

FCC RF Test Report

APPLICANT : OnePlus Technology (Shenzhen) Co., Ltd.
EQUIPMENT : tablet
BRAND NAME : ONEPLUS
MODEL NAME : OPD2415
FCC ID : 2ABZ2-OPD2415
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : (DTS) Digital Transmission System
TEST DATE(S) : Feb. 22, 2025 ~ Mar. 05, 2025

We, Sporton International Inc. (Kunshan), 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.

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

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (Kunshan)

**No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China**



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR511612C	Rev. 01	Initial issue of report	Mar. 31, 2025

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.247(a)(2)	6dB Bandwidth	$\geq 0.5\text{MHz}$	Pass	-
3.1	-	99% Bandwidth	-	Report Only	-
3.2	15.247(b)	Power Output Measurement	$\leq 30\text{dBm}$	Pass	-
3.3	15.247(e)	Power Spectral Density	$\leq 8\text{dBm}/3\text{kHz}$	Pass	-
3.4	15.247(d)	Conducted Band Edges	$\leq 20\text{dBc}$	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 4.95 dB at 2389.30 MHz
3.6	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 15.20 dB at 0.17 MHz
3.7	15.203 & 15.247(b)	Antenna Requirement	15.203 & 15.247(b)	Pass	-

Conformity Assessment Condition:

- 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/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
- 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

OnePlus Technology (Shenzhen) Co., Ltd.

18C02, 18C03, 18C04, and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen, Guangdong, P.R. China

1.2 Manufacturer

OnePlus Technology (Shenzhen) Co., Ltd.

18C02, 18C03, 18C04, and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen, Guangdong, P.R. China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	tablet
Brand Name	ONEPLUS
Model Name	OPD2415
FCC ID	2ABZ2-OPD2415
SN Code	Conducted: H621521000014EC9005G Conduction: H621521000015ECA000L Radiation: H621521000015ECA0017
HW Version	OPD2415_11
SW Version	OPD2415_15.0.1
EUT Stage	Production Unit

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

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	2412 MHz ~ 2462 MHz
Maximum (Peak) Output Power to antenna	<Ant 0> 802.11b : 24.36 dBm (0.2729 W) 802.11g : 25.02 dBm (0.3177 W) 802.11n HT20 : 25.10 dBm (0.3236 W) 802.11n HT40 : 26.32 dBm (0.4285 W) 802.11ax HE20 : 25.65 dBm (0.3673 W) 802.11ax HE40 : 26.42 dBm (0.4385 W) <Ant 1> 802.11b : 21.83 dBm (0.1524 W) 802.11g : 25.17 dBm (0.3289 W) 802.11n HT20 : 25.26 dBm (0.3357 W) 802.11n HT40 : 25.92 dBm (0.3908 W) 802.11ax HE20 : 25.78 dBm (0.3784 W) 802.11ax HE40 : 26.08 dBm (0.4055 W) <MIMO Ant 0+1> 802.11b : 24.31 dBm (0.2698 W) 802.11g : 26.45 dBm (0.4416 W) 802.11n HT20 : 26.50 dBm (0.4467 W) 802.11n HT40 : 27.65 dBm (0.5821 W) 802.11ax HE20 : 27.12 dBm (0.5152 W) 802.11ax HE40 : 27.66 dBm (0.5834 W) 802.11be EHT20 : 27.12 dBm (0.5152 W) 802.11be EHT40 : 27.74 dBm (0.5943 W)
99% Occupied Bandwidth	<MIMO Ant 0+1> 802.11b : 13.235MHz 802.11g : 17.646MHz 802.11n HT20 : 18.858MHz 802.11n HT40 : 38.044MHz 802.11ax HE20 : 19.470MHz 802.11ax HE40 : 38.820MHz 802.11be EHT20 : 19.482MHz 802.11be EHT40 : 38.892MHz <Ant 0 > 802.11b : 13.123MHz 802.11g : 17.642MHz 802.11n HT20 : 18.842MHz 802.11n HT40 : 37.436MHz 802.11ax HE20 : 19.430MHz 802.11ax HE40 : 38.844MHz <Ant 1 > 802.11b : 13.147MHz 802.11g : 17.586MHz 802.11n HT20 : 18.706MHz 802.11n HT40 : 37.932MHz 802.11ax HE20 : 19.422MHz 802.11ax HE40 : 38.748MHz
Antenna Type / Gain	<Ant 0> : cavity antenna with gain -1.10 dBi <Ant 1> : cavity antenna with gain 0 dBi
Type of Modulation	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 / 4096QAM) 802.11be: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM / 4096QAM)
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Note:

1. The device supports WLAN MIMO CDD mode.
2. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to the higher normal output power for 802.11be mode.
3. For 802.11n HT20 / ac VHT20, 802.11n HT40 / ac VHT40 modes, the whole testing have assessed only 802.11n HT20 / HT40 by referring to the higher output power.
4. 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, and partial RU verify bandedge/spurious.
5. 802.11be support OFDMA for Small size RU, 52Tone + 26 Tone or 106Tone + 26Tone, test combination as below:

<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. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-KS	CN1257	314309

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.
	CO02-SZ ; 03CH04-SZ	CN1256	421272

Note: Test data subcontracted: Radiation/Conduction test case in section 3.5~3.6 of this report

1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	TH01-KS	Tonscend	JS1120-3 test system China_210602	3.3.10
2.	03CH04-SZ	AUDIX	E3	6.2009-8-24
3.	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 (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	MCS0
802.11ax HE40	MCS0
802.11be EHT20	MCS0
802.11be EHT40	MCS0

SISO 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	MCS0
802.11ax HE40	MCS0

Test Cases

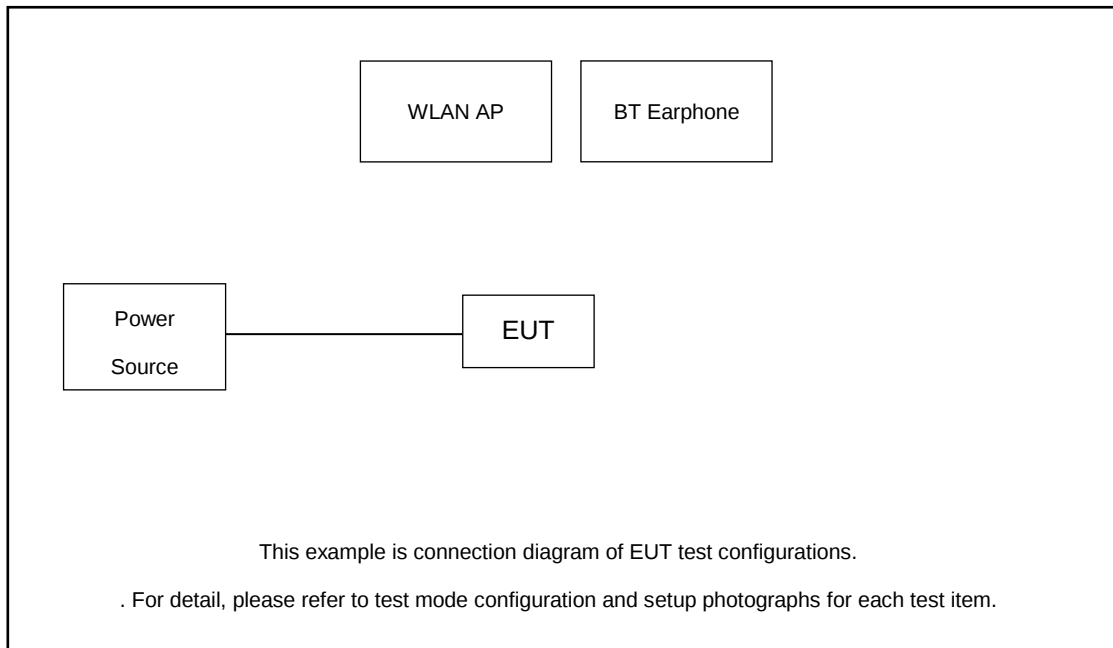
AC Conducted Emission	Mode 1 :Bluetooth Link + WLAN (2.4G) Link+ Battery 1 + USB Cable 1 (Charging from Adapter 1)
Remark: For Radiated Test Cases, the tests were performance with Adapter1 and USB Cable1.	

RSE Co-location

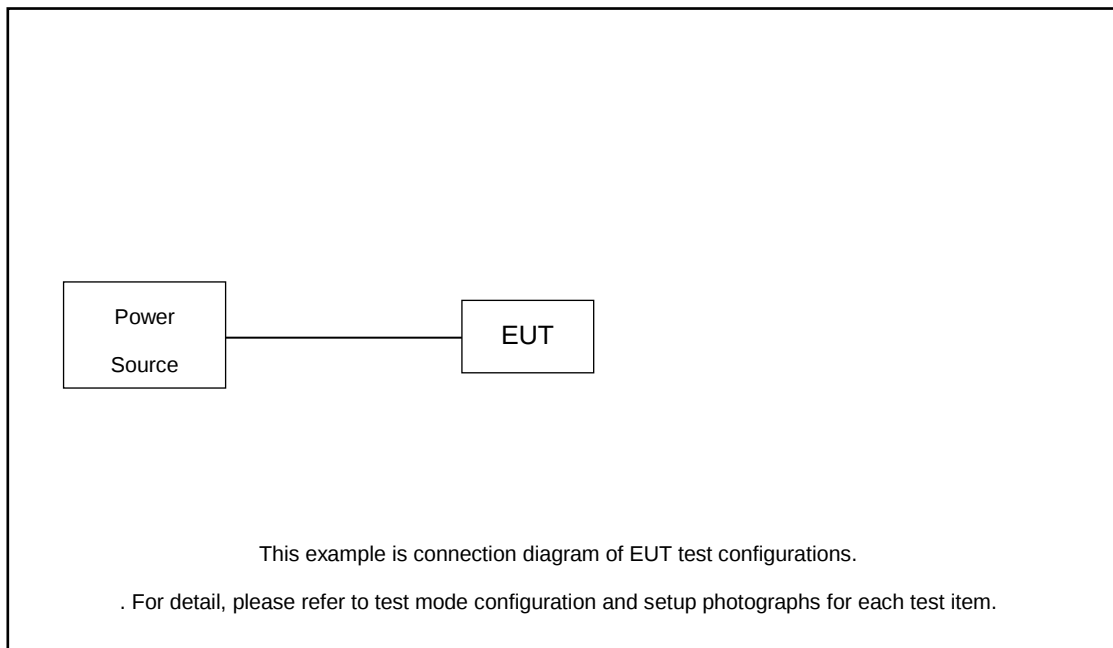
Bluetooth LE(2 Mbps) CH00 2402_TX + 802.11n HT20 CH11 2462
--

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.	Bluetooth Earphone	Samsung	EO-MG900	PYAHS-107W	N/A	N/A
2.	WLAN AP	Dlink	DIR-820L	KA2IR820LA1	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.

For AC power line conducted emissions, the EUT was set to connect with the WLAN AP under large package sizes transmission.

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.

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 2.12 + 10 = 12.12 \text{ (dB)}\end{aligned}$$

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.

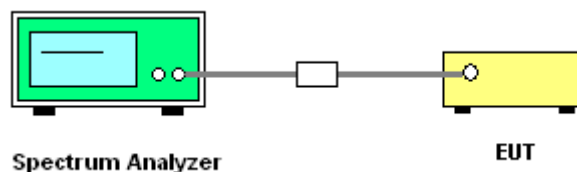
3.1.2 Measuring Instruments

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) $\geq 3 \times \text{RBW}$. 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 Single Antenna																
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
					Ant0	Ant1	SUM	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
11b	1Mbps	1	1	2412	24.36	21.81	/	30.00	30.00	-1.10	0.00	23.26	21.81	36.00	36.00	Pass
11b	1Mbps	1	6	2437	24.32	21.83		30.00	30.00	-1.10	0.00	23.22	21.83	36.00	36.00	Pass
11b	1Mbps	1	11	2462	24.29	21.80		30.00	30.00	-1.10	0.00	23.19	21.80	36.00	36.00	Pass
11g	6Mbps	1	1	2412	24.26	24.28		30.00	30.00	-1.10	0.00	23.16	24.28	36.00	36.00	Pass
11g	6Mbps	1	6	2437	25.02	25.17		30.00	30.00	-1.10	0.00	23.92	25.17	36.00	36.00	Pass
11g	6Mbps	1	11	2462	24.07	24.30		30.00	30.00	-1.10	0.00	22.97	24.30	36.00	36.00	Pass
HT20	MCS0	1	1	2412	24.28	24.36		30.00	30.00	-1.10	0.00	23.18	24.36	36.00	36.00	Pass
HT20	MCS0	1	6	2437	25.10	25.26		30.00	30.00	-1.10	0.00	24.00	25.26	36.00	36.00	Pass
HT20	MCS0	1	11	2462	24.13	24.33		30.00	30.00	-1.10	0.00	23.03	24.33	36.00	36.00	Pass
HT40	MCS0	1	3	2422	23.40	23.11		30.00	30.00	-1.10	0.00	22.30	23.11	36.00	36.00	Pass
HT40	MCS0	1	6	2437	26.32	25.92		30.00	30.00	-1.10	0.00	25.22	25.92	36.00	36.00	Pass
HT40	MCS0	1	9	2452	23.33	22.84		30.00	30.00	-1.10	0.00	22.23	22.84	36.00	36.00	Pass

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
					Ant0	Ant1	SUM	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
11b	1Mbps	2	1	2412	22.54	19.57	24.31	30.00		0.00		24.31		36.00		Pass
11b	1Mbps	2	6	2437	22.47	19.62	24.29	30.00		0.00		24.29		36.00		Pass
11b	1Mbps	2	11	2462	22.39	19.52	24.20	30.00		0.00		24.20		36.00		Pass
11g	6Mbps	2	1	2412	22.18	22.26	25.23	30.00		0.00		25.23		36.00		Pass
11g	6Mbps	2	6	2437	23.27	23.61	26.45	30.00		0.00		26.45		36.00		Pass
11g	6Mbps	2	11	2462	22.14	22.58	25.38	30.00		0.00		25.38		36.00		Pass
HT20	MCS0	2	1	2412	22.21	22.37	25.30	30.00		0.00		25.30		36.00		Pass
HT20	MCS0	2	6	2437	23.29	23.68	26.50	30.00		0.00		26.50		36.00		Pass
HT20	MCS0	2	11	2462	22.32	22.64	25.49	30.00		0.00		25.49		36.00		Pass
HT40	MCS0	2	3	2422	20.97	21.29	24.14	30.00		0.00		24.14		36.00		Pass
HT40	MCS0	2	6	2437	24.42	24.84	27.65	30.00		0.00		27.65		36.00		Pass
HT40	MCS0	2	9	2452	20.46	20.72	23.60	30.00		0.00		23.60		36.00		Pass



2.4GHz Band Single Antenna

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
						Ant0	Ant1	SUM	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
HE20	MCS0	1	1	2412	Full	24.80	24.90	/	30.00	30.00	-1.10	0.00	23.70	24.90	36.00	36.00	Pass
HE20	MCS0	1	6	2437	Full	25.65	25.78		30.00	30.00	-1.10	0.00	24.55	25.78	36.00	36.00	Pass
HE20	MCS0	1	11	2462	Full	24.76	24.94		30.00	30.00	-1.10	0.00	23.66	24.94	36.00	36.00	Pass
HE40	MCS0	1	3	2422	Full	23.54	23.20		30.00	30.00	-1.10	0.00	22.44	23.20	36.00	36.00	Pass
HE40	MCS0	1	6	2437	Full	26.42	26.08		30.00	30.00	-1.10	0.00	25.32	26.08	36.00	36.00	Pass
HE40	MCS0	1	9	2452	Full	23.46	22.66		30.00	30.00	-1.10	0.00	22.36	22.66	36.00	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
						Ant0	Ant1	SUM	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
HE20	MCS0	2	1	2412	Full	22.78	23.11	25.96	30.00		0.00		25.96		36.00		Pass
HE20	MCS0	2	1	2412	26/0	13.32	13.55	16.45	30.00		0.00		16.45		36.00		Pass
HE20	MCS0	2	1	2412	52/37	16.43	16.62	19.54	30.00		0.00		19.54		36.00		Pass
HE20	MCS0	2	1	2412	106/53	19.57	19.71	22.65	30.00		0.00		22.65		36.00		Pass
HE20	MCS0	2	6	2437	Full	24.02	24.19	27.12	30.00		0.00		27.12		36.00		Pass
HE20	MCS0	2	11	2462	Full	22.93	23.04	26.00	30.00		0.00		26.00		36.00		Pass
HE20	MCS0	2	11	2462	26/8	13.50	13.72	16.62	30.00		0.00		16.62		36.00		Pass
HE20	MCS0	2	11	2462	52/40	16.90	17.05	19.99	30.00		0.00		19.99		36.00		Pass
HE20	MCS0	2	11	2462	106/54	19.99	20.11	23.06	30.00		0.00		23.06		36.00		Pass
HE40	MCS0	2	3	2422	Full	21.07	21.43	24.26	30.00		0.00		24.26		36.00		Pass
HE40	MCS0	2	6	2437	Full	24.55	24.74	27.66	30.00		0.00		27.66		36.00		Pass
HE40	MCS0	2	9	2452	Full	20.65	21.23	23.96	30.00		0.00		23.96		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
						Ant0	Ant1	SUM	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
EHT20	MCS0	2	1	2412	Full	23.06	23.19	26.14	30.00		0.00		26.14		36.00		Pass
EHT20	MCS0	2	1	2412	26/0	13.38	13.60	16.50	30.00		0.00		16.50		36.00		Pass
EHT20	MCS0	2	1	2412	52/37	16.49	16.67	19.59	30.00		0.00		19.59		36.00		Pass
EHT20	MCS0	2	1	2412	106/53	19.63	19.76	22.71	30.00		0.00		22.71		36.00		Pass
EHT20	MCS0	2	1	2412	52+26	16.59	16.72	19.67	30.00		0.00		19.67		36.00		Pass
EHT20	MCS0	2	1	2412	106+26	19.77	19.88	22.84	30.00		0.00		22.84		36.00		Pass
EHT20	MCS0	2	6	2437	Full	24.08	24.14	27.12	30.00		0.00		27.12		36.00		Pass
EHT20	MCS0	2	11	2462	Full	22.97	23.08	26.04	30.00		0.00		26.04		36.00		Pass
EHT20	MCS0	2	11	2462	26/8	13.57	13.78	16.69	30.00		0.00		16.69		36.00		Pass
EHT20	MCS0	2	11	2462	52/40	16.97	17.11	20.05	30.00		0.00		20.05		36.00		Pass
EHT20	MCS0	2	11	2462	106/54	20.06	20.17	23.13	30.00		0.00		23.13		36.00		Pass
EHT20	MCS0	2	11	2462	52+26	17.02	17.14	20.09	30.00		0.00		20.09		36.00		Pass
EHT20	MCS0	2	11	2462	106+26	20.11	20.22	23.18	30.00		0.00		23.18		36.00		Pass
EHT40	MCS0	2	3	2422	Full	21.13	21.52	24.34	30.00		0.00		24.34		36.00		Pass
EHT40	MCS0	2	6	2437	Full	24.62	24.83	27.74	30.00		0.00		27.74		36.00		Pass
EHT40	MCS0	2	9	2452	Full	20.81	21.23	24.04	30.00		0.00		24.04		36.00		Pass



3.2.6 Test Result of Average Output Power (Reporting Only)

2.4GHz Band Single Antenna																		
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	
					Ant0	Ant1	SUM	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1		Ant 0	Ant 1
11b	1Mbps	1	1	2412	20.59	18.90	/	30.00	30.00	-1.10	0.00	19.49	18.90	36.00	36.00	Pass	22.00	19.50
11b	1Mbps	1	6	2437	20.55	18.91		30.00	30.00	-1.10	0.00	19.45	18.91	36.00	36.00	Pass	22.00	19.50
11b	1Mbps	1	11	2462	20.53	18.93		30.00	30.00	-1.10	0.00	19.43	18.93	36.00	36.00	Pass	22.00	19.50
11g	6Mbps	1	1	2412	17.57	17.91		30.00	30.00	-1.10	0.00	16.47	17.91	36.00	36.00	Pass	18.50	18.00
11g	6Mbps	1	6	2437	18.55	18.77		30.00	30.00	-1.10	0.00	17.45	18.77	36.00	36.00	Pass	19.50	19.00
11g	6Mbps	1	11	2462	17.53	17.96		30.00	30.00	-1.10	0.00	16.43	17.96	36.00	36.00	Pass	18.50	18.00
HT20	MCS0	1	1	2412	17.67	17.98		30.00	30.00	-1.10	0.00	16.57	17.98	36.00	36.00	Pass	18.50	18.00
HT20	MCS0	1	6	2437	18.56	18.82		30.00	30.00	-1.10	0.00	17.46	18.82	36.00	36.00	Pass	19.50	19.00
HT20	MCS0	1	11	2462	17.54	17.97		30.00	30.00	-1.10	0.00	16.44	17.97	36.00	36.00	Pass	18.50	18.00
HT40	MCS0	1	3	2422	15.57	15.83		30.00	30.00	-1.10	0.00	14.47	15.83	36.00	36.00	Pass	16.00	15.50
HT40	MCS0	1	6	2437	18.75	18.82		30.00	30.00	-1.10	0.00	17.65	18.82	36.00	36.00	Pass	19.50	18.50
HT40	MCS0	1	9	2452	15.31	15.40		30.00	30.00	-1.10	0.00	14.21	15.40	36.00	36.00	Pass	16.00	15.00

