

TEST REPORT

Report No.: BCTC2112272495-4E

Applicant: L FORWARD INC.

Product Name: 10.1inch tablet pc

Model/Type
reference: SGIN_X10

Tested Date: 2021-12-09 to 2022-01-07

Issued Date: 2022-01-07



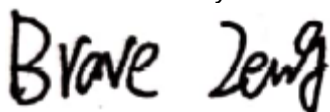
Shenzhen BCTC Testing Co., Ltd.



FCC ID:2A3YZ-SGINX10

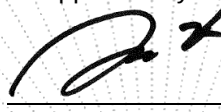
Product Name: 10.1inch tablet pc
Trademark: N/A
Model/Type reference: SGIN_X10
M103PQ
Prepared For: L FORWARD INC.
Address: 1908 Thomes Ave Cheyenne, Laramie, WY 82001, us
Manufacturer: Shenzhen NST Industry and Trade Co., Ltd.
Address: 3/F, Bldg 1, Hongbang Technology Park, No.30 Cuibao Road, Baolong 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, Tangwei, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Sample Received Date: 2021-12-09
Sample tested Date: 2021-12-09 to 2022-01-07
Issue Date: 2022-01-07
Report No.: BCTC2112272495-4E
Test Standards: FCC Part15 15.407
ANSI C63.10-2013
KDB 662911 D01 v02r01
KDB 789033 D02 v02r01
Test Results: PASS
Remark: This is WIFI-5GHz band radio test report.

Tested by:



Brave Zeng/ Project Handler

Approved by:



Zero Zhou/Reviewer

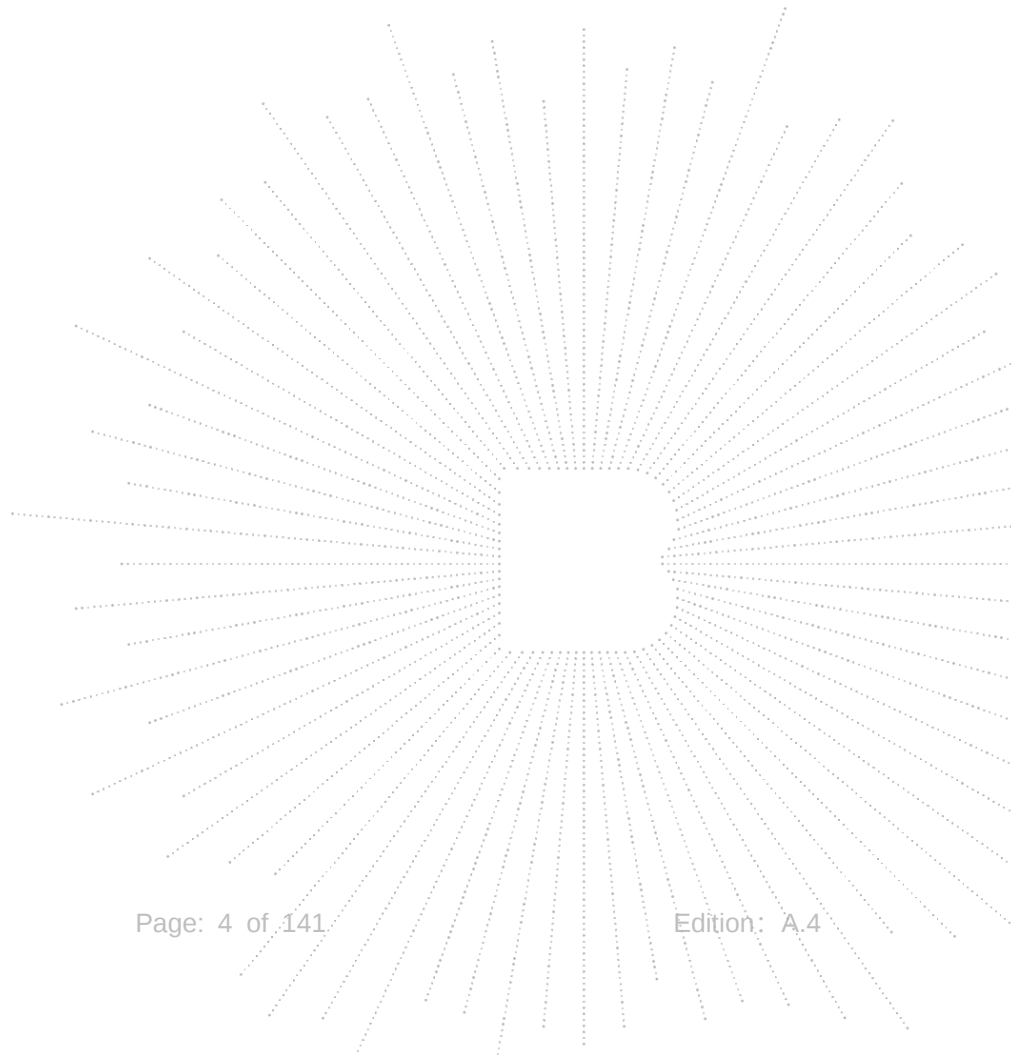
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(Note: N/A Means Not Applicable)



1. Version

Report No.	Issue Date	Description	Approved
BCTC2112272495-4E	2022-01-07	Original	Valid

2. Test Summary

The Product has been tested according to the following specifications:

1	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(30MHz-1GHz)	U=4.3dB
2	3m chamber Radiated spurious emission(9KHz-30MHz)	U=3.7dB
3	3m chamber Radiated spurious emission(1GHz-18GHz)	U=4.5dB
4	3m chamber Radiated spurious emission(18GHz-40GHz)	U=3.34dB
5	Conducted Emission (150kHz-30MHz)	U=3.20dB
6	Conducted Adjacent channel power	U=1.38dB
7	Conducted output power uncertainty Above 1G	U=1.576dB
8	Conducted output power uncertainty below 1G	U=1.28dB
9	humidity uncertainty	U=5.3%
10	Temperature uncertainty	U=0.59°C

4. Product Information And Test Setup

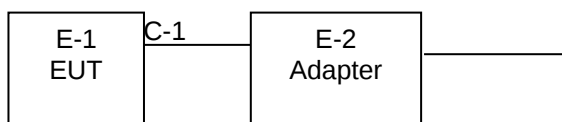
4.1 Product Information

Model/Type reference:	SGIN_X10 M103PQ
Model differences:	All the model are the same circuit and RF module, except model names.
Hardware Version:	SGIN_X10_EEA
Software Version:	SGIN_X10_US
IEEE 802.11 WLAN Mode Supported:	802.11a/n/ac(20MHz channel bandwidth) 802.11n/ac(40MHz channel bandwidth) 802.11ac(80MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n(HT20)/ac20; 5190-5230MHz for 802.11n(HT40)/ac40; 5210MHz for 802.11 ac80; 5745-5825 MHz for 802.11a/n(HT20)/ac20; 5755-5795 MHz for 802.11a/n(HT40)/ac40; 5775MHz for 802.11 ac80;
Data Rate	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac(VHT20): NSS1, MCS0-MCS8 802.11ac(VHT40/VHT80):NSS1, MCS0-MCS
Type of Modulation:	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac;
Number Of Channel	4 channels for 802.11a/n20 in the 5180-5240MHz band ; 2 channels for 802.11 n40 in the 5190-5230MHz band ; 1 channels for 802.11 ac80 in the 5210MHz band ; 5 channels for 802.11a/n20 in the 5745-5825MHz band ; 2 channels for 802.11 n40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band ;
Antenna installation:	Internal antenna
Antenna Gain:	2.81dBi
Ratings:	AC 120V/60Hz/DC 3.8V
Adapter:	MOEDL:JZB310-050200UU INPUT:100-240V~50-60Hz 0.35A OUTPUT: 5.0V ——— 2.0A 10.0W

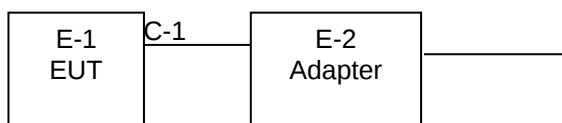
4.2 Test Setup Configuration

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

Conducted Emission:



Radiated Spurious Emission



4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	10.1inch tablet pc	N/A	SGIN_X10	M103PQ	EUT
E-2	Adapter	N/A	JZB310-050200UU	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C-1	N/A	N/A	1M	DC cable unshielded

Notes:

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

4.4 Channel List

Frequency and Channel list for 802.11a/n /ac (5180-5240MHz):

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

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

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

Frequency and Channel list for 802.11a/n /ac (5745-5825MHz):

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

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

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

4.5 Test Mode

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

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

Conducted Emission	
Final Test Mode	Description
Mode 4	Link Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	802.11a / n/ ac 20 CH36/ CH40/ CH 48 802.11a /n/ ac 20 CH149/ CH157/ CH 165
Mode 2	802.11n/ ac40 CH38/ CH 46 802.11n/ ac40 CH 151 / CH 159
Mode 3	802.11 ac80 CH 42/CH 155

Note: The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.

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, Tangwei, 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

IC Registered No.: 23583

5.2 Test Instrument Used

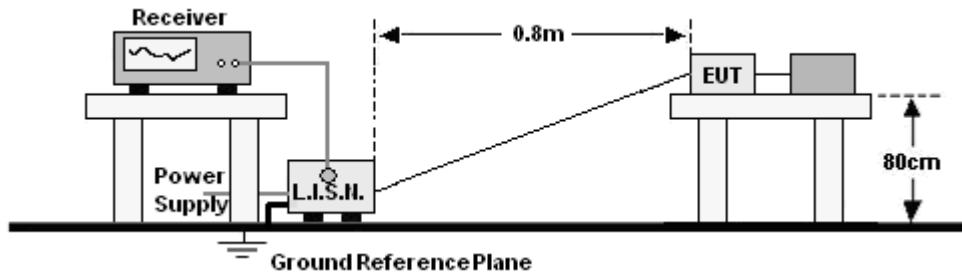
Conducted Emissions Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Receiver	R&S	ESR3	102075	May 28, 2021	May 27, 2022
LISN	R&S	ENV216	101375	May 28, 2021	May 27, 2022
ISN	HPX	ISN T800	S1509001	May 28, 2021	May 27, 2022
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\

RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power Metter	Keysight	E4419	\	May 28, 2021	May 27, 2022
Power Sensor (AV)	Keysight	E9300A	\	May 28, 2021	May 27, 2022
Signal Analyzer 20kHz-26.5G Hz	Keysight	N9020A	MY49100060	May 28, 2021	May 27, 2022
Spectrum Analyzer 9kHz-40GHz	R&S	FSP 40	\	May 28, 2021	May 27, 2022

Radiated Emissions Test (966 Chamber)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	Jun. 06. 2020	Jun. 05, 2023
Receiver	R&S	ESR3	102075	May 28, 2021	May 27, 2022
Receiver	R&S	ESRP	101154	May 28, 2021	May 27, 2022
Amplifier	SKET	LAPA_01G18 G-45dB	\	May 28, 2021	May 27, 2022
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 28, 2021	May 27, 2022
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	Jun. 01, 2021	May 31, 2022
Horn Antenna	Schwarzbeck	BBHA9120D	1541	Jun. 02, 2021	Jun. 01, 2022
Horn Antenn (18GHz-40GH z)	Schwarzbeck	BBHA9170	00822	Jun. 15, 2021	Jun. 14, 2022
Amplifier (18GHz-40GH z)	MITEQ	TTA1840-35- HG	2034381	May 28, 2021	May 27, 2022
Loop Antenna (9kHz-30MHz)	Schwarzbeck	FMZB1519B	00014	Jun. 02, 2021	Jun. 01, 2022
RF cables1 (9kHz-30MHz)	Huber+Suhnar	9kHz-30MHz	B1702988-000 8	May 28, 2021	May 27, 2022
RF cables2 (30MHz-1GHz)	Huber+Suhnar	30MHz-1GHz	1486150	May 28, 2021	May 27, 2022
RF cables3 (1GHz-40GHz)	Huber+Suhnar	1GHz-40GHz	1607106	May 28, 2021	May 27, 2022
Power Metter	Keysight	E4419	\	May 28, 2021	May 27, 2022
Power Sensor (AV)	Keysight	E9300A	\	May 28, 2021	May 27, 2022
Signal Analyzer 20kHz-26.5G Hz	Keysight	N9020A	MY49100060	May 28, 2021	May 27, 2022
Spectrum Analyzer 9kHz-40GHz	R&S	FSP 40	\	May 28, 2021	May 27, 2022
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.

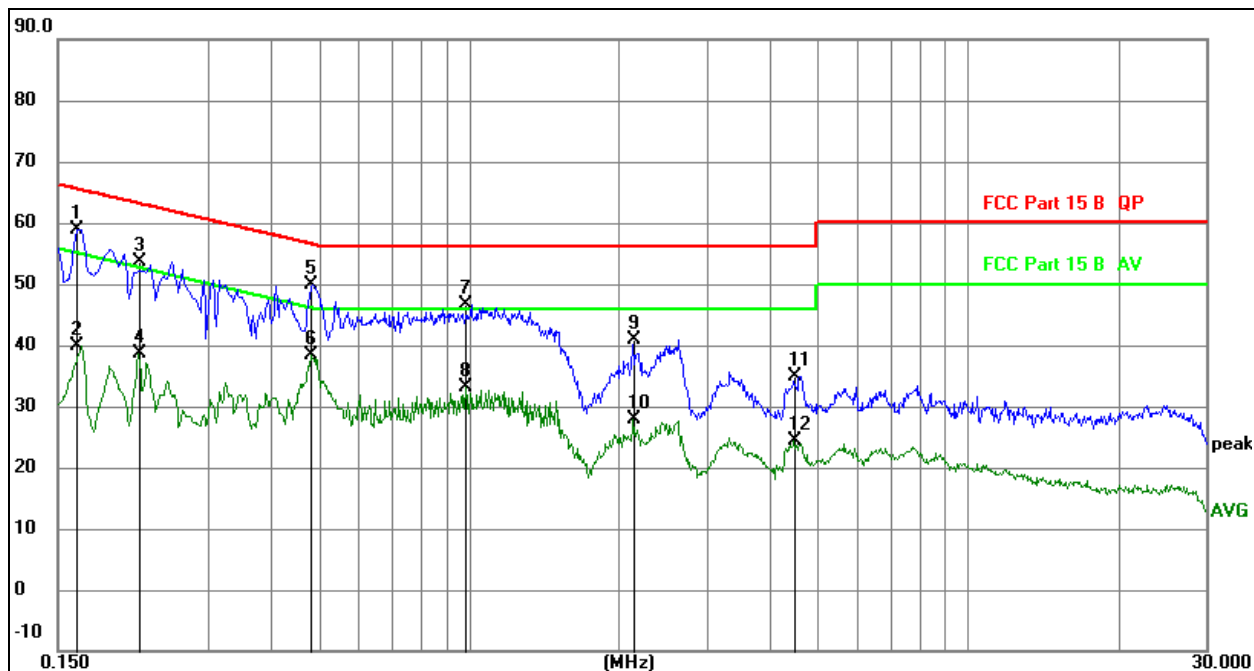
6.4 EUT operating Conditions

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.

We pretest AC 120V and AC 240V, the worst voltage was AC 120V and the data recording in the report.

