



Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community,
Fuhai Street, Bao'an District, Shenzhen, China

Appendix RF Test Data for BLE

Company : Labpano Technology (Changzhou) Co., Ltd.

EUT : panox v5 lite

Model Number : PIP226L

Report No. : CTA26032602401

Reviewed By : Eric Wang



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Appendix A: Frequency Error

Test Result

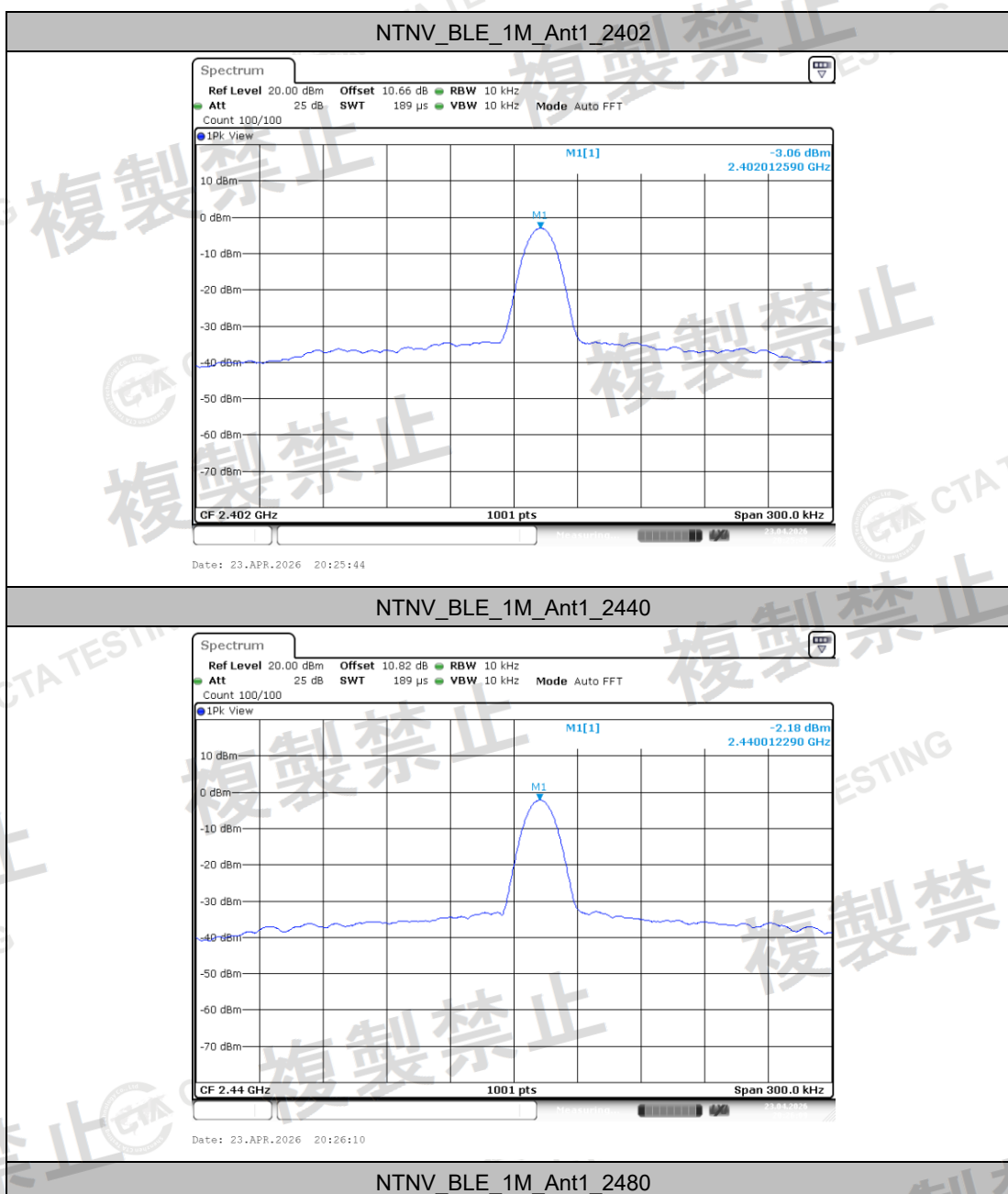
TestCondition	TestMode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTNV	BLE_1M	Ant1	2402	5.24147	±50	PASS
			2440	5.03689	±50	PASS
			2480	4.95565	±50	PASS
	BLE_2M	Ant1	2402	4.74188	±50	PASS
			2440	4.79098	±50	PASS
			2480	4.71371	±50	PASS



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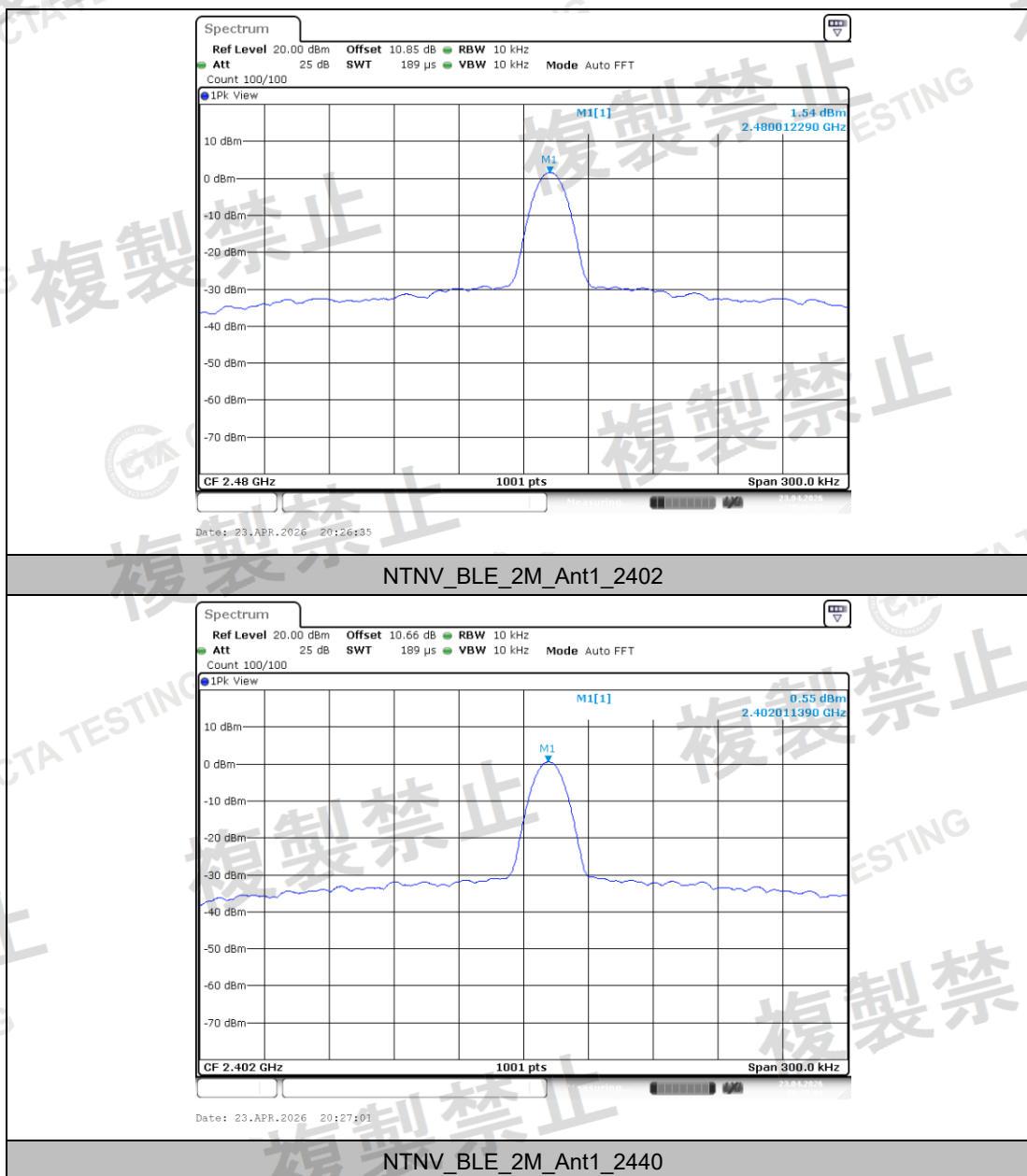
Test Graphs





