

TEST REPORT

Report No.: BCTC2410885656-3E

Applicant: YABER TECHNOLOGIES CO., LIMITED

Product Name: Projector

Test Model: L2s

Tested Date: 2024-10-14 to 2025-01-16

Issued Date: 2025-02-12

Shenzhen BCTC Testing Co., Ltd.



FCC ID: 2A4K9-L2

Product Name: Projector
Trademark: YABER
Model/Type reference: L2s
L2, L2 Plus, L2 Pro, L2 SE, S29, X8, X9
Prepared For: YABER TECHNOLOGIES CO., LIMITED
Address: Room 406, 4 Floor, B Building, BanTian International Center, HuanCheng South Road, BanTian Street, LongGang District, Shenzhen, China
Manufacturer: YABER TECHNOLOGIES CO., LIMITED
Address: Room 406, 4 Floor, B Building, BanTian International Center, HuanCheng South Road, BanTian Street, LongGang District, Shenzhen, 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: 2024-10-11
Sample tested Date: 2024-10-14 to 2025-01-16
Issue Date: 2025-02-12
Report No.: BCTC2410885656-3E
Test Standards: FCC Part15 15.407
ANSI C63.10-2013
KDB 789033 D02 v02r01
Test Results: PASS

Tested by:



Eric Yang/Project Handler

Approved by:



Zero Zhou/Reviewer

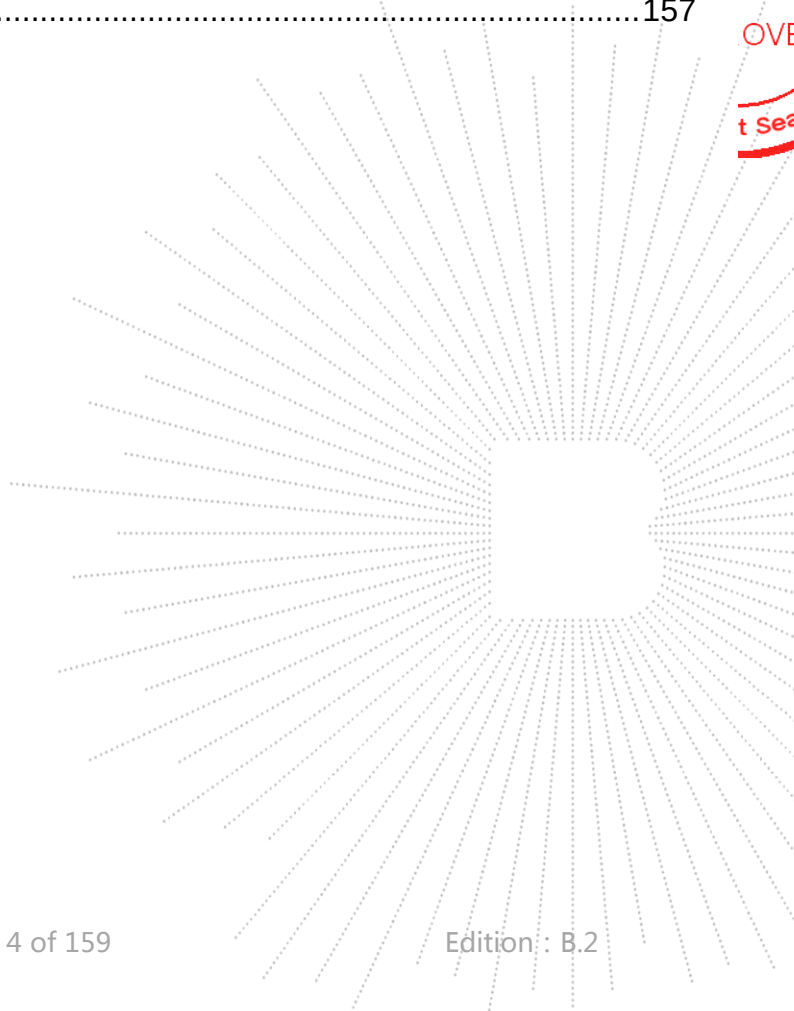
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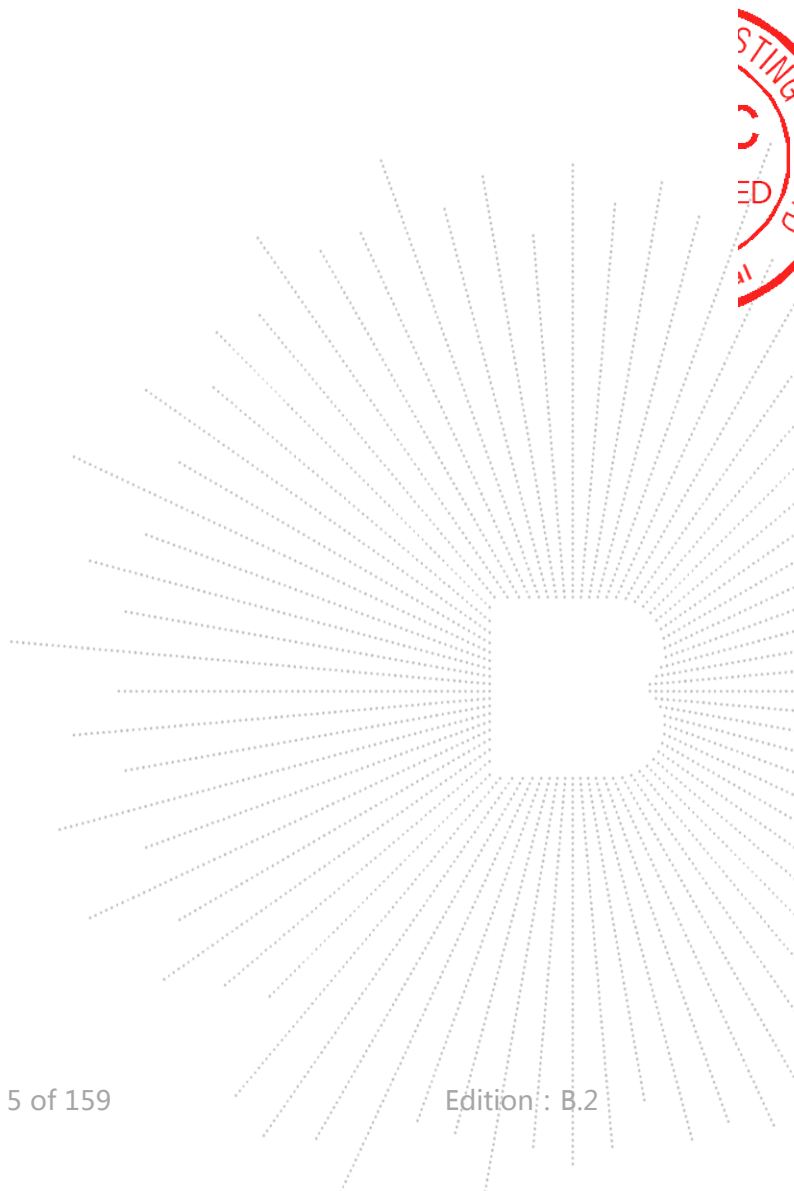
(Note: N/A Means Not Applicable)



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1. Version

Report No.	Issue Date	Description	Approved
BCTC2410885656-3E	2025-02-12	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:	L2s L2, L2 Plus, L2 Pro, L2 SE, S29, X8, X9
Model differences:	All the model are the same circuit and RF module, except model names and appearance color.
Hardware Version:	N/A
Software Version:	2407161426
IEEE 802.11 WLAN Mode Supported	802.11a/n(20MHz channel bandwidth) 802.11n(40MHz channel bandwidth) 5180-5240MHz for 802.11a/n(HT20); 5190-5230MHz for 802.11n(HT40); 5260-5320MHz for 802.11a/n(HT20); 5270-5310MHz for 802.11n (HT40); 5500-5700MHz for 802.11a/n(HT20); 5510-5670MHz for 802.11n (HT40); 5745-5825 MHz for 802.11a/n(HT20); 5755-5795 MHz for 802.11n(HT40);
Operation Frequency:	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15;
Data Rate	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n;
Type of Modulation:	
Antenna installation:	FPC antenna WIFI(5.1GHz): 3.60 dBi, WIFI(5.3GHz): 2.85 dBi, WIFI(5.6GHz): 3.31 dBi, WIFI(5.8GHz): 3.09 dBi
Antenna Gain:	Remark: ☒ The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information. ☐ The antenna gain of the product is provided by the customer, and the test data is affected by the customer information.
Ratings:	AC 100-240V~ 50/60Hz

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	Projector	YABER	L2s	N/A	EUT
E-2	N/A	N/A	N/A	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	0M	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

(U-NII-1) 5180MHz-5240MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency
20MHz	36	5180	40	5200
	44	5220	48	5240
40MHz	38	5190	46	5230
(U-NII-2A) 5260MHz-5320MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency
20MHz	52	5260	56	5280
	60	5300	64	5320
40MHz	54	5270	62	5310
(U-NII-2C) 5500MHz-5700MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency
20MHz	100	5500	105	5520
	108	5540	112	5560
	116	5580	/	/
	/	/	/	/
	132	5660	136	5680
	140	5700		
40MHz	102	5510	110	5550
	/	/	/	/
	134	5670	/	/
(U-NII-3) 5745MHz-5825MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency
20MHz	149	5745	153	5765
	157	5785	161	5805
	165	5825		
40MHz	151	5775	159	5795

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 / n20 CH36/ CH40/ CH 48 802.11a / n20 CH52/ CH56/ CH 64 802.11a / n20 CH100/ CH116/ CH 140 802.11a / n20 CH149/ CH157/ CH 165
Mode 2	802.11n40 CH38/ CH 46 802.11n40 CH54/ CH 62 802.11n40 CH102/ CH 110/CH134 802.11n40 CH 151 / CH 159
Mode 3	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

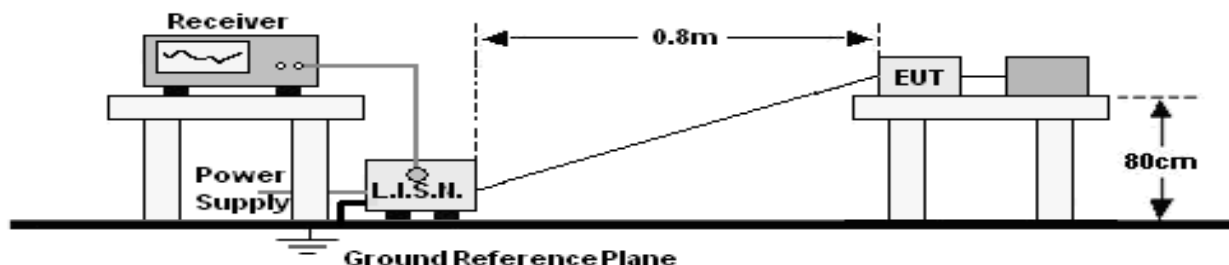
RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power meter	Keysight	E4419	\	May 16, 2024	May 15, 2025
Power Sensor (AV)	Keysight	E9300A	\	May 16, 2024	May 15, 2025
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 16, 2024	May 15, 2025
Spectrum Analyzer9kHz-40GHz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

Radiated Emissions Test (966 Chamber02)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	SKET	966 Room	966	Oct. 31. 2024	Oct. 30. 2027
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
Receiver	R&S	ESR17	100010	Oct. 31. 2024	Oct. 30. 2025
Amplifier	SKET	LNPA-30M01 G-30	SK2021082004	Oct. 31. 2024	Oct. 30. 2025
TRILOG Broadband Antenna	Schwarzbeck	VULB9168	1323	May 21, 2024	May 20, 2025
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 21, 2024	May 20, 2025
Amplifier	SKET	LAPA_01G18 G-45dB	SK202104090 1	May 16, 2024	May 15, 2025
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 21, 2024	May 20, 2025
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35- HG	2034381	May 16, 2024	May 15, 2025
Horn Antenna(18G Hz-40GHz)	Schwarzbeck	BBHA9170	00822	May 21, 2024	May 20, 2025
Spectrum Analyzer9kHz- 40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	FA-03A2 RE	\	\

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6. Conducted Emissions

6.1 Block Diagram Of Test Setup



6.2 Limit

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

Notes:

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

6.3 Test Procedure

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

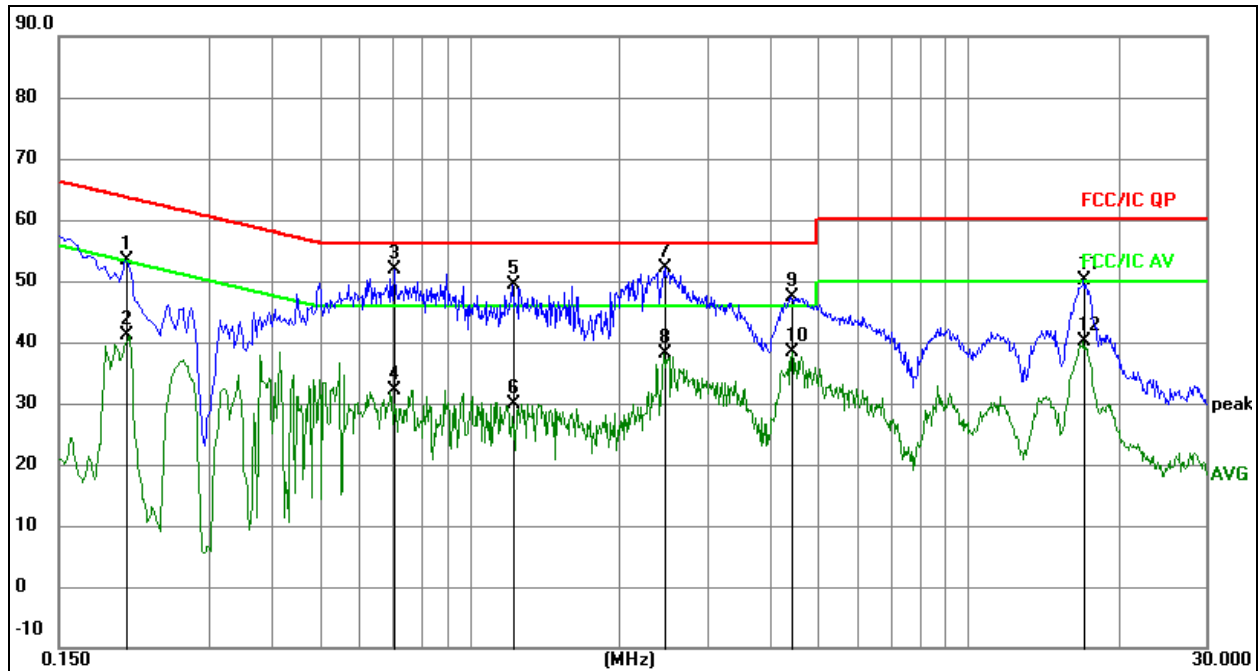
- The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
- The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak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

6.4 EUT Operating Conditions

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

6.5 Test Result

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 3	Test Voltage :	AC120V/60Hz

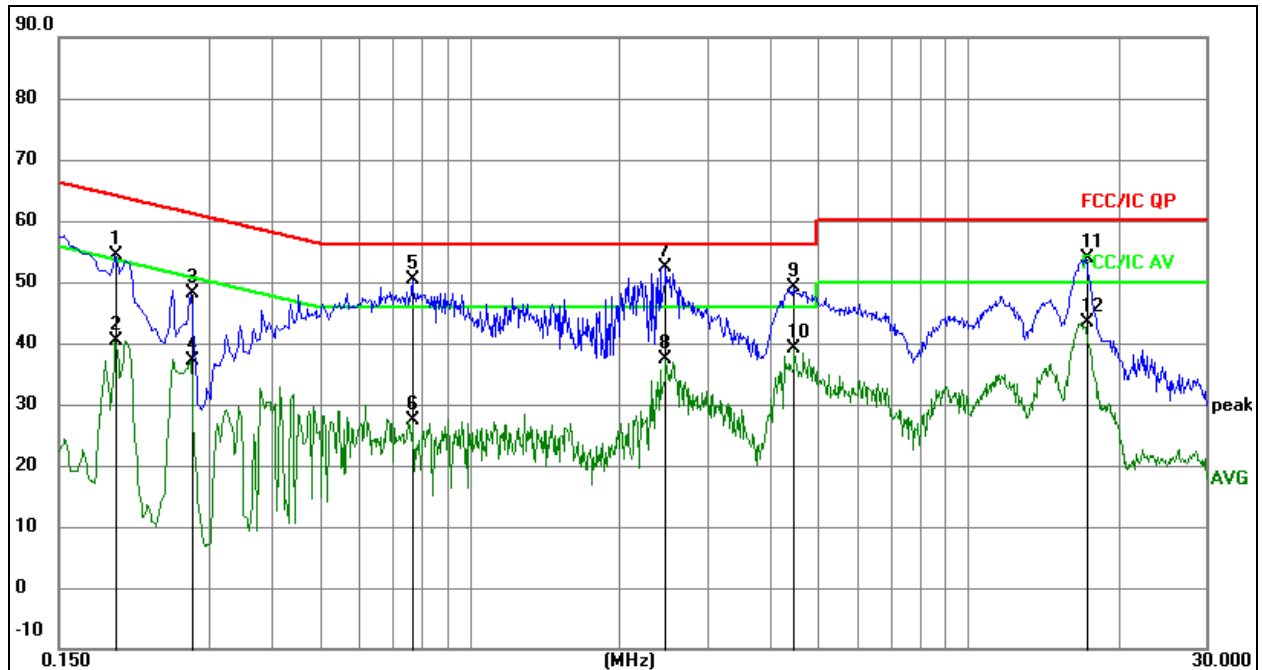


Remark:

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. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.2040	33.40	20.07	53.47	63.45	-9.98	QP
2		0.2040	21.03	20.07	41.10	53.45	-12.35	AVG
3		0.7080	31.89	20.09	51.98	56.00	-4.02	QP
4		0.7080	11.94	20.09	32.03	46.00	-13.97	AVG
5		1.2164	29.22	20.09	49.31	56.00	-6.69	QP
6		1.2164	9.80	20.09	29.89	46.00	-16.11	AVG
7	*	2.4630	32.05	20.11	52.16	56.00	-3.84	QP
8		2.4630	18.08	20.11	38.19	46.00	-7.81	AVG
9		4.4205	27.12	20.14	47.26	56.00	-8.74	QP
10		4.4205	18.14	20.14	38.28	46.00	-7.72	AVG
11		17.0970	29.71	20.32	50.03	60.00	-9.97	QP
12		17.0970	19.85	20.32	40.17	50.00	-9.83	AVG

