TEST REPORT

Report No.:	BCTC2411135403-4E
Applicant:	Acer India PVT Limited
Product Name:	Tablet
Test Model:	ACER TAB V9-22
Tested Date:	2024-11-15 to 2024-12-17
Issued Date:	2024-12-17

Shenzhen BCTC Testing Co., Ltd.

FCC ID: 2A94K-V9-22

Product Name:	Tablet
Trademark:	acer
Model/Type reference:	ACER TAB V9-22
Prepared For:	Acer India PVT Limited
Address:	Acer India PVT Limited, 6th Floor, Embassy Heights, No.13, Magrath Road, Bangalore, 560025, India
Manufacturer:	Acer India PVT Limited
Address:	Acer India PVT Limited, 6th Floor, Embassy Heights, No.13, Magrath Road, Bangalore, 560025, India
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:	2024-11-15
Sample tested Date:	2024-11-15 to 2024-12-17
Issue Date:	2024-12-17
Report No.:	BCTC2411135403-4E
Test Standards:	FCC Part15 15.407 ANSI C63.10-2013 KDB 789033 D02 v02r01
Test Results:	PASS

Tested by:

Brave Zeng/ Project Handler

Approved by:

Zero Zhou/Reviewer

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

Table Of Content

(Note: N/A Means Not Applicable)

1. Version

Report No.	Issue Date	Description	Approved
BCTC2411135403-4E	2024-12-17	Original	Valid

2. Test Summary

The Product has been tested according to the following specifications:

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

3. Measurement Uncertainty

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

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

4. Product Information And Test Setup

4.1 Product Information

Model/Type Reference:	ACER TAB V9-22
Model Differences:	N/A
Hardware Version:	N/A
Software Version:	N/A
IEEE 802.11 WLAN Mode Supported	802.11a/n/ac(20MHz channel bandwidth) 802.11n/ac(40MHz channel bandwidth) 802.11ac(80MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n(HT20)/ac(HT20); 5190-5230MHz for 802.11n(HT40)/ac(HT40); 5210MHz for 802.11 ac(HT80); 5745-5825 MHz for 802.11a/n(HT20)/ac(HT20); 5755-5795 MHz for 802.11n(HT40)/ac(HT40); 5775MHz for 802.11 ac(HT80);
Data Rate	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac(VHT20): NSS1, MCS0-MCS8 802.11ac(VHT40/VHT80):NSS1, MCS0-MCS
Type of Modulation:	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac;
Number Of Channel	4 channels for 802.11a/n20/ac20 in the 5180-5240MHz band ; 2 channels for 802.11 n40/ac40 in the 5190-5230MHz band ; 1 channels for 802.11 ac80 in the 5210MHz band ; 5 channels for 802.11a/n20/ac20 in the 5745-5825MHz band ; 2 channels for 802.11 n40/ac40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band
Antenna Type:	Internal antenna
Antenna Gain:	2.78 dBi 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 5V from adapter/DC 3.8V from battery
Adapter Information:	MODEL: BSY01J3050200U U INPUT: 100-240V~ 50/60Hz, 0.3A OUTPUT: 5.0V ⎓ 2.0A 10.0W

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
E-1	Tablet	acer	ACER TAB V9-22	N/A	EUT
E-2	Adapter	N/A	BSY01J30502 00U U	N/A	Auxiliary

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

Notes:

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

4.4 Channel List

5.1G

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

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

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

5.8G

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

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

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

4.5 Test Mode

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

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

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

4.6 Table Of Parameters Of Text Software Setting

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

Test software Version	CMD		
Parameters	DEF	DEF	DEF

5. Test Facility And Test Instrument Used

5.1 Test Facility

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

5.2 Test Instrument Used

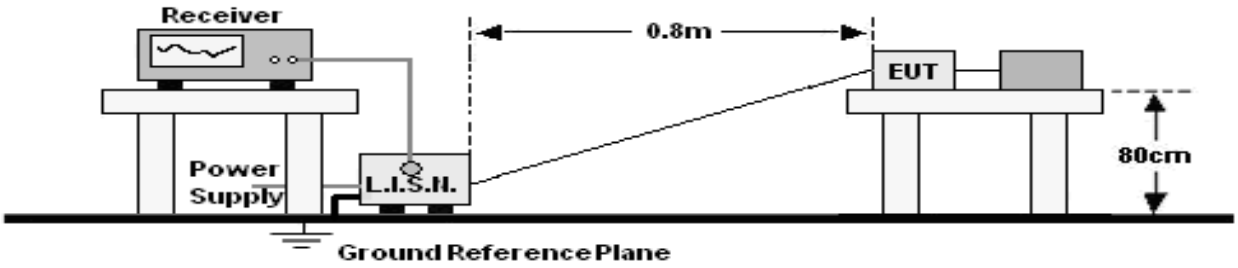
Conducted Emissions Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
LISN	R&S	ENV216	101375	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Pulse limiter	Schwarzbeck	VTSD9561-F	01323	May 16, 2024	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-RFCB	\	\	\
Software	MAIWEI	MTS 8310	\	\	\

Radiated Emissions Test (966 Chamber02)					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
966 chamber	SKET	966 Room	966	Oct. 31. 2024	Oct. 30. 2027
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
Receiver	R&S	ESRI7	100010	Oct. 31. 2024	Oct. 30. 2025
Amplifier	SKET	LNPA-30M01G-30	SK2021082004	Oct. 31. 2024	Oct. 30. 2025
TRILOG Broadband Antenna	Schwarzbeck	VULB9168	1323	May 21, 2024	May 20, 2025
Loop Antenna(9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	May 21, 2024	May 20, 2025
Amplifier	SKET	LAPA_01G18G-45dB	SK2021040901	May 16, 2024	May 15, 2025
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 21, 2024	May 20, 2025
Amplifier(18GHz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 16, 2024	May 15, 2025
Horn Antenna(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: 1. *Decreasing linearly with logarithm of frequency. 2. The lower limit shall apply at the transition frequencies.		

6.3 Test Procedure

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

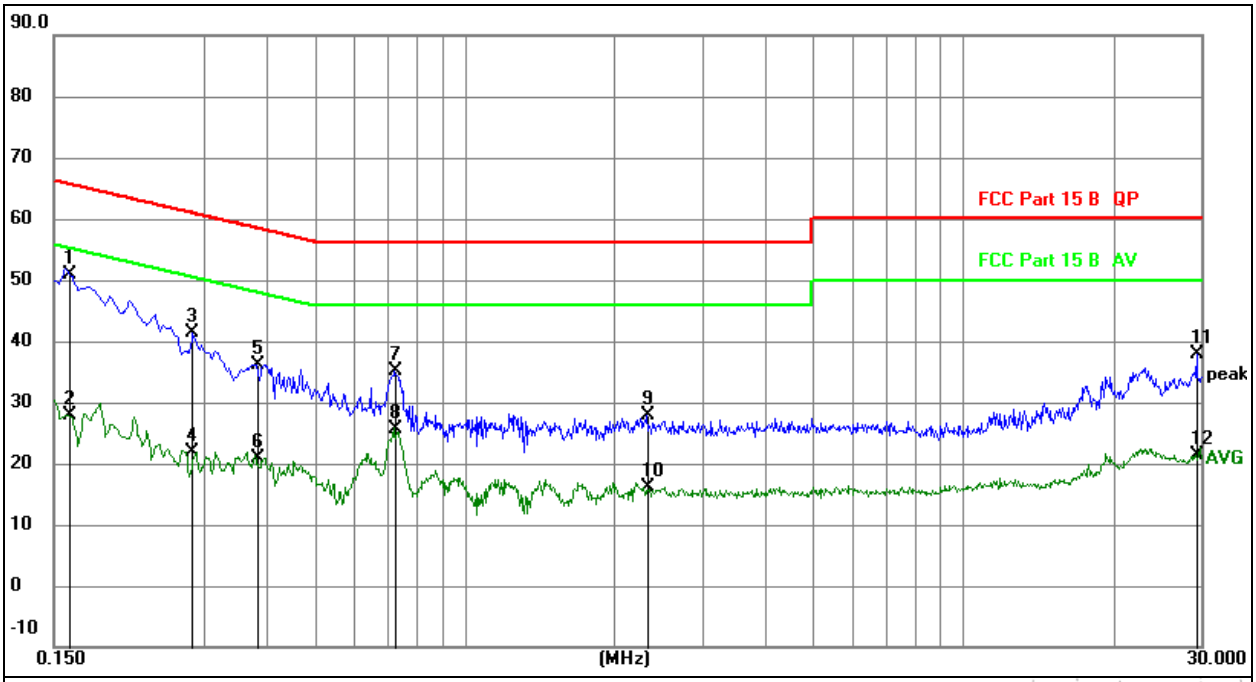
a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak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

6.4 EUT Operating Conditions

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

6.5 Test Result

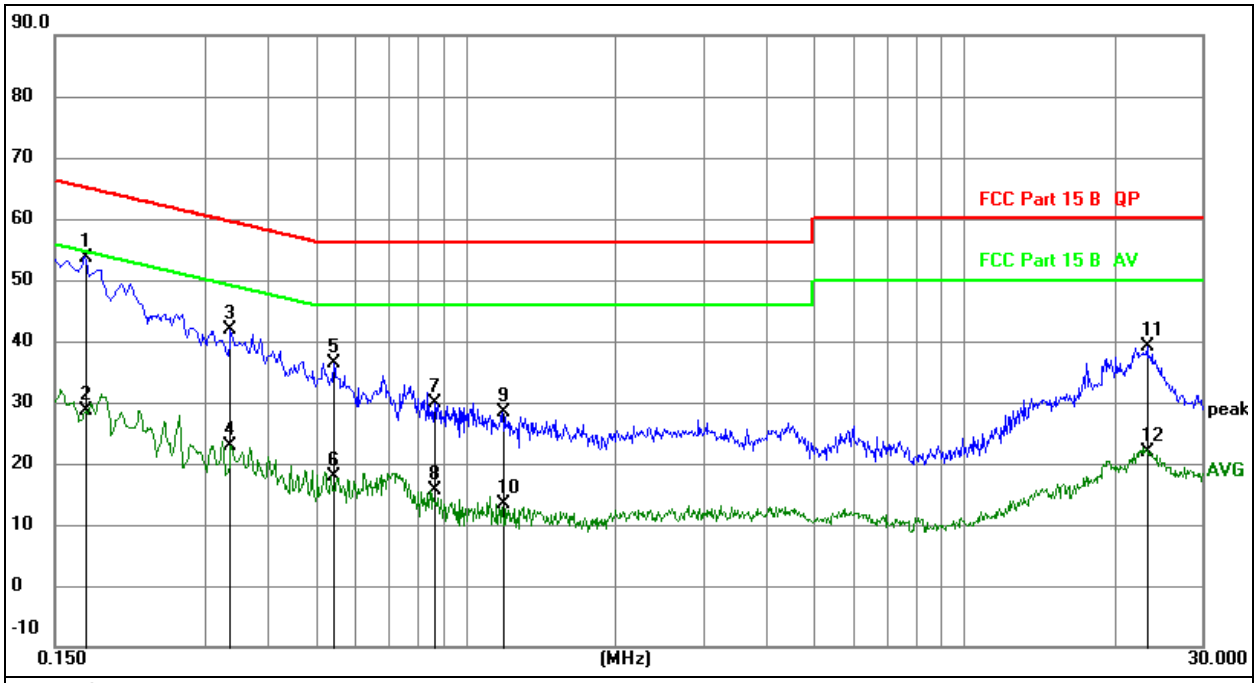
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz



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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1	*	0.1615	30.91	20.07	50.98	65.39	-14.41	QP
2		0.1615	7.89	20.07	27.96	55.39	-27.43	AVG
3		0.2847	21.25	20.07	41.32	60.68	-19.36	QP
4		0.2847	1.91	20.07	21.98	50.68	-28.70	AVG
5		0.3832	16.16	20.08	36.24	58.21	-21.97	QP
6		0.3832	0.78	20.08	20.86	48.21	-27.35	AVG
7		0.7236	14.99	20.09	35.08	56.00	-20.92	QP
8		0.7236	5.66	20.09	25.75	46.00	-20.25	AVG
9		2.3213	7.74	20.11	27.85	56.00	-28.15	QP
10		2.3213	-3.89	20.11	16.22	46.00	-29.78	AVG
11		29.3709	17.52	20.27	37.79	60.00	-22.21	QP
12		29.3709	1.09	20.27	21.36	50.00	-28.64	AVG

