

Test Report

Report No.: MTi230606005-02E1
Date of issue: 2023-09-26
Applicant: Ten-Tronics Co., Ltd.
Product: 150M HDMI Wireless Extender
Model(s): A-1488
FCC ID: 2ACIA-TTBT016

Shenzhen Microtest Co., Ltd.

<http://www.mtitest.com>

The test report is only used for customer scientific research, teaching, internal quality control and other purposes, and is for internal reference only.



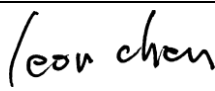
Instructions

1. This test report shall not be partially reproduced without the written consent of the laboratory.
2. The test results in this test report are only responsible for the samples submitted
3. This test report is invalid without the seal and signature of the laboratory.
4. This test report is invalid if transferred, altered, or tampered with in any form without authorization.
5. Any objection to this test report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

Table of contents

1	General Description	5
1.1	Description of the EUT	5
1.2	Description of test modes	5
1.3	Environmental Conditions	7
1.4	Description of support units	7
1.5	Measurement uncertainty	7
2	Summary of Test Result	8
3	Test Facilities and accreditations	9
3.1	Test laboratory	9
4	List of test equipment.....	10
5	Evaluation Results (Evaluation).....	11
5.1	Antenna requirement	11
6	Radio Spectrum Matter Test Results (RF)	11
6.1	Conducted Emission at AC power line	11
6.2	Occupied Bandwidth	14
6.3	Maximum Conducted Output Power.....	15
6.4	Power Spectral Density	16
6.5	Emissions in frequency bands.....	17
6.6	Band edge emissions (Radiated)	18
6.7	Radiated emissions (below 1GHz)	27
6.8	Radiated emissions (above 1GHz).....	33
	Photographs of the test setup	46
	Photographs of the EUT.....	47
	Appendix A: DTS Bandwidth	49
	Appendix B: Maximum conducted output power.....	62
	Appendix C: Maximum power spectral density.....	63
	Appendix D: Band edge measurements	76
	Appendix E: Conducted Spurious Emission	84
	Appendix F: Duty Cycle	120

Test Result Certification	
Applicant:	Ten-Tronics Co., Ltd.
Address:	No. 33, Lane 347, Chung-San S. Road, Young-Kang City, Tainan, Taiwan
Manufacturer:	Ten-Tronics Co., Ltd.
Address:	No. 33, Lane 347, Chung-San S. Road, Young-Kang City, Tainan, Taiwan
Product description	
Product name:	150M HDMI Wireless Extender
Trade mark:	N/A
Model name:	A-1488
Series Model:	N/A
Standards:	47 CFR Part 15.247
Test Method:	ANSI C63.10-2013 KDB 558074 D01 15.247 Meas Guidance v05r02 KDB 662911 D01 Multiple Transmitter Output v02r01
Date of Test	
Date of test:	2023-08-09 to 2023-09-26
Test result:	Pass

Test Engineer	:	
		(Maleah Deng)
Reviewed By	:	
		(Leon Chen)
Approved By	:	
		(Tom Xue)

1 General Description

1.1 Description of the EUT

Product name:	150M HDMI Wireless Extender
Model name:	A-1488
Series Model:	N/A
Model difference:	N/A
Electrical rating:	Input: DC 5V 2A
Accessories:	N/A
Hardware version:	V1.0
Software version:	V1.0
Test sample(s) number:	MTi230606005-02S1001
RF specification	
Operating frequency range:	802.11b/g/n20:2412~2462 MHz 802.11n40:2422~2452 MHz
Modulation type:	IEEE 802.11b: DSSS (DBPSK, DQPSK, CCK) IEEE 802.11g/n (HT20/HT40) : OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna(s) type:	FPC Antenna
Antenna(s) gain:	ANT1: 2.32dBi; ANT2: 2.32dBi; ANT1 and ANT2 are correlated antennas and Directive Antenna gain: 5.33dBi

1.2 Description of test modes

No.	Emission test modes
Mode1	TX-802.11b(SISO)
Mode2	TX-802.11g(SISO)
Mode3	TX-802.11n(HT20) (SISO)
Mode4	TX-802.11n(HT40) (SISO)
Mode5	TX-802.11n(HT20) (MIMO)
Mode6	TX-802.11n(HT40) (MIMO)

1.2.1 Operation channel list

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

Note: The test software provided by manufacturer is used to control EUT for working in engineering mode, that enables selectable channel, and capable of continuous transmitting mode.

Test Software:

For power setting, refer to below table.

Test Software(ANT1):		Realtek	
802.11b		802.11g	
Channel	Power setting	Channel	Power setting
1	43	1	45
6	43	6	45
11	43	11	45
802.11n(HT20)		802.11n(HT40)	
1	35	3	35
6	35	6	35
11	35	9	35
Test Software(ANT2):		Realtek	
802.11b		802.11g	
Channel	Power setting	Channel	Power setting
1	44	1	40
6	44	6	40
11	44	11	40
802.11n(HT20)		802.11n(HT40)	
1	35	3	30
6	35	6	30
11	35	9	30

1.3 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15°C ~ 35°C
Humidity:	20% RH ~ 75% RH
Atmospheric pressure:	98 kPa ~ 101 kPa

1.4 Description of support units

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

Support equipment list			
Description	Model	Serial No.	Manufacturer
HUAWEI CHARGE (10W)	HW-050200C02	K95212KA103561	HUAWEI
Support cable list			
Description	Length (m)	From	To
/	/	/	/

1.5 Measurement uncertainty

Measurement	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	±3.1dB
Occupied channel bandwidth	±3 %
RF output power, conducted	±1 dB
Power Spectral Density, conducted	±1 dB
Unwanted Emissions, conducted	±1 dB
Radiated spurious emissions (above 1GHz)	±5.3dB
Radiated spurious emissions (9kHz~30MHz)	±4.3dB
Radiated spurious emissions (30MHz~1GHz)	±4.7dB
Temperature	±1 °C
Humidity	± 5 %

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

2 Summary of Test Result

No.	Item	Standard	Requirement	Result
1	Antenna requirement	47 CFR Part 15.247	47 CFR 15.203	Pass
2	Conducted Emission at AC power line	47 CFR Part 15.247	47 CFR 15.207(a)	Pass
3	Occupied Bandwidth	47 CFR Part 15.247	47 CFR 15.247(a)(2)	Pass
4	Maximum Conducted Output Power	47 CFR Part 15.247	47 CFR 15.247(b)(3)	Pass
5	Power Spectral Density	47 CFR Part 15.247	47 CFR 15.247(e)	Pass
6	Emissions in frequency bands	47 CFR Part 15.247	47 CFR 15.247(d) 15.209, 15.205	Pass
7	Band edge emissions (Radiated)	47 CFR Part 15.247	47 CFR 15.247(d) 15.209, 15.205	Pass
8	Radiated emissions (below 1GHz)	47 CFR Part 15.247	47 CFR 15.247(d) 15.209, 15.205	Pass
9	Radiated emissions (above 1GHz)	47 CFR Part 15.247	47 CFR 15.247(d) 15.209, 15.205	Pass

3 Test Facilities and accreditations

3.1 Test laboratory

Test laboratory:	Shenzhen Microtest Co., Ltd.
Test site location:	101, No.7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	(86-755)88850135
Fax:	(86-755)88850136
CNAS Registration No.:	CNAS L5868
FCC Registration No.:	448573
IC Registration No.:	21760
CABID:	CN0093

4 List of test equipment

No.	Equipment	Manufacturer	Model	Serial No.	Cal. date	Cal. Due
Conducted Emission at AC power line						
1	EMI Test Receiver	Rohde&schwarz	ESCI3	101368	2023-04-26	2024-04-25
2	Artificial mains network	Schwarzbeck	NSLK 8127	183	2023-05-05	2024-05-04
3	Artificial Mains Network	Rohde & Schwarz	ESH2-Z5	100263	2023-06-03	2024-06-02
Occupied Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in frequency bands						
1	Wideband Radio Communication Tester	Rohde&schwarz	CMW500	149155	2023-04-26	2024-04-25
2	ESG Series Analog Ssignal Generator	Agilent	E4421B	GB40051240	2023-04-25	2024-04-24
3	PXA Signal Analyzer	Agilent	N9030A	MY51350296	2023-04-25	2024-04-24
4	Synthesized Sweeper	Agilent	83752A	3610A01957	2023-04-25	2024-04-24
5	MXA Signal Analyzer	Agilent	N9020A	MY50143483	2023-04-26	2024-04-25
6	RF Control Unit	Tonscend	JS0806-1	19D8060152	2023-04-26	2024-04-25
7	Band Reject Filter Group	Tonscend	JS0806-F	19D8060160	2023-05-05	2024-05-04
8	ESG Vector Signal Generator	Agilent	N5182A	MY50143762	2023-04-25	2024-04-24
9	DC Power Supply	Agilent	E3632A	MY40027695	2023-05-05	2024-05-04
Band edge emissions (Radiated) Emissions in frequency bands (above 1GHz)						
1	EMI Test Receiver	Rohde&schwarz	ESCI7	101166	2023-04-26	2024-04-25
2	Double Ridged Broadband Horn Antenna	schwarabeck	BBHA 9120 D	2278	2023-05-26	2024-05-25
3	Amplifier	Agilent	8449B	3008A01120	2023-06-26	2024-06-25
4	Multi-device Controller	TuoPu	TPMDC	/	2023-05-04	2024-05-03
5	MXA signal analyzer	Agilent	N9020A	MY54440859	2023-05-05	2024-05-04
Emissions in frequency bands (below 1GHz)						
1	EMI Test Receiver	Rohde&schwarz	ESCI7	101166	2023-04-26	2024-04-25
2	TRILOG Broadband Antenna	schwarabeck	VULB 9163	9163-1338	2023-06-11	2025-06-10
3	Amplifier	Hewlett-Packard	8447F	3113A06184	2023-06-26	2024-06-25
4	Multi-device Controller	TuoPu	TPMDC	/	2023-05-04	2024-05-03
5	Active Loop Antenna	Schwarzbeck	FMZB 1519 B	00066	2023-06-11	2025-06-10

5 Evaluation Results (Evaluation)

5.1 Antenna requirement

Test Requirement:	Refer to 47 CFR Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.
Description of the antenna of EUT:	The antenna of the EUT is permanently attached.
Conclusion:	The EUT complies with the requirement of FCC PART 15.203.

6 Radio Spectrum Matter Test Results (RF)

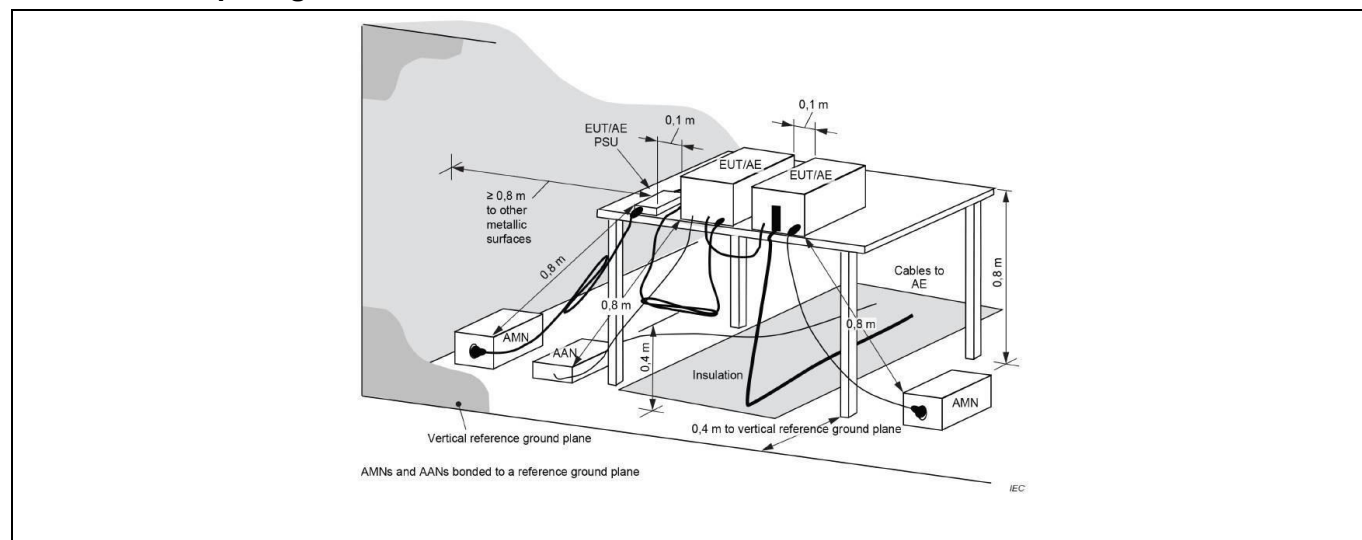
6.1 Conducted Emission at AC power line

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 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.			
Test Method:	ANSI C63.10-2013 section 6.2		
Procedure:	Refer to ANSI C63.10-2013 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices		

6.1.1 E.U.T. Operation:

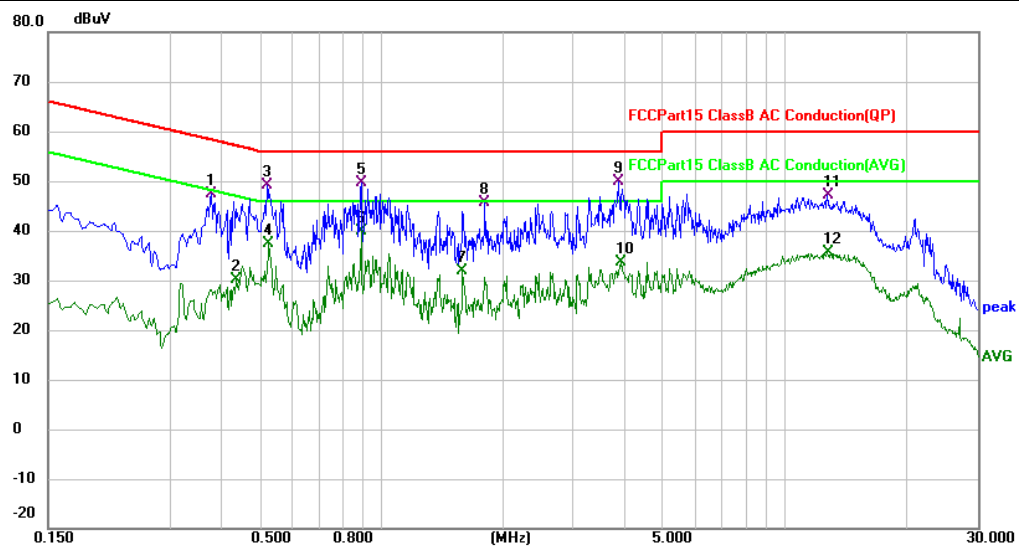
Operating Environment:					
Temperature:	28.5 °C	Humidity:	58.4 %	Atmospheric Pressure:	101 kPa
Test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6				

6.1.2 Test Setup Diagram:



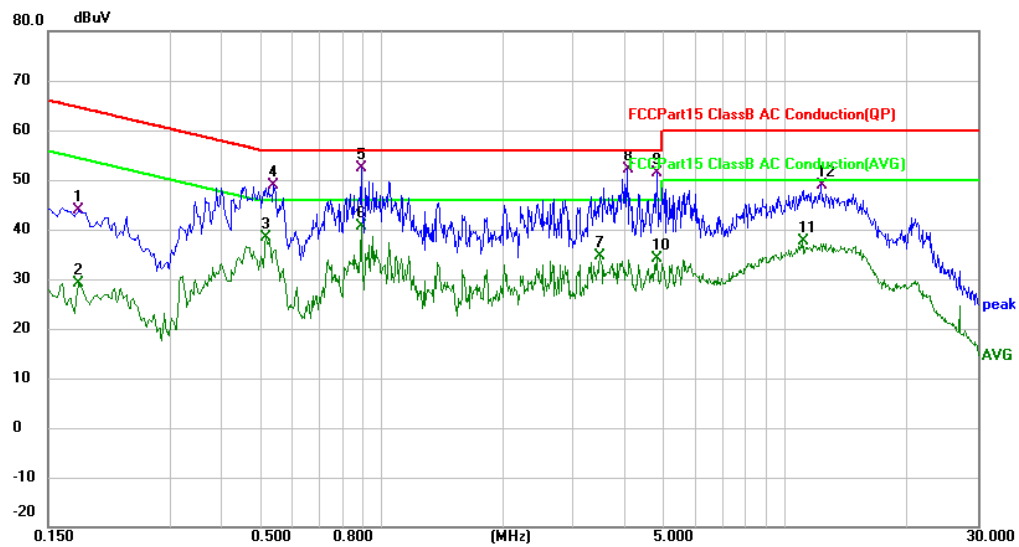
6.1.3 Test Data:

Mode4 / Line: Line / Band: 2.4G / BW: 40 / CH: 9(ANT 2)



