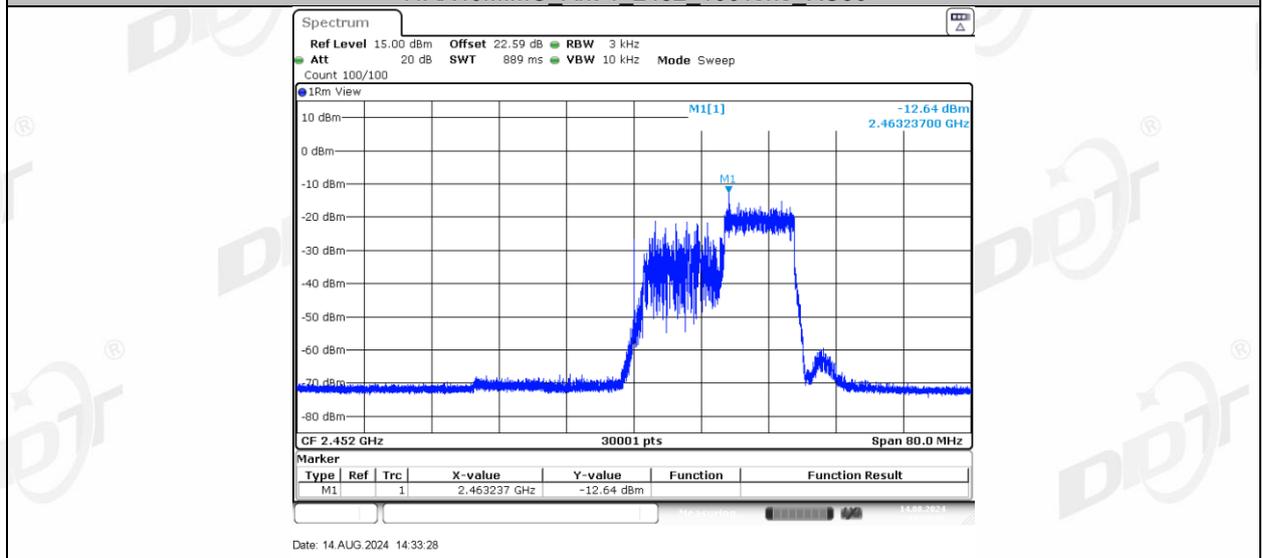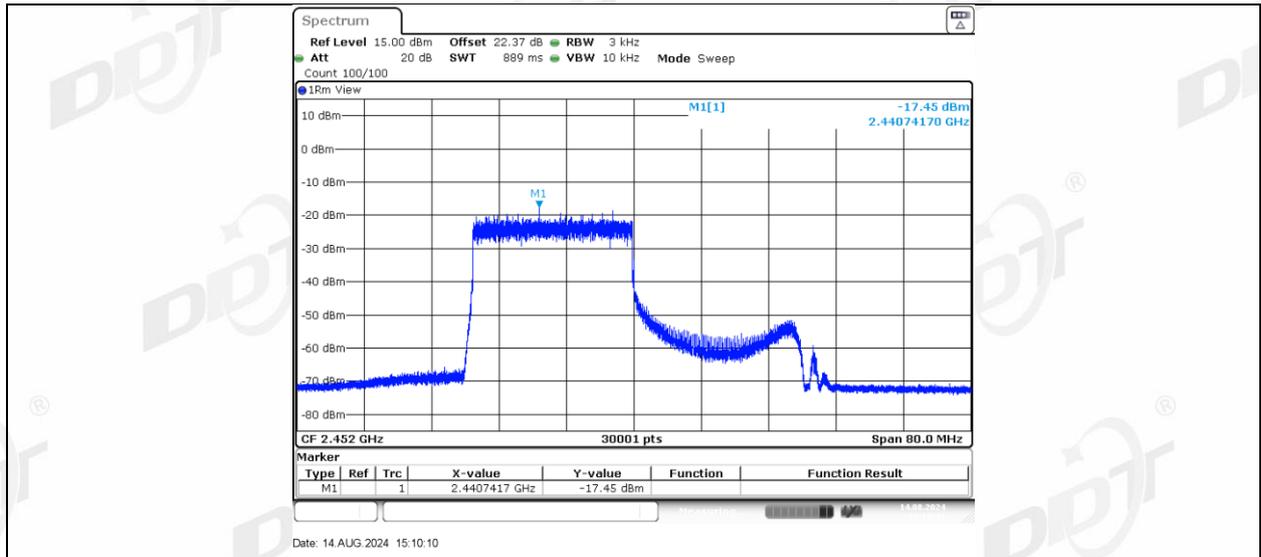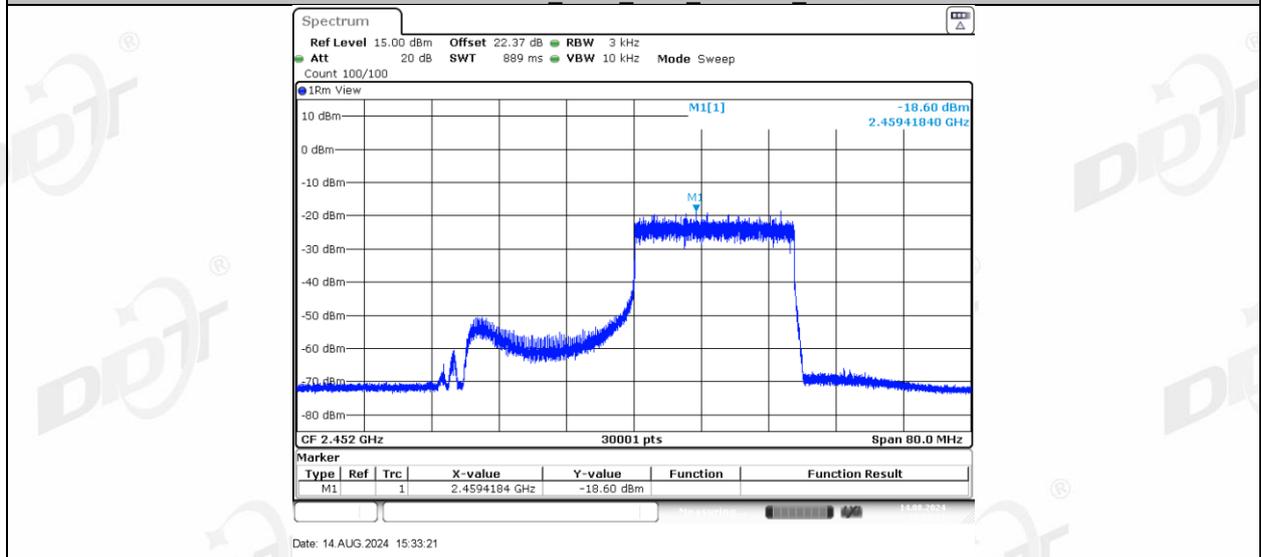11AX40MIMO_Ant-1_2452_106Tone_RU53
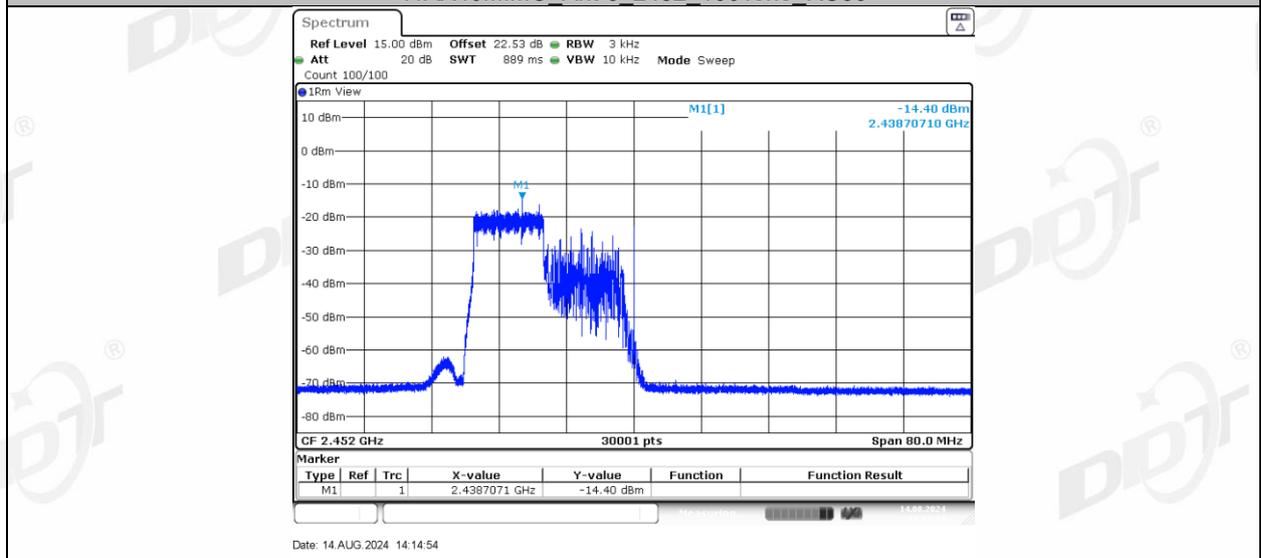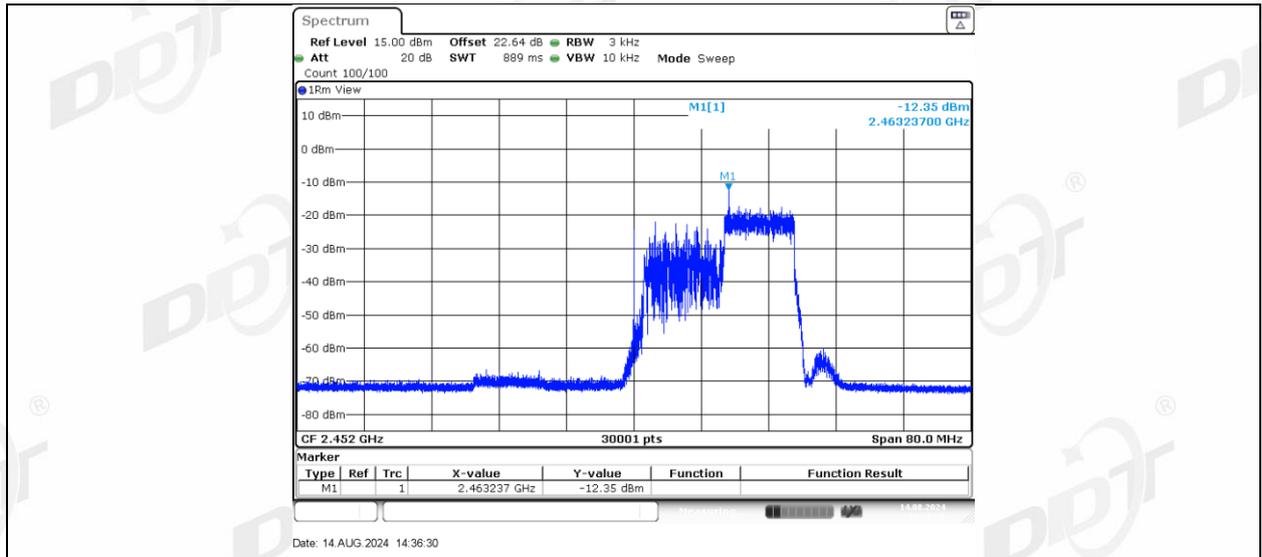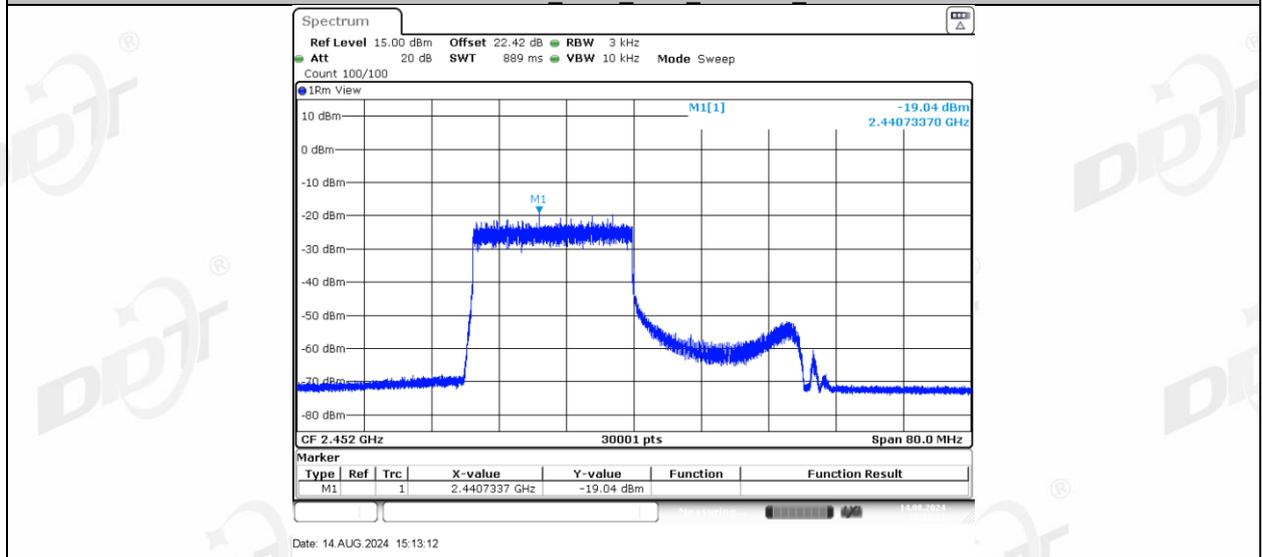

11AX40MIMO_Ant-1_2452_106Tone_RU56

11AX40MIMO_Ant-1_2452_242Tone_RU61

11AX40MIMO_Ant-1_2452_242Tone_RU62

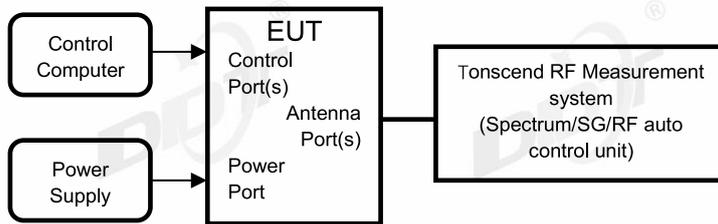11AX40MIMO_Ant-3_2452_106Tone_RU53

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Date: 14.AUG.2024 14:36:30

11AX40MIMO_Ant-3_2452_242Tone_RU61

Date: 14.AUG.2024 15:13:12

11AX40MIMO_Ant-3_2452_242Tone_RU62

Date: 14.AUG.2024 15:36:24
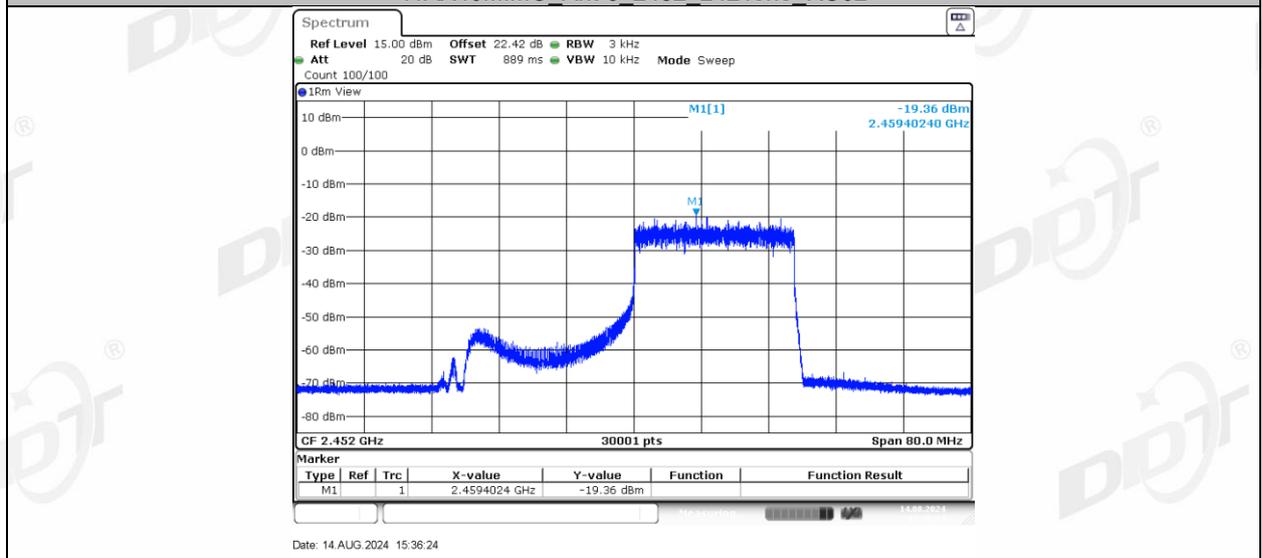
8. Band Edge Compliance (Conducted Method)

8.1. Block diagram of test setup

```
┌──────────┐      ┌─────────────┐
│ Control  │─────▶│ EUT         │      ┌──────────────────────┐
│ Computer │      │ Control     │      │ Tonscend RF Measurement│
└──────────┘      │ Port(s)     │      │ system               │
                  │      Antenna│──────│ (Spectrum/SG/RF auto │
┌──────────┐      │      Port(s)│      │ control unit)        │
│ Power    │─────▶│ Power       │      └──────────────────────┘
│ Supply   │      │ Port        │
└──────────┘      └─────────────┘
```

8.2. Limits

In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

8.3. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.
(2) Establish a reference level by using the following procedure:

RBW:	100 kHz
VBW:	300 kHz
Span	Encompass frequency range to be measured
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.