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



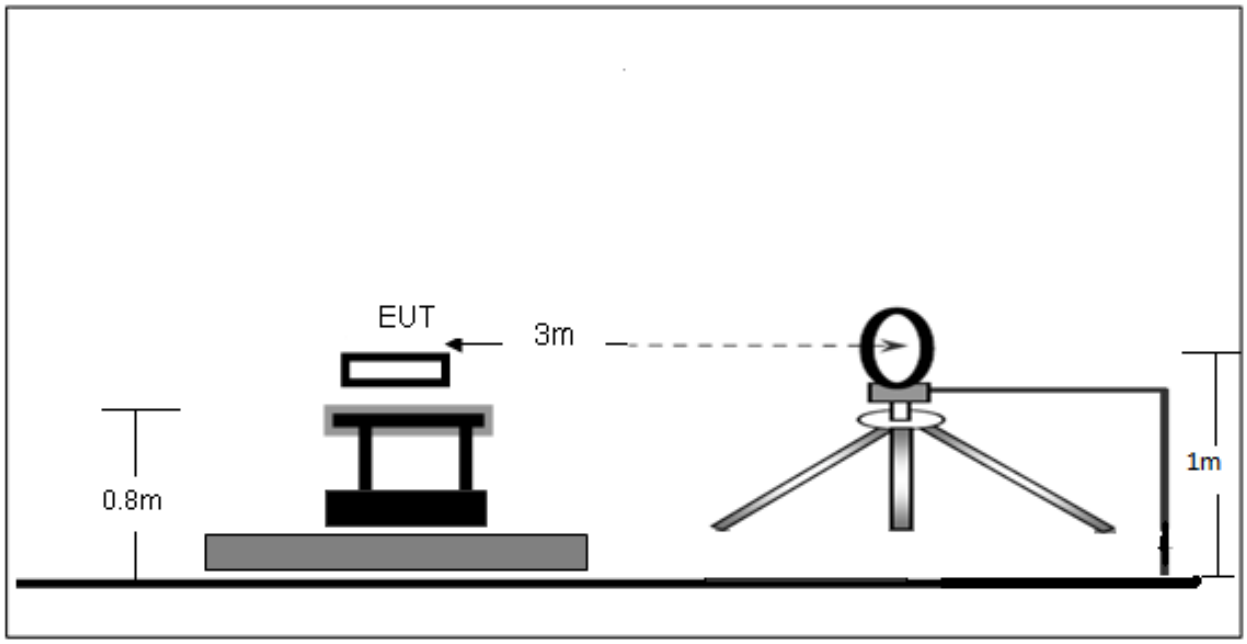
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over1 Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1	*	0.1722	33.68	20.07	53.75	64.85	-11.10	QP
2		0.1722	8.47	20.07	28.54	54.85	-26.31	AVG
3		0.3373	21.75	20.07	41.82	59.27	-17.45	QP
4		0.3373	2.89	20.07	22.96	49.27	-26.31	AVG
5		0.5435	16.20	20.08	36.28	56.00	-19.72	QP
6		0.5435	-2.15	20.08	17.93	46.00	-28.07	AVG
7		0.8664	9.91	20.09	30.00	56.00	-26.00	QP
8		0.8664	-4.50	20.09	15.59	46.00	-30.41	AVG
9		1.1844	8.32	20.09	28.41	56.00	-27.59	QP
10		1.1844	-6.61	20.09	13.48	46.00	-32.52	AVG
11		23.2633	18.77	20.31	39.08	60.00	-20.92	QP
12		23.2633	1.57	20.31	21.88	50.00	-28.12	AVG

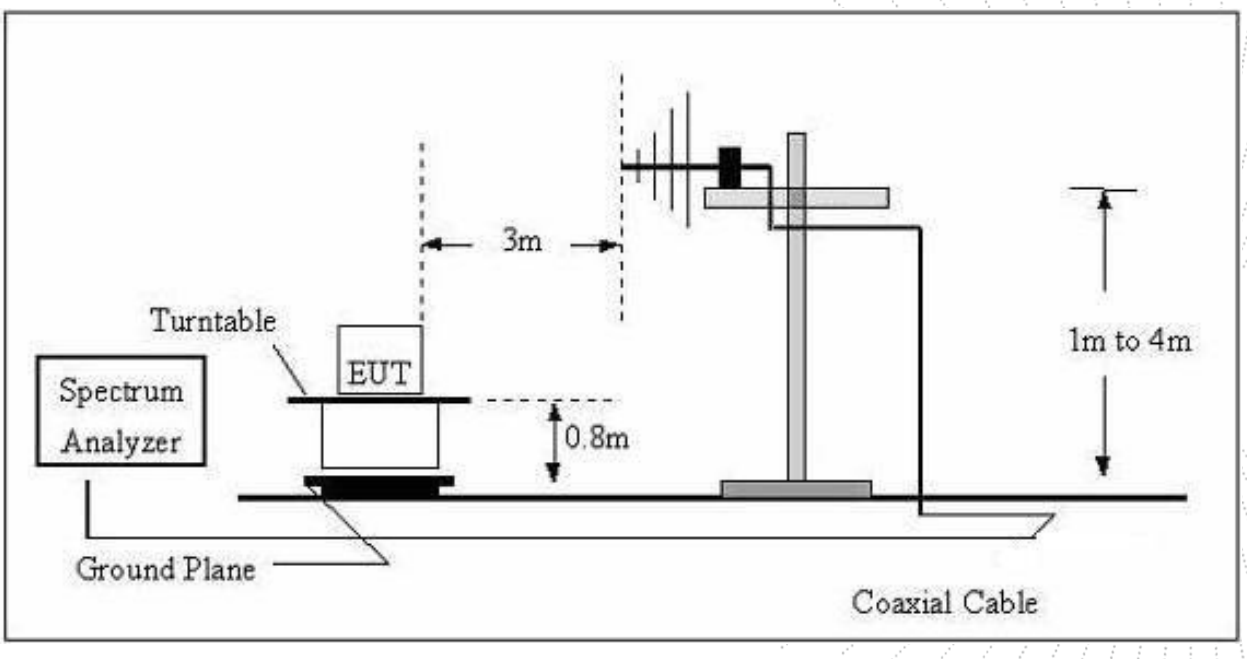
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

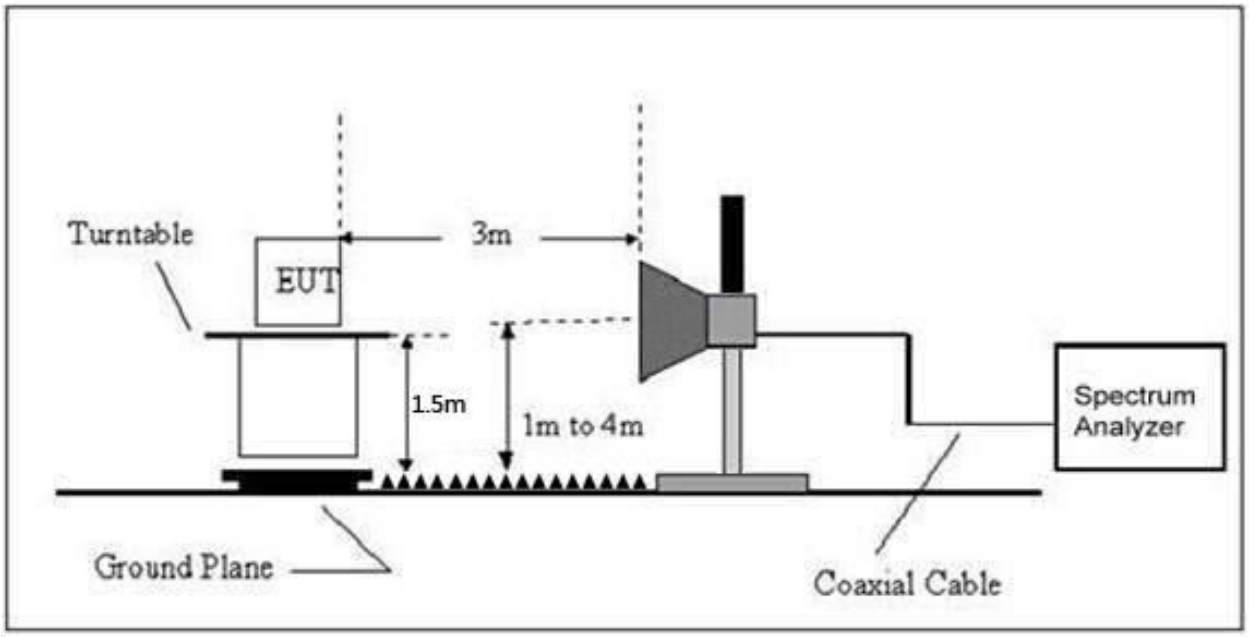
（A）Radiated Emission Test-Up Frequency Below 30MHz



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



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



7.2 Limit

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

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

Limits Of Radiated Emission Measurement (Above 1000MHz)

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

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

7.3 Test Procedure

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

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

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

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

Note:

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

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

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

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

7.4 EUT Operating Conditions

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

7.5 Test Result

Below 30MHz

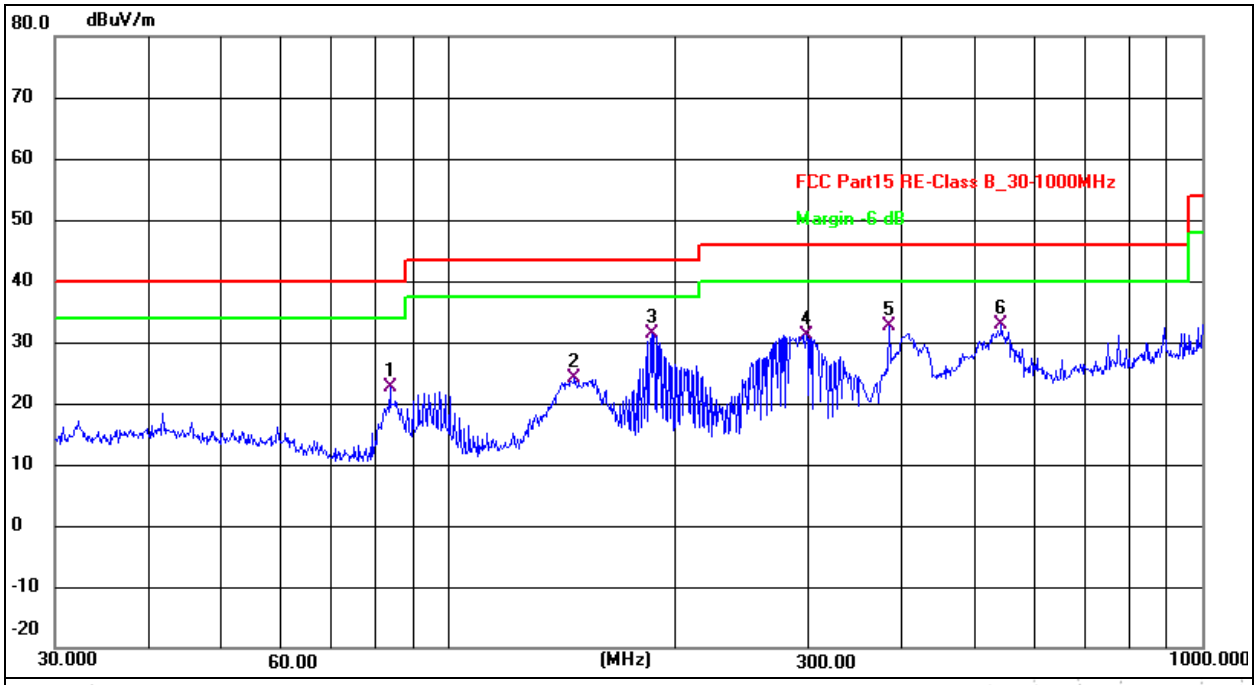
Temperature:	26℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 4	Polarization :	--

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

Note:
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =40 log (specific distance/test distance) (dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

Between 30MHz – 1GHz

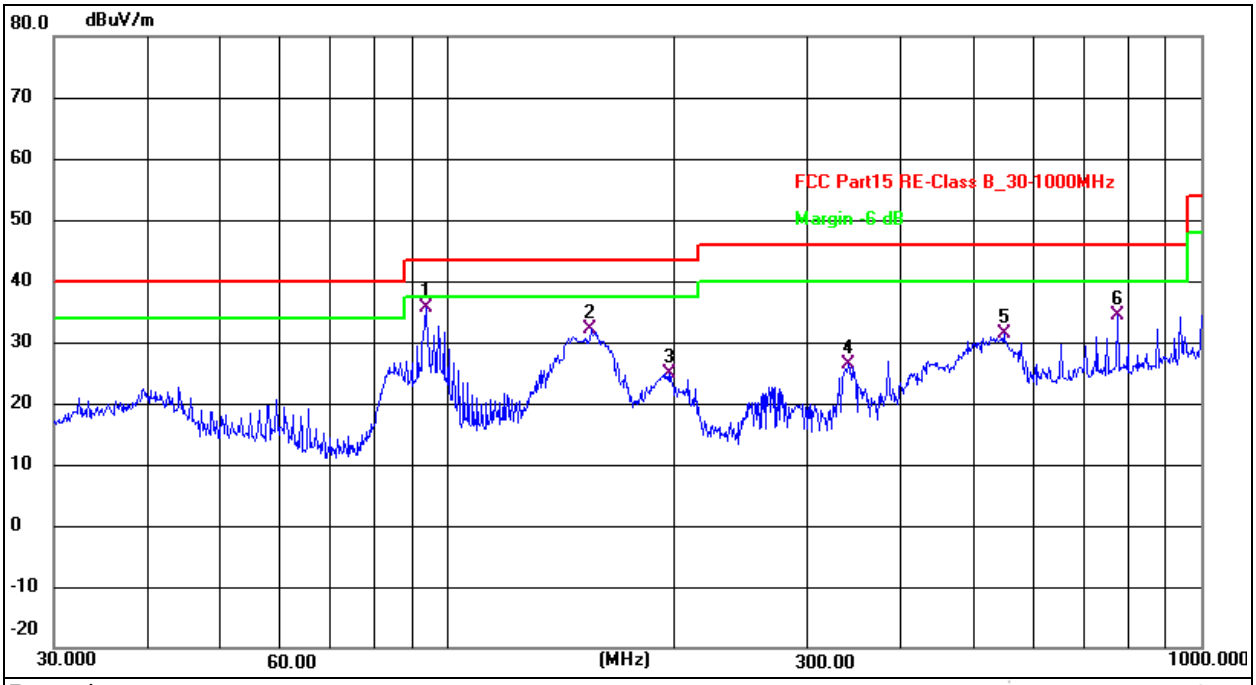
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz