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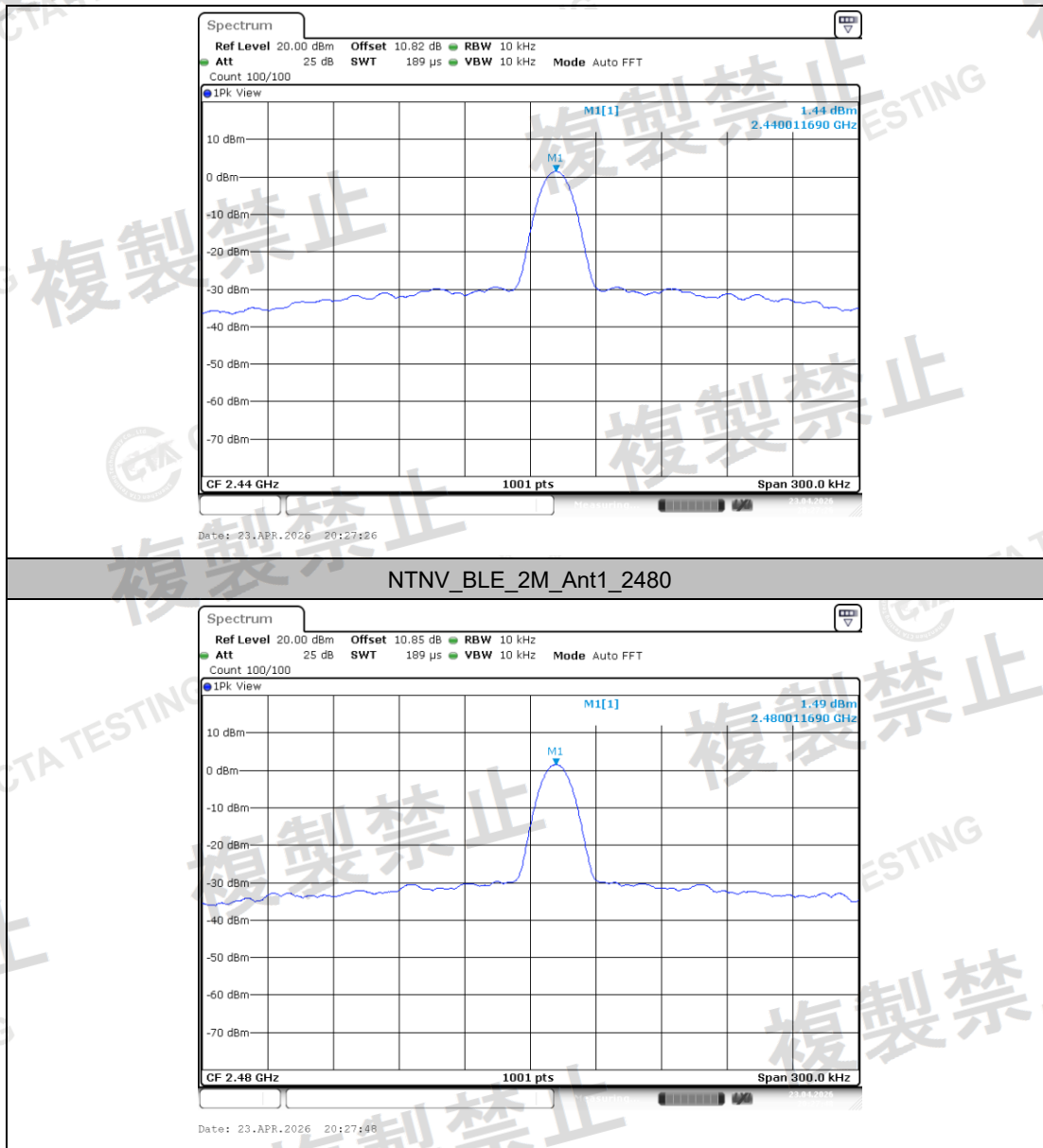
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Appendix B: Occupied Bandwidth

Test Result

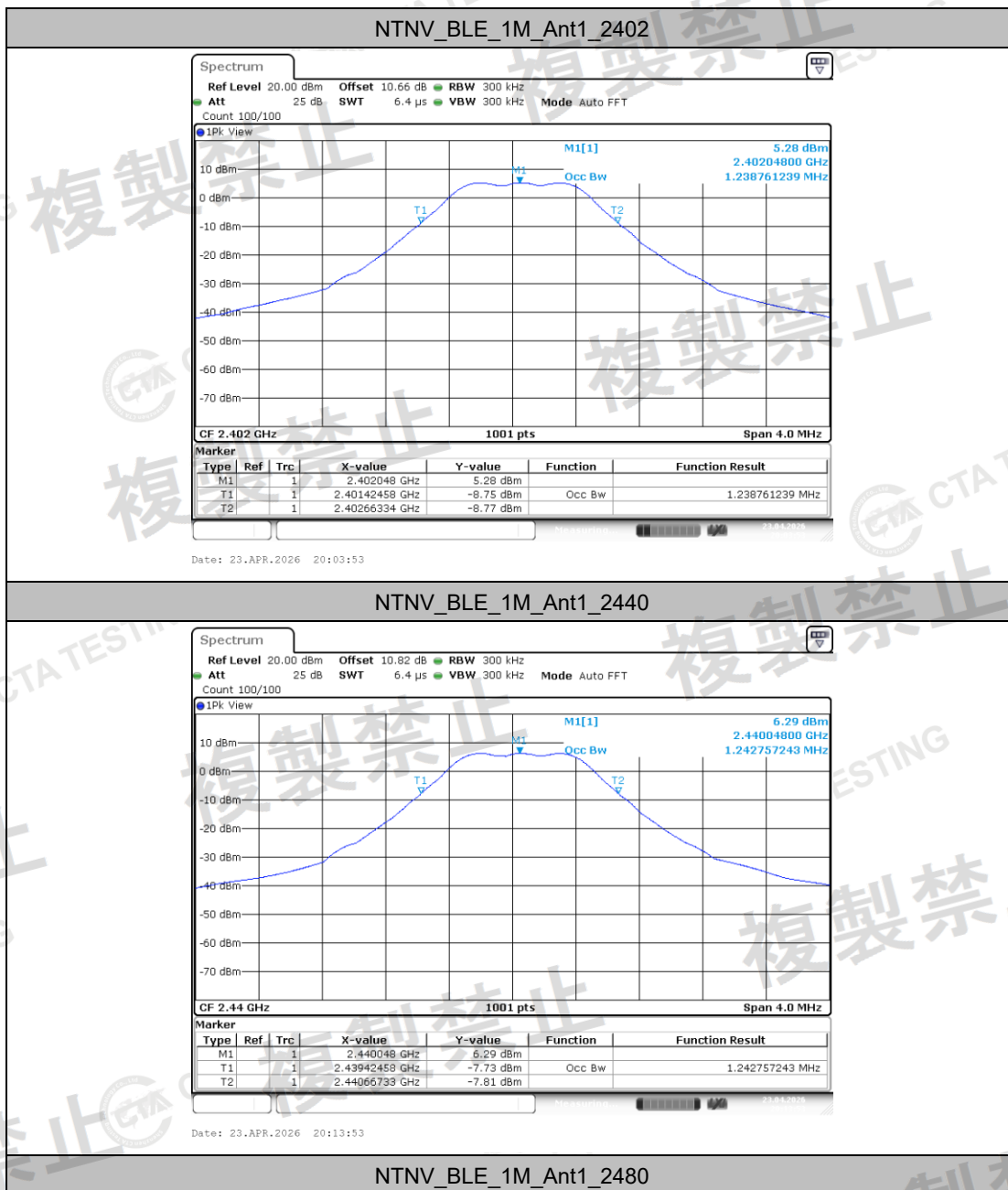
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	1.239	≤26	PASS
			2440	1.243	≤26	PASS
			2480	1.239	≤26	PASS
	BLE_2M	Ant1	2402	2.166	≤26	PASS
			2440	2.170	≤26	PASS
			2480	2.170	≤26	PASS



