

RF Test Data for 2.4G Wi-Fi (Conducted Measurements)

General Description of EUT	
Product Name:	Waterproof TV
Test Model:	WT32A0KAGA
Sample ID:	20210910-16_01-2
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 3.8V
Test Engineer:	HEJINGCHANG
Note: For a more detailed features description, please refer to the report TB-FCC183816	

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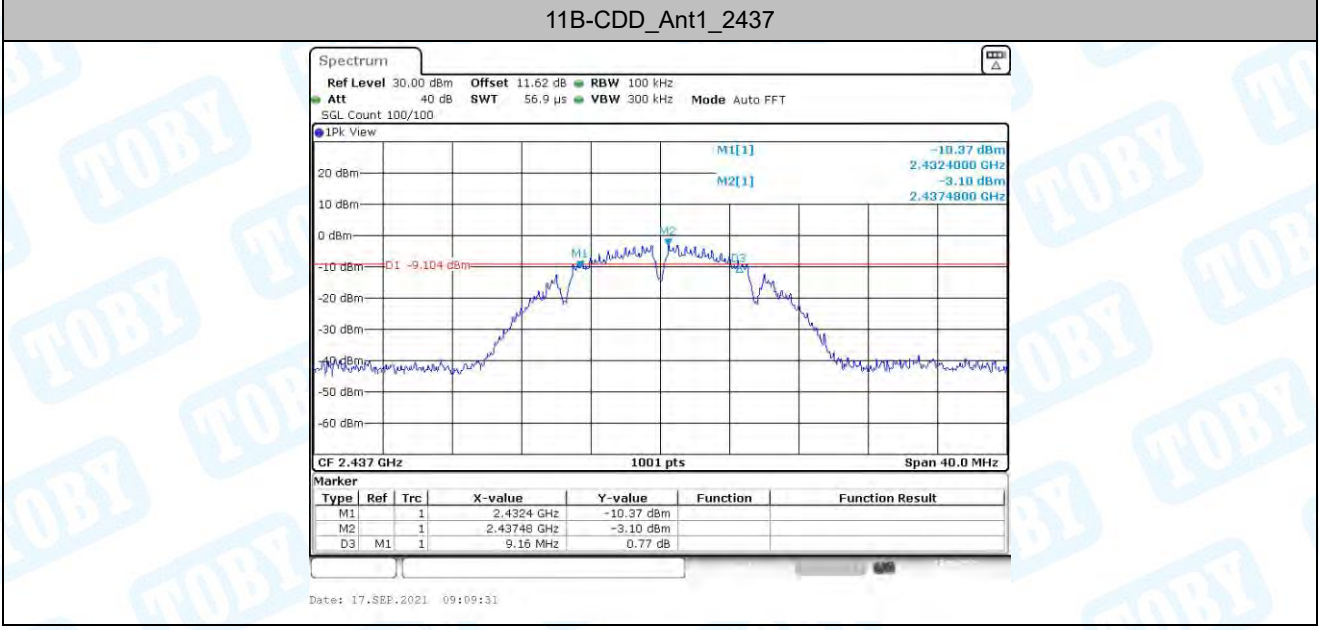
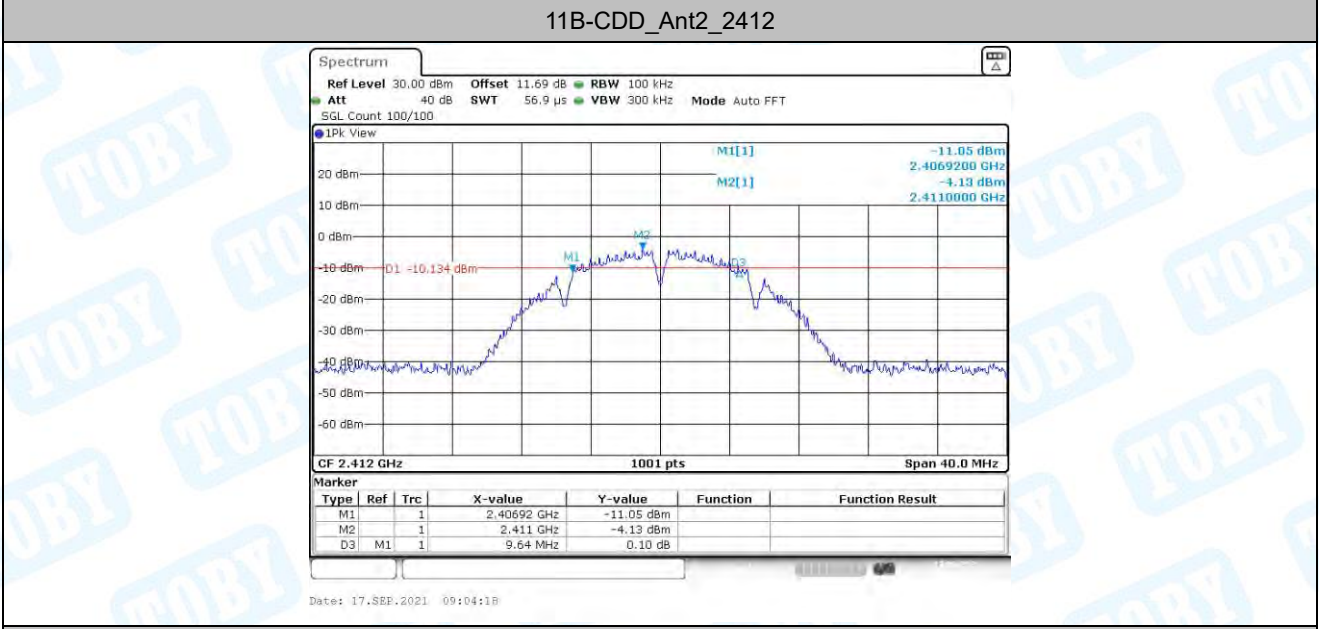
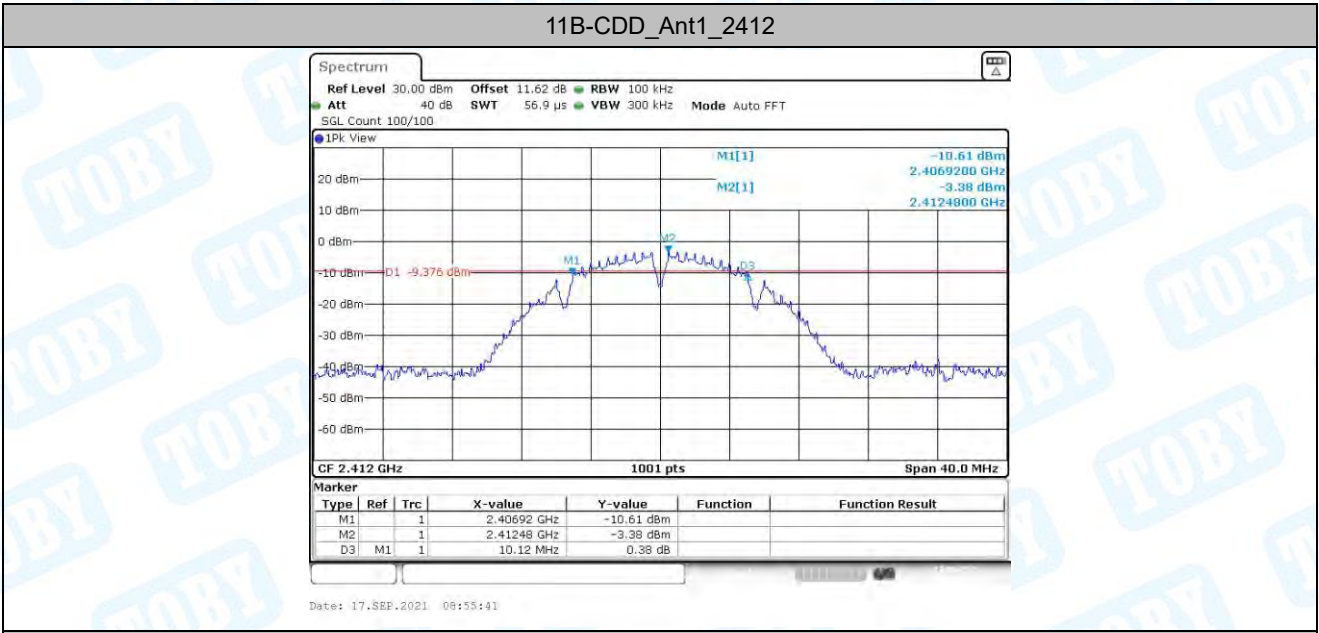
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1. DTS Bandwidth

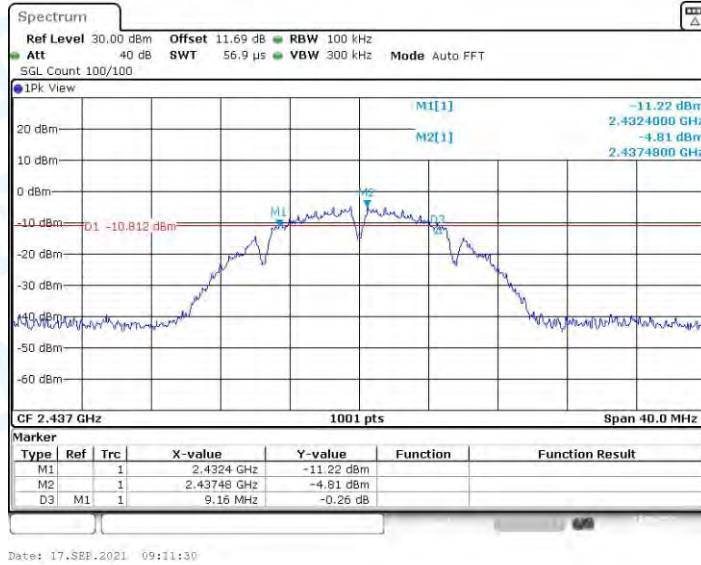
1.1. Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B-CDD	Ant1	2412	10.120	2406.920	2417.040	0.5	PASS
	Ant2	2412	9.640	2406.920	2416.560	0.5	PASS
	Ant1	2437	9.160	2432.400	2441.560	0.5	PASS
	Ant2	2437	9.160	2432.400	2441.560	0.5	PASS
	Ant1	2462	9.120	2457.440	2466.560	0.5	PASS
	Ant2	2462	9.640	2456.920	2466.560	0.5	PASS
11G-CDD	Ant1	2412	16.400	2403.800	2420.200	0.5	PASS
	Ant2	2412	15.240	2404.360	2419.600	0.5	PASS
	Ant1	2437	15.480	2429.440	2444.920	0.5	PASS
	Ant2	2437	16.440	2428.760	2445.200	0.5	PASS
	Ant1	2462	16.040	2454.160	2470.200	0.5	PASS
	Ant2	2462	13.960	2455.640	2469.600	0.5	PASS
11N20MIMO	Ant1	2412	15.160	2404.400	2419.560	0.5	PASS
	Ant2	2412	17.240	2403.480	2420.720	0.5	PASS
	Ant1	2437	16.080	2429.400	2445.480	0.5	PASS
	Ant2	2437	16.160	2429.360	2445.520	0.5	PASS
	Ant1	2462	13.920	2455.640	2469.560	0.5	PASS
	Ant2	2462	15.200	2454.400	2469.600	0.5	PASS
11N40MIMO	Ant1	2422	35.200	2404.400	2439.600	0.5	PASS
	Ant2	2422	35.280	2404.320	2439.600	0.5	PASS
	Ant1	2437	34.000	2420.600	2454.600	0.5	PASS
	Ant2	2437	30.320	2419.320	2449.640	0.5	PASS
	Ant1	2452	35.200	2434.400	2469.600	0.5	PASS
	Ant2	2452	35.200	2434.400	2469.600	0.5	PASS

