

RF Test Report

For

Applicant name: FOXX Development Inc.
Address: 3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005, USA
EUT name: Kids Smartwatch
Brand name: MIRO, FOXXD, FOXX
Model number: W1 SE
Series model number: N/A
FCC ID: 2AQRM-W1SE

Issued By

Company name: BTF Testing Lab (Shenzhen) Co., Ltd.
Address: 101/201/301, Building 1, Block 2, Tantou Industrial Park,Tantou Community, Songgang Subdistrict, Bao'an District, Shenzhen, China

Report number: BTF250723R00101
Test standards: 47 CFR Part 15.247
Test conclusion: Pass

Date of sample receipt: 2025-07-23
Test date: 2025-07-24 to 2025-08-19
Date of issue: 2025-08-20

Test by: Sean He
Sean He / Tester

Prepared by: Chris Liu
Chris Liu / Project engineer



Ryan.CJ / EMC Manager

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Revision History		
Version	Issue Date	Revisions Content
R_V0	2025-08-20	Original
<i>Note:</i> <i>Once the revision has been made, then previous versions reports are invalid.</i>		

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1 Introduction

1.1 Laboratory Location

Test location:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	101/201/301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Subdistrict, Bao'an District, Shenzhen, China
Phone number:	+86-0755-23146130
Fax number:	+86-0755-23146130

1.2 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Designation No.: CN1409**
BTF Testing Lab (Shenzhen) Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The test firm Registration No. is 695374.
- **CNAS - Registration No.: CNAS L17568**
BTF Testing Lab (Shenzhen) Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L17568.
- **A2LA - Registration No.: 6660.01**
BTF Testing Lab (Shenzhen) Co., Ltd. is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories.

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.
- (7) All entrusted information in this report is provided by the client and has been confirmed through consultation with the client; The testing items for this report have been discussed and confirmed with the client, and our company is only responsible for the content reflected in the report.

2 Product Information

2.1 Application Information

Company name:	FOXX Development Inc.
Address:	3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005, USA

2.2 Manufacturer Information

Company name:	FOXX Development Inc.
Address:	3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005, USA

2.3 Factory Information

Company name:	FOXX Development Inc.
Address:	3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005, USA

2.4 General Description of Equipment under Test (EUT)

EUT name:	Kids Smartwatch
Under test model name:	W1 SE
Series model name:	N/A
Description of model name differentiation:	N/A
Hardware version:	N/A
Software version:	N/A
Rating:	Rechargeable Li-ion polymer Battery DC3.85V/770mAh 2.9645Wh

2.5 Technical Information

Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz;
Channel numbers:	802.11b/g/n(HT20): 11 Channels;
Channel separation:	5MHz
Modulation technology:	802.11b: DSSS(CCK, DQPSK, DBPSK); 802.11g: OFDM(BPSK, QPSK, 16QAM, 64QAM); 802.11n(HT20): OFDM (BPSK, QPSK, 16QAM, 64QAM)
Max. E.I.R.P Power:	13.27dBm
Antenna type:	PIFA Antenna
Antenna gain:	-2.41dBi

Channel List:

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

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	±5 %
RF output power, conducted	±1.5 dB
Power Spectral Density, conducted	±3.0 dB
Unwanted Emissions, conducted	±3.0 dB
Supply voltages	±3 %
Time	±5 %
Conducted Emission for LISN (9kHz ~ 150kHz)	±2.97 dB
Conducted Emission for LISN (150kHz ~ 30MHz)	±2.45 dB
Radiated Emission (30MHz ~ 1000MHz)	±4.80 dB
Radiated Emission (1GHz ~ 18GHz)	±4.82 dB

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.3 Summary of Test Result

Item	Standard	Requirement	Result
Antenna requirement	47 CFR Part 15.247	47 CFR 15.203	Pass
Conducted Emission at AC power line	47 CFR Part 15.247	47 CFR 15.207(a)	Pass
6dB 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), 15.209, 15.205	Pass
Emissions in frequency bands (below 1GHz)	47 CFR Part 15.247	47 CFR 15.247(d), 15.209, 15.205	Pass
Emissions in frequency bands (above 1GHz)	47 CFR Part 15.247	47 CFR 15.247(d), 15.209, 15.205	Pass
Remark: 1. Pass: Meet the requirements. 2. N/A: not applicable.			

3.4 Additions to, deviations, or exclusions from the method

None

4 Test Configuration

4.1 Test Equipment List

Conducted Emission at AC power line					
Test Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
EMI Receiver	Rohde & Schwarz	ESCI3	101422	2024-10-25	2025-10-24
V-LISN	Schwarzbeck	NSLK 8127	01073	2024-10-25	2025-10-24
Coaxial Switcher	Schwarzbeck	CX210	CX210	/	/
Pulse Limiter	Schwarzbeck	VTSD 9561-F	00953	/	/
Test Software	Frad	EZ_EMC	Version: EMC-CON 3A1.1+	/	/

6dB Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in non-restricted frequency bands					
Test Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	Keysight	N9020A	MY50410020	2024-10-25	2025-10-24
ESG Vector Signal Generator	Agilent	E4438C	MY45094854	2024-10-25	2025-10-24
MXG Vector Signal Generator	Agilent	N5182A	MY46240163	2024-10-25	2025-10-24
Wideband Radio Communication Tester	Rohde&Schwarz	CMW500	161997	2024-10-25	2025-10-24
Temperature Humidity Chamber	ZZCKONG	ZZ-K02A	20210928007	2024-10-25	2025-10-24
DC Power Supply	Tongmen	etm-6050c	20211026123	2024-10-25	2025-10-24
RF Control Unit	Techy	TR1029-1	/	2024-10-25	2025-10-24
RF Sensor Unit	Techy	TR1029-2	/	2024-10-25	2025-10-24
Test Software	TST Pass	/	Version: 2.0	/	/

Band edge emissions (Radiated) Emissions in frequency bands (below 1GHz) Emissions in frequency bands (above 1GHz)					
Test Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
EMI Receiver	Rohde & Schwarz	ESCI7	101032	2024-10-25	2025-10-24
Signal Analyzer	Rohde & Schwarz	FSQ40	100010	2024-10-25	2025-10-24
Log periodic antenna	Schwarzbeck	VULB 9168	01328	2024-10-28	2025-10-27
Preamplifier (30MHz ~ 1GHz)	Schwarzbeck	BBV9744	00246	2024-09-24	2025-09-23
Horn Antenna	Schwarzbeck	BBHA9120D	2597	2024-10-30	2025-10-29
Preamplifier (1GHz ~ 18GHz)	Schwarzbeck	BBV9718D	00008	2024-09-24	2025-09-23
Test Software	Frad	EZ_EMC	Version: FA-03A2 RE+	/	/

4.2 Test Auxiliary Equipment

No.	Description	Manufacturer	Model	Serial Number	Certification
1	USB-C Power Adapter	Apple Inc.	A2166	/	

4.3 Test Modes

No.	Test Modes
TM1	802.11b mode
TM2	802.11g mode
TM3	802.11n(HT20) mode
TM4	802.11n(HT40) mode

4.4 Test Channel of EUT

Operation Band: 2400-2483.5 MHz

Bandwidth (MHz)	Lowest Channel (LCH) (MHz)	Middle Channel (MCH) (MHz)	Highest Channel (HCH) (MHz)
20	2412	2437	2462
40	2422	2437	2452

4.5 Test software

Test software:	Version:	Power Class:
Engineering Mode	***3646633***	10

5 Evaluation Results (Evaluation)

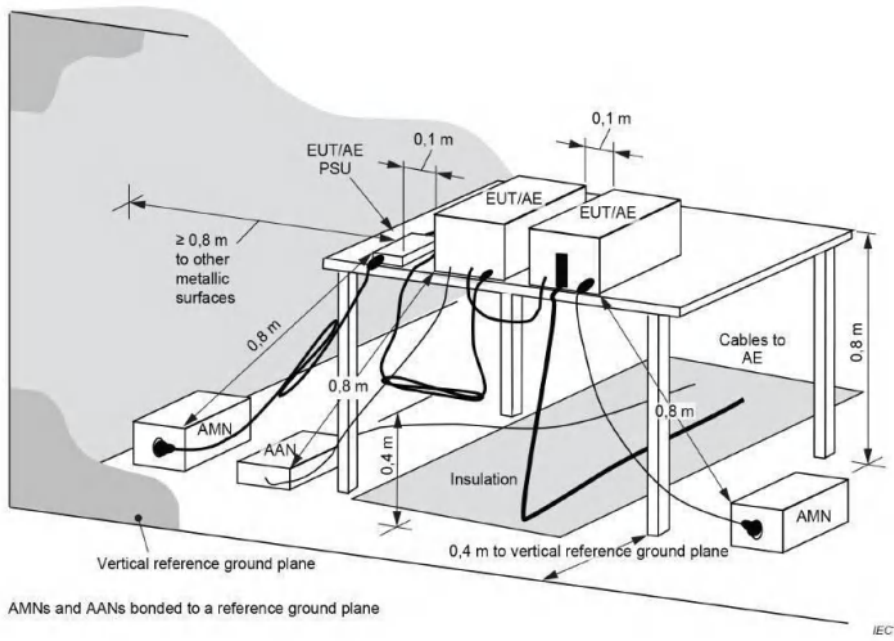
5.1 Antenna requirement

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.
Operating Environment:	
Temperature:	23.1 °C
Humidity:	54.7 %
Atmospheric Pressure:	1010 mbar
Test voltage:	AC 120 60Hz

6 Radio Spectrum Matter Test Results (RF)

6.1 Conducted Emission at AC power line

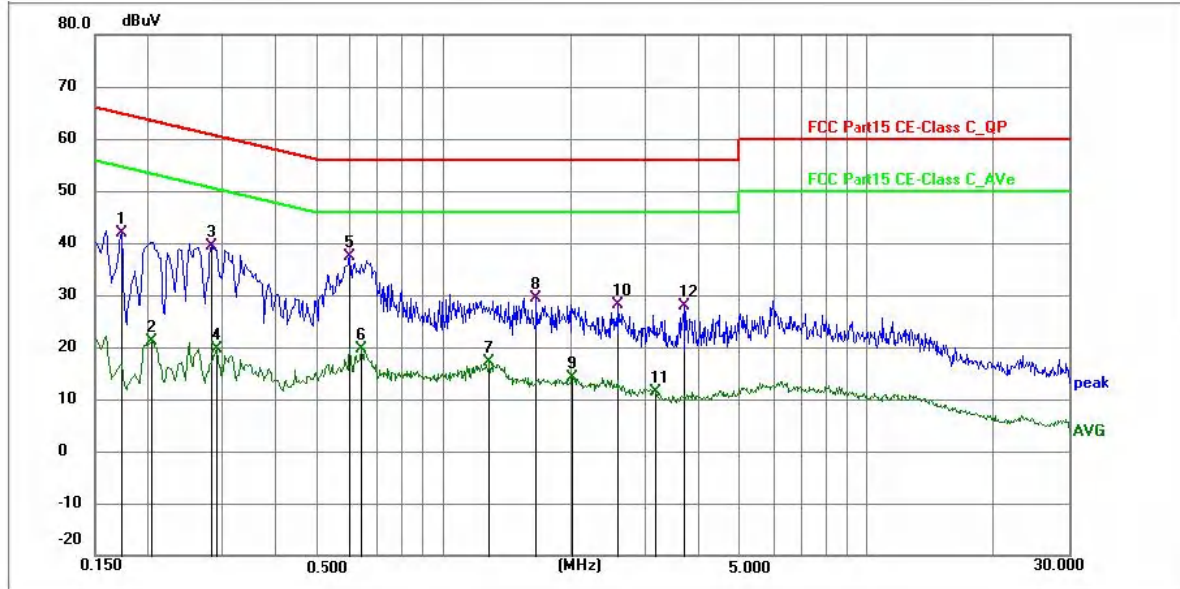
Test Requirement:	Refer to 47 CFR 15.207(a), Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN).		
Test Method:	ANSI C63.10-2020 section 6.2		
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.		
Procedure:	Refer to ANSI C63.10-2020 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices		

Test Setup:	 The diagram illustrates the test setup for an EUT/AE. It shows three EUT/AE units on a table, with a PSU connected to one. Dimensions include 0.1m for the PSU, 0.8m for the table height, and 0.4m for the distance to the vertical reference ground plane. A vertical reference ground plane is shown, and AMNs and AANs are bonded to a reference ground plane. The setup is labeled IEC.
Operating Environment:	
Temperature:	23.1 °C
Humidity:	54.7 %
Atmospheric Pressure:	1010 mbar
Test voltage:	AC 120 60Hz

6.1.1 Test Data

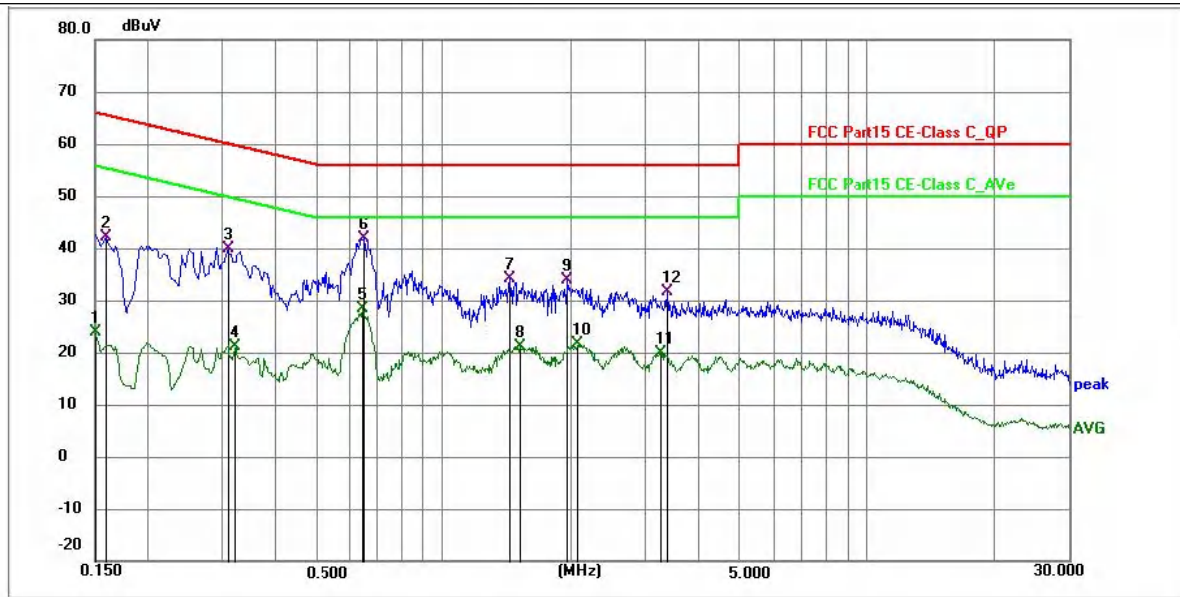
Remark: The report only reflects the test data of worst mode.

TM1 / Line: Line / Band: 2400-2483.5 MHz / BW: 20 / CH: M



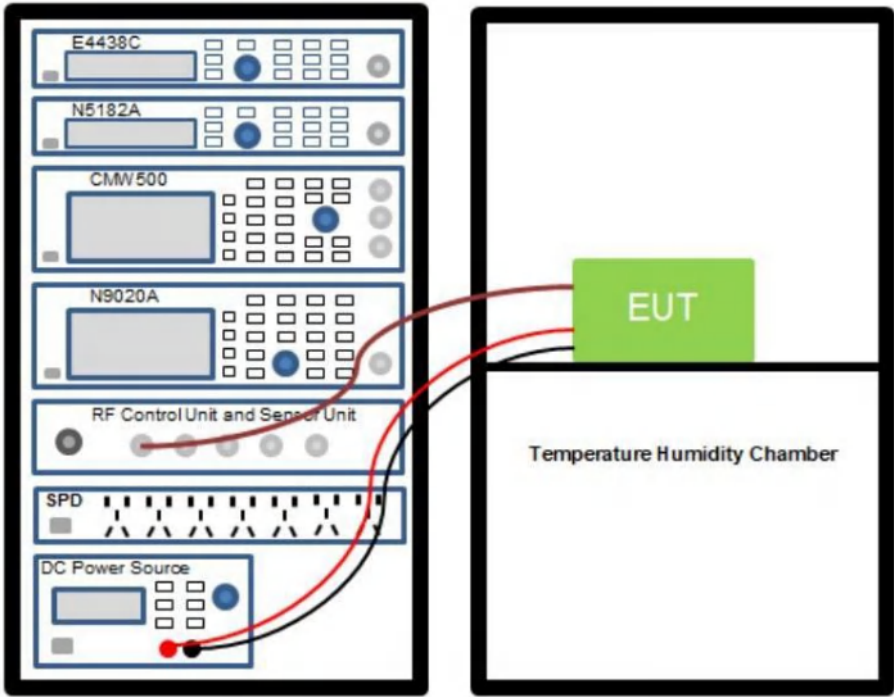
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1723	31.31	10.59	41.90	64.85	-22.95	QP	P	
2	0.2040	10.47	10.66	21.13	53.45	-32.32	AVG	P	
3	0.2805	28.74	10.66	39.40	60.80	-21.40	QP	P	
4	0.2893	8.86	10.66	19.52	50.54	-31.02	AVG	P	
5 *	0.6000	26.67	10.63	37.30	56.00	-18.70	QP	P	
6	0.6402	9.05	10.61	19.66	46.00	-26.34	AVG	P	
7	1.2839	6.33	10.80	17.13	46.00	-28.87	AVG	P	
8	1.6620	18.65	10.74	29.39	56.00	-26.61	QP	P	
9	2.0220	3.56	10.68	14.24	46.00	-31.76	AVG	P	
10	2.5889	17.32	10.70	28.02	56.00	-27.98	QP	P	
11	3.1604	0.70	10.72	11.42	46.00	-34.58	AVG	P	
12	3.6960	17.16	10.73	27.89	56.00	-28.11	QP	P	

TM1 / Line: Neutral / Band: 2400-2483.5 MHz / BW: 20 / CH: M



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1500	13.42	10.55	23.97	56.00	-32.03	AVG	P	
2	0.1590	31.49	10.55	42.04	65.52	-23.48	QP	P	
3	0.3074	29.18	10.64	39.82	60.04	-20.22	QP	P	
4	0.3209	10.47	10.65	21.12	49.68	-28.56	AVG	P	
5	0.6450	17.45	10.85	28.30	46.00	-17.70	AVG	P	
6 *	0.6493	31.00	10.85	41.85	56.00	-14.15	QP	P	
7	1.4370	23.22	10.90	34.12	56.00	-21.88	QP	P	
8	1.5135	10.26	10.91	21.17	46.00	-24.83	AVG	P	
9	1.9680	22.87	10.98	33.85	56.00	-22.15	QP	P	
10	2.0803	10.58	10.98	21.56	46.00	-24.44	AVG	P	
11	3.2414	9.10	10.90	20.00	46.00	-26.00	AVG	P	
12	3.3675	20.67	10.87	31.54	56.00	-24.46	QP	P	

6.2 6dB Bandwidth

Test Requirement:	47 CFR 15.247(a)(2)
Test Method:	ANSI C63.10-2020, section 11.8 KDB 558074 D01 15.247 Meas Guidance v05r02
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.
Procedure:	11.8.1 Option 1 The steps for the first option are as follows: a) Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz. b) Set the VBW $\geq [3 \times \text{RBW}]$. c) Detector = peak. d) Trace mode = max-hold. e) Sweep = No faster than coupled (auto) time. f) Allow the trace to stabilize. g) Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-6 dB down amplitude”. If a marker is below this “-6 dB down amplitude” value, then it shall be as close as possible to this value. 11.8.2 Option 2 The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described in 11.8.1 (i.e., RBW = 100 kHz, VBW $\geq 3 \times \text{RBW}$, and peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.
Test Setup:	 The diagram illustrates the test setup. On the left, a rack of instruments is shown, including an E4438C signal generator, an N5182A power meter, a CMW500 vector signal analyzer, an N9020A spectrum analyzer, an RF Control Unit and Sensor Unit, an SPD (Signal Power Detector), and a DC Power Source. On the right, a Temperature Humidity Chamber contains the EUT (Equipment Under Test). Red and black cables connect the instruments to the EUT, indicating the signal and power connections for the test.

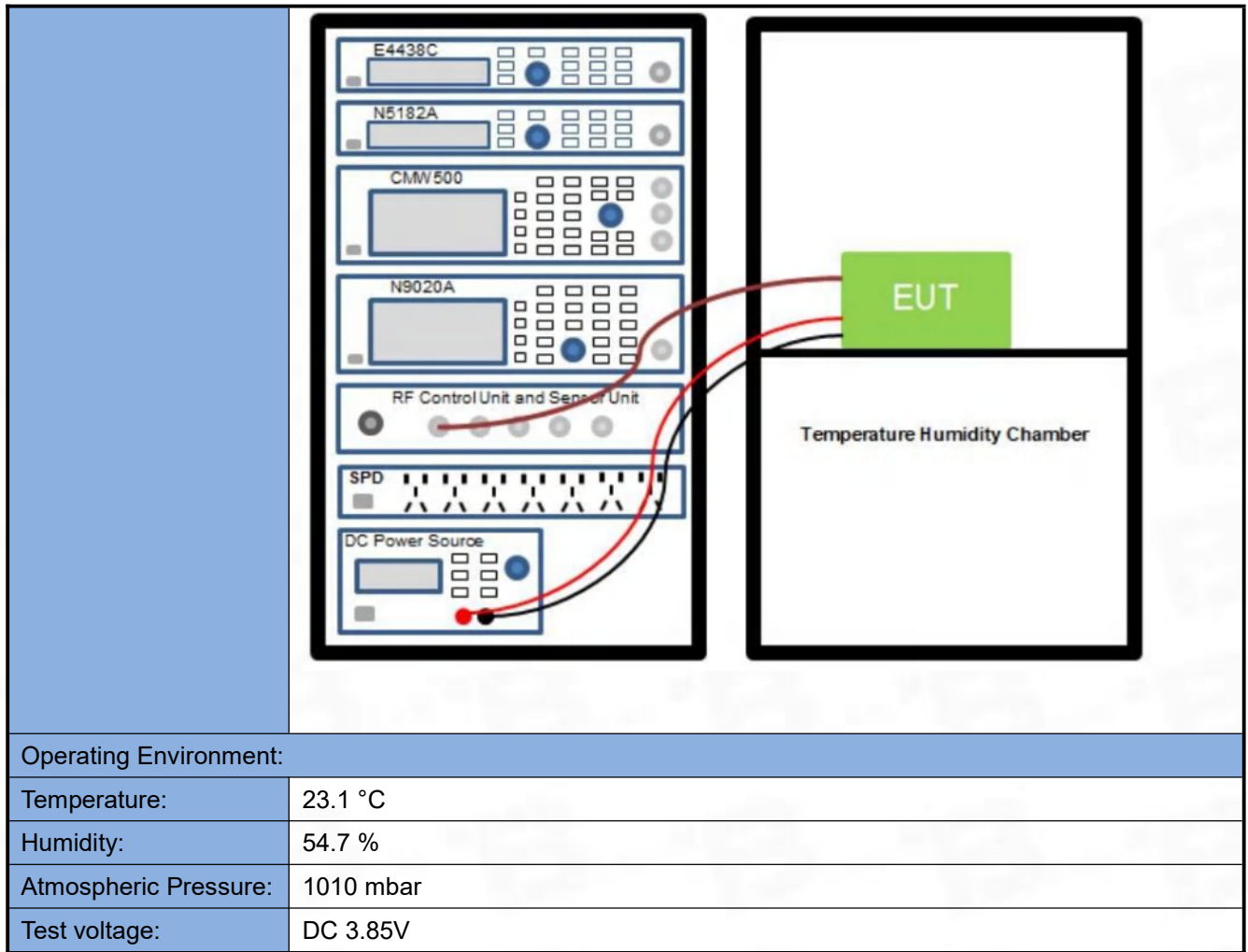
Operating Environment:	
Temperature:	23.1 °C
Humidity:	54.7 %
Atmospheric Pressure:	1010 mbar
Test voltage:	DC 3.85V

6.2.1 Test Data

Please Refer to Appendix for Details.

6.3 Maximum Conducted Output Power

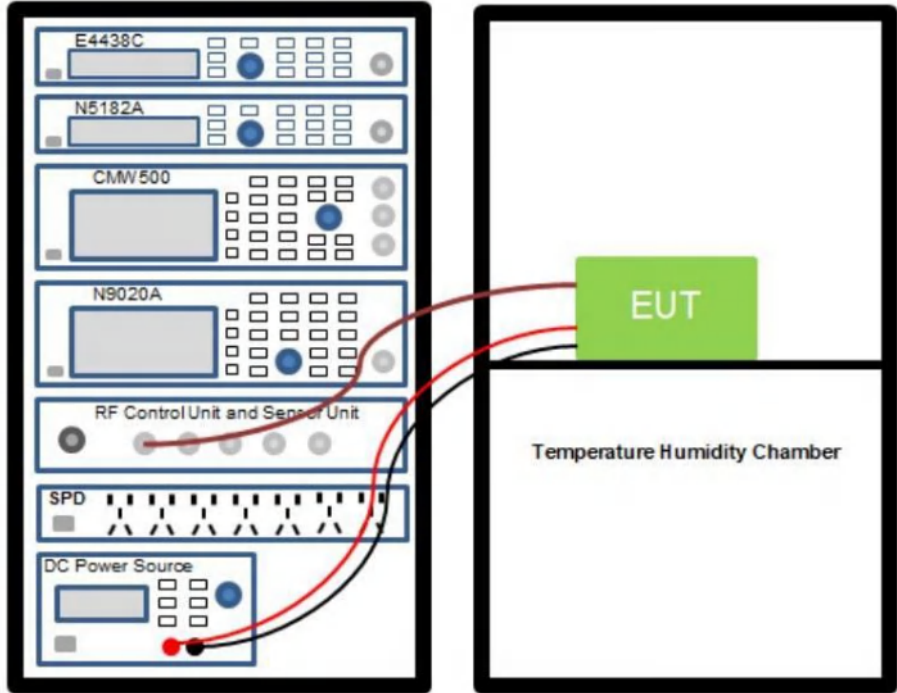
Test Requirement:	47 CFR 15.247(b)(3)
Test Method:	ANSI C63.10-2020, section 11.9.2 KDB 558074 D01 15.247 Meas Guidance v05r02
Test Limit:	Refer to 47 CFR 15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak 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.
Procedure:	a) Set span to at least 1.5 times the OBW. b) Set RBW = 1% to 5% of the OBW, not to exceed 1 MHz. c) Set VBW $\geq [3 \times \text{RBW}]$. d) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.) e) Sweep time = auto. f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode. g) If transmit duty cycle < 98%, use a sweep trigger with the level set to enable triggering only on full power pulses. The transmitter shall operate at the maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no OFF intervals) or at duty cycle $\geq 98\%$, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run." h) Trace average at least 100 traces in power averaging (rms) mode. i) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function, with band limits set equal to the OBW band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.
Test Setup:	



6.3.1 Test Data

Please Refer to Appendix for Details.

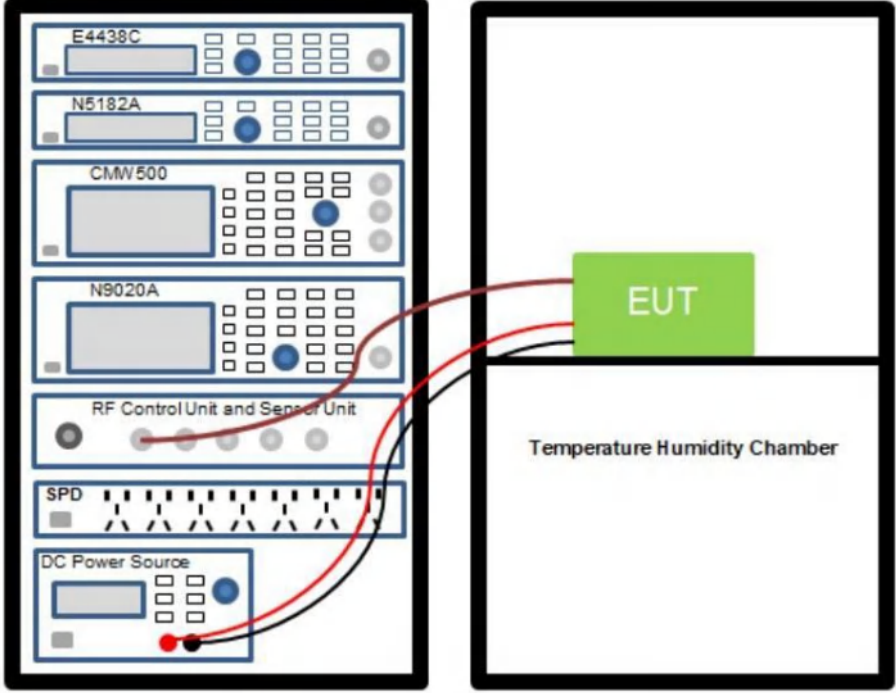
6.4 Power Spectral Density

Test Requirement:	47 CFR 15.247(e)
Test Method:	ANSI C63.10-2020, section 11.10 KDB 558074 D01 15.247 Meas Guidance v05r02
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.
Procedure:	ANSI C63.10-2020, section 11.10, Maximum power spectral density level in the fundamental emission
Test Setup:	
Operating Environment:	
Temperature:	23.1 °C
Humidity:	54.7 %
Atmospheric Pressure:	1010 mbar
Test voltage:	DC 3.85V

6.4.1 Test Data

Please Refer to Appendix for Details.

