



RF Test Report

For

Applicant Name: SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU
Address: INDUSTRIAL ZONE,GUANLAN, LONGHUA SHENZHEN, 518XXX
China
EUT Name: Tablet
Brand Name: OUKITEL
Model Number: OT5
Series Model Number: Refer to section 2

Issued By

Company Name: BTF Testing Lab (Shenzhen) Co., Ltd.
F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park,
Address: Tantou Community, Songgang Street, Bao'an District, Shenzhen,
China
Report Number: BTF230921R00703
Test Standards: 47 CFR Part 15.247
Test Conclusion: Pass
FCC ID: 2ANMU-OT5
Test Date: 2023-09-21 to 2023-10-13
Date of Issue: 2023-10-16

Prepared By:

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2023-10-16

Date:

Approved By:

Ryan.CJ
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2023-10-16

Date:

Note: All the test results in this report only related to the testing samples. Which can be duplicated completely for the legal use with approval of applicant; it shall not be reproduced except in full without the written approval of BTF Testing Lab (Shenzhen) Co., Ltd., All the objections should be raised within thirty days from the date of issue. To validate the report, you can contact us.



Test Report Number: BTF230921R00703

Revision History		
Version	Issue Date	Revisions Content
R_V0	2023-10-16	Original
<i>Note: Once the revision has been made, then previous versions reports are invalid.</i>		

Table of Contents

1	INTRODUCTION	5
1.1	Identification of Testing Laboratory	5
1.2	Identification of the Responsible Testing Location	5
1.3	Announcement	5
2	PRODUCT INFORMATION.....	6
2.1	Application Information	6
2.2	Manufacturer Information.....	6
2.3	Factory Information	6
2.4	General Description of Equipment under Test (EUT)	6
2.5	Technical Information	6
3	SUMMARY OF TEST RESULTS	7
3.1	Test Standards.....	7
3.2	Uncertainty of Test	7
3.3	Summary of Test Result	7
4	TEST CONFIGURATION	8
4.1	Test Equipment List	8
4.2	Test Auxiliary Equipment	10
4.3	Test Modes.....	10
5	EVALUATION RESULTS (EVALUATION).....	11
5.1	Antenna requirement	11
5.1.1	Conclusion:.....	11
6	RADIO SPECTRUM MATTER TEST RESULTS (RF).....	12
6.1	Conducted Emission at AC power line	12
6.1.1	E.U.T. Operation:	12
6.1.2	Test Setup Diagram:	12
6.1.3	Test Data:	13
6.2	Occupied Bandwidth	15
6.2.1	E.U.T. Operation:	15
6.2.2	Test Setup Diagram:	15
6.2.3	Test Data:	15
6.3	Maximum Conducted Output Power	16
6.3.1	E.U.T. Operation:	16
6.3.2	Test Setup Diagram:	16
6.3.3	Test Data:	16
6.4	Power Spectral Density	17
6.4.1	E.U.T. Operation:	17
6.4.2	Test Setup Diagram:	17
6.4.3	Test Data:	17
6.5	Emissions in non-restricted frequency bands	18
6.5.1	E.U.T. Operation:	18
6.5.2	Test Setup Diagram:	18
6.5.3	Test Data:	18
6.6	Band edge emissions (Radiated).....	19
6.6.1	E.U.T. Operation:	19
6.6.2	Test Setup Diagram:	19
6.6.3	Test Data:	20
6.7	Emissions in frequency bands (below 1GHz)	21
6.7.1	E.U.T. Operation:	21
6.7.2	Test Setup Diagram:	21

6.7.3	Test Data:	22
6.8	Emissions in frequency bands (above 1GHz)	24
6.8.1	E.U.T. Operation:	24
6.8.2	Test Setup Diagram:	24
6.8.3	Test Data:	25
7	TEST SETUP PHOTOS	27
8	EUT CONSTRUCTIONAL DETAILS (EUT PHOTOS)	29
APPENDIX.....		30

1 Introduction

1.1 Identification of Testing Laboratory

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

1.2 Identification of the Responsible Testing Location

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

1.3 Announcement

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

2 Product Information

2.1 Application Information

Company Name:	SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Address:	A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE, GUANLAN, LONGHUA SHENZHEN, 518XXX China

2.2 Manufacturer Information

Company Name:	SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Address:	A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE, GUANLAN, LONGHUA SHENZHEN, 518XXX China

2.3 Factory Information

Company Name:	SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Address:	A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE, GUANLAN, LONGHUA SHENZHEN, 518XXX China

2.4 General Description of Equipment under Test (EUT)

EUT Name:	Tablet
Test Model Number:	OT5
Series Model Number:	OT5 S, OT5 Pro, OT5 Ultra
Description of Model name differentiation:	Only the model name is different, everything else is the same
Hardware Version:	Q2_TV1.0
Software Version:	OUKITEL_OT5_EEA_V04

2.5 Technical Information

Power Supply:	DC 3.8V from battery
Power Adaptor:	Fast Charger Model:HJ-PD20W-US Input:100-240v~50/60Hz 0.6A Output:5.0V==3.0A 15.0W OR 9.0V==2.22A 19.98W OR 12.0V==1.67V 20.0W MAX
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:	PIFA ANT
Antenna Gain [#] :	-0.04dBi
Note: #: The antenna gain provided by the applicant, and the laboratory will not be responsible for the accumulated calculation results which covers the information provided by the applicant.	

3 Summary of Test Results

3.1 Test Standards

The tests were performed according to following standards:

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

3.2 Uncertainty of Test

Item	Measurement Uncertainty
Conducted Emission (150 kHz-30 MHz)	±2.64dB
Occupied Bandwidth	±69kHz
Transmitter Power, Conducted	±0.87dB
Power Spectral Density	±0.69dB
Conducted Spurious Emissions	±0.95dB
Radiated Spurious Emissions (above 1GHz)	1-6GHz: ±3.94dB 6-18GHz: ±4.16dB
Radiated Spurious Emissions (30M - 1GHz)	±4.12dB

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
Occupied Bandwidth	47 CFR Part 15.247	47 CFR 15.247(a)(2)	Pass
Maximum Conducted Output Power	47 CFR Part 15.247	47 CFR 15.247(b)(3)	Pass
Power Spectral Density	47 CFR Part 15.247	47 CFR 15.247(e)	Pass
Emissions in non-restricted frequency bands	47 CFR Part 15.247	47 CFR 15.247(d), 15.209, 15.205	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

4 Test Configuration

4.1 Test Equipment List

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

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

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

4.2 Test Auxiliary Equipment

The EUT was tested as an independent device.

4.3 Test Modes

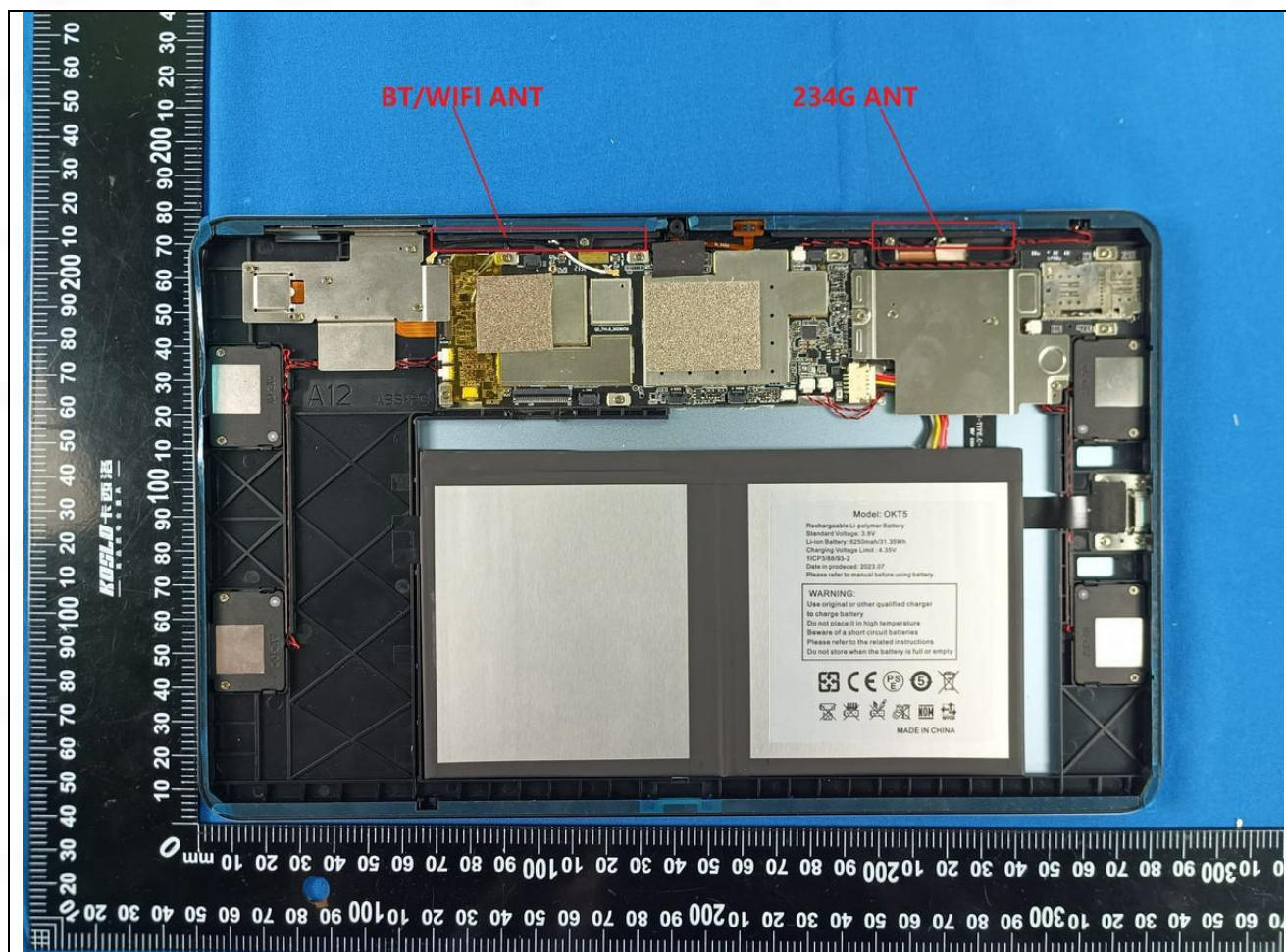
No.	Test Modes	Description
TM1	802.11b mode	Keep the EUT in 802.11b transmitting mode.
TM2	802.11g mode	Keep the EUT in 802.11g transmitting mode.
TM3	802.11n(HT20) mode	Keep the EUT in 802.11n(HT20) transmitting mode.
TM4	802.11n(HT40) mode	Keep the EUT in 802.11n(HT40) transmitting mode.

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.
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5.1.1 Conclusion:



6 Radio Spectrum Matter Test Results (RF)

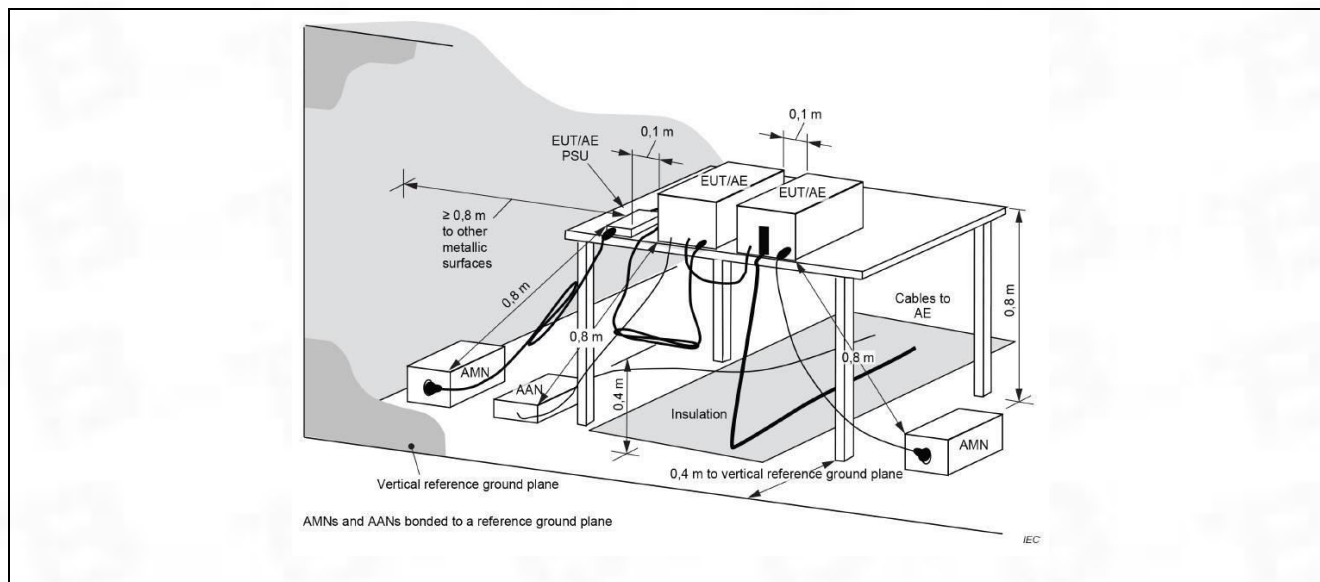
6.1 Conducted Emission at AC power line

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 C63.10-2013 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 C63.10-2013 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices		

6.1.1 E.U.T. Operation:

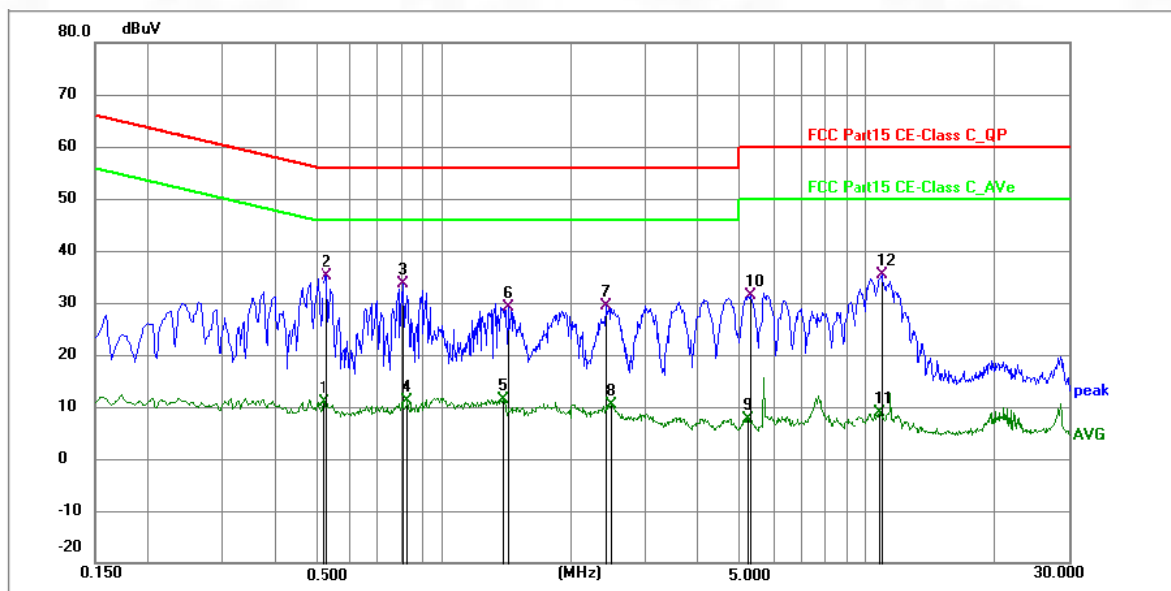
Operating Environment:	
Temperature:	25.8 °C
Humidity:	48.2 %
Atmospheric Pressure:	1010 mbar

6.1.2 Test Setup Diagram:



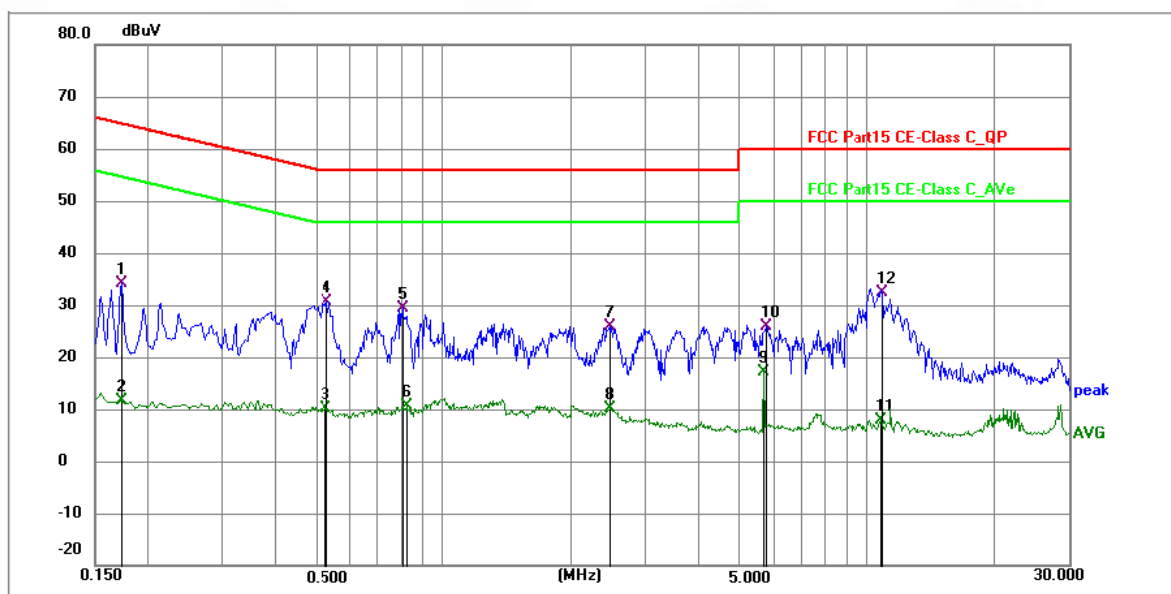
6.1.3 Test Data:

