RF TEST REPORT

For

Shenzhen Weihejia Electronic Technology Co.,LTD

Product Name: BHWW Laptop

Model(s).: BaseBook

Report Reference No.	:	**POCE230811003ERW**
FCC ID	:	**2AXKI-WH156B**
Applicant's Name	:	Shenzhen Weihejia Electronic Technology Co.,LTD
Address	:	Block 102, Building 9, Xihu Industrial park, Xikeng community, Yuanshan street, Longgang district, Shenzhen, China
Testing Laboratory	:	Shenzhen POCE Technology Co., Ltd.
Address	:	102 Building H1 & 1/F., Building H, Hongfa Science & Technology Park, Tangtou, Shiyan, Bao'an District, Shenzhen, Guangdong, China
Test Specification Standard	:	**47 CFR Part 15.247** **ANSI C63.10-2013 & KDB 558074 D01 Meas Guidance v05r02**
Date of Receipt	:	August 15, 2023
Date of Test	:	August 15, 2023 to August 31, 2023
Data of Issue	:	August 31, 2023
Result	:	**Pass**

Revision History Of Report

Version	Description	REPORT No.	Issue Date
V1.0	Original	POCE230811003ERW	August 31, 2023

NOTE1:

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

Compiled by:	Supervised by:	Approved by:
Amy Zhu / File administrators	Stone Yin / Technique principal	Machael Mo / Manager

CONTENTS

1 TEST SUMMARY

1.1 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

1.2 Summary of Test Result

Item	Method	Requirement	Result
Antenna requirement	/	47 CFR 15.203	Pass
Conducted Emission at AC power line	ANSI C63.10-2013 section 6.2	47 CFR 15.207(a)	Pass
Occupied Bandwidth	ANSI C63.10-2013, section 11.8 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(a)(2)	Pass
Maximum Conducted Output Power	ANSI C63.10-2013, section 11.9.1 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(b)(3)	Pass
Power Spectral Density	ANSI C63.10-2013, section 11.10 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(e)	Pass
Emissions in non-restricted frequency bands	ANSI C63.10-2013 section 11.11 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(d)	Pass
Band edge emissions (Radiated)	ANSI C63.10-2013 section 6.10 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(d)	Pass
Emissions in frequency bands (below 1GHz)	ANSI C63.10-2013 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(d)	Pass
Emissions in frequency bands (above 1GHz)	ANSI C63.10-2013 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(d)	Pass

Note: 1.N/A -this device(EUT) is not applicable to this testing item
2. RF-conducted test results including cable loss.

2 GENERAL INFORMATION

2.1 Client Information

Applicant's Name : Shenzhen Weihejia Electronic Technology Co.,LTD
Address : Block 102, Building 9, Xihu Industrial park, Xikeng community, Yuanshan street, Longgang district, Shenzhen, China

Manufacturer : Shenzhen Weihejia Electronic Technology Co.,LTD
Address : Block 102, Building 9, Xihu Industrial park, Xikeng community, Yuanshan street, Longgang district, Shenzhen, China

2.2 Description of Device (EUT)

Product Name:	BHWW Laptop
Sample number:	230811003
Model/Type reference:	BaseBook
Series Model:	N/A
Model Difference:	N/A
Trade Mark:	N/A
Product Description:	Laptop
Power Supply:	100-240VAC 50/60Hz 1.0A from adapter ; DC7.7V from battery
Power Adaptor:	INPUT:100-240VAC 50/60Hz 1.0A； OUTPUT:12V 3000mA
Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz; 802.11n(HT40): 2422MHz to 2452MHz
Number of Channels:	802.11b/g/n(HT20): 11 Channels; 802.11n(HT40): 7 Channels
Modulation Type:	802.11b: DSSS(CCK, DQPSK, DBPSK); 802.11g: OFDM(BPSK, QPSK, 16QAM, 64QAM); 802.11n(HT20 and HT40): OFDM (BPSK, QPSK, 16QAM, 64QAM)
Antenna Type:	FPC Antenna
Antenna Gain:	3.69dBi
HW:	REV11
SW:	V7.0.0

Operation Frequency each of channel

Channel	Frequency	Channel	Frequency
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz	/	/

Note:
In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

	802.11b/g/n(HT20)
Test channel	**Frequency (MHz)**
Lowest channel	2412MHz

Middle channel	2437MHz
Highest channel	2462MHz

	802.11n(HT40)
Test channel	**Frequency (MHz)**
Lowest channel	2422MHz
Middle channel	2437MHz
Highest channel	2452MHz

2.3 Description of Test Modes

No	Title	Description
TM1	802.11b mode	Keep the EUT in continuously transmitting mode with 802.11b modulation type. All bandwidth and data rates has been tested and found the data rate @ 11Mbps is the worst case. Only the data of worst case is recorded in the report.
TM2	802.11g mode	Keep the EUT in continuously transmitting mode with 802.11g modulation type. All bandwidth and data rates has been tested and found the data rate @ 54Mbps is the worst case. Only the data of worst case is recorded in the report.
TM3	802.11n(HT20) mode	Keep the EUT in continuously transmitting mode with 802.11b modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS7 is the worst case. Only the data of worst case is recorded in the report.
TM4	802.11n(HT40) mode	Keep the EUT in continuously transmitting mode with 802.11b modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS7 is the worst case. Only the data of worst case is recorded in the report.

Description

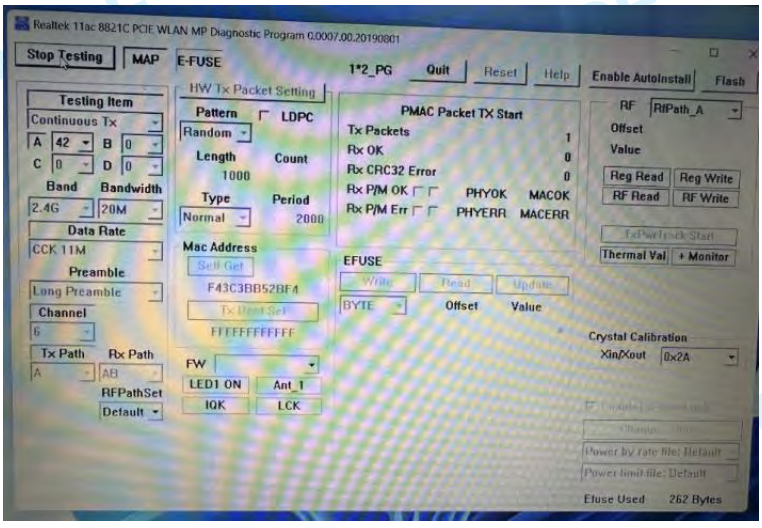
Keep the EUT works in continuously transmitting mode with GFSK modulation.

☒Special software is used.

☐Through engineering command into the engineering mode.
engineering command: *#*#3646633#*#*

☐Other method:

Special software:



2.4 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Description	Manufacturer	Model No.	Remark	Certification
1	ADAPTER	Weiheng Digital Company Limited	BCT120300-111DZ	Provide by client	SDOC
2					

2.5 Equipments Used During The Test

Conducted Emission at AC power line					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal. Due Date**
Shielding room	CY	8*4*3	20160102	2023/1/26	2025/1/25
Pulse Limiter	Schwarzbeck	VTSD 9561	561-G071	2023/2/27	2024/2/26
Cable	Schwarzbeck	/	/	2023/2/27	2024/2/26
Test Receiver	Rohde & Schwarz	ESPI	1164.6607K03-102109-MH	2023/6/13	2024/6/12
L.I.S.N	R&S	ESH3-Z5	831.5518.52	2022/12/29	2023/12/28
L.I.S.N	Schwarzbeck	NSLK 8126	NSLK 8126	/	/
50ΩCoaxial Switch	Anritsu	MP59B	M20531	/	/
EMI Testsoftware	Farad	EZ -EMC	V1.1.42	/	/

Emissions in restricted frequency bands and RF					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Test Receiver	R&S	ESCI	102109	2023/6/13	2024/6/12
Spectrum Analyzer	R&S	FSP30	1321.3008K40-101729-jR	2023/6/14	2024/6/13
966 Chamber	CY	9*6*6	20160101	2023/1/26	2025/1/25
Bore-sighting Antenna rack	PBB	1308503	16033	/	/
Loop antenna	ZHINAN	ZN30900C	ZN30900C	2021/7/5	2024/7/4
Broadband Antenna	Sunol Sciences	JB6 Antenna	A090414	2023/5-21	2025/5-20
Horn Antenna	Sunol Sciences	DRH-118	A091114	2023/5/13	2025/5/12
Horn antenna	COM-POWER	AH-1840(40G)	10100008	2023/4/5	2025/4/4
Power APM(LF)	Schwarzbeck	BBV9743	9743-151	2023/6/13	2024/6/12
Power APM(HF)	Schwarzbeck	BBV9718	9718-282	2023/6/13	2024/6/12
Cable(LF)#2	Schwarzbeck	/	/	2023/2/27	2024/2/26
Cable(LF)#1	Schwarzbeck	/	/	2023/2/27	2024/2/26
Cable(HF)#2	Schwarzbeck	AK9515E	96250	2023/2/28	2024/2/27
Cable(HF)#1	Schwarzbeck	SYV-50-3-1	/	2023/2/27	2024/2/26
Power divider	MIDEWEST	PWD-2533	SMA-79	2023/5/11	2026/5/10
signal generator	Keysight	N5181A	MY48180415	2022/12/10	2023/12/9
Power meter	Agilent	E4416	MY48200166	2022/12/29	2023/12/28
signal generator	Keysight	N5182A	MY50143455	2022/12/29	2023/12/28
Spectrum Analyzer	Keysight	N9020A	MY53420323	2022/12/29	2023/12/28

RF Sensor Unit	TACHOY	TR1029-2	000001	/	/
RF Control Unit	TACHOY	TR1029-1	000001	/	/
Position Controller	MF	MF-7802	/	/	/
EMI Testsoftware	Farad	EZ -EMC	V1.1.42	/	/
RF TestSoftware	TACHOY	RTS-01	V2.0.0.0	/	/

2.6 Statement Of The Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Disturbance (0.15~30MHz)	±3.41dB
Occupied Bandwidth	±3.63%
RF conducted power	±0.733dB
RF power density	±0.234%
Conducted Spurious emissions	±1.98dB
Radiated Emission (Above 1GHz)	±5.46dB
Radiated Emission (Below 1GHz)	±5.79dB
Note: (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

2.7 Authorizations

Company Name:	Shenzhen POCE Technology Co., Ltd.
Address:	101-102 Building H5 & 1/F., Building H, Hongfa Science & Technology Park, Tangtou, Shiyan, Bao'an District, Shenzhen, Guangdong, China
Phone Number:	+86-13267178997
Fax Number:	86-755-29113252

Identification of the Responsible Testing Location

Company Name:	Shenzhen POCE Technology Co., Ltd.
Address:	101-102 Building H5 & 1/F., Building H, Hongfa Science & Technology Park, Tangtou, Shiyan, Bao'an District, Shenzhen, Guangdong, China
Phone Number:	+86-13267178997
Fax Number:	86-755-29113252
FCC Registration Number:	0032847402
Designation Number:	CN1342
Test Firm Registration No.:	778666
A2LA Certificate Number:	6270.01

2.8 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 POCE 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.

3 Evaluation Results (Evaluation)

3.1 Antenna requirement

Test Requirement:	Refer to 47 CFR Part 15.203, 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.

3.1.1 Conclusion:

4 Radio Spectrum Matter Test Results (RF)

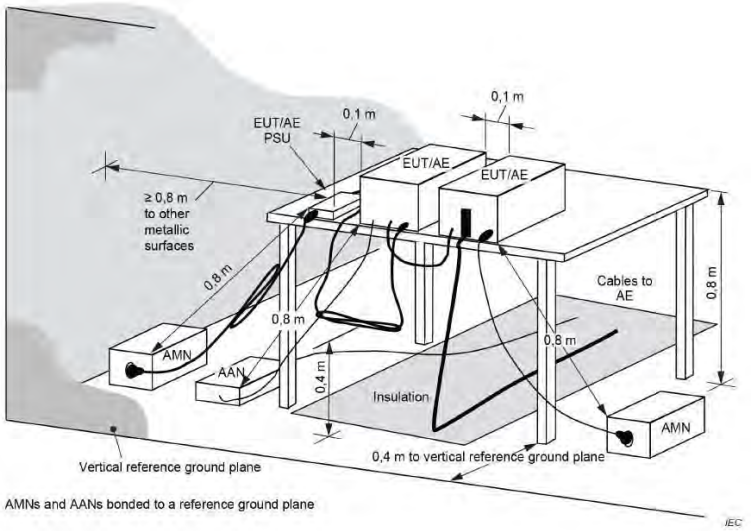
4.1 Conducted Emission at AC power line

Test Requirement:	Refer to 47 CFR 15.207(a), 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 μH/50 ohms line impedance stabilization network (LISN).
Test Limit:	Frequency of emission (MHz) / Conducted limit (dBμV): 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.
Test Method:	ANSI C63.10-2013 section 6.2
Procedure:	Refer to ANSI C63.10-2013 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices

4.1.1 E.U.T. Operation:

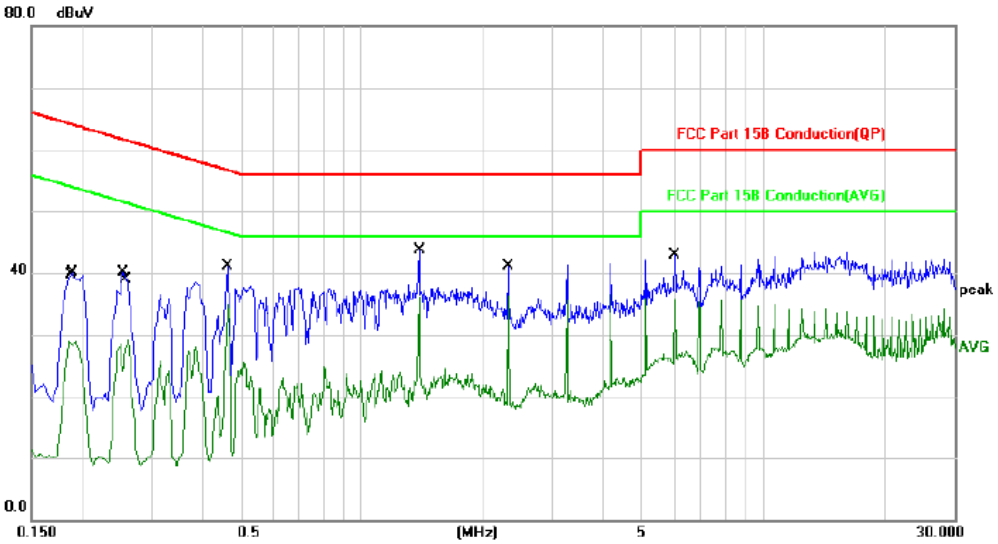
Operating Environment:					
Temperature:	22.7 °C	Humidity:	54.6 %	Atmospheric Pressure:	102 kPa
Pre test mode:	TM2				
Final test mode:	TM2				

4.1.2 Test Setup Diagram:



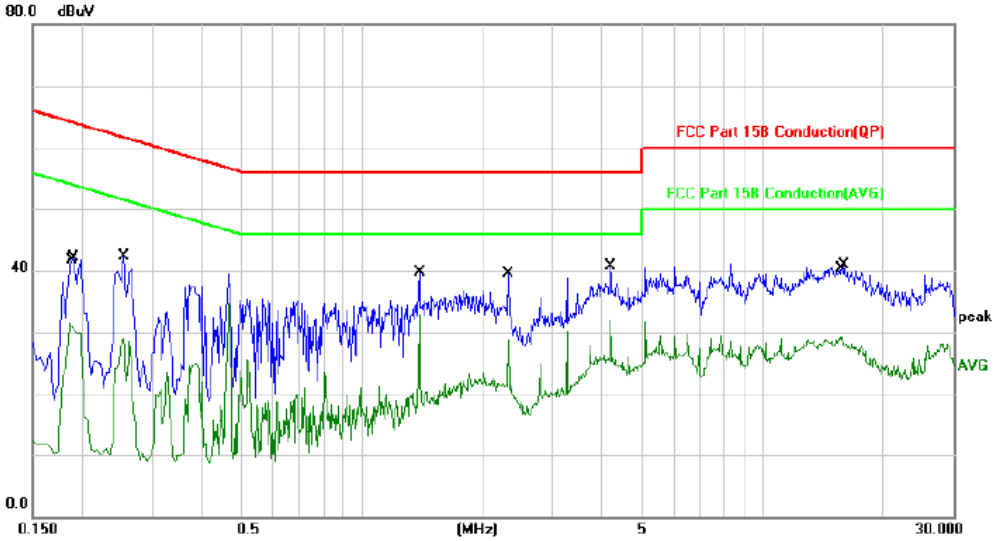
4.1.3 Test Data:

TM2 / Line: Line / Band: 2400-2483.5 MHz / BW: 20 / CH: H



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1860	18.91	9.99	28.90	54.21	-25.31	AVG	
2		0.1900	30.02	9.99	40.01	64.03	-24.02	QP	
3		0.2540	30.11	9.99	40.10	61.62	-21.52	QP	
4		0.2620	19.07	9.98	29.05	51.36	-22.31	AVG	
5		0.4620	31.12	9.95	41.07	56.66	-15.59	QP	
6		0.4620	24.93	9.95	34.88	46.66	-11.78	AVG	
7		1.3900	33.92	9.87	43.79	56.00	-12.21	QP	
8		1.3900	26.20	9.87	36.07	46.00	-9.93	AVG	
9		2.3179	31.21	9.92	41.13	56.00	-14.87	QP	
10	*	2.3179	26.43	9.92	36.35	46.00	-9.65	AVG	
11		6.0260	32.90	10.07	42.97	60.00	-17.03	QP	
12		6.0260	25.58	10.07	35.65	50.00	-14.35	AVG	

TM2 / Line: Neutral / Band: 2400-2483.5 MHz / BW: 20 / CH: H



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1860	21.42	9.99	31.41	54.21	-22.80	AVG	
2		0.1900	32.19	9.99	42.18	64.03	-21.85	QP	
3		0.2540	32.32	9.99	42.31	61.62	-19.31	QP	
4		0.2540	18.86	9.99	28.85	51.62	-22.77	AVG	
5		1.3940	29.90	9.87	39.77	56.00	-16.23	QP	
6	*	1.3940	23.11	9.87	32.98	46.00	-13.02	AVG	
7		2.3179	29.53	9.92	39.45	56.00	-16.55	QP	
8		2.3179	18.86	9.92	28.78	46.00	-17.22	AVG	
9		4.1740	30.78	9.99	40.77	56.00	-15.23	QP	
10		4.1740	21.89	9.99	31.88	46.00	-14.12	AVG	
11		15.7820	18.89	10.23	29.12	50.00	-20.88	AVG	
12		16.0459	30.71	10.23	40.94	60.00	-19.06	QP	

NOTE:
1.An initial pre-scan was performed on the line and neutral lines with peak detector.
2.Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3.Mesurement Level = Reading level + Correct Factor, Over=Limit- Mesurement
4. The test results only show the worst mode or worst channel.

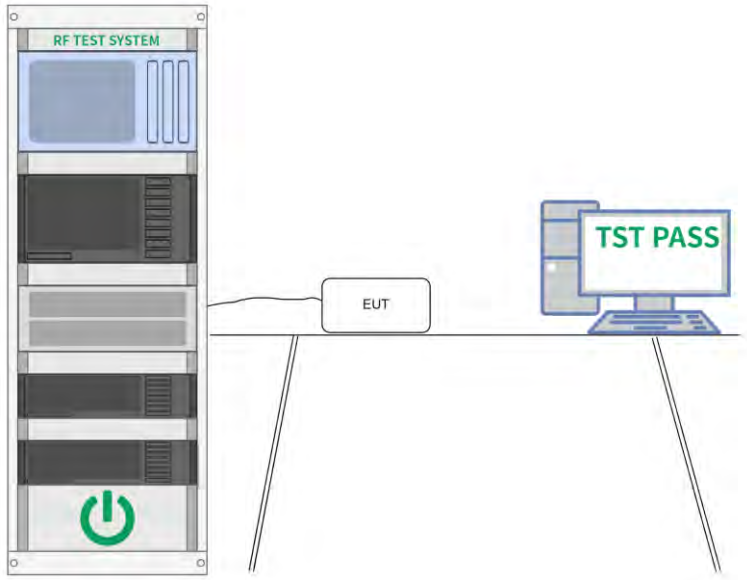
4.2 Occupied Bandwidth

Test Requirement:	47 CFR 15.247(a)(2)
Test Limit:	Refer to 47 CFR 15.247(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.
Test Method:	ANSI C63.10-2013, section 11.8 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	a) Set RBW = 100 kHz. b) Set the VBW >= [3 × 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.

4.2.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.7 °C	Humidity:	54.6 %	Atmospheric Pressure:	102 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	TM1, TM2, TM3, TM4				

4.2.2 Test Setup Diagram:



4.2.3 Test Data:

Please Refer to Appendix for Details.

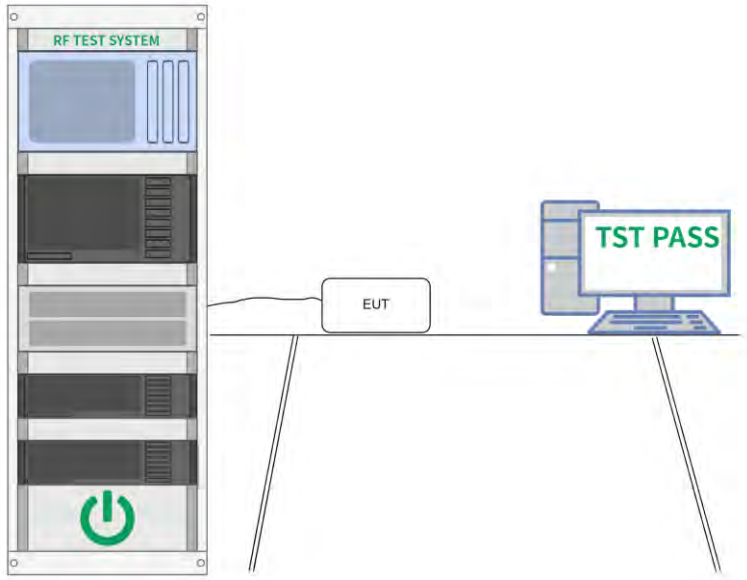
4.3 Maximum Conducted Output Power

Test Requirement:	47 CFR 15.247(b)(3)
Test Limit:	Refer to 47 CFR 15.247(b)(3), 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:	ANSI C63.10-2013, section 11.9.1 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013, section 11.9.1 Maximum peak conducted output power

4.3.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.7 °C	Humidity:	54.6 %	Atmospheric Pressure:	102 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	TM1, TM2, TM3, TM4				

4.3.2 Test Setup Diagram:



4.3.3 Test Data:

Please Refer to Appendix for Details.

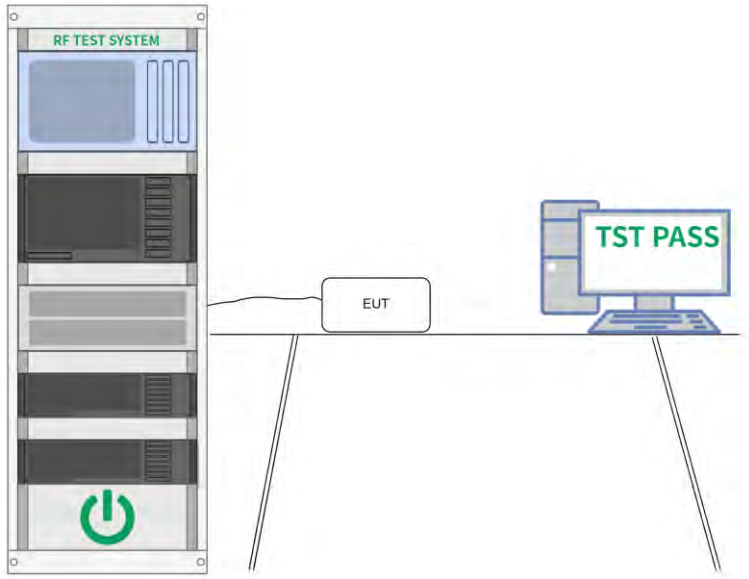
4.4 Power Spectral Density

Test Requirement:	47 CFR 15.247(e)
Test Limit:	Refer to 47 CFR 15.247(e), 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:	ANSI C63.10-2013, section 11.10 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013, section 11.10, Maximum power spectral density level in the fundamental emission

4.4.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.7 °C	Humidity:	54.6 %	Atmospheric Pressure:	102 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	TM1, TM2, TM3, TM4				

4.4.2 Test Setup Diagram:



4.4.3 Test Data:

Please Refer to Appendix for Details.

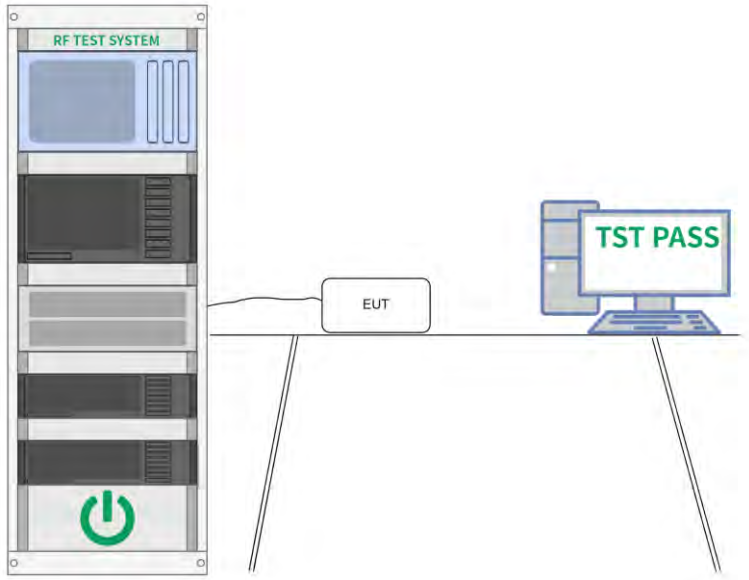
4.5 Emissions in non-restricted frequency bands

Test Requirement:	47 CFR 15.247(d)
Test Limit:	Refer to 47 CFR 15.247(d), 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:	ANSI C63.10-2013 section 11.11 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013 Section 11.11.1, Section 11.11.2, Section 11.11.3

4.5.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.7 °C	Humidity:	54.6 %	Atmospheric Pressure:	102 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	TM1, TM2, TM3, TM4				

4.5.2 Test Setup Diagram:



4.5.3 Test Data:

Please Refer to Appendix for Details.

4.6 Band edge emissions (Radiated)

Test Requirement:	Refer to 47 CFR 15.247(d), 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 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

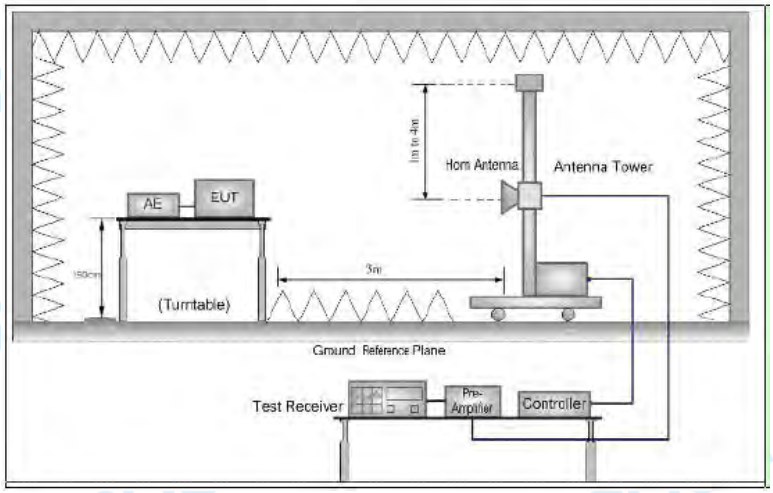
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.

Test Method:	ANSI C63.10-2013 section 6.10 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013 section 6.10.5.2

4.6.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.7 °C	Humidity:	54.6 %	Atmospheric Pressure:	102 kPa
Pre test mode:	TM1/TM2				
Final test mode:	TM1/TM2				

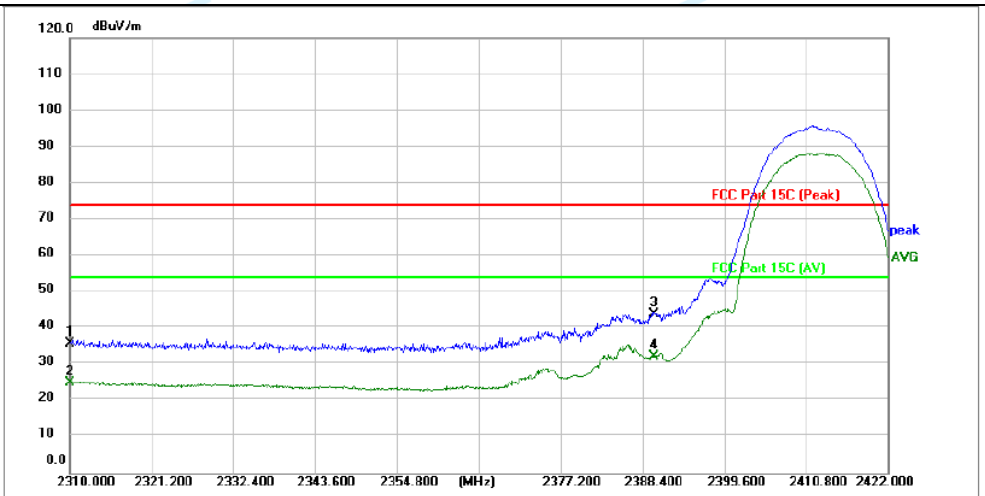
4.6.2 Test Setup Diagram:



4.6.3 Test Data:

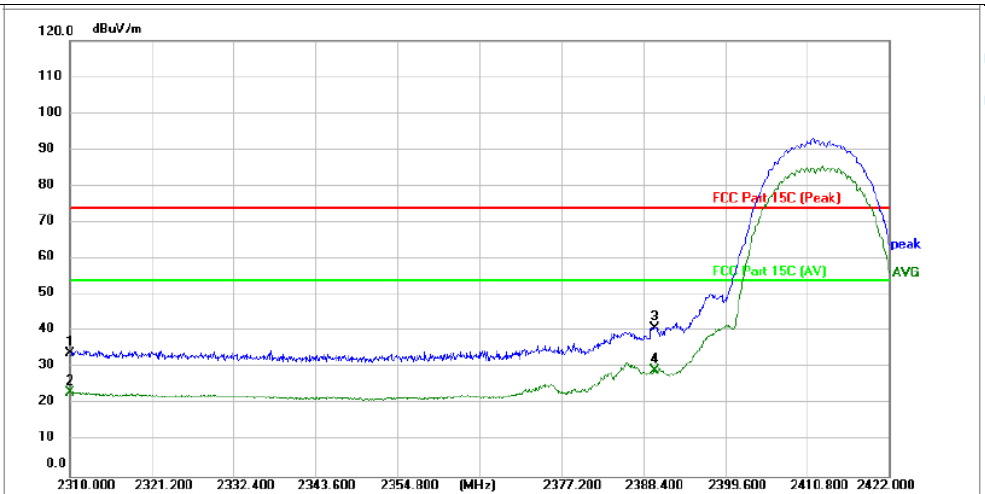
NOTE: The test results only show the worst mode or worst channel.

TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 20 / CH: L



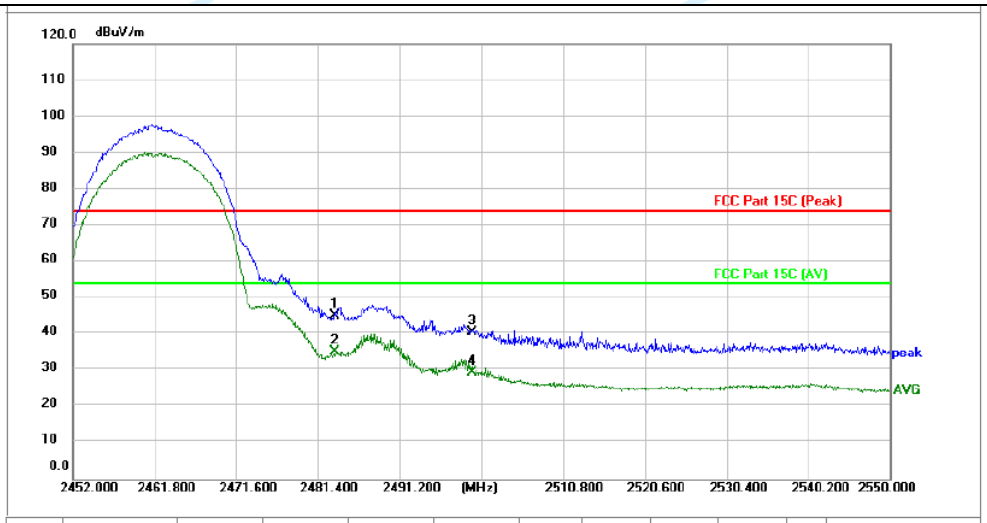
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2310.000	42.64	-6.93	35.71	74.00	-38.29	peak			P	
2	2310.000	32.07	-6.93	25.14	54.00	-28.86	AVG			P	
3	2390.000	50.69	-6.72	43.97	74.00	-30.03	peak			P	
4 *	2390.000	39.12	-6.72	32.40	54.00	-21.60	AVG			P	

TM1 / Polarization: Vertical/ Band: 2400-2483.5 MHz / BW: 20 / CH: L



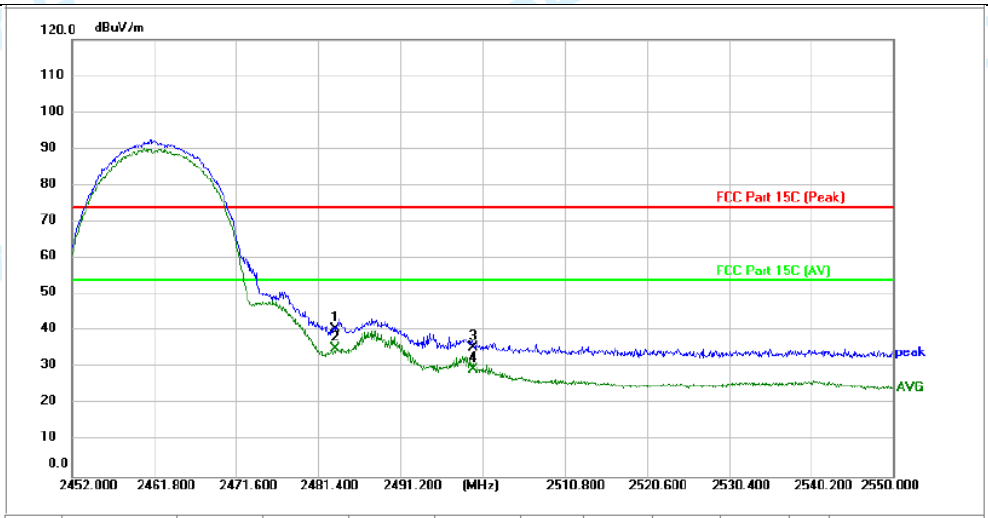
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2310.000	42.24	-8.23	34.01	74.00	-39.99	peak	150		P	
2	2310.000	31.55	-8.23	23.32	54.00	-30.68	AVG	150		P	
3	2390.000	48.83	-7.91	40.92	74.00	-33.08	peak	150		P	
4 *	2390.000	37.04	-7.91	29.13	54.00	-24.87	AVG	150		P	

TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 20 / CH: H



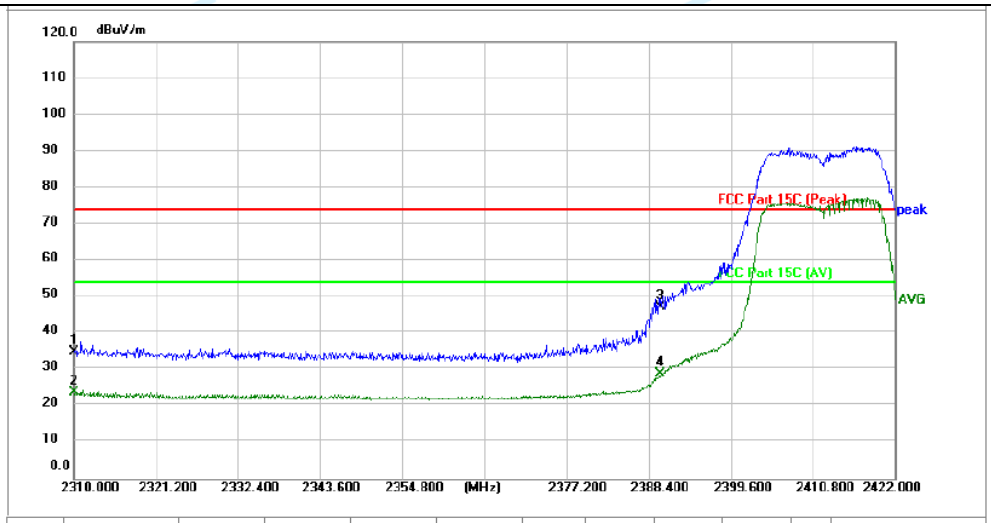
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2483.500	51.71	-6.47	45.24	74.00	-28.76	peak			P	
2 *	2483.500	41.63	-6.47	35.16	54.00	-18.84	AVG			P	
3	2500.000	47.00	-6.43	40.57	74.00	-33.43	peak			P	
4	2500.000	35.84	-6.43	29.41	54.00	-24.59	AVG			P	

TM1 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 20 / CH: H



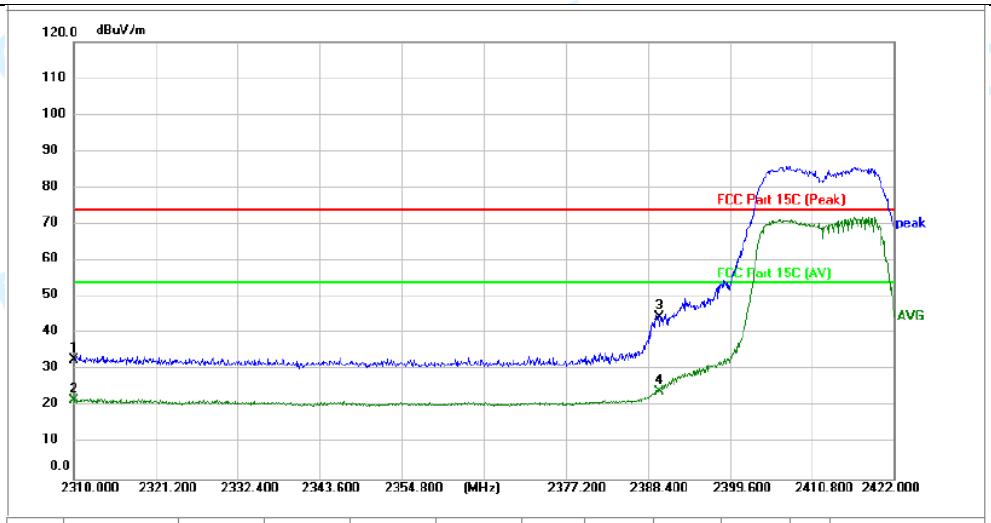
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2483.500	48.11	-7.54	40.57	74.00	-33.43	peak			P	
2 *	2483.500	42.70	-7.54	35.16	54.00	-18.84	AVG			P	
3	2500.000	43.02	-7.48	35.54	74.00	-38.46	peak			P	
4	2500.000	36.89	-7.48	29.41	54.00	-24.59	AVG			P	

TM2 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 20 / CH: L



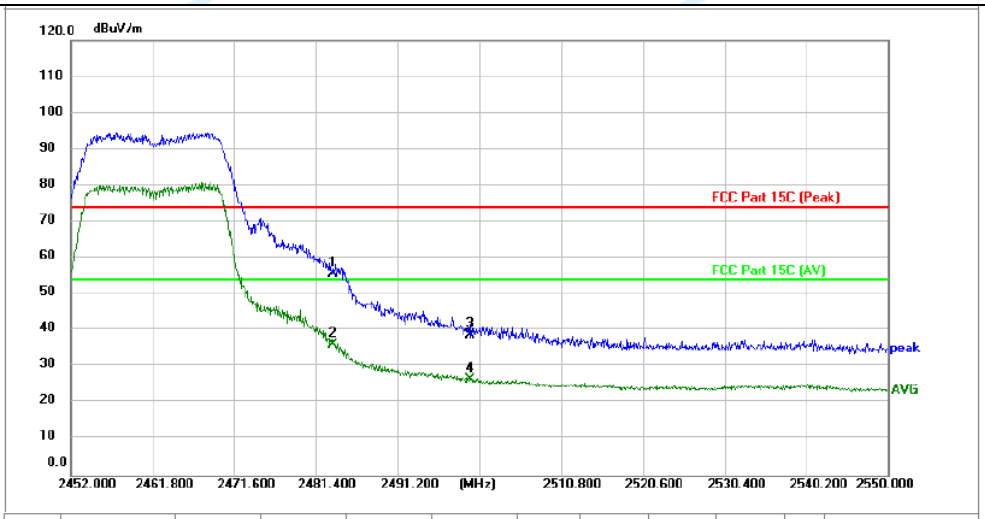
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2310.000	41.98	-6.93	35.05	74.00	-38.95	peak			P	
2	2310.000	30.67	-6.93	23.74	54.00	-30.26	AVG			P	
3	2390.000	53.96	-6.72	47.24	74.00	-26.76	peak			P	
4 *	2390.000	35.77	-6.72	29.05	54.00	-24.95	AVG			P	

TM2 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 20 / CH: L



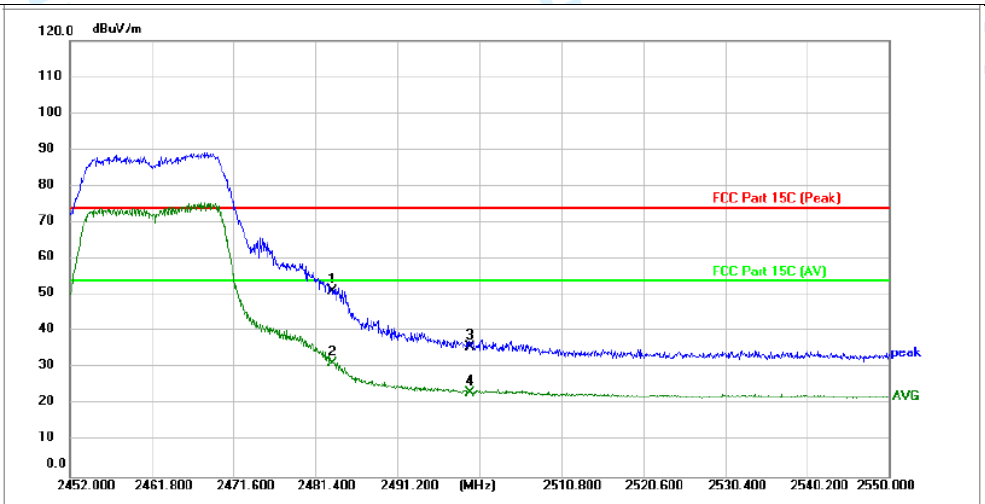
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2310.000	41.14	-8.23	32.91	74.00	-41.09	peak			P	
2	2310.000	29.97	-8.23	21.74	54.00	-32.26	AVG			P	
3 *	2390.000	52.54	-7.91	44.63	74.00	-29.37	peak			P	
4	2390.000	32.19	-7.91	24.28	54.00	-29.72	AVG			P	

TM2 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 20 / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2483.500	62.11	-6.47	55.64	74.00	-18.36	peak			P	
2 *	2483.500	42.73	-6.47	36.26	54.00	-17.74	AVG			P	
3	2500.000	45.28	-6.43	38.85	74.00	-35.15	peak			P	
4	2500.000	32.94	-6.43	26.51	54.00	-27.49	AVG			P	

TM2 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 20 / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2483.500	58.58	-7.54	51.04	74.00	-22.96	peak			P	
2 *	2483.500	38.96	-7.54	31.42	54.00	-22.58	AVG			P	
3	2500.000	43.18	-7.48	35.70	74.00	-38.30	peak			P	
4	2500.000	30.65	-7.48	23.17	54.00	-30.83	AVG			P	

Note: Peak and Average measurement were performed at the frequencies with maximized peak emission.
Mesurement Level = Reading level + Correct Factor, Over=Limit- Mesurement

Note:
Per ANSI C63.10-2013, if there are two or more antnnas, the conducted powers at Core 0, Core 1,…, Core i were first measured separately, as shown in the section above(this product olny have one antenna). The measured values were then summed in linear power units then converted back to dBm.

Per ANSI C63.10-2013 Section 14.4.3.2.3, the directional gain is calculated using the following formula, where GN is the gain of the nth antenna and NANT, the total number of antennas used.
For correlated unequal antenna gain
Directional gain = 10*log[(10G1/20 + 10G2/20 + … + 10GN/20)2 / NANT] dBi

For completely uncorrelated unequal antenna gain
Directional gain = 10*log[(10G1/10 + 10G2/10 + … + 10GN/10)/ NANT] dBi

Sample Multiple antennas Calculation: Core 0 + Core 1 +…Core i. = MIMO/CDD
(i is the number of antennas)
(#VALUE! mW + mW) = #VALUE! mW = dBm
Sample e.i.r.p. Calculation:
e.i.r.p. (dBm) = Conducted Power (dBm) + Ant gain (dBi)

4.7 Emissions in frequency bands (below 1GHz)

Test Requirement:	Refer to 47 CFR 15.247(d), 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 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

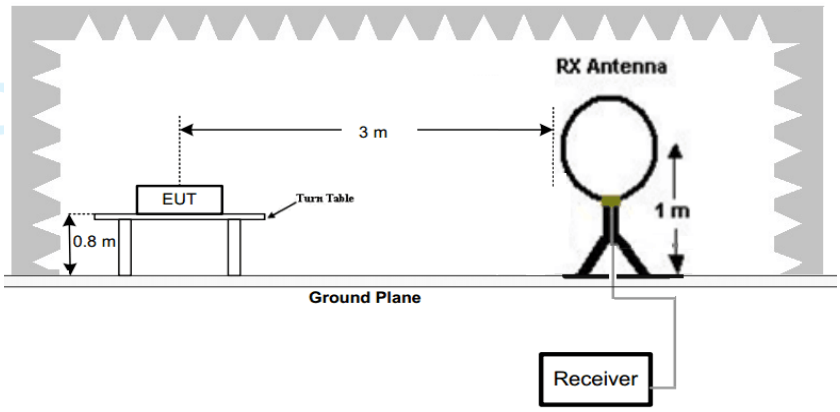
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.

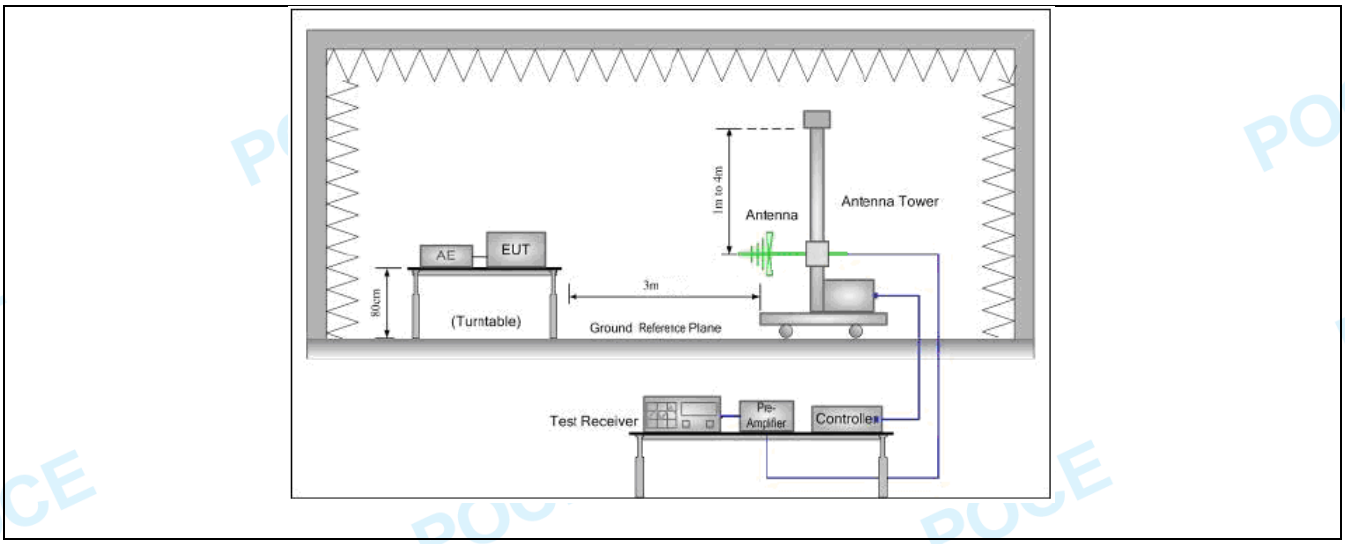
Test Method:	ANSI C63.10-2013 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013 section 6.6.4

4.7.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.7 °C	Humidity:	54.6 %	Atmospheric Pressure:	102 kPa
Pre test mode:	TM2				
Final test mode:	TM2				

4.7.2 Test Setup Diagram:





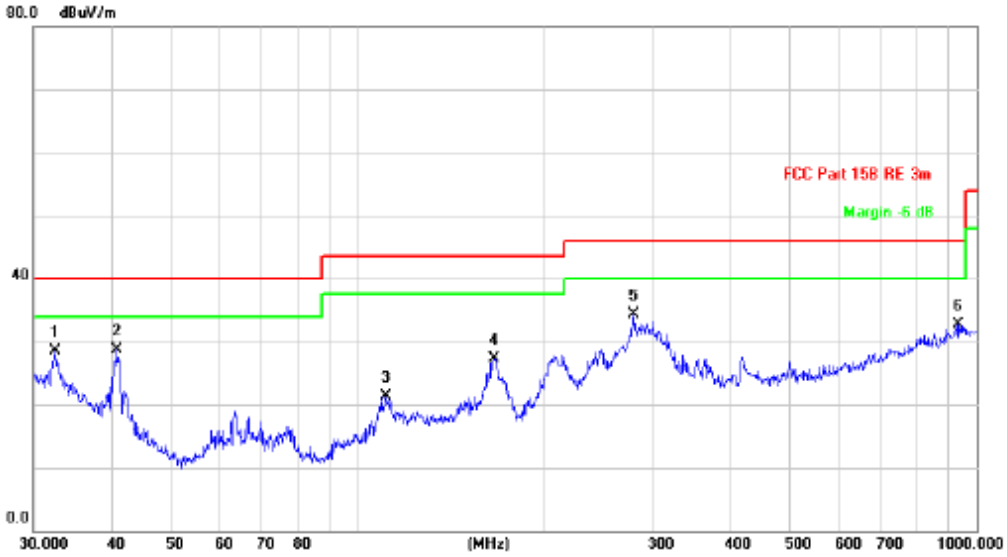
4.7.3 Test Data:

Between 9KHz – 30MHz
The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

NOTE: The test results only show the worst mode or worst channel.

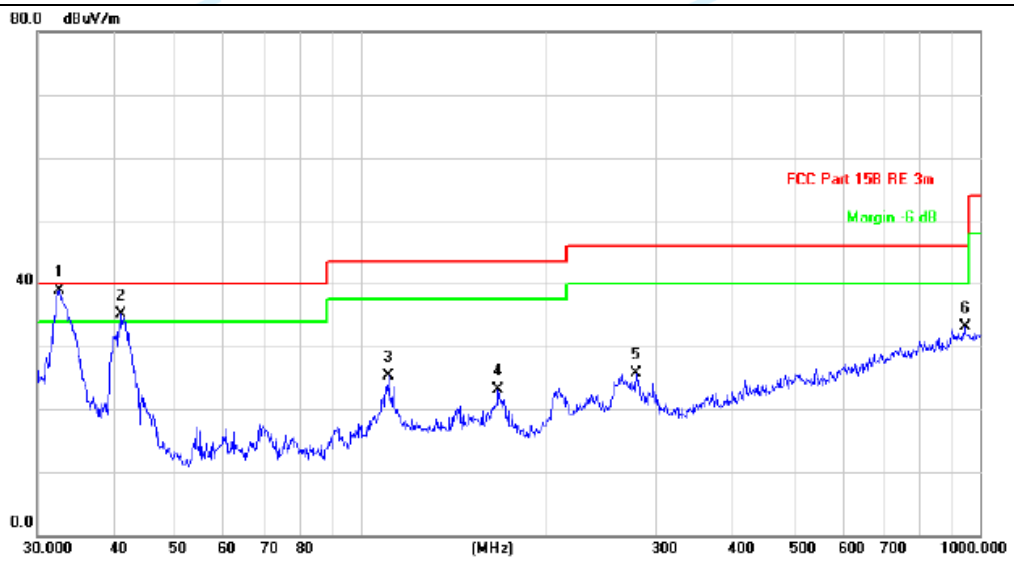
Between 30MHz – 1000MHz

TM2 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 20 / CH: H



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		32.5197	27.62	0.87	28.49	40.00	-11.51	QP	100	142	
2	*	40.9881	33.84	-5.23	28.61	40.00	-11.39	QP	100	350	
3		111.3468	27.79	-6.40	21.39	43.50	-22.11	QP	100	26	
4		166.6513	33.78	-6.41	27.37	43.50	-16.13	QP	100	145	
5		279.0436	38.18	-3.95	34.23	46.00	-11.77	QP	100	86	
6		935.5462	25.01	7.76	32.77	46.00	-13.23	QP	100	328	

TM2 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 20 / CH: H



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1	*	32.5198	38.01	0.86	38.87	40.00	-1.13	QP	100	357	
2	!	40.9881	40.32	-5.23	35.09	40.00	-4.91	QP	100	178	
3		110.9571	31.66	-6.43	25.23	43.50	-18.27	QP	100	208	
4		166.6514	29.43	-6.41	23.02	43.50	-20.48	QP	100	45	
5		278.0668	29.68	-3.95	25.73	46.00	-20.27	QP	100	2	
6		945.4399	25.25	7.77	33.02	46.00	-12.98	QP	100	110	

Note: Peak and Average measurement were performed at the frequencies with maximized peak emission.
Mesurement Level = Reading level + Correct Factor, Over=Limit- Mesurement

Note:

Per ANSI C63.10-2013, if there are two or more antnnas, the conducted powers at Core 0, Core 1,…, Core i were first measured separately, as shown in the section above(this product olny have one antenna). The measured values were then summed in linear power units then converted back to dBm.

Per ANSI C63.10-2013 Section 14.4.3.2.3, the directional gain is calculated using the following formula, where GN is the gain of the nth antenna and NANT, the total number of antennas used.

For correlated unequal antenna gain

Directional gain = 10*log[(10G1/20 + 10G2/20 + … + 10GN/20)2 / NANT] dBi

For completely uncorrelated unequal antenna gain

Directional gain = 10*log[(10G1/10 + 10G2/10 + … + 10GN/10)/ NANT] dBi

Sample Multiple antennas Calculation: Core 0 + Core 1 +…Core i. = MIMO/CDD

(i is the number of antennas)

(#VALUE! mW + mW) = #VALUE! mW = dBm

Sample e.i.r.p. Calculation:

e.i.r.p. (dBm) = Conducted Power (dBm) + Ant gain (dBi)

4.8 Emissions in 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 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

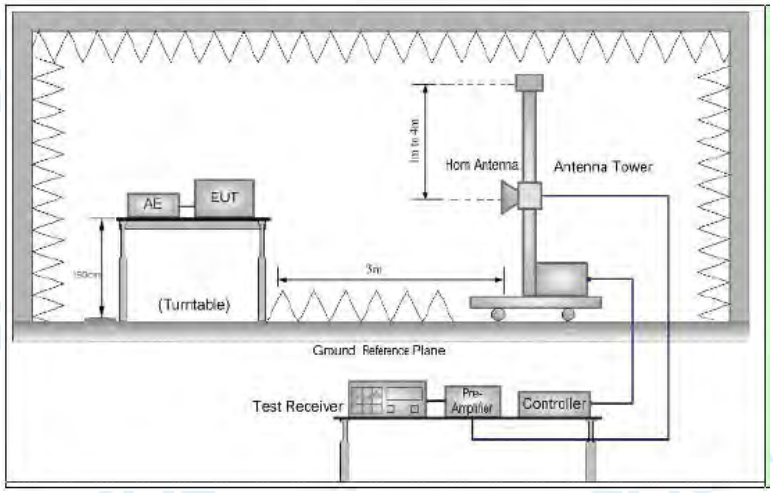
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.

Test Method:	ANSI C63.10-2013 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013 section 6.6.4

4.8.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.7 °C	Humidity:	54.6 %	Atmospheric Pressure:	102 kPa
Pre test mode:	TM1, TM2				
Final test mode:	TM1, TM2				

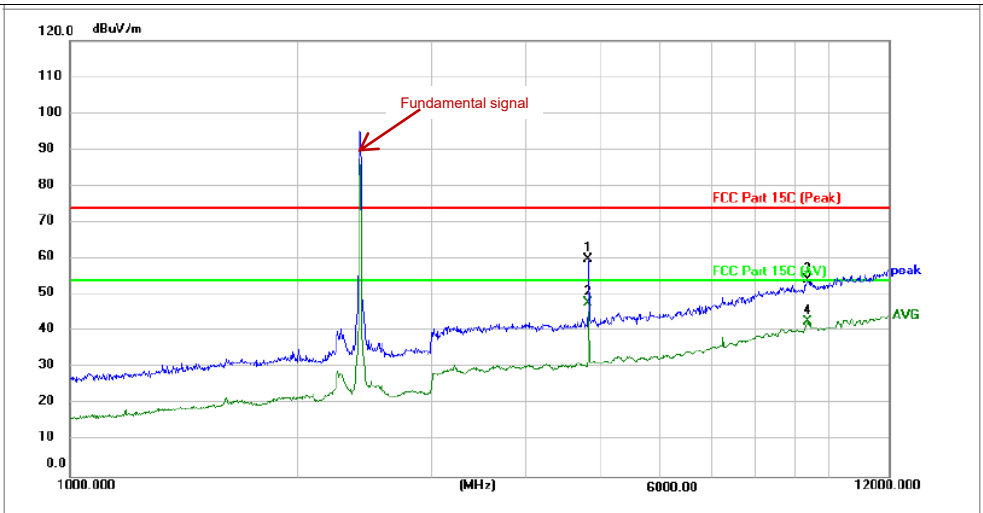
4.8.2 Test Setup Diagram:



4.8.3 Test Data:

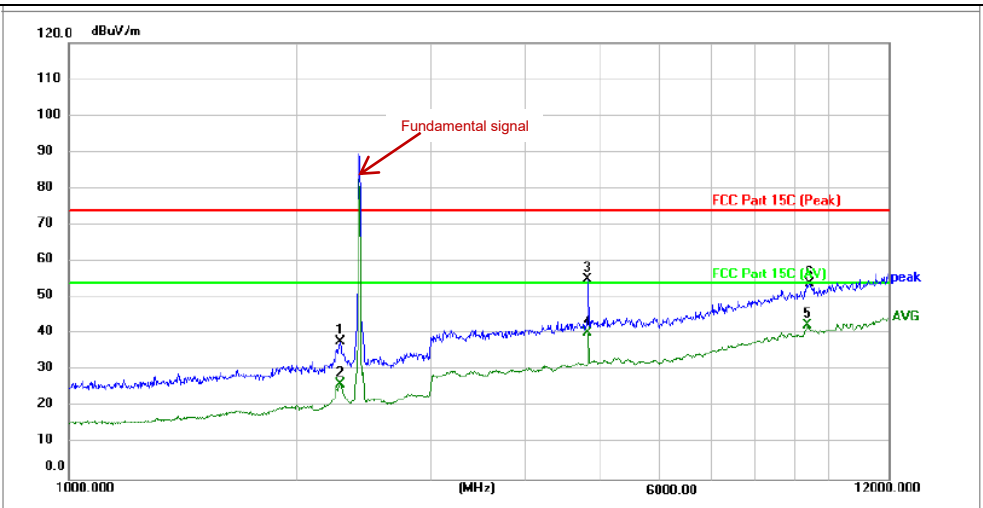
The testing frequency can reach up to 13GHz, but the worst mode and channel are recorded,

TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 20 / CH: L



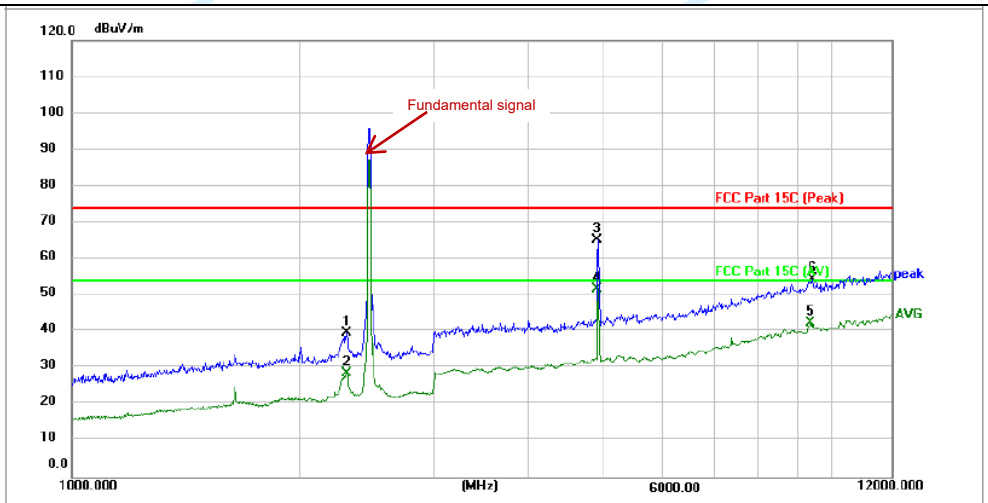
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	4820.829	60.65	-0.84	59.81	74.00	-14.19	peak			P	
2 *	4820.829	48.63	-0.84	47.79	54.00	-6.21	AVG			P	
3	9383.013	46.21	8.07	54.28	74.00	-19.72	peak			P	
4	9383.013	34.68	8.07	42.75	54.00	-11.25	AVG			P	

TM1 / Polarization: Vertical/ Band: 2400-2483.5 MHz / BW: 20 / CH: L



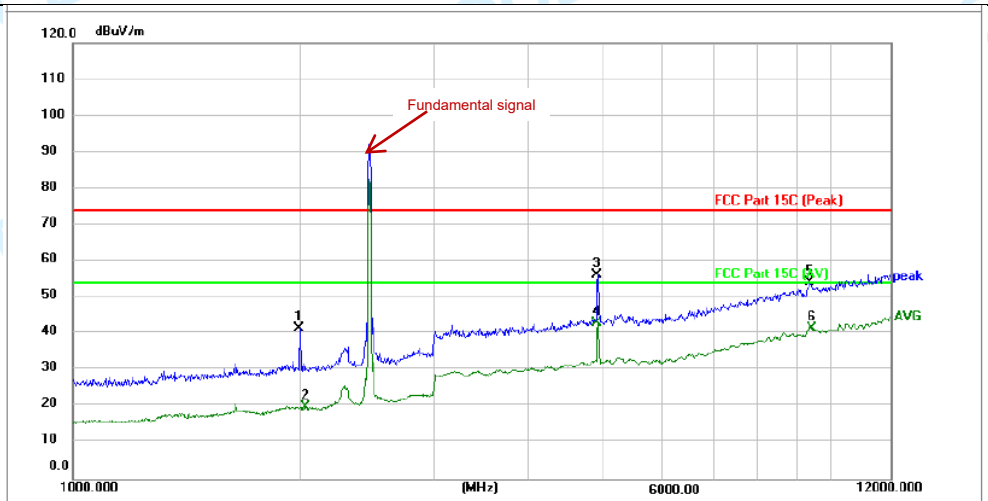
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2276.193	46.27	-8.36	37.91	74.00	-36.09	peak			P	
2	2276.193	34.47	-8.36	26.11	54.00	-27.89	AVG			P	
3	4820.829	55.41	-0.22	55.19	74.00	-18.81	peak			P	
4	4832.823	40.43	-0.18	40.25	54.00	-13.75	AVG			P	
5 *	9383.013	34.58	7.86	42.44	54.00	-11.56	AVG			P	
6	9429.761	45.84	7.90	53.74	74.00	-20.26	peak			P	

TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 20 / CH: H



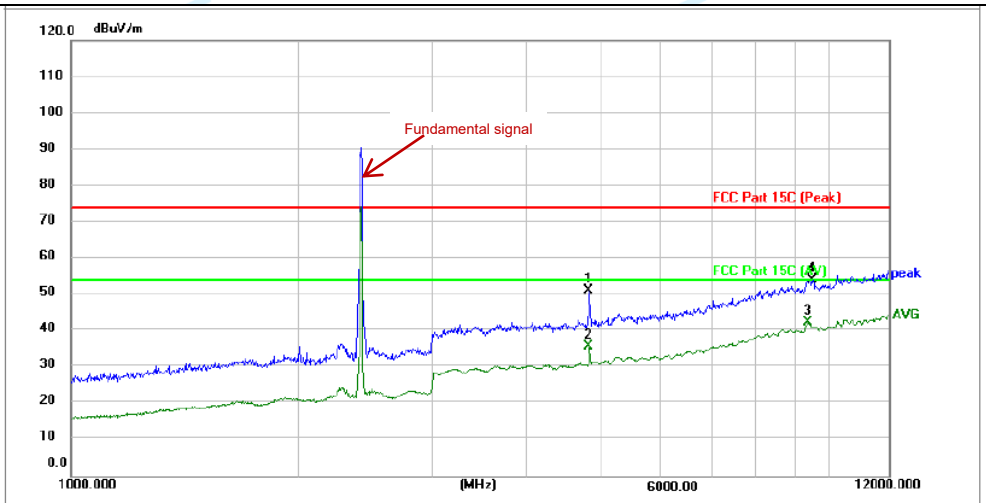
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2298.930	46.66	-6.96	39.70	74.00	-34.30	peak			P	
2	2298.930	35.50	-6.96	28.54	54.00	-25.46	AVG			P	
3	4929.857	65.61	-0.47	65.14	74.00	-8.86	peak			P	
4 *	4929.857	52.11	-0.47	51.64	54.00	-2.36	AVG			P	
5	9383.013	34.43	8.07	42.50	54.00	-11.50	AVG			P	
6	9429.761	46.43	8.08	54.51	74.00	-19.49	peak			P	

TM1 / Polarization: Vertical/ Band: 2400-2483.5 MHz / BW: 20 / CH: H



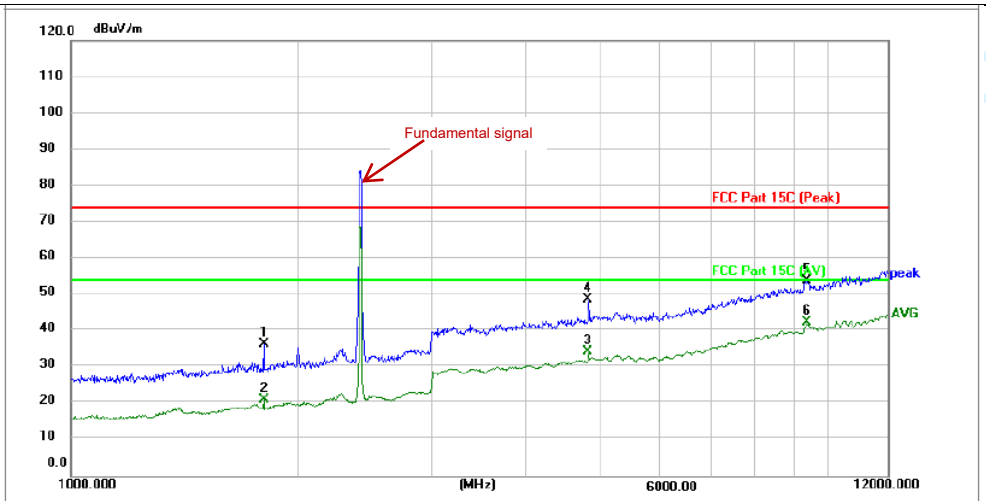
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1995.319	50.90	-9.46	41.44	74.00	-32.56	peak			P	
2	2035.381	29.31	-9.31	20.00	54.00	-34.00	AVG			P	
3	4929.857	56.12	0.14	56.26	74.00	-17.74	peak			P	
4 *	4929.857	42.88	0.14	43.02	54.00	-10.98	AVG			P	
5	9383.013	46.37	7.86	54.23	74.00	-19.77	peak			P	
6	9429.761	33.58	7.90	41.48	54.00	-12.52	AVG			P	

TM2/ Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 20 / CH: L



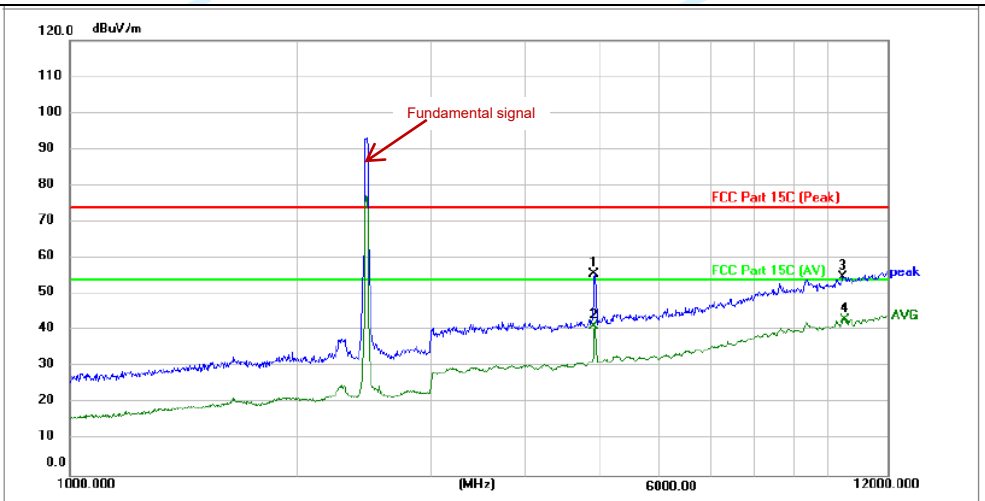
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	4820.829	52.09	-0.84	51.25	74.00	-22.75	peak	150		P	
2	4832.823	36.77	-0.80	35.97	54.00	-18.03	AVG	150		P	
3 *	9383.013	34.46	8.07	42.53	54.00	-11.47	AVG	150		P	
4	9523.956	46.03	8.09	54.12	74.00	-19.88	peak	150		P	

TM2 / Polarization: Vertical/ Band: 2400-2483.5 MHz / BW: 20 / CH: L



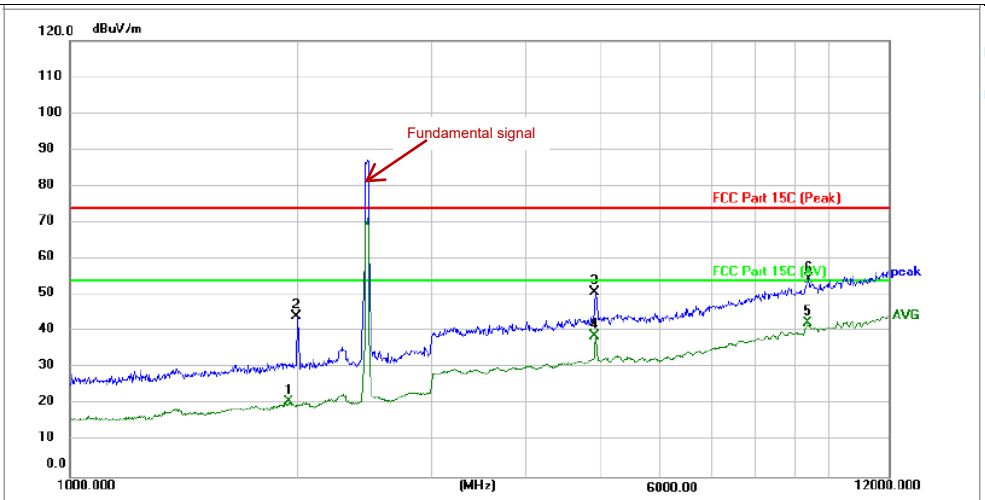
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1797.574	46.52	-10.19	36.33	74.00	-37.67	peak			P	
2	1797.574	31.33	-10.19	21.14	54.00	-32.86	AVG			P	
3	4820.829	34.42	-0.22	34.20	54.00	-19.80	AVG			P	
4	4832.823	49.00	-0.18	48.82	74.00	-25.18	peak			P	
5	9383.013	46.12	7.86	53.98	74.00	-20.02	peak			P	
6 *	9383.013	34.45	7.86	42.31	54.00	-11.69	AVG			P	

TM2 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 20 / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	4929.857	56.08	-0.47	55.61	74.00	-18.39	peak	150		P	
2	4929.857	41.60	-0.47	41.13	54.00	-12.87	AVG	150		P	
3	10467.098	45.94	8.94	54.88	74.00	-19.12	peak	150		P	
4 *	10519.247	33.97	9.03	43.00	54.00	-11.00	AVG	150		P	

TM2 / Polarization: Vertical/ Band: 2400-2483.5 MHz / BW: 20 / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1946.348	30.42	-9.64	20.78	54.00	-33.22	AVG			P	
2	1995.319	53.75	-9.46	44.29	74.00	-29.71	peak			P	
3	4929.857	50.60	0.14	50.74	74.00	-23.26	peak			P	
4	4929.857	38.76	0.14	38.90	54.00	-15.10	AVG			P	
5 *	9383.013	34.53	7.86	42.39	54.00	-11.61	AVG			P	
6	9406.358	46.57	7.89	54.46	74.00	-19.54	peak			P	

Remark: Margin = Limit – Level
Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
Level=Test receiver reading + correction factor

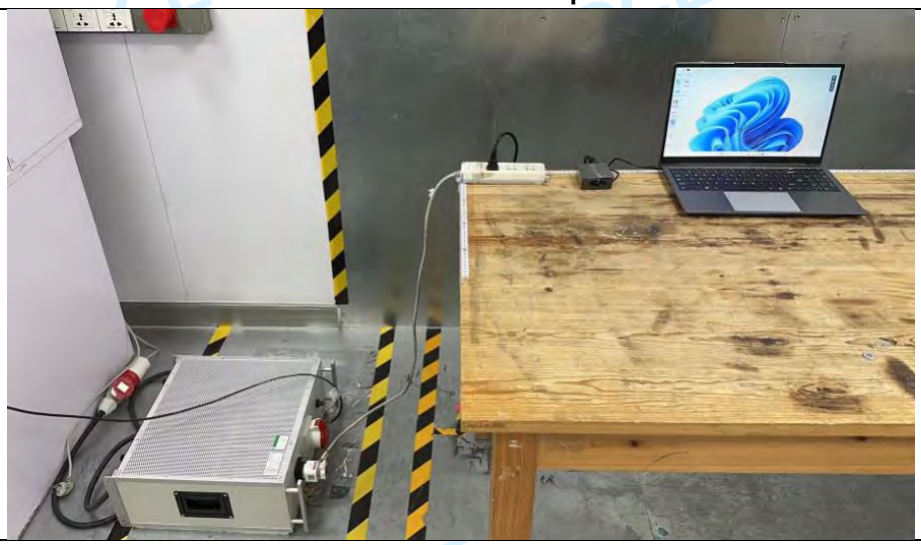
Note:
Per ANSI C63.10-2013, if there are two or more antnnas, the conducted powers at Core 0, Core 1,…, Core i were first measured separately, as shown in the section above(this product olny have one antenna). The measured values were then summed in linear power units then converted back to dBm.

Sample Multiple antennas Calculation: Core 0 + Core 1 +…Core i. = MIMO/CDD
(i is the number of antennas)

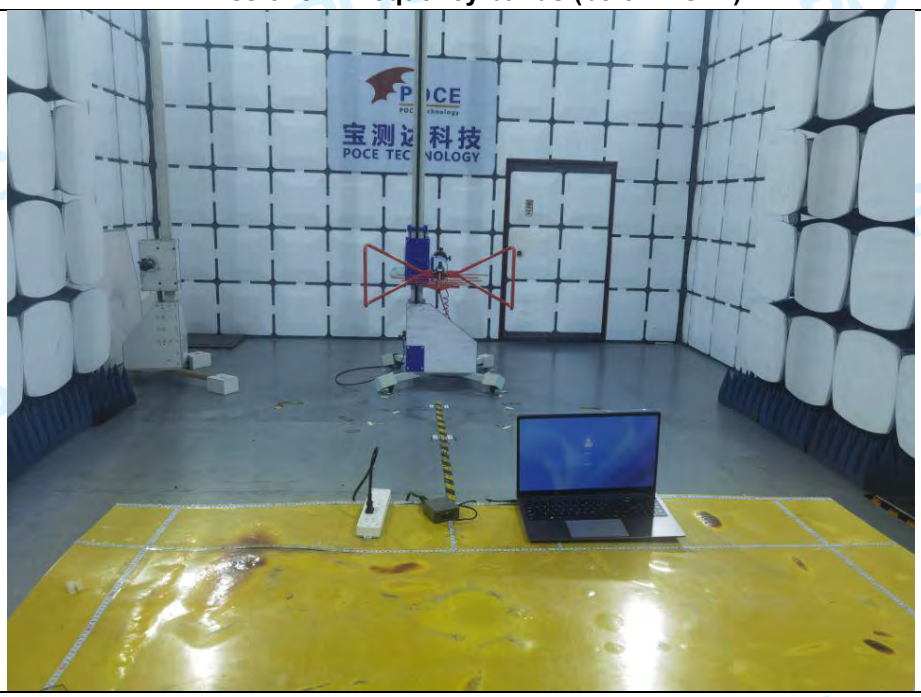
(#VALUE! mW + XX mW) = #VALUE! mW = XX dBm
Sample e.i.r.p. Calculation:
XX dBm= Conducted Power (dBm) + Ant gain (dBi)

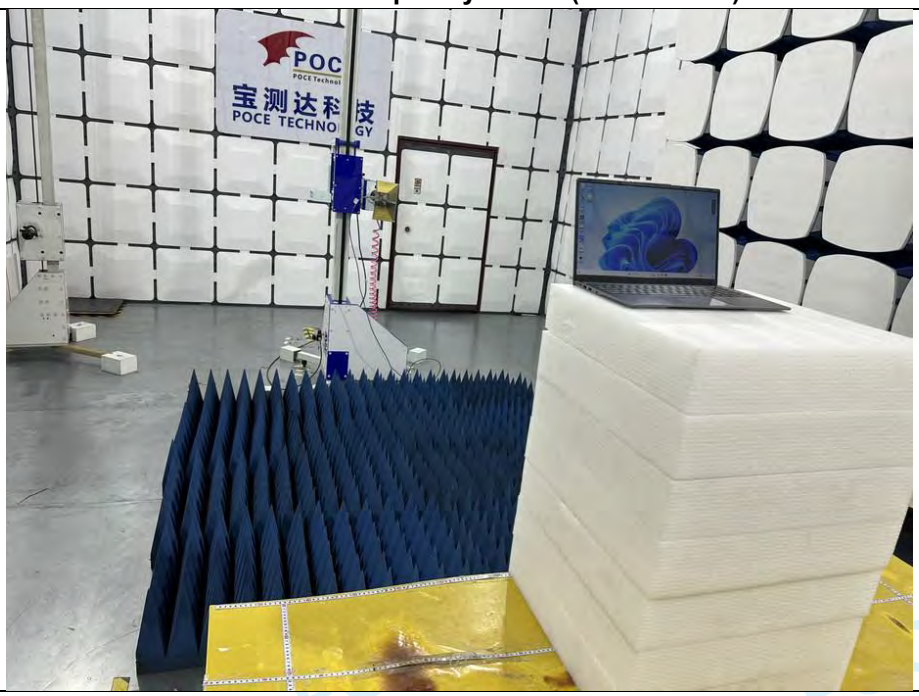
5 TEST SETUP PHOTOS

Conducted Emission at AC power line



Emissions in frequency bands (below 1GHz)



Emissions in frequency bands (above 1GHz)


6 PHOTOS OF THE EUT

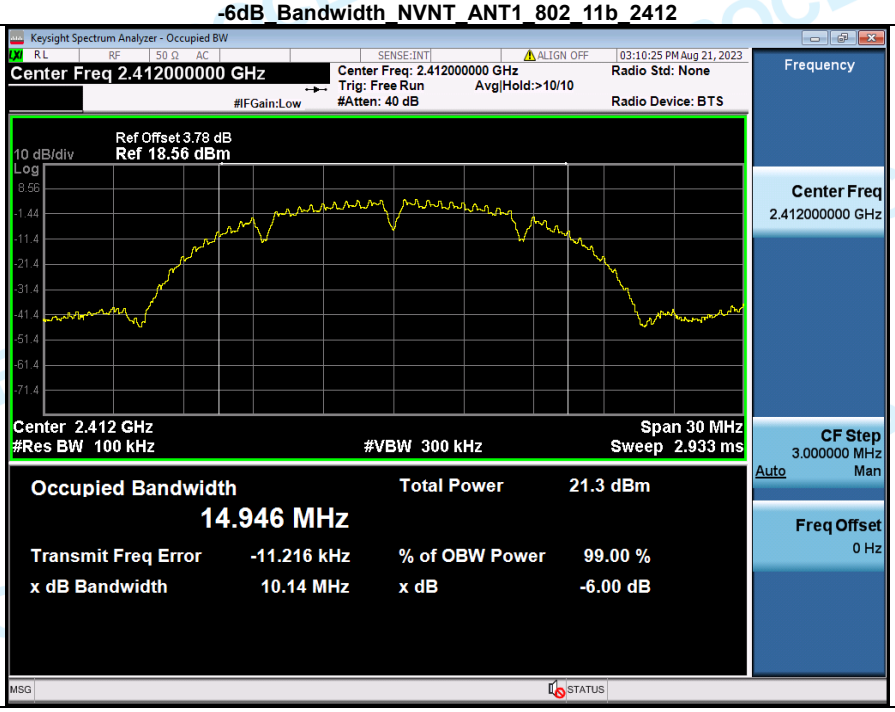
Please refer to report No.: POCE230811187TRW for details.

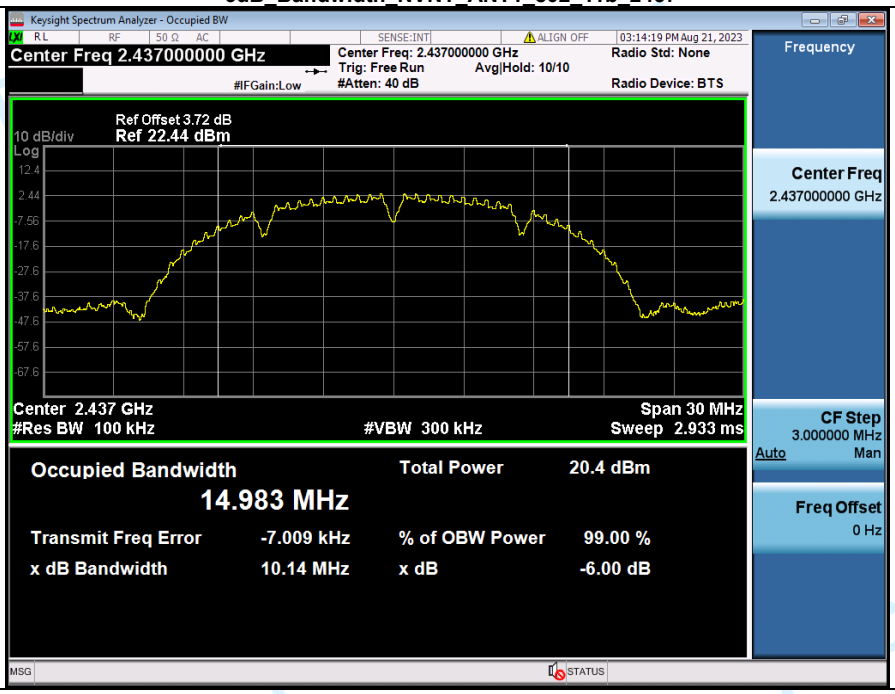
Appendix

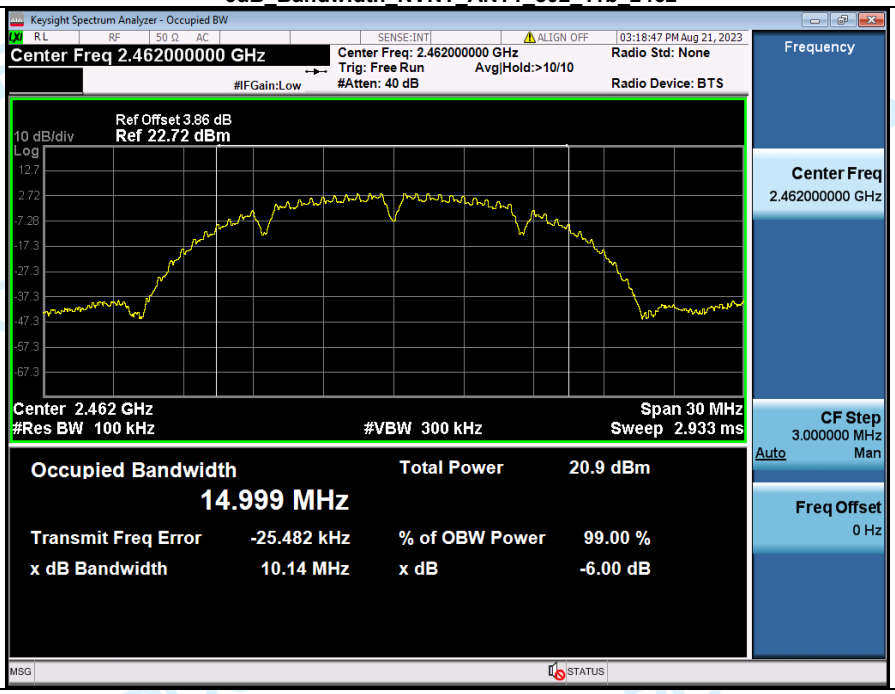
1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	10.14	500	Pass
NVNT	ANT1	802.11b	2437.00	10.14	500	Pass
NVNT	ANT1	802.11b	2462.00	10.14	500	Pass
NVNT	ANT1	802.11g	2412.00	16.54	500	Pass
NVNT	ANT1	802.11g	2437.00	16.53	500	Pass
NVNT	ANT1	802.11g	2462.00	16.53	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.78	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.78	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.78	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	36.47	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	36.47	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	36.47	500	Pass

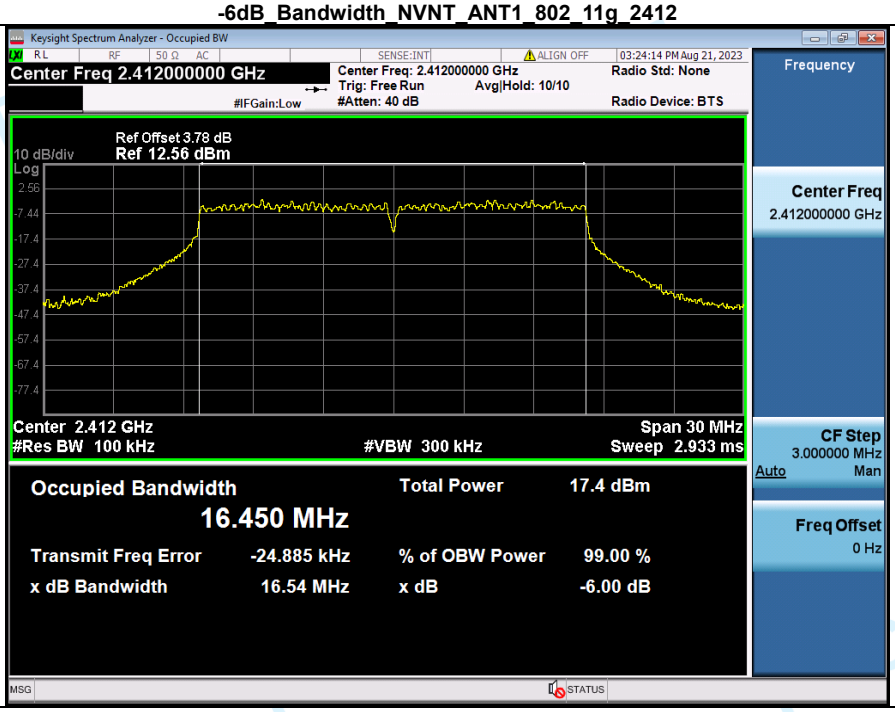
-6dB_Bandwidth_NVNT_ANT1_802_11b_2412



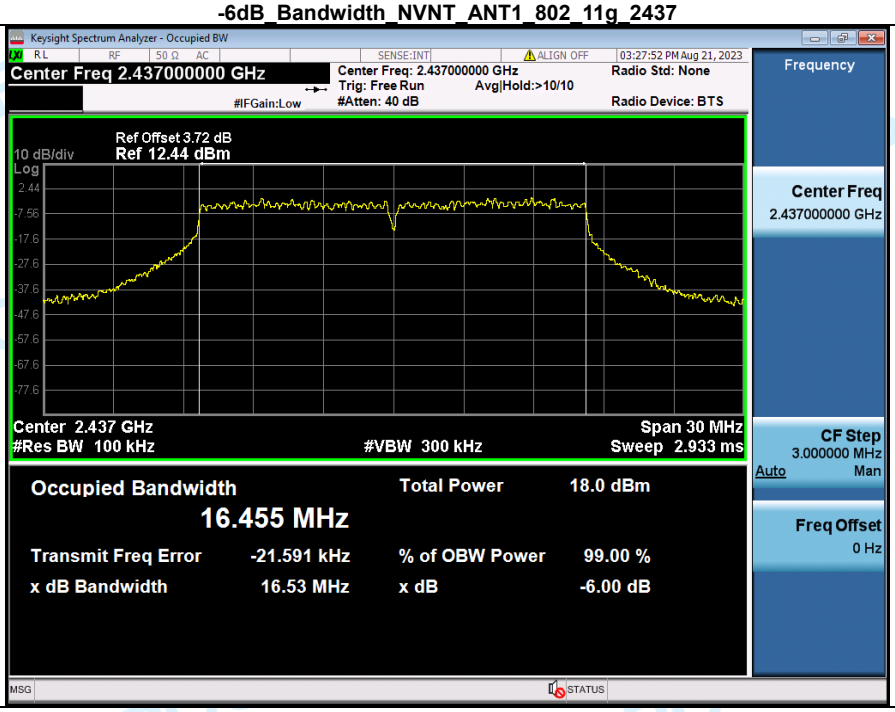
-6dB_Bandwidth_NVNT_ANT1_802_11b_2437


-6dB_Bandwidth_NVNT_ANT1_802_11b_2462


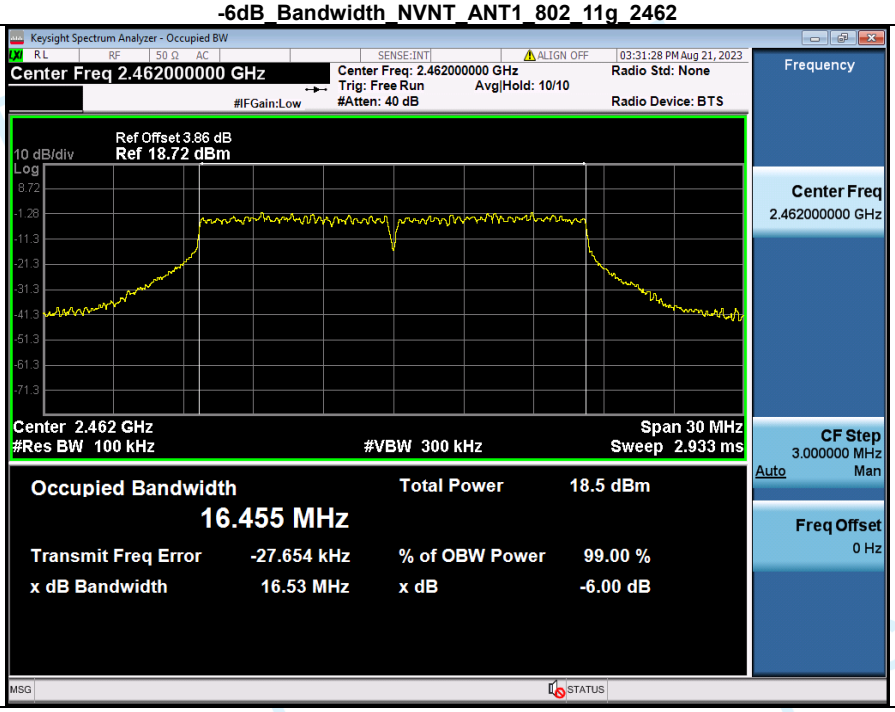
-6dB_Bandwidth_NVNT_ANT1_802_11g_2412



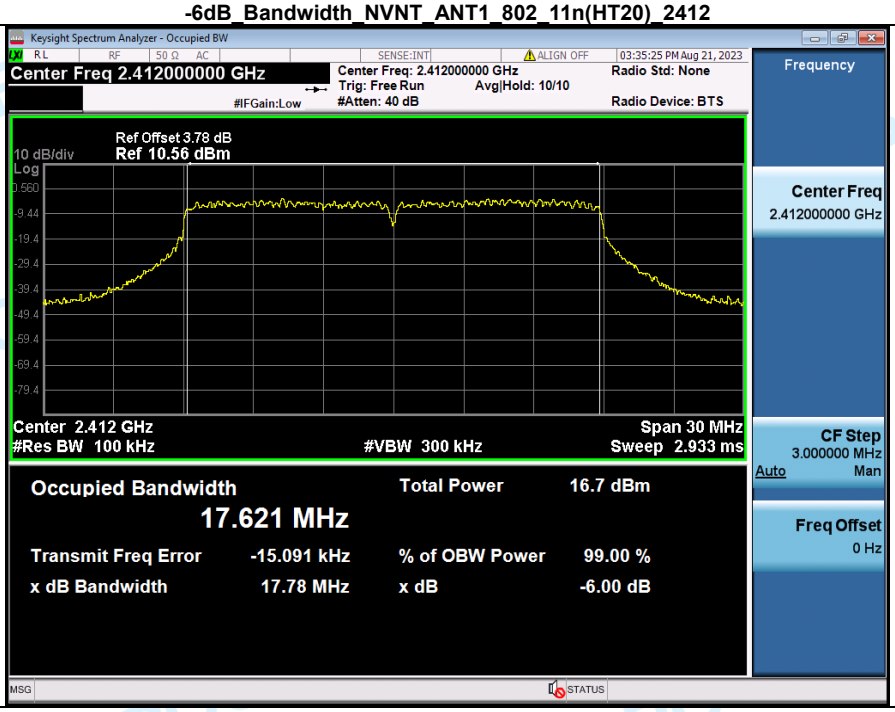
-6dB_Bandwidth_NVNT_ANT1_802_11g_2437



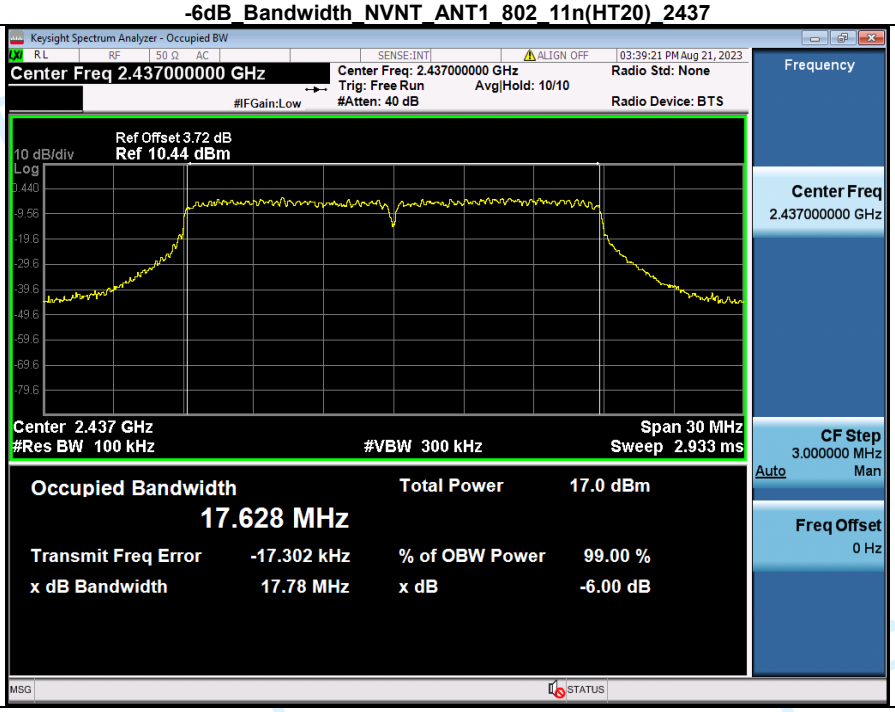
-6dB_Bandwidth_NVNT_ANT1_802_11g_2462



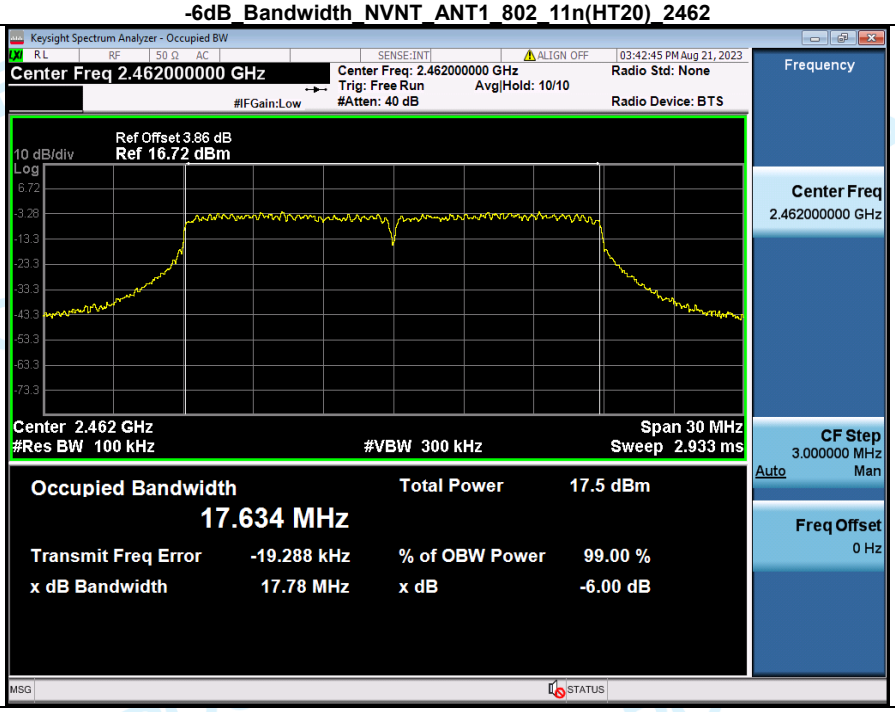
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