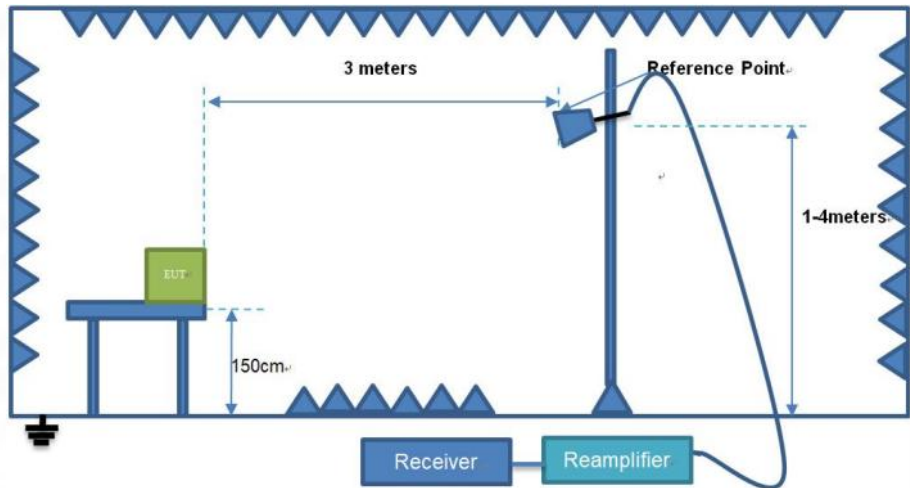
6.5 Emissions in non-restricted frequency bands

Test Requirement:	47 CFR 15.247(d)
Test Method:	ANSI C63.10-2020 section 11.11 KDB 558074 D01 15.247 Meas Guidance v05r02
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.
Procedure:	ANSI C63.10-2020 Section 11.11.1, Section 11.11.2, Section 11.11.3
Test Setup:	
Operating Environment:	
Temperature:	23.1 °C
Humidity:	54.7 %
Atmospheric Pressure:	1010 mbar
Test voltage:	DC 3.85V

6.5.1 Test Data

Please Refer to Appendix for Details.

6.6 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 Method:	ANSI C63.10-2020 section 6.10 KDB 558074 D01 15.247 Meas Guidance v05r02		
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. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.		
Procedure:	ANSI C63.10-2020 section 6.10.5.2		
Test Setup:			
Operating Environment:			
Temperature:	23.1 °C		
Humidity:	54.7 %		
Atmospheric Pressure:	1010 mbar		
Test voltage:	DC 3.85V		

6.6.1 Test Data

Remark: The report only reflects the test data of worst mode.

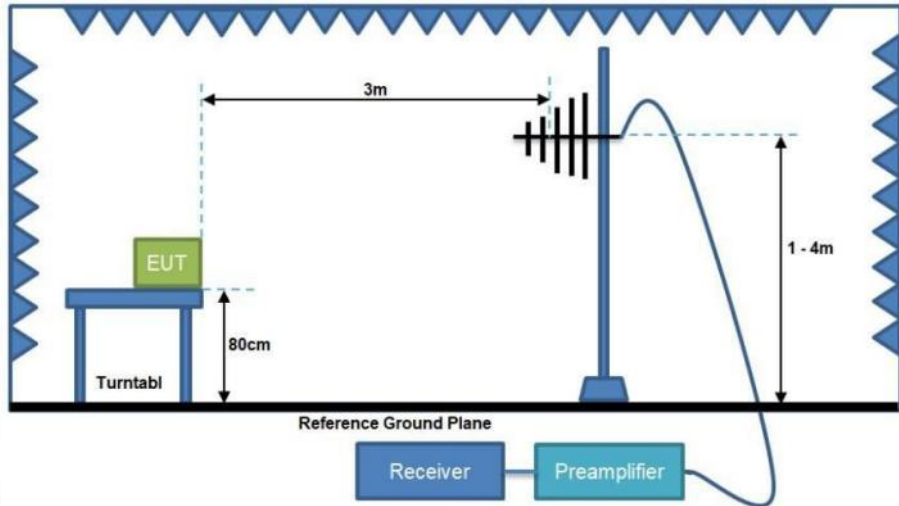
802.11b mode							
Test Channel: Lowest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
2310.00	50.69	3.85	54.54	74.00	-19.46	Peak	Pass
2310.00	40.64	3.85	44.49	54.00	-9.51	AVG	Pass
2390.00	52.87	3.91	56.78	74.00	-17.22	Peak	Pass
2390.00	42.05	3.91	45.96	54.00	-8.04	AVG	Pass
Test Channel: Lowest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
2310.00	52.21	3.85	56.07	74.00	-17.93	Peak	Pass
2310.00	42.38	3.85	46.23	54.00	-7.77	AVG	Pass
2390.00	51.54	3.91	55.46	74.00	-18.54	Peak	Pass
2390.00	40.97	3.91	44.88	54.00	-9.12	AVG	Pass
Test Channel: Highest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
2483.50	50.57	3.99	54.56	74.00	-19.44	Peak	Pass
2483.50	40.93	3.99	44.92	54.00	-9.08	AVG	Pass
2500.00	52.14	4.00	56.14	74.00	-17.86	Peak	Pass
2500.00	42.36	4.00	46.36	54.00	-7.64	AVG	Pass
Test Channel: Highest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
2483.50	51.34	3.99	55.32	74.00	-18.68	Peak	Pass
2483.50	41.71	3.99	45.69	54.00	-8.31	AVG	Pass
2500.00	51.44	4.00	55.44	74.00	-18.56	Peak	Pass
2500.00	41.42	4.00	45.42	54.00	-8.58	AVG	Pass

802.11g mode							
Test Channel: Lowest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
2310.00	50.16	3.85	54.01	74	-19.99	Peak	Pass
2310.00	40.11	3.85	43.96	54	-10.04	AVG	Pass
2390.00	52.34	3.91	56.25	74	-17.75	Peak	Pass
2390.00	41.52	3.91	45.43	54	-8.57	AVG	Pass
Test Channel: Lowest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
2310.00	51.68	3.85	55.53	74	-18.47	Peak	Pass
2310.00	41.85	3.85	45.7	54	-8.3	AVG	Pass
2390.00	51.01	3.91	54.92	74	-19.08	Peak	Pass
2390.00	40.44	3.91	44.35	54	-9.65	AVG	Pass
Test Channel: Highest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
2483.50	50.04	3.99	54.03	74	-19.97	Peak	Pass
2483.50	40.4	3.99	44.39	54	-9.61	AVG	Pass
2500.00	51.61	4	55.61	74	-18.39	Peak	Pass
2500.00	41.83	4	45.83	54	-8.17	AVG	Pass
Test Channel: Highest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
2483.50	50.81	3.99	54.8	74	-19.2	Peak	Pass
2483.50	41.18	3.99	45.17	54	-8.83	AVG	Pass
2500.00	50.91	4	54.91	74	-19.09	Peak	Pass
2500.00	40.89	4	44.89	54	-9.11	AVG	Pass

802.11n20 mode							
Test Channel: Lowest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
2310.00	49.48	3.85	53.33	74	-20.67	Peak	Pass
2310.00	39.43	3.85	43.28	54	-10.72	AVG	Pass
2390.00	51.66	3.91	55.57	74	-18.43	Peak	Pass
2390.00	40.84	3.91	44.75	54	-9.25	AVG	Pass
Test Channel: Lowest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
2310.00	51	3.85	54.85	74	-19.15	Peak	Pass
2310.00	41.17	3.85	45.02	54	-8.98	AVG	Pass
2390.00	50.33	3.91	54.24	74	-19.76	Peak	Pass
2390.00	39.76	3.91	43.67	54	-10.33	AVG	Pass
Test Channel: Highest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
2483.50	49.36	3.99	53.35	74	-20.65	Peak	Pass
2483.50	39.72	3.99	43.71	54	-10.29	AVG	Pass
2500.00	50.93	4	54.93	74	-19.07	Peak	Pass
2500.00	41.15	4	45.15	54	-8.85	AVG	Pass
Test Channel: Highest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
2483.50	50.13	3.99	54.12	74	-19.88	Peak	Pass
2483.50	40.5	3.99	44.49	54	-9.51	AVG	Pass
2500.00	50.23	4	54.23	74	-19.77	Peak	Pass
2500.00	40.21	4	44.21	54	-9.79	AVG	Pass

Note:Margin=Level-Limit=Reading+factor-Limit

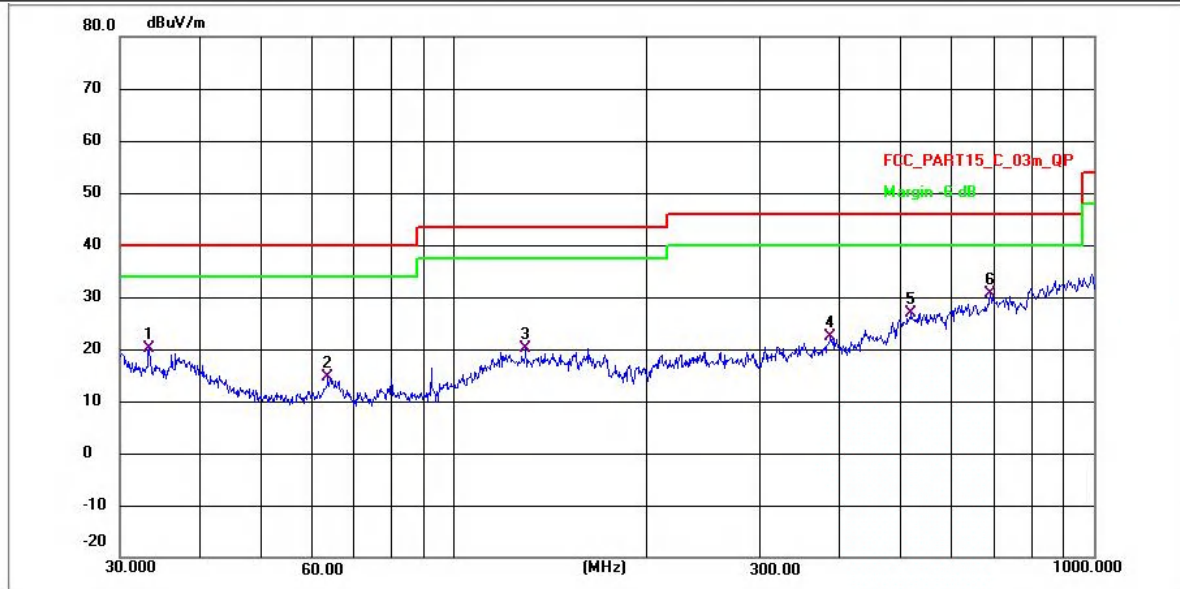
6.7 Emissions in frequency bands (below 1GHz)

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 Method:	ANSI C63.10-2020 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02		
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. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.		
Procedure:	ANSI C63.10-2020 section 6.6.4		
Test Setup:			
Operating Environment:			
Temperature:	23.1 °C		
Humidity:	54.7 %		
Atmospheric Pressure:	1010 mbar		
Test voltage:	DC 3.85V		

6.7.1 Test Data

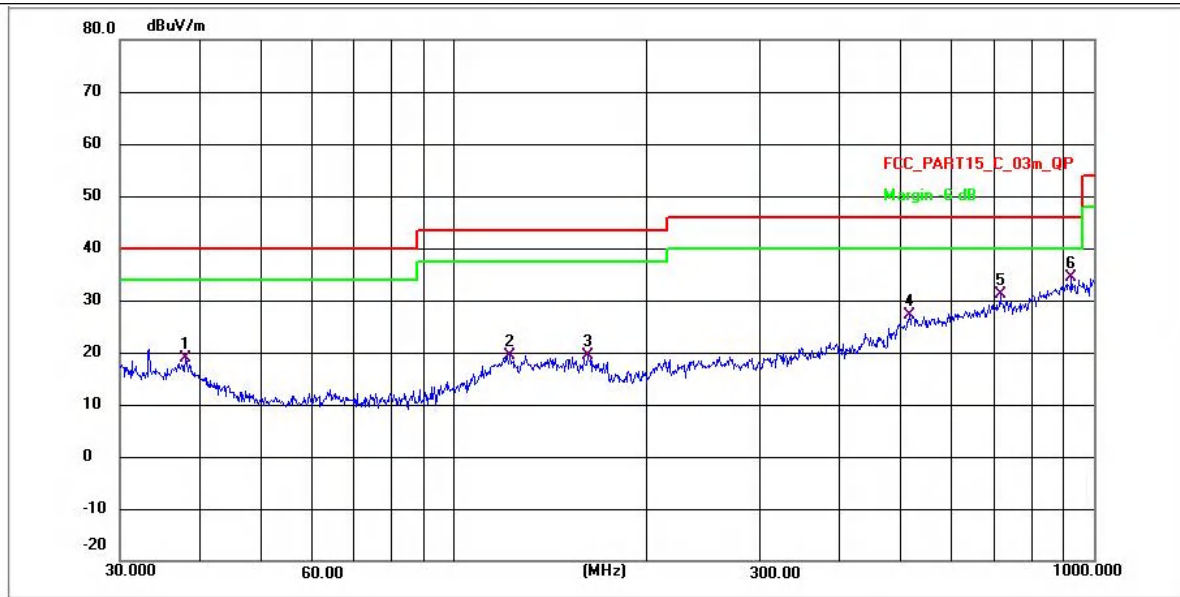
Remark: The report only reflects the test data of worst mode.

TM1 / Polarization: Horizontal



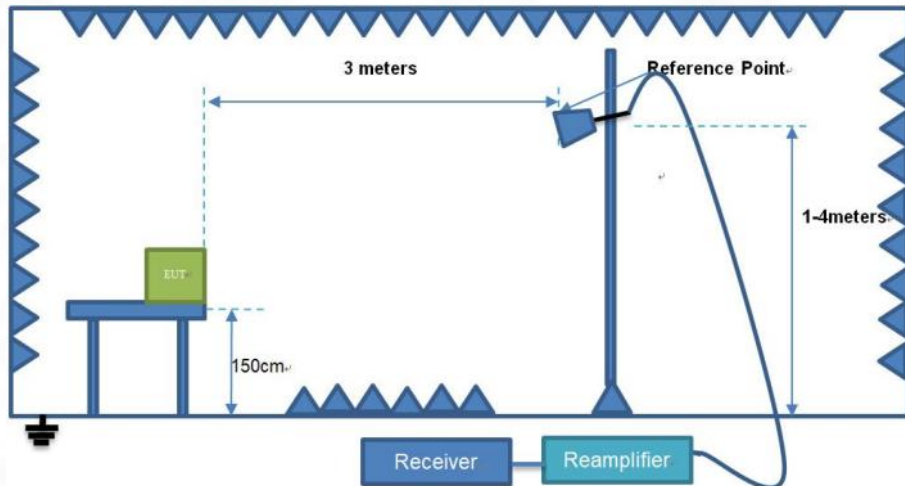
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	33.3278	29.88	-9.68	20.20	40.00	-19.80	QP	P
2	63.3132	24.06	-9.42	14.64	40.00	-25.36	QP	P
3	129.4677	42.32	-22.19	20.13	43.50	-23.37	QP	P
4	386.6338	42.19	-19.93	22.26	46.00	-23.74	QP	P
5	519.0650	45.85	-18.86	26.99	46.00	-19.01	QP	P
6 *	689.5644	48.37	-17.68	30.69	46.00	-15.31	QP	P

TM1 / Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	37.9450	28.54	-9.65	18.89	40.00	-21.11	QP	P
2	122.4040	41.69	-22.26	19.43	43.50	-24.07	QP	P
3	161.4740	41.39	-21.90	19.49	43.50	-24.01	QP	P
4	515.4373	46.07	-18.89	27.18	46.00	-18.82	QP	P
5	714.1733	48.73	-17.65	31.08	46.00	-14.92	QP	P
6 *	922.5157	50.51	-16.08	34.43	46.00	-11.57	QP	P

6.8 Emissions in frequency bands (above 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 Method:	ANSI C63.10-2020 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02		
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. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.		
Procedure:	ANSI C63.10-2020 section 6.6.4		
Test Setup:			
Operating Environment:			
Temperature:	23.1 °C		
Humidity:	54.7 %		
Atmospheric Pressure:	1010 mbar		
Test voltage:	DC 3.85V		

6.8.1 Test Data

Remark: The report only reflects the test data of worst mode.

802.11b mode							
Test Channel: Lowest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4824.00	92.91	-48.84	44.07	74.00	-29.93	Peak	Pass
4824.00	91.32	-48.84	42.48	54.00	-11.52	AVG	Pass
7236.00	91.32	-47.02	44.30	74.00	-29.70	Peak	Pass
7236.00	80.39	-47.02	33.37	54.00	-20.63	AVG	Pass
Test Channel: Lowest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4824.00	93.83	-48.84	44.99	74.00	-29.01	Peak	Pass
4824.00	92.14	-48.84	43.30	54.00	-10.70	AVG	Pass
7236.00	92.14	-47.02	45.12	74.00	-28.88	Peak	Pass
7236.00	90.56	-47.02	43.54	54.00	-10.46	AVG	Pass
Test Channel: Middle channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4874.00	93.47	-48.83	44.64	74.00	-29.36	Peak	Pass
4874.00	82.22	-48.83	33.39	54.00	-20.61	AVG	Pass
7311.00	91.88	-47.01	44.87	74.00	-29.13	Peak	Pass
7311.00	80.95	-47.01	33.94	54.00	-20.06	AVG	Pass
Test Channel: Middle channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4874.00	94.21	-48.84	45.37	74.00	-28.63	Peak	Pass
4874.00	82.96	-48.84	34.12	54.00	-19.88	AVG	Pass
7311.00	92.52	-47.02	45.50	74.00	-28.50	Peak	Pass
7311.00	81.59	-47.02	34.57	54.00	-19.43	AVG	Pass
Test Channel: Highest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result

4924.00	94.05	-48.72	45.33	74.00	-28.67	Peak	Pass
4924.00	92.46	-48.72	43.74	54.00	-10.26	AVG	Pass
7386.00	92.46	-46.90	45.56	74.00	-28.44	Peak	Pass
7386.00	81.53	-46.90	34.63	54.00	-19.37	AVG	Pass
Test Channel: Highest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4924.00	94.75	-48.72	46.03	74.00	-27.97	Peak	Pass
4924.00	93.06	-48.72	44.34	54.00	-9.66	AVG	Pass
7386.00	93.06	-46.90	46.16	74.00	-27.84	Peak	Pass
7386.00	81.88	-46.90	34.98	54.00	-19.02	AVG	Pass

Note:Margin=Level-Limit=Reading+factor-Limit

802.11g mode							
Test Channel: Lowest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4824.00	93.97	-48.84	45.13	74.00	-28.87	Peak	Pass
4824.00	92.38	-48.84	43.54	54.00	-10.46	AVG	Pass
7236.00	92.38	-47.02	45.36	74.00	-28.64	Peak	Pass
7236.00	81.45	-47.02	34.43	54.00	-19.57	AVG	Pass
Test Channel: Lowest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4824.00	94.89	-48.84	46.05	74.00	-27.95	Peak	Pass
4824.00	93.20	-48.84	44.36	54.00	-9.64	AVG	Pass
7236.00	93.20	-47.02	46.18	74.00	-27.82	Peak	Pass
7236.00	90.56	-47.02	43.54	54.00	-10.46	AVG	Pass
Test Channel: Middle channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4874.00	94.53	-48.83	45.70	74.00	-28.30	Peak	Pass
4874.00	83.28	-48.83	34.45	54.00	-19.55	AVG	Pass
7311.00	92.94	-47.01	45.93	74.00	-28.07	Peak	Pass
7311.00	82.01	-47.01	35.00	54.00	-19.00	AVG	Pass

Test Channel: Middle channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4874.00	95.27	-48.84	46.43	74.00	-27.57	Peak	Pass
4874.00	84.02	-48.84	35.18	54.00	-18.82	AVG	Pass
7311.00	93.58	-47.02	46.56	74.00	-27.44	Peak	Pass
7311.00	82.65	-47.02	35.63	54.00	-18.37	AVG	Pass
Test Channel: Highest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4924.00	95.11	-48.72	46.39	74.00	-27.61	Peak	Pass
4924.00	93.52	-48.72	44.80	54.00	-9.20	AVG	Pass
7386.00	93.52	-46.90	46.62	74.00	-27.38	Peak	Pass
7386.00	82.59	-46.90	35.69	54.00	-18.31	AVG	Pass
Test Channel: Highest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4924.00	95.81	-48.72	47.09	74.00	-26.91	Peak	Pass
4924.00	94.12	-48.72	45.40	54.00	-8.60	AVG	Pass
7386.00	94.12	-46.90	47.22	74.00	-26.78	Peak	Pass
7386.00	82.94	-46.90	36.04	54.00	-17.96	AVG	Pass

Note:Margin=Level-Limit=Reading+factor-Limit

802.11n mode							
Test Channel: Lowest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4824.00	92.63	-48.84	43.79	74.00	-30.21	Peak	Pass
4824.00	91.04	-48.84	42.20	54.00	-11.80	AVG	Pass
7236.00	91.04	-47.02	44.02	74.00	-29.98	Peak	Pass
7236.00	80.11	-47.02	33.09	54.00	-20.91	AVG	Pass
Test Channel: Lowest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result

4824.00	93.55	-48.84	44.71	74.00	-29.29	Peak	Pass
4824.00	91.86	-48.84	43.02	54.00	-10.98	AVG	Pass
7236.00	91.86	-47.02	44.84	74.00	-29.16	Peak	Pass
7236.00	90.56	-47.02	43.54	54.00	-10.46	AVG	Pass
Test Channel: Middle channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4874.00	93.19	-48.83	44.36	74.00	-29.64	Peak	Pass
4874.00	81.94	-48.83	33.11	54.00	-20.89	AVG	Pass
7311.00	91.60	-47.01	44.59	74.00	-29.41	Peak	Pass
7311.00	80.67	-47.01	33.66	54.00	-20.34	AVG	Pass
Test Channel: Middle channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4874.00	93.93	-48.84	45.09	74.00	-28.91	Peak	Pass
4874.00	82.68	-48.84	33.84	54.00	-20.16	AVG	Pass
7311.00	92.24	-47.02	45.22	74.00	-28.78	Peak	Pass
7311.00	81.31	-47.02	34.29	54.00	-19.71	AVG	Pass
Test Channel: Highest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4924.00	93.77	-48.72	45.05	74.00	-28.95	Peak	Pass
4924.00	92.18	-48.72	43.46	54.00	-10.54	AVG	Pass
7386.00	92.18	-46.90	45.28	74.00	-28.72	Peak	Pass
7386.00	81.25	-46.90	34.35	54.00	-19.65	AVG	Pass
Test Channel: Highest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
4924.00	94.47	-48.72	45.75	74.00	-28.25	Peak	Pass
4924.00	92.78	-48.72	44.06	54.00	-9.94	AVG	Pass
7386.00	92.78	-46.90	45.88	74.00	-28.12	Peak	Pass
7386.00	81.60	-46.90	34.70	54.00	-19.30	AVG	Pass

7 Test Setup Photos

Refer to Appendix I Test Setup Photos

8 EUT Constructional Details (EUT Photos)

Refer to Appendix II External Photos and Appendix III Internal Photos

Appendix - 2.G WIFI

1. Duty Cycle

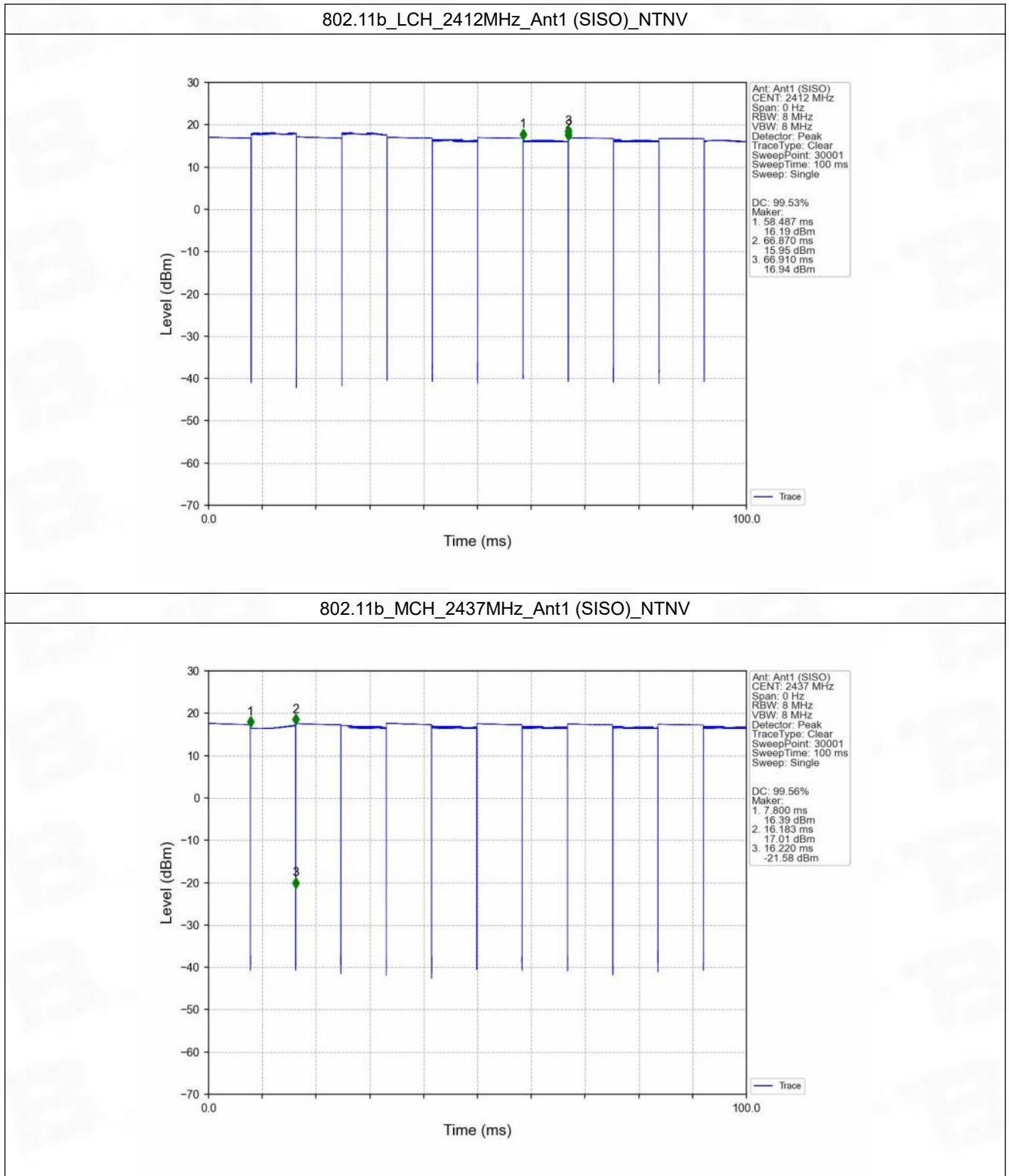
1.1 Test Result

1.1.1 Ant1

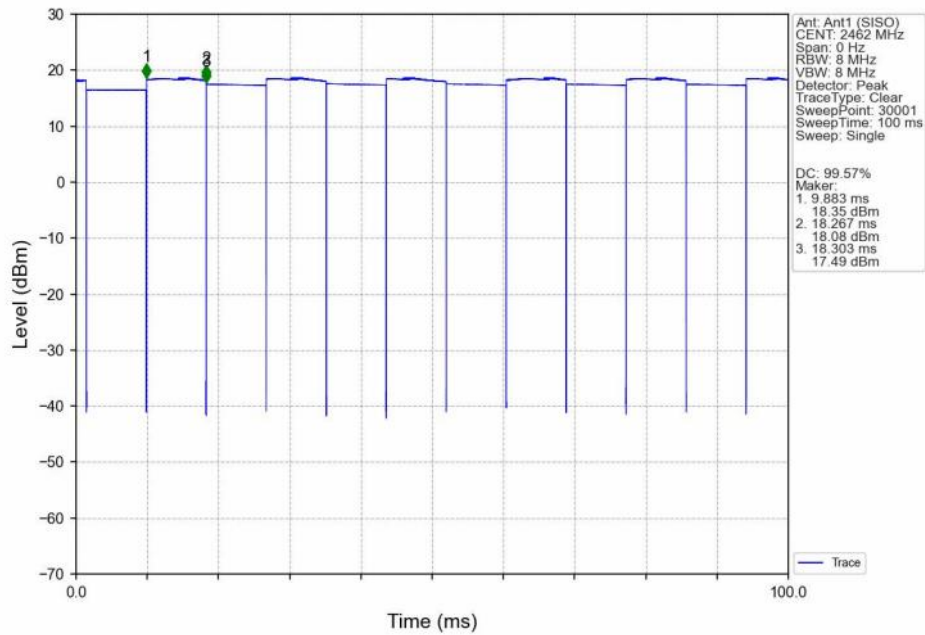
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	8.383	8.423	99.53	0.02	0.04
		2437	8.383	8.420	99.56	0.02	0.00
		2462	8.384	8.420	99.57	0.02	0.00
802.11g	SISO	2412	1.393	1.436	97.01	0.13	0.03
		2437	1.393	1.435	97.07	0.13	0.03
		2462	1.393	1.443	96.53	0.15	0.61
802.11n (HT20)	SISO	2412	1.300	1.352	96.15	0.17	0.67
		2437	1.301	1.343	96.87	0.14	0.03
		2462	1.301	1.352	96.23	0.17	0.67

