TEST REPORT

Report No.:	BCTC2502264702-4E
Applicant:	SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Product Name:	Rugged Smart Tablet
Test Model:	RT3 Pro
Tested Date:	2025-02-14 to 2025-03-14
Issued Date:	2025-03-14

Shenzhen BCTC Testing Co., Ltd.

FCC ID: 2ANMU-RT3PRO

Product Name:	Rugged Smart Tablet
Trademark:	OUKITEL
Model/Type reference:	RT3 Pro RT3 E, RT3 S, RT3, RT3 Plus, RT3 Ultra, RT3 GT, RT3 TITAN
Prepared For:	SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Address:	A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE, GUANLAN, LONGHUA, SHENZHEN, 518XXX, China
Manufacturer:	SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Address:	A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE, GUANLAN, LONGHUA, SHENZHEN, 518XXX, China
Prepared By:	Shenzhen BCTC Testing Co., Ltd.
Address:	1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Sample Received Date:	2025-02-14
Sample tested Date:	2025-02-14 to 2025-03-14
Issue Date:	2025-03-14
Report No.:	BCTC2502264702-4E
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
BCTC2502264702-4E	2025-03-14	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:	RT3 Pro RT3 E, RT3 S, RT3, RT3 Plus, RT3 Ultra, RT3 GT, RT3 TITAN
Model differences:	All the model are the same circuit and RF module, except model names.
Hardware Version:	P593_MAIN_PCB_V1.1
Software Version:	OUKITEL_RT3_Pro_EEA_V11
IEEE 802.11 WLAN Mode Supported	802.11a/n/ac(20MHz channel bandwidth) 802.11n/ac(40MHz channel bandwidth) 802.11ac(80MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n(HT20); 5190-5230MHz for 802.11n(HT40); 5210MHz for 802.11 ac80; 5745-5825 MHz for 802.11a/n(HT20); 5755-5795 MHz for 802.11n(HT40); 5775MHz for 802.11 ac80;
Data Rate	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac(VHT20): NSS1, MCS0-MCS8 802.11ac(VHT40/VHT80):NSS1, MCS0-MCS
Type of Modulation:	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac;
Number Of Channel	4 channels for 802.11a/n20 in the 5180-5240MHz band ; 2 channels for 802.11 n40 in the 5190-5230MHz band ; 1 channels for 802.11 ac80 in the 5210MHz band ; 5 channels for 802.11a/n20 in the 5745-5825MHz band ; 2 channels for 802.11 n40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band
Antenna installation:	Internal antenna
Antenna Gain:	0.6 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 3.91V from battery
Adapter Information:	Model: HJ-0502000N2-US 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	Rugged Smart Tablet	OUKITEL	RT3 Pro	N/A	EUT
E-2	Adapter	N/A	HJ-0502000N2-US	N/A	Auxiliary
E-3	TF card	SanDisk	32G	---	---

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

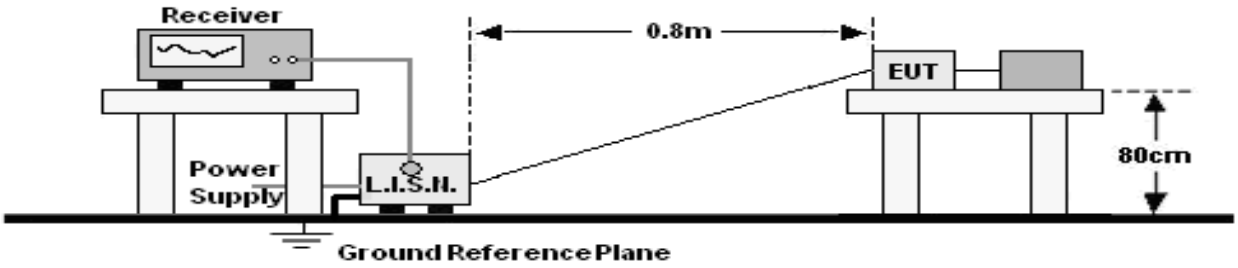
Conducted Emissions Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
LISN	R&S	ENV216	101375	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Pulse limiter	Schwarzbeck	VTSD9561-F	01323	May 16, 2024	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 Chamber01)					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
966 chamber	ChengYu	966 Room	966	May 15, 2023	May 14, 2026
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
Receiver	R&S	ESRP	101154	May 16, 2024	May 15, 2025
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 16, 2024	May 15, 2025
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 21, 2024	May 20, 2025
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 21, 2024	May 20, 2025
Amplifier	SKET	LAPA_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

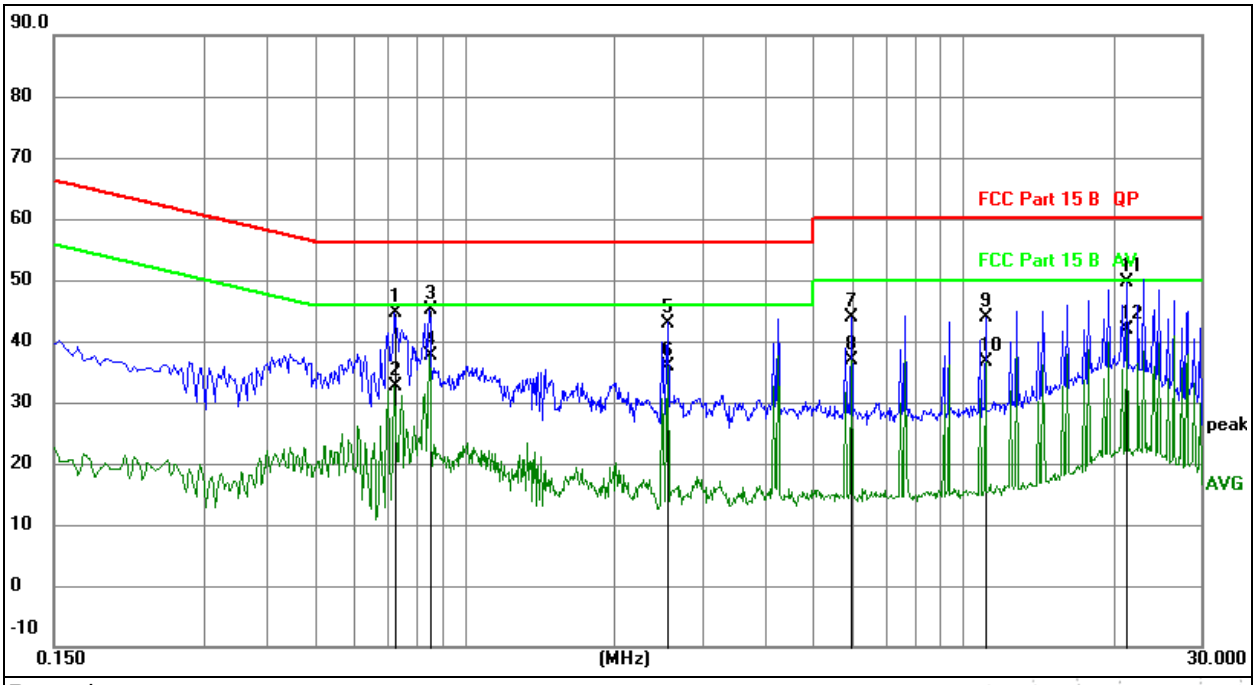
a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak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

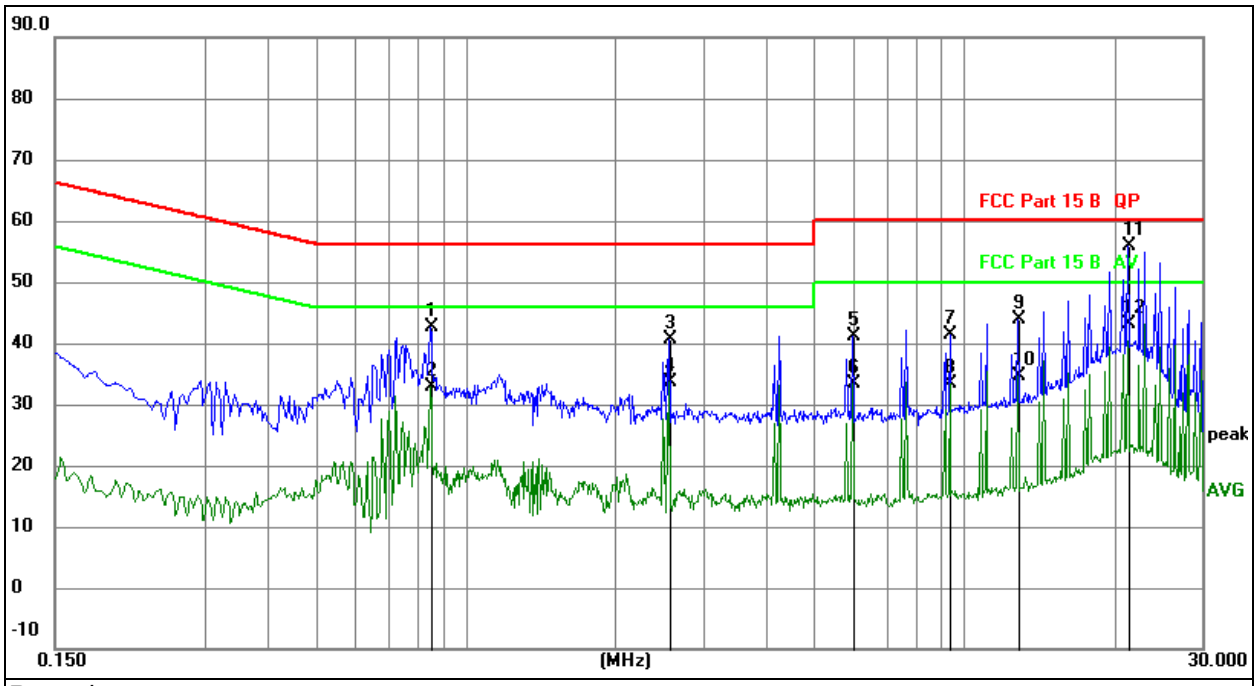
Temperature:	24.1 ℃	Relative Humidity:	53%
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz



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		0.7236	24.43	20.09	44.52	56.00	-11.48	QP
2		0.7236	12.63	20.09	32.72	46.00	-13.28	AVG
3		0.8483	24.98	20.09	45.07	56.00	-10.93	QP
4		0.8483	17.50	20.09	37.59	46.00	-8.41	AVG
5		2.5535	22.89	20.11	43.00	56.00	-13.00	QP
6		2.5535	15.77	20.11	35.88	46.00	-10.12	AVG
7		5.9608	23.65	20.15	43.80	60.00	-16.20	QP
8		5.9608	16.76	20.15	36.91	50.00	-13.09	AVG
9		11.0797	23.59	20.20	43.79	60.00	-16.21	QP
10		11.0797	16.35	20.20	36.55	50.00	-13.45	AVG
11		21.2595	29.27	20.32	49.59	60.00	-10.41	QP
12	*	21.2595	21.45	20.32	41.77	50.00	-8.23	AVG

Temperature:	24.1 ℃	Relative Humidity:	53%
Pressure:	101KPa	Phase :	N
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz



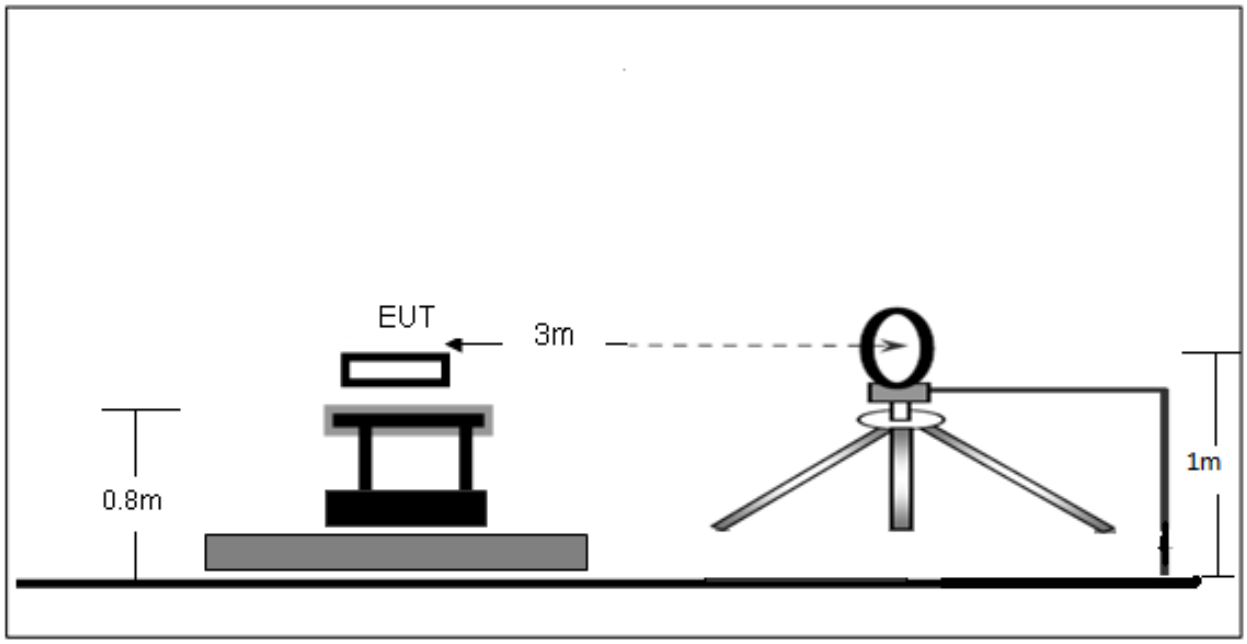
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over1 Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.8519	22.48	20.09	42.57	56.00	-13.43	QP
2		0.8519	12.73	20.09	32.82	46.00	-13.18	AVG
3		2.5574	20.51	20.11	40.62	56.00	-15.38	QP
4		2.5574	13.52	20.11	33.63	46.00	-12.37	AVG
5		5.9730	21.02	20.15	41.17	60.00	-18.83	QP
6		5.9730	13.28	20.15	33.43	50.00	-16.57	AVG
7		9.3840	21.15	20.17	41.32	60.00	-18.68	QP
8		9.3840	13.10	20.17	33.27	50.00	-16.73	AVG
9		12.7950	23.59	20.25	43.84	60.00	-16.16	QP
10		12.7950	14.27	20.25	34.52	50.00	-15.48	AVG
11	*	21.3315	35.47	20.32	55.79	60.00	-4.21	QP
12		21.3315	22.92	20.32	43.24	50.00	-6.76	AVG

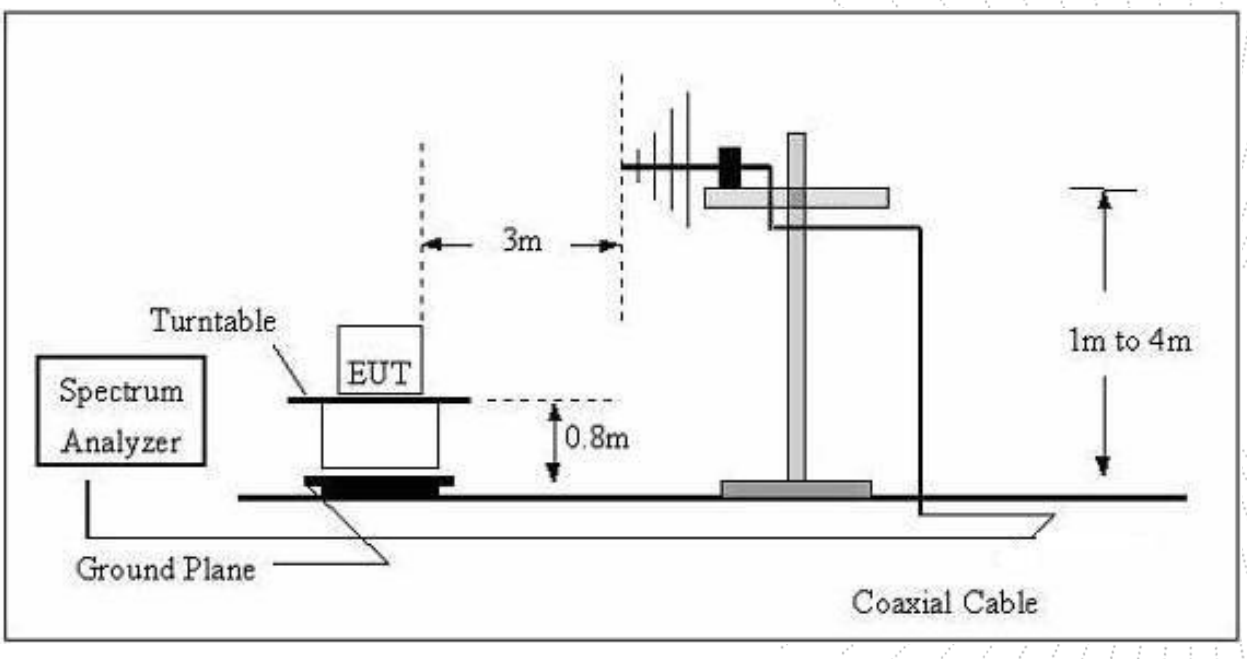
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

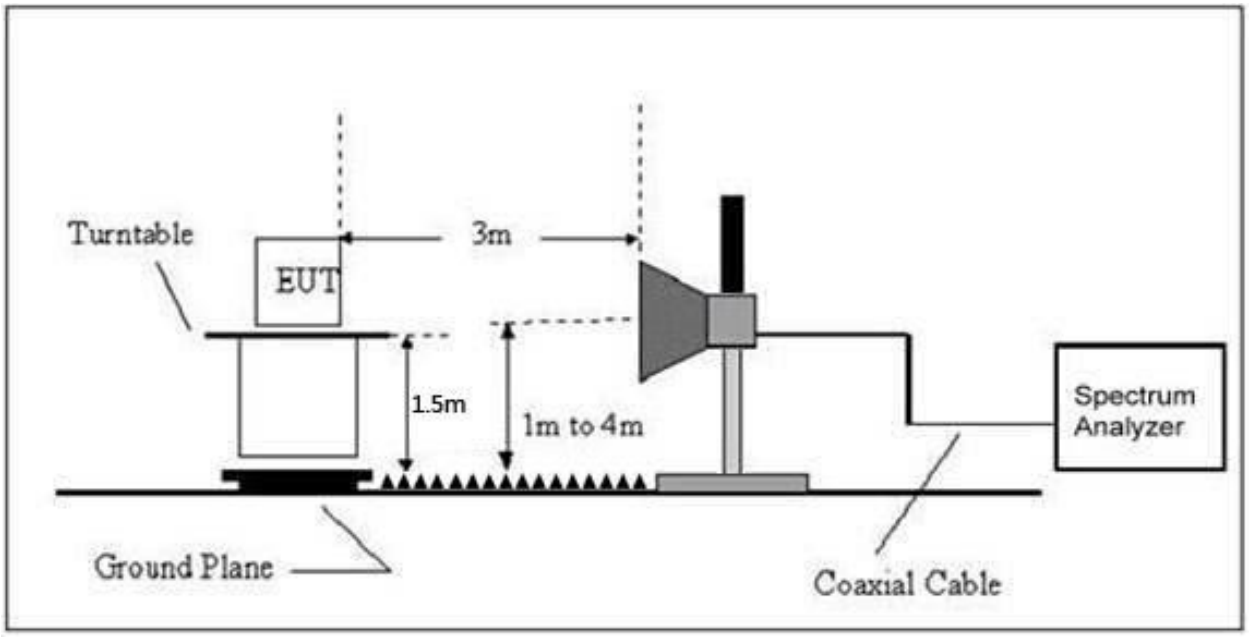
（A）Radiated Emission Test-Up Frequency Below 30MHz



（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

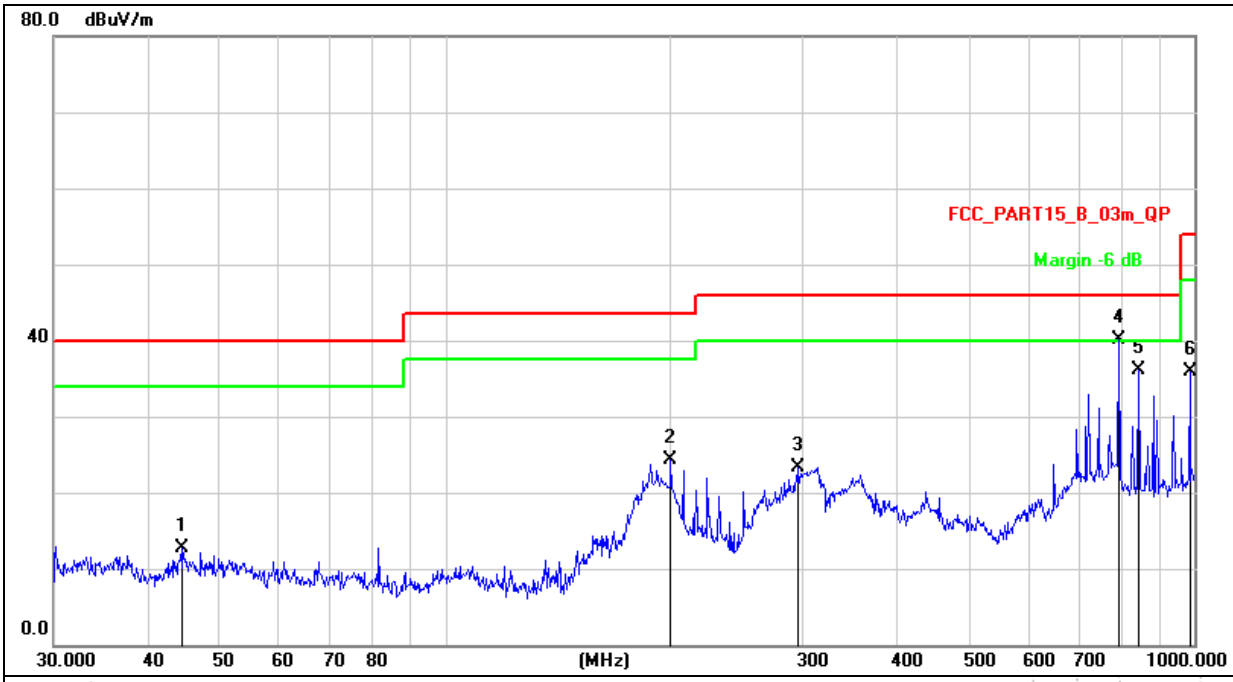
Temperature:	24.1 ℃	Relative Humidity:	51%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 4	Polarization :	--