Then mark the maximum amplitude of all unwanted emissions outside of the authorized frequency band.
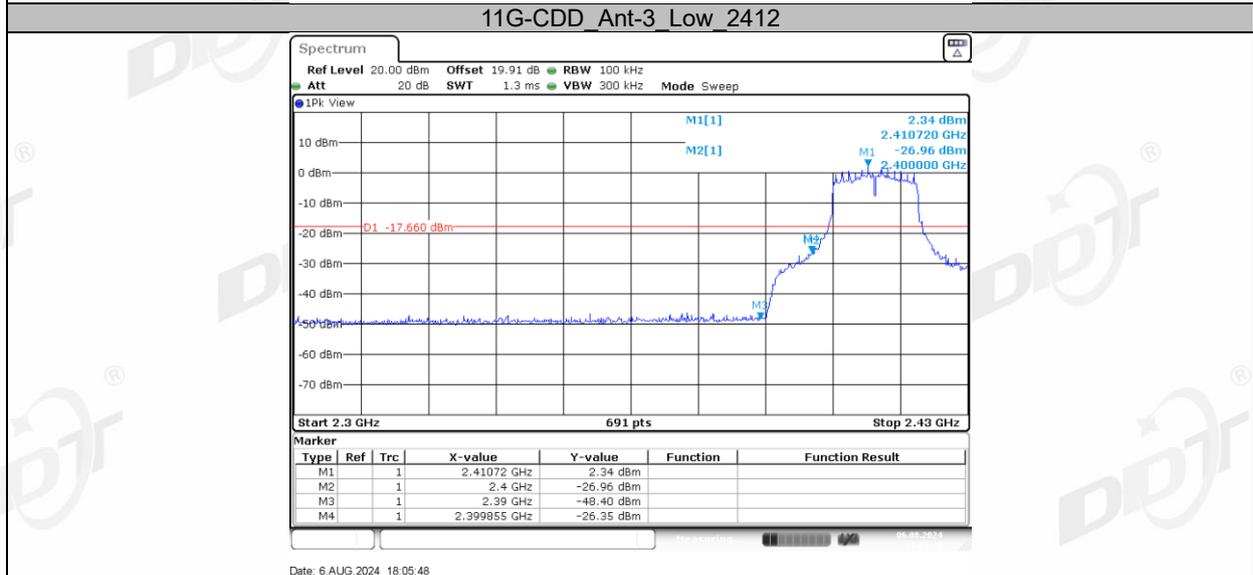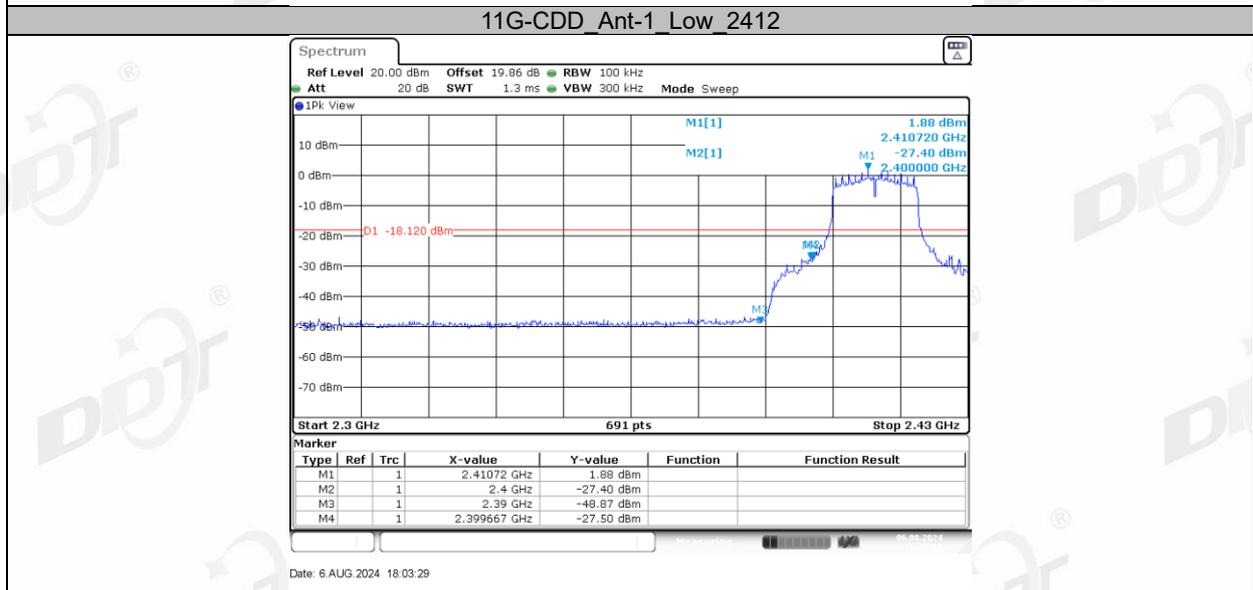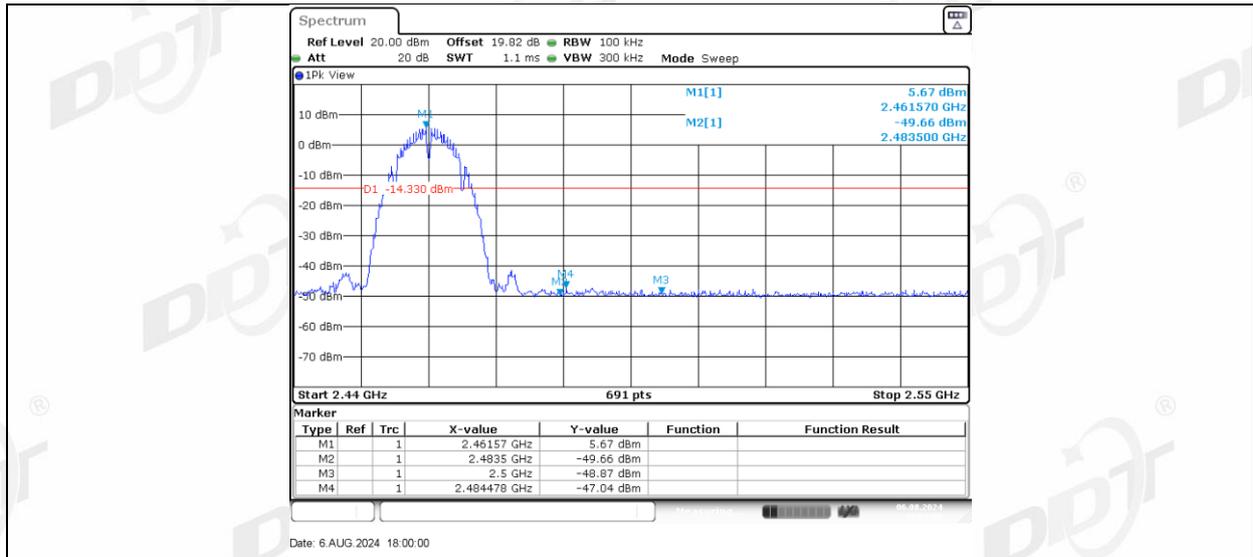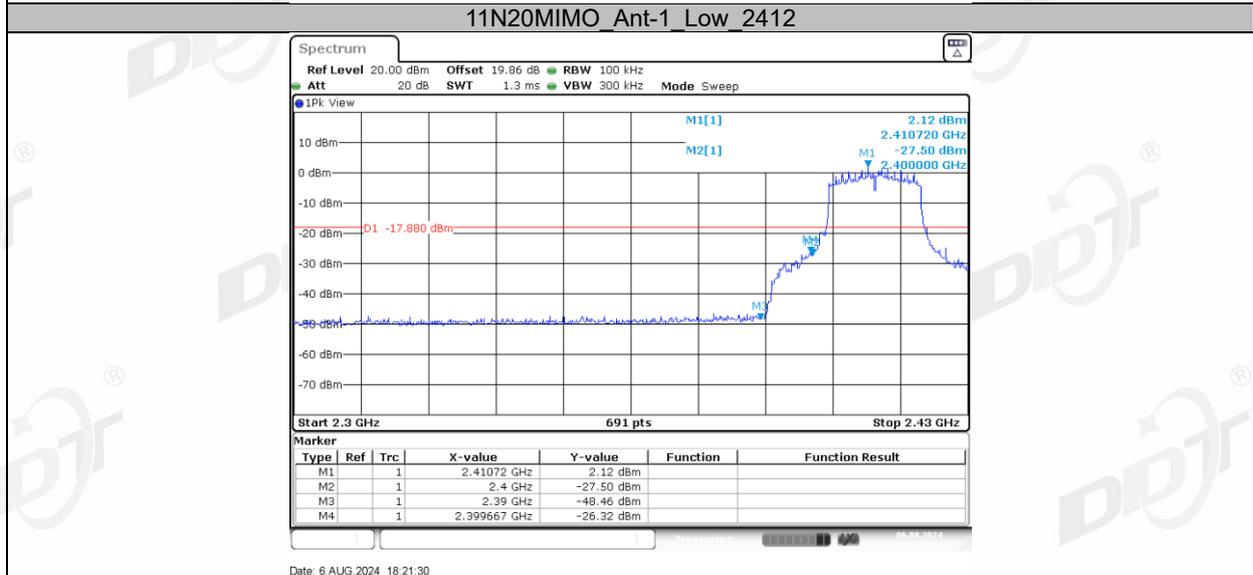
8.4. Test result

Test Engineer:	Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	24.5℃,39.8%RH	Test Date:	2024.07.19-2024.08.21
Test Power Supply:	DC 3.3V	Sample Number:	S24052405-002

EUT Set Mode	CH or Frequency	Result(dBm)	EUT Set Mode	CH or Frequency	Result (dBm)
11b	CH1	Pass	11g	CH1	Pass
	CH11	Pass		CH11	Pass
11n HT 20	CH1	Pass	11n HT 40	CH3	Pass
	CH11	Pass		CH9	Pass
11ax HE 20	CH1	Pass	11ax HE 40	CH3	Pass
	CH11	Pass		CH9	Pass
11ax HE 20	CH1	Pass	11ax HE 40	CH3	Pass
	CH11	Pass		CH9	Pass

8.5. Test graphs

11B-CDD_Ant-1_Low_2412
Date: 6.AUG.2024 17:45:20
11B-CDD_Ant-3_Low_2412
Date: 6.AUG.2024 17:47:24
11B-CDD_Ant-1_High_2462
Date: 6.AUG.2024 17:57:54
11B-CDD_Ant-3_High_2462

11G-CDD_Ant-1_Low_2412

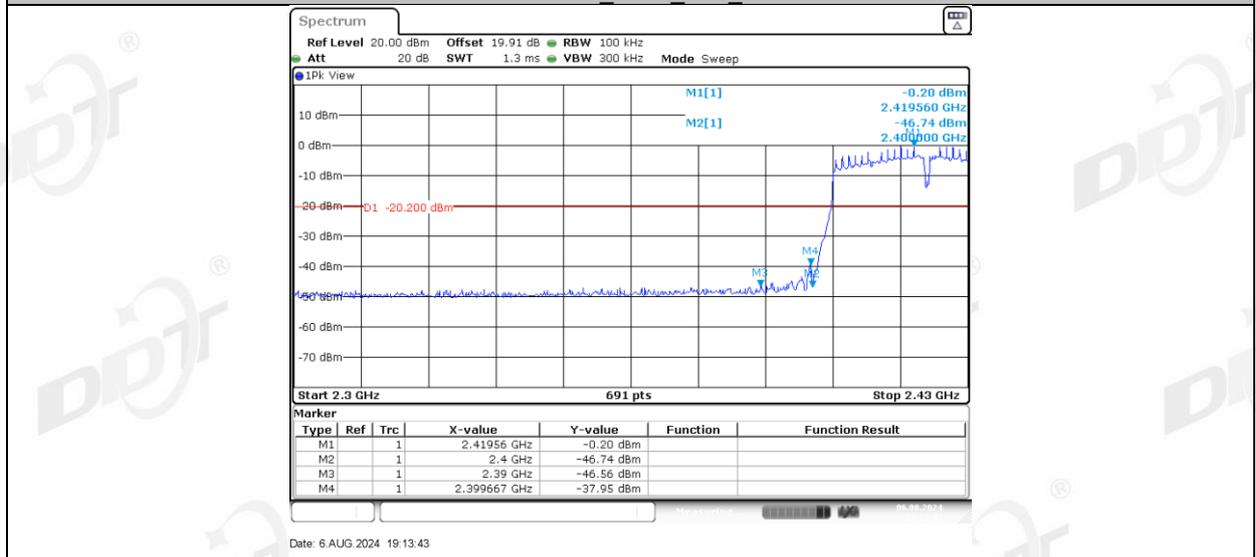11G-CDD_Ant-3_Low_2412

11G-CDD_Ant-1_High_2462

11G-CDD_Ant-3_High_2462

11N20MIMO_Ant-1_Low_2412

11N20MIMO_Ant-3_Low_2412

Date: 6.AUG.2024 18:23:50

11N20MIMO_Ant-1_High_2462

Date: 6.AUG.2024 18:59:42

11N20MIMO_Ant-3_High_2462

Date: 6.AUG.2024 19:02:03

11N40MIMO_Ant-1_Low_2422

Date: 19.JUL.2024 21:30:35

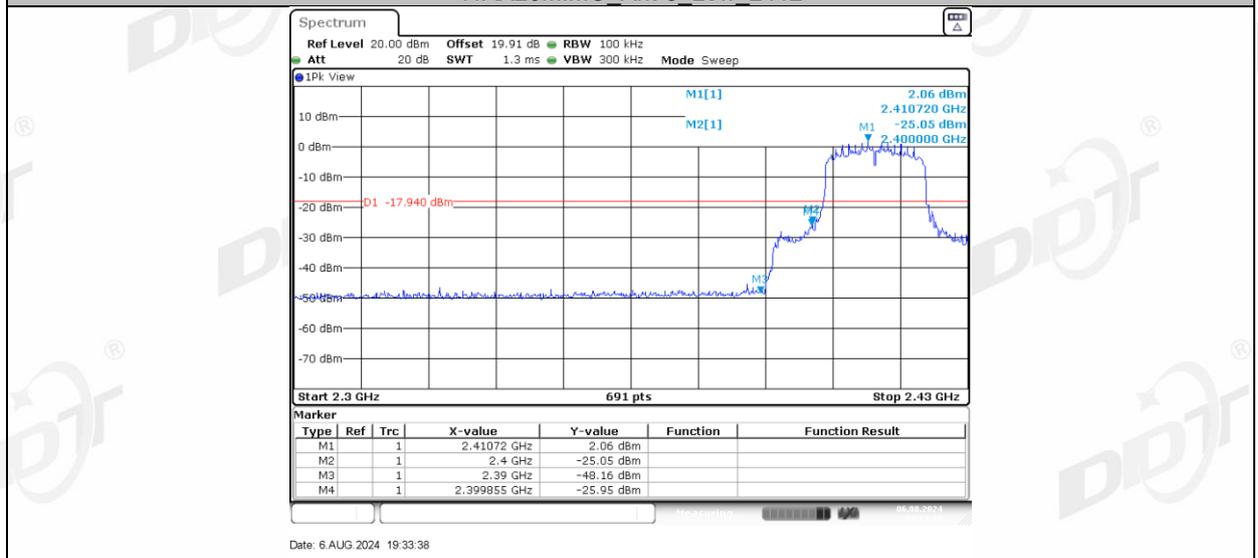**11N40MIMO_Ant-3_Low_2422**

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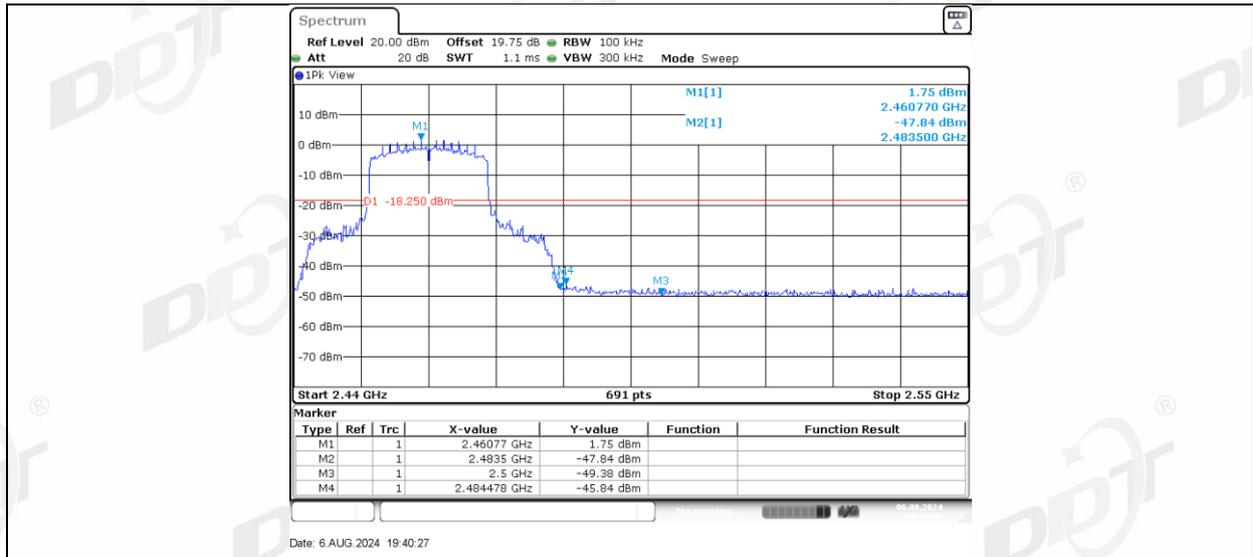**11N40MIMO_Ant-1_High_2452**
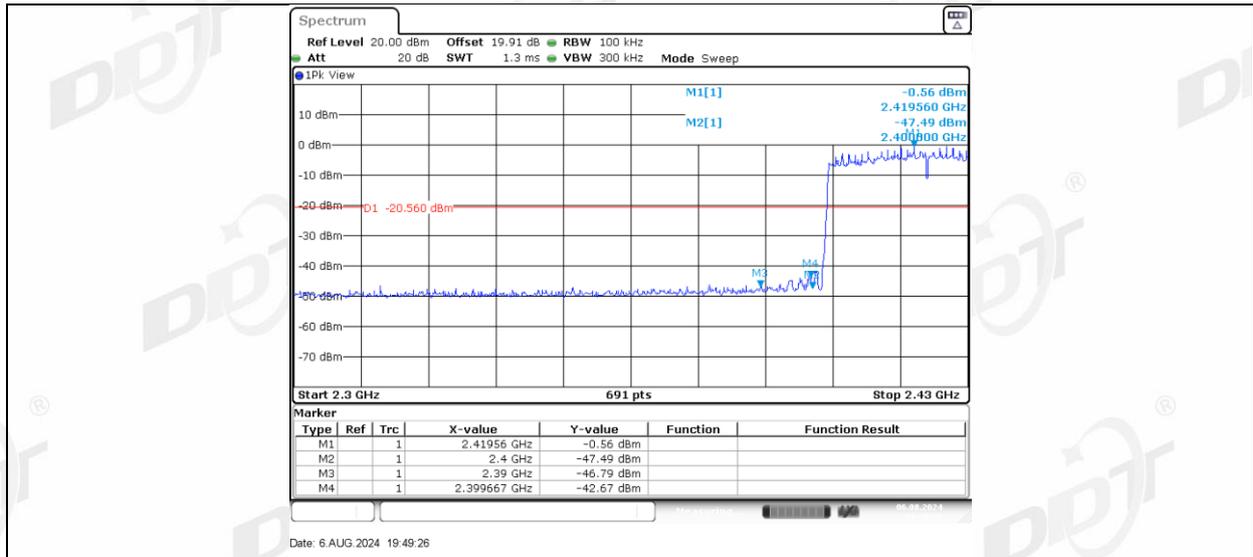

