



RF Test Report

For

Applicant Name: Shenzhen DOOGEE Hengtong Technology CO.,LTD
Address: B, 2/F, Building A4, Silicon Valley Power Digital Industrial Park, No. 22, Longhua New District, Shenzhen, China
EUT Name: Tablet
Brand Name: DOOGEE
Model Number: R10, R10Pro, R10S, R10E
Series Model Number: Refer to section 2

Issued By

Company Name: BTF Testing Lab (Shenzhen) Co., Ltd.
Address: F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China

Report Number: BTF230607R00203
Test Standards: 47 CFR Part 15.247

Test Conclusion: Pass
FCC ID: 2AX4YR10
Test Date: 2023-04-22 to 2023-05-08
Date of Issue: 2023-06-07

Prepared By:

Elma.Yang

Date:

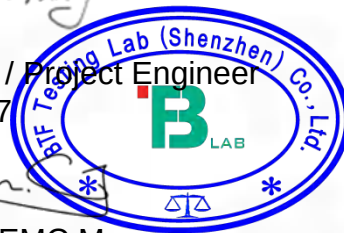
elma.yang / Project Engineer
2023-06-07

Approved By:

Ryan.CJ

Date:

Ryan.CJ / EMC Manager
2023-06-07



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Test Report Number: BTF230607R00203

Revision History		
Version	Issue Date	Revisions Content
R_V0	2023-06-07	Original
<i>Note: Once the revision has been made, then previous versions reports are invalid.</i>		

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1 Introduction

1.1 Identification of Testing Laboratory

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Phone Number:	+86-0755-23146130
Fax Number:	+86-0755-23146130

1.2 Identification of the Responsible Testing Location

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Phone Number:	+86-0755-23146130
Fax Number:	+86-0755-23146130
FCC Registration Number:	518915
Designation Number:	CN1330

1.3 Announcement

- (1) The test report reference to the report template version v0.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) This document may not be altered or revised in any way unless done so by BTF and all revisions are duly noted in the revisions section.
- (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2 Product Information

2.1 Application Information

Company Name:	Shenzhen DOOGEE Hengtong Technology CO.,LTD
Address:	B, 2/F, Building A4, Silicon Valley Power Digital Industrial Park, No. 22, Longhua New District, Shenzhen, China

2.2 Manufacturer Information

Company Name:	Shenzhen DOOGEE Hengtong Technology CO.,LTD
Address:	B, 2/F, Building A4, Silicon Valley Power Digital Industrial Park, No. 22, Longhua New District, Shenzhen, China

2.3 Factory Information

Company Name:	Shenzhen DOOGEE Hengtong Technology CO.,LTD
Address:	B, 2/F, Building A4, Silicon Valley Power Digital Industrial Park, No. 22, Longhua New District, Shenzhen, China

2.4 General Description of Equipment under Test (EUT)

EUT Name:	Tablet
Test Model Number:	R10
Series Model Number:	R10, R10Pro, R10S, R10E
Diff:	There is no difference except the name of the model. All tests are made with the R10 model

2.5 Technical Information

Power Supply:	DC 3.8V from battery or DC 9V from adapter
Power Adaptor:	Input: 100~240V 50/60Hz 0.6A Output: 5V=3A, 9V=2.22A, 12V=1.67A
Operation Frequency:	2412MHz-2462MHz for IEEE 802.11 b, g, n(HT20), ax20 2422MHz~2452MHz for IEEE802.11n(HT40), ax40
Number of Channels:	802.11b/802.11g /802.11n(HT20)/ax20: 11CH 802.11(HT40), ax40: 7CH
Modulation Type:	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n :OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax :OFDM(64QAM, 16QAM, QPSK, BPSK)
Antenna Type:	PIFA antenna
Antenna Gain:	1.37dBi

Note: #: The antenna gain provided by the applicant, and the laboratory will not be responsible for the accumulated calculation results which covers the information provided by the applicant.

3 Summary of Test Results

3.1 Test Standards

The tests were performed according to following standards:

47 CFR Part 15.247: Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz

3.2 Uncertainty of Test

Measurement	Value
Occupied Channel Bandwidth	69 KHz
RF output power, conducted	0.87 dB
Power Spectral Density, conducted	0.69 dB
Unwanted Emissions, conducted	0.94 dB
All emissions, radiated(<1GHz)	4.12 dB
All emissions, radiated(>1GHz)	4.16 dB
Temperature	0.82 °C
Humidity	4.1 %

3.3 Summary of Test Result

Item	Standard	Requirement	Result
Antenna requirement	47 CFR Part 15.247	Part 15.203	Pass
Conducted Emission at AC power line	47 CFR Part 15.247	47 CFR 15.207(a)	Pass
Occupied Bandwidth	47 CFR Part 15.247	47 CFR 15.247(a)(2)	Pass
Maximum Conducted Output Power	47 CFR Part 15.247	47 CFR 15.247(b)(3)	Pass
Power Spectral Density	47 CFR Part 15.247	47 CFR 15.247(e)	Pass
Emissions in non-restricted frequency bands	47 CFR Part 15.247	47 CFR 15.247(d)	Pass
Band edge emissions (Radiated)	47 CFR Part 15.247	47 CFR 15.247(d)	Pass
Emissions in restricted frequency bands (below 1GHz)	47 CFR Part 15.247	47 CFR 15.247(d)	Pass
Emissions in restricted frequency bands (above 1GHz)	47 CFR Part 15.247	47 CFR 15.247(d)	Pass

4 Test Configuration

4.1 Test Equipment List

Conducted Emission at AC power line					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Pulse Limiter	SCHWARZBECK	VTSD 9561-F	00953	2022-11-24	2023-11-23
Coaxial Switcher	SCHWARZBECK	CX210	CX210	2022-11-24	2023-11-23
V-LISN	SCHWARZBECK	NSLK 8127	01073	2022-11-24	2023-11-23
LISN	AFJ	LS16/110VAC	16010020076	2023-02-23	2024-02-22
EMI Receiver	ROHDE&SCHWARZ	ESCI3	101422	2022-11-24	2023-11-23

Occupied Bandwidth					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
RFTest software	/	V1.00	/	/	/
RF Control Unit	Techy	TR1029-1	/	2022-11-24	2023-11-23
RF Sensor Unit	Techy	TR1029-2	/	2022-11-24	2023-11-23
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2022-11-24	2023-11-23
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2022-11-24	2023-11-23
WIDEBAND RADIO COMMUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2022-11-24	2023-11-23
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2022-11-24	2023-11-23

Maximum Conducted Output Power					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
RFTest software	/	V1.00	/	/	/
RF Control Unit	Techy	TR1029-1	/	2022-11-24	2023-11-23
RF Sensor Unit	Techy	TR1029-2	/	2022-11-24	2023-11-23
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2022-11-24	2023-11-23
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2022-11-24	2023-11-23
WIDEBAND RADIO COMMUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2022-11-24	2023-11-23
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2022-11-24	2023-11-23

Power Spectral Density					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
RFTest software	/	V1.00	/	/	/

RF Control Unit	Techy	TR1029-1	/	2022-11-24	2023-11-23
RF Sensor Unit	Techy	TR1029-2	/	2022-11-24	2023-11-23
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2022-11-24	2023-11-23
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2022-11-24	2023-11-23
WIDEBAND RADIO COMMUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2022-11-24	2023-11-23
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2022-11-24	2023-11-23

Emissions in non-restricted frequency bands

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
RFTest software	/	V1.00	/	/	/
RF Control Unit	Techy	TR1029-1	/	2022-11-24	2023-11-23
RF Sensor Unit	Techy	TR1029-2	/	2022-11-24	2023-11-23
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2022-11-24	2023-11-23
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2022-11-24	2023-11-23
WIDEBAND RADIO COMMUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2022-11-24	2023-11-23
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2022-11-24	2023-11-23

Band edge emissions (Radiated)

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Coaxial cable Multiflex 141	Schwarzbeck	N/SMA 0.5m	517386	2022-03-26	2023-03-25
Preamplifier	SCHWARZBECK	BBV9744	00246	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF1-SMAM-10m	21101566	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-10m	21101570	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF1-SMAM-1m	21101568	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-1m	21101576	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-2.5m	21101573	2022-11-24	2023-11-23
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Horn Antenna	SCHWARZBECK	BBHA9170	01157	2021-11-28	2023-11-27
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI7	101032	2022-11-24	2023-11-23
SIGNAL ANALYZER	ROHDE&SCHWARZ	FSQ40	100010	2022-11-24	2023-11-23

POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Broadband Preamplifier	SCHWARZBECK	BBV9718D	00008	2022-03-26	2023-03-25
Horn Antenna	SCHWARZBECK	BBHA9120D	2597	2022-05-22	2024-05-21
EZ EMC	Frad	FA-03A2 RE+	/	/	/
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Log periodic antenna	SCHWARZBECK	VULB 9168	01328	2021-11-28	2023-11-27

Emissions in restricted frequency bands (below 1GHz)

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Coaxial cable Multiflex 141	Schwarzbeck	N/SMA 0.5m	517386	2022-03-26	2023-03-25
Preamplifier	SCHWARZBECK	BBV9744	00246	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF1-SMASMAM-10m	21101566	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-10m	21101570	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF1-SMASMAM-1m	21101568	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-1m	21101576	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-2.5m	21101573	2022-11-24	2023-11-23
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Horn Antenna	SCHWARZBECK	BBHA9170	01157	2021-11-28	2023-11-27
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI7	101032	2022-11-24	2023-11-23
SIGNAL ANALYZER	ROHDE&SCHWARZ	FSQ40	100010	2022-11-24	2023-11-23
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Broadband Preamplifier	SCHWARZBECK	BBV9718D	00008	2022-03-26	2023-03-25
Horn Antenna	SCHWARZBECK	BBHA9120D	2597	2022-05-22	2024-05-21
EZ EMC	Frad	FA-03A2 RE+	/	/	/
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Log periodic antenna	SCHWARZBECK	VULB 9168	01328	2021-11-28	2023-11-27

Emissions in restricted frequency bands (above 1GHz)

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Coaxial cable Multiflex 141	Schwarzbeck	N/SMA 0.5m	517386	2022-03-26	2023-03-25
Preamplifier	SCHWARZBECK	BBV9744	00246	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF1-SMASMAM-10m	21101566	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-10m	21101570	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF1-SMASMAM-1m	21101568	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-1m	21101576	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF2-NMNM-2.5m	21101573	2022-11-24	2023-11-23

POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Horn Antenna	SCHWARZBECK	BBHA9170	01157	2021-11-28	2023-11-27
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI7	101032	2022-11-24	2023-11-23
SIGNAL ANALYZER	ROHDE&SCHWARZ	FSQ40	100010	2022-11-24	2023-11-23
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Broadband Preamplifier	SCHWARZBECK	BBV9718D	00008	2022-03-26	2023-03-25
Horn Antenna	SCHWARZBECK	BBHA9120D	2597	2022-05-22	2024-05-21
EZ EMC	Frad	FA-03A2 RE+	/	/	/
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Log periodic antenna	SCHWARZBECK	VULB 9168	01328	2021-11-28	2023-11-27

4.2 Test Auxiliary Equipment

The EUT was tested as an independent device.

4.3 Test Modes

Duty cycle :100% Keeping TX

Mode	data rate (Mbps)(see Note)	Channel	Frequency (MHz)
IEEE 802.11b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	High: CH11	2462
IEEE 802.11 n(HT20)	6.5	Low :CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
IEEE 802.11 n(HT40)	13.5	Low :CH3	2422
	13.5	Middle: CH6	2437
	13.5	High: CH9	2452
IEEE 802.11 ax20	8	Low :CH1	2412
	8	Middle: CH6	2437
	8	High: CH11	2462
IEEE 802.11 ax40	16	Low :CH3	2422
	16	Middle: CH6	2437
	16	High: CH9	2452

Note: According exploratory test, EUT will have maximum output power in those data rate. So those data rate were used for all test.

Channel list:

For IEEE 802.11b, g, n(HT20), ax20

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH1	2412	CH5	2432	CH9	2452
CH2	2417	CH6	2437	CH10	2457
CH3	2422	CH7	2442	CH11	2462
CH4	2427	CH8	2447		

For IEEE 802.11 n(HT40), ax40

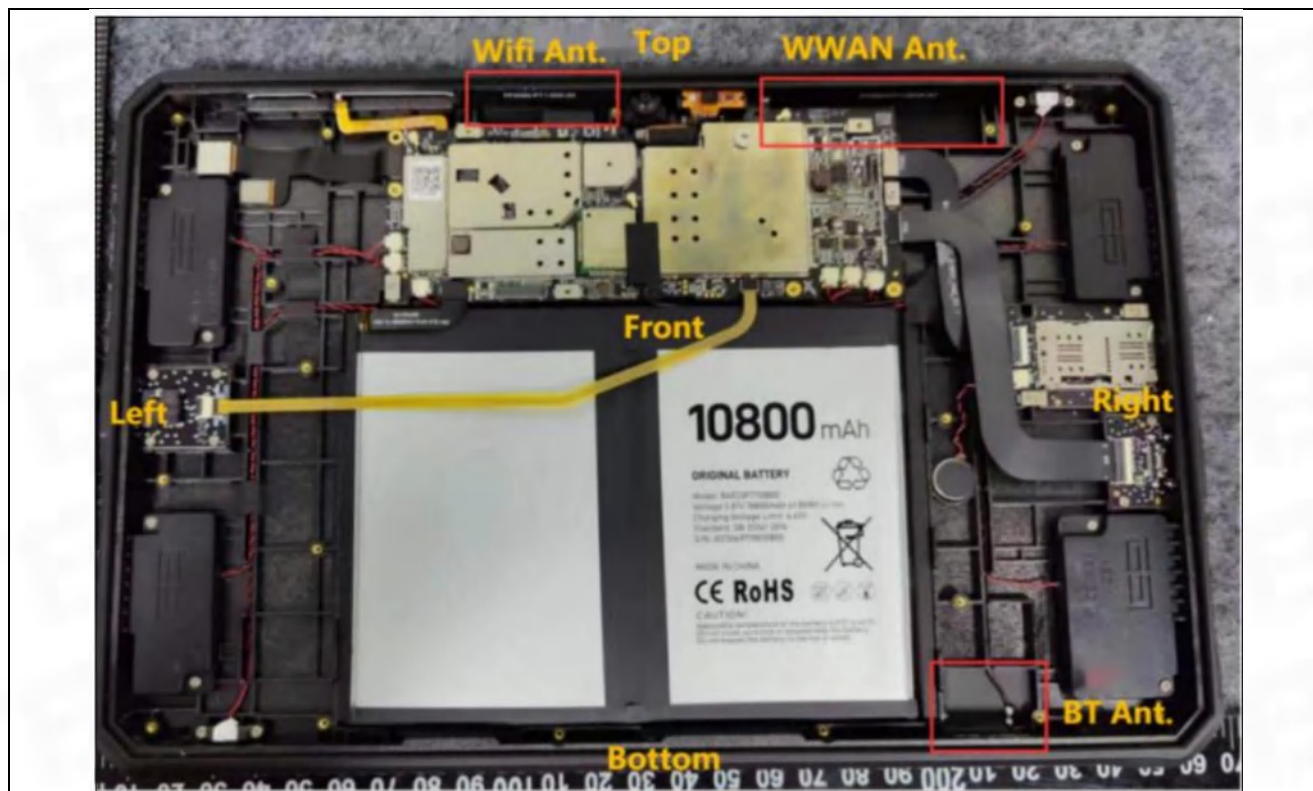
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH1	2422	CH5	2442		
CH2	2427	CH6	2447		
CH3	2432	CH7	2452		
CH4	2437				

5 Evaluation Results (Evaluation)

5.1 Antenna requirement

Test Requirement:	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.
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5.1.1 Conclusion :Pass



6 Radio Spectrum Matter Test Results (RF)

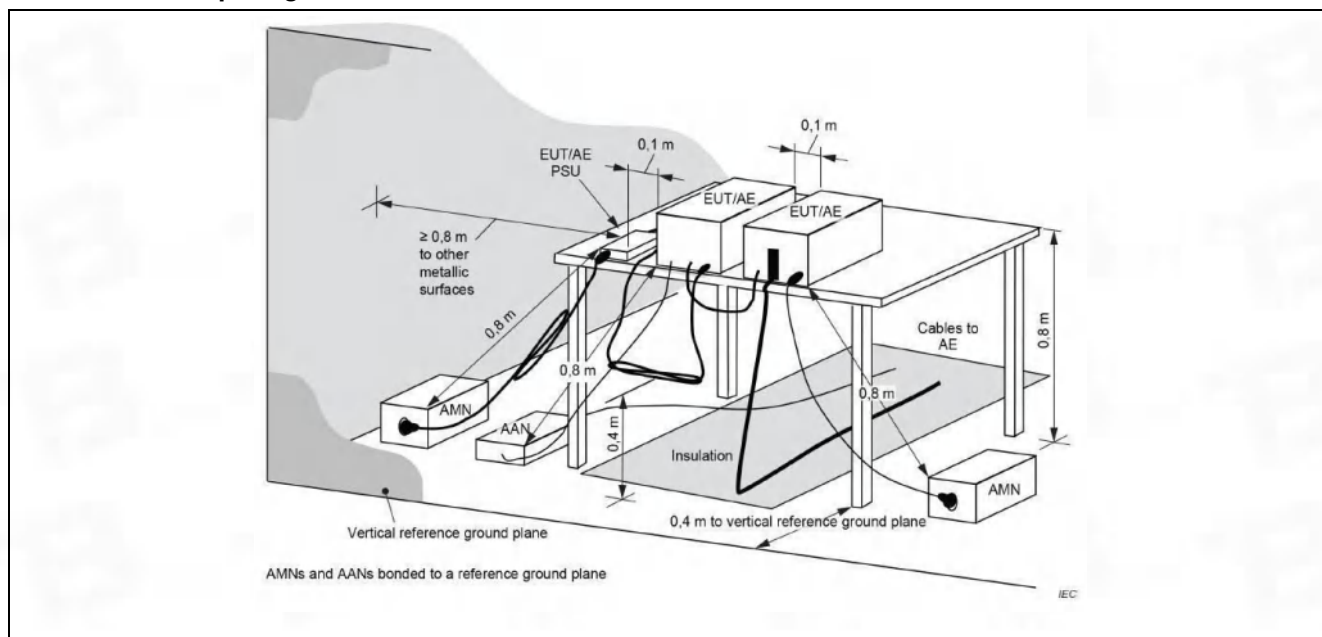
6.1 Conducted Emission at AC power line

Test Requirement:	Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN).		
Test Method:	Refer to ANSI C63.10-2013 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices		
Test Limit:	Frequency of emission (MHz)	Conducted limit (dB μ V)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
*Decreases with the logarithm of the frequency.			

6.1.1 E.U.T. Operation:

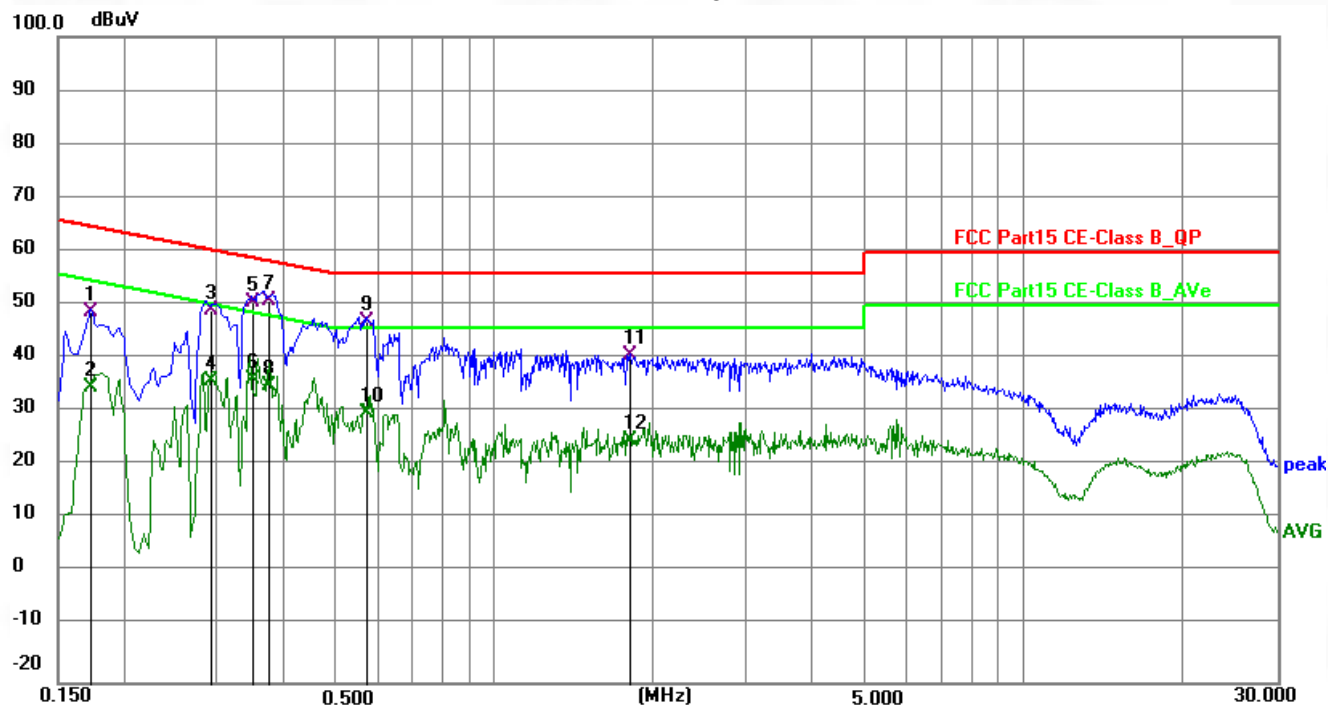
Operating Environment:	
Temperature:	24.8 °C
Humidity:	52.5 %
Atmospheric Pressure:	1010 mbar

6.1.2 Test Setup Diagram:



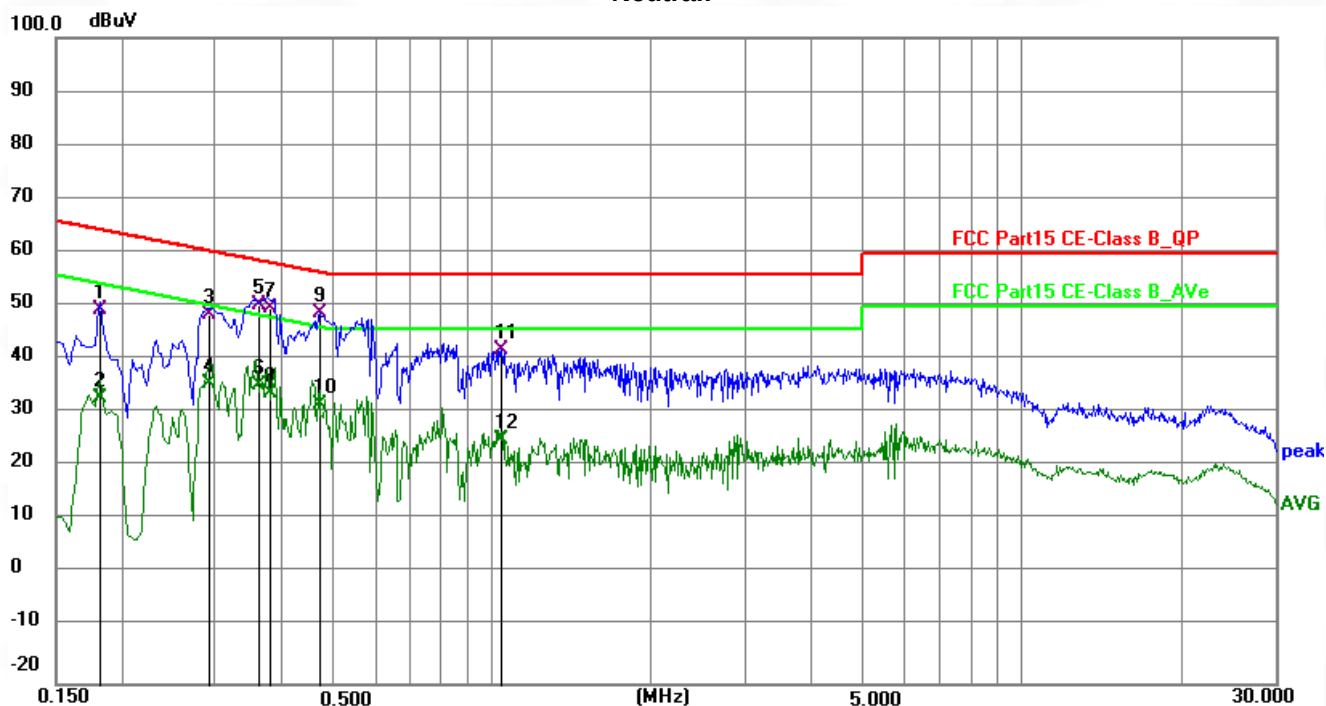
6.1.3 Test Data:

Line:



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1723	39.38	9.64	49.02	64.85	-15.83	QP
2	0.1723	25.37	9.64	35.01	54.85	-19.84	AVG
3	0.2930	39.51	9.63	49.14	60.44	-11.30	QP
4	0.2930	26.50	9.63	36.13	50.44	-14.31	AVG
5	0.3515	41.23	9.63	50.86	58.93	-8.07	QP
6	0.3515	26.91	9.63	36.54	48.93	-12.39	AVG
7	0.3769	41.26	9.63	50.89	58.35	-7.46	QP
8	0.3769	25.51	9.63	35.14	48.35	-13.21	AVG
9	0.5730	37.63	9.62	47.25	56.00	-8.75	QP
10	0.5730	20.52	9.62	30.14	46.00	-15.86	AVG
11	1.8015	31.37	9.65	41.02	56.00	-14.98	QP
12	1.8015	15.49	9.65	25.14	46.00	-20.86	AVG

Neutral:



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1814	39.95	9.63	49.58	64.42	-14.84	QP
2	0.1814	23.62	9.63	33.25	54.42	-21.17	AVG
3	0.2927	39.16	9.62	48.78	60.45	-11.67	QP
4	0.2927	26.08	9.62	35.70	50.45	-14.75	AVG
5	0.3620	40.83	9.62	50.45	58.68	-8.23	QP
6	0.3620	25.97	9.62	35.59	48.68	-13.09	AVG
7	0.3820	40.24	9.62	49.86	58.24	-8.38	QP
8	0.3820	24.37	9.62	33.99	48.24	-14.25	AVG
9	0.4692	39.18	9.62	48.80	56.53	-7.73	QP
10	0.4692	22.39	9.62	32.01	46.53	-14.52	AVG
11	1.0410	32.38	9.64	42.02	56.00	-13.98	QP
12	1.0410	15.90	9.64	25.54	46.00	-20.46	AVG

Note: All modes and channels have been tested and only the B mode 2412MHz mode with the worst data is listed.

