
Vertical	15540.197	63.95	-7.84	56.11	74	-17.89	PK
Vertical	15540.197	49.67	-7.84	41.83	54	-12.17	AV
Horizontal	4434.156	73.15	-20.73	52.42	68.2	-15.78	PK
Horizontal	4434.156	59.53	-20.73	38.80	54	-15.20	AV
Horizontal	10360.114	60.09	-9.36	50.73	68.2	-17.47	PK
Horizontal	10360.114	49.77	-9.36	40.41	54	-13.59	AV
Horizontal	15540.127	60.63	-7.84	52.79	74	-21.21	PK
Horizontal	15540.127	49.36	-7.84	41.52	54	-12.48	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.085	70.37	-20.42	49.96	74	-24.04	PK
Vertical	4592.085	59.16	-20.42	38.74	54	-15.26	AV
Vertical	10400.065	64.24	-9.30	54.94	68.2	-13.26	PK
Vertical	10400.065	49.06	-9.30	39.76	54	-14.24	AV
Vertical	15600.146	63.00	-7.82	55.18	74	-18.82	PK
Vertical	15600.146	49.06	-7.82	41.24	54	-12.76	AV
Horizontal	4592.161	72.28	-20.42	51.87	74	-22.13	PK
Horizontal	4592.161	59.66	-20.42	39.24	54	-14.76	AV
Horizontal	10400.101	62.07	-9.30	52.77	68.2	-15.43	PK
Horizontal	10400.101	49.51	-9.30	40.21	54	-13.79	AV
Horizontal	15600.149	62.74	-7.82	54.92	74	-19.08	PK
Horizontal	15600.149	49.46	-7.82	41.64	54	-12.36	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.194	72.51	-20.12	52.39	74	-21.61	PK
Vertical	4739.194	59.25	-20.12	39.13	54	-14.87	AV
Vertical	10480.101	62.93	-9.18	53.75	68.2	-14.45	PK
Vertical	10480.101	49.16	-9.18	39.98	54	-14.02	AV
Vertical	15720.096	62.55	-7.78	54.77	74	-19.23	PK
Vertical	15720.096	49.08	-7.78	41.30	54	-12.70	AV
Horizontal	4739.195	71.48	-20.12	51.36	74	-22.64	PK
Horizontal	4739.195	59.23	-20.12	39.11	54	-14.89	AV
Horizontal	10480.073	63.82	-9.18	54.64	68.2	-13.56	PK
Horizontal	10480.073	49.35	-9.18	40.17	54	-13.83	AV
Horizontal	15720.164	64.45	-7.78	56.67	74	-17.33	PK
Horizontal	15720.164	49.27	-7.78	41.49	54	-12.51	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
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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	4434.192	74.26	-20.73	53.53	68.2	-14.67	PK
Vertical	4434.192	59.17	-20.73	38.44	54	-15.56	AV
Vertical	10380.149	63.87	-9.33	54.54	68.2	-13.66	PK
Vertical	10380.149	49.53	-9.33	40.20	54	-13.80	AV
Vertical	15570.097	61.36	-7.83	53.53	74	-20.47	PK
Vertical	15570.097	49.33	-7.83	41.50	54	-12.50	AV
Horizontal	4434.127	74.11	-20.73	53.38	74	-20.62	PK
Horizontal	4434.127	59.21	-20.73	38.47	54	-15.53	AV
Horizontal	10380.121	63.99	-9.33	54.66	68.2	-13.54	PK
Horizontal	10380.121	49.34	-9.33	40.01	54	-13.99	AV
Horizontal	15570.064	62.95	-7.83	55.12	74	-18.88	PK
Horizontal	15570.064	49.92	-7.83	42.09	54	-11.91	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.127	71.74	-20.12	51.61	68.2	-16.59	PK
Vertical	4739.127	59.47	-20.12	39.35	54	-14.65	AV
Vertical	10460.094	62.74	-9.21	53.53	68.2	-14.67	PK
Vertical	10460.094	49.29	-9.21	40.08	54	-13.92	AV
Vertical	15690.016	61.28	-7.79	53.49	74	-20.51	PK
Vertical	15690.016	49.97	-7.79	42.18	54	-11.82	AV
Horizontal	4739.189	73.92	-20.12	53.80	68.2	-14.40	PK
Horizontal	4739.189	59.87	-20.12	39.75	54	-14.25	AV
Horizontal	10460.157	62.57	-9.21	53.36	68.2	-14.84	PK
Horizontal	10460.157	49.70	-9.21	40.49	54	-13.51	AV
Horizontal	15690.106	62.74	-7.79	54.95	74	-19.05	PK
Horizontal	15690.106	49.52	-7.79	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 Mode.

Test Mode:	TX(5.1G) - 802.11ac 80
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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 (5210 MHz)-Above 1G							
Vertical	4434.062	74.48	-20.73	53.74	68.2	-14.46	PK
Vertical	4434.062	59.13	-20.73	38.40	54	-15.60	AV
Vertical	10420.087	61.30	-9.27	52.03	68.2	-16.17	PK
Vertical	10420.087	49.07	-9.27	39.80	54	-14.20	AV
Vertical	15630.137	61.97	-7.81	54.16	74	-19.84	PK
Vertical	15630.137	49.98	-7.81	42.17	54	-11.83	AV
Horizontal	4434.082	72.55	-20.73	51.82	68.2	-16.38	PK
Horizontal	4434.082	59.78	-20.73	39.05	54	-14.95	AV
Horizontal	10420.189	40.35	9.27	49.62	68.2	-18.58	PK
Horizontal	10420.189	29.77	9.27	39.04	54	-14.96	AV
Horizontal	15630.018	63.13	-7.81	55.32	74	-18.68	PK
Horizontal	15630.018	49.98	-7.81	42.17	54	-11.83	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) - 802.11ax-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	4434.129	74.23	-20.73	53.50	68.2	-14.70	PK
Vertical	4434.129	59.81	-20.73	39.08	54	-14.92	AV
Vertical	10360.118	62.99	-9.36	53.63	68.2	-14.57	PK
Vertical	10360.118	49.36	-9.36	40.00	54	-14.00	AV
Vertical	15540.148	63.91	-7.84	56.07	74	-17.93	PK
Vertical	15540.148	49.07	-7.84	41.23	54	-12.77	AV
Horizontal	4434.047	73.09	-20.73	52.36	68.2	-15.84	PK
Horizontal	4434.047	59.46	-20.73	38.73	54	-15.27	AV
Horizontal	10360.066	63.19	-9.36	53.83	68.2	-14.37	PK
Horizontal	10360.066	49.92	-9.36	40.56	54	-13.44	AV
Horizontal	15540.169	60.82	-7.84	52.98	74	-21.02	PK
Horizontal	15540.169	49.94	-7.84	42.10	54	-11.90	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.174	74.40	-20.42	53.99	74	-20.01	PK
Vertical	4592.174	59.89	-20.42	39.48	54	-14.52	AV
Vertical	10400.138	60.48	-9.30	51.18	68.2	-17.02	PK
Vertical	10400.138	49.56	-9.30	40.26	54	-13.74	AV
Vertical	15600.141	60.77	-7.82	52.95	74	-21.05	PK
Vertical	15600.141	49.05	-7.82	41.23	54	-12.77	AV
Horizontal	4592.019	72.90	-20.42	52.48	74	-21.52	PK
Horizontal	4592.019	59.04	-20.42	38.63	54	-15.37	AV
Horizontal	10400.175	64.86	-9.30	55.56	68.2	-12.64	PK
Horizontal	10400.175	49.78	-9.30	40.48	54	-13.52	AV
Horizontal	15600.143	64.23	-7.82	56.41	74	-17.59	PK
Horizontal	15600.143	49.12	-7.82	41.30	54	-12.70	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.053	72.14	-20.12	52.01	74	-21.99	PK
Vertical	4739.053	59.57	-20.12	39.44	54	-14.56	AV
Vertical	10480.033	61.09	-9.18	51.91	68.2	-16.29	PK
Vertical	10480.033	49.18	-9.18	40.00	54	-14.00	AV
Vertical	15720.200	63.03	-7.78	55.25	74	-18.75	PK
Vertical	15720.200	49.71	-7.78	41.93	54	-12.07	AV
Horizontal	4739.063	74.26	-20.12	54.14	74	-19.86	PK
Horizontal	4739.063	59.20	-20.12	39.08	54	-14.92	AV
Horizontal	10480.125	60.74	-9.18	51.56	68.2	-16.64	PK
Horizontal	10480.125	49.27	-9.18	40.09	54	-13.91	AV
Horizontal	15720.068	61.35	-7.78	53.57	74	-20.43	PK
Horizontal	15720.068	49.16	-7.78	41.38	54	-12.62	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) - 802.11ax-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	4434.166	72.23	-20.73	51.50	68.2	-16.70	PK
Vertical	4434.166	59.14	-20.73	38.41	54	-15.59	AV
Vertical	10380.180	63.33	-9.33	54.00	68.2	-14.20	PK
Vertical	10380.180	49.08	-9.33	39.75	54	-14.25	AV
Vertical	15570.132	61.20	-7.83	53.37	74	-20.63	PK
Vertical	15570.132	49.77	-7.83	41.94	54	-12.06	AV
Horizontal	4434.160	73.05	-20.73	52.32	74	-21.68	PK
Horizontal	4434.160	59.25	-20.73	38.52	54	-15.48	AV
Horizontal	10380.012	60.25	-9.33	50.92	68.2	-17.28	PK
Horizontal	10380.012	49.84	-9.33	40.51	54	-13.49	AV
Horizontal	15570.109	64.32	-7.83	56.49	74	-17.51	PK
Horizontal	15570.109	49.16	-7.83	41.33	54	-12.67	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.059	72.15	-20.12	52.03	68.2	-16.17	PK
Vertical	4739.059	59.27	-20.12	39.15	54	-14.85	AV
Vertical	10460.056	60.60	-9.21	51.39	68.2	-16.81	PK
Vertical	10460.056	49.71	-9.21	40.50	54	-13.50	AV
Vertical	15690.178	63.13	-7.79	55.34	74	-18.66	PK
Vertical	15690.178	49.12	-7.79	41.33	54	-12.67	AV
Horizontal	4739.097	70.10	-20.12	49.98	68.2	-18.22	PK
Horizontal	4739.097	59.28	-20.12	39.16	54	-14.84	AV
Horizontal	10460.190	63.06	-9.21	53.85	68.2	-14.35	PK
Horizontal	10460.190	49.16	-9.21	39.95	54	-14.05	AV
Horizontal	15690.003	61.39	-7.79	53.60	74	-20.40	PK
Horizontal	15690.003	49.26	-7.79	41.47	54	-12.53	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) - 802.11ax 80
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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 (5210 MHz)-Above 1G							
Vertical	4434.187	71.13	-20.73	50.40	68.2	-17.80	PK
Vertical	4434.187	59.59	-20.73	38.86	54	-15.14	AV
Vertical	10420.116	64.98	-9.27	55.71	68.2	-12.49	PK
Vertical	10420.116	49.82	-9.27	40.55	54	-13.45	AV
Vertical	15630.094	62.43	-7.81	54.62	74	-19.38	PK
Vertical	15630.094	49.60	-7.81	41.79	54	-12.21	AV
Horizontal	4434.010	74.71	-20.73	53.97	68.2	-14.23	PK
Horizontal	4434.010	59.48	-20.73	38.75	54	-15.25	AV
Horizontal	10420.065	43.29	9.27	52.56	68.2	-15.64	PK
Horizontal	10420.065	29.99	9.27	39.26	54	-14.74	AV
Horizontal	15630.098	62.40	-7.81	54.59	74	-19.41	PK
Horizontal	15630.098	49.74	-7.81	41.93	54	-12.07	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
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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	4679.012	71.89	-20.24	51.64	74	-22.36	PK
Vertical	4679.012	59.33	-20.24	39.09	54	-14.91	AV
Vertical	11490.002	62.35	-8.79	53.56	68.2	-14.64	PK
Vertical	11490.002	49.94	-8.79	41.15	54	-12.85	AV
Vertical	17235.014	58.15	-3.18	54.97	68.2	-13.23	PK
Vertical	17235.014	44.03	-3.18	40.85	54	-13.15	AV
Horizontal	4679.119	72.07	-20.73	51.34	74	-22.66	PK
Horizontal	4679.119	59.29	-20.73	38.56	54	-15.44	AV
Horizontal	11490.001	61.23	-8.79	52.44	68.2	-15.76	PK
Horizontal	11490.001	49.60	-8.79	40.81	54	-13.19	AV
Horizontal	17235.140	55.06	-3.18	51.88	68.2	-16.32	PK
Horizontal	17235.140	44.81	-3.18	41.63	54	-12.37	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.192	71.86	-20.42	51.45	74	-22.55	PK
Vertical	4592.192	59.54	-20.42	39.13	54	-14.87	AV
Vertical	11570.069	61.39	-8.86	52.53	68.2	-15.67	PK
Vertical	11570.069	49.62	-8.86	40.76	54	-13.24	AV
Vertical	17355.014	59.55	-2.52	57.03	68.2	-11.17	PK
Vertical	17355.014	44.06	-2.52	41.54	54	-12.46	AV
Horizontal	4592.106	71.74	-20.42	51.32	74	-22.68	PK
Horizontal	4592.106	59.12	-20.42	38.70	54	-15.30	AV
Horizontal	11570.028	60.26	-8.86	51.40	68.2	-16.80	PK
Horizontal	11570.028	49.69	-8.86	40.83	54	-13.17	AV
Horizontal	17355.180	59.03	-2.52	56.51	68.2	-11.69	PK
Horizontal	17355.180	44.54	-2.52	42.02	54	-11.98	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.037	70.53	-18.93	51.60	68.2	-16.60	PK
Vertical	6039.037	59.38	-18.93	40.45	54	-13.55	AV
Vertical	11650.061	61.71	-8.92	52.79	74	-21.21	PK
Vertical	11650.061	49.16	-8.92	40.24	54	-13.76	AV
Vertical	17475.160	60.00	-1.86	58.14	68.2	-10.06	PK
Vertical	17475.160	44.24	-1.86	42.38	54	-11.62	AV
Horizontal	6039.101	71.21	-18.93	52.28	68.2	-15.92	PK
Horizontal	6039.101	59.62	-18.93	40.68	54	-13.32	AV
Horizontal	11650.119	63.55	-8.92	54.63	74	-19.37	PK
Horizontal	11650.119	49.20	-8.92	40.28	54	-13.72	AV
Horizontal	17475.137	59.98	-1.86	58.12	68.2	-10.08	PK
Horizontal	17475.137	44.87	-1.86	43.01	54	-10.99	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.

