

RF TEST REPORT

Test Equipment : AIRTMS S807
Model Name : AIRTMS S807
HVIN(IC) : S807
FCC ID : 2BRSL-S807
IC : 34476-S807
Date of receipt : 2025-07-16
Test duration : 2025-09-03 ~ 2025-10-24
Date of issue : 2025-11-17

Applicant : KORNIC GLORY CO., Ltd.
WonyoungBldg. 3F~4F, 155, Hakdong-ro, Gangnam-gu, Seoul,
Republic of Korea

Test Laboratory : Lab-T, Inc.
2182-42 Baegok-daero, Mohyeon-eup, Cheoin-gu, Yongin-si
Gyeonggi-do 17036, Korea

Test specification : FCC Part 15 Subpart C 15.247
RSS-247 Issue 4 (2025-07), RSS-GEN Issue 5 A2 (2021-02)

RF Output Power : 25.57 dBm

Test result : Pass

The above equipment was tested by Lab-T Testing Laboratory for compliance with the requirements of FCC,IC Rules and Regulations.
The test results presented in this test report are limited only to the sample supplied by applicant and the use of this test report is inhibited other than its purpose.
This test report shall not be reproduced except in full, without the written approval of Lab-T, Inc

Tested by:



Engineer
SungSin Kim

Reviewed by:



Technical Manager
SangHoon Yu

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1. Revision history

Test Report No.	Date	Description
TRRFCC25-0002	2025-11-17	Initial issue

2. Information

2.1 Applicant Information

Applicant name	KORNIC GLORY CO., Ltd.
Address	WonyoungBldg. 3F~4F, 155, Hakdong-ro, Gangnam-gu, Seoul, Republic of Korea
Telephone No.	+82-2-6003-0953
Person in charge	KYUNGIL KANG / cs@kglory.co.kr
Manufacturer	DAVOLINK Inc.
Address	112, Beolmal-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea

2.2 Test Laboratory information

Corporate name	Lab-T, Inc.
Representative	Duke (Jongyoung) Kim
Address	2182-42 Baegok-daero, Mohyeon-eup, Cheoin-gu, Yongin-si, Gyeonggi-do 17036, Korea(Republic of)
FCC & IC MRA Designation No.	KR0159
ISED No.	22000
Telephone	+82-31-322-6767
Fax	+82-31-322-6768
E-mail	info@lab-t.net

2.3 Test Location

Test Site	used	Address
Building L	☒	2182-40 Baegok-daero, Mohyeon-eup, Cheoin-gu, Yongin-si, Gyeonggi-do 17036, Korea(Republic of)
Building T	☒	2182-42 Baegok-daero, Mohyeon-eup, Cheoin-gu, Yongin-si, Gyeonggi-do 17036, Korea(Republic of)
Building A	☐	2182-44 Baegok-daero, Mohyeon-eup, Cheoin-gu, Yongin-si, Gyeonggi-do 17036, Korea(Republic of)

3. Information About Test Equipment

3.1 Equipment Information

Equipment type	AIRTMS S807
Equipment model name	AIRTMS S807
HVIN ^{Note3}	S807
Frequency range	2 412 MHz ~ 2 462 MHz (20MHz BW) 2 422 MHz ~ 2 452 MHz (40MHz BW)
Modulation type	DSSS, CCK, OFDM
Power supply ^{Note 2}	DC 12 V, PoE(48V)
H/W version	DV-PCB-DVW-704-V1.0
S/W version	TESS AIRTMS V5.0

Note 1 : The above EUT information was declared by the manufacturer.

Note 2 : The test was performed only at DC 12 V.

Note 3 : HVIN is model name of the IC

3.2 Antenna Information

Type	Model No.	Gain	Note.
PCB antenna 1	Anray2313049309PA01	3 dBi	TRX
PCB antenna 2	Anray2313049309PB02	3 dBi	RX

3.3 Test Frequency

Test mode	Test frequency (MHz)		
	Lowest frequency	Middle frequency	Highest frequency
802.11b	2 412	2 437	2 462
802.11g	2 412	2 437	2 462
802.11n(HT20)	2 412	2 437	2 462
802.11n(HT40)	2 422	2 437	2 452
802.11ax(HE20)	2 412	2 437	2 462
802.11ax(HE40)	2 422	2 437	2 452
802.11be(EHT20)	2 412	2 437	2 462
802.11be(EHT40)	2 422	2 437	2 452

3.4 Worst case

802.11b	1 Mbps	802.11ax(HE20)	MCS0
802.11g	6 Mbps	802.11ax(HE40)	MCS0
802.11n(HT20)	MCS0	802.11be(EHT20)	MCS0
802.11n(HT40)	MCS0	802.11be(EHT40)	MCS0

Note1 : The power measurement has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates.

3.5 Tested Companion Device Information

Type	Manufacturer	Model	Note
AC/DC ADAPTER	POWER-TEK	SWPP-12003000-W	-

3.6 Operating conditions for the EUT

Firmware state		TESS AIRTMS V5.0
Test software name(version)		QRCT v4.0
Test power setting		Declared setting value
Serial number (Setup mode)	EUT #1	00434 (RF Conducted)
	EUT #2	00433 (Radiated &Conducted Emission)

4. Test Report

4.1 Summary

FCC Part 15 / RSS-247				
FCC Rule	IC Rule	Parameter	Clause	Status
Transmitter Requirements				
15.203 15.247(b)(4)	RSS-247 6.5	Antenna Requirement	4.3.1	C
15.247(b)(3)	RSS-247 6.3.2	Maximum Peak Output Power	4.3.2	C
15.247(e)	RSS-247 6.3.1(b)	Peak Power Spectral Density	4.3.3	C
15.247(a)(2)	RSS-247 6.3.1(a)	6 dB Channel Bandwidth	4.3.4	C
-	RSS-GEN 6.7	Occupied Bandwidth	4.3.4	C
15.247(d) 15.205(a) 15.209(a)	RSS-247 6.6 RSS-GEN 8.9 RSS-GEN 8.10	Spurious Emission, Band Edge and Restricted bands	4.3.5	C
15.207(a)	RSS-GEN 8.8	Conducted Emissions	4.3.6	C
NOTE 1 : C = Comply N/C = Not Comply N/T = Not Tested N/A = Not Applicable				

* The general test methods used to test this device is ANSI C63.10:2020

4.2 Measurement Uncertainty

Mesurement items	Expanded Uncertainty	
RF Output Power	0.77 dB	(The confidence level is about 95 %, $k=2$)
Power Spectral Density	0.97 dB	(The confidence level is about 95 %, $k=2$)
Occupied Channel Bandwidth	6.44 kHz	(The confidence level is about 95 %, $k=2$)
Conducted Spurious Emissions	0.48 dB	(The confidence level is about 95 %, $k=2$)
Radiated Spurious Emissions (1 GHz under)	4.85 dB	(The confidence level is about 95 %, $k=2$)
Radiated Spurious Emissions (Above 1 GHz)	4.39 dB	(The confidence level is about 95 %, $k=2$)
Conducted emission	2.42 dB	(The confidence level is about 95 %, $k=2$)

4.3 Transmitter Requirements

4.3.1 Antenna Requirement

4.3.1.1 Regulation

Accoding to §15.203 An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Accoding to §15.247(b)(4) e conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Accoding to §RSS-247 6.5(c)(ii) If the transmitter employs an antenna system that emits multiple directional beams, but does not emit multiple directional beams simultaneously, the total output power conducted to the array or arrays that comprise the device (i.e. the sum of the power supplied to all antennas, antenna elements, staves, etc., and summed across all carriers or frequency channels) shall not exceed the applicable conducted output power limit as specified in sections 6.2.3.2 and 6.3.2. However, the total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi.

4.3.1.2 Result

Comply

(The transmitter has a PCB Antenna. The directional peak gain of the antenna is 3 dBi.)

4.3.1.3 Measurement data

Antenna	Directional Gain For Power (dBi)	Directional Gain For PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
PCB antenna 1	3.0	3.0	0.00	0.00

4.3.2 Maximum Peak Output Power

4.3.2.1 Regulation

According to §15.247(b)(3) and RSS-247 6.3.2 For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

According to §15.247(b)(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.3.2.2 Measurement Procedure

ANSI C63.10 § 11.9.1 Maximum peak conducted output power

4.3.2.2.1 PKPM1 Peak power meter method

The maximum peak conducted output power may be measured using a broadband peak RF power meter.

The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector

4.3.2.3 Result

Comply (measurement data : refer to the next page)

4.3.2.4 Measurement data

Test mode : 802.11b

Freq. (MHz)	Result (dBm)	Result (mW)	Limit (mW)
2 412	24.18	261.82	1 000
2 437	23.42	219.79	1 000
2 462	24.23	264.85	1 000

Test mode : 802.11g

Freq. (MHz)	Result (dBm)	Result (mW)	Limit (mW)
2 412	23.79	239.33	1 000
2 437	23.26	211.84	1 000
2 462	23.50	223.87	1 000

Test mode : 802.11n(HT20)

Freq. (MHz)	Result (dBm)	Result (mW)	Limit (mW)
2 412	24.06	254.68	1 000
2 437	23.51	224.39	1 000
2 462	23.66	232.27	1 000

Test mode : 802.11n(HT40)

Freq. (MHz)	Result (dBm)	Result (mW)	Limit (mW)
2 422	22.66	184.50	1 000
2 437	25.57	360.58	1 000
2 452	22.62	182.81	1 000

Test mode : 802.11ax(HE20)

Freq. (MHz)	Result (dBm)	Result (mW)	Limit (mW)
2 412	23.23	210.38	1 000
2 437	23.71	234.96	1 000
2 462	22.97	198.15	1 000

Test mode : 802.11ax(HE40)

Freq. (MHz)	Result (dBm)	Result (mW)	Limit (mW)
2 422	22.70	186.21	1 000
2 437	24.74	297.85	1 000
2 452	22.71	186.64	1 000

Note 1 : refer to 4.3.1 for information on limit reduction.

Note 2 : We took the insertion loss of the cable loss into consideration within the measuring instrument.

Test mode : 802.11be(EHT20)

Freq. (MHz)	Result (dBm)	Result (mW)	Limit (mW)
2 412	23.60	229.09	1 000
2 437	23.67	232.81	1 000
2 462	23.10	204.17	1 000

Test mode : 802.11be(EHT40)

Freq. (MHz)	Result (dBm)	Result (mW)	Limit (mW)
2 422	22.55	179.89	1 000
2 437	24.76	299.23	1 000
2 452	22.54	179.47	1 000

Note 1 : refer to 4.3.1 for information on limit reduction.

Note 2 : We took the insertion loss of the cable loss into consideration within the measuring instrument.

4.3.3 Peak Power Spectral Density

4.3.3.1 Regulation

According to §15.247(e) and RSS-247 §6.3.1(b) For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

4.3.3.2 Measurement Procedure

ANSI C63.10 § 11.10 Maximum power spectral density level in the fundamental emission

4.3.3.2.1 Method PKPSD (peak PSD)

This procedure shall be used if maximum peak conducted output power was used to demonstrate compliance, and is optional if the maximum conducted (average) output power was used to demonstrate compliance.

- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5 times the DTS bandwidth.
- c) Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- d) Set the VBW $\geq 3 \text{ RBW}$.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.
- j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

4.3.3.3 Result

Comply (measurement data : refer to the next page)

4.3.3.4 Measurement data

Test mode : 802.11b

Freq. (MHz)	Result (dBm)	Limit (dBm)
2 412	-1.18	8.00
2 437	-1.54	8.00
2 462	-0.19	8.00

Test mode : 802.11g

Freq. (MHz)	Result (dBm)	Limit (dBm)
2 412	-11.18	8.00
2 437	-6.63	8.00
2 462	-7.29	8.00

Test mode : 802.11n(HT20)

Freq. (MHz)	Result (dBm)	Limit (dBm)
2 412	-5.85	8.00
2 437	-5.06	8.00
2 462	-4.98	8.00

Test mode : 802.11n(HT40)

Freq. (MHz)	Result (dBm)	Limit (dBm)
2 422	-10.45	8.00
2 437	-5.10	8.00
2 452	-10.34	8.00

Test mode : 802.11ax(HE20)

Freq. (MHz)	Result (dBm)	Limit (dBm)
2 412	-6.94	8.00
2 437	-4.32	8.00
2 462	-7.29	8.00

Test mode : 802.11ax(HE40)

Freq. (MHz)	Result (dBm)	Limit (dBm)
2 422	-10.76	8.00
2 437	-8.31	8.00
2 452	-9.69	8.00

Note 1 : refer to 4.3.1 for information on limit reduction.

Note 2 : We took the insertion loss of the cable loss into consideration within the measuring instrument.

Test mode : 802.11be(EHT20)

Freq. (MHz)	Result (dBm)	Limit (dBm)
2 412	-7.38	8.00
2 437	-5.94	8.00
2 462	-7.37	8.00

Test mode : 802.11be(EHT40)

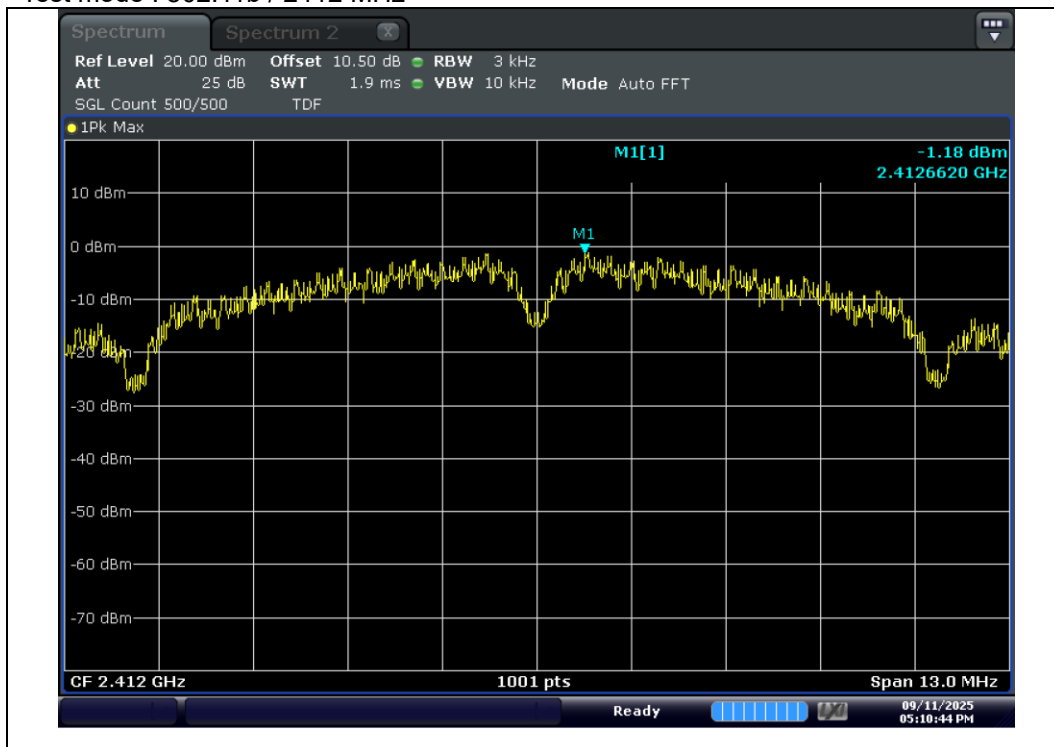
Freq. (MHz)	Result (dBm)	Limit (dBm)
2 422	-10.61	8.00
2 437	-8.12	8.00
2 452	-10.63	8.00

Note 1 : refer to 4.3.1 for information on limit reduction.

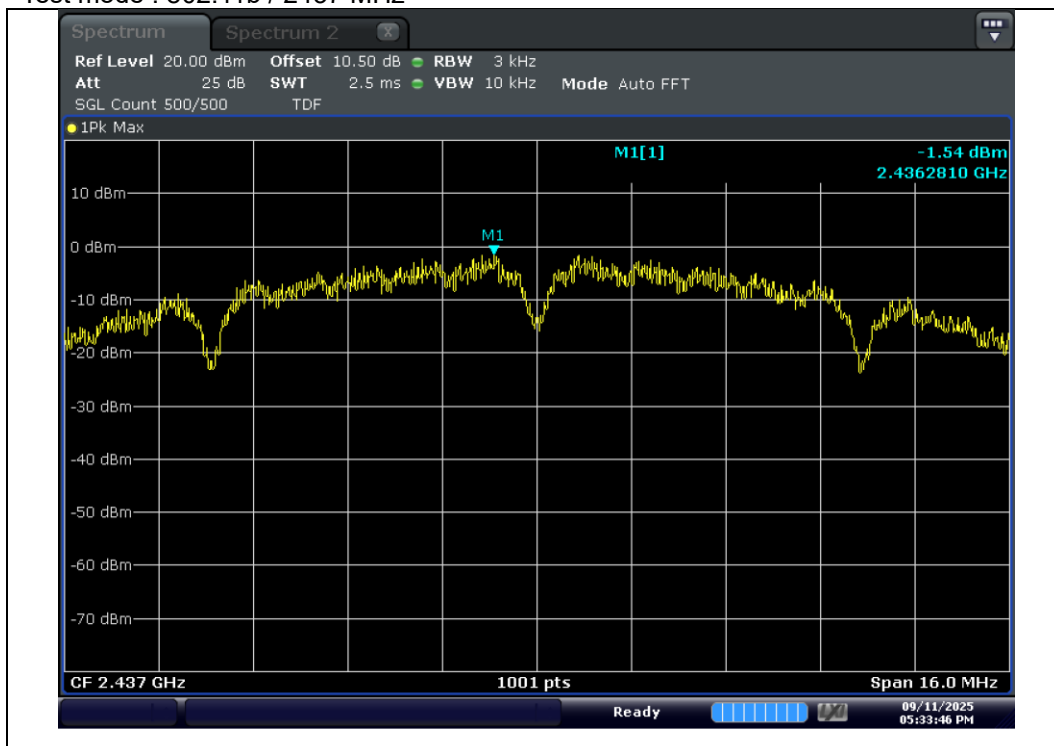
Note 2 : We took the insertion loss of the cable loss into consideration within the measuring instrument.