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.3780	36.42	11.05	47.47	58.32	-10.85	QP	
2		0.4380	18.95	11.19	30.14	47.10	-16.96	AVG	
3		0.5220	37.87	11.36	49.23	56.00	-6.77	QP	
4		0.5260	25.88	11.38	37.26	46.00	-8.74	AVG	
5		0.8940	37.48	12.17	49.65	56.00	-6.35	QP	
6		0.8940	27.63	12.17	39.80	46.00	-6.20	AVG	
7		1.5900	18.48	13.35	31.83	46.00	-14.17	AVG	
8		1.8060	32.03	13.70	45.73	56.00	-10.27	QP	
9	*	3.8980	39.58	10.27	49.85	56.00	-6.15	QP	
10		3.9500	23.47	10.27	33.74	46.00	-12.26	AVG	
11		12.7259	36.55	10.47	47.02	60.00	-12.98	QP	
12		12.7259	25.21	10.47	35.68	50.00	-14.32	AVG	

Mode4 / Line: Neutral / Band: 2.4G / BW: 40 / CH: 9(ANT 2)



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1780	33.55	10.24	43.79	64.58	-20.79	QP	
2		0.1780	19.00	10.24	29.24	54.58	-25.34	AVG	
3		0.5180	27.08	11.36	38.44	46.00	-7.56	AVG	
4		0.5420	37.36	11.41	48.77	56.00	-7.23	QP	
5	*	0.8940	40.36	12.13	52.49	56.00	-3.51	QP	
6		0.8940	28.44	12.13	40.57	46.00	-5.43	AVG	
7		3.4980	24.32	10.28	34.60	46.00	-11.40	AVG	
8		4.0860	41.84	10.29	52.13	56.00	-3.87	QP	
9		4.8300	41.21	10.27	51.48	56.00	-4.52	QP	
10		4.8300	23.93	10.27	34.20	46.00	-11.80	AVG	
11		11.0740	27.26	10.35	37.61	50.00	-12.39	AVG	
12		12.2580	38.44	10.39	48.83	60.00	-11.17	QP	

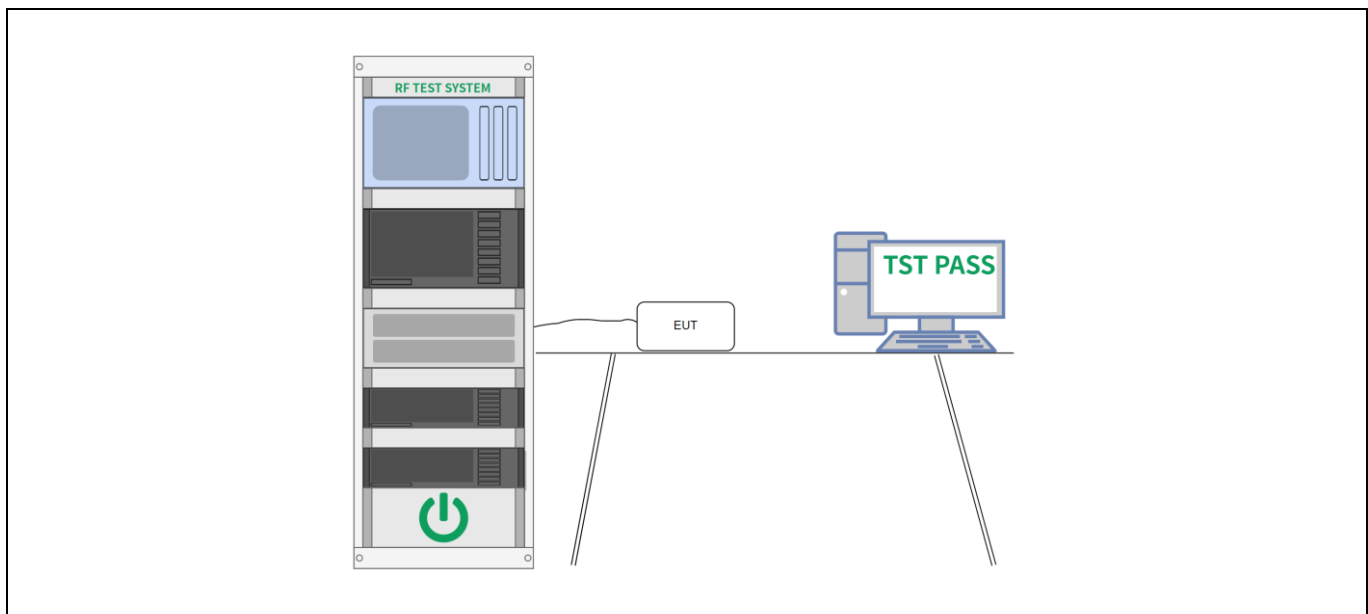
6.2 Occupied Bandwidth

Test Requirement:	47 CFR 15.247(a)(2)
Test Limit:	Refer to 47 CFR 15.247(a)(2), Systems using digital modulation techniques may operate in the 902-928 MHz, and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Test Method:	ANSI C63.10-2013, section 11.8 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	a) Set RBW = 100 kHz. b) Set the VBW $\geq [3 \times \text{RBW}]$. 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:	26.3 °C	Humidity:	52.8 %	Atmospheric Pressure:	98 kPa
Test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6				

6.2.2 Test Setup Diagram:



6.2.3 Test Data:

Please Refer to Appendix for Details.

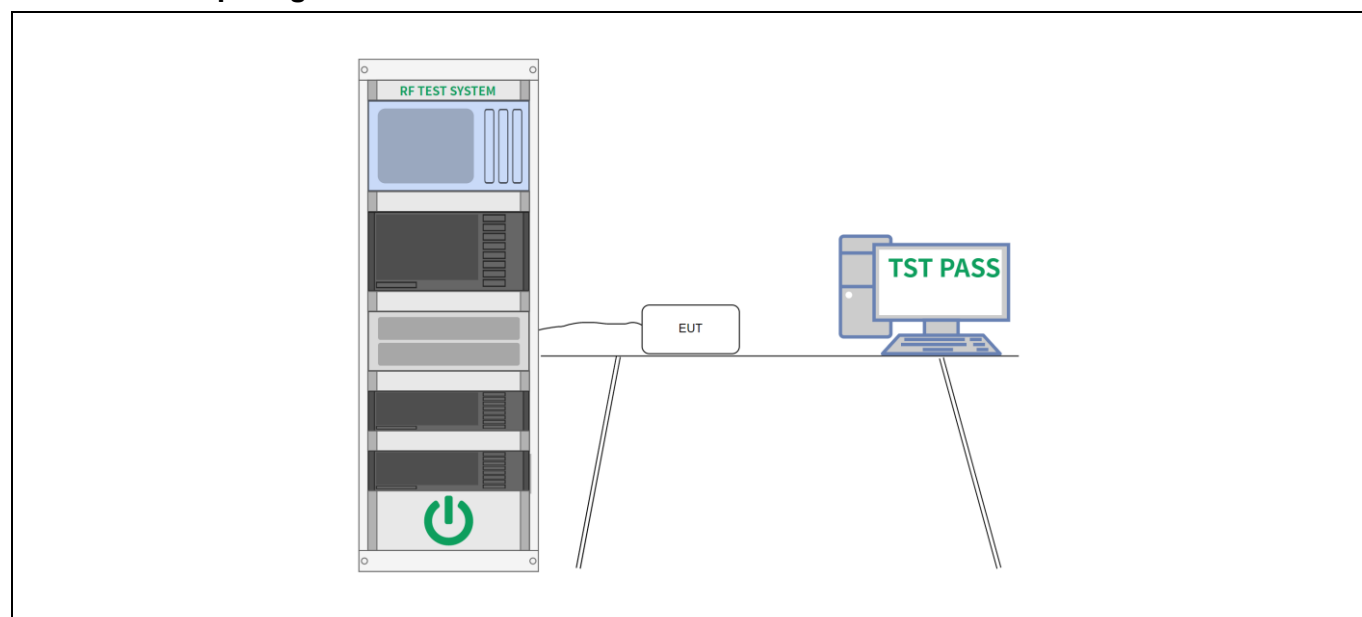
6.3 Maximum Conducted Output Power

Test Requirement:	47 CFR 15.247(b)(3)
Test Limit:	Refer to 47 CFR 15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
Test Method:	ANSI C63.10-2013, section 11.9.1 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013, section 11.9.1 Maximum peak conducted output power

6.3.1 E.U.T. Operation:

Operating Environment:					
Temperature:	26.3 °C	Humidity:	52.8 %	Atmospheric Pressure:	98 kPa
Test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6				

6.3.2 Test Setup Diagram:



6.3.3 Test Data:

Please Refer to Appendix for Details.

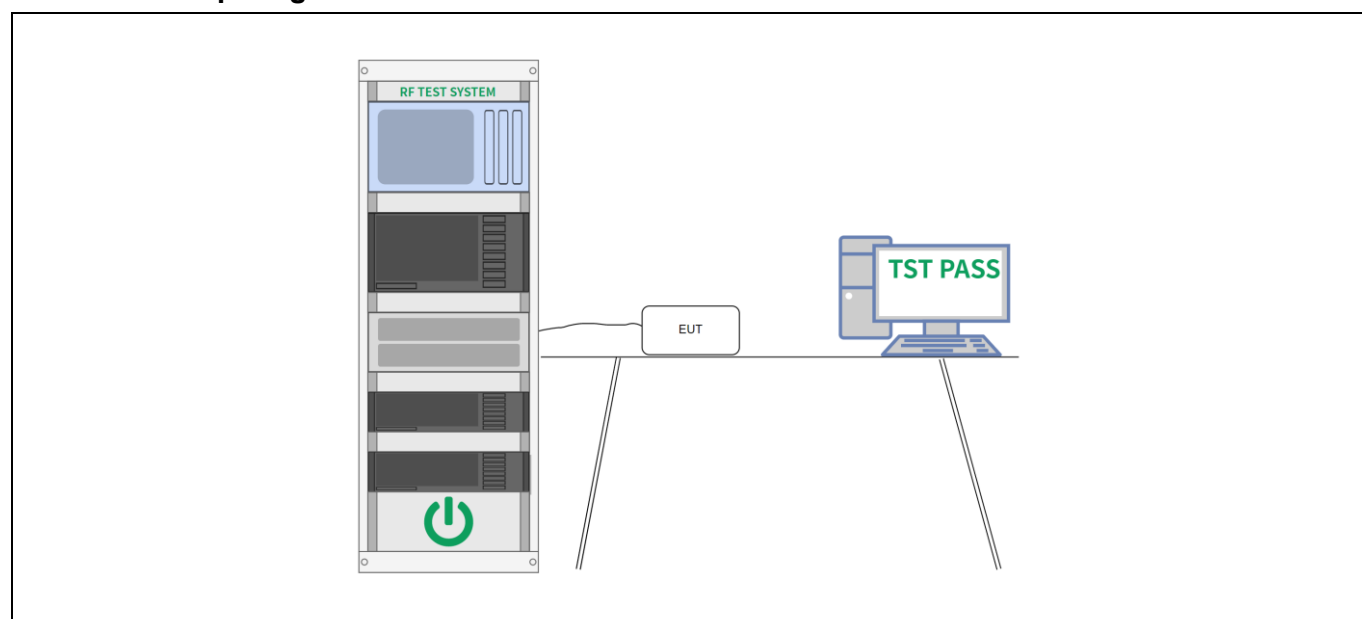
6.4 Power Spectral Density

Test Requirement:	47 CFR 15.247(e)
Test Limit:	Refer to 47 CFR 15.247(e), For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.
Test Method:	ANSI C63.10-2013, section 11.10 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013, section 11.10, Maximum power spectral density level in the fundamental emission

6.4.1 E.U.T. Operation:

Operating Environment:					
Temperature:	26.3 °C	Humidity:	52.8 %	Atmospheric Pressure:	98 kPa
Test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6				

6.4.2 Test Setup Diagram:



6.4.3 Test Data:

Please Refer to Appendix for Details.

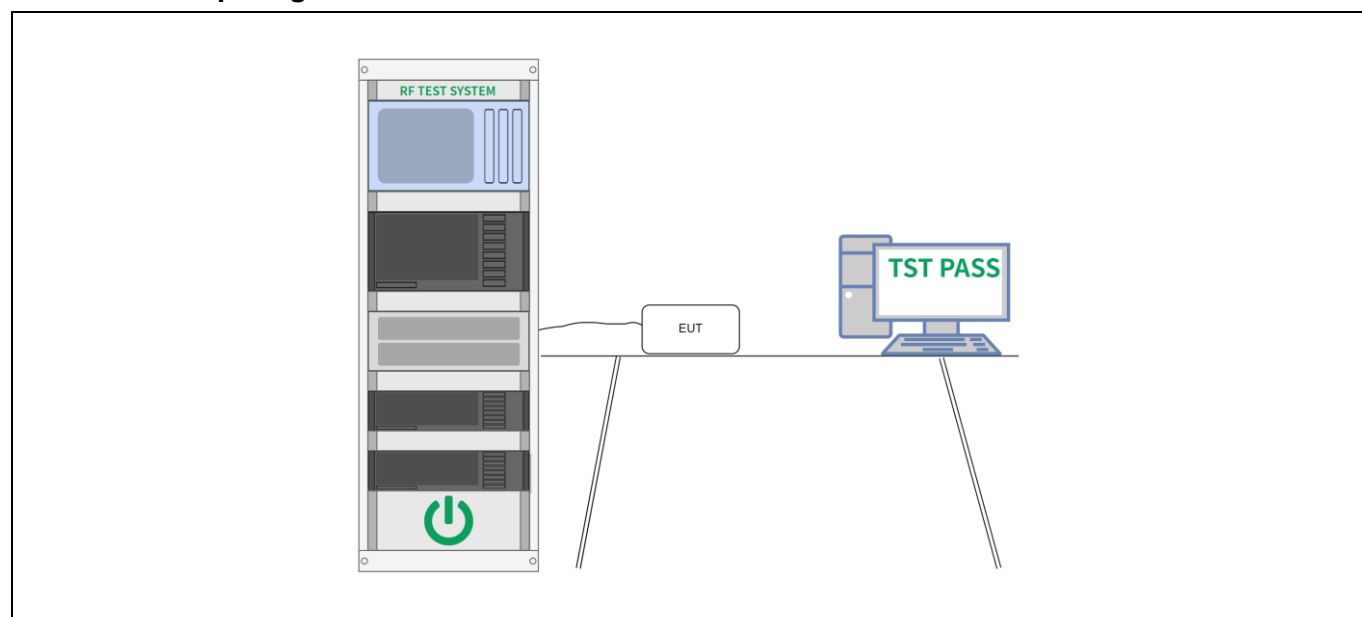
6.5 Emissions in frequency bands

Test Requirement:	47 CFR 15.247(d)
Test Limit:	Refer to 47 CFR 15.247(d), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.
Test Method:	ANSI C63.10-2013 section 11.11 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013 Section 11.11.1, Section 11.11.2, Section 11.11.3

6.5.1 E.U.T. Operation:

Operating Environment:					
Temperature:	26.3 °C	Humidity:	52.8 %	Atmospheric Pressure:	98 kPa
Test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6				

6.5.2 Test Setup Diagram:



6.5.3 Test Data:

Please Refer to Appendix for Details.

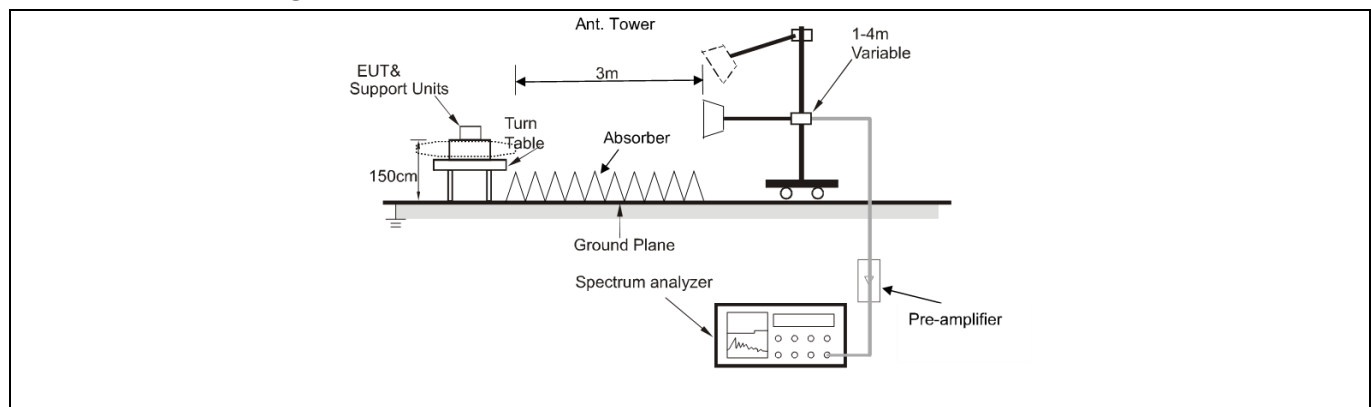
6.6 Band edge emissions (Radiated)

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 Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.			
Test Method:	ANSI C63.10-2013 section 6.10 KDB 558074 D01 15.247 Meas Guidance v05r02		
Procedure:	ANSI C63.10-2013 section 6.10.5.2		

6.6.1 E.U.T. Operation:

Operating Environment:					
Temperature:	25 °C	Humidity:	54 %	Atmospheric Pressure:	100 kPa
Test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6				
Note: The amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported. All modes of operation of the EUT were investigated, and only the worst-case results are reported.					