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	4679.117	72.41	-20.24	52.17	74	-21.83	PK
Vertical	4679.117	59.94	-20.24	39.70	54	-14.30	AV
Vertical	11490.003	63.29	-8.79	54.50	68.2	-13.70	PK
Vertical	11490.003	49.38	-8.79	40.59	54	-13.41	AV
Vertical	17235.020	56.81	-3.18	53.63	68.2	-14.57	PK
Vertical	17235.020	44.60	-3.18	41.42	54	-12.58	AV
Horizontal	4679.056	70.12	-20.24	49.88	74	-24.12	PK
Horizontal	4679.056	59.49	-20.24	39.24	54	-14.76	AV
Horizontal	11490.163	63.77	-8.79	54.98	68.2	-13.22	PK
Horizontal	11490.163	49.23	-8.79	40.44	54	-13.56	AV
Horizontal	17235.115	57.83	-3.18	54.65	68.2	-13.55	PK
Horizontal	17235.115	44.93	-3.18	41.75	54	-12.25	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.010	72.77	-20.42	52.35	74	-21.65	PK
Vertical	4592.010	59.01	-20.42	38.59	54	-15.41	AV
Vertical	11570.027	63.19	-8.86	54.33	68.2	-13.87	PK
Vertical	11570.027	49.48	-8.86	40.62	54	-13.38	AV
Vertical	17355.025	56.78	-2.52	54.26	68.2	-13.94	PK
Vertical	17355.025	44.45	-2.52	41.93	54	-12.07	AV
Horizontal	4592.050	73.53	-20.42	53.12	74	-20.88	PK
Horizontal	4592.050	59.60	-20.42	39.18	54	-14.82	AV
Horizontal	11570.098	61.14	-8.86	52.28	68.2	-15.92	PK
Horizontal	11570.098	49.65	-8.86	40.79	54	-13.21	AV
Horizontal	17355.056	55.21	-2.52	52.69	68.2	-15.51	PK
Horizontal	17355.056	44.52	-2.52	42.00	54	-12.00	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.125	70.94	-18.93	52.01	68.2	-16.19	PK
Vertical	6039.125	59.46	-18.93	40.53	54	-13.47	AV
Vertical	11650.016	60.26	-8.92	51.34	74	-22.66	PK
Vertical	11650.016	49.88	-8.92	40.96	54	-13.04	AV
Vertical	17475.095	57.82	-1.86	55.96	68.2	-12.24	PK
Vertical	17475.095	44.72	-1.86	42.86	54	-11.14	AV
Horizontal	6039.171	71.85	-18.93	52.92	68.2	-15.28	PK
Horizontal	6039.171	59.04	-18.93	40.11	54	-13.89	AV
Horizontal	11650.197	63.18	-8.92	54.26	74	-19.74	PK
Horizontal	11650.197	49.54	-8.92	40.62	54	-13.38	AV
Horizontal	17475.065	57.00	-1.86	55.14	68.2	-13.06	PK
Horizontal	17475.065	44.24	-1.86	42.38	54	-11.62	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
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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 (5755 MHz)-Above 1G							
Vertical	4679.122	72.36	-20.24	52.12	74	-21.88	PK
Vertical	4679.122	59.21	-20.24	38.97	54	-15.03	AV
Vertical	11510.065	62.24	-8.81	53.43	74	-20.57	PK
Vertical	11510.065	49.14	-8.81	40.33	54	-13.67	AV
Vertical	17265.130	59.77	-3.01	56.76	68.2	-11.44	PK
Vertical	17265.130	44.64	-3.01	41.63	54	-12.37	AV
Horizontal	4679.019	73.84	-20.24	53.60	74	-20.40	PK
Horizontal	4679.019	59.01	-20.24	38.77	54	-15.23	AV
Horizontal	11510.036	60.35	-8.81	51.54	74	-22.46	PK
Horizontal	11510.036	49.71	-8.81	40.90	54	-13.10	AV
Horizontal	17265.094	58.25	-3.01	55.24	68.2	-12.96	PK
Horizontal	17265.094	44.43	-3.01	41.42	54	-12.58	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.118	70.57	-18.93	51.64	68.2	-16.56	PK
Vertical	6039.118	59.95	-18.93	41.02	54	-12.98	AV
Vertical	11590.005	62.25	-8.87	53.38	74	-20.62	PK
Vertical	11590.005	49.36	-8.87	40.49	54	-13.51	AV
Vertical	17385.182	59.20	-2.35	56.85	68.2	-11.35	PK
Vertical	17385.182	44.87	-2.35	42.52	54	-11.48	AV
Horizontal	6039.039	74.03	-18.93	55.10	68.2	-13.10	PK
Horizontal	6039.039	59.10	-18.93	40.17	54	-13.83	AV
Horizontal	11590.121	64.70	-8.87	55.83	74	-18.17	PK
Horizontal	11590.121	49.31	-8.87	40.44	54	-13.56	AV
Horizontal	17385.171	57.53	-2.35	55.18	68.2	-13.02	PK
Horizontal	17385.171	44.58	-2.35	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.