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

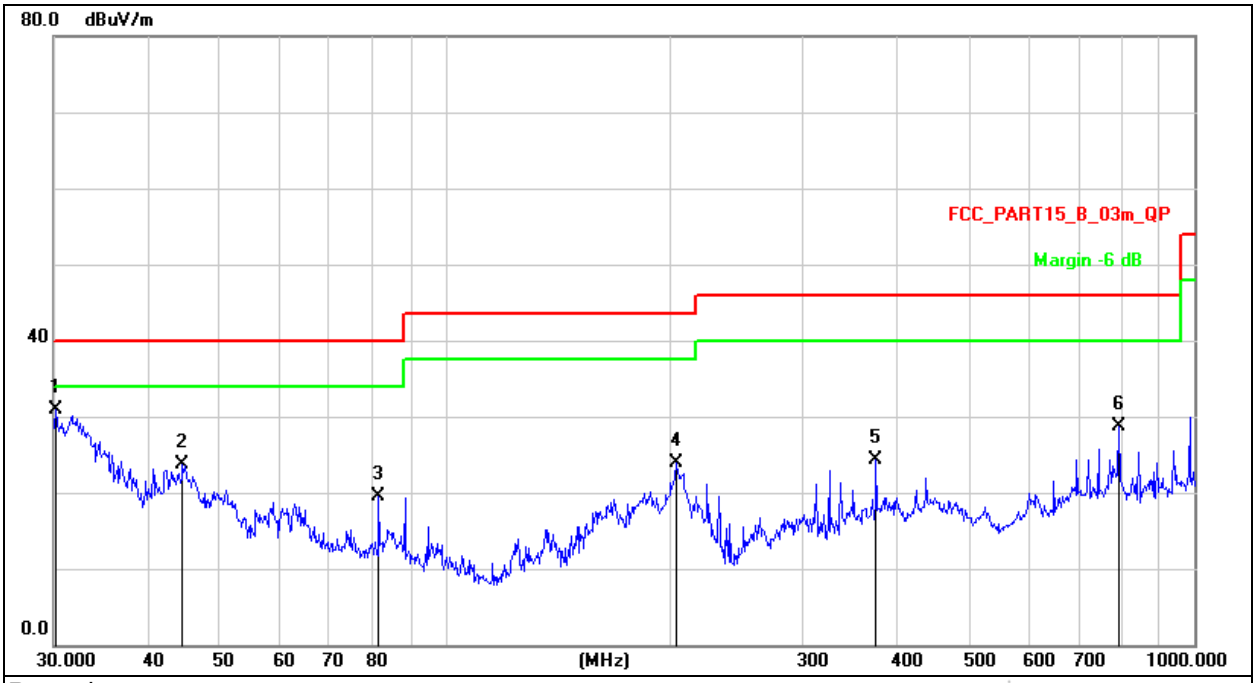
Temperature:	24.1 ℃	Relative Humidity:	51%
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz



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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		44.4308	27.11	-14.36	12.75	40.00	-27.25	QP
2		199.9856	40.08	-15.72	24.36	43.50	-19.14	QP
3		296.1836	36.58	-13.32	23.26	46.00	-22.74	QP
4	*	793.3960	44.54	-4.48	40.06	46.00	-5.94	QP
5		842.1296	40.15	-4.05	36.10	46.00	-9.90	QP
6		986.0717	38.45	-2.52	35.93	54.00	-18.07	QP

Temperature:	24.1 ℃	Relative Humidity:	51%
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz



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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	30.2111	47.49	-16.61	30.88	40.00	-9.12	QP
2		44.5868	38.01	-14.34	23.67	40.00	-16.33	QP
3		81.4970	38.93	-19.40	19.53	40.00	-20.47	QP
4		203.5228	39.49	-15.62	23.87	43.50	-19.63	QP
5		375.9385	35.40	-11.15	24.25	46.00	-21.75	QP
6		793.3960	33.24	-4.48	28.76	46.00	-17.24	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	4434.141	71.04	-20.73	50.31	68.2	-17.89	PK
Vertical	4434.141	59.16	-20.73	38.43	54	-15.57	AV
Vertical	10360.181	60.71	-9.36	51.35	68.2	-16.85	PK
Vertical	10360.181	49.19	-9.36	39.83	54	-14.17	AV
Vertical	15540.018	61.56	-7.84	53.72	74	-20.28	PK
Vertical	15540.018	49.22	-7.84	41.38	54	-12.62	AV
Horizontal	4434.190	73.88	-20.73	53.15	68.2	-15.05	PK
Horizontal	4434.190	59.95	-20.73	39.22	54	-14.78	AV
Horizontal	10360.025	64.13	-9.36	54.77	68.2	-13.43	PK
Horizontal	10360.025	49.07	-9.36	39.71	54	-14.29	AV
Horizontal	15540.151	61.62	-7.84	53.78	74	-20.22	PK
Horizontal	15540.151	49.88	-7.84	42.04	54	-11.96	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.030	71.31	-20.42	50.90	74	-23.10	PK
Vertical	4592.030	59.32	-20.42	38.91	54	-15.09	AV
Vertical	10400.050	64.78	-9.30	55.48	68.2	-12.72	PK
Vertical	10400.050	49.23	-9.30	39.93	54	-14.07	AV
Vertical	15600.017	61.57	-7.82	53.75	74	-20.25	PK
Vertical	15600.017	49.22	-7.82	41.40	54	-12.60	AV
Horizontal	4592.117	70.09	-20.42	49.68	74	-24.32	PK
Horizontal	4592.117	59.86	-20.42	39.44	54	-14.56	AV
Horizontal	10400.005	61.81	-9.30	52.51	68.2	-15.69	PK
Horizontal	10400.005	49.02	-9.30	39.72	54	-14.28	AV
Horizontal	15600.186	62.31	-7.82	54.49	74	-19.51	PK
Horizontal	15600.186	49.25	-7.82	41.43	54	-12.57	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.122	73.27	-20.12	53.15	74	-20.85	PK
Vertical	4739.122	59.64	-20.12	39.52	54	-14.48	AV
Vertical	10480.056	61.99	-9.18	52.81	68.2	-15.39	PK
Vertical	10480.056	49.76	-9.18	40.58	54	-13.42	AV
Vertical	15720.199	64.78	-7.78	57.00	74	-17.00	PK
Vertical	15720.199	49.66	-7.78	41.88	54	-12.12	AV
Horizontal	4739.141	73.13	-20.12	53.00	74	-21.00	PK
Horizontal	4739.141	59.46	-20.12	39.34	54	-14.66	AV
Horizontal	10480.195	62.99	-9.18	53.81	68.2	-14.39	PK
Horizontal	10480.195	49.27	-9.18	40.09	54	-13.91	AV
Horizontal	15720.026	61.74	-7.78	53.96	74	-20.04	PK
Horizontal	15720.026	49.28	-7.78	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:	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	4434.029	74.58	-20.73	53.85	68.2	-14.35	PK
Vertical	4434.029	59.29	-20.73	38.56	54	-15.44	AV
Vertical	10360.054	62.18	-9.36	52.82	68.2	-15.38	PK
Vertical	10360.054	49.71	-9.36	40.35	54	-13.65	AV
Vertical	15540.179	61.92	-7.84	54.08	74	-19.92	PK
Vertical	15540.179	49.99	-7.84	42.15	54	-11.85	AV
Horizontal	4434.022	74.38	-20.73	53.65	68.2	-14.55	PK
Horizontal	4434.022	59.13	-20.73	38.40	54	-15.60	AV
Horizontal	10360.056	62.82	-9.36	53.46	68.2	-14.74	PK
Horizontal	10360.056	49.45	-9.36	40.09	54	-13.91	AV
Horizontal	15540.082	60.84	-7.84	53.00	74	-21.00	PK
Horizontal	15540.082	49.00	-7.84	41.16	54	-12.84	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.093	73.18	-20.42	52.76	74	-21.24	PK
Vertical	4592.093	59.36	-20.42	38.94	54	-15.06	AV
Vertical	10400.064	63.84	-9.30	54.54	68.2	-13.66	PK
Vertical	10400.064	49.04	-9.30	39.74	54	-14.26	AV
Vertical	15600.087	60.81	-7.82	52.99	74	-21.01	PK
Vertical	15600.087	49.11	-7.82	41.29	54	-12.71	AV
Horizontal	4592.094	74.71	-20.42	54.30	74	-19.70	PK
Horizontal	4592.094	59.99	-20.42	39.57	54	-14.43	AV
Horizontal	10400.133	61.13	-9.30	51.83	68.2	-16.37	PK
Horizontal	10400.133	49.66	-9.30	40.36	54	-13.64	AV
Horizontal	15600.130	61.68	-7.82	53.86	74	-20.14	PK
Horizontal	15600.130	49.93	-7.82	42.11	54	-11.89	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.033	71.29	-20.12	51.17	74	-22.83	PK
Vertical	4739.033	59.88	-20.12	39.75	54	-14.25	AV
Vertical	10480.104	60.49	-9.18	51.31	68.2	-16.89	PK
Vertical	10480.104	49.54	-9.18	40.36	54	-13.64	AV
Vertical	15720.052	61.43	-7.78	53.65	74	-20.35	PK
Vertical	15720.052	49.18	-7.78	41.40	54	-12.60	AV
Horizontal	4739.181	71.60	-20.12	51.48	74	-22.52	PK
Horizontal	4739.181	59.38	-20.12	39.25	54	-14.75	AV
Horizontal	10480.100	63.23	-9.18	54.05	68.2	-14.15	PK
Horizontal	10480.100	49.32	-9.18	40.14	54	-13.86	AV
Horizontal	15720.065	63.74	-7.78	55.96	74	-18.04	PK
Horizontal	15720.065	49.65	-7.78	41.87	54	-12.13	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:	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	4434.001	74.65	-20.73	53.92	68.2	-14.28	PK
Vertical	4434.001	59.37	-20.73	38.64	54	-15.36	AV
Vertical	10380.022	63.13	-9.33	53.80	68.2	-14.40	PK
Vertical	10380.022	49.45	-9.33	40.12	54	-13.88	AV
Vertical	15570.127	64.78	-7.83	56.95	74	-17.05	PK
Vertical	15570.127	49.89	-7.83	42.06	54	-11.94	AV
Horizontal	4434.040	72.72	-20.73	51.99	74	-22.01	PK
Horizontal	4434.040	59.79	-20.73	39.06	54	-14.94	AV
Horizontal	10380.071	61.57	-9.33	52.24	68.2	-15.96	PK
Horizontal	10380.071	49.65	-9.33	40.32	54	-13.68	AV
Horizontal	15570.104	63.44	-7.83	55.61	74	-18.39	PK
Horizontal	15570.104	49.95	-7.83	42.12	54	-11.88	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.020	72.51	-20.12	52.39	68.2	-15.81	PK
Vertical	4739.020	59.44	-20.12	39.32	54	-14.68	AV
Vertical	10460.115	62.78	-9.21	53.57	68.2	-14.63	PK
Vertical	10460.115	49.01	-9.21	39.80	54	-14.20	AV
Vertical	15690.116	63.70	-7.79	55.91	74	-18.09	PK
Vertical	15690.116	49.46	-7.79	41.67	54	-12.33	AV
Horizontal	4739.136	70.11	-20.12	49.99	68.2	-18.21	PK
Horizontal	4739.136	59.32	-20.12	39.20	54	-14.80	AV
Horizontal	10460.126	60.95	-9.21	51.74	68.2	-16.46	PK
Horizontal	10460.126	49.04	-9.21	39.83	54	-14.17	AV
Horizontal	15690.049	64.95	-7.79	57.16	74	-16.84	PK
Horizontal	15690.049	49.47	-7.79	41.68	54	-12.32	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	4434.053	74.57	-20.73	53.83	68.2	-14.37	PK
Vertical	4434.053	59.97	-20.73	39.24	54	-14.76	AV
Vertical	10360.041	61.73	-9.36	52.37	68.2	-15.83	PK
Vertical	10360.041	49.28	-9.36	39.92	54	-14.08	AV
Vertical	15540.047	61.00	-7.84	53.16	74	-20.84	PK
Vertical	15540.047	49.20	-7.84	41.36	54	-12.64	AV
Horizontal	4434.171	71.58	-20.73	50.85	68.2	-17.35	PK
Horizontal	4434.171	59.50	-20.73	38.77	54	-15.23	AV
Horizontal	10360.067	60.51	-9.36	51.15	68.2	-17.05	PK
Horizontal	10360.067	49.62	-9.36	40.26	54	-13.74	AV
Horizontal	15540.020	61.10	-7.84	53.26	74	-20.74	PK
Horizontal	15540.020	49.07	-7.84	41.23	54	-12.77	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.030	74.92	-20.42	54.51	74	-19.49	PK
Vertical	4592.030	59.92	-20.42	39.51	54	-14.49	AV
Vertical	10400.036	60.01	-9.30	50.71	68.2	-17.49	PK
Vertical	10400.036	49.52	-9.30	40.22	54	-13.78	AV
Vertical	15600.081	61.75	-7.82	53.93	74	-20.07	PK
Vertical	15600.081	49.28	-7.82	41.46	54	-12.54	AV
Horizontal	4592.160	70.87	-20.42	50.45	74	-23.55	PK
Horizontal	4592.160	59.03	-20.42	38.61	54	-15.39	AV
Horizontal	10400.099	62.78	-9.30	53.48	68.2	-14.72	PK
Horizontal	10400.099	49.25	-9.30	39.95	54	-14.05	AV
Horizontal	15600.107	62.18	-7.82	54.36	74	-19.64	PK
Horizontal	15600.107	49.73	-7.82	41.91	54	-12.09	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.067	70.96	-20.12	50.84	74	-23.16	PK
Vertical	4739.067	59.43	-20.12	39.31	54	-14.69	AV
Vertical	10480.089	64.49	-9.18	55.31	68.2	-12.89	PK
Vertical	10480.089	49.19	-9.18	40.01	54	-13.99	AV
Vertical	15720.065	62.79	-7.78	55.01	74	-18.99	PK
Vertical	15720.065	49.85	-7.78	42.07	54	-11.93	AV
Horizontal	4739.099	71.83	-20.12	51.71	74	-22.29	PK
Horizontal	4739.099	59.28	-20.12	39.16	54	-14.84	AV
Horizontal	10480.062	60.99	-9.18	51.81	68.2	-16.39	PK
Horizontal	10480.062	49.90	-9.18	40.72	54	-13.28	AV
Horizontal	15720.196	63.94	-7.78	56.16	74	-17.84	PK
Horizontal	15720.196	49.17	-7.78	41.39	54	-12.61	AV

