

TEST REPORT

Report No.: BCTC2507520951-4E

Applicant: Acer India PVT Limited

Product Name: Laptop

Test Model: Aspire 14 AS14H-53

Tested Date: 2025-07-02 to 2025-08-11

Issued Date: 2025-08-11

Shenzhen BCTC Testing Co., Ltd.



FCC ID: 2A94K-AS14H-53

Product Name: Laptop

Trademark: 

Model/Type reference: Aspire 14 AS14H-53

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.

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Sample Received Date: 2025-07-02

Sample tested Date: 2025-07-02 to 2025-08-11

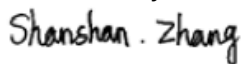
Issue Date: 2025-08-11

Report No.: BCTC2507520951-4E

Test Standards: FCC Part15 15.407
ANSI C63.10-2013
KDB 662911 D01 v02r01
KDB 789033 D02 v02r01

Test Results: PASS

Tested by:



Shanshan. Zhang / Project Handler

Approved by:



Zero Zhou/Reviewer

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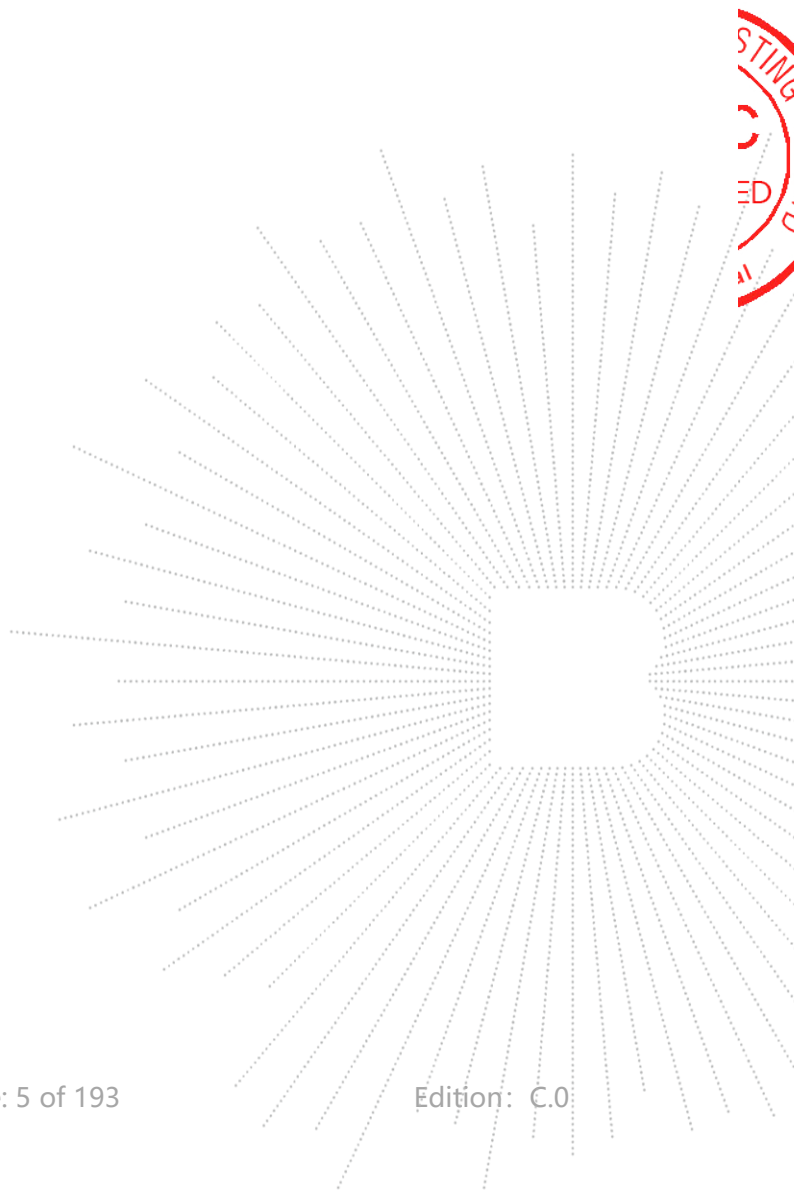
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(Note: N/A Means Not Applicable)

1. Version

Report No.	Issue Date	Description	Approved
BCTC2507520951-4E	2025-08-11	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	Power Spectral Density	U=1.19dB
8	Conducted output power uncertainty Above 1G	U=1.576dB
9	Conducted output power uncertainty below 1G	U=1.28dB
10	Conducted spurious emissions	U=0.55dB
11	Occupied Bandwidth/Frequency Range	U=3.46%
12	humidity uncertainty	U=5.3%
13	Temperature uncertainty	U=0.59℃
14	Frequency Error	U=53.50Hz
15	Frequency Drift	U=0.64kHz

4. Product Information And Test Setup

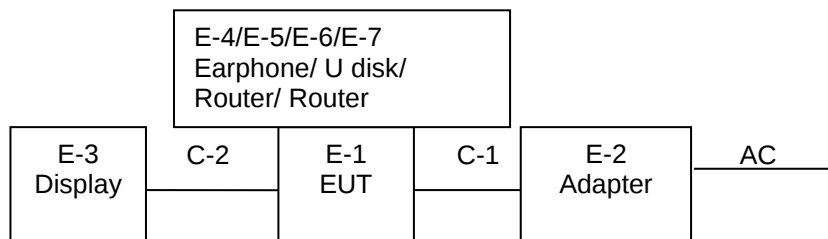
4.1 Product Information

Model/Type Reference:	Aspire 14 AS14H-53
Model Differences:	N/A
Hardware Version:	N/A
Software Version:	N/A
IEEE 802.11 WLAN Mode Supported	802.11a/n/ac/ax(20MHz channel bandwidth) 802.11n/ac/ax(40MHz channel bandwidth) 802.11ac/ax(80MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n/ax(HT20); 5190-5230MHz for 802.11n/ax(HT40); 5210MHz for 802.11 ac/ax80; 5745-5825 MHz for 802.11a/n/ax(HT20); 5755-5795 MHz for 802.11n/ax(HT40); 5775MHz for 802.11 ac/ax80;
Data Rate	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40): MCS0-MCS15; 802.11ac(VHT20): MCS0-MCS8 802.11ac(VHT40/VHT80): MCS0-MCS9 802.11ax (HE 20/HE 40/HE 80): MCS0-MCS11
Type of Modulation:	OFDM with BPSK/QPSK/16QAM/64QAM for 802.11a/n OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11ac OFDMA with BPSK / BPSK_DCM /QPSK /QPSK_DCM /QAM16 /QAM16_DCM /QAM64 /QAM256 /QAM1024 for 802.11ax
Number Of Channel	4 channels for 802.11a/n20/ax20 in the 5180-5240MHz band ; 2 channels for 802.11 n40/ax40 in the 5190-5230MHz band ; 1 channels for 802.11 ac80/ax80 in the 5210MHz band ; 5 channels for 802.11a/n20/ax20 in the 5745-5825MHz band ; 2 channels for 802.11 n40/ax40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80/ax80 in the 5775MHz band
Antenna installation:	Internal antenna*2
Antenna Gain:	WIFI(5.1GHz): Antenna A: 1.57 dBi, Antenna B: 1.82 dBi WIFI(5.8GHz): Antenna A: 2.1 dBi, Antenna B: 2.27 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 19V from adapter or DC 11.4V from battery
Adapter:	MODEL: HKA09019047-6U INPUT: 100-240V~ 50/60Hz, 1.5A OUTPUT: 19V  4.74A 90.06W

4.2 Test Setup Configuration

See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

Conducted Emission and Radiated Spurious Emission:



4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	Laptop		Aspire 14 AS14H-53	---	EUT
E-2	Adapter	---	HKA09019047-6U	---	Auxiliary
E-3	Display	Xiaomi	L43M7-ES	---	Auxiliary
E-4	Earphone	SONY	IER-M7	---	Auxiliary
E-5	U disk	SanDisk	--	---	Auxiliary
E-6	Router	XiaoMi	R4A	---	Auxiliary
E-7	TF card	SanDisk	32G	---	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C-1	---	---	1m	DC cable unshielded
C-2	---	---	0.8m	HDMI cable unshielded

Notes:

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

4.4 Channel List

5.1G

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

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

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

5.8G

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

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

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

4.5 Test Mode

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

Pretest Mode	Description
Mode 1	802.11a / n/ ac 20/ ax 20 CH36/ CH40/ CH 48 802.11a /n/ ac 20/ ax 20 CH149/ CH157/ CH 165
Mode 2	802.11n/ ac40/ ax 40 CH38/ CH 46 802.11n/ ac40/ ax 40 CH 151 / CH 159
Mode 3	802.11 ac80/ ax80 CH 42/CH 155
Mode 4	Link mode (Conducted emission & Radiated emission)

Note:

- (1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
- (2) We're testing antenna A data.
- (3) This product does not support RU mode.

4.6 Table Of Parameters Of Text Software Setting

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

Test software Version	phwfw02372_22.10.0.7tools		
Parameters	DEF	DEF	DEF

4.7 Antenna

5.1G

Antenna	Brand	Model Name	Antenna Type	Gain (dBi)	NOTE
A	N/A	N/A	Internal antenna	1.57	N/A
B	N/A	N/A	Internal antenna	1.82	N/A

1)For power spectral density(PSD) measurements,
 $\text{Array Gain} = 10\log(\text{NANT}/\text{NSS})\text{dB} = 10\log(2/1) = 3.01\text{dB}$,
 So the directional gain for PSD is 4.83 dBi

2)For power measurements,
 The Array gain=0 dB for $\text{NANT} \leq 4$,
 So the directional gain for Power measurements is 1.82 dBi

5.8G

Antenna	Brand	Model Name	Antenna Type	Gain (dBi)	NOTE
A	N/A	N/A	Internal antenna	2.1	N/A
B	N/A	N/A	Internal antenna	2.27	N/A

1)For power spectral density(PSD) measurements,
 $\text{Array Gain} = 10\log(\text{NANT}/\text{NSS})\text{dB} = 10\log(2/1) = 3.01\text{dB}$,
 So the directional gain for PSD is 5.28 dB

2)For power measurements,
 The Array gain=0 dB for $\text{NANT} \leq 4$,
 So the directional gain for Power measurements is 2.27 dBi

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

5. Test Facility And Test Instrument Used

5.1 Test Facility

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

FCC Test Firm Registration Number: 712850

A2LA certificate registration number is: CN1212

ISED Registered No.: 23583

ISED CAB identifier: CN0017

5.2 Test Instrument Used

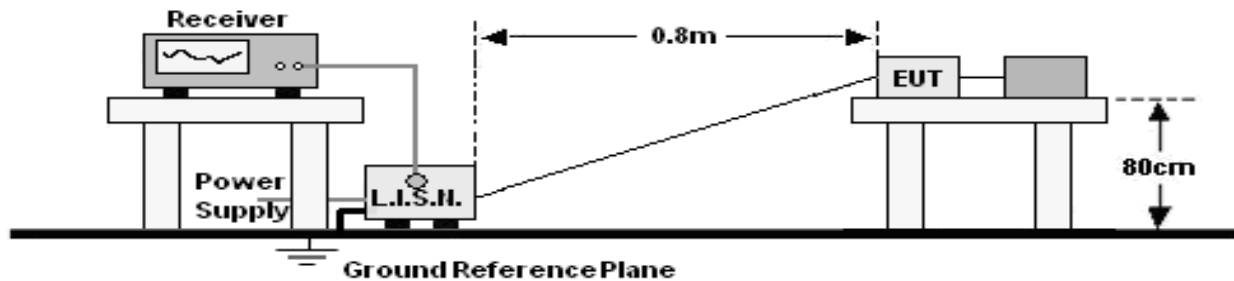
Conducted Emissions Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Receiver	R&S	ESR3	102075	May 08, 2025	May 07, 2026
LISN	R&S	ENV216	101375	May 14, 2025	May 13, 2026
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Pulse limiter	Schwarzbeck	VTSD9561-F	01323	May 14, 2025	May 13, 2026

RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power Meter	Keysight	E4419	\	May 14, 2025	May 13, 2026
Power Sensor (AV)	Keysight	E9300A	\	May 14, 2025	May 13, 2026
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 14, 2025	May 13, 2026
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 14, 2025	May 13, 2026
Radio frequency control box	MAIWEI	MW100-RFC B	\	\	\
Software	MAIWEI	MTS 8310	\	\	\

Radiated Emissions Test (966 Chamber01)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	May 15, 2023	May 14, 2026
Receiver	R&S	ESR3	102075	May 08, 2025	May 07, 2026
Receiver	R&S	ESRP	101154	May 14, 2025	May 13, 2026
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 14, 2025	May 13, 2026
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 24, 2025	May 23, 2026
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 24, 2025	May 23, 2026
Amplifier	SKET	LAPA_01G1 8G-45dB	SK2021040901	May 14, 2025	May 13, 2026
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 24, 2025	May 23, 2026
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 24, 2025	May 23, 2026
Horn Antenna(18G Hz-40GHz)	Schwarzbeck	BBHA9170	00822	May 24, 2025	May 23, 2026
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 14, 2025	May 13, 2026
Software	Frad	EZ-EMC	FA-03A2 RE	\	\

6. Conducted Emissions

6.1 Block Diagram Of Test Setup



6.2 Limit

Frequency (MHz)	Limit (dBuV)	
	Quas-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Notes:

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

6.3 Test Procedure

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

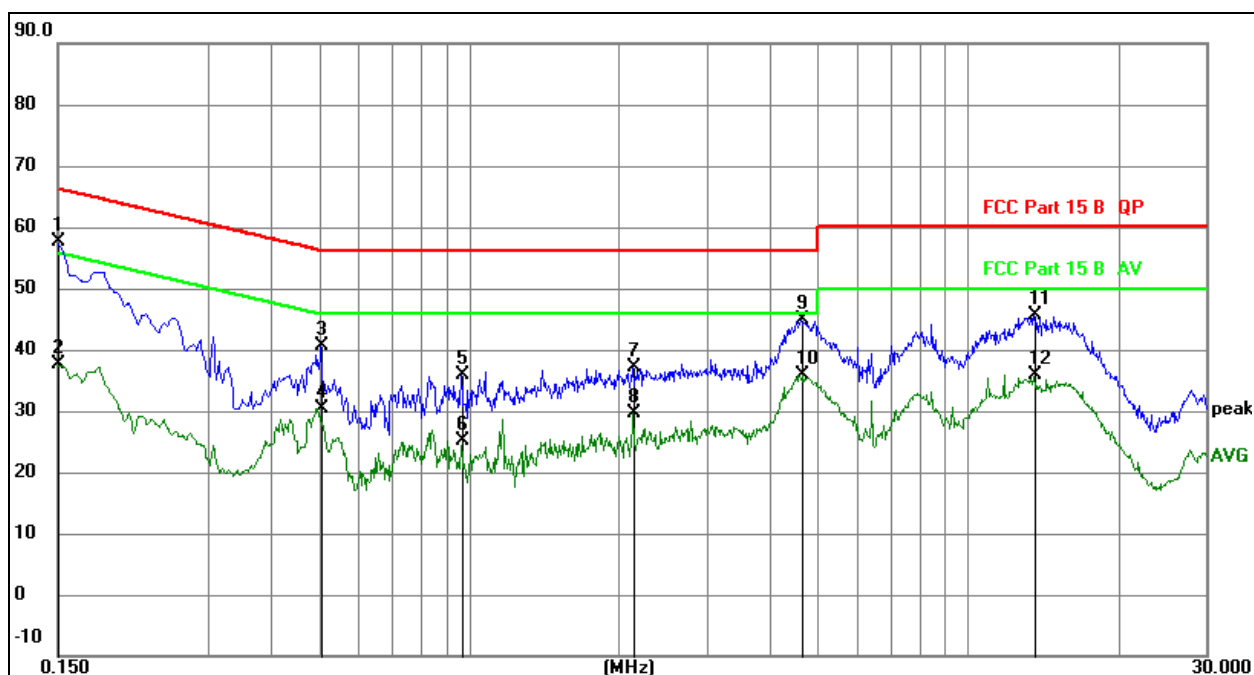
- The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
- The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak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

