FCC RF Test Report

APPLICANT	:	Sonim Technologies, Inc.
EQUIPMENT	:	Mobile Hotspot
BRAND NAME	:	Sonim
MODEL NAME	:	H700B
FCC ID	:	WYPH700B
STANDARD	:	FCC Part 15 Subpart C §15.247
CLASSIFICATION	:	(DTS) Digital Transmission System
TEST DATE(S)	:	Sep. 12, 2024 ~ May 15, 2025

We, Sporton International Inc. (Shenzhen), would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Shenzhen), the test report shall not be reproduced except in full.

Fly Liang

Approved by: Fly Liang

ACCREDITED Cert #5145.01

Sporton International Inc. (ShenZhen)

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR480204A	Rev. 01	Initial issue of report	May 27, 2025

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.247(a)(2)	6dB Bandwidth	≥ 0.5MHz	Pass	-
3.1	-	99% Bandwidth	-	Report Only	-
3.2	15.247(b)	Power Output Measurement	≤ 30dBm	Pass	-
3.3	15.247(e)	Power Spectral Density	≤ 8dBm/3kHz	Pass	-
3.4	15.247(d)	Conducted Band Edges	≤ 20dBc	Pass	-
		Conducted Spurious Emission		Pass	-
3.5	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 1.07 dB at 1557 MHz
3.6	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 15.32 dB at 0.60 MHz
3.7	15.203 & 15.247(b)	Antenna Requirement	15.203 & 15.247(b)	Pass	-

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. 2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Applicant

Sonim Technologies, Inc.
4445 Eastgate Mall,Suite200,San Diego, CA92121, USA

1.2 Manufacturer

Sonim Technologies, Inc.
4445 Eastgate Mall,Suite200,San Diego, CA92121, USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Hotspot
Brand Name	Sonim
Model Name	H700B
FCC ID	WYPH700B
IMEI Code	Conducted: 351393280001029 Conduction: 351393280007588 Radiation: 351393280007620
HW Version	V3.0
SW Version	H70.0-01-22.3.0-10.25.00
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

<table>
<tr><th colspan="2">Standards-related Product Specification</th></tr>
<tr><td>Tx/Rx Channel Frequency Range</td><td>2412 MHz ~ 2462 MHz</td></tr>
<tr><td>Maximum (Peak) Output Power to antenna</td><td><MIMO Ant 7+6>
802.11b : 21.97 dBm (0.1574 W)
802.11g : 25.33 dBm (0.3412 W)
802.11n HT20 : 24.58 dBm (0.2871 W)
802.11n HT40 : 24.96 dBm (0.3133 W)
802.11be EHT20 : 19.69 dBm (0.0931 W)
802.11be EHT40 : 19.69 dBm (0.0931 W)</td></tr>
<tr><td>99% Occupied Bandwidth</td><td><MIMO Ant 7+6>
802.11b : 14.599MHz
802.11g : 18.626MHz
802.11n HT20 : 19.226MHz
802.11n HT40 : 37.420MHz
802.11be EHT20 : 19.854MHz
802.11be EHT40 : 39.020MHz</td></tr>
<tr><td>Antenna Type / Gain</td><td><Ant 7> : PIFA Antenna type with gain 0.00 dBi
<Ant 6> : PIFA Antenna type with gain 0.34 dBi</td></tr>
<tr><td>Type of Modulation</td><td>802.11b : DSSS (DBPSK / DQPSK / CCK)
802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)
802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)
802.11ax : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM)
802.11be: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM / 4096QAM)</td></tr>
<tr><td>Antenna Function Description</td><td>
<table>
<tr><td></td><td>Ant. 7</td><td>Ant. 6</td></tr>
<tr><td>802.11 b/g/n/ac/ax/be SISO</td><td>V</td><td>V</td></tr>
<tr><td>802.11 b/g/n/ac/ax/be CDD 1S2T</td><td colspan="2">V</td></tr>
<tr><td>802.11 b/g/n/ac/ax/be TXBF 1S2T</td><td colspan="2">V</td></tr>
</table>
</td></tr>
</table>

Note:

1. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to the higher output power.
2. The device supports WLAN MIMO CDD&TXBF mode.
3. The Tx Beamforming power/EIRP is not greater than CDD mode, so CDD mode covers Tx Beamforming mode, therefore, the all test has assessed CDD mode only.
4. For 802.11n HT20 /ac VHT20 and 802.11n HT40 /ac VHT40 mode, the whole testing have assessed only 802.11n HT20/HT40 by referring to the higher output power.
5. For 802.11ax HE20 /be EHT20 and 802.11ax HE40/be EHT40 mode, the whole testing have assessed only 802.11be EHT20/EHT40 by referring to the higher output power.
6. The device supports multiple spatial streams, the worst cases directional gain will occur when NSS = 1, therefore, the 1S2T(CDD&TXBF) mode is the worst; 1S2T: NSS=1, MIMO 2Tx.
7. 802.11ax/be support OFDMA full RU tone and partial RU tone, both full RU and partial RU-left (for low CH) and partial RU-right (for high CH) test output power, the full RU Power/PSD > partial RU,

therefore the full RU perform full test to cover partial RU except for Spurious and bandedge.

8. 802.11be support small size RU modes as below, which is less than full RU conducted power, therefore have assessed only Power Density/RSE.

<Small size RU 52+26 Tone>:

Bandwidth	Tones		Index		For test modes configure
20MHz	26	52	1	38	1
20MHz	52	26	39	7	3

<Small size RU 106+26 Tone>:

Bandwidth	Tones		Index		For test modes configure
20MHz	106	26	53	4	1
20MHz	26	106	4	54	2

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Testing Location

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	TH01-SZ CO02-SZ ; 03CH01-SZ	CN1256	421272

1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH01-SZ	AUDIX	E3	6.2009-8-24
2.	CO02-SZ	AUDIX	E3	6.120613b

1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 15 Subpart C §15.247
- FCC KDB 558074 D01 15.247 Meas Guidance v05r02
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y/X plane) were recorded in this report.

b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437	-	-

2.2 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

MIMO Antenna

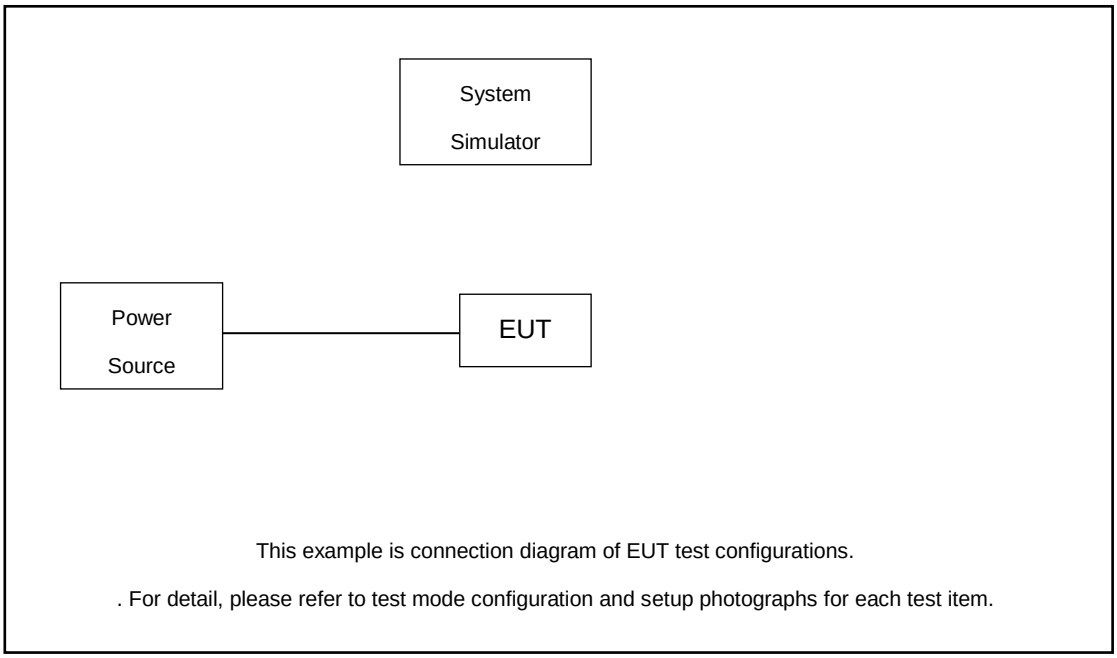
Modulation	Data Rate
802.11b	**1 Mbps**
802.11g	**6 Mbps**
802.11n HT20	**MCS0**
802.11n HT40	**MCS0**
802.11ac VHT20 (Covered by HT20)	**MCS0**
802.11ac VHT40 (Covered by HT40)	**MCS0**
802.11ax HE20 (Covered by EHT20)	**MCS0**
802.11ax HE40 (Covered by EHT40)	**MCS0**
802.11be EHT20	**MCS0**
802.11be EHT40	**MCS0**

Test Cases	
AC Conducted Emission	Mode 1 :WCDMA Band 5 Idle + WLAN Link(2.4G) + Adapter 1 + USB Cable 1 + Battery 1
Remark: For Radiated Test Cases, The tests were performance with Adapter 1 and USB Cable 1.	

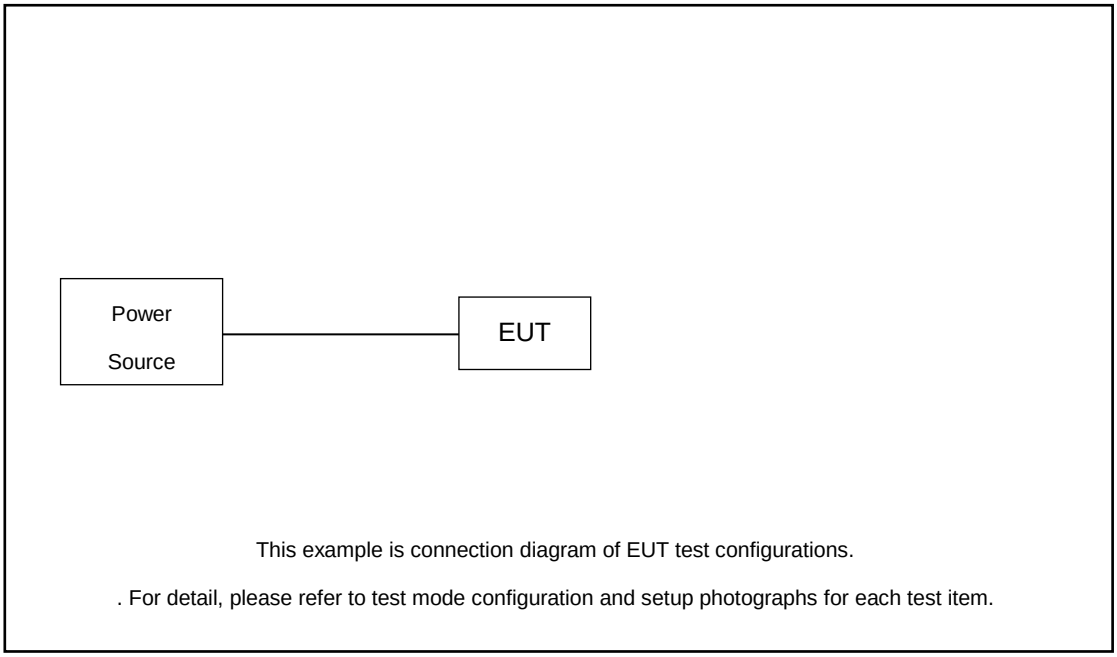
RSE Co-location
802.11b CH01 2412 Tx + LTE Band14 Link

2.3 Connection Diagram of Test System

AC Conducted Emission:



Radiated Emission:



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded,1.8m

2.5 EUT Operation Test Setup

For WLAN RF test items, an engineering test program was provided and enabled to make EUT continuous transmit.

2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 2.12 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 2.12 + 10 = 12.12 (dB)

3 Test Result

3.1 6dB and 99% Bandwidth Measurement

3.1.1 Limit of 6dB and 99% Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The testing follows ANSI C63.10-2013 clause 11.8
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) ≥ 3*RBW. In order to make an accurate measurement. The 6 dB bandwidth must be greater than 500 kHz.
5. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = 1%~5% of OBW and set the Video bandwidth (VBW) approximately three times the RBW.
6. Measure and record the results in the test report.

3.1.4 Test Setup

3.1.5 Test Result of 6dB and 99% Occupied Bandwidth

Please refer to Appendix A.

3.2 Output Power Measurement

3.2.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. If transmitting antenna with directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

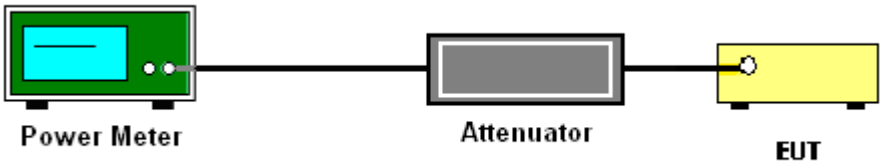
3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

1. The testing follows the Measurement Procedure of ANSI C63.10-2013 clause 11.9.1.3 PKPM1 Peak power meter or ANSI C63.10-2013 clause 11.9.2.3.1 Method AVGPM method.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

3.2.4 Test Setup



3.2.5 Test Result of Peak Output Power

2.4GHz Band MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant7	Ant6	SUM	Ant7	Ant6	Ant7	Ant6	Ant7	Ant6	Ant7	Ant6	
11b	1Mbps	2	1	2412	18.33	17.96	21.16	30.00		0.34		21.50		36.00		Pass
11b	1Mbps	2	6	2437	19.32	18.57	21.97	30.00		0.34		22.31		36.00		Pass
11b	1Mbps	2	11	2462	18.71	18.01	21.38	30.00		0.34		21.72		36.00		Pass
11g	6Mbps	2	1	2412	21.10	21.50	24.31	30.00		0.34		24.65		36.00		Pass
11g	6Mbps	2	6	2437	22.50	22.13	25.33	30.00		0.34		25.67		36.00		Pass
11g	6Mbps	2	11	2462	22.12	21.50	24.83	30.00		0.34		25.17		36.00		Pass
HT20	MCS0	2	1	2412	20.22	20.80	23.53	30.00		0.34		23.87		36.00		Pass
HT20	MCS0	2	6	2437	21.80	21.32	24.58	30.00		0.34		24.92		36.00		Pass
HT20	MCS0	2	11	2462	21.52	21.09	24.32	30.00		0.34		24.66		36.00		Pass
HT40	MCS0	2	3	2422	21.88	21.45	24.68	30.00		0.34		25.02		36.00		Pass
HT40	MCS0	2	6	2437	21.90	21.52	24.72	30.00		0.34		25.06		36.00		Pass
HT40	MCS0	2	9	2452	21.99	21.90	24.96	30.00		0.34		25.30		36.00		Pass

2.4GHz Band MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
						Ant7	Ant6	SUM	Ant7	Ant6	Ant7	Ant6	Ant7	Ant6	Ant7	Ant6	
EHT20	MCS0	2	1	2412	Full	16.65	16.21	19.45	30.00		0.34		19.79		36.00		Pass
EHT20	MCS0	2	6	2437	Full	16.98	16.35	19.69	30.00		0.34		20.03		36.00		Pass
EHT20	MCS0	2	11	2462	Full	16.85	16.45	19.66	30.00		0.34		20.00		36.00		Pass
EHT40	MCS0	2	3	2422	Full	16.62	16.45	19.55	30.00		0.34		19.89		36.00		Pass
EHT40	MCS0	2	6	2437	Full	16.76	16.60	19.69	30.00		0.34		20.03		36.00		Pass
EHT40	MCS0	2	9	2452	Full	16.56	16.44	19.51	30.00		0.34		19.85		36.00		Pass

3.2.6 Test Result of Average Output Power (Reporting Only)

2.4GHz Band MIMO																		
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail	Setting	
					Ant7	Ant6	SUM	Ant7	Ant6	Ant7	Ant6	Ant7	Ant6	Ant7	Ant6		Ant 7	Ant 6
11b	1Mbps	2	1	2412	13.70	13.60	16.66	30.00		0.34		17.00		36.00		Pass	13.50	
11b	1Mbps	2	6	2437	15.60	15.10	18.37	30.00		0.34		18.71		36.00		Pass	15.50	
11b	1Mbps	2	11	2462	15.00	14.60	17.81	30.00		0.34		18.15		36.00		Pass	15.00	
11g	6Mbps	2	1	2412	15.40	15.20	18.31	30.00		0.34		18.65		36.00		Pass	15.50	
11g	6Mbps	2	6	2437	15.90	15.30	18.62	30.00		0.34		18.96		36.00		Pass	16.00	
11g	6Mbps	2	11	2462	15.70	15.00	18.37	30.00		0.34		18.71		36.00		Pass	16.00	
HT20	MCS0	2	1	2412	14.30	14.10	17.21	30.00		0.34		17.55		36.00		Pass	14.50	
HT20	MCS0	2	6	2437	14.90	14.30	17.62	30.00		0.34		17.96		36.00		Pass	15.00	
HT20	MCS0	2	11	2462	14.80	14.20	17.52	30.00		0.34		17.86		36.00		Pass	15.00	
HT40	MCS0	2	3	2422	14.40	14.00	17.21	30.00		0.34		17.55		36.00		Pass	14.50	
HT40	MCS0	2	6	2437	14.50	14.00	17.27	30.00		0.34		17.61		36.00		Pass	14.50	
HT40	MCS0	2	9	2452	14.80	14.30	17.57	30.00		0.34		17.91		36.00		Pass	15.00	

2.4GHz Band MIMO																			
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail	Setting	
						Ant7	Ant6	SUM	Ant7	Ant6	Ant7	Ant6	Ant7	Ant6	Ant7	Ant6		Ant 7	Ant 6
EHT20	MCS0	2	1	2412	Full	9.60	9.40	12.51	30.00		0.34		12.85		36.00		Pass	9.50	
EHT20	MCS0	2	6	2437	Full	9.80	9.10	12.47	30.00		0.34		12.81		36.00		Pass	10.00	
EHT20	MCS0	2	11	2462	Full	9.90	9.40	12.67	30.00		0.34		13.01		36.00		Pass	10.00	
EHT40	MCS0	2	3	2422	Full	9.60	9.00	12.32	30.00		0.34		12.66		36.00		Pass	10.00	
EHT40	MCS0	2	6	2437	Full	9.60	9.10	12.37	30.00		0.34		12.71		36.00		Pass	10.00	
EHT40	MCS0	2	9	2452	Full	9.60	9.00	12.32	30.00		0.34		12.66		36.00		Pass	10.00	

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

The peak power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.

3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

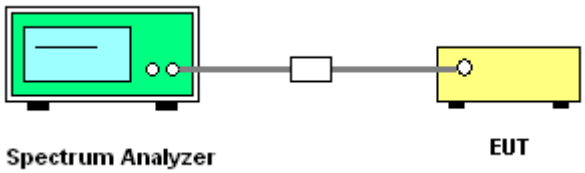
3.3.3 Test Procedures

1. The testing follows Measurement Procedure of ANSI C63.10-2013 clause 11.10.2 Method PKPSD.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 3 kHz. Video bandwidth VBW = 10 kHz In order to make an accurate measurement, set the span to 1.5 times DTS Channel Bandwidth. (6dB BW)
5. Detector = peak, Sweep time = auto couple, Trace mode = max hold, Allow trace to fully stabilize. Use the peak marker function to determine the maximum power level.
6. Measure and record the results in the test report.
7. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01:

   Method (b): Measure and sum spectral maxima across the outputs.

   The measurement on each individual output were performed with the same span and number on each individual output. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

3.4 Conducted Band Edges and Spurious Emission Measurement

3.4.1 Limit of Conducted Band Edges and Spurious Emission Measurement

In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB / 30dB relative to the maximum PSD level in 100 kHz by RF conducted measurement.

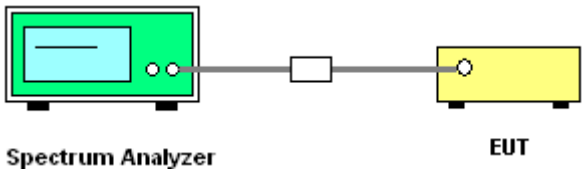
3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The testing follows ANSI C63.10-2013 clause 11.11
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d).
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.4.4 Test Setup



3.4.5 Test Result of Conducted Band Edges and Spurious Emission

Please refer to Appendix A.