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	
					Ant0	Ant1	SUM	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1		Ant 0	Ant 1
11b	1Mbps	2	1	2412	18.94	16.74	20.99	30.00		0.00		20.99		36.00		Pass	20/17	
11b	1Mbps	2	6	2437	18.81	16.74	20.91	30.00		0.00		20.91		36.00		Pass	20/17	
11b	1Mbps	2	11	2462	18.75	16.75	20.87	30.00		0.00		20.87		36.00		Pass	20/17	
11g	6Mbps	2	1	2412	15.55	16.12	18.85	30.00		0.00		18.85		36.00		Pass	16.00	
11g	6Mbps	2	6	2437	16.57	17.04	19.82	30.00		0.00		19.82		36.00		Pass	17.00	
11g	6Mbps	2	11	2462	15.58	16.05	18.83	30.00		0.00		18.83		36.00		Pass	16.00	
HT20	MCS0	2	1	2412	15.57	16.15	18.88	30.00		0.00		18.88		36.00		Pass	16.00	
HT20	MCS0	2	6	2437	16.59	17.76	20.22	30.00		0.00		20.22		36.00		Pass	17.00	
HT20	MCS0	2	11	2462	15.60	16.08	18.86	30.00		0.00		18.86		36.00		Pass	16.00	
HT40	MCS0	2	3	2422	13.57	14.35	16.99	30.00		0.00		16.99		36.00		Pass	14.00	
HT40	MCS0	2	6	2437	16.66	17.30	20.00	30.00		0.00		20.00		36.00		Pass	17.00	
HT40	MCS0	2	9	2452	13.03	13.84	16.46	30.00		0.00		16.46		36.00		Pass	13.50	



2.4GHz Band Single Antenna																			
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	
						Ant0	Ant1	SUM	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1		Ant 0	Ant 1
HE20	MCS0	1	1	2412	Full	17.71	18.03	/	30.00	30.00	-1.10	0.00	16.61	18.03	36.00	36.00	Pass	18.50	18.00
HE20	MCS0	1	6	2437	Full	18.55	18.88		30.00	30.00	-1.10	0.00	17.45	18.88	36.00	36.00	Pass	19.50	19.00
HE20	MCS0	1	11	2462	Full	17.56	18.01		30.00	30.00	-1.10	0.00	16.46	18.01	36.00	36.00	Pass	18.50	18.00
HE40	MCS0	1	3	2422	Full	15.58	15.88		30.00	30.00	-1.10	0.00	14.48	15.88	36.00	36.00	Pass	16.00	15.50
HE40	MCS0	1	6	2437	Full	18.77	18.88		30.00	30.00	-1.10	0.00	17.67	18.88	36.00	36.00	Pass	19.50	18.50
HE40	MCS0	1	9	2452	Full	15.34	15.43		30.00	30.00	-1.10	0.00	14.24	15.43	36.00	36.00	Pass	16.00	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	
						Ant0	Ant1	SUM	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1		Ant 0	Ant 1
HE20	MCS0	2	1	2412	Full	15.59	16.13	18.88	30.00		0.00		18.88		36.00		Pass	16.00	
HE20	MCS0	2	1	2412	26/0	5.27	5.41	8.35	30.00		0.00		8.35		36.00		Pass	5.50	
HE20	MCS0	2	1	2412	52/37	8.14	8.49	11.33	30.00		0.00		11.33		36.00		Pass	9.00	
HE20	MCS0	2	1	2412	106/53	11.12	11.62	14.39	30.00		0.00		14.39		36.00		Pass	12.00	
HE20	MCS0	2	6	2437	Full	16.52	17.08	19.82	30.00		0.00		19.82		36.00		Pass	17.00	
HE20	MCS0	2	11	2462	Full	15.53	16.09	18.83	30.00		0.00		18.83		36.00		Pass	16.00	
HE20	MCS0	2	11	2462	26/8	5.25	5.68	8.48	30.00		0.00		8.48		36.00		Pass	6.00	
HE20	MCS0	2	11	2462	52/40	8.42	8.72	11.58	30.00		0.00		11.58		36.00		Pass	9.50	
HE20	MCS0	2	11	2462	106/54	11.27	11.82	14.56	30.00		0.00		14.56		36.00		Pass	12.50	
HE40	MCS0	2	3	2422	Full	13.60	14.38	17.02	30.00		0.00		17.02		36.00		Pass	14.00	
HE40	MCS0	2	6	2437	Full	16.74	17.41	20.10	30.00		0.00		20.10		36.00		Pass	17.00	
HE40	MCS0	2	9	2452	Full	13.10	13.82	16.49	30.00		0.00		16.49		36.00		Pass	13.50	



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	
						Ant0	Ant1	SUM	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1		Ant 0	Ant 1
EHT20	MCS0	2	1	2412	Full	15.64	16.22	18.95	30.00		0.00		18.95		36.00		Pass	16.00	
EHT20	MCS0	2	1	2412	26/0	5.29	5.43	8.37	30.00		0.00		8.37		36.00		Pass	5.50	
EHT20	MCS0	2	1	2412	52/37	8.26	8.58	11.43	30.00		0.00		11.43		36.00		Pass	9.00	
EHT20	MCS0	2	1	2412	106/53	11.18	11.68	14.45	30.00		0.00		14.45		36.00		Pass	12.00	
EHT20	MCS0	2	1	2412	52+26	8.12	8.69	11.42	30.00		0.00		11.42		36.00		Pass	9.00	
EHT20	MCS0	2	1	2412	106+26	11.10	11.69	14.42	30.00		0.00		14.42		36.00		Pass	12.00	
EHT20	MCS0	2	6	2437	Full	16.54	17.12	19.85	30.00		0.00		19.85		36.00		Pass	17.00	
EHT20	MCS0	2	11	2462	Full	15.58	16.13	18.87	30.00		0.00		18.87		36.00		Pass	16.00	
EHT20	MCS0	2	11	2462	26/8	5.26	5.72	8.51	30.00		0.00		8.51		36.00		Pass	6.00	
EHT20	MCS0	2	11	2462	52/40	8.45	8.76	11.62	30.00		0.00		11.62		36.00		Pass	9.50	
EHT20	MCS0	2	11	2462	106/54	11.32	11.86	14.61	30.00		0.00		14.61		36.00		Pass	12.50	
EHT20	MCS0	2	11	2462	52+26	8.18	8.73	11.47	30.00		0.00		11.47		36.00		Pass	9.50	
EHT20	MCS0	2	11	2462	106+26	11.33	11.82	14.59	30.00		0.00		14.59		36.00		Pass	12.50	
EHT40	MCS0	2	3	2422	Full	13.65	14.43	17.07	30.00		0.00		17.07		36.00		Pass	14.00	
EHT40	MCS0	2	6	2437	Full	16.79	17.46	20.15	30.00		0.00		20.15		36.00		Pass	17.00	
EHT40	MCS0	2	9	2452	Full	13.15	13.87	16.54	30.00		0.00		16.54		36.00		Pass	13.50	

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.

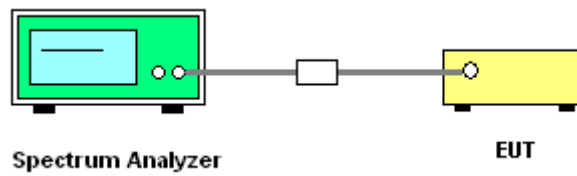
3.3.3 Test Procedures

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 (a): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

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.

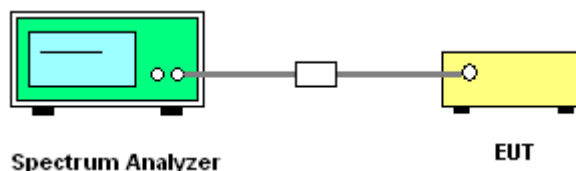
3.4.2 Measuring Instruments

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

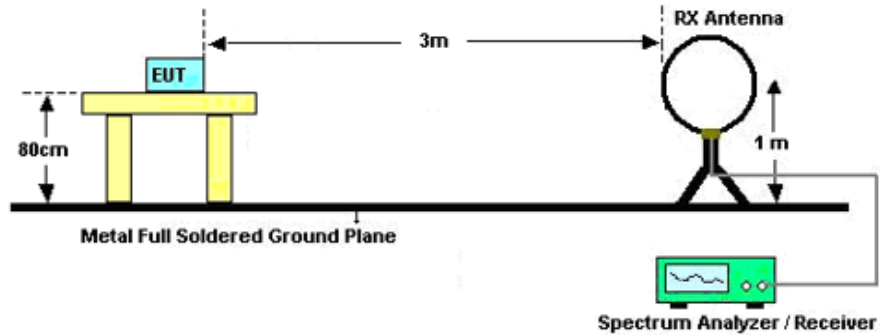
1. The testing follows ANSI C63.10-2013 clause 11.11 & 11.12
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better 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 $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement.

For average measurement:

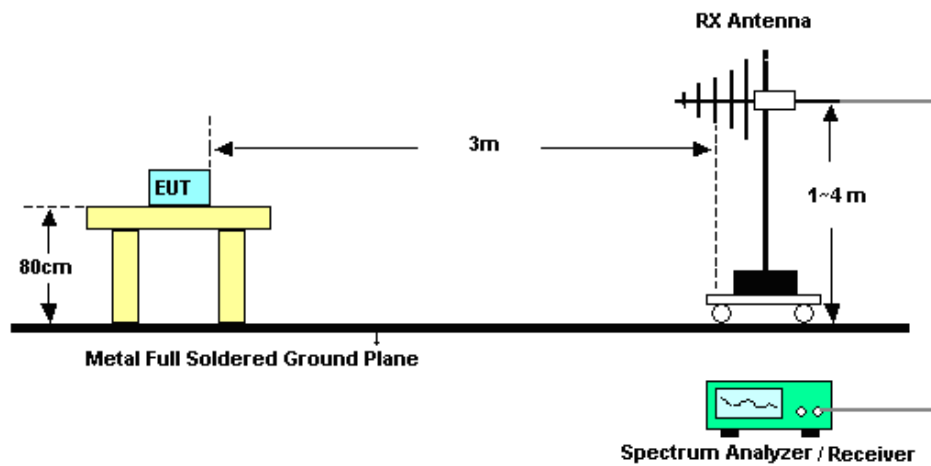
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

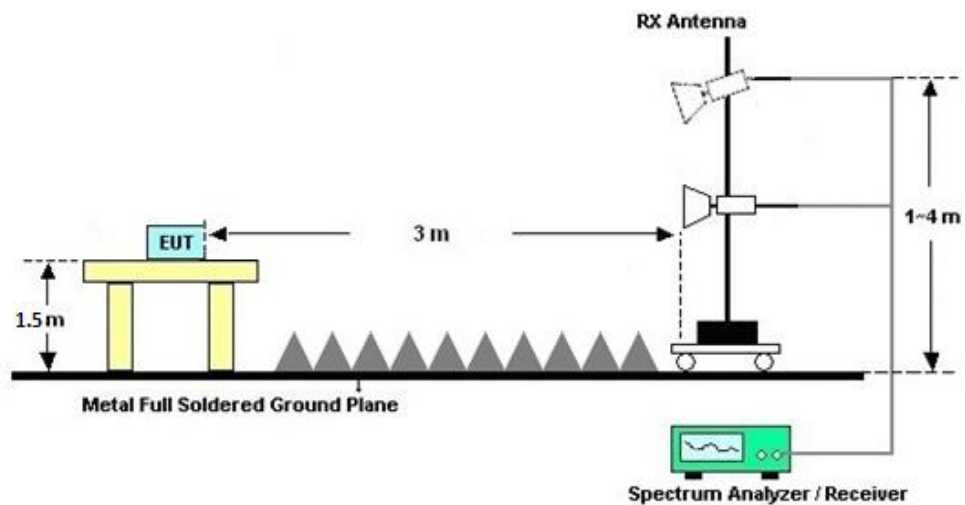
For radiated emissions below 30MHz



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 (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.

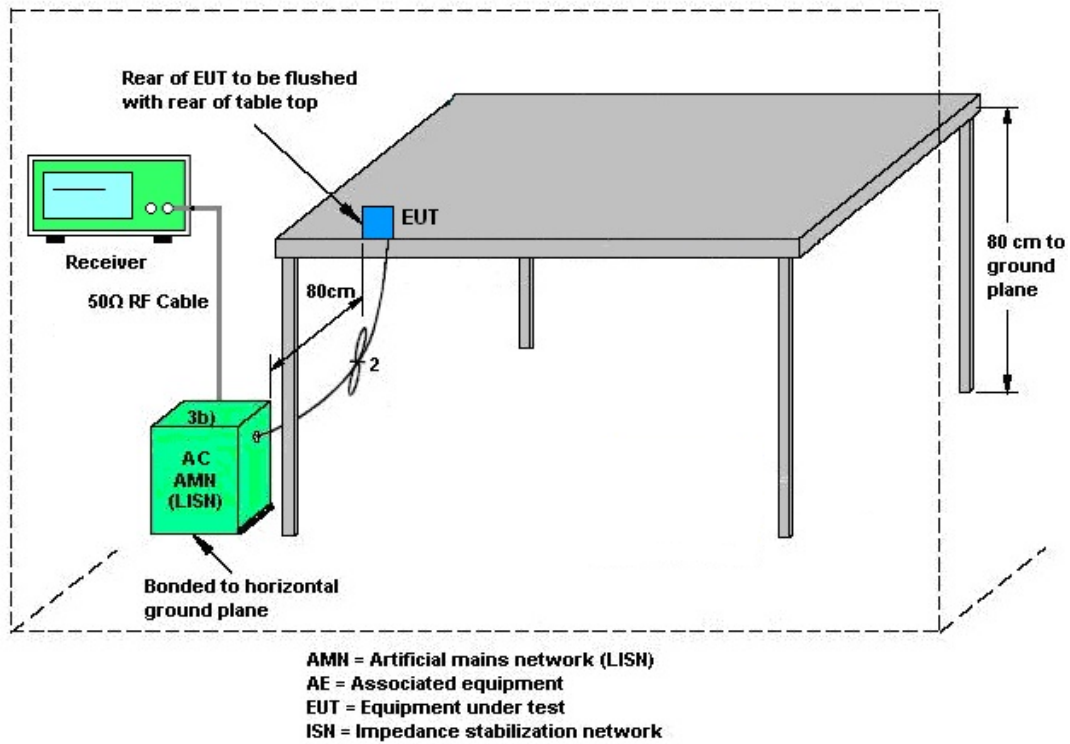
3.6.2 Measuring Instruments

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;

The EUT supports CDD mode.

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. 0	Ant. 1	DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
2.4 GHz	-1.10	0.00	0.00	2.48	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
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 10, 2024	Feb. 22, 2025~ Feb. 24, 2025	Oct. 09, 2025	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 02, 2025	Feb. 22, 2025~ Feb. 24, 2025	Jan. 01, 2026	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 02, 2025	Feb. 22, 2025~ Feb. 24, 2025	Jan. 01, 2026	Conducted (TH01-KS)
EMI Receiver	R&S	ESR7	102297	9kHz~7GHz;	Jul. 03, 2024	Feb. 22, 2025	Jul. 02, 2025	Conduction (CO02-SZ)
AC LISN	R&S	ENV216	101499	9kHz~30MHz	Jul. 03, 2024	Feb. 22, 2025	Jul. 02, 2025	Conduction (CO02-SZ)
AC Power Source	CHROMA	61601	616010002470	100Vac~250Vac	Dec.25, 2024	Feb. 22, 2025	Dec. 24, 2025	Conduction (CO02-SZ)
EMI Test Receiver	R&S	ESR7	101404	9kHz~7GHz	Oct. 14, 2024	Feb. 25, 2025~ Mar. 05, 2025	Oct. 13, 2025	Radiation (03CH04-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 03, 2024	Feb. 25, 2025~ Mar. 05, 2025	Jul. 02, 2025	Radiation (03CH04-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	Feb. 25, 2025~ Mar. 05, 2025	Dec. 27, 2025	Radiation (03CH04-SZ)
Bilog Antenna	TeseQ	CBL6111D	41909	30MHz~1GHz	May. 09, 2024	Feb. 25, 2025~ Mar. 05, 2025	May. 08, 2025	Radiation (03CH04-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1474	1GHz~18GHz	Jul. 07, 2023	Feb. 25, 2025~ Mar. 05, 2025	Jul. 06, 2025	Radiation (03CH04-SZ)
Horn Antenna	SCHWARZBECK	BBHA9170	9170#679	15GHz~40GHz	Jul. 04, 2024	Feb. 25, 2025~ Mar. 05, 2025	Jul. 03, 2025	Radiation (03CH04-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz~3000MHz	Oct. 18, 2024	Feb. 25, 2025~ Mar. 05, 2025	Oct. 17, 2025	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 14, 2024	Feb. 25, 2025~ Mar. 05, 2025	Oct. 13, 2025	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 03, 2024	Feb. 25, 2025~ Mar. 05, 2025	Jul. 02, 2025	Radiation (03CH04-SZ)
Amplifier	Agilent Technologies	83017A	MY57280136	500MHz~26.5GHz	Jul. 03, 2024	Feb. 25, 2025~ Mar. 05, 2025	Jul. 02, 2025	Radiation (03CH04-SZ)
AC Power Source	APC	AFV-S-600B	F119050019	N/A	Oct. 14, 2024	Feb. 25, 2025~ Mar. 05, 2025	Oct. 13, 2025	Radiation (03CH04-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Feb. 25, 2025~ Mar. 05, 2025	NCR	Radiation (03CH04-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Feb. 25, 2025~ Mar. 05, 2025	NCR	Radiation (03CH04-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

Conducted Spurious Emission & Bandedge	±2.22 dB
Occupied Channel Bandwidth	±0.1%
Conducted Power	±0.50 dB
Conducted Power Spectral Density	±0.90 dB
Frequency	±0.04 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))	5.1 dB
---	--------

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.1 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.8 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.1 dB
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----- THE END -----