6.6.2 Test Setup Diagram:



6.6.3 Test Data:

Mode4 / Polarization: Horizontal / Band: 2.4G / BW: 40 / CH: 3(ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		2310.000	39.31	-2.66	36.65	74.00	-37.35	peak
2		2310.000	31.31	-2.66	28.65	54.00	-25.35	AVG
3		2390.000	55.78	-2.03	53.75	74.00	-20.25	peak
4	*	2390.000	40.06	-2.03	38.03	54.00	-15.97	AVG

Mode4 / Polarization: Vertical / Band: 2.4G / BW: 40 / CH: 3(ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		2310.000	42.33	-2.66	39.67	74.00	-34.33	peak
2		2310.000	32.43	-2.66	29.77	54.00	-24.23	AVG
3		2390.000	60.43	-2.03	58.40	74.00	-15.60	peak
4	*	2390.000	44.61	-2.03	42.58	54.00	-11.42	AVG

Mode4 / Polarization: Horizontal / Band: 2.4G / BW: 40 / CH: 9(ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		2483.500	47.48	-1.91	45.57	74.00	-28.43	peak
2		2483.500	38.78	-1.91	36.87	54.00	-17.13	AVG
3		2500.000	51.11	-1.80	49.31	74.00	-24.69	peak
4	*	2500.000	38.75	-1.80	36.95	54.00	-17.05	AVG

Mode4 / Polarization: Vertical / Band: 2.4G / BW: 40 / CH: 9(ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		2483.500	48.20	-1.91	46.29	74.00	-27.71	peak
2	*	2483.500	38.94	-1.91	37.03	54.00	-16.97	AVG
3		2500.000	49.32	-1.80	47.52	74.00	-26.48	peak
4		2500.000	38.69	-1.80	36.89	54.00	-17.11	AVG

Mode6 / Polarization: Horizontal / Band: 2.4G / BW: 40 / CH: 3(ANT 1+ANT2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		2310.000	44.36	-2.66	41.70	74.00	-32.30	peak
2		2310.000	34.28	-2.66	31.62	54.00	-22.38	AVG
3		2390.000	45.96	-2.03	43.93	74.00	-30.07	peak
4	*	2390.000	36.12	-2.03	34.09	54.00	-19.91	AVG

Mode6 / Polarization: Vertical / Band: 2.4G / BW: 40 / CH: 3(ANT 1+ANT2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		2310.000	42.97	-2.66	40.31	74.00	-33.69	peak
2		2310.000	33.94	-2.66	31.28	54.00	-22.72	AVG
3		2390.000	44.33	-2.03	42.30	74.00	-31.70	peak
4	*	2390.000	34.18	-2.03	32.15	54.00	-21.85	AVG

Mode6 / Polarization: Horizontal / Band: 2.4G / BW: 40 / CH: 9(ANT 1+ANT2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		2483.500	49.52	-1.91	47.61	74.00	-26.39	peak
2	*	2483.500	39.85	-1.91	37.94	54.00	-16.06	AVG
3		2500.000	49.82	-1.80	48.02	74.00	-25.98	peak
4		2500.000	39.72	-1.80	37.92	54.00	-16.08	AVG

Mode6 / Polarization: Vertical / Band: 2.4G / BW: 40 / CH: 9(ANT 1+ANT2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		2483.500	49.57	-1.91	47.66	74.00	-26.34	peak
2		2483.500	39.22	-1.91	37.31	54.00	-16.69	AVG
3		2500.000	50.30	-1.80	48.50	74.00	-25.50	peak
4	*	2500.000	39.19	-1.80	37.39	54.00	-16.61	AVG

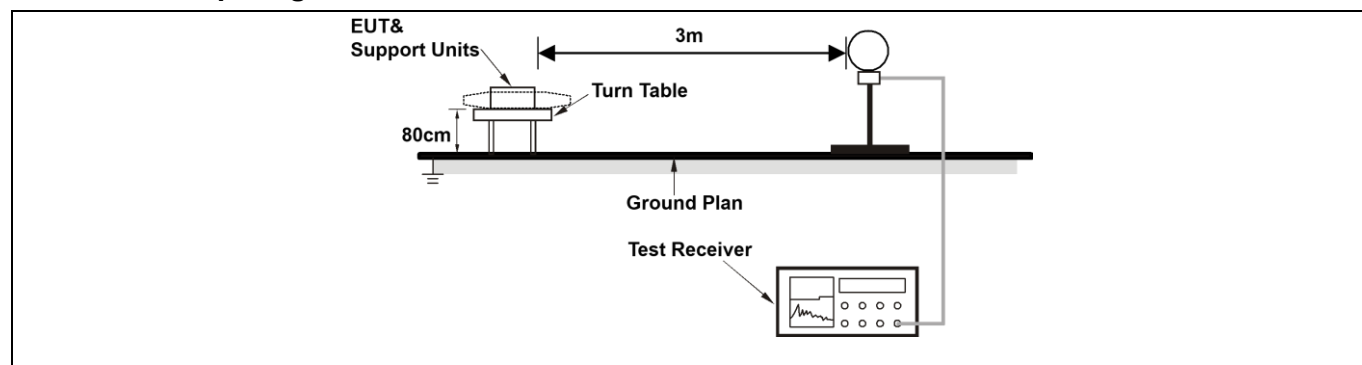
6.7 Radiated emissions (below 1GHz)

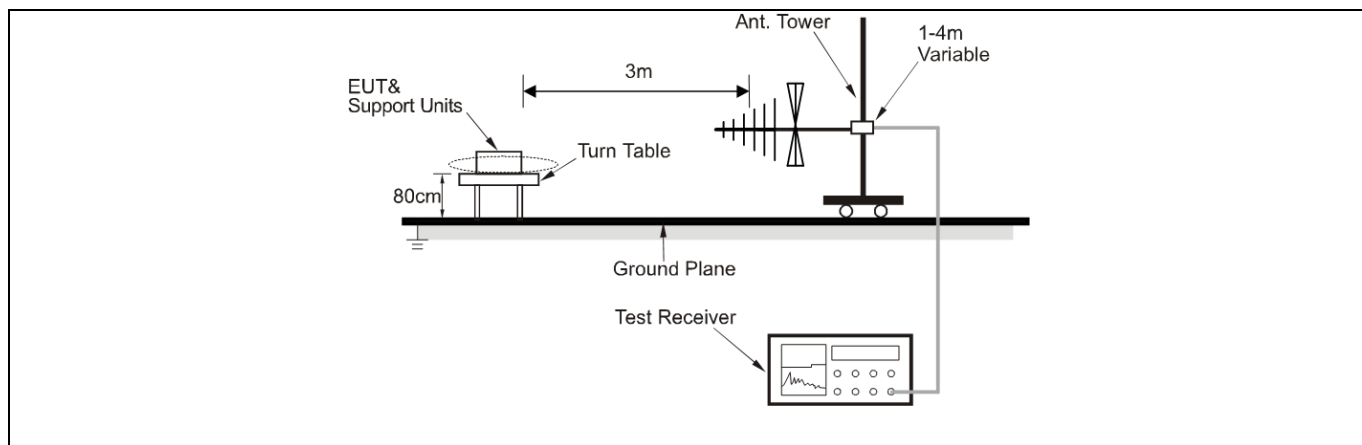
Test Requirement:	Refer to 47 CFR 15.247(d), In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).`		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.			
Test Method:	ANSI C63.10-2013 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02		
Procedure:	ANSI C63.10-2013 section 6.6.4		

6.7.1 E.U.T. Operation:

Operating Environment:					
Temperature:	25 °C	Humidity:	54 %	Atmospheric Pressure:	100 kPa
Test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6				
Note: The amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported. All modes of operation of the EUT were investigated, and only the worst-case results are reported. There were no emissions found below 30MHz within 20dB of the limit.					

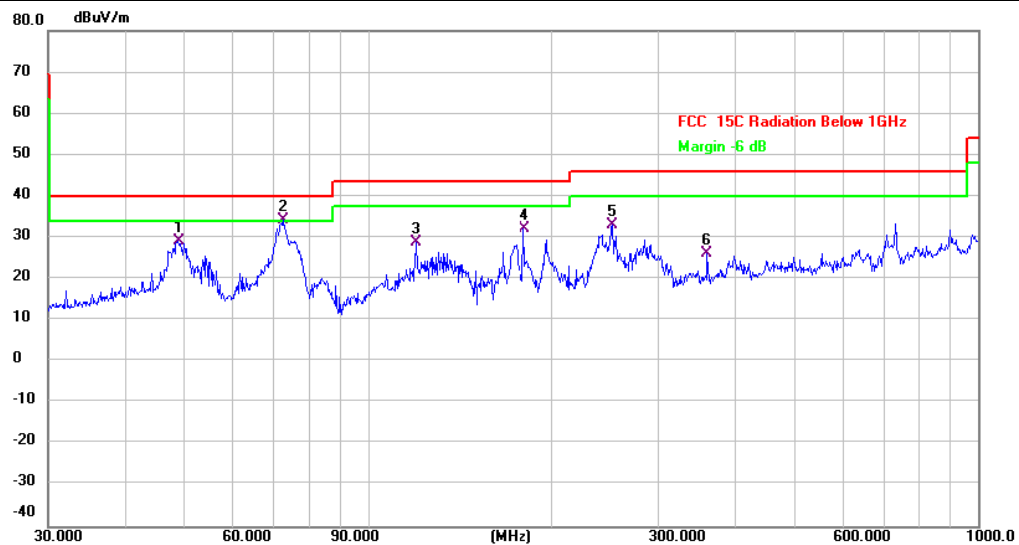
6.7.2 Test Setup Diagram:





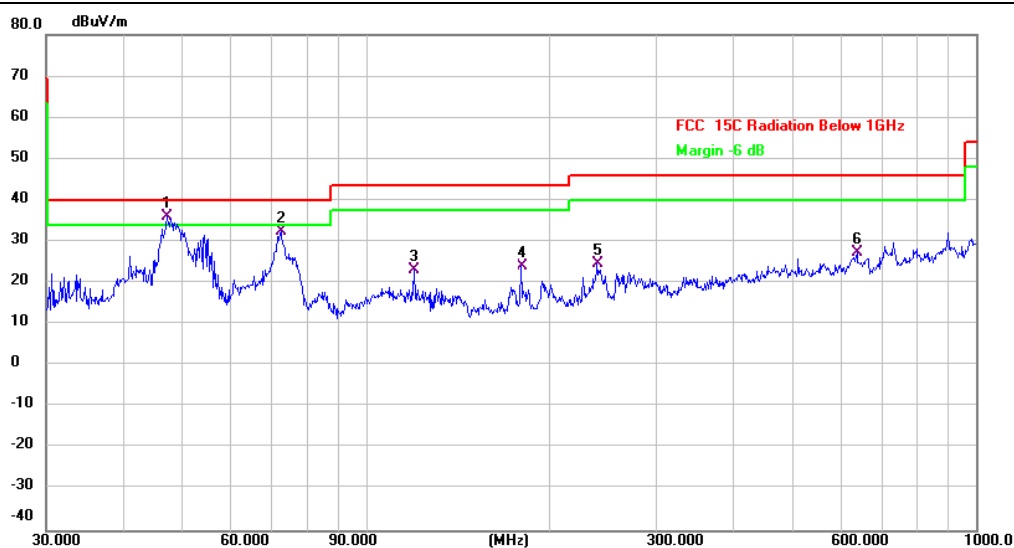
6.7.3 Test Data:

Mode1 / Polarization: Horizontal / Band: 2.4G / BW: 20 / CH: 11(ANT 2)



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		48.8429	36.49	-7.27	29.22	40.00	-10.78	QP	
2	*	72.5916	45.64	-11.42	34.22	40.00	-5.78	QP	
3		119.8556	38.12	-9.22	28.90	43.50	-14.60	QP	
4		180.0165	42.23	-9.96	32.27	43.50	-11.23	QP	
5		252.0627	40.70	-7.66	33.04	46.00	-12.96	QP	
6		360.4476	31.68	-5.61	26.07	46.00	-19.93	QP	

Mode1 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: 11(ANT 2)



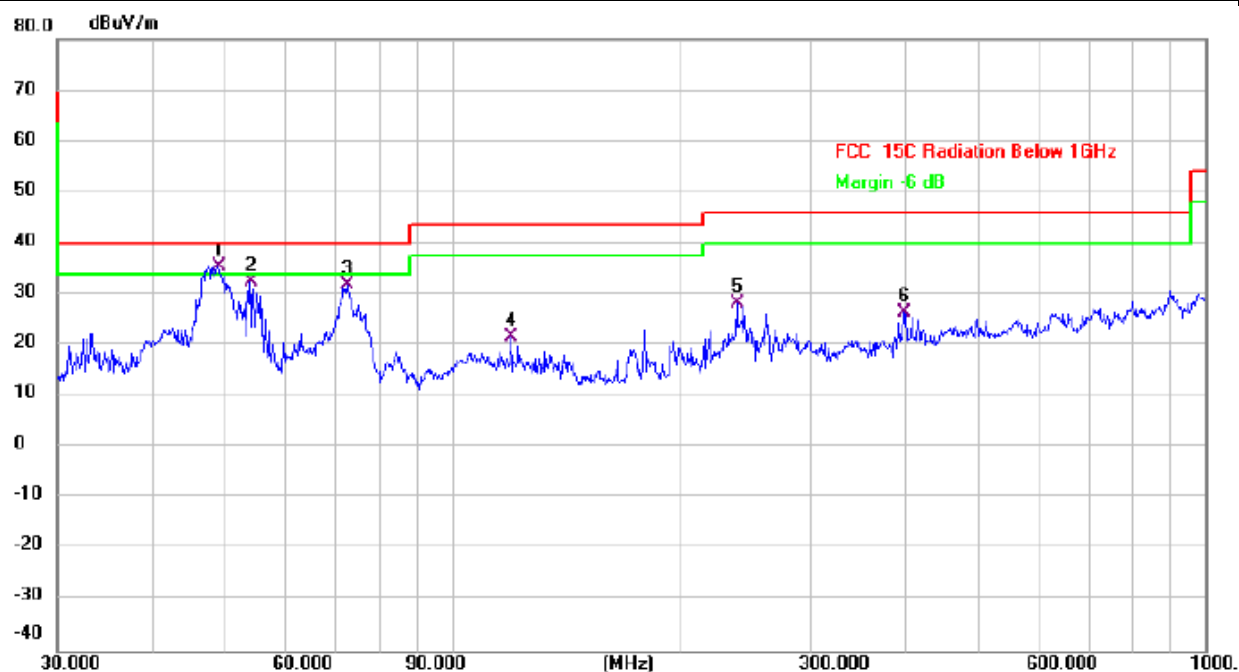
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	47.3255	43.60	-7.45	36.15	40.00	-3.85	QP	
2		72.5916	43.82	-11.42	32.40	40.00	-7.60	QP	
3		119.8556	32.43	-9.22	23.21	43.50	-20.29	QP	
4		180.0165	34.08	-9.96	24.12	43.50	-19.38	QP	
5		239.9874	31.60	-6.89	24.71	46.00	-21.29	QP	
6		638.3686	27.61	-0.32	27.29	46.00	-18.71	QP	

Mode5 / Polarization: Horizontal / Band: 2.4G / BW: 20 / CH: 11(ANT 1+ANT 2)



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		49.1865	36.93	-7.24	29.69	40.00	-10.31	QP	
2	*	72.3376	46.00	-11.34	34.66	40.00	-5.34	QP	
3		119.8556	37.14	-9.22	27.92	43.50	-15.58	QP	
4		180.0165	42.65	-9.96	32.69	43.50	-10.81	QP	
5		242.5253	38.36	-7.32	31.04	46.00	-14.96	QP	
6		281.9946	36.60	-6.59	30.01	46.00	-15.99	QP	

Mode5 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: 11(ANT 1+ANT 2)



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	48.8429	42.78	-7.27	35.51	40.00	-4.49	QP	
2		53.8818	40.01	-7.49	32.52	40.00	-7.48	QP	
3		72.5916	43.24	-11.42	31.82	40.00	-8.18	QP	
4		119.8556	30.84	-9.22	21.62	43.50	-21.88	QP	
5		239.1473	35.31	-6.92	28.39	46.00	-17.61	QP	
6		399.0302	31.45	-5.09	26.36	46.00	-19.64	QP	

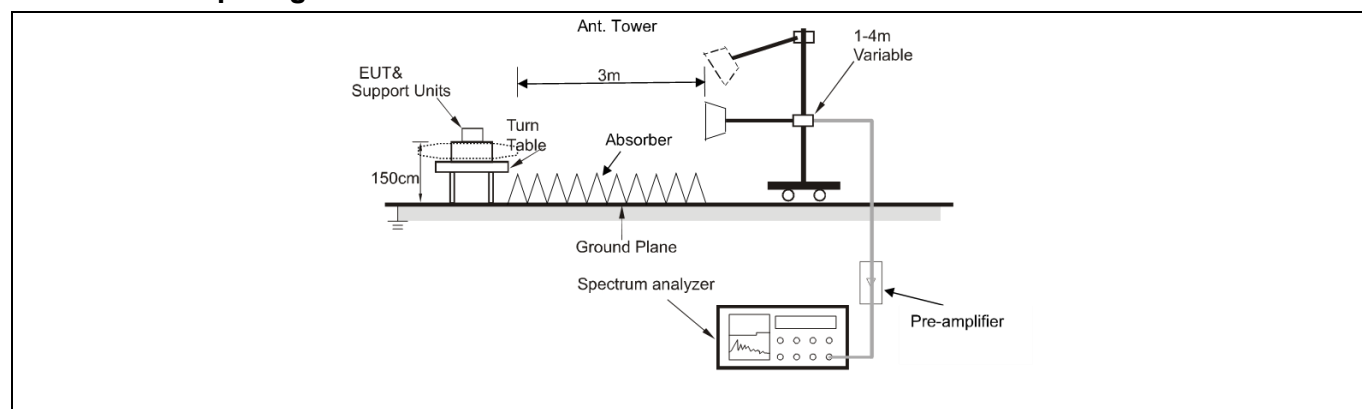
6.8 Radiated emissions (above 1GHz)

Test Requirement:	In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).`		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.			
Test Method:	ANSI C63.10-2013 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02		
Procedure:	ANSI C63.10-2013 section 6.6.4		

6.8.1 E.U.T. Operation:

Operating Environment:						
Temperature:	25 °C		Humidity:	54 %	Atmospheric Pressure:	100 kPa
Test mode:		Mode1, Mode2, Mode3, Mode4, Mode5, Mode6				
Note: Test frequency are from 1GHz to 25GHz, the amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported. All modes of operation of the EUT were investigated, and only the worst-case results are reported.						