1.2 Test Graph

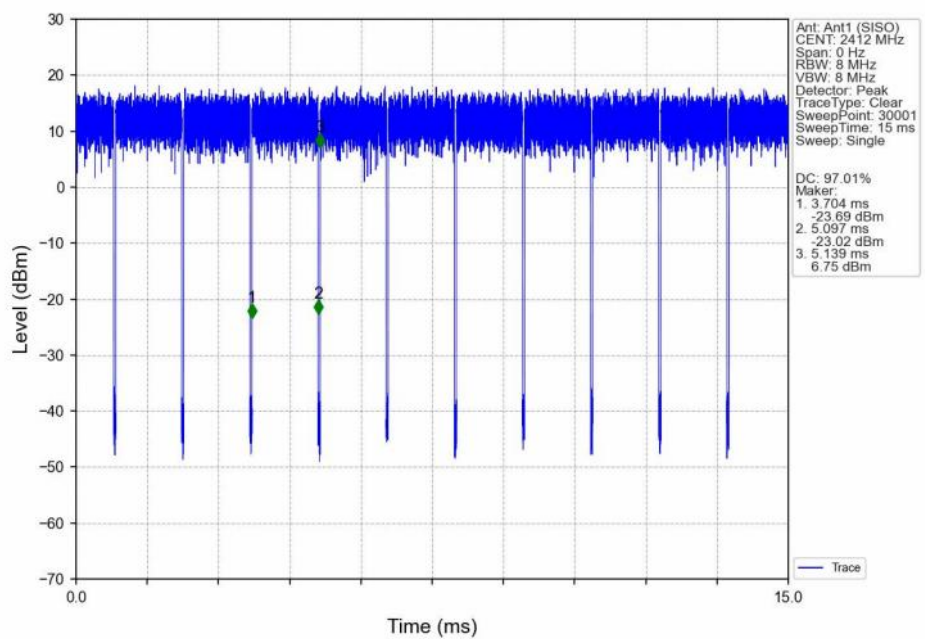
1.2.1 Ant1



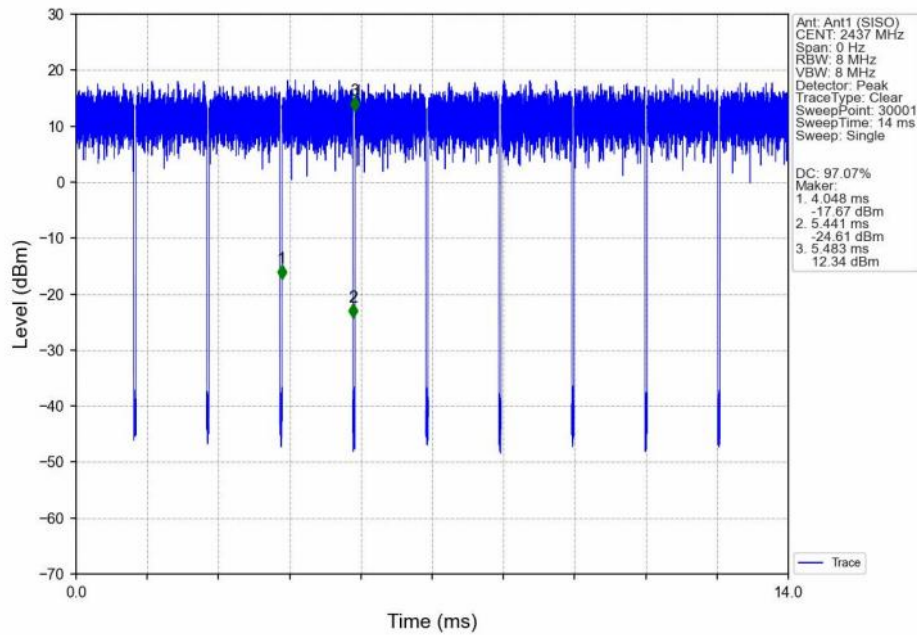
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



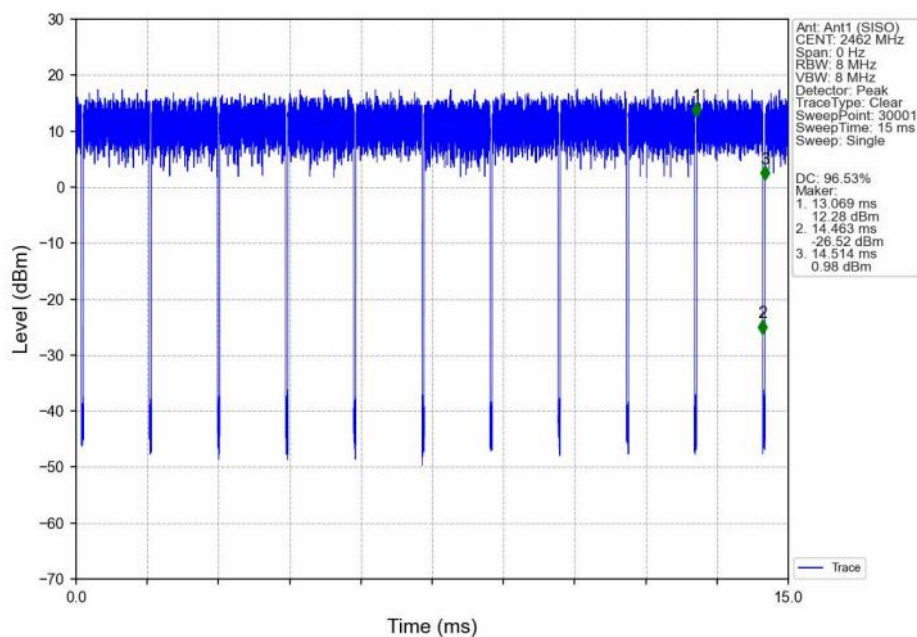
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



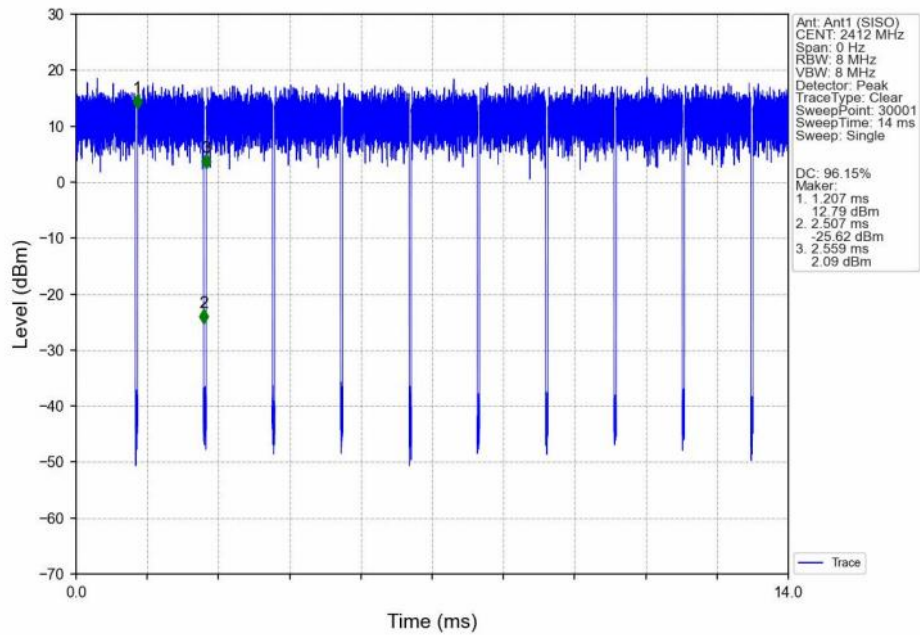
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



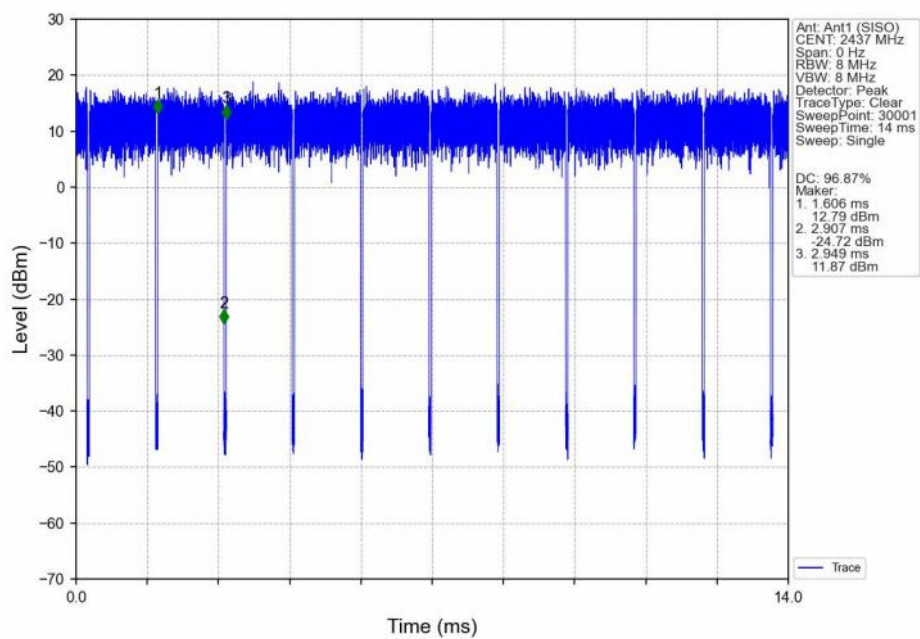
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



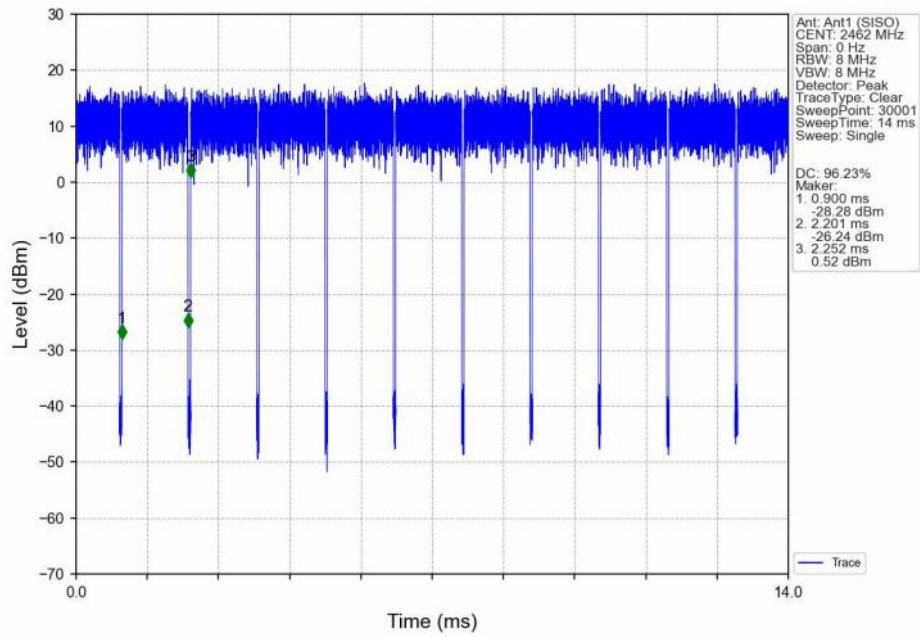
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

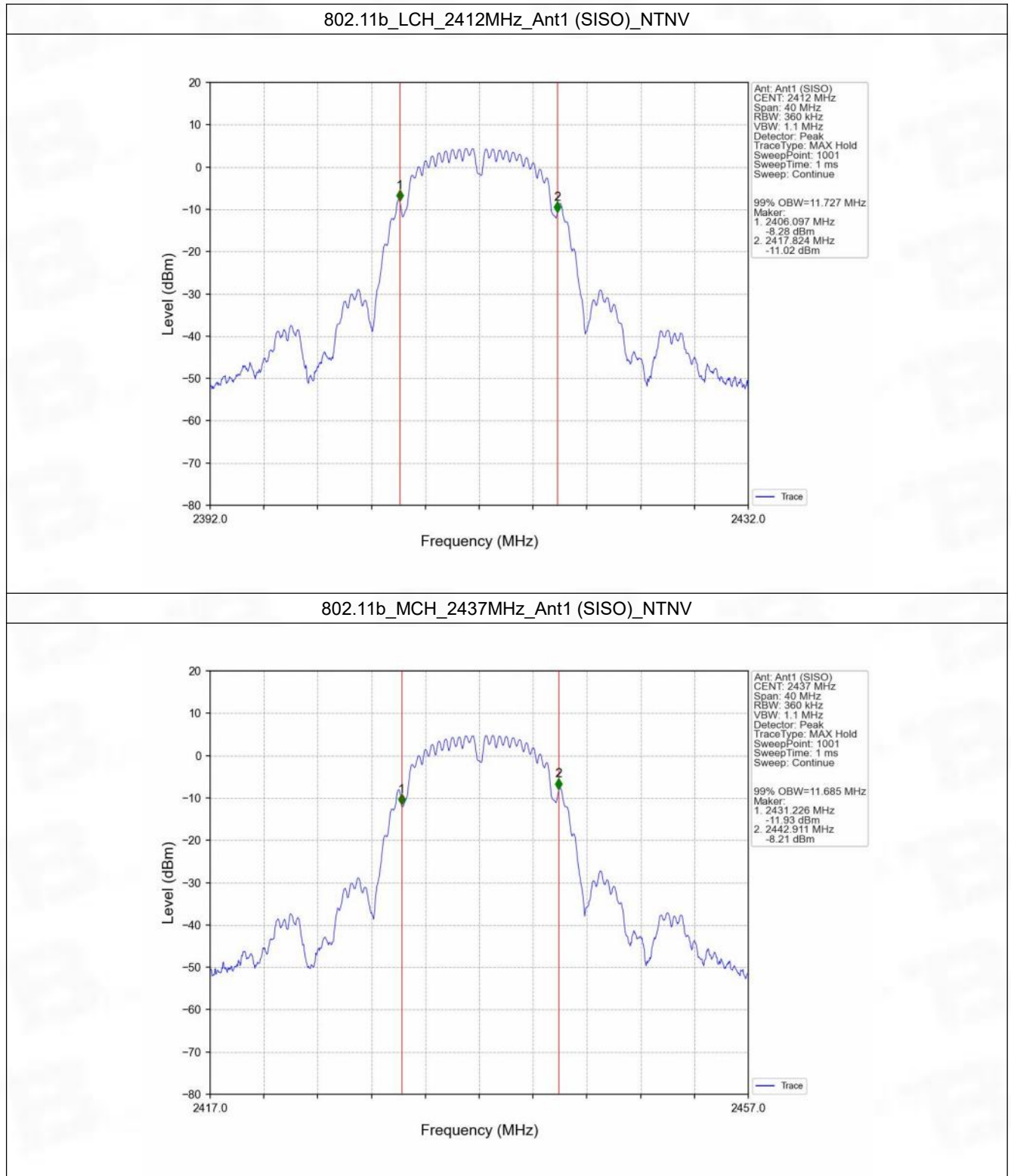
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	11.727	/	Pass
		2437	1	11.685	/	Pass
		2462	1	11.741	/	Pass
802.11g	SISO	2412	1	17.878	/	Pass
		2437	1	17.870	/	Pass
		2462	1	17.918	/	Pass
802.11n (HT20)	SISO	2412	1	18.618	/	Pass
		2437	1	18.617	/	Pass
		2462	1	18.602	/	Pass

2.1.2 6dB BW

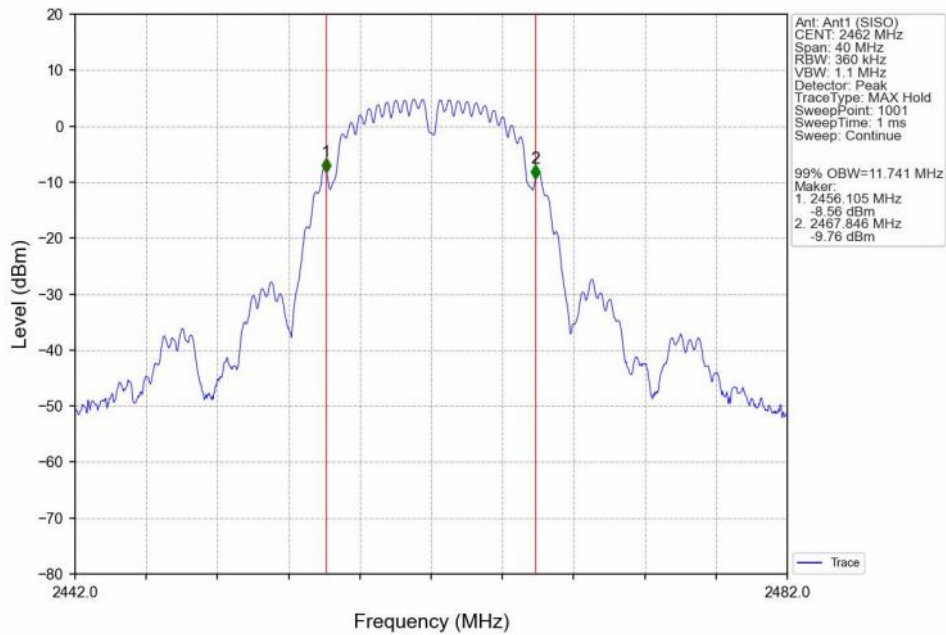
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	9.327	≥ 0.5	Pass
		2437	1	9.321	≥ 0.5	Pass
		2462	1	9.348	≥ 0.5	Pass
802.11g	SISO	2412	1	16.667	≥ 0.5	Pass
		2437	1	16.831	≥ 0.5	Pass
		2462	1	16.831	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	17.588	≥ 0.5	Pass
		2437	1	17.554	≥ 0.5	Pass
		2462	1	17.748	≥ 0.5	Pass

2.2 Test Graph

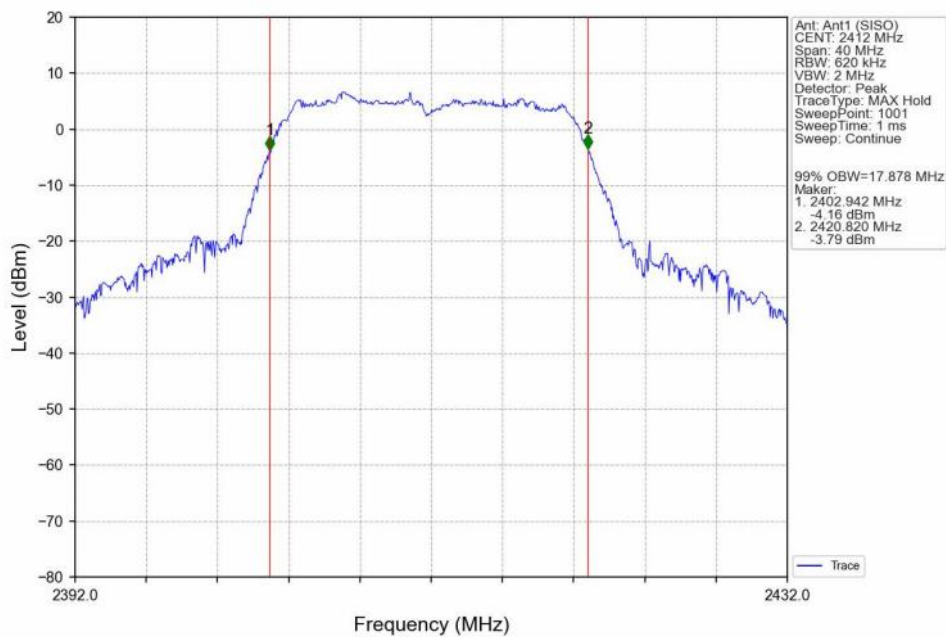
2.2.1 OBW



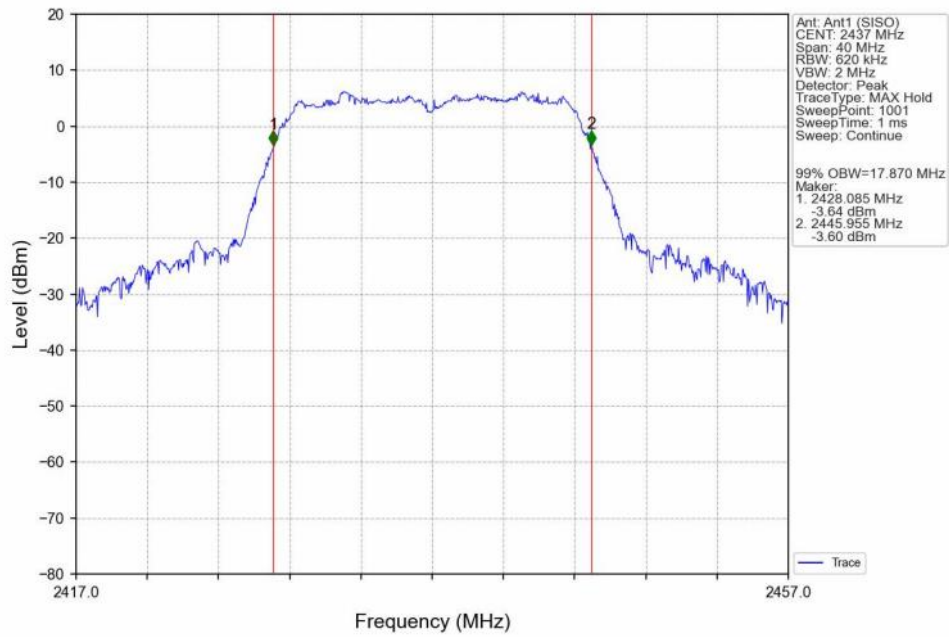
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



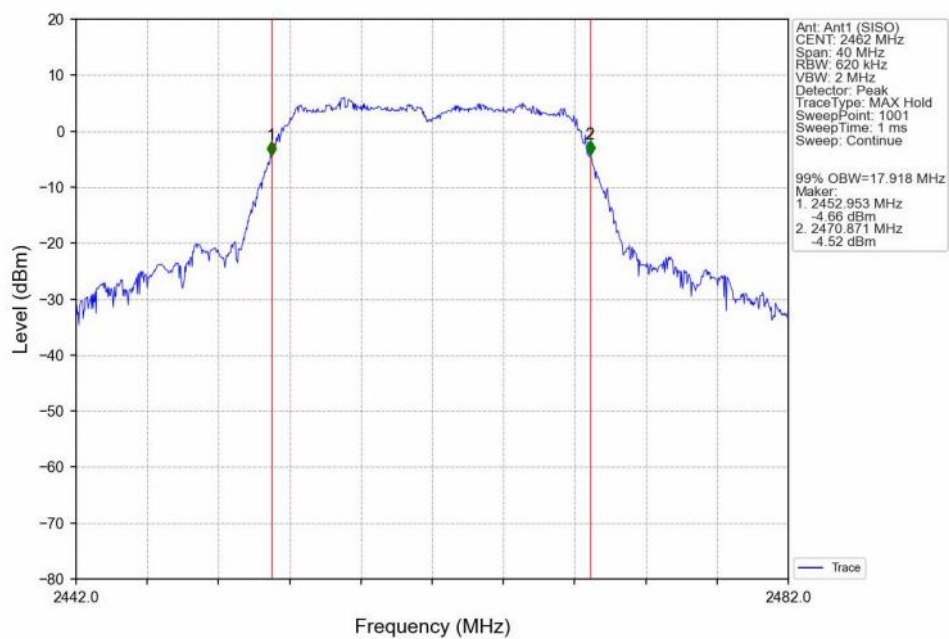
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



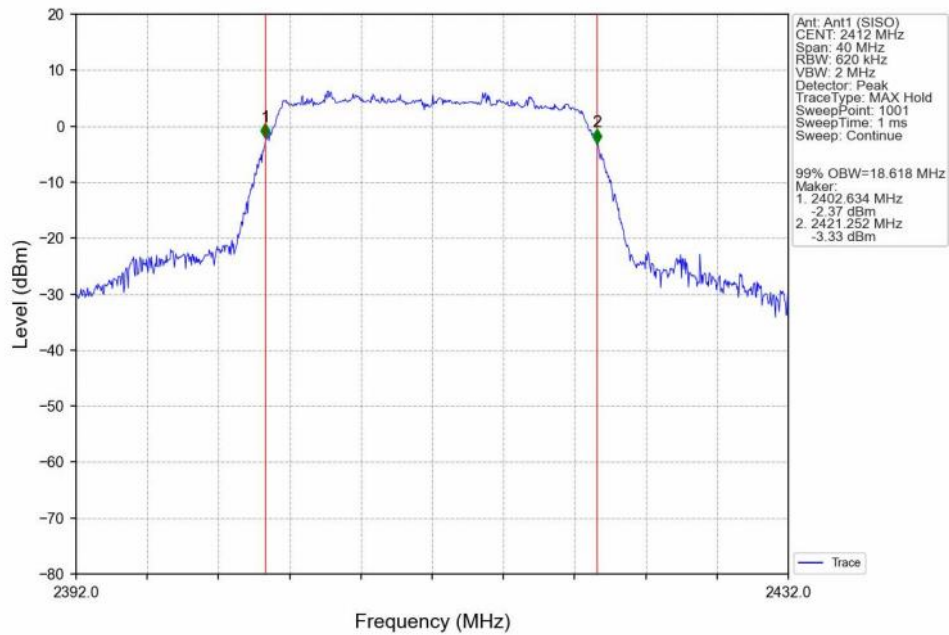
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



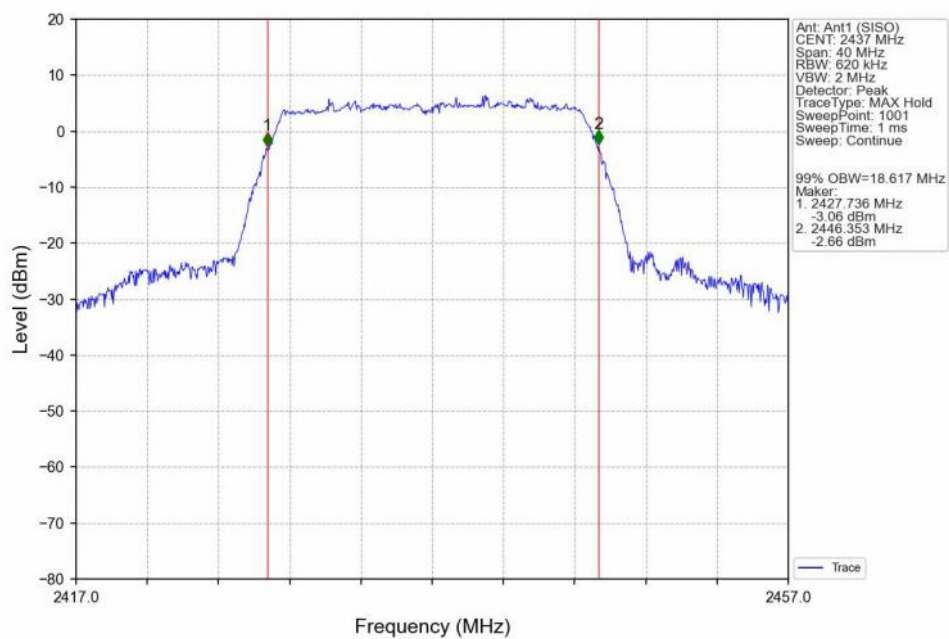
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



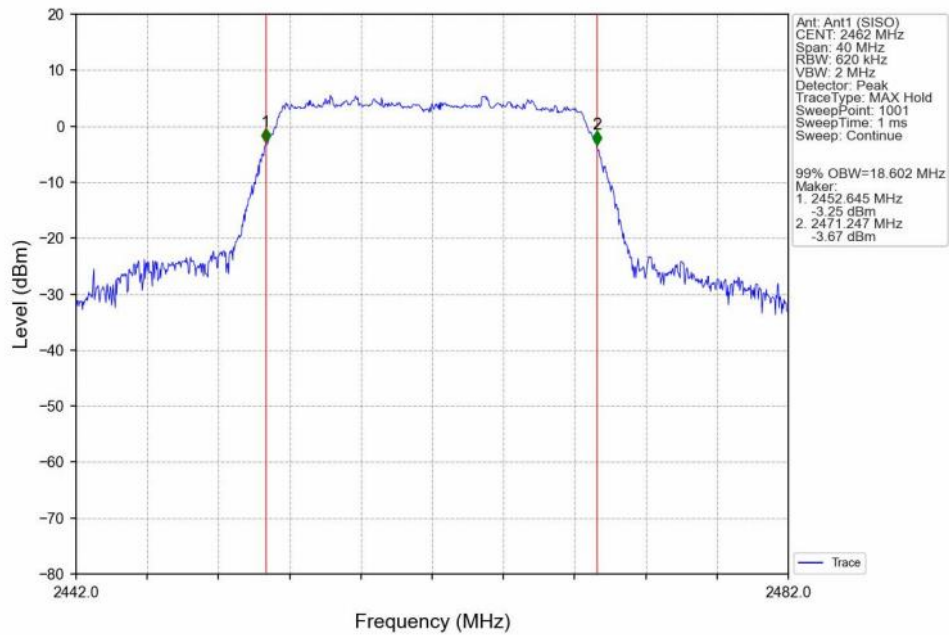
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