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

Test Mode:	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	4434.052	71.72	-20.73	50.99	68.2	-17.21	PK
Vertical	4434.052	59.18	-20.73	38.45	54	-15.55	AV
Vertical	10380.087	64.25	-9.33	54.92	68.2	-13.28	PK
Vertical	10380.087	49.34	-9.33	40.01	54	-13.99	AV
Vertical	15570.103	60.73	-7.83	52.90	74	-21.10	PK
Vertical	15570.103	49.71	-7.83	41.88	54	-12.12	AV
Horizontal	4434.125	71.25	-20.73	50.51	74	-23.49	PK
Horizontal	4434.125	59.28	-20.73	38.55	54	-15.45	AV
Horizontal	10380.072	64.22	-9.33	54.89	68.2	-13.31	PK
Horizontal	10380.072	49.96	-9.33	40.63	54	-13.37	AV
Horizontal	15570.035	60.05	-7.83	52.22	74	-21.78	PK
Horizontal	15570.035	49.63	-7.83	41.80	54	-12.20	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.192	70.48	-20.12	50.36	68.2	-17.84	PK
Vertical	4739.192	59.63	-20.12	39.51	54	-14.49	AV
Vertical	10460.054	64.67	-9.21	55.46	68.2	-12.74	PK
Vertical	10460.054	49.37	-9.21	40.16	54	-13.84	AV
Vertical	15690.119	60.49	-7.79	52.70	74	-21.30	PK
Vertical	15690.119	49.94	-7.79	42.15	54	-11.85	AV
Horizontal	4739.082	70.27	-20.12	50.15	68.2	-18.05	PK
Horizontal	4739.082	59.08	-20.12	38.96	54	-15.04	AV
Horizontal	10460.033	64.69	-9.21	55.48	68.2	-12.72	PK
Horizontal	10460.033	49.63	-9.21	40.42	54	-13.58	AV
Horizontal	15690.134	62.31	-7.79	54.52	74	-19.48	PK
Horizontal	15690.134	49.03	-7.79	41.24	54	-12.76	AV

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

Test Mode:	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	4434.008	74.84	-20.73	54.10	68.2	-14.10	PK
Vertical	4434.008	59.04	-20.73	38.31	54	-15.69	AV
Vertical	10420.035	63.36	-9.27	54.09	68.2	-14.11	PK
Vertical	10420.035	49.79	-9.27	40.52	54	-13.48	AV
Vertical	15630.150	63.51	-7.81	55.70	74	-18.30	PK
Vertical	15630.150	49.56	-7.81	41.75	54	-12.25	AV
Horizontal	4434.092	70.53	-20.73	49.80	68.2	-18.40	PK
Horizontal	4434.092	59.36	-20.73	38.63	54	-15.37	AV
Horizontal	10420.094	42.07	9.27	51.34	68.2	-16.86	PK
Horizontal	10420.094	29.68	9.27	38.95	54	-15.05	AV
Horizontal	15630.170	61.51	-7.81	53.70	74	-20.30	PK
Horizontal	15630.170	49.91	-7.81	42.10	54	-11.90	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	4679.199	74.87	-20.24	54.63	74	-19.37	PK
Vertical	4679.199	59.83	-20.24	39.59	54	-14.41	AV
Vertical	11490.154	61.37	-8.79	52.58	68.2	-15.62	PK
Vertical	11490.154	49.69	-8.79	40.90	54	-13.10	AV
Vertical	17235.006	56.93	-3.18	53.75	68.2	-14.45	PK
Vertical	17235.006	44.06	-3.18	40.88	54	-13.12	AV
Horizontal	4679.049	71.25	-20.73	50.52	74	-23.48	PK
Horizontal	4679.049	59.18	-20.73	38.45	54	-15.55	AV
Horizontal	11490.155	60.12	-8.79	51.33	68.2	-16.87	PK
Horizontal	11490.155	49.26	-8.79	40.47	54	-13.53	AV
Horizontal	17235.199	55.48	-3.18	52.30	68.2	-15.90	PK
Horizontal	17235.199	44.41	-3.18	41.23	54	-12.77	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.084	72.12	-20.42	51.70	74	-22.30	PK
Vertical	4592.084	59.24	-20.42	38.82	54	-15.18	AV
Vertical	11570.189	63.07	-8.86	54.21	68.2	-13.99	PK
Vertical	11570.189	49.12	-8.86	40.26	54	-13.74	AV
Vertical	17355.019	58.62	-2.52	56.10	68.2	-12.10	PK
Vertical	17355.019	44.14	-2.52	41.62	54	-12.38	AV
Horizontal	4592.039	73.07	-20.42	52.66	74	-21.34	PK
Horizontal	4592.039	59.88	-20.42	39.46	54	-14.54	AV
Horizontal	11570.047	62.44	-8.86	53.58	68.2	-14.62	PK
Horizontal	11570.047	49.53	-8.86	40.67	54	-13.33	AV
Horizontal	17355.183	55.35	-2.52	52.83	68.2	-15.37	PK
Horizontal	17355.183	44.17	-2.52	41.65	54	-12.35	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.117	73.45	-18.93	54.52	68.2	-13.68	PK
Vertical	6039.117	59.24	-18.93	40.31	54	-13.69	AV
Vertical	11650.101	63.52	-8.92	54.60	74	-19.40	PK
Vertical	11650.101	49.48	-8.92	40.56	54	-13.44	AV
Vertical	17475.099	58.59	-1.86	56.73	68.2	-11.47	PK
Vertical	17475.099	44.15	-1.86	42.29	54	-11.71	AV
Horizontal	6039.018	70.55	-18.93	51.61	68.2	-16.59	PK
Horizontal	6039.018	59.80	-18.93	40.87	54	-13.13	AV
Horizontal	11650.133	61.45	-8.92	52.53	74	-21.47	PK
Horizontal	11650.133	49.04	-8.92	40.12	54	-13.88	AV
Horizontal	17475.045	58.58	-1.86	56.72	68.2	-11.48	PK
Horizontal	17475.045	44.91	-1.86	43.05	54	-10.95	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	4679.079	73.83	-20.24	53.59	74	-20.41	PK
Vertical	4679.079	59.59	-20.24	39.35	54	-14.65	AV
Vertical	11490.123	60.00	-8.79	51.21	68.2	-16.99	PK
Vertical	11490.123	49.26	-8.79	40.47	54	-13.53	AV
Vertical	17235.158	55.70	-3.18	52.52	68.2	-15.68	PK
Vertical	17235.158	44.36	-3.18	41.18	54	-12.82	AV
Horizontal	4679.134	71.77	-20.24	51.53	74	-22.47	PK
Horizontal	4679.134	59.01	-20.24	38.77	54	-15.23	AV
Horizontal	11490.195	60.21	-8.79	51.42	68.2	-16.78	PK
Horizontal	11490.195	49.80	-8.79	41.01	54	-12.99	AV
Horizontal	17235.028	57.38	-3.18	54.20	68.2	-14.00	PK
Horizontal	17235.028	44.06	-3.18	40.88	54	-13.12	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.181	70.62	-20.42	50.20	74	-23.80	PK
Vertical	4592.181	59.39	-20.42	38.97	54	-15.03	AV
Vertical	11570.143	64.07	-8.86	55.21	68.2	-12.99	PK
Vertical	11570.143	49.54	-8.86	40.68	54	-13.32	AV
Vertical	17355.199	60.00	-2.52	57.48	68.2	-10.72	PK
Vertical	17355.199	44.99	-2.52	42.47	54	-11.53	AV
Horizontal	4592.078	72.68	-20.42	52.26	74	-21.74	PK
Horizontal	4592.078	59.47	-20.42	39.05	54	-14.95	AV
Horizontal	11570.004	64.57	-8.86	55.71	68.2	-12.49	PK
Horizontal	11570.004	50.00	-8.86	41.14	54	-12.86	AV
Horizontal	17355.004	55.35	-2.52	52.83	68.2	-15.37	PK
Horizontal	17355.004	44.78	-2.52	42.26	54	-11.74	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.092	73.02	-18.93	54.09	68.2	-14.11	PK
Vertical	6039.092	59.33	-18.93	40.39	54	-13.61	AV
Vertical	11650.113	60.37	-8.92	51.45	74	-22.55	PK
Vertical	11650.113	49.68	-8.92	40.76	54	-13.24	AV
Vertical	17475.042	58.95	-1.86	57.09	68.2	-11.11	PK
Vertical	17475.042	44.32	-1.86	42.46	54	-11.54	AV
Horizontal	6039.095	72.40	-18.93	53.47	68.2	-14.73	PK
Horizontal	6039.095	59.09	-18.93	40.16	54	-13.84	AV
Horizontal	11650.184	60.66	-8.92	51.74	74	-22.26	PK
Horizontal	11650.184	49.12	-8.92	40.20	54	-13.80	AV
Horizontal	17475.090	56.98	-1.86	55.12	68.2	-13.08	PK
Horizontal	17475.090	44.92	-1.86	43.06	54	-10.94	AV