6.5 Test Result

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	AC120V/60Hz
Test Mode:	Mode 4	Polarization :	L

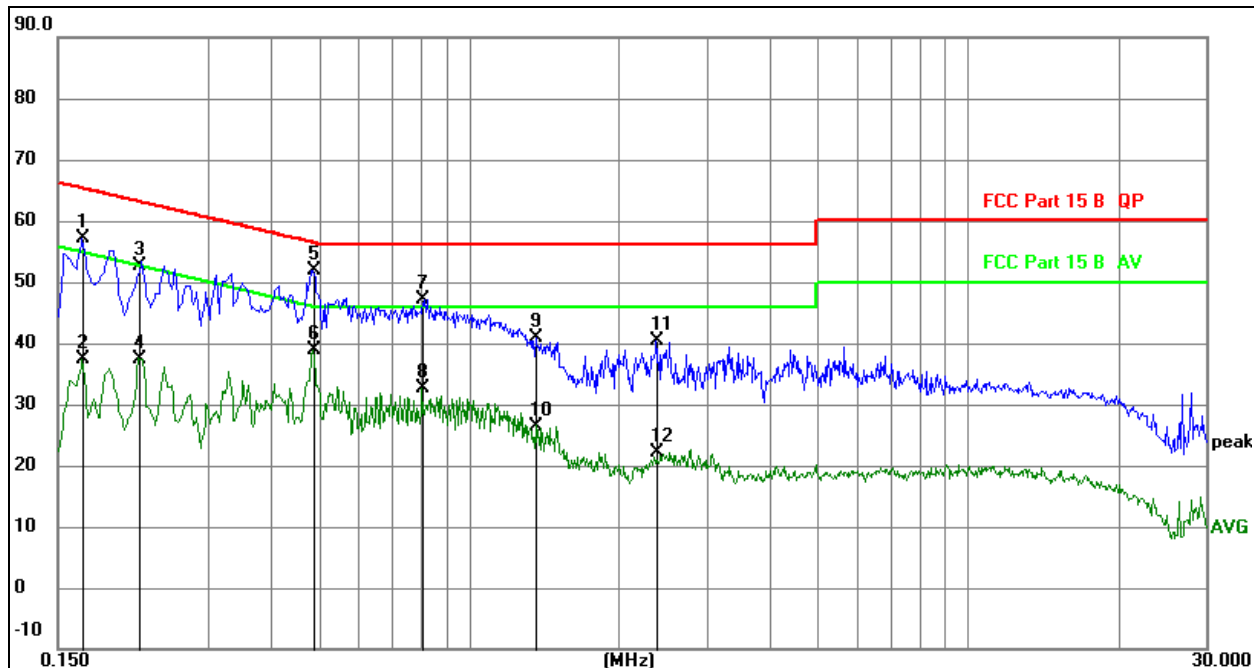


Remark:

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. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1633	39.29	19.61	58.90	65.29	-6.39	QP
2		0.1633	20.37	19.61	39.98	55.29	-15.31	AVG
3		0.2174	33.98	19.61	53.59	62.92	-9.33	QP
4		0.2174	18.94	19.61	38.55	52.92	-14.37	AVG
5	*	0.4812	30.31	19.62	49.93	56.32	-6.39	QP
6		0.4812	18.64	19.62	38.26	46.32	-8.06	AVG
7		0.9839	27.02	19.63	46.65	56.00	-9.35	QP
8		0.9839	13.41	19.63	33.04	46.00	-12.96	AVG
9		2.1326	21.27	19.63	40.90	56.00	-15.10	QP
10		2.1326	8.30	19.63	27.93	46.00	-18.07	AVG
11		4.4777	15.19	19.70	34.89	56.00	-21.11	QP
12		4.4777	4.72	19.70	24.42	46.00	-21.58	AVG

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	AC120V/60Hz
Test Mode:	Mode 4	Polarization :	N


Remark:

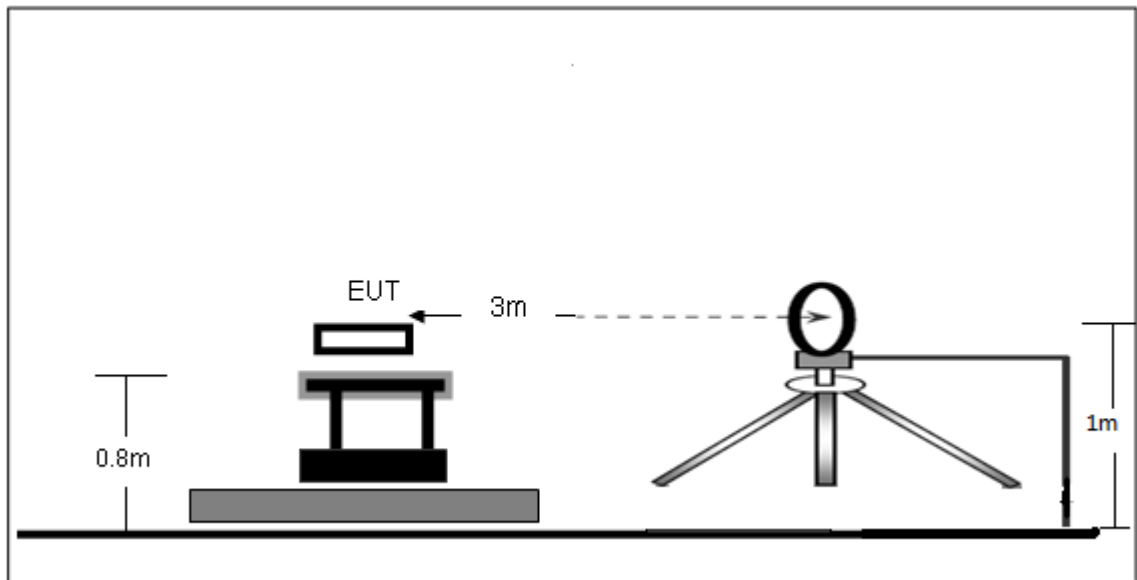
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1680	37.51	19.61	57.12	65.06	-7.94	QP
2		0.1680	17.74	19.61	37.35	55.06	-17.71	AVG
3		0.2175	33.09	19.61	52.70	62.91	-10.21	QP
4		0.2175	17.89	19.61	37.50	52.91	-15.41	AVG
5	*	0.4875	32.24	19.62	51.86	56.21	-4.35	QP
6		0.4875	19.24	19.62	38.86	46.21	-7.35	AVG
7		0.8070	27.62	19.62	47.24	56.00	-8.76	QP
8		0.8070	13.01	19.62	32.63	46.00	-13.37	AVG
9		1.3605	21.15	19.63	40.78	56.00	-15.22	QP
10		1.3605	6.87	19.63	26.50	46.00	-19.50	AVG
11		2.3775	20.63	19.64	40.27	56.00	-15.73	QP
12		2.3775	2.55	19.64	22.19	46.00	-23.81	AVG

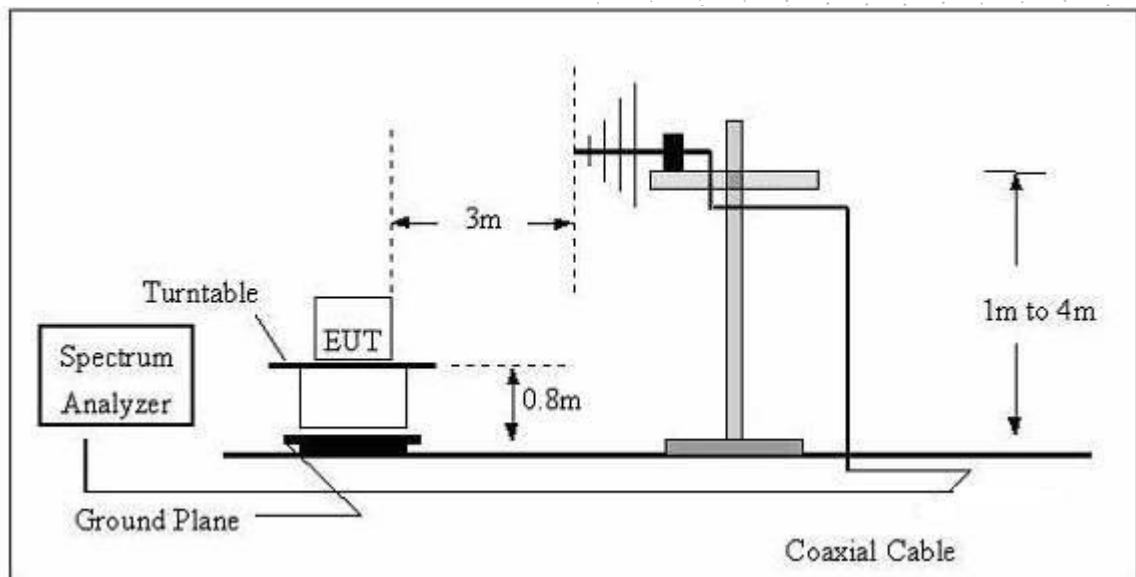
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

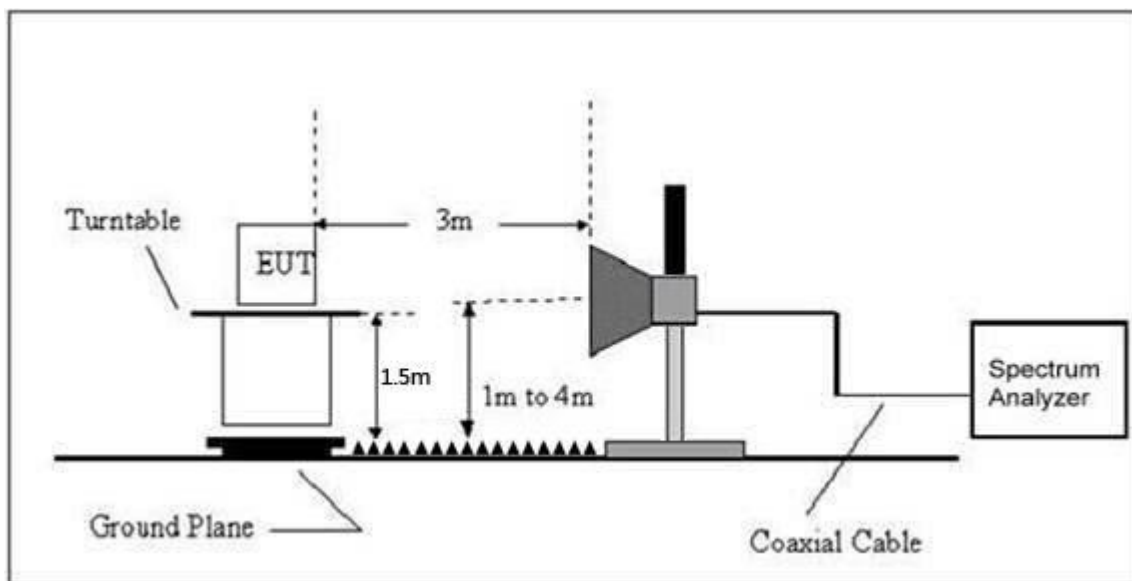
(A) Radiated Emission Test-Up Frequency Below 30MHz



(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(kHz)	300	$10000 * 2400/F(\text{kHz})$	$20\log^{(2400/F(\text{kHz}))} + 80$
0.490 ~ 1.705	24000/F(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%
Pressure:	101KPa	Test Voltage :	AC120V/60Hz
Test Mode:	Mode 5	Polarization :	---

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

Note:

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

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

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

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	AC120V/60Hz
Test Mode:	Mode 4	Polarization :	Horizontal



Remark:

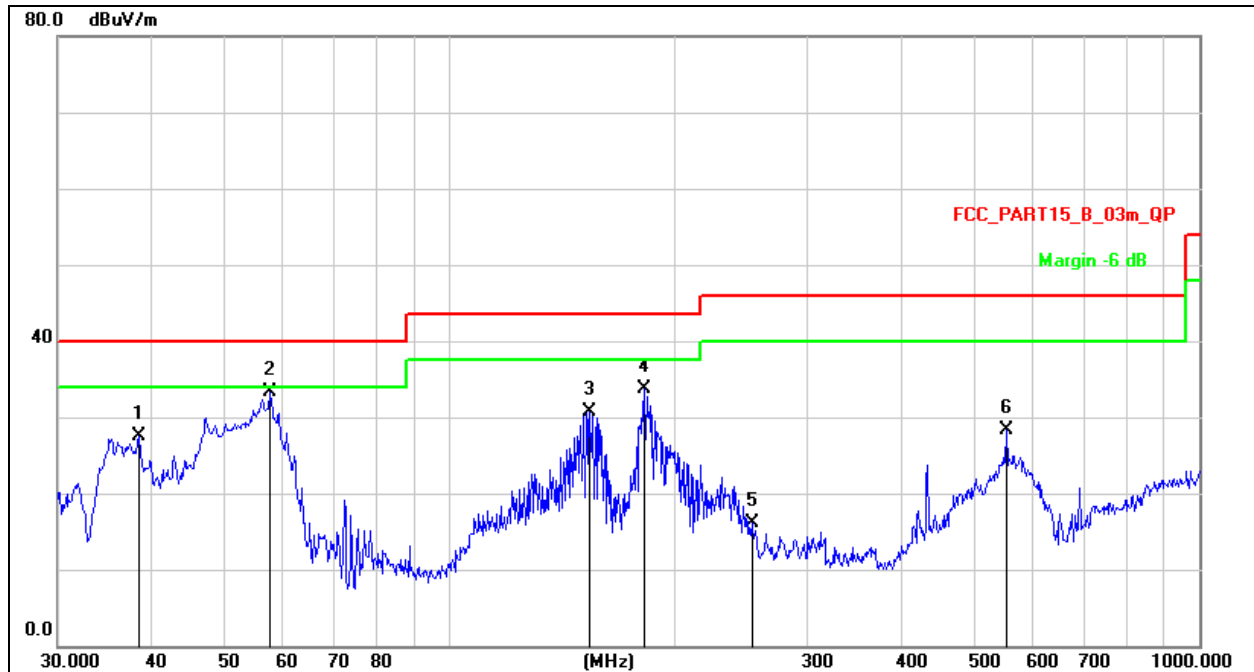
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

2. Measurement = Reading Level + Correct Factor

3. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		37.0248	37.24	-15.97	21.27	40.00	-18.73	QP
2		58.6126	41.43	-15.76	25.67	40.00	-14.33	QP
3		155.3642	47.39	-19.16	28.23	43.50	-15.27	QP
4	*	181.9199	47.85	-17.46	30.39	43.50	-13.11	QP
5		300.3672	32.10	-13.59	18.51	46.00	-27.49	QP
6		492.4685	28.81	-9.09	19.72	46.00	-26.28	QP

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	AC120V/60Hz
Test Mode:	Mode 4	Polarization :	Vertical



Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		38.4808	43.17	-15.69	27.48	40.00	-12.52	QP
2	*	57.5938	48.95	-15.65	33.30	40.00	-6.70	QP
3		153.7384	49.90	-19.26	30.64	43.50	-12.86	QP
4		181.9199	51.24	-17.46	33.78	43.50	-9.72	QP
5		252.9482	31.09	-15.06	16.03	46.00	-29.97	QP
6		552.8831	35.97	-7.61	28.36	46.00	-17.64	QP

Test Mode:	TX(5.1G) - 802.11a
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G									
V	4434.189	63.44	5.94	35.40	44.00	60.78	68.2	-7.42	PK
V	4434.189	43.16	5.94	35.40	44.00	40.50	54	-13.50	AV
V	10360.174	62.19	8.46	39.75	44.50	65.90	68.2	-2.30	PK
V	10360.174	43.30	8.46	39.75	44.50	47.01	54	-6.99	AV
V	15540.099	63.42	10.12	38.80	44.10	68.24	74	-5.76	PK
V	15540.099	43.65	10.12	38.80	42.70	49.87	54	-4.13	AV
H	4434.102	60.32	5.94	35.18	44.00	57.44	68.2	-10.76	PK
H	4434.102	43.21	5.94	35.18	44.00	40.33	54	-13.67	AV
H	10360.066	52.28	8.46	38.71	44.50	54.95	68.2	-13.25	PK
H	10360.066	42.85	8.46	38.71	44.50	45.52	54	-8.48	AV
H	15540.137	52.94	10.12	38.38	44.10	57.34	74	-16.66	PK
H	15540.137	44.54	10.12	38.38	44.10	48.94	54	-5.06	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.124	60.19	6.48	36.35	44.05	58.97	74	-15.03	PK
V	4592.124	43.18	6.48	36.35	44.05	41.96	54	-12.04	AV
V	10400.141	63.49	8.47	37.88	44.51	65.33	68.2	-2.87	PK
V	10400.141	43.86	8.47	37.88	44.51	45.70	54	-8.30	AV
V	15600.051	63.10	10.12	38.80	44.10	67.92	74	-6.08	PK
V	15600.051	43.30	10.12	38.80	42.70	49.52	54	-4.48	AV
H	4592.059	60.63	6.48	36.37	44.05	59.43	74	-14.57	PK
H	4592.059	43.28	6.48	36.37	44.05	42.08	54	-11.92	AV
H	10400.100	52.72	8.47	38.64	44.50	55.33	68.2	-12.87	PK
H	10400.100	40.45	8.47	38.64	44.50	43.06	54	-10.94	AV
H	15600.114	51.57	10.12	38.38	44.10	55.97	74	-18.03	PK
H	15600.114	42.73	10.12	38.38	44.10	47.13	54	-6.87	AV
High Channel (5240 MHz)-Above 1G									
V	4739.041	64.17	7.10	37.24	43.50	65.01	74	-8.99	PK
V	4739.041	43.28	7.10	37.24	43.50	44.12	54	-9.88	AV
V	10480.032	61.76	8.46	37.68	44.50	63.40	68.2	-4.80	PK
V	10480.032	43.74	8.46	37.68	44.50	45.38	54	-8.62	AV
V	15720.139	61.05	10.12	38.80	44.10	65.87	74	-8.13	PK
V	15720.139	43.76	10.12	38.80	42.70	49.98	54	-4.02	AV
H	4739.020	60.96	7.10	37.24	43.50	61.80	74	-12.20	PK
H	4739.020	43.81	7.10	37.24	43.50	44.65	54	-9.35	AV
H	10480.126	54.59	8.46	38.57	44.50	57.12	68.2	-11.08	PK
H	10480.126	44.26	8.46	38.57	44.50	46.79	54	-7.21	AV
H	15720.107	52.99	10.12	38.38	44.10	57.39	74	-16.61	PK
H	15720.107	40.84	10.12	38.38	44.10	45.24	54	-8.76	AV