6.4 EUT Operating Conditions

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

6.5 Test Result

Temperature:	23.1 °C	Relative Humidity:	52%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization:	L



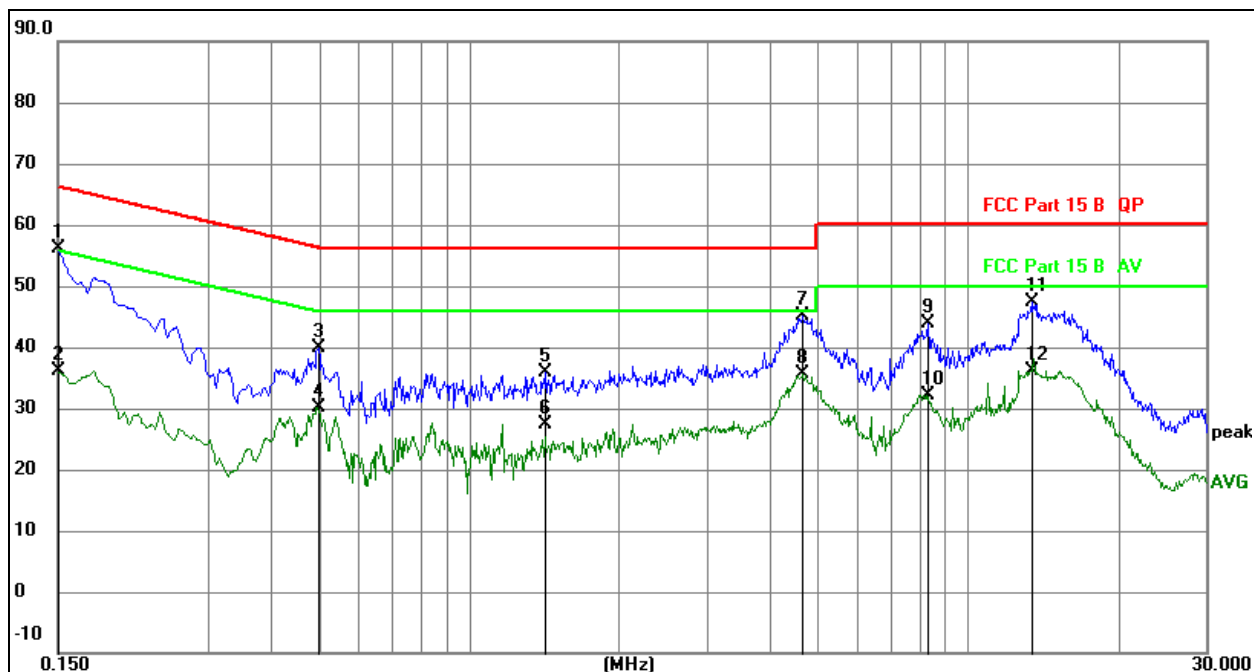
Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz			dBuV	dBuV	dB	Detector
1	*	0.1500	37.61	20.04	57.65	66.00	-8.35	QP
2		0.1500	17.51	20.04	37.55	56.00	-18.45	AVG
3		0.5047	20.66	20.06	40.72	56.00	-15.28	QP
4		0.5047	10.44	20.06	30.50	46.00	-15.50	AVG
5		0.9633	15.72	20.27	35.99	56.00	-20.01	QP
6		0.9633	4.84	20.27	25.11	46.00	-20.89	AVG
7		2.1326	16.99	20.21	37.20	56.00	-18.80	QP
8		2.1326	9.32	20.21	29.53	46.00	-16.47	AVG
9		4.6223	24.16	20.68	44.84	56.00	-11.16	QP
10		4.6223	15.21	20.68	35.89	46.00	-10.11	AVG
11		13.5509	23.54	22.15	45.69	60.00	-14.31	QP
12		13.5509	13.70	22.15	35.85	50.00	-14.15	AVG

STING
ED

Temperature:	23.1 °C	Relative Humidity:	52%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization:	N


Remark:

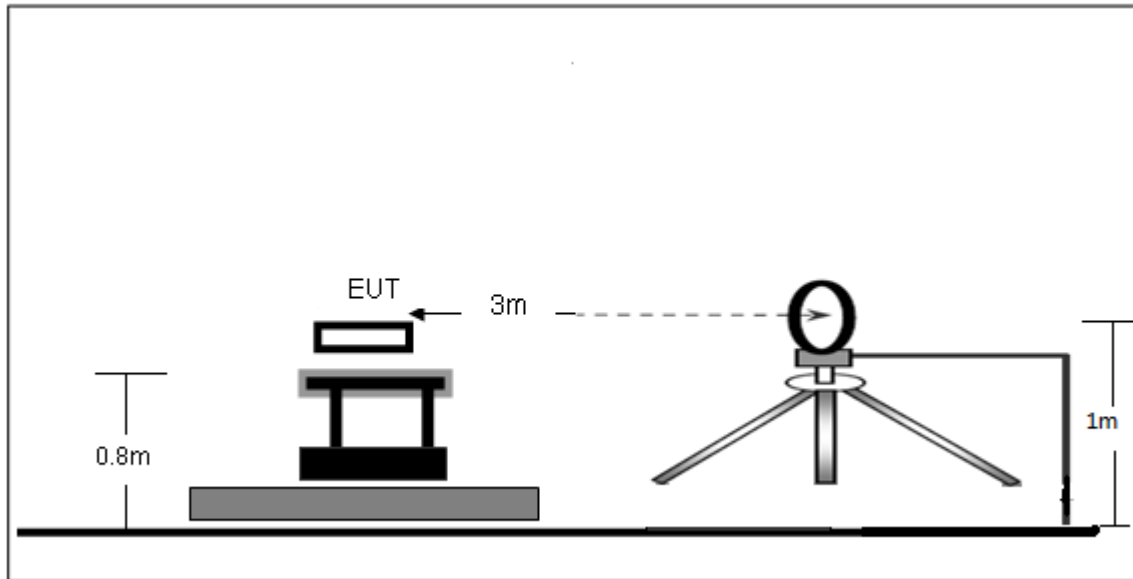
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1	*	0.1500	35.98	20.04	56.02	66.00	-9.98	QP
2		0.1500	16.00	20.04	36.04	56.00	-19.96	AVG
3		0.4993	19.90	20.06	39.96	56.01	-16.05	QP
4		0.4993	9.98	20.06	30.04	46.01	-15.97	AVG
5		1.4256	15.60	20.23	35.83	56.00	-20.17	QP
6		1.4256	7.20	20.23	27.43	46.00	-18.57	AVG
7		4.6715	24.52	20.68	45.20	56.00	-10.80	QP
8		4.6715	14.97	20.68	35.65	46.00	-10.35	AVG
9		8.3228	22.67	21.12	43.79	60.00	-16.21	QP
10		8.3228	11.07	21.12	32.19	50.00	-17.81	AVG
11		13.4080	25.36	22.12	47.48	60.00	-12.52	QP
12		13.4080	13.94	22.12	36.06	50.00	-13.94	AVG

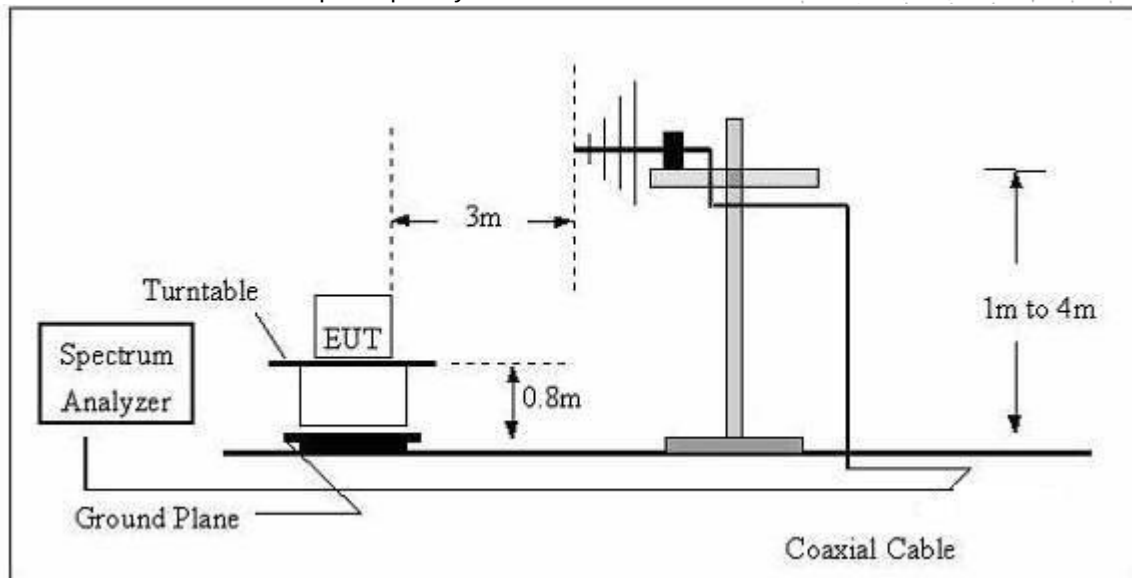
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

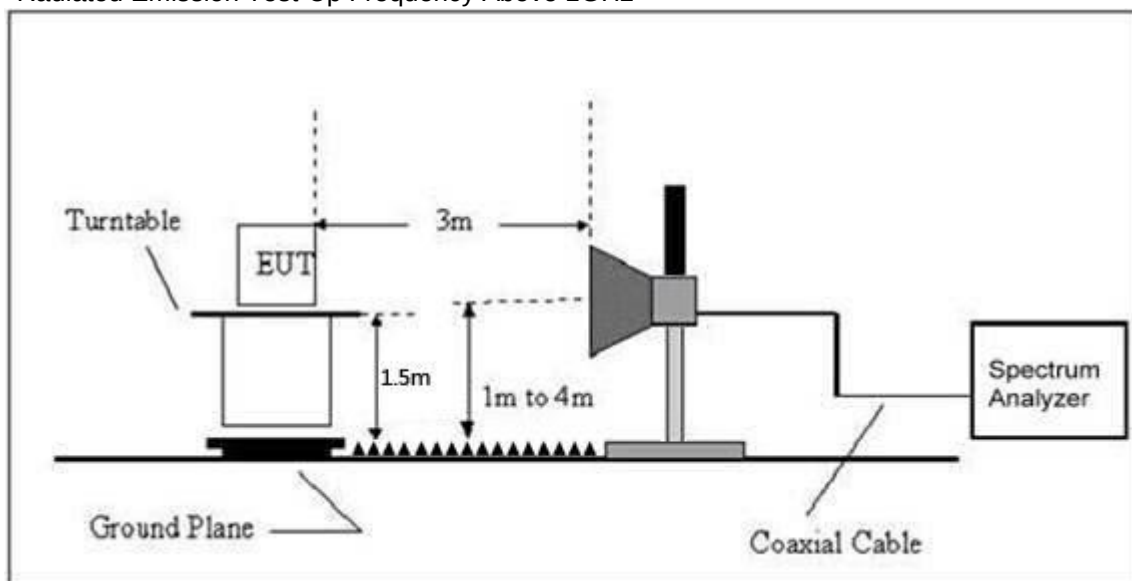
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



7.2 Limit

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

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

Limits Of Radiated Emission Measurement (Above 1000MHz)

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

Notes:

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

7.3 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT.

Use the following spectrum analyzer settings:

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

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

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

Note:

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

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

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

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

7.4 EUT Operating Conditions

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

7.5 Test Result

Below 30MHz

Temperature:	26°C	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz/ DC 11.4V
Test Mode:	Mode 4		

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

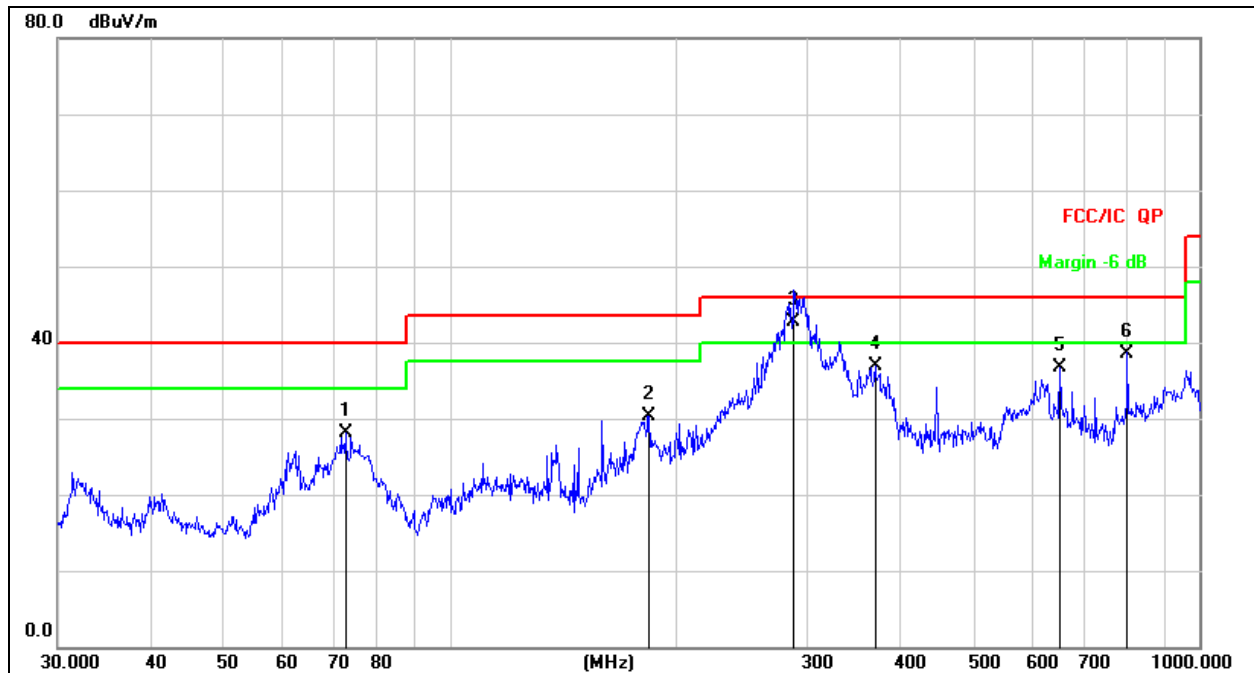
Note:

