



RF Test Report

For

Applicant Name: Shenzhen Eview GPS Technology
Address: Rm 201, building1-A, Nankechuang yuangu, Dalang, Longhua District, Shenzhen China.
EUT Name: Personal Safety Watch
Brand Name: N/A
Model Number: EV-06X

Issued By

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

Report Number: BTFSZ230307R00102
Test Standards: 47 CFR Part 15.247
Test Conclusion: Pass
FCC ID: 2AUMJEV-06X
Test Date: 2023-03-07 to 2023-04-18
Date of Issue: 2023-04-18

Prepared By:

Chris Liu

Date:

Chris Liu / Project Engineer
2023-04-18

Approved By:

Ryan.CJ

Date:

Ryan.CJ / EMC Manager
2023-04-18

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Test Report Number: BTFSZ230307R00102

Revision History		
Version	Issue Date	Revisions Content
R_V0	2023-04-18	Original
<i>Note: Once the revision has been made, then previous versions reports are invalid.</i>		

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1 Introduction

1.1 Identification of Testing Laboratory

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

1.2 Identification of the Responsible Testing Location

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

1.3 Announcement

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

2 Product Information

2.1 Application Information

Company Name:	Shenzhen Eview GPS Technology
Address:	Rm 201,building1-A,Nankechuang yuangu,Dalang, Longhua District,Shenzhen China.

2.2 Manufacturer Information

Company Name:	Shenzhen Eview GPS Technology
Address:	Rm 201,building1-A,Nankechuang yuangu,Dalang, Longhua District,Shenzhen China.

2.3 Factory Information

Company Name:	Shenzhen Eview GPS Technology
Address:	Rm 201,building1-A,Nankechuang yuangu,Dalang, Longhua District,Shenzhen China.

2.4 General Description of Equipment under Test (EUT)

EUT Name:	Personal Safety Watch
Test Model Number:	EV-06X

2.5 Technical Information

Power Supply:	DC 3.8V from battery
Operation Frequency:	2402MHz to 2480MHz
Number of Channels:	40
Modulation Type:	GFSK
Antenna Type:	LDS PIFA Antenna
Antenna Gain:	-2.66dBi

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)	$\pm 2.64\text{dB}$
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	Part 15.203	Pass
Conducted Emission at AC power line	47 CFR Part 15.247	47 CFR 15.207(a)	Pass
Occupied Bandwidth	47 CFR Part 15.247	47 CFR 15.247(a)(2)	Pass
Maximum Conducted Output Power	47 CFR Part 15.247	47 CFR 15.247(b)(3)	Pass
Power Spectral Density	47 CFR Part 15.247	47 CFR 15.247(e)	Pass
Emissions in non-restricted frequency bands	47 CFR Part 15.247	47 CFR 15.247(d)	Pass
Band edge emissions (Radiated)	47 CFR Part 15.247	47 CFR 15.247(d)	Pass
Emissions in restricted frequency bands (below 1GHz)	47 CFR Part 15.247	47 CFR 15.247(d)	Pass
Emissions in restricted frequency bands (above 1GHz)	47 CFR Part 15.247	47 CFR 15.247(d)	Pass

4 Test Configuration

4.1 Test Equipment List

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

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

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

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

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

Emissions in non-restricted frequency bands

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

Band edge emissions (Radiated)

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Coaxial cable Multiflex 141	Schwarzbeck	N/SMA 0.5m	517386	2023-03-24	2024-03-23
Preamplifier	SCHWARZBECK	BBV9744	00246	2022-11-24	2023-11-23
RE Cable	REBES Talent	UF1-SMAMAM-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-SMAMAM-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

Emissions in restricted frequency bands (below 1GHz)

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Coaxial cable Multiflex 141	Schwarzbeck	N/SMA 0.5m	517386	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

Emissions in restricted frequency bands (above 1GHz)

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Coaxial cable Multiflex 141	Schwarzbeck	N/SMA 0.5m	517386	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

Title	Manufacturer	Model No.	Serial No.
Adapter	Huawei	HW-059200CHQ	/

4.3 Test Modes

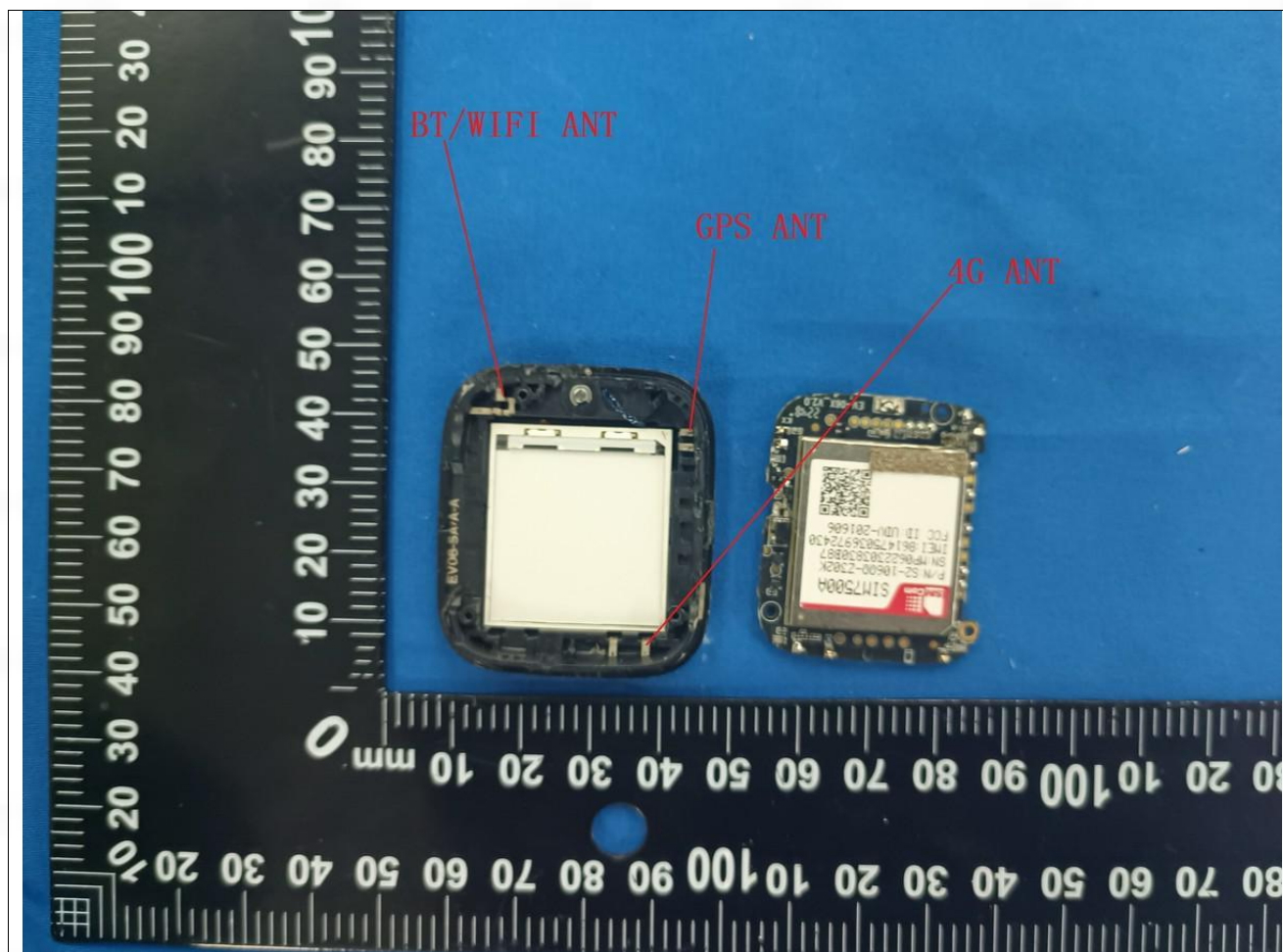
No.	Test Modes	Description
TM1	TX mode	Keep the EUT connect to AC power line and works in continuously transmitting mode with GFSK modulation.

5 Evaluation Results (Evaluation)

5.1 Antenna requirement

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



6 Radio Spectrum Matter Test Results (RF)

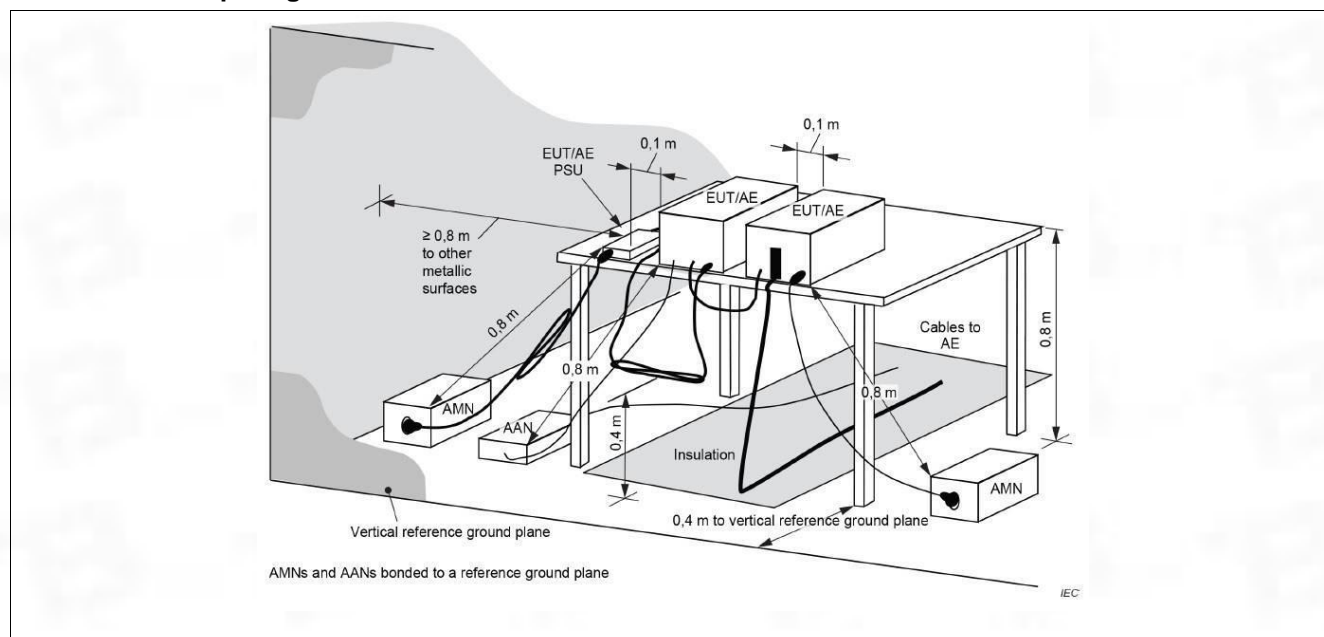
6.1 Conducted Emission at AC power line

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

6.1.1 E.U.T. Operation:

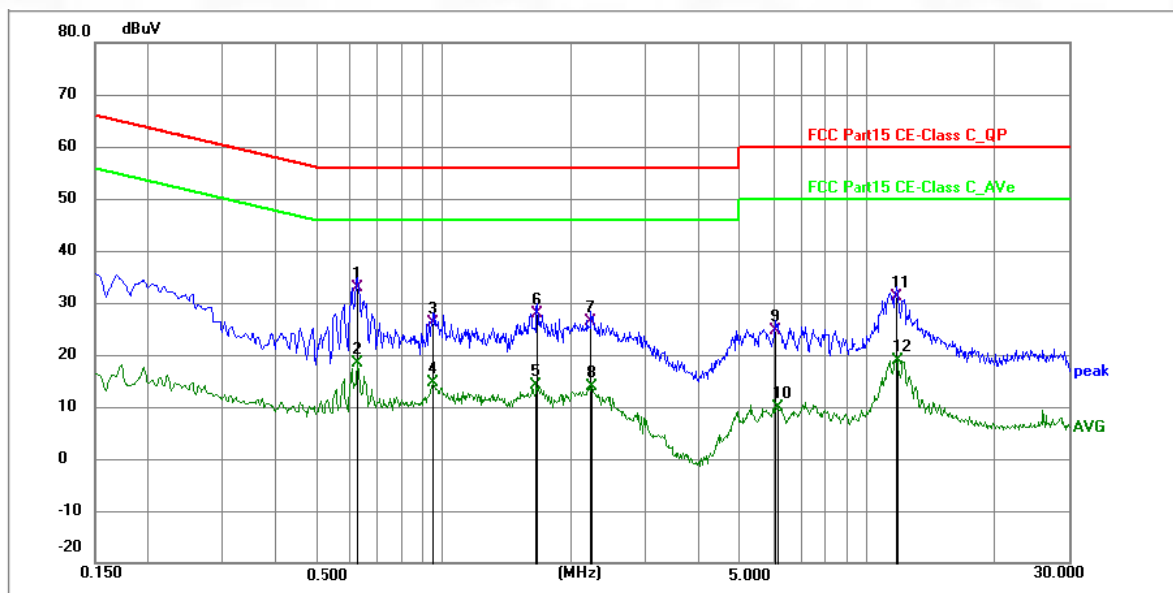
Operating Environment:	
Temperature:	24.5 °C
Humidity:	49.2 %
Atmospheric Pressure:	1010 mbar

6.1.2 Test Setup Diagram:



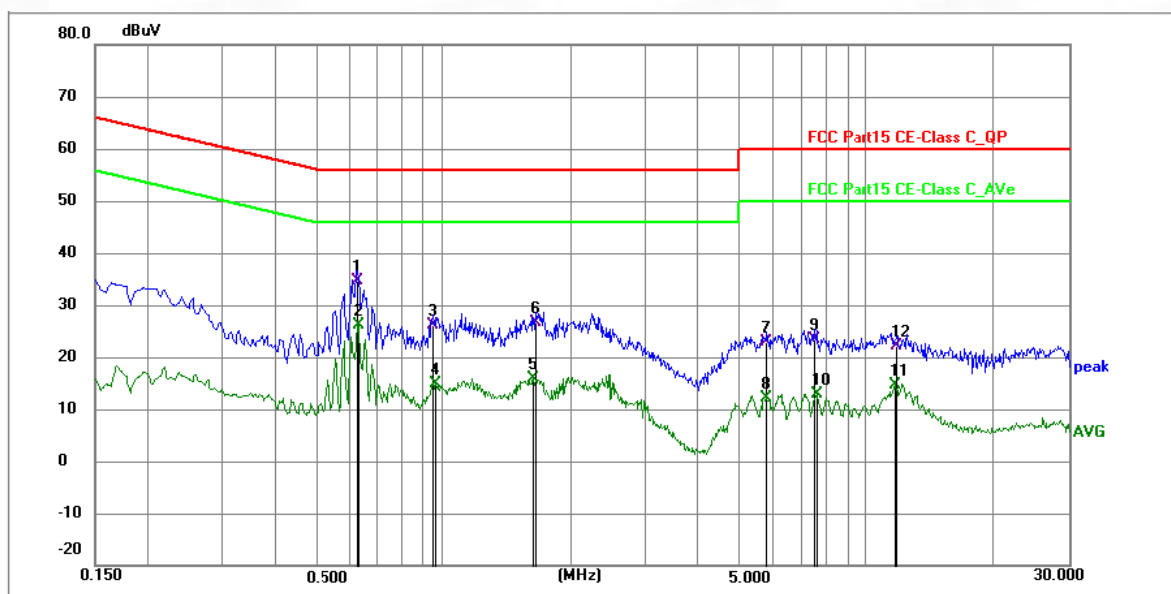
6.1.3 Test Data:

TM1 / Line: Line / Band: 2.4G / BW: 2 / CH: M



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.6270	22.12	10.68	32.80	56.00	-23.20	QP	P	
2	0.6270	7.58	10.68	18.26	46.00	-27.74	AVG	P	
3	0.9465	15.39	10.77	26.16	56.00	-29.84	QP	P	
4	0.9465	3.92	10.77	14.69	46.00	-31.31	AVG	P	
5	1.6620	3.35	10.72	14.07	46.00	-31.93	AVG	P	
6	1.6710	17.25	10.72	27.97	56.00	-28.03	QP	P	
7	2.2334	16.87	9.53	26.40	56.00	-29.60	QP	P	
8	2.2425	4.35	9.48	13.83	46.00	-32.17	AVG	P	
9	6.0853	13.84	10.72	24.56	60.00	-35.44	QP	P	
10	6.1260	-0.81	10.72	9.91	50.00	-40.09	AVG	P	
11	11.7780	20.09	10.94	31.03	60.00	-28.97	QP	P	
12	11.8275	7.94	10.94	18.88	50.00	-31.12	AVG	P	

TM1 / Line: Neutral / Band: 2.4G / BW: 2 / CH: M



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.6270	24.03	10.68	34.71	56.00	-21.29	QP	P	
2 *	0.6313	15.47	10.69	26.16	46.00	-19.84	AVG	P	
3	0.9465	15.43	10.77	26.20	56.00	-29.80	QP	P	
4	0.9600	4.16	10.77	14.93	46.00	-31.07	AVG	P	
5	1.6305	5.18	10.72	15.90	46.00	-30.10	AVG	P	
6	1.6530	15.80	10.72	26.52	56.00	-29.48	QP	P	
7	5.7840	12.23	10.71	22.94	60.00	-37.06	QP	P	
8	5.7840	1.53	10.71	12.24	50.00	-37.76	AVG	P	
9	7.5210	12.66	10.78	23.44	60.00	-36.56	QP	P	
10	7.5660	2.08	10.78	12.86	50.00	-37.14	AVG	P	
11	11.7285	3.66	10.90	14.56	50.00	-35.44	AVG	P	
12	11.8139	11.19	10.90	22.09	60.00	-37.91	QP	P	

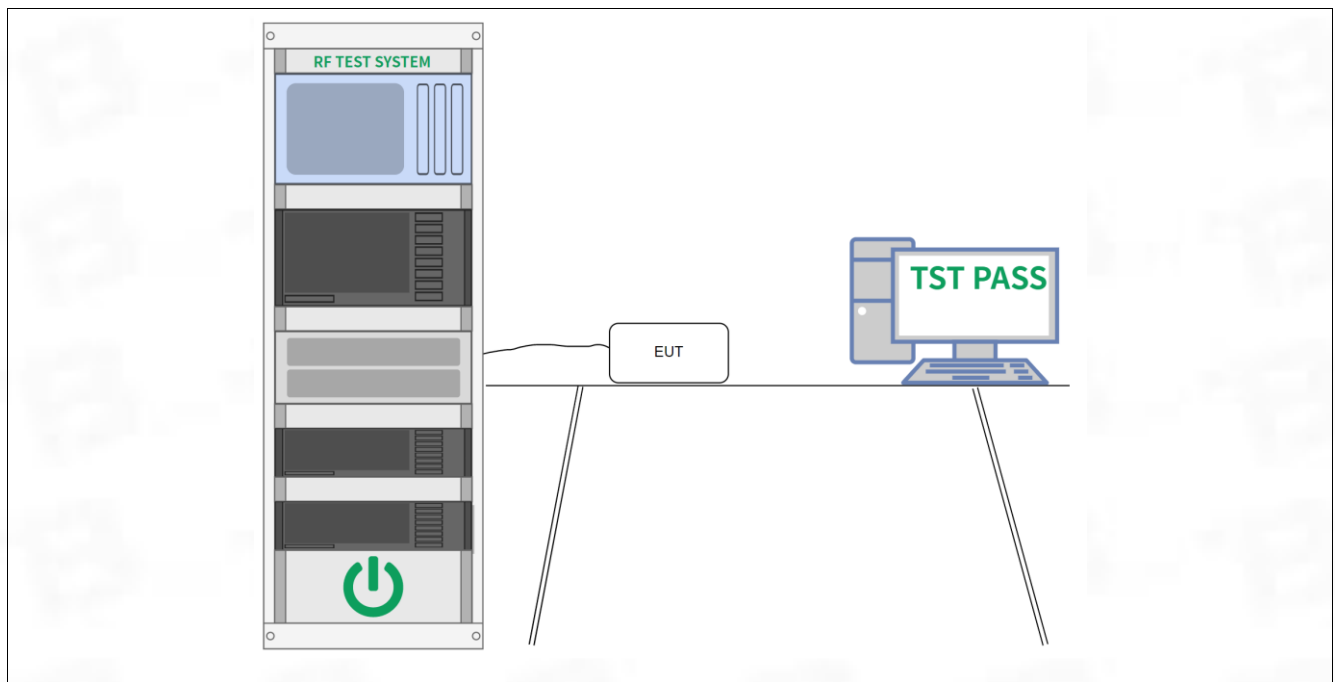
6.2 Occupied Bandwidth

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

6.2.1 E.U.T. Operation:

Operating Environment:	
Temperature:	24.8 °C
Humidity:	51.9 %
Atmospheric Pressure:	1010 mbar

6.2.2 Test Setup Diagram:



6.2.3 Test Data:

Please Refer to Appendix for Details.