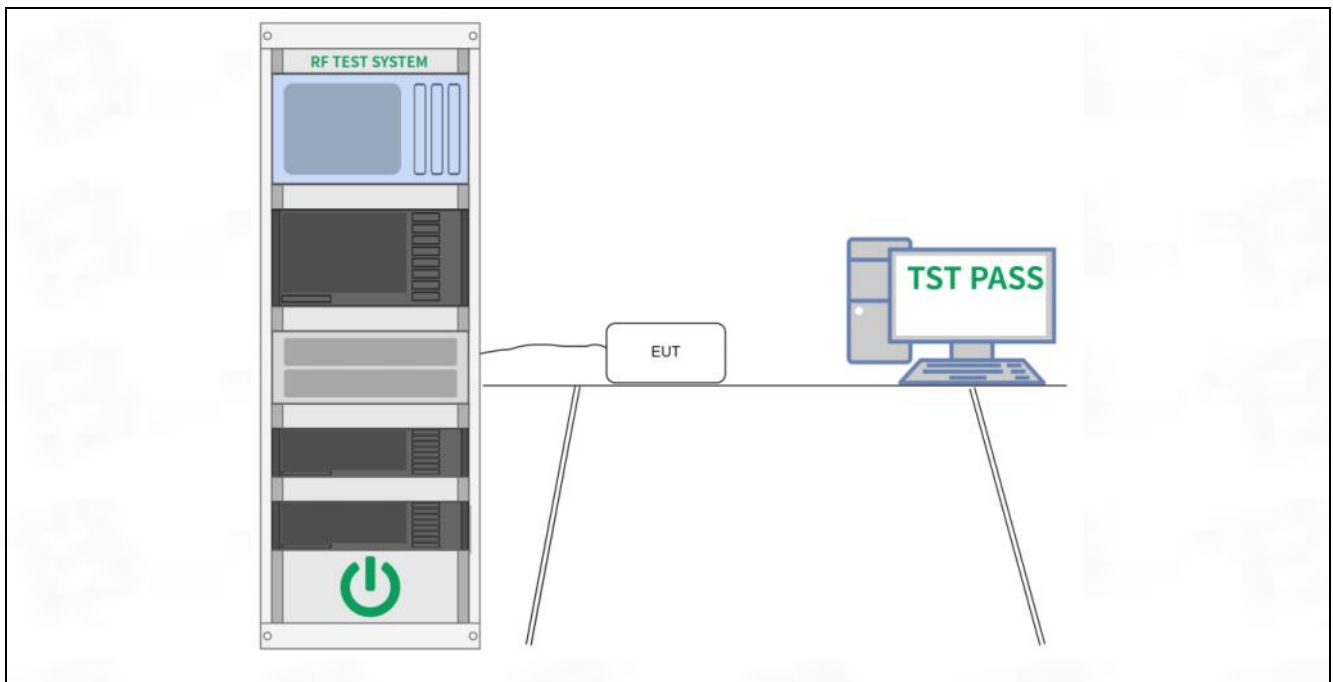
6.2 Occupied Bandwidth

Test Requirement:	Systems using digital modulation techniques may operate in the 902-928 MHz, and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Test Method:	DTS bandwidth
Test Limit:	Section (a)(2), Systems using digital modulation techniques may operate in the 902-928 MHz, and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Procedure:	a) Set RBW = 100 kHz. b) Set the VBW $\geq [3 \times \text{RBW}]$. c) Detector = peak. d) Trace mode = max hold. e) Sweep = auto couple. f) Allow the trace to stabilize. g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.2.1 E.U.T. Operation:

Operating Environment:	
Temperature:	23.6 °C
Humidity:	52.9 %
Atmospheric Pressure:	1010 mbar

6.2.2 Test Setup Diagram:

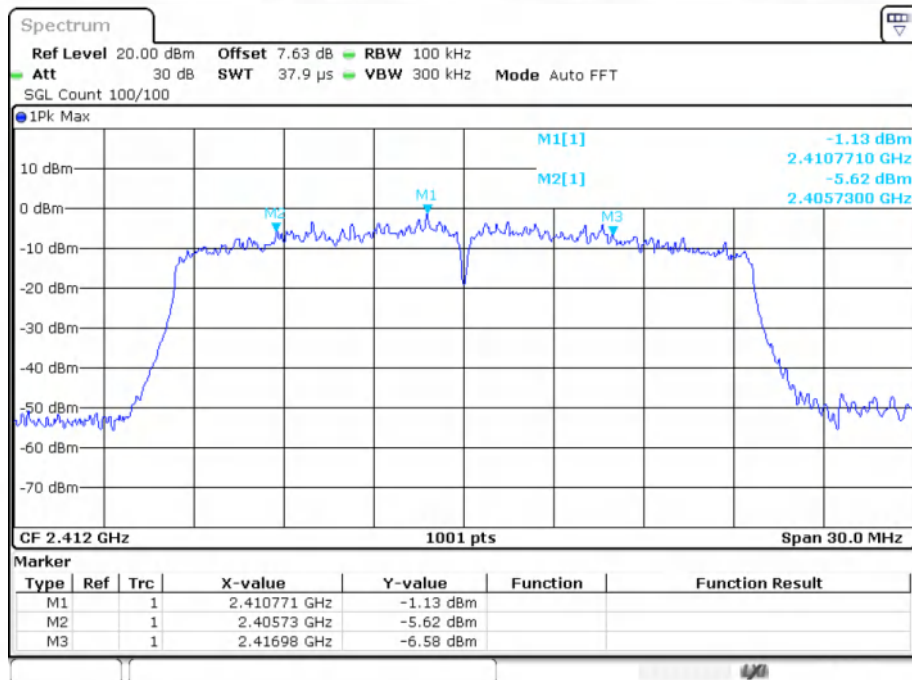


6.2.3 Test Data:

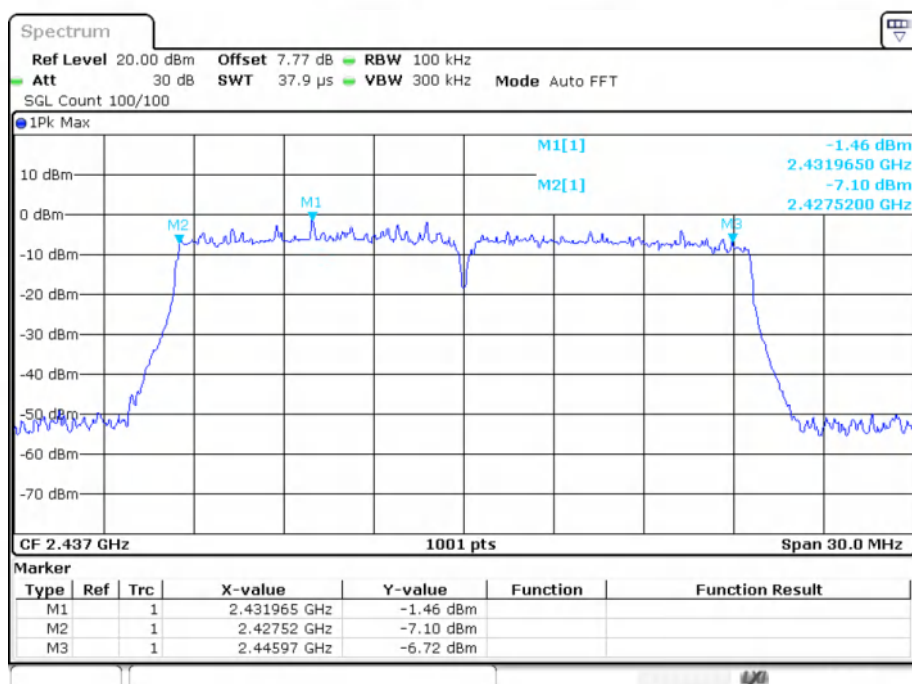
-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	ax20	2412	Ant1	11.25	0.5	Pass
NVNT	ax20	2437	Ant1	18.45	0.5	Pass
NVNT	ax20	2462	Ant1	18.63	0.5	Pass
NVNT	ax40	2422	Ant1	22.44	0.5	Pass
NVNT	ax40	2437	Ant1	37.62	0.5	Pass
NVNT	ax40	2452	Ant1	38.16	0.5	Pass
NVNT	b	2412	Ant1	10.08	0.5	Pass
NVNT	b	2437	Ant1	11.07	0.5	Pass
NVNT	b	2462	Ant1	10.08	0.5	Pass
NVNT	g	2412	Ant1	15.42	0.5	Pass
NVNT	g	2437	Ant1	16.41	0.5	Pass
NVNT	g	2462	Ant1	16.44	0.5	Pass
NVNT	n20	2412	Ant1	17.61	0.5	Pass
NVNT	n20	2437	Ant1	17.64	0.5	Pass
NVNT	n20	2462	Ant1	17.73	0.5	Pass
NVNT	n40	2422	Ant1	35.4	0.5	Pass
NVNT	n40	2437	Ant1	36.36	0.5	Pass
NVNT	n40	2452	Ant1	36.48	0.5	Pass

