

TEST REPORT

Report No.: BCTC2301770787-4E

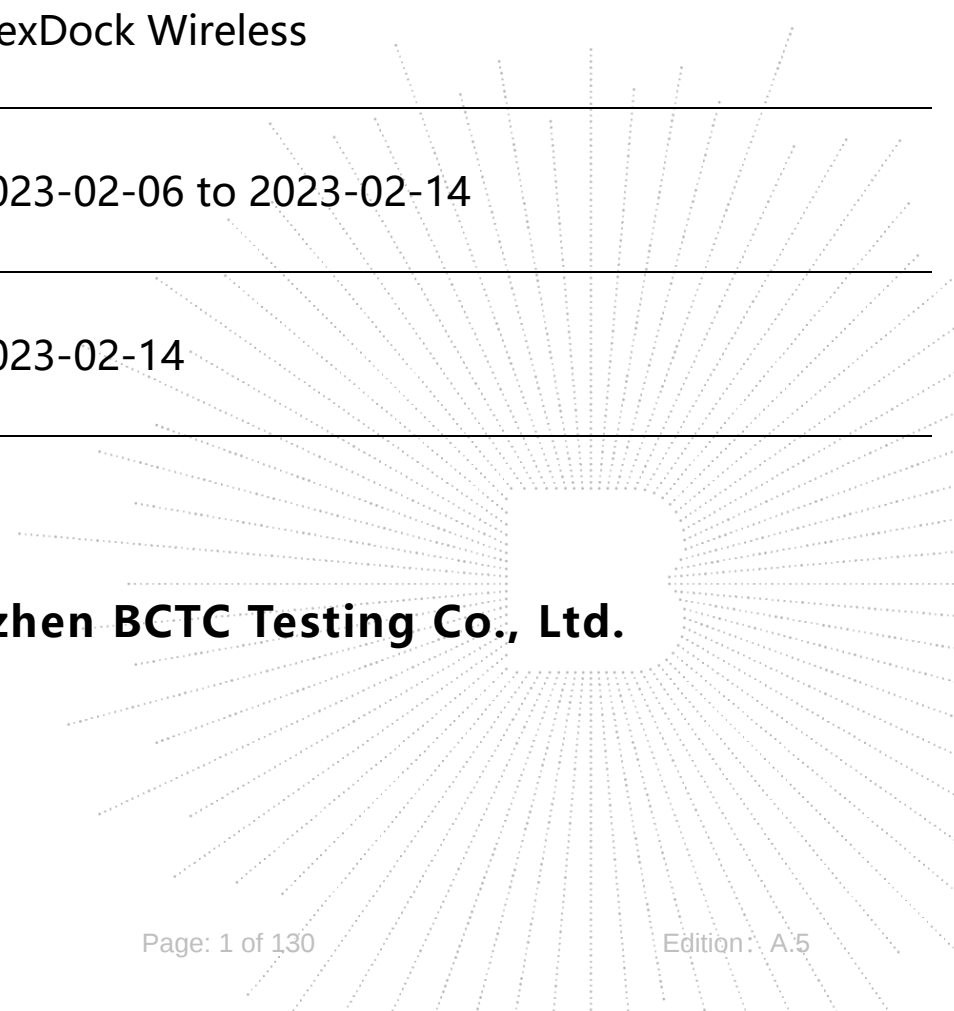
Applicant: Nex Computer LLC

Product Name: NexDock

Model/Type
reference: NexDock Wireless

Tested Date: 2023-02-06 to 2023-02-14

Issued Date: 2023-02-14



Shenzhen BCTC Testing Co., Ltd.

FCC ID:2AIMUNDW2213

Product Name: NexDock
Trademark: N/A
Model/Type reference: NexDock Wireless
Prepared For: Nex Computer LLC
Address: 672 Camillo Road Sierra Madre California United States
Manufacturer: Shenchuang Industrial (HK) Limited
Address: FLAT/RM P 4/F LLADRO CENTRE, 72 HOI YUEN ROAD, KWUN TONG KOWLOON, HONG KONG
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: 2023-02-06
Sample tested Date: 2023-02-06 to 2023-02-14
Issue Date: 2023-02-14
Report No.: BCTC2301770787-4E
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:



Kelsey Tan/ Project Handler

Approved by:



Zero Zhou/Reviewer

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

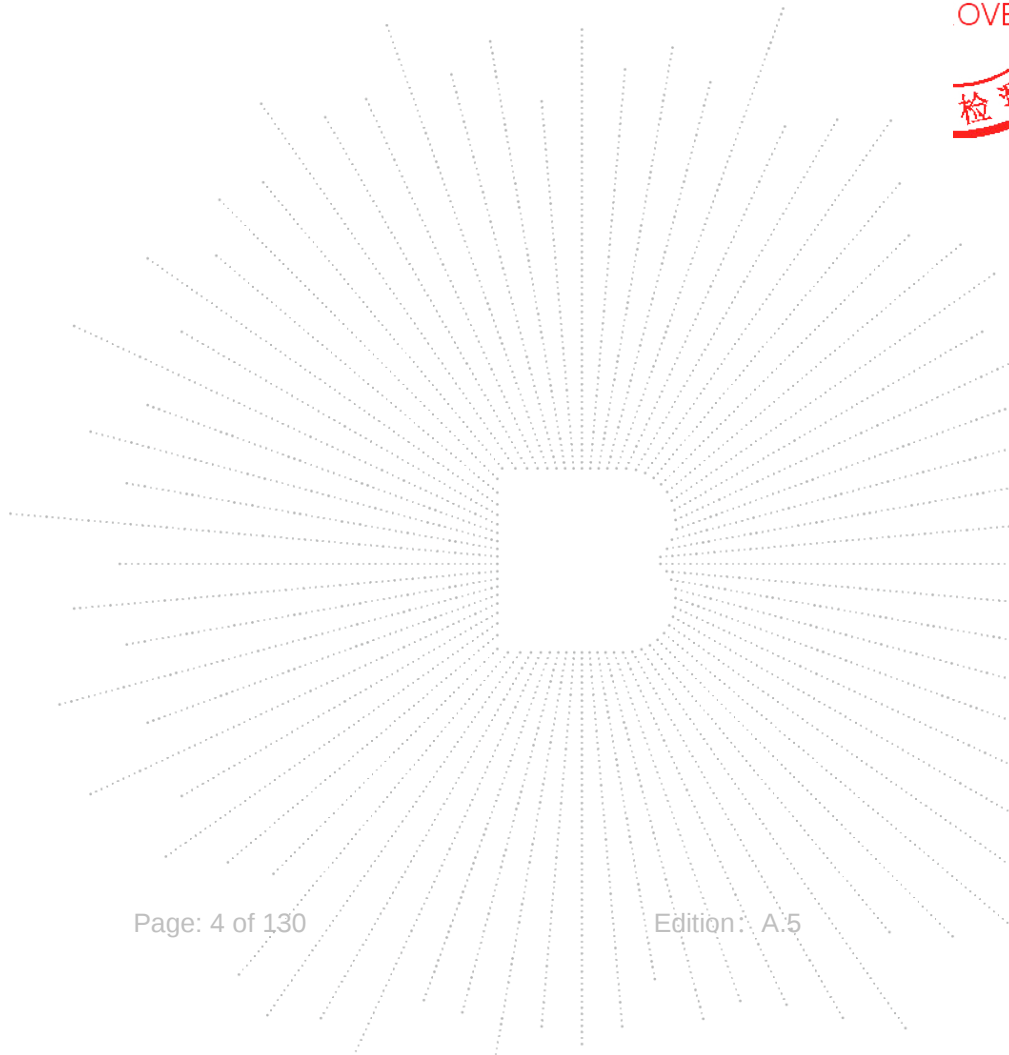
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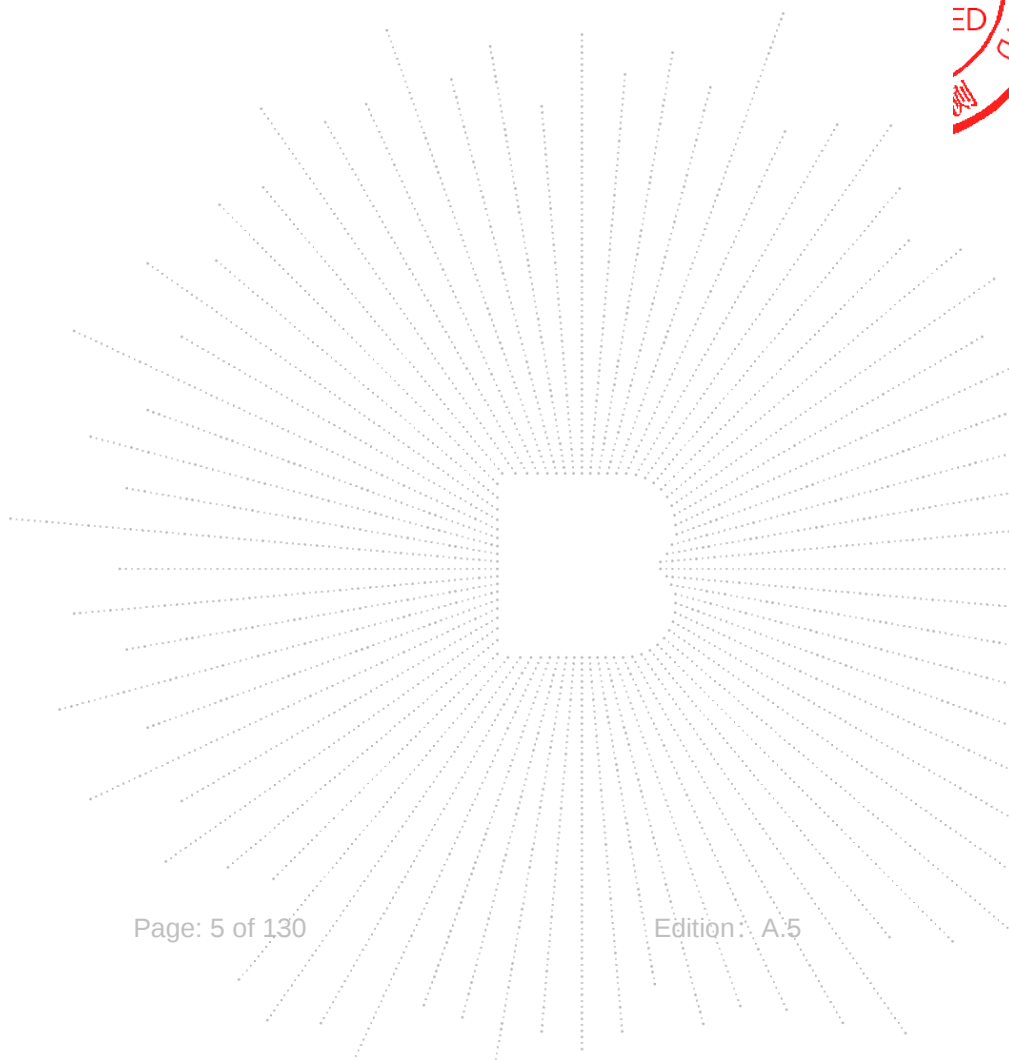
(Note: N/A Means Not Applicable)

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1. Version

Report No.	Issue Date	Description	Approved
BCTC2301770787-4E	2023-02-14	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

CO., LTD.

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℃

4. Product Information And Test Setup

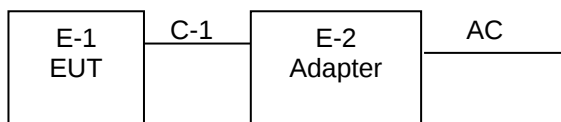
4.1 Product Information

Model/Type reference:	NexDock Wireless
Model differences:	N/A
Hardware Version:	N/A
Software Version:	N/A
IEEE 802.11 WLAN Mode Supported:	802.11a/n/ac(20MHz channel bandwidth) 802.11n/ac(40MHz channel bandwidth) 802.11ac(80MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n(HT20)/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:	FPCB antenna
Antenna Gain:	5.1G:2.1 dBi 5.8G:2.27 dBi
Ratings:	DC 12V Battery:DC 7.6V
Adapter 1 information:	MODEL:JP-P08 Input:AC100-240V 50/60Hz 0.5A Max PD Output:DC 5V 3A/DC 9V 2.22A/DC 12V 1.67A
Adapter 2 information:	MODEL:S-TR-151PU4 Input:AC100-240V 50/60Hz 0.5A Max PD Output:DC 5V 3A/DC 9V 2.22A/DC 12V 1.67A
Remark:	The antenna gain of the product is provided by the customer, and the test data is affected by the customer information

4.2 Test Setup Configuration

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

Conducted Emission and Radiated Spurious Emission:



4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	NexDock	N/A	NexDock 360	Ref. the Section 4.1	EUT

Item	Shielded Type	Ferrite Core	Length	Note
C-1	N/A	N/A	0.3M	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

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	SecureCRT		
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

IC Registered No.: 23583

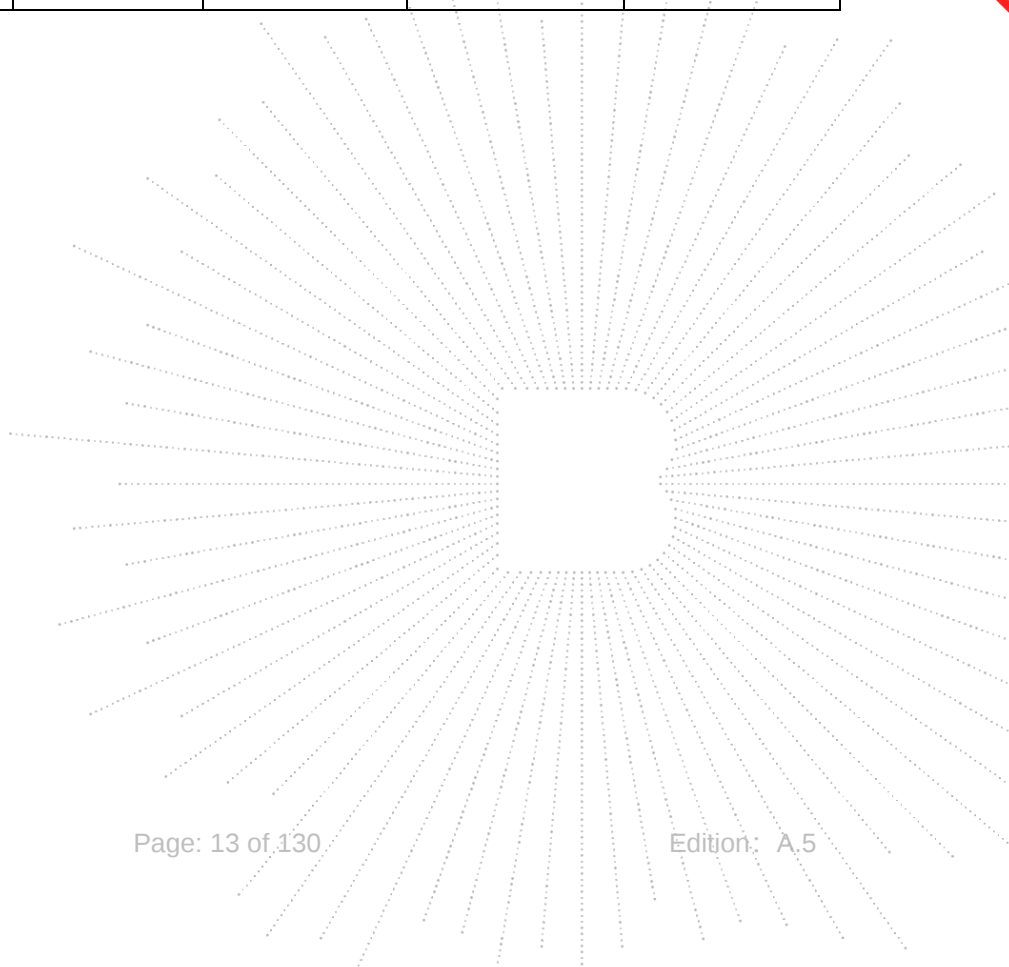
FCC Designation No.: CN1212

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
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Attenuator	\	10dB C-6GHz	1650	May 28, 2021	May 27, 2022

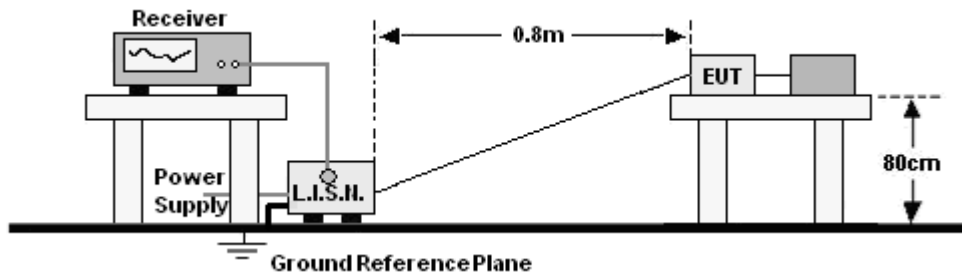
RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power Metter	Keysight	E4419	\	May 24, 2022	May 23, 2023
Power Sensor (AV)	Keysight	E9300A	\	May 24, 2022	May 23, 2023
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 24, 2022	May 23, 2023
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 24, 2022	May 23, 2023
Radio frequency control box	MAIWEI	MW100-RFC B	\	\	\
Software	MAIWEI	MTS 8310	\	\	\

Radiated Emissions Test (966 Chamber01)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	Jun. 06. 2020	Jun. 05, 2023
Receiver	R&S	ESR3	102075	May 24, 2022	May 23, 2023
Receiver	R&S	ESRP	101154	May 24, 2022	May 23, 2023
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 24, 2022	May 23, 2023
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 26, 2022	May 25, 2023
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 26, 2022	May 25, 2023
Amplifier	SKET	LAPA_01G18 G-45dB	\	May 24, 2022	May 23, 2023
Horn Antenna	Schwarzbeck	BBHA9120D	1541	Jun. 06, 2022	Jun. 05, 2023
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 26, 2022	May 25, 2023
Horn Antenn(18GH z-40GHz)	Schwarzbeck	BBHA9170	00822	Jun. 06, 2022	Jun. 05, 2023
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 24, 2022	May 23, 2023
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

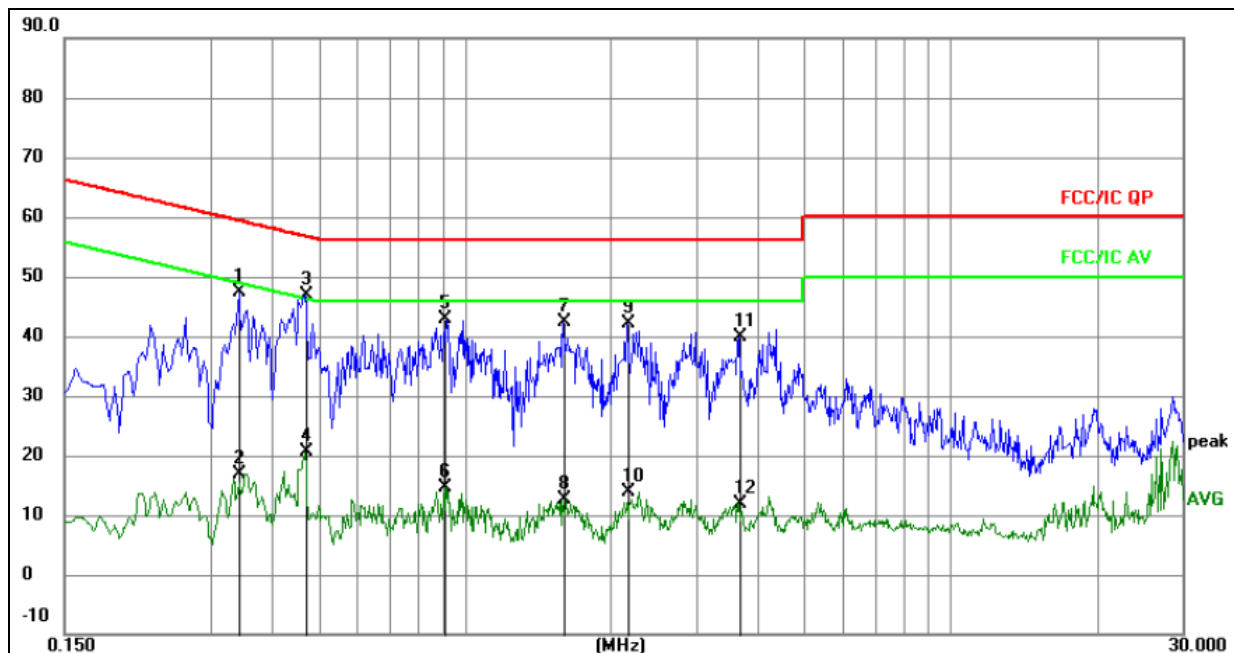
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

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

6.5 Test Result

Adapter 1:

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

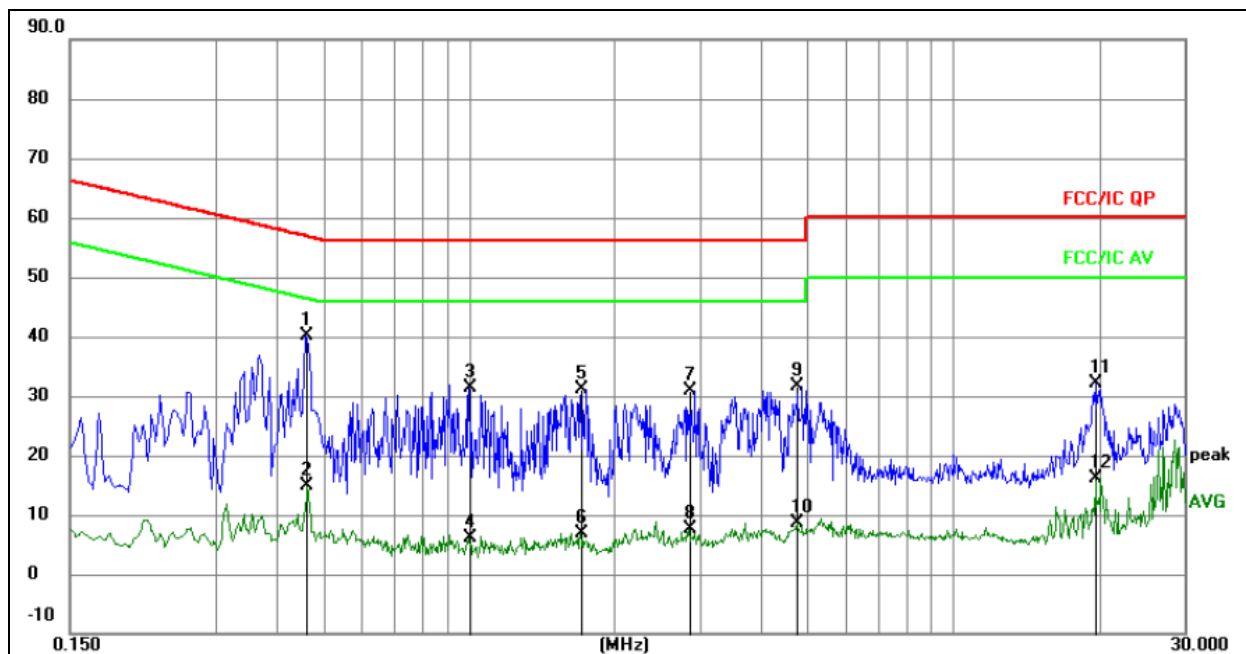


Remark:

