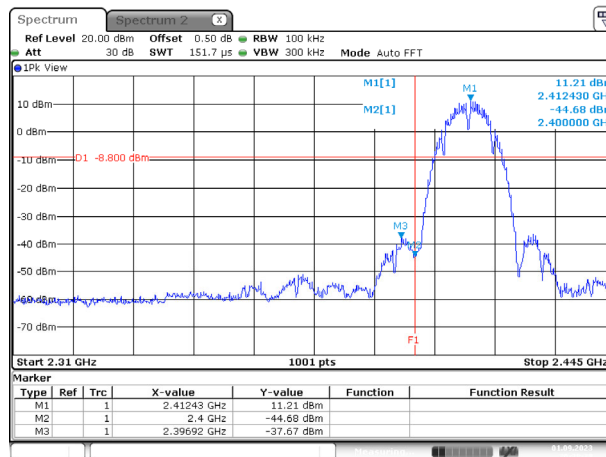


Product : Notebook Computer  
 Test Item : Band Edge  
 Test Mode : Transmit (802.11b)-SISO A  
 Test Date : 2023/09/01

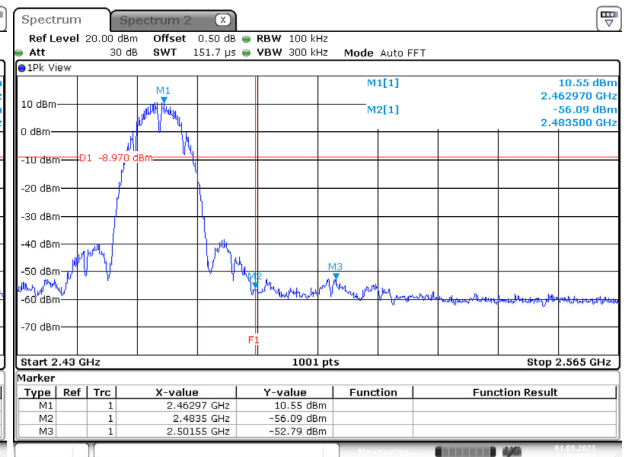
Measurement Level	Result
$\Delta$ (dB)	
> 20	PASS

Channel 01



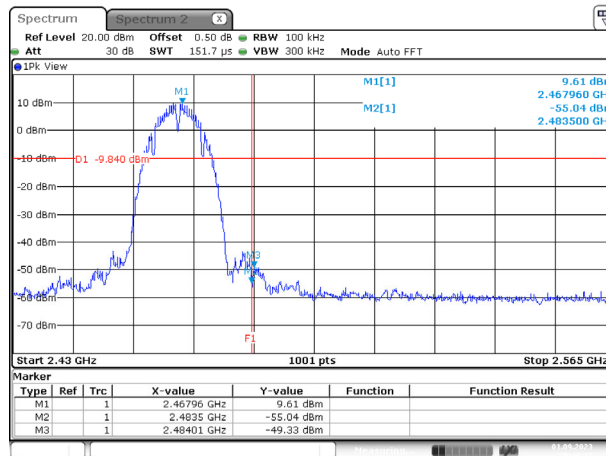
Date: 1.SEP.2023 20:38:39

Channel 11



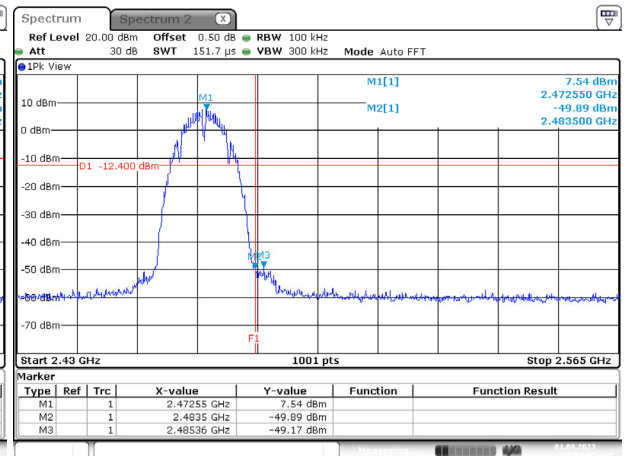
Date: 1.SEP.2023 20:44:50

Channel 12



Date: 1.SEP.2023 20:48:17

Channel 13

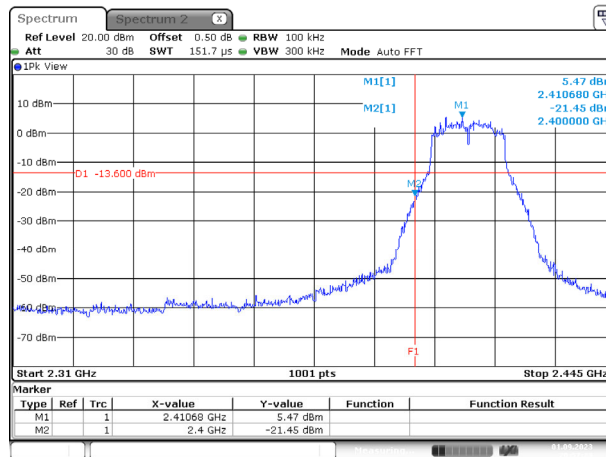


Date: 1.SEP.2023 20:53:39

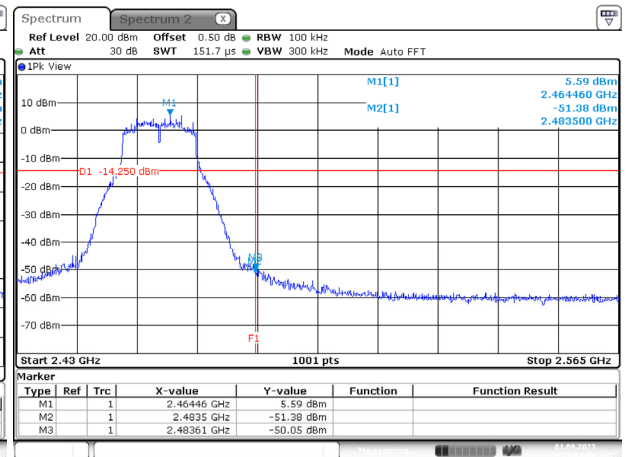
Product : Notebook Computer  
 Test Item : Band Edge  
 Test Mode : Transmit (802.11g)-SISO A  
 Test Date : 2023/09/01

Measurement Level	Result
$\Delta$ (dB)	
> 20	PASS

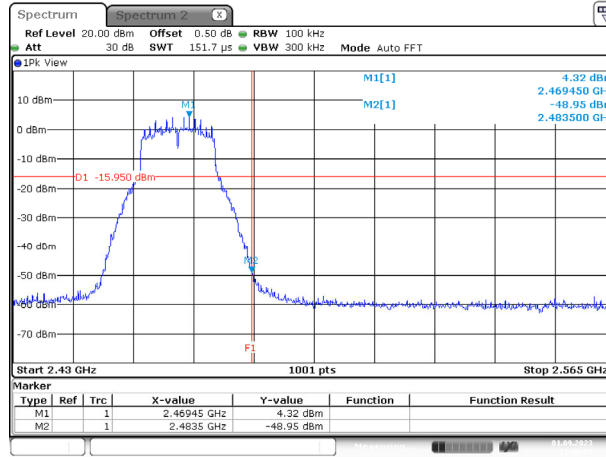
Channel 01



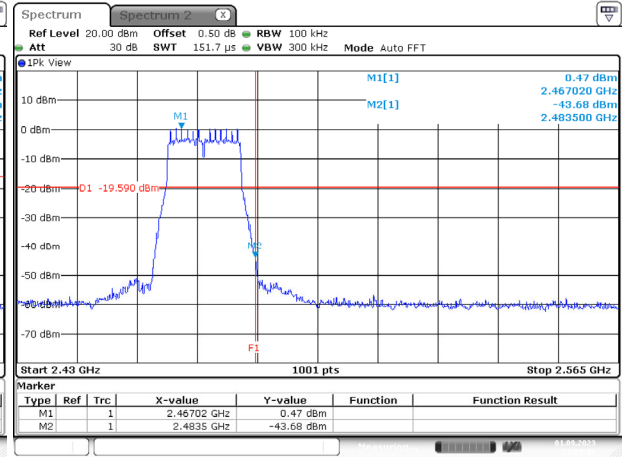
Channel 11



Channel 12



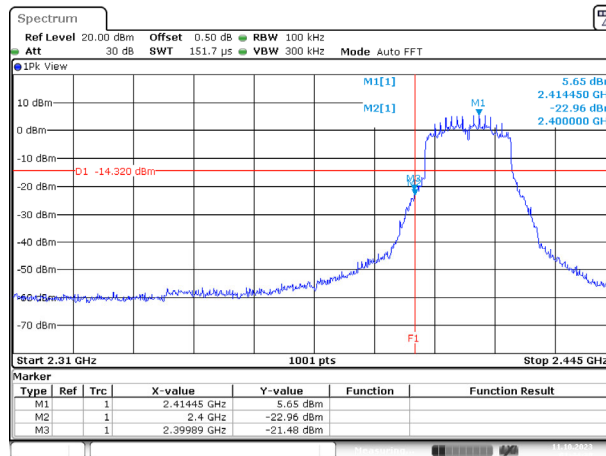
Channel 13



Product : Notebook Computer  
 Test Item : Band Edge  
 Test Mode : Transmit (802.11ax-20 MHz)-SISO A  
 Test Date : 2023/10/11