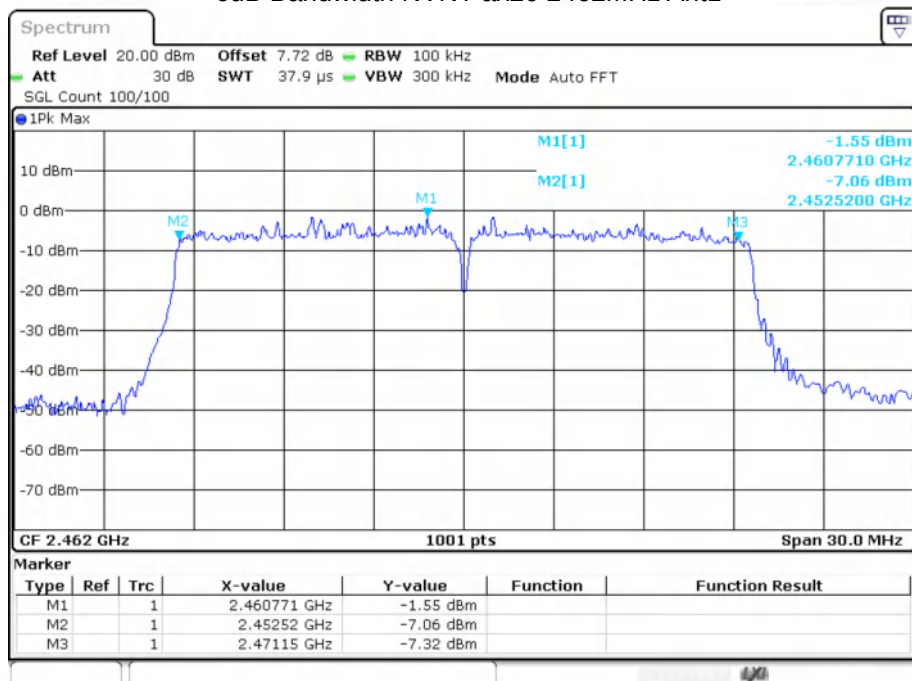
-6dB Bandwidth NVNT ax20 2412MHz Ant1



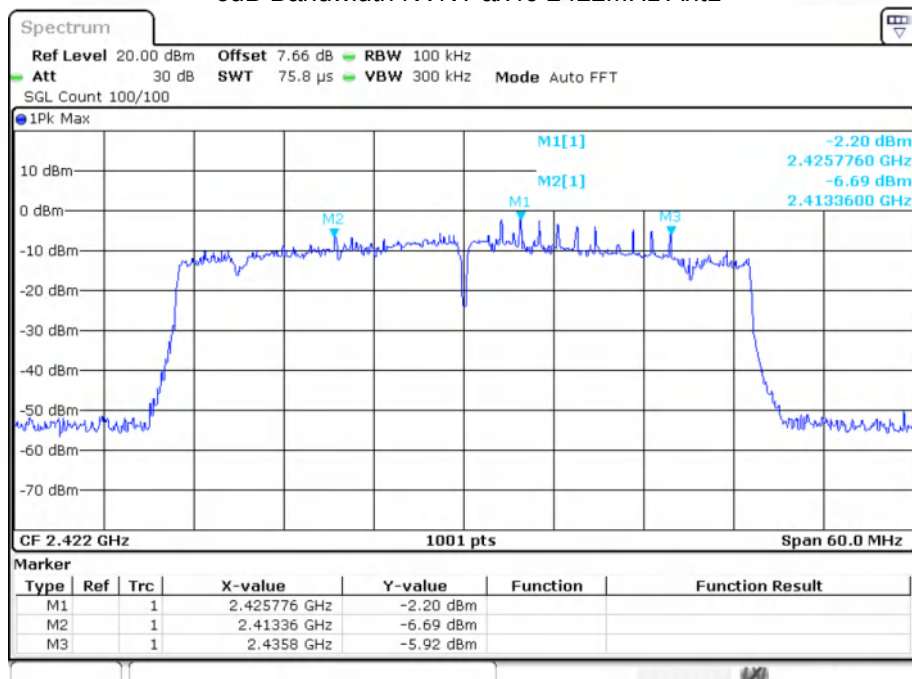
-6dB Bandwidth NVNT ax20 2437MHz Ant1



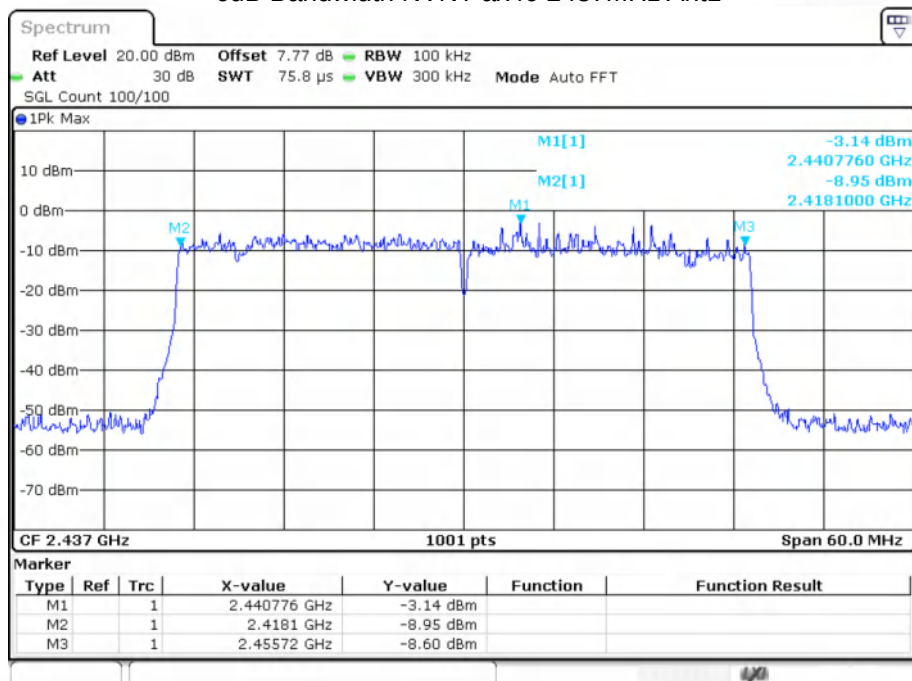
-6dB Bandwidth NVNT ax20 2462MHz Ant1



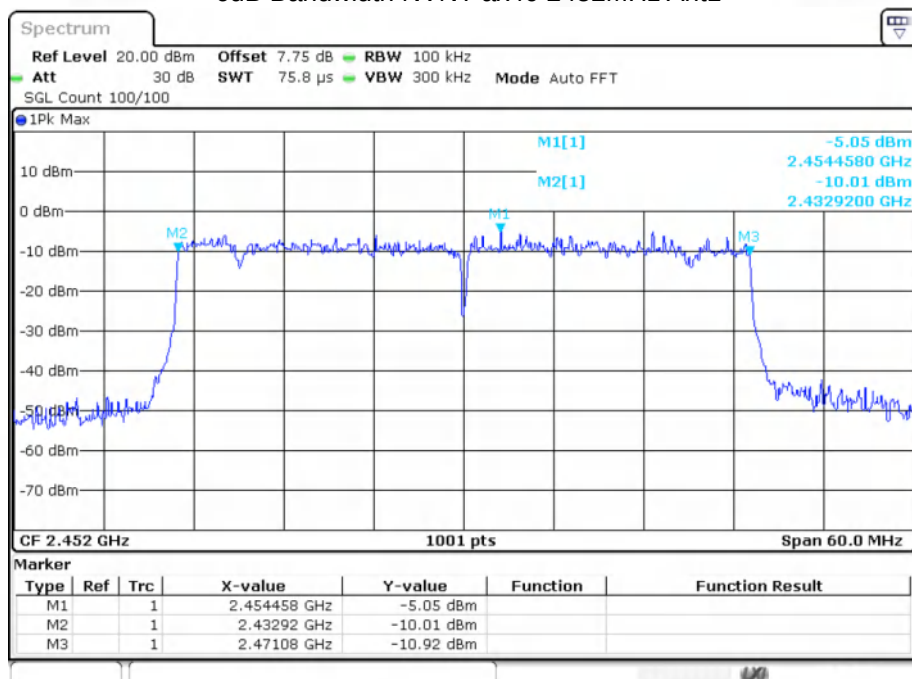
-6dB Bandwidth NVNT ax40 2422MHz Ant1



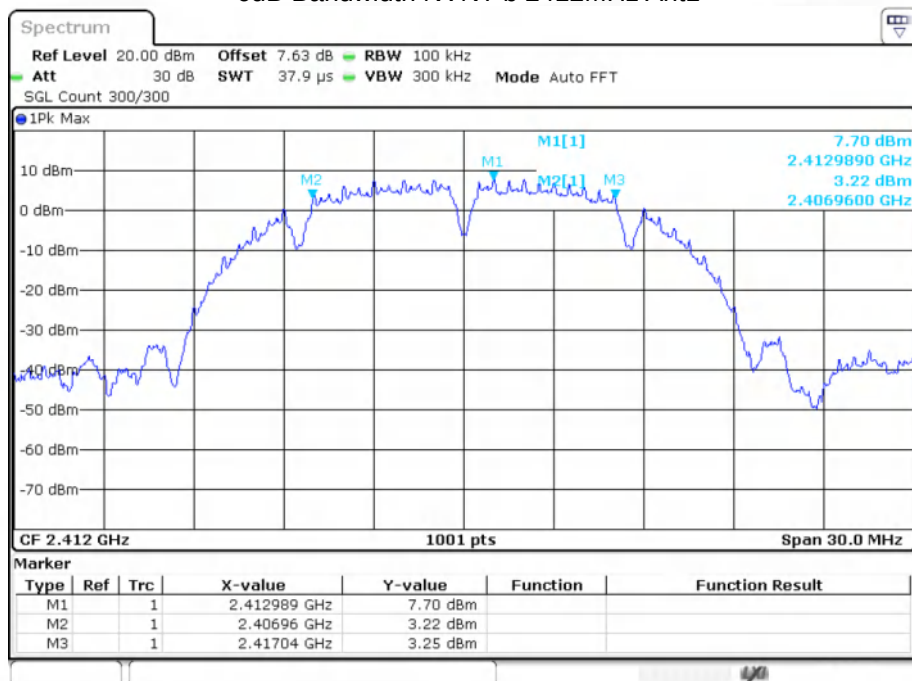
-6dB Bandwidth NVNT ax40 2437MHz Ant1



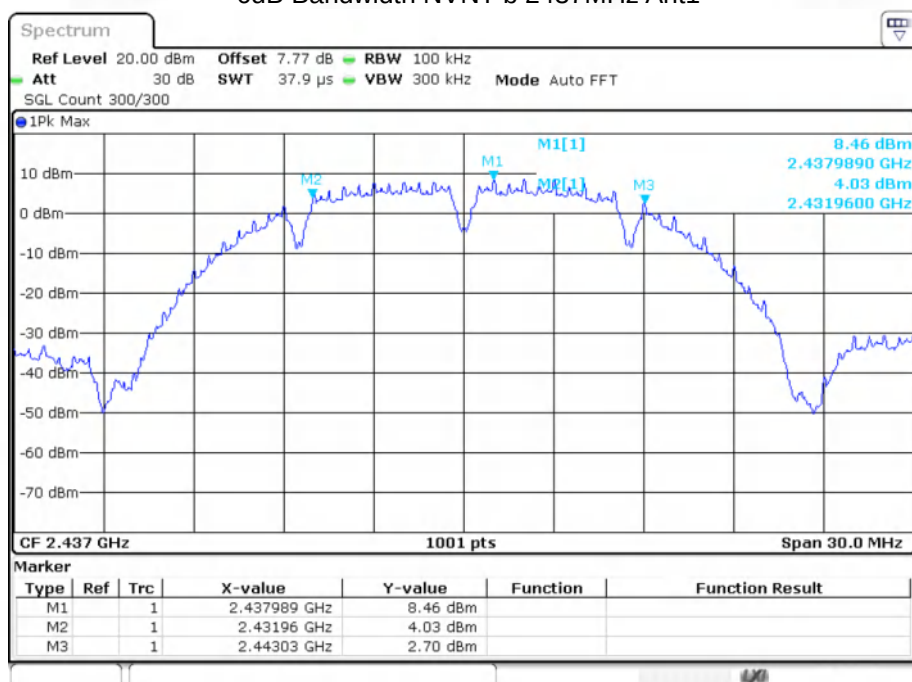
-6dB Bandwidth NVNT ax40 2452MHz Ant1



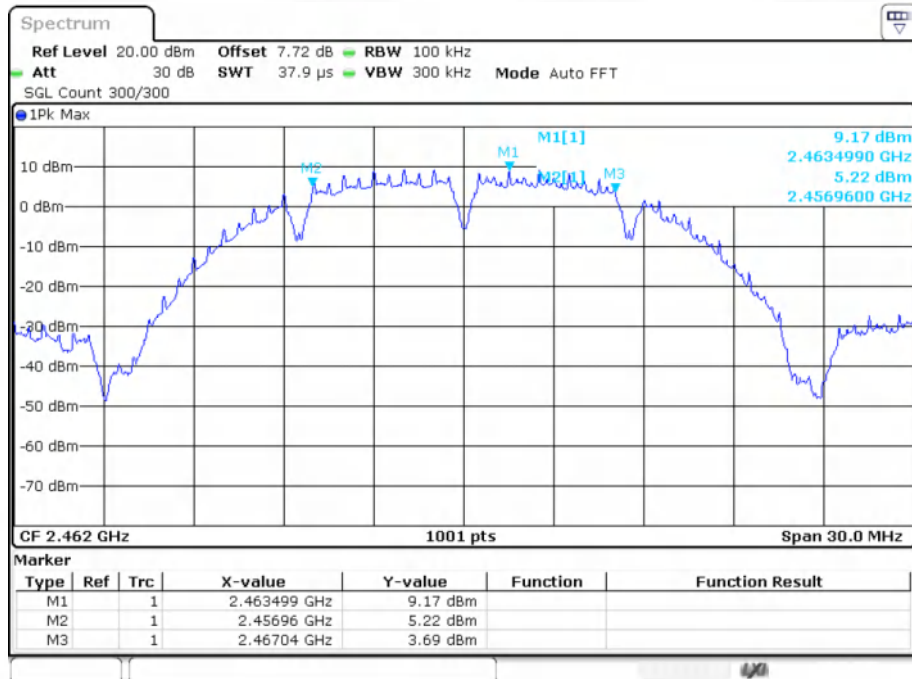
-6dB Bandwidth NVNT b 2412MHz Ant1



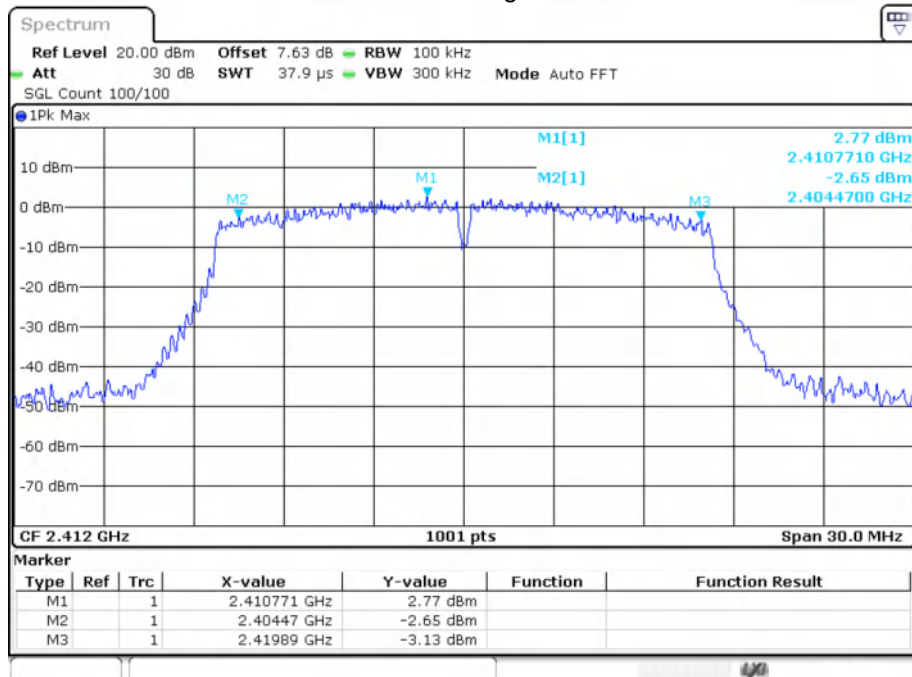
-6dB Bandwidth NVNT b 2437MHz Ant1



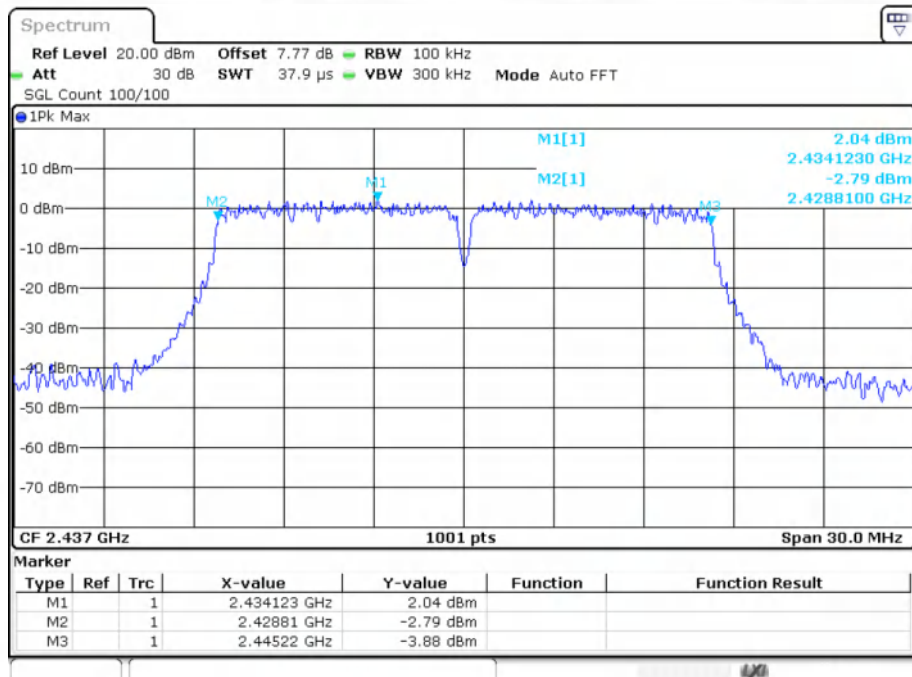
-6dB Bandwidth NVNT b 2462MHz Ant1



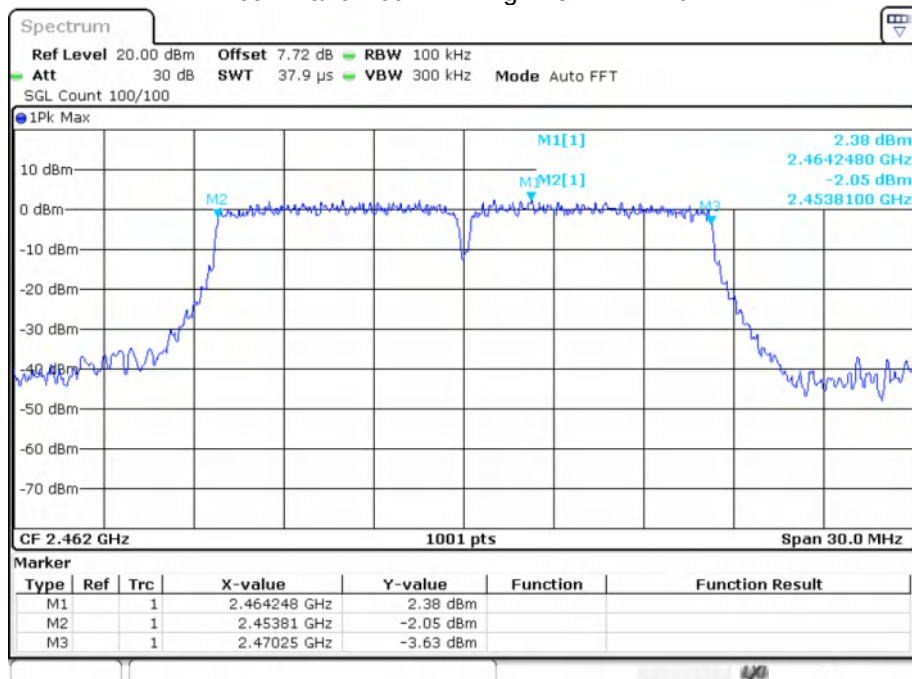
-6dB Bandwidth NVNT g 2412MHz Ant1



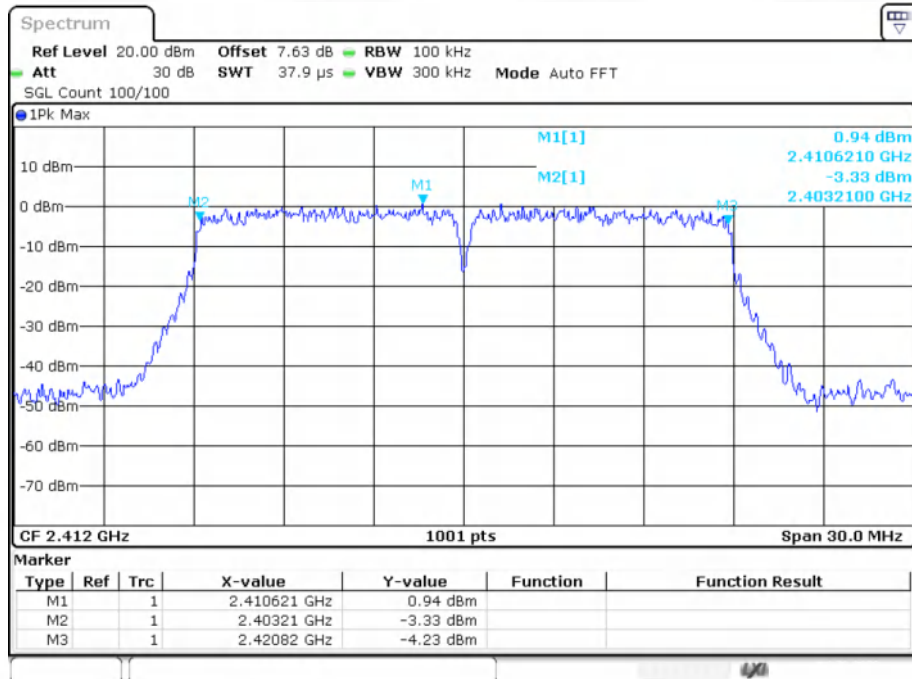
-6dB Bandwidth NVNT g 2437MHz Ant1



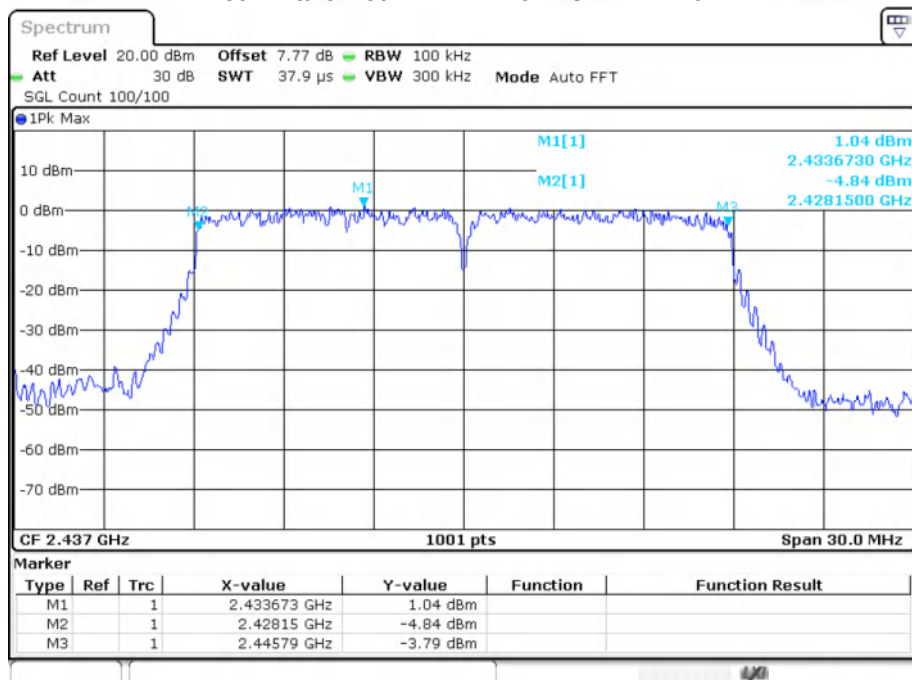
-6dB Bandwidth NVNT g 2462MHz Ant1



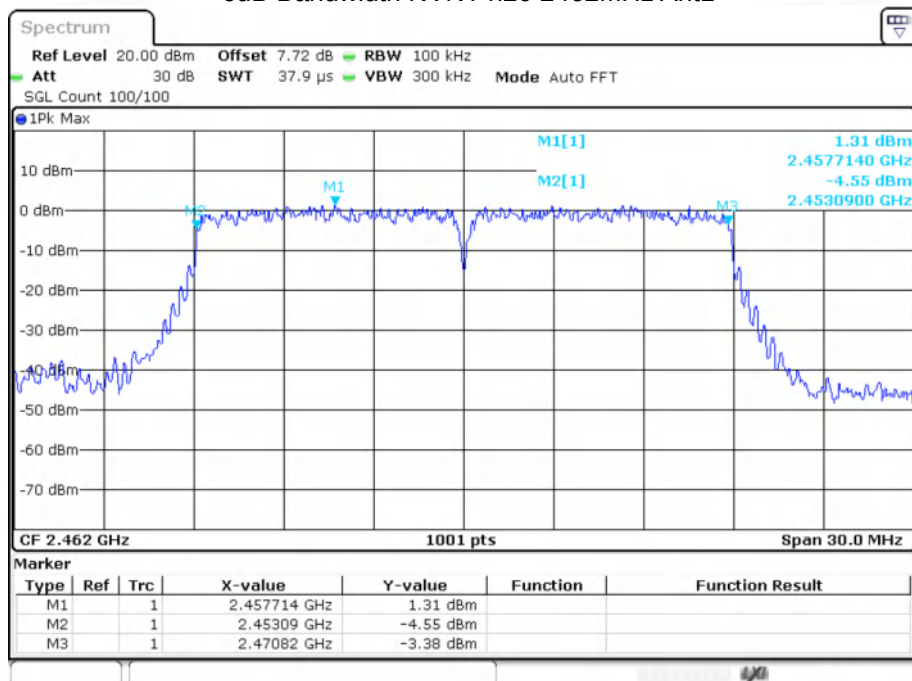
-6dB Bandwidth NVNT n20 2412MHz Ant1



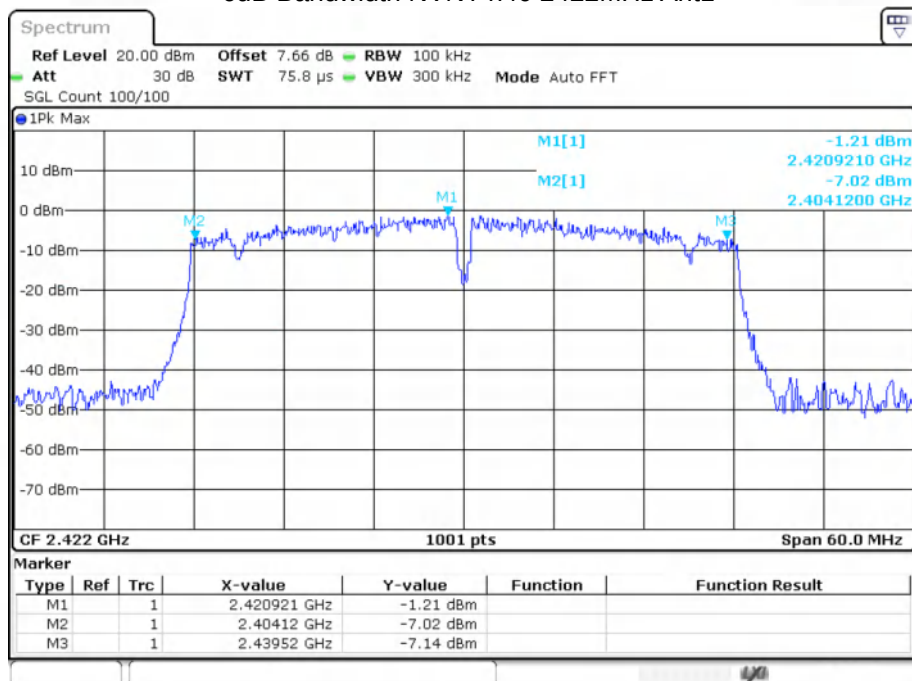
-6dB Bandwidth NVNT n20 2437MHz Ant1



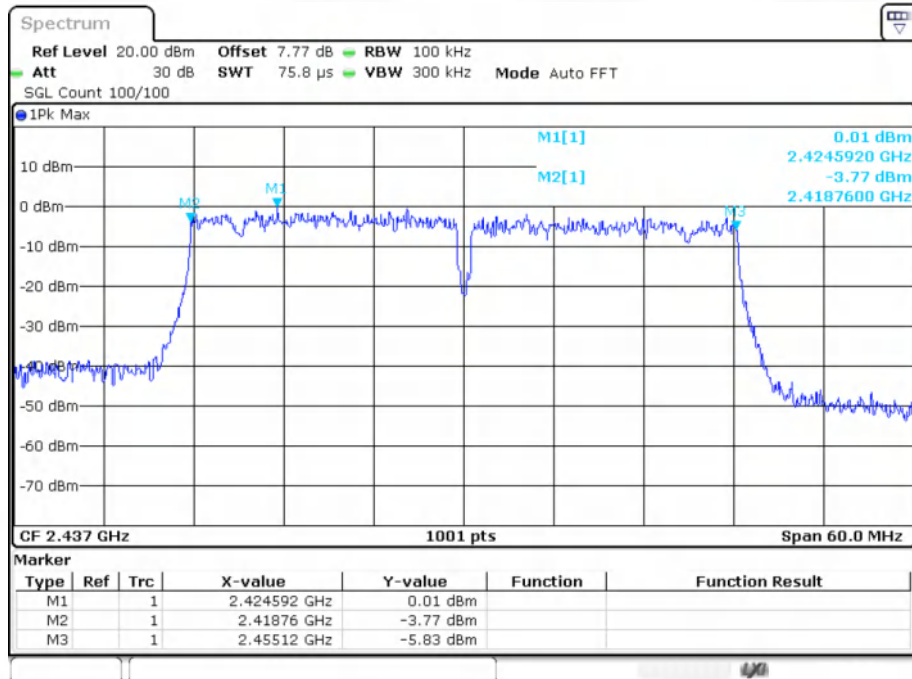
-6dB Bandwidth NVNT n20 2462MHz Ant1



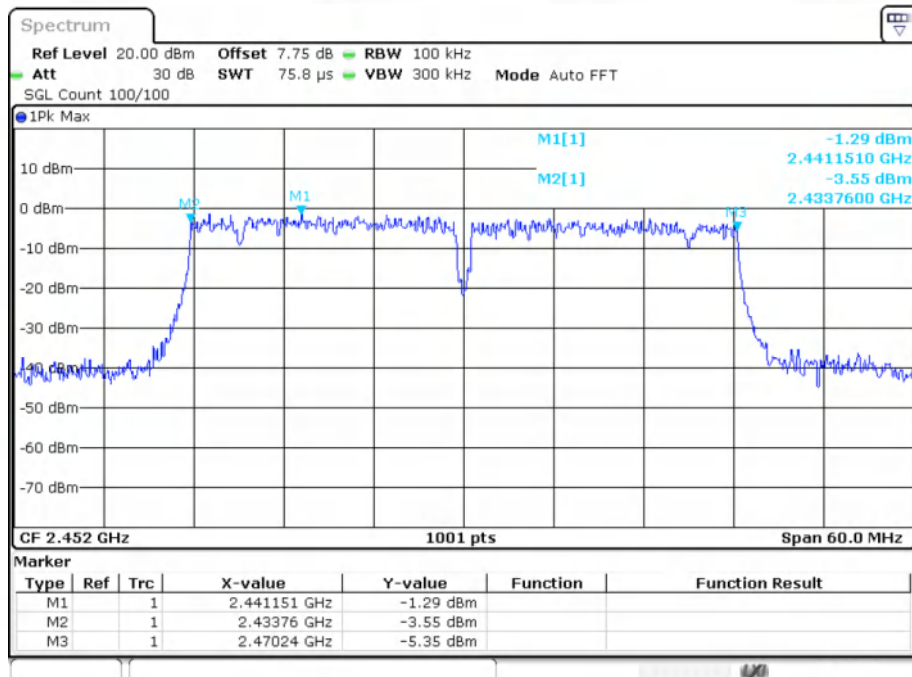
-6dB Bandwidth NVNT n40 2422MHz Ant1



-6dB Bandwidth NVNT n40 2437MHz Ant1



-6dB Bandwidth NVNT n40 2452MHz Ant1



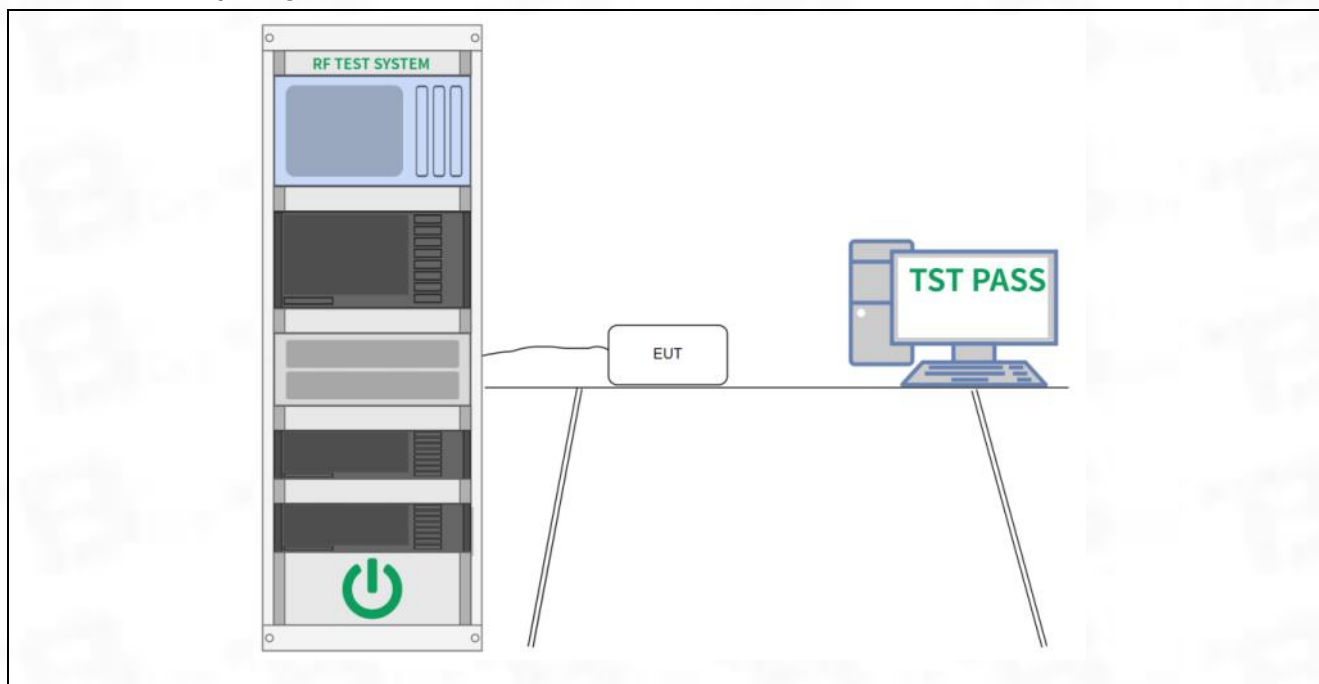
6.3 Maximum Conducted Output Power

Test Requirement:	For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
Test Method:	Maximum peak conducted output power
Test Limit:	For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
Procedure:	ANSI C63.10-2013, section 11.9.1 Maximum peak conducted output power

6.3.1 E.U.T. Operation:

Operating Environment:	
Temperature:	23.6 °C
Humidity:	52.9 %
Atmospheric Pressure:	1010 mbar

6.3.2 Test Setup Diagram:



6.3.3 Test Data:

Mode	Frequency (MHz)	Antenna	PK Output power(dBm)	Limit (dBm)	Result
IEEE 802.11b	CH1: 2412	Ant 1	19.09	30	PASS
	CH6: 2437	Ant 1	18.94	30	PASS
	CH11: 2462	Ant 1	19.56	30	PASS
IEEE 802.11g	CH1: 2412	Ant 1	18.45	30	PASS
	CH6: 2437	Ant 1	18.49	30	PASS
	CH11: 2462	Ant 1	18.90	30	PASS
IEEE 802.11n HT20	CH1: 2412	Ant 1	19.83	30	PASS
	CH6: 2437	Ant 1	19.56	30	PASS
	CH11: 2462	Ant 1	19.88	30	PASS
IEEE 802.11n HT40	CH3: 2422	Ant 1	17.75	30	PASS
	CH6: 2437	Ant 1	18.11	30	PASS
	CH9: 2452	Ant 1	18.44	30	PASS
IEEE 802.11ax20	CH1: 2412	Ant 1	15.88	30	PASS
	CH6: 2437	Ant 1	16.42	30	PASS
	CH11: 2462	Ant 1	16.66	30	PASS
IEEE 802.11ax40	CH3: 2422	Ant 1	16.11	30	PASS
	CH6: 2437	Ant 1	16.19	30	PASS
	CH9: 2452	Ant 1	15.36	30	PASS

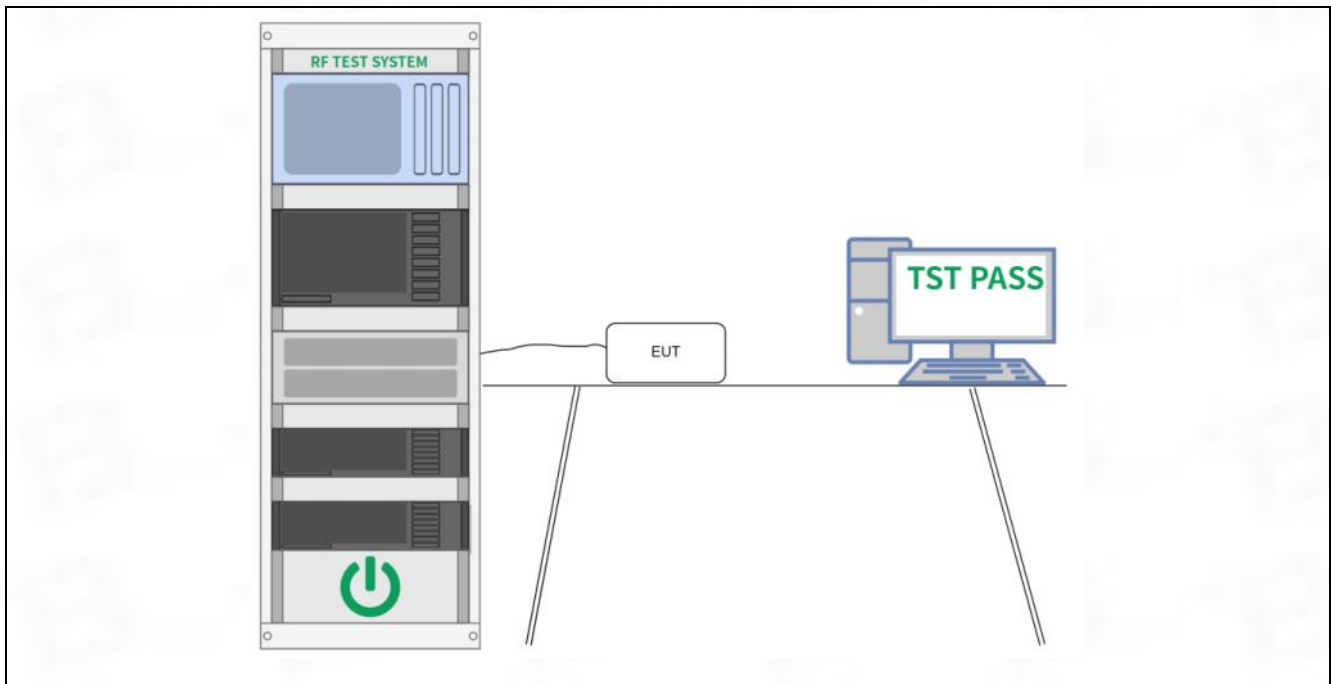
6.4 Power Spectral Density

Test Requirement:	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.
Test Method:	Maximum power spectral density level in the fundamental emission
Test Limit:	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

6.4.1 E.U.T. Operation:

Operating Environment:	
Temperature:	23.6 °C
Humidity:	52.9 %
Atmospheric Pressure:	1010 mbar

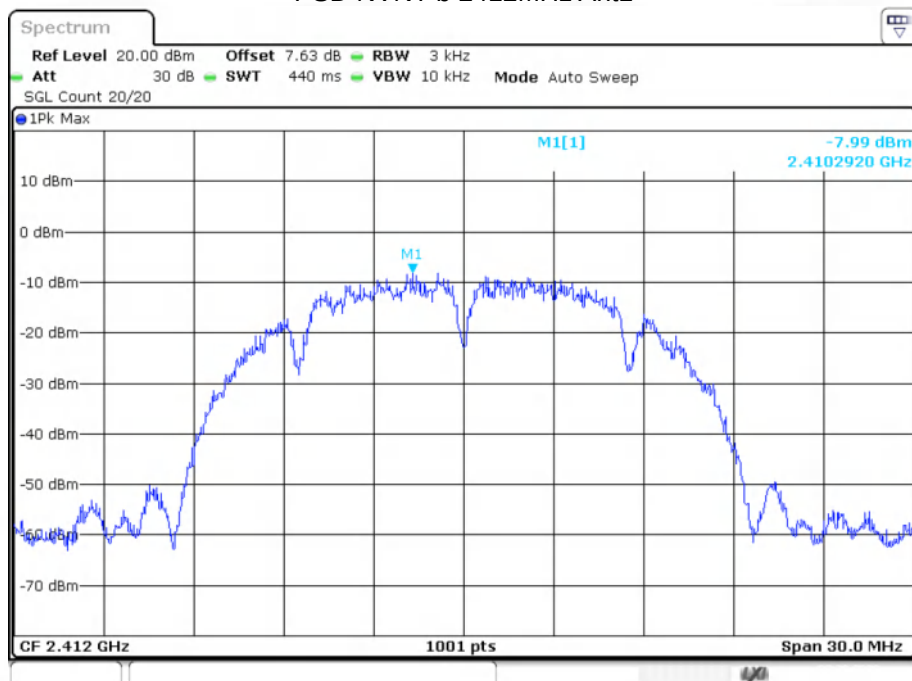
6.4.2 Test Setup Diagram:



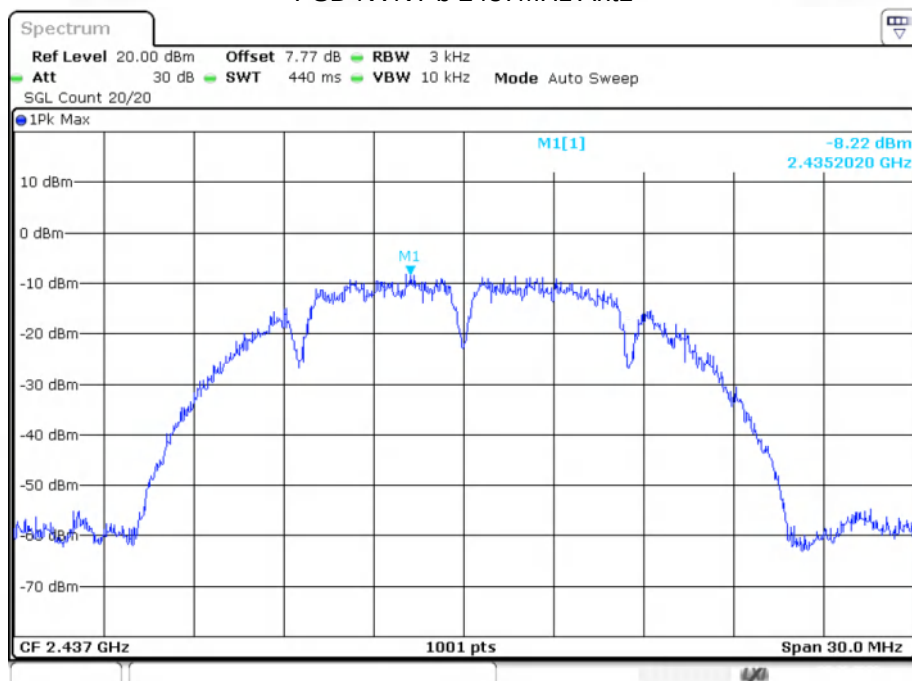
6.4.3 Test Data:

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-7.987	8	Pass
NVNT	b	2437	Ant1	-8.218	8	Pass
NVNT	b	2462	Ant1	-7.076	8	Pass
NVNT	g	2412	Ant1	-15.091	8	Pass
NVNT	g	2437	Ant1	-16.537	8	Pass
NVNT	g	2462	Ant1	-16.097	8	Pass
NVNT	n20	2412	Ant 1	-13.707	8	Pass
NVNT	n20	2437	Ant 1	-16.259	8	Pass
NVNT	n20	2462	Ant 1	-15.384	8	Pass
NVNT	n40	2422	Ant 1	-19.729	8	Pass
NVNT	n40	2437	Ant 1	-21.349	8	Pass
NVNT	n40	2452	Ant 1	-21.036	8	Pass
NVNT	ax20	2412	Ant 1	-1.895	8	Pass
NVNT	ax20	2437	Ant 1	-3.729	8	Pass
NVNT	ax20	2462	Ant 1	-3.284	8	Pass
NVNT	ax40	2422	Ant 1	-5.971	8	Pass
NVNT	ax40	2437	Ant 1	-6.74	8	Pass
NVNT	ax40	2452	Ant 1	-7.414	8	Pass

