



Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [Mhz]	RefLevel [dBm/100KHz]	Result [dBm/100KHz]	Limit [dBm/100KHz]	Verdict
11B	ANT0	2412	30~1000	6.11	-50.42	≤-13.89	PASS
			1000~26500	6.11	-44.54	≤-13.89	PASS
			1000~26500	6.61	-43.36	≤-13.39	PASS
	ANT0	2437	30~1000	3.77	-51.12	≤-16.23	PASS
			1000~26500	3.77	-44.85	≤-16.23	PASS
			1000~26500	4.07	-45.32	≤-15.93	PASS
	ANT0	2462	30~1000	4.93	-49.95	≤-15.07	PASS
			1000~26500	4.93	-44.86	≤-15.07	PASS
			1000~26500	5.73	-44.06	≤-14.27	PASS
11G	ANT0	2412	30~1000	3.67	-50.76	≤-16.33	PASS
			1000~26500	3.67	-44.92	≤-16.33	PASS
			1000~26500	3.73	-45.02	≤-16.27	PASS
	ANT0	2417	30~1000	6.90	-50.2	≤-13.1	PASS
			1000~26500	6.90	-43.46	≤-13.1	PASS
			1000~26500	7.01	-44.43	≤-12.99	PASS
	ANT0	2437	30~1000	7.32	-50.45	≤-12.68	PASS
			1000~26500	7.32	-43.81	≤-12.68	PASS
			1000~26500	7.24	-44.09	≤-12.76	PASS
	ANT0	2447	30~1000	7.28	-49.51	≤-12.72	PASS
			1000~26500	7.28	-44.01	≤-12.72	PASS
			1000~26500	7.31	-44.09	≤-12.69	PASS
	ANT0	2452	30~1000	5.93	-50.75	≤-14.07	PASS
			1000~26500	5.93	-44.55	≤-14.07	PASS
			1000~26500	5.08	-44.79	≤-14.92	PASS
	ANT0	2457	30~1000	4.89	-50.28	≤-15.11	PASS
			1000~26500	4.89	-44.65	≤-15.11	PASS
			1000~26500	4.23	-43.85	≤-15.77	PASS
	ANT0	2462	30~1000	1.89	-50.73	≤-18.11	PASS
			1000~26500	1.89	-45.1	≤-18.11	PASS
			1000~26500	2.12	-44.67	≤-17.88	PASS
11N20MIMO	ANT0	2412	30~1000	-2.68	-50.27	≤-22.68	PASS
			1000~26500	-2.68	-45.21	≤-22.68	PASS



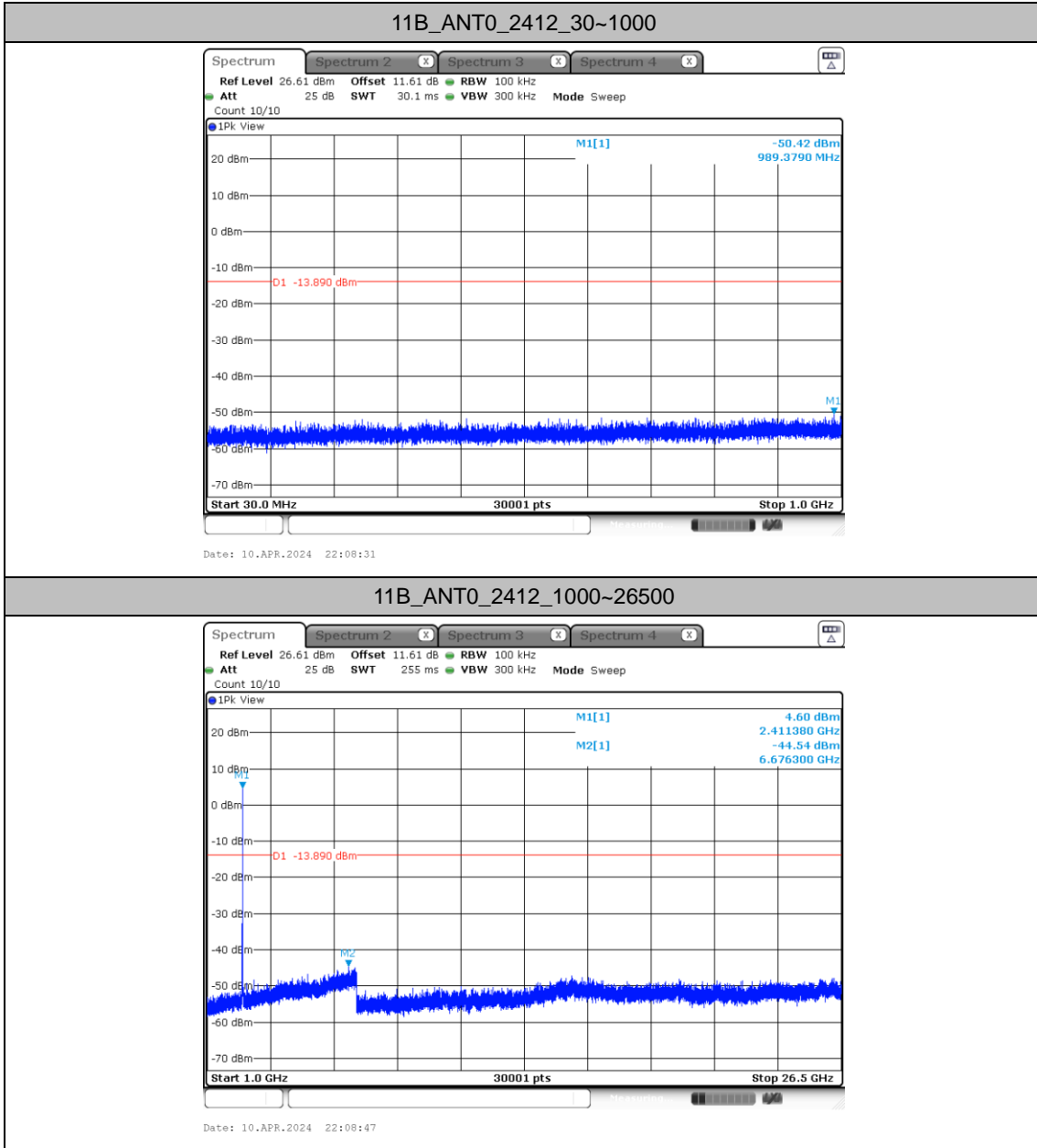
	ANT1	2412	30~1000	-2.23	-50.28	≤-22.23	PASS
			1000~26500	-2.23	-44.84	≤-22.23	PASS
	ANT0	2417	30~1000	0.48	-50.52	≤-19.52	PASS
			1000~26500	0.48	-44.67	≤-19.52	PASS
	ANT1	2417	30~1000	1.60	-50.43	≤-18.4	PASS
			1000~26500	1.60	-44.51	≤-18.4	PASS
	ANT0	2422	30~1000	4.07	-50.93	≤-15.93	PASS
			1000~26500	4.07	-45.17	≤-15.93	PASS
	ANT1	2422	30~1000	5.05	-50.57	≤-14.95	PASS
			1000~26500	5.05	-44.74	≤-14.95	PASS
	ANT0	2437	30~1000	4.47	-50.39	≤-15.53	PASS
			1000~26500	4.47	-44.7	≤-15.53	PASS
	ANT1	2437	30~1000	5.28	-50.88	≤-14.72	PASS
			1000~26500	5.28	-45.24	≤-14.72	PASS
	ANT0	2442	30~1000	5.24	-50.82	≤-14.76	PASS
			1000~26500	5.24	-44.77	≤-14.76	PASS
	ANT1	2442	30~1000	5.83	-50.09	≤-14.17	PASS
			1000~26500	5.83	-44.29	≤-14.17	PASS
	ANT0	2447	30~1000	5.26	-50.88	≤-14.74	PASS
			1000~26500	5.26	-44.57	≤-14.74	PASS
	ANT1	2447	30~1000	5.60	-50.88	≤-14.4	PASS
			1000~26500	5.60	-44.79	≤-14.4	PASS
	ANT0	2452	30~1000	2.71	-49.51	≤-17.29	PASS
			1000~26500	2.71	-44.86	≤-17.29	PASS
ANT1	2452	30~1000	2.66	-50.12	≤-17.34	PASS	
		1000~26500	2.66	-44.04	≤-17.34	PASS	
ANT0	2457	30~1000	-0.76	-50.48	≤-20.76	PASS	
		1000~26500	-0.76	-43.98	≤-20.76	PASS	
ANT1	2457	30~1000	-0.75	-50.08	≤-20.75	PASS	
		1000~26500	-0.75	-44.88	≤-20.75	PASS	
ANT0	2462	30~1000	-3.72	-50.65	≤-23.72	PASS	
		1000~26500	-3.72	-44.9	≤-23.72	PASS	
ANT1	2462	30~1000	-3.09	-51.31	≤-23.09	PASS	
		1000~26500	-3.09	-44.53	≤-23.09	PASS	
11N40MIMO	ANT0	2422	30~1000	-5.34	-50.79	≤-25.34	PASS
			1000~26500	-5.34	-44.91	≤-25.34	PASS
	ANT1	2422	30~1000	-5.12	-50.24	≤-25.12	PASS
			1000~26500	-5.12	-45.04	≤-25.12	PASS

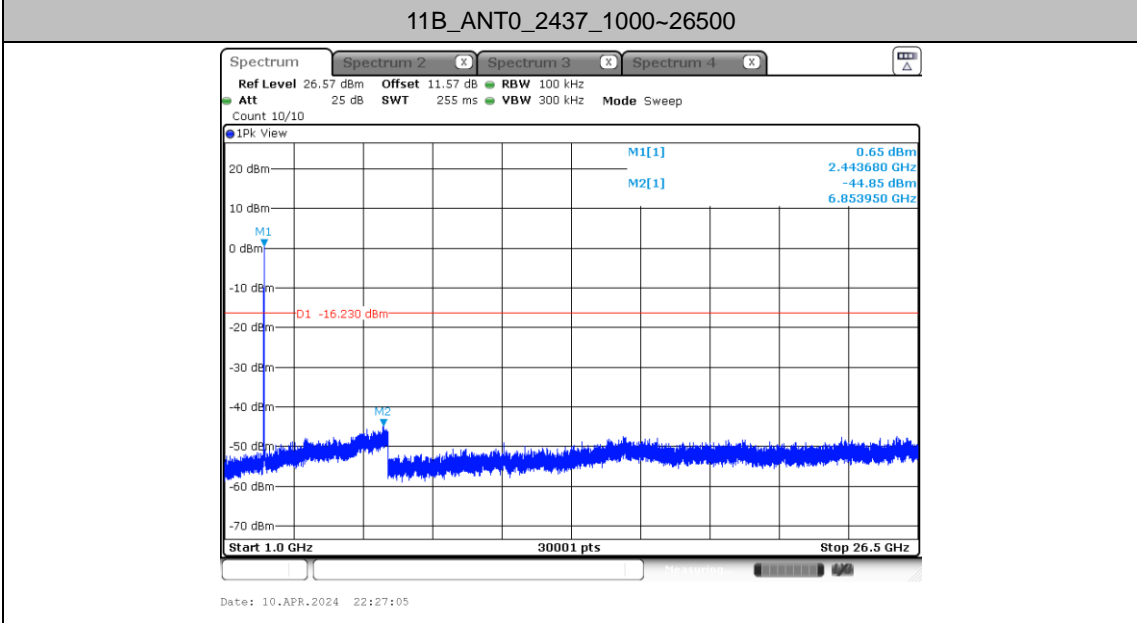
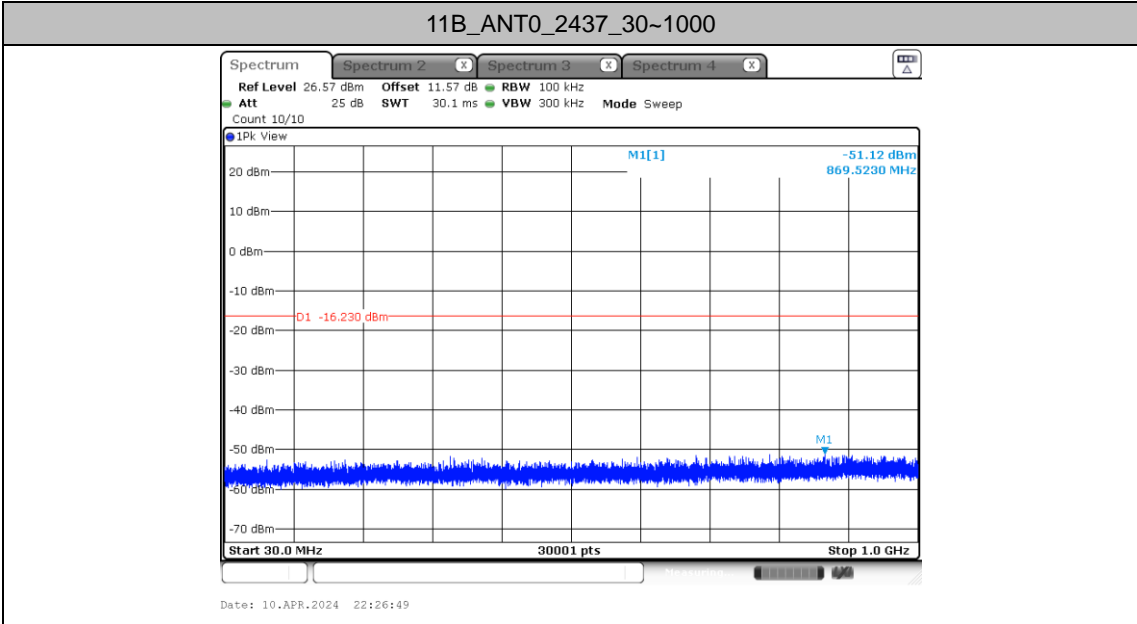


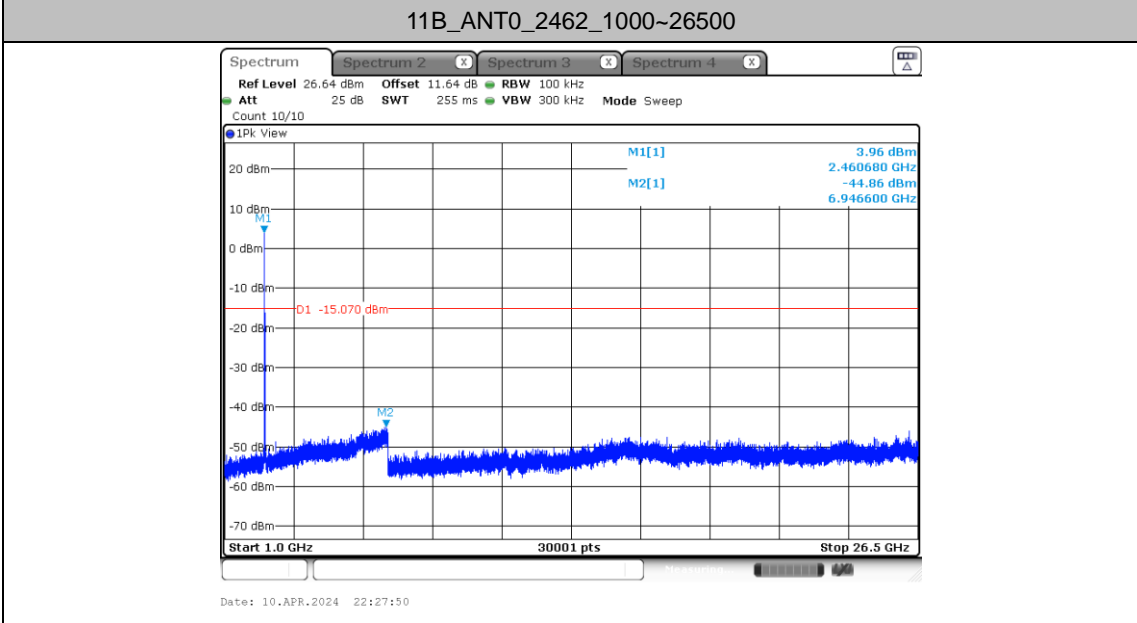
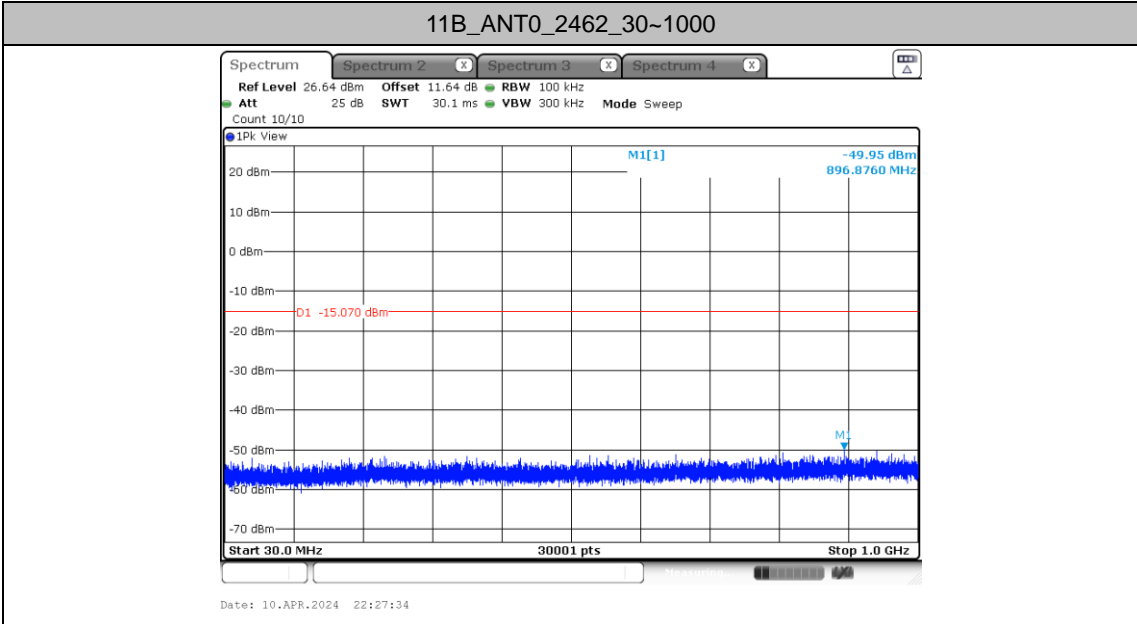
ANT0	2427	30~1000	-4.07	-50.75	≤-24.07	PASS
		1000~26500	-4.07	-45.27	≤-24.07	PASS
ANT1	2427	30~1000	-4.22	-50.48	≤-24.22	PASS
		1000~26500	-4.22	-44.18	≤-24.22	PASS
ANT0	2432	30~1000	0.07	-50.36	≤-19.93	PASS
		1000~26500	0.07	-39.75	≤-19.93	PASS
ANT1	2432	30~1000	0.65	-51.36	≤-19.35	PASS
		1000~26500	0.65	-43.49	≤-19.35	PASS
ANT0	2437	30~1000	-0.21	-50.99	≤-20.21	PASS
		1000~26500	-0.21	-43.17	≤-20.21	PASS
ANT1	2437	30~1000	0.36	-50.76	≤-19.64	PASS
		1000~26500	0.36	-42.26	≤-19.64	PASS
ANT0	2442	30~1000	-3.17	-50.92	≤-23.17	PASS
		1000~26500	-3.17	-43.21	≤-23.17	PASS
ANT1	2442	30~1000	-2.75	-50.38	≤-22.75	PASS
		1000~26500	-2.75	-41.33	≤-22.75	PASS
ANT0	2447	30~1000	-3.57	-51.06	≤-23.57	PASS
		1000~26500	-3.57	-45.27	≤-23.57	PASS
ANT1	2447	30~1000	-3.49	-49.51	≤-23.49	PASS
		1000~26500	-3.49	-43.31	≤-23.49	PASS
ANT0	2452	30~1000	-4.66	-51.01	≤-24.66	PASS
		1000~26500	-4.66	-44.67	≤-24.66	PASS
ANT1	2452	30~1000	-4.89	-50.47	≤-24.89	PASS
		1000~26500	-4.89	-44.58	≤-24.89	PASS