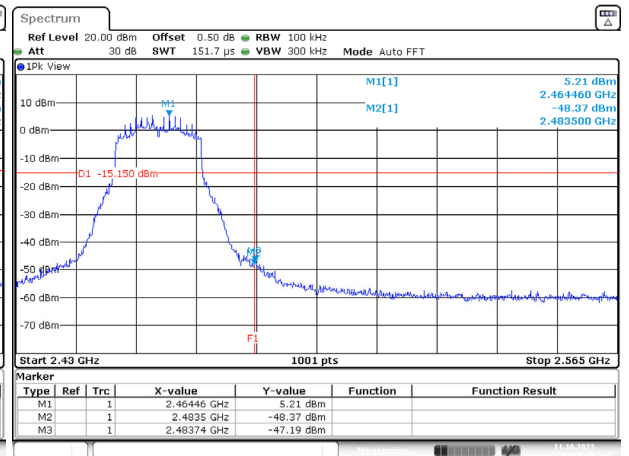
Measurement Level	Result
$\Delta$ (dB)	
> 20	PASS

Channel 01



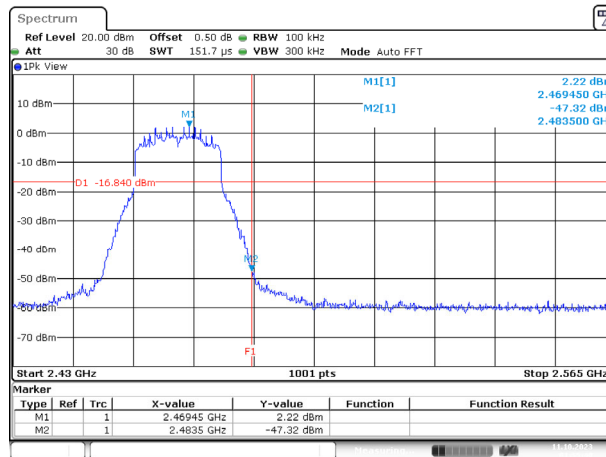
Date: 11.OCT.2023 01:44:30

Channel 11



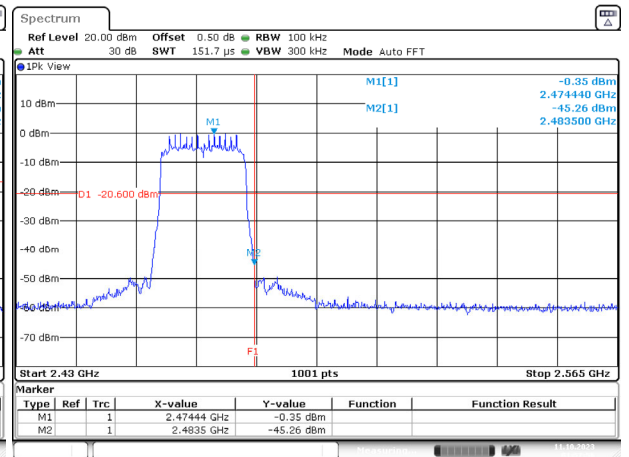
Date: 11.OCT.2023 01:52:49

Channel 12



Date: 11.OCT.2023 01:55:41

Channel 13

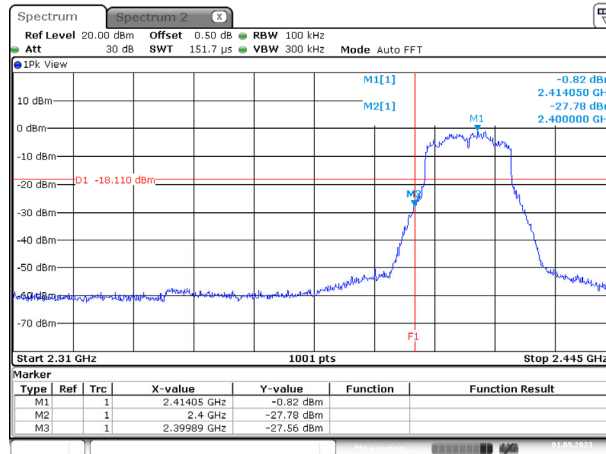


Date: 11.OCT.2023 01:57:56

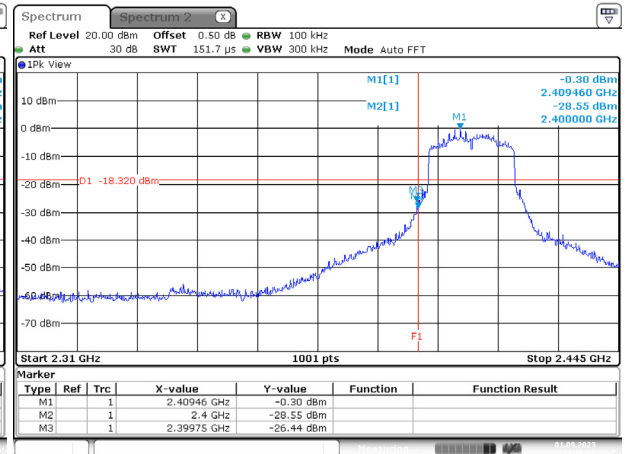
Product : Notebook Computer  
 Test Item : Band Edge  
 Test Mode : Transmit (802.11ax-20 MHz)-MIMO  
 Test Date : 2023/09/01

Measurement Level	Result
$\Delta$ (dB)	
> 20	PASS

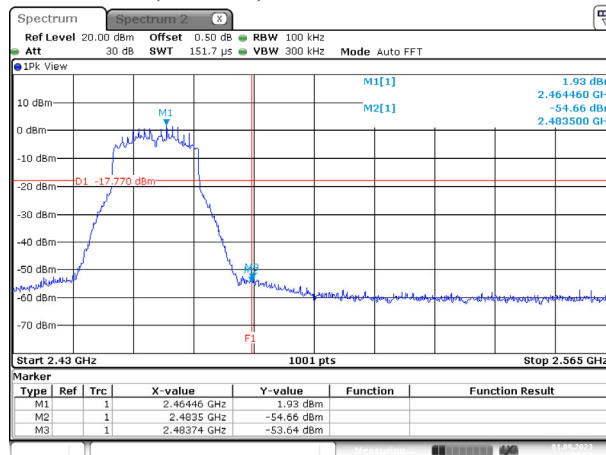
Channel 01 (Chain A)



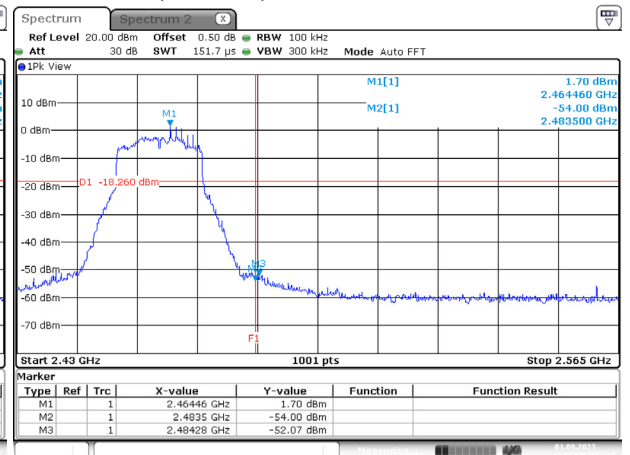
Channel 01 (Chain B)



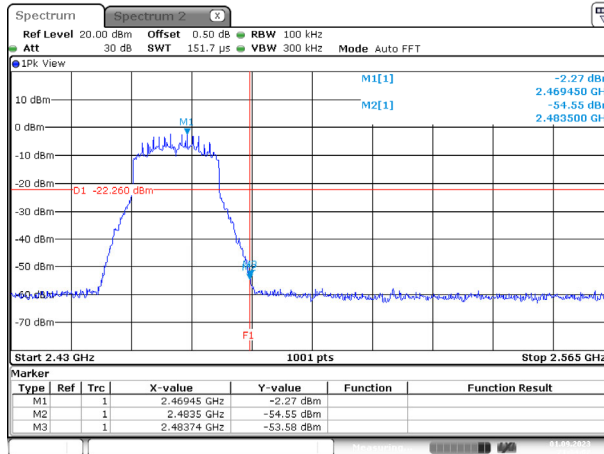
Channel 11 (Chain A)



Channel 11 (Chain B)