3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

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

3.5.2 Measuring Instruments

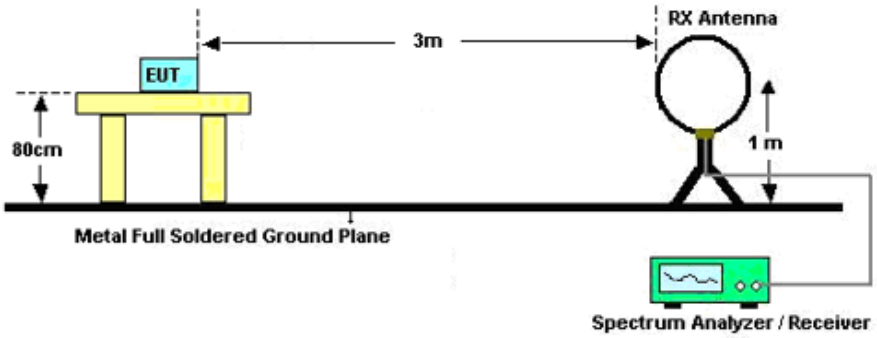
The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

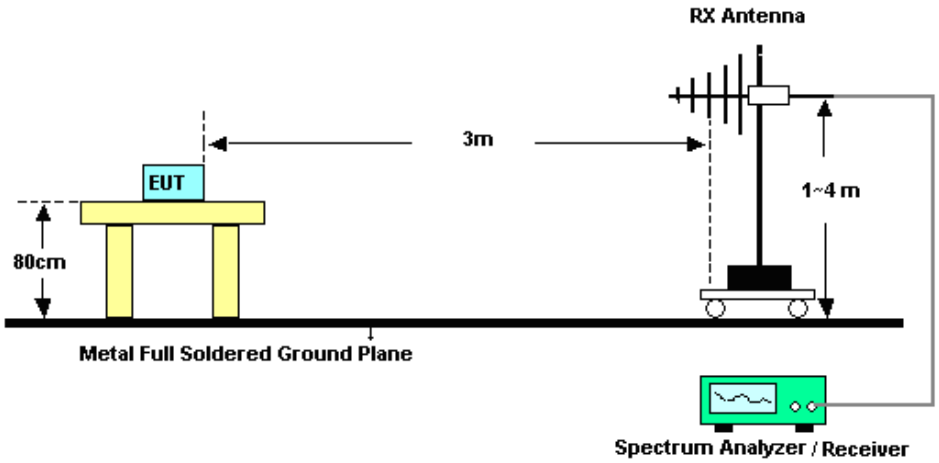
1. The testing follows ANSI C63.10-2013 clause 11.11 & 11.12
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than peak limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
8. Use the following spectrum analyzer settings:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW=100 kHz for f < 1 GHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
   (3) Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement.
   For average measurement:
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

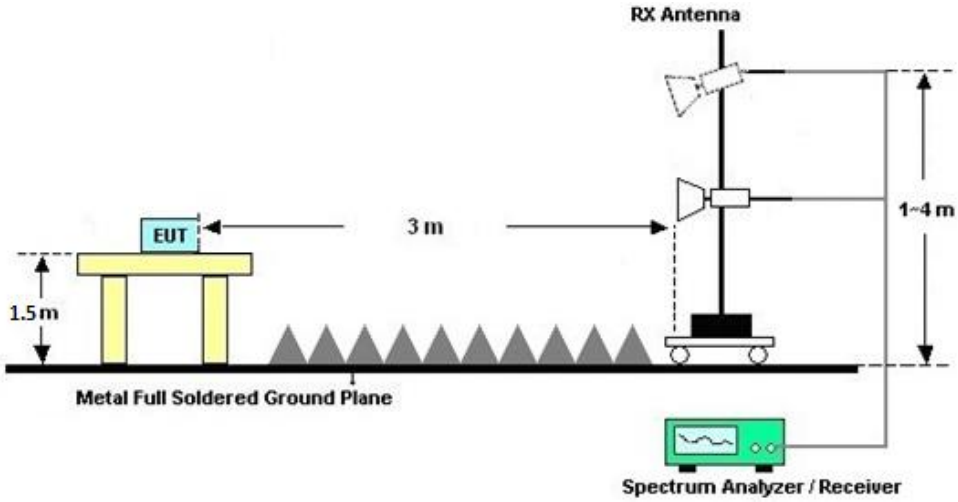
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.5.5 Test Results of Radiated Spurious Emissions (9kHz ~ 30MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C.

3.5.7 Duty Cycle

Please refer to Appendix D.

3.5.8 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic or 40GHz, whichever is lower)

Please refer to Appendix C.

3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment 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.

Frequency of Emission (MHz)	Conducted Limit (dBμV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

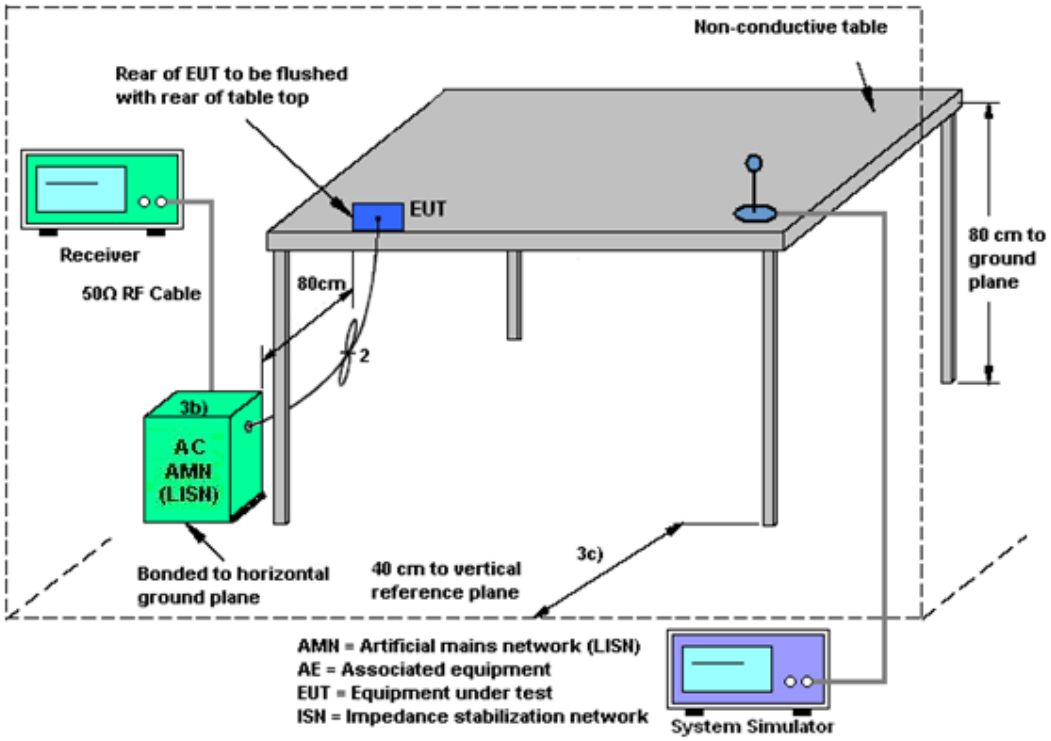
3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF bandwidth = 9kHz) with Maximum Hold Mode.

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.7 Antenna Requirements

3.7.1 Standard Applicable

If directional gain of transmitting Antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. 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 rule.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(N_{ANT}/N_{SS}=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain “DG” is calculated as following table.

<CDD Modes>

	Ant. 7 (dBi)	Ant. 6 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
2.4 GHz	0.00	0.34	0.34	3.18	0.00	0.00

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)

<TXBF Mode>

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For TXBF transmissions, directional gain is calculated as

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k / 20}$ if the kth antenna is being fed by spatial stream j, or zero if it is not;

G_k is the gain in dBi of the kth antenna.

The directional gain calculation is following F)2)e)ii).

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain “DG” is calculated as following table.

	Ant 7 (dBi)	Ant 6 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
2.4GHz	0.00	0.34	3.18	3.18	0.00	0.00

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Dec. 25, 2024	Mar. 28, 2025~ May 15, 2025	Dec. 24, 2025	Radiation (03CH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 03, 2024	Mar. 28, 2025~ May 15, 2025	Jul. 02, 2025	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	Mar. 28, 2025~ May 15, 2025	Dec. 27, 2025	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	Mar. 28, 2025~ May 15, 2025	Oct. 23, 2025	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 04, 2024	Mar. 28, 2025~ May 15, 2025	Jul. 03, 2025	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	Mar. 28, 2025~ May 15, 2025	Apr. 08, 2025	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 03, 2025		Apr. 02, 2026	Radiation (03CH01-SZ)
LF Amplifier	EM Electronics	EM330	060788	20MHz-3GHz	Dec. 25, 2024	Mar. 28, 2025~ May 15, 2025	Dec. 24, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 14, 2024	Mar. 28, 2025~ May 15, 2025	Oct. 13, 2025	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 14, 2024	Mar. 28, 2025~ May 15, 2025	Oct. 13, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 03, 2024	Mar. 28, 2025~ May 15, 2025	Jul. 02, 2025	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	Oct. 14, 2024	Mar. 28, 2025~ May 15, 2025	Oct. 13, 2025	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Mar. 28, 2025~ May 15, 2025	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Mar. 28, 2025~ May 15, 2025	NCR	Radiation (03CH01-SZ)
EMI Receiver	R&S	ESR7	102297	9kHz~7GHz;	Jul. 03, 2024	Mar. 30, 2025	Jul. 02, 2025	Conduction (CO02-SZ)
AC LISN	R&S	ENV216	101499	9kHz~30MHz	Jul. 03, 2024	Mar. 30, 2025	Jul. 02, 2025	Conduction (CO02-SZ)
AC Power Source	CHROMA	61601	616010002470	100Vac~250Vac	Dec. 25, 2024	Mar. 30, 2025	Dec. 24, 2025	Conduction (CO02-SZ)
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 09, 2024	Sep. 12, 2024~ Apr. 24, 2025	Apr. 08, 2025	Conducted (TH01-SZ)
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 02, 2025		Apr. 01, 2026	Conducted (TH01-SZ)
Pulse Power Senor	Anritsu	MA2411B	1339473	30MHz~40GHz	Dec. 29, 2023	Sep. 12, 2024~ Apr. 24, 2025	Dec. 28, 2024	Conducted (TH01-SZ)
Pulse Power Senor	Anritsu	MA2411B	1339473	30MHz~40GHz	Dec. 25, 2024		Dec. 24, 2025	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Oct. 15, 2023	Sep. 12, 2024~ Apr. 24, 2025	Oct. 14, 2024	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Oct. 14, 2024		Oct. 13, 2025	Conducted (TH01-SZ)

NCR: No Calibration Required

5 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	±1.34 dB
Occupied Channel Bandwidth	±0.012 MHz
Conducted Power	±1.34 dB
Conducted Power Spectral Density	±1.32 dB
Frequency	±1.3 Hz

Uncertainty of AC Conducted Emission Measurement (0.15 MHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.5 dB

Uncertainty of Radiated Emission Measurement (9 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.8 dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.2 dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.0 dB

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.3 dB

---------- THE END ----------

Appendix A. Conducted Test Results

Ambient Condition: 24-26 ℃, 45-55 %RH	
According Standard: ■Part15C	
Test Date: 2024.09.12~2025.4.24	**Test Engineer:** Wen Shiwei

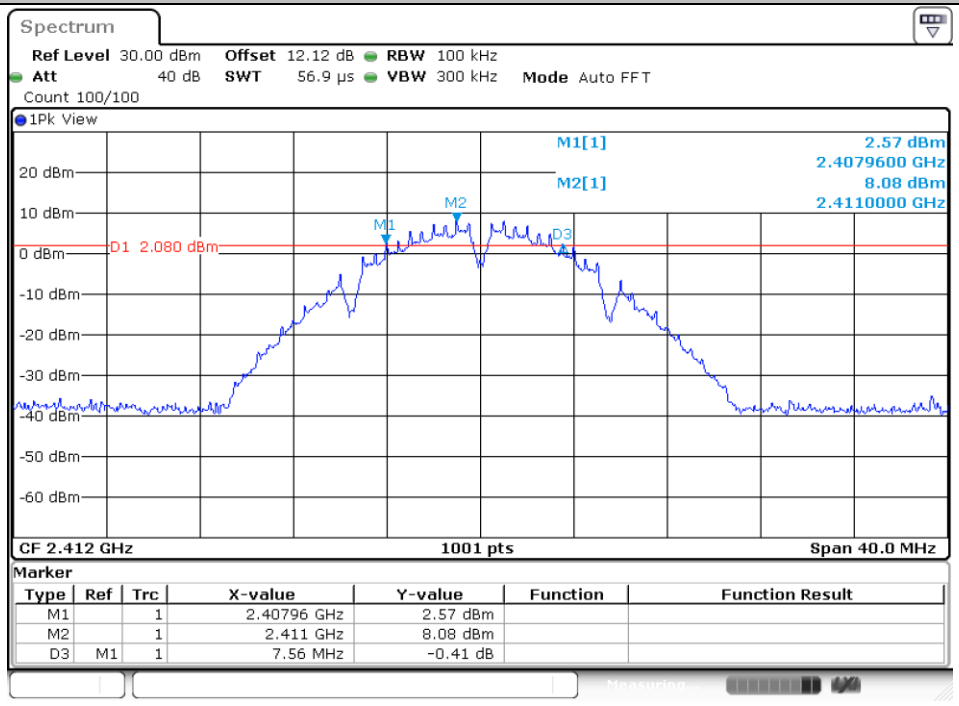
DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B-CDD	Ant7	2412	7.56	2407.96	2415.52	0.5	PASS
	Ant6	2412	7.52	2407.48	2415.00	0.5	PASS
	Ant7	2437	7.08	2433.96	2441.04	0.5	PASS
	Ant6	2437	7.08	2433.96	2441.04	0.5	PASS
	Ant7	2462	8.56	2457.48	2466.04	0.5	PASS
	Ant6	2462	8.08	2458.44	2466.52	0.5	PASS
11G-CDD	Ant7	2412	16.08	2403.80	2419.88	0.5	PASS
	Ant6	2412	15.76	2403.80	2419.56	0.5	PASS
	Ant7	2437	15.72	2429.44	2445.16	0.5	PASS
	Ant6	2437	15.68	2429.48	2445.16	0.5	PASS
	Ant7	2462	16.36	2453.80	2470.16	0.5	PASS
	Ant6	2462	16.40	2453.80	2470.20	0.5	PASS
11N20MIMO	Ant7	2412	17.32	2403.20	2420.52	0.5	PASS
	Ant6	2412	17.68	2403.08	2420.76	0.5	PASS
	Ant7	2437	16.32	2429.48	2445.80	0.5	PASS
	Ant6	2437	15.04	2430.76	2445.80	0.5	PASS
	Ant7	2462	17.80	2453.08	2470.88	0.5	PASS
	Ant6	2462	17.60	2453.20	2470.80	0.5	PASS
11N40MIMO	Ant7	2422	36.32	2403.84	2440.16	0.5	PASS
	Ant6	2422	36.48	2403.76	2440.24	0.5	PASS
	Ant7	2437	36.40	2418.76	2455.16	0.5	PASS
	Ant6	2437	32.56	2421.96	2454.52	0.5	PASS
	Ant7	2452	35.20	2434.40	2469.60	0.5	PASS
	Ant6	2452	35.12	2434.40	2469.52	0.5	PASS
11BE20MIMO	Ant7	2412	18.48	2402.72	2421.20	0.5	PASS
	Ant6	2412	18.00	2402.48	2420.48	0.5	PASS
	Ant7	2437	18.80	2427.80	2446.60	0.5	PASS
	Ant6	2437	17.00	2429.48	2446.48	0.5	PASS
	Ant7	2462	19.04	2452.48	2471.52	0.5	PASS
	Ant6	2462	19.04	2452.48	2471.52	0.5	PASS
11BE40MIMO	Ant7	2422	38.24	2402.88	2441.12	0.5	PASS
	Ant6	2422	37.92	2403.04	2440.96	0.5	PASS
	Ant7	2437	38.16	2417.88	2456.04	0.5	PASS
	Ant6	2437	37.36	2417.96	2455.32	0.5	PASS
	Ant7	2452	37.20	2433.44	2470.64	0.5	PASS
	Ant6	2452	37.60	2433.20	2470.80	0.5	PASS

