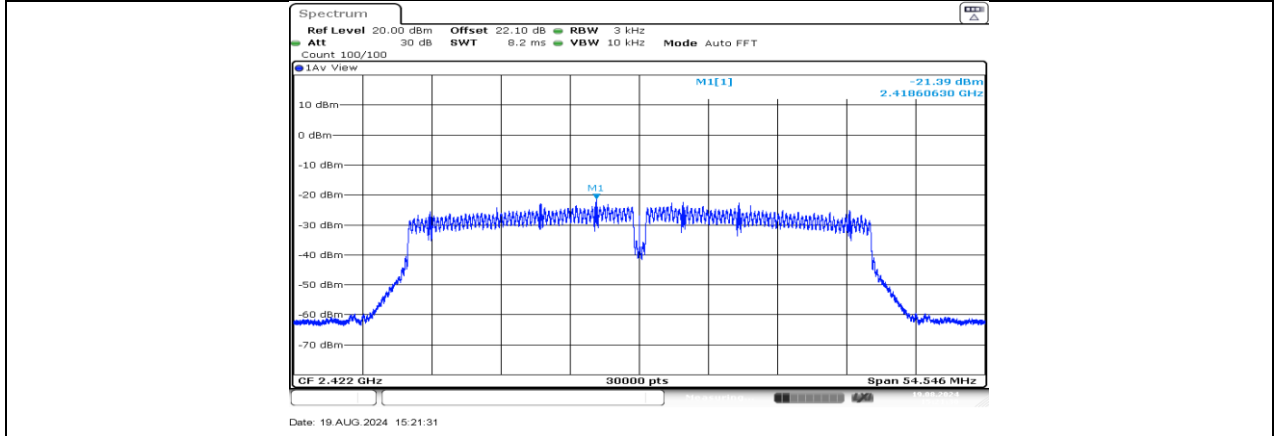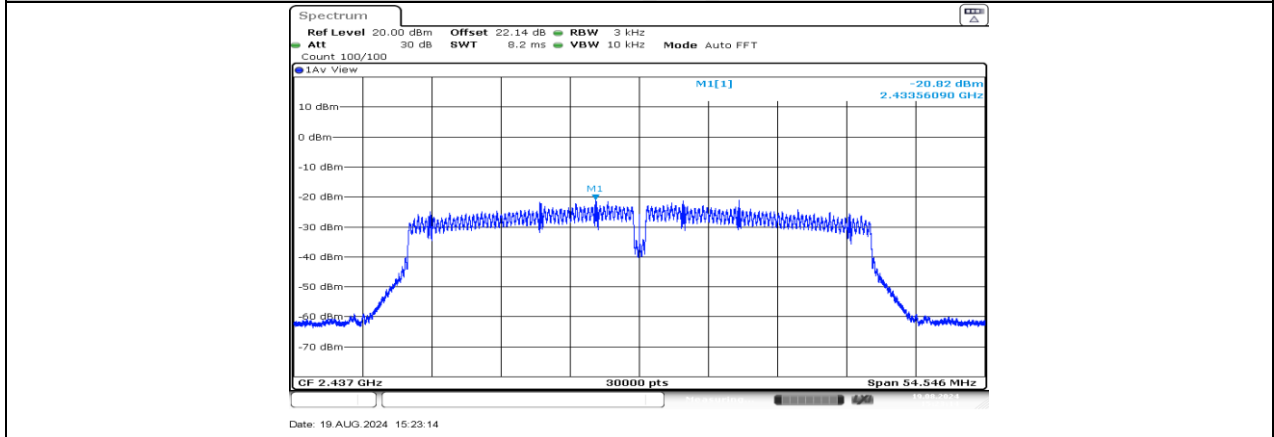11N40MIMO_Ant1_2422

11N40MIMO_Ant2_2422

11N40MIMO_Ant1_2437

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UL Solutions
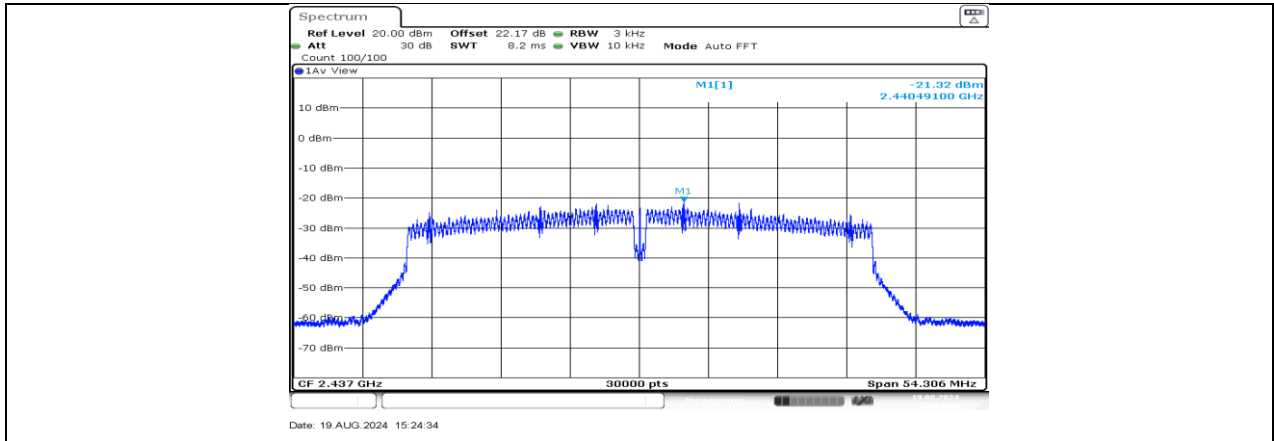
11N40MIMO_Ant2_2437
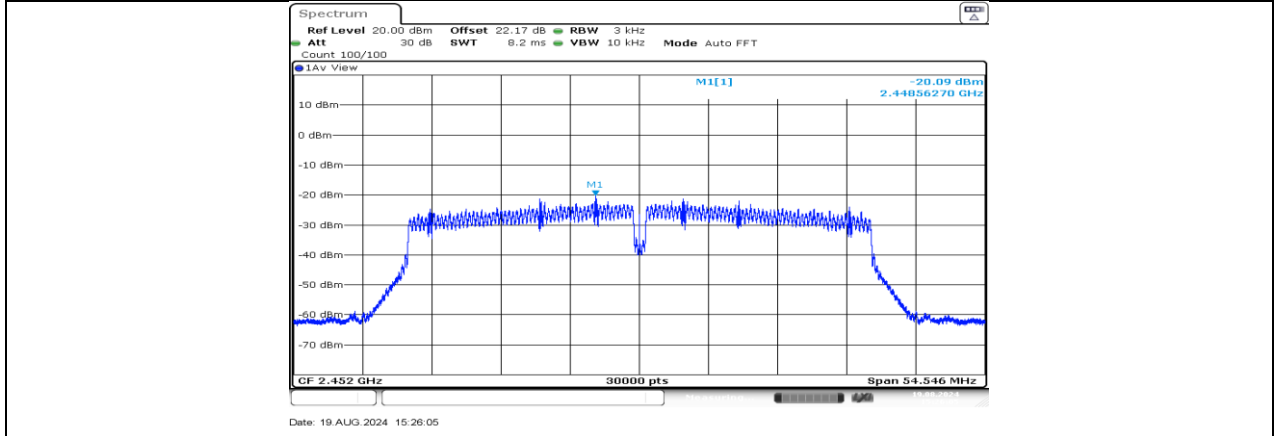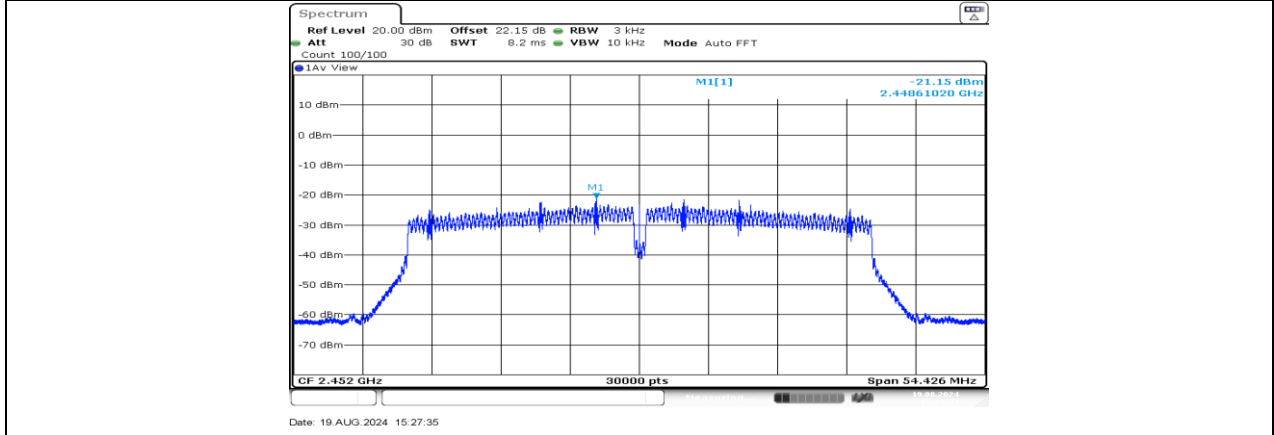

11N40MIMO_Ant1_2452

11N40MIMO_Ant2_2452

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11.5. APPENDIX E: BAND EDGE MEASUREMENTS
11.5.1. Test Result

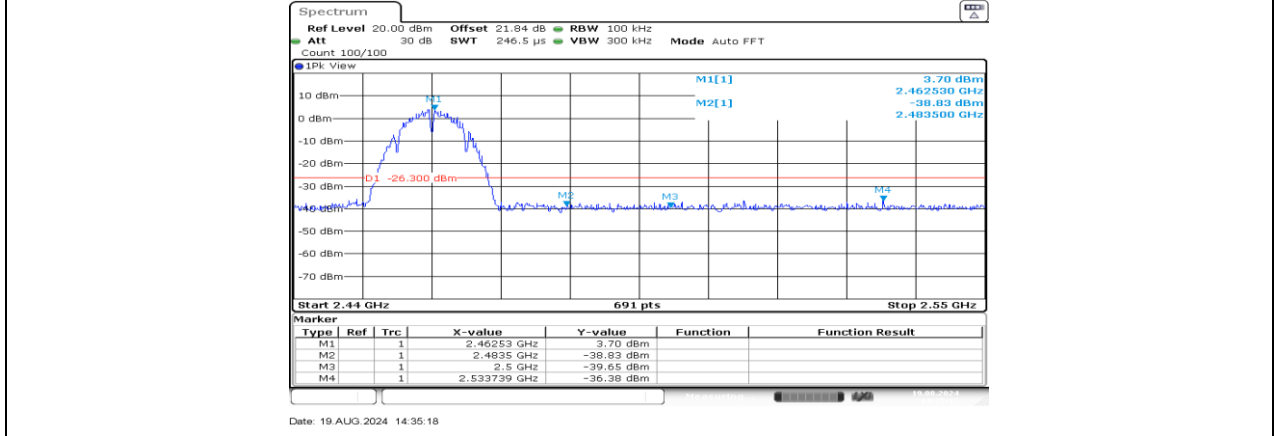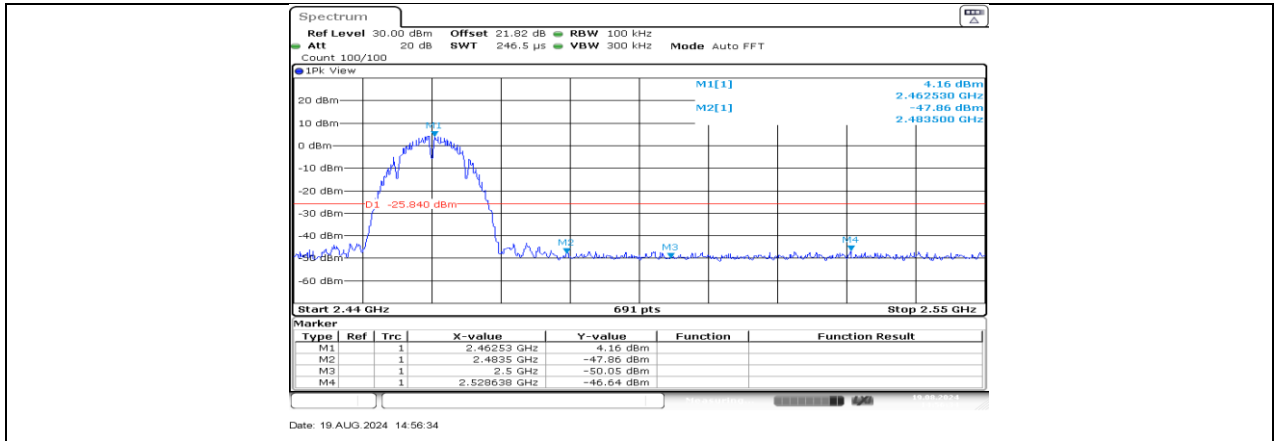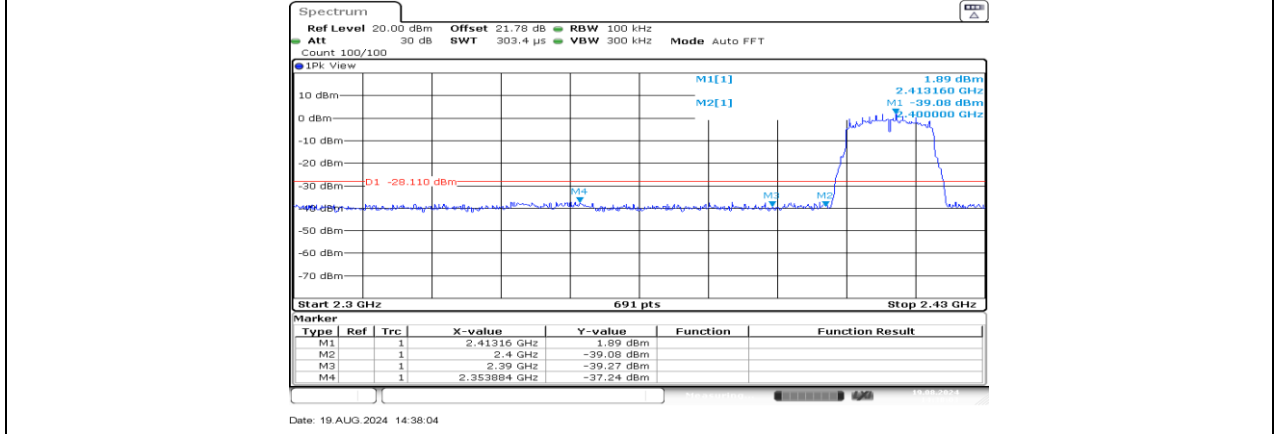| Test Mode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.15	-36.72	≤-24.85	PASS
	Ant2	Low	2412	5.20	-43.72	≤-24.8	PASS
	Ant1	High	2462	3.70	-36.38	≤-26.3	PASS
	Ant2	High	2462	4.16	-46.64	≤-25.84	PASS
11G	Ant1	Low	2412	1.89	-37.24	≤-28.11	PASS
	Ant2	Low	2412	2.77	-41.96	≤-27.23	PASS
	Ant1	High	2462	2.98	-36.94	≤-27.02	PASS
	Ant2	High	2462	2.66	-46.01	≤-27.34	PASS
11N20MIMO	Ant1	Low	2412	3.14	-41.14	≤-26.86	PASS
	Ant2	Low	2412	1.82	-42.18	≤-28.18	PASS
	Ant1	High	2462	3.30	-46.05	≤-26.7	PASS
	Ant2	High	2462	2.41	-46.59	≤-27.59	PASS
11N40MIMO	Ant1	Low	2422	0.36	-40.43	≤-29.64	PASS
	Ant2	Low	2422	-0.78	-40.53	≤-30.78	PASS
	Ant1	High	2452	0.91	-45.71	≤-29.09	PASS
	Ant2	High	2452	-1.28	-45.03	≤-31.28	PASS