4.3.3.5 Test Plot

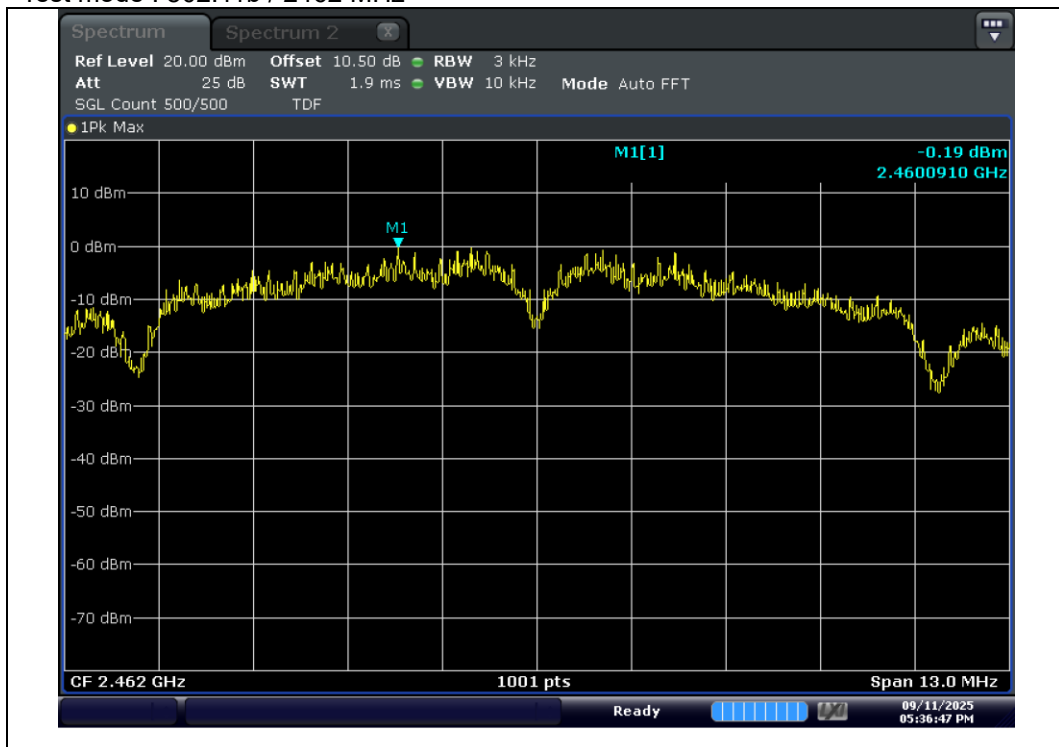
Test mode : 802.11b / 2412 MHz



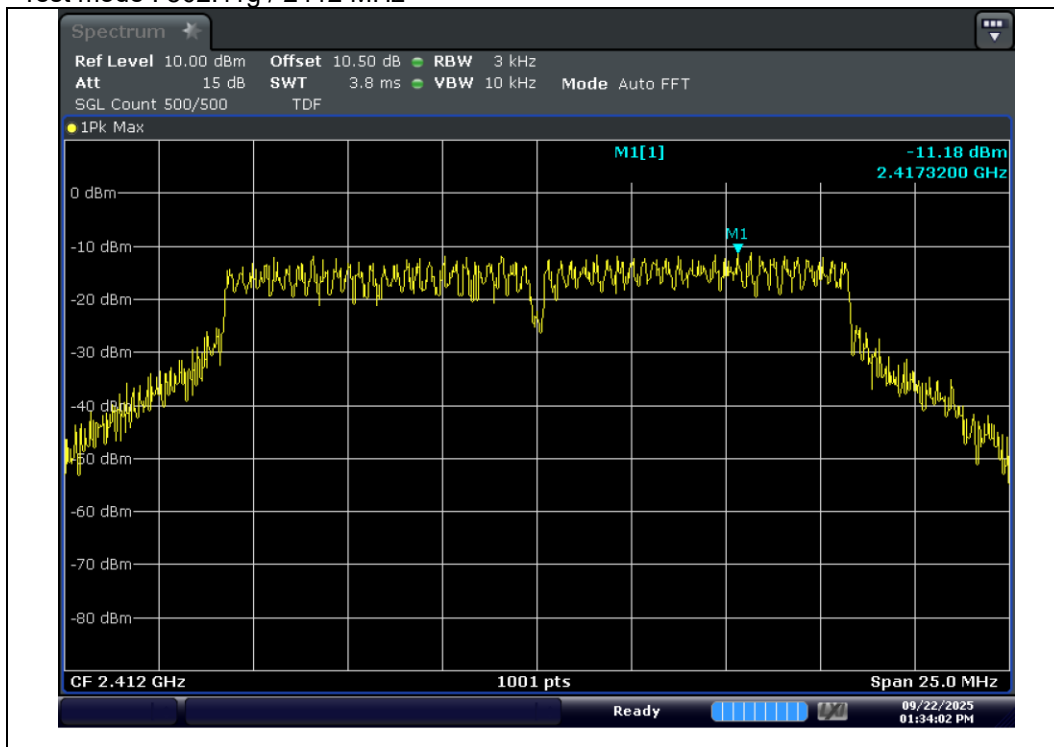
Test mode : 802.11b / 2437 MHz



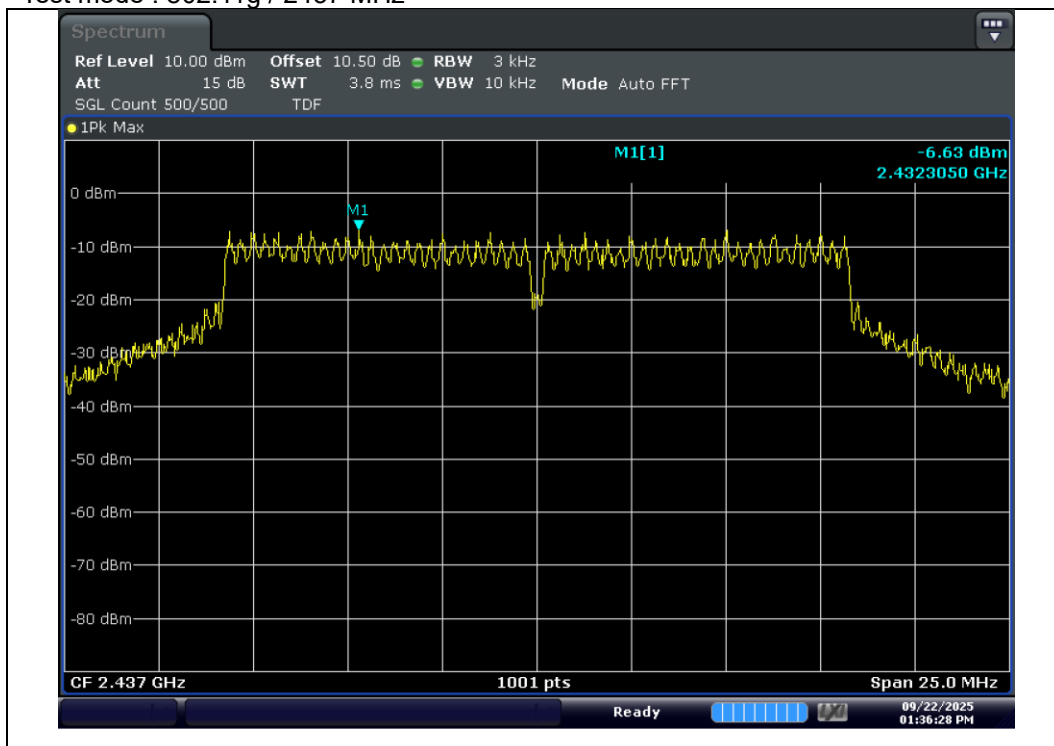
Test mode : 802.11b / 2462 MHz



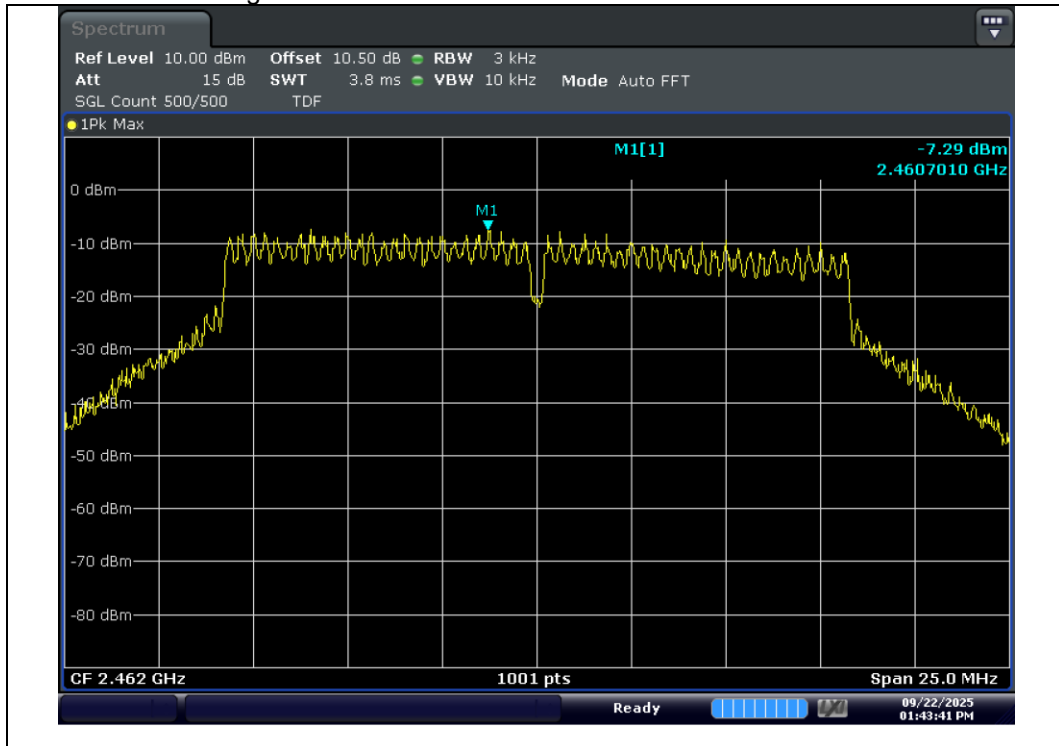
Test mode : 802.11g / 2412 MHz



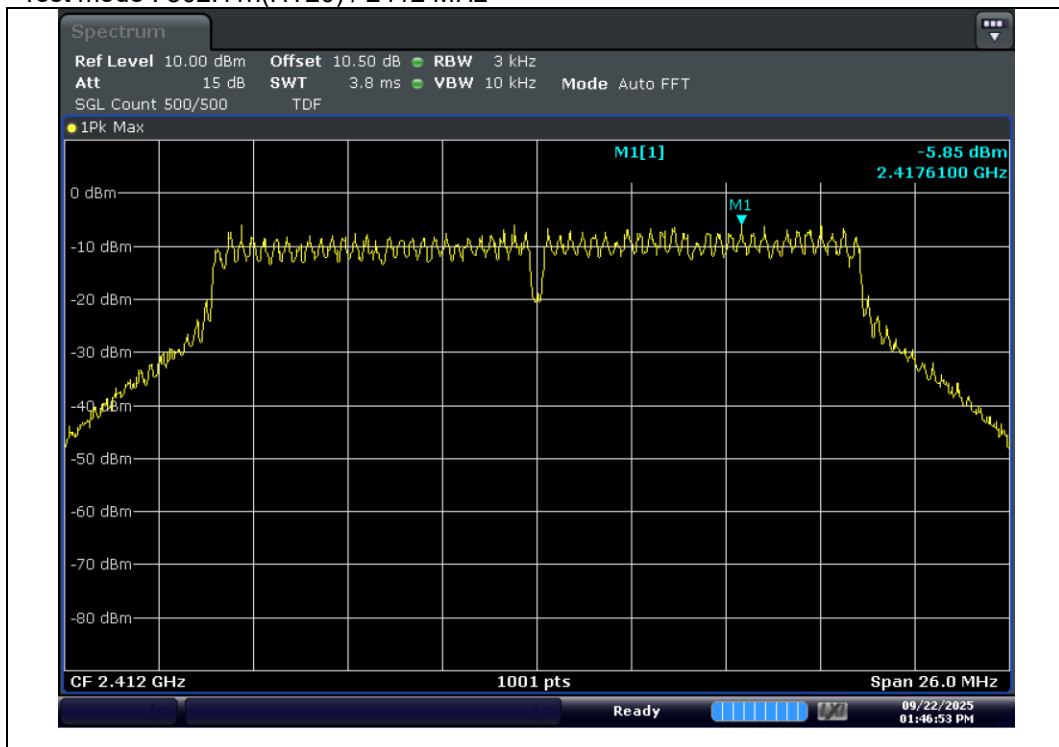
Test mode : 802.11g / 2437 MHz



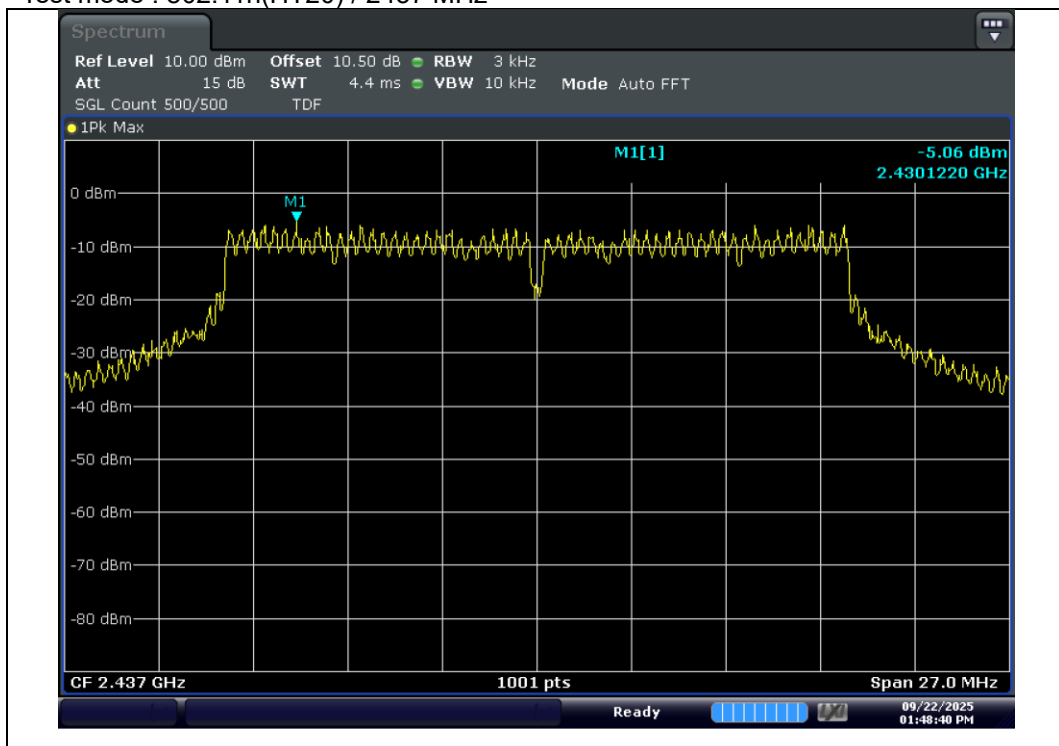
Test mode : 802.11g / 2462 MHz



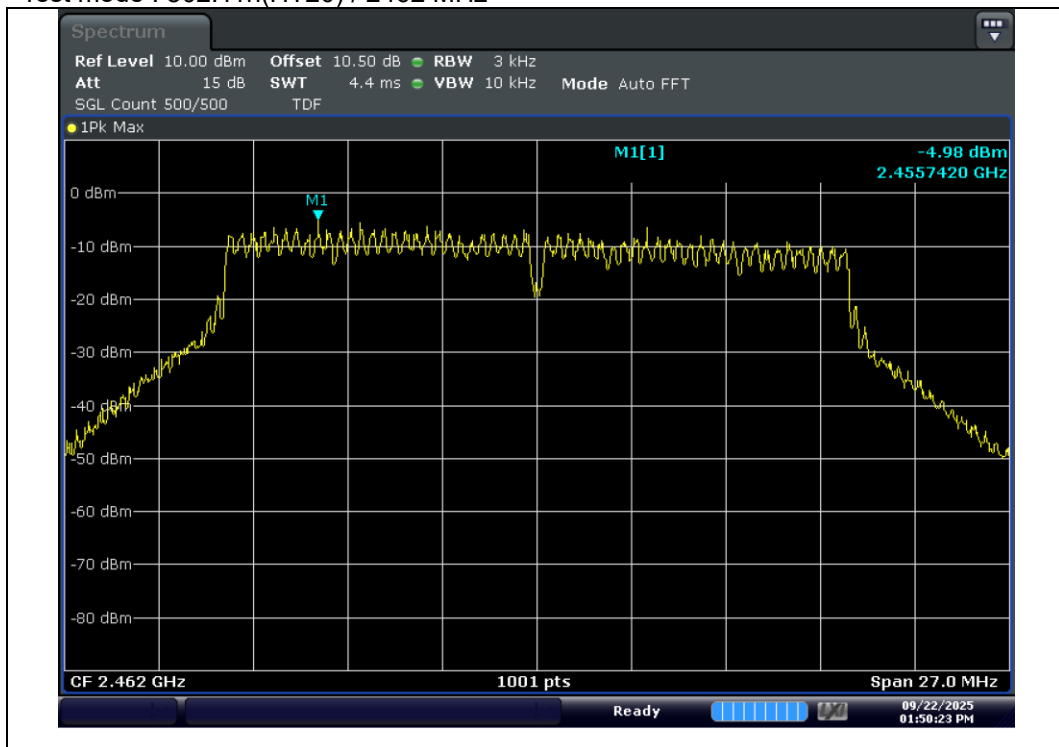
Test mode : 802.11n(HT20) / 2412 MHz



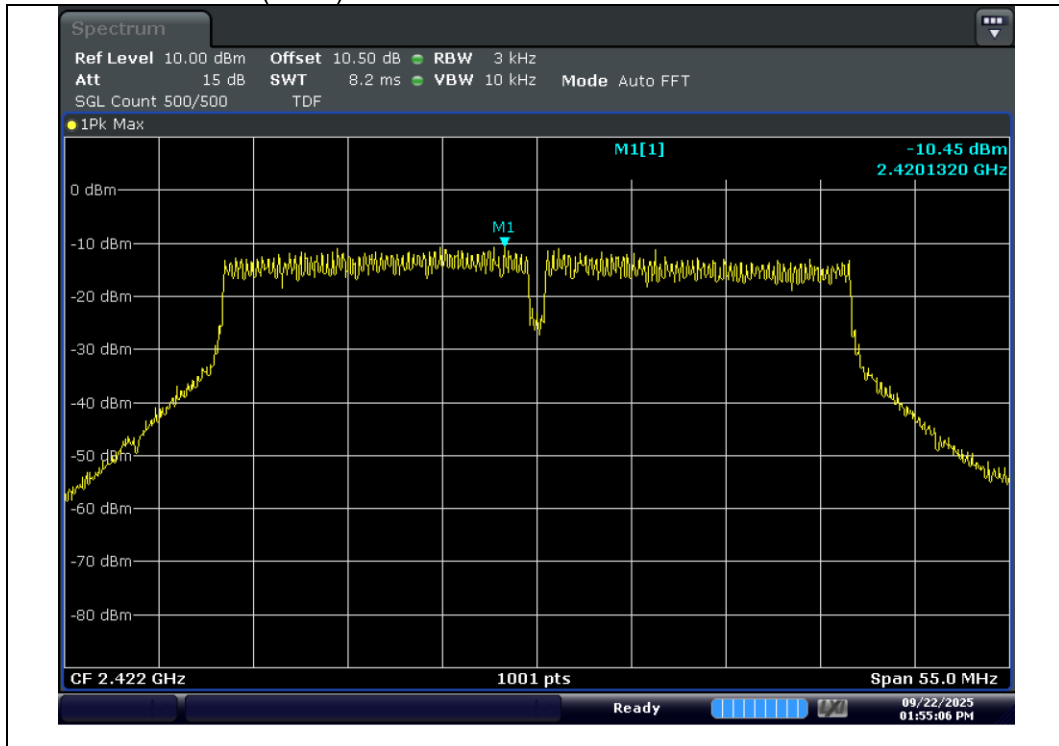
Test mode : 802.11n(HT20) / 2437 MHz



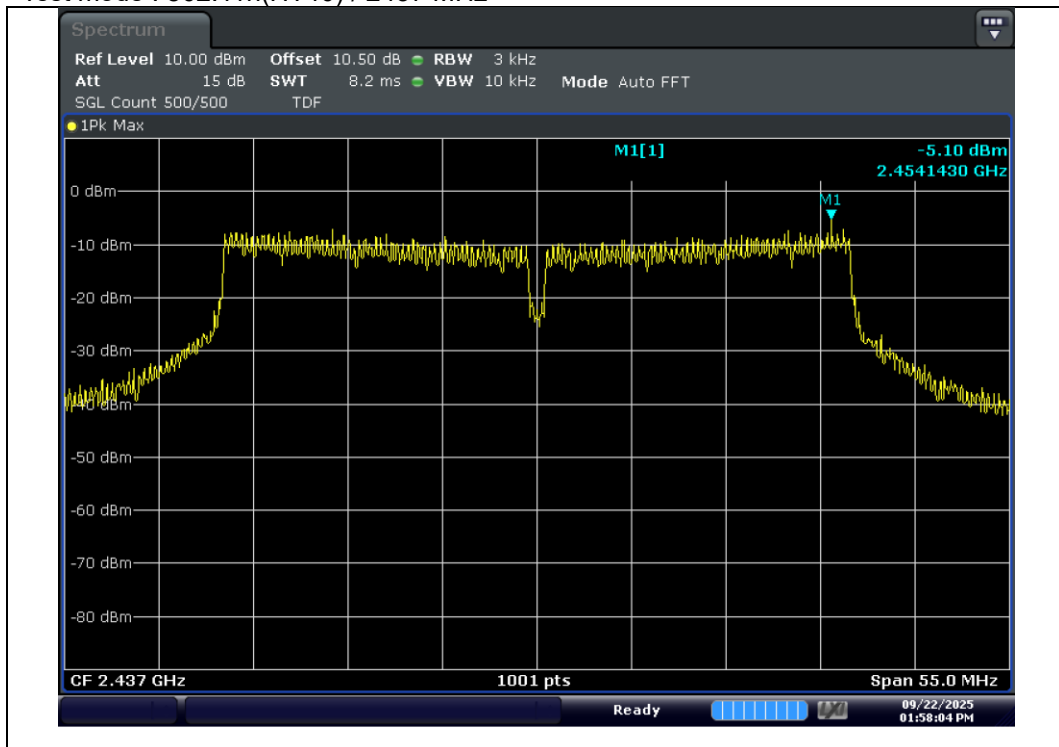
Test mode : 802.11n(HT20) / 2462 MHz



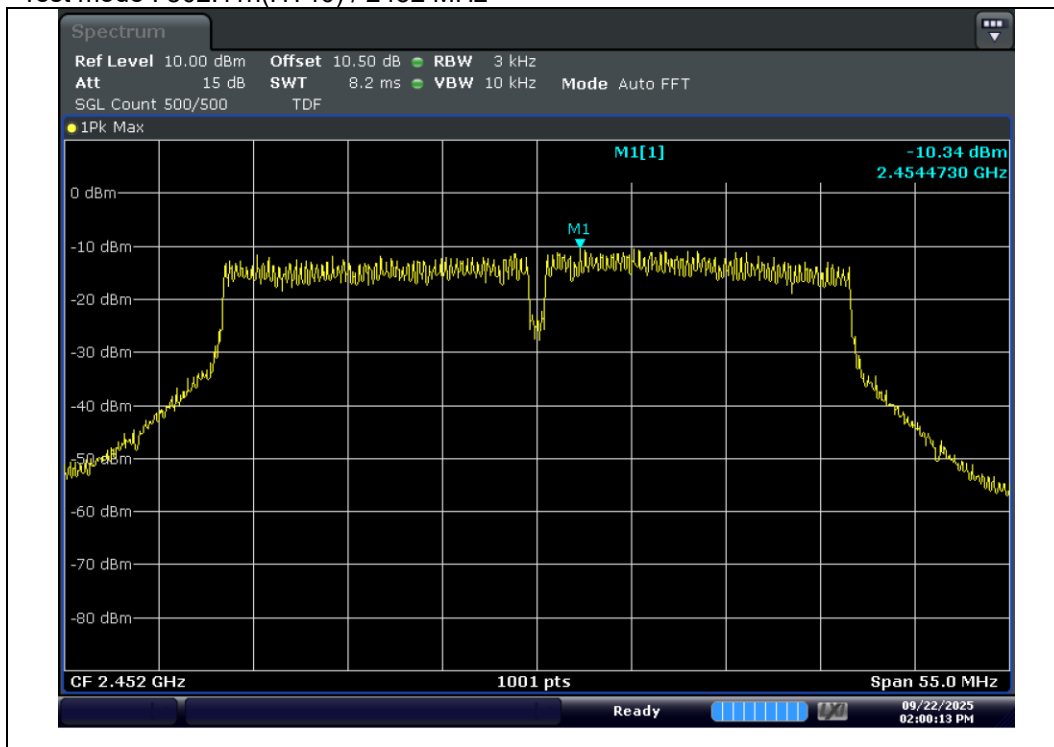
Test mode : 802.11n(HT40) / 2422 MHz



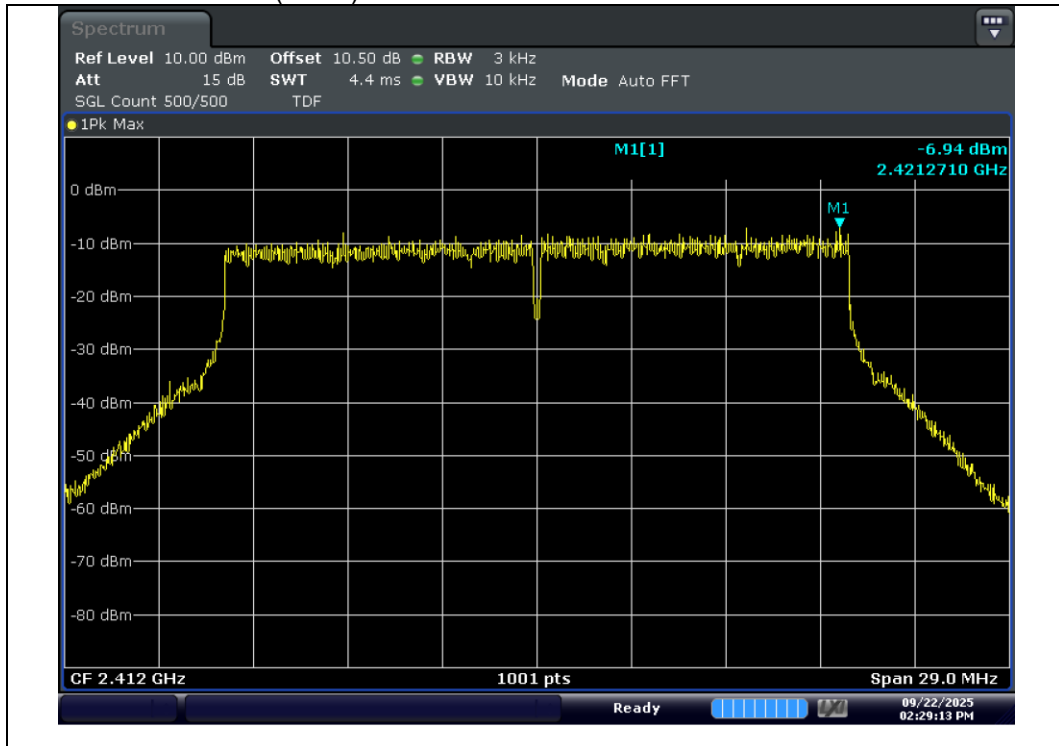
Test mode : 802.11n(HT40) / 2437 MHz



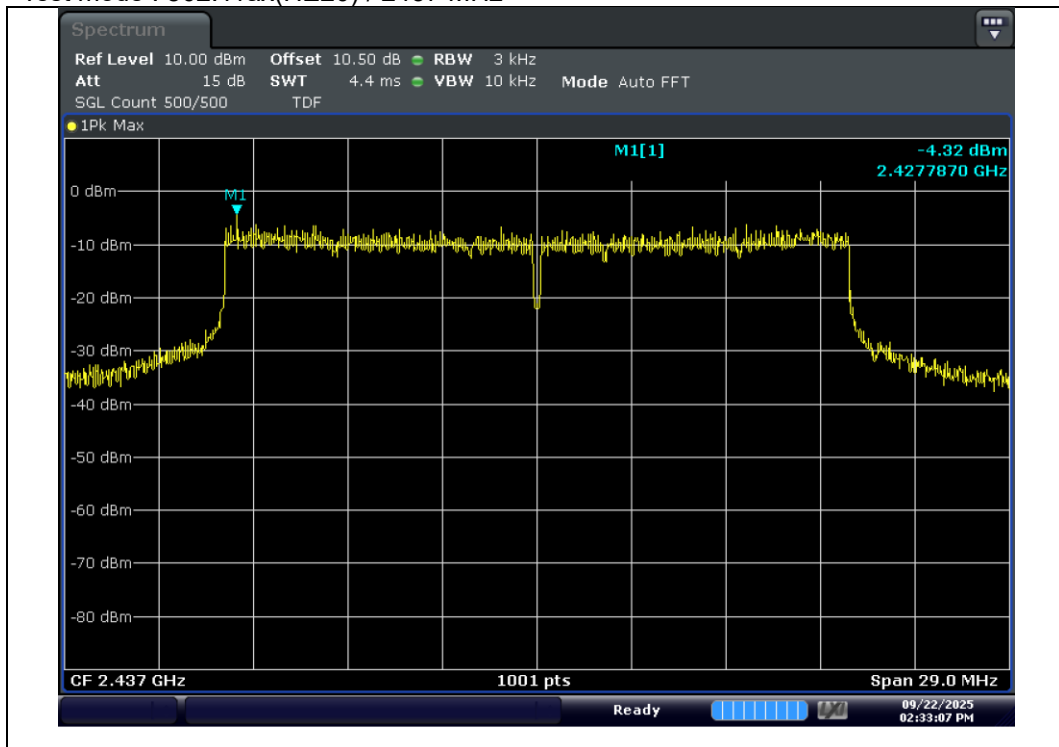
Test mode : 802.11n(HT40) / 2452 MHz



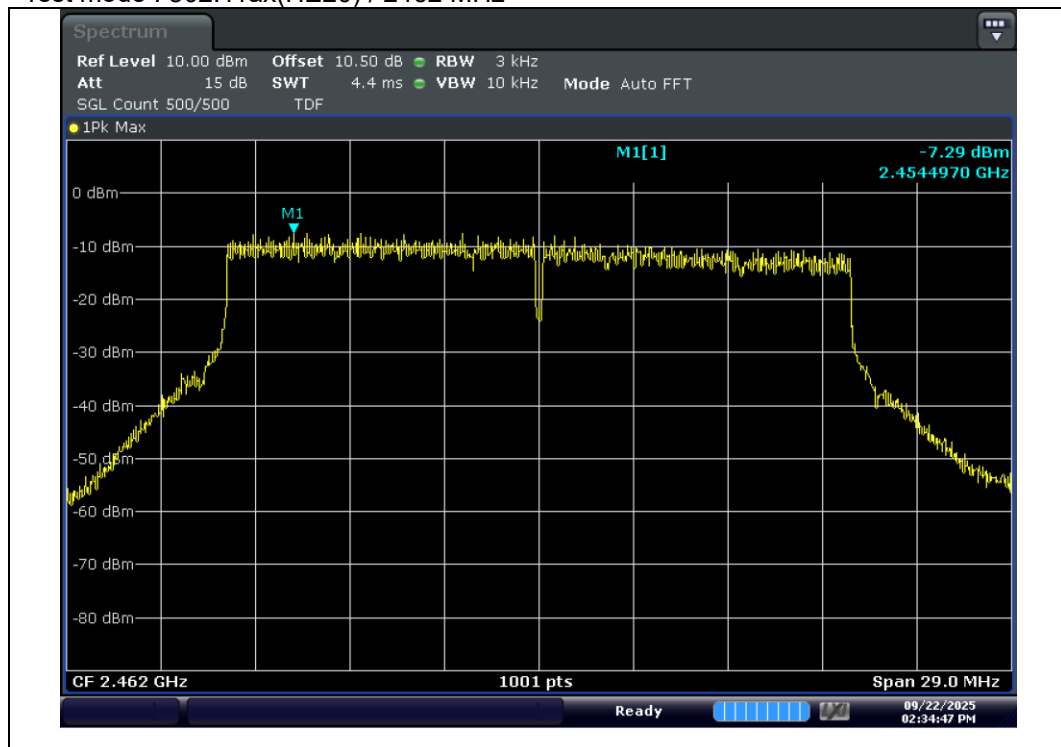
Test mode : 802.11ax(HE20) / 2412 MHz



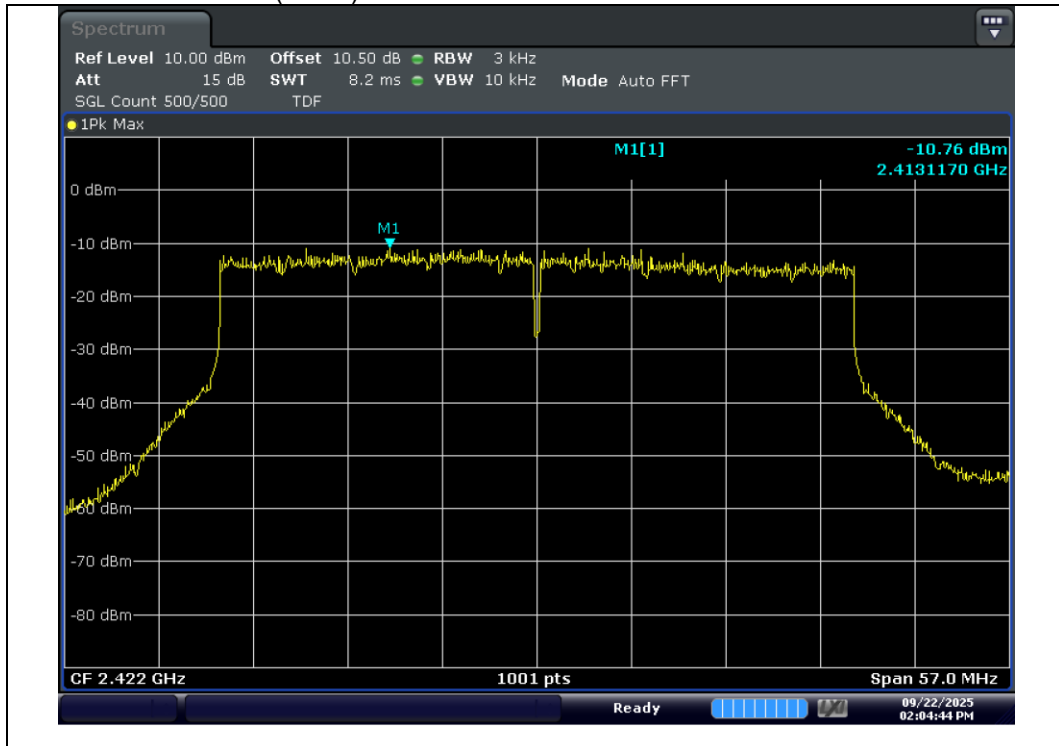
Test mode : 802.11ax(HE20) / 2437 MHz



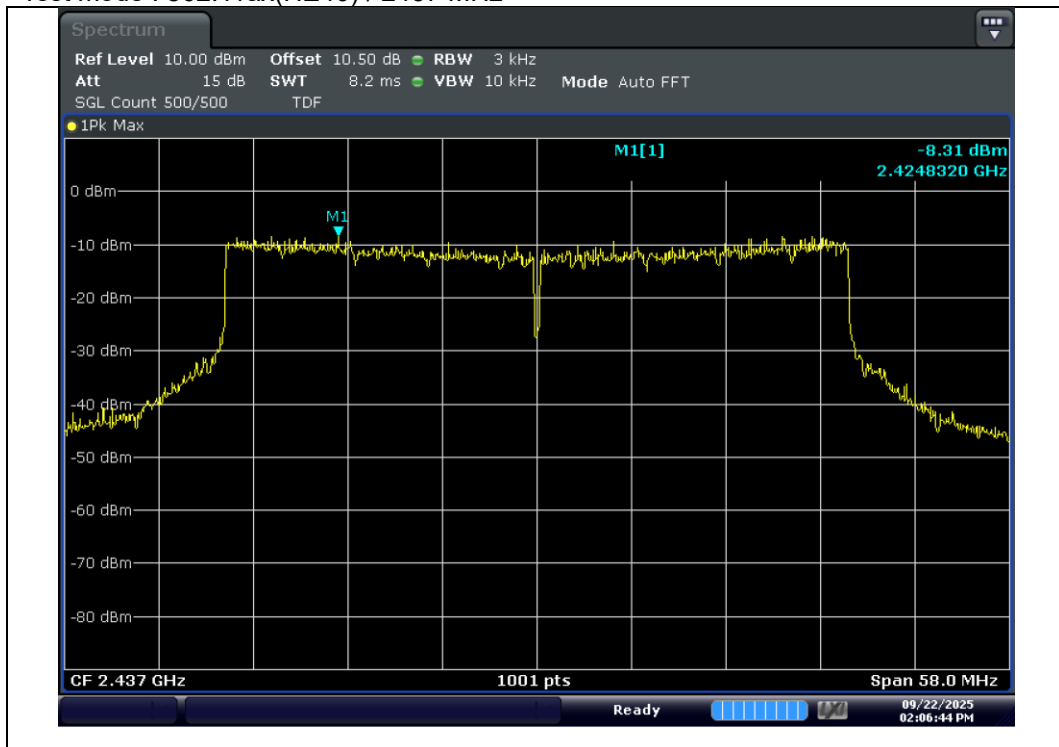
Test mode : 802.11ax(HE20) / 2462 MHz



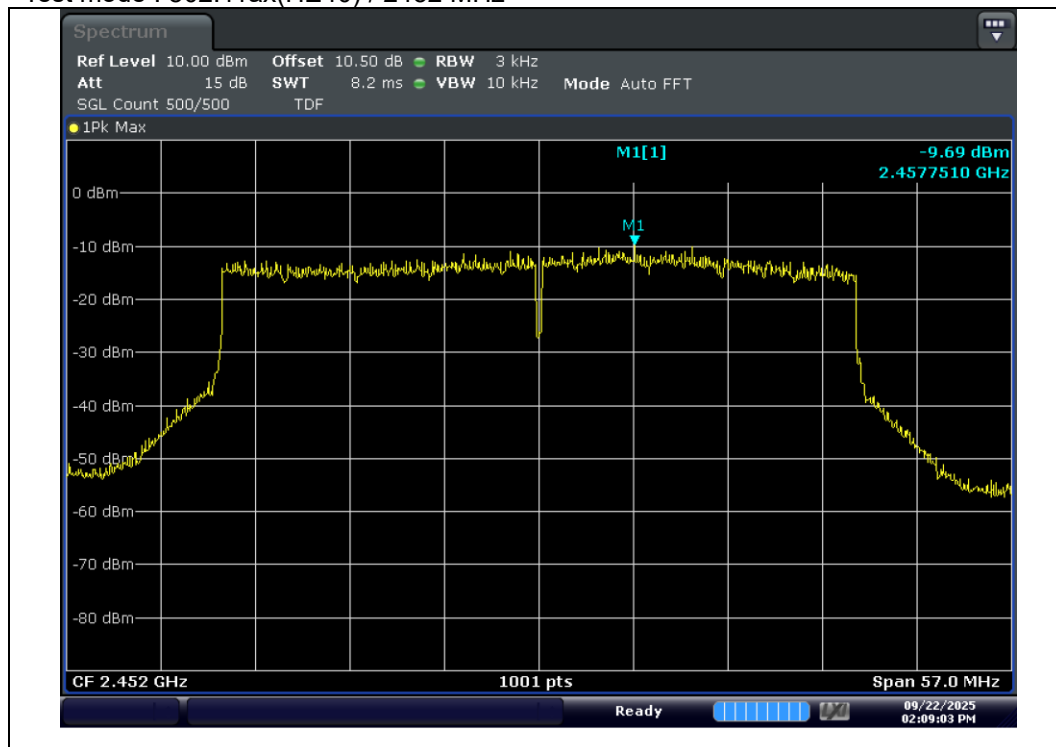
Test mode : 802.11ax(HE40) / 2422 MHz



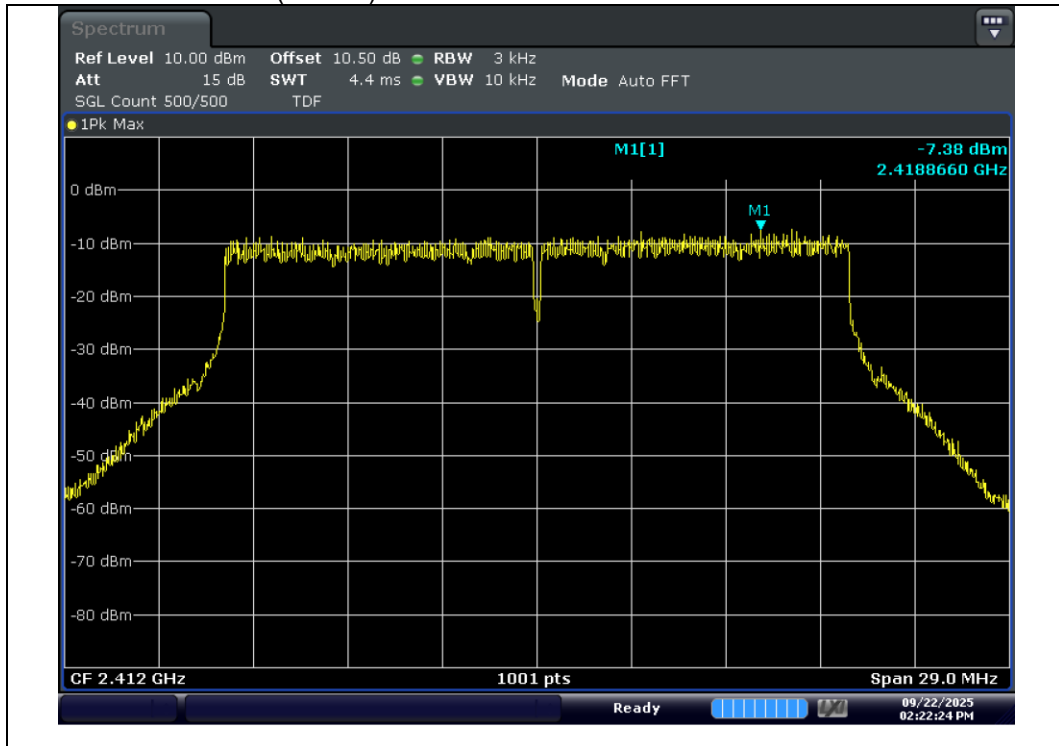
Test mode : 802.11ax(HE40) / 2437 MHz



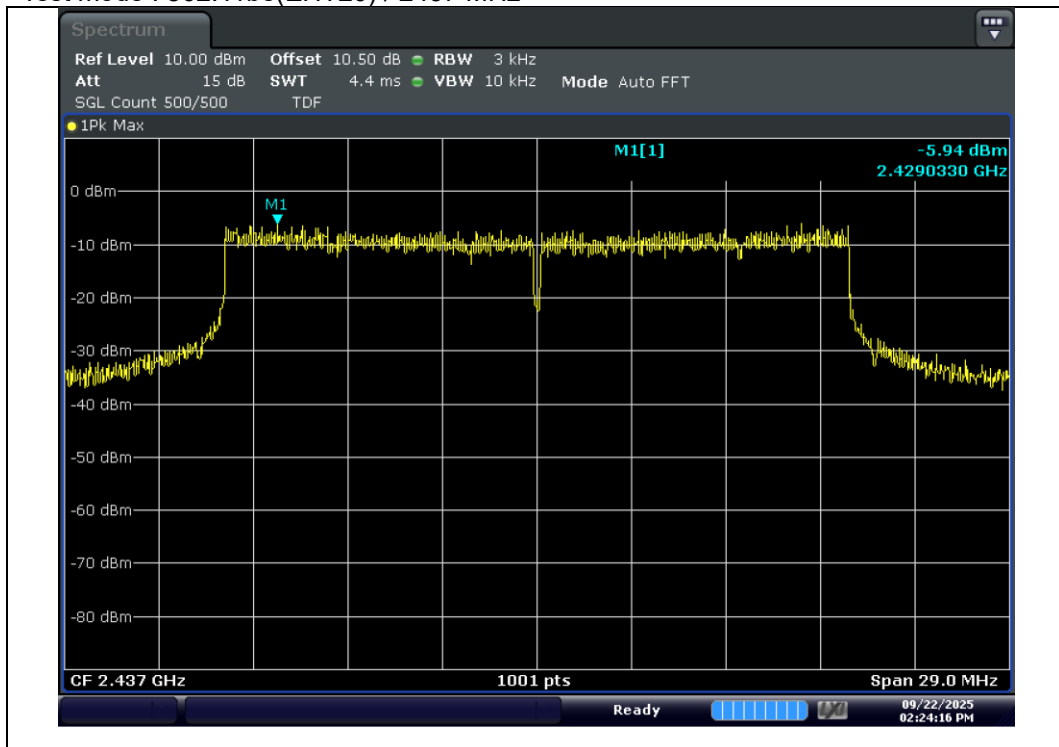
Test mode : 802.11ax(HE40) / 2452 MHz



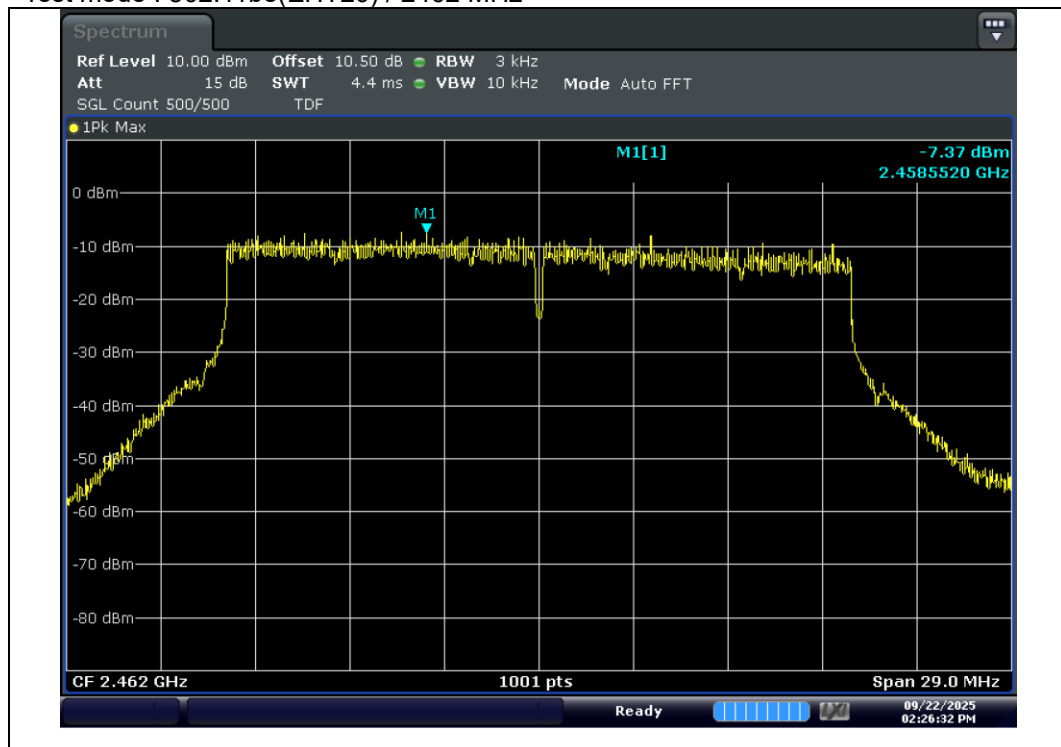
Test mode : 802.11be(EHT20) / 2412 MHz



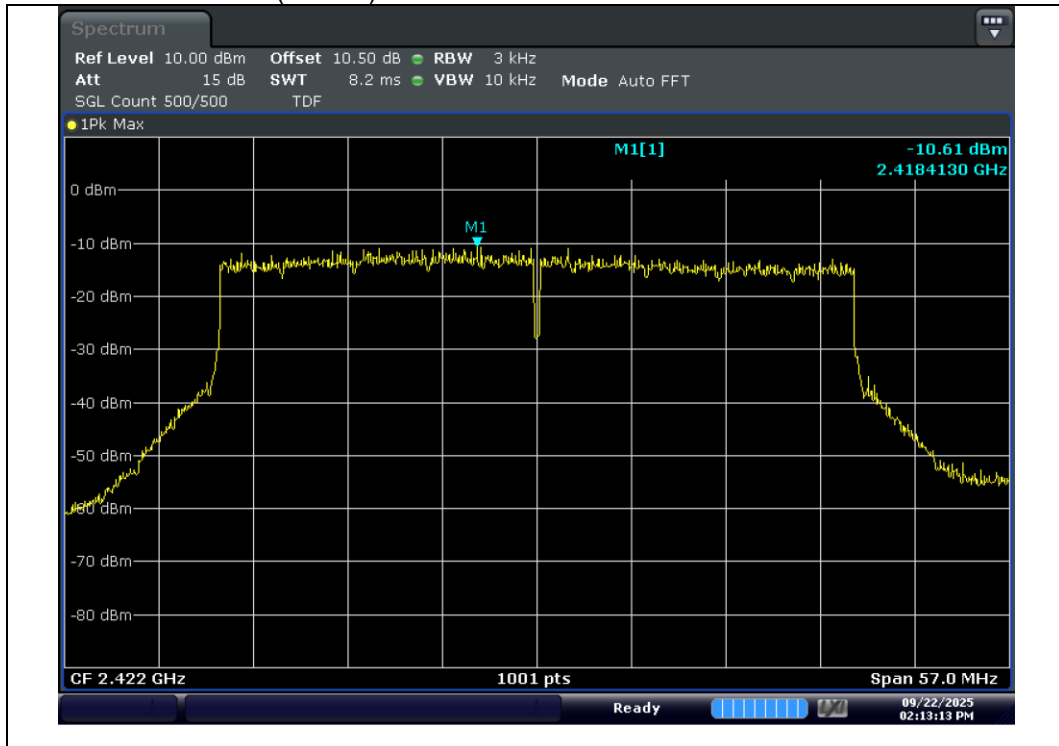
Test mode : 802.11be(EHT20) / 2437 MHz



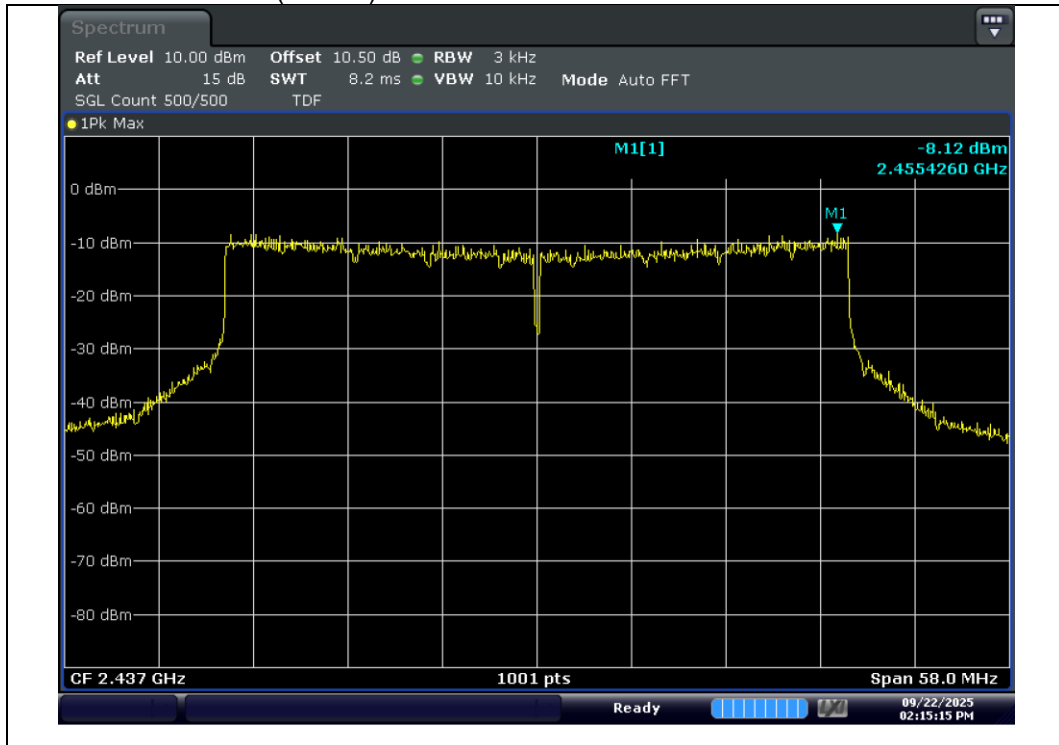
Test mode : 802.11be(EHT20) / 2462 MHz



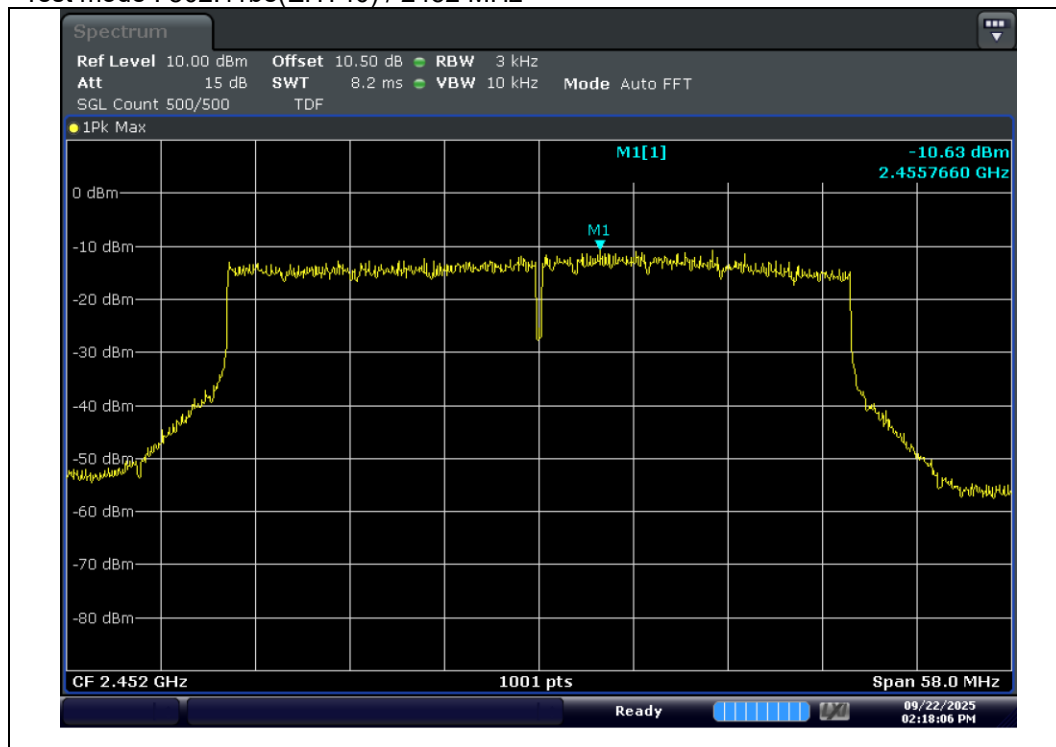
Test mode : 802.11be(EHT40) / 2422 MHz



Test mode : 802.11be(EHT40) / 2437 MHz