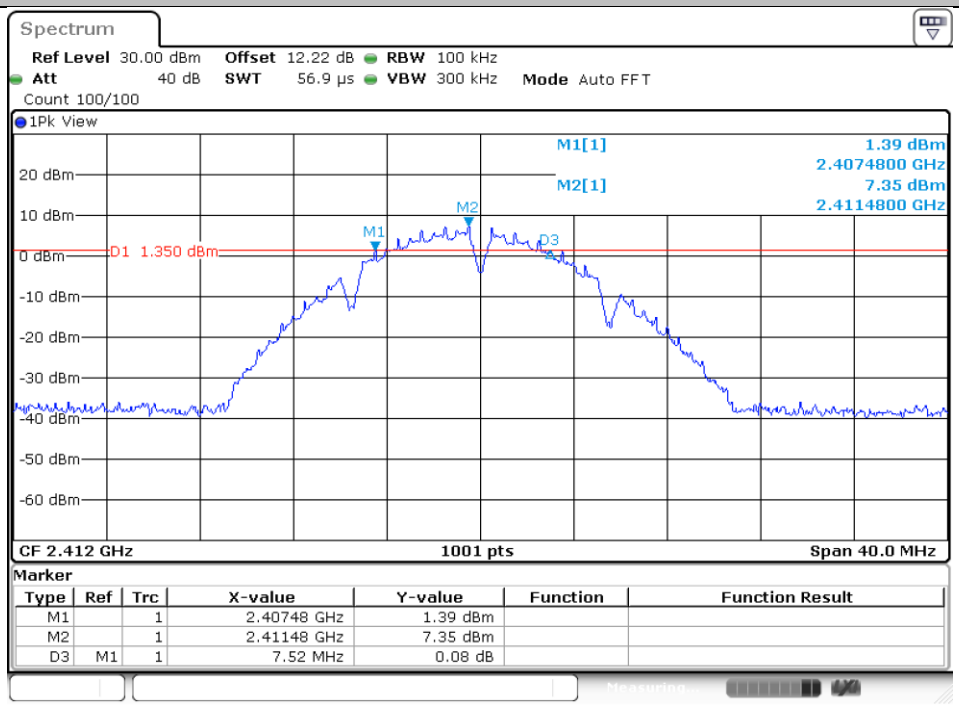
Test Graphs

11B-CDD_Ant7_2412



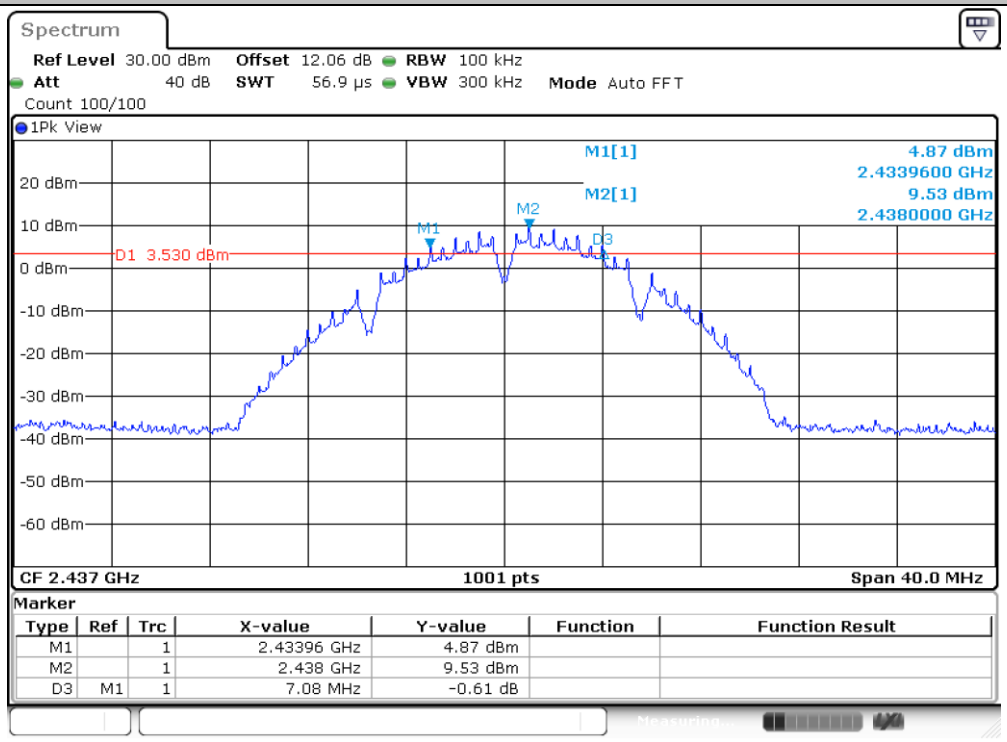
Date: 12.SEP.2024 23:25:28

11B-CDD_Ant6_2412



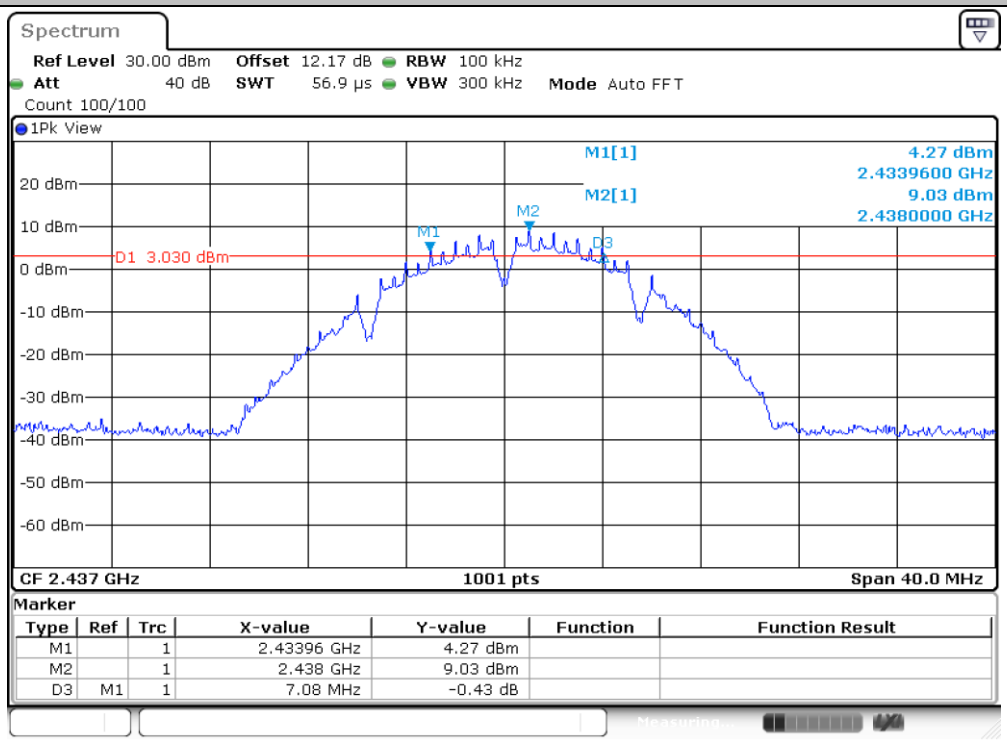
Date: 12.SEP.2024 23:27:00

11B-CDD_Ant7_2437



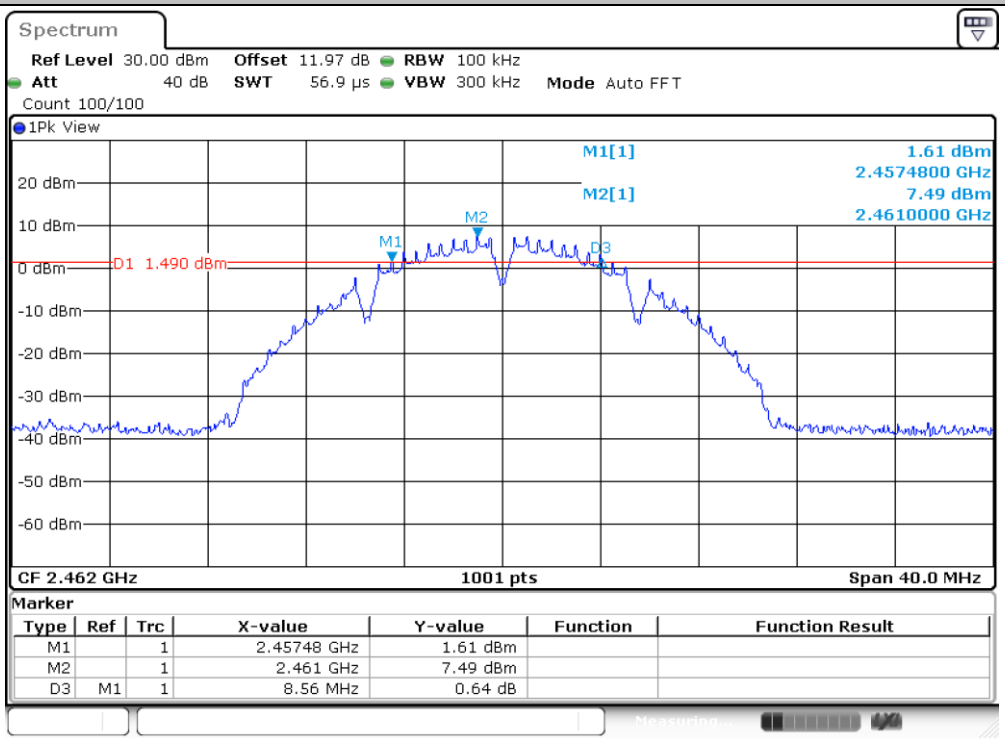
Date: 12.SEP.2024 23:28:41

11B-CDD_Ant6_2437



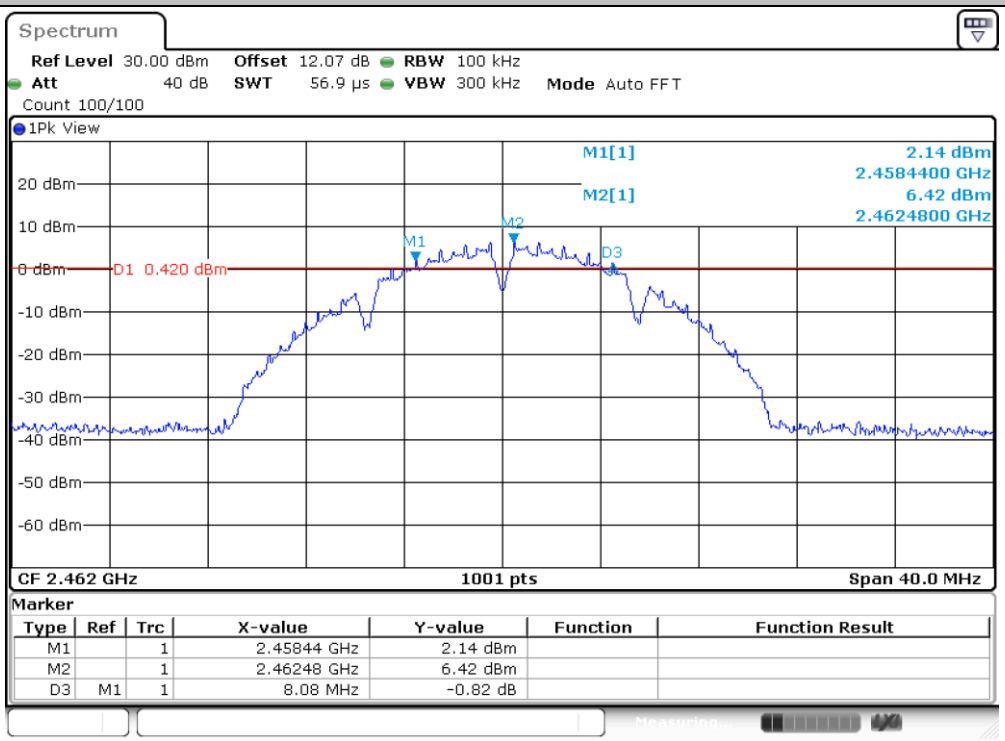
Date: 12.SEP.2024 23:29:41

11B-CDD_Ant7_2462



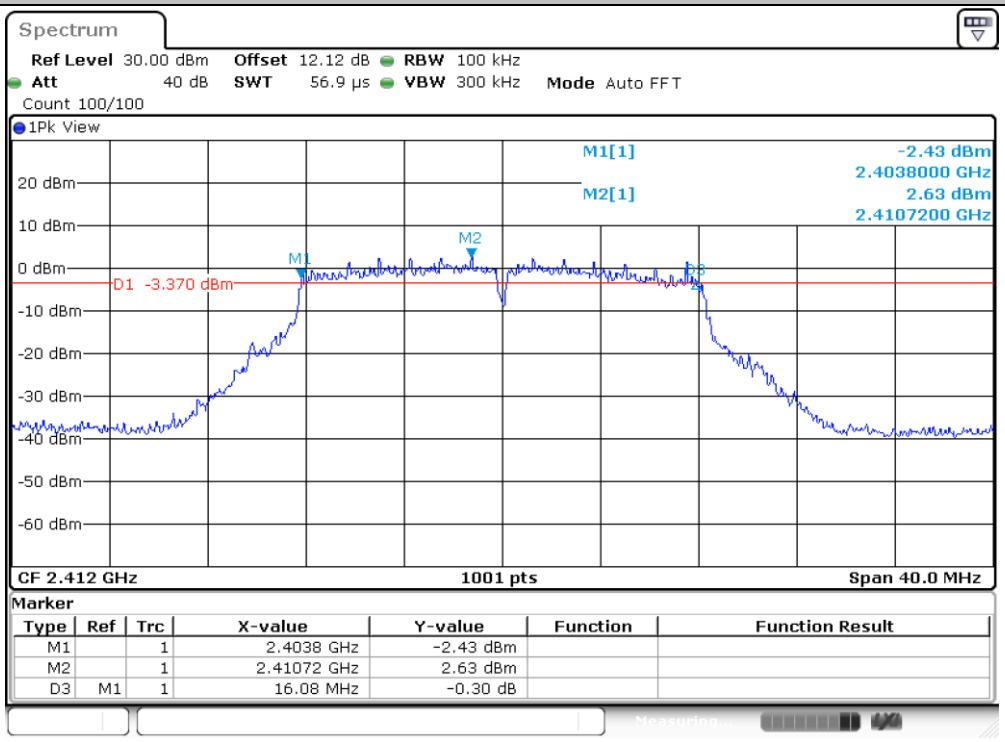
Date: 12.SEP.2024 23:30:54

11B-CDD_Ant6_2462



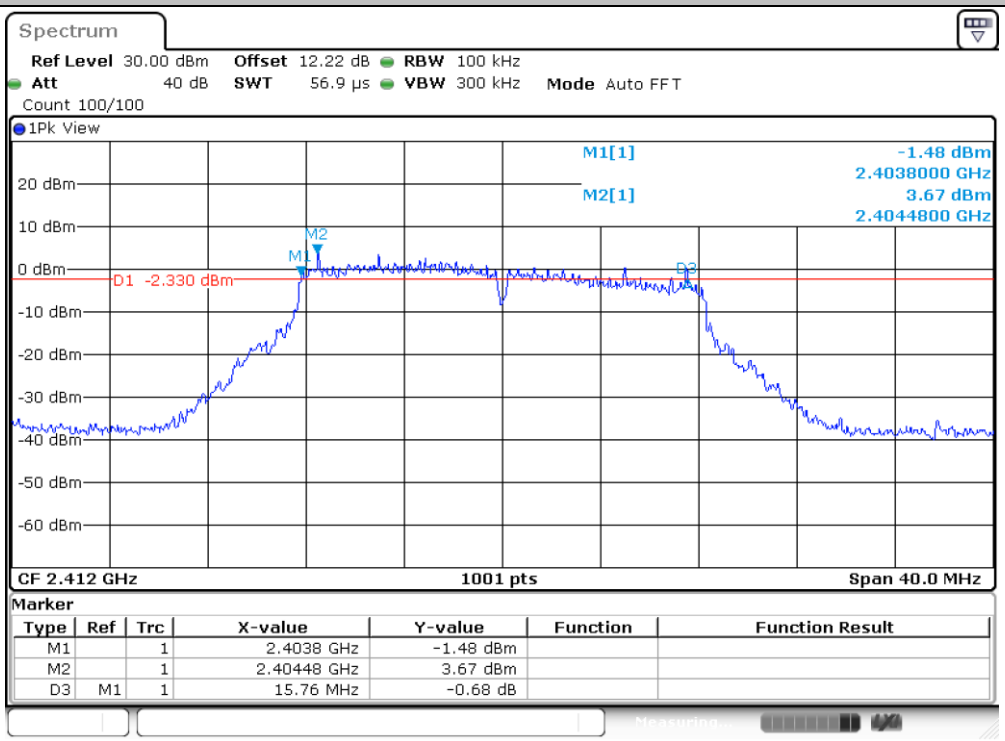
Date: 12.SEP.2024 23:32:26

11G-CDD_Ant7_2412



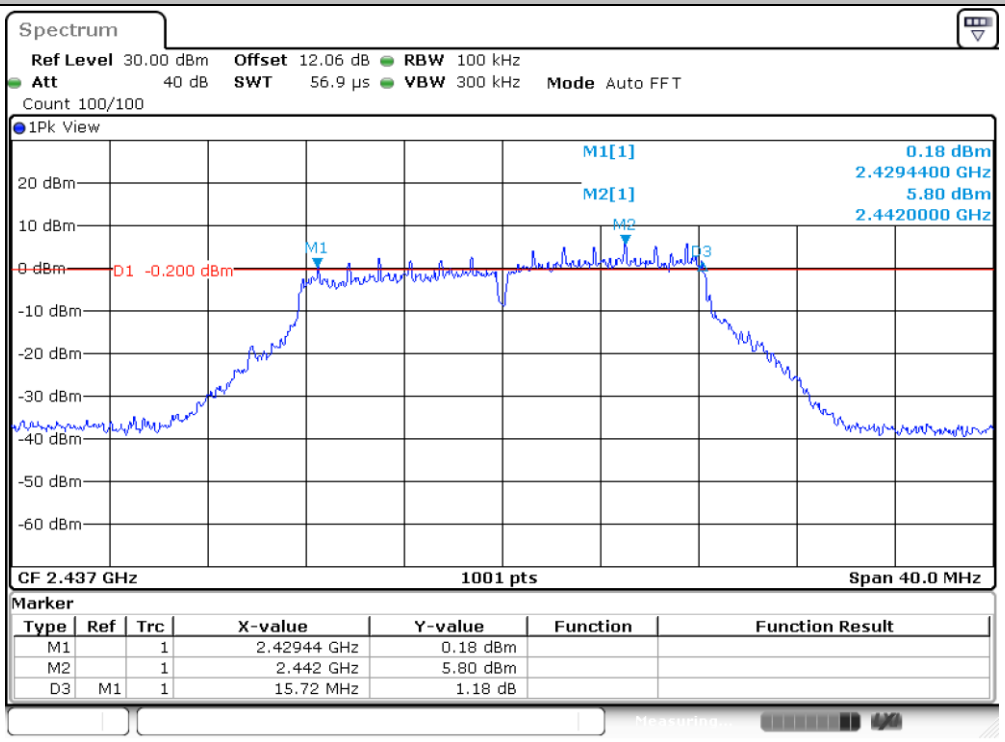
Date: 12.SEP.2024 23:34:09

11G-CDD_Ant6_2412



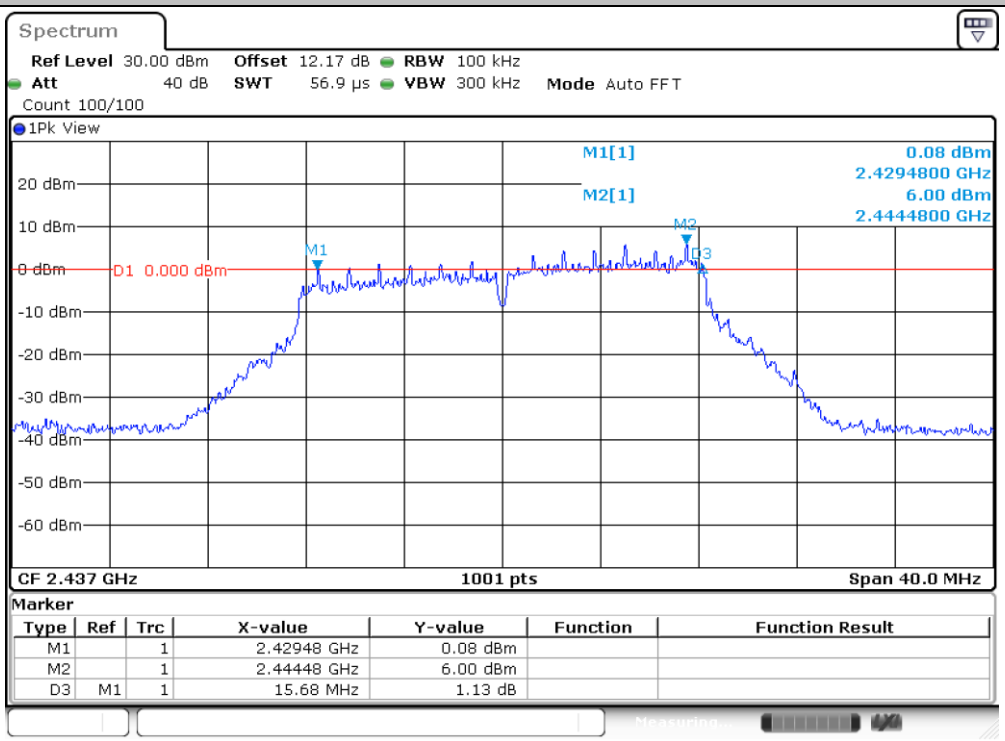
Date: 12.SEP.2024 23:35:36

11G-CDD_Ant7_2437



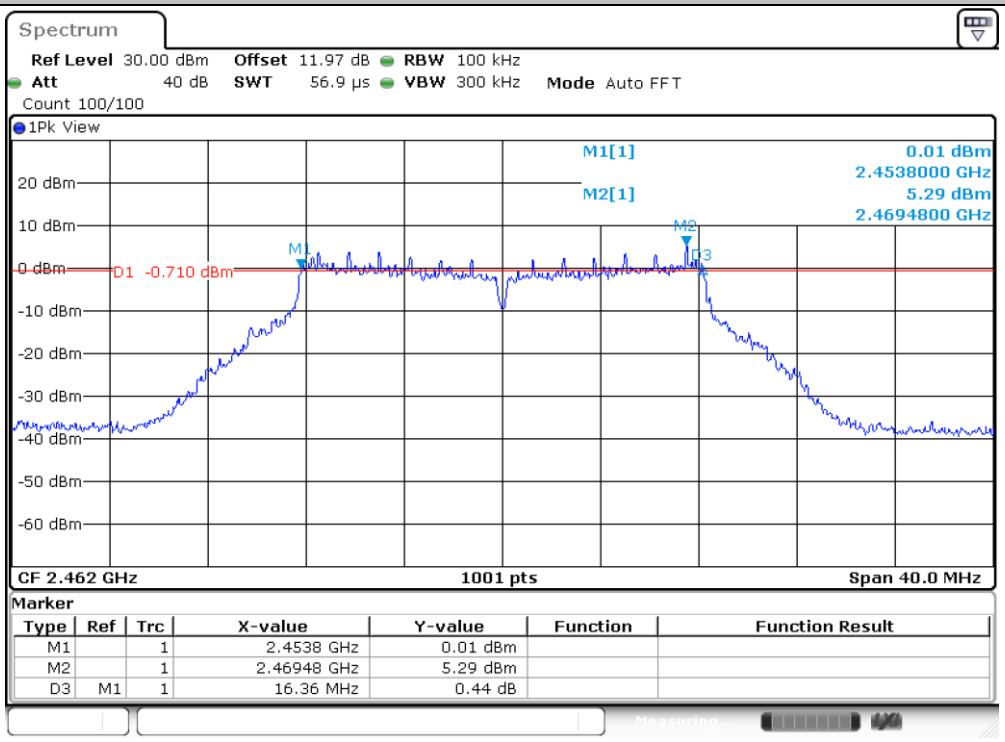
Date: 12.SEP.2024 23:37:04

11G-CDD_Ant6_2437



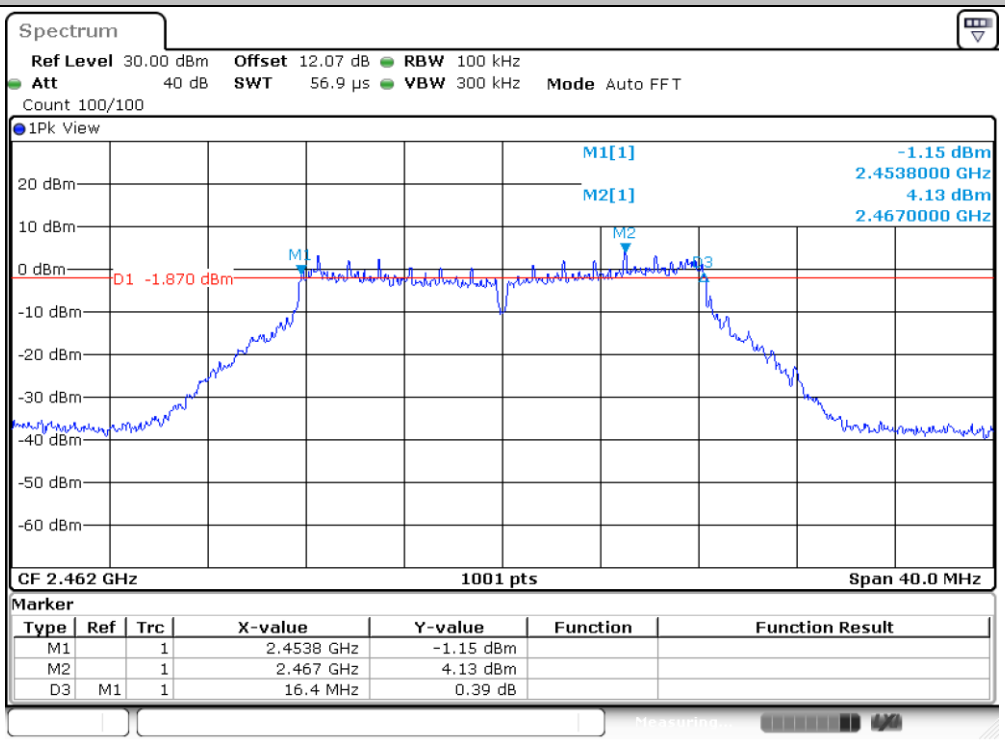
Date: 12.SEP.2024 23:38:05

11G-CDD_Ant7_2462



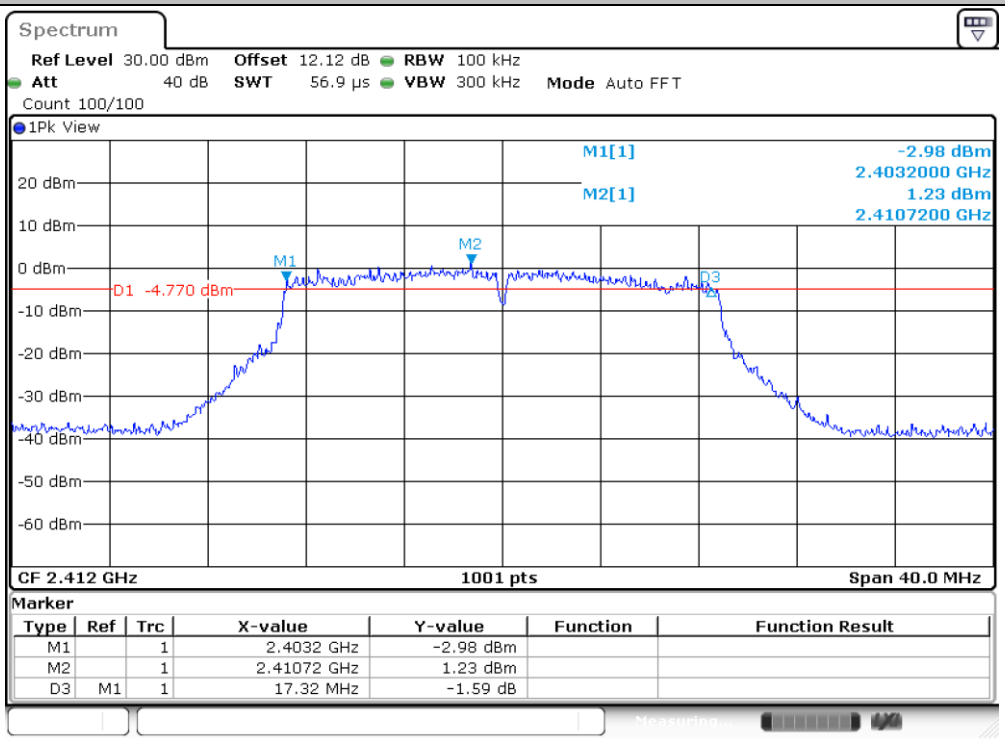
Date: 12.SEP.2024 23:39:15

11G-CDD_Ant6_2462



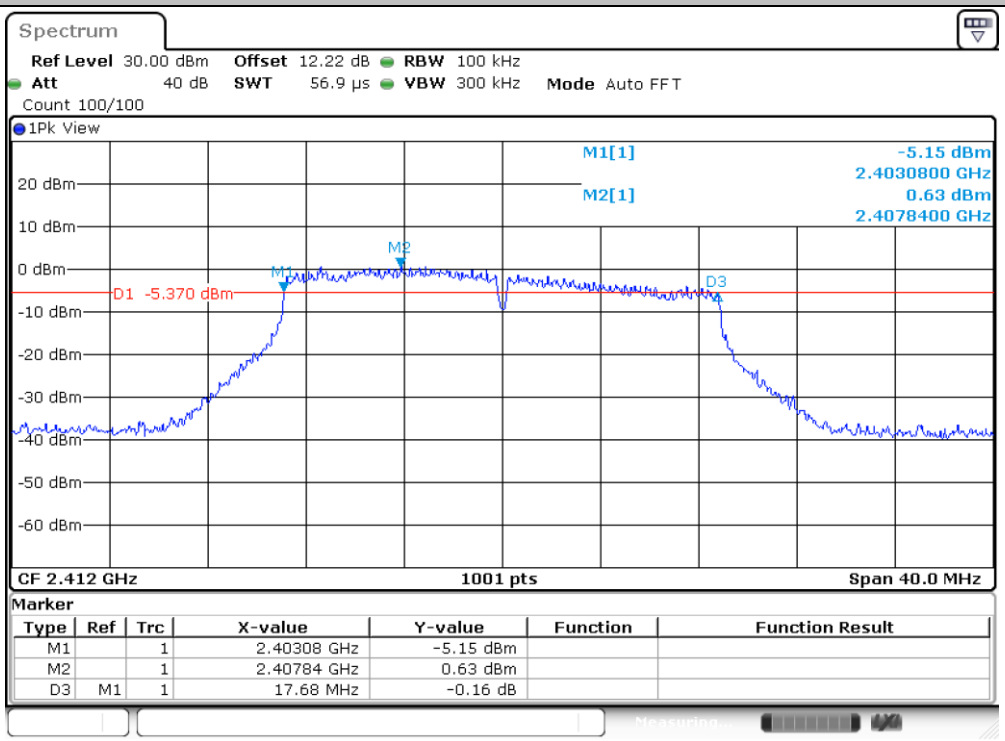
Date: 12.SEP.2024 23:40:25

11N20MIMO_Ant7_2412



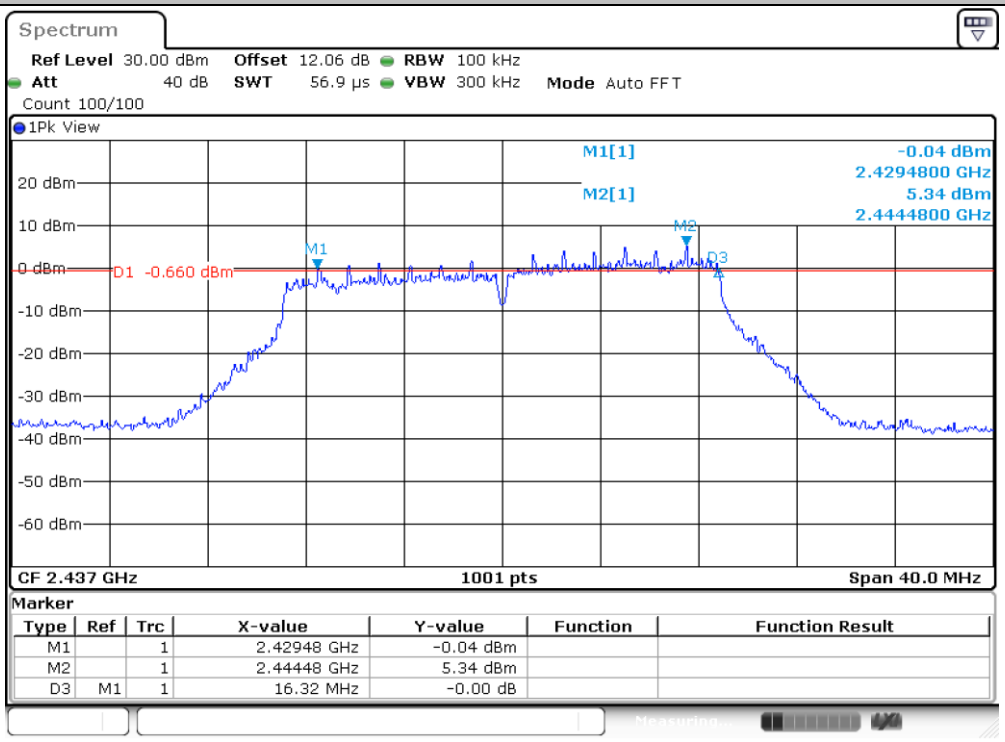
Date: 12.SEP.2024 23:42:17