Test Graphs

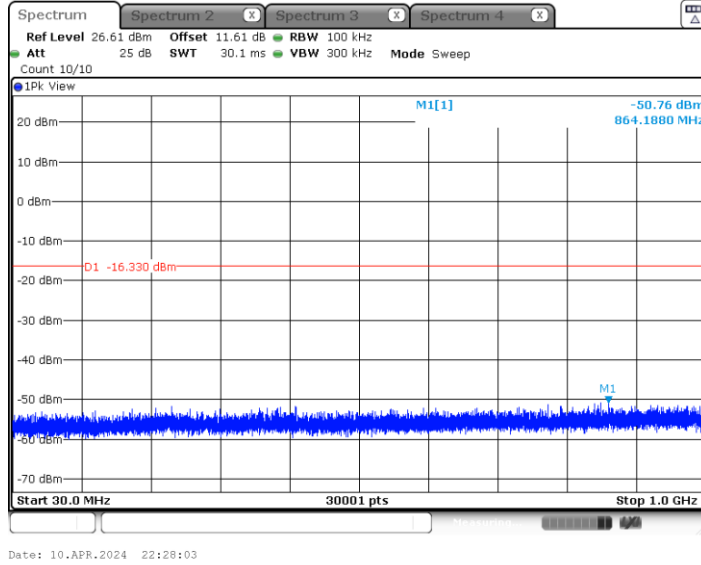




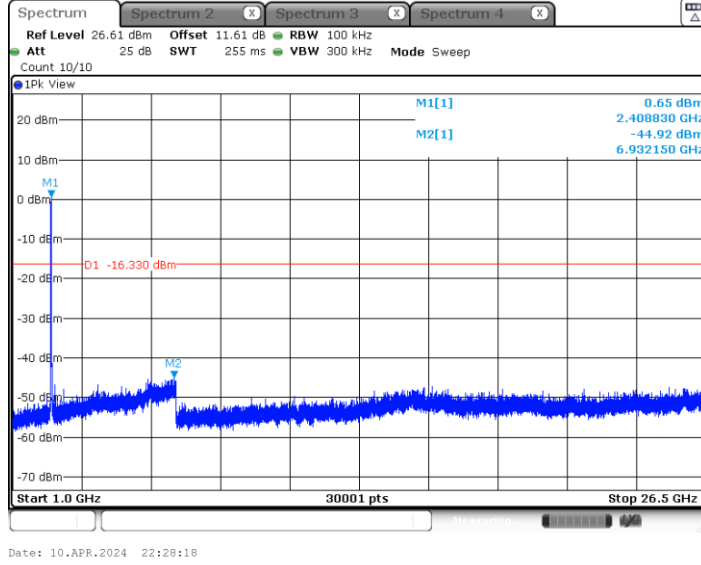


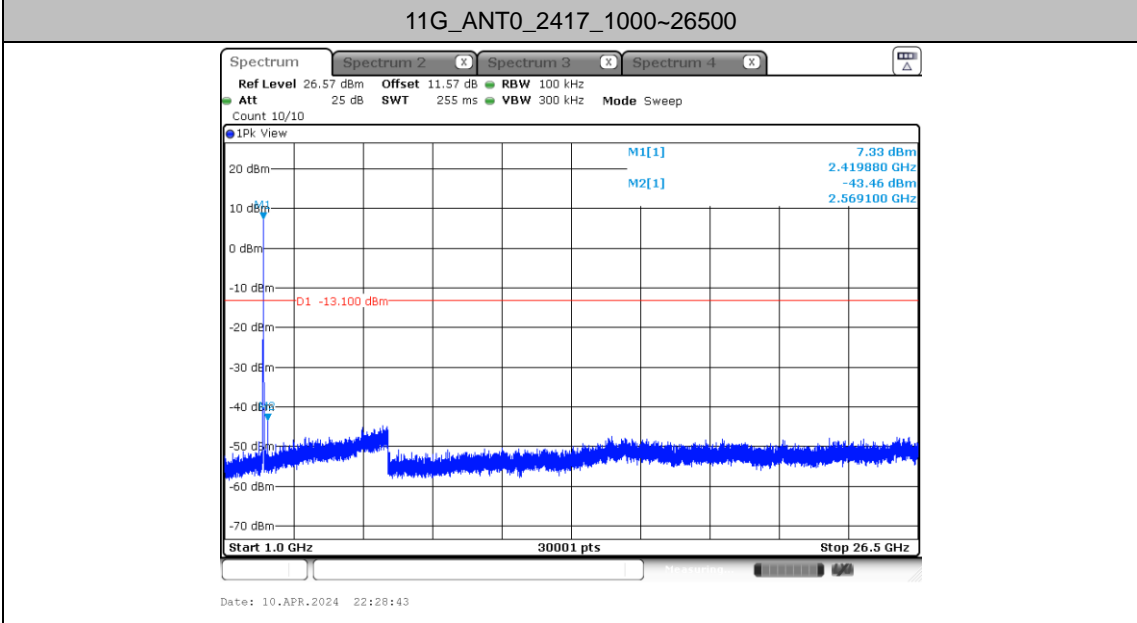
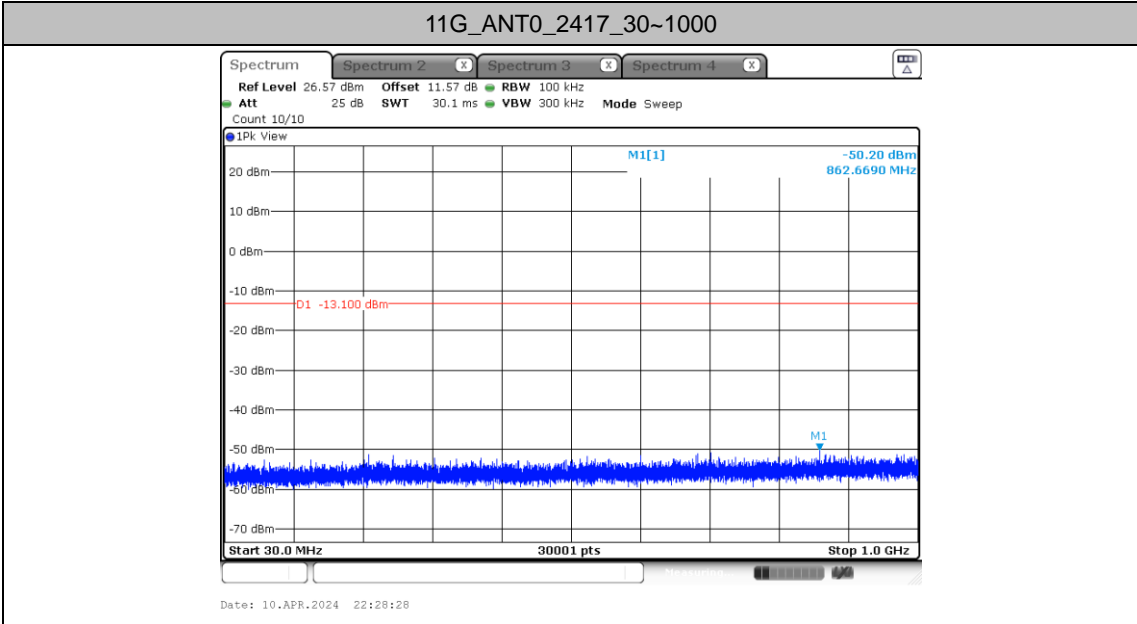


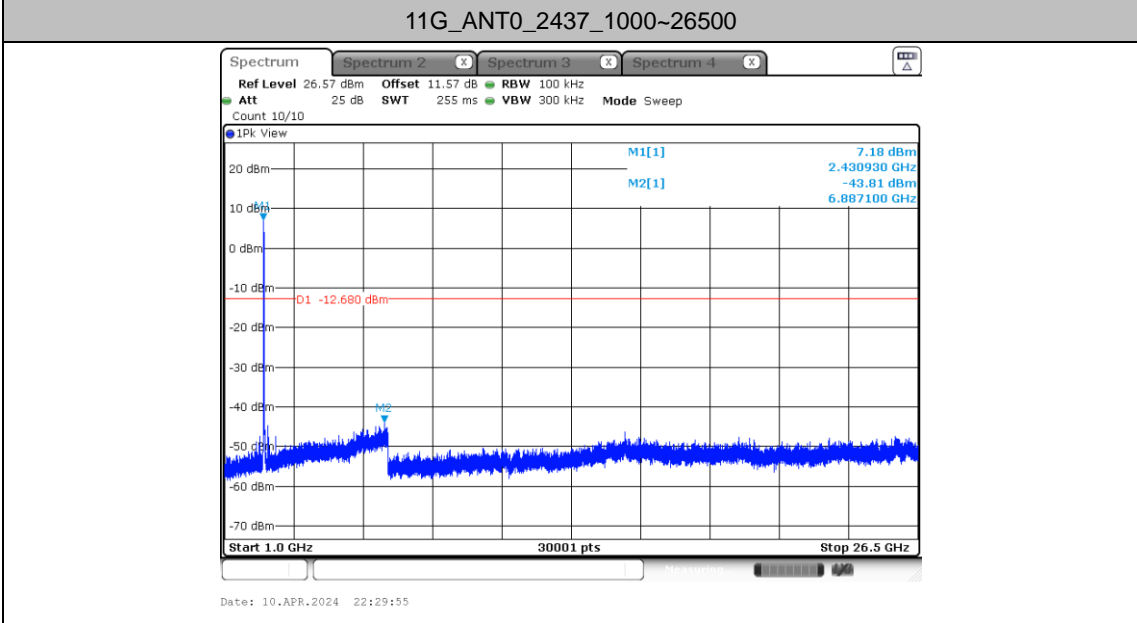
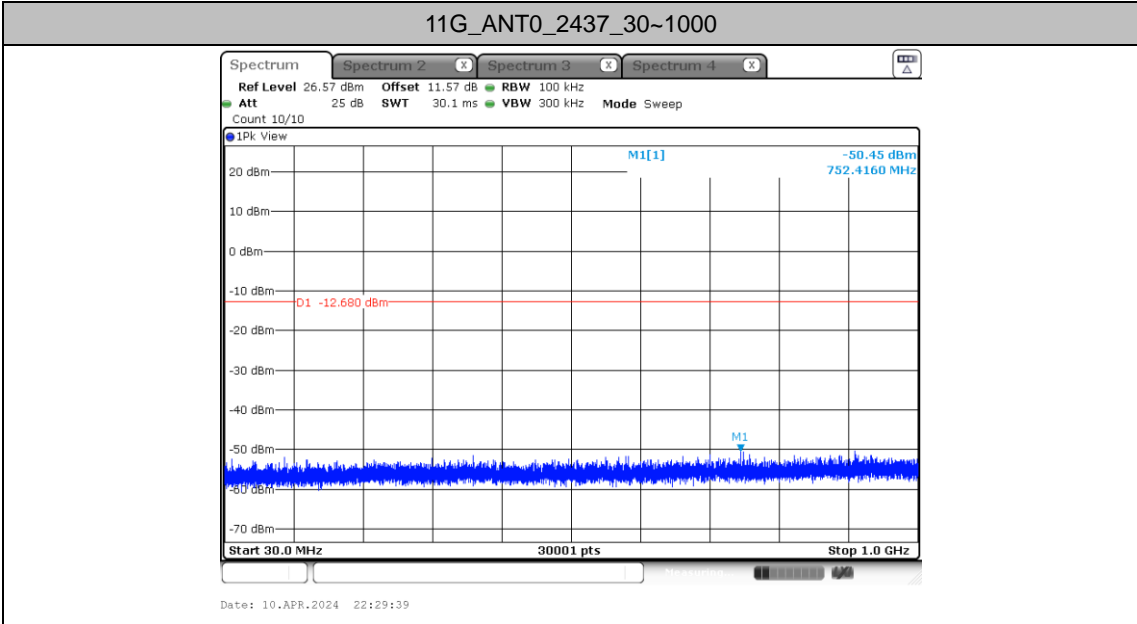
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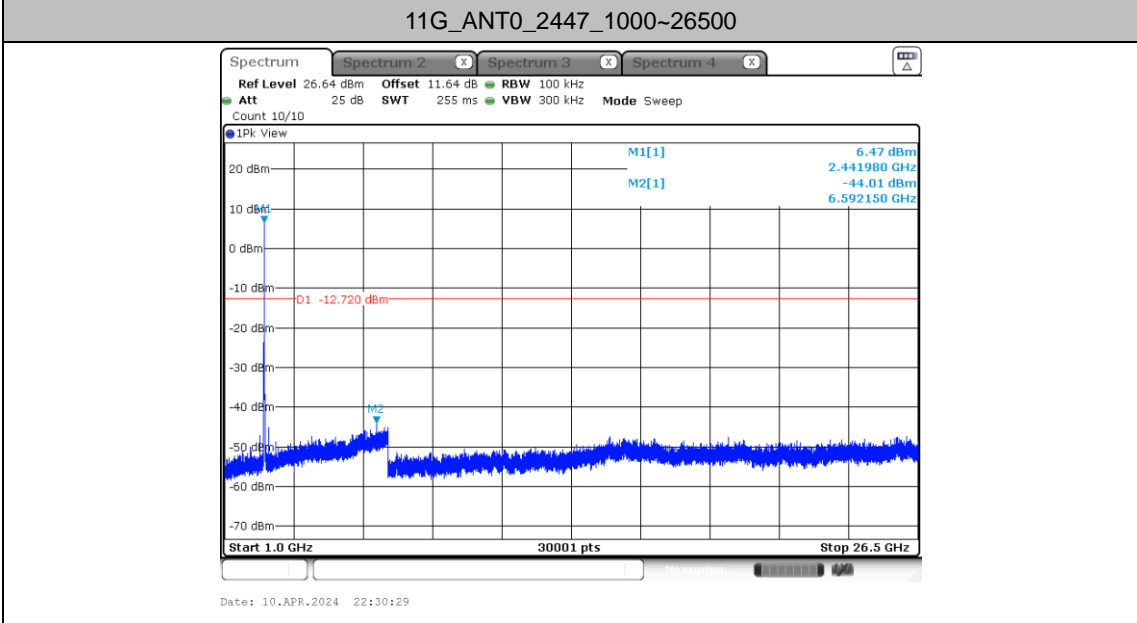
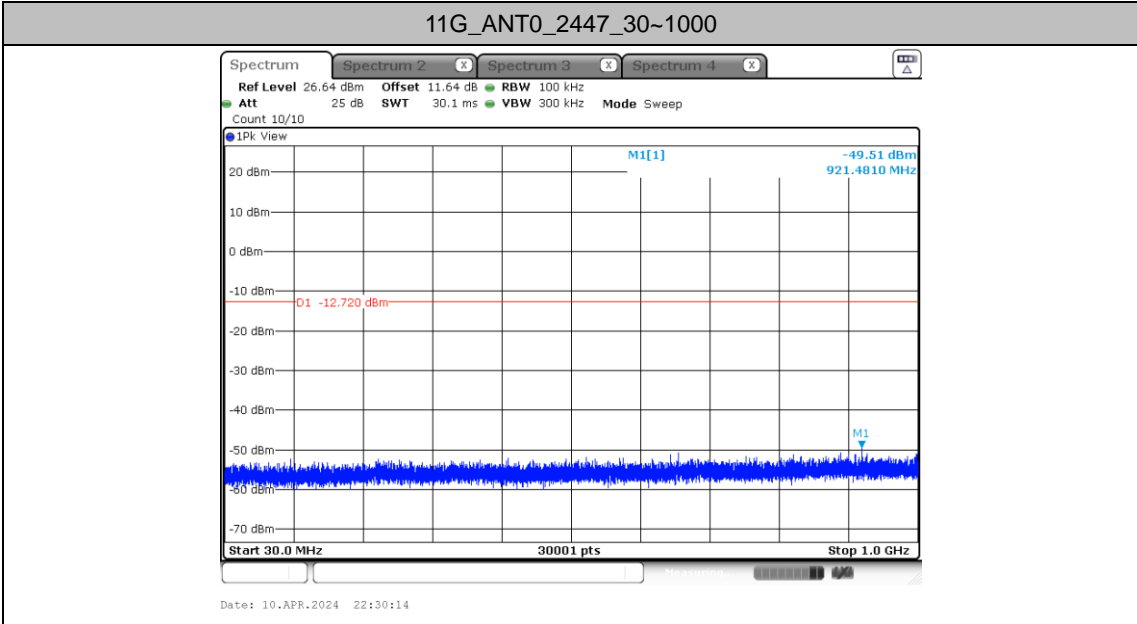


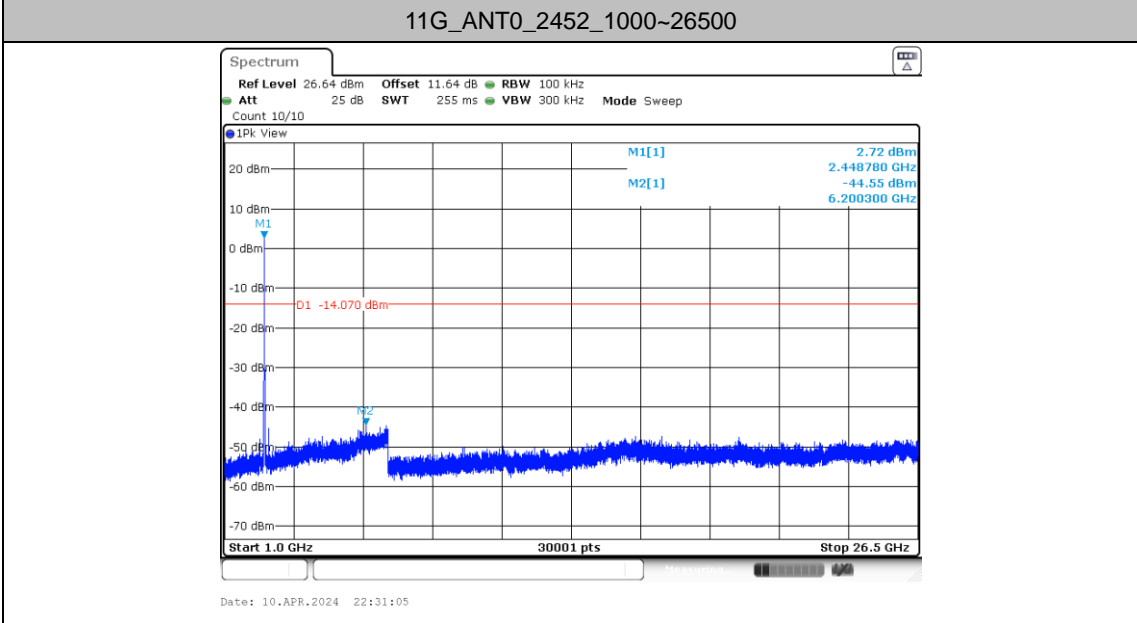
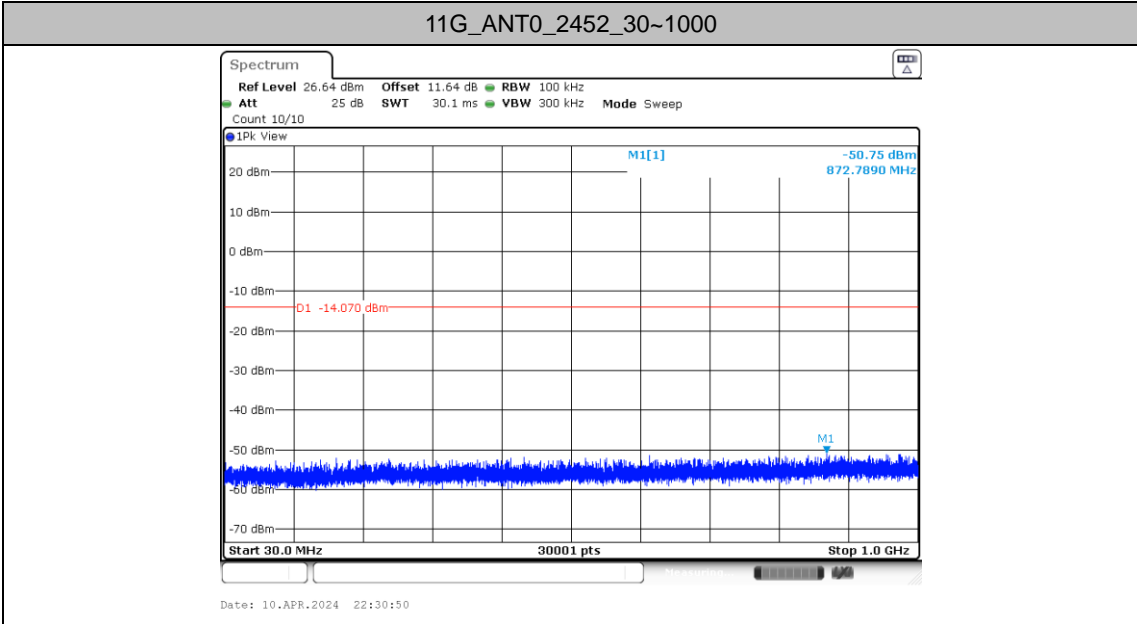
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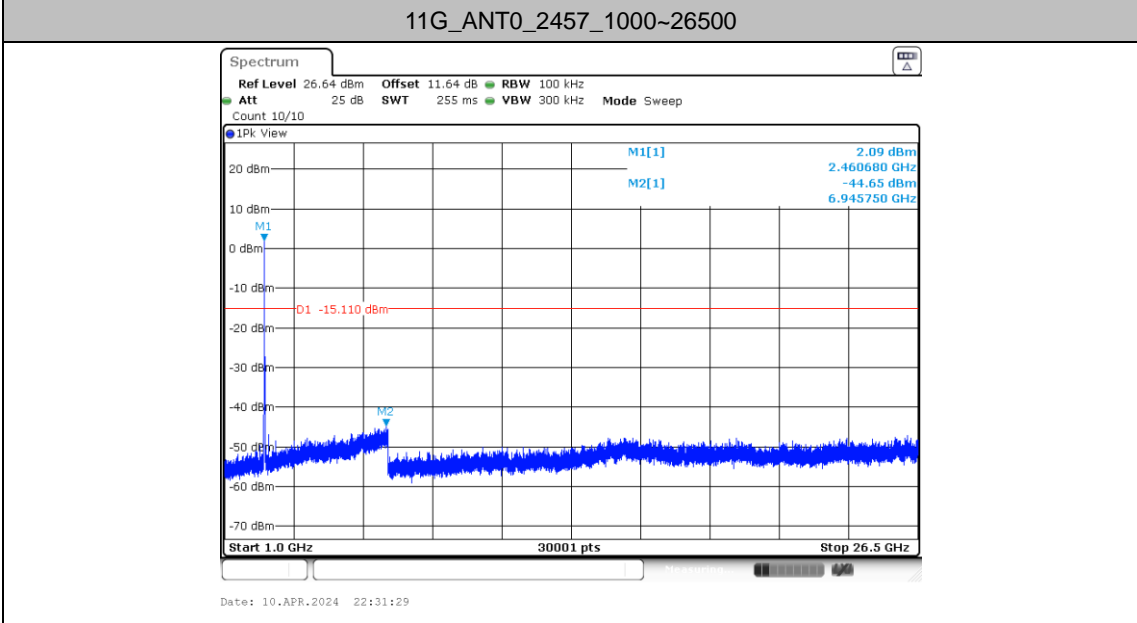
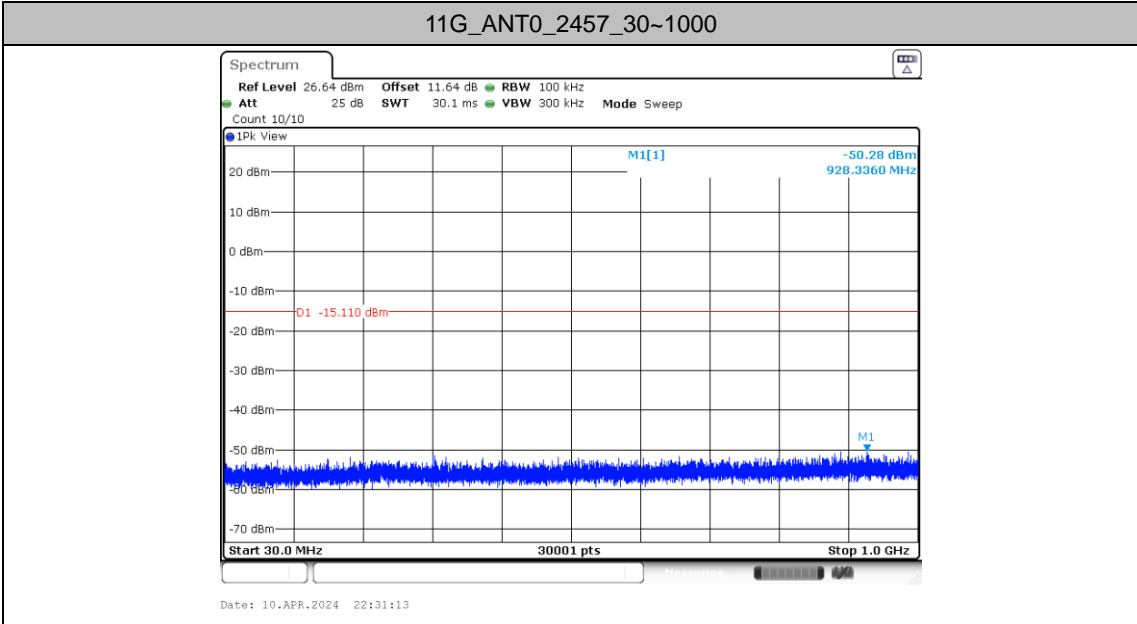