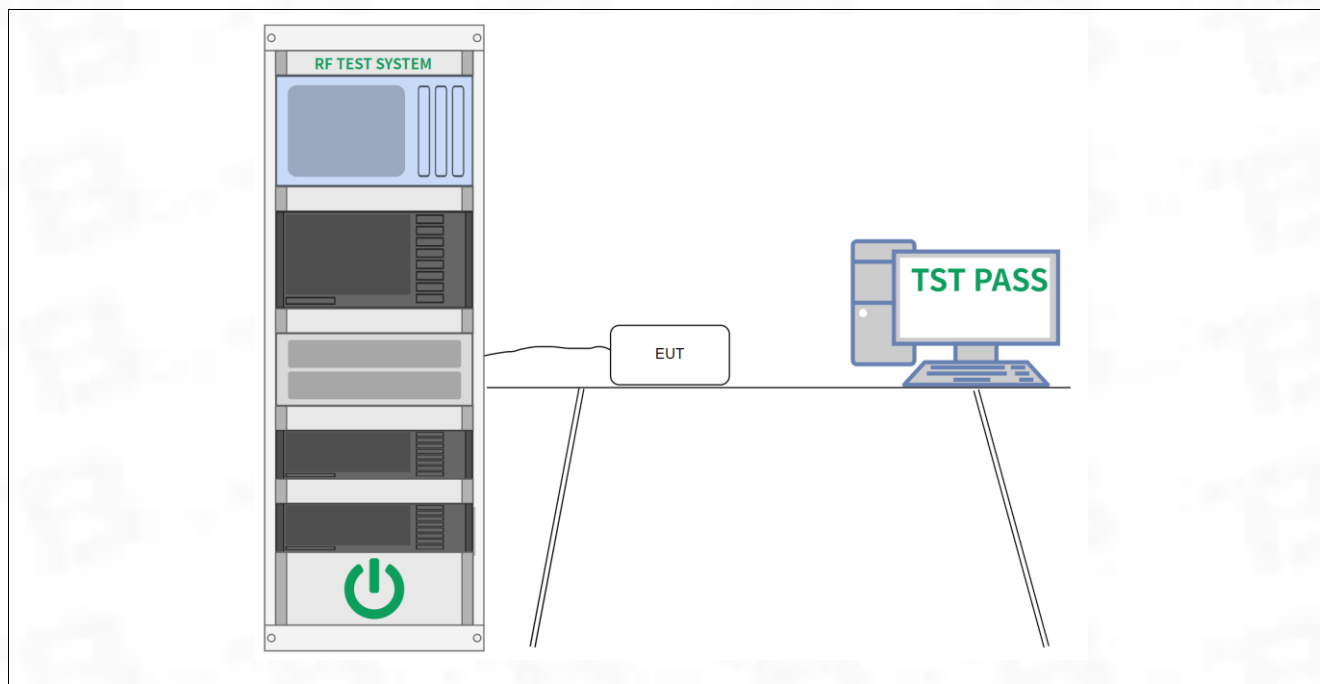
6.3 Maximum Conducted Output Power

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

6.3.1 E.U.T. Operation:

Operating Environment:	
Temperature:	24.8 °C
Humidity:	51.9 %
Atmospheric Pressure:	1010 mbar

6.3.2 Test Setup Diagram:



6.3.3 Test Data:

Please Refer to Appendix for Details.

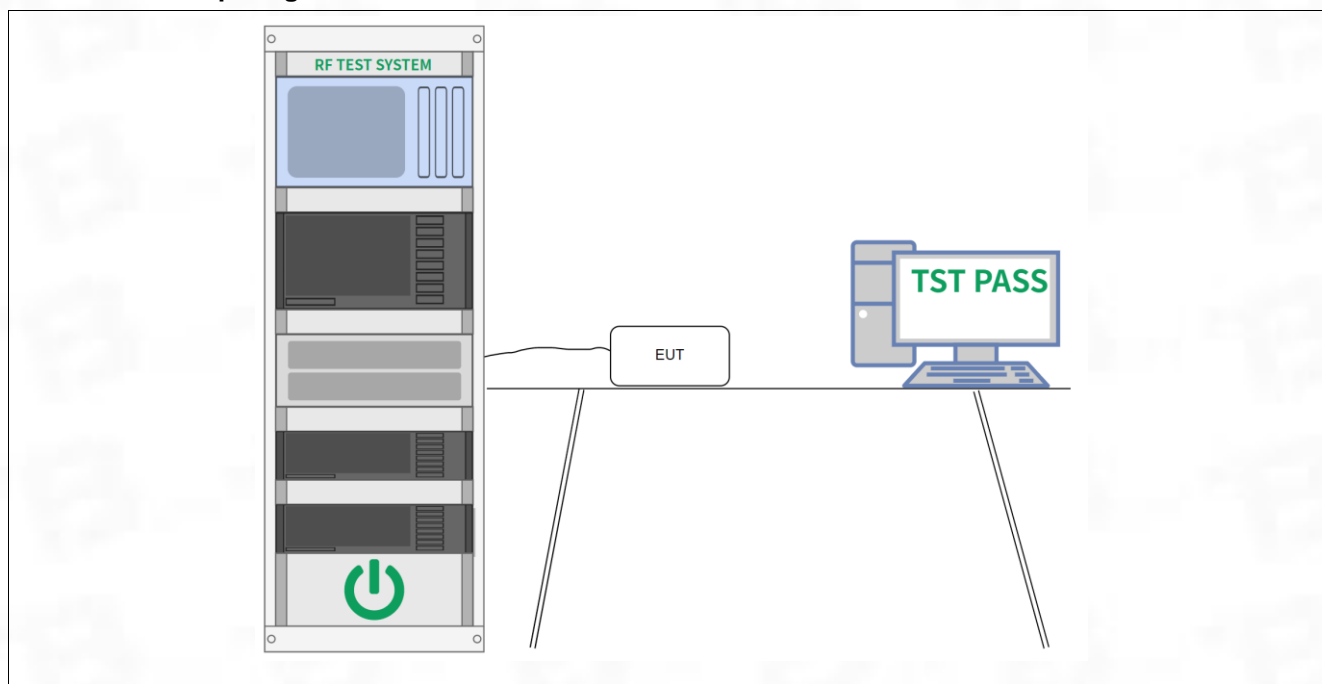
6.4 Power Spectral Density

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

6.4.1 E.U.T. Operation:

Operating Environment:	
Temperature:	24.8 °C
Humidity:	51.9 %
Atmospheric Pressure:	1010 mbar

6.4.2 Test Setup Diagram:



6.4.3 Test Data:

Please Refer to Appendix for Details.

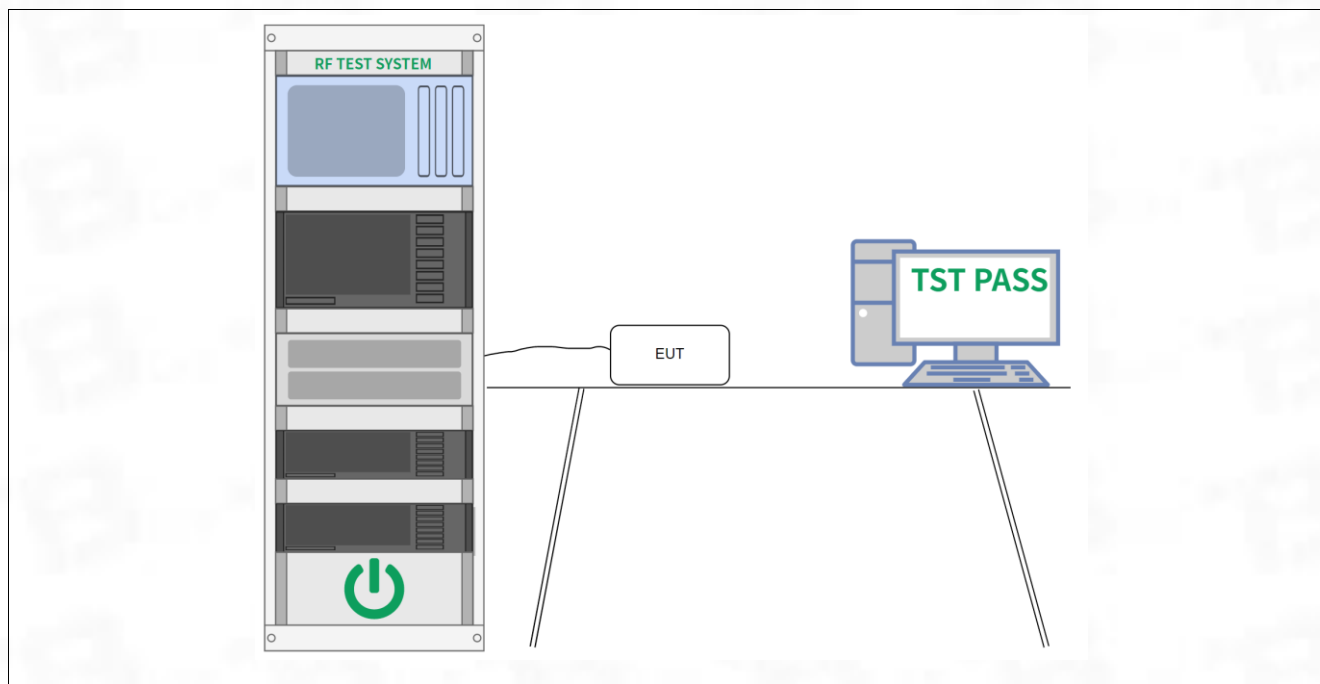
6.5 Emissions in non-restricted frequency bands

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

6.5.1 E.U.T. Operation:

Operating Environment:	
Temperature:	24.8 °C
Humidity:	51.9 %
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:	In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).`		
Test Method:	Radiated emissions tests		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.			
Procedure:	ANSI C63.10-2013 section 6.6.4		

6.6.1 E.U.T. Operation:

Operating Environment:	
Temperature:	23.1 °C
Humidity:	49.9 %
Atmospheric Pressure:	1010 mbar

6.6.2 Test Data:

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 1 / CH: L

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2310.000	67.71	-31.25	36.46	74.00	-37.54	peak	P
2	2390.000	67.75	-31.17	36.58	74.00	-37.42	peak	P
3 *	2400.000	72.68	-31.16	41.52	74.00	-32.48	peak	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 1 / CH: L

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2310.000	44.91	-6.45	38.46	74.00	-35.54	peak	P
2	2390.000	41.95	-6.37	35.58	74.00	-38.42	peak	P
3 *	2400.000	52.88	-6.36	46.52	74.00	-27.48	peak	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 1 / CH: H

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	2483.500	72.04	-31.09	40.95	74.00	-33.05	peak	P
2	2500.000	69.38	-31.07	38.31	74.00	-35.69	peak	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 1 / CH: H

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	2483.500	49.74	-6.29	43.45	74.00	-30.55	peak	P
2	2500.000	43.58	-6.27	37.31	74.00	-36.69	peak	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 2 / CH: L

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2310.000	68.85	-31.25	37.60	74.00	-36.40	peak	P
2	2390.000	68.78	-31.17	37.61	74.00	-36.39	peak	P
3 *	2400.000	72.42	-31.16	41.26	74.00	-32.74	peak	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 2 / CH: L

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2310.000	45.55	-6.45	39.10	74.00	-34.90	peak	P
2	2390.000	43.98	-6.37	37.61	74.00	-36.39	peak	P
3 *	2400.000	55.62	-6.36	49.26	74.00	-24.74	peak	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 2 / CH: H

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	2483.500	74.92	-31.09	43.83	74.00	-30.17	peak	P
2	2500.000	70.40	-31.07	39.33	74.00	-34.67	peak	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 2 / CH: H

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	2483.500	48.12	-6.29	41.83	74.00	-32.17	peak	P
2	2500.000	44.60	-6.27	38.33	74.00	-35.67	peak	P

6.7 Emissions in restricted frequency bands (below 1GHz)

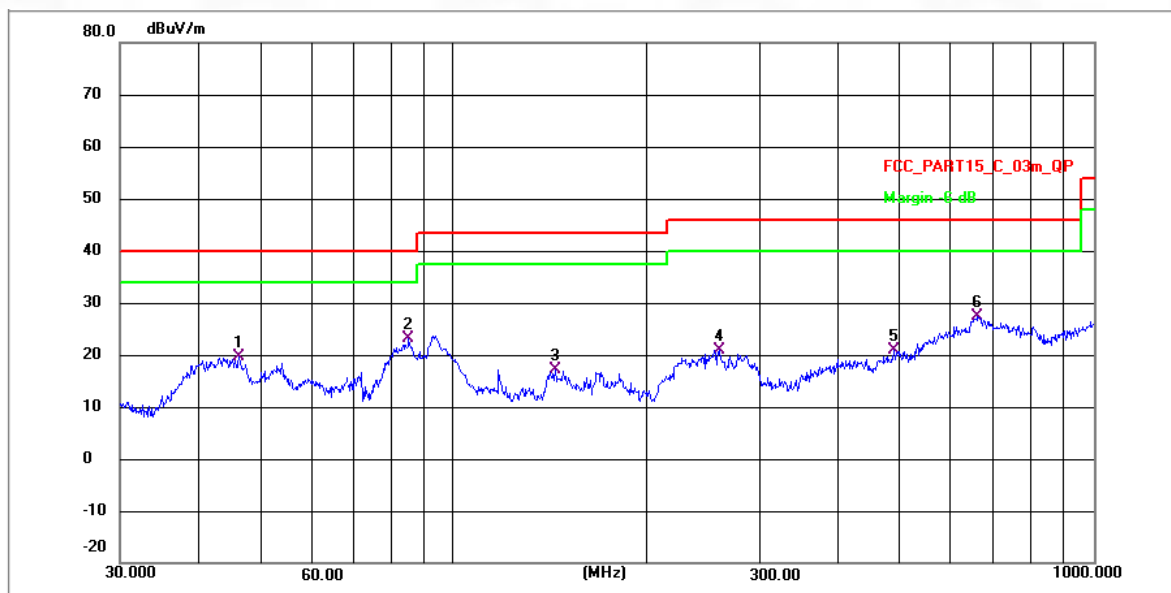
Test Requirement:	In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).`		
Test Method:	Radiated emissions tests		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)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

6.7.1 E.U.T. Operation:

Operating Environment:	
Temperature:	23.1 °C
Humidity:	49.9 %
Atmospheric Pressure:	1010 mbar

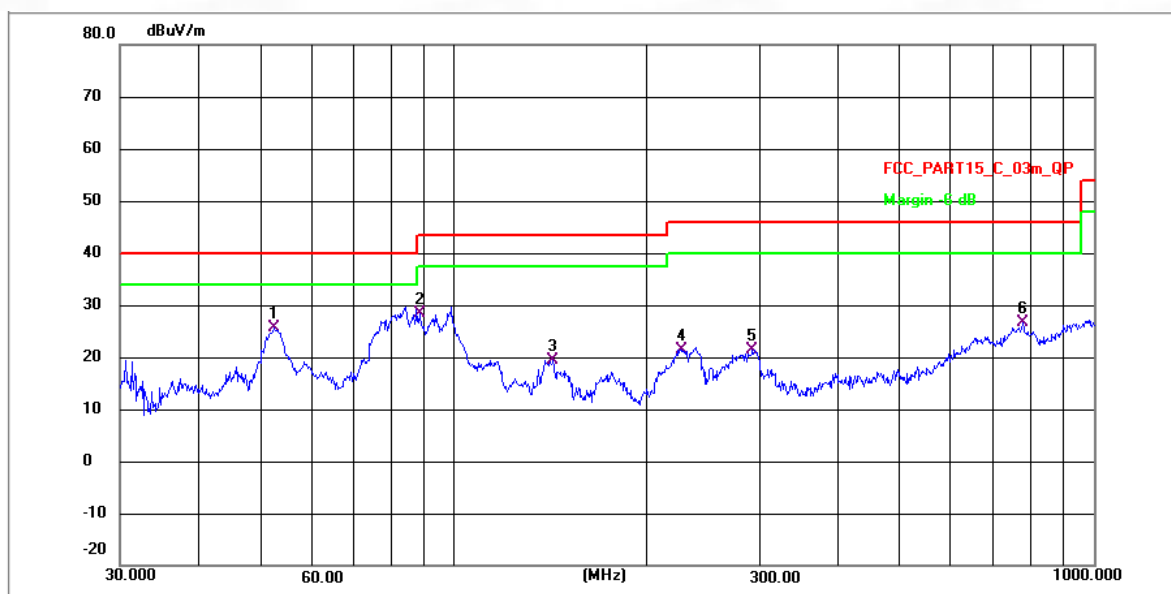
6.7.2 Test Data:

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 1 / CH: L



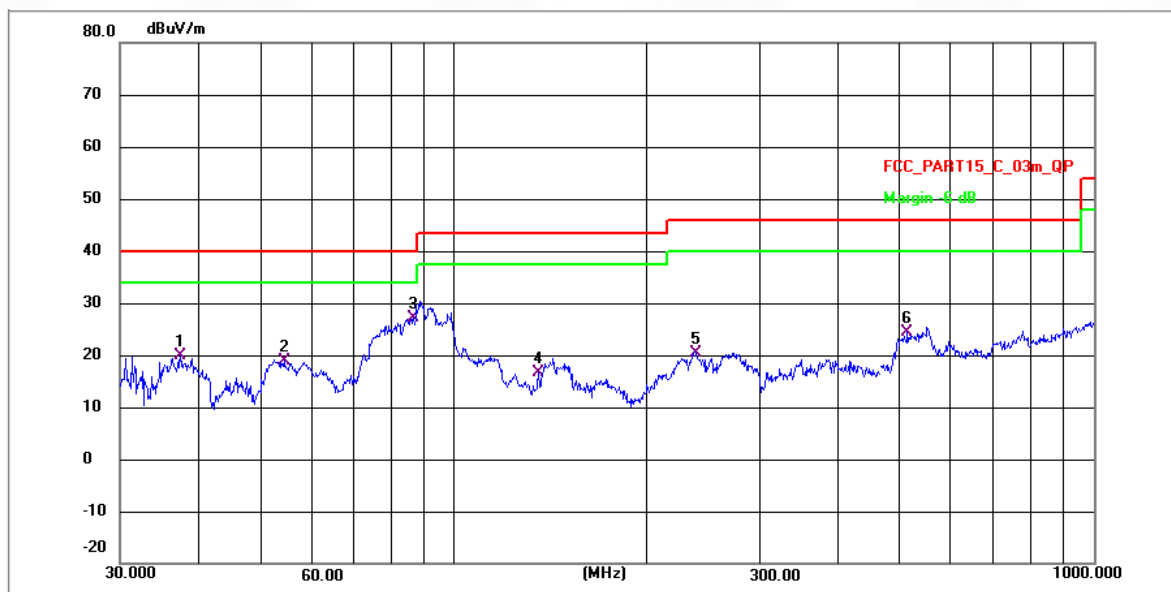
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	46.0970	47.77	-28.09	19.68	40.00	-20.32	QP	P
2 *	85.1486	51.02	-27.85	23.17	40.00	-16.83	QP	P
3	144.0820	44.31	-27.28	17.03	43.50	-26.47	QP	P
4	259.2336	47.56	-26.64	20.92	46.00	-25.08	QP	P
5	488.1702	46.29	-25.49	20.80	46.00	-25.20	QP	P
6	659.9922	52.18	-24.92	27.26	46.00	-18.74	QP	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 1 / CH: L



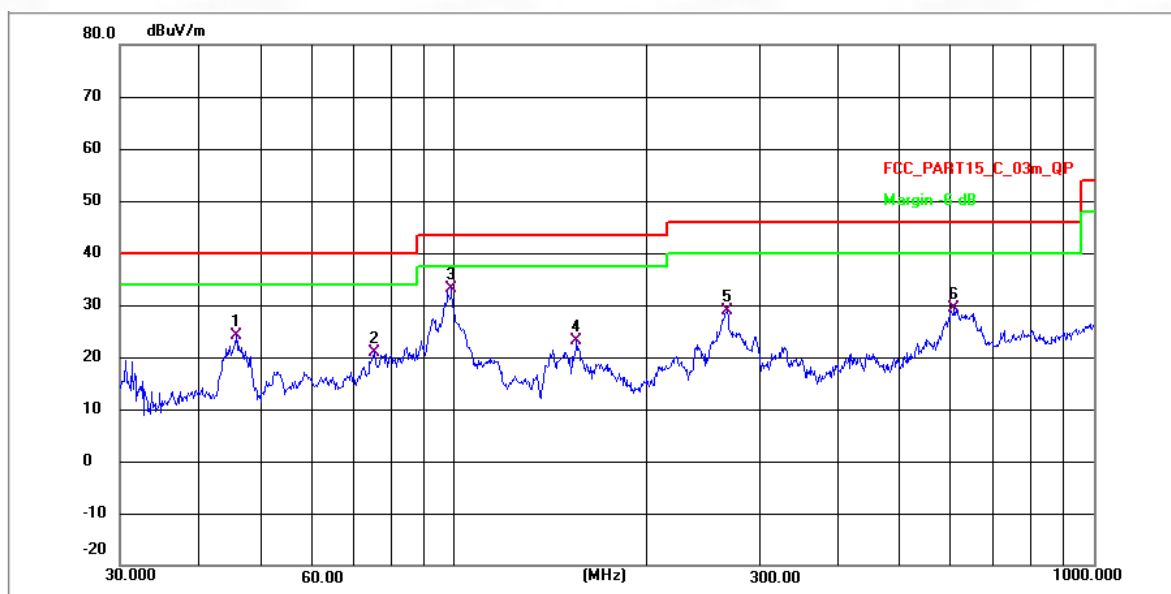
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	52.2077	53.58	-28.02	25.56	40.00	-14.44	QP	P
2	88.6524	56.32	-27.84	28.48	43.50	-15.02	QP	P
3	143.3260	46.72	-27.28	19.44	43.50	-24.06	QP	P
4	227.6904	48.29	-26.84	21.45	46.00	-24.55	QP	P
5	292.5708	47.99	-26.57	21.42	46.00	-24.58	QP	P
6	775.5170	51.80	-25.12	26.68	46.00	-19.32	QP	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 1 / CH: M