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	N
Test Mode:	Mode 3	Test Voltage :	AC120V/60Hz



Remark:

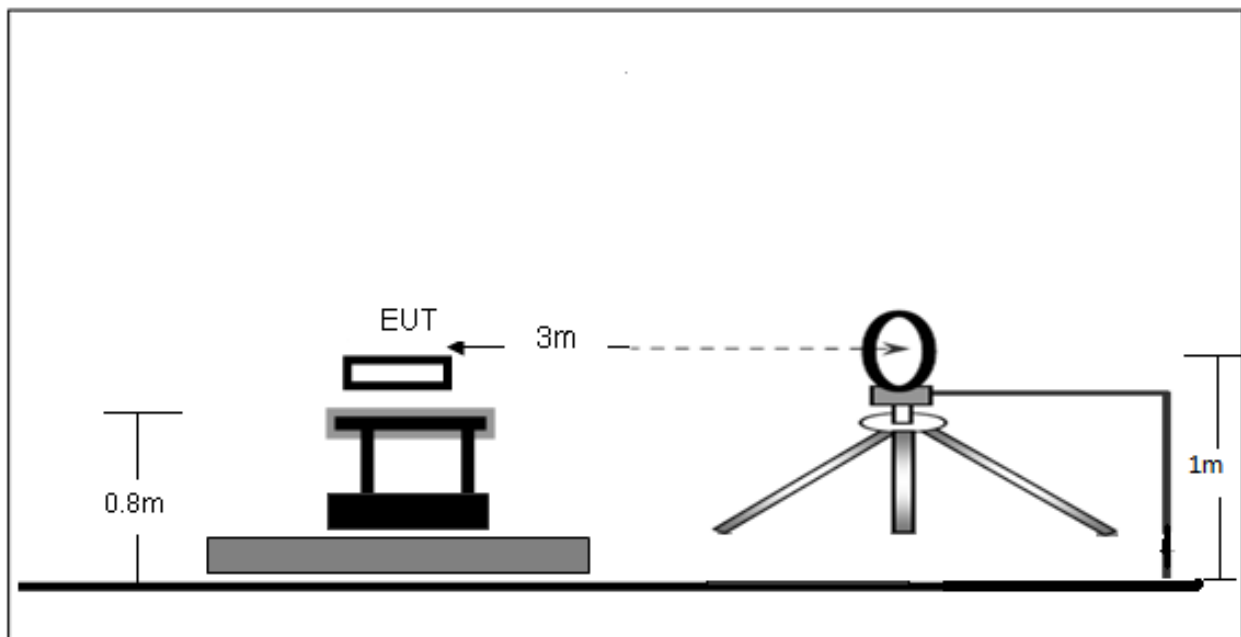
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over1 Measurement-Limit

No.	Mk.	Freq. MHz	Reading Level	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1945	34.32	20.07	54.39	63.84	-9.45	QP
2		0.1945	20.30	20.07	40.37	53.84	-13.47	AVG
3		0.2759	27.94	20.07	48.01	60.94	-12.93	QP
4		0.2759	16.94	20.07	37.01	50.94	-13.93	AVG
5		0.7669	30.17	20.09	50.26	56.00	-5.74	QP
6		0.7669	7.20	20.09	27.29	46.00	-18.71	AVG
7	*	2.4736	32.31	20.11	52.42	56.00	-3.58	QP
8		2.4736	17.38	20.11	37.49	46.00	-8.51	AVG
9		4.4540	28.87	20.14	49.01	56.00	-6.99	QP
10		4.4540	19.07	20.14	39.21	46.00	-6.79	AVG
11		17.1994	33.59	20.32	53.91	60.00	-6.09	QP
12		17.1994	23.18	20.32	43.50	50.00	-6.50	AVG

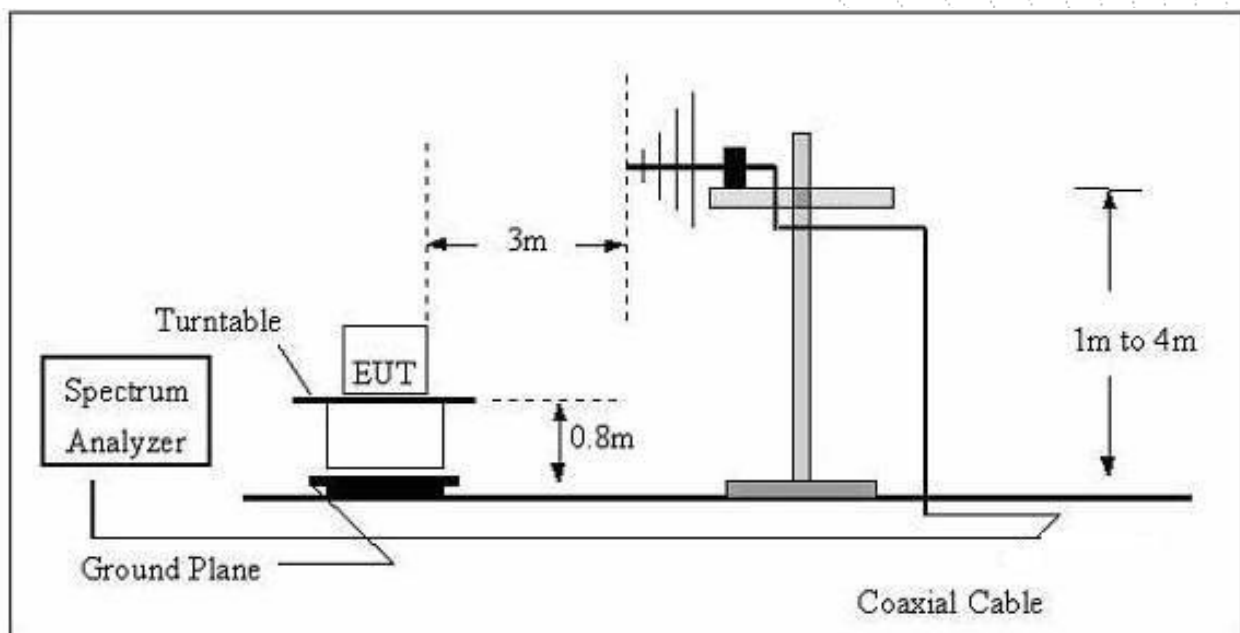
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

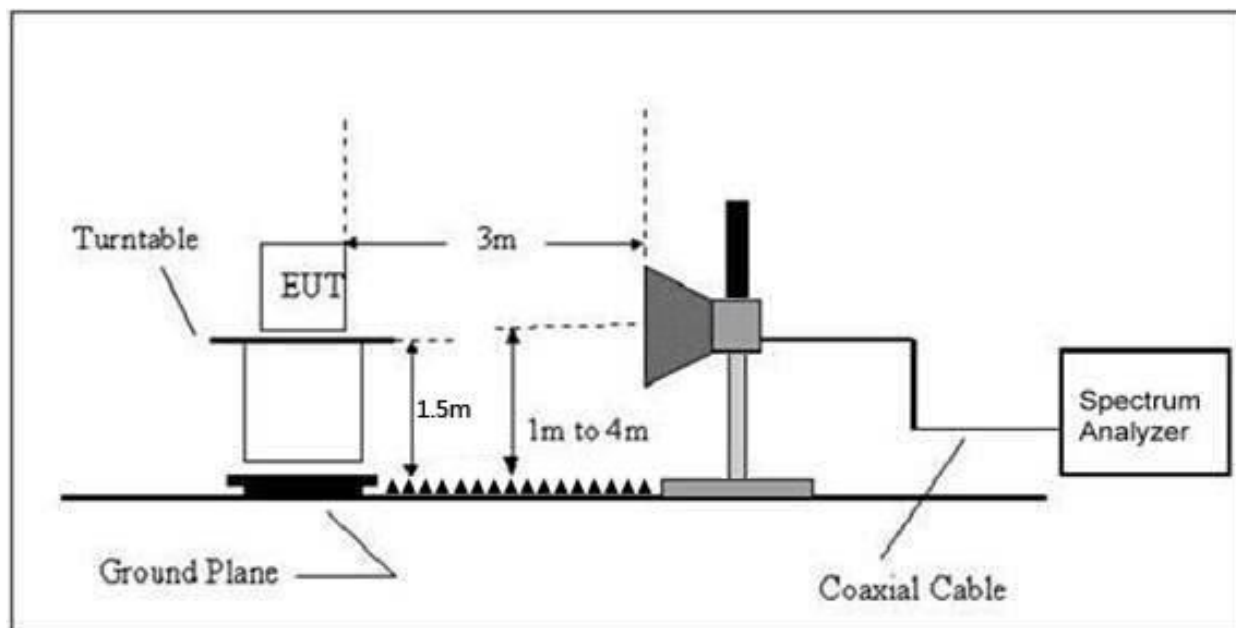
(A) Radiated Emission Test-Up Frequency Below 30MHz



(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℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 3	Polarization :	--

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

Note:

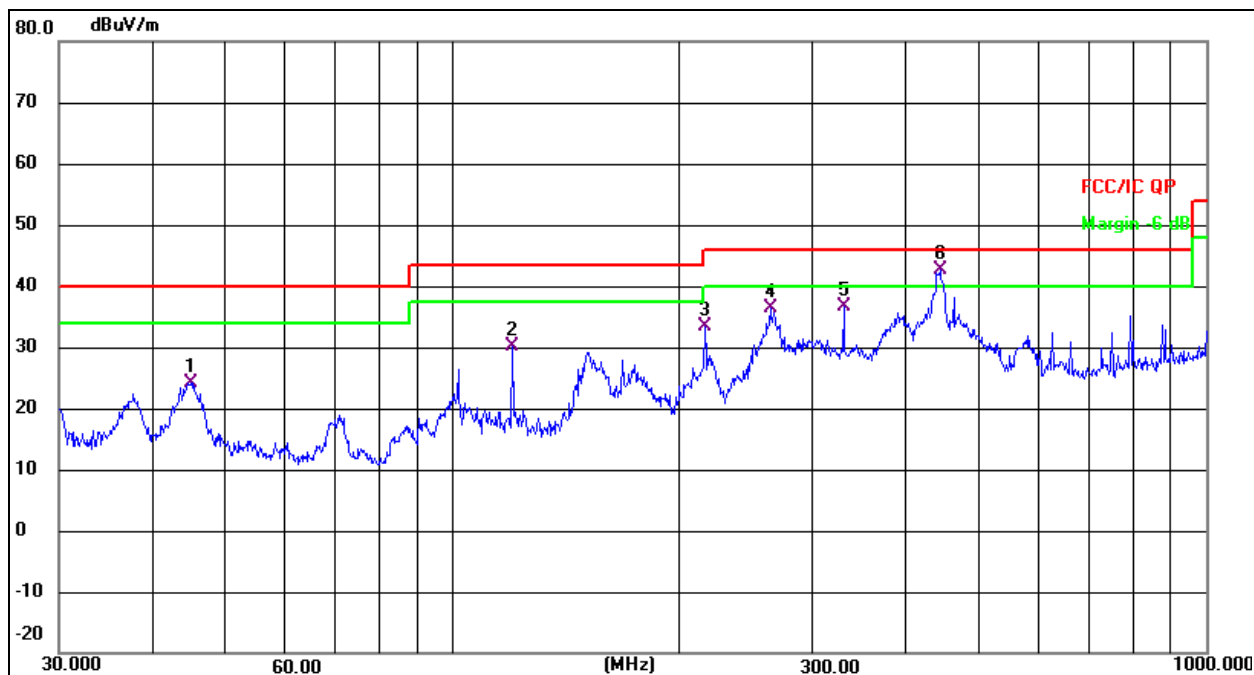
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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

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

Between 30MHz – 1GHz

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 3	Test Voltage :	AC120V/60Hz

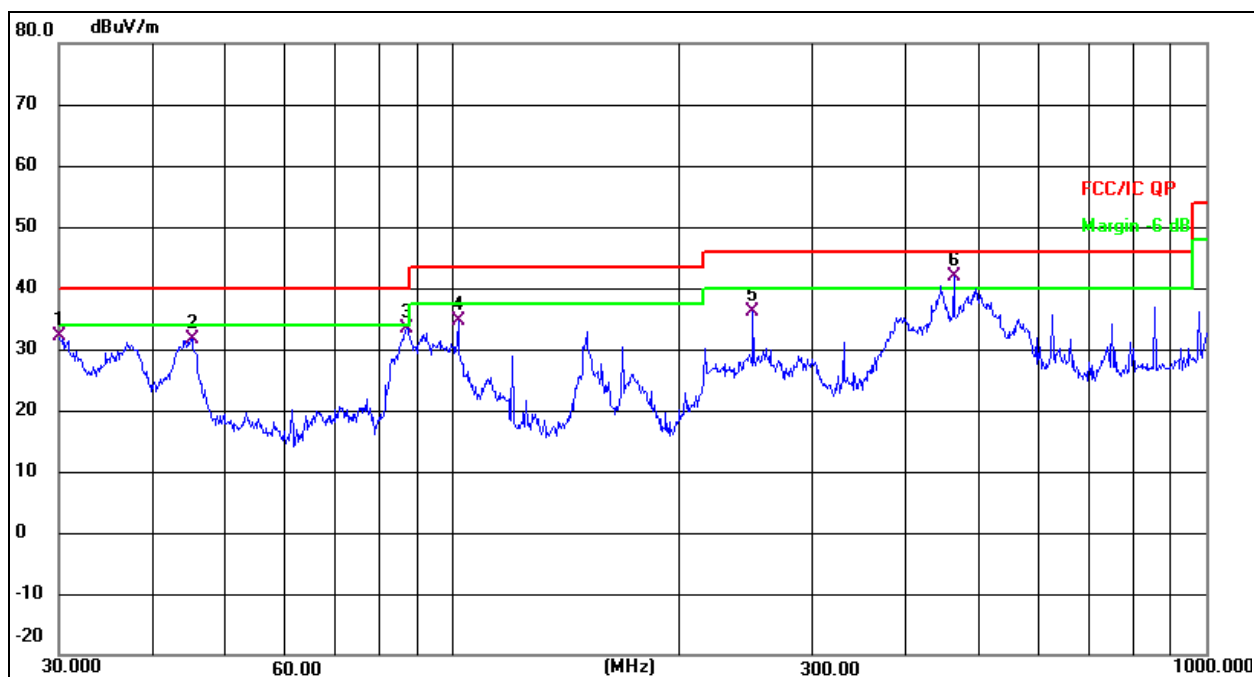


Remark:

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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	44.9006	37.49	-13.28	24.21	40.00	-15.79	QP
2	119.8556	43.51	-13.49	30.02	43.50	-13.48	QP
3	216.0239	47.39	-13.96	33.43	46.00	-12.57	QP
4	263.8190	48.31	-12.05	36.26	46.00	-9.74	QP
5	330.1948	46.34	-9.69	36.65	46.00	-9.35	QP
6 *	443.2942	49.19	-6.56	42.63	46.00	-3.37	QP

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 3	Test Voltage :	AC120V/60Hz



Remark:

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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.0000	44.29	-12.20	32.09	40.00	-7.91	QP
2	45.0583	44.97	-13.29	31.68	40.00	-8.32	QP
3	86.8068	49.30	-15.90	33.40	40.00	-6.60	QP
4	101.6443	49.80	-15.06	34.74	43.50	-8.76	QP
5	250.3012	48.65	-12.59	36.06	46.00	-9.94	QP
6 *	462.3455	48.05	-6.10	41.95	46.00	-4.05	QP

Between 1GHz – 40GHz

Test Mode:	TX(5.1G) - 802.11a
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.165	74.84	-20.73	54.11	68.2	-14.09	PK
Vertical	4434.165	59.24	-20.73	38.51	54	-15.49	AV
Vertical	10360.106	63.19	-9.36	53.83	68.2	-14.37	PK
Vertical	10360.106	49.75	-9.36	40.39	54	-13.61	AV
Vertical	15540.008	62.30	-7.84	54.46	74	-19.54	PK
Vertical	15540.008	49.51	-7.84	41.67	54	-12.33	AV
Horizontal	4434.112	74.30	-20.73	53.57	68.2	-14.63	PK
Horizontal	4434.112	59.56	-20.73	38.83	54	-15.17	AV
Horizontal	10360.050	61.88	-9.36	52.52	68.2	-15.68	PK
Horizontal	10360.050	49.65	-9.36	40.29	54	-13.71	AV
Horizontal	15540.095	62.46	-7.84	54.62	74	-19.38	PK
Horizontal	15540.095	49.58	-7.84	41.74	54	-12.26	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.166	72.27	-20.42	51.86	74	-22.14	PK
Vertical	4592.166	59.37	-20.42	38.95	54	-15.05	AV
Vertical	10400.155	64.41	-9.30	55.11	68.2	-13.09	PK
Vertical	10400.155	49.13	-9.30	39.83	54	-14.17	AV
Vertical	15600.045	63.82	-7.82	56.00	74	-18.00	PK
Vertical	15600.045	49.72	-7.82	41.90	54	-12.10	AV
Horizontal	4592.146	72.98	-20.42	52.57	74	-21.43	PK
Horizontal	4592.146	59.97	-20.42	39.56	54	-14.44	AV
Horizontal	10400.151	63.63	-9.30	54.33	68.2	-13.87	PK
Horizontal	10400.151	49.24	-9.30	39.94	54	-14.06	AV
Horizontal	15600.143	63.62	-7.82	55.80	74	-18.20	PK
Horizontal	15600.143	49.51	-7.82	41.69	54	-12.31	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.079	70.06	-20.12	49.94	74	-24.06	PK
Vertical	4739.079	59.22	-20.12	39.10	54	-14.90	AV
Vertical	10480.187	61.18	-9.18	52.00	68.2	-16.20	PK
Vertical	10480.187	49.58	-9.18	40.40	54	-13.60	AV
Vertical	15720.150	60.90	-7.78	53.12	74	-20.88	PK
Vertical	15720.150	49.92	-7.78	42.14	54	-11.86	AV
Horizontal	4739.072	74.71	-20.12	54.59	74	-19.41	PK
Horizontal	4739.072	59.49	-20.12	39.37	54	-14.63	AV
Horizontal	10480.031	62.79	-9.18	53.61	68.2	-14.59	PK
Horizontal	10480.031	49.12	-9.18	39.94	54	-14.06	AV
Horizontal	15720.016	64.75	-7.78	56.97	74	-17.03	PK
Horizontal	15720.016	49.51	-7.78	41.73	54	-12.27	AV