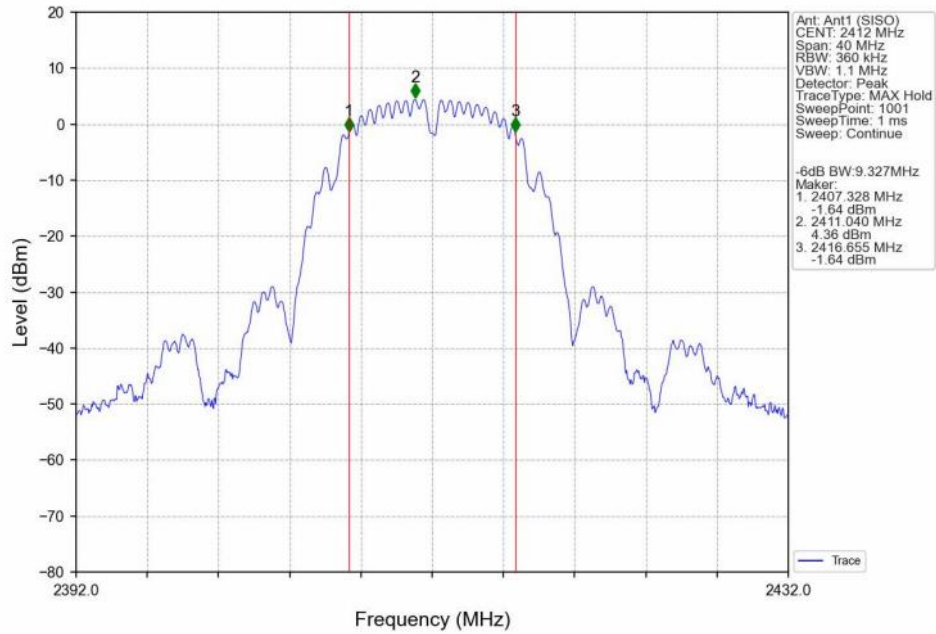


802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

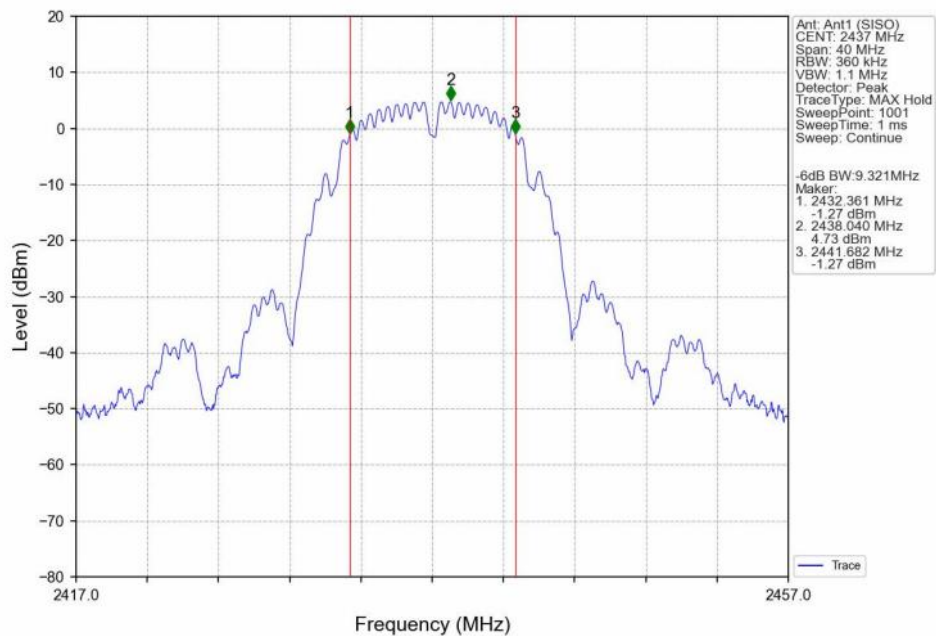


2.2.2 6dB BW

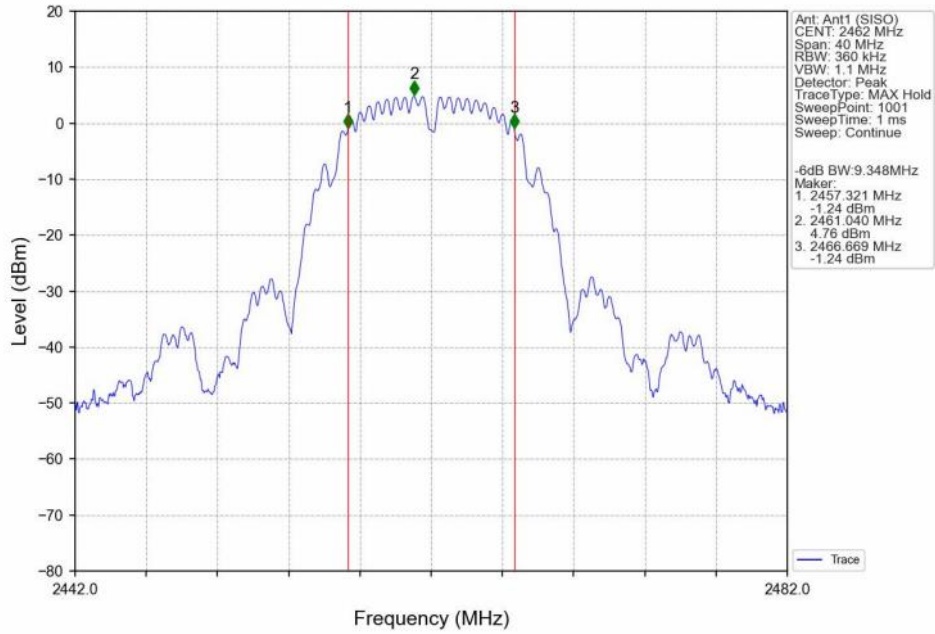
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



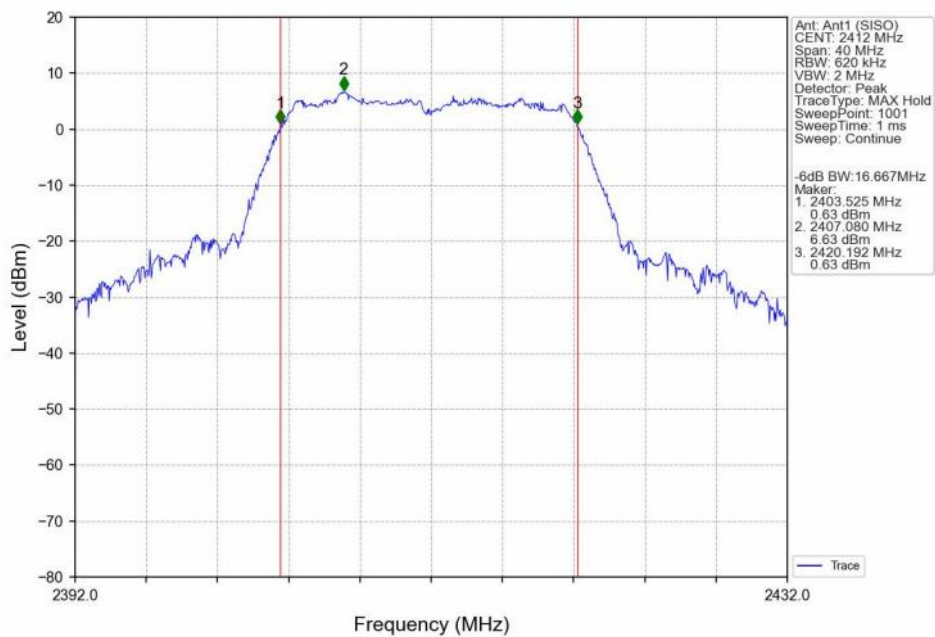
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



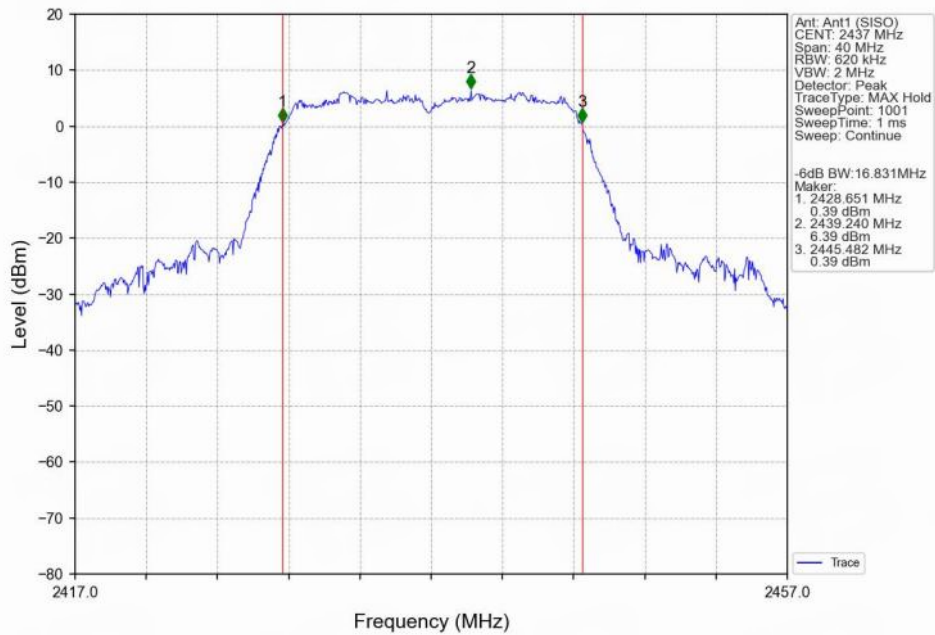
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



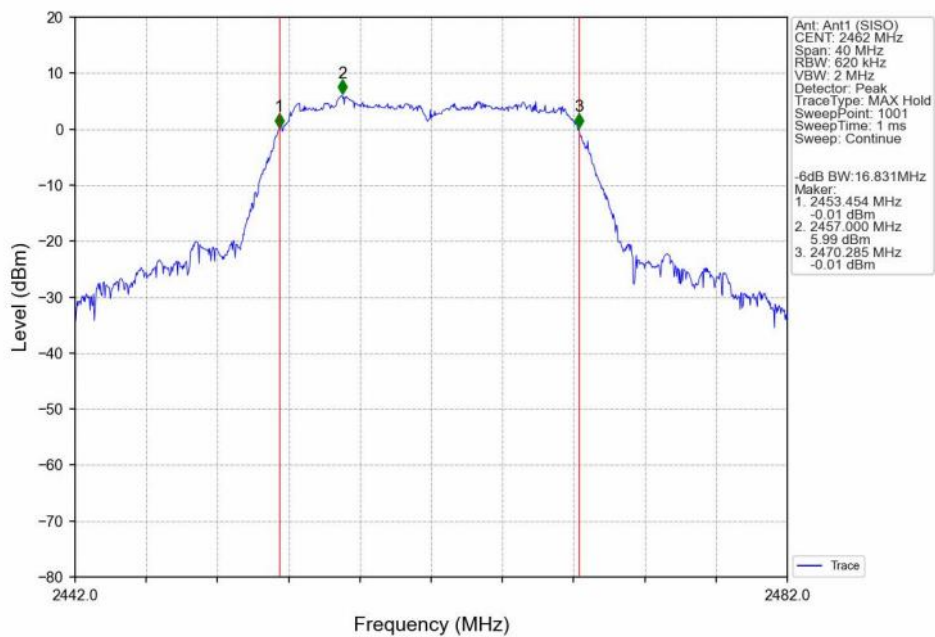
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



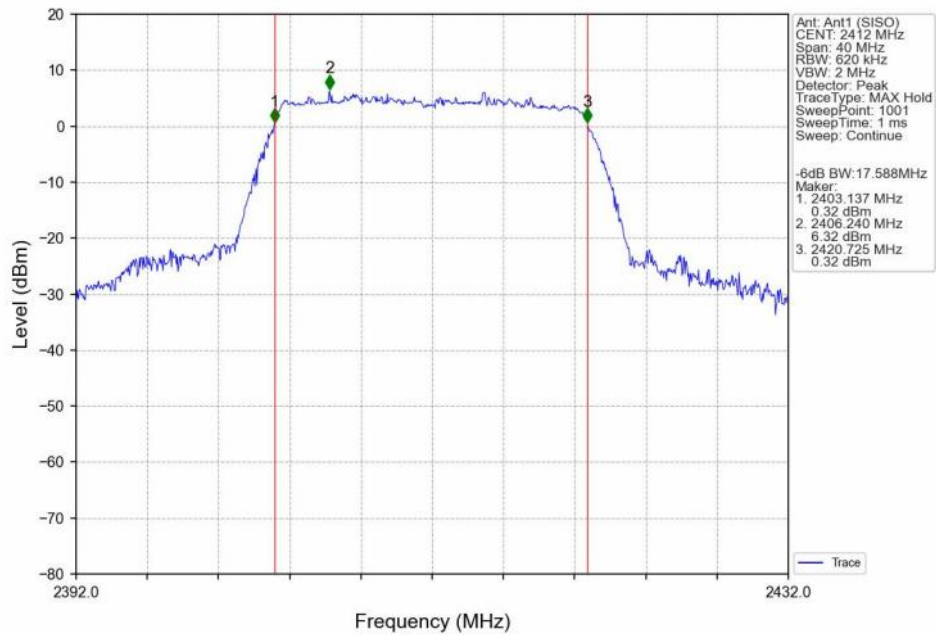
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



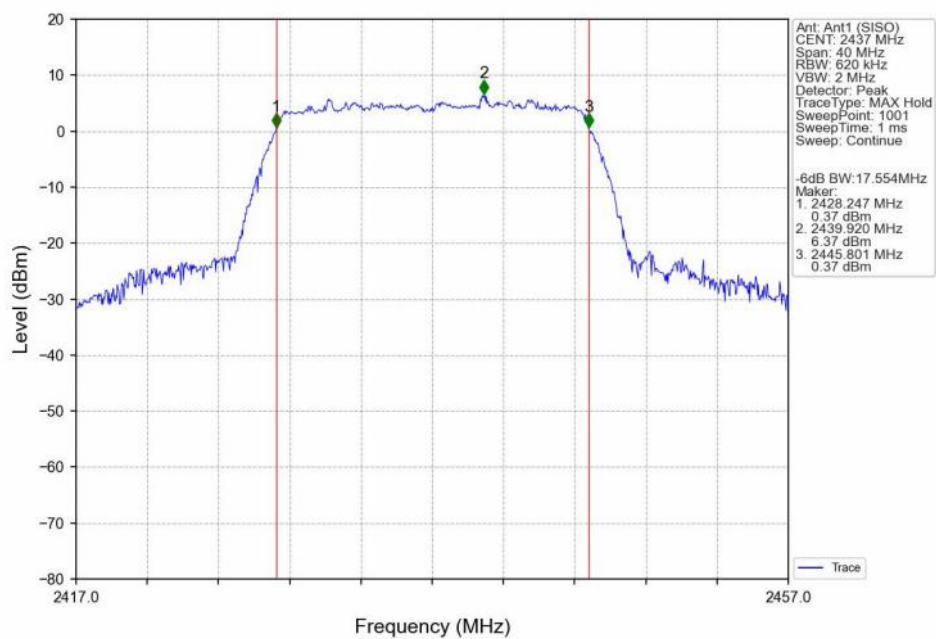
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



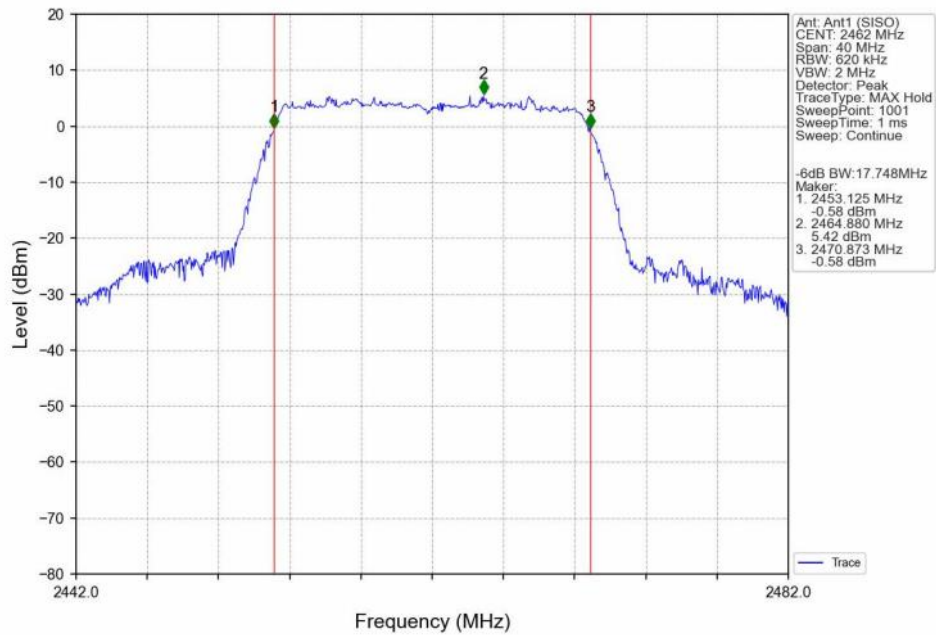
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



3. Maximum Conducted Output Power

3.1 Test Result

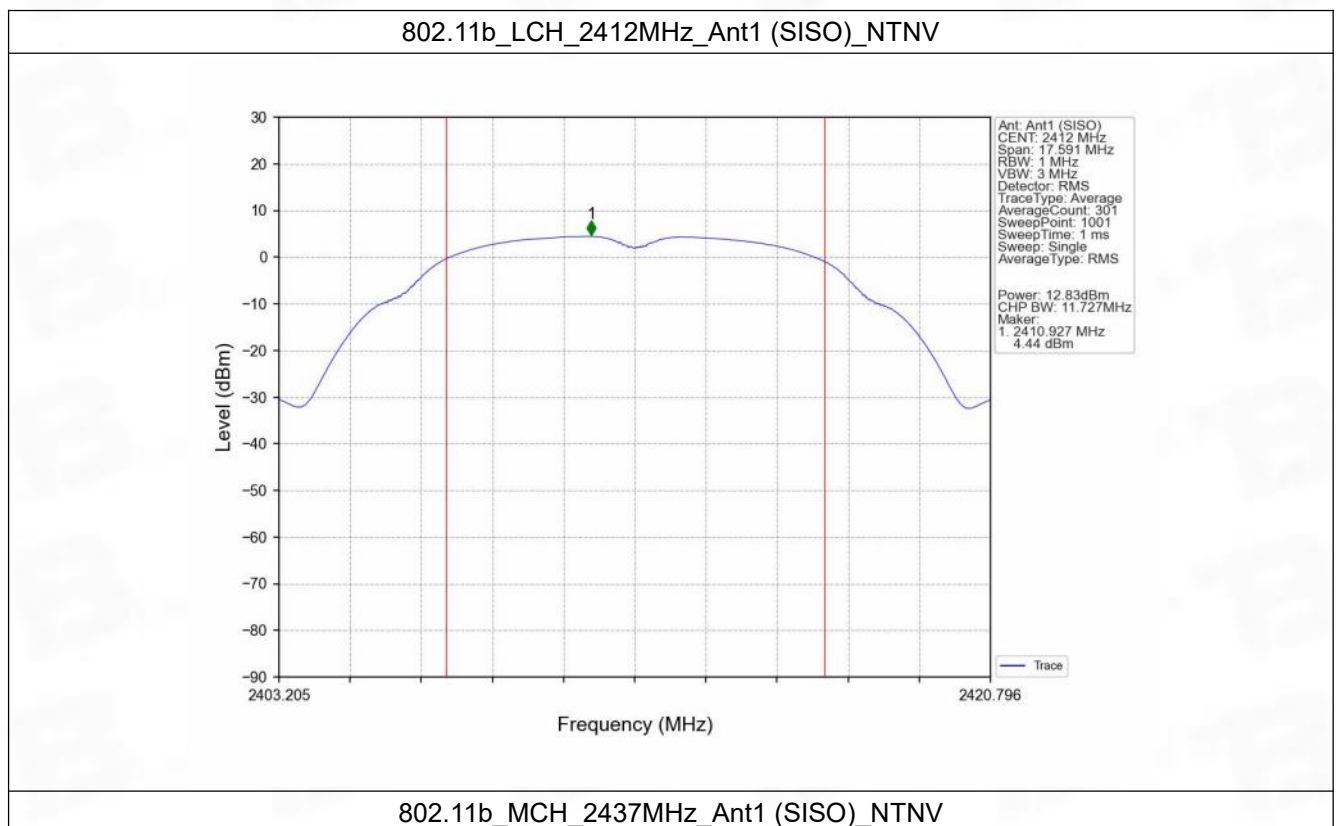
3.1.1 Power

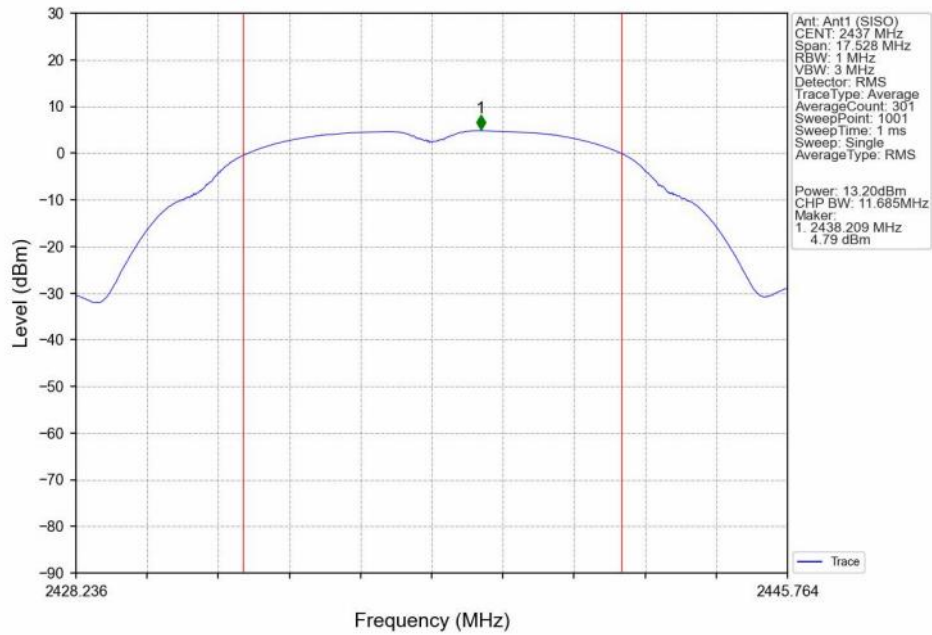
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	12.83	<=30	Pass
		2437	13.20	<=30	Pass
		2462	13.27	<=30	Pass
802.11g	SISO	2412	11.64	<=30	Pass
		2437	11.66	<=30	Pass
		2462	11.00	<=30	Pass
802.11n (HT20)	SISO	2412	11.59	<=30	Pass
		2437	11.58	<=30	Pass
		2462	10.98	<=30	Pass

Note1: Antenna Gain: Ant1: -2.41dBi;

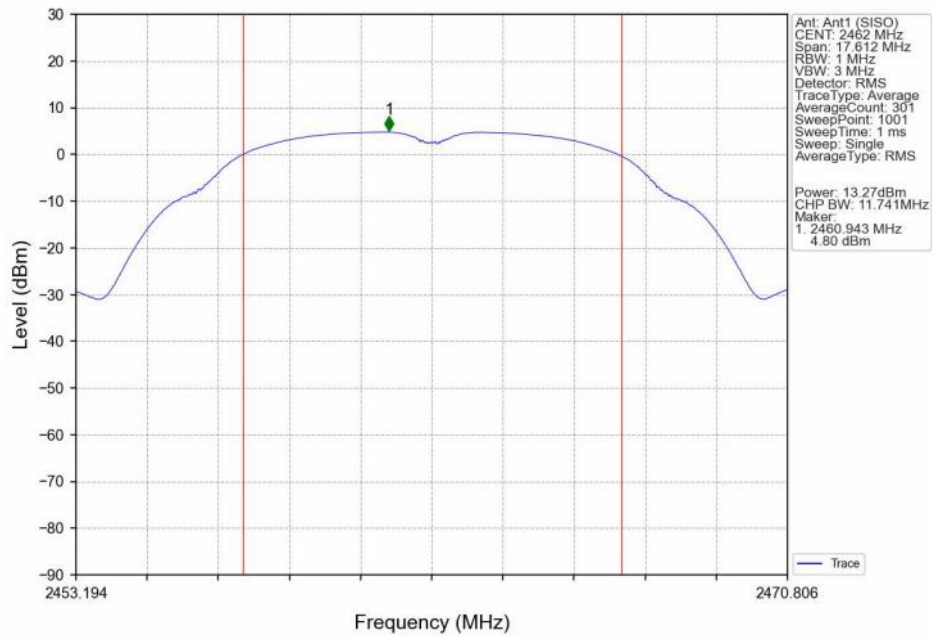
3.2 Test Graph

3.2.1 Power

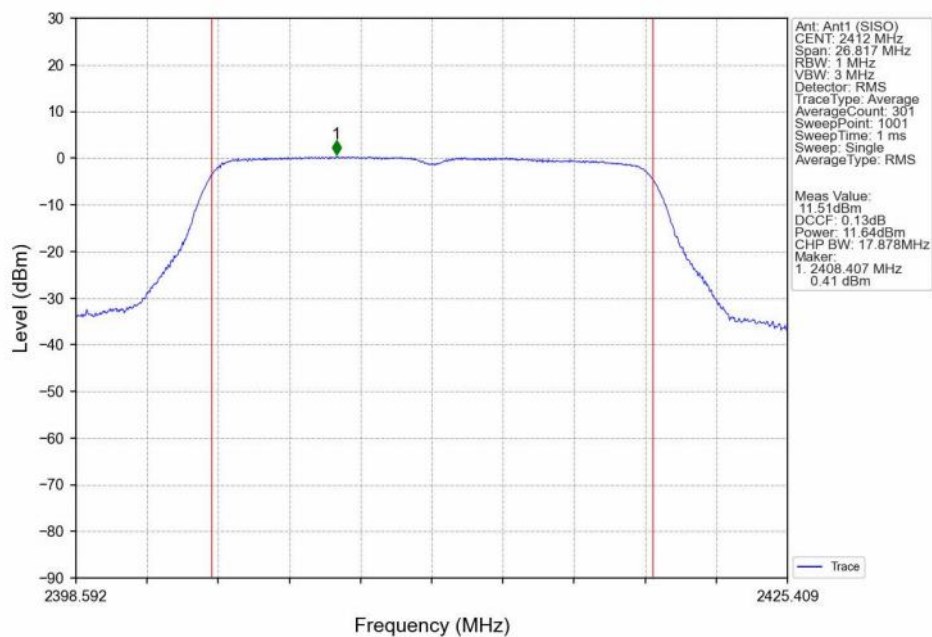




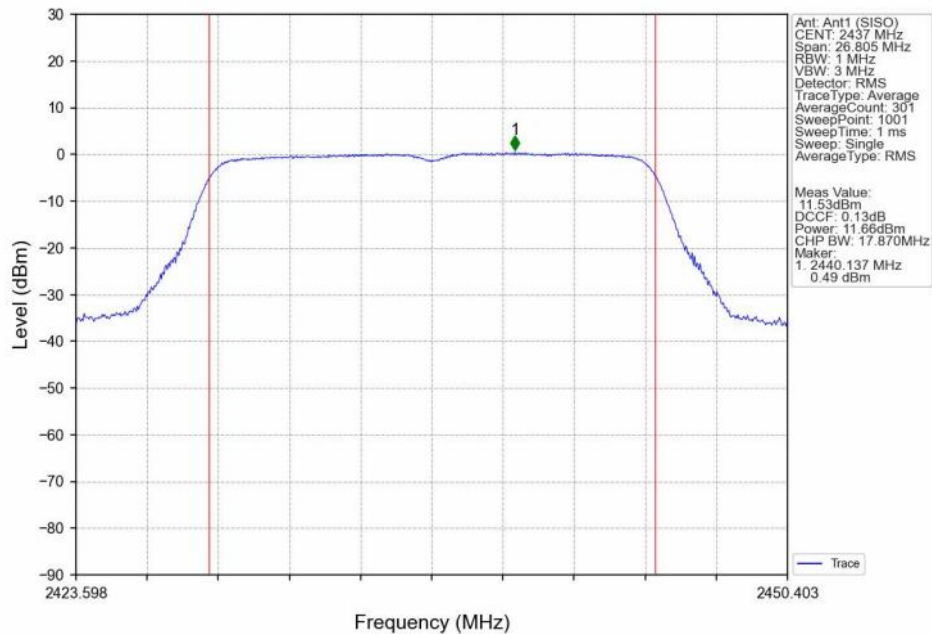
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



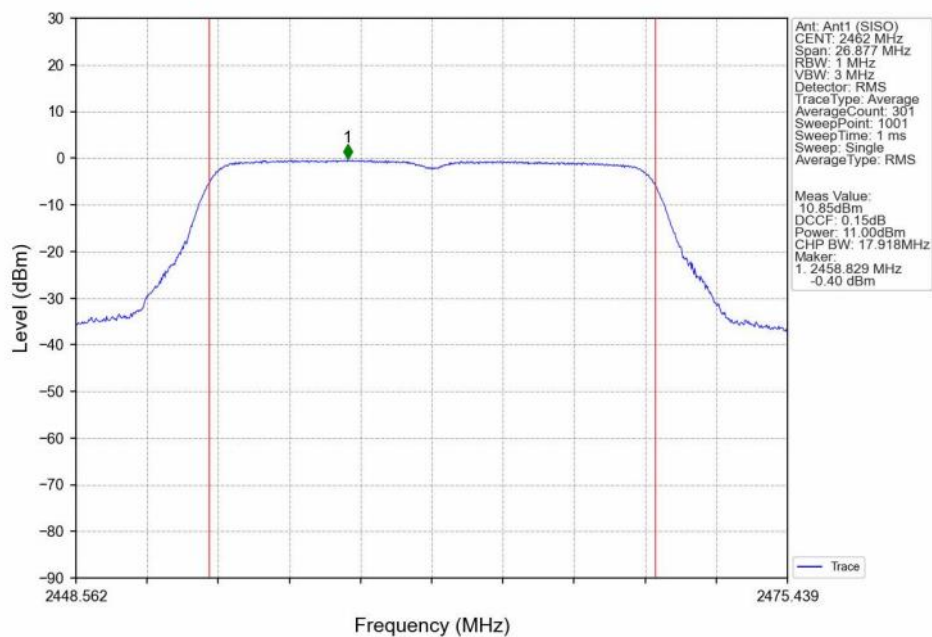
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



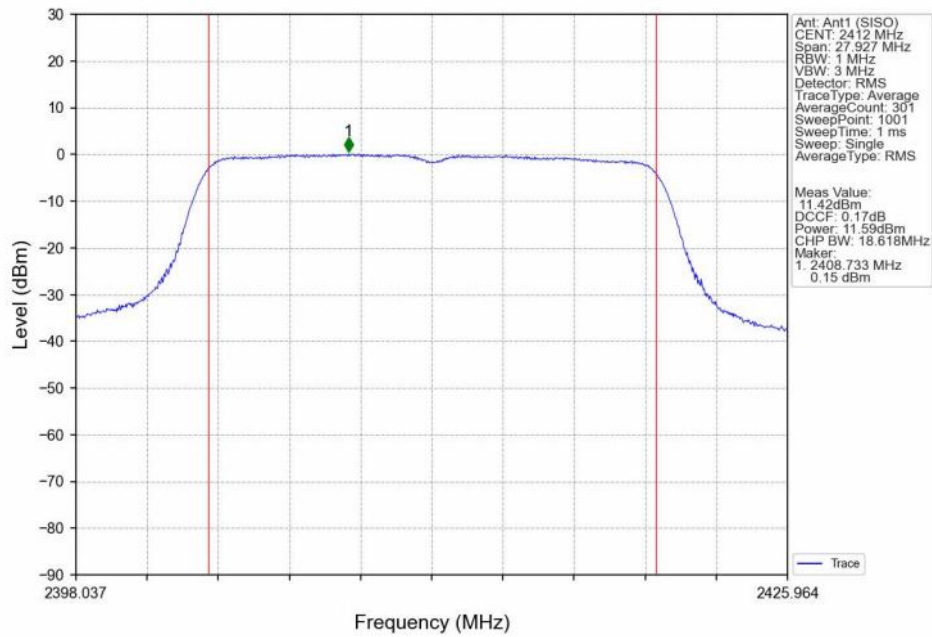
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