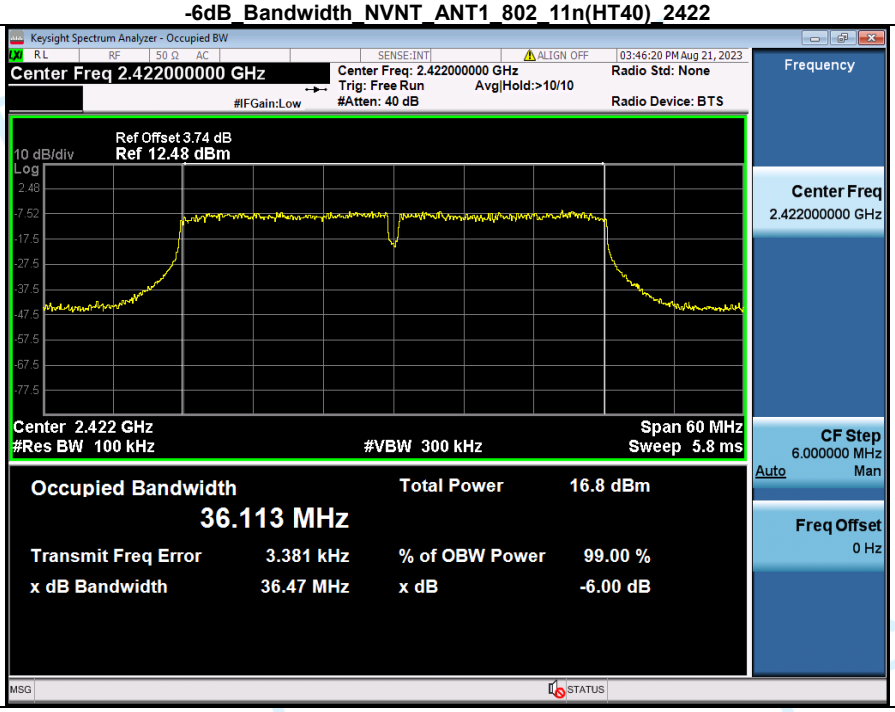
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



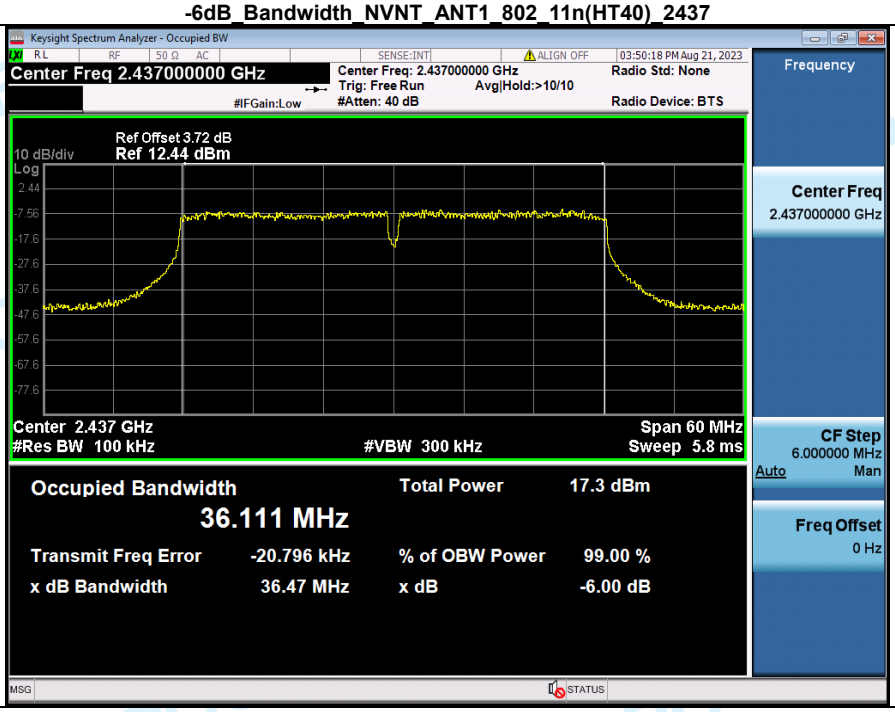
-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462

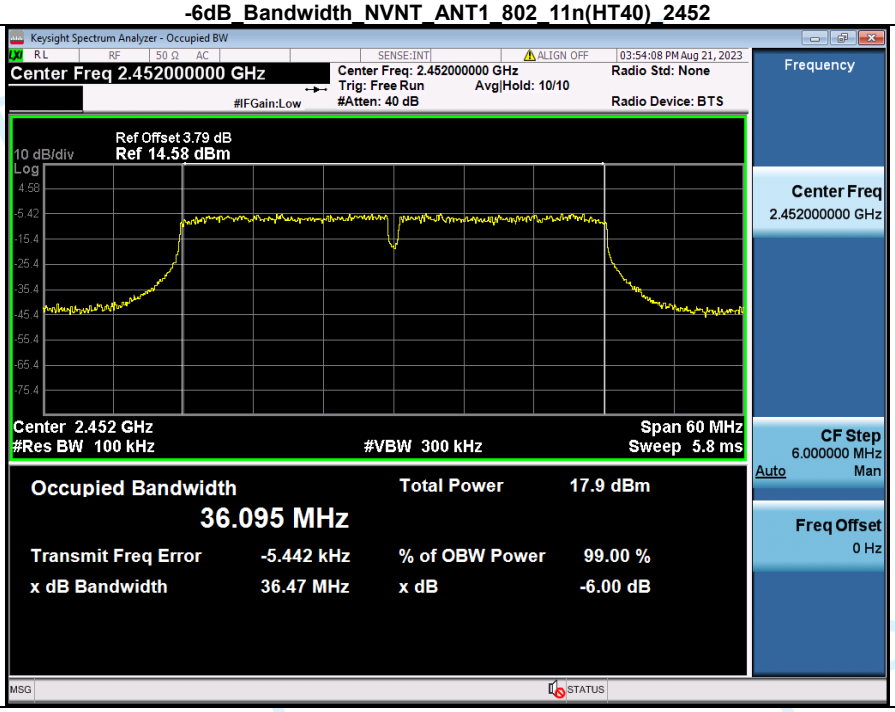


-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2437

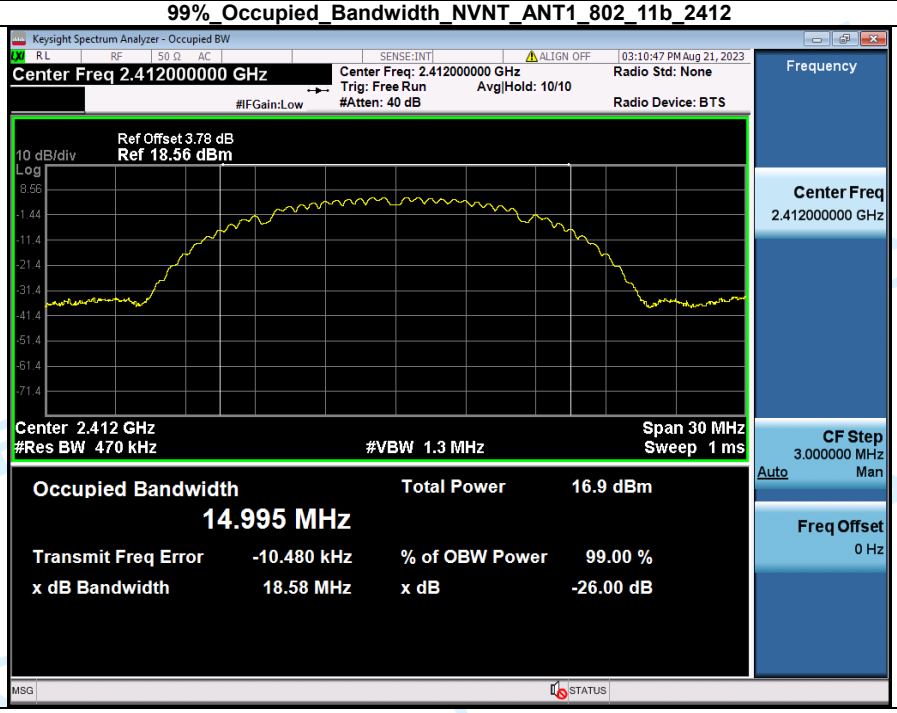


-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452


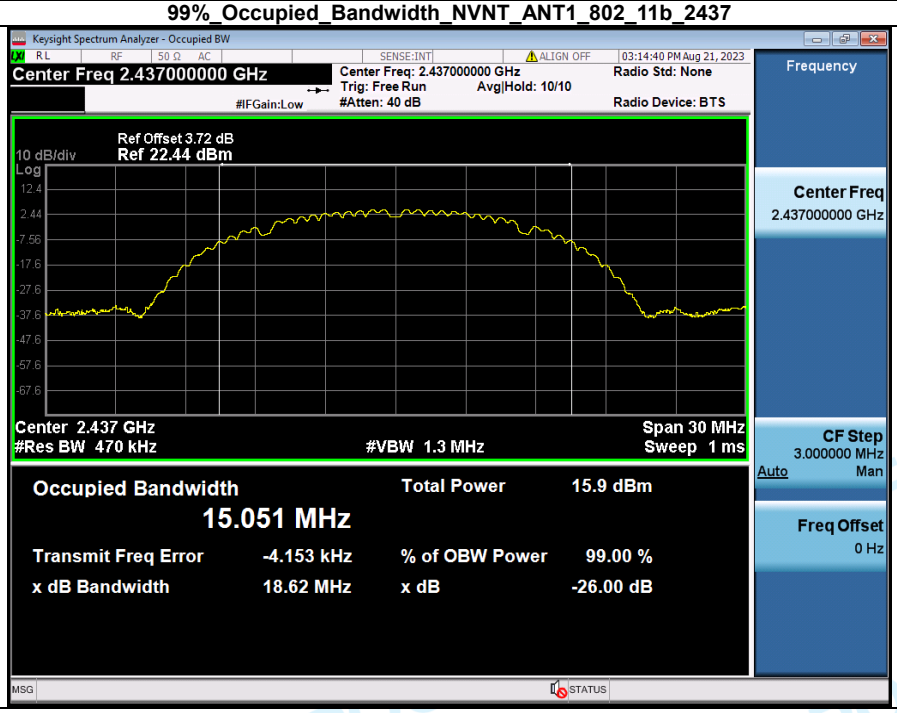
2. 99% Occupied Bandwidth

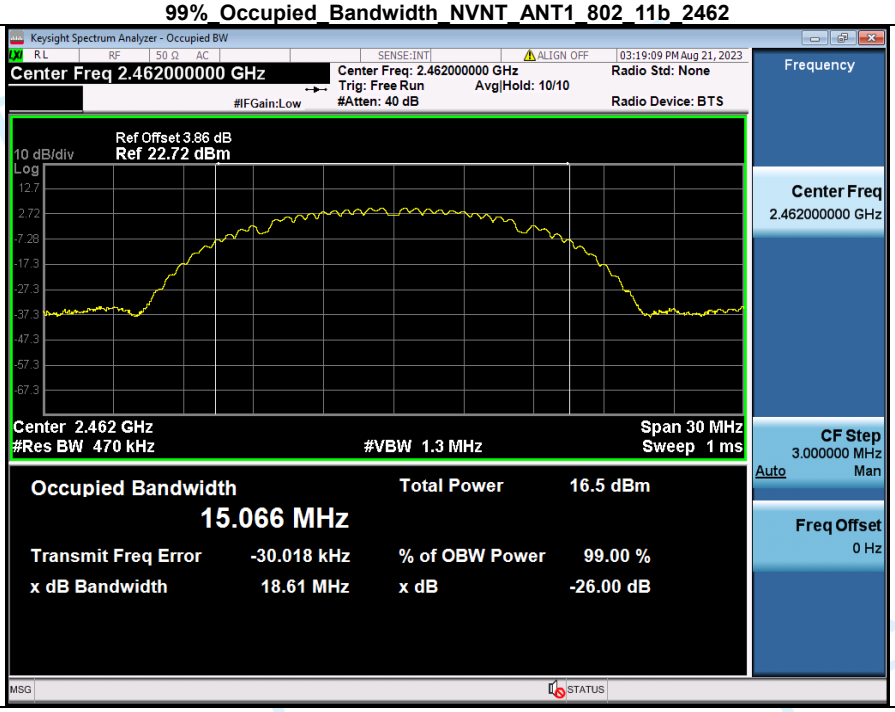
Condition	Antenna	Modulation	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	802.11b	2412.00	14.995
NVNT	ANT1	802.11b	2437.00	15.051
NVNT	ANT1	802.11b	2462.00	15.066
NVNT	ANT1	802.11g	2412.00	16.899
NVNT	ANT1	802.11g	2437.00	16.925
NVNT	ANT1	802.11g	2462.00	17.013
NVNT	ANT1	802.11n(HT20)	2412.00	17.938
NVNT	ANT1	802.11n(HT20)	2437.00	17.953
NVNT	ANT1	802.11n(HT20)	2462.00	17.921
NVNT	ANT1	802.11n(HT40)	2422.00	36.665
NVNT	ANT1	802.11n(HT40)	2437.00	36.685
NVNT	ANT1	802.11n(HT40)	2452.00	36.614

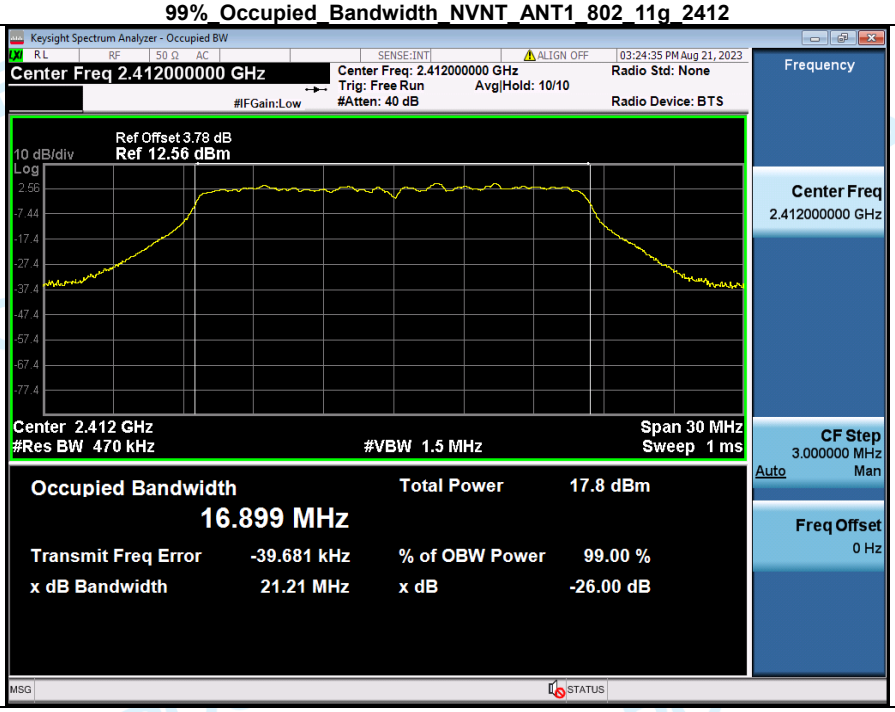
99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2412



99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2437



99%_Occupied_Bandwidth_NVNT_ANT1_802_11b_2462


99%_Occupied_Bandwidth_NVNT_ANT1_802_11g_2412


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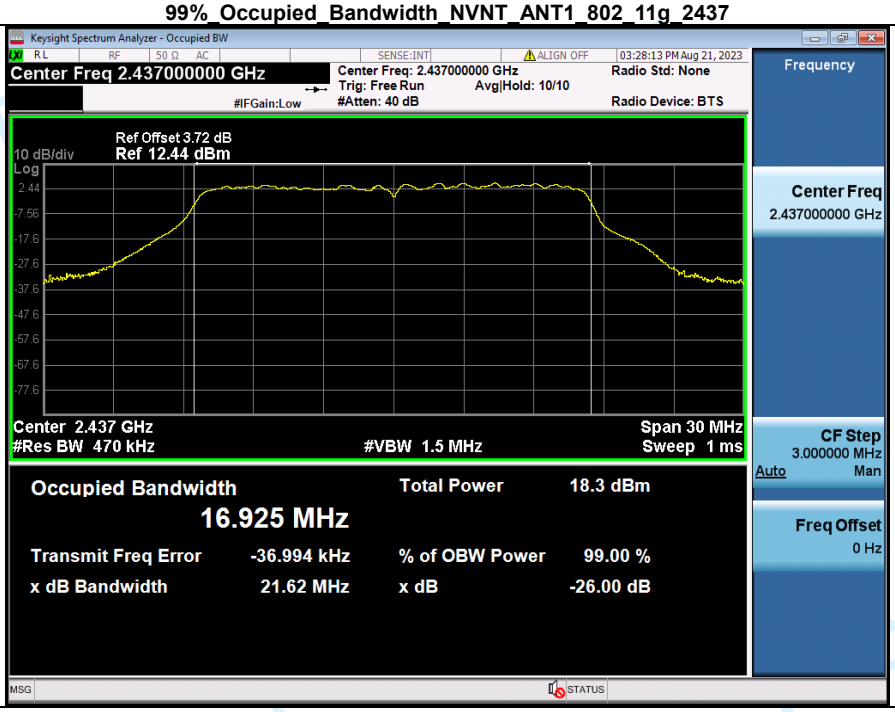

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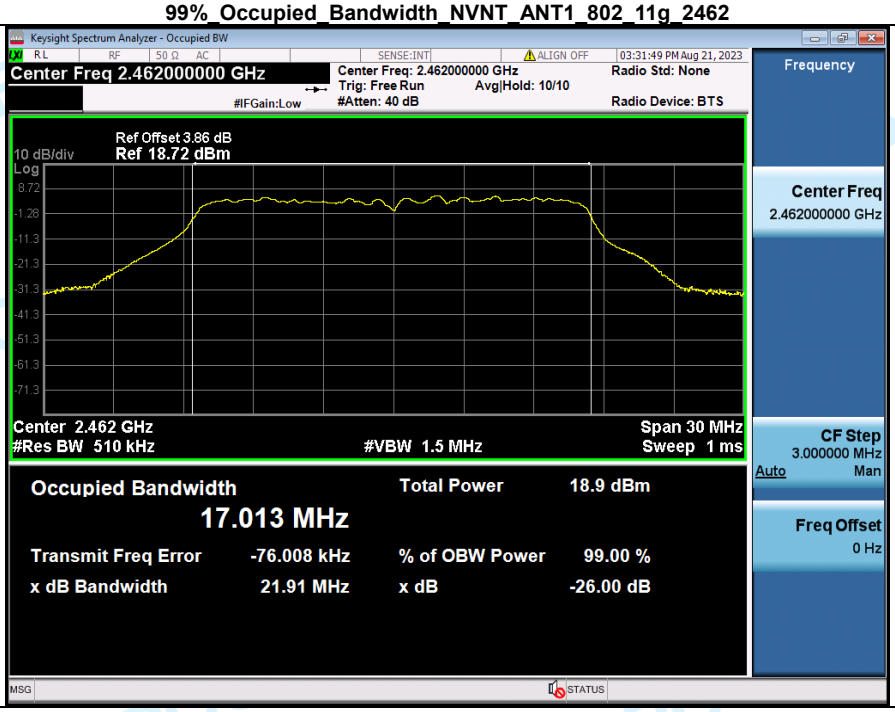
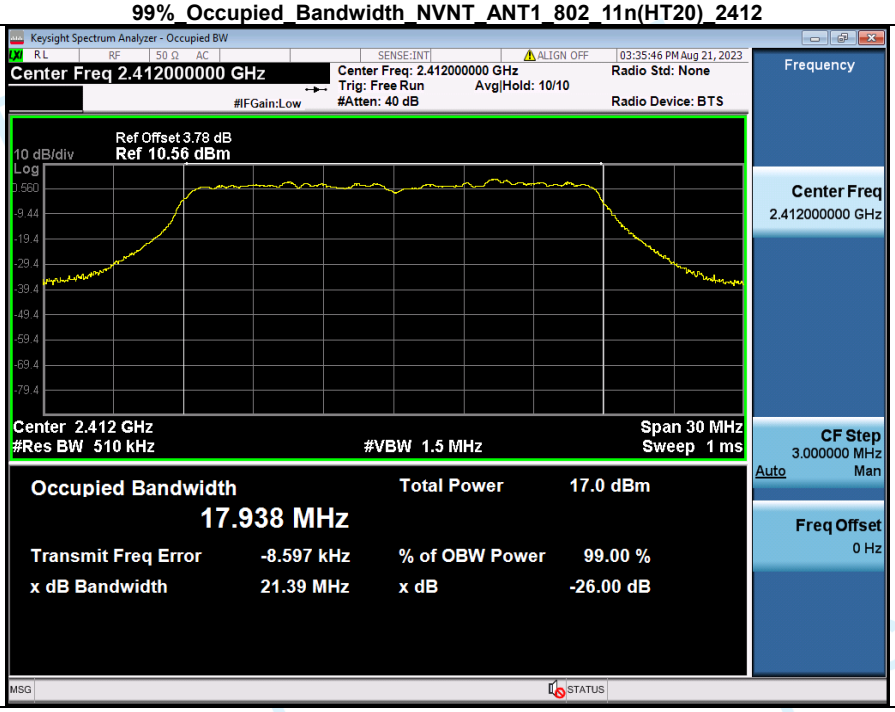
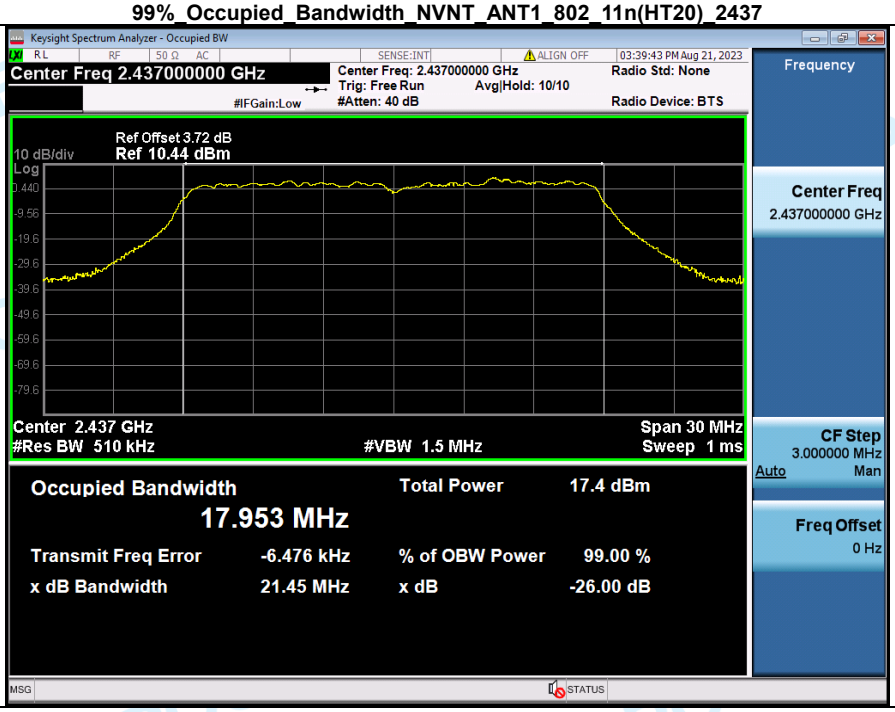
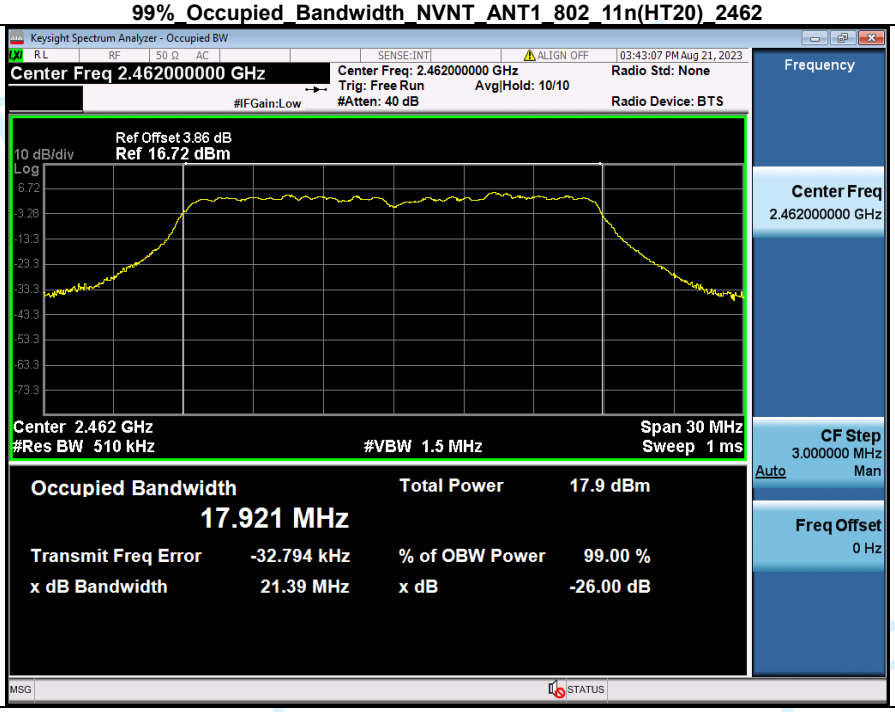


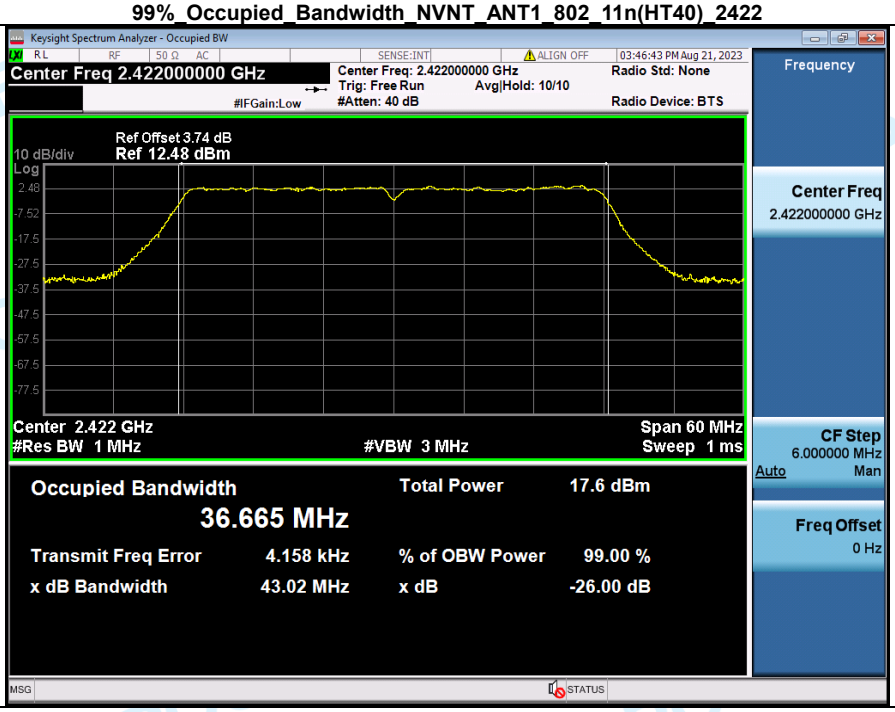
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412


99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437


99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



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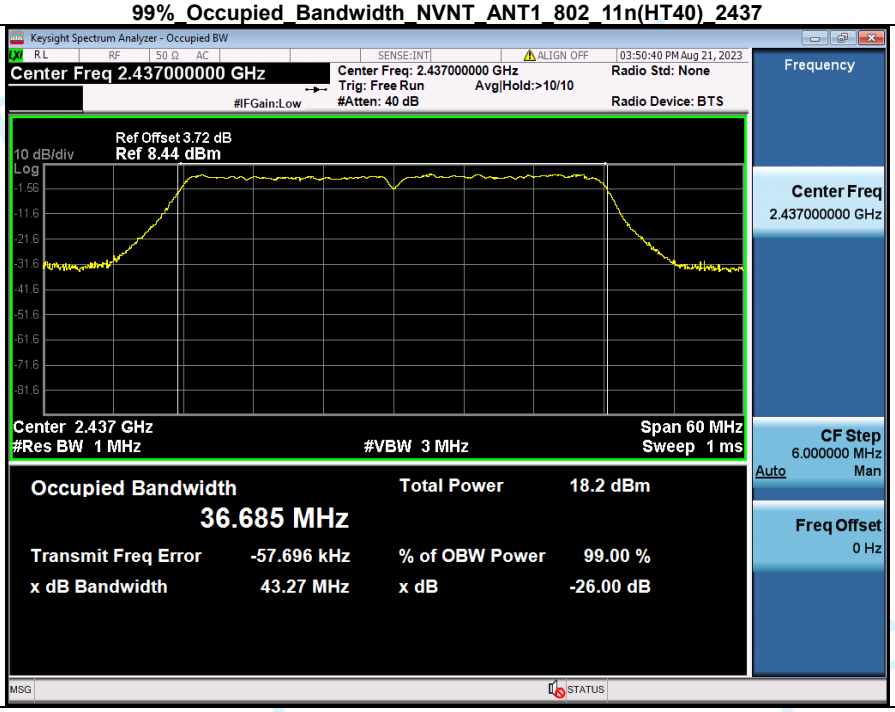
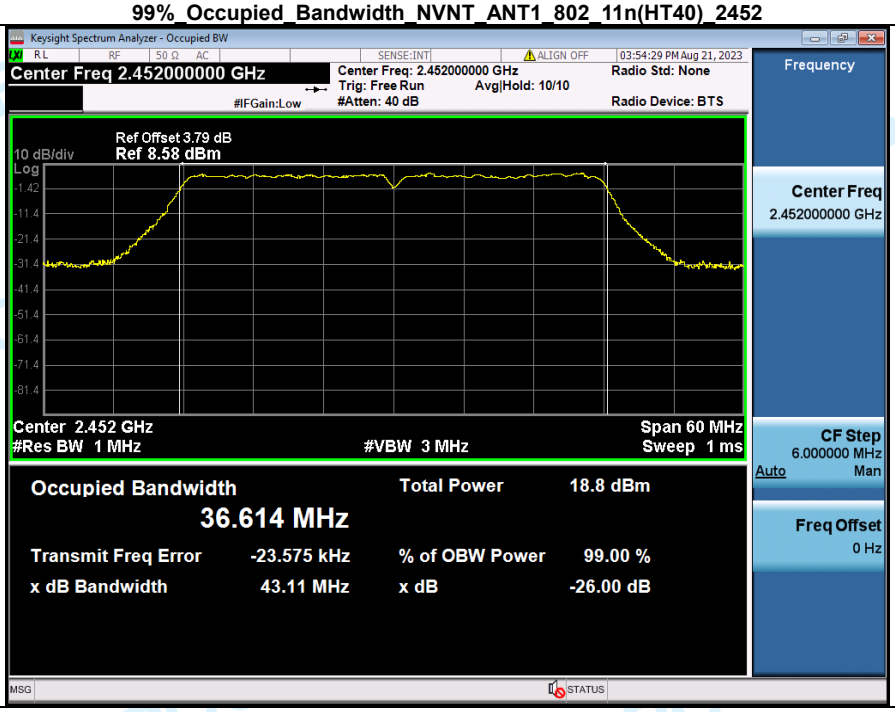