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

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

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

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

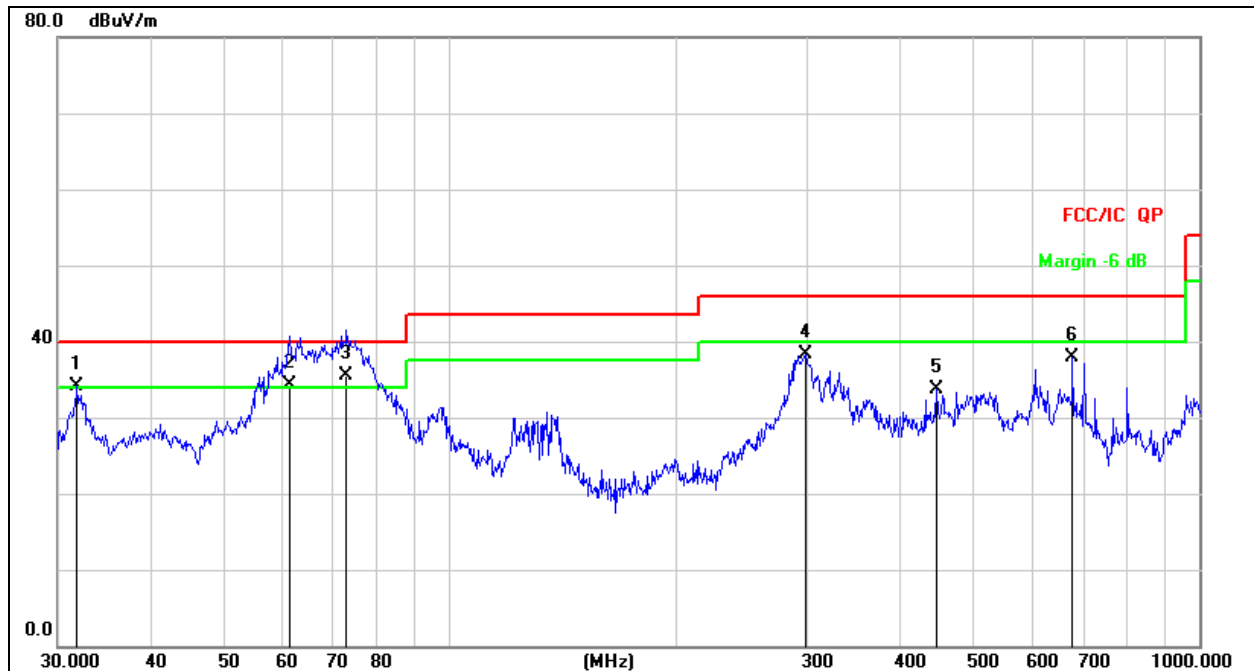


Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		72.5916	44.37	-16.34	28.03	40.00	-11.97	QP
2		184.4898	45.69	-15.39	30.30	43.50	-13.20	QP
3	*	287.9904	54.92	-12.29	42.63	46.00	-3.37	QP
4		369.4047	47.04	-10.20	36.84	46.00	-9.16	QP
5		651.9417	41.92	-5.14	36.78	46.00	-9.22	QP
6		801.7863	41.18	-2.58	38.60	46.00	-7.40	QP

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

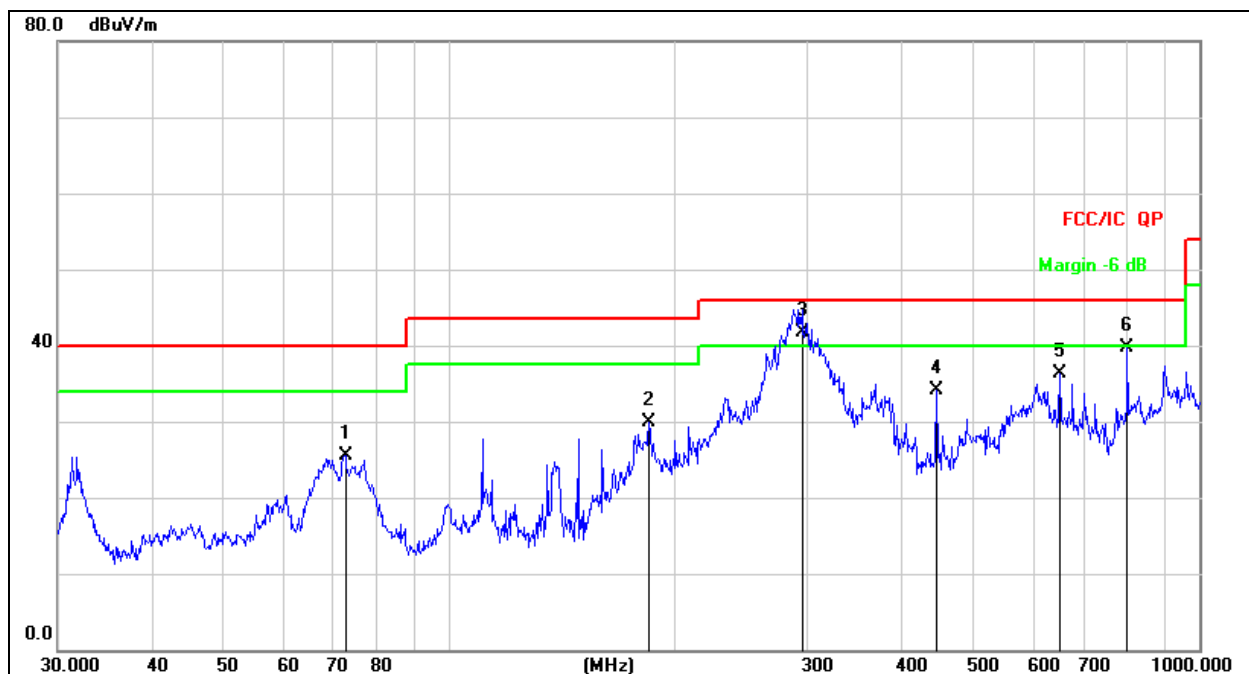


Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	!	31.8427	49.10	-14.99	34.11	40.00	-5.89	QP
2	!	61.1316	49.16	-14.90	34.26	40.00	-5.74	QP
3	*	72.8466	51.88	-16.33	35.55	40.00	-4.45	QP
4		298.2681	50.39	-12.04	38.35	46.00	-7.65	QP
5		446.4141	42.18	-8.47	33.71	46.00	-12.29	QP
6		677.5798	42.92	-5.01	37.91	46.00	-8.09	QP

Temperature:	26 °C	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	DC 11.4V
Test Mode:	Mode 4	Polarization:	Horizontal

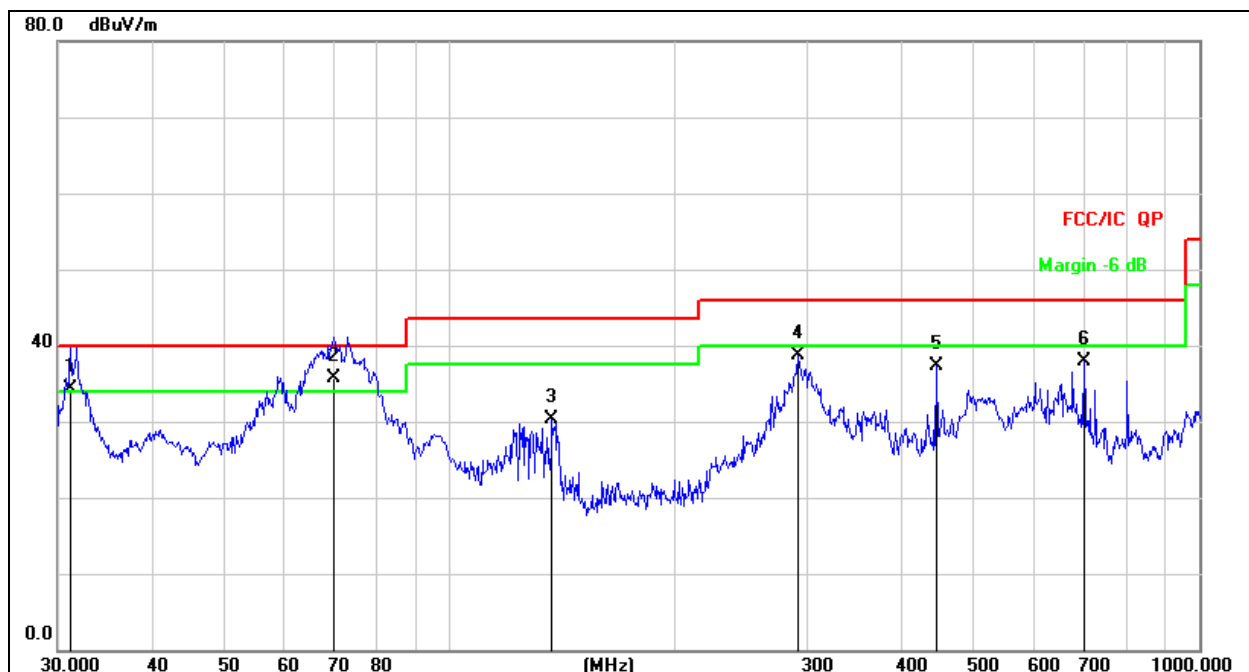


Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dB/m	dB	
1		72.5916	41.85	-16.34	25.51	40.00	-14.49	QP
2		184.4898	45.23	-15.39	29.84	43.50	-13.66	QP
3	*	295.1469	53.89	-12.12	41.77	46.00	-4.23	QP
4		446.4141	42.51	-8.47	34.04	46.00	-11.96	QP
5		651.9417	41.36	-5.14	36.22	46.00	-9.78	QP
6		801.7863	42.29	-2.58	39.71	46.00	-6.29	QP

Temperature:	26 °C	Relative Humidity:	54%RH
Pressure:	101KPa	Test Voltage:	DC 11.4V
Test Mode:	Mode 4	Polarization:	Vertical



Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	!	31.1798	49.28	-15.06	34.22	40.00	-5.78	QP
2	*	70.0902	52.11	-16.49	35.62	40.00	-4.38	QP
3		136.9391	47.24	-16.86	30.38	43.50	-13.12	QP
4		291.0360	50.91	-12.22	38.69	46.00	-7.31	QP
5		446.4141	45.69	-8.47	37.22	46.00	-8.78	QP
6		701.7609	42.70	-4.86	37.84	46.00	-8.16	QP

Between 1GHz – 40GHz

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

Test mode: 802.11a Frequency(MHz): 5180

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)
5150.72	H	65.71	74	48.32	54
5150.33	V	58.74	74	41.58	54

Test mode: 802.11a Frequency(MHz): 5240

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)
5301.35	H	46.53	74	36.68	54
5301.26	V	41.44	74	29.66	54

Note:

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

Test Mode:	TX(5.1G) - 802.11a
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.126	72.41	-20.73	51.68	68.20	-16.52	PK
Vertical	4434.126	59.34	-20.73	38.61	54.00	-15.39	AV
Vertical	10360.153	61.45	-9.36	52.09	68.20	-16.11	PK
Vertical	10360.153	49.93	-9.36	40.57	54.00	-13.43	AV
Vertical	15540.032	62.01	-7.84	54.17	74.00	-19.83	PK
Vertical	15540.032	49.76	-7.84	41.92	54.00	-12.08	AV
Horizontal	4434.130	72.18	-20.73	51.45	68.20	-16.75	PK
Horizontal	4434.130	59.46	-20.73	38.73	54.00	-15.27	AV
Horizontal	10360.159	60.27	-9.36	50.91	68.20	-17.29	PK
Horizontal	10360.159	49.61	-9.36	40.25	54.00	-13.75	AV
Horizontal	15540.158	64.67	-7.84	56.83	74.00	-17.17	PK
Horizontal	15540.158	49.85	-7.84	42.01	54.00	-11.99	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.105	74.75	-20.42	54.33	74.00	-19.67	PK
Vertical	4592.105	59.85	-20.42	39.43	54.00	-14.57	AV
Vertical	10400.050	61.56	-9.30	52.26	68.20	-15.94	PK
Vertical	10400.050	49.59	-9.30	40.29	54.00	-13.71	AV
Vertical	15600.042	63.40	-7.82	55.58	74.00	-18.42	PK
Vertical	15600.042	49.33	-7.82	41.51	54.00	-12.49	AV
Horizontal	4592.100	72.74	-20.42	52.32	74.00	-21.68	PK
Horizontal	4592.100	59.54	-20.42	39.13	54.00	-14.87	AV
Horizontal	10400.060	62.35	-9.30	53.05	68.20	-15.15	PK
Horizontal	10400.060	49.01	-9.30	39.71	54.00	-14.29	AV
Horizontal	15600.152	64.43	-7.82	56.61	74.00	-17.39	PK
Horizontal	15600.152	49.12	-7.82	41.30	54.00	-12.70	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.073	71.70	-20.12	51.58	74.00	-22.42	PK
Vertical	4739.073	59.31	-20.12	39.19	54.00	-14.81	AV
Vertical	10480.156	62.55	-9.18	53.37	68.20	-14.83	PK
Vertical	10480.156	49.32	-9.18	40.14	54.00	-13.86	AV
Vertical	15720.007	60.52	-7.78	52.74	74.00	-21.26	PK
Vertical	15720.007	49.55	-7.78	41.77	54.00	-12.23	AV
Horizontal	4739.097	70.72	-20.12	50.60	74.00	-23.40	PK
Horizontal	4739.097	59.19	-20.12	39.07	54.00	-14.93	AV
Horizontal	10480.012	64.91	-9.18	55.73	68.20	-12.47	PK
Horizontal	10480.012	49.01	-9.18	39.83	54.00	-14.17	AV
Horizontal	15720.177	61.19	-7.78	53.41	74.00	-20.59	PK
Horizontal	15720.177	49.83	-7.78	42.05	54.00	-11.95	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.