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

Test Mode:	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	4679.077	70.10	-20.24	49.86	74	-24.14	PK
Vertical	4679.077	59.79	-20.24	39.54	54	-14.46	AV
Vertical	11510.116	62.13	-8.81	53.32	74	-20.68	PK
Vertical	11510.116	49.55	-8.81	40.74	54	-13.26	AV
Vertical	17265.043	59.83	-3.01	56.82	68.2	-11.38	PK
Vertical	17265.043	44.67	-3.01	41.66	54	-12.34	AV
Horizontal	4679.169	70.07	-20.24	49.83	74	-24.17	PK
Horizontal	4679.169	59.09	-20.24	38.84	54	-15.16	AV
Horizontal	11510.017	61.35	-8.81	52.54	74	-21.46	PK
Horizontal	11510.017	49.81	-8.81	41.00	54	-13.00	AV
Horizontal	17265.010	57.41	-3.01	54.40	68.2	-13.80	PK
Horizontal	17265.010	44.81	-3.01	41.80	54	-12.20	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.097	72.14	-18.93	53.21	68.2	-14.99	PK
Vertical	6039.097	59.23	-18.93	40.30	54	-13.70	AV
Vertical	11590.192	63.84	-8.87	54.97	74	-19.03	PK
Vertical	11590.192	49.67	-8.87	40.80	54	-13.20	AV
Vertical	17385.180	57.67	-2.35	55.32	68.2	-12.88	PK
Vertical	17385.180	44.82	-2.35	42.47	54	-11.53	AV
Horizontal	6039.107	70.68	-18.93	51.74	68.2	-16.46	PK
Horizontal	6039.107	59.99	-18.93	41.06	54	-12.94	AV
Horizontal	11590.179	64.06	-8.87	55.19	74	-18.81	PK
Horizontal	11590.179	49.87	-8.87	41.00	54	-13.00	AV
Horizontal	17385.191	56.31	-2.35	53.96	68.2	-14.24	PK
Horizontal	17385.191	44.50	-2.35	42.15	54	-11.85	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	4679.099	72.32	-20.24	52.07	74	-21.93	PK
Vertical	4679.099	60.00	-20.24	39.76	54	-14.24	AV
Vertical	11490.198	64.72	-8.79	55.93	68.2	-12.27	PK
Vertical	11490.198	49.95	-8.79	41.16	54	-12.84	AV
Vertical	17235.060	57.84	-3.18	54.66	68.2	-13.54	PK
Vertical	17235.060	44.34	-3.18	41.16	54	-12.84	AV
Horizontal	4679.135	70.39	-20.24	50.15	74	-23.85	PK
Horizontal	4679.135	59.68	-20.24	39.44	54	-14.56	AV
Horizontal	11490.178	60.81	-8.79	52.02	68.2	-16.18	PK
Horizontal	11490.178	49.07	-8.79	40.28	54	-13.72	AV
Horizontal	17235.098	58.18	-3.18	55.00	68.2	-13.20	PK
Horizontal	17235.098	44.56	-3.18	41.38	54	-12.62	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.019	73.86	-20.42	53.45	74	-20.55	PK
Vertical	4592.019	59.08	-20.42	38.66	54	-15.34	AV
Vertical	11570.003	60.63	-8.86	51.77	68.2	-16.43	PK
Vertical	11570.003	49.64	-8.86	40.78	54	-13.22	AV
Vertical	17355.158	57.73	-2.52	55.21	68.2	-12.99	PK
Vertical	17355.158	44.26	-2.52	41.74	54	-12.26	AV
Horizontal	4592.059	71.69	-20.42	51.27	74	-22.73	PK
Horizontal	4592.059	59.68	-20.42	39.26	54	-14.74	AV
Horizontal	11570.134	64.77	-8.86	55.91	68.2	-12.29	PK
Horizontal	11570.134	49.28	-8.86	40.42	54	-13.58	AV
Horizontal	17355.067	59.13	-2.52	56.61	68.2	-11.59	PK
Horizontal	17355.067	44.98	-2.52	42.46	54	-11.54	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.081	70.31	-18.93	51.37	68.2	-16.83	PK
Vertical	6039.081	59.20	-18.93	40.27	54	-13.73	AV
Vertical	11650.147	63.41	-8.92	54.49	74	-19.51	PK
Vertical	11650.147	49.88	-8.92	40.96	54	-13.04	AV
Vertical	17475.002	59.74	-1.86	57.88	68.2	-10.32	PK
Vertical	17475.002	44.65	-1.86	42.79	54	-11.21	AV
Horizontal	6039.105	71.67	-18.93	52.74	68.2	-15.46	PK
Horizontal	6039.105	59.75	-18.93	40.82	54	-13.18	AV
Horizontal	11650.083	64.92	-8.92	56.00	74	-18.00	PK
Horizontal	11650.083	49.95	-8.92	41.03	54	-12.97	AV
Horizontal	17475.143	56.47	-1.86	54.61	68.2	-13.59	PK
Horizontal	17475.143	44.86	-1.86	43.00	54	-11.00	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	4679.003	73.51	-20.24	53.27	74	-20.73	PK
Vertical	4679.003	59.32	-20.24	39.08	54	-14.92	AV
Vertical	11510.132	64.73	-8.81	55.92	74	-18.08	PK
Vertical	11510.132	49.40	-8.81	40.59	54	-13.41	AV
Vertical	17265.077	59.88	-3.01	56.87	68.2	-11.33	PK
Vertical	17265.077	44.43	-3.01	41.42	54	-12.58	AV
Horizontal	4679.121	73.99	-20.24	53.75	74	-20.25	PK
Horizontal	4679.121	59.09	-20.24	38.84	54	-15.16	AV
Horizontal	11510.029	63.07	-8.81	54.26	74	-19.74	PK
Horizontal	11510.029	49.52	-8.81	40.71	54	-13.29	AV
Horizontal	17265.114	56.55	-3.01	53.54	68.2	-14.66	PK
Horizontal	17265.114	44.29	-3.01	41.28	54	-12.72	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.198	72.41	-18.93	53.48	68.2	-14.72	PK
Vertical	6039.198	59.47	-18.93	40.54	54	-13.46	AV
Vertical	11590.055	62.16	-8.87	53.29	74	-20.71	PK
Vertical	11590.055	49.16	-8.87	40.29	54	-13.71	AV
Vertical	17385.125	56.33	-2.35	53.98	68.2	-14.22	PK
Vertical	17385.125	44.11	-2.35	41.76	54	-12.24	AV
Horizontal	6039.074	73.27	-18.93	54.34	68.2	-13.86	PK
Horizontal	6039.074	59.76	-18.93	40.83	54	-13.17	AV
Horizontal	11590.145	60.80	-8.87	51.93	74	-22.07	PK
Horizontal	11590.145	49.37	-8.87	40.50	54	-13.50	AV
Horizontal	17385.029	59.68	-2.35	57.33	68.2	-10.87	PK
Horizontal	17385.029	44.45	-2.35	42.10	54	-11.90	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.

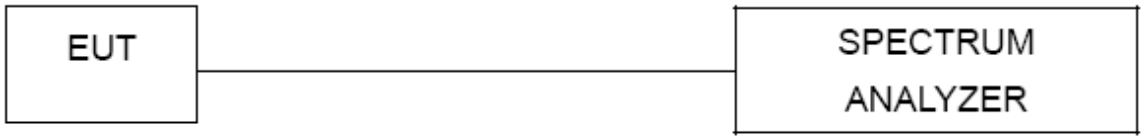
Test Mode :	TX (5.8G) -- 802.11ac 80

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	4679.026	70.03	-20.24	49.79	74	-24.21	PK
Vertical	4679.026	59.72	-20.24	39.48	54	-14.52	AV
Vertical	11550.103	63.48	-8.84	54.64	74	-19.36	PK
Vertical	11550.103	49.98	-8.84	41.14	54	-12.86	AV
Vertical	17325.154	56.49	-2.68	53.81	68.2	-14.39	PK
Vertical	17325.154	44.90	-2.68	42.22	54	-11.78	AV
Horizontal	4679.071	70.09	-20.24	49.85	74	-24.15	PK
Horizontal	4679.071	59.08	-20.24	38.83	54	-15.17	AV
Horizontal	11550.089	61.43	-8.84	52.59	74	-21.41	PK
Horizontal	11550.089	49.12	-8.84	40.28	54	-13.72	AV
Horizontal	17325.165	58.09	-2.68	55.41	68.2	-12.79	PK
Horizontal	17325.165	44.96	-2.68	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.

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 3.91V
Test Mode:	(5180-5240MHz); (5745-5825MHz)		

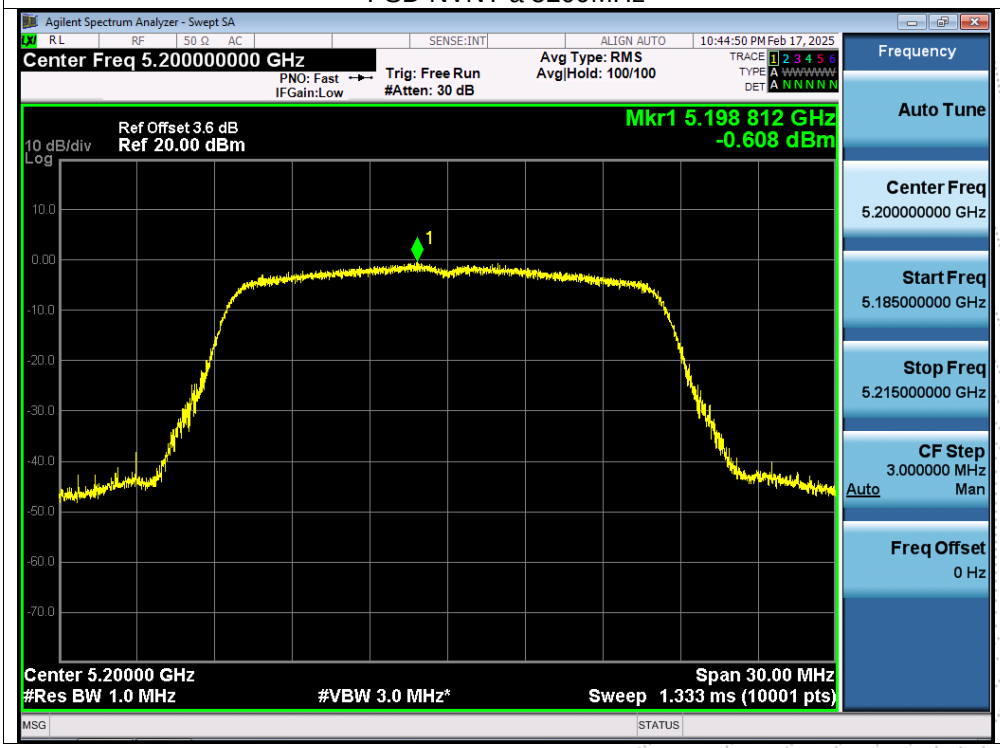
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/1MHz)	Limit (dBm/1MHz)	Verdict
NVNT	a	5180	-0.18	11	Pass
NVNT	a	5200	-0.61	11	Pass
NVNT	a	5240	-2.02	11	Pass
NVNT	n20	5180	-1.33	11	Pass
NVNT	n20	5200	-1.76	11	Pass
NVNT	n20	5240	-3.18	11	Pass
NVNT	n40	5190	-5.6	11	Pass
NVNT	n40	5230	-7.03	11	Pass
NVNT	ac20	5180	-1	11	Pass
NVNT	ac20	5200	-1.79	11	Pass
NVNT	ac20	5240	-3.26	11	Pass
NVNT	ac40	5190	-5.64	11	Pass
NVNT	ac40	5230	-6.8	11	Pass
NVNT	ac80	5210	-10.82	11	Pass

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/510KHz)	Conducted PSD (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
NVNT	a	5745	-3.55	-3.636	30	Pass
NVNT	a	5785	-4.33	-4.416	30	Pass
NVNT	a	5825	-4.98	-5.066	30	Pass
NVNT	n20	5745	-4.99	-5.076	30	Pass
NVNT	n20	5785	-5.88	-5.966	30	Pass
NVNT	n20	5825	-5.96	-6.046	30	Pass
NVNT	n40	5755	-8.77	-8.856	30	Pass
NVNT	n40	5795	-9.66	-9.746	30	Pass
NVNT	ac20	5745	-4.8	-4.886	30	Pass
NVNT	ac20	5785	-5.55	-5.636	30	Pass
NVNT	ac20	5825	-5.86	-5.946	30	Pass
NVNT	ac40	5755	-8.65	-8.736	30	Pass
NVNT	ac40	5795	-9.59	-9.676	30	Pass
NVNT	ac80	5775	-13.45	-13.536	30	Pass
Note: Correction Factor = 10log(500KHz/RBW in measurement) =-0.086						