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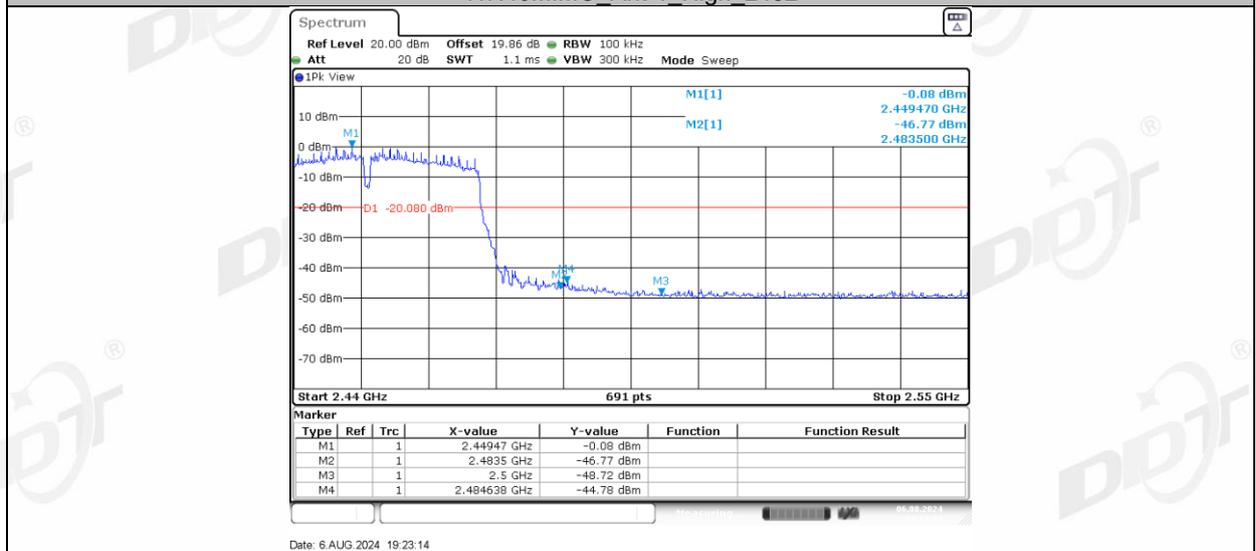
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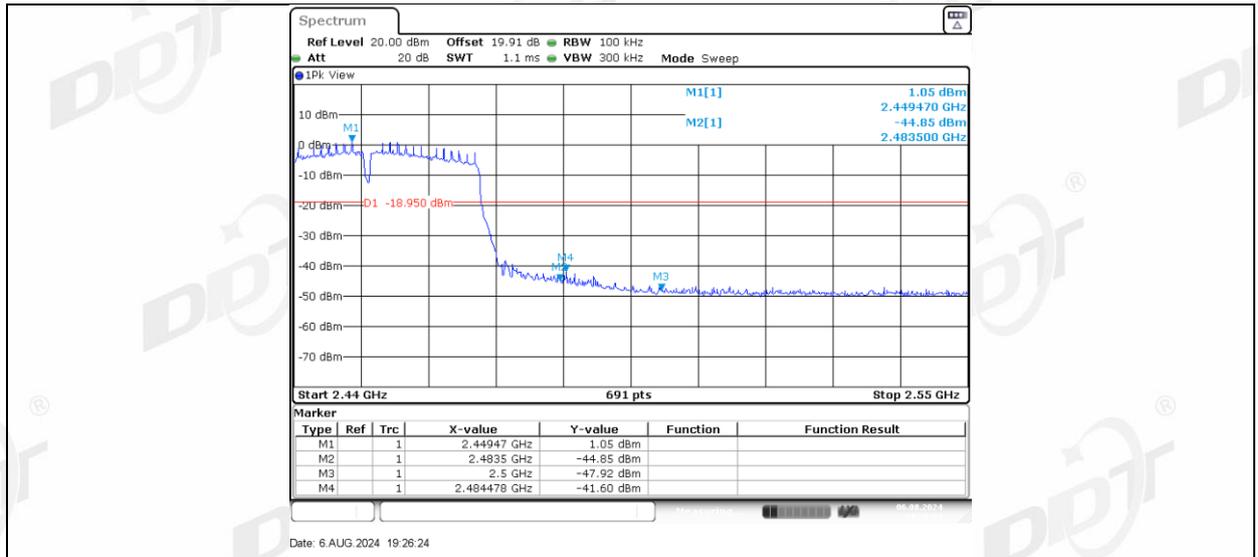
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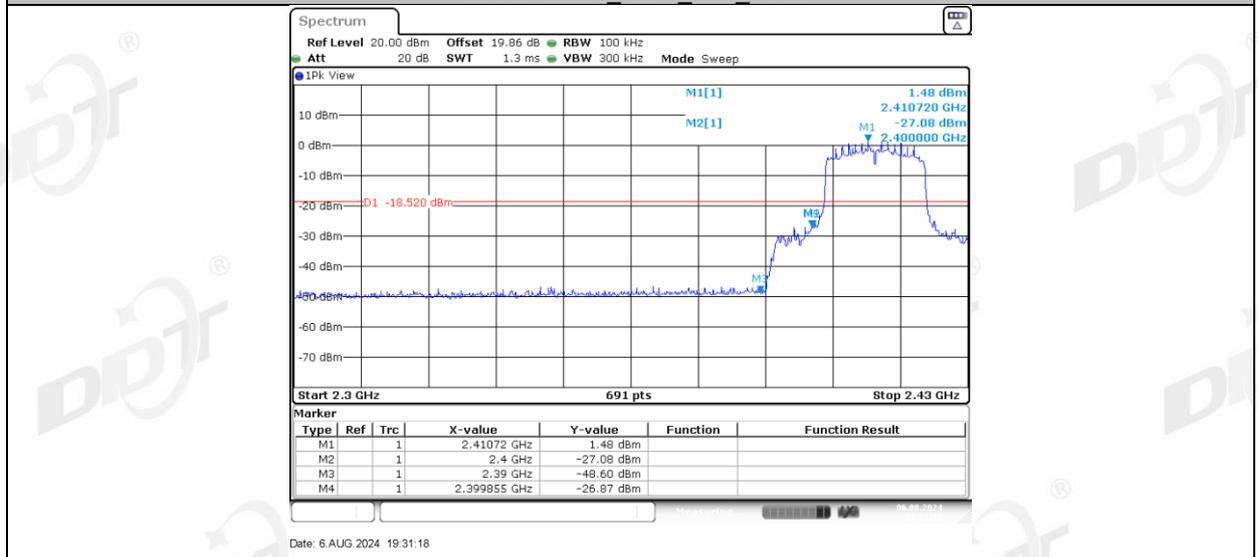
11AX20MIMO_Ant-3_Low_2412

11AX20MIMO_Ant-1_High_2462

11AX20MIMO_Ant-3_High_2462

11AX40MIMO_Ant-1_Low_2422

11AX40MIMO_Ant-3_Low_2422

Spectrum

Ref Level 20.00 dBm   Offset 19.91 dB   RBW 100 kHz
Att   20 dB   SWT   1.3 ms   VBW 300 kHz   Mode Sweep
1Pk View

M1[1] -0.56 dBm
       2.419560 GHz
M2[1] -47.49 dBm
       2.400000 GHz

D1 -20.560 dBm

Start 2.3 GHz   691 pts   Stop 2.43 GHz

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.41956 GHz	-0.56 dBm		
M2		1	2.4 GHz	-47.49 dBm		
M3		1	2.39 GHz	-46.79 dBm		
M4		1	2.399667 GHz	-42.67 dBm		

Date: 6.AUG.2024 19:49:26

11AX40MIMO_Ant-1_High_2452

Spectrum

Ref Level 20.00 dBm   Offset 19.86 dB   RBW 100 kHz
Att   20 dB   SWT   1.1 ms   VBW 300 kHz   Mode Sweep
1Pk View

M1[1] -0.53 dBm
       2.449470 GHz
M2[1] -45.94 dBm
       2.483500 GHz

D1 -20.530 dBm

Start 2.44 GHz   691 pts   Stop 2.55 GHz

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.44947 GHz	-0.53 dBm		
M2		1	2.4835 GHz	-45.94 dBm		
M3		1	2.5 GHz	-48.82 dBm		
M4		1	2.484478 GHz	-41.02 dBm		

Date: 6.AUG.2024 19:58:51

11AX40MIMO_Ant-3_High_2452

Spectrum

Ref Level 20.00 dBm   Offset 19.91 dB   RBW 100 kHz
Att   20 dB   SWT   1.1 ms   VBW 300 kHz   Mode Sweep
1Pk View

M1[1] 0.68 dBm
       2.449470 GHz
M2[1] -43.92 dBm
       2.483500 GHz

D1 -19.320 dBm

Start 2.44 GHz   691 pts   Stop 2.55 GHz

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.44947 GHz	0.68 dBm		
M2		1	2.4835 GHz	-43.92 dBm		
M3		1	2.5 GHz	-48.30 dBm		
M4		1	2.484478 GHz	-40.99 dBm		