Appendix A. Conducted Test Results



Ambient Condition: 24-26 °C, 45-55 %RH

According Standard: ■Part15C

Test Date: 2025.02.22~2025.2.24

Test Engineer: Chen ZhiQiang

MIMO

DTS Bandwidth

Test Result

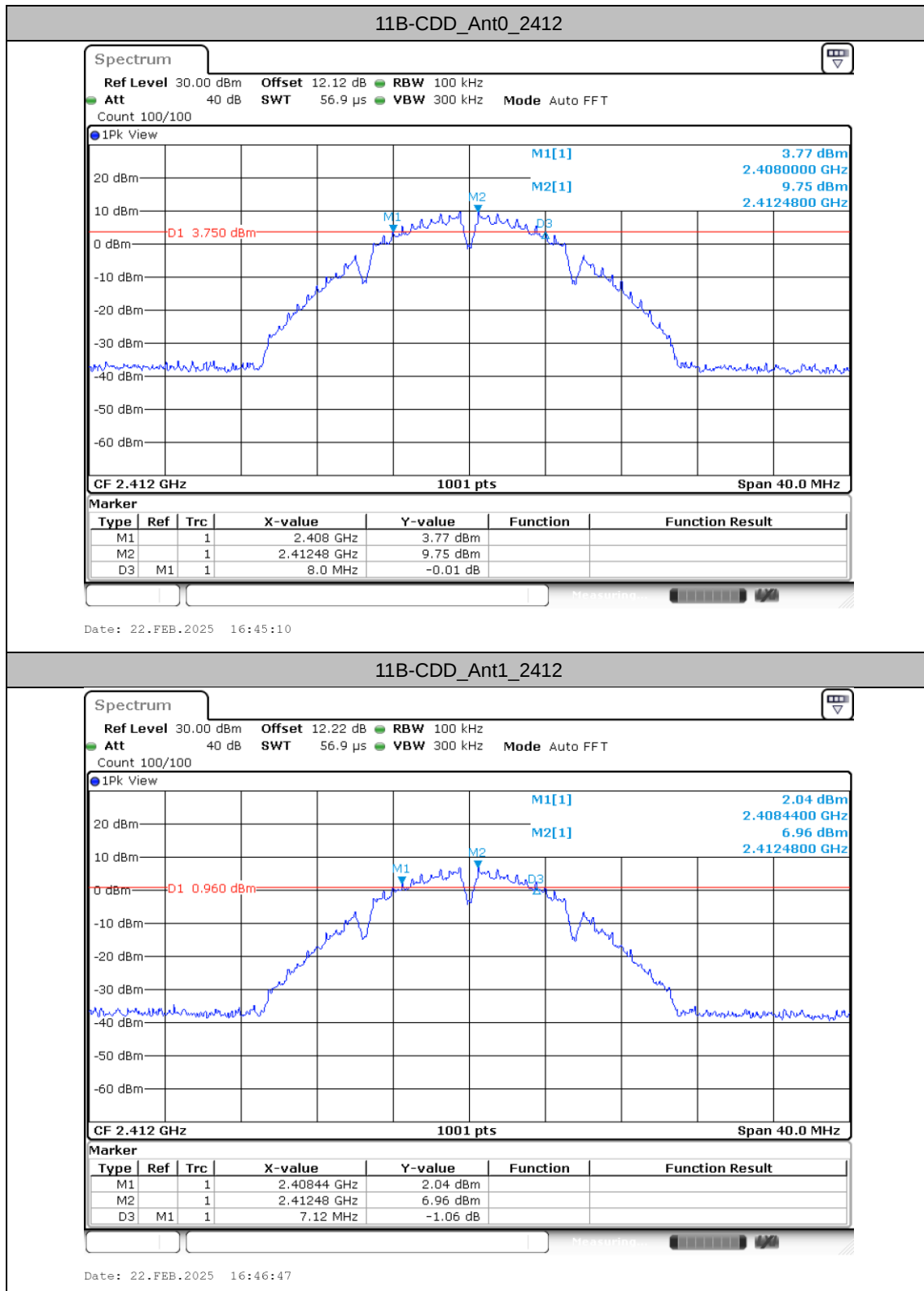
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B-CDD	Ant0	2412	8.00	2408.00	2416.00	0.5	PASS
	Ant1	2412	7.12	2408.44	2415.56	0.5	PASS
	Ant0	2437	8.04	2432.96	2441.00	0.5	PASS
	Ant1	2437	8.04	2432.96	2441.00	0.5	PASS
	Ant0	2462	7.08	2458.44	2465.52	0.5	PASS
	Ant1	2462	7.08	2458.44	2465.52	0.5	PASS
11G-CDD	Ant0	2412	16.36	2403.80	2420.16	0.5	PASS
	Ant1	2412	16.36	2403.80	2420.16	0.5	PASS
	Ant0	2437	16.36	2428.80	2445.16	0.5	PASS
	Ant1	2437	16.36	2428.80	2445.16	0.5	PASS
	Ant0	2462	16.36	2453.80	2470.16	0.5	PASS
	Ant1	2462	16.36	2453.80	2470.16	0.5	PASS
11N20MIMO	Ant0	2412	17.80	2403.08	2420.88	0.5	PASS
	Ant1	2412	17.60	2403.20	2420.80	0.5	PASS
	Ant0	2437	17.60	2428.20	2445.80	0.5	PASS
	Ant1	2437	17.60	2428.20	2445.80	0.5	PASS
	Ant0	2462	17.60	2453.20	2470.80	0.5	PASS
	Ant1	2462	17.60	2453.20	2470.80	0.5	PASS
11N40MIMO	Ant0	2422	36.40	2403.76	2440.16	0.5	PASS
	Ant1	2422	36.32	2403.84	2440.16	0.5	PASS
	Ant0	2437	36.32	2418.84	2455.16	0.5	PASS
	Ant1	2437	36.48	2418.76	2455.24	0.5	PASS
	Ant0	2452	36.40	2433.76	2470.16	0.5	PASS
	Ant1	2452	36.40	2433.76	2470.16	0.5	PASS
11AX20MIMO	Ant0	2412	19.20	2402.40	2421.60	0.5	PASS
	Ant1	2412	19.00	2402.48	2421.48	0.5	PASS
	Ant0	2437	19.04	2427.48	2446.52	0.5	PASS
	Ant1	2437	19.04	2427.48	2446.52	0.5	PASS

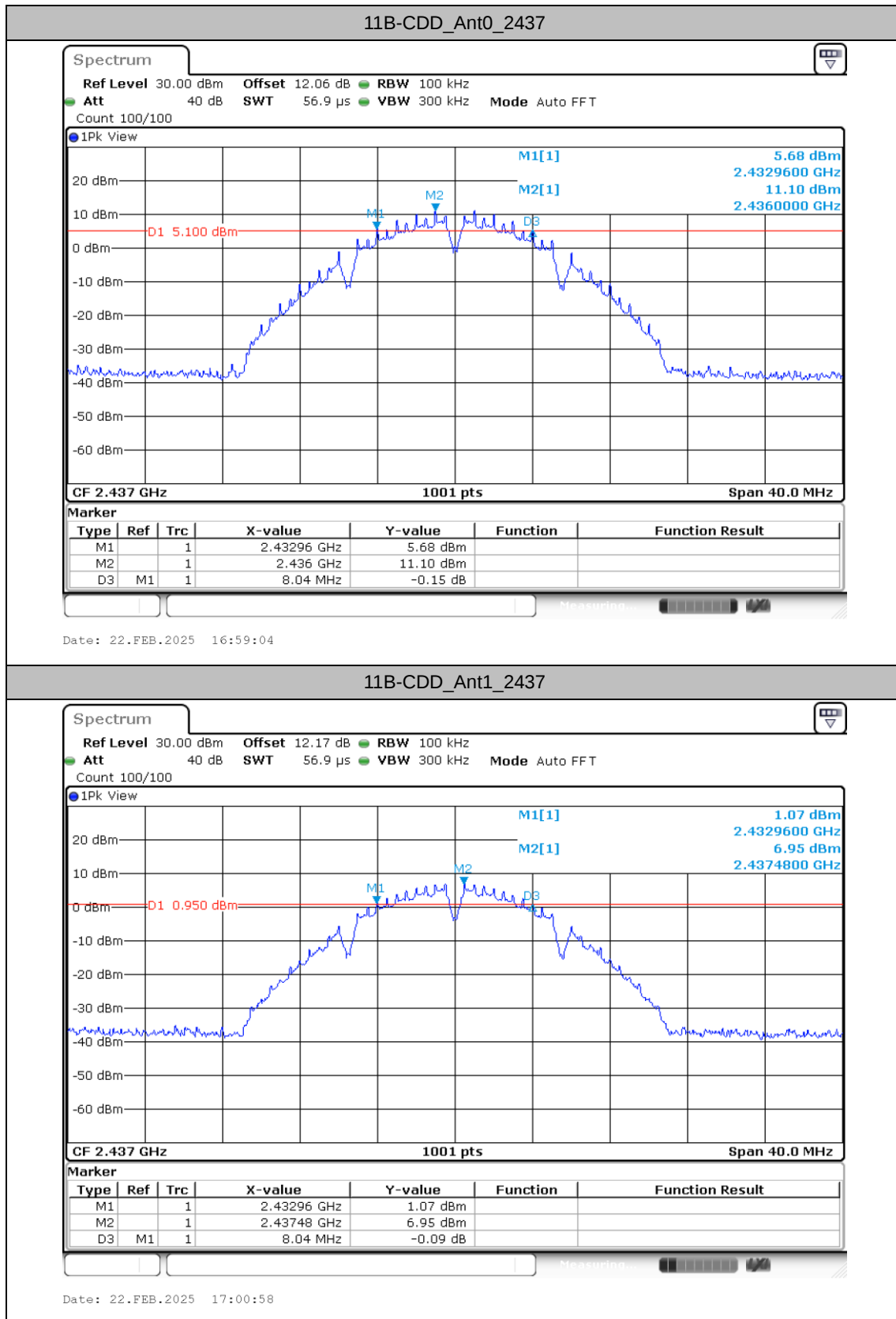


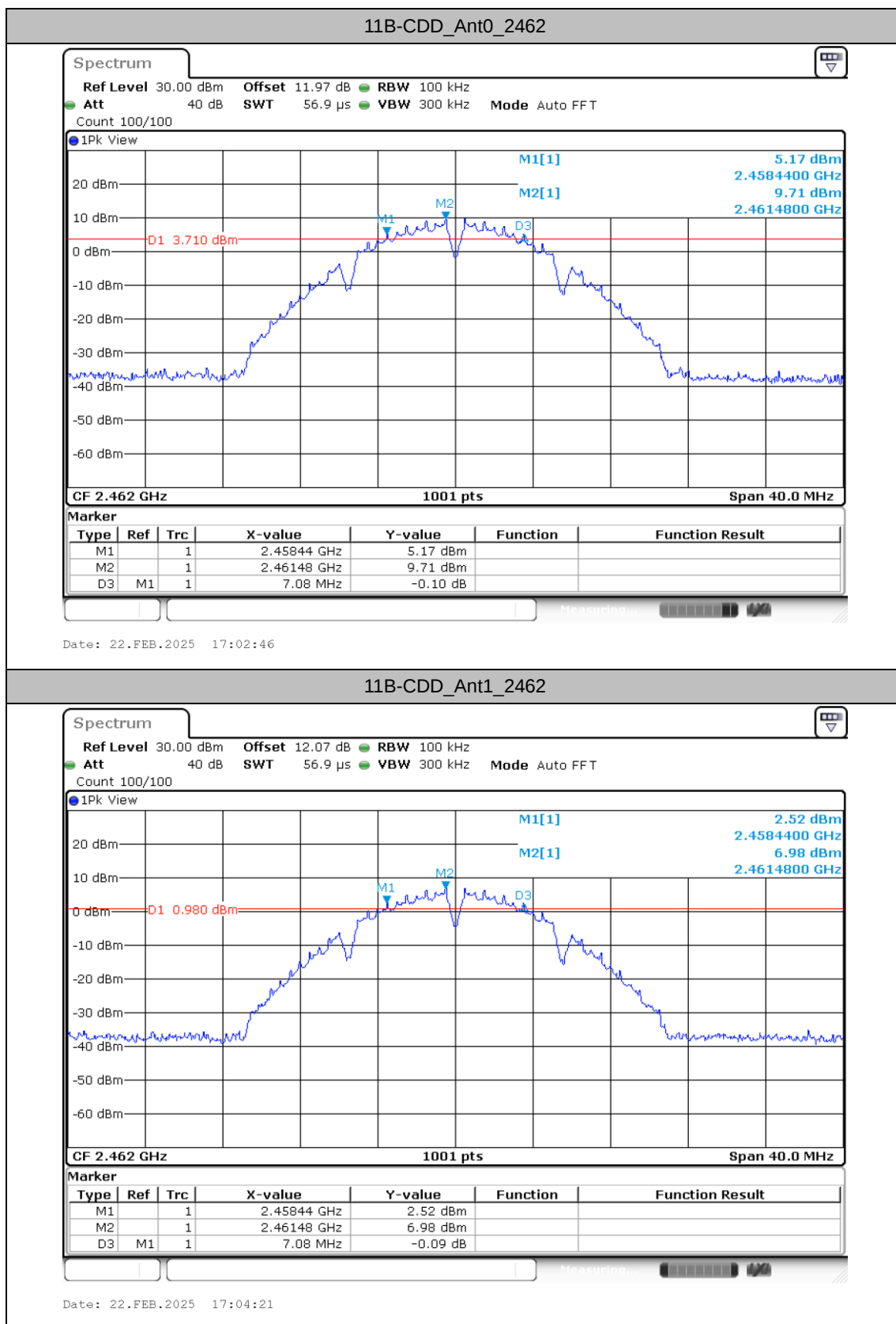
	Ant0	2462	19.08	2452.44	2471.52	0.5	PASS
	Ant1	2462	19.00	2452.48	2471.48	0.5	PASS
11AX40MIMO	Ant0	2422	38.32	2402.88	2441.20	0.5	PASS
	Ant1	2422	38.00	2403.04	2441.04	0.5	PASS
	Ant0	2437	38.24	2417.88	2456.12	0.5	PASS
	Ant1	2437	38.24	2417.88	2456.12	0.5	PASS
	Ant0	2452	38.32	2432.80	2471.12	0.5	PASS
	Ant1	2452	38.40	2432.80	2471.20	0.5	PASS
11BE20MIMO	Ant0	2412	19.04	2402.48	2421.52	0.5	PASS
	Ant1	2412	19.00	2402.48	2421.48	0.5	PASS
	Ant0	2437	19.08	2427.44	2446.52	0.5	PASS
	Ant1	2437	19.00	2427.48	2446.48	0.5	PASS
	Ant0	2462	19.04	2452.48	2471.52	0.5	PASS
	Ant1	2462	19.08	2452.44	2471.52	0.5	PASS
11BE40MIMO	Ant0	2422	38.32	2402.80	2441.12	0.5	PASS
	Ant1	2422	38.32	2402.80	2441.12	0.5	PASS
	Ant0	2437	38.32	2417.80	2456.12	0.5	PASS
	Ant1	2437	38.24	2417.88	2456.12	0.5	PASS
	Ant0	2452	38.16	2432.96	2471.12	0.5	PASS
	Ant1	2452	38.32	2432.88	2471.20	0.5	PASS

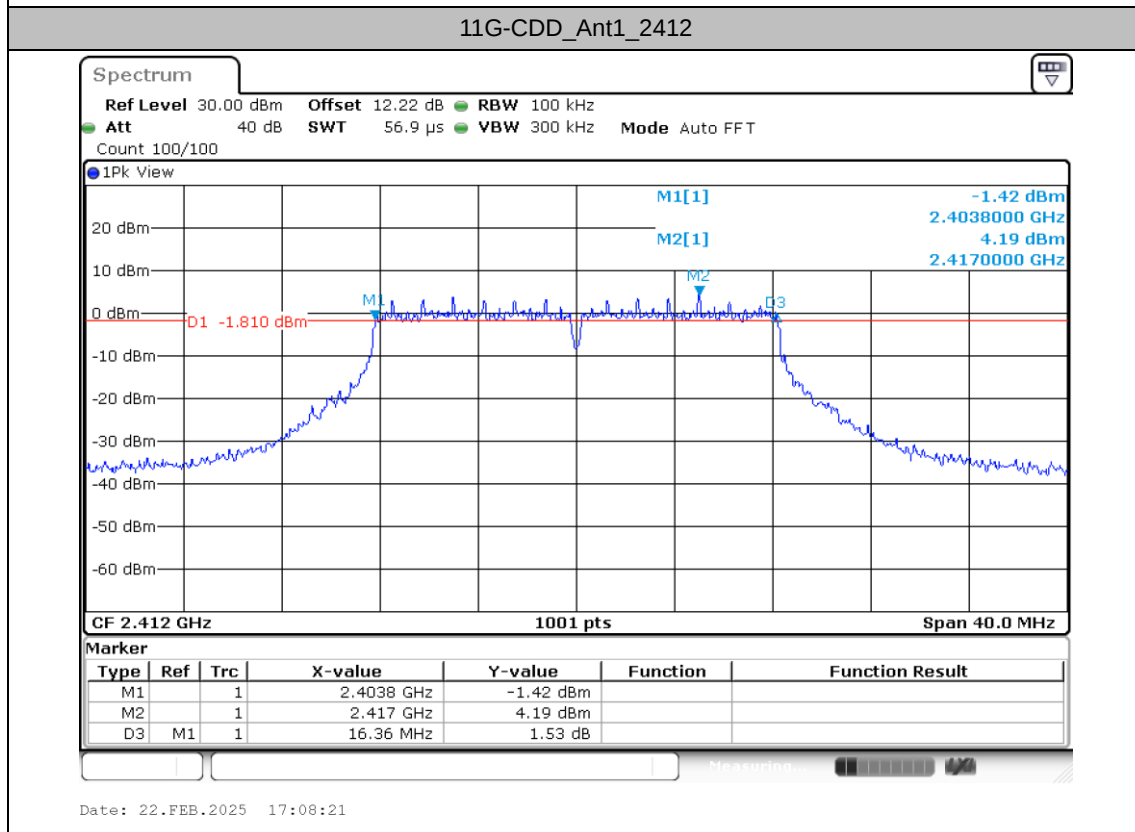
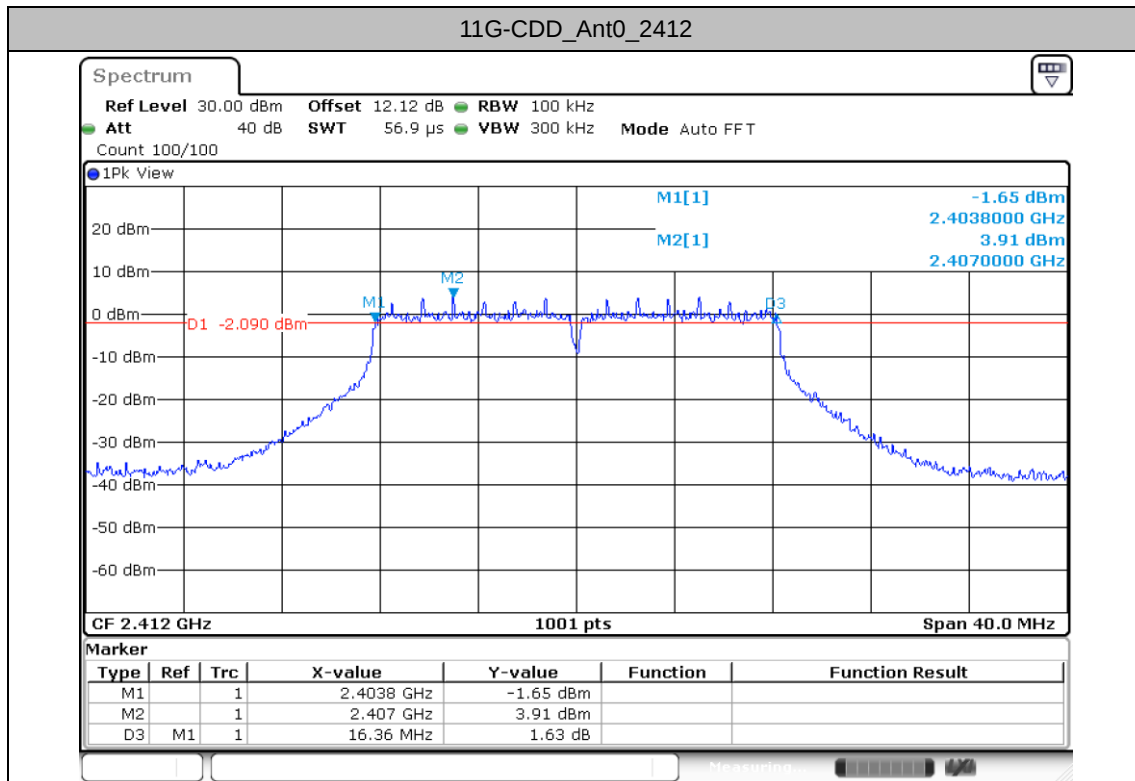