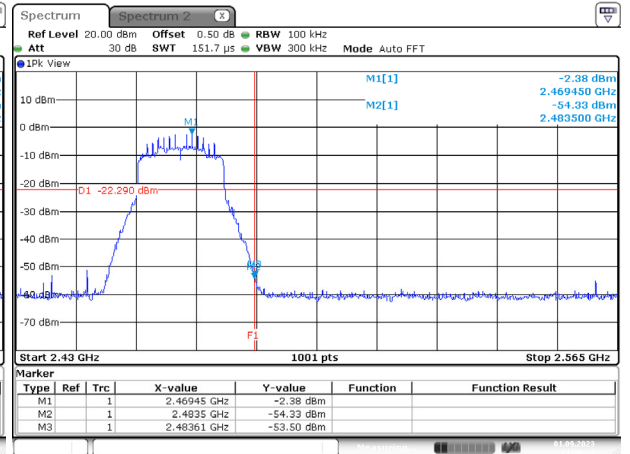


### Channel 12 (Chain A)



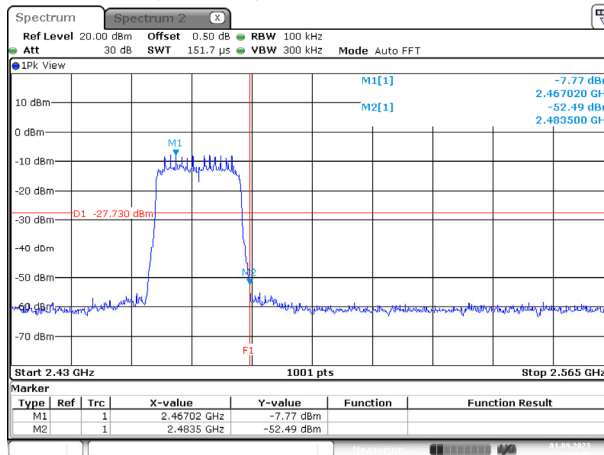
Date: 1.SEP.2023 21:34:02

### Channel 12 (Chain B)



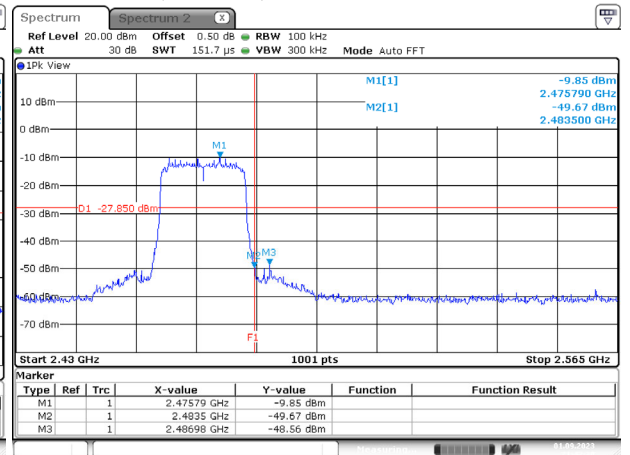
Date: 1.SEP.2023 21:30:23

### Channel 13 (Chain A)



Date: 1.SEP.2023 21:38:05

### Channel 13 (Chain B)

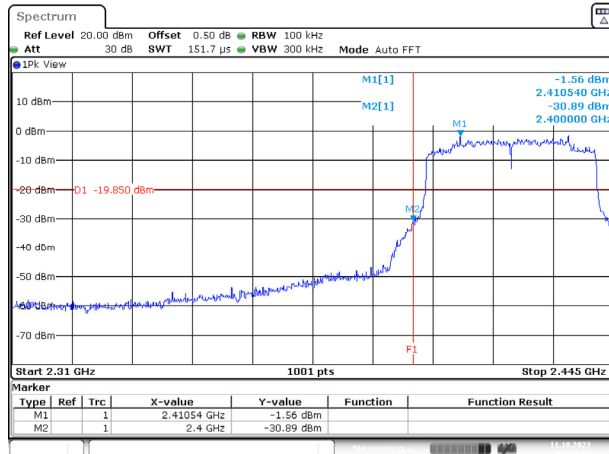


Date: 1.SEP.2023 21:42:30

Product : Notebook Computer  
 Test Item : Band Edge  
 Test Mode : Transmit (802.11ax-40 MHz)-SISO A  
 Test Date : 2023/10/11

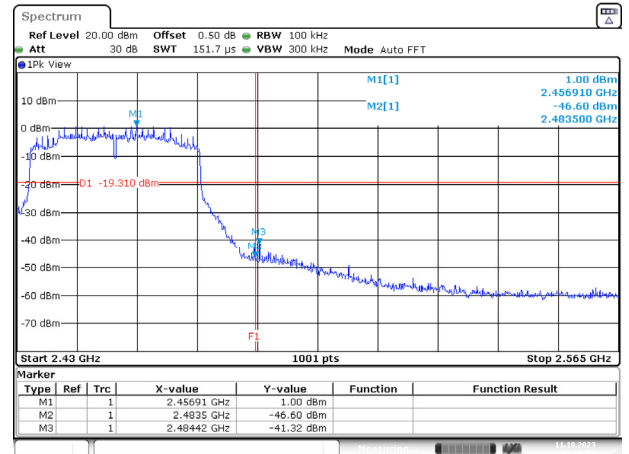
Measurement Level	Result
$\Delta$ (dB)	
> 20	PASS

Channel 03



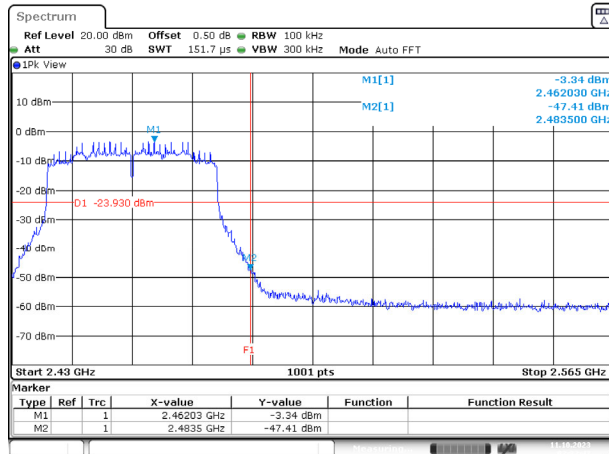
Date: 11.OCT.2023 02:25:33

Channel 09



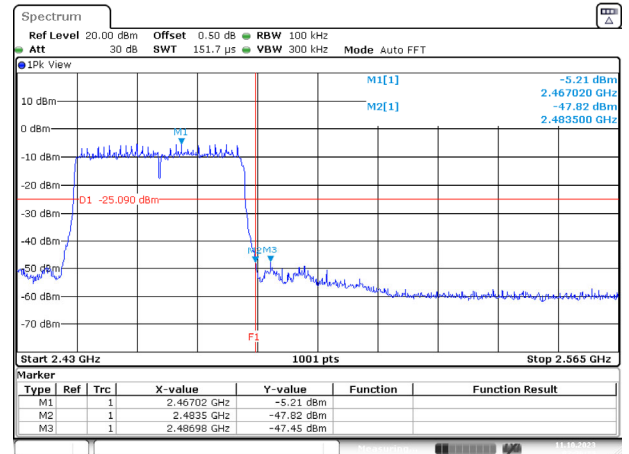
Date: 11.OCT.2023 02:30:55

Channel 10



Date: 11.OCT.2023 02:33:47

Channel 11

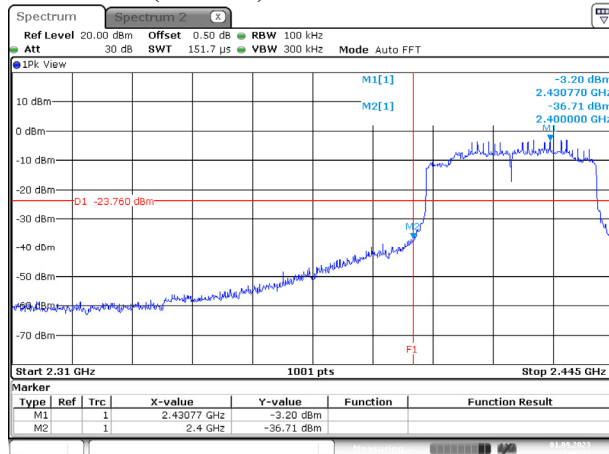


Date: 11.OCT.2023 02:36:23

Product : Notebook Computer  
 Test Item : Band Edge  
 Test Mode : Transmit (802.11ax-40 MHz)-MIMO  
 Test Date : 2023/09/01

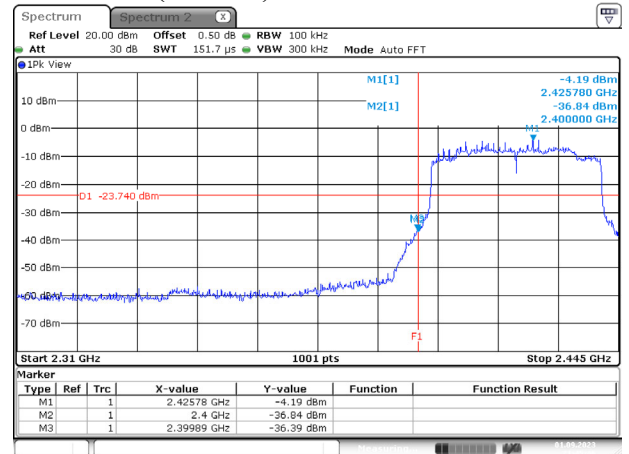
Measurement Level	Result
$\Delta$ (dB)	
> 20	PASS

Channel 03 (Chain A)



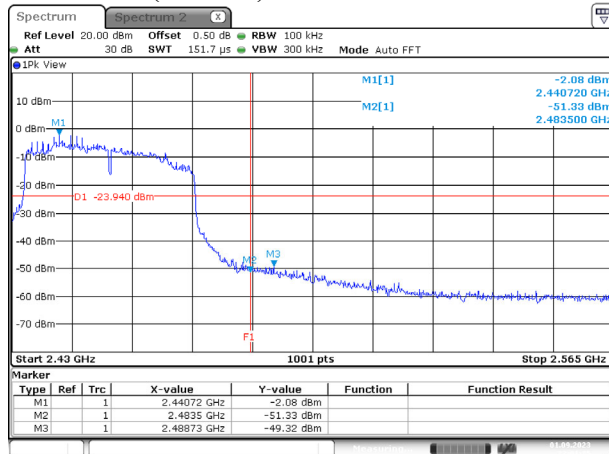
Date: 1 SEP.2023 21:48:57

Channel 03 (Chain B)



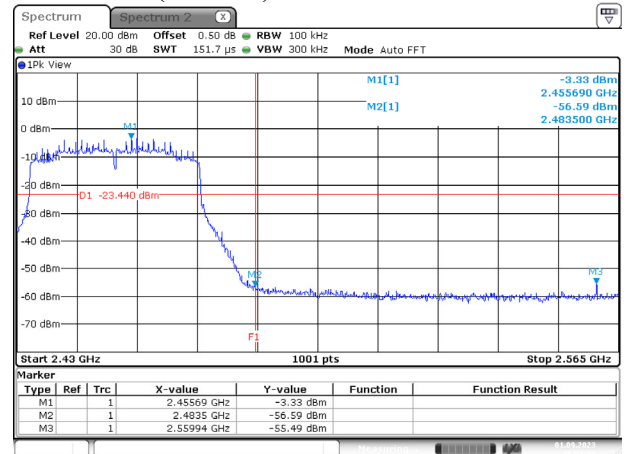
Date: 1 SEP.2023 21:45:47

Channel 09 (Chain A)