6.8.2 Test Setup Diagram:



6.8.3 Test Data:

Mode1 / Polarization: Horizontal / Band: 2.4G / BW: 20 / CH: 1(ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		4824.000	44.12	2.81	46.93	74.00	-27.07	peak
2		4824.000	37.56	2.81	40.37	54.00	-13.63	AVG
3		7236.000	40.50	9.10	49.60	74.00	-24.40	peak
4		7236.000	34.17	9.10	43.27	54.00	-10.73	AVG
5		9848.000	41.65	11.50	53.15	74.00	-20.85	peak
6	*	9848.000	34.61	11.50	46.11	54.00	-7.89	AVG

Mode1 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: 1(ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		4824.000	40.49	2.81	43.30	74.00	-30.70	peak
2		4824.000	35.64	2.81	38.45	54.00	-15.55	AVG
3		7236.000	39.98	9.10	49.08	74.00	-24.92	peak
4		7236.000	33.65	9.10	42.75	54.00	-11.25	AVG
5		9648.000	41.58	10.98	52.56	74.00	-21.44	peak
6	*	9648.000	35.33	10.98	46.31	54.00	-7.69	AVG

Mode1 / Polarization: Horizontal / Band: 2.4G / BW: 20 / CH: 6(ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		4874.000	42.60	3.02	45.62	74.00	-28.38	peak
2		4874.000	36.39	3.02	39.41	54.00	-14.59	AVG
3		7311.000	39.90	8.97	48.87	74.00	-25.13	peak
4		7311.000	33.39	8.97	42.36	54.00	-11.64	AVG
5		9748.000	40.98	11.95	52.93	74.00	-21.07	peak
6	*	9748.000	34.56	11.95	46.51	54.00	-7.49	AVG

Mode1 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: 6(ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		4874.000	41.00	3.02	44.02	74.00	-29.98	peak
2		4874.000	34.47	3.02	37.49	54.00	-16.51	AVG
3		7311.000	40.13	8.97	49.10	74.00	-24.90	peak
4		7311.000	33.91	8.97	42.88	54.00	-11.12	AVG
5		9748.000	41.20	11.95	53.15	74.00	-20.85	peak
6	*	9748.000	34.24	11.95	46.19	54.00	-7.81	AVG

Mode1 / Polarization: Horizontal / Band: 2.4G / BW: 20 / CH: 11(ANT 2)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		4924.000	42.37	3.27	45.64	74.00	-28.36	peak
2		4924.000	37.58	3.27	40.85	54.00	-13.15	AVG
3		7386.000	39.77	9.16	48.93	74.00	-25.07	peak
4		7386.000	32.89	9.16	42.05	54.00	-11.95	AVG
5		9848.000	40.67	11.50	52.17	74.00	-21.83	peak
6	*	9848.000	34.46	11.50	45.96	54.00	-8.04	AVG

Mode1 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: 11(ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		4924.000	40.39	3.27	43.66	74.00	-30.34	peak
2		4924.000	33.06	3.27	36.33	54.00	-17.67	AVG
3		7386.000	40.48	9.16	49.64	74.00	-24.36	peak
4		7386.000	32.99	9.16	42.15	54.00	-11.85	AVG
5		9848.000	40.92	11.50	52.42	74.00	-21.58	peak
6	*	9848.000	34.72	11.50	46.22	54.00	-7.78	AVG

Mode5 / Polarization: Horizontal / Band: 2.4G / BW: 20 / CH: 1(ANT 1+ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		4824.000	42.15	2.81	44.96	74.00	-29.04	peak
2		4824.000	35.73	2.81	38.54	54.00	-15.46	AVG
3		7236.000	40.06	9.10	49.16	74.00	-24.84	peak
4		7236.000	33.65	9.10	42.75	54.00	-11.25	AVG
5		9648.000	41.84	10.98	52.82	74.00	-21.18	peak
6	*	9648.000	35.33	10.98	46.31	54.00	-7.69	AVG

Mode5 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: 1(ANT 1+ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		4824.000	40.59	2.81	43.40	74.00	-30.60	peak
2		4824.000	33.54	2.81	36.35	54.00	-17.65	AVG
3		7236.000	39.54	9.10	48.64	74.00	-25.36	peak
4		7236.000	33.44	9.10	42.54	54.00	-11.46	AVG
5		9648.000	42.33	10.98	53.31	74.00	-20.69	peak
6	*	9648.000	36.11	10.98	47.09	54.00	-6.91	AVG

Mode5 / Polarization: Horizontal / Band: 2.4G / BW: 20 / CH: 6(ANT 1+ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		4874.000	40.89	3.02	43.91	74.00	-30.09	peak
2		4874.000	33.52	3.02	36.54	54.00	-17.46	AVG
3		7311.000	40.50	8.97	49.47	74.00	-24.53	peak
4		7311.000	34.31	8.97	43.28	54.00	-10.72	AVG
5		9748.000	41.26	11.95	53.21	74.00	-20.79	peak
6	*	9748.000	35.19	11.95	47.14	54.00	-6.86	AVG

Mode5 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: 6(ANT 1+ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		4874.000	40.48	3.02	43.50	74.00	-30.50	peak
2		4874.000	33.52	3.02	36.54	54.00	-17.46	AVG
3		7311.000	40.44	8.97	49.41	74.00	-24.59	peak
4		7311.000	34.28	8.97	43.25	54.00	-10.75	AVG
5		9748.000	40.83	11.95	52.78	74.00	-21.22	peak
6	*	9748.000	34.30	11.95	46.25	54.00	-7.75	AVG

Mode5 / Polarization: Horizontal / Band: 2.4G / BW: 20 / CH: 11(ANT 1+ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		4924.000	42.22	3.27	45.49	74.00	-28.51	peak
2		4924.000	36.14	3.27	39.41	54.00	-14.59	AVG
3		7386.000	39.91	9.16	49.07	74.00	-24.93	peak
4		7386.000	33.17	9.16	42.33	54.00	-11.67	AVG
5		9848.000	40.99	11.50	52.49	74.00	-21.51	peak
6	*	9848.000	34.81	11.50	46.31	54.00	-7.69	AVG

Mode5 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: 11(ANT 1+ANT 2)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		4924.000	39.75	3.27	43.02	74.00	-30.98	peak
2		4924.000	32.47	3.27	35.74	54.00	-18.26	AVG
3		7386.000	39.72	9.16	48.88	74.00	-25.12	peak
4		7386.000	33.09	9.16	42.25	54.00	-11.75	AVG
5		9848.000	41.27	11.50	52.77	74.00	-21.23	peak
6	*	9848.000	35.14	11.50	46.64	54.00	-7.36	AVG

Photographs of the test setup

Refer to Appendix - Test Setup Photos

Photographs of the EUT

Refer to Appendix - EUT Photos

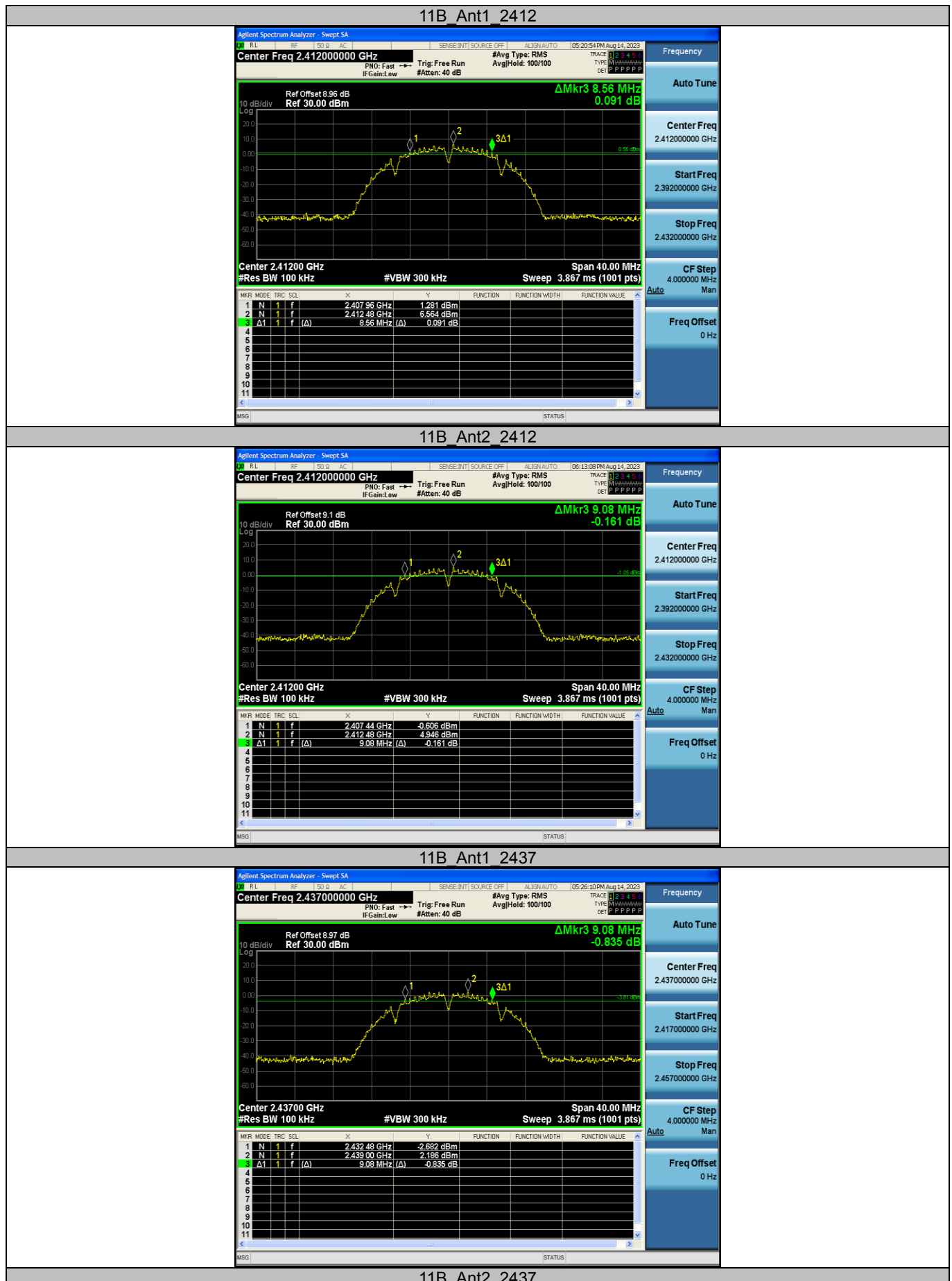
Appendix

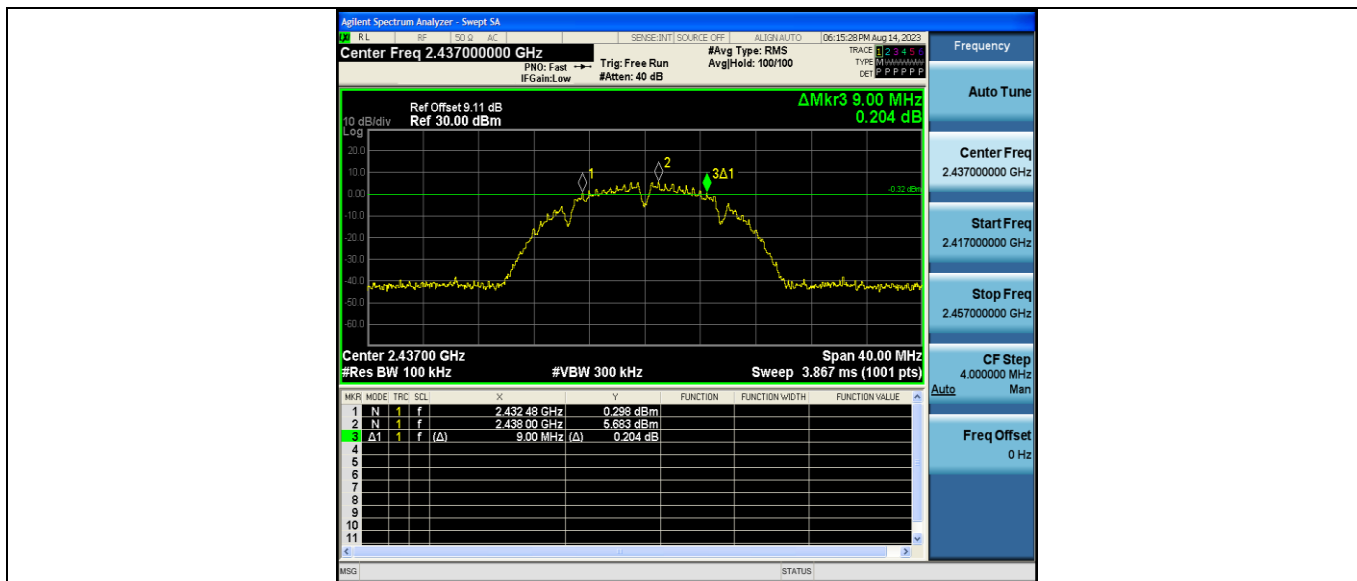
Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	8.560	0.5	PASS
	Ant2	2412	9.080	0.5	PASS
	Ant1	2437	9.080	0.5	PASS
	Ant2	2437	9.000	0.5	PASS
	Ant1	2462	8.600	0.5	PASS
	Ant2	2462	9.040	0.5	PASS
11G	Ant1	2412	16.280	0.5	PASS
	Ant2	2412	16.320	0.5	PASS
	Ant1	2437	16.320	0.5	PASS
	Ant2	2437	16.320	0.5	PASS
	Ant1	2462	16.320	0.5	PASS
	Ant2	2462	16.280	0.5	PASS
11N20SISO	Ant1	2412	16.120	0.5	PASS
	Ant2	2412	16.480	0.5	PASS
	Ant1	2437	16.480	0.5	PASS
	Ant2	2437	16.160	0.5	PASS
	Ant1	2462	16.680	0.5	PASS
	Ant2	2462	17.240	0.5	PASS
11N40SISO	Ant1	2422	35.680	0.5	PASS
	Ant2	2422	36.080	0.5	PASS
	Ant1	2437	35.600	0.5	PASS
	Ant2	2437	35.520	0.5	PASS
	Ant1	2452	35.680	0.5	PASS
	Ant2	2452	36.240	0.5	PASS
11N20MIMO	Ant1	2412	17.120	0.5	PASS
	Ant2	2412	17.280	0.5	PASS
	Ant1	2437	17.000	0.5	PASS
	Ant2	2437	16.880	0.5	PASS
	Ant1	2462	17.120	0.5	PASS
	Ant2	2462	17.040	0.5	PASS
11N40MIMO	Ant1	2422	36.320	0.5	PASS
	Ant2	2422	36.320	0.5	PASS
	Ant1	2437	35.760	0.5	PASS
	Ant2	2437	35.360	0.5	PASS
	Ant1	2452	35.520	0.5	PASS
	Ant2	2452	36.080	0.5	PASS