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		0.3435	27.69	19.76	47.45	59.12	-11.67	QP
2		0.3435	-2.81	19.76	16.95	49.12	-32.17	AVG
3	*	0.4694	27.06	19.73	46.79	56.52	-9.73	QP
4		0.4694	0.98	19.73	20.71	46.52	-25.81	AVG
5		0.9103	23.20	19.75	42.95	56.00	-13.05	QP
6		0.9103	-5.04	19.75	14.71	46.00	-31.29	AVG
7		1.5988	22.65	19.83	42.48	56.00	-13.52	QP
8		1.5988	-7.18	19.83	12.65	46.00	-33.35	AVG
9		2.1568	22.18	19.90	42.08	56.00	-13.92	QP
10		2.1568	-6.12	19.90	13.78	46.00	-32.22	AVG
11		3.6690	19.81	20.06	39.87	56.00	-16.13	QP
12		3.6690	-8.29	20.06	11.77	46.00	-34.23	AVG

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

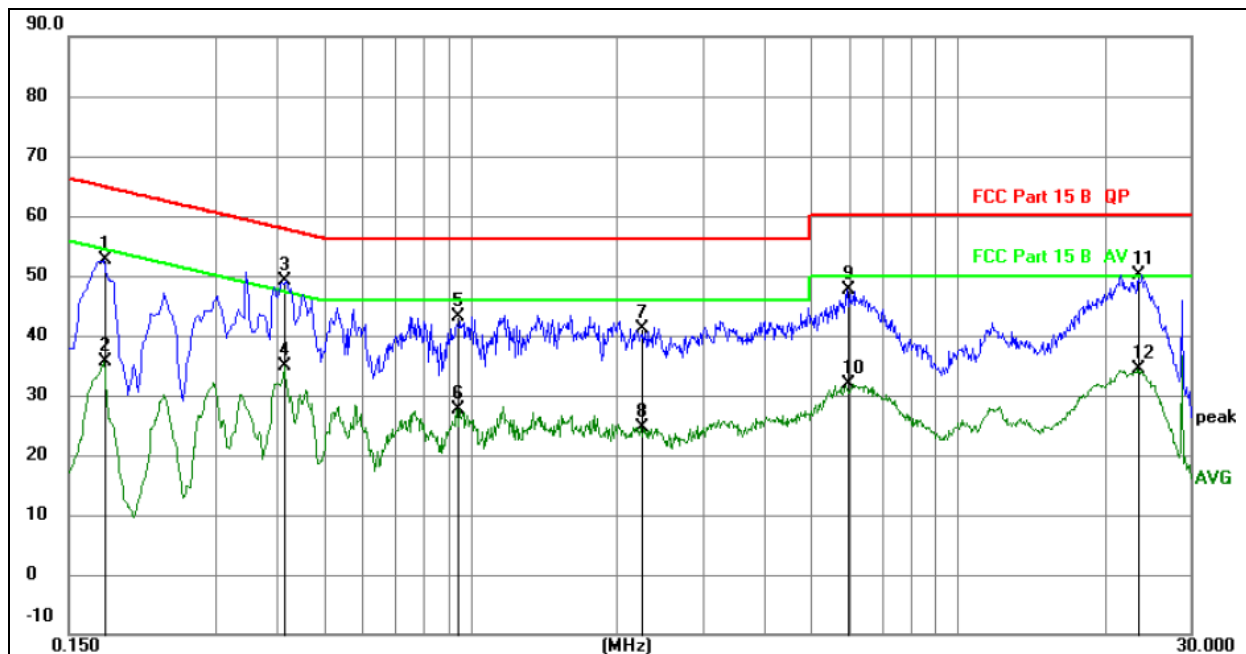

Remark:

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	*	0.4605	20.39	19.73	40.12	56.68	-16.56	QP
2		0.4605	-4.79	19.73	14.94	46.68	-31.74	AVG
3		1.0003	11.60	19.76	31.36	56.00	-24.64	QP
4		1.0003	-13.74	19.76	6.02	46.00	-39.98	AVG
5		1.7069	11.22	19.84	31.06	56.00	-24.94	QP
6		1.7069	-12.89	19.84	6.95	46.00	-39.05	AVG
7		2.8454	10.92	19.97	30.89	56.00	-25.11	QP
8		2.8454	-12.46	19.97	7.51	46.00	-38.49	AVG
9		4.7714	11.50	20.12	31.62	56.00	-24.38	QP
10		4.7714	-11.50	20.12	8.62	46.00	-37.38	AVG
11		19.7115	11.59	20.50	32.09	60.00	-27.91	QP
12		19.7115	-4.49	20.50	16.01	50.00	-33.99	AVG

Adapter 2:

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

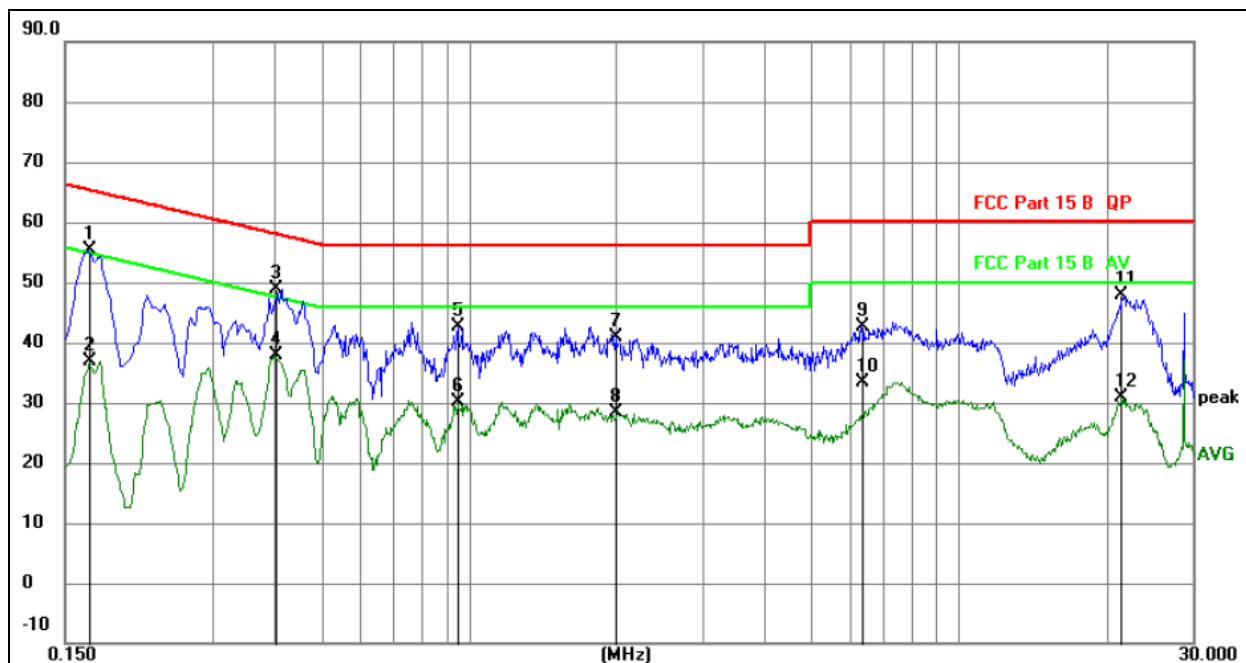


Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1770	32.78	19.74	52.52	64.63	-12.11	QP
2		0.1770	15.79	19.74	35.53	54.63	-19.10	AVG
3	*	0.4155	29.33	19.74	49.07	57.54	-8.47	QP
4		0.4155	15.06	19.74	34.80	47.54	-12.74	AVG
5		0.9420	23.44	19.76	43.20	56.00	-12.80	QP
6		0.9420	7.86	19.76	27.62	46.00	-18.38	AVG
7		2.2425	21.34	19.91	41.25	56.00	-14.75	QP
8		2.2425	4.69	19.91	24.60	46.00	-21.40	AVG
9		5.9595	27.52	20.15	47.67	60.00	-12.33	QP
10		5.9595	11.63	20.15	31.78	50.00	-18.22	AVG
11		23.4285	29.58	20.52	50.10	60.00	-9.90	QP
12		23.4285	13.83	20.52	34.35	50.00	-15.65	AVG

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



Remark:

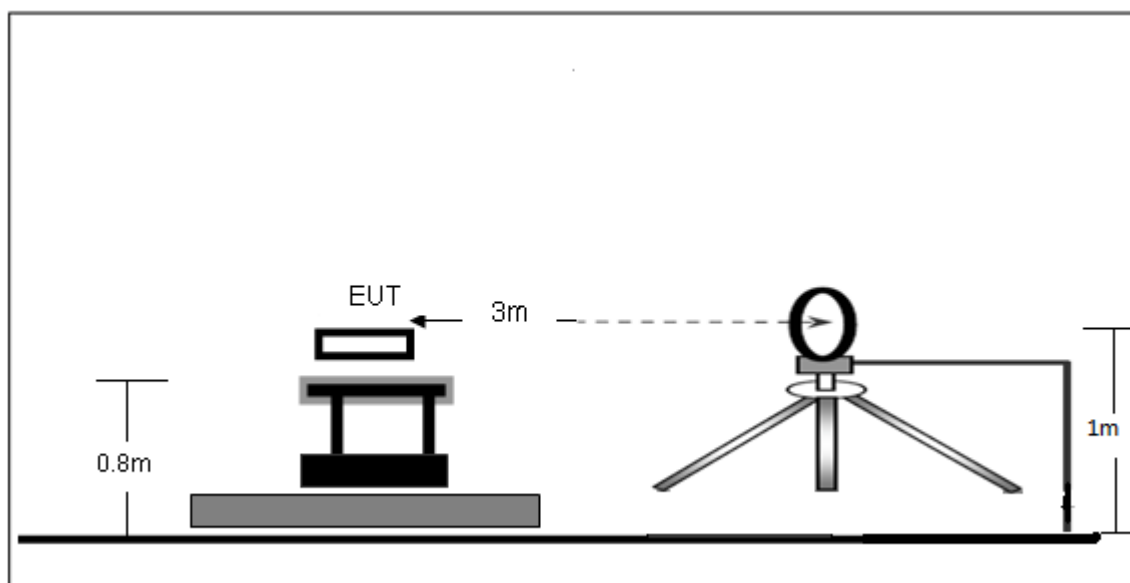
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No. Mk.	Freq. MHz	Reading Level	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1	0.1680	35.63	19.72	55.35	65.06	-9.71	QP
2	0.1680	17.09	19.72	36.81	55.06	-18.25	AVG
3 *	0.4019	29.09	19.75	48.84	57.81	-8.97	QP
4	0.4019	18.08	19.75	37.83	47.81	-9.98	AVG
5	0.9481	22.91	19.76	42.67	56.00	-13.33	QP
6	0.9481	10.44	19.76	30.20	46.00	-15.80	AVG
7	1.9906	21.08	19.88	40.96	56.00	-15.04	QP
8	1.9906	8.46	19.88	28.34	46.00	-17.66	AVG
9	6.3186	22.59	20.16	42.75	60.00	-17.25	QP
10	6.3186	13.34	20.16	33.50	50.00	-16.50	AVG
11	21.4860	27.27	20.51	47.78	60.00	-12.22	QP
12	21.4860	10.31	20.51	30.82	50.00	-19.18	AVG

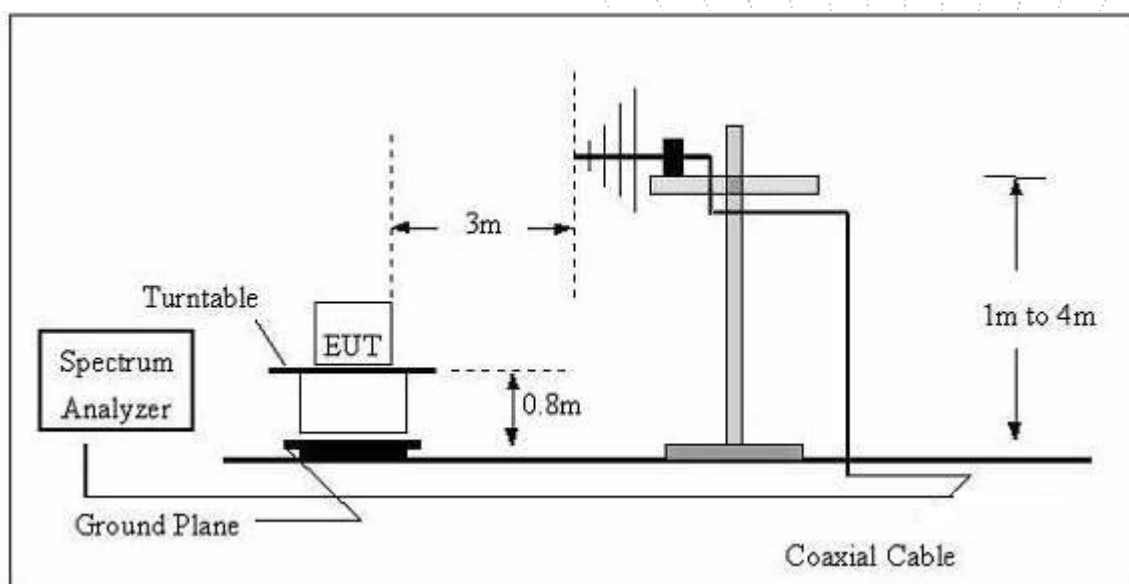
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

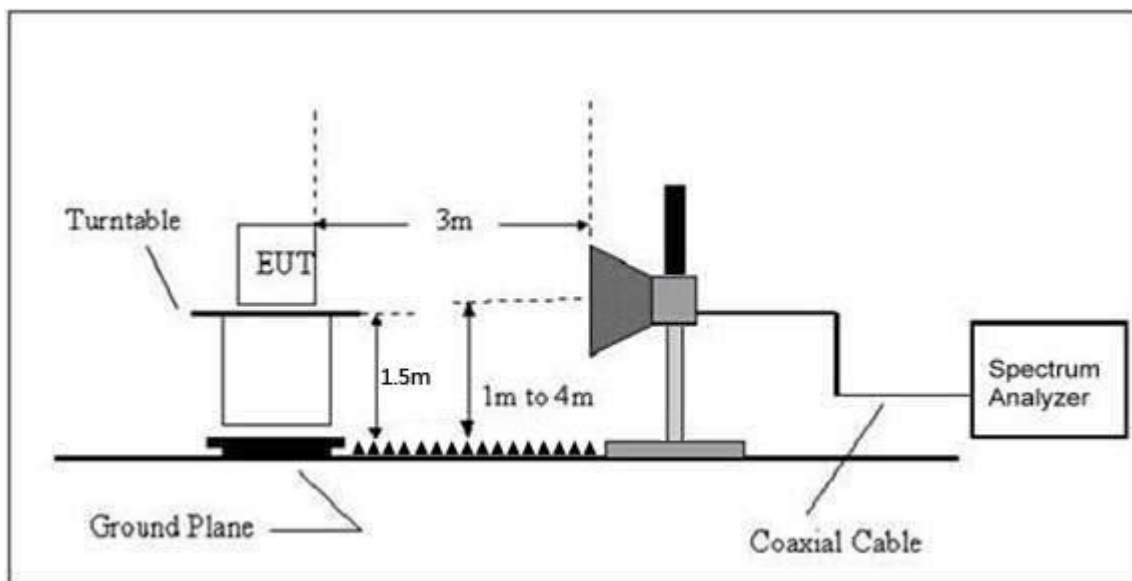
(A) Radiated Emission Test-Up Frequency Below 30MHz



(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 4	Polarization :	---

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

Note:

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

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

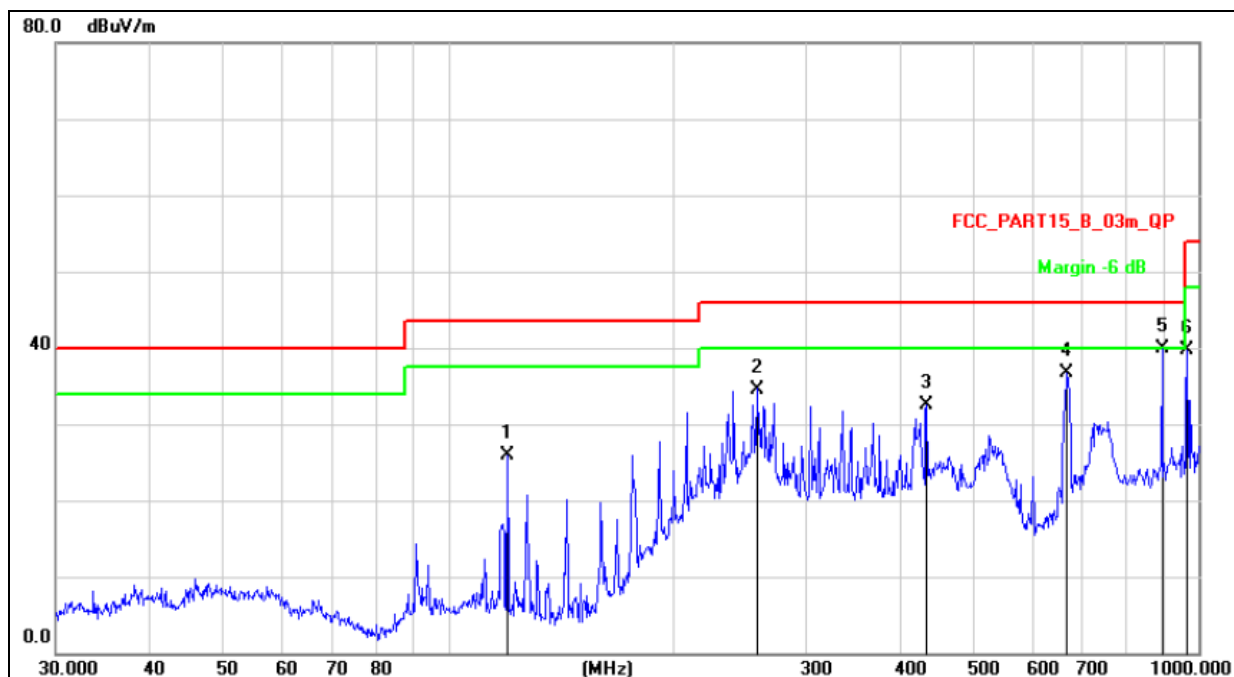
Limit line = specific limits(dBuv) + distance extrapolation factor.

TEST
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OVER
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Between 30MHz – 1GHz

Adapter 1:

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

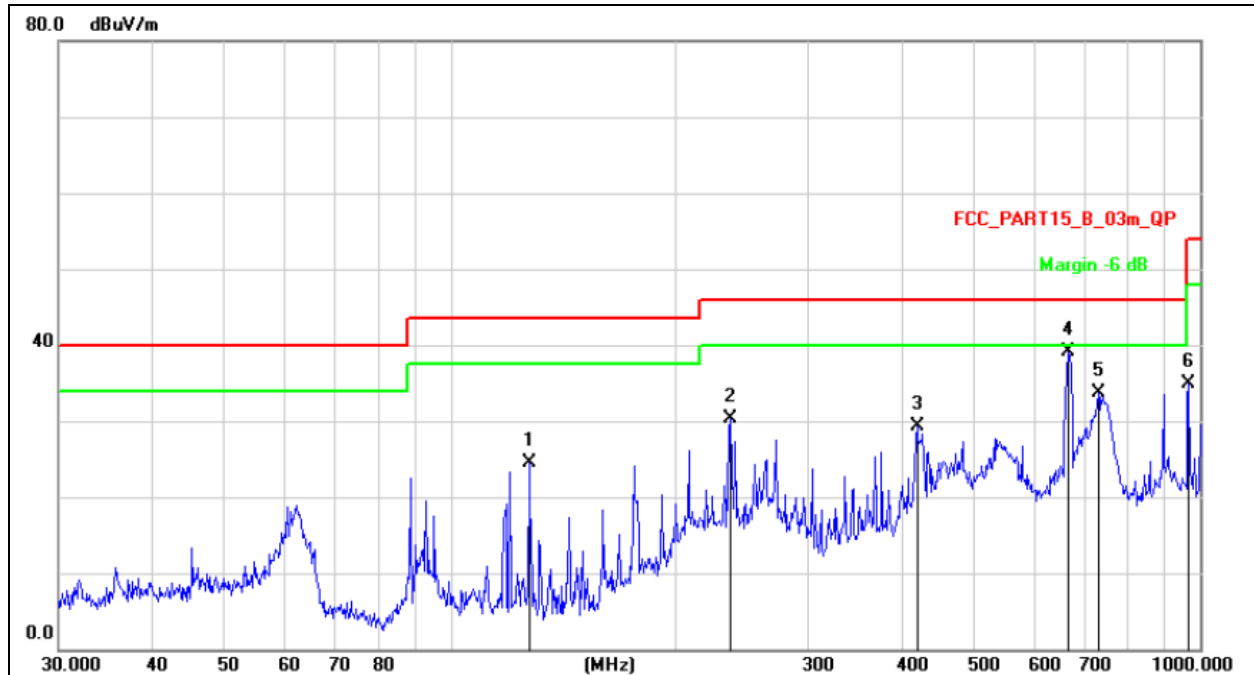


Remark:

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

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		119.8556	45.06	-19.07	25.99	43.50	-17.51	QP
2		258.3264	50.22	-15.62	34.60	46.00	-11.40	QP
3		434.0651	44.27	-11.72	32.55	46.00	-13.45	QP
4		668.1423	44.27	-7.51	36.76	46.00	-9.24	QP
5	*	893.8567	44.61	-4.66	39.95	46.00	-6.05	QP
6		965.5421	43.66	-3.96	39.70	54.00	-14.30	QP