11N20MIMO_Ant6_2412



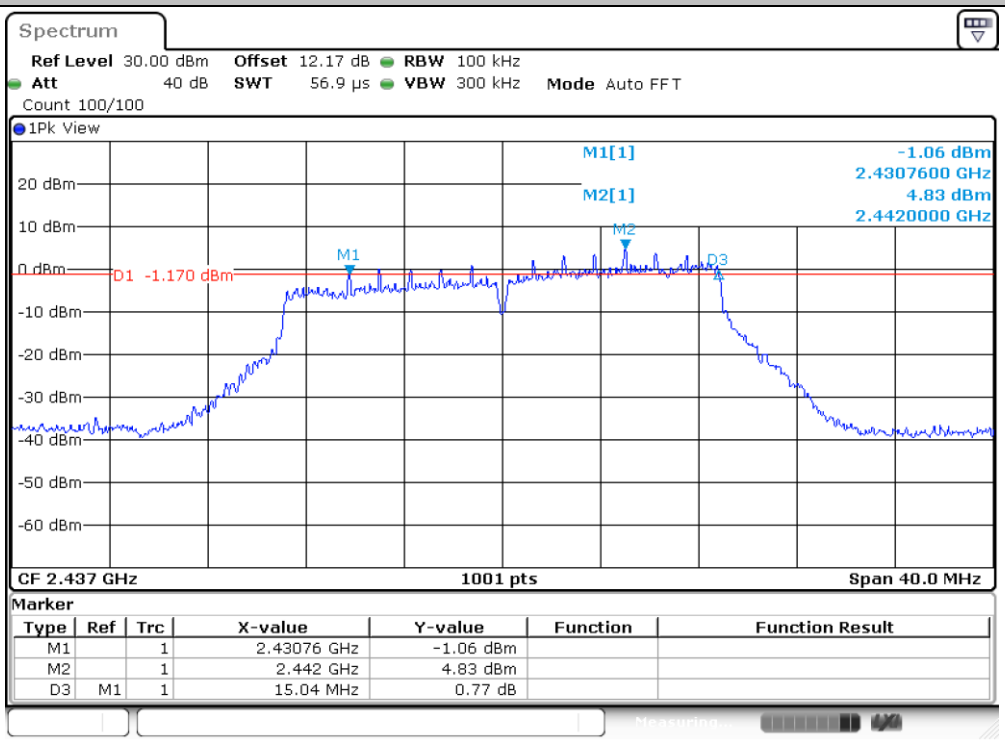
Date: 12.SEP.2024 23:43:45

11N20MIMO_Ant7_2437



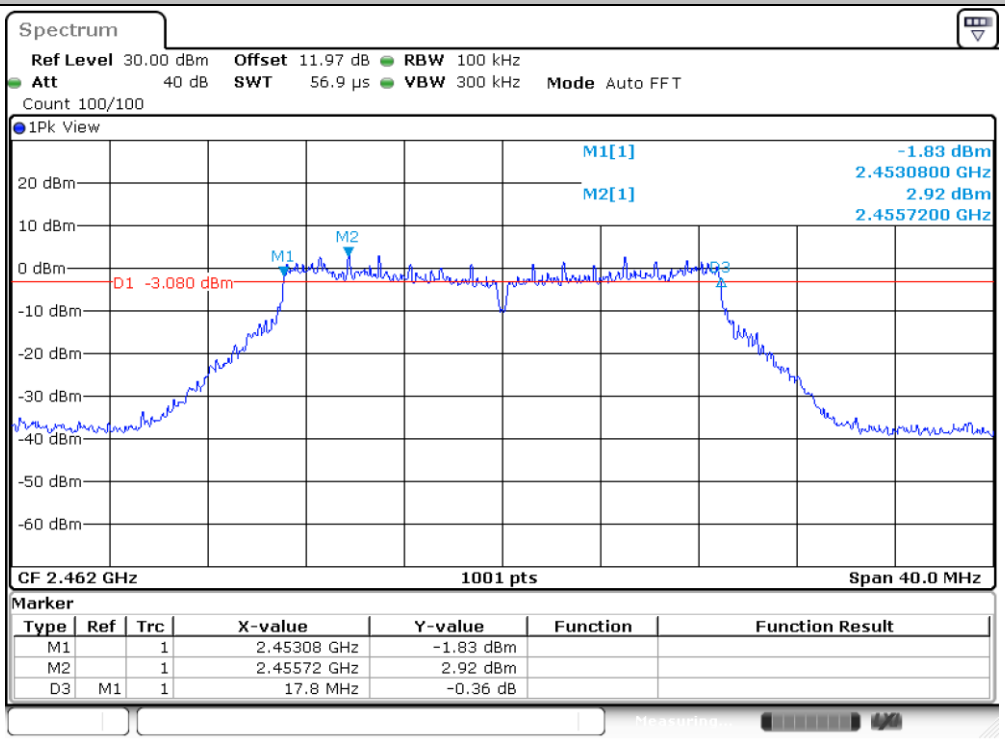
Date: 13.SEP.2024 00:47:36

11N20MIMO_Ant6_2437



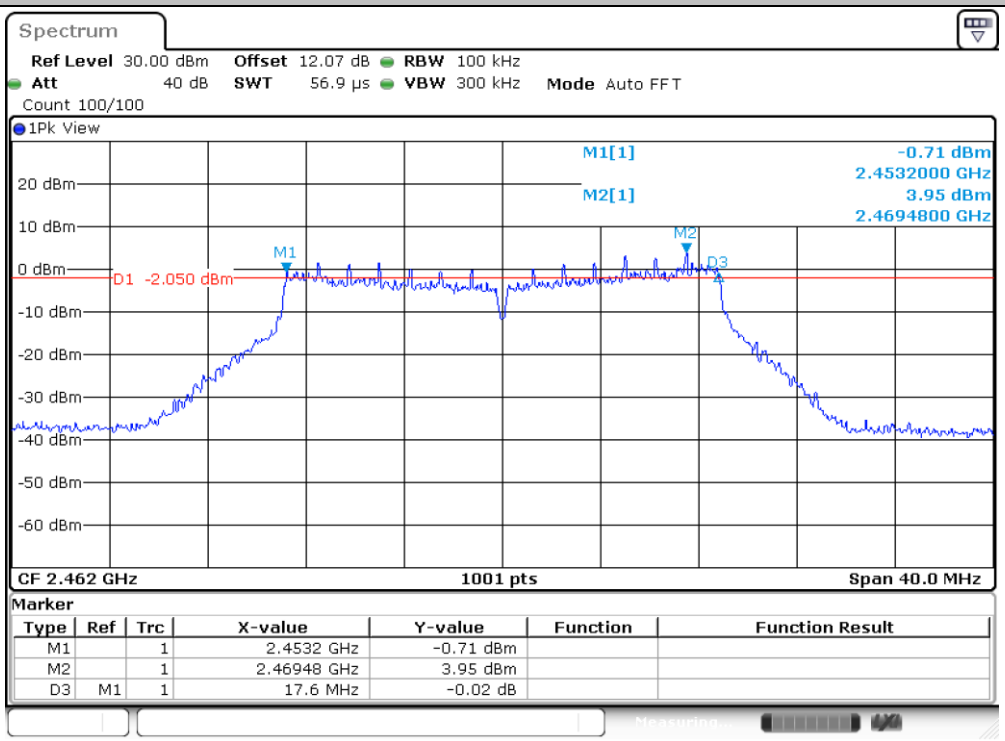
Date: 13.SEP.2024 01:14:56

11N20MIMO_Ant7_2462



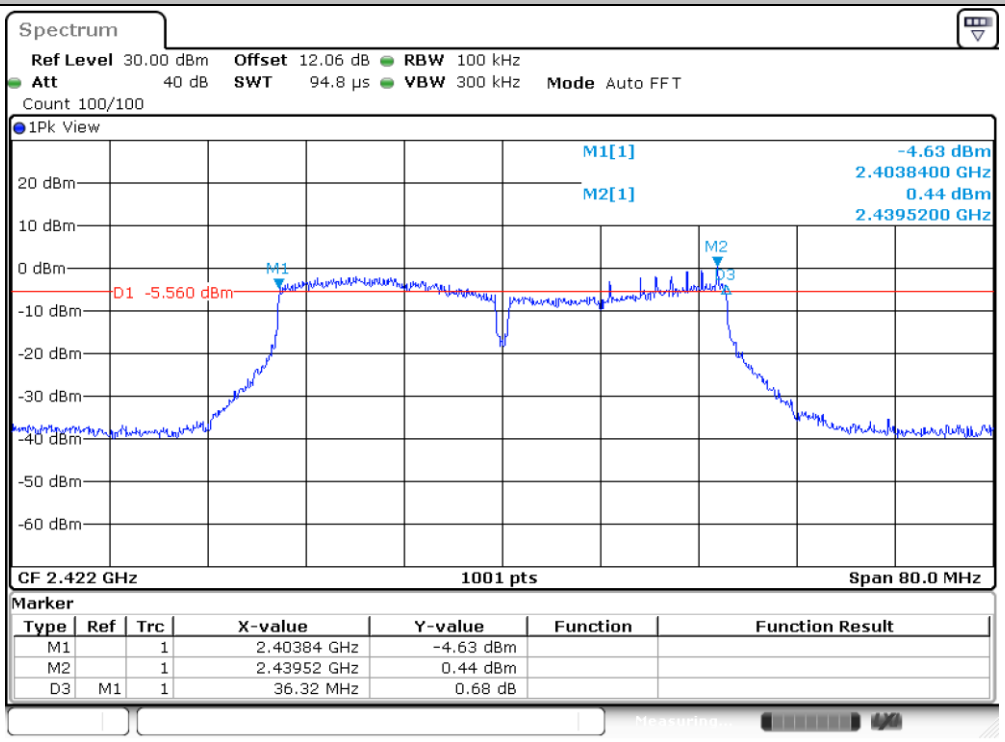
Date: 12.SEP.2024 23:47:33

11N20MIMO_Ant6_2462



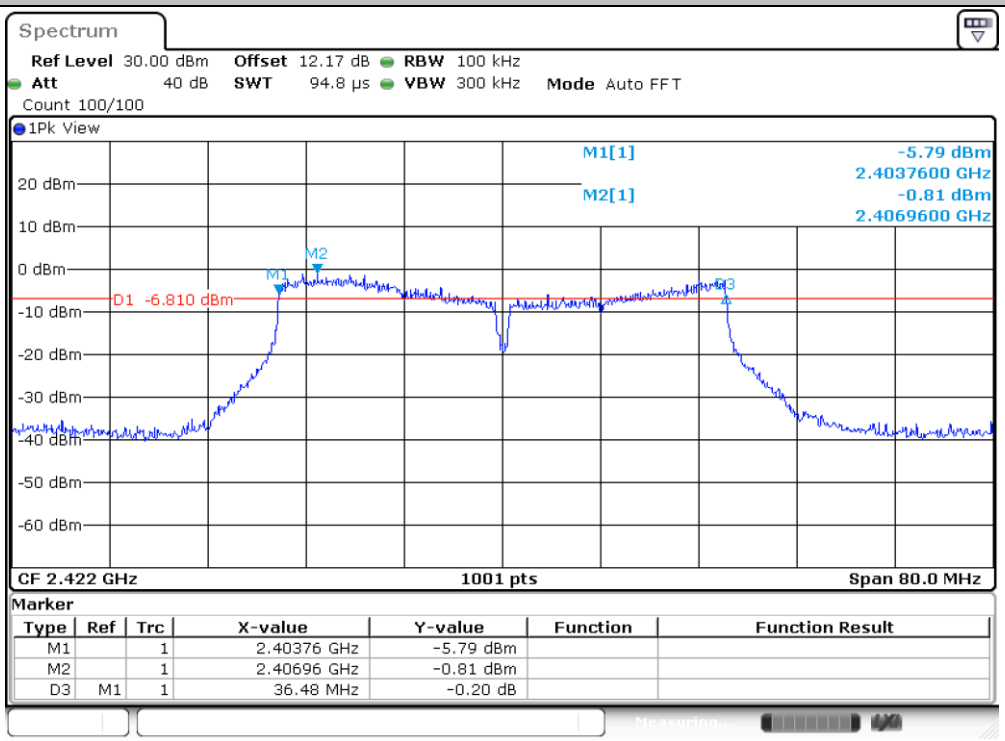
Date: 12.SEP.2024 23:48:44

11N40MIMO_Ant7_2422



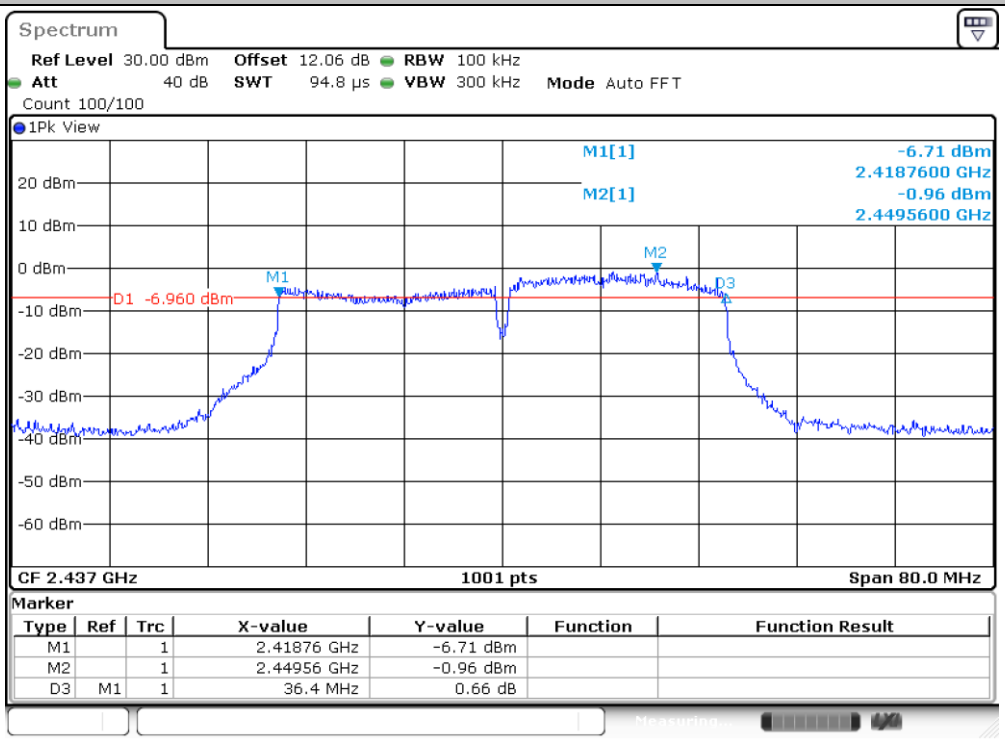
Date: 12.SEP.2024 23:50:33

11N40MIMO_Ant6_2422



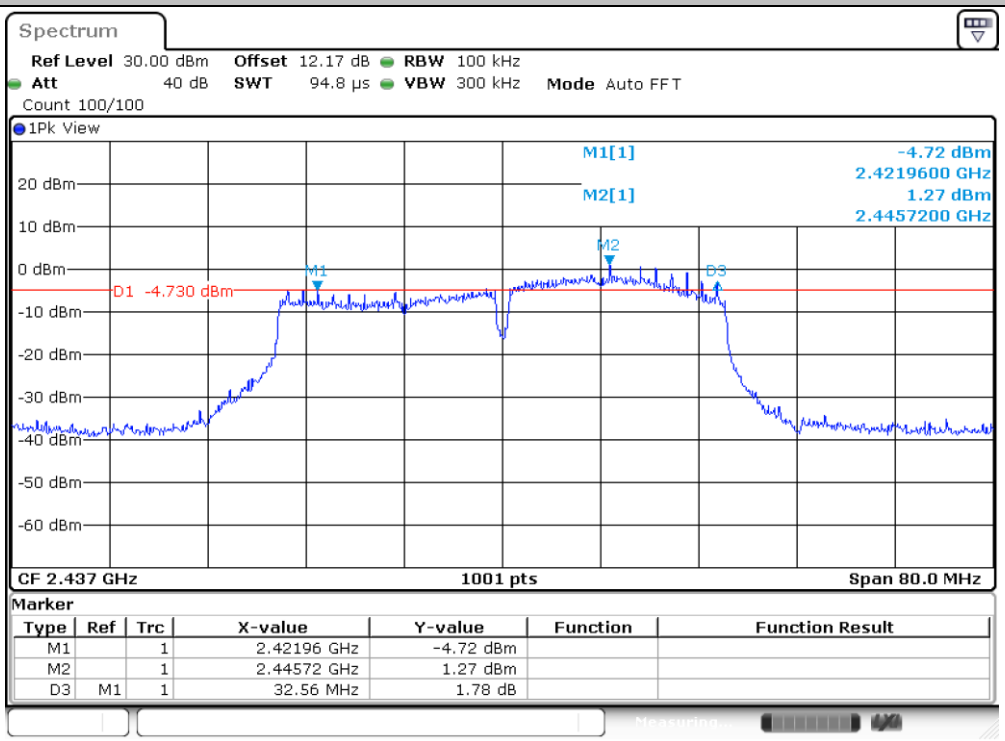
Date: 12.SEP.2024 23:52:01

11N40MIMO_Ant7_2437



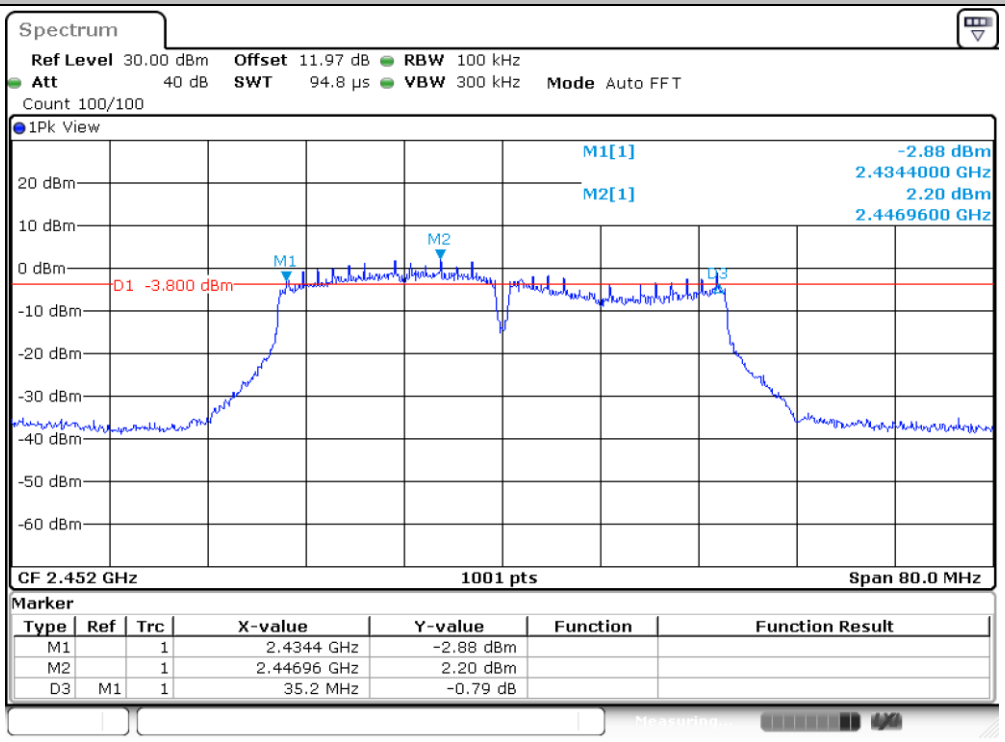
Date: 13.SEP.2024 00:19:48

11N40MIMO_Ant6_2437



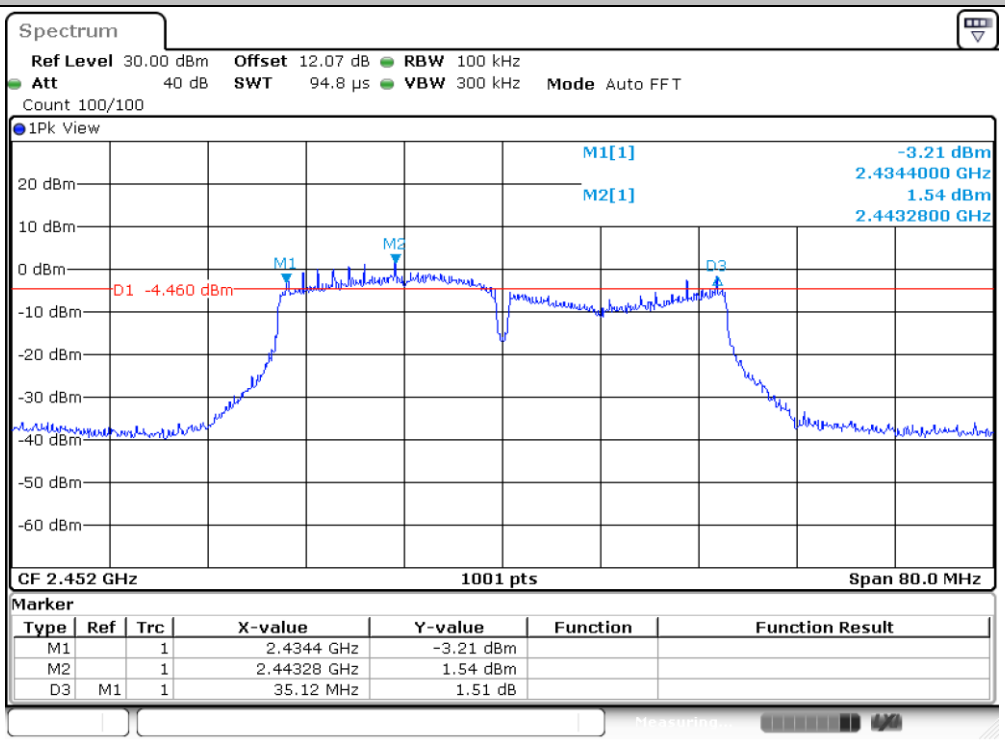
Date: 13.SEP.2024 00:55:28

11N40MIMO_Ant7_2452



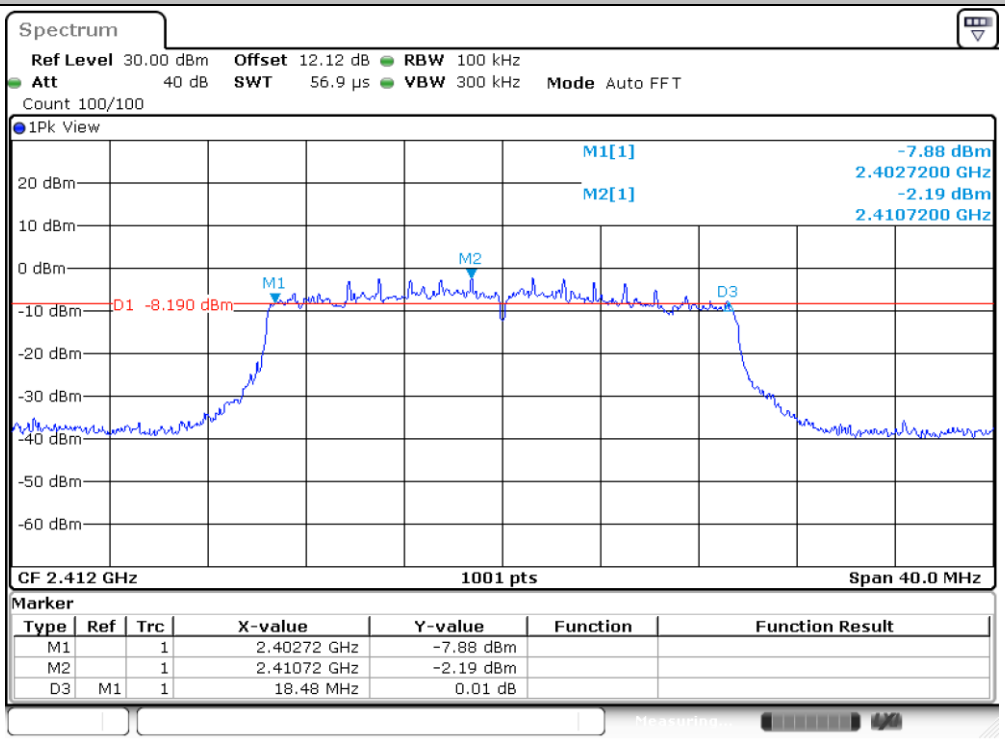
Date: 13.SEP.2024 00:52:27

11N40MIMO_Ant6_2452



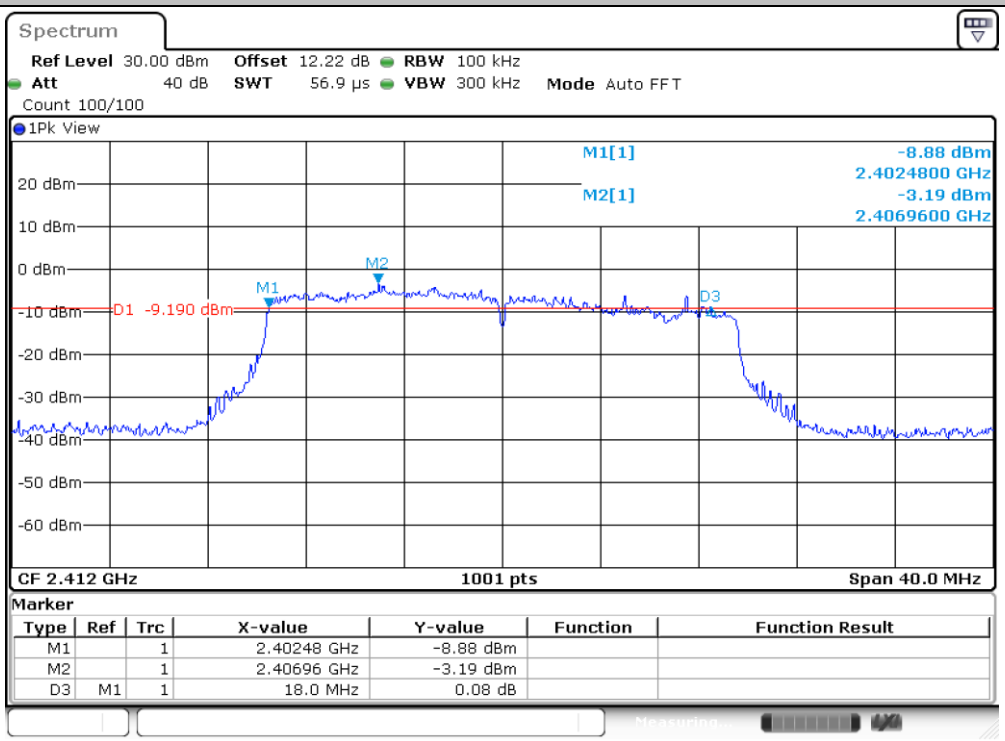
Date: 13.SEP.2024 00:23:23

11BE20MIMO_Ant7_2412



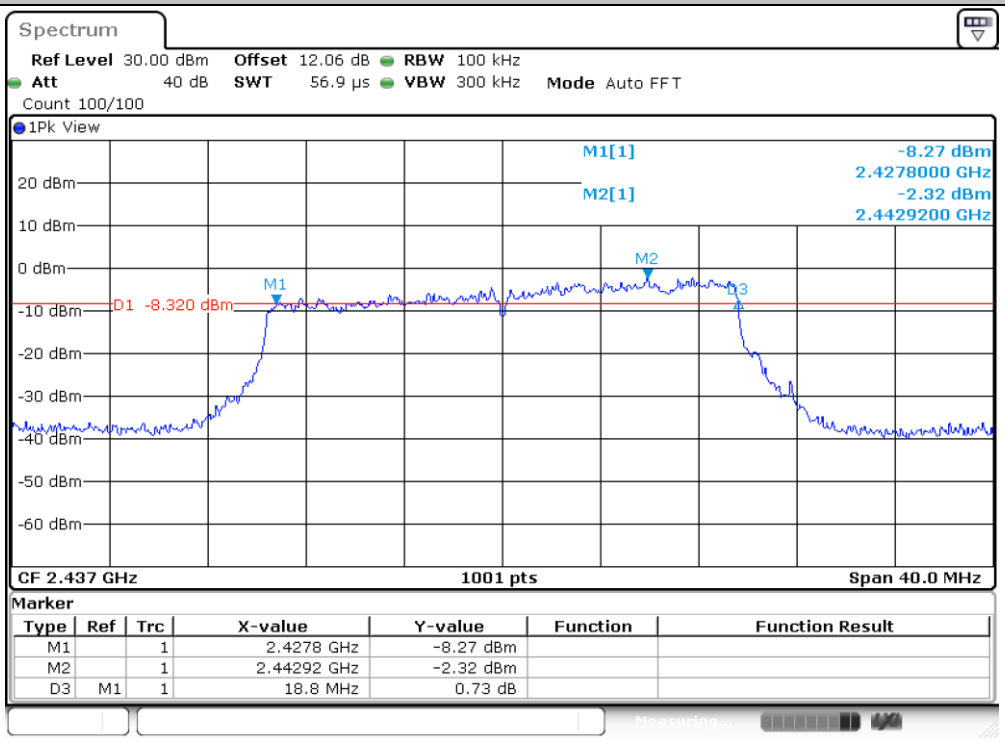
Date: 13.SEP.2024 00:25:09

11BE20MIMO_Ant6_2412



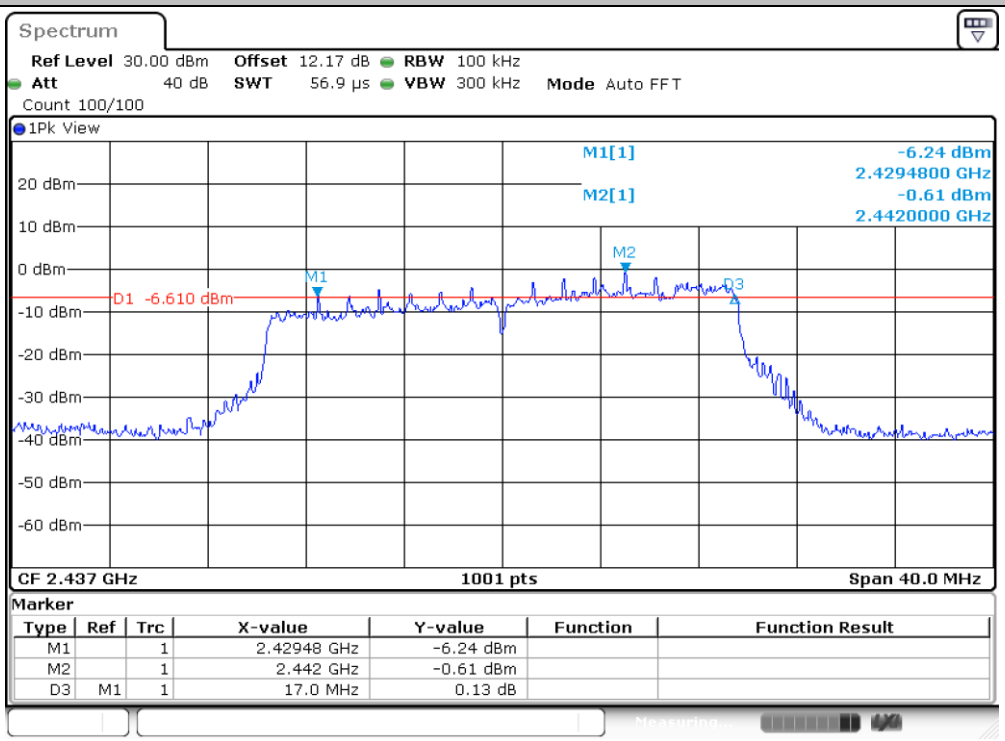
Date: 13.SEP.2024 00:26:37