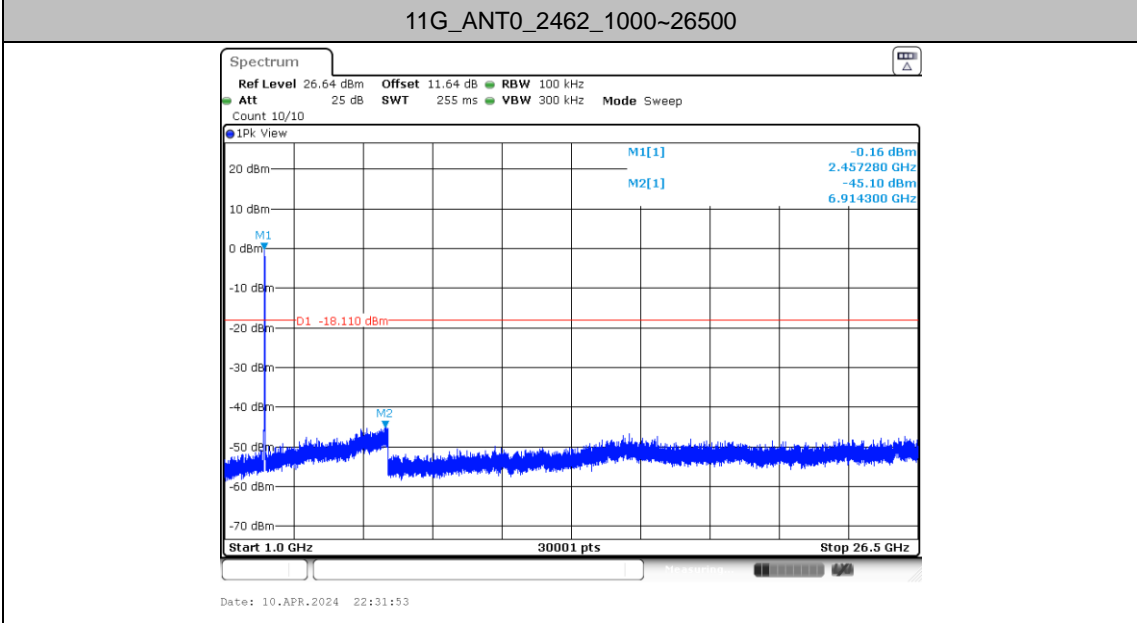
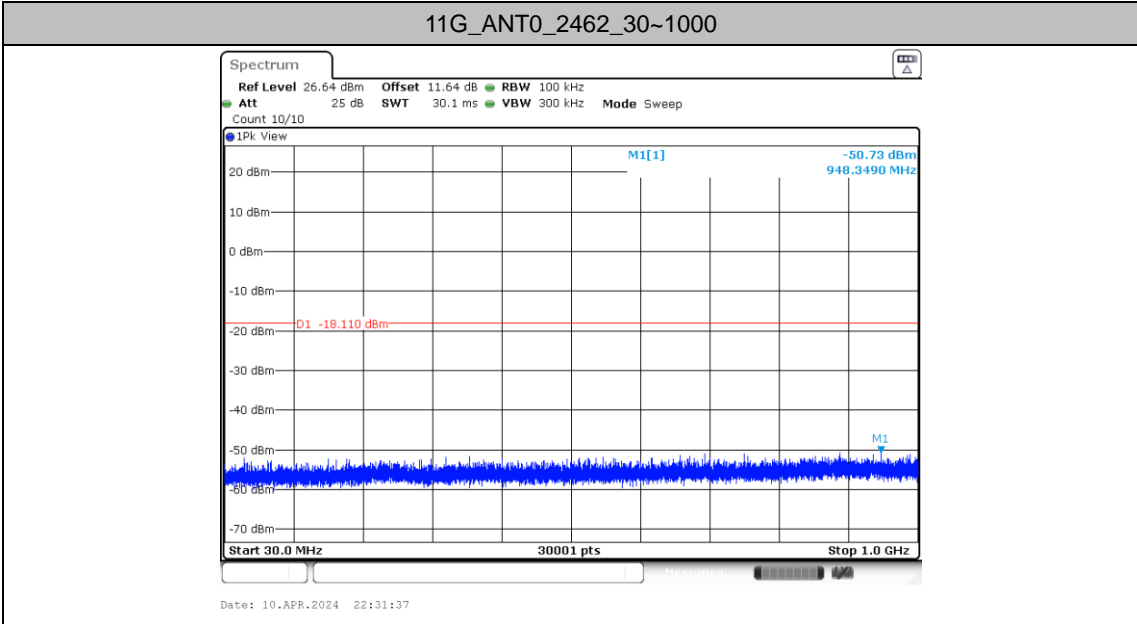






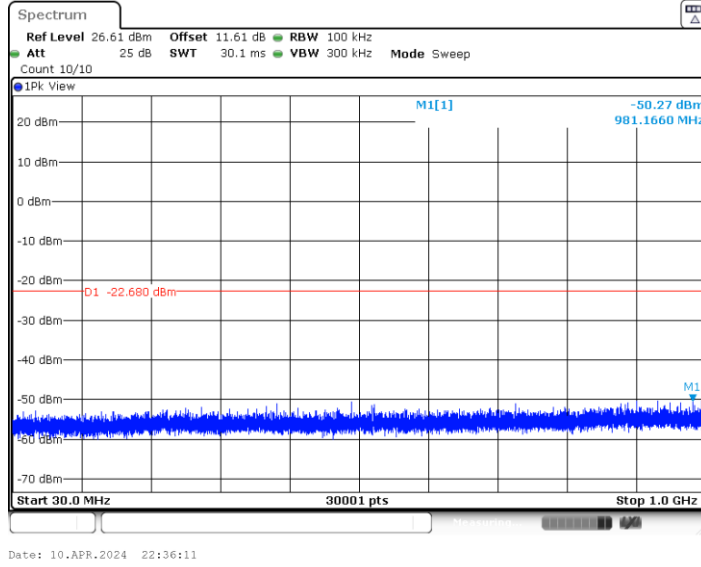




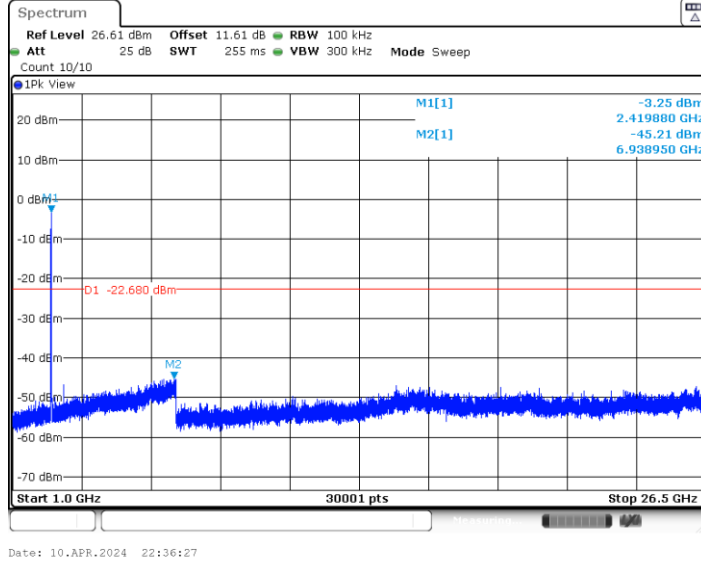


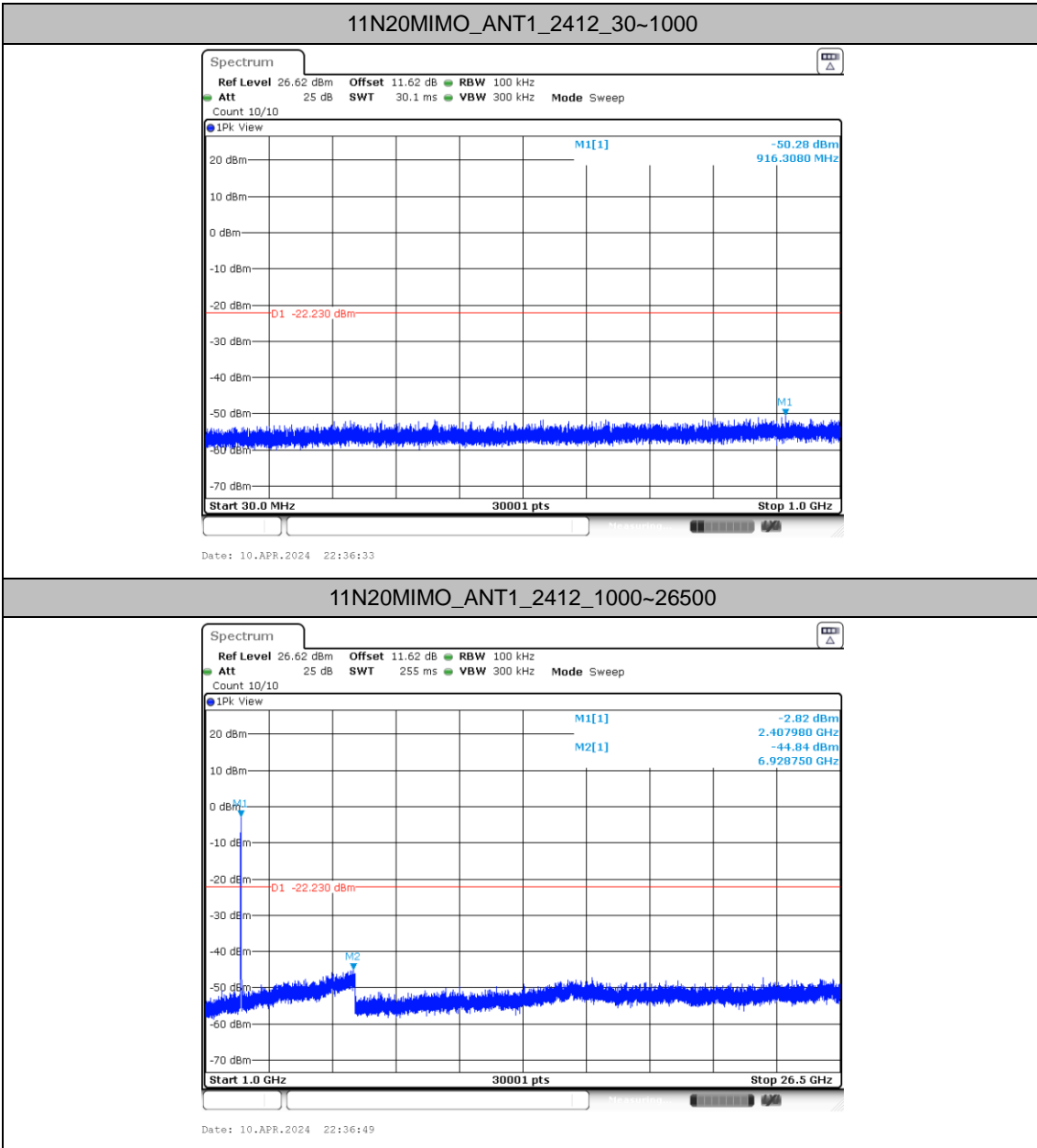


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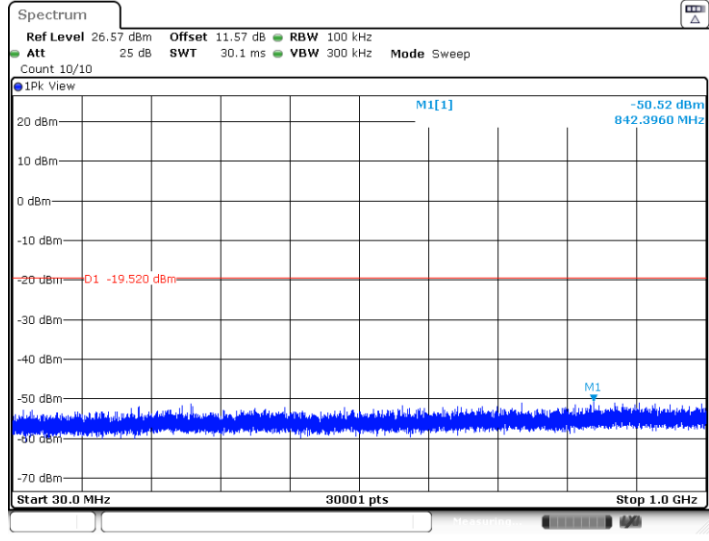
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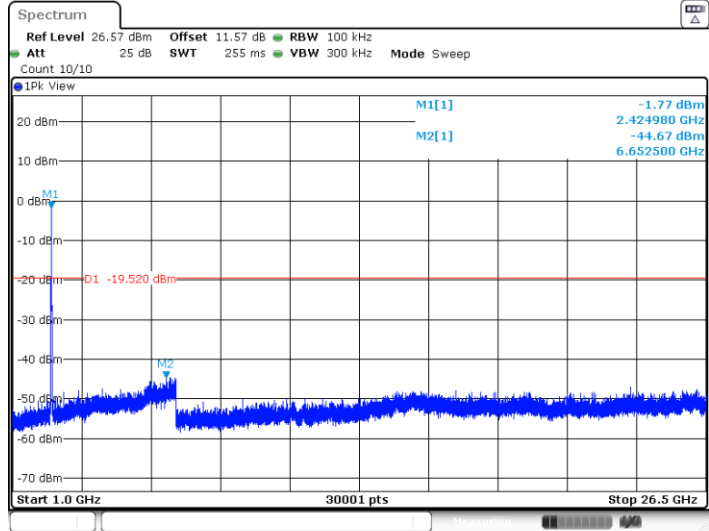


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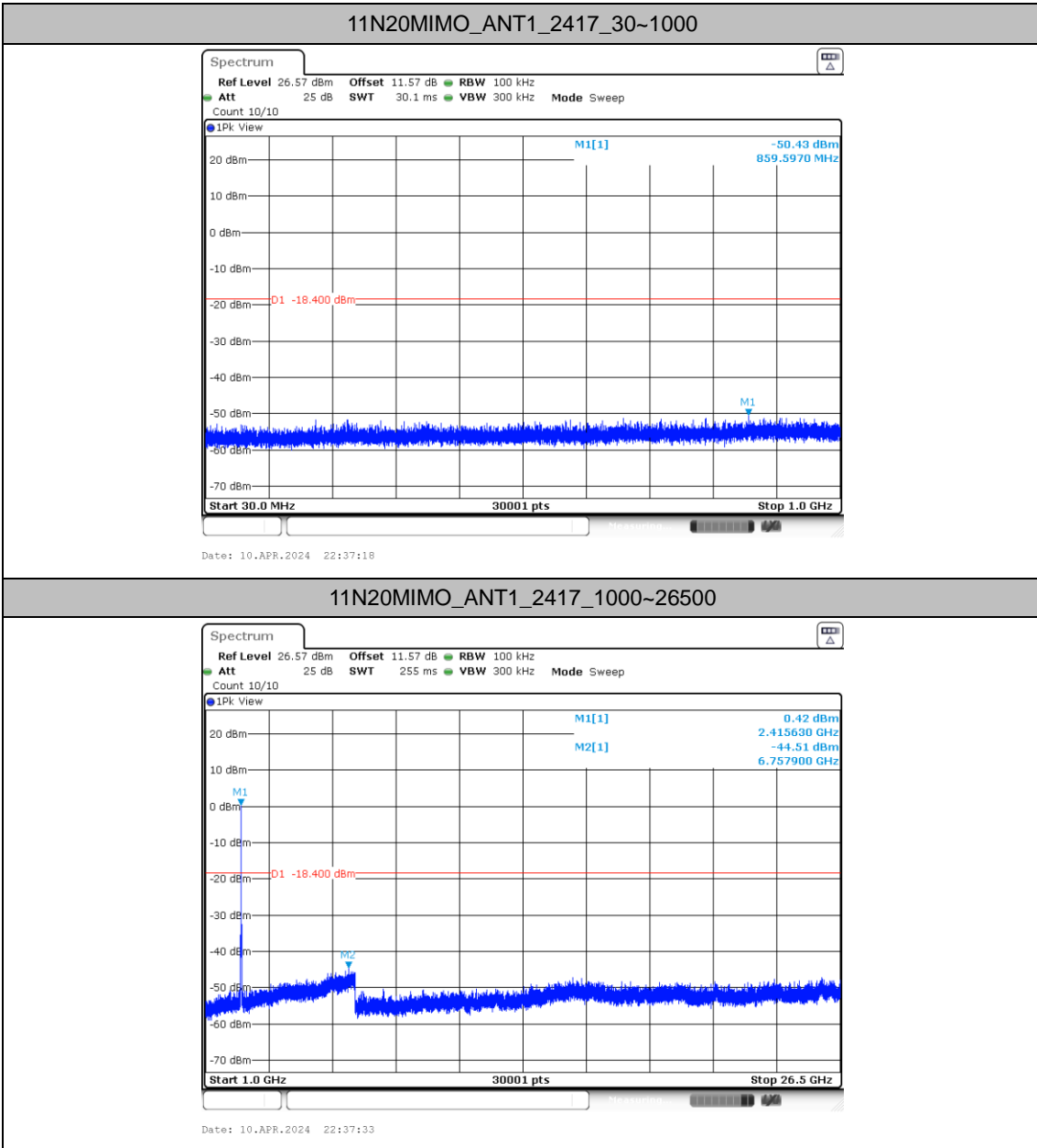


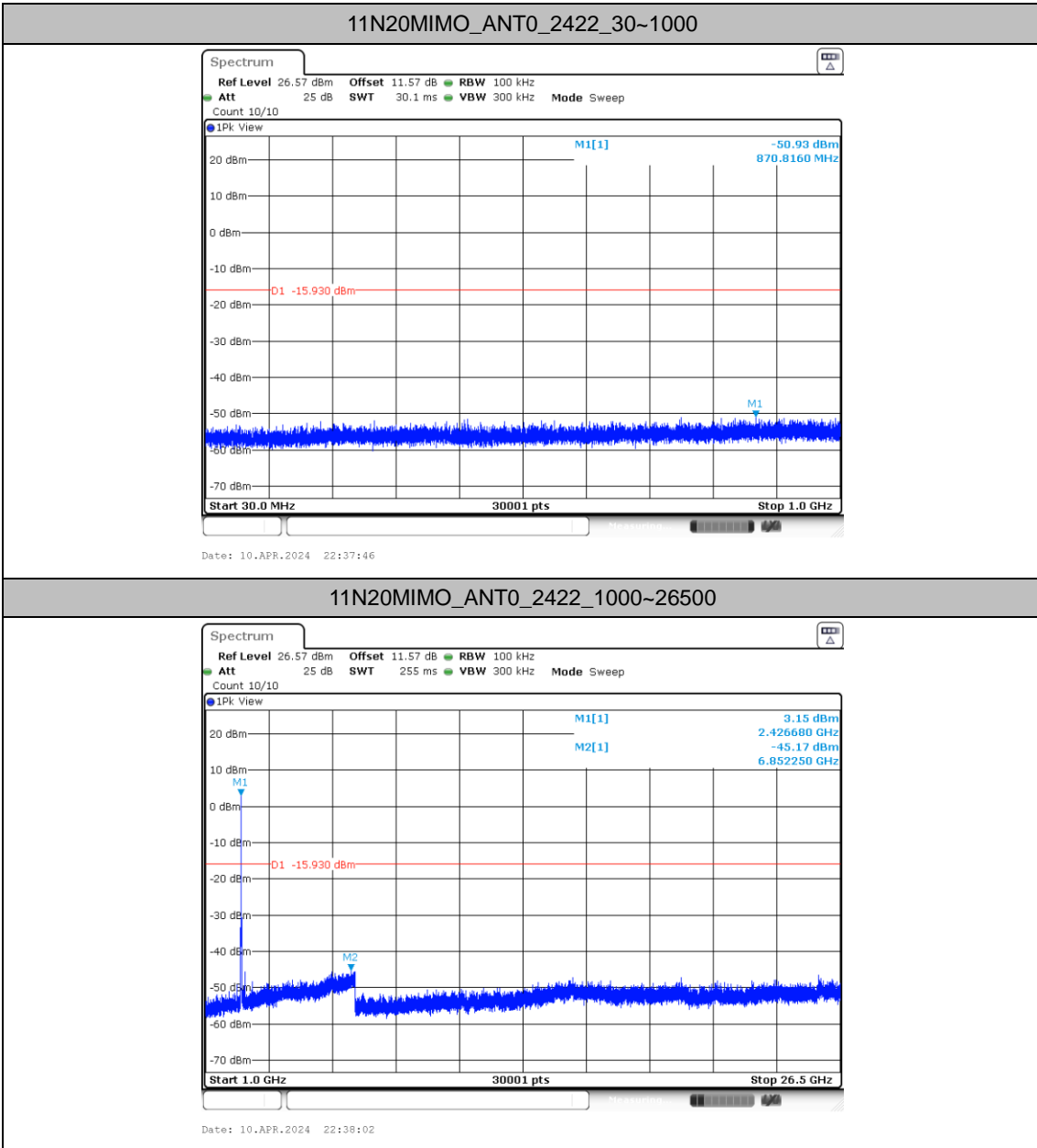
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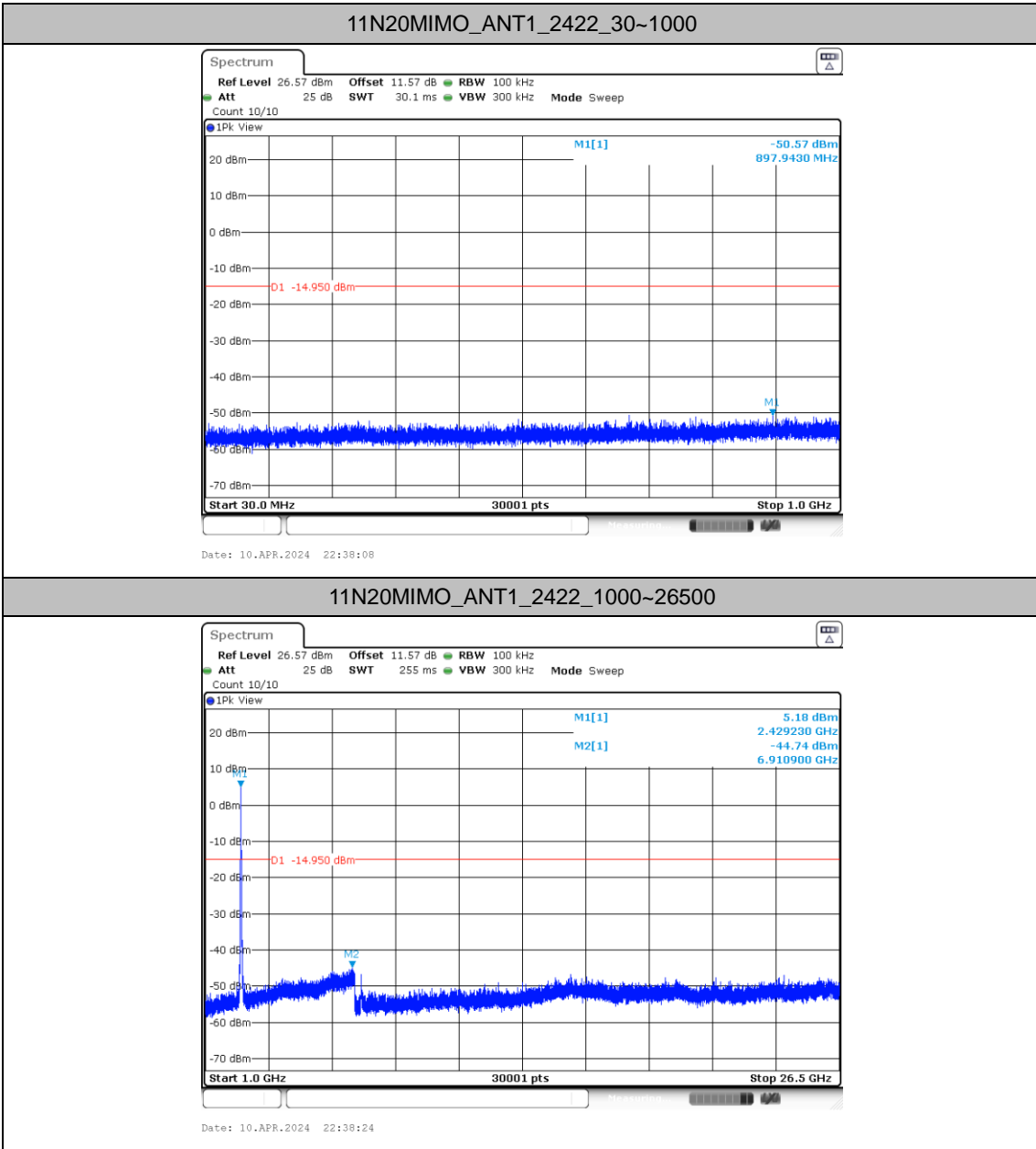
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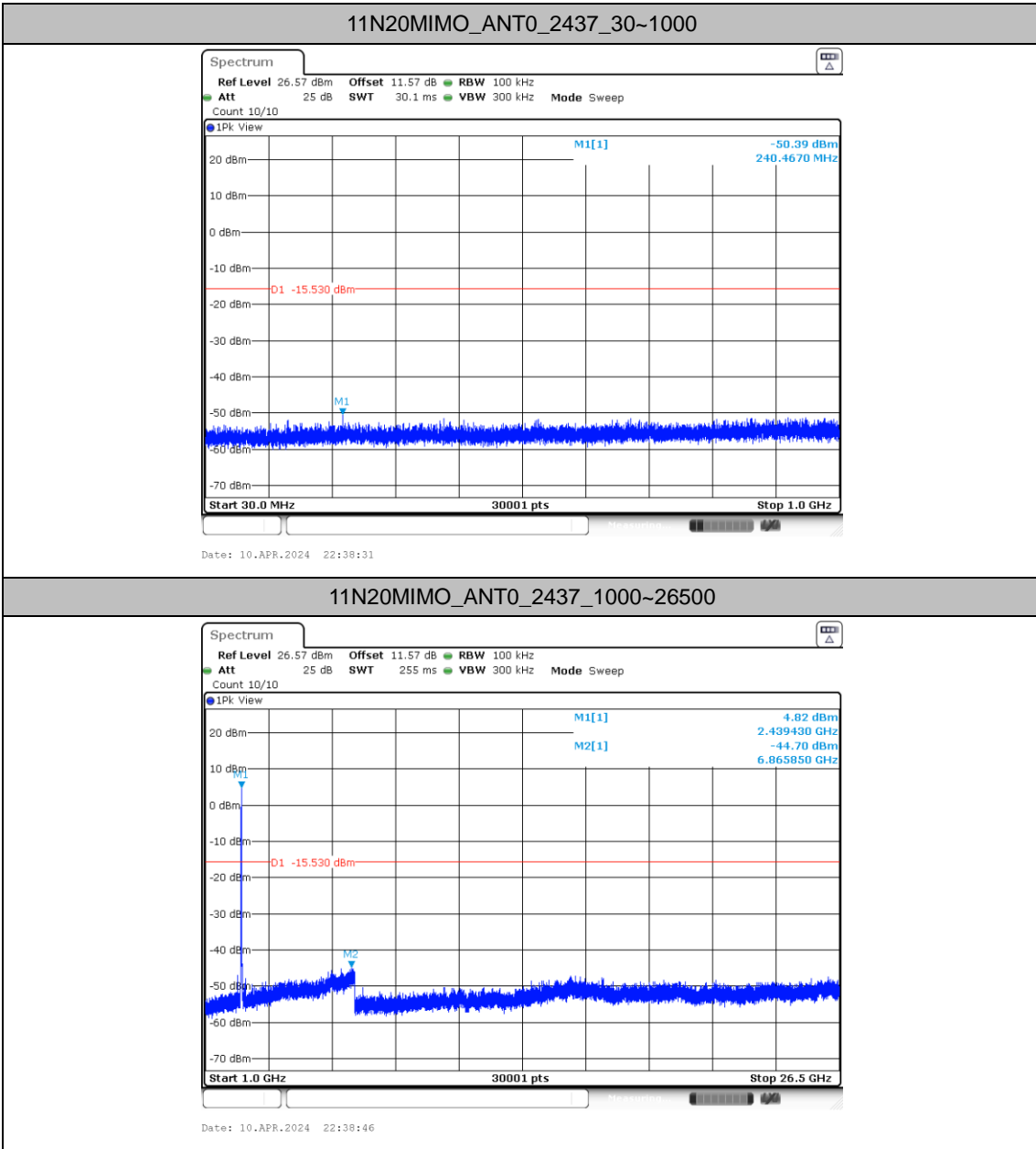