The worst case is Antenna A

Test Mode:	TX(5.1G) - 802.11n-HT20
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.178	70.53	-20.73	49.80	68.20	-18.40	PK
Vertical	4434.178	59.90	-20.73	39.17	54.00	-14.83	AV
Vertical	10360.129	64.56	-9.36	55.20	68.20	-13.00	PK
Vertical	10360.129	49.18	-9.36	39.82	54.00	-14.18	AV
Vertical	15540.142	60.98	-7.84	53.14	74.00	-20.86	PK
Vertical	15540.142	49.46	-7.84	41.62	54.00	-12.38	AV
Horizontal	4434.104	70.67	-20.73	49.94	68.20	-18.26	PK
Horizontal	4434.104	59.71	-20.73	38.98	54.00	-15.02	AV
Horizontal	10360.127	61.56	-9.36	52.20	68.20	-16.00	PK
Horizontal	10360.127	49.69	-9.36	40.33	54.00	-13.67	AV
Horizontal	15540.159	60.56	-7.84	52.72	74.00	-21.28	PK
Horizontal	15540.159	49.24	-7.84	41.40	54.00	-12.60	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.043	70.63	-20.42	50.21	74.00	-23.79	PK
Vertical	4592.043	59.93	-20.42	39.52	54.00	-14.48	AV
Vertical	10400.191	62.63	-9.30	53.33	68.20	-14.87	PK
Vertical	10400.191	49.49	-9.30	40.19	54.00	-13.81	AV
Vertical	15600.166	64.88	-7.82	57.06	74.00	-16.94	PK
Vertical	15600.166	49.05	-7.82	41.23	54.00	-12.77	AV
Horizontal	4592.067	74.92	-20.42	54.50	74.00	-19.50	PK
Horizontal	4592.067	59.36	-20.42	38.94	54.00	-15.06	AV
Horizontal	10400.039	61.69	-9.30	52.39	68.20	-15.81	PK
Horizontal	10400.039	49.60	-9.30	40.30	54.00	-13.70	AV
Horizontal	15600.053	63.42	-7.82	55.60	74.00	-18.40	PK
Horizontal	15600.053	49.59	-7.82	41.77	54.00	-12.23	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.147	70.14	-20.12	50.02	74.00	-23.98	PK
Vertical	4739.147	59.37	-20.12	39.25	54.00	-14.75	AV
Vertical	10480.141	62.00	-9.18	52.82	68.20	-15.38	PK
Vertical	10480.141	49.58	-9.18	40.40	54.00	-13.60	AV
Vertical	15720.078	62.48	-7.78	54.70	74.00	-19.30	PK
Vertical	15720.078	49.91	-7.78	42.13	54.00	-11.87	AV
Horizontal	4739.014	74.20	-20.12	54.08	74.00	-19.92	PK
Horizontal	4739.014	59.44	-20.12	39.31	54.00	-14.69	AV
Horizontal	10480.174	61.44	-9.18	52.26	68.20	-15.94	PK
Horizontal	10480.174	49.95	-9.18	40.77	54.00	-13.23	AV
Horizontal	15720.013	61.08	-7.78	53.30	74.00	-20.70	PK
Horizontal	15720.013	49.82	-7.78	42.04	54.00	-11.96	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode:	TX(5.1G) - 802.11n-HT40
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.156	74.25	-20.73	53.52	68.20	-14.68	PK
Vertical	4434.156	59.03	-20.73	38.30	54.00	-15.70	AV
Vertical	10380.121	63.81	-9.33	54.48	68.20	-13.72	PK
Vertical	10380.121	49.18	-9.33	39.85	54.00	-14.15	AV
Vertical	15570.140	63.44	-7.83	55.61	74.00	-18.39	PK
Vertical	15570.140	49.74	-7.83	41.91	54.00	-12.09	AV
Horizontal	4434.052	73.29	-20.73	52.56	74.00	-21.44	PK
Horizontal	4434.052	59.93	-20.73	39.20	54.00	-14.80	AV
Horizontal	10380.042	64.68	-9.33	55.35	68.20	-12.85	PK
Horizontal	10380.042	49.76	-9.33	40.43	54.00	-13.57	AV
Horizontal	15570.097	63.30	-7.83	55.47	74.00	-18.53	PK
Horizontal	15570.097	49.14	-7.83	41.31	54.00	-12.69	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.082	70.54	-20.12	50.41	68.20	-17.79	PK
Vertical	4739.082	59.55	-20.12	39.42	54.00	-14.58	AV
Vertical	10460.023	61.57	-9.21	52.36	68.20	-15.84	PK
Vertical	10460.023	49.73	-9.21	40.52	54.00	-13.48	AV
Vertical	15690.178	62.94	-7.79	55.15	74.00	-18.85	PK
Vertical	15690.178	49.09	-7.79	41.30	54.00	-12.70	AV
Horizontal	4739.184	71.85	-20.12	51.73	68.20	-16.47	PK
Horizontal	4739.184	59.07	-20.12	38.95	54.00	-15.05	AV
Horizontal	10460.108	63.75	-9.21	54.54	68.20	-13.66	PK
Horizontal	10460.108	49.31	-9.21	40.10	54.00	-13.90	AV
Horizontal	15690.051	63.11	-7.79	55.32	74.00	-18.68	PK
Horizontal	15690.051	49.86	-7.79	42.07	54.00	-11.93	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode:	TX(5.1G) - 802.11ac-HT20
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.091	71.83	-20.73	51.10	68.20	-17.10	PK
Vertical	4434.091	59.83	-20.73	39.10	54.00	-14.90	AV
Vertical	10360.062	63.58	-9.36	54.22	68.20	-13.98	PK
Vertical	10360.062	49.82	-9.36	40.46	54.00	-13.54	AV
Vertical	15540.036	61.97	-7.84	54.13	74.00	-19.87	PK
Vertical	15540.036	49.30	-7.84	41.46	54.00	-12.54	AV
Horizontal	4434.198	70.79	-20.73	50.06	68.20	-18.14	PK
Horizontal	4434.198	59.07	-20.73	38.33	54.00	-15.67	AV
Horizontal	10360.078	61.34	-9.36	51.98	68.20	-16.22	PK
Horizontal	10360.078	49.79	-9.36	40.43	54.00	-13.57	AV
Horizontal	15540.077	63.38	-7.84	55.54	74.00	-18.46	PK
Horizontal	15540.077	49.92	-7.84	42.08	54.00	-11.92	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.142	72.68	-20.42	52.27	74.00	-21.73	PK
Vertical	4592.142	59.93	-20.42	39.52	54.00	-14.48	AV
Vertical	10400.166	64.09	-9.30	54.79	68.20	-13.41	PK
Vertical	10400.166	49.60	-9.30	40.30	54.00	-13.70	AV
Vertical	15600.070	64.57	-7.82	56.75	74.00	-17.25	PK
Vertical	15600.070	49.51	-7.82	41.69	54.00	-12.31	AV
Horizontal	4592.183	71.44	-20.42	51.03	74.00	-22.97	PK
Horizontal	4592.183	59.35	-20.42	38.93	54.00	-15.07	AV
Horizontal	10400.106	60.86	-9.30	51.56	68.20	-16.64	PK
Horizontal	10400.106	49.61	-9.30	40.31	54.00	-13.69	AV
Horizontal	15600.193	61.48	-7.82	53.66	74.00	-20.34	PK
Horizontal	15600.193	49.35	-7.82	41.53	54.00	-12.47	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.033	74.25	-20.12	54.13	74.00	-19.87	PK
Vertical	4739.033	59.82	-20.12	39.70	54.00	-14.30	AV
Vertical	10480.059	60.82	-9.18	51.64	68.20	-16.56	PK
Vertical	10480.059	49.50	-9.18	40.32	54.00	-13.68	AV
Vertical	15720.042	63.56	-7.78	55.78	74.00	-18.22	PK
Vertical	15720.042	49.98	-7.78	42.20	54.00	-11.80	AV
Horizontal	4739.124	74.74	-20.12	54.62	74.00	-19.38	PK
Horizontal	4739.124	59.19	-20.12	39.07	54.00	-14.93	AV
Horizontal	10480.123	63.40	-9.18	54.22	68.20	-13.98	PK
Horizontal	10480.123	49.57	-9.18	40.39	54.00	-13.61	AV
Horizontal	15720.196	64.82	-7.78	57.04	74.00	-16.96	PK
Horizontal	15720.196	49.67	-7.78	41.89	54.00	-12.11	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode:	TX(5.1G) - 802.11ac-HT40
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.085	73.03	-20.73	52.30	68.20	-15.90	PK
Vertical	4434.085	59.95	-20.73	39.22	54.00	-14.78	AV
Vertical	10380.104	63.21	-9.33	53.88	68.20	-14.32	PK
Vertical	10380.104	49.87	-9.33	40.54	54.00	-13.46	AV
Vertical	15570.154	64.70	-7.83	56.87	74.00	-17.13	PK
Vertical	15570.154	49.41	-7.83	41.58	54.00	-12.42	AV
Horizontal	4434.181	73.98	-20.73	53.25	74.00	-20.75	PK
Horizontal	4434.181	59.01	-20.73	38.27	54.00	-15.73	AV
Horizontal	10380.072	60.20	-9.33	50.87	68.20	-17.33	PK
Horizontal	10380.072	49.03	-9.33	39.70	54.00	-14.30	AV
Horizontal	15570.067	64.72	-7.83	56.89	74.00	-17.11	PK
Horizontal	15570.067	49.34	-7.83	41.51	54.00	-12.49	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.125	74.99	-20.12	54.87	68.20	-13.33	PK
Vertical	4739.125	59.23	-20.12	39.11	54.00	-14.89	AV
Vertical	10460.195	62.33	-9.21	53.12	68.20	-15.08	PK
Vertical	10460.195	49.88	-9.21	40.67	54.00	-13.33	AV
Vertical	15690.005	62.42	-7.79	54.63	74.00	-19.37	PK
Vertical	15690.005	49.83	-7.79	42.04	54.00	-11.96	AV
Horizontal	4739.089	70.38	-20.12	50.25	68.20	-17.95	PK
Horizontal	4739.089	59.44	-20.12	39.32	54.00	-14.68	AV
Horizontal	10460.134	62.71	-9.21	53.50	68.20	-14.70	PK
Horizontal	10460.134	49.96	-9.21	40.75	54.00	-13.25	AV
Horizontal	15690.059	60.12	-7.79	52.33	74.00	-21.67	PK
Horizontal	15690.059	49.60	-7.79	41.81	54.00	-12.19	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode:	TX(5.1G) - 802.11ac 80
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5210 MHz)-Above 1G							
Vertical	4434.009	72.60	-20.73	51.87	68.20	-16.33	PK
Vertical	4434.009	59.48	-20.73	38.74	54.00	-15.26	AV
Vertical	10420.167	60.96	-9.27	51.69	68.20	-16.51	PK
Vertical	10420.167	49.49	-9.27	40.22	54.00	-13.78	AV
Vertical	15630.142	63.16	-7.81	55.35	74.00	-18.65	PK
Vertical	15630.142	49.68	-7.81	41.87	54.00	-12.13	AV
Horizontal	4434.126	73.27	-20.73	52.54	68.20	-15.66	PK
Horizontal	4434.126	59.30	-20.73	38.56	54.00	-15.44	AV
Horizontal	10420.028	44.81	9.27	54.08	68.20	-14.12	PK
Horizontal	10420.028	29.96	9.27	39.23	54.00	-14.77	AV
Horizontal	15630.157	60.36	-7.81	52.55	74.00	-21.45	PK
Horizontal	15630.157	49.53	-7.81	41.72	54.00	-12.28	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode:	TX(5.1G) - 802.11ax-HT20
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.189	72.44	-20.73	51.71	68.20	-16.49	PK
Vertical	4434.189	59.65	-20.73	38.92	54.00	-15.08	AV
Vertical	10360.082	62.33	-9.36	52.97	68.20	-15.23	PK
Vertical	10360.082	49.31	-9.36	39.95	54.00	-14.05	AV
Vertical	15540.013	61.71	-7.84	53.87	74.00	-20.13	PK
Vertical	15540.013	49.34	-7.84	41.50	54.00	-12.50	AV
Horizontal	4434.034	71.38	-20.73	50.65	68.20	-17.55	PK
Horizontal	4434.034	59.53	-20.73	38.80	54.00	-15.20	AV
Horizontal	10360.070	63.22	-9.36	53.86	68.20	-14.34	PK
Horizontal	10360.070	49.12	-9.36	39.76	54.00	-14.24	AV
Horizontal	15540.077	60.39	-7.84	52.55	74.00	-21.45	PK
Horizontal	15540.077	49.05	-7.84	41.21	54.00	-12.79	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.105	70.31	-20.42	49.90	74.00	-24.10	PK
Vertical	4592.105	59.74	-20.42	39.32	54.00	-14.68	AV
Vertical	10400.059	62.46	-9.30	53.16	68.20	-15.04	PK
Vertical	10400.059	49.05	-9.30	39.75	54.00	-14.25	AV
Vertical	15600.025	64.43	-7.82	56.61	74.00	-17.39	PK
Vertical	15600.025	49.11	-7.82	41.29	54.00	-12.71	AV
Horizontal	4592.076	71.41	-20.42	50.99	74.00	-23.01	PK
Horizontal	4592.076	59.78	-20.42	39.36	54.00	-14.64	AV
Horizontal	10400.163	63.79	-9.30	54.49	68.20	-13.71	PK
Horizontal	10400.163	49.72	-9.30	40.42	54.00	-13.58	AV
Horizontal	15600.015	62.61	-7.82	54.79	74.00	-19.21	PK
Horizontal	15600.015	49.41	-7.82	41.59	54.00	-12.41	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.176	74.68	-20.12	54.55	74.00	-19.45	PK
Vertical	4739.176	59.14	-20.12	39.02	54.00	-14.98	AV
Vertical	10480.058	62.97	-9.18	53.79	68.20	-14.41	PK
Vertical	10480.058	49.13	-9.18	39.95	54.00	-14.05	AV
Vertical	15720.015	64.53	-7.78	56.75	74.00	-17.25	PK
Vertical	15720.015	49.09	-7.78	41.31	54.00	-12.69	AV
Horizontal	4739.164	70.23	-20.12	50.11	74.00	-23.89	PK
Horizontal	4739.164	59.08	-20.12	38.96	54.00	-15.04	AV
Horizontal	10480.079	60.97	-9.18	51.79	68.20	-16.41	PK
Horizontal	10480.079	49.35	-9.18	40.17	54.00	-13.83	AV
Horizontal	15720.002	62.98	-7.78	55.20	74.00	-18.80	PK
Horizontal	15720.002	49.33	-7.78	41.55	54.00	-12.45	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 is MIMO Mode.

Test Mode:	TX(5.1G) - 802.11ax-HT40
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.156	70.58	-20.73	49.85	68.20	-18.35	PK
Vertical	4434.156	59.55	-20.73	38.82	54.00	-15.18	AV
Vertical	10380.006	63.29	-9.33	53.96	68.20	-14.24	PK
Vertical	10380.006	49.02	-9.33	39.69	54.00	-14.31	AV
Vertical	15570.054	60.43	-7.83	52.60	74.00	-21.40	PK
Vertical	15570.054	49.08	-7.83	41.25	54.00	-12.75	AV
Horizontal	4434.061	74.01	-20.73	53.28	74.00	-20.72	PK
Horizontal	4434.061	59.33	-20.73	38.60	54.00	-15.40	AV
Horizontal	10380.001	60.35	-9.33	51.02	68.20	-17.18	PK
Horizontal	10380.001	49.49	-9.33	40.16	54.00	-13.84	AV
Horizontal	15570.042	63.19	-7.83	55.36	74.00	-18.64	PK
Horizontal	15570.042	49.68	-7.83	41.85	54.00	-12.15	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.104	73.24	-20.12	53.12	68.20	-15.08	PK
Vertical	4739.104	59.48	-20.12	39.36	54.00	-14.64	AV
Vertical	10460.042	62.18	-9.21	52.97	68.20	-15.23	PK
Vertical	10460.042	49.47	-9.21	40.26	54.00	-13.74	AV
Vertical	15690.100	64.14	-7.79	56.35	74.00	-17.65	PK
Vertical	15690.100	49.32	-7.79	41.53	54.00	-12.47	AV
Horizontal	4739.118	71.11	-20.12	50.99	68.20	-17.21	PK
Horizontal	4739.118	59.46	-20.12	39.34	54.00	-14.66	AV
Horizontal	10460.074	60.25	-9.21	51.04	68.20	-17.16	PK
Horizontal	10460.074	49.03	-9.21	39.82	54.00	-14.18	AV
Horizontal	15690.026	60.88	-7.79	53.09	74.00	-20.91	PK
Horizontal	15690.026	49.44	-7.79	41.65	54.00	-12.35	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode:	TX(5.1G) - 802.11ax 80
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5210 MHz)-Above 1G							
Vertical	4434.101	73.85	-20.73	53.12	68.20	-15.08	PK
Vertical	4434.101	59.43	-20.73	38.70	54.00	-15.30	AV
Vertical	10420.116	64.64	-9.27	55.37	68.20	-12.83	PK
Vertical	10420.116	49.07	-9.27	39.80	54.00	-14.20	AV
Vertical	15630.143	61.14	-7.81	53.33	74.00	-20.67	PK
Vertical	15630.143	49.90	-7.81	42.09	54.00	-11.91	AV
Horizontal	4434.176	71.80	-20.73	51.07	68.20	-17.13	PK
Horizontal	4434.176	59.08	-20.73	38.35	54.00	-15.65	AV
Horizontal	10420.196	40.51	9.27	49.78	68.20	-18.42	PK
Horizontal	10420.196	29.23	9.27	38.50	54.00	-15.50	AV
Horizontal	15630.165	64.47	-7.81	56.66	74.00	-17.34	PK
Horizontal	15630.165	49.65	-7.81	41.84	54.00	-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 is MIMO Mode.