Test Graphs

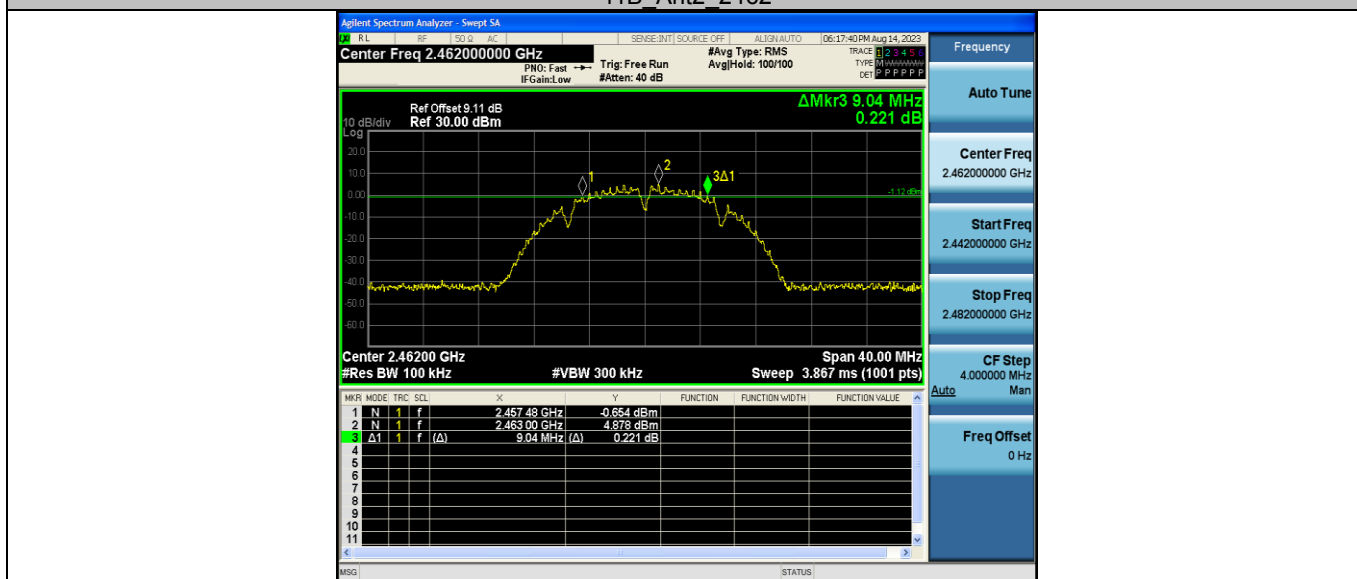




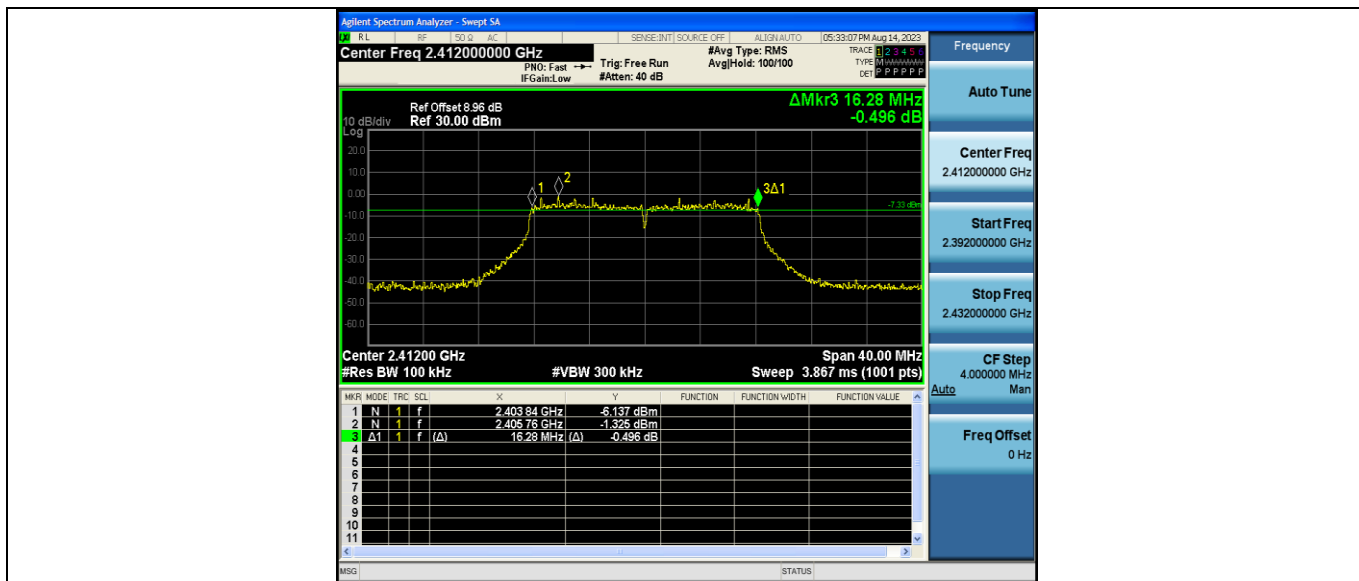
11B Ant1 2462



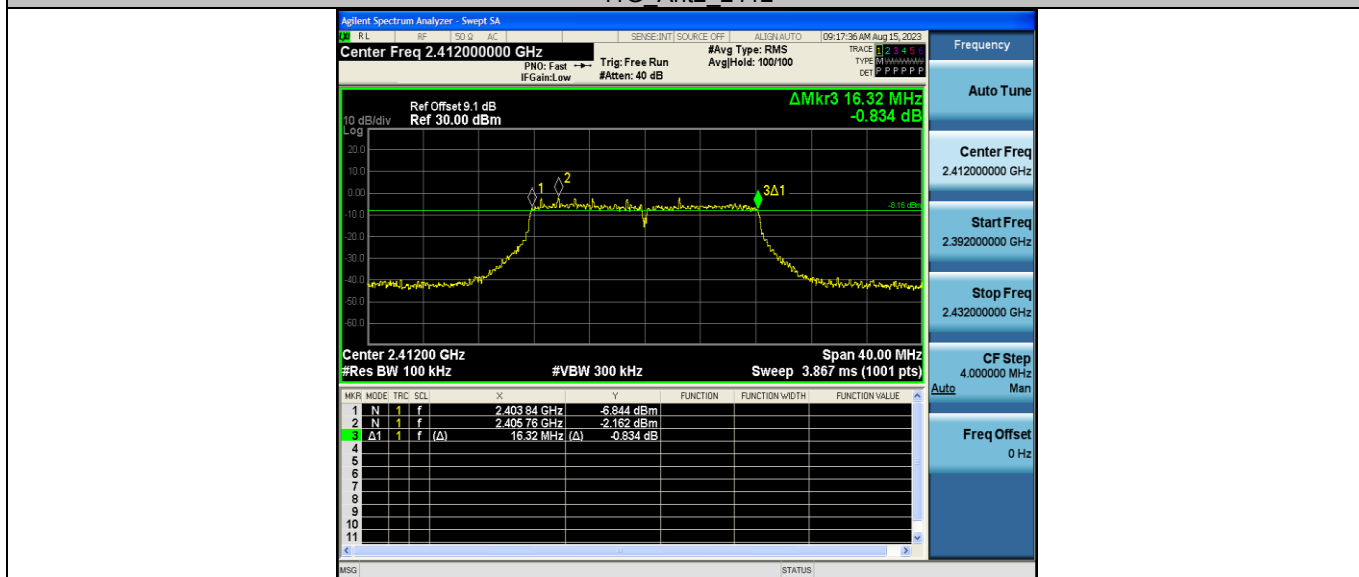
11B Ant2 2462



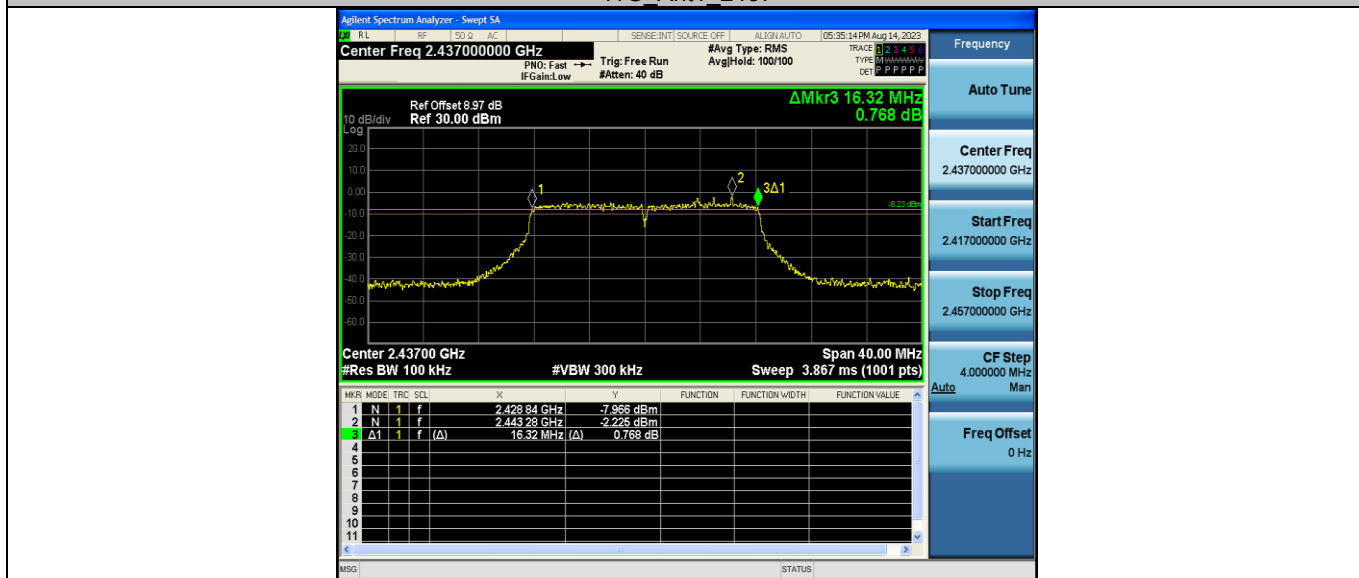
11G Ant1 2412



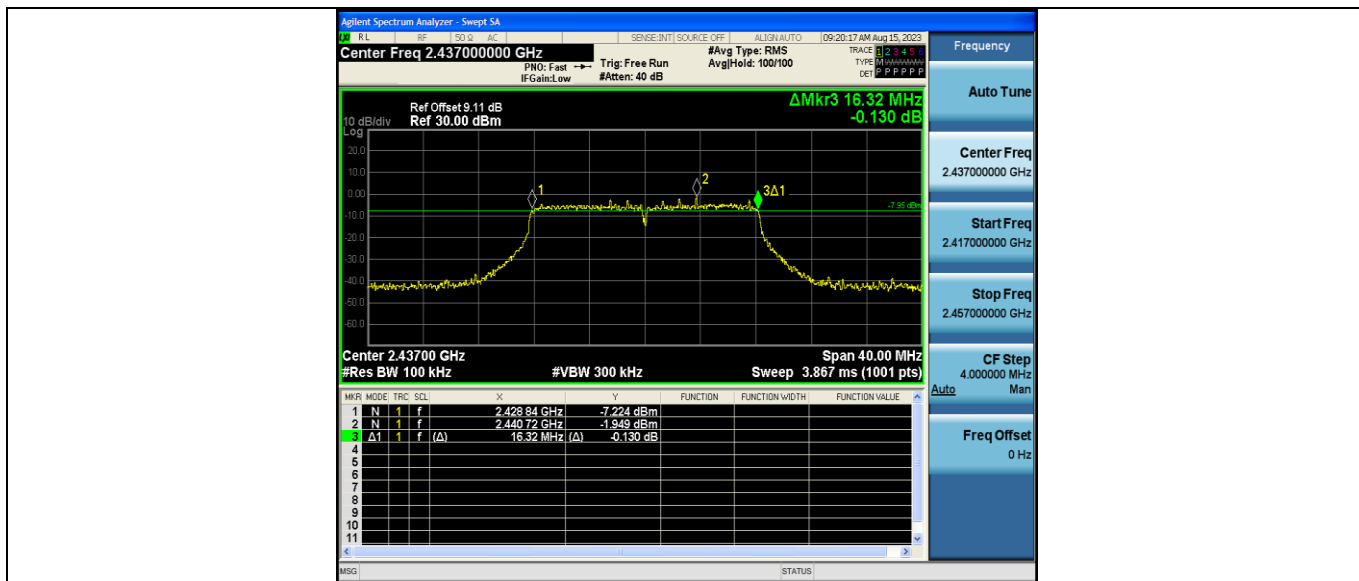
11G_Ant2_2412



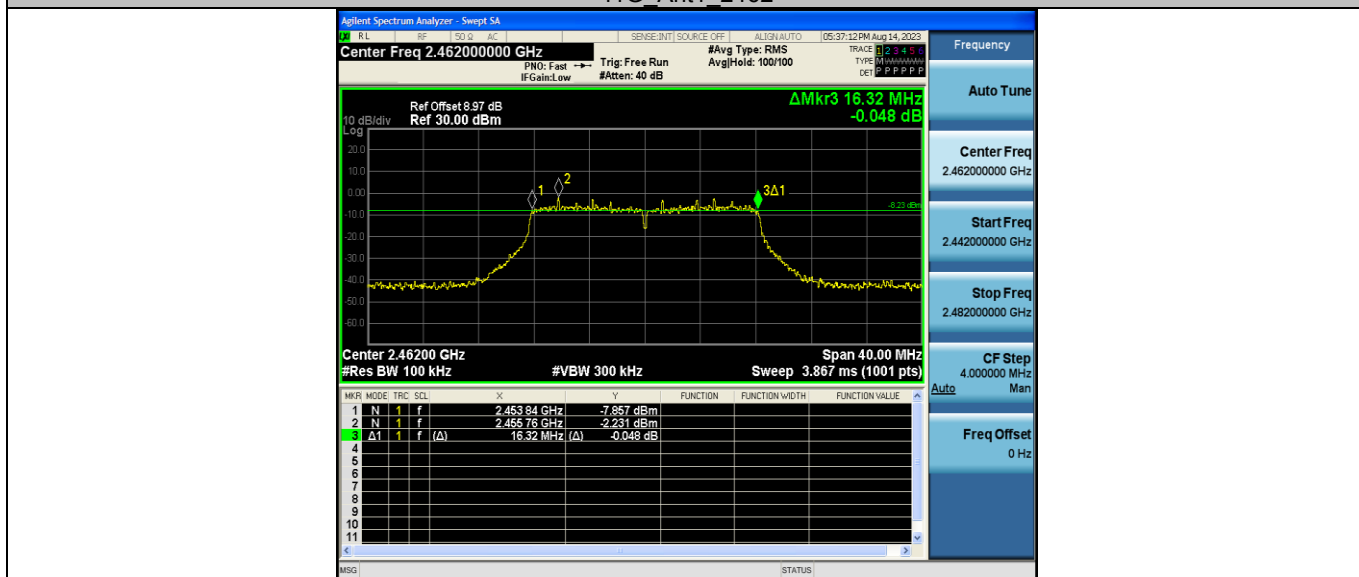
11G_Ant1_2437



11G_Ant2_2437



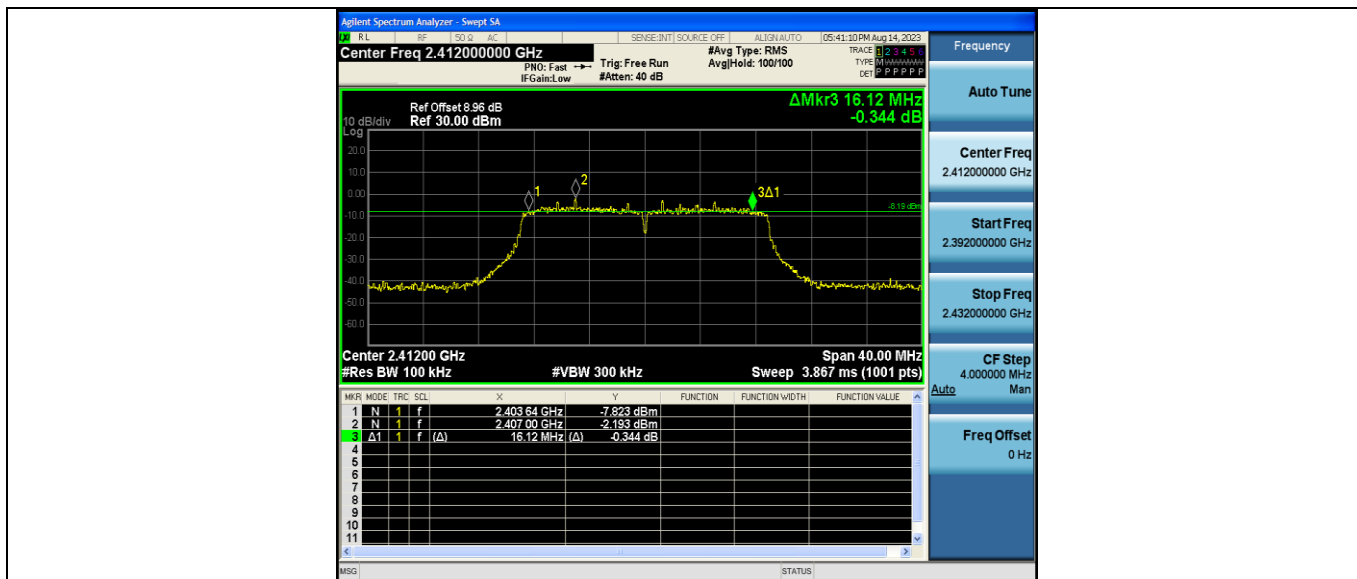
11G_Ant1_2462



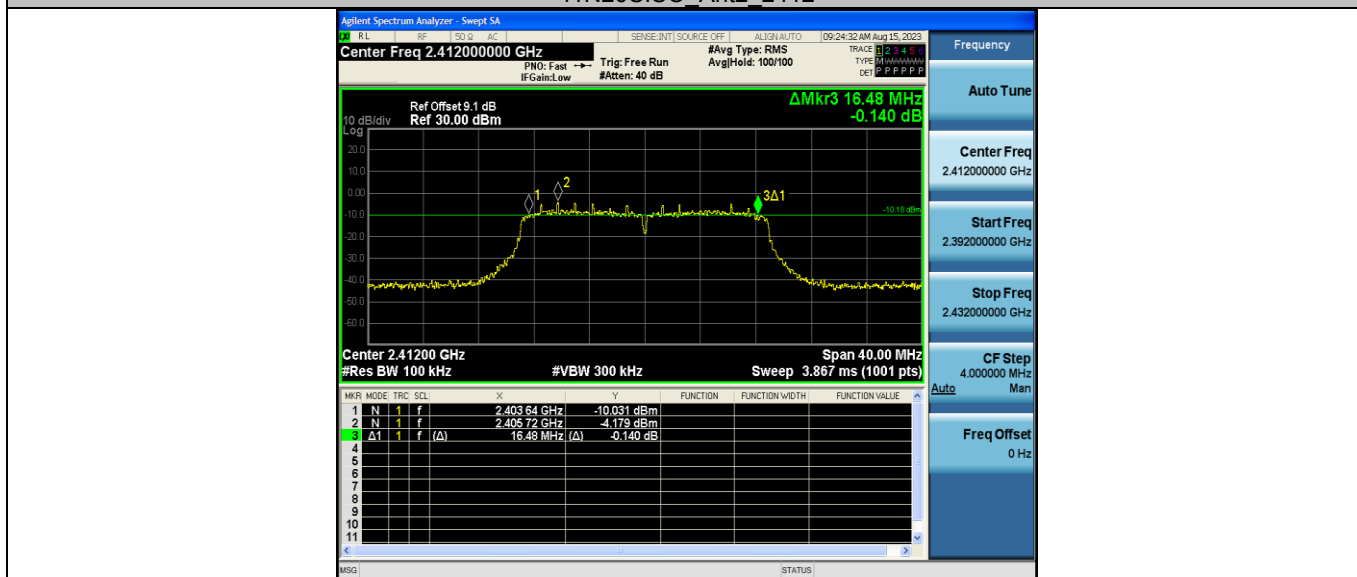
11G_Ant2_2462



11N20SISO_Ant1_2412



11N20SISO_Ant2_2412



11N20SISO_Ant1_2437



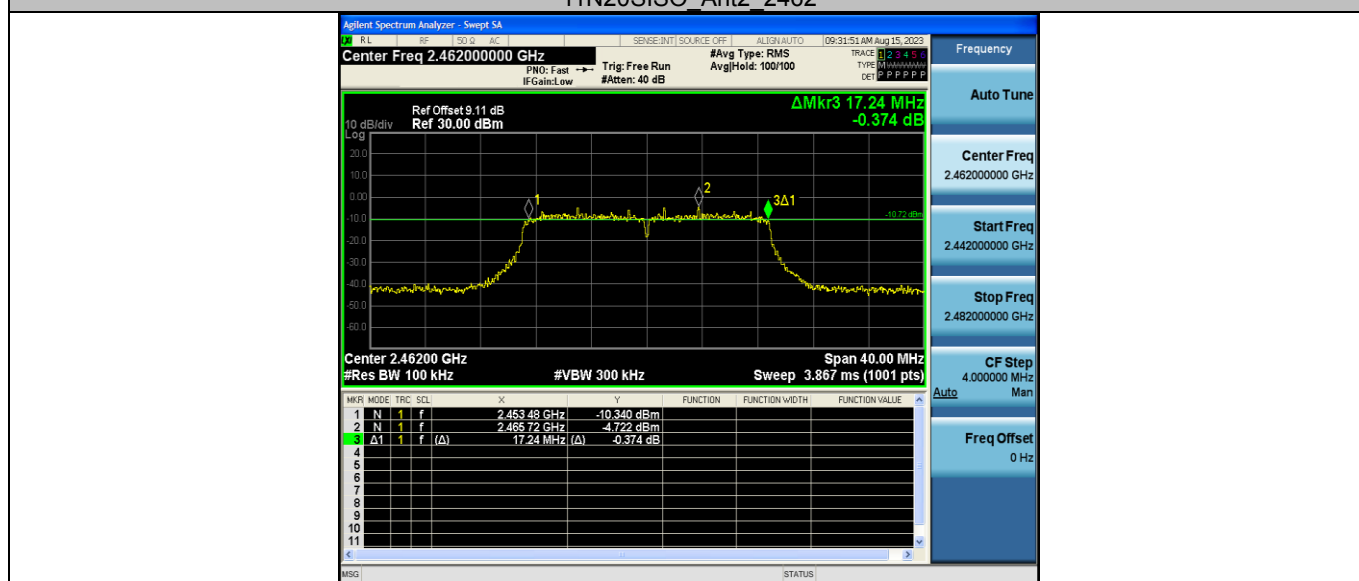
11N20SISO_Ant2_2437



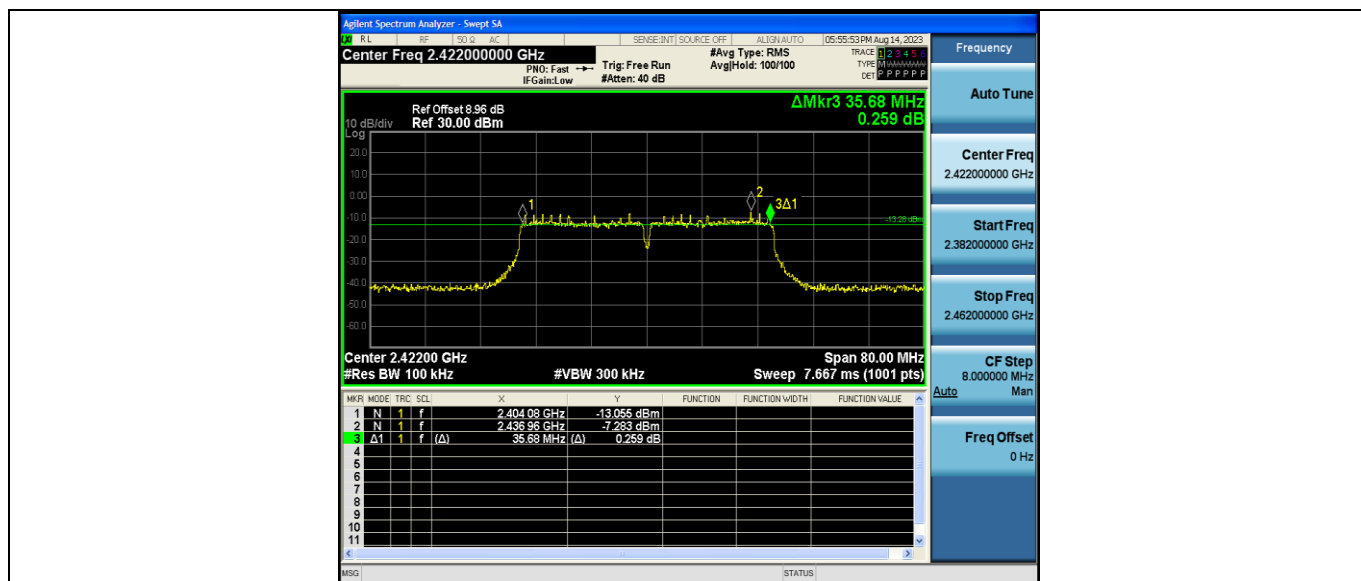
11N20SISO_Ant1_2462



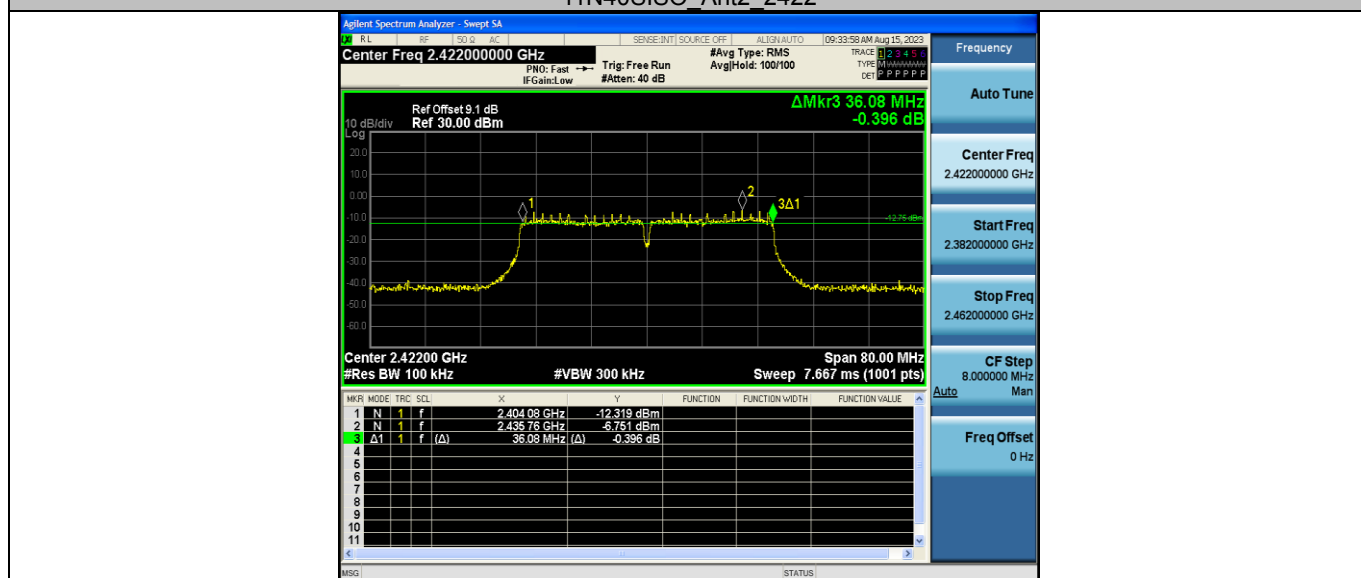
11N20SISO_Ant2_2462



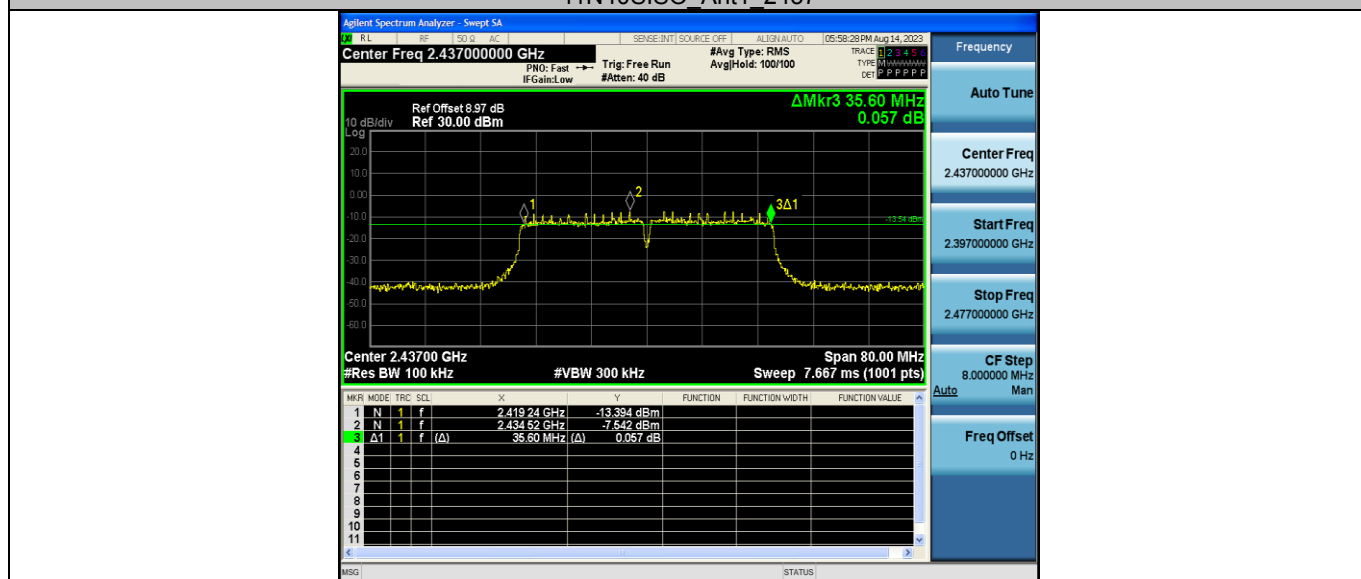
11N40SISO_Ant1_2422



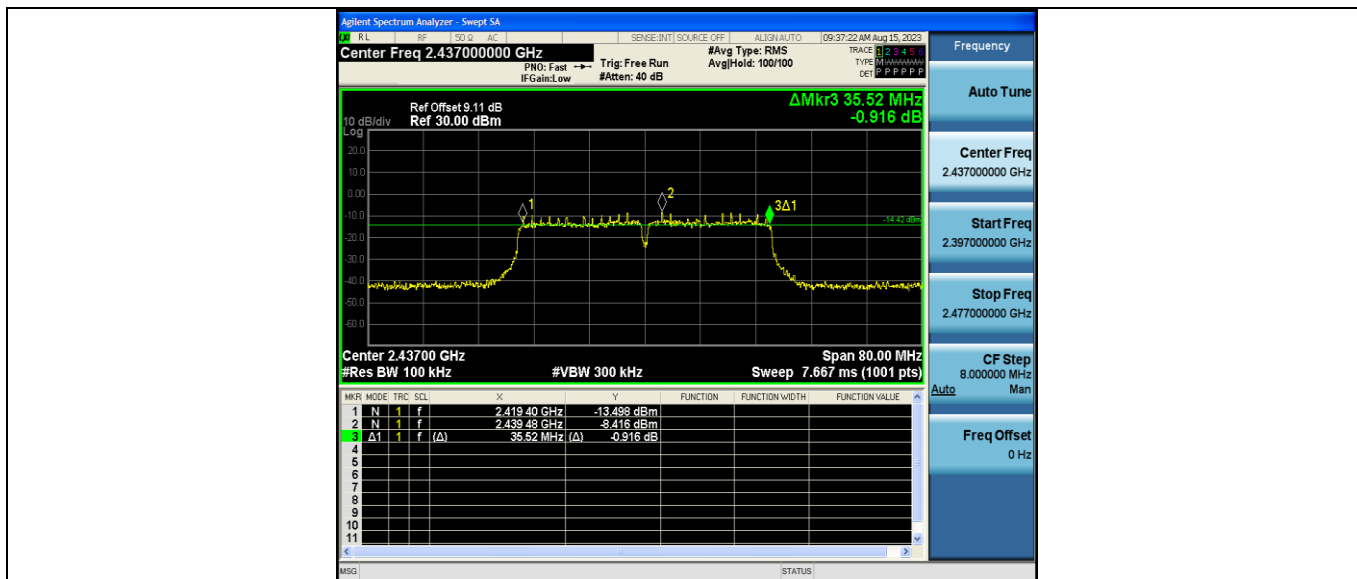
11N40SISO_Ant2_2422



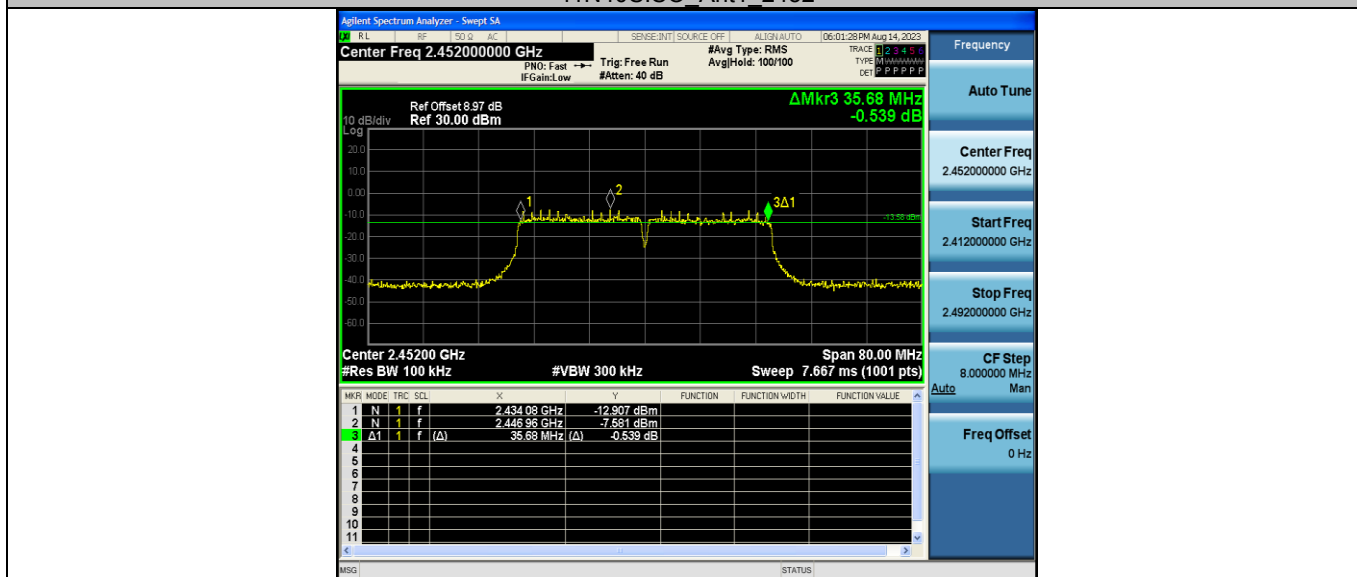
11N40SISO_Ant1_2437



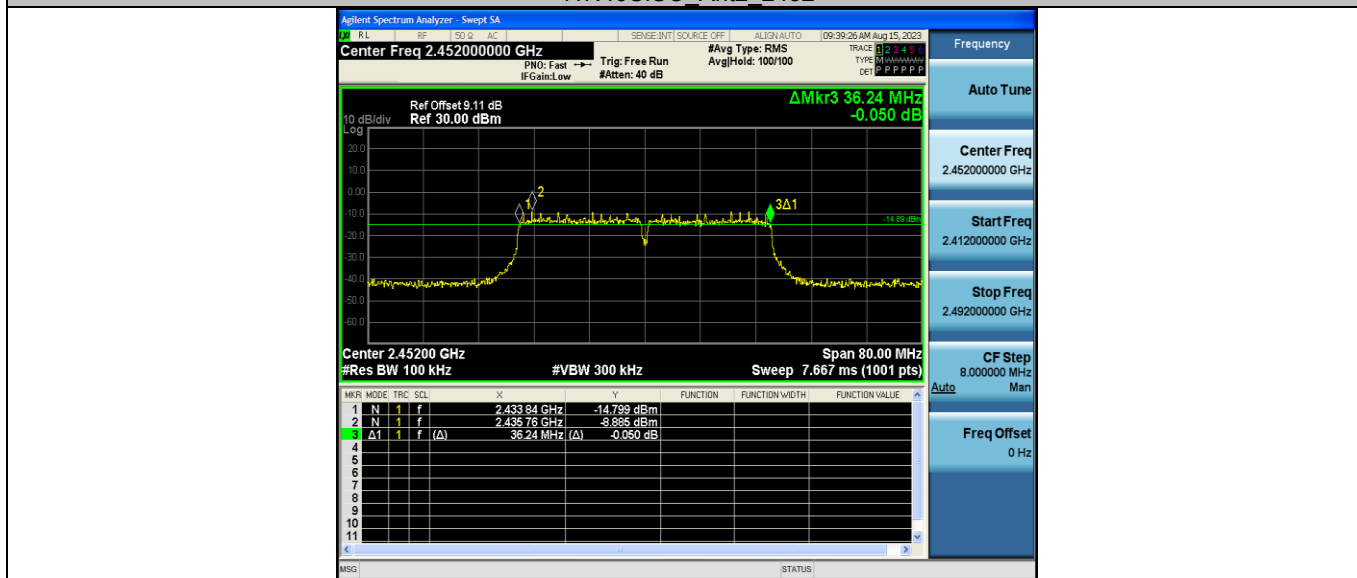
11N40SISO_Ant2_2437



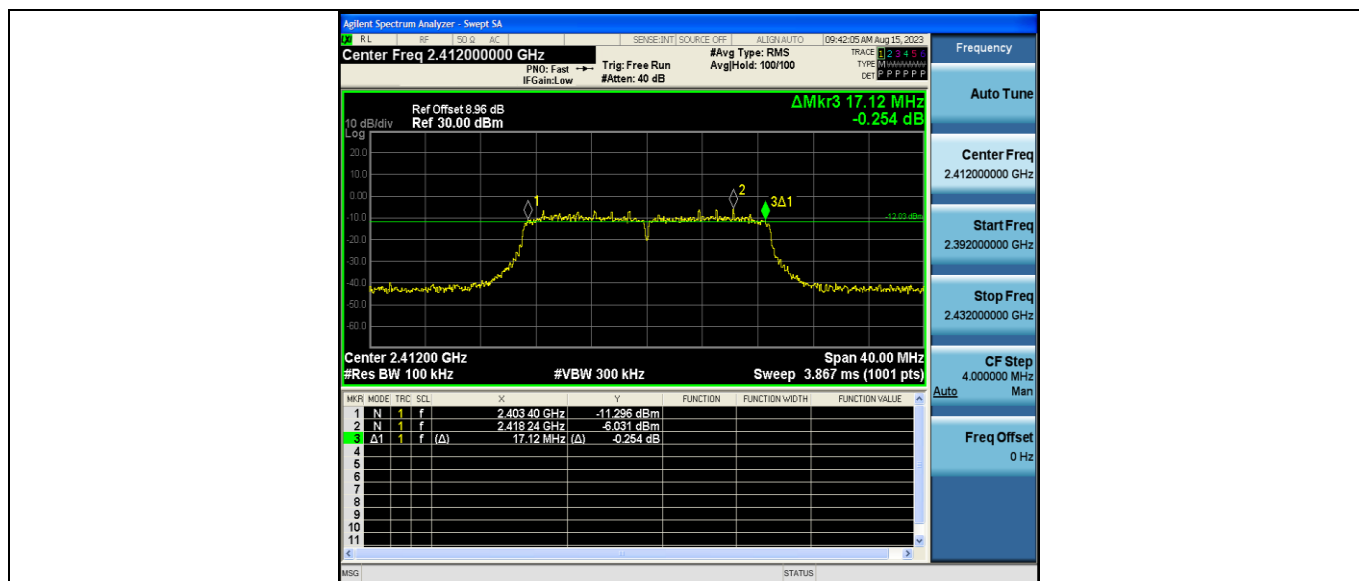
11N40SISO_Ant1_2452



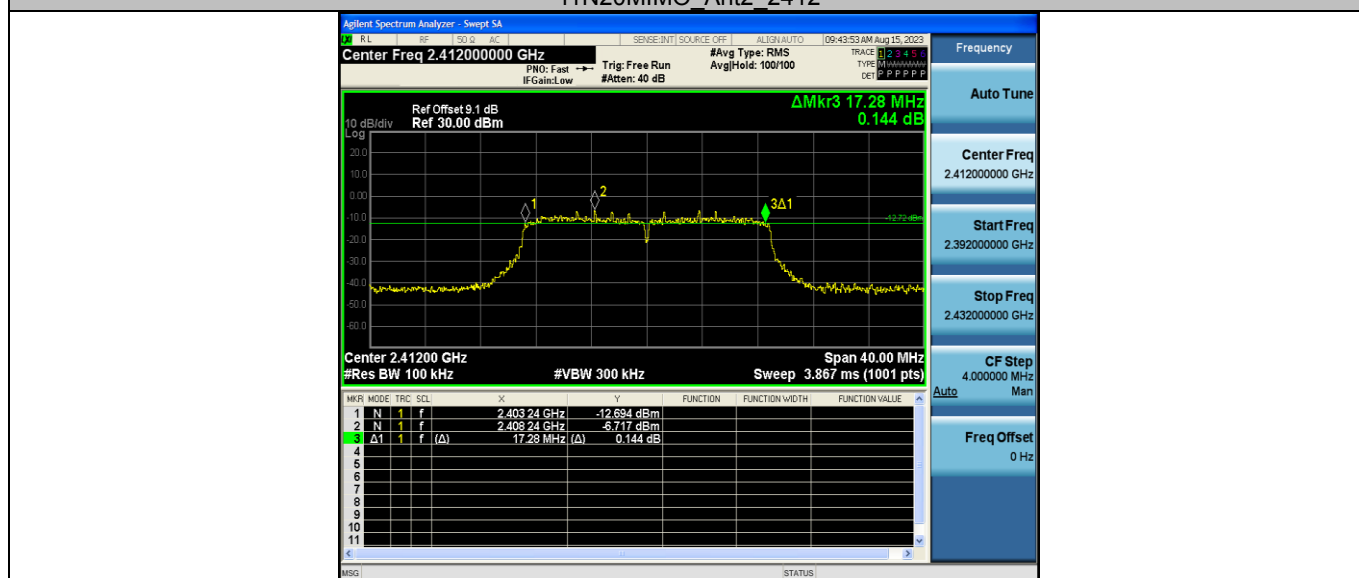