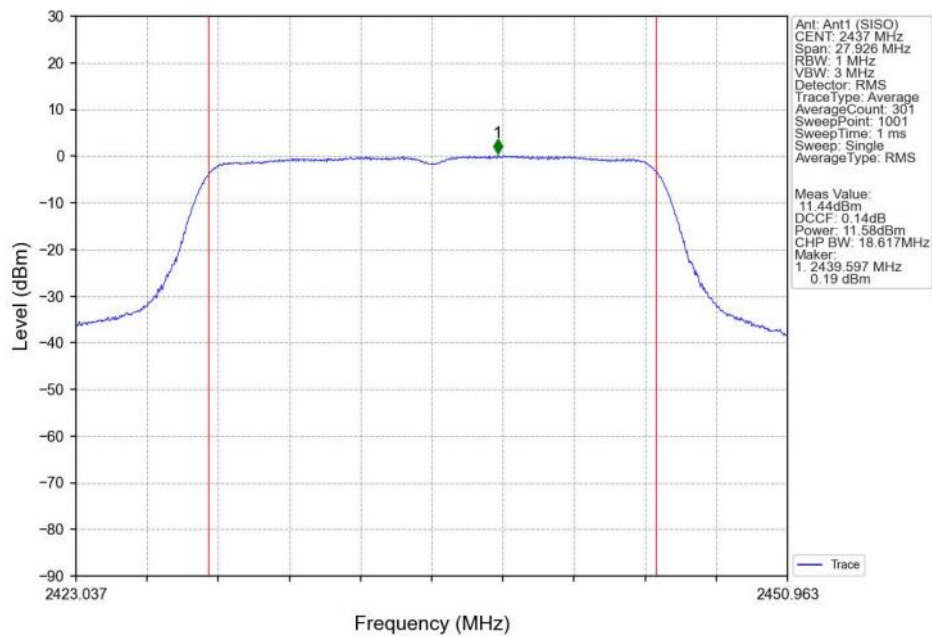
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



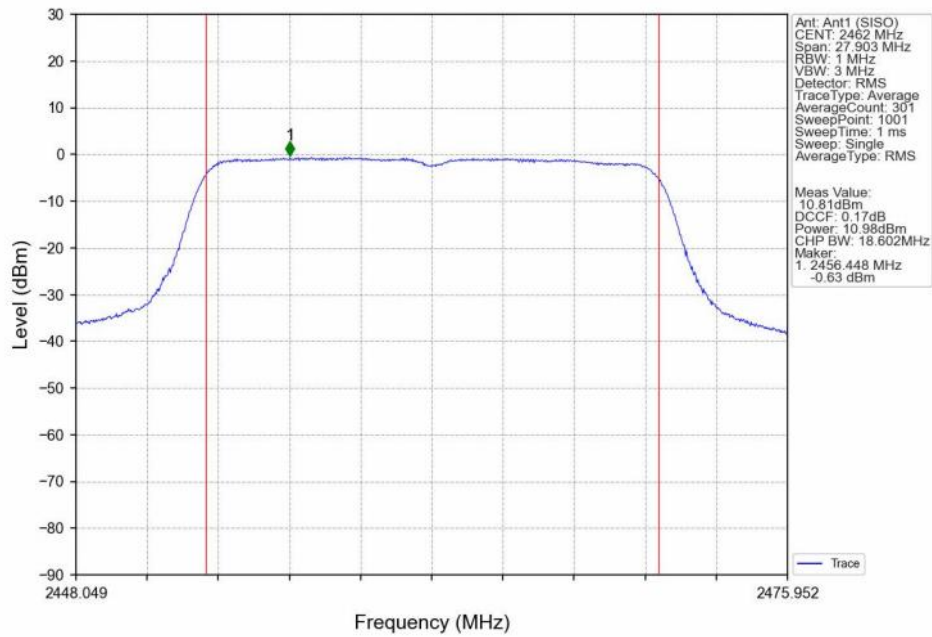
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

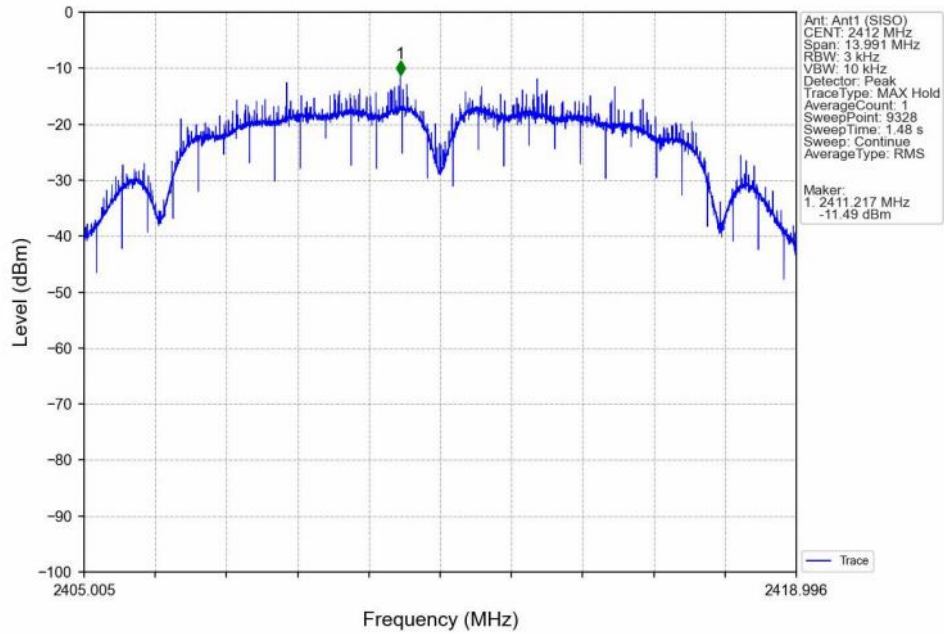
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	-11.49	<=8	Pass
		2437	-11.72	<=8	Pass
		2462	-11.07	<=8	Pass
802.11g	SISO	2412	-14.47	<=8	Pass
		2437	-16.28	<=8	Pass
		2462	-15.61	<=8	Pass
802.11n (HT20)	SISO	2412	-15.77	<=8	Pass
		2437	-14.72	<=8	Pass
		2462	-17.06	<=8	Pass

Note1: Antenna Gain: Ant1: -2.41dBi;

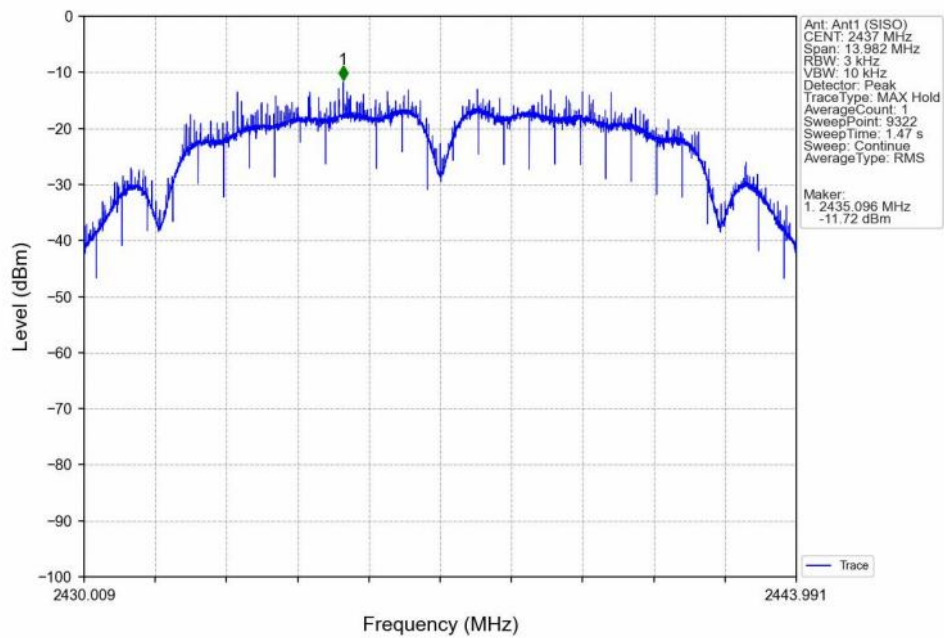
4.2 Test Graph

4.2.1 PSD

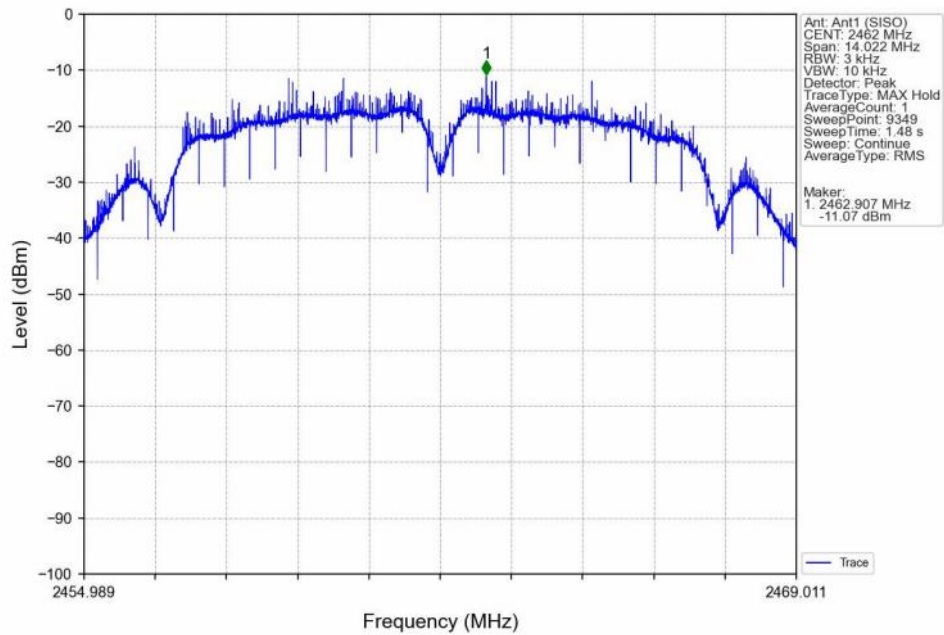
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



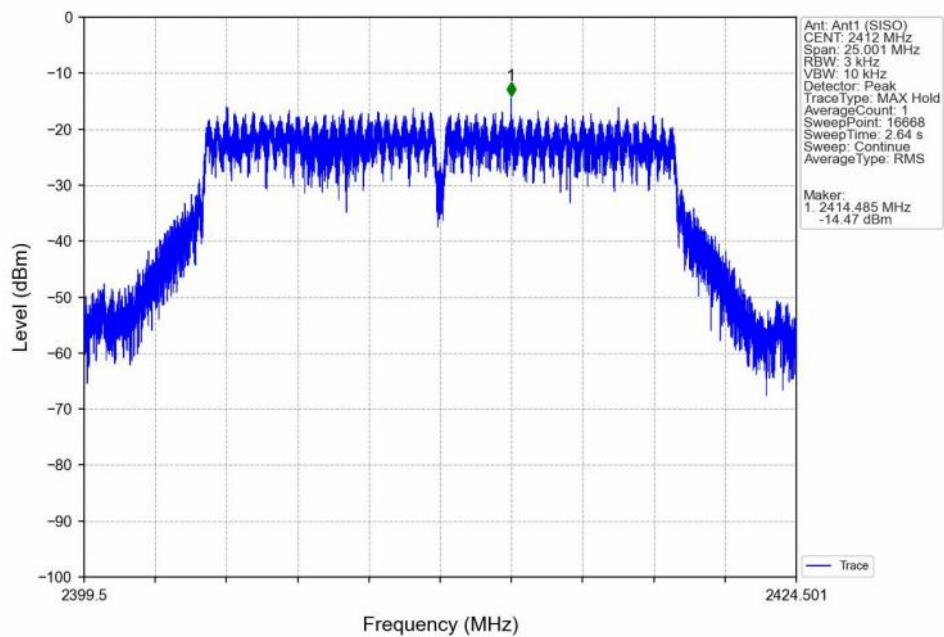
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



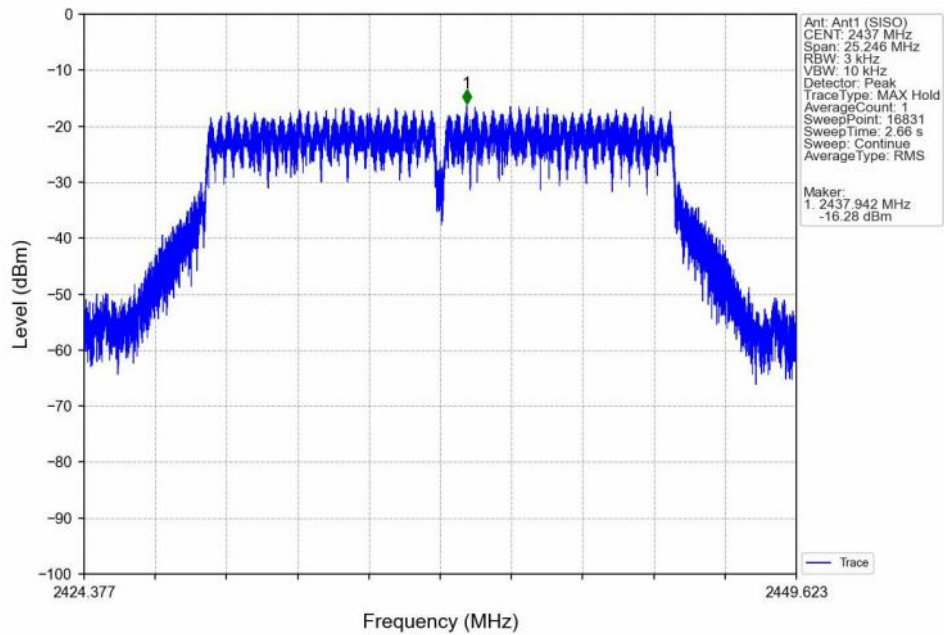
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



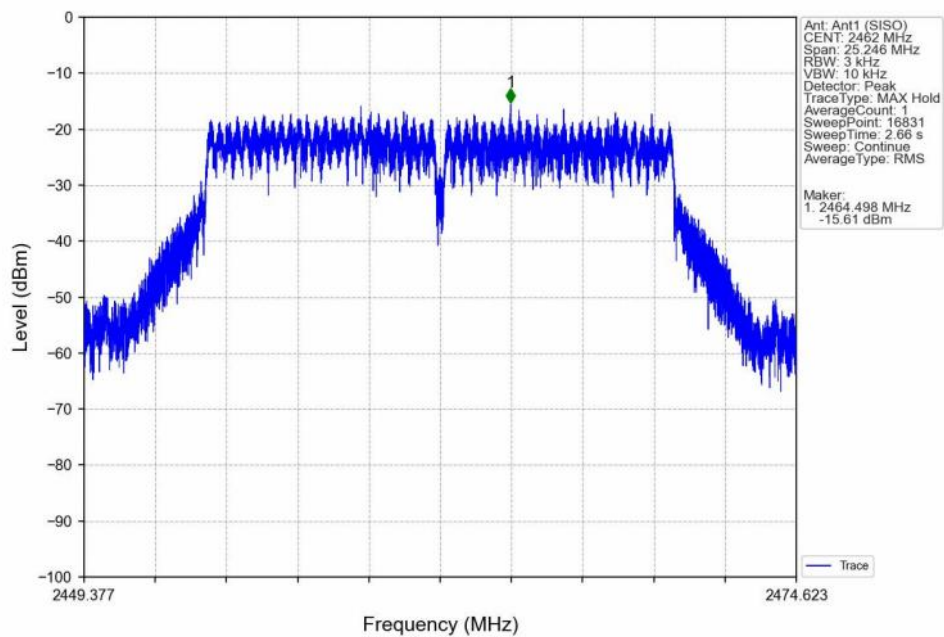
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



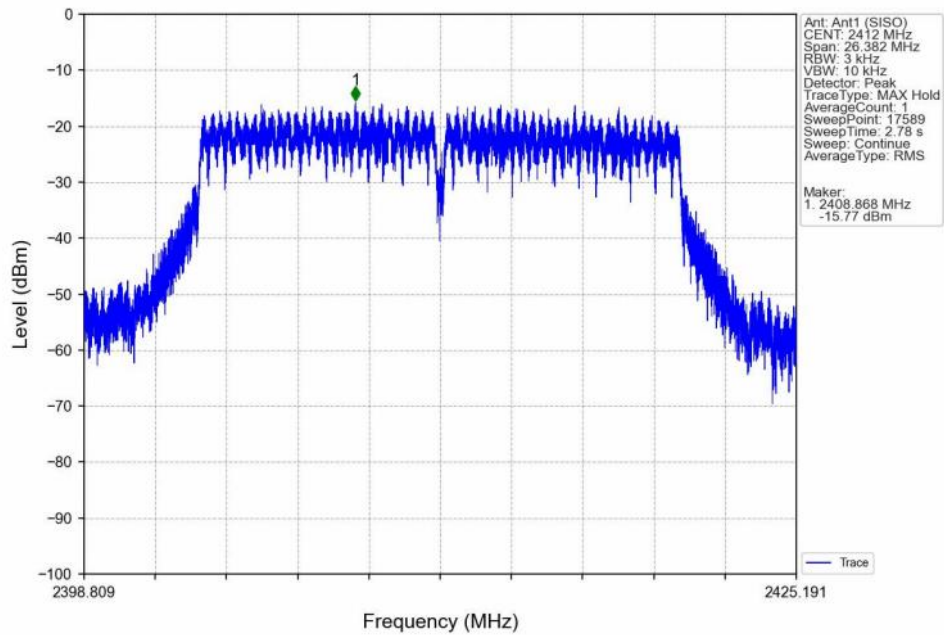
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



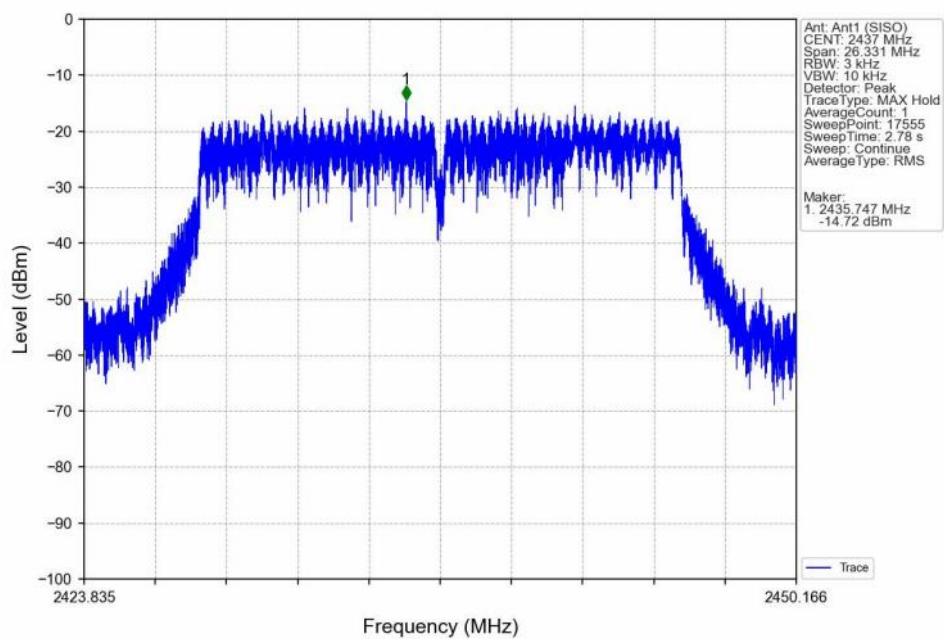
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



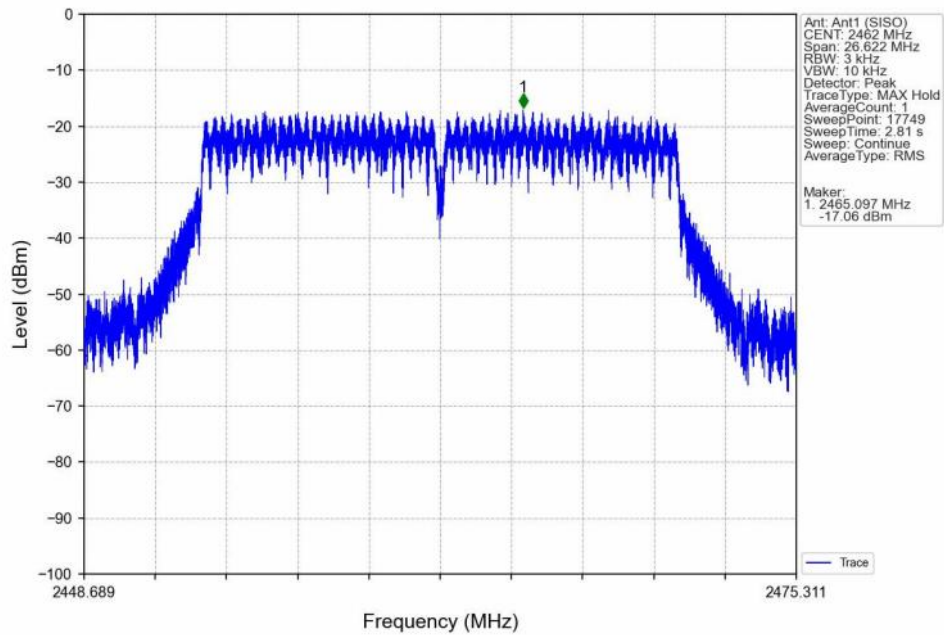
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Test Result

5.1.1 Ref

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	4.16
		2437	1	4.61
		2462	1	4.58
802.11g	SISO	2412	1	0.71
		2437	1	0.83
		2462	1	-0.04
802.11n (HT20)	SISO	2412	1	0.58
		2437	1	0.37
		2462	1	-0.11

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

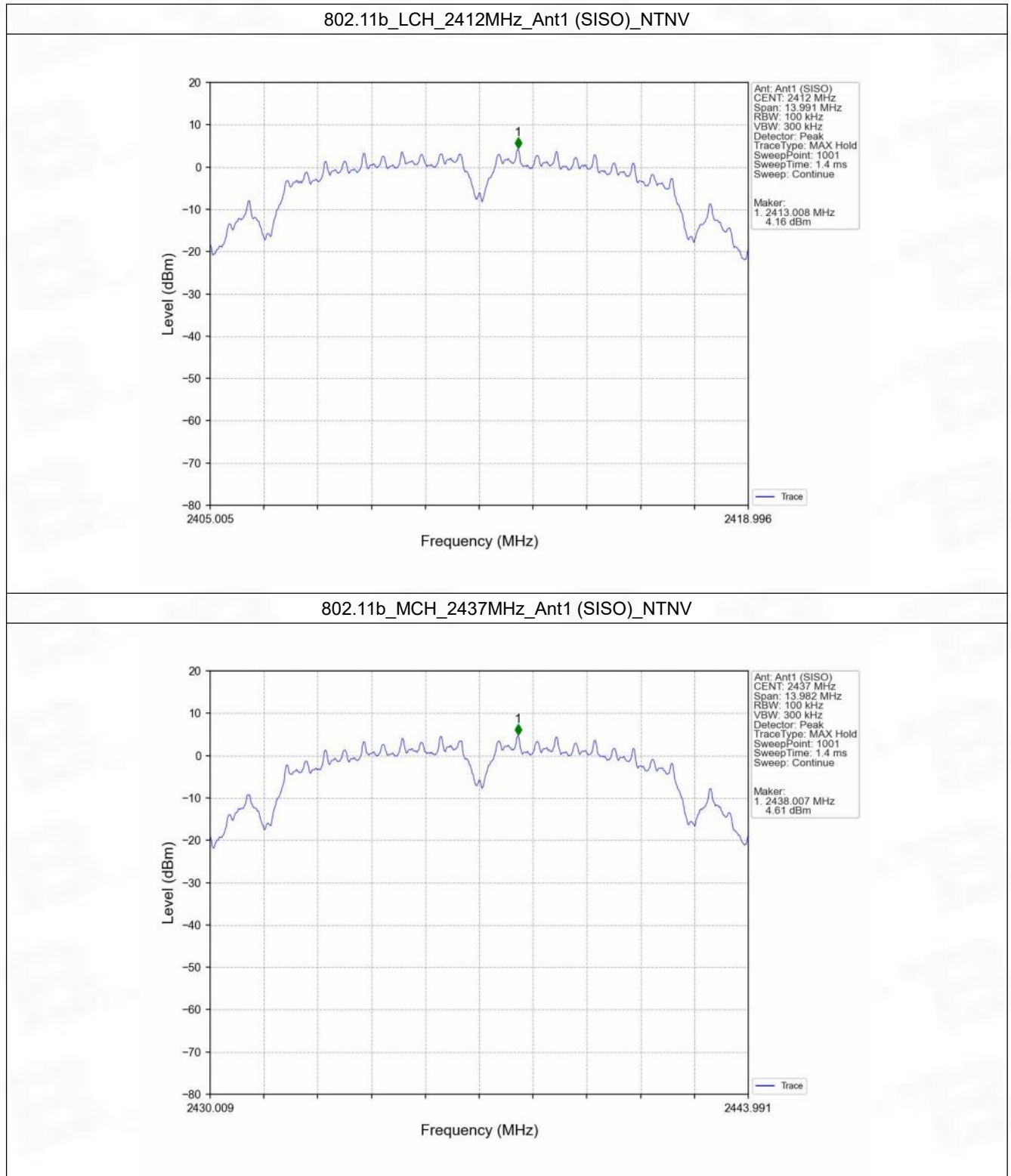
5.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	4.16	-25.84	Pass
		2437	1	4.61	-25.39	Pass
		2462	1	4.58	-25.42	Pass
802.11g	SISO	2412	1	0.71	-29.29	Pass
		2437	1	0.83	-29.17	Pass
		2462	1	-0.04	-30.04	Pass
802.11n (HT20)	SISO	2412	1	0.58	-29.42	Pass
		2437	1	0.37	-29.63	Pass
		2462	1	-0.11	-30.11	Pass

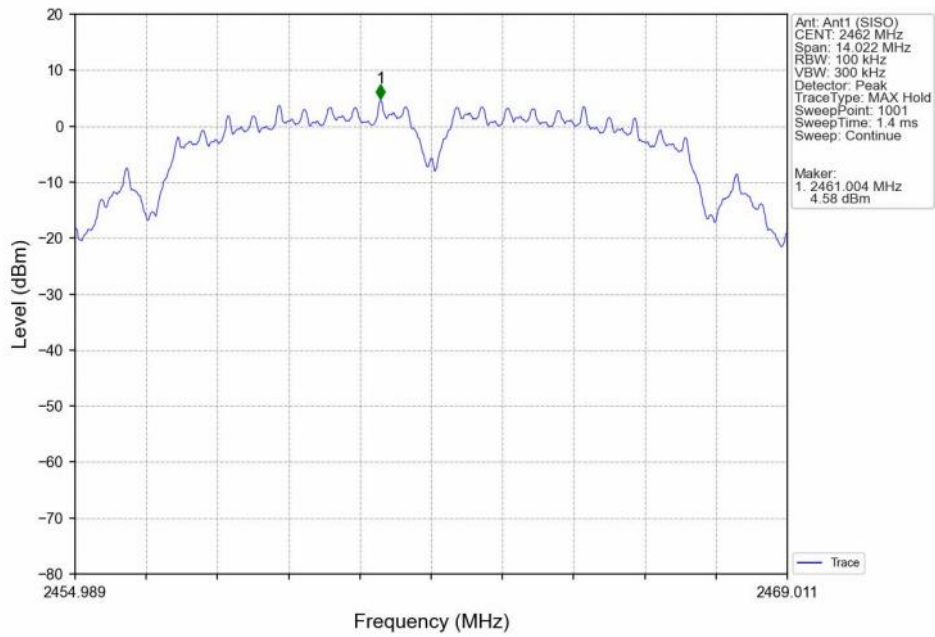
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