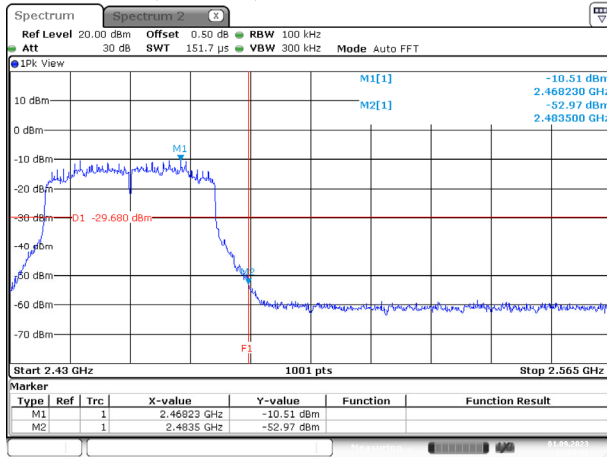
Date: 1 SEP.2023 22:01:26

Channel 09 (Chain B)



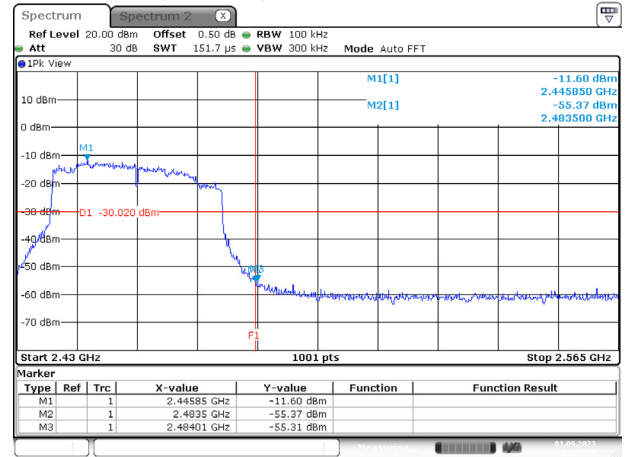
Date: 1 SEP.2023 21:57:12

### Channel 10 (Chain A)



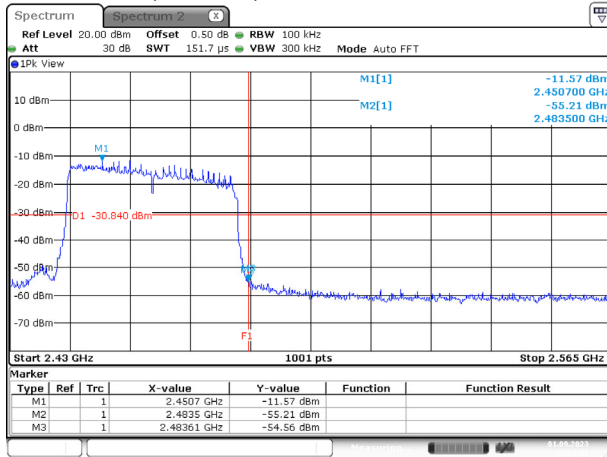
Date: 1.SEP.2023 22:03:56

### Channel 10 (Chain B)



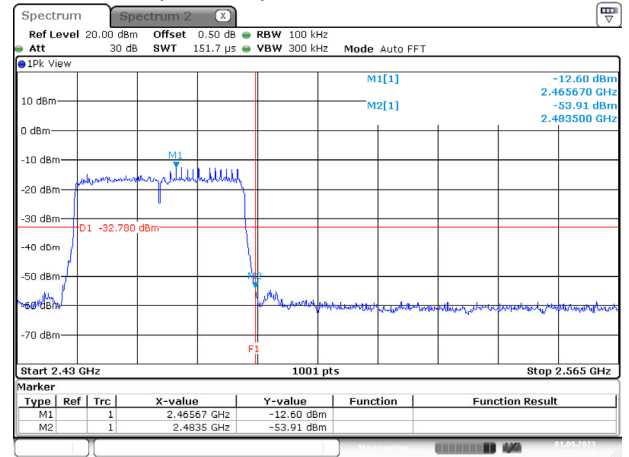
Date: 1.SEP.2023 22:07:59

### Channel 11 (Chain A)



Date: 1.SEP.2023 22:14:12

### Channel 11 (Chain B)

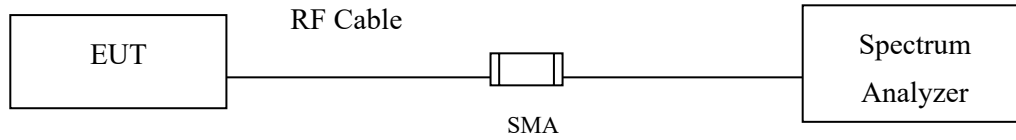


Date: 1.SEP.2023 22:11:05



## 7. 6dB Bandwidth

### 7.1. Test Setup



### 7.2. Limits

The minimum bandwidth shall be at least 500 kHz.

### 7.3. Test Procedure

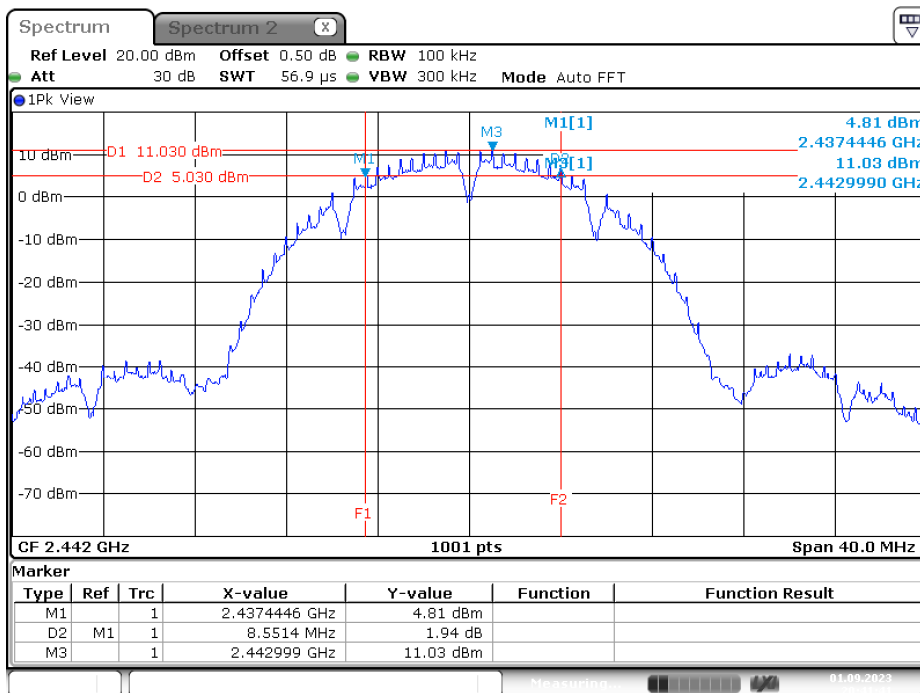
The EUT was setup according to ANSI C63.4, 2014; tested according to ANSI C63.10 Section 11.8 for compliance to FCC 47CFR 15.247 requirements.

7.4. Test Result of 6dB Bandwidth

Product : Notebook Computer  
 Test Item : 6dB Bandwidth Data  
 Test Mode : Transmit (802.11b)-SISO A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	9071	>500	Pass
07	2442	8551	>500	Pass
11	2462	9031	>500	Pass
12	2467	9031	>500	Pass
13	2472	9071	>500	Pass

Channel 07

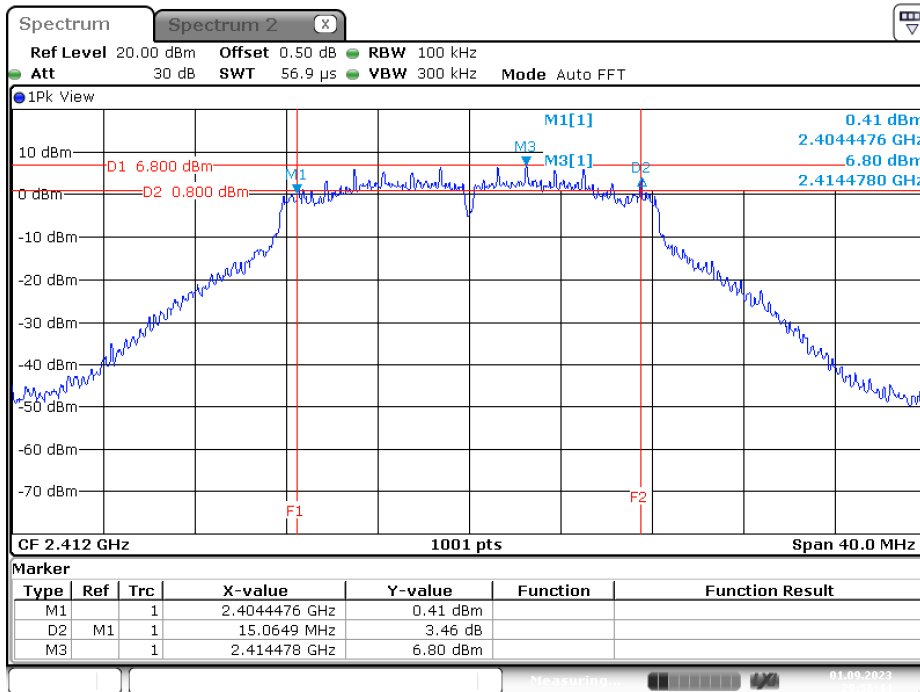


Date: 1.SEP.2023 20:41:42

Product : Notebook Computer  
 Test Item : 6dB Bandwidth Data  
 Test Mode : Transmit (802.11g)-SISO A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	15065	>500	Pass
07	2442	15065	>500	Pass
11	2462	15065	>500	Pass
12	2467	15105	>500	Pass
13	2472	16304	>500	Pass