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	0.5210	0.33	10.62	10.95	46.00	-35.05	AVG	P	
2 *	0.5280	24.63	10.62	35.25	56.00	-20.75	QP	P	
3	0.8070	22.97	10.75	33.72	56.00	-22.28	QP	P	
4	0.8250	0.43	10.75	11.18	46.00	-34.82	AVG	P	
5	1.3872	0.74	10.74	11.48	46.00	-34.52	AVG	P	
6	1.4325	18.43	10.74	29.17	56.00	-26.83	QP	P	
7	2.4315	18.64	10.70	29.34	56.00	-26.66	QP	P	
8	2.4900	-0.29	10.70	10.41	46.00	-35.59	AVG	P	
9	5.2214	-3.10	10.81	7.71	50.00	-42.29	AVG	P	
10	5.2934	20.45	10.81	31.26	60.00	-28.74	QP	P	
11	10.7790	-2.14	10.95	8.81	50.00	-41.19	AVG	P	
12	10.8643	24.43	10.95	35.38	60.00	-24.62	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	0.1723	23.48	10.56	34.04	64.85	-30.81	QP	P	
2	0.1723	1.04	10.56	11.60	54.85	-43.25	AVG	P	
3	0.5233	-0.47	10.62	10.15	46.00	-35.85	AVG	P	
4 *	0.5280	19.89	10.62	30.51	56.00	-25.49	QP	P	
5	0.8024	18.67	10.75	29.42	56.00	-26.58	QP	P	
6	0.8205	-0.18	10.75	10.57	46.00	-35.43	AVG	P	
7	2.4630	15.10	10.70	25.80	56.00	-30.20	QP	P	
8	2.4810	-0.54	10.70	10.16	46.00	-35.84	AVG	P	
9	5.7030	6.23	10.79	17.02	50.00	-32.98	AVG	P	
10	5.7570	15.01	10.79	25.80	60.00	-34.20	QP	P	
11	10.8103	-3.13	10.93	7.80	50.00	-42.20	AVG	P	
12	10.9050	21.45	10.93	32.38	60.00	-27.62	QP	P	

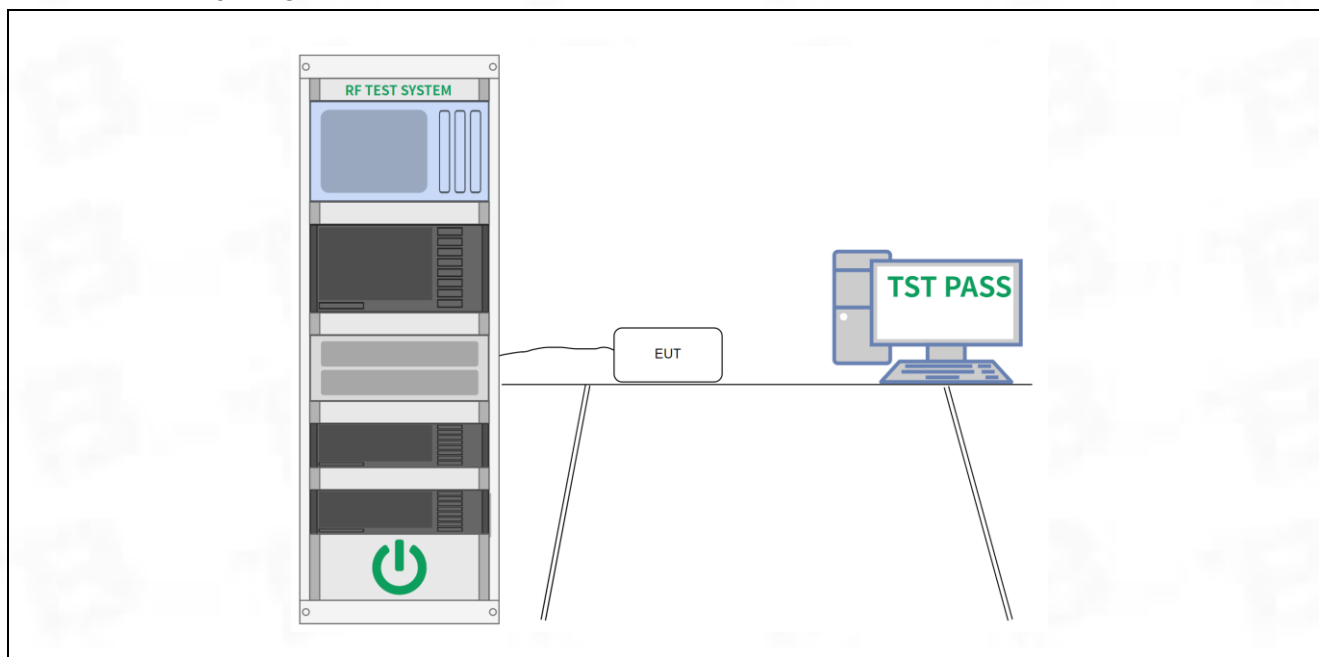
6.2 Occupied Bandwidth

Test Requirement:	47 CFR 15.247(a)(2)
Test Method:	ANSI C63.10-2013, 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:	a) Set RBW = 100 kHz. b) Set the VBW $\geq [3 \times \text{RBW}]$. c) Detector = peak. d) Trace mode = max hold. e) Sweep = auto couple. f) Allow the trace to stabilize. g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.2.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.8 °C
Humidity:	48.2 %
Atmospheric Pressure:	1010 mbar

6.2.2 Test Setup Diagram:



6.2.3 Test Data:

Please Refer to Appendix for Details.

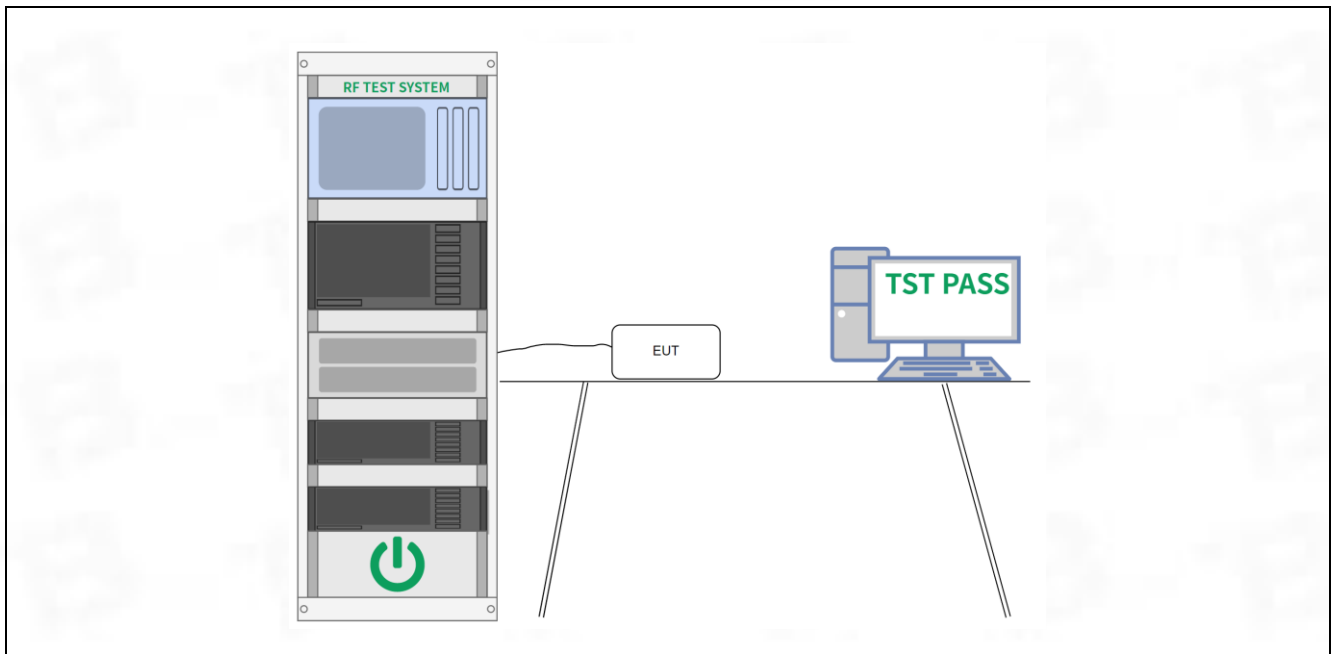
6.3 Maximum Conducted Output Power

Test Requirement:	47 CFR 15.247(b)(3)
Test Method:	ANSI C63.10-2013, section 11.9.1 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:	ANSI C63.10-2013, section 11.9.1 Maximum peak conducted output power

6.3.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.8 °C
Humidity:	48.2 %
Atmospheric Pressure:	1010 mbar

6.3.2 Test Setup Diagram:



6.3.3 Test Data:

Please Refer to Appendix for Details.

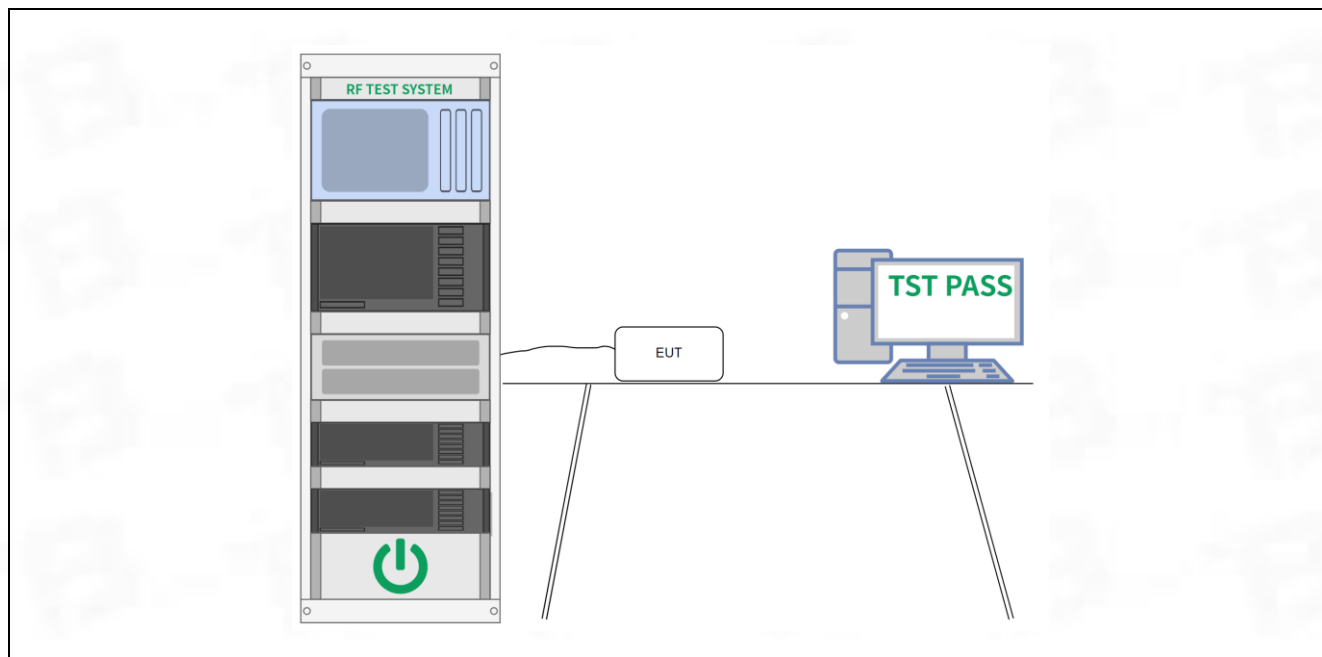
6.4 Power Spectral Density

Test Requirement:	47 CFR 15.247(e)
Test Method:	ANSI C63.10-2013, 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 C63.10-2013, section 11.10, Maximum power spectral density level in the fundamental emission

6.4.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.8 °C
Humidity:	48.2 %
Atmospheric Pressure:	1010 mbar

6.4.2 Test Setup Diagram:



6.4.3 Test Data:

Please Refer to Appendix for Details.

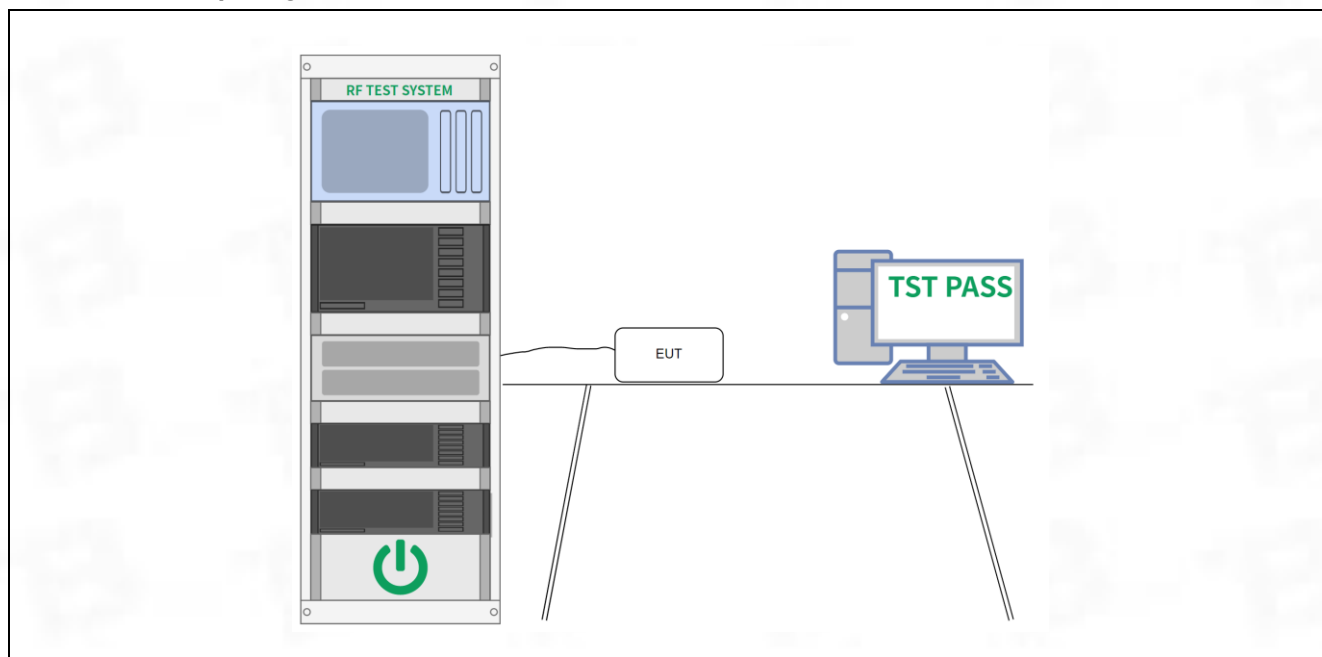
6.5 Emissions in non-restricted frequency bands

Test Requirement:	47 CFR 15.247(d), 15.209, 15.205
Test Method:	ANSI C63.10-2013 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 C63.10-2013 Section 11.11.1, Section 11.11.2, Section 11.11.3

6.5.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.8 °C
Humidity:	48.2 %
Atmospheric Pressure:	1010 mbar

6.5.2 Test Setup Diagram:



6.5.3 Test Data:

Please Refer to Appendix for Details.

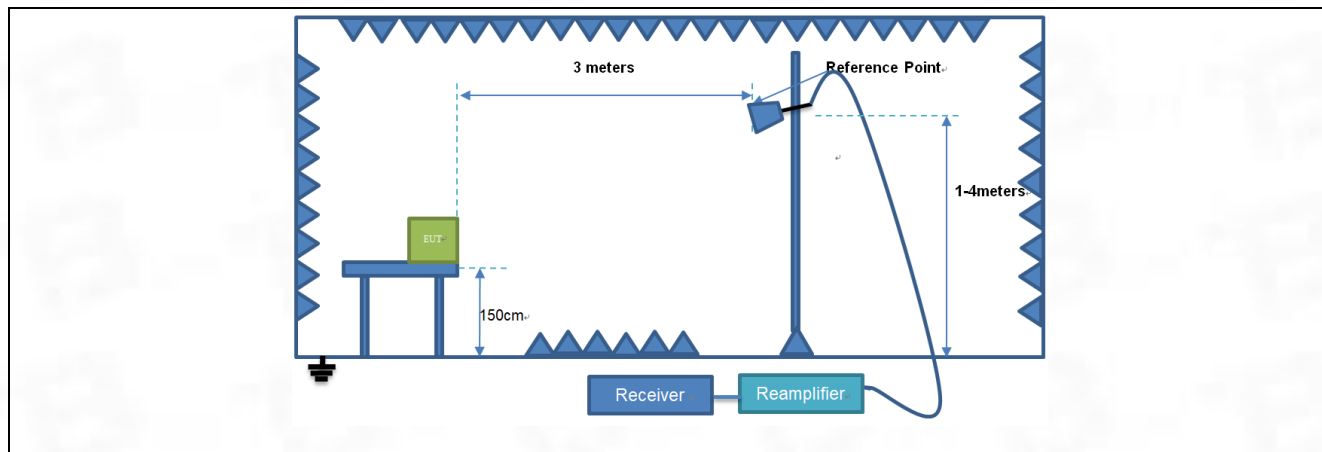
6.6 Band edge emissions (Radiated)

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 C63.10-2013 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.			
Procedure:	ANSI C63.10-2013 section 6.10.5.2		

6.6.1 E.U.T. Operation:

Operating Environment:	
Temperature:	24 °C
Humidity:	52.2 %
Atmospheric Pressure:	1010 mbar

6.6.2 Test Setup Diagram:



6.6.3 Test Data:

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	P/F
1	2310.000	83.58	-31.79	51.79	74.00	-22.21	peak	P
2	2390.000	84.03	-31.90	52.13	74.00	-21.87	peak	P
3	2400.000	84.71	-31.96	52.75	74.00	-21.25	peak	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	P/F
1	2310.000	83.75	-31.70	52.05	74.00	-21.95	peak	P
2	2390.000	84.20	-31.81	52.39	74.00	-21.61	peak	P
3	2400.000	84.88	-31.87	53.01	74.00	-20.99	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	P/F
1	2483.500	85.31	-31.51	53.80	74.00	-20.20	peak	P
2	2500.000	83.34	-31.62	51.72	74.00	-22.28	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	P/F
1	2483.500	84.92	-31.57	53.35	74.00	-20.65	peak	P
2	2500.000	82.95	-31.68	51.27	74.00	-22.73	peak	P