Test Mode:	TX (5.8G) -- 802.11a
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.029	74.65	-20.24	54.41	74.00	-19.59	PK
Vertical	4679.029	59.48	-20.24	39.24	54.00	-14.76	AV
Vertical	11490.064	60.49	-8.79	51.70	68.20	-16.50	PK
Vertical	11490.064	49.55	-8.79	40.76	54.00	-13.24	AV
Vertical	17235.088	59.96	-3.18	56.78	68.20	-11.42	PK
Vertical	17235.088	44.04	-3.18	40.86	54.00	-13.14	AV
Horizontal	4679.125	73.26	-20.73	52.53	74.00	-21.47	PK
Horizontal	4679.125	59.89	-20.73	39.16	54.00	-14.84	AV
Horizontal	11490.182	62.79	-8.79	54.00	68.20	-14.20	PK
Horizontal	11490.182	49.05	-8.79	40.26	54.00	-13.74	AV
Horizontal	17235.073	56.78	-3.18	53.60	68.20	-14.60	PK
Horizontal	17235.073	44.99	-3.18	41.81	54.00	-12.19	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.144	70.69	-20.42	50.27	74.00	-23.73	PK
Vertical	4592.144	59.32	-20.42	38.91	54.00	-15.09	AV
Vertical	11570.149	62.09	-8.86	53.23	68.20	-14.97	PK
Vertical	11570.149	49.17	-8.86	40.31	54.00	-13.69	AV
Vertical	17355.051	58.60	-2.52	56.08	68.20	-12.12	PK
Vertical	17355.051	44.91	-2.52	42.39	54.00	-11.61	AV
Horizontal	4592.126	70.78	-20.42	50.36	74.00	-23.64	PK
Horizontal	4592.126	59.85	-20.42	39.43	54.00	-14.57	AV
Horizontal	11570.021	63.58	-8.86	54.72	68.20	-13.48	PK
Horizontal	11570.021	49.30	-8.86	40.44	54.00	-13.56	AV
Horizontal	17355.010	59.22	-2.52	56.70	68.20	-11.50	PK
Horizontal	17355.010	44.39	-2.52	41.87	54.00	-12.13	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.142	70.16	-18.93	51.23	68.20	-16.97	PK
Vertical	6039.142	59.61	-18.93	40.68	54.00	-13.32	AV
Vertical	11650.047	62.34	-8.92	53.42	74.00	-20.58	PK
Vertical	11650.047	49.75	-8.92	40.83	54.00	-13.17	AV
Vertical	17475.046	56.92	-1.86	55.06	68.20	-13.14	PK
Vertical	17475.046	44.35	-1.86	42.49	54.00	-11.51	AV
Horizontal	6039.121	73.54	-18.93	54.61	68.20	-13.59	PK
Horizontal	6039.121	59.12	-18.93	40.18	54.00	-13.82	AV
Horizontal	11650.155	60.77	-8.92	51.85	74.00	-22.15	PK
Horizontal	11650.155	49.27	-8.92	40.35	54.00	-13.65	AV
Horizontal	17475.198	59.58	-1.86	57.72	68.20	-10.48	PK
Horizontal	17475.198	44.80	-1.86	42.94	54.00	-11.06	AV

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

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

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

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

The worst case is Antenna A

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

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.164	74.01	-20.24	53.77	74.00	-20.23	PK
Vertical	4679.164	59.90	-20.24	39.66	54.00	-14.34	AV
Vertical	11490.160	63.38	-8.79	54.59	68.20	-13.61	PK
Vertical	11490.160	49.28	-8.79	40.49	54.00	-13.51	AV
Vertical	17235.098	57.98	-3.18	54.80	68.20	-13.40	PK
Vertical	17235.098	44.64	-3.18	41.46	54.00	-12.54	AV
Horizontal	4679.178	74.19	-20.24	53.95	74.00	-20.05	PK
Horizontal	4679.178	59.87	-20.24	39.63	54.00	-14.37	AV
Horizontal	11490.010	64.57	-8.79	55.78	68.20	-12.42	PK
Horizontal	11490.010	49.53	-8.79	40.74	54.00	-13.26	AV
Horizontal	17235.051	59.52	-3.18	56.34	68.20	-11.86	PK
Horizontal	17235.051	44.80	-3.18	41.62	54.00	-12.38	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.178	73.60	-20.42	53.18	74.00	-20.82	PK
Vertical	4592.178	59.79	-20.42	39.37	54.00	-14.63	AV
Vertical	11570.059	63.36	-8.86	54.50	68.20	-13.70	PK
Vertical	11570.059	49.90	-8.86	41.04	54.00	-12.96	AV
Vertical	17355.154	58.18	-2.52	55.66	68.20	-12.54	PK
Vertical	17355.154	44.06	-2.52	41.54	54.00	-12.46	AV
Horizontal	4592.053	74.57	-20.42	54.16	74.00	-19.84	PK
Horizontal	4592.053	59.47	-20.42	39.05	54.00	-14.95	AV
Horizontal	11570.161	64.94	-8.86	56.08	68.20	-12.12	PK
Horizontal	11570.161	49.37	-8.86	40.51	54.00	-13.49	AV
Horizontal	17355.128	59.50	-2.52	56.98	68.20	-11.22	PK
Horizontal	17355.128	44.15	-2.52	41.63	54.00	-12.37	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.064	71.49	-18.93	52.56	68.20	-15.64	PK
Vertical	6039.064	59.59	-18.93	40.66	54.00	-13.34	AV
Vertical	11650.066	61.50	-8.92	52.58	74.00	-21.42	PK
Vertical	11650.066	49.50	-8.92	40.58	54.00	-13.42	AV
Vertical	17475.004	58.09	-1.86	56.23	68.20	-11.97	PK
Vertical	17475.004	44.54	-1.86	42.68	54.00	-11.32	AV
Horizontal	6039.011	72.63	-18.93	53.69	68.20	-14.51	PK
Horizontal	6039.011	59.32	-18.93	40.39	54.00	-13.61	AV
Horizontal	11650.153	60.29	-8.92	51.37	74.00	-22.63	PK
Horizontal	11650.153	49.61	-8.92	40.69	54.00	-13.31	AV
Horizontal	17475.110	58.24	-1.86	56.38	68.20	-11.82	PK
Horizontal	17475.110	44.58	-1.86	42.72	54.00	-11.28	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode:	TX (5.8G) -- 802.11n-HT40
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.169	74.22	-20.24	53.98	74.00	-20.02	PK
Vertical	4679.169	59.41	-20.24	39.16	54.00	-14.84	AV
Vertical	11510.190	61.41	-8.81	52.60	74.00	-21.40	PK
Vertical	11510.190	49.08	-8.81	40.27	54.00	-13.73	AV
Vertical	17265.142	58.49	-3.01	55.48	68.20	-12.72	PK
Vertical	17265.142	44.10	-3.01	41.09	54.00	-12.91	AV
Horizontal	4679.113	71.61	-20.24	51.36	74.00	-22.64	PK
Horizontal	4679.113	59.19	-20.24	38.94	54.00	-15.06	AV
Horizontal	11510.109	60.42	-8.81	51.61	74.00	-22.39	PK
Horizontal	11510.109	49.85	-8.81	41.04	54.00	-12.96	AV
Horizontal	17265.157	59.37	-3.01	56.36	68.20	-11.84	PK
Horizontal	17265.157	44.21	-3.01	41.20	54.00	-12.80	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.035	70.43	-18.93	51.50	68.20	-16.70	PK
Vertical	6039.035	59.18	-18.93	40.24	54.00	-13.76	AV
Vertical	11590.042	64.86	-8.87	55.99	74.00	-18.01	PK
Vertical	11590.042	49.14	-8.87	40.27	54.00	-13.73	AV
Vertical	17385.093	59.86	-2.35	57.51	68.20	-10.69	PK
Vertical	17385.093	44.94	-2.35	42.59	54.00	-11.41	AV
Horizontal	6039.036	72.28	-18.93	53.35	68.20	-14.85	PK
Horizontal	6039.036	59.69	-18.93	40.76	54.00	-13.24	AV
Horizontal	11590.065	63.71	-8.87	54.84	74.00	-19.16	PK
Horizontal	11590.065	49.96	-8.87	41.09	54.00	-12.91	AV
Horizontal	17385.030	59.55	-2.35	57.20	68.20	-11.00	PK
Horizontal	17385.030	44.93	-2.35	42.58	54.00	-11.42	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 is MIMO Mode.

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

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.121	72.44	-20.24	52.20	74.00	-21.80	PK
Vertical	4679.121	59.25	-20.24	39.01	54.00	-14.99	AV
Vertical	11490.178	61.50	-8.79	52.71	68.20	-15.49	PK
Vertical	11490.178	49.46	-8.79	40.67	54.00	-13.33	AV
Vertical	17235.121	58.93	-3.18	55.75	68.20	-12.45	PK
Vertical	17235.121	44.28	-3.18	41.10	54.00	-12.90	AV
Horizontal	4679.016	70.78	-20.24	50.54	74.00	-23.46	PK
Horizontal	4679.016	59.10	-20.24	38.86	54.00	-15.14	AV
Horizontal	11490.144	62.47	-8.79	53.68	68.20	-14.52	PK
Horizontal	11490.144	49.21	-8.79	40.42	54.00	-13.58	AV
Horizontal	17235.096	57.59	-3.18	54.41	68.20	-13.79	PK
Horizontal	17235.096	44.76	-3.18	41.58	54.00	-12.42	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.194	70.02	-20.42	49.60	74.00	-24.40	PK
Vertical	4592.194	59.43	-20.42	39.01	54.00	-14.99	AV
Vertical	11570.087	61.25	-8.86	52.39	68.20	-15.81	PK
Vertical	11570.087	49.69	-8.86	40.83	54.00	-13.17	AV
Vertical	17355.096	56.42	-2.52	53.90	68.20	-14.30	PK
Vertical	17355.096	44.54	-2.52	42.02	54.00	-11.98	AV
Horizontal	4592.093	72.08	-20.42	51.66	74.00	-22.34	PK
Horizontal	4592.093	59.33	-20.42	38.92	54.00	-15.08	AV
Horizontal	11570.119	64.25	-8.86	55.39	68.20	-12.81	PK
Horizontal	11570.119	49.83	-8.86	40.97	54.00	-13.03	AV
Horizontal	17355.182	57.23	-2.52	54.71	68.20	-13.49	PK
Horizontal	17355.182	44.57	-2.52	42.05	54.00	-11.95	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.152	73.06	-18.93	54.12	68.20	-14.08	PK
Vertical	6039.152	59.97	-18.93	41.04	54.00	-12.96	AV
Vertical	11650.054	62.95	-8.92	54.03	74.00	-19.97	PK
Vertical	11650.054	49.01	-8.92	40.09	54.00	-13.91	AV
Vertical	17475.182	56.94	-1.86	55.08	68.20	-13.12	PK
Vertical	17475.182	44.46	-1.86	42.60	54.00	-11.40	AV
Horizontal	6039.082	72.17	-18.93	53.24	68.20	-14.96	PK
Horizontal	6039.082	59.86	-18.93	40.93	54.00	-13.07	AV
Horizontal	11650.021	62.07	-8.92	53.15	74.00	-20.85	PK
Horizontal	11650.021	49.27	-8.92	40.35	54.00	-13.65	AV
Horizontal	17475.022	55.11	-1.86	53.25	68.20	-14.95	PK
Horizontal	17475.022	44.88	-1.86	43.02	54.00	-10.98	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode :	TX (5.8G) -- 802.11ac-HT40
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.144	72.87	-20.24	52.63	74.00	-21.37	PK
Vertical	4679.144	59.55	-20.24	39.31	54.00	-14.69	AV
Vertical	11510.197	63.92	-8.81	55.11	74.00	-18.89	PK
Vertical	11510.197	49.33	-8.81	40.52	54.00	-13.48	AV
Vertical	17265.053	59.15	-3.01	56.14	68.20	-12.06	PK
Vertical	17265.053	44.61	-3.01	41.60	54.00	-12.40	AV
Horizontal	4679.128	71.10	-20.24	50.86	74.00	-23.14	PK
Horizontal	4679.128	59.16	-20.24	38.92	54.00	-15.08	AV
Horizontal	11510.120	62.49	-8.81	53.68	74.00	-20.32	PK
Horizontal	11510.120	49.62	-8.81	40.81	54.00	-13.19	AV
Horizontal	17265.106	55.87	-3.01	52.86	68.20	-15.34	PK
Horizontal	17265.106	44.86	-3.01	41.85	54.00	-12.15	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.177	70.84	-18.93	51.91	68.20	-16.29	PK
Vertical	6039.177	59.95	-18.93	41.02	54.00	-12.98	AV
Vertical	11590.100	64.70	-8.87	55.83	74.00	-18.17	PK
Vertical	11590.100	49.87	-8.87	41.00	54.00	-13.00	AV
Vertical	17385.187	59.87	-2.35	57.52	68.20	-10.68	PK
Vertical	17385.187	44.99	-2.35	42.64	54.00	-11.36	AV
Horizontal	6039.157	72.35	-18.93	53.42	68.20	-14.78	PK
Horizontal	6039.157	59.65	-18.93	40.72	54.00	-13.28	AV
Horizontal	11590.050	61.96	-8.87	53.09	74.00	-20.91	PK
Horizontal	11590.050	49.29	-8.87	40.42	54.00	-13.58	AV
Horizontal	17385.111	55.05	-2.35	52.70	68.20	-15.50	PK
Horizontal	17385.111	44.86	-2.35	42.51	54.00	-11.49	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode :	TX (5.8G) -- 802.11ac 80
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5775 MHz)-Above 1G							
Vertical	4679.032	74.28	-20.24	54.03	74.00	-19.97	PK
Vertical	4679.032	59.67	-20.24	39.43	54.00	-14.57	AV
Vertical	11550.051	61.28	-8.84	52.44	74.00	-21.56	PK
Vertical	11550.051	49.39	-8.84	40.55	54.00	-13.45	AV
Vertical	17325.162	56.86	-2.68	54.18	68.20	-14.02	PK
Vertical	17325.162	44.11	-2.68	41.43	54.00	-12.57	AV
Horizontal	4679.171	71.41	-20.24	51.17	74.00	-22.83	PK
Horizontal	4679.171	59.17	-20.24	38.93	54.00	-15.07	AV
Horizontal	11550.144	62.76	-8.84	53.92	74.00	-20.08	PK
Horizontal	11550.144	49.86	-8.84	41.02	54.00	-12.98	AV
Horizontal	17325.117	56.37	-2.68	53.69	68.20	-14.51	PK
Horizontal	17325.117	44.85	-2.68	42.17	54.00	-11.83	AV

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

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

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

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

Test Mode is MIMO Mode.