11.5.2. Test Graphs
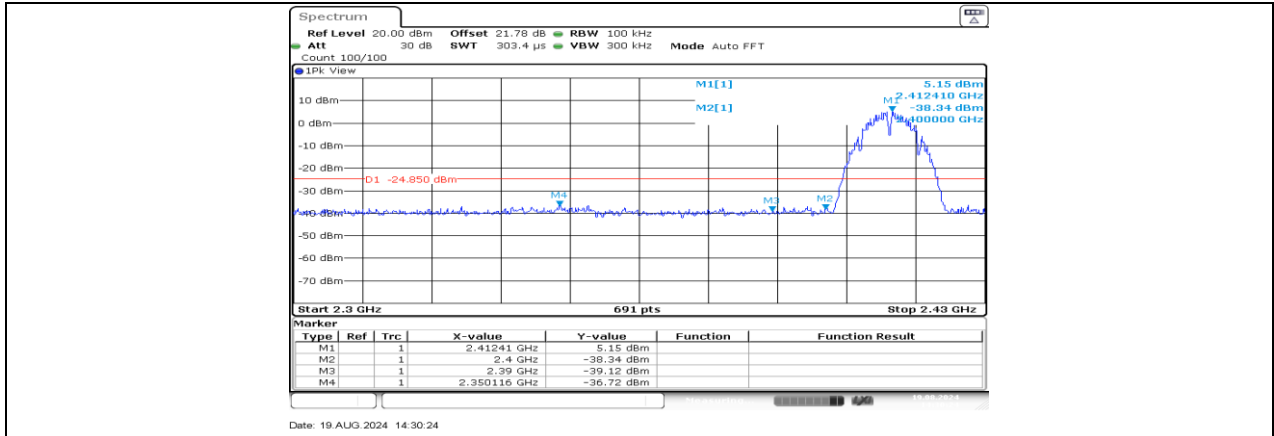
11B_Ant1_Low_2412
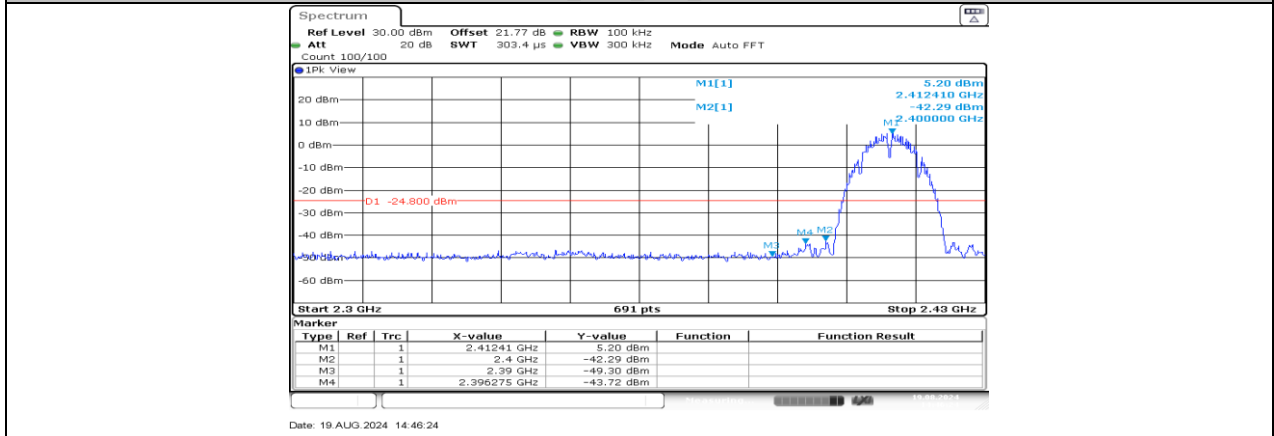
11B_Ant2_Low_2412
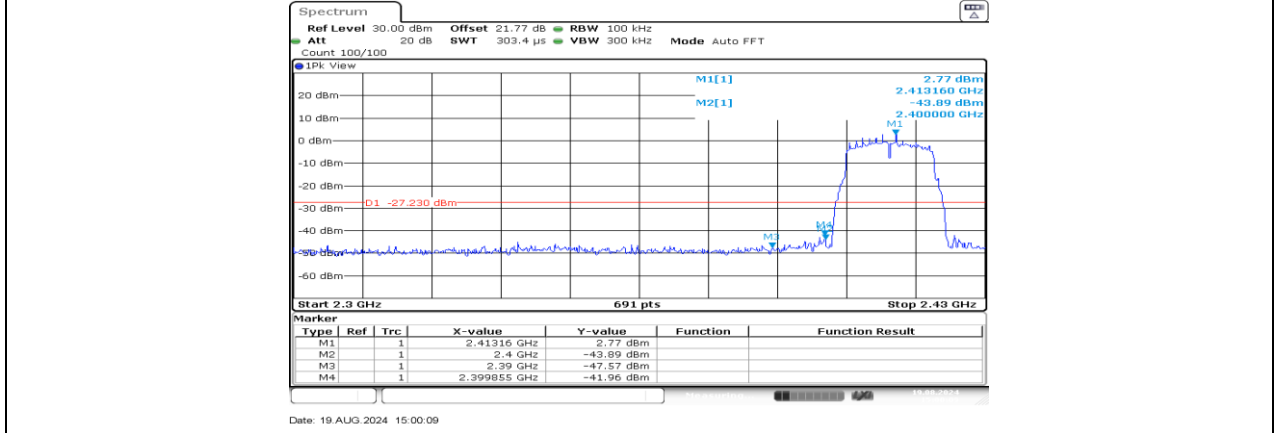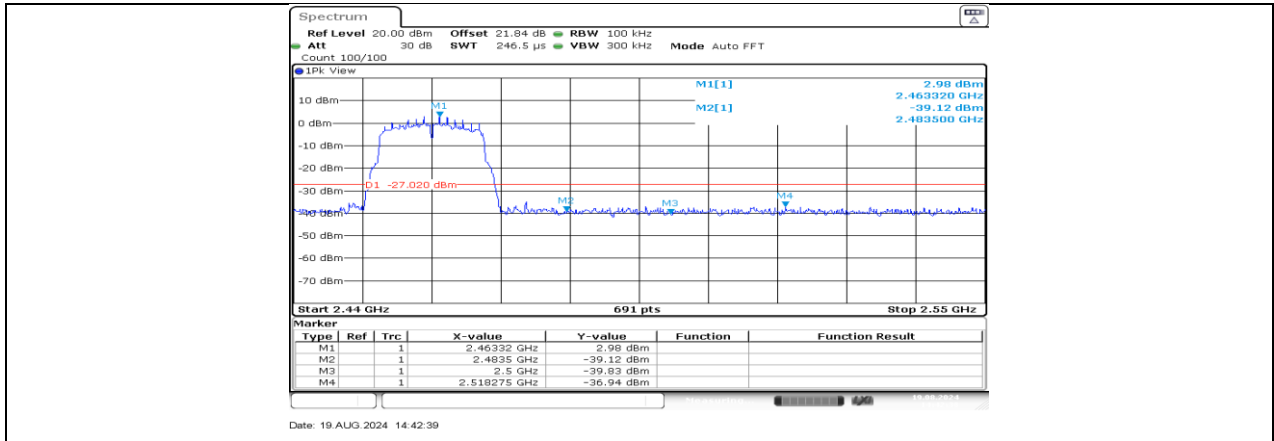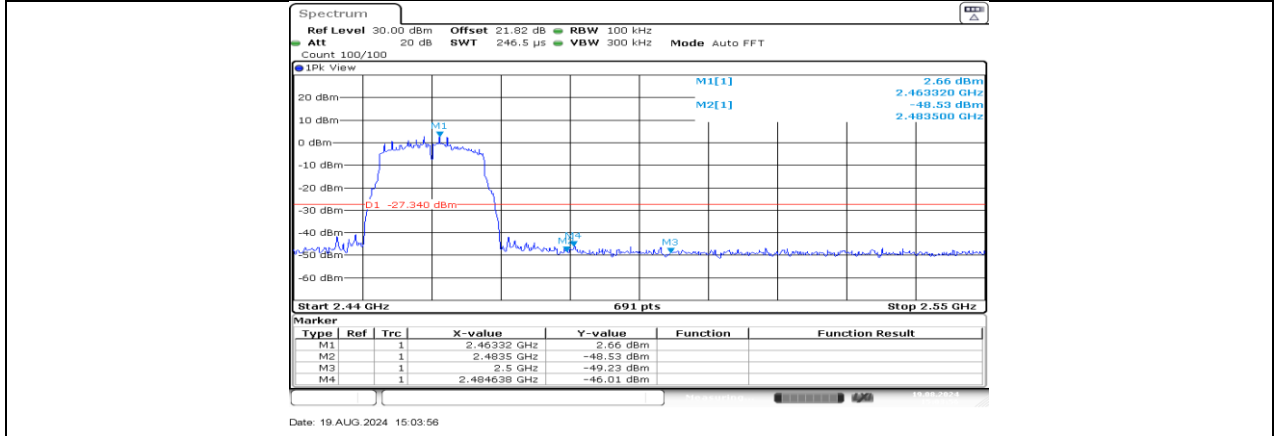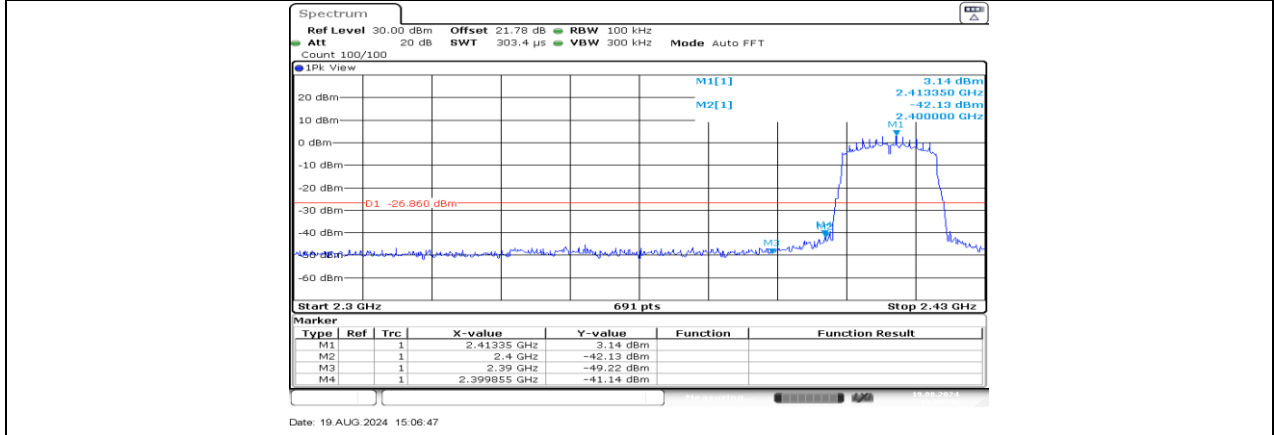

11B_Ant1_High_2462

11B_Ant2_High_2462

11G_Ant1_Low_2412

11G_Ant2_Low_2412

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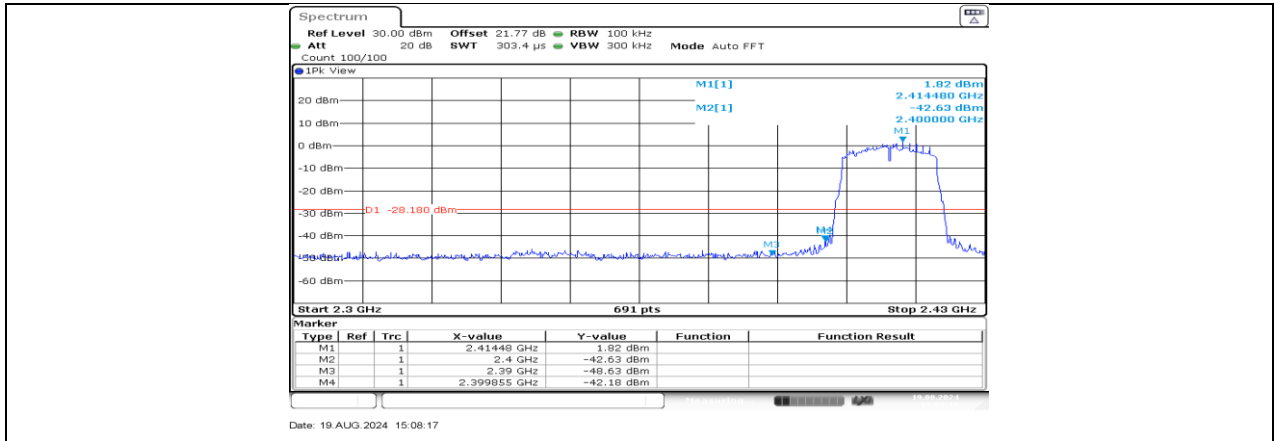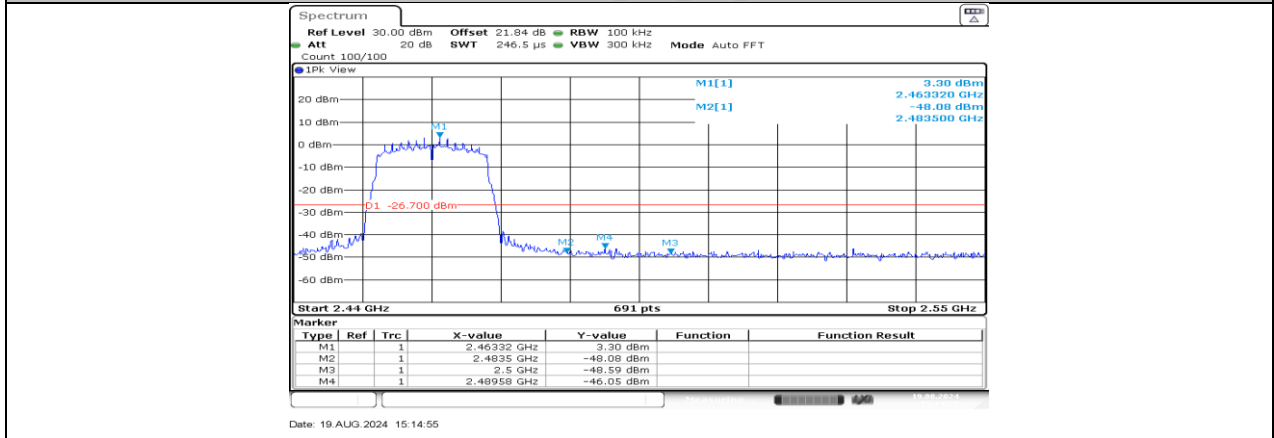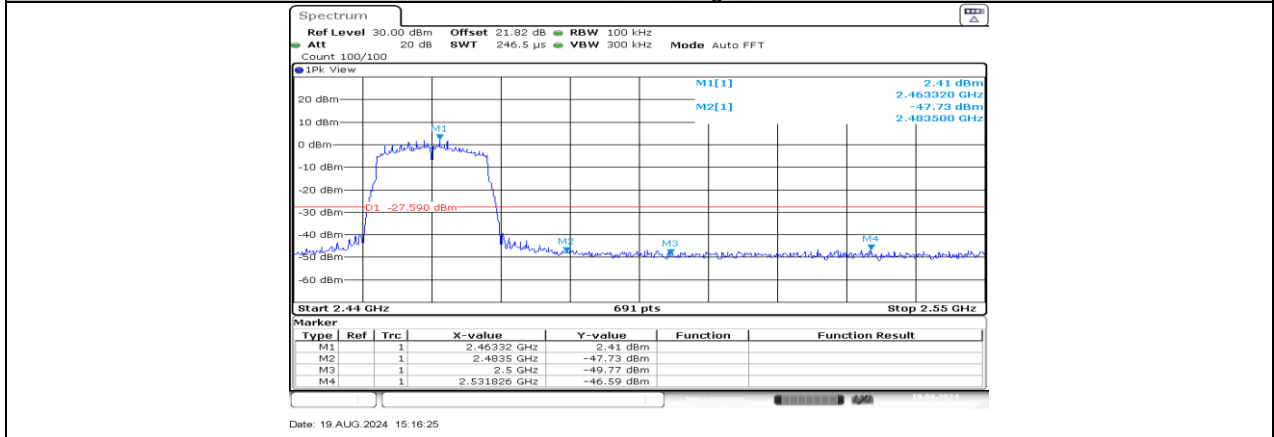
11G_Ant1_High_2462
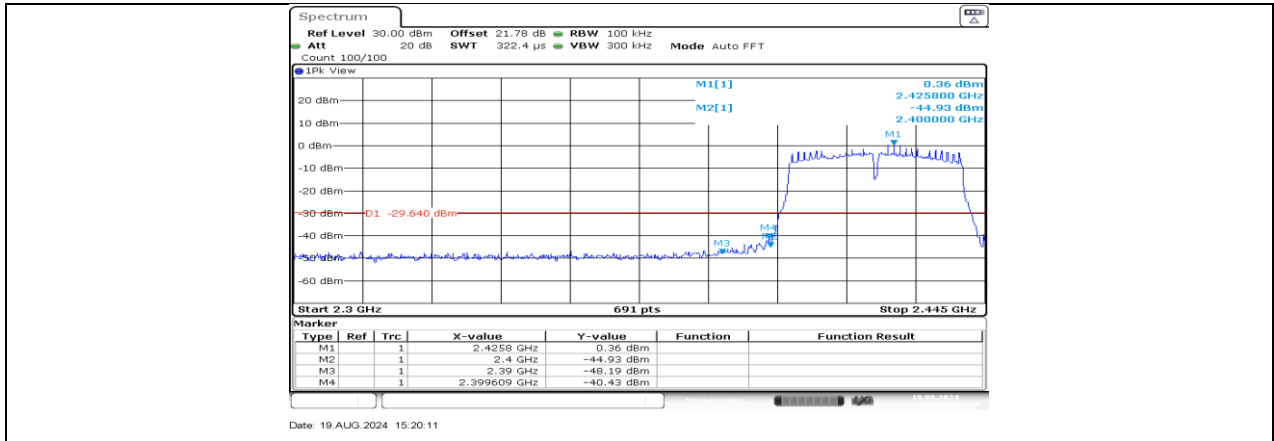

11G_Ant2_High_2462

11N20MIMO_Ant1_Low_2412

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11N20MIMO_Ant2_Low_2412

11N20MIMO_Ant1_High_2462

11N20MIMO_Ant2_High_2462

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11N40MIMO_Ant1_Low_2422
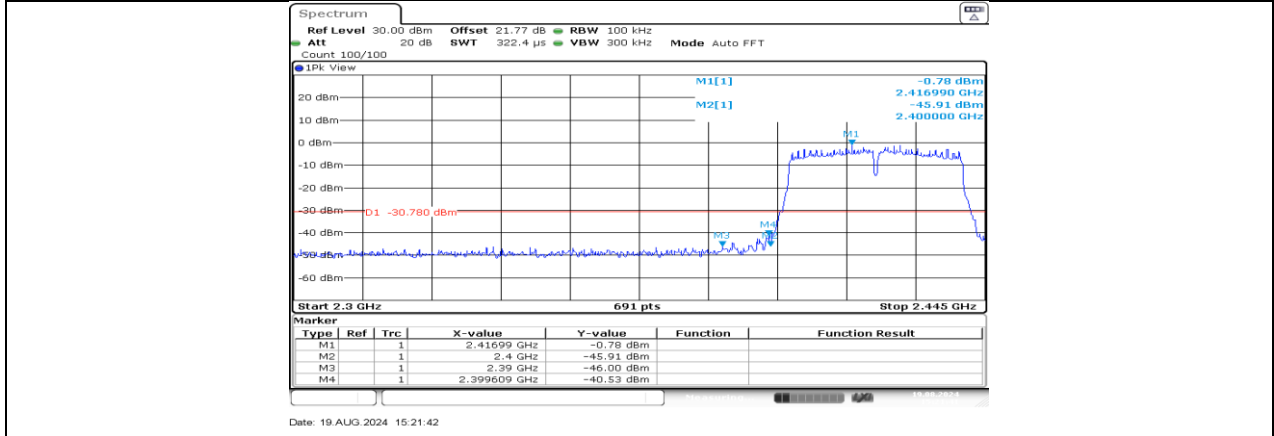
11N40MIMO_Ant2_Low_2422

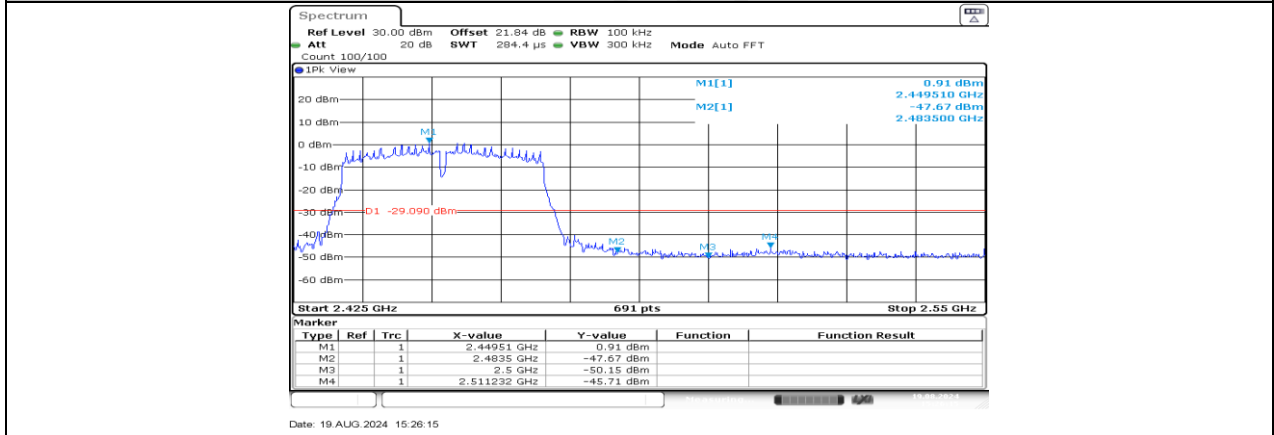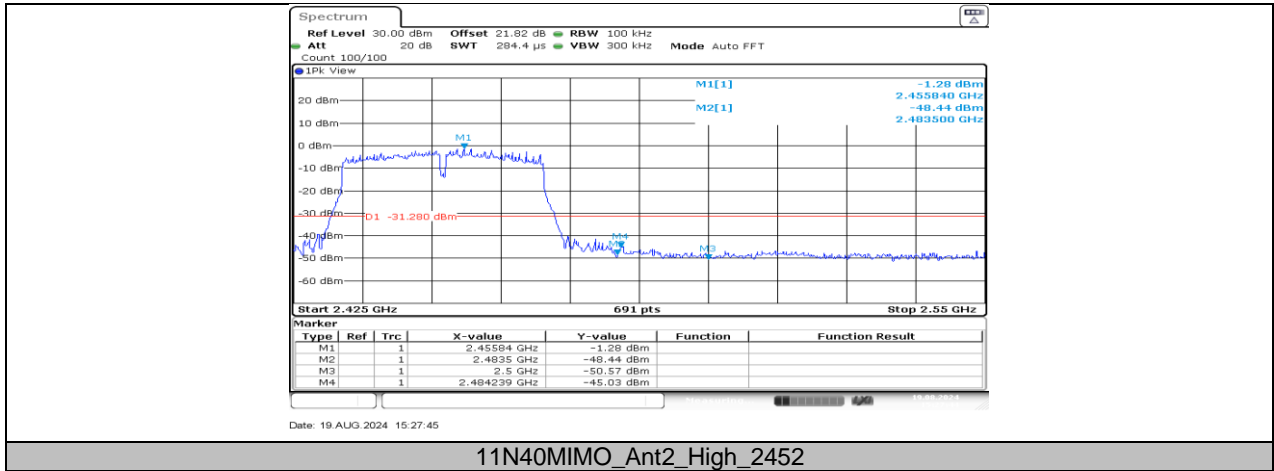11N40MIMO_Ant1_High_2452