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

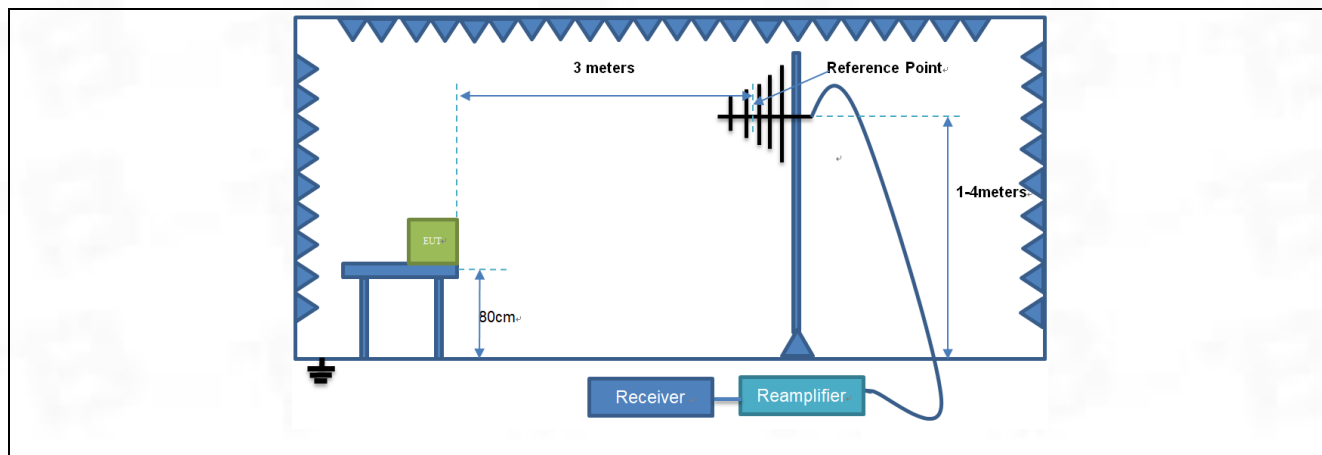
6.7 Emissions in frequency bands (below 1GHz)

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 C63.10-2013 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.			
Procedure:	ANSI C63.10-2013 section 6.6.4		

6.7.1 E.U.T. Operation:

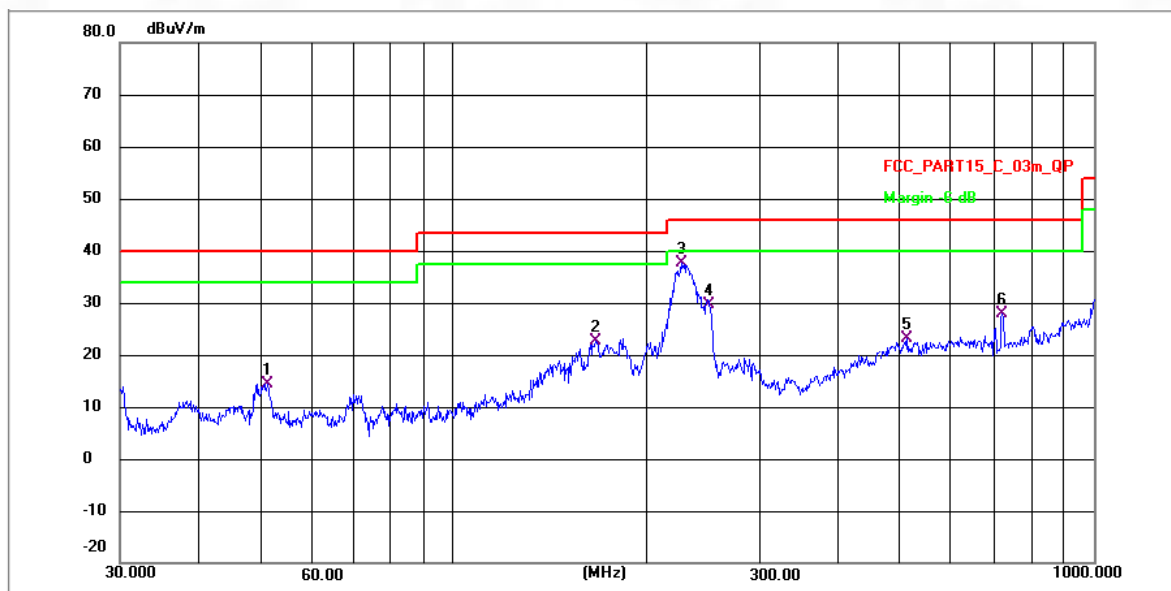
Operating Environment:	
Temperature:	23.3 °C
Humidity:	52.7 %
Atmospheric Pressure:	1010 mbar

6.7.2 Test Setup Diagram:



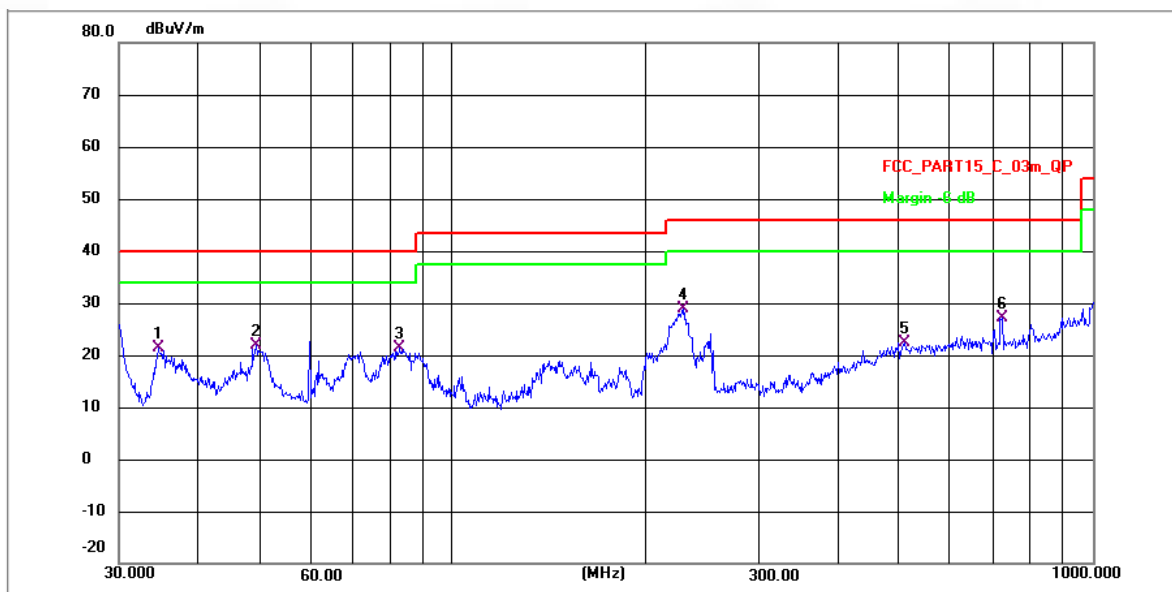
6.7.3 Test Data:

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



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	51.0314	32.62	-18.26	14.36	40.00	-25.64	QP	P
2	166.0680	39.49	-16.76	22.73	43.50	-20.77	QP	P
3 *	226.8936	54.13	-16.43	37.70	46.00	-8.30	QP	P
4	250.7404	45.99	-16.24	29.75	46.00	-16.25	QP	P
5	512.7334	34.62	-11.53	23.09	46.00	-22.91	QP	P
6	720.4616	51.65	-23.66	27.99	46.00	-18.01	QP	P

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



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	34.6385	41.93	-20.64	21.29	40.00	-18.71	QP	P
2	49.2730	42.17	-20.33	21.84	40.00	-18.16	QP	P
3	82.7932	40.24	-18.84	21.40	40.00	-18.60	QP	P
4 *	228.8914	43.53	-14.54	28.99	46.00	-17.01	QP	P
5	508.2582	33.62	-11.17	22.45	46.00	-23.55	QP	P
6	722.9924	50.87	-23.69	27.18	46.00	-18.82	QP	P

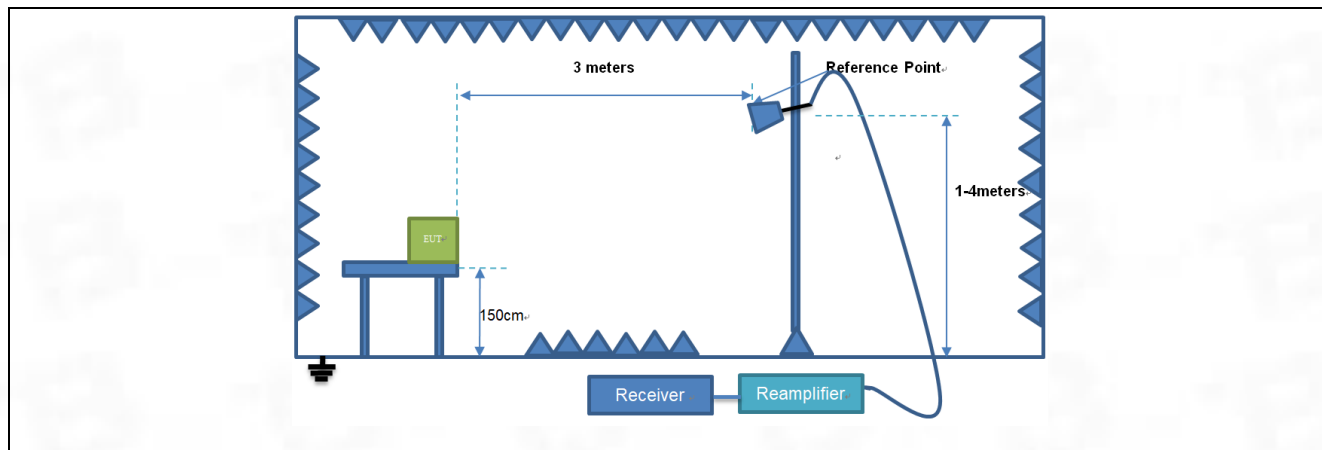
6.8 Emissions in frequency bands (above 1GHz)

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 Method:	ANSI C63.10-2013 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.			
Procedure:	ANSI C63.10-2013 section 6.6.4		

6.8.1 E.U.T. Operation:

Operating Environment:	
Temperature:	24 °C
Humidity:	52.2 %
Atmospheric Pressure:	1010 mbar

6.8.2 Test Setup Diagram:



6.8.3 Test Data:

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	P/F
1	1244.584	68.59	-30.32	38.27	74.00	-35.73	peak	P
2	3418.750	76.06	-29.13	46.93	74.00	-27.07	peak	P
3	5234.733	75.71	-27.17	48.54	74.00	-25.46	peak	P
4	6717.761	76.67	-25.18	51.49	74.00	-22.51	peak	P
5	9538.699	74.52	-23.28	51.24	74.00	-22.76	peak	P
6 *	13349.879	73.78	-21.08	52.70	74.00	-21.30	peak	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	P/F
1	1194.881	69.17	-30.04	39.13	74.00	-34.87	peak	P
2	3418.750	76.06	-29.13	46.93	74.00	-27.07	peak	P
3	5808.773	78.08	-25.95	52.13	74.00	-21.87	peak	P
4	7642.047	77.45	-25.00	52.45	74.00	-21.55	peak	P
5	11374.576	75.88	-23.15	52.73	74.00	-21.27	peak	P
6 *	15695.407	74.71	-21.54	53.17	74.00	-20.83	peak	P

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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	1426.504	66.07	-31.30	34.77	74.00	-39.23	peak	P
2	4632.298	74.12	-28.41	45.71	74.00	-28.29	peak	P
3	7290.357	76.19	-24.84	51.35	74.00	-22.65	peak	P
4	9544.214	74.67	-23.29	51.38	74.00	-22.62	peak	P
5	12621.909	72.77	-21.55	51.22	74.00	-22.78	peak	P
6 *	15033.809	73.09	-20.48	52.61	74.00	-21.39	peak	P

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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	1243.865	66.99	-30.31	36.68	74.00	-37.32	peak	P
2	4329.355	74.21	-28.86	45.35	74.00	-28.65	peak	P
3	6356.951	76.39	-25.36	51.03	74.00	-22.97	peak	P
4	9044.657	76.14	-24.21	51.93	74.00	-22.07	peak	P
5	12013.232	74.09	-22.18	51.91	74.00	-22.09	peak	P
6 *	14337.801	73.87	-21.16	52.71	74.00	-21.29	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	P/F
1	1278.123	67.14	-30.50	36.64	74.00	-37.36	peak	P
2	3383.362	73.90	-29.16	44.74	74.00	-29.26	peak	P
3	4952.145	76.31	-27.51	48.80	74.00	-25.20	peak	P
4	6680.971	76.49	-25.22	51.27	74.00	-22.73	peak	P
5	9456.345	74.61	-23.30	51.31	74.00	-22.69	peak	P
6 *	13438.923	73.88	-21.01	52.87	74.00	-21.13	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	P/F
1	1246.384	68.52	-30.33	38.19	74.00	-35.81	peak	P
2	4610.925	73.70	-28.48	45.22	74.00	-28.78	peak	P
3	6684.834	77.71	-25.21	52.50	74.00	-21.50	peak	P
4 *	9149.834	77.08	-23.98	53.10	74.00	-20.90	peak	P
5	11937.085	75.32	-22.30	53.02	74.00	-20.98	peak	P
6	14994.752	73.36	-20.41	52.95	74.00	-21.05	peak	P

7 Test Setup Photos

Conducted Emission at AC power line



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



Emissions in frequency bands (below 1GHz)

8 EUT Constructional Details (EUT Photos)

Please refer to the test report No. BTF230921R00701

P

Appendix

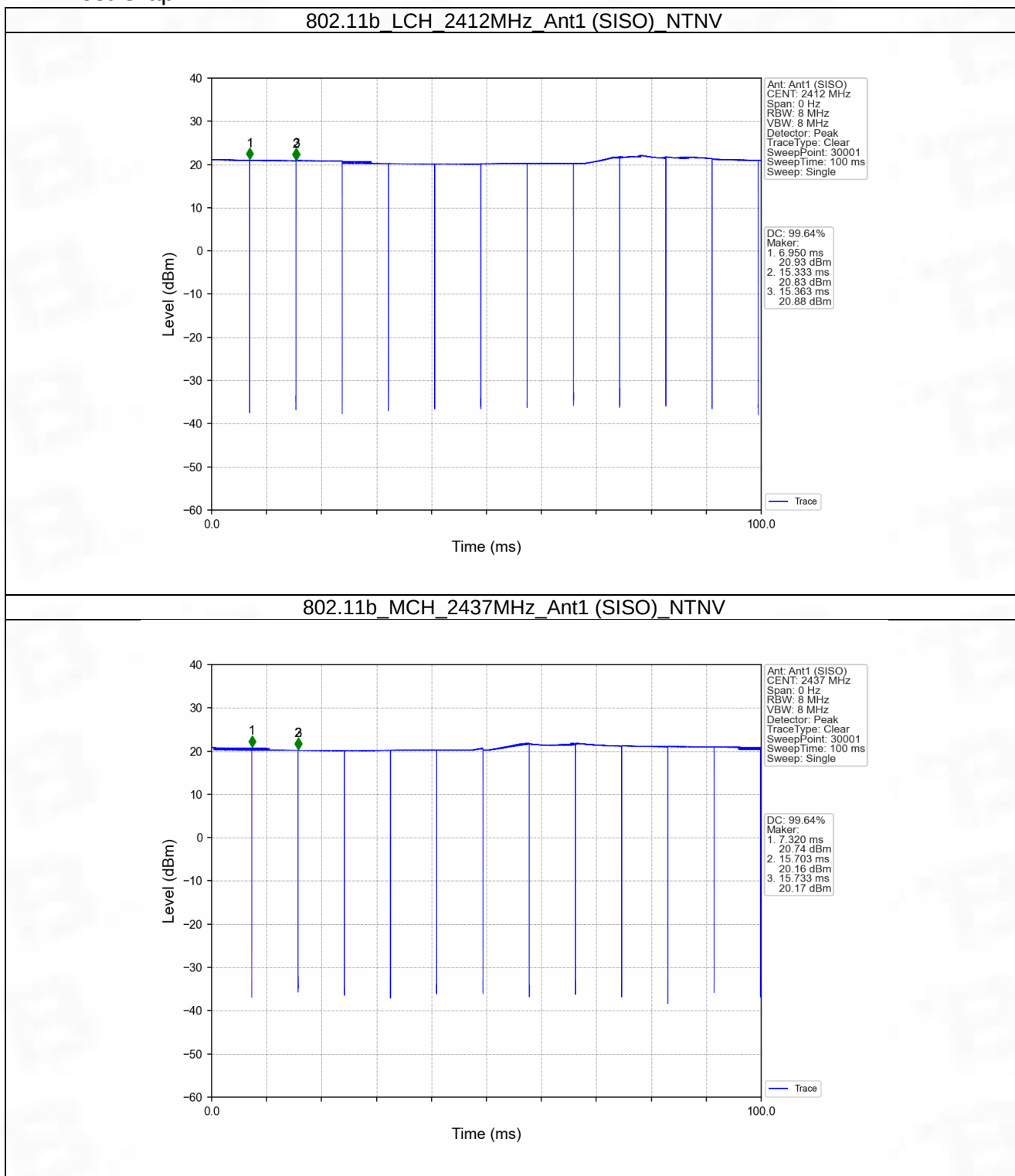
1. Duty Cycle

1.1 Ant1

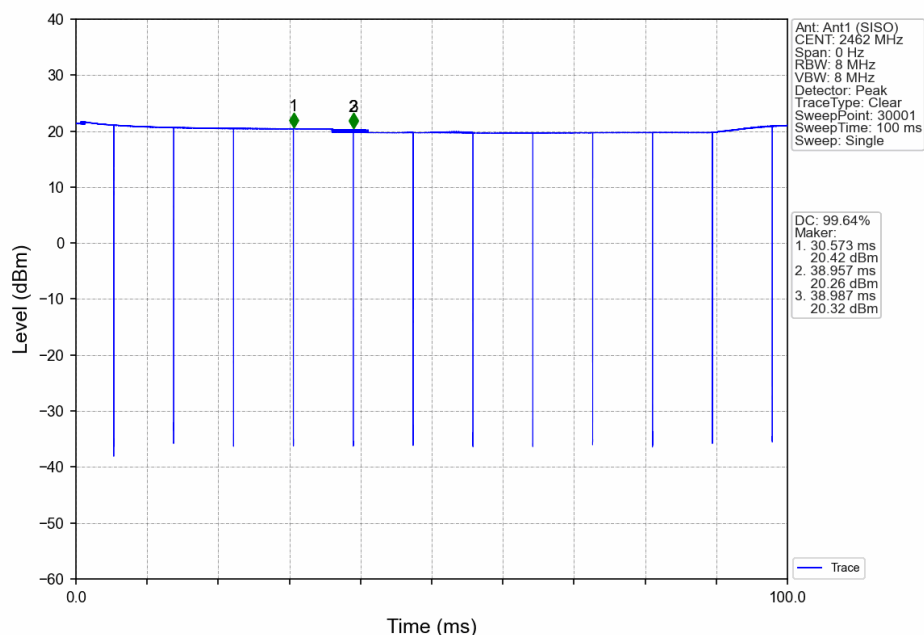
1.1.1 Test Result

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	8.413	99.64	0.02	0.04
		2437	8.383	8.413	99.64	0.02	0.04
		2462	8.384	8.414	99.64	0.02	0.04
802.11g	SISO	2412	1.394	1.428	97.62	0.10	0.03
		2437	1.395	1.428	97.69	0.10	0.03
		2462	1.394	1.428	97.62	0.10	0.03
802.11n (HT20)	SISO	2412	1.302	1.336	97.46	0.11	0.03
		2437	1.302	1.336	97.46	0.11	0.03
		2462	1.302	1.336	97.46	0.11	0.07
802.11n (HT40)	SISO	2422	0.650	0.683	95.17	0.22	0.03
		2437	0.649	0.683	95.02	0.22	0.03
		2452	0.649	0.683	95.02	0.22	0.03