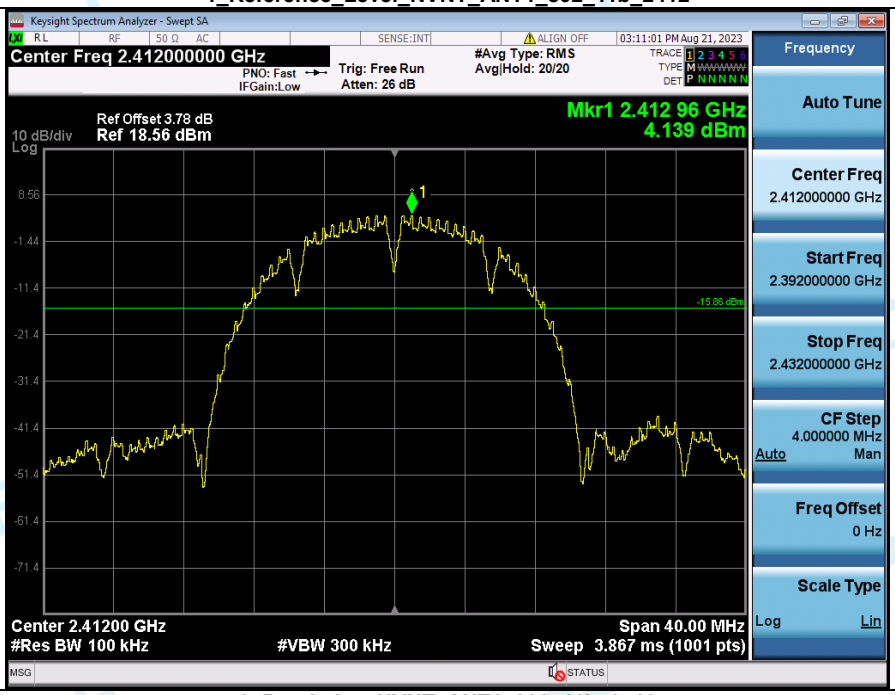
99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452



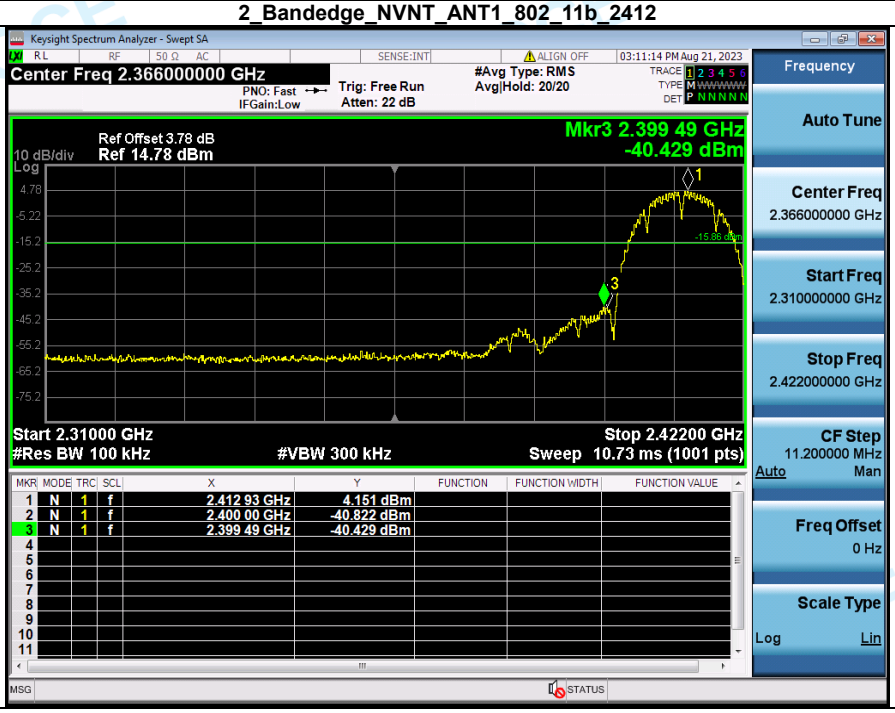
3. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2399.488	-40.429	-15.861	Pass
NVNT	ANT1	802.11b	2462.00	2488.000	-47.881	-15.954	Pass
NVNT	ANT1	802.11g	2412.00	2399.936	-40.157	-21.863	Pass
NVNT	ANT1	802.11g	2462.00	2483.584	-51.955	-20.638	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.936	-41.995	-23.621	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2484.496	-51.889	-22.459	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.760	-41.527	-26.242	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2484.836	-48.434	-25.306	Pass

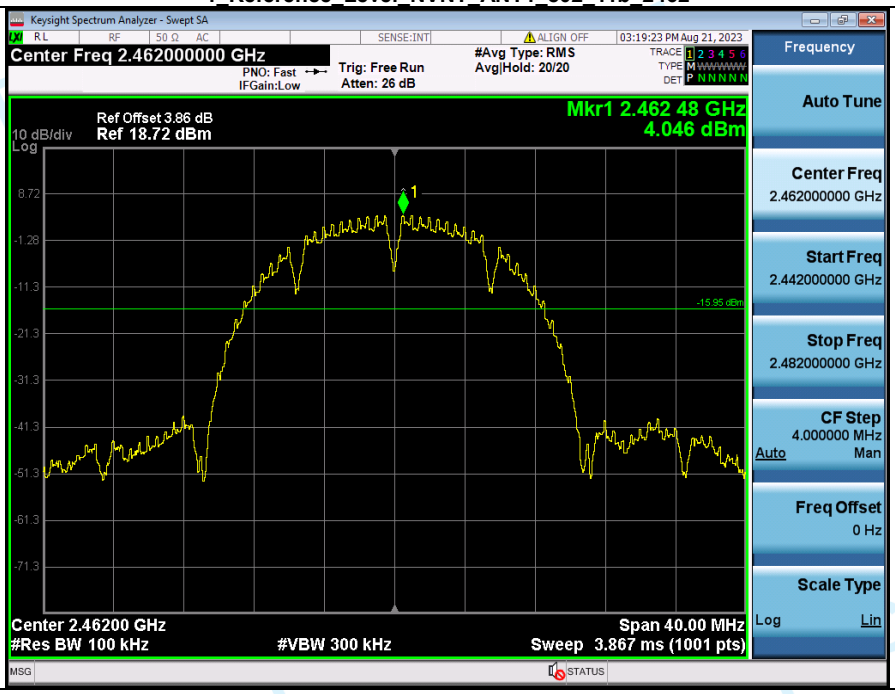
1_Reference_Level_NVNT_ANT1_802_11b_2412



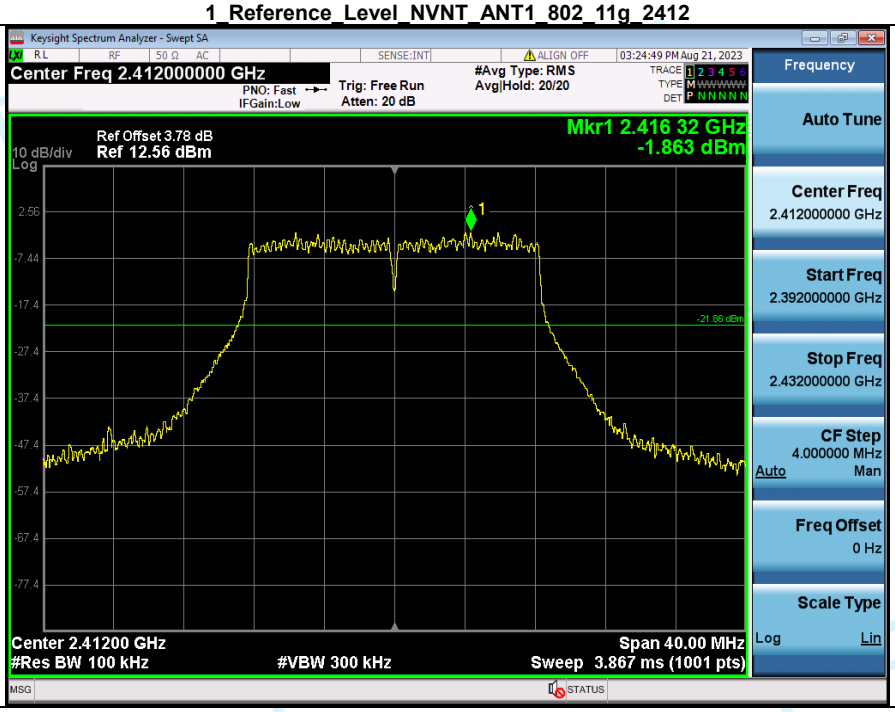
2_Bandedge_NVNT_ANT1_802_11b_2412



1_Reference_Level_NVNT_ANT1_802_11b_2462



2_Bandedge_NVNT_ANT1_802_11b_2462

1_Reference_Level_NVNT_ANT1_802_11g_2412

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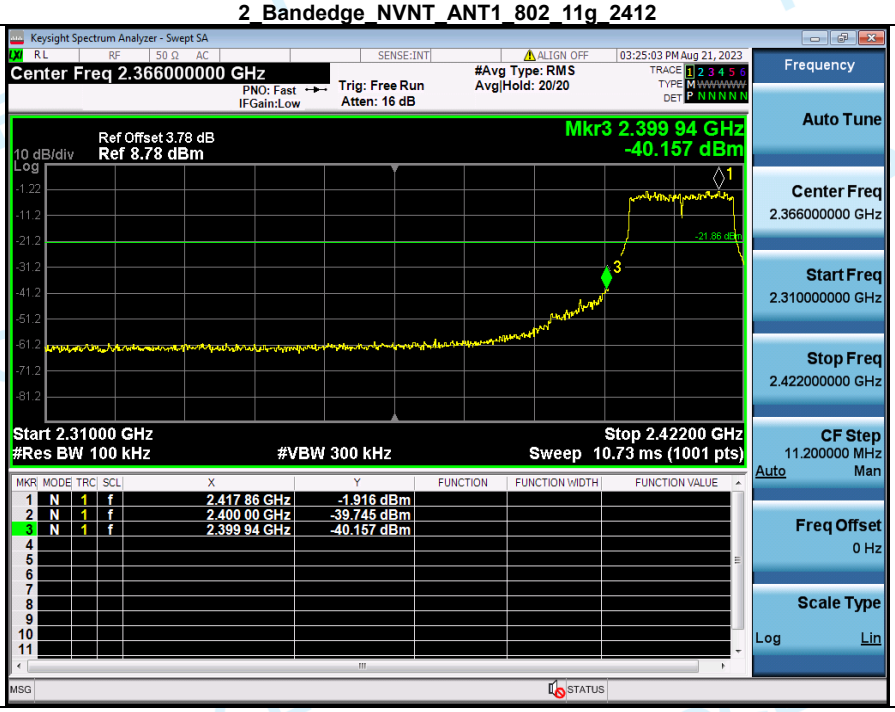
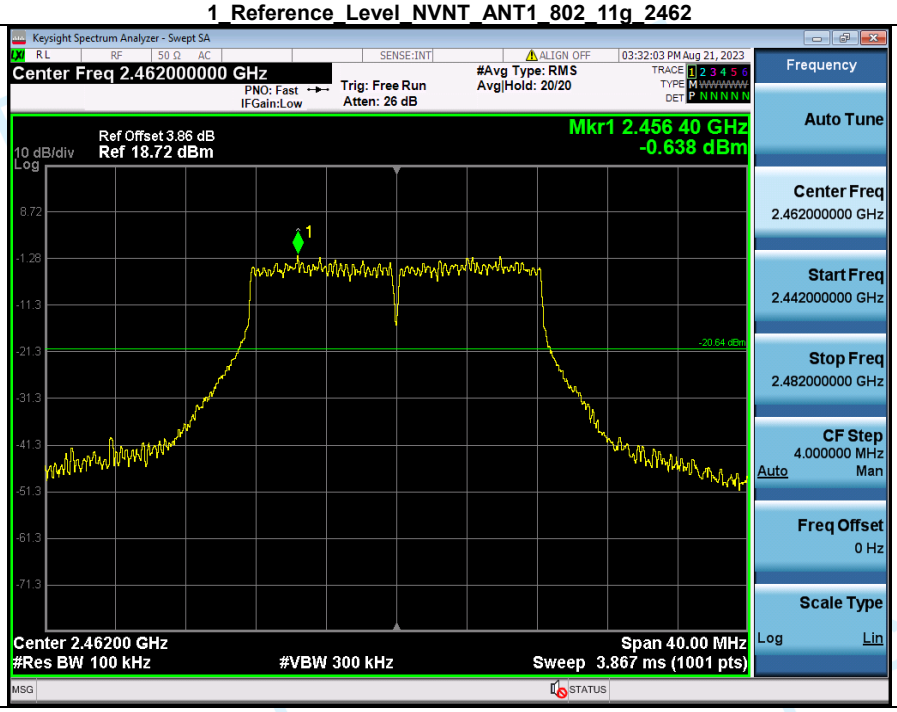
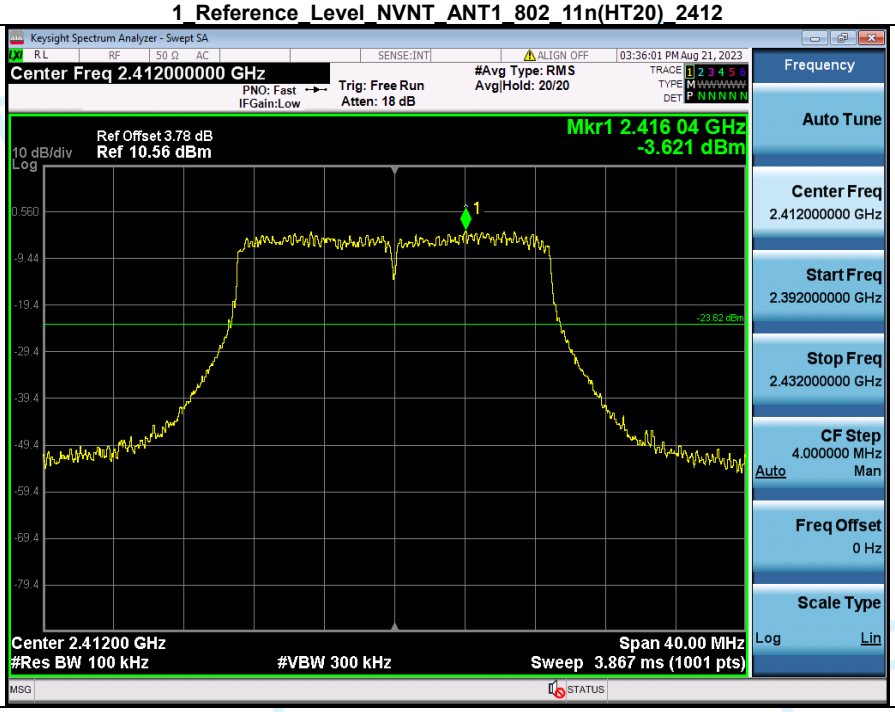
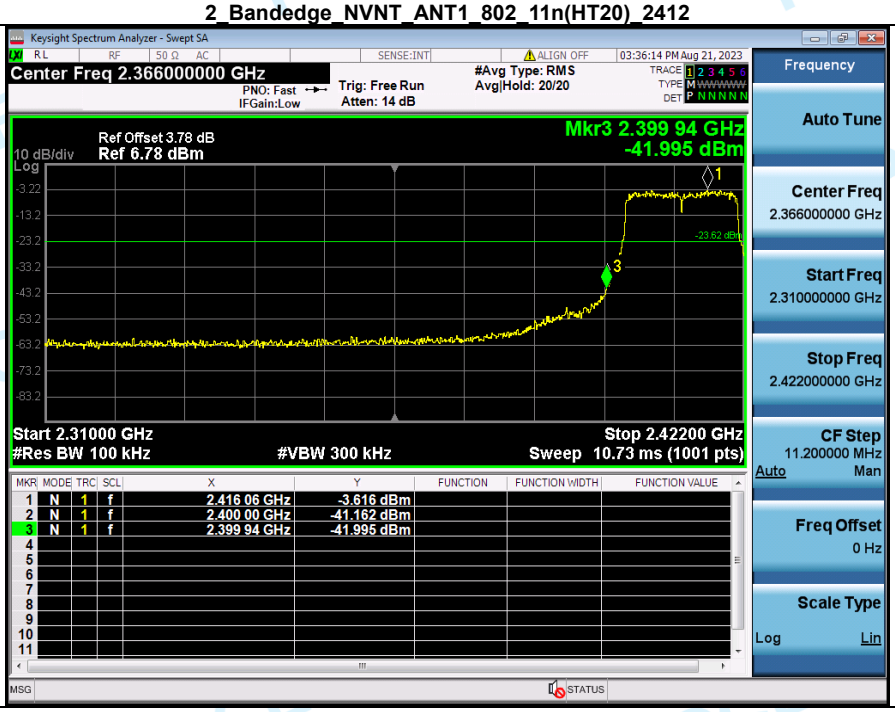


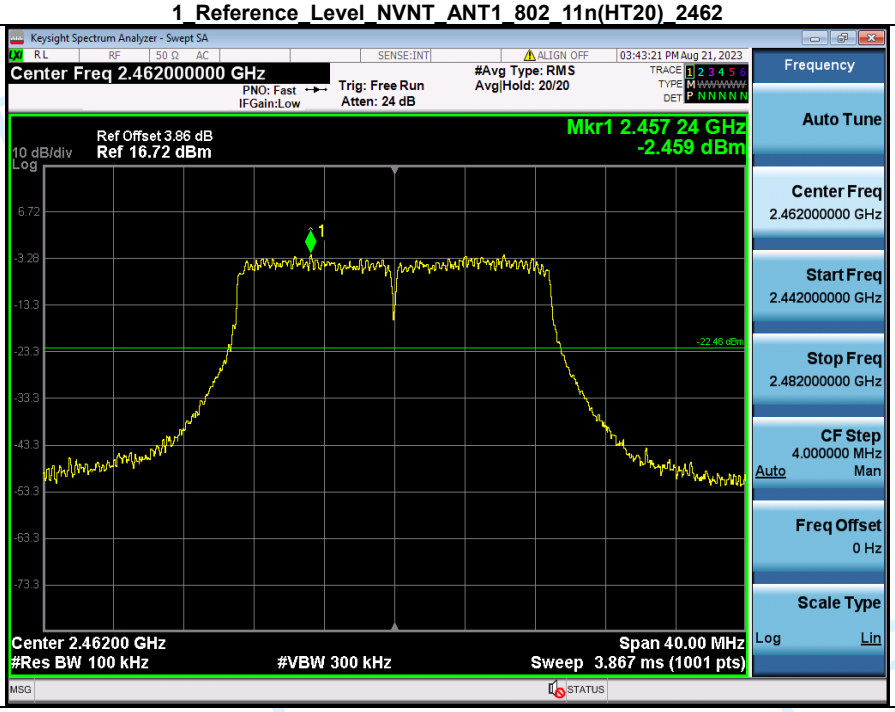
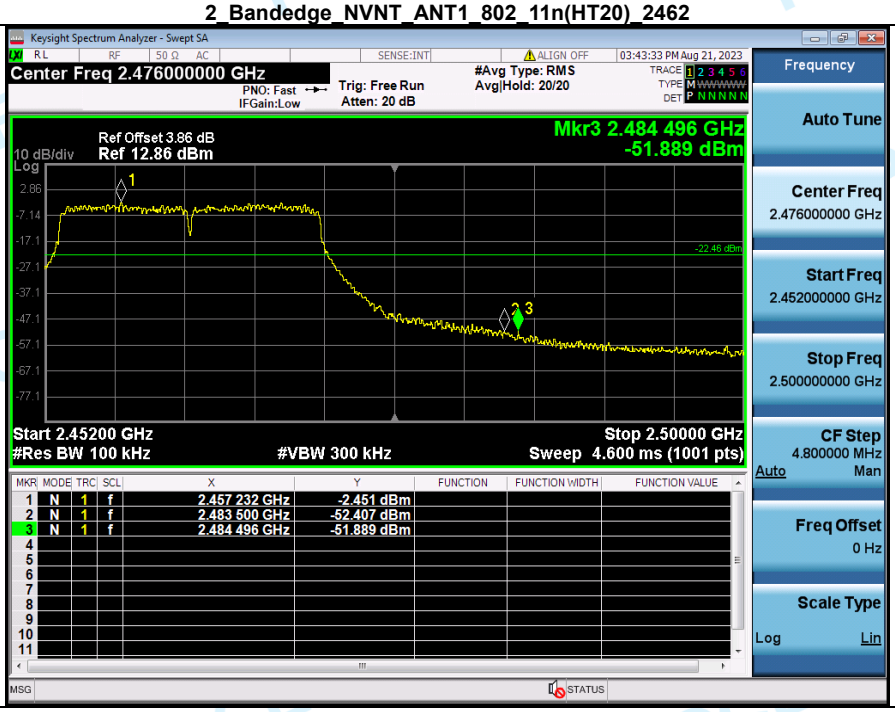
1_Reference_Level_NVNT_ANT1_802_11g_2462

2_Bandedge_NVNT_ANT1_802_11g_2462


1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412

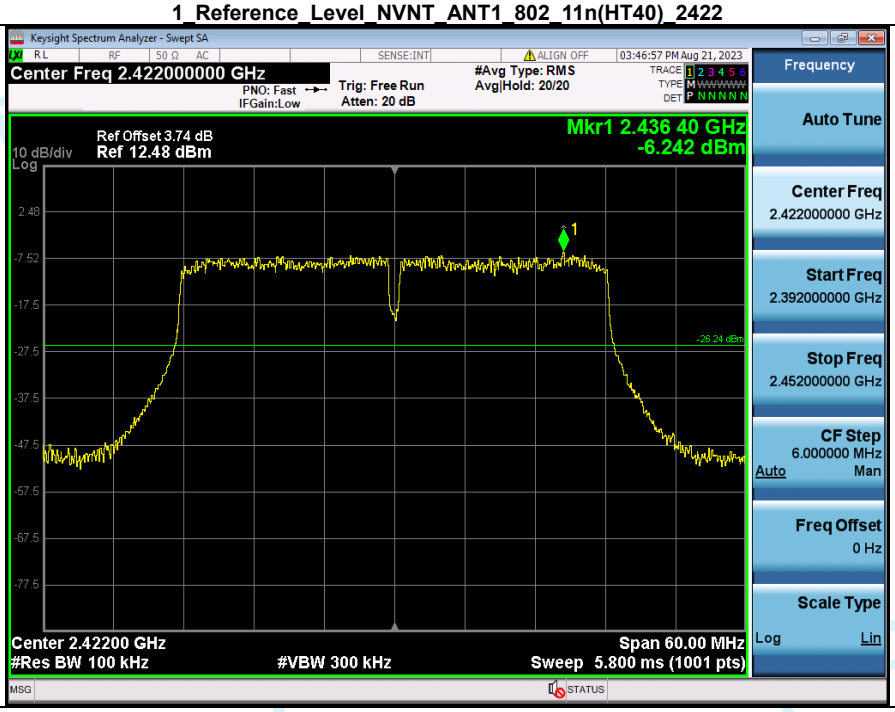


2_Bandedge_NVNT_ANT1_802_11n(HT20)_2412

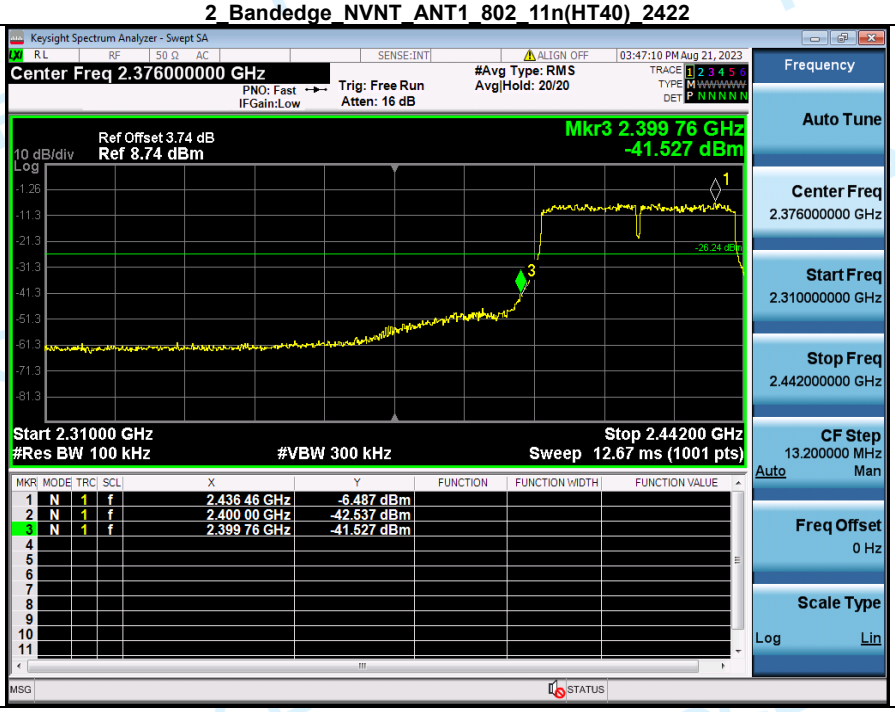


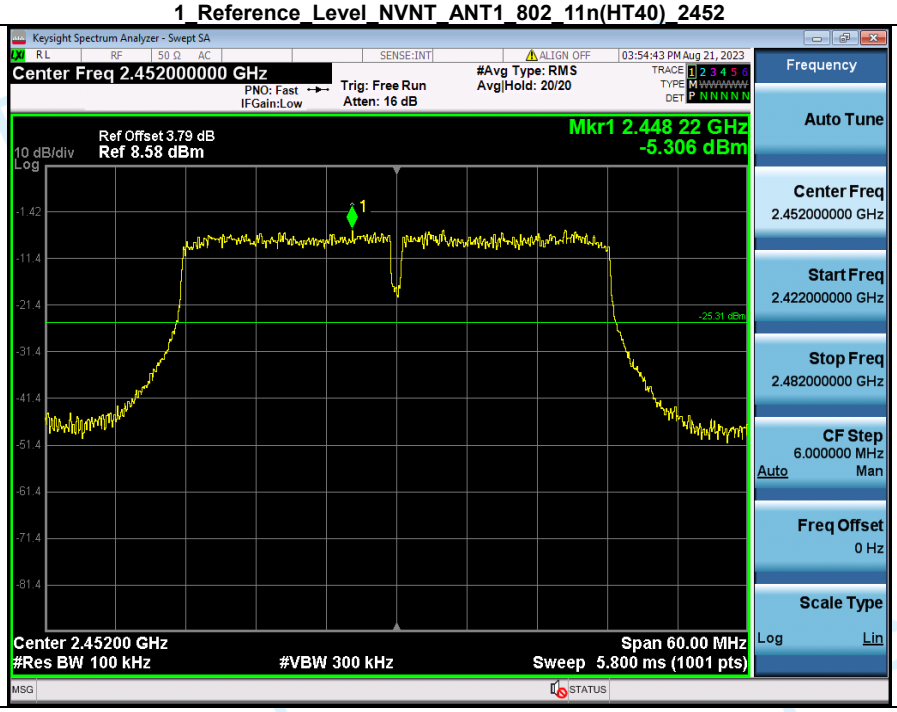
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462

2_Bandedge_NVNT_ANT1_802_11n(HT20)_2462


1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2422



2_Bandedge_NVNT_ANT1_802_11n(HT40)_2422

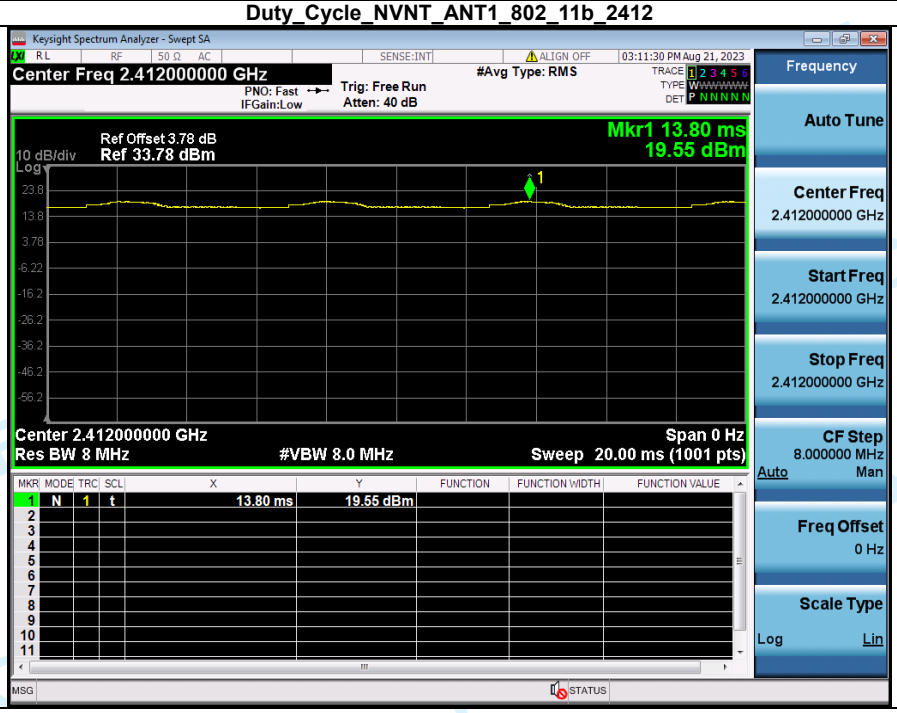


1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2452

2_Bandedge_NVNT_ANT1_802_11n(HT40)_2452

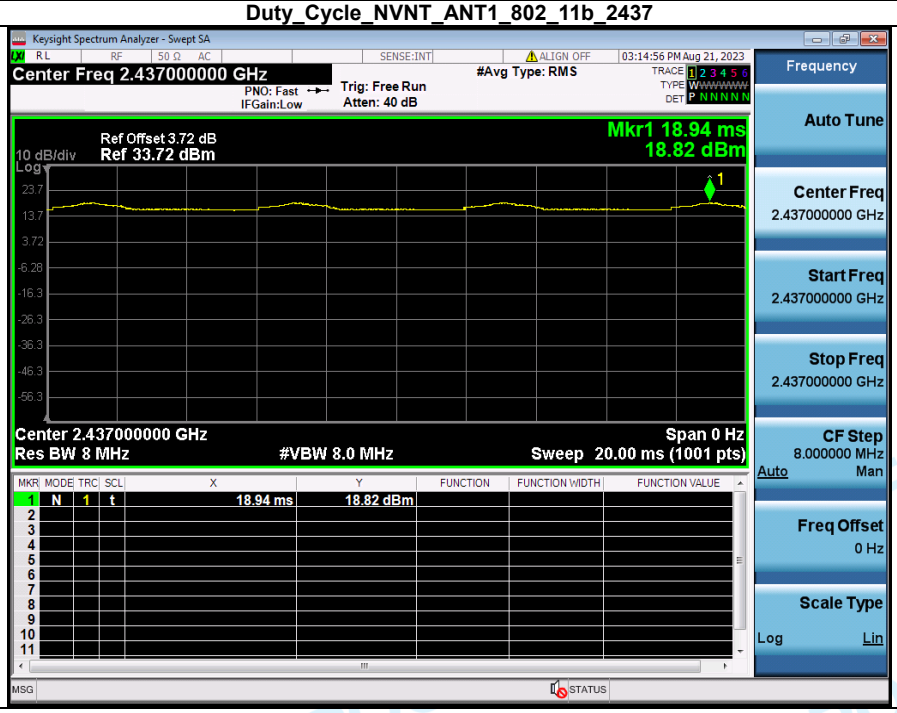

4. Duty Cycle

Condition	Antenna	Modulation	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	802.11b	2412.00	100	0.00
NVNT	ANT1	802.11b	2437.00	100	0.00
NVNT	ANT1	802.11b	2462.00	100	0.00
NVNT	ANT1	802.11g	2412.00	100	0.00
NVNT	ANT1	802.11g	2437.00	100	0.00
NVNT	ANT1	802.11g	2462.00	100	0.00
NVNT	ANT1	802.11n(HT20)	2412.00	100	0.00
NVNT	ANT1	802.11n(HT20)	2437.00	100	0.00
NVNT	ANT1	802.11n(HT20)	2462.00	100	0.00
NVNT	ANT1	802.11n(HT40)	2422.00	100	0.00
NVNT	ANT1	802.11n(HT40)	2437.00	100	0.00
NVNT	ANT1	802.11n(HT40)	2452.00	100	0.00