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

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

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

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

Test Mode:	TX(5.1G) - 802.11n-HT20
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G									
V	4434.016	60.87	5.94	35.40	44.00	58.21	68.2	-9.99	PK
V	4434.016	43.89	5.94	35.40	44.00	41.23	54	-12.77	AV
V	10360.077	61.91	8.46	39.75	44.50	65.62	68.2	-2.58	PK
V	10360.077	43.65	8.46	39.75	44.50	47.36	54	-6.64	AV
V	15540.003	62.75	10.12	38.80	44.10	67.57	74	-6.43	PK
V	15540.003	43.57	10.12	38.80	42.70	49.79	54	-4.21	AV
H	4434.079	61.97	5.94	35.18	44.00	59.09	68.2	-9.11	PK
H	4434.079	43.82	5.94	35.18	44.00	40.94	54	-13.06	AV
H	10360.118	52.22	8.46	38.71	44.50	54.89	68.2	-13.31	PK
H	10360.118	43.00	8.46	38.71	44.50	45.67	54	-8.33	AV
H	15540.152	53.11	10.12	38.38	44.10	57.51	74	-16.49	PK
H	15540.152	42.88	10.12	38.38	44.10	47.28	54	-6.72	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.052	63.68	6.48	36.35	44.05	62.46	74	-11.54	PK
V	4592.052	43.11	6.48	36.35	44.05	41.89	54	-12.11	AV
V	10400.054	61.31	8.47	37.88	44.51	63.15	68.2	-5.05	PK
V	10400.054	43.48	8.47	37.88	44.51	45.32	54	-8.68	AV
V	15600.012	61.15	10.12	38.80	44.10	65.97	74	-8.03	PK
V	15600.012	43.38	10.12	38.80	42.70	49.60	54	-4.40	AV
H	4592.166	62.85	6.48	36.37	44.05	61.65	74	-12.35	PK
H	4592.166	43.54	6.48	36.37	44.05	42.34	54	-11.66	AV
H	10400.037	51.08	8.47	38.64	44.50	53.69	68.2	-14.51	PK
H	10400.037	42.87	8.47	38.64	44.50	45.48	54	-8.52	AV
H	15600.073	50.88	10.12	38.38	44.10	55.28	74	-18.72	PK
H	15600.073	42.16	10.12	38.38	44.10	46.56	54	-7.44	AV
High Channel (5240 MHz)-Above 1G									
V	4739.032	64.88	7.10	37.24	43.50	65.72	74	-8.28	PK
V	4739.032	43.96	7.10	37.24	43.50	44.80	54	-9.20	AV
V	10480.149	64.59	8.46	37.68	44.50	66.23	68.2	-1.97	PK
V	10480.149	43.46	8.46	37.68	44.50	45.10	54	-8.90	AV
V	15720.110	62.59	10.12	38.80	44.10	67.41	74	-6.59	PK
V	15720.110	43.64	10.12	38.80	42.70	49.86	54	-4.14	AV
H	4739.029	60.84	7.10	37.24	43.50	61.68	74	-12.32	PK
H	4739.029	43.25	7.10	37.24	43.50	44.09	54	-9.91	AV
H	10480.107	54.38	8.46	38.57	44.50	56.91	68.2	-11.29	PK
H	10480.107	44.53	8.46	38.57	44.50	47.06	54	-6.94	AV
H	15720.134	52.83	10.12	38.38	44.10	57.23	74	-16.77	PK
H	15720.134	40.67	10.12	38.38	44.10	45.07	54	-8.93	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:	TX(5.1G) - 802.11n-HT40
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5190 MHz)-Above 1G									
V	4434.190	63.73	5.94	35.40	44.00	61.07	68.2	-7.13	PK
V	4434.190	43.32	5.94	35.40	44.00	40.66	54	-13.34	AV
V	10380.014	61.25	8.46	39.75	44.50	64.96	68.2	-3.24	PK
V	10380.014	43.89	8.46	39.75	44.50	47.60	54	-6.40	AV
V	15570.180	61.05	10.12	38.80	44.10	65.87	74	-8.13	PK
V	15570.180	43.41	10.12	38.80	42.70	49.63	54	-4.37	AV
H	4434.105	61.05	5.94	35.18	44.00	58.17	74	-15.83	PK
H	4434.105	43.79	5.94	35.18	44.00	40.91	54	-13.09	AV
H	10380.124	53.03	8.46	38.71	44.50	55.70	68.2	-12.50	PK
H	10380.124	41.73	8.46	38.71	44.50	44.40	54	-9.60	AV
H	15570.023	54.61	10.12	38.38	44.10	59.01	74	-14.99	PK
H	15570.023	43.08	10.12	38.38	44.10	47.48	54	-6.52	AV
High Channel (5230 MHz)-Above 1G									
V	4739.198	62.18	6.48	36.35	44.05	60.96	68.2	-7.24	PK
V	4739.198	43.55	6.48	36.35	44.05	42.33	54	-11.67	AV
V	10460.152	64.23	8.47	37.88	44.51	66.07	68.2	-2.13	PK
V	10460.152	43.17	8.47	37.88	44.51	45.01	54	-8.99	AV
V	15690.041	60.06	10.12	38.80	44.10	64.88	74	-9.12	PK
V	15690.041	43.04	10.12	38.80	42.70	49.26	54	-4.74	AV
H	4739.081	61.79	6.48	36.37	44.05	60.59	68.2	-7.61	PK
H	4739.081	43.80	6.48	36.37	44.05	42.60	54	-11.40	AV
H	10460.015	53.35	8.47	38.64	44.50	55.96	68.2	-12.24	PK
H	10460.015	44.06	8.47	38.64	44.50	46.67	54	-7.33	AV
H	15690.101	54.77	10.12	38.38	44.10	59.17	74	-14.83	PK
H	15690.101	43.04	10.12	38.38	44.10	47.44	54	-6.56	AV

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

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

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

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

Test Mode:	TX(5.1G) - 802.11ac-HT20
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G									
V	4434.015	64.71	5.94	35.40	44.00	62.05	68.2	-6.15	PK
V	4434.015	43.91	5.94	35.40	44.00	41.25	54	-12.75	AV
V	10360.158	61.77	8.46	39.75	44.50	65.48	68.2	-2.72	PK
V	10360.158	43.67	8.46	39.75	44.50	47.38	54	-6.62	AV
V	15540.043	61.46	10.12	38.80	44.10	66.28	74	-7.72	PK
V	15540.043	43.54	10.12	38.80	42.70	49.76	54	-4.24	AV
H	4434.067	64.85	5.94	35.18	44.00	61.97	68.2	-6.23	PK
H	4434.067	44.00	5.94	35.18	44.00	41.12	54	-12.88	AV
H	10360.077	52.50	8.46	38.71	44.50	55.17	68.2	-13.03	PK
H	10360.077	41.15	8.46	38.71	44.50	43.82	54	-10.18	AV
H	15540.123	53.20	10.12	38.38	44.10	57.60	74	-16.40	PK
H	15540.123	40.83	10.12	38.38	44.10	45.23	54	-8.77	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.028	64.38	6.48	36.35	44.05	63.16	74	-10.84	PK
V	4592.028	43.97	6.48	36.35	44.05	42.75	54	-11.25	AV
V	10400.178	61.84	8.47	37.88	44.51	63.68	68.2	-4.52	PK
V	10400.178	43.69	8.47	37.88	44.51	45.53	54	-8.47	AV
V	15600.048	61.47	10.12	38.80	44.10	66.29	74	-7.71	PK
V	15600.048	43.87	10.12	38.80	42.70	50.09	54	-3.91	AV
H	4592.030	62.06	6.48	36.37	44.05	60.86	74	-13.14	PK
H	4592.030	43.03	6.48	36.37	44.05	41.83	54	-12.17	AV
H	10400.135	50.52	8.47	38.64	44.50	53.13	68.2	-15.07	PK
H	10400.135	41.49	8.47	38.64	44.50	44.10	54	-9.90	AV
H	15600.010	52.25	10.12	38.38	44.10	56.65	74	-17.35	PK
H	15600.010	44.65	10.12	38.38	44.10	49.05	54	-4.95	AV
High Channel (5240 MHz)-Above 1G									
V	4739.198	60.69	7.10	37.24	43.50	61.53	74	-12.47	PK
V	4739.198	43.08	7.10	37.24	43.50	43.92	54	-10.08	AV
V	10480.081	64.27	8.46	37.68	44.50	65.91	68.2	-2.29	PK
V	10480.081	43.50	8.46	37.68	44.50	45.14	54	-8.86	AV
V	15720.146	64.62	10.12	38.80	44.10	69.44	74	-4.56	PK
V	15720.146	43.71	10.12	38.80	42.70	49.93	54	-4.07	AV
H	4739.194	62.86	7.10	37.24	43.50	63.70	74	-10.30	PK
H	4739.194	43.23	7.10	37.24	43.50	44.07	54	-9.93	AV
H	10480.079	51.29	8.46	38.57	44.50	53.82	68.2	-14.38	PK
H	10480.079	41.38	8.46	38.57	44.50	43.91	54	-10.09	AV
H	15720.134	50.52	10.12	38.38	44.10	54.92	74	-19.08	PK
H	15720.134	41.84	10.12	38.38	44.10	46.24	54	-7.76	AV

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

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

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

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

Test Mode:	TX(5.1G) - 802.11ac-HT40
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5190 MHz)-Above 1G									
V	4434.110	60.45	5.94	35.40	44.00	57.79	68.2	-10.41	PK
V	4434.110	43.85	5.94	35.40	44.00	41.19	54	-12.81	AV
V	10380.195	63.35	8.46	39.75	44.50	67.06	68.2	-1.14	PK
V	10380.195	43.81	8.46	39.75	44.50	47.52	54	-6.48	AV
V	15570.091	61.88	10.12	38.80	44.10	66.70	74	-7.30	PK
V	15570.091	43.37	10.12	38.80	42.70	49.59	54	-4.41	AV
H	4434.124	60.63	5.94	35.18	44.00	57.75	74	-16.25	PK
H	4434.124	43.75	5.94	35.18	44.00	40.87	54	-13.13	AV
H	10380.079	52.41	8.46	38.71	44.50	55.08	68.2	-13.12	PK
H	10380.079	43.11	8.46	38.71	44.50	45.78	54	-8.22	AV
H	15570.081	52.09	10.12	38.38	44.10	56.49	74	-17.51	PK
H	15570.081	41.48	10.12	38.38	44.10	45.88	54	-8.12	AV
High Channel (5230 MHz)-Above 1G									
V	4739.135	61.74	6.48	36.35	44.05	60.52	68.2	-7.68	PK
V	4739.135	43.51	6.48	36.35	44.05	42.29	54	-11.71	AV
V	10460.019	60.04	8.47	37.88	44.51	61.88	68.2	-6.32	PK
V	10460.019	43.59	8.47	37.88	44.51	45.43	54	-8.57	AV
V	15690.172	63.36	10.12	38.80	44.10	68.18	74	-5.82	PK
V	15690.172	43.81	10.12	38.80	42.70	50.03	54	-3.97	AV
H	4739.178	60.47	6.48	36.37	44.05	59.27	68.2	-8.93	PK
H	4739.178	43.48	6.48	36.37	44.05	42.28	54	-11.72	AV
H	10460.101	54.33	8.47	38.64	44.50	56.94	68.2	-11.26	PK
H	10460.101	42.17	8.47	38.64	44.50	44.78	54	-9.22	AV
H	15690.026	54.26	10.12	38.38	44.10	58.66	74	-15.34	PK
H	15690.026	44.68	10.12	38.38	44.10	49.08	54	-4.92	AV

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

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

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

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

Test Mode:	TX(5.1G) - 802.11ac-HT80
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
(5210 MHz)-Above 1G									
V	4434.002	62.01	5.94	35.40	44.00	59.35	68.2	-8.85	PK
V	4434.002	43.73	5.94	35.40	44.00	41.07	54	-12.93	AV
V	10420.184	60.14	8.46	39.75	44.50	63.85	68.2	-4.35	PK
V	10420.184	43.08	8.46	39.75	44.50	46.79	54	-7.21	AV
V	15630.067	64.99	10.12	38.80	44.10	69.81	74	-4.19	PK
V	15630.067	43.57	10.12	38.80	42.70	49.79	54	-4.21	AV
H	4434.102	62.83	5.94	35.18	44.00	59.95	68.2	-8.25	PK
H	4434.102	43.40	5.94	35.18	44.00	40.52	54	-13.48	AV
H	10420.096	51.69	8.46	38.71	44.50	54.36	68.2	-13.84	PK
H	10420.096	43.55	8.46	38.71	44.50	46.22	54	-7.78	AV
H	15630.060	53.84	10.12	38.38	44.10	58.24	74	-15.76	PK
H	15630.060	41.33	10.12	38.38	44.10	45.73	54	-8.27	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(5.8G) - 802.11a
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5745 MHz)-Above 1G									
V	4679.155	57.00	5.94	35.40	44.00	54.34	74	-19.66	PK
V	4679.155	43.53	5.94	35.40	44.00	40.87	54	-13.13	AV
V	11490.013	55.64	8.46	39.75	44.50	59.35	68.2	-8.85	PK
V	11490.013	43.32	8.46	39.75	44.50	47.03	54	-6.97	AV
V	17235.183	57.11	10.12	38.80	44.10	61.93	68.2	-6.27	PK
V	17235.183	43.85	10.12	38.80	42.70	50.07	54	-3.93	AV
H	4679.135	56.94	5.94	35.18	44.00	54.06	74	-19.94	PK
H	4679.135	43.20	5.94	35.18	44.00	40.32	54	-13.68	AV
H	11490.194	51.40	8.46	38.71	44.50	54.07	68.2	-14.13	PK
H	11490.194	41.56	8.46	38.71	44.50	44.23	54	-9.77	AV
H	17235.123	53.54	10.12	38.38	44.10	57.94	68.2	-10.26	PK
H	17235.123	44.05	10.12	38.38	44.10	48.45	54	-5.55	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.199	57.05	6.48	36.35	44.05	55.83	74	-18.17	PK
V	4592.199	43.28	6.48	36.35	44.05	42.06	54	-11.94	AV
V	11570.183	55.85	8.47	37.88	44.51	57.69	68.2	-10.51	PK
V	11570.183	43.12	8.47	37.88	44.51	44.96	54	-9.04	AV
V	17355.048	59.16	10.12	38.80	44.10	63.98	68.2	-4.22	PK
V	17355.048	39.20	10.12	38.80	42.70	45.42	54	-8.58	AV
H	4592.074	55.38	6.48	36.37	44.05	54.18	74	-19.82	PK
H	4592.074	43.88	6.48	36.37	44.05	42.68	54	-11.32	AV
H	11570.044	54.41	8.47	38.64	44.50	57.02	68.2	-11.18	PK
H	11570.044	40.69	8.47	38.64	44.50	43.30	54	-10.70	AV
H	17355.134	54.34	10.12	38.38	44.10	58.74	68.2	-9.46	PK
H	17355.134	44.66	10.12	38.38	44.10	49.06	54	-4.94	AV
High Channel (5825 MHz)-Above 1G									
V	6039.194	58.14	7.10	37.24	43.50	58.98	68.2	-9.22	PK
V	6039.194	43.19	7.10	37.24	43.50	44.03	54	-9.97	AV
V	11650.104	58.60	8.46	37.68	44.50	60.24	74	-13.76	PK
V	11650.104	43.29	8.46	37.68	44.50	44.93	54	-9.07	AV
V	17475.163	53.02	10.12	38.80	44.10	57.84	68.2	-10.36	PK
V	17475.163	43.68	10.12	38.80	42.70	49.90	54	-4.10	AV
H	6039.067	56.61	7.10	37.24	43.50	57.45	68.2	-10.75	PK
H	6039.067	43.91	7.10	37.24	43.50	44.75	54	-9.25	AV
H	11650.149	53.06	8.46	38.57	44.50	55.59	74	-18.41	PK
H	11650.149	42.92	8.46	38.57	44.50	45.45	54	-8.55	AV
H	17475.066	53.00	10.12	38.38	44.10	57.40	68.2	-10.80	PK
H	17475.066	43.07	10.12	38.38	44.10	47.47	54	-6.53	AV

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

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

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

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

Test Mode:	TX(5.8G) - 802.11n-HT20
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5745 MHz)-Above 1G									
V	4679.089	57.37	5.94	35.40	44.00	54.71	74	-19.29	PK
V	4679.089	43.54	5.94	35.40	44.00	40.88	54	-13.12	AV
V	11490.180	53.69	8.46	39.75	44.50	57.40	68.2	-10.80	PK
V	11490.180	43.69	8.46	39.75	44.50	47.40	54	-6.60	AV
V	17235.159	59.70	10.12	38.80	44.10	64.52	68.2	-3.68	PK
V	17235.159	43.73	10.12	38.80	42.70	49.95	54	-4.05	AV
H	4679.027	57.89	5.94	35.18	44.00	55.01	74	-18.99	PK
H	4679.027	43.98	5.94	35.18	44.00	41.10	54	-12.90	AV
H	11490.099	49.62	8.46	38.71	44.50	52.29	68.2	-15.91	PK
H	11490.099	42.84	8.46	38.71	44.50	45.51	54	-8.49	AV
H	17235.025	54.83	10.12	38.38	44.10	59.23	68.2	-8.97	PK
H	17235.025	41.83	10.12	38.38	44.10	46.23	54	-7.77	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.072	59.55	6.48	36.35	44.05	58.33	74	-15.67	PK
V	4592.072	43.27	6.48	36.35	44.05	42.05	54	-11.95	AV
V	11570.038	58.46	8.47	37.88	44.51	60.30	68.2	-7.90	PK
V	11570.038	43.90	8.47	37.88	44.51	45.74	54	-8.26	AV
V	17355.007	61.98	10.12	38.80	44.10	66.80	68.2	-1.40	PK
V	17355.007	43.86	10.12	38.80	42.70	50.08	54	-3.92	AV
H	4592.127	58.82	6.48	36.37	44.05	57.62	74	-16.38	PK
H	4592.127	43.10	6.48	36.37	44.05	41.90	54	-12.10	AV
H	11570.071	52.28	8.47	38.64	44.50	54.89	68.2	-13.31	PK
H	11570.071	43.42	8.47	38.64	44.50	46.03	54	-7.97	AV
H	17355.110	54.42	10.12	38.38	44.10	58.82	68.2	-9.38	PK
H	17355.110	42.21	10.12	38.38	44.10	46.61	54	-7.39	AV
High Channel (5825 MHz)-Above 1G									
V	6039.125	58.66	7.10	37.24	43.50	59.50	68.2	-8.70	PK
V	6039.125	43.68	7.10	37.24	43.50	44.52	54	-9.48	AV
V	11650.047	60.96	8.46	37.68	44.50	62.60	74	-11.40	PK
V	11650.047	43.92	8.46	37.68	44.50	45.56	54	-8.44	AV
V	17475.036	58.38	10.12	38.80	44.10	63.20	68.2	-5.00	PK
V	17475.036	43.30	10.12	38.80	42.70	49.52	54	-4.48	AV
H	6039.055	58.09	7.10	37.24	43.50	58.93	68.2	-9.27	PK
H	6039.055	43.96	7.10	37.24	43.50	44.80	54	-9.20	AV
H	11650.127	50.73	8.46	38.57	44.50	53.26	74	-20.74	PK
H	11650.127	44.86	8.46	38.57	44.50	47.39	54	-6.61	AV
H	17475.107	53.96	10.12	38.38	44.10	58.36	68.2	-9.84	PK
H	17475.107	42.70	10.12	38.38	44.10	47.10	54	-6.90	AV