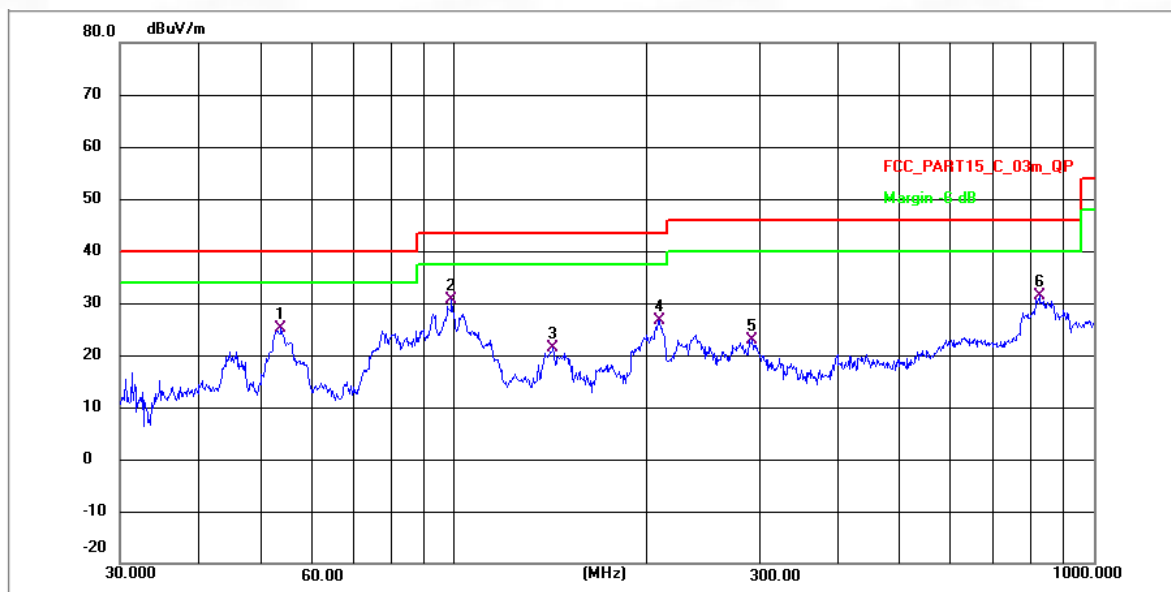
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	37.4164	48.13	-28.21	19.92	40.00	-20.08	QP	P
2	54.1660	46.90	-28.00	18.90	40.00	-21.10	QP	P
3 *	86.8067	54.94	-27.85	27.09	40.00	-12.91	QP	P
4	135.7440	43.87	-27.34	16.53	43.50	-26.97	QP	P
5	239.1470	47.26	-26.78	20.48	46.00	-25.52	QP	P
6	511.8351	49.70	-25.42	24.28	46.00	-21.72	QP	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 1 / CH: M



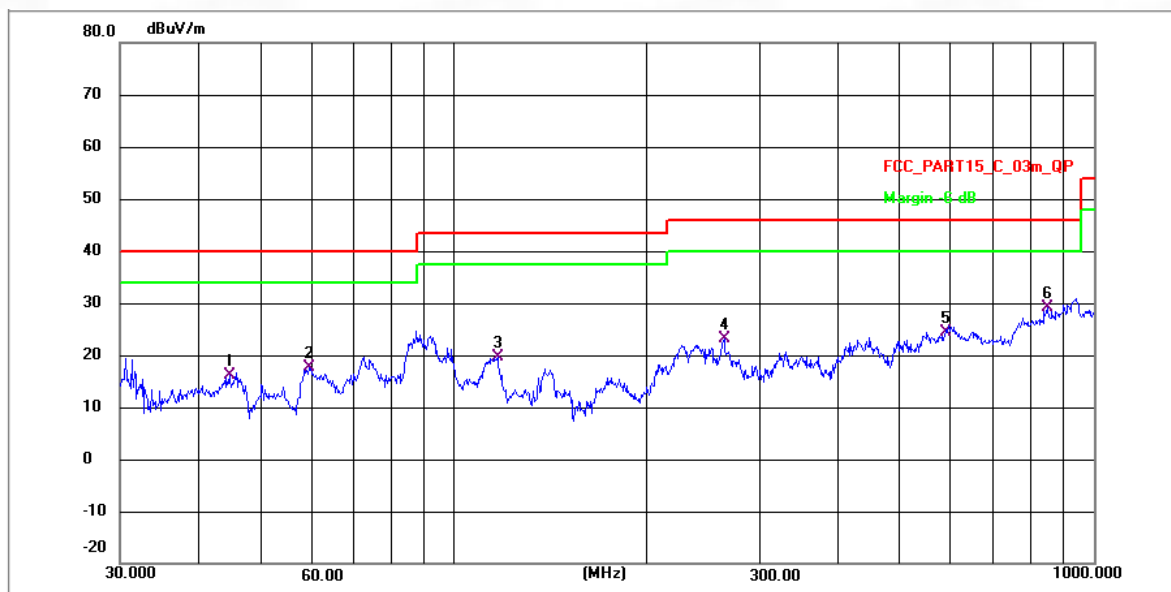
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	45.6146	52.13	-28.09	24.04	40.00	-15.96	QP	P
2	75.1821	48.88	-27.90	20.98	40.00	-19.02	QP	P
3 *	99.1795	60.79	-27.75	33.04	43.50	-10.46	QP	P
4	155.6370	50.38	-27.22	23.16	43.50	-20.34	QP	P
5	266.6090	55.48	-26.61	28.87	46.00	-17.13	QP	P
6	607.7866	54.50	-25.11	29.39	46.00	-16.61	QP	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 1 / CH: H



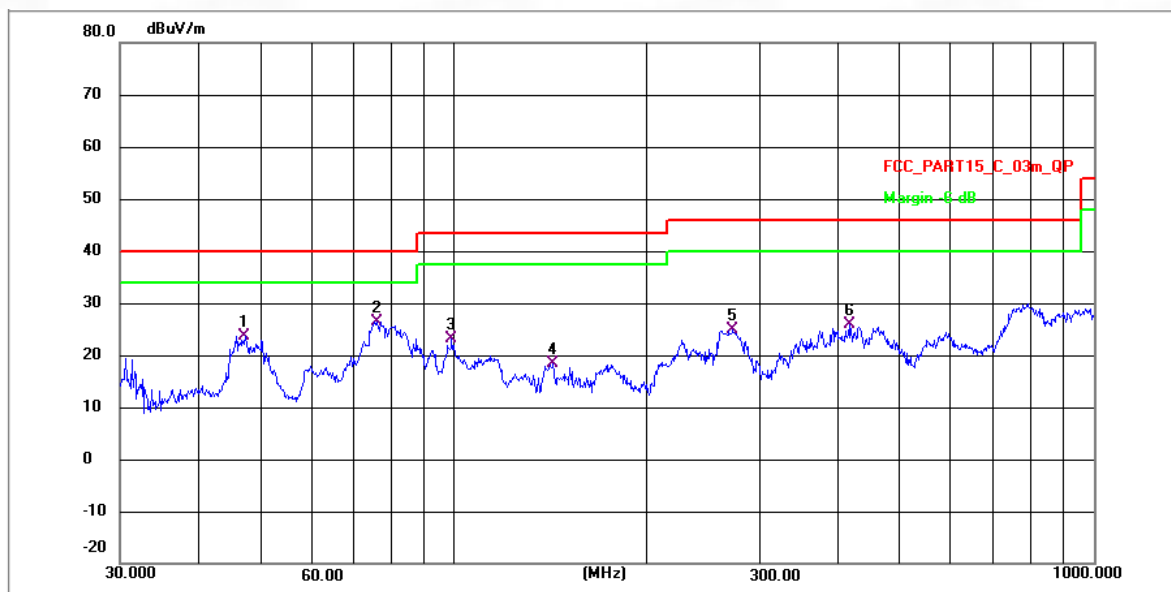
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	53.5990	53.20	-28.01	25.19	40.00	-14.81	QP	P
2 *	99.1795	58.29	-27.75	30.54	43.50	-12.96	QP	P
3	143.3260	48.72	-27.28	21.44	43.50	-22.06	QP	P
4	210.0481	53.62	-26.94	26.68	43.50	-16.82	QP	P
5	292.5708	49.49	-26.57	22.92	46.00	-23.08	QP	P
6	824.5968	56.45	-25.03	31.42	46.00	-14.58	QP	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 1 / CH: H



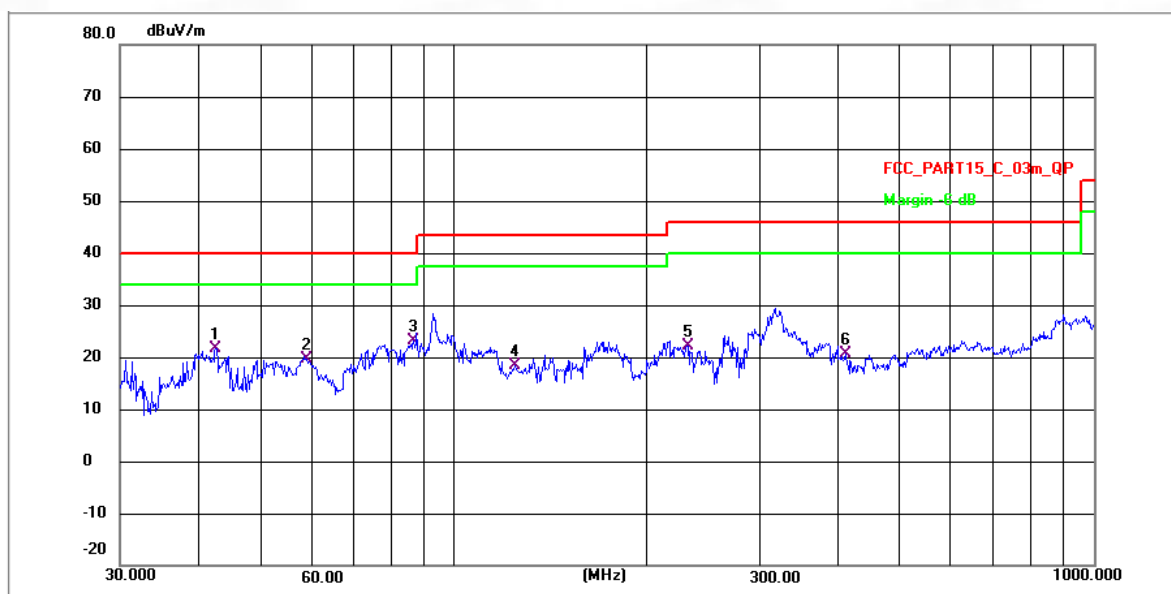
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	44.4307	44.23	-28.10	16.13	40.00	-23.87	QP	P
2	59.4405	45.52	-27.94	17.58	40.00	-22.42	QP	P
3	117.3602	47.16	-27.53	19.63	43.50	-23.87	QP	P
4	264.2820	49.66	-26.62	23.04	46.00	-22.96	QP	P
5	587.8731	49.68	-25.18	24.50	46.00	-21.50	QP	P
6 *	848.0561	54.07	-24.84	29.23	46.00	-16.77	QP	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 2 / CH: L



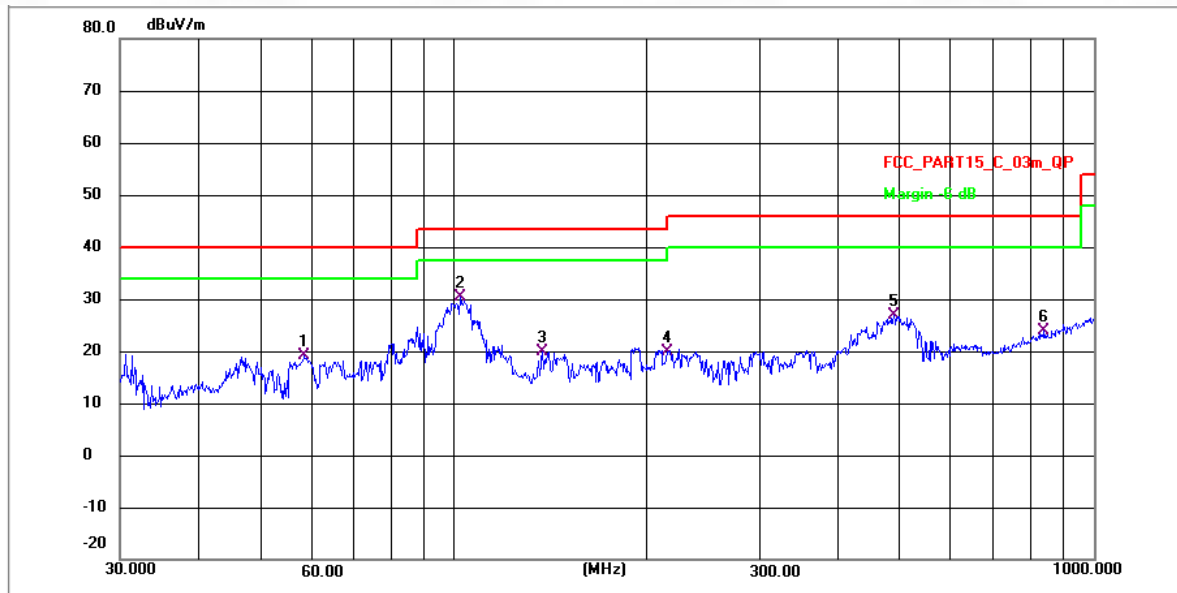
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	47.0770	51.75	-28.08	23.67	40.00	-16.33	QP	P
2 *	75.8442	54.27	-27.90	26.37	40.00	-13.63	QP	P
3	99.1795	50.79	-27.75	23.04	43.50	-20.46	QP	P
4	143.3260	45.72	-27.28	18.44	43.50	-25.06	QP	P
5	273.2340	51.41	-26.57	24.84	46.00	-21.16	QP	P
6	414.7223	51.53	-25.70	25.83	46.00	-20.17	QP	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 2 / CH: L



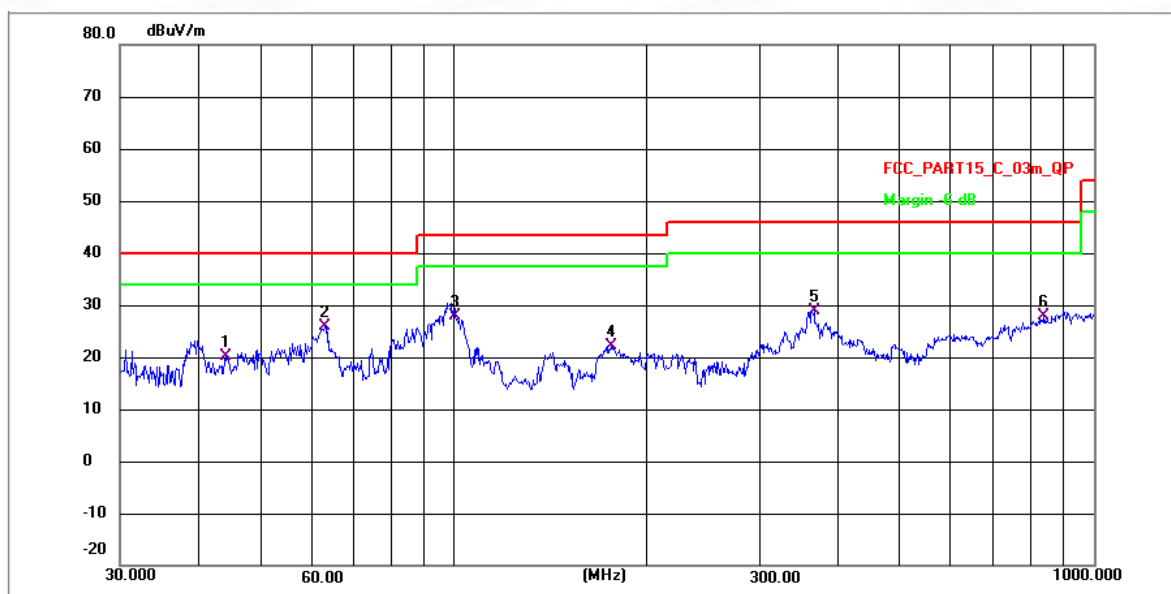
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	42.4508	49.73	-28.12	21.61	40.00	-18.39	QP	P
2	58.7154	47.48	-27.95	19.53	40.00	-20.47	QP	P
3 *	86.8067	50.94	-27.85	23.09	40.00	-16.91	QP	P
4	125.0065	45.75	-27.45	18.30	43.50	-25.20	QP	P
5	232.1245	49.01	-26.82	22.19	46.00	-23.81	QP	P
6	408.2293	46.36	-25.72	20.64	46.00	-25.36	QP	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 2 / CH: M



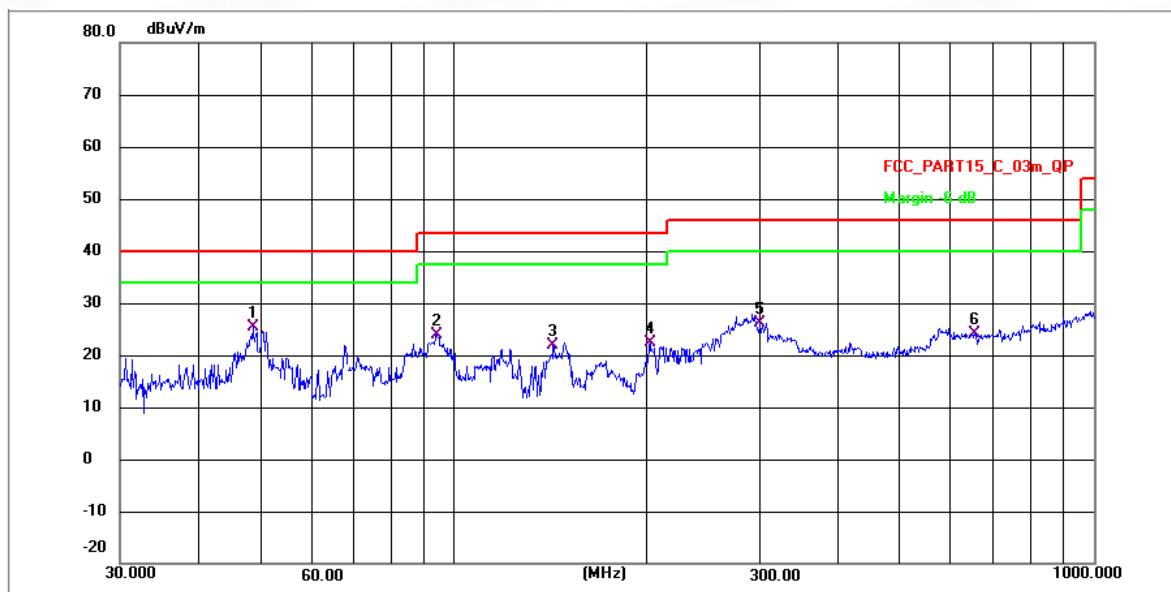
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	58.3051	47.08	-27.95	19.13	40.00	-20.87	QP	P
2 *	102.5391	57.97	-27.71	30.26	43.50	-13.24	QP	P
3	137.6613	47.25	-27.32	19.93	43.50	-23.57	QP	P
4	215.6452	46.86	-26.91	19.95	43.50	-23.55	QP	P
5	488.1702	52.29	-25.49	26.80	46.00	-19.20	QP	P
6	837.7115	48.91	-24.92	23.99	46.00	-22.01	QP	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 2 / CH: M