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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	83.5222	38.55	-15.99	22.56	40.00	-17.44	QP
2	146.8877	35.18	-11.17	24.01	43.50	-19.49	QP
3 *	185.7882	44.84	-13.55	31.29	43.50	-12.21	QP
4	298.2681	41.88	-10.66	31.22	46.00	-14.78	QP
5	383.9318	40.69	-8.08	32.61	46.00	-13.39	QP
6	541.3725	36.98	-4.12	32.86	46.00	-13.14	QP

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



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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	93.4402	51.13	-15.59	35.54	43.50	-7.96	QP
2	154.8204	43.43	-11.26	32.17	43.50	-11.33	QP
3	196.5098	39.14	-14.34	24.80	43.50	-18.70	QP
4	339.5887	35.87	-9.41	26.46	46.00	-19.54	QP
5	547.0976	35.27	-3.98	31.29	46.00	-14.71	QP
6	774.1584	33.93	0.40	34.33	46.00	-11.67	QP

Between 1GHz – 40GHz

Test Mode:	TX(5.1G) - 802.11a

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.177	74.34	-20.73	53.60	68.2	-14.60	PK
Vertical	4434.177	59.08	-20.73	38.34	54	-15.66	AV
Vertical	10360.022	61.93	-9.36	52.57	68.2	-15.63	PK
Vertical	10360.022	49.84	-9.36	40.48	54	-13.52	AV
Vertical	15540.027	60.64	-7.84	52.80	74	-21.20	PK
Vertical	15540.027	49.90	-7.84	42.06	54	-11.94	AV
Horizontal	4434.030	70.37	-20.73	49.64	68.2	-18.56	PK
Horizontal	4434.030	59.25	-20.73	38.52	54	-15.48	AV
Horizontal	10360.053	62.43	-9.36	53.07	68.2	-15.13	PK
Horizontal	10360.053	49.65	-9.36	40.29	54	-13.71	AV
Horizontal	15540.198	64.38	-7.84	56.54	74	-17.46	PK
Horizontal	15540.198	49.34	-7.84	41.50	54	-12.50	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.004	73.17	-20.42	52.76	74	-21.24	PK
Vertical	4592.004	59.89	-20.42	39.47	54	-14.53	AV
Vertical	10400.185	62.88	-9.30	53.58	68.2	-14.62	PK
Vertical	10400.185	49.82	-9.30	40.52	54	-13.48	AV
Vertical	15600.010	62.92	-7.82	55.10	74	-18.90	PK
Vertical	15600.010	49.97	-7.82	42.15	54	-11.85	AV
Horizontal	4592.088	70.66	-20.42	50.25	74	-23.75	PK
Horizontal	4592.088	59.32	-20.42	38.90	54	-15.10	AV
Horizontal	10400.042	61.63	-9.30	52.33	68.2	-15.87	PK
Horizontal	10400.042	49.03	-9.30	39.73	54	-14.27	AV
Horizontal	15600.181	64.67	-7.82	56.85	74	-17.15	PK
Horizontal	15600.181	49.07	-7.82	41.25	54	-12.75	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.090	71.98	-20.12	51.86	74	-22.14	PK
Vertical	4739.090	59.17	-20.12	39.04	54	-14.96	AV
Vertical	10480.065	62.59	-9.18	53.41	68.2	-14.79	PK
Vertical	10480.065	49.10	-9.18	39.92	54	-14.08	AV
Vertical	15720.043	63.83	-7.78	56.05	74	-17.95	PK
Vertical	15720.043	49.51	-7.78	41.73	54	-12.27	AV
Horizontal	4739.080	71.59	-20.12	51.47	74	-22.53	PK
Horizontal	4739.080	59.40	-20.12	39.28	54	-14.72	AV
Horizontal	10480.020	63.39	-9.18	54.21	68.2	-13.99	PK
Horizontal	10480.020	49.96	-9.18	40.78	54	-13.22	AV
Horizontal	15720.188	62.09	-7.78	54.31	74	-19.69	PK
Horizontal	15720.188	49.74	-7.78	41.96	54	-12.04	AV

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

Test Mode:	TX(5.1G) - 802.11n-HT20

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.121	72.17	-20.73	51.44	68.2	-16.76	PK
Vertical	4434.121	59.83	-20.73	39.10	54	-14.90	AV
Vertical	10360.116	62.66	-9.36	53.30	68.2	-14.90	PK
Vertical	10360.116	49.29	-9.36	39.93	54	-14.07	AV
Vertical	15540.174	62.32	-7.84	54.48	74	-19.52	PK
Vertical	15540.174	49.86	-7.84	42.02	54	-11.98	AV
Horizontal	4434.194	73.30	-20.73	52.57	68.2	-15.63	PK
Horizontal	4434.194	59.56	-20.73	38.83	54	-15.17	AV
Horizontal	10360.118	61.47	-9.36	52.11	68.2	-16.09	PK
Horizontal	10360.118	49.61	-9.36	40.25	54	-13.75	AV
Horizontal	15540.079	60.50	-7.84	52.66	74	-21.34	PK
Horizontal	15540.079	49.21	-7.84	41.37	54	-12.63	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.165	71.22	-20.42	50.80	74	-23.20	PK
Vertical	4592.165	59.28	-20.42	38.87	54	-15.13	AV
Vertical	10400.070	60.20	-9.30	50.90	68.2	-17.30	PK
Vertical	10400.070	49.12	-9.30	39.82	54	-14.18	AV
Vertical	15600.199	64.08	-7.82	56.26	74	-17.74	PK
Vertical	15600.199	49.87	-7.82	42.05	54	-11.95	AV
Horizontal	4592.033	71.54	-20.42	51.12	74	-22.88	PK
Horizontal	4592.033	59.09	-20.42	38.68	54	-15.32	AV
Horizontal	10400.002	63.87	-9.30	54.57	68.2	-13.63	PK
Horizontal	10400.002	49.02	-9.30	39.72	54	-14.28	AV
Horizontal	15600.011	63.52	-7.82	55.70	74	-18.30	PK
Horizontal	15600.011	49.53	-7.82	41.71	54	-12.29	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.122	73.20	-20.12	53.08	74	-20.92	PK
Vertical	4739.122	59.65	-20.12	39.53	54	-14.47	AV
Vertical	10480.157	60.74	-9.18	51.56	68.2	-16.64	PK
Vertical	10480.157	49.71	-9.18	40.53	54	-13.47	AV
Vertical	15720.085	64.98	-7.78	57.20	74	-16.80	PK
Vertical	15720.085	49.35	-7.78	41.57	54	-12.43	AV
Horizontal	4739.142	72.51	-20.12	52.39	74	-21.61	PK
Horizontal	4739.142	59.95	-20.12	39.83	54	-14.17	AV
Horizontal	10480.108	61.16	-9.18	51.98	68.2	-16.22	PK
Horizontal	10480.108	49.96	-9.18	40.78	54	-13.22	AV
Horizontal	15720.010	64.27	-7.78	56.49	74	-17.51	PK
Horizontal	15720.010	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:	TX(5.1G) - 802.11n-HT40

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.005	72.13	-20.73	51.40	68.2	-16.80	PK
Vertical	4434.005	59.79	-20.73	39.06	54	-14.94	AV
Vertical	10380.117	62.23	-9.33	52.90	68.2	-15.30	PK
Vertical	10380.117	49.30	-9.33	39.97	54	-14.03	AV
Vertical	15570.149	60.16	-7.83	52.33	74	-21.67	PK
Vertical	15570.149	49.31	-7.83	41.48	54	-12.52	AV
Horizontal	4434.133	70.18	-20.73	49.45	74	-24.55	PK
Horizontal	4434.133	59.25	-20.73	38.52	54	-15.48	AV
Horizontal	10380.104	63.49	-9.33	54.16	68.2	-14.04	PK
Horizontal	10380.104	49.85	-9.33	40.52	54	-13.48	AV
Horizontal	15570.087	62.67	-7.83	54.84	74	-19.16	PK
Horizontal	15570.087	49.50	-7.83	41.67	54	-12.33	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.042	74.07	-20.12	53.95	68.2	-14.25	PK
Vertical	4739.042	59.76	-20.12	39.64	54	-14.36	AV
Vertical	10460.107	64.16	-9.21	54.95	68.2	-13.25	PK
Vertical	10460.107	49.02	-9.21	39.81	54	-14.19	AV
Vertical	15690.180	60.88	-7.79	53.09	74	-20.91	PK
Vertical	15690.180	49.96	-7.79	42.17	54	-11.83	AV
Horizontal	4739.117	72.42	-20.12	52.30	68.2	-15.90	PK
Horizontal	4739.117	59.13	-20.12	39.01	54	-14.99	AV
Horizontal	10460.118	63.85	-9.21	54.64	68.2	-13.56	PK
Horizontal	10460.118	49.50	-9.21	40.29	54	-13.71	AV
Horizontal	15690.003	63.04	-7.79	55.25	74	-18.75	PK
Horizontal	15690.003	49.80	-7.79	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:	TX(5.1G) - 802.11ac-HT20

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.190	71.20	-20.73	50.47	68.2	-17.73	PK
Vertical	4434.190	59.04	-20.73	38.31	54	-15.69	AV
Vertical	10360.096	61.28	-9.36	51.92	68.2	-16.28	PK
Vertical	10360.096	49.40	-9.36	40.04	54	-13.96	AV
Vertical	15540.147	63.82	-7.84	55.98	74	-18.02	PK
Vertical	15540.147	49.49	-7.84	41.65	54	-12.35	AV
Horizontal	4434.029	72.38	-20.73	51.65	68.2	-16.55	PK
Horizontal	4434.029	59.75	-20.73	39.01	54	-14.99	AV
Horizontal	10360.199	64.10	-9.36	54.74	68.2	-13.46	PK
Horizontal	10360.199	49.47	-9.36	40.11	54	-13.89	AV
Horizontal	15540.164	64.12	-7.84	56.28	74	-17.72	PK
Horizontal	15540.164	49.00	-7.84	41.16	54	-12.84	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.197	71.77	-20.42	51.36	74	-22.64	PK
Vertical	4592.197	59.98	-20.42	39.56	54	-14.44	AV
Vertical	10400.006	61.12	-9.30	51.82	68.2	-16.38	PK
Vertical	10400.006	49.53	-9.30	40.23	54	-13.77	AV
Vertical	15600.178	63.93	-7.82	56.11	74	-17.89	PK
Vertical	15600.178	49.77	-7.82	41.95	54	-12.05	AV
Horizontal	4592.063	70.07	-20.42	49.66	74	-24.34	PK
Horizontal	4592.063	59.01	-20.42	38.60	54	-15.40	AV
Horizontal	10400.198	61.71	-9.30	52.41	68.2	-15.79	PK
Horizontal	10400.198	49.43	-9.30	40.13	54	-13.87	AV
Horizontal	15600.163	63.17	-7.82	55.35	74	-18.65	PK
Horizontal	15600.163	49.83	-7.82	42.01	54	-11.99	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.081	70.16	-20.12	50.03	74	-23.97	PK
Vertical	4739.081	59.79	-20.12	39.66	54	-14.34	AV
Vertical	10480.152	64.08	-9.18	54.90	68.2	-13.30	PK
Vertical	10480.152	49.62	-9.18	40.44	54	-13.56	AV
Vertical	15720.169	62.99	-7.78	55.21	74	-18.79	PK
Vertical	15720.169	49.02	-7.78	41.24	54	-12.76	AV
Horizontal	4739.178	74.50	-20.12	54.38	74	-19.62	PK
Horizontal	4739.178	59.37	-20.12	39.25	54	-14.75	AV
Horizontal	10480.000	60.17	-9.18	50.99	68.2	-17.21	PK
Horizontal	10480.000	49.85	-9.18	40.67	54	-13.33	AV
Horizontal	15720.122	61.36	-7.78	53.58	74	-20.42	PK
Horizontal	15720.122	49.06	-7.78	41.28	54	-12.72	AV

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

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

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.156	74.73	-20.73	54.00	68.2	-14.20	PK
Vertical	4434.156	59.59	-20.73	38.86	54	-15.14	AV
Vertical	10380.132	64.66	-9.33	55.33	68.2	-12.87	PK
Vertical	10380.132	49.68	-9.33	40.35	54	-13.65	AV
Vertical	15570.033	63.33	-7.83	55.50	74	-18.50	PK
Vertical	15570.033	49.36	-7.83	41.53	54	-12.47	AV
Horizontal	4434.068	72.44	-20.73	51.71	74	-22.29	PK
Horizontal	4434.068	59.75	-20.73	39.02	54	-14.98	AV
Horizontal	10380.133	61.98	-9.33	52.65	68.2	-15.55	PK
Horizontal	10380.133	49.08	-9.33	39.75	54	-14.25	AV
Horizontal	15570.116	61.97	-7.83	54.14	74	-19.86	PK
Horizontal	15570.116	49.60	-7.83	41.77	54	-12.23	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.021	70.70	-20.12	50.57	68.2	-17.63	PK
Vertical	4739.021	59.00	-20.12	38.88	54	-15.12	AV
Vertical	10460.145	60.55	-9.21	51.34	68.2	-16.86	PK
Vertical	10460.145	49.70	-9.21	40.49	54	-13.51	AV
Vertical	15690.151	61.76	-7.79	53.97	74	-20.03	PK
Vertical	15690.151	49.33	-7.79	41.54	54	-12.46	AV
Horizontal	4739.018	72.54	-20.12	52.42	68.2	-15.78	PK
Horizontal	4739.018	59.99	-20.12	39.87	54	-14.13	AV
Horizontal	10460.135	61.61	-9.21	52.40	68.2	-15.80	PK
Horizontal	10460.135	49.48	-9.21	40.27	54	-13.73	AV
Horizontal	15690.178	62.46	-7.79	54.67	74	-19.33	PK
Horizontal	15690.178	49.37	-7.79	41.58	54	-12.42	AV