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11N40MIMO_Ant2_High_2452

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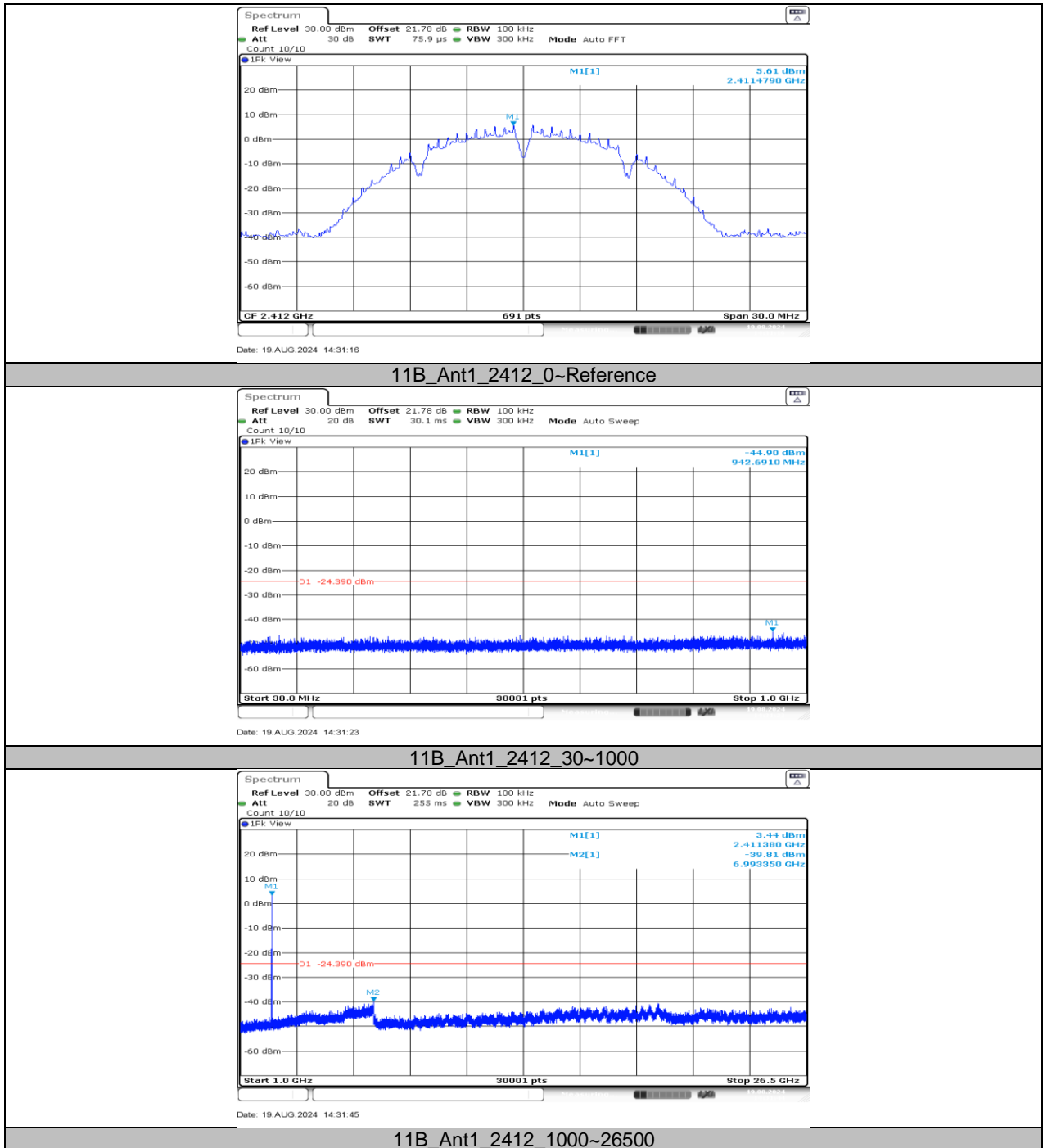
11.6. APPENDIX F: CONDUCTED SPURIOUS EMISSION
11.6.1. Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [Mhz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	5.61	---	PASS
			30~1000	-44.9	≤-24.39	PASS
			1000~26500	-39.81	≤-24.39	PASS
	Ant2	2412	Reference	5.17	---	PASS
			30~1000	-45.6	≤-24.83	PASS
			1000~26500	-40.3	≤-24.83	PASS
	Ant1	2437	Reference	5.29	---	PASS
			30~1000	-45.58	≤-24.71	PASS
			1000~26500	-40.48	≤-24.71	PASS
	Ant2	2437	Reference	5.16	---	PASS
			30~1000	-45.54	≤-24.84	PASS
			1000~26500	-40.02	≤-24.84	PASS
	Ant1	2462	Reference	5.09	---	PASS
			30~1000	-45.15	≤-24.91	PASS
			1000~26500	-40.52	≤-24.91	PASS
	Ant2	2462	Reference	5.18	---	PASS
			30~1000	-44.59	≤-24.82	PASS
			1000~26500	-39.8	≤-24.82	PASS
11G	Ant1	2412	Reference	2.13	---	PASS
			30~1000	-44.76	≤-27.87	PASS
			1000~26500	-40.66	≤-27.87	PASS
	Ant2	2412	Reference	2.78	---	PASS
			30~1000	-45.9	≤-27.22	PASS
			1000~26500	-40.09	≤-27.22	PASS
	Ant1	2437	Reference	2.83	---	PASS
			30~1000	-45.92	≤-27.17	PASS
			1000~26500	-40.45	≤-27.17	PASS
	Ant2	2437	Reference	2.75	---	PASS
			30~1000	-45.84	≤-27.25	PASS
			1000~26500	-40.73	≤-27.25	PASS
	Ant1	2462	Reference	3.00	---	PASS
			30~1000	-45.44	≤-27	PASS
			1000~26500	-40.5	≤-27	PASS
	Ant2	2462	Reference	2.64	---	PASS
			30~1000	-44.94	≤-27.36	PASS
			1000~26500	-40.32	≤-27.36	PASS
11N20MIMO	Ant1	2412	Reference	3.08	---	PASS
			30~1000	-45.6	≤-26.92	PASS
			1000~26500	-40.69	≤-26.92	PASS
	Ant2	2412	Reference	2.53	---	PASS
			30~1000	-45.8	≤-27.47	PASS
			1000~26500	-39.93	≤-27.47	PASS
	Ant1	2437	Reference	3.19	---	PASS
			30~1000	-45.71	≤-26.81	PASS
			1000~26500	-40.8	≤-26.81	PASS
	Ant2	2437	Reference	2.44	---	PASS
			30~1000	-45.7	≤-27.56	PASS
			1000~26500	-40.44	≤-27.56	PASS
	Ant1	2462	Reference	3.35	---	PASS
			30~1000	-45.46	≤-26.65	PASS
			1000~26500	-40.29	≤-26.65	PASS
	Ant2	2462	Reference	2.51	---	PASS
			30~1000	-46.01	≤-27.49	PASS
			1000~26500	-40.53	≤-27.49	PASS
11N40MIMO	Ant1	2422	Reference	0.49	---	PASS

			30~1000	-45.88	≤-29.51	PASS
			1000~26500	-40.03	≤-29.51	PASS
	Ant2	2422	Reference	-0.15	---	PASS
			30~1000	-45.92	≤-30.15	PASS
			1000~26500	-40.5	≤-30.15	PASS
	Ant1	2437	Reference	0.56	---	PASS
			30~1000	-45.27	≤-29.44	PASS
			1000~26500	-40.11	≤-29.44	PASS
	Ant2	2437	Reference	0.29	---	PASS
			30~1000	-45.34	≤-29.71	PASS
			1000~26500	-40.28	≤-29.71	PASS
	Ant1	2452	Reference	0.16	---	PASS
			30~1000	-44.63	≤-29.84	PASS
			1000~26500	-39.91	≤-29.84	PASS
	Ant2	2452	Reference	0.03	---	PASS
			30~1000	-45.2	≤-29.97	PASS
			1000~26500	-40.68	≤-29.97	PASS

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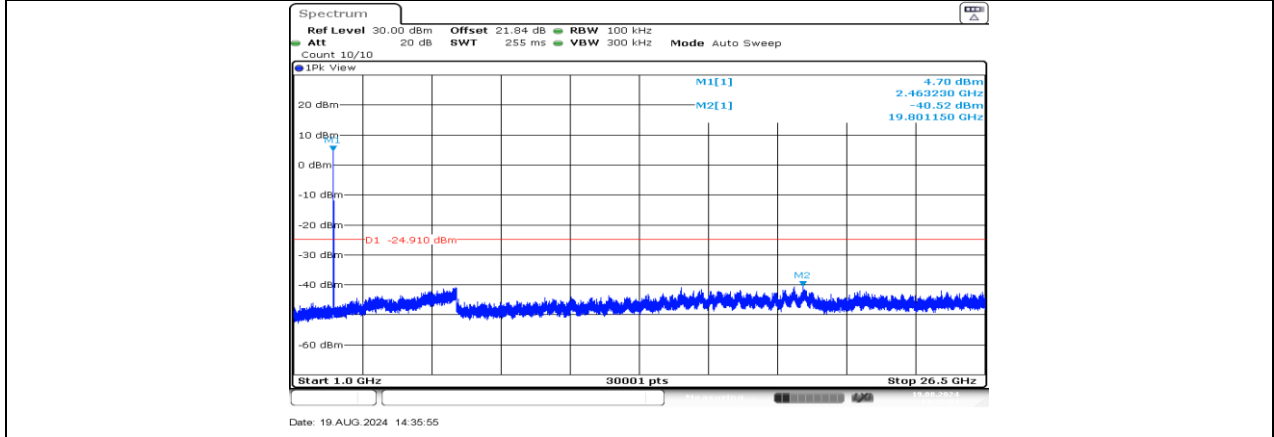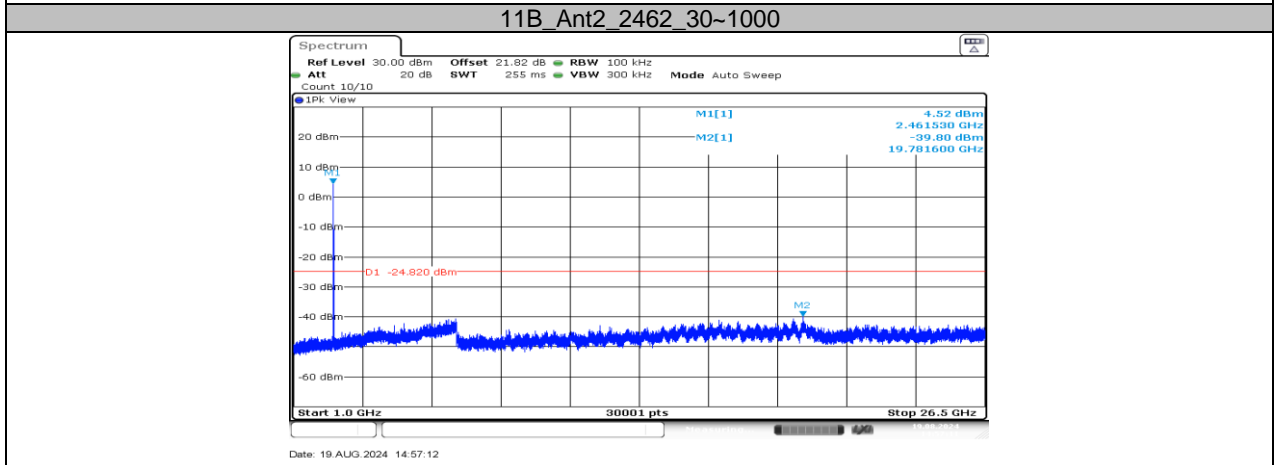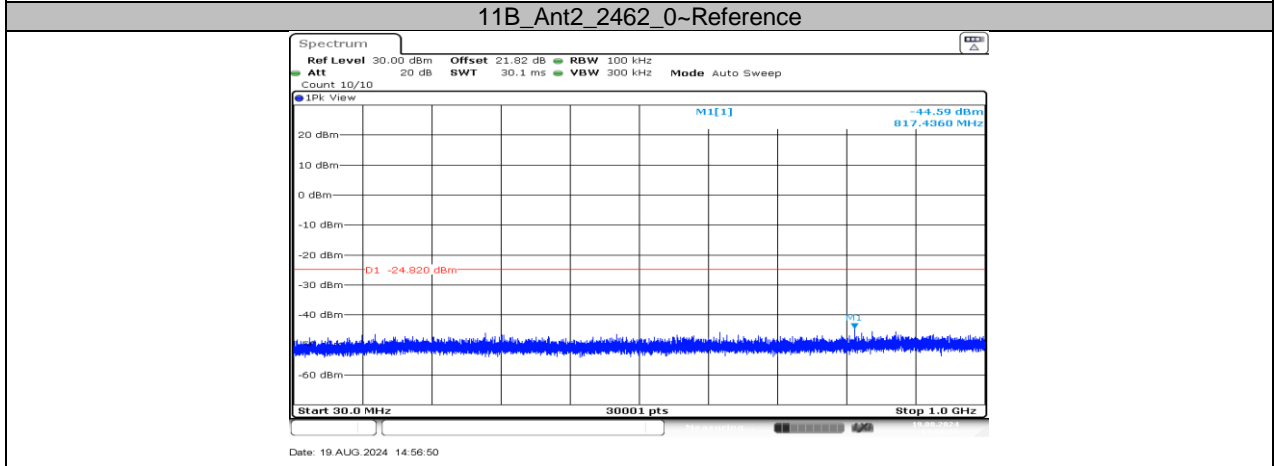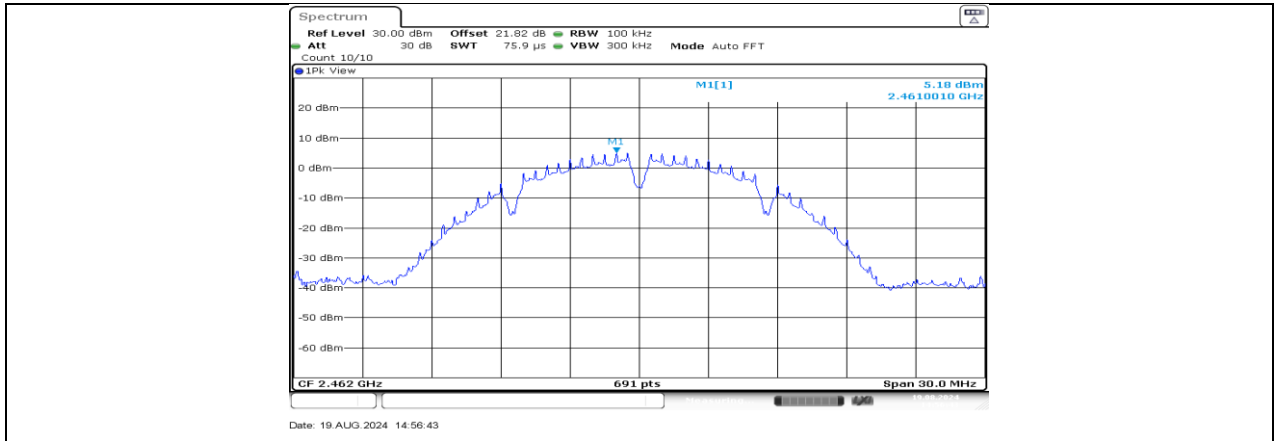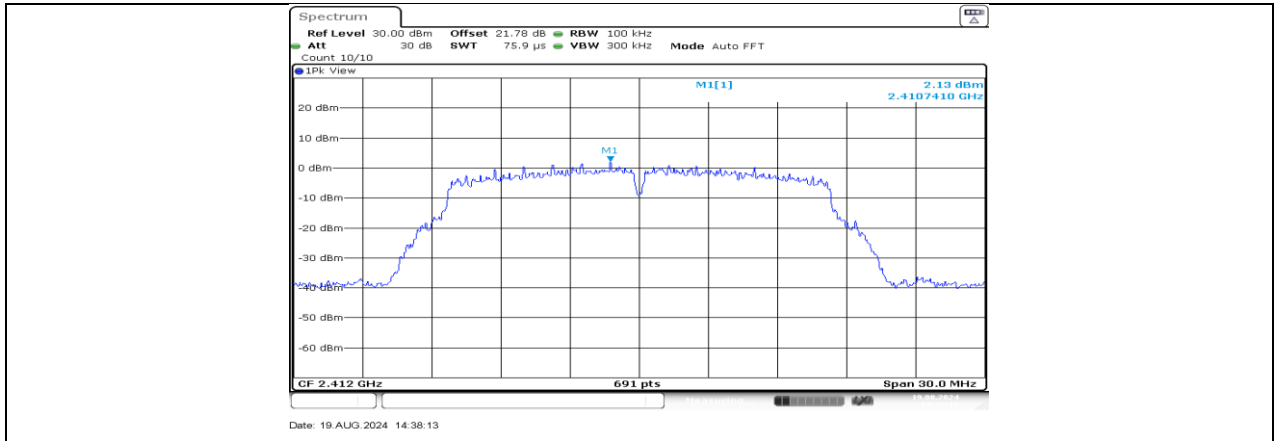
11.6.2. Test Graphs
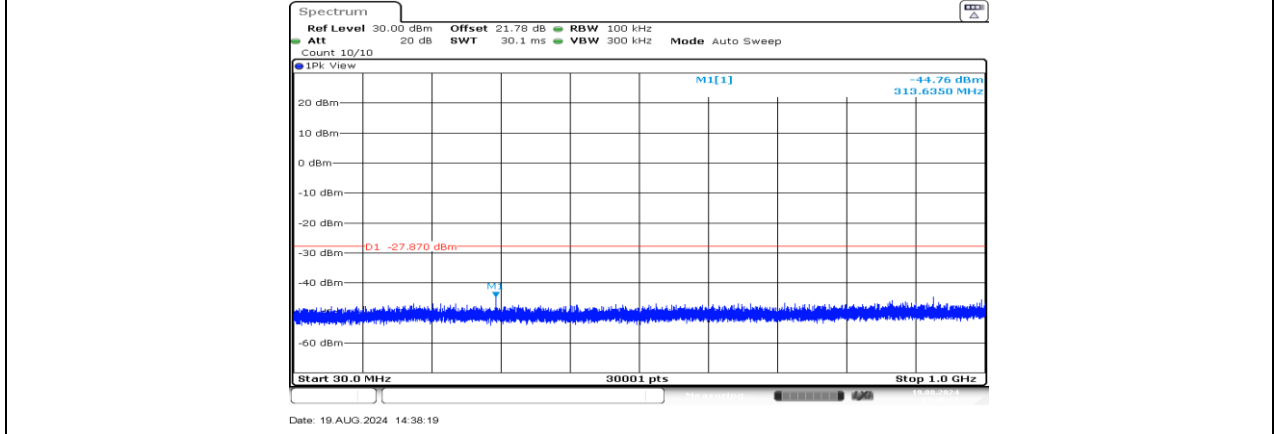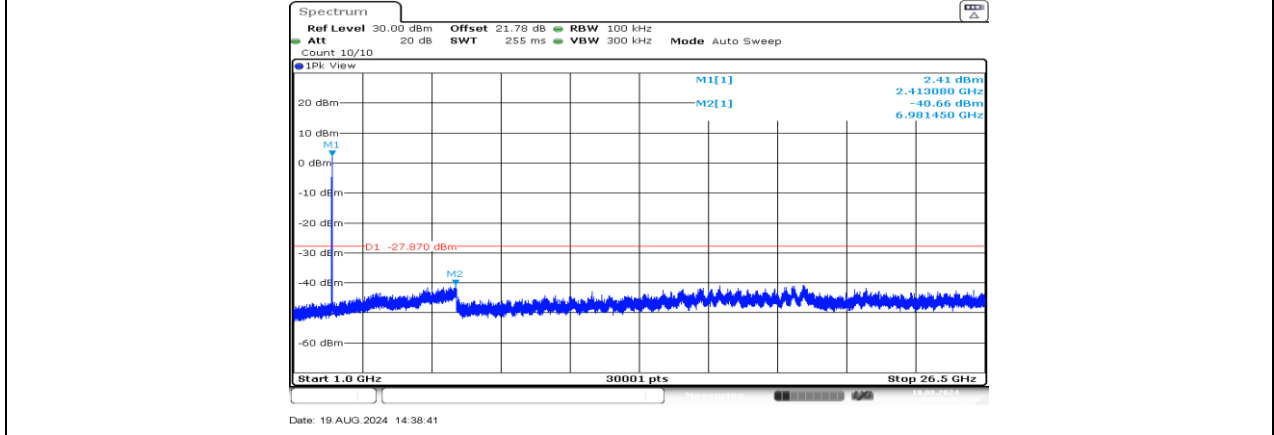