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

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

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

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

Test Mode:	TX(5.8G) - 802.11n-HT40
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5755 MHz)-Above 1G									
V	4679.193	56.20	5.94	35.40	44.00	53.54	74	-20.46	PK
V	4679.193	43.08	5.94	35.40	44.00	40.42	54	-13.58	AV
V	11510.143	56.07	8.46	39.75	44.50	59.78	74	-14.22	PK
V	11510.143	43.22	8.46	39.75	44.50	46.93	54	-7.07	AV
V	17265.003	59.02	10.12	38.80	44.10	63.84	68.2	-4.36	PK
V	17265.003	2.00	10.12	38.80	42.70	8.22	54	-45.78	AV
H	4679.088	60.28	5.94	35.18	44.00	57.40	74	-16.60	PK
H	4679.088	43.56	5.94	35.18	44.00	40.68	54	-13.32	AV
H	11510.138	51.55	8.46	38.71	44.50	54.22	74	-19.78	PK
H	11510.138	44.18	8.46	38.71	44.50	46.85	54	-7.15	AV
H	17265.037	51.99	10.12	38.38	44.10	56.39	68.2	-11.81	PK
H	17265.037	41.22	10.12	38.38	44.10	45.62	54	-8.38	AV
High Channel (5795 MHz)-Above 1G									
V	6039.034	60.76	6.48	36.35	44.05	59.54	68.2	-8.66	PK
V	6039.034	43.37	6.48	36.35	44.05	42.15	54	-11.85	AV
V	11590.108	56.39	8.47	37.88	44.51	58.23	74	-15.77	PK
V	11590.108	43.80	8.47	37.88	44.51	45.64	54	-8.36	AV
V	17385.089	55.08	10.12	38.80	44.10	59.90	68.2	-8.30	PK
V	17385.089	41.94	10.12	38.80	42.70	48.16	54	-5.84	AV
H	6039.043	59.64	6.48	36.37	44.05	58.44	68.2	-9.76	PK
H	6039.043	43.58	6.48	36.37	44.05	42.38	54	-11.62	AV
H	11590.182	51.72	8.47	38.64	44.50	54.33	74	-19.67	PK
H	11590.182	43.86	8.47	38.64	44.50	46.47	54	-7.53	AV
H	17385.109	50.91	10.12	38.38	44.10	55.31	68.2	-12.89	PK
H	17385.109	42.16	10.12	38.38	44.10	46.56	54	-7.44	AV

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

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

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

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

Test Mode:	TX(5.8G) - 802.11ac-HT20
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5745 MHz)-Above 1G									
V	4679.065	59.96	5.94	35.40	44.00	57.30	74	-16.70	PK
V	4679.065	43.05	5.94	35.40	44.00	40.39	54	-13.61	AV
V	11490.157	54.12	8.46	39.75	44.50	57.83	68.2	-10.37	PK
V	11490.157	43.01	8.46	39.75	44.50	46.72	54	-7.28	AV
V	17235.108	61.84	10.12	38.80	44.10	66.66	68.2	-1.54	PK
V	17235.108	43.79	10.12	38.80	42.70	50.01	54	-3.99	AV
H	4679.108	57.12	5.94	35.18	44.00	54.24	74	-19.76	PK
H	4679.108	43.16	5.94	35.18	44.00	40.28	54	-13.72	AV
H	11490.016	48.63	8.46	38.71	44.50	51.30	68.2	-16.90	PK
H	11490.016	40.53	8.46	38.71	44.50	43.20	54	-10.80	AV
H	17235.183	52.92	10.12	38.38	44.10	57.32	68.2	-10.88	PK
H	17235.183	43.32	10.12	38.38	44.10	47.72	54	-6.28	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.075	59.78	6.48	36.35	44.05	58.56	74	-15.44	PK
V	4592.075	43.16	6.48	36.35	44.05	41.94	54	-12.06	AV
V	11570.004	57.01	8.47	37.88	44.51	58.85	68.2	-9.35	PK
V	11570.004	43.67	8.47	37.88	44.51	45.51	54	-8.49	AV
V	17355.157	59.84	10.12	38.80	44.10	64.66	68.2	-3.54	PK
V	17355.157	43.64	10.12	38.80	42.70	49.86	54	-4.14	AV
H	4592.191	57.75	6.48	36.37	44.05	56.55	74	-17.45	PK
H	4592.191	43.36	6.48	36.37	44.05	42.16	54	-11.84	AV
H	11570.142	54.00	8.47	38.64	44.50	56.61	68.2	-11.59	PK
H	11570.142	42.39	8.47	38.64	44.50	45.00	54	-9.00	AV
H	17355.196	54.01	10.12	38.38	44.10	58.41	68.2	-9.79	PK
H	17355.196	40.33	10.12	38.38	44.10	44.73	54	-9.27	AV
High Channel (5825 MHz)-Above 1G									
V	6039.167	55.18	7.10	37.24	43.50	56.02	68.2	-12.18	PK
V	6039.167	43.13	7.10	37.24	43.50	43.97	54	-10.03	AV
V	11650.099	58.99	8.46	37.68	44.50	60.63	74	-13.37	PK
V	11650.099	43.66	8.46	37.68	44.50	45.30	54	-8.70	AV
V	17475.117	57.32	10.12	38.80	44.10	62.14	68.2	-6.06	PK
V	17475.117	43.75	10.12	38.80	42.70	49.97	54	-4.03	AV
H	6039.040	58.11	7.10	37.24	43.50	58.95	68.2	-9.25	PK
H	6039.040	43.20	7.10	37.24	43.50	44.04	54	-9.96	AV
H	11650.096	51.61	8.46	38.57	44.50	54.14	74	-19.86	PK
H	11650.096	42.22	8.46	38.57	44.50	44.75	54	-9.25	AV
H	17475.108	51.04	10.12	38.38	44.10	55.44	68.2	-12.76	PK
H	17475.108	40.83	10.12	38.38	44.10	45.23	54	-8.77	AV

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

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

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

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

Test Mode:	TX(5.8G) - 802.11ac-HT40
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5755 MHz)-Above 1G									
V	4679.013	57.93	5.94	35.40	44.00	55.27	74	-18.73	PK
V	4679.013	43.68	5.94	35.40	44.00	41.02	54	-12.98	AV
V	11510.054	56.42	8.46	39.75	44.50	60.13	74	-13.87	PK
V	11510.054	43.64	8.46	39.75	44.50	47.35	54	-6.65	AV
V	17265.189	57.23	10.12	38.80	44.10	62.05	68.2	-6.15	PK
V	17265.189	2.00	10.12	38.80	42.70	8.22	54	-45.78	AV
H	4679.065	59.46	5.94	35.18	44.00	56.58	74	-17.42	PK
H	4679.065	43.32	5.94	35.18	44.00	40.44	54	-13.56	AV
H	11510.160	50.89	8.46	38.71	44.50	53.56	74	-20.44	PK
H	11510.160	41.23	8.46	38.71	44.50	43.90	54	-10.10	AV
H	17265.113	52.81	10.12	38.38	44.10	57.21	68.2	-10.99	PK
H	17265.113	41.09	10.12	38.38	44.10	45.49	54	-8.51	AV
High Channel (5795 MHz)-Above 1G									
V	6039.099	56.68	6.48	36.35	44.05	55.46	68.2	-12.74	PK
V	6039.099	43.39	6.48	36.35	44.05	42.17	54	-11.83	AV
V	11590.194	56.33	8.47	37.88	44.51	58.17	74	-15.83	PK
V	11590.194	43.30	8.47	37.88	44.51	45.14	54	-8.86	AV
V	17385.098	55.38	10.12	38.80	44.10	60.20	68.2	-8.00	PK
V	17385.098	41.47	10.12	38.80	42.70	47.69	54	-6.31	AV
H	6039.097	57.77	6.48	36.37	44.05	56.57	68.2	-11.63	PK
H	6039.097	43.80	6.48	36.37	44.05	42.60	54	-11.40	AV
H	11590.033	52.90	8.47	38.64	44.50	55.51	74	-18.49	PK
H	11590.033	44.82	8.47	38.64	44.50	47.43	54	-6.57	AV
H	17385.175	52.39	10.12	38.38	44.10	56.79	68.2	-11.41	PK
H	17385.175	42.52	10.12	38.38	44.10	46.92	54	-7.08	AV

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

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

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

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

Test Mode:	TX(5.8G) - 802.11ac-HT80
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
(5775 MHz)-Above 1G									
V	4679.151	57.54	5.94	35.40	44.00	54.88	74	-19.12	PK
V	4679.151	43.77	5.94	35.40	44.00	41.11	54	-12.89	AV
V	11550.140	59.82	8.46	39.75	44.50	63.53	74	-10.47	PK
V	11550.140	43.33	8.46	39.75	44.50	47.04	54	-6.96	AV
V	17325.158	57.17	10.12	38.80	44.10	61.99	68.2	-6.21	PK
V	17325.158	41.71	10.12	38.80	42.70	47.93	54	-6.07	AV
H	4679.005	56.80	5.94	35.18	44.00	53.92	74	-20.08	PK
H	4679.005	43.71	5.94	35.18	44.00	40.83	54	-13.17	AV
H	11550.093	51.13	8.46	38.71	44.50	53.80	74	-20.20	PK
H	11550.093	43.26	8.46	38.71	44.50	45.93	54	-8.07	AV
H	17325.120	54.08	10.12	38.38	44.10	58.48	68.2	-9.72	PK
H	17325.120	44.62	10.12	38.38	44.10	49.02	54	-4.98	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.

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 Wifi Repeater 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 Wifi Repeater 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 Wifi Repeaters 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

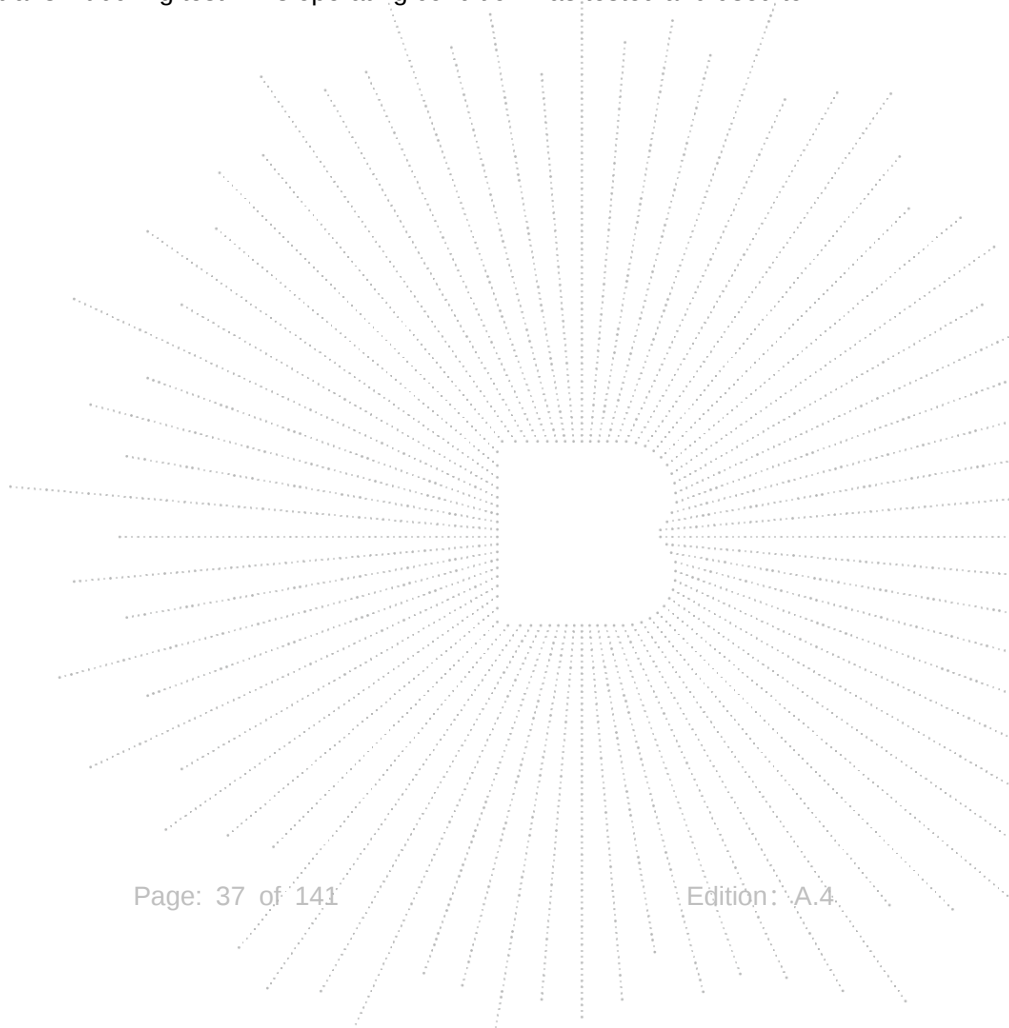
For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 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 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 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