CO.LTD

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

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.185	74.07	-20.24	53.82	74.00	-20.18	PK
Vertical	4679.185	59.21	-20.24	38.97	54.00	-15.03	AV
Vertical	11490.053	61.12	-8.79	52.33	68.20	-15.87	PK
Vertical	11490.053	49.08	-8.79	40.29	54.00	-13.71	AV
Vertical	17235.119	56.11	-3.18	52.93	68.20	-15.27	PK
Vertical	17235.119	44.93	-3.18	41.75	54.00	-12.25	AV
Horizontal	4679.077	71.26	-20.24	51.02	74.00	-22.98	PK
Horizontal	4679.077	59.07	-20.24	38.83	54.00	-15.17	AV
Horizontal	11490.095	60.78	-8.79	51.99	68.20	-16.21	PK
Horizontal	11490.095	49.84	-8.79	41.05	54.00	-12.95	AV
Horizontal	17235.191	56.53	-3.18	53.35	68.20	-14.85	PK
Horizontal	17235.191	44.36	-3.18	41.18	54.00	-12.82	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.051	72.94	-20.42	52.52	74.00	-21.48	PK
Vertical	4592.051	59.21	-20.42	38.79	54.00	-15.21	AV
Vertical	11570.034	63.66	-8.86	54.80	68.20	-13.40	PK
Vertical	11570.034	49.22	-8.86	40.36	54.00	-13.64	AV
Vertical	17355.056	55.75	-2.52	53.23	68.20	-14.97	PK
Vertical	17355.056	44.50	-2.52	41.98	54.00	-12.02	AV
Horizontal	4592.104	73.32	-20.42	52.91	74.00	-21.09	PK
Horizontal	4592.104	59.20	-20.42	38.78	54.00	-15.22	AV
Horizontal	11570.095	61.64	-8.86	52.78	68.20	-15.42	PK
Horizontal	11570.095	49.49	-8.86	40.63	54.00	-13.37	AV
Horizontal	17355.154	55.75	-2.52	53.23	68.20	-14.97	PK
Horizontal	17355.154	44.24	-2.52	41.72	54.00	-12.28	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.181	74.95	-18.93	56.01	68.20	-12.19	PK
Vertical	6039.181	59.69	-18.93	40.75	54.00	-13.25	AV
Vertical	11650.154	63.46	-8.92	54.54	74.00	-19.46	PK
Vertical	11650.154	49.53	-8.92	40.61	54.00	-13.39	AV
Vertical	17475.145	59.44	-1.86	57.58	68.20	-10.62	PK
Vertical	17475.145	44.64	-1.86	42.78	54.00	-11.22	AV
Horizontal	6039.171	71.23	-18.93	52.30	68.20	-15.90	PK
Horizontal	6039.171	59.85	-18.93	40.92	54.00	-13.08	AV
Horizontal	11650.063	60.66	-8.92	51.74	74.00	-22.26	PK
Horizontal	11650.063	49.10	-8.92	40.18	54.00	-13.82	AV
Horizontal	17475.155	58.46	-1.86	56.60	68.20	-11.60	PK
Horizontal	17475.155	44.27	-1.86	42.41	54.00	-11.59	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode :	TX (5.8G) -- 802.11ax-HT40
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.005	73.73	-20.24	53.49	74.00	-20.51	PK
Vertical	4679.005	59.83	-20.24	39.58	54.00	-14.42	AV
Vertical	11510.115	64.90	-8.81	56.09	74.00	-17.91	PK
Vertical	11510.115	49.88	-8.81	41.07	54.00	-12.93	AV
Vertical	17265.027	57.44	-3.01	54.43	68.20	-13.77	PK
Vertical	17265.027	44.06	-3.01	41.05	54.00	-12.95	AV
Horizontal	4679.048	74.18	-20.24	53.94	74.00	-20.06	PK
Horizontal	4679.048	59.05	-20.24	38.81	54.00	-15.19	AV
Horizontal	11510.038	64.58	-8.81	55.77	74.00	-18.23	PK
Horizontal	11510.038	49.62	-8.81	40.81	54.00	-13.19	AV
Horizontal	17265.052	55.98	-3.01	52.97	68.20	-15.23	PK
Horizontal	17265.052	44.20	-3.01	41.19	54.00	-12.81	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.105	71.23	-18.93	52.30	68.20	-15.90	PK
Vertical	6039.105	59.18	-18.93	40.24	54.00	-13.76	AV
Vertical	11590.061	62.43	-8.87	53.56	74.00	-20.44	PK
Vertical	11590.061	49.75	-8.87	40.88	54.00	-13.12	AV
Vertical	17385.006	57.84	-2.35	55.49	68.20	-12.71	PK
Vertical	17385.006	44.27	-2.35	41.92	54.00	-12.08	AV
Horizontal	6039.189	72.22	-18.93	53.29	68.20	-14.91	PK
Horizontal	6039.189	59.98	-18.93	41.05	54.00	-12.95	AV
Horizontal	11590.000	64.64	-8.87	55.77	74.00	-18.23	PK
Horizontal	11590.000	49.87	-8.87	41.00	54.00	-13.00	AV
Horizontal	17385.089	57.67	-2.35	55.32	68.20	-12.88	PK
Horizontal	17385.089	44.26	-2.35	41.91	54.00	-12.09	AV

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

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

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

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

Test Mode is MIMO Mode.

Test Mode :	TX (5.8G) -- 802.11ax 80
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5775 MHz)-Above 1G							
Vertical	4679.021	72.59	-20.24	52.35	74.00	-21.65	PK
Vertical	4679.021	59.81	-20.24	39.56	54.00	-14.44	AV
Vertical	11550.070	63.92	-8.84	55.08	74.00	-18.92	PK
Vertical	11550.070	49.54	-8.84	40.70	54.00	-13.30	AV
Vertical	17325.011	59.81	-2.68	57.13	68.20	-11.07	PK
Vertical	17325.011	44.52	-2.68	41.84	54.00	-12.16	AV
Horizontal	4679.024	73.13	-20.24	52.88	74.00	-21.12	PK
Horizontal	4679.024	59.12	-20.24	38.87	54.00	-15.13	AV
Horizontal	11550.075	61.75	-8.84	52.91	74.00	-21.09	PK
Horizontal	11550.075	49.46	-8.84	40.62	54.00	-13.38	AV
Horizontal	17325.144	56.06	-2.68	53.38	68.20	-14.82	PK
Horizontal	17325.144	44.11	-2.68	41.43	54.00	-12.57	AV

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

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

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

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

Test Mode is MIMO Mode.

TC
BC
PPR
Report

8. Power Spectral Density Test

8.1 Block Diagram Of Test Setup



8.2 Limit

For the band 5.15-5.25 GHz,

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

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

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

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

For the band 5.725-5.85 GHz

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

8.3 Test Procedure

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).

b) Set $VBW \geq 3 RBW$.

c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.

e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

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

8.4 EUT Operating Conditions

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

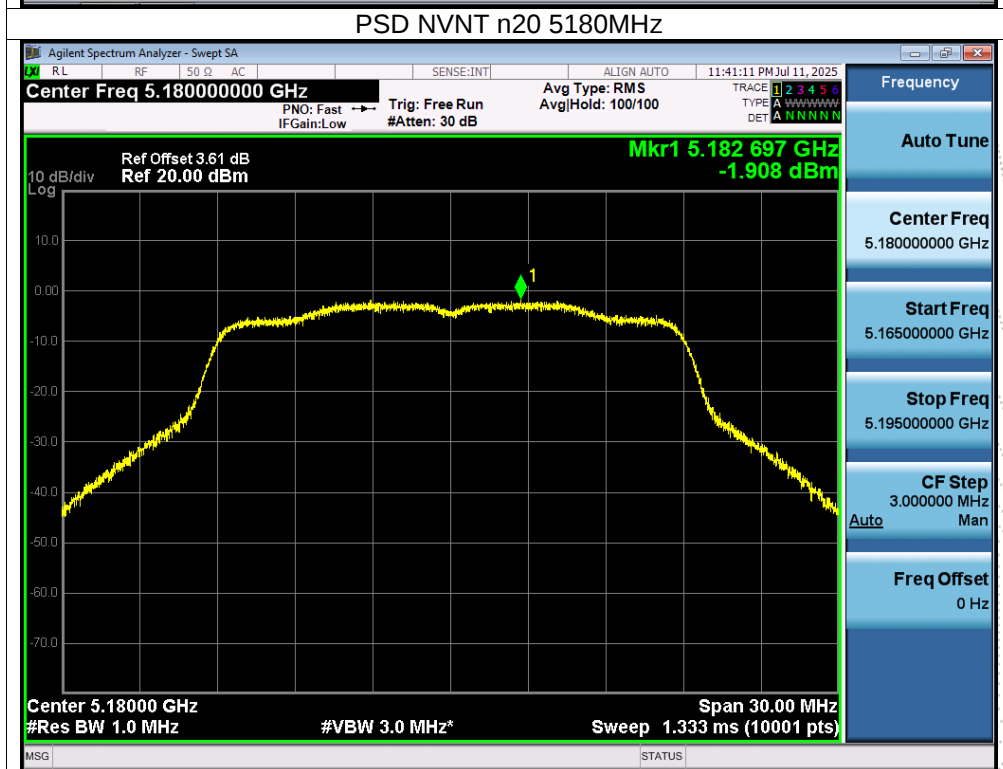
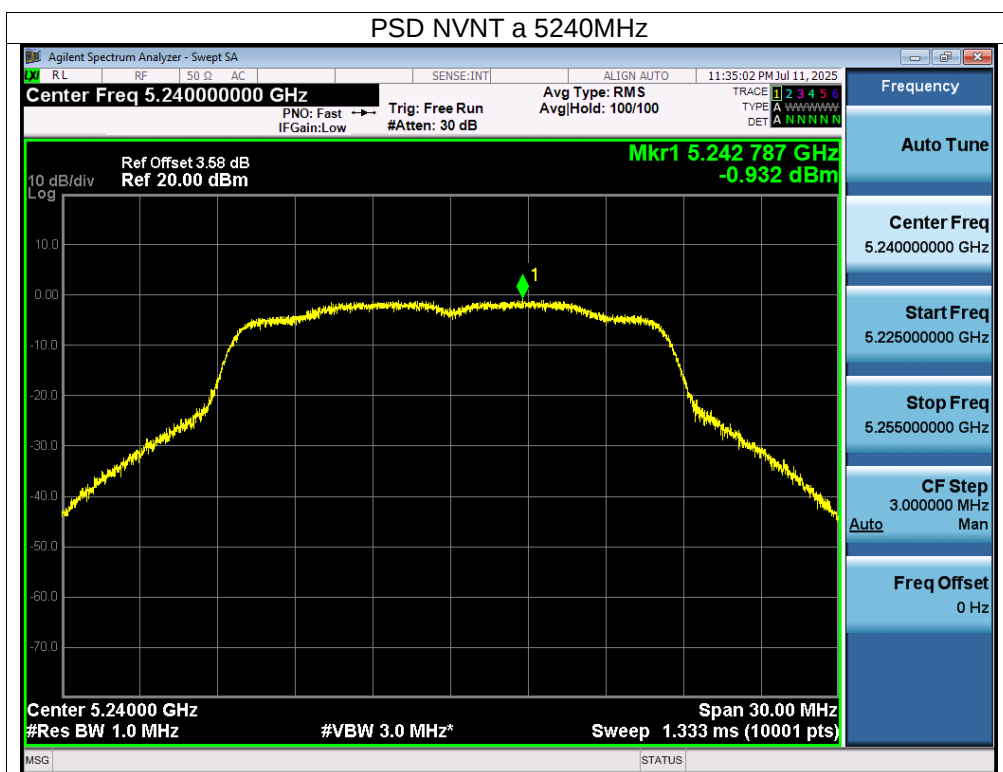
8.5 Test Result

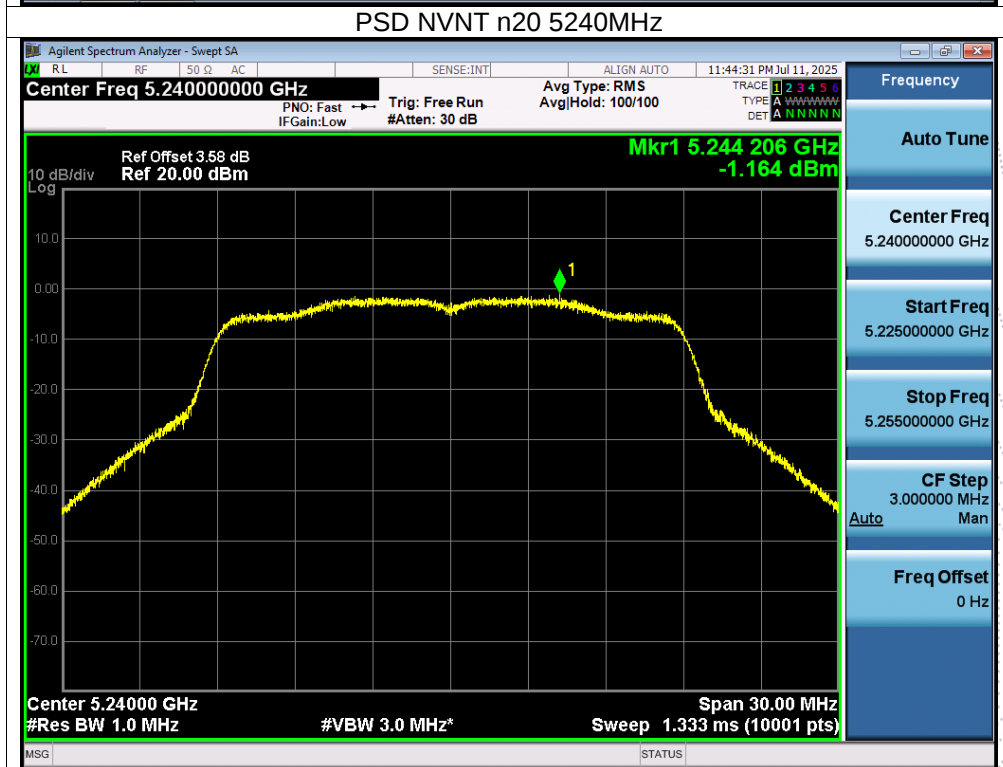
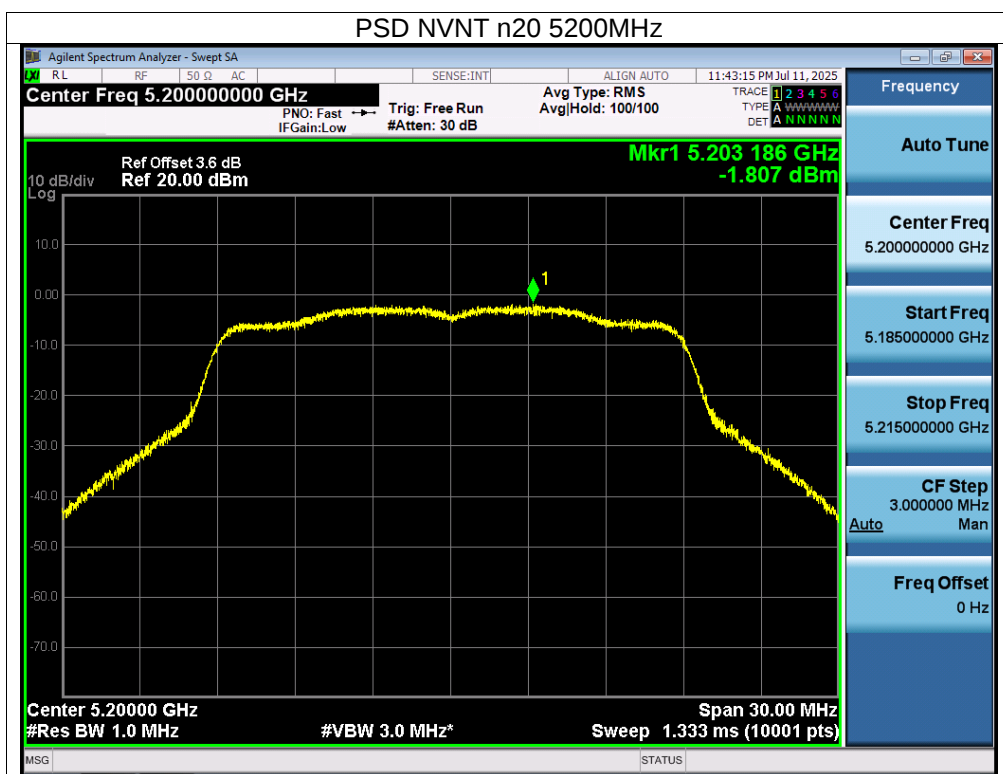
Temperature:	26 °C	Relative Humidity:	54%RH
Pressure:	101kPa	Test Voltage:	DC 11.4V
Test Mode:	TX Frequency U-NII-1 (5180-5240MHz)		