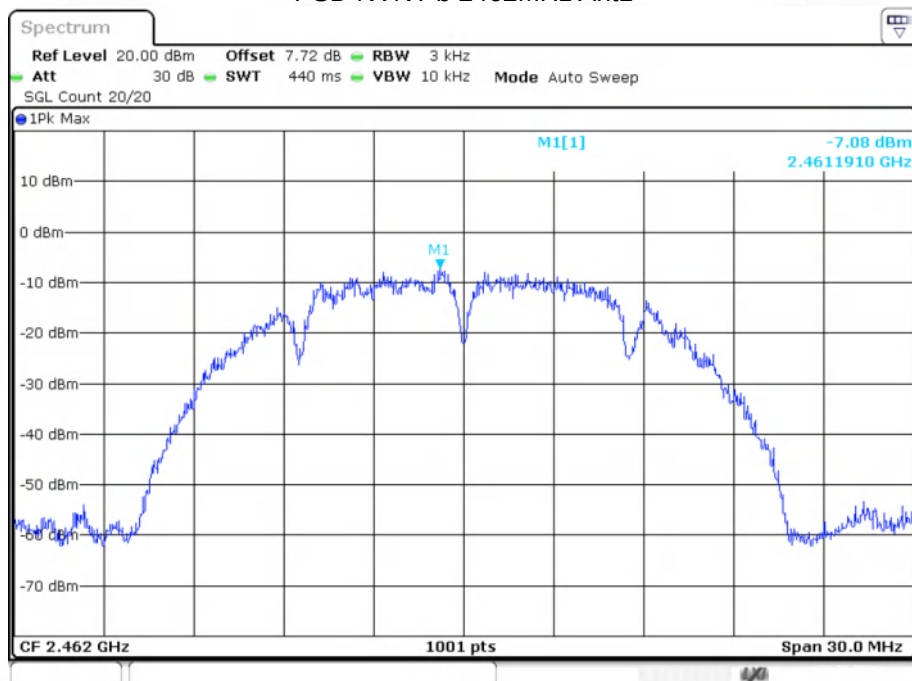
PSD NVNT b 2412MHz Ant1



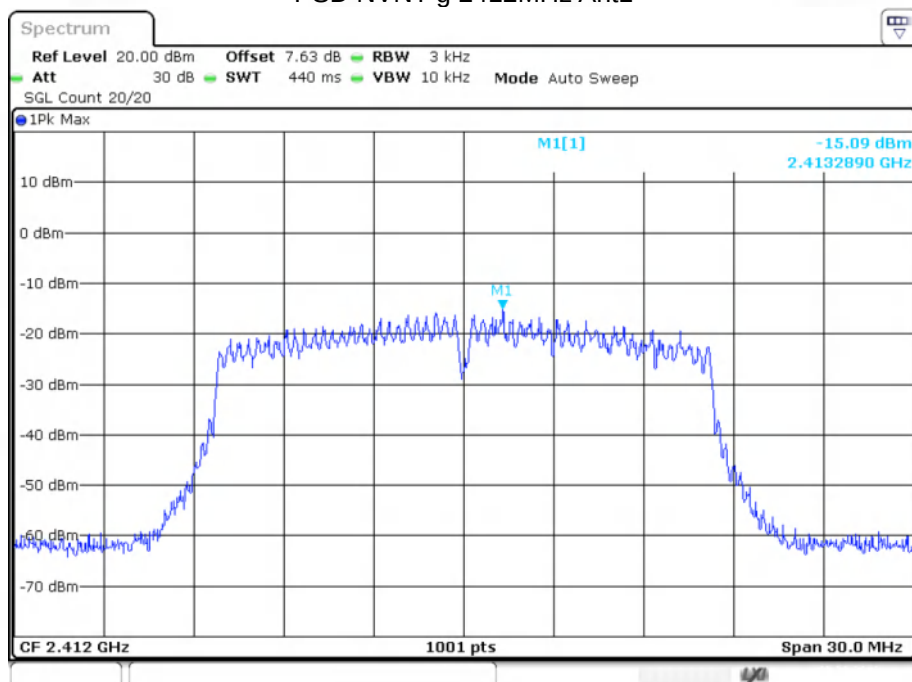
PSD NVNT b 2437MHz Ant1



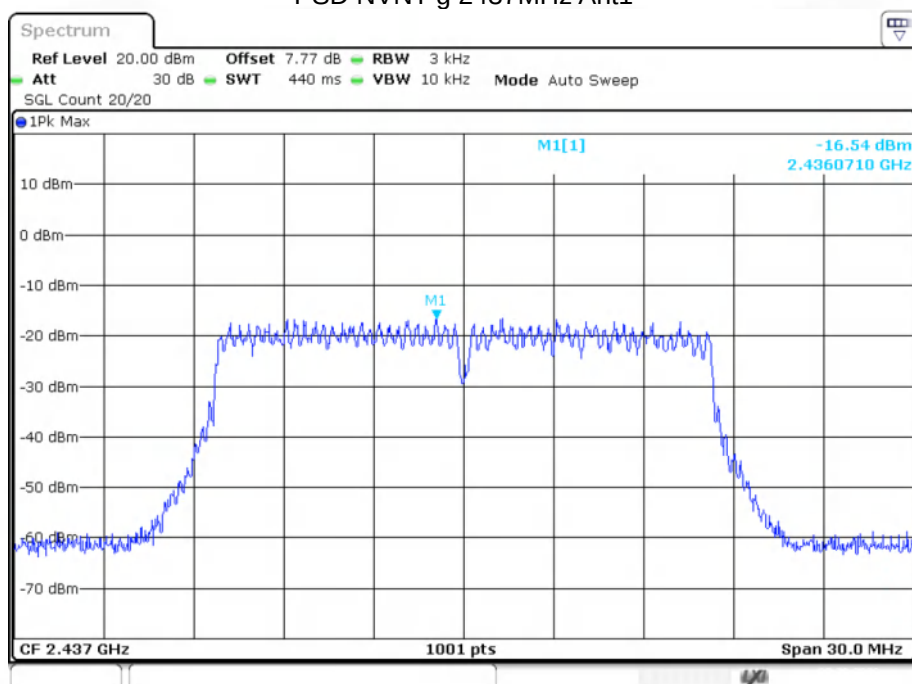
PSD NVNT b 2462MHz Ant1



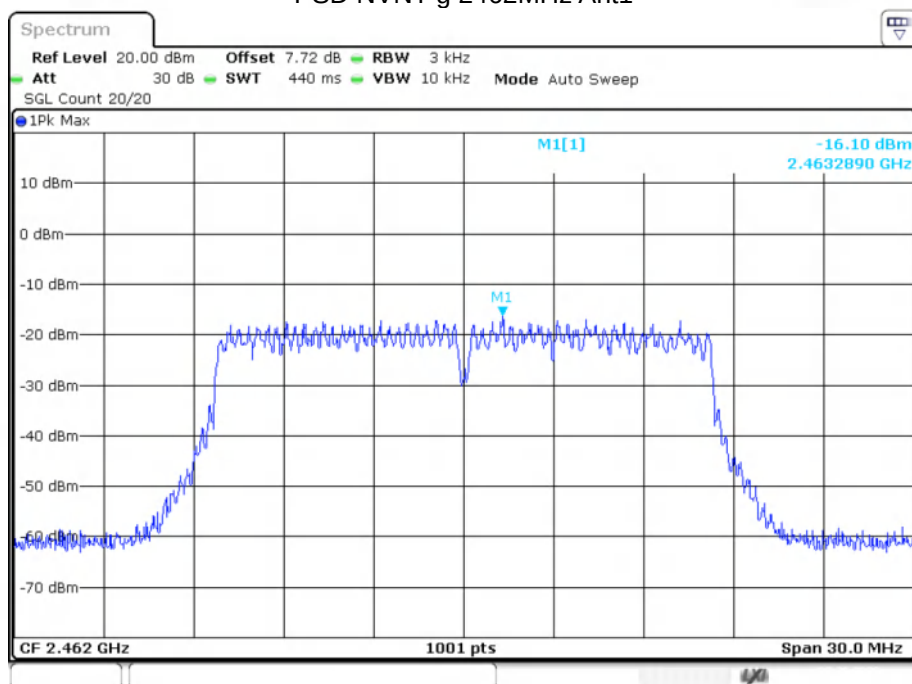
PSD NVNT g 2412MHz Ant1



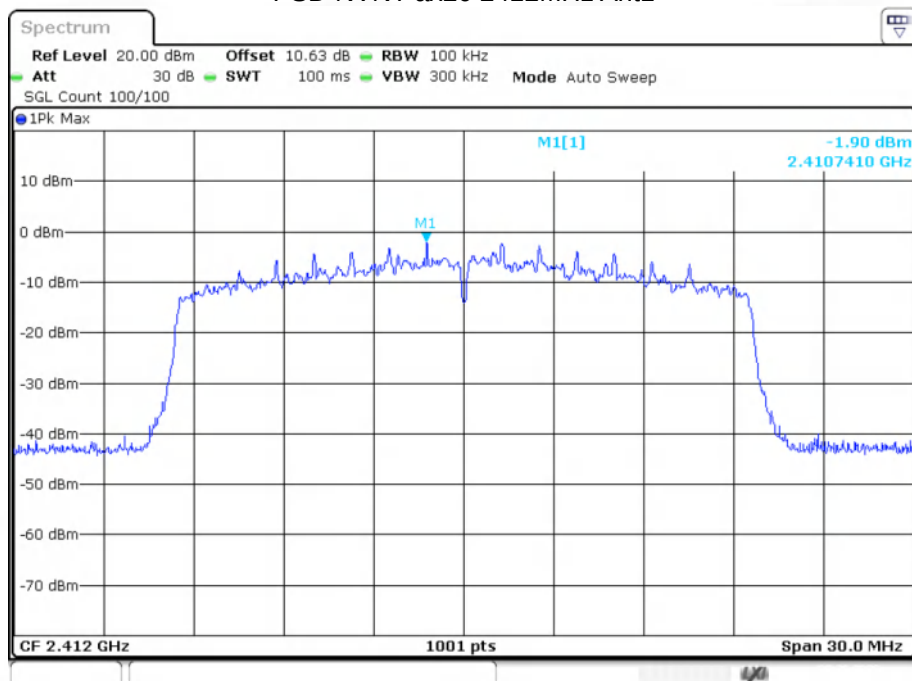
PSD NVNT g 2437MHz Ant1



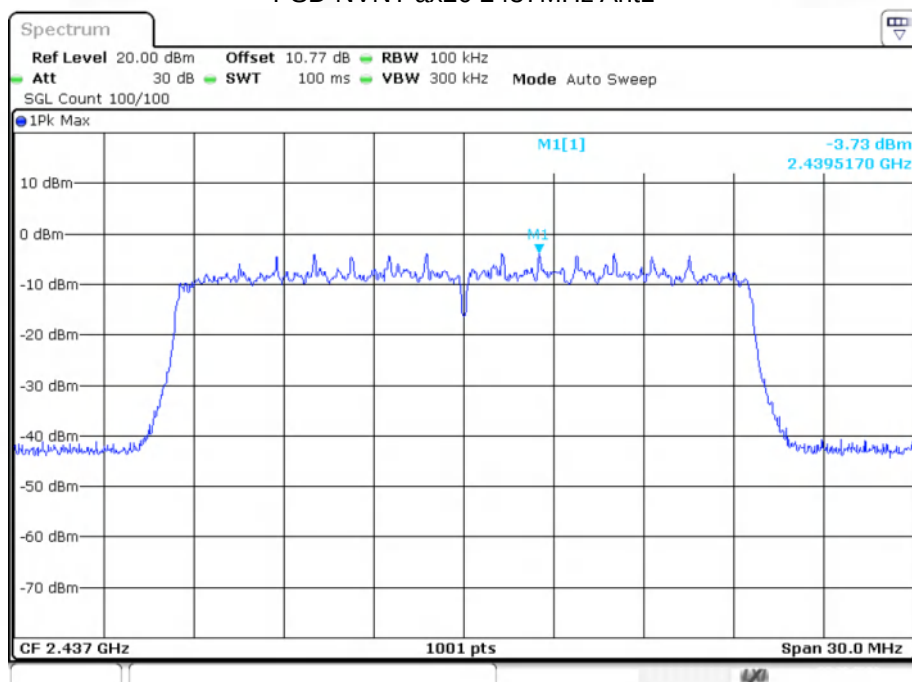
PSD NVNT g 2462MHz Ant1



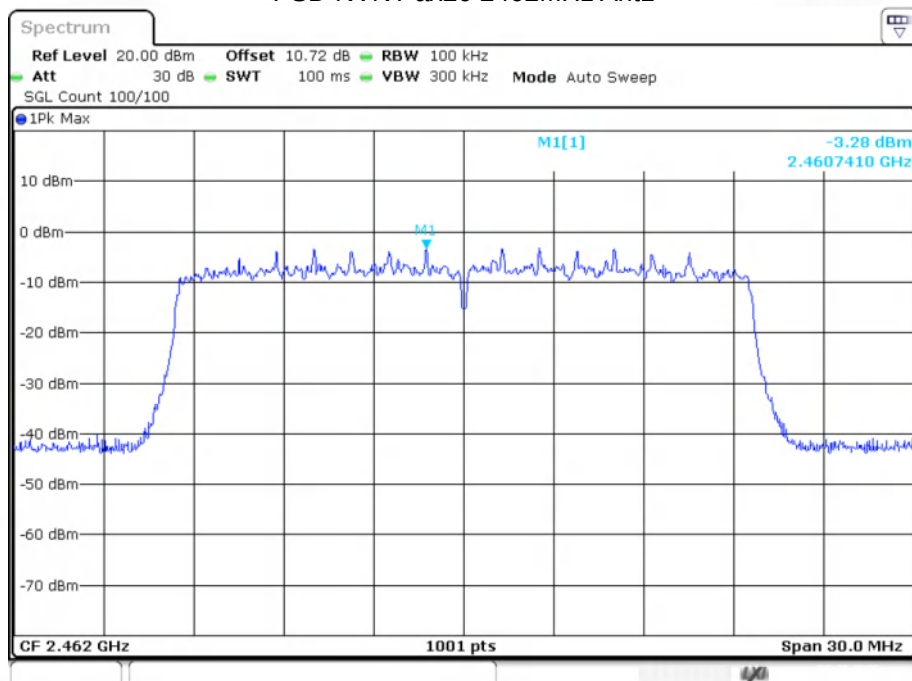
PSD NVNT ax20 2412MHz Ant1



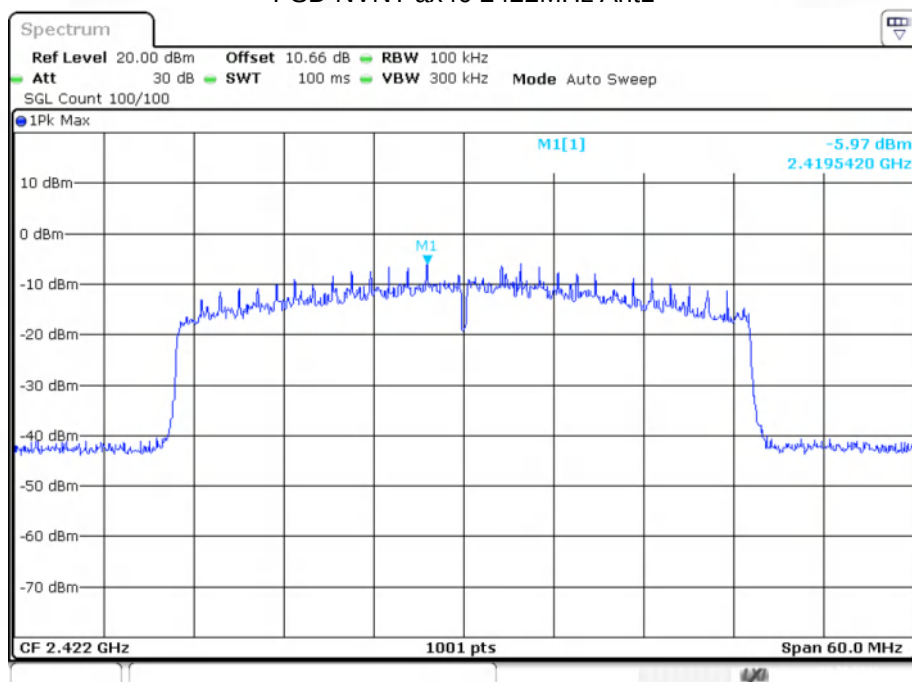
PSD NVNT ax20 2437MHz Ant1



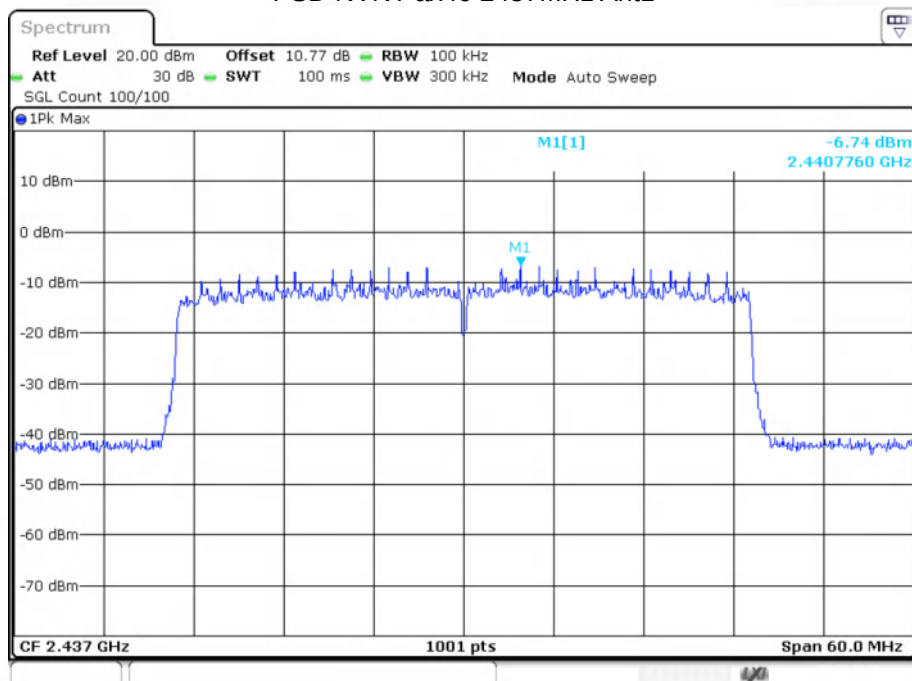
PSD NVNT ax20 2462MHz Ant1



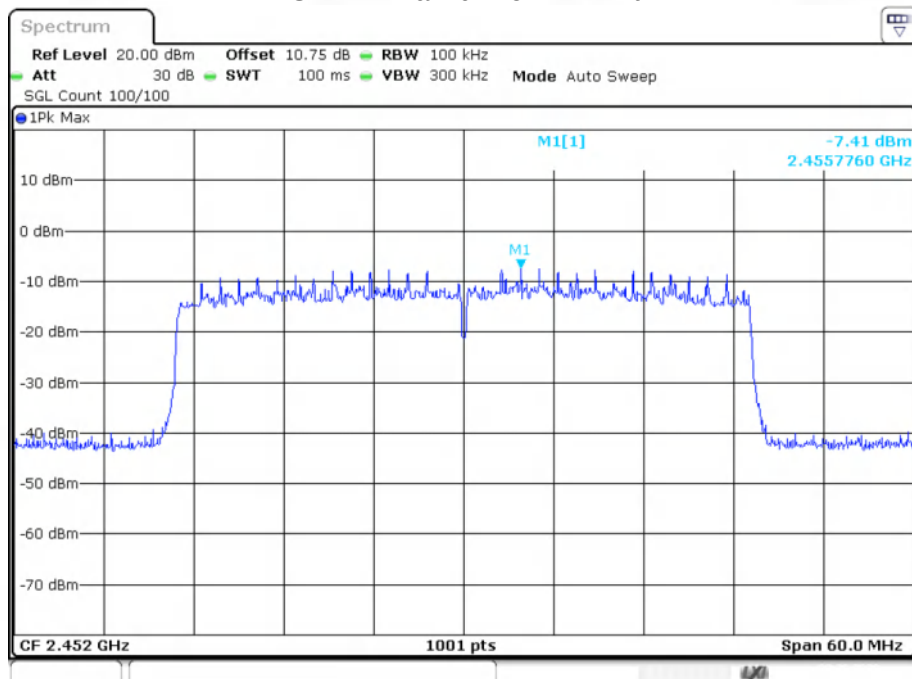
PSD NVNT ax40 2422MHz Ant1



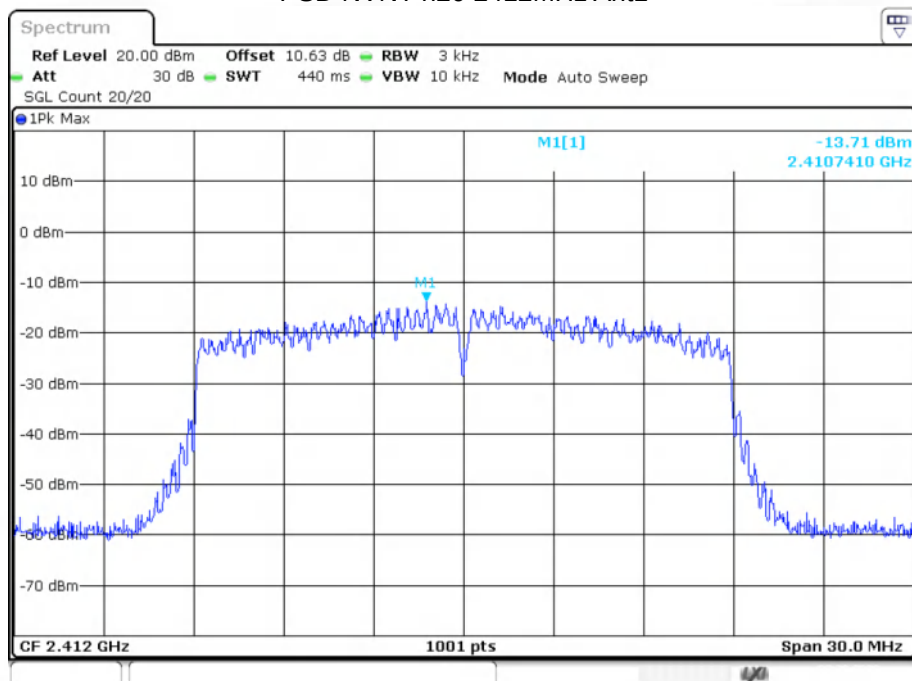
PSD NVNT ax40 2437MHz Ant1



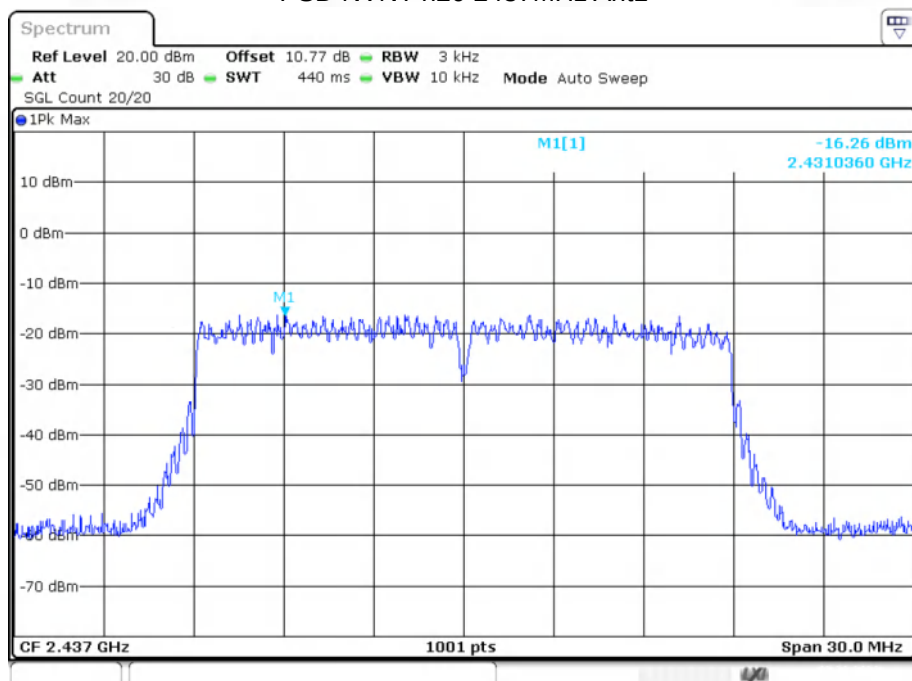
PSD NVNT ax40 2452MHz Ant1



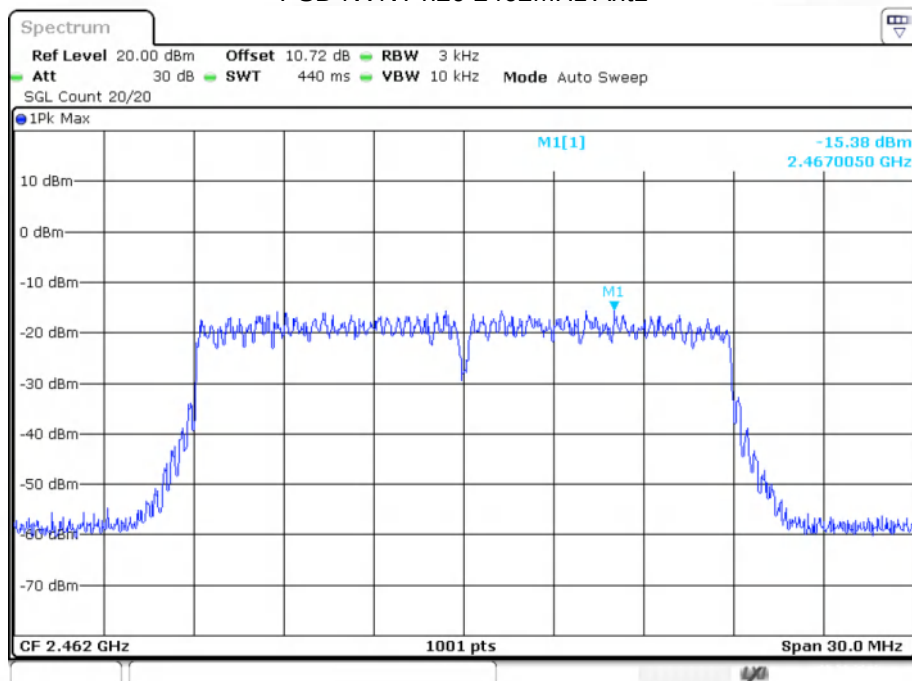
PSD NVNT n20 2412MHz Ant1



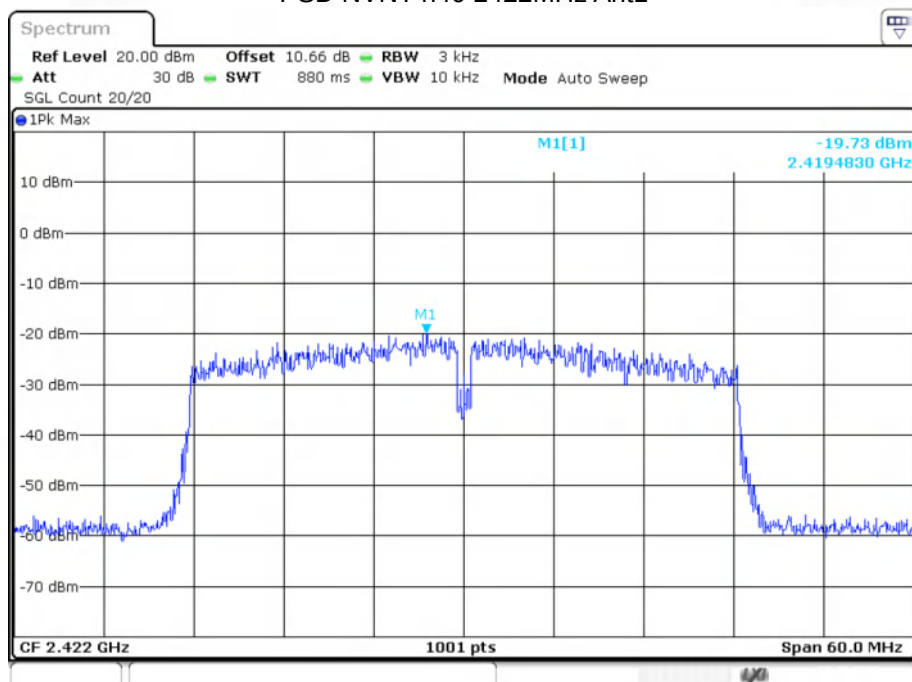
PSD NVNT n20 2437MHz Ant1



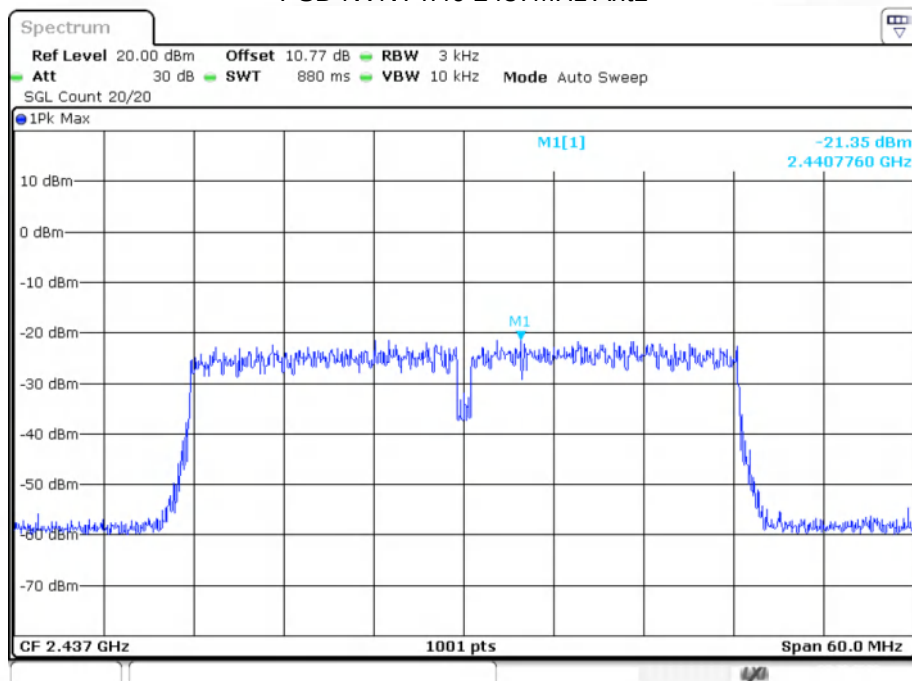
PSD NVNT n20 2462MHz Ant1



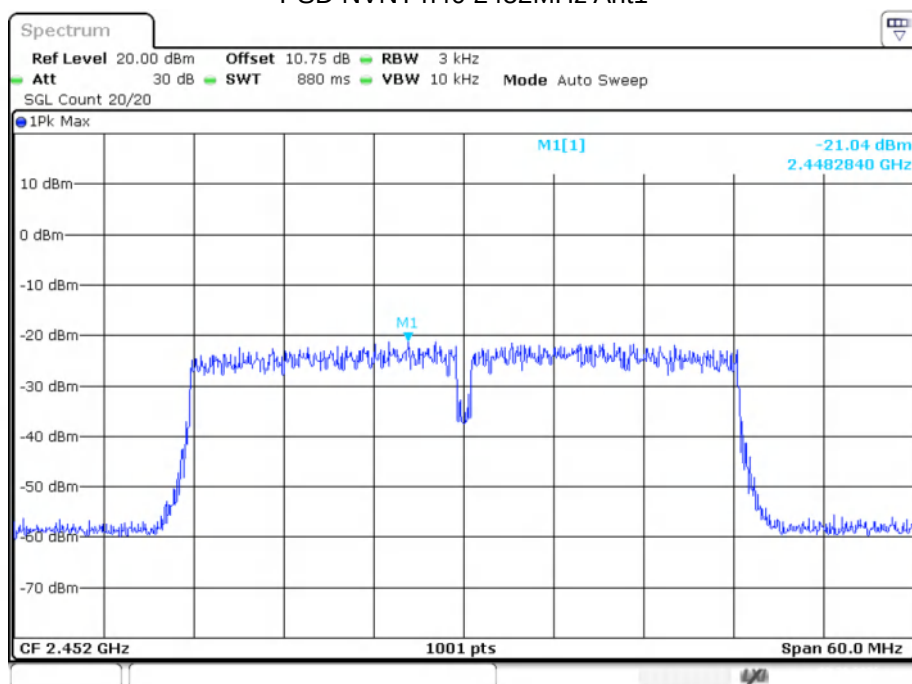
PSD NVNT n40 2422MHz Ant1



PSD NVNT n40 2437MHz Ant1



PSD NVNT n40 2452MHz Ant1



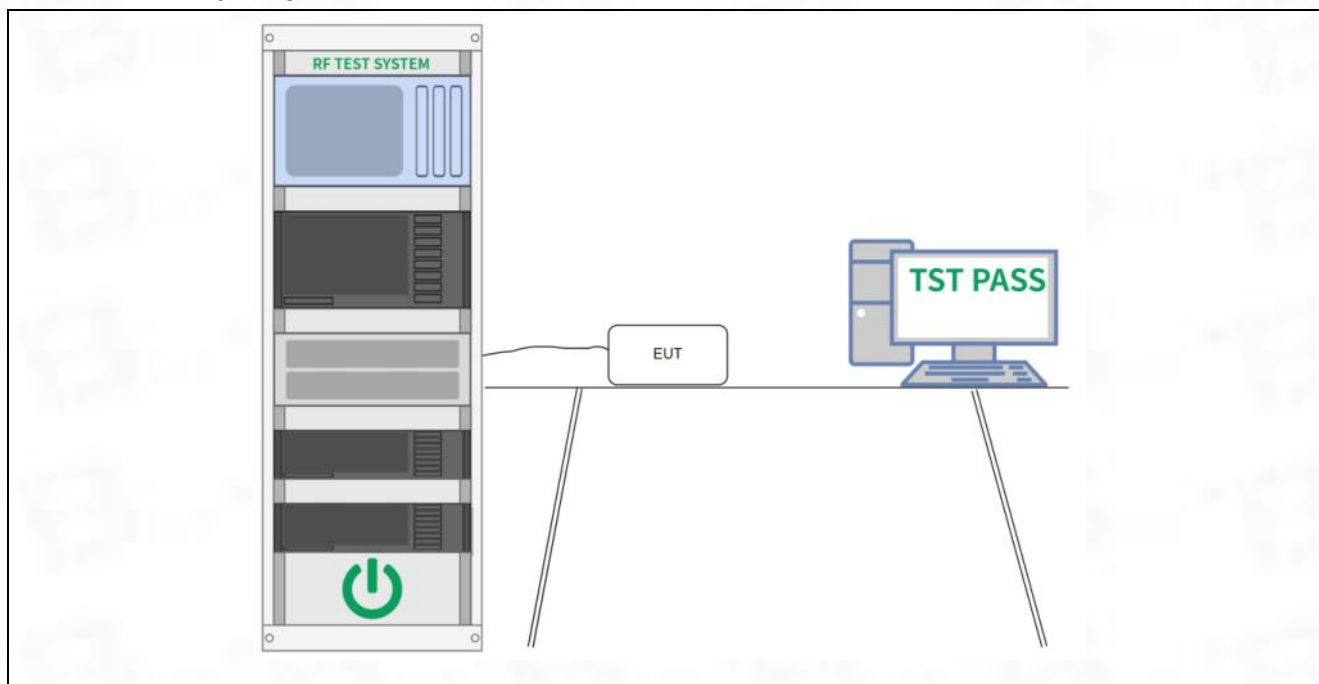
6.5 Emissions in non-restricted frequency bands

Test Requirement:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.