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

8.4 EUT operating Conditions

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

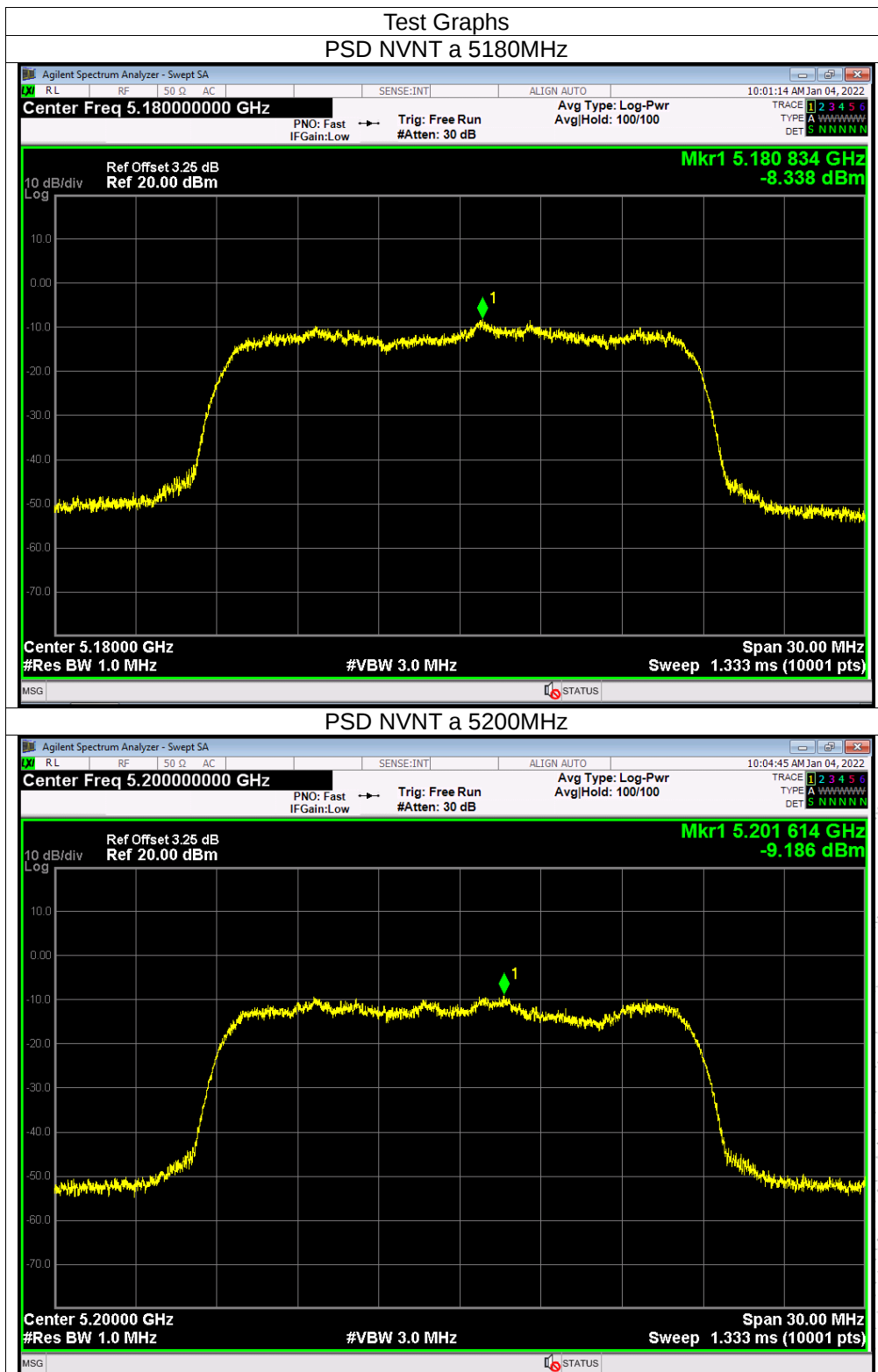


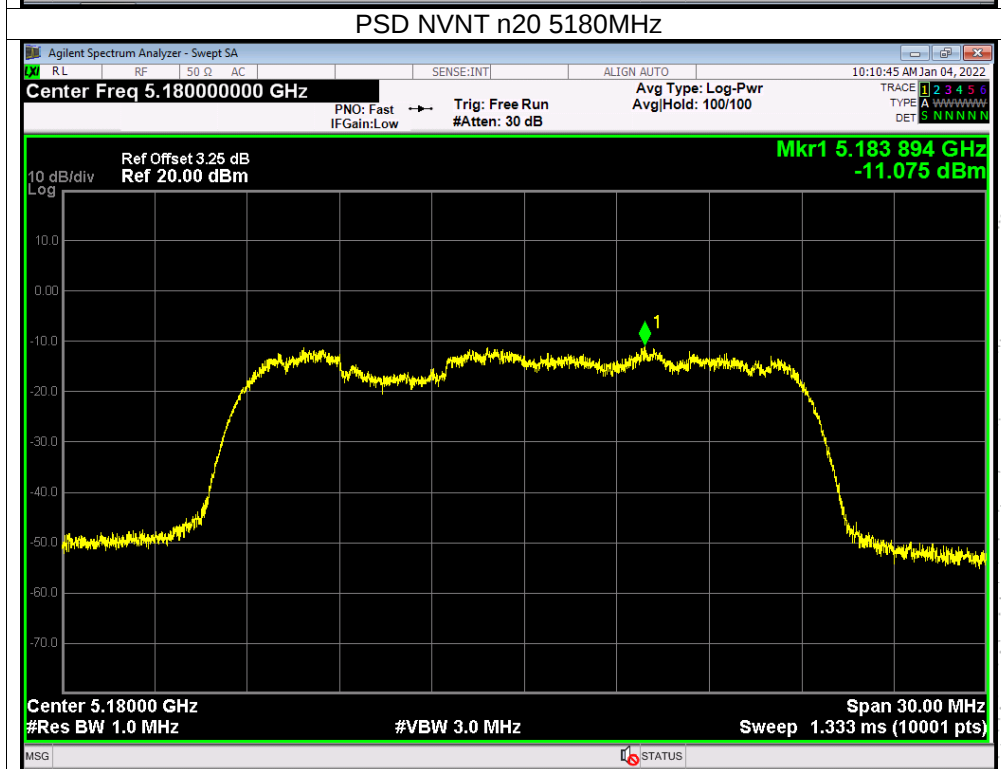
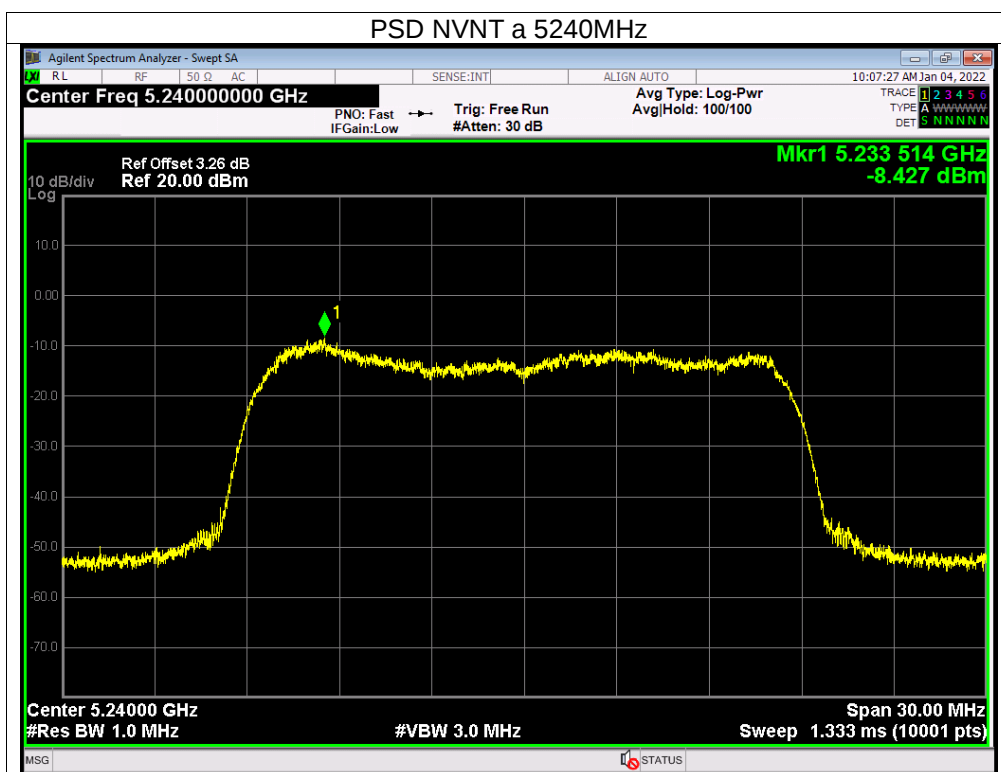
8.5 Test Result

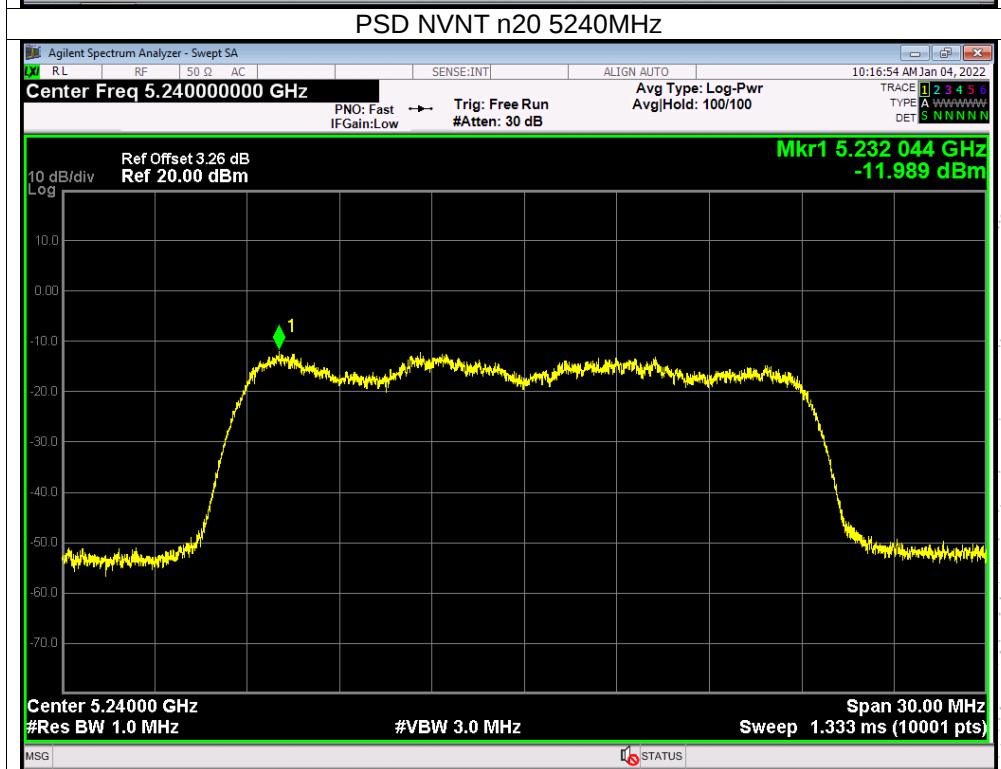
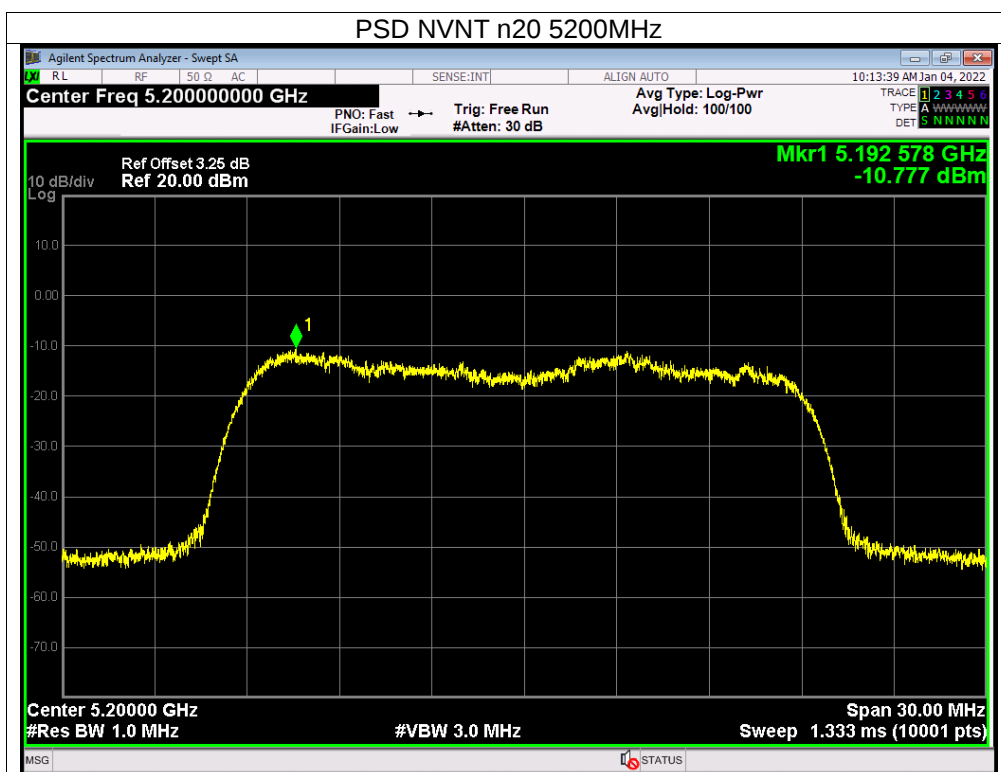
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	(5180-5240MHz); (5745-5825MHz)		

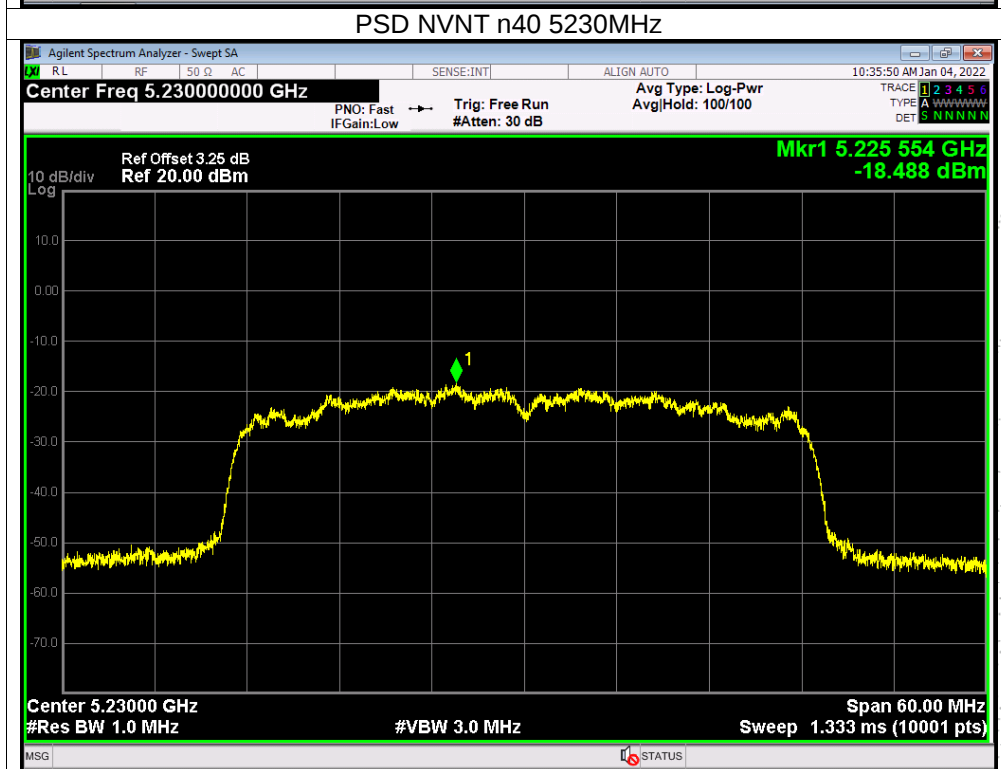
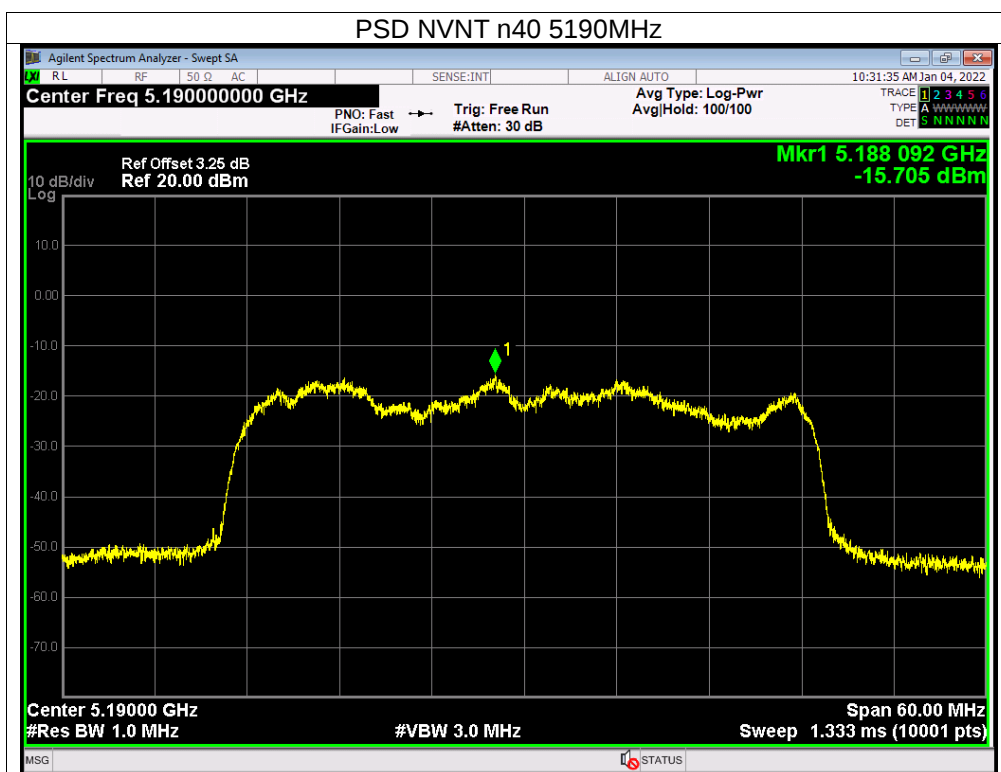
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	-8.34	11	Pass
NVNT	a	5200	-9.19	11	Pass
NVNT	a	5240	-8.43	11	Pass
NVNT	n20	5180	-11.08	11	Pass
NVNT	n20	5200	-10.78	11	Pass
NVNT	n20	5240	-11.99	11	Pass
NVNT	n40	5190	-15.71	11	Pass
NVNT	n40	5230	-18.49	11	Pass
NVNT	ac20	5180	-9.19	11	Pass
NVNT	ac20	5200	-10.22	11	Pass
NVNT	ac20	5240	-10.44	11	Pass
NVNT	ac40	5190	-15.39	11	Pass
NVNT	ac40	5230	-17.46	11	Pass
NVNT	ac80	5210	-25.67	11	Pass