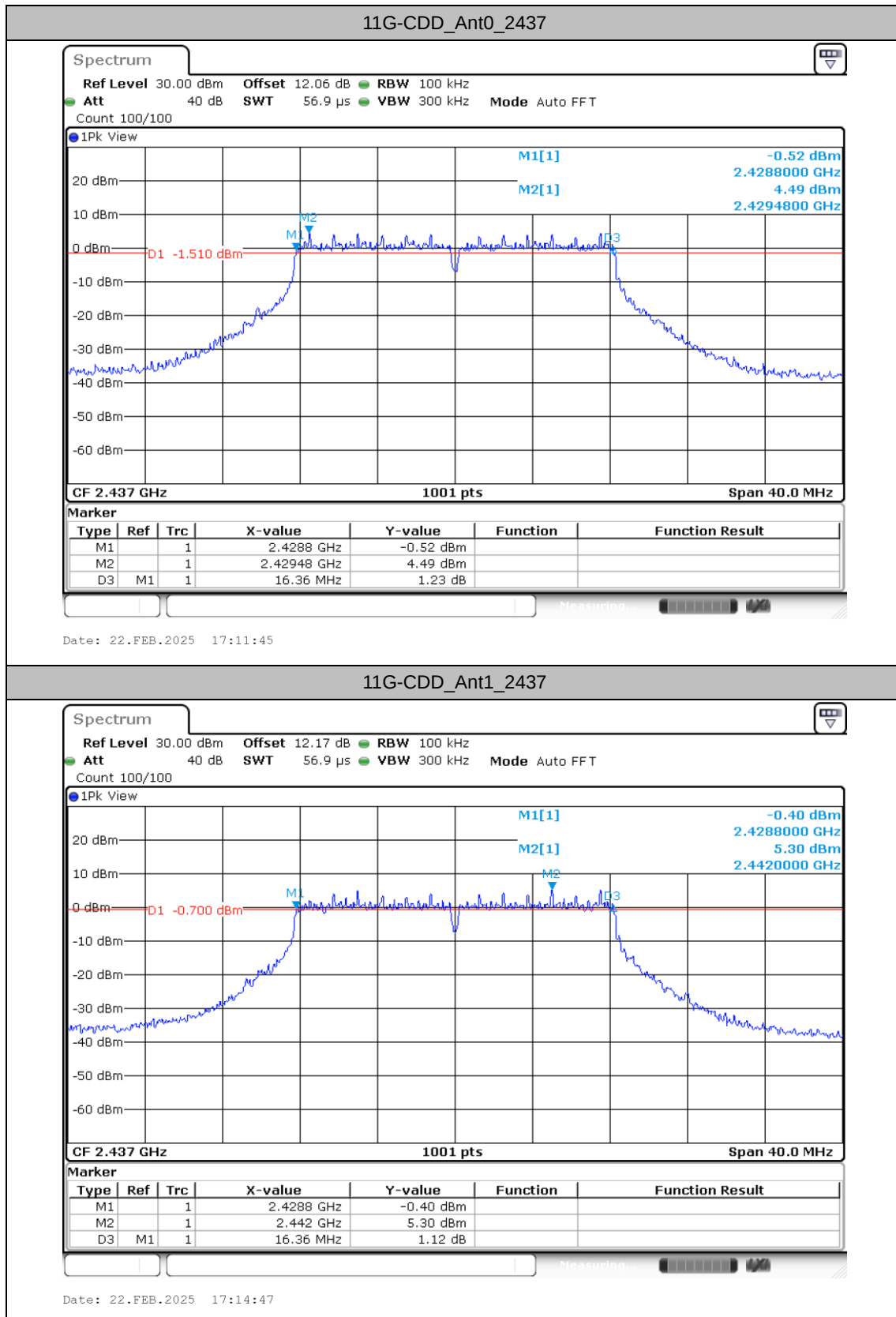
Test Graphs

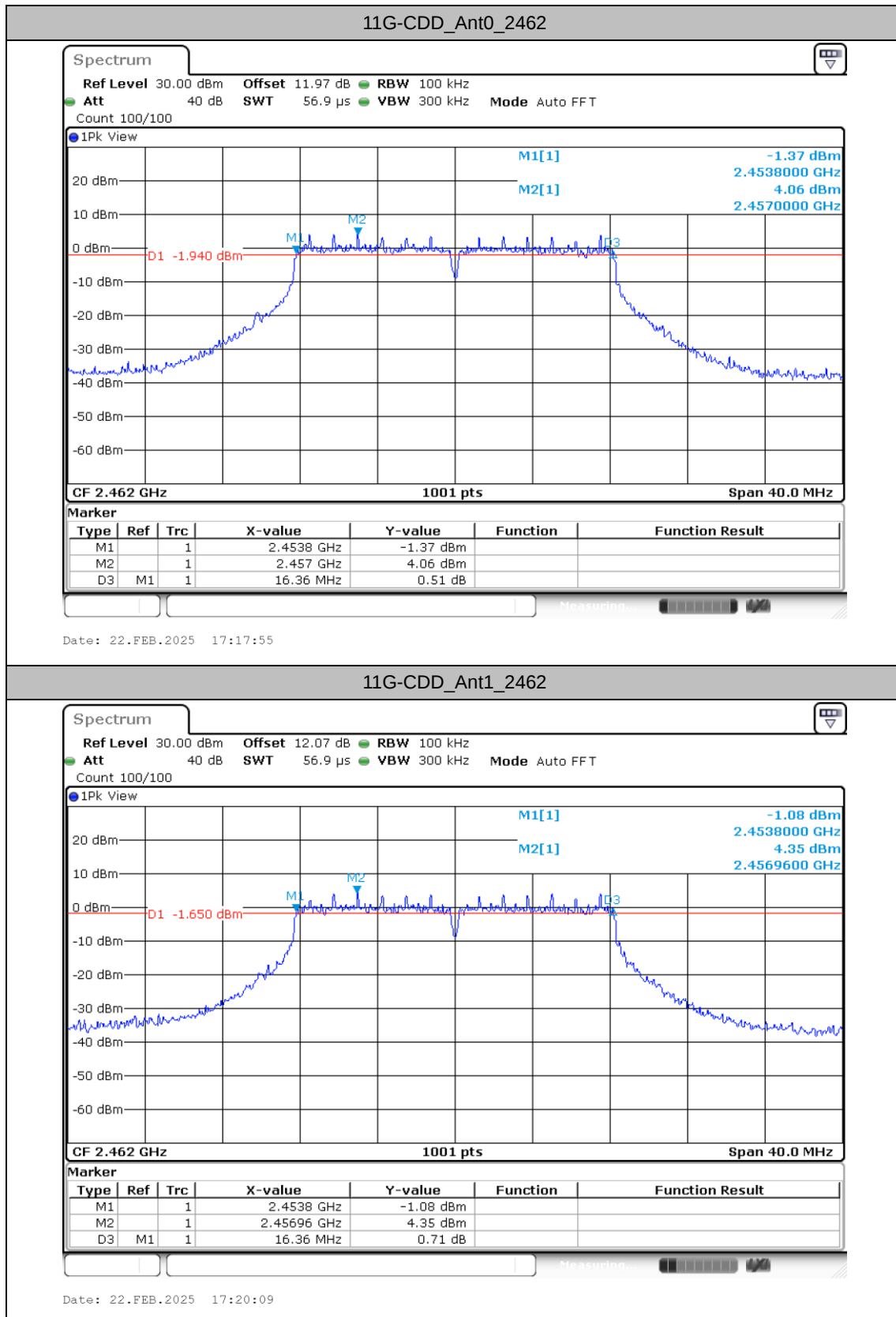


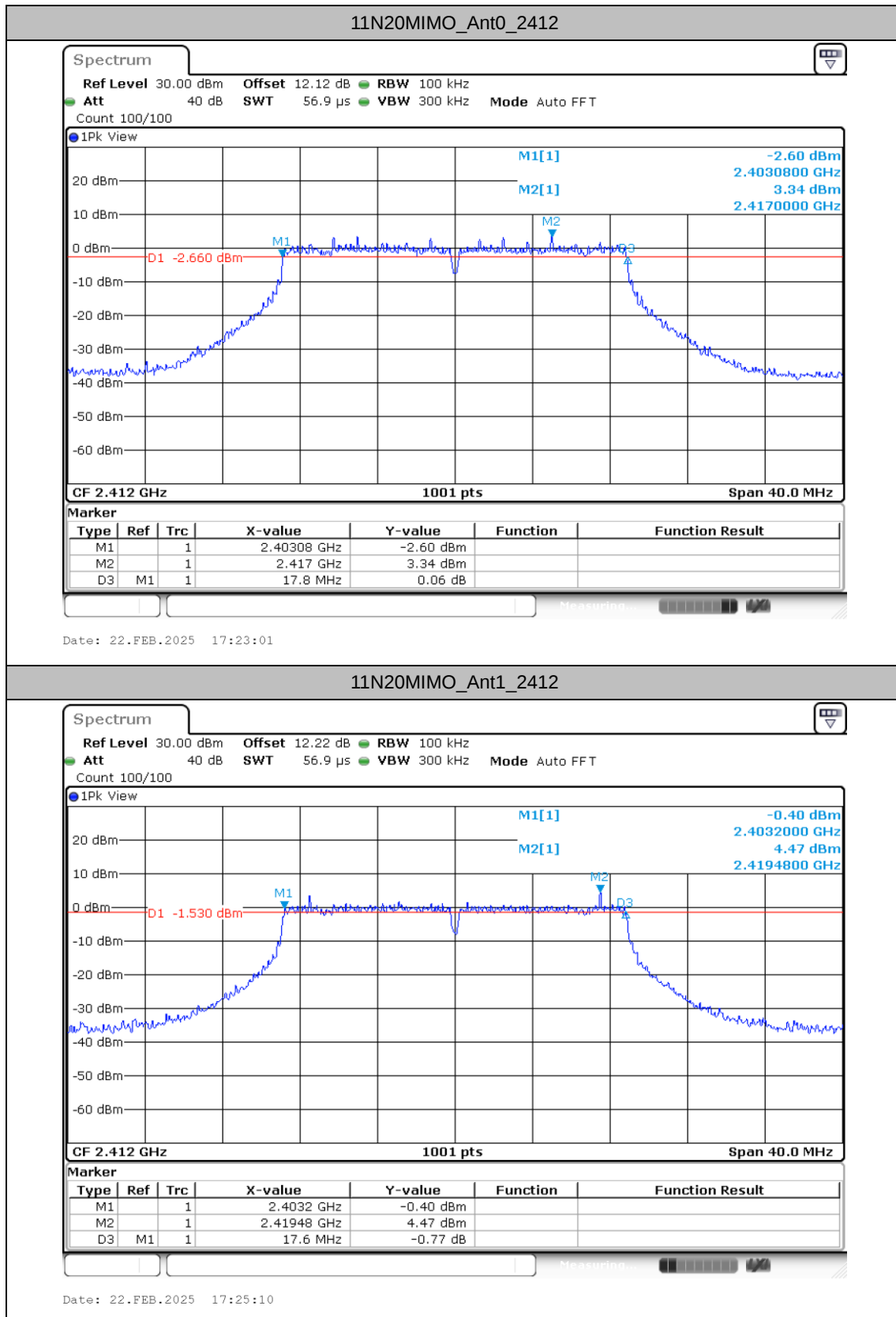


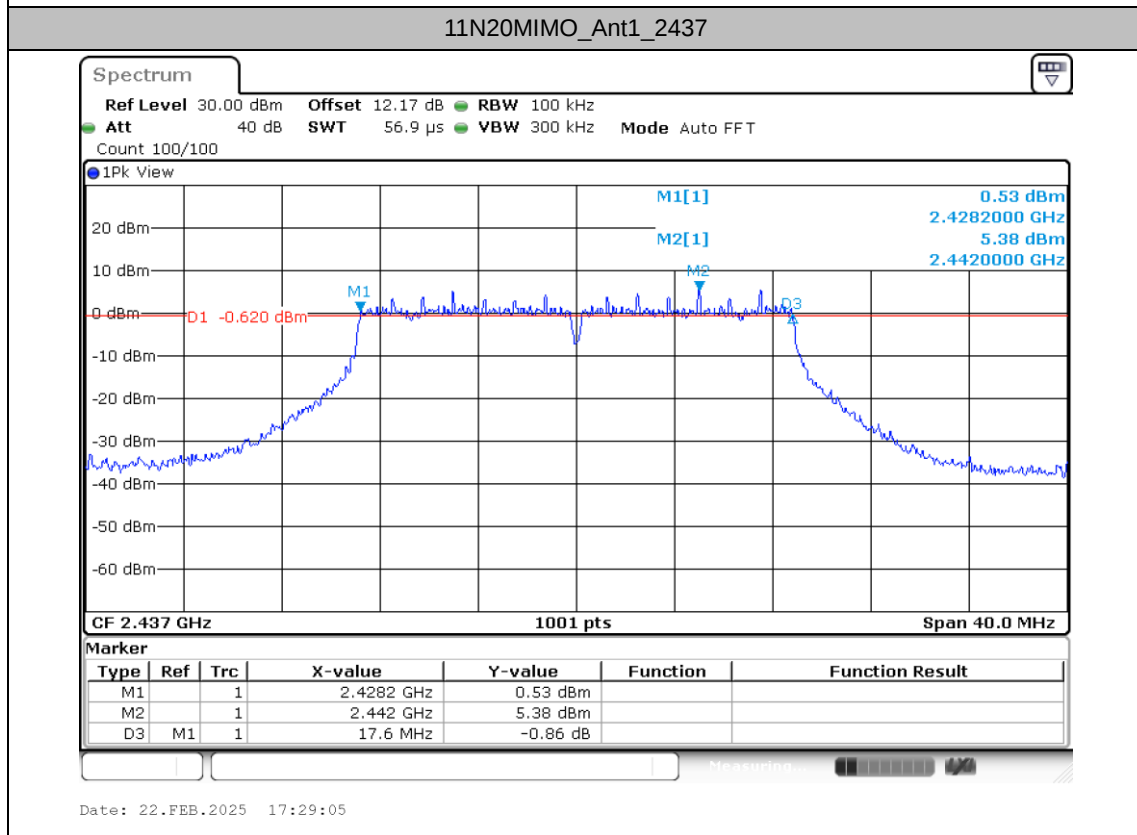
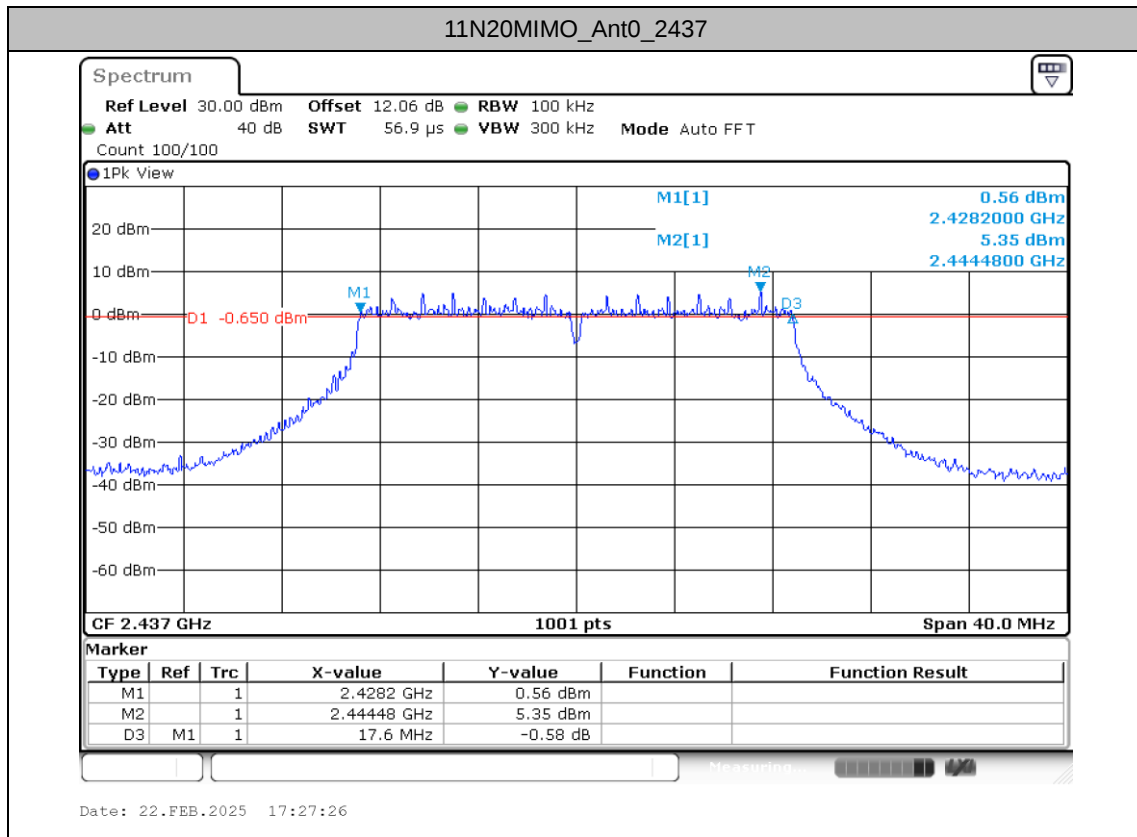


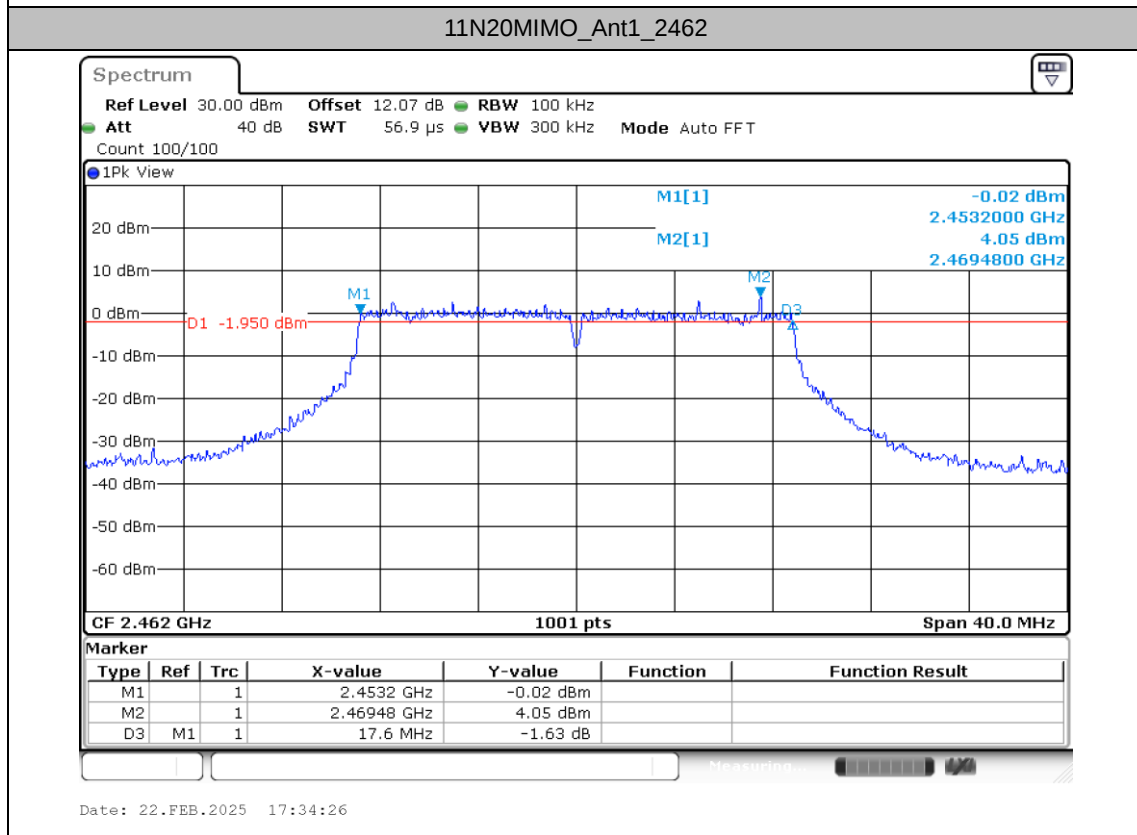
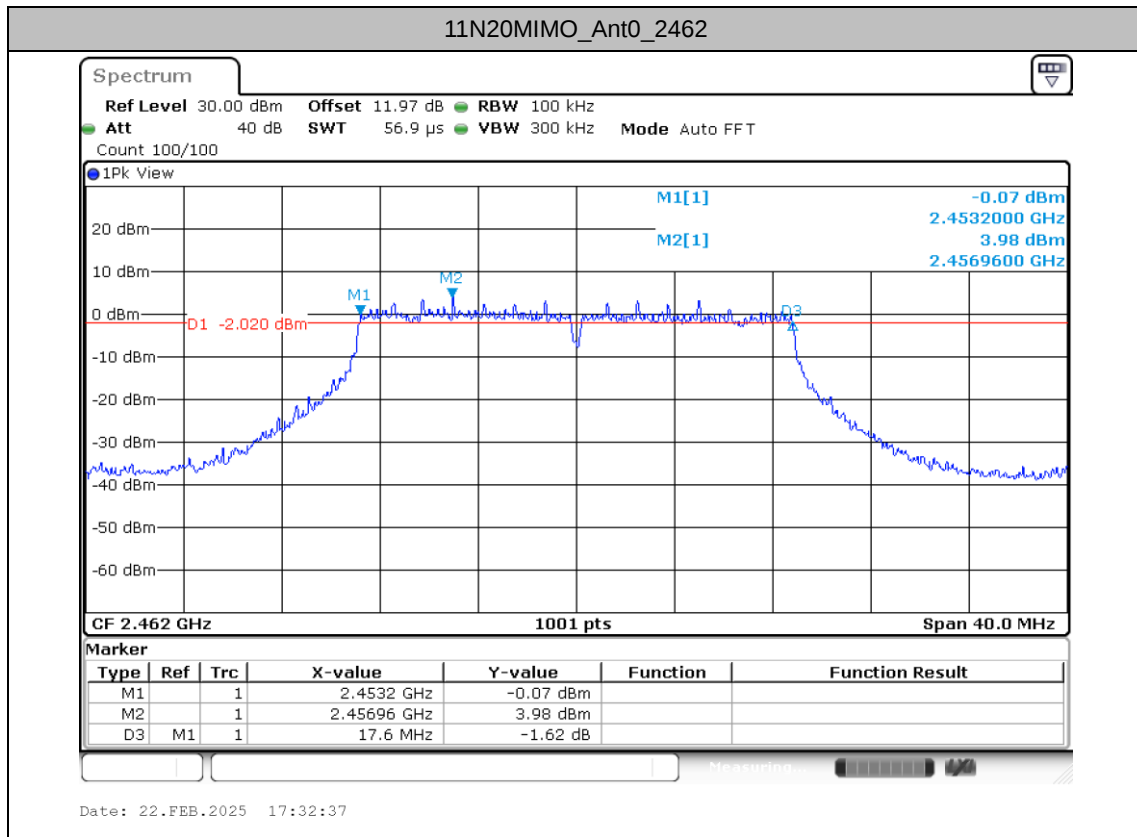