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

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

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5210 MHz)-Above 1G							
Vertical	4434.101	72.44	-20.73	51.71	68.2	-16.49	PK
Vertical	4434.101	59.23	-20.73	38.50	54	-15.50	AV
Vertical	10420.156	60.66	-9.27	51.39	68.2	-16.81	PK
Vertical	10420.156	49.45	-9.27	40.18	54	-13.82	AV
Vertical	15630.175	60.30	-7.81	52.49	74	-21.51	PK
Vertical	15630.175	49.54	-7.81	41.73	54	-12.27	AV
Horizontal	4434.041	74.05	-20.73	53.32	68.2	-14.88	PK
Horizontal	4434.041	59.65	-20.73	38.92	54	-15.08	AV
Horizontal	10420.069	41.77	9.27	51.04	68.2	-17.16	PK
Horizontal	10420.069	29.72	9.27	38.99	54	-15.01	AV
Horizontal	15630.041	61.95	-7.81	54.14	74	-19.86	PK
Horizontal	15630.041	49.65	-7.81	41.84	54	-12.16	AV

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

Test Mode:	TX (5.8G) -- 802.11a

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.170	73.24	-20.24	53.00	74	-21.00	PK
Vertical	4679.170	59.16	-20.24	38.92	54	-15.08	AV
Vertical	11490.008	64.22	-8.79	55.43	68.2	-12.77	PK
Vertical	11490.008	49.61	-8.79	40.82	54	-13.18	AV
Vertical	17235.029	57.98	-3.18	54.80	68.2	-13.40	PK
Vertical	17235.029	44.07	-3.18	40.89	54	-13.11	AV
Horizontal	4679.143	73.70	-20.73	52.97	74	-21.03	PK
Horizontal	4679.143	59.96	-20.73	39.23	54	-14.77	AV
Horizontal	11490.198	63.70	-8.79	54.91	68.2	-13.29	PK
Horizontal	11490.198	49.44	-8.79	40.65	54	-13.35	AV
Horizontal	17235.036	57.03	-3.18	53.85	68.2	-14.35	PK
Horizontal	17235.036	44.07	-3.18	40.89	54	-13.11	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.103	71.72	-20.42	51.30	74	-22.70	PK
Vertical	4592.103	59.04	-20.42	38.62	54	-15.38	AV
Vertical	11570.196	62.60	-8.86	53.74	68.2	-14.46	PK
Vertical	11570.196	49.74	-8.86	40.88	54	-13.12	AV
Vertical	17355.139	58.90	-2.52	56.38	68.2	-11.82	PK
Vertical	17355.139	44.33	-2.52	41.81	54	-12.19	AV
Horizontal	4592.075	72.74	-20.42	52.32	74	-21.68	PK
Horizontal	4592.075	59.72	-20.42	39.31	54	-14.69	AV
Horizontal	11570.032	64.62	-8.86	55.76	68.2	-12.44	PK
Horizontal	11570.032	49.50	-8.86	40.64	54	-13.36	AV
Horizontal	17355.068	58.12	-2.52	55.60	68.2	-12.60	PK
Horizontal	17355.068	44.06	-2.52	41.54	54	-12.46	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.040	71.19	-18.93	52.25	68.2	-15.95	PK
Vertical	6039.040	59.22	-18.93	40.29	54	-13.71	AV
Vertical	11650.151	60.34	-8.92	51.42	74	-22.58	PK
Vertical	11650.151	49.80	-8.92	40.88	54	-13.12	AV
Vertical	17475.088	57.10	-1.86	55.24	68.2	-12.96	PK
Vertical	17475.088	44.76	-1.86	42.90	54	-11.10	AV
Horizontal	6039.106	74.71	-18.93	55.78	68.2	-12.42	PK
Horizontal	6039.106	59.33	-18.93	40.40	54	-13.60	AV
Horizontal	11650.021	62.79	-8.92	53.87	74	-20.13	PK
Horizontal	11650.021	49.85	-8.92	40.93	54	-13.07	AV
Horizontal	17475.187	55.67	-1.86	53.81	68.2	-14.39	PK
Horizontal	17475.187	44.41	-1.86	42.55	54	-11.45	AV

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

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

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.017	71.97	-20.24	51.73	74	-22.27	PK
Vertical	4679.017	59.65	-20.24	39.40	54	-14.60	AV
Vertical	11490.075	60.74	-8.79	51.95	68.2	-16.25	PK
Vertical	11490.075	49.40	-8.79	40.61	54	-13.39	AV
Vertical	17235.089	58.95	-3.18	55.77	68.2	-12.43	PK
Vertical	17235.089	44.90	-3.18	41.72	54	-12.28	AV
Horizontal	4679.055	72.00	-20.24	51.75	74	-22.25	PK
Horizontal	4679.055	59.53	-20.24	39.28	54	-14.72	AV
Horizontal	11490.053	61.64	-8.79	52.85	68.2	-15.35	PK
Horizontal	11490.053	49.07	-8.79	40.28	54	-13.72	AV
Horizontal	17235.010	58.41	-3.18	55.23	68.2	-12.97	PK
Horizontal	17235.010	44.74	-3.18	41.56	54	-12.44	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.041	72.95	-20.42	52.53	74	-21.47	PK
Vertical	4592.041	59.28	-20.42	38.86	54	-15.14	AV
Vertical	11570.091	63.31	-8.86	54.45	68.2	-13.75	PK
Vertical	11570.091	49.20	-8.86	40.34	54	-13.66	AV
Vertical	17355.063	58.67	-2.52	56.15	68.2	-12.05	PK
Vertical	17355.063	44.02	-2.52	41.50	54	-12.50	AV
Horizontal	4592.173	73.19	-20.42	52.77	74	-21.23	PK
Horizontal	4592.173	59.34	-20.42	38.93	54	-15.07	AV
Horizontal	11570.028	62.06	-8.86	53.20	68.2	-15.00	PK
Horizontal	11570.028	49.79	-8.86	40.93	54	-13.07	AV
Horizontal	17355.127	57.99	-2.52	55.47	68.2	-12.73	PK
Horizontal	17355.127	44.41	-2.52	41.89	54	-12.11	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.050	71.93	-18.93	53.00	68.2	-15.20	PK
Vertical	6039.050	59.16	-18.93	40.23	54	-13.77	AV
Vertical	11650.091	62.10	-8.92	53.18	74	-20.82	PK
Vertical	11650.091	49.65	-8.92	40.73	54	-13.27	AV
Vertical	17475.173	55.21	-1.86	53.35	68.2	-14.85	PK
Vertical	17475.173	44.60	-1.86	42.74	54	-11.26	AV
Horizontal	6039.101	72.13	-18.93	53.20	68.2	-15.00	PK
Horizontal	6039.101	59.19	-18.93	40.25	54	-13.75	AV
Horizontal	11650.138	64.49	-8.92	55.57	74	-18.43	PK
Horizontal	11650.138	49.55	-8.92	40.63	54	-13.37	AV
Horizontal	17475.056	56.53	-1.86	54.67	68.2	-13.53	PK
Horizontal	17475.056	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.

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

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.142	73.27	-20.24	53.03	74	-20.97	PK
Vertical	4679.142	59.63	-20.24	39.39	54	-14.61	AV
Vertical	11510.068	61.31	-8.81	52.50	74	-21.50	PK
Vertical	11510.068	49.64	-8.81	40.83	54	-13.17	AV
Vertical	17265.138	55.11	-3.01	52.10	68.2	-16.10	PK
Vertical	17265.138	44.19	-3.01	41.18	54	-12.82	AV
Horizontal	4679.130	70.74	-20.24	50.50	74	-23.50	PK
Horizontal	4679.130	59.68	-20.24	39.44	54	-14.56	AV
Horizontal	11510.077	61.63	-8.81	52.82	74	-21.18	PK
Horizontal	11510.077	49.86	-8.81	41.05	54	-12.95	AV
Horizontal	17265.088	55.62	-3.01	52.61	68.2	-15.59	PK
Horizontal	17265.088	44.45	-3.01	41.44	54	-12.56	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.051	73.40	-18.93	54.47	68.2	-13.73	PK
Vertical	6039.051	59.16	-18.93	40.23	54	-13.77	AV
Vertical	11590.142	61.41	-8.87	52.54	74	-21.46	PK
Vertical	11590.142	49.64	-8.87	40.77	54	-13.23	AV
Vertical	17385.119	55.36	-2.35	53.01	68.2	-15.19	PK
Vertical	17385.119	44.79	-2.35	42.44	54	-11.56	AV
Horizontal	6039.054	74.18	-18.93	55.24	68.2	-12.96	PK
Horizontal	6039.054	59.85	-18.93	40.92	54	-13.08	AV
Horizontal	11590.107	60.25	-8.87	51.38	74	-22.62	PK
Horizontal	11590.107	49.23	-8.87	40.36	54	-13.64	AV
Horizontal	17385.116	58.90	-2.35	56.55	68.2	-11.65	PK
Horizontal	17385.116	44.10	-2.35	41.75	54	-12.25	AV

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

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

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.035	73.02	-20.24	52.78	74	-21.22	PK
Vertical	4679.035	59.67	-20.24	39.43	54	-14.57	AV
Vertical	11490.066	62.49	-8.79	53.70	68.2	-14.50	PK
Vertical	11490.066	49.32	-8.79	40.53	54	-13.47	AV
Vertical	17235.085	55.18	-3.18	52.00	68.2	-16.20	PK
Vertical	17235.085	44.83	-3.18	41.65	54	-12.35	AV
Horizontal	4679.054	73.67	-20.24	53.43	74	-20.57	PK
Horizontal	4679.054	59.60	-20.24	39.36	54	-14.64	AV
Horizontal	11490.200	63.19	-8.79	54.40	68.2	-13.80	PK
Horizontal	11490.200	49.57	-8.79	40.78	54	-13.22	AV
Horizontal	17235.143	59.81	-3.18	56.63	68.2	-11.57	PK
Horizontal	17235.143	44.44	-3.18	41.26	54	-12.74	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.040	70.89	-20.42	50.47	74	-23.53	PK
Vertical	4592.040	59.09	-20.42	38.68	54	-15.32	AV
Vertical	11570.078	61.51	-8.86	52.65	68.2	-15.55	PK
Vertical	11570.078	49.83	-8.86	40.97	54	-13.03	AV
Vertical	17355.113	57.00	-2.52	54.48	68.2	-13.72	PK
Vertical	17355.113	44.67	-2.52	42.15	54	-11.85	AV
Horizontal	4592.129	72.00	-20.42	51.58	74	-22.42	PK
Horizontal	4592.129	59.65	-20.42	39.23	54	-14.77	AV
Horizontal	11570.053	63.52	-8.86	54.66	68.2	-13.54	PK
Horizontal	11570.053	49.84	-8.86	40.98	54	-13.02	AV
Horizontal	17355.002	58.84	-2.52	56.32	68.2	-11.88	PK
Horizontal	17355.002	44.75	-2.52	42.23	54	-11.77	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.198	72.59	-18.93	53.66	68.2	-14.54	PK
Vertical	6039.198	59.03	-18.93	40.10	54	-13.90	AV
Vertical	11650.190	64.78	-8.92	55.86	74	-18.14	PK
Vertical	11650.190	49.70	-8.92	40.78	54	-13.22	AV
Vertical	17475.067	59.90	-1.86	58.04	68.2	-10.16	PK
Vertical	17475.067	44.33	-1.86	42.47	54	-11.53	AV
Horizontal	6039.188	73.22	-18.93	54.29	68.2	-13.91	PK
Horizontal	6039.188	59.80	-18.93	40.87	54	-13.13	AV
Horizontal	11650.013	60.80	-8.92	51.88	74	-22.12	PK
Horizontal	11650.013	49.03	-8.92	40.11	54	-13.89	AV
Horizontal	17475.018	55.35	-1.86	53.49	68.2	-14.71	PK
Horizontal	17475.018	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.