11N40SISO_Ant2_2452



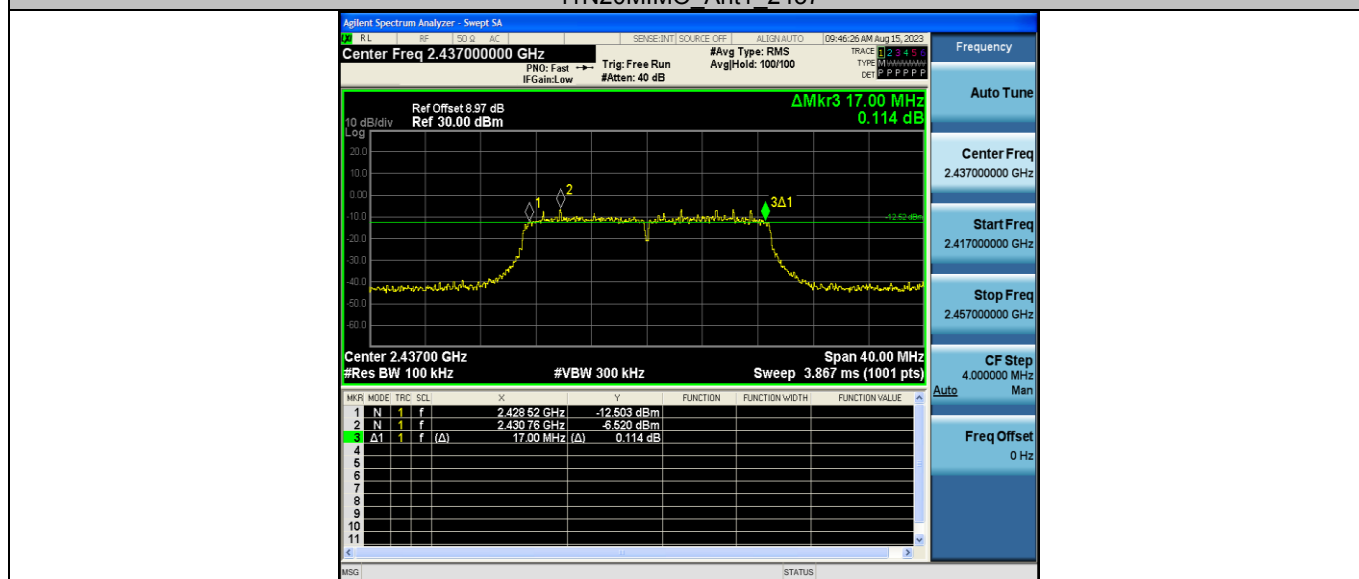
11N20MIMO_Ant1_2412



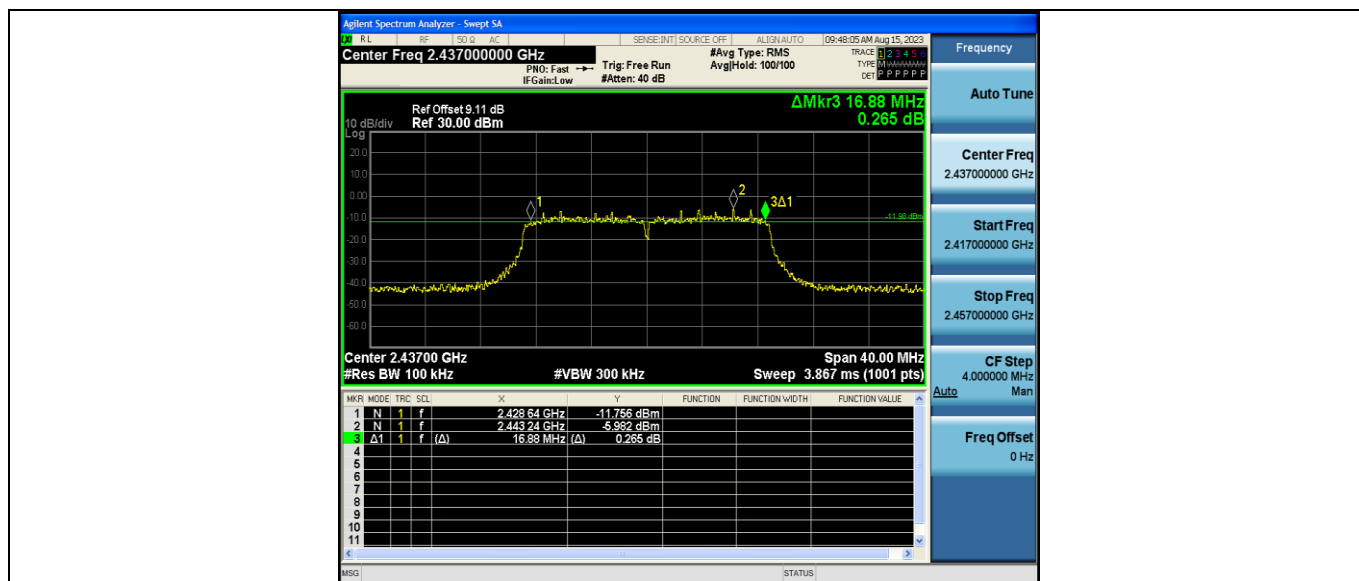
11N20MIMO_Ant2_2412



11N20MIMO_Ant1_2437



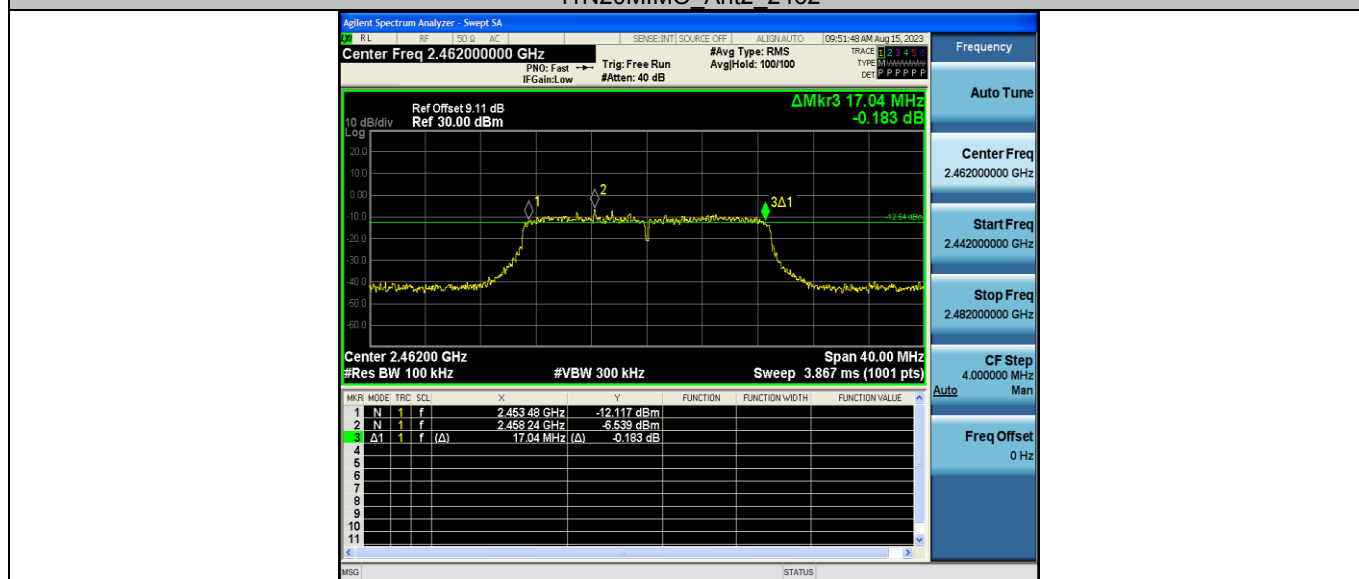
11N20MIMO_Ant2_2437



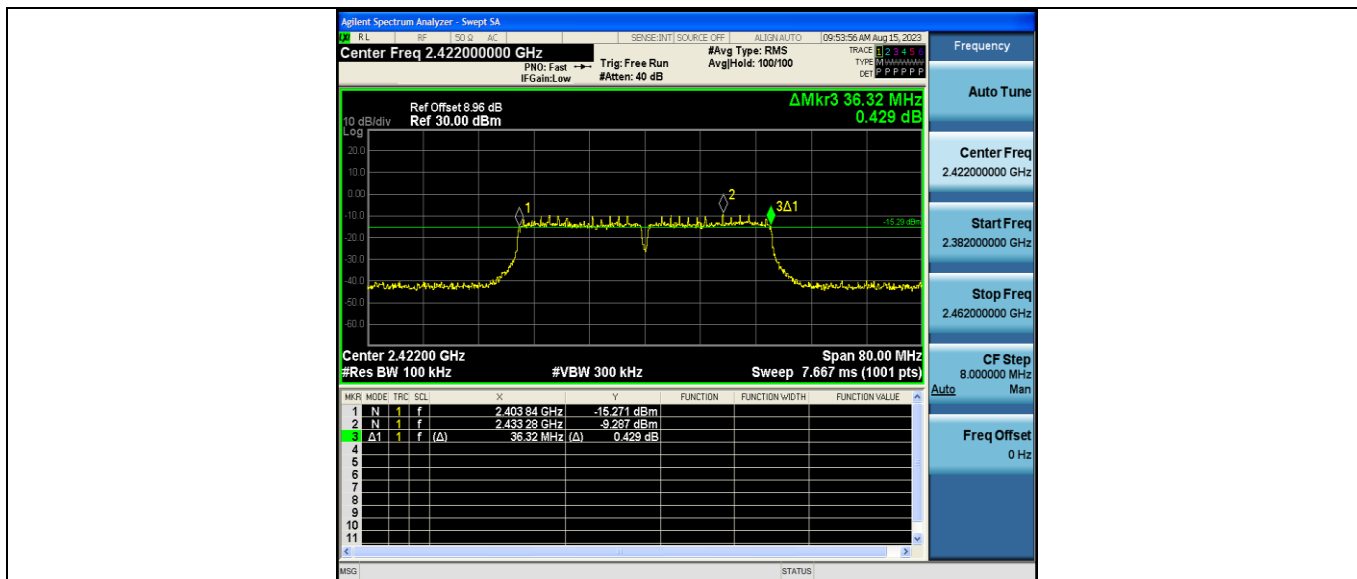
11N20MIMO_Ant1_2462



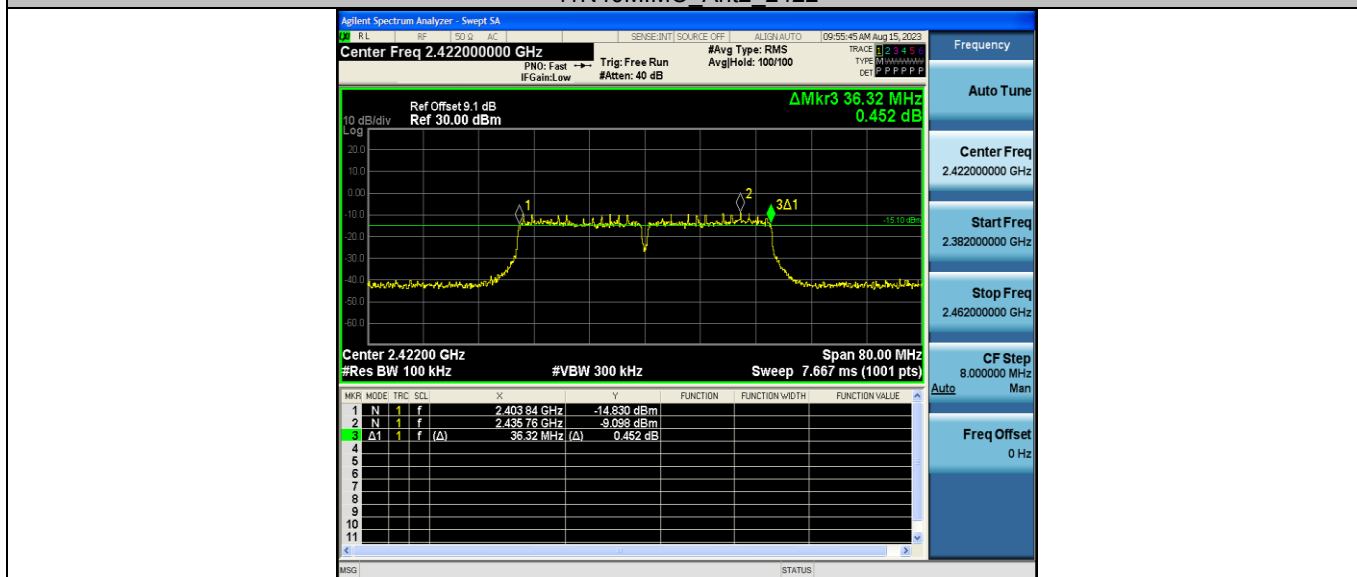
11N20MIMO_Ant2_2462



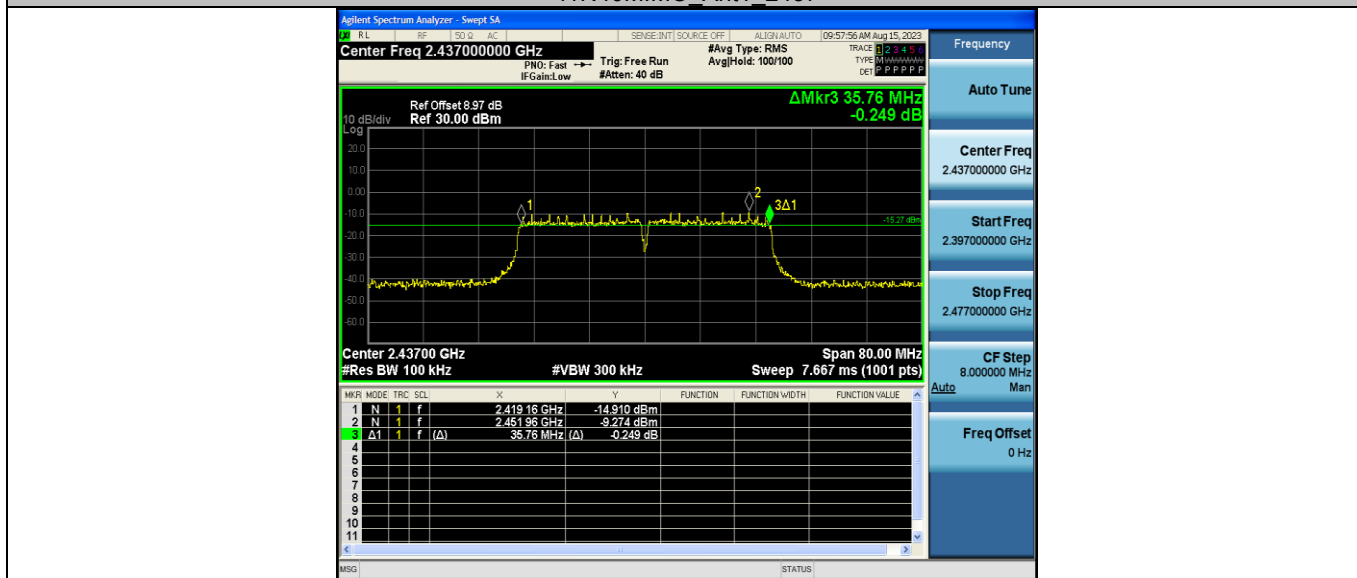
11N40MIMO_Ant1_2422



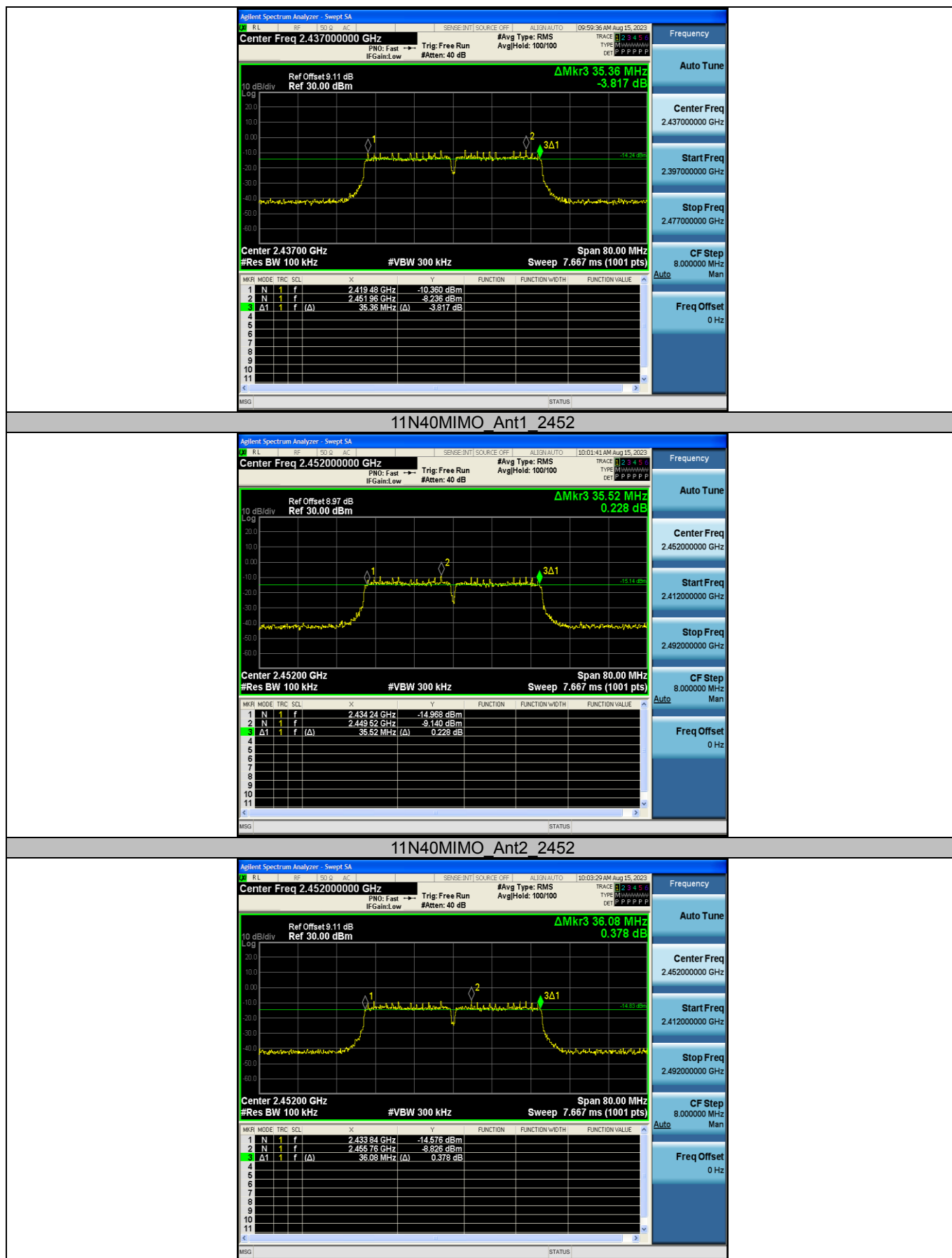
11N40MIMO_Ant2_2422



11N40MIMO_Ant1_2437



11N40MIMO_Ant2_2437



Appendix B: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency [MHz]	Peak Power [dBm]	Conducted Limit [dBm]	Verdict
11B	Ant1	2412	15.19	≤30.00	PASS
	Ant2	2412	16.51	≤30.00	PASS
	Ant1	2437	14.19	≤30.00	PASS
	Ant2	2437	17.04	≤30.00	PASS
	Ant1	2462	14.15	≤30.00	PASS
	Ant2	2462	16.50	≤30.00	PASS
11G	Ant1	2412	16.93	≤30.00	PASS
	Ant2	2412	16.60	≤30.00	PASS
	Ant1	2437	16.48	≤30.00	PASS
	Ant2	2437	17.03	≤30.00	PASS
	Ant1	2462	15.70	≤30.00	PASS
	Ant2	2462	16.60	≤30.00	PASS
11N20SISO	Ant1	2412	12.95	≤30.00	PASS
	Ant2	2412	13.68	≤30.00	PASS
	Ant1	2437	13.25	≤30.00	PASS