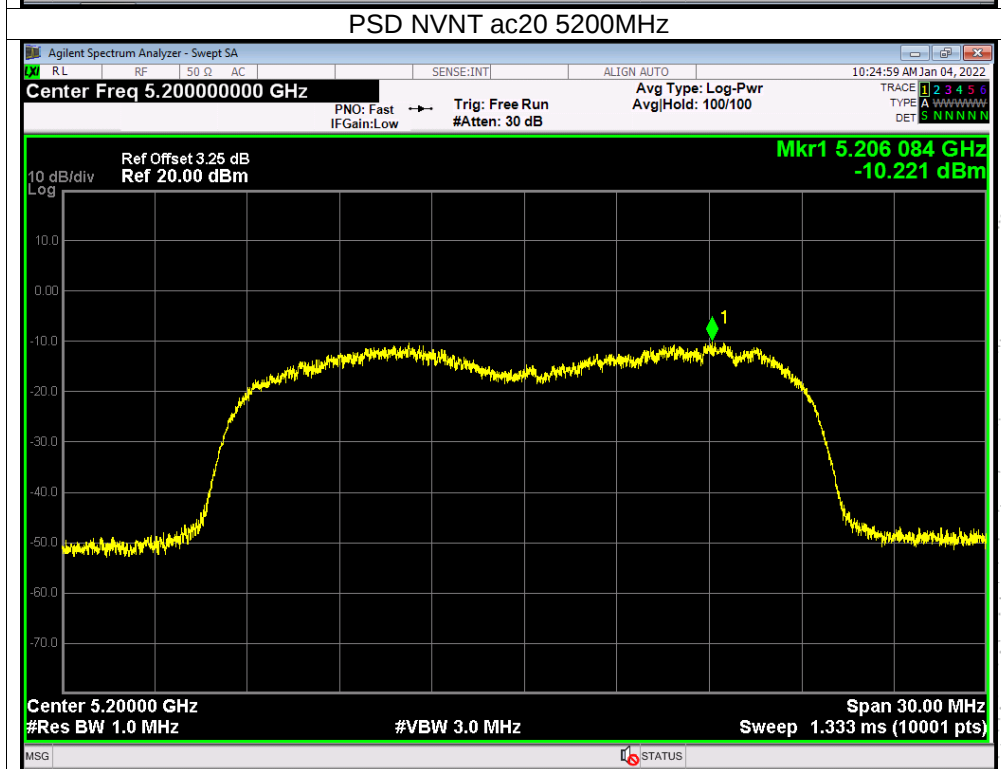
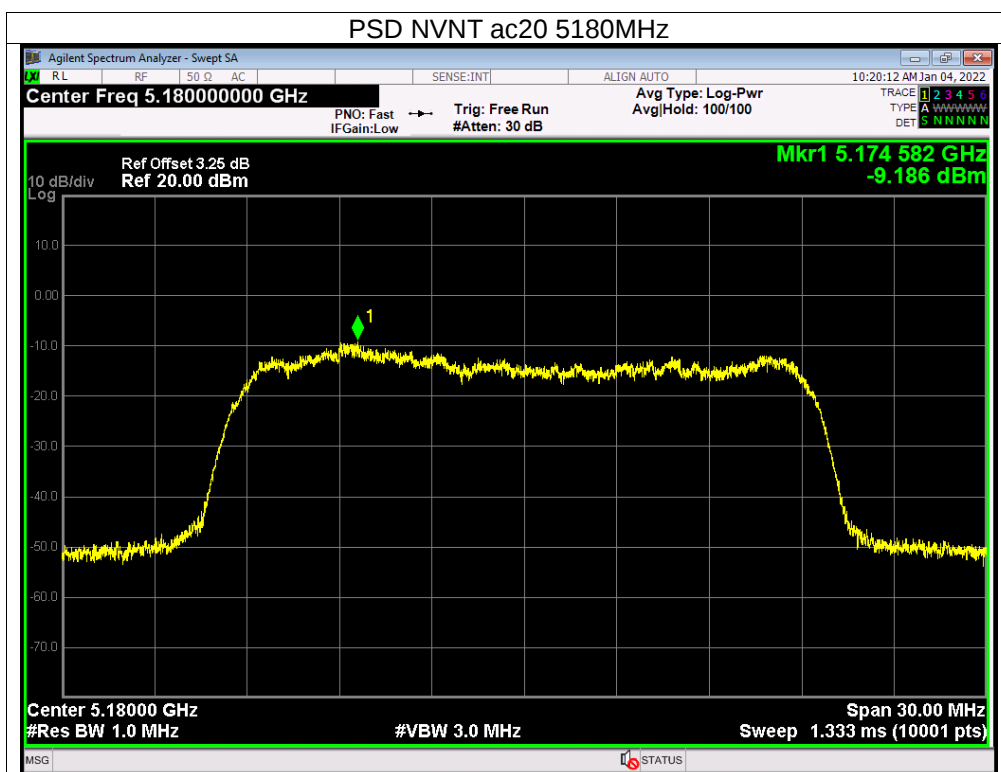
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
NVNT	a	5745	0.14	30	Pass
NVNT	a	5785	-0.38	30	Pass
NVNT	a	5825	-0.58	30	Pass
NVNT	n20	5745	1.03	30	Pass
NVNT	n20	5785	0.21	30	Pass
NVNT	n20	5825	-0.72	30	Pass
NVNT	n40	5755	-2.91	30	Pass
NVNT	n40	5795	-2.72	30	Pass
NVNT	ac20	5745	1.24	30	Pass
NVNT	ac20	5785	1.12	30	Pass
NVNT	ac20	5825	0.27	30	Pass
NVNT	ac40	5755	-2.52	30	Pass
NVNT	ac40	5795	-3.27	30	Pass
NVNT	ac80	5775	-5.47	30	Pass

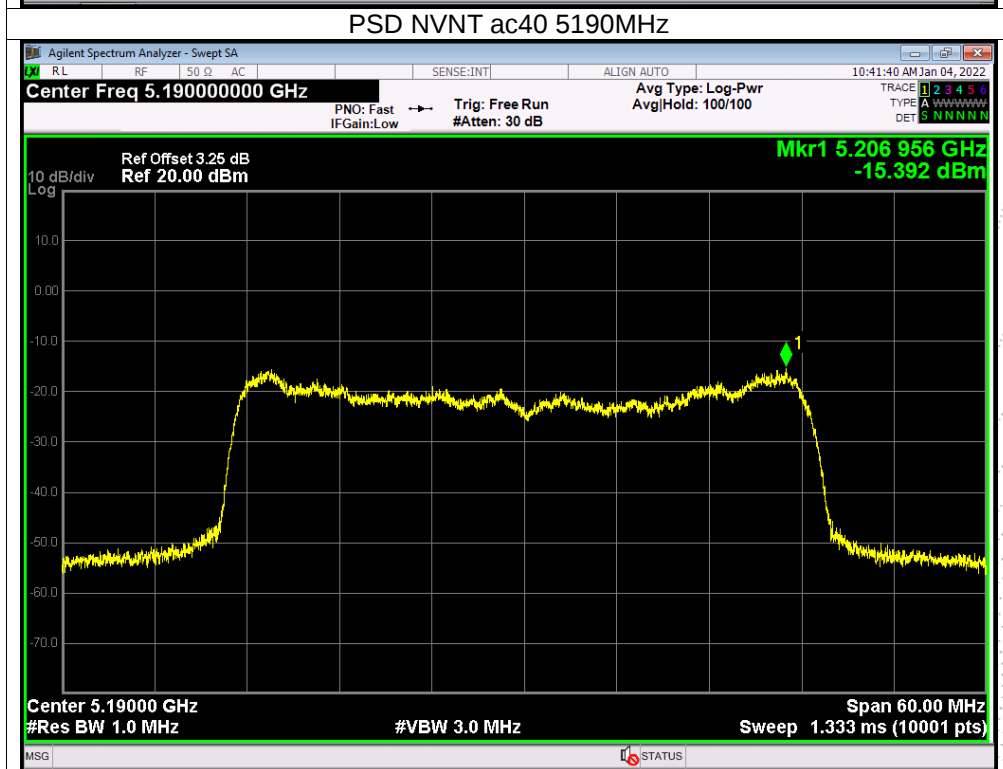
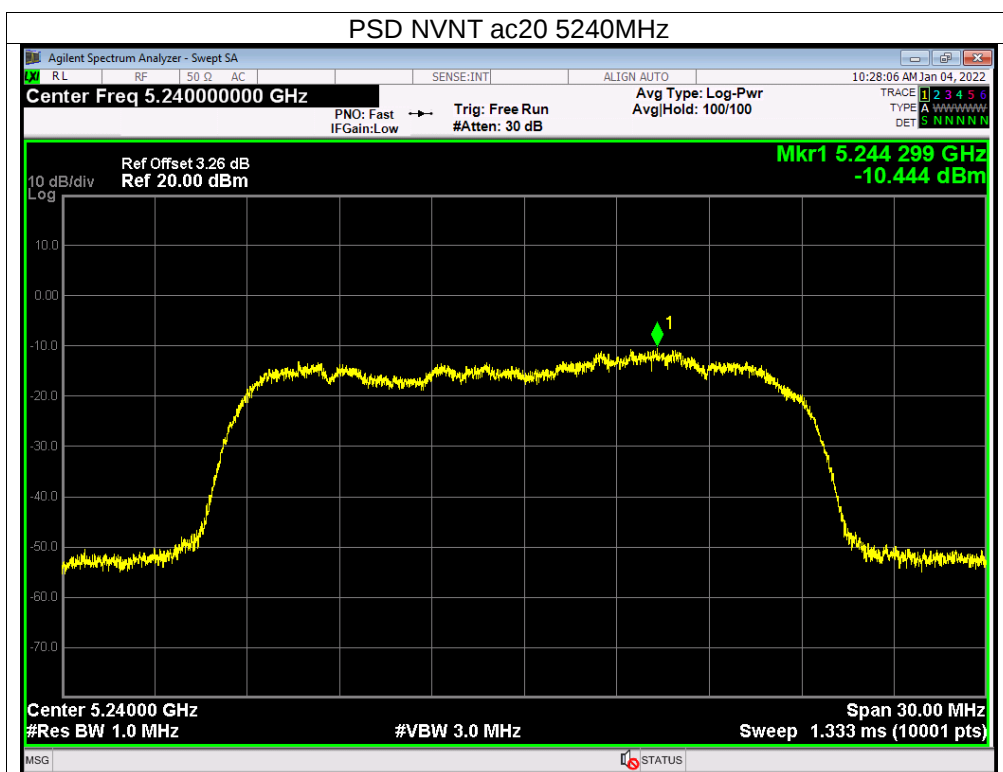


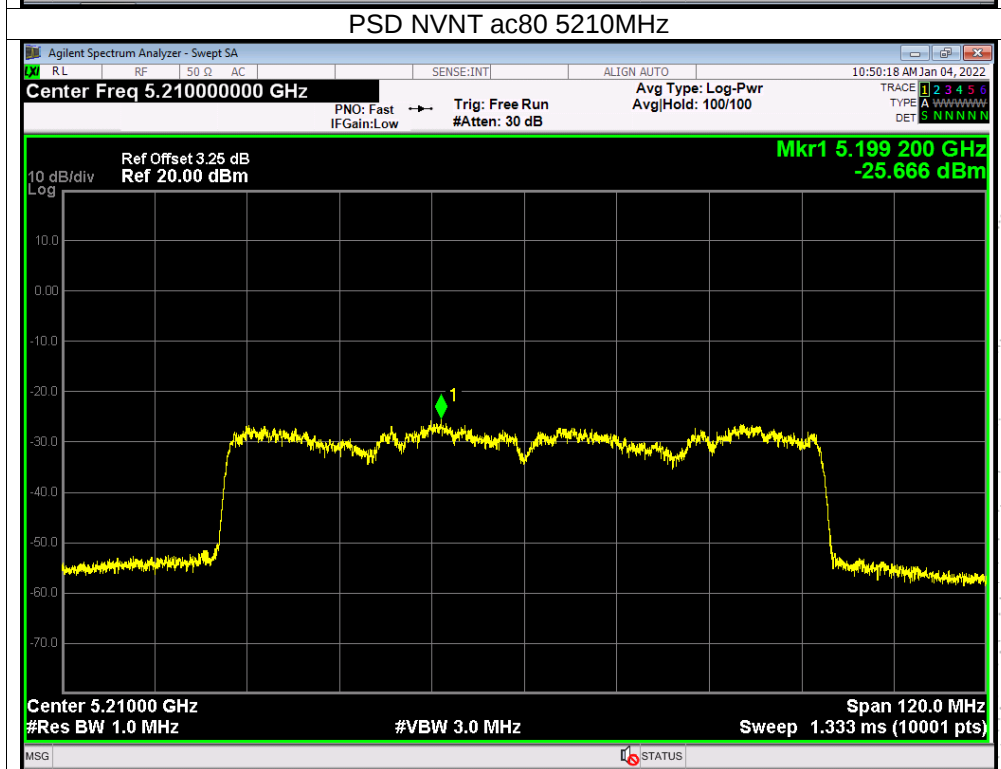
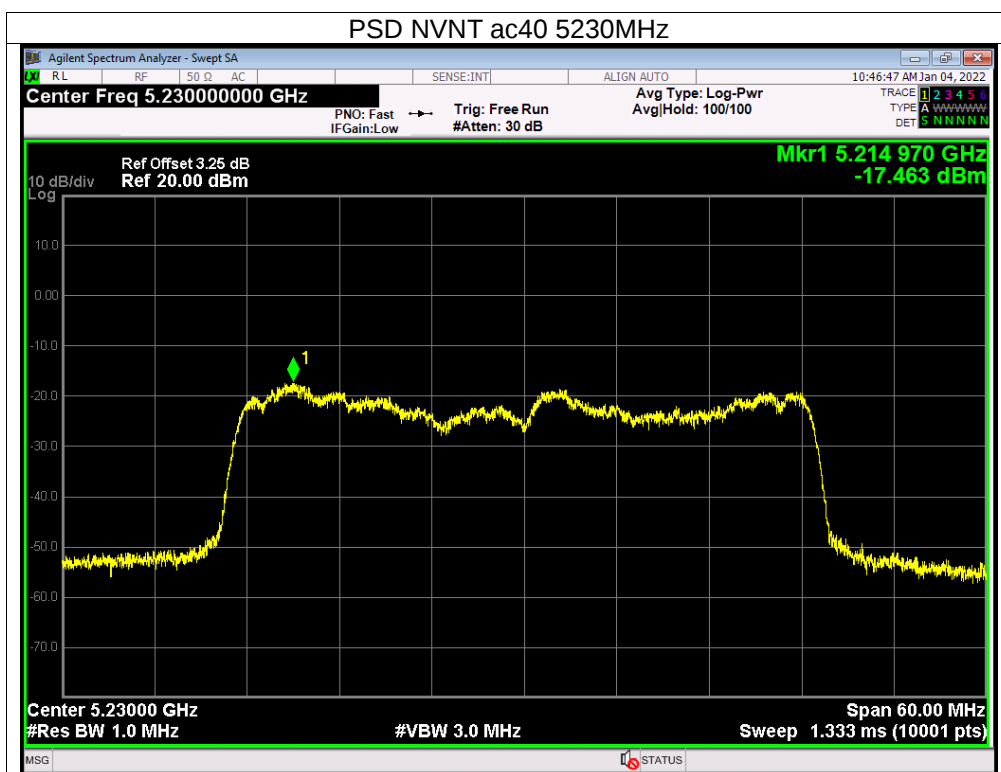