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

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

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

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

Test Mode:	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	4434.064	70.31	-20.73	49.57	68.2	-18.63	PK
Vertical	4434.064	59.30	-20.73	38.57	54	-15.43	AV
Vertical	10360.049	63.36	-9.36	54.00	68.2	-14.20	PK
Vertical	10360.049	49.44	-9.36	40.08	54	-13.92	AV
Vertical	15540.122	62.18	-7.84	54.34	74	-19.66	PK
Vertical	15540.122	49.30	-7.84	41.46	54	-12.54	AV
Horizontal	4434.110	70.68	-20.73	49.94	68.2	-18.26	PK
Horizontal	4434.110	59.66	-20.73	38.93	54	-15.07	AV
Horizontal	10360.125	64.07	-9.36	54.71	68.2	-13.49	PK
Horizontal	10360.125	49.06	-9.36	39.70	54	-14.30	AV
Horizontal	15540.020	60.07	-7.84	52.23	74	-21.77	PK
Horizontal	15540.020	49.75	-7.84	41.91	54	-12.09	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.038	73.31	-20.42	52.89	74	-21.11	PK
Vertical	4592.038	59.49	-20.42	39.07	54	-14.93	AV
Vertical	10400.018	63.15	-9.30	53.85	68.2	-14.35	PK
Vertical	10400.018	49.12	-9.30	39.82	54	-14.18	AV
Vertical	15600.015	62.16	-7.82	54.34	74	-19.66	PK
Vertical	15600.015	49.82	-7.82	42.00	54	-12.00	AV
Horizontal	4592.131	71.03	-20.42	50.61	74	-23.39	PK
Horizontal	4592.131	59.28	-20.42	38.86	54	-15.14	AV
Horizontal	10400.188	63.50	-9.30	54.20	68.2	-14.00	PK
Horizontal	10400.188	49.06	-9.30	39.76	54	-14.24	AV
Horizontal	15600.191	64.04	-7.82	56.22	74	-17.78	PK
Horizontal	15600.191	49.84	-7.82	42.02	54	-11.98	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.084	71.71	-20.12	51.59	74	-22.41	PK
Vertical	4739.084	59.90	-20.12	39.78	54	-14.22	AV
Vertical	10480.155	63.56	-9.18	54.38	68.2	-13.82	PK
Vertical	10480.155	49.45	-9.18	40.27	54	-13.73	AV
Vertical	15720.181	60.88	-7.78	53.10	74	-20.90	PK
Vertical	15720.181	49.54	-7.78	41.76	54	-12.24	AV
Horizontal	4739.179	70.59	-20.12	50.47	74	-23.53	PK
Horizontal	4739.179	59.85	-20.12	39.73	54	-14.27	AV
Horizontal	10480.190	63.62	-9.18	54.44	68.2	-13.76	PK
Horizontal	10480.190	49.98	-9.18	40.80	54	-13.20	AV
Horizontal	15720.007	60.96	-7.78	53.18	74	-20.82	PK
Horizontal	15720.007	49.00	-7.78	41.22	54	-12.78	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
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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	4434.186	71.53	-20.73	50.80	68.2	-17.40	PK
Vertical	4434.186	59.11	-20.73	38.38	54	-15.62	AV
Vertical	10380.182	63.37	-9.33	54.04	68.2	-14.16	PK
Vertical	10380.182	49.81	-9.33	40.48	54	-13.52	AV
Vertical	15570.040	60.09	-7.83	52.26	74	-21.74	PK
Vertical	15570.040	49.85	-7.83	42.02	54	-11.98	AV
Horizontal	4434.013	71.62	-20.73	50.89	74	-23.11	PK
Horizontal	4434.013	59.01	-20.73	38.28	54	-15.72	AV
Horizontal	10380.165	64.39	-9.33	55.06	68.2	-13.14	PK
Horizontal	10380.165	49.08	-9.33	39.75	54	-14.25	AV
Horizontal	15570.049	60.79	-7.83	52.96	74	-21.04	PK
Horizontal	15570.049	49.49	-7.83	41.66	54	-12.34	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.033	73.66	-20.12	53.54	68.2	-14.66	PK
Vertical	4739.033	59.20	-20.12	39.08	54	-14.92	AV
Vertical	10460.078	63.97	-9.21	54.76	68.2	-13.44	PK
Vertical	10460.078	49.94	-9.21	40.73	54	-13.27	AV
Vertical	15690.053	62.74	-7.79	54.95	74	-19.05	PK
Vertical	15690.053	49.66	-7.79	41.87	54	-12.13	AV
Horizontal	4739.071	71.55	-20.12	51.43	68.2	-16.77	PK
Horizontal	4739.071	59.45	-20.12	39.33	54	-14.67	AV
Horizontal	10460.143	60.85	-9.21	51.64	68.2	-16.56	PK
Horizontal	10460.143	49.83	-9.21	40.62	54	-13.38	AV
Horizontal	15690.110	61.04	-7.79	53.25	74	-20.75	PK
Horizontal	15690.110	49.30	-7.79	41.51	54	-12.49	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:	TX(5.3G) - 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 (5260 MHz)-Above 1G							
Vertical	4434.098	73.42	-20.73	52.69	68.2	-15.51	PK
Vertical	4434.098	59.72	-20.73	38.98	54	-15.02	AV
Vertical	10520.065	62.79	-9.12	53.67	68.2	-14.53	PK
Vertical	10520.065	49.40	-9.12	40.28	54	-13.72	AV
Vertical	15780.026	64.53	-7.77	56.76	74	-17.24	PK
Vertical	15780.026	49.56	-7.77	41.79	54	-12.21	AV
Horizontal	4434.181	70.95	-20.73	50.22	68.2	-17.98	PK
Horizontal	4434.181	59.93	-20.73	39.20	54	-14.80	AV
Horizontal	10520.117	61.67	-9.12	52.55	68.2	-15.65	PK
Horizontal	10520.117	49.11	-9.12	39.99	54	-14.01	AV
Horizontal	15780.195	62.58	-7.77	54.81	74	-19.19	PK
Horizontal	15780.195	49.18	-7.77	41.41	54	-12.59	AV
Middle Channel (5280 MHz)-Above 1G							
Vertical	4592.051	74.77	-20.42	54.36	74	-19.64	PK
Vertical	4592.051	59.95	-20.42	39.53	54	-14.47	AV
Vertical	10560.166	63.34	-9.06	54.28	68.2	-13.92	PK
Vertical	10560.166	49.79	-9.06	40.73	54	-13.27	AV
Vertical	15840.047	62.69	-7.75	54.94	74	-19.06	PK
Vertical	15840.047	49.01	-7.75	41.26	54	-12.74	AV
Horizontal	4592.176	73.56	-20.42	53.14	74	-20.86	PK
Horizontal	4592.176	59.70	-20.42	39.28	54	-14.72	AV
Horizontal	10560.017	63.45	-9.06	54.39	68.2	-13.81	PK
Horizontal	10560.017	49.35	-9.06	40.29	54	-13.71	AV
Horizontal	15840.193	62.03	-7.75	54.28	74	-19.72	PK
Horizontal	15840.193	49.09	-7.75	41.34	54	-12.66	AV
High Channel (5320 MHz)-Above 1G							
Vertical	4739.015	74.52	-20.12	54.40	74	-19.60	PK
Vertical	4739.015	59.66	-20.12	39.54	54	-14.46	AV
Vertical	10640.076	64.47	-8.94	55.53	68.2	-12.67	PK
Vertical	10640.076	49.00	-8.94	40.06	54	-13.94	AV
Vertical	15960.138	62.89	-7.71	55.18	74	-18.82	PK
Vertical	15960.138	49.09	-7.71	41.38	54	-12.62	AV
Horizontal	4739.036	72.54	-20.12	52.42	74	-21.58	PK
Horizontal	4739.036	59.09	-20.12	38.97	54	-15.03	AV
Horizontal	10640.136	62.59	-8.94	53.65	68.2	-14.55	PK
Horizontal	10640.136	49.02	-8.94	40.08	54	-13.92	AV
Horizontal	15960.133	61.26	-7.71	53.55	74	-20.45	PK
Horizontal	15960.133	49.16	-7.71	41.45	54	-12.55	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(5.3G) - 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 (5260 MHz)-Above 1G							
Vertical	4434.183	70.20	-20.73	49.47	68.2	-18.73	PK
Vertical	4434.183	59.89	-20.73	39.16	54	-14.84	AV
Vertical	10520.086	63.90	-9.12	54.78	68.2	-13.42	PK
Vertical	10520.086	49.23	-9.12	40.11	54	-13.89	AV
Vertical	15780.031	62.21	-7.77	54.44	74	-19.56	PK
Vertical	15780.031	49.23	-7.77	41.46	54	-12.54	AV
Horizontal	4434.169	70.23	-20.73	49.50	68.2	-18.70	PK
Horizontal	4434.169	59.05	-20.73	38.32	54	-15.68	AV
Horizontal	10520.007	63.86	-9.12	54.74	68.2	-13.46	PK
Horizontal	10520.007	49.59	-9.12	40.47	54	-13.53	AV
Horizontal	15780.043	60.95	-7.77	53.18	74	-20.82	PK
Horizontal	15780.043	49.70	-7.77	41.93	54	-12.07	AV
Middle Channel (5280 MHz)-Above 1G							
Vertical	4592.113	73.42	-20.42	53.01	74	-20.99	PK
Vertical	4592.113	59.42	-20.42	39.00	54	-15.00	AV
Vertical	10560.025	60.50	-9.06	51.44	68.2	-16.76	PK
Vertical	10560.025	49.10	-9.06	40.04	54	-13.96	AV
Vertical	15840.169	62.27	-7.75	54.52	74	-19.48	PK
Vertical	15840.169	49.32	-7.75	41.57	54	-12.43	AV
Horizontal	4592.170	70.58	-20.42	50.16	74	-23.84	PK
Horizontal	4592.170	59.42	-20.42	39.00	54	-15.00	AV
Horizontal	10560.018	60.33	-9.06	51.27	68.2	-16.93	PK
Horizontal	10560.018	49.78	-9.06	40.72	54	-13.28	AV
Horizontal	15840.075	62.26	-7.75	54.51	74	-19.49	PK
Horizontal	15840.075	49.43	-7.75	41.68	54	-12.32	AV
High Channel (5320 MHz)-Above 1G							
Vertical	4739.108	71.57	-20.12	51.45	74	-22.55	PK
Vertical	4739.108	59.78	-20.12	39.66	54	-14.34	AV
Vertical	10640.155	64.85	-8.94	55.91	68.2	-12.29	PK
Vertical	10640.155	49.93	-8.94	40.99	54	-13.01	AV
Vertical	15960.035	60.90	-7.71	53.19	74	-20.81	PK
Vertical	15960.035	49.36	-7.71	41.65	54	-12.35	AV
Horizontal	4739.117	74.35	-20.12	54.23	74	-19.77	PK
Horizontal	4739.117	59.87	-20.12	39.75	54	-14.25	AV
Horizontal	10640.145	60.34	-8.94	51.40	68.2	-16.80	PK
Horizontal	10640.145	49.23	-8.94	40.29	54	-13.71	AV
Horizontal	15960.044	63.85	-7.71	56.14	74	-17.86	PK
Horizontal	15960.044	49.11	-7.71	41.40	54	-12.60	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(5.3G) - 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 (5270 MHz)-Above 1G							
Vertical	4434.195	71.28	-20.73	50.55	68.2	-17.65	PK
Vertical	4434.195	59.99	-20.73	39.26	54	-14.74	AV
Vertical	10540.029	61.60	-9.09	52.51	68.2	-15.69	PK
Vertical	10540.029	49.10	-9.09	40.01	54	-13.99	AV
Vertical	15810.033	64.41	-7.76	56.65	74	-17.35	PK
Vertical	15810.033	49.05	-7.76	41.29	54	-12.71	AV
Horizontal	4434.107	73.26	-20.73	52.53	74	-21.47	PK
Horizontal	4434.107	59.84	-20.73	39.11	54	-14.89	AV
Horizontal	10540.070	63.29	-9.09	54.20	68.2	-14.00	PK
Horizontal	10540.070	49.90	-9.09	40.81	54	-13.19	AV
Horizontal	15810.074	60.95	-7.76	53.19	74	-20.81	PK
Horizontal	15810.074	49.82	-7.76	42.06	54	-11.94	AV
Middle Channel (5310 MHz)-Above 1G							
Vertical	4739.021	74.90	-20.12	54.78	68.2	-13.42	PK
Vertical	4739.021	59.18	-20.12	39.06	54	-14.94	AV
Vertical	10620.003	61.33	-8.97	52.36	68.2	-15.84	PK
Vertical	10620.003	49.85	-8.97	40.88	54	-13.12	AV
Vertical	15930.114	62.01	-7.72	54.29	74	-19.71	PK
Vertical	15930.114	49.05	-7.72	41.33	54	-12.67	AV
Horizontal	4739.194	73.75	-20.12	53.63	68.2	-14.57	PK
Horizontal	4739.194	59.62	-20.12	39.50	54	-14.50	AV
Horizontal	10620.101	62.32	-8.97	53.35	68.2	-14.85	PK
Horizontal	10620.101	49.17	-8.97	40.20	54	-13.80	AV
Horizontal	15930.198	62.62	-7.72	54.90	74	-19.10	PK
Horizontal	15930.198	49.51	-7.72	41.79	54	-12.21	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(5.6G) - 802.11a
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Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5500 MHz)-Above 1G							
Vertical	4434.121	72.72	-20.73	51.99	68.2	-16.21	PK
Vertical	4434.121	59.90	-20.73	39.17	54	-14.83	AV
Vertical	11000.066	61.42	-8.40	53.02	68.2	-15.18	PK
Vertical	11000.066	49.10	-8.40	40.70	54	-13.30	AV
Vertical	16500.163	62.86	-6.09	56.77	74	-17.23	PK
Vertical	16500.163	49.78	-6.09	43.69	54	-10.31	AV
Horizontal	4434.114	73.33	-20.73	52.59	68.2	-15.61	PK
Horizontal	4434.114	59.40	-20.73	38.67	54	-15.33	AV
Horizontal	11000.148	61.57	-8.40	53.17	68.2	-15.03	PK
Horizontal	11000.148	49.33	-8.40	40.93	54	-13.07	AV
Horizontal	16500.168	63.19	-6.09	57.10	74	-16.90	PK
Horizontal	16500.168	49.05	-6.09	42.96	54	-11.04	AV
middle Channel (5580 MHz)-Above 1G							
Vertical	4592.103	72.30	-20.42	51.88	74	-22.12	PK
Vertical	4592.103	59.30	-20.42	38.88	54	-15.12	AV
Vertical	11160.023	64.89	-8.53	56.36	68.2	-11.84	PK
Vertical	11160.023	49.71	-8.53	41.18	54	-12.82	AV
Vertical	16740.110	61.62	-5.31	56.31	74	-17.69	PK
Vertical	16740.110	49.95	-5.31	44.64	54	-9.36	AV
Horizontal	4592.196	72.91	-20.42	52.49	74	-21.51	PK
Horizontal	4592.196	59.10	-20.42	38.68	54	-15.32	AV
Horizontal	11160.034	61.75	-8.53	53.22	68.2	-14.98	PK
Horizontal	11160.034	49.43	-8.53	40.90	54	-13.10	AV
Horizontal	16740.039	64.11	-5.31	58.80	74	-15.20	PK
Horizontal	16740.039	49.17	-5.31	43.86	54	-10.14	AV
High Channel (5700 MHz)-Above 1G							
Vertical	4739.141	70.26	-20.12	50.14	74	-23.86	PK
Vertical	4739.141	59.29	-20.12	39.17	54	-14.83	AV
Vertical	11400.017	62.41	-8.72	53.69	68.2	-14.51	PK
Vertical	11400.017	49.02	-8.72	40.30	54	-13.70	AV
Vertical	17100.083	64.83	-3.92	60.91	74	-13.09	PK
Vertical	17100.083	49.63	-3.92	45.71	54	-8.29	AV
Horizontal	4739.183	73.51	-20.12	53.39	74	-20.61	PK
Horizontal	4739.183	59.46	-20.12	39.34	54	-14.66	AV
Horizontal	11400.186	62.56	-8.72	53.84	68.2	-14.36	PK
Horizontal	11400.186	49.13	-8.72	40.41	54	-13.59	AV
Horizontal	17100.078	61.21	-3.92	57.29	74	-16.71	PK
Horizontal	17100.078	49.18	-3.92	45.26	54	-8.74	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(5.6G) - 802.11n-HT20
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Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5500 MHz)-Above 1G							
Vertical	4434.155	72.81	-20.73	52.08	68.2	-16.12	PK
Vertical	4434.155	59.04	-20.73	38.30	54	-15.70	AV
Vertical	11000.087	64.59	-8.40	56.19	68.2	-12.01	PK
Vertical	11000.087	49.00	-8.40	40.60	54	-13.40	AV
Vertical	16500.159	61.07	-6.09	54.98	74	-19.02	PK
Vertical	16500.159	49.59	-6.09	43.50	54	-10.50	AV
Horizontal	4434.138	71.23	-20.73	50.49	68.2	-17.71	PK
Horizontal	4434.138	59.14	-20.73	38.41	54	-15.59	AV
Horizontal	11000.084	61.82	-8.40	53.42	68.2	-14.78	PK
Horizontal	11000.084	49.00	-8.40	40.60	54	-13.40	AV
Horizontal	16500.098	60.43	-6.09	54.34	74	-19.66	PK
Horizontal	16500.098	49.16	-6.09	43.07	54	-10.93	AV
middle Channel (5580 MHz)-Above 1G							
Vertical	4592.181	74.82	-20.42	54.41	74	-19.59	PK
Vertical	4592.181	59.83	-20.42	39.41	54	-14.59	AV
Vertical	11160.046	63.11	-8.53	54.58	68.2	-13.62	PK
Vertical	11160.046	49.91	-8.53	41.38	54	-12.62	AV
Vertical	16740.164	64.81	-5.31	59.50	74	-14.50	PK
Vertical	16740.164	49.64	-5.31	44.33	54	-9.67	AV
Horizontal	4592.179	73.17	-20.42	52.75	74	-21.25	PK
Horizontal	4592.179	59.34	-20.42	38.92	54	-15.08	AV
Horizontal	11160.170	64.53	-8.53	56.00	68.2	-12.20	PK
Horizontal	11160.170	49.39	-8.53	40.86	54	-13.14	AV
Horizontal	16740.013	62.21	-5.31	56.90	74	-17.10	PK
Horizontal	16740.013	49.99	-5.31	44.68	54	-9.32	AV
High Channel (5700 MHz)-Above 1G							
Vertical	4739.055	72.38	-20.12	52.26	74	-21.74	PK
Vertical	4739.055	59.66	-20.12	39.54	54	-14.46	AV
Vertical	11400.160	60.61	-8.72	51.89	68.2	-16.31	PK
Vertical	11400.160	49.80	-8.72	41.08	54	-12.92	AV
Vertical	17100.165	60.71	-3.92	56.79	74	-17.21	PK
Vertical	17100.165	49.62	-3.92	45.70	54	-8.30	AV
Horizontal	4739.195	74.09	-20.12	53.96	74	-20.04	PK
Horizontal	4739.195	59.73	-20.12	39.60	54	-14.40	AV
Horizontal	11400.181	61.23	-8.72	52.51	68.2	-15.69	PK
Horizontal	11400.181	49.68	-8.72	40.96	54	-13.04	AV
Horizontal	17100.185	62.08	-3.92	58.16	74	-15.84	PK
Horizontal	17100.185	49.32	-3.92	45.40	54	-8.60	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(5.6G) - 802.11n-HT40
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Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5510 MHz)-Above 1G							
Vertical	4434.082	61.19	-20.73	40.46	68.2	-27.74	PK
Vertical	4434.082	43.52	-20.73	22.79	54	-31.21	AV
Vertical	11020.077	61.58	-8.42	53.16	68.2	-15.04	PK
Vertical	11020.077	43.15	-8.42	34.73	54	-19.27	AV
Vertical	16530.011	60.81	-5.99	54.82	74	-19.18	PK
Vertical	16530.011	43.68	-5.99	37.69	54	-16.31	AV
Horizontal	4434.152	62.96	-20.73	42.23	74	-31.77	PK
Horizontal	4434.152	43.95	-20.73	23.22	54	-30.78	AV
Horizontal	11020.003	51.09	-8.42	42.67	68.2	-25.53	PK
Horizontal	11020.003	43.55	-8.42	35.13	54	-18.87	AV
Horizontal	16530.102	53.31	-5.99	47.32	74	-26.68	PK
Horizontal	16530.102	43.70	-5.99	37.71	54	-16.29	AV
middle Channel (5550 MHz)-Above 1G							
Vertical	4592.122	60.28	-20.42	39.86	74	-34.14	PK
Vertical	4592.122	43.59	-20.42	23.18	54	-30.82	AV
Vertical	11100.153	62.49	-8.40	54.09	68.2	-14.11	PK
Vertical	11100.153	43.70	-8.40	35.30	54	-18.70	AV
Vertical	16650.008	62.95	-5.60	57.35	74	-16.65	PK
Vertical	16650.008	43.44	-5.60	37.84	54	-16.16	AV
Horizontal	4592.090	61.36	-20.42	40.94	74	-33.06	PK
Horizontal	4592.090	43.29	-20.42	22.87	54	-31.13	AV
Horizontal	11100.069	54.80	-8.40	46.40	68.2	-21.80	PK
Horizontal	11100.069	41.46	-8.40	33.06	54	-20.94	AV
Horizontal	16650.086	52.21	-5.60	46.61	74	-27.39	PK
Horizontal	16650.086	41.55	-5.60	35.95	54	-18.05	AV
High Channel (5670 MHz)-Above 1G							
Vertical	4739.182	63.30	-20.12	43.18	68.2	-25.02	PK
Vertical	4739.182	43.76	-20.12	23.64	54	-30.36	AV
Vertical	11340.174	63.93	-8.67	55.26	68.2	-12.94	PK
Vertical	11340.174	43.22	-8.67	34.55	54	-19.45	AV
Vertical	17010.119	63.63	-4.41	59.22	74	-14.78	PK
Vertical	17010.119	43.11	-4.41	38.70	54	-15.30	AV
Horizontal	4739.004	64.38	-20.12	44.26	68.2	-23.94	PK
Horizontal	4739.004	43.28	-20.12	23.16	54	-30.84	AV
Horizontal	11340.182	50.49	-8.67	41.82	68.2	-26.38	PK
Horizontal	11340.182	43.75	-8.67	35.08	54	-18.92	AV
Horizontal	17010.030	50.60	-4.41	46.19	74	-27.81	PK
Horizontal	17010.030	41.69	-4.41	37.28	54	-16.72	AV