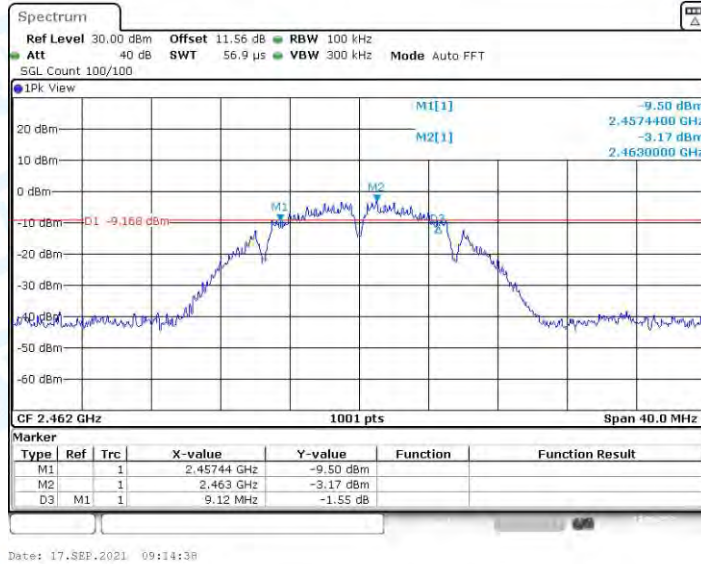
1.2. Test Graphs



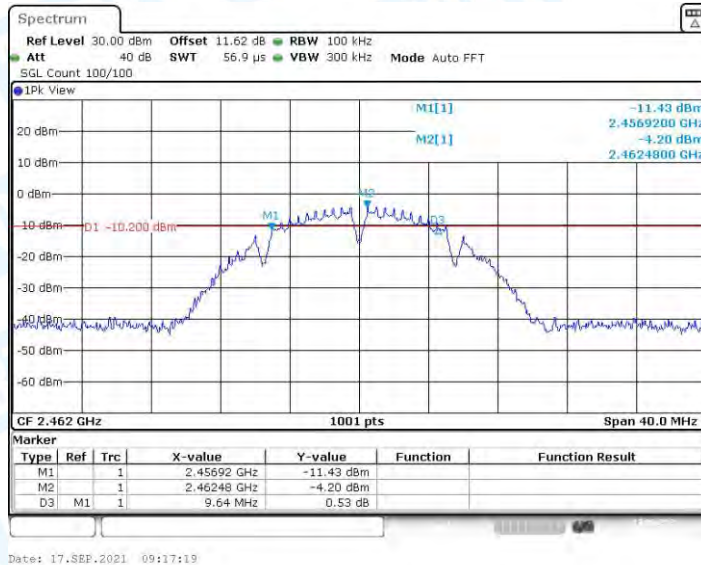
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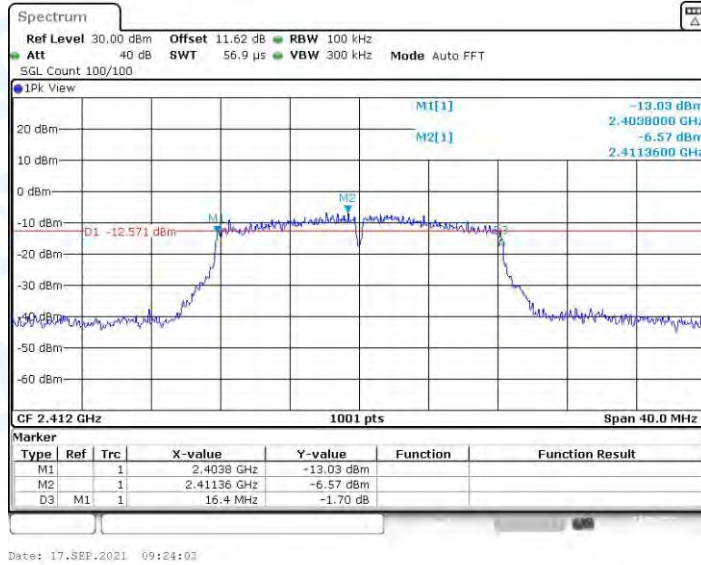
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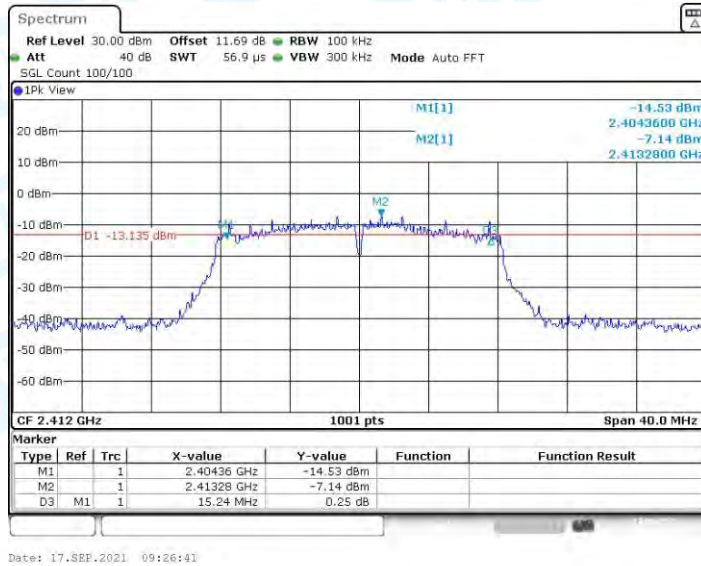
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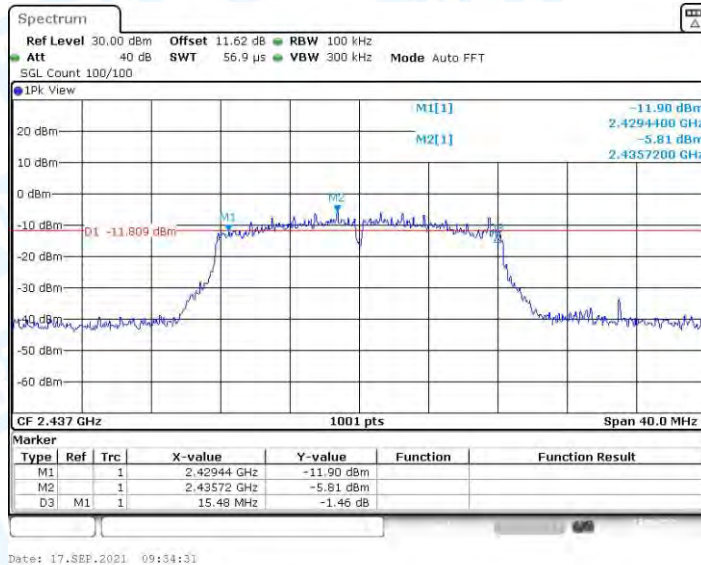
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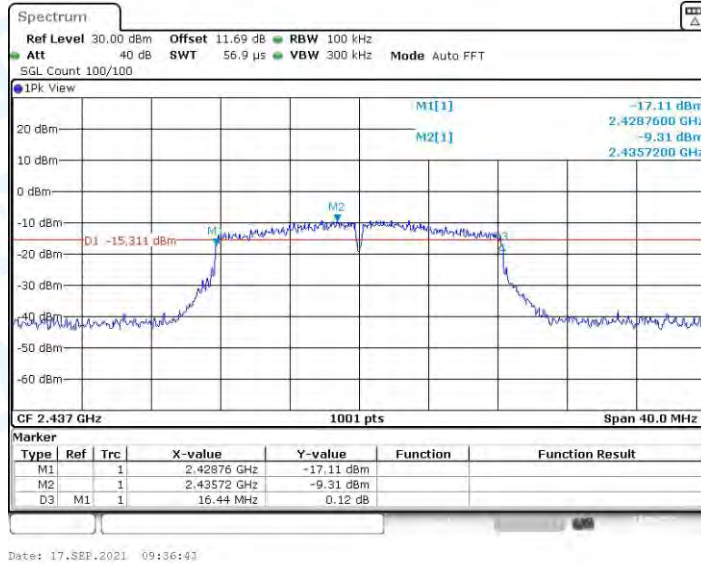
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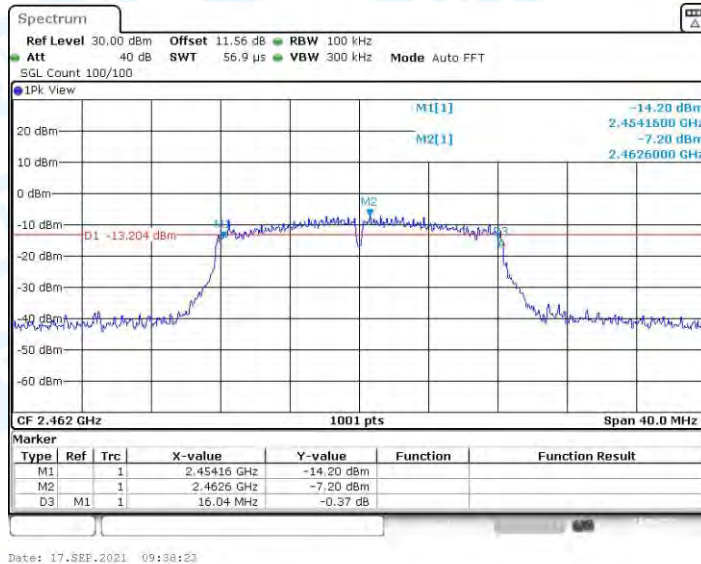
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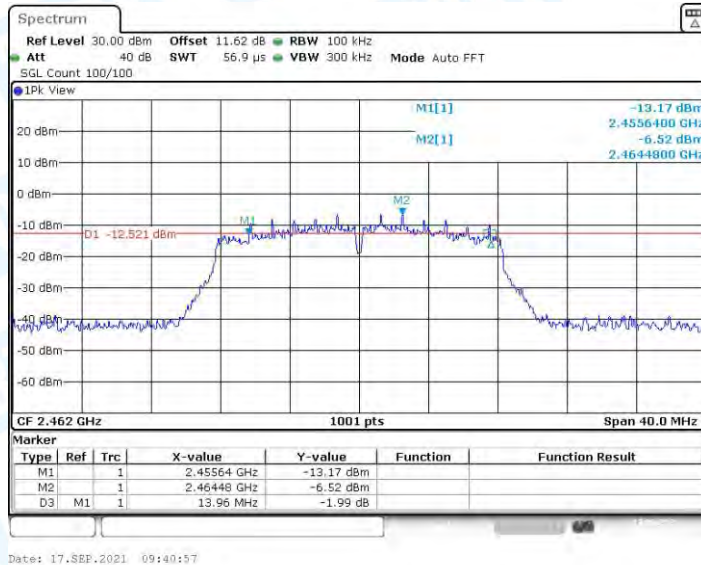
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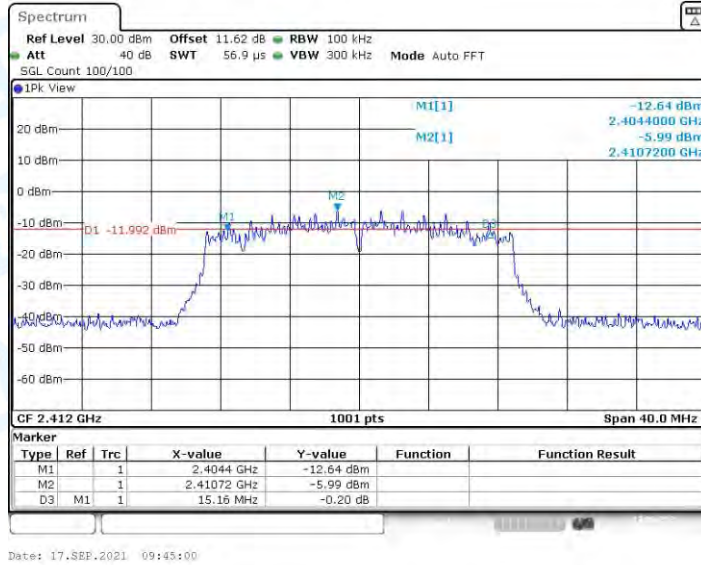
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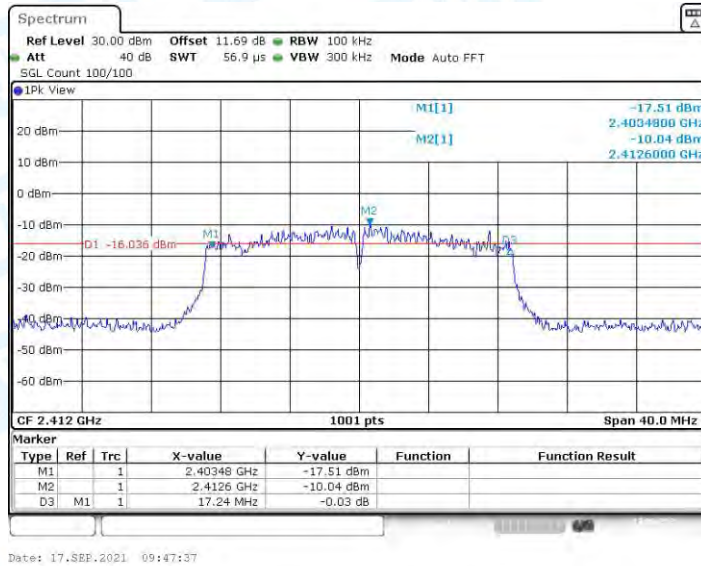
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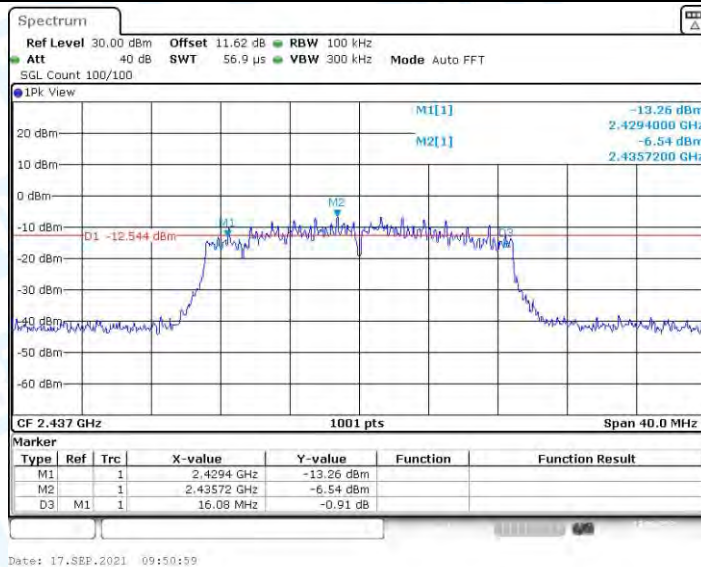
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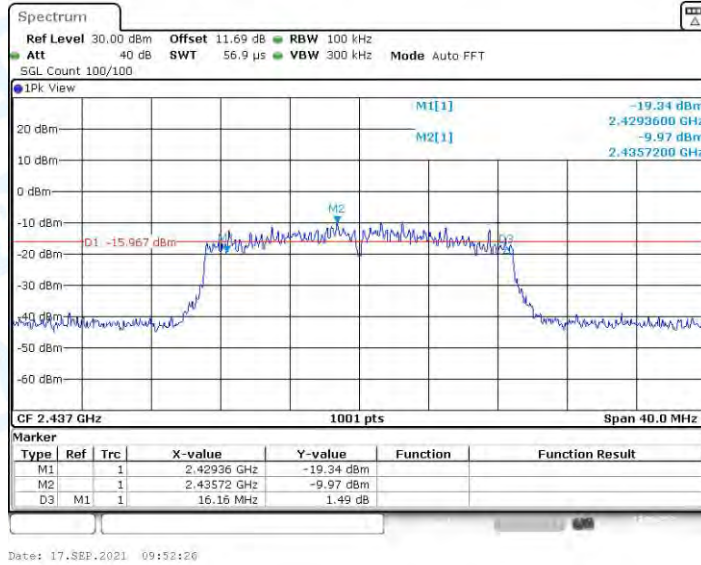
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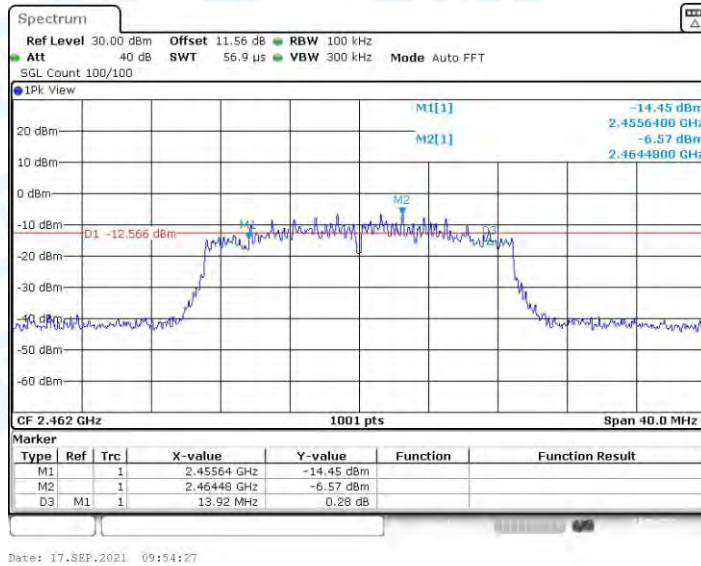
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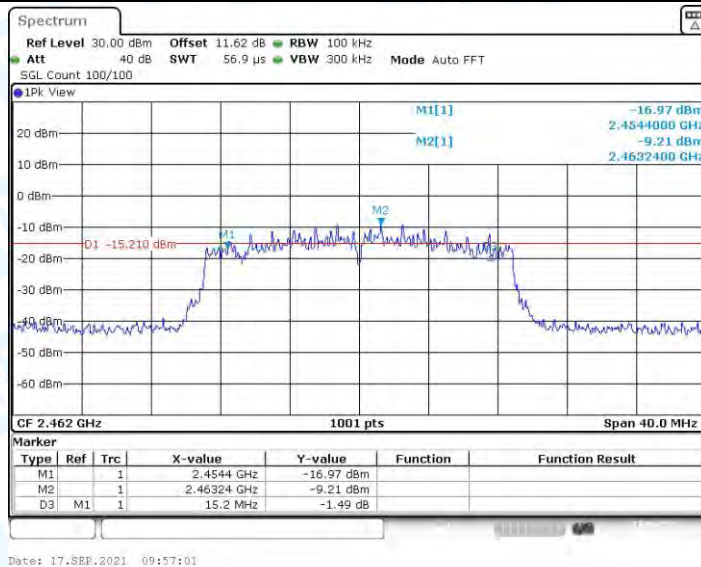
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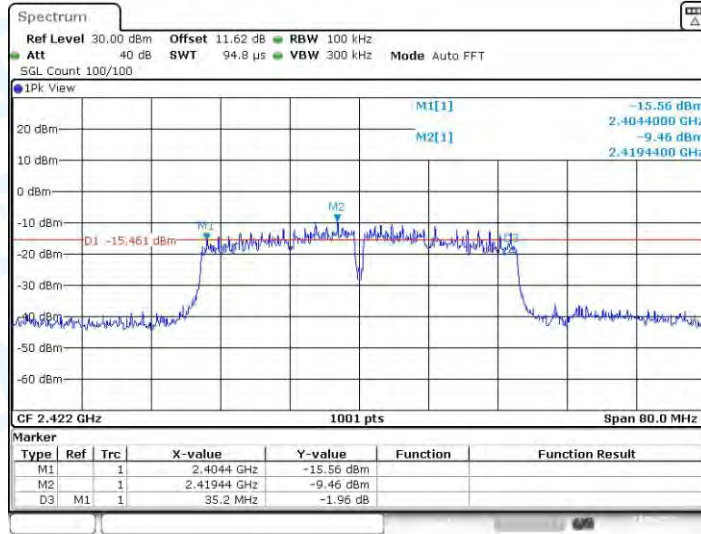
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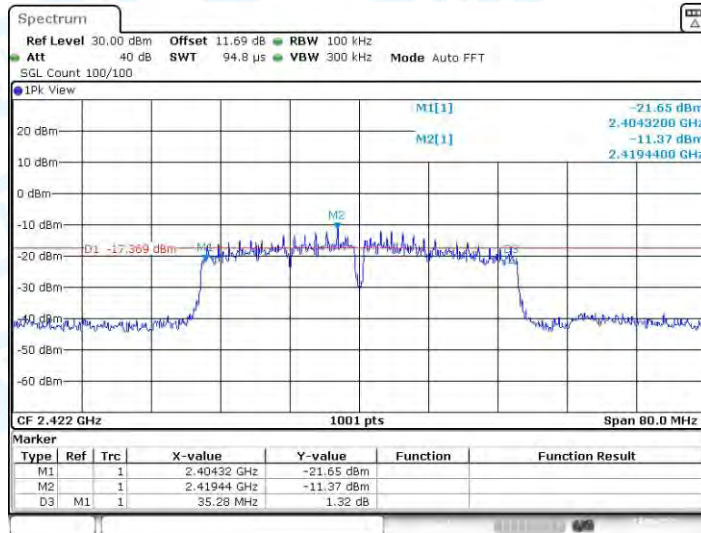
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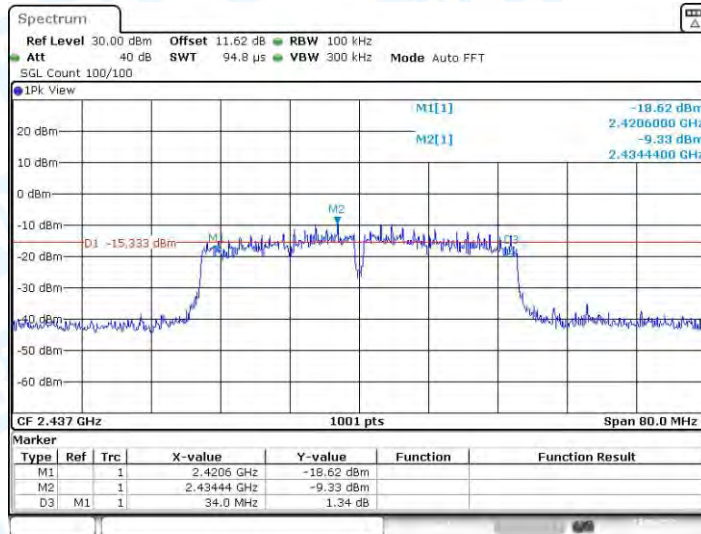
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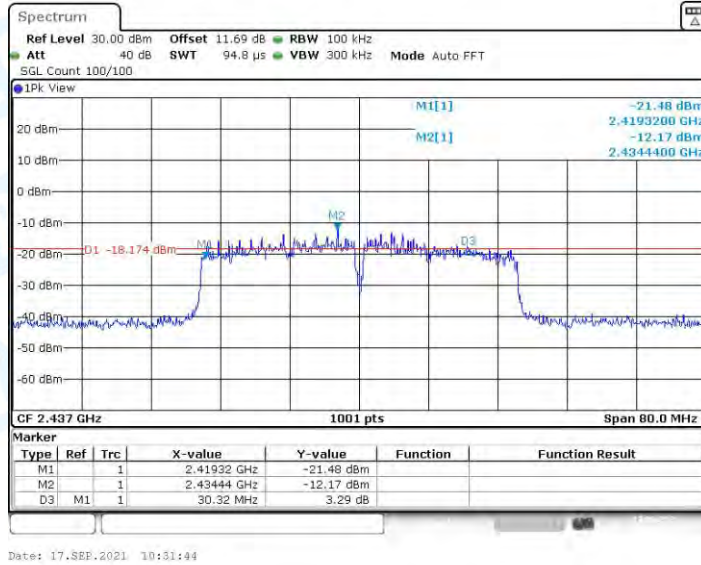
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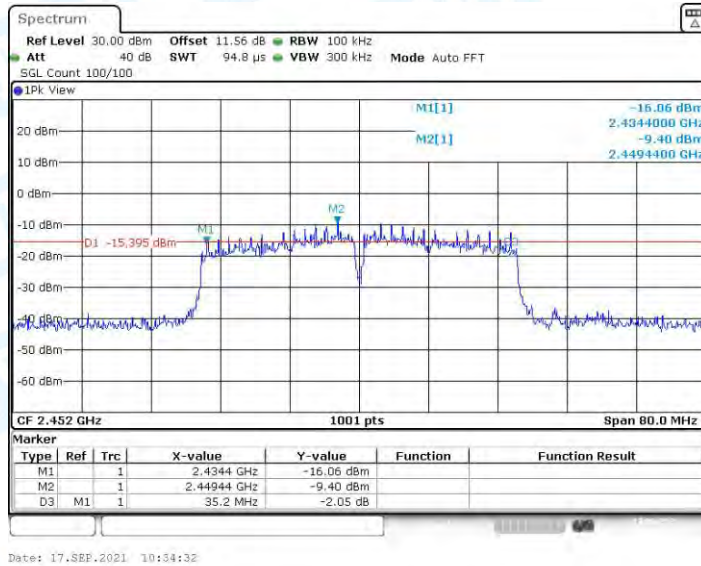
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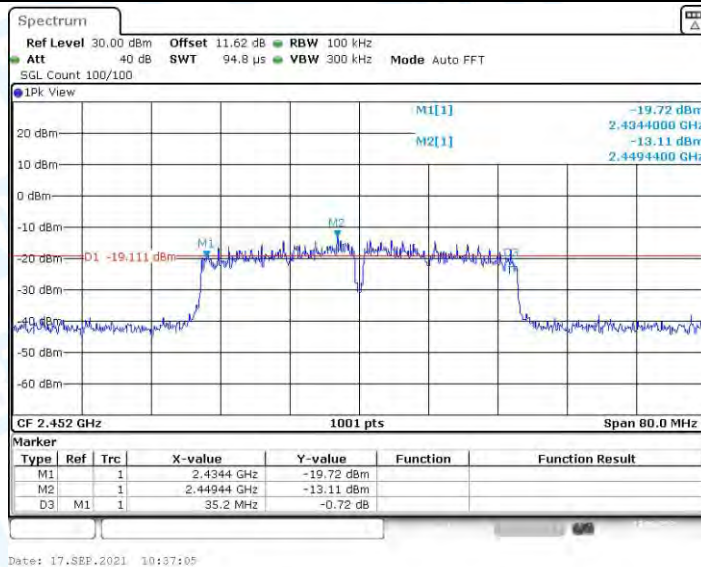
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452