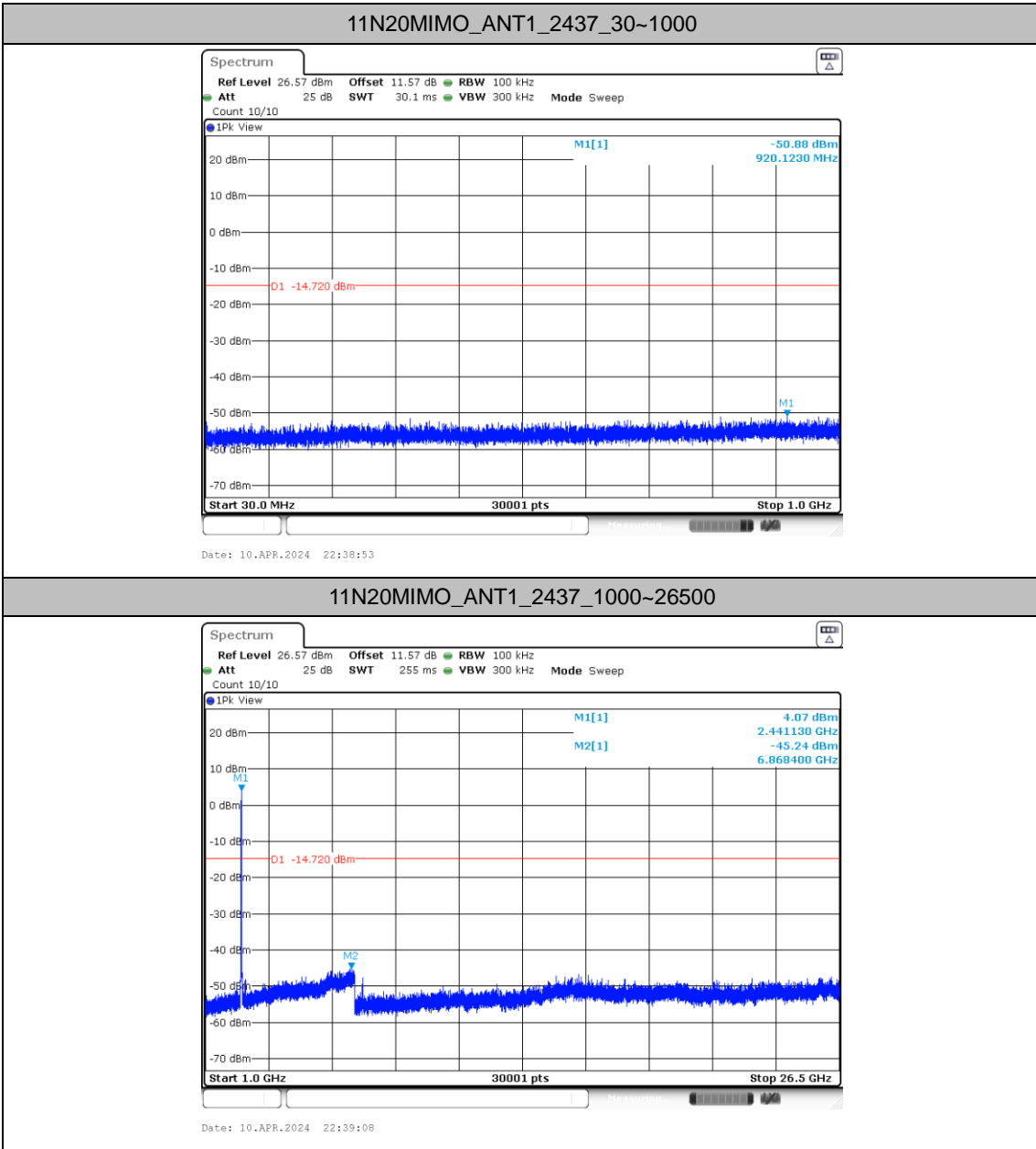
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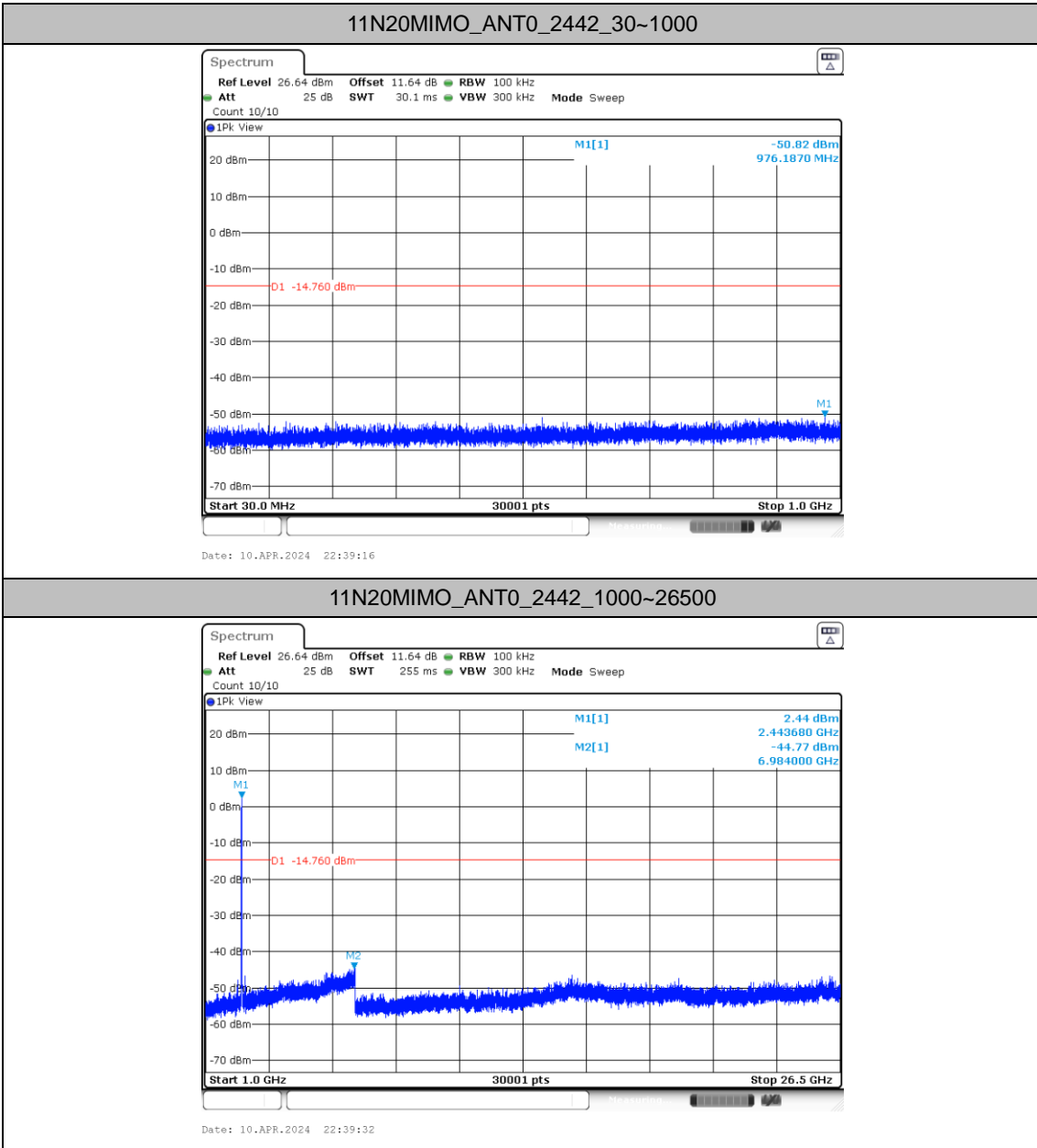