Date: 6.AUG.2024 20:02:03

9. RF Conducted Spurious Emissions

9.1. Block diagram of test setup

```
┌──────────┐        ┌─────────────┐
│ Control  │───────▶│ EUT         │
│ Computer │        │ Control     │        ┌──────────────────────┐
└──────────┘        │ Port(s)     │        │ Tonscend RF Measurement│
                    │      Antenna│────────│ system               │
                    │      Port(s)│        │ (Spectrum/SG/RF auto │
┌──────────┐        │ Power       │        │ control unit)        │
│ Power    │───────▶│ Port        │        └──────────────────────┘
│ Supply   │        └─────────────┘
└──────────┘
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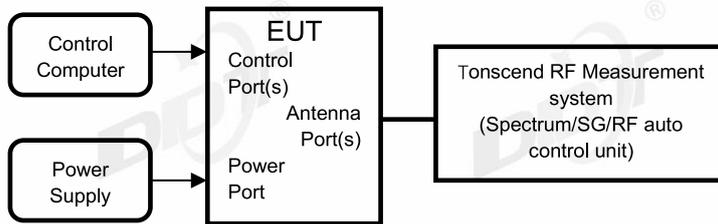
9.2. Limits

In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

9.3. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.
(2) Establish a reference level by using the following procedure:

Center frequency	Test frequency
RBW:	100 kHz
VBW:	300 kHz
Span	Wide enough to capture the peak level of the in-band emission
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.
(4) Set the spectrum analyzer as follows:

RBW:	100 kHz
VBW:	300 kHz
Span	Encompass frequency range to be measured
Number of measurement points	≥Span/RBW