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



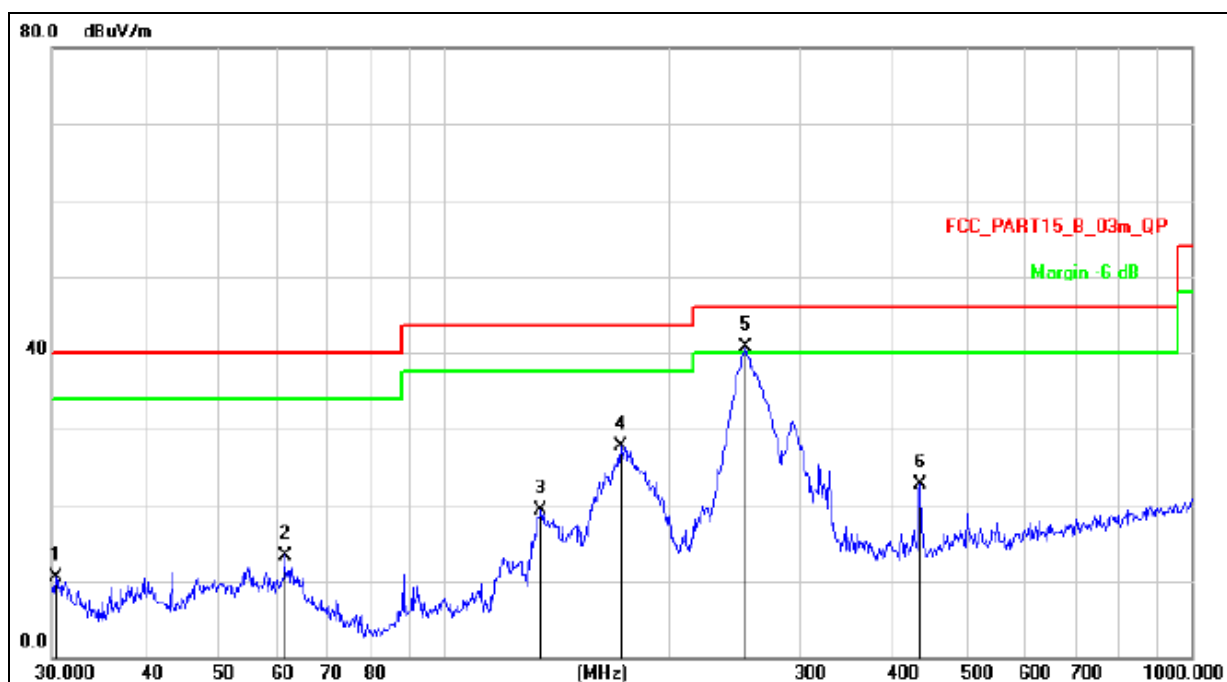
Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dB/m	dB	
1		127.2176	44.12	-19.55	24.57	43.50	-18.93	QP
2		236.6447	46.53	-16.24	30.29	46.00	-15.71	QP
3		419.1081	41.26	-11.93	29.33	46.00	-16.67	QP
4	*	668.1423	46.71	-7.51	39.20	46.00	-6.80	QP
5		731.9203	40.29	-6.67	33.62	46.00	-12.38	QP
6		965.5421	38.79	-3.96	34.83	54.00	-19.17	QP

Adapter 2:

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

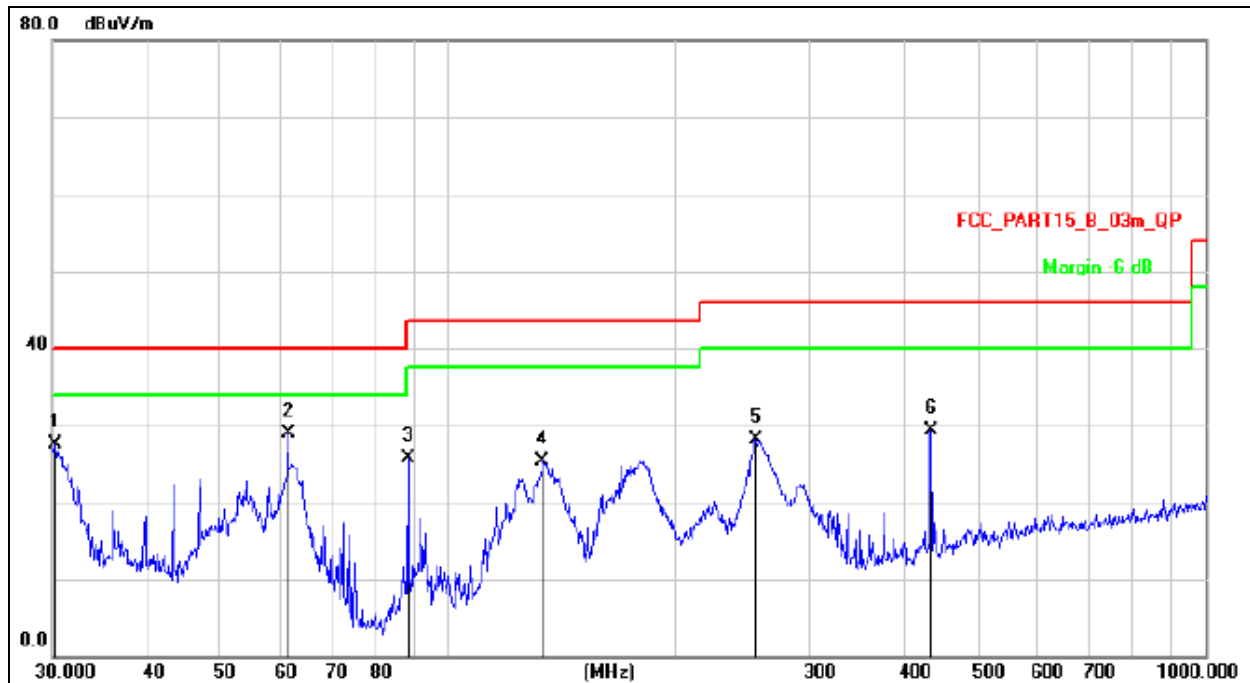


Remark:

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

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		30.3173	28.87	-18.33	10.54	40.00	-29.46	QP
2		61.3463	30.87	-17.47	13.40	40.00	-26.60	QP
3		135.0319	39.37	-20.07	19.30	43.50	-24.20	QP
4		172.5988	47.08	-19.39	27.69	43.50	-15.81	QP
5	*	253.8367	56.35	-15.73	40.62	46.00	-5.38	QP
6		434.0651	34.52	-11.72	22.80	46.00	-23.20	QP

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



Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		30.2111	45.85	-18.34	27.51	40.00	-12.49	QP
2	*	61.3463	46.30	-17.47	28.83	40.00	-11.17	QP
3		88.3421	45.39	-19.62	25.77	43.50	-17.73	QP
4		133.1511	45.22	-19.94	25.28	43.50	-18.22	QP
5		254.7284	43.90	-15.71	28.19	46.00	-17.81	QP
6		434.0651	40.99	-11.72	29.27	46.00	-16.73	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	4434.076	64.68	5.94	35.40	44.00	62.02	68.2	-6.18	PK
V	4434.076	43.49	5.94	35.40	44.00	40.83	54	-13.17	AV
V	10360.105	60.36	8.46	39.75	44.50	64.07	68.2	-4.13	PK
V	10360.105	43.70	8.46	39.75	44.50	47.41	54	-6.59	AV
V	15540.199	61.64	10.12	38.80	44.10	66.46	74	-7.54	PK
V	15540.199	43.64	10.12	38.80	42.70	49.86	54	-4.14	AV
H	4434.028	62.74	5.94	35.18	44.00	59.86	68.2	-8.34	PK
H	4434.028	43.47	5.94	35.18	44.00	40.59	54	-13.41	AV
H	10360.028	53.34	8.46	38.71	44.50	56.01	68.2	-12.19	PK
H	10360.028	44.62	8.46	38.71	44.50	47.29	54	-6.71	AV
H	15540.046	51.20	10.12	38.38	44.10	55.60	74	-18.40	PK
H	15540.046	41.96	10.12	38.38	44.10	46.36	54	-7.64	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.168	61.90	6.48	36.35	44.05	60.68	74	-13.32	PK
V	4592.168	43.27	6.48	36.35	44.05	42.05	54	-11.95	AV
V	10400.012	64.04	8.47	37.88	44.51	65.88	68.2	-2.32	PK
V	10400.012	43.31	8.47	37.88	44.51	45.15	54	-8.85	AV
V	15600.046	61.89	10.12	38.80	44.10	66.71	74	-7.29	PK
V	15600.046	43.39	10.12	38.80	42.70	49.61	54	-4.39	AV
H	4592.176	64.78	6.48	36.37	44.05	63.58	74	-10.42	PK
H	4592.176	43.81	6.48	36.37	44.05	42.61	54	-11.39	AV
H	10400.162	54.50	8.47	38.64	44.50	57.11	68.2	-11.09	PK
H	10400.162	44.39	8.47	38.64	44.50	47.00	54	-7.00	AV
H	15600.052	54.29	10.12	38.38	44.10	58.69	74	-15.31	PK
H	15600.052	42.52	10.12	38.38	44.10	46.92	54	-7.08	AV
High Channel (5240 MHz)-Above 1G									
V	4739.019	61.16	7.10	37.24	43.50	62.00	74	-12.00	PK
V	4739.019	43.24	7.10	37.24	43.50	44.08	54	-9.92	AV
V	10480.162	62.49	8.46	37.68	44.50	64.13	68.2	-4.07	PK
V	10480.162	43.96	8.46	37.68	44.50	45.60	54	-8.40	AV
V	15720.162	64.44	10.12	38.80	44.10	69.26	74	-4.74	PK
V	15720.162	43.58	10.12	38.80	42.70	49.80	54	-4.20	AV
H	4739.115	60.22	7.10	37.24	43.50	61.06	74	-12.94	PK
H	4739.115	43.47	7.10	37.24	43.50	44.31	54	-9.69	AV
H	10480.115	54.34	8.46	38.57	44.50	56.87	68.2	-11.33	PK
H	10480.115	43.17	8.46	38.57	44.50	45.70	54	-8.30	AV
H	15720.188	53.96	10.12	38.38	44.10	58.36	74	-15.64	PK
H	15720.188	42.40	10.12	38.38	44.10	46.80	54	-7.20	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	4434.075	61.34	5.94	35.40	44.00	58.68	68.2	-9.52	PK
V	4434.075	43.28	5.94	35.40	44.00	40.62	54	-13.38	AV
V	10360.066	60.91	8.46	39.75	44.50	64.62	68.2	-3.58	PK
V	10360.066	43.86	8.46	39.75	44.50	47.57	54	-6.43	AV
V	15540.003	61.35	10.12	38.80	44.10	66.17	74	-7.83	PK
V	15540.003	43.13	10.12	38.80	42.70	49.35	54	-4.65	AV
H	4434.041	64.85	5.94	35.18	44.00	61.97	68.2	-6.23	PK
H	4434.041	43.43	5.94	35.18	44.00	40.55	54	-13.45	AV
H	10360.032	54.06	8.46	38.71	44.50	56.73	68.2	-11.47	PK
H	10360.032	42.01	8.46	38.71	44.50	44.68	54	-9.32	AV
H	15540.190	51.51	10.12	38.38	44.10	55.91	74	-18.09	PK
H	15540.190	41.48	10.12	38.38	44.10	45.88	54	-8.12	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.190	63.02	6.48	36.35	44.05	61.80	74	-12.20	PK
V	4592.190	43.08	6.48	36.35	44.05	41.86	54	-12.14	AV
V	10400.048	61.48	8.47	37.88	44.51	63.32	68.2	-4.88	PK
V	10400.048	43.03	8.47	37.88	44.51	44.87	54	-9.13	AV
V	15600.079	63.55	10.12	38.80	44.10	68.37	74	-5.63	PK
V	15600.079	43.80	10.12	38.80	42.70	50.02	54	-3.98	AV
H	4592.039	62.47	6.48	36.37	44.05	61.27	74	-12.73	PK
H	4592.039	43.80	6.48	36.37	44.05	42.60	54	-11.40	AV
H	10400.033	52.24	8.47	38.64	44.50	54.85	68.2	-13.35	PK
H	10400.033	42.30	8.47	38.64	44.50	44.91	54	-9.09	AV
H	15600.191	50.20	10.12	38.38	44.10	54.60	74	-19.40	PK
H	15600.191	40.03	10.12	38.38	44.10	44.43	54	-9.57	AV
High Channel (5240 MHz)-Above 1G									
V	4739.142	64.99	7.10	37.24	43.50	65.83	74	-8.17	PK
V	4739.142	43.27	7.10	37.24	43.50	44.11	54	-9.89	AV
V	10480.051	64.64	8.46	37.68	44.50	66.28	68.2	-1.92	PK
V	10480.051	43.03	8.46	37.68	44.50	44.67	54	-9.33	AV
V	15720.065	64.26	10.12	38.80	44.10	69.08	74	-4.92	PK
V	15720.065	43.42	10.12	38.80	42.70	49.64	54	-4.36	AV
H	4739.131	64.30	7.10	37.24	43.50	65.14	74	-8.86	PK
H	4739.131	43.28	7.10	37.24	43.50	44.12	54	-9.88	AV
H	10480.010	53.71	8.46	38.57	44.50	56.24	68.2	-11.96	PK
H	10480.010	41.03	8.46	38.57	44.50	43.56	54	-10.44	AV
H	15720.023	54.89	10.12	38.38	44.10	59.29	74	-14.71	PK
H	15720.023	41.46	10.12	38.38	44.10	45.86	54	-8.14	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	4434.154	61.92	5.94	35.40	44.00	59.26	68.2	-8.94	PK
V	4434.154	43.63	5.94	35.40	44.00	40.97	54	-13.03	AV
V	10380.147	60.67	8.46	39.75	44.50	64.38	68.2	-3.82	PK
V	10380.147	43.72	8.46	39.75	44.50	47.43	54	-6.57	AV
V	15570.125	61.51	10.12	38.80	44.10	66.33	74	-7.67	PK
V	15570.125	43.14	10.12	38.80	42.70	49.36	54	-4.64	AV
H	4434.020	64.78	5.94	35.18	44.00	61.90	74	-12.10	PK
H	4434.020	43.60	5.94	35.18	44.00	40.72	54	-13.28	AV
H	10380.123	51.39	8.46	38.71	44.50	54.06	68.2	-14.14	PK
H	10380.123	42.80	8.46	38.71	44.50	45.47	54	-8.53	AV
H	15570.055	53.54	10.12	38.38	44.10	57.94	74	-16.06	PK
H	15570.055	44.29	10.12	38.38	44.10	48.69	54	-5.31	AV
High Channel (5230 MHz)-Above 1G									
V	4739.112	61.46	6.48	36.35	44.05	60.24	68.2	-7.96	PK
V	4739.112	43.09	6.48	36.35	44.05	41.87	54	-12.13	AV
V	10460.034	62.06	8.47	37.88	44.51	63.90	68.2	-4.30	PK
V	10460.034	43.61	8.47	37.88	44.51	45.45	54	-8.55	AV
V	15690.033	61.96	10.12	38.80	44.10	66.78	74	-7.22	PK
V	15690.033	43.24	10.12	38.80	42.70	49.46	54	-4.54	AV
H	4739.020	62.91	6.48	36.37	44.05	61.71	68.2	-6.49	PK
H	4739.020	43.03	6.48	36.37	44.05	41.83	54	-12.17	AV
H	10460.049	52.56	8.47	38.64	44.50	55.17	68.2	-13.03	PK
H	10460.049	43.04	8.47	38.64	44.50	45.65	54	-8.35	AV
H	15690.117	52.79	10.12	38.38	44.10	57.19	74	-16.81	PK
H	15690.117	43.73	10.12	38.38	44.10	48.13	54	-5.87	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	4434.114	60.47	5.94	35.40	44.00	57.81	68.2	-10.39	PK
V	4434.114	43.96	5.94	35.40	44.00	41.30	54	-12.70	AV
V	10360.179	60.74	8.46	39.75	44.50	64.45	68.2	-3.75	PK
V	10360.179	43.39	8.46	39.75	44.50	47.10	54	-6.90	AV
V	15540.114	62.57	10.12	38.80	44.10	67.39	74	-6.61	PK
V	15540.114	43.13	10.12	38.80	42.70	49.35	54	-4.65	AV
H	4434.134	63.39	5.94	35.18	44.00	60.51	68.2	-7.69	PK
H	4434.134	43.51	5.94	35.18	44.00	40.63	54	-13.37	AV
H	10360.190	54.90	8.46	38.71	44.50	57.57	68.2	-10.63	PK
H	10360.190	43.50	8.46	38.71	44.50	46.17	54	-7.83	AV
H	15540.139	50.45	10.12	38.38	44.10	54.85	74	-19.15	PK
H	15540.139	43.53	10.12	38.38	44.10	47.93	54	-6.07	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.035	60.41	6.48	36.35	44.05	59.19	74	-14.81	PK
V	4592.035	43.44	6.48	36.35	44.05	42.22	54	-11.78	AV
V	10400.032	60.36	8.47	37.88	44.51	62.20	68.2	-6.00	PK
V	10400.032	43.10	8.47	37.88	44.51	44.94	54	-9.06	AV
V	15600.093	62.30	10.12	38.80	44.10	67.12	74	-6.88	PK
V	15600.093	43.29	10.12	38.80	42.70	49.51	54	-4.49	AV
H	4592.152	62.65	6.48	36.37	44.05	61.45	74	-12.55	PK
H	4592.152	43.95	6.48	36.37	44.05	42.75	54	-11.25	AV
H	10400.152	50.79	8.47	38.64	44.50	53.40	68.2	-14.80	PK
H	10400.152	41.43	8.47	38.64	44.50	44.04	54	-9.96	AV
H	15600.056	53.75	10.12	38.38	44.10	58.15	74	-15.85	PK
H	15600.056	40.52	10.12	38.38	44.10	44.92	54	-9.08	AV
High Channel (5240 MHz)-Above 1G									
V	4739.197	61.62	7.10	37.24	43.50	62.46	74	-11.54	PK
V	4739.197	43.56	7.10	37.24	43.50	44.40	54	-9.60	AV
V	10480.040	60.89	8.46	37.68	44.50	62.53	68.2	-5.67	PK
V	10480.040	43.20	8.46	37.68	44.50	44.84	54	-9.16	AV
V	15720.124	60.03	10.12	38.80	44.10	64.85	74	-9.15	PK
V	15720.124	43.26	10.12	38.80	42.70	49.48	54	-4.52	AV
H	4739.118	61.79	7.10	37.24	43.50	62.63	74	-11.37	PK
H	4739.118	43.89	7.10	37.24	43.50	44.73	54	-9.27	AV
H	10480.194	50.63	8.46	38.57	44.50	53.16	68.2	-15.04	PK
H	10480.194	43.38	8.46	38.57	44.50	45.91	54	-8.09	AV
H	15720.194	54.30	10.12	38.38	44.10	58.70	74	-15.30	PK
H	15720.194	42.48	10.12	38.38	44.10	46.88	54	-7.12	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	4434.010	64.48	5.94	35.40	44.00	61.82	68.2	-6.38	PK
V	4434.010	43.80	5.94	35.40	44.00	41.14	54	-12.86	AV
V	10380.159	61.65	8.46	39.75	44.50	65.36	68.2	-2.84	PK
V	10380.159	43.49	8.46	39.75	44.50	47.20	54	-6.80	AV
V	15570.106	62.03	10.12	38.80	44.10	66.85	74	-7.15	PK
V	15570.106	43.14	10.12	38.80	42.70	49.36	54	-4.64	AV
H	4434.092	60.30	5.94	35.18	44.00	57.42	74	-16.58	PK
H	4434.092	43.32	5.94	35.18	44.00	40.44	54	-13.56	AV
H	10380.176	50.46	8.46	38.71	44.50	53.13	68.2	-15.07	PK
H	10380.176	42.89	8.46	38.71	44.50	45.56	54	-8.44	AV
H	15570.064	54.59	10.12	38.38	44.10	58.99	74	-15.01	PK
H	15570.064	44.95	10.12	38.38	44.10	49.35	54	-4.65	AV
High Channel (5230 MHz)-Above 1G									
V	4739.120	63.68	6.48	36.35	44.05	62.46	68.2	-5.74	PK
V	4739.120	43.17	6.48	36.35	44.05	41.95	54	-12.05	AV
V	10460.084	64.06	8.47	37.88	44.51	65.90	68.2	-2.30	PK
V	10460.084	43.97	8.47	37.88	44.51	45.81	54	-8.19	AV
V	15690.068	63.96	10.12	38.80	44.10	68.78	74	-5.22	PK
V	15690.068	43.19	10.12	38.80	42.70	49.41	54	-4.59	AV
H	4739.186	61.60	6.48	36.37	44.05	60.40	68.2	-7.80	PK
H	4739.186	43.54	6.48	36.37	44.05	42.34	54	-11.66	AV
H	10460.175	52.42	8.47	38.64	44.50	55.03	68.2	-13.17	PK
H	10460.175	42.88	8.47	38.64	44.50	45.49	54	-8.51	AV
H	15690.174	52.89	10.12	38.38	44.10	57.29	74	-16.71	PK
H	15690.174	42.25	10.12	38.38	44.10	46.65	54	-7.35	AV

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

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

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

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

Test Mode:	TX(5.1G) - 802.11ac-HT80
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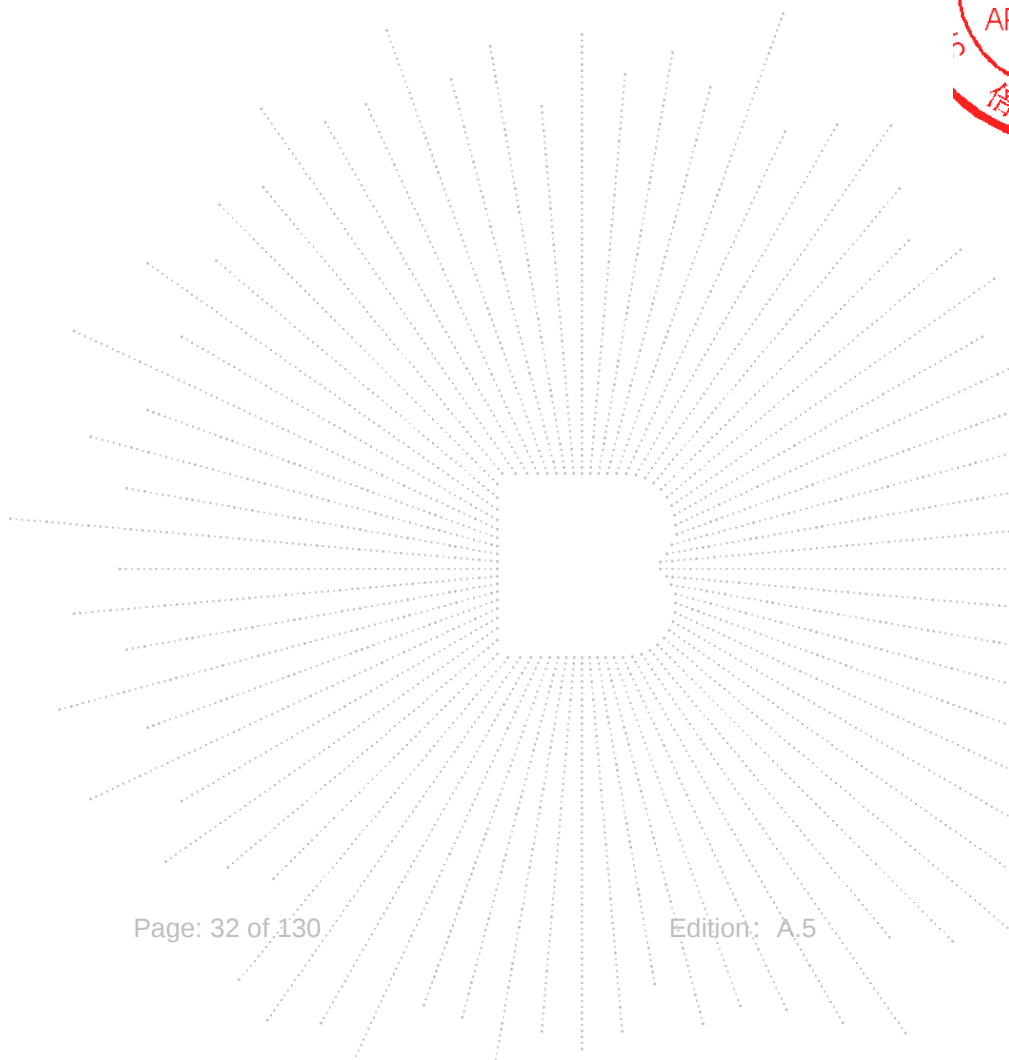
Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
(5210 MHz)-Above 1G									
V	4434.110	63.78	5.94	35.40	44.00	61.12	68.2	-7.08	PK
V	4434.110	43.49	5.94	35.40	44.00	40.83	54	-13.17	AV
V	10420.030	60.88	8.46	39.75	44.50	64.59	68.2	-3.61	PK
V	10420.030	43.03	8.46	39.75	44.50	46.74	54	-7.26	AV
V	15630.023	60.01	10.12	38.80	44.10	64.83	74	-9.17	PK
V	15630.023	43.55	10.12	38.80	42.70	49.77	54	-4.23	AV
H	4434.163	63.12	5.94	35.18	44.00	60.24	68.2	-7.96	PK
H	4434.163	43.23	5.94	35.18	44.00	40.35	54	-13.65	AV
H	10420.044	54.72	8.46	38.71	44.50	57.39	68.2	-10.81	PK
H	10420.044	44.79	8.46	38.71	44.50	47.46	54	-6.54	AV
H	15630.086	51.78	10.12	38.38	44.10	56.18	74	-17.82	PK
H	15630.086	44.56	10.12	38.38	44.10	48.96	54	-5.04	AV