Test mode : 802.11be(EHT40) / 2452 MHz



4.3.4 6 dB Bandwidth(DTS Bandwidth)

4.3.4.1 Regulation

According to §15.247(e) and RSS-247 §6.3.1(a) Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

4.3.4.2 Measurement Procedure

These test measurement settings are specified in section 8.0 of 558074 D01 DTS Meas Guidance

4.3.4.2.1 DTS Channel Bandwidth-Option 1

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) ≥ 3 RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

4.3.4.2.2 DTS Channel Bandwidth Measurement Procedure-Option 2

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW ≥ 3 RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

4.3.4.3 Result

Comply (measurement data : refer to the next page)

4.3.4.4 Measurement data

Test mode : 802.11b

Frequency (MHz)	6 dB Bandwidth (MHz)	Min. Limit (MHz)	Occupied Bandwidth (MHz)
2412	8.05	0.50	13.07
2437	10.06	0.50	16.97
2462	8.04	0.50	13.56

Test mode : 802.11g

Frequency (MHz)	6 dB Bandwidth (MHz)	Min. Limit (MHz)	Occupied Bandwidth (MHz)
2412	16.30	0.50	16.73
2437	16.35	0.50	18.11
2462	16.43	0.50	16.72

Test mode : 802.11n(HT20)

Frequency (MHz)	6 dB Bandwidth (MHz)	Min. Limit (MHz)	Occupied Bandwidth (MHz)
2412	17.33	0.50	17.87
2437	17.63	0.50	18.76
2462	17.62	0.50	17.75

Test mode : 802.11n(HT40)

Frequency (MHz)	6 dB Bandwidth (MHz)	Min. Limit (MHz)	Occupied Bandwidth (MHz)
2422	36.35	0.50	36.69
2437	36.35	0.50	37.61
2452	36.44	0.50	36.96

Test mode : 802.11ax(HE20)

Frequency (MHz)	6 dB Bandwidth (MHz)	Min. Limit (MHz)	Occupied Bandwidth (MHz)
2412	19.12	0.50	19.06
2437	19.05	0.50	19.24
2462	19.04	0.50	18.98

Test mode : 802.11ax(HE40)

Frequency (MHz)	6 dB Bandwidth (MHz)	Min. Limit (MHz)	Occupied Bandwidth (MHz)
2422	37.88	0.50	38.04
2437	38.23	0.50	38.24
2452	37.94	0.50	38.00

Test mode : 802.11be(EHT20)