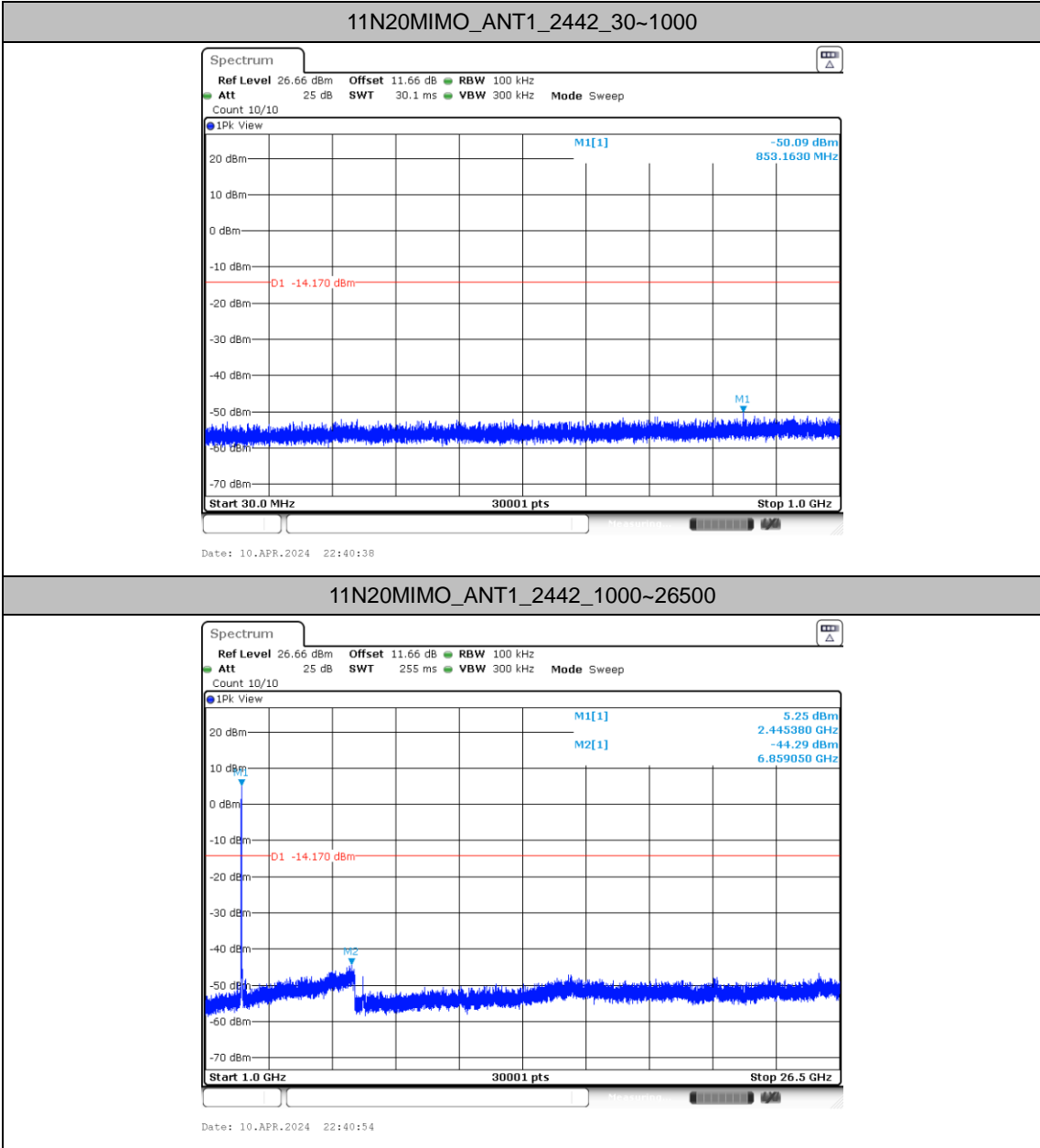


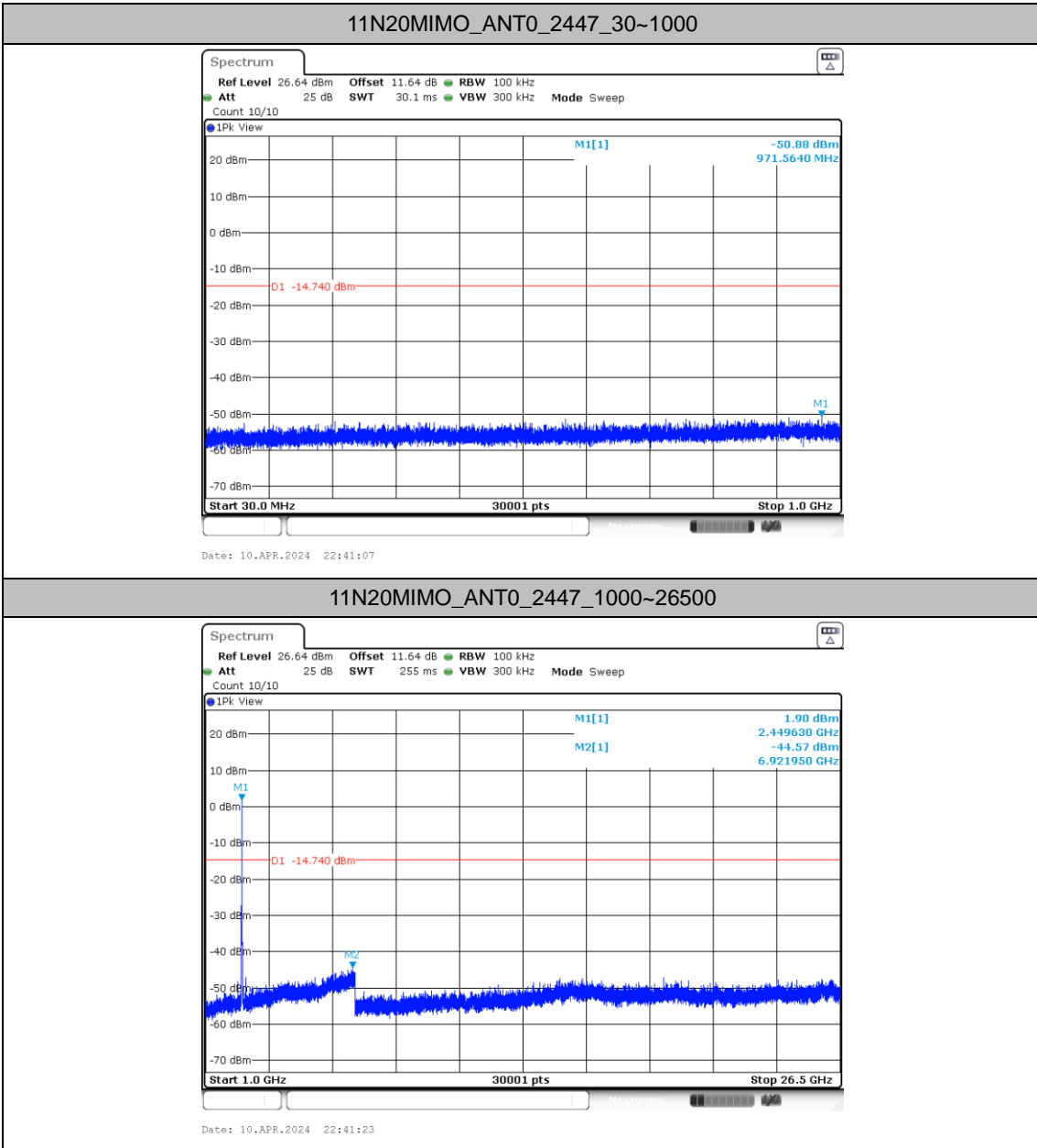


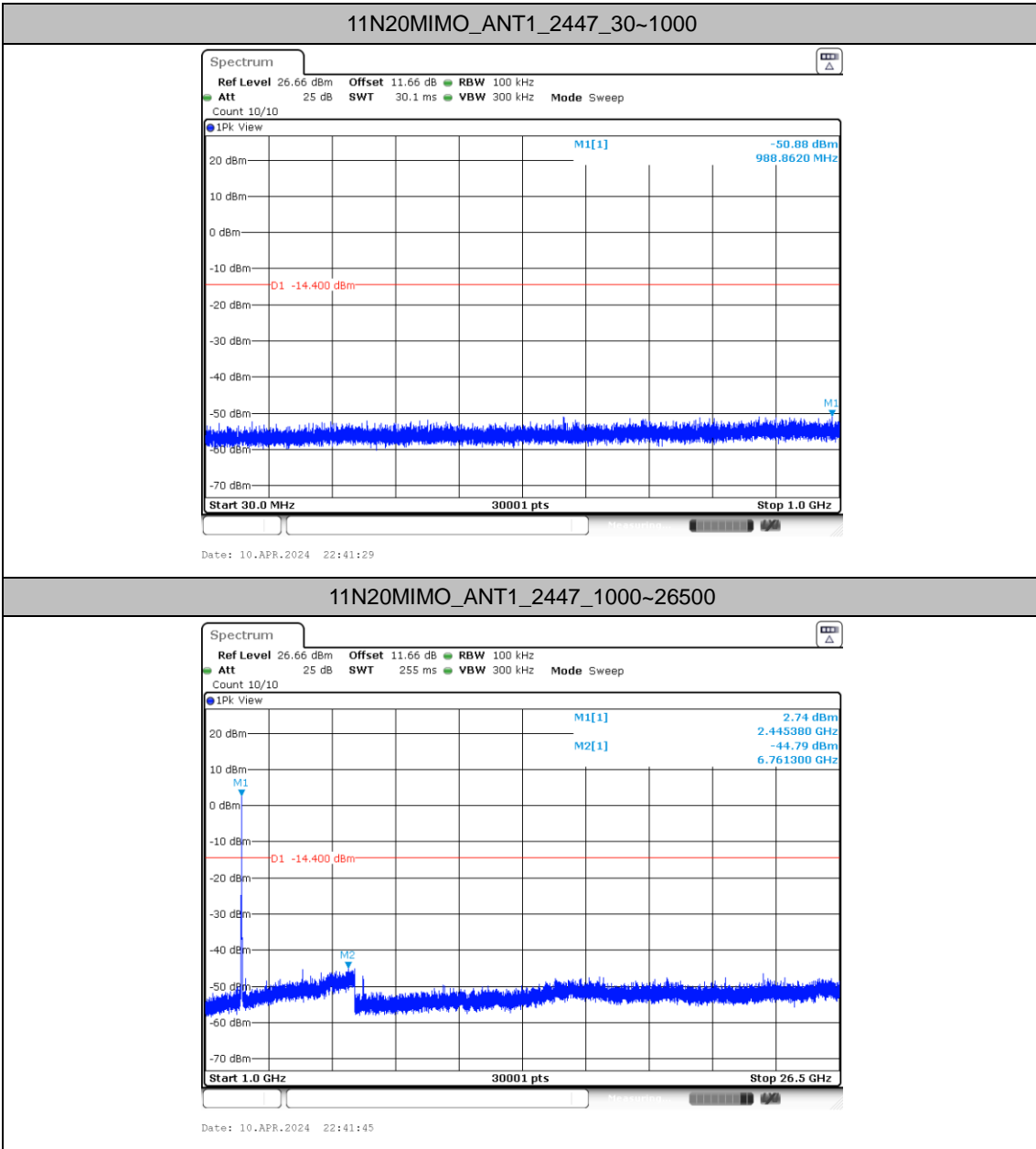


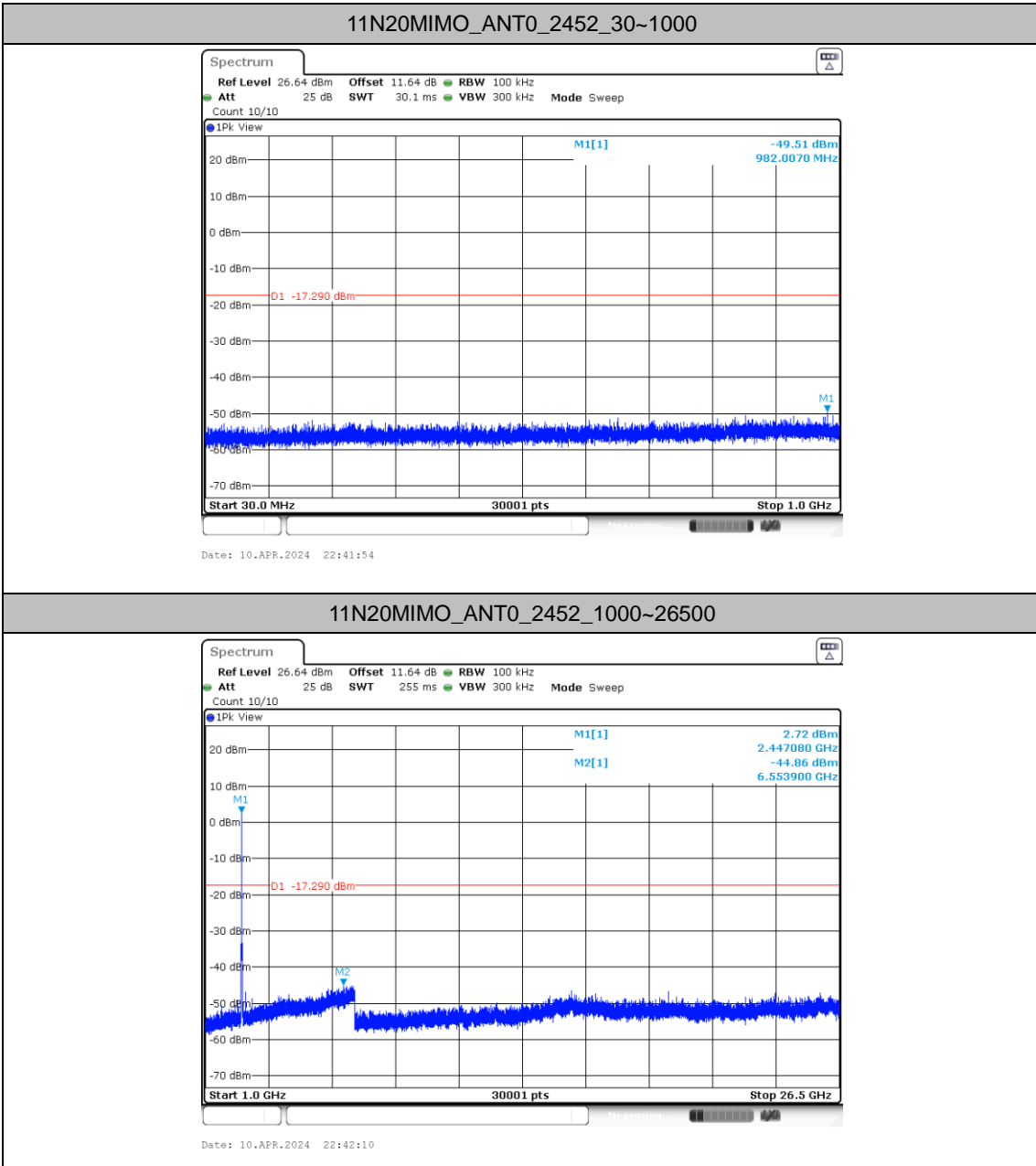


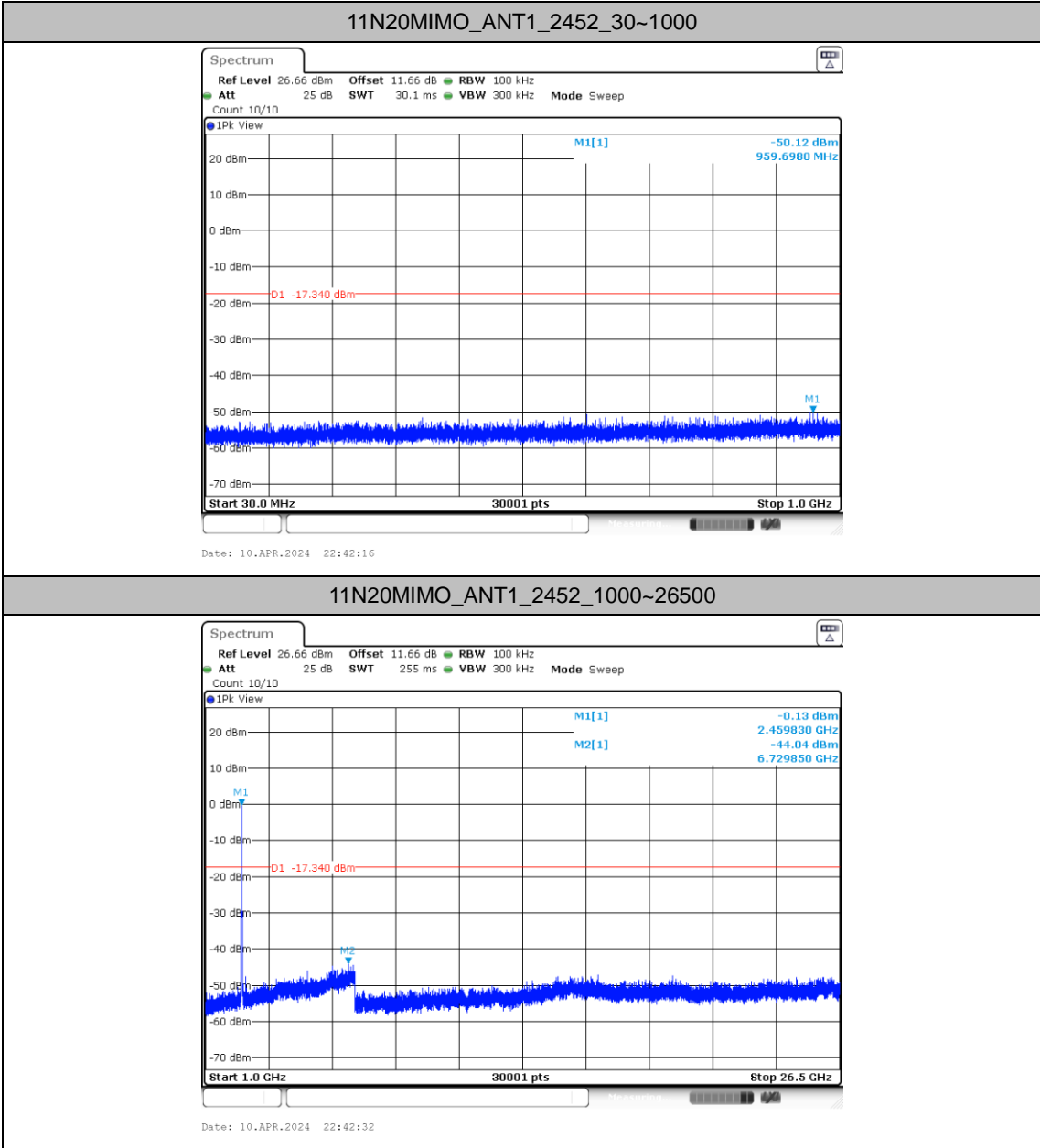


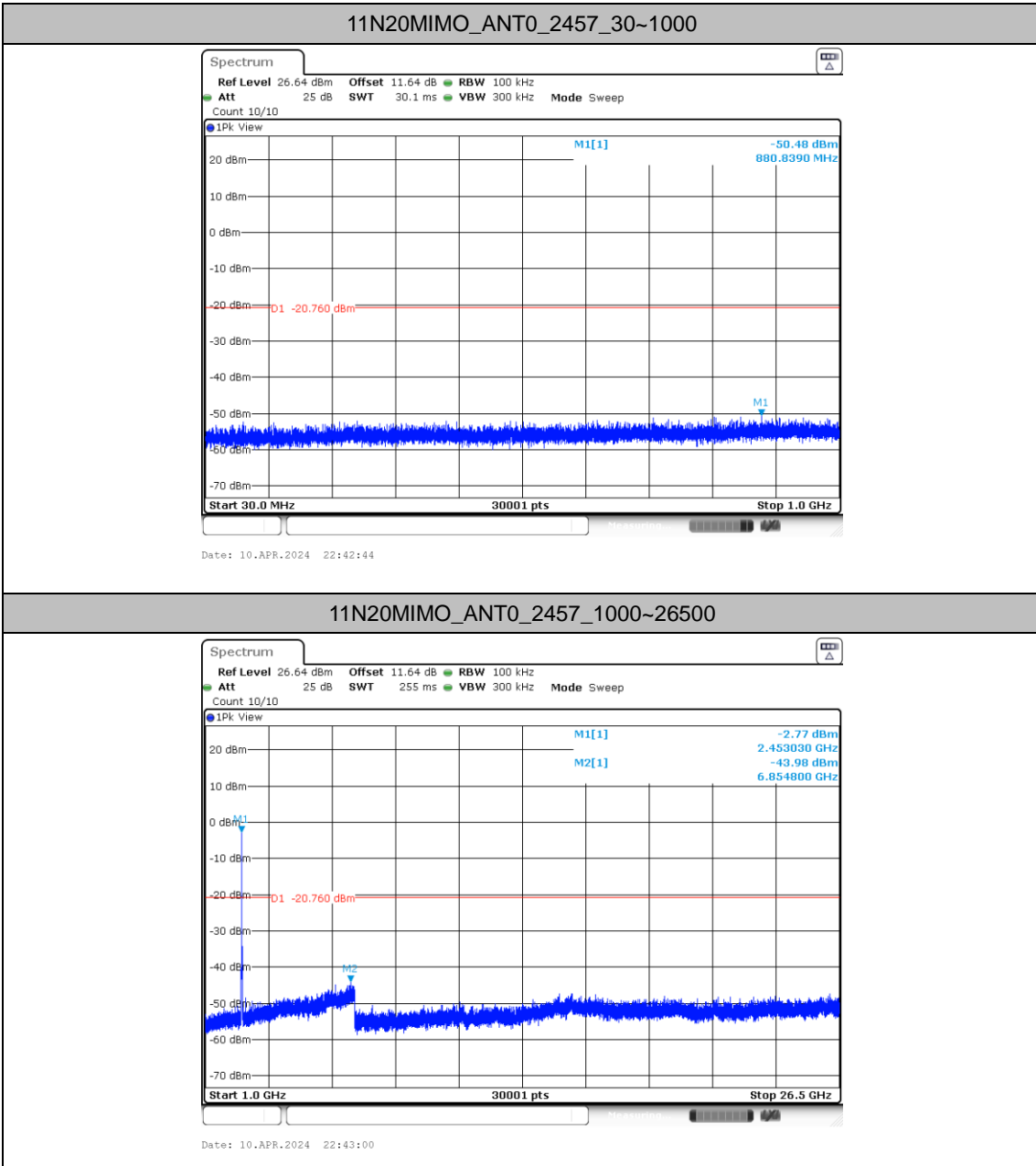


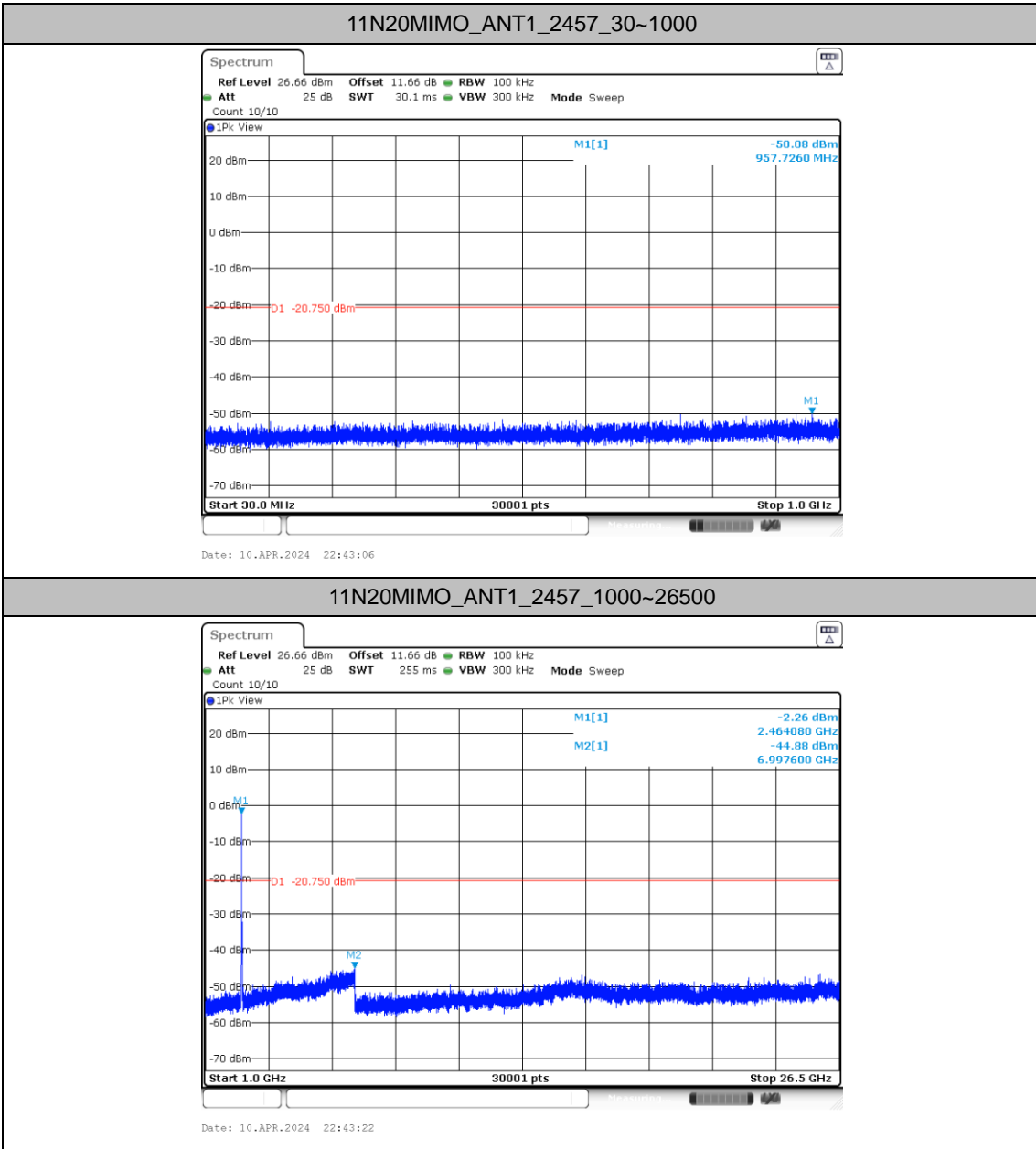


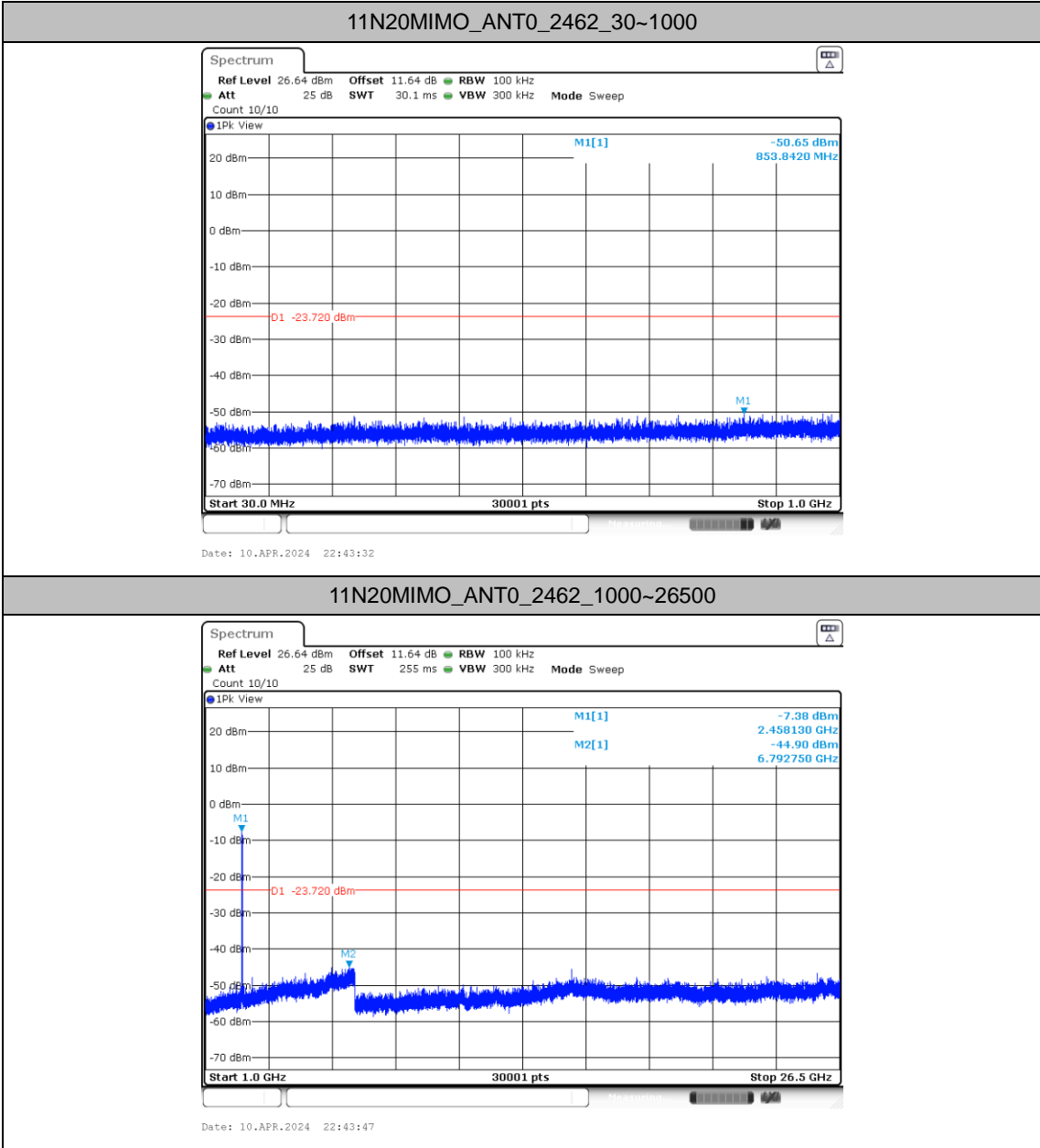


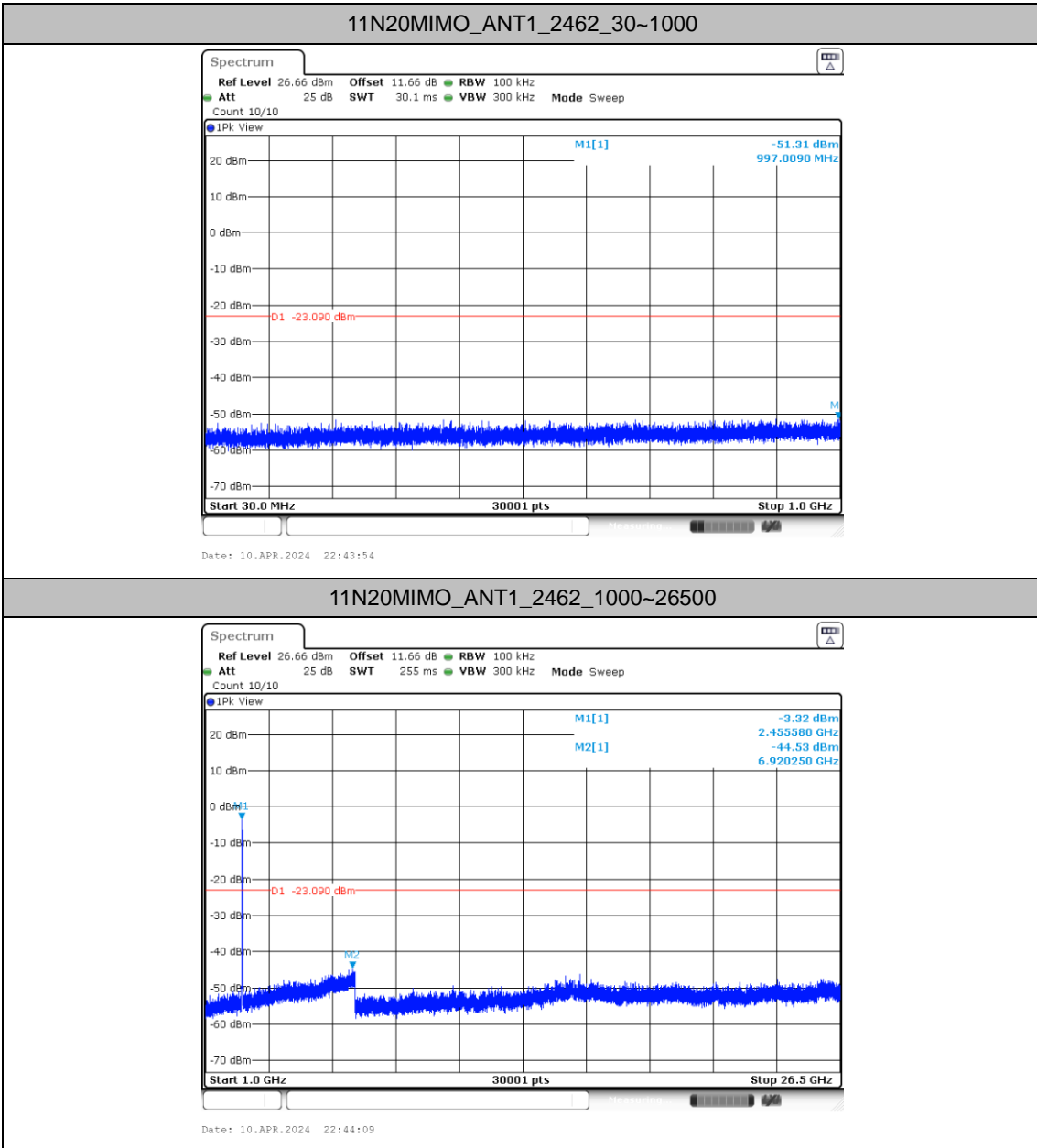


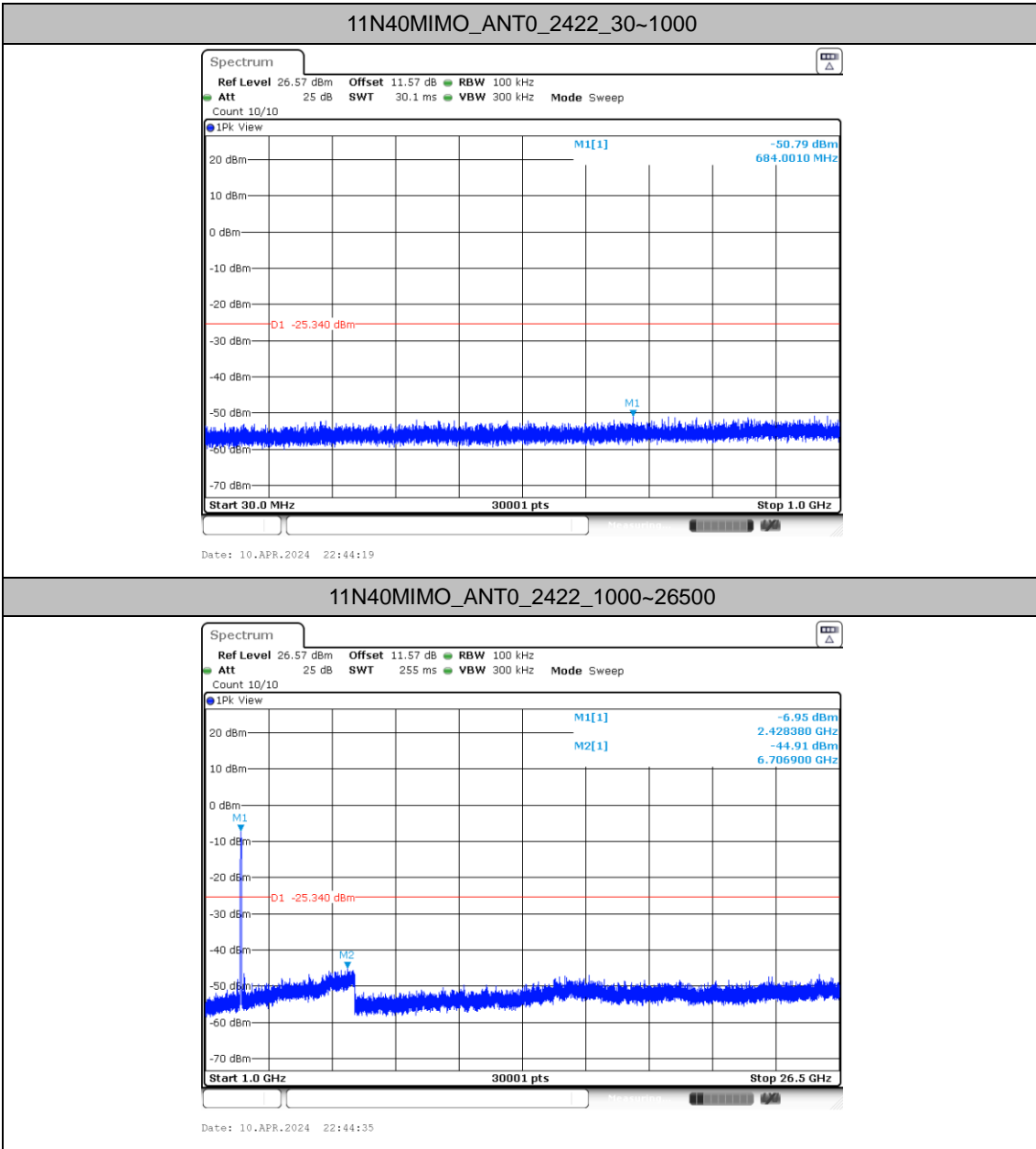


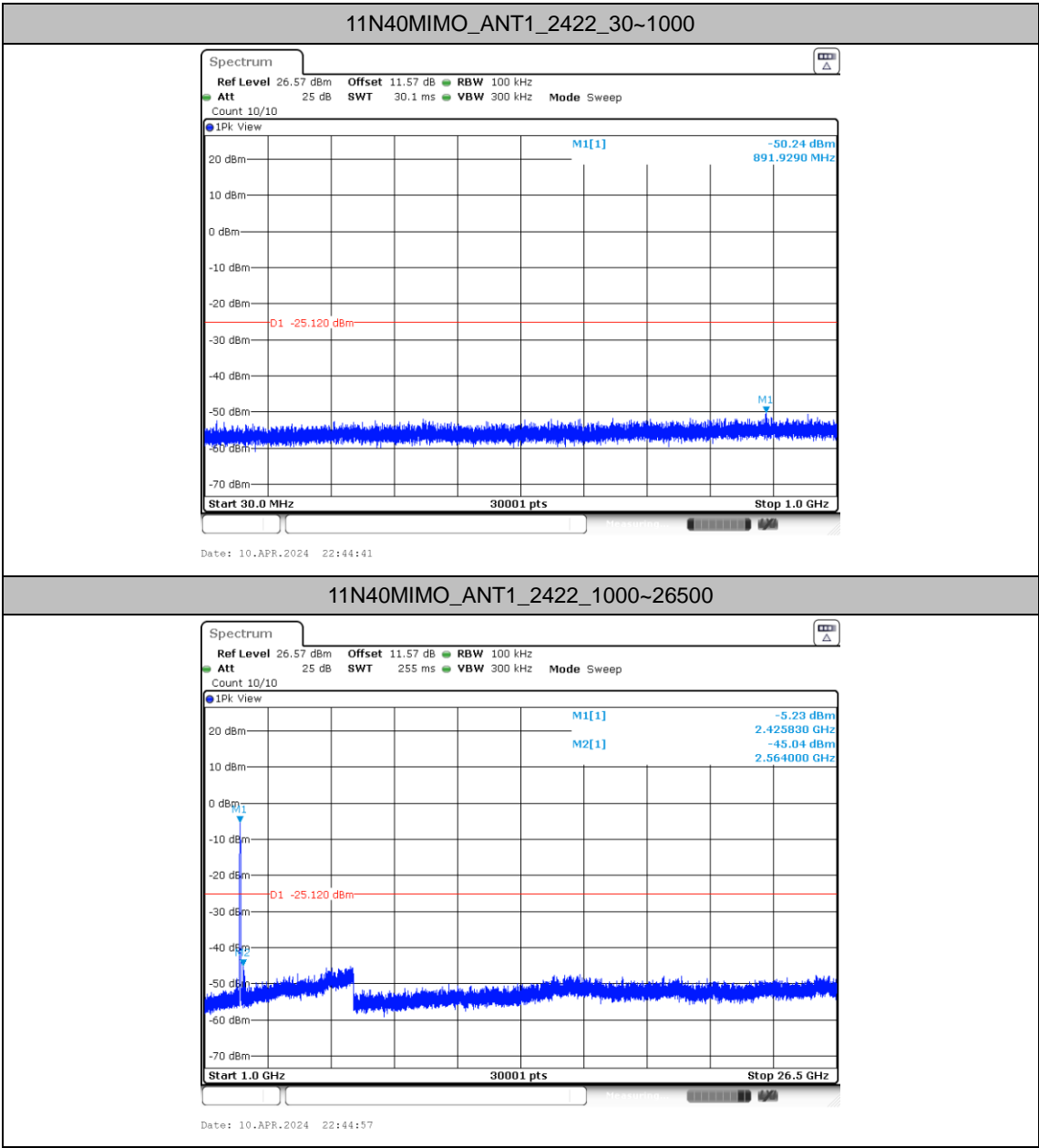


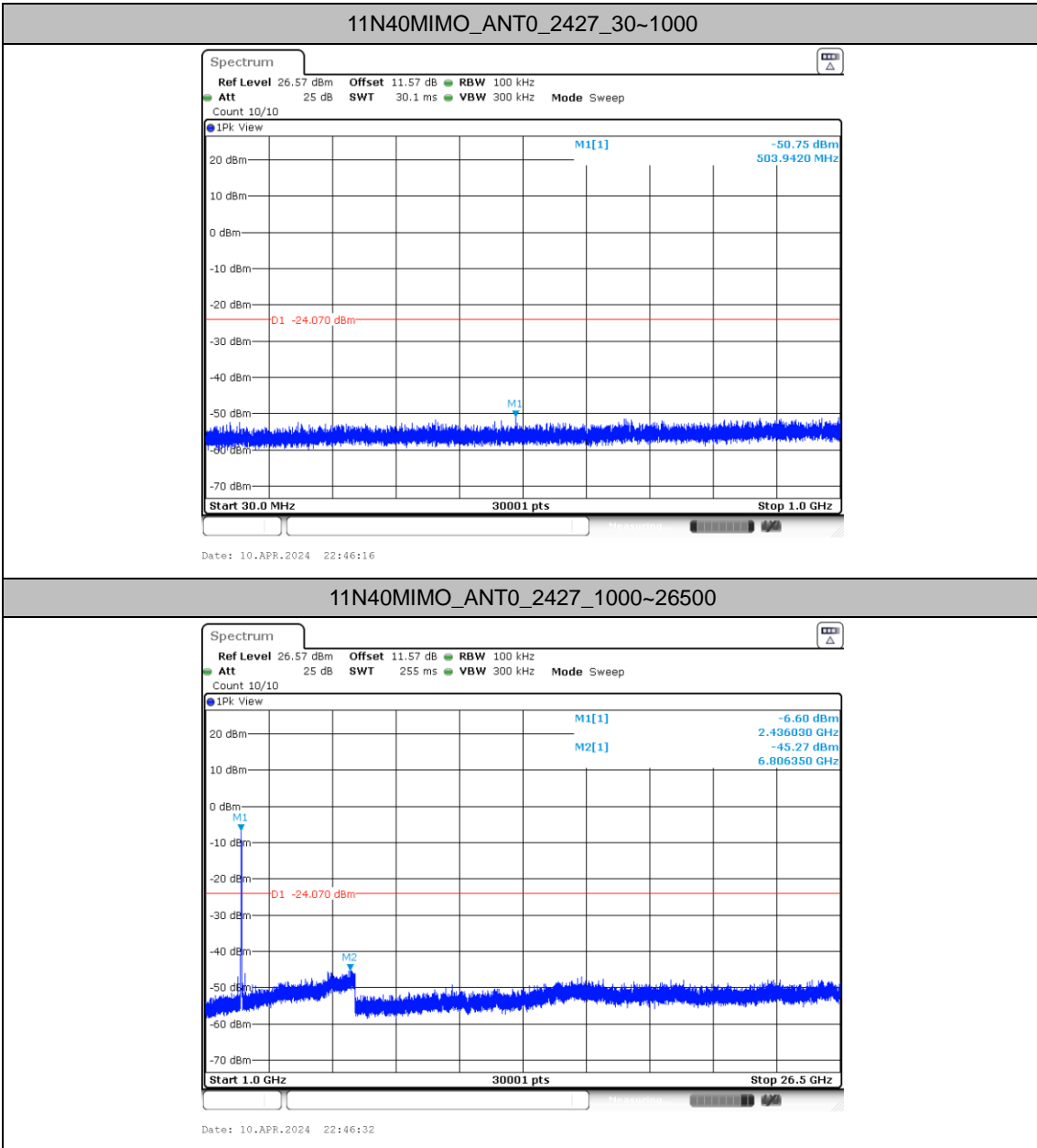


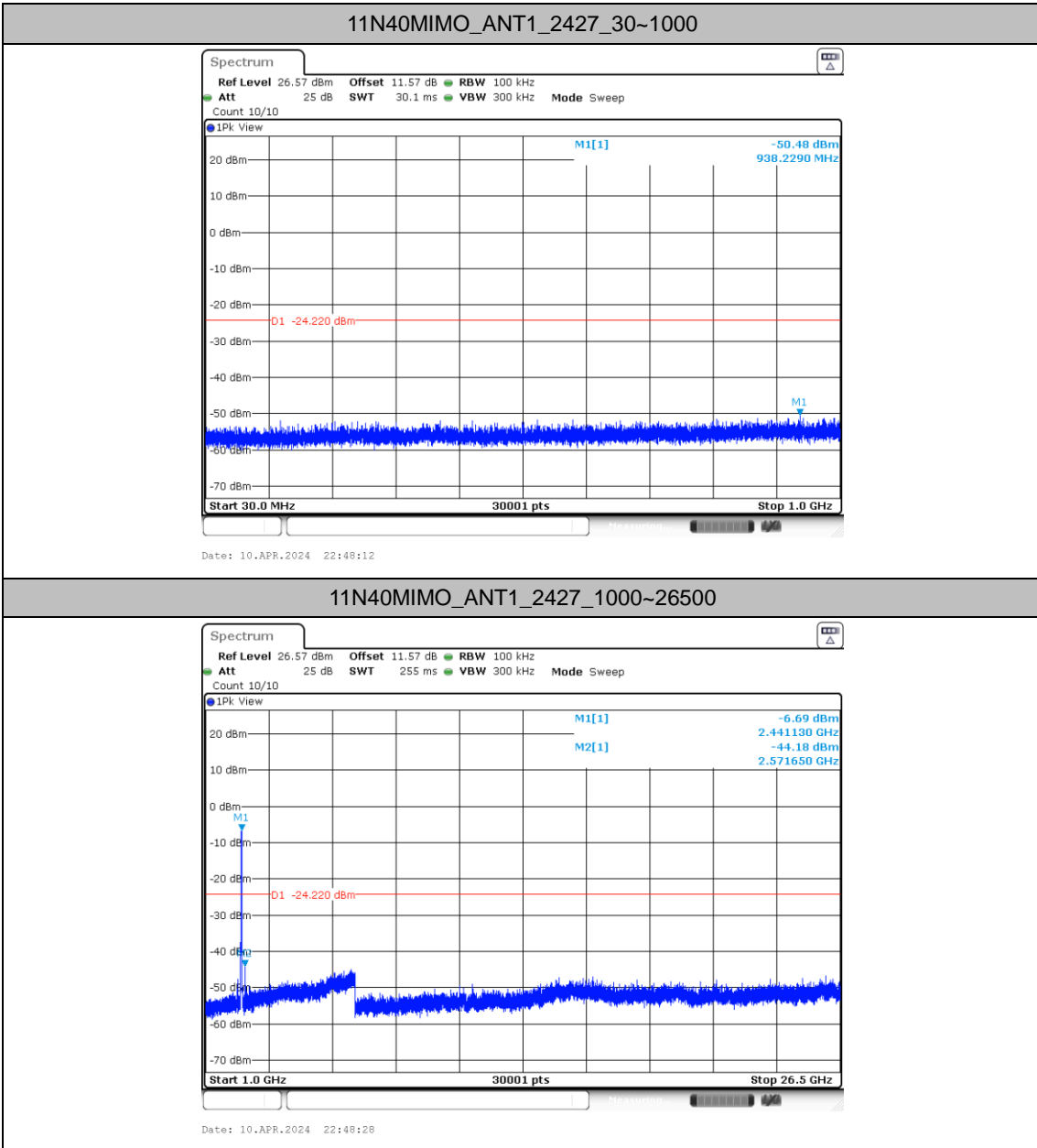


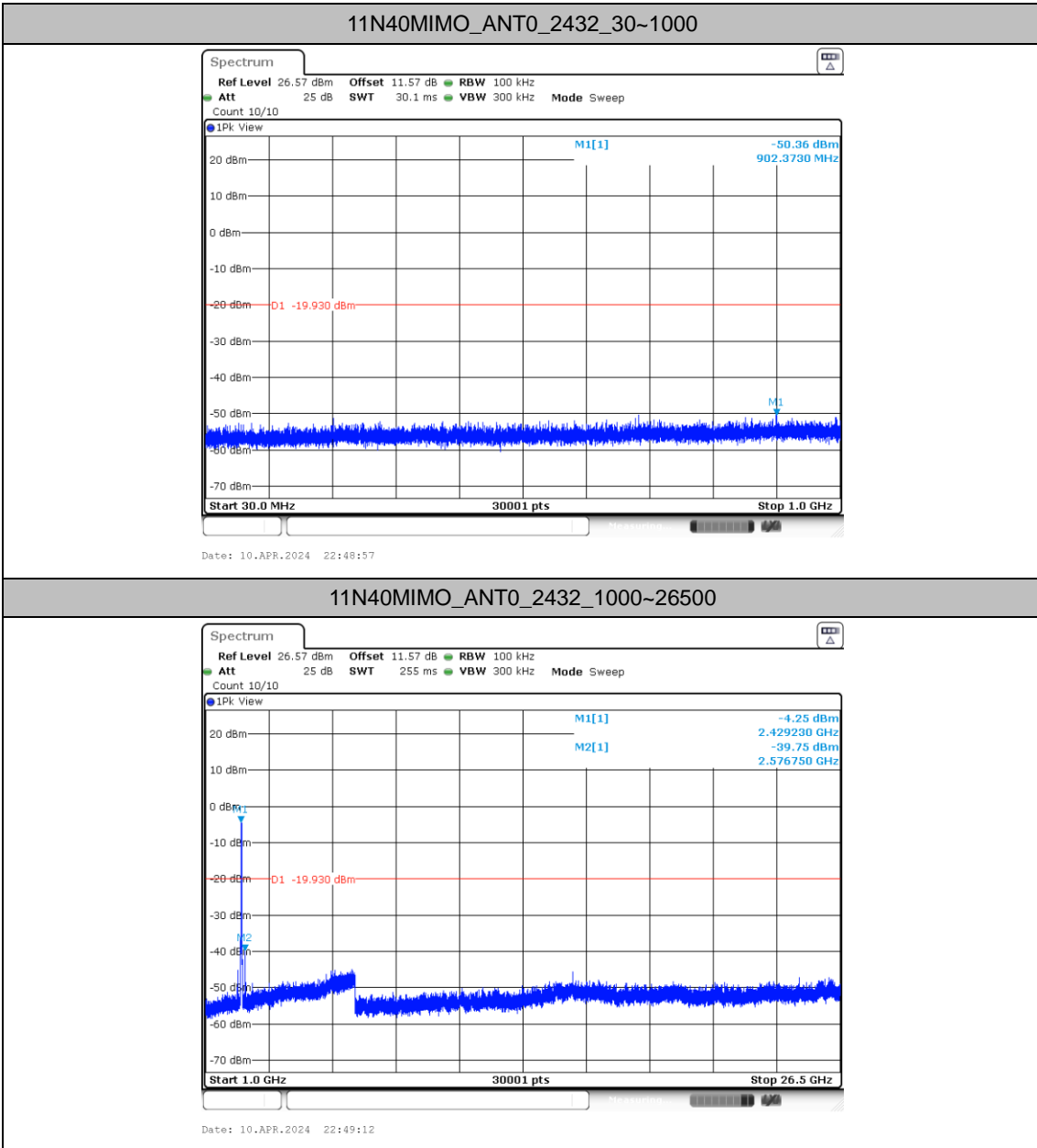


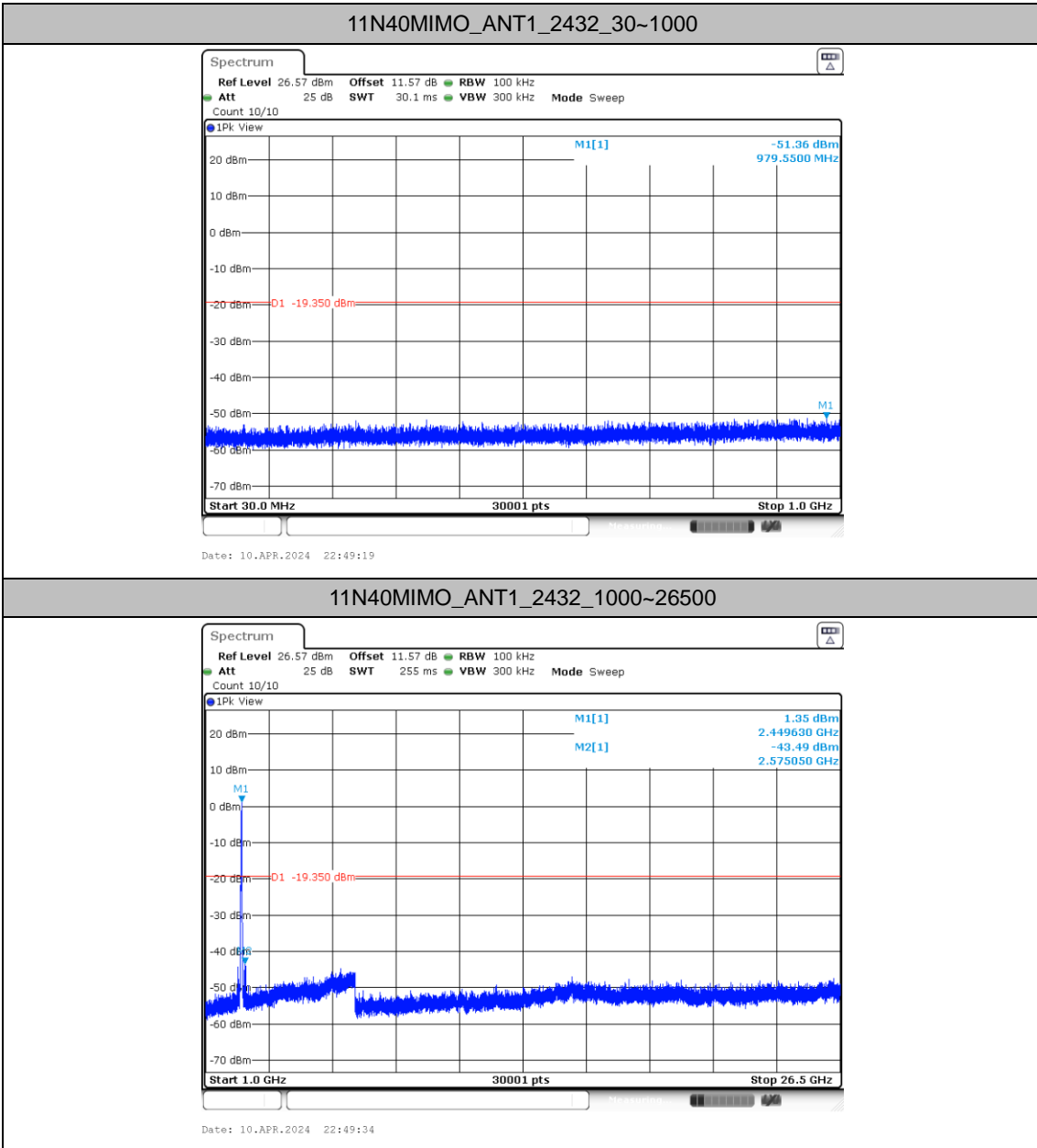


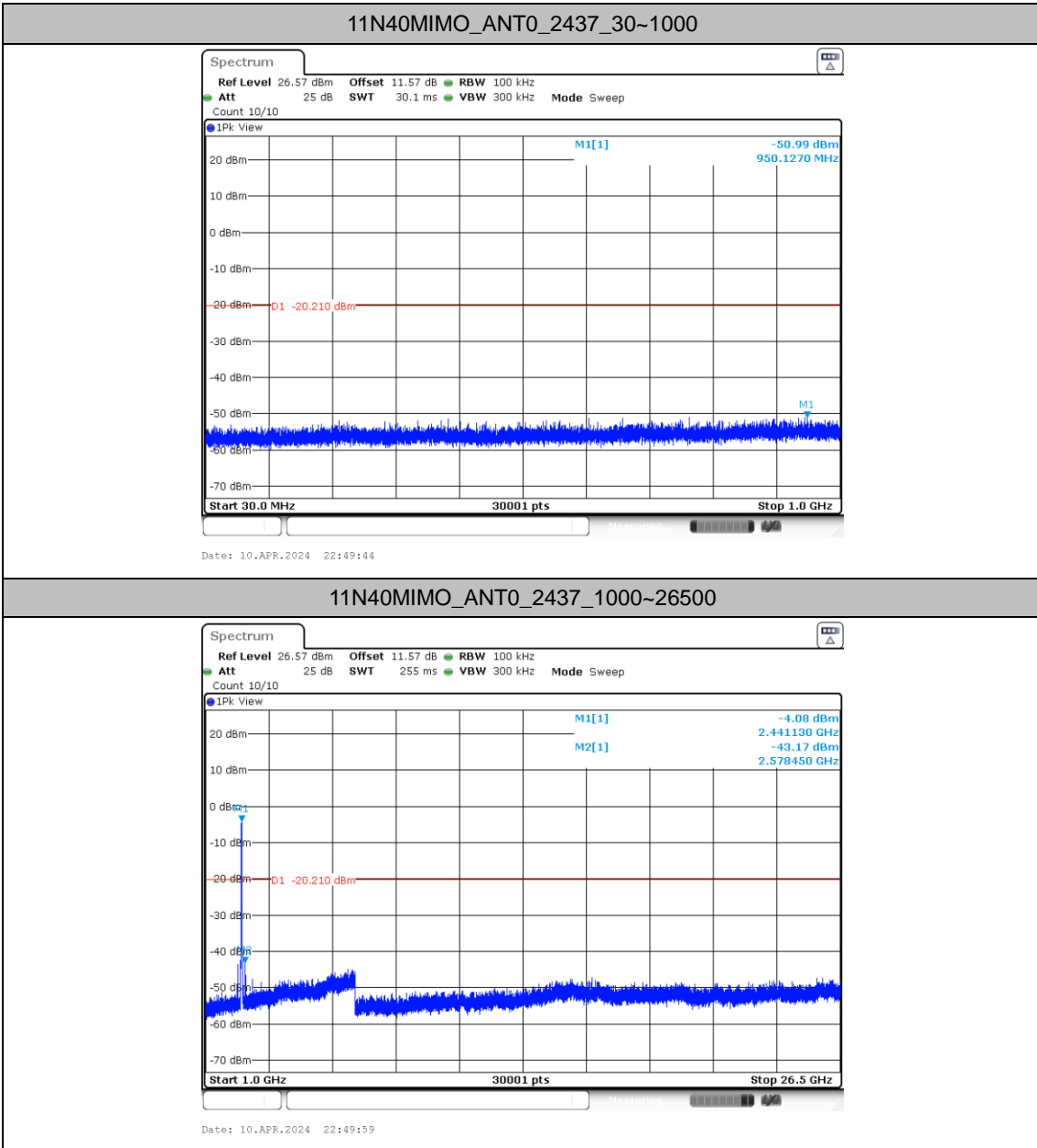


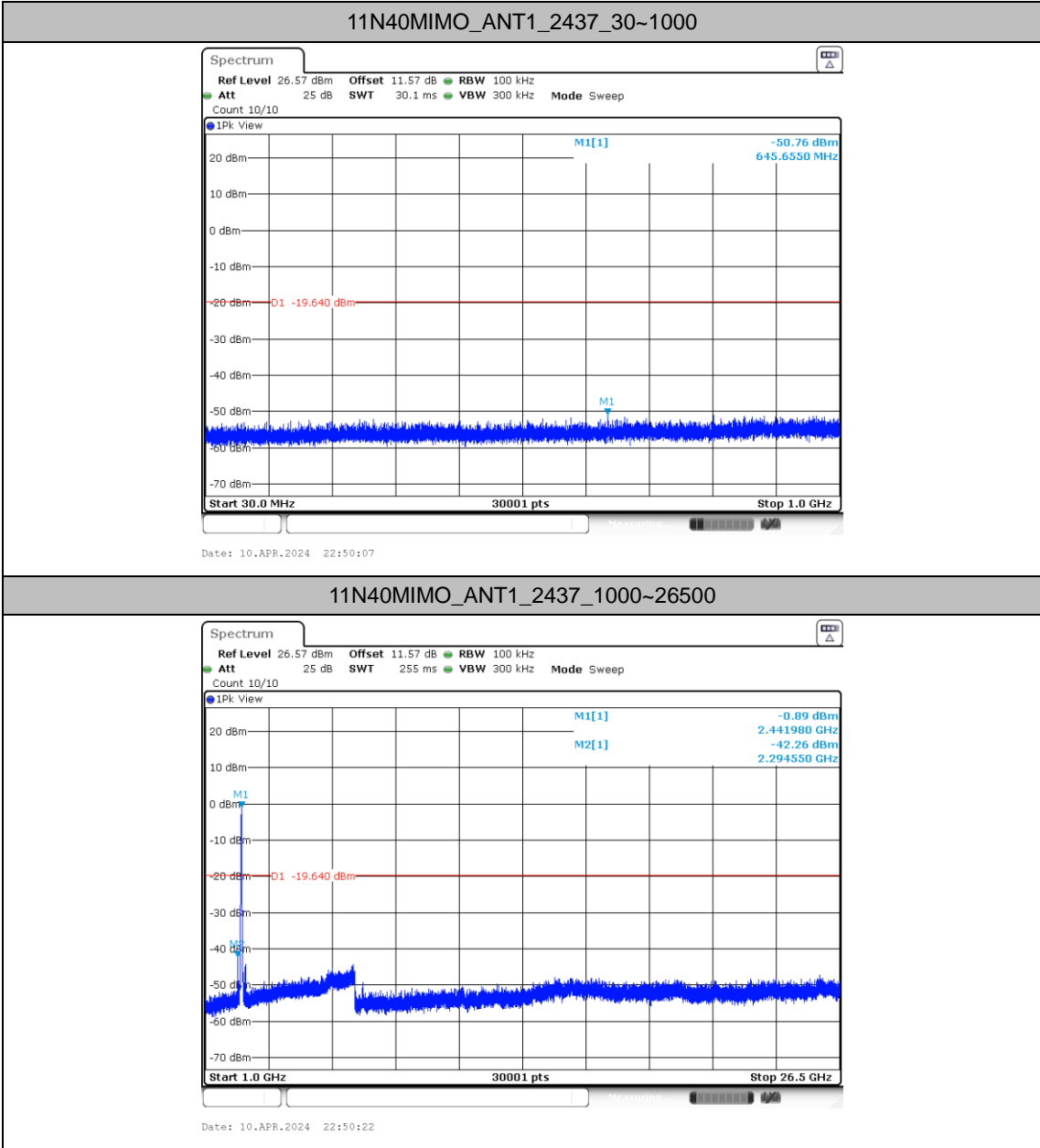


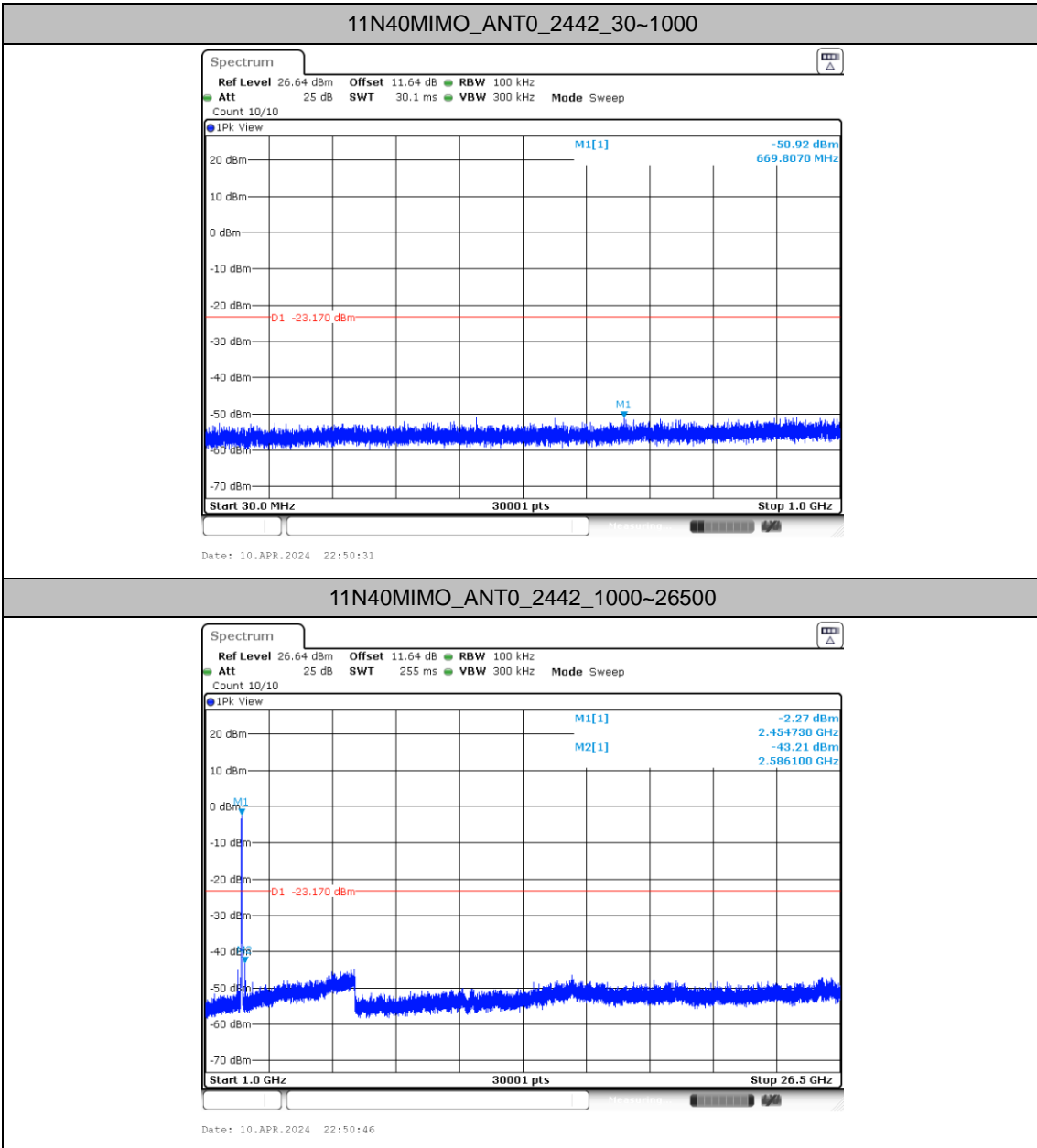


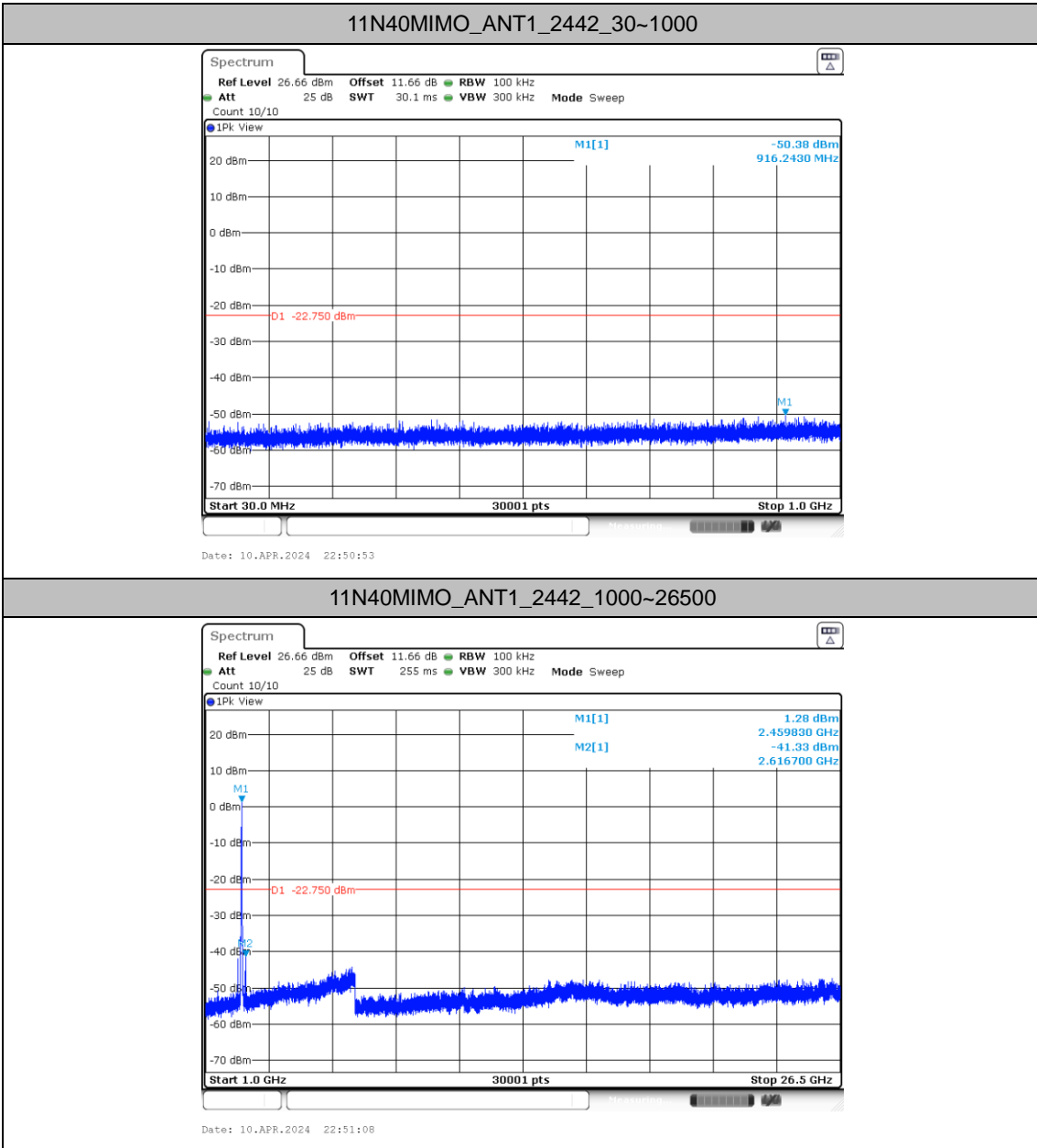


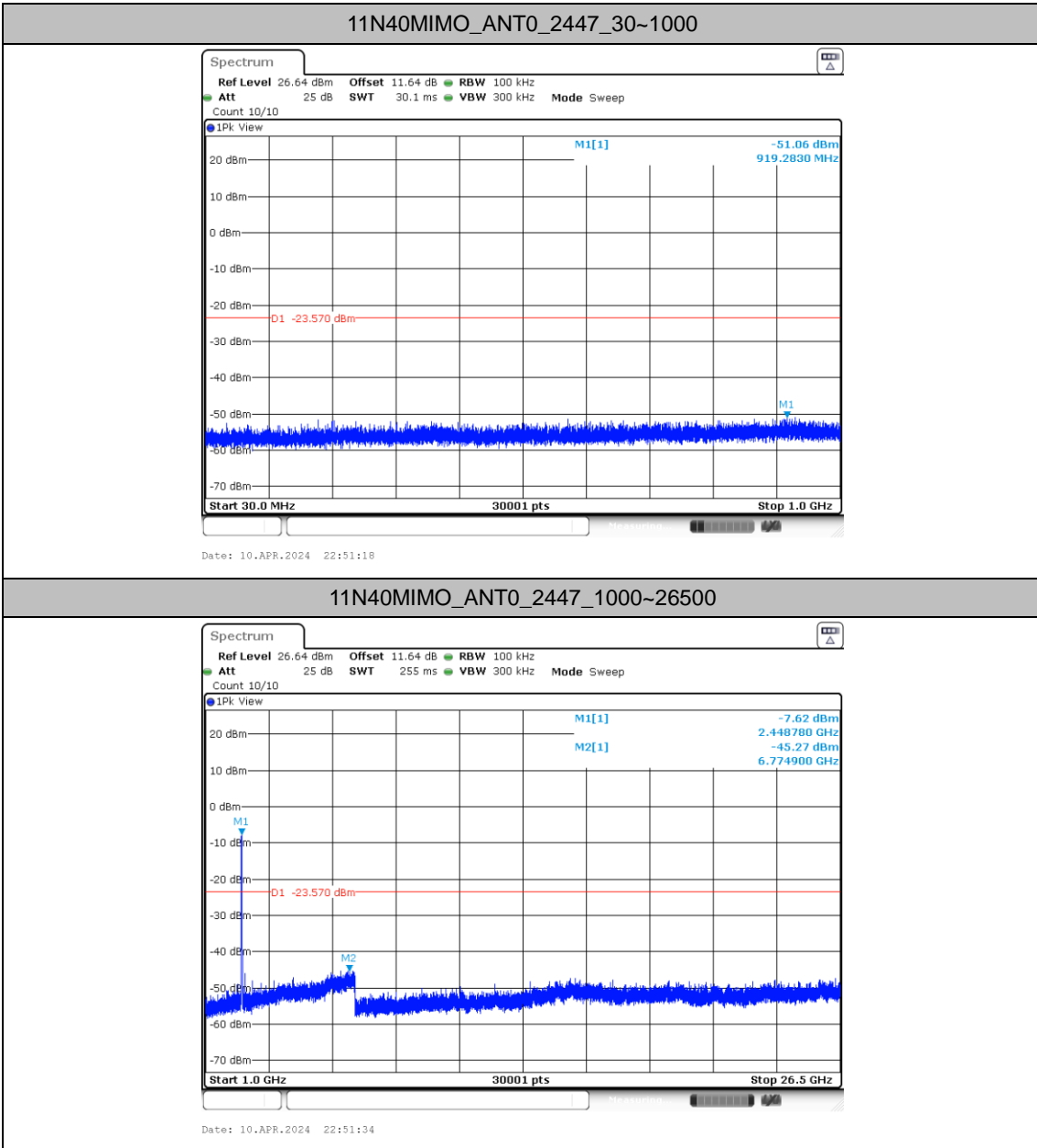


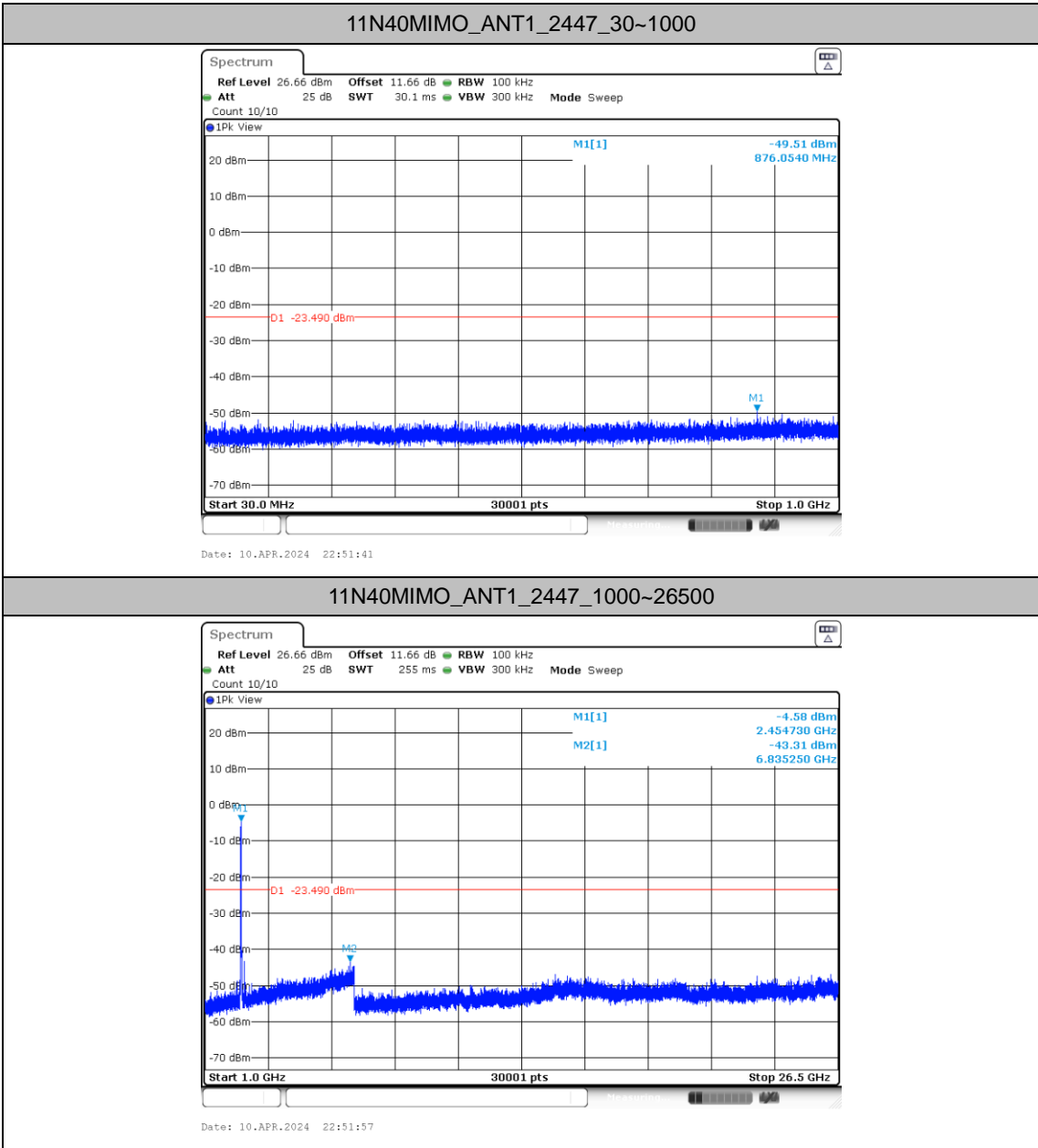


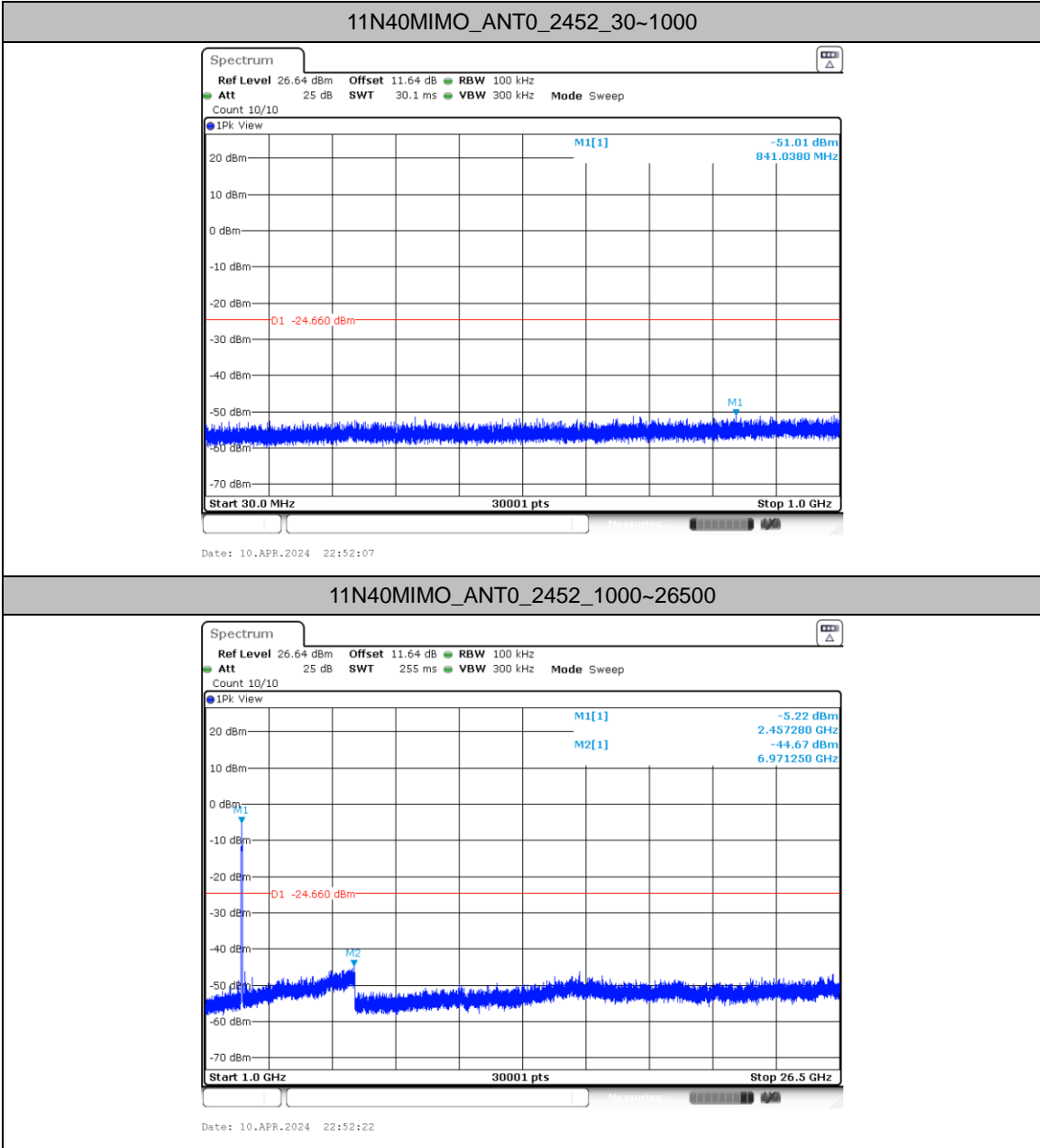


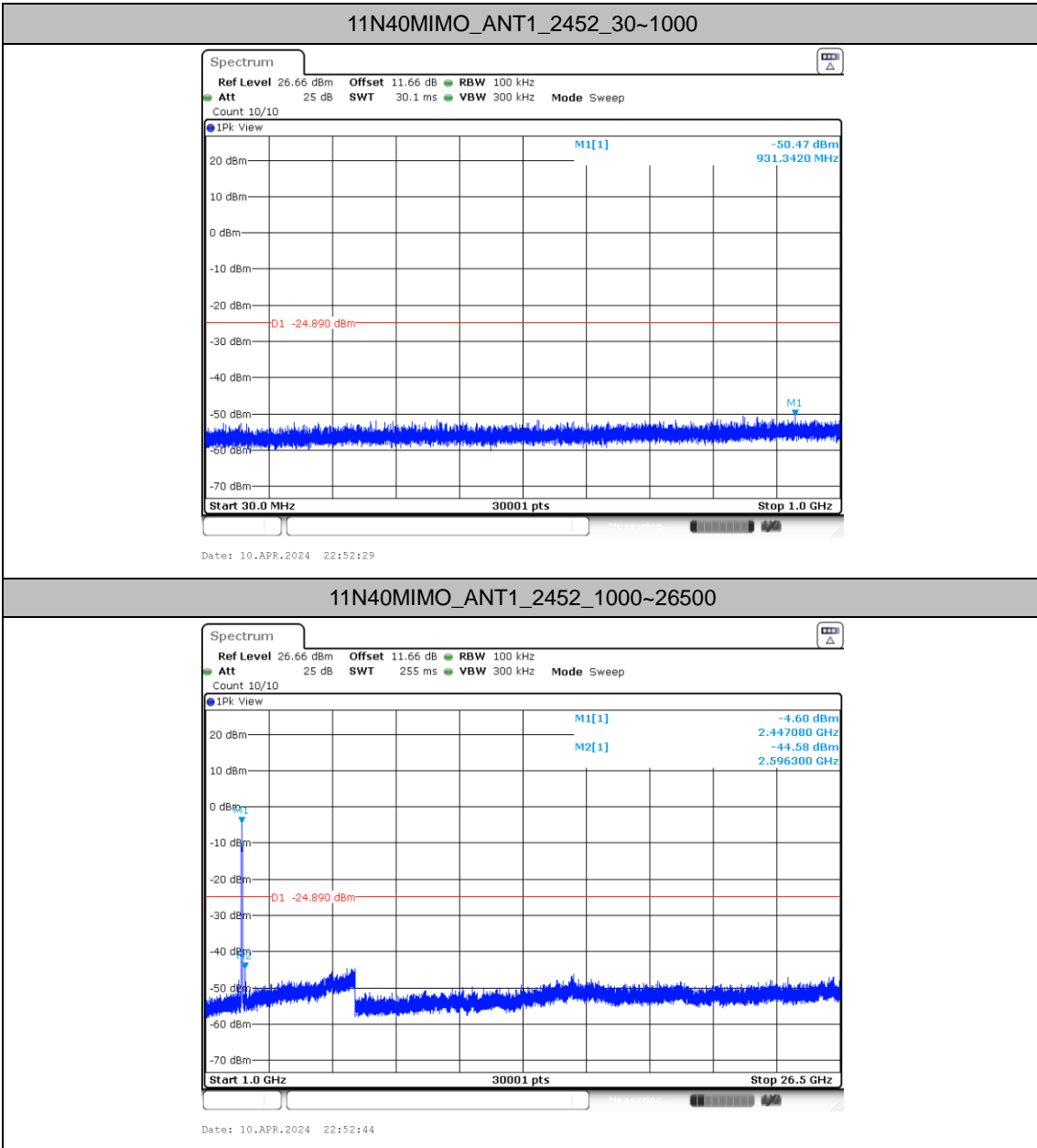








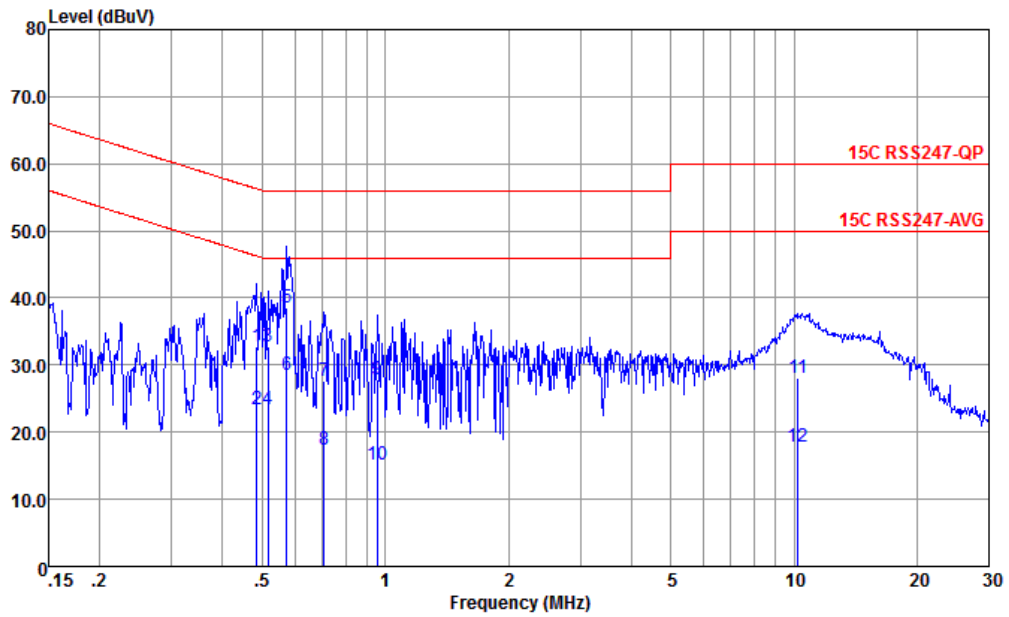






Appendix B. AC Conducted Emission Test Results

Test Engineer :	Amos	Temperature :	25.3~26.2°C
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

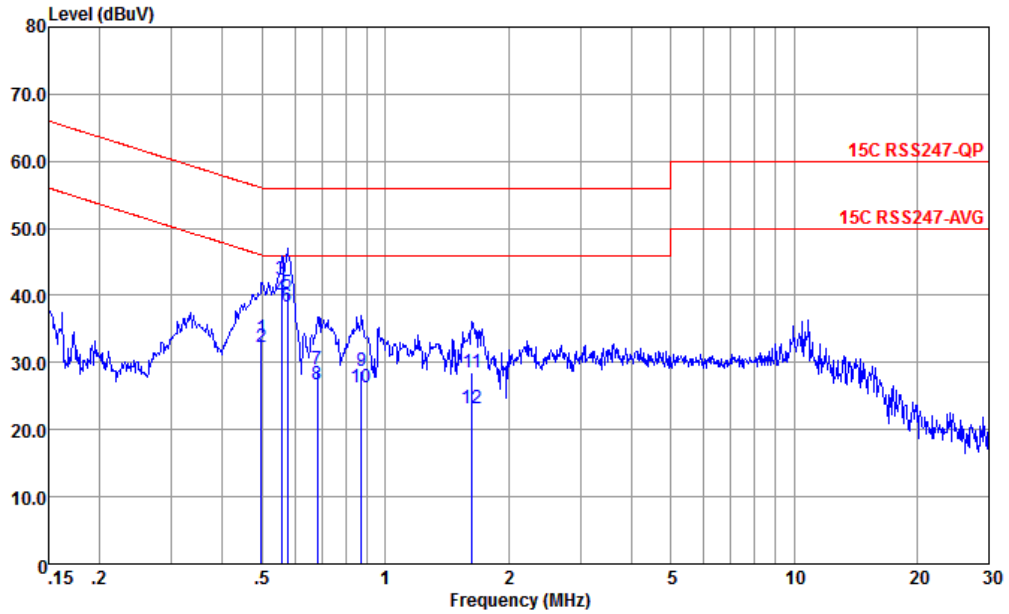


Site : CO01-KS
 Condition : 15C RSS247-QP LISN-060105-L 2023 LINE

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.484	32.70	-23.57	56.27	22.51	-0.03	10.22	QP
2	0.484	23.50	-22.77	46.27	13.31	-0.03	10.22	Average
3	0.516	32.67	-23.33	56.00	22.49	-0.03	10.21	QP
4	0.516	23.47	-22.53	46.00	13.29	-0.03	10.21	Average
5 *	0.573	38.64	-17.36	56.00	28.50	-0.05	10.19	QP
6	0.573	28.44	-17.56	46.00	18.30	-0.05	10.19	Average
7	0.708	27.59	-28.41	56.00	17.50	-0.07	10.16	QP
8	0.708	17.39	-28.61	46.00	7.30	-0.07	10.16	Average
9	0.953	27.82	-28.18	56.00	17.81	-0.10	10.11	QP
10	0.953	15.22	-30.78	46.00	5.21	-0.10	10.11	Average
11	10.233	28.03	-31.97	60.00	17.50	-0.16	10.69	QP
12	10.233	17.83	-32.17	50.00	7.30	-0.16	10.69	Average



Test Engineer :	Amos	Temperature :	25.3~26.2°C