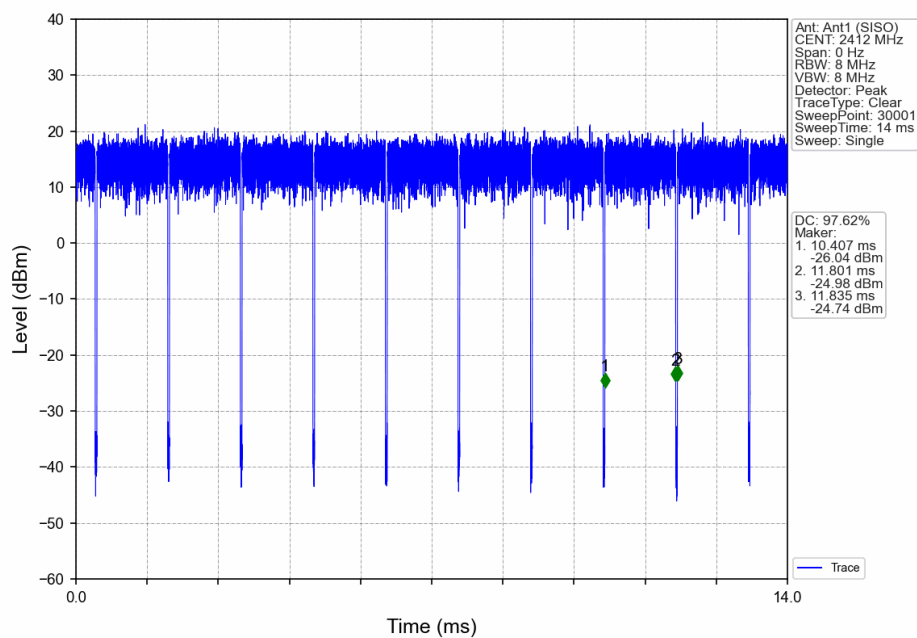
1.1.2 Test Graph



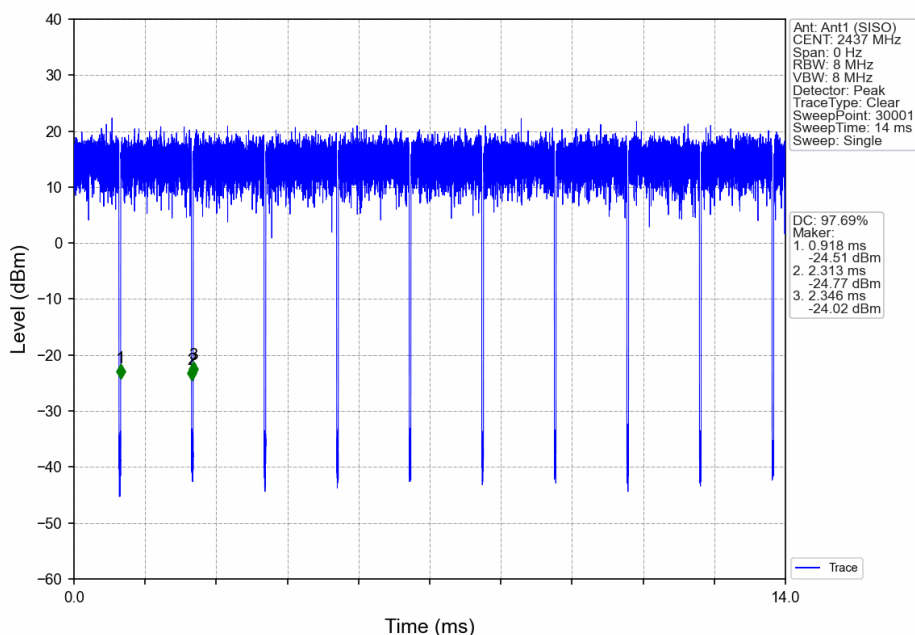
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



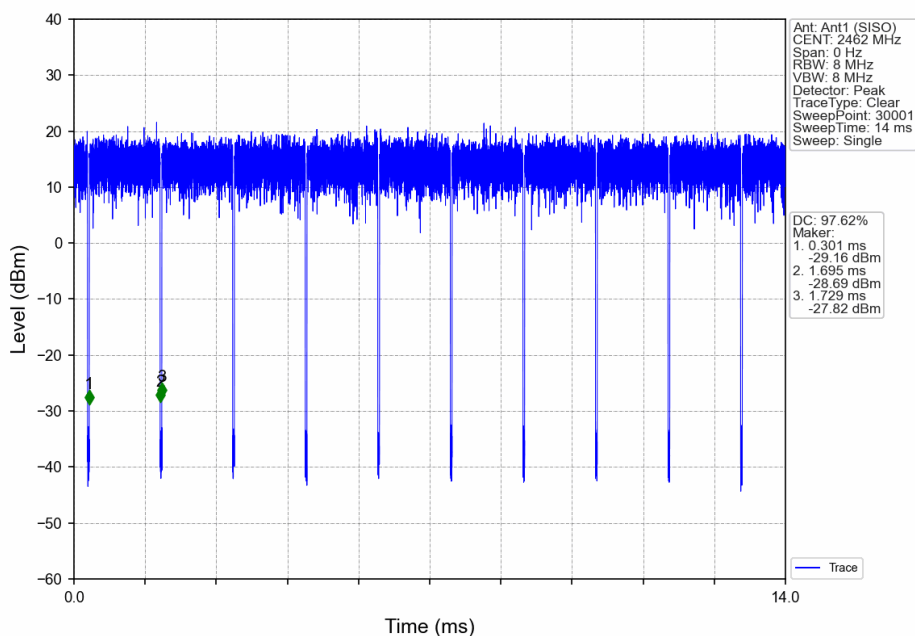
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



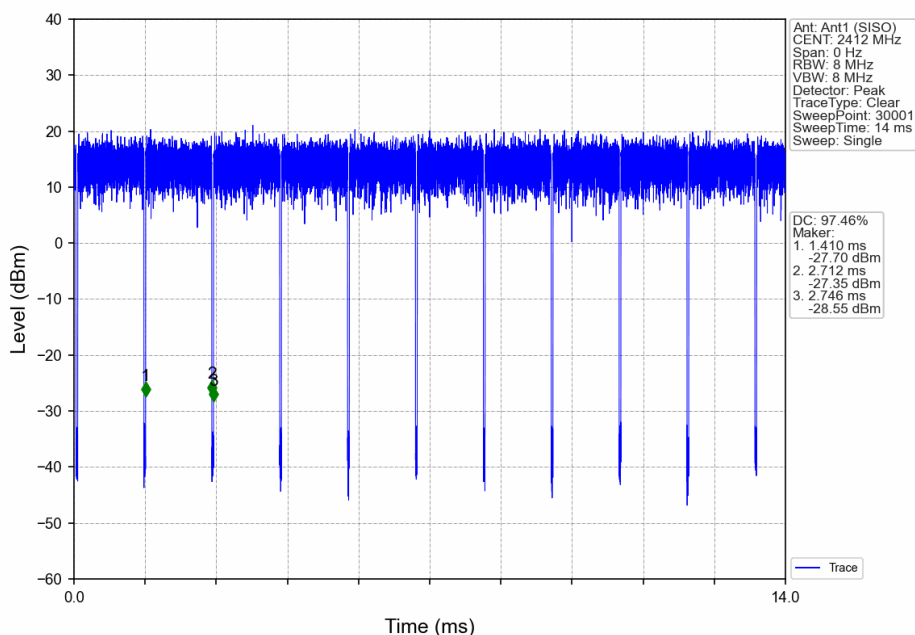
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



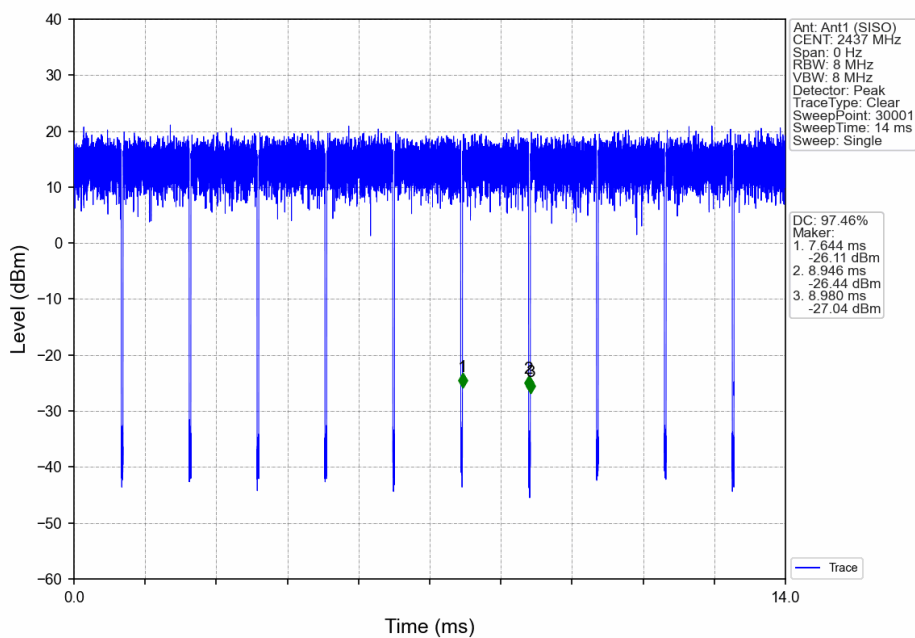
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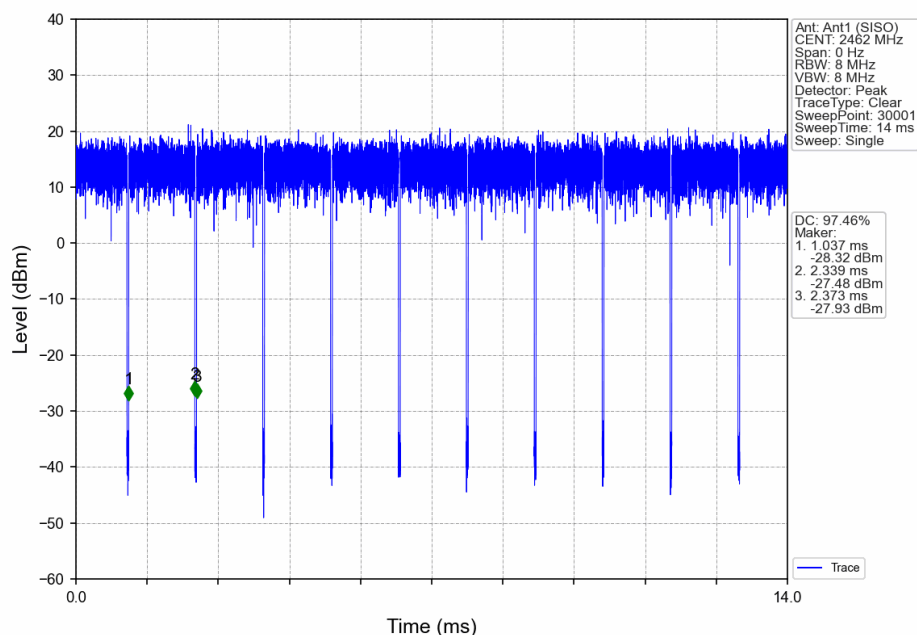
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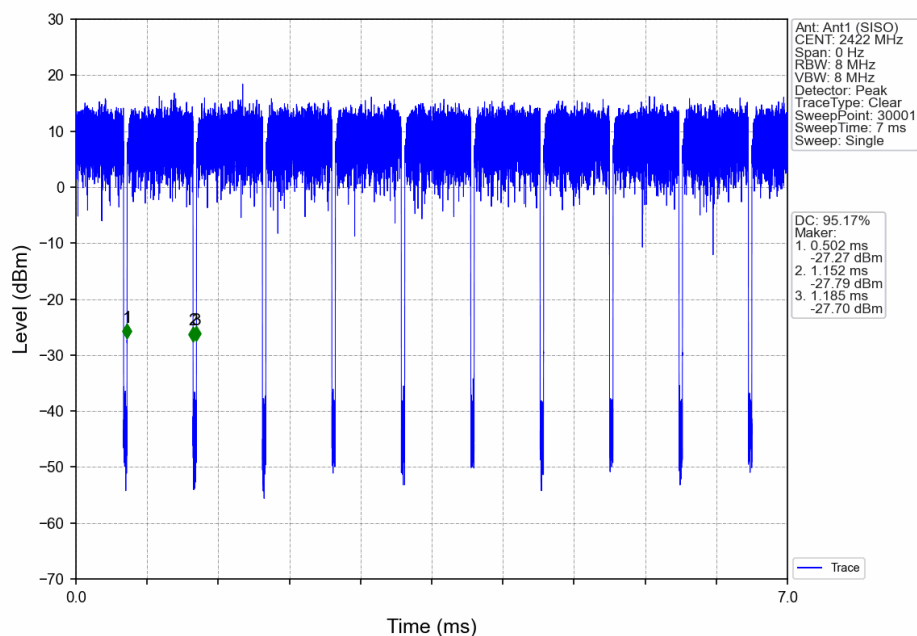
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



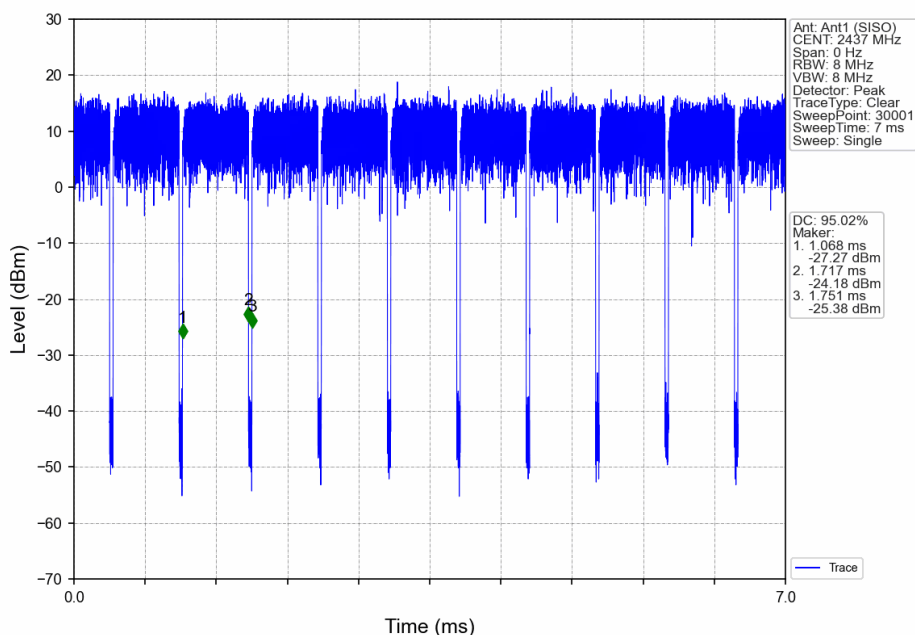
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



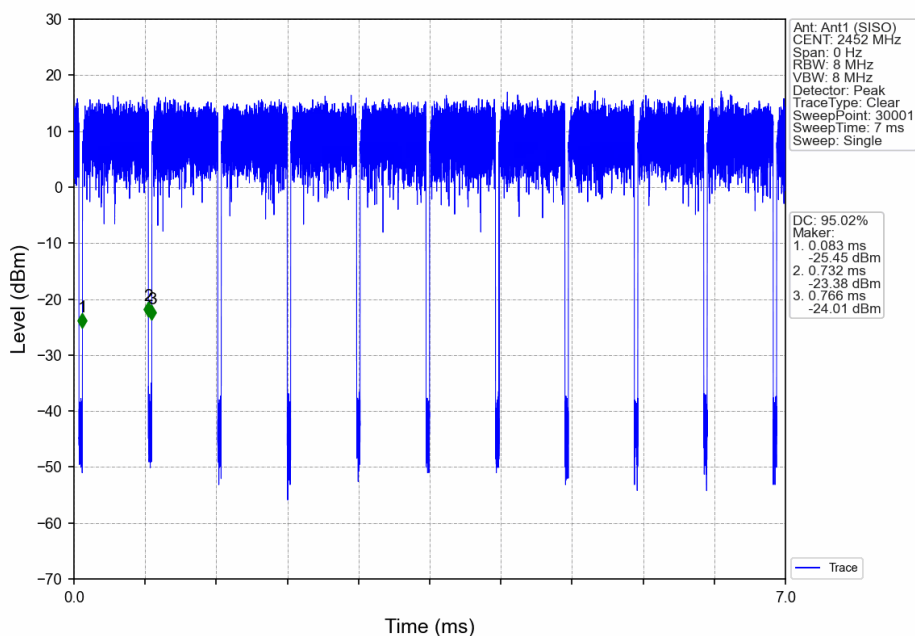
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