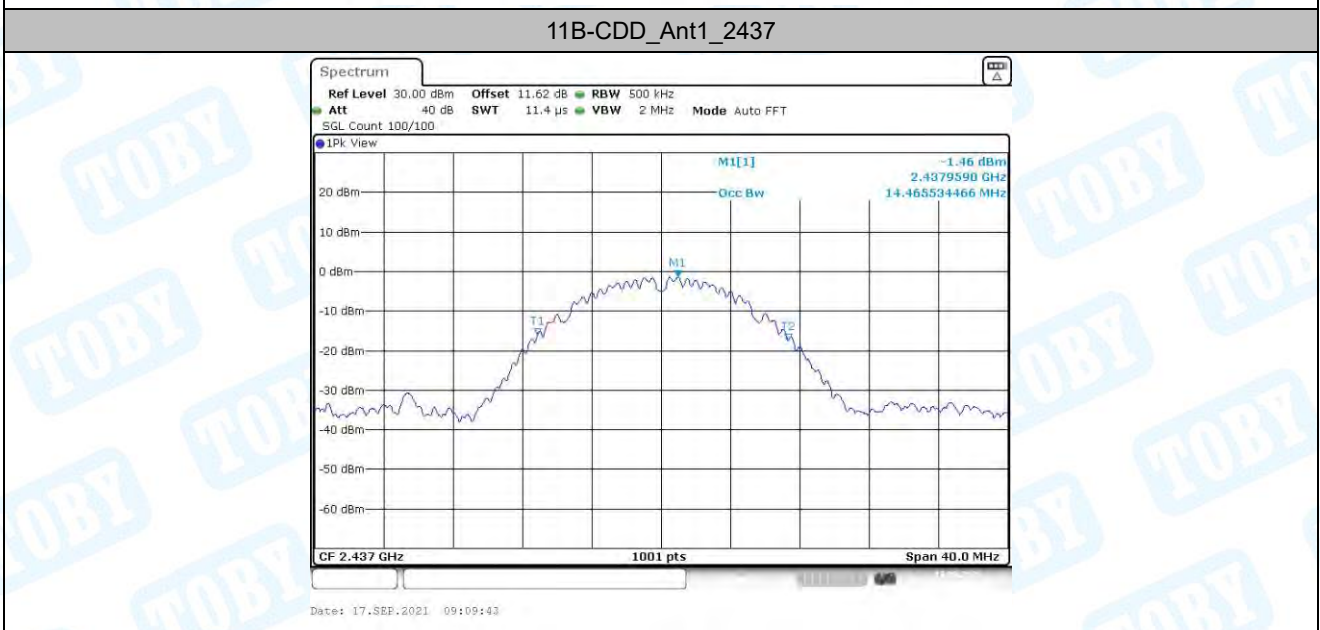
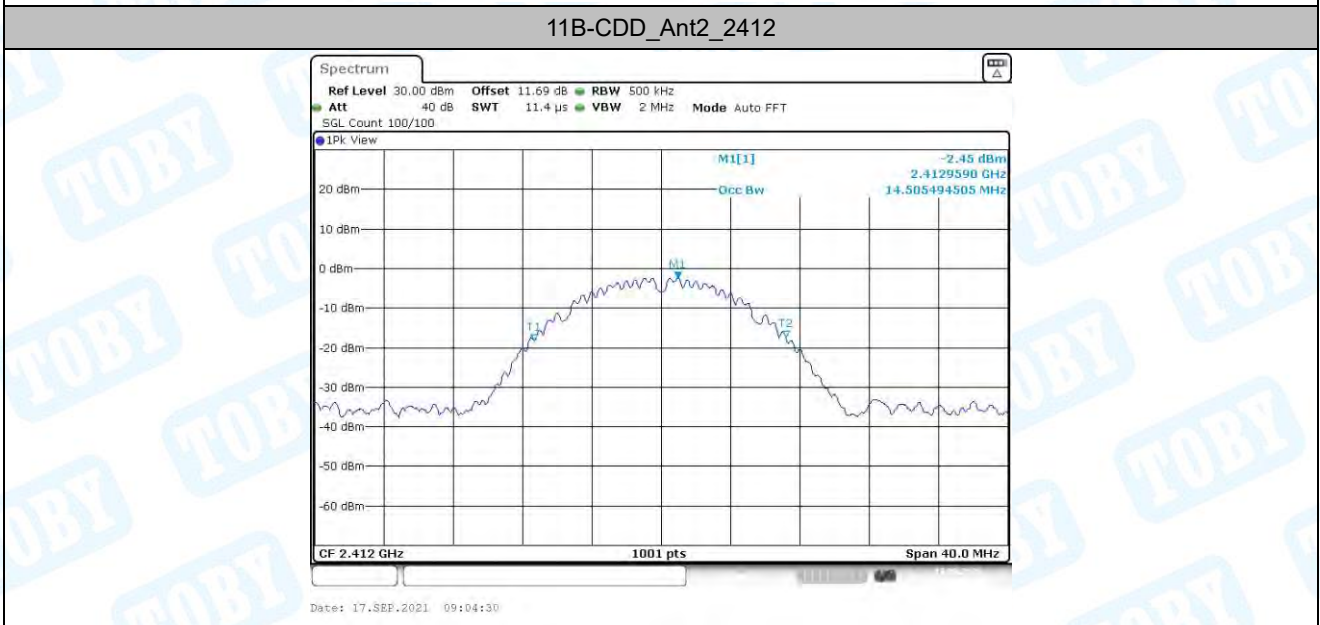
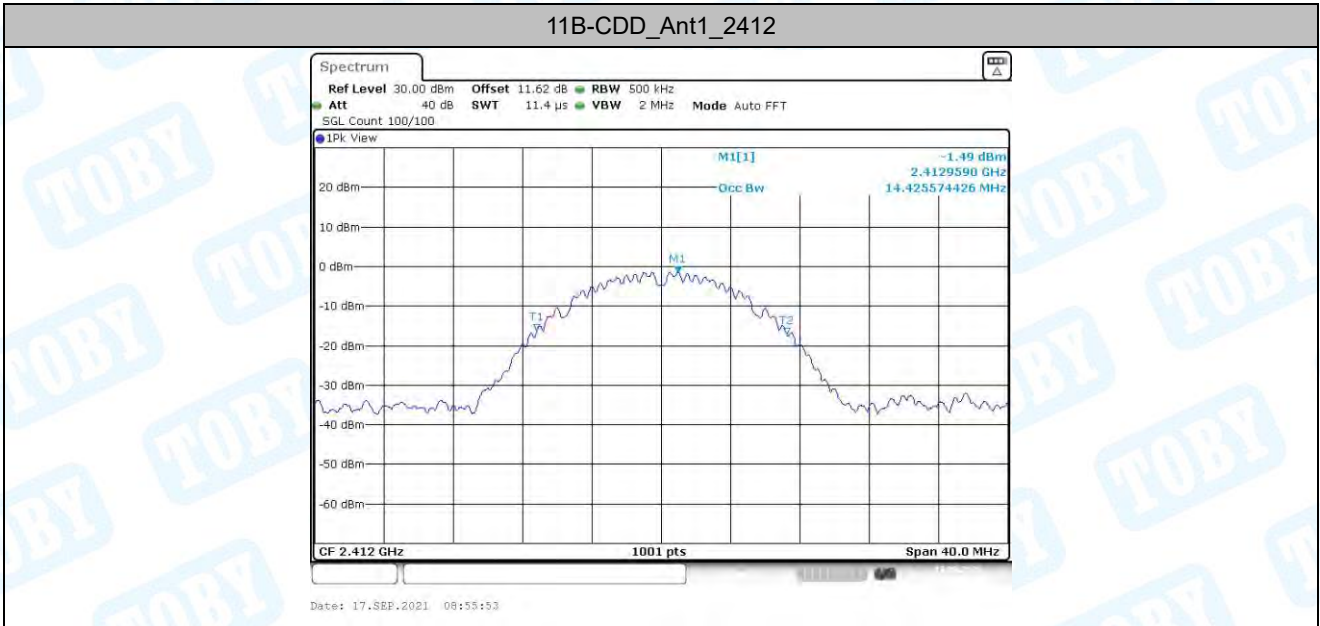


2. Occupied Channel Bandwidth

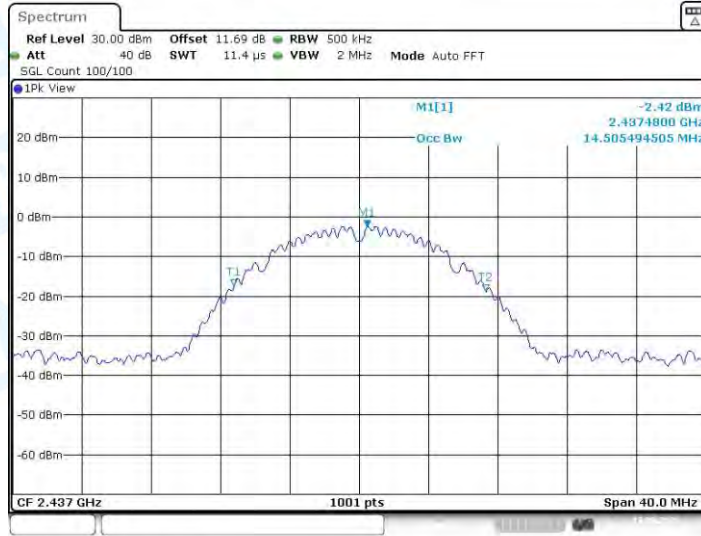
2.1. Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B-CDD	Ant1	2412	14.426	2404.807	2419.233	---	PASS
	Ant2	2412	14.505	2404.687	2419.193	---	PASS
	Ant1	2437	14.466	2429.847	2444.313	---	PASS
	Ant2	2437	14.505	2429.767	2444.273	---	PASS
	Ant1	2462	14.346	2454.847	2469.193	---	PASS
	Ant2	2462	14.505	2454.767	2469.273	---	PASS
11G-CDD	Ant1	2412	16.663	2403.728	2420.392	---	PASS
	Ant2	2412	16.543	2403.728	2420.272	---	PASS
	Ant1	2437	16.543	2428.728	2445.272	---	PASS
	Ant2	2437	16.543	2428.728	2445.272	---	PASS
	Ant1	2462	16.623	2453.648	2470.272	---	PASS
	Ant2	2462	17.023	2453.608	2470.631	---	PASS
11N20MIMO	Ant1	2412	17.822	2403.169	2420.991	---	PASS
	Ant2	2412	17.822	2403.009	2420.831	---	PASS
	Ant1	2437	17.742	2428.169	2445.911	---	PASS
	Ant2	2437	18.102	2428.009	2446.111	---	PASS
	Ant1	2462	17.742	2453.129	2470.871	---	PASS
	Ant2	2462	17.862	2453.089	2470.951	---	PASS
11N40MIMO	Ant1	2422	36.763	2403.459	2440.222	---	PASS
	Ant2	2422	36.683	2403.698	2440.382	---	PASS
	Ant1	2437	36.763	2418.618	2455.382	---	PASS
	Ant2	2437	36.603	2418.778	2455.382	---	PASS
	Ant1	2452	36.523	2433.698	2470.222	---	PASS
	Ant2	2452	36.603	2433.698	2470.302	---	PASS

2.2. Test Graphs



11B-CDD_Ant2_2437



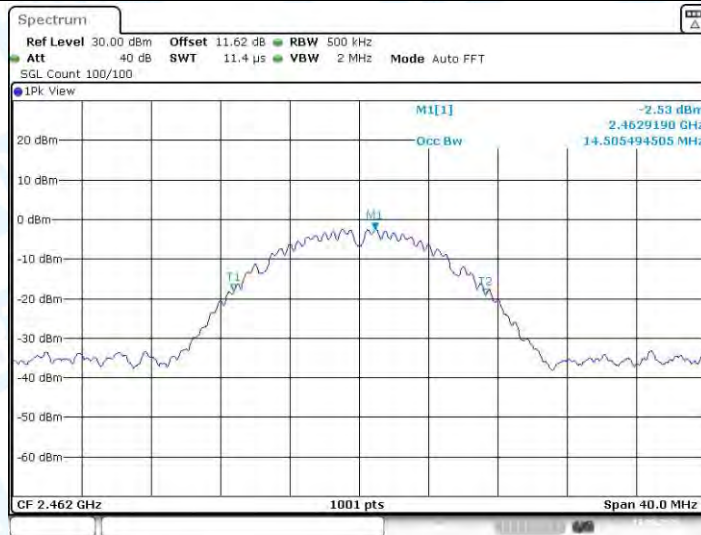
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11B-CDD_Ant1_2462



Date: 17.SEP.2021 09:14:49

11B-CDD_Ant2_2462



Date: 17.SEP.2021 09:17:30

11G-CDD_Ant1_2412



Date: 17.SEP.2021 09:24:14

11G-CDD_Ant2_2412



Date: 17.SEP.2021 09:26:52

11G-CDD_Ant1_2437



Date: 17.SEP.2021 09:34:43

11G-CDD_Ant2_2437



Date: 17.SEP.2021 09:36:54

11G-CDD_Ant1_2462



Date: 17.SEP.2021 09:38:34

11G-CDD_Ant2_2462



Date: 17.SEP.2021 09:41:09

11N20MIMO_Ant1_2412



Date: 17.SEP.2021 09:45:12

11N20MIMO_Ant2_2412



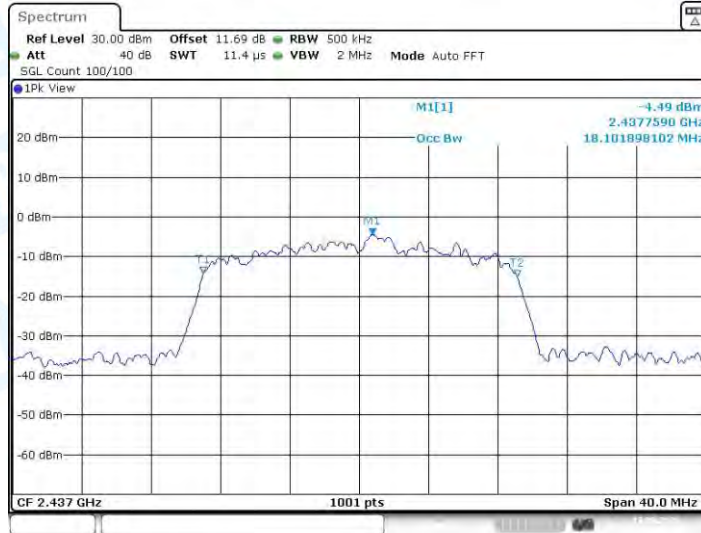
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11N20MIMO_Ant1_2437



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11N20MIMO_Ant2_2437



Date: 17.SEP.2021 09:52:38

11N20MIMO_Ant1_2462



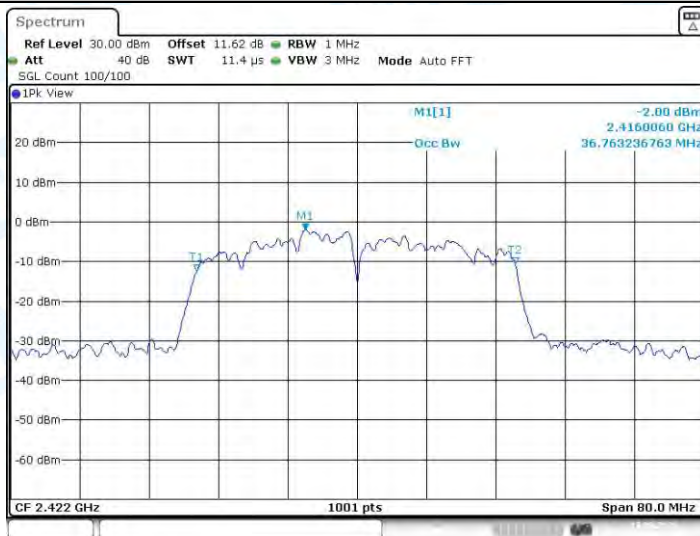
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11N20MIMO_Ant2_2462



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11N40MIMO_Ant1_2422



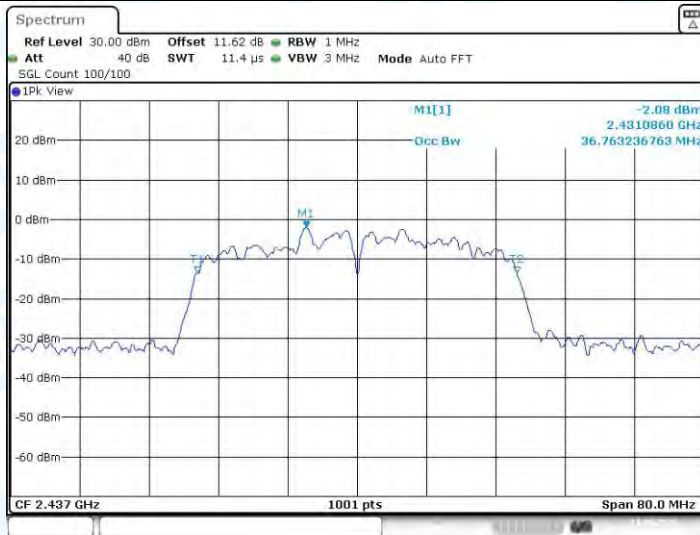
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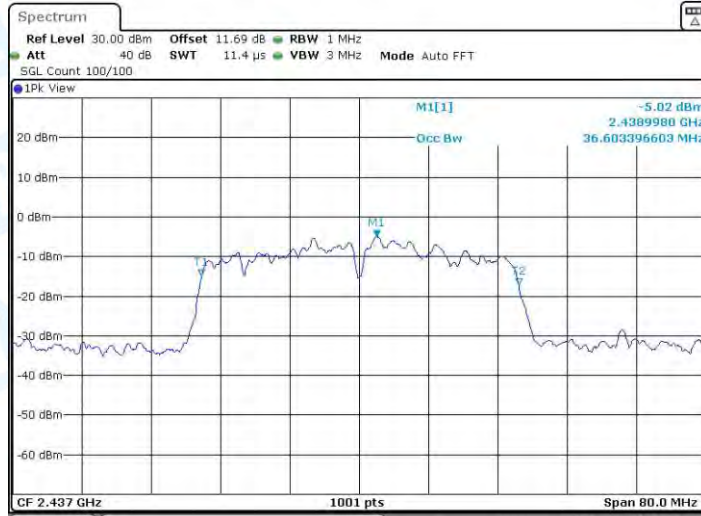
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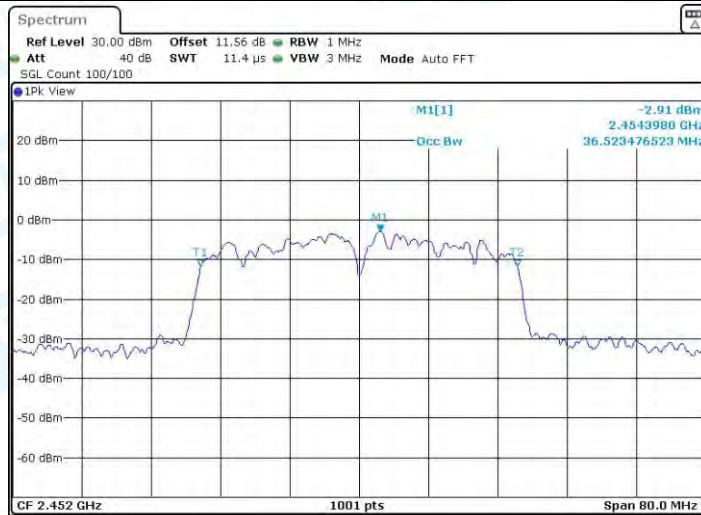
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11N40MIMO_Ant2_2437