Test Graphs

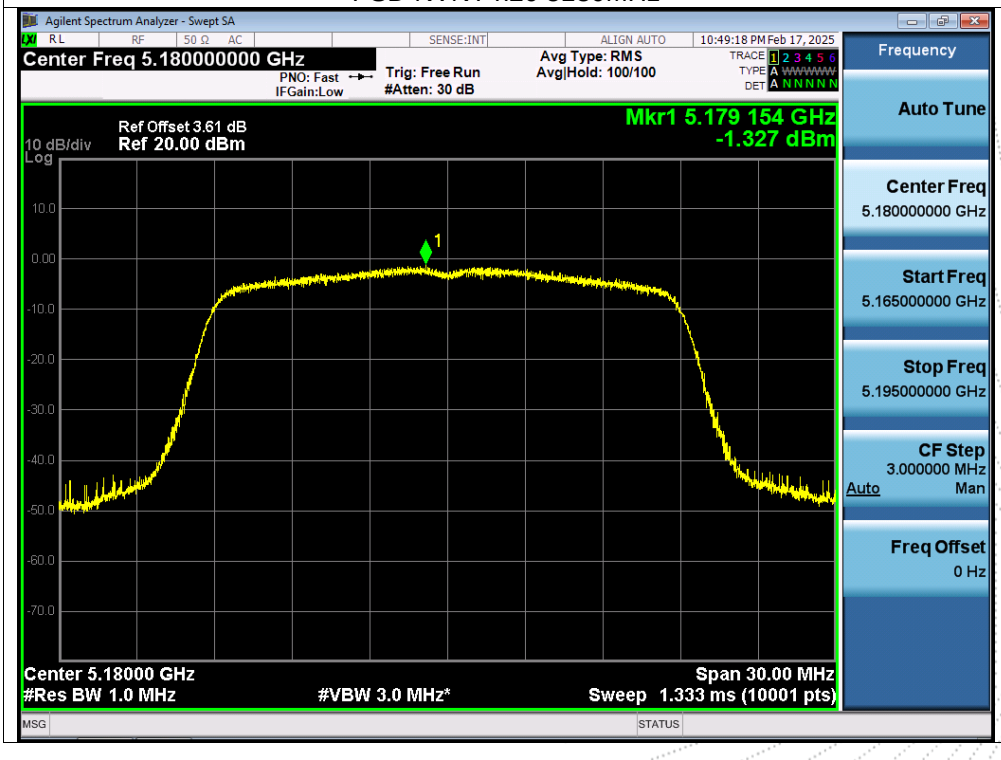
PSD NVNT a 5180MHz

PSD NVNT a 5200MHz

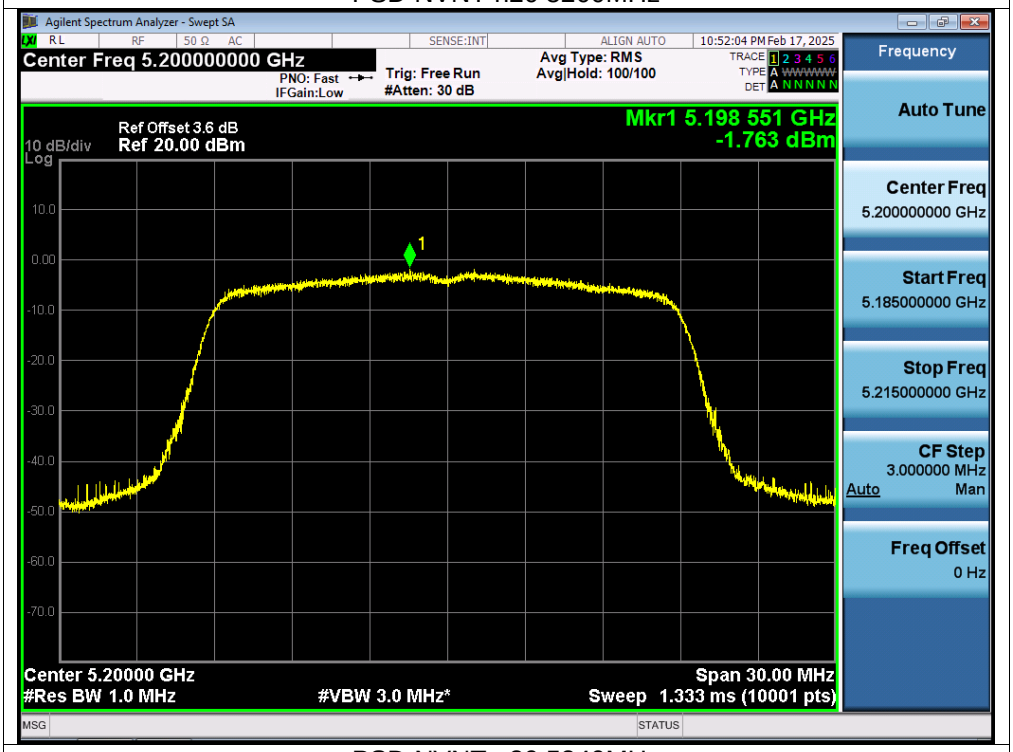


PSD NVNT a 5240MHz

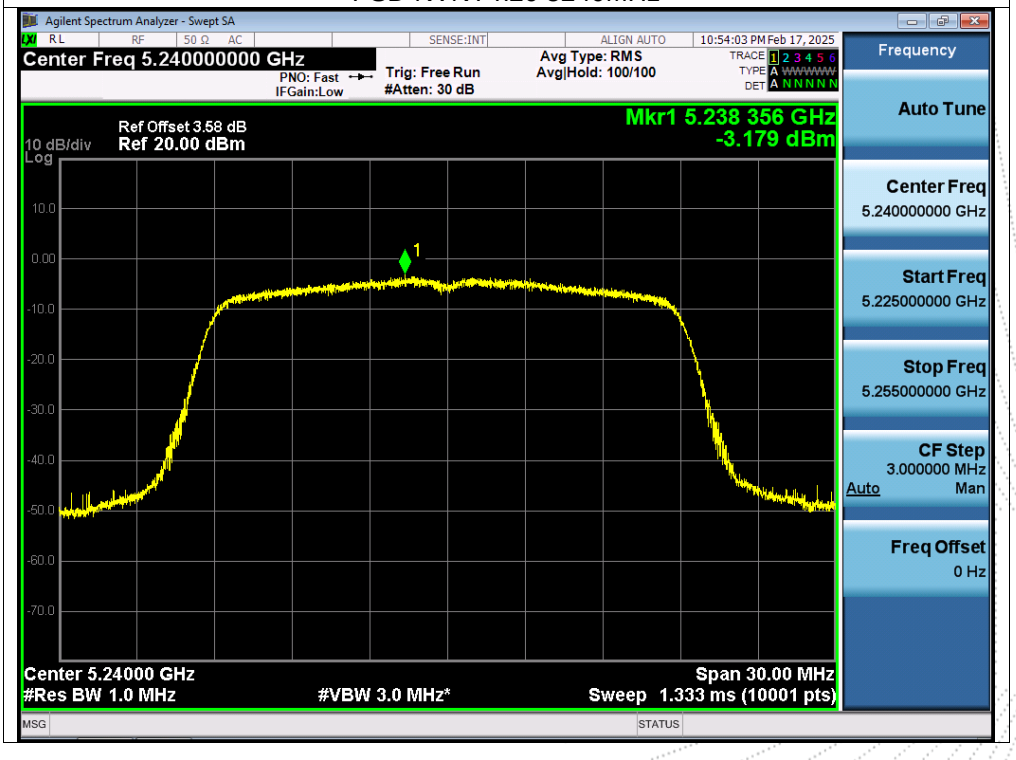
PSD NVNT n20 5180MHz



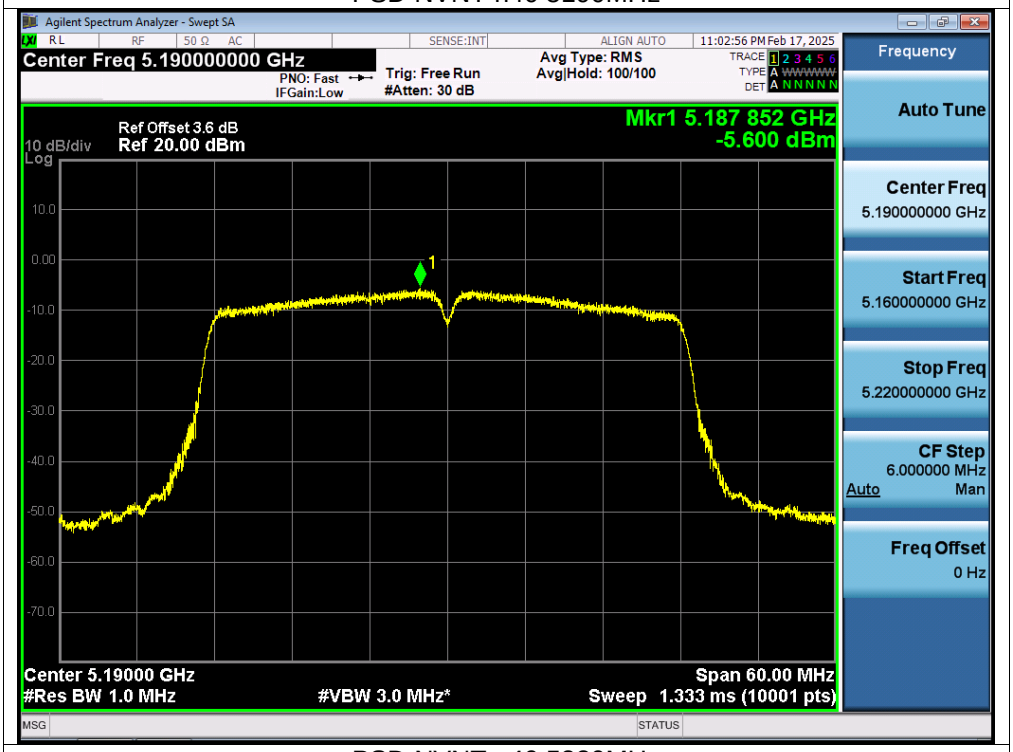
PSD NVNT n20 5200MHz



PSD NVNT n20 5240MHz

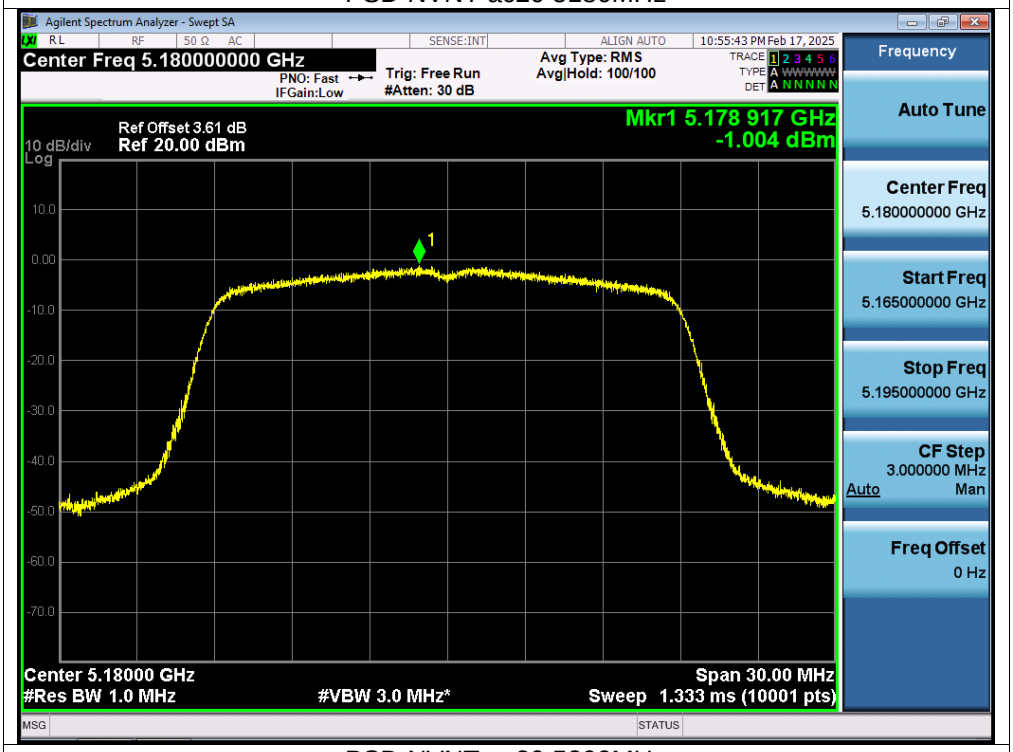


PSD NVNT n40 5190MHz



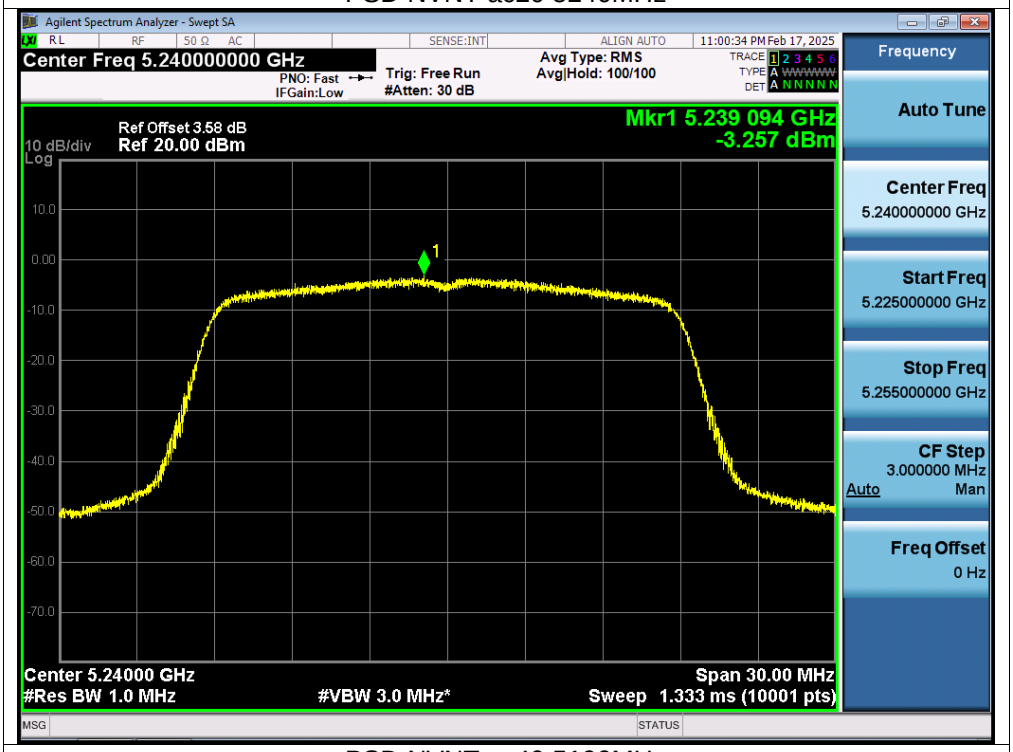
PSD NVNT n40 5230MHz

PSD NVNT ac20 5180MHz



PSD NVNT ac20 5200MHz

PSD NVNT ac20 5240MHz



PSD NVNT ac40 5190MHz

PSD NVNT ac40 5230MHz

PSD NVNT ac80 5210MHz

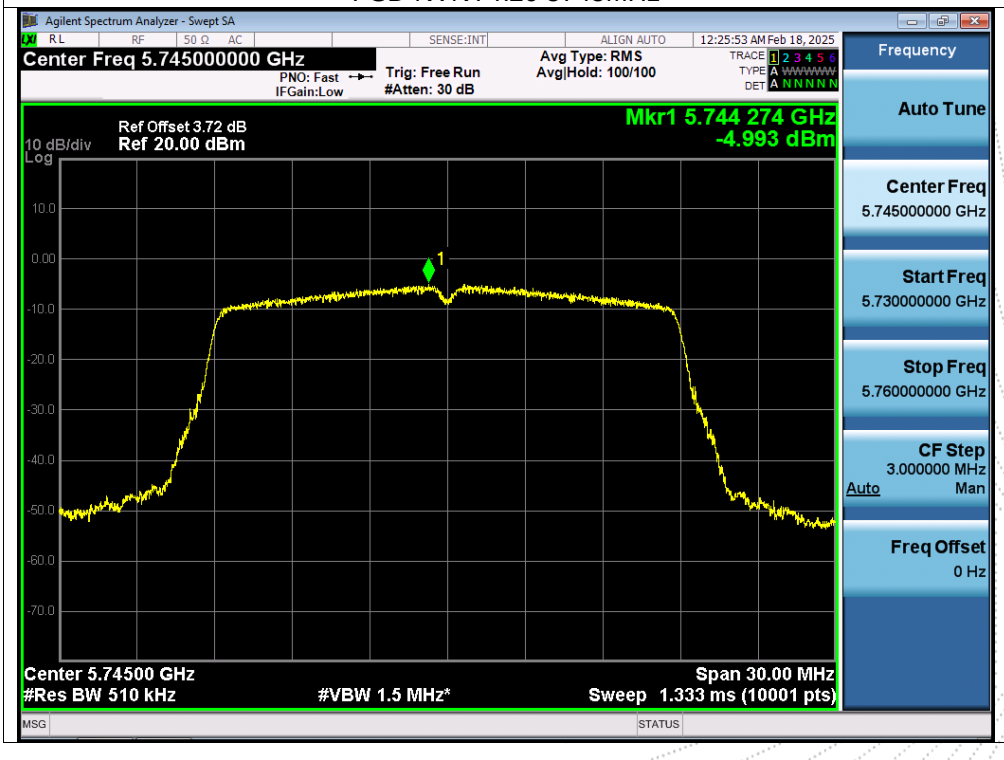