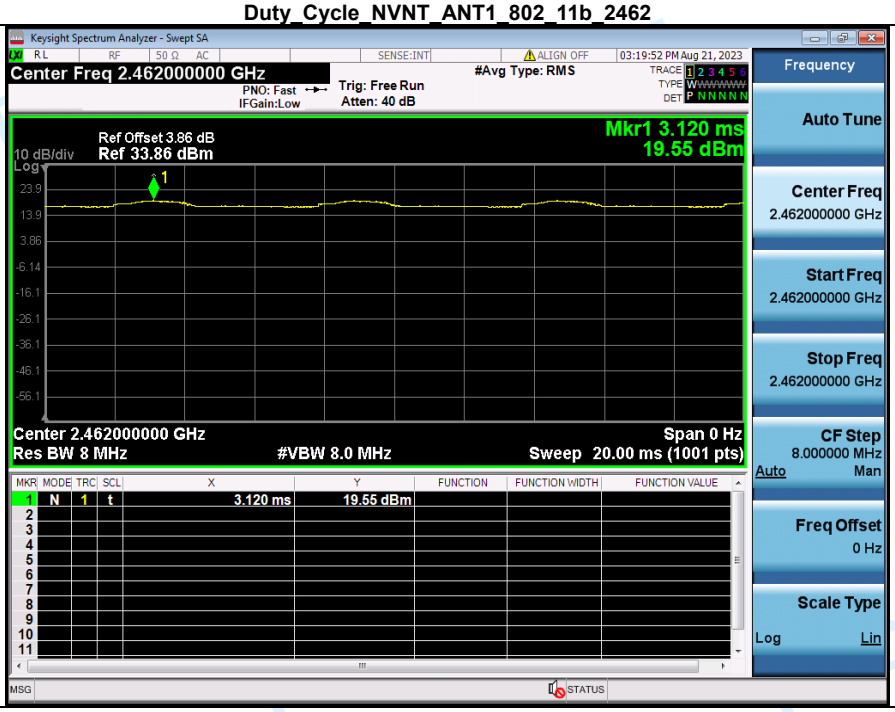
Duty_Cycle_NVNT_ANT1_802_11b_2412



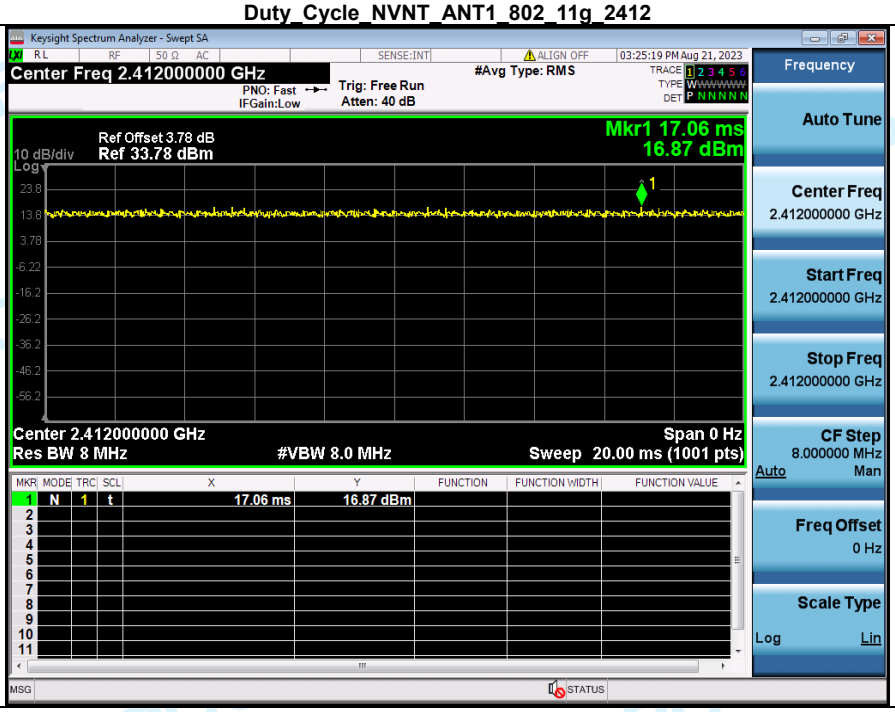
Duty_Cycle_NVNT_ANT1_802_11b_2437



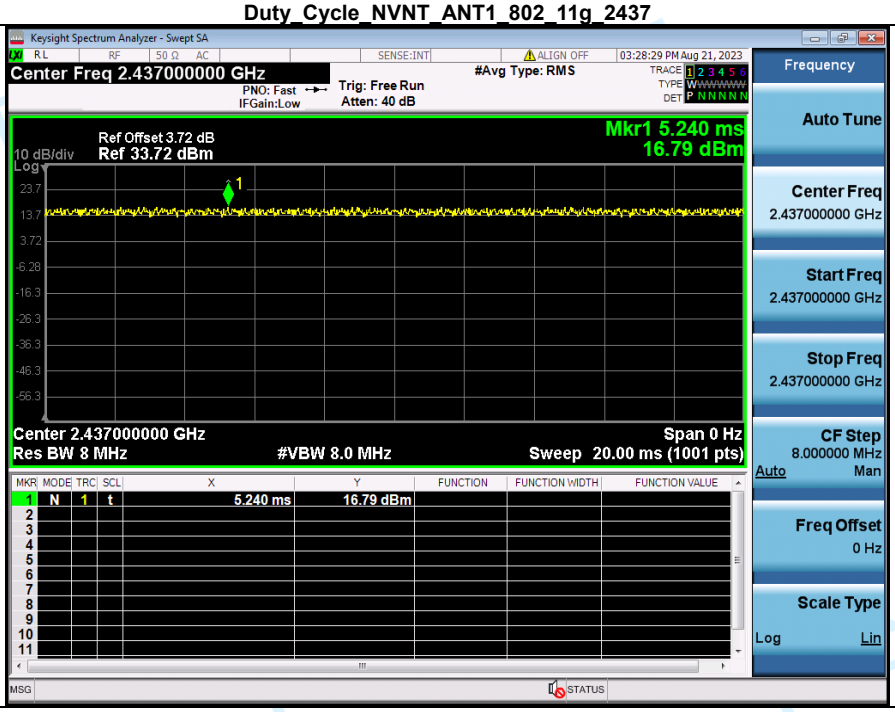
Duty_Cycle_NVNT_ANT1_802_11b_2462



Duty_Cycle_NVNT_ANT1_802_11g_2412



Duty_Cycle_NVNT_ANT1_802_11g_2437



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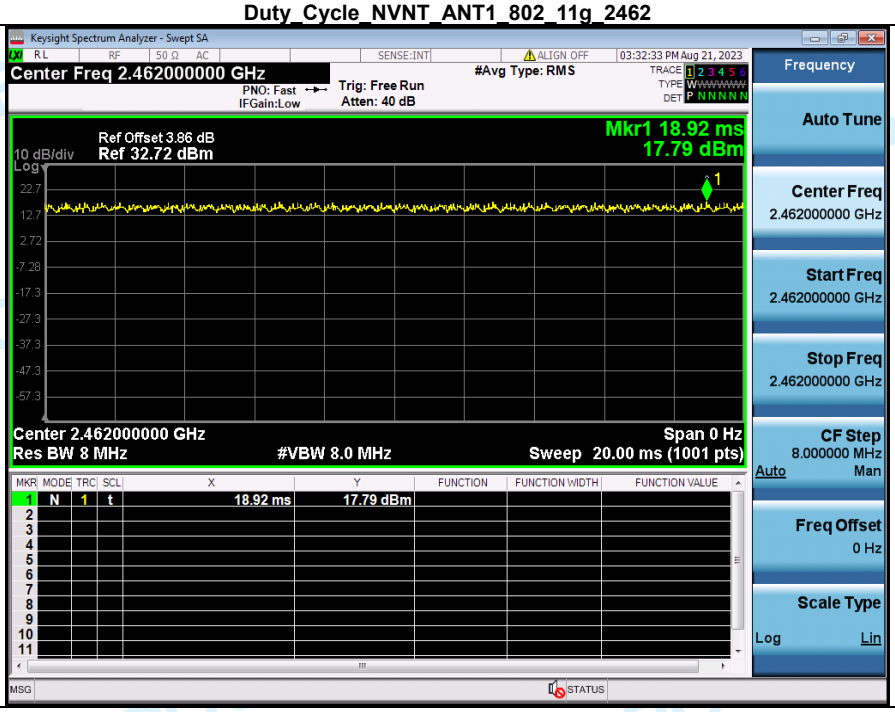
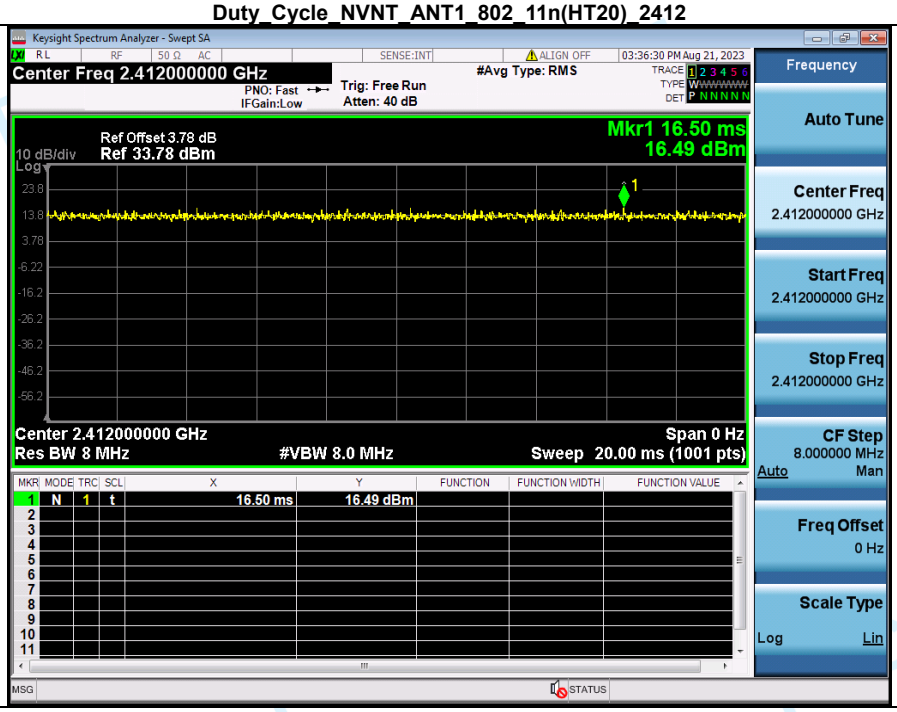
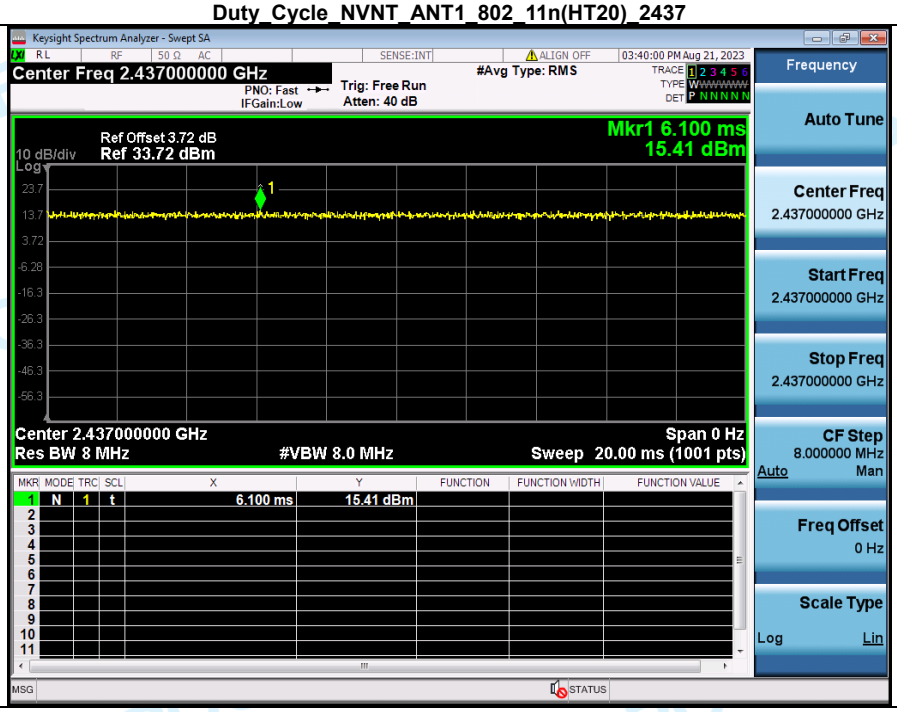


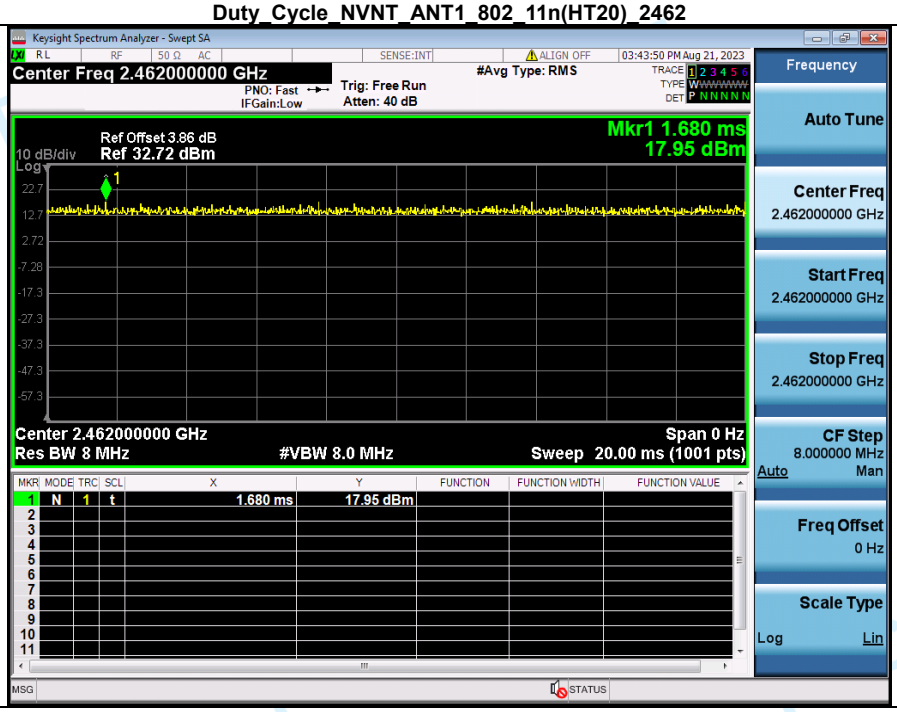
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412



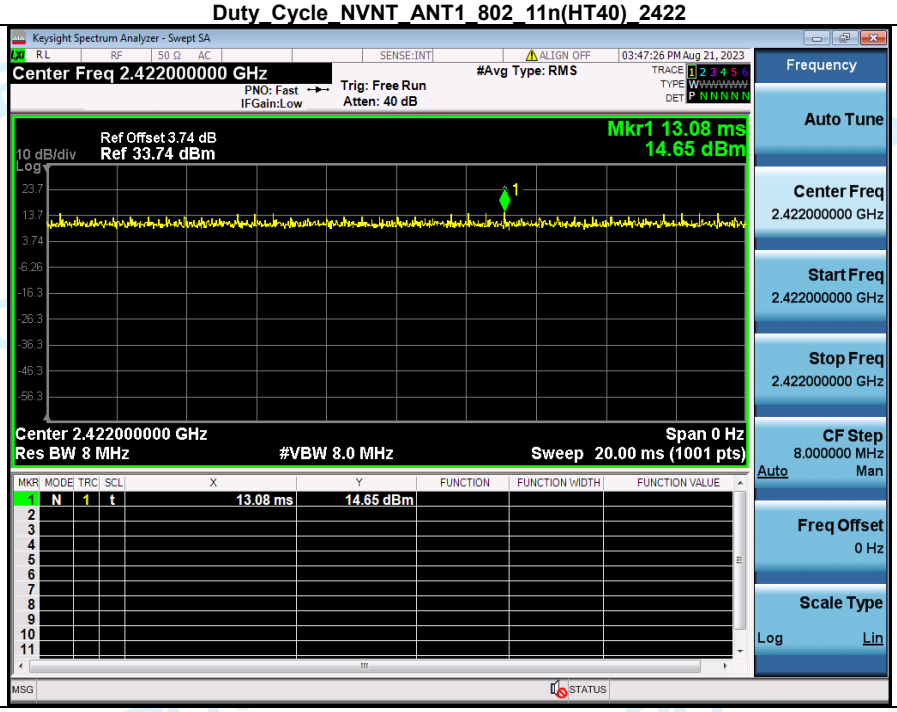
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2437



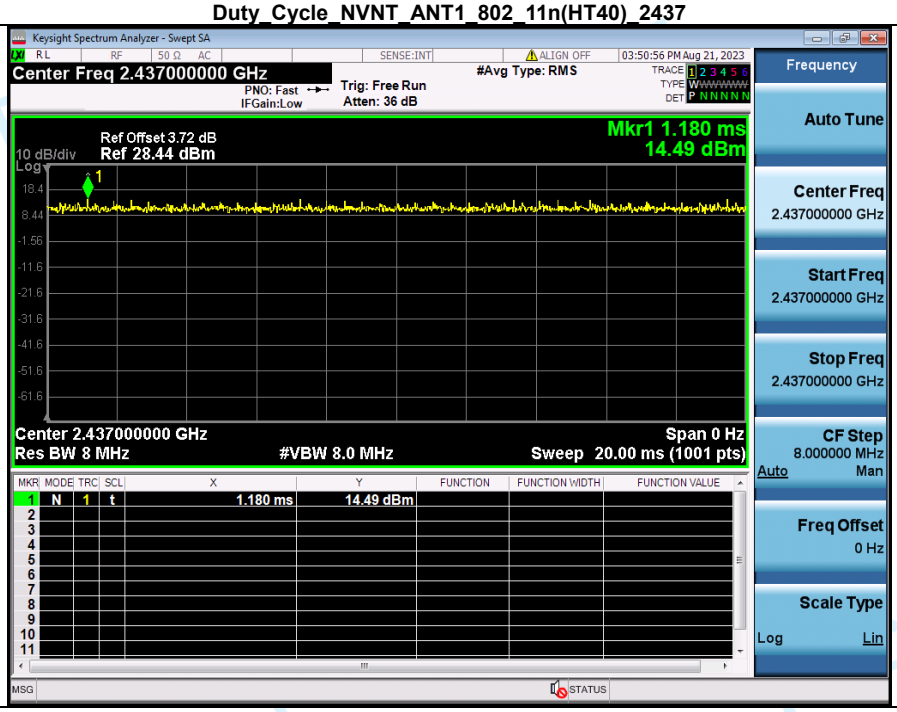
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2462



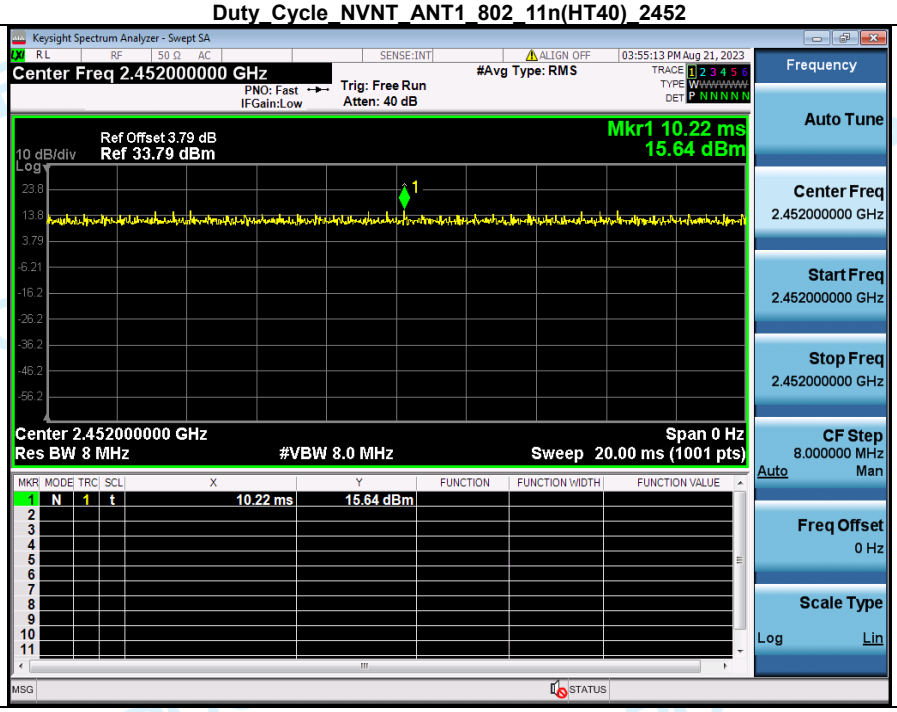
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2422



Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2437



Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2452



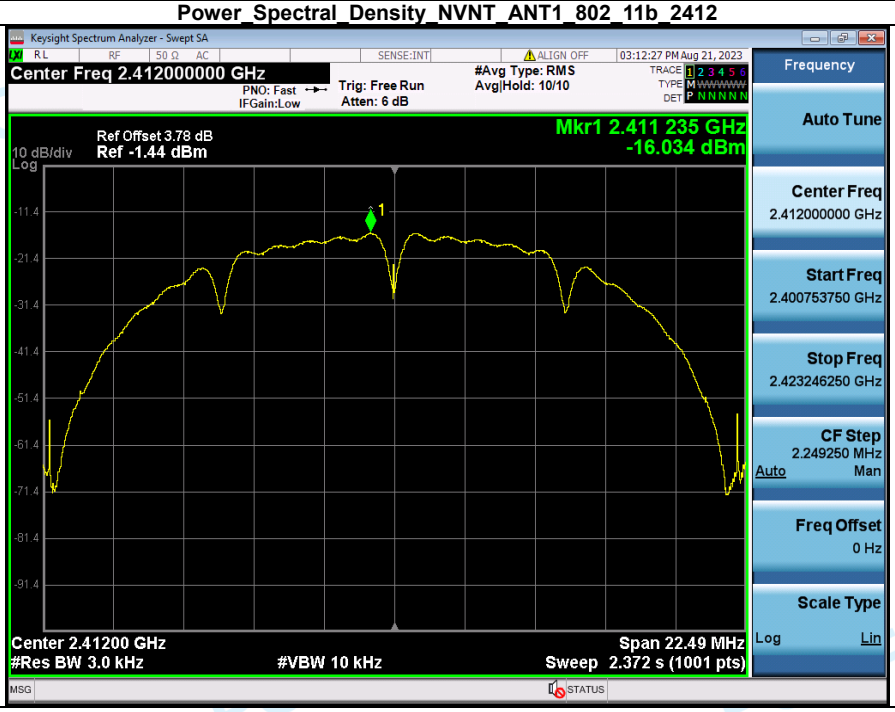
5. MAX. Output Power

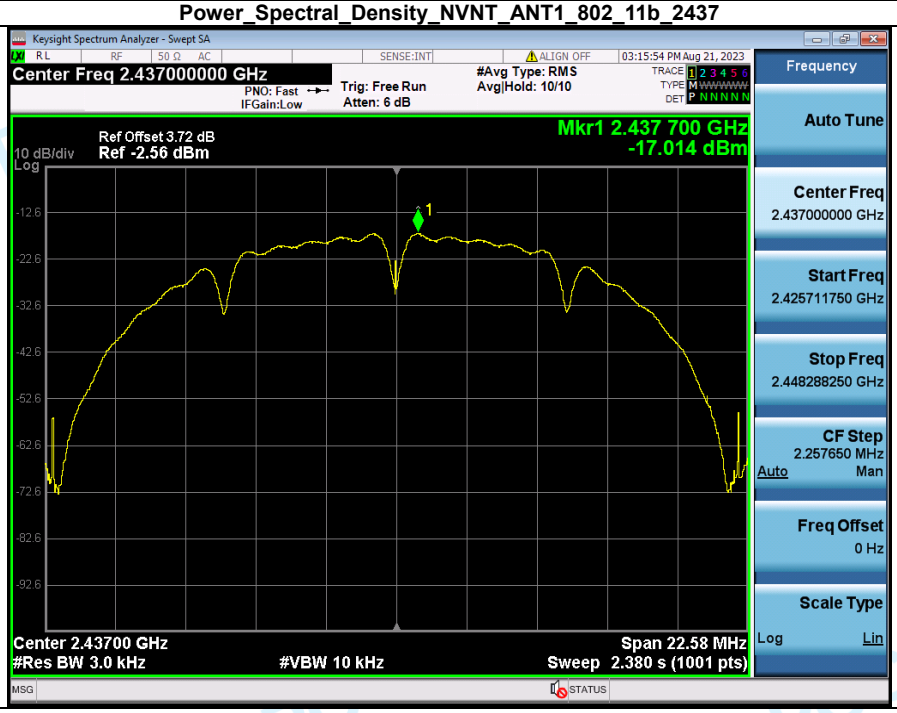
Condition	Antenna	Modulation	Frequency (MHz)	PK Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	17.32	N/A	17.32	30	Pass
NVNT	ANT1	802.11b	2437.00	17.31	N/A	17.31	30	Pass
NVNT	ANT1	802.11b	2462.00	17.24	N/A	17.24	30	Pass
NVNT	ANT1	802.11g	2412.00	18.76	N/A	18.76	30	Pass
NVNT	ANT1	802.11g	2437.00	19.25	N/A	19.25	30	Pass
NVNT	ANT1	802.11g	2462.00	19.71	N/A	19.71	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.50	N/A	17.50	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.90	N/A	17.90	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	18.44	N/A	18.44	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	17.61	N/A	17.61	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	18.20	N/A	18.20	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	18.71	N/A	18.71	30	Pass

6. Power Spectral Density

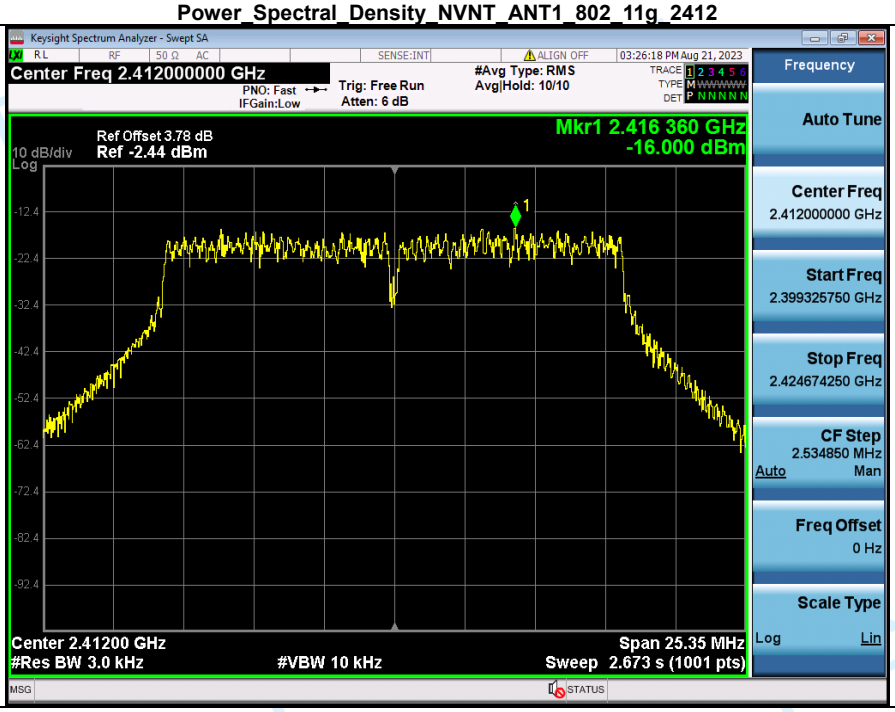
Condition	Antenna	Modulation	Frequency (MHz)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	-16.03	8	Pass
NVNT	ANT1	802.11b	2437.00	-17.01	8	Pass
NVNT	ANT1	802.11b	2462.00	-16.07	8	Pass
NVNT	ANT1	802.11g	2412.00	-16.00	8	Pass
NVNT	ANT1	802.11g	2437.00	-15.45	8	Pass
NVNT	ANT1	802.11g	2462.00	-14.82	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-17.16	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-16.64	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-16.58	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-19.17	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-18.36	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-18.15	8	Pass

Power_Spectral_Density_NVNT_ANT1_802_11b_2412



Power_Spectral_Density_NVNT_ANT1_802_11b_2437


Power_Spectral_Density_NVNT_ANT1_802_11b_2462


Power_Spectral_Density_NVNT_ANT1_802_11g_2412


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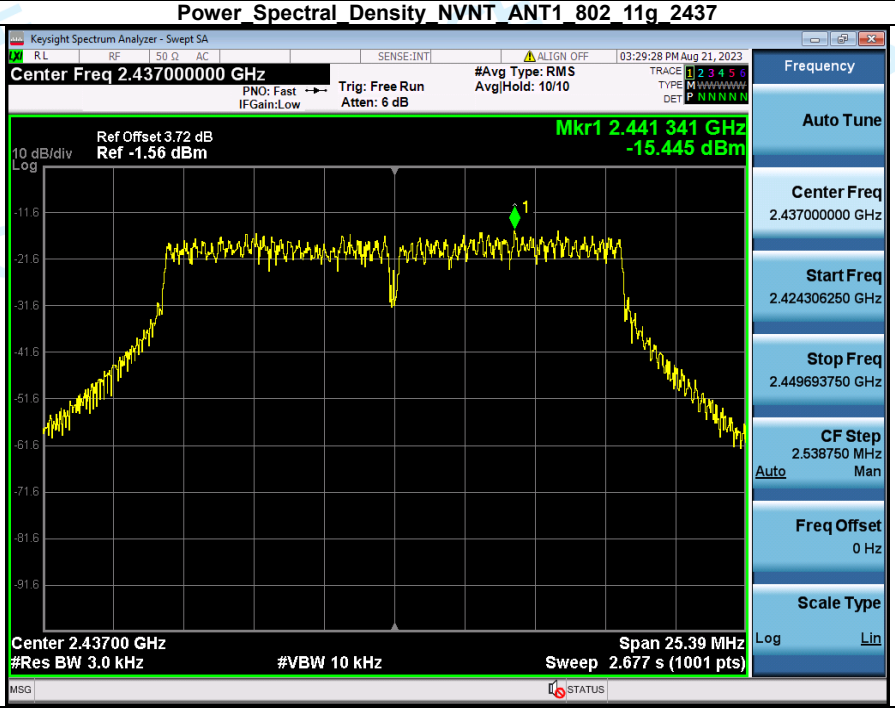