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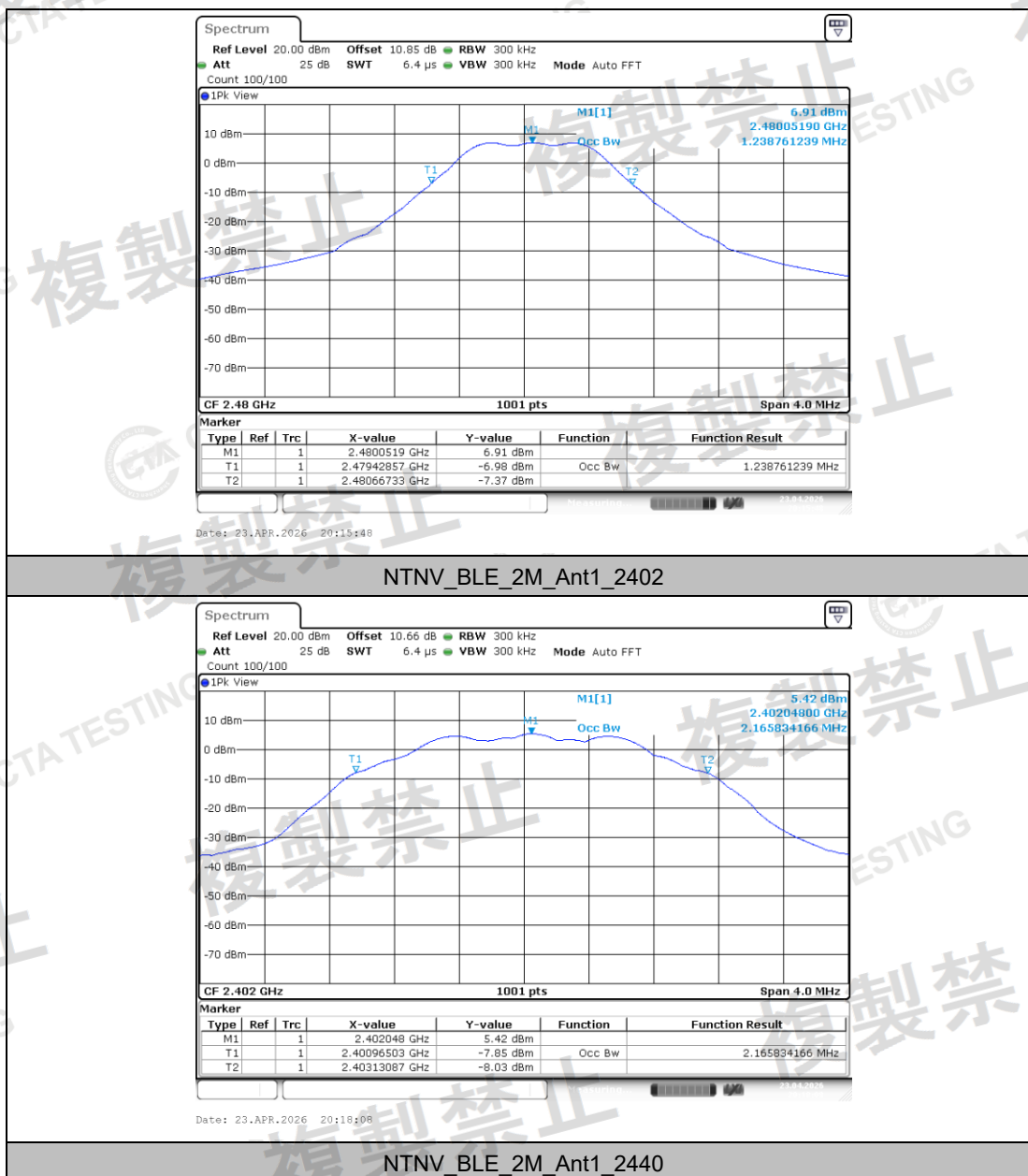
Test Graphs





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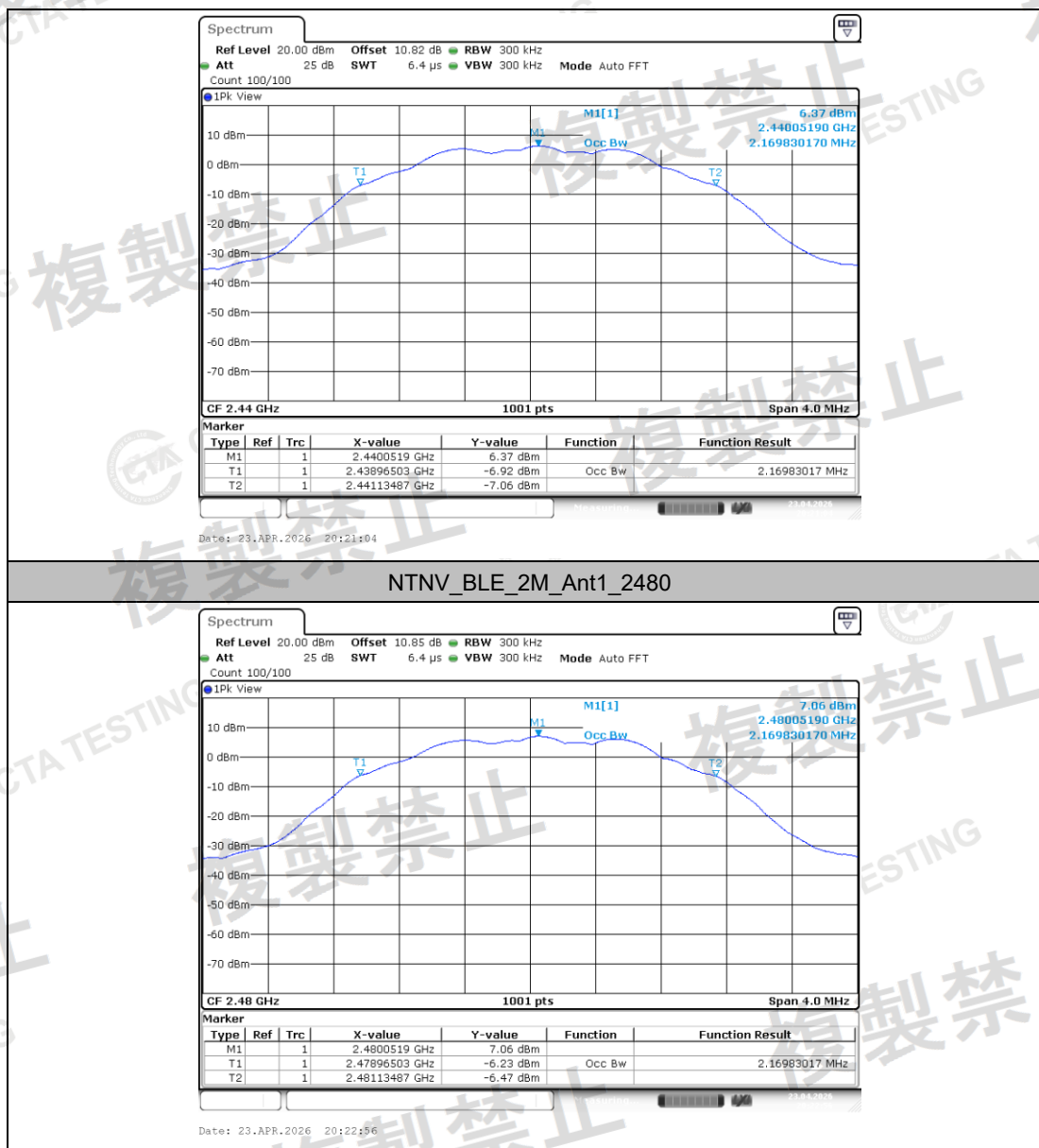
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Appendix C: Spread Bandwidth