11BE20MIMO_Ant7_2437



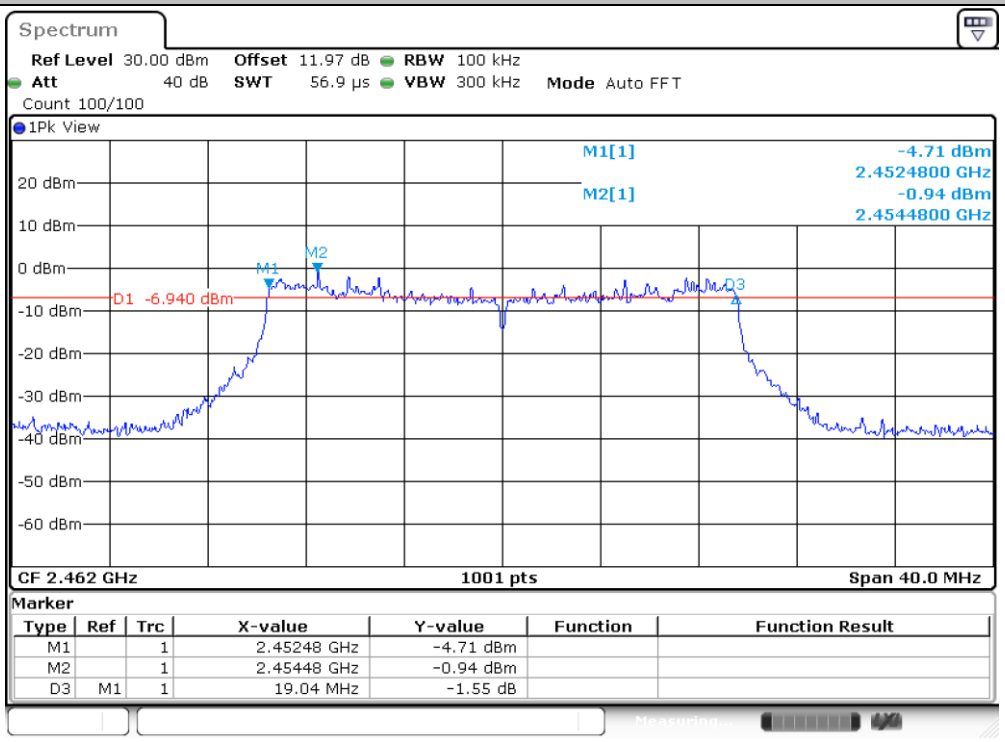
Date: 13.SEP.2024 00:28:05

11BE20MIMO_Ant6_2437



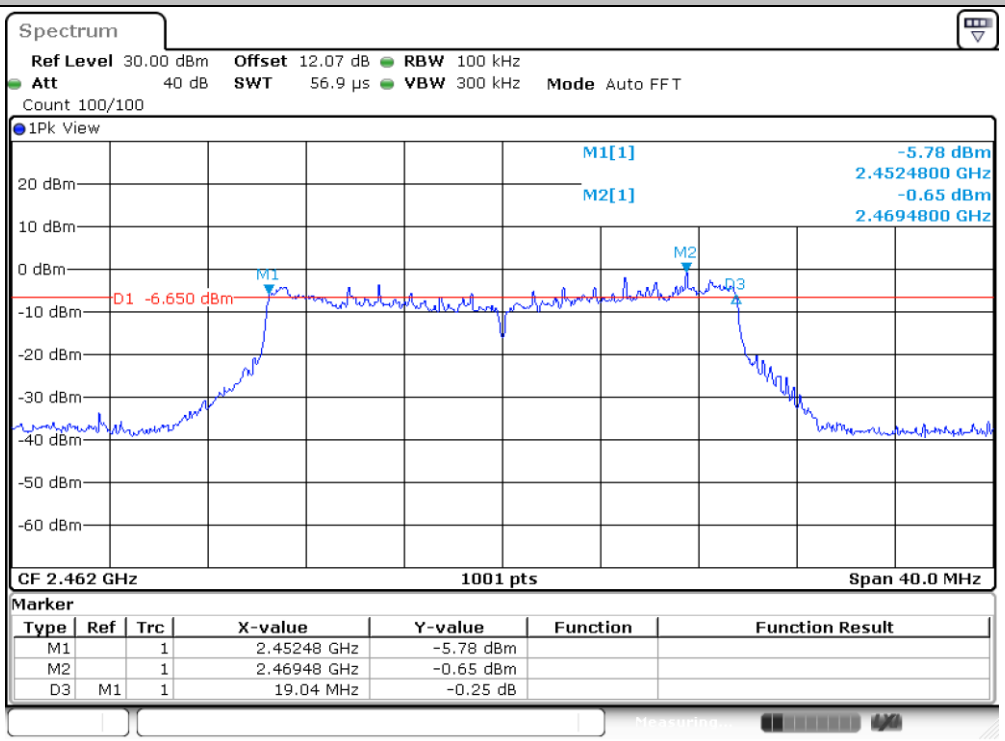
Date: 13.SEP.2024 00:58:58

11BE20MIMO_Ant7_2462



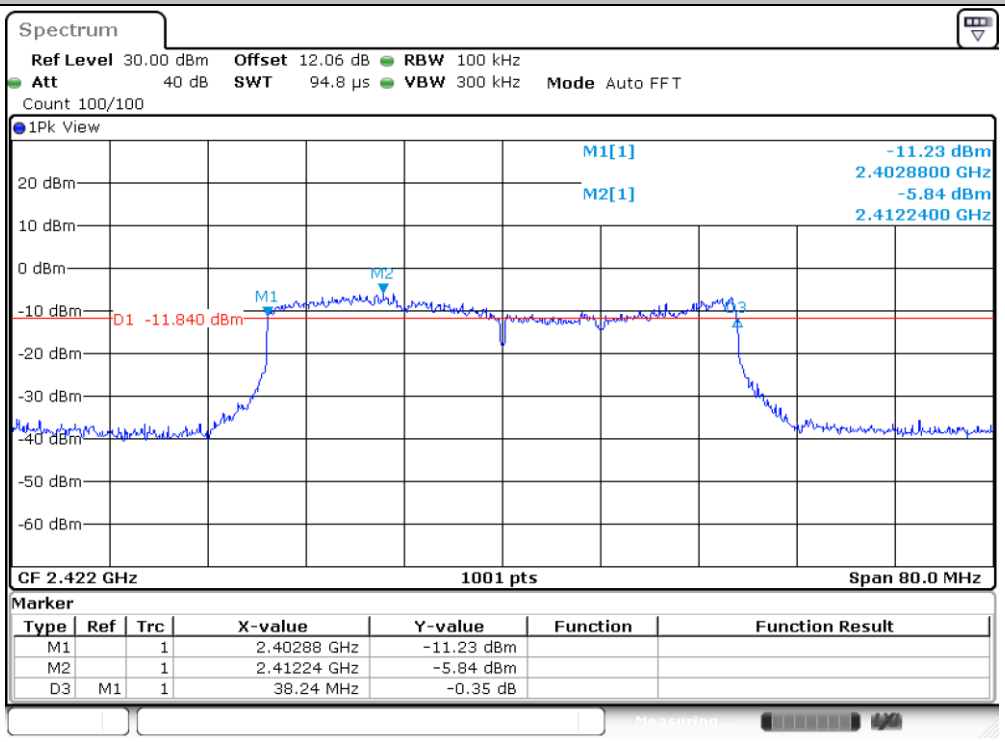
Date: 13.SEP.2024 00:30:18

11BE20MIMO_Ant6_2462



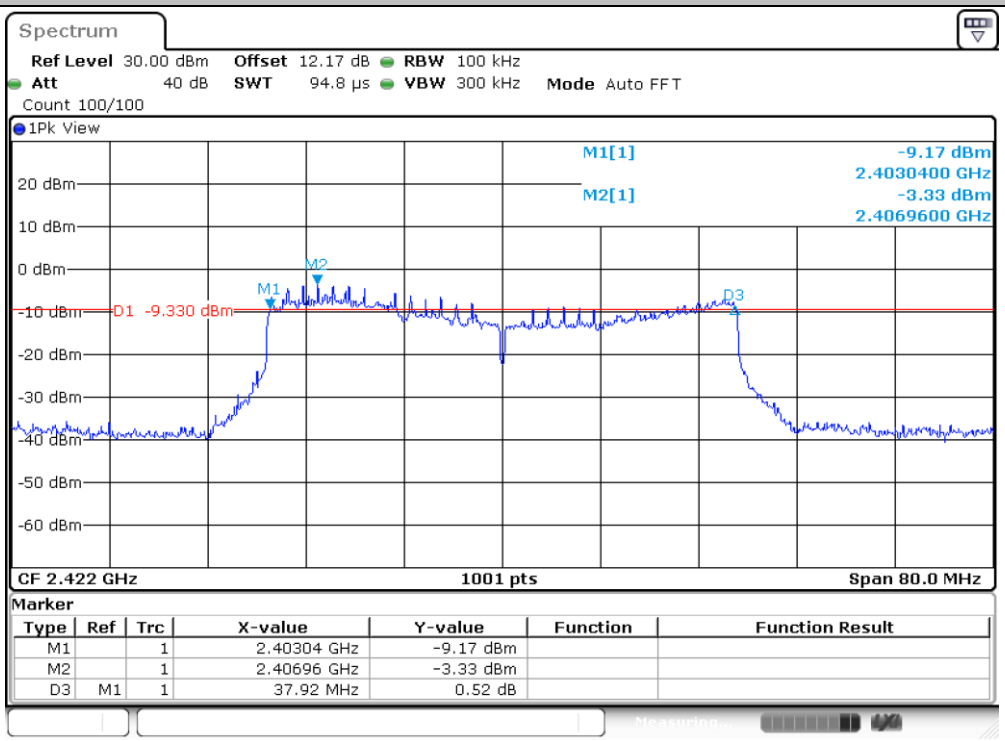
Date: 13.SEP.2024 00:31:29

11BE40MIMO_Ant7_2422



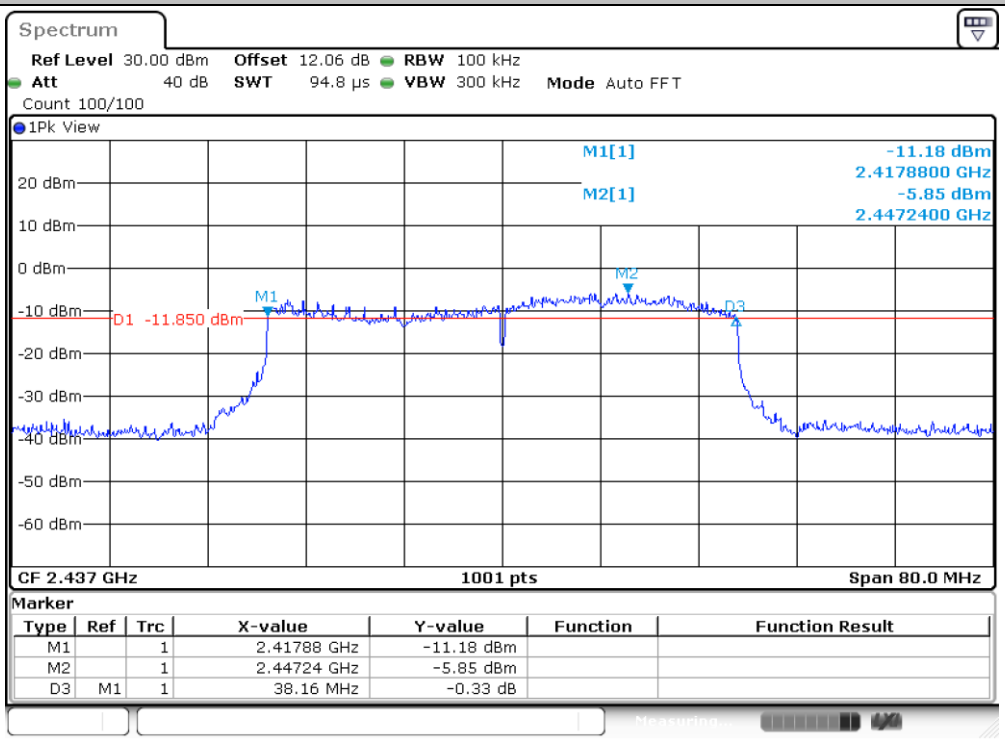
Date: 13.SEP.2024 00:33:32

11BE40MIMO_Ant6_2422



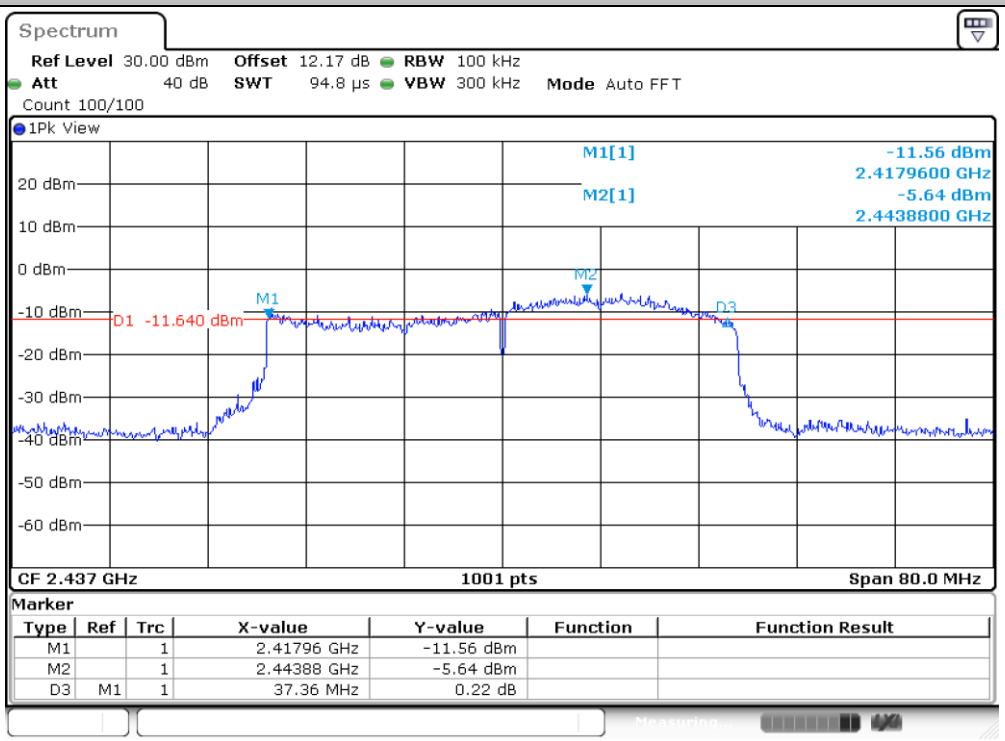
Date: 13.SEP.2024 00:35:00

11BE40MIMO_Ant7_2437



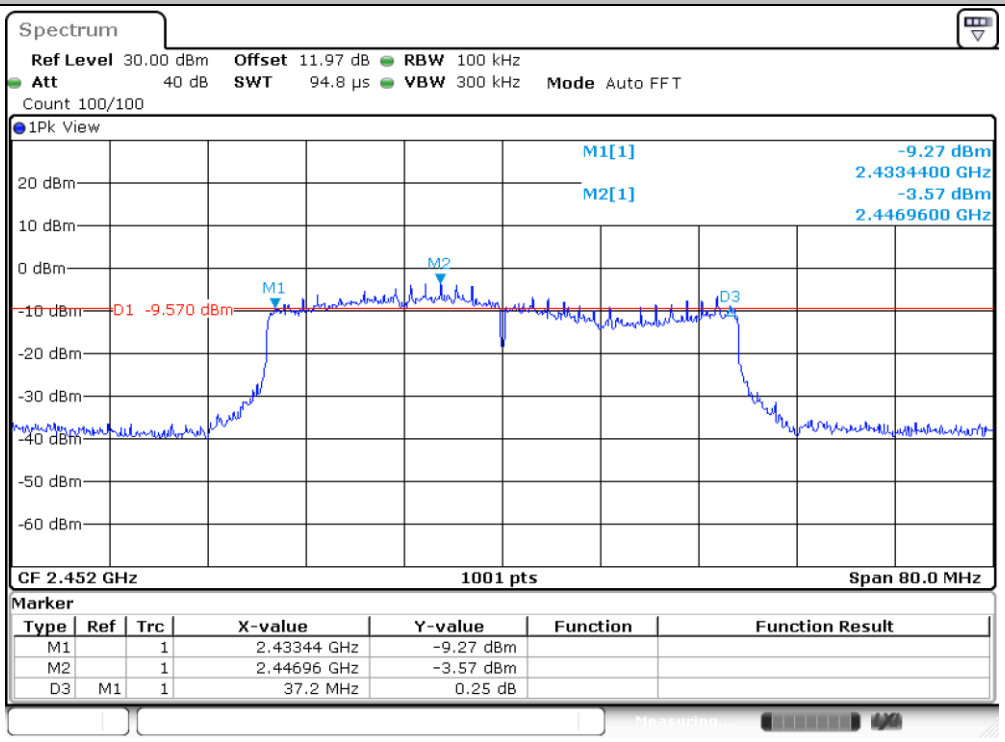
Date: 13.SEP.2024 00:36:20

11BE40MIMO_Ant6_2437



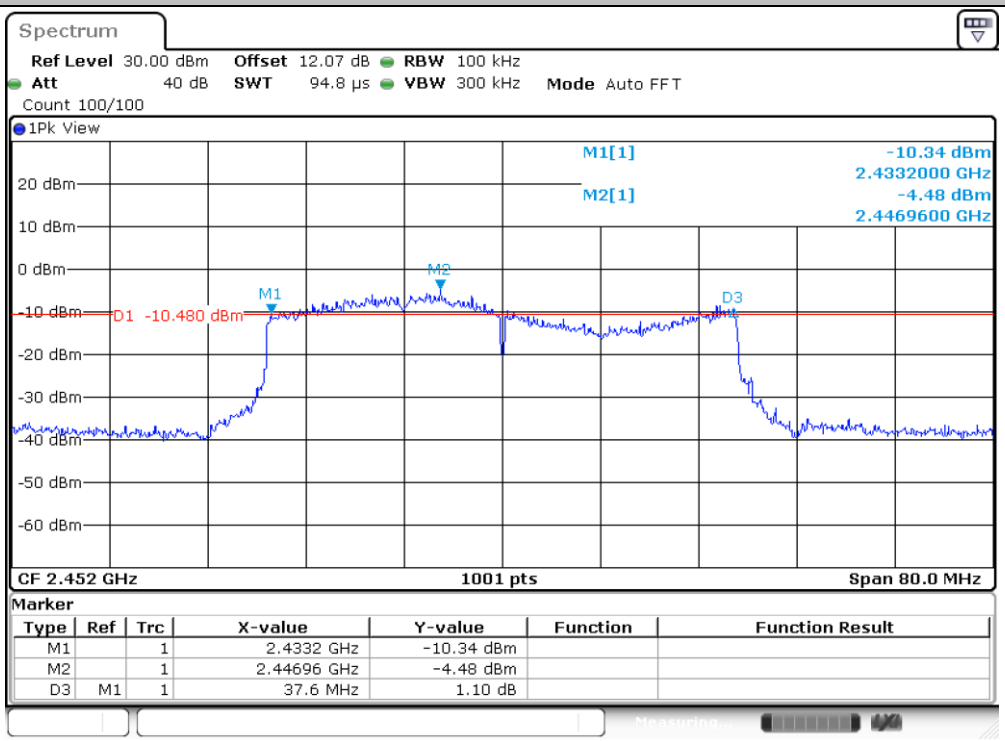
Date: 13.SEP.2024 01:08:26

11BE40MIMO_Ant7_2452



Date: 13.SEP.2024 00:38:47

11BE40MIMO_Ant6_2452



Date: 13.SEP.2024 00:39:59

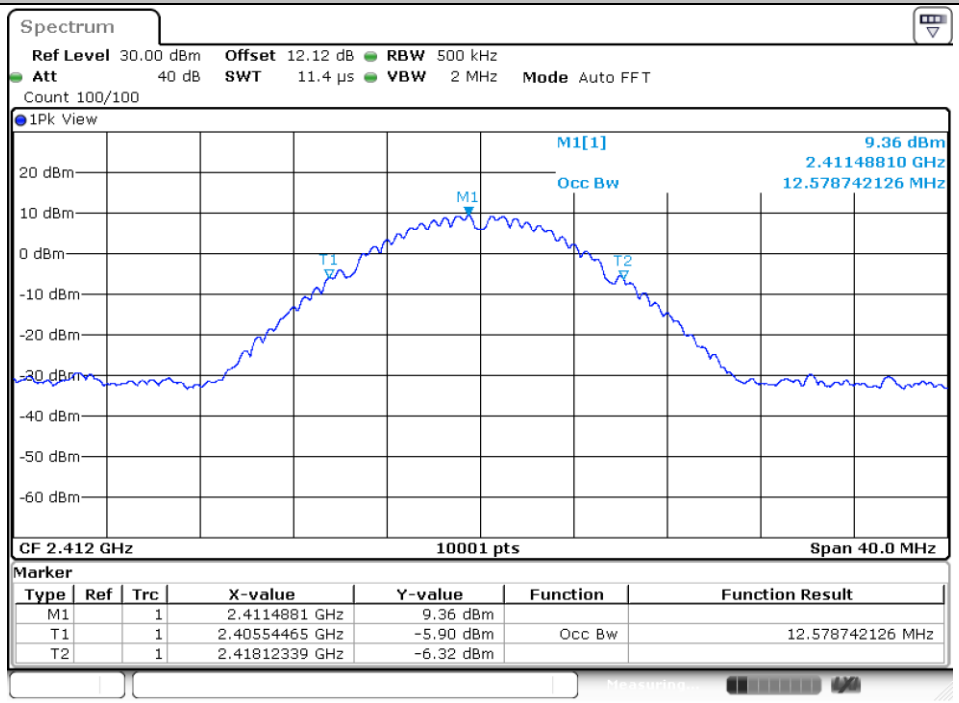
Occupied Channel Bandwidth

Test Result

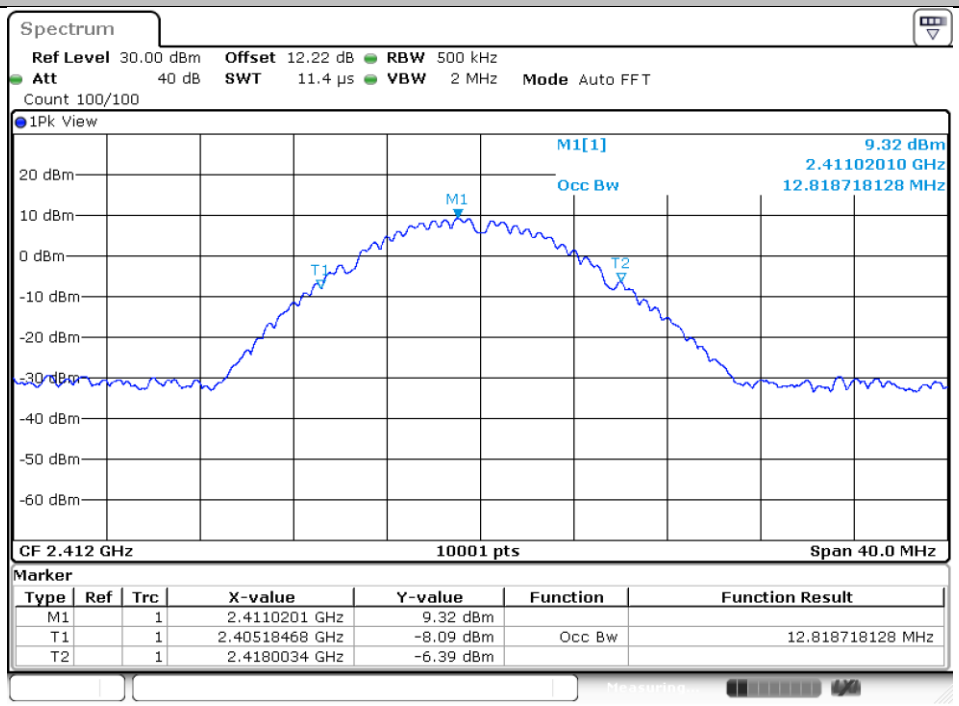
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]
11B-CDD	Ant7	2412	12.579	2405.5446	2418.1234
	Ant6	2412	12.819	2405.1847	2418.0034
	Ant7	2437	13.275	2430.8126	2444.0873
	Ant6	2437	13.219	2430.9006	2444.1193
	Ant7	2462	14.427	2454.7687	2469.1953