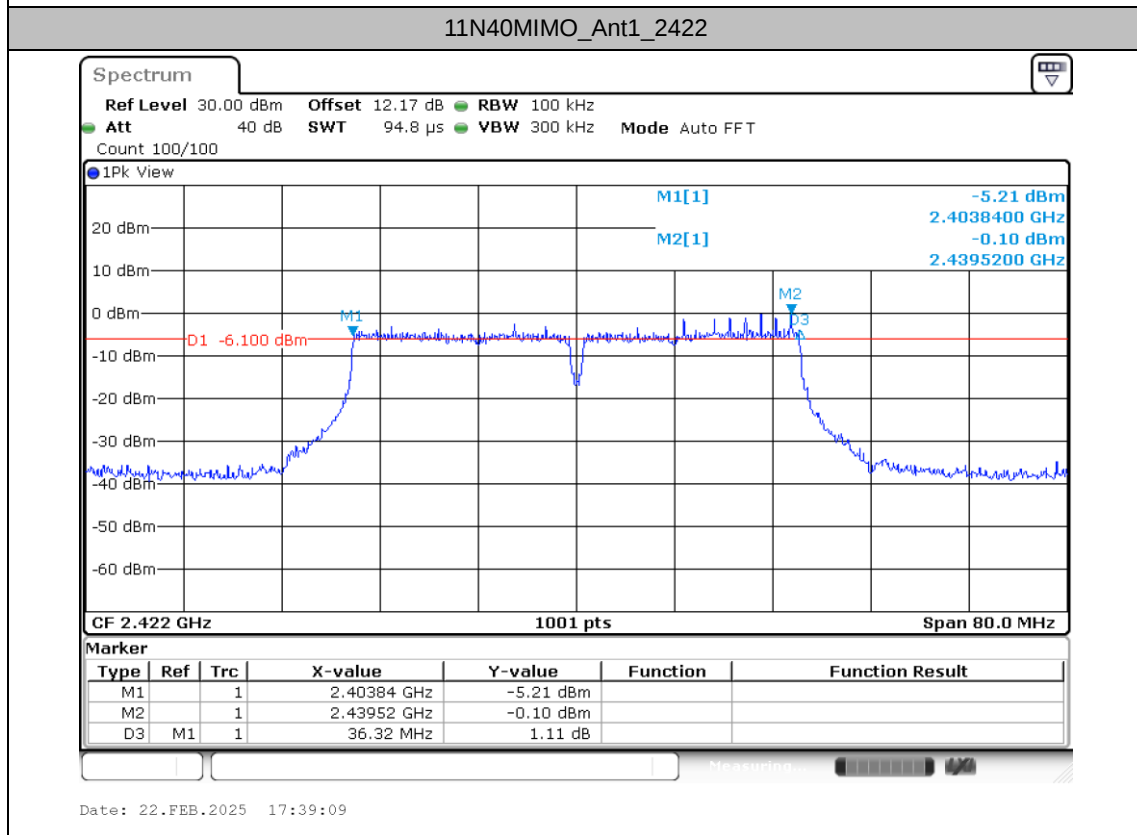
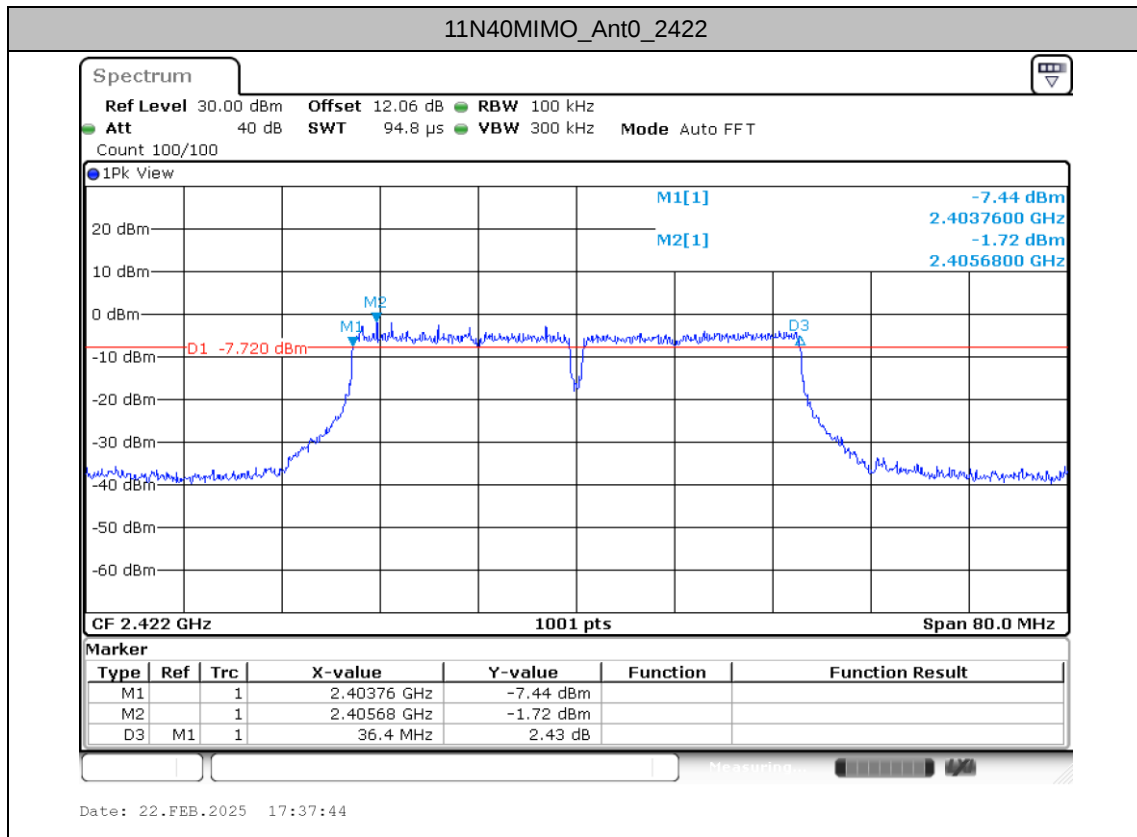


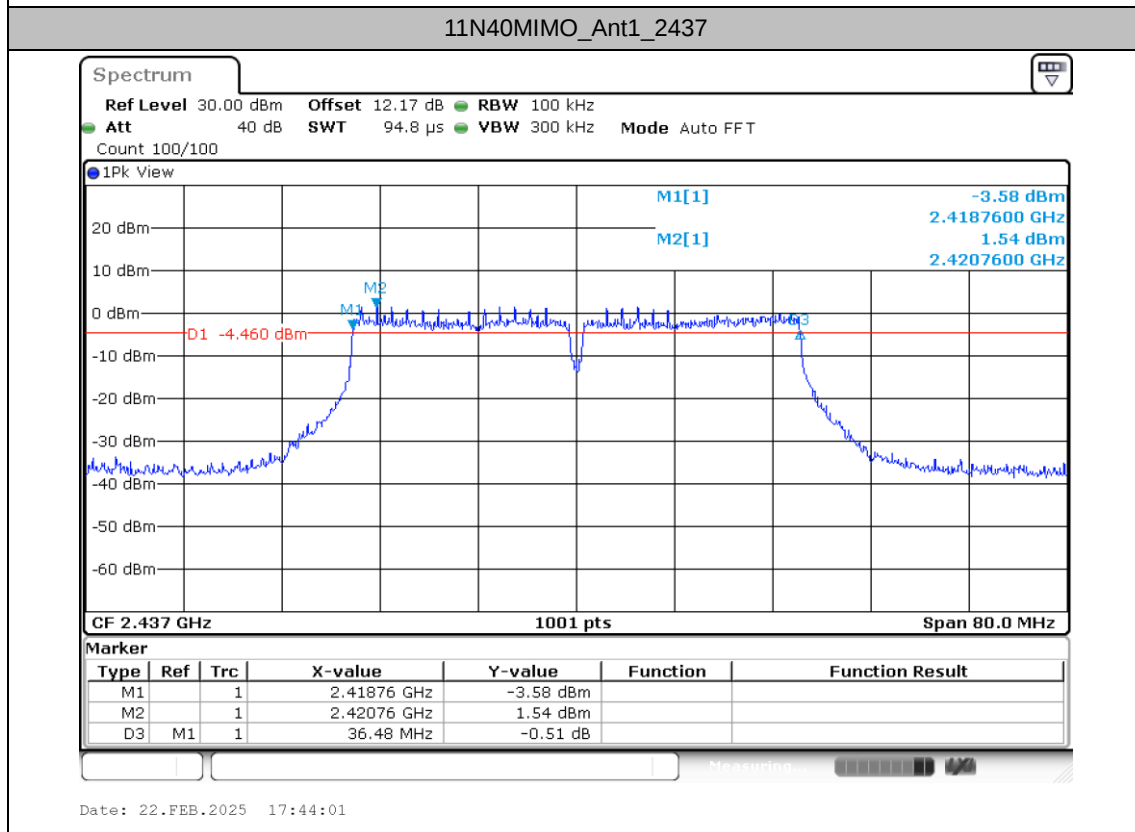
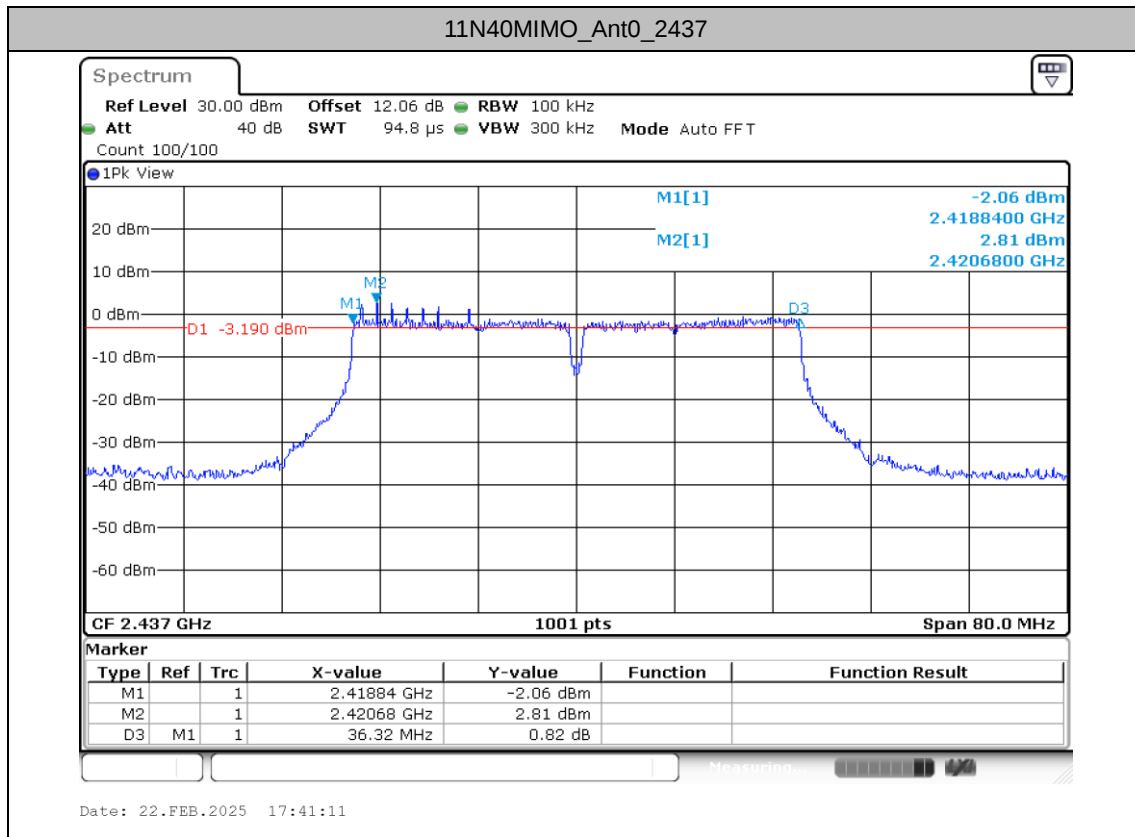