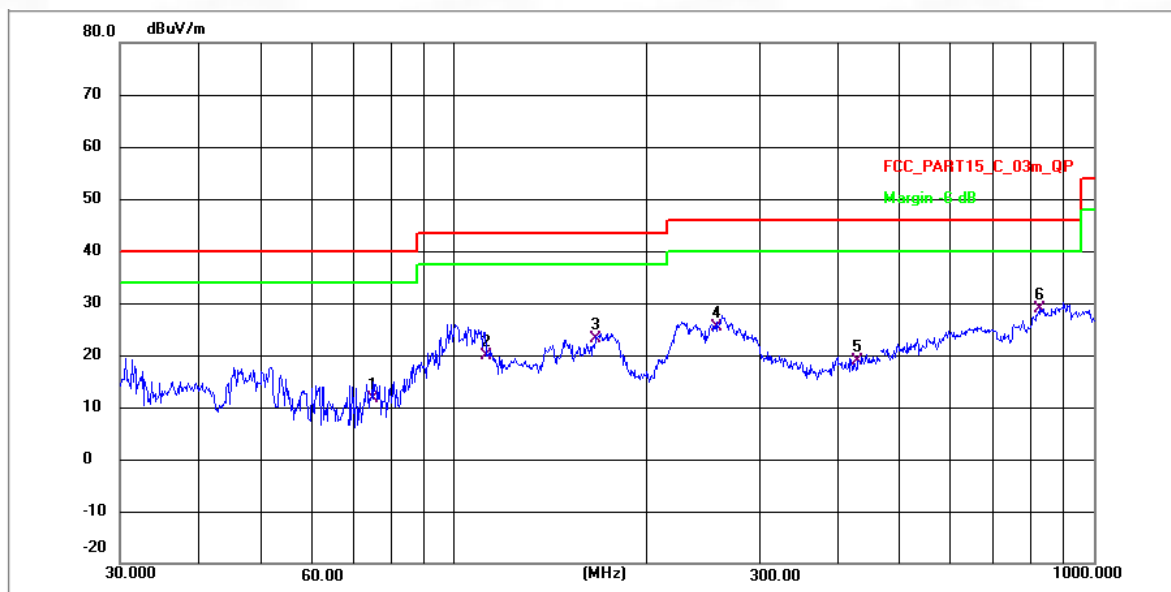
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	44.1200	48.25	-28.10	20.15	40.00	-19.85	QP	P
2 *	62.7605	53.70	-27.93	25.77	40.00	-14.23	QP	P
3	100.5806	55.49	-27.73	27.76	43.50	-15.74	QP	P
4	175.9598	49.28	-27.15	22.13	43.50	-21.37	QP	P
5	364.8987	55.01	-26.03	28.98	46.00	-17.02	QP	P
6	837.7115	52.91	-24.92	27.99	46.00	-18.01	QP	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 2 / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	48.4164	53.33	-28.07	25.26	40.00	-14.74	QP	P
2	94.0978	51.72	-27.79	23.93	43.50	-19.57	QP	P
3	143.3260	49.22	-27.28	21.94	43.50	-21.56	QP	P
4	202.8103	49.36	-26.98	22.38	43.50	-21.12	QP	P
5	300.8942	52.71	-26.57	26.14	46.00	-19.86	QP	P
6	653.0855	49.05	-24.95	24.10	46.00	-21.90	QP	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 2 / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	75.0502	39.52	-27.90	11.62	40.00	-28.38	QP	P
2	112.5241	47.55	-27.59	19.96	43.50	-23.54	QP	P
3	166.6511	50.37	-27.18	23.19	43.50	-20.31	QP	P
4	258.7795	51.99	-26.65	25.34	46.00	-20.66	QP	P
5	427.2694	44.56	-25.66	18.90	46.00	-27.10	QP	P
6 *	824.5968	53.95	-25.03	28.92	46.00	-17.08	QP	P

6.8 Emissions in restricted frequency bands (above 1GHz)

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

6.8.1 E.U.T. Operation:

Operating Environment:	
Temperature:	23.1 °C
Humidity:	49.9 %
Atmospheric Pressure:	1010 mbar

6.8.2 Test Data:

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 1 / CH: L

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2378.651	66.69	-30.51	36.18	74.00	-37.82	peak	P
2	3923.001	65.52	-29.00	36.52	74.00	-37.48	peak	P
3	5480.919	67.17	-26.96	40.21	74.00	-33.79	peak	P
4	7730.913	70.06	-25.13	44.93	74.00	-29.07	peak	P
5	11397.613	69.69	-23.14	46.55	74.00	-27.45	peak	P
6 *	14425.093	71.14	-21.18	49.96	74.00	-24.04	peak	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 1 / CH: L

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2425.163	72.15	-30.45	41.70	125.20	-83.50	peak	P
2	3615.927	64.17	-29.04	35.13	74.00	-38.87	peak	P
3	5397.597	62.67	-27.04	35.63	74.00	-38.37	peak	P
4	7859.336	59.90	-25.32	34.58	74.00	-39.42	peak	P
5	11694.613	62.15	-22.73	39.42	74.00	-34.58	peak	P
6 *	14014.122	63.14	-21.09	42.05	74.00	-31.95	peak	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 1 / CH: M

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2479.743	73.25	-30.39	42.86	125.20	-82.34	peak	P
2	4843.148	60.84	-27.82	33.02	74.00	-40.98	peak	P
3	7802.750	60.50	-25.23	35.27	74.00	-38.73	peak	P
4	9883.915	62.81	-24.04	38.77	74.00	-35.23	peak	P
5	14317.095	64.68	-21.16	43.52	74.00	-30.48	peak	P
6 *	16528.824	64.73	-19.13	45.60	74.00	-28.40	peak	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 1 / CH: M

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	2384.847	73.61	-30.50	43.11	74.00	-30.89	peak	P
2	3325.192	63.77	-29.21	34.56	74.00	-39.44	peak	P
3	5008.283	61.21	-27.36	33.85	74.00	-40.15	peak	P
4	7169.159	60.94	-24.88	36.06	74.00	-37.94	peak	P
5	9049.887	62.10	-24.20	37.90	74.00	-36.10	peak	P
6	13721.526	62.27	-21.02	41.25	74.00	-32.75	peak	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 1 / CH: H

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2358.114	72.50	-30.53	41.97	74.00	-32.03	peak	P
2	3532.254	59.63	-29.05	30.58	74.00	-43.42	peak	P
3	4843.148	60.34	-27.82	32.52	74.00	-41.48	peak	P
4	7659.739	61.00	-25.02	35.98	74.00	-38.02	peak	P
5	10804.169	64.38	-23.86	40.52	74.00	-33.48	peak	P
6 *	13893.130	65.69	-21.07	44.62	74.00	-29.38	peak	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 1 / CH: H

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2697.336	73.93	-30.03	43.90	74.00	-30.10	peak	P
2	3675.994	63.79	-29.04	34.75	74.00	-39.25	peak	P
3	5432.029	62.88	-27.00	35.88	74.00	-38.12	peak	P
4	8556.396	64.07	-25.21	38.86	74.00	-35.14	peak	P
5	11114.580	67.97	-23.36	44.61	74.00	-29.39	peak	P
6 *	13713.596	67.15	-21.02	46.13	74.00	-27.87	peak	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 2 / CH: L

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2451.947	73.43	-30.42	43.01	125.20	-82.19	peak	P
2	3412.827	64.78	-29.14	35.64	74.00	-38.36	peak	P
3	5097.369	61.10	-27.29	33.81	74.00	-40.19	peak	P
4	7823.074	63.43	-25.26	38.17	74.00	-35.83	peak	P
5	10655.309	65.51	-24.18	41.33	74.00	-32.67	peak	P
6 *	14843.825	66.53	-20.65	45.88	74.00	-28.12	peak	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 2 / CH: L

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2675.594	69.58	-30.06	39.52	74.00	-34.48	peak	P
2	4843.148	61.34	-27.82	33.52	74.00	-40.48	peak	P
3	7343.227	62.85	-24.83	38.02	74.00	-35.98	peak	P
4	10735.685	63.63	-24.01	39.62	74.00	-34.38	peak	P
5	12469.611	63.22	-21.65	41.57	74.00	-32.43	peak	P
6 *	15905.482	64.07	-21.57	42.50	74.00	-31.50	peak	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 2 / CH: M

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	2714.543	74.08	-30.01	44.07	74.00	-29.93	peak	P
2	3954.878	63.35	-29.00	34.35	74.00	-39.65	peak	P
3	7041.830	59.82	-24.92	34.90	74.00	-39.10	peak	P
4	8809.863	62.24	-24.69	37.55	74.00	-36.45	peak	P
5	11550.165	63.55	-22.98	40.57	74.00	-33.43	peak	P
6	14942.833	63.22	-20.49	42.73	74.00	-31.27	peak	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 2 / CH: M

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2533.352	72.40	-30.32	42.08	74.00	-31.92	peak	P
2	4148.061	62.23	-28.94	33.29	74.00	-40.71	peak	P
3	6549.048	65.33	-25.34	39.99	74.00	-34.01	peak	P
4	8169.708	67.31	-25.46	41.85	74.00	-32.15	peak	P
5 *	11227.589	66.89	-23.26	43.63	74.00	-30.37	peak	P
6	14201.694	62.73	-21.13	41.60	74.00	-32.40	peak	P

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 2 / CH: H

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2758.838	72.94	-29.92	43.02	74.00	-30.98	peak	P
2	5008.283	62.21	-27.36	34.85	74.00	-39.15	peak	P
3	7294.573	61.67	-24.84	36.83	74.00	-37.17	peak	P
4	10974.124	64.71	-23.49	41.22	74.00	-32.78	peak	P
5	14066.879	66.92	-21.10	45.82	74.00	-28.18	peak	P
6 *	16639.071	66.99	-18.93	48.06	74.00	-25.94	peak	P

TM1 / Polarization: Vertical / Band: 2.4G / BW: 2 / CH: H

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2864.473	70.56	-29.75	40.81	74.00	-33.19	peak	P
2	5272.696	65.33	-27.15	38.18	74.00	-35.82	peak	P
3	9160.419	64.99	-23.95	41.04	74.00	-32.96	peak	P
4	11453.755	63.55	-23.10	40.45	74.00	-33.55	peak	P
5	13622.733	64.90	-21.00	43.90	74.00	-30.10	peak	P
6 *	15960.745	66.31	-21.59	44.72	74.00	-29.28	peak	P

7 Test Setup Photos

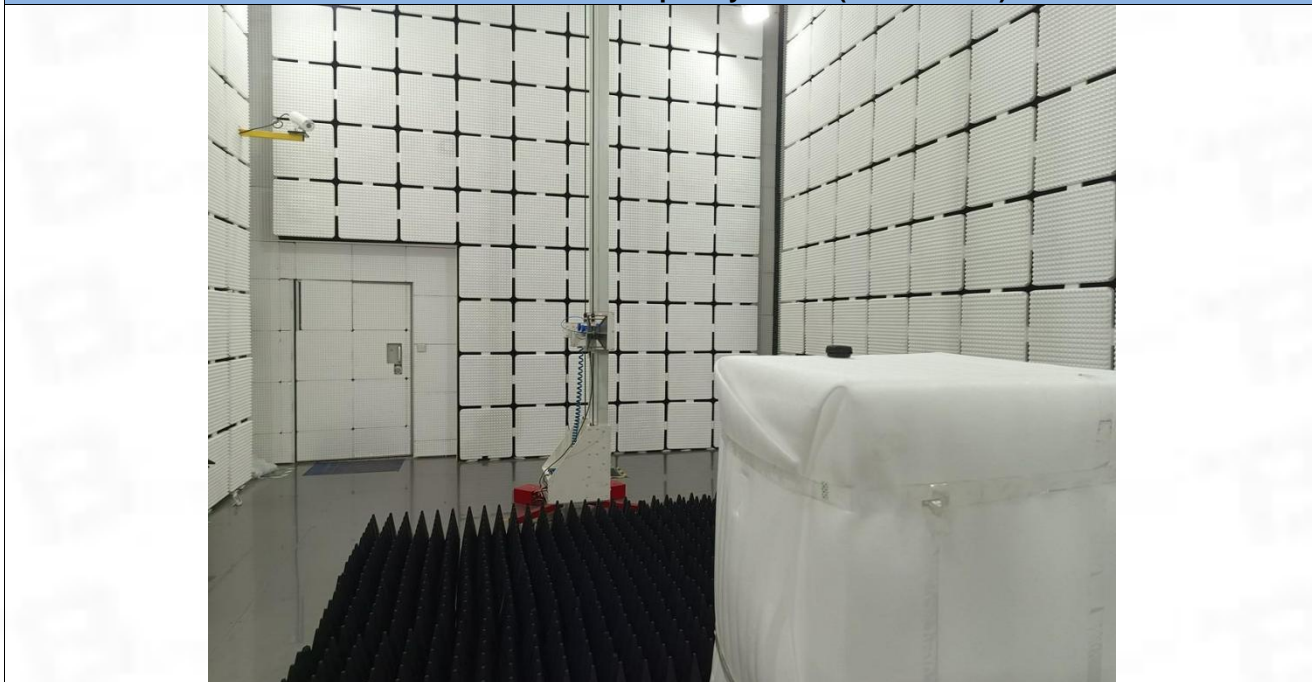
Conducted Emission at AC power line



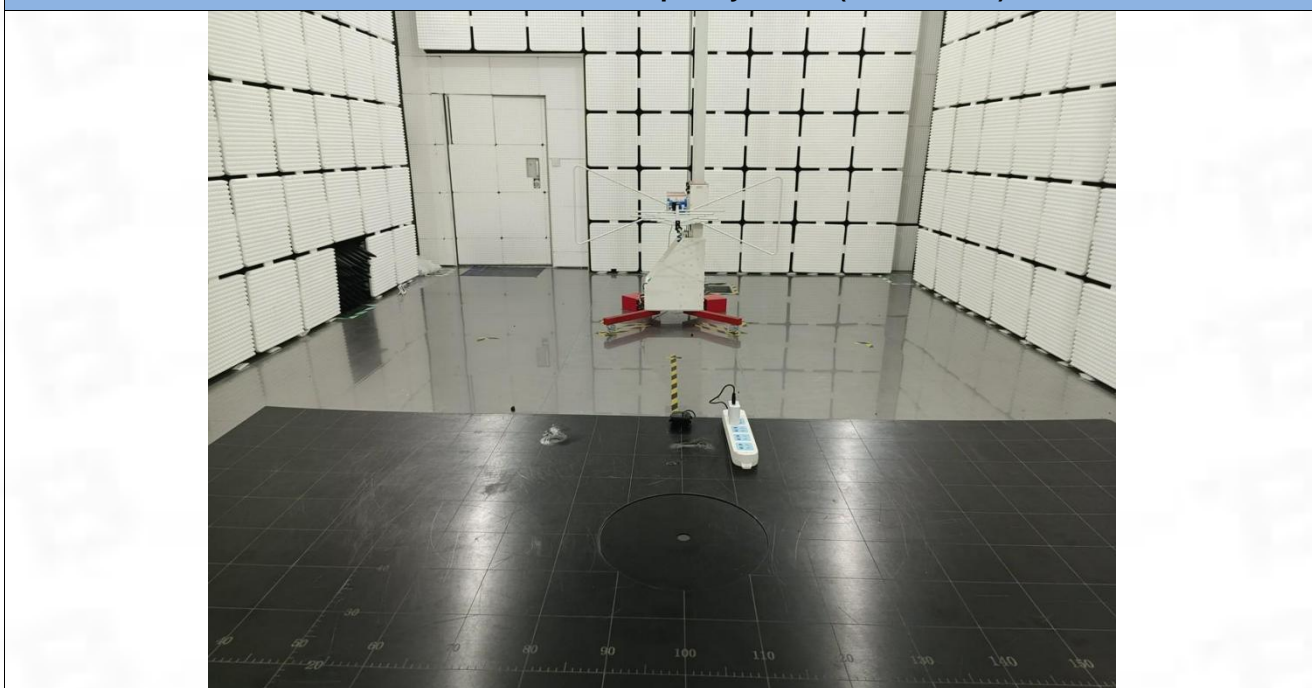
Occupied Bandwidth
Maximum Conducted Output Power
Power Spectral Density
Emissions in non-restricted frequency bands



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



Emissions in restricted frequency bands (below 1GHz)



8 EUT Constructional Details (EUT Photos)

Please refer to the report No.BTFSZ230307R00101.

Appendix

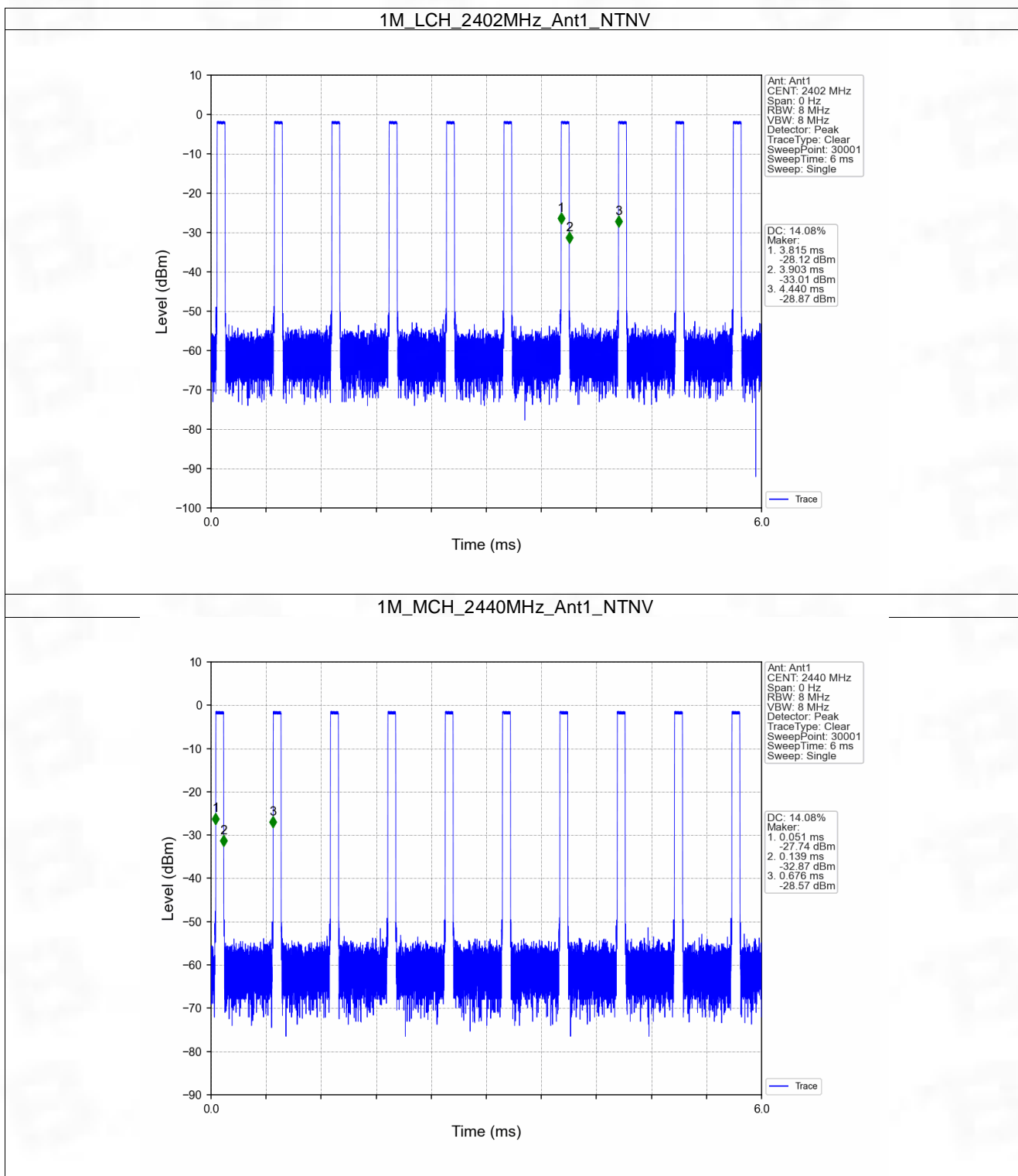
1. Duty Cycle

1.1 Ant1

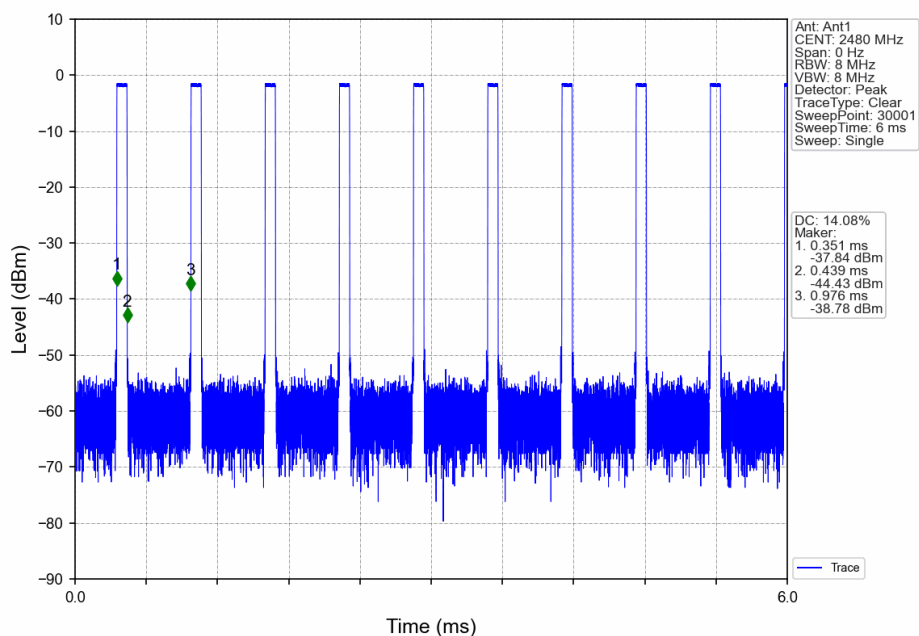
1.1.1 Test Result

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
1M	SISO	2402	0.088	0.625	14.08	8.51	0.03
		2440	0.088	0.625	14.08	8.51	0.00
		2480	0.088	0.625	14.08	8.51	0.00
2M	SISO	2402	0.052	0.625	8.32	10.80	0.00
		2440	0.052	0.625	8.32	10.80	0.00
		2480	0.052	0.625	8.32	10.80	0.03