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

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

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

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



Test Mode:	TX(5.8G) - 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	4679.072	55.09	5.94	35.40	44.00	52.43	74	-21.57	PK
V	4679.072	43.63	5.94	35.40	44.00	40.97	54	-13.03	AV
V	11490.147	54.76	8.46	39.75	44.50	58.47	68.2	-9.73	PK
V	11490.147	43.93	8.46	39.75	44.50	47.64	54	-6.36	AV
V	17235.189	57.85	10.12	38.80	44.10	62.67	68.2	-5.53	PK
V	17235.189	43.33	10.12	38.80	42.70	49.55	54	-4.45	AV
H	4679.004	56.92	5.94	35.18	44.00	54.04	74	-19.96	PK
H	4679.004	43.67	5.94	35.18	44.00	40.79	54	-13.21	AV
H	11490.135	51.07	8.46	38.71	44.50	53.74	68.2	-14.46	PK
H	11490.135	40.69	8.46	38.71	44.50	43.36	54	-10.64	AV
H	17235.163	53.44	10.12	38.38	44.10	57.84	68.2	-10.36	PK
H	17235.163	43.14	10.12	38.38	44.10	47.54	54	-6.46	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.034	57.74	6.48	36.35	44.05	56.52	74	-17.48	PK
V	4592.034	43.95	6.48	36.35	44.05	42.73	54	-11.27	AV
V	11570.106	59.57	8.47	37.88	44.51	61.41	68.2	-6.79	PK
V	11570.106	43.33	8.47	37.88	44.51	45.17	54	-8.83	AV
V	17355.038	59.67	10.12	38.80	44.10	64.49	68.2	-3.71	PK
V	17355.038	39.75	10.12	38.80	42.70	45.97	54	-8.03	AV
H	4592.174	58.72	6.48	36.37	44.05	57.52	74	-16.48	PK
H	4592.174	43.02	6.48	36.37	44.05	41.82	54	-12.18	AV
H	11570.130	51.41	8.47	38.64	44.50	54.02	68.2	-14.18	PK
H	11570.130	42.28	8.47	38.64	44.50	44.89	54	-9.11	AV
H	17355.068	51.97	10.12	38.38	44.10	56.37	68.2	-11.83	PK
H	17355.068	40.15	10.12	38.38	44.10	44.55	54	-9.45	AV
High Channel (5825 MHz)-Above 1G									
V	6039.198	56.86	7.10	37.24	43.50	57.70	68.2	-10.50	PK
V	6039.198	43.65	7.10	37.24	43.50	44.49	54	-9.51	AV
V	11650.049	61.21	8.46	37.68	44.50	62.85	74	-11.15	PK
V	11650.049	43.95	8.46	37.68	44.50	45.59	54	-8.41	AV
V	17475.003	57.05	10.12	38.80	44.10	61.87	68.2	-6.33	PK
V	17475.003	43.43	10.12	38.80	42.70	49.65	54	-4.35	AV
H	6039.168	56.95	7.10	37.24	43.50	57.79	68.2	-10.41	PK
H	6039.168	43.92	7.10	37.24	43.50	44.76	54	-9.24	AV
H	11650.200	51.70	8.46	38.57	44.50	54.23	74	-19.77	PK
H	11650.200	43.43	8.46	38.57	44.50	45.96	54	-8.04	AV
H	17475.041	51.28	10.12	38.38	44.10	55.68	68.2	-12.52	PK
H	17475.041	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) - 802.11n-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	4679.183	58.53	5.94	35.40	44.00	55.87	74	-18.13	PK
V	4679.183	43.56	5.94	35.40	44.00	40.90	54	-13.10	AV
V	11490.197	56.78	8.46	39.75	44.50	60.49	68.2	-7.71	PK
V	11490.197	43.54	8.46	39.75	44.50	47.25	54	-6.75	AV
V	17235.079	60.32	10.12	38.80	44.10	65.14	68.2	-3.06	PK
V	17235.079	43.73	10.12	38.80	42.70	49.95	54	-4.05	AV
H	4679.126	56.90	5.94	35.18	44.00	54.02	74	-19.98	PK
H	4679.126	43.41	5.94	35.18	44.00	40.53	54	-13.47	AV
H	11490.024	49.93	8.46	38.71	44.50	52.60	68.2	-15.60	PK
H	11490.024	42.56	8.46	38.71	44.50	45.23	54	-8.77	AV
H	17235.025	52.83	10.12	38.38	44.10	57.23	68.2	-10.97	PK
H	17235.025	44.59	10.12	38.38	44.10	48.99	54	-5.01	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.073	60.27	6.48	36.35	44.05	59.05	74	-14.95	PK
V	4592.073	43.75	6.48	36.35	44.05	42.53	54	-11.47	AV
V	11570.040	56.81	8.47	37.88	44.51	58.65	68.2	-9.55	PK
V	11570.040	43.55	8.47	37.88	44.51	45.39	54	-8.61	AV
V	17355.044	57.97	10.12	38.80	44.10	62.79	68.2	-5.41	PK
V	17355.044	43.90	10.12	38.80	42.70	50.12	54	-3.88	AV
H	4592.115	56.57	6.48	36.37	44.05	55.37	74	-18.63	PK
H	4592.115	43.97	6.48	36.37	44.05	42.77	54	-11.23	AV
H	11570.127	54.54	8.47	38.64	44.50	57.15	68.2	-11.05	PK
H	11570.127	42.82	8.47	38.64	44.50	45.43	54	-8.57	AV
H	17355.166	50.58	10.12	38.38	44.10	54.98	68.2	-13.22	PK
H	17355.166	44.75	10.12	38.38	44.10	49.15	54	-4.85	AV
High Channel (5825 MHz)-Above 1G									
V	6039.142	57.25	7.10	37.24	43.50	58.09	68.2	-10.11	PK
V	6039.142	43.18	7.10	37.24	43.50	44.02	54	-9.98	AV
V	11650.165	58.04	8.46	37.68	44.50	59.68	74	-14.32	PK
V	11650.165	43.52	8.46	37.68	44.50	45.16	54	-8.84	AV
V	17475.114	57.24	10.12	38.80	44.10	62.06	68.2	-6.14	PK
V	17475.114	43.88	10.12	38.80	42.70	50.10	54	-3.90	AV
H	6039.004	59.87	7.10	37.24	43.50	60.71	68.2	-7.49	PK
H	6039.004	43.18	7.10	37.24	43.50	44.02	54	-9.98	AV
H	11650.114	51.80	8.46	38.57	44.50	54.33	74	-19.67	PK
H	11650.114	43.75	8.46	38.57	44.50	46.28	54	-7.72	AV
H	17475.013	50.12	10.12	38.38	44.10	54.52	68.2	-13.68	PK
H	17475.013	44.51	10.12	38.38	44.10	48.91	54	-5.09	AV

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

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

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

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

Test Mode:	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	4679.060	56.10	5.94	35.40	44.00	53.44	74	-20.56	PK
V	4679.060	43.68	5.94	35.40	44.00	41.02	54	-12.98	AV
V	11510.002	56.12	8.46	39.75	44.50	59.83	74	-14.17	PK
V	11510.002	43.42	8.46	39.75	44.50	47.13	54	-6.87	AV
V	17265.031	55.14	10.12	38.80	44.10	59.96	68.2	-8.24	PK
V	17265.031	2.00	10.12	38.80	42.70	8.22	54	-45.78	AV
H	4679.007	57.67	5.94	35.18	44.00	54.79	74	-19.21	PK
H	4679.007	43.18	5.94	35.18	44.00	40.30	54	-13.70	AV
H	11510.003	51.40	8.46	38.71	44.50	54.07	74	-19.93	PK
H	11510.003	40.69	8.46	38.71	44.50	43.36	54	-10.64	AV
H	17265.192	50.23	10.12	38.38	44.10	54.63	68.2	-13.57	PK
H	17265.192	43.27	10.12	38.38	44.10	47.67	54	-6.33	AV
High Channel (5795 MHz)-Above 1G									
V	6039.021	56.42	6.48	36.35	44.05	55.20	68.2	-13.00	PK
V	6039.021	43.76	6.48	36.35	44.05	42.54	54	-11.46	AV
V	11590.153	59.71	8.47	37.88	44.51	61.55	74	-12.45	PK
V	11590.153	43.24	8.47	37.88	44.51	45.08	54	-8.92	AV
V	17385.000	55.22	10.12	38.80	44.10	60.04	68.2	-8.16	PK
V	17385.000	41.58	10.12	38.80	42.70	47.80	54	-6.20	AV
H	6039.159	58.42	6.48	36.37	44.05	57.22	68.2	-10.98	PK
H	6039.159	43.61	6.48	36.37	44.05	42.41	54	-11.59	AV
H	11590.183	53.77	8.47	38.64	44.50	56.38	74	-17.62	PK
H	11590.183	44.91	8.47	38.64	44.50	47.52	54	-6.48	AV
H	17385.082	52.51	10.12	38.38	44.10	56.91	68.2	-11.29	PK
H	17385.082	42.46	10.12	38.38	44.10	46.86	54	-7.14	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	4679.042	56.87	5.94	35.40	44.00	54.21	74	-19.79	PK
V	4679.042	43.11	5.94	35.40	44.00	40.45	54	-13.55	AV
V	11490.189	55.80	8.46	39.75	44.50	59.51	68.2	-8.69	PK
V	11490.189	43.89	8.46	39.75	44.50	47.60	54	-6.40	AV
V	17235.096	59.30	10.12	38.80	44.10	64.12	68.2	-4.08	PK
V	17235.096	43.83	10.12	38.80	42.70	50.05	54	-3.95	AV
H	4679.075	59.02	5.94	35.18	44.00	56.14	74	-17.86	PK
H	4679.075	43.05	5.94	35.18	44.00	40.17	54	-13.83	AV
H	11490.002	49.54	8.46	38.71	44.50	52.21	68.2	-15.99	PK
H	11490.002	44.39	8.46	38.71	44.50	47.06	54	-6.94	AV
H	17235.018	50.61	10.12	38.38	44.10	55.01	68.2	-13.19	PK
H	17235.018	41.11	10.12	38.38	44.10	45.51	54	-8.49	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.149	62.36	6.48	36.35	44.05	61.14	74	-12.86	PK
V	4592.149	43.44	6.48	36.35	44.05	42.22	54	-11.78	AV
V	11570.130	55.17	8.47	37.88	44.51	57.01	68.2	-11.19	PK
V	11570.130	43.96	8.47	37.88	44.51	45.80	54	-8.20	AV
V	17355.020	61.81	10.12	38.80	44.10	66.63	68.2	-1.57	PK
V	17355.020	43.82	10.12	38.80	42.70	50.04	54	-3.96	AV
H	4592.050	58.39	6.48	36.37	44.05	57.19	74	-16.81	PK
H	4592.050	43.14	6.48	36.37	44.05	41.94	54	-12.06	AV
H	11570.009	50.23	8.47	38.64	44.50	52.84	68.2	-15.36	PK
H	11570.009	40.06	8.47	38.64	44.50	42.67	54	-11.33	AV
H	17355.086	54.15	10.12	38.38	44.10	58.55	68.2	-9.65	PK
H	17355.086	44.73	10.12	38.38	44.10	49.13	54	-4.87	AV
High Channel (5825 MHz)-Above 1G									
V	6039.154	58.12	7.10	37.24	43.50	58.96	68.2	-9.24	PK
V	6039.154	43.36	7.10	37.24	43.50	44.20	54	-9.80	AV
V	11650.094	56.70	8.46	37.68	44.50	58.34	74	-15.66	PK
V	11650.094	43.82	8.46	37.68	44.50	45.46	54	-8.54	AV
V	17475.103	57.92	10.12	38.80	44.10	62.74	68.2	-5.46	PK
V	17475.103	43.77	10.12	38.80	42.70	49.99	54	-4.01	AV
H	6039.124	56.26	7.10	37.24	43.50	57.10	68.2	-11.10	PK
H	6039.124	43.48	7.10	37.24	43.50	44.32	54	-9.68	AV
H	11650.052	50.90	8.46	38.57	44.50	53.43	74	-20.57	PK
H	11650.052	44.33	8.46	38.57	44.50	46.86	54	-7.14	AV
H	17475.116	51.05	10.12	38.38	44.10	55.45	68.2	-12.75	PK
H	17475.116	40.35	10.12	38.38	44.10	44.75	54	-9.25	AV

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

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

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

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

Test Mode:	TX(5.8G) - 802.11ac-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	4679.063	56.10	5.94	35.40	44.00	53.44	74	-20.56	PK
V	4679.063	43.61	5.94	35.40	44.00	40.95	54	-13.05	AV
V	11510.105	56.46	8.46	39.75	44.50	60.17	74	-13.83	PK
V	11510.105	43.08	8.46	39.75	44.50	46.79	54	-7.21	AV
V	17265.036	56.33	10.12	38.80	44.10	61.15	68.2	-7.05	PK
V	17265.036	2.00	10.12	38.80	42.70	8.22	54	-45.78	AV
H	4679.167	60.12	5.94	35.18	44.00	57.24	74	-16.76	PK
H	4679.167	43.59	5.94	35.18	44.00	40.71	54	-13.29	AV
H	11510.153	52.87	8.46	38.71	44.50	55.54	74	-18.46	PK
H	11510.153	42.88	8.46	38.71	44.50	45.55	54	-8.45	AV
H	17265.119	50.01	10.12	38.38	44.10	54.41	68.2	-13.79	PK
H	17265.119	44.88	10.12	38.38	44.10	49.28	54	-4.72	AV
High Channel (5795 MHz)-Above 1G									
V	6039.054	58.58	6.48	36.35	44.05	57.36	68.2	-10.84	PK
V	6039.054	43.82	6.48	36.35	44.05	42.60	54	-11.40	AV
V	11590.165	58.41	8.47	37.88	44.51	60.25	74	-13.75	PK
V	11590.165	43.26	8.47	37.88	44.51	45.10	54	-8.90	AV
V	17385.132	55.50	10.12	38.80	44.10	60.32	68.2	-7.88	PK
V	17385.132	41.31	10.12	38.80	42.70	47.53	54	-6.47	AV
H	6039.113	59.99	6.48	36.37	44.05	58.79	68.2	-9.41	PK
H	6039.113	43.57	6.48	36.37	44.05	42.37	54	-11.63	AV
H	11590.073	53.45	8.47	38.64	44.50	56.06	74	-17.94	PK
H	11590.073	44.30	8.47	38.64	44.50	46.91	54	-7.09	AV
H	17385.133	52.18	10.12	38.38	44.10	56.58	68.2	-11.62	PK
H	17385.133	42.21	10.12	38.38	44.10	46.61	54	-7.39	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	4679.054	58.68	5.94	35.40	44.00	56.02	74	-17.98	PK
V	4679.054	43.01	5.94	35.40	44.00	40.35	54	-13.65	AV
V	11550.173	56.92	8.46	39.75	44.50	60.63	74	-13.37	PK
V	11550.173	43.78	8.46	39.75	44.50	47.49	54	-6.51	AV
V	17325.174	58.78	10.12	38.80	44.10	63.60	68.2	-4.60	PK
V	17325.174	41.12	10.12	38.80	42.70	47.34	54	-6.66	AV
H	4679.058	56.22	5.94	35.18	44.00	53.34	74	-20.66	PK
H	4679.058	43.65	5.94	35.18	44.00	40.77	54	-13.23	AV
H	11550.160	50.65	8.46	38.71	44.50	53.32	74	-20.68	PK
H	11550.160	40.69	8.46	38.71	44.50	43.36	54	-10.64	AV
H	17325.049	50.54	10.12	38.38	44.10	54.94	68.2	-13.26	PK
H	17325.049	41.96	10.12	38.38	44.10	46.36	54	-7.64	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

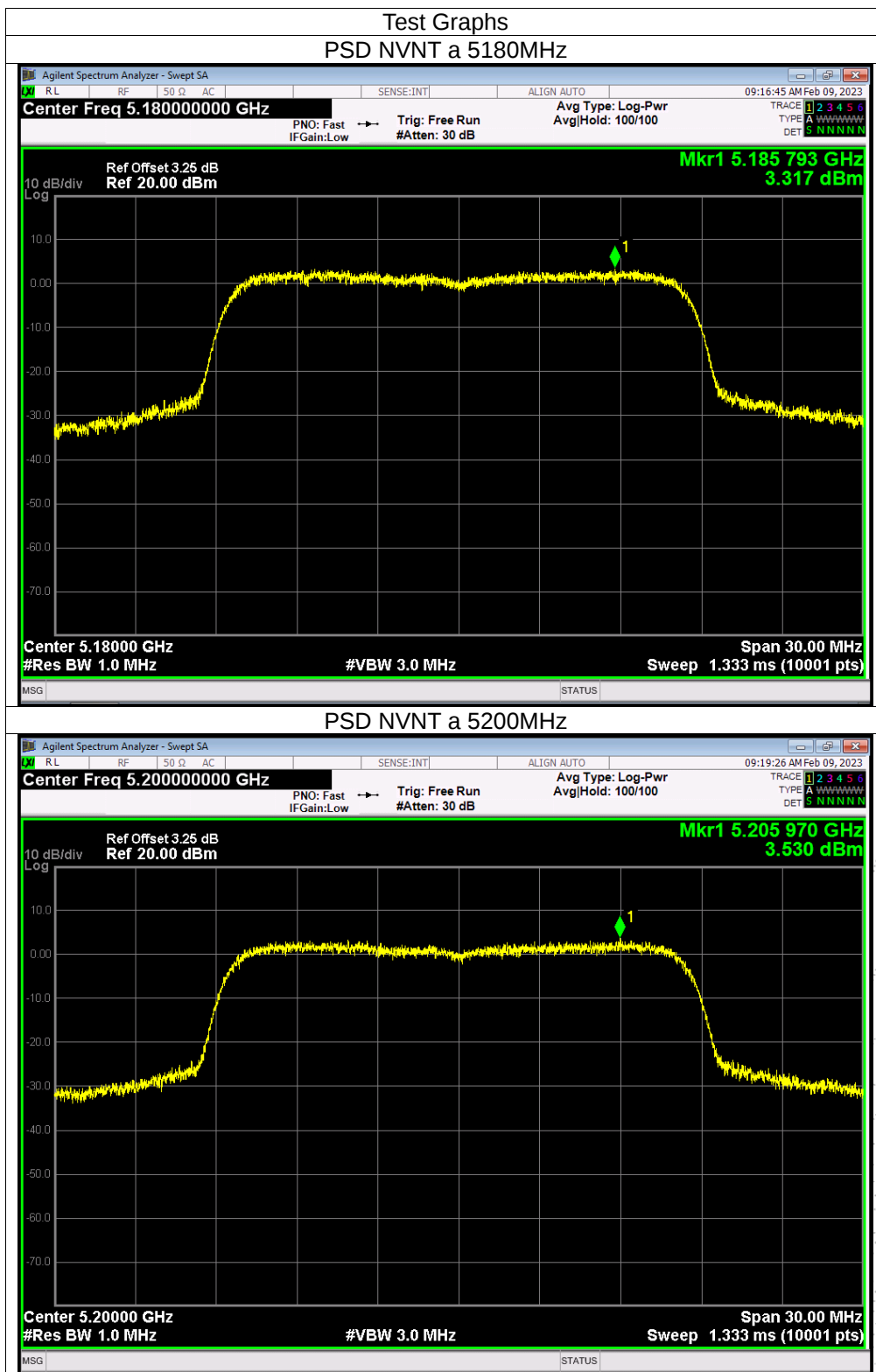
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