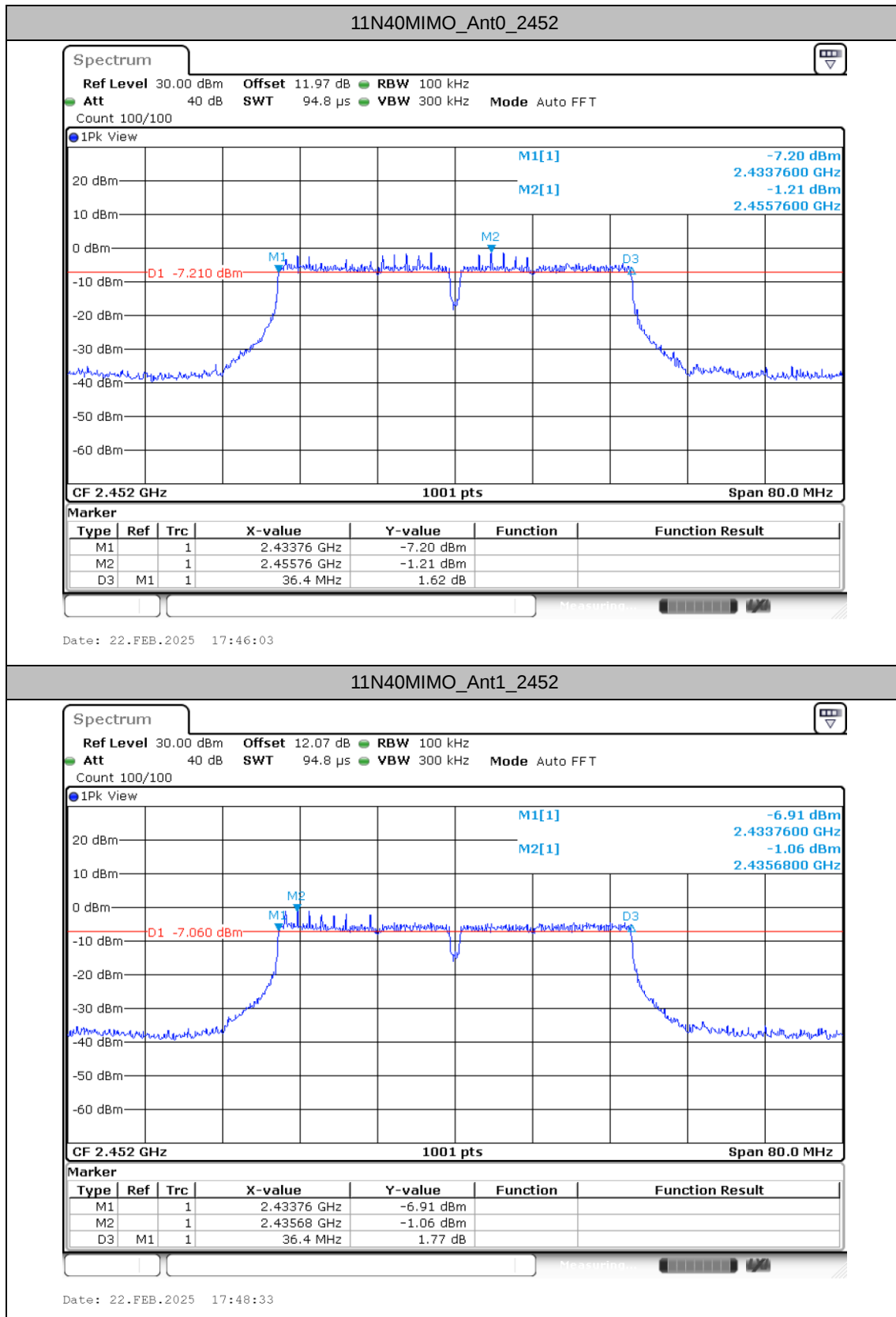


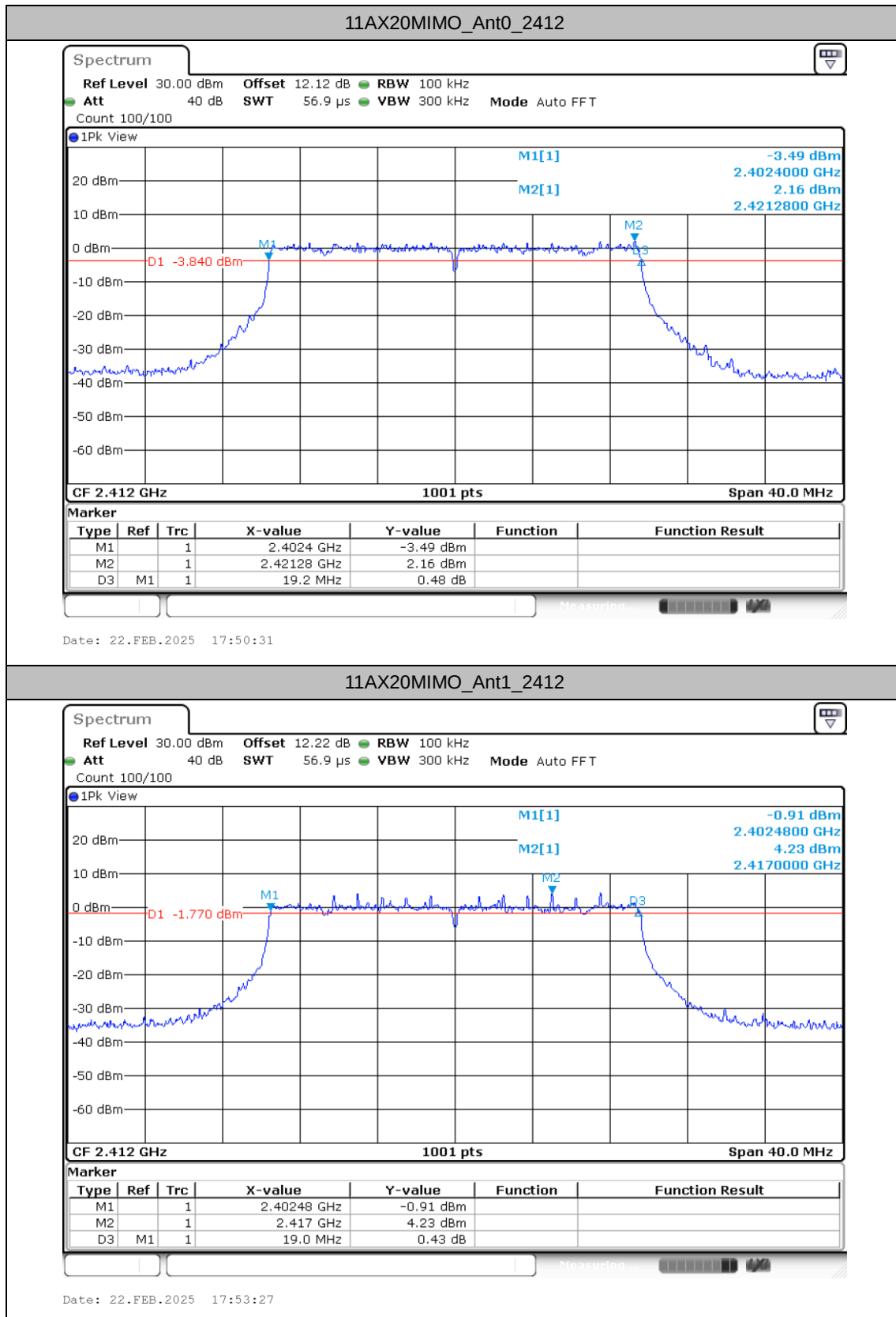


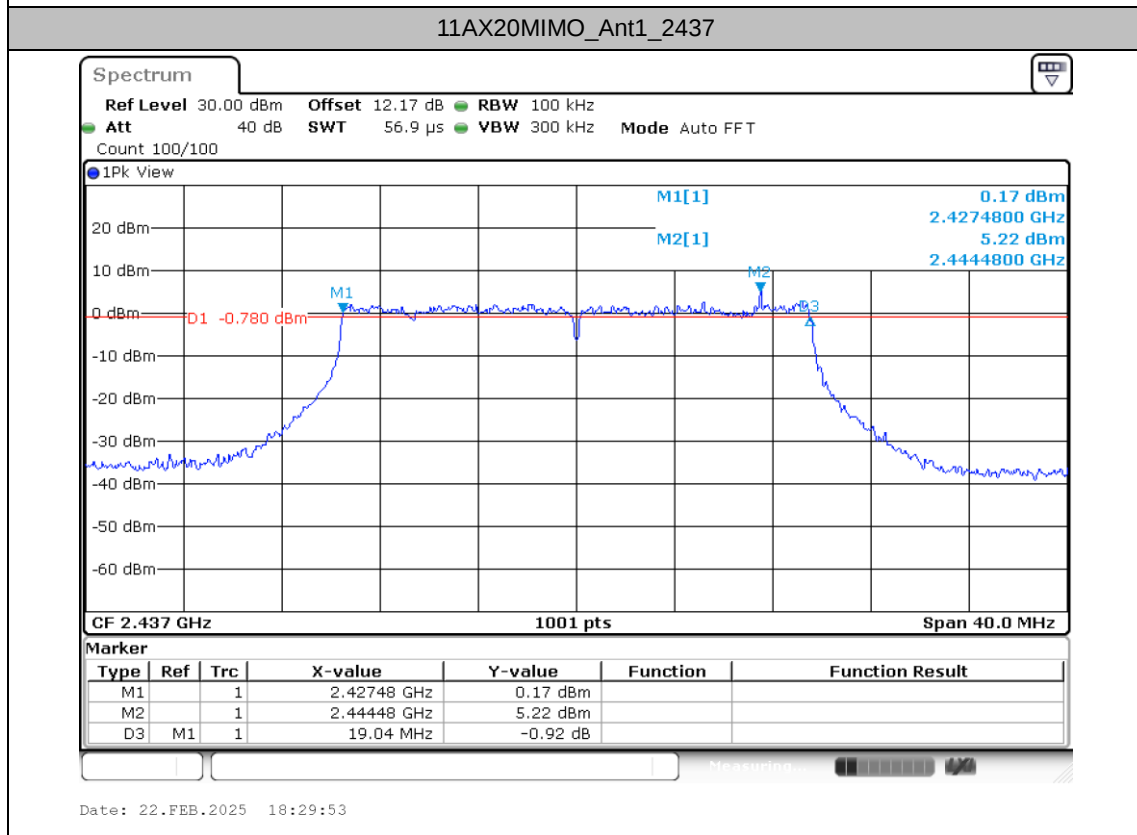
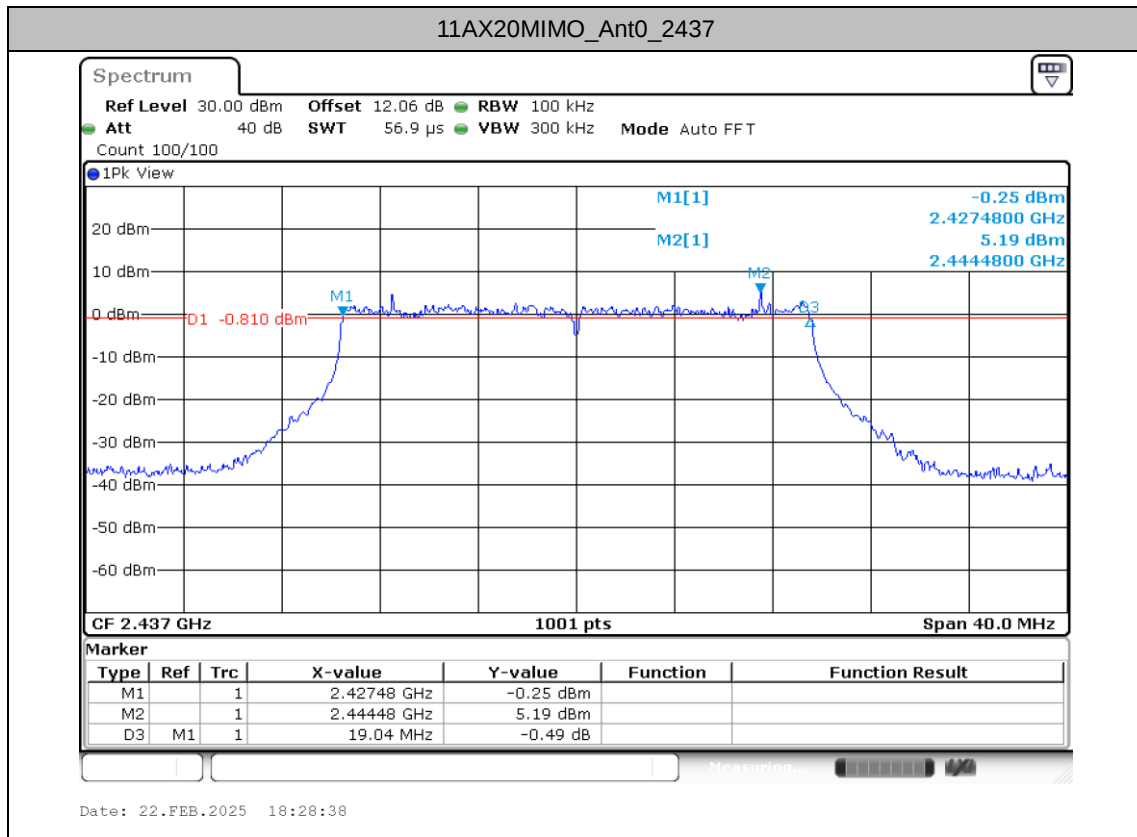


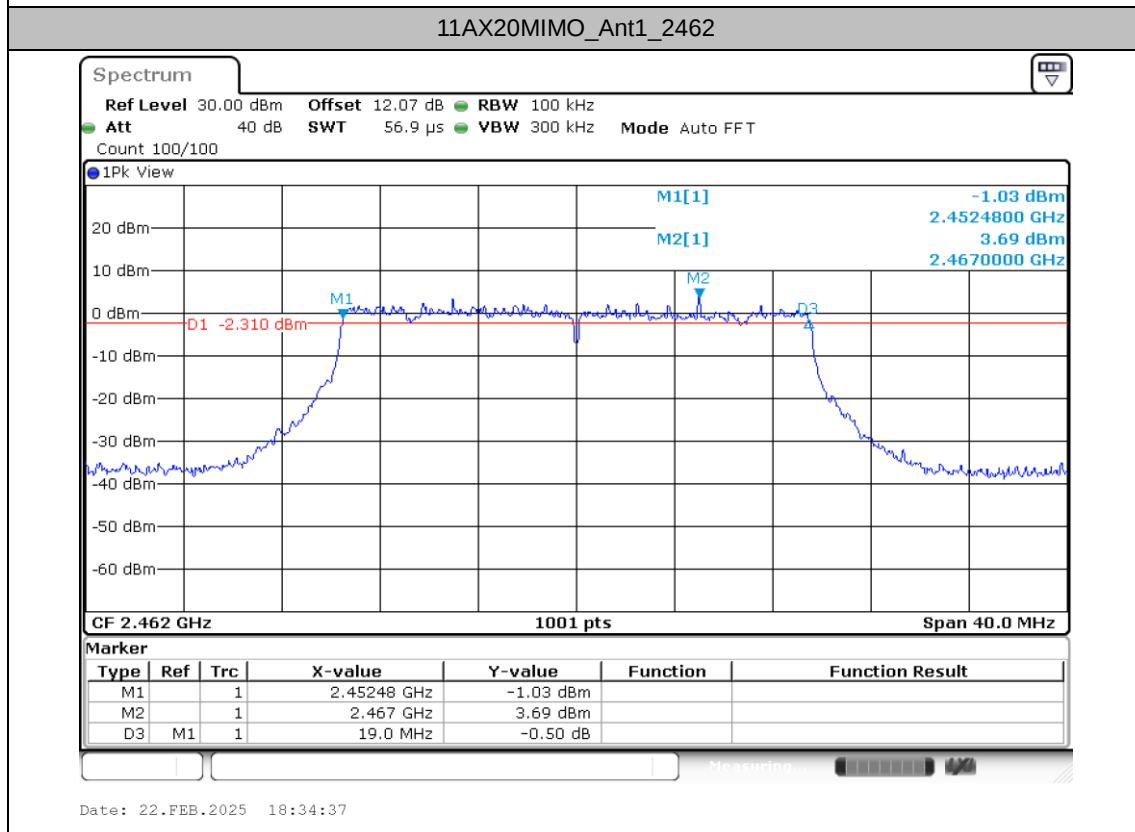
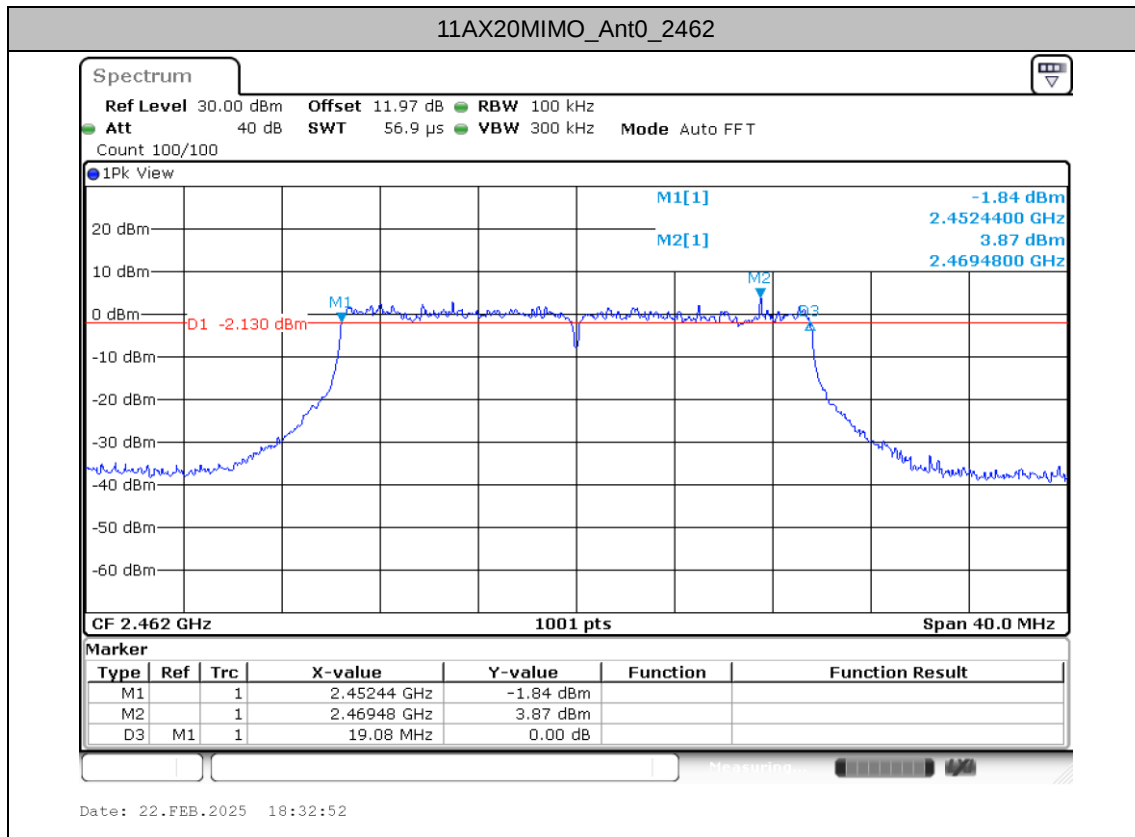


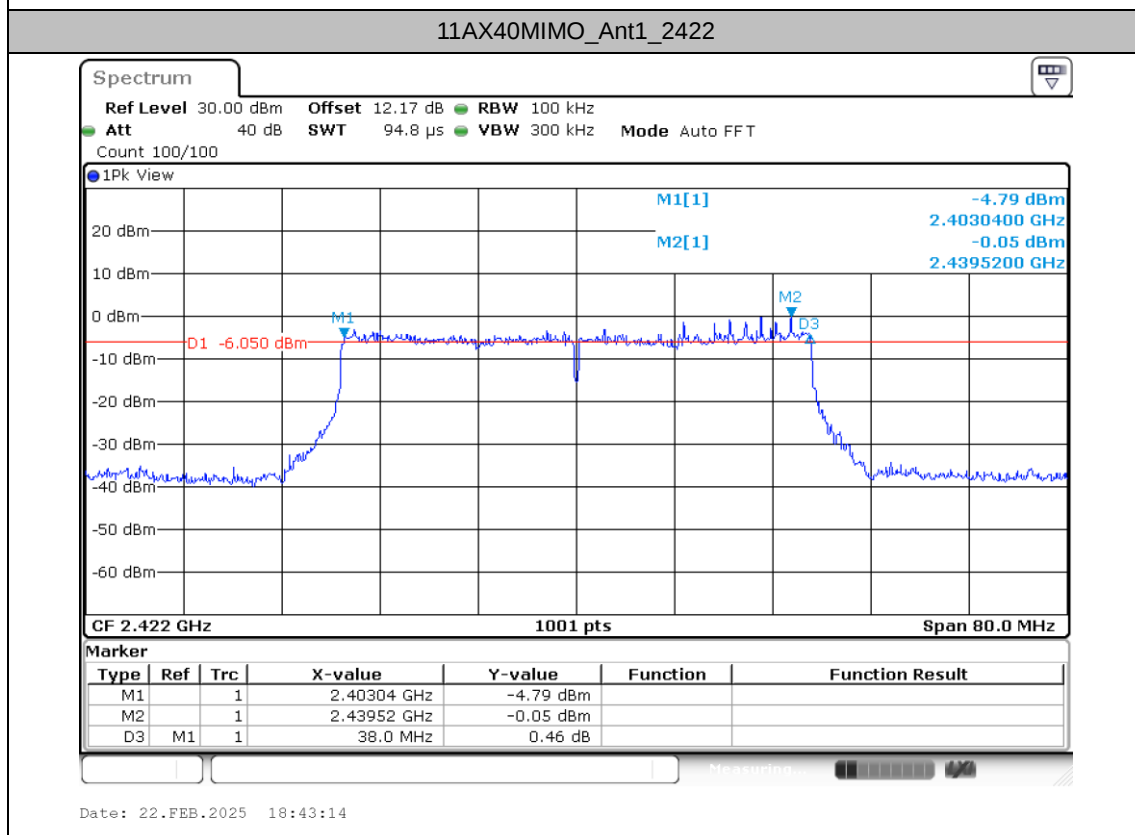
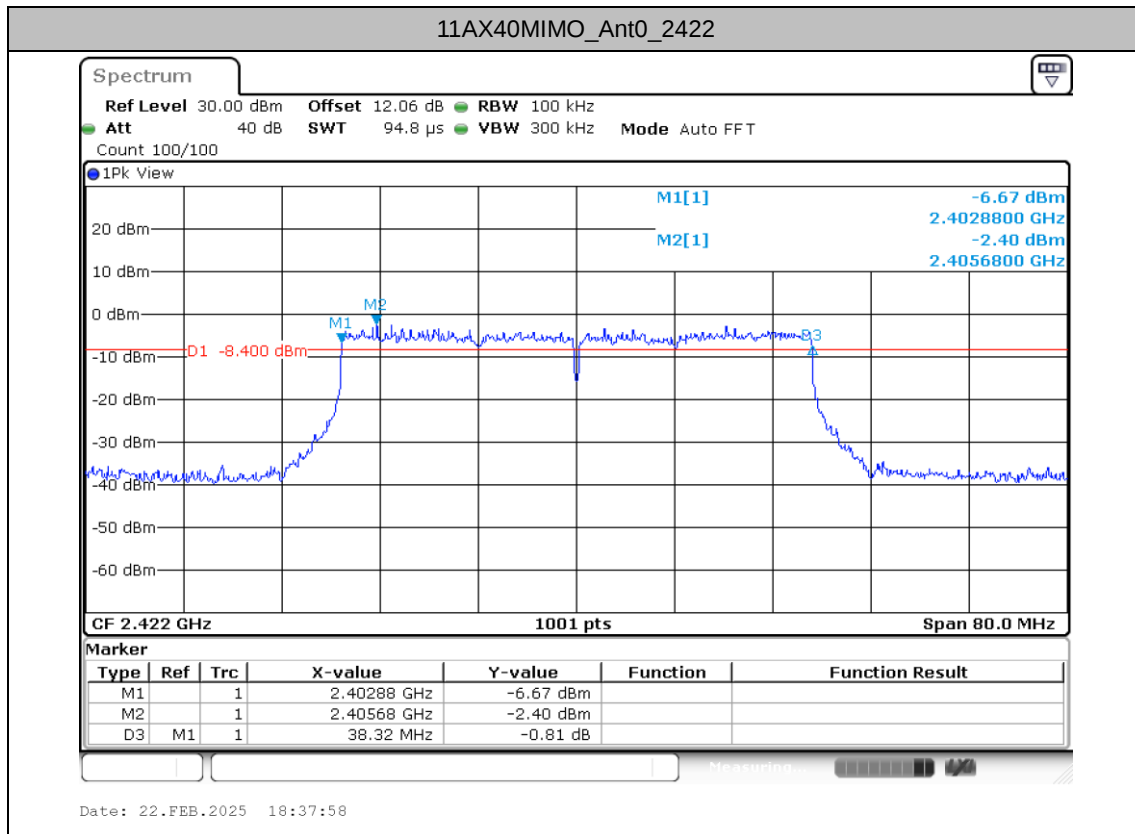


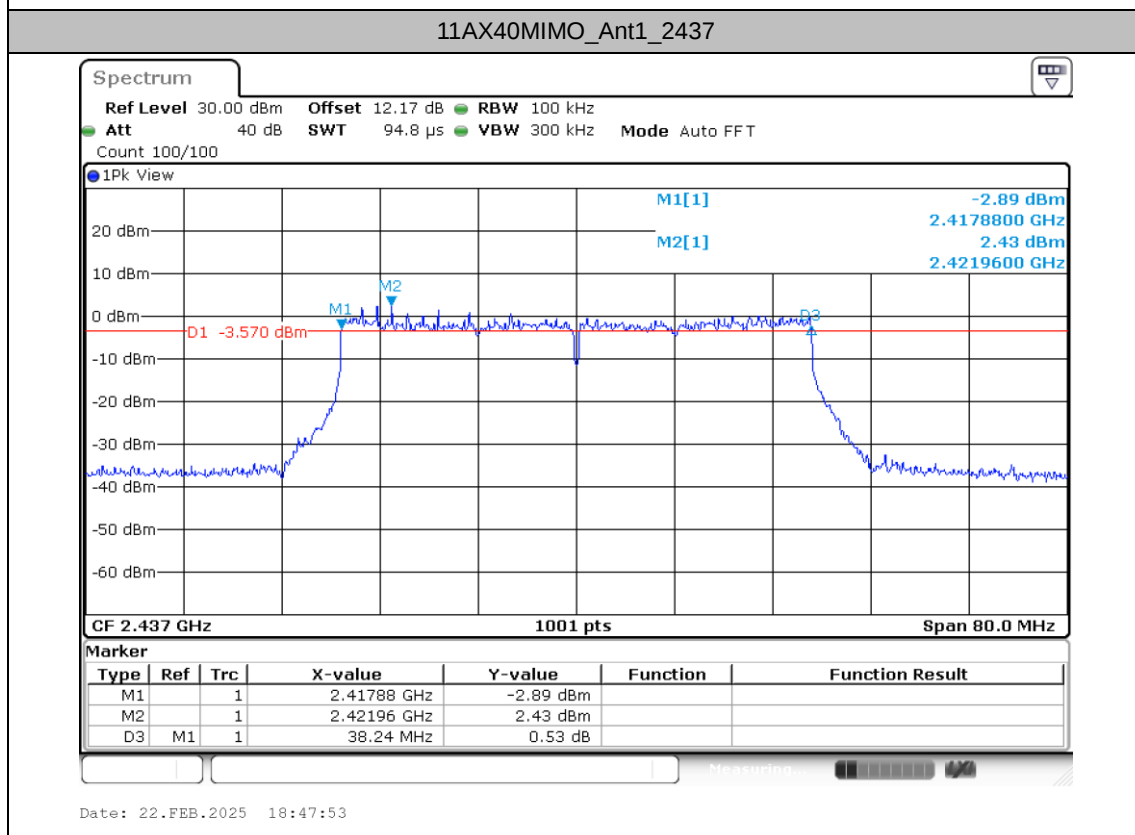
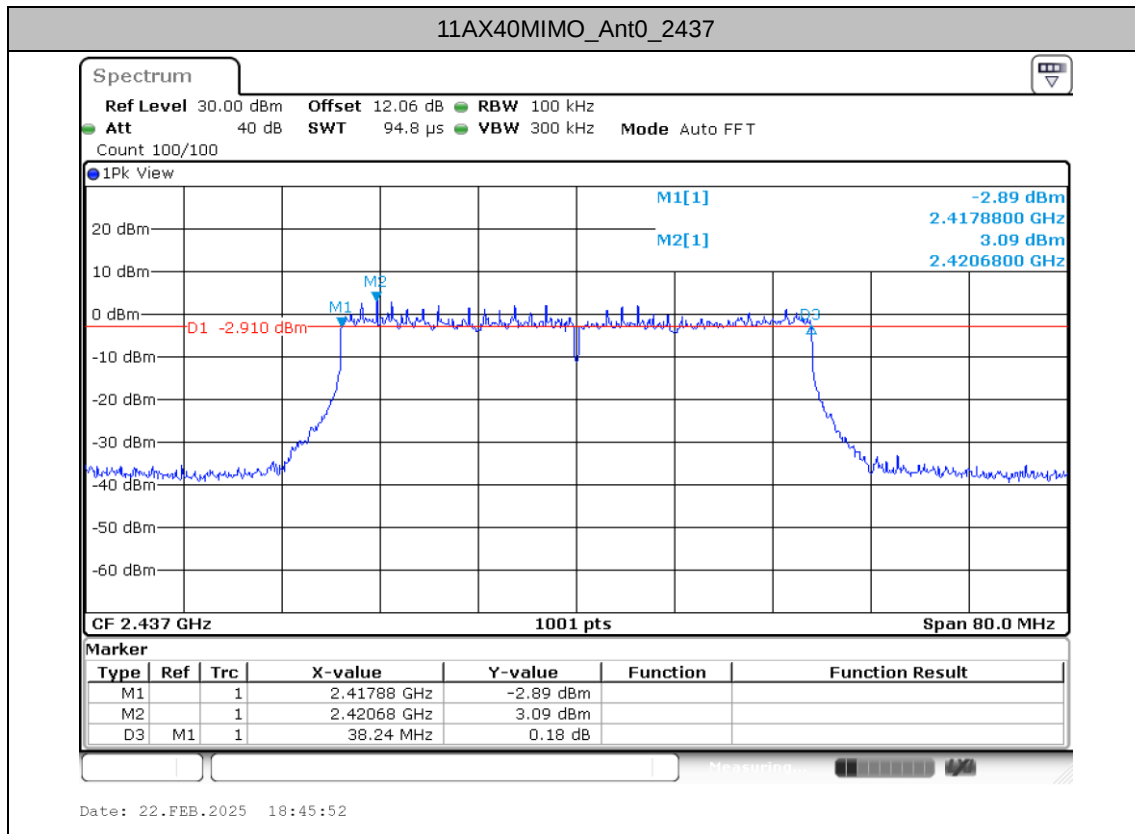