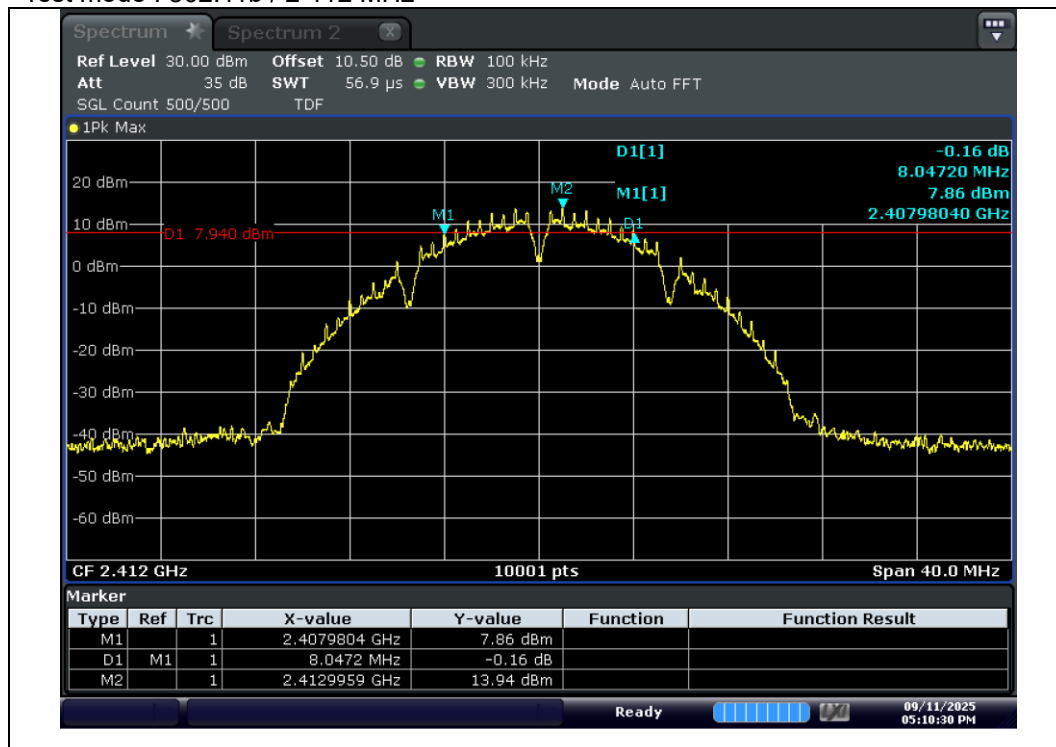
Frequency (MHz)	6 dB Bandwidth (MHz)	Min. Limit (MHz)	Occupied Bandwidth (MHz)
2412	18.93	0.50	19.05
2437	19.06	0.50	19.27
2462	19.01	0.50	18.95

Test mode : 802.11be(EHT40)

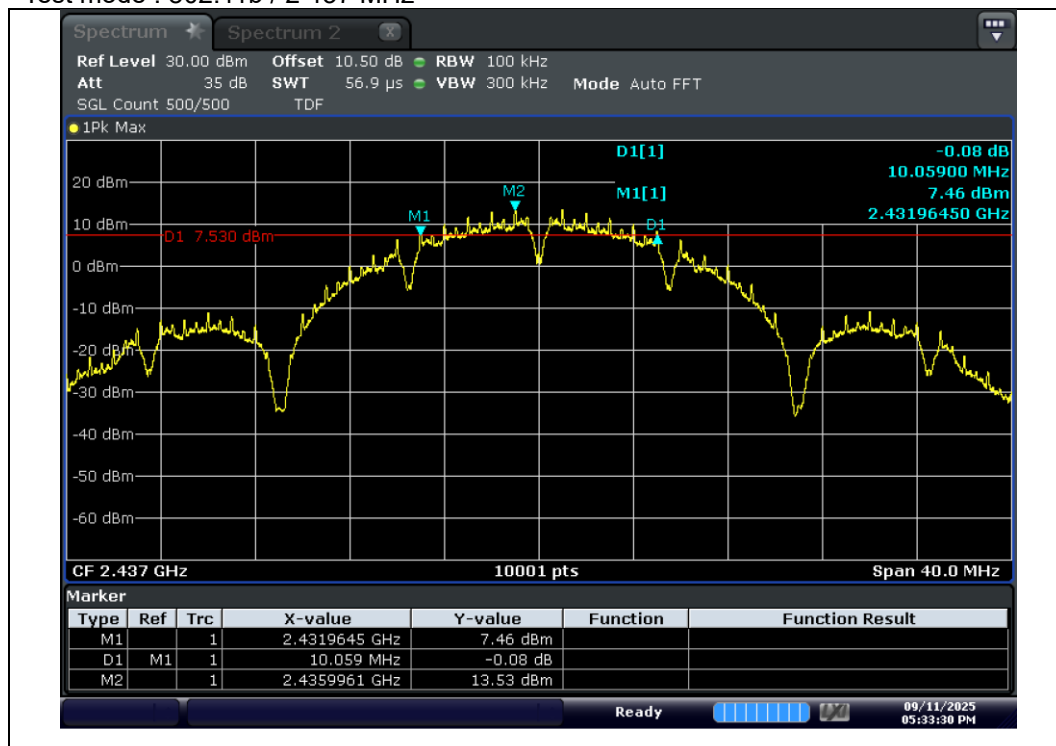
Frequency (MHz)	6 dB Bandwidth (MHz)	Min. Limit (MHz)	Occupied Bandwidth (MHz)
2422	37.51	0.50	37.91
2437	38.22	0.50	38.21
2452	38.00	0.50	37.92