Test Mode is MIMO 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	4679.188	73.93	-20.24	53.69	74	-20.31	PK
Vertical	4679.188	59.95	-20.24	39.71	54	-14.29	AV
Vertical	11490.066	62.16	-8.79	53.37	68.2	-14.83	PK
Vertical	11490.066	49.40	-8.79	40.61	54	-13.39	AV
Vertical	17235.098	58.51	-3.18	55.33	68.2	-12.87	PK
Vertical	17235.098	44.16	-3.18	40.98	54	-13.02	AV
Horizontal	4679.129	73.09	-20.24	52.85	74	-21.15	PK
Horizontal	4679.129	59.75	-20.24	39.51	54	-14.49	AV
Horizontal	11490.110	60.99	-8.79	52.20	68.2	-16.00	PK
Horizontal	11490.110	49.13	-8.79	40.34	54	-13.66	AV
Horizontal	17235.048	59.59	-3.18	56.41	68.2	-11.79	PK
Horizontal	17235.048	44.96	-3.18	41.78	54	-12.22	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.059	72.83	-20.42	52.41	74	-21.59	PK
Vertical	4592.059	59.58	-20.42	39.17	54	-14.83	AV
Vertical	11570.077	63.00	-8.86	54.14	68.2	-14.06	PK
Vertical	11570.077	49.23	-8.86	40.37	54	-13.63	AV
Vertical	17355.182	55.20	-2.52	52.68	68.2	-15.52	PK
Vertical	17355.182	44.71	-2.52	42.19	54	-11.81	AV
Horizontal	4592.147	71.52	-20.42	51.10	74	-22.90	PK
Horizontal	4592.147	59.21	-20.42	38.80	54	-15.20	AV
Horizontal	11570.105	64.84	-8.86	55.98	68.2	-12.22	PK
Horizontal	11570.105	49.81	-8.86	40.95	54	-13.05	AV
Horizontal	17355.119	59.01	-2.52	56.49	68.2	-11.71	PK
Horizontal	17355.119	44.42	-2.52	41.90	54	-12.10	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.042	71.40	-18.93	52.47	68.2	-15.73	PK
Vertical	6039.042	59.32	-18.93	40.39	54	-13.61	AV
Vertical	11650.098	62.25	-8.92	53.33	74	-20.67	PK
Vertical	11650.098	49.19	-8.92	40.27	54	-13.73	AV
Vertical	17475.028	58.92	-1.86	57.06	68.2	-11.14	PK
Vertical	17475.028	44.02	-1.86	42.16	54	-11.84	AV
Horizontal	6039.085	70.35	-18.93	51.42	68.2	-16.78	PK
Horizontal	6039.085	59.52	-18.93	40.59	54	-13.41	AV
Horizontal	11650.056	60.84	-8.92	51.92	74	-22.08	PK
Horizontal	11650.056	49.41	-8.92	40.49	54	-13.51	AV
Horizontal	17475.056	55.56	-1.86	53.70	68.2	-14.50	PK
Horizontal	17475.056	44.71	-1.86	42.85	54	-11.15	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode :	TX (5.8G) -- 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 (5755 MHz)-Above 1G							
Vertical	4679.177	72.76	-20.24	52.51	74	-21.49	PK
Vertical	4679.177	59.87	-20.24	39.63	54	-14.37	AV
Vertical	11510.190	62.50	-8.81	53.69	74	-20.31	PK
Vertical	11510.190	49.21	-8.81	40.40	54	-13.60	AV
Vertical	17265.130	58.22	-3.01	55.21	68.2	-12.99	PK
Vertical	17265.130	44.75	-3.01	41.74	54	-12.26	AV
Horizontal	4679.166	71.57	-20.24	51.33	74	-22.67	PK
Horizontal	4679.166	59.42	-20.24	39.18	54	-14.82	AV
Horizontal	11510.005	61.66	-8.81	52.85	74	-21.15	PK
Horizontal	11510.005	49.19	-8.81	40.38	54	-13.62	AV
Horizontal	17265.099	55.93	-3.01	52.92	68.2	-15.28	PK
Horizontal	17265.099	44.09	-3.01	41.08	54	-12.92	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.008	72.29	-18.93	53.35	68.2	-14.85	PK
Vertical	6039.008	59.98	-18.93	41.05	54	-12.95	AV
Vertical	11590.144	63.54	-8.87	54.67	74	-19.33	PK
Vertical	11590.144	49.44	-8.87	40.57	54	-13.43	AV
Vertical	17385.143	58.91	-2.35	56.56	68.2	-11.64	PK
Vertical	17385.143	44.34	-2.35	41.99	54	-12.01	AV
Horizontal	6039.008	71.87	-18.93	52.94	68.2	-15.26	PK
Horizontal	6039.008	59.70	-18.93	40.77	54	-13.23	AV
Horizontal	11590.138	62.84	-8.87	53.97	74	-20.03	PK
Horizontal	11590.138	49.61	-8.87	40.74	54	-13.26	AV
Horizontal	17385.173	55.35	-2.35	53.00	68.2	-15.20	PK
Horizontal	17385.173	44.33	-2.35	41.98	54	-12.02	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode :	TX (5.8G) -- 802.11ac 80
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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 (5775 MHz)-Above 1G							
Vertical	4679.174	72.12	-20.24	51.88	74	-22.12	PK
Vertical	4679.174	59.66	-20.24	39.42	54	-14.58	AV
Vertical	11550.193	61.98	-8.84	53.14	74	-20.86	PK
Vertical	11550.193	49.14	-8.84	40.30	54	-13.70	AV
Vertical	17325.192	58.11	-2.68	55.43	68.2	-12.77	PK
Vertical	17325.192	44.15	-2.68	41.47	54	-12.53	AV
Horizontal	4679.157	70.35	-20.24	50.11	74	-23.89	PK
Horizontal	4679.157	59.68	-20.24	39.44	54	-14.56	AV
Horizontal	11550.058	61.10	-8.84	52.26	74	-21.74	PK
Horizontal	11550.058	49.10	-8.84	40.26	54	-13.74	AV
Horizontal	17325.115	58.90	-2.68	56.22	68.2	-11.98	PK
Horizontal	17325.115	44.34	-2.68	41.66	54	-12.34	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) --802.11ax-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	4679.023	70.11	-20.24	49.87	74	-24.13	PK
Vertical	4679.023	59.72	-20.24	39.48	54	-14.52	AV
Vertical	11490.121	61.49	-8.79	52.70	68.2	-15.50	PK
Vertical	11490.121	49.19	-8.79	40.40	54	-13.60	AV
Vertical	17235.086	55.56	-3.18	52.38	68.2	-15.82	PK
Vertical	17235.086	44.60	-3.18	41.42	54	-12.58	AV
Horizontal	4679.157	73.53	-20.24	53.29	74	-20.71	PK
Horizontal	4679.157	59.10	-20.24	38.86	54	-15.14	AV
Horizontal	11490.066	60.19	-8.79	51.40	68.2	-16.80	PK
Horizontal	11490.066	49.87	-8.79	41.08	54	-12.92	AV
Horizontal	17235.144	58.12	-3.18	54.94	68.2	-13.26	PK
Horizontal	17235.144	44.15	-3.18	40.97	54	-13.03	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.097	70.95	-20.42	50.53	74	-23.47	PK
Vertical	4592.097	59.31	-20.42	38.90	54	-15.10	AV
Vertical	11570.062	64.24	-8.86	55.38	68.2	-12.82	PK
Vertical	11570.062	49.15	-8.86	40.29	54	-13.71	AV
Vertical	17355.100	57.05	-2.52	54.53	68.2	-13.67	PK
Vertical	17355.100	44.47	-2.52	41.95	54	-12.05	AV
Horizontal	4592.042	72.56	-20.42	52.15	74	-21.85	PK
Horizontal	4592.042	59.33	-20.42	38.91	54	-15.09	AV
Horizontal	11570.030	64.01	-8.86	55.15	68.2	-13.05	PK
Horizontal	11570.030	49.66	-8.86	40.80	54	-13.20	AV
Horizontal	17355.196	58.61	-2.52	56.09	68.2	-12.11	PK
Horizontal	17355.196	44.26	-2.52	41.74	54	-12.26	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.062	74.94	-18.93	56.00	68.2	-12.20	PK
Vertical	6039.062	59.11	-18.93	40.18	54	-13.82	AV
Vertical	11650.096	60.02	-8.92	51.10	74	-22.90	PK
Vertical	11650.096	49.42	-8.92	40.50	54	-13.50	AV
Vertical	17475.116	56.90	-1.86	55.04	68.2	-13.16	PK
Vertical	17475.116	44.77	-1.86	42.91	54	-11.09	AV
Horizontal	6039.169	72.79	-18.93	53.86	68.2	-14.34	PK
Horizontal	6039.169	59.02	-18.93	40.09	54	-13.91	AV
Horizontal	11650.171	62.56	-8.92	53.64	74	-20.36	PK
Horizontal	11650.171	49.10	-8.92	40.18	54	-13.82	AV
Horizontal	17475.001	56.03	-1.86	54.17	68.2	-14.03	PK
Horizontal	17475.001	44.73	-1.86	42.87	54	-11.13	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) -- 802.11ax-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 (5755 MHz)-Above 1G							
Vertical	4679.160	70.69	-20.24	50.45	74	-23.55	PK
Vertical	4679.160	59.06	-20.24	38.82	54	-15.18	AV
Vertical	11510.048	63.52	-8.81	54.71	74	-19.29	PK
Vertical	11510.048	49.95	-8.81	41.14	54	-12.86	AV
Vertical	17265.032	56.37	-3.01	53.36	68.2	-14.84	PK
Vertical	17265.032	44.38	-3.01	41.37	54	-12.63	AV
Horizontal	4679.190	74.39	-20.24	54.15	74	-19.85	PK
Horizontal	4679.190	59.60	-20.24	39.36	54	-14.64	AV
Horizontal	11510.121	63.54	-8.81	54.73	74	-19.27	PK
Horizontal	11510.121	49.57	-8.81	40.76	54	-13.24	AV
Horizontal	17265.032	55.52	-3.01	52.51	68.2	-15.69	PK
Horizontal	17265.032	44.04	-3.01	41.03	54	-12.97	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.030	73.12	-18.93	54.19	68.2	-14.01	PK
Vertical	6039.030	59.31	-18.93	40.38	54	-13.62	AV
Vertical	11590.136	60.18	-8.87	51.31	74	-22.69	PK
Vertical	11590.136	49.81	-8.87	40.94	54	-13.06	AV
Vertical	17385.012	57.83	-2.35	55.48	68.2	-12.72	PK
Vertical	17385.012	44.42	-2.35	42.07	54	-11.93	AV
Horizontal	6039.134	72.32	-18.93	53.38	68.2	-14.82	PK
Horizontal	6039.134	59.04	-18.93	40.11	54	-13.89	AV
Horizontal	11590.085	60.81	-8.87	51.94	74	-22.06	PK
Horizontal	11590.085	49.37	-8.87	40.50	54	-13.50	AV
Horizontal	17385.063	56.70	-2.35	54.35	68.2	-13.85	PK
Horizontal	17385.063	44.49	-2.35	42.14	54	-11.86	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) -- 802.11ax 80
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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 (5775 MHz)-Above 1G							
Vertical	4679.022	71.46	-20.24	51.22	74	-22.78	PK
Vertical	4679.022	59.39	-20.24	39.15	54	-14.85	AV
Vertical	11550.184	63.23	-8.84	54.39	74	-19.61	PK
Vertical	11550.184	49.78	-8.84	40.94	54	-13.06	AV
Vertical	17325.146	56.02	-2.68	53.34	68.2	-14.86	PK
Vertical	17325.146	44.22	-2.68	41.54	54	-12.46	AV
Horizontal	4679.093	70.60	-20.24	50.36	74	-23.64	PK
Horizontal	4679.093	59.19	-20.24	38.95	54	-15.05	AV
Horizontal	11550.050	62.86	-8.84	54.02	74	-19.98	PK
Horizontal	11550.050	49.79	-8.84	40.95	54	-13.05	AV
Horizontal	17325.014	59.04	-2.68	56.36	68.2	-11.84	PK
Horizontal	17325.014	44.18	-2.68	41.50	54	-12.50	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.

- ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge
- All the modes 802.11a/n/ac/ax has been tested and the worst result 802.11ax20 recorded as below:

Test mode: 802.11ax20 Frequency(MHz): 5180

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)
5150.35	H	64.25	74	45.38	54
5150.21	V	63.38	74	43.24	54

Test mode: 802.11ax20 Frequency(MHz): 5240

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)
5360.32	H	45.48	74	28.62	54
5360.22	V	43.42	74	28.25	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

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

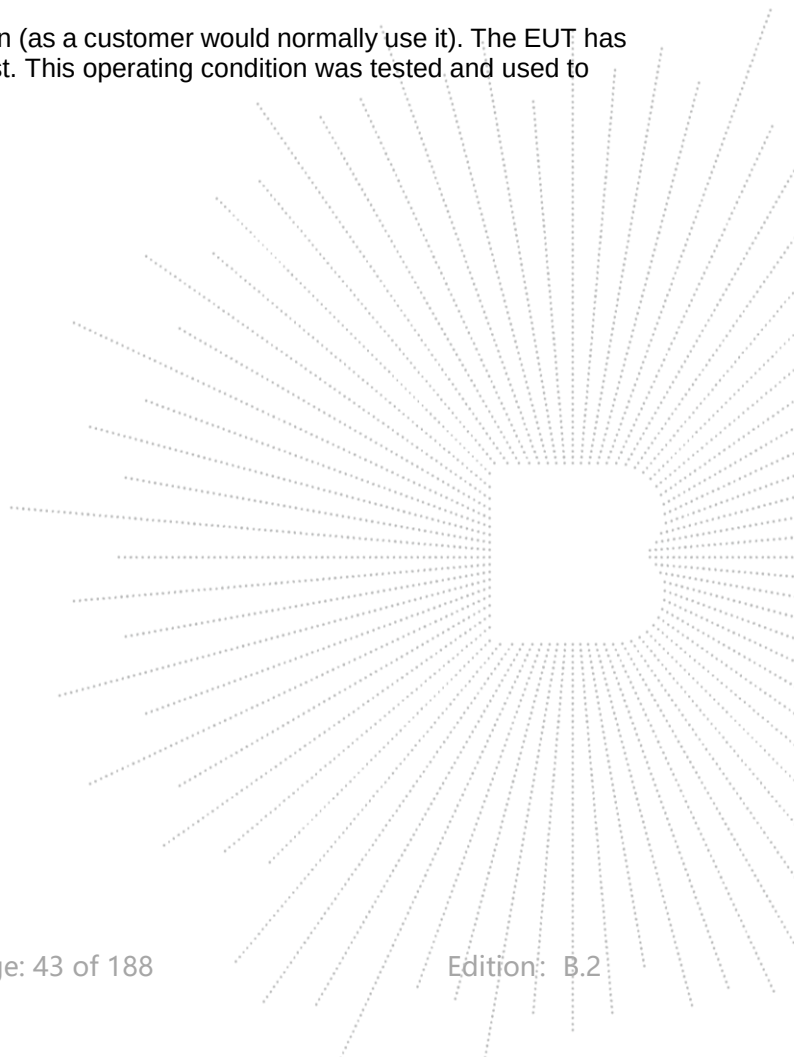
For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 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.

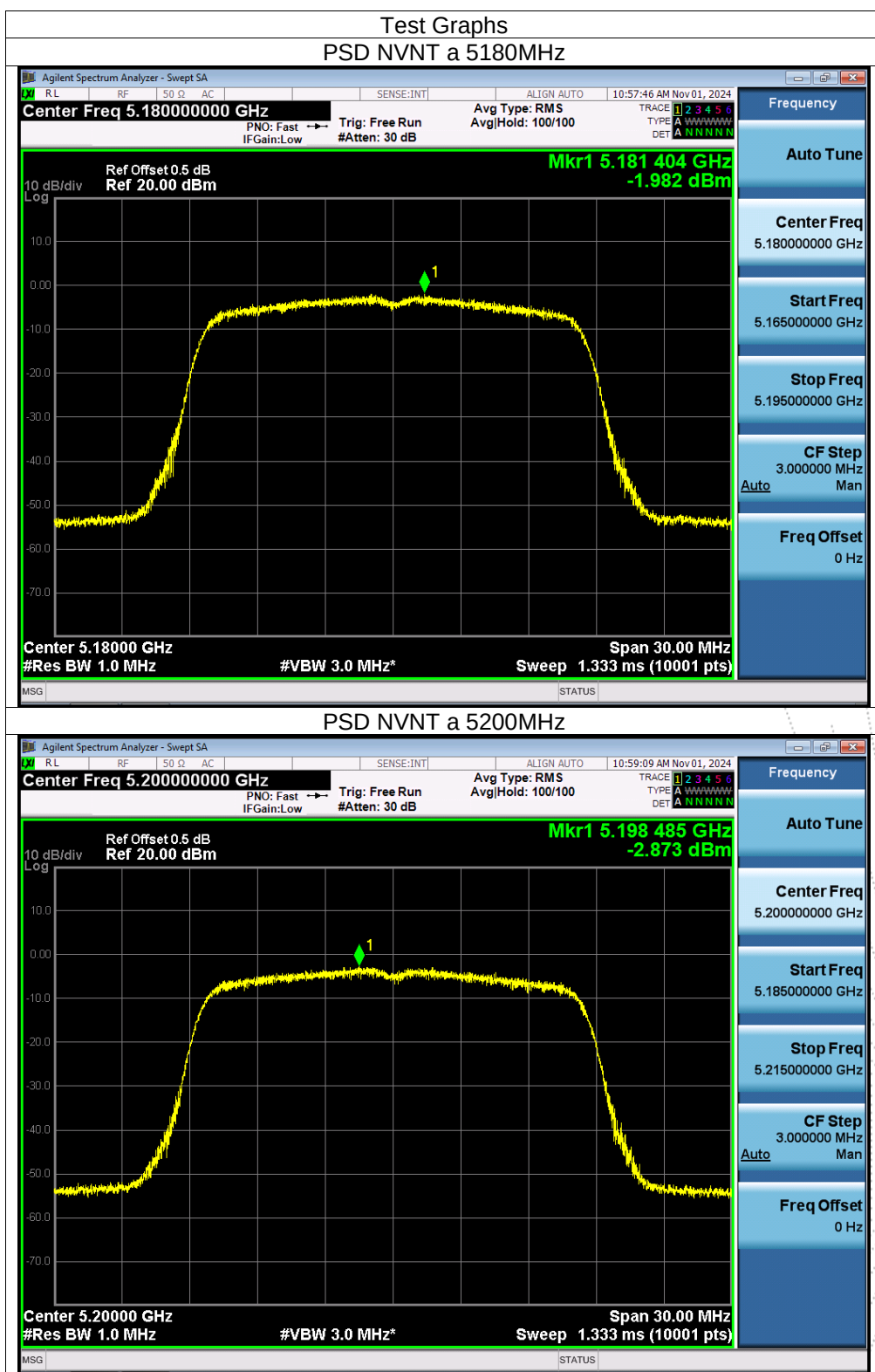


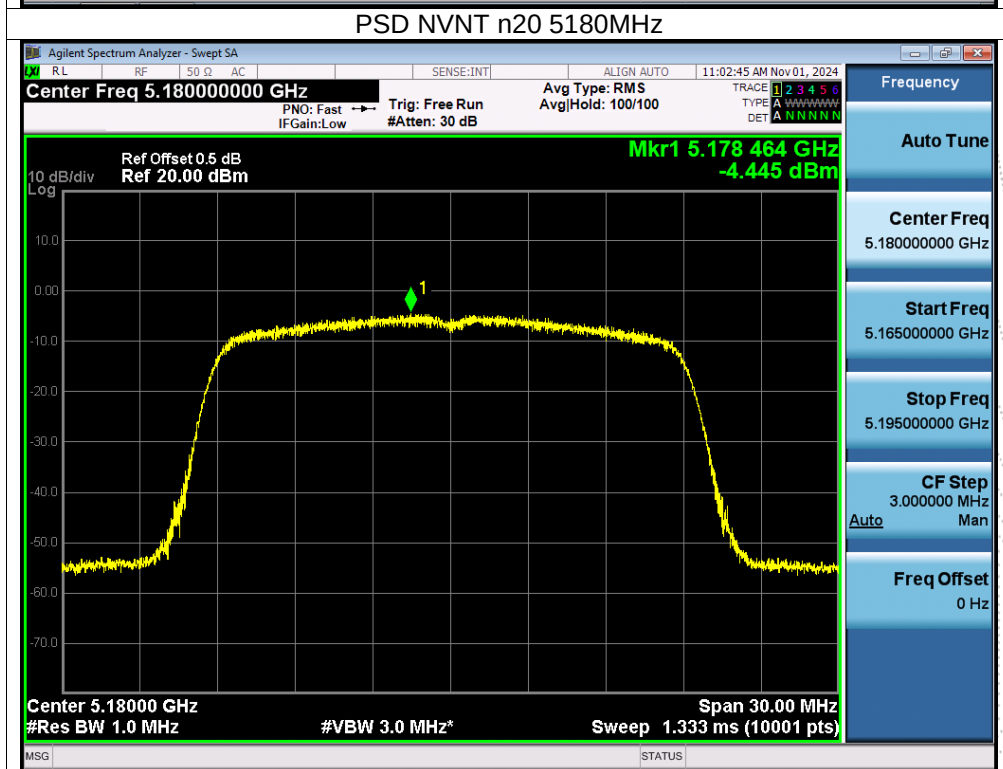
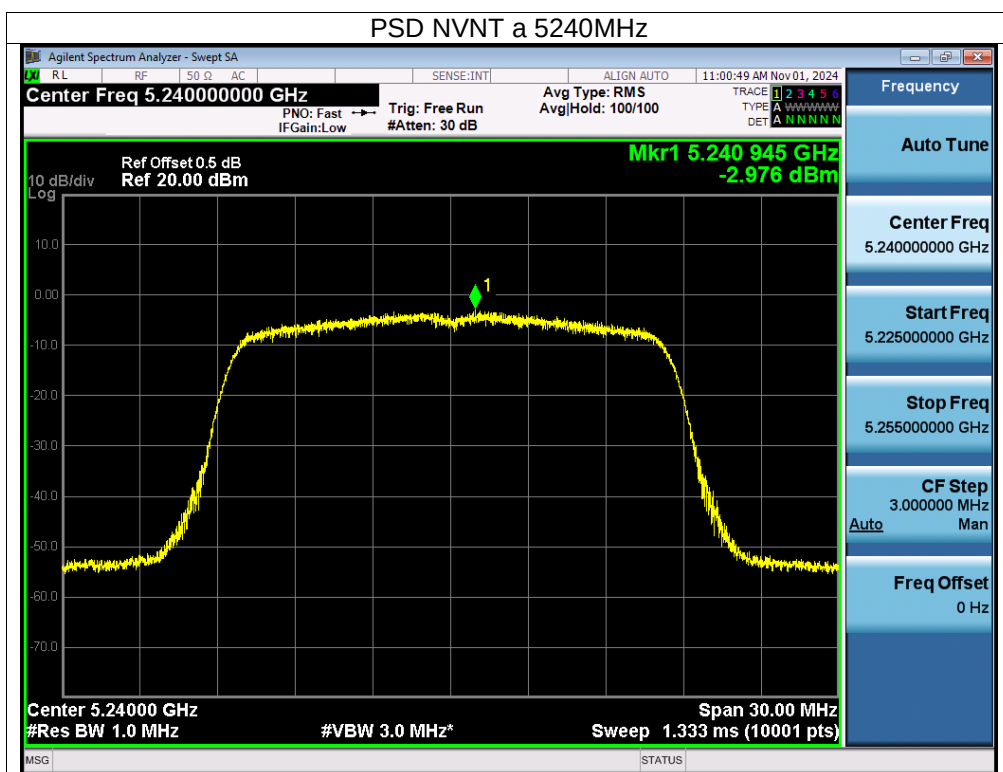
8.5 Test Result