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

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.058	71.42	-20.24	51.18	74	-22.82	PK
Vertical	4679.058	59.32	-20.24	39.08	54	-14.92	AV
Vertical	11510.091	61.26	-8.81	52.45	74	-21.55	PK
Vertical	11510.091	49.56	-8.81	40.75	54	-13.25	AV
Vertical	17265.019	58.09	-3.01	55.08	68.2	-13.12	PK
Vertical	17265.019	44.28	-3.01	41.27	54	-12.73	AV
Horizontal	4679.140	73.76	-20.24	53.52	74	-20.48	PK
Horizontal	4679.140	59.90	-20.24	39.66	54	-14.34	AV
Horizontal	11510.050	64.93	-8.81	56.12	74	-17.88	PK
Horizontal	11510.050	49.83	-8.81	41.02	54	-12.98	AV
Horizontal	17265.024	55.36	-3.01	52.35	68.2	-15.85	PK
Horizontal	17265.024	44.89	-3.01	41.88	54	-12.12	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.046	73.10	-18.93	54.17	68.2	-14.03	PK
Vertical	6039.046	59.82	-18.93	40.89	54	-13.11	AV
Vertical	11590.077	65.00	-8.87	56.13	74	-17.87	PK
Vertical	11590.077	49.19	-8.87	40.32	54	-13.68	AV
Vertical	17385.191	56.85	-2.35	54.50	68.2	-13.70	PK
Vertical	17385.191	44.09	-2.35	41.74	54	-12.26	AV
Horizontal	6039.098	70.78	-18.93	51.85	68.2	-16.35	PK
Horizontal	6039.098	59.26	-18.93	40.33	54	-13.67	AV
Horizontal	11590.112	63.24	-8.87	54.37	74	-19.63	PK
Horizontal	11590.112	49.80	-8.87	40.93	54	-13.07	AV
Horizontal	17385.056	55.59	-2.35	53.24	68.2	-14.96	PK
Horizontal	17385.056	44.63	-2.35	42.28	54	-11.72	AV

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

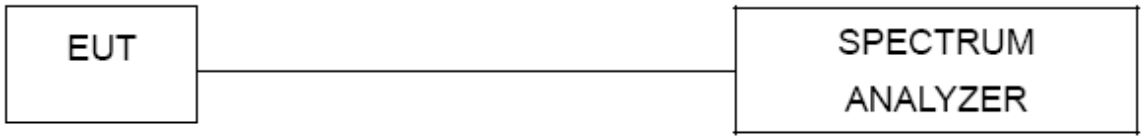
Test Mode :	TX (5.8G) -- 802.11ac 80

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5775 MHz)-Above 1G							
Vertical	4679.112	72.21	-20.24	51.97	74	-22.03	PK
Vertical	4679.112	59.69	-20.24	39.44	54	-14.56	AV
Vertical	11550.147	63.70	-8.84	54.86	74	-19.14	PK
Vertical	11550.147	49.16	-8.84	40.32	54	-13.68	AV
Vertical	17325.028	58.71	-2.68	56.03	68.2	-12.17	PK
Vertical	17325.028	44.60	-2.68	41.92	54	-12.08	AV
Horizontal	4679.181	74.01	-20.24	53.77	74	-20.23	PK
Horizontal	4679.181	59.34	-20.24	39.10	54	-14.90	AV
Horizontal	11550.149	60.92	-8.84	52.08	74	-21.92	PK
Horizontal	11550.149	49.42	-8.84	40.58	54	-13.42	AV
Horizontal	17325.042	55.80	-2.68	53.12	68.2	-15.08	PK
Horizontal	17325.042	44.88	-2.68	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.

8. Power Spectral Density Test

8.1 Block Diagram Of Test Setup



8.2 Limit

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

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

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

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

For the band 5.725-5.85 GHz

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

8.3 Test Procedure

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

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

8.4 EUT Operating Conditions

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

8.5 Test Result

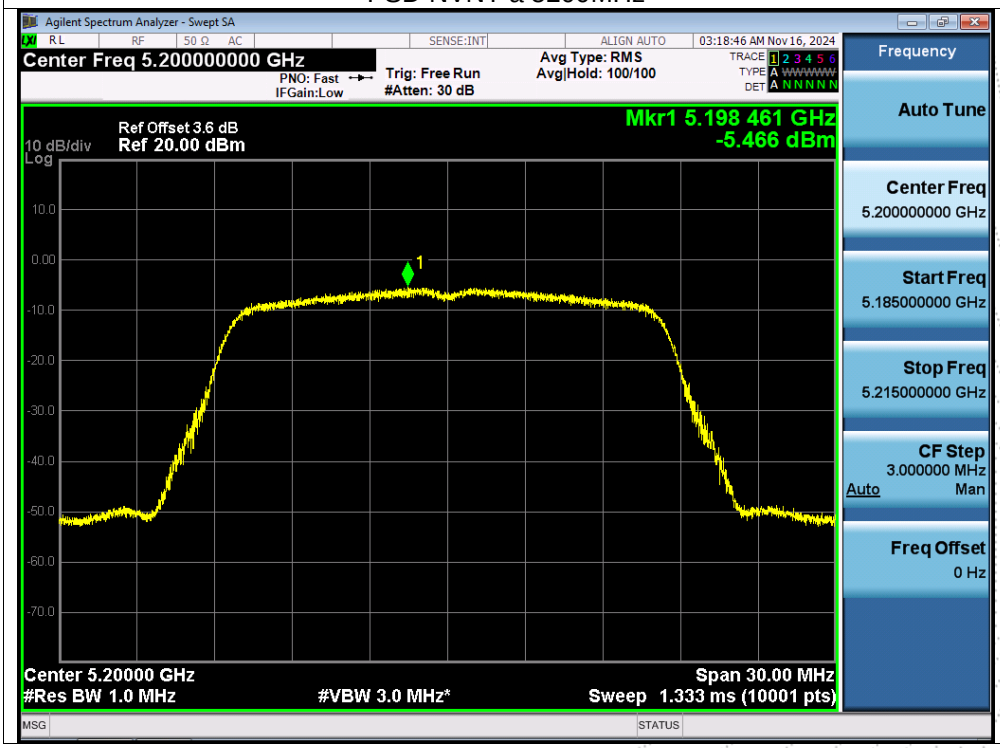
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 3.8V
Test Mode:	(5180-5240MHz); (5745-5825MHz)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/1MHz)	Limit (dBm/1MHz)	Verdict
NVNT	a	5180	-3.9	11	Pass
NVNT	a	5200	-5.47	11	Pass
NVNT	a	5240	-3.83	11	Pass
NVNT	n20	5180	-6.89	11	Pass
NVNT	n20	5200	-7.21	11	Pass
NVNT	n20	5240	-6.32	11	Pass
NVNT	n40	5190	-11.57	11	Pass
NVNT	n40	5230	-11.21	11	Pass
NVNT	ac20	5180	-6.7	11	Pass
NVNT	ac20	5200	-7.38	11	Pass
NVNT	ac20	5240	-6.01	11	Pass
NVNT	ac40	5190	-11.84	11	Pass
NVNT	ac40	5230	-11.27	11	Pass
NVNT	ac80	5210	-16.93	11	Pass

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/ 510KHz)	Conducted PSD (dBm/ 500KHz)	Limit (dBm/ 500KHz)	Verdict
NVNT	a	5745	-3.85	-3.936	30	Pass
NVNT	a	5785	-5.17	-5.256	30	Pass
NVNT	a	5825	-5.44	-5.526	30	Pass
NVNT	n20	5745	-5.57	-5.656	30	Pass
NVNT	n20	5785	-6.27	-6.356	30	Pass
NVNT	n20	5825	-6.98	-7.066	30	Pass
NVNT	n40	5755	-10.53	-10.616	30	Pass
NVNT	n40	5795	-11.01	-11.096	30	Pass
NVNT	ac20	5745	-5.7	-5.786	30	Pass
NVNT	ac20	5785	-6.12	-6.206	30	Pass
NVNT	ac20	5825	-6.8	-6.886	30	Pass
NVNT	ac40	5755	-10.56	-10.646	30	Pass
NVNT	ac40	5795	-11.06	-11.146	30	Pass
NVNT	ac80	5775	-14.43	-14.516	30	Pass
Note: Correction Factor = 10log(500KHz/RBW in measurement) =-0.086						