4.3.4.5 6 dB Bandwidth Test Plot

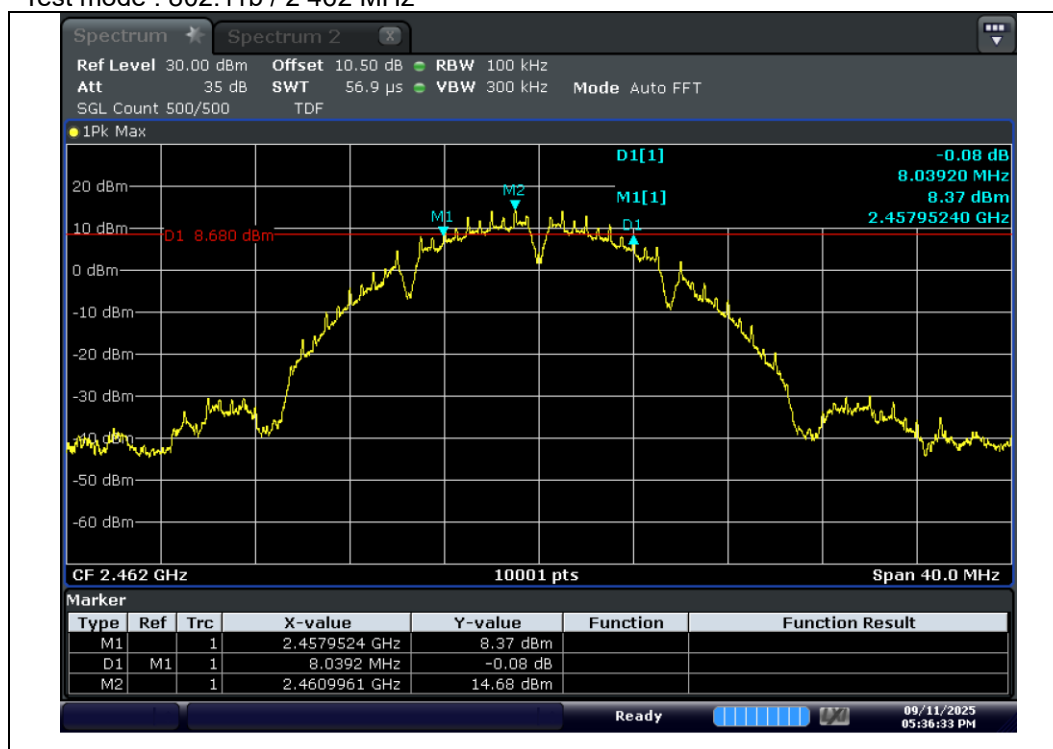
Test mode : 802.11b / 2 412 MHz



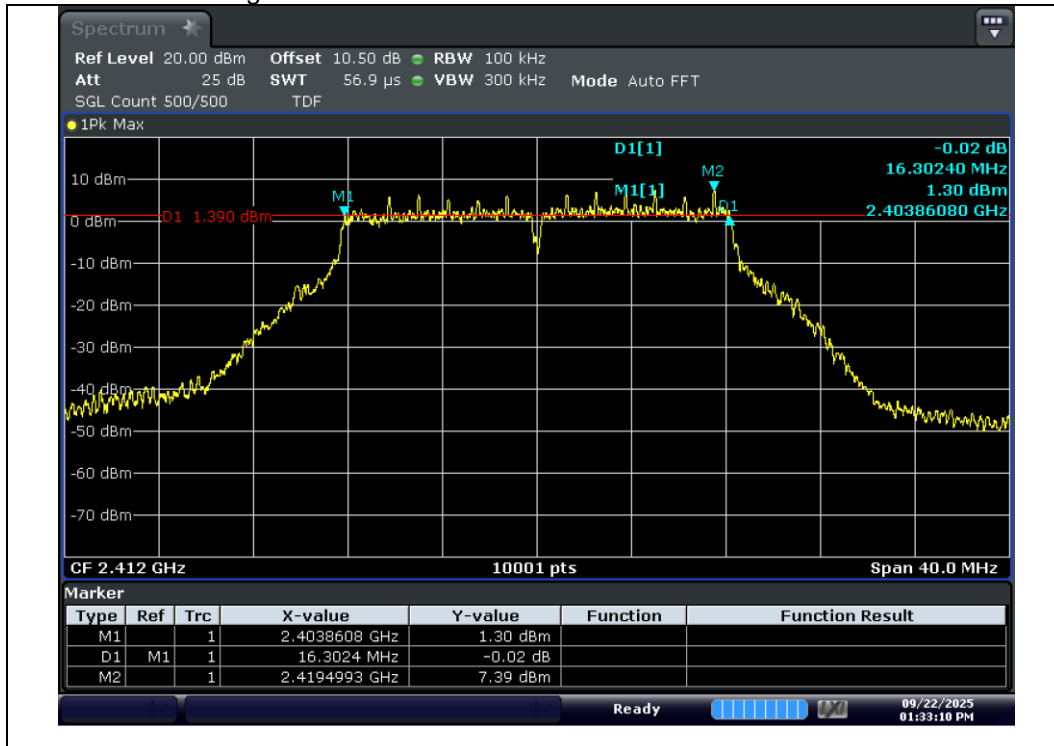
Test mode : 802.11b / 2 437 MHz



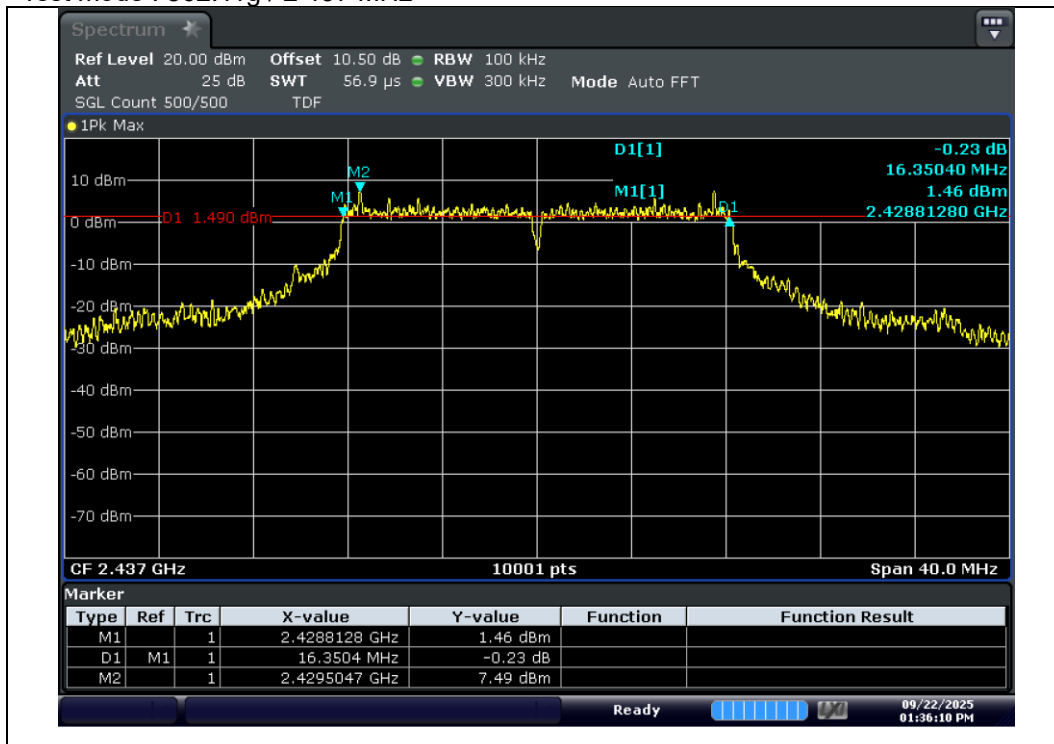
Test mode : 802.11b / 2.462 MHz



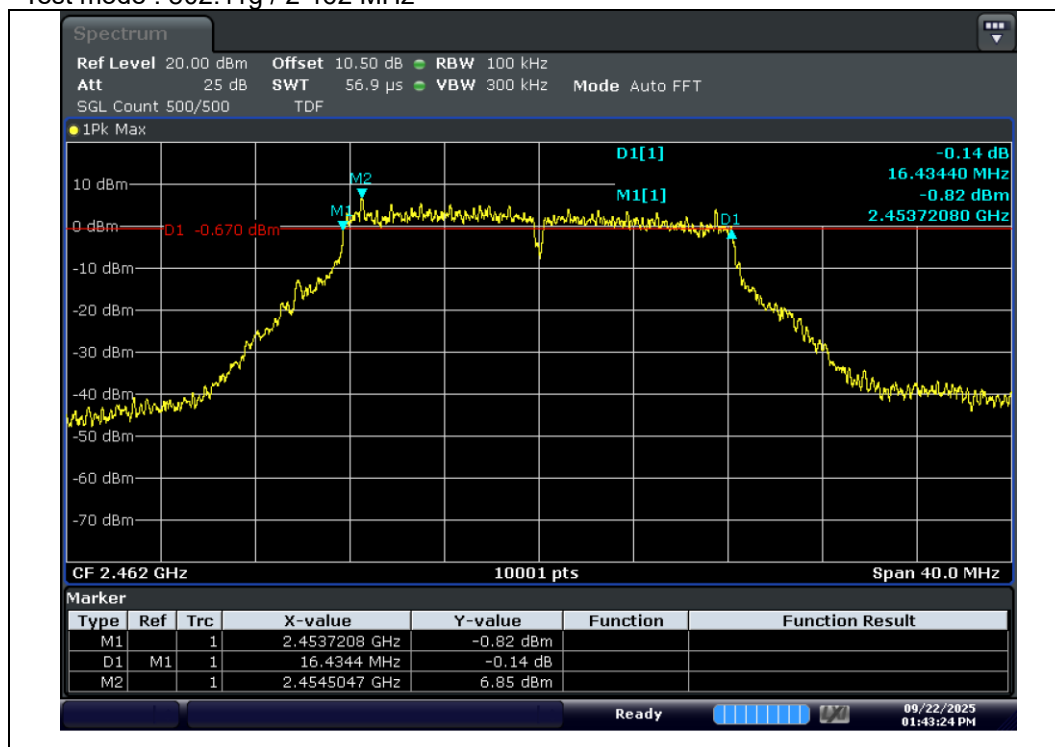
Test mode : 802.11g / 2 412 MHz



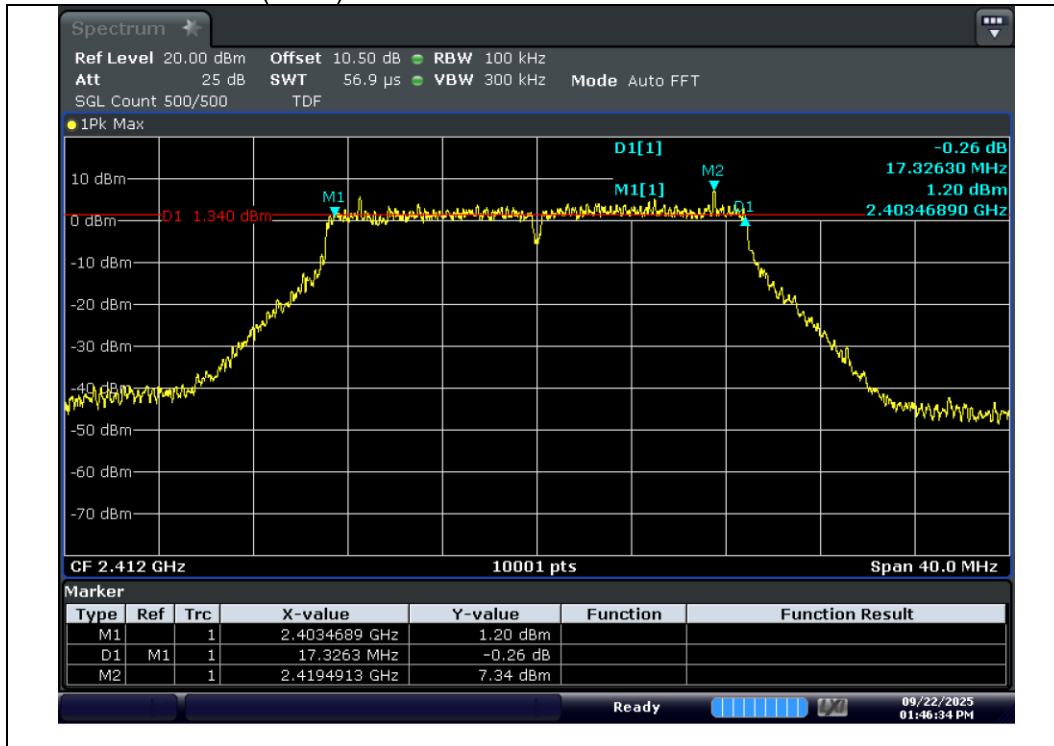
Test mode : 802.11g / 2 437 MHz



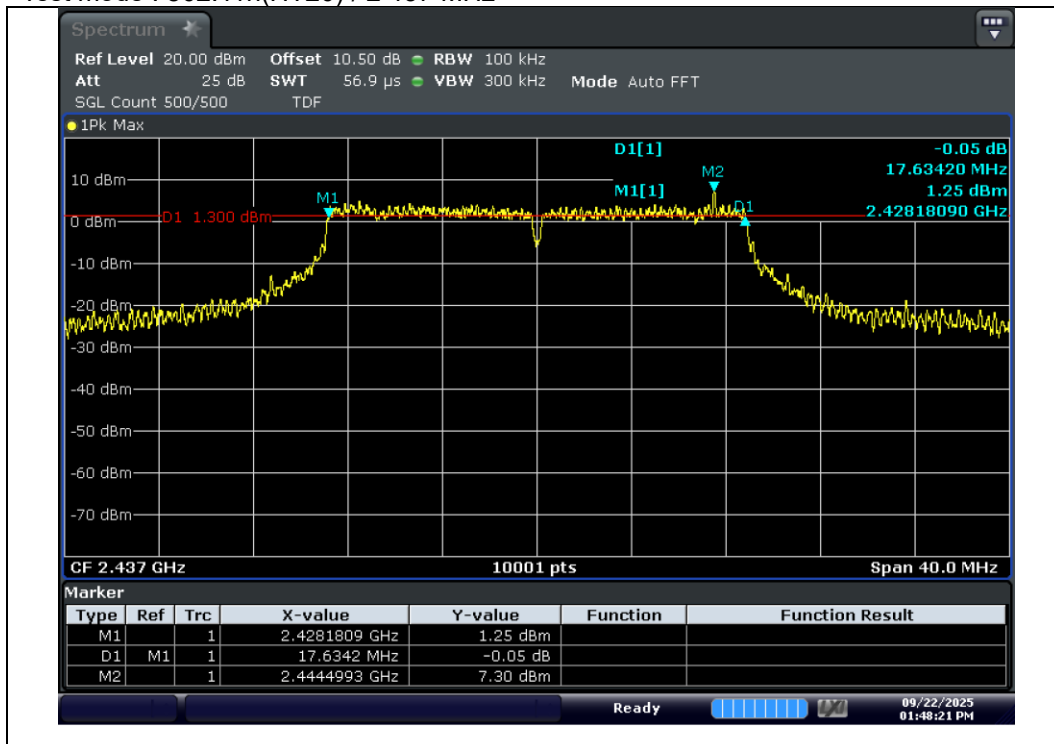
Test mode : 802.11g / 2.462 MHz



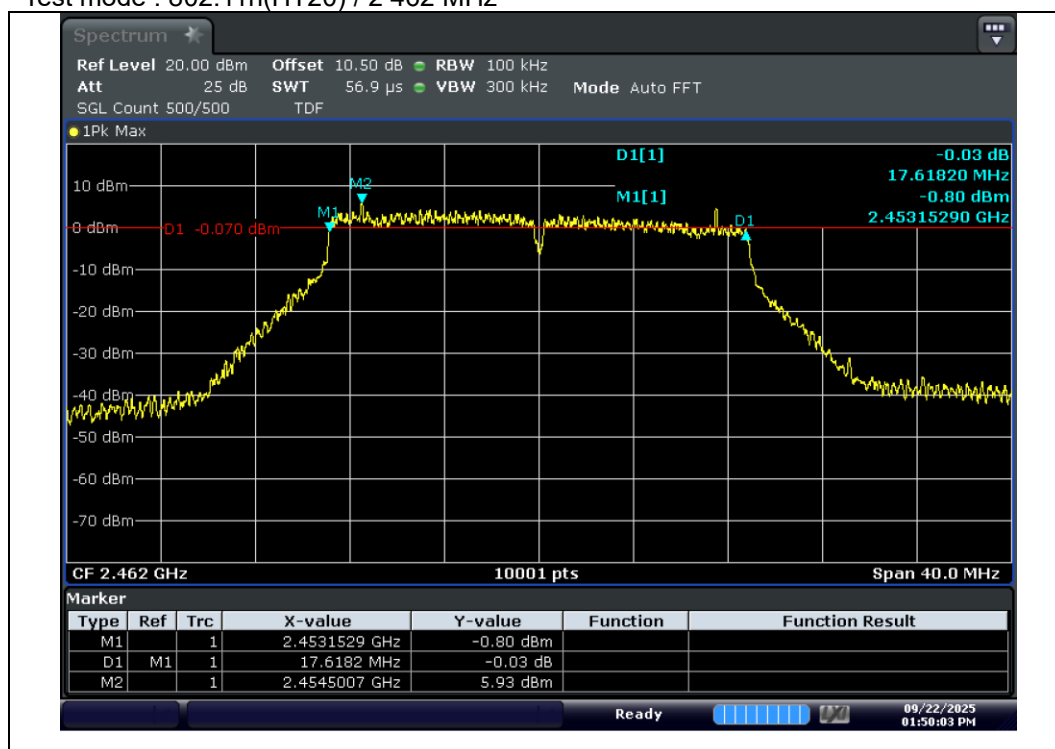
Test mode : 802.11n(HT20) / 2 412 MHz



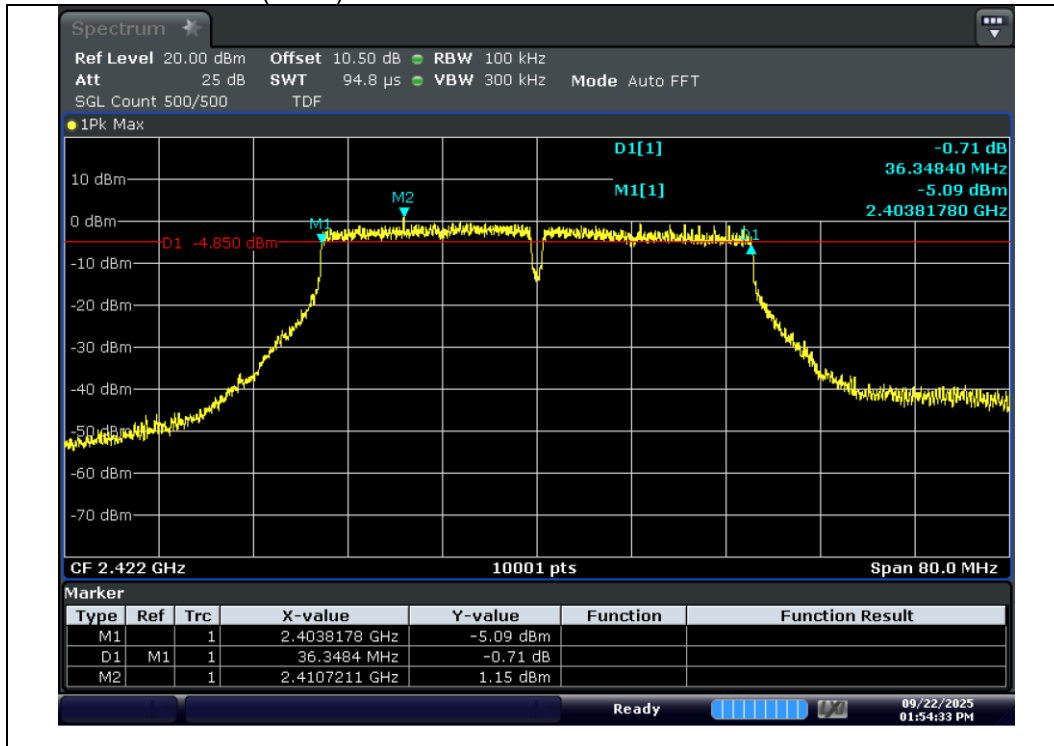
Test mode : 802.11n(HT20) / 2 437 MHz



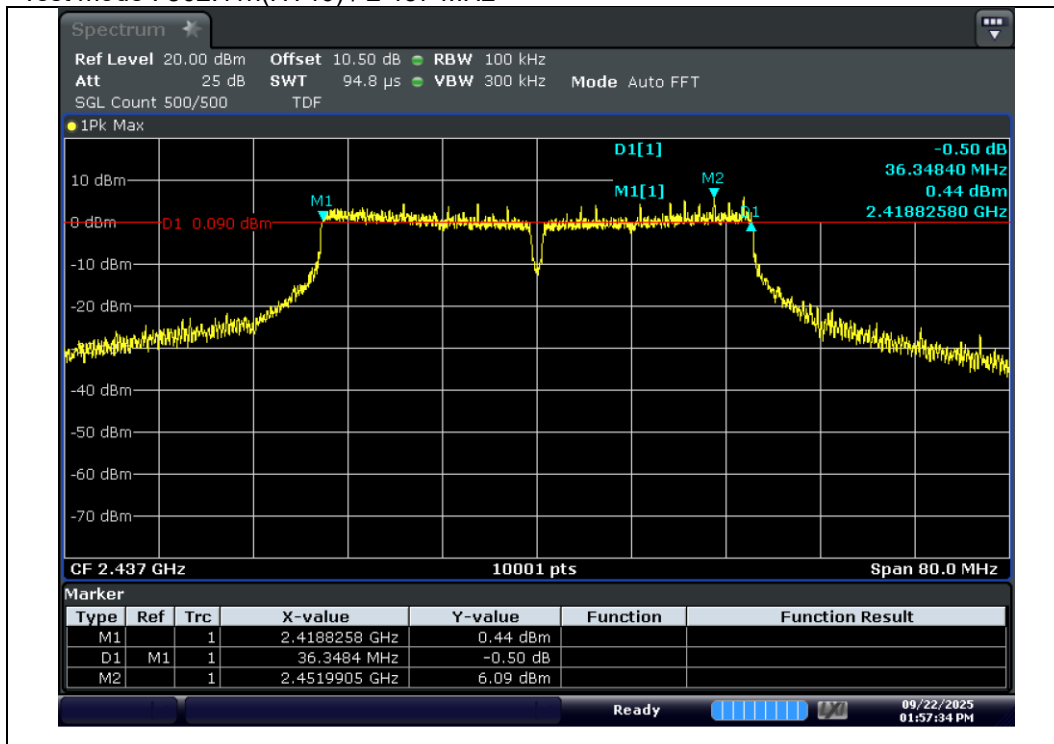
Test mode : 802.11n(HT20) / 2 462 MHz



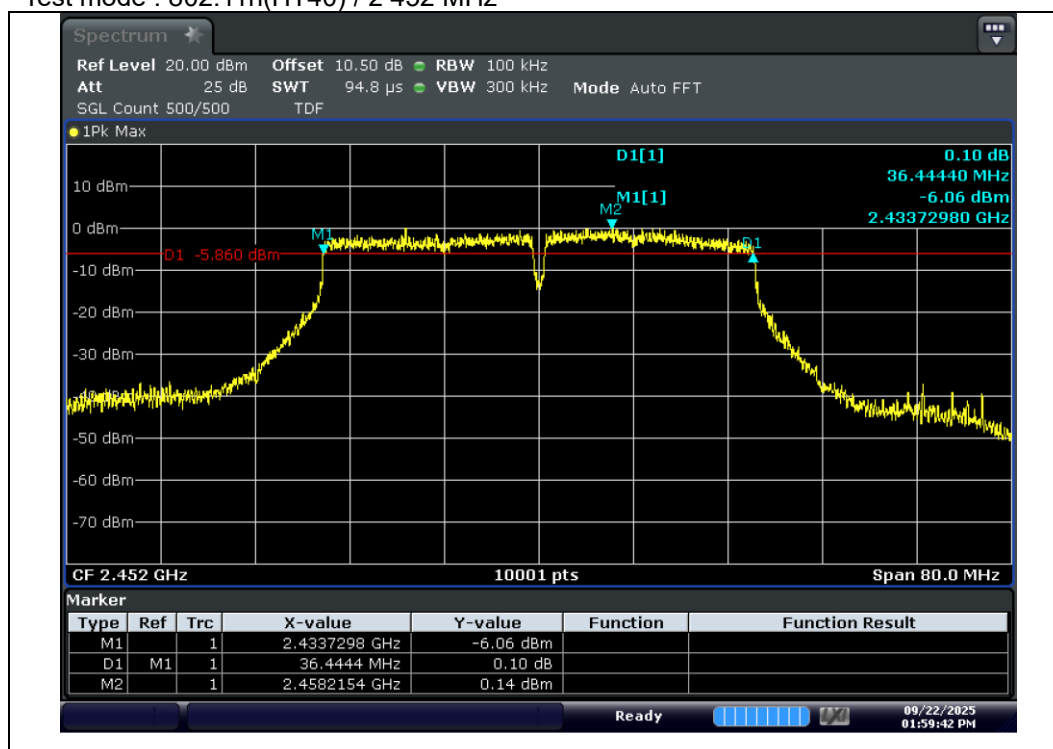
Test mode : 802.11n(HT40) / 2 422 MHz



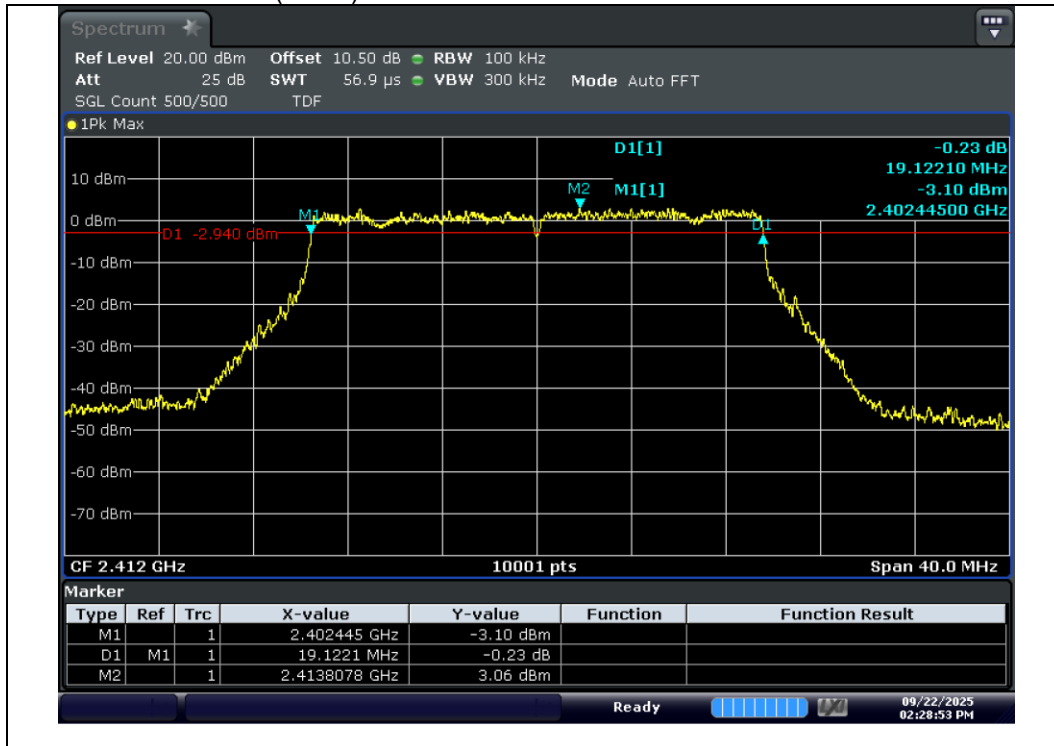
Test mode : 802.11n(HT40) / 2 437 MHz



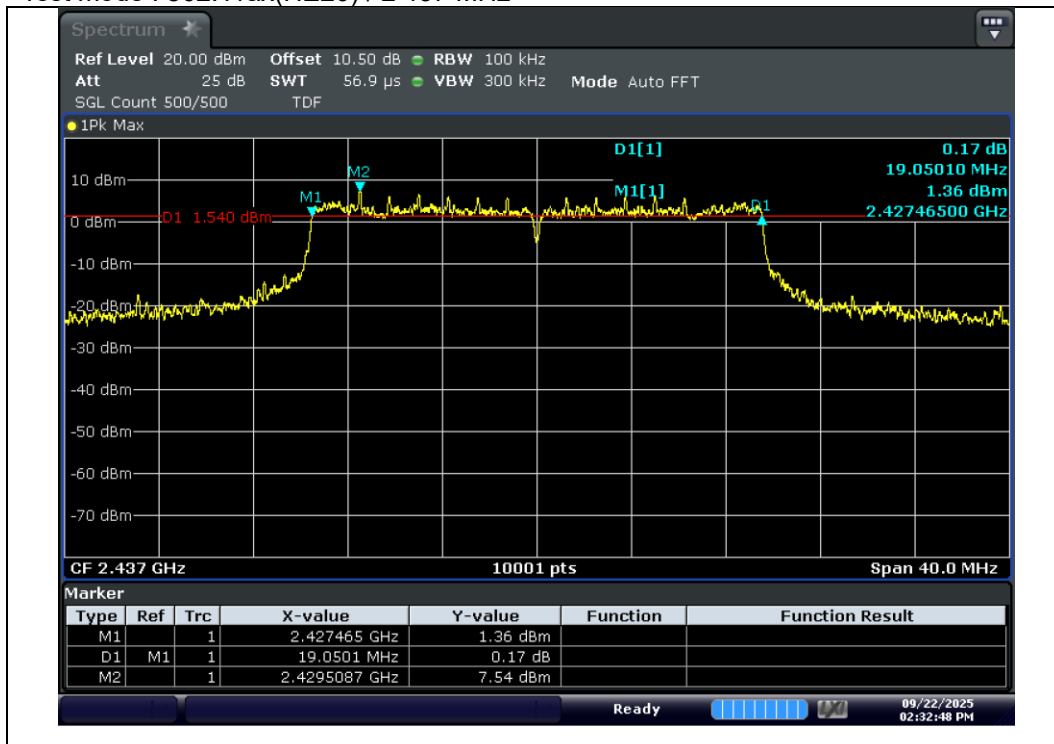
Test mode : 802.11n(HT40) / 2 452 MHz



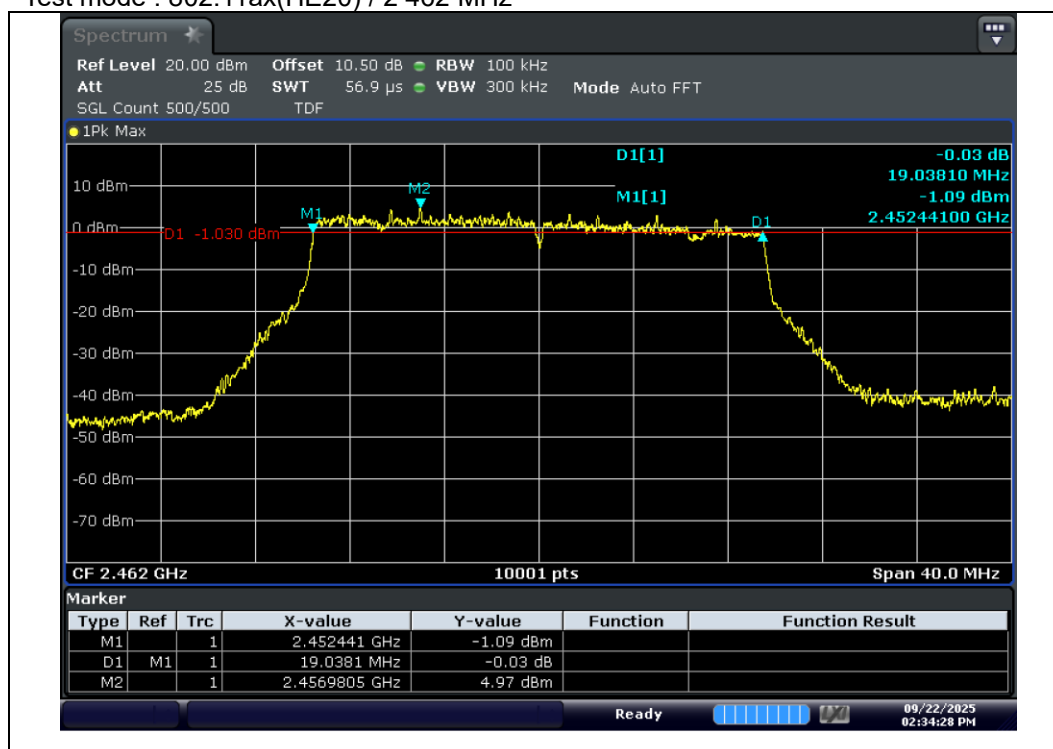
Test mode : 802.11ax(HE20) / 2 412 MHz



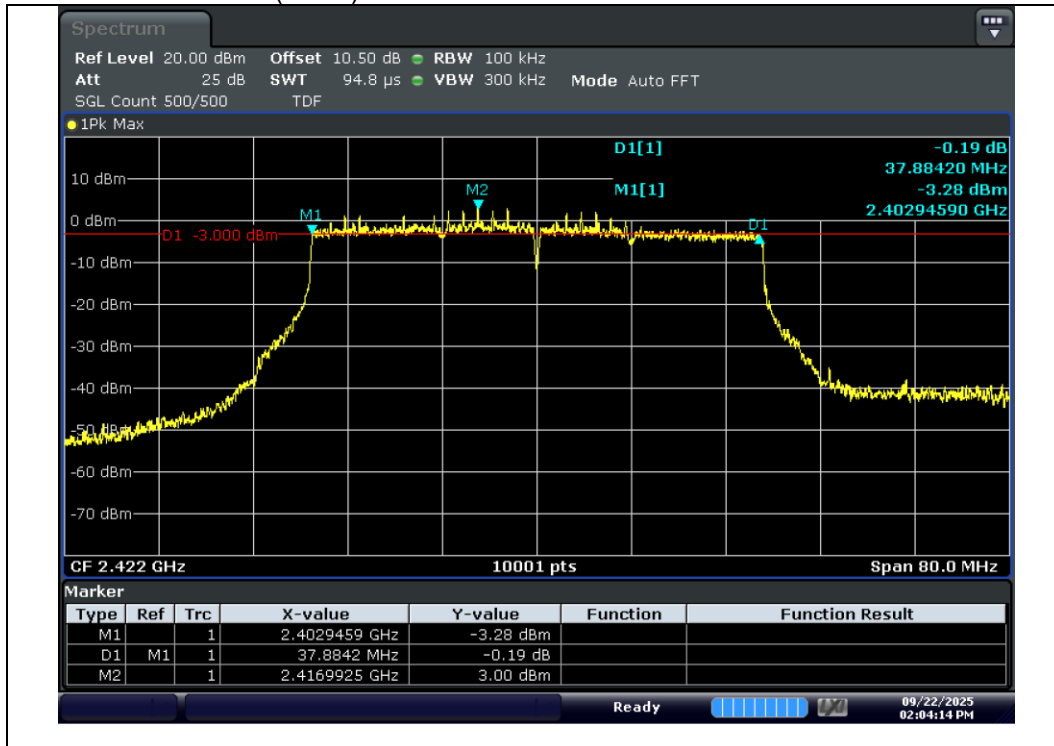
Test mode : 802.11ax(HE20) / 2 437 MHz



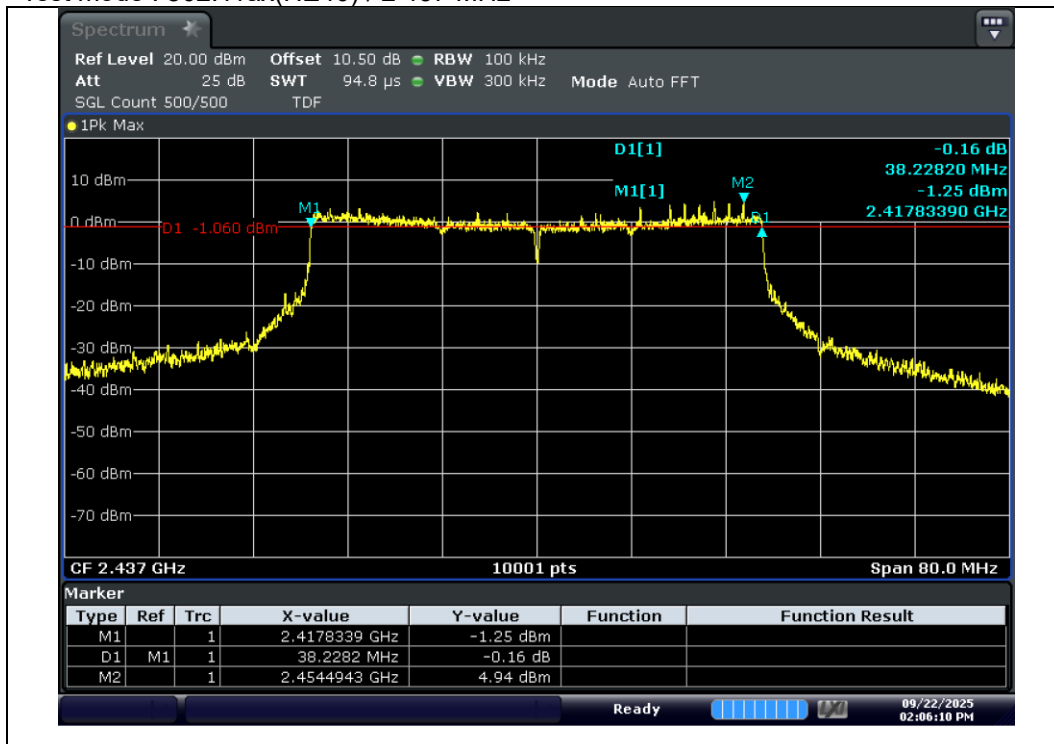
Test mode : 802.11ax(HE20) / 2 462 MHz



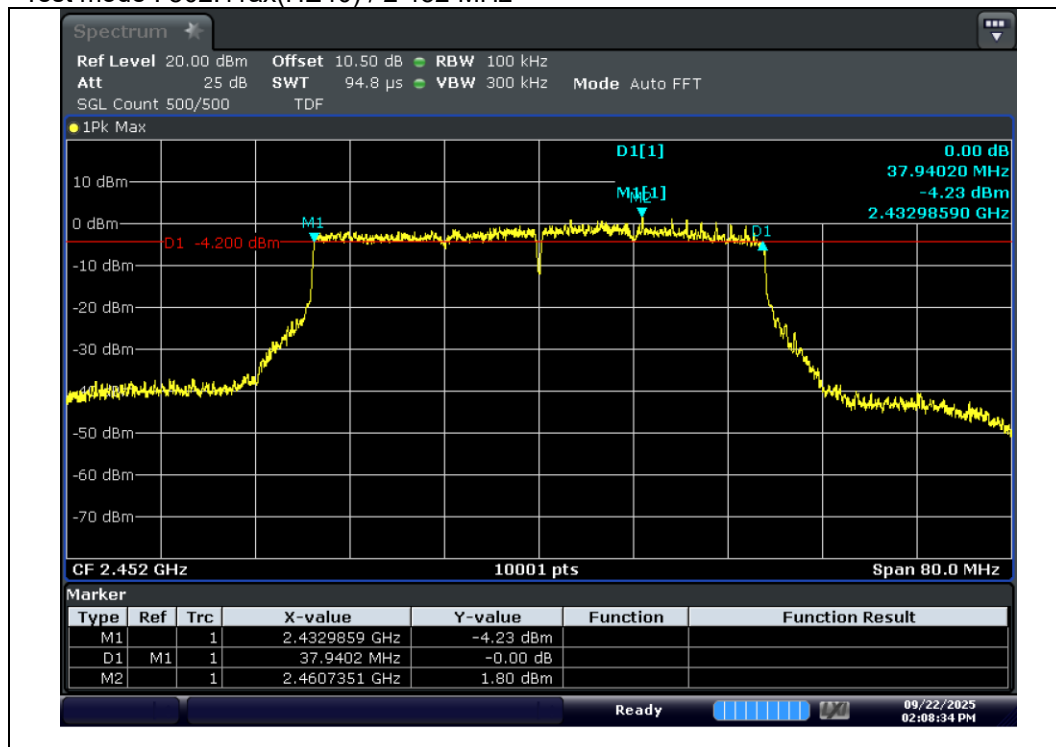
Test mode : 802.11ax(HE40) / 2 422 MHz



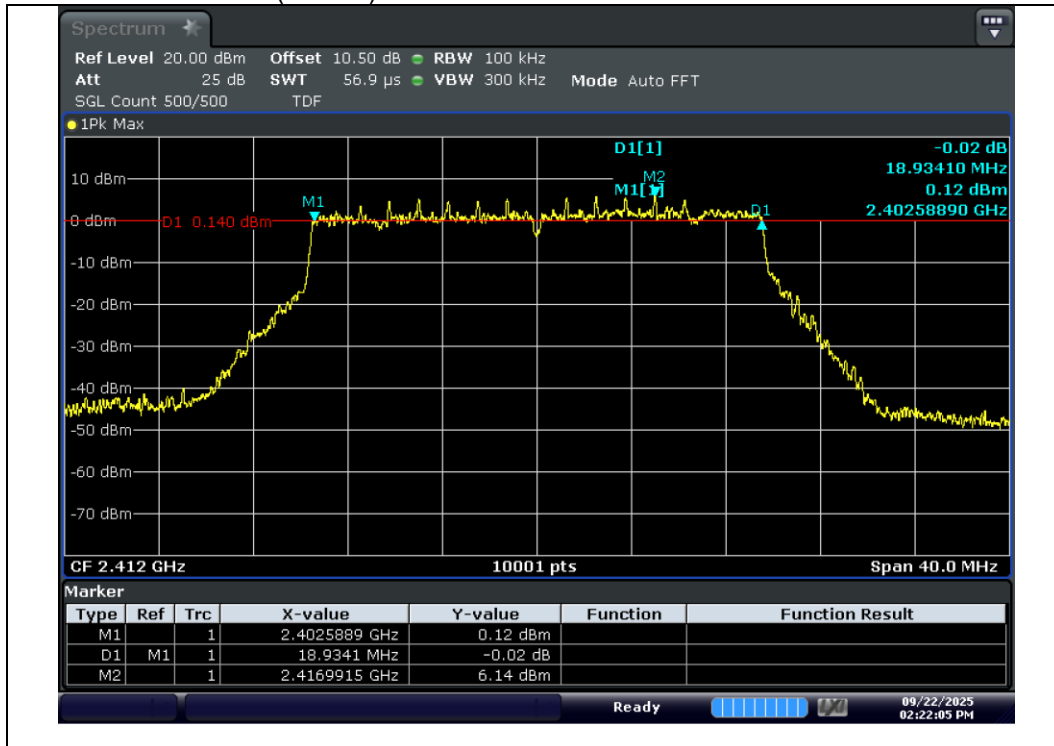
Test mode : 802.11ax(HE40) / 2 437 MHz



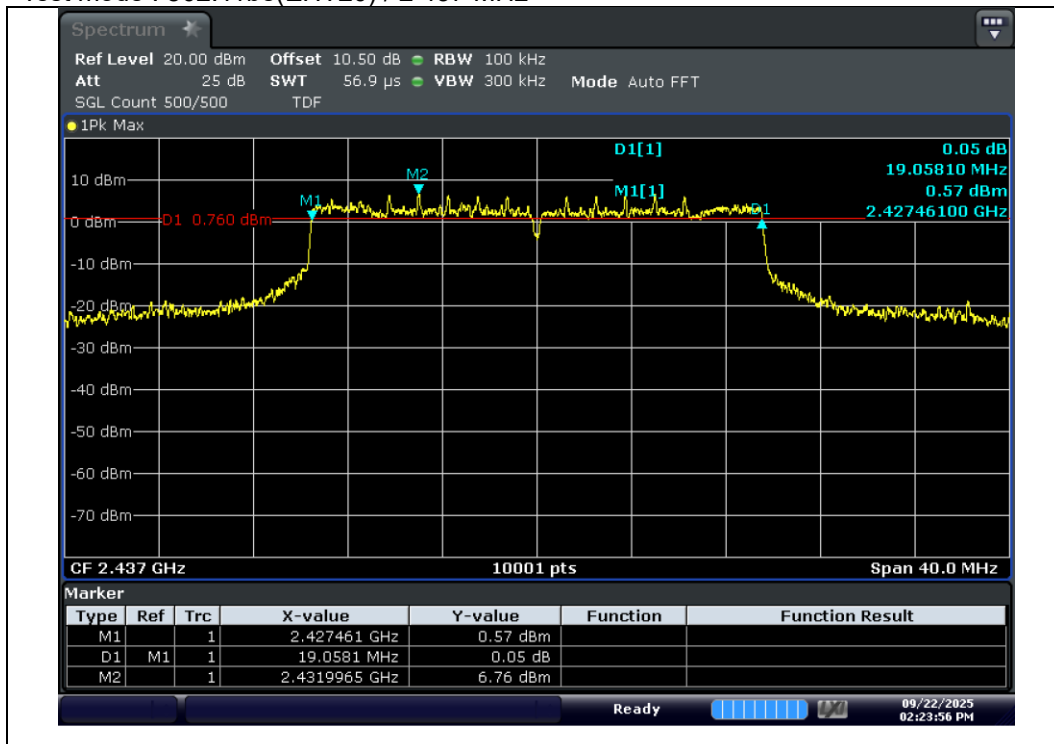
Test mode : 802.11ax(HE40) / 2 452 MHz



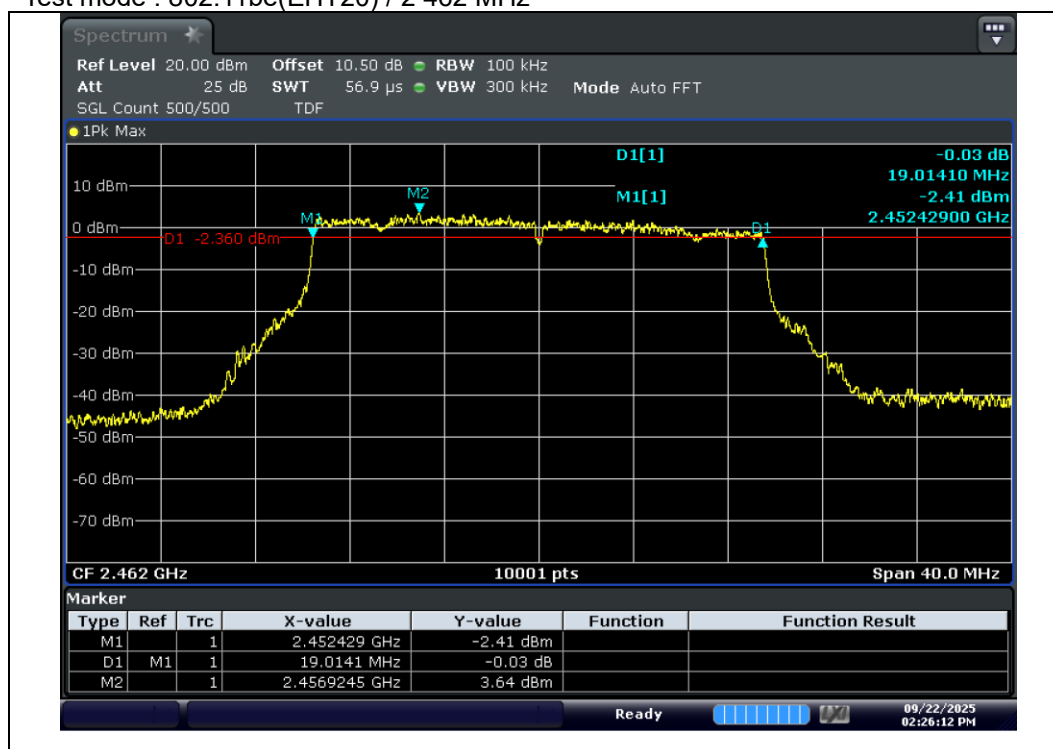
Test mode : 802.11be(EHT20) / 2 412 MHz



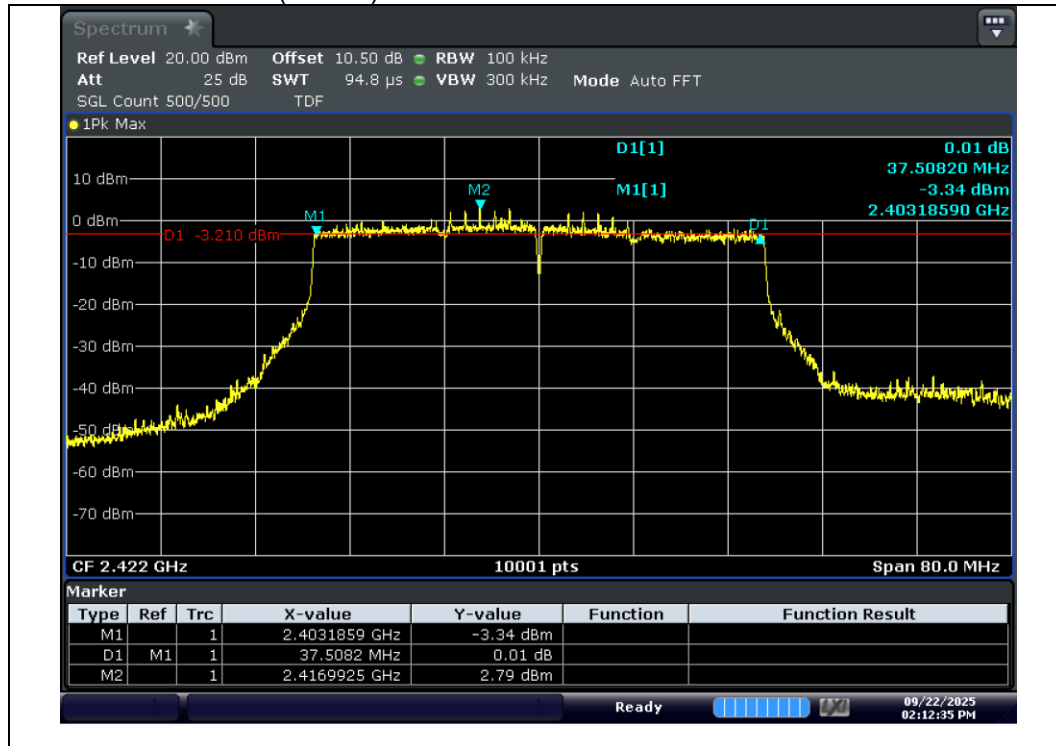
Test mode : 802.11be(EHT20) / 2 437 MHz



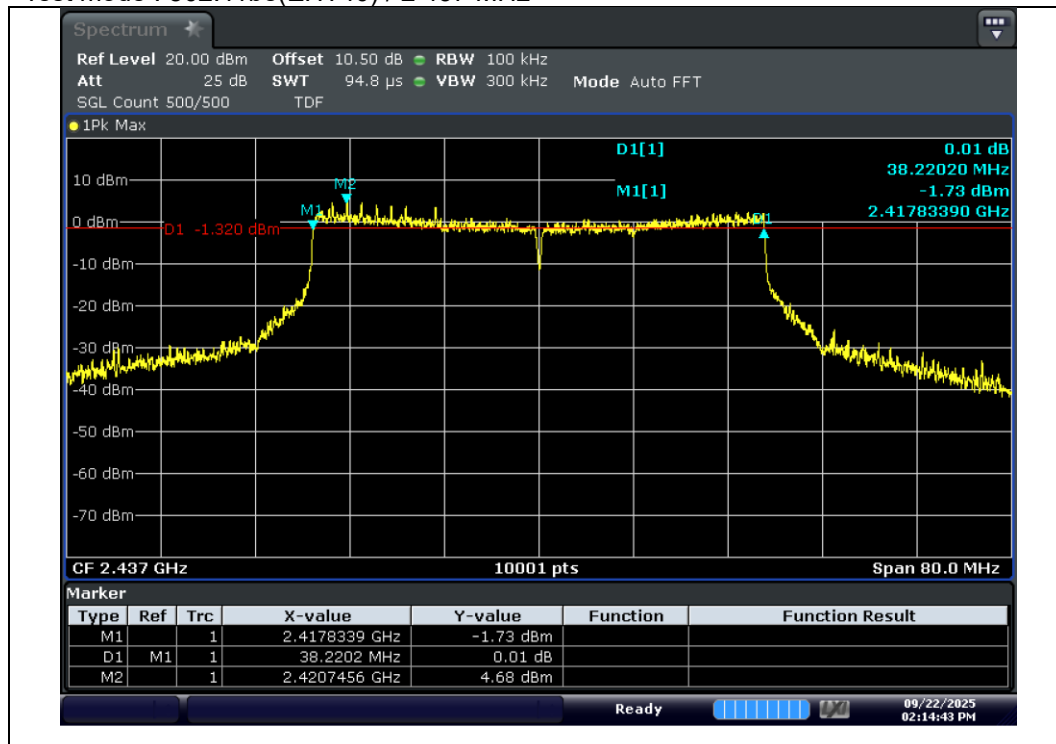
Test mode : 802.11be(EHT20) / 2 462 MHz



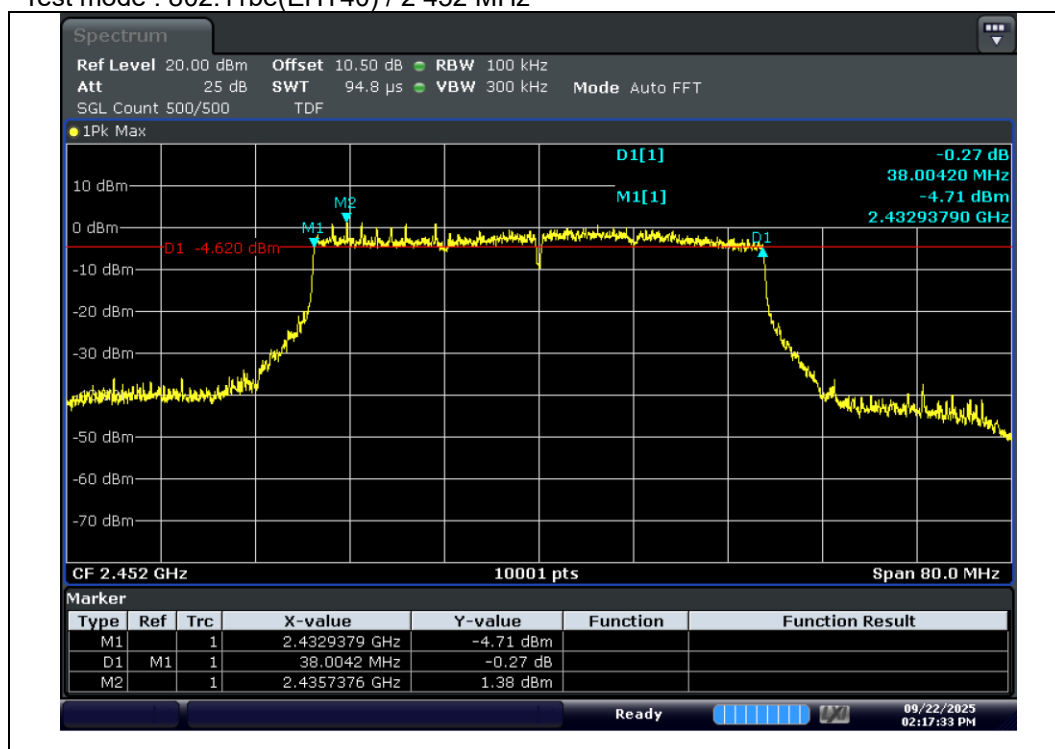
Test mode : 802.11be(EHT40) / 2 422 MHz



Test mode : 802.11be(EHT40) / 2 437 MHz

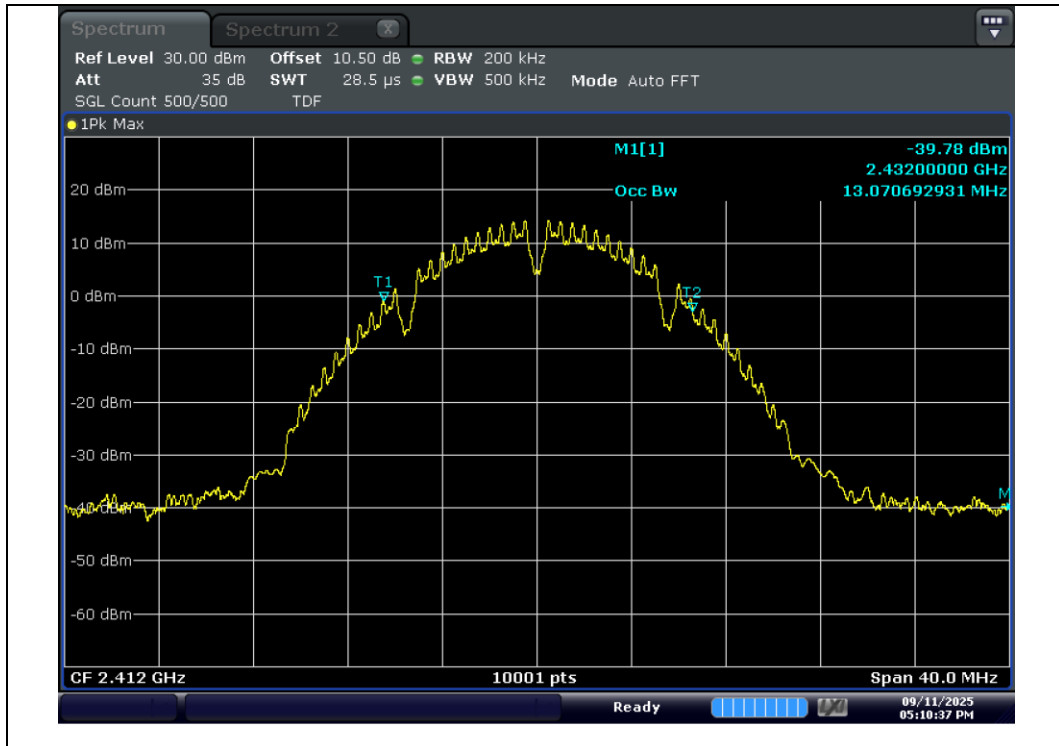


Test mode : 802.11be(EHT40) / 2 452 MHz

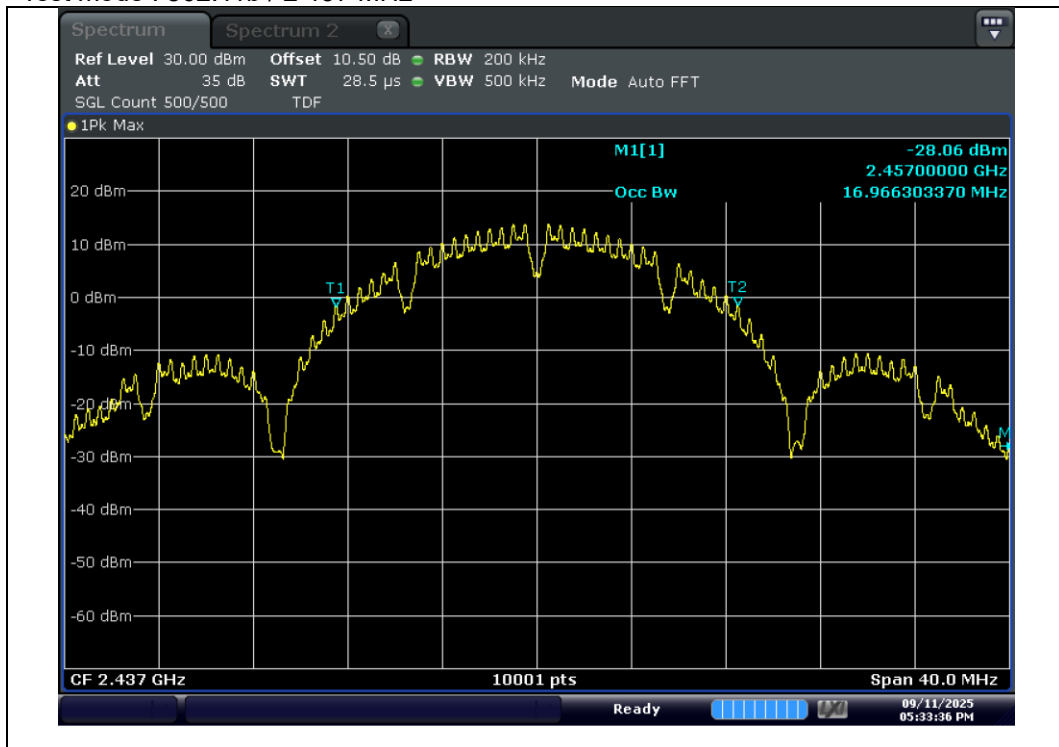


4.3.4.6 99% Occupied Bandwidth Test Plot

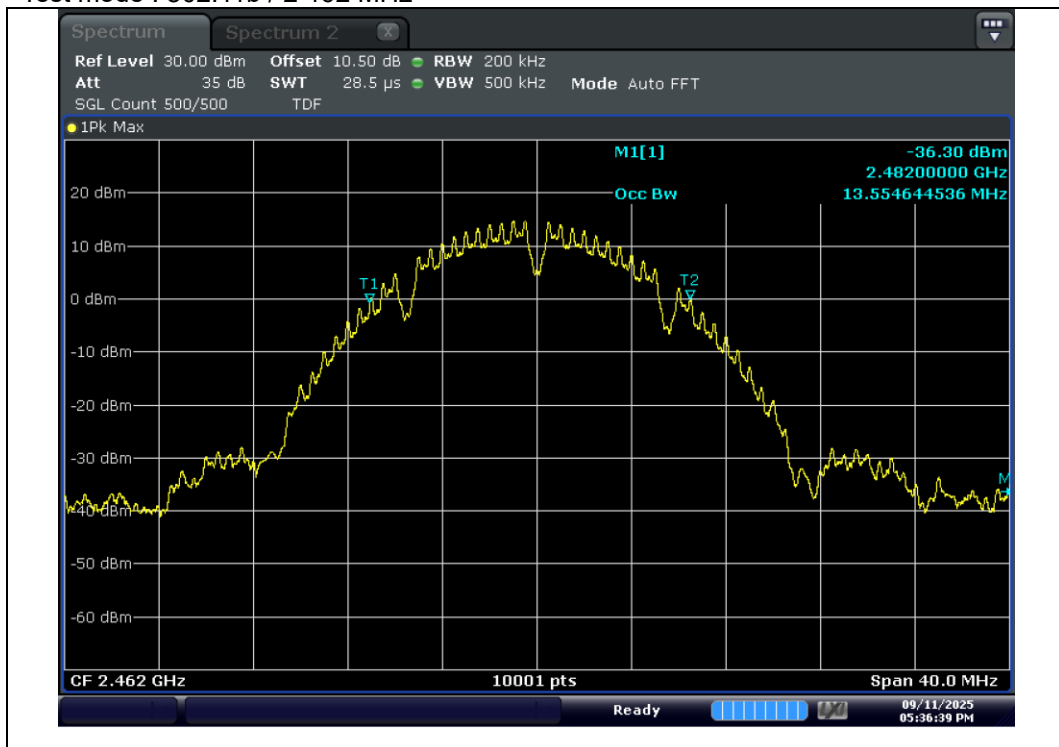
Test mode : 802.11b / 2 412 MHz