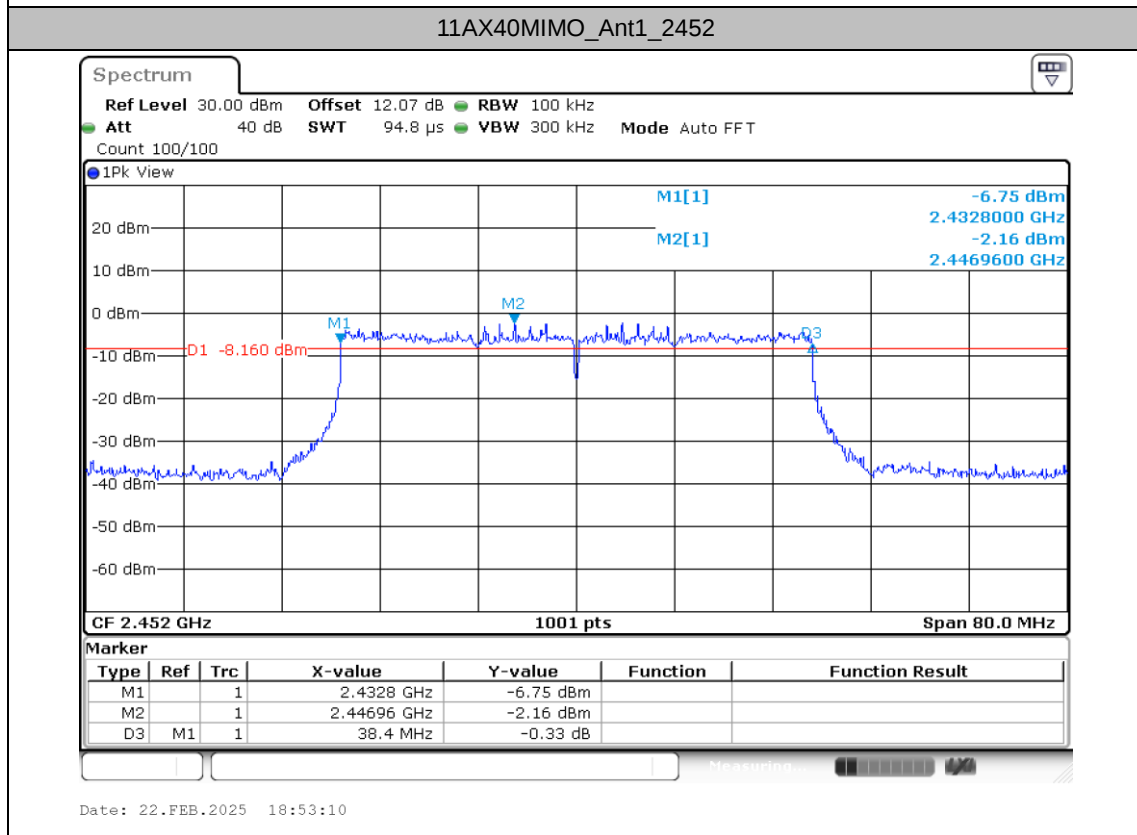
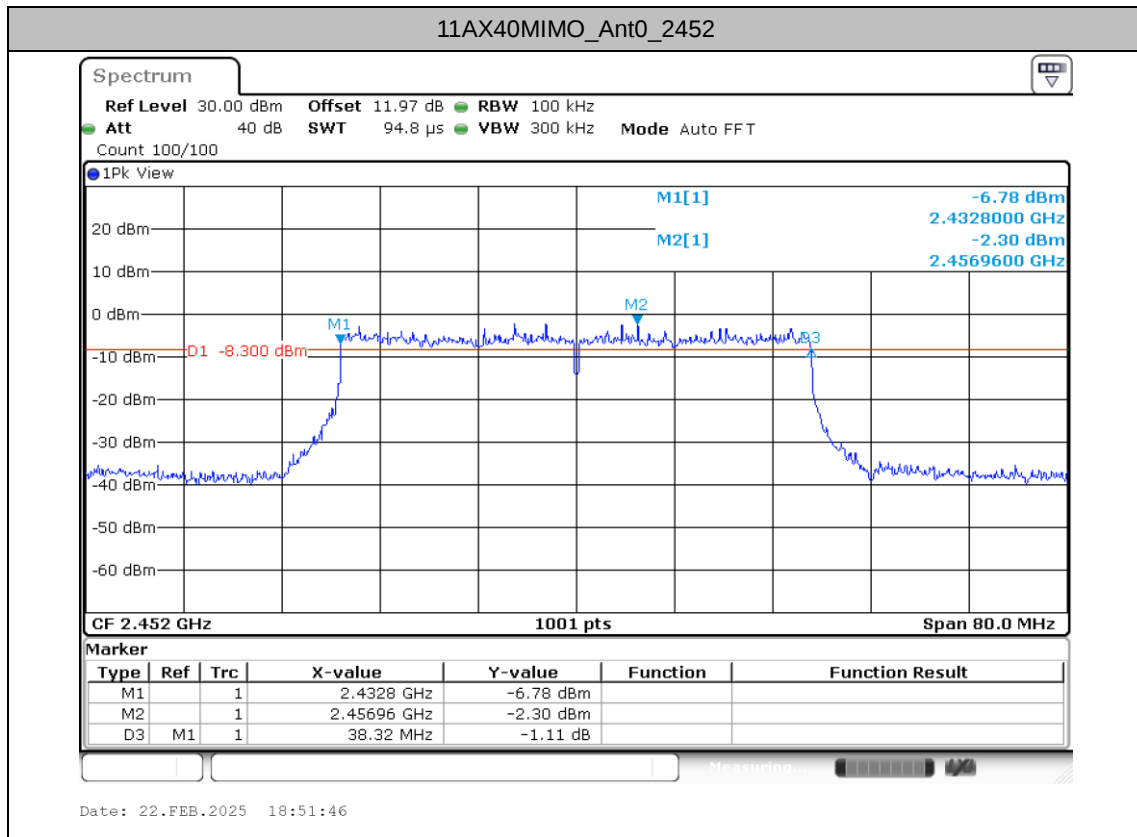


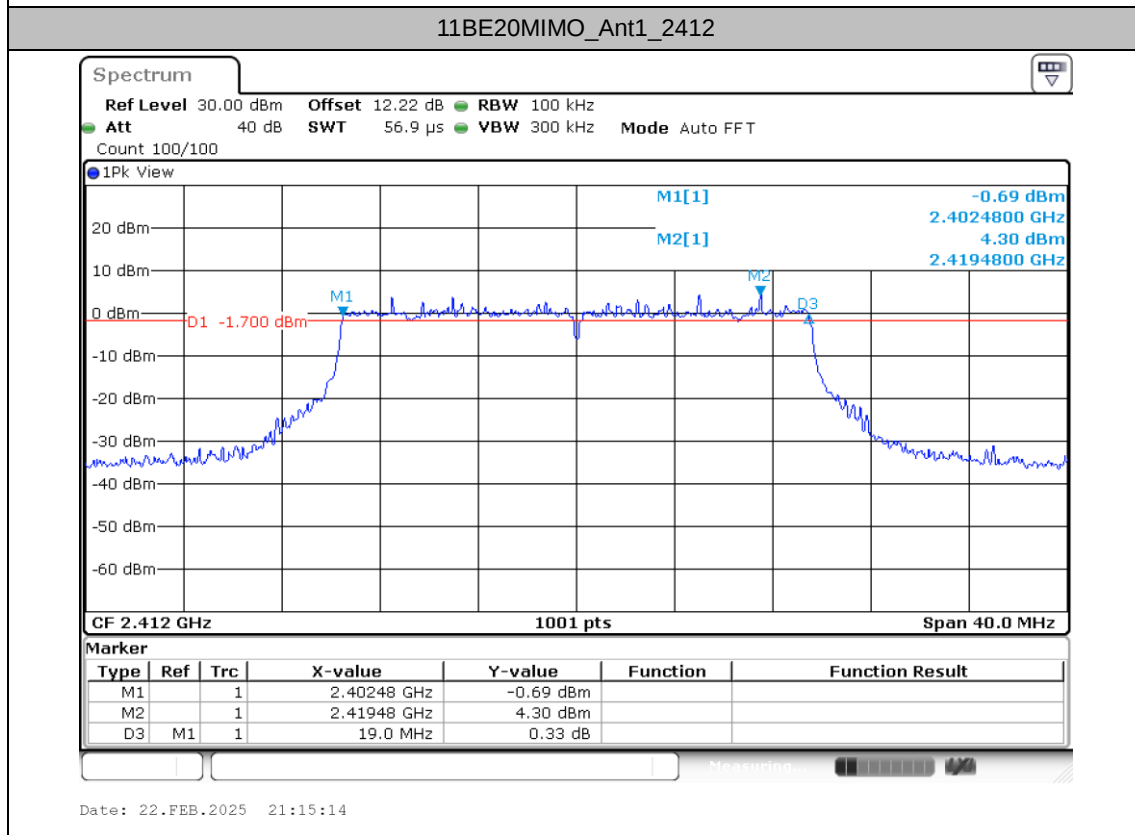
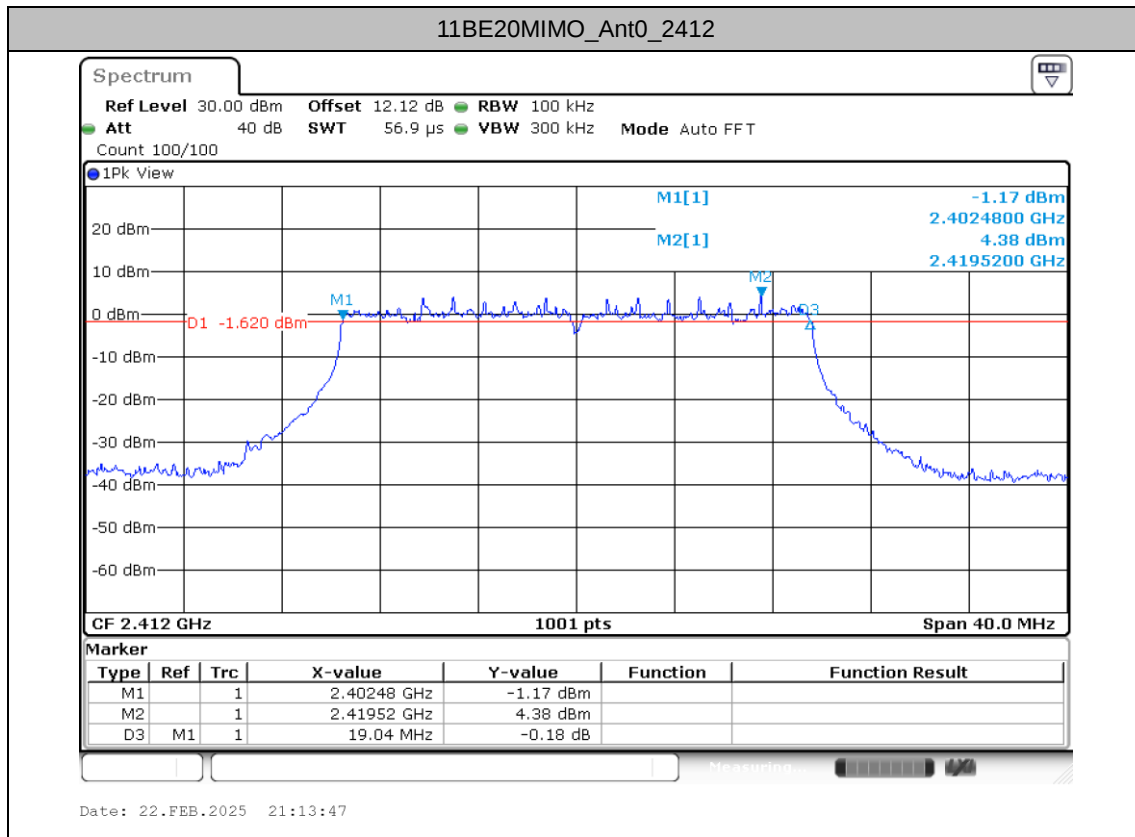


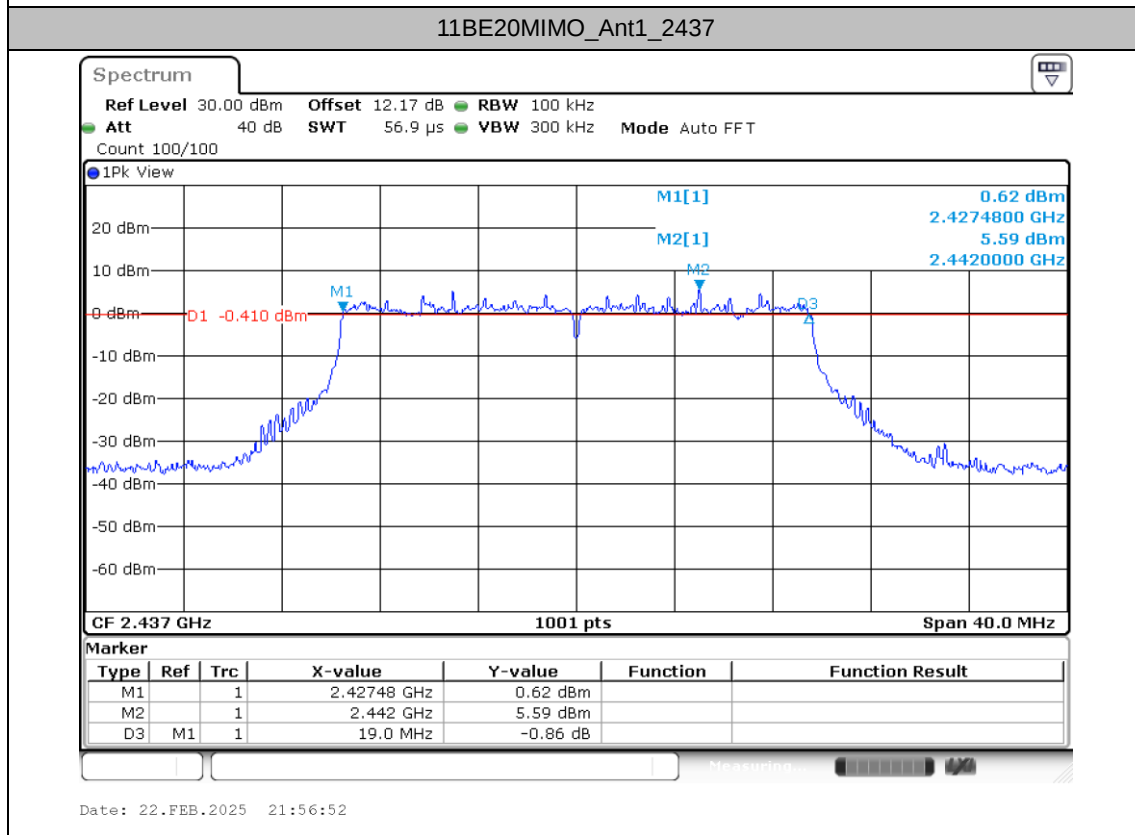
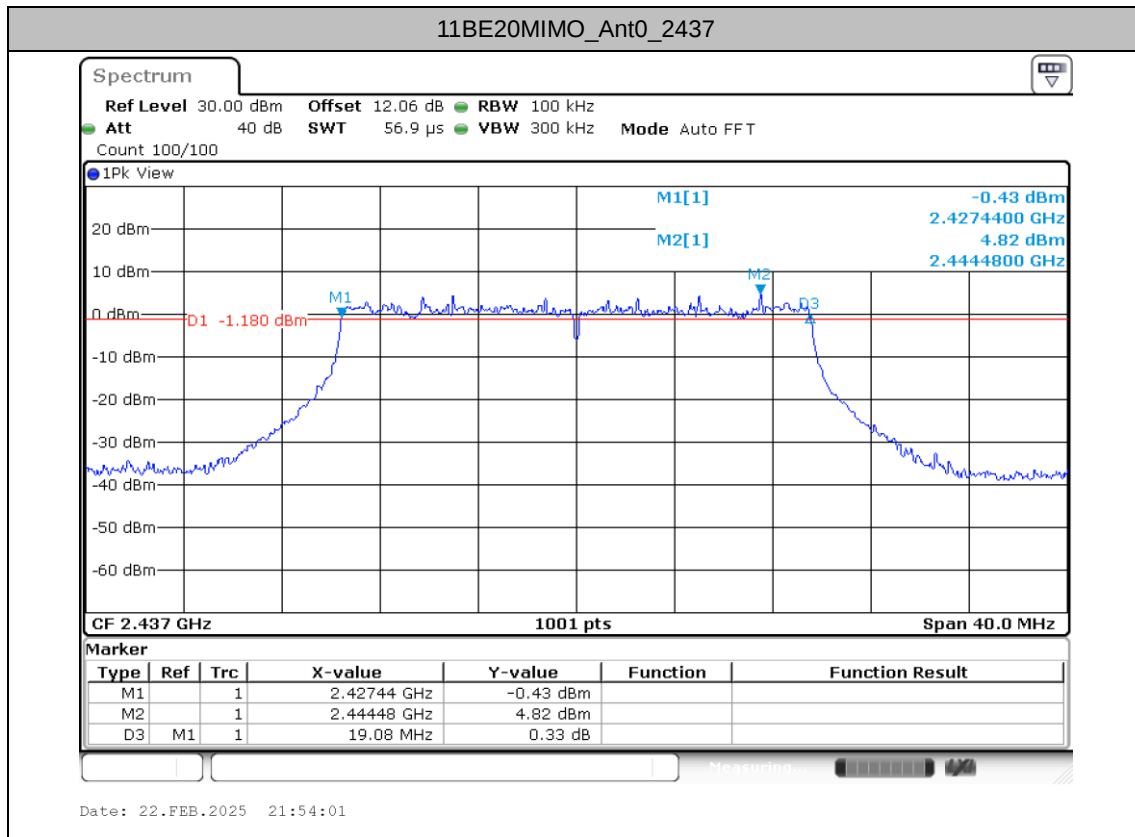