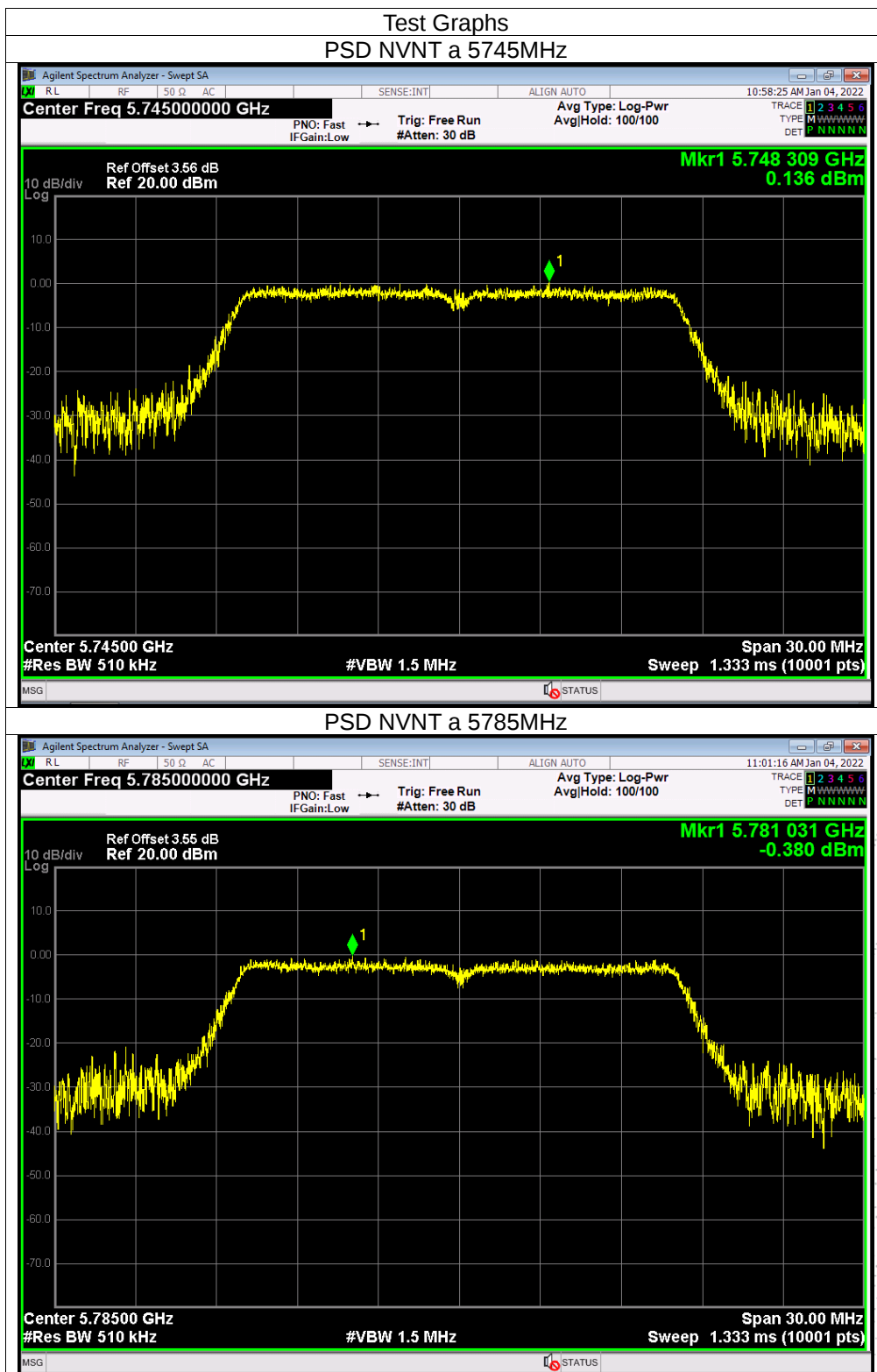


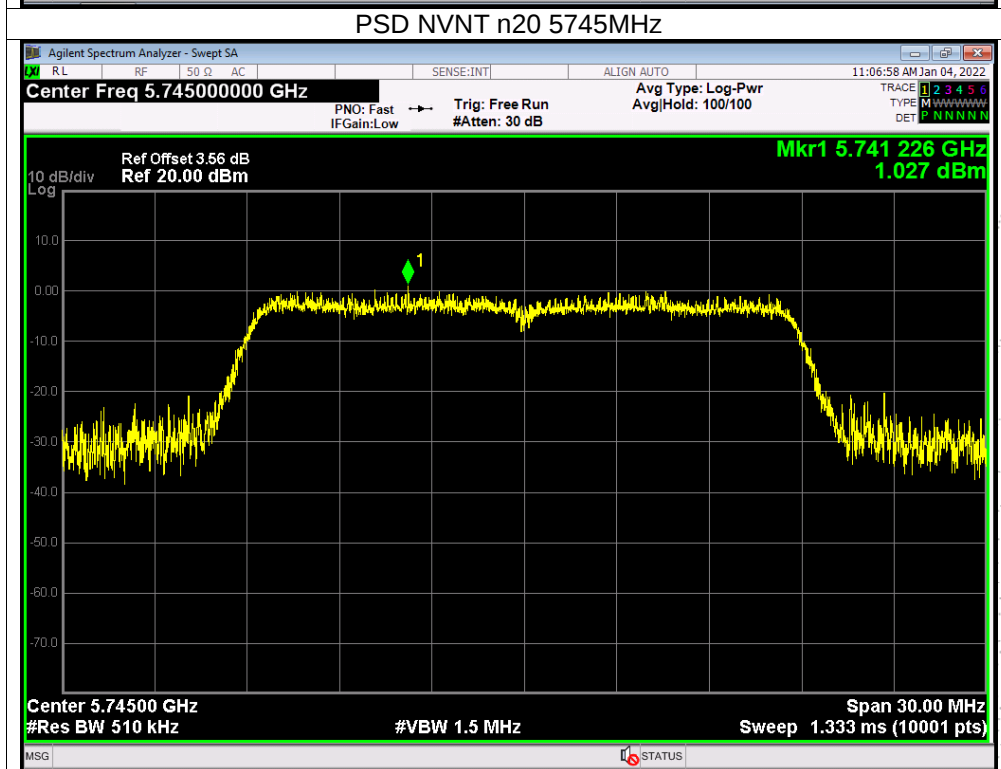
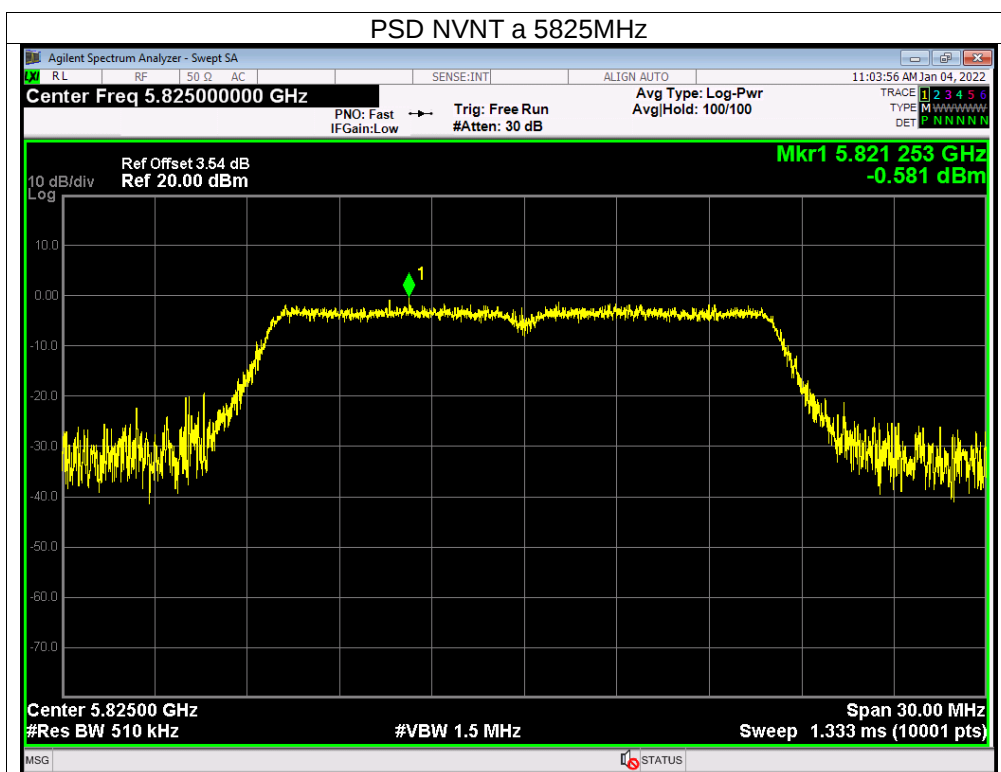


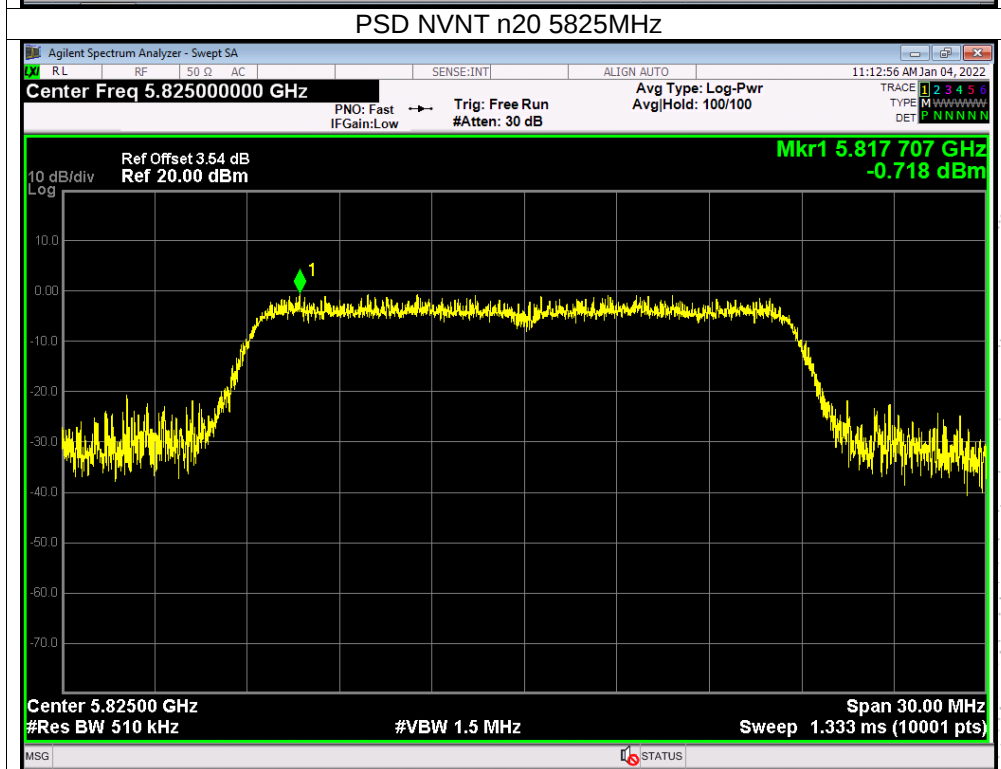
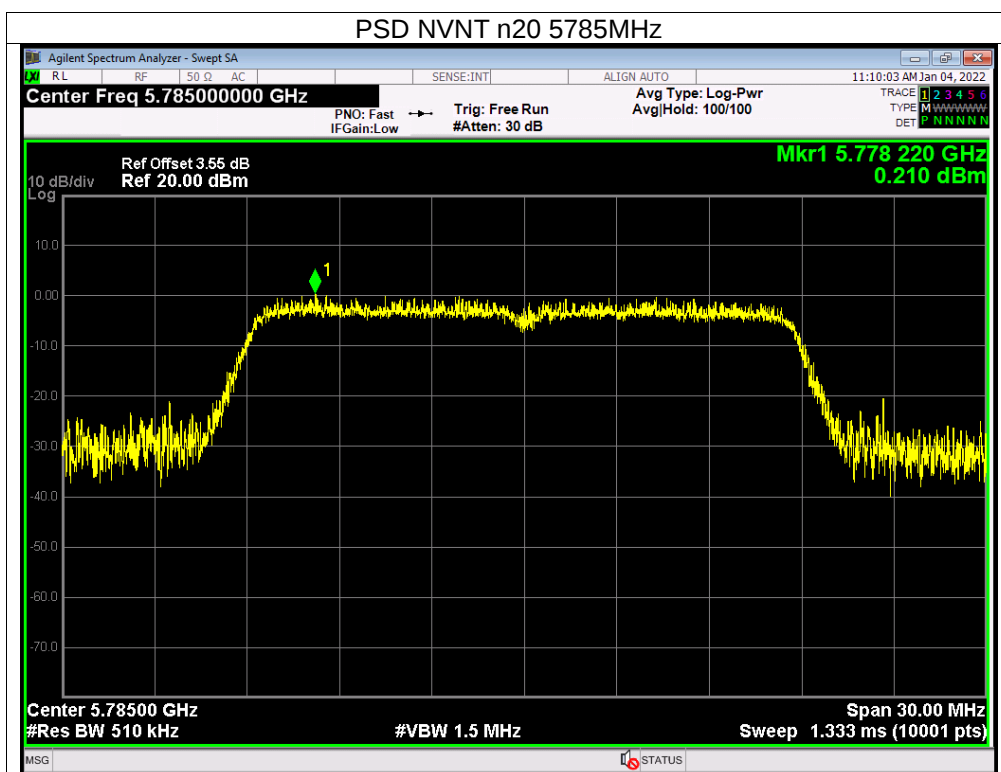


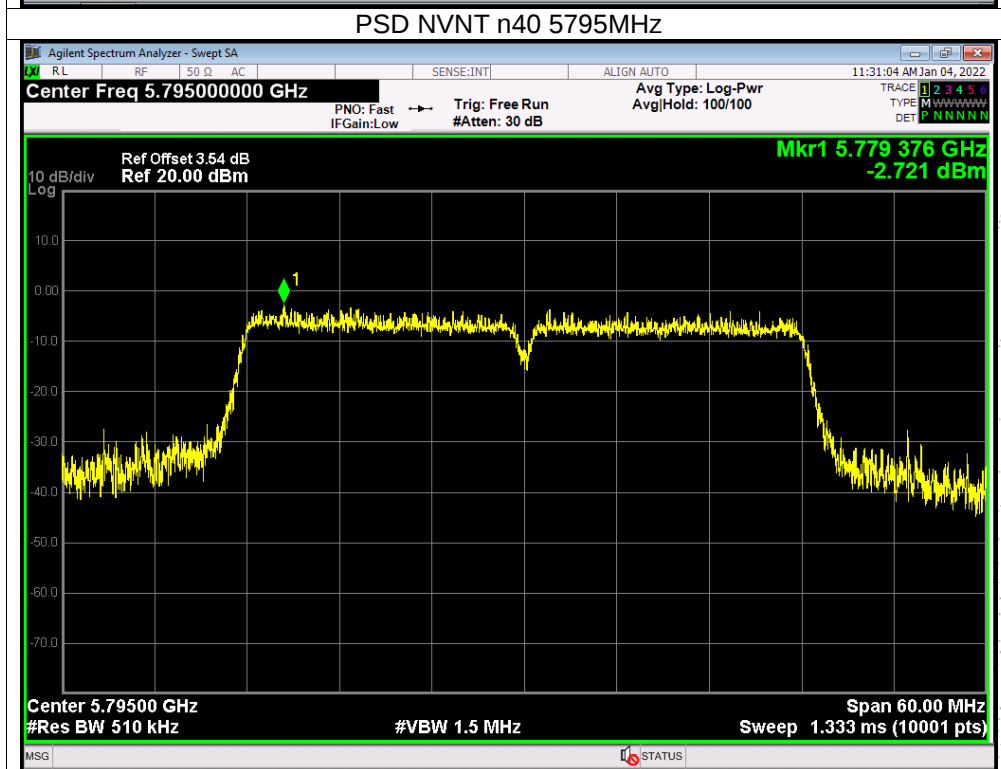
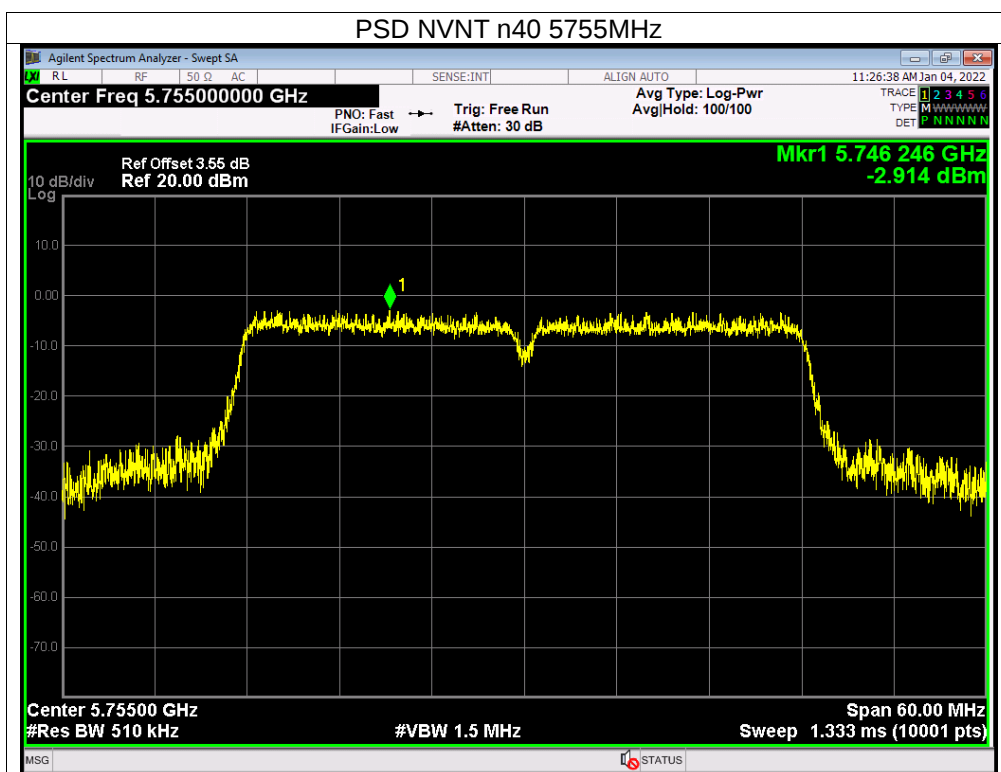