Test Result

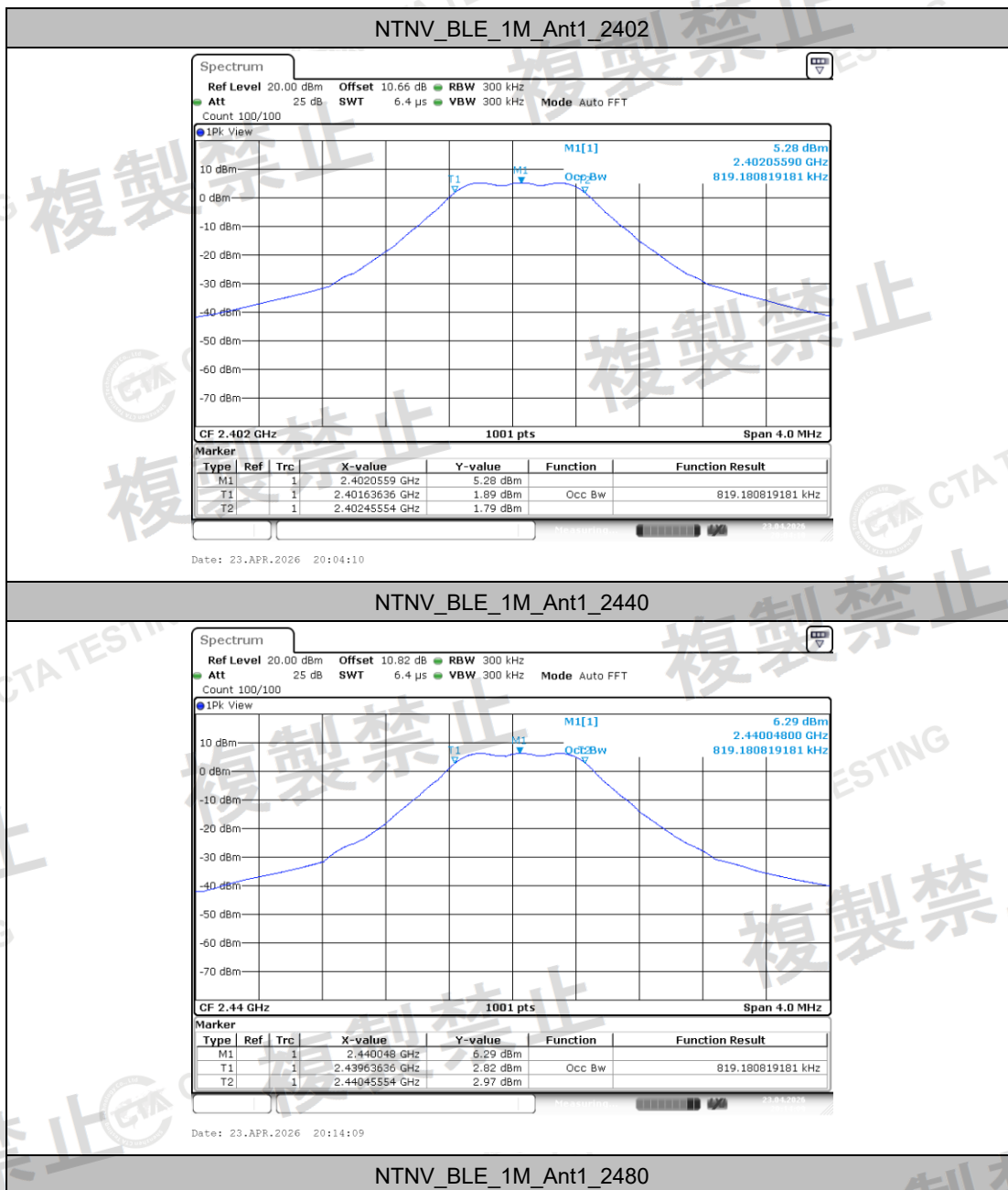
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	0.819	≥ 0.5	PASS
			2440	0.819	≥ 0.5	PASS
			2480	0.819	≥ 0.5	PASS
	BLE_2M	Ant1	2402	1.403	≥ 0.5	PASS
			2440	1.399	≥ 0.5	PASS
			2480	1.407	≥ 0.5	PASS



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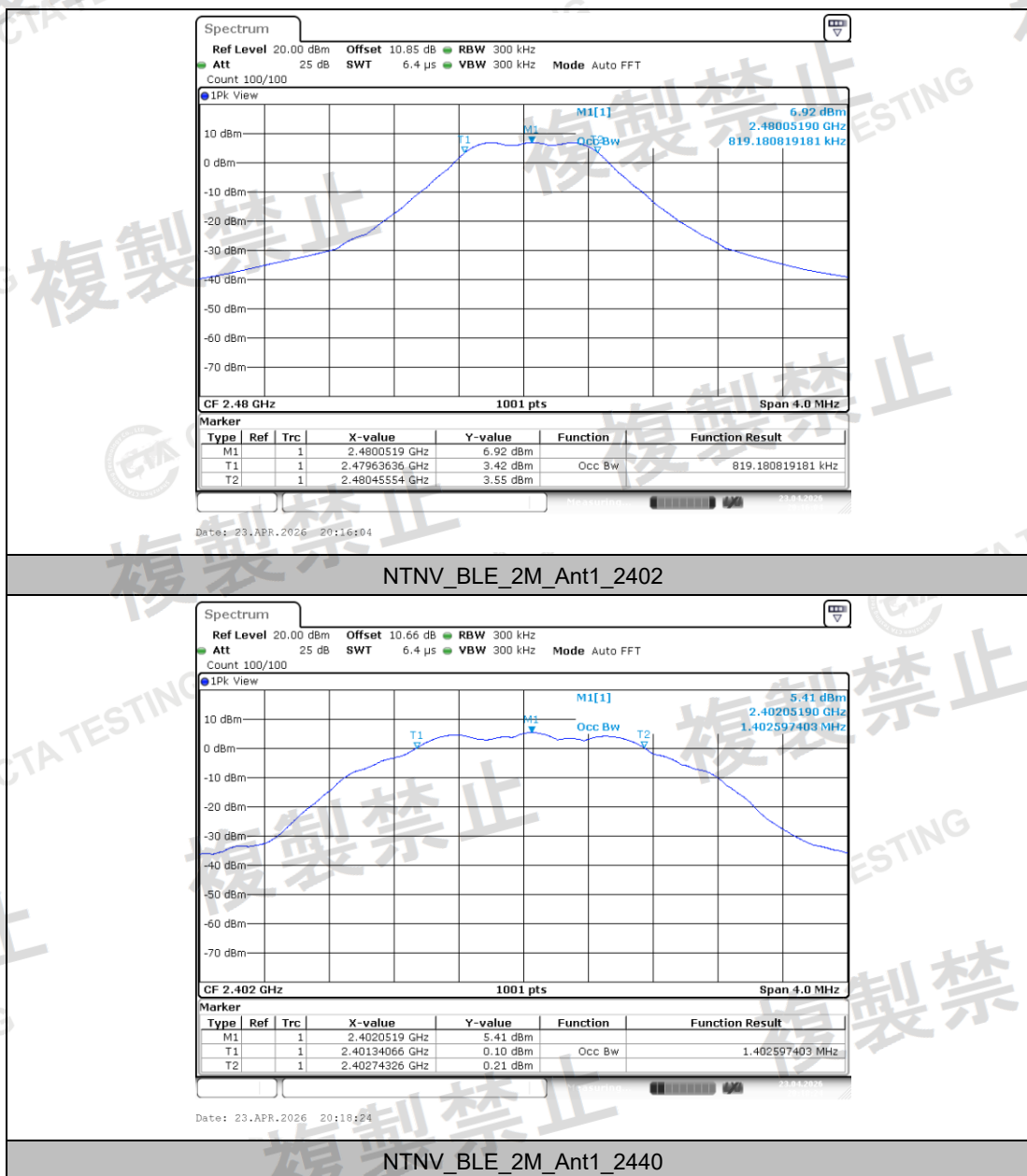
Test Graphs





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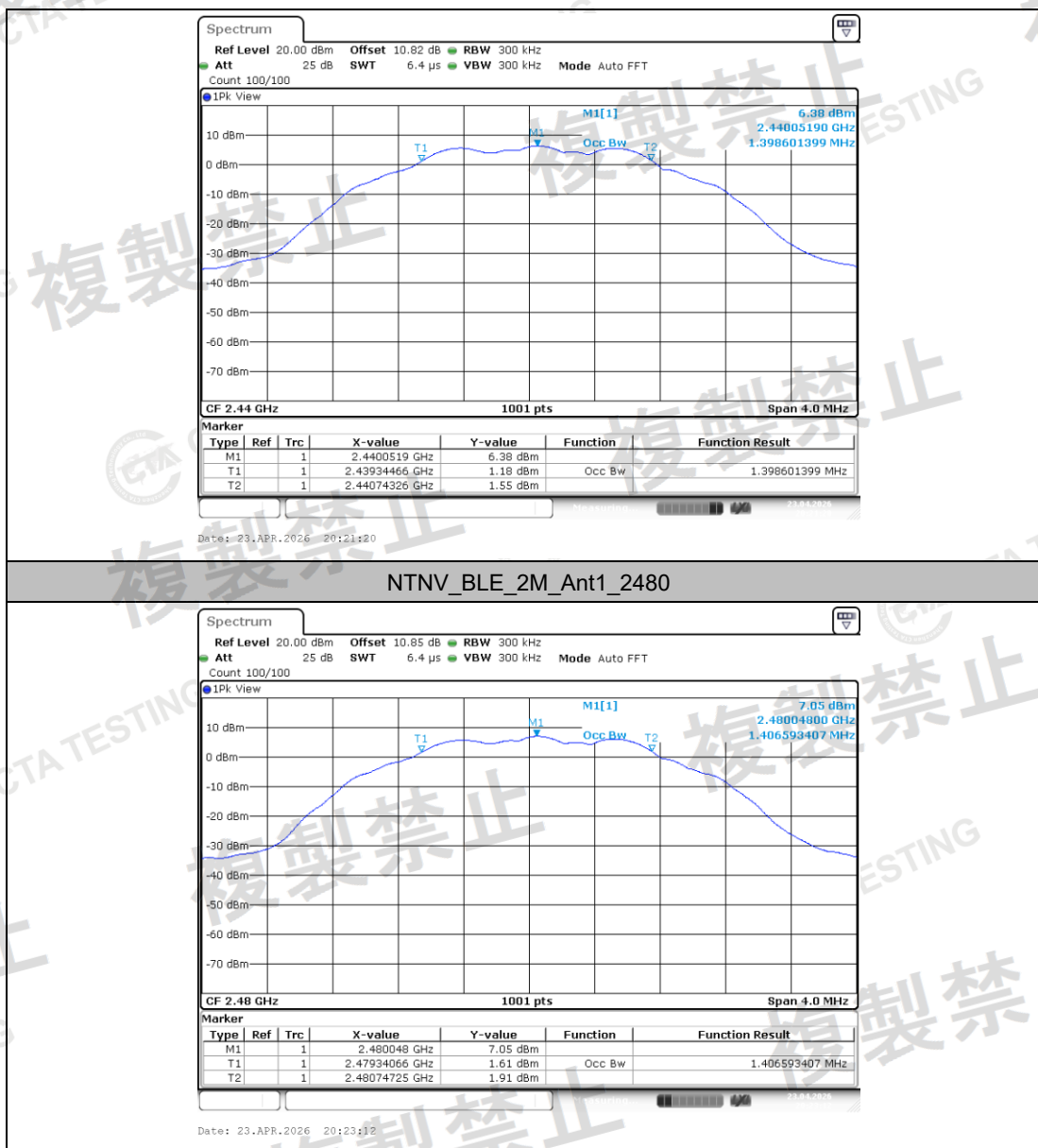
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Appendix D: Spurious Emission of TX