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
 Condition : 15C RSS247-QP LISN-060105-N 2023 NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.497	33.74	-22.31	56.05	23.60	-0.07	10.21	QP
2	0.497	32.24	-13.81	46.05	22.10	-0.07	10.21	Average
3	0.558	42.32	-13.68	56.00	32.20	-0.07	10.19	QP
4 *	0.558	39.72	-6.28	46.00	29.60	-0.07	10.19	Average
5	0.576	40.32	-15.68	56.00	30.20	-0.07	10.19	QP
6	0.576	38.42	-7.58	46.00	28.30	-0.07	10.19	Average
7	0.683	28.89	-27.11	56.00	18.80	-0.07	10.16	QP
8	0.683	26.69	-19.31	46.00	16.60	-0.07	10.16	Average
9	0.876	28.84	-27.16	56.00	18.80	-0.09	10.13	QP
10	0.876	26.24	-19.76	46.00	16.20	-0.09	10.13	Average
11	1.628	28.46	-27.54	56.00	18.50	-0.11	10.07	QP
12	1.628	23.16	-22.84	46.00	13.20	-0.11	10.07	Average

Note:

- Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
- Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)



Appendix C. Radiated Spurious Emission Test Data

Test Engineer :	Carry	Relative Humidity :	41~42%
		Temperature :	22~23°C

Radiated Spurious Emission Test Modes

Mode	Band (MHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 1	2400-2483.5	0	802.11b	01	2412	1Mbps	-	-
Mode 2	2400-2483.5	0	802.11b	06	2437	1Mbps	-	-
Mode 3	2400-2483.5	0	802.11b	11	2462	1Mbps	-	-
Mode 4	2400-2483.5	0	802.11g	01	2412	6Mbps	-	-
Mode 5	2400-2483.5	0	802.11g	06	2437	6Mbps	-	-
Mode 6	2400-2483.5	0	802.11g	11	2462	6Mbps	-	-
Mode 7	2400-2483.5	CDD 0+1	802.11n HT20	01	2412	MCS0	-	-
Mode 8	2400-2483.5	CDD 0+1	802.11n HT20	06	2437	MCS0	-	-
Mode 9	2400-2483.5	CDD 0+1	802.11n HT20	11	2462	MCS0	-	-
Mode 10	2400-2483.5	CDD 0+1	802.11n HT40	03	2422	MCS0	-	-
Mode 11	2400-2483.5	CDD 0+1	802.11n HT40	06	2437	MCS0	-	-
Mode 12	2400-2483.5	CDD 0+1	802.11n HT40	09	2452	MCS0	-	-
Mode 13	2400-2483.5	0	802.11g	02	2417	6Mbps	-	-
Mode 14	2400-2483.5	0	802.11g	10	2457	6Mbps	-	-
Mode 15	2400-2483.5	0	802.11g	09	2452	6Mbps	-	-
Mode 16	2400-2483.5	0	802.11g	08	2447	6Mbps	-	-
Mode 17	2400-2483.5	CDD 0+1	802.11n HT20	02	2417	MCS0	-	-