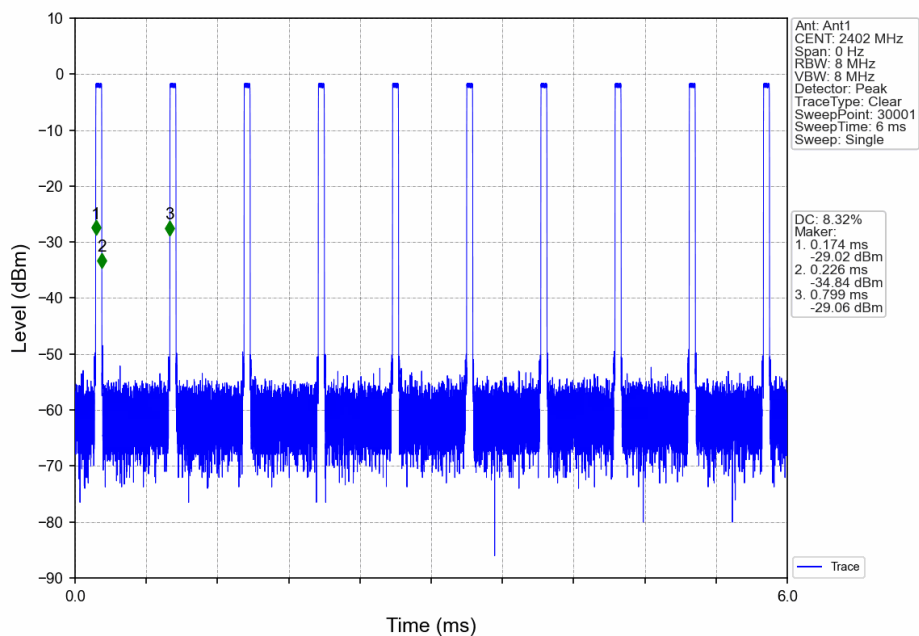
1.1.2 Test Graph



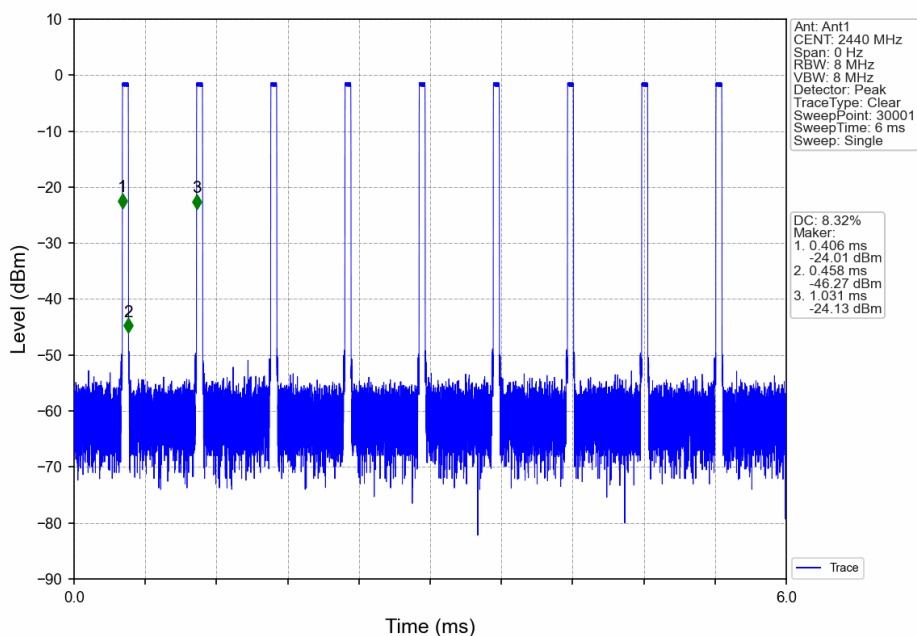
1M_HCH_2480MHz_Ant1_NTNV



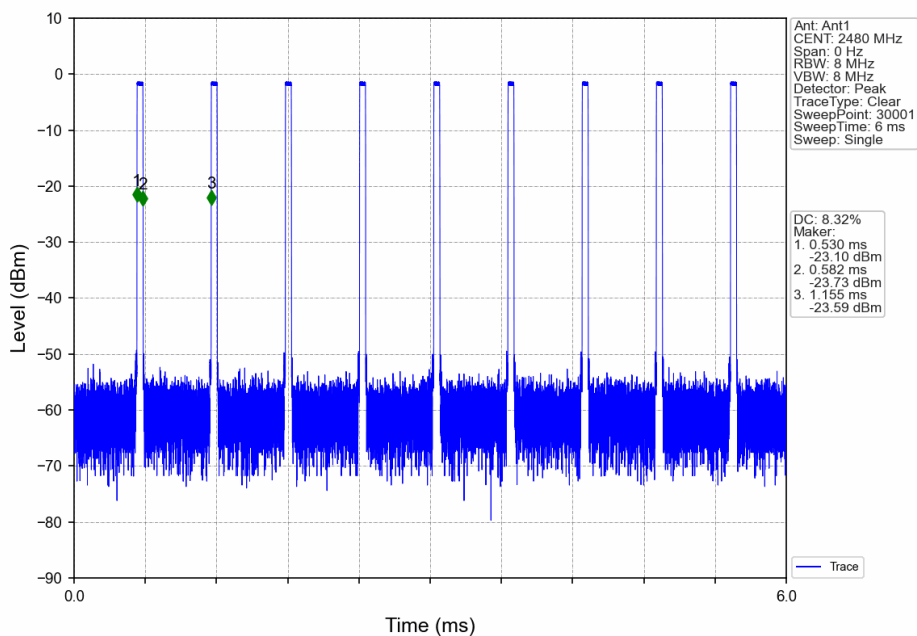
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



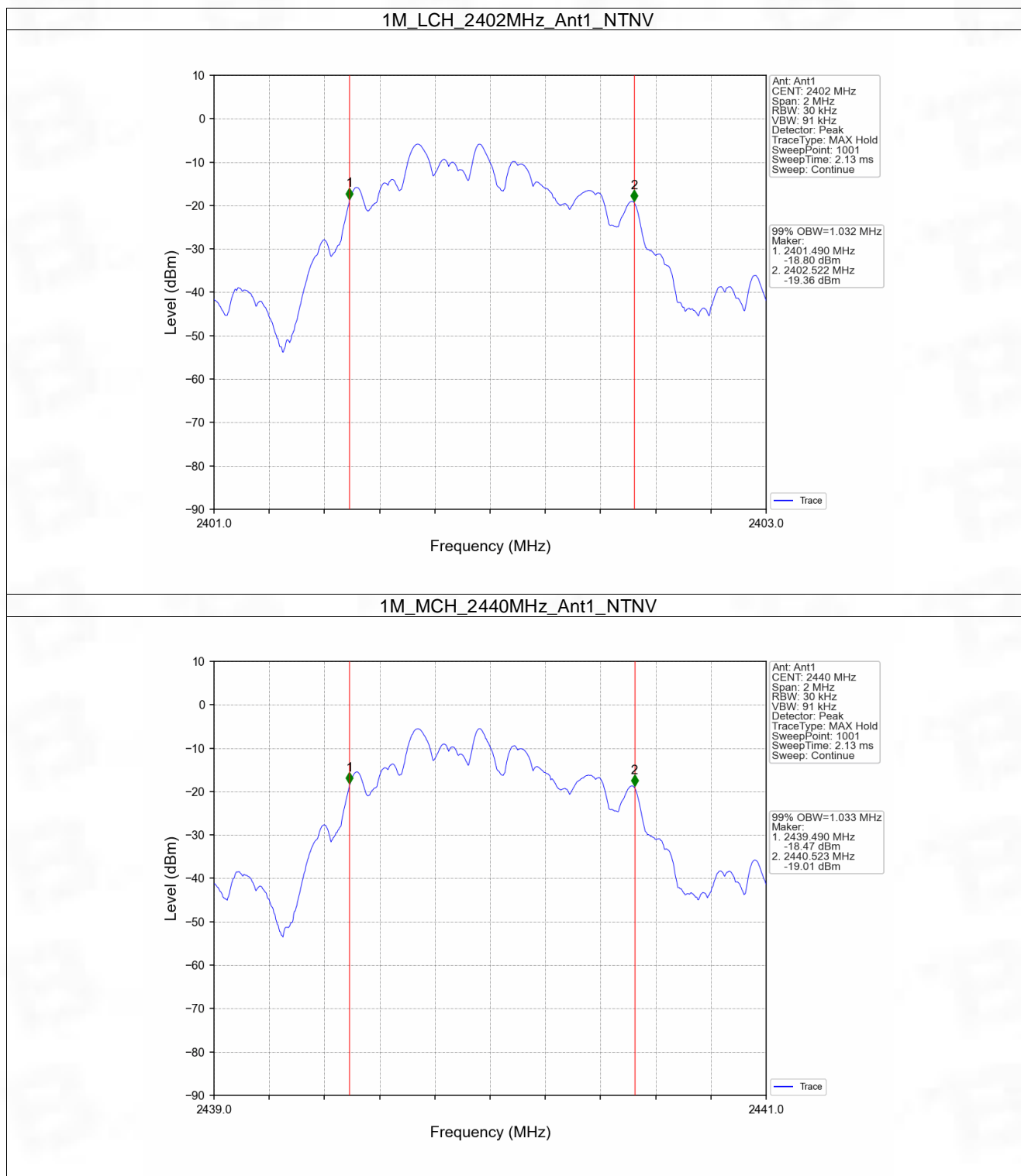
2. Bandwidth

2.1 OBW

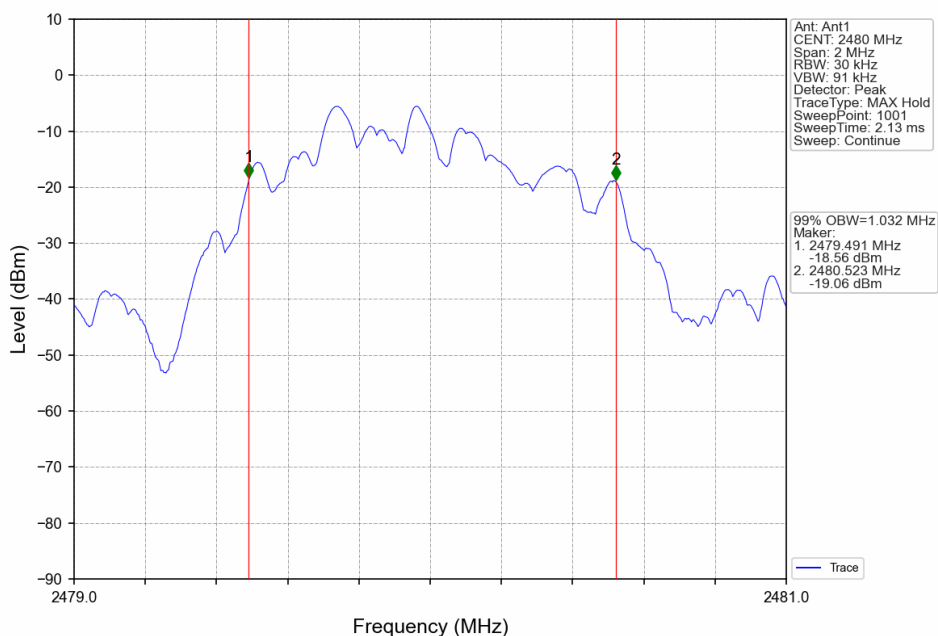
2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
1M	SISO	2402	1	1.032	Pass
		2440	1	1.033	Pass
		2480	1	1.032	Pass
2M	SISO	2402	1	2.066	Pass
		2440	1	2.066	Pass
		2480	1	2.065	Pass

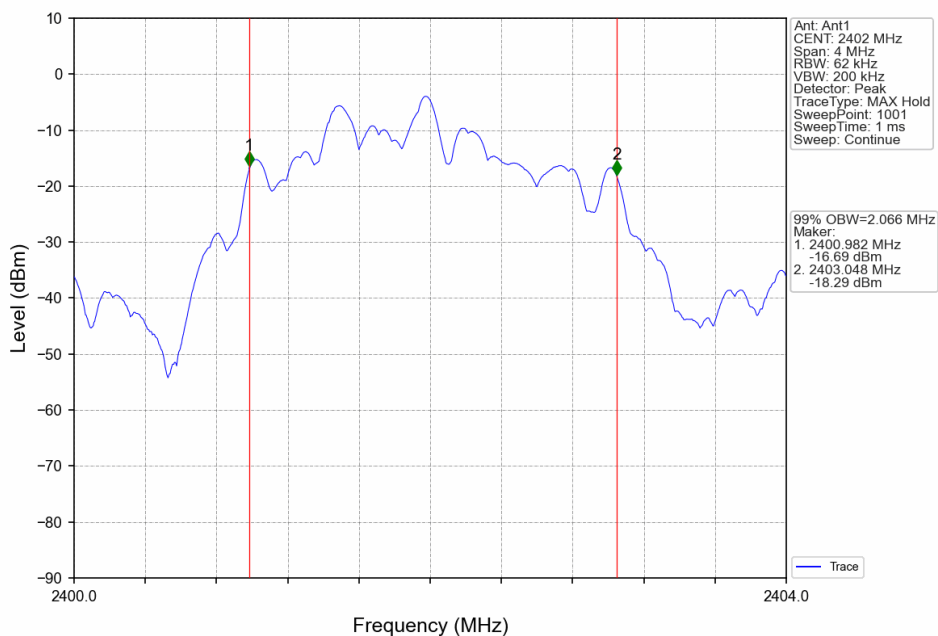
2.1.2 Test Graph



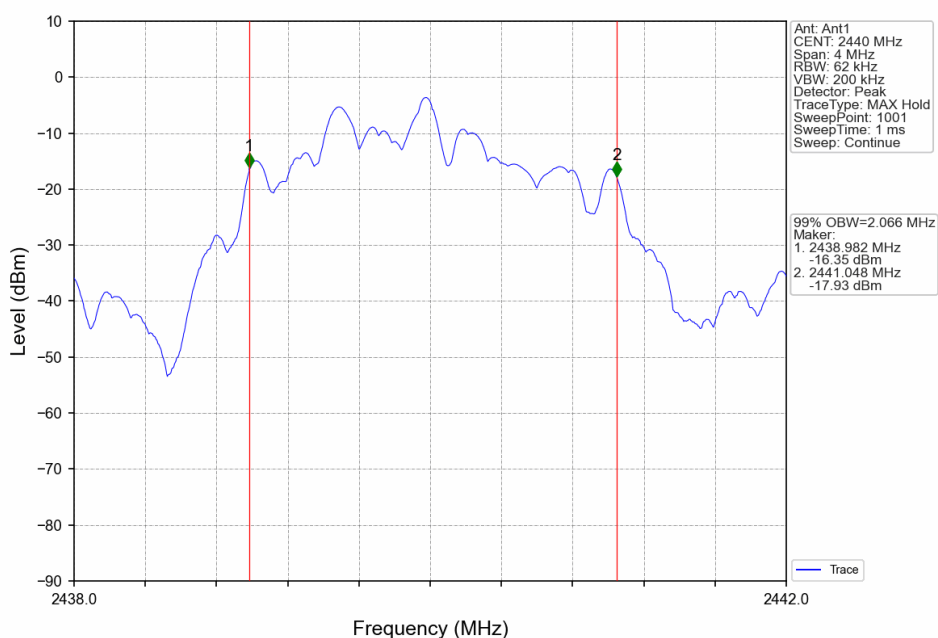
1M_HCH_2480MHz_Ant1_NTNV



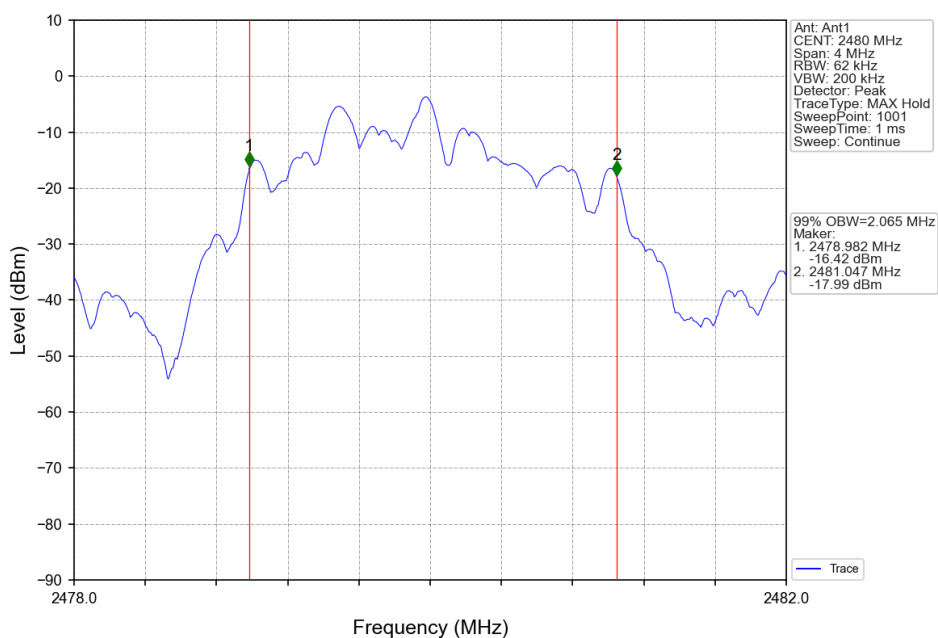
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV

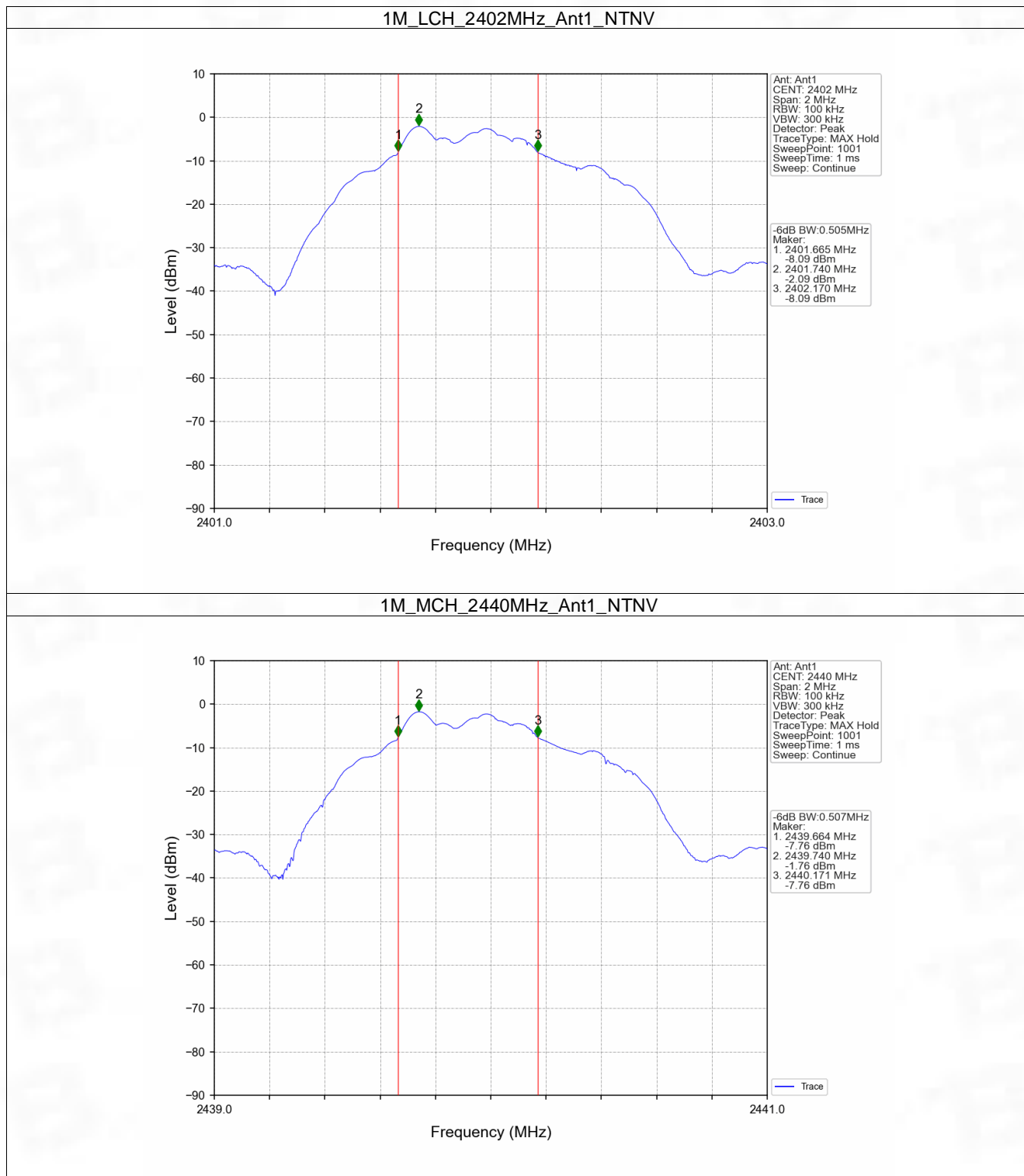


2.2 6dB BW

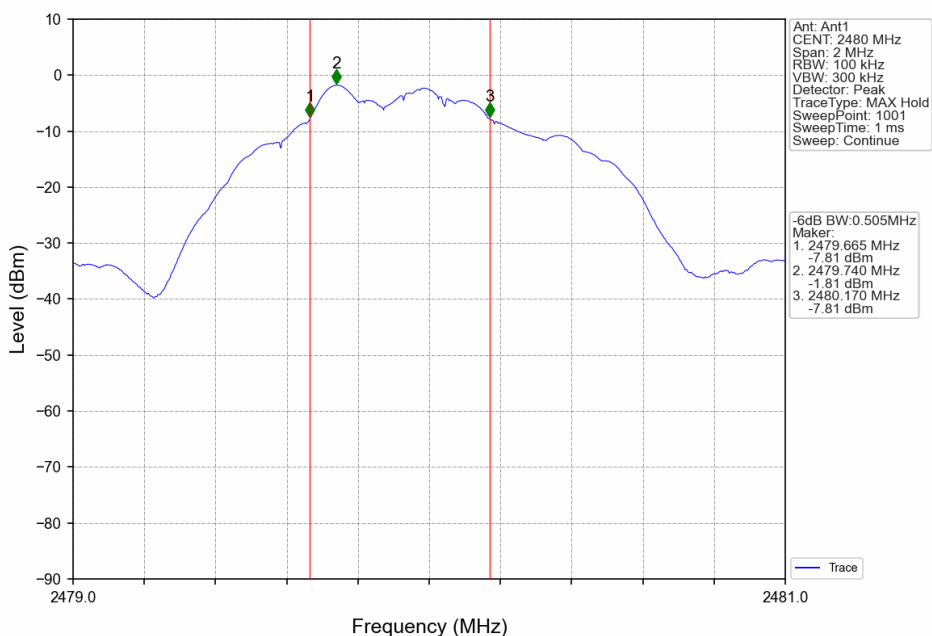
2.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	2402	1	0.505	≥ 0.5	Pass
		2440	1	0.507	≥ 0.5	Pass
		2480	1	0.505	≥ 0.5	Pass
2M	SISO	2402	1	0.878	≥ 0.5	Pass
		2440	1	0.881	≥ 0.5	Pass
		2480	1	0.877	≥ 0.5	Pass