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(5) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude of all unwanted emissions outside of the authorized frequency band

9.4. Test result

Test Engineer:	Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	24.5℃,39.8%RH	Test Date:	2024.07.19-2024.08.21
Test Power Supply:	DC 3.3V	Sample Number:	S24052405-002

EUT Set Mode	CH or Frequency	Result(dBm)	EUT Set Mode	CH or Frequency	Result (dBm)
11b	CH1	Pass	11g	CH1	Pass
11b	CH11	Pass	11g	CH11	Pass
11n HT 20	CH1	Pass	11n HT 40	CH3	Pass
11n HT 20	CH11	Pass	11n HT 40	CH9	Pass
11ax HE 20	CH1	Pass	11ax HE 40	CH3	Pass
11ax HE 20	CH11	Pass	11ax HE 40	CH9	Pass
11ax HE 20	CH1	Pass	11ax HE 40	CH3	Pass
11ax HE 20	CH11	Pass	11ax HE 40	CH9	Pass

9.5. Test graphs

11B-CDD_Ant-1_2412_0~Reference

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11B-CDD_Ant-1_2412_30~1000

Date: 6.AUG.2024 17:45:33

11B-CDD_Ant-1_2412_1000~26500

Date: 6.AUG.2024 17:45:55

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11B-CDD_Ant-3_2412_30~1000

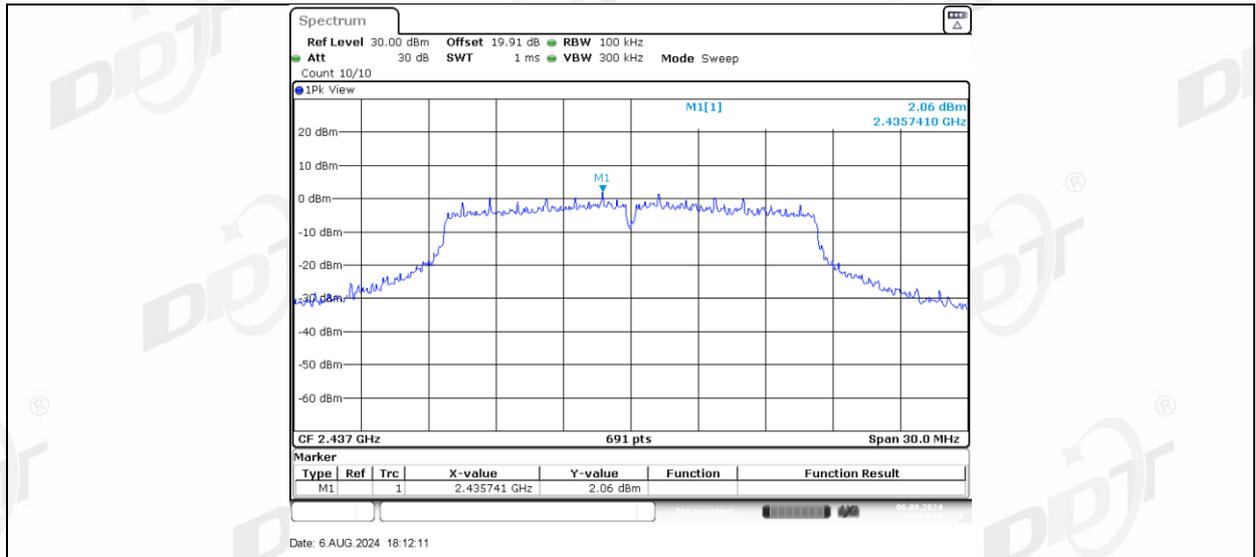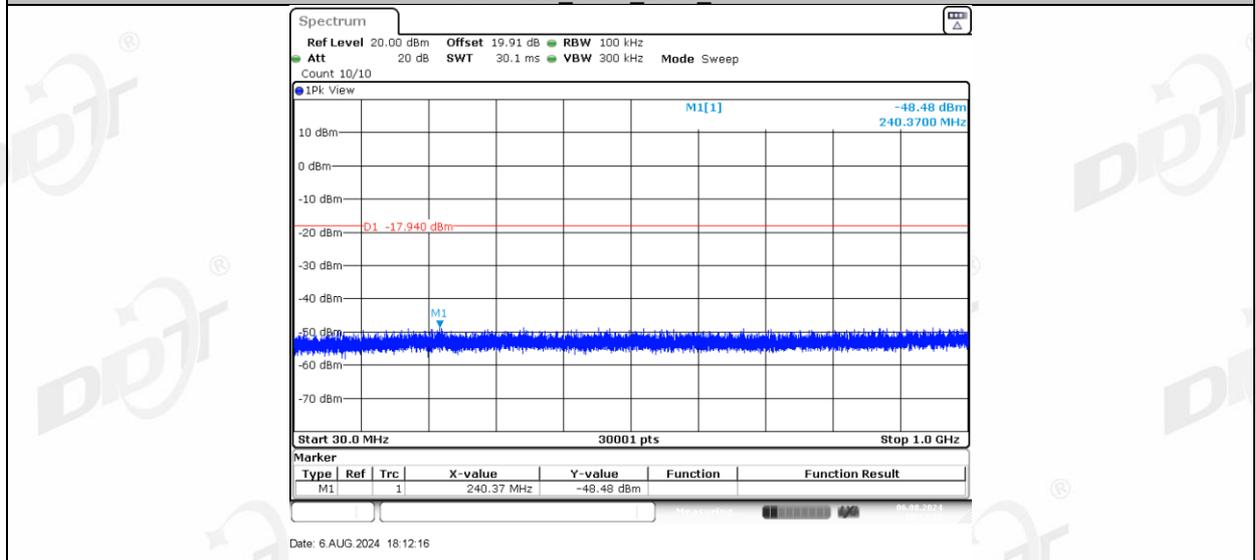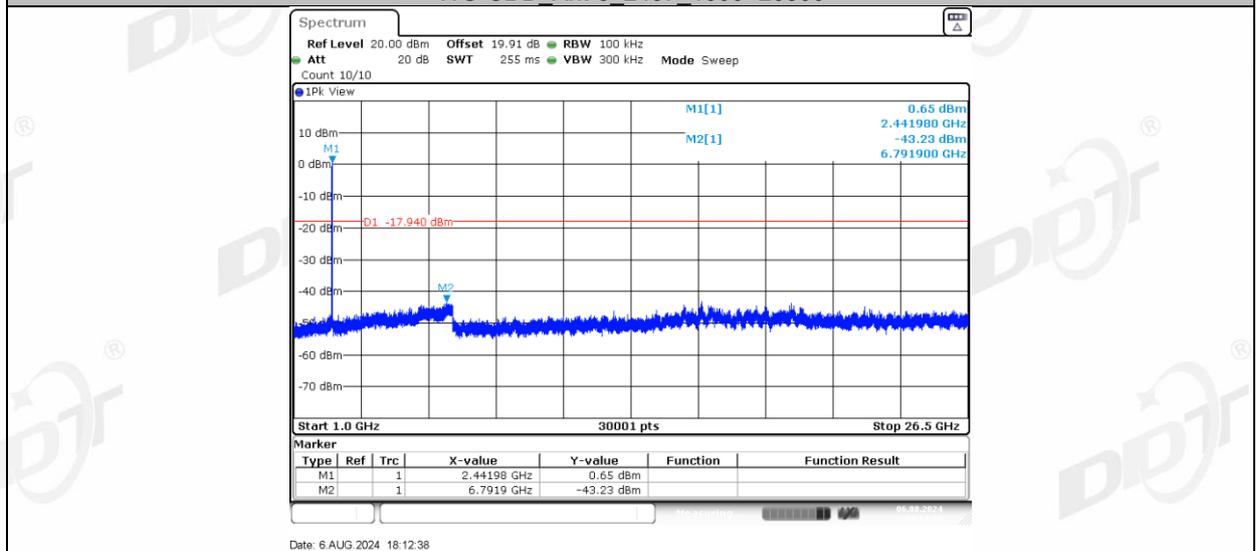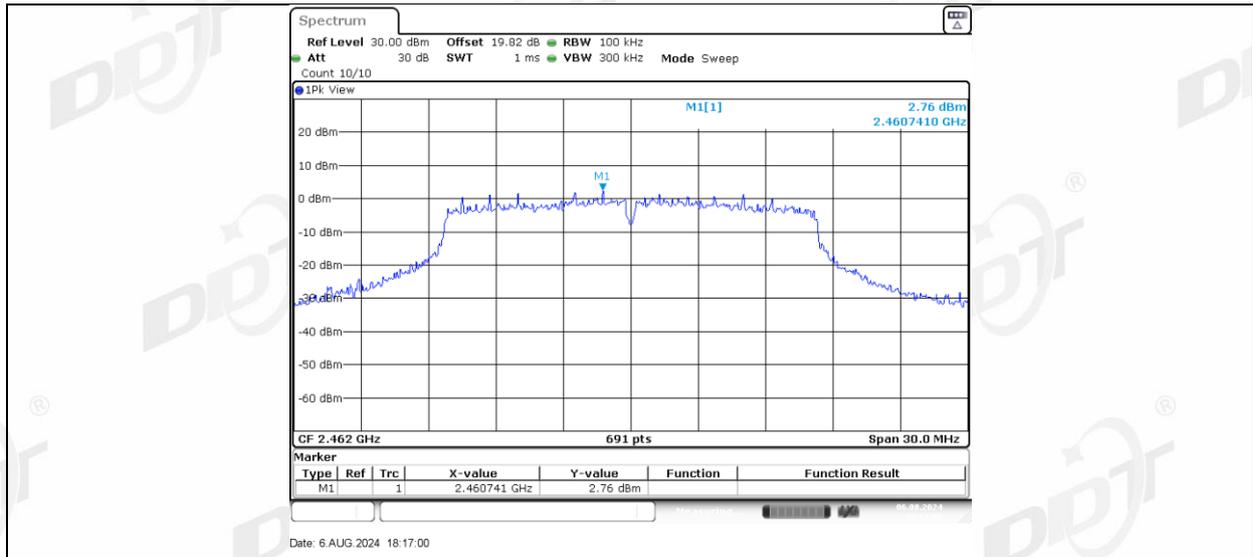11B-CDD_Ant-3_2412_1000~26500
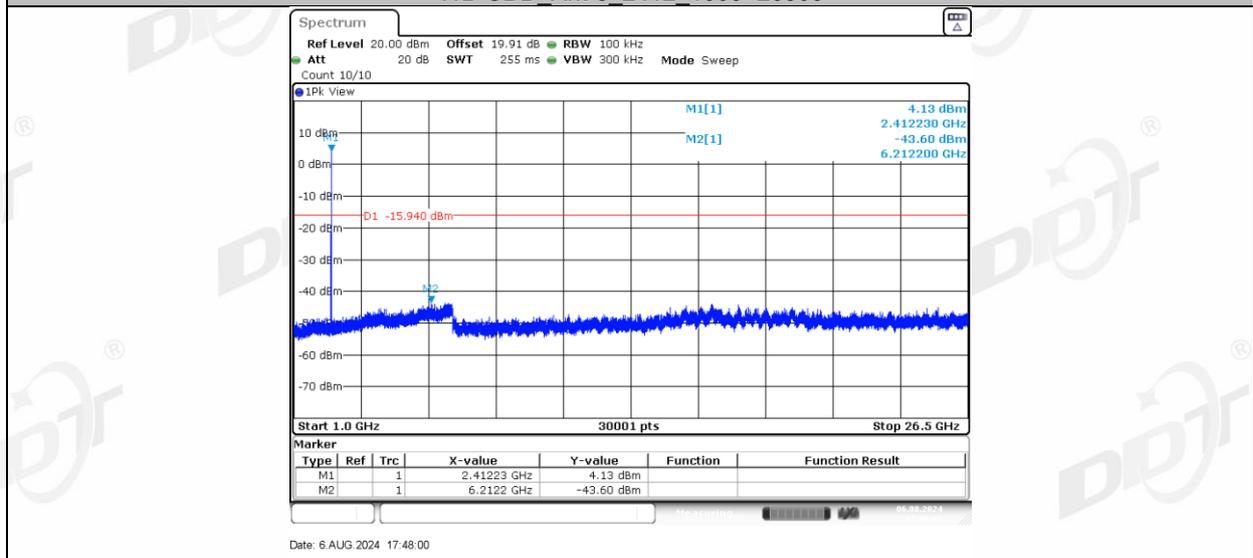
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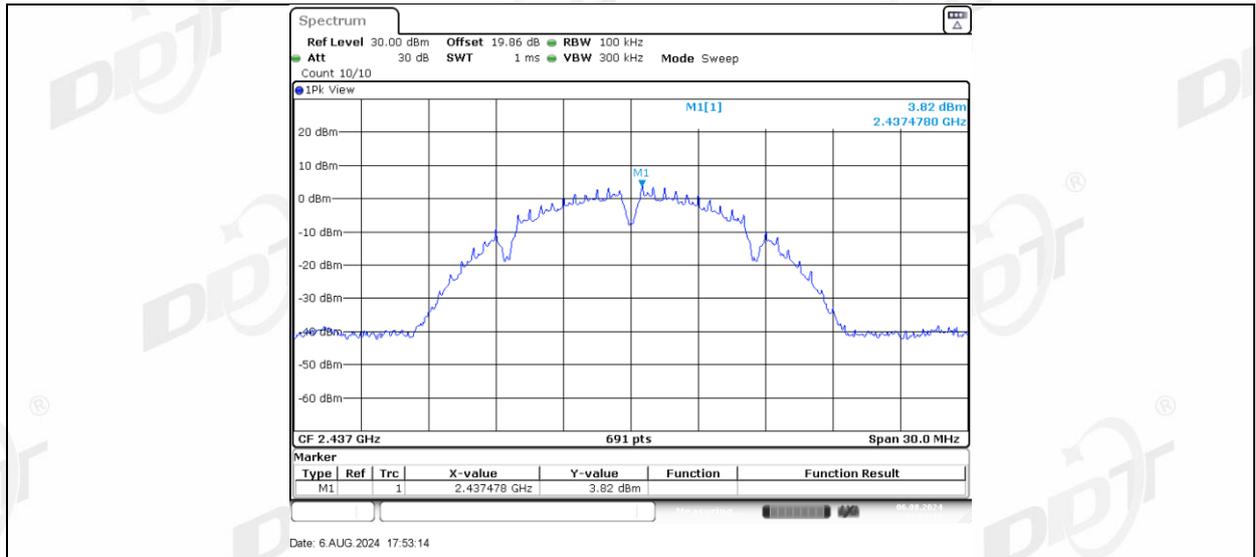