Test Method:	Emissions in nonrestricted frequency bands
Test Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.
Procedure:	ANSI C63.10-2013 Section 11.11.1, Section 11.11.2, Section 11.11.3

6.5.1 E.U.T. Operation:

Operating Environment:	
Temperature:	23.6 °C
Humidity:	52.9 %
Atmospheric Pressure:	1010 mbar

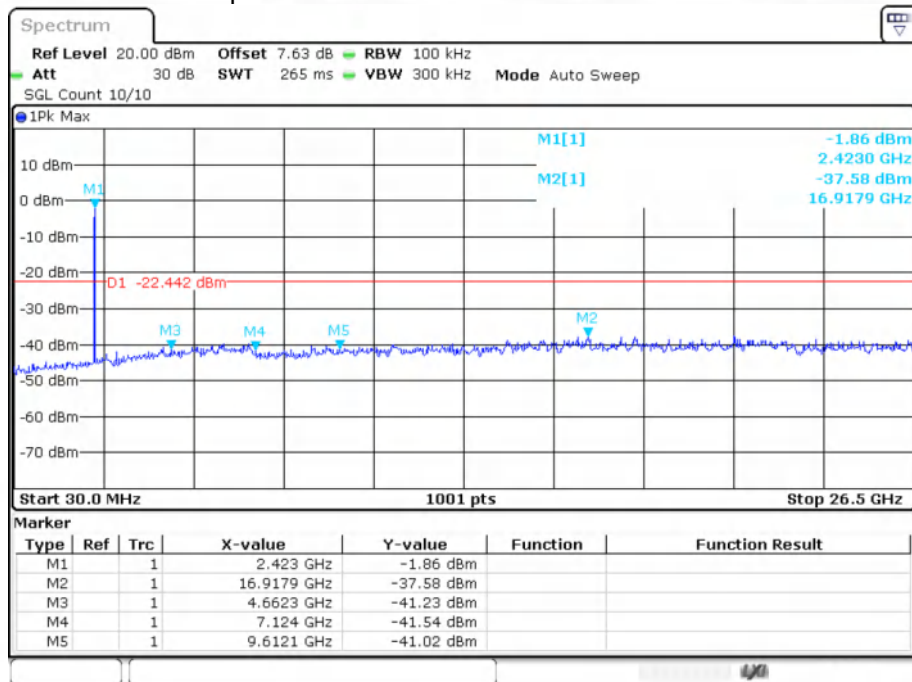
6.5.2 Test Setup Diagram:



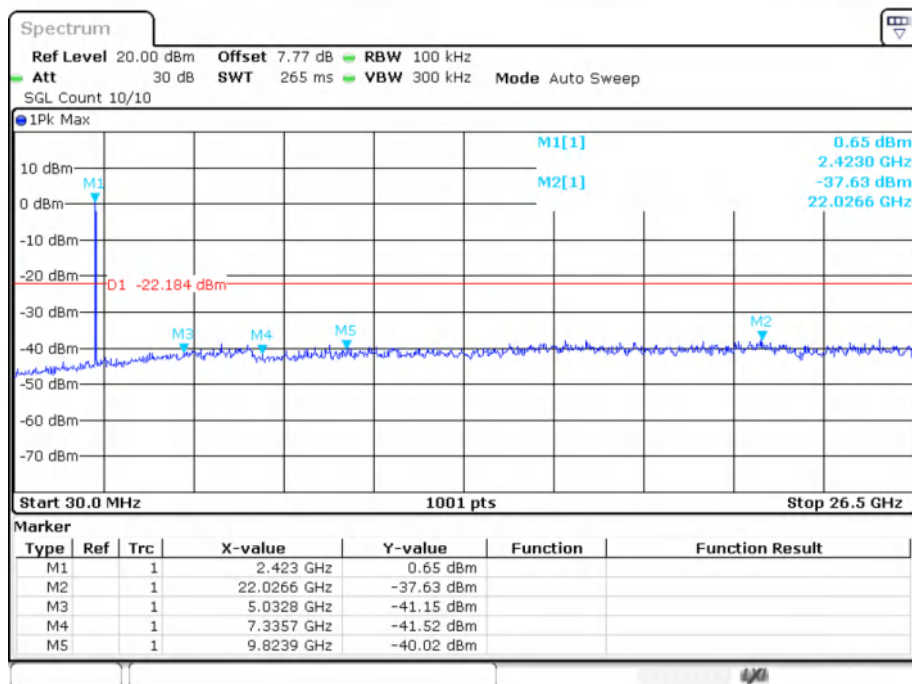
6.5.3 Test Data:

Conducted RF Spurious Emission

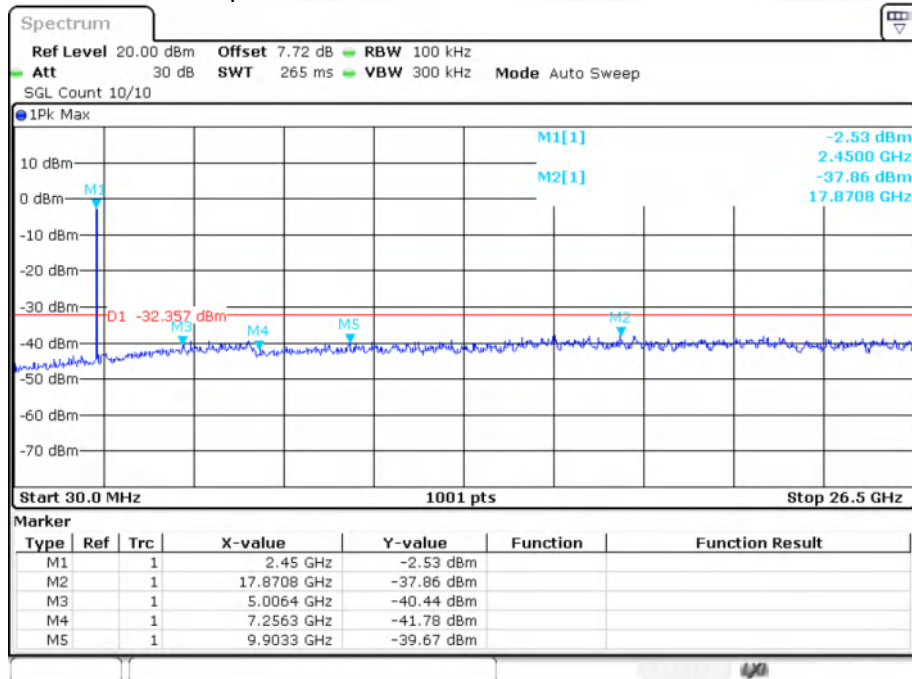
Tx. Spurious NVNT ax20 2412MHz Ant1 Emission



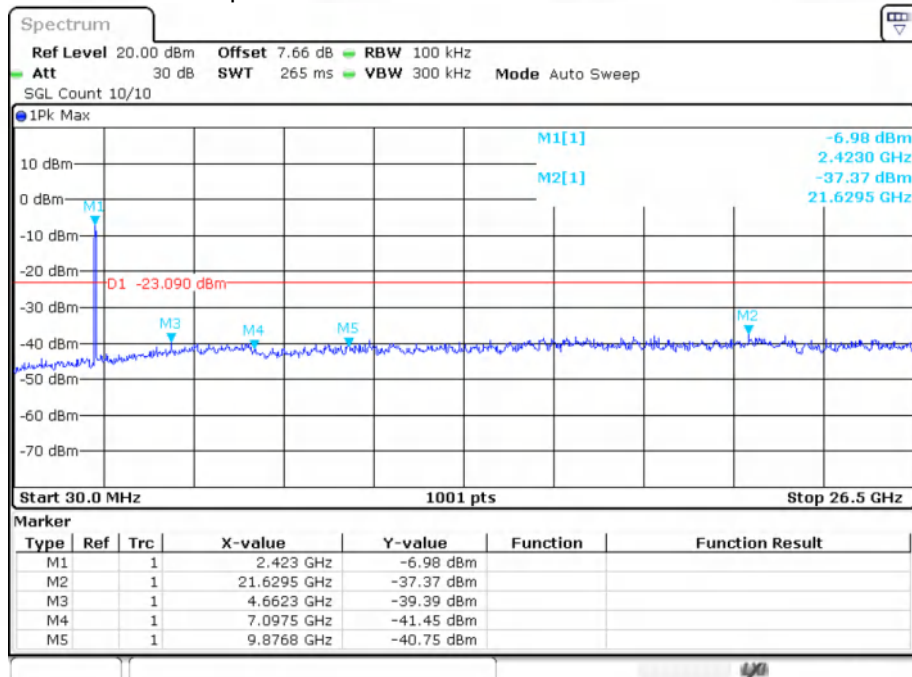
Tx. Spurious NVNT ax20 2437MHz Ant1 Emission



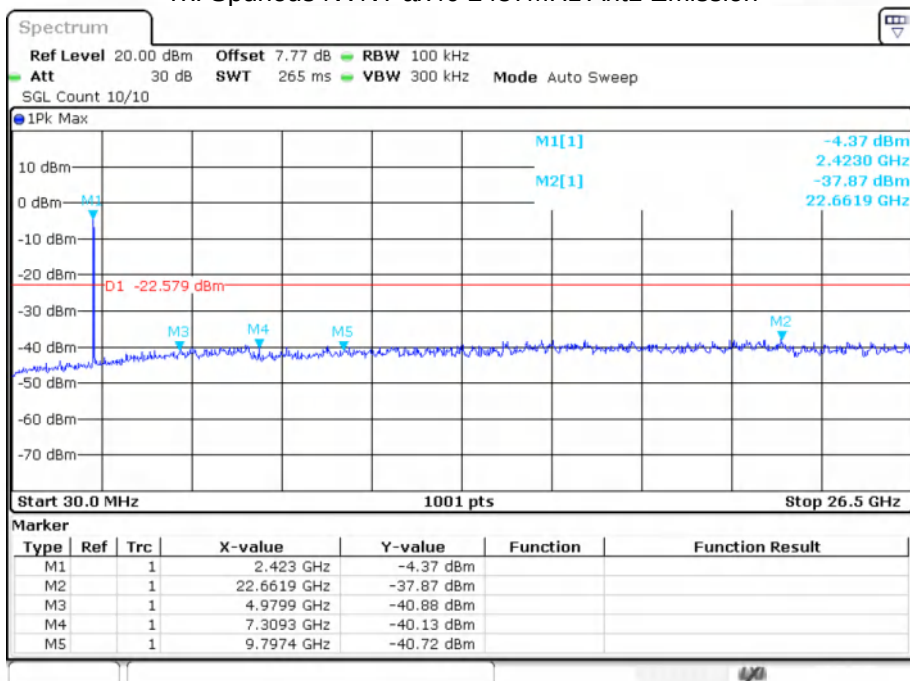
Tx. Spurious NVNT ax20 2462MHz Ant1 Emission



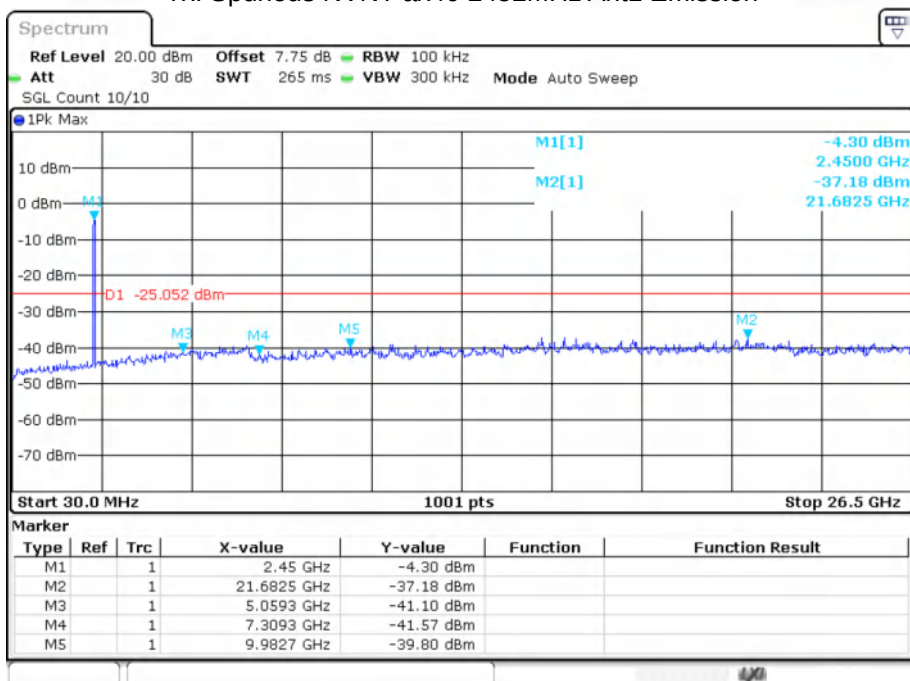
Tx. Spurious NVNT ax40 2422MHz Ant1 Emission



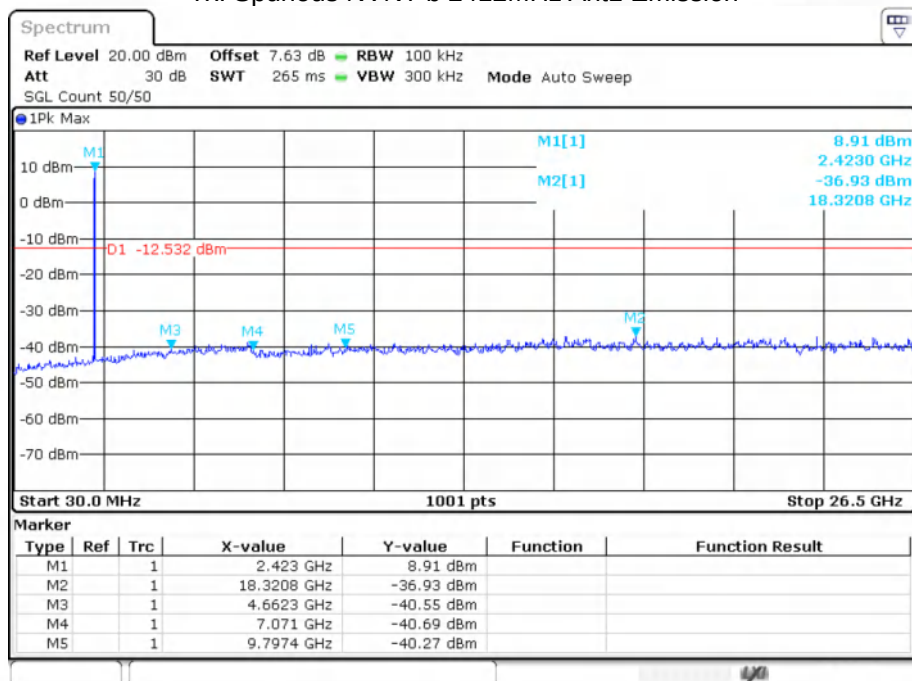
Tx. Spurious NVNT ax40 2437MHz Ant1 Emission



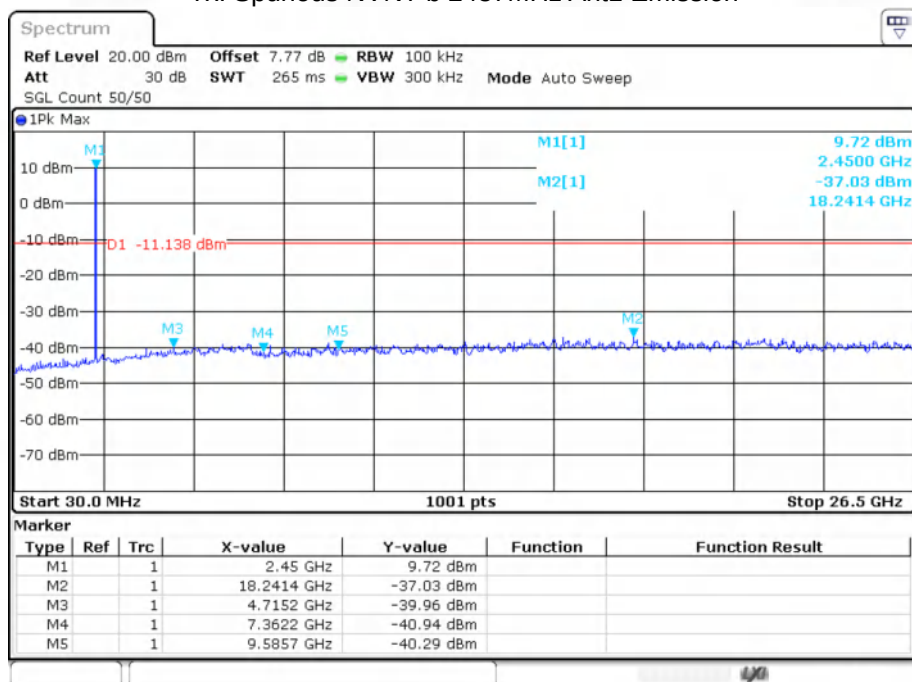
Tx. Spurious NVNT ax40 2452MHz Ant1 Emission



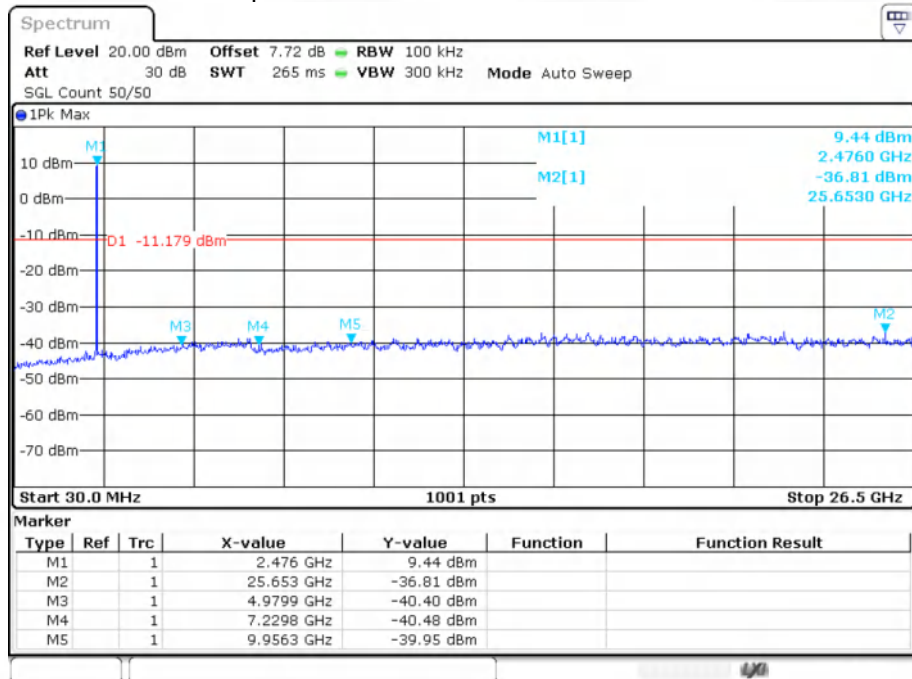
Tx. Spurious NVNT b 2412MHz Ant1 Emission



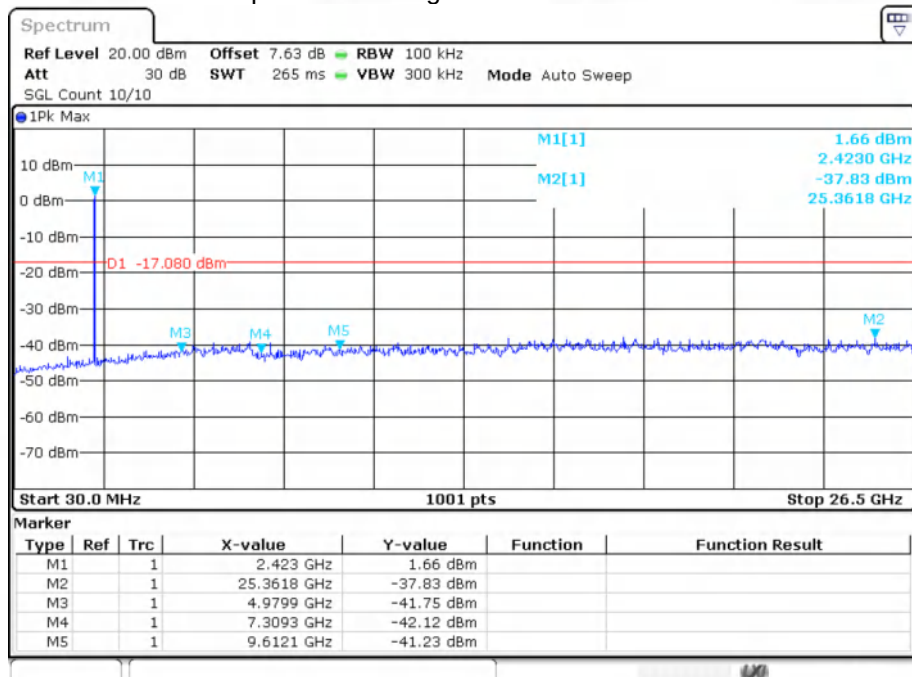
Tx. Spurious NVNT b 2437MHz Ant1 Emission



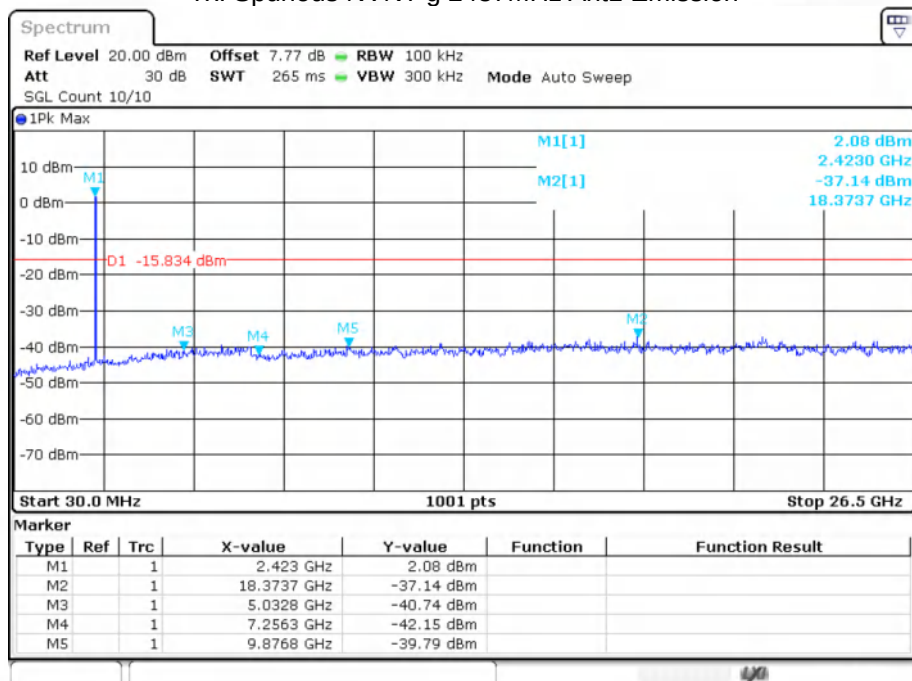
Tx. Spurious NVNT b 2462MHz Ant1 Emission