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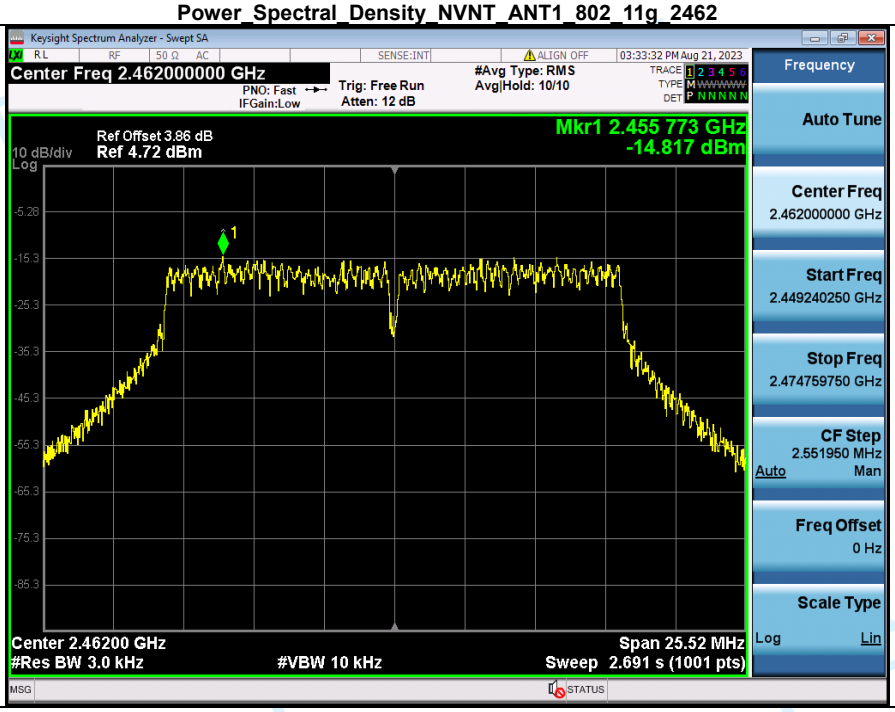
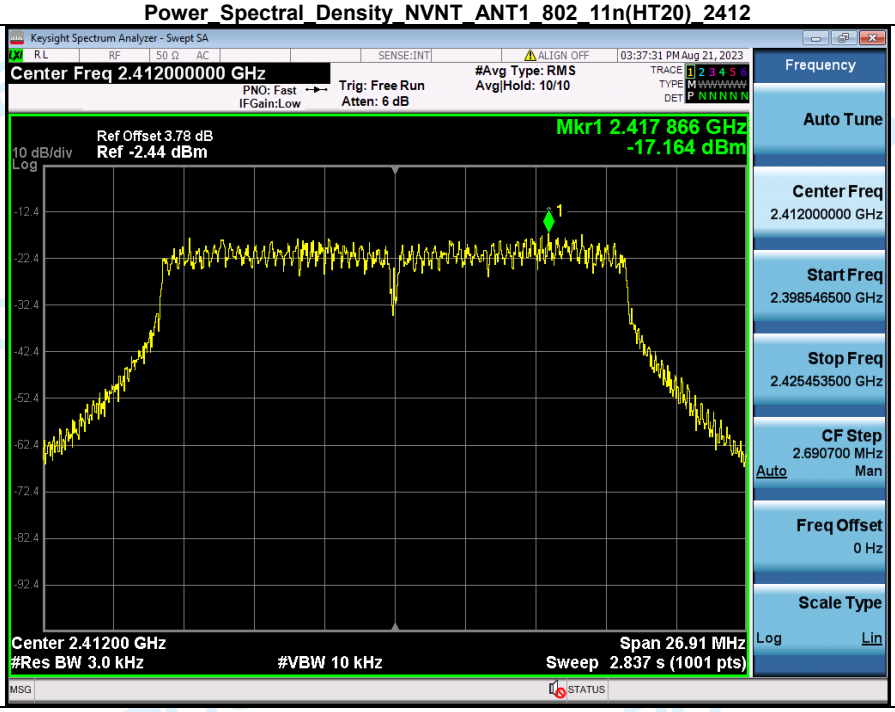


Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2412


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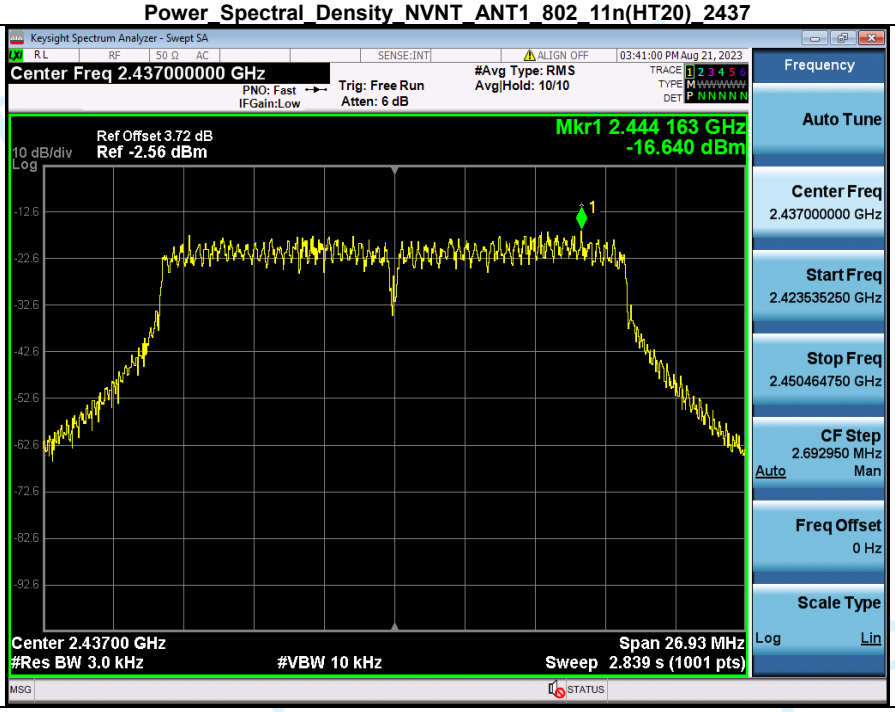
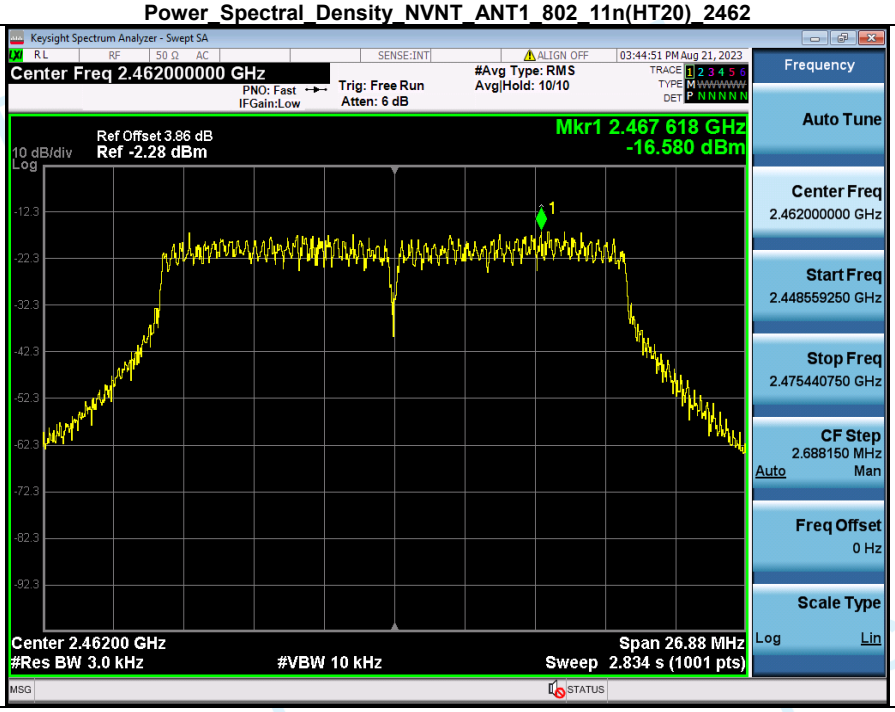
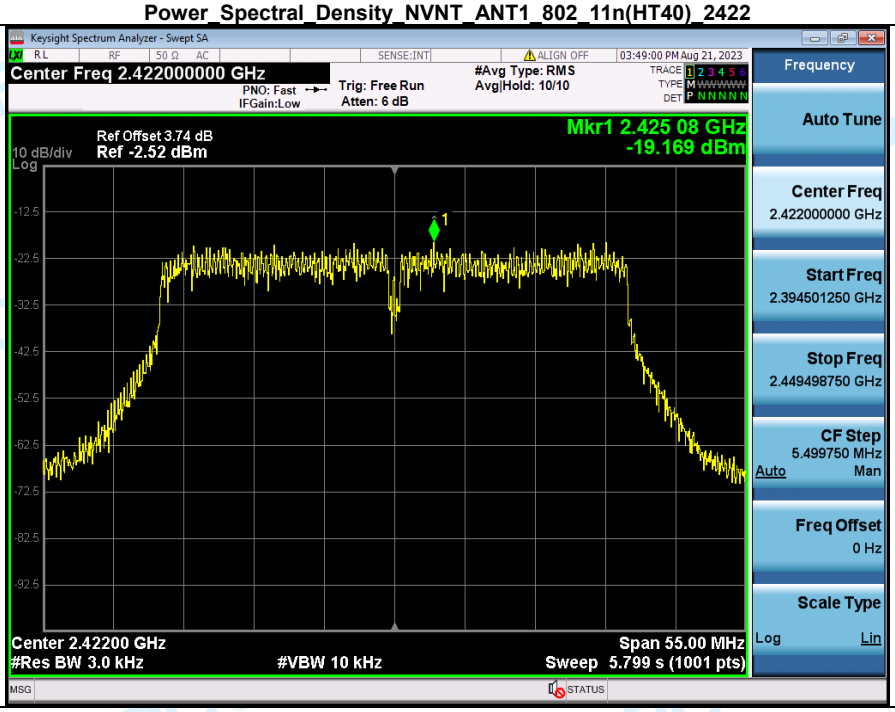
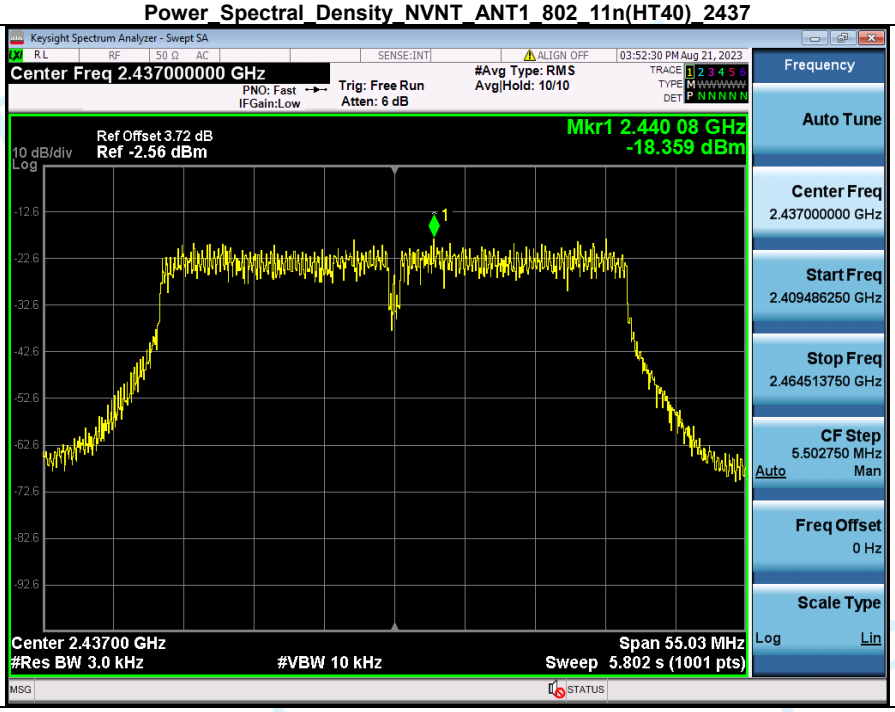
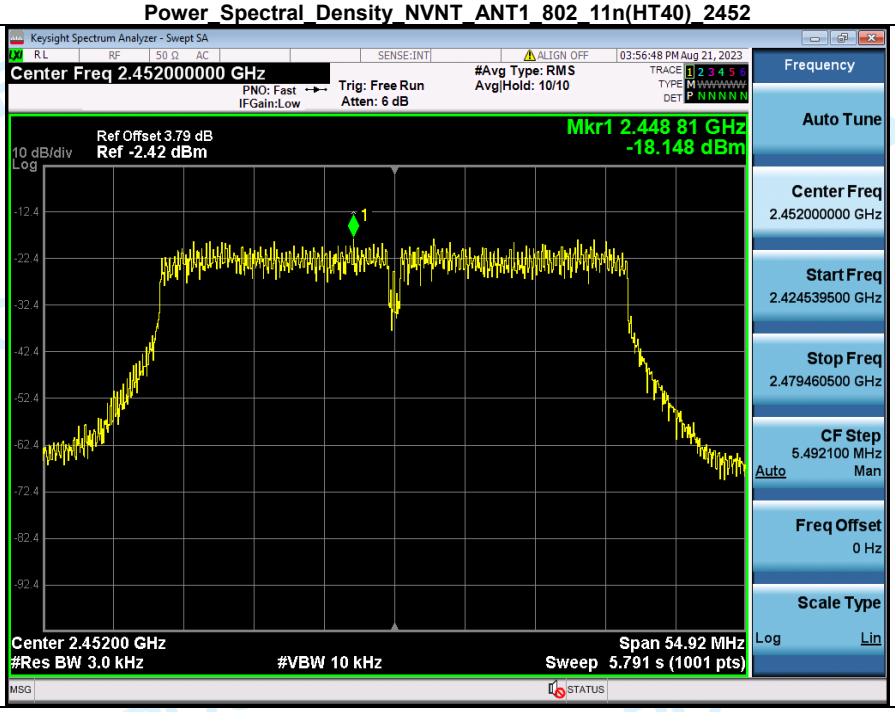


Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2462


Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2422


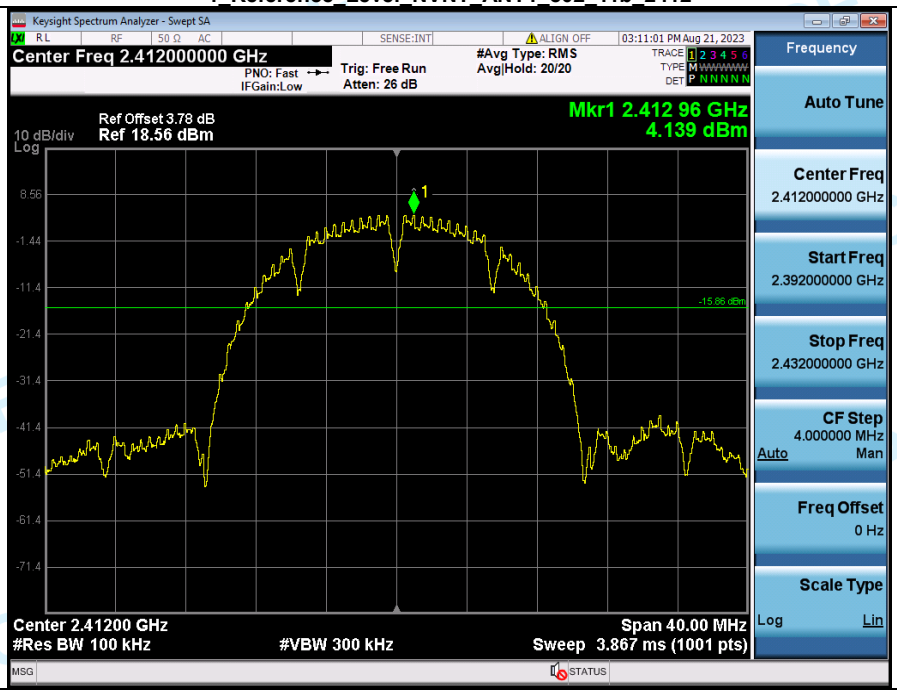
Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2437


Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2452


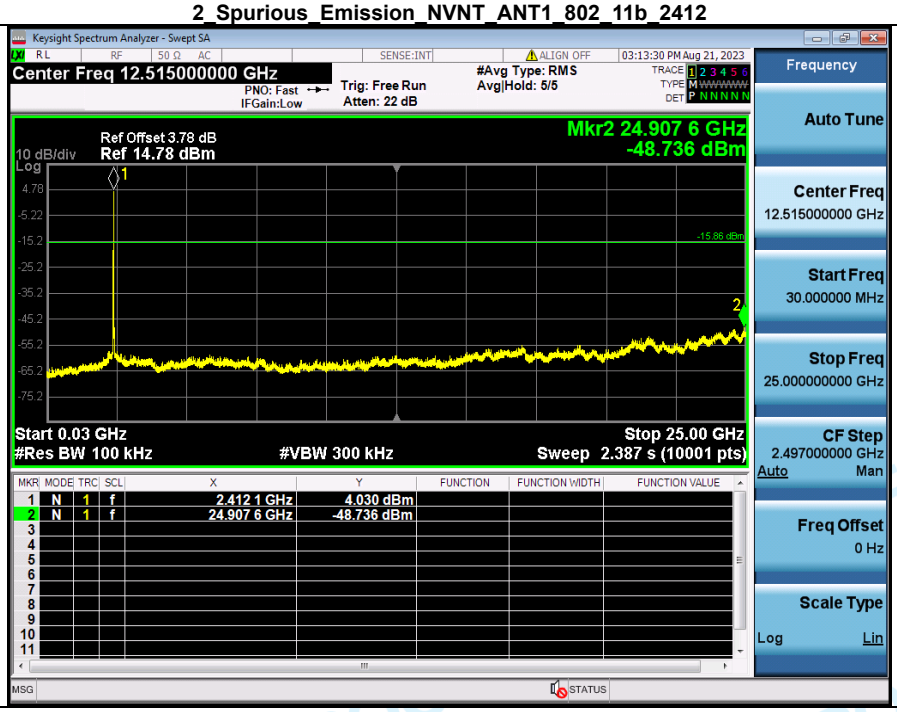
7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	24907.611	-48.736	-15.861	Pass
NVNT	ANT1	802.11b	2437.00	24483.121	-45.051	-17.107	Pass
NVNT	ANT1	802.11b	2462.00	23946.266	-49.023	-15.954	Pass
NVNT	ANT1	802.11g	2412.00	24975.030	-54.873	-21.863	Pass
NVNT	ANT1	802.11g	2437.00	24056.134	-54.588	-21.392	Pass
NVNT	ANT1	802.11g	2462.00	23963.745	-49.444	-20.638	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24602.977	-57.142	-23.621	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	24543.049	-57.187	-23.242	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24063.625	-51.202	-22.459	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	24046.146	-55.091	-26.242	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	24925.090	-59.168	-25.870	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2504.527	-58.690	-25.306	Pass

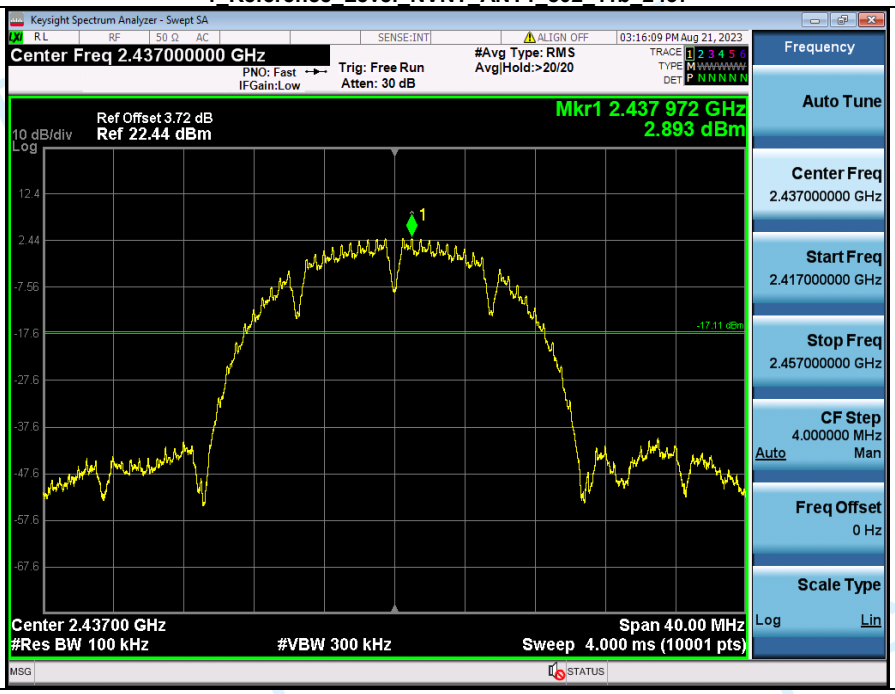
1_Reference_Level_NVNT_ANT1_802_11b_2412



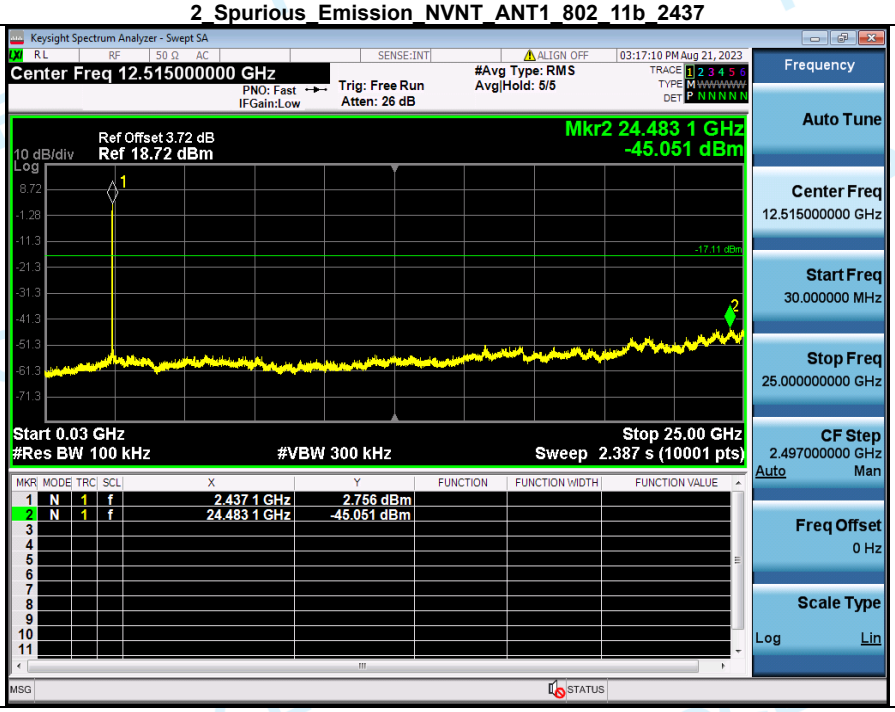
2_Spurious_Emission_NVNT_ANT1_802_11b_2412

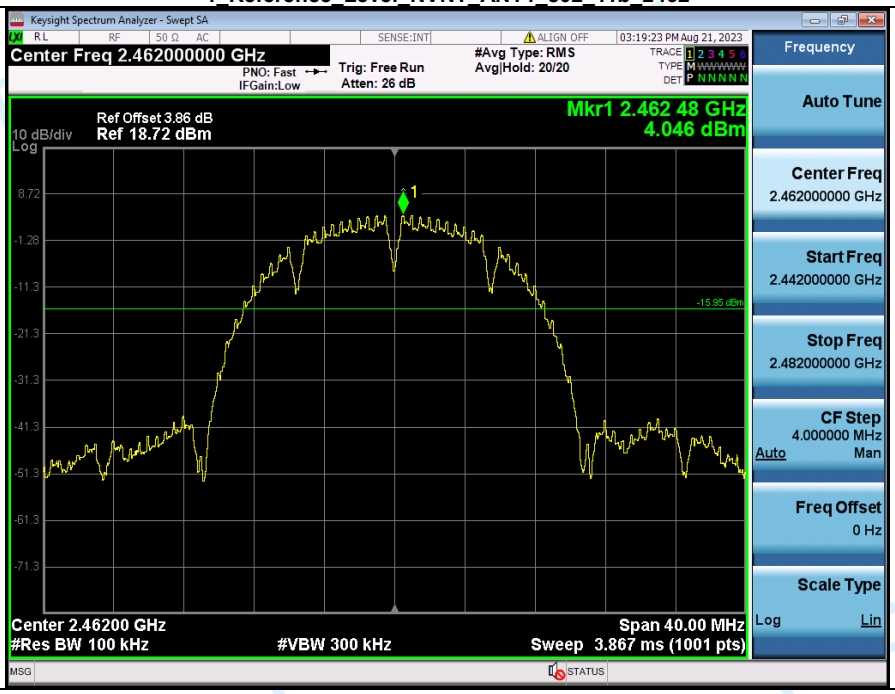


1_Reference_Level_NVNT_ANT1_802_11b_2437



2_Spurious_Emission_NVNT_ANT1_802_11b_2437



1_Reference_Level_NVNT_ANT1_802_11b_2462

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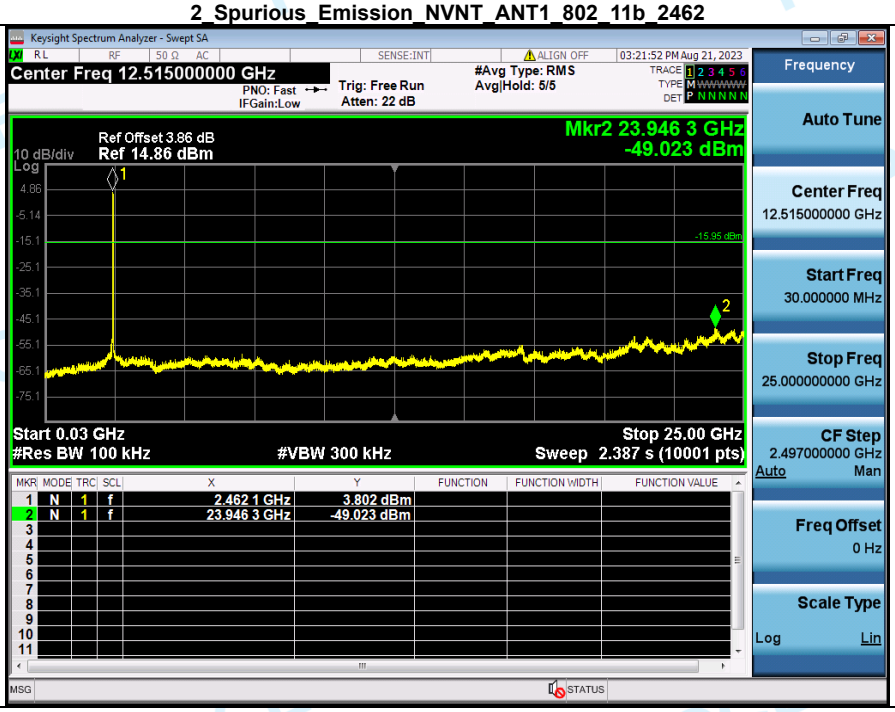
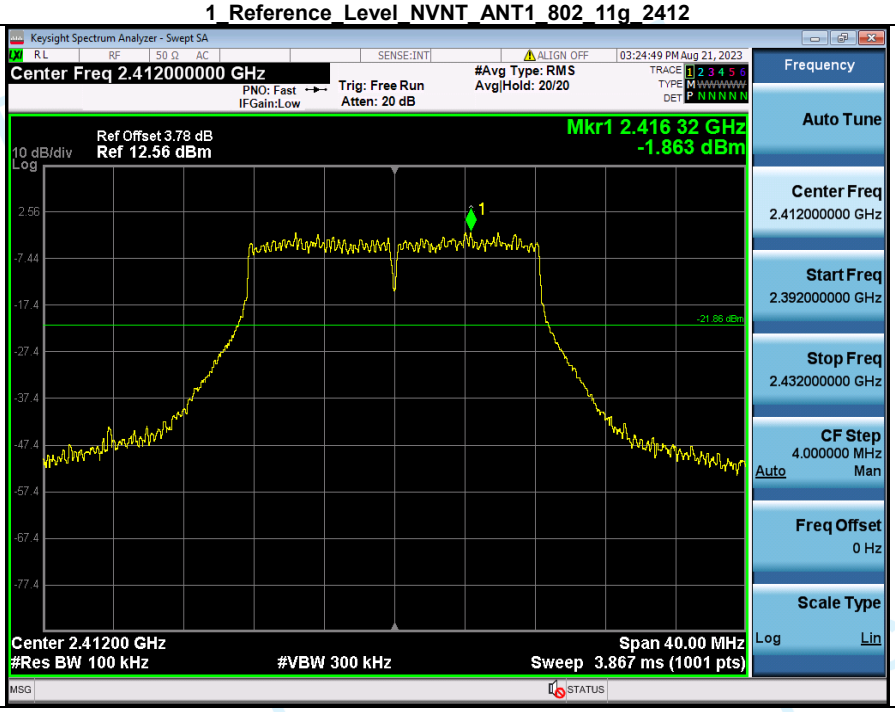
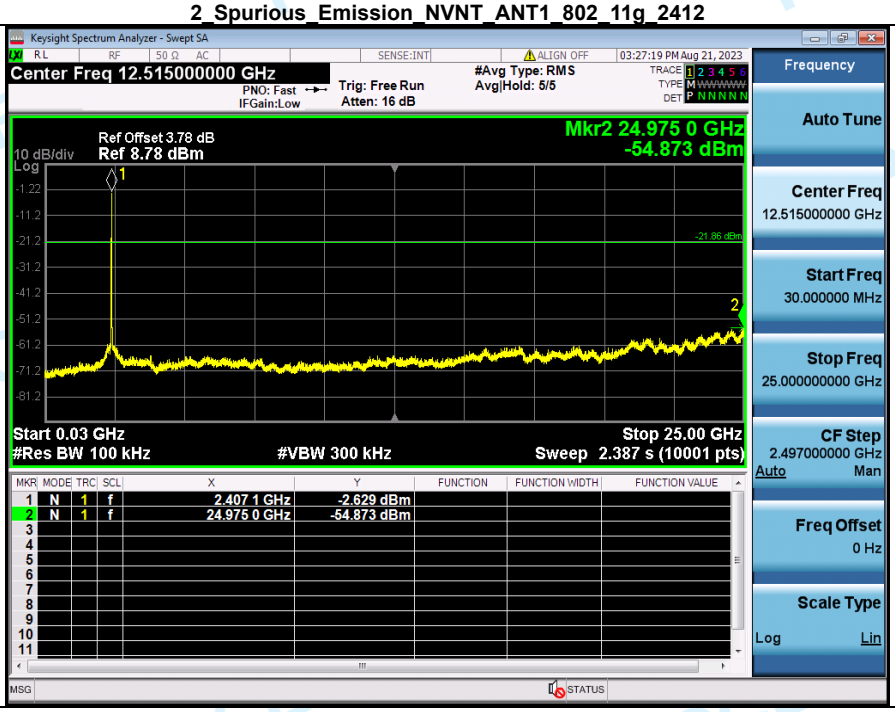