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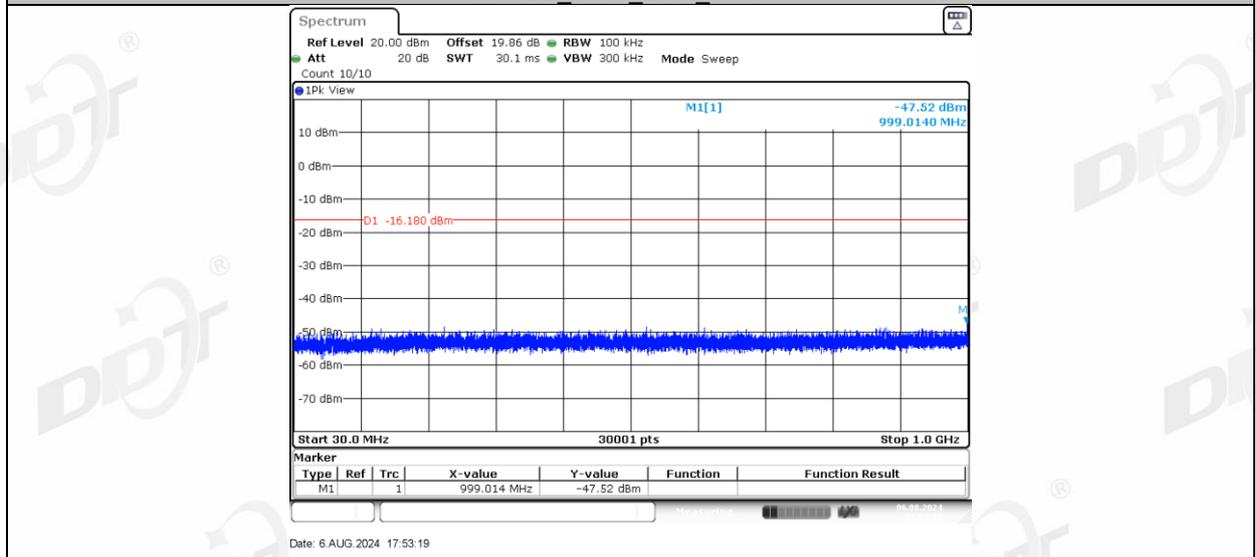
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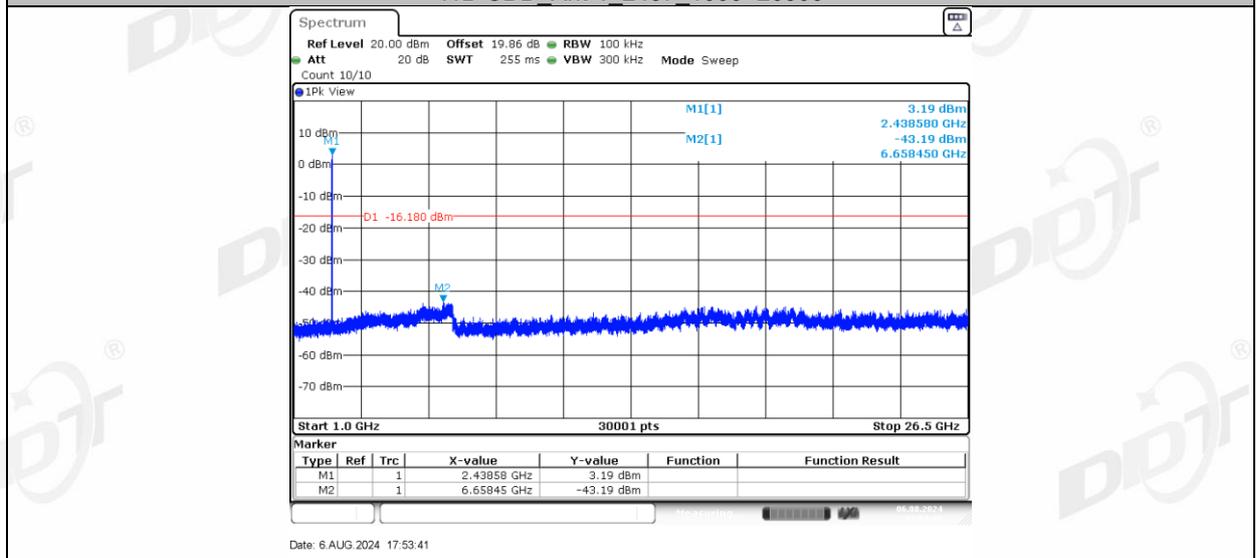
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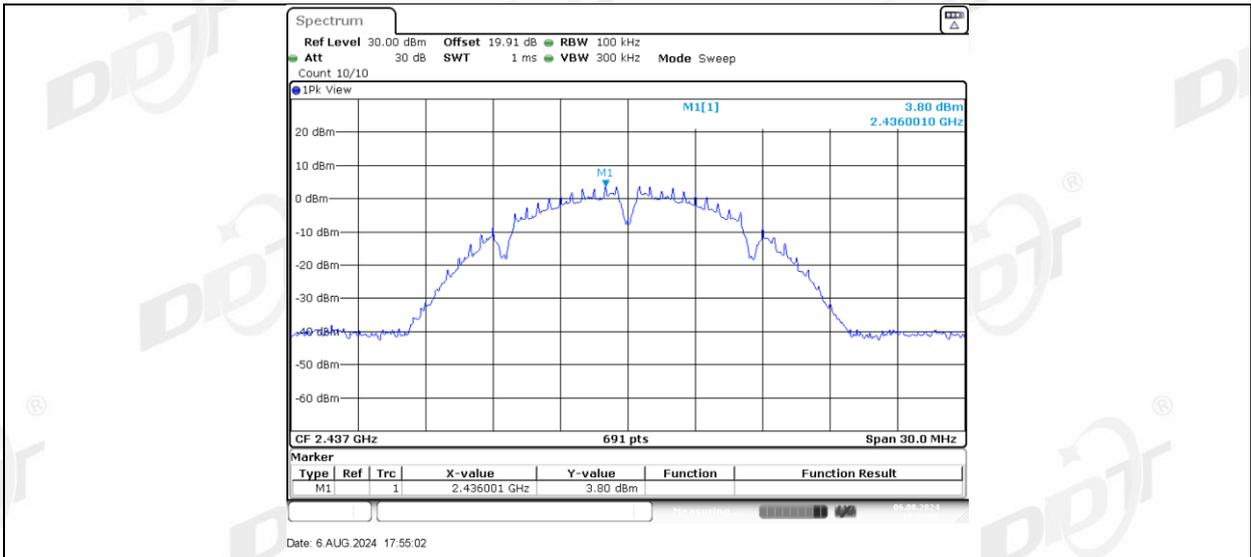
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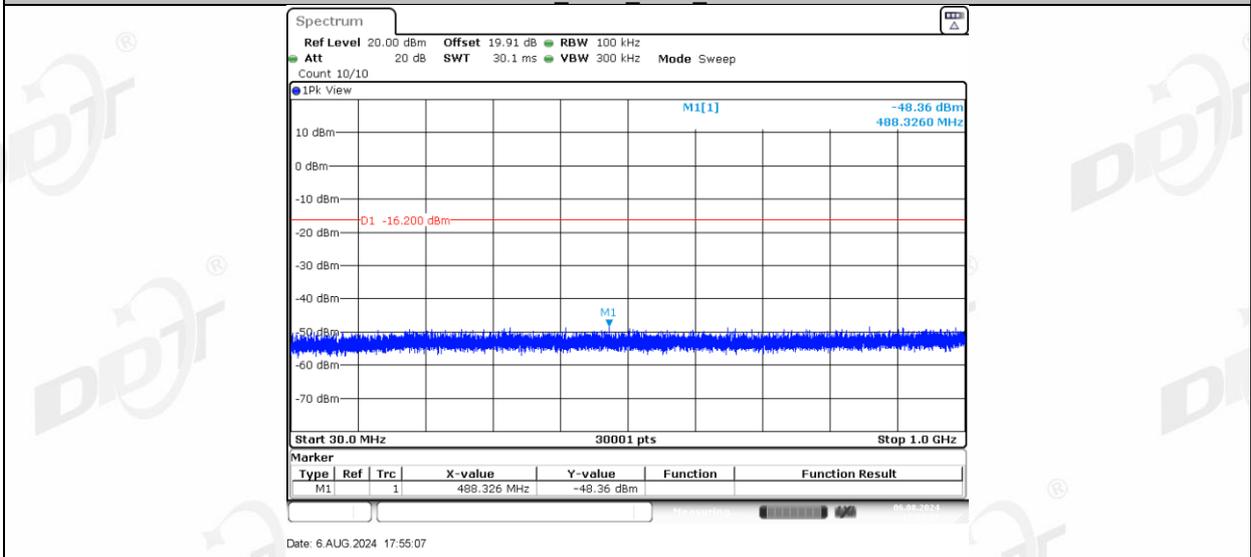
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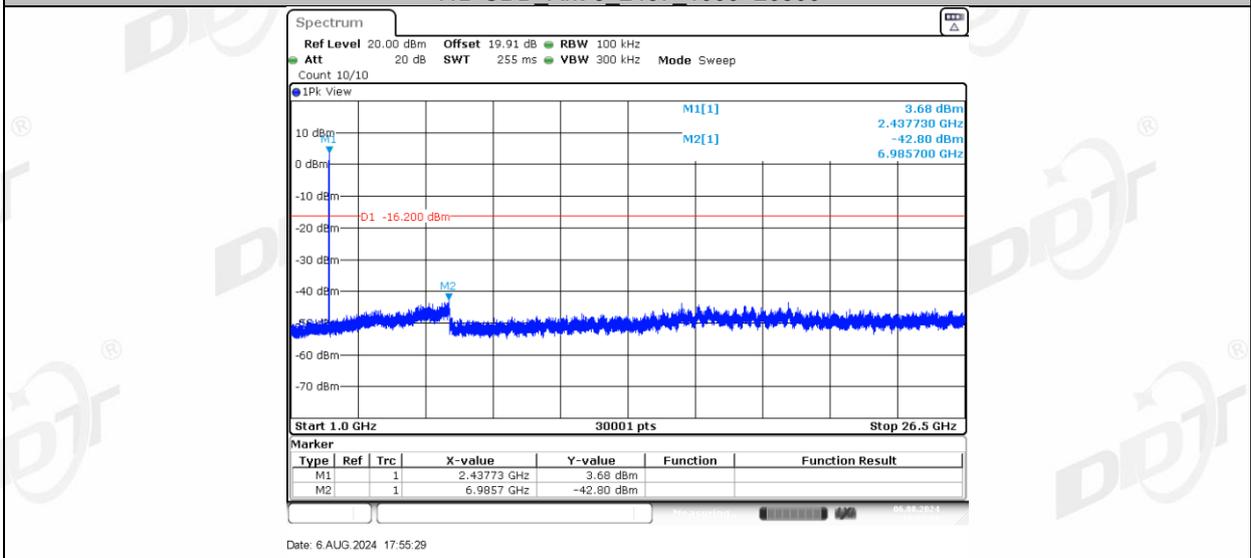
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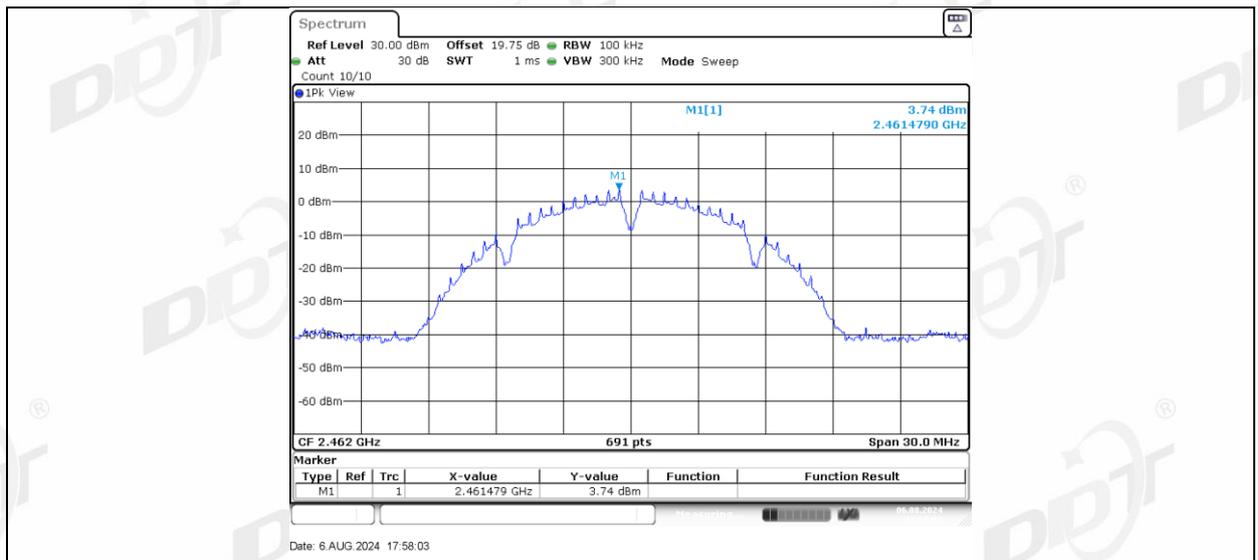
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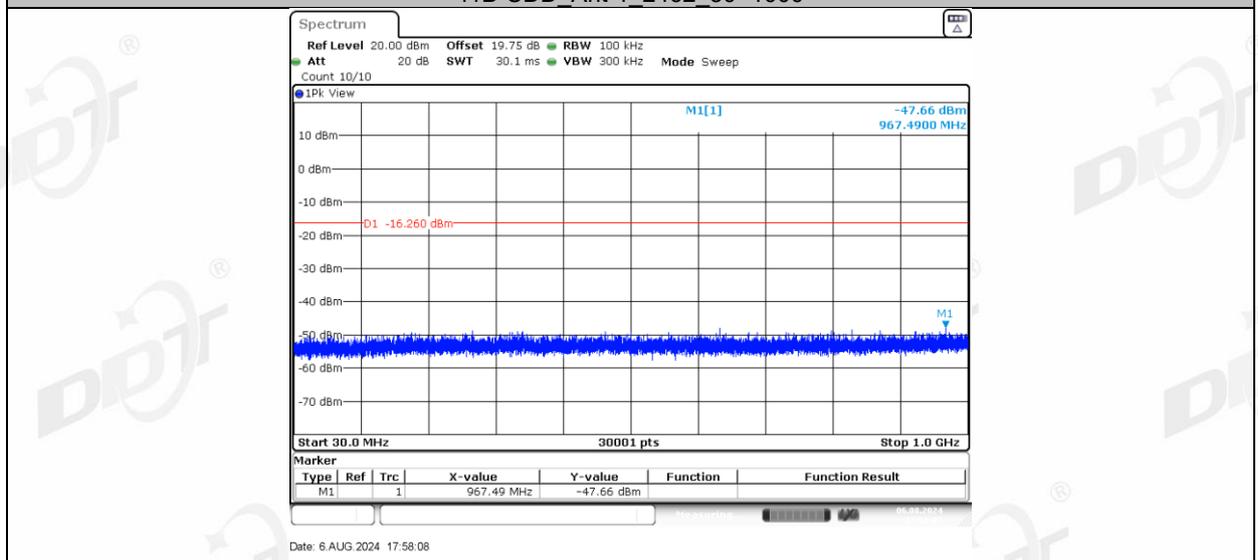
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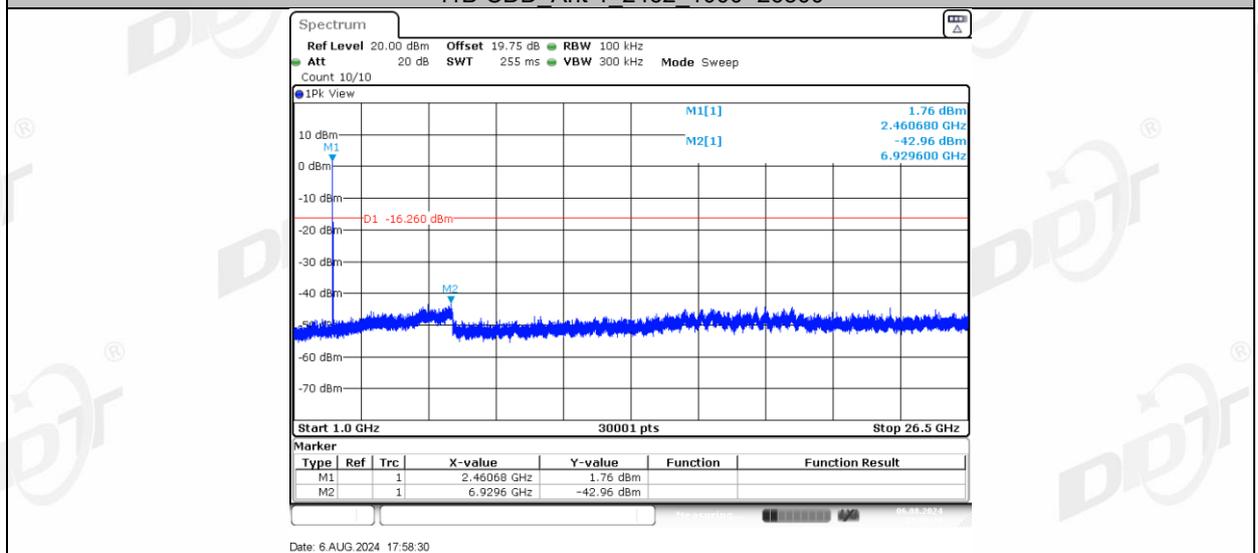
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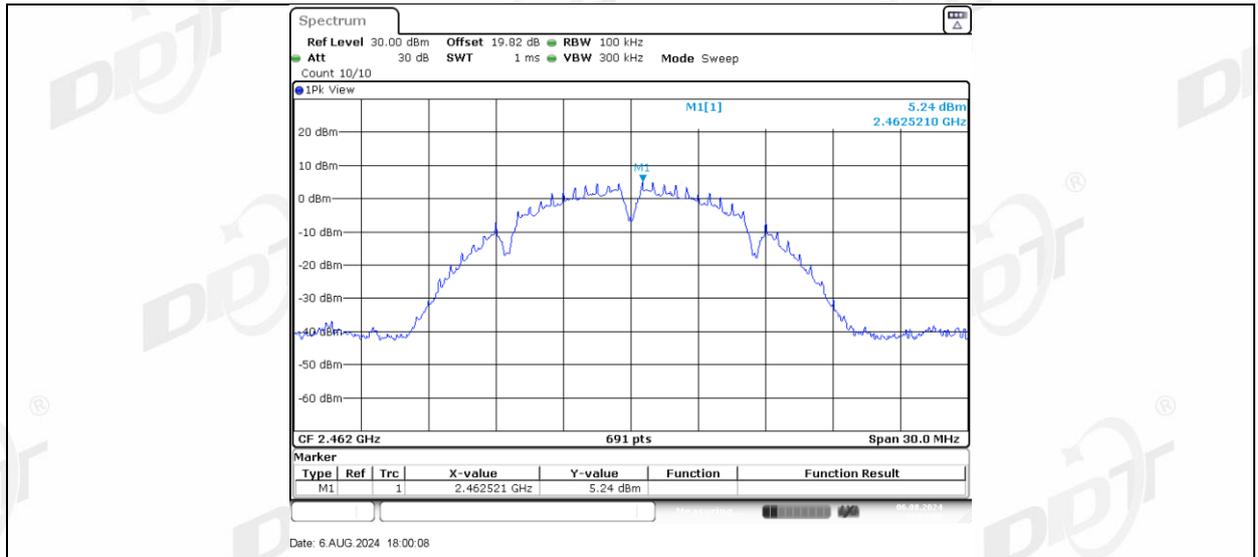
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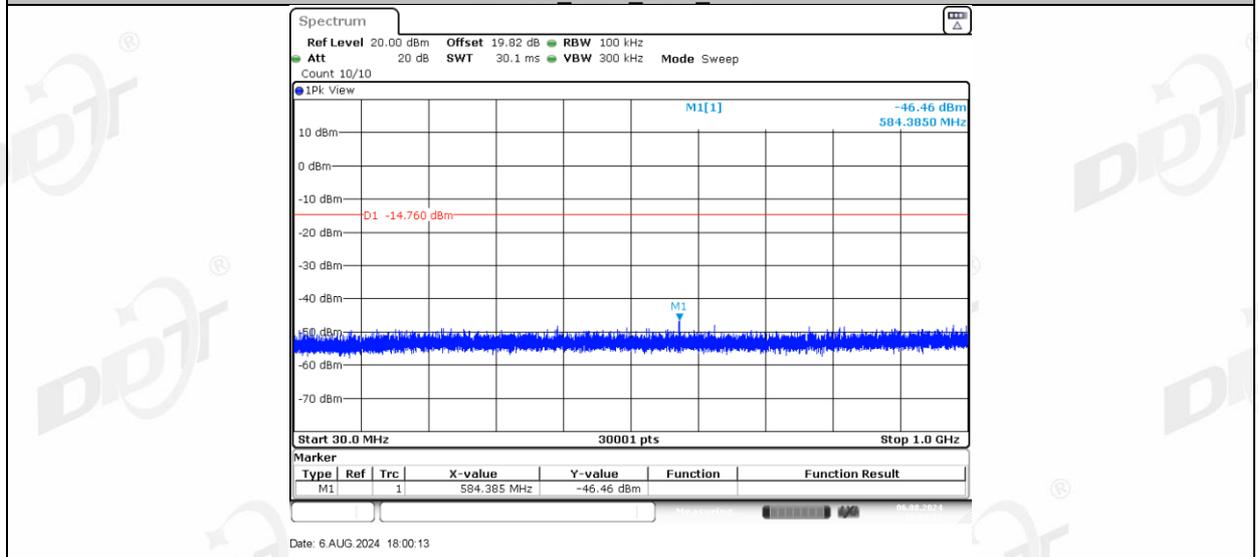
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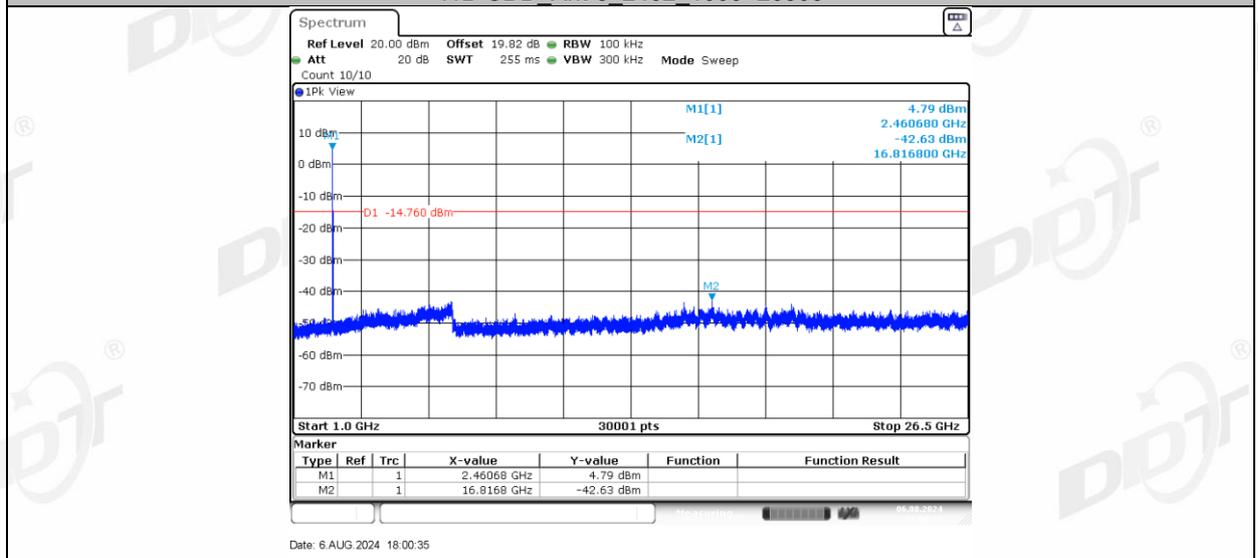
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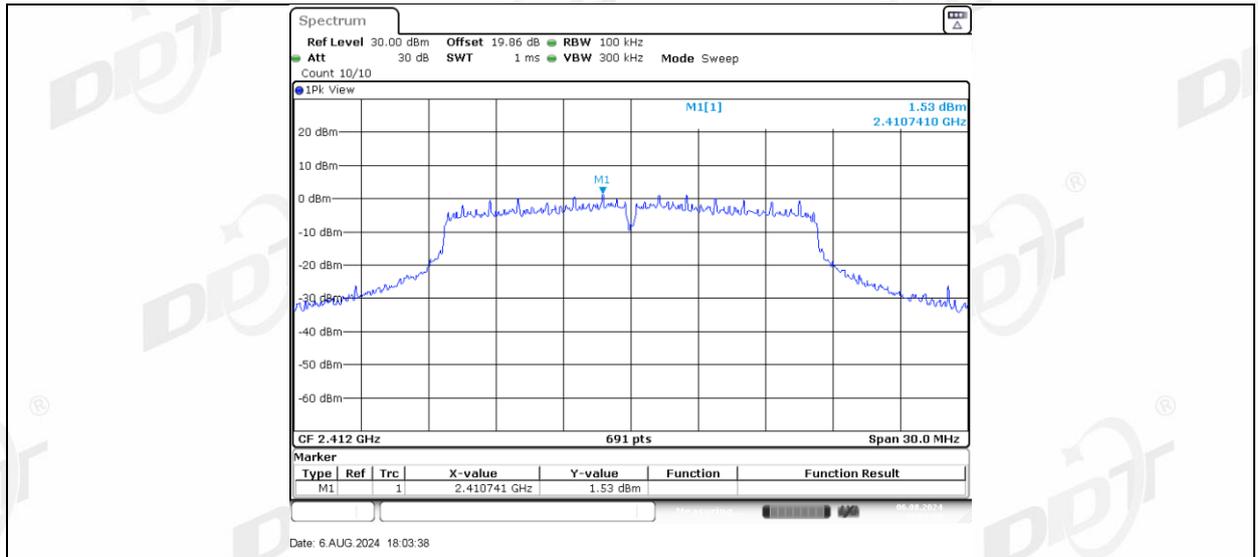
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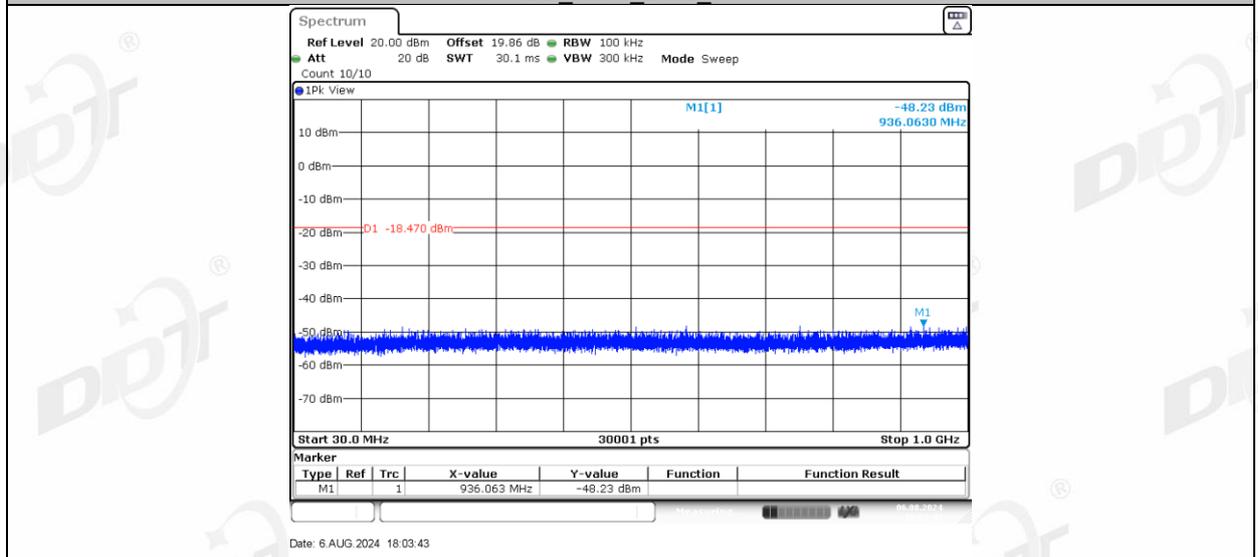
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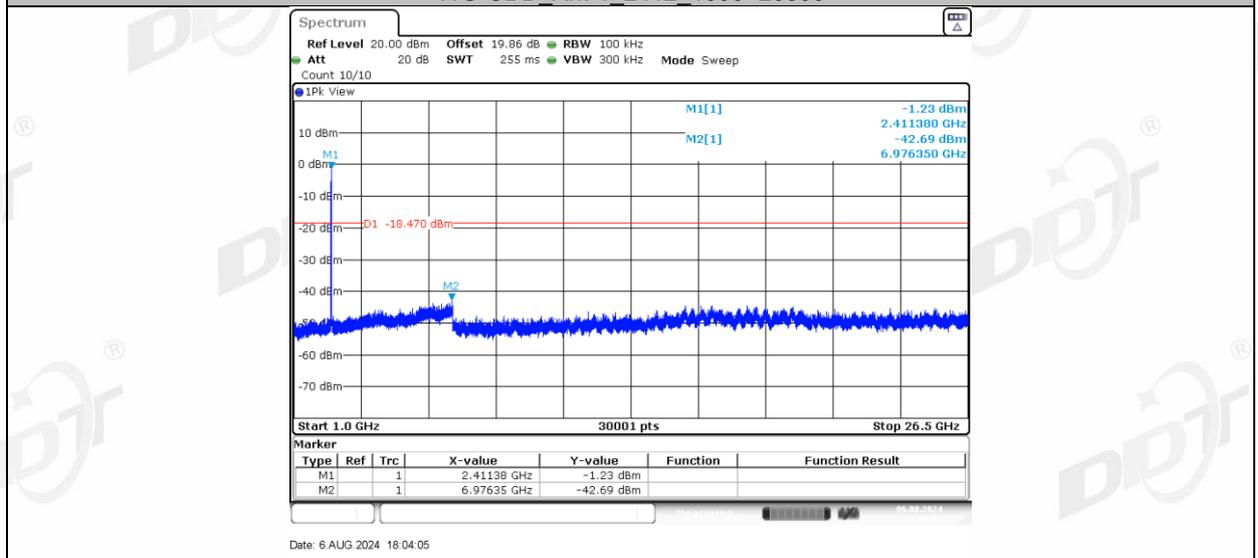
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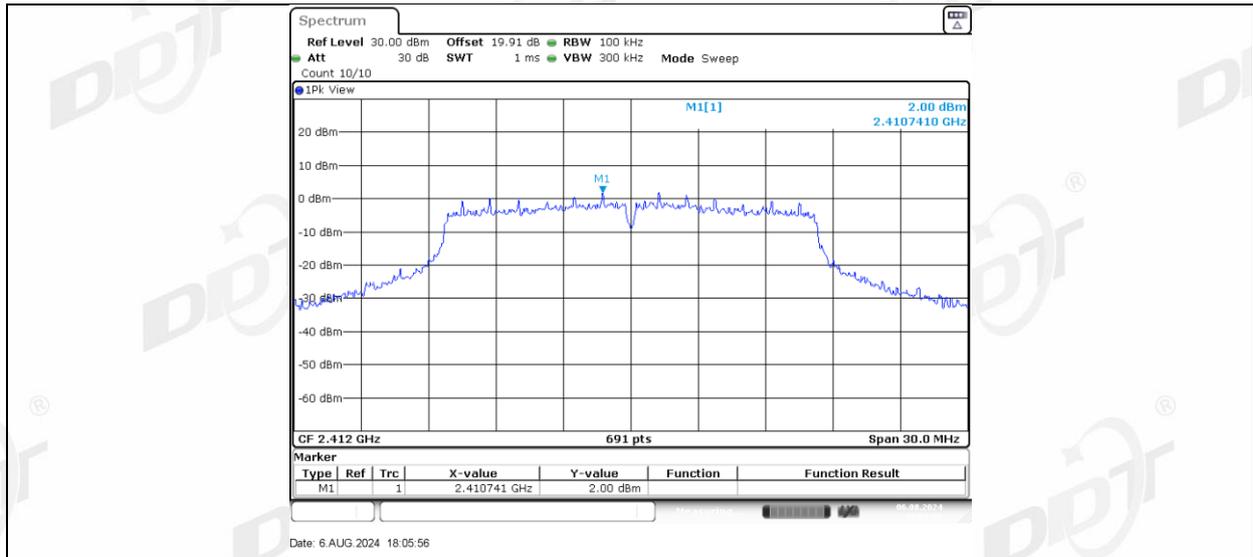