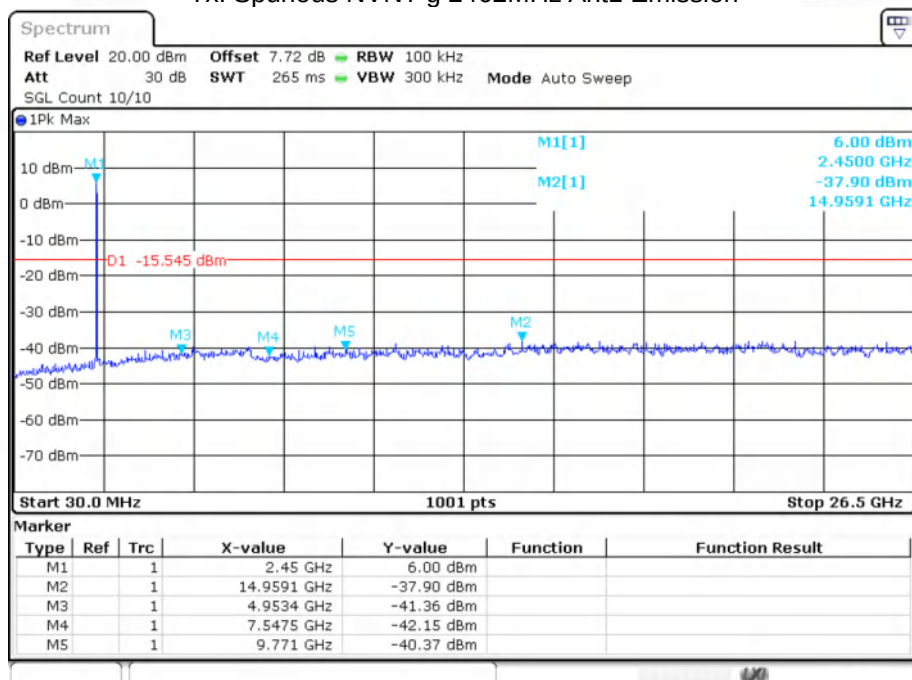
Tx. Spurious NVNT g 2412MHz Ant1 Emission



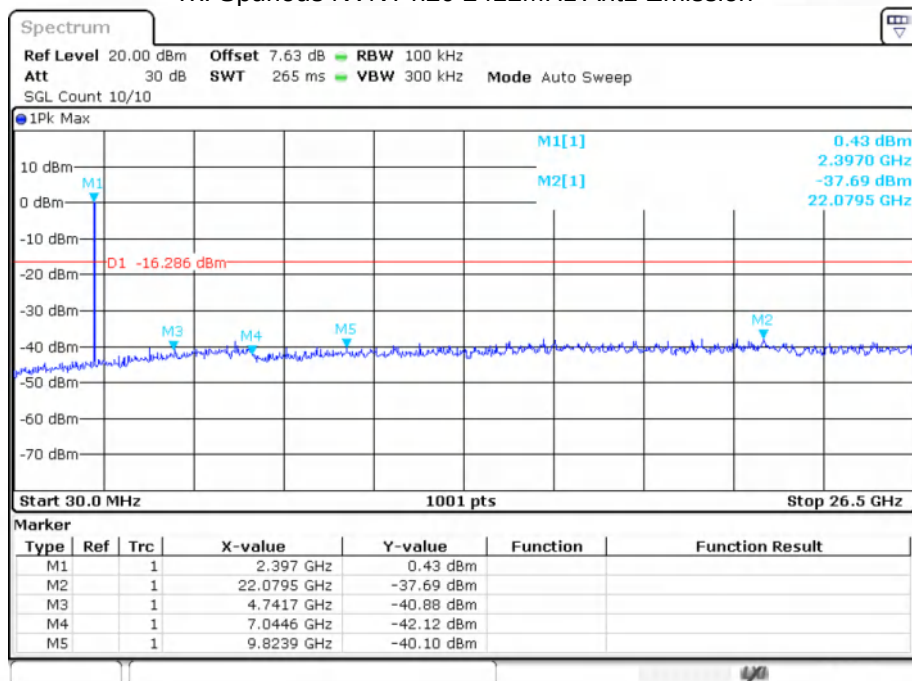
Tx. Spurious NVNT g 2437MHz Ant1 Emission



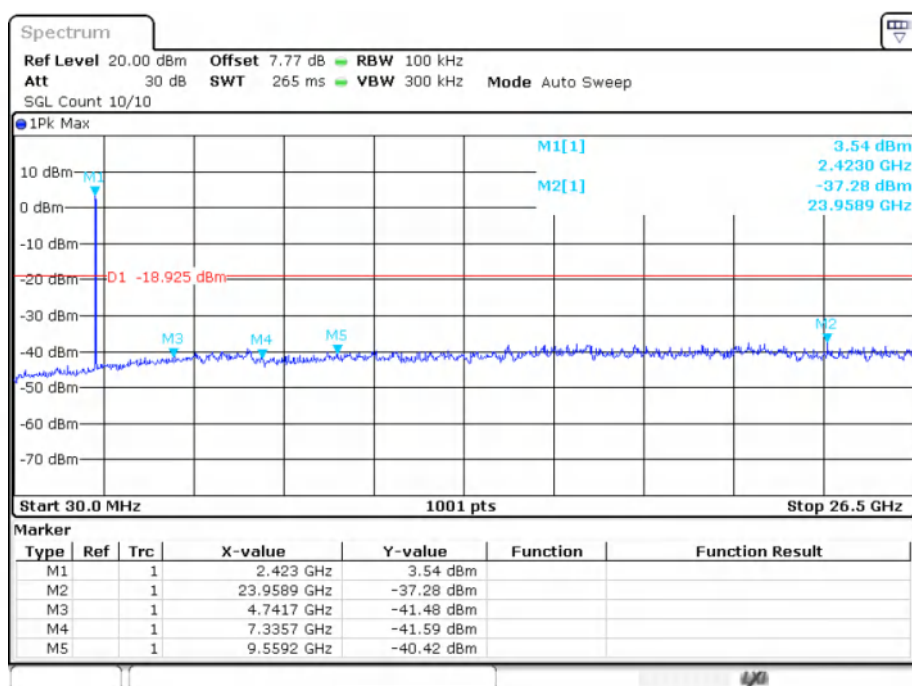
Tx. Spurious NVNT g 2462MHz Ant1 Emission



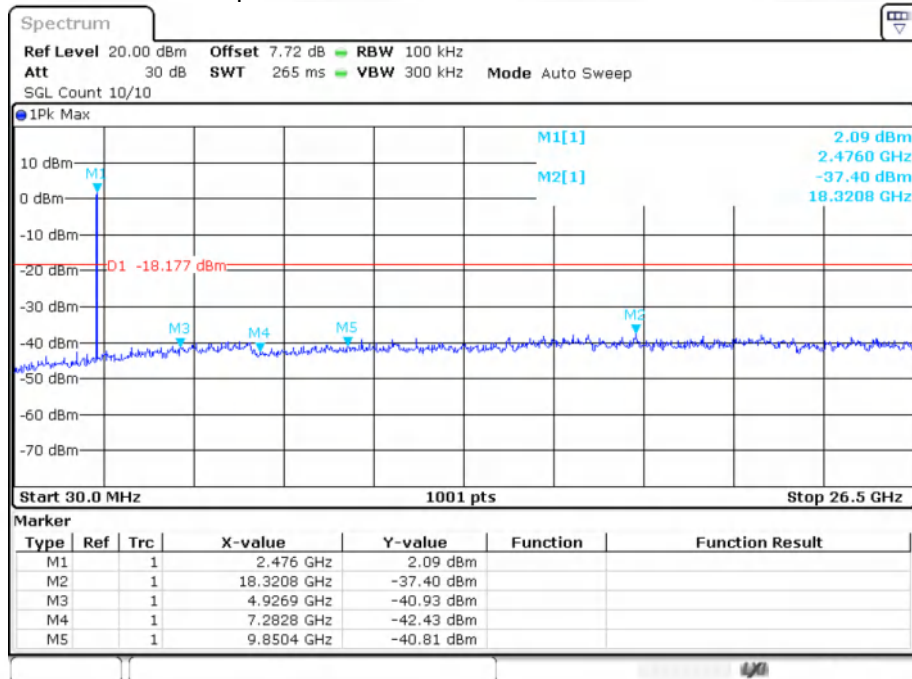
Tx. Spurious NVNT n20 2412MHz Ant1 Emission



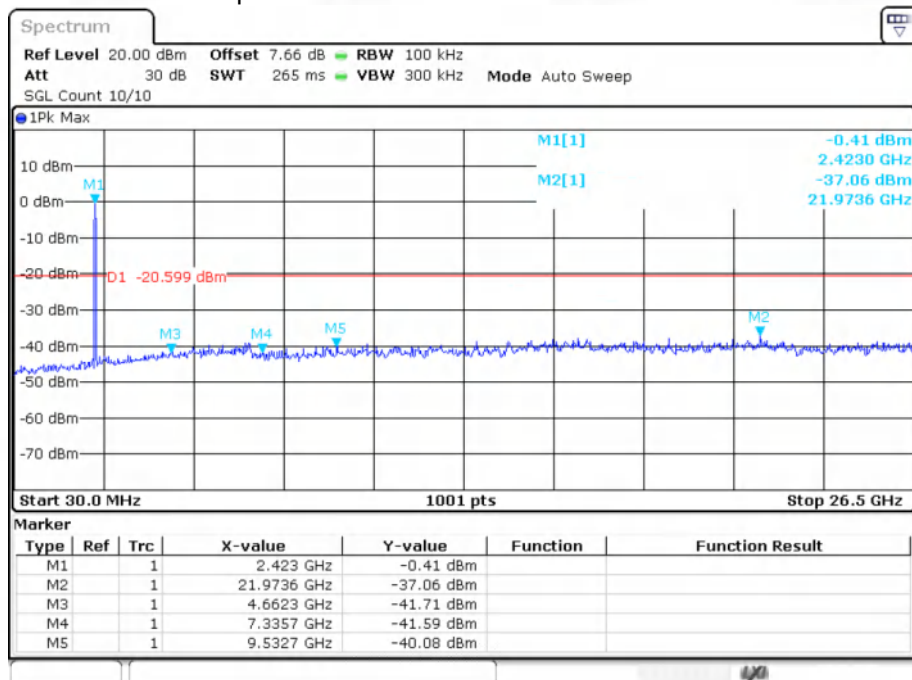
Tx. Spurious NVNT n20 2437MHz Ant1 Emission



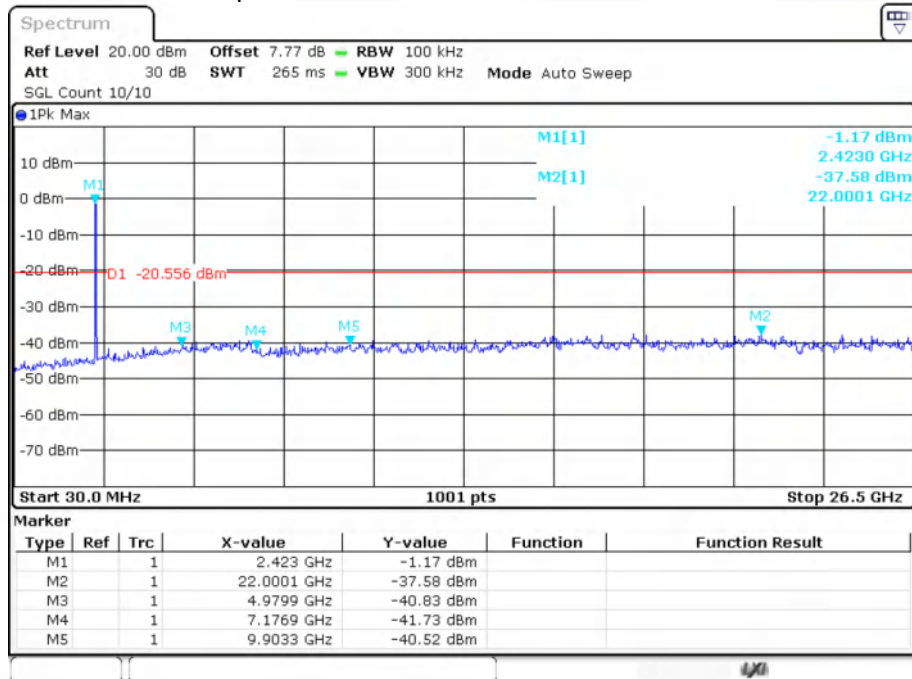
Tx. Spurious NVNT n20 2462MHz Ant1 Emission



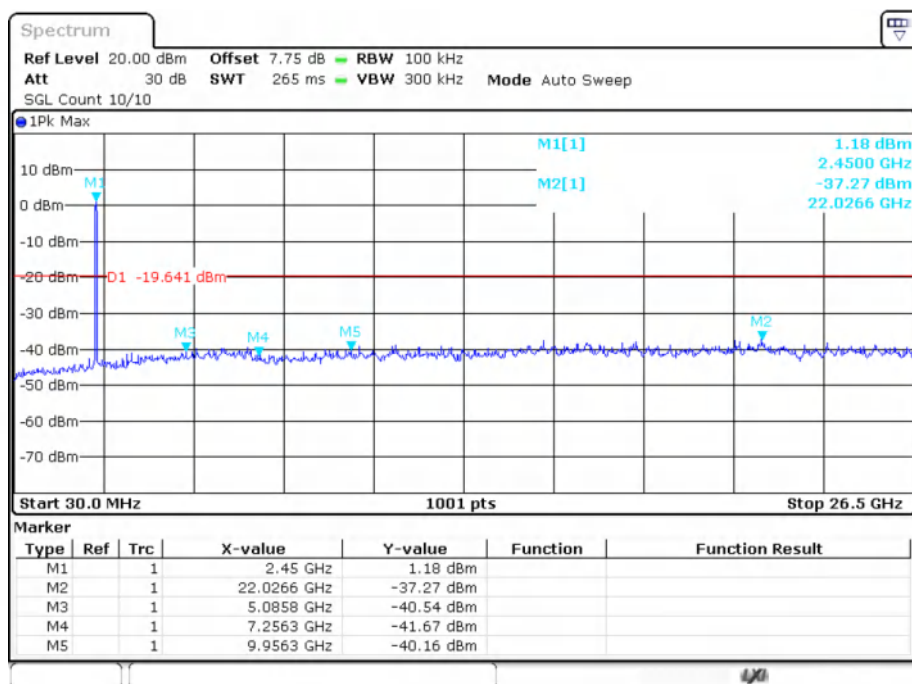
Tx. Spurious NVNT n40 2422MHz Ant1 Emission



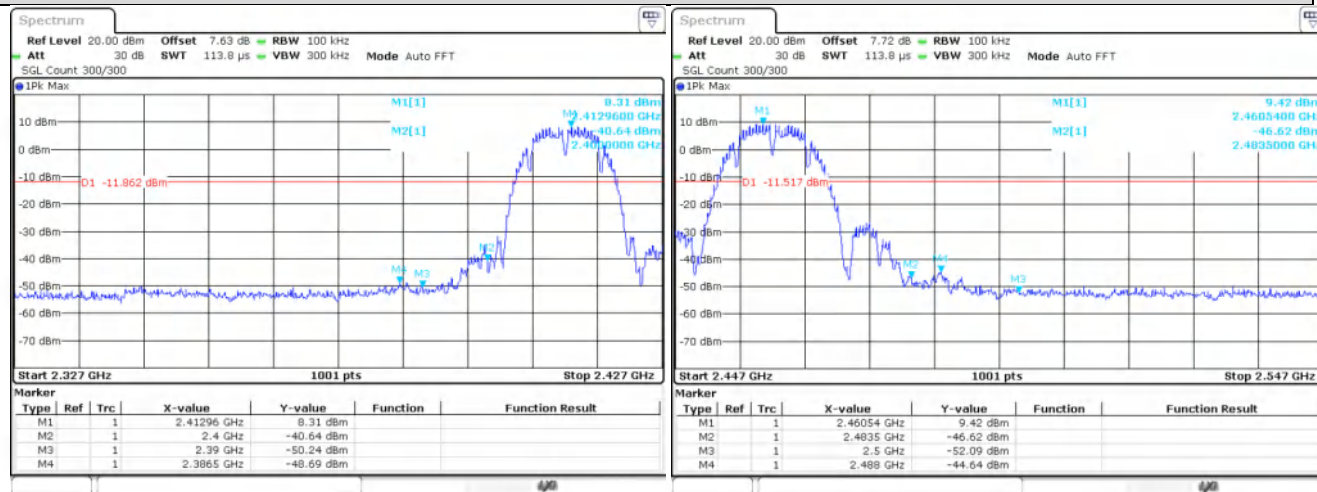
Tx. Spurious NVNT n40 2437MHz Ant1 Emission



Tx. Spurious NVNT n40 2452MHz Ant1 Emission



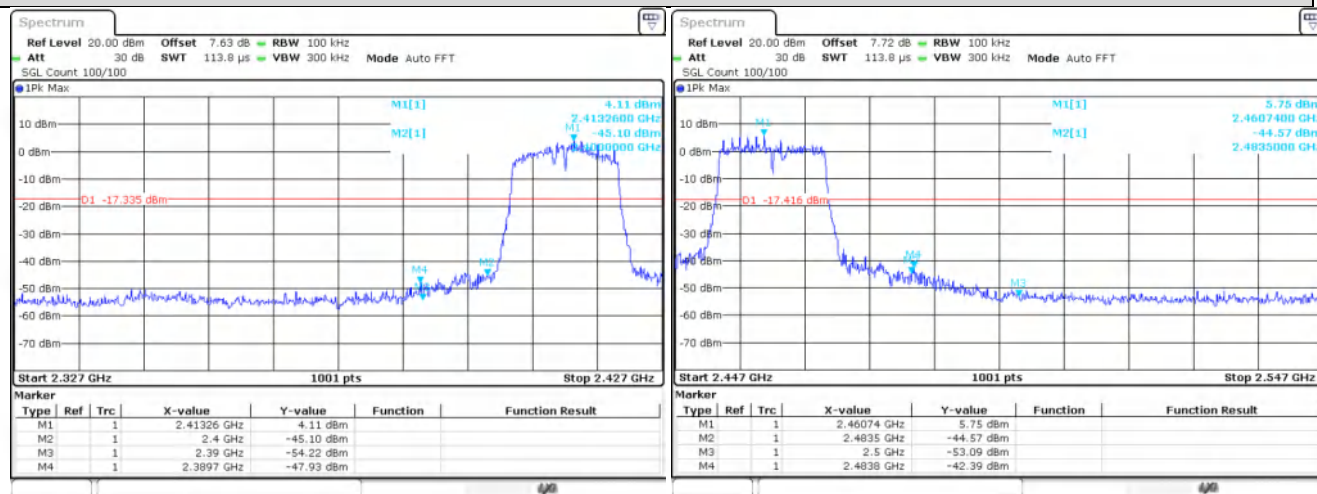
Test mode: 802.11b



Lowest channel

Highest channel

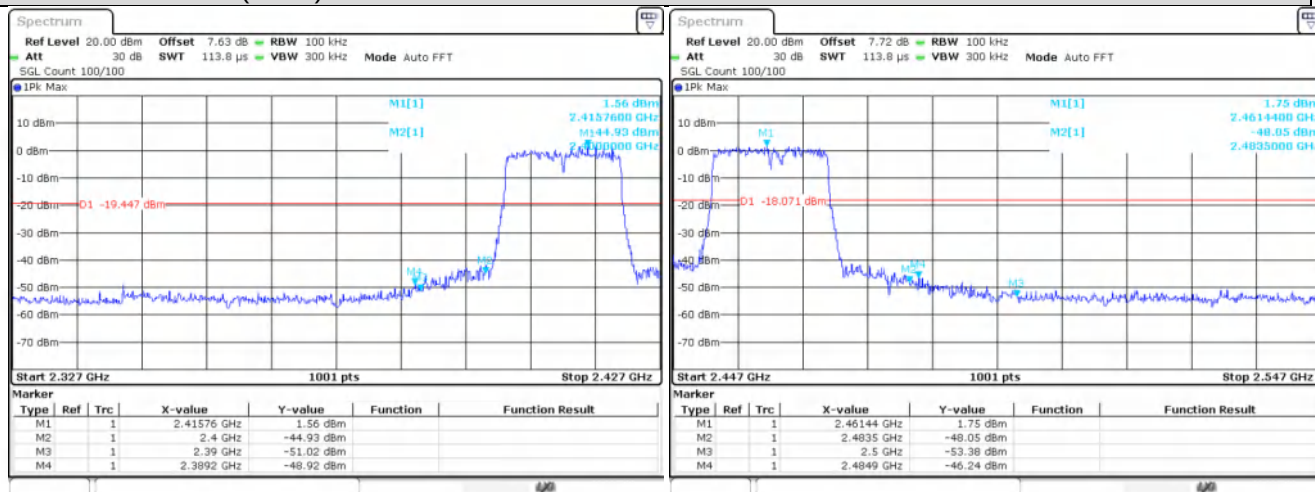
Test mode: 802.11g



Lowest channel

Highest channel

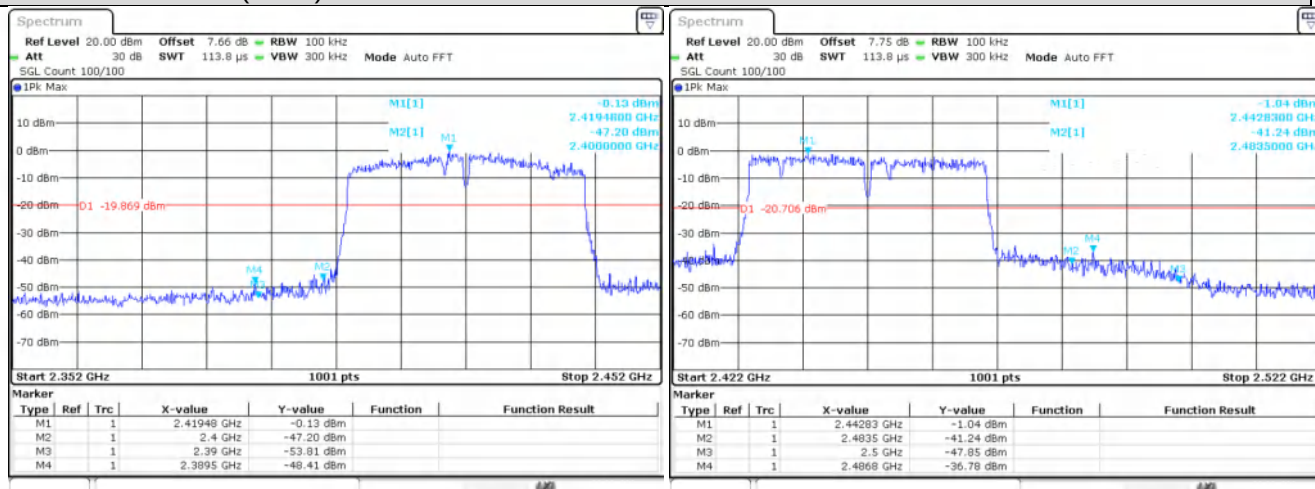
Test mode: 802.11n(HT20)



Lowest channel

Highest channel

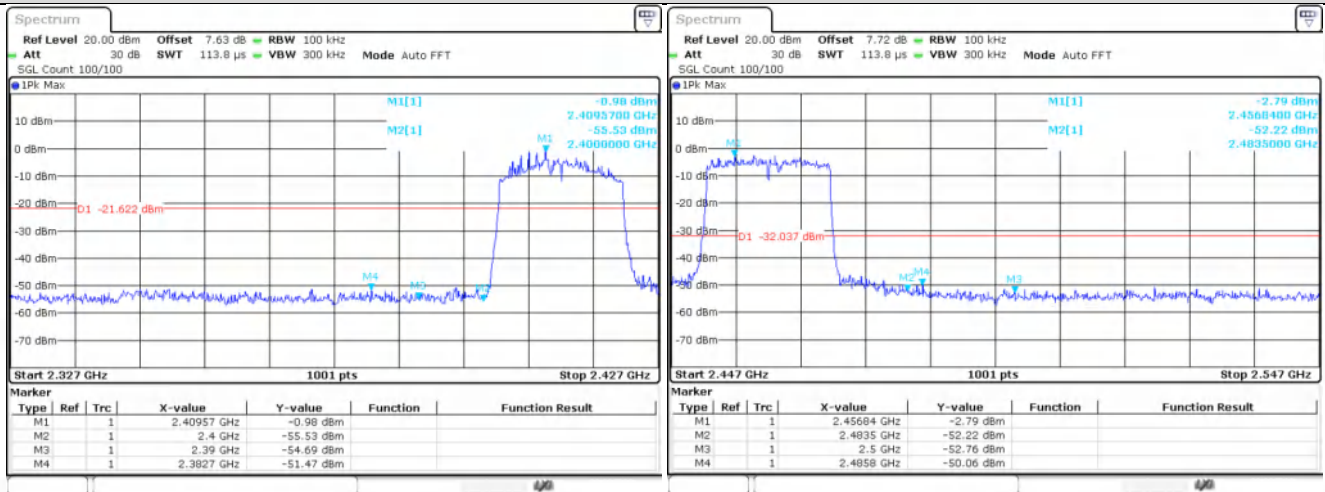
Test mode: 802.11n(HT40)



Lowest channel

Highest channel

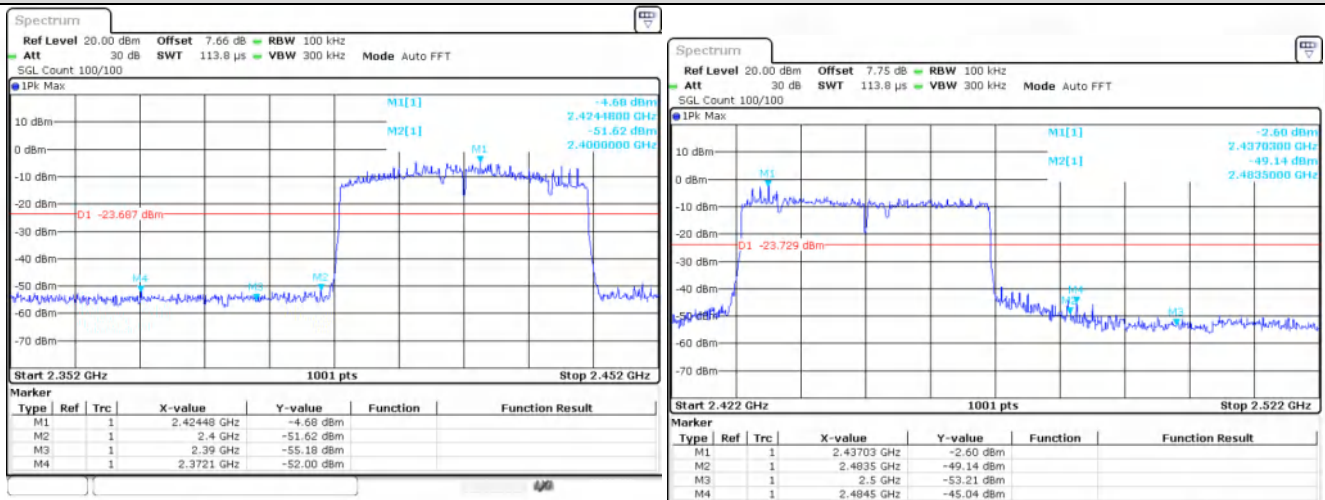
Test mode: 802.11ax20



Lowest channel

Highest channel

Test mode: 802.11ax40



Lowest channel

Highest channel

6.6 Band edge emissions (Radiated)

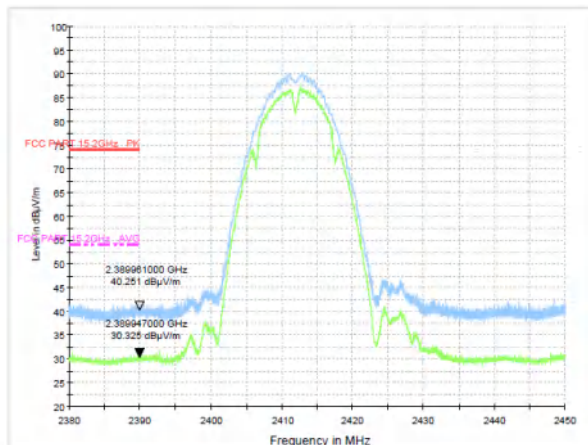
Test Requirement:	In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).`		
Test Method:	Radiated emissions tests		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.			
Procedure:	ANSI C63.10-2013 section 6.6.4		