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

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

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

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

Test Mode:	TX (5.8G) -- 802.11a
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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	4679.090	72.85	-20.24	52.60	74	-21.40	PK
Vertical	4679.090	59.18	-20.24	38.94	54	-15.06	AV
Vertical	11490.121	64.79	-8.79	56.00	68.2	-12.20	PK
Vertical	11490.121	49.43	-8.79	40.64	54	-13.36	AV
Vertical	17235.047	58.08	-3.18	54.90	68.2	-13.30	PK
Vertical	17235.047	44.40	-3.18	41.22	54	-12.78	AV
Horizontal	4679.066	72.00	-20.73	51.27	74	-22.73	PK
Horizontal	4679.066	59.91	-20.73	39.18	54	-14.82	AV
Horizontal	11490.161	62.90	-8.79	54.11	68.2	-14.09	PK
Horizontal	11490.161	49.77	-8.79	40.98	54	-13.02	AV
Horizontal	17235.037	56.56	-3.18	53.38	68.2	-14.82	PK
Horizontal	17235.037	44.40	-3.18	41.22	54	-12.78	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.152	73.20	-20.42	52.78	74	-21.22	PK
Vertical	4592.152	59.21	-20.42	38.80	54	-15.20	AV
Vertical	11570.128	64.75	-8.86	55.89	68.2	-12.31	PK
Vertical	11570.128	49.10	-8.86	40.24	54	-13.76	AV
Vertical	17355.121	56.06	-2.52	53.54	68.2	-14.66	PK
Vertical	17355.121	44.52	-2.52	42.00	54	-12.00	AV
Horizontal	4592.197	71.00	-20.42	50.58	74	-23.42	PK
Horizontal	4592.197	59.96	-20.42	39.54	54	-14.46	AV
Horizontal	11570.178	64.87	-8.86	56.01	68.2	-12.19	PK
Horizontal	11570.178	49.63	-8.86	40.77	54	-13.23	AV
Horizontal	17355.118	57.25	-2.52	54.73	68.2	-13.47	PK
Horizontal	17355.118	44.51	-2.52	41.99	54	-12.01	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.057	73.09	-18.93	54.16	68.2	-14.04	PK
Vertical	6039.057	59.63	-18.93	40.70	54	-13.30	AV
Vertical	11650.079	61.81	-8.92	52.89	74	-21.11	PK
Vertical	11650.079	49.26	-8.92	40.34	54	-13.66	AV
Vertical	17475.064	57.88	-1.86	56.02	68.2	-12.18	PK
Vertical	17475.064	44.95	-1.86	43.09	54	-10.91	AV
Horizontal	6039.181	70.89	-18.93	51.96	68.2	-16.24	PK
Horizontal	6039.181	59.22	-18.93	40.29	54	-13.71	AV
Horizontal	11650.040	60.15	-8.92	51.23	74	-22.77	PK
Horizontal	11650.040	49.61	-8.92	40.69	54	-13.31	AV
Horizontal	17475.168	58.73	-1.86	56.87	68.2	-11.33	PK
Horizontal	17475.168	44.16	-1.86	42.30	54	-11.70	AV

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

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

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

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

Test Mode: 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	4679.044	74.13	-20.24	53.88	74	-20.12	PK
Vertical	4679.044	59.47	-20.24	39.23	54	-14.77	AV
Vertical	11490.055	61.68	-8.79	52.89	68.2	-15.31	PK
Vertical	11490.055	49.52	-8.79	40.73	54	-13.27	AV
Vertical	17235.025	58.53	-3.18	55.35	68.2	-12.85	PK
Vertical	17235.025	44.89	-3.18	41.71	54	-12.29	AV
Horizontal	4679.074	71.02	-20.24	50.77	74	-23.23	PK
Horizontal	4679.074	59.71	-20.24	39.47	54	-14.53	AV
Horizontal	11490.078	60.13	-8.79	51.34	68.2	-16.86	PK
Horizontal	11490.078	49.80	-8.79	41.01	54	-12.99	AV
Horizontal	17235.117	59.80	-3.18	56.62	68.2	-11.58	PK
Horizontal	17235.117	44.85	-3.18	41.67	54	-12.33	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.120	73.01	-20.42	52.59	74	-21.41	PK
Vertical	4592.120	59.01	-20.42	38.59	54	-15.41	AV
Vertical	11570.142	62.90	-8.86	54.04	68.2	-14.16	PK
Vertical	11570.142	49.55	-8.86	40.69	54	-13.31	AV
Vertical	17355.013	59.09	-2.52	56.57	68.2	-11.63	PK
Vertical	17355.013	44.72	-2.52	42.20	54	-11.80	AV
Horizontal	4592.062	72.96	-20.42	52.55	74	-21.45	PK
Horizontal	4592.062	59.45	-20.42	39.04	54	-14.96	AV
Horizontal	11570.071	62.57	-8.86	53.71	68.2	-14.49	PK
Horizontal	11570.071	49.09	-8.86	40.23	54	-13.77	AV
Horizontal	17355.170	58.29	-2.52	55.77	68.2	-12.43	PK
Horizontal	17355.170	44.84	-2.52	42.32	54	-11.68	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.098	72.78	-18.93	53.85	68.2	-14.35	PK
Vertical	6039.098	59.06	-18.93	40.13	54	-13.87	AV
Vertical	11650.073	64.47	-8.92	55.55	74	-18.45	PK
Vertical	11650.073	49.33	-8.92	40.41	54	-13.59	AV
Vertical	17475.199	55.82	-1.86	53.96	68.2	-14.24	PK
Vertical	17475.199	44.82	-1.86	42.96	54	-11.04	AV
Horizontal	6039.181	72.24	-18.93	53.30	68.2	-14.90	PK
Horizontal	6039.181	59.84	-18.93	40.91	54	-13.09	AV
Horizontal	11650.107	62.34	-8.92	53.42	74	-20.58	PK
Horizontal	11650.107	49.20	-8.92	40.28	54	-13.72	AV
Horizontal	17475.156	59.34	-1.86	57.48	68.2	-10.72	PK
Horizontal	17475.156	44.35	-1.86	42.49	54	-11.51	AV

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

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

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

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

Test Mode:	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	4679.028	74.93	-20.24	54.68	74	-19.32	PK
Vertical	4679.028	59.56	-20.24	39.32	54	-14.68	AV
Vertical	11510.107	63.39	-8.81	54.58	74	-19.42	PK
Vertical	11510.107	49.22	-8.81	40.41	54	-13.59	AV
Vertical	17265.001	56.34	-3.01	53.33	68.2	-14.87	PK
Vertical	17265.001	44.58	-3.01	41.57	54	-12.43	AV
Horizontal	4679.123	72.10	-20.24	51.86	74	-22.14	PK
Horizontal	4679.123	59.85	-20.24	39.61	54	-14.39	AV
Horizontal	11510.023	60.62	-8.81	51.81	74	-22.19	PK
Horizontal	11510.023	49.45	-8.81	40.64	54	-13.36	AV
Horizontal	17265.018	59.52	-3.01	56.51	68.2	-11.69	PK
Horizontal	17265.018	44.16	-3.01	41.15	54	-12.85	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.035	71.94	-18.93	53.00	68.2	-15.20	PK
Vertical	6039.035	59.60	-18.93	40.67	54	-13.33	AV
Vertical	11590.073	61.26	-8.87	52.39	74	-21.61	PK
Vertical	11590.073	49.04	-8.87	40.17	54	-13.83	AV
Vertical	17385.185	56.64	-2.35	54.29	68.2	-13.91	PK
Vertical	17385.185	44.63	-2.35	42.28	54	-11.72	AV
Horizontal	6039.166	73.74	-18.93	54.81	68.2	-13.39	PK
Horizontal	6039.166	59.11	-18.93	40.17	54	-13.83	AV
Horizontal	11590.076	64.00	-8.87	55.13	74	-18.87	PK
Horizontal	11590.076	49.11	-8.87	40.24	54	-13.76	AV
Horizontal	17385.138	56.54	-2.35	54.19	68.2	-14.01	PK
Horizontal	17385.138	44.09	-2.35	41.74	54	-12.26	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 $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

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

8.4 EUT Operating Conditions

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

8.5 Test Result

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	AC 120V
Test Mode:	(5180-5240MHz); (5260-5320MHz); (5500-5700MHz) ;(5745-5825MHz)		

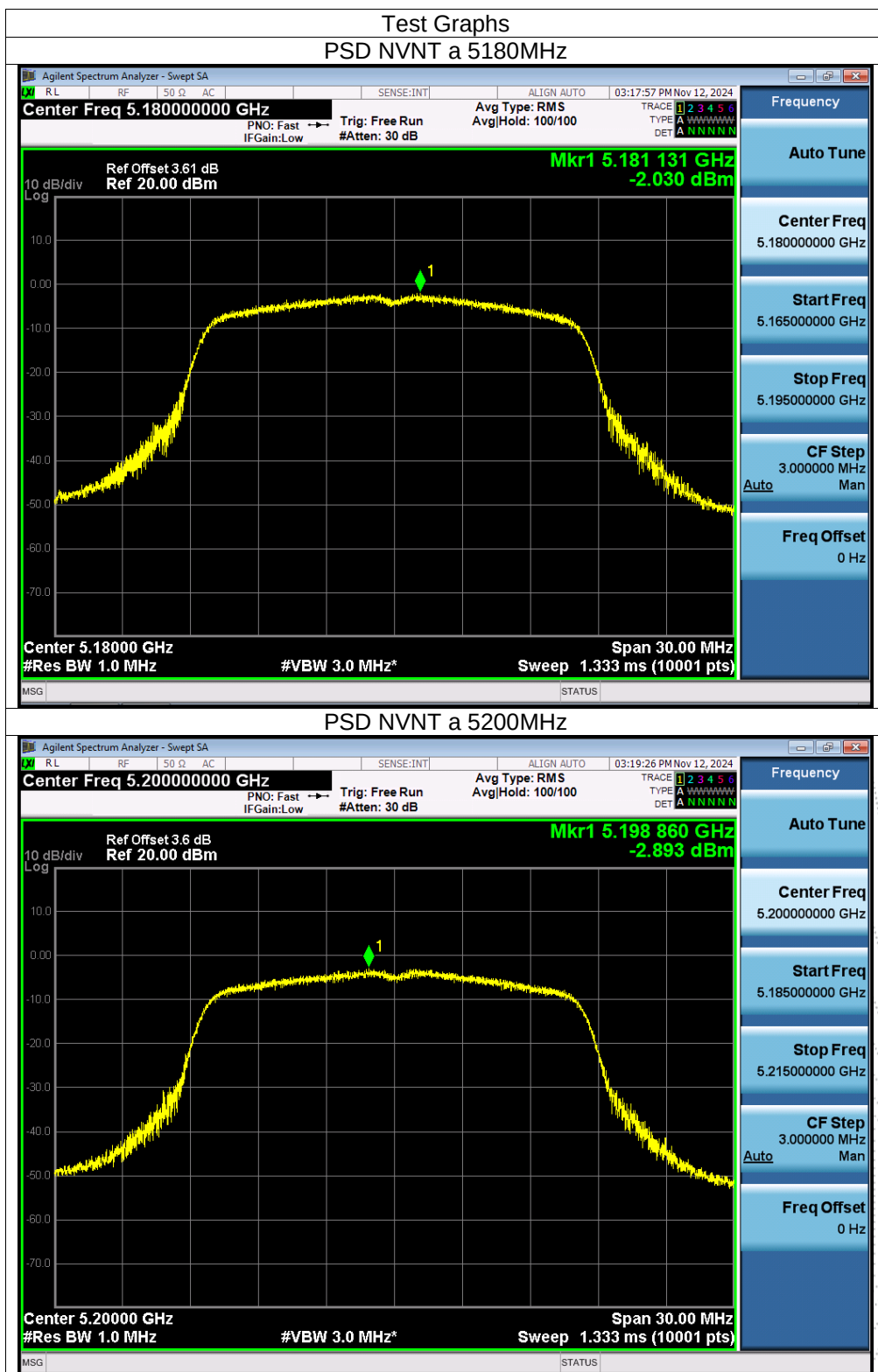
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/1MHz)	Limit (dBm/1MHz)	Verdict
NVNT	a	5180	-2.03	11	Pass
NVNT	a	5200	-2.89	11	Pass
NVNT	a	5240	-4.49	11	Pass
NVNT	n20	5180	-3.54	11	Pass
NVNT	n20	5200	-4.33	11	Pass
NVNT	n20	5240	-6.05	11	Pass
NVNT	n40	5190	-7.35	11	Pass
NVNT	n40	5230	-8.93	11	Pass