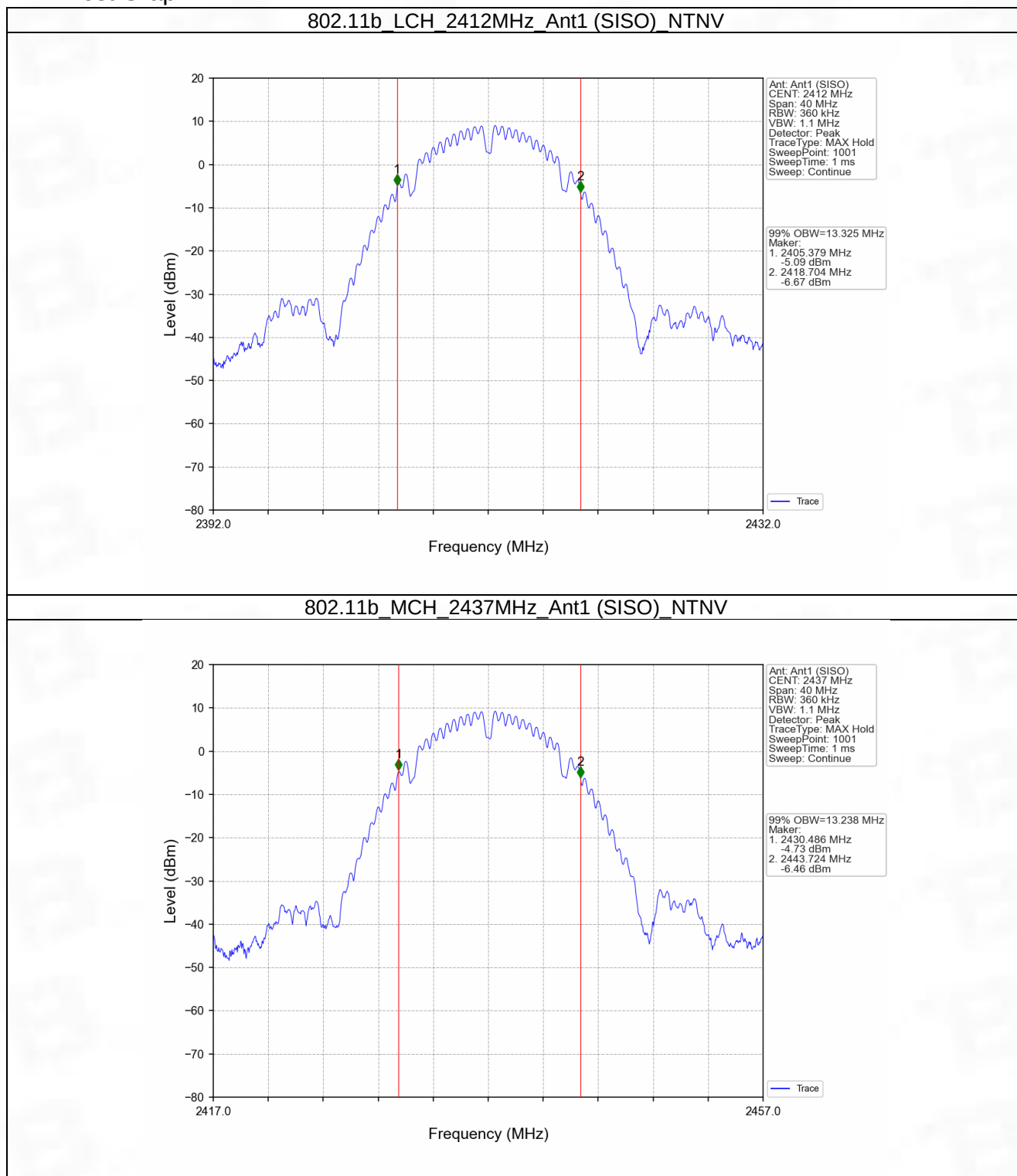
2. Bandwidth

2.1 OBW

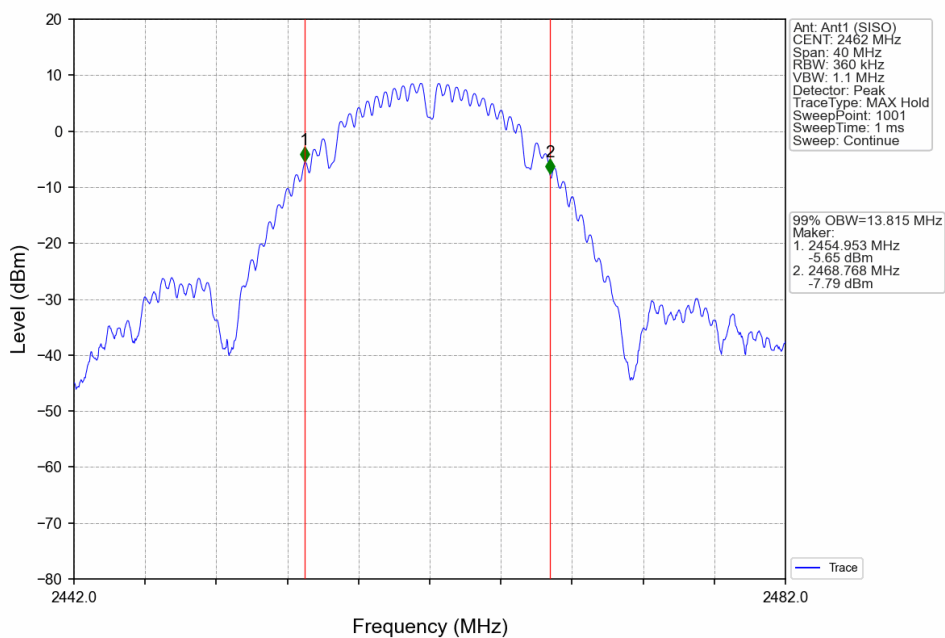
2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11b	SISO	2412	1	13.325	Pass
		2437	1	13.238	Pass
		2462	1	13.815	Pass
802.11g	SISO	2412	1	17.596	Pass
		2437	1	17.632	Pass
		2462	1	17.816	Pass
802.11n (HT20)	SISO	2412	1	18.480	Pass
		2437	1	18.469	Pass
		2462	1	18.833	Pass
802.11n (HT40)	SISO	2422	1	37.065	Pass
		2437	1	36.310	Pass
		2452	1	36.743	Pass

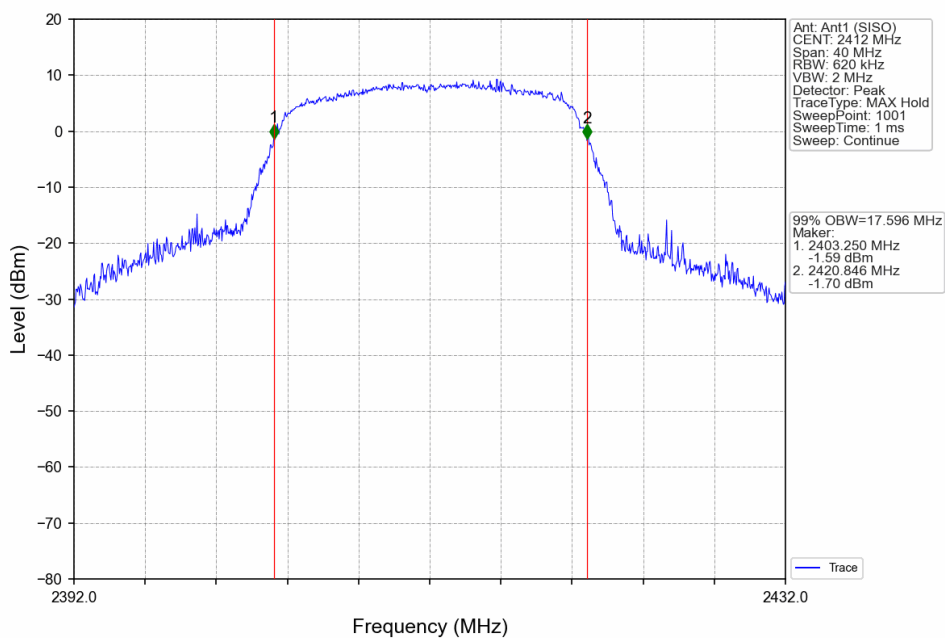
2.1.2 Test Graph



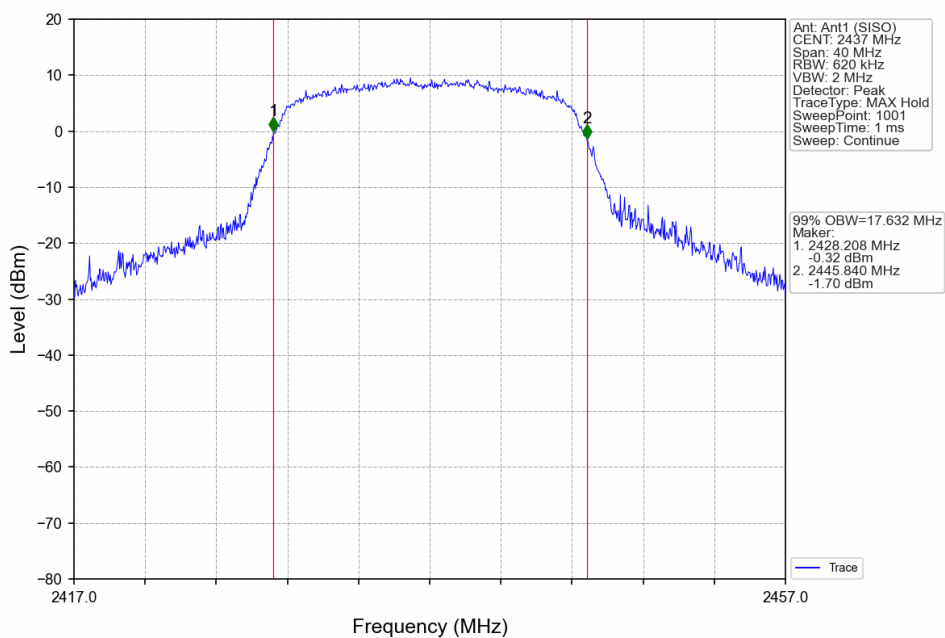
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



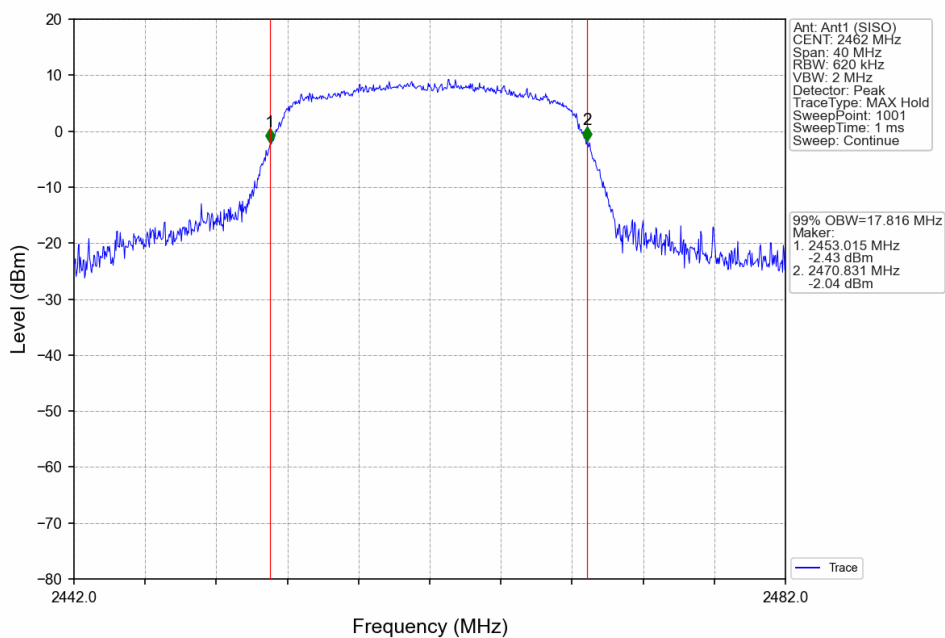
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



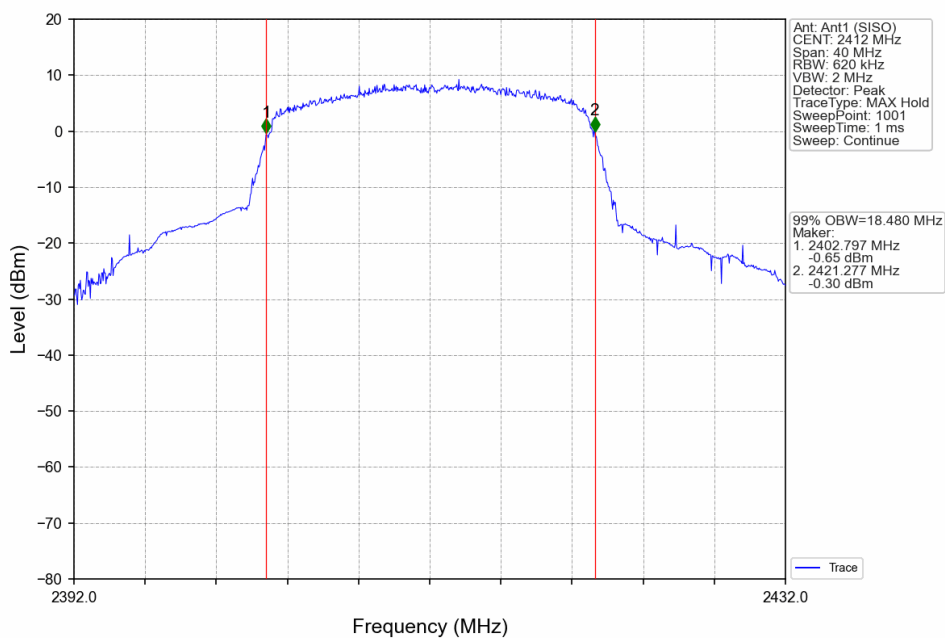
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



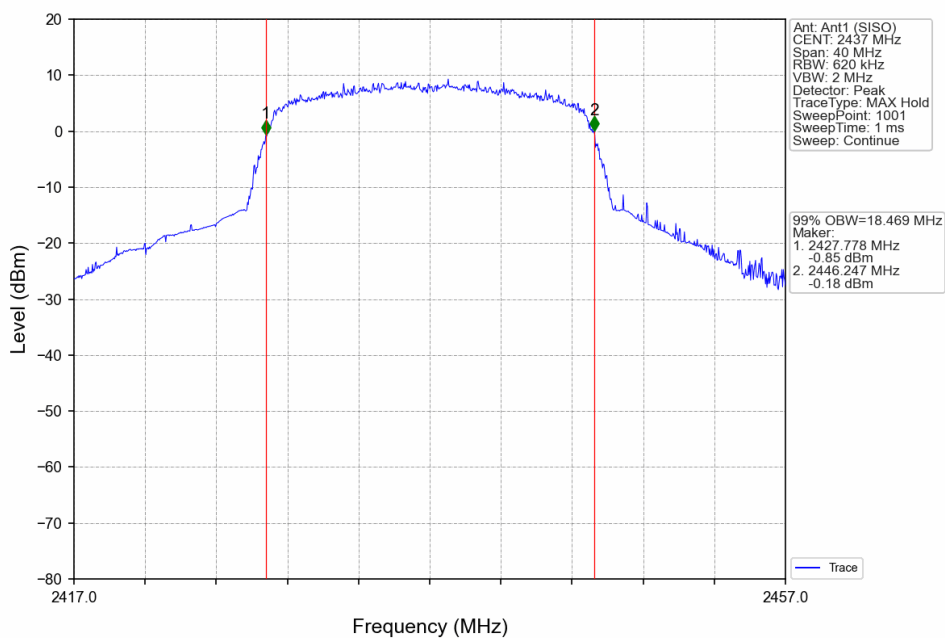
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



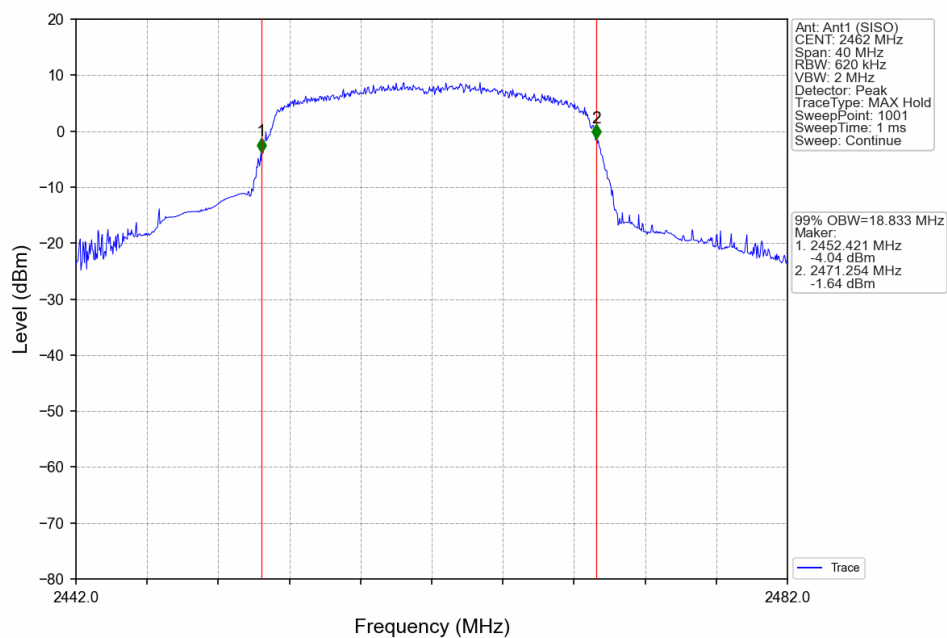
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