	Ant2	2437	14.00	≤30.00	PASS
	Ant1	2462	12.79	≤30.00	PASS
	Ant2	2462	13.91	≤30.00	PASS
11N40SISO	Ant1	2422	13.48	≤30.00	PASS
	Ant2	2422	12.36	≤30.00	PASS
	Ant1	2437	13.71	≤30.00	PASS
	Ant2	2437	12.49	≤30.00	PASS
	Ant1	2452	13.65	≤30.00	PASS
	Ant2	2452	12.73	≤30.00	PASS
11N20MIMO	Ant1	2412	12.38	≤30.00	PASS
	Ant2	2412	11.94	≤30.00	PASS
	total	2412	15.18	≤30.00	PASS
	Ant1	2437	11.70	≤30.00	PASS
	Ant2	2437	12.14	≤30.00	PASS
	total	2437	14.94	≤30.00	PASS
	Ant1	2462	11.18	≤30.00	PASS
	Ant2	2462	11.86	≤30.00	PASS
	total	2462	14.54	≤30.00	PASS
11N40MIMO	Ant1	2422	12.05	≤30.00	PASS
	Ant2	2422	12.28	≤30.00	PASS
	total	2422	15.18	≤30.00	PASS
	Ant1	2437	12.00	≤30.00	PASS
	Ant2	2437	12.51	≤30.00	PASS
	total	2437	15.27	≤30.00	PASS
	Ant1	2452	11.96	≤30.00	PASS
	Ant2	2452	12.72	≤30.00	PASS
	total	2452	15.37	≤30.00	PASS

Appendix C: Maximum power spectral density

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/3-100kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-2.05	≤8.00	PASS
	Ant2	2412	0.65	≤8.00	PASS
	Ant1	2437	-1.64	≤8.00	PASS
	Ant2	2437	1.91	≤8.00	PASS
	Ant1	2462	-1.39	≤8.00	PASS