Test Graphs

PSD NVNT a 5745MHz

PSD NVNT a 5785MHz

PSD NVNT a 5825MHz

PSD NVNT n20 5745MHz



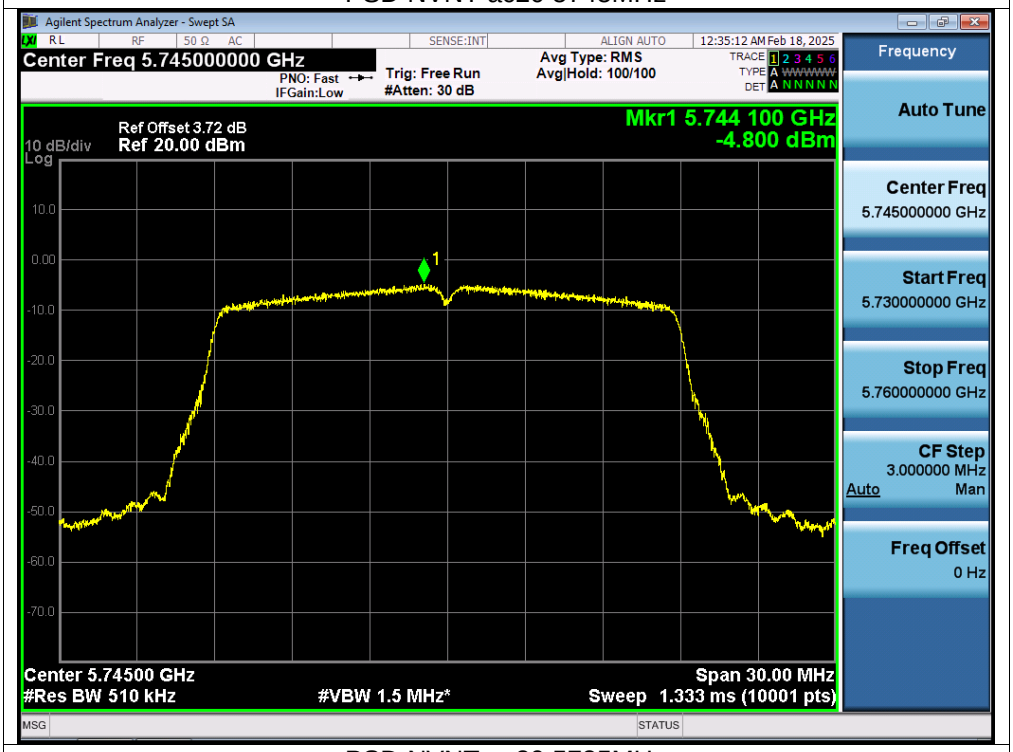
PSD NVNT n20 5785MHz

PSD NVNT n20 5825MHz

PSD NVNT n40 5755MHz

PSD NVNT n40 5795MHz

PSD NVNT ac20 5745MHz



PSD NVNT ac20 5785MHz

PSD NVNT ac20 5825MHz

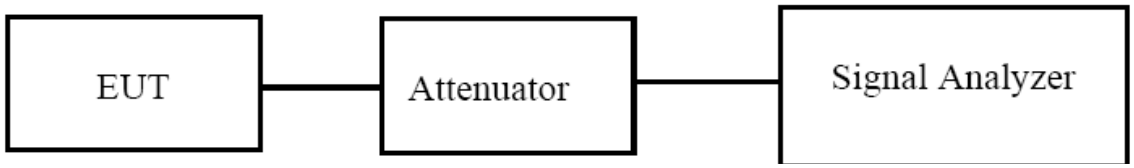
PSD NVNT ac40 5755MHz

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.

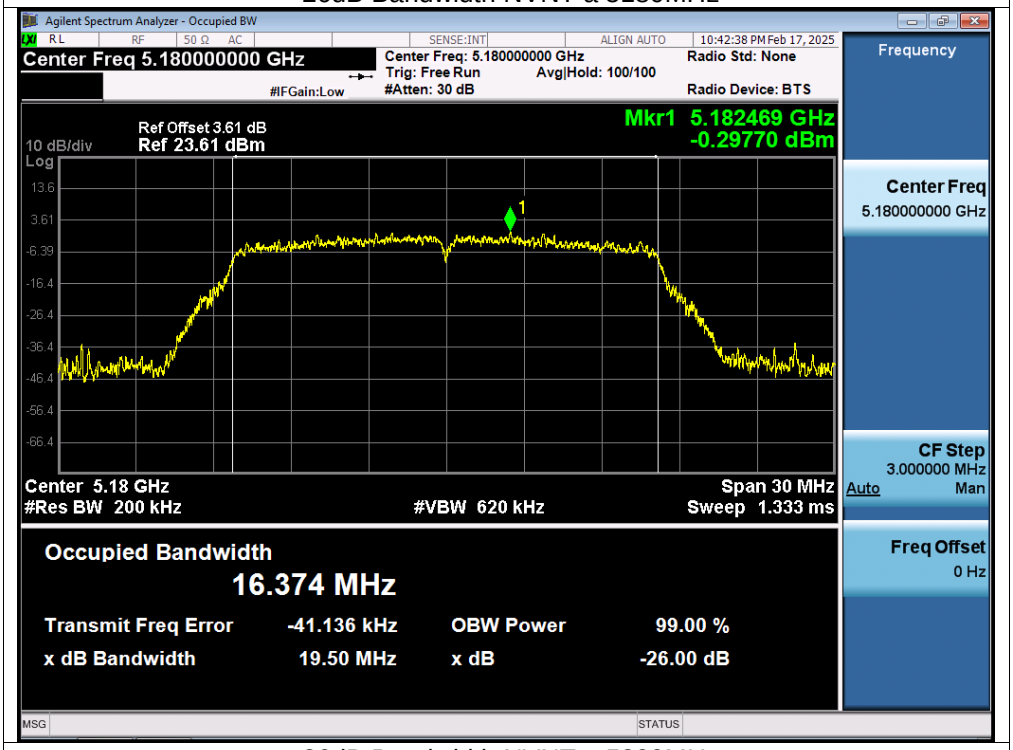
9.5 Test Result

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 3.91V
Test Mode:	TX Frequency U-NII-1 (5180-5240MHz)		