11B_Ant1_2412_0~Reference
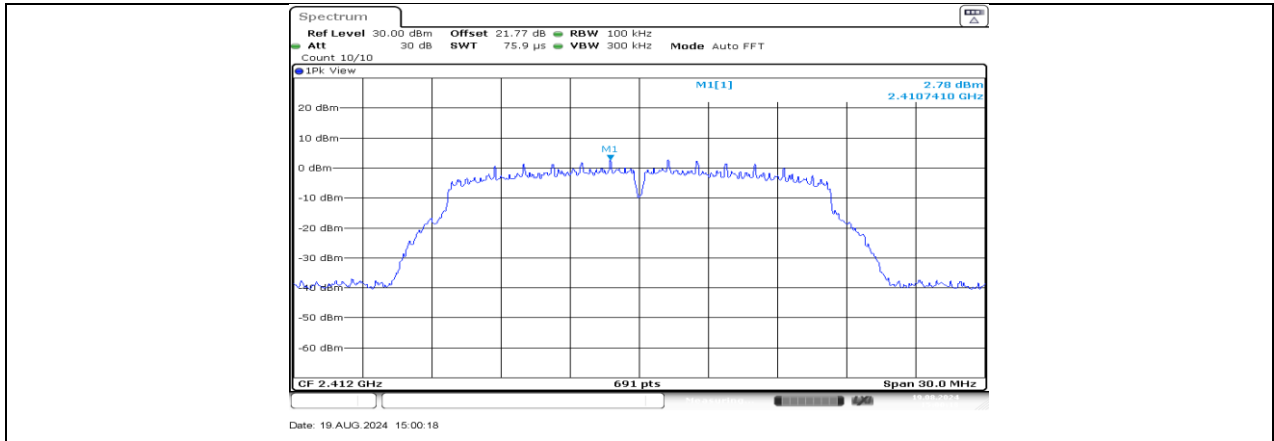

11B_Ant1_2412_30~1000

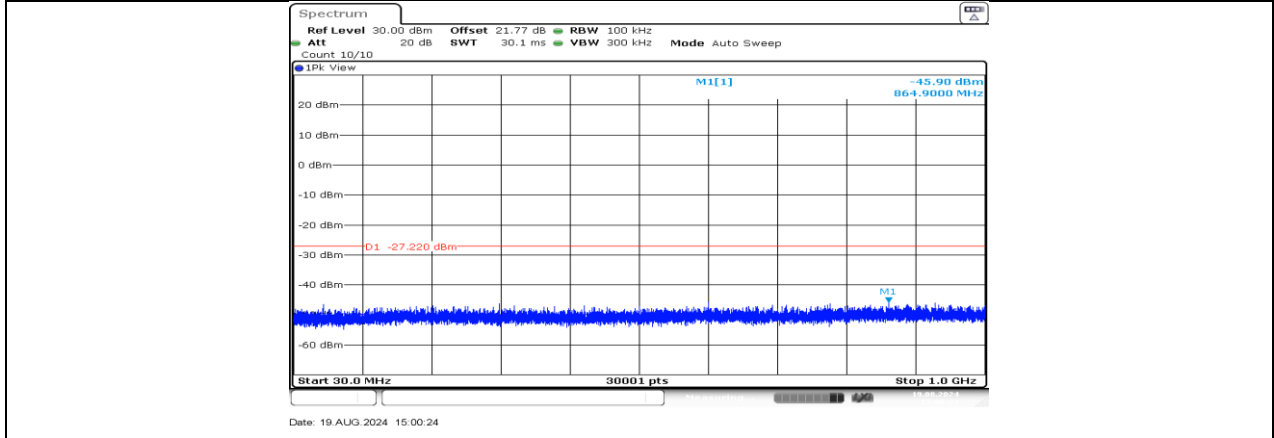

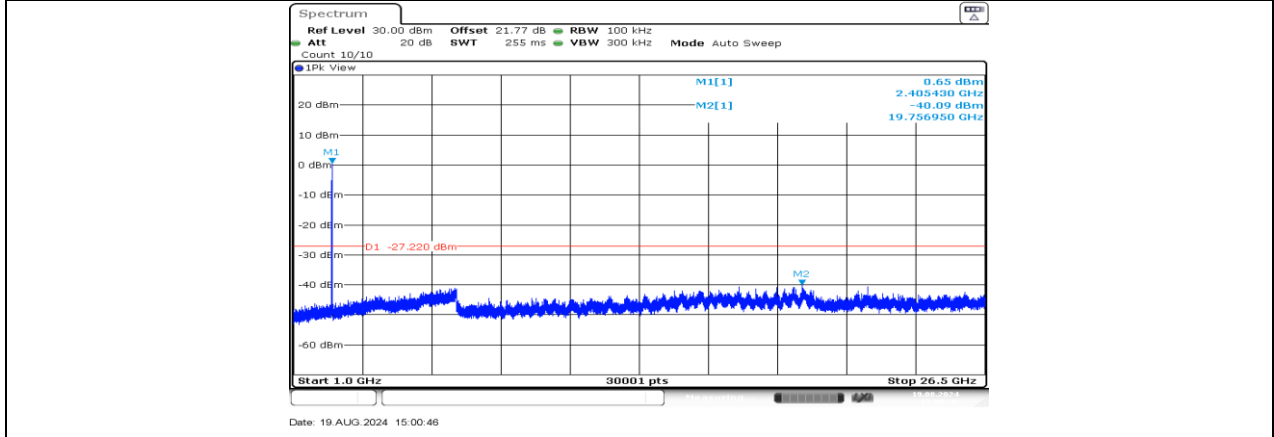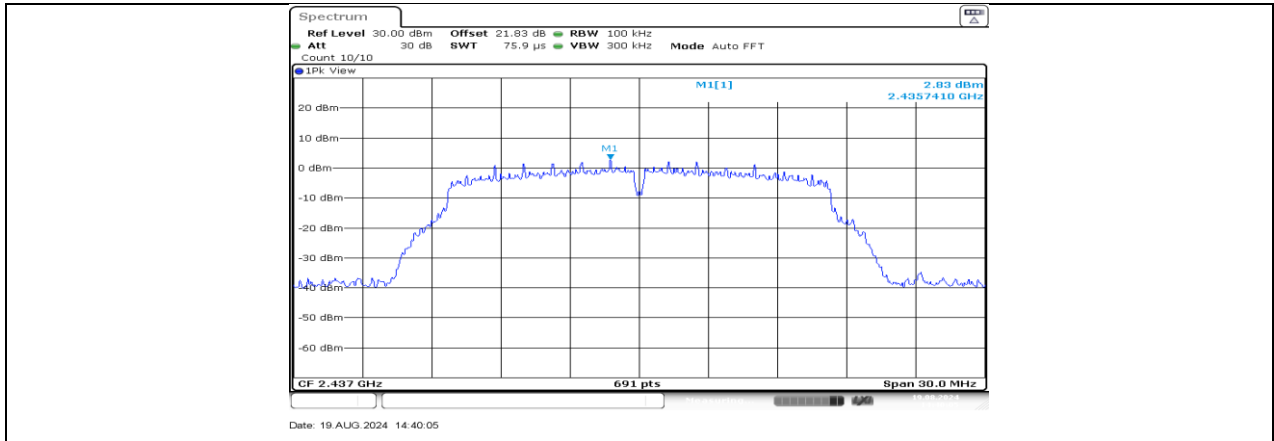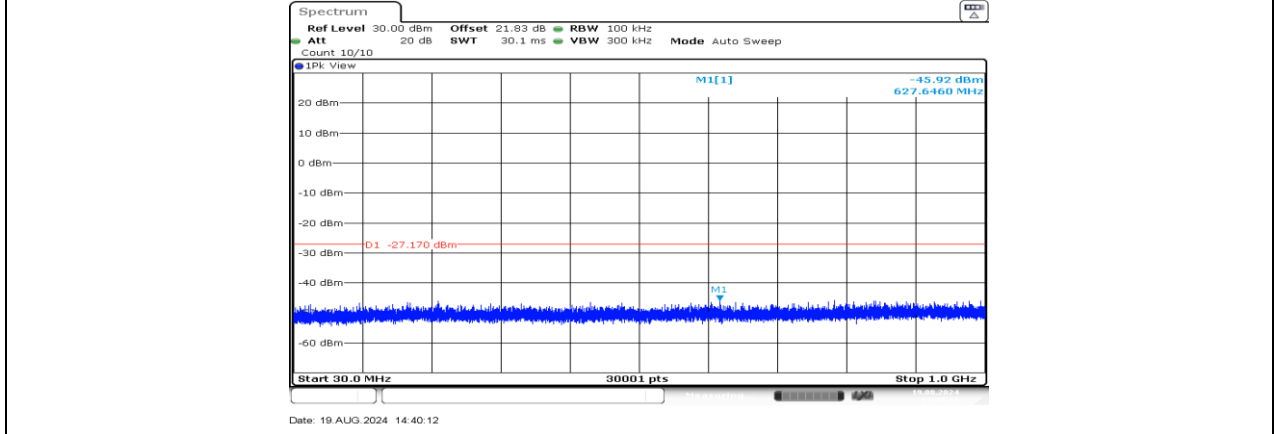11B_Ant1_2412_1000~26500

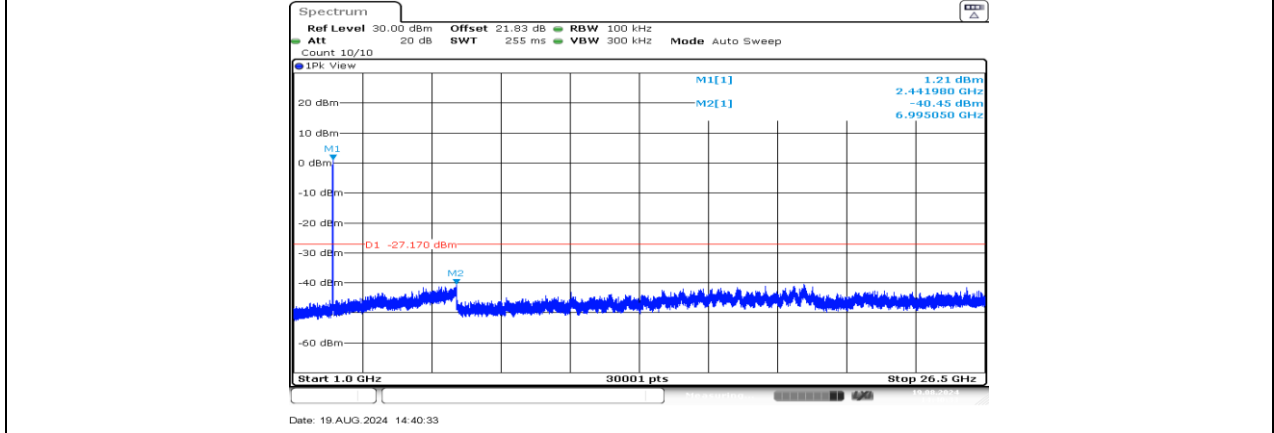11B_Ant2_2412_0~Reference
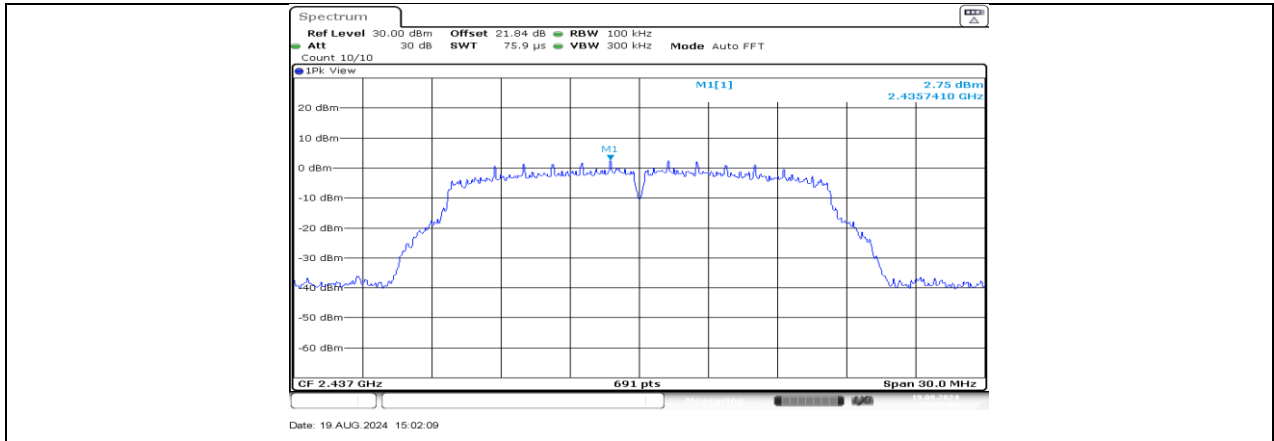

11B_Ant2_2412_30~1000

11B_Ant2_2412_1000~26500

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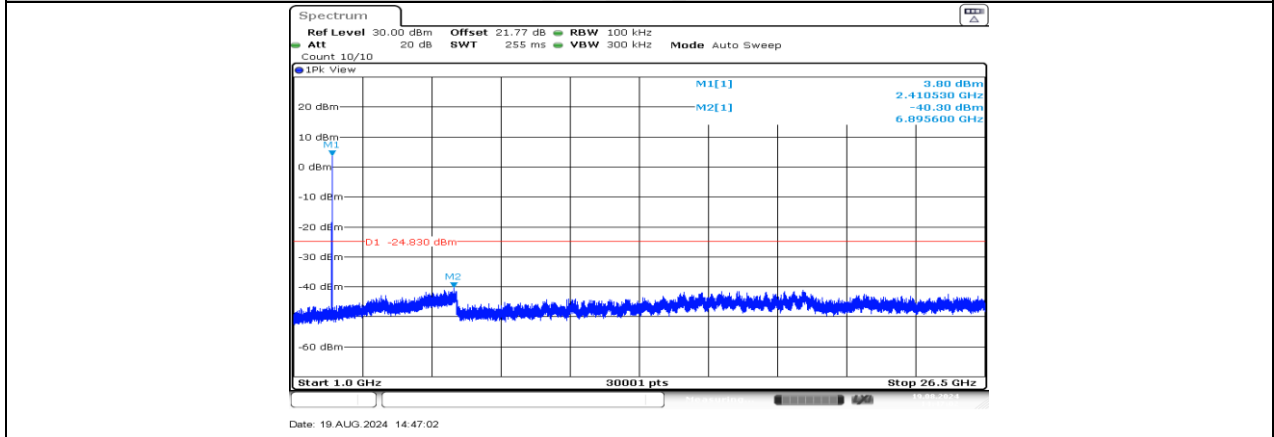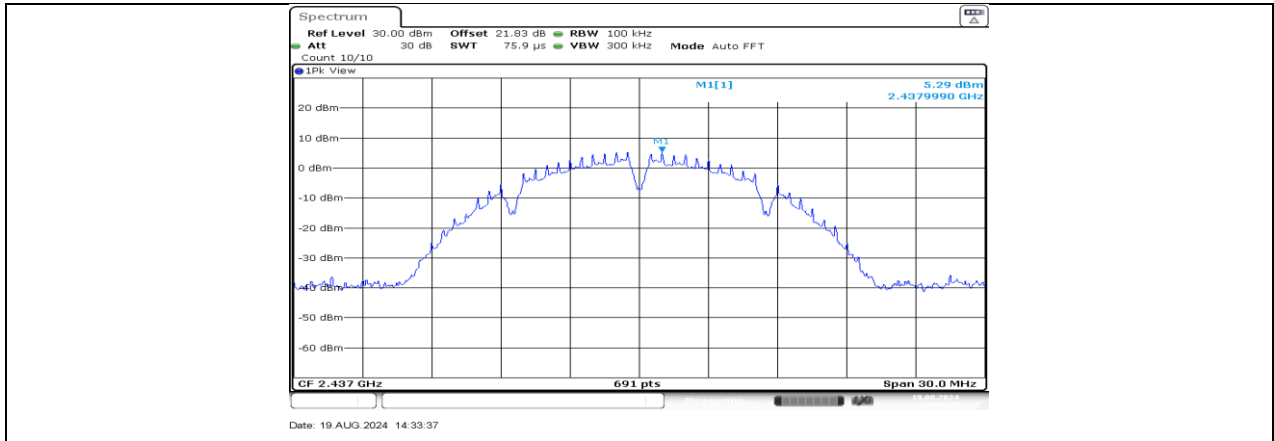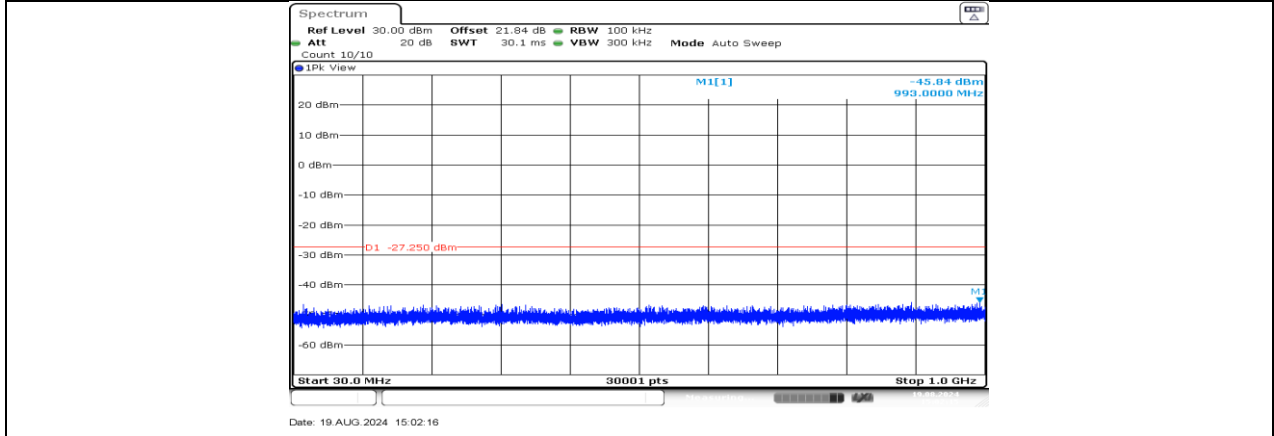
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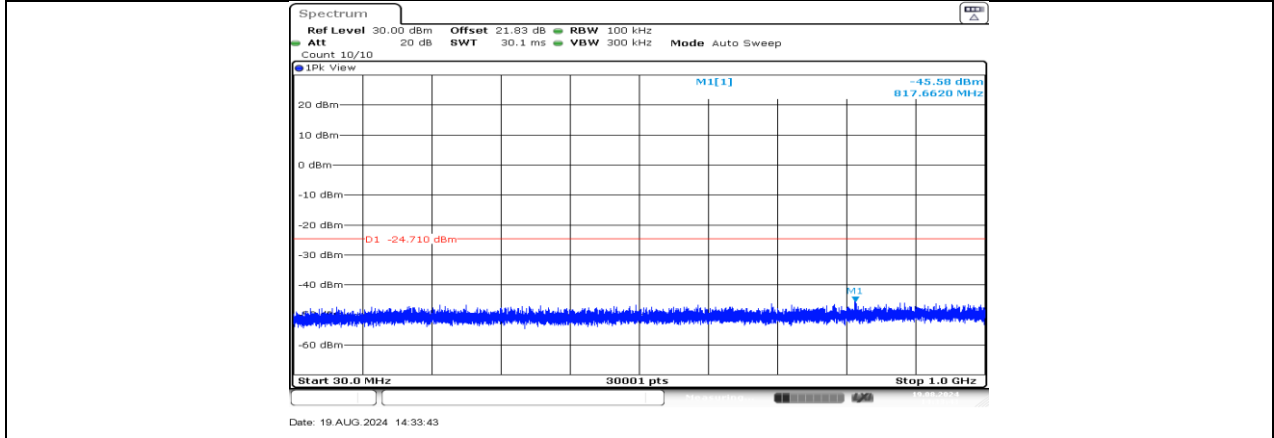
11B_Ant1_2437_30~1000