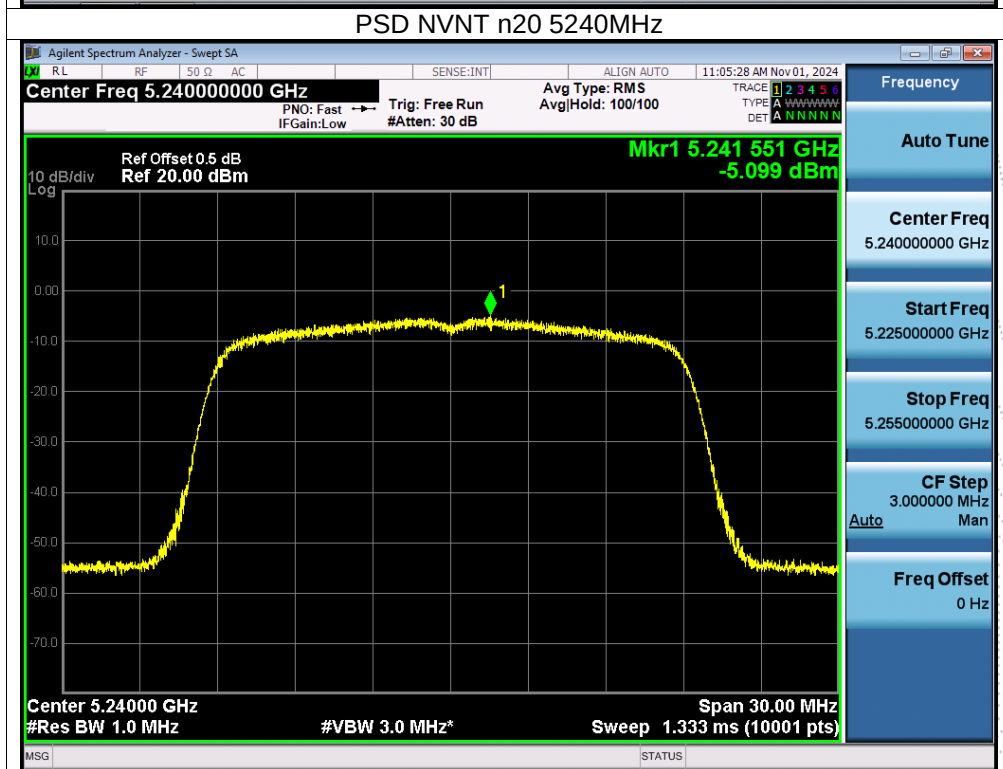
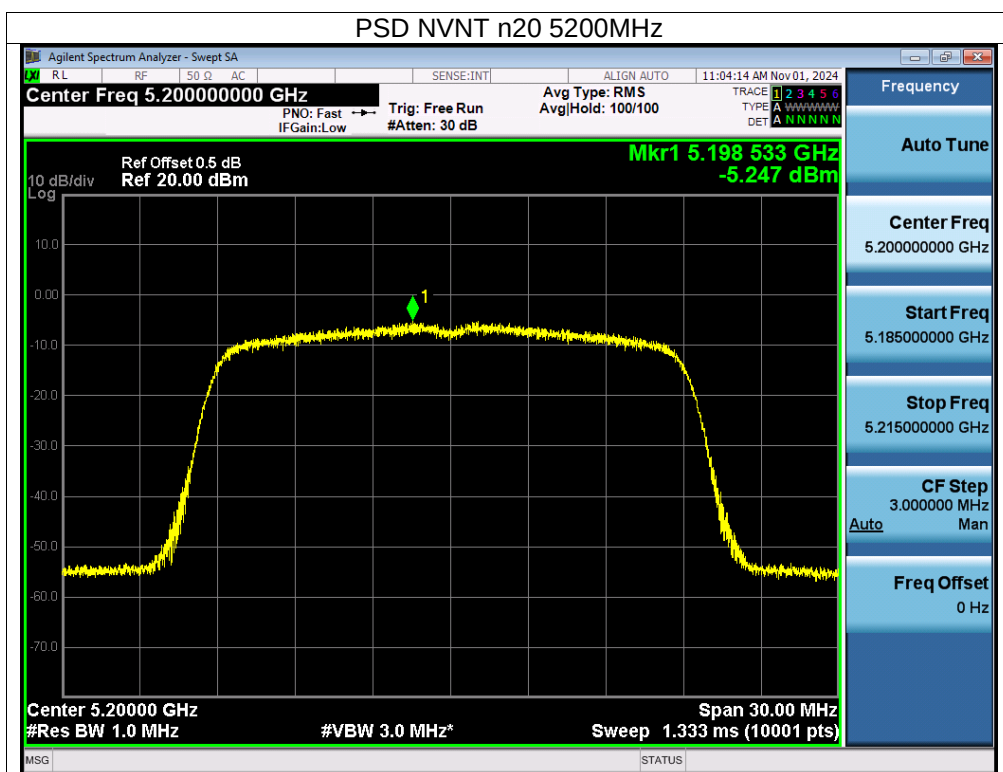
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 7.6V
Test Mode:	TX Frequency U-NII-1 (5180-5240MHz)		

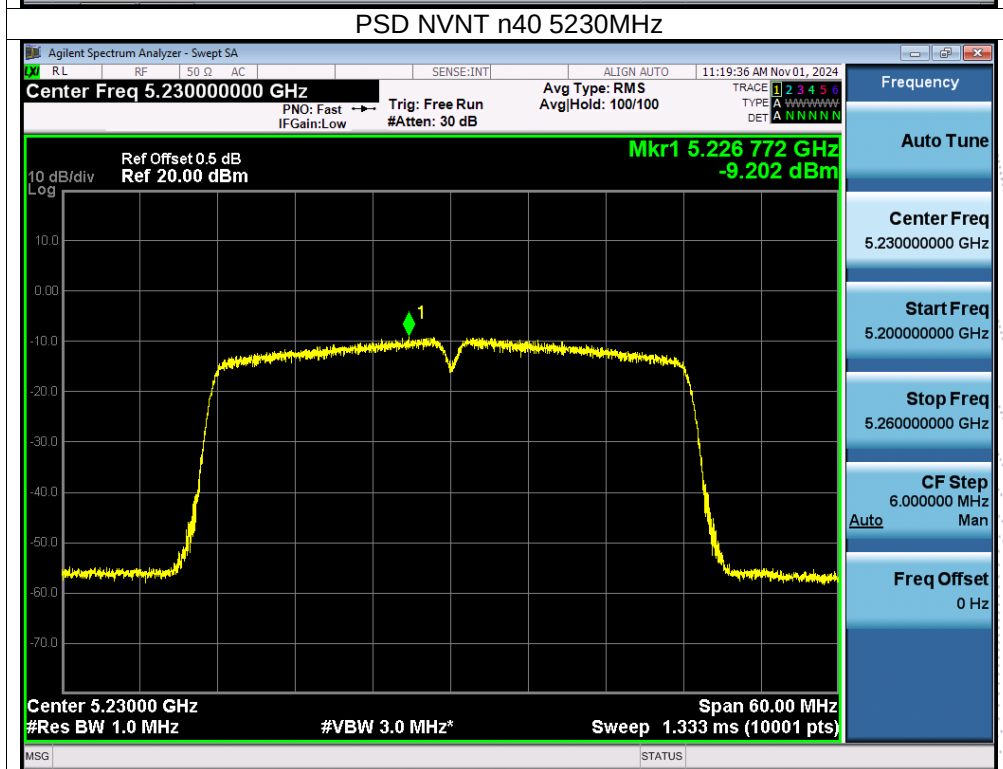
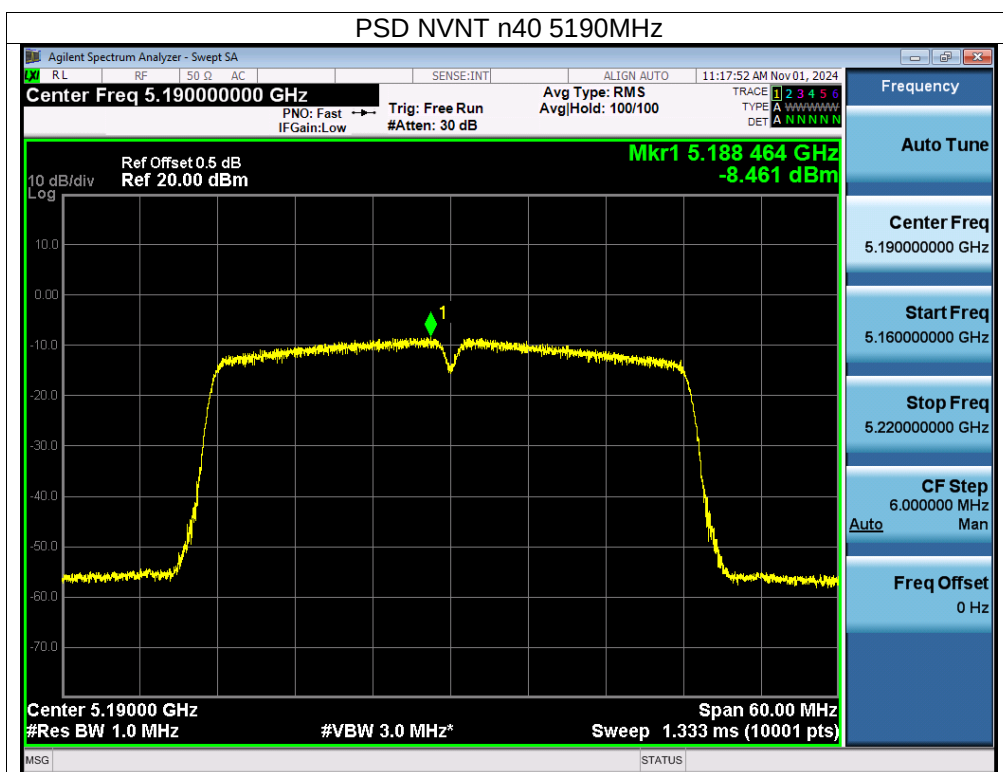
Condition	Mode	Frequency (MHz)	Measured Power Density (dBm/MHz)			Limit (dBm/MHz)	Result
			ANT A	ANT B	Total		
NVNT	a	5180	-2.68	-1.98	/	11	PASS
NVNT	a	5200	-2.92	-2.87	/	11	PASS
NVNT	a	5240	-3.07	-2.98	/	11	PASS
NVNT	n20	5180	-4.06	-4.45	-1.24	11	PASS
NVNT	n20	5200	-4.76	-5.25	-1.99	11	PASS
NVNT	n20	5240	-4.18	-5.1	-1.61	11	PASS
NVNT	n40	5190	-8.59	-8.46	-5.51	11	PASS
NVNT	n40	5230	-8.63	-9.2	-5.90	11	PASS
NVNT	ac20	5180	-4.27	-4.6	-1.42	11	PASS
NVNT	ac20	5200	-4.6	-5.04	-1.80	11	PASS
NVNT	ac20	5240	-4.93	-5.08	-1.99	11	PASS
NVNT	ac40	5190	-8.31	-8.18	-5.23	11	PASS
NVNT	ac40	5230	-8.83	-8.96	-5.88	11	PASS
NVNT	ac80	5210	-13.72	-13.73	-10.71	11	PASS
NVNT	ax20	5180	-3.19	-3.57	-0.37	11	PASS
NVNT	ax20	5200	-4.14	-4.51	-1.31	11	PASS
NVNT	ax20	5240	-4.31	-4.44	-1.36	11	PASS
NVNT	ax40	5190	-8.46	-8.07	-5.25	11	PASS
NVNT	ax40	5230	-8.72	-8.71	-5.70	11	PASS
NVNT	ax80	5210	-13.47	-13.99	-10.71	11	PASS