Channel 01

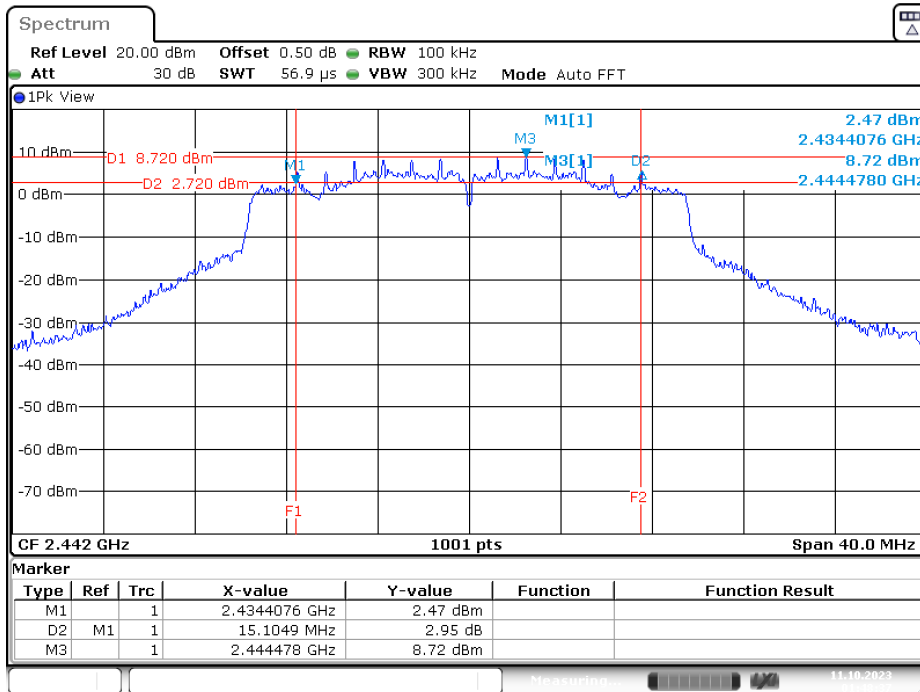


Date: 1.SEP.2023 20:56:44

Product : Notebook Computer  
 Test Item : 6dB Bandwidth Data  
 Test Mode : Transmit (802.11ax-20 MHz)-SISO A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	17343	>500	Pass
07	2442	15105	>500	Pass
11	2462	18382	>500	Pass
12	2467	15944	>500	Pass
13	2472	18262	>500	Pass

Channel 07



Date: 11.OCT.2023 01:48:37

Product : Notebook Computer  
 Test Item : 6dB Bandwidth Data  
 Test Mode : Transmit (802.11ax-20 MHz)-MIMO

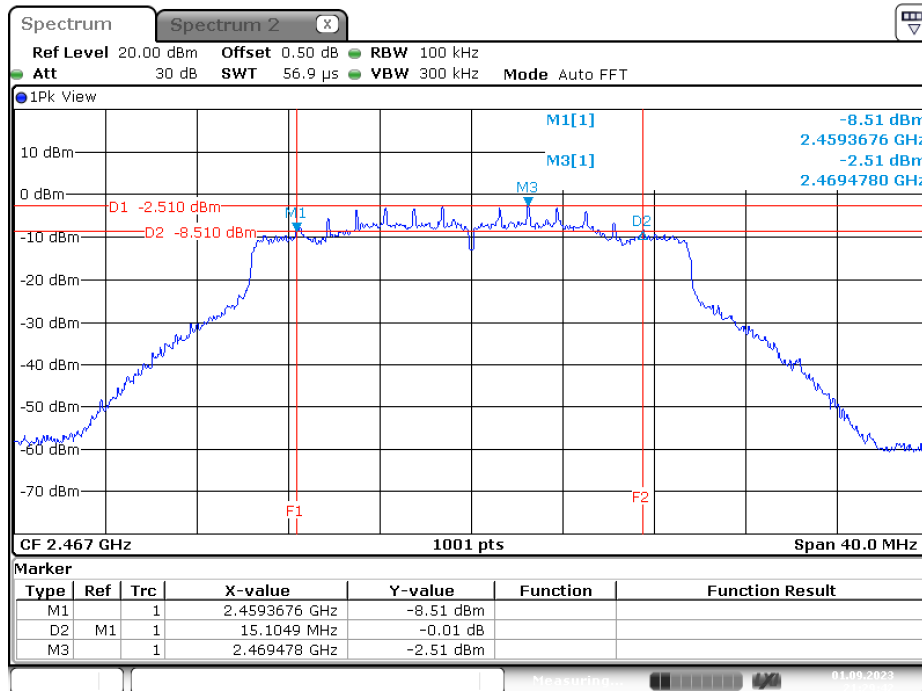
Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	18821	>500	Pass
07	2442	16184	>500	Pass
11	2462	17263	>500	Pass
12	2467	18302	>500	Pass
13	2472	18462	>500	Pass

Chain B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	15145	>500	Pass
07	2442	15824	>500	Pass
11	2462	16304	>500	Pass
12	2467	15105	>500	Pass
13	2472	17662	>500	Pass

Channel 12 (Chain B)

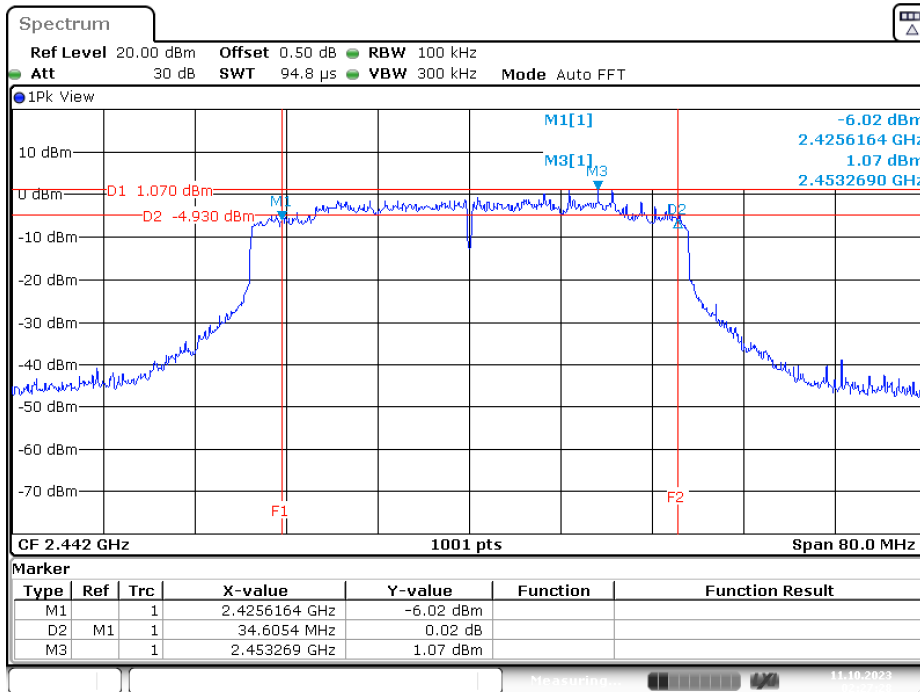


Date: 1.SEP.2023 21:29:43

Product : Notebook Computer  
 Test Item : 6dB Bandwidth Data  
 Test Mode : Transmit (802.11ax-40 MHz)-SISO A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
03	2422	36444	>500	Pass
07	2442	34605	>500	Pass
09	2452	35085	>500	Pass
10	2457	35005	>500	Pass
11	2462	37642	>500	Pass

Channel 07



Date: 11.OCT.2023 02:27:28

Product : Notebook Computer  
 Test Item : 6dB Bandwidth Data  
 Test Mode : Transmit (802.11ax-40 MHz)-MIMO

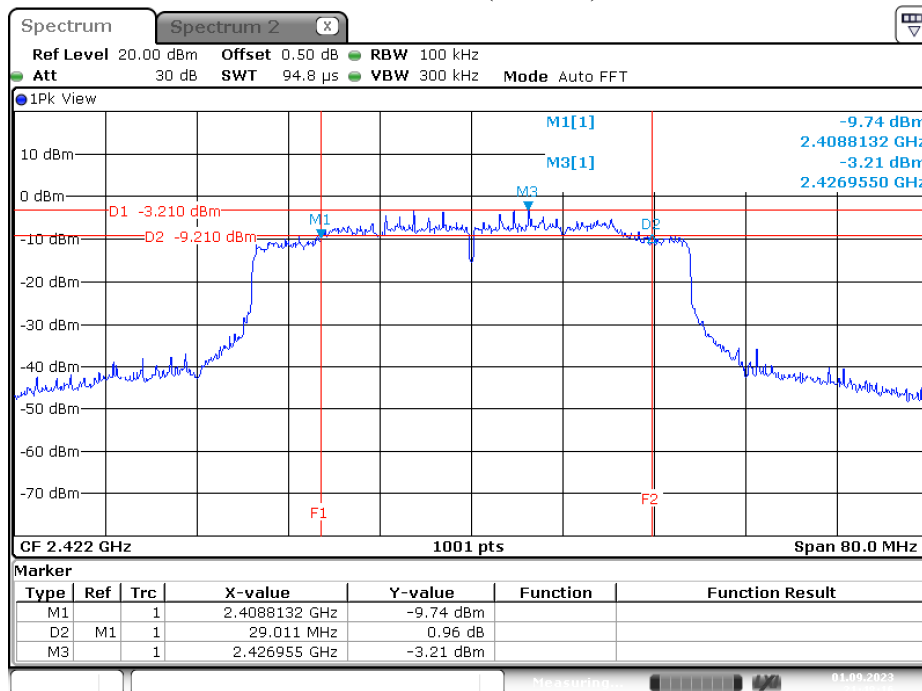
Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
03	2422	29011	>500	Pass
07	2442	33806	>500	Pass
09	2452	31169	>500	Pass
10	2457	35245	>500	Pass
11	2462	33886	>500	Pass

Chain B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
03	2422	35085	>500	Pass
07	2442	31409	>500	Pass
09	2452	35005	>500	Pass
10	2457	29650	>500	Pass
11	2462	37243	>500	Pass