11B_Ant1_2437_1000~26500

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11B_Ant2_2437_0~Reference

11B_Ant2_2437_30~1000

11B_Ant2_2437_1000~26500

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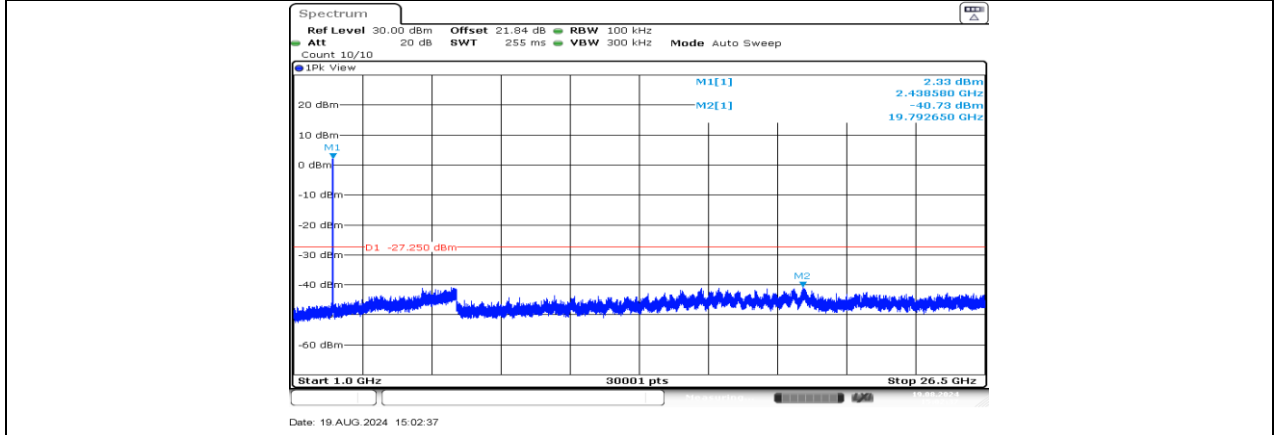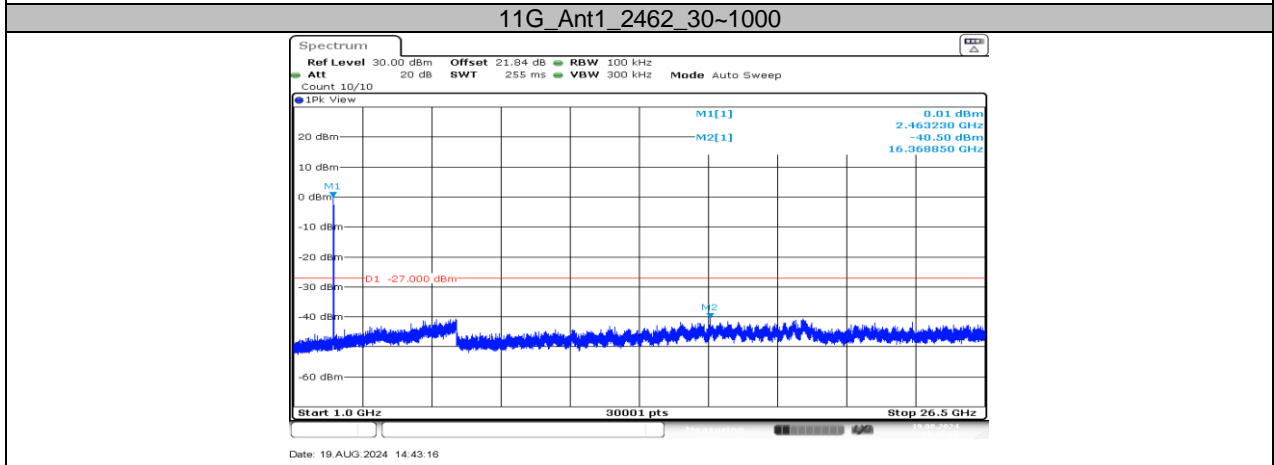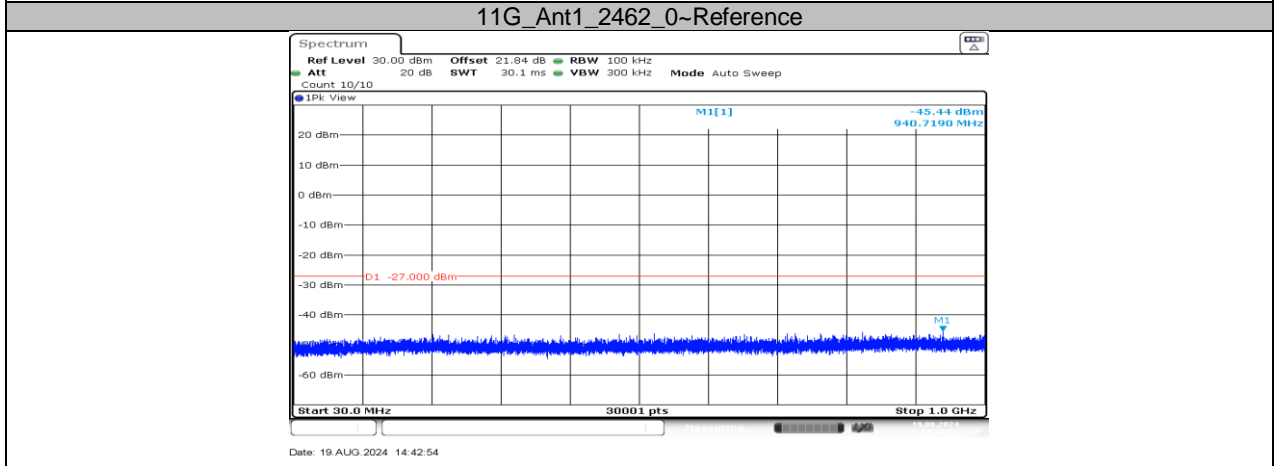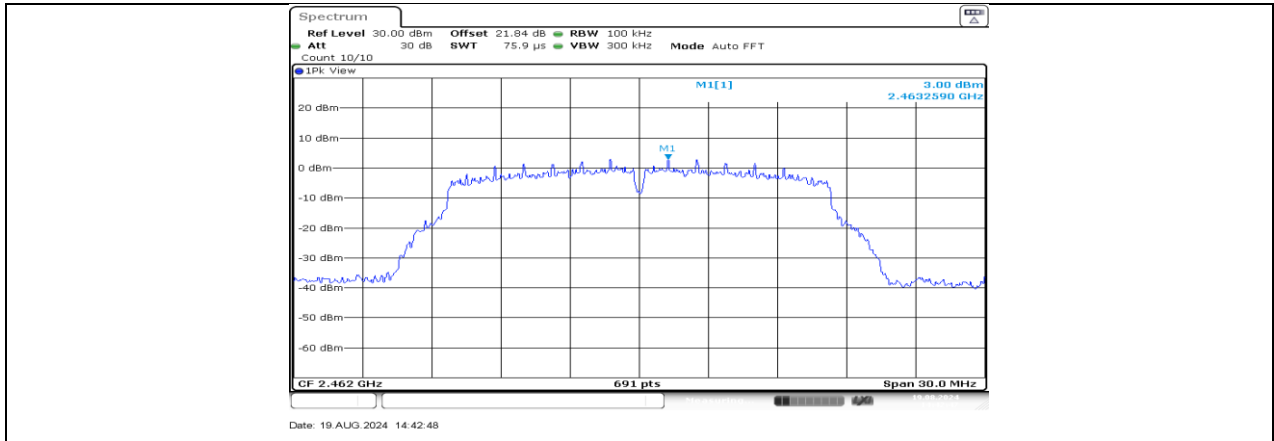
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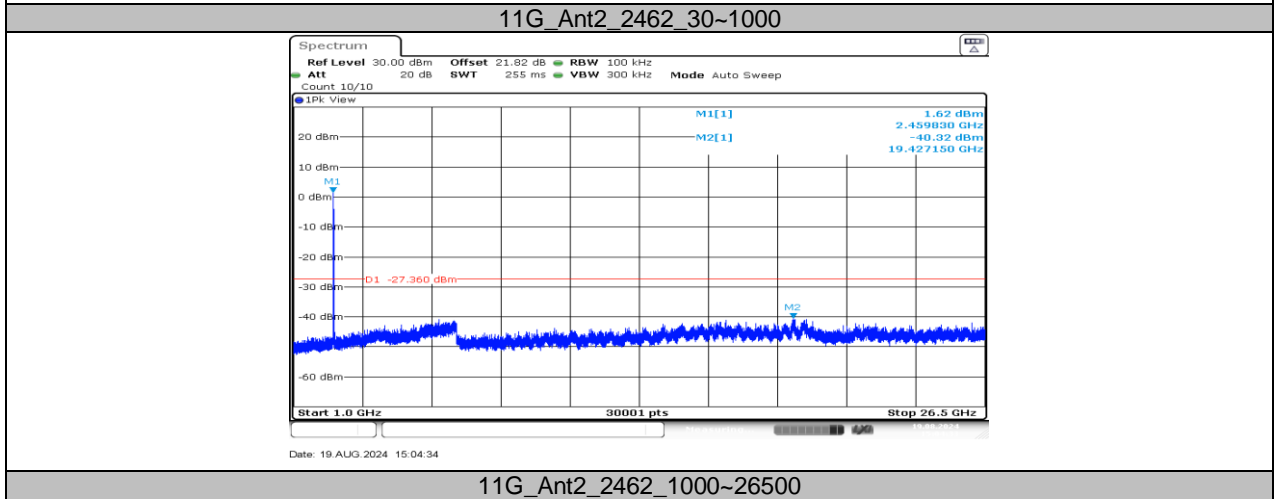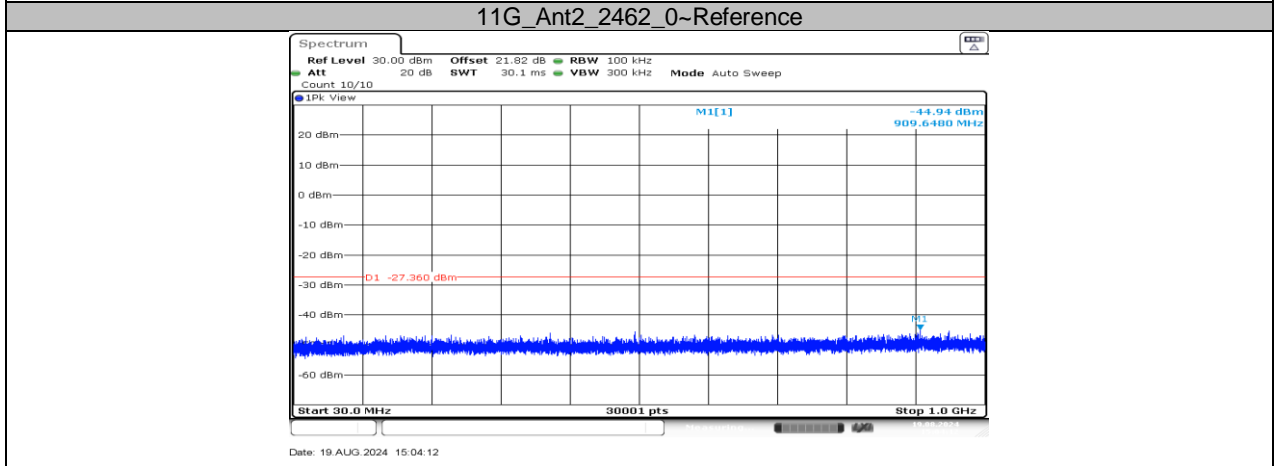

11B_Ant1_2462_30~1000

11B_Ant1_2462_1000~26500

11B_Ant2_2462_0~Reference

11B_Ant2_2462_30~1000

11B_Ant2_2462_1000~26500

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11G_Ant1_2412_0~Reference

11G_Ant1_2412_30~1000

11G_Ant1_2412_1000~26500

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11G_Ant2_2412_0~Reference

11G_Ant2_2412_30~1000

11G_Ant2_2412_1000~26500

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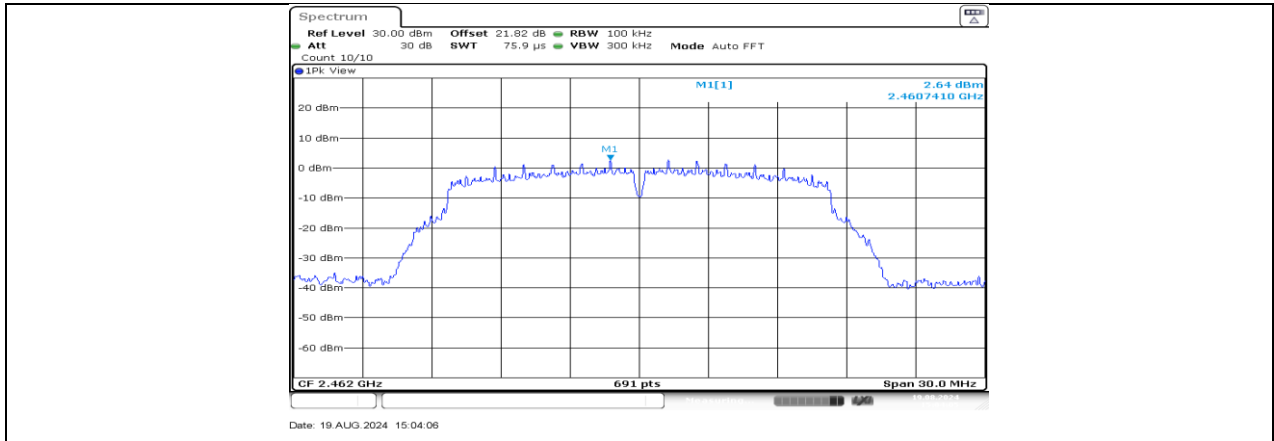
11G_Ant1_2437_0~Reference

11G_Ant1_2437_30~1000

11G_Ant1_2437_1000~26500

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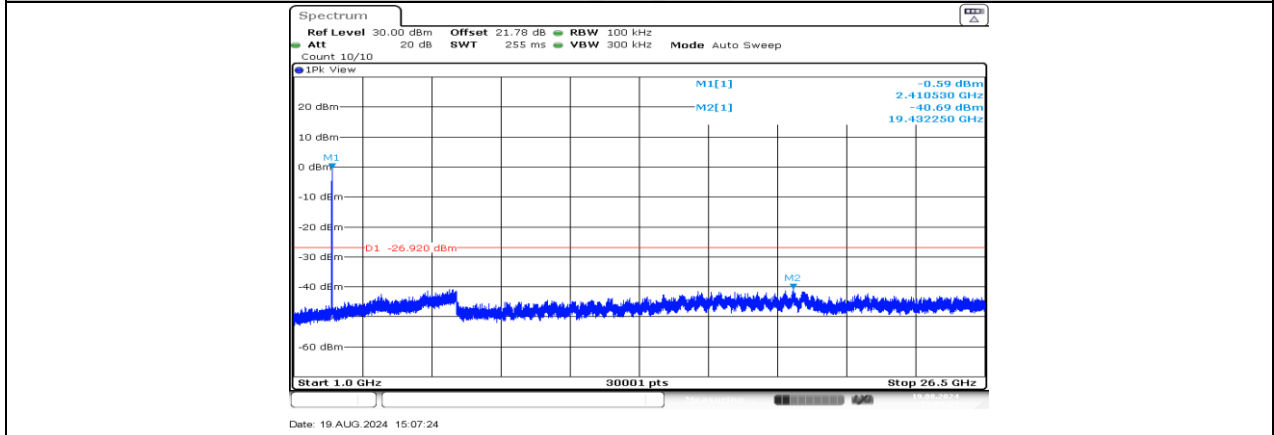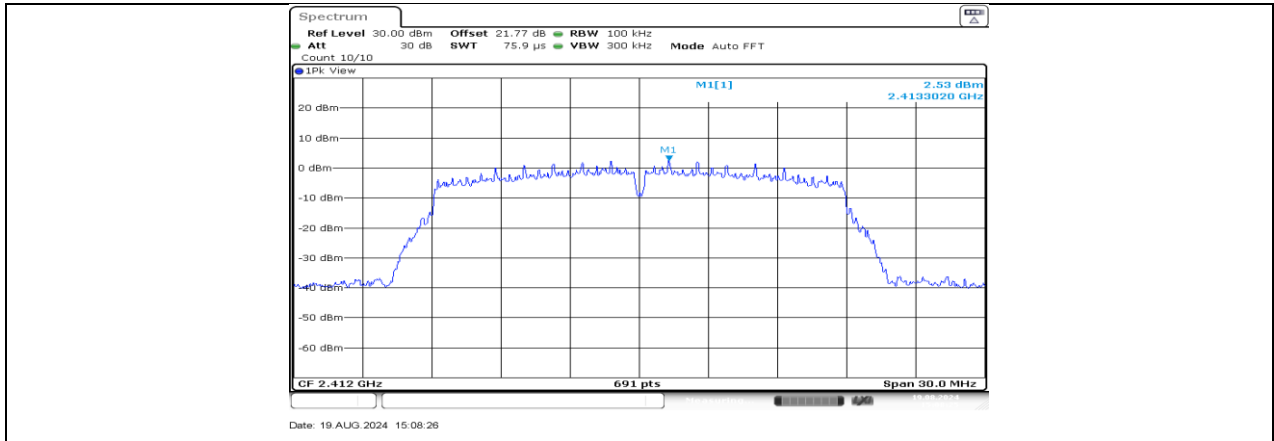
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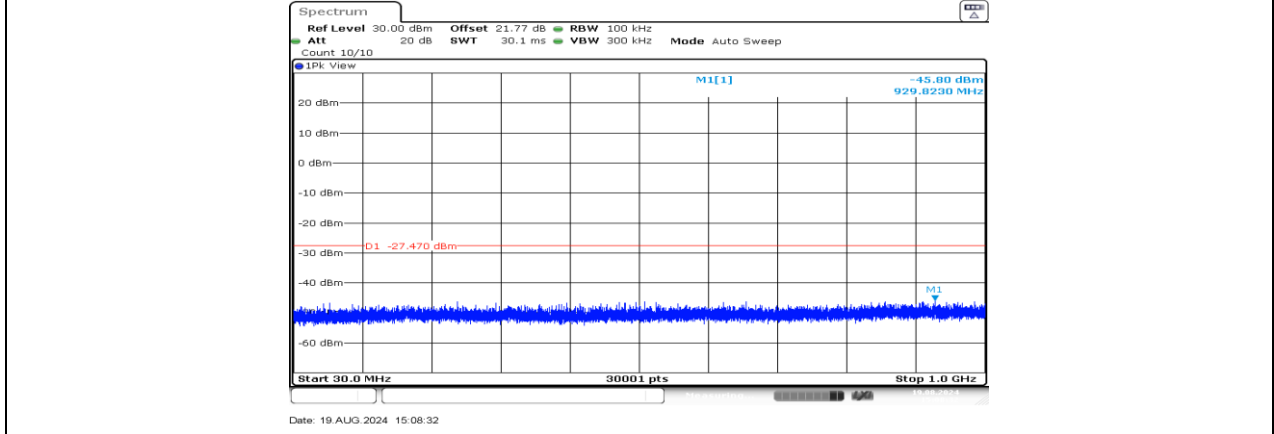