Test Graphs
PSD NVNT a 5180MHz

PSD NVNT a 5200MHz

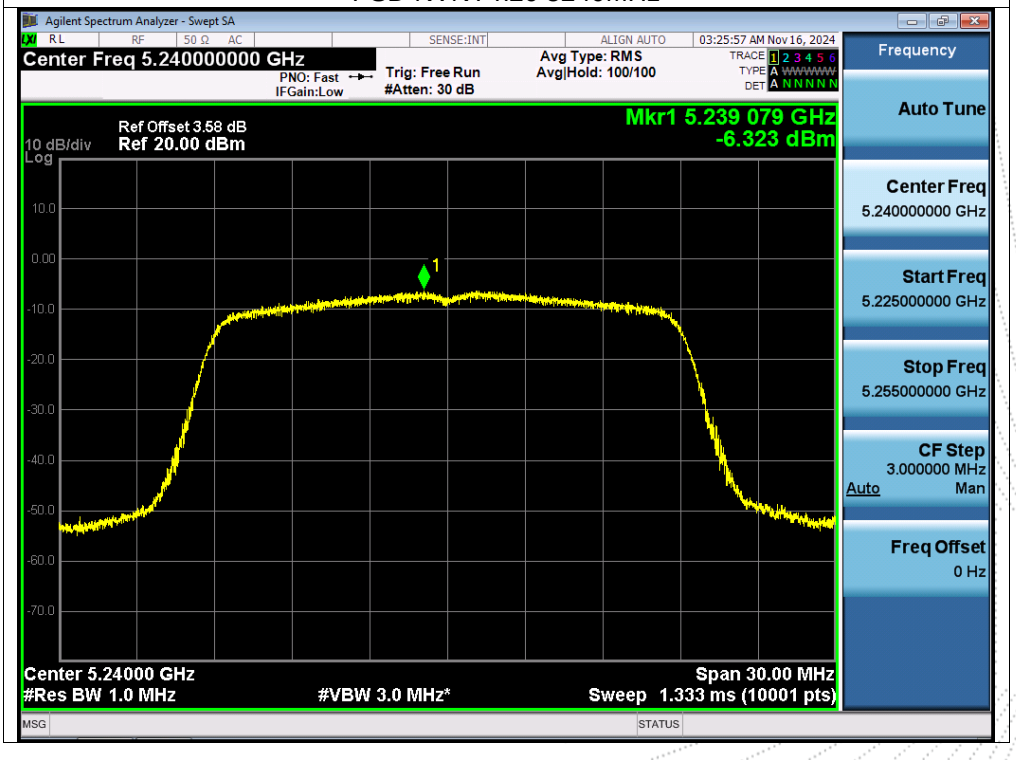


PSD NVNT a 5240MHz

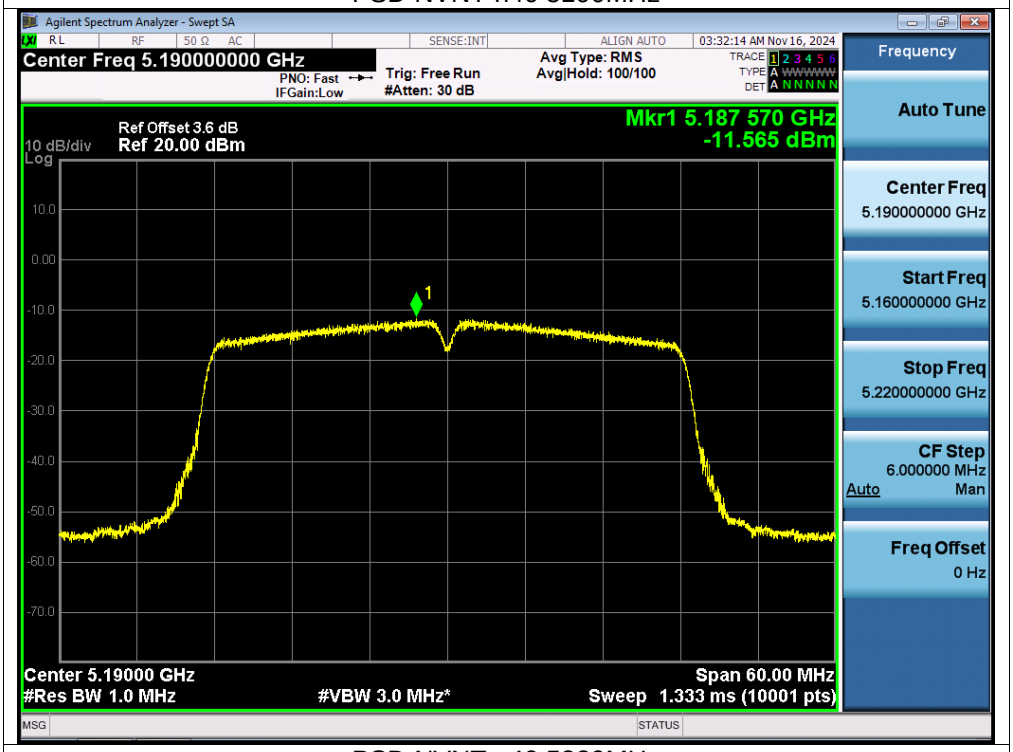
PSD NVNT n20 5180MHz

PSD NVNT n20 5200MHz

PSD NVNT n20 5240MHz

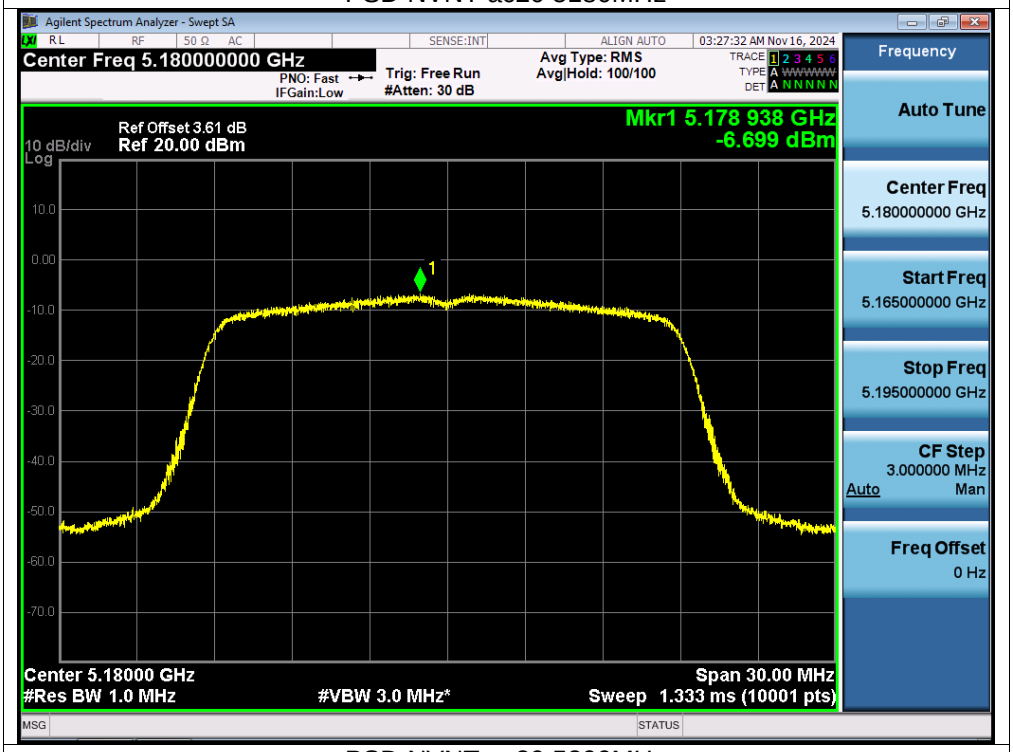


PSD NVNT n40 5190MHz

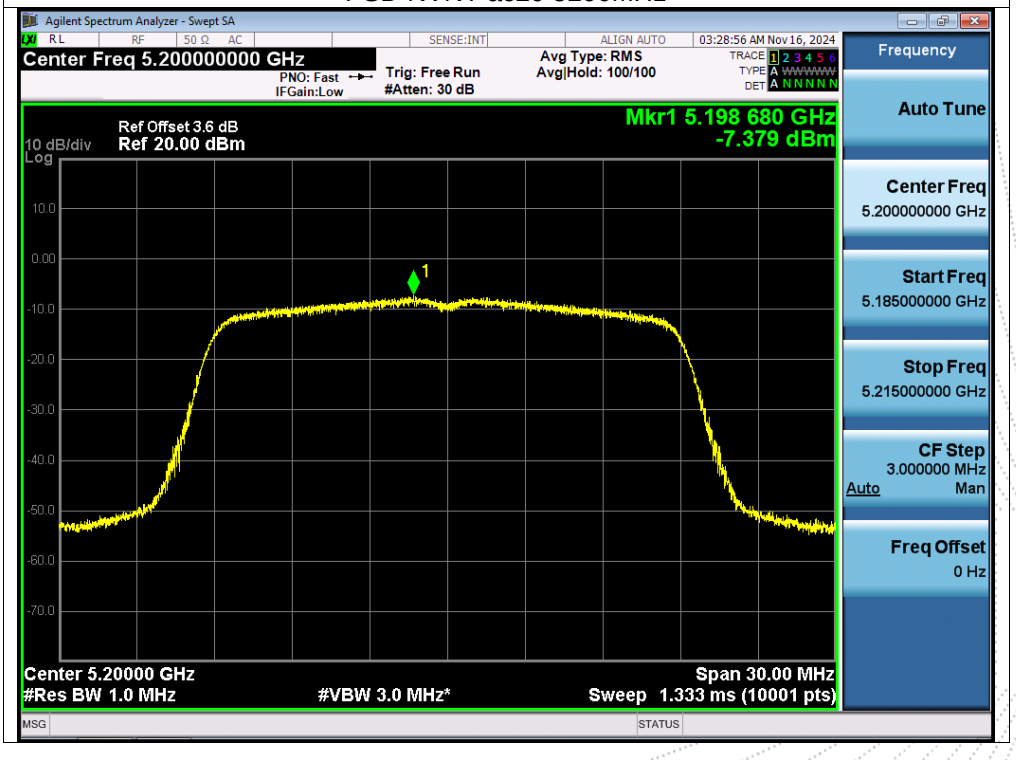


PSD NVNT n40 5230MHz

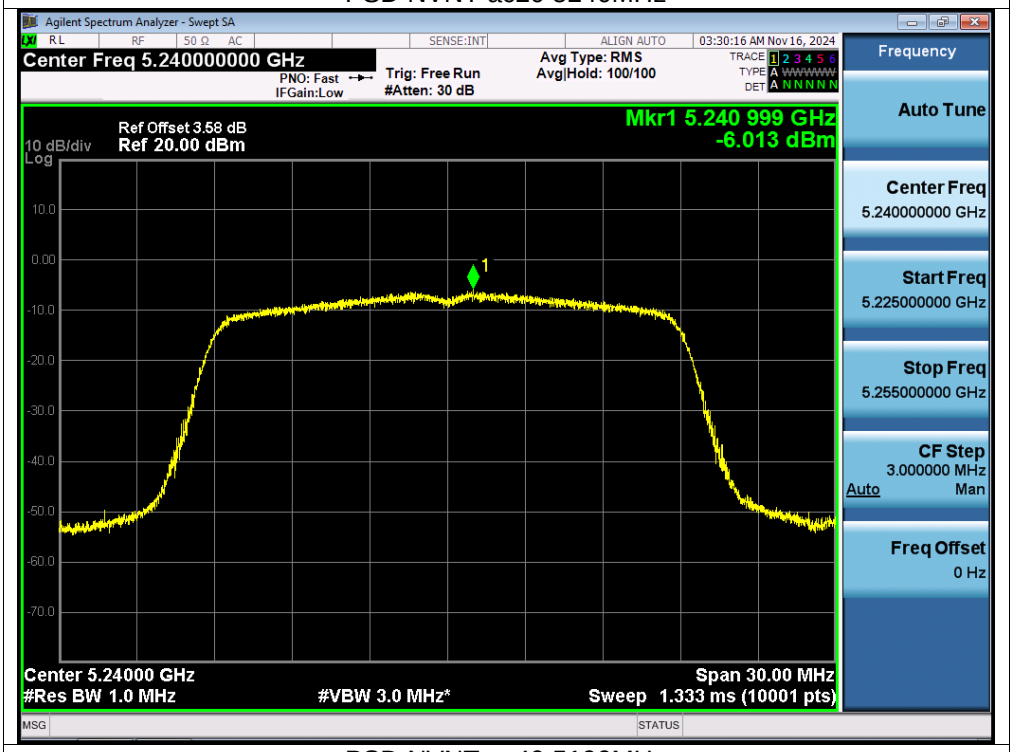
PSD NVNT ac20 5180MHz



PSD NVNT ac20 5200MHz



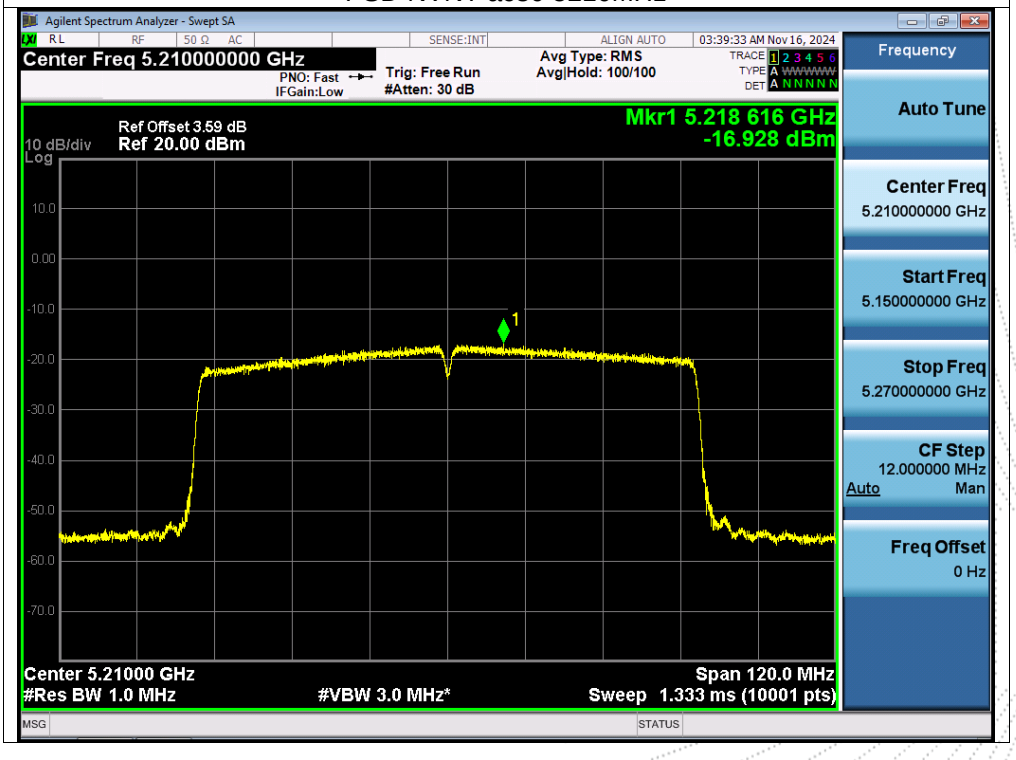
PSD NVNT ac20 5240MHz



PSD NVNT ac40 5190MHz

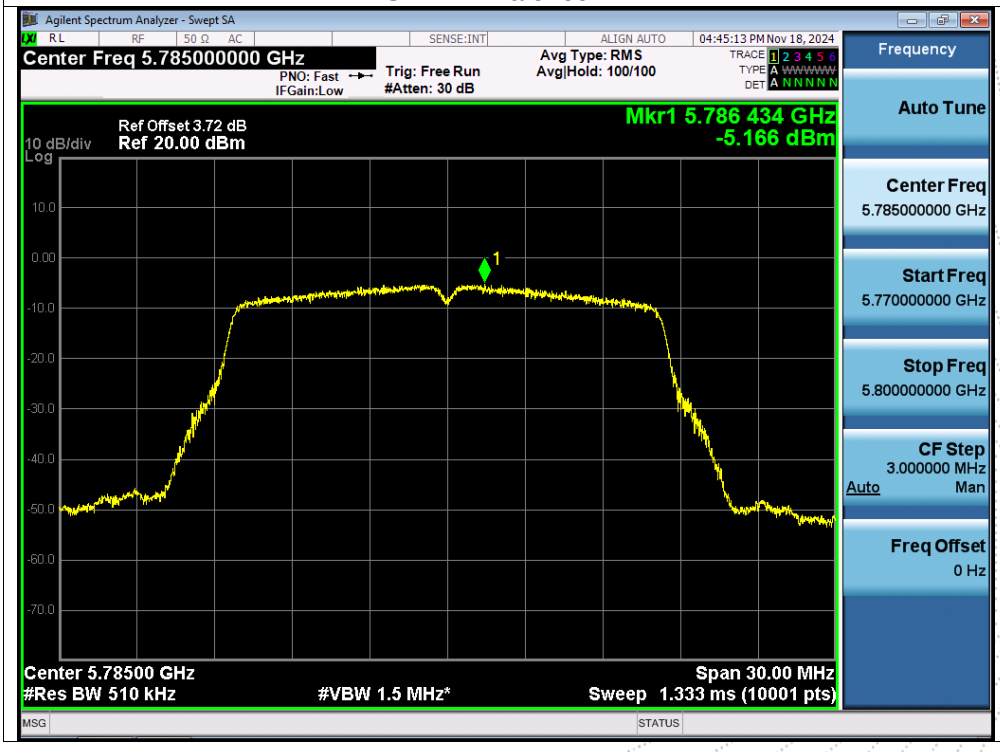
PSD NVNT ac40 5230MHz

PSD NVNT ac80 5210MHz



Test Graphs
PSD NVNT a 5745MHz

PSD NVNT a 5785MHz



PSD NVNT a 5825MHz

PSD NVNT n20 5745MHz

PSD NVNT n20 5785MHz

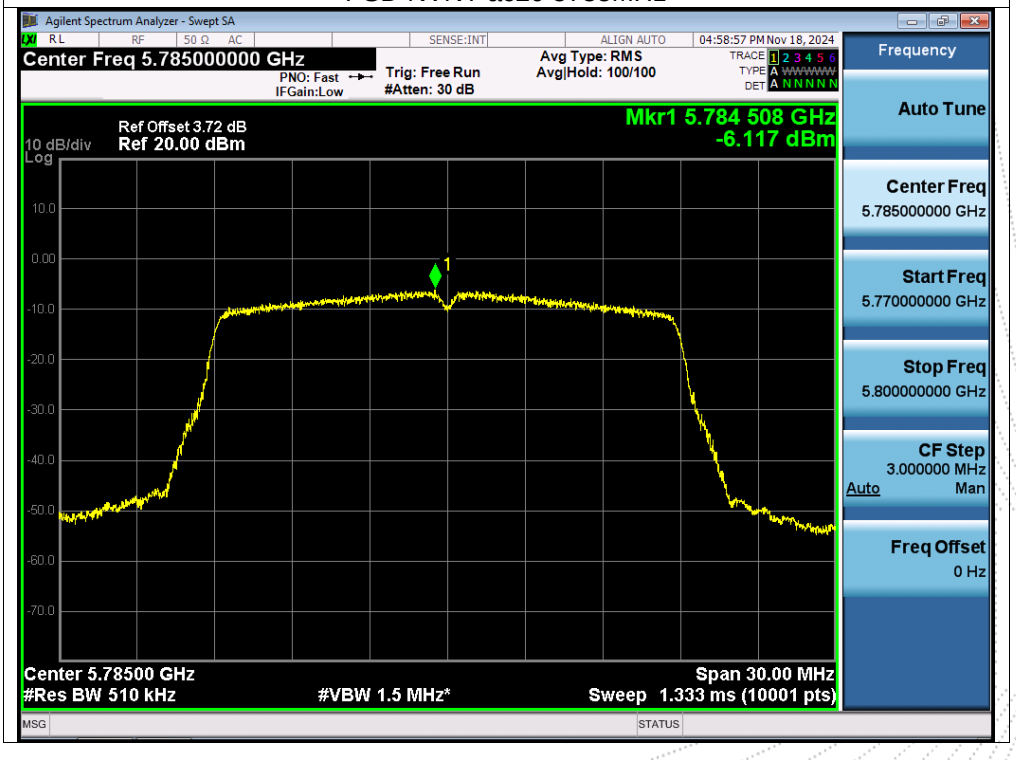
PSD NVNT n20 5825MHz

PSD NVNT n40 5755MHz

PSD NVNT n40 5795MHz

PSD NVNT ac20 5745MHz

PSD NVNT ac20 5785MHz



PSD NVNT ac20 5825MHz

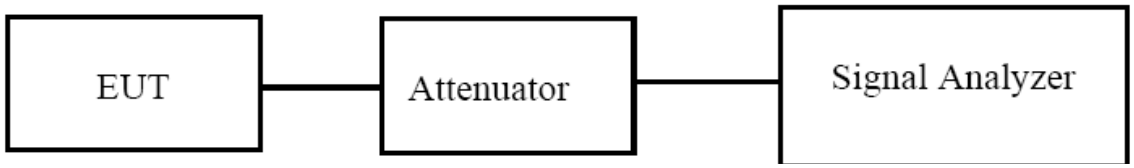
PSD NVNT ac40 5755MHz

PSD NVNT ac40 5795MHz

PSD NVNT ac80 5775MHz

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

9.1 Block Diagram Of Test Setup



9.2 Limit

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

9.3 Test Procedure