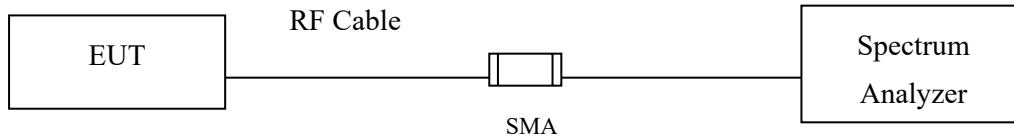
Channel 03 (Chain A)



Date: 1.SEP.2023 21:48:17

## 8. Power Density

### 8.1. Test Setup



### 8.2. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8 dBm in any 3 kHz bandwidth.

### 8.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013; tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

The maximum power spectral density using C63.10 Section 11.10.2 Method PKPSD (peak PSD)

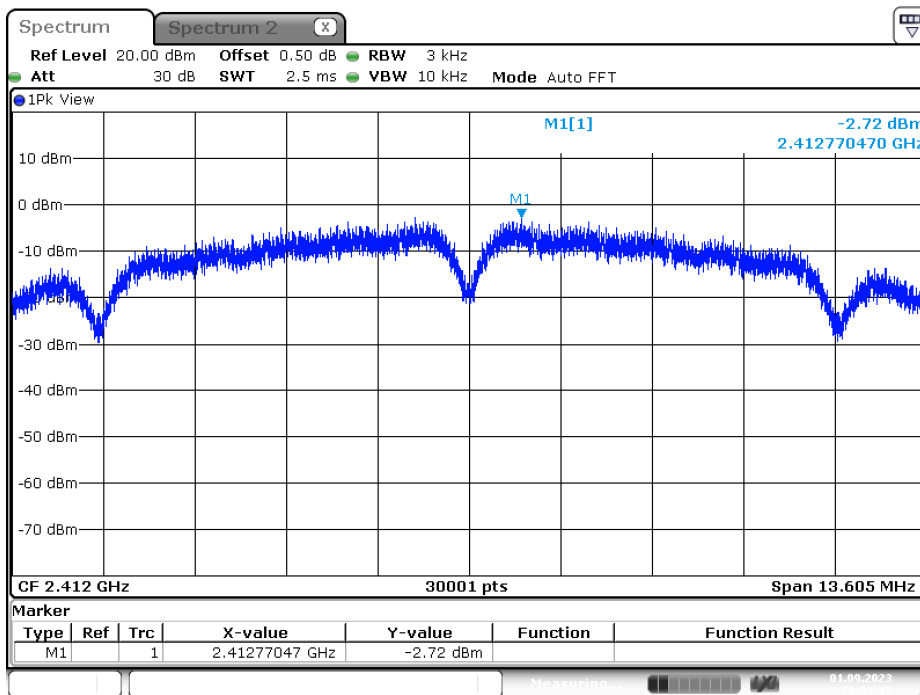


8.4. Test Result of Power Density

Product : Notebook Computer  
 Test Item : Power Density Data  
 Test Mode : Transmit (802.11b)-SISO A

Channel No.	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
01	2412	-2.72	8	Pass
07	2442	-2.79	8	Pass
11	2462	-2.82	8	Pass
12	2467	-3.79	8	Pass
13	2472	-6.33	8	Pass

Channel 01

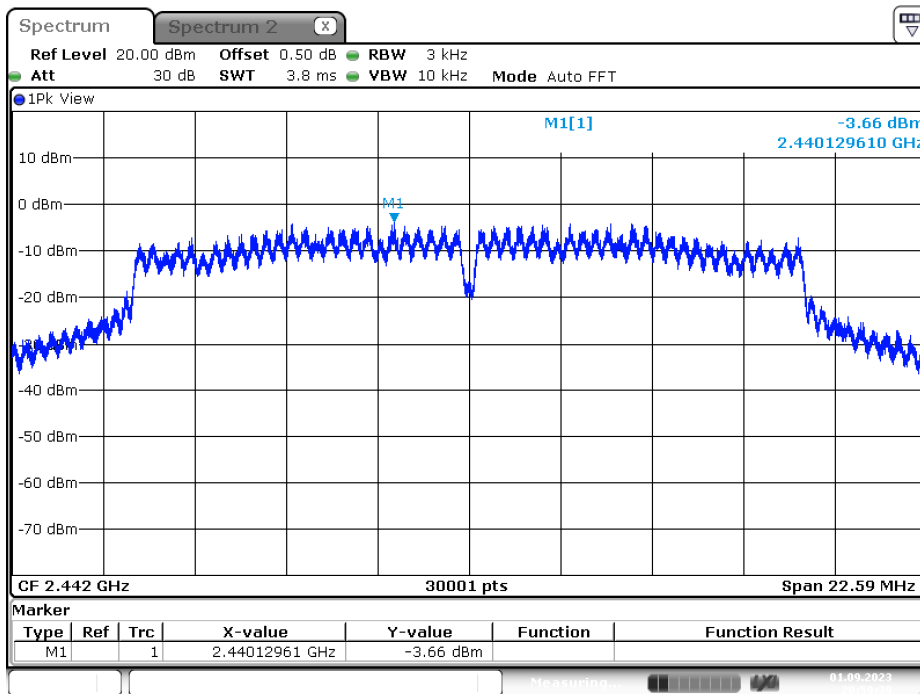


Date: 1.SEP.2023 20:38:18

Product : Notebook Computer  
 Test Item : Power Density Data  
 Test Mode : Transmit (802.11g)-SISO A

Channel No.	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
01	2412	-6.79	8	Pass
07	2442	-3.66	8	Pass
11	2462	-6.84	8	Pass
12	2467	-9.35	8	Pass
13	2472	-12.70	8	Pass

Channel 07

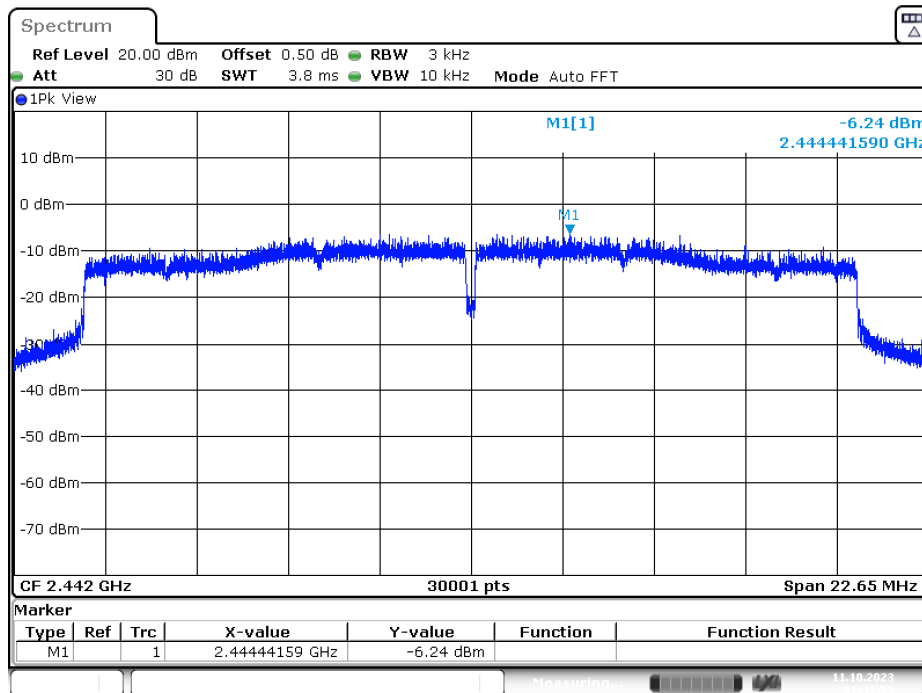


Date: 1.SEP.2023 20:59:39

Product : Notebook Computer  
 Test Item : Power Density Data  
 Test Mode : Transmit (802.11ax-20 MHz)-SISO A

Channel No.	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
01	2412	-8.69	8	Pass
07	2442	-6.24	8	Pass
11	2462	-8.68	8	Pass
12	2467	-11.47	8	Pass
13	2472	-15.45	8	Pass

Channel 07



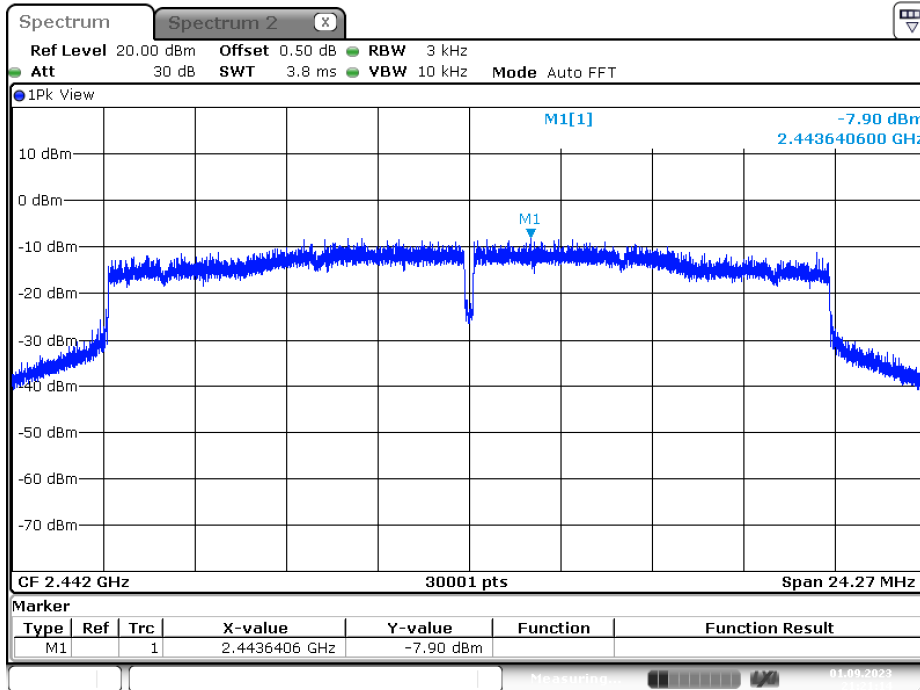
Date: 11.OCT.2023 01:48:55

Product : Notebook Computer  
 Test Item : Power Density Data  
 Test Mode : Transmit (802.11ax-20 MHz)-MIMO