	Ant6	2462	14.599	2454.8807	2469.4793
11G-CDD	Ant7	2412	16.974	2403.3569	2420.3312
	Ant6	2412	16.77	2403.3889	2420.1592
	Ant7	2437	17.438	2428.4889	2445.9271
	Ant6	2437	17.074	2428.7288	2445.8031
	Ant7	2462	18.154	2452.8849	2471.0391
	Ant6	2462	18.626	2452.5249	2471.1511
11N20MIMO	Ant7	2412	17.998	2402.9249	2420.9231
	Ant6	2412	18.05	2402.7889	2420.8391
	Ant7	2437	18.466	2427.9489	2446.4151
	Ant6	2437	18.298	2428.2289	2446.5270
	Ant7	2462	19.226	2452.3290	2471.5550
	Ant6	2462	19.21	2452.4450	2471.6550
11N40MIMO	Ant7	2422	37.196	2403.4819	2440.6781
	Ant6	2422	37.42	2403.4419	2440.8621
	Ant7	2437	36.708	2418.6338	2455.3422
	Ant6	2437	36.516	2418.6258	2455.1422
	Ant7	2452	37.212	2433.4259	2470.6381
	Ant6	2452	36.764	2433.6178	2470.3822
11BE20MIMO	Ant7	2412	19.246	2402.4290	2421.6750
	Ant6	2412	19.194	2402.3250	2421.5190
	Ant7	2437	19.262	2427.5369	2446.7990
	Ant6	2437	19.202	2427.5329	2446.7350
	Ant7	2462	19.642	2452.0570	2471.6990
	Ant6	2462	19.854	2452.1650	2472.0190
11BE40MIMO	Ant7	2422	39.02	2402.6179	2441.6380
	Ant6	2422	38.82	2402.6339	2441.4541
	Ant7	2437	38.236	2417.8099	2456.0461
	Ant6	2437	37.996	2417.9299	2455.9261
	Ant7	2452	38.1	2432.9619	2471.0621
	Ant6	2452	38.252	2432.9459	2471.1981