11G_Ant2_2437_30~1000

11G_Ant2_2437_1000~26500

11G_Ant1_2462_0~Reference

11G_Ant1_2462_30~1000

11G_Ant1_2462_1000~26500

11G_Ant2_2462_0~Reference

11G_Ant2_2462_30~1000

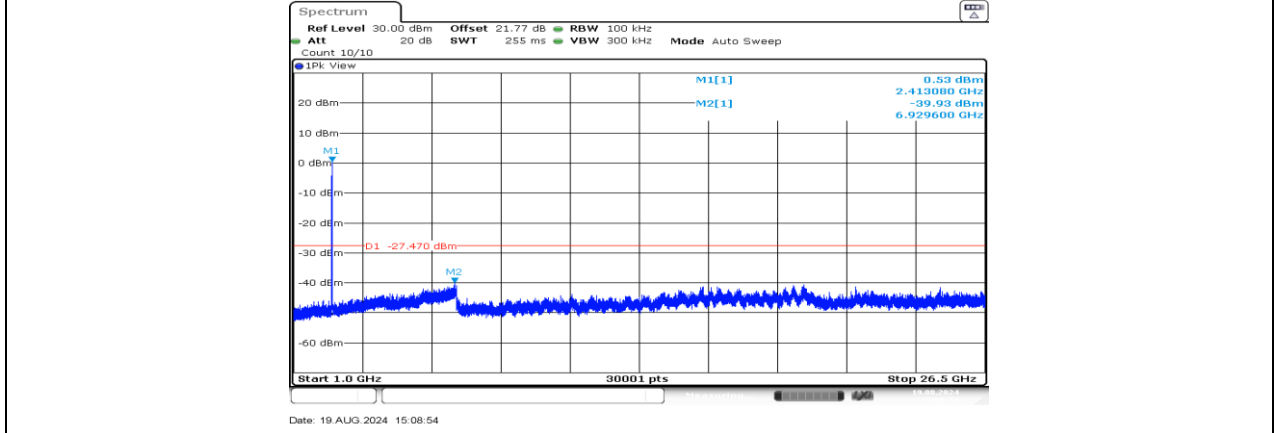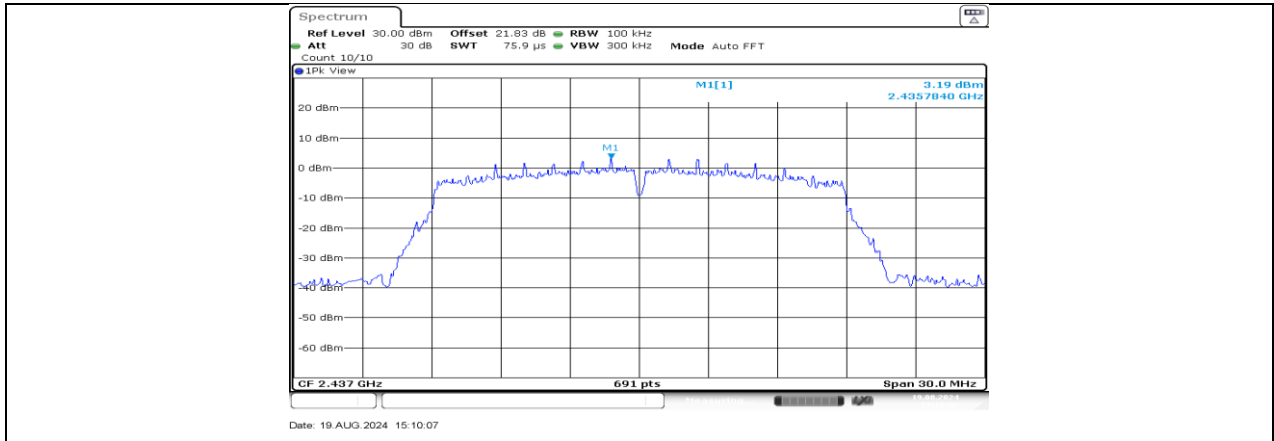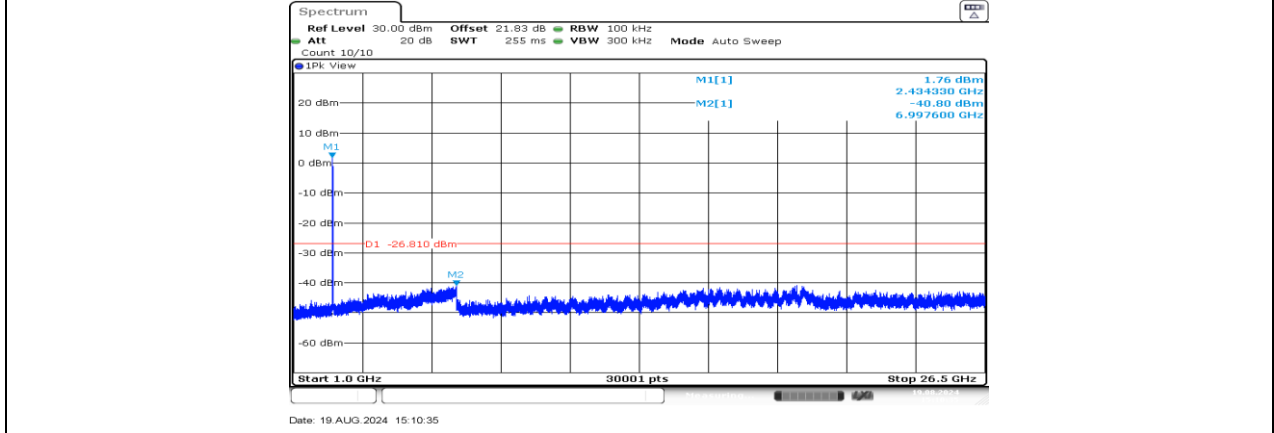11G_Ant2_2462_1000~26500
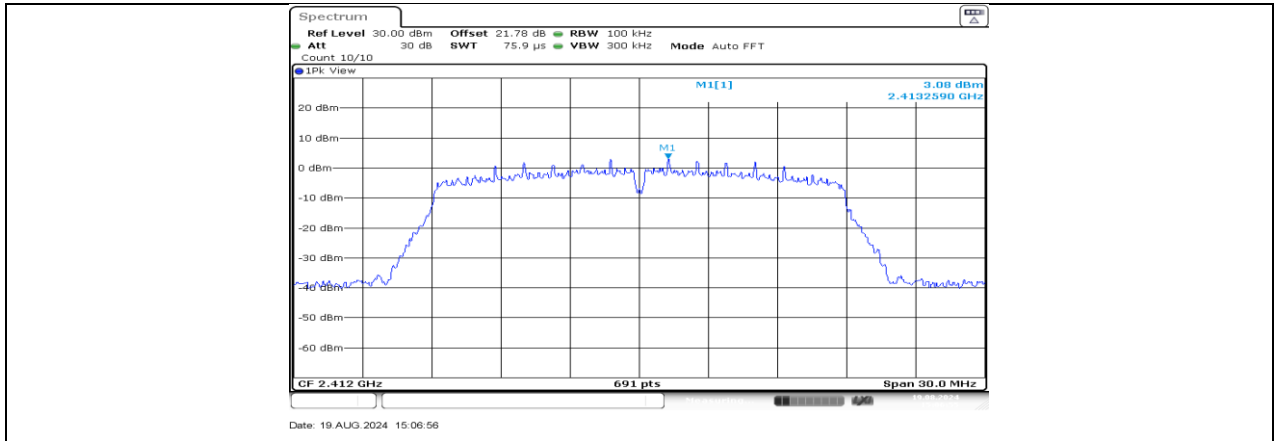
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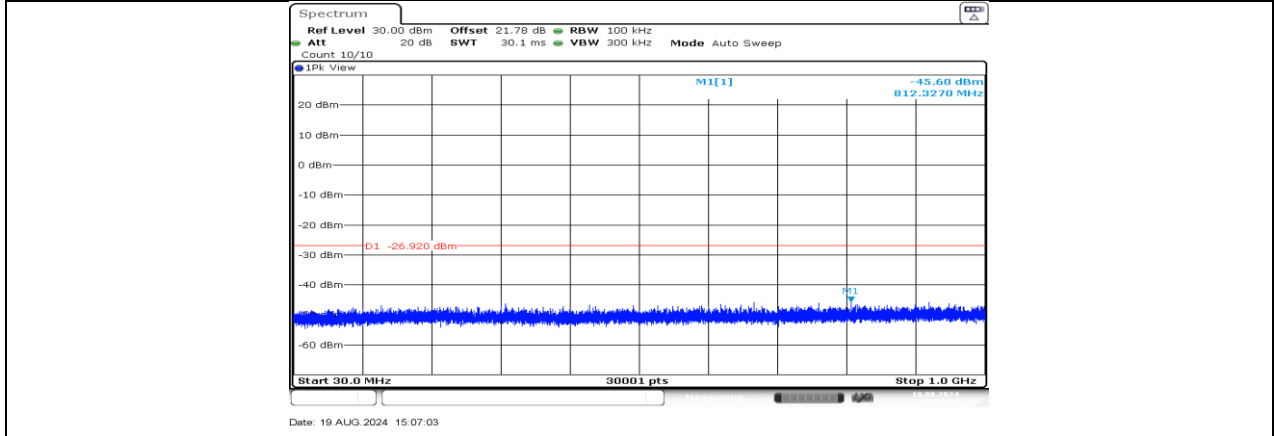
11N20MIMO_Ant1_2412_30~1000

11N20MIMO_Ant1_2412_1000~26500

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11N20MIMO_Ant2_2412_0~Reference

11N20MIMO_Ant2_2412_30~1000

11N20MIMO_Ant2_2412_1000~26500

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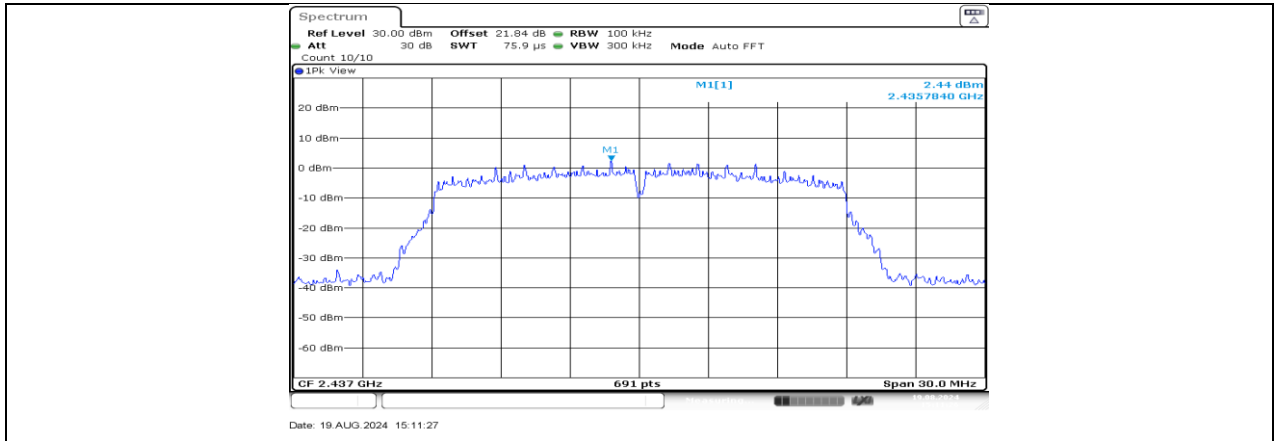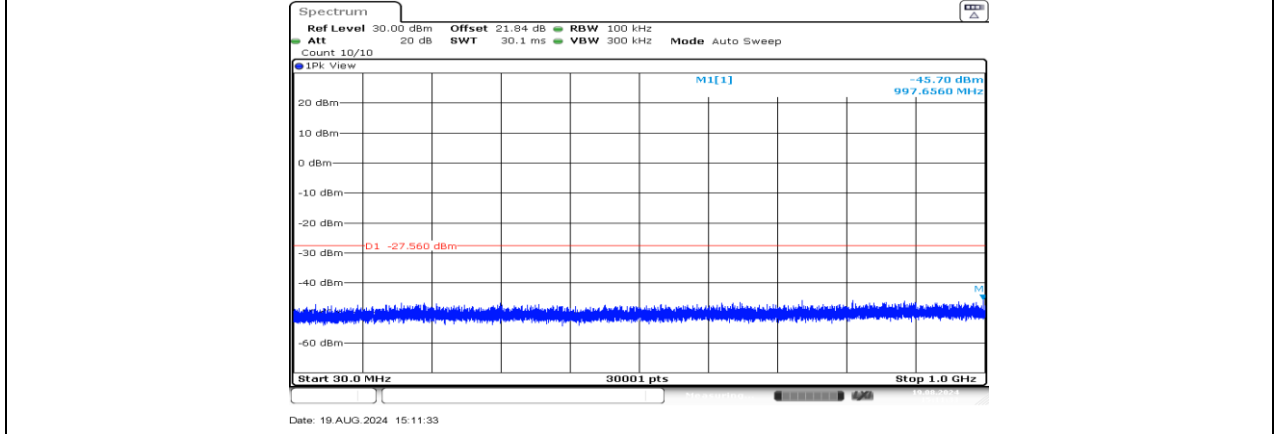
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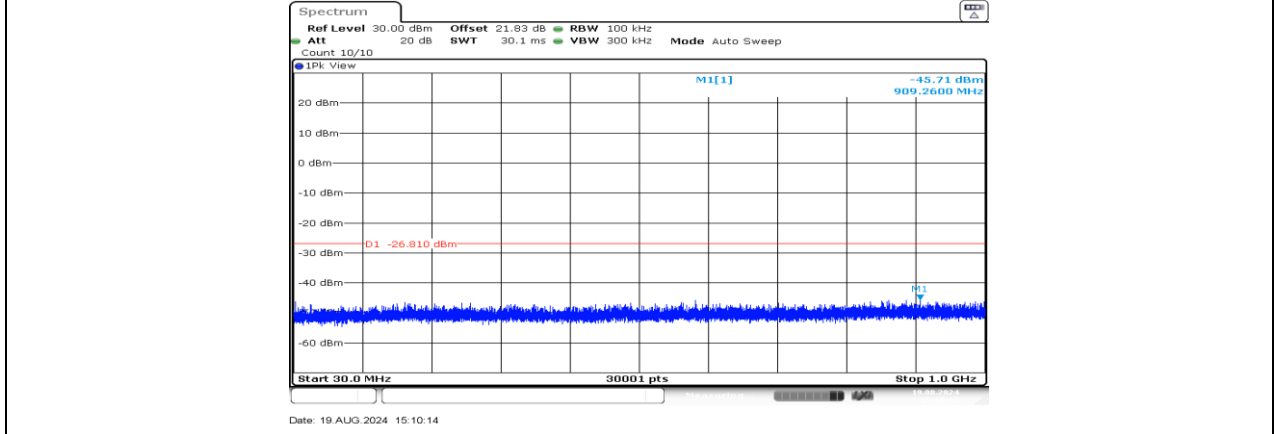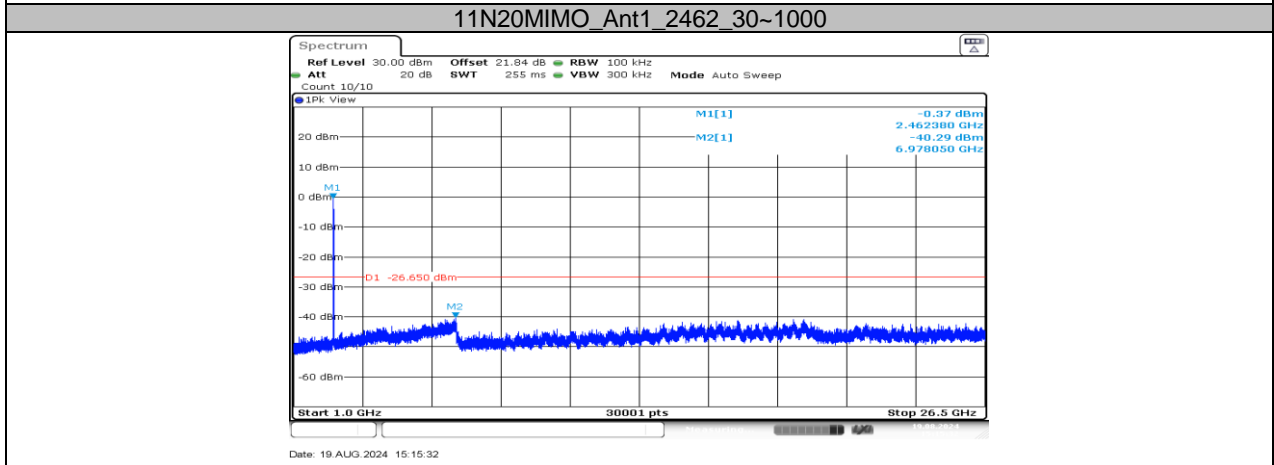

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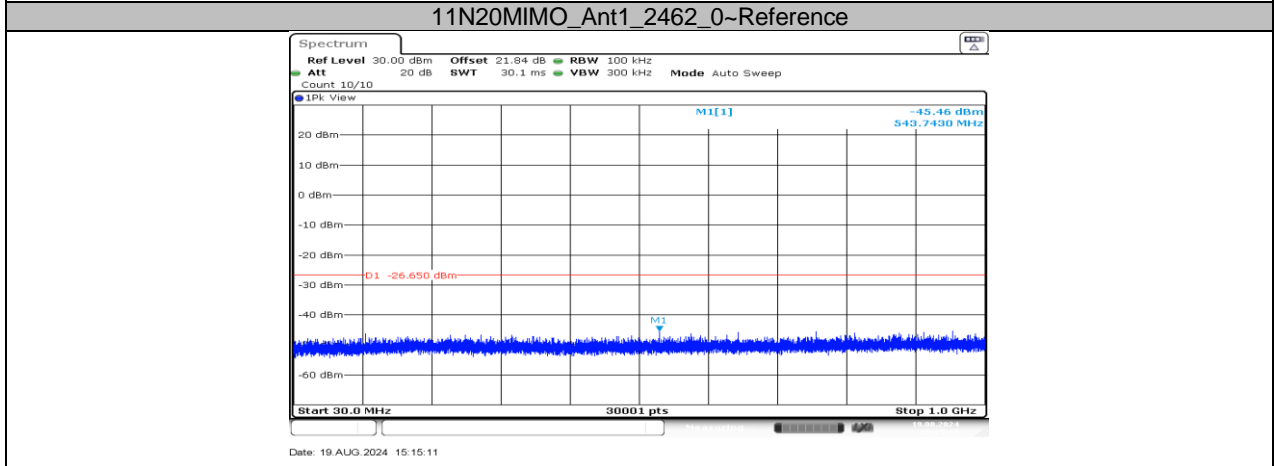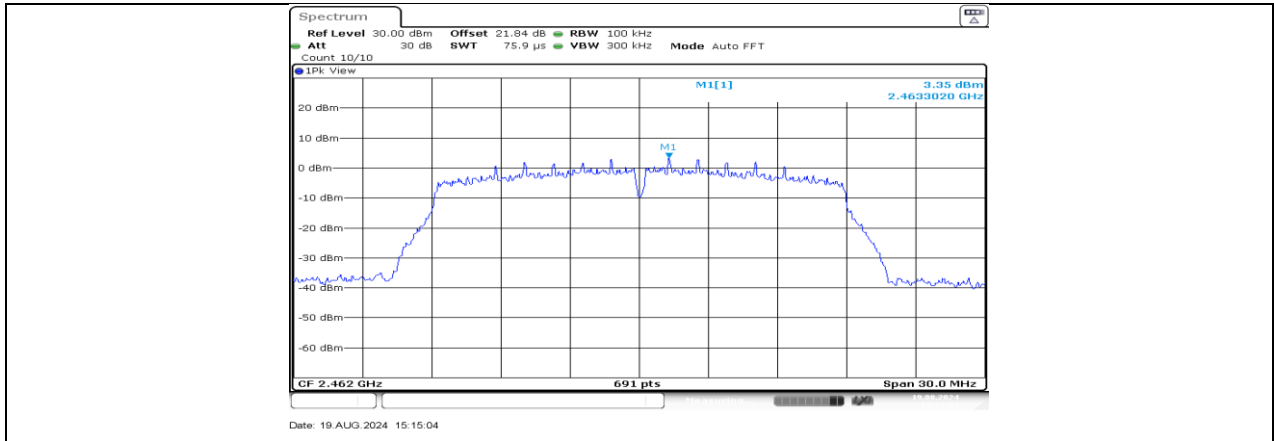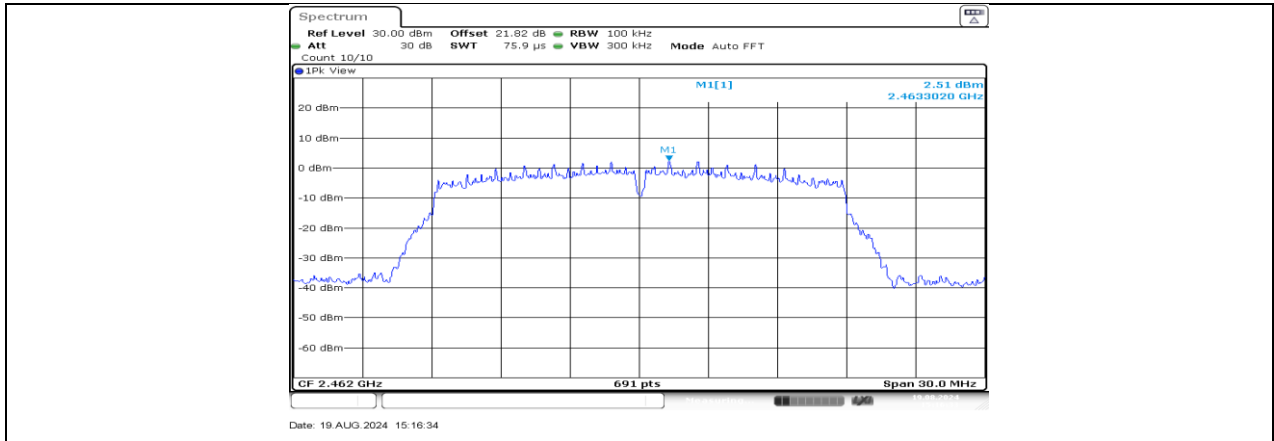

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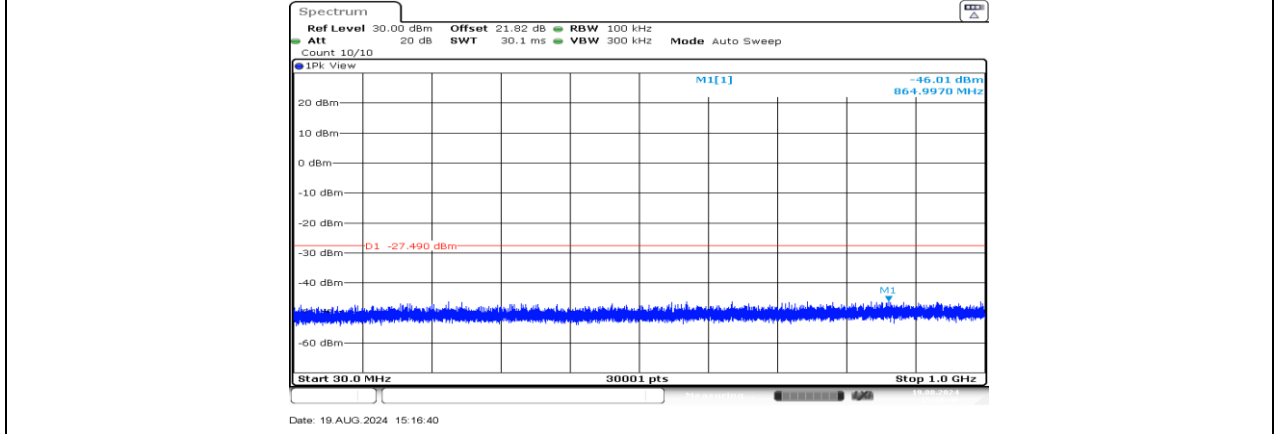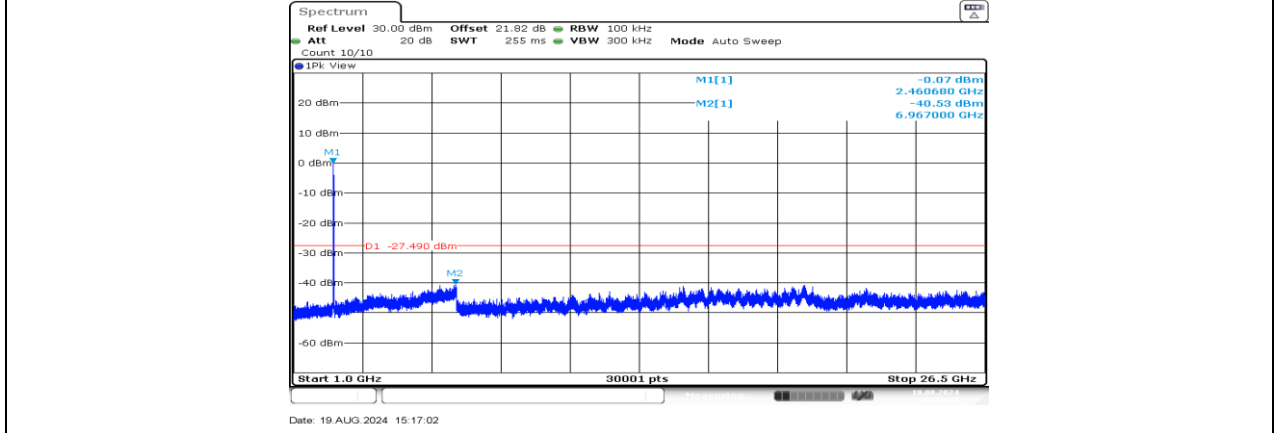
11N20MIMO_Ant2_2437_0~Reference