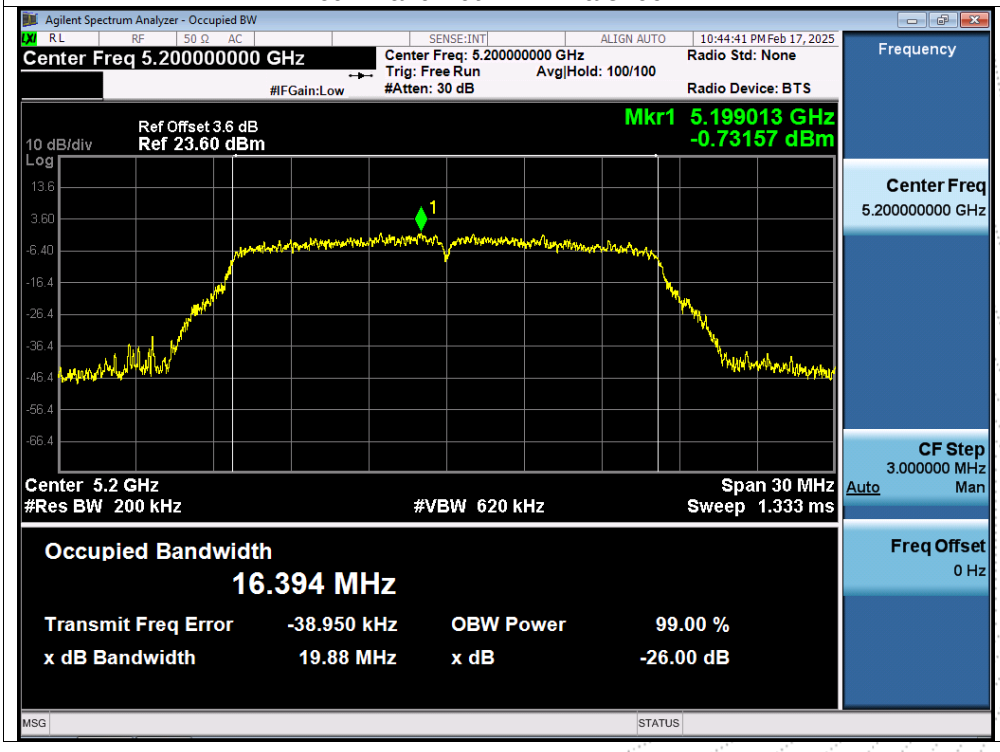
Condition	Mode	Frequency (MHz)	99% bandwidth (MHz)	-26dB bandwidth (MHz)	Result
NVNT	a	5180	16.395	19.496	Pass
NVNT	a	5200	16.385	19.88	Pass
NVNT	a	5240	16.405	19.563	Pass
NVNT	n20	5180	17.541	19.941	Pass
NVNT	n20	5200	17.538	19.782	Pass
NVNT	n20	5240	17.53	20.155	Pass
NVNT	n40	5190	35.96	39.943	Pass
NVNT	n40	5230	35.978	40.119	Pass
NVNT	ac20	5180	17.525	20.018	Pass
NVNT	ac20	5200	17.55	19.772	Pass
NVNT	ac20	5240	17.565	19.889	Pass
NVNT	ac40	5190	35.912	40.373	Pass
NVNT	ac40	5230	35.892	40.202	Pass
NVNT	ac80	5210	75.197	80.262	Pass

Test Graphs

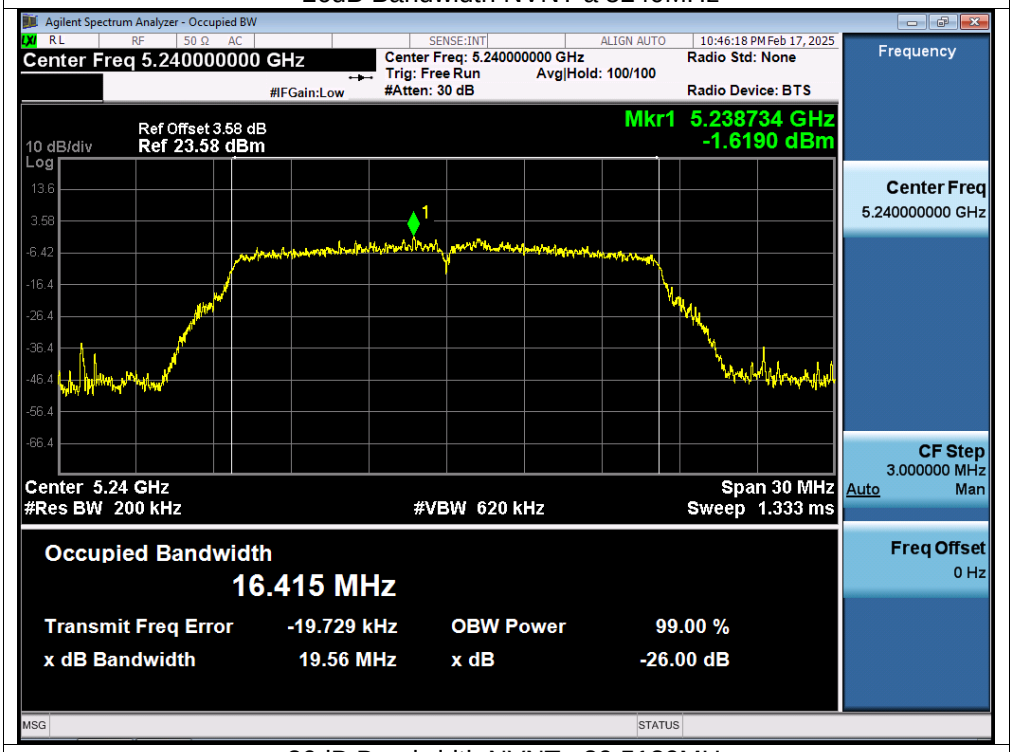
-26dB Bandwidth NVNT a 5180MHz



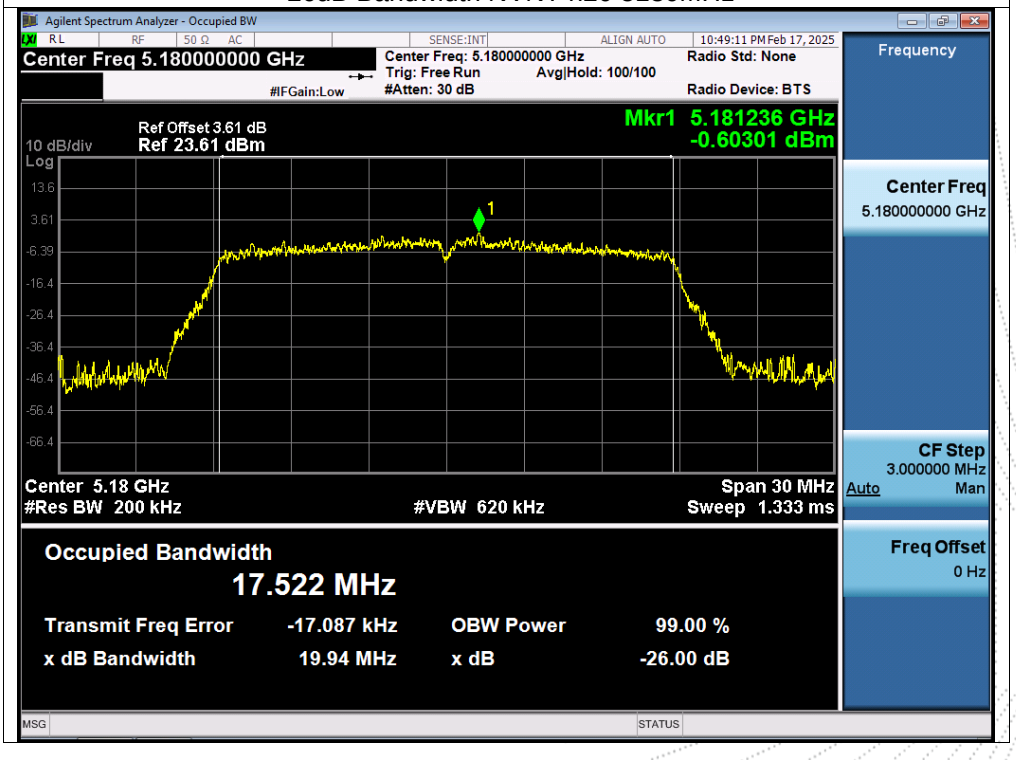
-26dB Bandwidth NVNT a 5200MHz



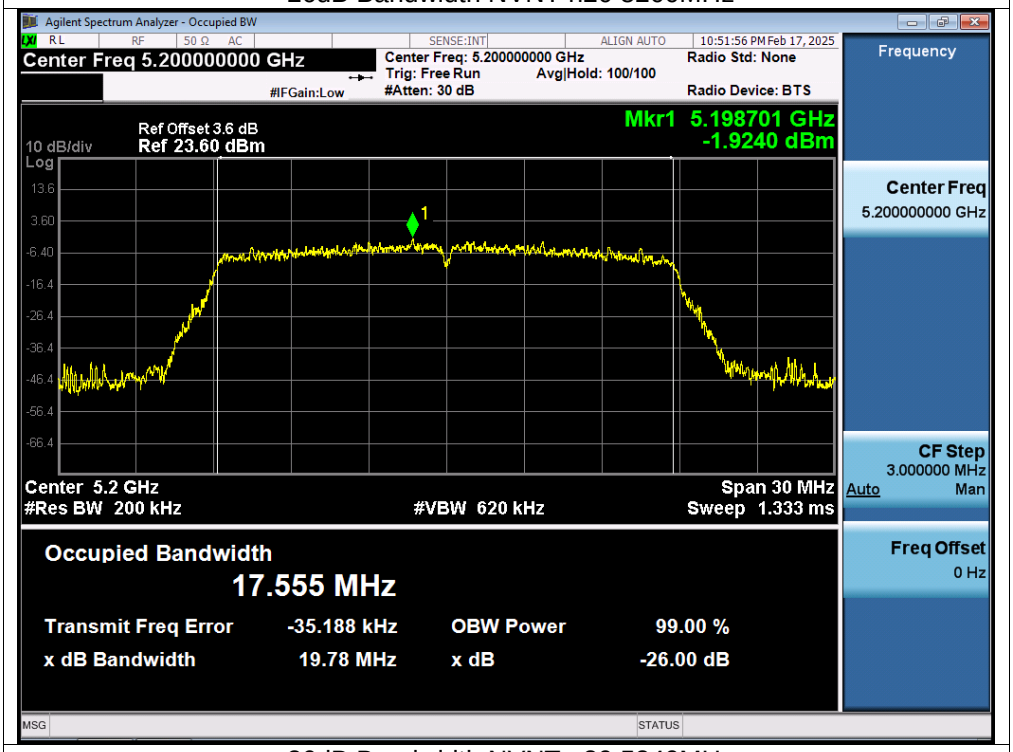
-26dB Bandwidth NVNT a 5240MHz



-26dB Bandwidth NVNT n20 5180MHz



-26dB Bandwidth NVNT n20 5200MHz



-26dB Bandwidth NVNT n20 5240MHz