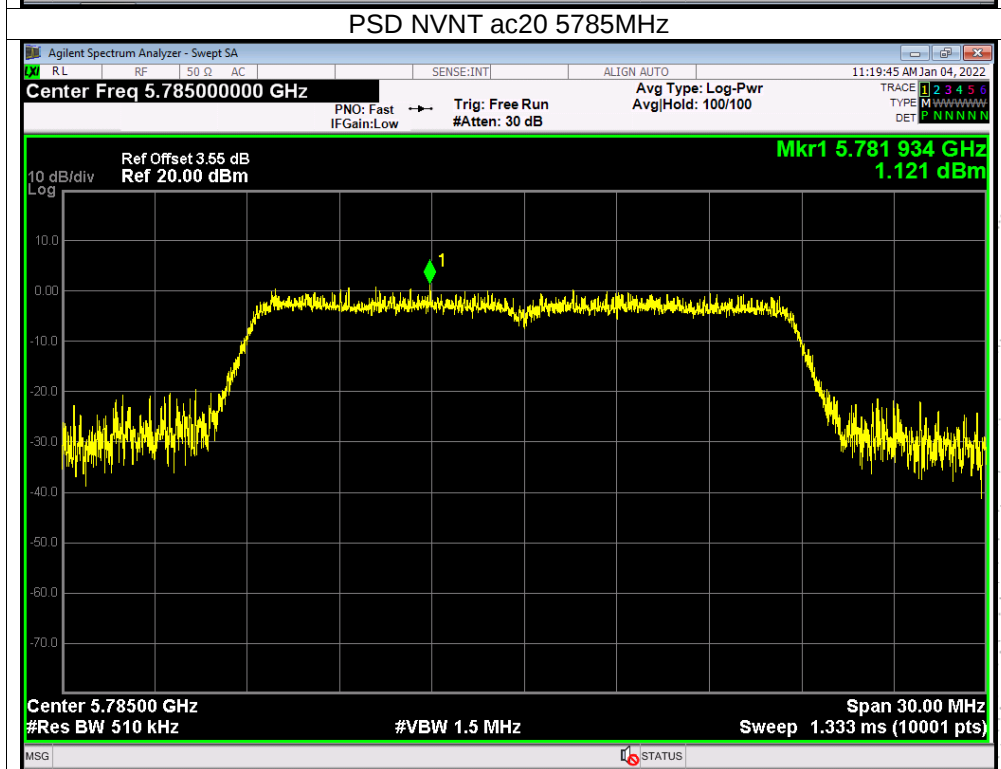
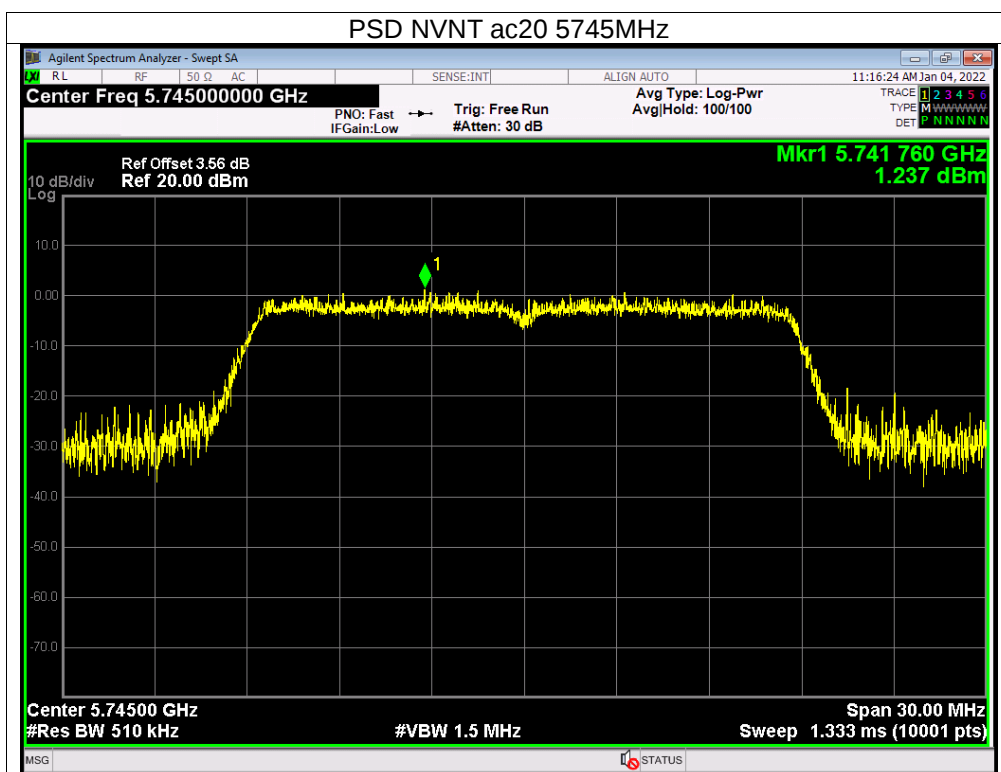


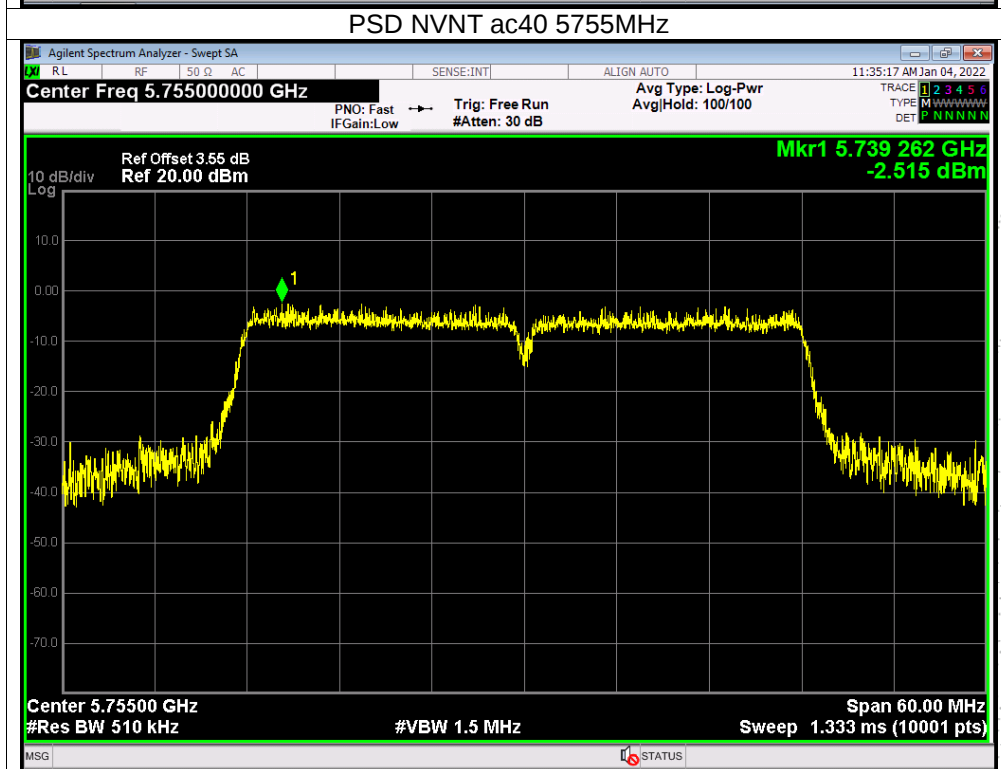
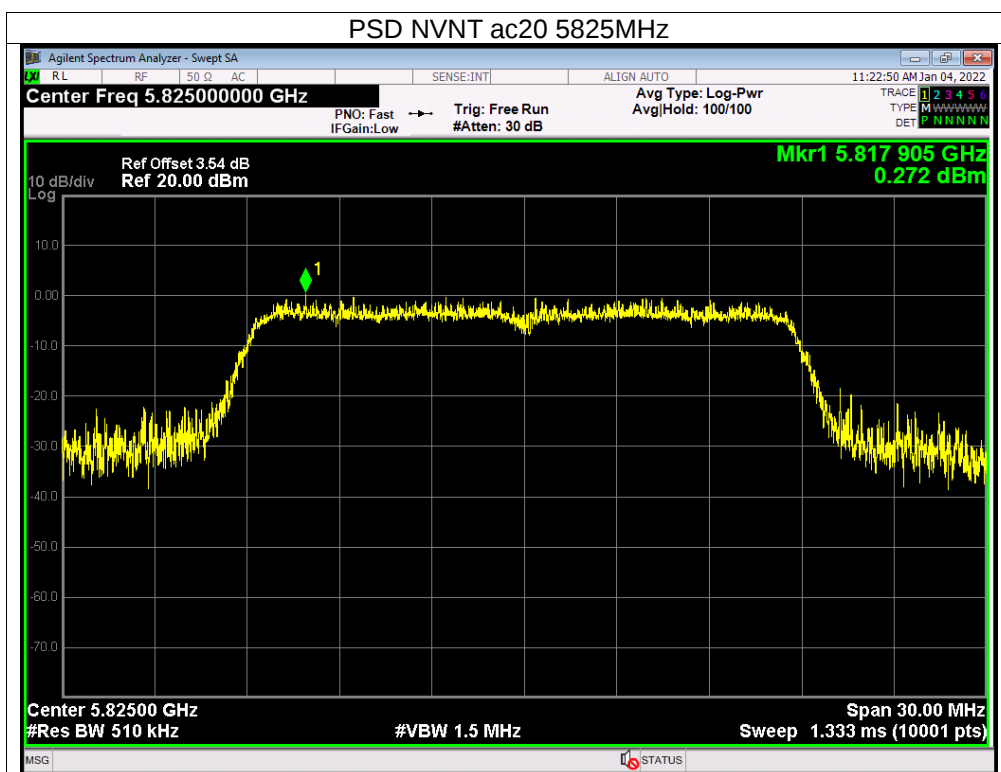


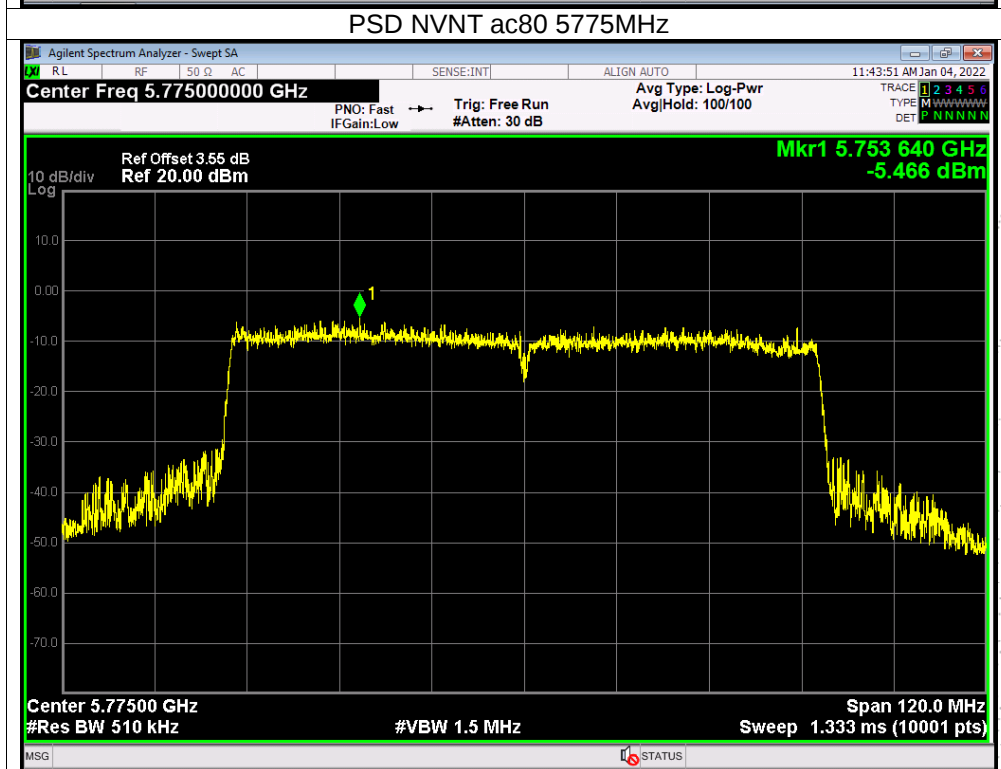
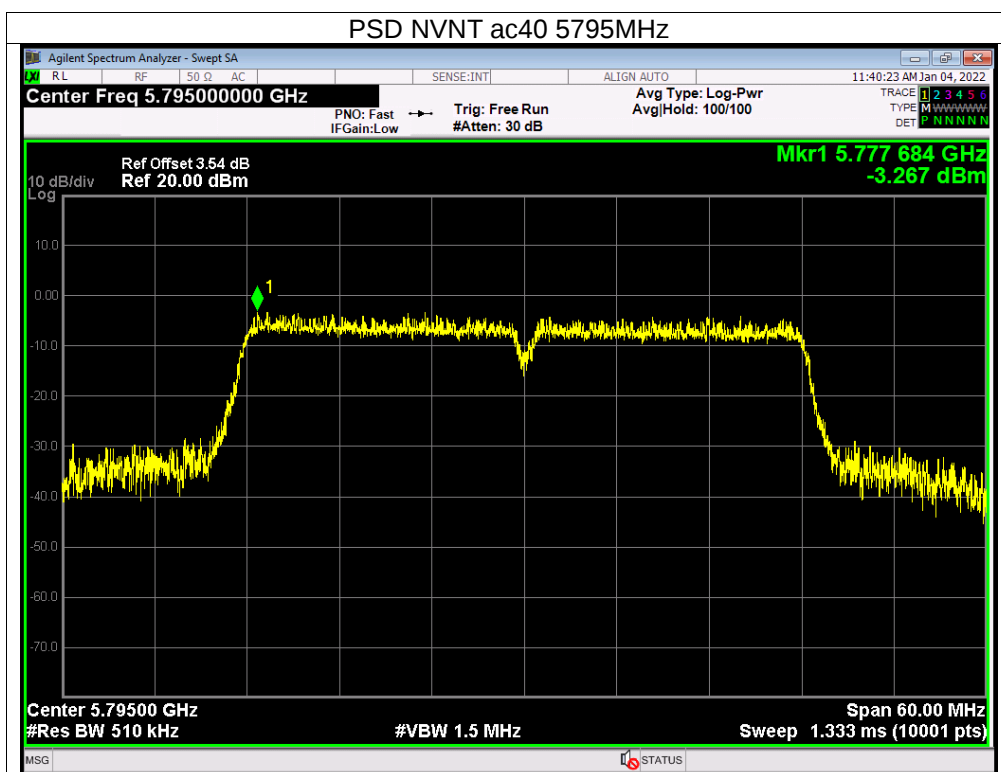






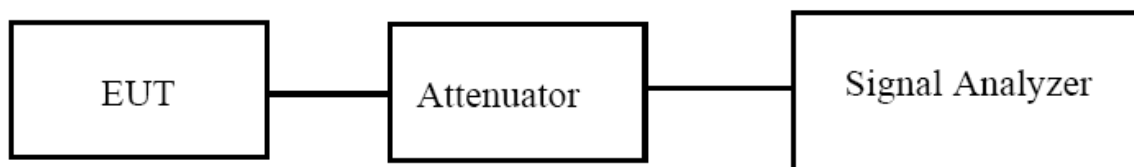






9. 26dB & 6dB & 99% Emission Bandwidth

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.

9.3 Test procedure

a) Set RBW = approximately 1% of the emission bandwidth.

b) Set the VBW > RBW.

c) Detector = Peak.

d) Trace mode = max hold.

e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.

2. Set span = 1.5 times to 5.0 times the OBW.

3. Set RBW = 1 % to 5 % of the OBW

4. Set VBW $\geq 3 \cdot$ RBW

5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

6. Use the 99 % power bandwidth function of the instrument (if available).

7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

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 :	AC120V/60Hz
Test Mode:	(5180-5240MHz)		

Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	28.604	Pass
NVNT	a	5200	26.903	Pass
NVNT	a	5240	27.958	Pass
NVNT	n20	5180	27.939	Pass
NVNT	n20	5200	27.964	Pass
NVNT	n20	5240	28.261	Pass
NVNT	n40	5190	42.81	Pass
NVNT	n40	5230	45.129	Pass
NVNT	ac20	5180	29.358	Pass
NVNT	ac20	5200	28.205	Pass
NVNT	ac20	5240	26.426	Pass
NVNT	ac40	5190	45.087	Pass
NVNT	ac40	5230	43.353	Pass
NVNT	ac80	5210	78.248	Pass

Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5180	16.568
NVNT	a	5200	16.526
NVNT	a	5240	16.59
NVNT	n20	5180	17.621
NVNT	n20	5200	17.613
NVNT	n20	5240	17.63
NVNT	n40	5190	36.28
NVNT	n40	5230	36.298
NVNT	ac20	5180	17.611
NVNT	ac20	5200	17.659
NVNT	ac20	5240	17.63
NVNT	ac40	5190	36.218
NVNT	ac40	5230	36.286
NVNT	ac80	5210	75.533

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	AC120V/60Hz
Test Mode:	(5745-5825MHz)		

Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	16.338	0.5	Pass
NVNT	a	5785	16.407	0.5	Pass
NVNT	a	5825	16.33	0.5	Pass
NVNT	n20	5745	17.242	0.5	Pass
NVNT	n20	5785	17.402	0.5	Pass
NVNT	n20	5825	17.267	0.5	Pass
NVNT	n40	5755	36.033	0.5	Pass
NVNT	n40	5795	36.142	0.5	Pass
NVNT	ac20	5745	17.425	0.5	Pass
NVNT	ac20	5785	17.378	0.5	Pass
NVNT	ac20	5825	17.299	0.5	Pass
NVNT	ac40	5755	35.961	0.5	Pass
NVNT	ac40	5795	35.629	0.5	Pass
NVNT	ac80	5775	75.512	0.5	Pass

Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5745	16.561
NVNT	a	5785	16.569
NVNT	a	5825	16.566
NVNT	n20	5745	17.627
NVNT	n20	5785	17.648
NVNT	n20	5825	17.629
NVNT	n40	5755	36.238
NVNT	n40	5795	36.244
NVNT	ac20	5745	17.618
NVNT	ac20	5785	17.629
NVNT	ac20	5825	17.615
NVNT	ac40	5755	36.239
NVNT	ac40	5795	36.253
NVNT	ac80	5775	75.521