11N20MIMO_Ant2_2437_30~1000

11N20MIMO_Ant2_2437_1000~26500

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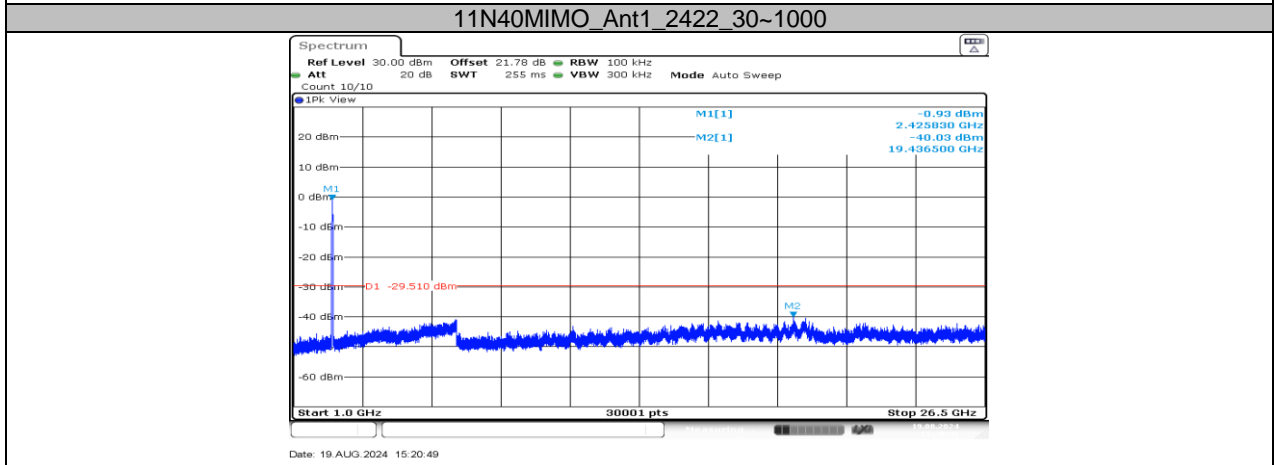*This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.*

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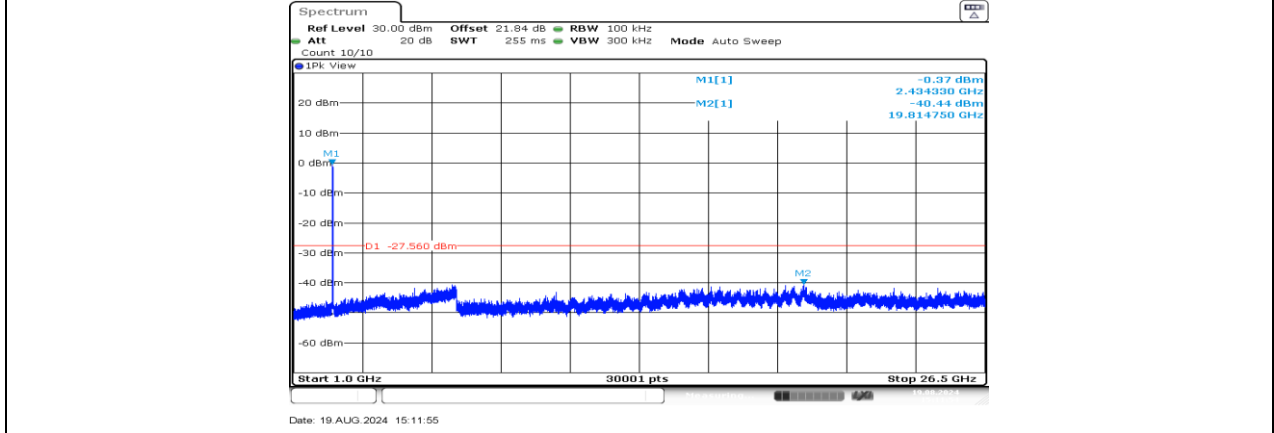
11N20MIMO_Ant1_2462_30~1000

11N20MIMO_Ant1_2462_1000~26500

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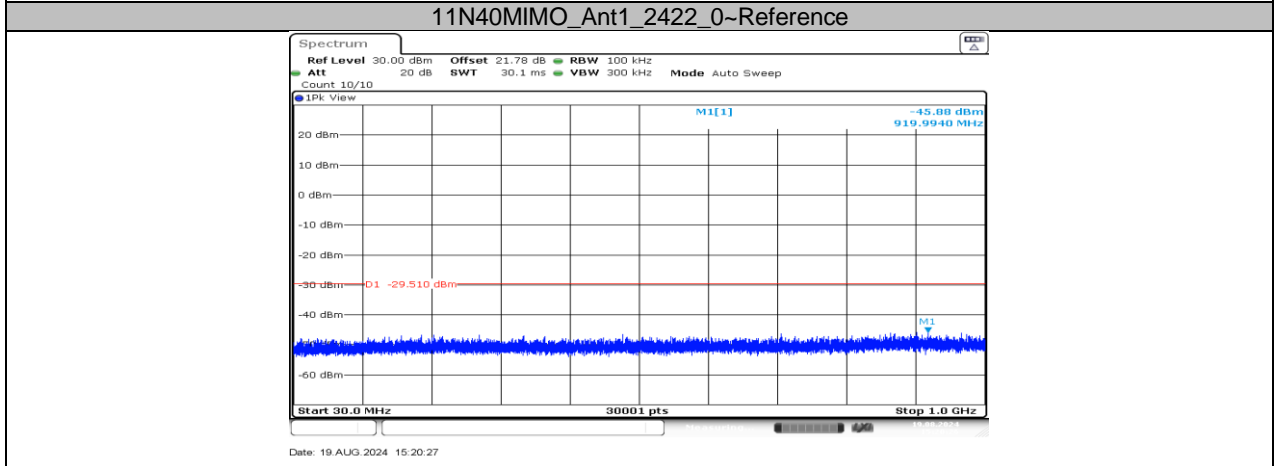*This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.*
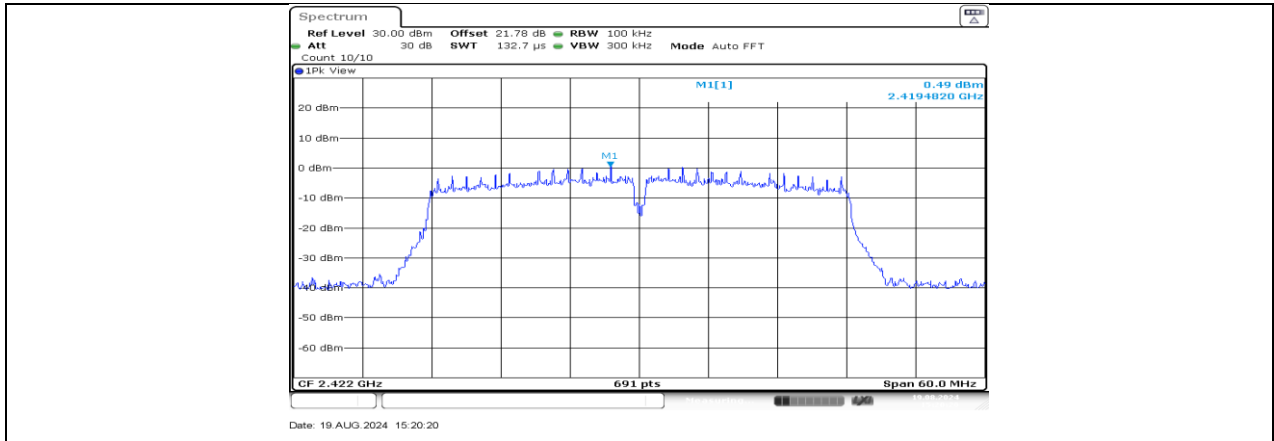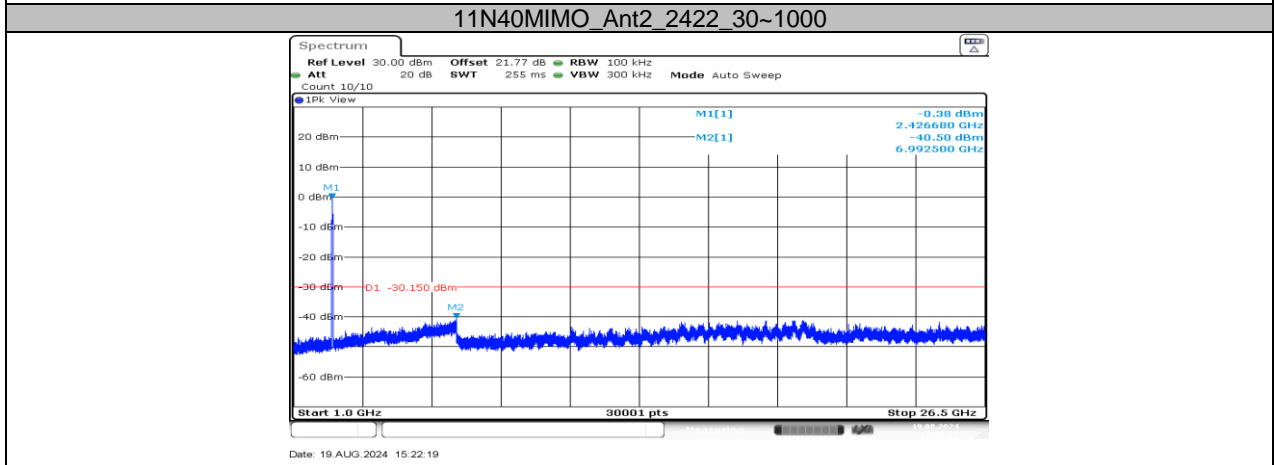
11N20MIMO_Ant2_2462_0~Reference

11N20MIMO_Ant2_2462_30~1000

11N20MIMO_Ant2_2462_1000~26500

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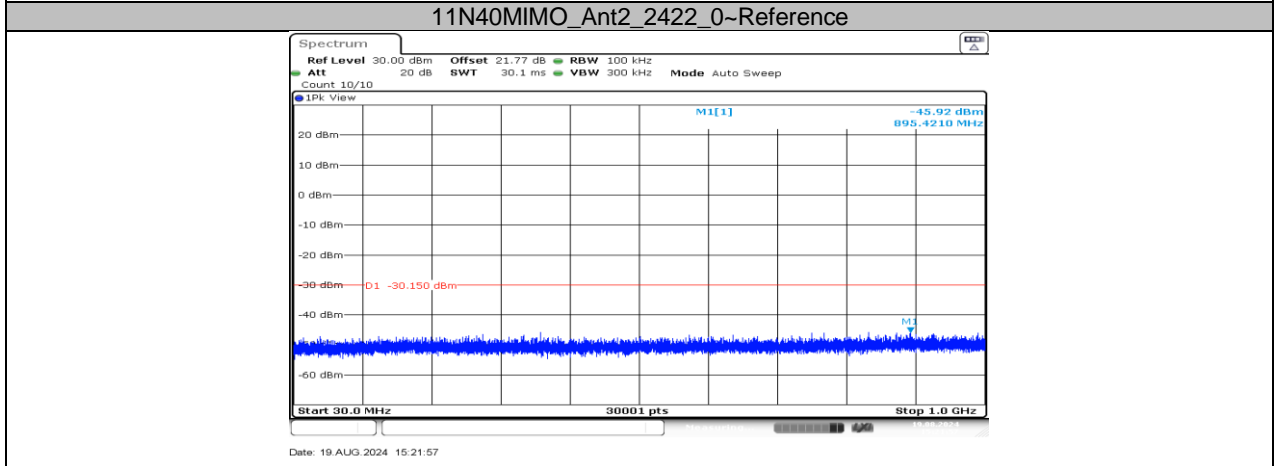
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11N40MIMO_Ant1_2422_30~1000

11N40MIMO_Ant1_2422_1000~26500
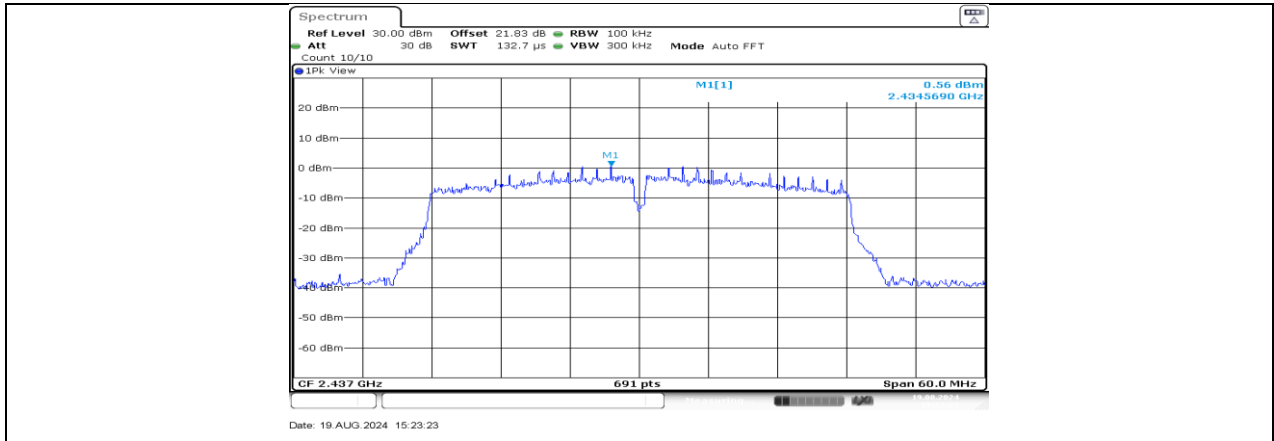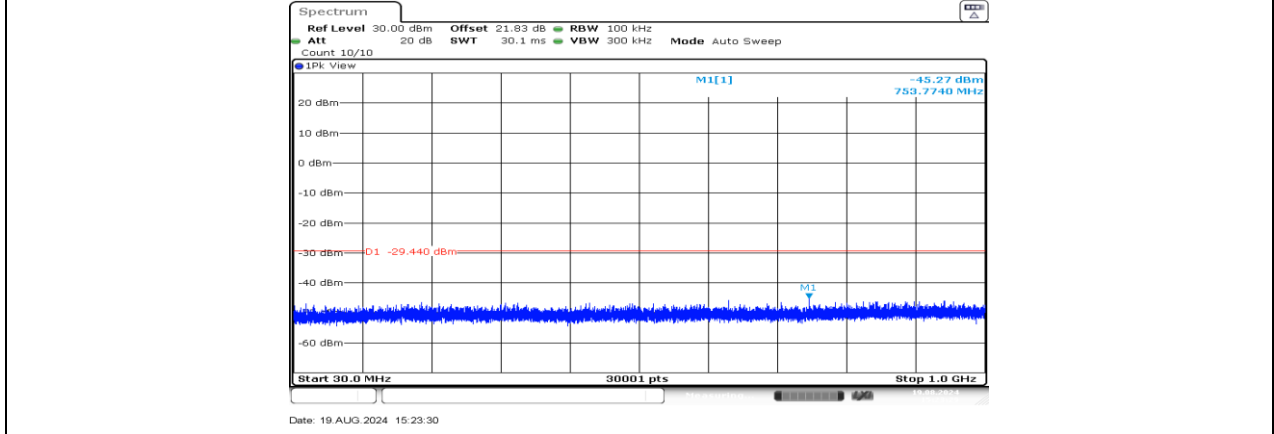
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11N40MIMO_Ant2_2422_30~1000
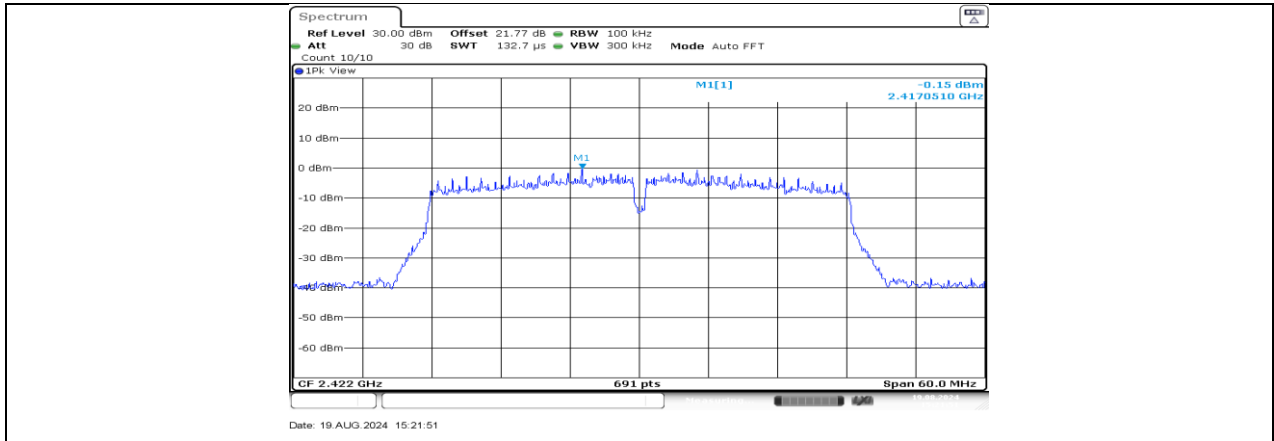
11N40MIMO_Ant2_2422_1000~26500