	Ant2	2462	1.02	≤8.00	PASS
11G	Ant1	2412	-6.53	≤8.00	PASS
	Ant2	2412	-6.91	≤8.00	PASS
	Ant1	2437	-6.37	≤8.00	PASS
	Ant2	2437	-6.22	≤8.00	PASS
	Ant1	2462	-7.05	≤8.00	PASS
	Ant2	2462	-7.04	≤8.00	PASS
11N20SISO	Ant1	2412	-10.13	≤8.00	PASS
	Ant2	2412	-9.57	≤8.00	PASS
	Ant1	2437	-9.7	≤8.00	PASS
	Ant2	2437	-8.72	≤8.00	PASS
	Ant1	2462	-10.38	≤8.00	PASS
	Ant2	2462	-9.14	≤8.00	PASS
11N40SISO	Ant1	2422	-11.67	≤8.00	PASS
	Ant2	2422	-12.95	≤8.00	PASS
	Ant1	2437	-11.41	≤8.00	PASS
	Ant2	2437	-12.83	≤8.00	PASS
	Ant1	2452	-11.77	≤8.00	PASS
	Ant2	2452	-12.66	≤8.00	PASS
11N20MIMO	Ant1	2412	-11.15	≤8.00	PASS
	Ant2	2412	-11.25	≤8.00	PASS
	total	2412	-8.19	≤8.00	PASS
	Ant1	2437	-11.7	≤8.00	PASS
	Ant2	2437	-10.85	≤8.00	PASS
	total	2437	-8.24	≤8.00	PASS
	Ant1	2462	-12.48	≤8.00	PASS
	Ant2	2462	-11.28	≤8.00	PASS
	total	2462	-8.83	≤8.00	PASS
11N40MIMO	Ant1	2422	-13.29	≤8.00	PASS
	Ant2	2422	-13.28	≤8.00	PASS
	total	2422	-10.27	≤8.00	PASS
	Ant1	2437	-13.15	≤8.00	PASS
	Ant2	2437	-12.99	≤8.00	PASS
	total	2437	-10.06	≤8.00	PASS
	Ant1	2452	-13.55	≤8.00	PASS
	Ant2	2452	-12.72	≤8.00	PASS
	total	2452	-10.10	≤8.00	PASS

Test Graphs