5.2 Test Graph

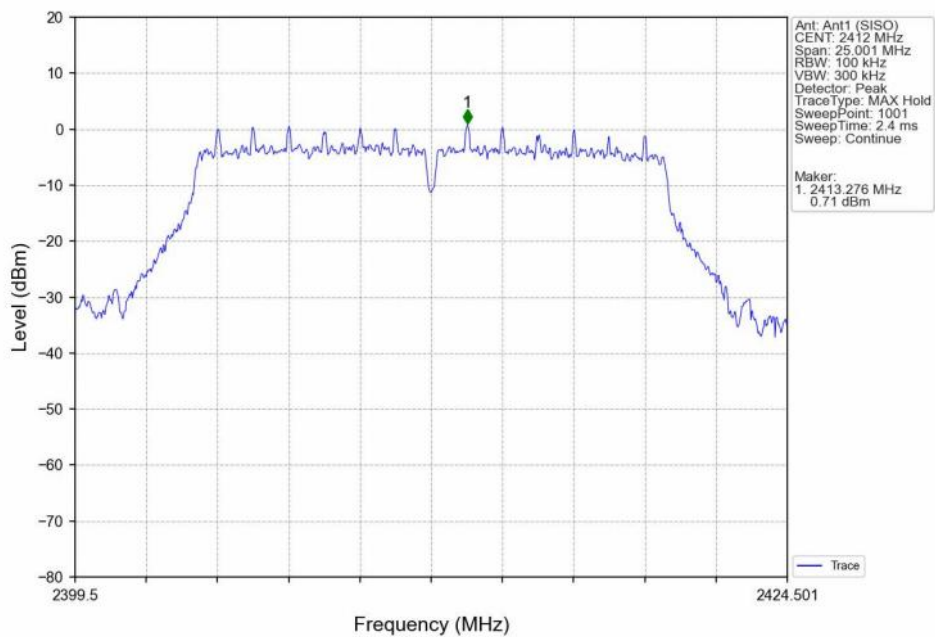
5.2.1 Ref



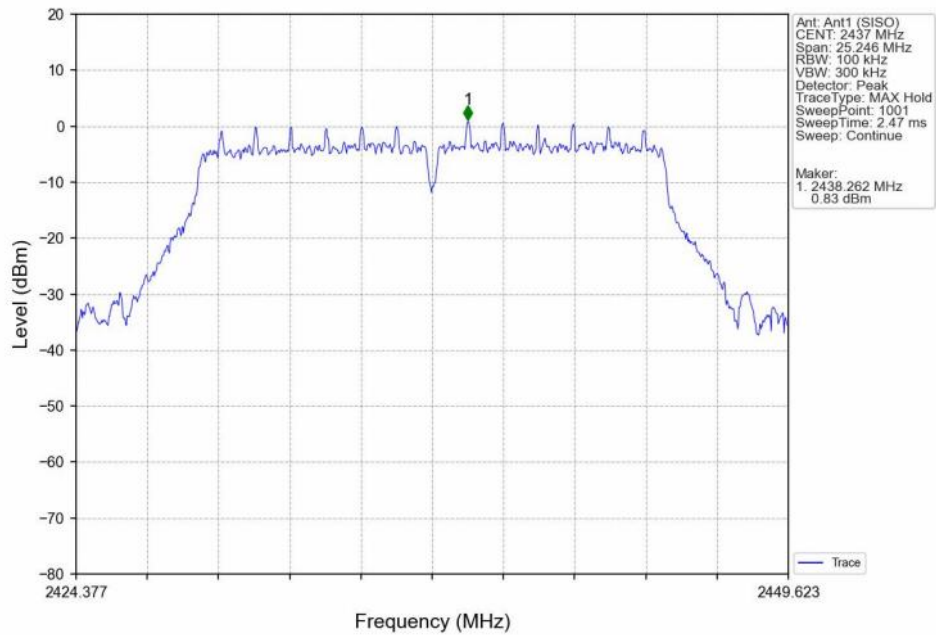
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



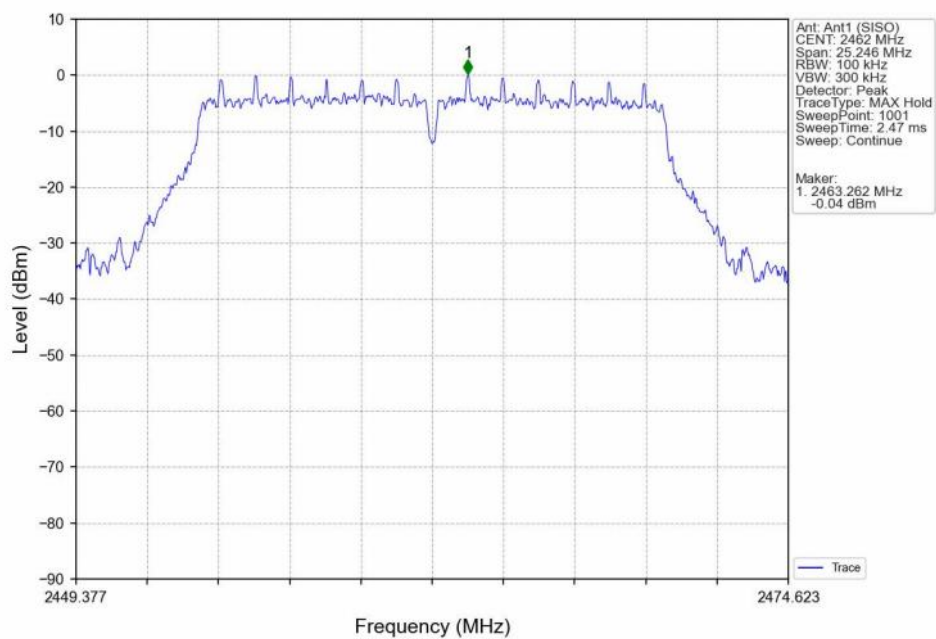
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



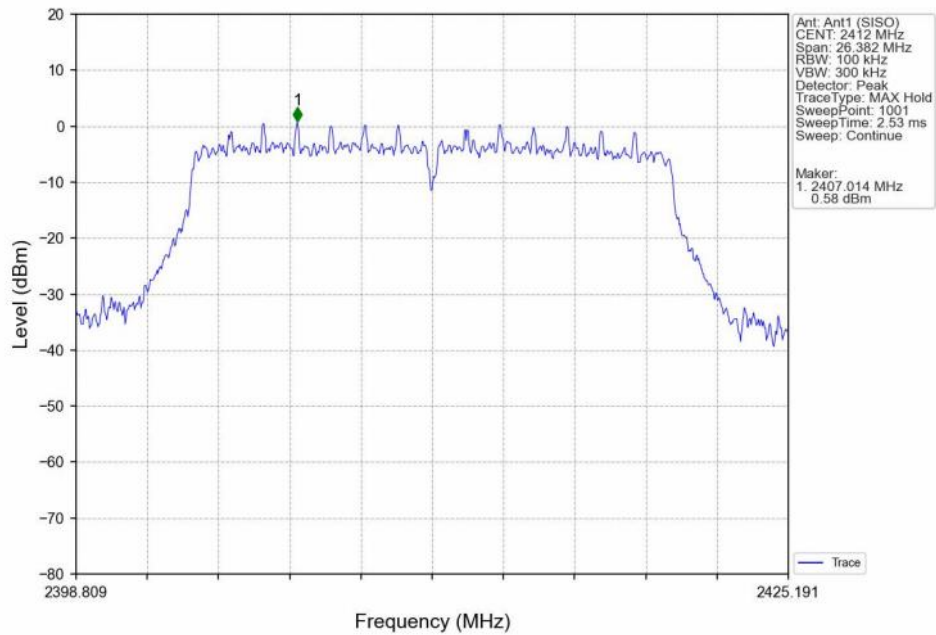
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



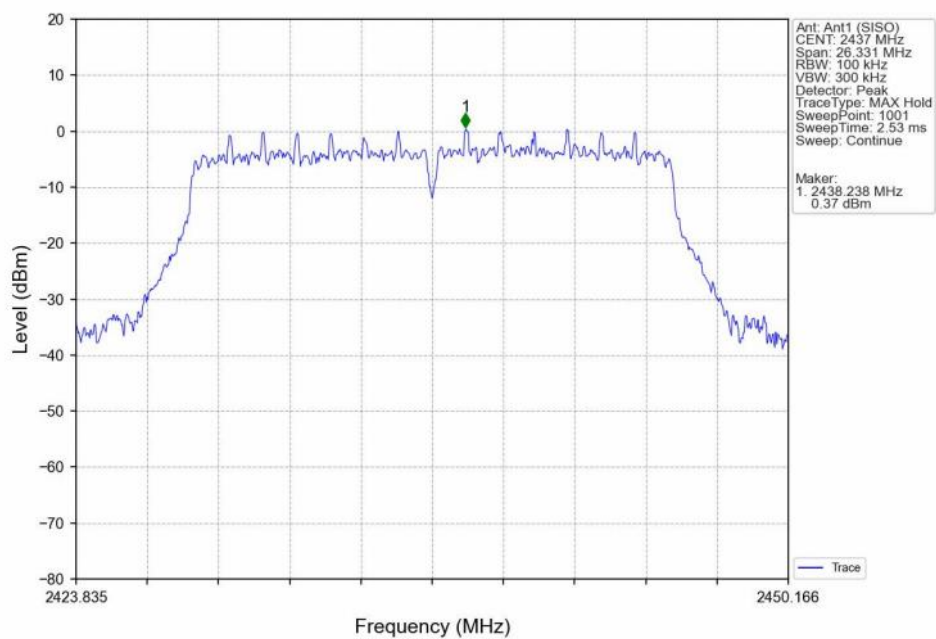
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



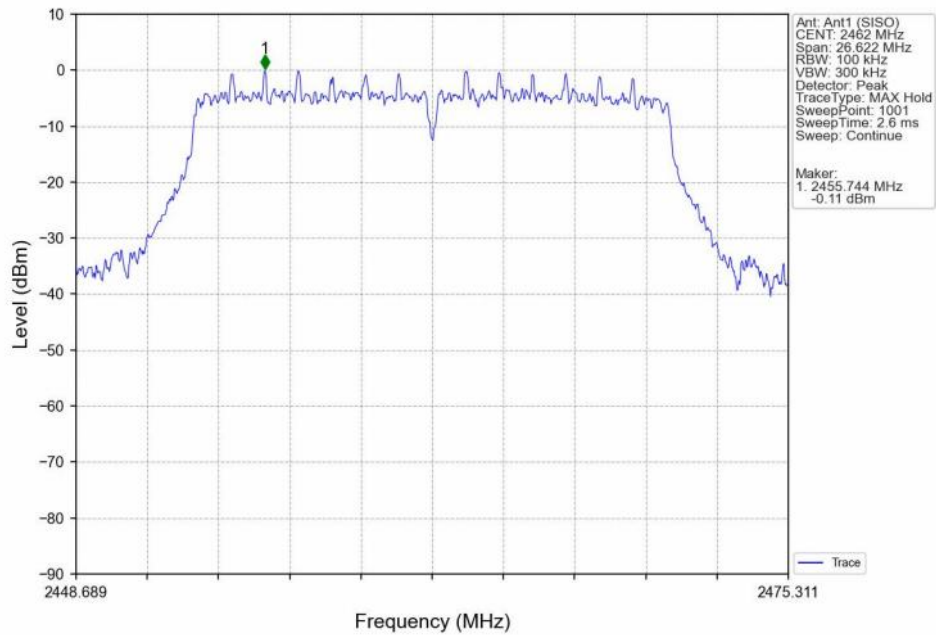
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

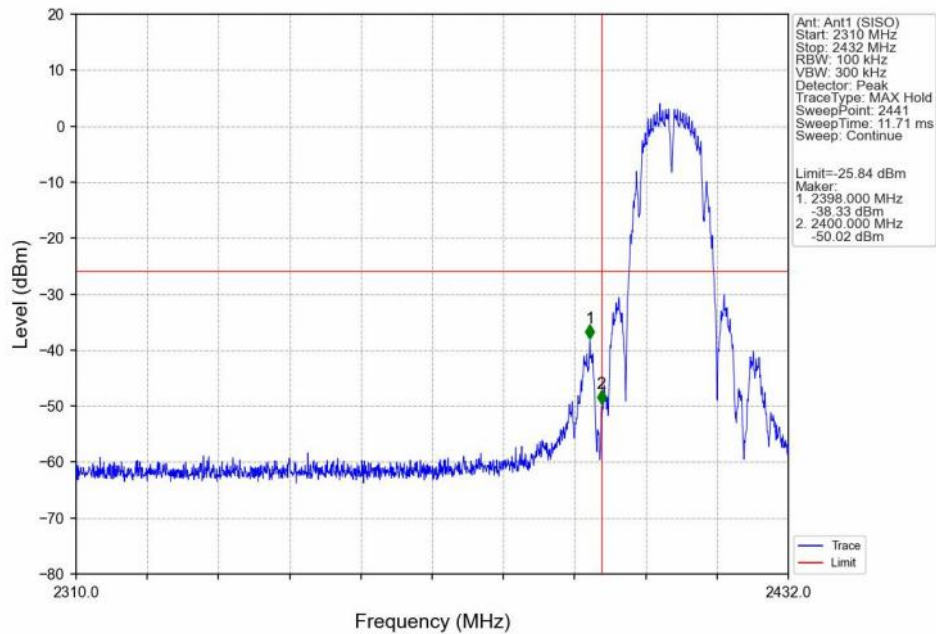


802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

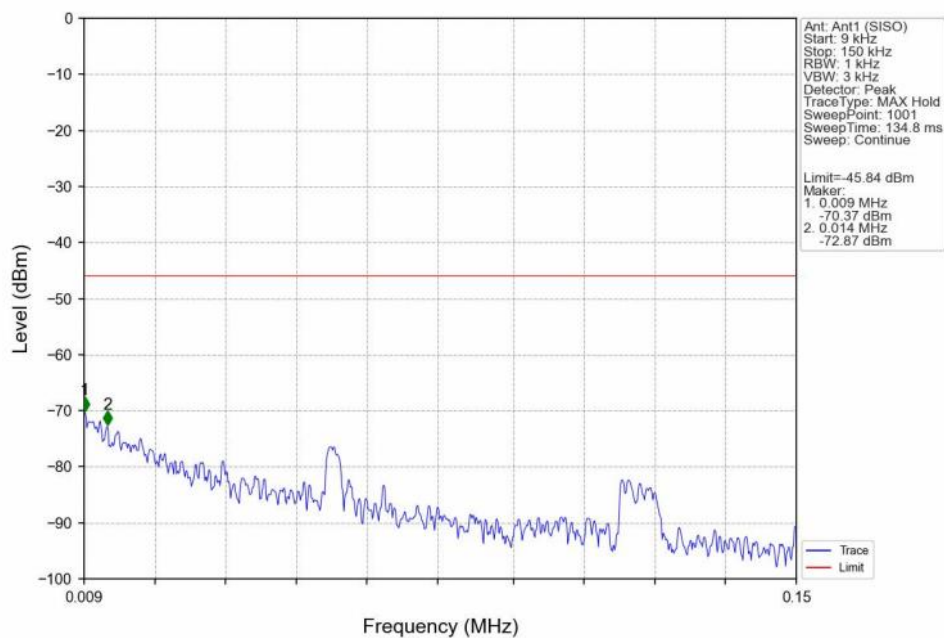


5.2.2 CSE

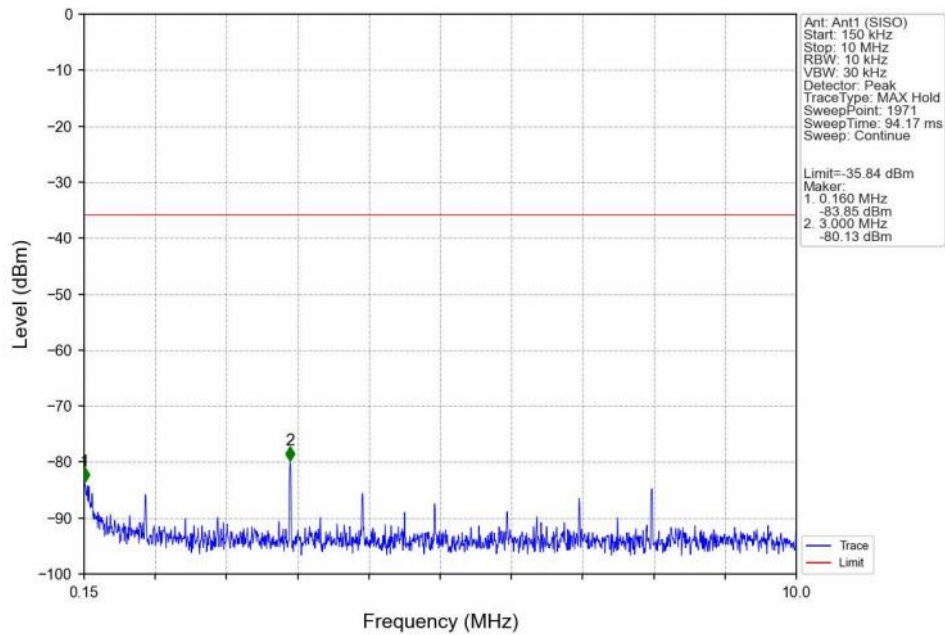
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



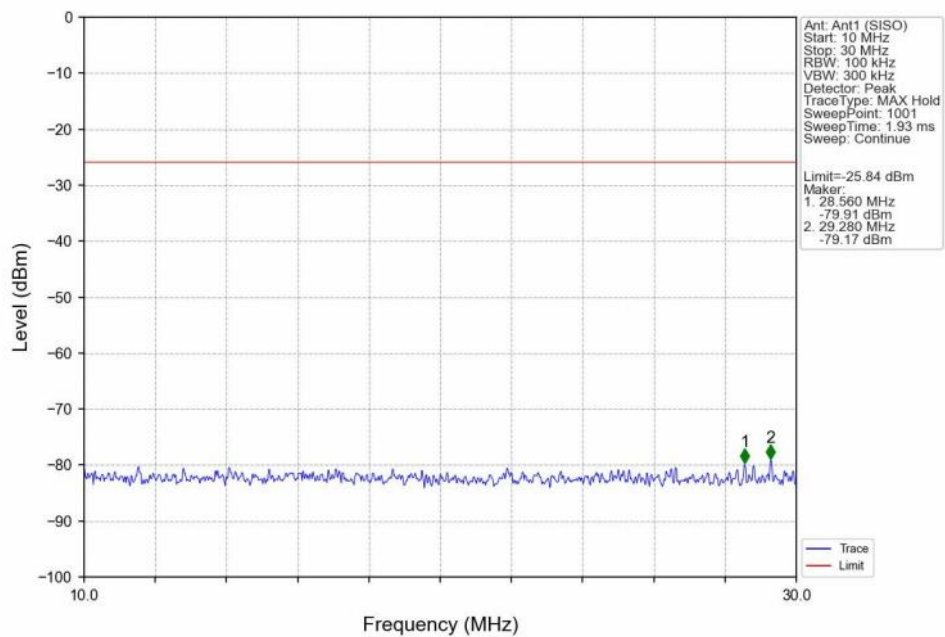
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



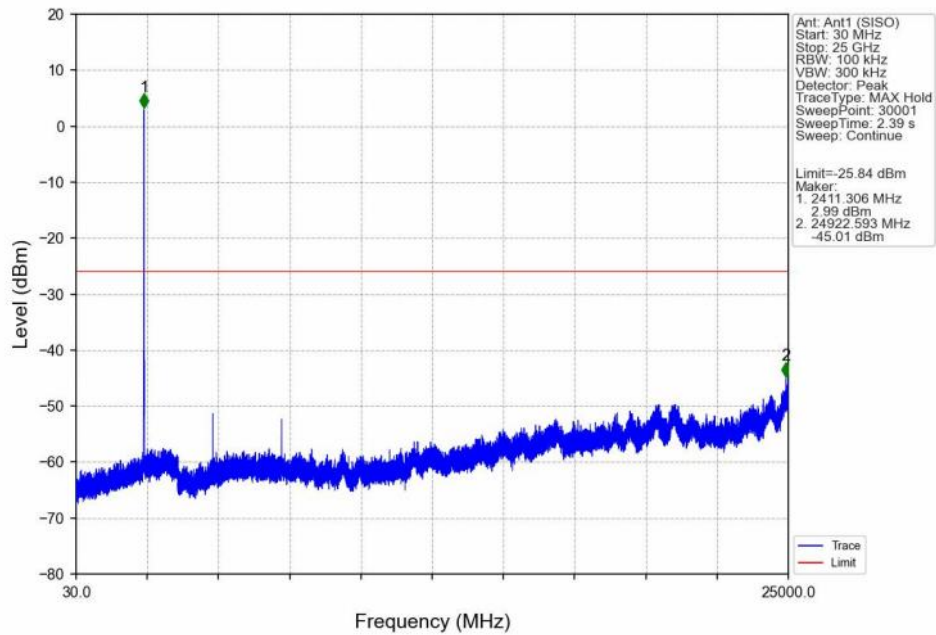
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



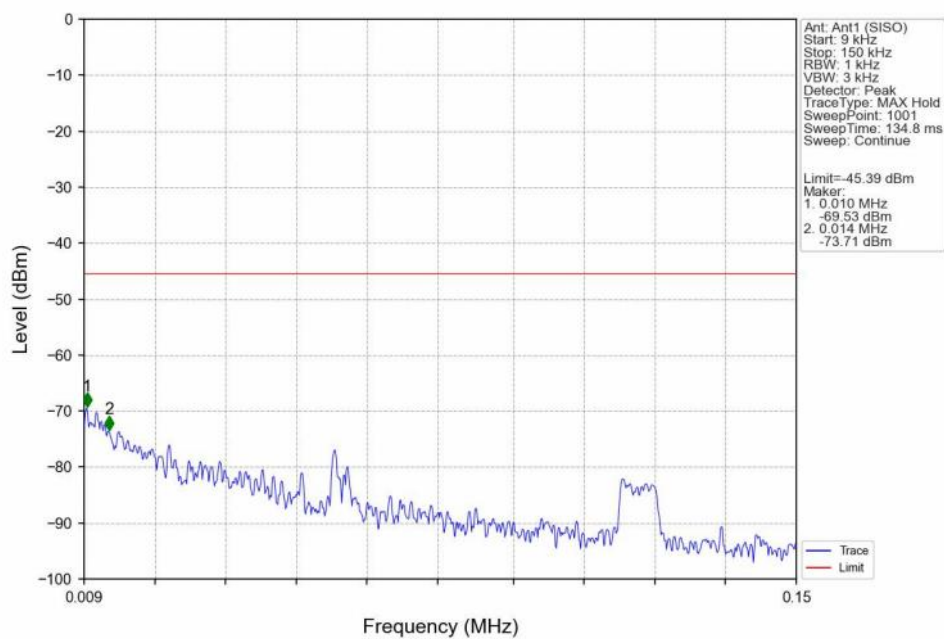
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



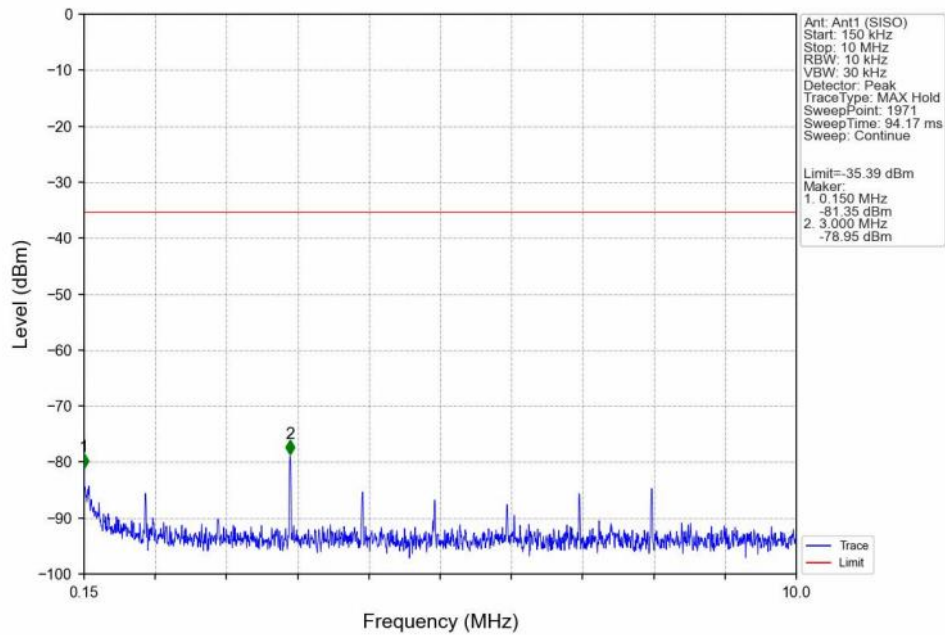
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



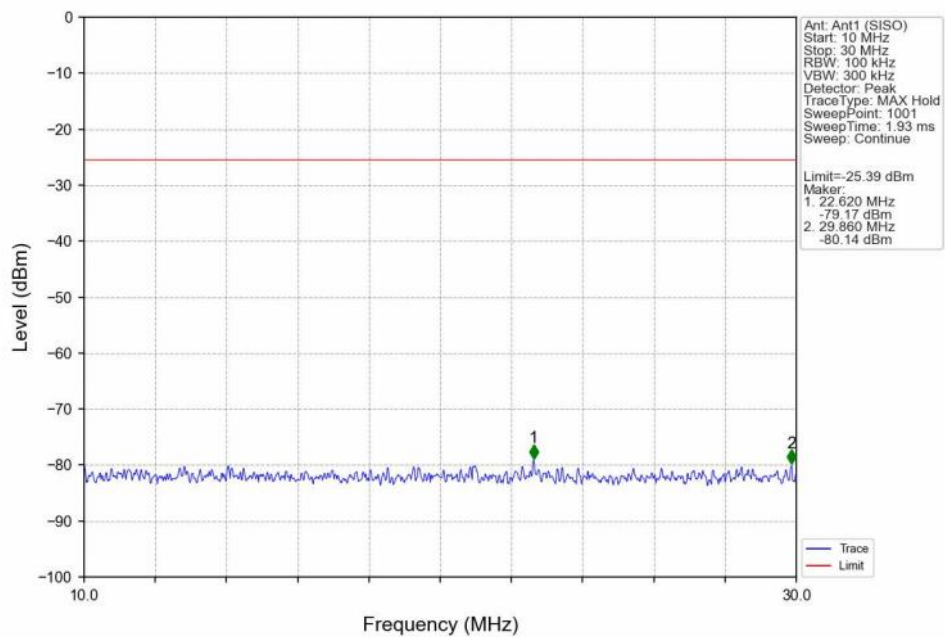
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



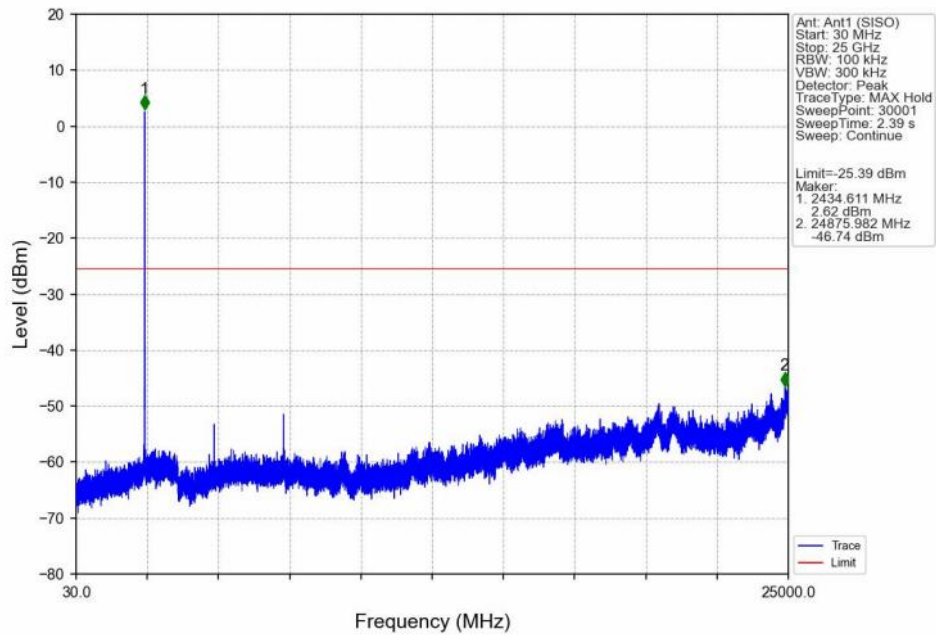
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