Channel No.	Frequency (MHz)	Chain	PPSD (dBm)	10*log(2) (dB)	Total PPSD (dBm)	Limit (dBm)	Result
01	2412	A	-12.57	3.01	-9.56	8	Pass
		B	-12.49	3.01	-9.48		
07	2442	A	-7.90	3.01	-4.89	8	Pass
		B	-8.21	3.01	-5.20		
11	2462	A	-12.88	3.01	-9.87	8	Pass
		B	-12.85	3.01	-9.84		
12	2467	A	-16.96	3.01	-13.95	8	Pass
		B	-16.02	3.01	-13.01		
13	2472	A	-22.38	3.01	-19.37	8	Pass
		B	-22.74	3.01	-19.73		

Note: The quantity 10\*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 07 (Chain A)

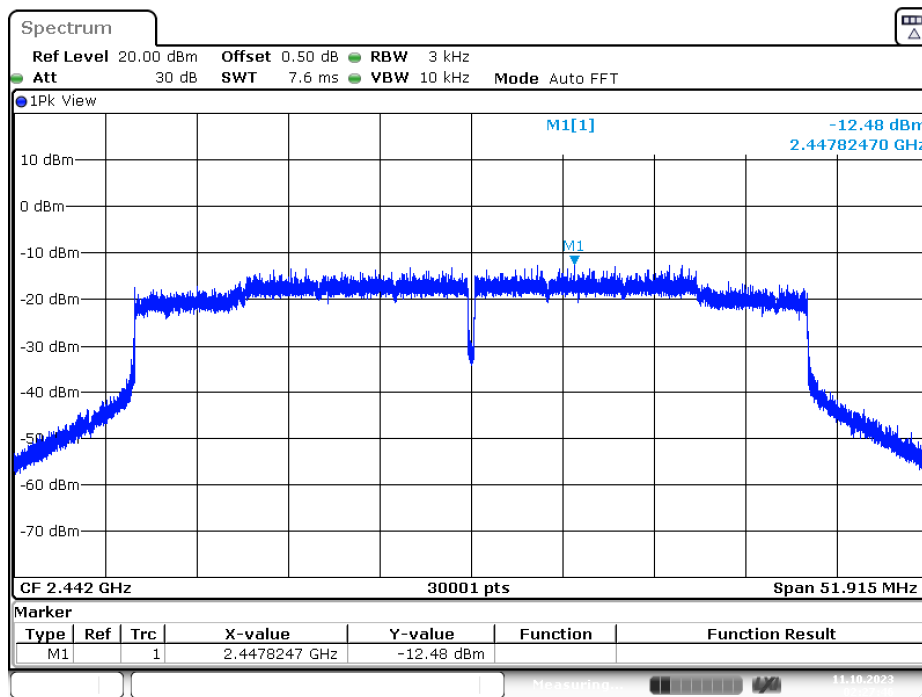


Date: 1.SEP.2023 21:21:14

Product : Notebook Computer  
 Test Item : Power Density Data  
 Test Mode : Transmit (802.11ax-40 MHz)-SISO A

Channel No.	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
03	2422	-13.72	8	Pass
07	2442	-12.48	8	Pass
09	2452	-13.06	8	Pass
10	2457	-17.40	8	Pass
11	2462	-19.07	8	Pass

Channel 07



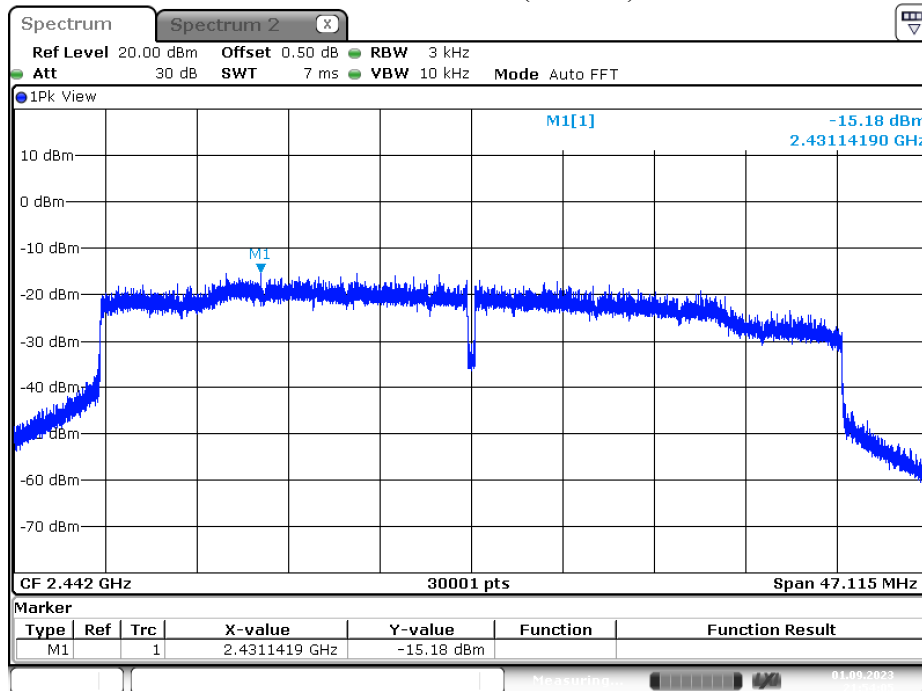
Date: 11.OCT.2023 02:27:47

Product : Notebook Computer  
 Test Item : Power Density Data  
 Test Mode : Transmit (802.11ax-40 MHz)-MIMO

Channel No.	Frequency (MHz)	Chain	PPSD (dBm)	10*log(2) (dB)	Total PPSD (dBm)	Limit (dBm)	Result
03	2412	A	-17.39	3.01	-14.38	8	Pass
		B	-17.20	3.01	-14.19		
07	2442	A	-16.05	3.01	-13.04	8	Pass
		B	-15.18	3.01	-12.17		
09	2452	A	-16.30	3.01	-13.29	8	Pass
		B	-16.97	3.01	-13.96		
10	2457	A	-23.86	3.01	-20.85	8	Pass
		B	-22.85	3.01	-19.84		
11	2462	A	-23.95	3.01	-20.94	8	Pass
		B	-25.99	3.01	-22.98		

Note: The quantity 10\*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 07 (Chain B)

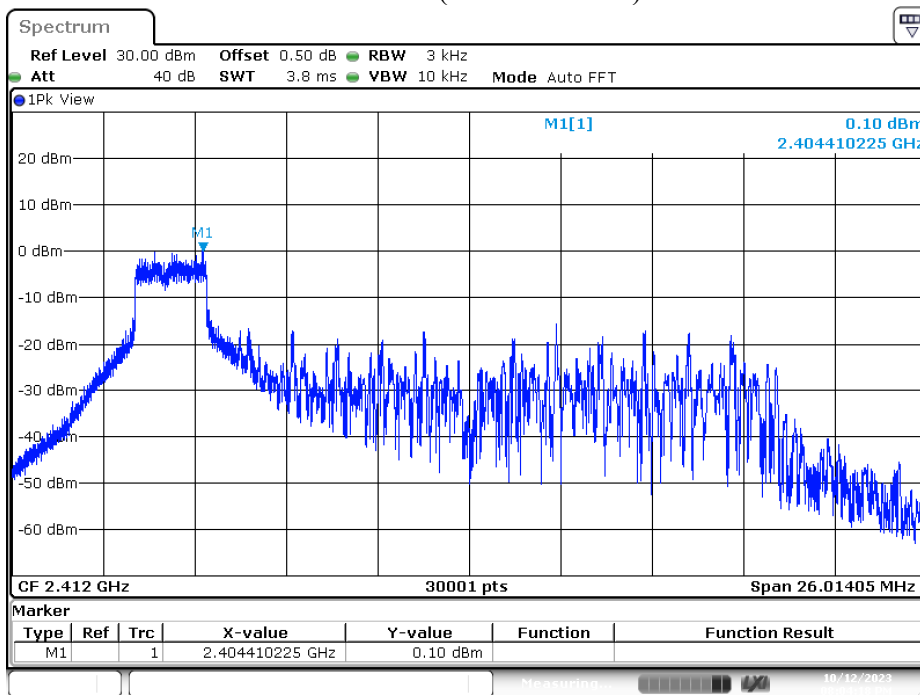


Date: 1.SEP.2023 21:54:05

Product : Notebook Computer  
 Test Item : Power Density Data  
 Test Mode : Transmit (802.11ax-20 MHz) (Partial RU)-SISO A

Channel No.	Frequency (MHz)	RU Config	PPSD (dBm)	Limit (dBm)	Result
01	2412	26/0	0.10	8	Pass
		52/37	-2.78	8	Pass
		106/53	-5.41	8	Pass
13	2472	26/8	-6.51	8	Pass
		52/40	-8.05	8	Pass
		106/54	-11.18	8	Pass

Channel 01 (Partial RU 26/0)