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11N40MIMO_Ant1_2452



Date: 17.SEP.2021 10:34:44

11N40MIMO_Ant2_2452



Date: 17.SEP.2021 10:37:17

3. Maximum conducted output power

3.1. Test Result

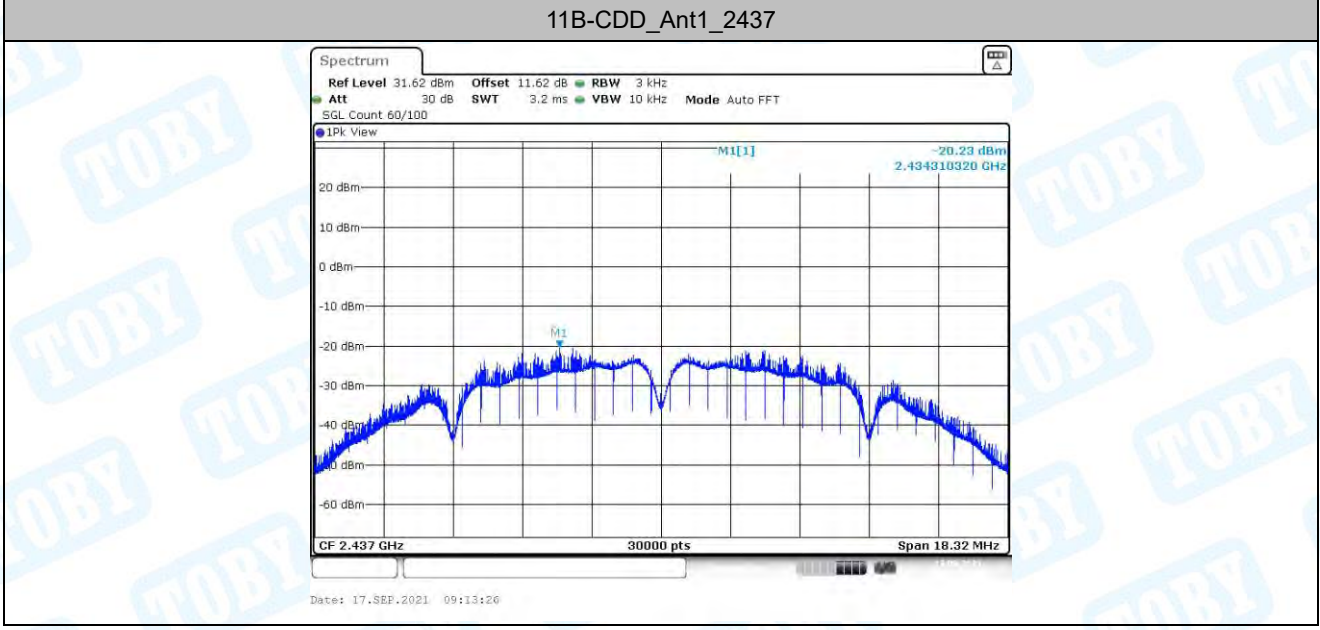
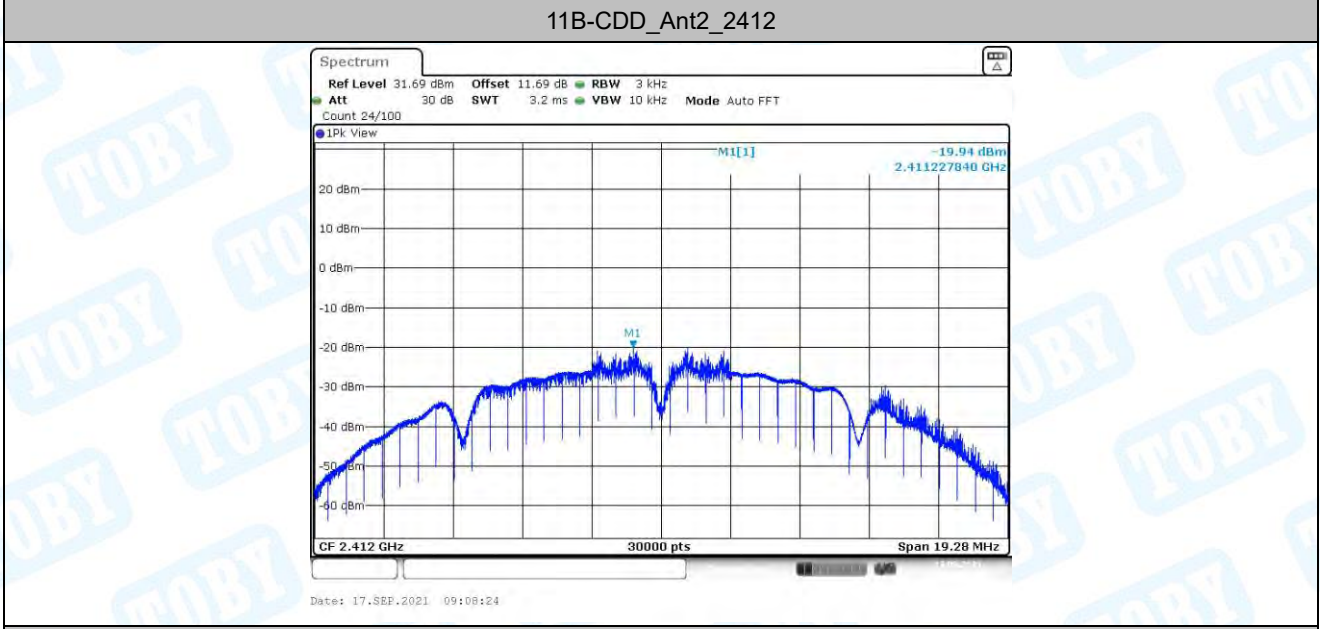
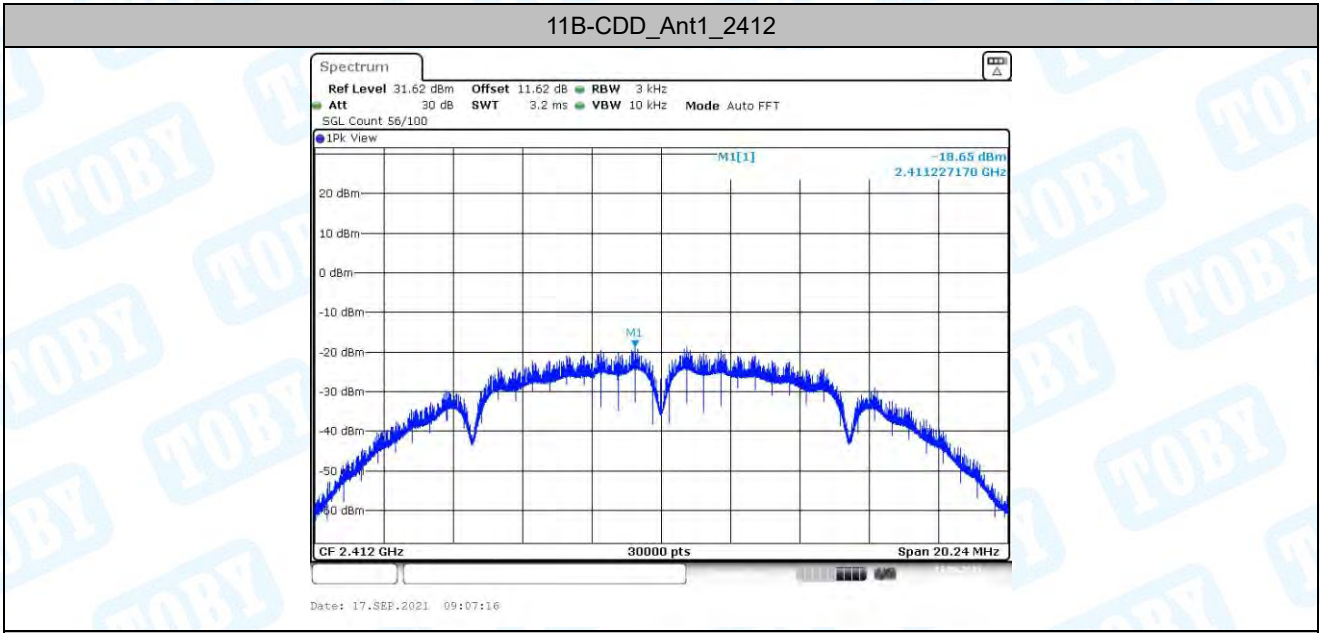
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B-CDD	Ant1	2412	9.84	≤30	PASS
	Ant2	2412	9.10	≤30	PASS
	Ant1	2437	9.79	≤30	PASS
	Ant2	2437	8.90	≤30	PASS
	Ant1	2462	9.79	≤30	PASS
	Ant2	2462	8.76	≤30	PASS
11G-CDD	Ant1	2412	13.26	≤30	PASS
	Ant2	2412	11.96	≤30	PASS
	Ant1	2437	13.36	≤30	PASS
	Ant2	2437	11.52	≤30	PASS
	Ant1	2462	13.19	≤30	PASS
	Ant2	2462	11.28	≤30	PASS
11N20MIMO	Ant1	2412	11.25	≤30	PASS
	Ant2	2412	8.62	≤30	PASS
	total	2412	13.1	≤30	PASS
	Ant1	2437	10.90	≤30	PASS
	Ant2	2437	8.18	≤30	PASS
	total	2437	12.8	≤30	PASS
	Ant1	2462	10.63	≤30	PASS
	Ant2	2462	7.98	≤30	PASS
	total	2462	12.5	≤30	PASS
11N40MIMO	Ant1	2422	10.45	≤30	PASS
	Ant2	2422	7.88	≤30	PASS
	total	2422	12.4	≤30	PASS
	Ant1	2437	10.23	≤30	PASS
	Ant2	2437	7.34	≤30	PASS
	total	2437	12.0	≤30	PASS
	Ant1	2452	10.05	≤30	PASS
	Ant2	2452	7.29	≤30	PASS
	total	2452	11.9	≤30	PASS

4. Maximum power spectral density

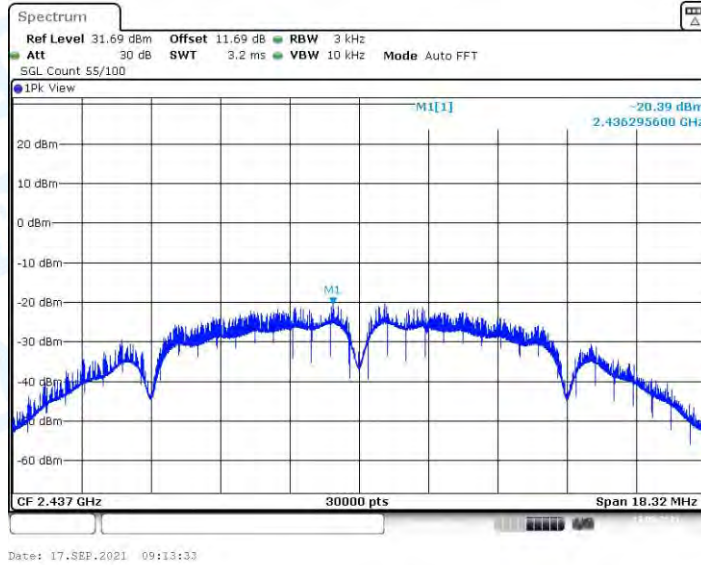
4.1. Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B-CDD	Ant1	2412	-18.65	≤8	PASS
	Ant2	2412	-19.94	≤8	PASS
	Ant1	2437	-20.23	≤8	PASS
	Ant2	2437	-20.39	≤8	PASS
	Ant1	2462	-19.28	≤8	PASS
	Ant2	2462	-24.83	≤8	PASS
11G-CDD	Ant1	2412	-20.2	≤8	PASS
	Ant2	2412	-21.63	≤8	PASS
	Ant1	2437	-21.14	≤8	PASS
	Ant2	2437	-21.62	≤8	PASS
	Ant1	2462	-20.98	≤8	PASS
	Ant2	2462	-22.96	≤8	PASS
11N20MIMO	Ant1	2412	-20.63	≤8	PASS
	Ant2	2412	-24.43	≤8	PASS
	total	2412	-19.12	≤8	PASS
	Ant1	2437	-21.19	≤8	PASS
	Ant2	2437	-25.07	≤8	PASS
	total	2437	-19.70	≤8	PASS
	Ant1	2462	-21.11	≤8	PASS
	Ant2	2462	-25.13	≤8	PASS
	total	2462	-19.66	≤8	PASS
11N40MIMO	Ant1	2422	-26.63	≤8	PASS
	Ant2	2422	-28.59	≤8	PASS
	total	2422	-24.49	≤8	PASS
	Ant1	2437	-26.45	≤8	PASS
	Ant2	2437	-29.63	≤8	PASS
	total	2437	-24.74	≤8	PASS
	Ant1	2452	-27.12	≤8	PASS
	Ant2	2452	-29.34	≤8	PASS
	total	2452	-25.08	≤8	PASS

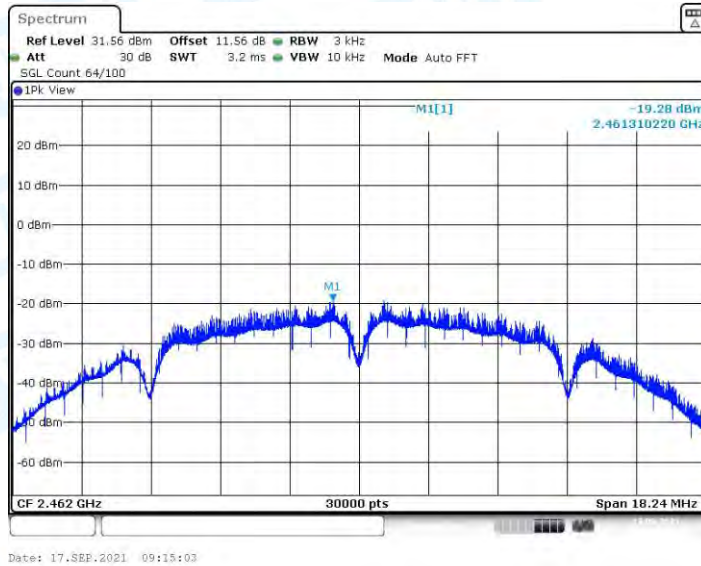
4.2. Test Graphs



11B-CDD_Ant2_2437



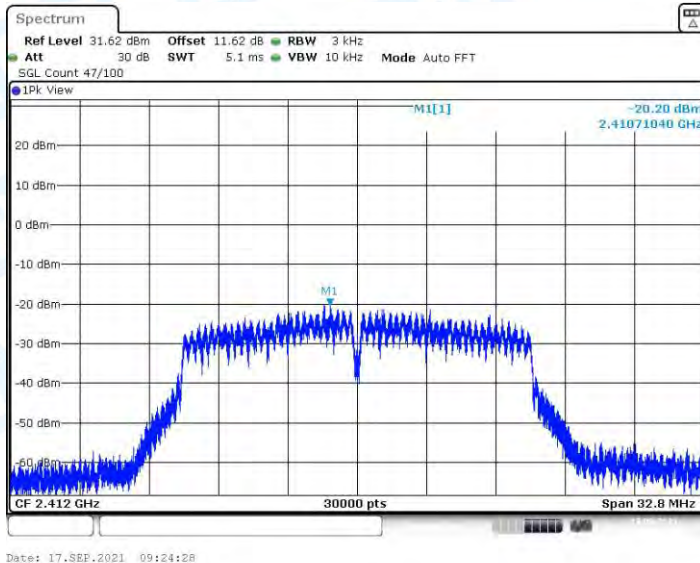
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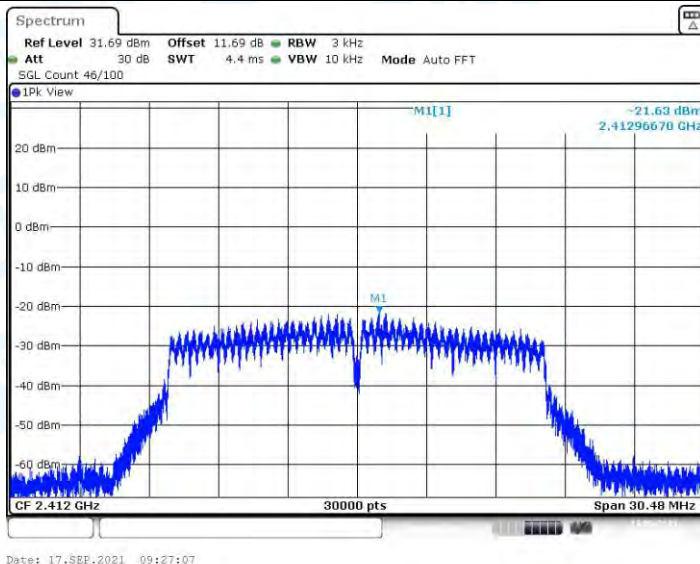
11B-CDD_Ant2_2462