6.6.1 E.U.T. Operation:

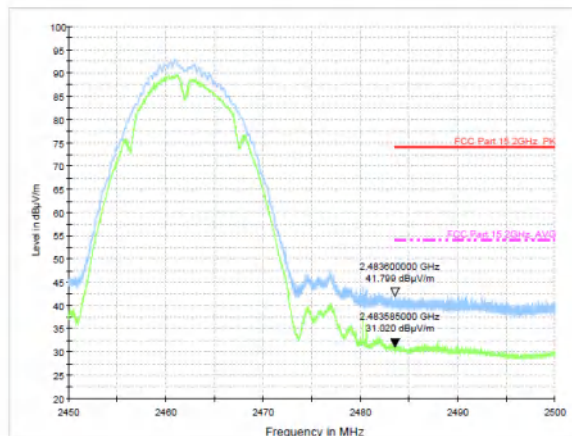
Operating Environment:	
Temperature:	25.8 °C
Humidity:	51.2 %
Atmospheric Pressure:	1010 mbar

6.6.2 Test Data:

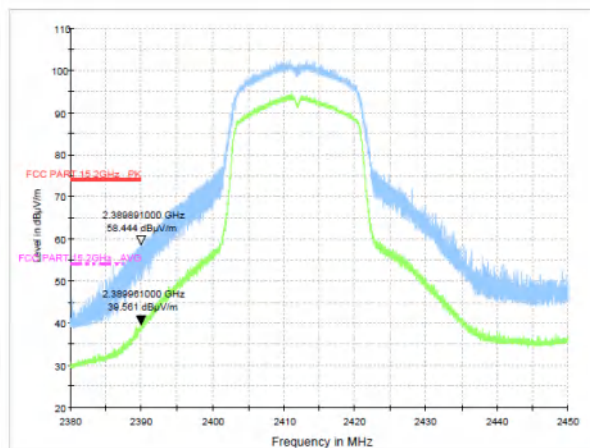
Test Mode: IEEE 802.11b-Low



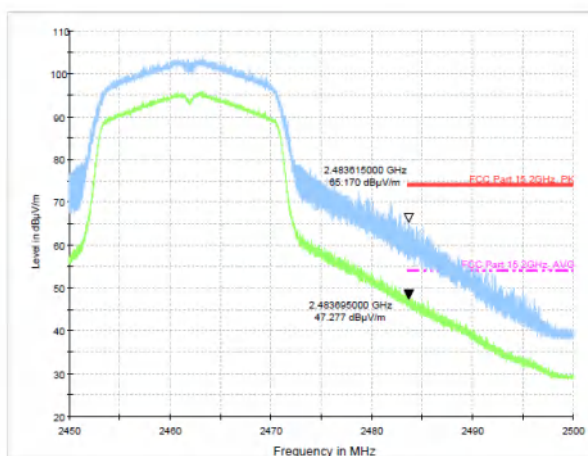
Test Mode: IEEE 802.11b-High



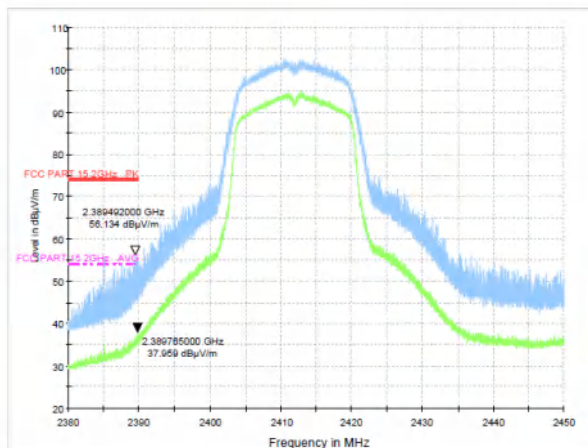
Test Mode: IEEE 802.11g-Low



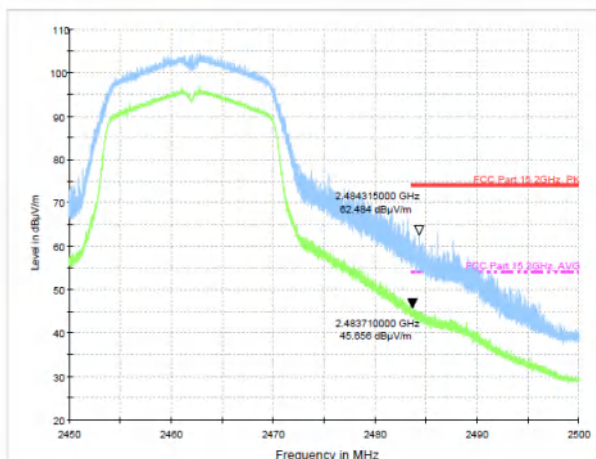
Test Mode: IEEE 802.11g-High



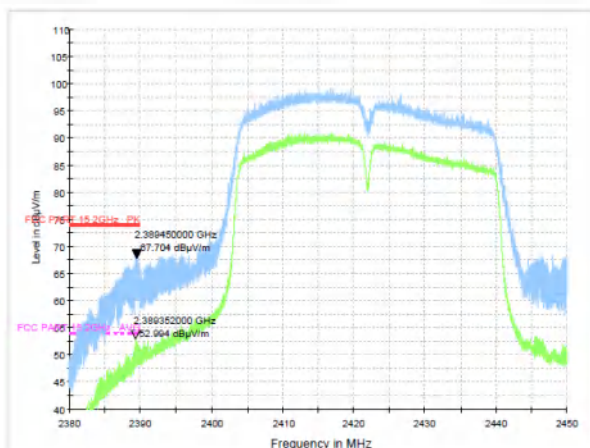
Test Mode: IEEE 802.11n20-Low



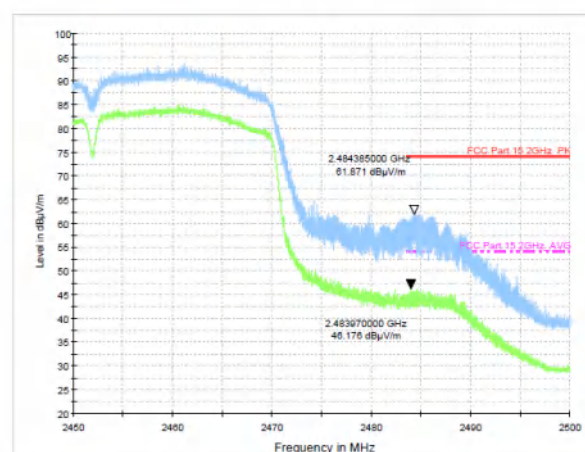
Test Mode: IEEE 802.11n20-High



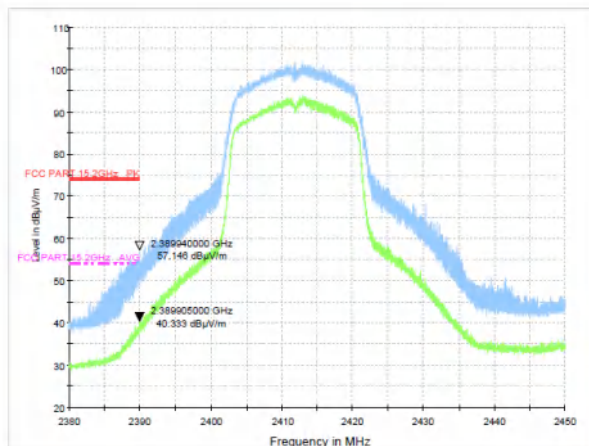
Test Mode: IEEE 802.11n40-Low



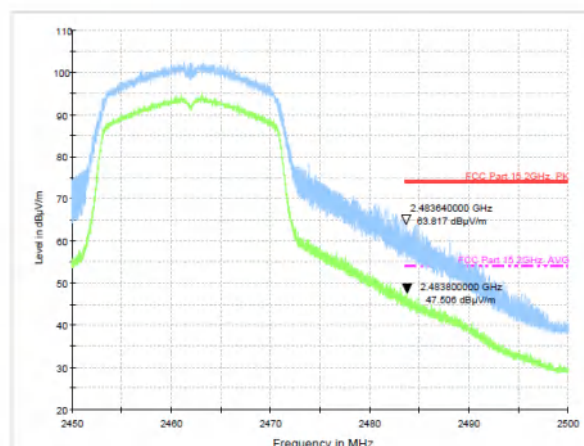
Test Mode: IEEE 802.11n40-High



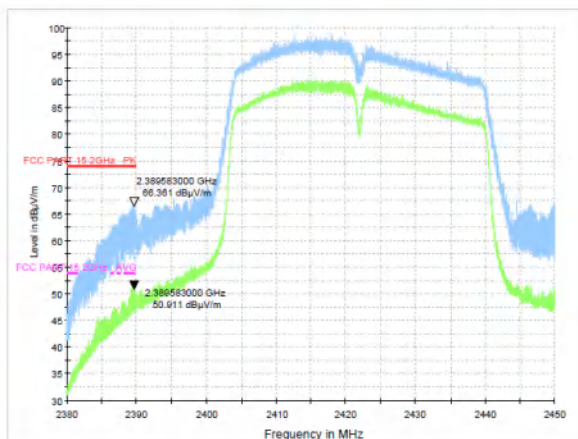
Test Mode: IEEE 802.11ax20-Low



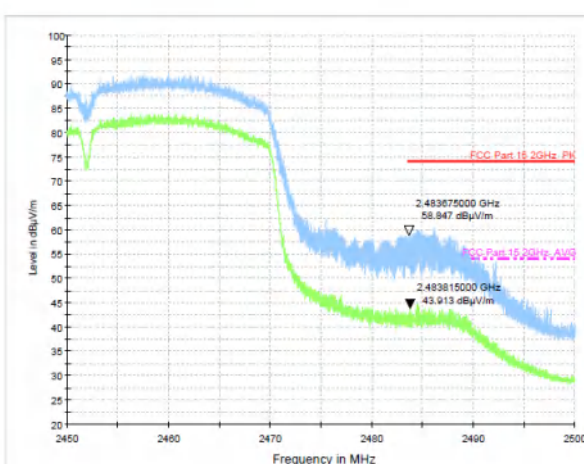
Test Mode: IEEE 802.11ax20-High



Test Mode: IEEE 802.11ax40-Low



Test Mode: IEEE 802.11ax40-High



6.7 Emissions in restricted frequency bands (below 1GHz)

Test Requirement:	In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).`		
Test Method:	Radiated emissions tests		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.			
Procedure:	ANSI C63.10-2013 section 6.6.4		

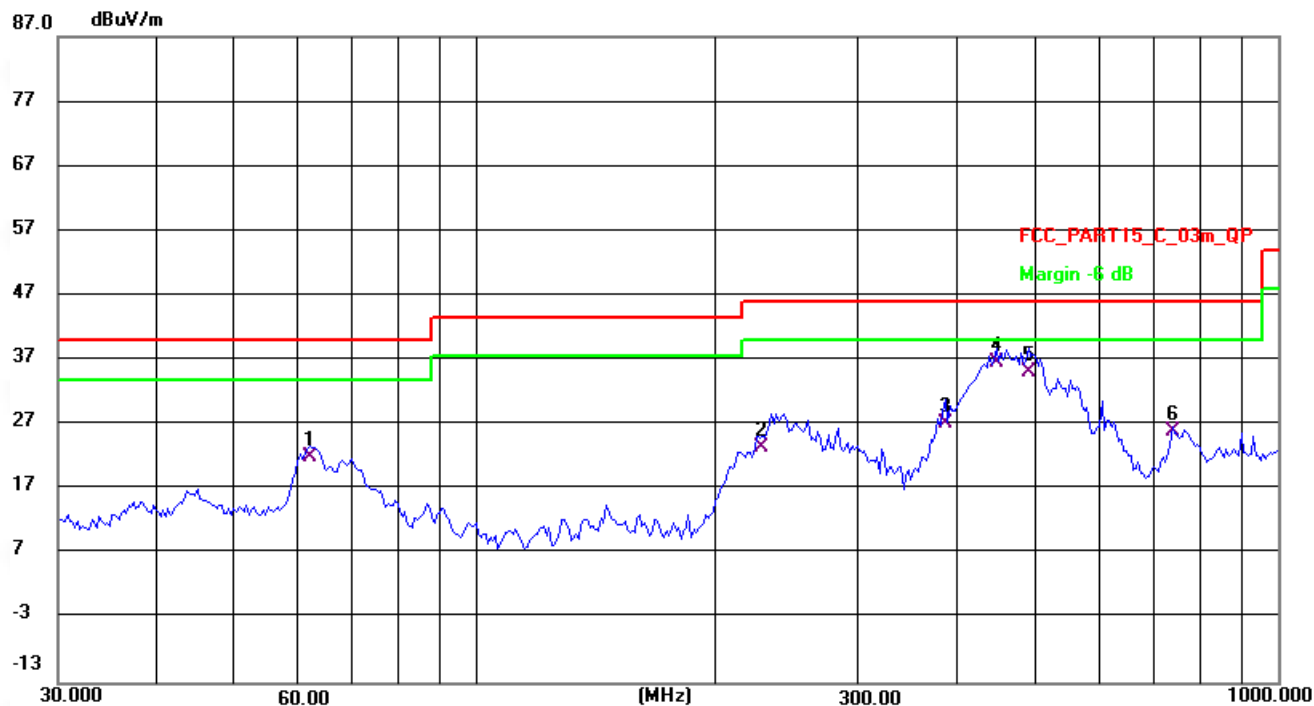
6.7.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.8 °C
Humidity:	51.2 %
Atmospheric Pressure:	1010 mbar

6.7.2 Test Data:

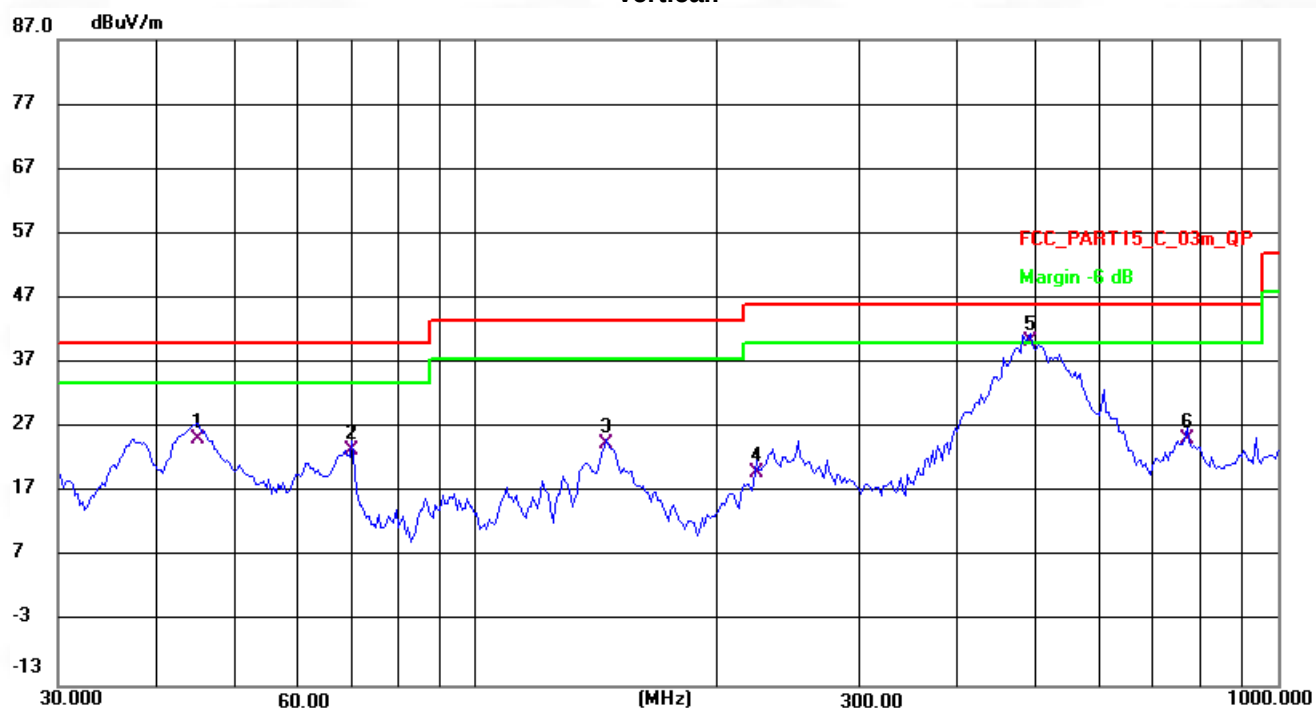
From 30MHz to 1000MHz: Conclusion: Pass

Horizontal:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	61.8674	42.63	-20.62	22.01	40.00	-17.99	QP	200	348	
2	227.0164	48.91	-25.33	23.58	46.00	-22.42	QP	100	112	
3	384.5446	47.35	-20.01	27.34	46.00	-18.66	QP	100	220	
4 *	445.6931	54.79	-18.22	36.57	46.00	-9.43	QP	100	162	
5	488.3263	52.35	-17.30	35.05	46.00	-10.95	QP	100	285	
6	739.2136	37.16	-11.29	25.87	46.00	-20.13	QP	100	256	

Vertical:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	44.8153	44.87	-19.51	25.36	40.00	-14.64	QP	100	0	
2	69.8361	45.62	-22.05	23.57	40.00	-16.43	QP	100	270	
3	145.2480	45.46	-20.94	24.52	43.50	-18.98	QP	100	90	
4	223.1760	45.54	-25.40	20.14	46.00	-25.86	QP	100	0	
5 *	491.0695	57.51	-17.26	40.25	46.00	-5.75	QP	100	180	
6	770.6450	35.73	-10.59	25.14	46.00	-20.86	QP	100	0	

Remark: All modes have been tested, and only worst data of b mode, Channel 2412MHz was listed in this report.

6.8 Emissions in restricted frequency bands (above 1GHz)

Test Requirement:	In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).`		
Test Method:	Radiated emissions tests		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.			
Procedure:	ANSI C63.10-2013 section 6.6.4		

6.8.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.8 °C
Humidity:	51.2 %
Atmospheric Pressure:	1010 mbar

6.8.2 Test Data:

From 1G-25GHz

Test Mode: IEEE 802.11b TX Low									
Freq (MHz)	Read Level (dBuV/m)	Polar (H/V)	Antenna Factor (dB/m)	Cable loss(dB)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4824	48.34	V	33.93	10.18	34.26	58.19	74	-15.81	PK
4824	36.59	V	33.93	10.18	34.26	46.44	54	-7.56	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
4824	47.36	H	33.93	10.18	34.26	57.21	74	-16.79	PK
4824	35.61	H	33.93	10.18	34.26	45.46	54	-8.54	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11b TX Mid									
4874	49.55	V	33.95	10.20	34.26	59.44	74	-14.56	PK
4874	35.92	V	33.95	10.20	34.26	45.81	54	-8.19	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
4874	48.54	H	33.95	10.20	34.26	58.43	74	-15.57	PK
4874	34.05	H	33.95	10.20	34.26	43.94	54	-10.06	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11b TX High									
4924	47.52	V	33.98	10.22	34.25	57.47	74	-16.53	PK
4924	33.44	V	33.98	10.22	34.25	43.39	54	-10.61	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
4924	46.64	H	33.98	10.22	34.25	56.59	74	-17.41	PK
4924	32.61	H	33.98	10.22	34.25	42.56	54	-11.44	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
Note:									
1, Result = Read level + Antenna factor + cable loss-Amp factor									
2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.									

Test Mode: IEEE 802.11g TX Low									
Freq (MHz)	Read Level (dBuV/m)	Polar (H/V)	Antenna Factor (dB/m)	Cable loss(dB)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4824	48.35	V	33.93	10.18	34.26	58.20	74	-15.80	PK
4824	36.39	V	33.93	10.18	34.26	46.24	54	-7.76	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
4824	47.75	H	33.93	10.18	34.26	57.60	74	-16.40	PK
4824	35.15	H	33.93	10.18	34.26	45.00	54	-9.00	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11g TX Mid									
4874	49.31	V	33.95	10.20	34.26	59.20	74	-14.80	PK
4874	35.54	V	33.95	10.20	34.26	45.43	54	-8.57	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
4874	48.65	H	33.95	10.20	34.26	58.54	74	-15.46	PK
4874	34.64	H	33.95	10.20	34.26	44.53	54	-9.47	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11g TX High									
4924	47.75	V	33.98	10.22	34.25	57.70	74	-16.30	PK
4924	33.12	V	33.98	10.22	34.25	43.07	54	-10.93	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
4924	46.23	H	33.98	10.22	34.25	56.18	74	-17.82	PK
4924	32.43	H	33.98	10.22	34.25	42.38	54	-11.62	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
Note:									
1, Result = Read level + Antenna factor + cable loss-Amp factor									
2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.									

Test Mode: IEEE 802.11n HT20 TX Low									
Freq (MHz)	Read Level (dBuV/m)	Polar (H/V)	Antenna Factor (dB/m)	Cable loss(dB)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4824	48.22	V	33.93	10.18	34.26	58.07	74	-15.93	PK
4824	36.87	V	33.93	10.18	34.26	46.72	54	-7.28	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
4824	47.30	H	33.93	10.18	34.26	57.15	74	-16.85	PK
4824	35.37	H	33.93	10.18	34.26	45.22	54	-8.78	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11n HT20 TX Mid									
4874	49.43	V	33.95	10.20	34.26	59.32	74	-14.68	PK
4874	35.90	V	33.95	10.20	34.26	45.79	54	-8.21	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
4874	48.08	H	33.95	10.20	34.26	57.97	74	-16.03	PK
4874	34.59	H	33.95	10.20	34.26	44.48	54	-9.52	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11n HT20 TX High									
4924	47.69	V	33.98	10.22	34.25	57.64	74	-16.36	PK
4924	33.16	V	33.98	10.22	34.25	43.11	54	-10.89	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
4924	46.71	H	33.98	10.22	34.25	56.66	74	-17.34	PK
4924	32.99	H	33.98	10.22	34.25	42.94	54	-11.06	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
Note:									
1, Result = Read level + Antenna factor + cable loss-Amp factor									
2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.									

Test Mode: IEEE 802.11n HT40 TX Low									
Freq (MHz)	Read Level (dBuV/m)	Polar (H/V)	Antenna Factor (dB/m)	Cable loss(dB)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4844	48.70	V	33.93	10.18	34.26	58.55	74	-15.45	PK
4844	36.49	V	33.93	10.18	34.26	46.34	54	-7.66	AV
7266	/	/	/	/	/	/	/	/	/
9688	/	/	/	/	/	/	/	/	/
4844	47.18	H	33.93	10.18	34.26	57.03	74	-16.97	PK
4844	35.10	H	33.93	10.18	34.26	44.95	54	-9.05	AV
7266	/	/	/	/	/	/	/	/	/
9688	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11n HT40 TX Mid									
4874	49.07	V	33.95	10.20	34.26	58.96	74	-15.04	PK
4874	35.43	V	33.95	10.20	34.26	45.32	54	-8.68	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
4874	48.72	H	33.95	10.20	34.26	58.61	74	-15.39	PK
4874	34.07	H	33.95	10.20	34.26	43.96	54	-10.04	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11n HT40 TX High									
4904	47.99	V	33.98	10.22	34.25	57.94	74	-16.06	PK
4904	33.12	V	33.98	10.22	34.25	43.07	54	-10.93	AV
7356	/	/	/	/	/	/	/	/	/
9808	/	/	/	/	/	/	/	/	/
4904	46.29	H	33.98	10.22	34.25	56.24	74	-17.76	PK
4904	32.82	H	33.98	10.22	34.25	42.77	54	-11.23	AV
7356	/	/	/	/	/	/	/	/	/
9808	/	/	/	/	/	/	/	/	/
Note:									
1, Result = Read level + Antenna factor + cable loss-Amp factor									
2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.									

Test Mode: IEEE 802.11ax20 TX Low									
Freq (MHz)	Read Level (dBUV/m)	Polar (H/V)	Antenna Factor (dB/m)	Cable loss(dB)	Amp Factor (dB)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Remark
4824	48.91	V	33.93	10.18	34.26	58.76	74	-15.24	PK
4824	36.13	V	33.93	10.18	34.26	45.98	54	-8.02	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
4824	47.47	H	33.93	10.18	34.26	57.32	74	-16.68	PK
4824	35.70	H	33.93	10.18	34.26	45.55	54	-8.45	AV
7236	/	/	/	/	/	/	/	/	/
9648	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11ax20 TX Mid									
4874	49.78	V	33.95	10.20	34.26	59.67	74	-14.33	PK
4874	35.25	V	33.95	10.20	34.26	45.14	54	-8.86	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
4874	48.58	H	33.95	10.20	34.26	58.47	74	-15.53	PK
4874	34.60	H	33.95	10.20	34.26	44.49	54	-9.51	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11ax20 TX High									
4924	47.87	V	33.98	10.22	34.25	57.82	74	-16.18	PK
4924	33.02	V	33.98	10.22	34.25	42.97	54	-11.03	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
4924	46.77	H	33.98	10.22	34.25	56.72	74	-17.28	PK
4924	32.67	H	33.98	10.22	34.25	42.62	54	-11.38	AV
7386	/	/	/	/	/	/	/	/	/
9848	/	/	/	/	/	/	/	/	/
Note:									
1, Result = Read level + Antenna factor + cable loss-Amp factor									
2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.									

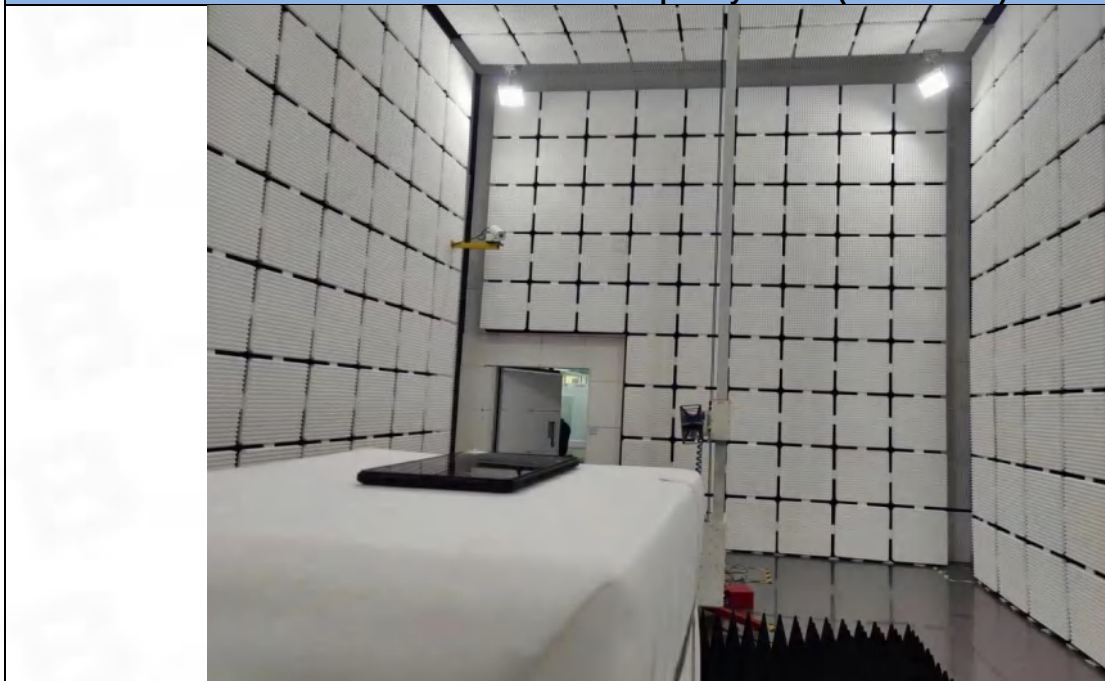
Test Mode: IEEE 802.11ax40 TX Low									
Freq (MHz)	Read Level (dBuV/m)	Polar (H/V)	Antenna Factor (dB/m)	Cable loss(dB)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4844	48.36	V	33.93	10.18	34.26	58.21	74	-15.79	PK
4844	36.55	V	33.93	10.18	34.26	46.40	54	-7.60	AV
7266	/	/	/	/	/	/	/	/	/
9688	/	/	/	/	/	/	/	/	/
4844	47.45	H	33.93	10.18	34.26	57.30	74	-16.70	PK
4844	35.55	H	33.93	10.18	34.26	45.40	54	-8.60	AV
7266	/	/	/	/	/	/	/	/	/
9688	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11ax40 TX Mid									
4874	49.67	V	33.95	10.20	34.26	59.56	74	-14.44	PK
4874	35.33	V	33.95	10.20	34.26	45.22	54	-8.78	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
4874	48.00	H	33.95	10.20	34.26	57.89	74	-16.11	PK
4874	34.39	H	33.95	10.20	34.26	44.28	54	-9.72	AV
7311	/	/	/	/	/	/	/	/	/
9748	/	/	/	/	/	/	/	/	/
Test Mode: IEEE 802.11ax40 TX High									
4904	47.96	V	33.98	10.22	34.25	57.91	74	-16.09	PK
4904	33.56	V	33.98	10.22	34.25	43.51	54	-10.49	AV
7356	/	/	/	/	/	/	/	/	/
9808	/	/	/	/	/	/	/	/	/
4904	46.67	H	33.98	10.22	34.25	56.62	74	-17.38	PK
4904	32.73	H	33.98	10.22	34.25	42.68	54	-11.32	AV
7356	/	/	/	/	/	/	/	/	/
9808	/	/	/	/	/	/	/	/	/
Note:									
1, Result = Read level + Antenna factor + cable loss-Amp factor									
2, All the other emissions not reported were too low to read and deemed to comply with FCC limit.									