Test Result

TestCondition	TestMode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	240.01	-54.75	≤-26	0.00335	≤2.5	PASS
				1000~2387	1815.21	-52.69	≤-26	0.00538	≤2.5	PASS
				2387~2400	2400.00	-27.15	≤-16	1.92752	≤25	PASS
				2483.5~2496.5	2494.69	-43.04	≤-16	0.04966	≤25	PASS
				2496.5~13000	6859.13	-43.71	≤-26	0.04256	≤2.5	PASS
			2440	30~1000	897.91	-54.39	≤-26	0.00364	≤2.5	PASS
				1000~2387	1823.88	-53.16	≤-26	0.00483	≤2.5	PASS
				2387~2400	2395.41	-43.35	≤-16	0.04624	≤25	PASS
				2483.5~2496.5	2495.01	-43.07	≤-16	0.04932	≤25	PASS
				2496.5~13000	6898.52	-42.98	≤-26	0.05035	≤2.5	PASS
			2480	30~1000	218.67	-54.20	≤-26	0.00380	≤2.5	PASS
				1000~2387	1755.22	-53.12	≤-26	0.00488	≤2.5	PASS
				2387~2400	2396.11	-43.28	≤-16	0.04699	≤25	PASS
				2483.5~2496.5	2483.60	-39.41	≤-16	0.11455	≤25	PASS
				2496.5~13000	6693.17	-42.59	≤-26	0.05508	≤2.5	PASS
	BLE_2M	Ant1	2402	30~1000	239.52	-53.72	≤-26	0.00425	≤2.5	PASS
				1000~2387	2015.28	-53.13	≤-26	0.00486	≤2.5	PASS
				2387~2400	2400	-17.01	≤-16	19.9067 3	≤25	See table below
				2483.5~2496.5	2494.08	-43.28	≤-16	0.04699	≤25	PASS
				2496.5~13000	6925.30	-42.86	≤-26	0.05176	≤2.5	PASS
			2440	30~1000	853.53	-54.60	≤-26	0.00347	≤2.5	PASS
				1000~2387	2274.65	-52.75	≤-26	0.00531	≤2.5	PASS
				2387~2400	2387.81	-43.71	≤-16	0.04256	≤25	PASS
				2483.5~2496.5	2484.83	-43.25	≤-16	0.04732	≤25	PASS
				2496.5~13000	6920.05	-43.59	≤-26	0.04375	≤2.5	PASS
			2480	30~1000	904.70	-54.17	≤-26	0.00383	≤2.5	PASS
				1000~2387	1673.04	-53.06	≤-26	0.00494	≤2.5	PASS
				2387~2400	2393.87	-43.21	≤-16	0.04775	≤25	PASS
				2483.5~2496.5	2483.52	-36.59	≤-16	0.21928	≤25	PASS
				2496.5~13000	6540.87	-43.67	≤-26	0.04295	≤2.5	PASS



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Test Result_Step2

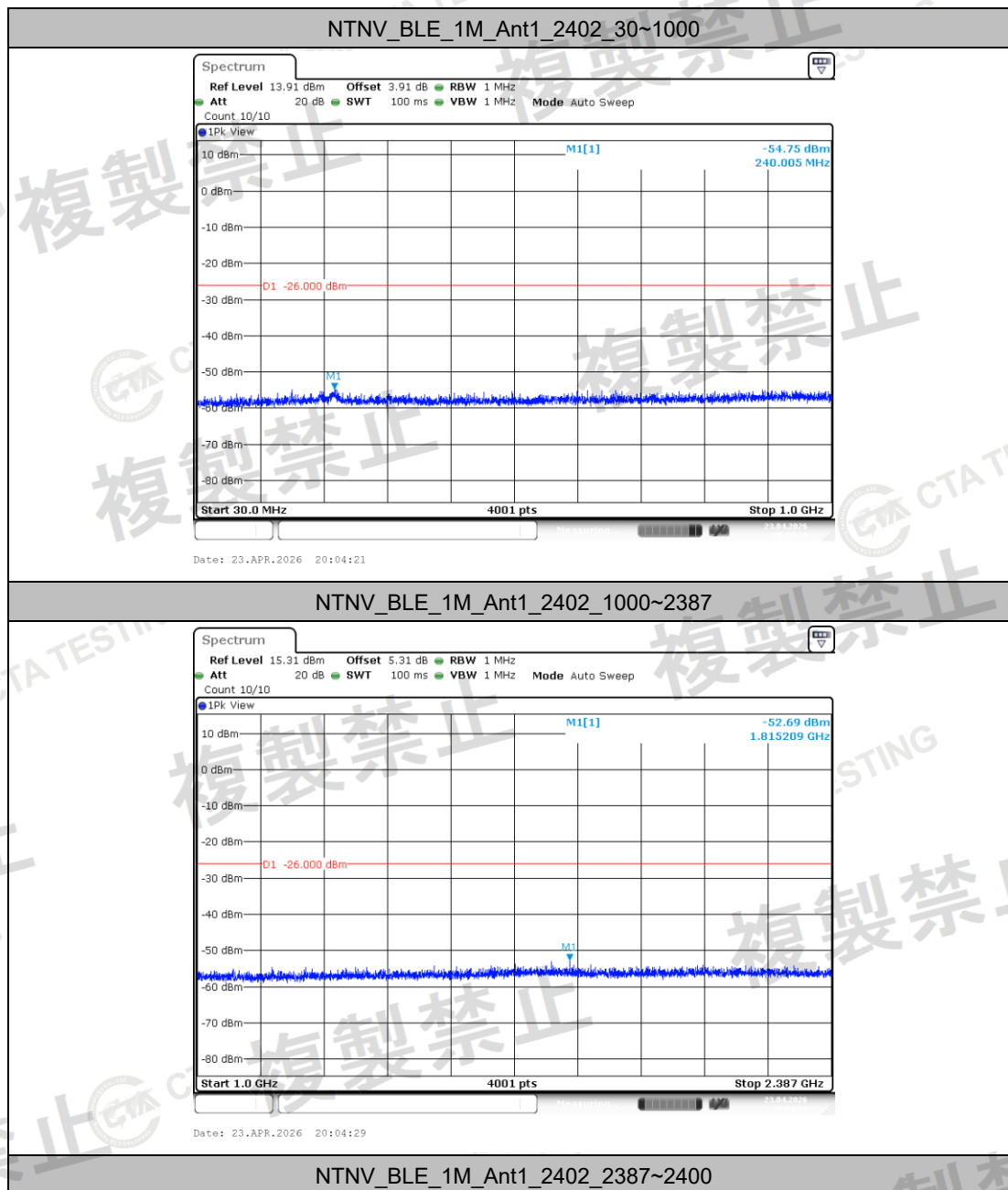
TestCondition	TestMode	Antenna	Freq(M Hz)	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	BLE_2M	Ant1	2402	2400.00	-26.12	≤-16	2.44343	≤25	PASS