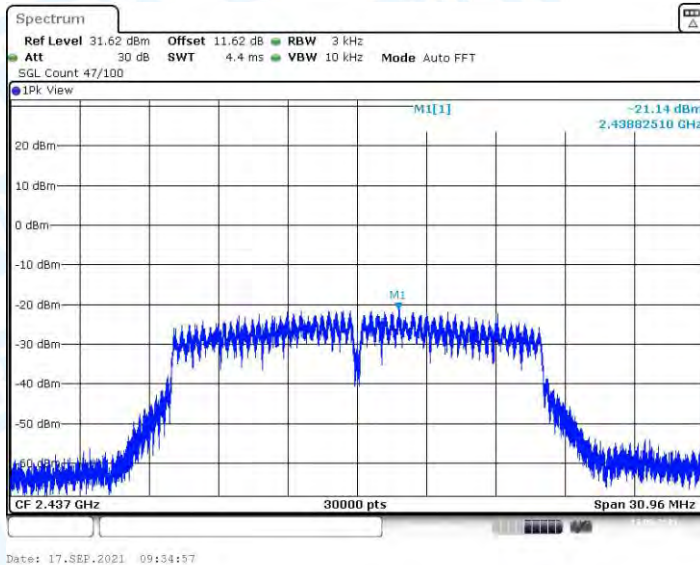
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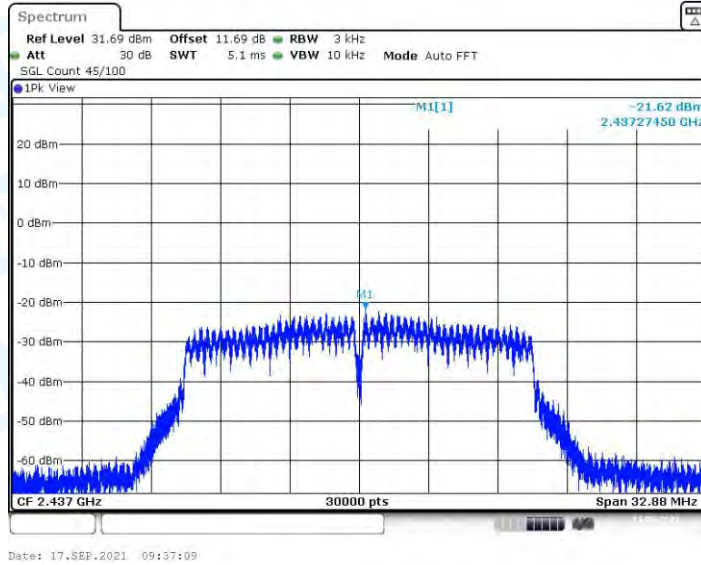
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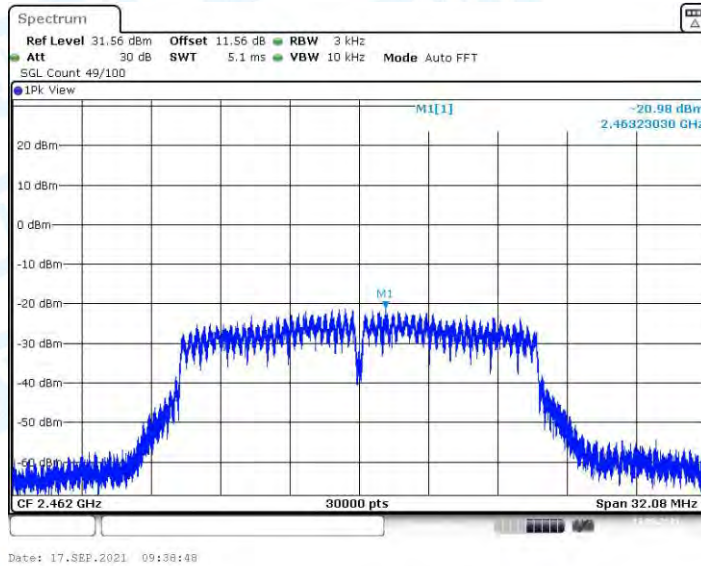
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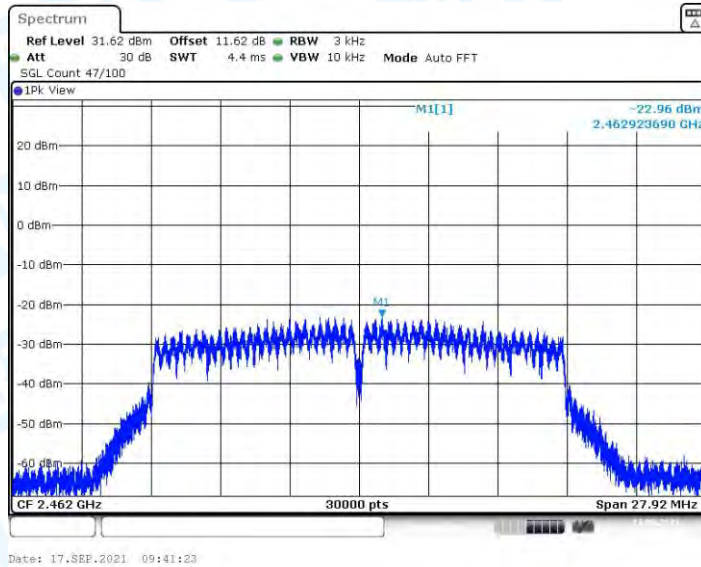
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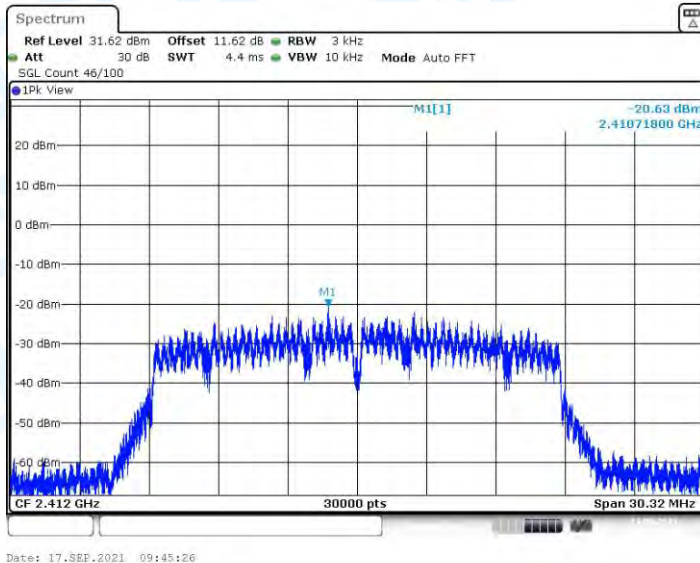
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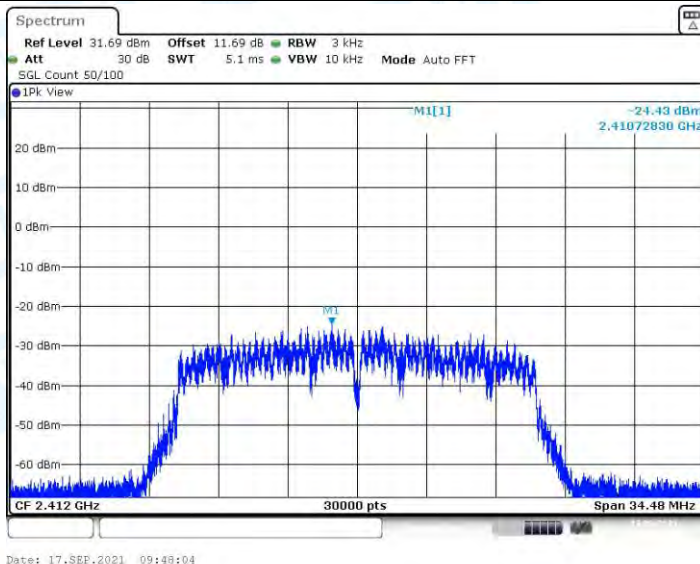
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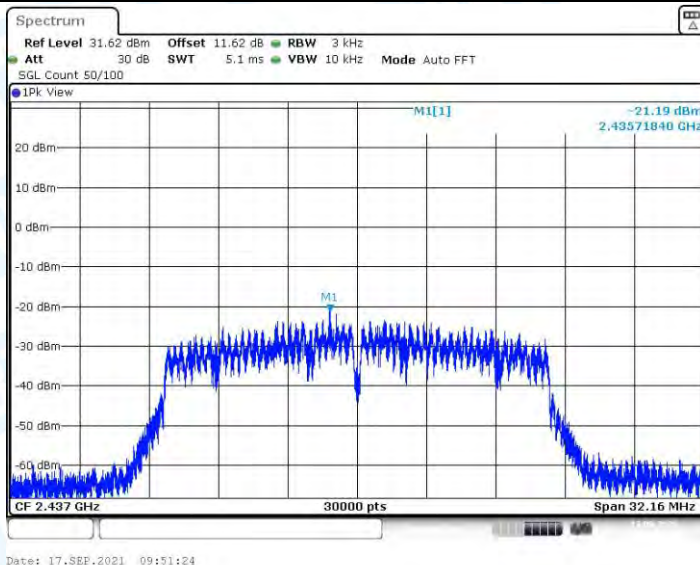
11N20MIMO_Ant1_2412



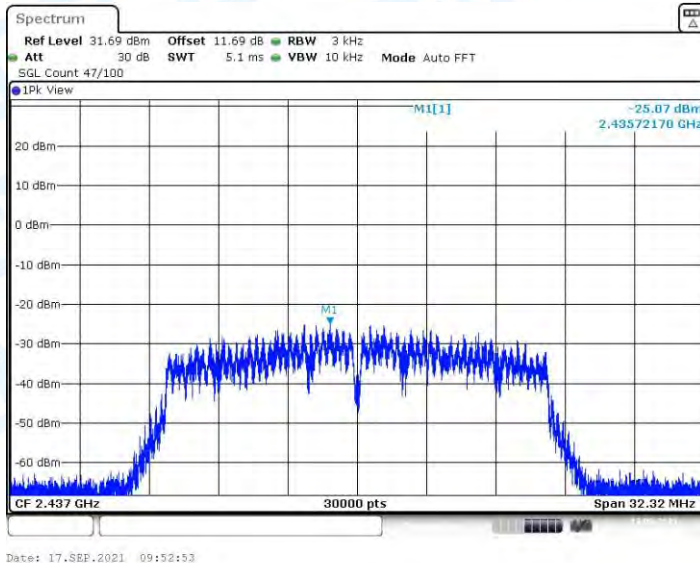
11N20MIMO_Ant2_2412



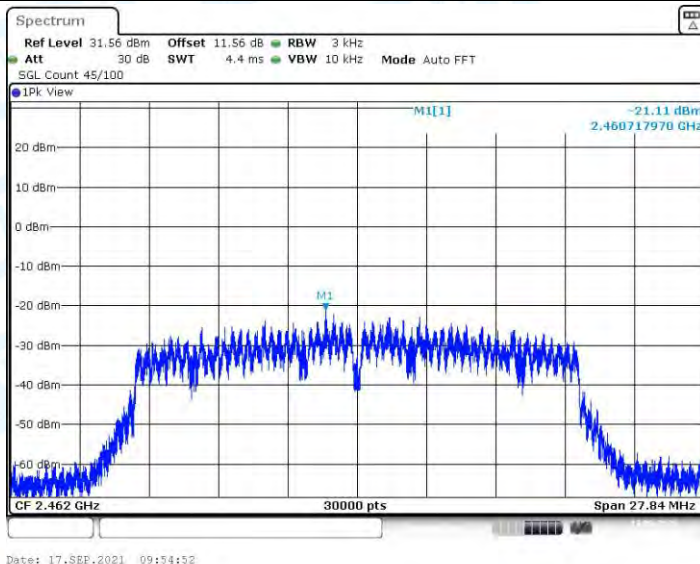
11N20MIMO_Ant1_2437



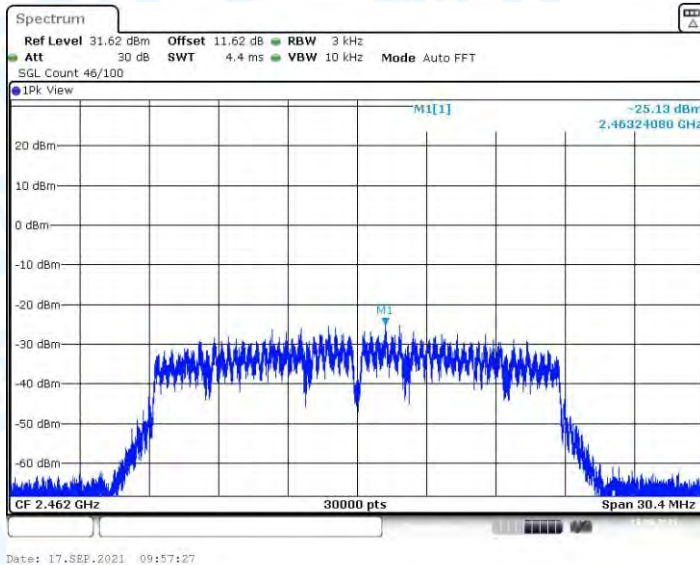
11N20MIMO_Ant2_2437



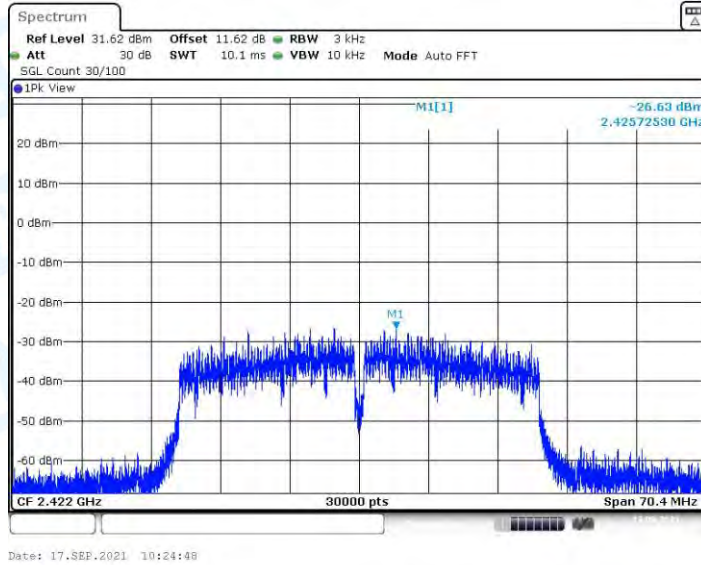
11N20MIMO_Ant1_2462



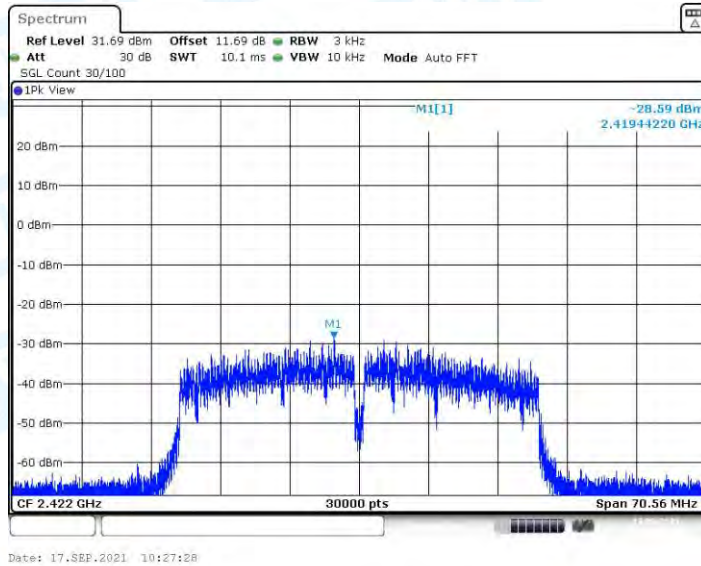
11N20MIMO_Ant2_2462



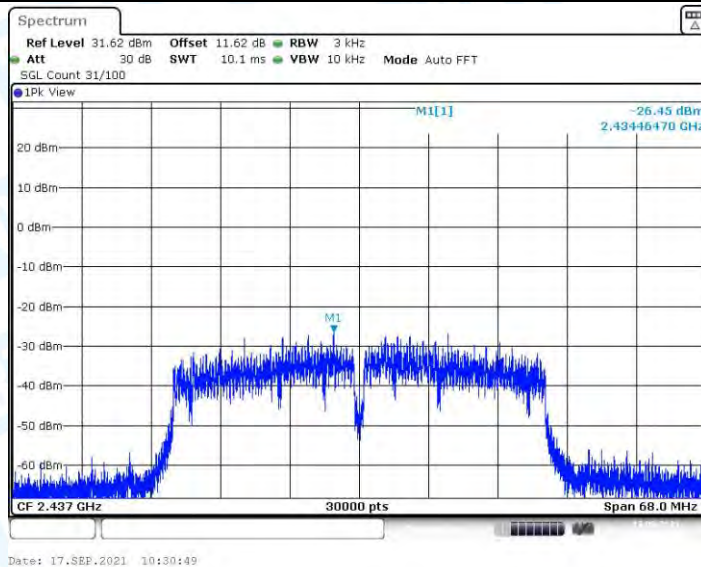
11N40MIMO_Ant1_2422



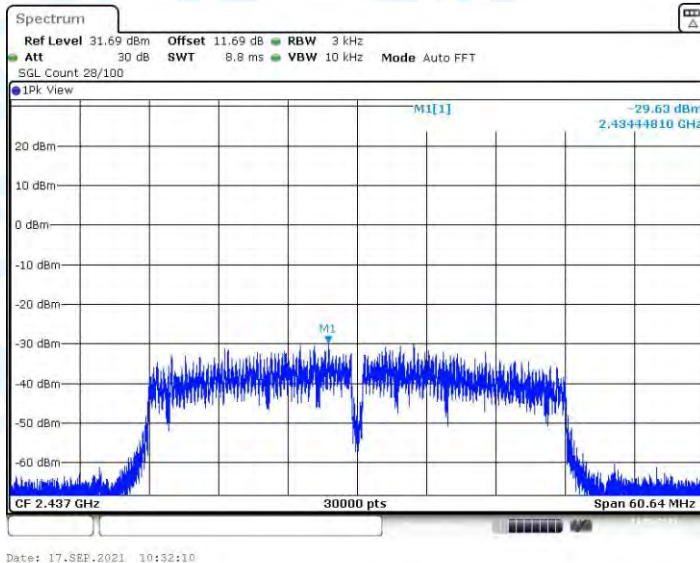
11N40MIMO_Ant2_2422



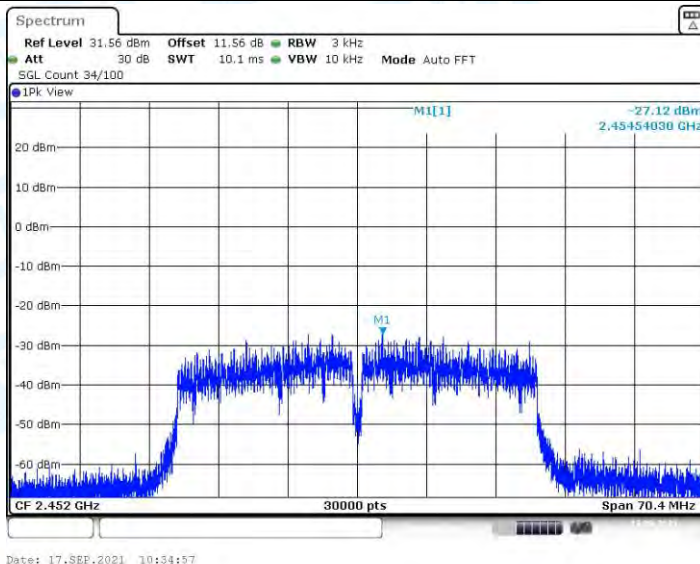
11N40MIMO_Ant1_2437



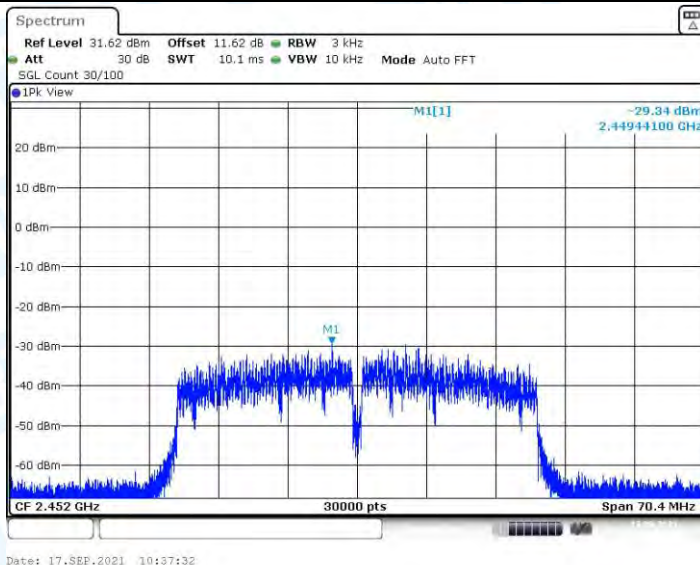
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452