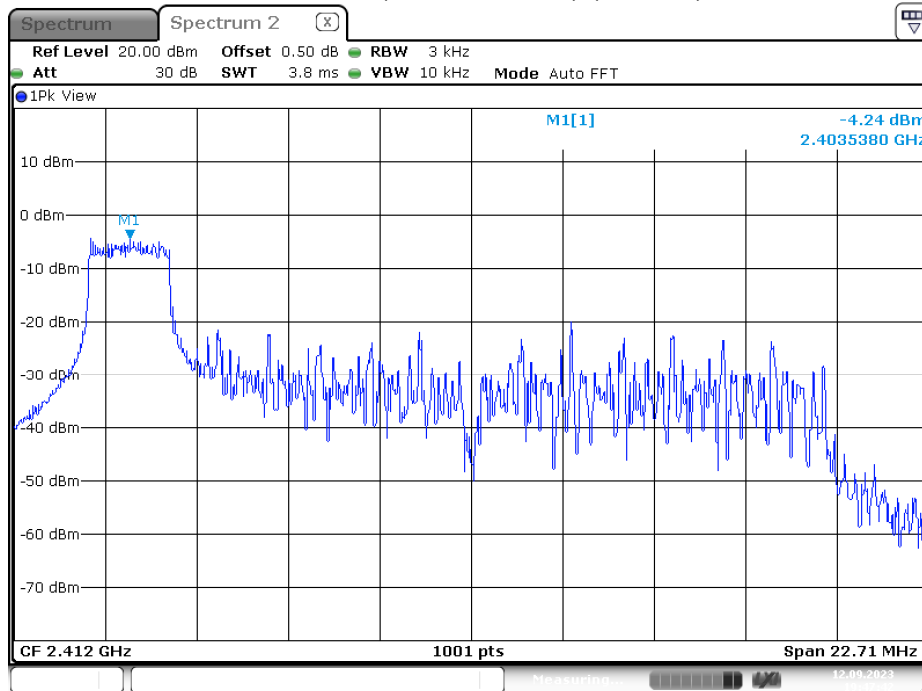
Date: 12.OCT.2023 20:04:19

Product : Notebook Computer  
 Test Item : Power Density Data  
 Test Mode : Transmit (802.11ax-20 MHz) (Partial RU)-MIMO

Channel No.	Frequency (MHz)	RU Config	Chain	PPSD/MHz (dBm)	10*log(2) (dB)	Total PPSD/MHz (dBm)	Limit (dBm)	Result
01	2412	26/0	A	-4.39	3.01	-1.38	8	Pass
			B	-4.24	3.01	-1.23		Pass
		52/37	A	-7.02	3.01	-4.01	8	Pass
			B	-6.27	3.01	-3.26		Pass
		106/53	A	-9.45	3.01	-6.44	8	Pass
			B	-9.22	3.01	-6.21		Pass
13	2472	26/8	A	-13.18	3.01	-10.17	8	Pass
			B	-11.75	3.01	-8.74		Pass
		52/40	A	-15.55	3.01	-12.54	8	Pass
			B	-15.36	3.01	-12.35		Pass
		106/54	A	-18.00	3.01	-14.99	8	Pass
			B	-17.25	3.01	-14.24		Pass

Note: The quantity 10\*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 01 (Partial RU 26/0) (Chain B)

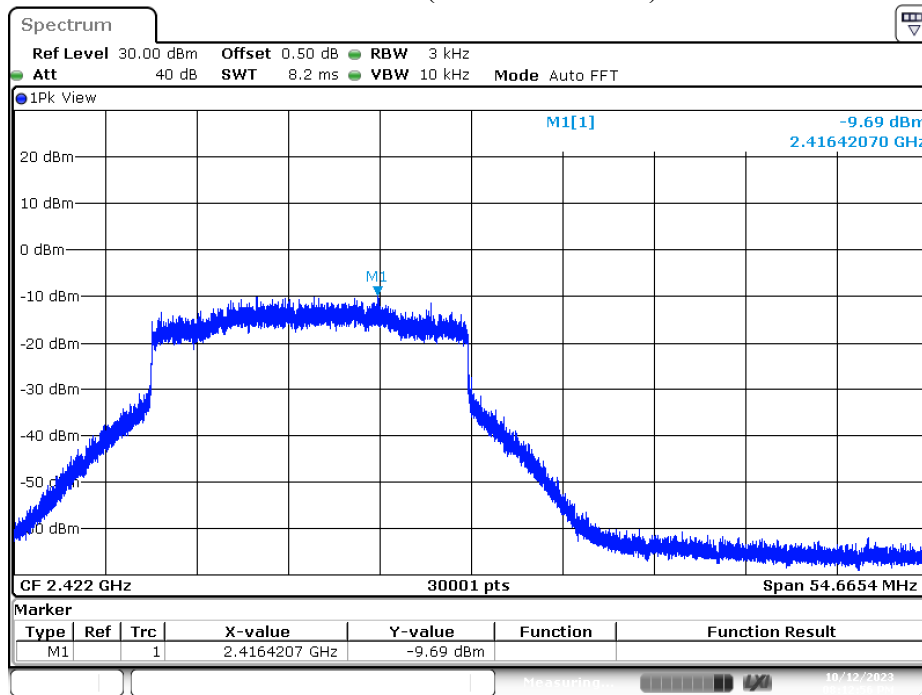




Product : Notebook Computer  
 Test Item : Power Density Data  
 Test Mode : Transmit (802.11ax-40 MHz) (Partial RU)-SISO A

Channel No.	Frequency (MHz)	RU Config	PPSD (dBm)	Limit (dBm)	Result
03	2422	242/61	-9.69	8	Pass
11	2462	242/62	-15.48	8	Pass

Channel 03 (Partial RU 242/61)



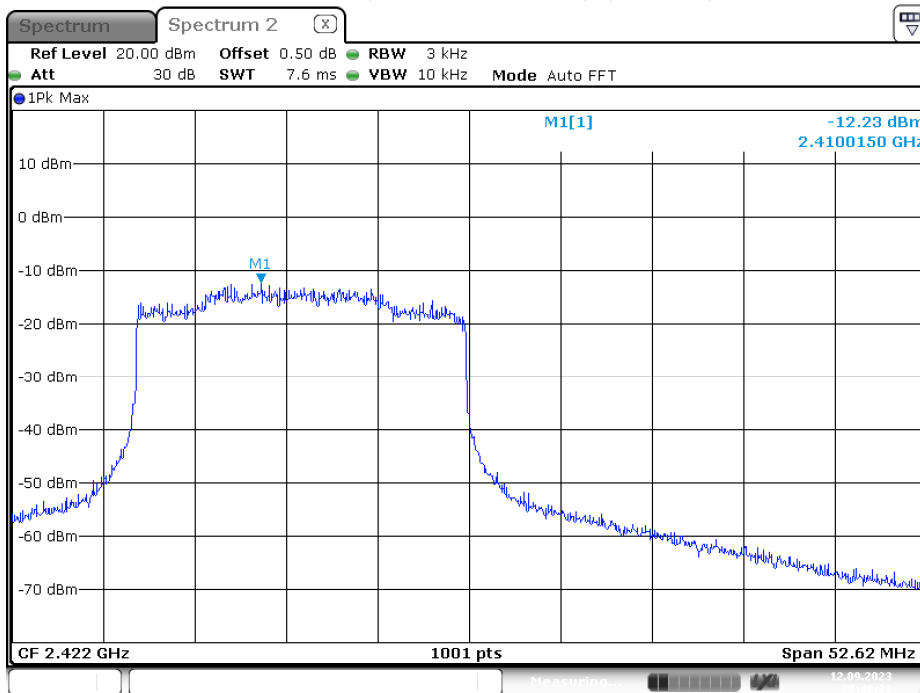
Date: 12.OCT.2023 20:12:57

Product : Notebook Computer  
 Test Item : Power Density Data  
 Test Mode : Transmit (802.11ax-40 MHz) (Partial RU)-MIMO

Channel No.	Frequency (MHz)	RU Config	Chain	PPSD/MHz (dBm)	10*log(2) (dB)	Total PPSD/MHz (dBm)	Limit (dBm)	Result
03	2422	242/61	A	-13.58	3.01	-10.57	8	Pass
			B	-12.23	3.01	-9.22		Pass
11	2462	242/62	A	-22.82	3.01	-19.81	8	Pass
			B	-20.38	3.01	-17.37		Pass

Note: The quantity 10\*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

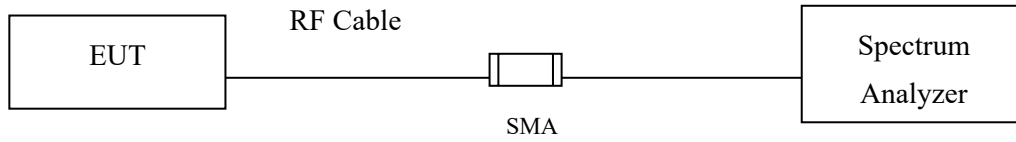
Channel 03 (Partial RU 242/61) (Chain B)



Date: 12.SEP.2023 20:46:23

## 9. Duty Cycle

### 9.1. Test Setup



### 9.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to ANSI C63.10 2013 for compliance to FCC 47CFR 15.247 requirements.

### 9.3. Test Result of Duty Cycle

Product : Notebook Computer  
 Test Item : Duty Cycle  
 Test Mode : Transmit

Duty Cycle Formula:

Duty Cycle = Ton / (Ton + Toff)

Duty Factor = 10 Log (1/Duty Cycle)

Results:

SISO A

2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11b	8.3400	8.4200	99.05	0.04
802.11g	2.0860	2.1350	97.70	0.10
802.11ax-20 MHz	3.9750	4.0350	98.51	0.07
802.11ax-40 MHz	3.9600	4.0350	98.14	0.08
802.11ax-20 MHz (Partial RU)	2.5800	2.6300	98.10	0.08
802.11ax-40 MHz (Partial RU)	2.5800	2.6300	98.10	0.08

SISO B

2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11b	8.3250	8.4000	99.11	0.04
802.11g	2.0800	2.1360	97.38	0.12
802.11ax-20 MHz	3.9600	4.0200	98.51	0.07
802.11ax-40 MHz	3.9750	4.0350	98.51	0.07
802.11ax-20 MHz (Partial RU)	2.5900	2.6400	98.11	0.08
802.11ax-40 MHz (Partial RU)	2.5800	2.6400	97.73	0.10

MIMO

2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11ax-20 MHz	3.9700	4.0300	98.51	0.07
802.11ax-40 MHz	3.9800	4.0400	98.51	0.06
802.11ax-20 MHz (Partial RU)	2.5900	2.6400	98.11	0.08
802.11ax-40 MHz (Partial RU)	2.5900	2.6400	98.11	0.08