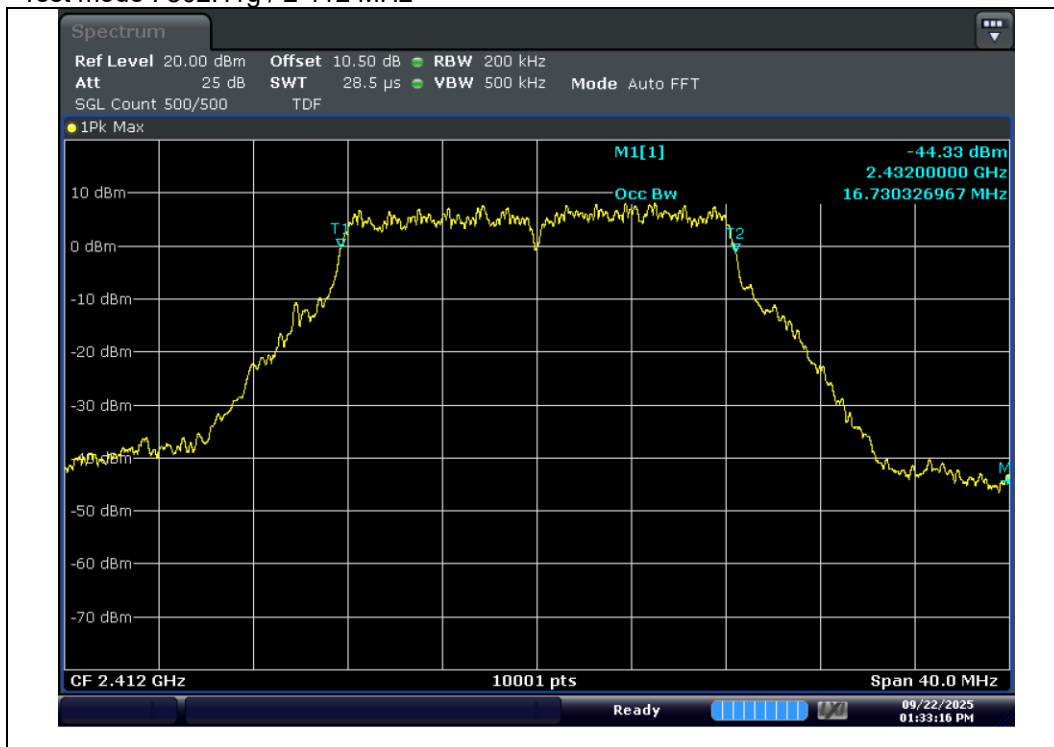
Test mode : 802.11b / 2 437 MHz



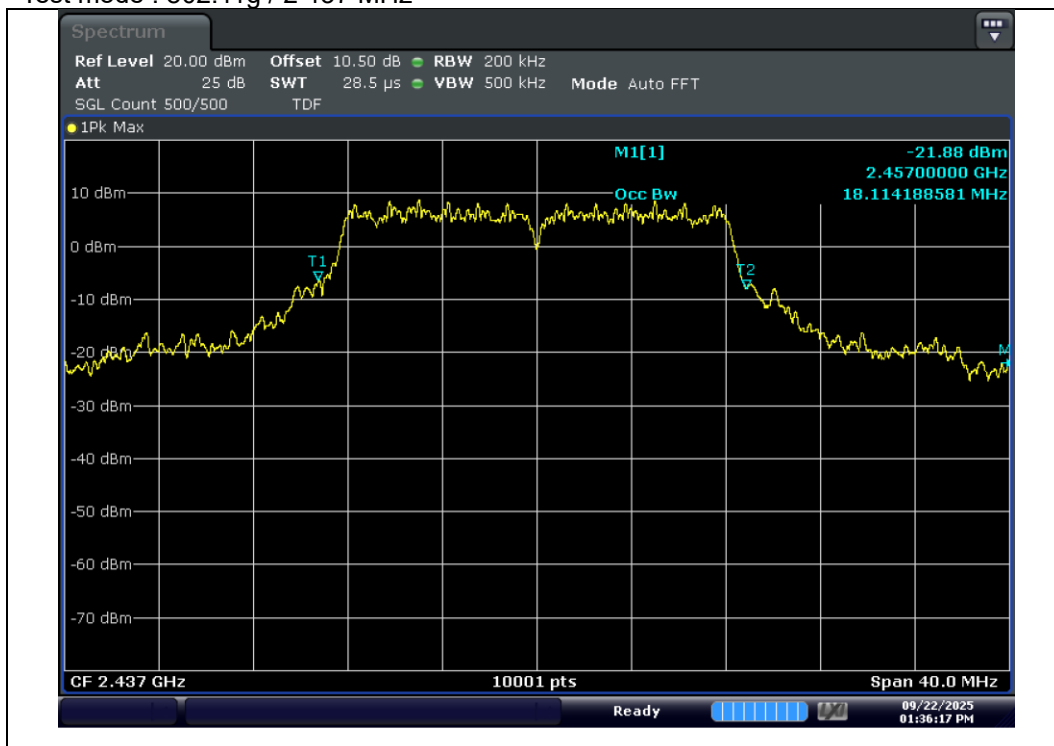
Test mode : 802.11b / 2 462 MHz



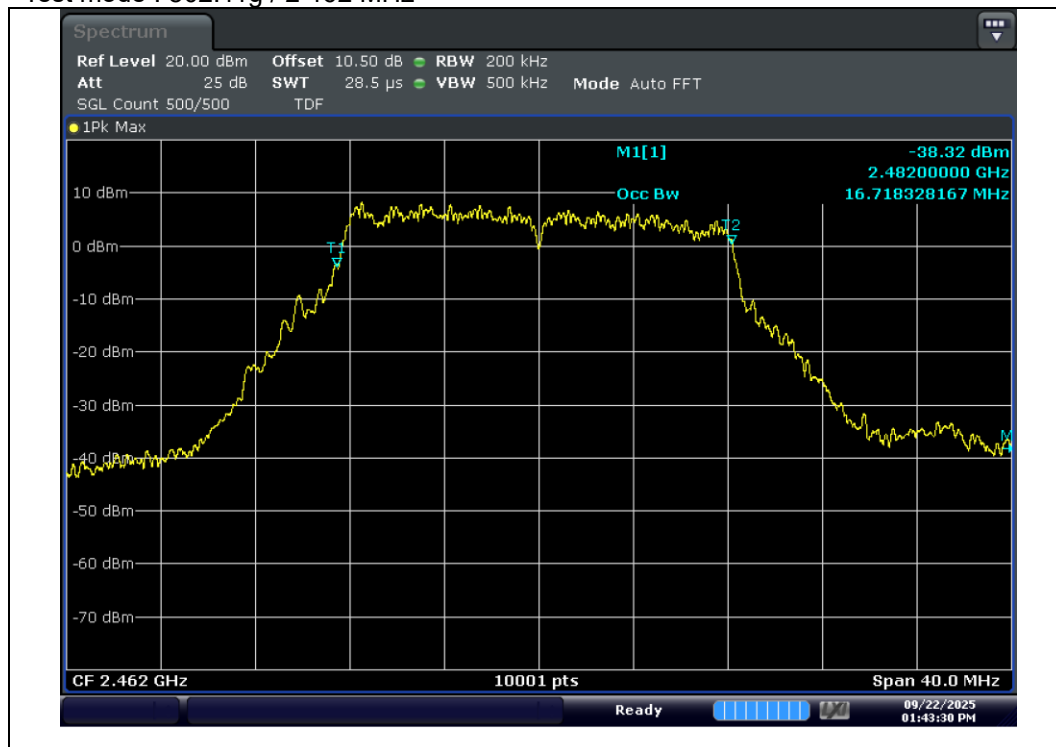
Test mode : 802.11g / 2 412 MHz



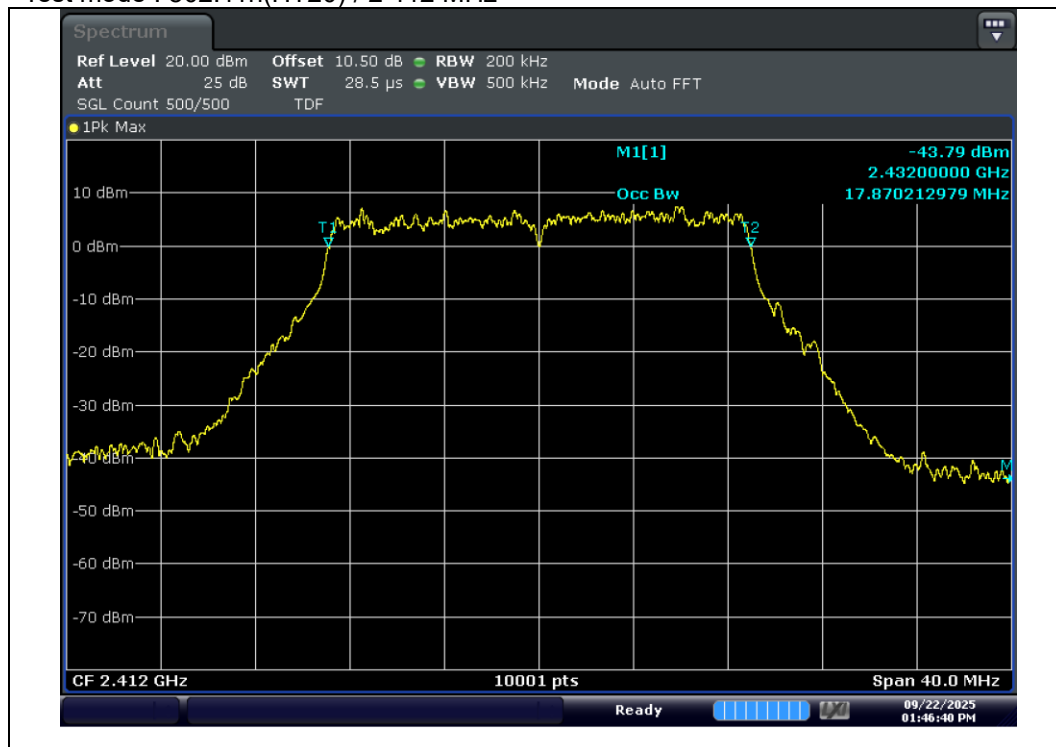
Test mode : 802.11g / 2 437 MHz



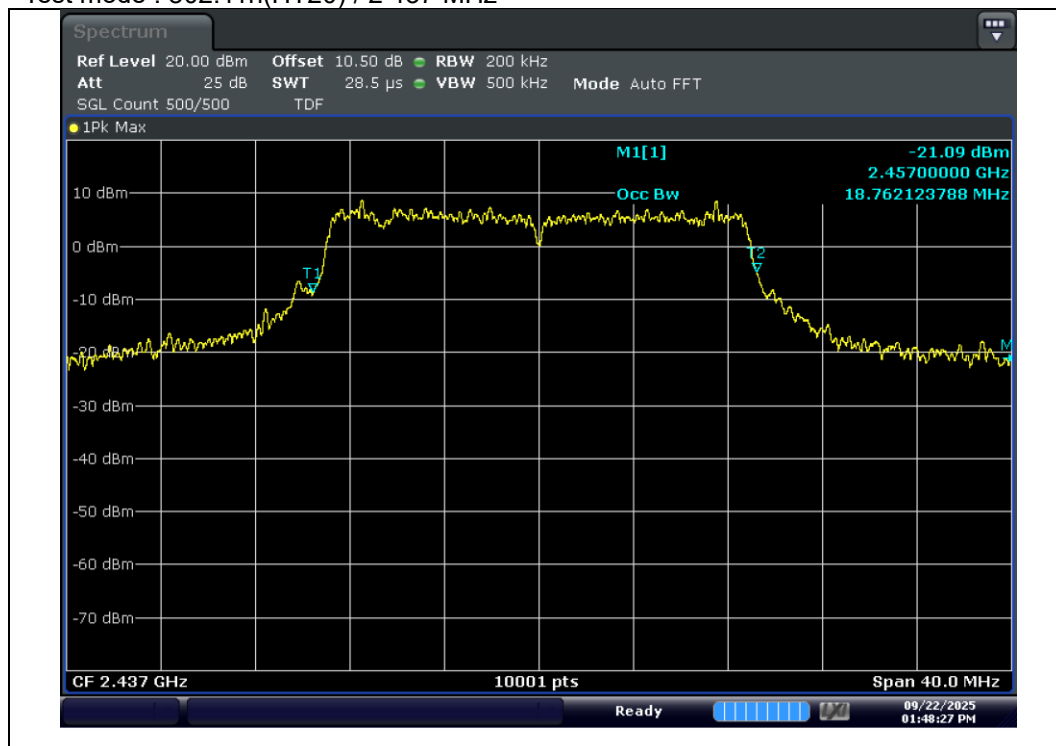
Test mode : 802.11g / 2.462 MHz



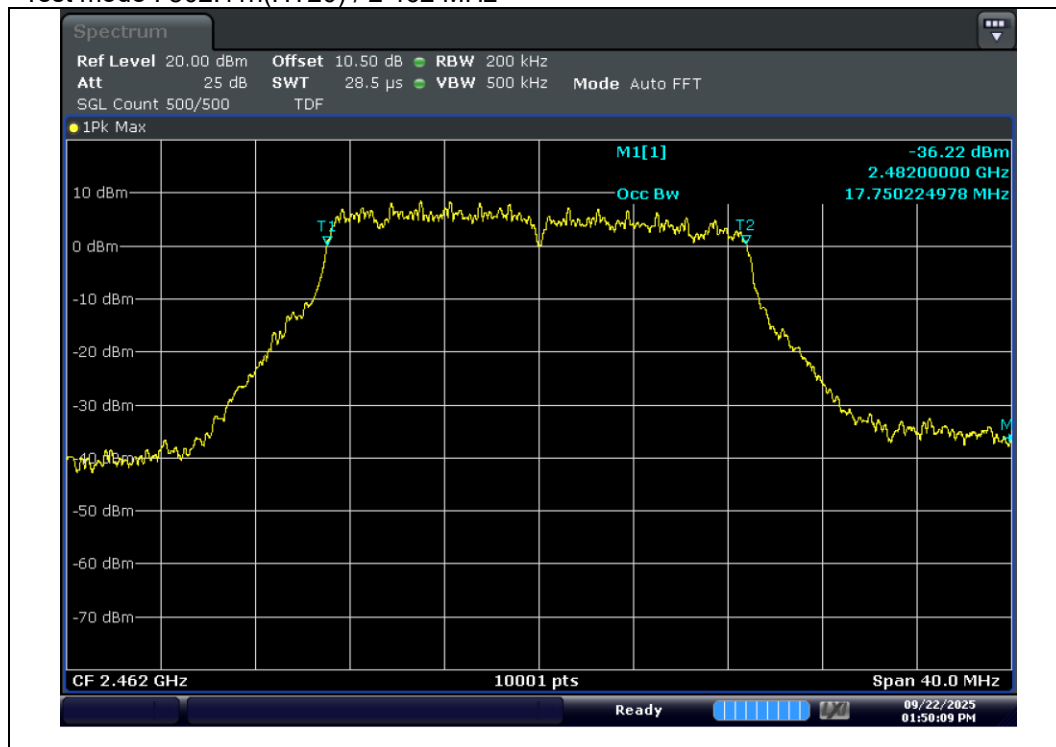
Test mode : 802.11n(HT20) / 2 412 MHz



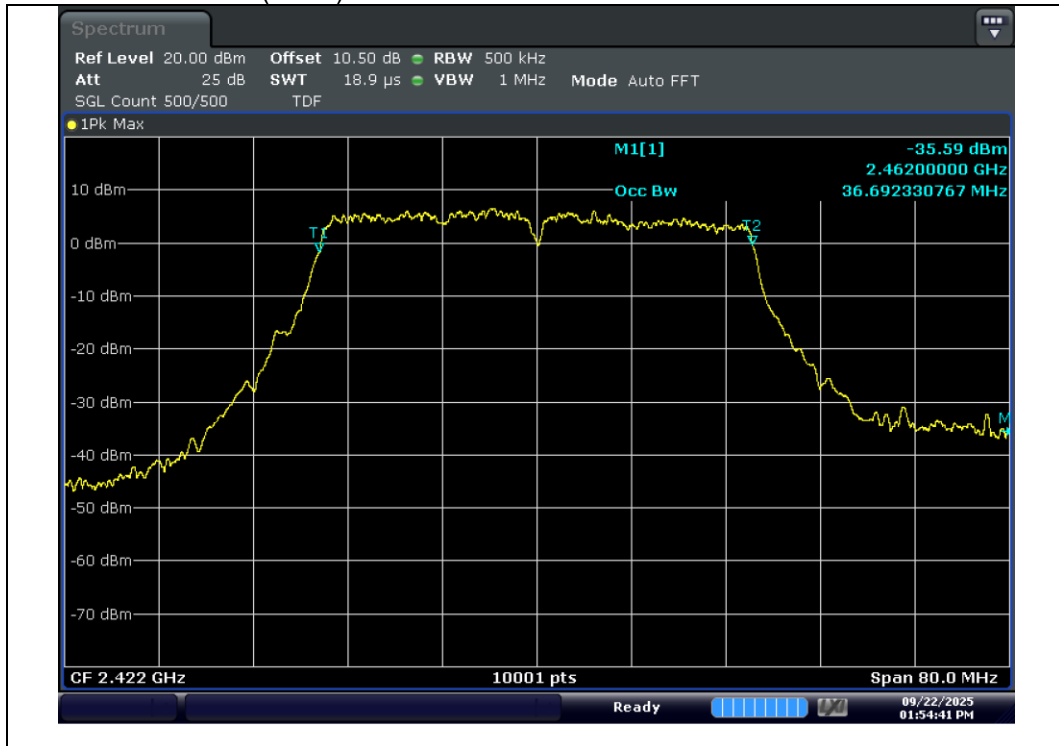
Test mode : 802.11n(HT20) / 2 437 MHz



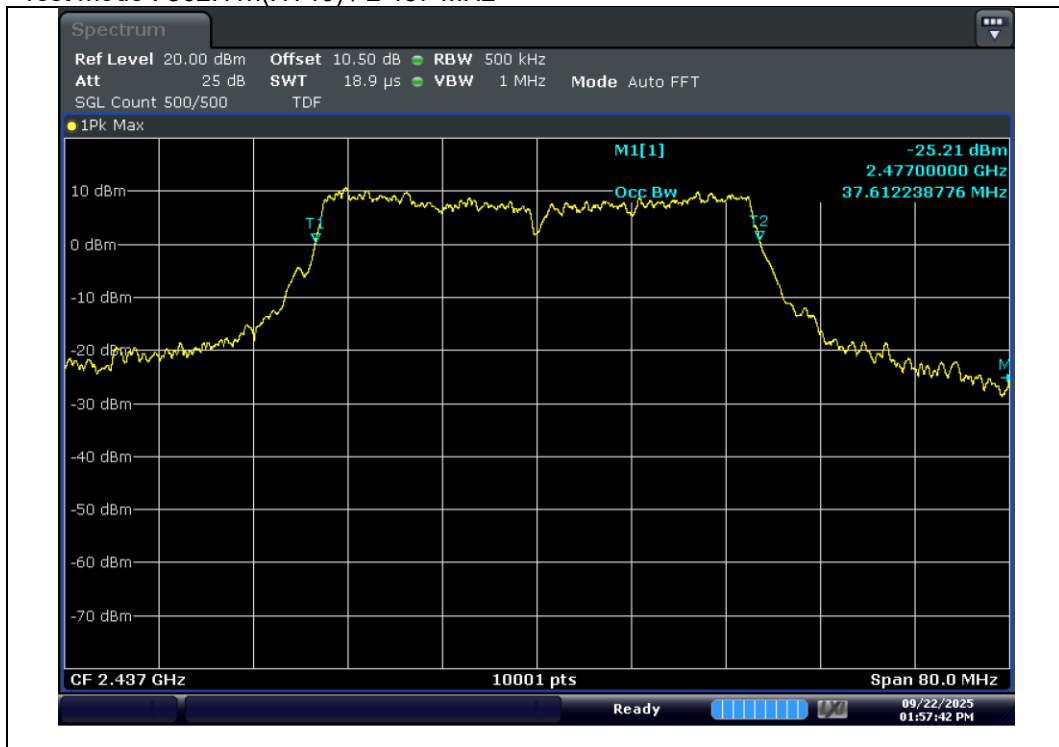
Test mode : 802.11n(HT20) / 2 462 MHz



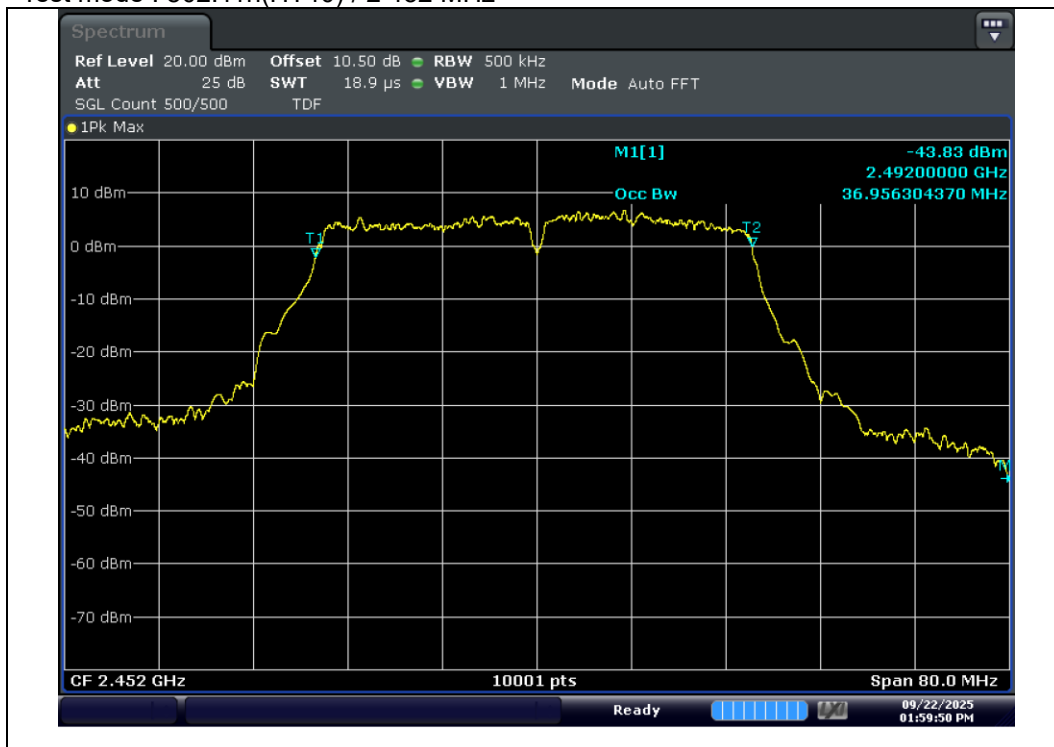
Test mode : 802.11n(HT40) / 2 422 MHz



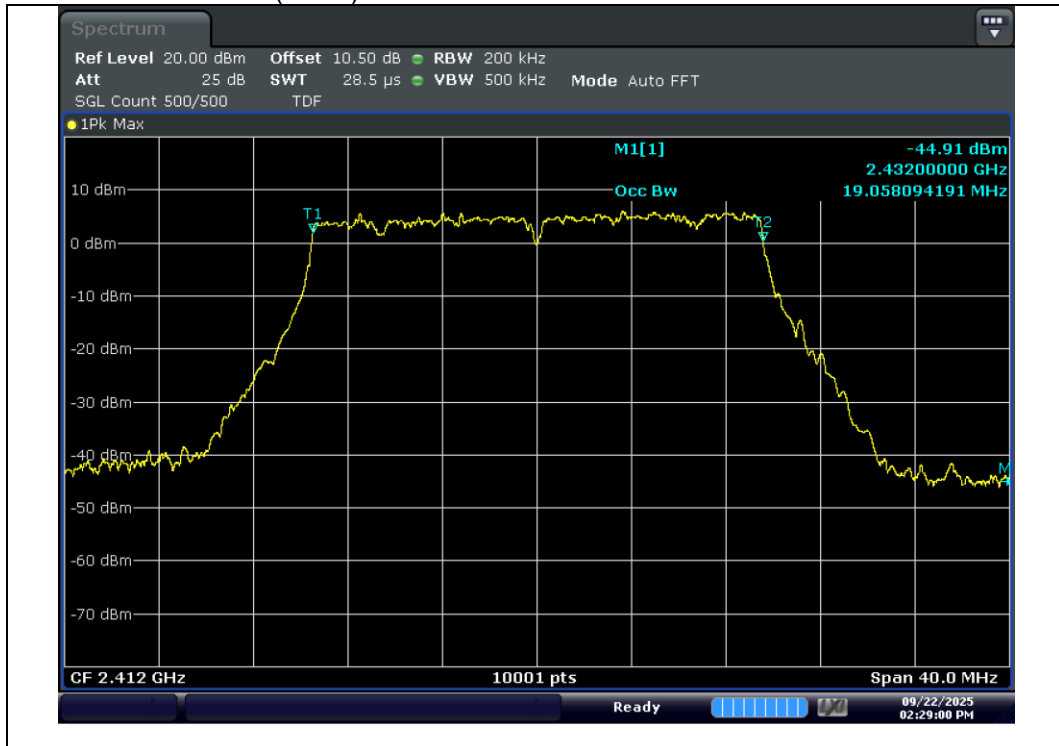
Test mode : 802.11n(HT40) / 2 437 MHz



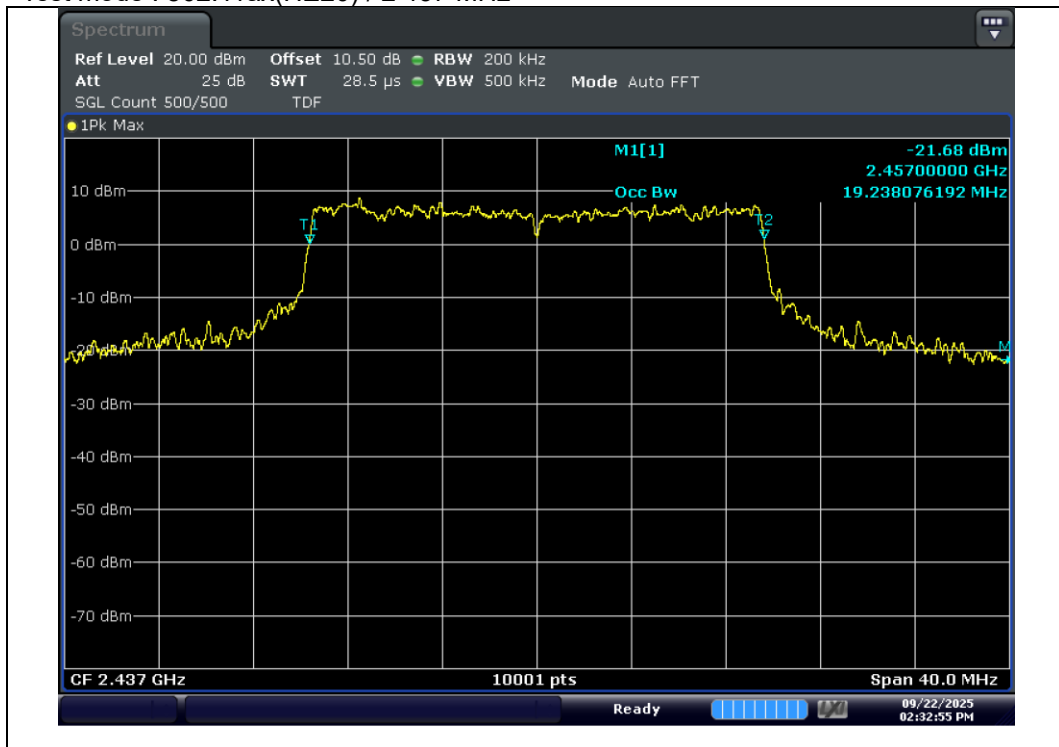
Test mode : 802.11n(HT40) / 2 452 MHz



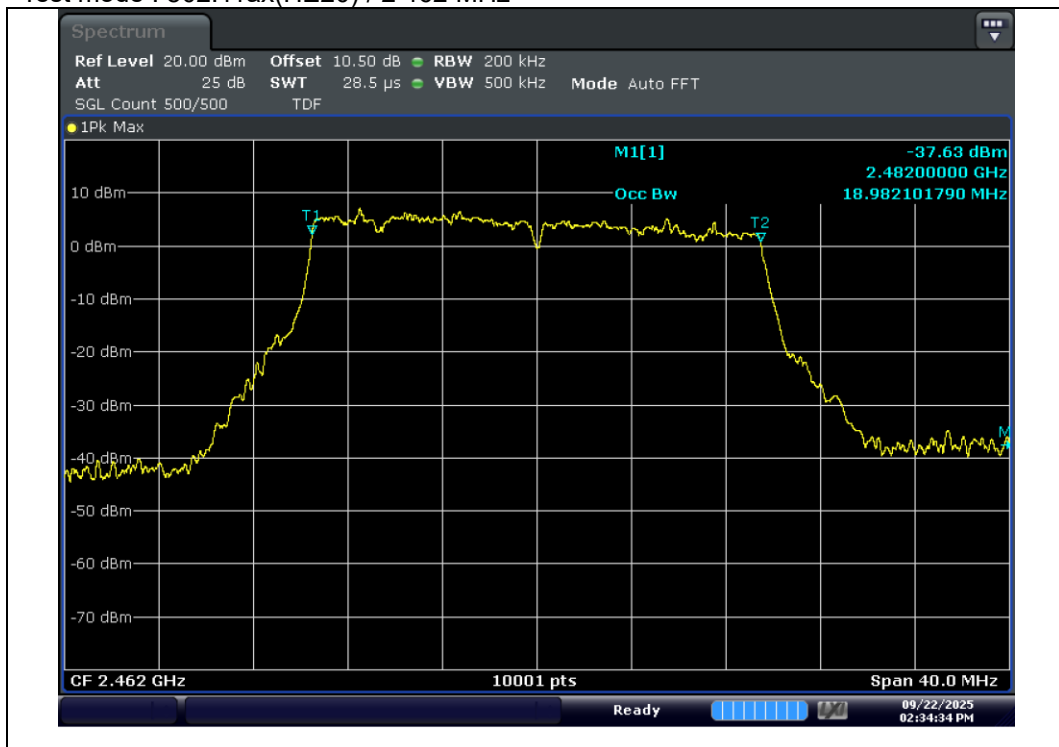
Test mode : 802.11ax(HE20) / 2 412 MHz



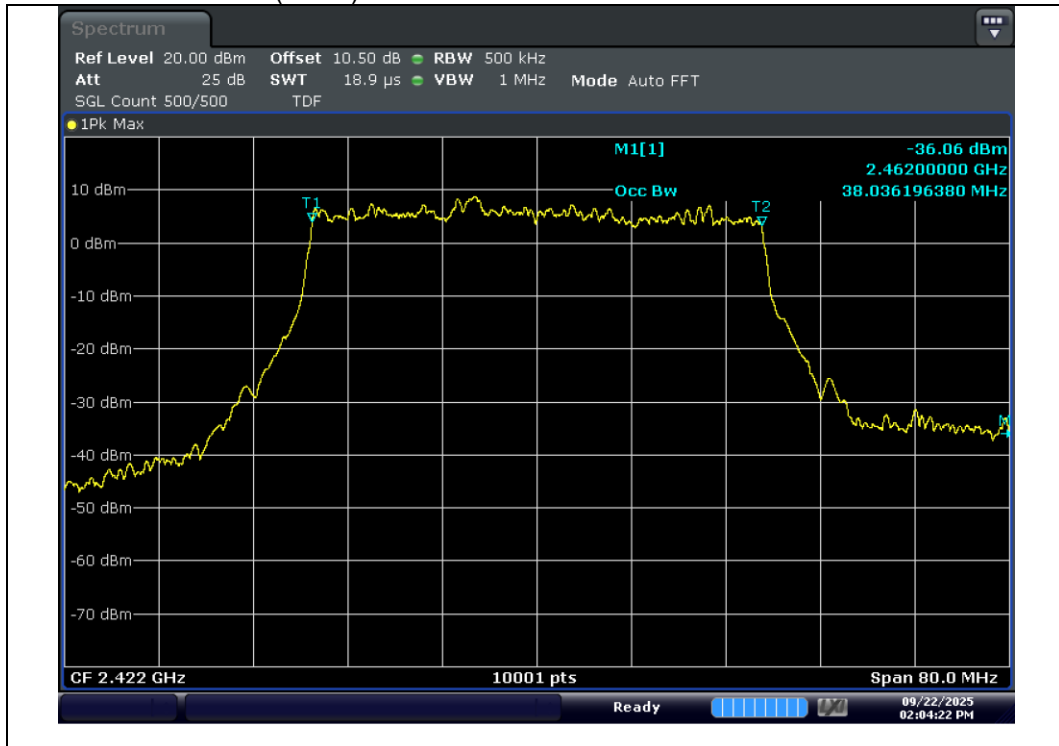
Test mode : 802.11ax(HE20) / 2 437 MHz



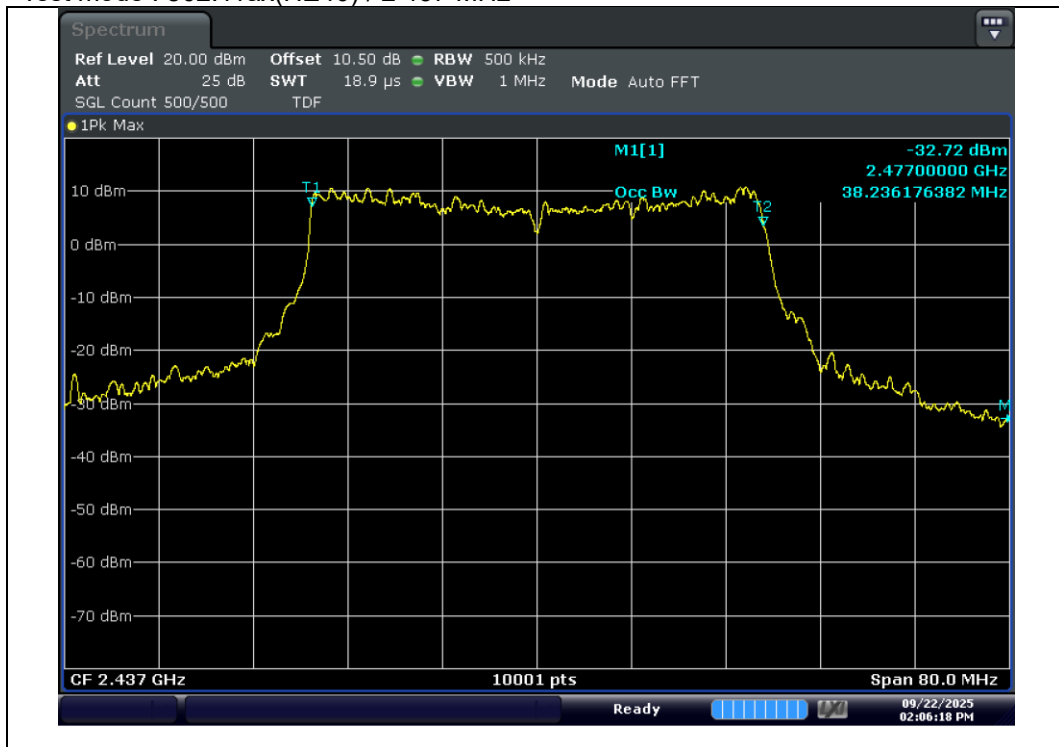
Test mode : 802.11ax(HE20) / 2 462 MHz



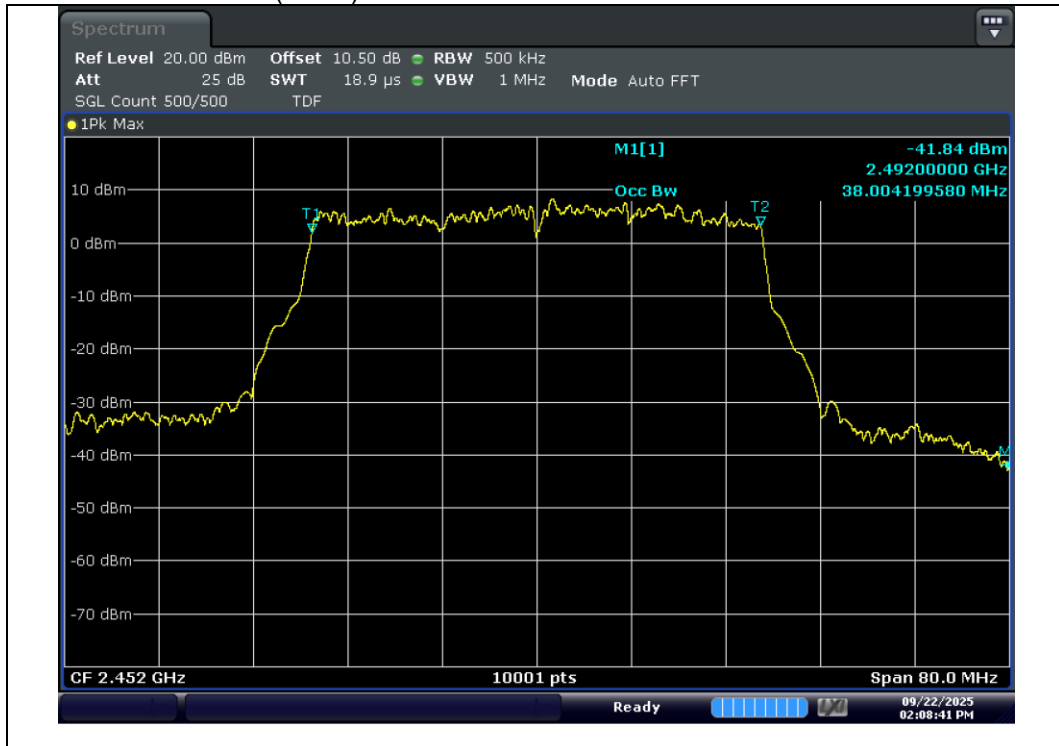
Test mode : 802.11ax(HE40) / 2 422 MHz



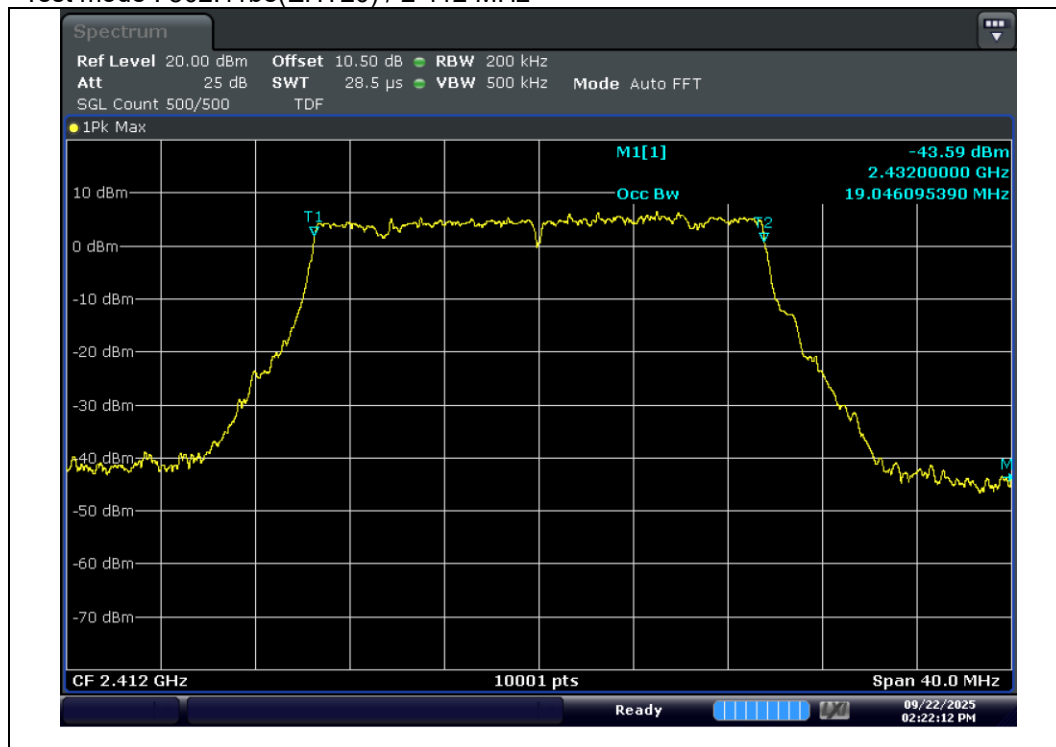
Test mode : 802.11ax(HE40) / 2 437 MHz



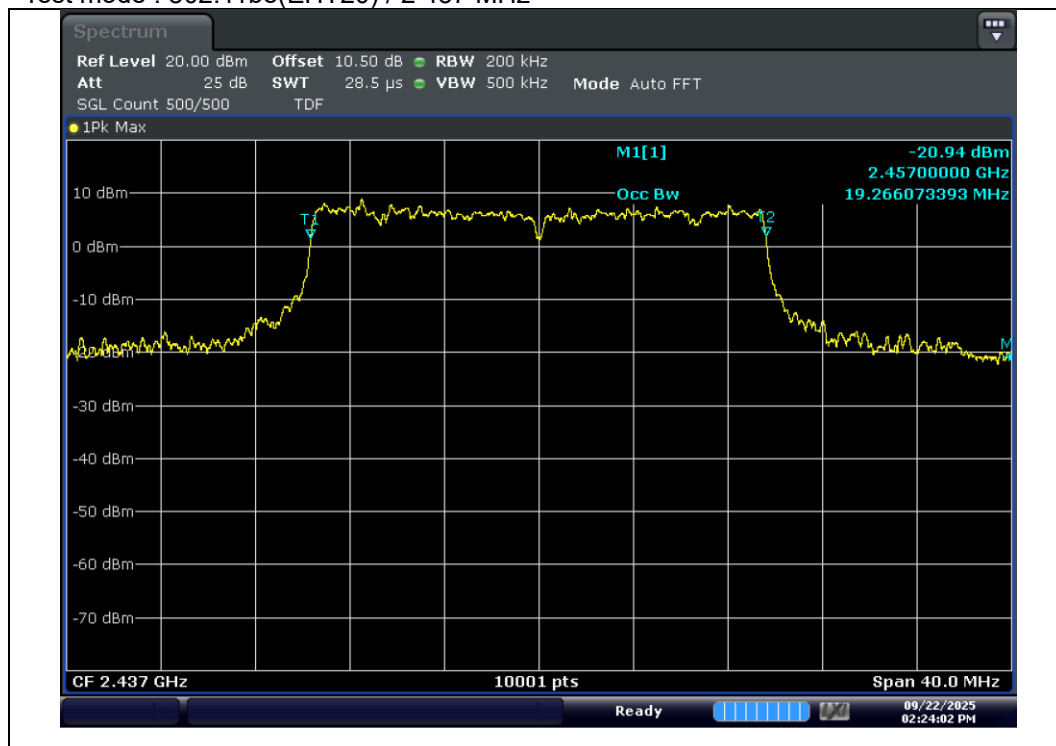
Test mode : 802.11ax(HE40) / 2 452 MHz



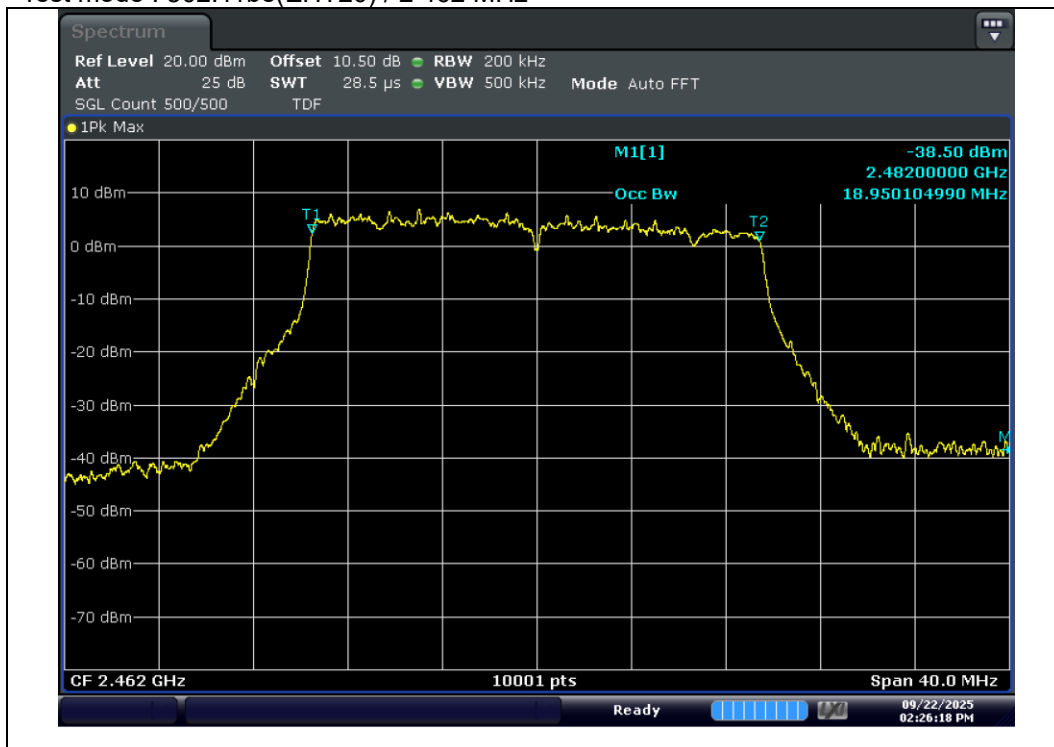
Test mode : 802.11be(EHT20) / 2 412 MHz



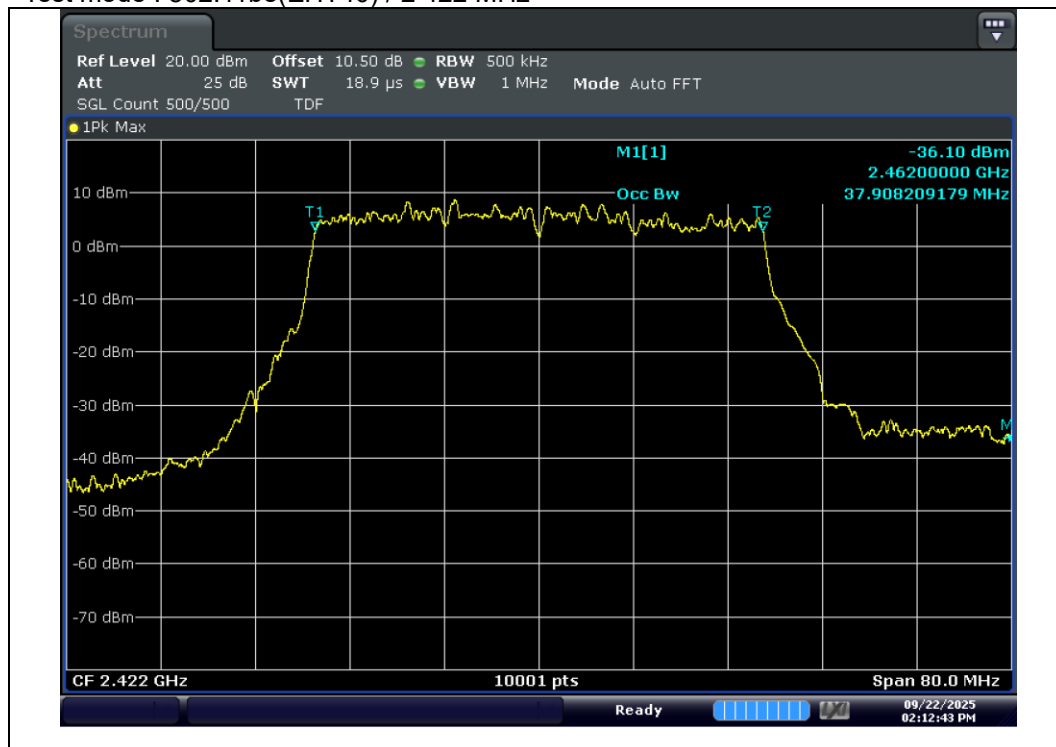
Test mode : 802.11be(EHT20) / 2 437 MHz



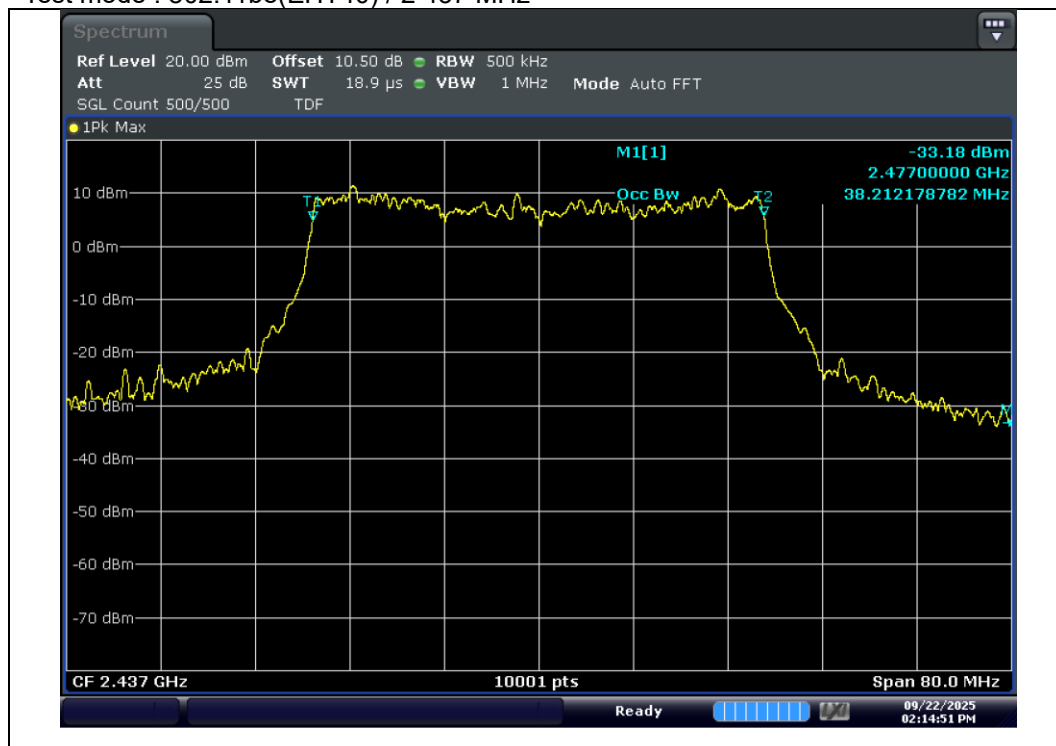
Test mode : 802.11be(EHT20) / 2 462 MHz



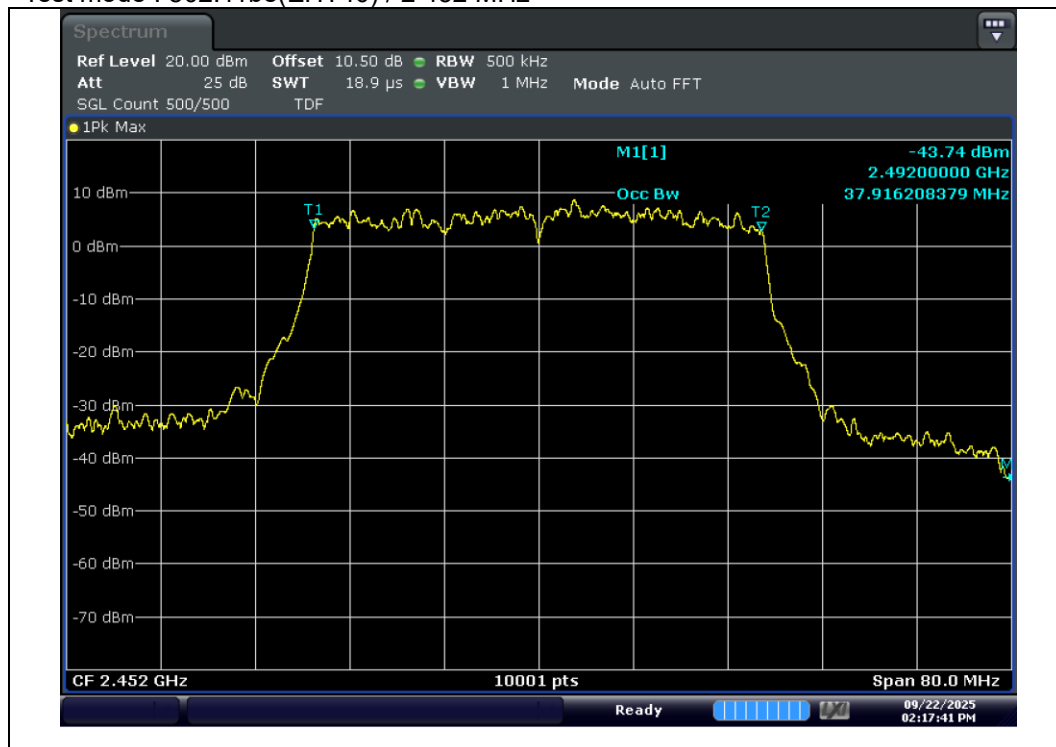
Test mode : 802.11be(EHT40) / 2 422 MHz



Test mode : 802.11be(EHT40) / 2 437 MHz



Test mode : 802.11be(EHT40) / 2 452 MHz



4.3.5 Spurious Emission, Band Edge, and Restricted bands

4.3.5.1 Regulation

According to §15.247(d) and RSS-247 6.6 in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

According to §15.209(a) and RSS-GEN 8.9 Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009 - 0.490	2 400/F(kHz)	300