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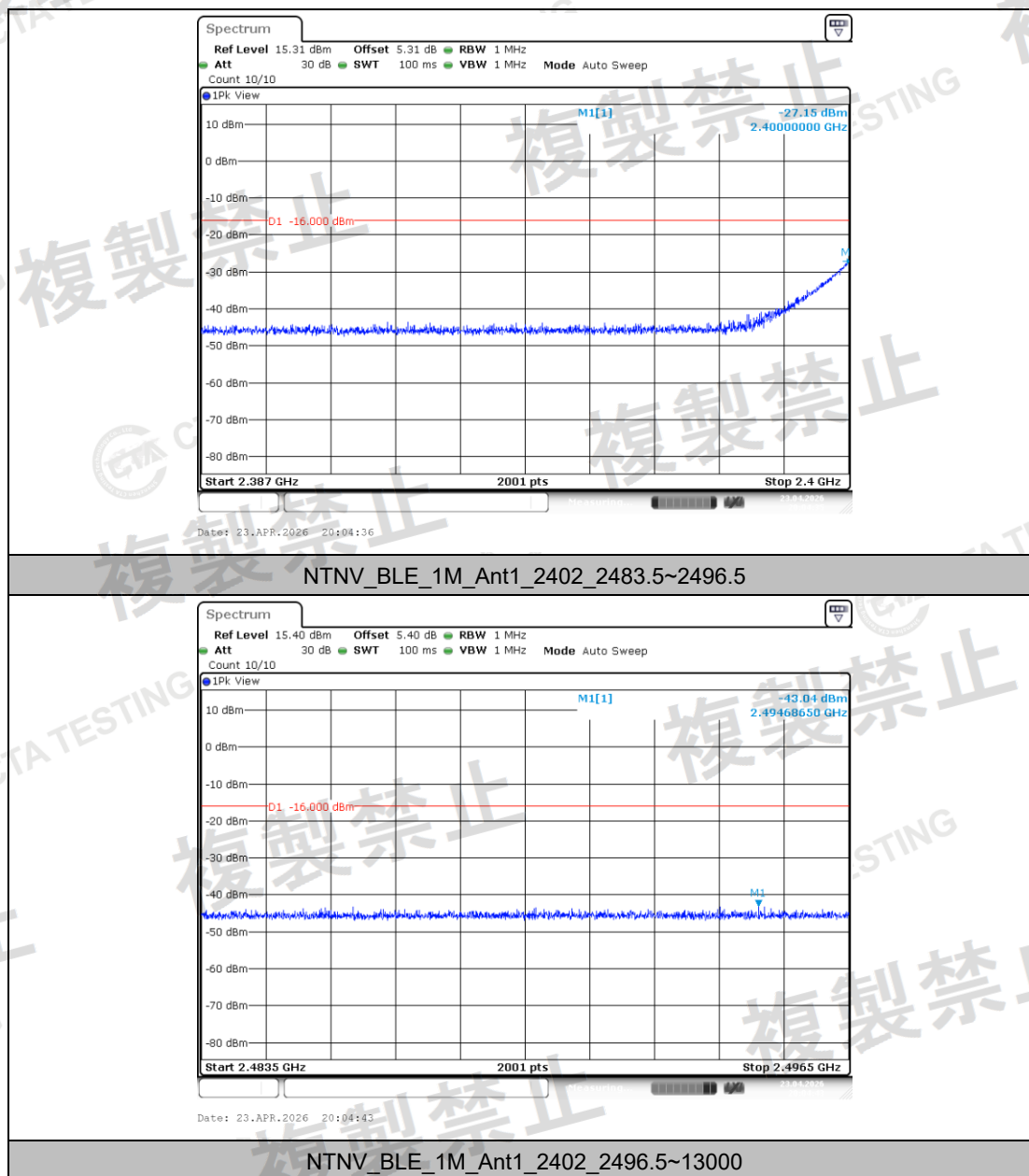
Test Graphs