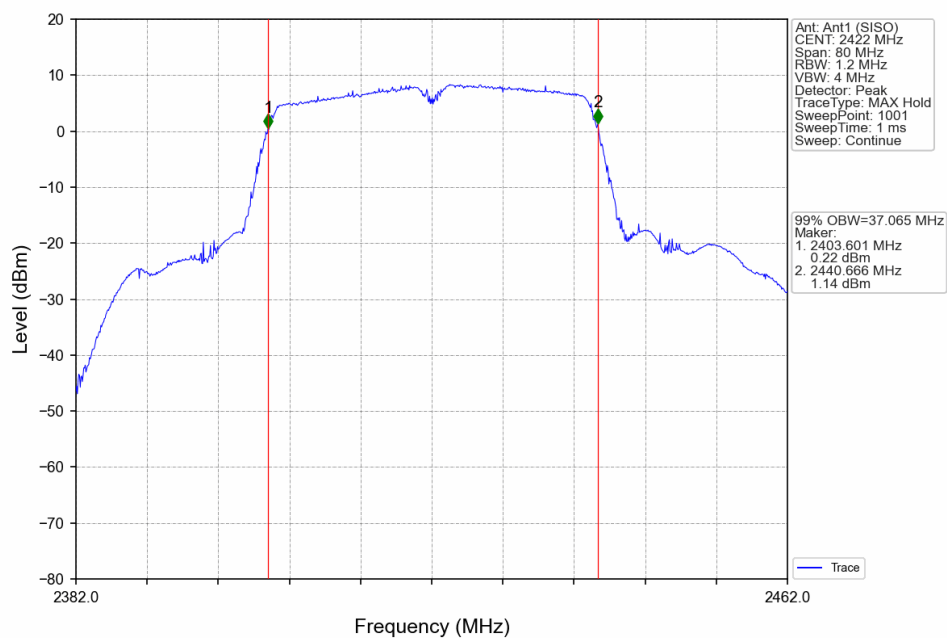
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



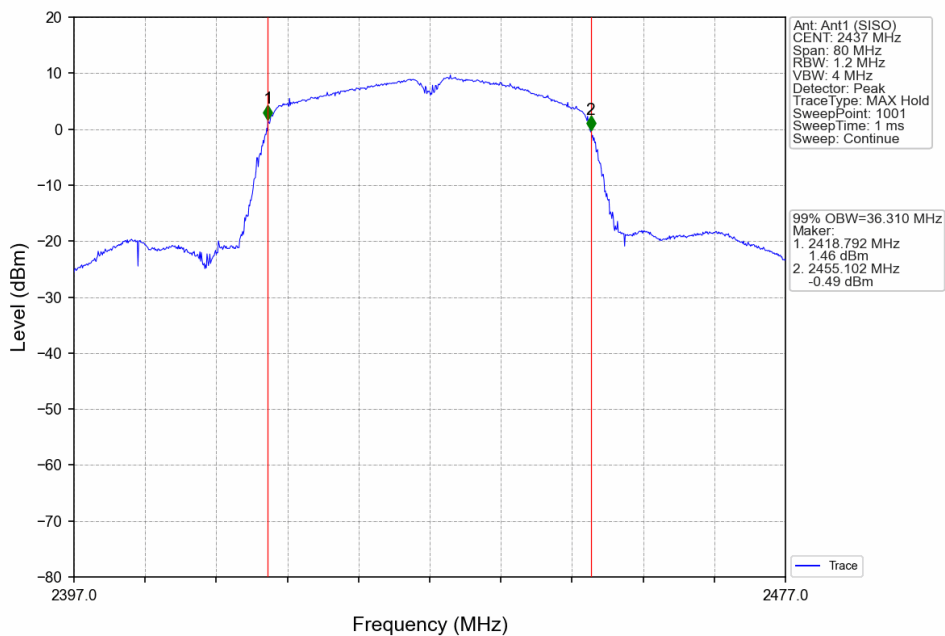
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



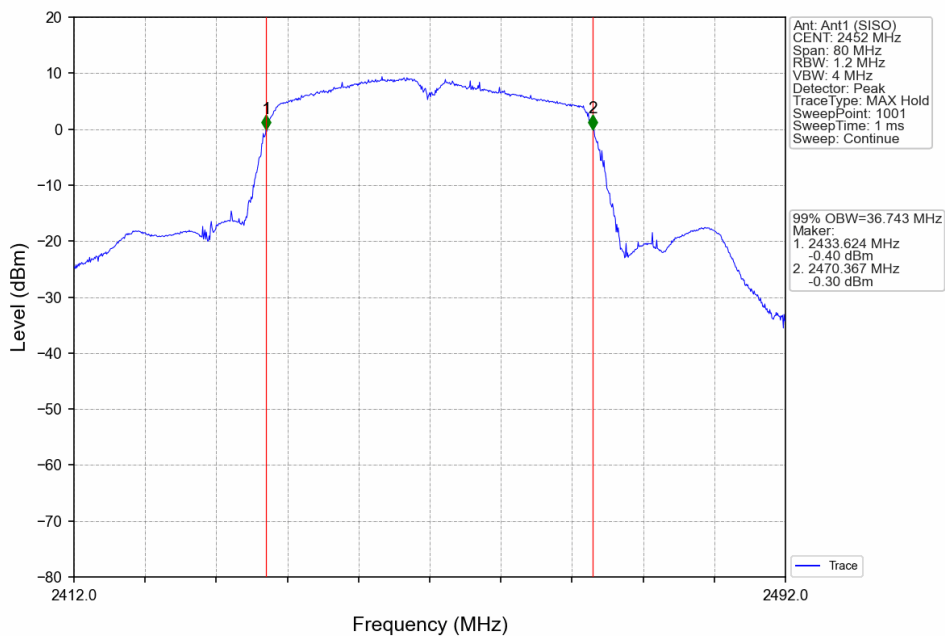
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV

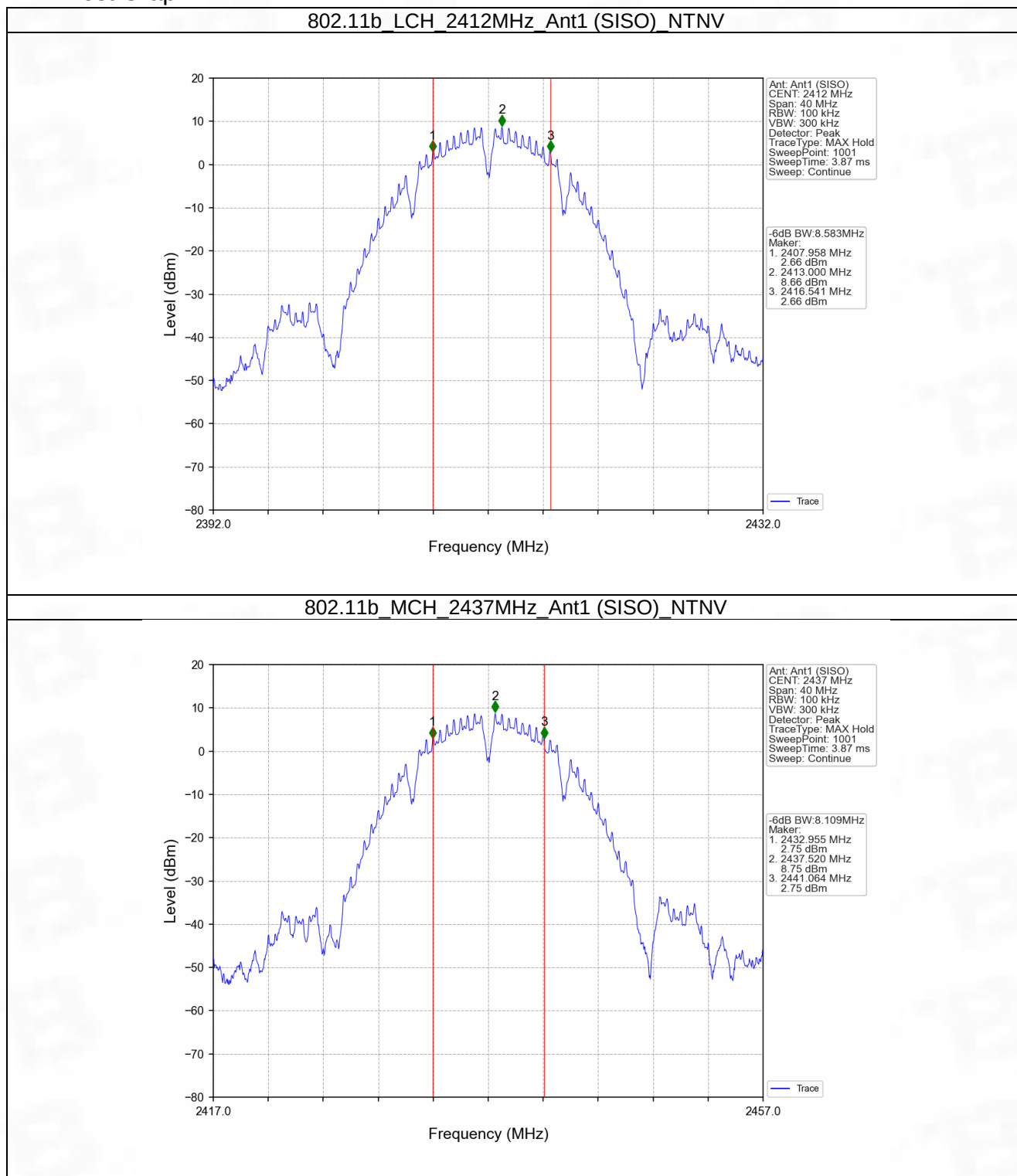


2.2 6dB BW

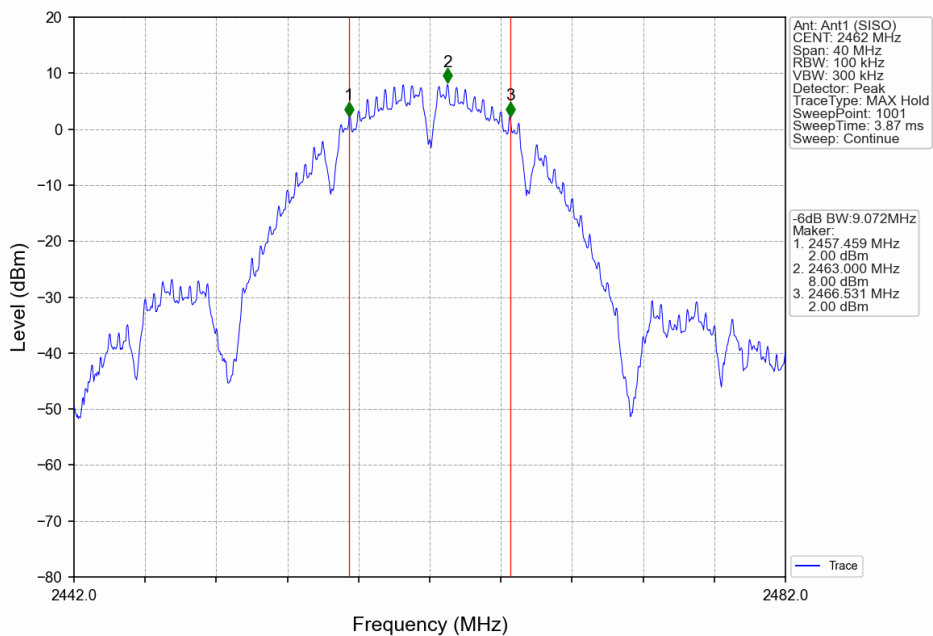
2.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	8.583	≥ 0.5	Pass
		2437	1	8.109	≥ 0.5	Pass
		2462	1	9.072	≥ 0.5	Pass
802.11g	SISO	2412	1	15.163	≥ 0.5	Pass
		2437	1	15.167	≥ 0.5	Pass
		2462	1	15.174	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	15.139	≥ 0.5	Pass
		2437	1	15.168	≥ 0.5	Pass
		2462	1	15.476	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	35.492	≥ 0.5	Pass
		2437	1	33.850	≥ 0.5	Pass
		2452	1	35.110	≥ 0.5	Pass

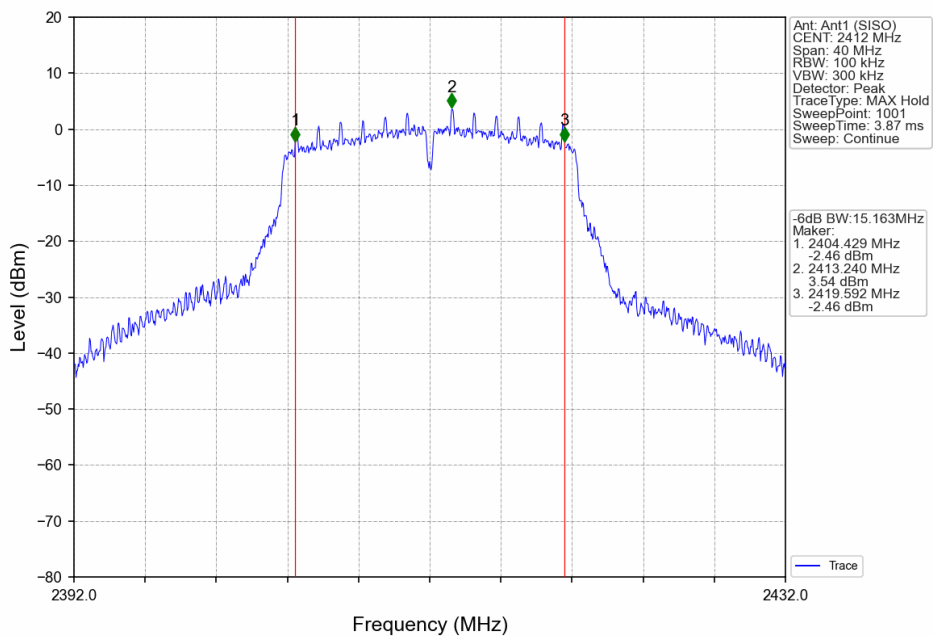
2.2.2 Test Graph



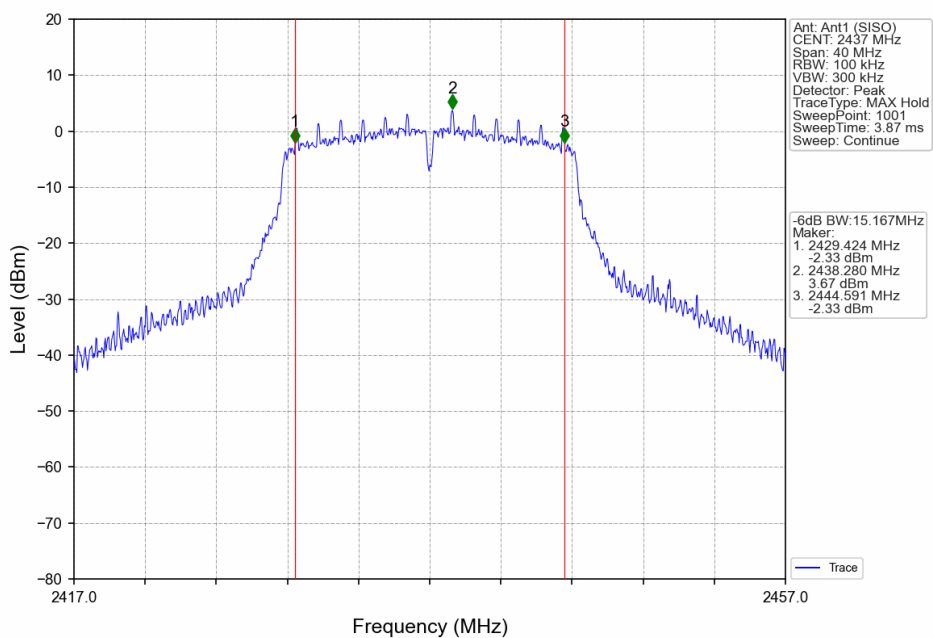
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



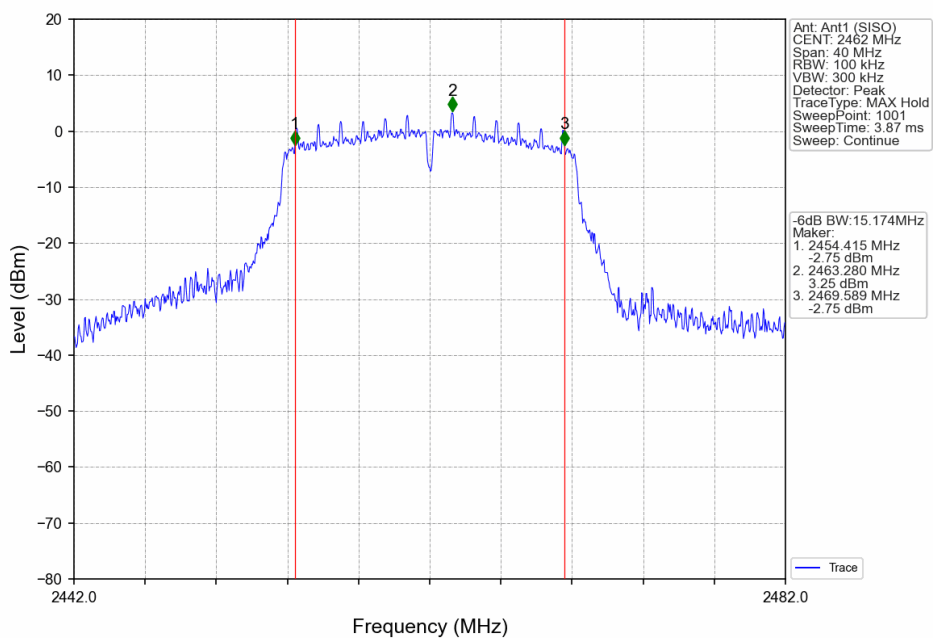
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