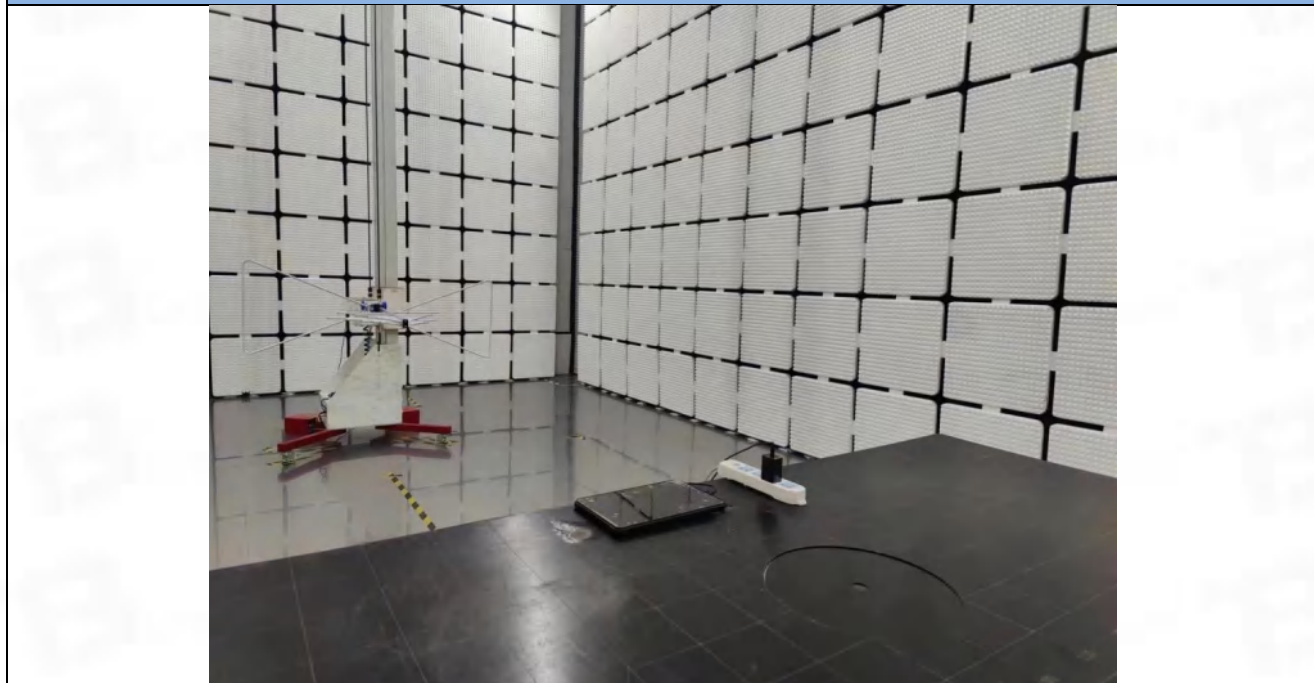
7 Test Setup Photos

Conducted Emission at AC power line



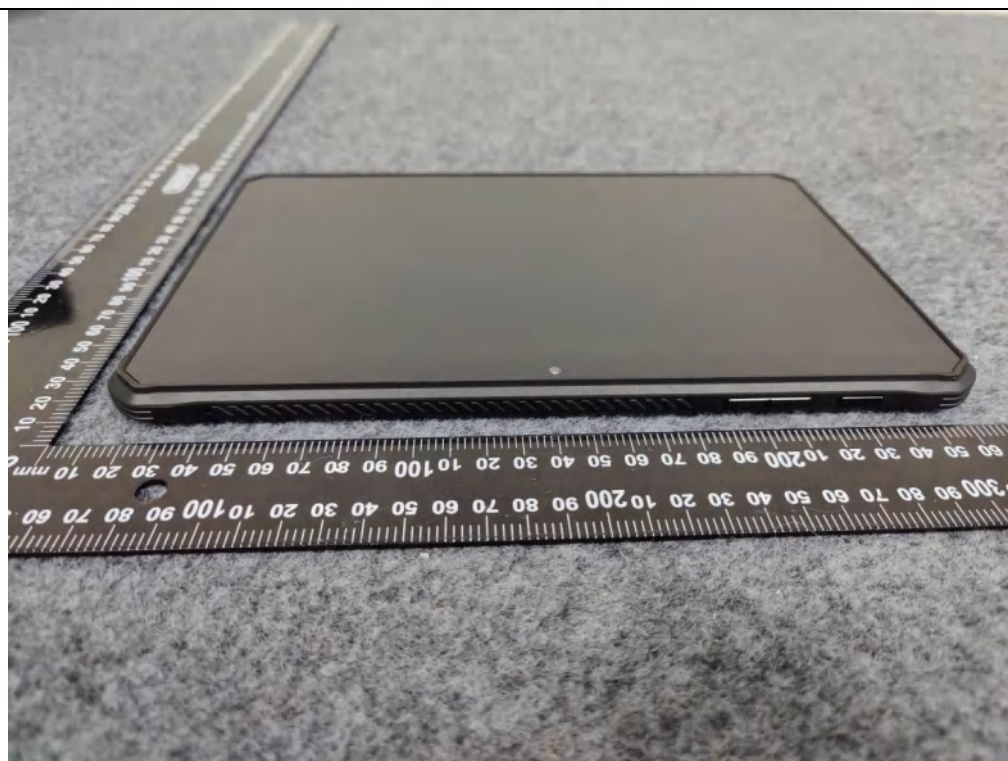
**Band edge emissions (Radiated)
Emissions in restricted frequency bands (above 1GHz)**



Emissions in restricted frequency bands (below 1GHz)

8 EUT Constructional Details (EUT Photos)

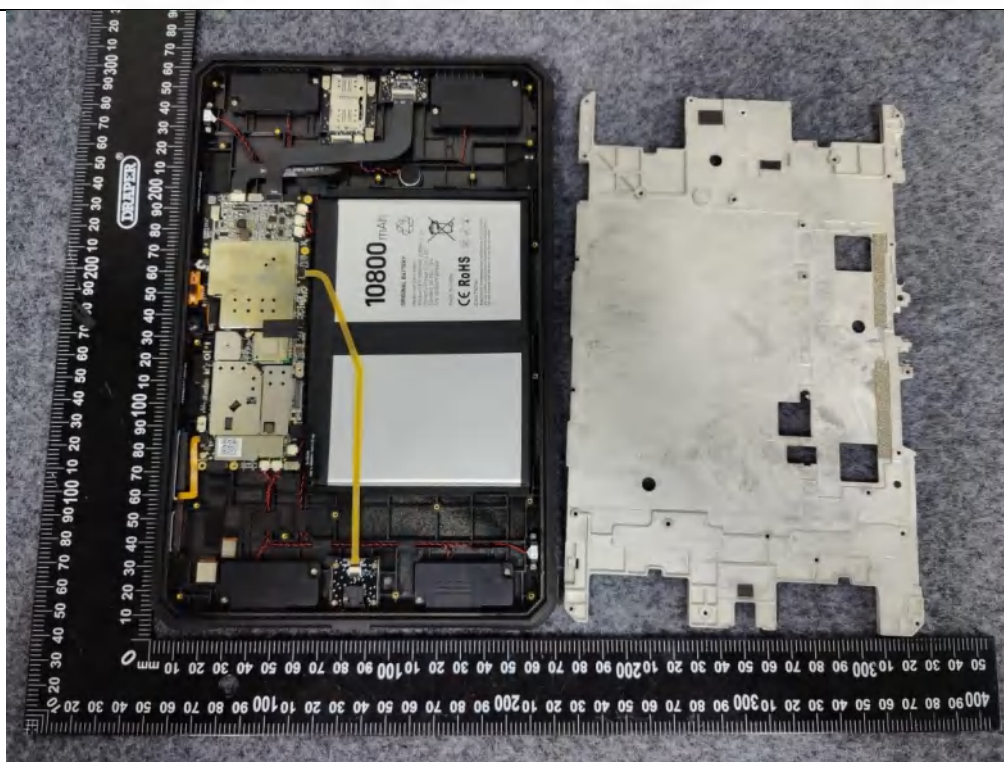




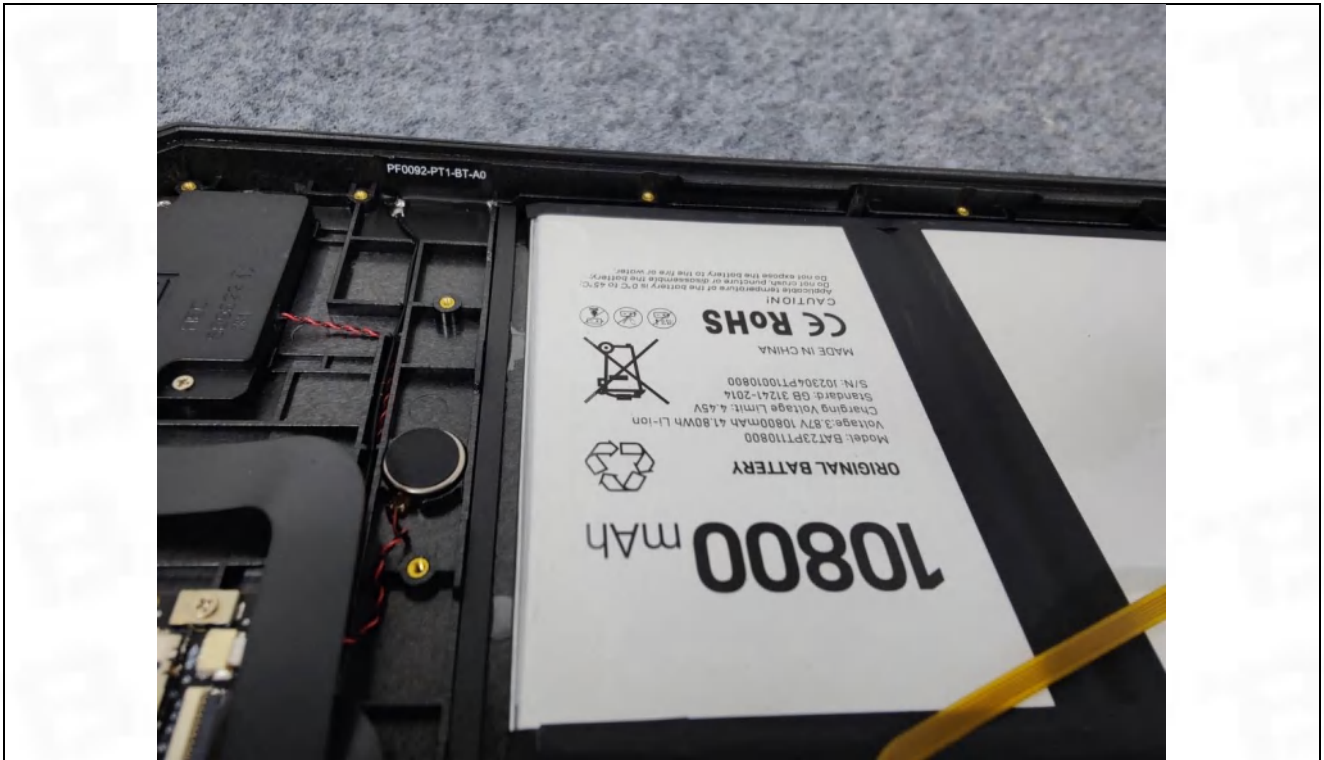


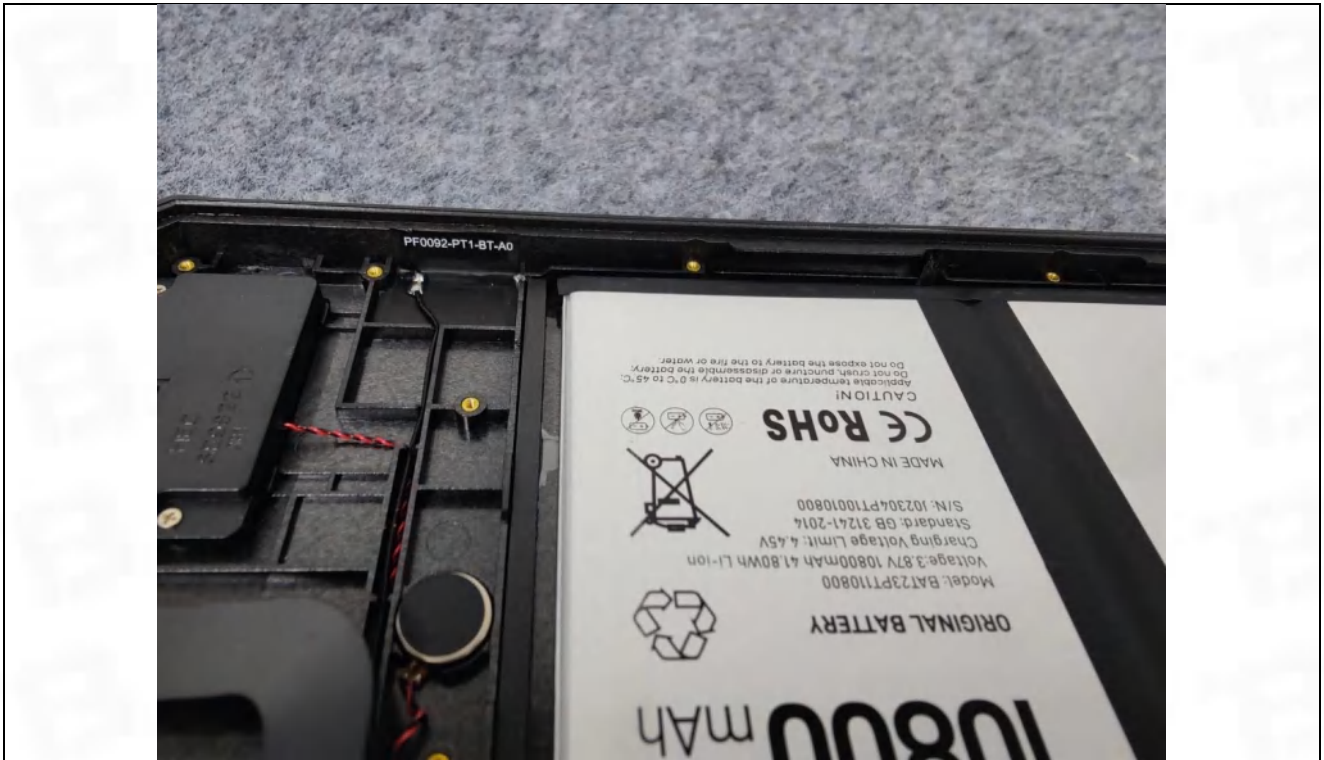


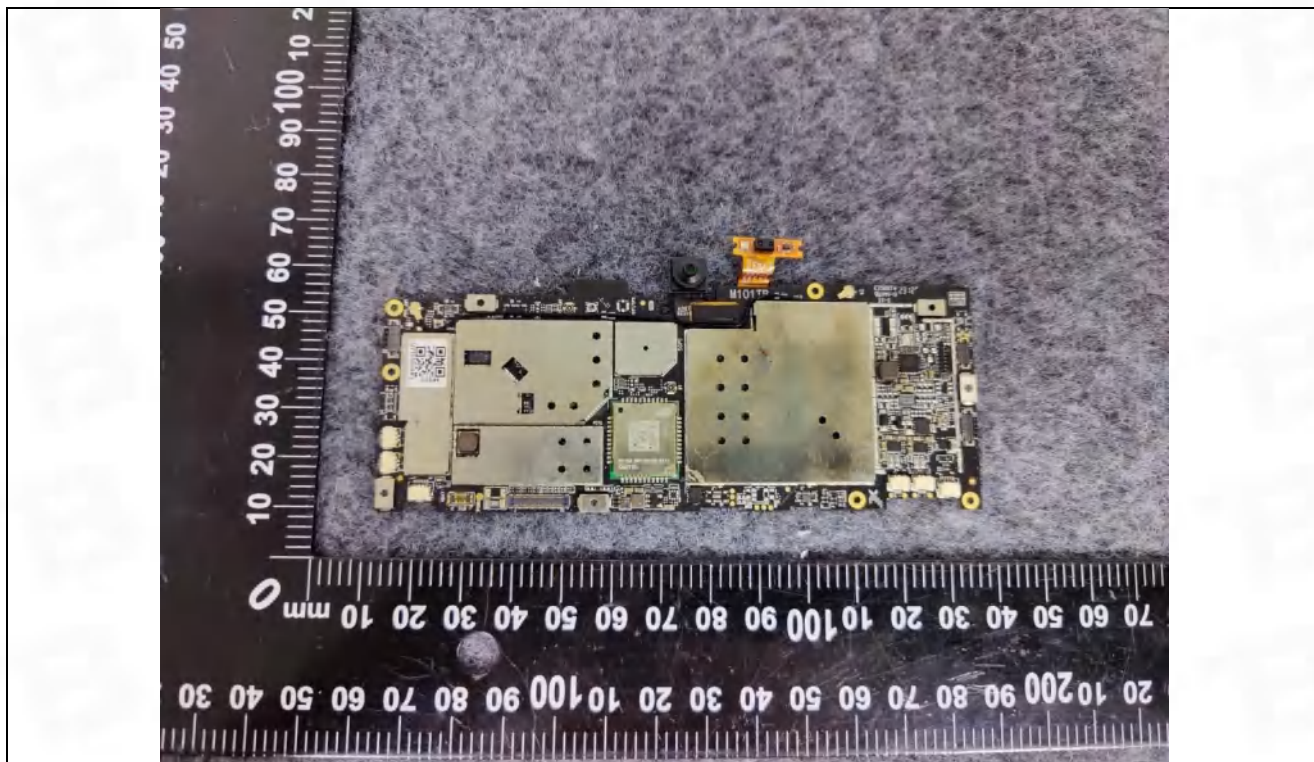
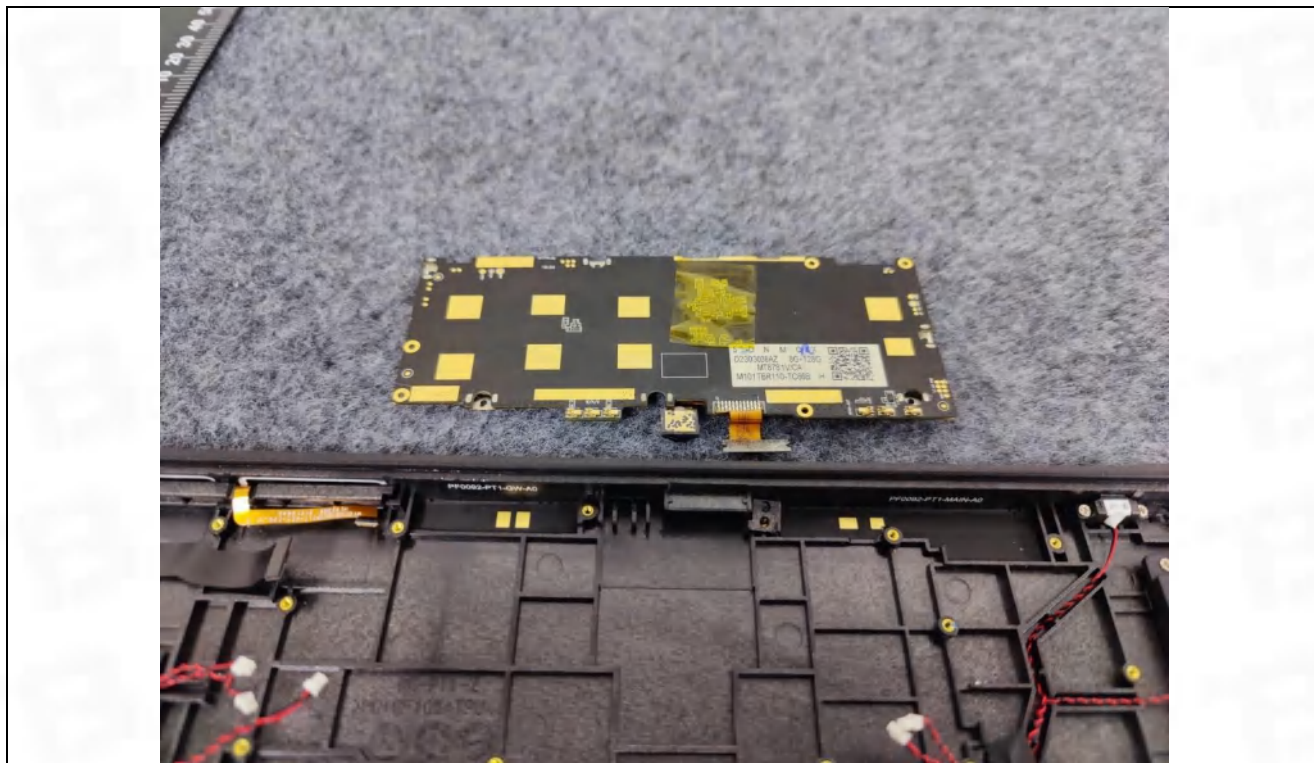
Internal

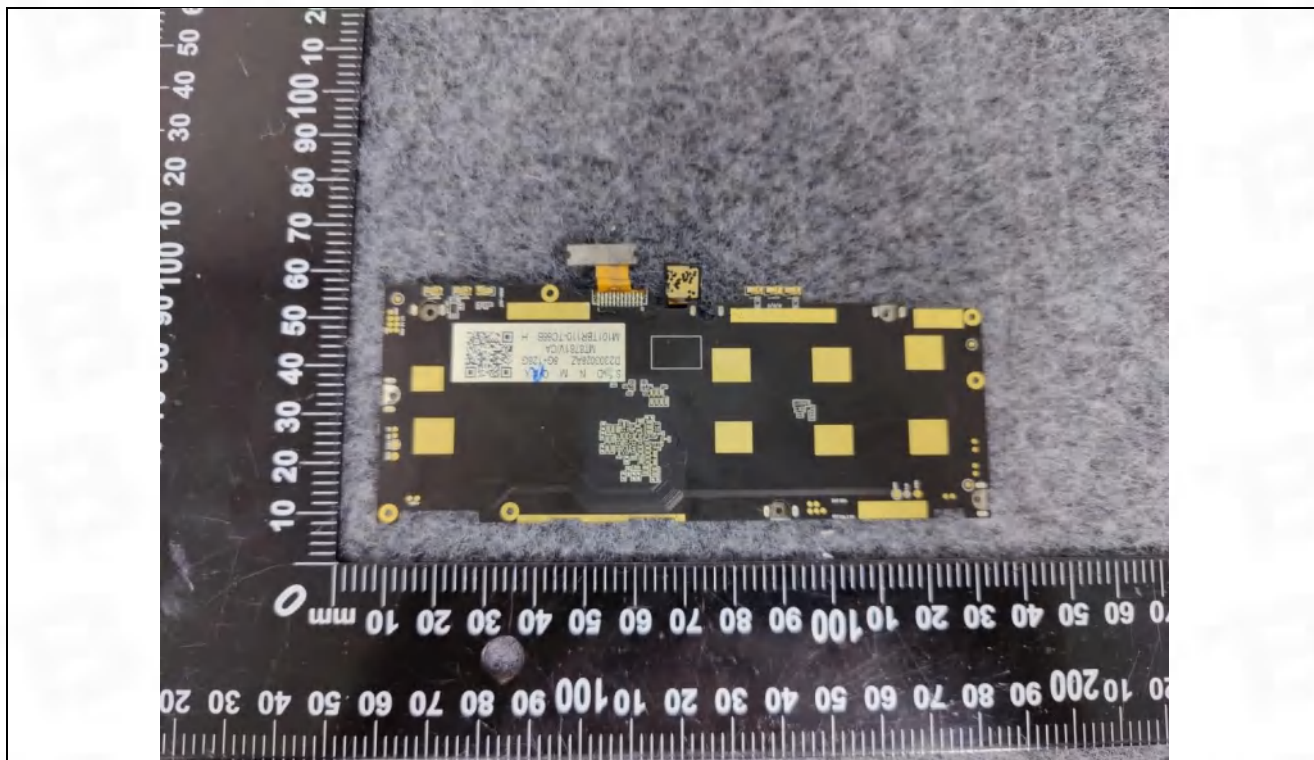


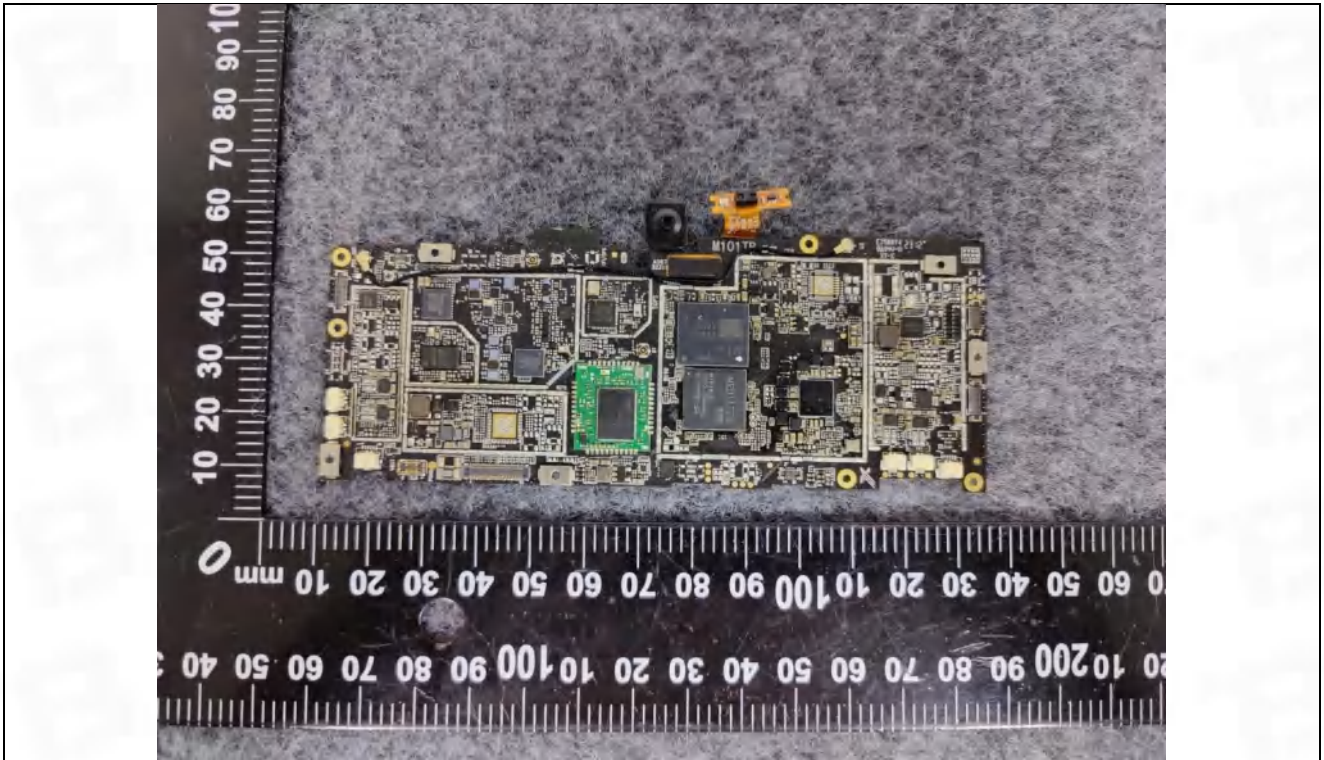














Test Report Number: BTF230607R00203



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-- END OF REPORT --