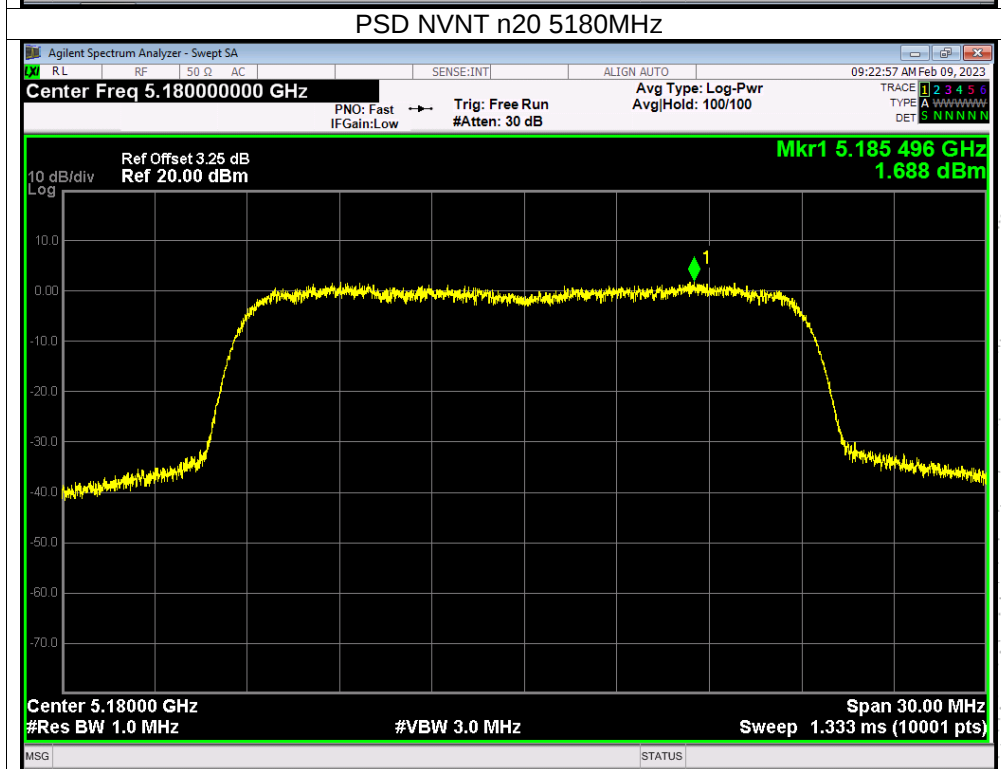
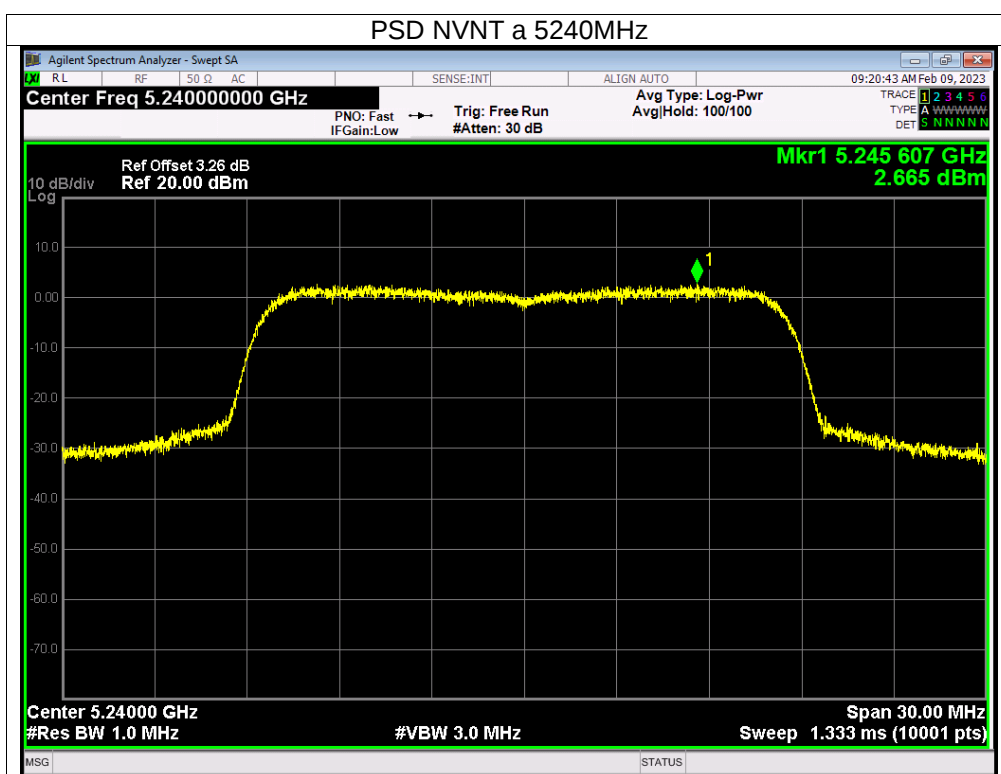
8.5 Test Result

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 7.6V
Test Mode:	(5180-5240MHz); (5745-5825MHz)		

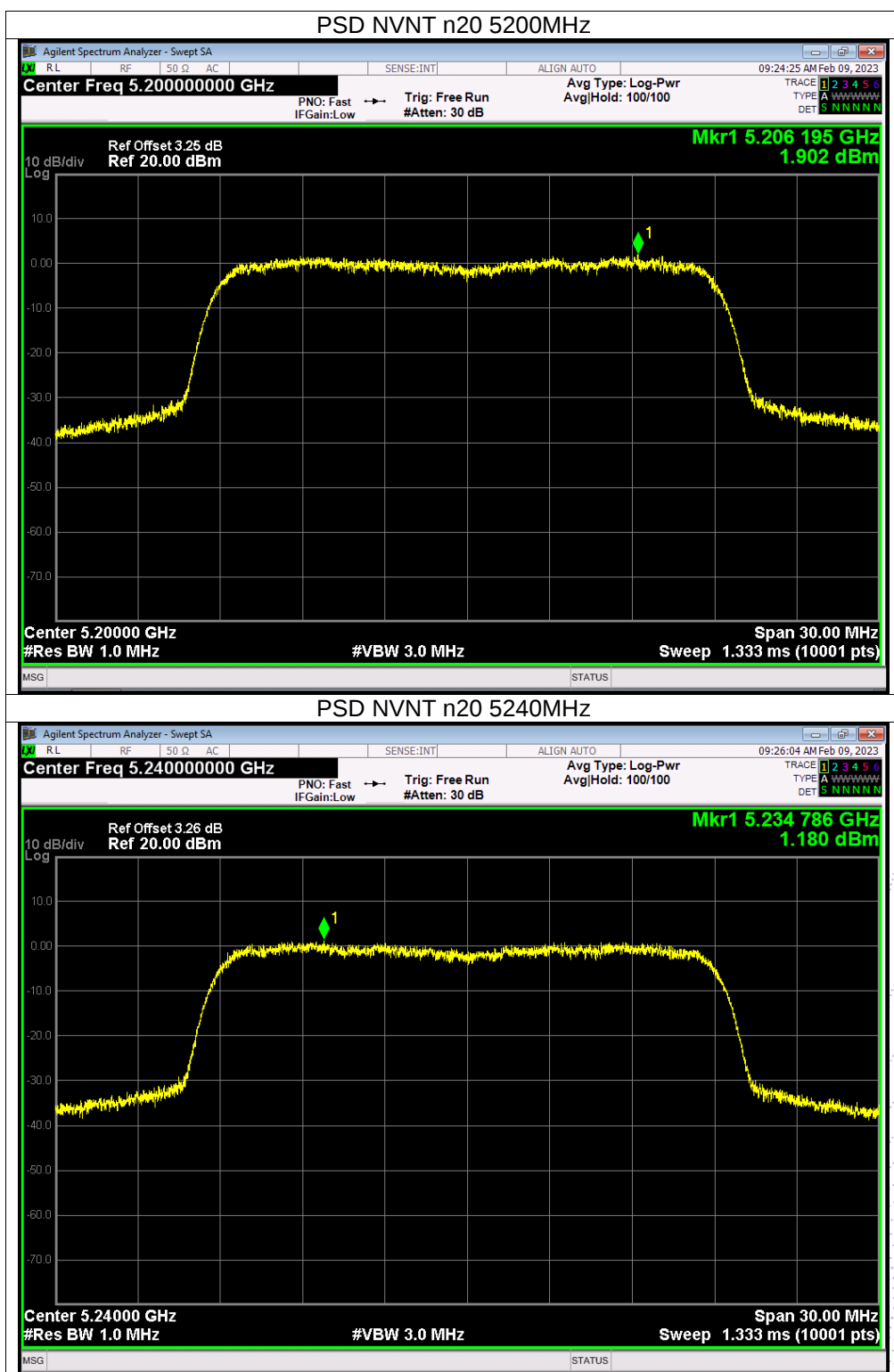
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	3.32	11	Pass
NVNT	a	5200	3.53	11	Pass
NVNT	a	5240	2.67	11	Pass
NVNT	n20	5180	1.69	11	Pass
NVNT	n20	5200	1.90	11	Pass
NVNT	n20	5240	1.18	11	Pass
NVNT	n40	5190	-2.18	11	Pass
NVNT	n40	5230	-3.26	11	Pass
NVNT	ac20	5180	1.88	11	Pass
NVNT	ac20	5200	1.87	11	Pass
NVNT	ac20	5240	1.55	11	Pass
NVNT	ac40	5190	-2.87	11	Pass
NVNT	ac40	5230	-3.17	11	Pass
NVNT	ac80	5210	-4.62	11	Pass

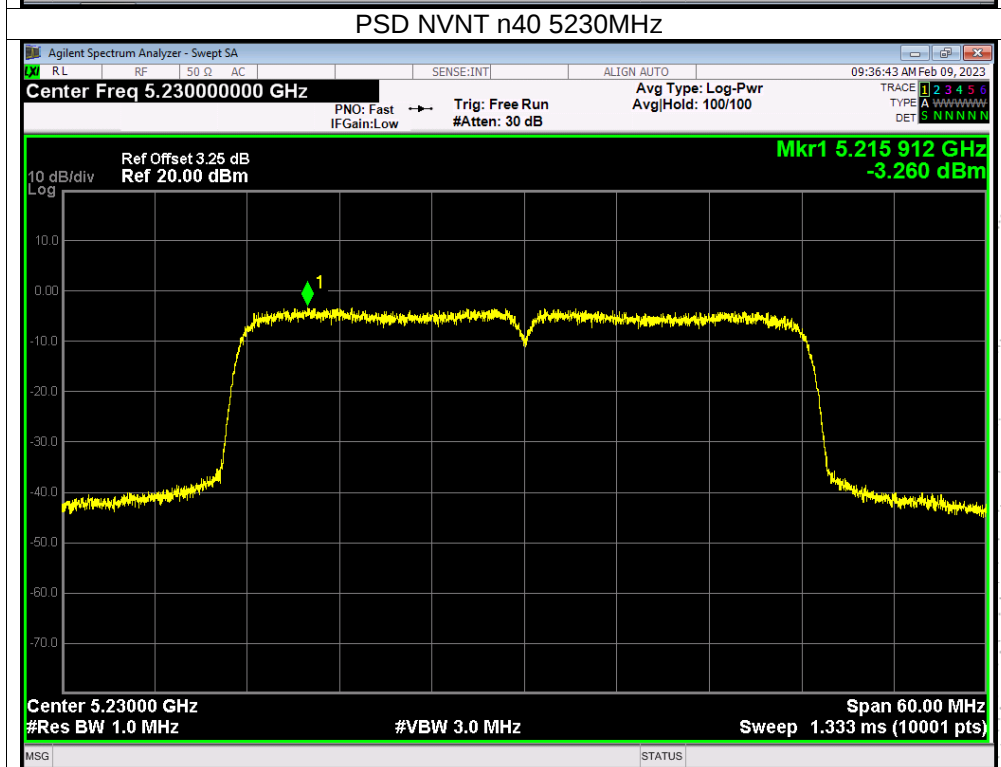
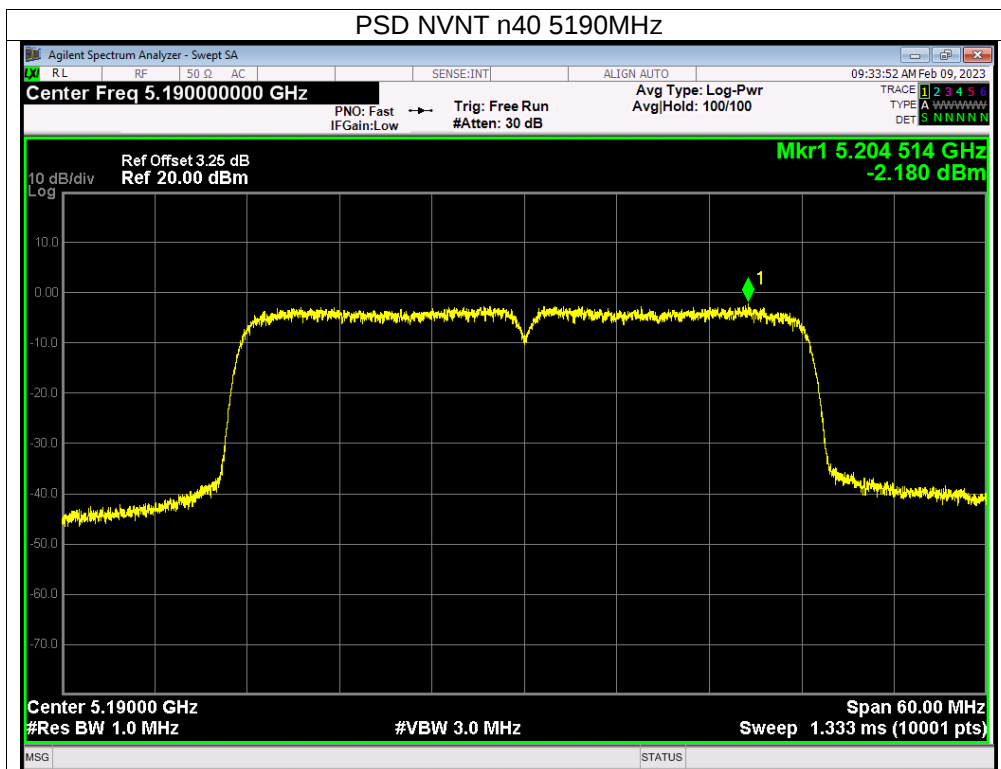
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	0.34	30	Pass
NVNT	a	5785	-1.32	30	Pass
NVNT	a	5825	-2.38	30	Pass
NVNT	n20	5745	-0.90	30	Pass
NVNT	n20	5785	-2.54	30	Pass
NVNT	n20	5825	-3.49	30	Pass
NVNT	n40	5755	-5.39	30	Pass
NVNT	n40	5795	-6.60	30	Pass
NVNT	ac20	5745	-0.93	30	Pass
NVNT	ac20	5785	-2.36	30	Pass
NVNT	ac20	5825	-3.47	30	Pass
NVNT	ac40	5755	-5.00	30	Pass
NVNT	ac40	5795	-6.90	30	Pass
NVNT	ac80	5775	-8.40	30	Pass



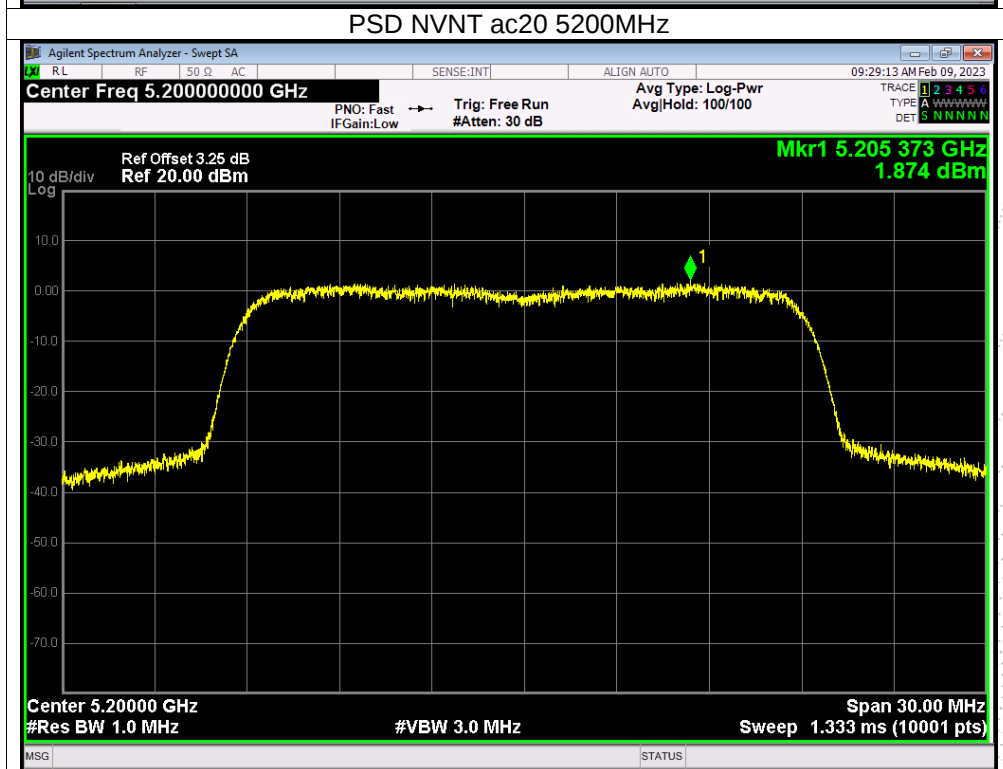
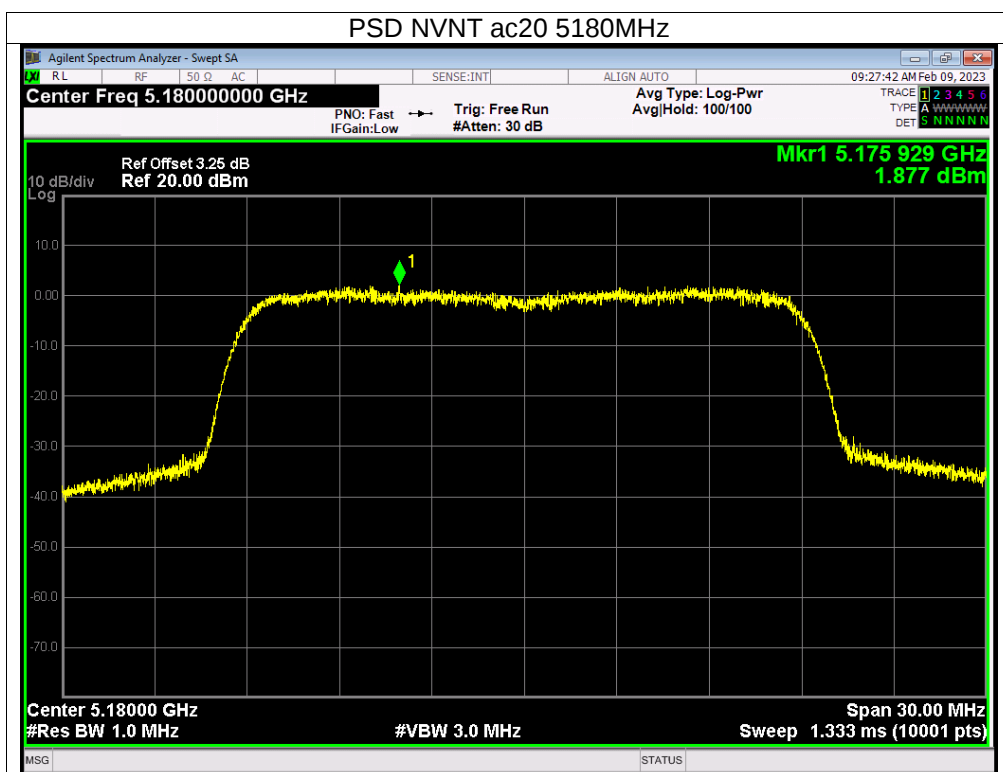