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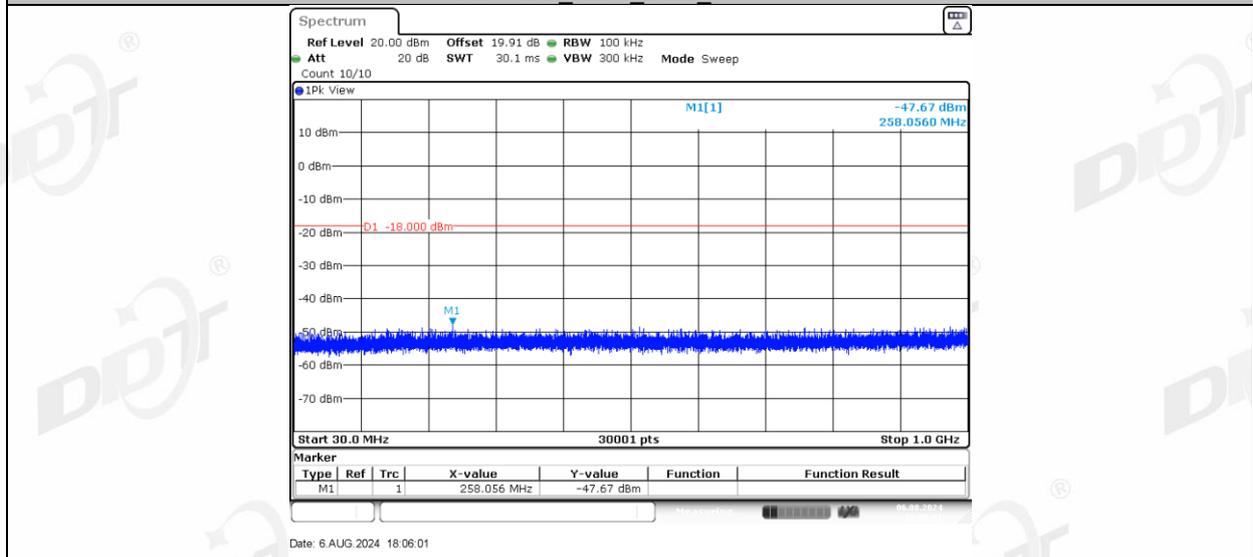
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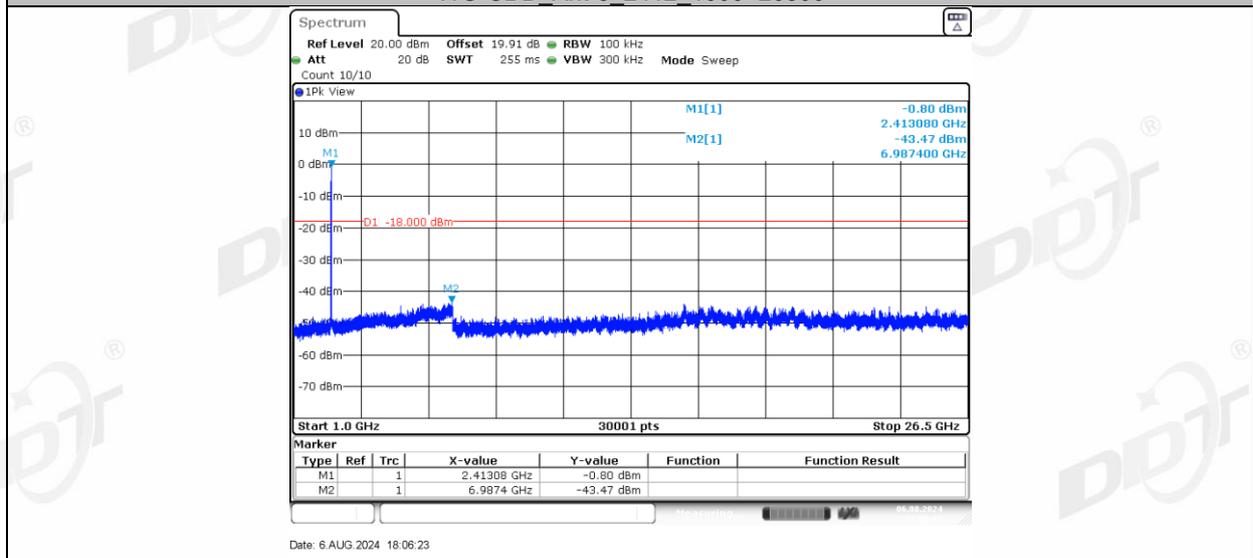
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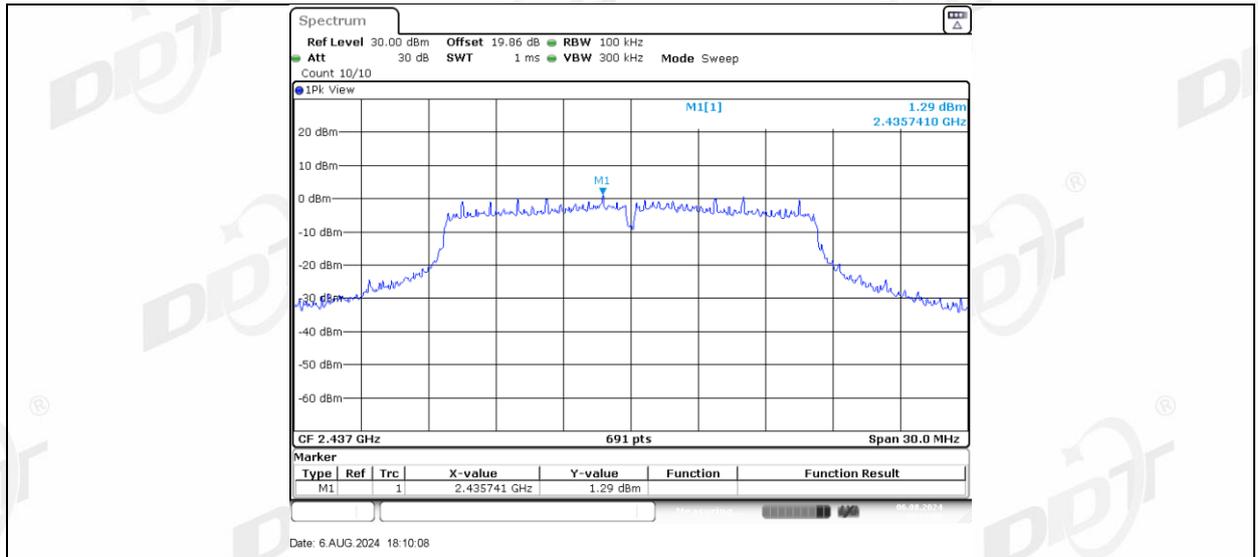
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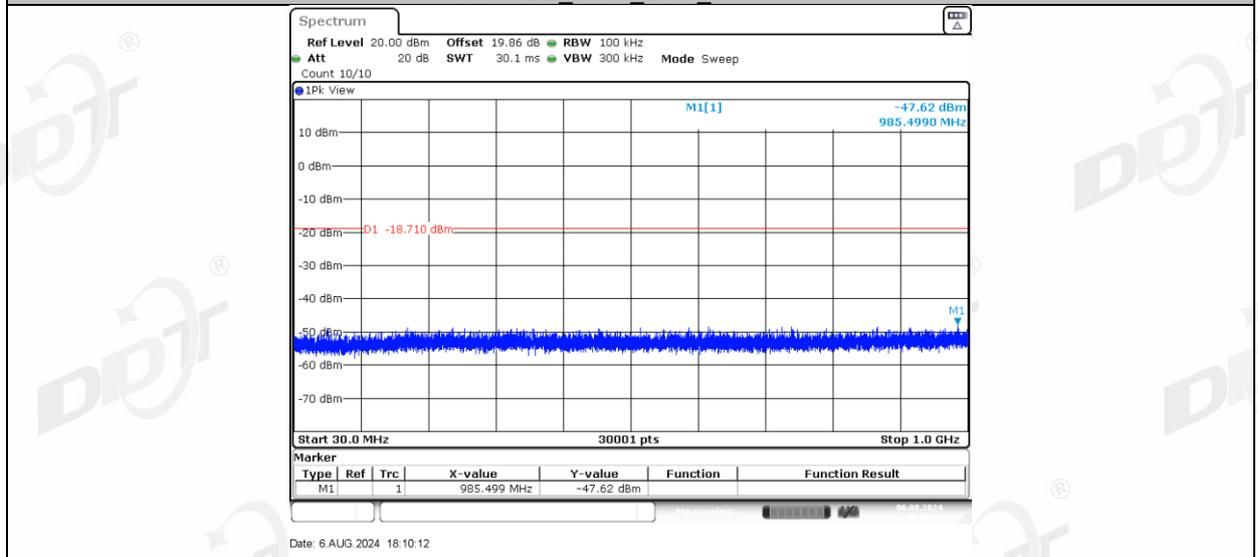
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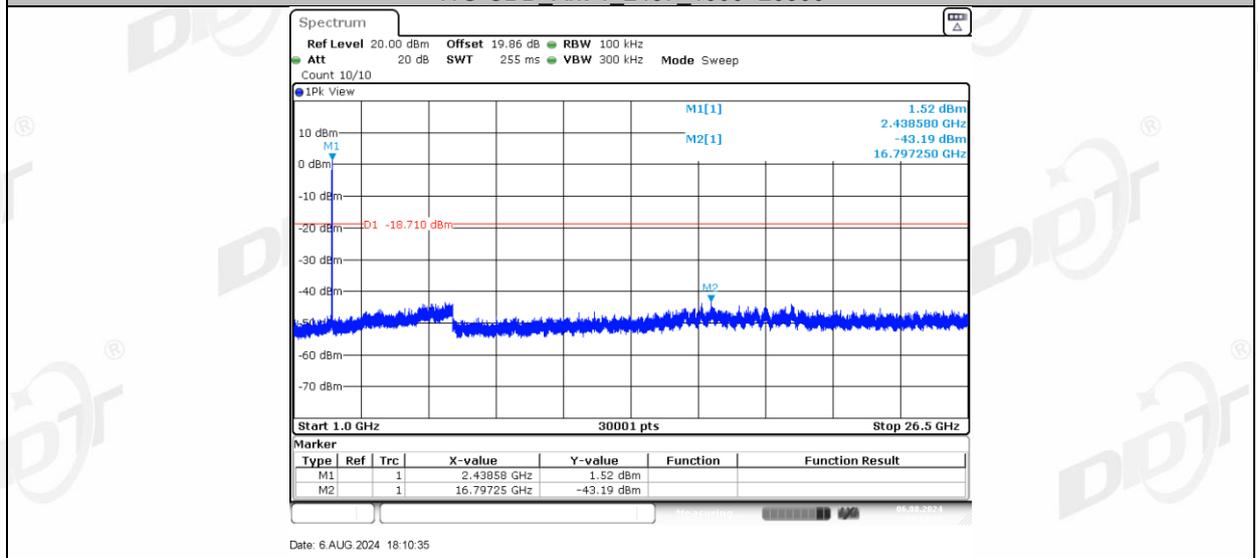
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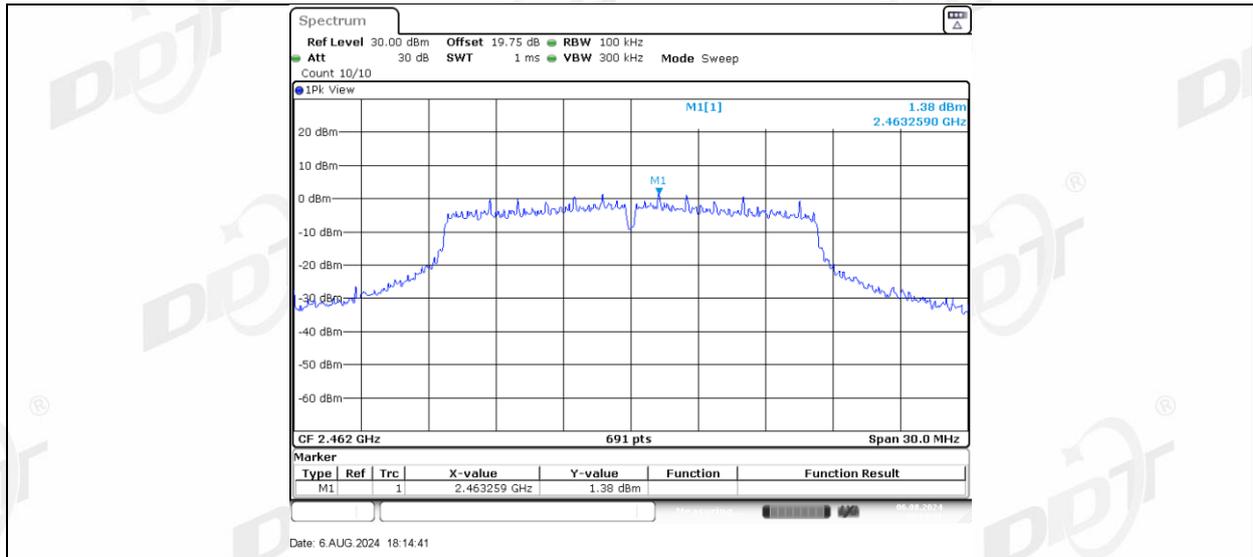
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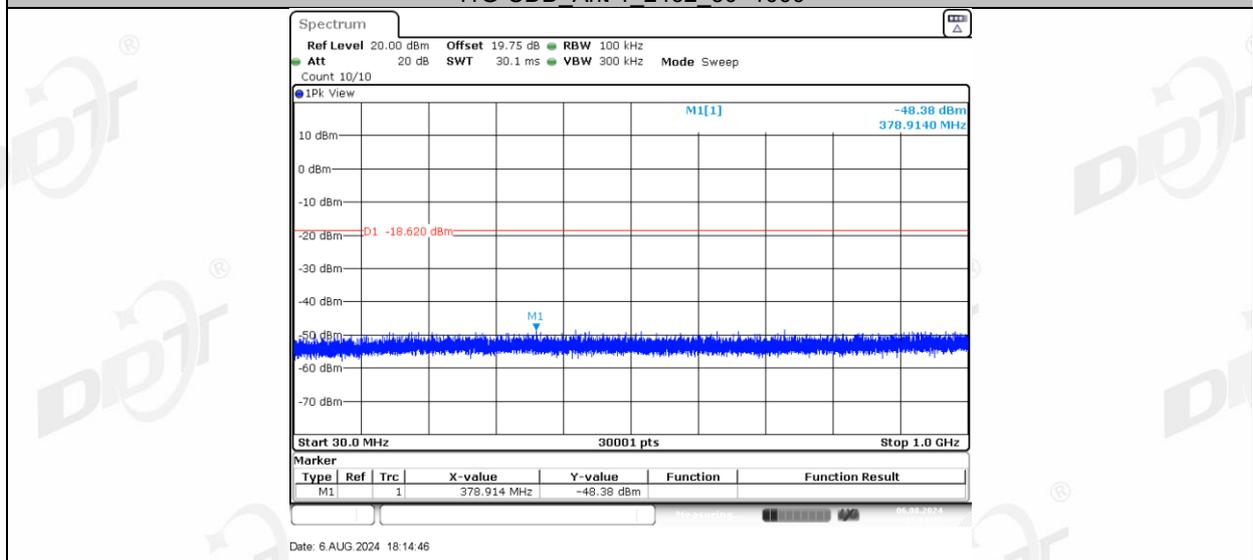
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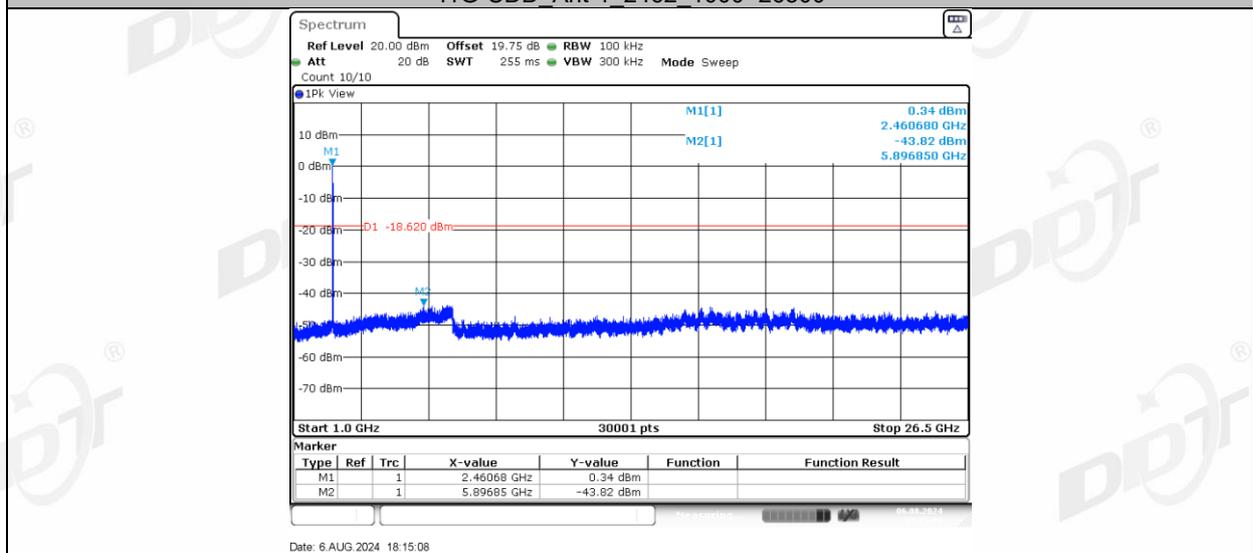
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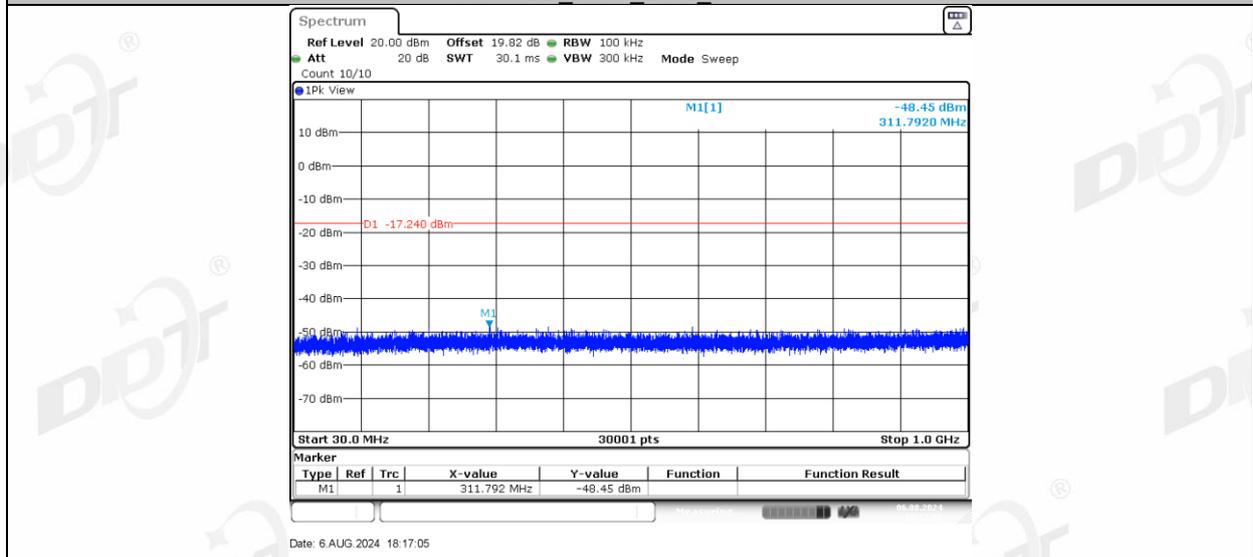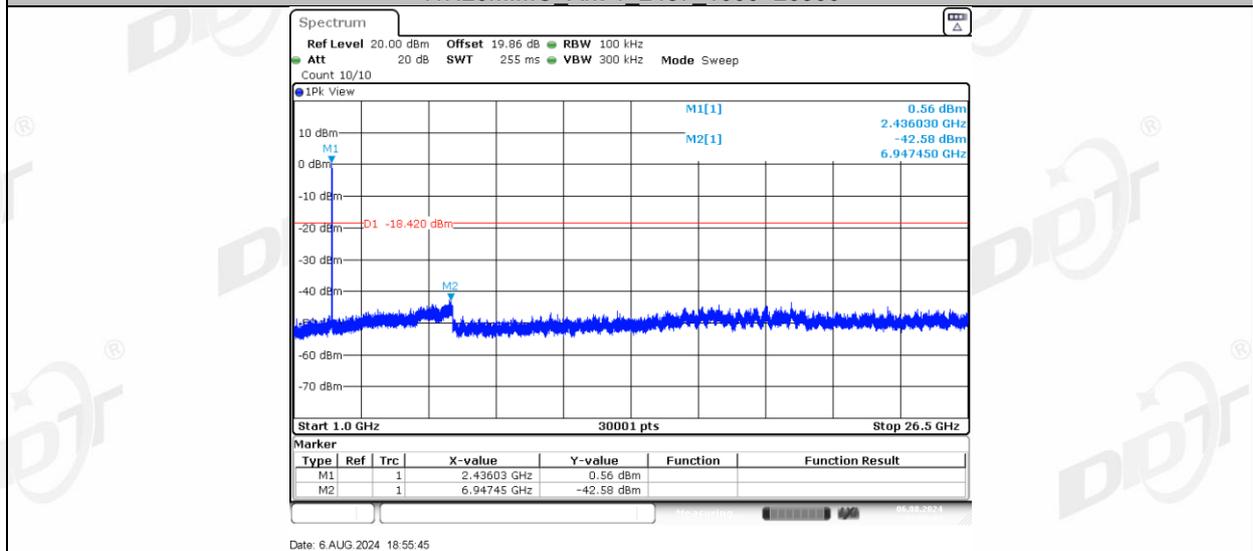

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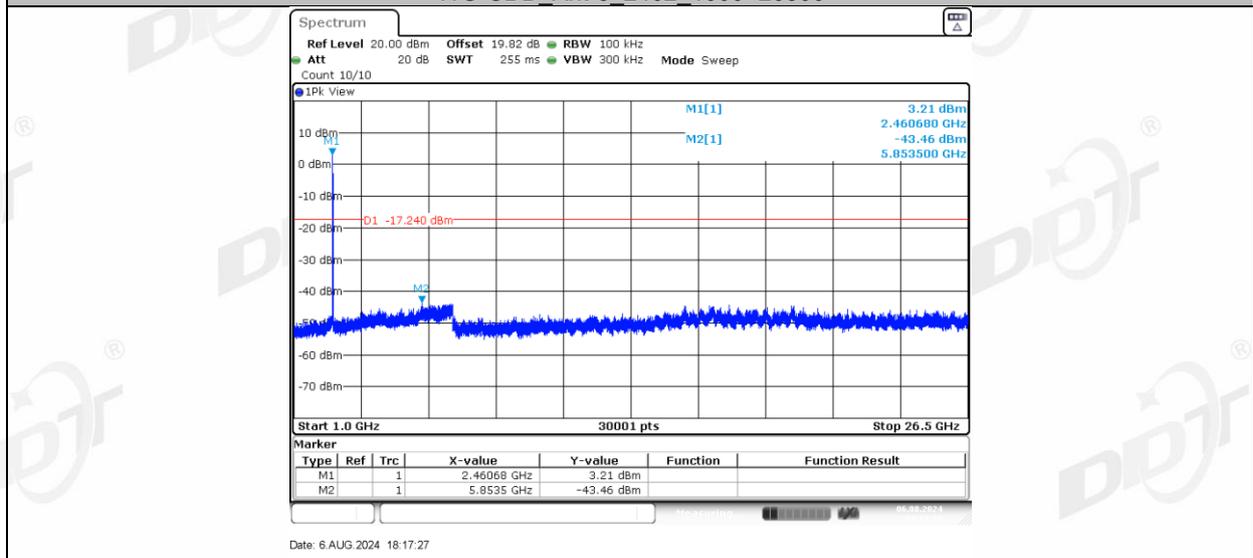
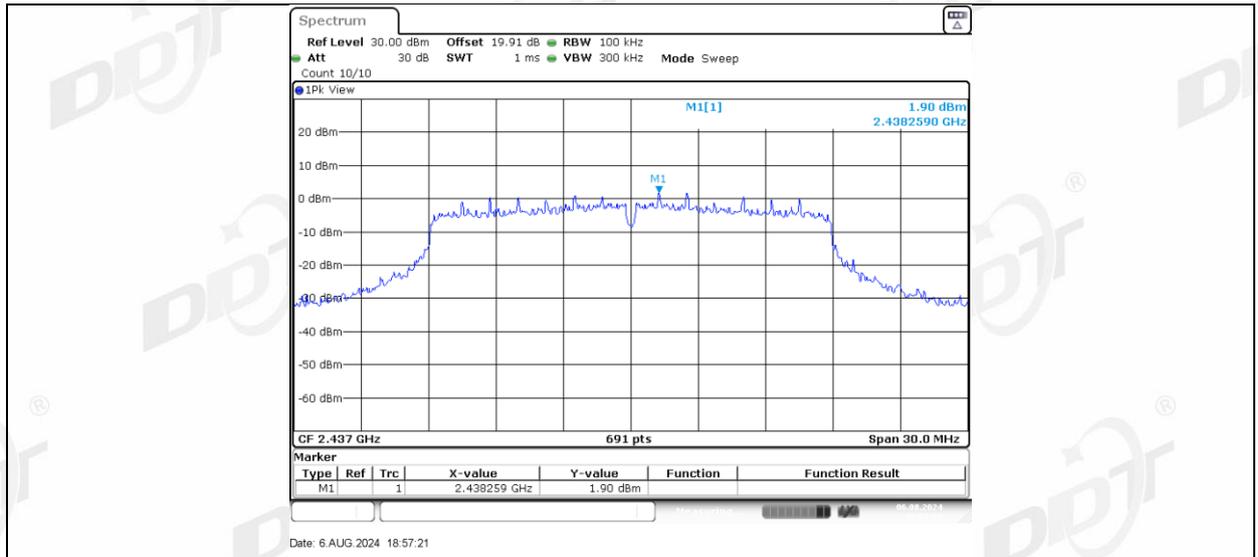11N20MIMO_Ant-1_2412_0~Reference
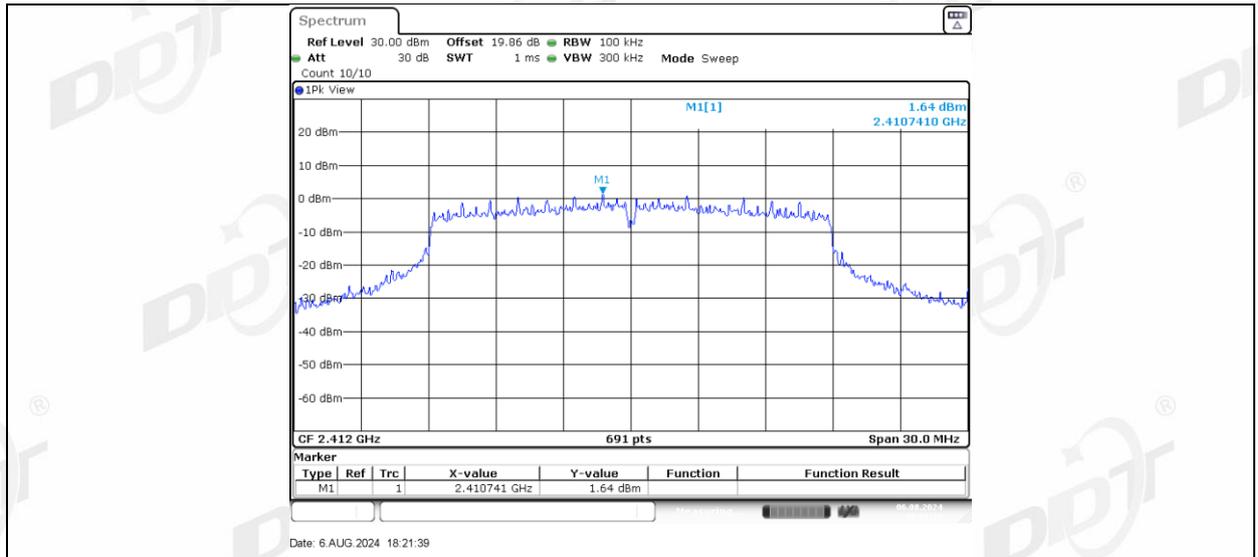
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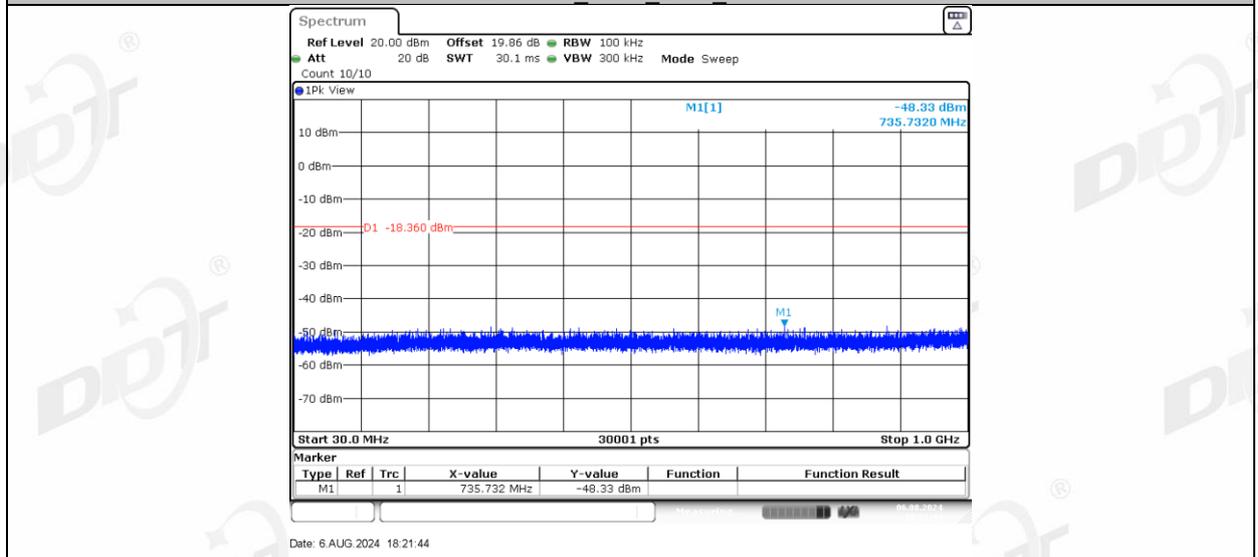
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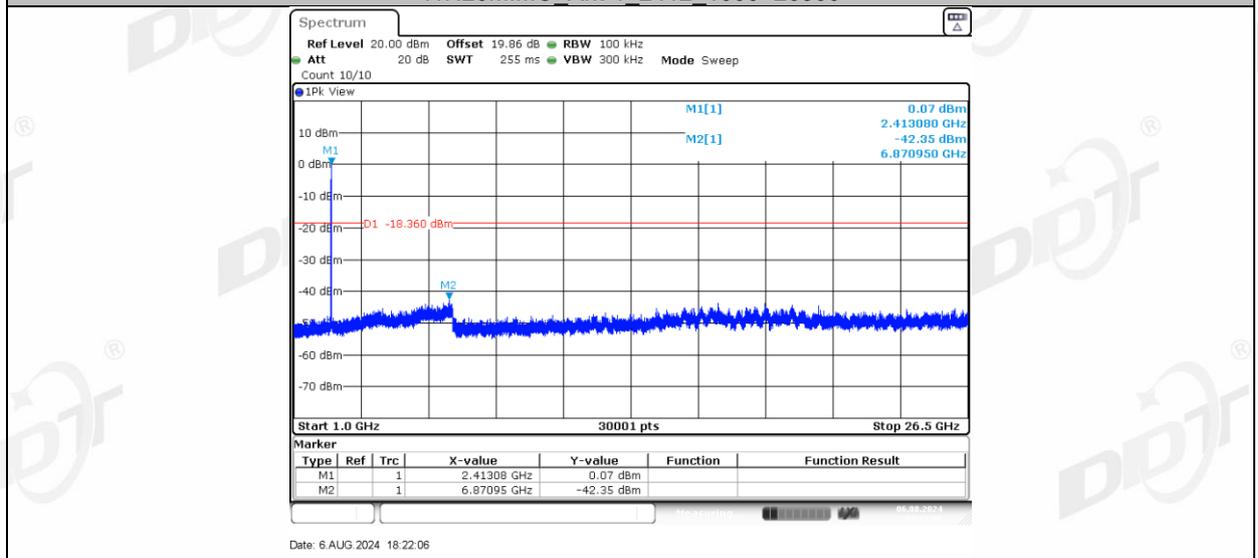