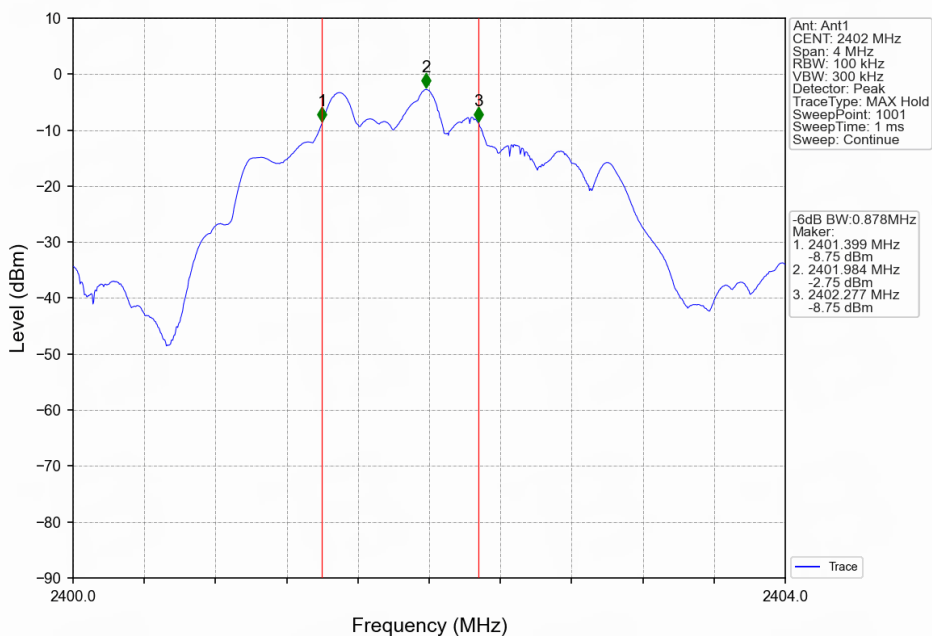
2.2.2 Test Graph



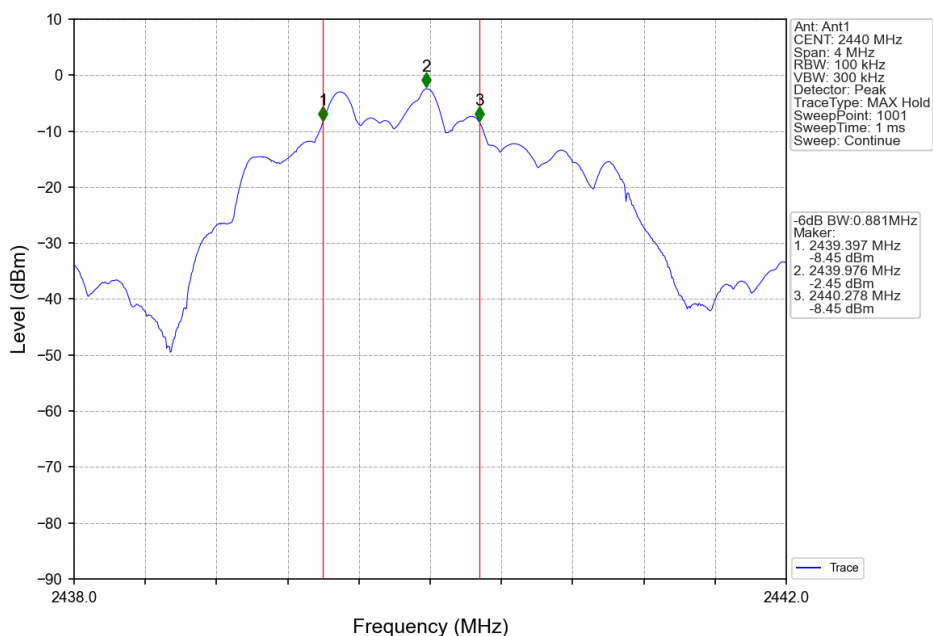
1M_HCH_2480MHz_Ant1_NTNV



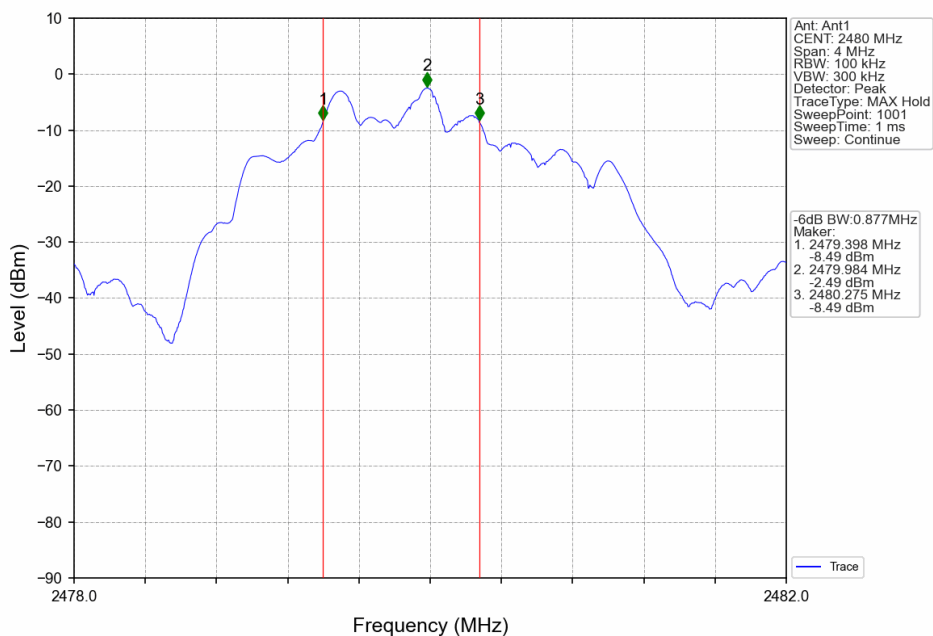
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



3. Maximum Conducted Output Power

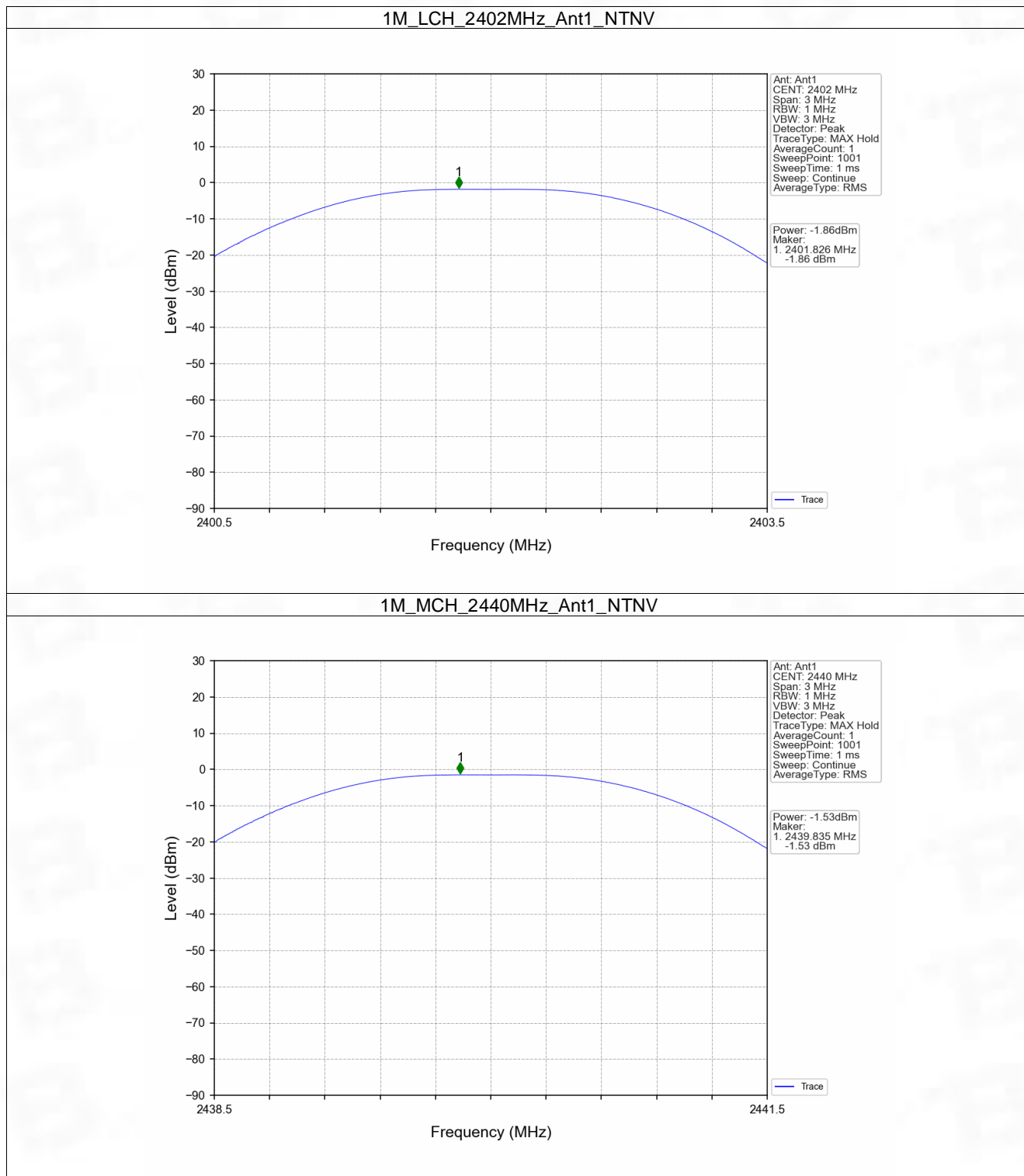
3.1 Power

3.1.1 Test Result

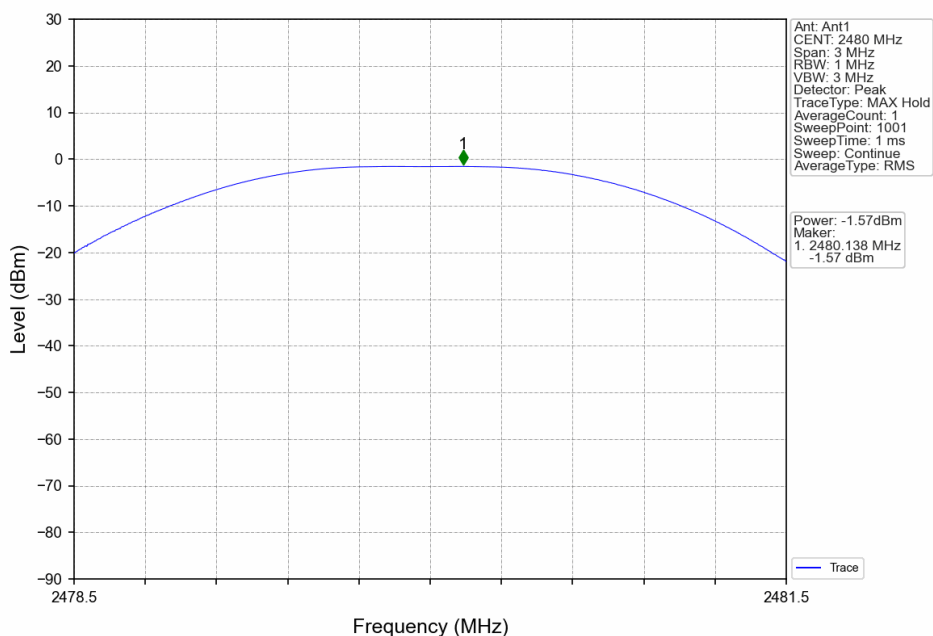
Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1M	SISO	2402	-1.86	≤ 30	Pass
		2440	-1.53	≤ 30	Pass
		2480	-1.57	≤ 30	Pass
2M	SISO	2402	-2.01	≤ 30	Pass
		2440	-1.69	≤ 30	Pass
		2480	-1.74	≤ 30	Pass

Note1: Antenna Gain: Ant1: -2.66dBi;

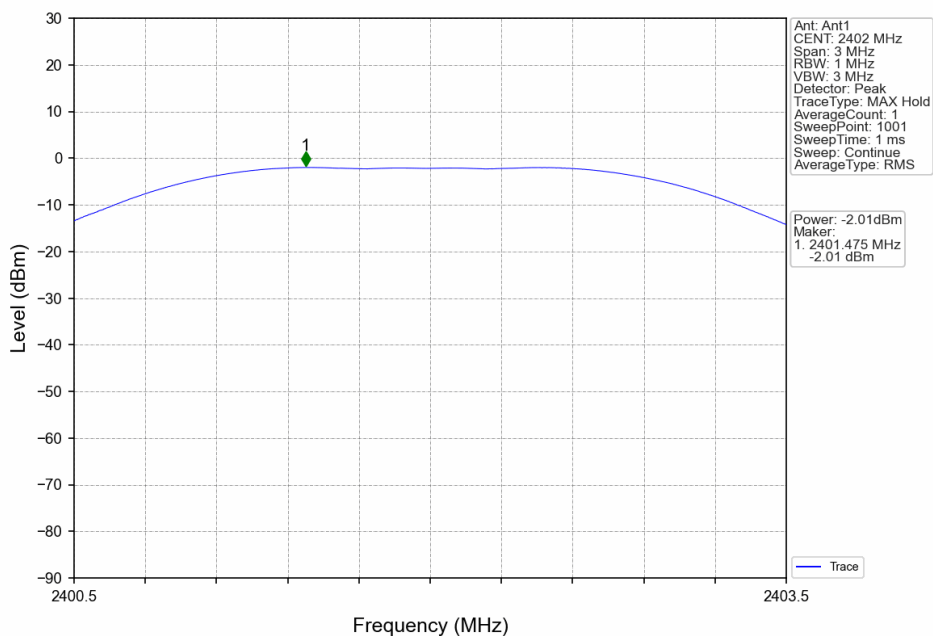
3.1.2 Test Graph



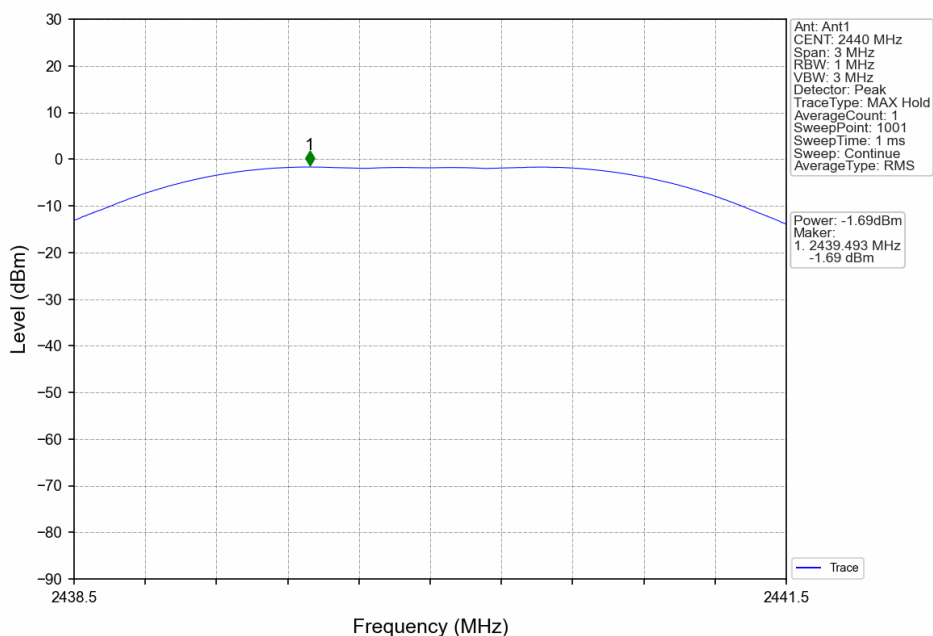
1M_HCH_2480MHz_Ant1_NTNV



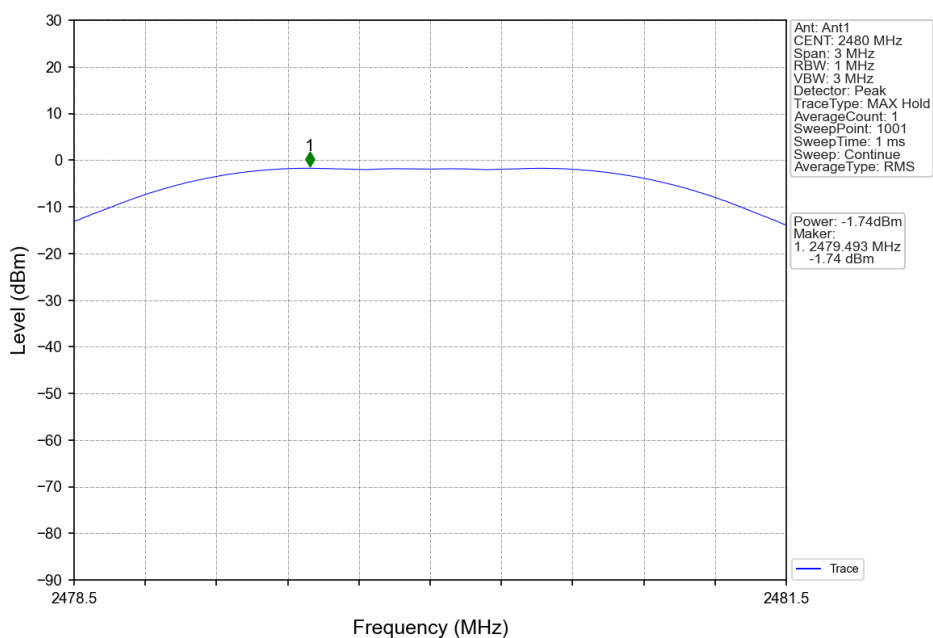
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