0.490 - 1.705	24 000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100**	3
88 - 216	150**	3
216 - 960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 MHz, 76–88 MHz, 174–216 MHz or 470–806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

According to §15.205(a) and (b) only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.009 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
0.495 - 0.505	16.694 75 - 16.695 25	608 - 614	5.35 - 5.46
2.173 5 - 2.190 5	16.804 25 - 16.804 75	960 – 1 240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1 300 – 1 427	8.025 - 8.5
4.177 25 - 4.177 75	37.5 - 38.25	1 435 – 1 626.5	9.0 - 9.2
4.207 25 - 4.207 75	73 - 74.6	1 645.5 – 1 646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1 660 – 1 710	10.6 - 12.7
6.267 75 - 6.268 25	108 - 121.94	1 718.8 – 1 722.2	13.25 - 13.4
6.311 75 - 6.312 25	123 - 138	2 200 – 2 300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2 310 – 2 390	15.35 - 16.2
8.362 - 8.366	156.524 75 - 156.525 25	2 483.5 – 2 500	17.7 - 21.4
8.376 25 - 8.386 75	156.7 - 156.9	2 690 – 2 900	22.01 - 23.12
8.414 25 - 8.414 75	162.012 5 - 167.17	3 260 – 3 267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3 332 – 3 339	31.2 - 31.8
12.519 75 - 12.520 25	240 - 285	3 345.8 – 3 358	36.43 - 36.5
12.576 75 - 12.577 25	322 - 335.4	3 600 – 4 400	Above 38.6
13.36 - 13.41			

The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurement

According to RSS-GEN 8.10(c) Unwanted emissions that do not fall within the restricted frequency bands listed in table 7 shall comply either with the limits specified in the applicable RSS or with those specified in table 5 and table 6.

MHz	MHz	MHz	GHz
0.009 - 0.110	13.36 – 13.41	960 – 1427	9.0 – 9.2
0.495 - 0.505	16.42 – 16.423	1435 – 1626.5	9.3 – 9.5
2.173 5 - 2.190 5	16.69475 – 16.69525	1645.5 - 1646.5	10.6 – 12.7
3.020 – 3.026	16.80425 - 16.80475	1660 – 1710	13.25 – 13.4
4.125 – 4.128	25.5 – 25.67	1718.8 – 1722.2	14.47 – 14.5
4.17725 – 4.17775	37.5 – 38.25	2200 – 2300	15.35 – 16.2
4.20725 – 4.20775	73 – 74.6	2310 - 2390	17.7 – 21.4
5.677 – 5.683	74.8 – 75.2	2483.5 – 2500	22.01 – 23.12