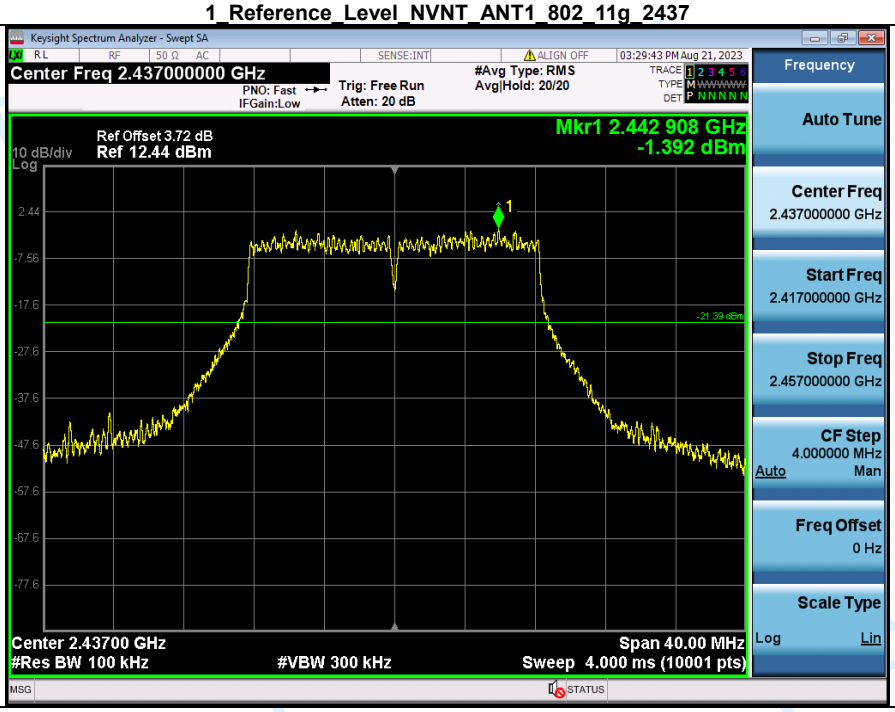
1_Reference_Level_NVNT_ANT1_802_11g_2412



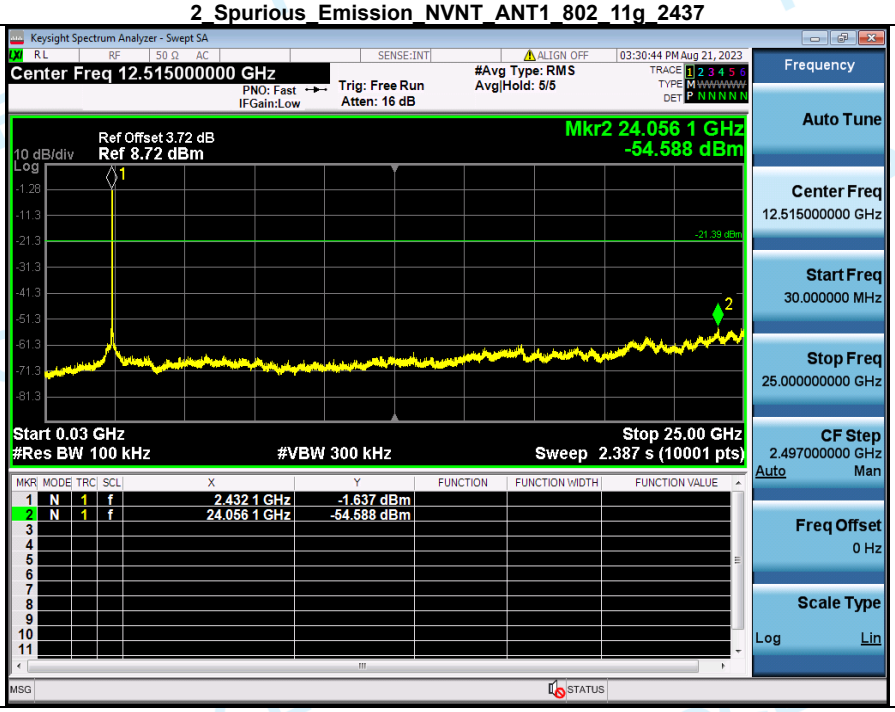
2_Spurious_Emission_NVNT_ANT1_802_11g_2412

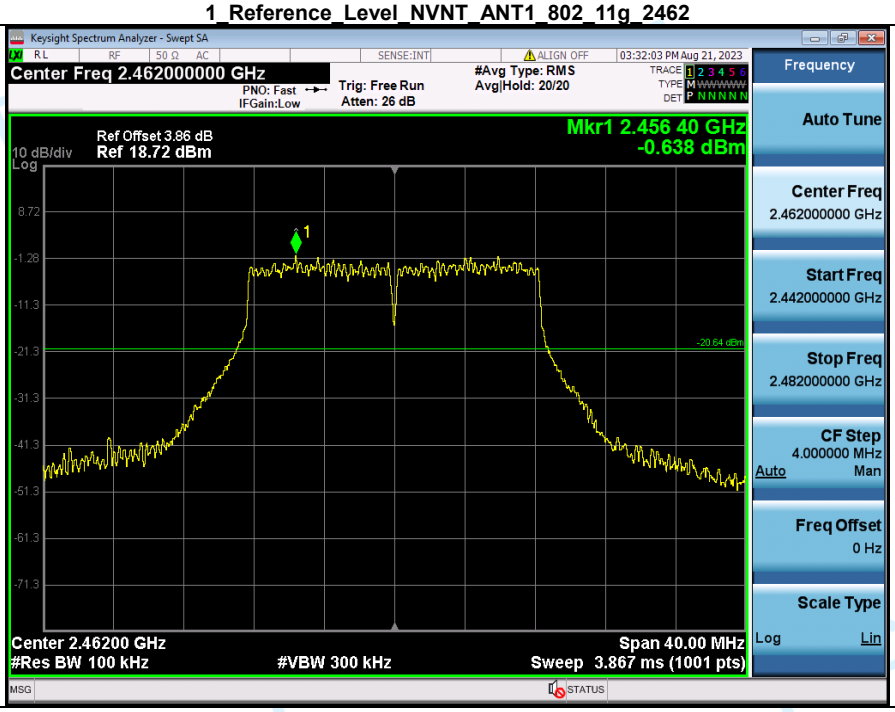


1_Reference_Level_NVNT_ANT1_802_11g_2437



2_Spurious_Emission_NVNT_ANT1_802_11g_2437



1_Reference_Level_NVNT_ANT1_802_11g_2462

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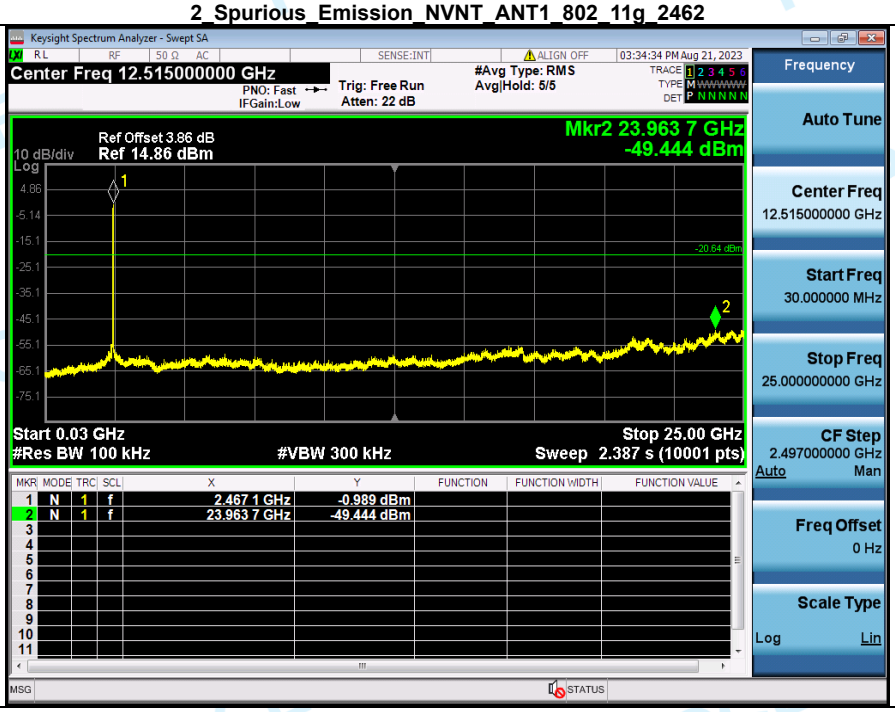
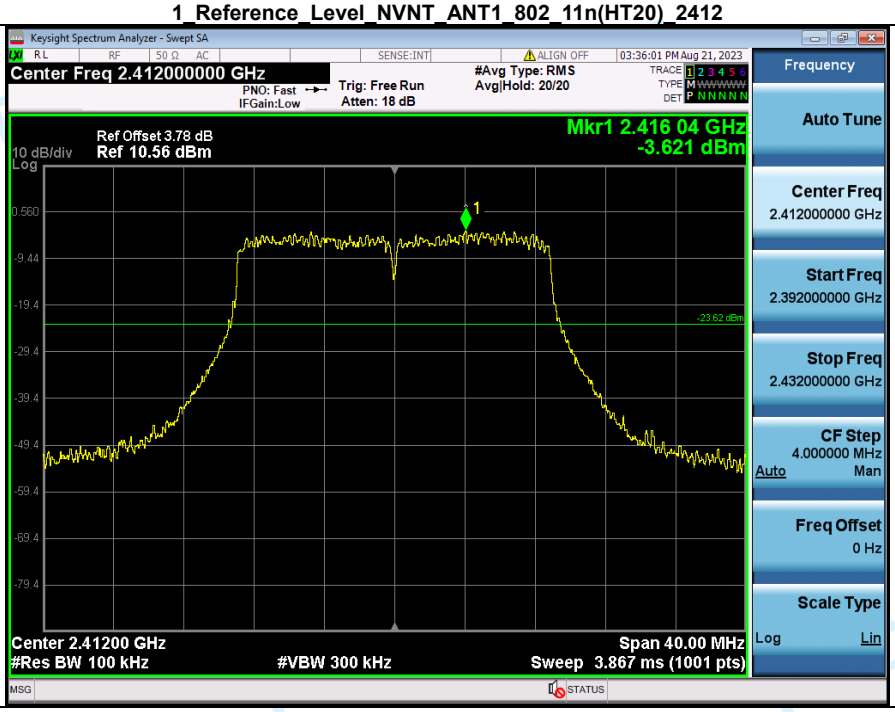


1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412

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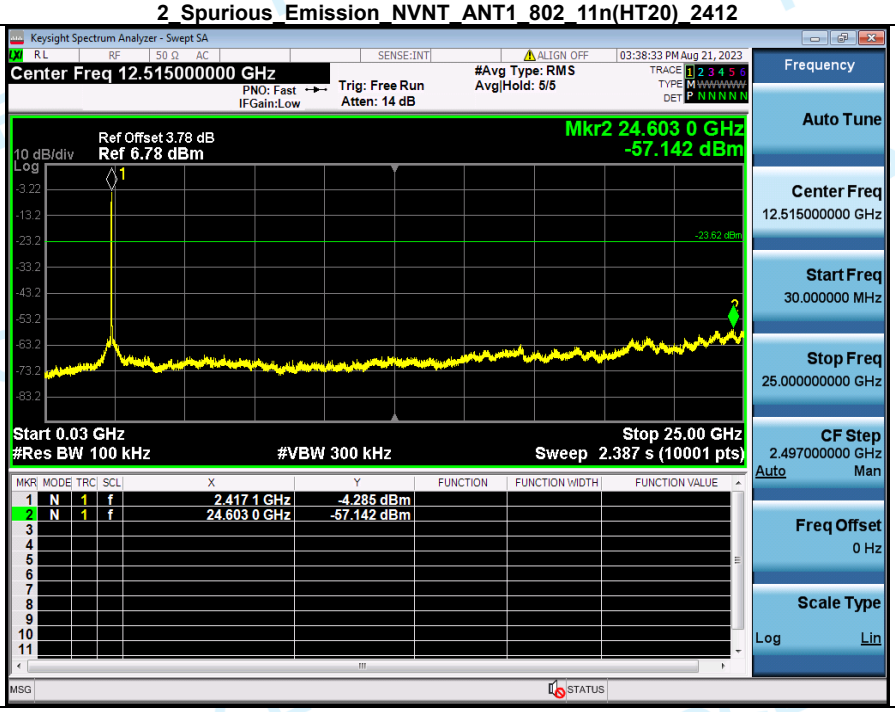

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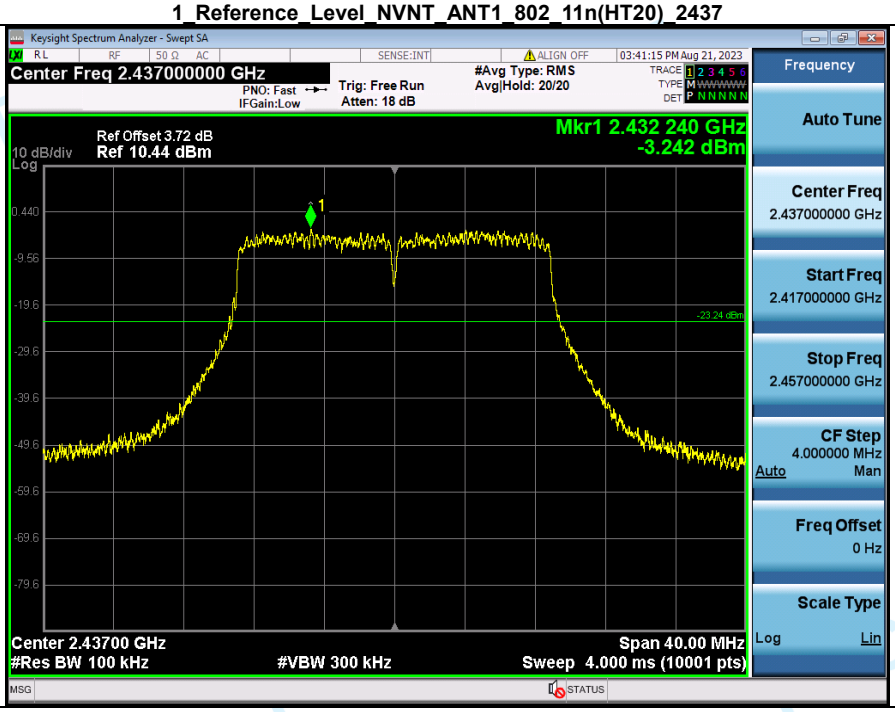
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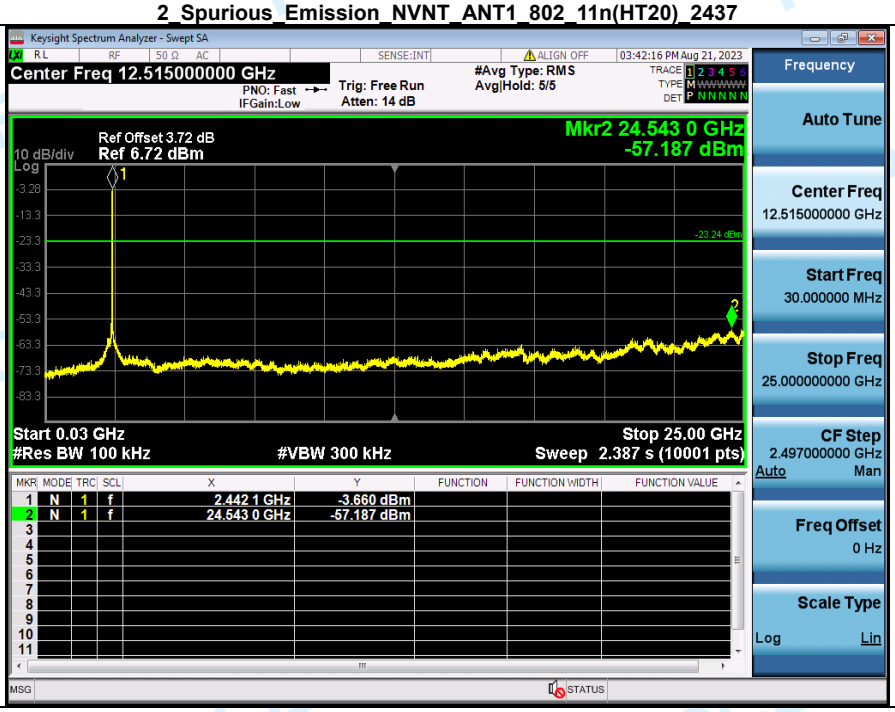

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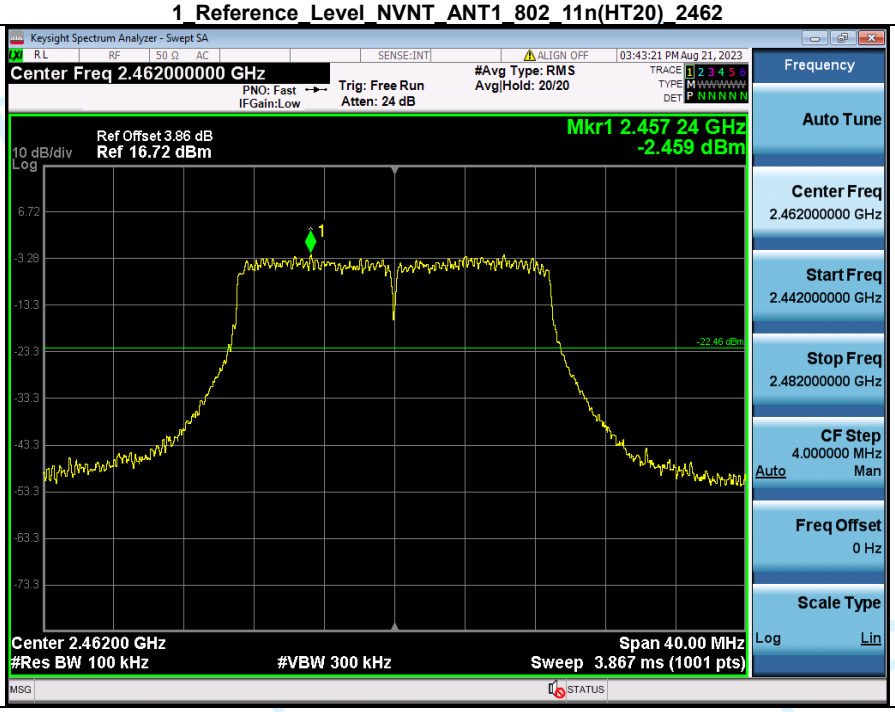
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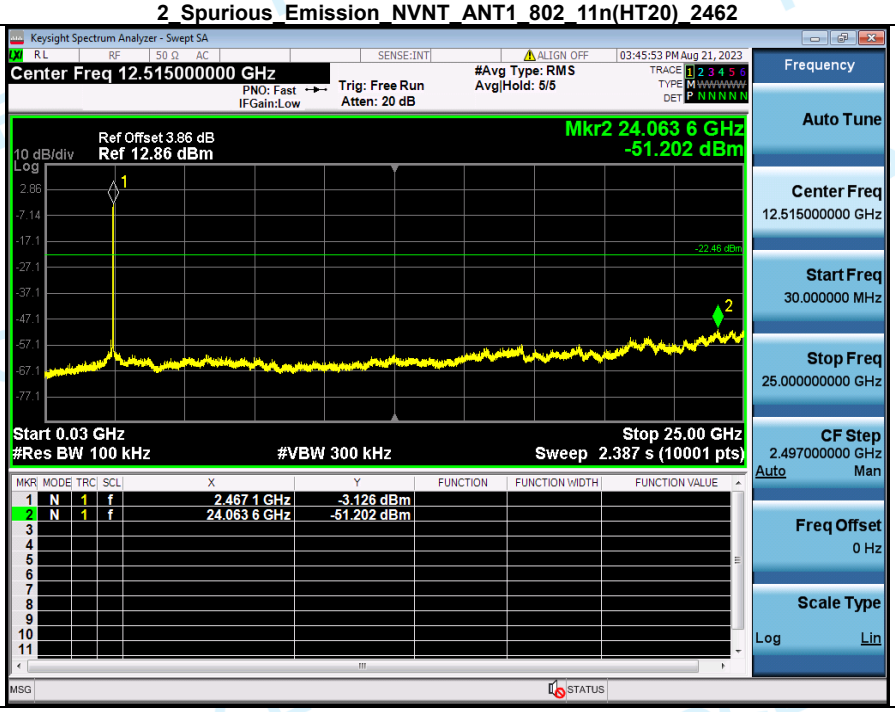

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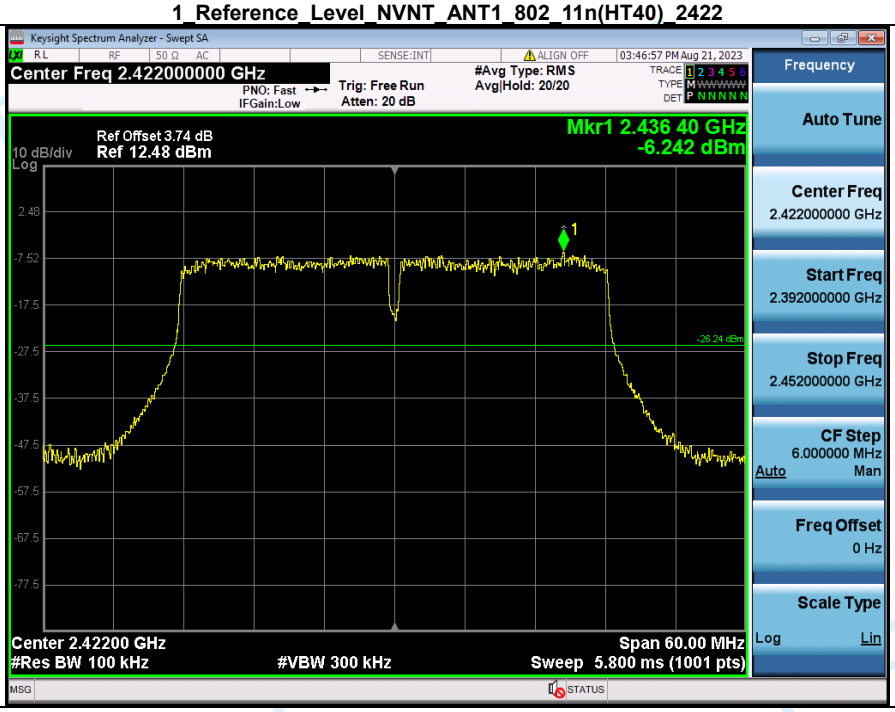

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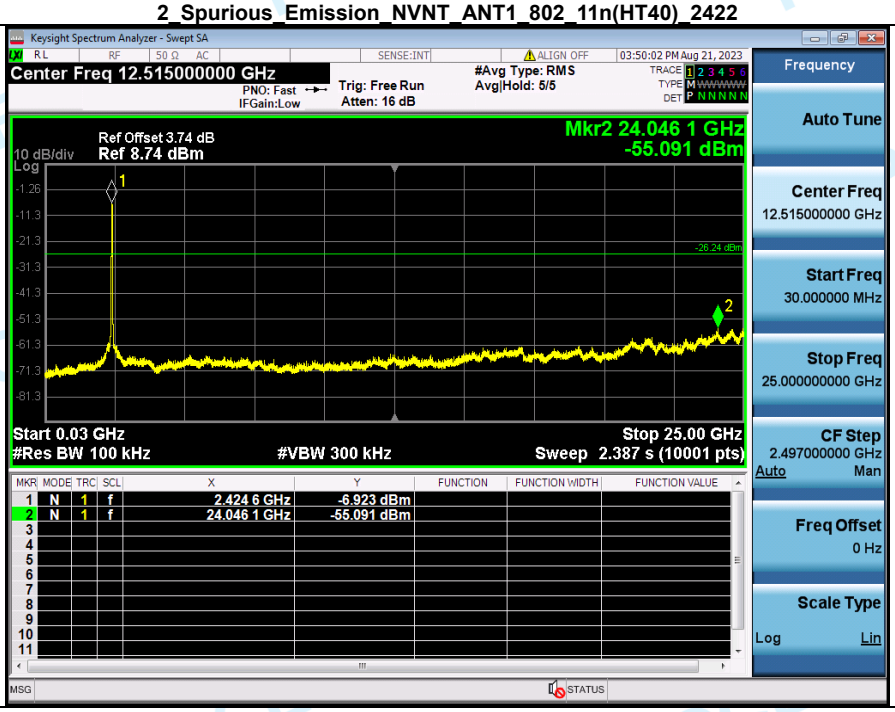
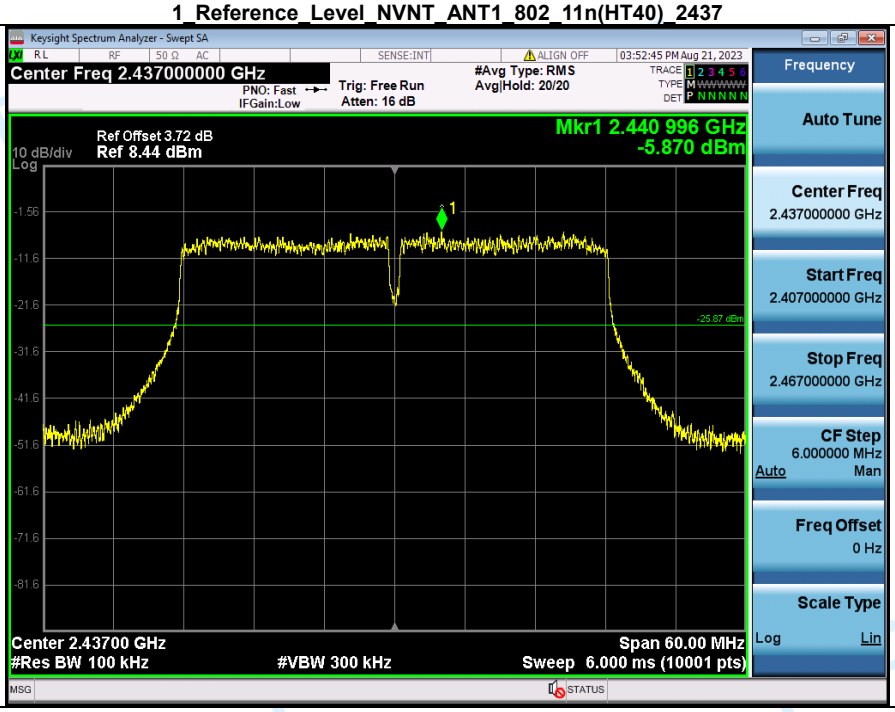


1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2437



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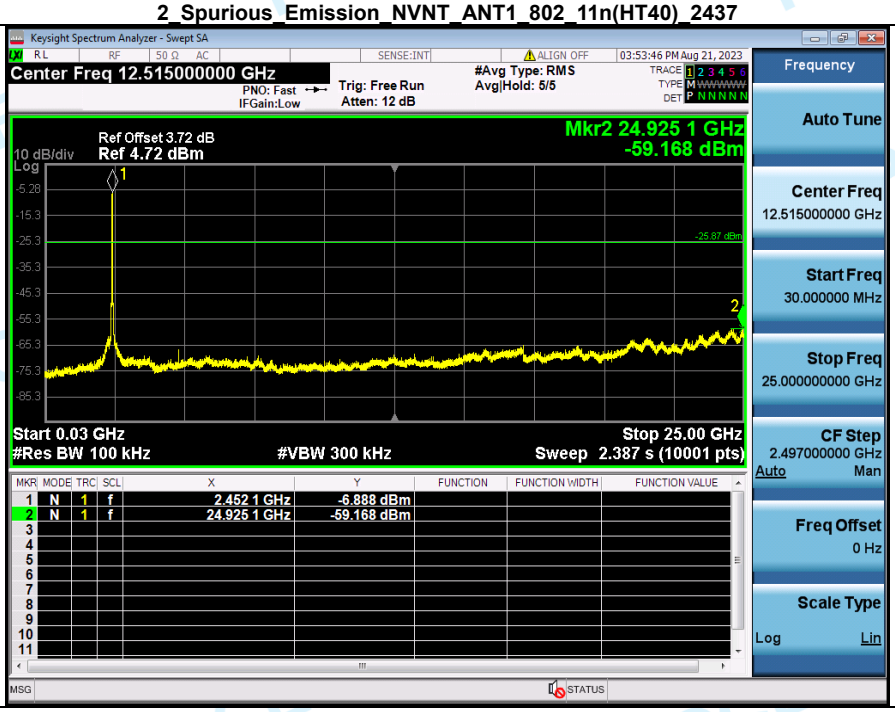

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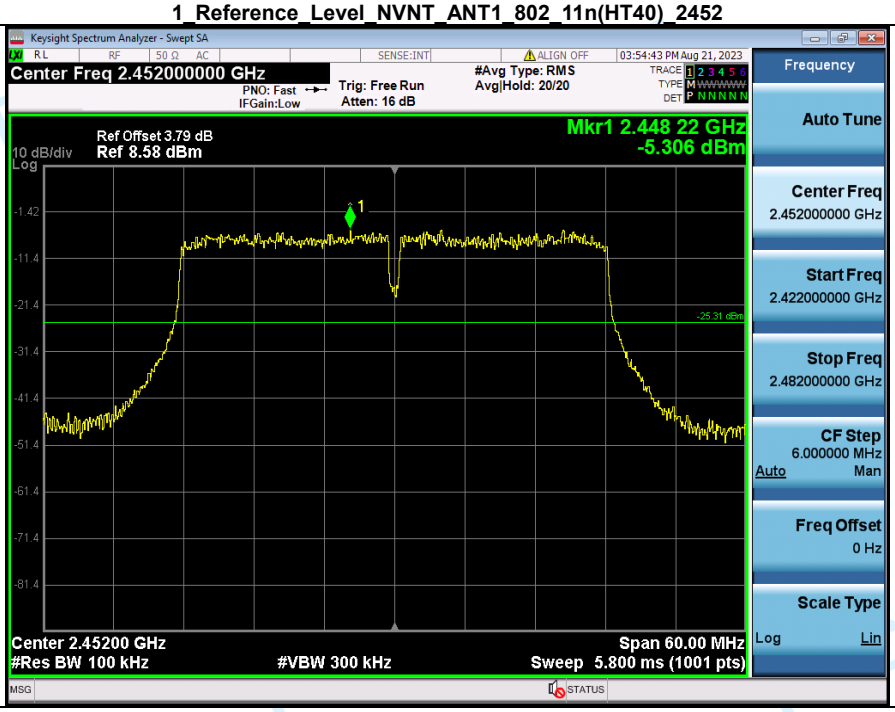
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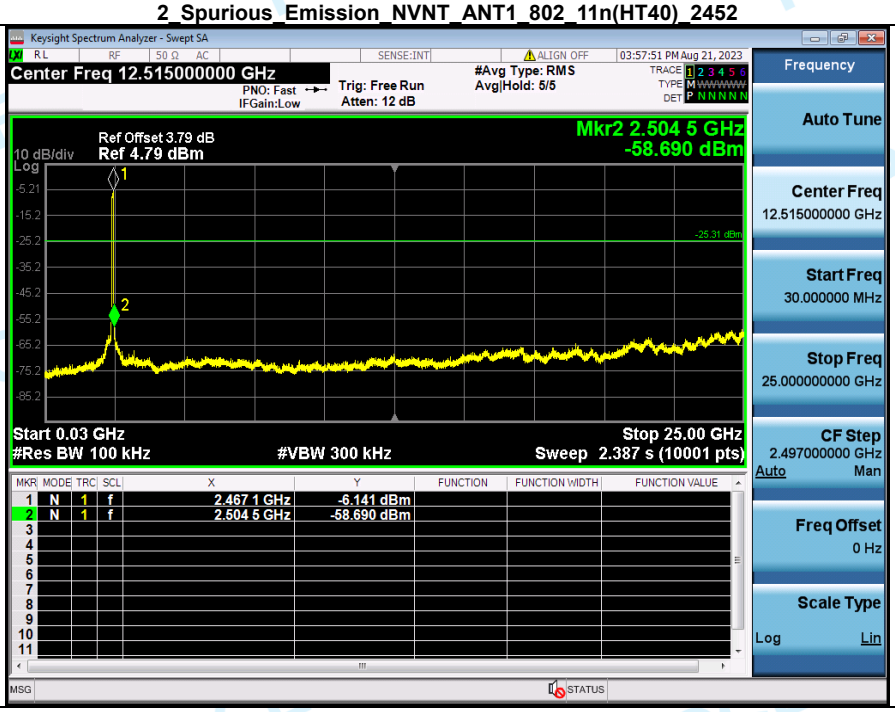

********** End of Report **********