Test Graphs

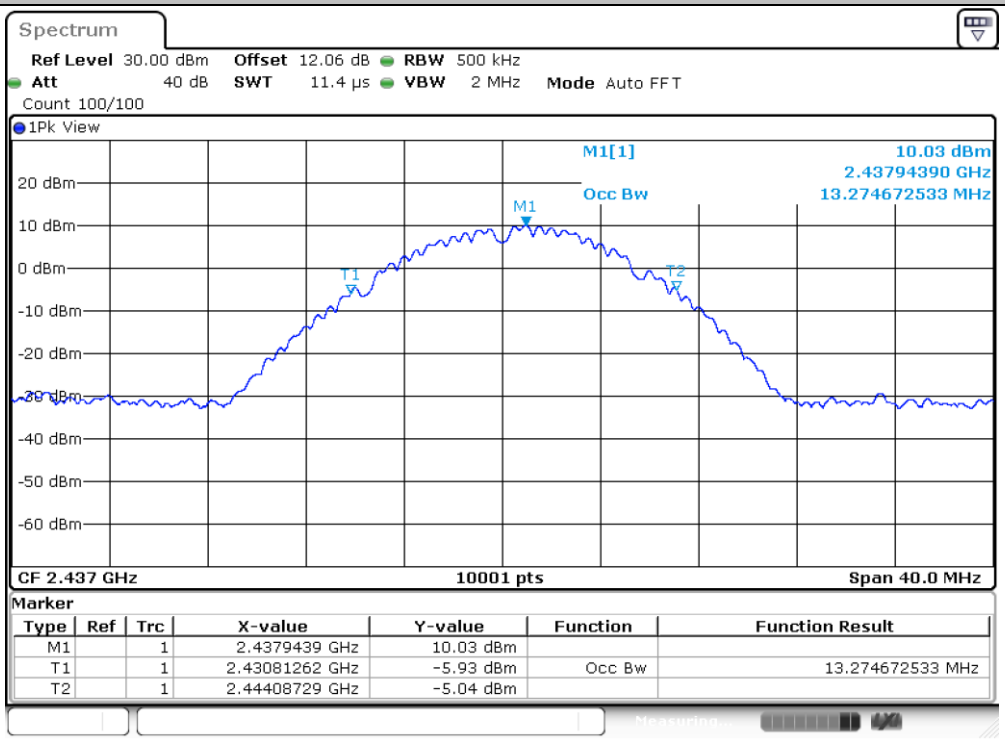
11B-CDD_Ant7_2412



11B-CDD_Ant6_2412

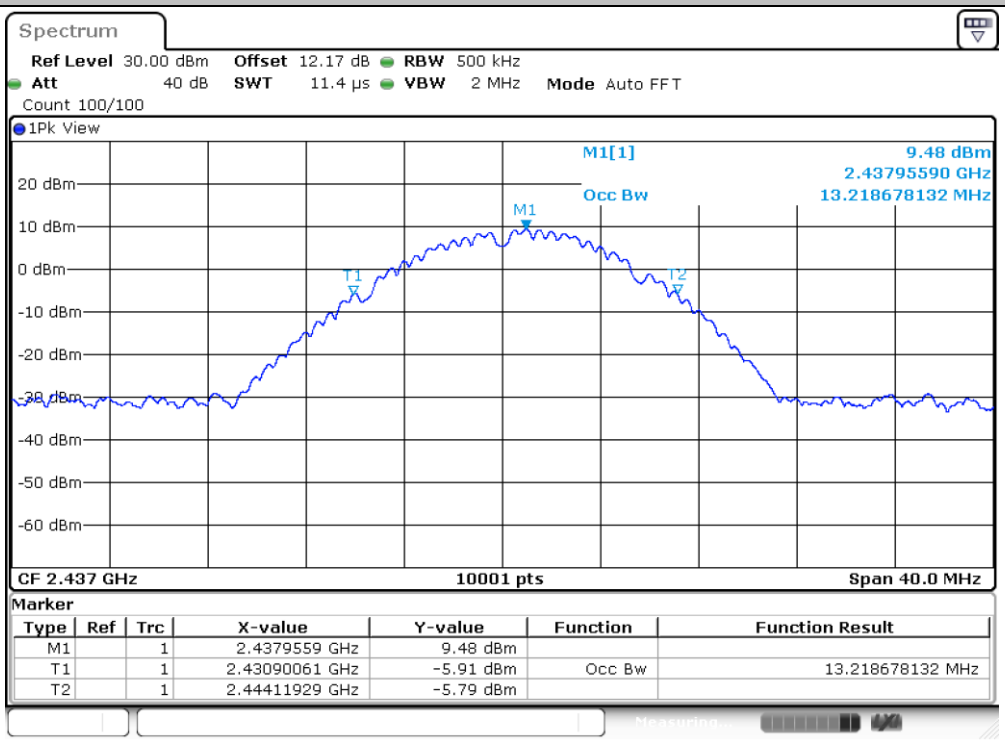


11B-CDD_Ant7_2437



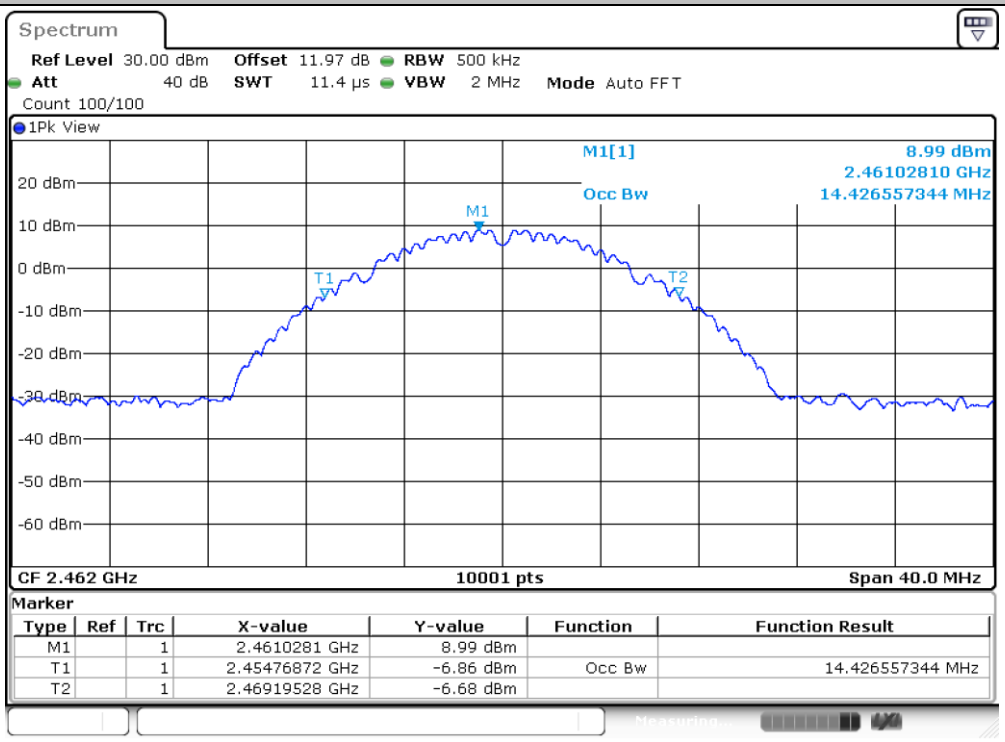
Date: 12.SEP.2024 23:28:47

11B-CDD_Ant6_2437



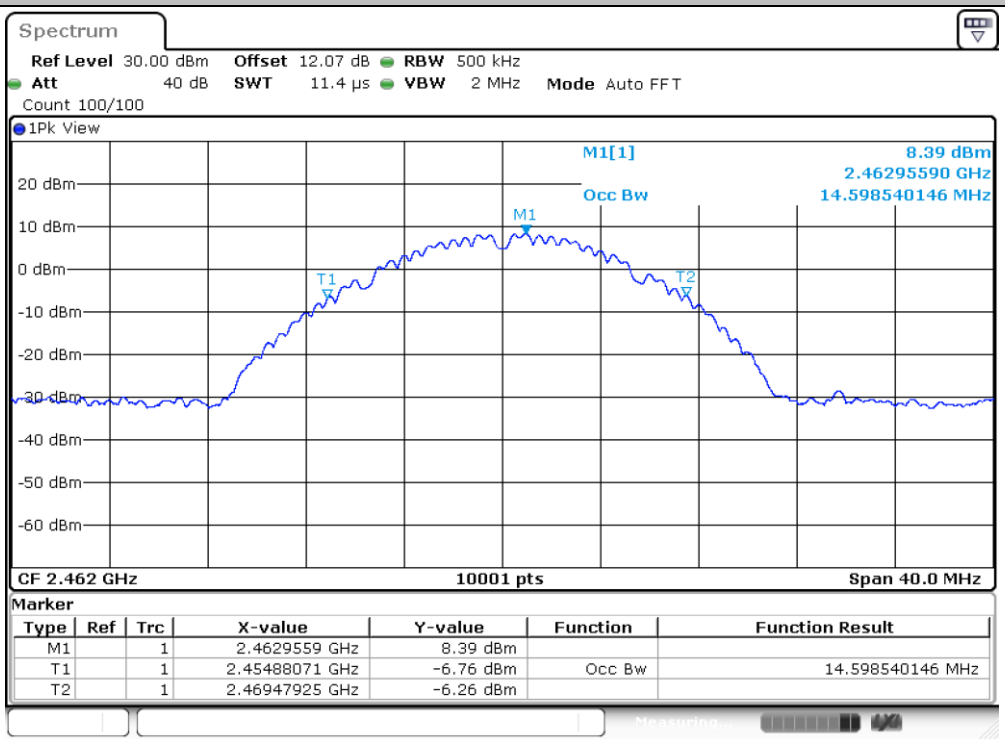
Date: 12.SEP.2024 23:29:48

11B-CDD_Ant7_2462



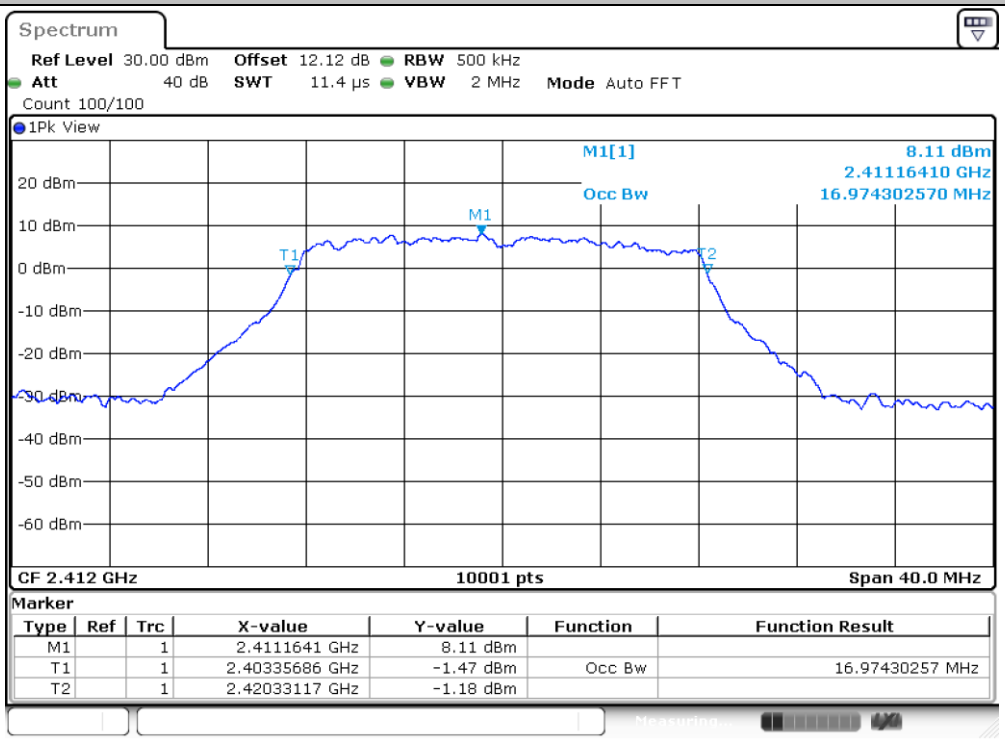
Date: 12.SEP.2024 23:31:01

11B-CDD_Ant6_2462



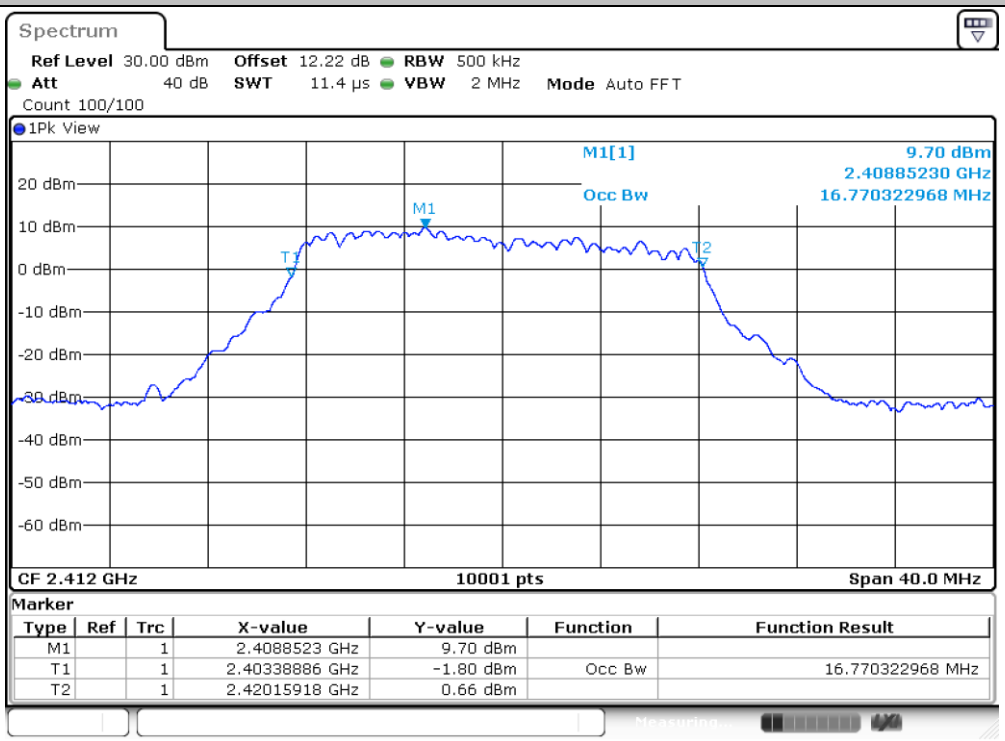
Date: 12.SEP.2024 23:32:33

11G-CDD_Ant7_2412



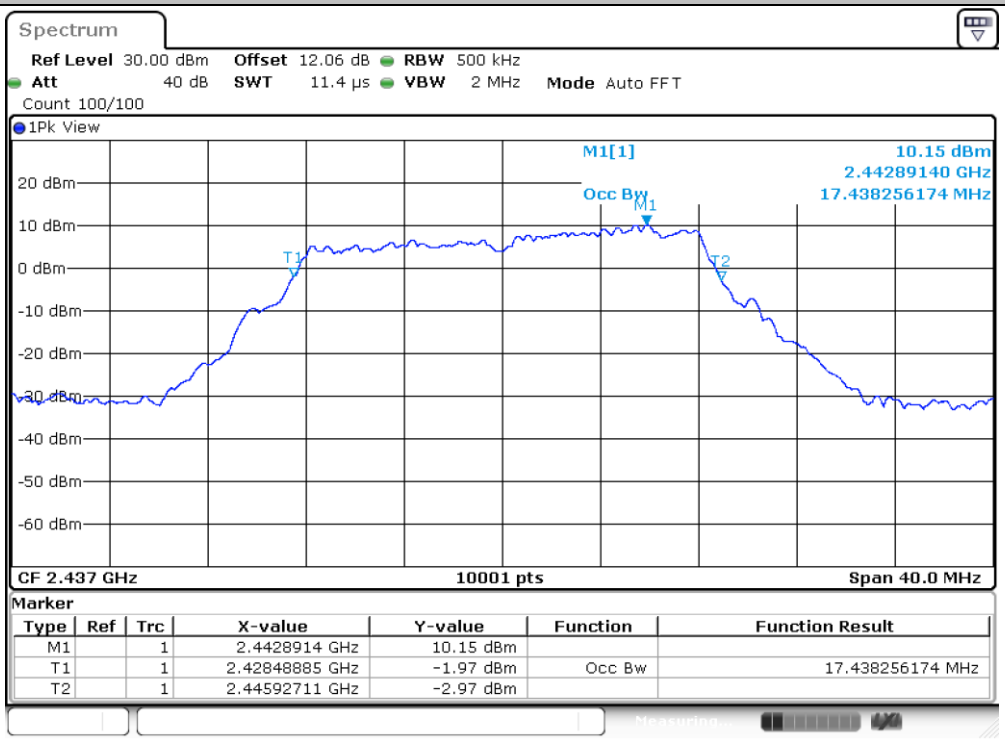
Date: 12.SEP.2024 23:34:16

11G-CDD_Ant6_2412



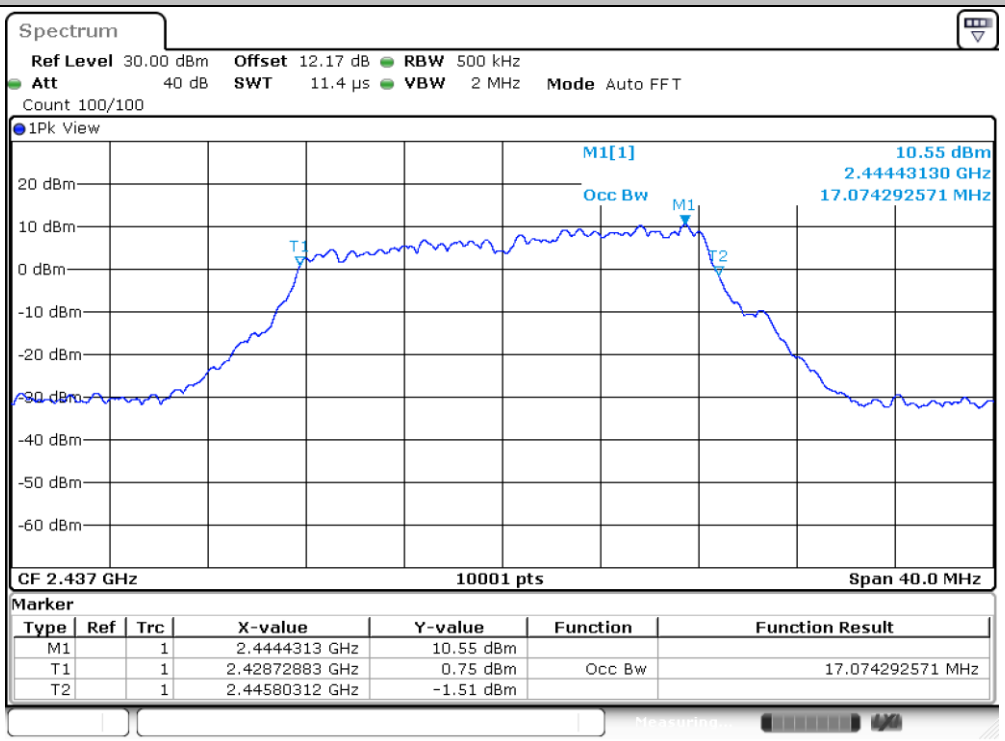
Date: 12.SEP.2024 23:35:43

11G-CDD_Ant7_2437



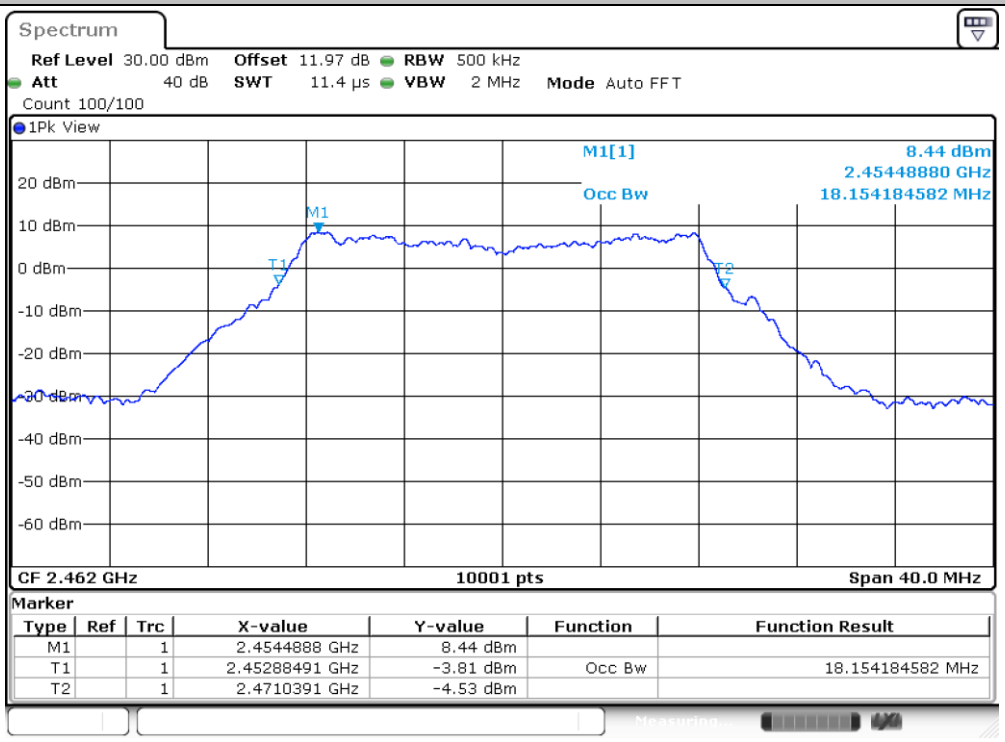