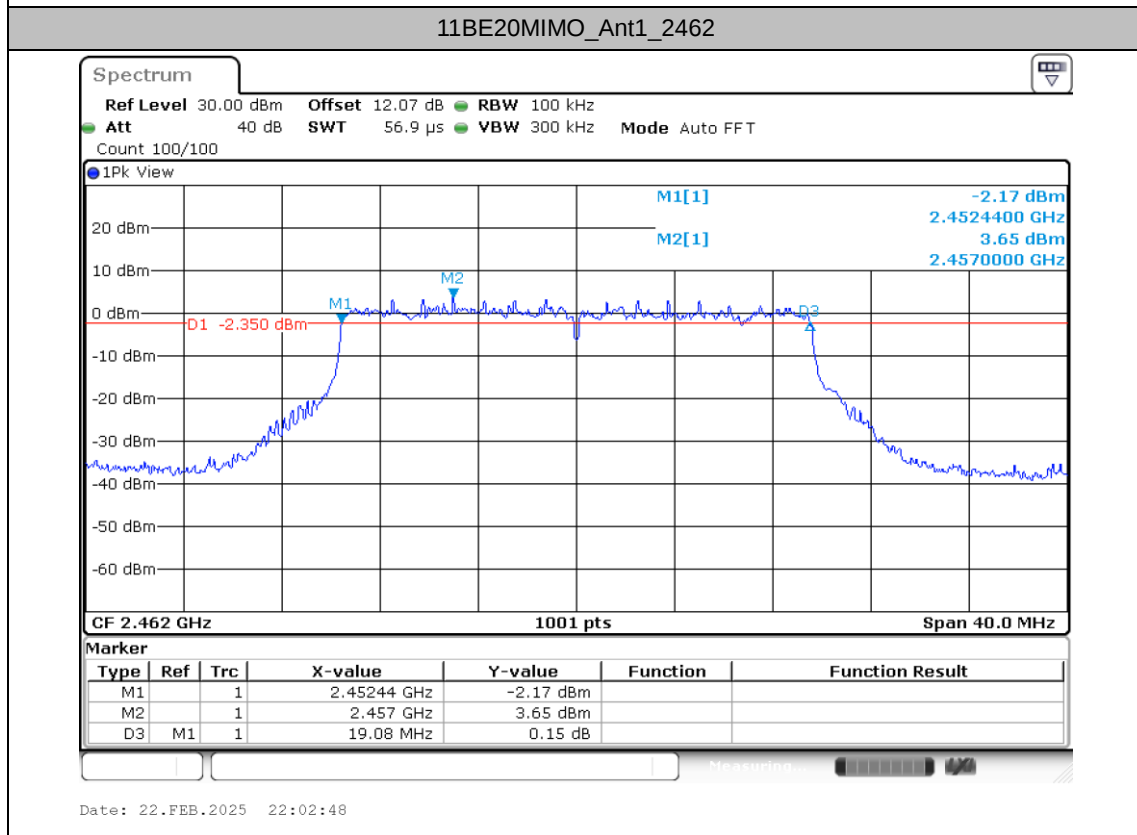
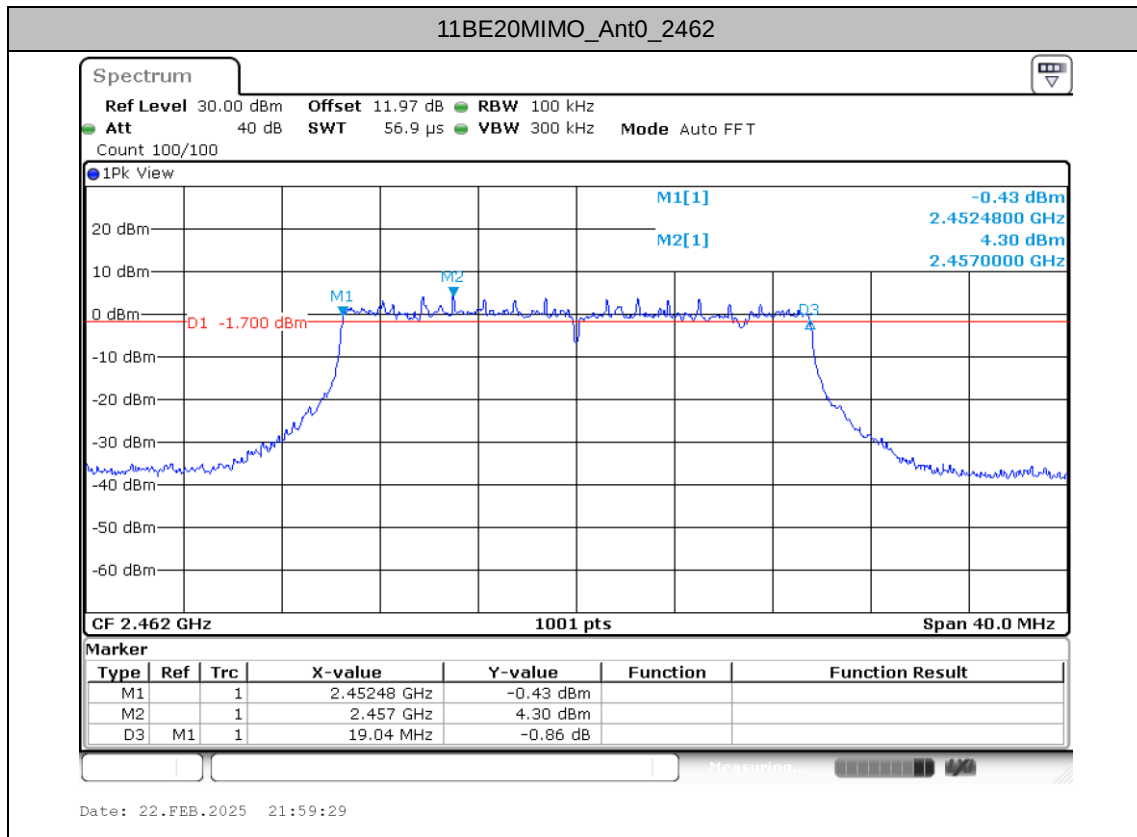


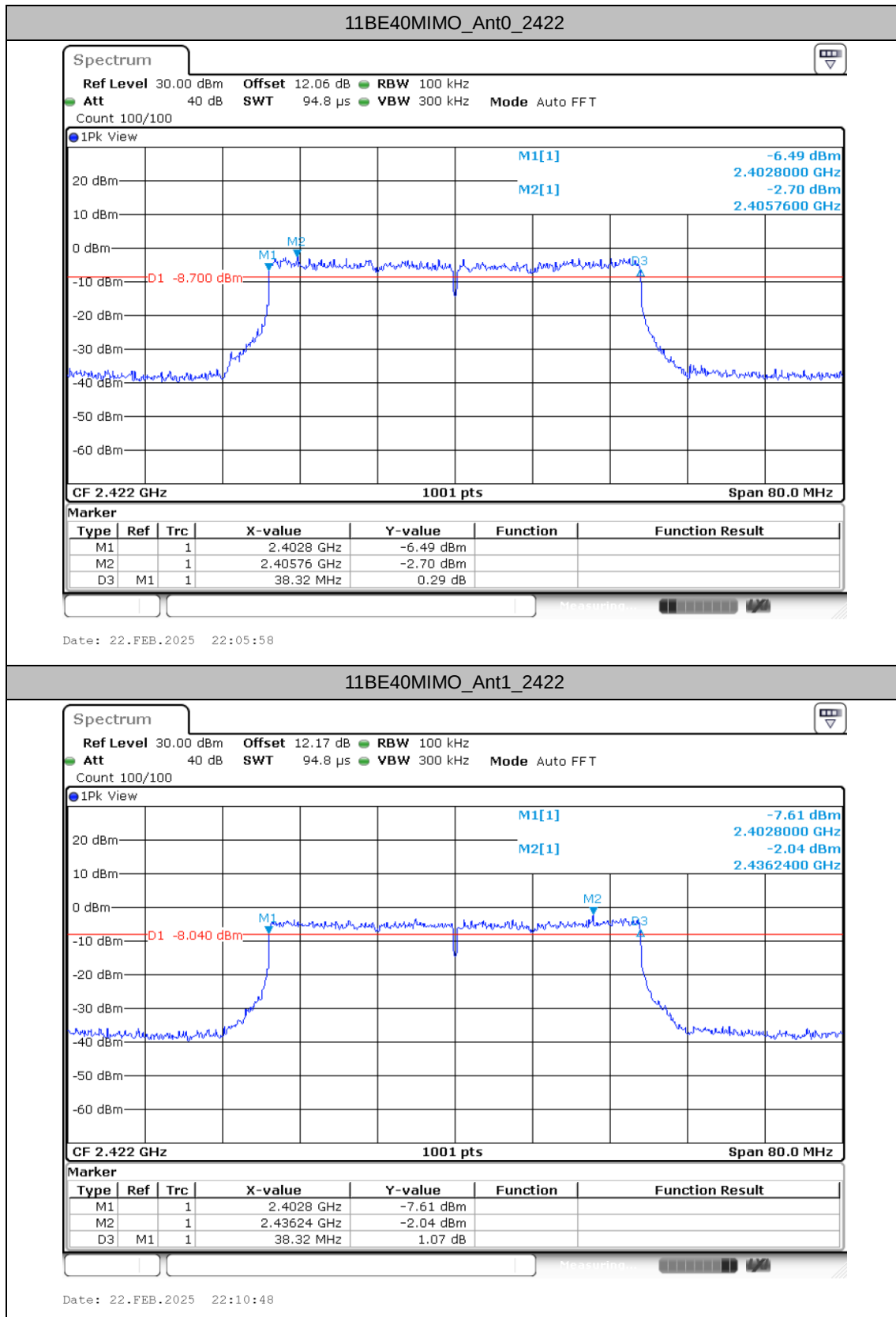


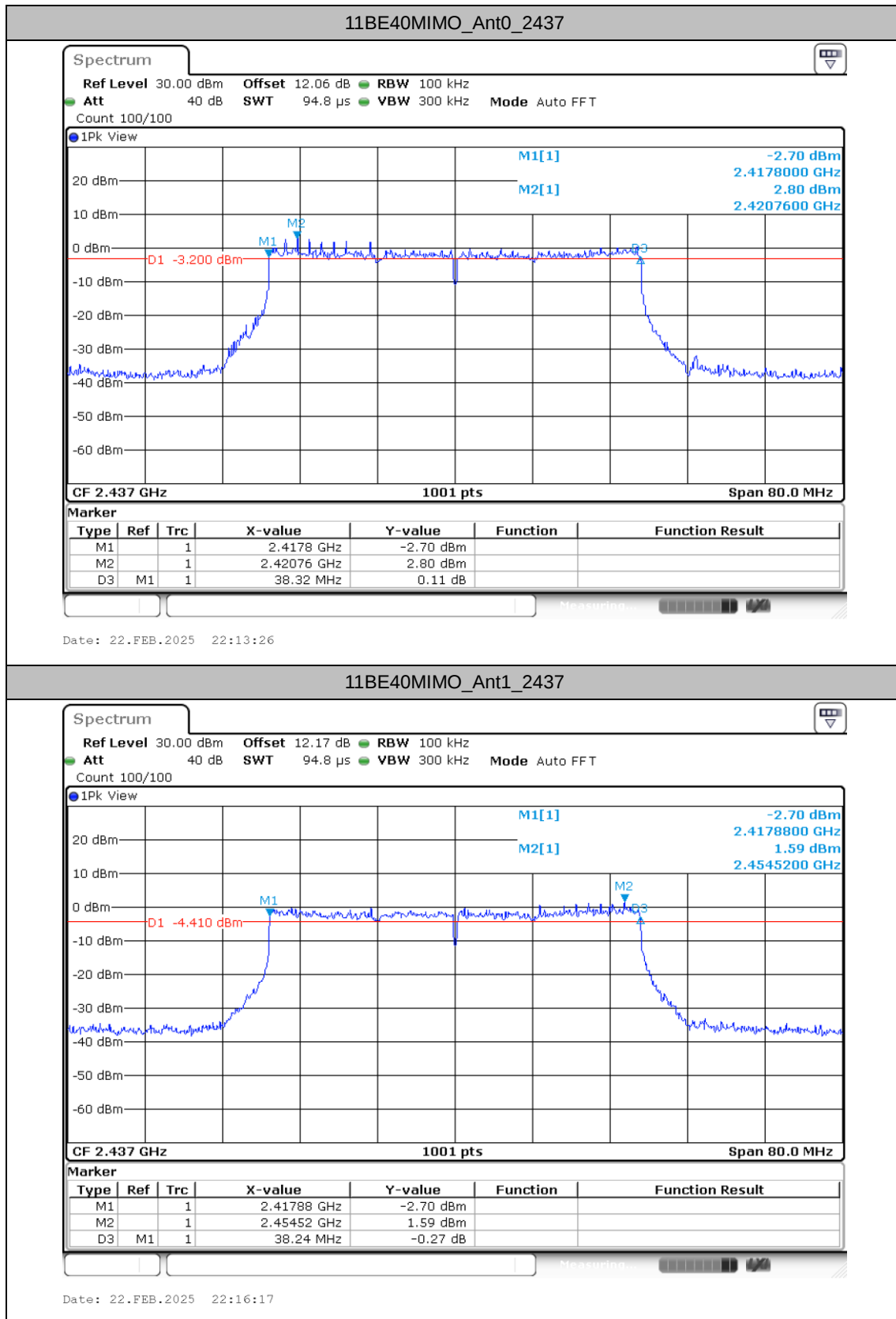


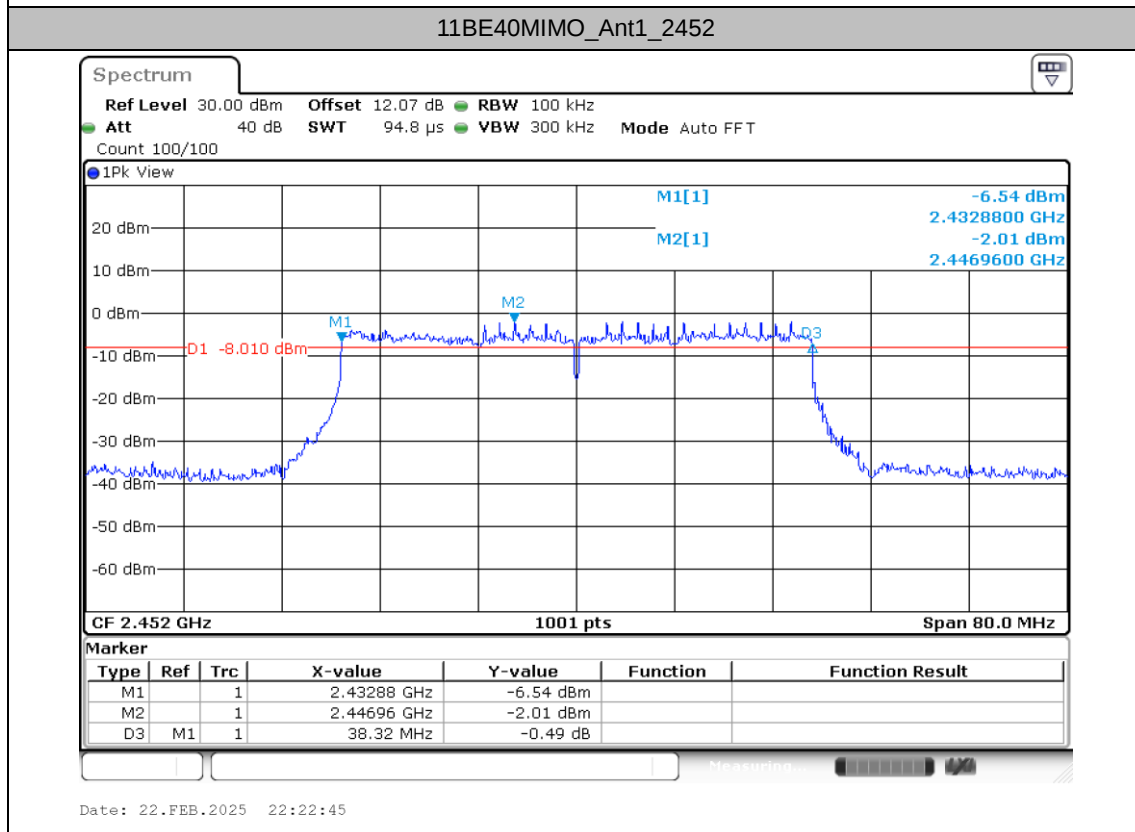
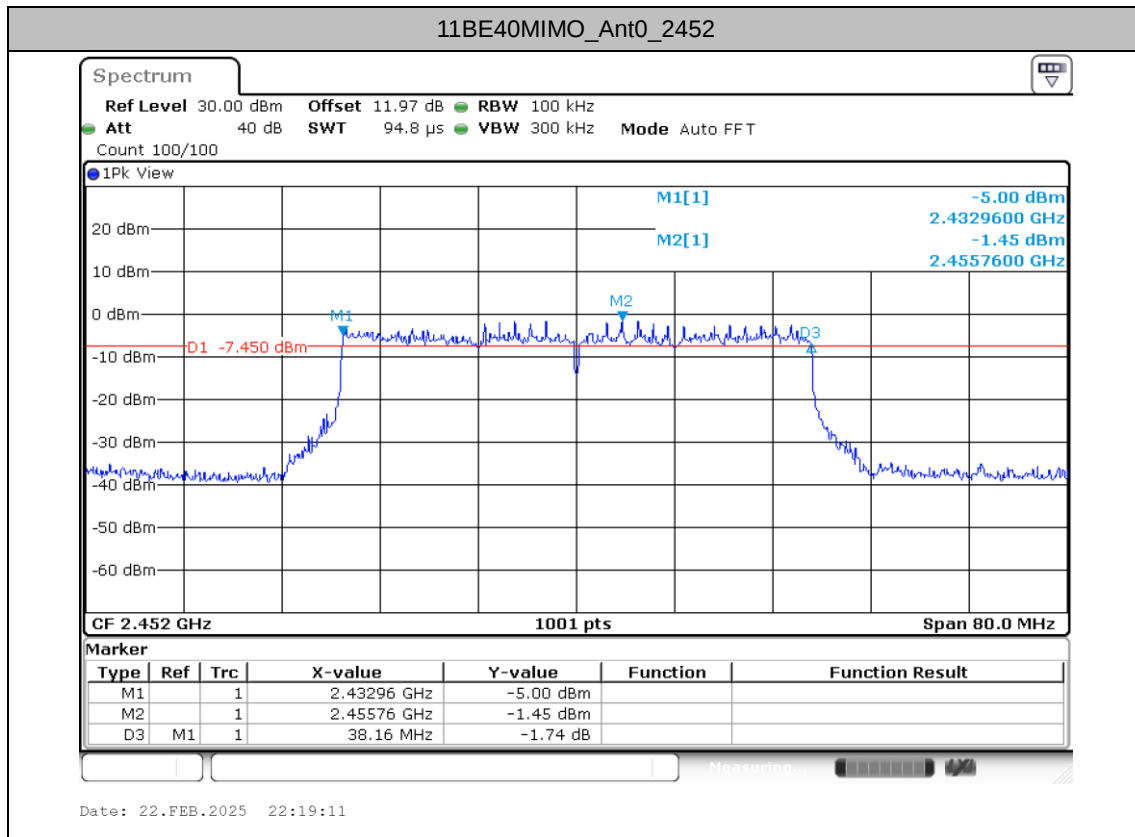














Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]
11B-CDD	Ant0	2412	13.099	2405.4807	2418.5793
	Ant1	2412	13.051	2405.4807	2418.5313
	Ant0	2437	13.107	2430.4487	2443.5553
	Ant1	2437	13.235	2430.4167	2443.6513
	Ant0	2462	13.095	2455.3887	2468.4834
	Ant1	2462	13.199	2455.3607	2468.5593
11G-CDD	Ant0	2412	17.47	2403.1529	2420.6231
	Ant1	2412	17.278	2403.2609	2420.5391
	Ant0	2437	17.646	2428.0369	2445.6831
	Ant1	2437	17.122	2428.5088	2445.6311
	Ant0	2462	17.61	2453.0529	2470.6631
	Ant1	2462	17.17	2453.4129	2470.5831
11N20MIMO	Ant0	2412	18.466	2402.7849	2421.2511
	Ant1	2412	18.742	2402.7489	2421.4911
	Ant0	2437	18.602	2427.6329	2446.2351
	Ant1	2437	18.454	2427.7209	2446.1751
	Ant0	2462	18.858	2452.4330	2471.2911
	Ant1	2462	18.602	2452.5729	2471.1751
11N40MIMO	Ant0	2422	37.452	2403.0899	2440.5421
	Ant1	2422	37.092	2403.5538	2440.6461
	Ant0	2437	37.82	2418.0179	2455.8381
	Ant1	2437	38.044	2417.9939	2456.0381
	Ant0	2452	37.3	2433.5538	2470.8541
	Ant1	2452	37.444	2433.4899	2470.9341
11AX20MIMO	Ant0	2412	19.406	2402.2770	2421.6830
	Ant1	2412	19.354	2402.2330	2421.5870
	Ant0	2437	19.378	2427.3650	2446.7430
	Ant1	2437	19.266	2427.3770	2446.6430
	Ant0	2462	19.47	2452.3050	2471.7750
	Ant1	2462	19.274	2452.3490	2471.6230
11AX40MIMO	Ant0	2422	38.628	2402.8339	2441.4621
	Ant1	2422	38.404	2402.7619	2441.1661
	Ant0	2437	38.524	2417.8259	2456.3501
	Ant1	2437	38.82	2417.6019	2456.4221



	Ant0	2452	38.484	2432.7059	2471.1901
	Ant1	2452	38.62	2432.7219	2471.3421
11BE20MIMO	Ant0	2412	19.458	2402.2170	2421.6750
	Ant1	2412	19.31	2402.3810	2421.6910
	Ant0	2437	19.378	2427.2610	2446.6390
	Ant1	2437	19.482	2427.2850	2446.7670
	Ant0	2462	19.366	2452.3130	2471.6790
	Ant1	2462	19.346	2452.3810	2471.7270
11BE40MIMO	Ant0	2422	38.58	2402.8339	2441.4141
	Ant1	2422	38.548	2402.8019	2441.3501
	Ant0	2437	38.468	2417.7299	2456.1981
	Ant1	2437	38.556	2417.7619	2456.3181
	Ant0	2452	38.892	2432.7379	2471.6300
	Ant1	2452	38.516	2432.8099	2471.3261



Test Graphs