4. Maximum Power Spectral Density

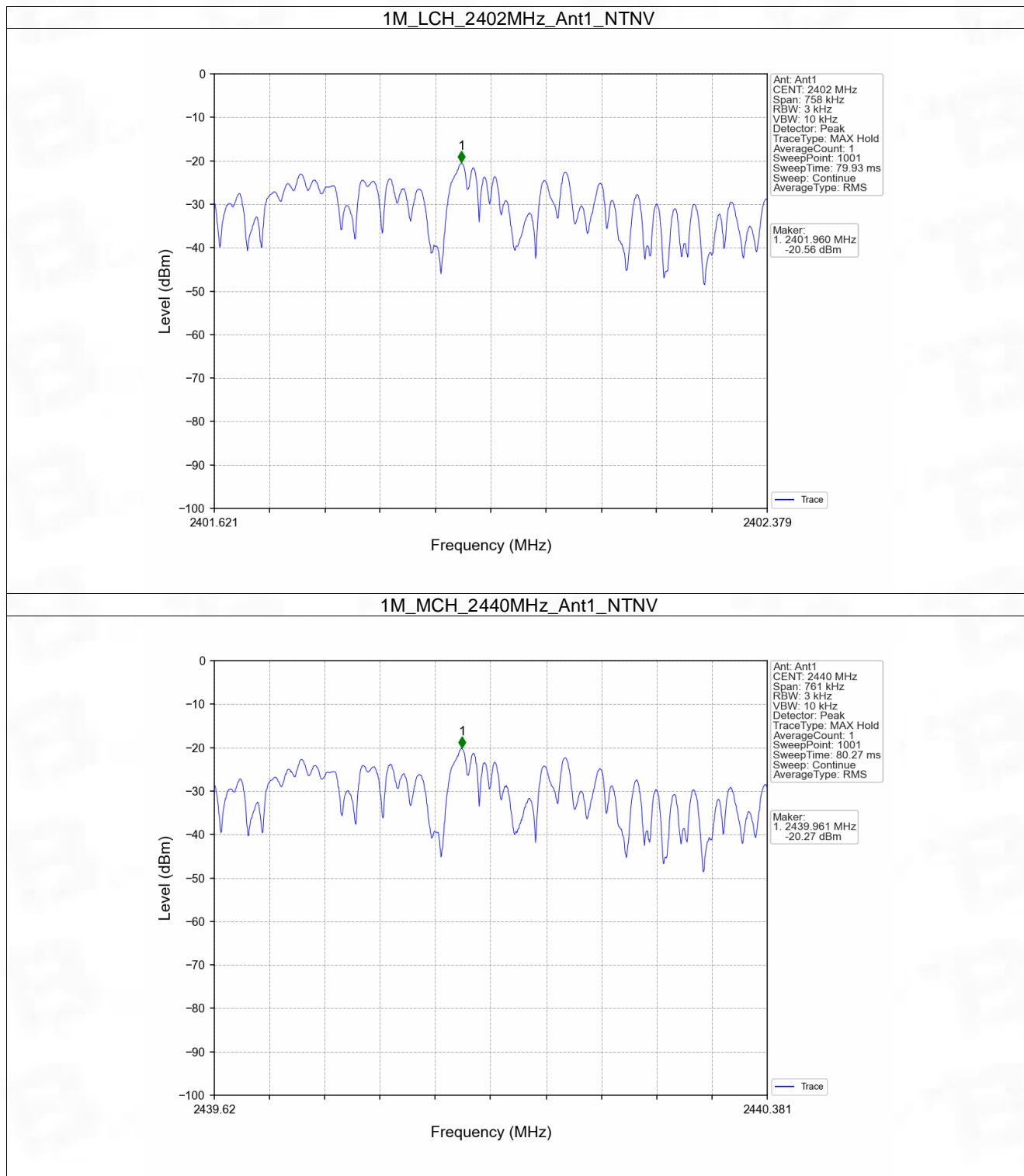
4.1 PSD

4.1.1 Test Result

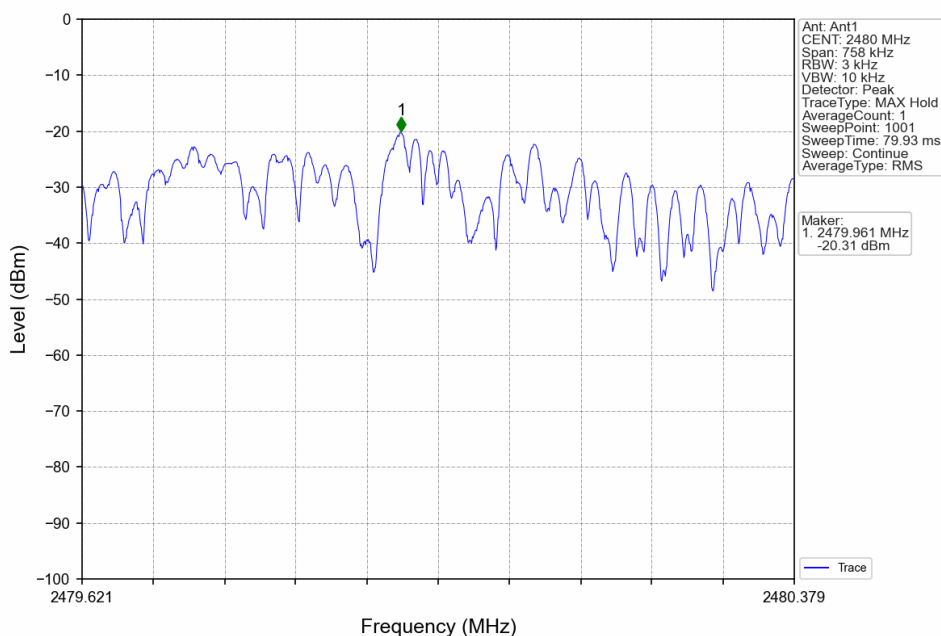
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
1M	SISO	2402	-20.56	≤ 8	Pass
		2440	-20.27	≤ 8	Pass
		2480	-20.31	≤ 8	Pass
2M	SISO	2402	-24.18	≤ 8	Pass
		2440	-23.89	≤ 8	Pass
		2480	-23.94	≤ 8	Pass

Note1: Antenna Gain: Ant1: -2.66dBi;

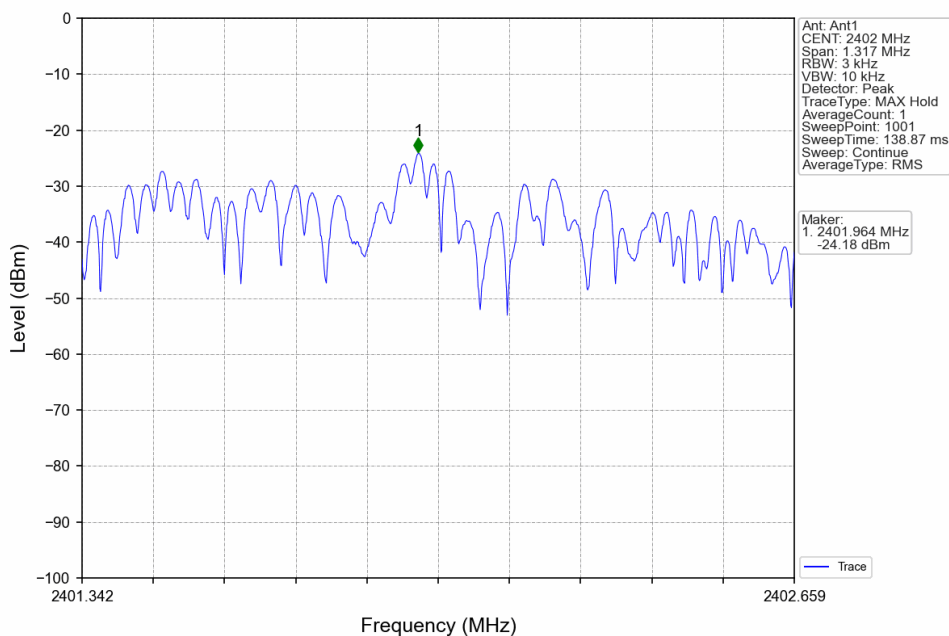
4.1.2 Test Graph



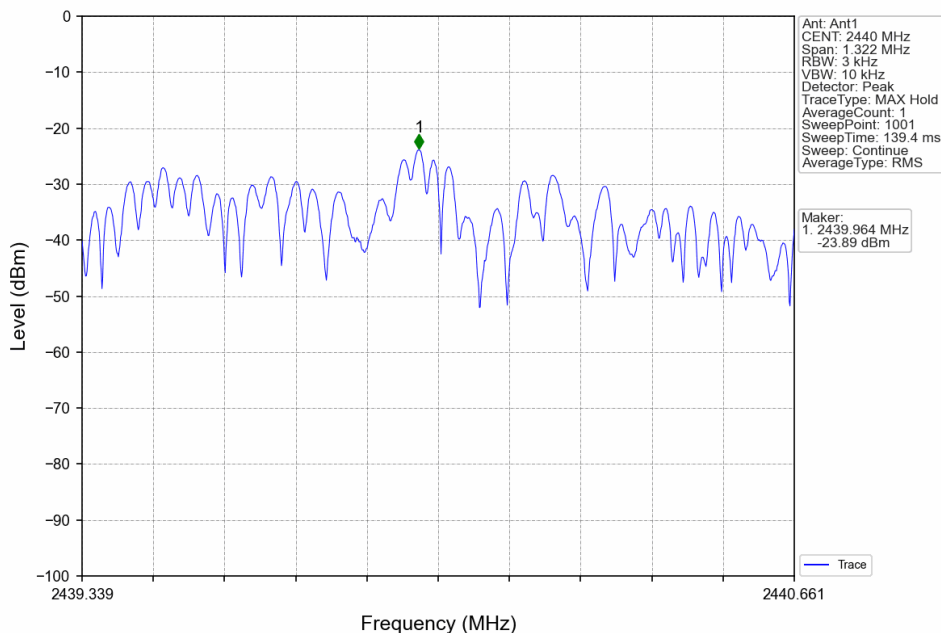
1M_HCH_2480MHz_Ant1_NTNV



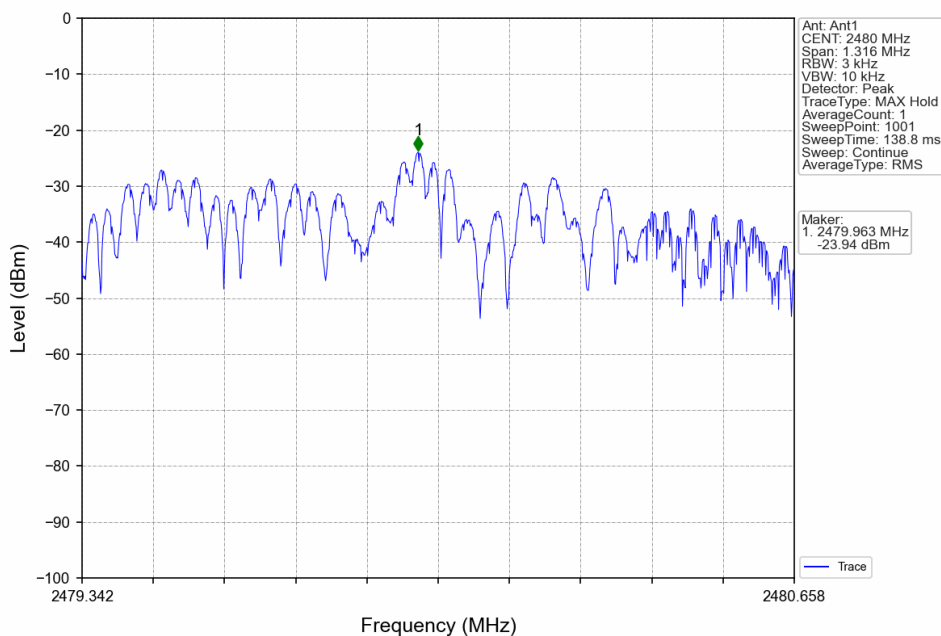
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



5. Unwanted Emissions In Non-restricted Frequency Bands

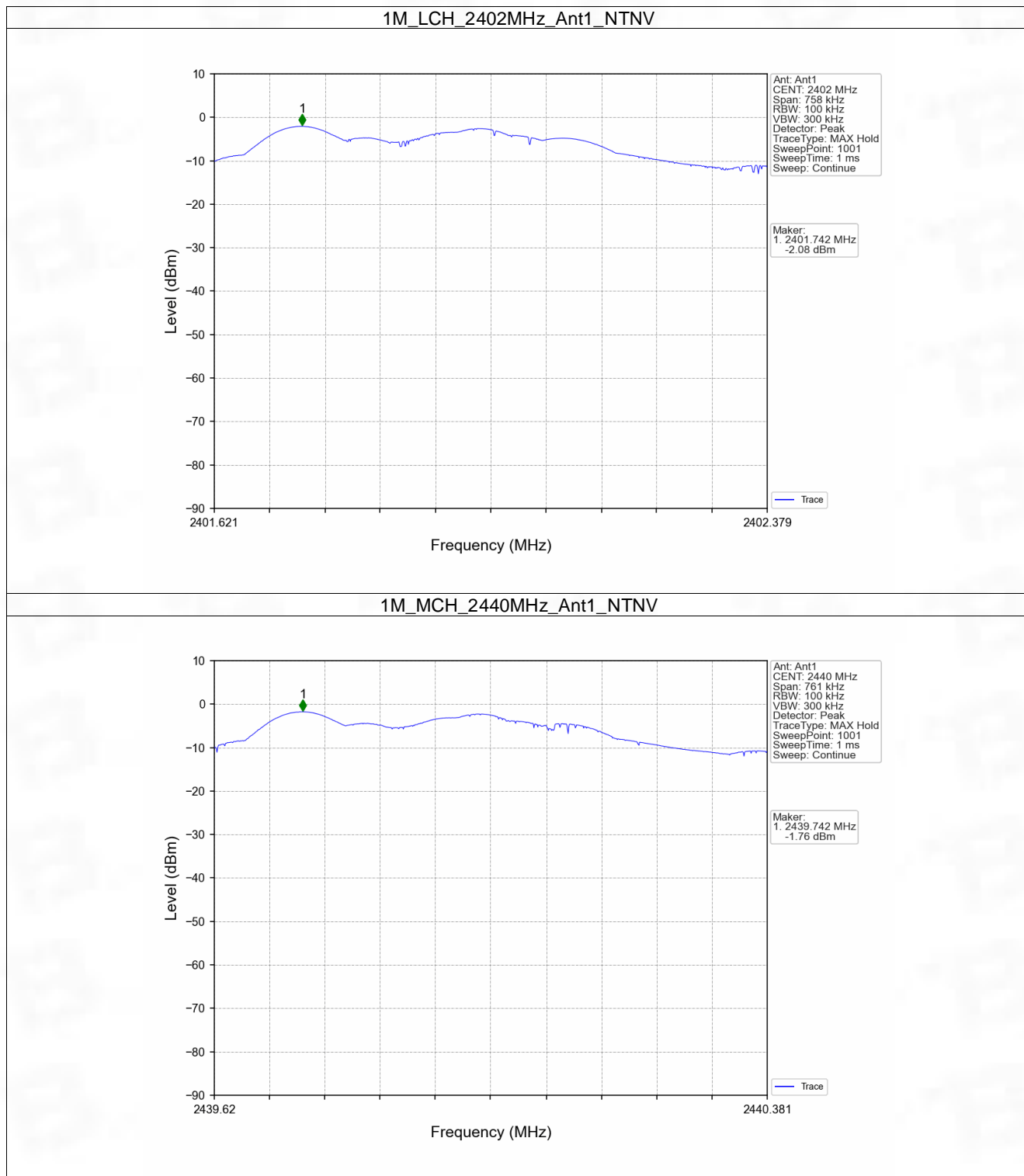
5.1 Ref

5.1.1 Test Result

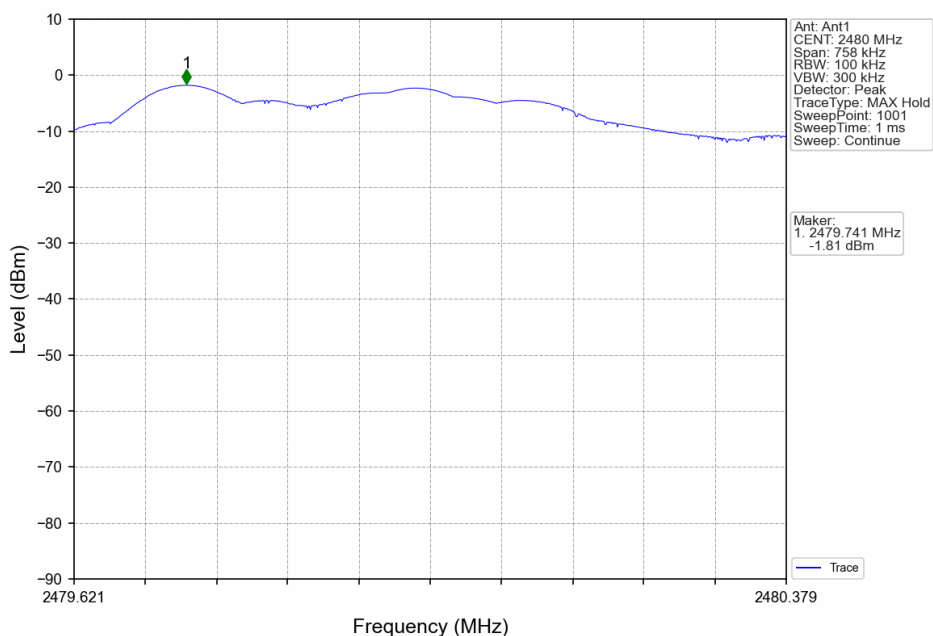
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
1M	SISO	2402	1	-2.08
		2440	1	-1.76
		2480	1	-1.81
2M	SISO	2402	1	-2.80
		2440	1	-2.45
		2480	1	-2.49

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.

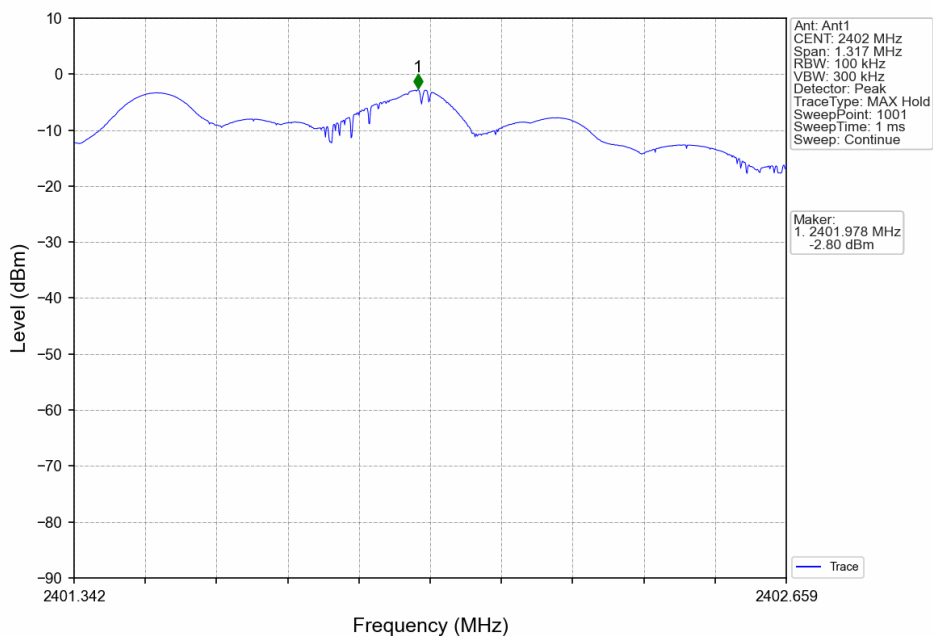
5.1.2 Test Graph



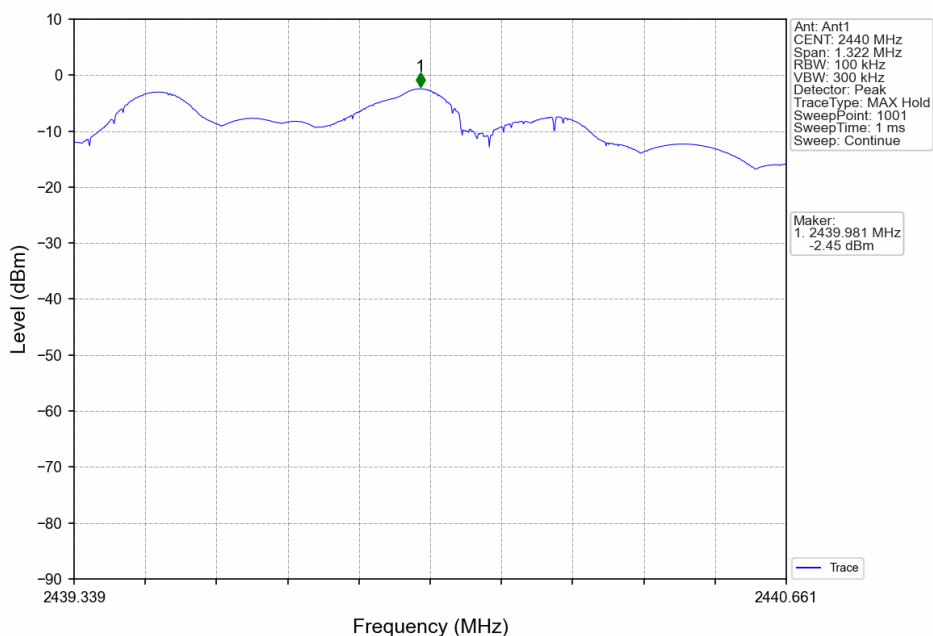
1M_HCH_2480MHz_Ant1_NTNV



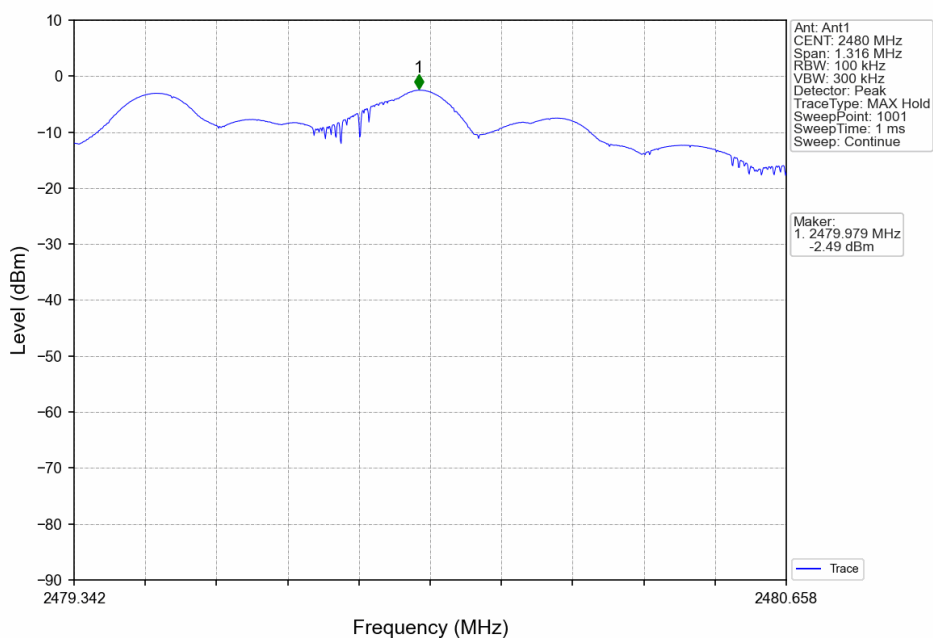
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