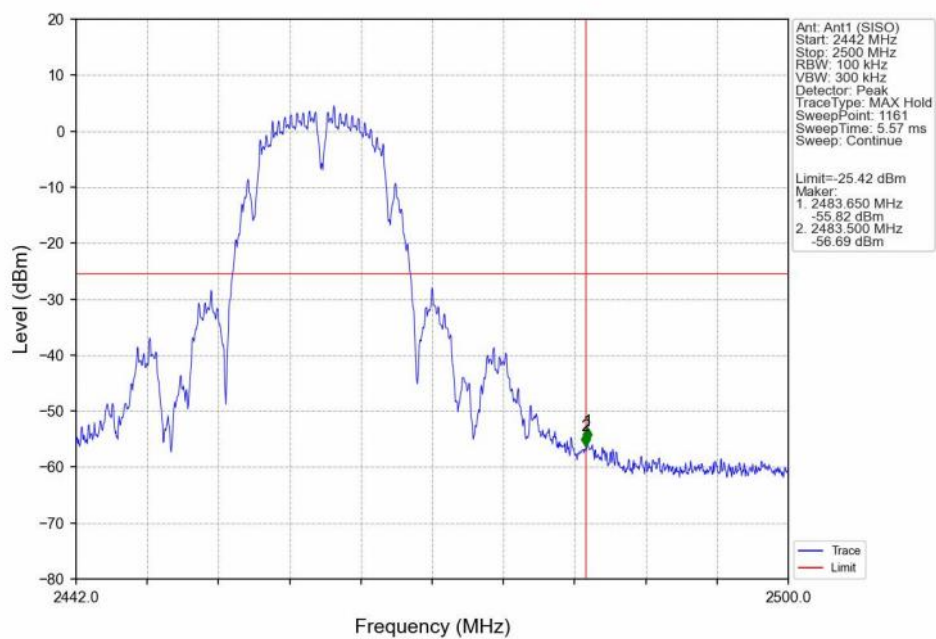
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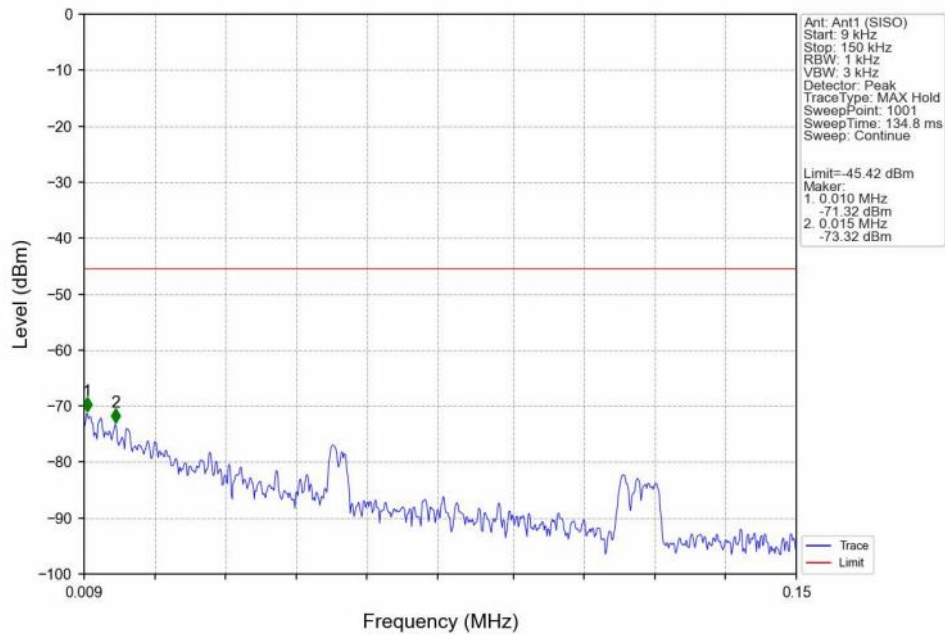
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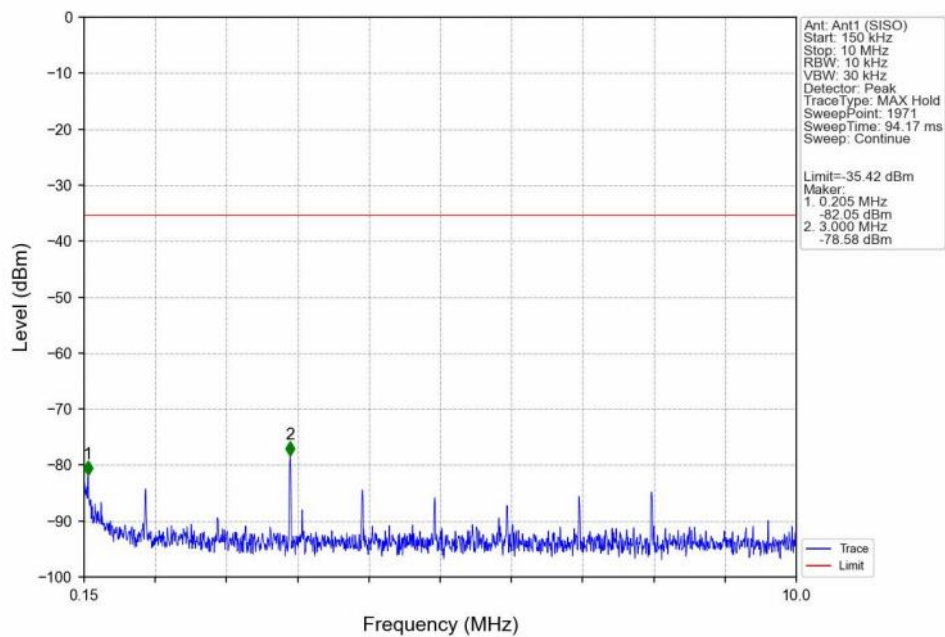
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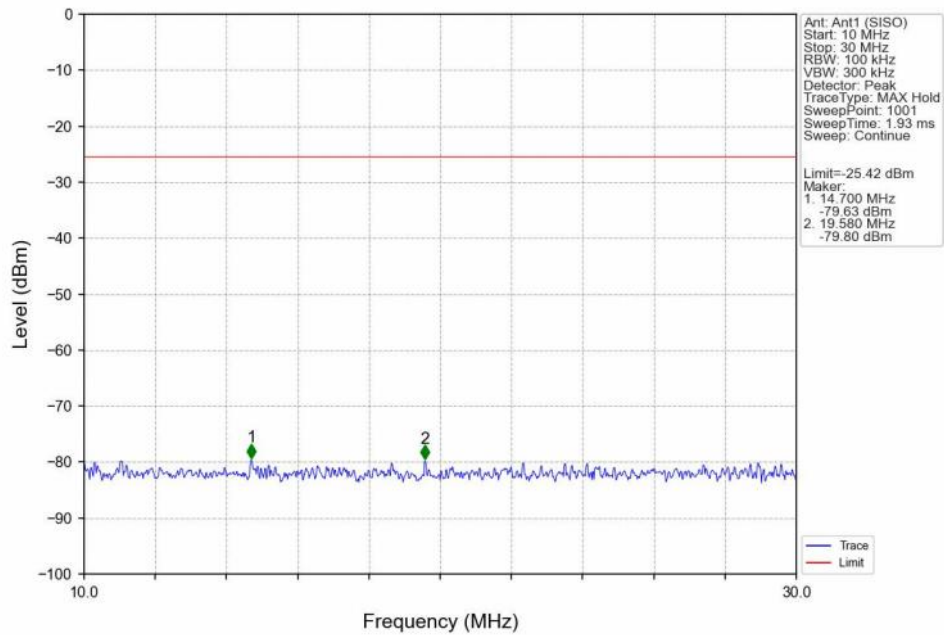
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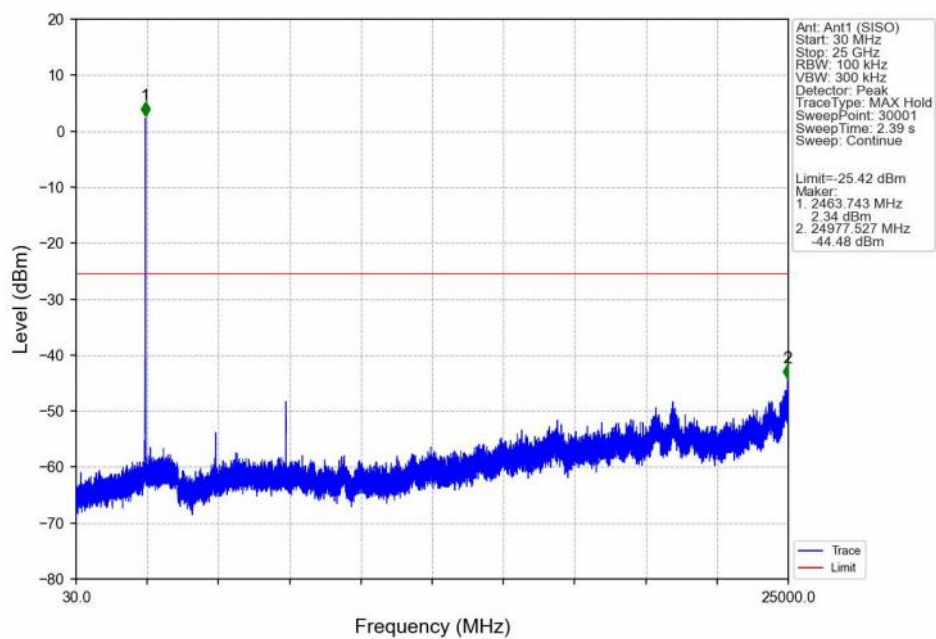
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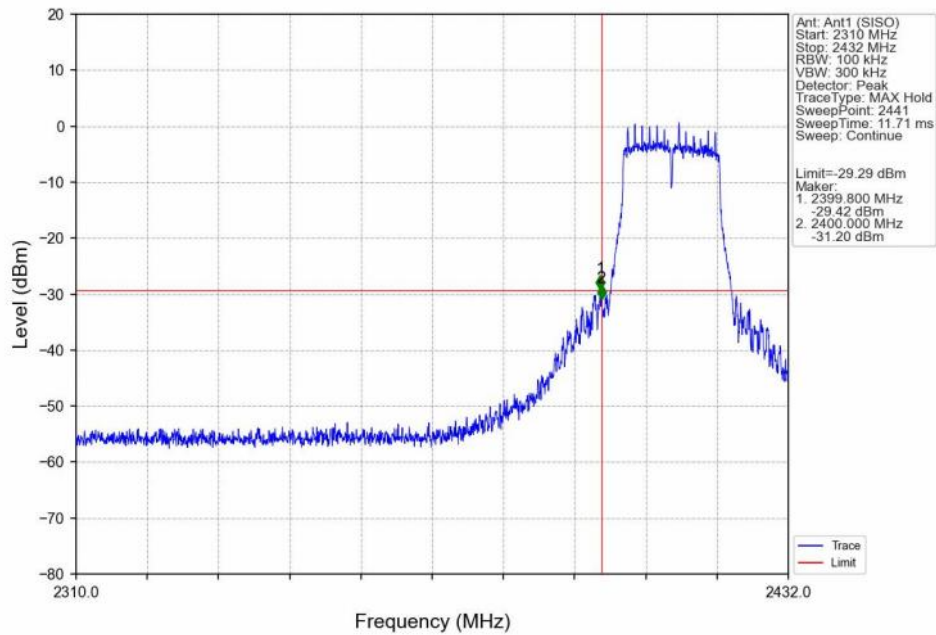
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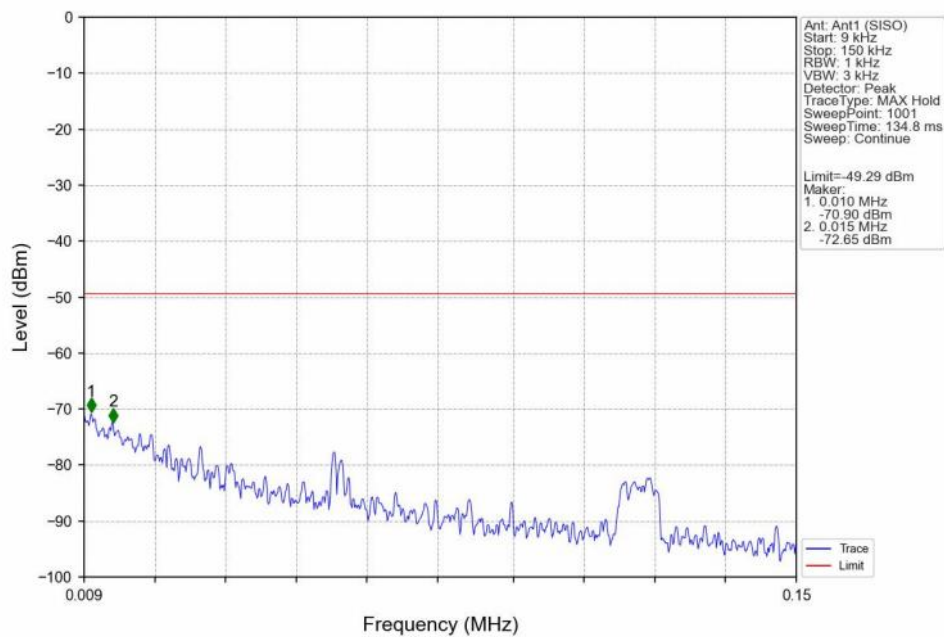
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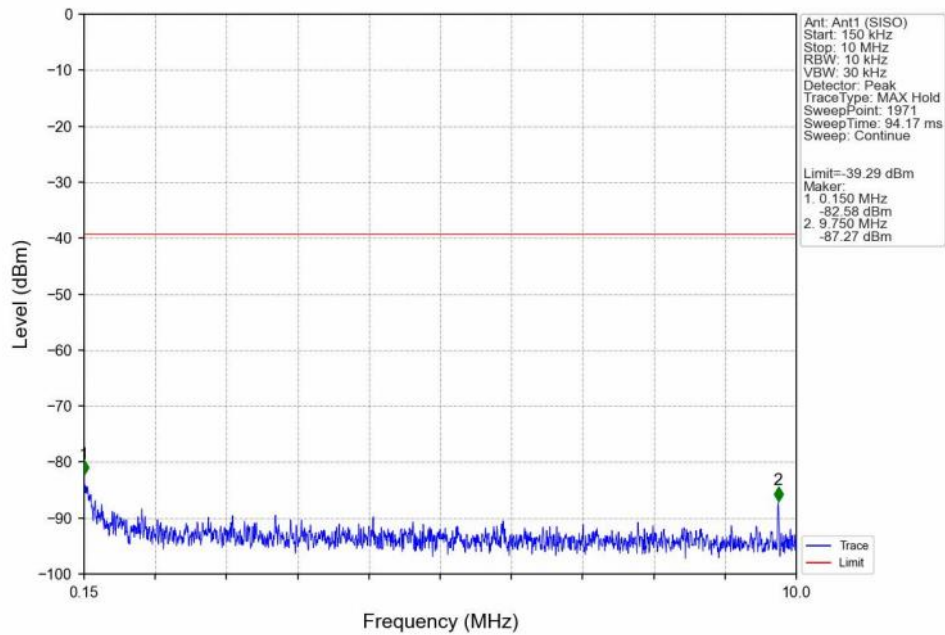
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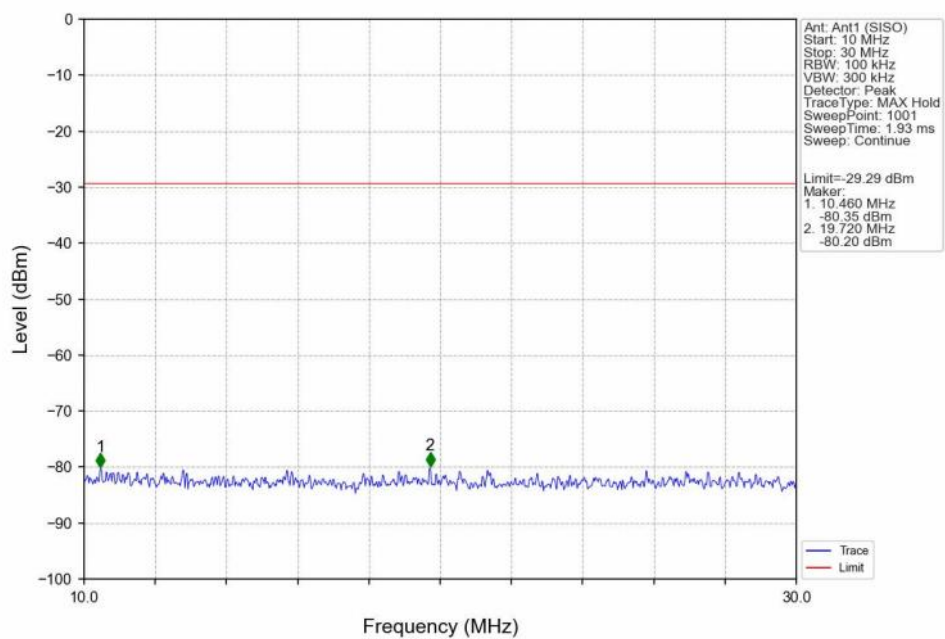
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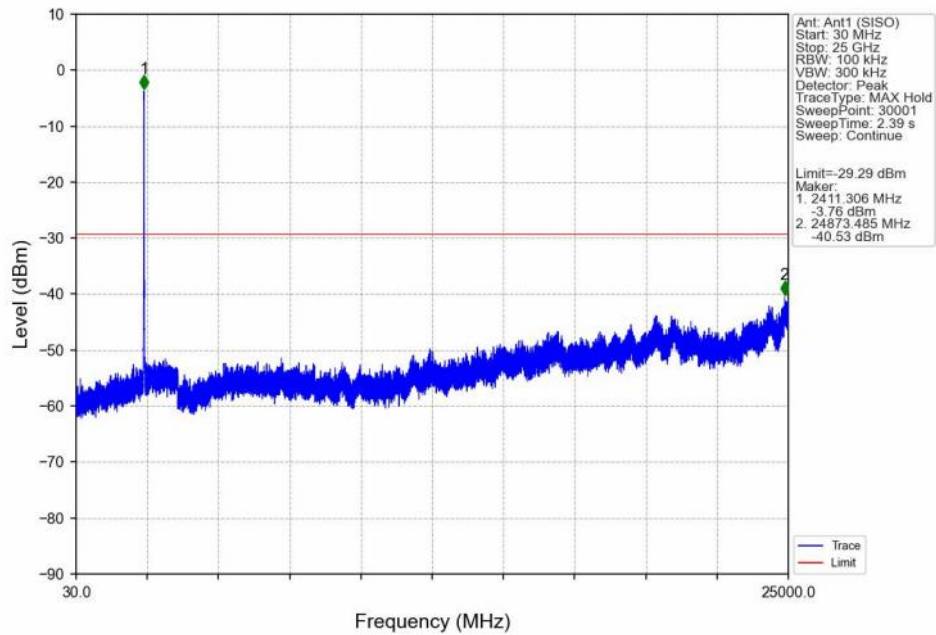
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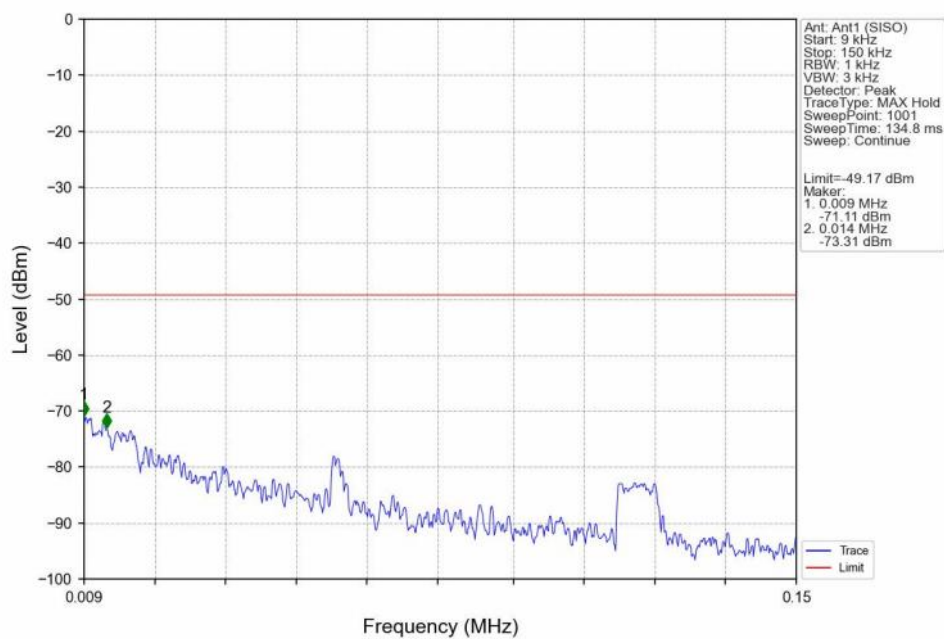
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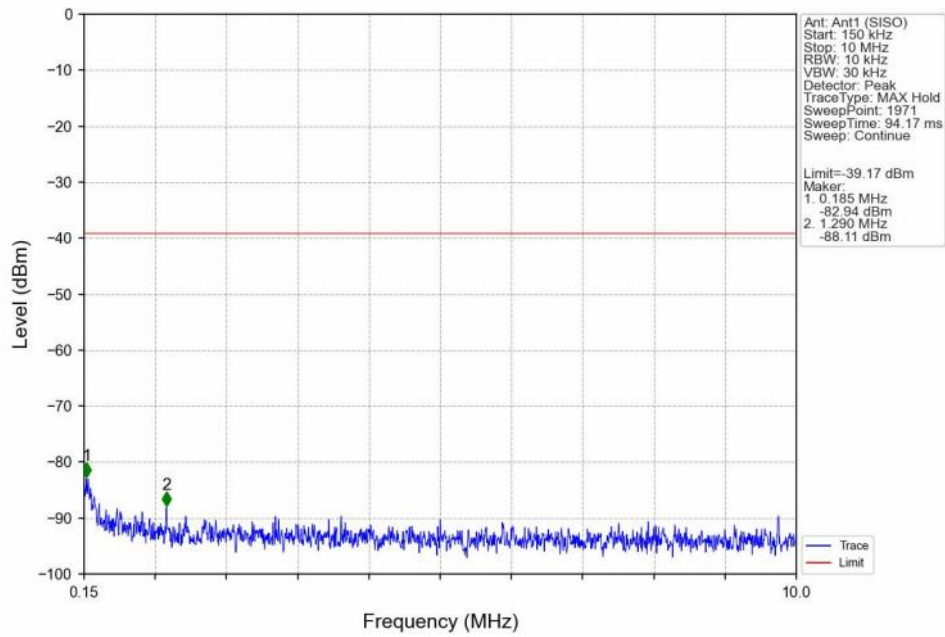
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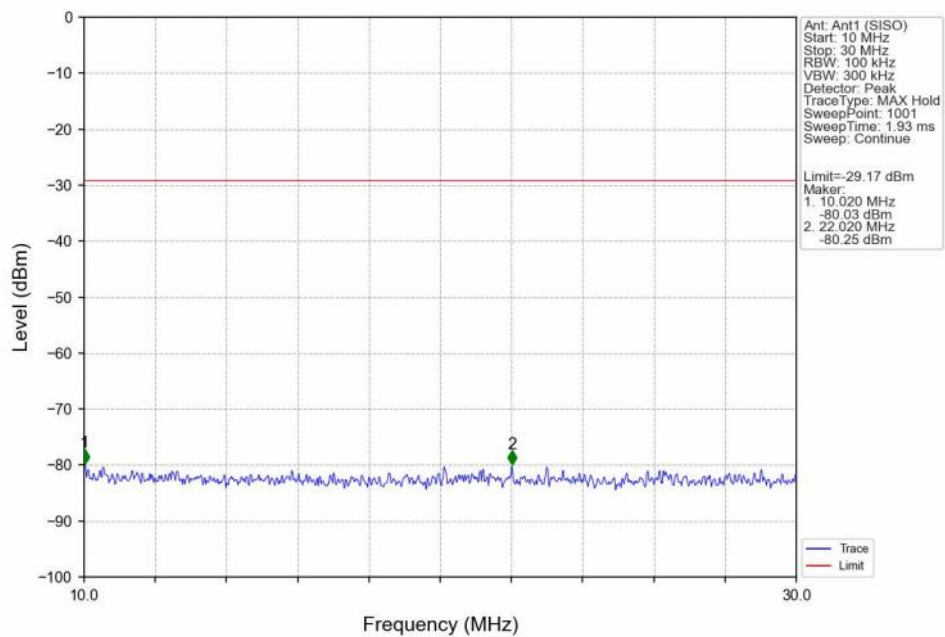
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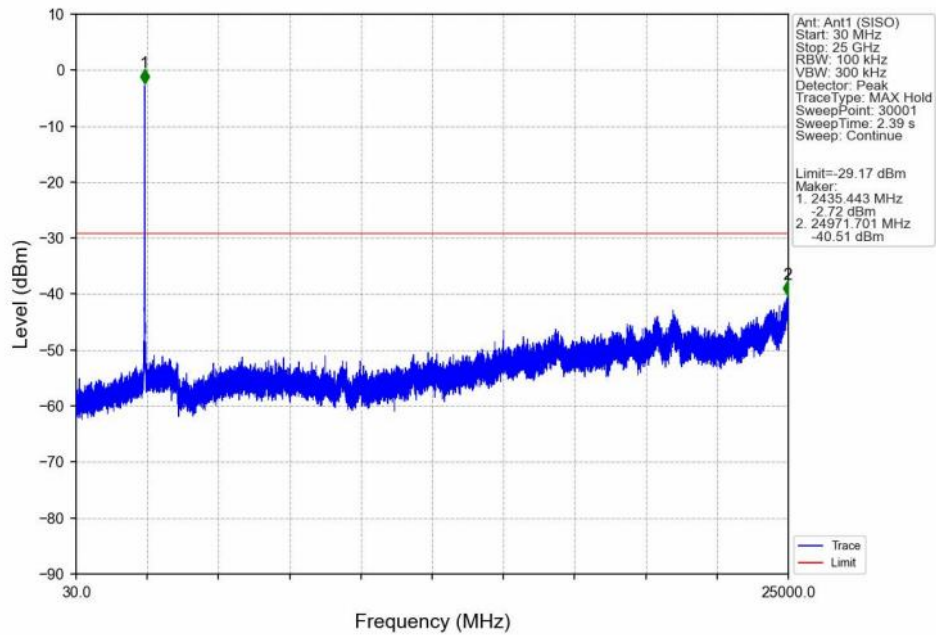
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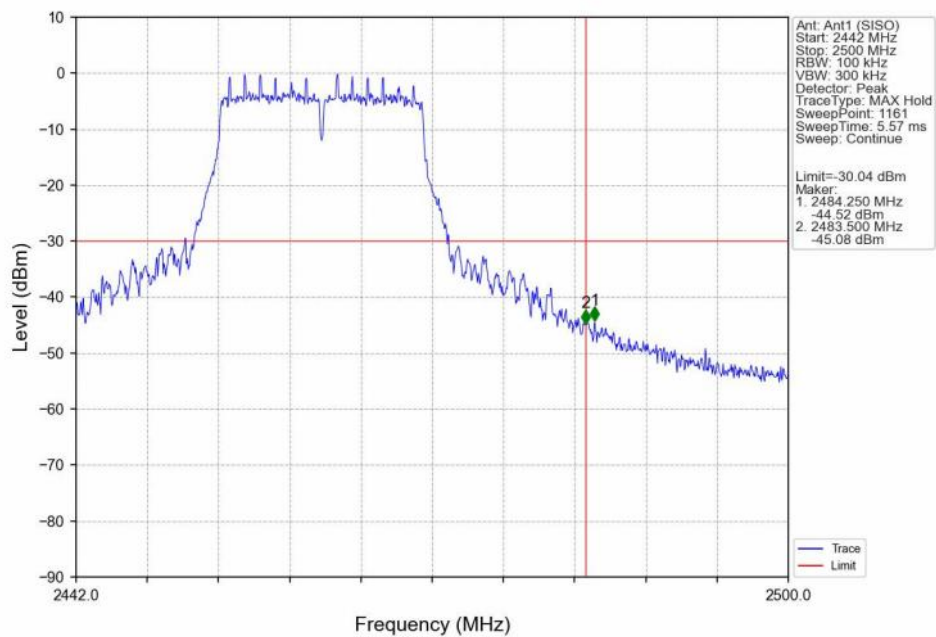
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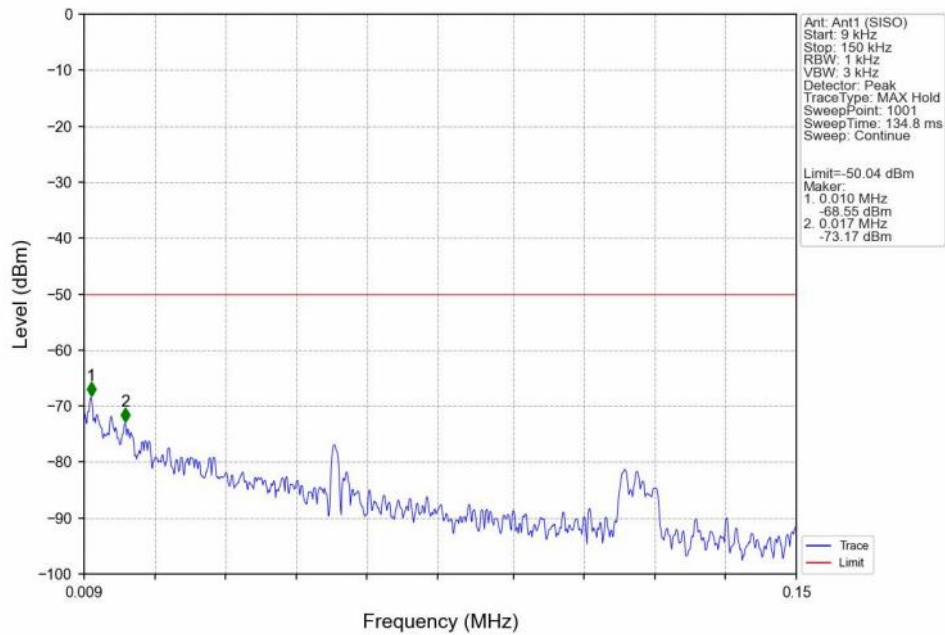
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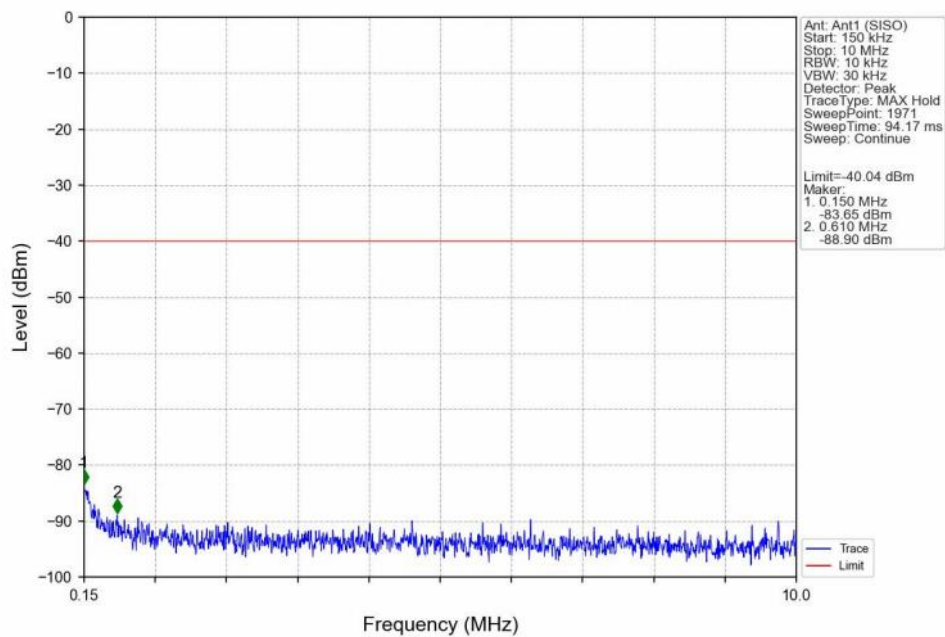
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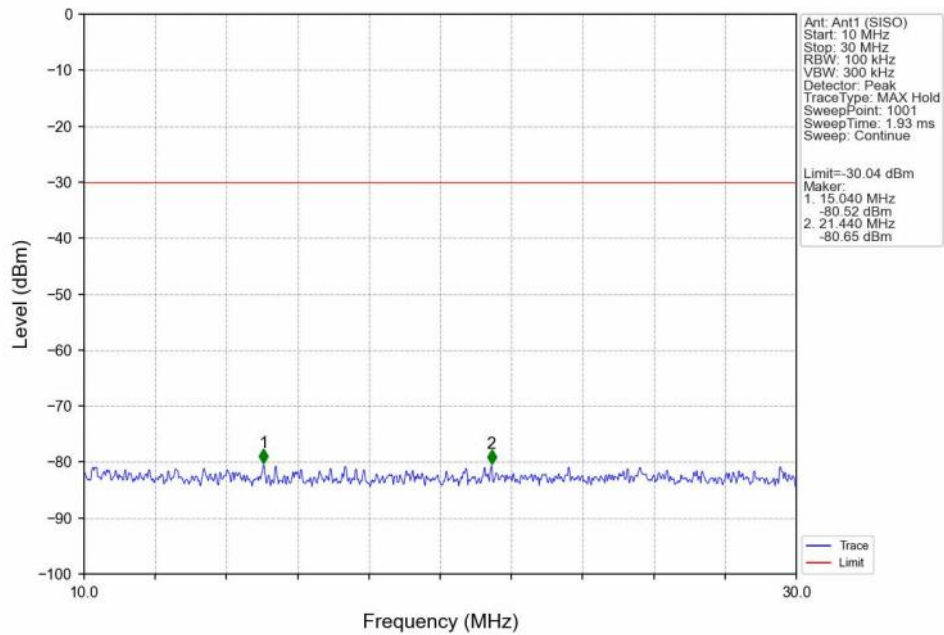
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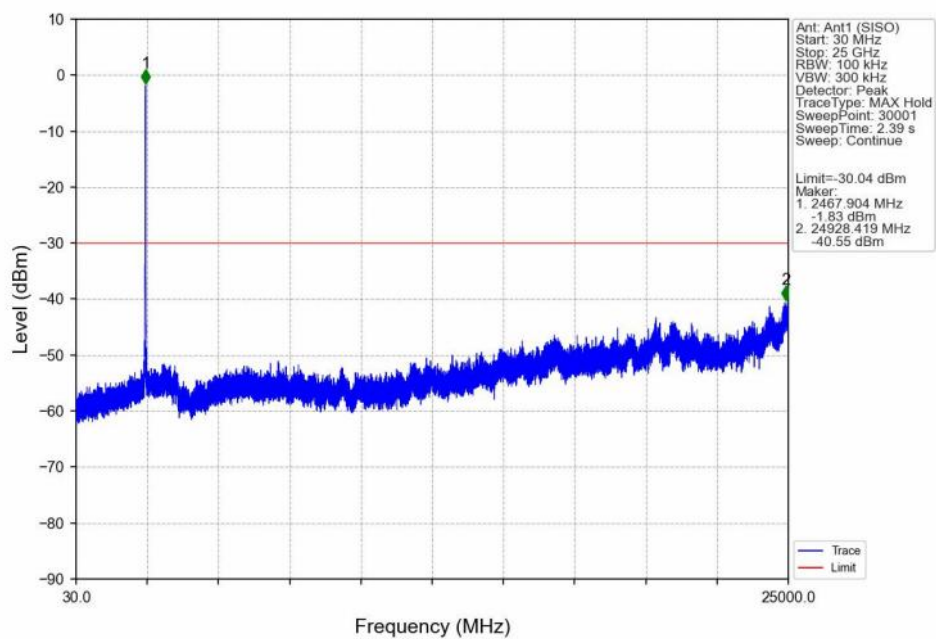