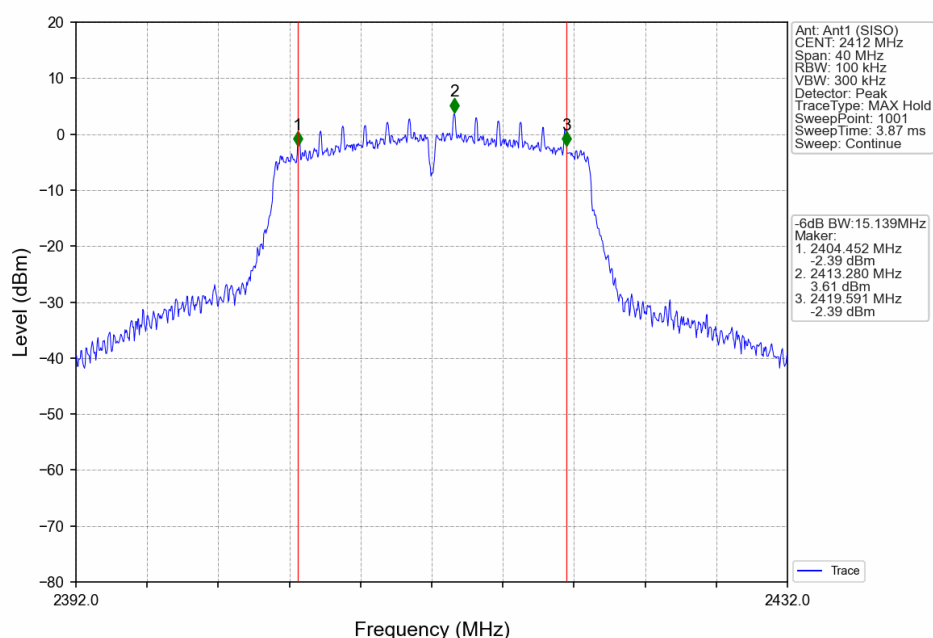
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



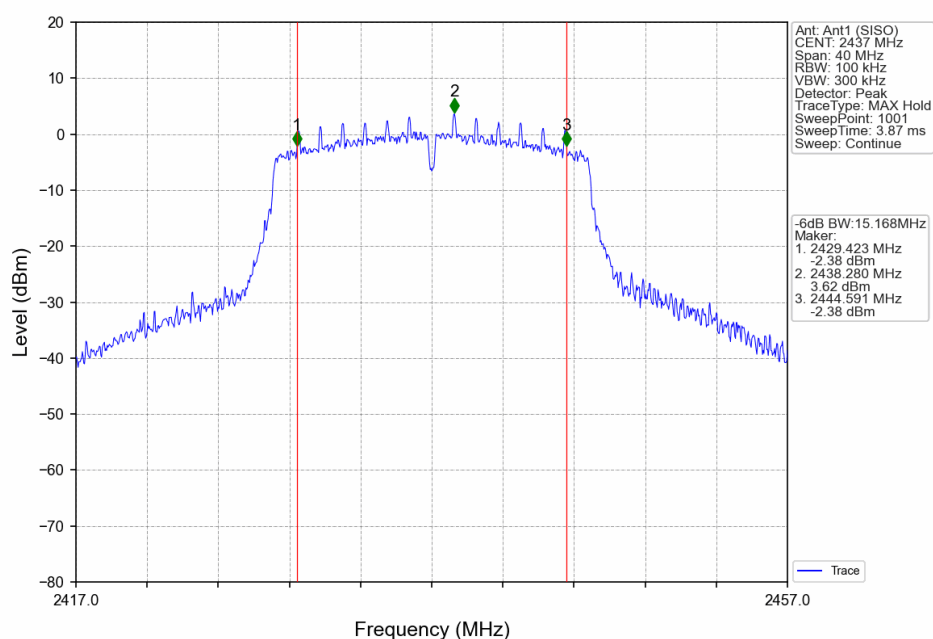
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



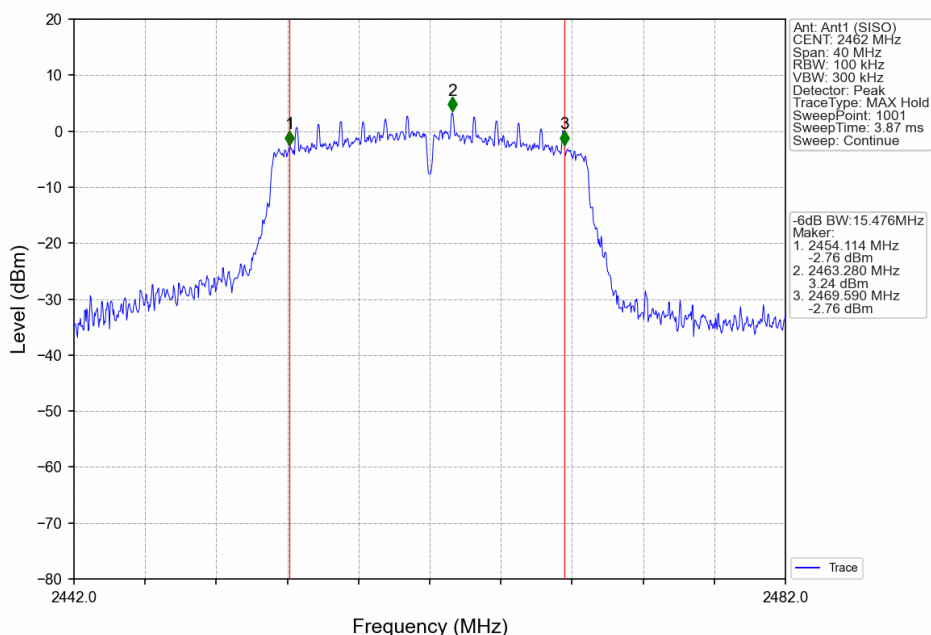
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



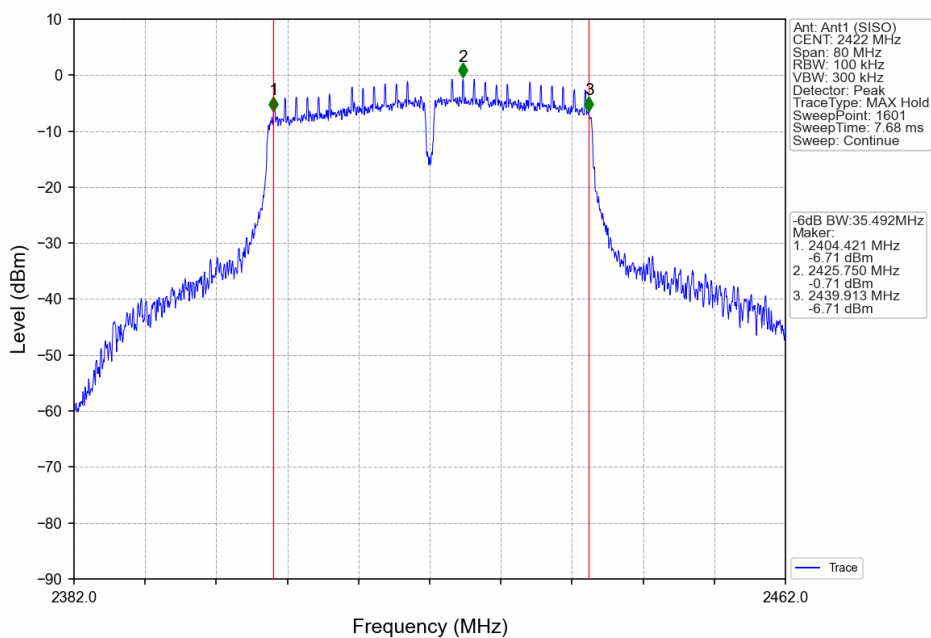
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



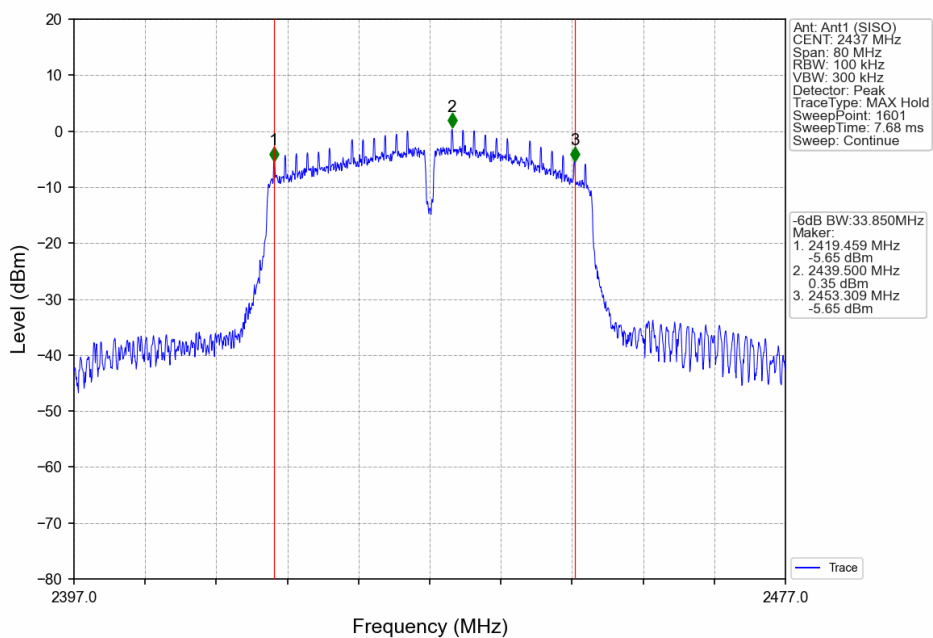
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



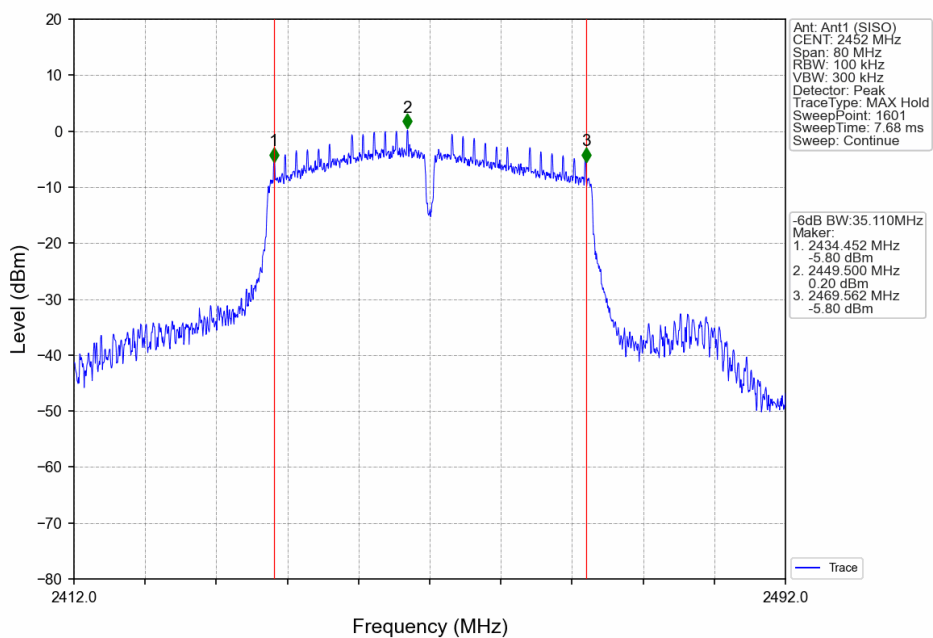
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



3. Maximum Conducted Output Power

3.1 Power

3.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	19.32	<=30	Pass
		2437	19.34	<=30	Pass
		2462	19.12	<=30	Pass
802.11g	SISO	2412	21.12	<=30	Pass
		2437	21.29	<=30	Pass
		2462	21.07	<=30	Pass
802.11n (HT20)	SISO	2412	20.94	<=30	Pass
		2437	21.13	<=30	Pass
		2462	20.71	<=30	Pass
802.11n (HT40)	SISO	2422	20.53	<=30	Pass
		2437	20.77	<=30	Pass
		2452	20.55	<=30	Pass

Note1: Antenna Gain: Ant1: 0.00dBi;

4. Maximum Power Spectral Density

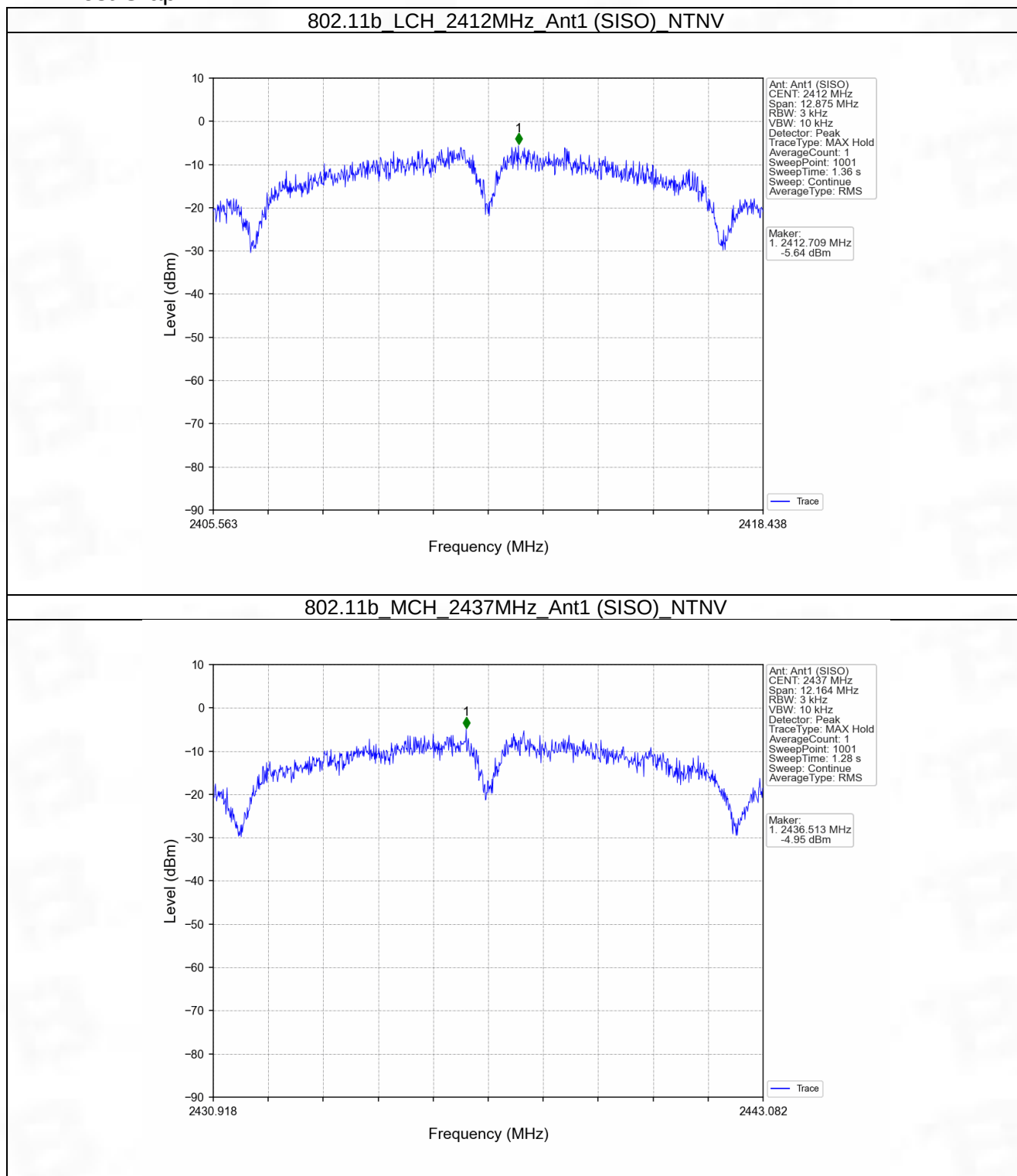
4.1 PSD

4.1.1 Test Result

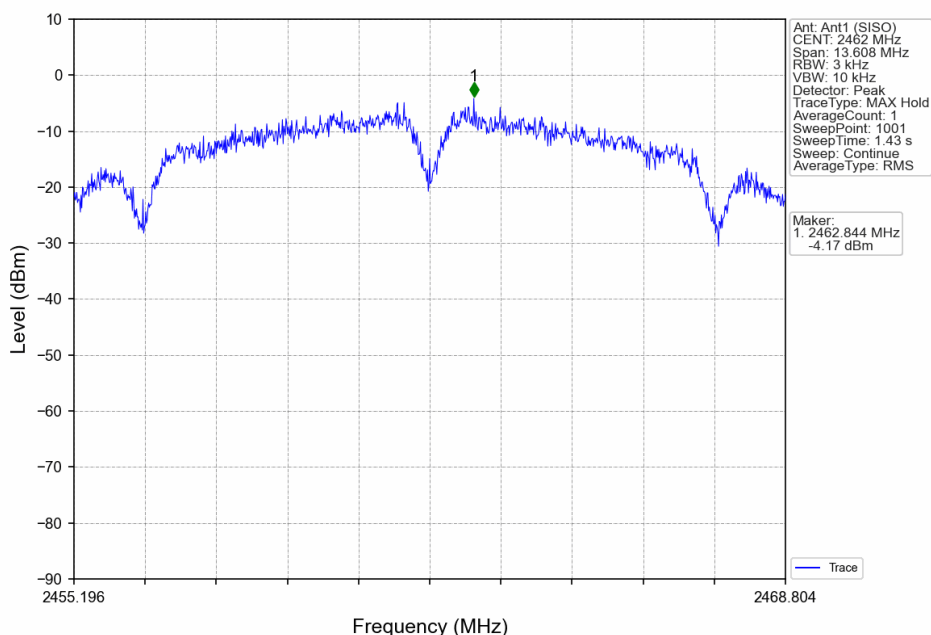
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	-5.64	<=8	Pass
		2437	-4.95	<=8	Pass
		2462	-4.17	<=8	Pass
802.11g	SISO	2412	-10.37	<=8	Pass
		2437	-10.11	<=8	Pass
		2462	-9.72	<=8	Pass
802.11n (HT20)	SISO	2412	-10.46	<=8	Pass
		2437	-10.96	<=8	Pass
		2462	-11.07	<=8	Pass
802.11n (HT40)	SISO	2422	-13.86	<=8	Pass
		2437	-14.25	<=8	Pass
		2452	-14.55	<=8	Pass