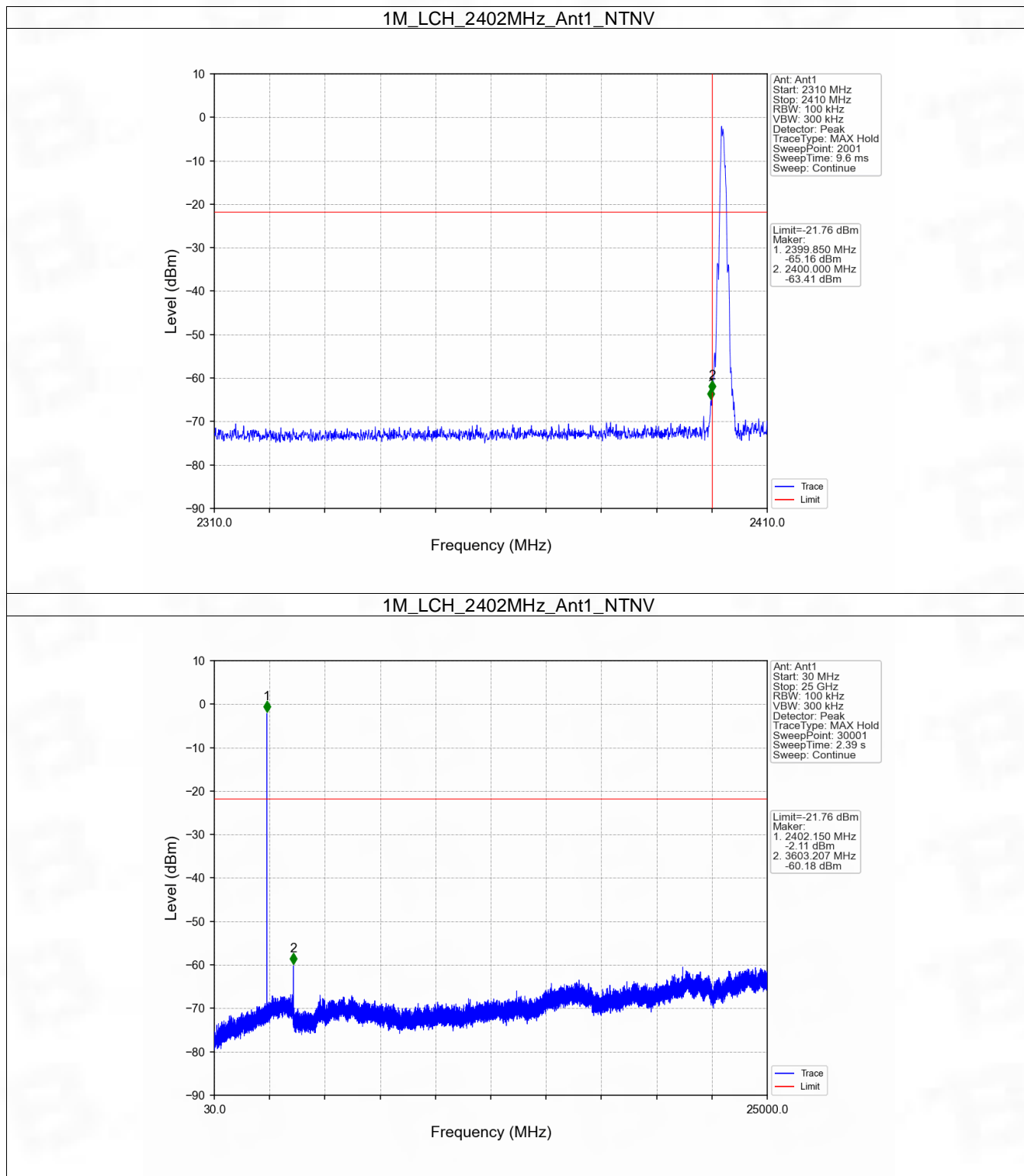
5.2 CSE

5.2.1 Test Result

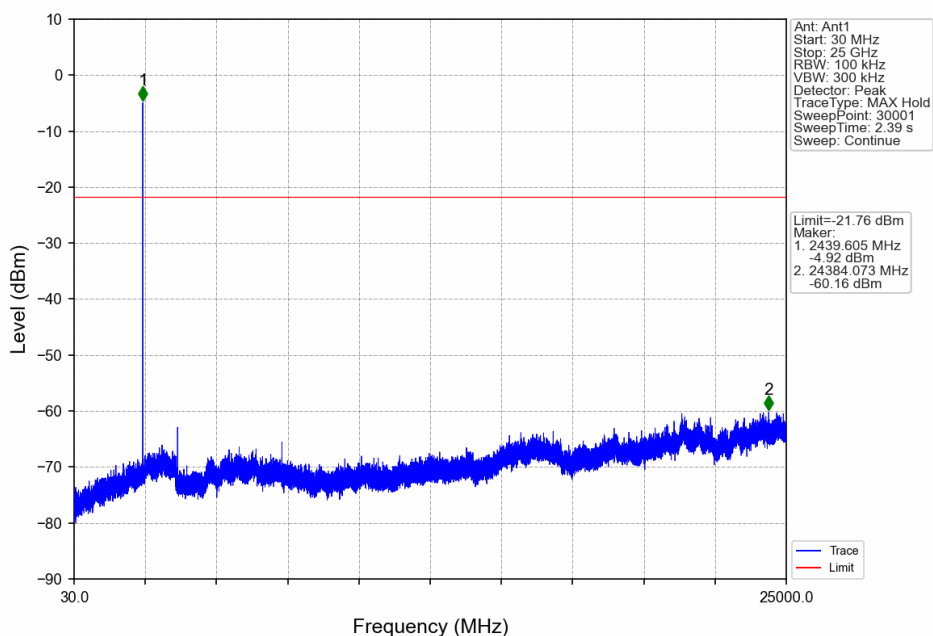
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	2402	1	-1.76	-21.76	Pass
		2440	1	-1.76	-21.76	Pass
		2480	1	-1.76	-21.76	Pass
2M	SISO	2402	1	-2.45	-22.45	Pass
		2440	1	-2.45	-22.45	Pass
		2480	1	-2.45	-22.45	Pass

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.

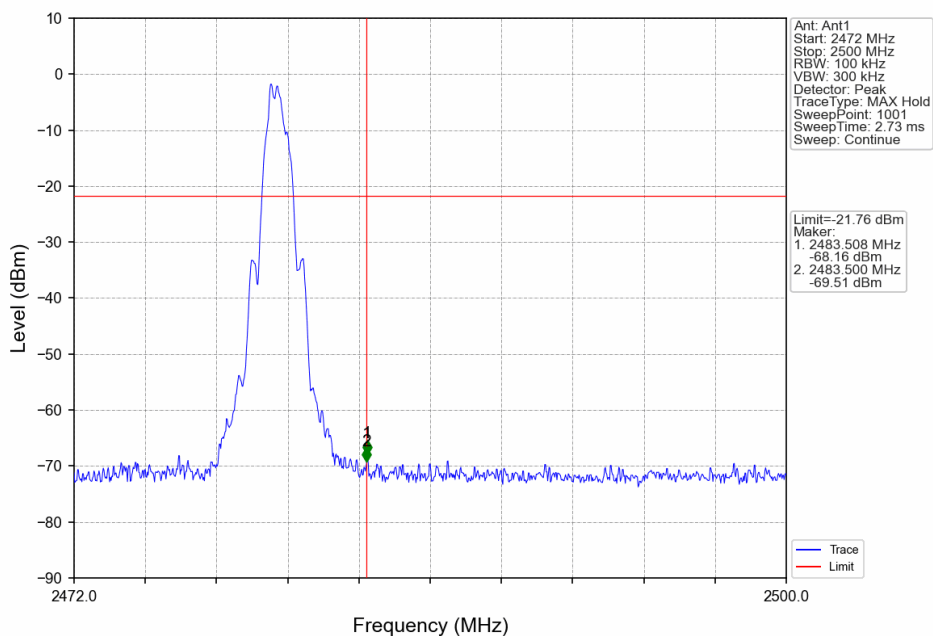
5.2.2 Test Graph



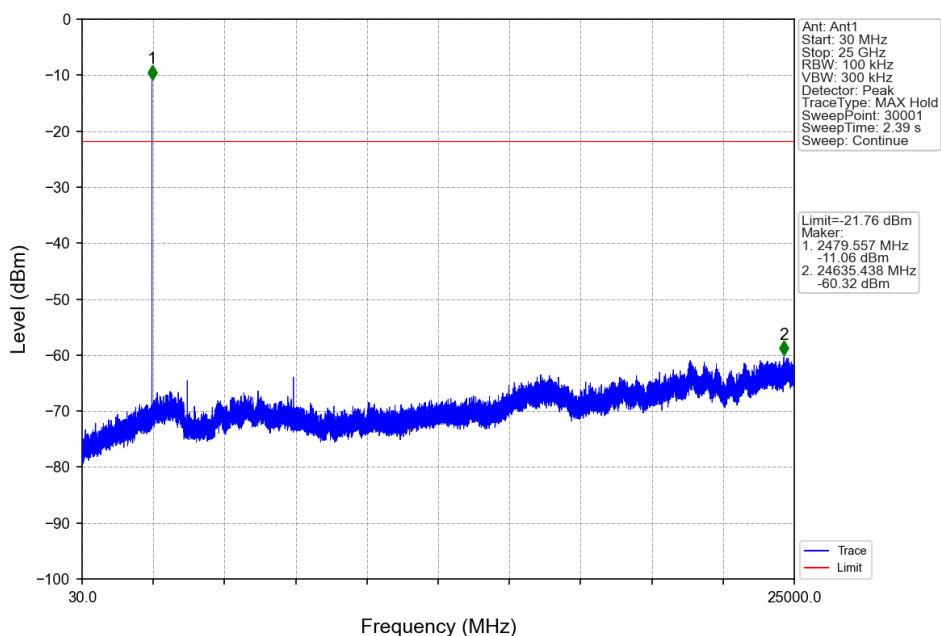
1M_MCH_2440MHz_Ant1_NTNV



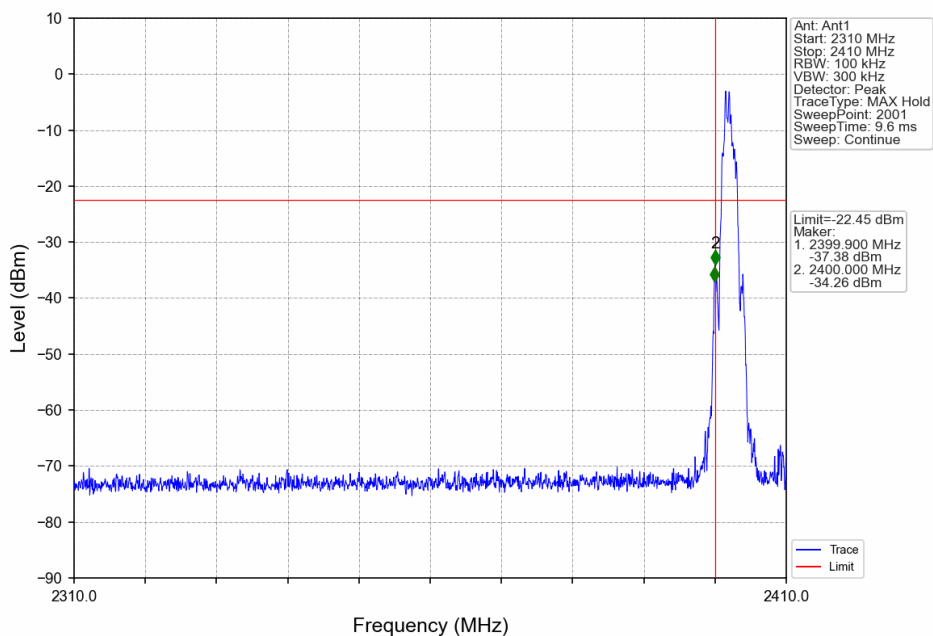
1M_HCH_2480MHz_Ant1_NTNV



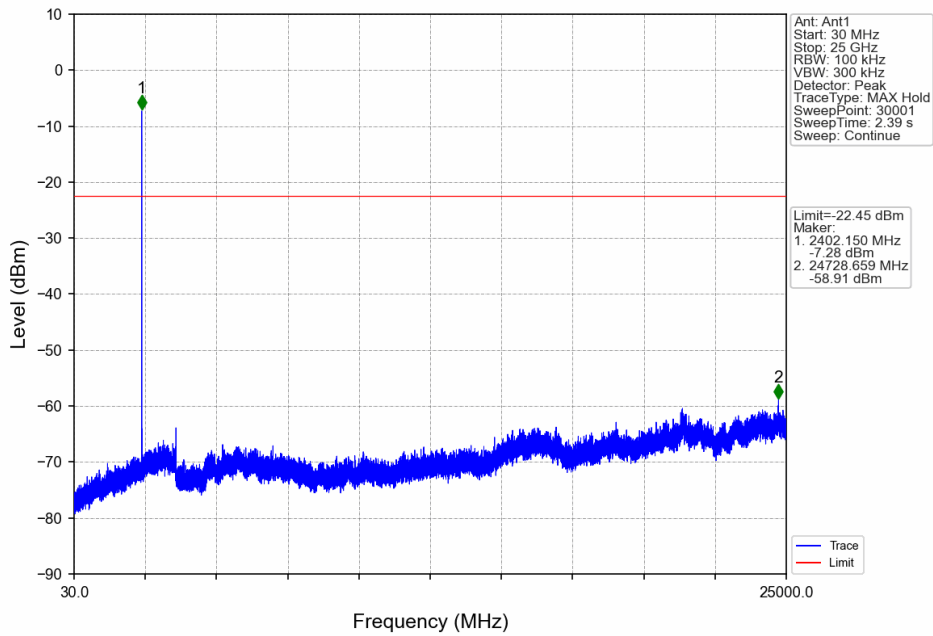
1M_HCH_2480MHz_Ant1_NTNV



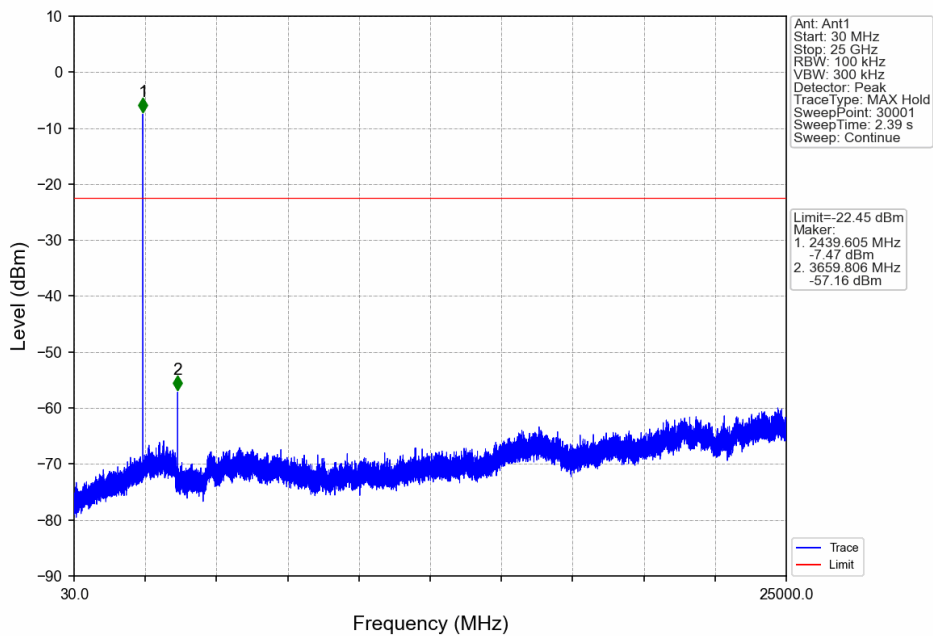
2M_LCH_2402MHz_Ant1_NTNV



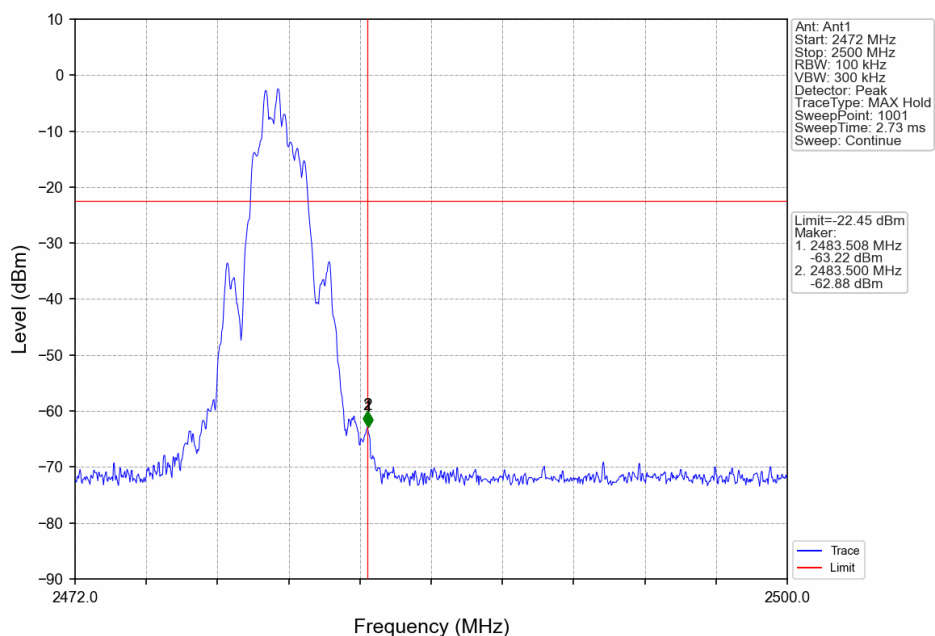
2M_LCH_2402MHz_Ant1_NTNV



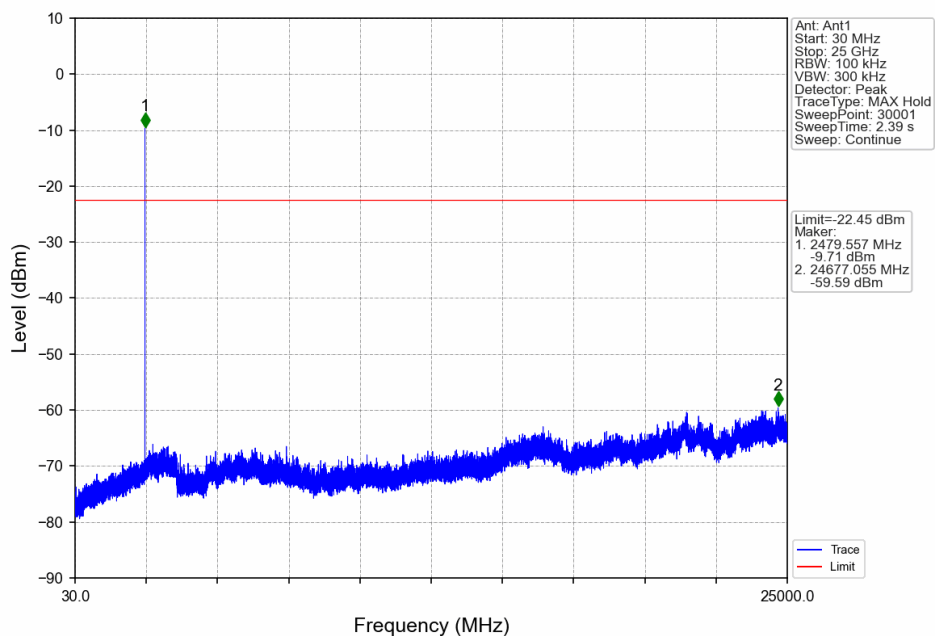
2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



6. Form731

6.1 Form731

6.1.1 Test Result

Lower Freq (MHz)	High Freq (MHz)	MAX Power (W)	MAX Power (dBm)
2402	2480	0.0007	-1.53



Test Report Number: BTFSZ230307R00102



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