Date: 12.SEP.2024 23:37:11

11G-CDD_Ant6_2437



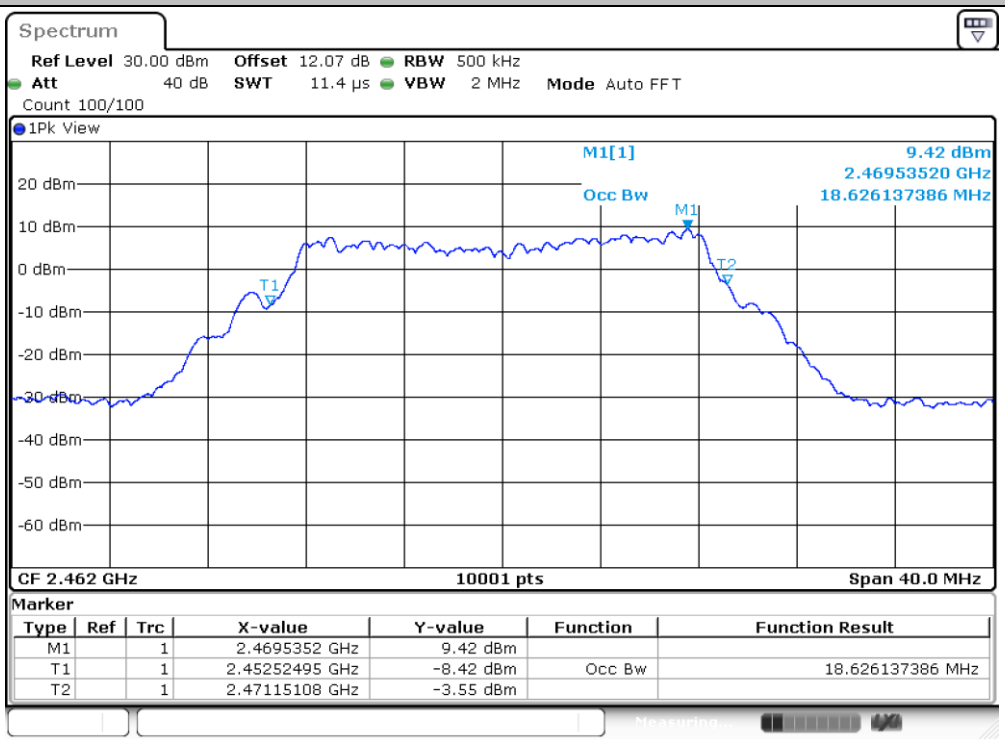
Date: 12.SEP.2024 23:38:12

11G-CDD_Ant7_2462



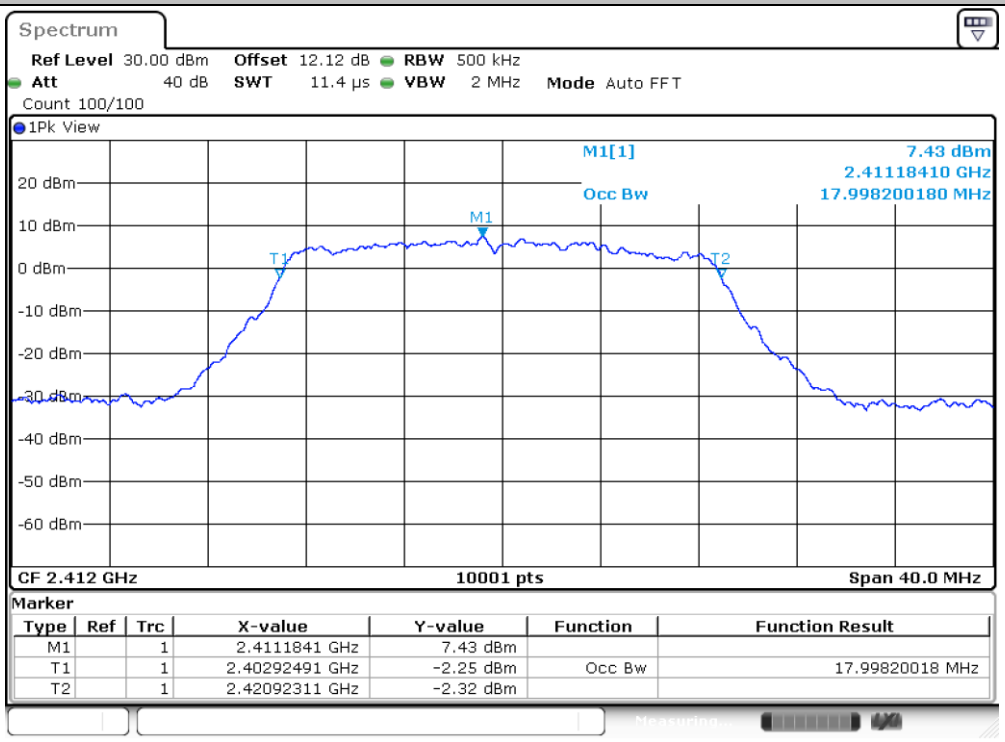
Date: 12.SEP.2024 23:39:22

11G-CDD_Ant6_2462



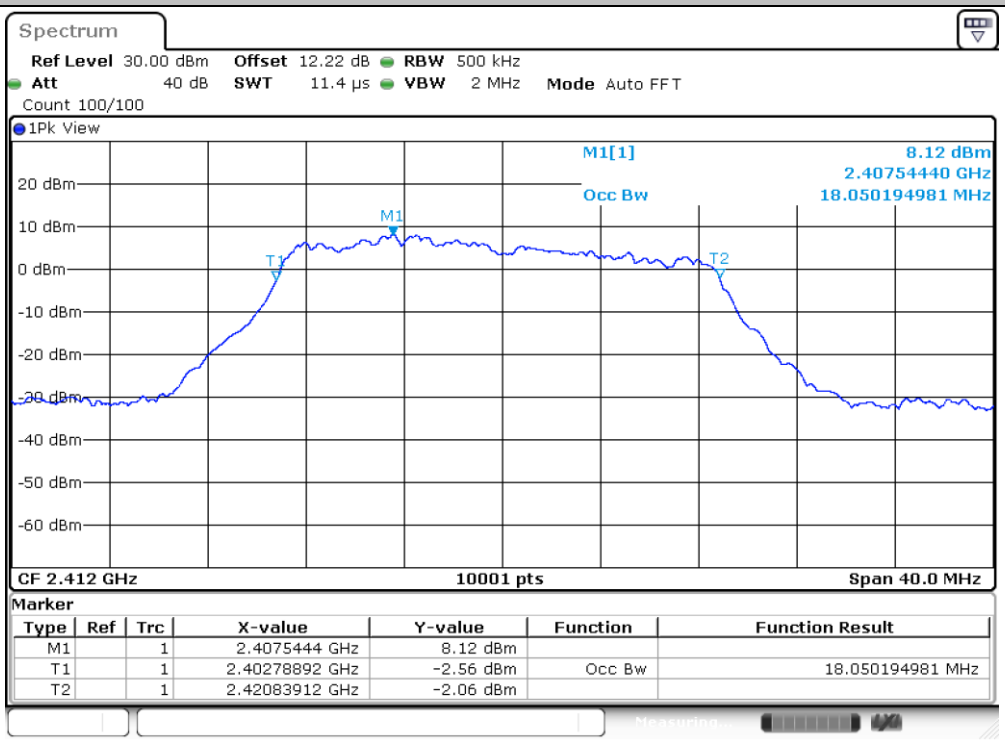
Date: 12.SEP.2024 23:40:32

11N20MIMO_Ant7_2412



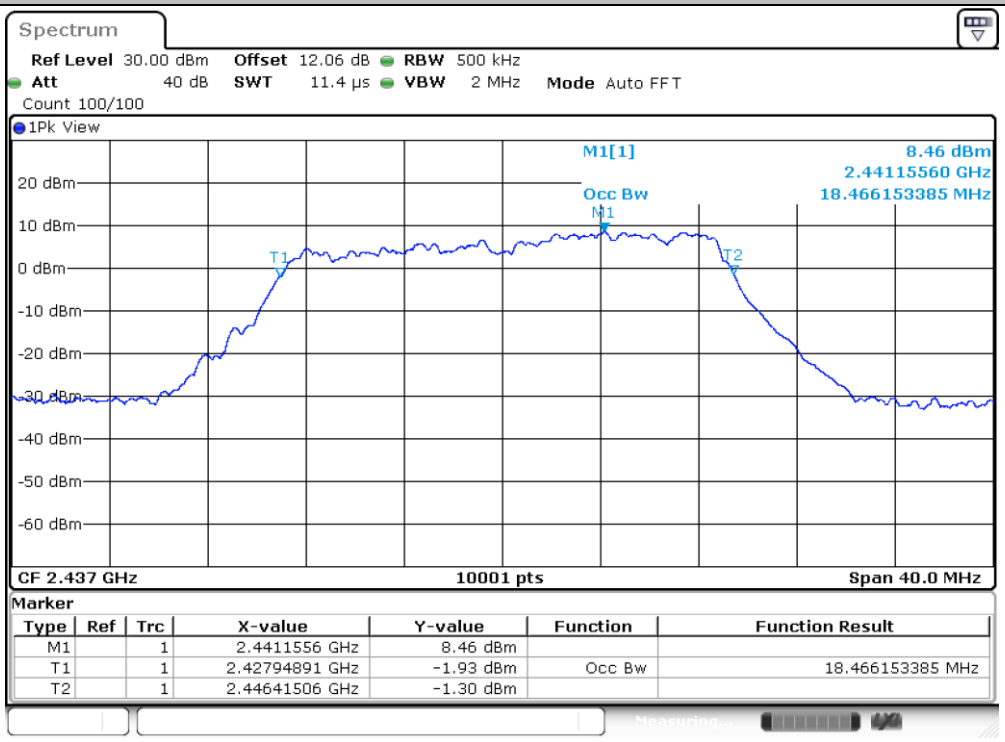
Date: 12.SEP.2024 23:42:24

11N20MIMO_Ant6_2412



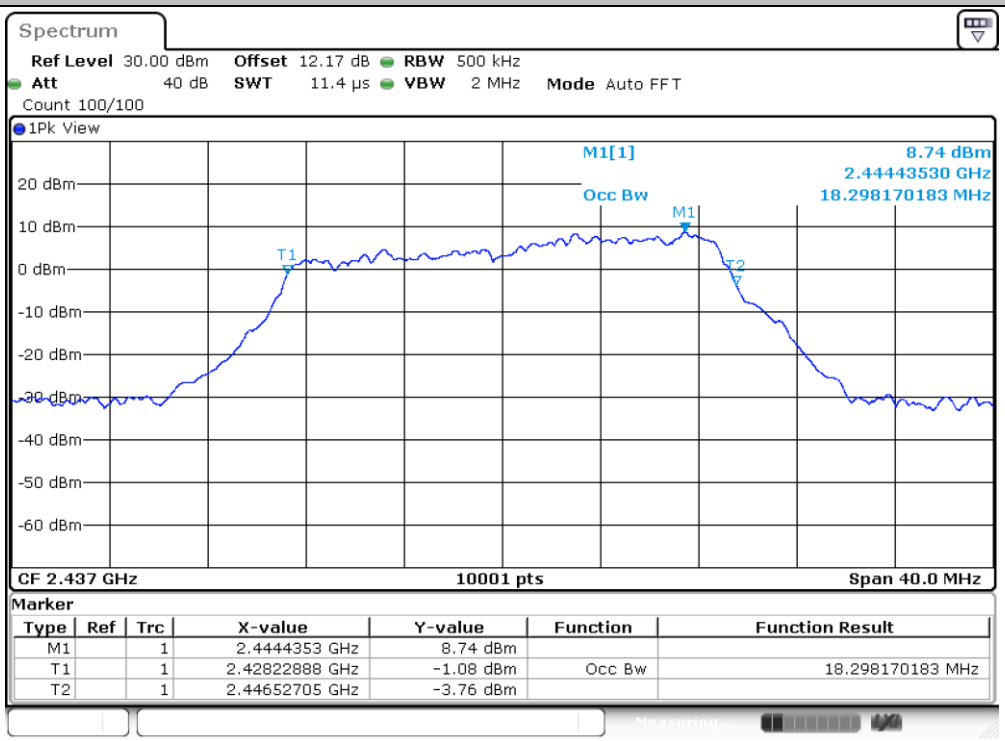
Date: 12.SEP.2024 23:43:52

11N20MIMO_Ant7_2437



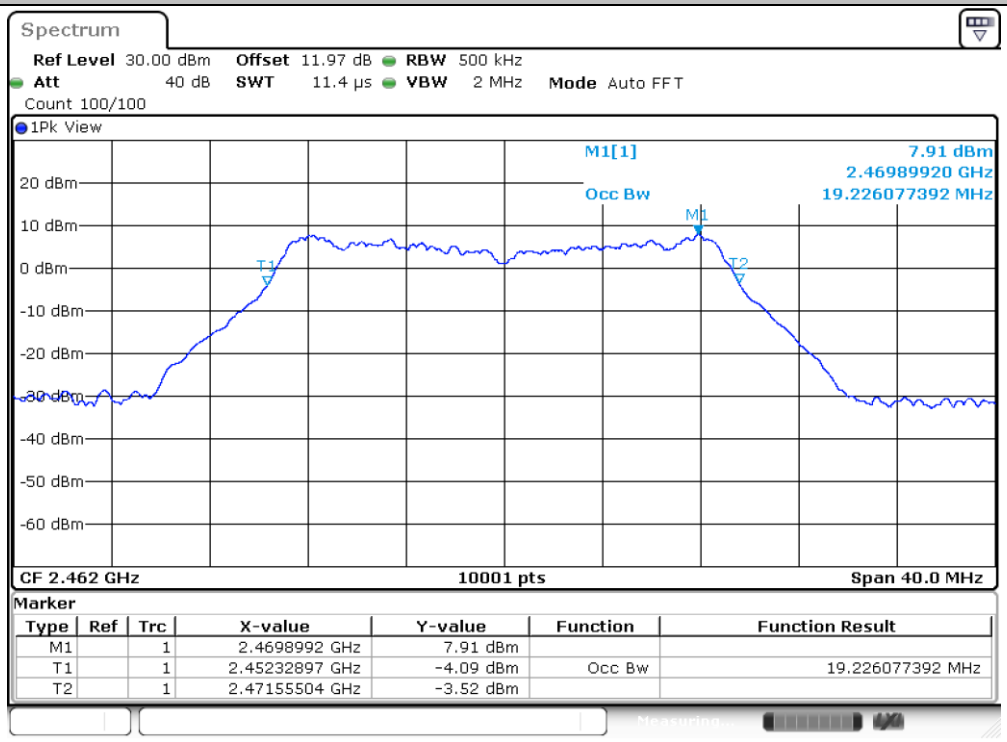
Date: 13.SEP.2024 00:48:01

11N20MIMO_Ant6_2437



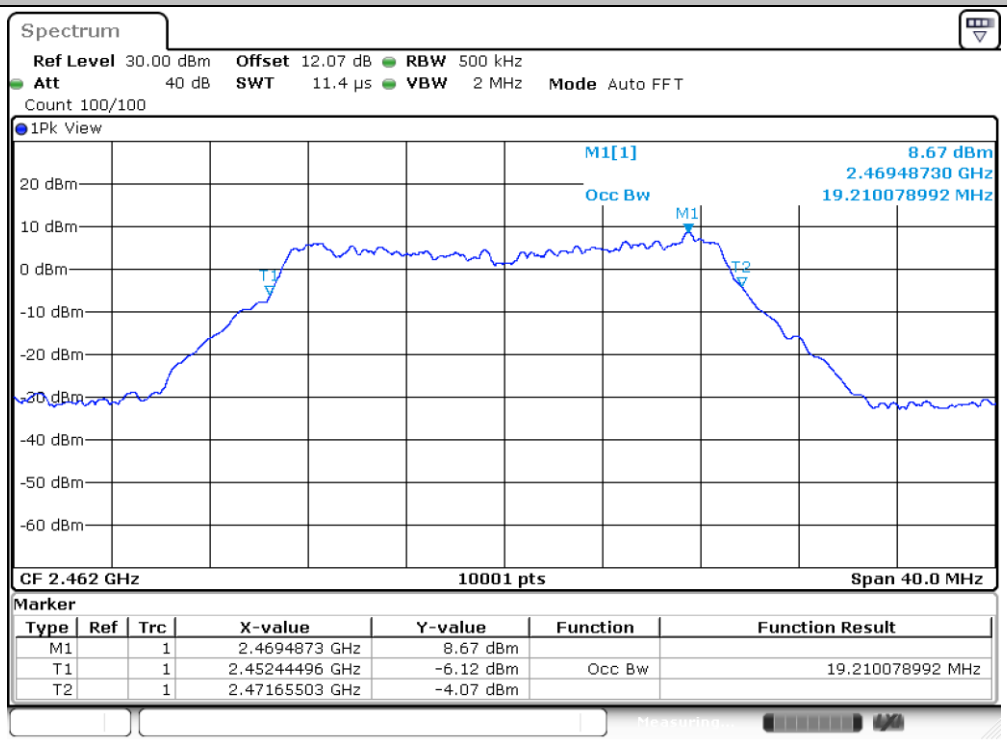
Date: 13.SEP.2024 01:15:12

11N20MIMO_Ant7_2462



Date: 12.SEP.2024 23:47:40

11N20MIMO_Ant6_2462



Date: 12.SEP.2024 23:48:50