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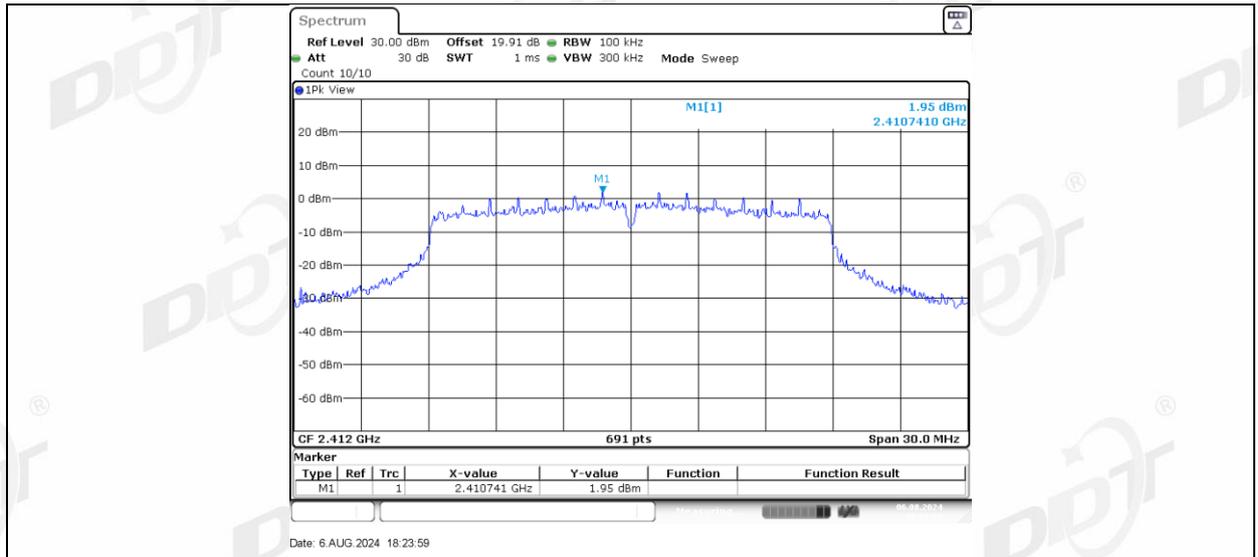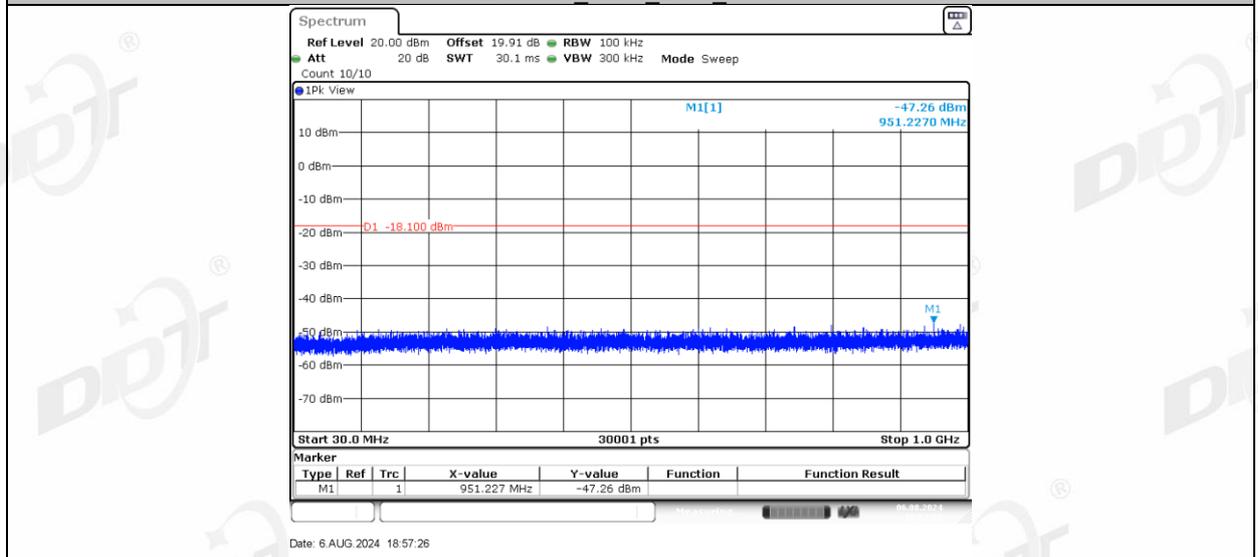
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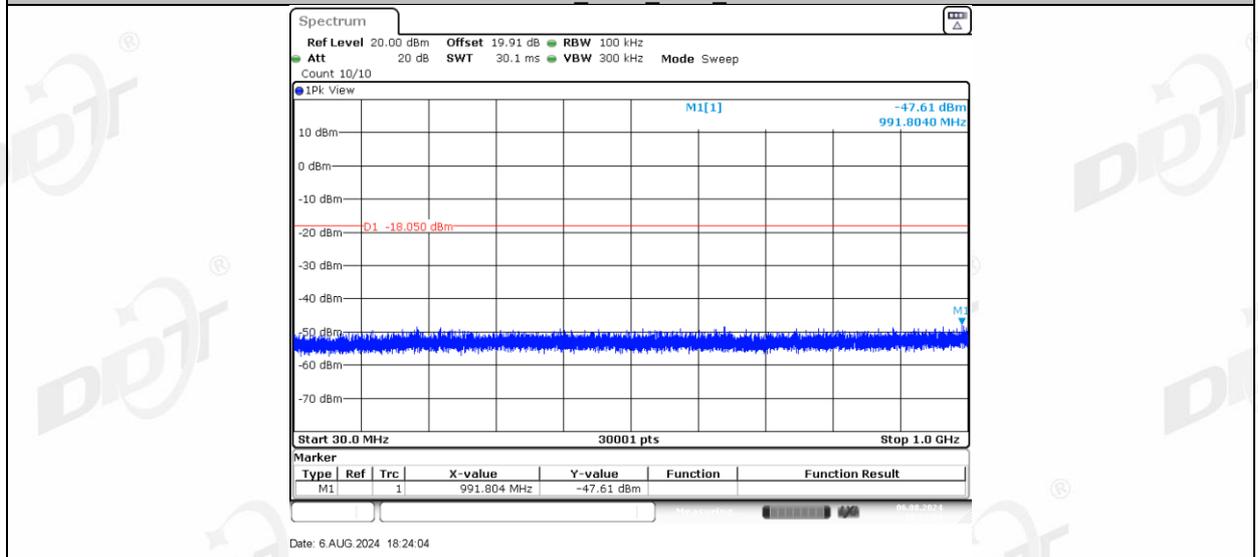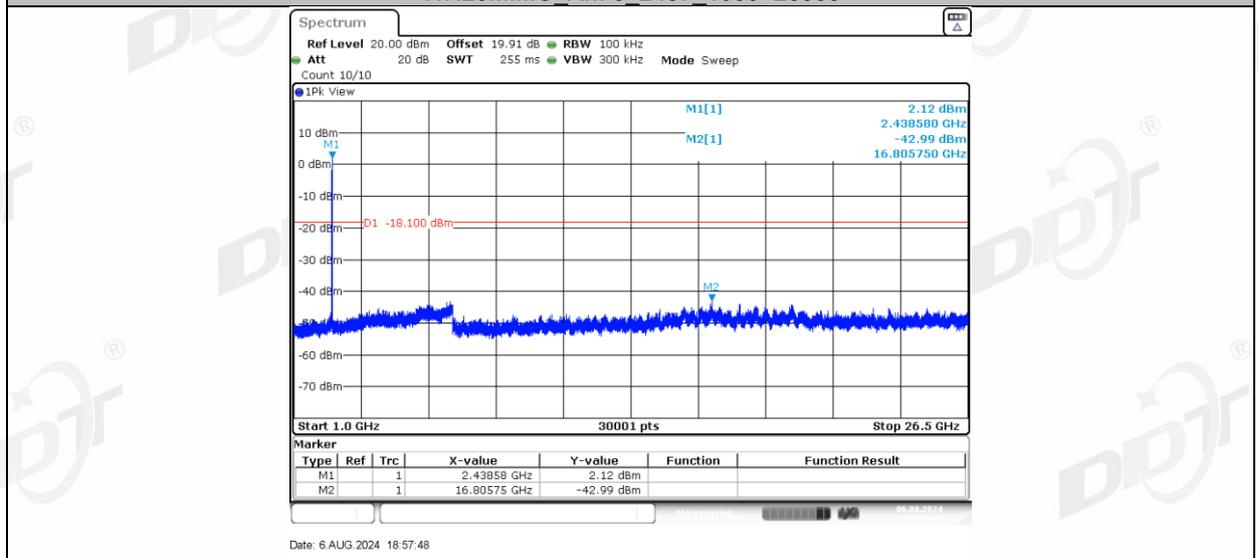

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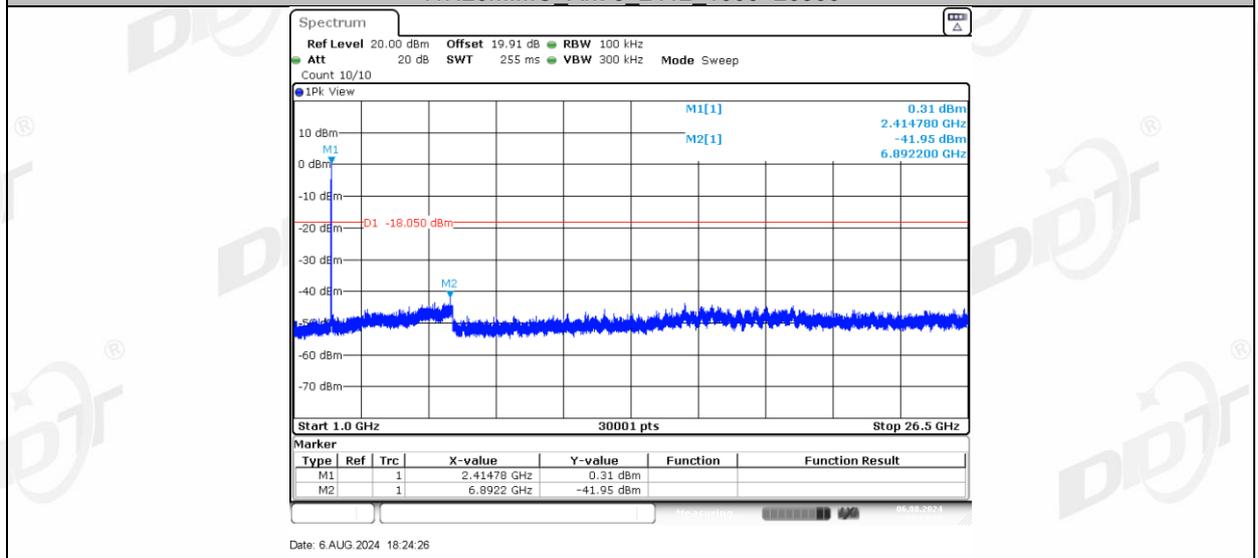
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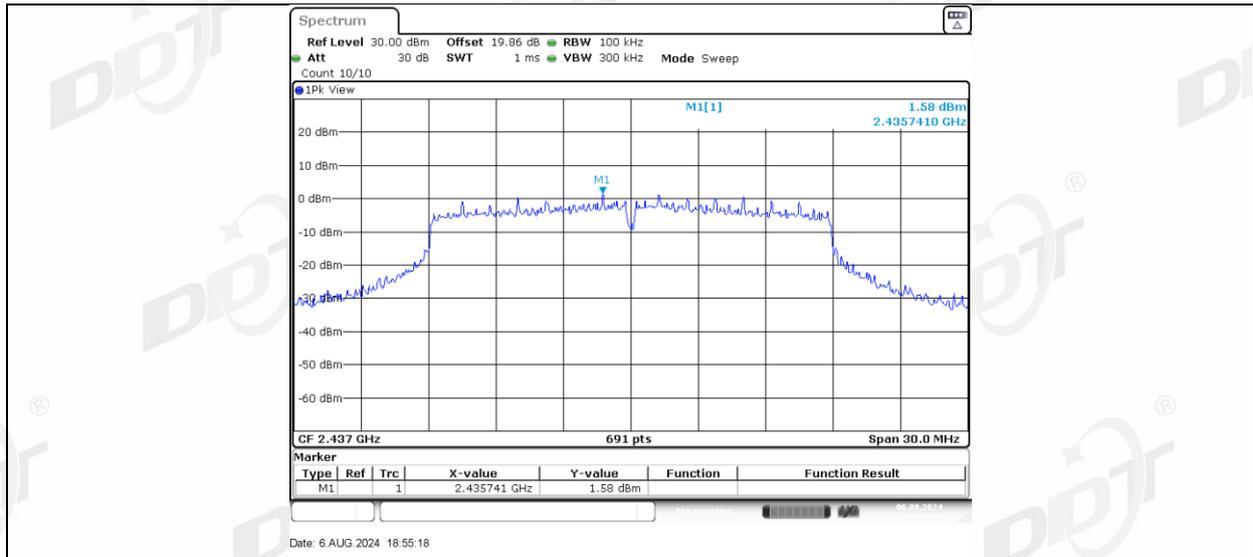
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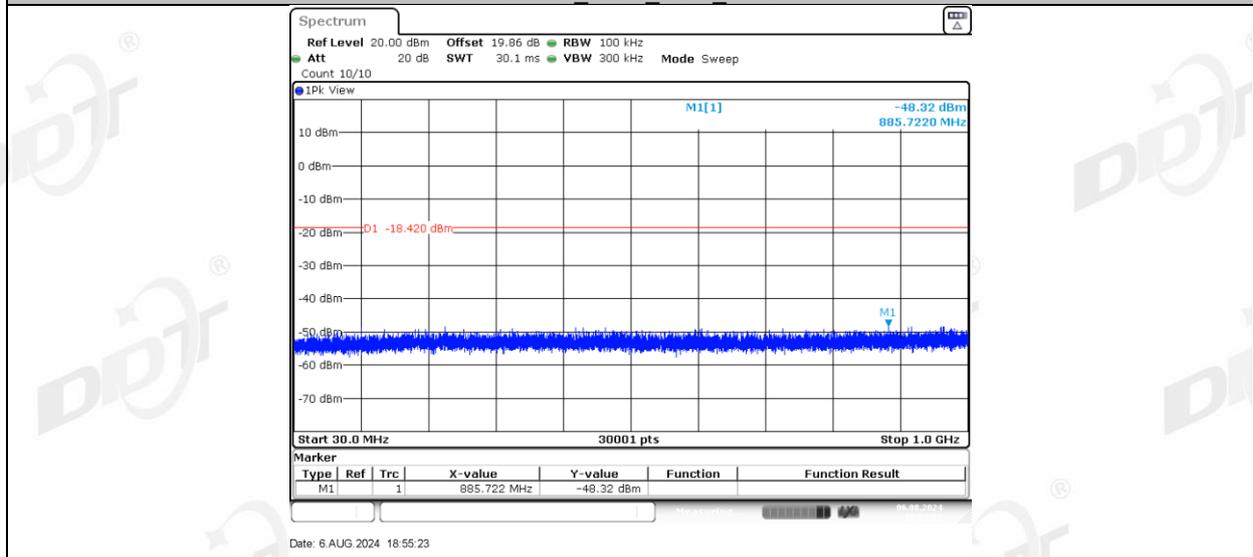
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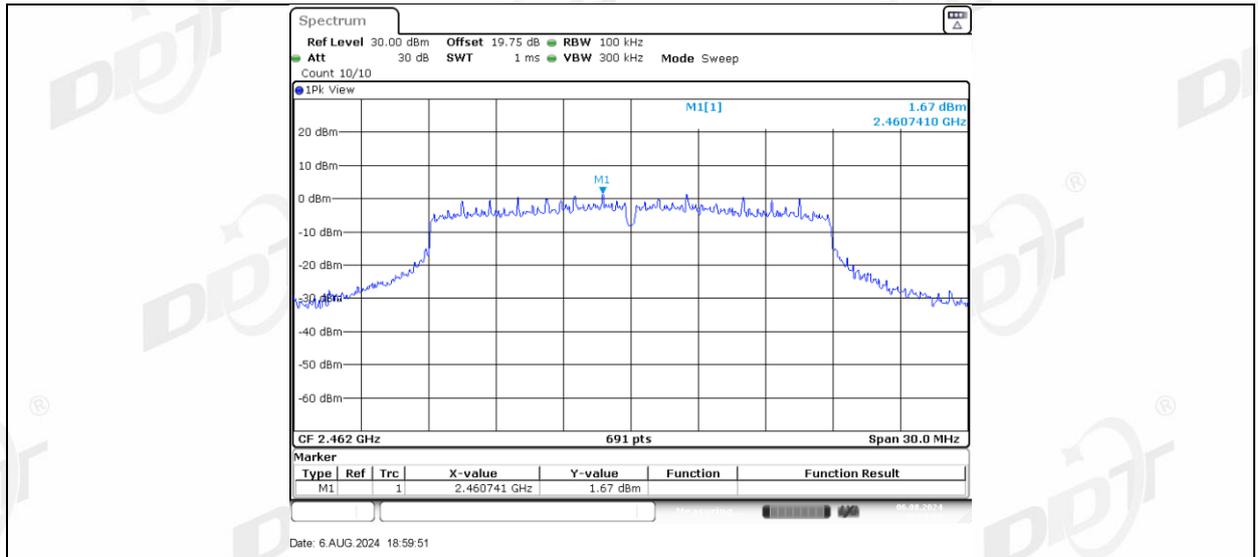

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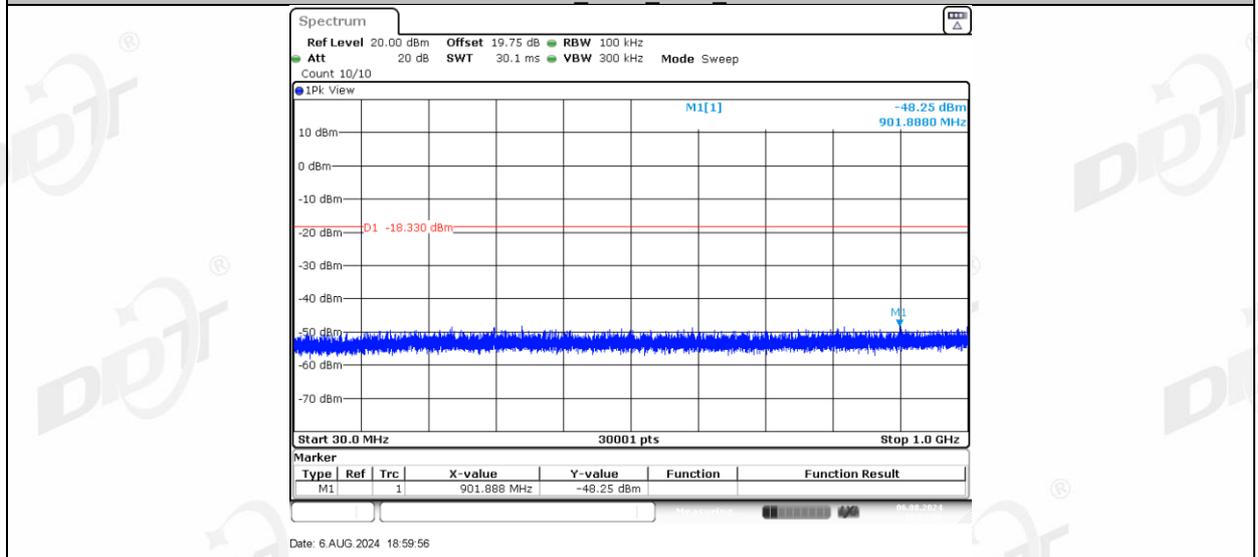
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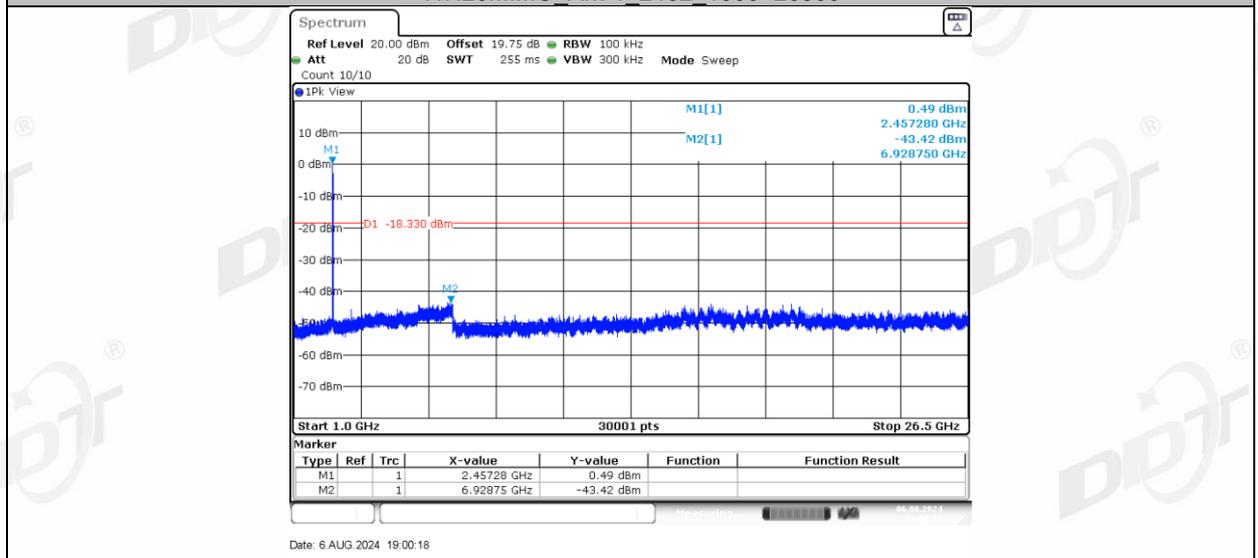11N20MIMO_Ant-3_2437_1000~26500

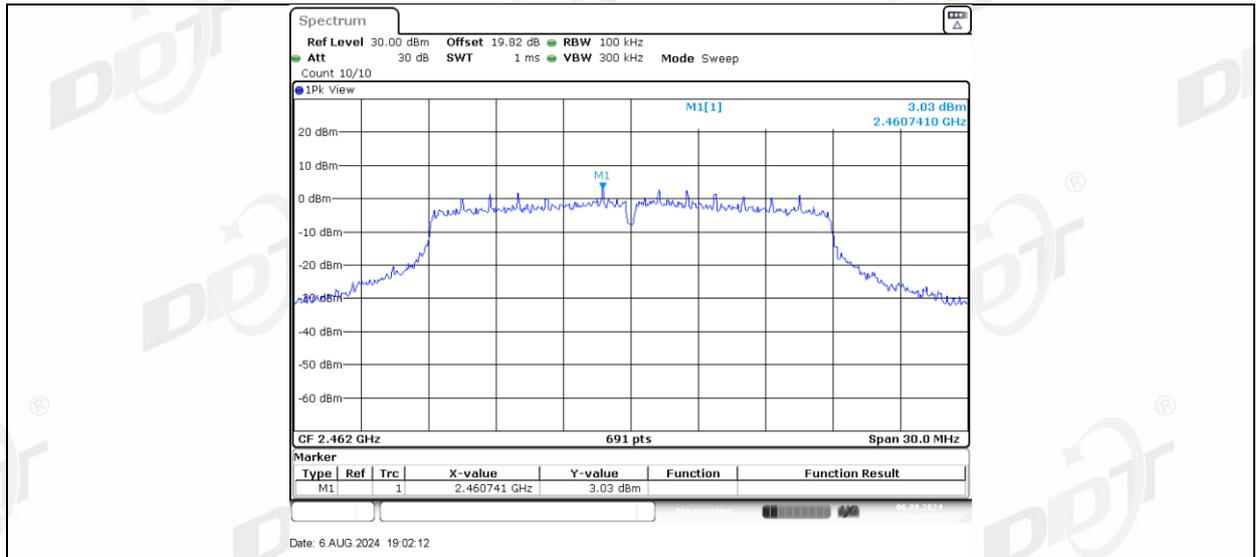11N20MIMO_Ant-1_2462_0~Reference
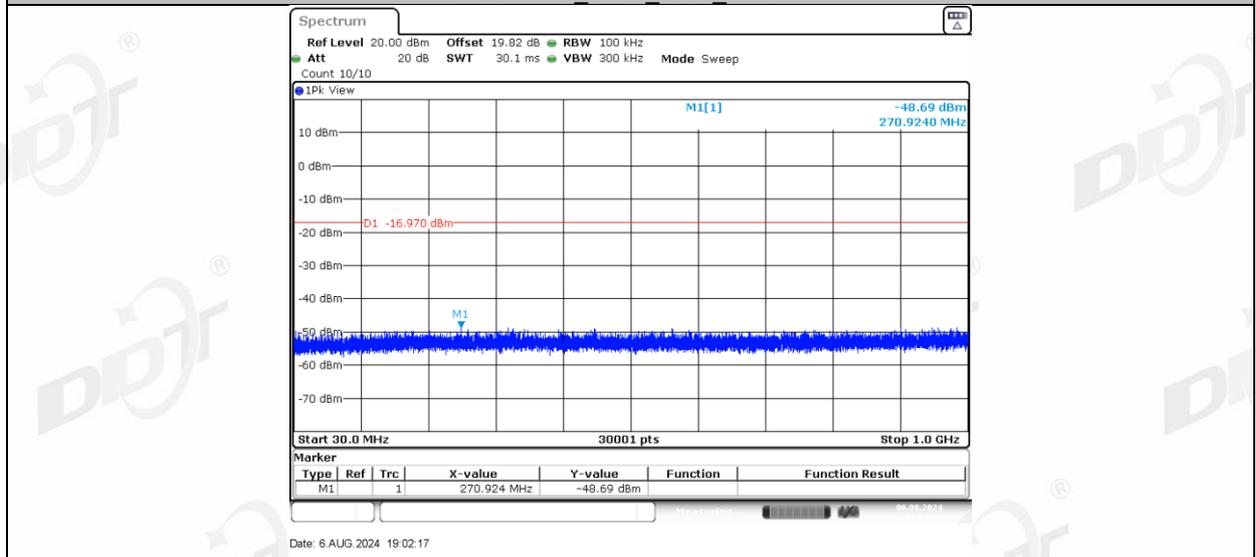
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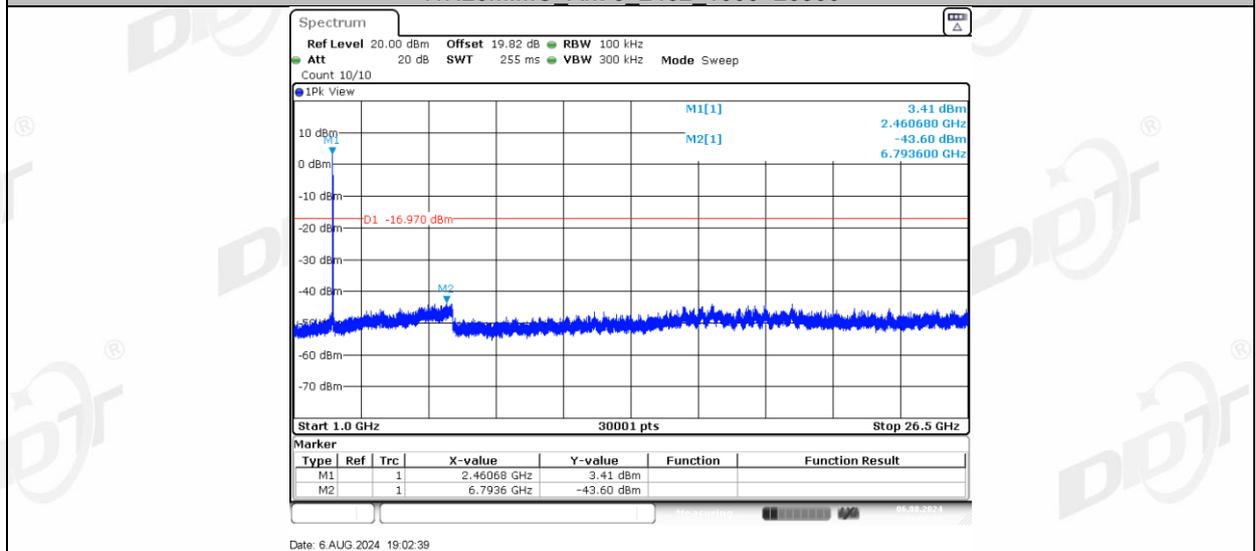11N20MIMO_Ant-1_2462_1000~26500

11N20MIMO_Ant-3_2462_0~Reference

11N20MIMO_Ant-3_2462_30~1000

11N20MIMO_Ant-3_2462_1000~26500

11N40MIMO_Ant-1_2422_0~Reference

11N40MIMO_Ant-1_2422_30~1000

11N40MIMO_Ant-1_2422_1000~26500

11N40MIMO_Ant-3_2422_0~Reference