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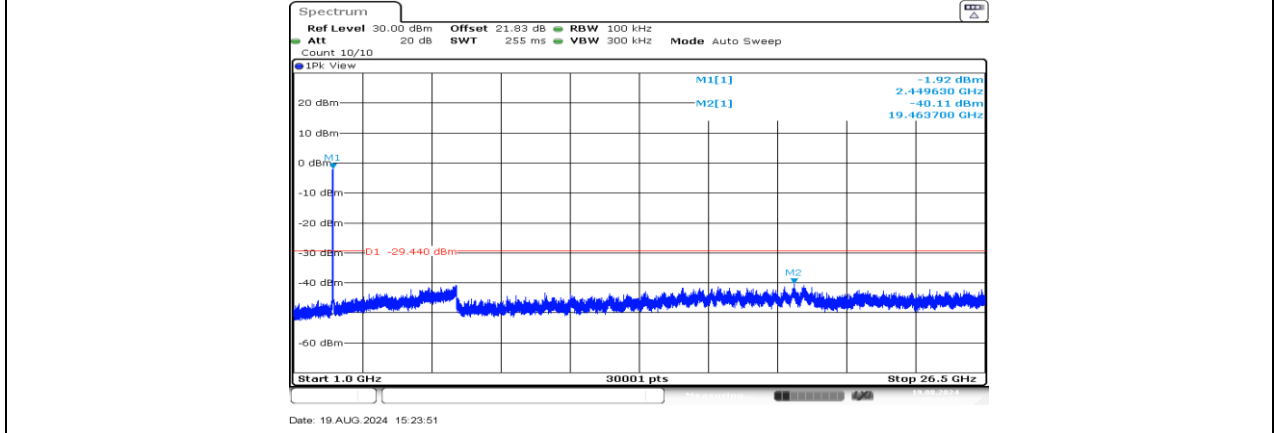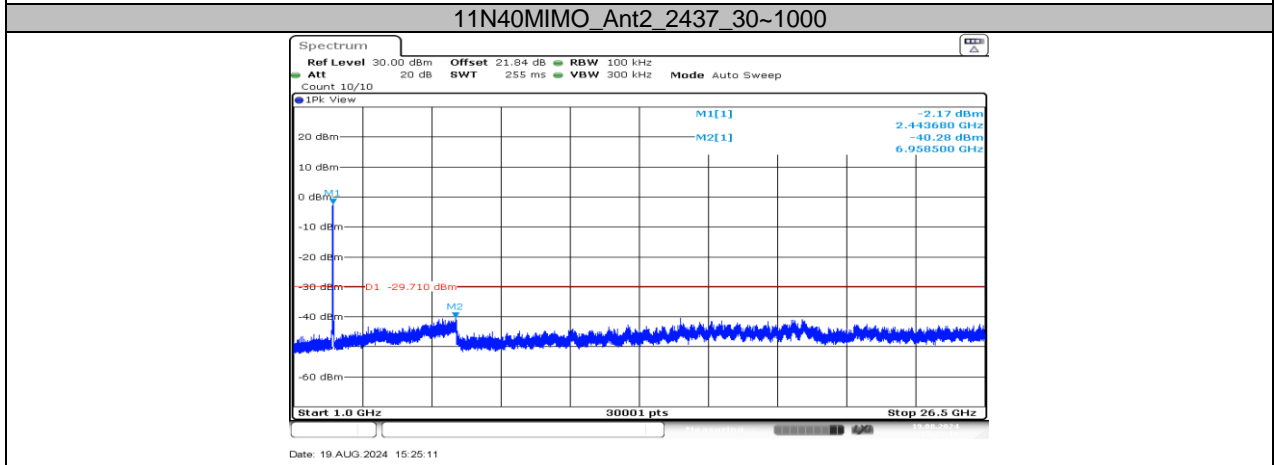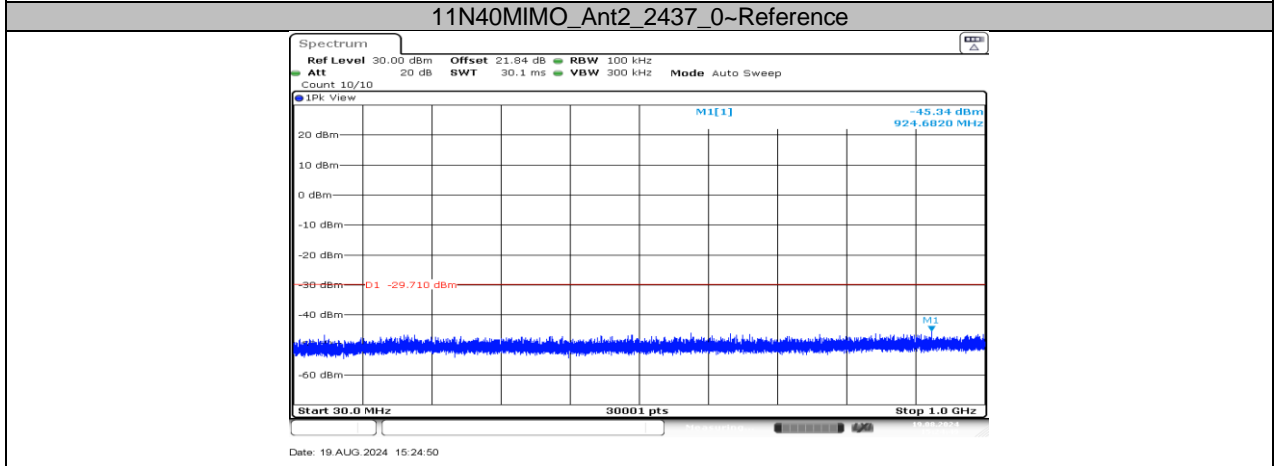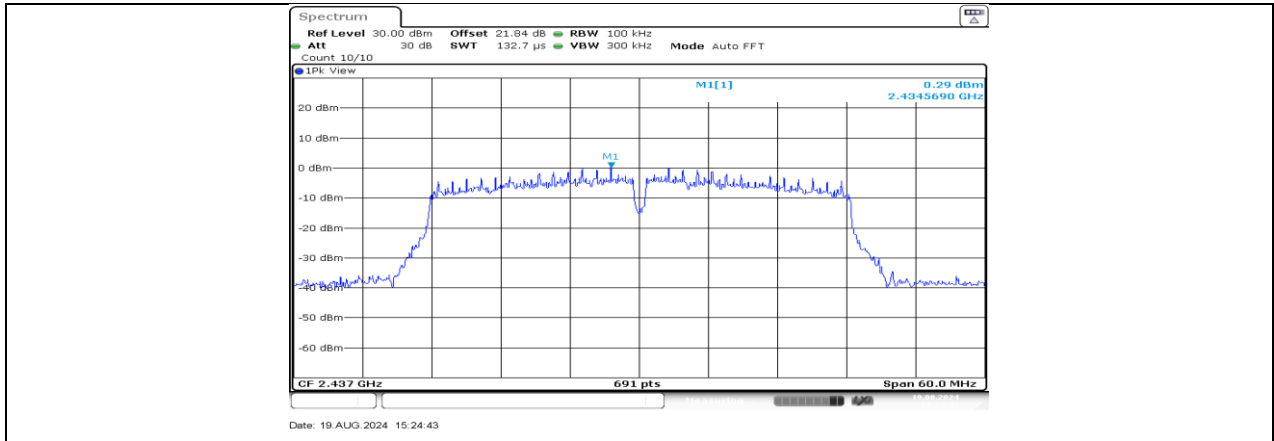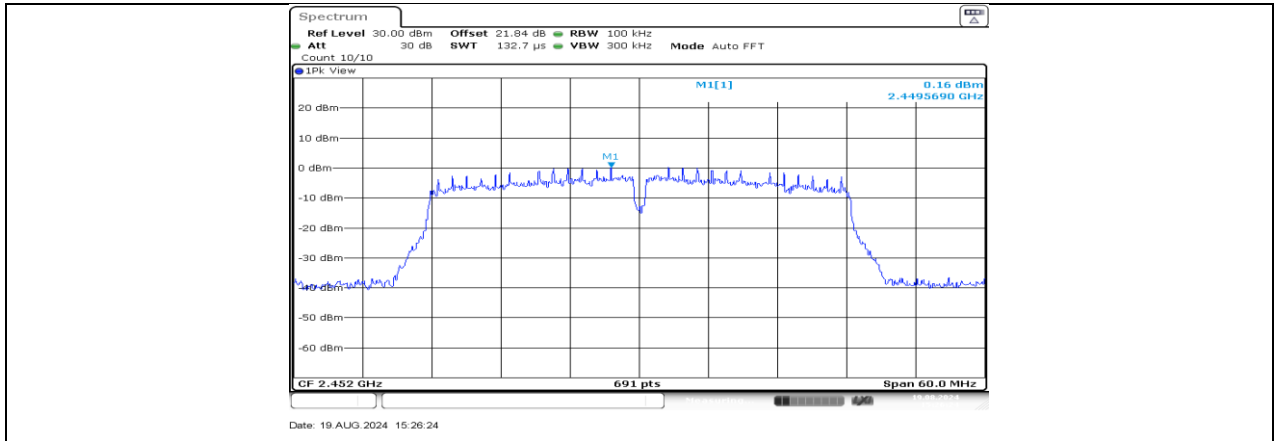
11N40MIMO_Ant1_2437_0~Reference

11N40MIMO_Ant1_2437_30~1000

11N40MIMO_Ant1_2437_1000~26500

11N40MIMO_Ant2_2437_0~Reference

11N40MIMO_Ant2_2437_30~1000
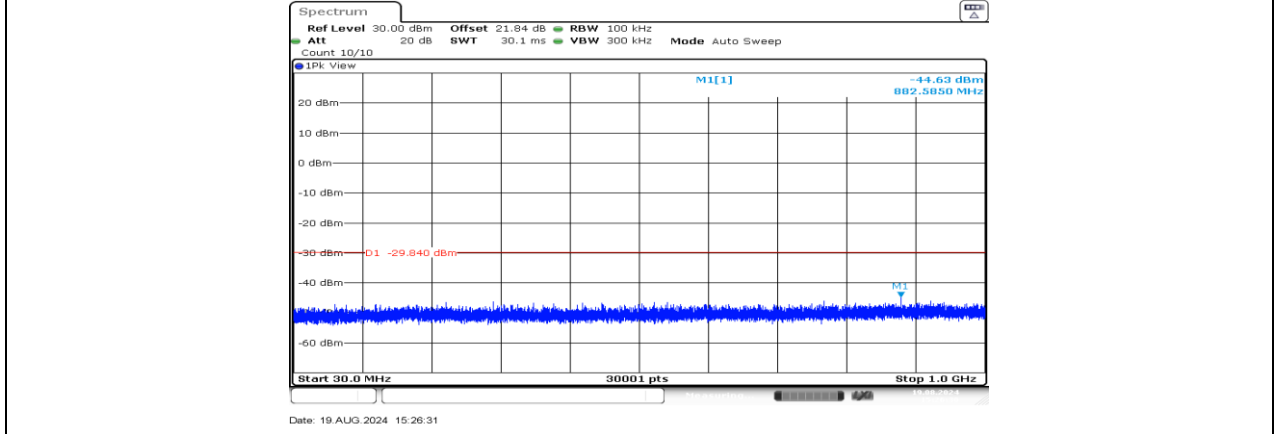

11N40MIMO_Ant2_2437_1000~26500

UL Solutions

11N40MIMO_Ant1_2452_0~Reference

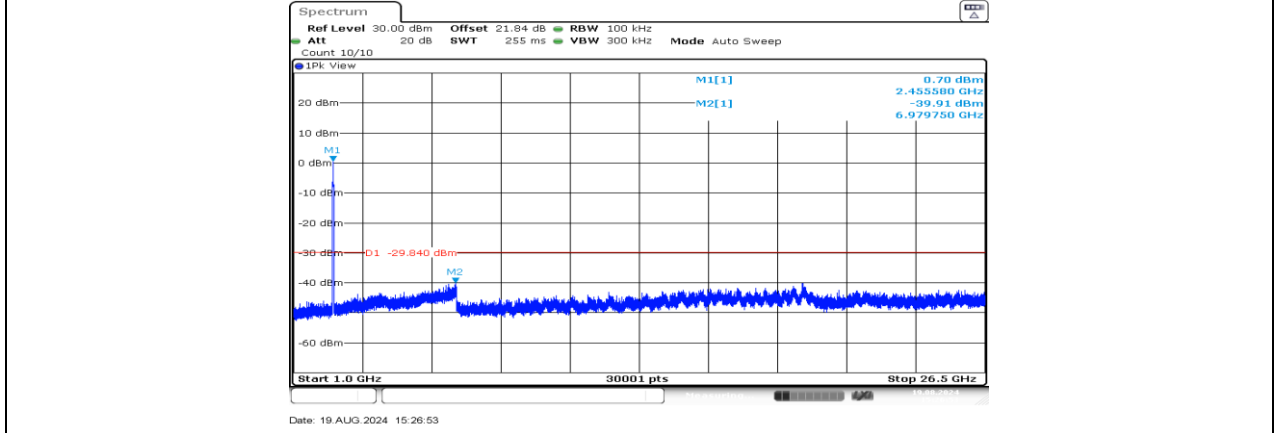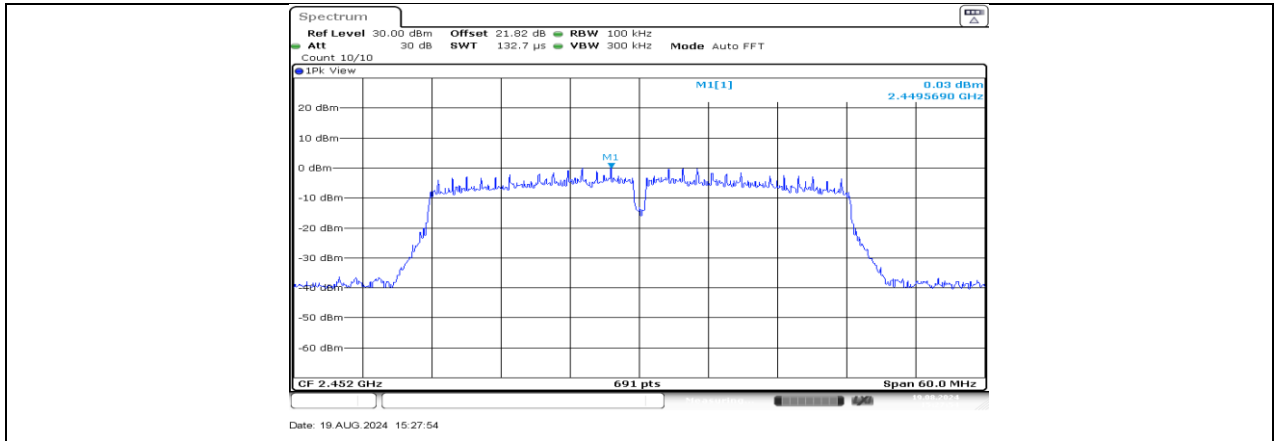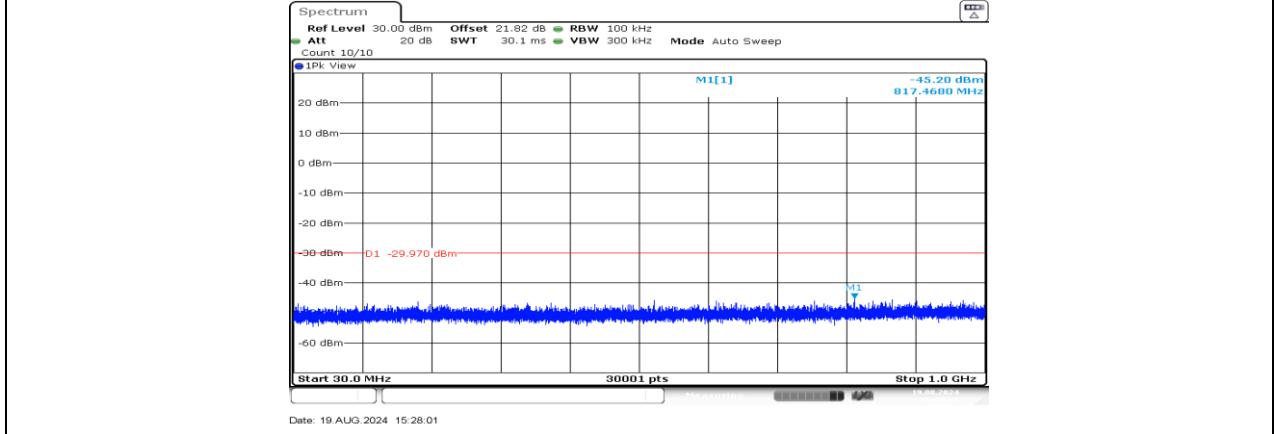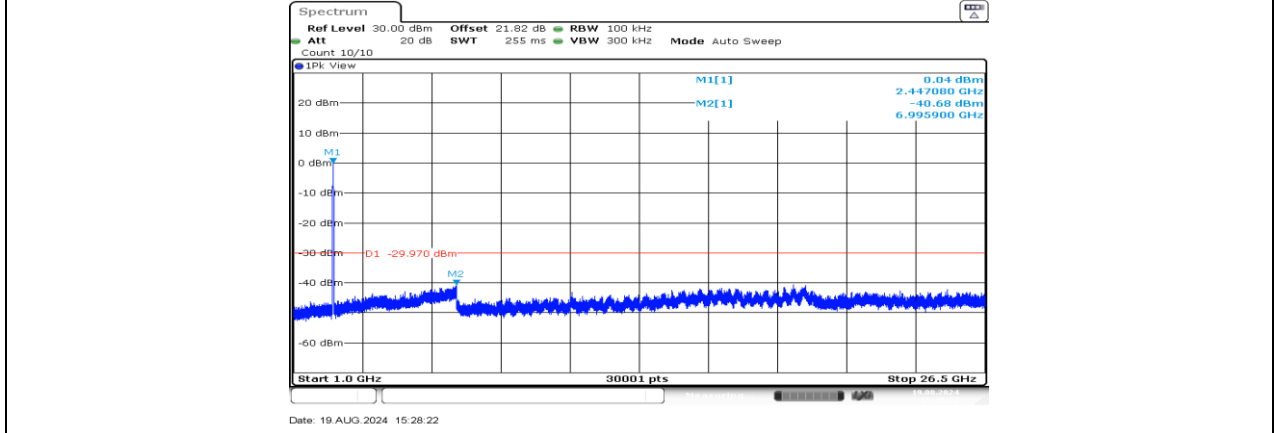11N40MIMO_Ant1_2452_30~1000

11N40MIMO_Ant1_2452_1000~26500

11N40MIMO_Ant2_2452_0~Reference

11N40MIMO_Ant2_2452_30~1000

11N40MIMO_Ant2_2452_1000~26500

11.7. APPENDIX G: DUTY CYCLE
11.7.1. Test Result

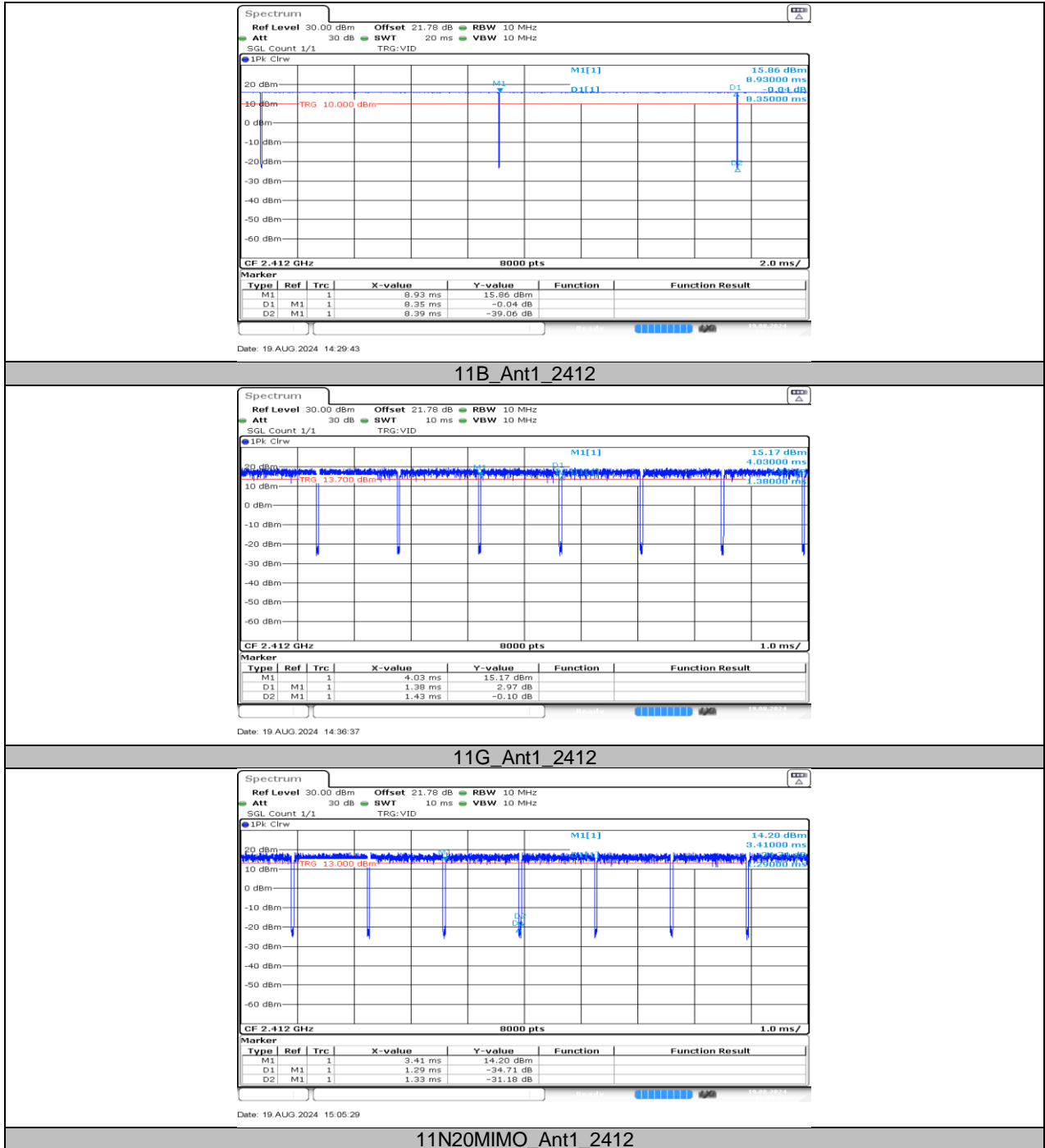| Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11B	8.35	8.39	0.9952	99.52	0.02	N/A	0.01
11G	1.38	1.43	0.9650	96.50	0.15	0.72	1
11N20MIMO	1.29	1.33	0.9699	96.99	0.13	0.78	1
11N40MIMO	0.64	0.68	0.9412	94.12	0.26	1.56	2

Note:
Duty Cycle Correction Factor=10log (1/x).
Where: x is Duty Cycle (Linear)
Where: T is On Time
If that calculated VBW is not available on the analyzer then the next higher value should be used.

11.7.2. Test Graphs

11B_Ant1_2412

11G_Ant1_2412

11N20MIMO_Ant1_2412

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11N40MIMO_Ant1_2422

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