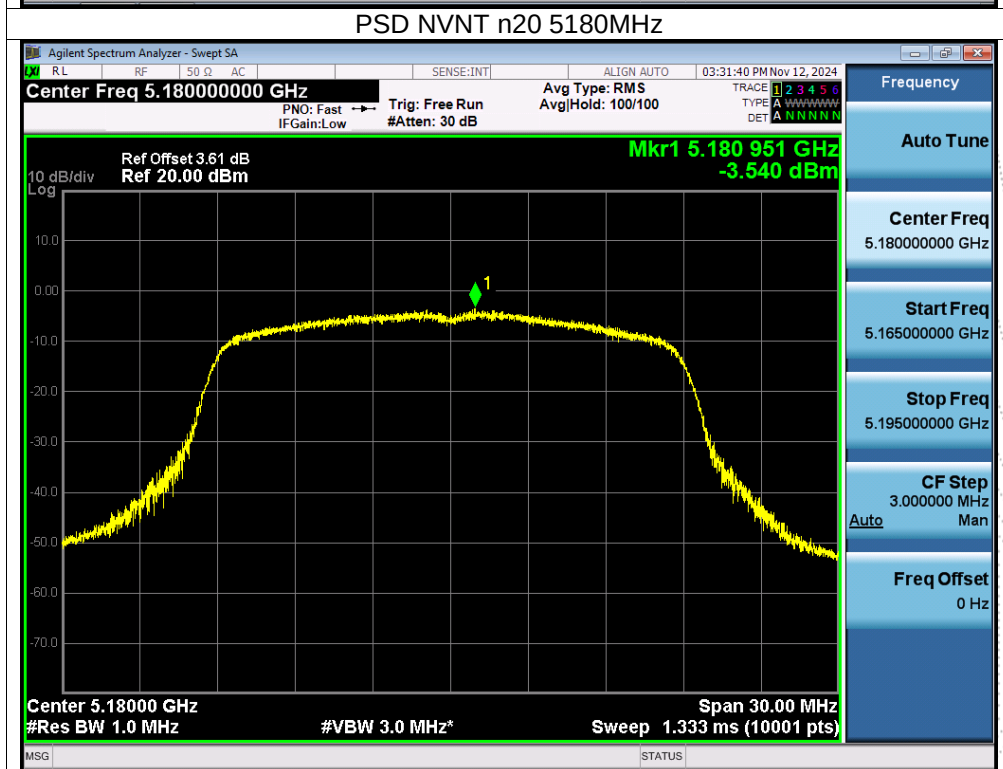
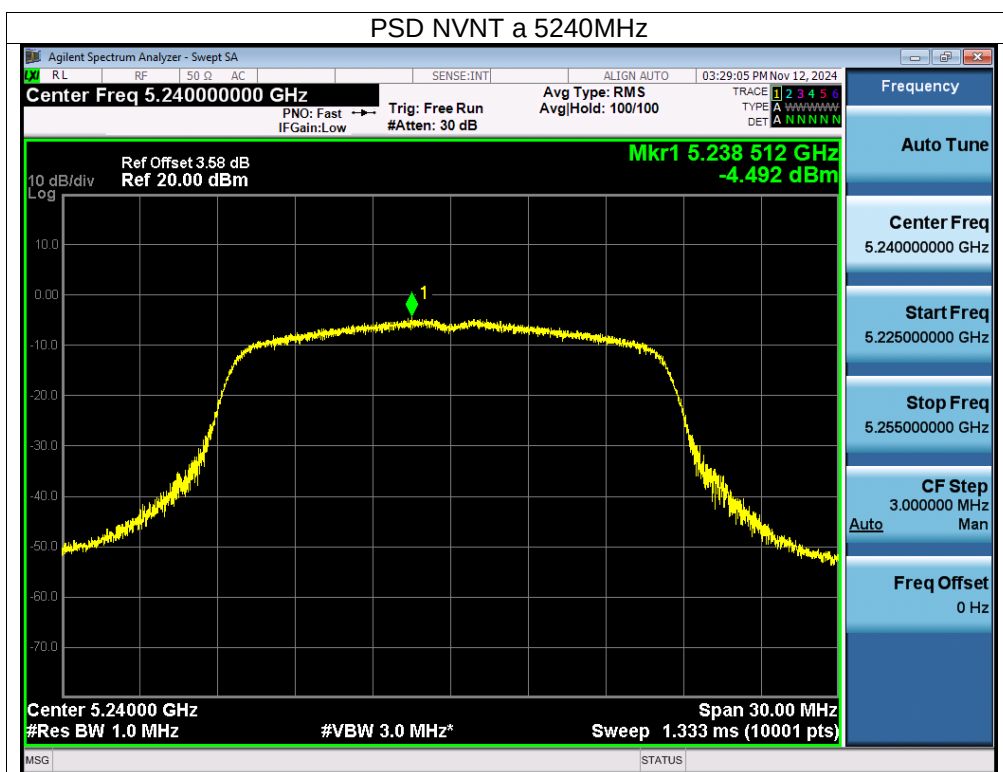
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/1MHz)	Limit (dBm/1MHz)	Verdict
NVNT	a	5260	-2.19	11	Pass
NVNT	a	5280	-0.96	11	Pass
NVNT	a	5320	-0.81	11	Pass
NVNT	n20	5260	-3.19	11	Pass
NVNT	n20	5280	-2.65	11	Pass
NVNT	n20	5320	-2.46	11	Pass
NVNT	n40	5270	-7.15	11	Pass
NVNT	n40	5310	-6.42	11	Pass

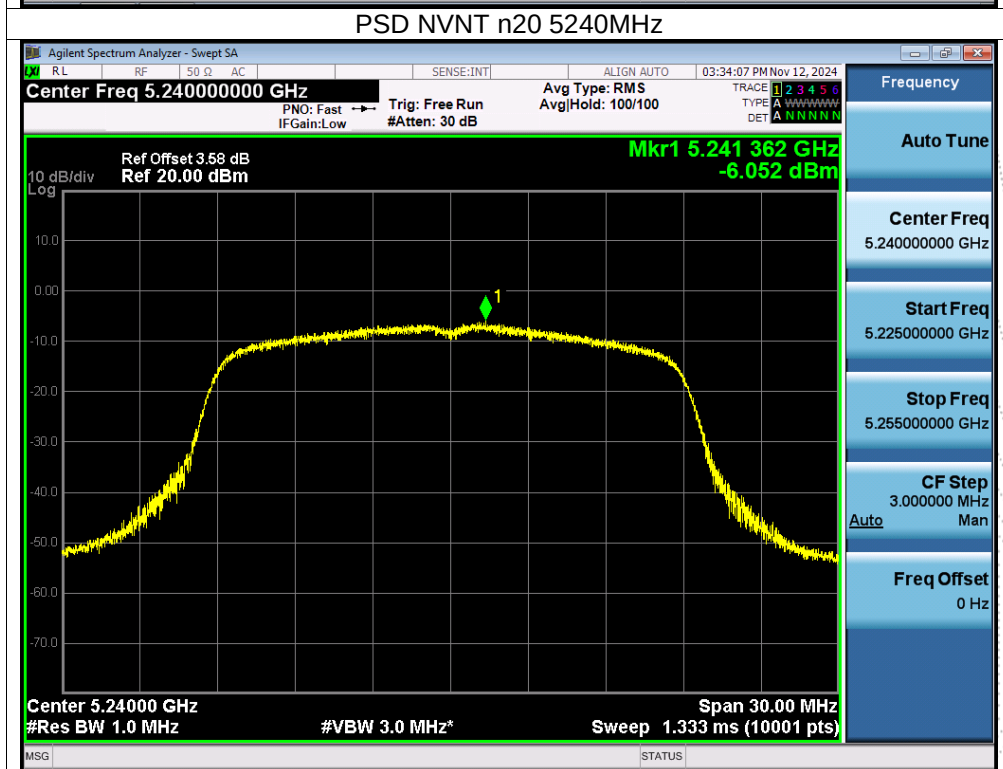
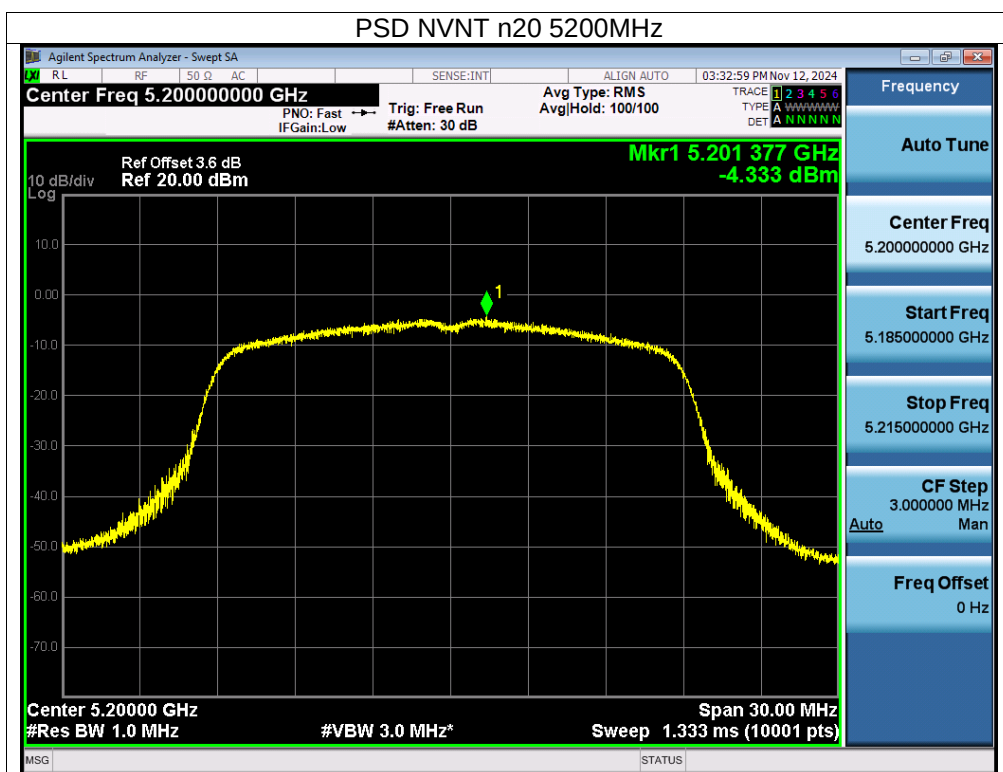
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/1MHz)	Limit (dBm/1MHz)	Verdict
NVNT	a	5500	-1.82	11	Pass
NVNT	a	5580	-2.54	11	Pass
NVNT	a	5700	-0.65	11	Pass
NVNT	n20	5500	-3.21	11	Pass
NVNT	n20	5580	-3.96	11	Pass
NVNT	n20	5700	-2.25	11	Pass
NVNT	n40	5510	-7.55	11	Pass
NVNT	n40	5550	-7.44	11	Pass
NVNT	n40	5670	-7.17	11	Pass

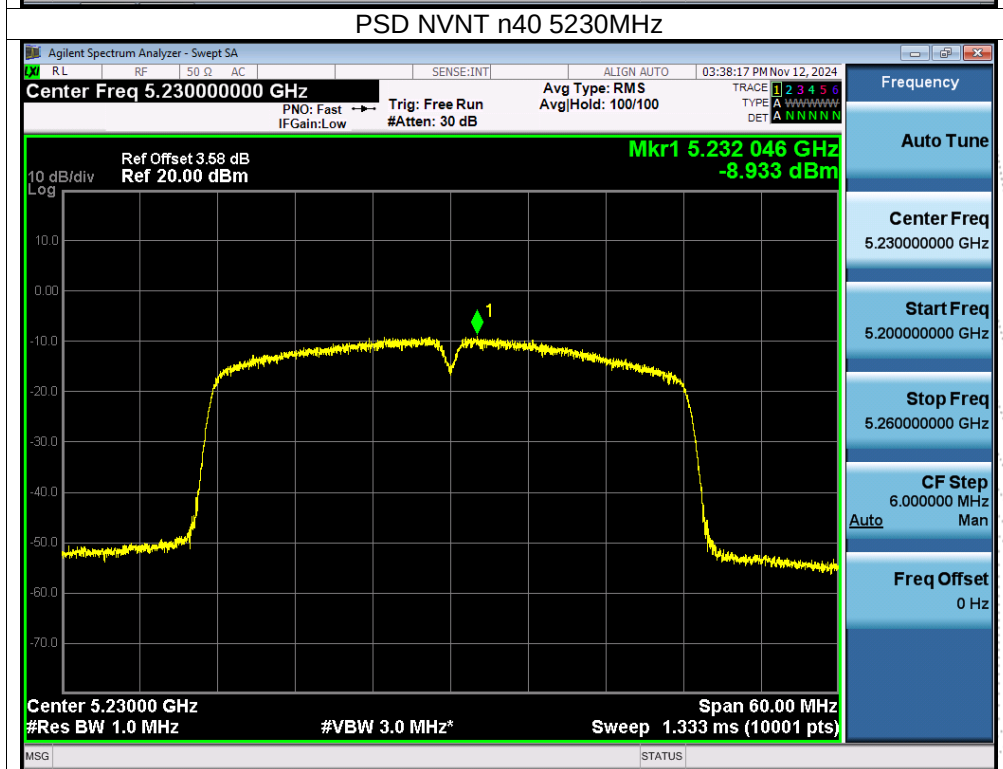
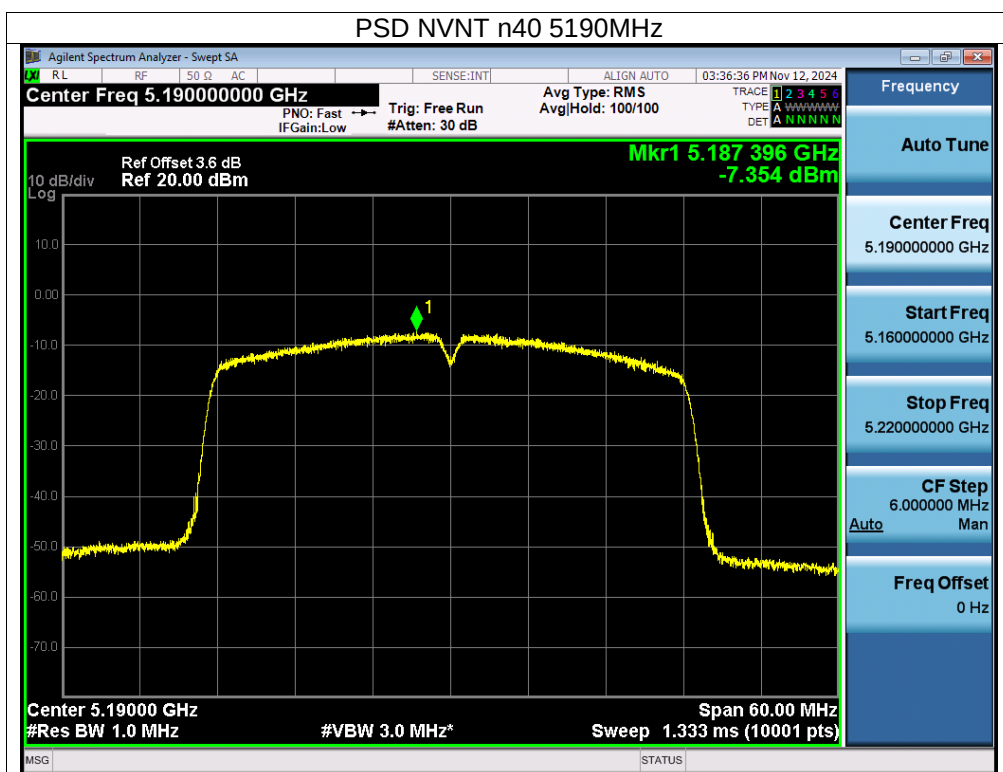
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/510KHz)	Conducted PSD (dBm/500KHz)	Limit (dBm)	Verdict
NVNT	a	5745	-5.37	-5.456	30	Pass
NVNT	a	5785	-5.44	-5.526	30	Pass
NVNT	a	5825	-5.4	-5.486	30	Pass
NVNT	n20	5745	-7.03	-7.116	30	Pass
NVNT	n20	5785	-7.01	-7.096	30	Pass
NVNT	n20	5825	-6.29	-6.376	30	Pass
NVNT	n40	5755	-9.78	-9.866	30	Pass
NVNT	n40	5795	-9.93	-10.016	30	Pass

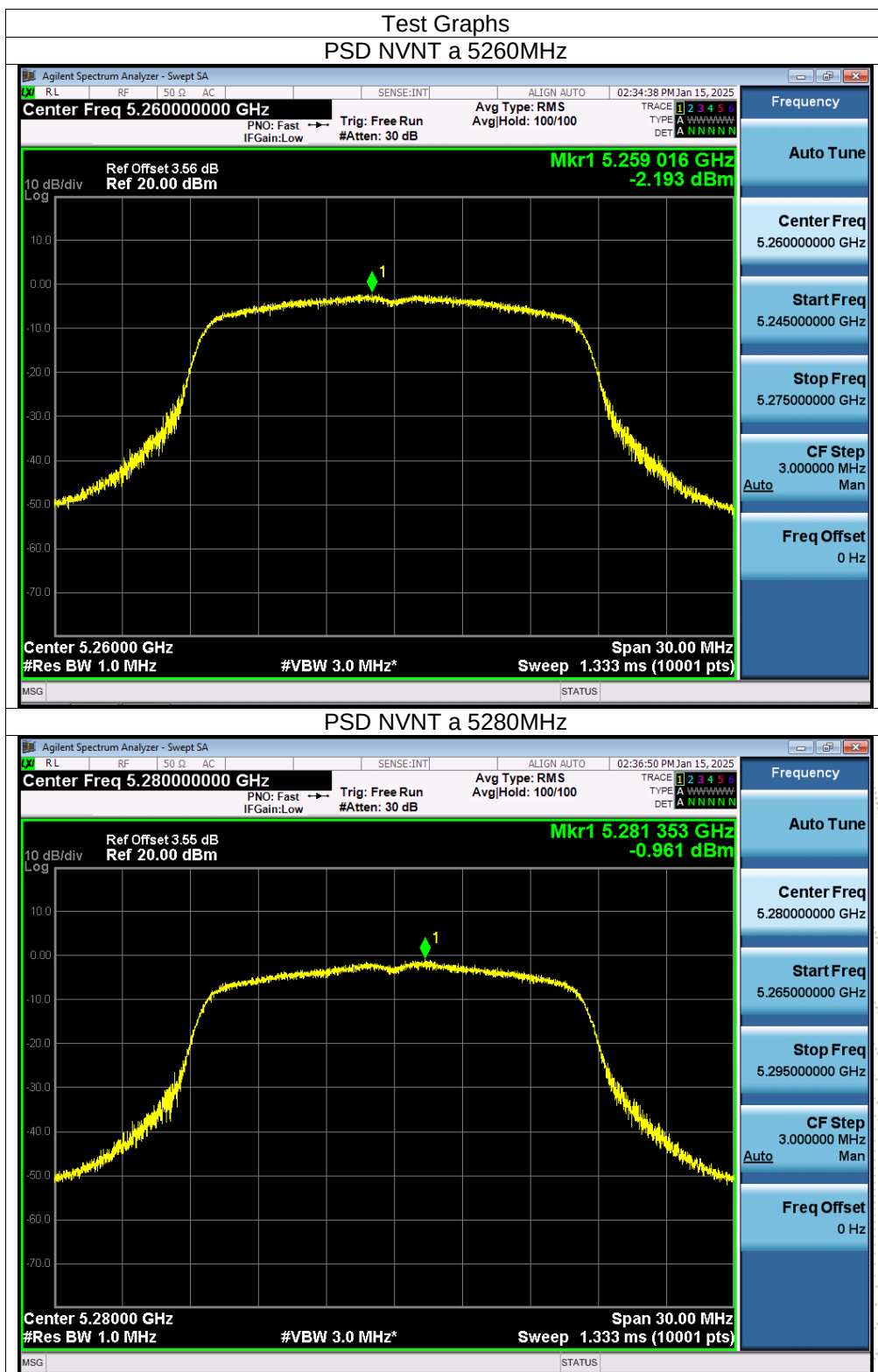
Note: Correction Factor = $10\log(500\text{KHz}/\text{RBW in measurement}) = -0.086$