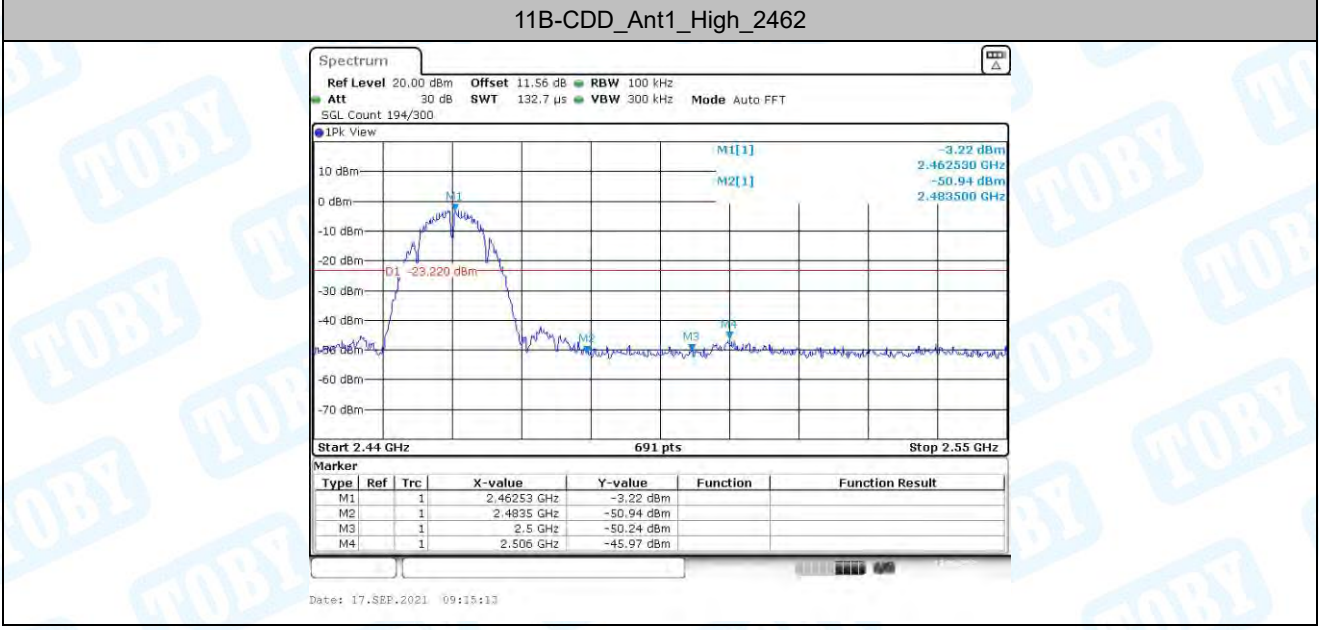
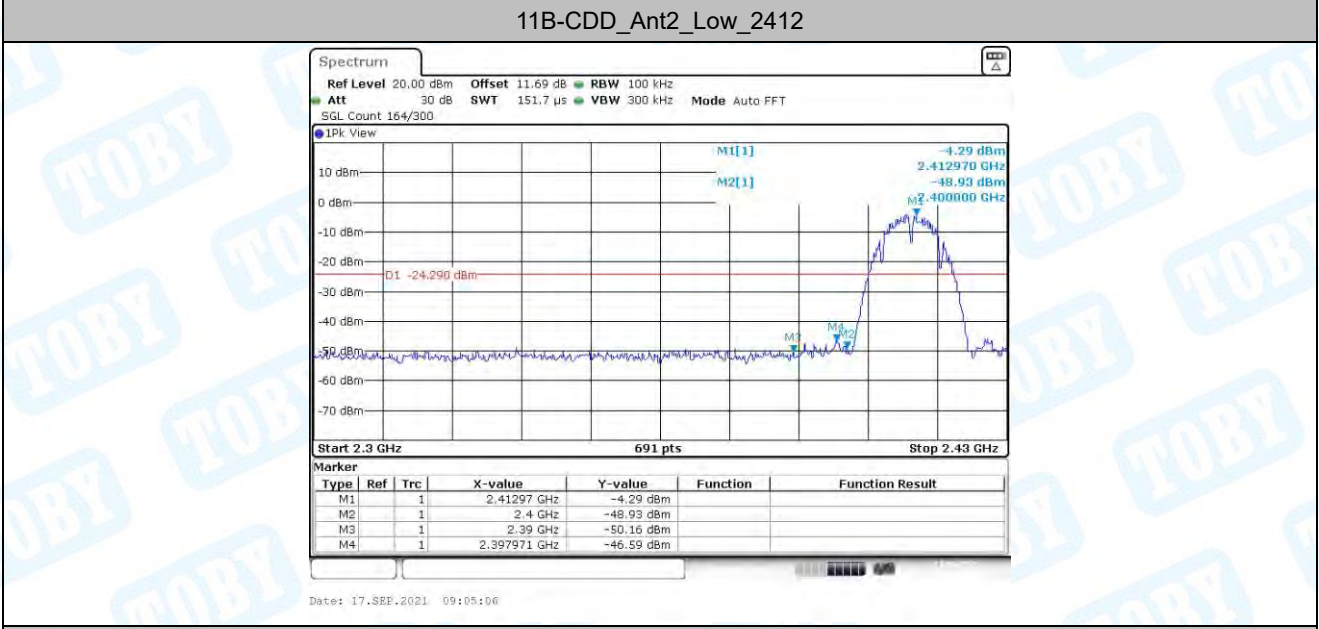
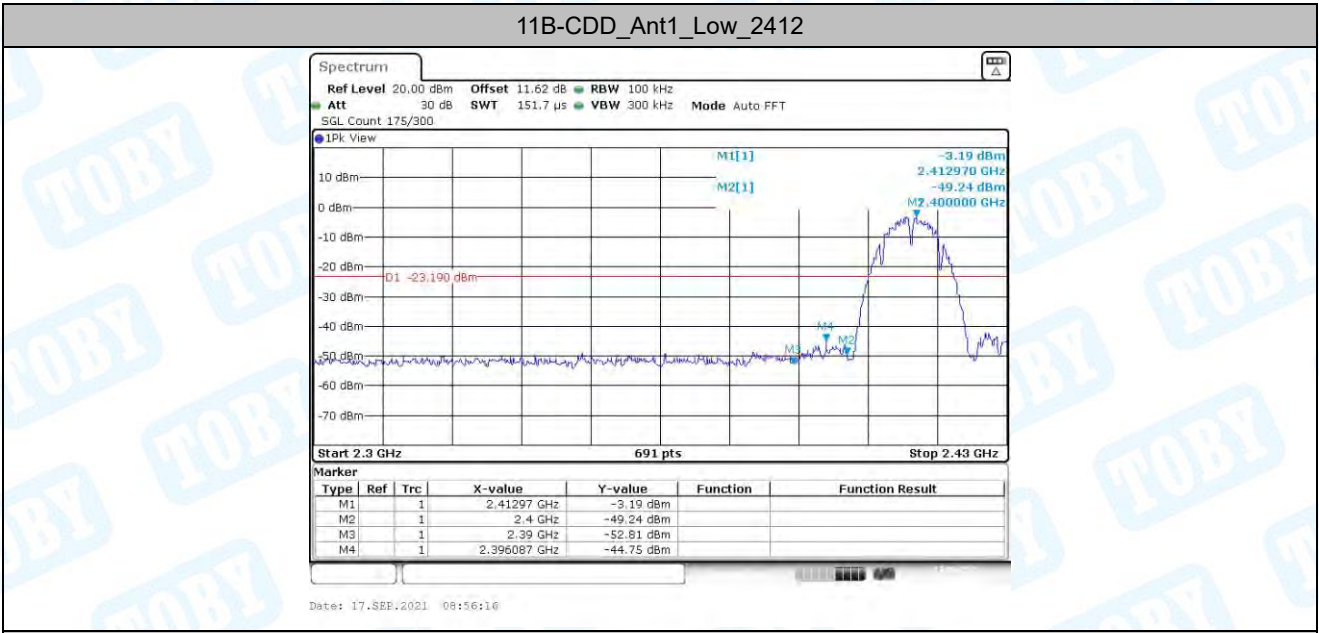


5. Band edge measurements

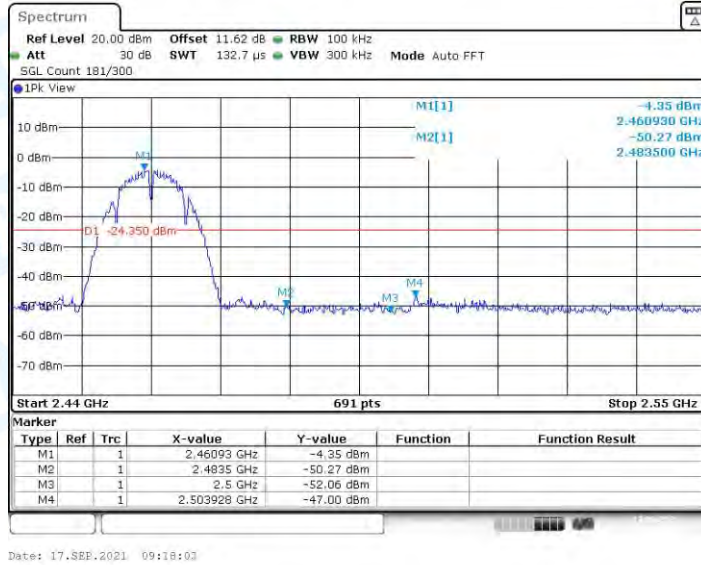
5.1. Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B-CDD	Ant1	Low	2412	-3.19	-44.75	≤-23.19	PASS
	Ant2	Low	2412	-4.29	-46.59	≤-24.29	PASS
	Ant1	High	2462	-3.22	-45.97	≤-23.22	PASS
	Ant2	High	2462	-4.35	-47	≤-24.35	PASS
11G-CDD	Ant1	Low	2412	-4.63	-42.32	≤-24.63	PASS
	Ant2	Low	2412	-8.49	-43	≤-28.49	PASS
	Ant1	High	2462	-6.44	-47.18	≤-26.44	PASS
	Ant2	High	2462	-9.15	-46.47	≤-29.15	PASS
11N20MIMO	Ant1	Low	2412	-6.52	-42.5	≤-26.52	PASS
	Ant2	Low	2412	-8.83	-48.21	≤-28.83	PASS
	Ant1	High	2462	-6.61	-47.57	≤-26.61	PASS
	Ant2	High	2462	-9.55	-47.02	≤-29.55	PASS
11N40MIMO	Ant1	Low	2422	-9.50	-39.07	≤-29.5	PASS
	Ant2	Low	2422	-11.34	-43.36	≤-31.34	PASS
	Ant1	High	2452	-9.55	-42.04	≤-29.55	PASS
	Ant2	High	2452	-11.99	-47.29	≤-31.99	PASS