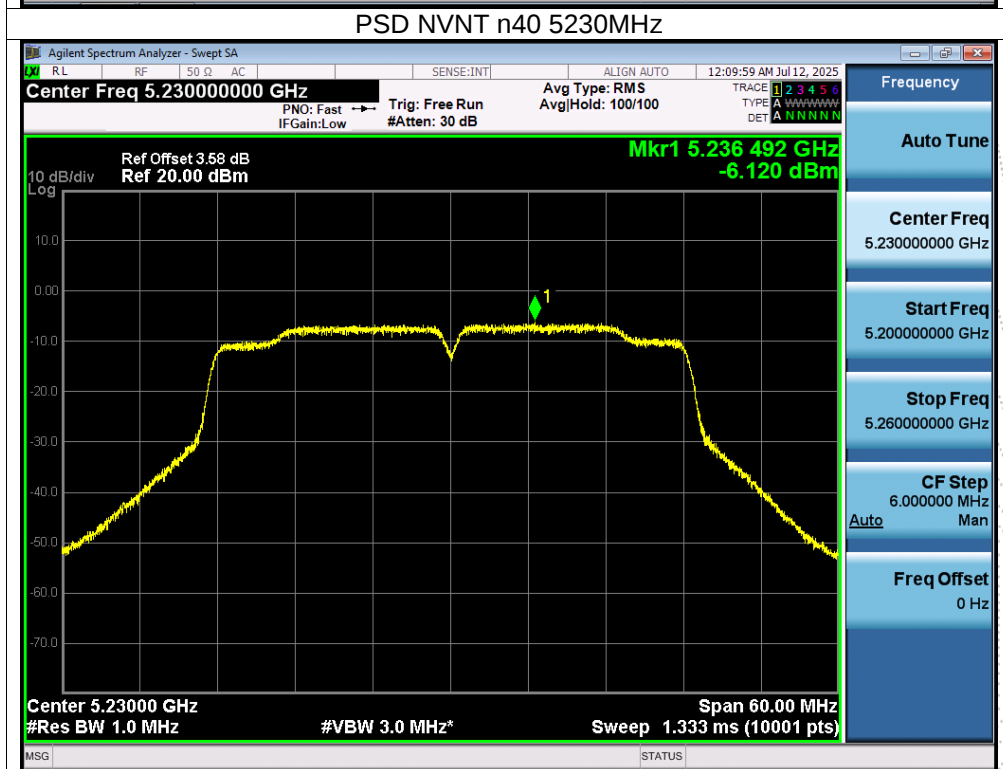
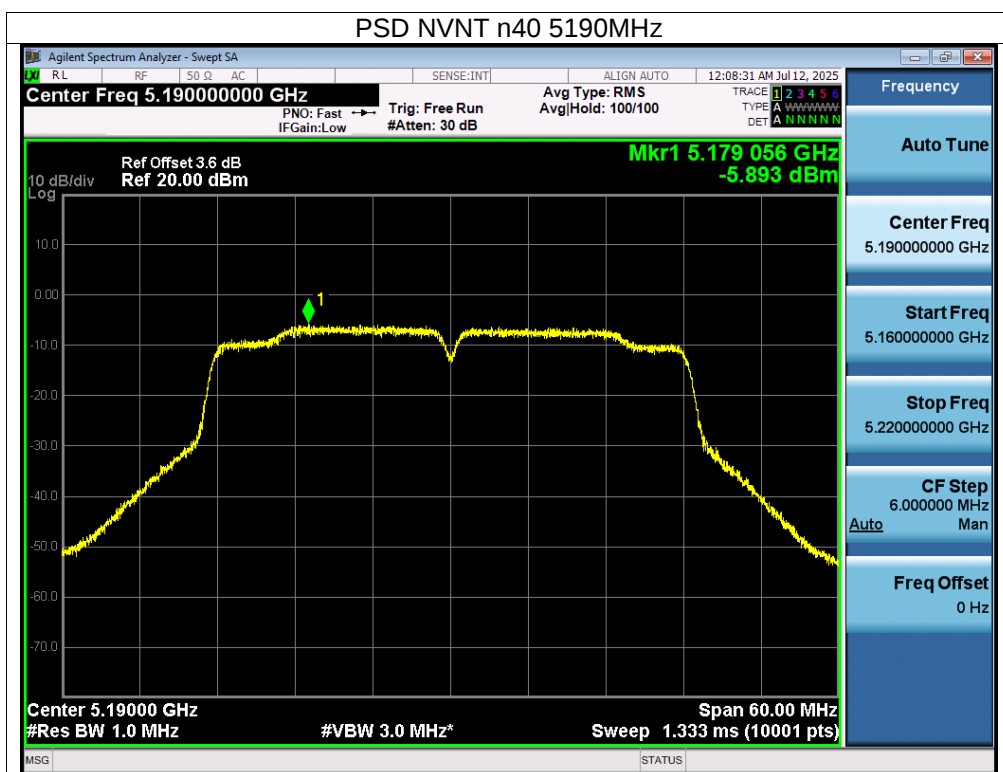
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)			Limit (dBm/MHz)	Result
			ANT A	ANT B	Total		
NVNT	a	5180	-0.74	-2.40	/	11	PASS
NVNT	a	5200	-1.12	-2.43	/	11	PASS
NVNT	a	5240	-0.93	-3.33	/	11	PASS
NVNT	n20	5180	-1.91	-3.41	0.41	11	PASS
NVNT	n20	5200	-1.81	-3.70	0.36	11	PASS
NVNT	n20	5240	-1.16	-4.68	0.44	11	PASS
NVNT	n40	5190	-5.89	-8.05	-3.83	11	PASS
NVNT	n40	5230	-6.12	-9.03	-4.33	11	PASS
NVNT	ac20	5180	-2.02	-3.48	0.32	11	PASS
NVNT	ac20	5200	-2.46	-3.74	-0.04	11	PASS
NVNT	ac20	5240	-1.74	-4.59	0.08	11	PASS
NVNT	ac40	5190	-6.16	-8.02	-3.98	11	PASS
NVNT	ac40	5230	-6.28	-8.94	-4.40	11	PASS
NVNT	ac80	5210	-10.95	-13.21	-8.92	11	PASS
NVNT	ax20	5180	-1.32	-3.93	0.58	11	PASS
NVNT	ax20	5200	-2.03	-4.08	0.08	11	PASS
NVNT	ax20	5240	-2.02	-5.08	-0.28	11	PASS
NVNT	ax40	5190	-5.69	-8.83	-3.97	11	PASS
NVNT	ax40	5230	-6.59	-9.22	-4.70	11	PASS
NVNT	ax80	5210	-11.26	-13.80	-9.34	11	PASS

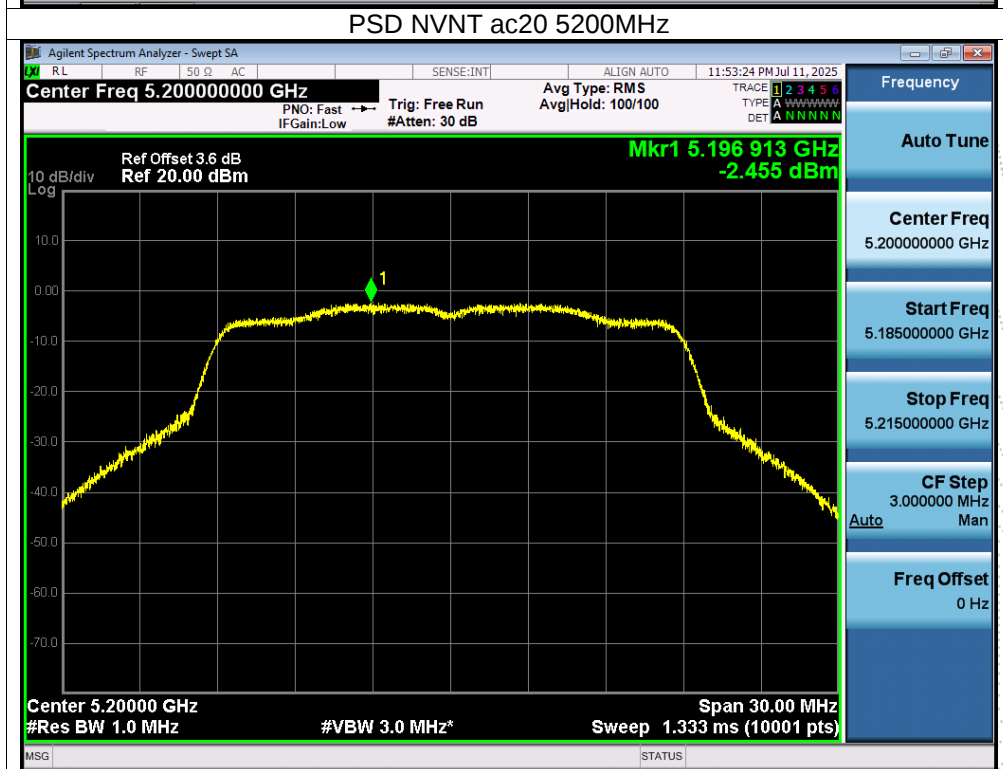
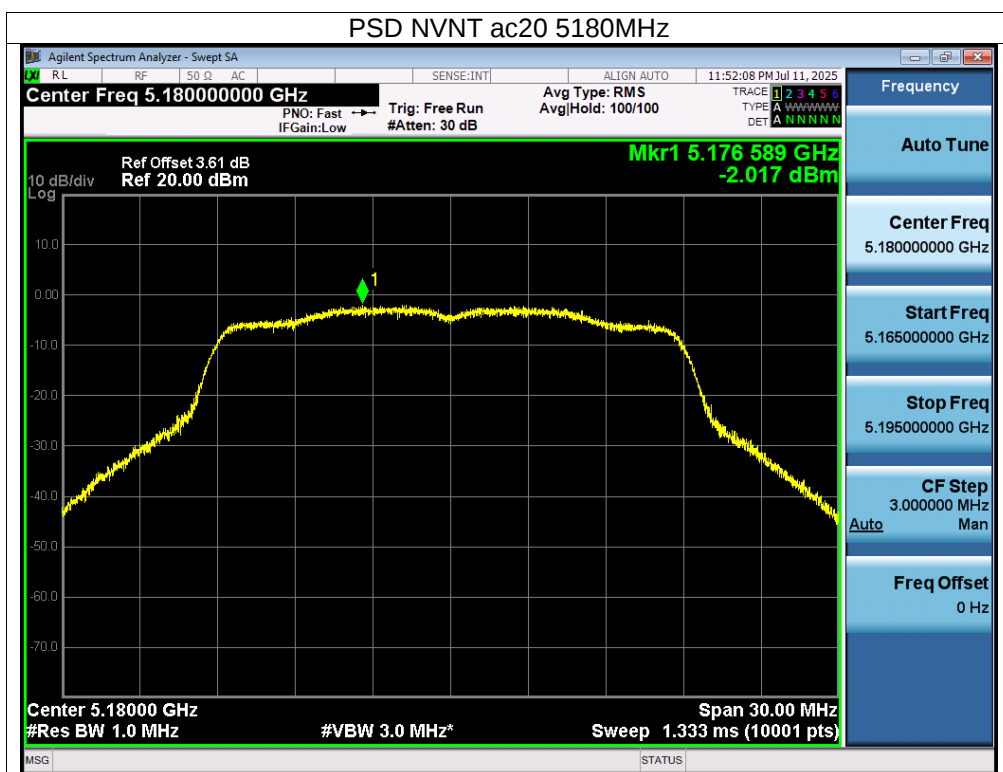
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

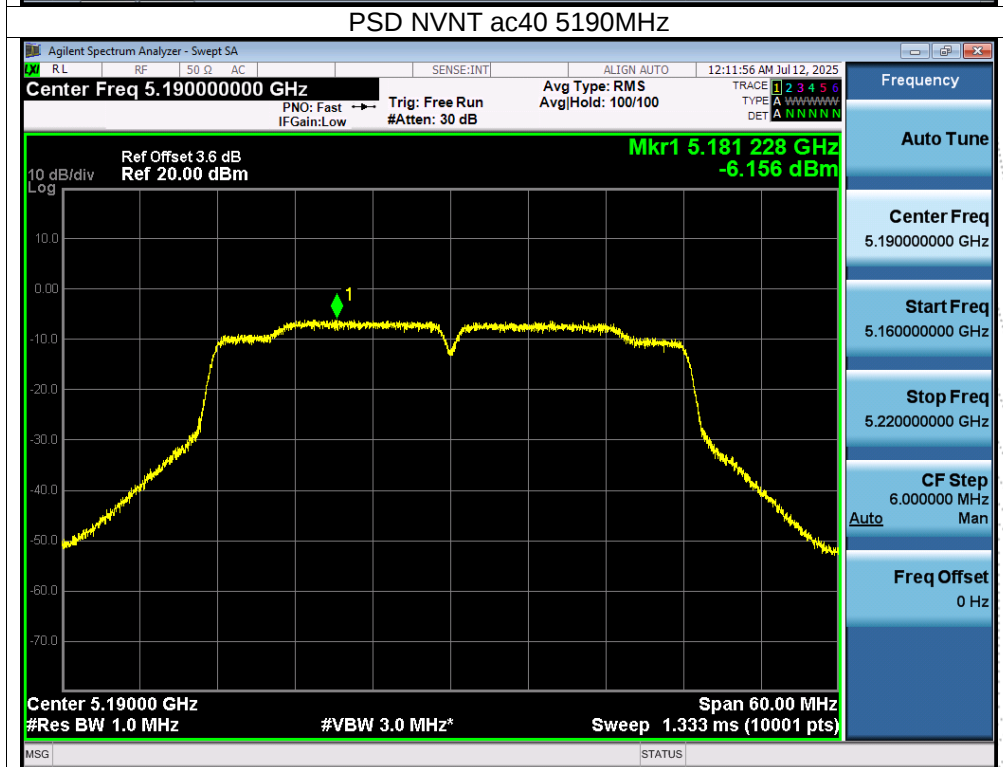
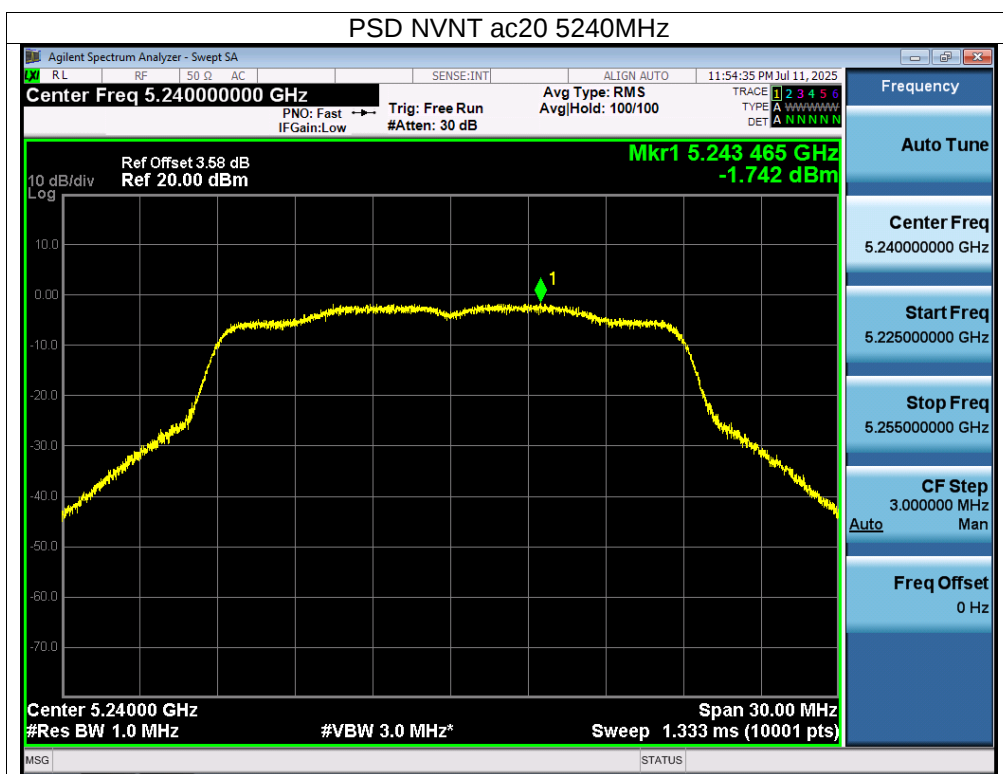