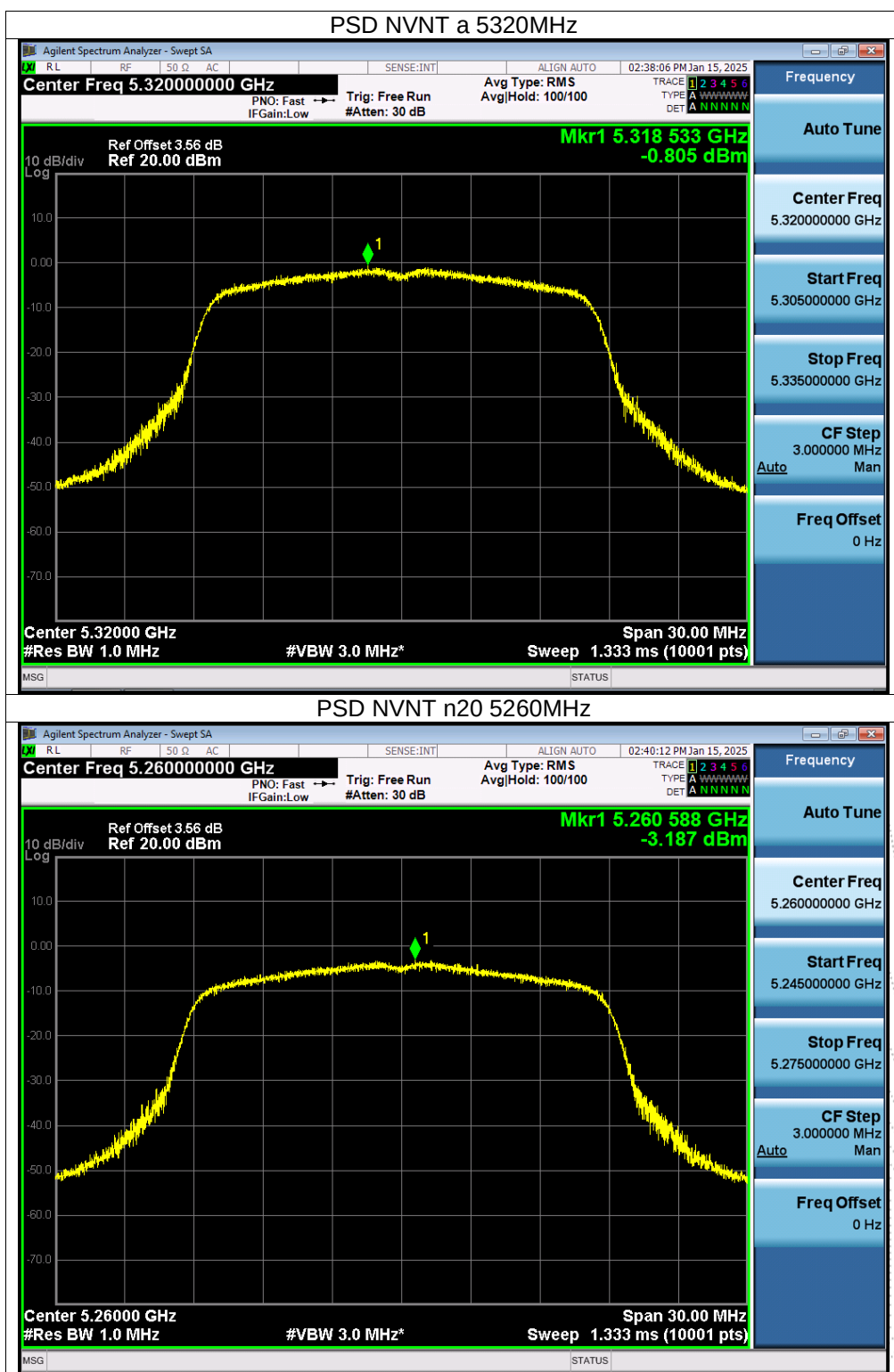


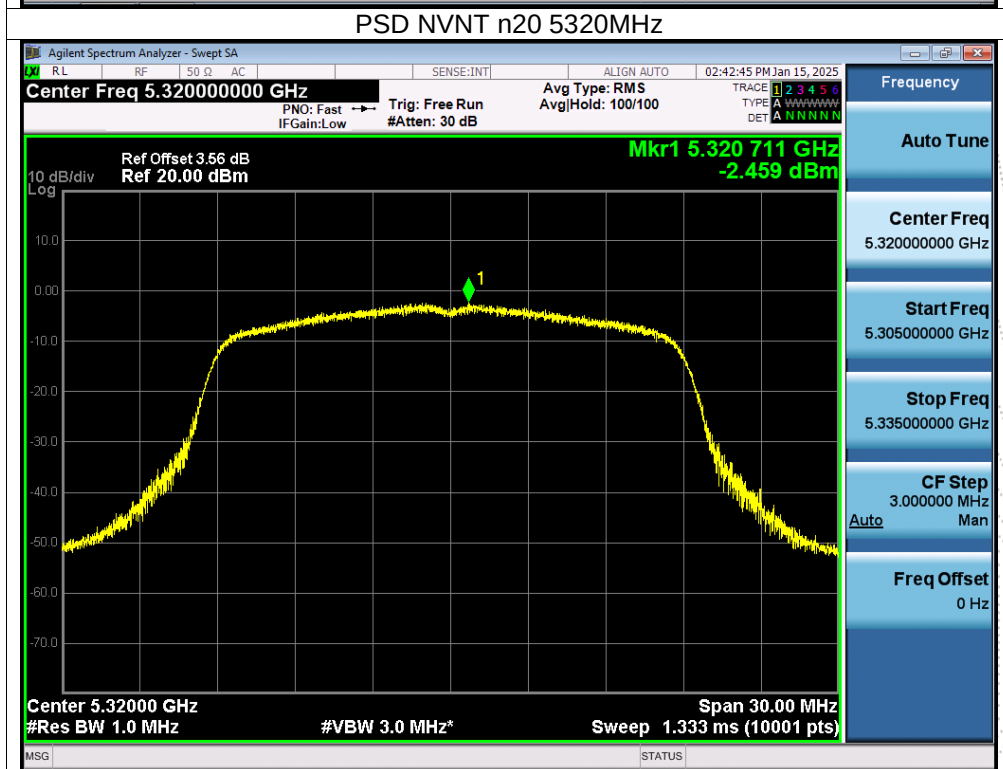
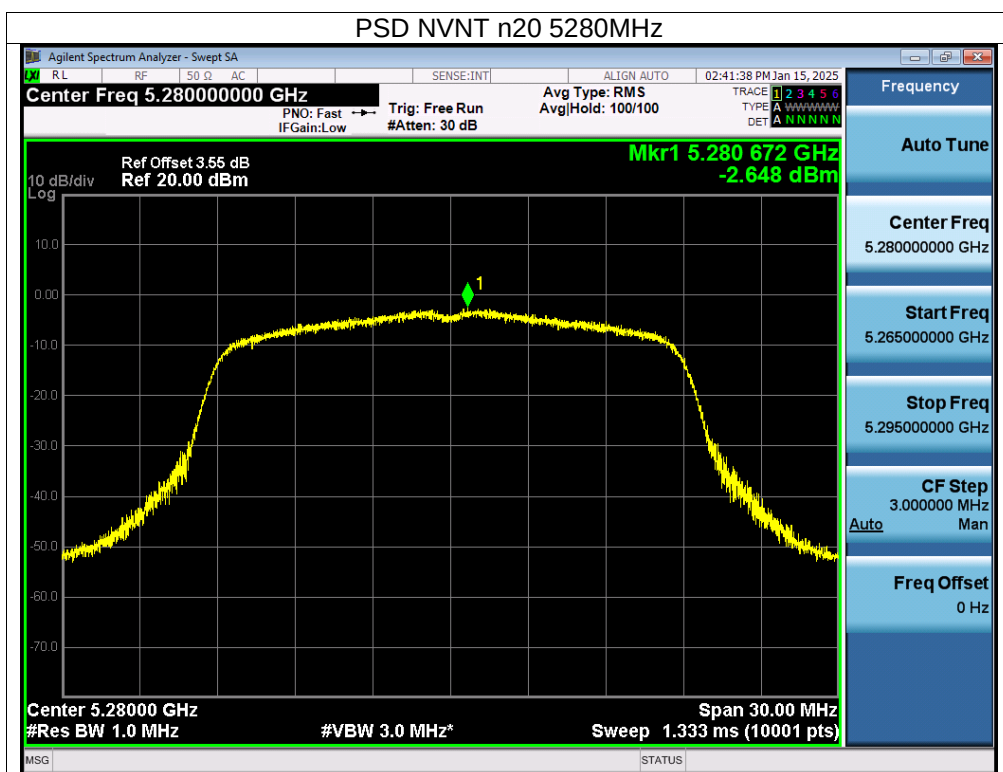


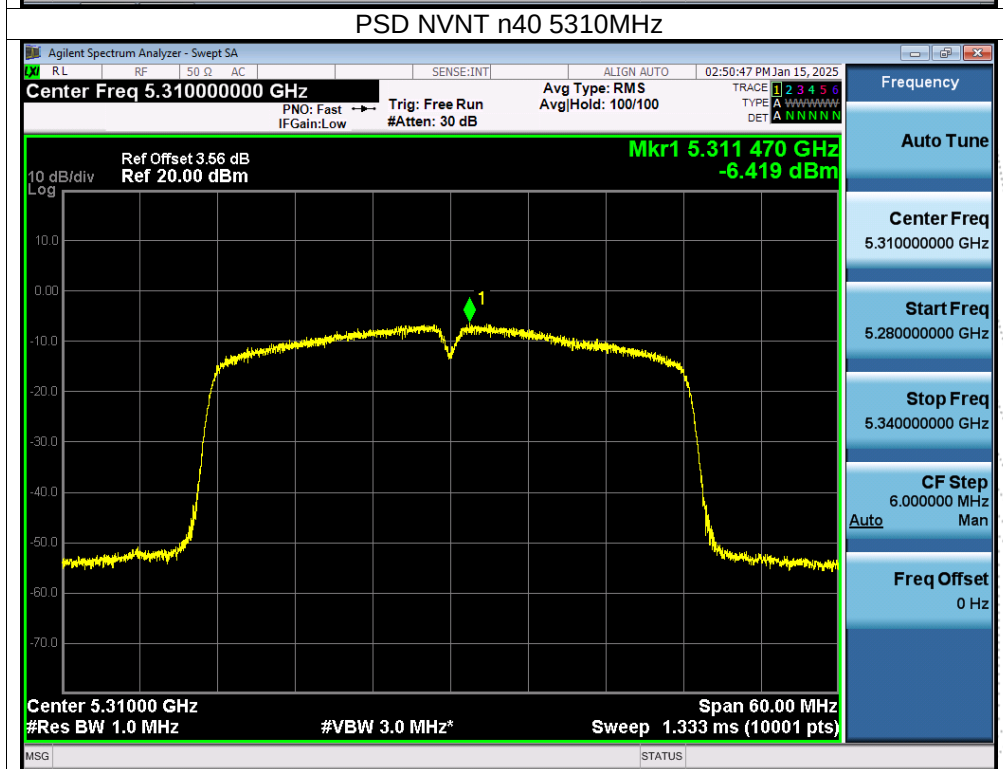
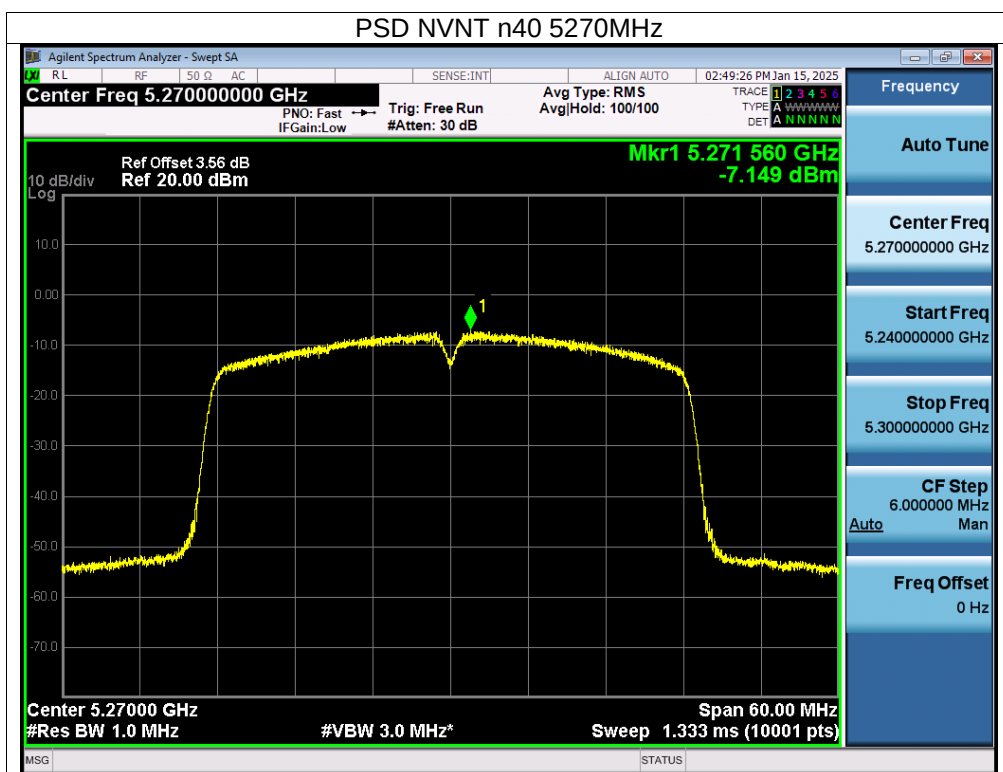