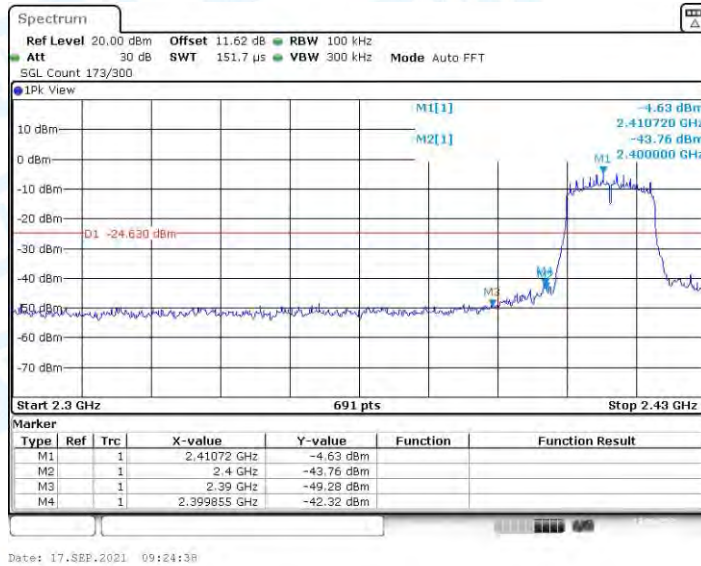
5.2. Test Graphs



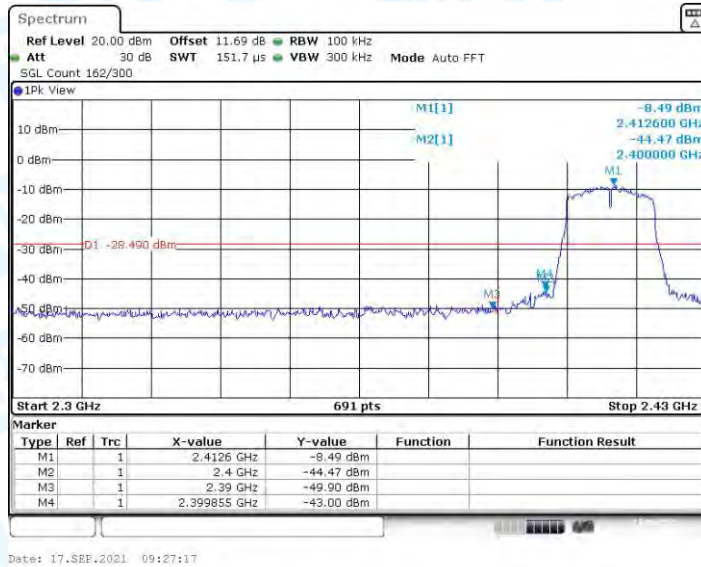
11B-CDD_Ant2_High_2462



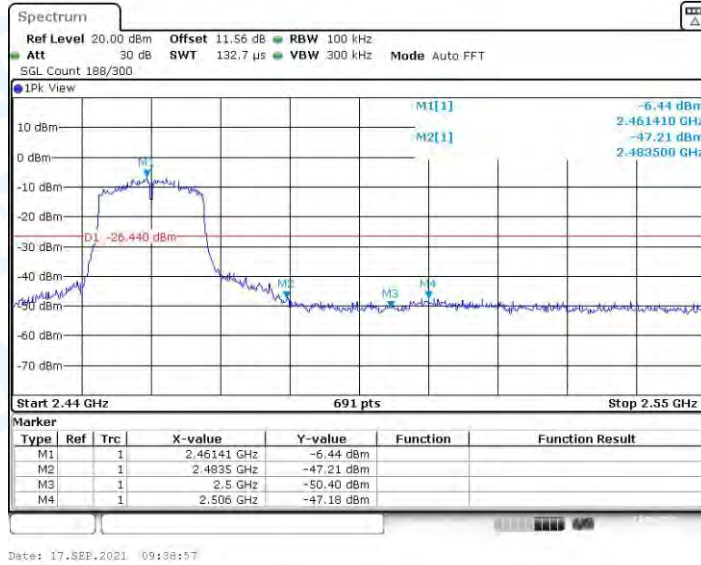
11G-CDD_Ant1_Low_2412



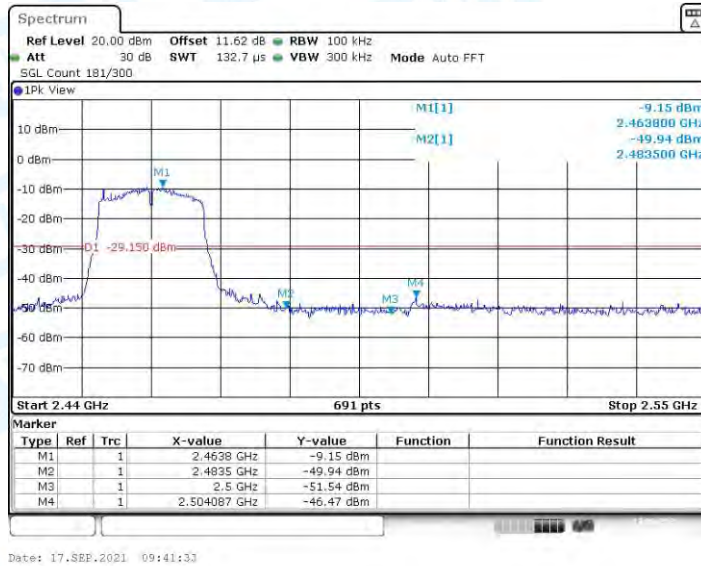
11G-CDD_Ant2_Low_2412



11G-CDD_Ant1_High_2462



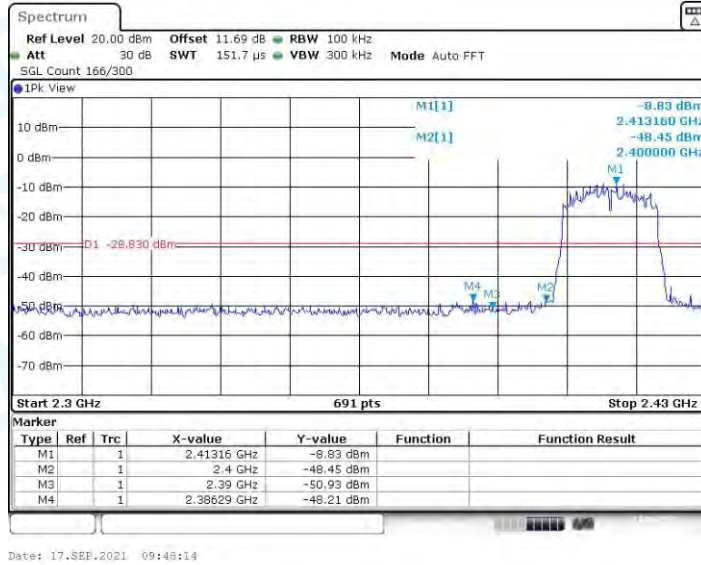
11G-CDD_Ant2_High_2462



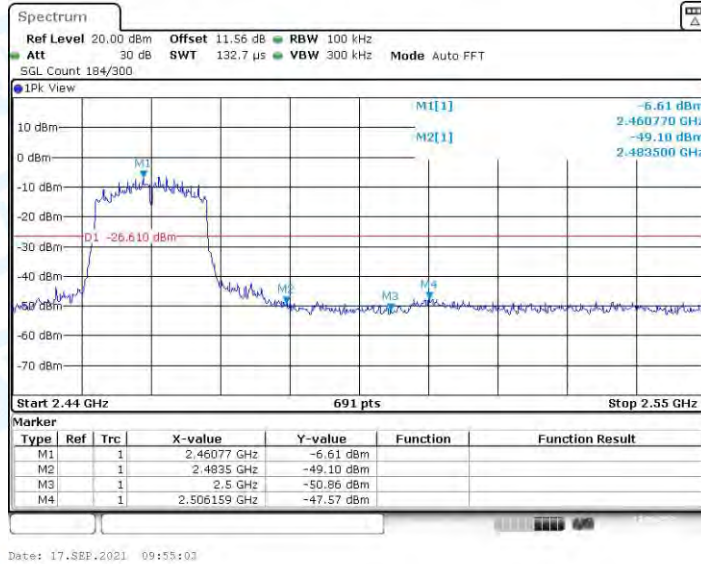
11N20MIMO_Ant1_Low_2412



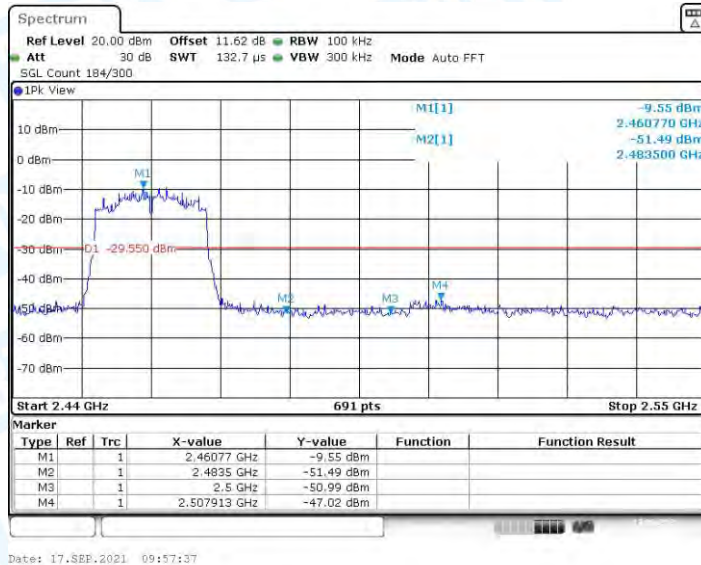
11N20MIMO_Ant2_Low_2412



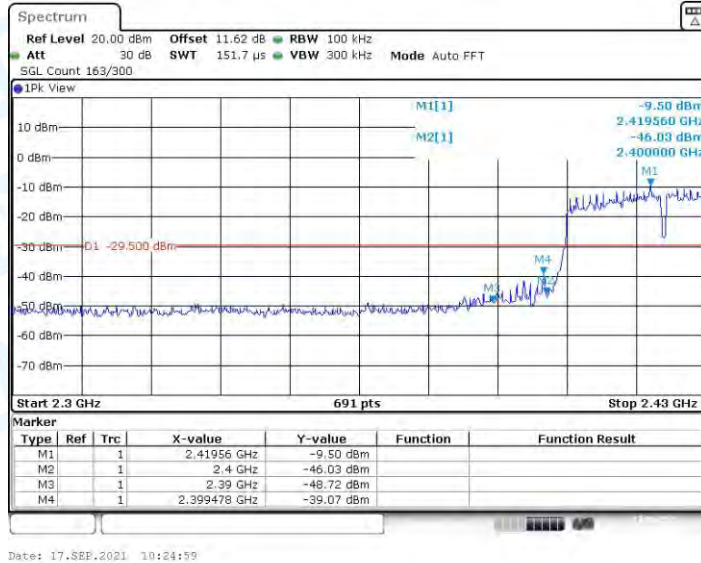
11N20MIMO_Ant1_High_2462



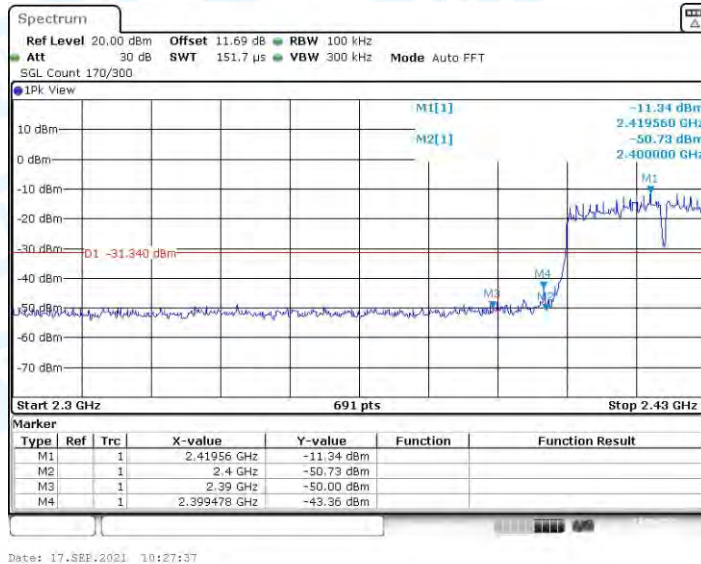
11N20MIMO_Ant2_High_2462



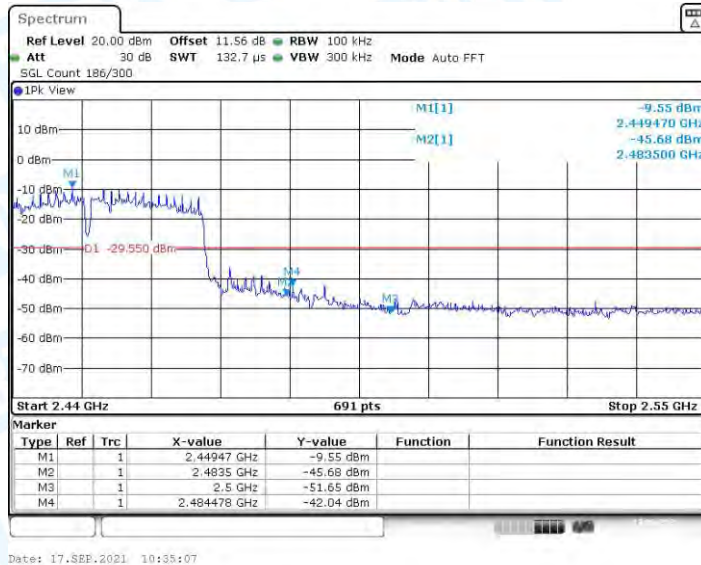
11N40MIMO_Ant1_Low_2422

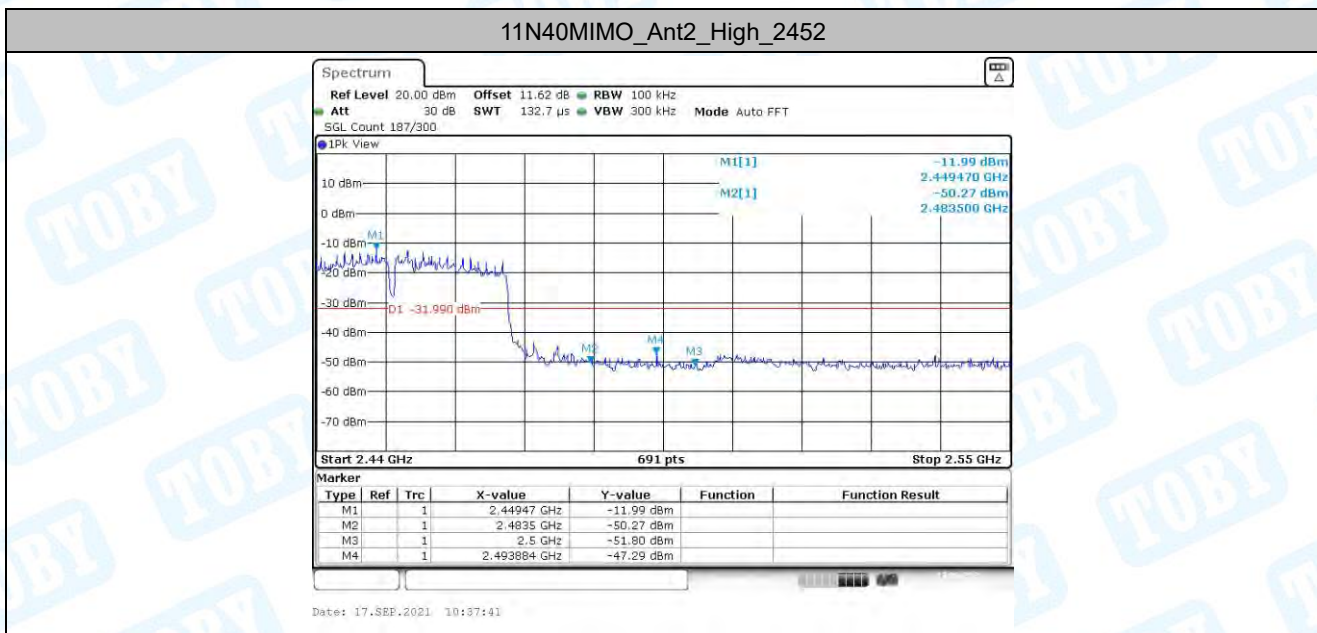


11N40MIMO_Ant2_Low_2422



11N40MIMO_Ant1_High_2452





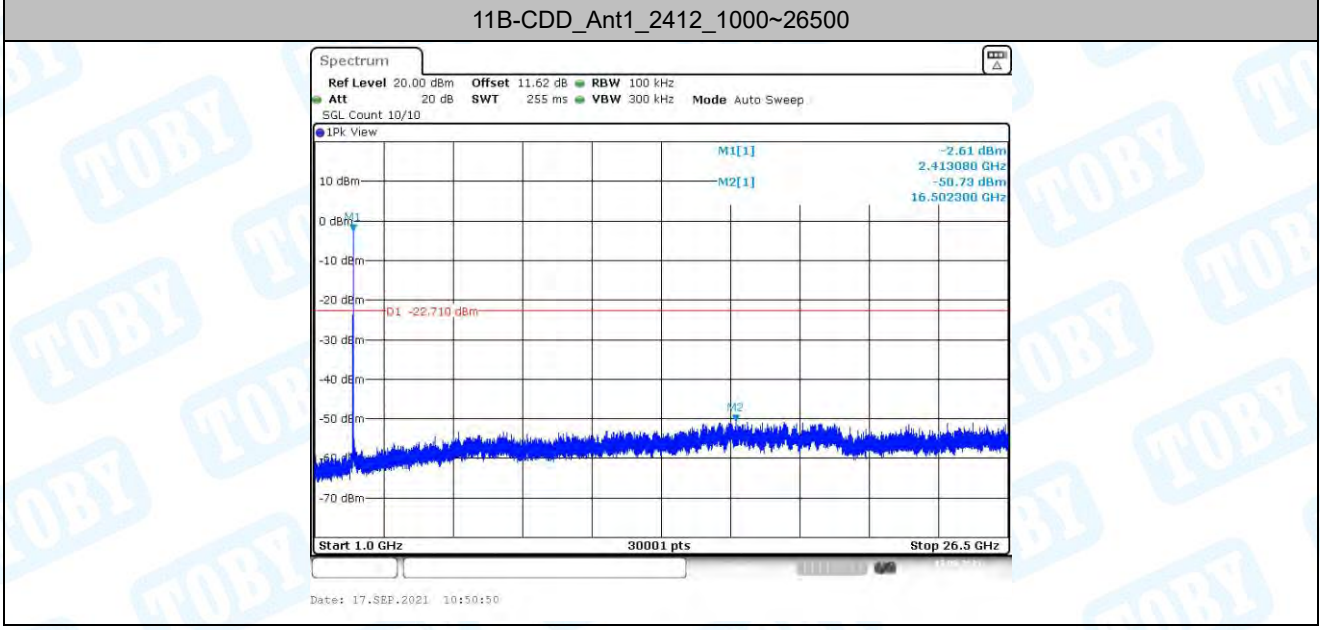
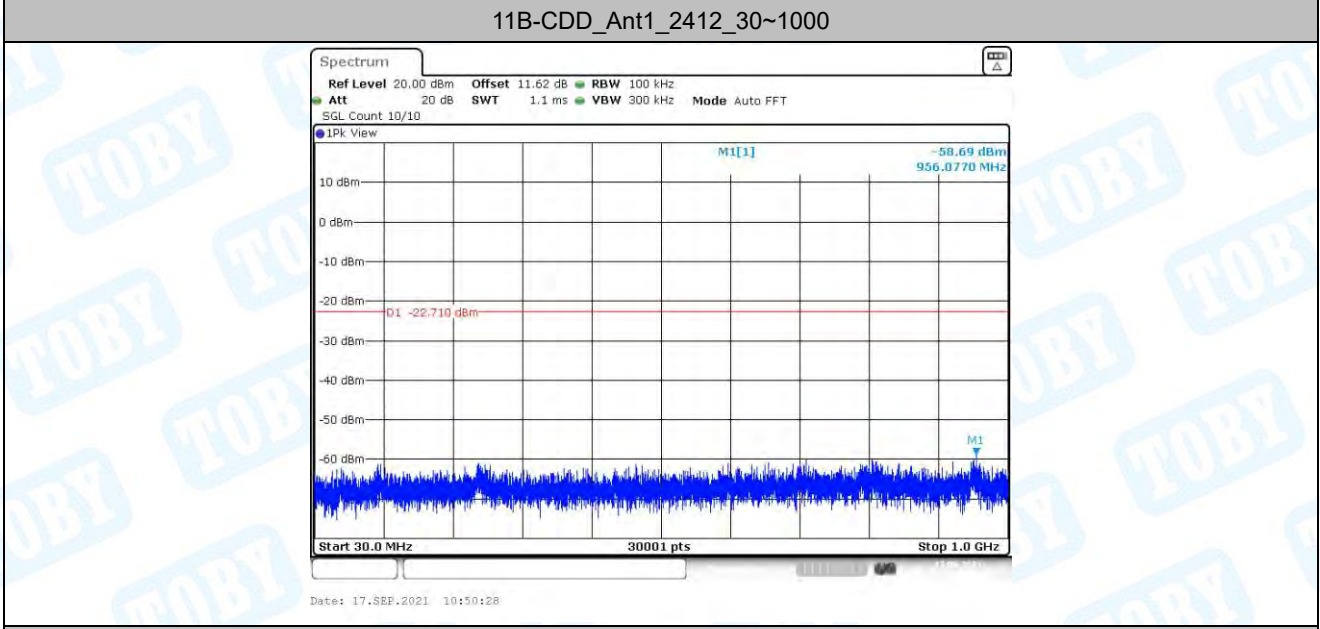
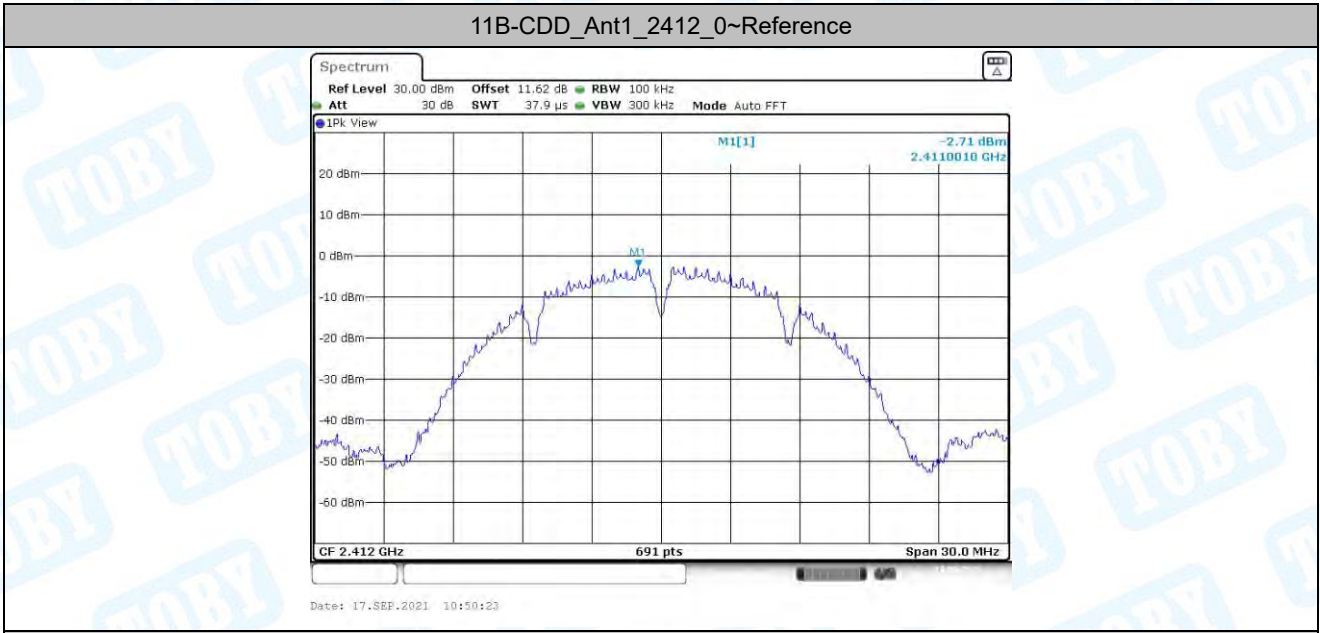
6. Conducted Spurious Emission

6.1. Test Result

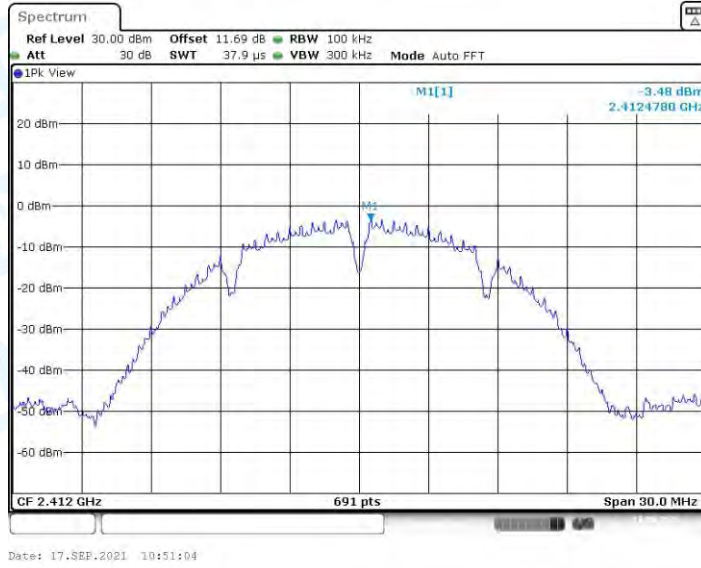
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict	
11B-CDD	Ant1	2412	Reference	-2.71	-2.71	---	PASS	
			30~1000	-2.71	-58.69	≤-22.71	PASS	
			1000~26500	-2.71	-50.73	≤-22.71	PASS	
	Ant2	2412	Reference	-3.48	-3.48	---	PASS	
			30~1000	-3.48	-58.8	≤-23.48	PASS	
			1000~26500	-3.48	-50.54	≤-23.48	PASS	
	Ant1	2437	Reference	-2.64	-2.64	---	PASS	
			30~1000	-2.64	-59.9	≤-22.64	PASS	
			1000~26500	-2.64	-50.22	≤-22.64	PASS	
	Ant2	2437	Reference	-4.18	-4.18	---	PASS	
			30~1000	-4.18	-60.09	≤-24.18	PASS	
			1000~26500	-4.18	-49.5	≤-24.18	PASS	
	Ant1	2462	Reference	-3.11	-3.11	---	PASS	
			30~1000	-3.11	-60.21	≤-23.11	PASS	
			1000~26500	-3.11	-49.74	≤-23.11	PASS	
	Ant2	2462	Reference	-4.34	-4.34	---	PASS	
			30~1000	-4.34	-60.04	≤-24.34	PASS	
			1000~26500	-4.34	-48.89	≤-24.34	PASS	
	11G-CDD	Ant1	2412	Reference	-4.66	-4.66	---	PASS
				30~1000	-4.66	-59.87	≤-24.66	PASS
				1000~26500	-4.66	-50.24	≤-24.66	PASS
		Ant2	2412	Reference	-5.97	-5.97	---	PASS
				30~1000	-5.97	-59.46	≤-25.97	PASS
				1000~26500	-5.97	-50.57	≤-25.97	PASS
Ant1		2437	Reference	-4.40	-4.40	---	PASS	
			30~1000	-4.40	-59.12	≤-24.4	PASS	
			1000~26500	-4.40	-50.41	≤-24.4	PASS	
Ant2		2437	Reference	-5.68	-5.68	---	PASS	
			30~1000	-5.68	-59.72	≤-25.68	PASS	
			1000~26500	-5.68	-50.1	≤-25.68	PASS	
Ant1		2462	Reference	-4.58	-4.58	---	PASS	
			30~1000	-4.58	-59.76	≤-24.58	PASS	
			1000~26500	-4.58	-50.3	≤-24.58	PASS	
Ant2		2462	Reference	-8.34	-8.34	---	PASS	
			30~1000	-8.34	-59.84	≤-28.34	PASS	
			1000~26500	-8.34	-50.66	≤-28.34	PASS	
11N20MIMO		Ant1	2412	Reference	-6.29	-6.29	---	PASS
				30~1000	-6.29	-59.8	≤-26.29	PASS
				1000~26500	-6.29	-50.07	≤-26.29	PASS
		Ant2	2412	Reference	-8.09	-8.09	---	PASS
				30~1000	-8.09	-59.69	≤-28.09	PASS