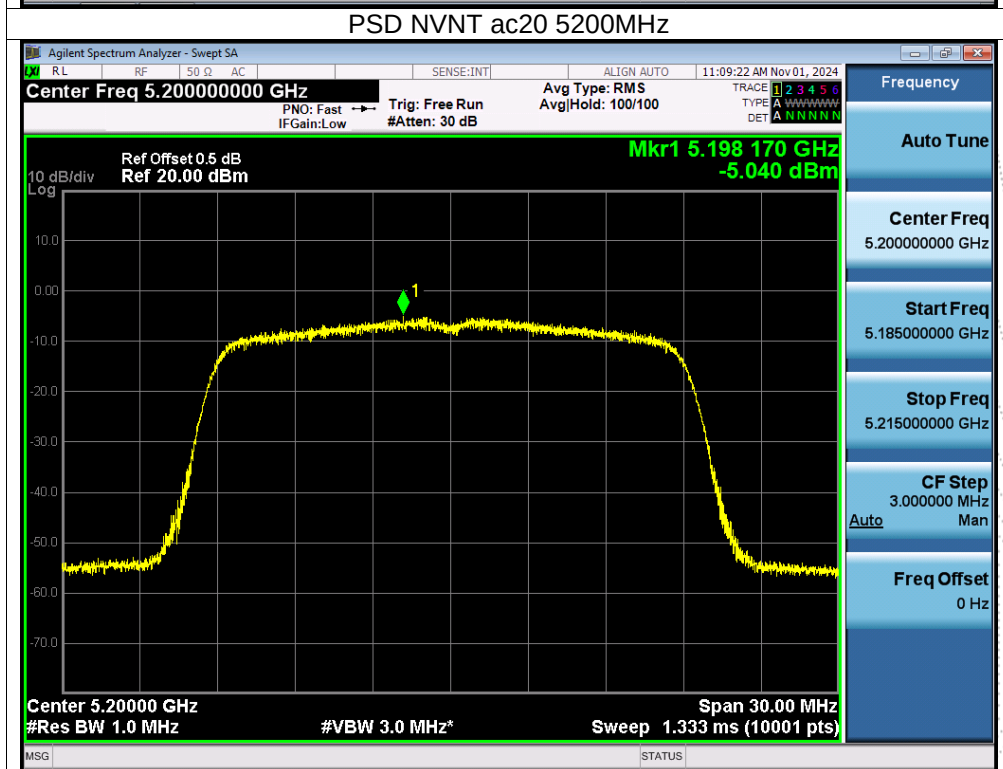
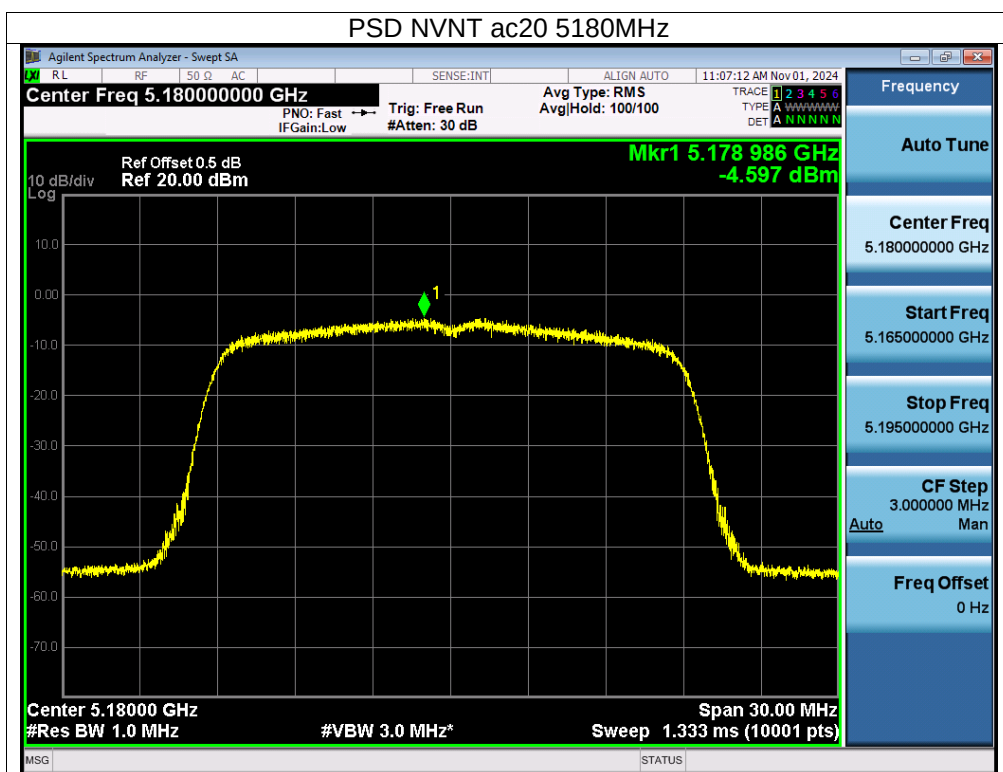
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

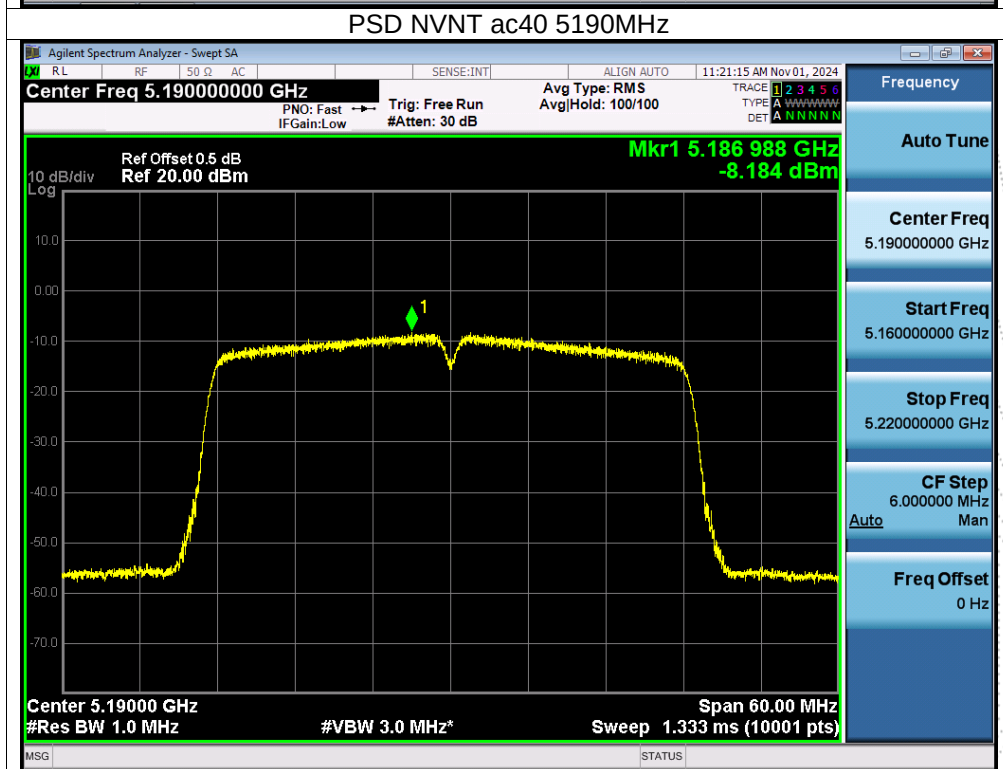
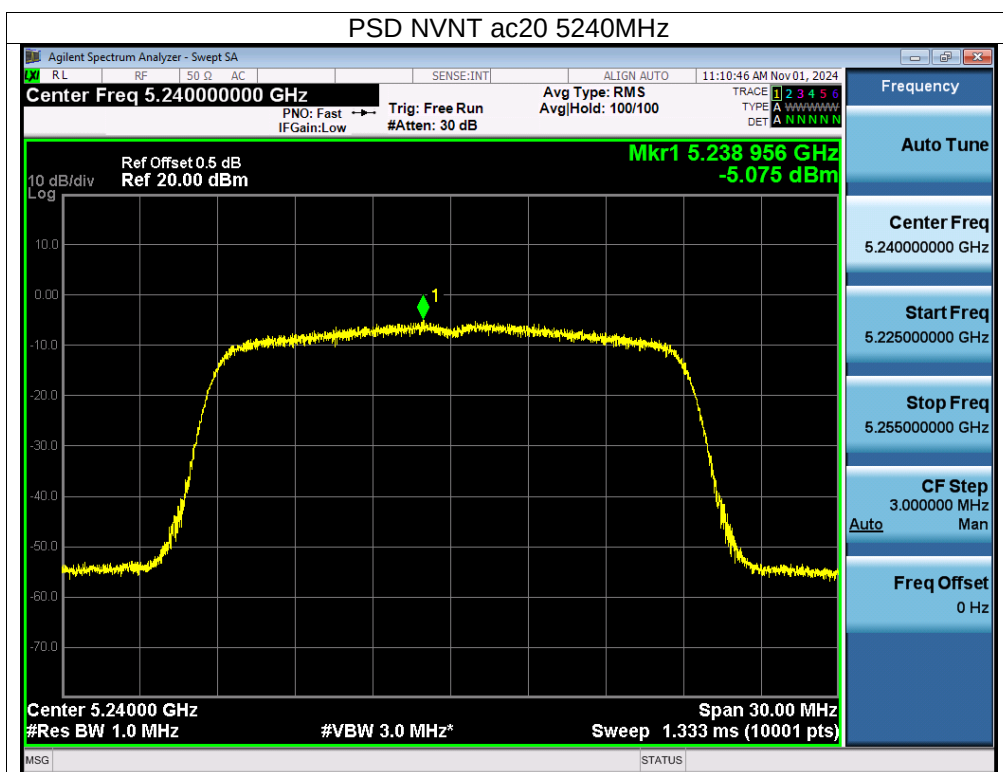