Mode 18	2400-2483.5	CDD 0+1	802.11n HT20	10	2457	MCS0	-	-
Mode 19	2400-2483.5	CDD 0+1	802.11n HT20	09	2452	MCS0	-	-
Mode 20	2400-2483.5	CDD 0+1	802.11n HT20	08	2447	MCS0	-	-
Mode 21	2400-2483.5	CDD 0+1	802.11n HT20	07	2442	MCS0	-	-
Mode 22	2400-2483.5	CDD 0+1	802.11n HT40	04	2427	MCS0	-	-
Mode 23	2400-2483.5	CDD 0+1	802.11n HT40	05	2432	MCS0	-	-
Mode 24	2400-2483.5	CDD 0+1	802.11n HT40	08	2447	MCS0	-	-
Mode 25	2400-2483.5	CDD 0+1	802.11n HT40	07	2442	MCS0	-	-
Mode 26	2400-2483.5	CDD 0+1	802.11n HT20	03	2422	MCS0	-	-



Summary of each worse mode

Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	Remark
1	802.11b	01	2880.00	44.67	54.00	-9.33	H	Average	Pass	Band Edge
1	802.11b	01	4824.00	50.78	54.00	-3.22	H	AVERAGE	Pass	Harmonic
2	802.11b	06	-	-	-	-	-	-	-	Band Edge
2	802.11b	06	4874.00	50.56	54.00	-3.44	H	AVERAGE	Pass	Harmonic
3	802.11b	11	2483.50	48.14	54.00	-5.86	H	AVERAGE	Pass	Band Edge
3	802.11b	11	4924.00	50.89	54.00	-3.11	H	AVERAGE	Pass	Harmonic
4	802.11g	01	2389.17	70.59	74.00	-3.41	H	PEAK	Pass	Band Edge
4	802.11g	01	4824.00	45.95	74.00	-28.05	H	PEAK	Pass	Harmonic
5	802.11g	06	-	-	-	-	-	-	-	Band Edge
5	802.11g	06	4879.50	50.43	54.00	-3.57	H	AVERAGE	Pass	Harmonic
6	802.11g	11	2483.50	50.73	54.00	-3.27	H	AVERAGE	Pass	Band Edge
6	802.11g	11	4924.00	41.58	54.00	-12.42	H	AVERAGE	Pass	Harmonic
7	802.11n HT20	01	2389.43	50.79	54.00	-3.21	H	AVERAGE	Pass	Band Edge
7	802.11n HT20	01	4824.00	41.69	74.00	-32.31	H	PEAK	Pass	Harmonic
8	802.11n HT20	06	-	-	-	-	-	-	-	Band Edge
8	802.11n HT20	06	7311.00	50.77	54.00	-3.23	V	AVERAGE	Pass	Harmonic
9	802.11n HT20	11	2483.62	50.55	54.00	-3.45	H	AVERAGE	Pass	Band Edge
9	802.11n HT20	11	4924.00	41.77	74.00	-32.23	H	PEAK	Pass	Harmonic
10	802.11n HT40	03	2389.43	50.35	54.00	-3.65	H	AVERAGE	Pass	Band Edge
10	802.11n HT40	03	7266.00	42.78	74.00	-31.22	V	PEAK	Pass	Harmonic
11	802.11n HT40	06	2294.00	50.42	54.00	-3.58	H	Average	Pass	Band Edge
11	802.11n HT40	06	4874.00	39.81	54.00	-14.19	H	AVERAGE	Pass	Harmonic