	Ant1	2437	1000~26500	-8.09	-49.81	≤-28.09	PASS
			Reference	-6.36	-6.36	---	PASS
			30~1000	-6.36	-58.99	≤-26.36	PASS
	Ant2	2437	1000~26500	-6.36	-50.21	≤-26.36	PASS
			Reference	-8.99	-8.99	---	PASS
			30~1000	-8.99	-60.75	≤-28.99	PASS
	Ant1	2462	1000~26500	-8.99	-50.3	≤-28.99	PASS
			Reference	-6.64	-6.64	---	PASS
			30~1000	-6.64	-59.86	≤-26.64	PASS
	Ant2	2462	1000~26500	-6.64	-50.07	≤-26.64	PASS
			Reference	-9.23	-9.23	---	PASS
			30~1000	-9.23	-58.84	≤-29.23	PASS
11N40MIMO	Ant1	2422	1000~26500	-9.23	-45.09	≤-29.23	PASS
			Reference	-9.01	-9.01	---	PASS
			30~1000	-9.01	-60.11	≤-29.01	PASS
	Ant2	2422	1000~26500	-9.01	-50.3	≤-29.01	PASS
			Reference	-11.43	-11.43	---	PASS
			30~1000	-11.43	-59.79	≤-31.43	PASS
	Ant1	2437	1000~26500	-11.43	-50.47	≤-31.43	PASS
			Reference	-9.58	-9.58	---	PASS
			30~1000	-9.58	-60.28	≤-29.58	PASS
	Ant2	2437	1000~26500	-9.58	-49.5	≤-29.58	PASS
			Reference	-11.77	-11.77	---	PASS
			30~1000	-11.77	-59.71	≤-31.77	PASS
Ant1	2452	1000~26500	-11.77	-50.04	≤-31.77	PASS	
		Reference	-9.70	-9.70	---	PASS	
		30~1000	-9.70	-58	≤-29.7	PASS	
Ant2	2452	1000~26500	-9.70	-49.61	≤-29.7	PASS	
		Reference	-11.96	-11.96	---	PASS	
		30~1000	-11.96	-58.99	≤-31.96	PASS	
			1000~26500	-11.96	-49.64	≤-31.96	PASS

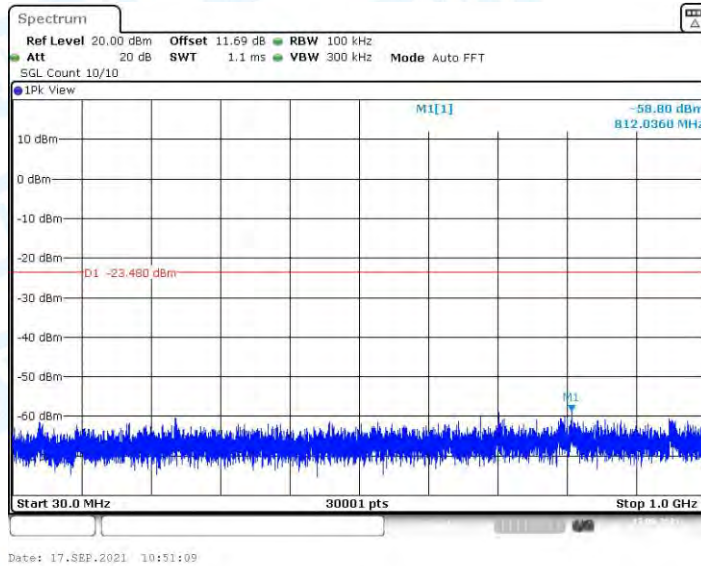
6.2. Test Graphs



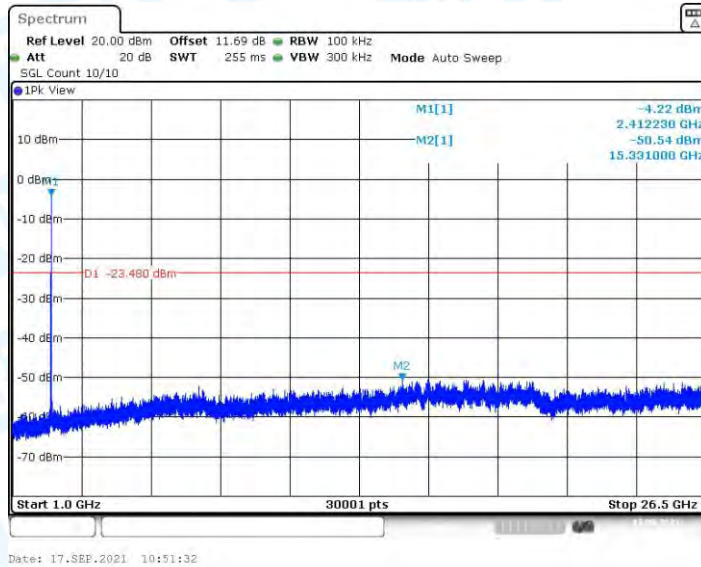
11B-CDD_Ant2_2412_0~Reference



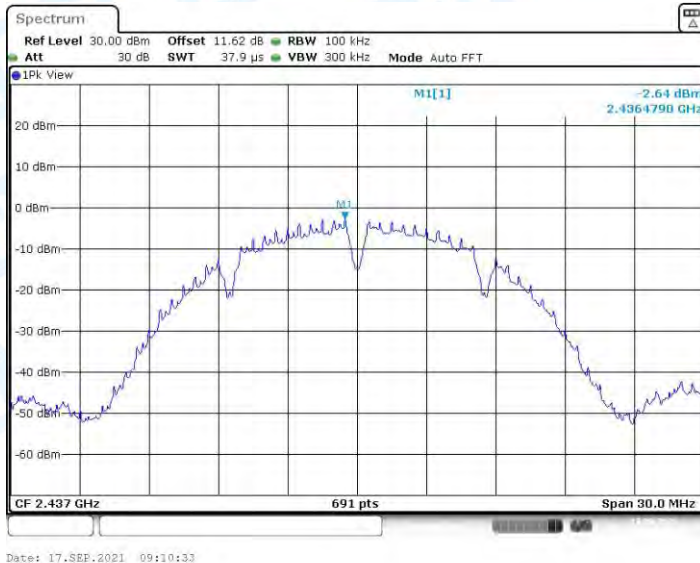
11B-CDD_Ant2_2412_30~1000



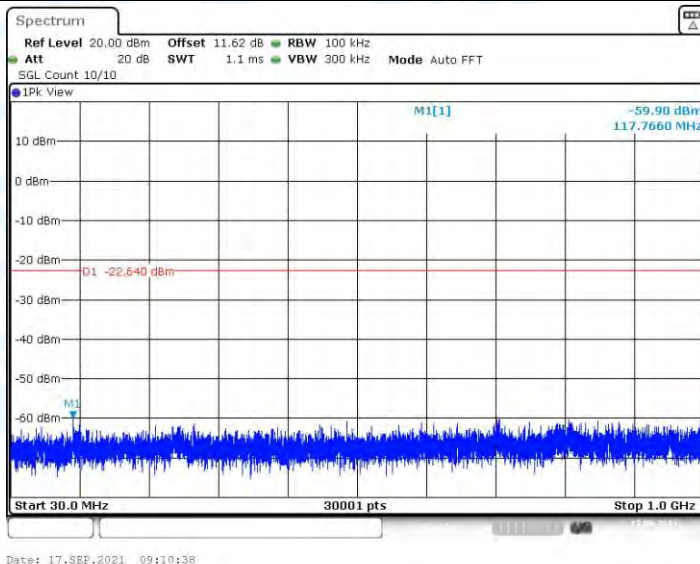
11B-CDD_Ant2_2412_1000~26500



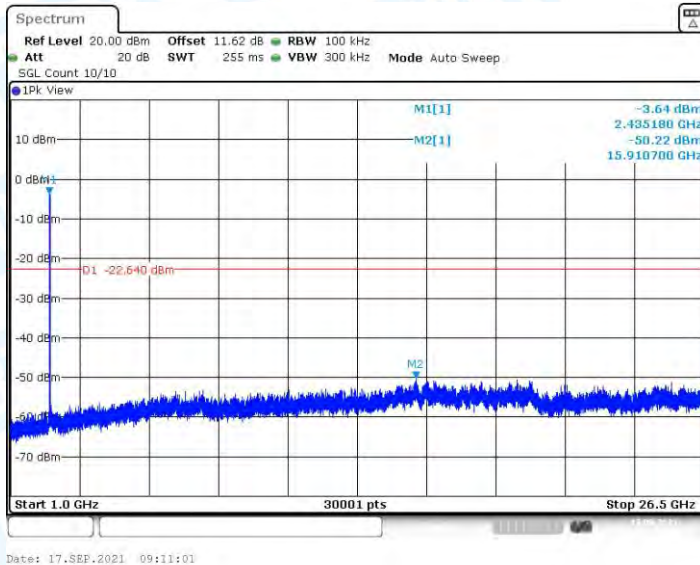
11B-CDD_Ant1_2437_0~Reference



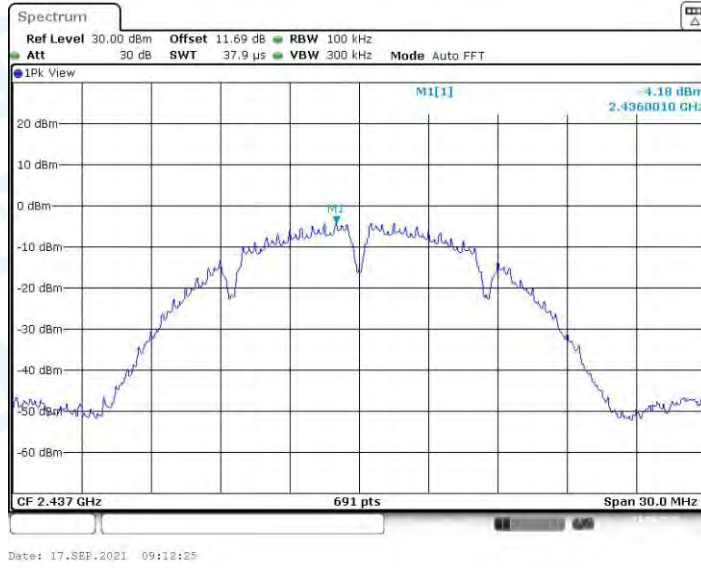
11B-CDD_Ant1_2437_30~1000



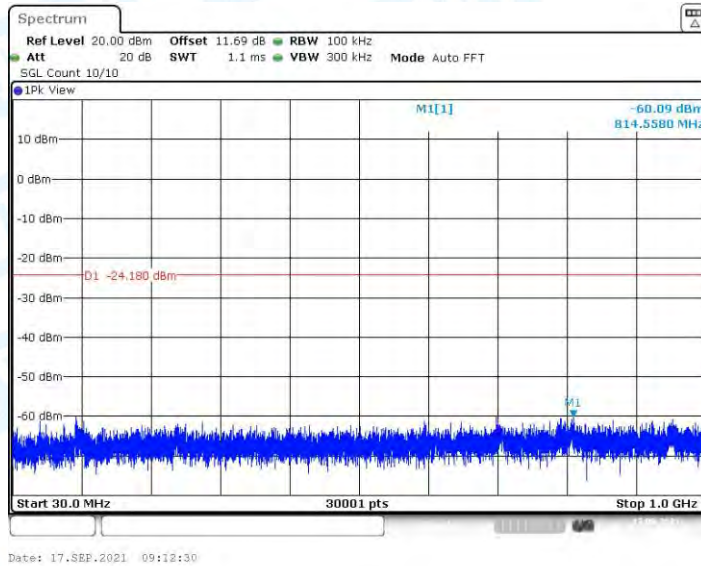
11B-CDD_Ant1_2437_1000~26500



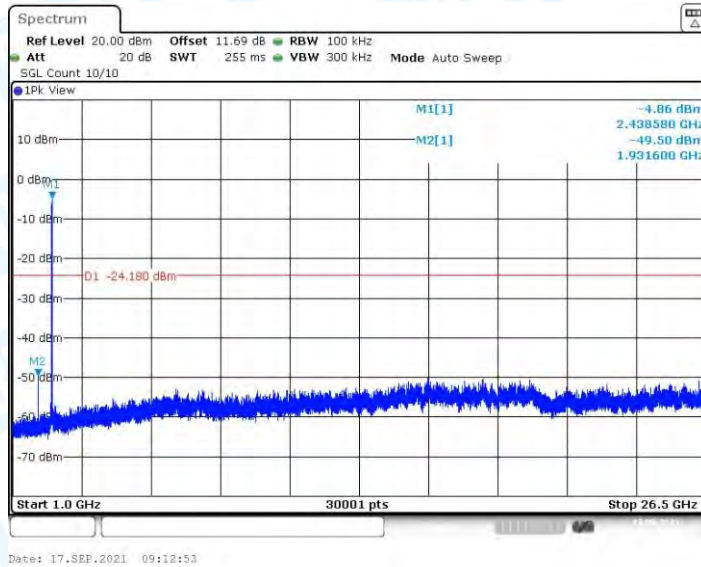
11B-CDD_Ant2_2437_0~Reference



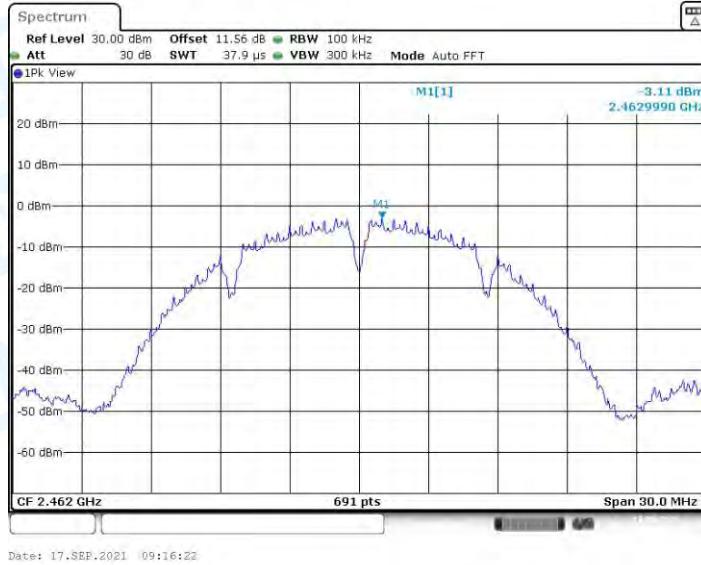
11B-CDD_Ant2_2437_30~1000



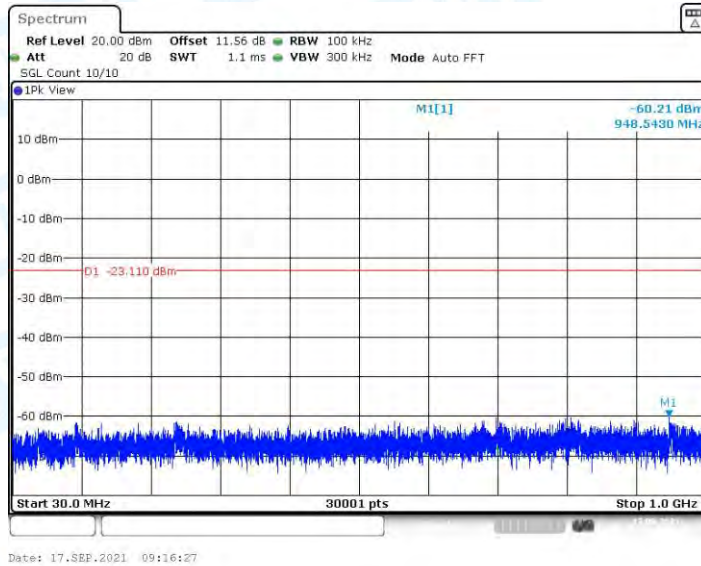
11B-CDD_Ant2_2437_1000~26500



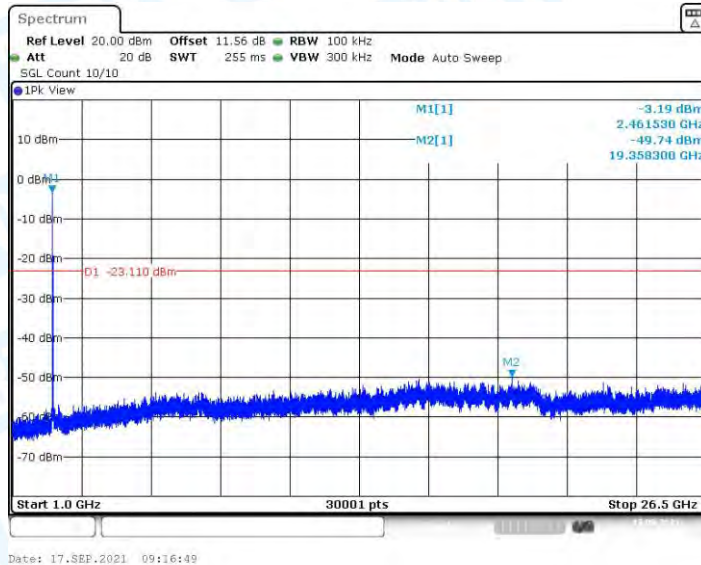
11B-CDD_Ant1_2462_0~Reference



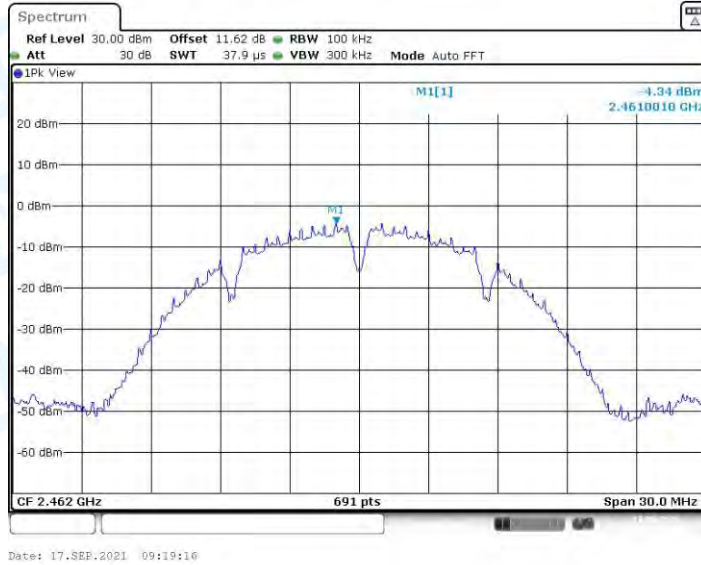
11B-CDD_Ant1_2462_30~1000



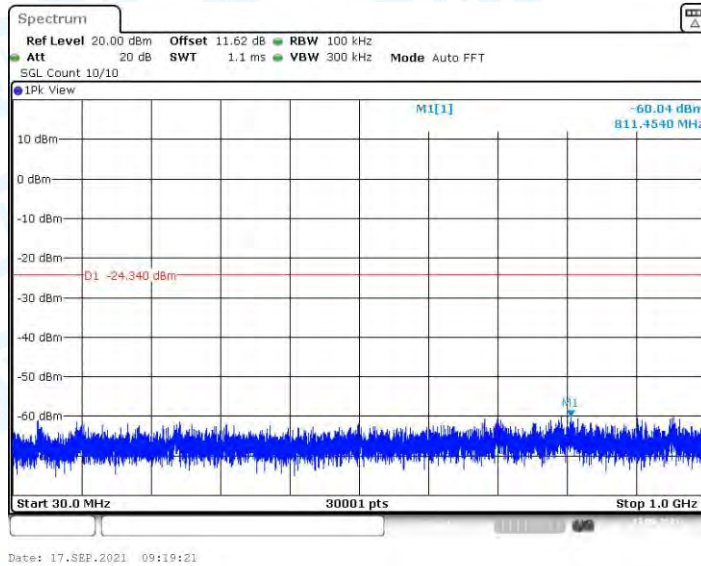
11B-CDD_Ant1_2462_1000~26500



11B-CDD_Ant2_2462_0~Reference



11B-CDD_Ant2_2462_30~1000



11B-CDD_Ant2_2462_1000~26500