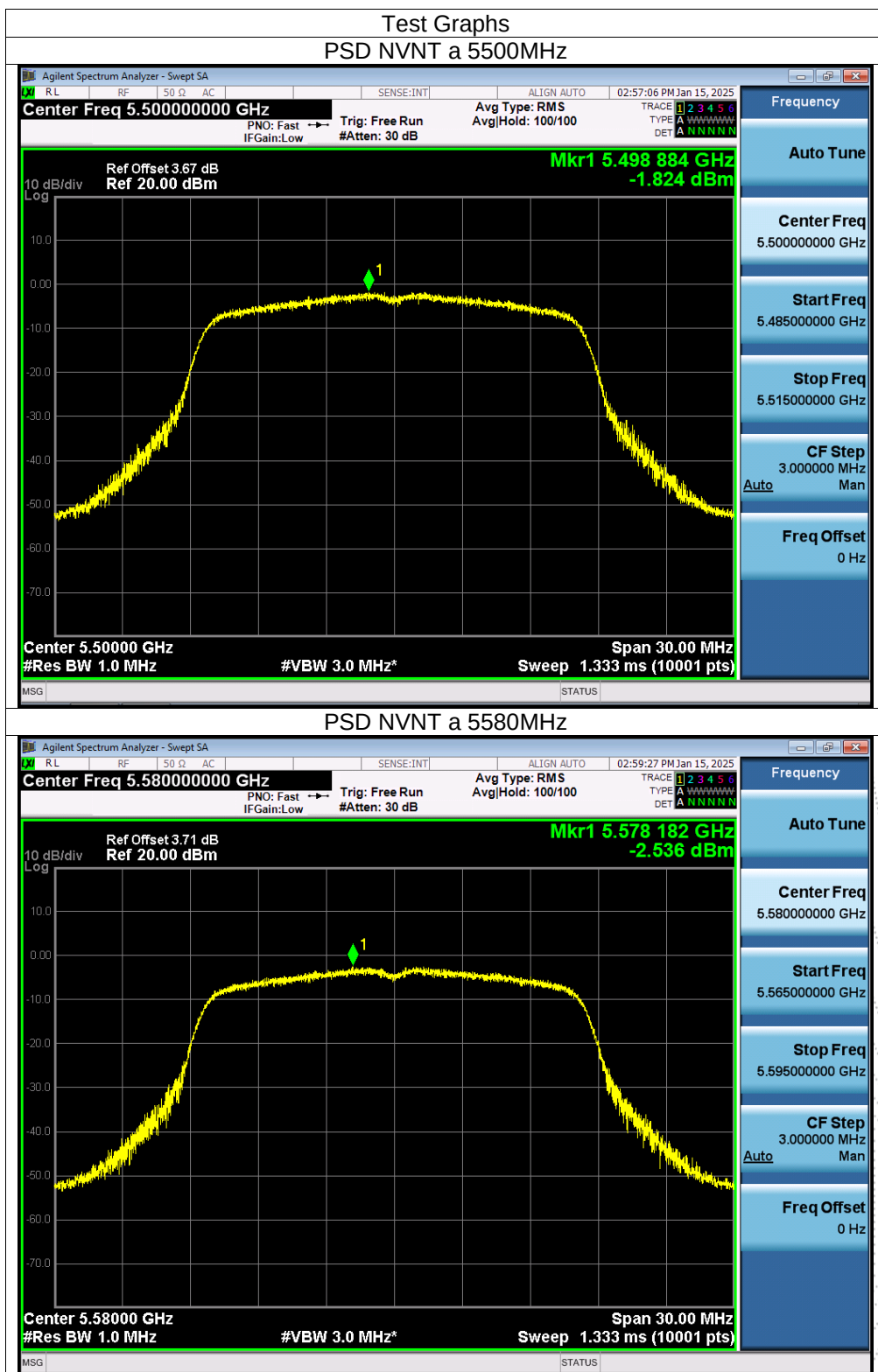


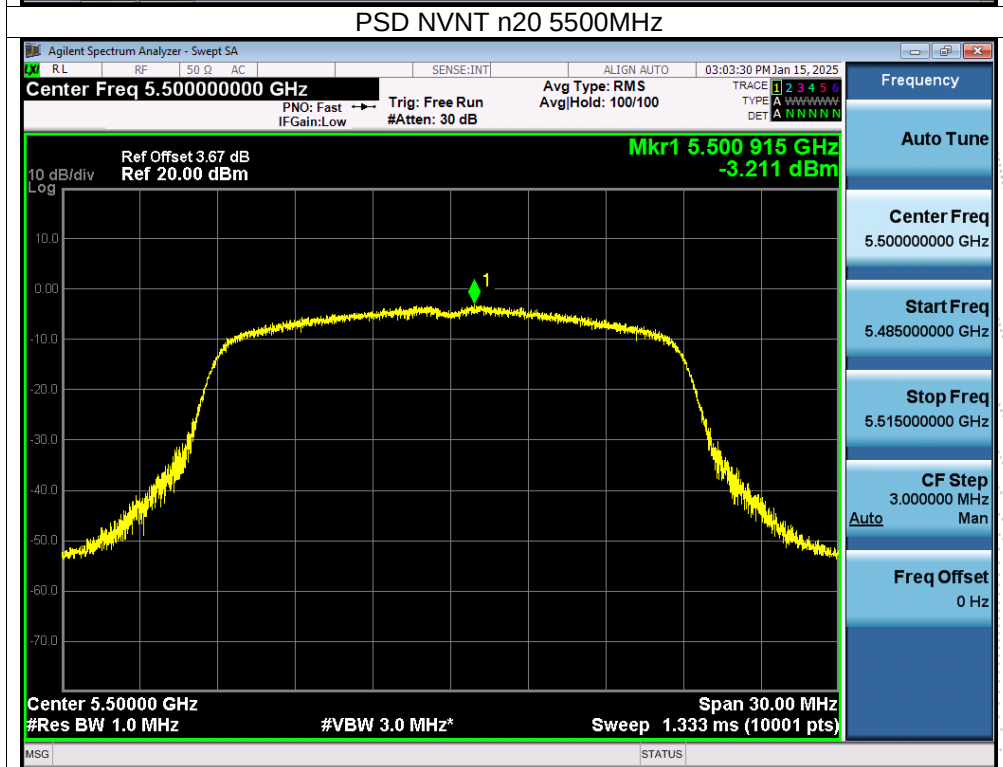
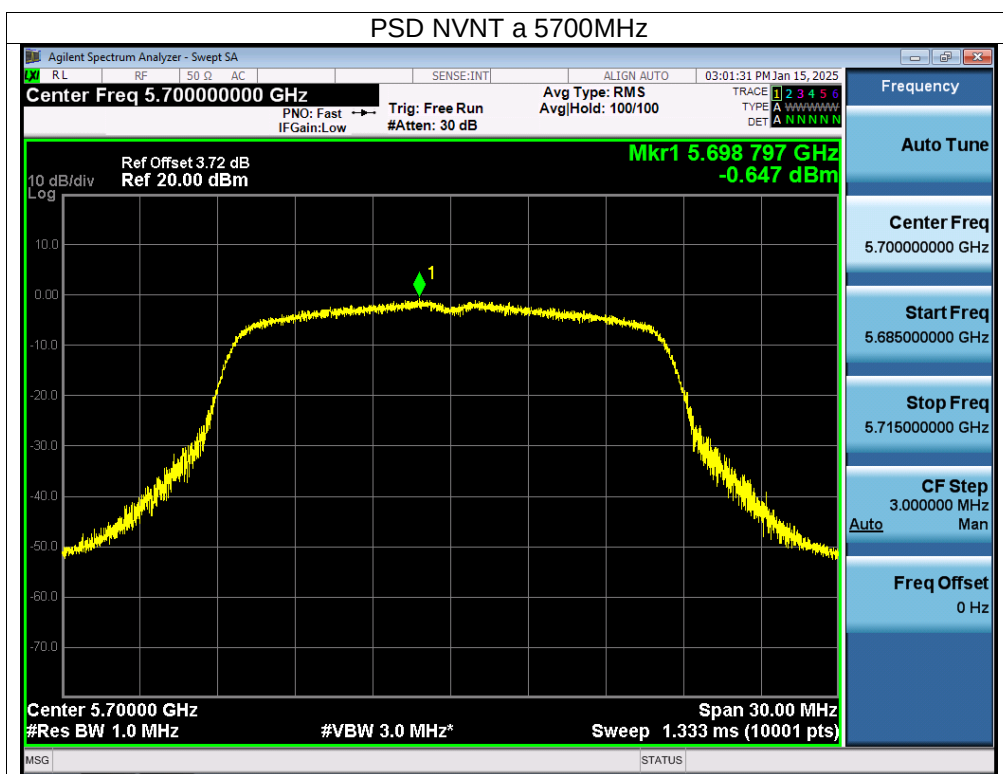


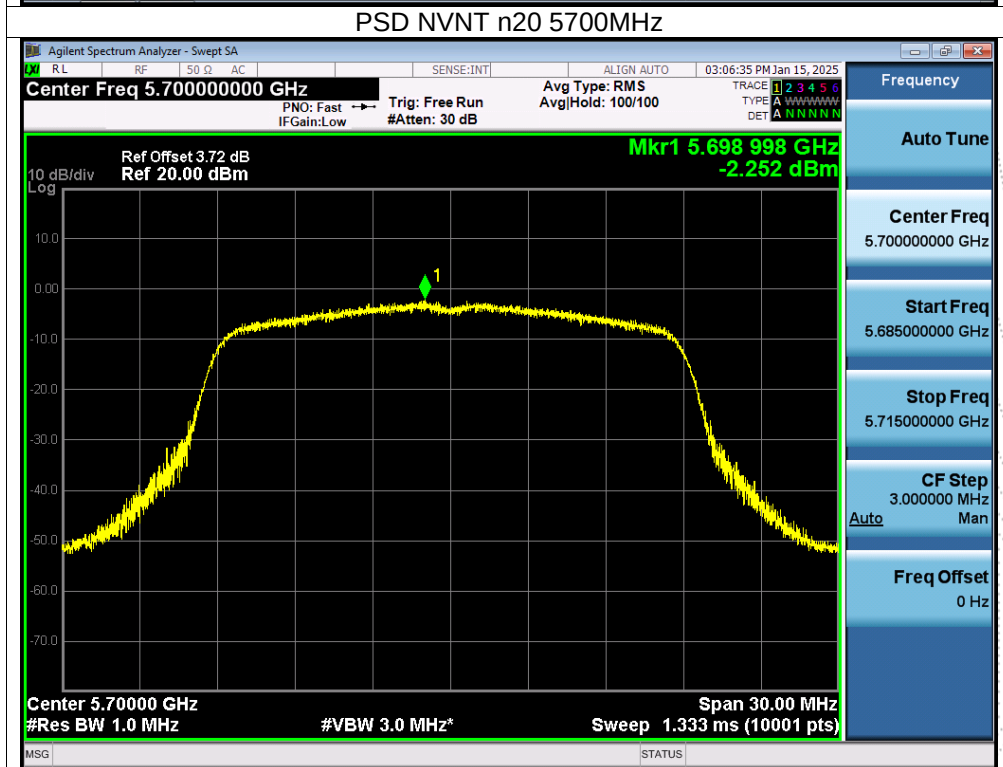
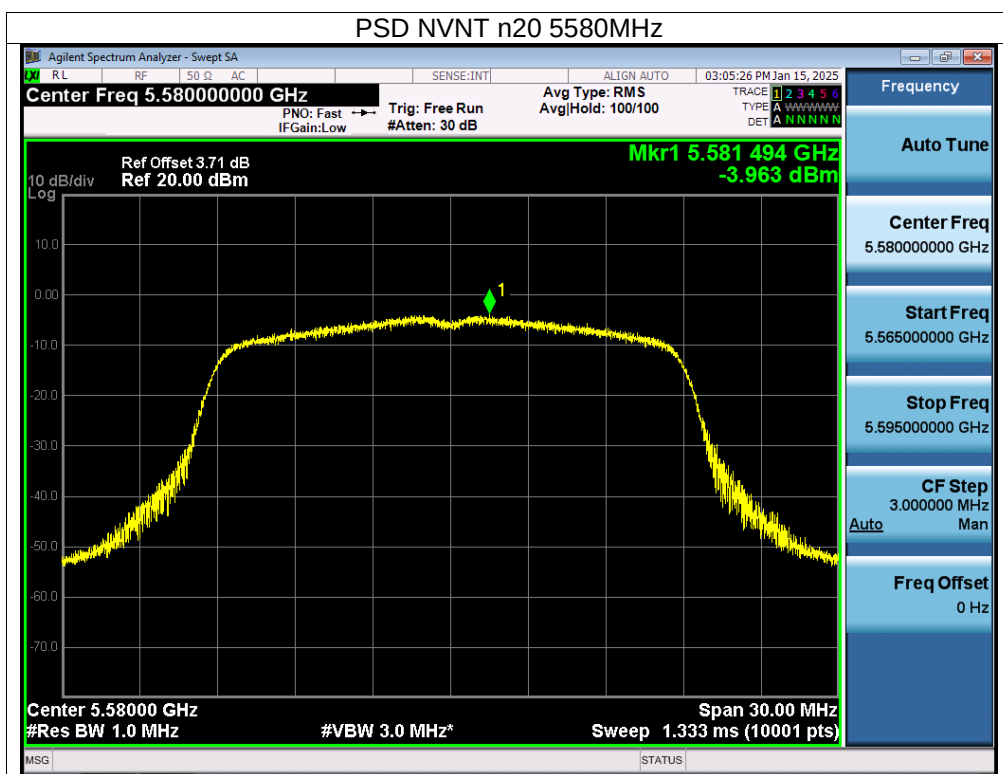