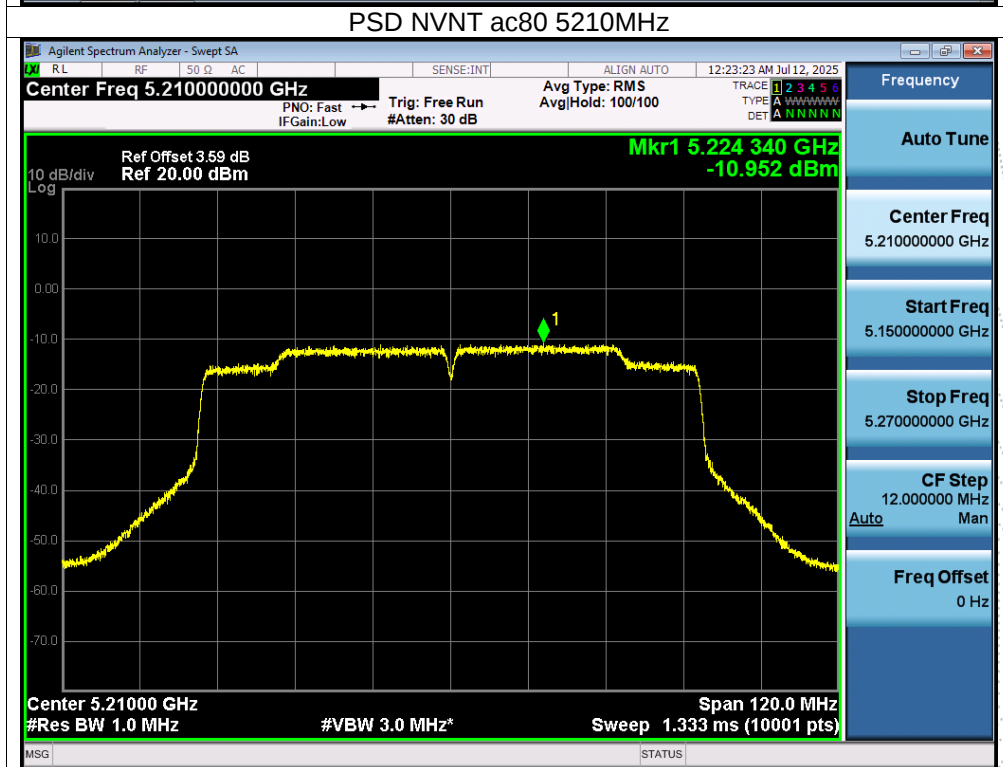
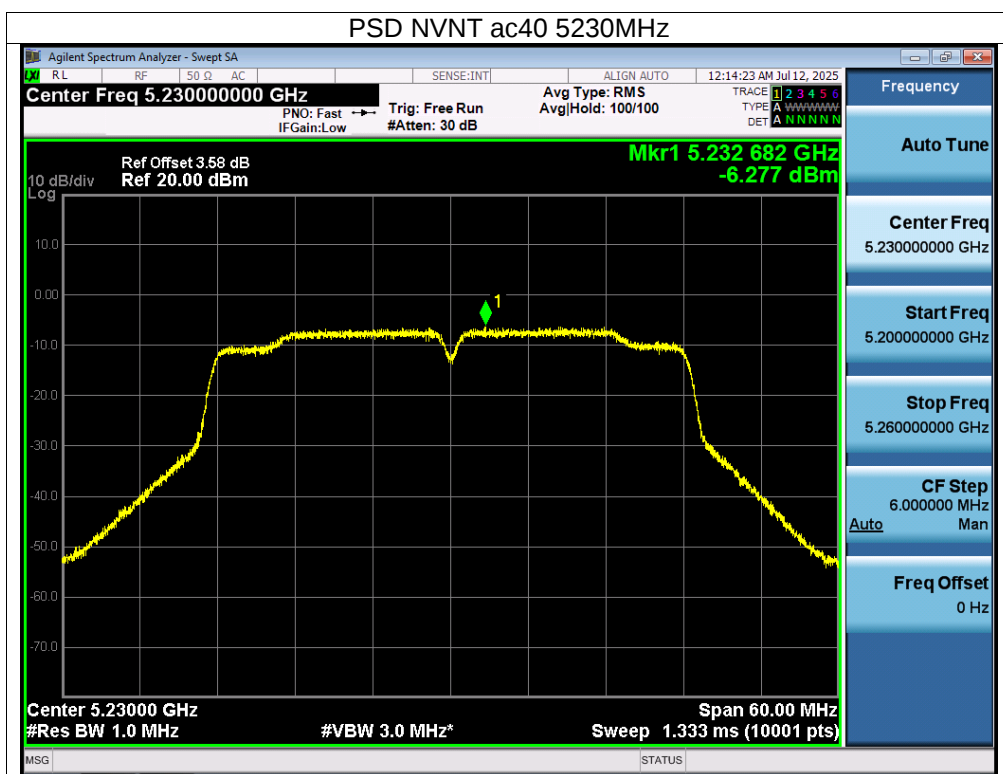




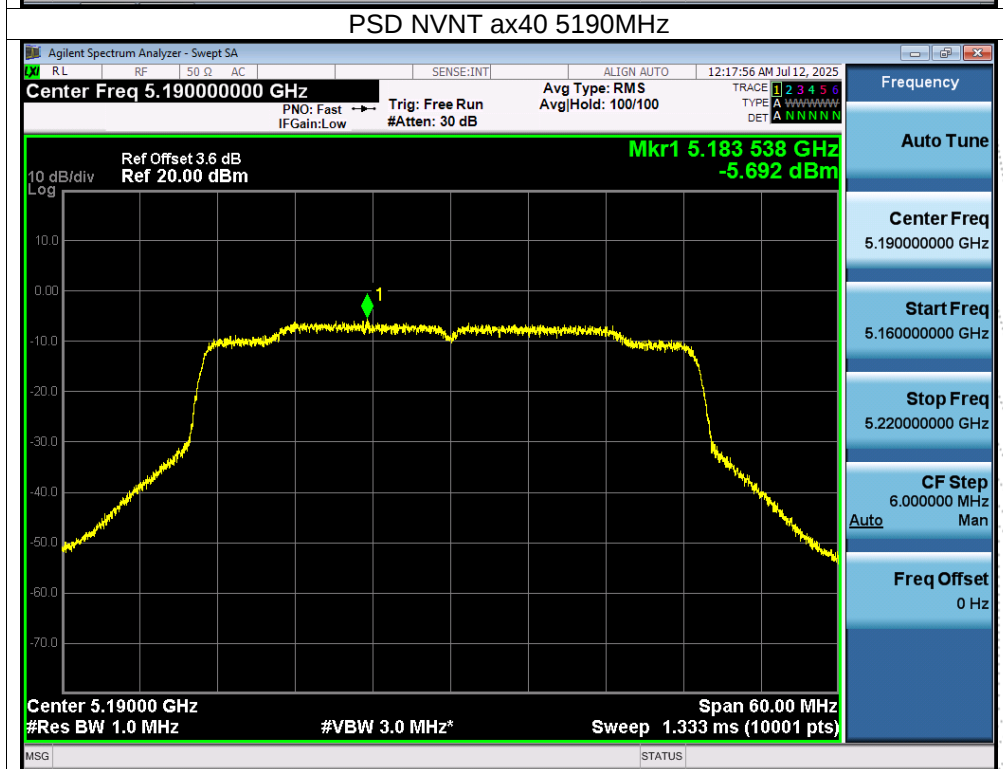
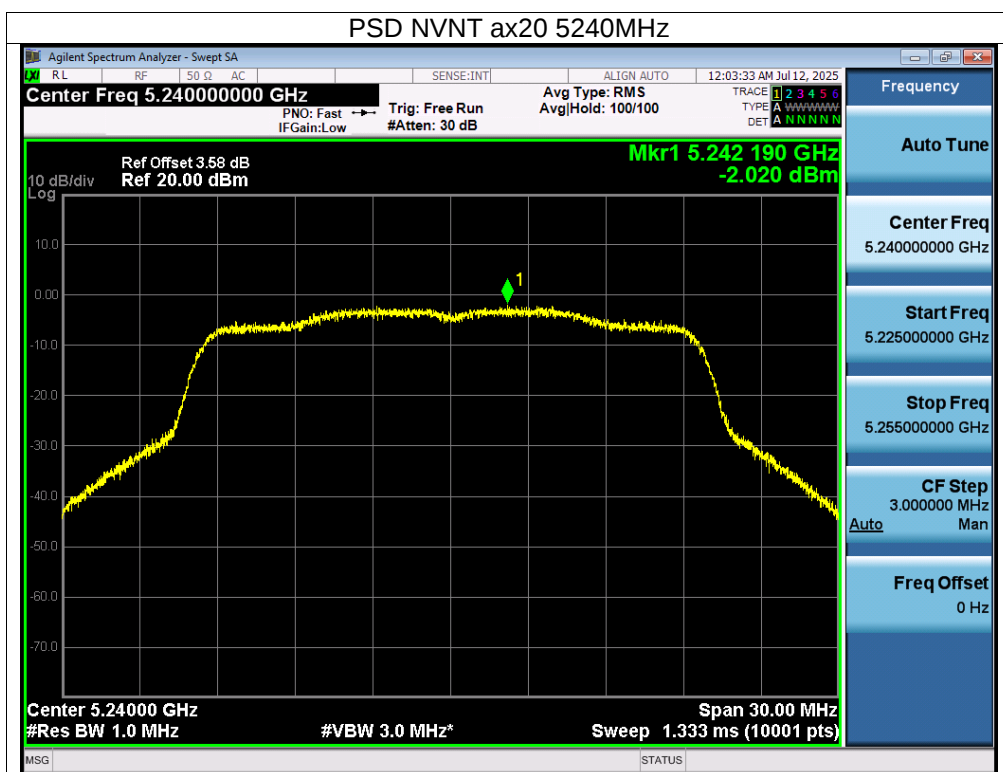


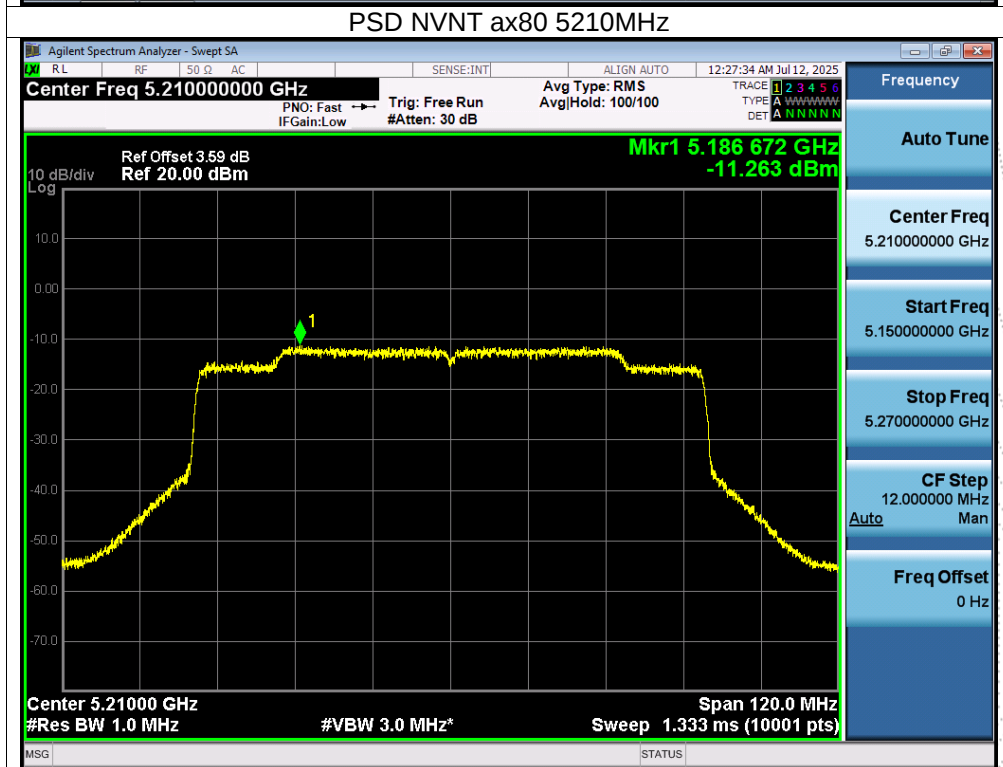
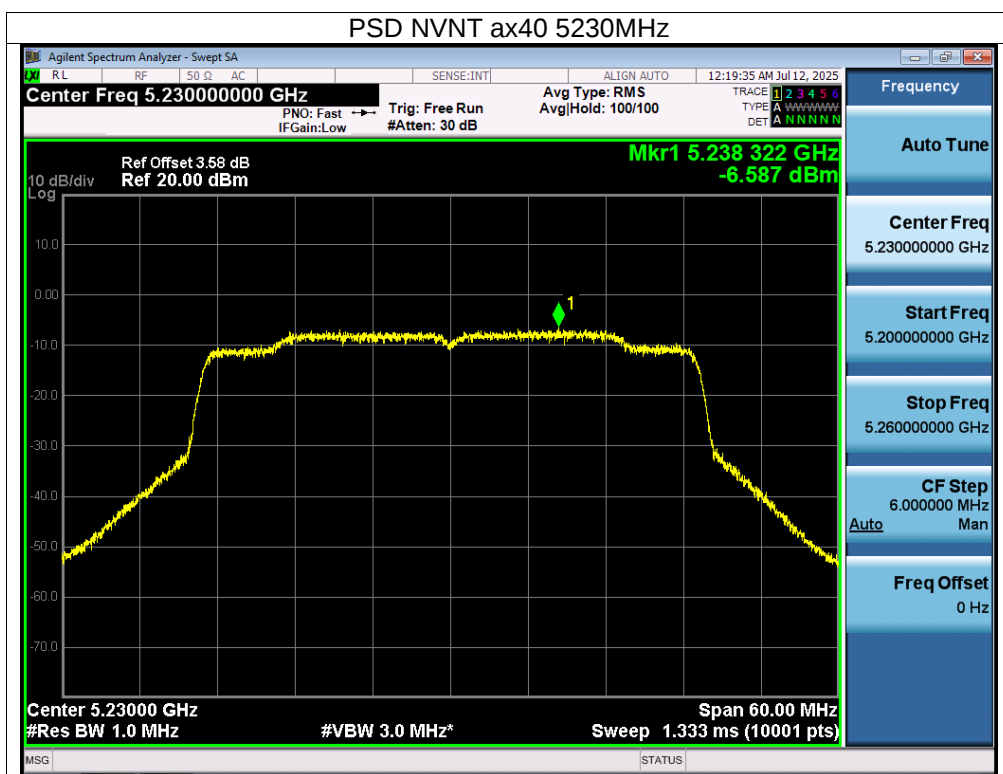












Temperature:	26 °C	Relative Humidity:	54%RH
Pressure:	101kPa	Test Voltage:	DC 11.4V
Test Mode:	TX Frequency U-NII-3 (5745-5825MHz)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)			Limit (dBm/MHz)	Result
			ANT A	ANT B	Total		
NVNT	a	5745	-4.56	-8.69	/	30	PASS
NVNT	a	5785	-4.88	-9.49	/	30	PASS
NVNT	a	5825	-5.55	-10.08	/	30	PASS
NVNT	n20	5745	-5.89	-9.91	-4.44	30	PASS
NVNT	n20	5785	-6.38	-10.71	-5.02	30	PASS
NVNT	n20	5825	-6.35	-11.47	-5.19	30	PASS
NVNT	n40	5755	-9.55	-13.84	-8.18	30	PASS
NVNT	n40	5795	-9.92	-14.72	-8.68	30	PASS
NVNT	ac20	5745	-5.87	-9.87	-4.41	30	PASS
NVNT	ac20	5785	-6.36	-10.70	-5.00	30	PASS
NVNT	ac20	5825	-6.42	-11.24	-5.18	30	PASS
NVNT	ac40	5755	-9.99	-13.59	-8.42	30	PASS
NVNT	ac40	5795	-9.99	-14.72	-8.73	30	PASS
NVNT	ac80	5775	-13.15	-17.40	-11.76	30	PASS
NVNT	ax20	5745	-5.89	-10.05	-4.48	30	PASS
NVNT	ax20	5785	-6.38	-10.87	-5.06	30	PASS
NVNT	ax20	5825	-6.82	-11.71	-5.60	30	PASS
NVNT	ax40	5755	-10.18	-14.07	-8.69	30	PASS
NVNT	ax40	5795	-10.60	-14.85	-9.21	30	PASS
NVNT	ax80	5775	-13.33	-17.65	-11.96	30	PASS

TEST
FC
VE
Seal

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