6.215 – 6.218	108 – 138	2655 – 2900	23.6 – 24.0
6.26775 – 6.26825	149.9 – 150.05	3260 – 3267	31.2 – 31.8
6.31175 – 6.31225	156.52475 – 156.52525	3332 – 3339	36.43 – 36.5
8.291 – 8.294	156.7 – 156.9	3345.8 - 3358	Above 38.6
8.363 – 8.366	162.0125 – 167.17	3500 – 4400	-
8.37625 – 8.38675	167.75 – 173.2	4500 – 5150	-
8.41425 – 8.41475	240 – 285	5350 – 5460	-
12.29 – 12.293	322 – 335.4	7250 - 7750	-
12.51975 – 12.52025	399.9 – 410	8025 – 8500	-
12.57675 – 12.57725	608 – 614	-	-

4.3.5.2 Measurement Procedure

4.3.5.2.1 Band-edge Compliance of RF Conducted Emissions

4.3.5.2.1.1 Reference Level Measurement

Establish a reference level by using the following procedure:

- 1) Set instrument center frequency to DTS channel center frequency.
- 2) Set the span to ≥ 1.5 times the DTS bandwidth.
- 3) Set the RBW = 100 kHz.
- 4) Set the VBW $\geq 3 \times$ RBW.
- 5) Detector = peak.
- 6) Sweep time = auto couple.
- 7) Trace mode = max hold.
- 8) Allow trace to fully stabilize.
- 9) Use the peak marker function to determine the maximum PSD level.

4.3.5.2.1.2 Emissions Level Measurement

- 1) Set the center frequency and span to encompass frequency range to be measured.
- 2) Set the RBW = 100 kHz.
- 3) Set the VBW $\geq 3 \times$ RBW.
- 4) Detector = peak.
- 5) Ensure that the number of measurement points $\geq$ span/RBW
- 6) Sweep time = auto couple.
- 7) Trace mode = max hold.
- 8) Allow trace to fully stabilize.
- 9) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements specified in 11.1 a) or 11.1 b).

Report the three highest emissions relative to the limit.

4.3.5.2.2 Conducted Spurious Emissions

Set the spectrum analyzer as follows:

- 1) Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
- 2) RBW = 100 kHz
- 3) VBW $\geq 3 \times$ RBW
- 4) Sweep = auto
- 5) Detector function = peak
- 6) Trace = max hold
- 7) Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded.
- 8) Each frequency found during preliminary measurements was re-examined and investigated. The test-receiver system was set up to average, peak, and quasi-peak detector function with specified bandwidth.