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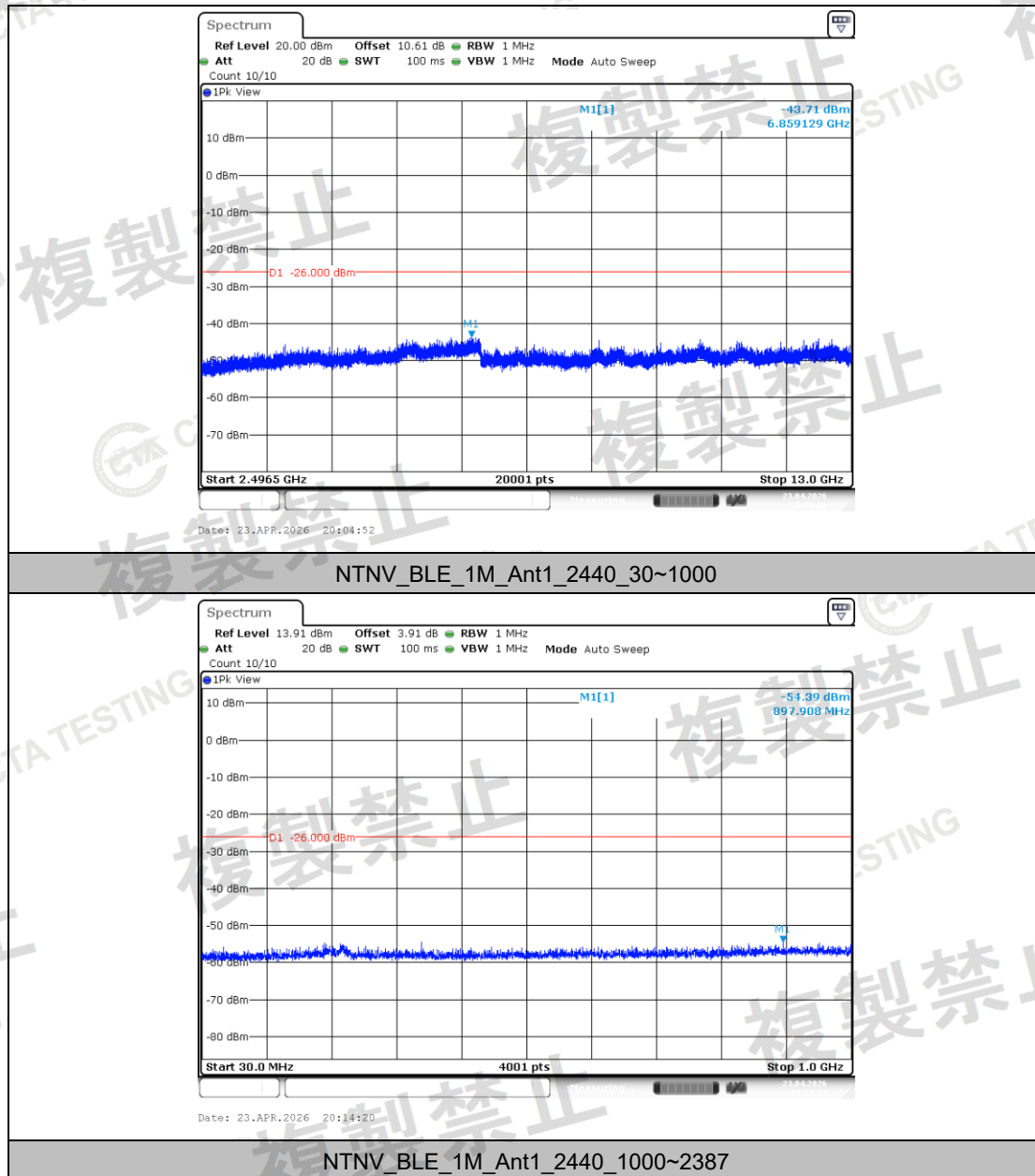
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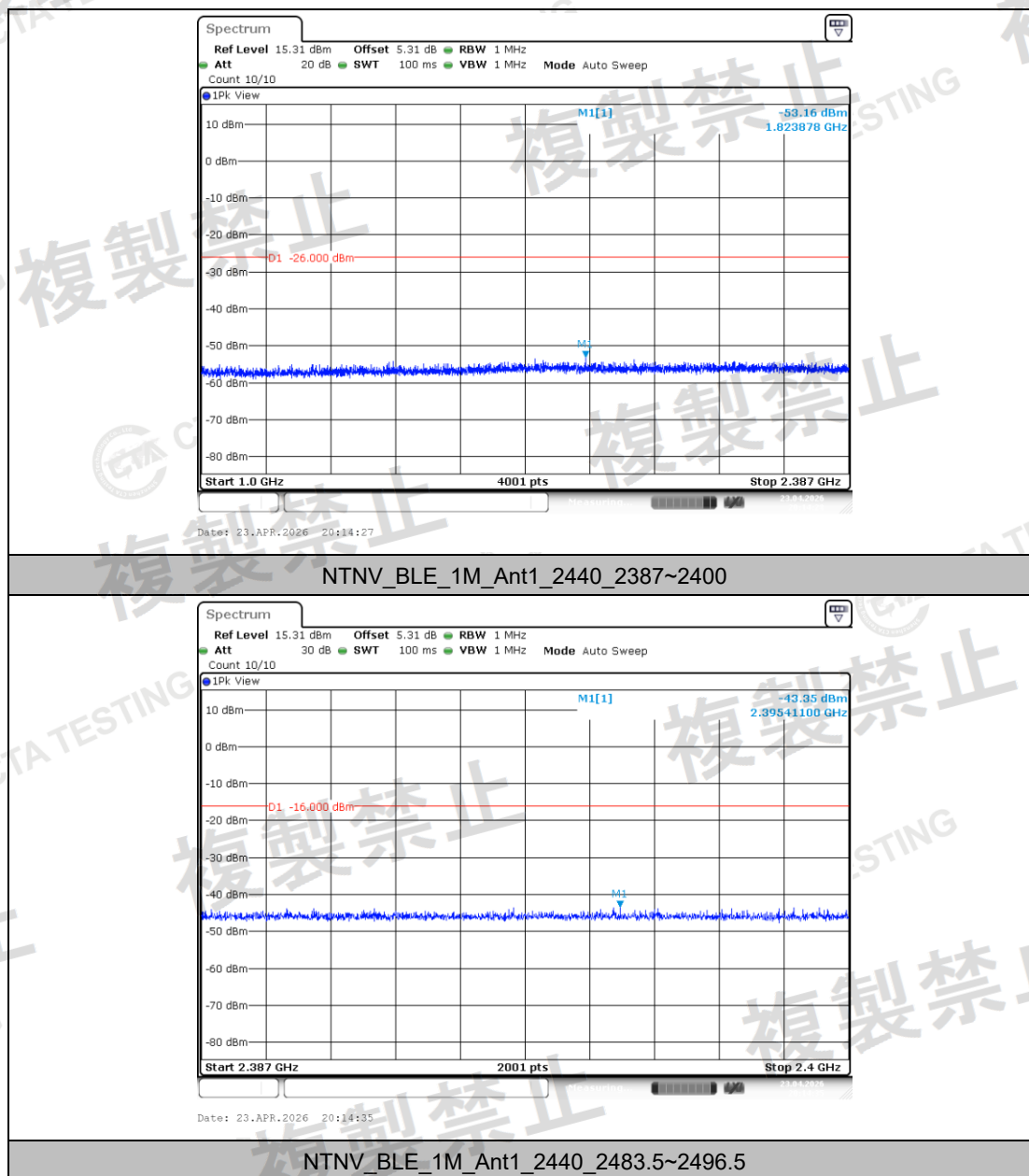
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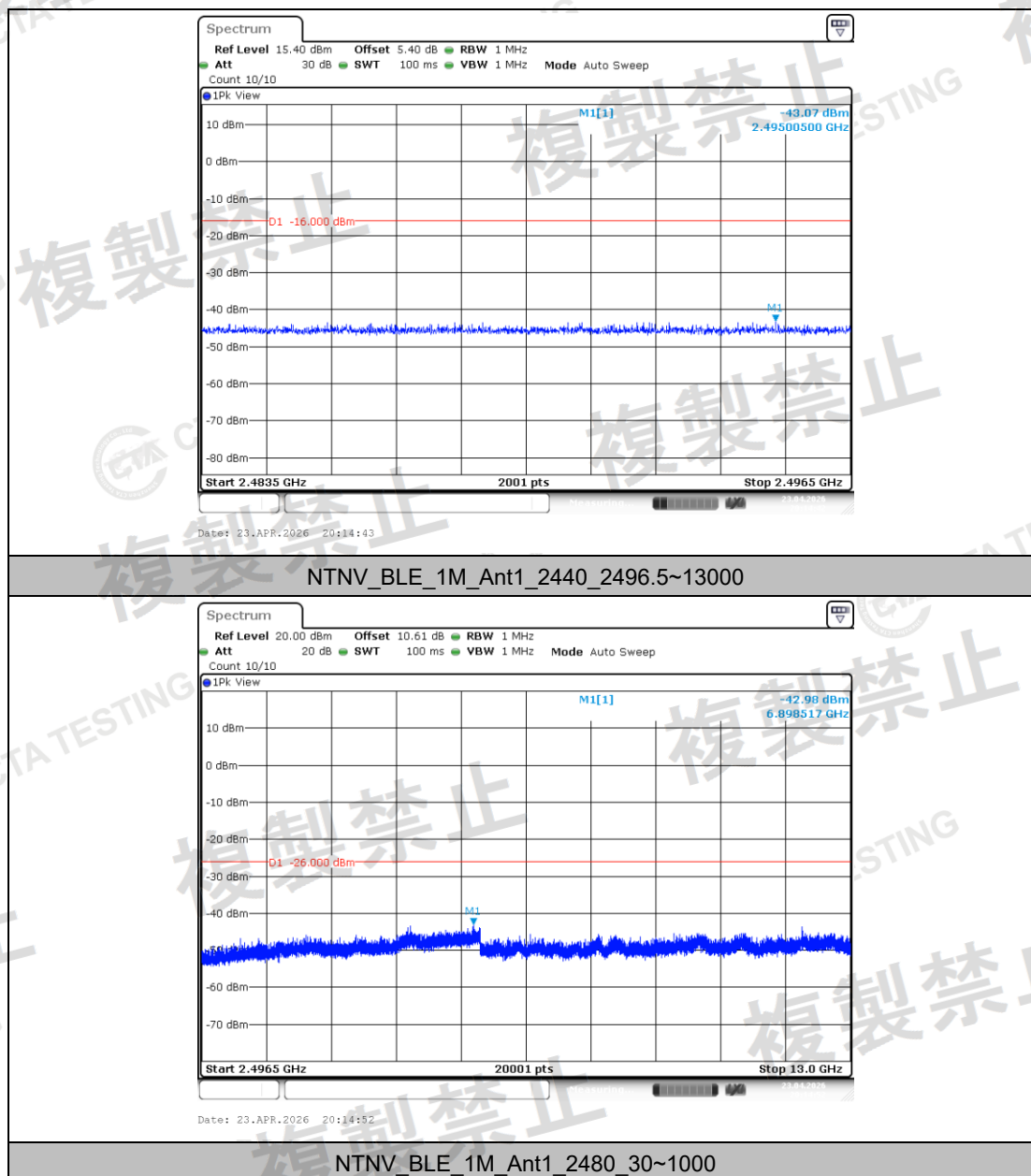