a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

The following procedure shall be used for measuring (99 %) power bandwidth:
1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 · RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

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

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

9.4 EUT Operating Conditions

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

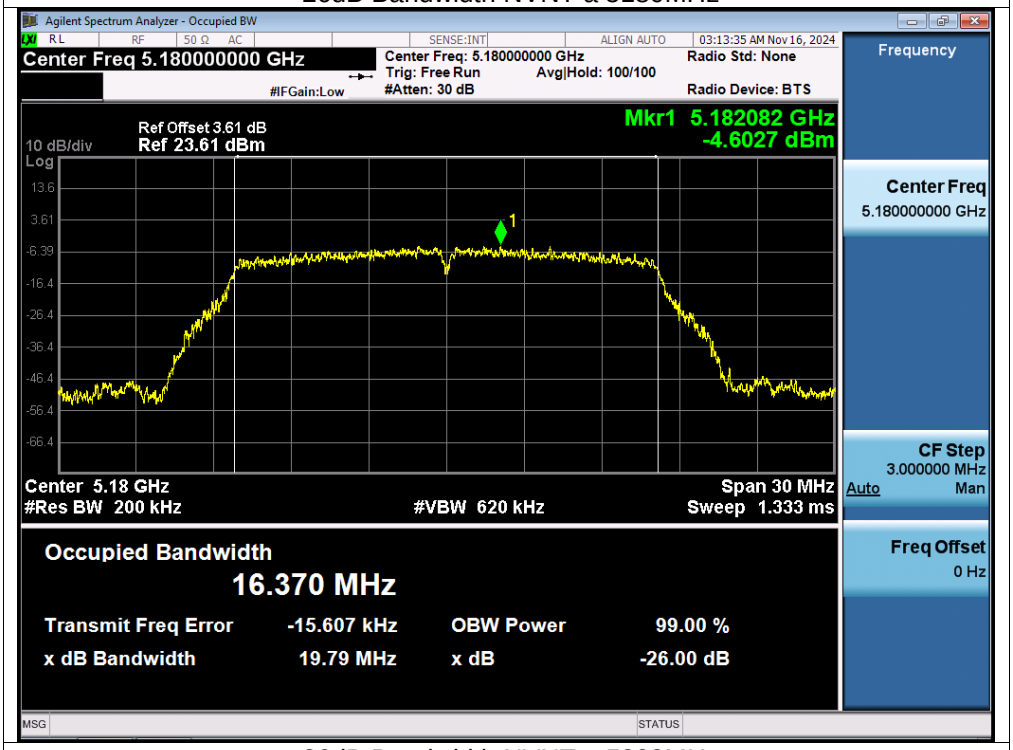
9.5 Test Result

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 3.8V
Test Mode:	TX Frequency U-NII-1 (5180-5240MHz)		

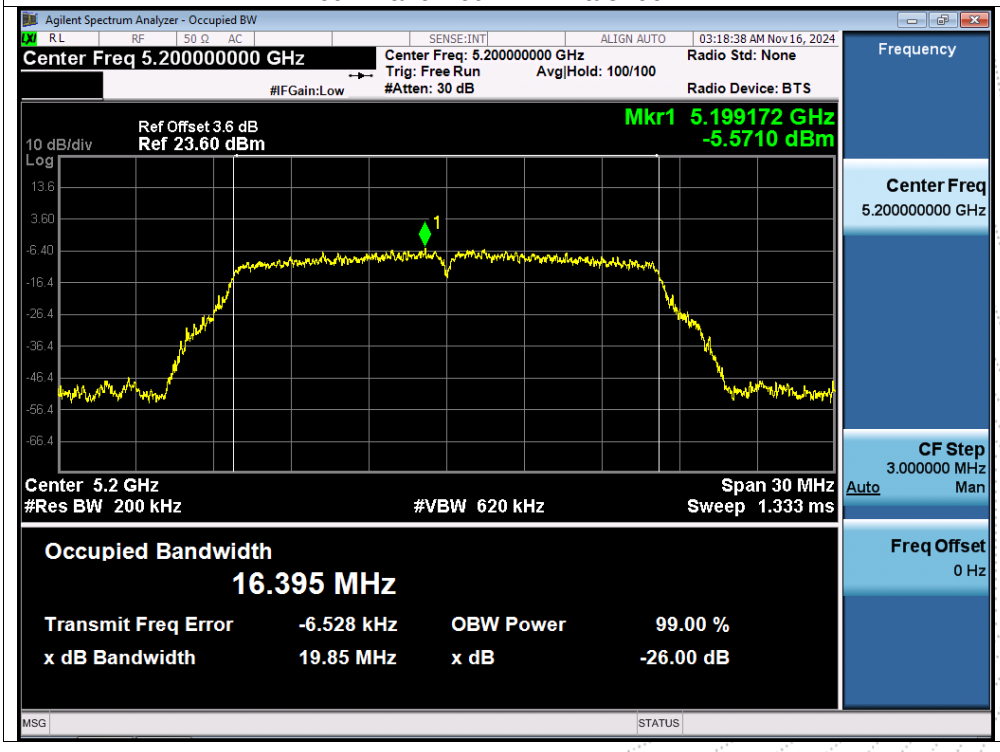
Condition	Mode	Frequency (MHz)	99% bandwidth (MHz)	-26dB bandwidth (MHz)	Result
NVNT	a	5180	16.424	19.79	Pass
NVNT	a	5200	16.439	19.85	Pass
NVNT	a	5240	16.405	19.818	Pass
NVNT	n20	5180	17.555	19.961	Pass
NVNT	n20	5200	17.567	20.137	Pass
NVNT	n20	5240	17.562	20.024	Pass
NVNT	n40	5190	35.96	40.23	Pass
NVNT	n40	5230	35.936	40.066	Pass
NVNT	ac20	5180	17.548	19.987	Pass
NVNT	ac20	5200	17.56	20.094	Pass
NVNT	ac20	5240	17.533	20.06	Pass
NVNT	ac40	5190	36.017	40.061	Pass
NVNT	ac40	5230	35.938	39.942	Pass
NVNT	ac80	5210	75.249	80.662	Pass