12	802.11n HT40	09	2483.92	50.41	54.00	-3.59	H	AVERAGE	Pass	Band Edge
12	802.11n HT40	09	4924.00	42.63	74.00	-31.37	H	PEAK	Pass	Harmonic
13	802.11g	02	2264.00	49.02	54.00	-4.98	H	Average	Pass	Band Edge
13	802.11g	02	7251.00	50.65	54.00	-3.35	V	AVERAGE	Pass	Harmonic
14	802.11g	10	2483.50	70.22	74.00	-3.78	H	Peak	Pass	Band Edge
14	802.11g	10	7371.00	47.14	54.00	-6.86	V	AVERAGE	Pass	Harmonic
15	802.11g	09	2483.98	50.17	54.00	-3.83	H	AVERAGE	Pass	Band Edge
15	802.11g	09	7356.00	47.56	54.00	-6.44	V	AVERAGE	Pass	Harmonic
16	802.11g	08	2483.50	50.86	54.00	-3.14	H	AVERAGE	Pass	Band Edge
16	802.11g	08	7341.00	50.80	54.00	-3.20	V	AVERAGE	Pass	Harmonic
17	802.11n HT20	02	2389.95	50.18	54.00	-3.82	H	AVERAGE	Pass	Band Edge
17	802.11n HT20	02	7251.00	42.83	54.00	-11.17	V	AVERAGE	Pass	Harmonic
18	802.11n HT20	10	2484.52	50.26	54.00	-3.74	H	AVERAGE	Pass	Band Edge
18	802.11n HT20	10	7372.00	46.85	74.00	-27.15	V	Peak	Pass	Harmonic
19	802.11n HT20	09	2484.58	50.03	54.00	-3.97	H	AVERAGE	Pass	Band Edge
19	802.11n HT20	09	7356.00	47.69	54.00	-6.31	V	AVERAGE	Pass	Harmonic
20	802.11n HT20	08	2483.62	50.75	54.00	-3.25	H	AVERAGE	Pass	Band Edge
20	802.11n HT20	08	7341.00	50.83	54.00	-3.17	V	AVERAGE	Pass	Harmonic
21	802.11n HT20	07	2485.06	50.53	54.00	-3.47	H	AVERAGE	Pass	Band Edge
21	802.11n HT20	07	7326.00	50.68	54.00	-3.32	V	AVERAGE	Pass	Harmonic



22	802.11n HT40	04	2388.06	50.03	54.00	-3.97	H	AVERAGE	Pass	Band Edge
22	802.11n HT40	04	4854.00	44.28	74.00	-29.72	H	PEAK	Pass	Harmonic
23	802.11n HT40	05	2388.91	50.31	54.00	-3.69	V	AVERAGE	Pass	Band Edge
23	802.11n HT40	05	7296.00	45.12	54.00	-8.88	V	AVERAGE	Pass	Harmonic
24	802.11n HT40	08	2484.15	50.30	54.00	-3.70	H	AVERAGE	Pass	Band Edge
24	802.11n HT40	08	4894.00	44.28	74.00	-29.72	H	PEAK	Pass	Harmonic
25	802.11n HT40	07	2483.93	49.57	54.00	-4.43	H	AVERAGE	Pass	Band Edge
25	802.11n HT40	07	4884.00	45.42	74.00	-28.58	H	PEAK	Pass	Harmonic
26	802.11n HT20	03	2389.95	50.48	54.00	-3.52	H	AVERAGE	Pass	Band Edge
26	802.11n HT20	03	7266.00	50.56	54.00	-3.44	V	AVERAGE	Pass	Harmonic