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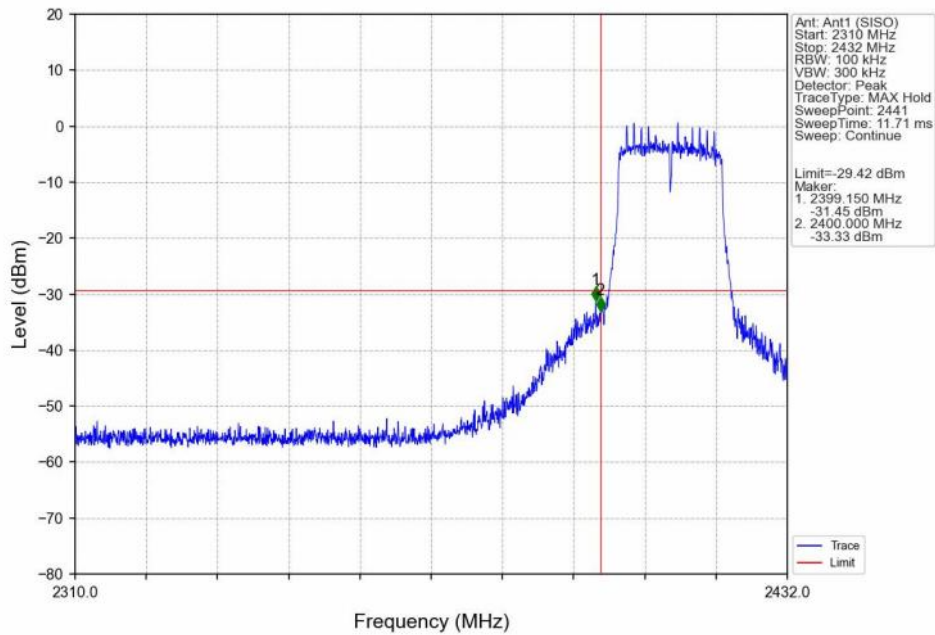
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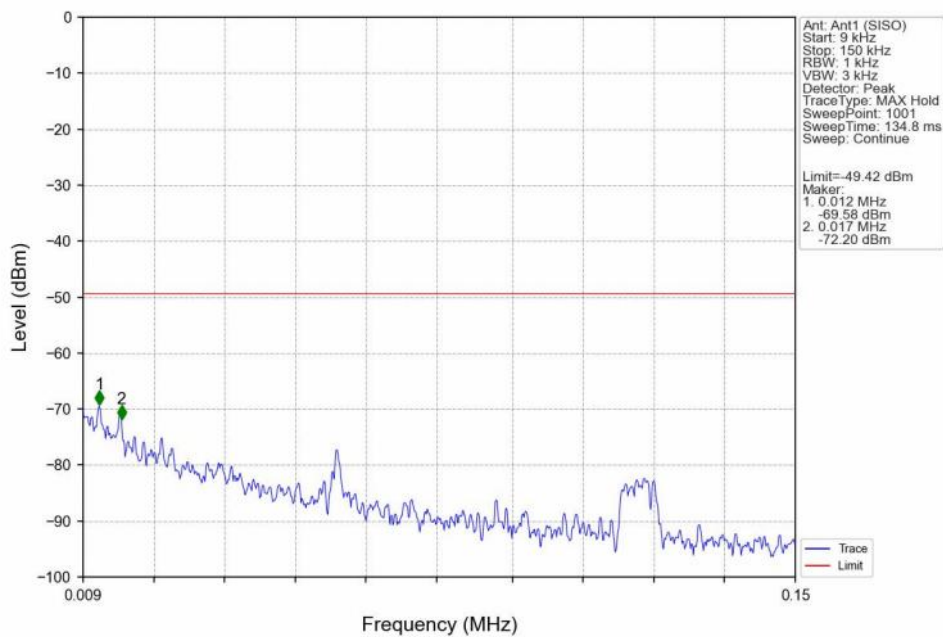
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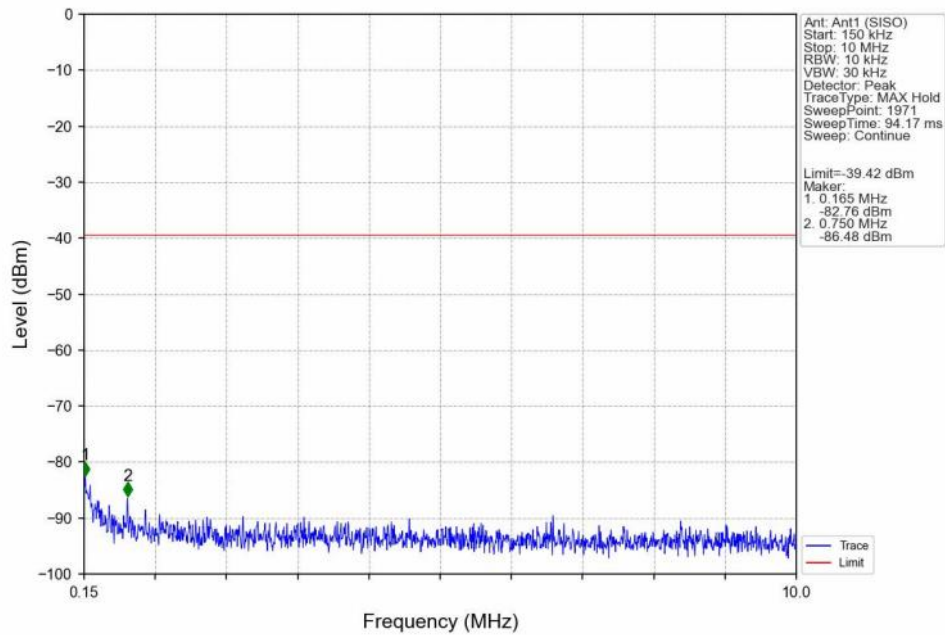
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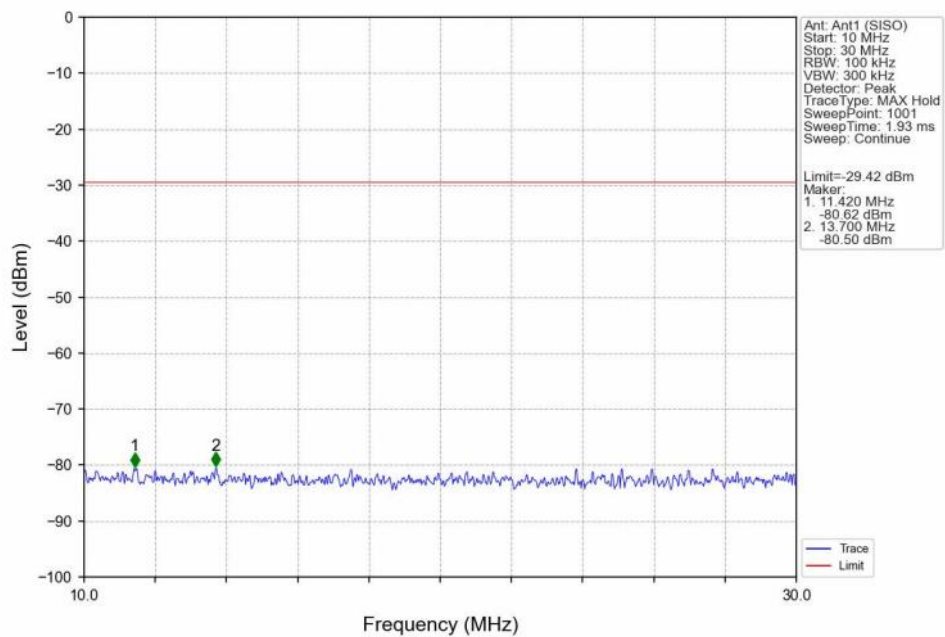
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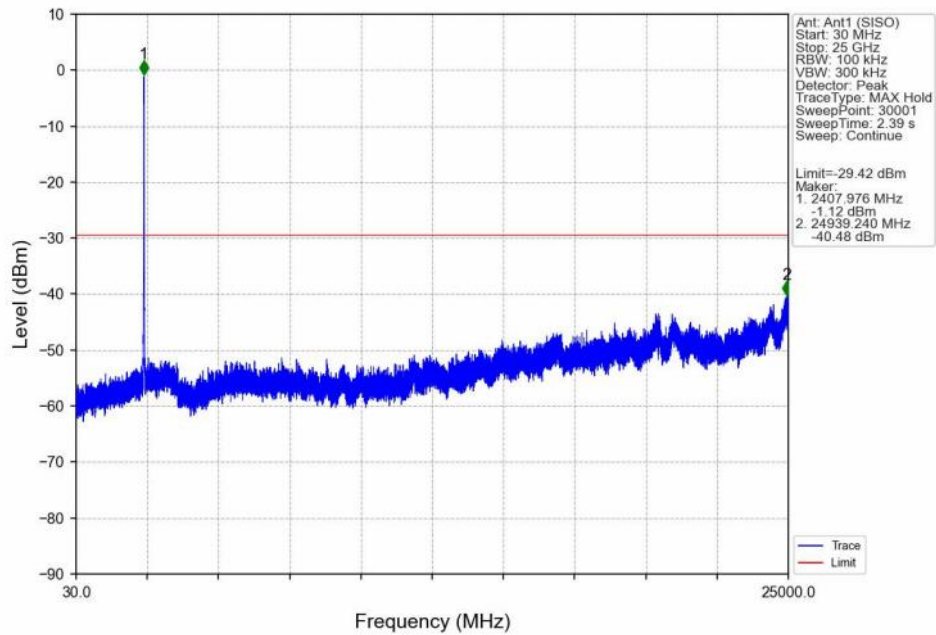
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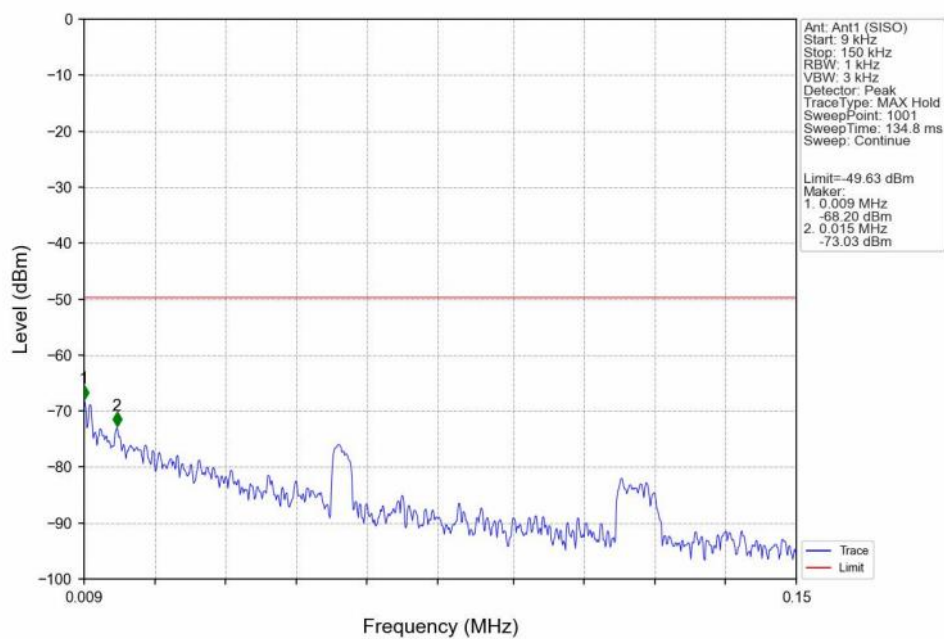
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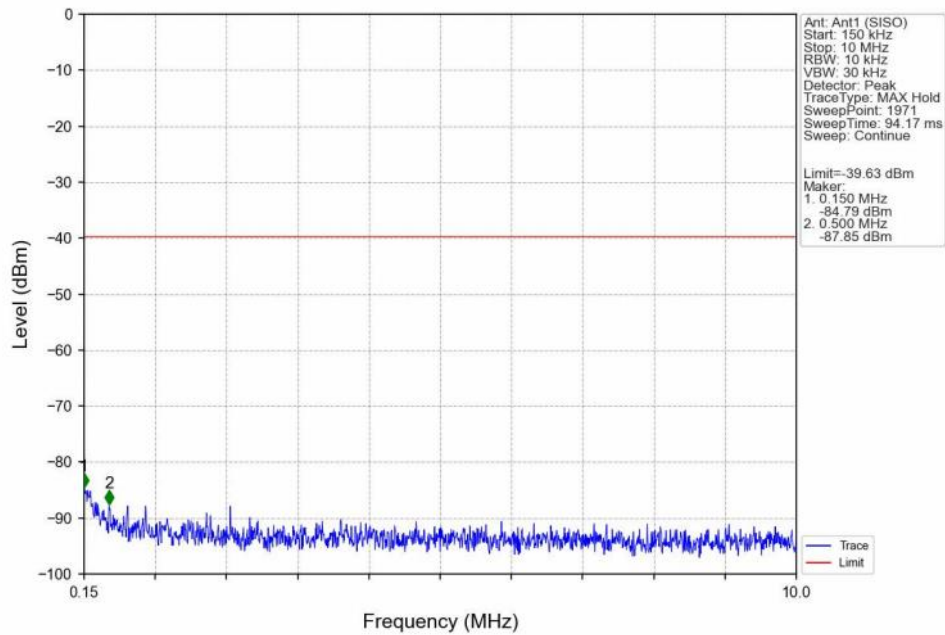
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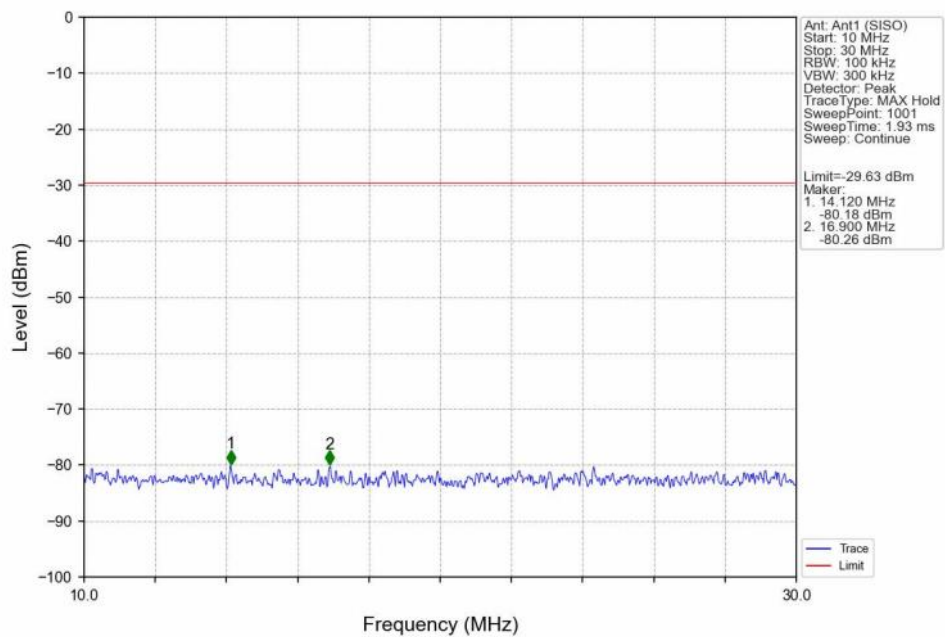
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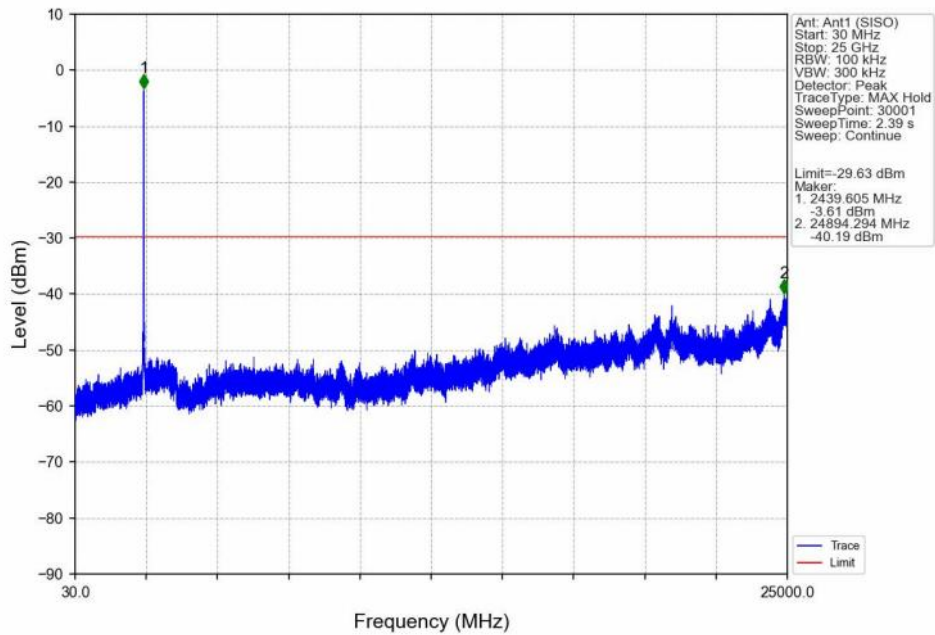
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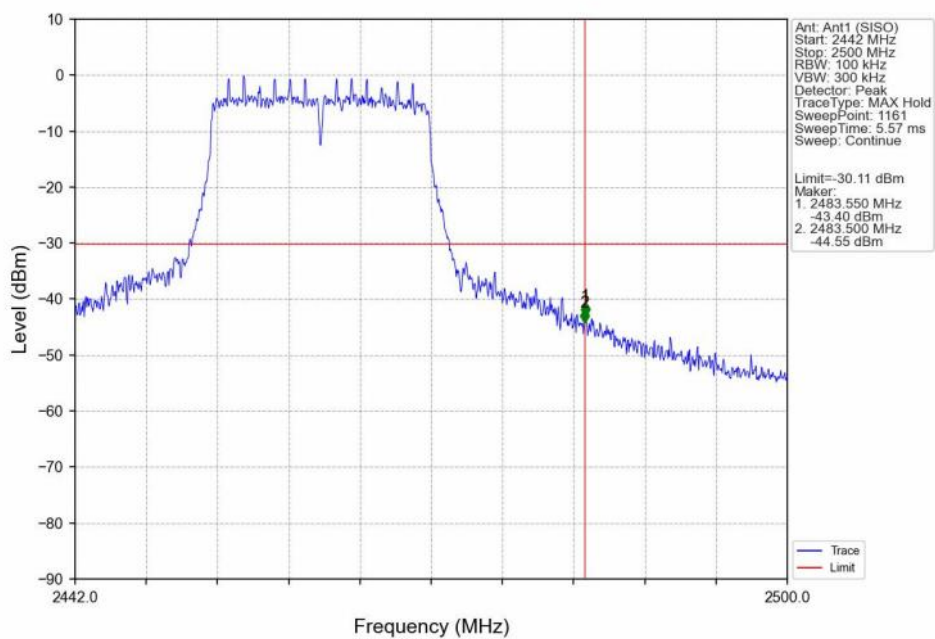
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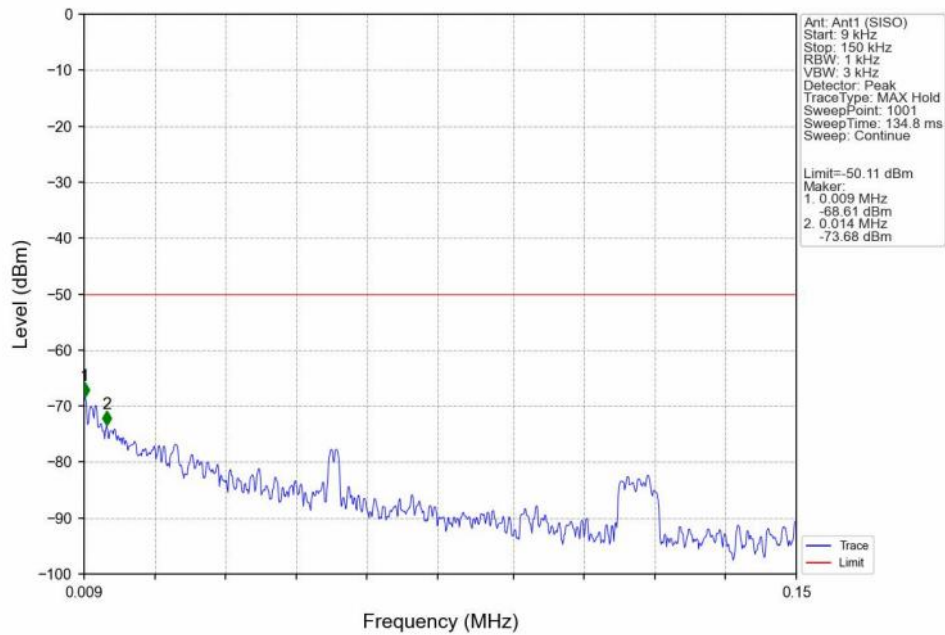
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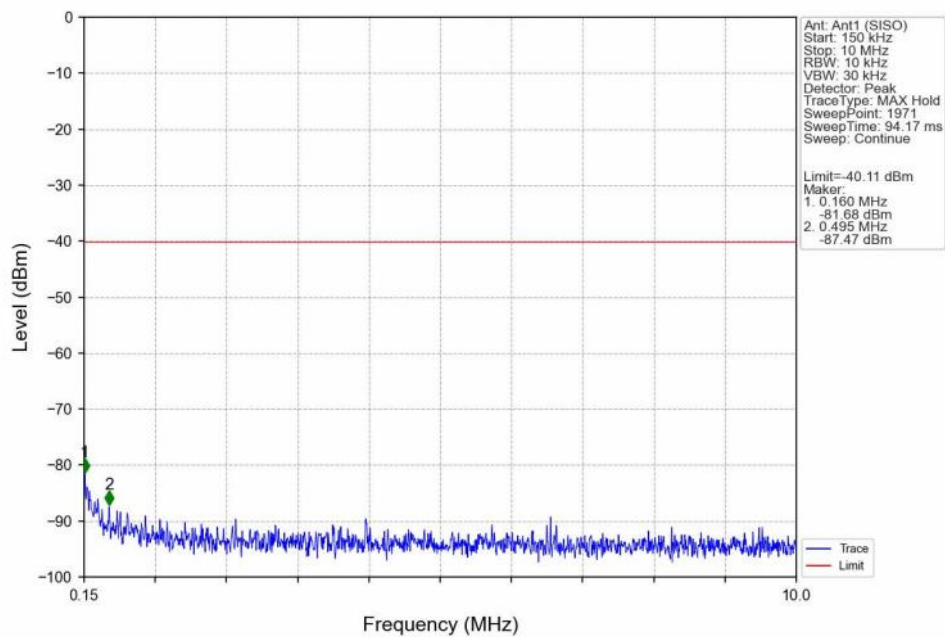
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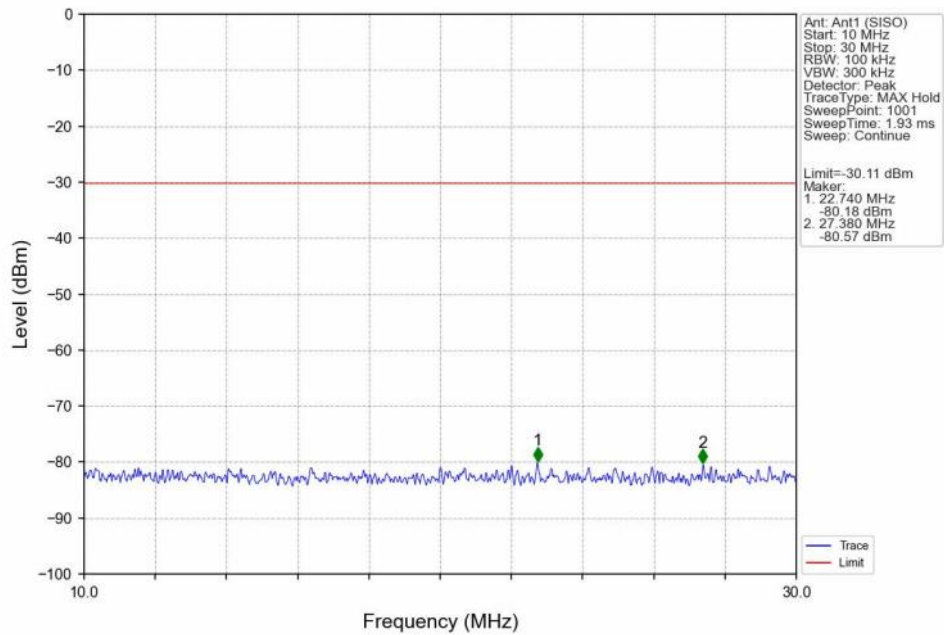
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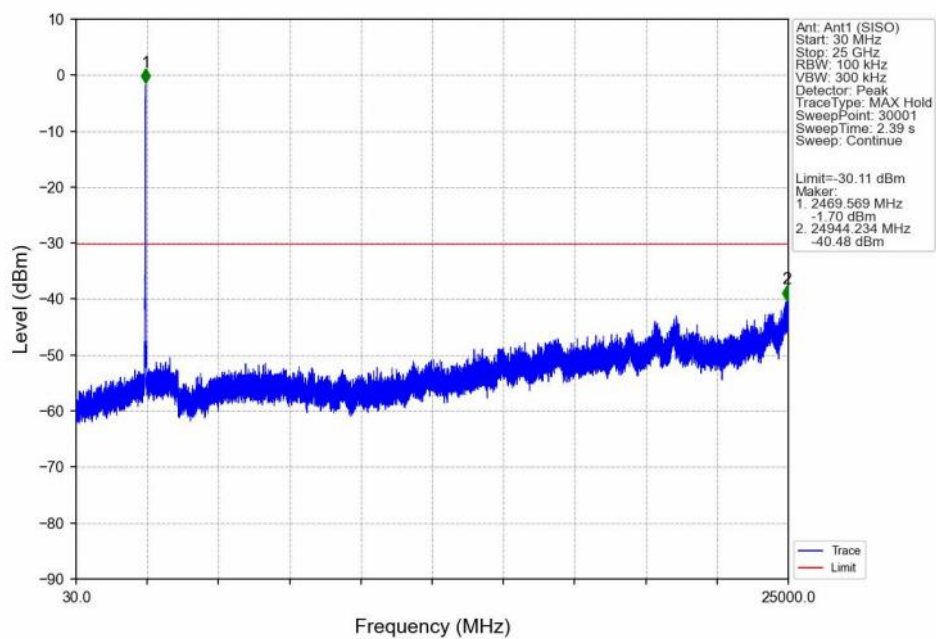
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802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



6. Form731

6.1 Test Result

6.1.1 Form731

Lower Freq (MHz)	High Freq (MHz)	MAX Power (W)	MAX Power (dBm)
2412	2462	0.0212	13.27



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www.btf-lab.com

-- END OF REPORT --