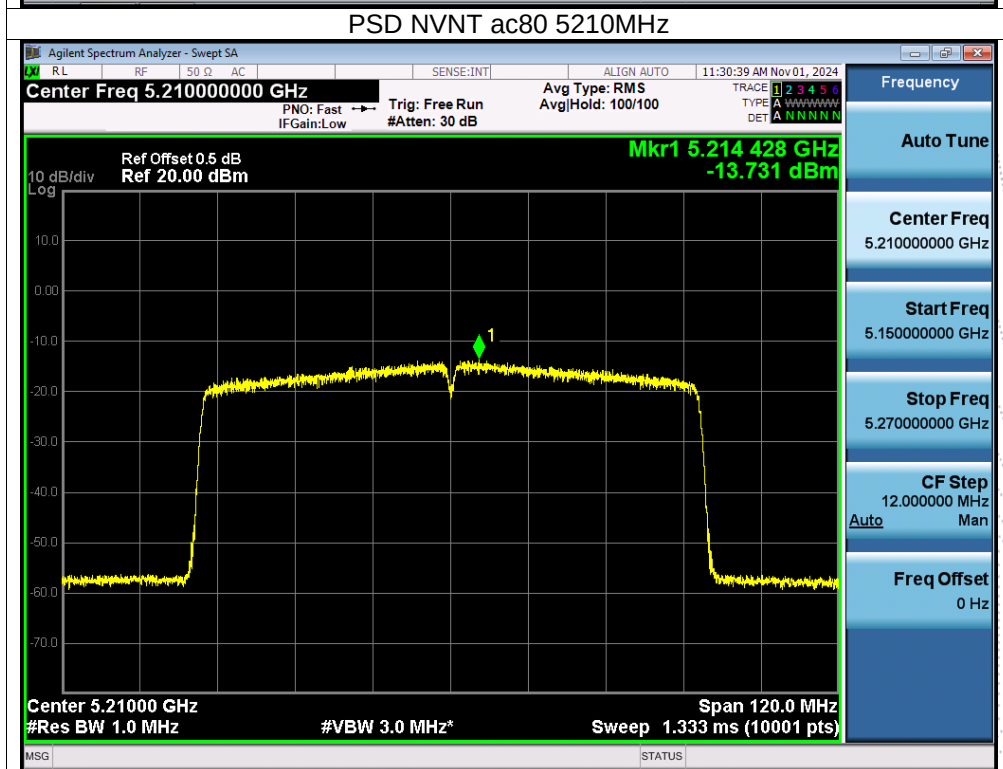
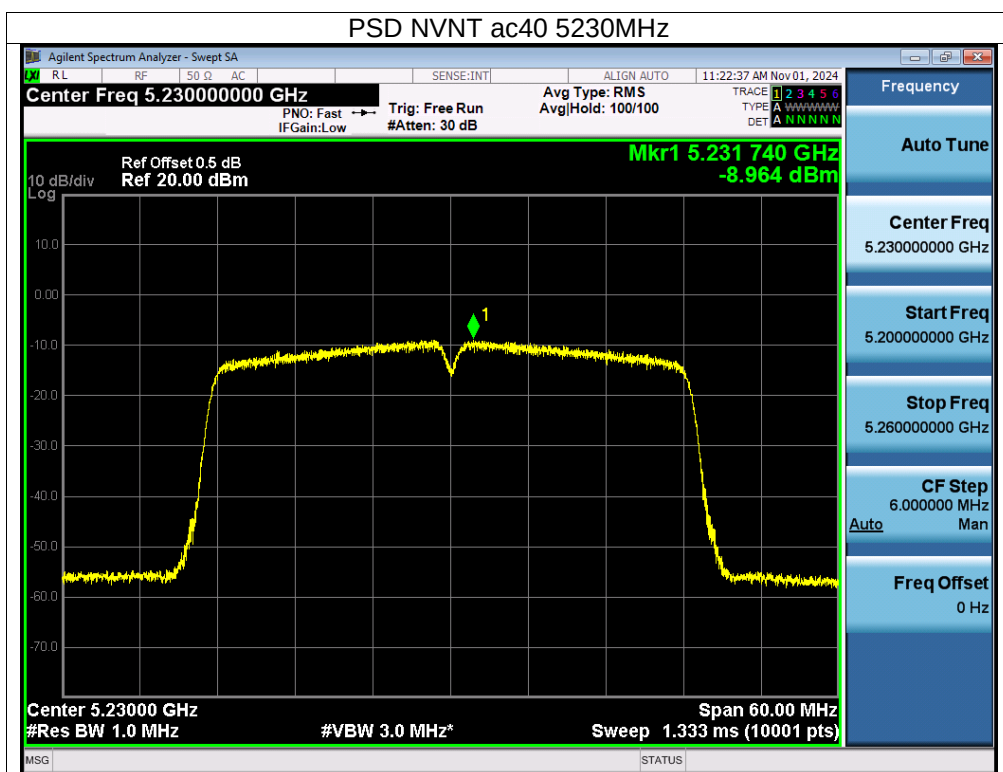


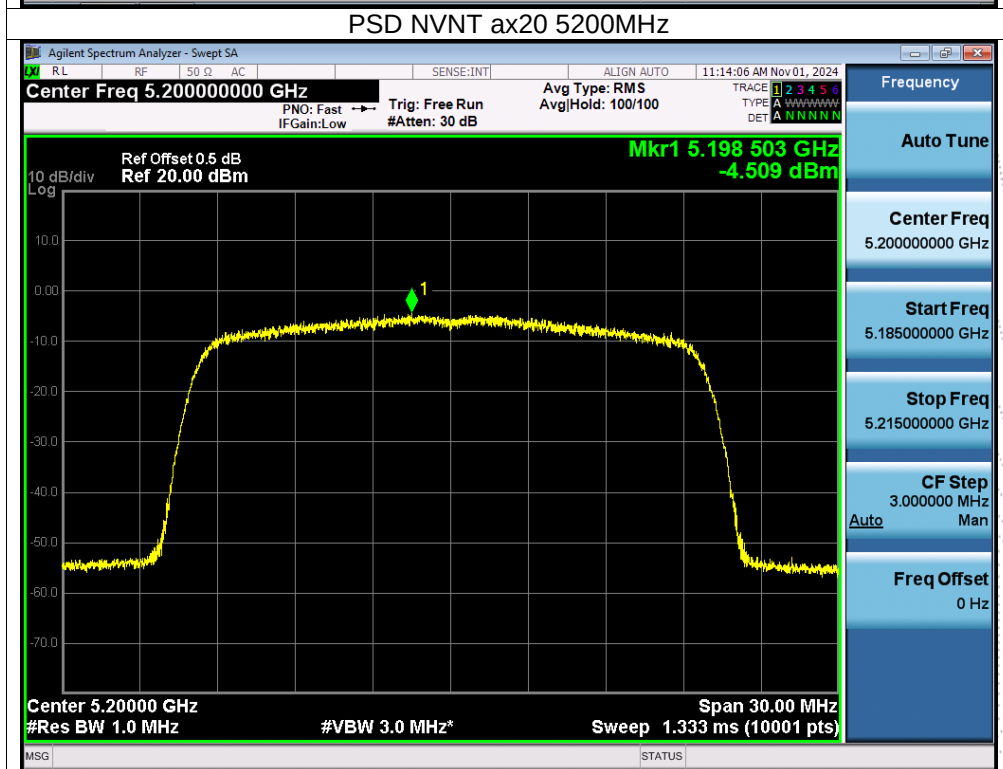
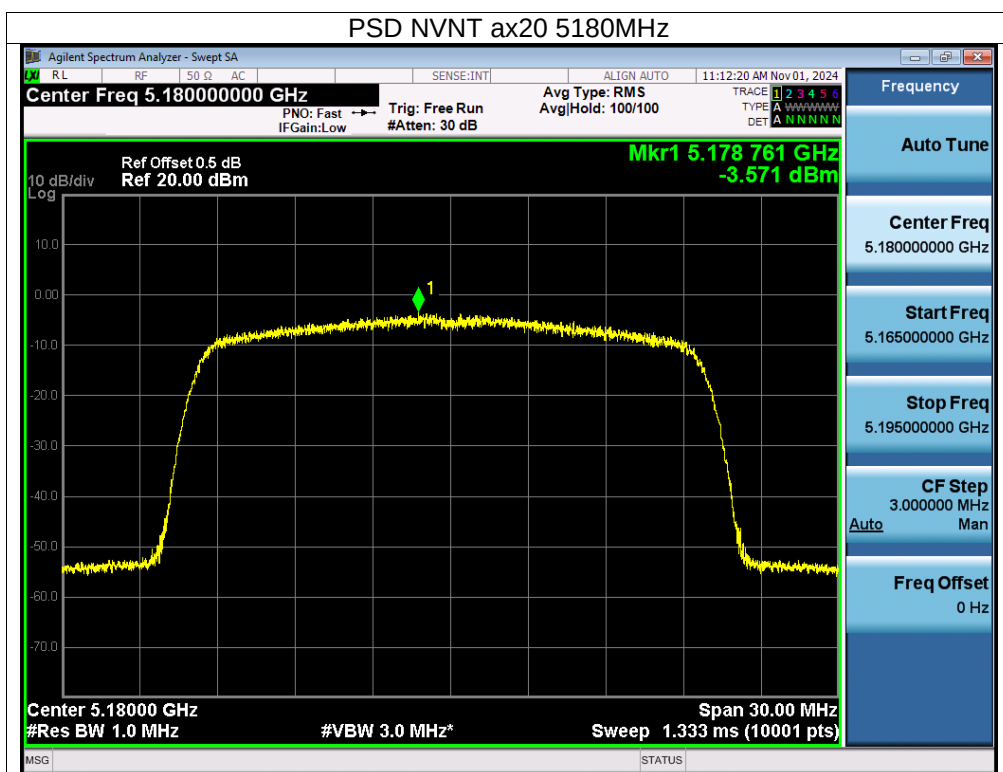