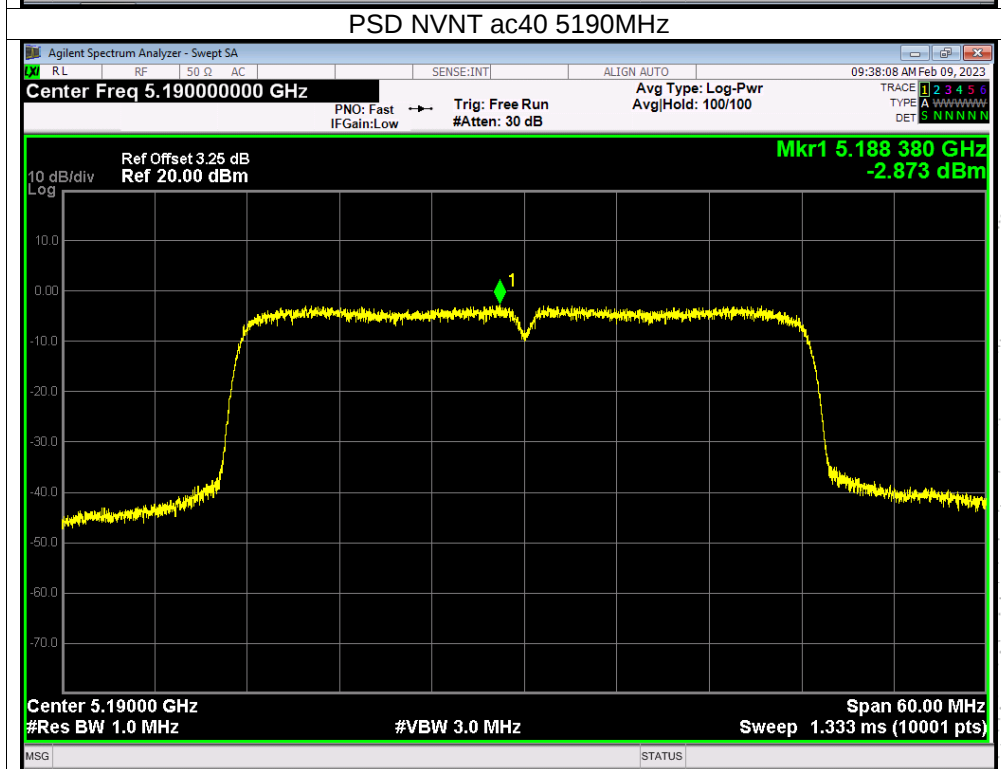
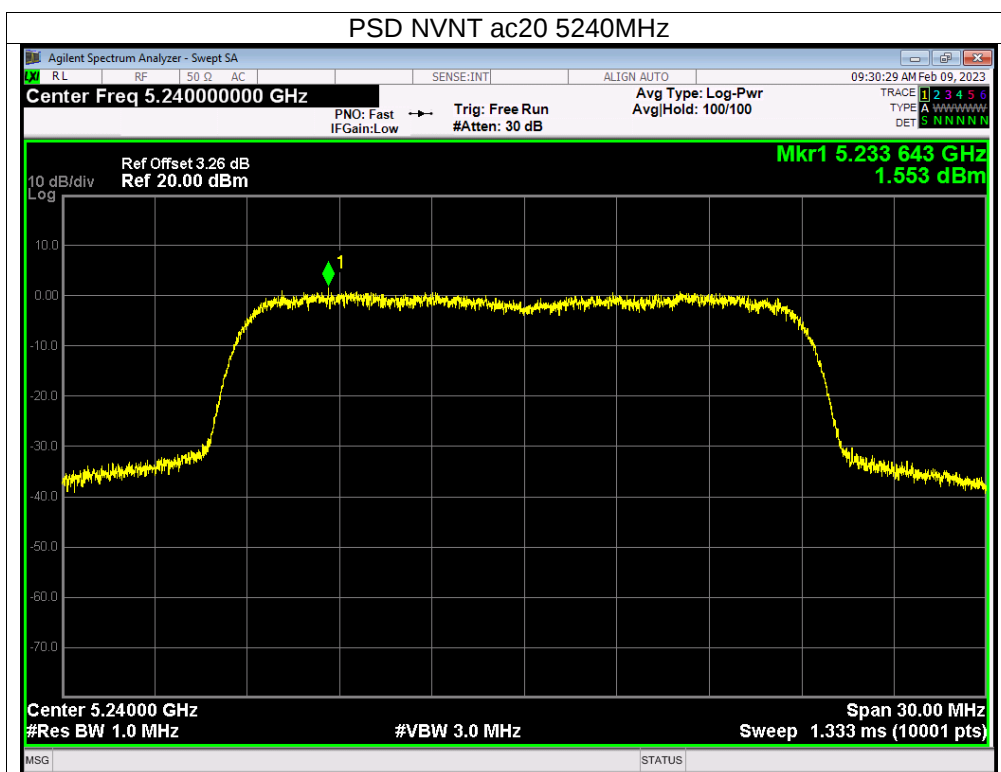
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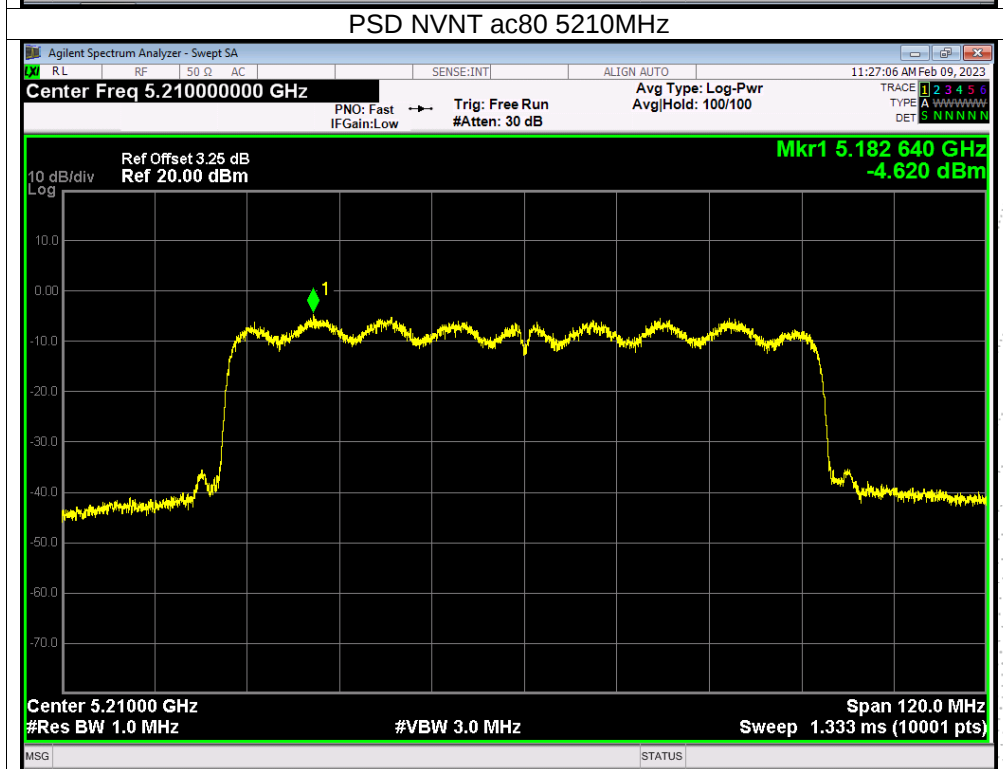
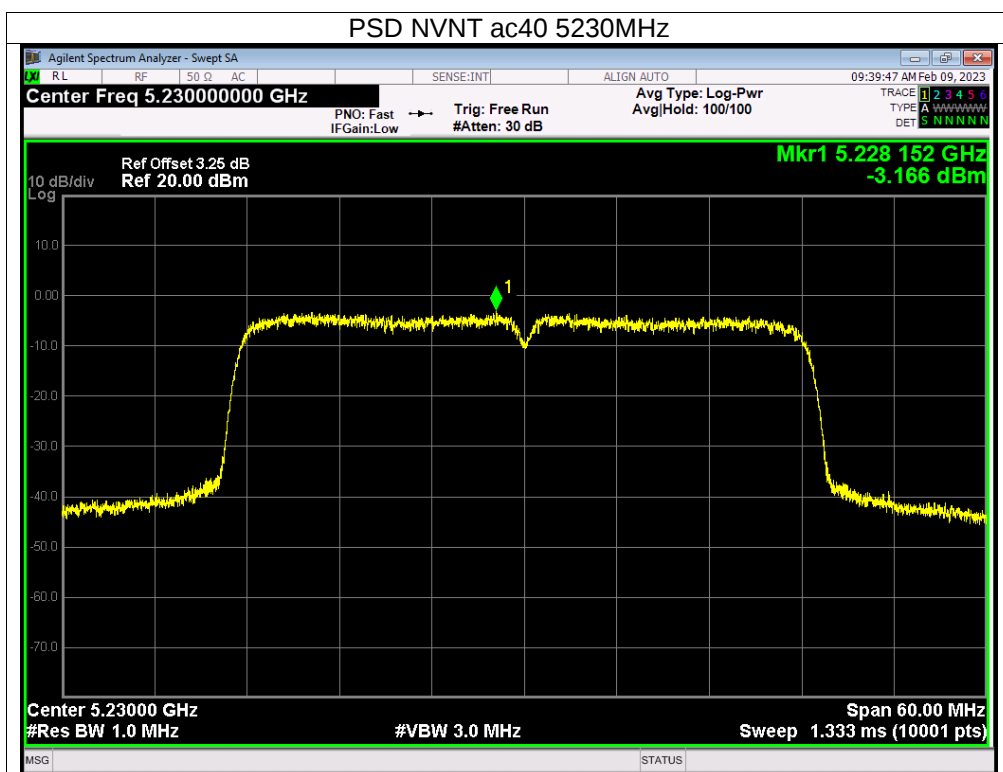


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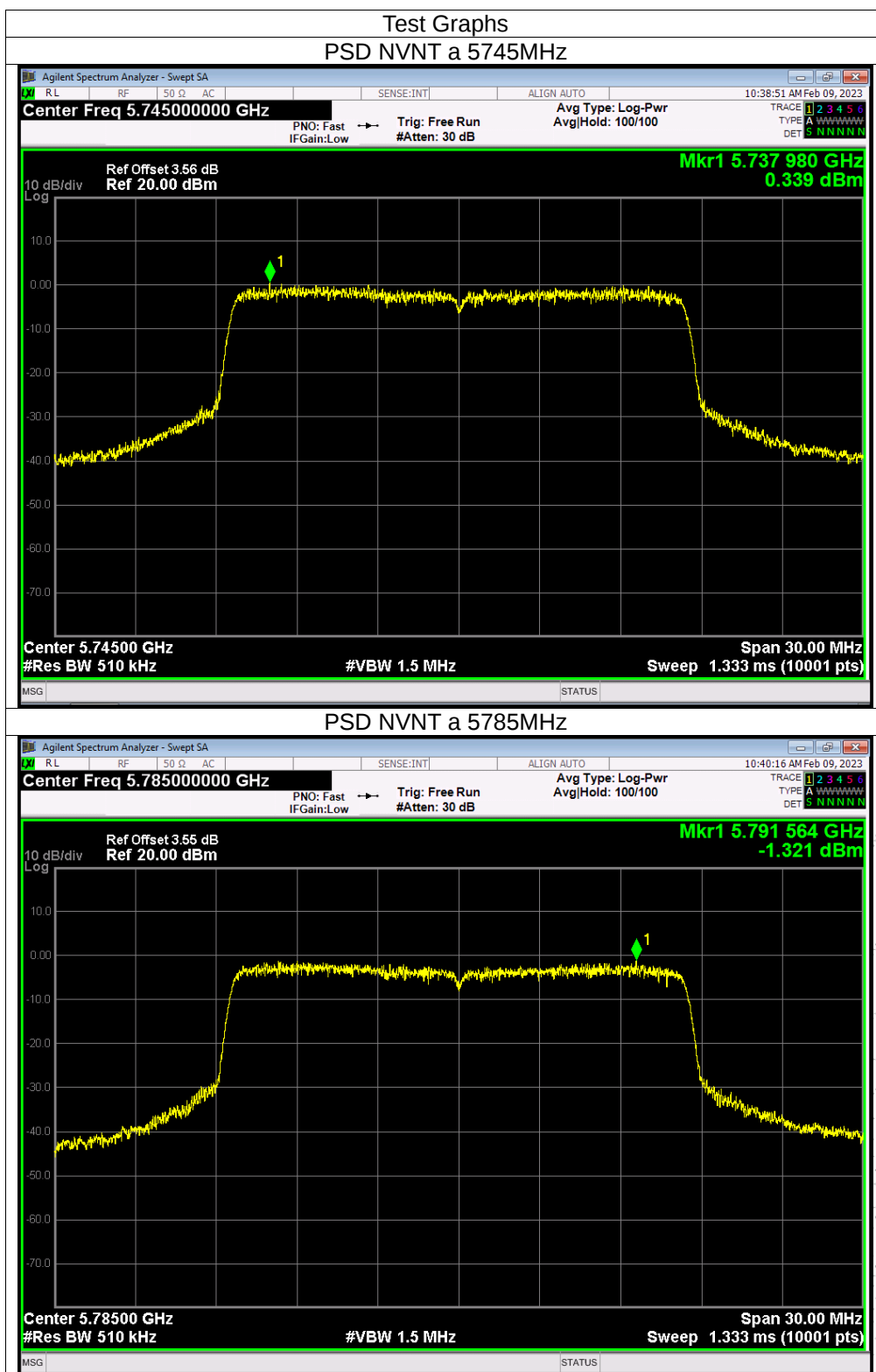




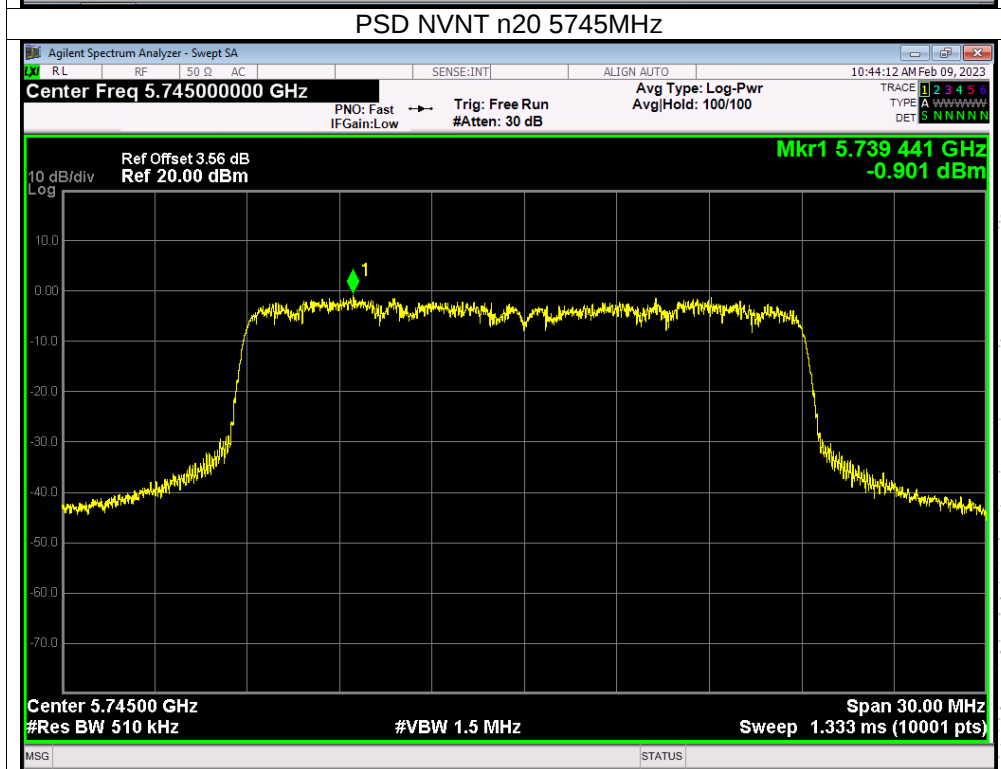
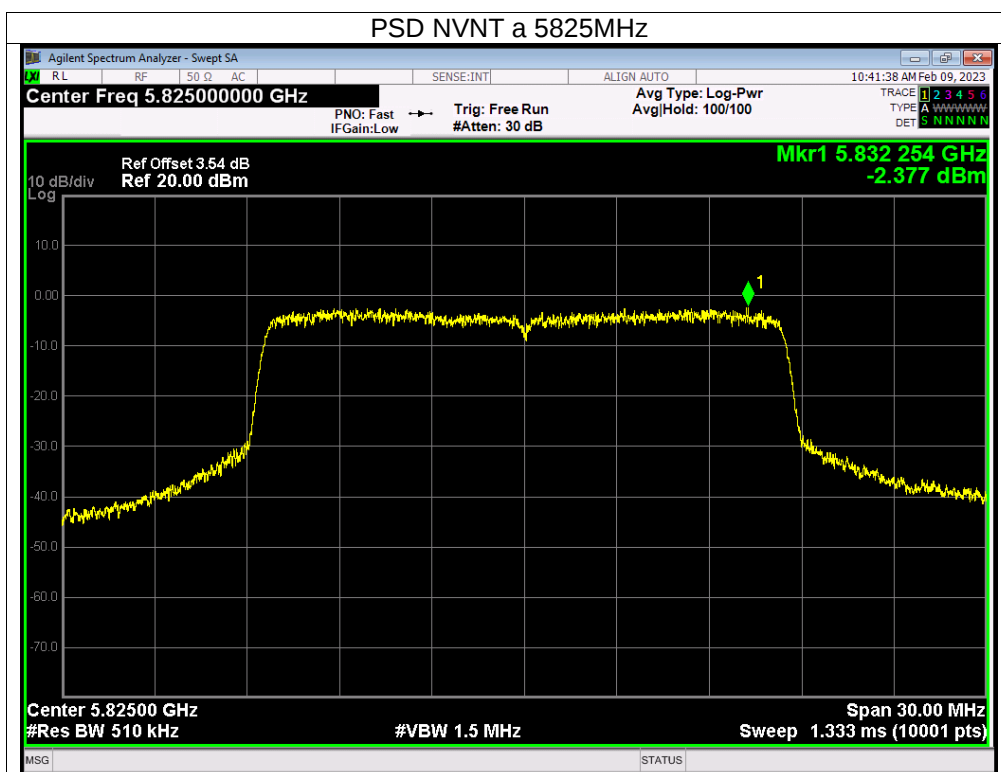
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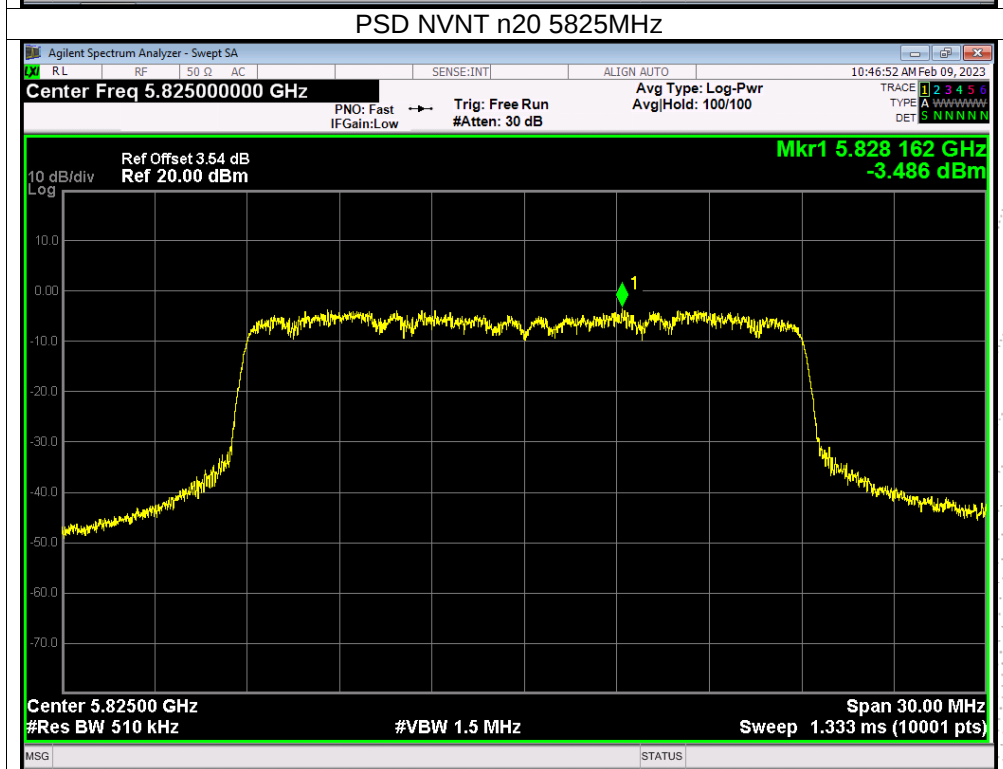
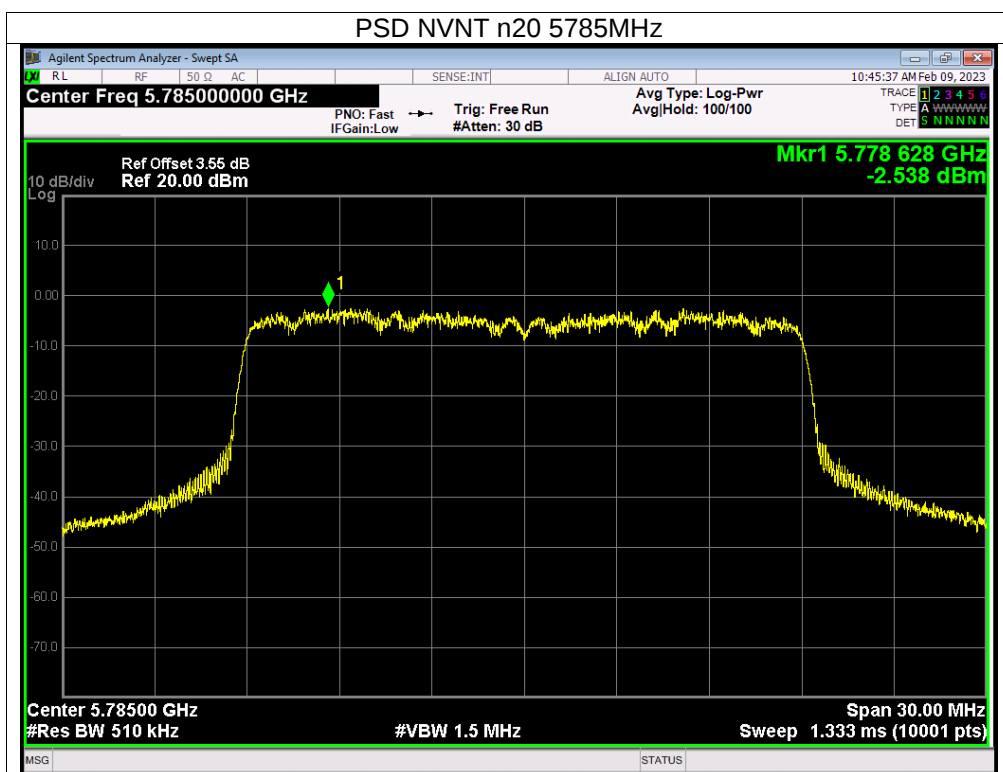


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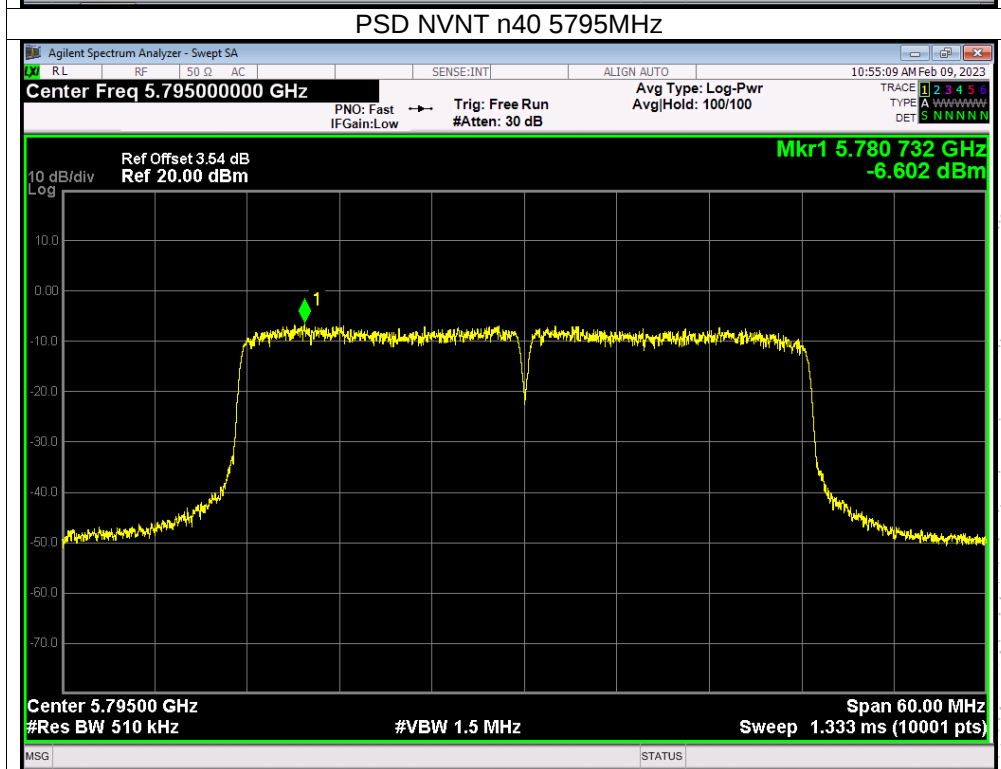
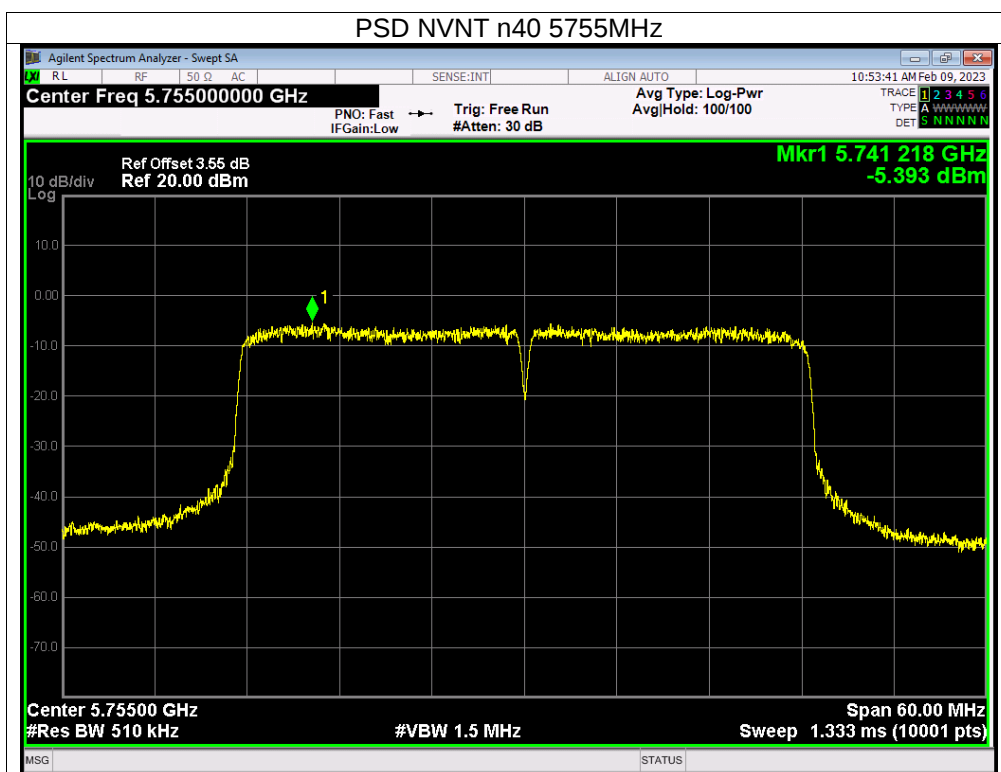