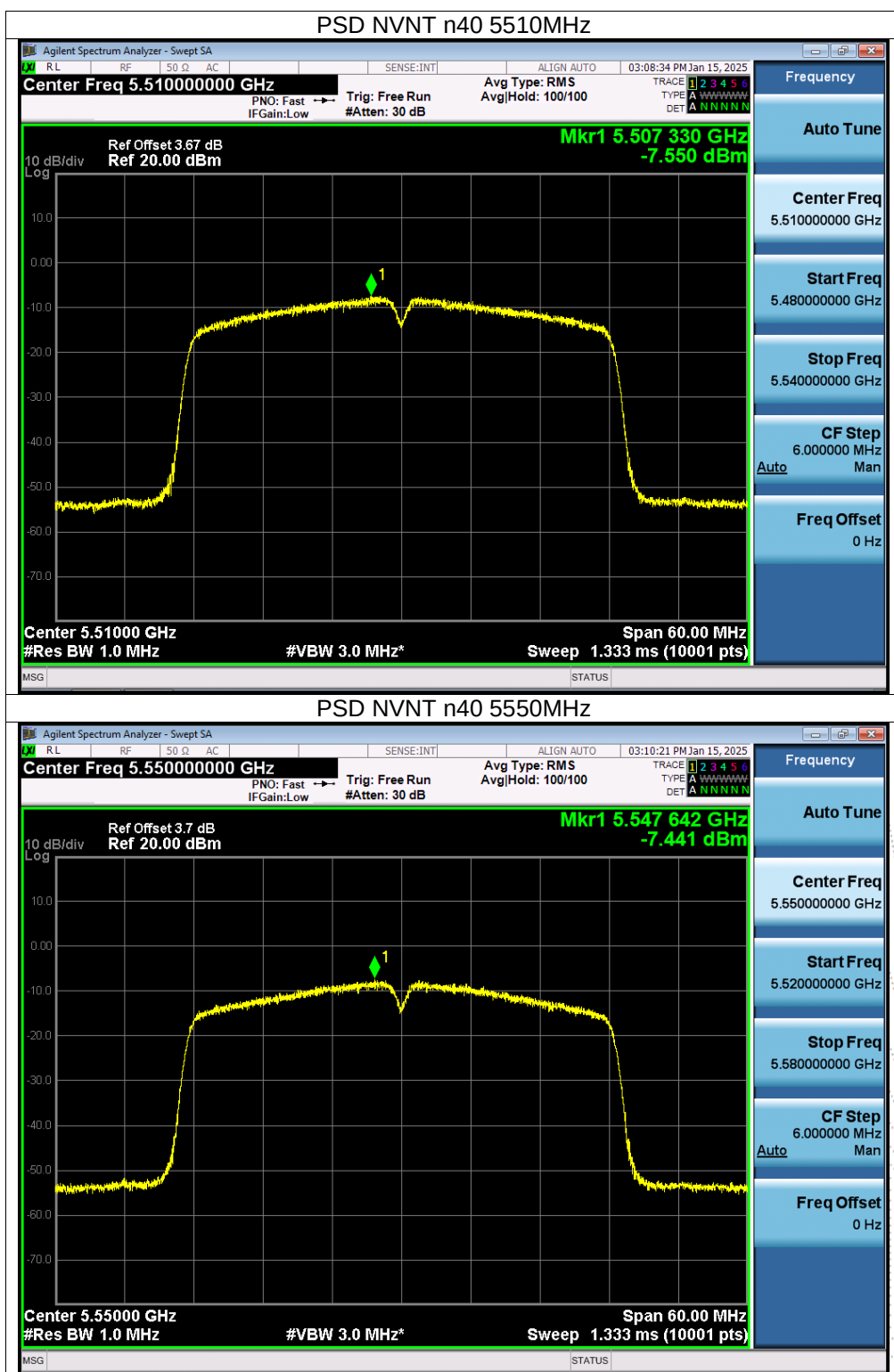


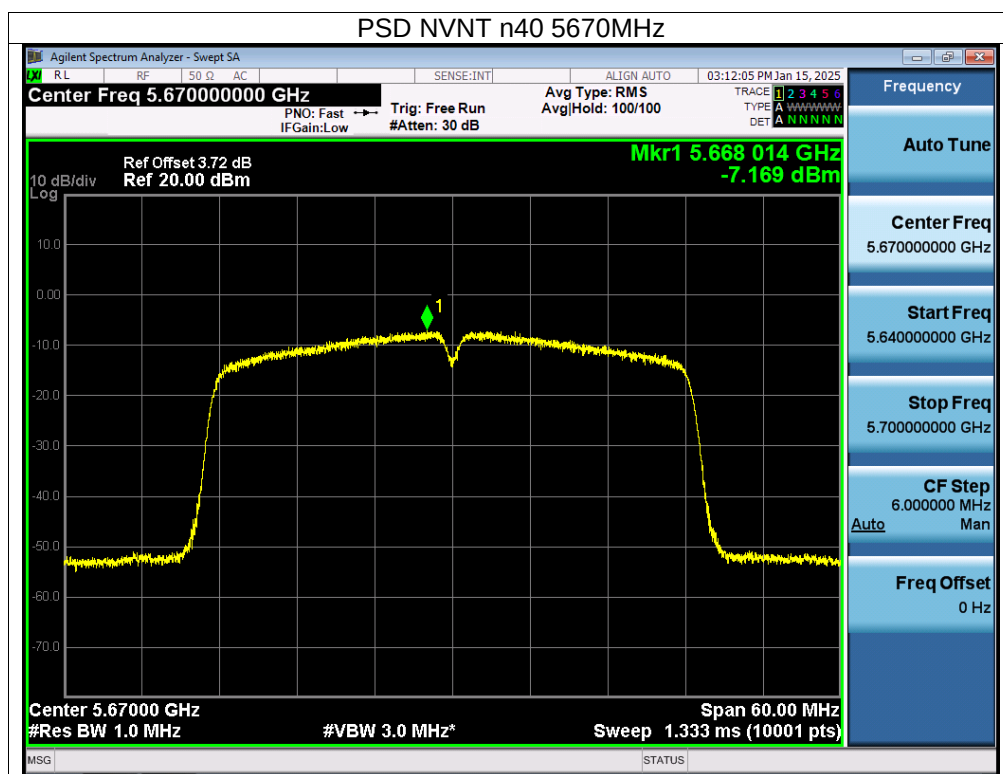




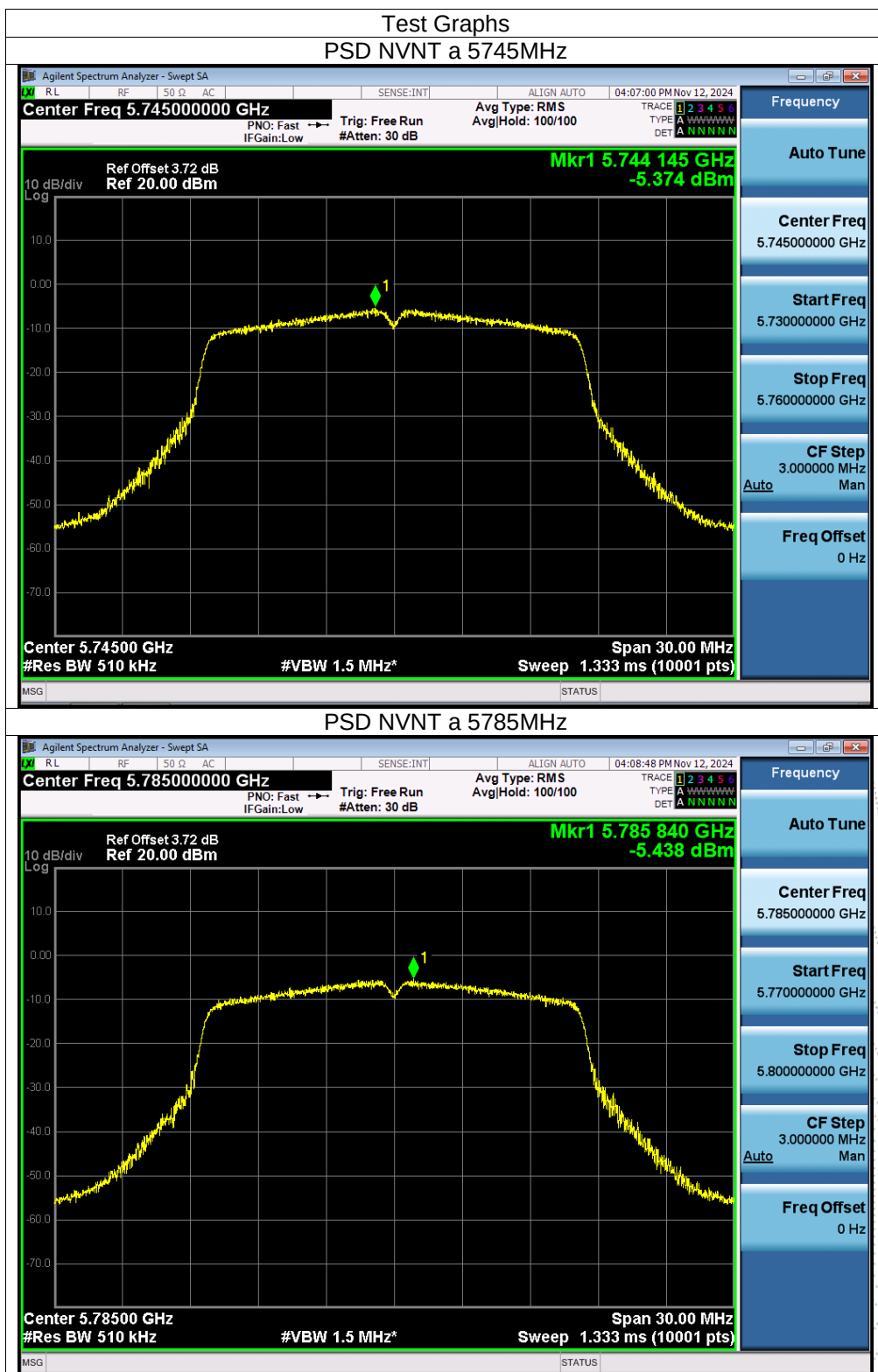


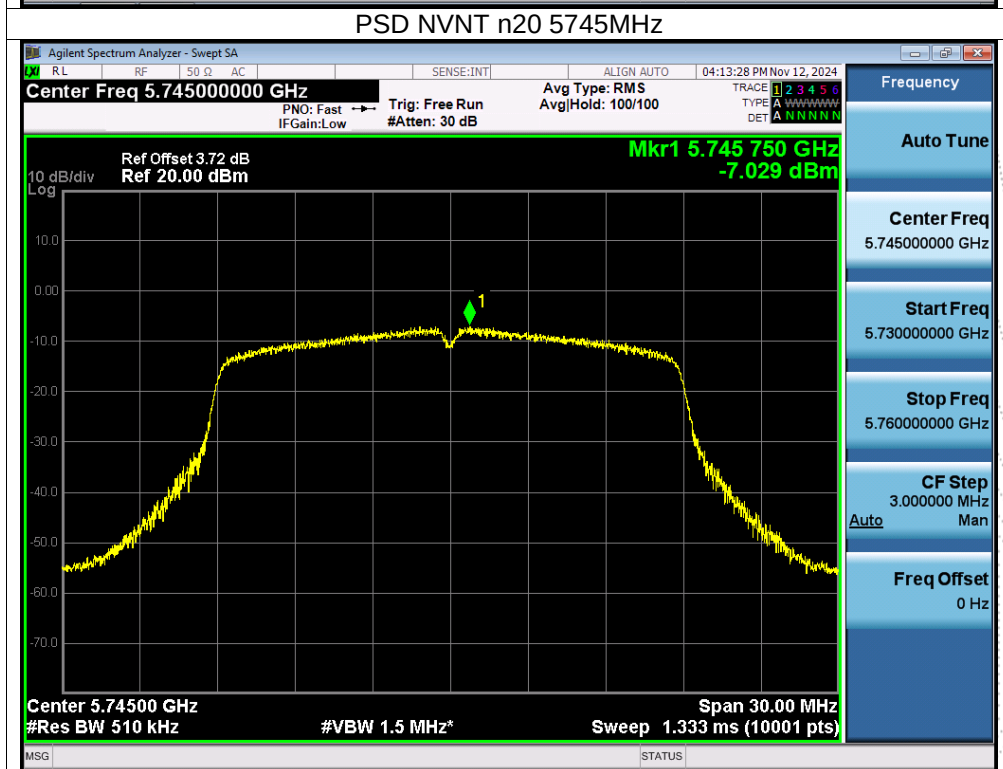
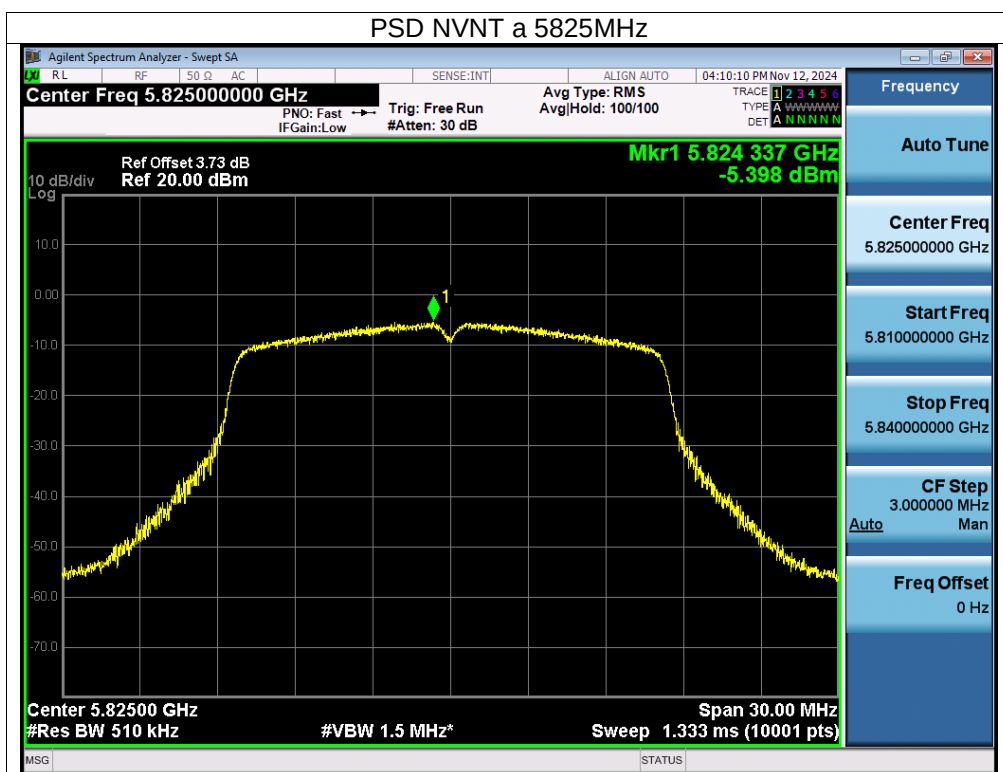


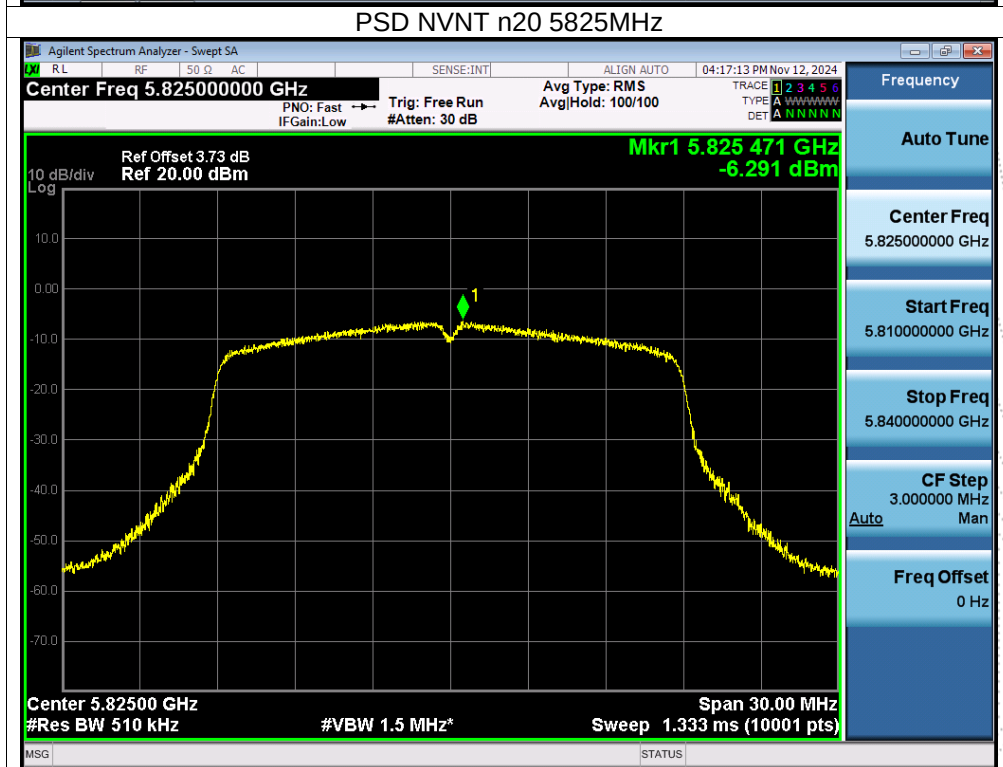
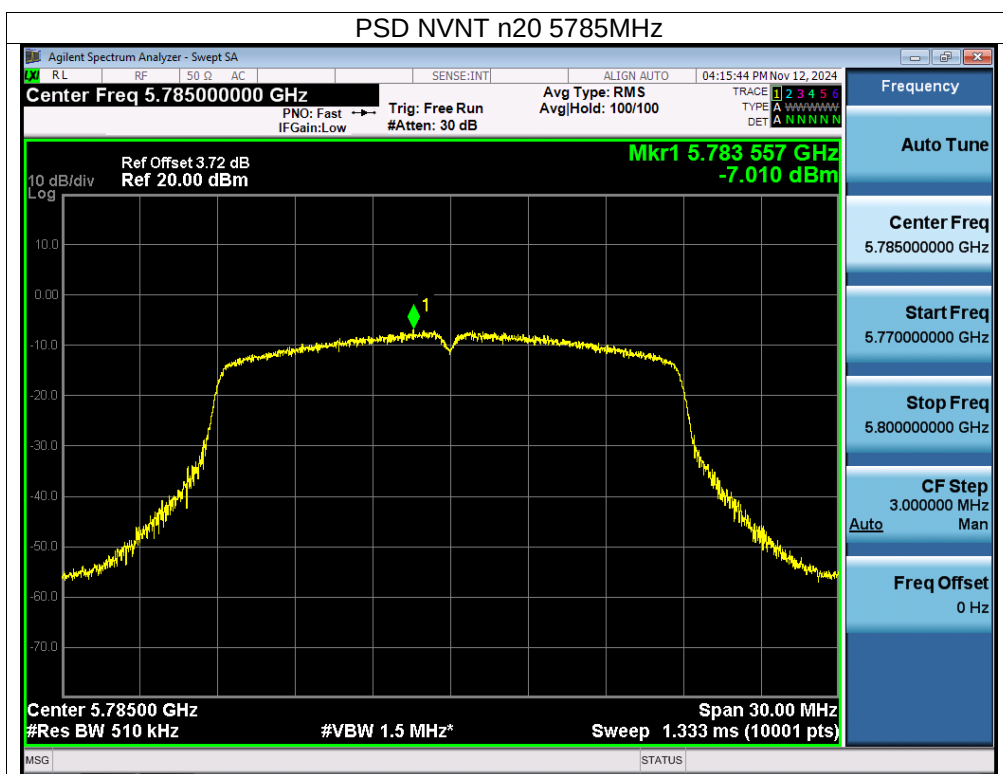


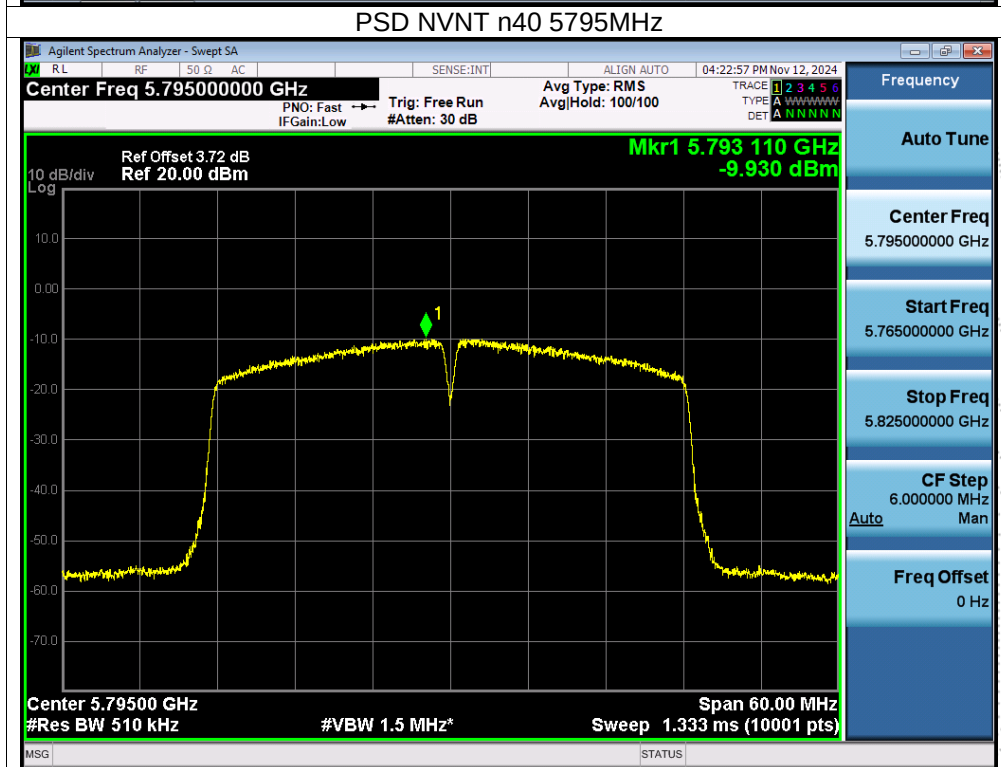
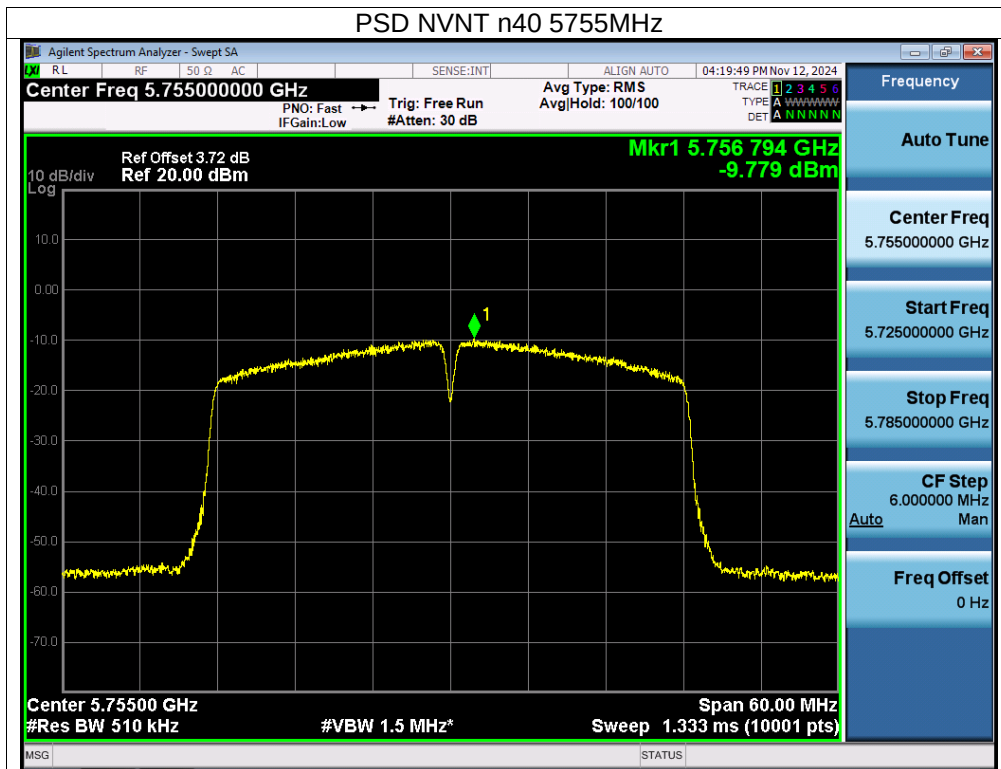


BCTC
BCTC
PPR
Report



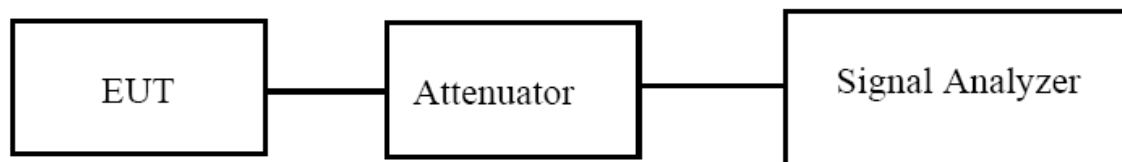






9. 26dB & 6dB & 99% Emission Bandwidth

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

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- 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:

- Set center frequency to the nominal EUT channel center frequency.
- Set span = 1.5 times to 5.0 times the OBW.
- Set RBW = 1 % to 5 % of the OBW
- Set VBW $\geq 3 \cdot$ RBW
- 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.
- Use the 99 % power bandwidth function of the instrument (if available).
- 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

- Set RBW = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- Detector = Peak.
- Trace mode = max hold.
- 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 °C	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	AC 120V
Test Mode:	TX Frequency U-NII-1 (5180-5240MHz)		

Condition	Mode	Frequency (MHz)	99% bandwidth (MHz)	-26dB bandwidth (MHz)	Result
NVNT	a	5180	16.214	19.202	Pass
NVNT	a	5200	16.214	19.127	Pass
NVNT	a	5240	16.244	19.334	Pass
NVNT	n20	5180	17.335	20.103	Pass
NVNT	n20	5200	17.354	20.161	Pass
NVNT	n20	5240	17.319	19.953	Pass
NVNT	n40	5190	35.218	37.912	Pass
NVNT	n40	5230	35.273	37.839	Pass