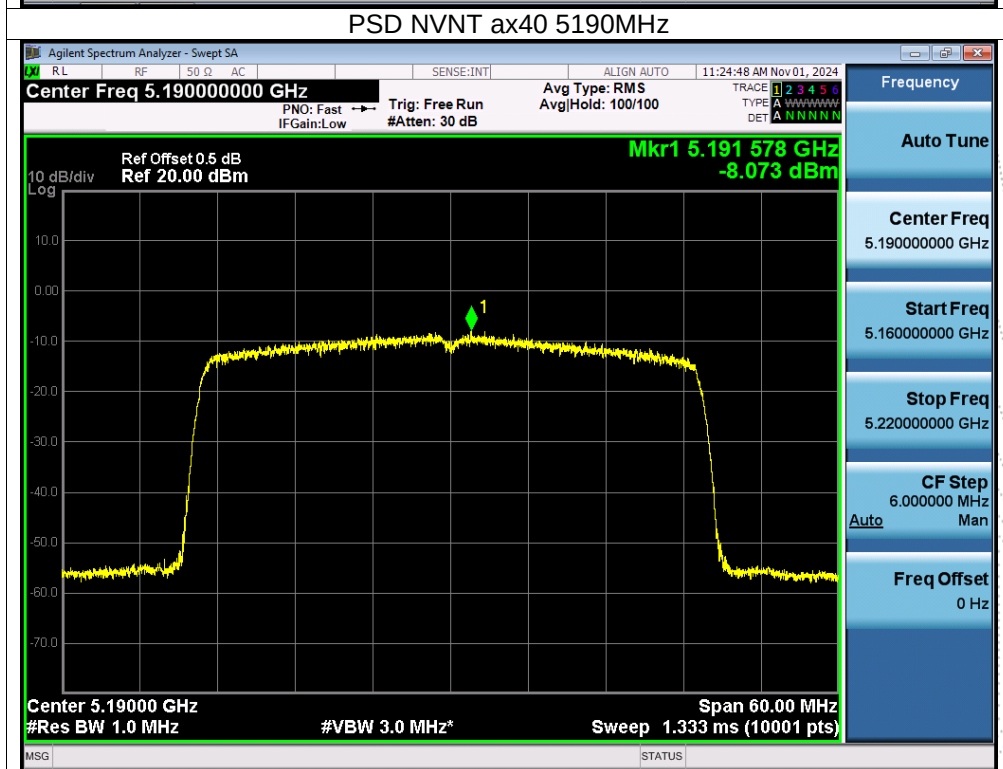
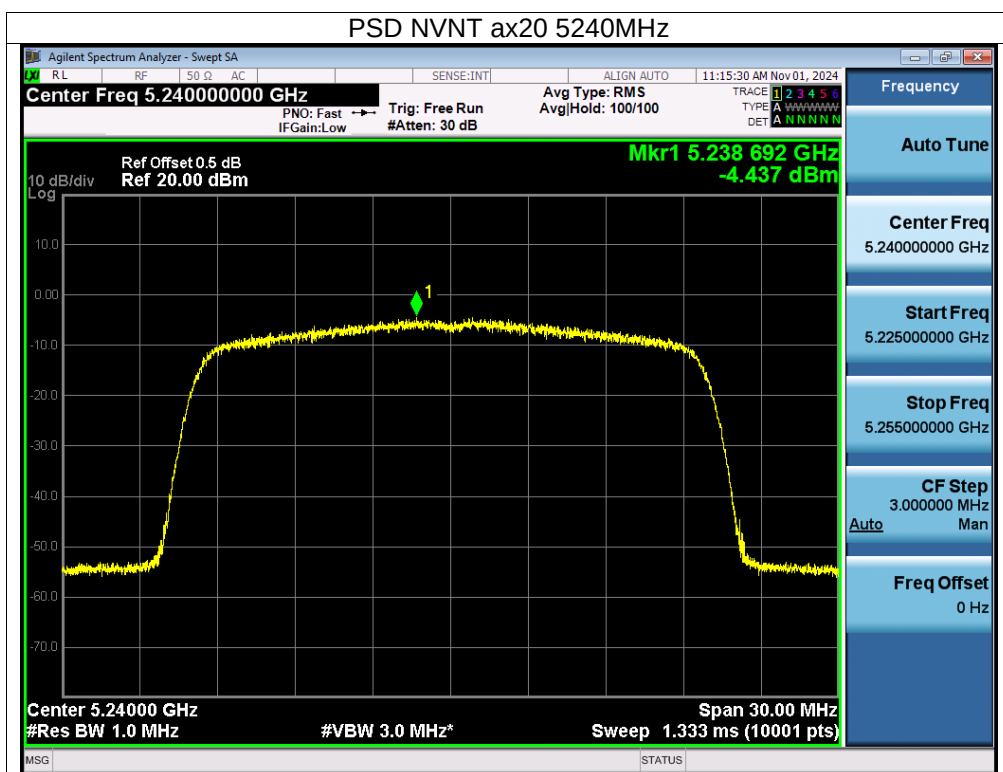


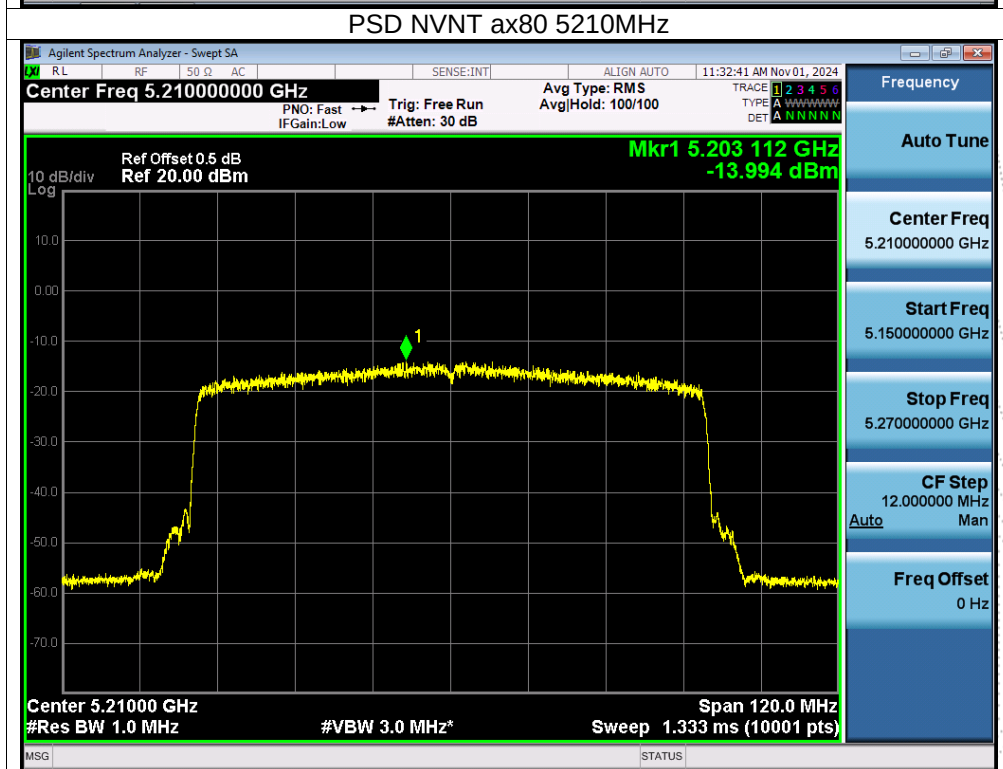
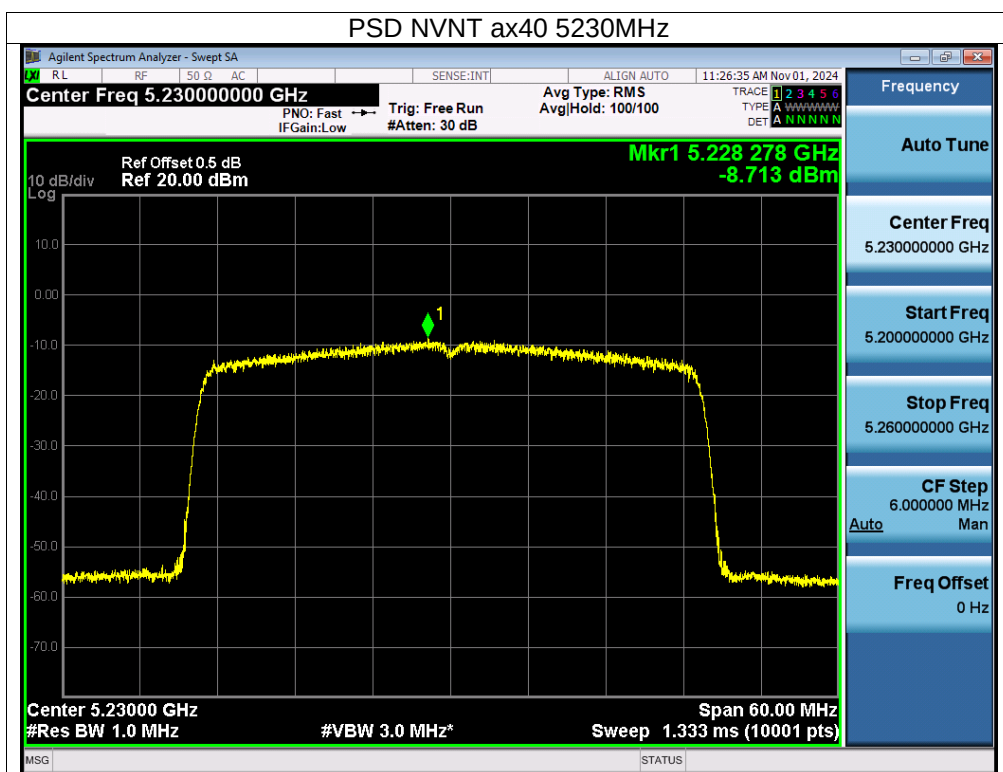












Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 7.6V
Test Mode:	TX Frequency U-NII-3 (5745-5825MHz)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/510KHz)		Conducted PSD (dBm/500KHz)				Verdict
			ANT A	ANT B	ANT A	ANT B	Total	Limit	
NVNT	a	5745	-5.42	-4.57	-5.506	-4.656	/	30	Pass
NVNT	a	5785	-6.32	-6.05	-6.406	-6.136	/	30	Pass
NVNT	a	5825	-7.51	-7.49	-7.596	-7.576	/	30	Pass
NVNT	n20	5745	-7.33	-6.94	-7.416	-7.026	0.72	30	Pass
NVNT	n20	5785	-8.52	-8.07	-8.606	-8.156	0.56	30	Pass
NVNT	n20	5825	-9.43	-9.43	-9.516	-9.516	0.46	30	Pass
NVNT	n40	5755	-10.74	-10.68	-10.826	-10.766	0.35	30	Pass
NVNT	n40	5795	-12.27	-11.78	-12.356	-11.866	0.25	30	Pass
NVNT	ac20	5745	-6.82	-6.64	-6.906	-6.726	0.81	30	Pass
NVNT	ac20	5785	-8.45	-8.33	-8.536	-8.416	0.57	30	Pass
NVNT	ac20	5825	-9.28	-9	-9.366	-9.086	0.48	30	Pass
NVNT	ac40	5755	-11.06	-11.75	-11.146	-11.836	0.32	30	Pass
NVNT	ac40	5795	-12.41	-11.38	-12.496	-11.466	0.24	30	Pass
NVNT	ac80	5775	-14.95	-13.86	-15.036	-13.946	0.13	30	Pass
NVNT	ax20	5745	-5.76	-5.8	-5.846	-5.886	1.00	30	Pass
NVNT	ax20	5785	-7.86	-7.49	-7.946	-7.576	0.65	30	Pass
NVNT	ax20	5825	-8.65	-8.33	-8.736	-8.416	0.55	30	Pass
NVNT	ax40	5755	-11.14	-11.51	-11.226	-11.596	0.32	30	Pass
NVNT	ax40	5795	-12.96	-11.63	-13.046	-11.716	0.21	30	Pass
NVNT	ax80	5775	-14.63	-14.04	-14.716	-14.126	0.14	30	Pass
Note: Correction Factor = 10log(500KHz/RBW in measurement) =-0.086									

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