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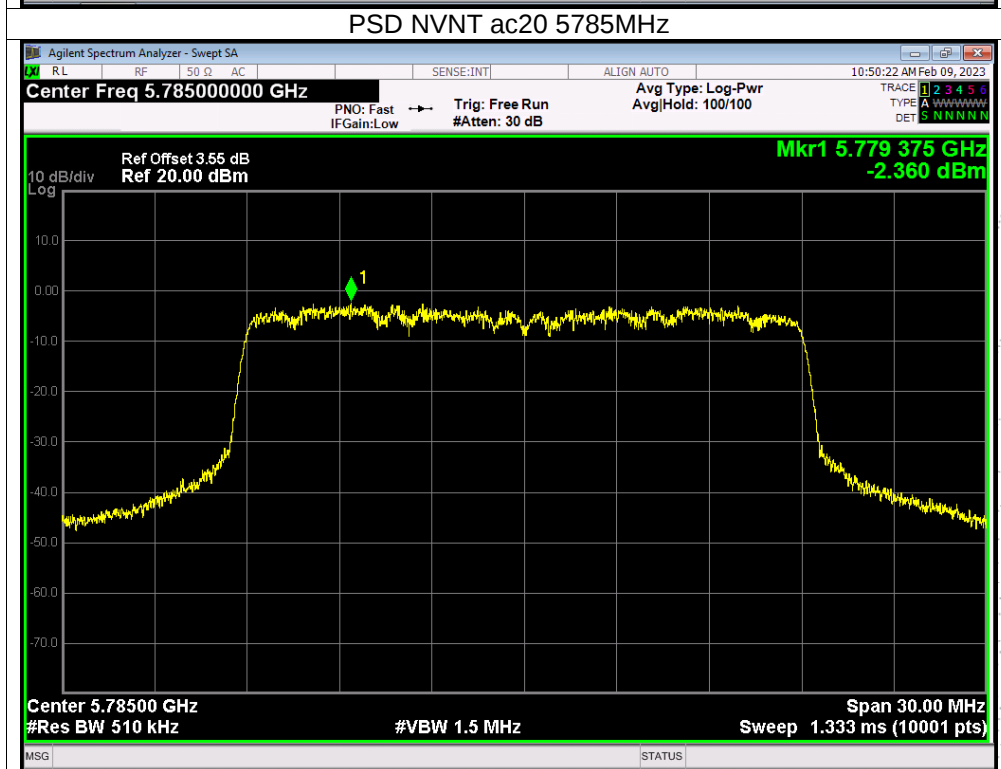
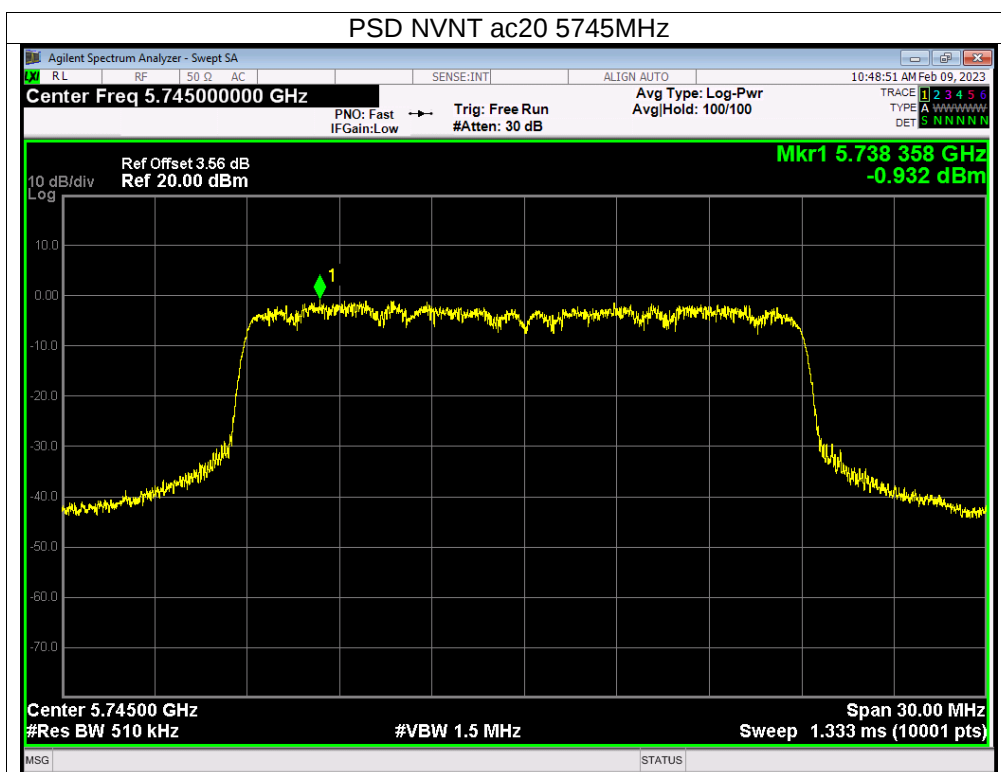




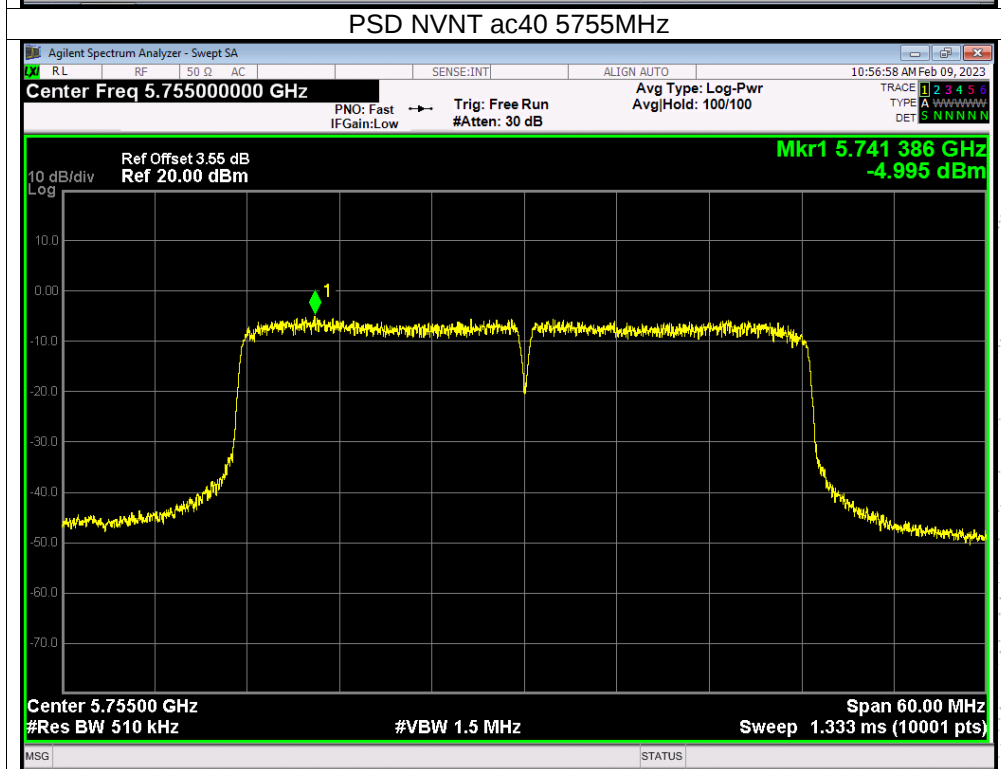
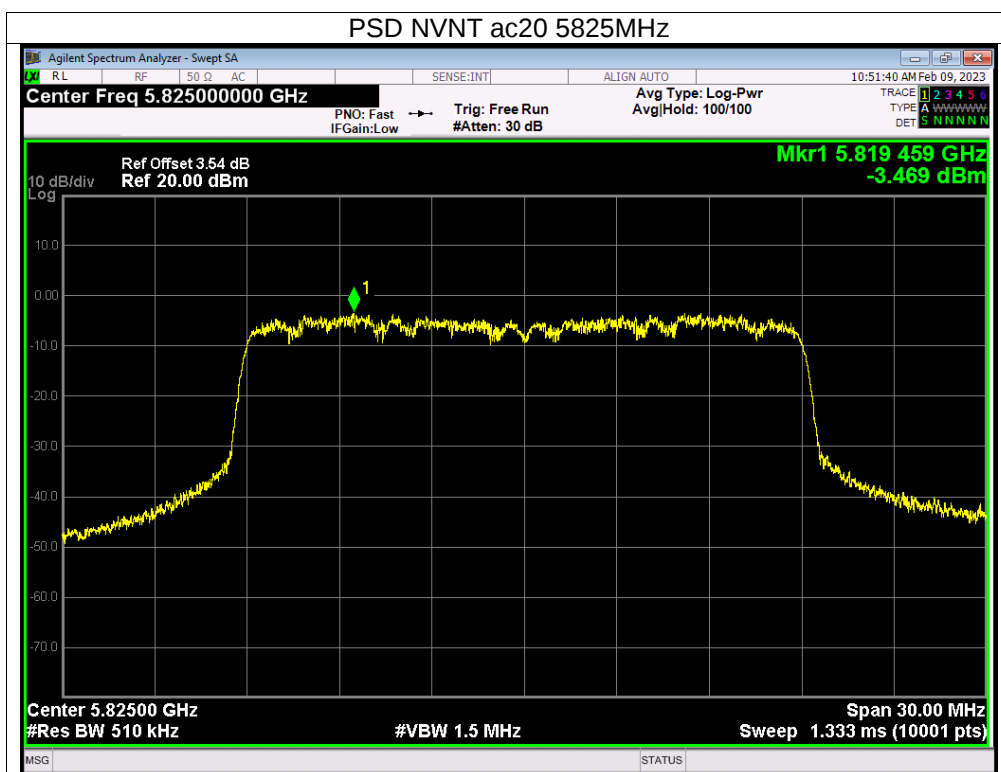
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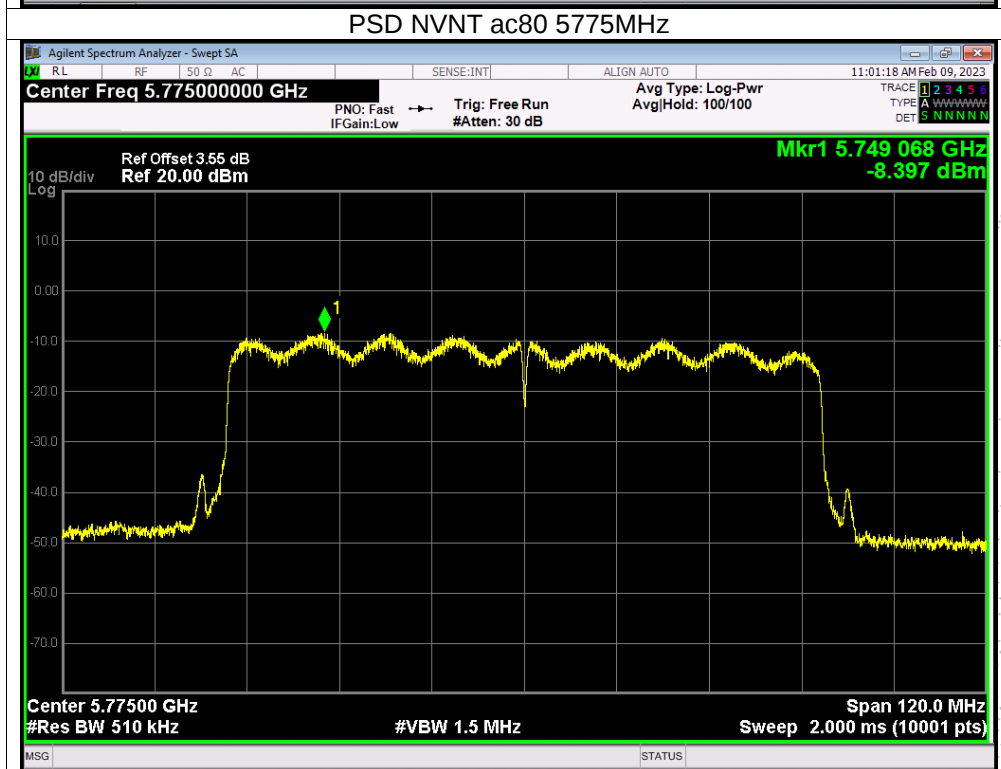
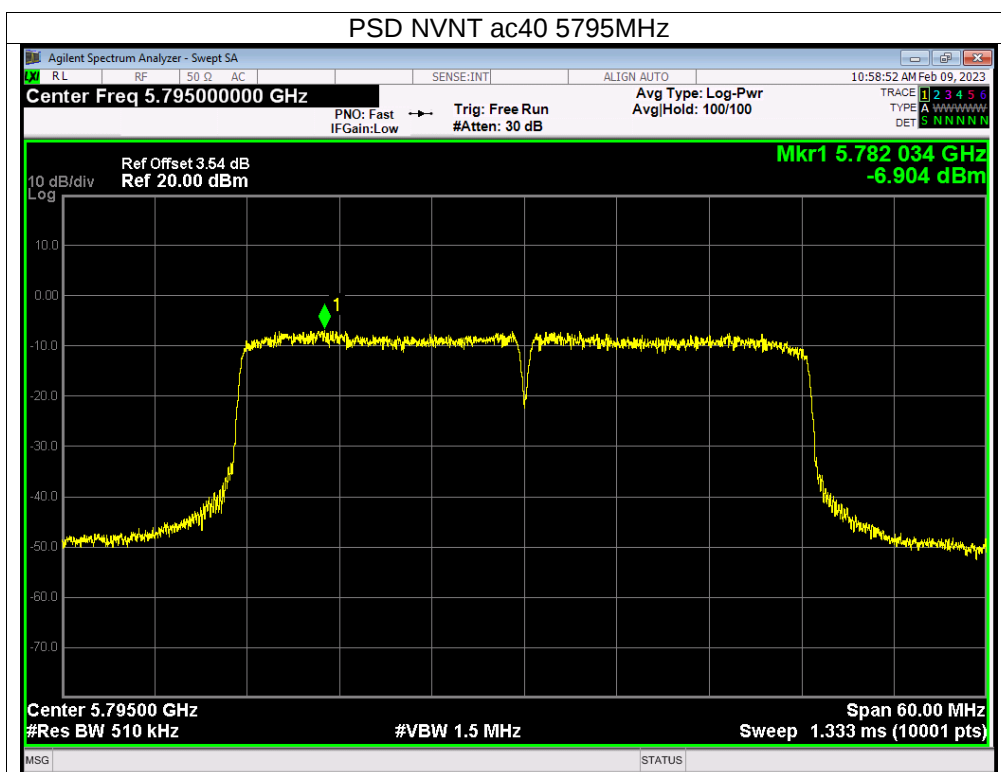
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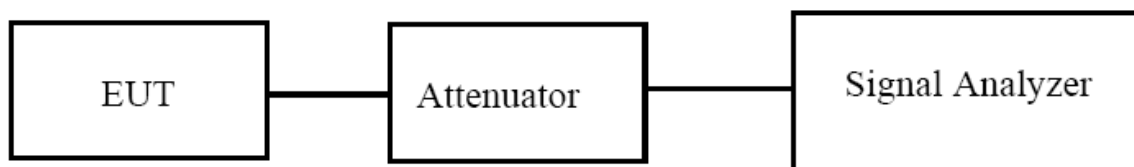
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9. 26dB & 6dB & 99% Emission Bandwidth

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:	DC 7.6V
Test Mode:	(5180-5240MHz)		

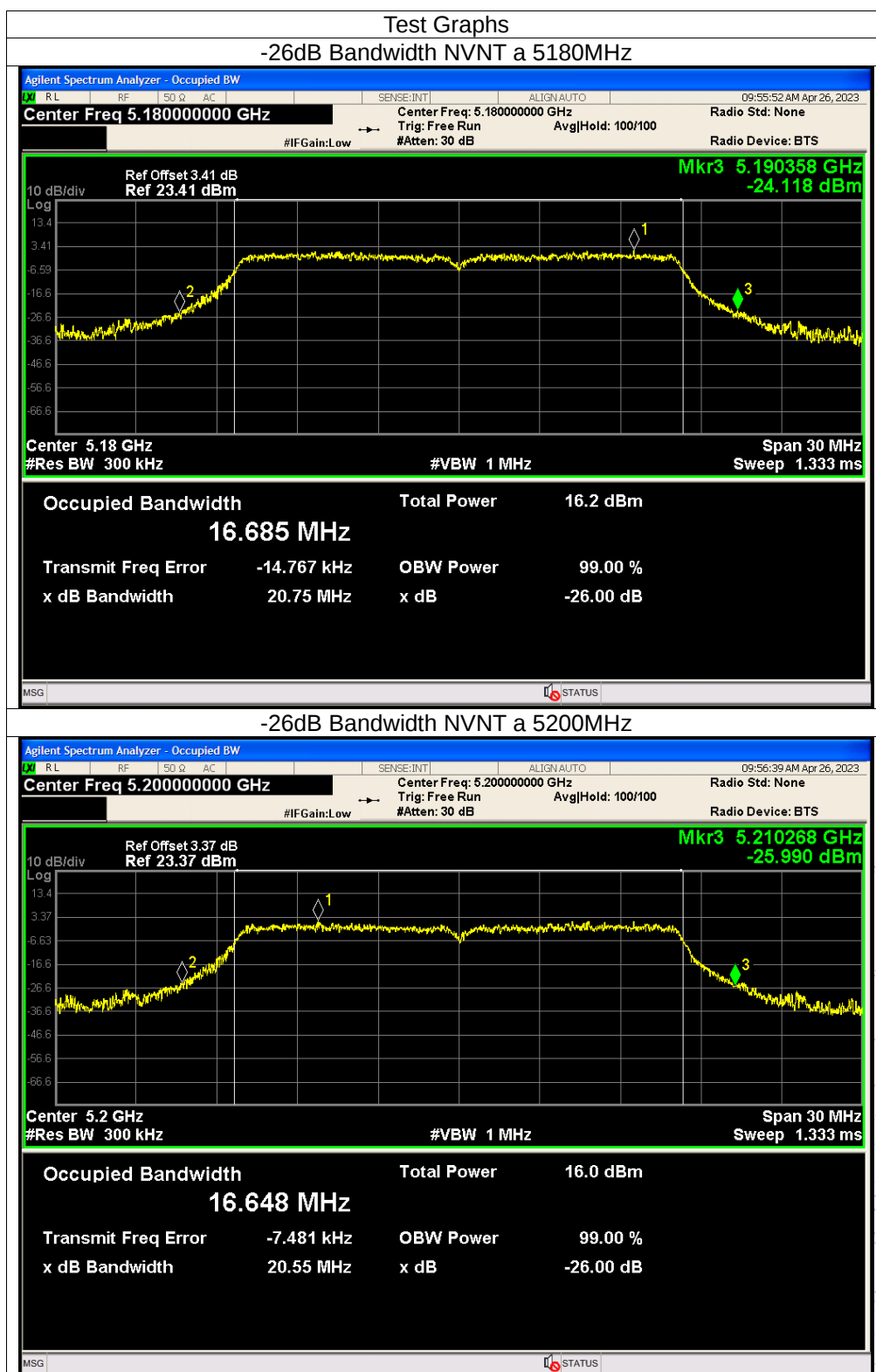
Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	20.745	0.5	Pass
NVNT	a	5200	20.551	0.5	Pass
NVNT	a	5240	20.705	0.5	Pass
NVNT	n20	5180	21.761	0.5	Pass
NVNT	n20	5200	21.729	0.5	Pass
NVNT	n20	5240	21.831	0.5	Pass
NVNT	n40	5190	43.084	0.5	Pass
NVNT	n40	5230	42.964	0.5	Pass
NVNT	ac20	5180	21.586	0.5	Pass
NVNT	ac20	5200	21.681	0.5	Pass
NVNT	ac20	5240	21.872	0.5	Pass
NVNT	ac40	5190	42.966	0.5	Pass
NVNT	ac40	5230	42.763	0.5	Pass
NVNT	ac80	5210	82.078	0.5	Pass

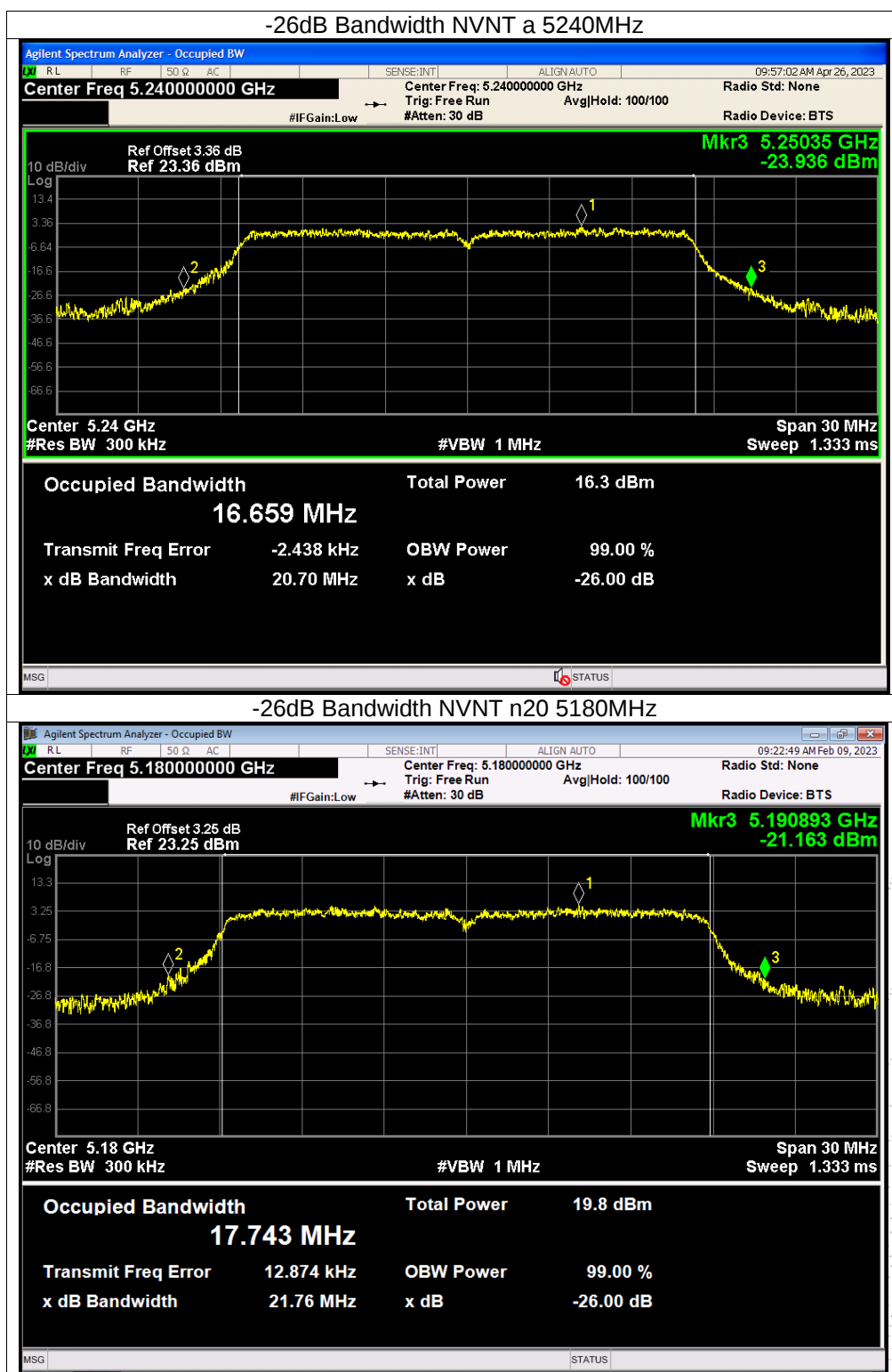
Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5180	16.616
NVNT	a	5200	16.621
NVNT	a	5240	16.613
NVNT	n20	5180	17.645
NVNT	n20	5200	17.657
NVNT	n20	5240	17.681
NVNT	n40	5190	36.118
NVNT	n40	5230	36.096
NVNT	ac20	5180	17.652
NVNT	ac20	5200	17.686
NVNT	ac20	5240	17.680
NVNT	ac40	5190	36.115
NVNT	ac40	5230	36.110
NVNT	ac80	5210	75.179