Test Graphs

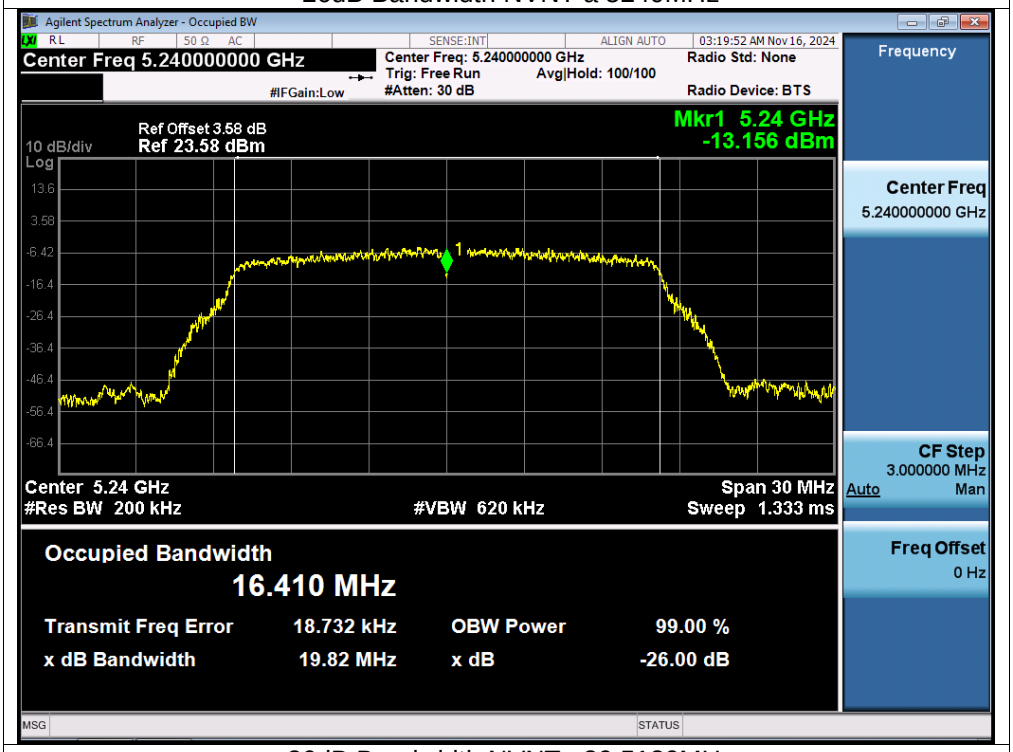
-26dB Bandwidth NVNT a 5180MHz



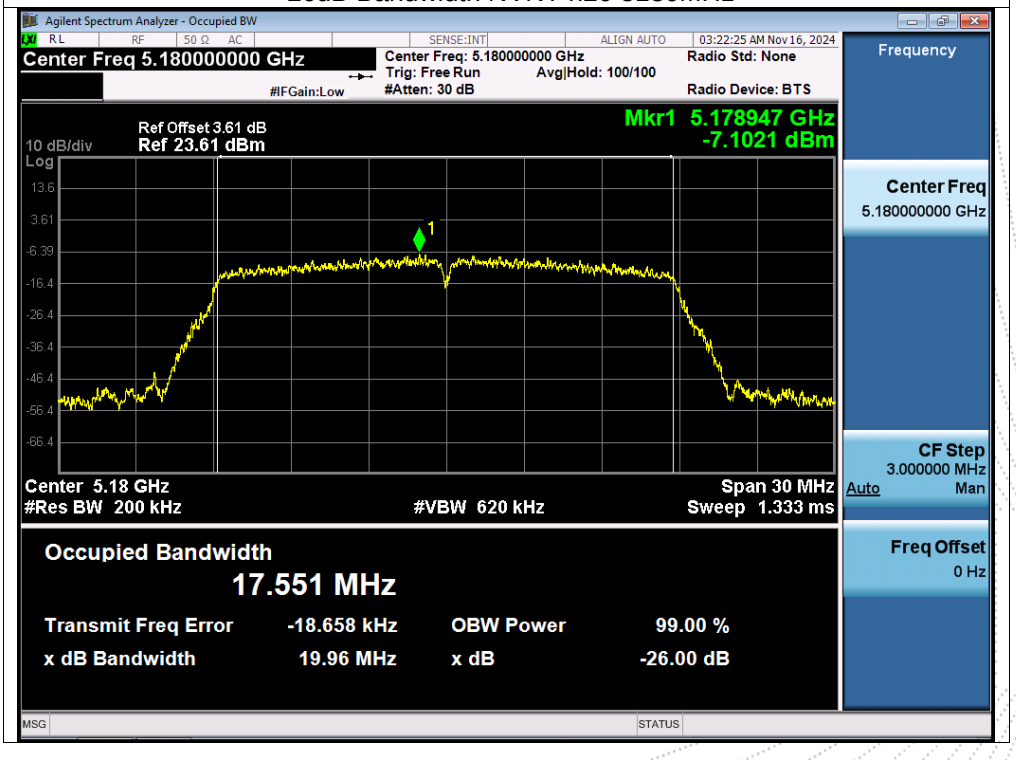
-26dB Bandwidth NVNT a 5200MHz



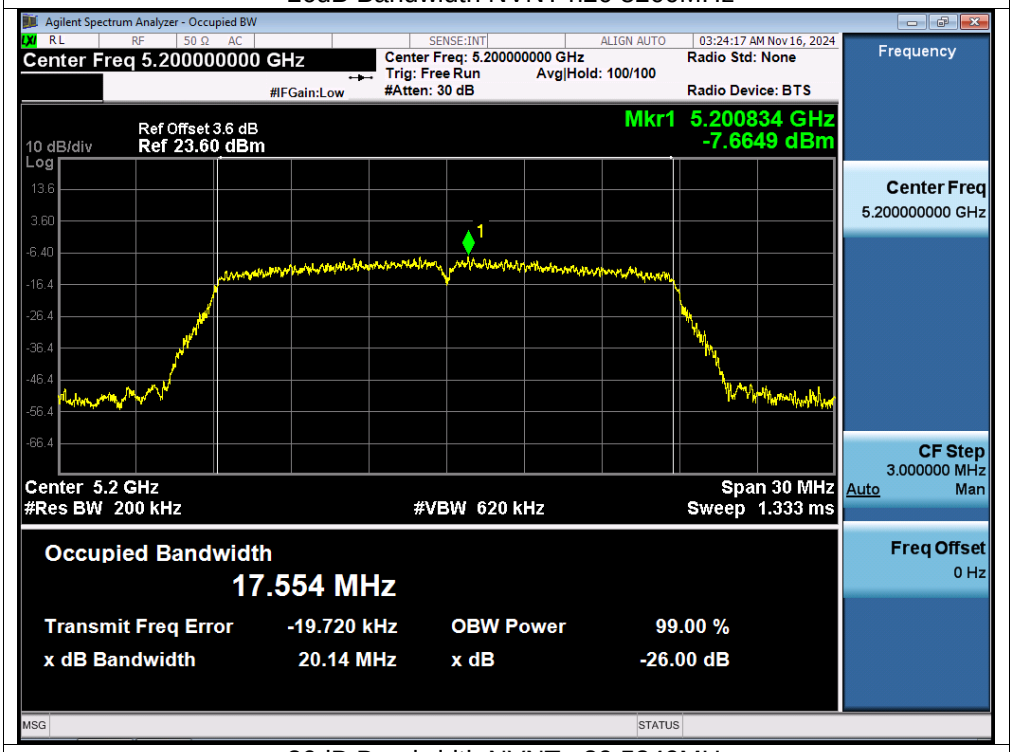
-26dB Bandwidth NVNT a 5240MHz



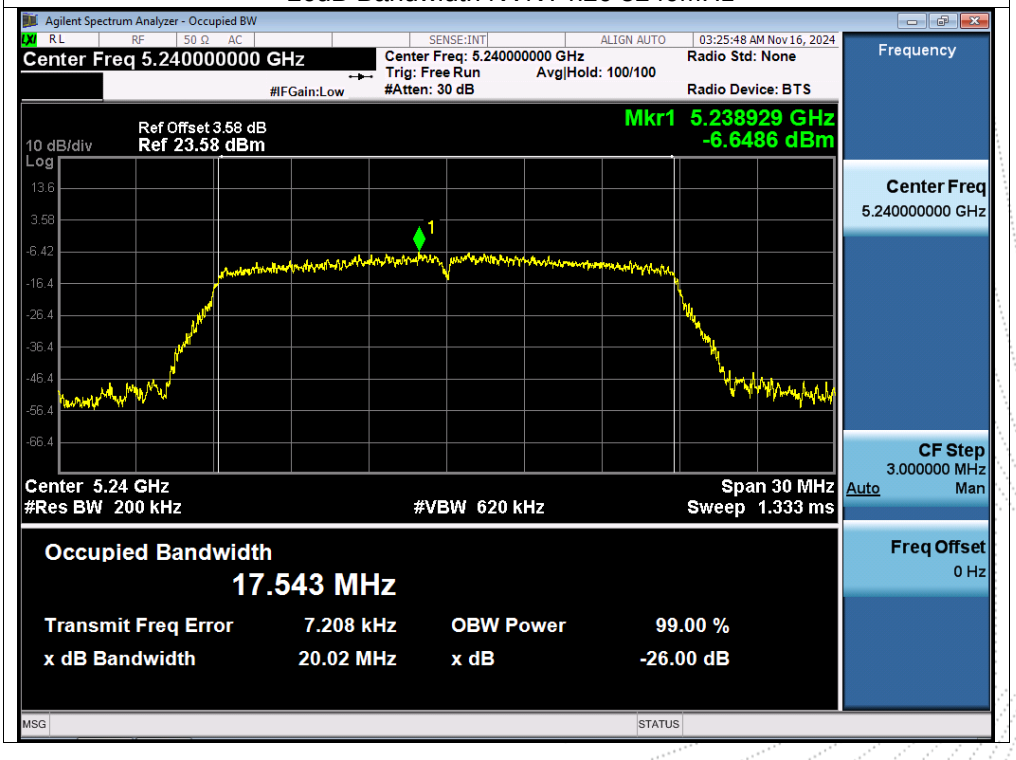
-26dB Bandwidth NVNT n20 5180MHz



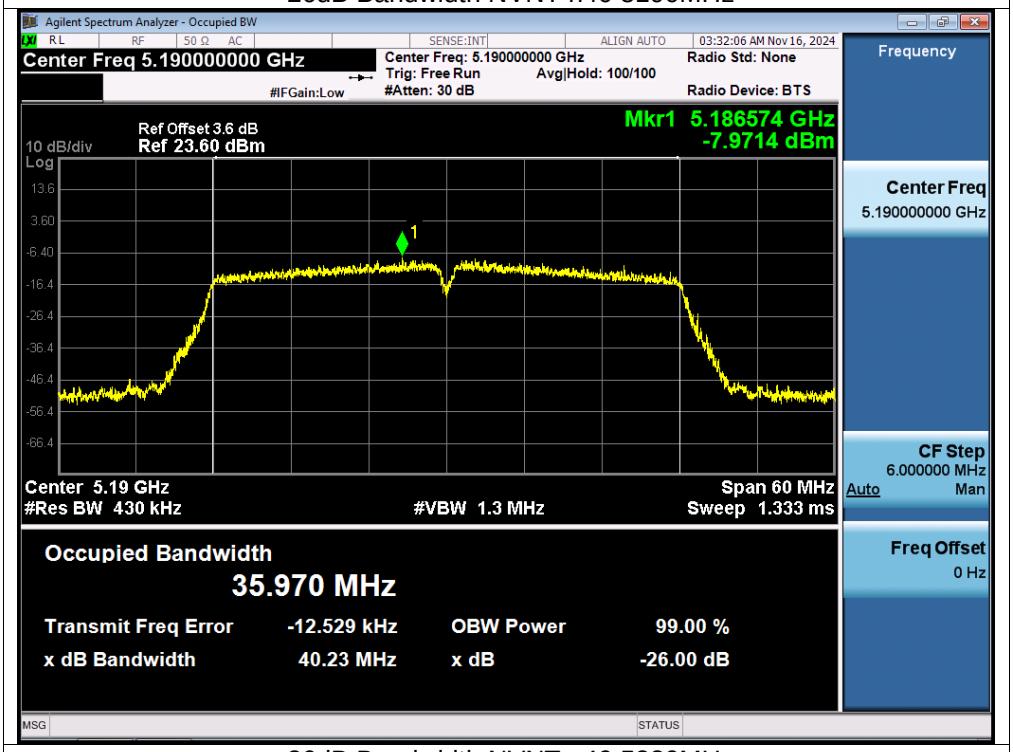
-26dB Bandwidth NVNT n20 5200MHz



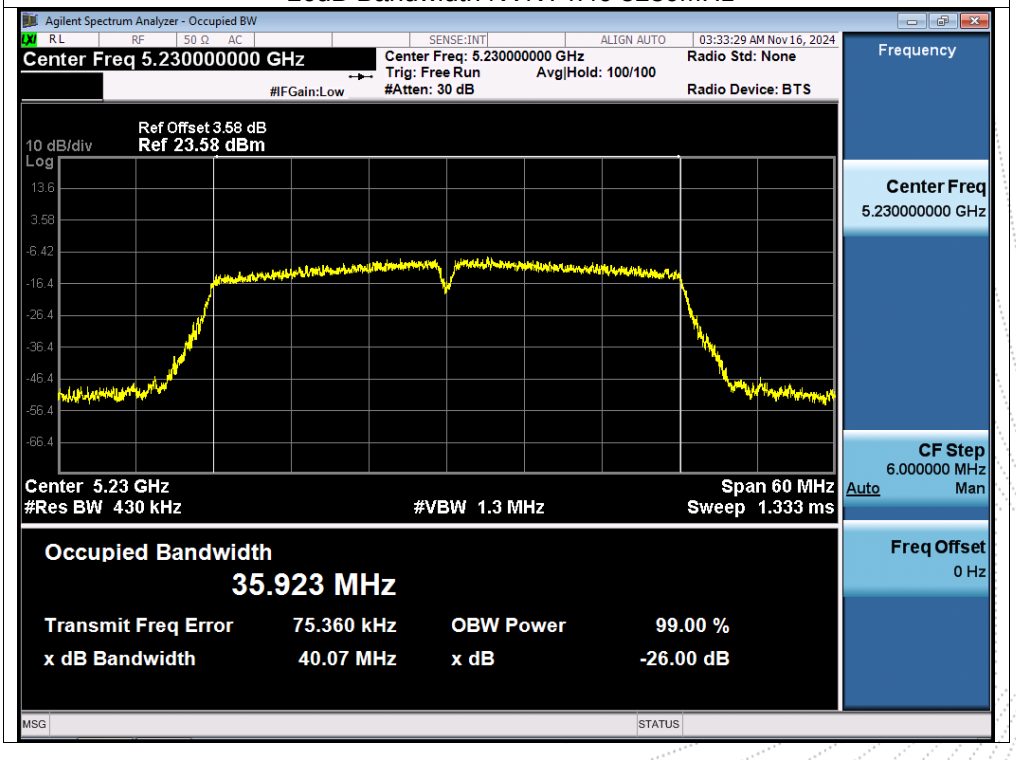
-26dB Bandwidth NVNT n20 5240MHz



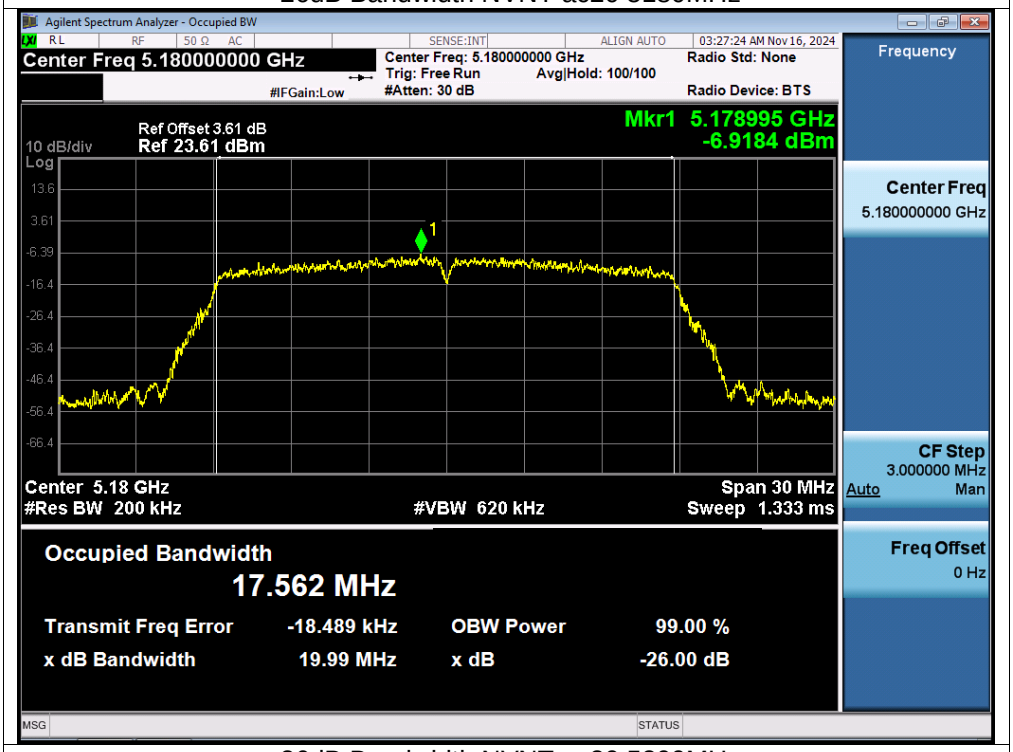
-26dB Bandwidth NVNT n40 5190MHz



-26dB Bandwidth NVNT n40 5230MHz



-26dB Bandwidth NVNT ac20 5180MHz



-26dB Bandwidth NVNT ac20 5200MHz