Note1: Antenna Gain: Ant1: 0.00dBi;

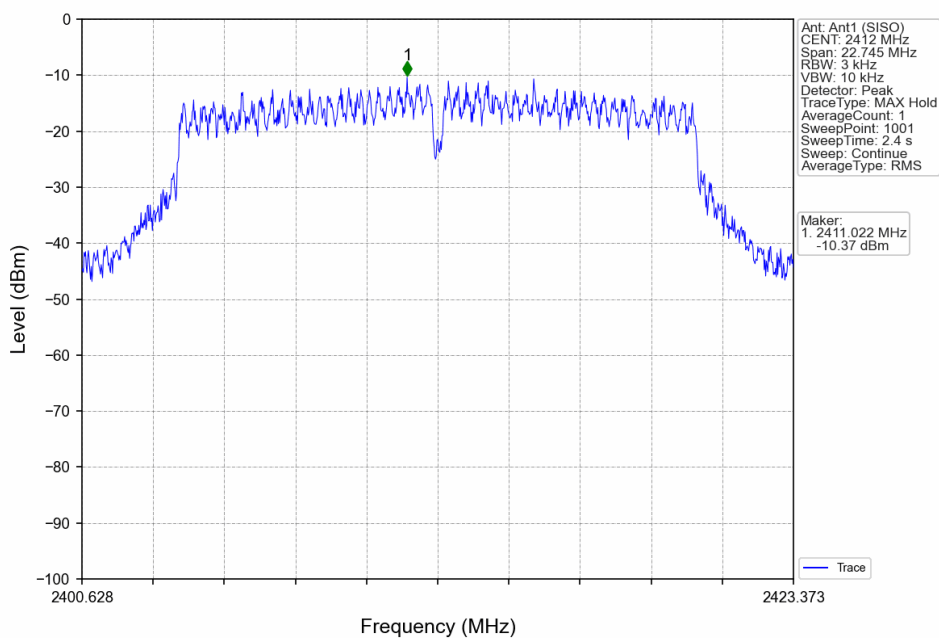
4.1.2 Test Graph



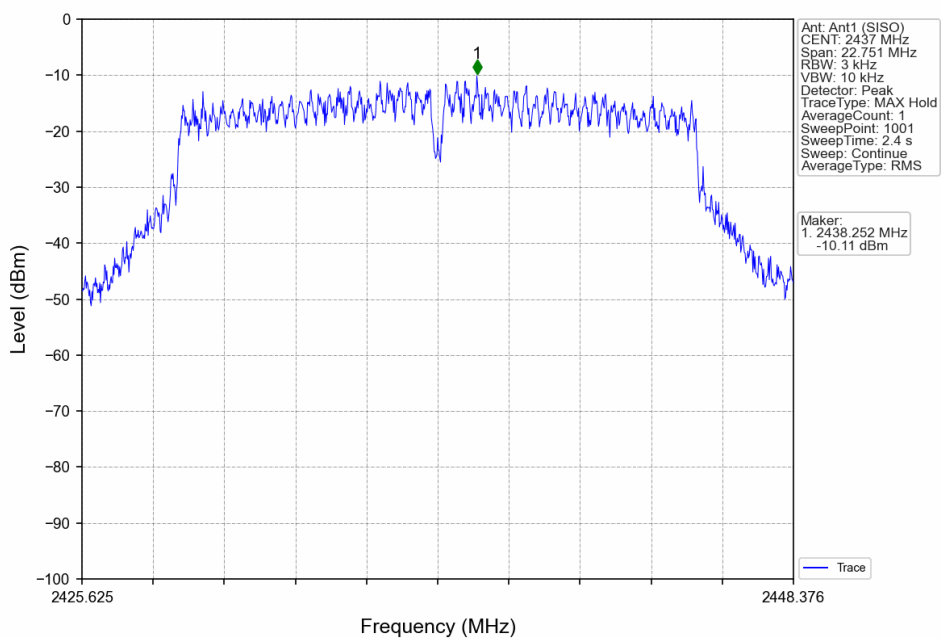
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



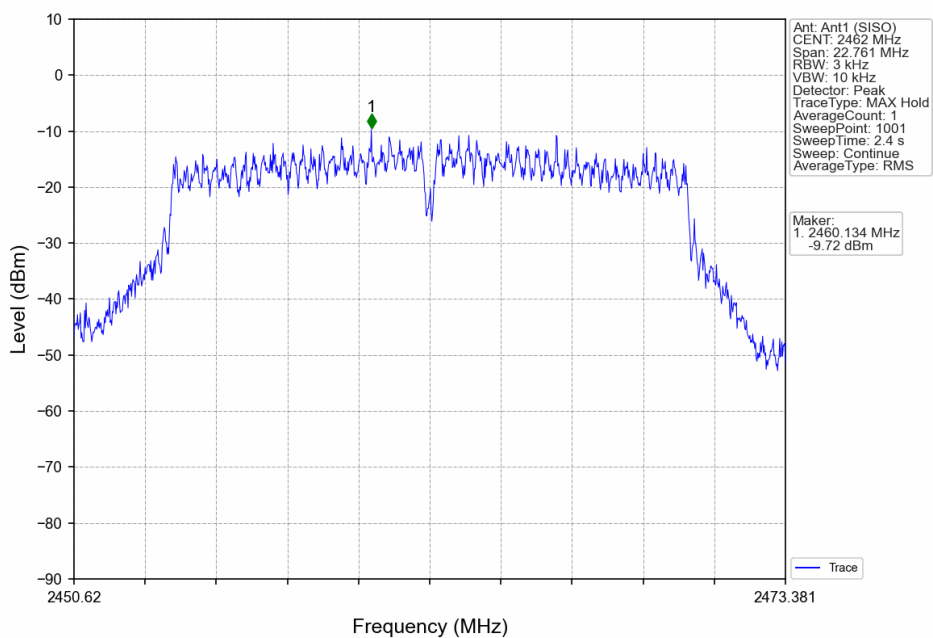
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



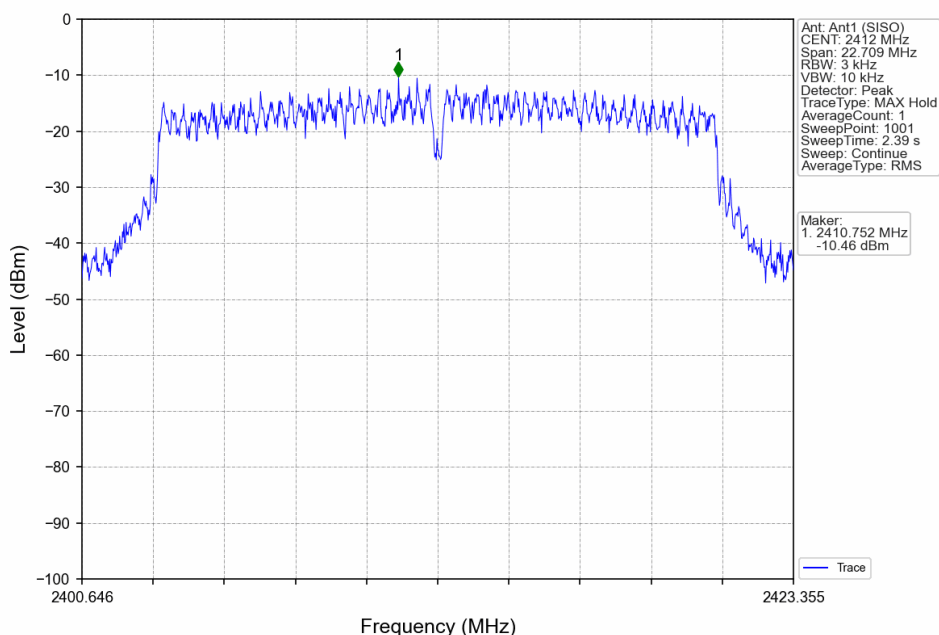
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



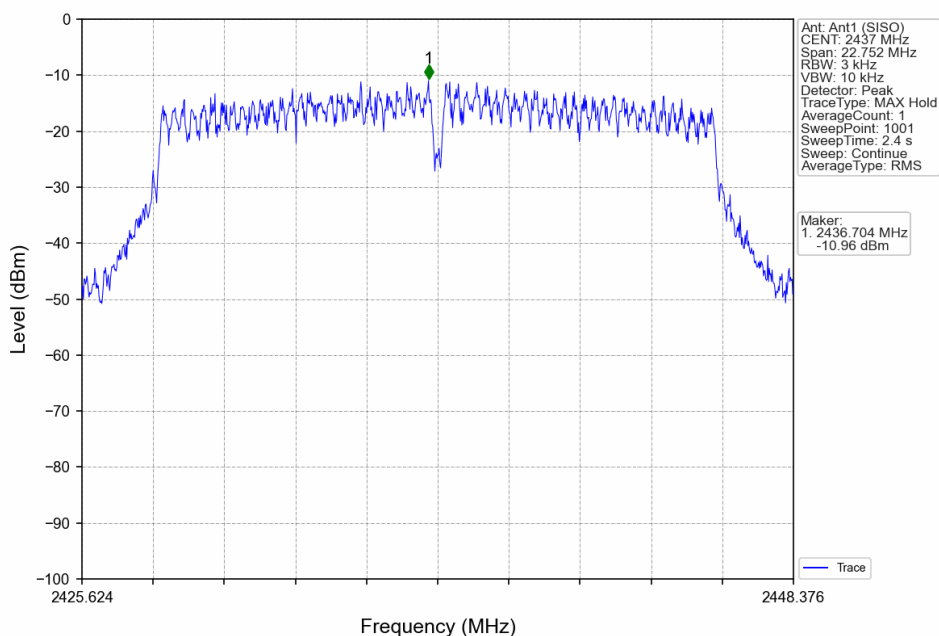
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



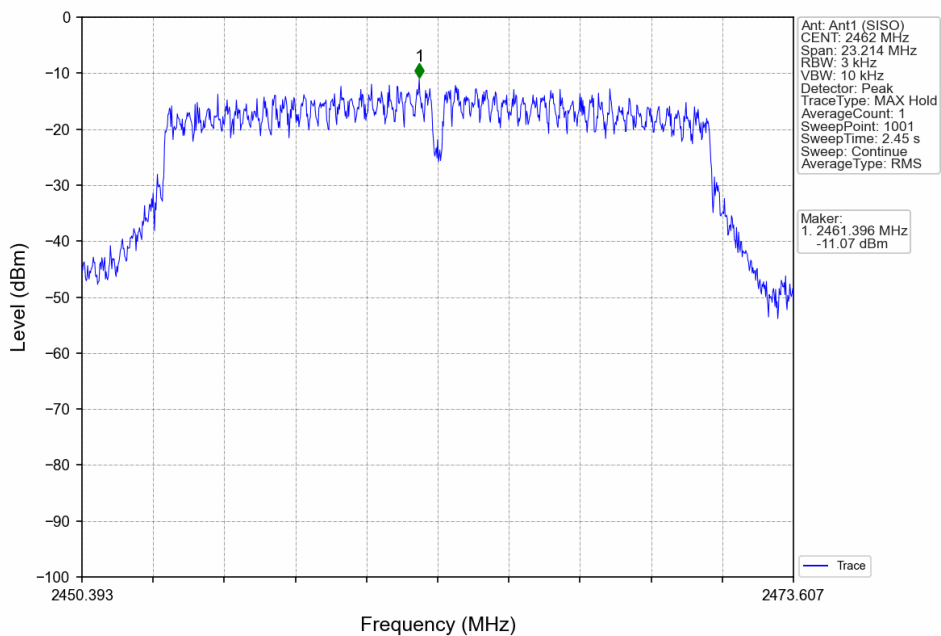
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



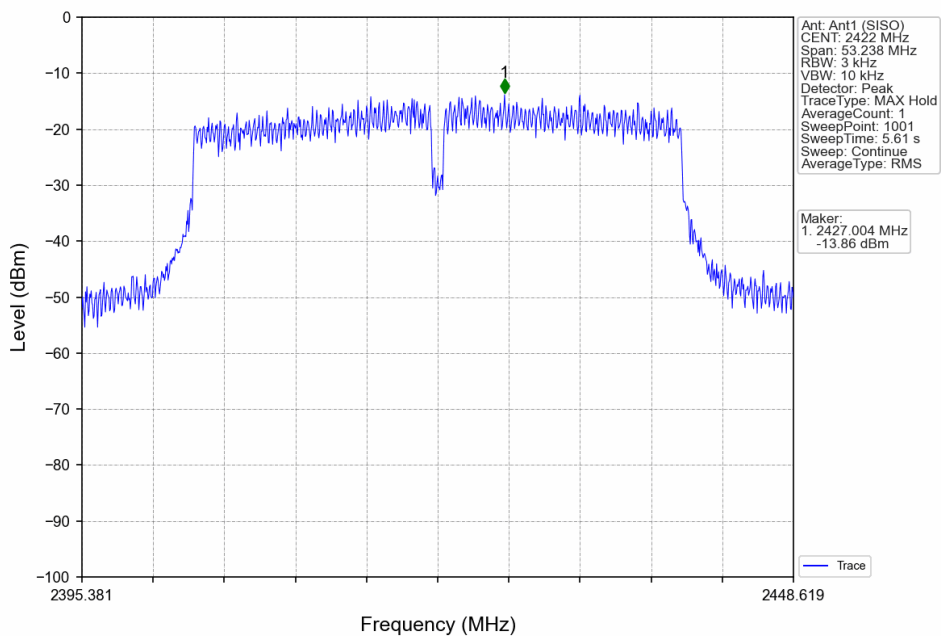
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



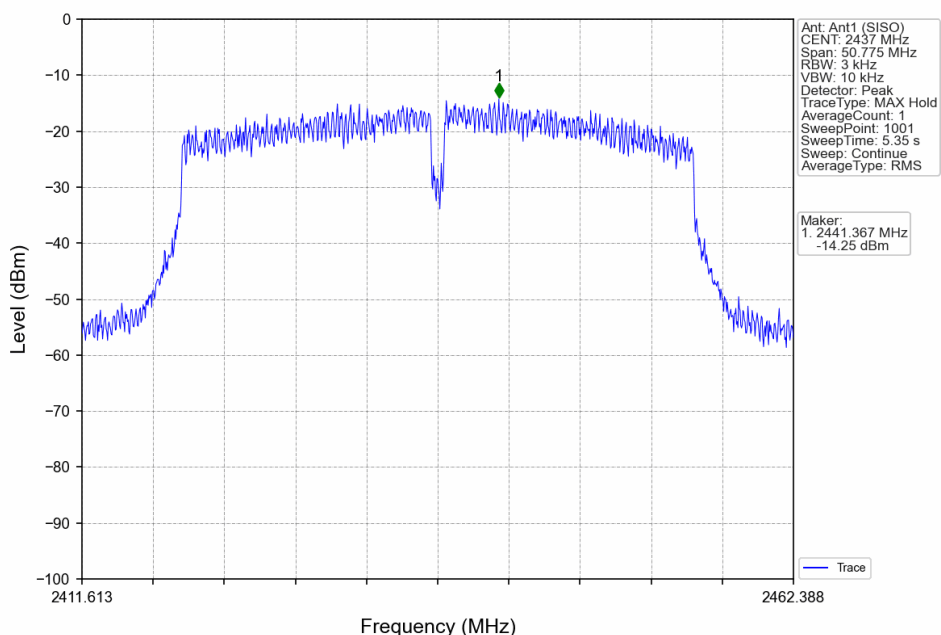
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



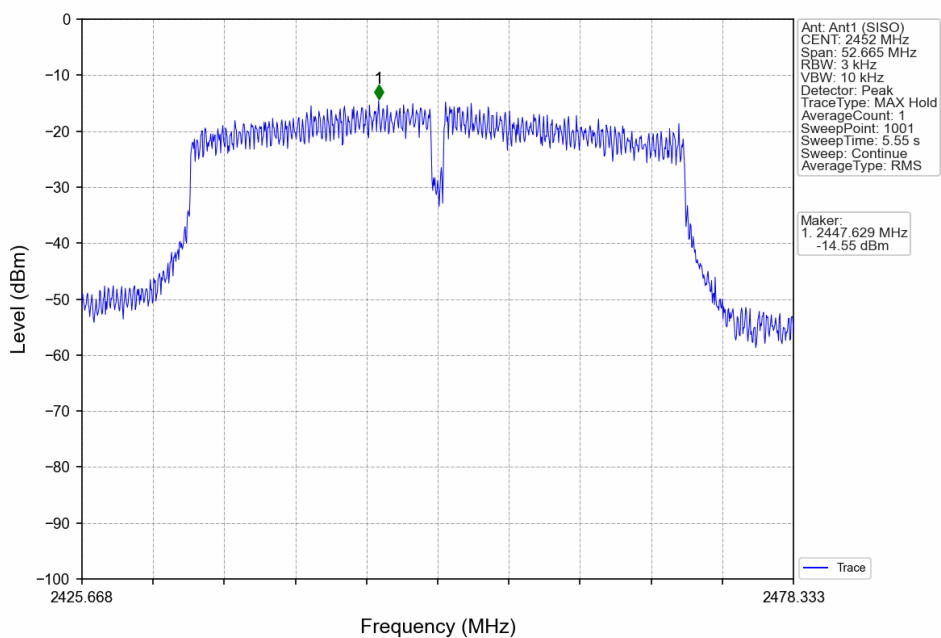
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Ref

5.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	-19.44
		2437	1	6.77
		2462	1	-19.47
802.11g	SISO	2412	1	4.10
		2437	1	4.15
		2462	1	-21.58
802.11n (HT20)	SISO	2412	1	4.16
		2437	1	4.33
		2462	1	-21.68
802.11n (HT40)	SISO	2422	1	1.15
		2437	1	0.90
		2452	1	-25.19

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

5.1.2 Test Graph