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

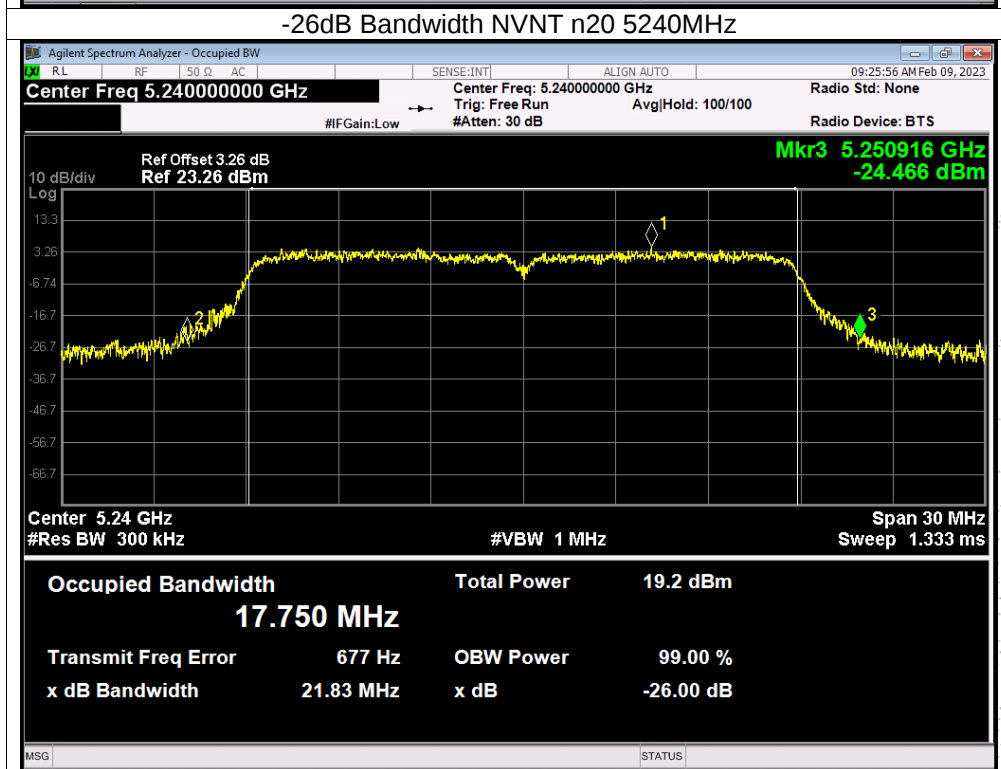
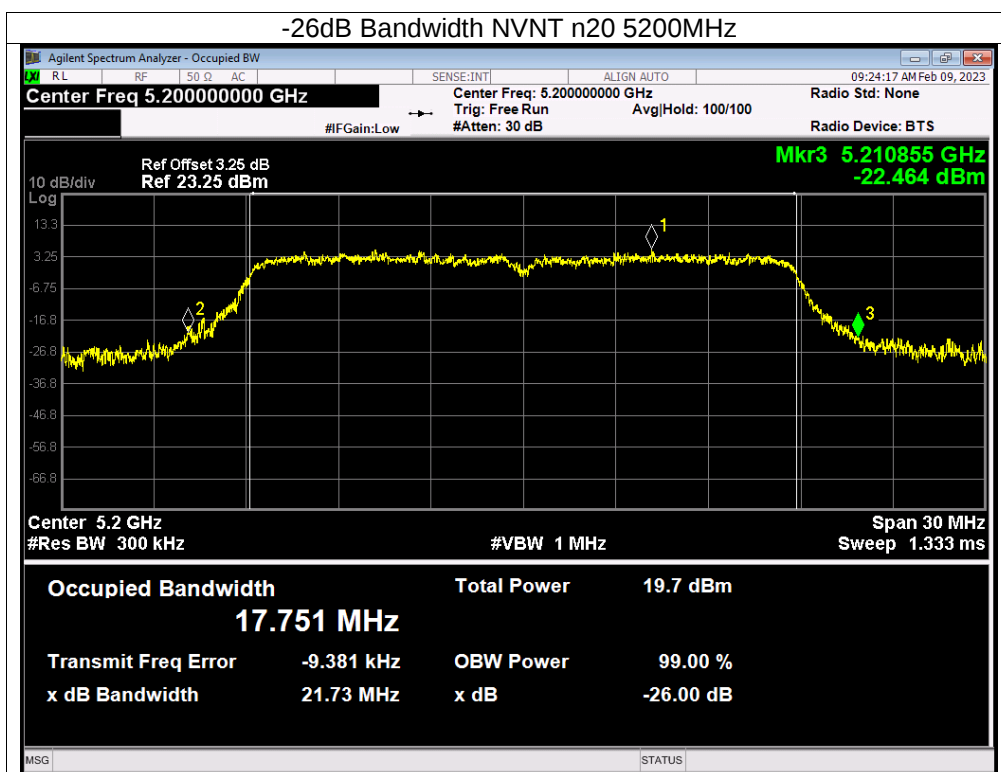
Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	16.492	0.5	Pass
NVNT	a	5785	16.536	0.5	Pass
NVNT	a	5825	16.497	0.5	Pass
NVNT	n20	5745	17.635	0.5	Pass
NVNT	n20	5785	17.650	0.5	Pass
NVNT	n20	5825	17.622	0.5	Pass
NVNT	n40	5755	36.395	0.5	Pass
NVNT	n40	5795	36.366	0.5	Pass
NVNT	ac20	5745	17.629	0.5	Pass
NVNT	ac20	5785	17.713	0.5	Pass
NVNT	ac20	5825	17.630	0.5	Pass
NVNT	ac40	5755	36.386	0.5	Pass
NVNT	ac40	5795	36.397	0.5	Pass
NVNT	ac80	5775	75.295	0.5	Pass

Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5745	16.547
NVNT	a	5785	16.565
NVNT	a	5825	16.561
NVNT	n20	5745	17.660
NVNT	n20	5785	17.650
NVNT	n20	5825	17.663
NVNT	n40	5755	36.108
NVNT	n40	5795	36.134
NVNT	ac20	5745	17.666
NVNT	ac20	5785	17.679
NVNT	ac20	5825	17.663
NVNT	ac40	5755	36.147
NVNT	ac40	5795	36.138
NVNT	ac80	5775	75.206

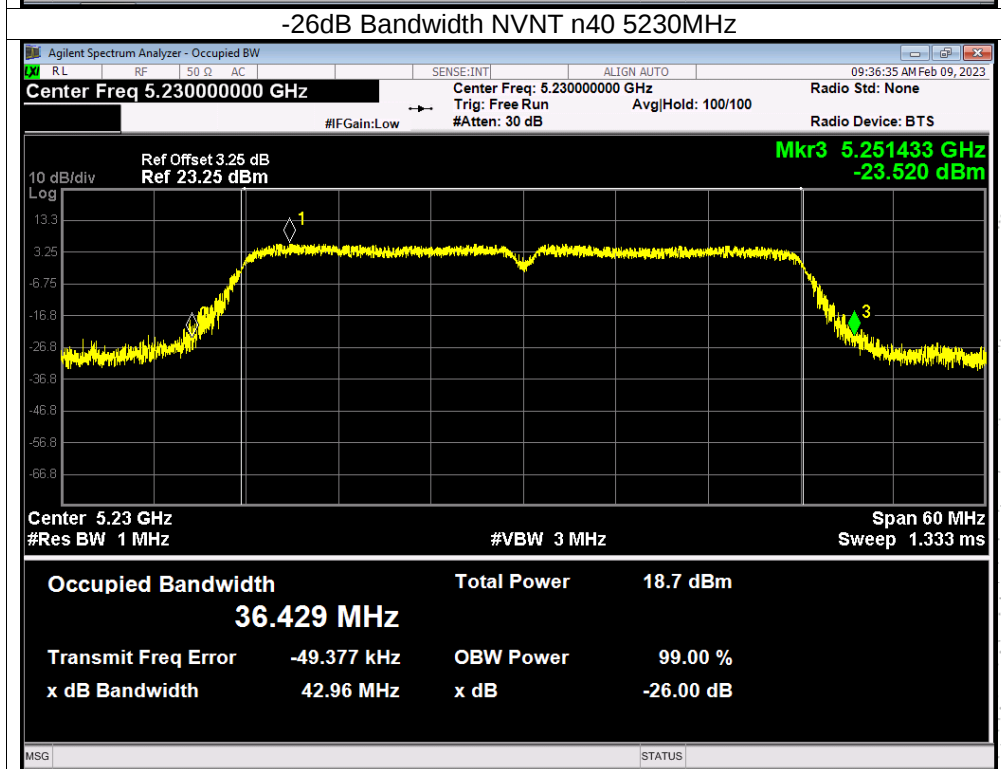
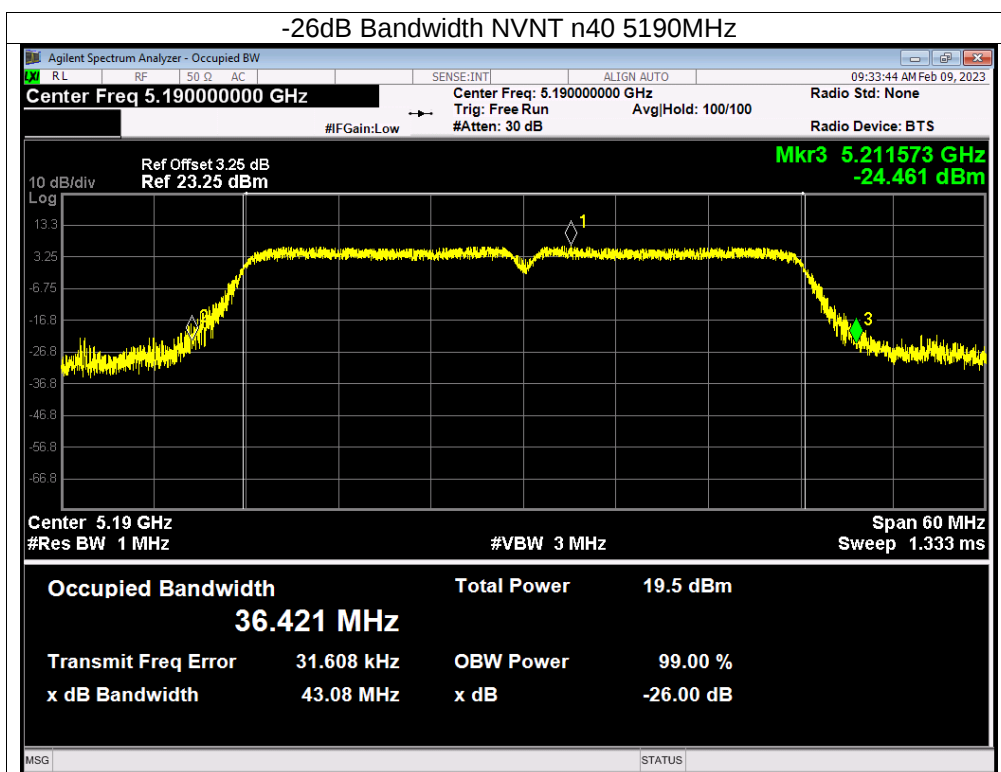




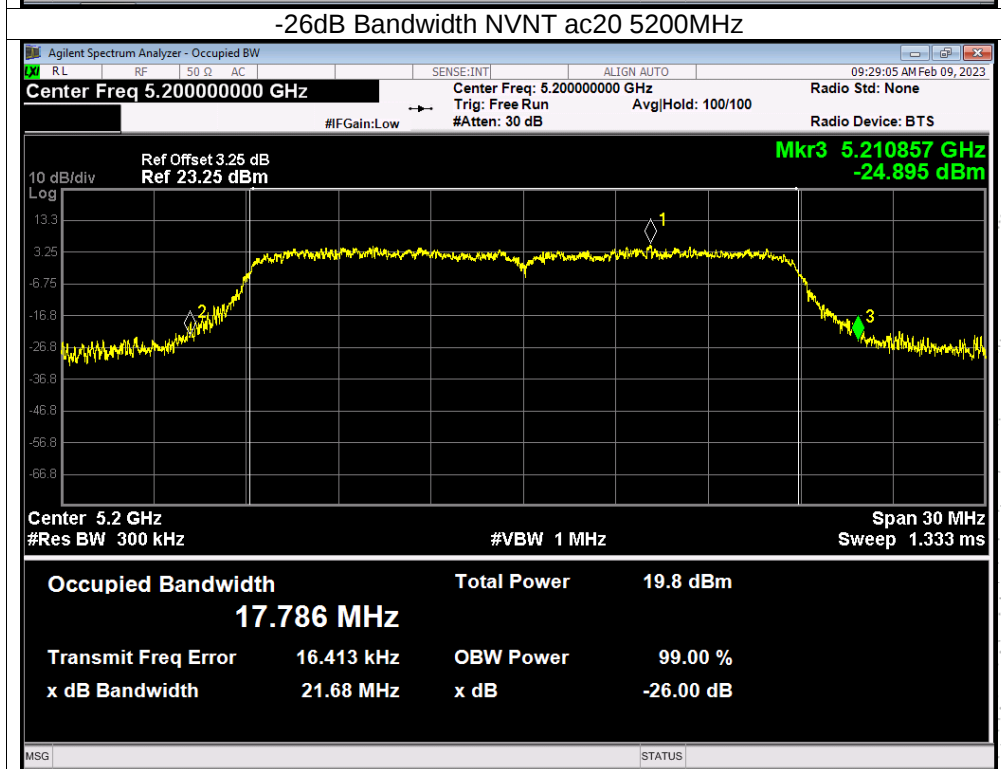
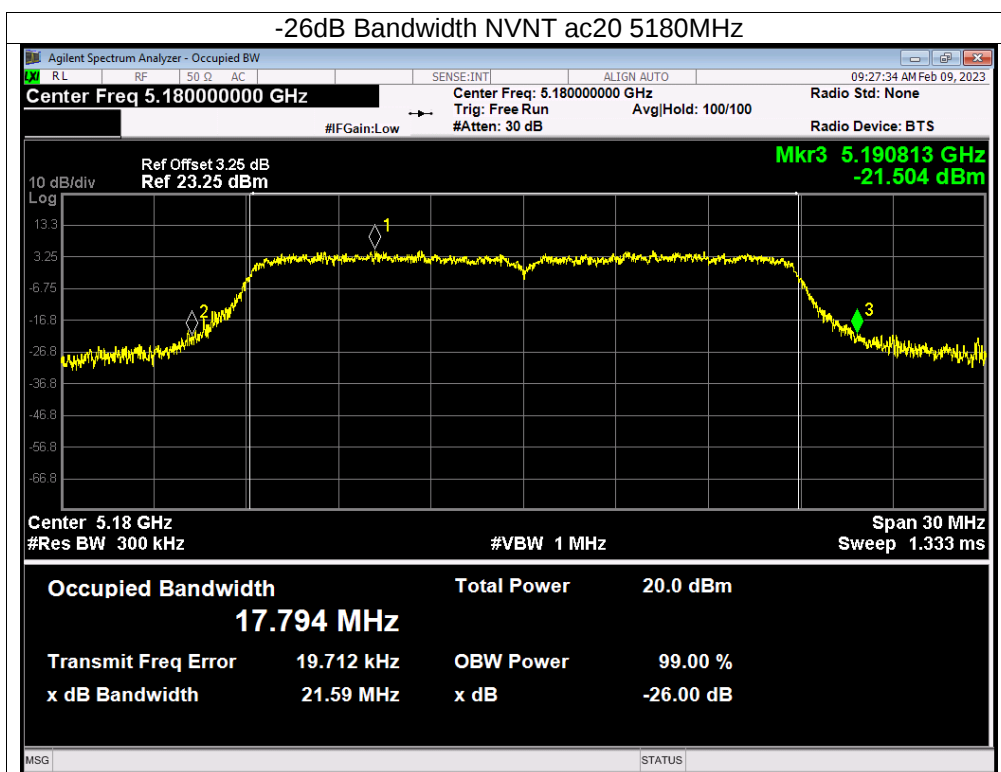
CO. LTD.



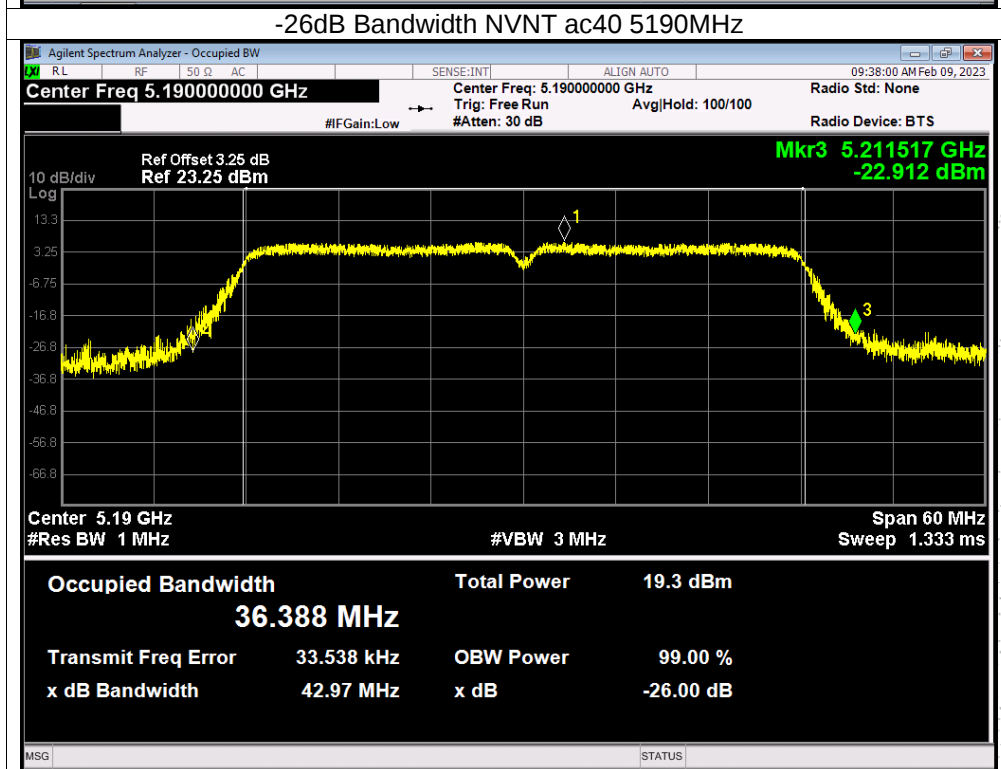
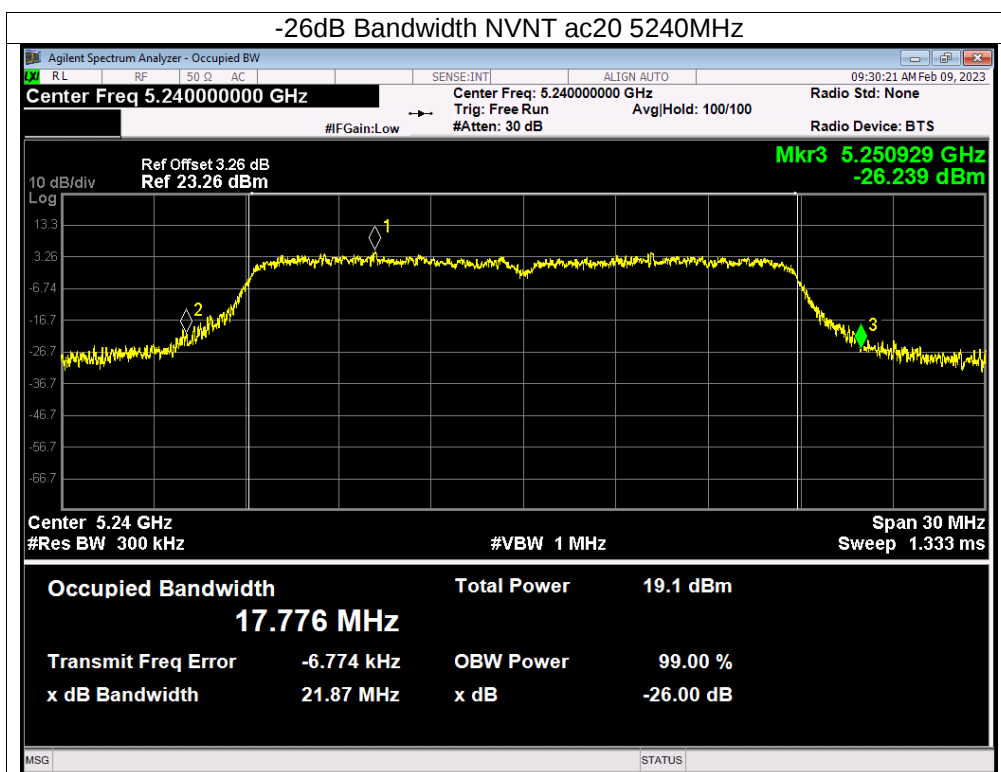
SHENZHEN



BCTC
BC
APPR
停测



TEST
TC
OVERD
检测



ING CO., LTD