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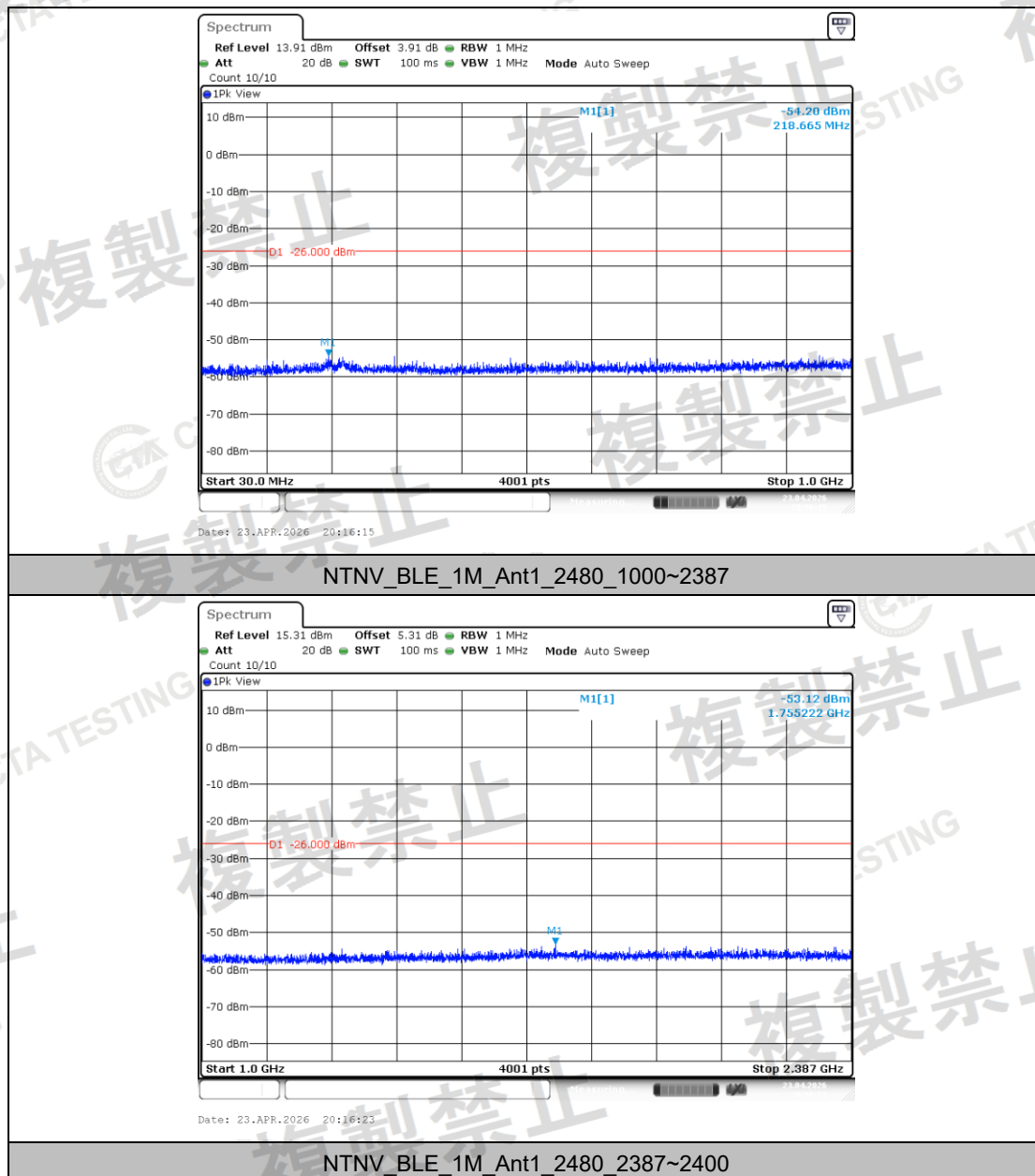
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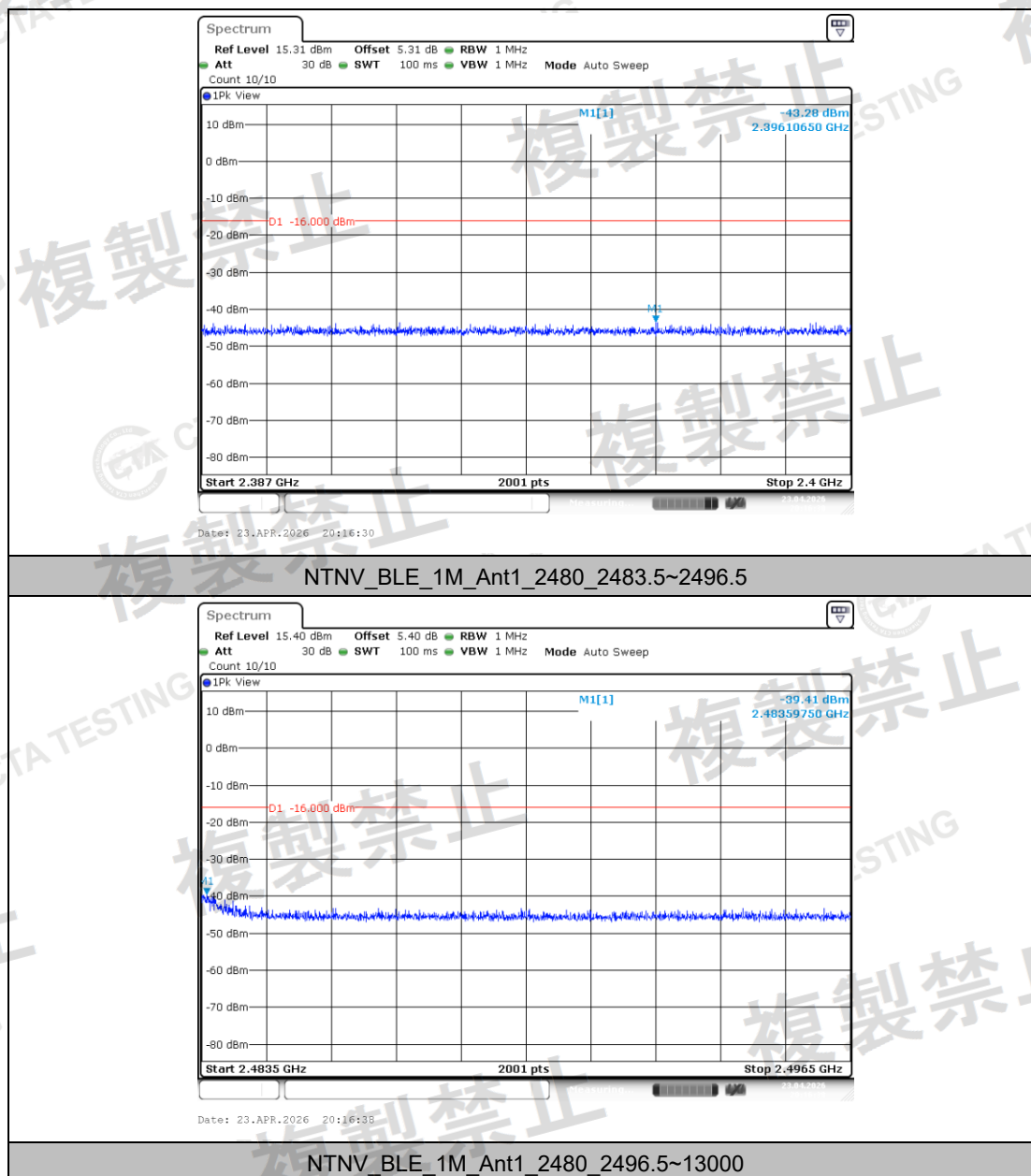
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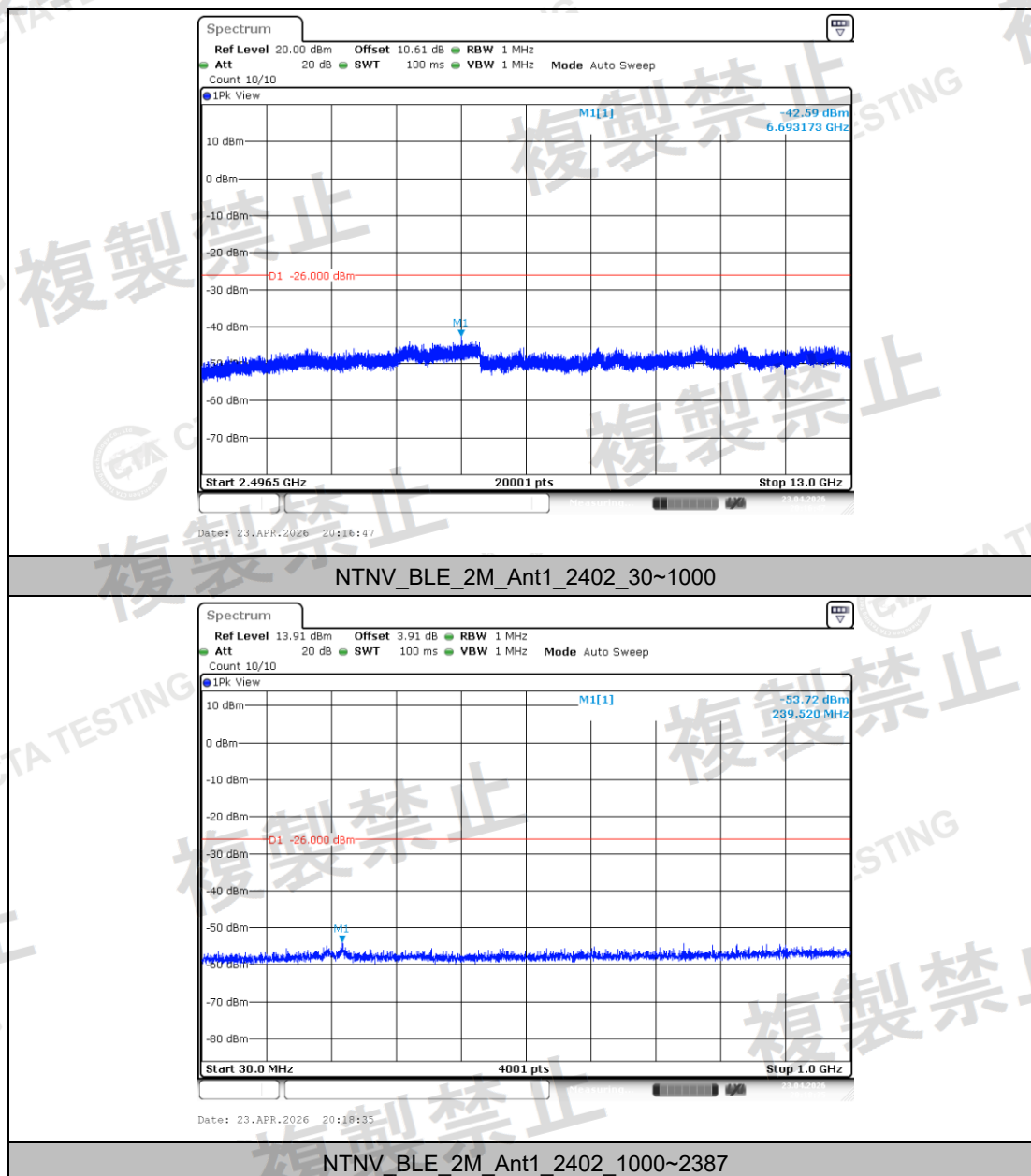
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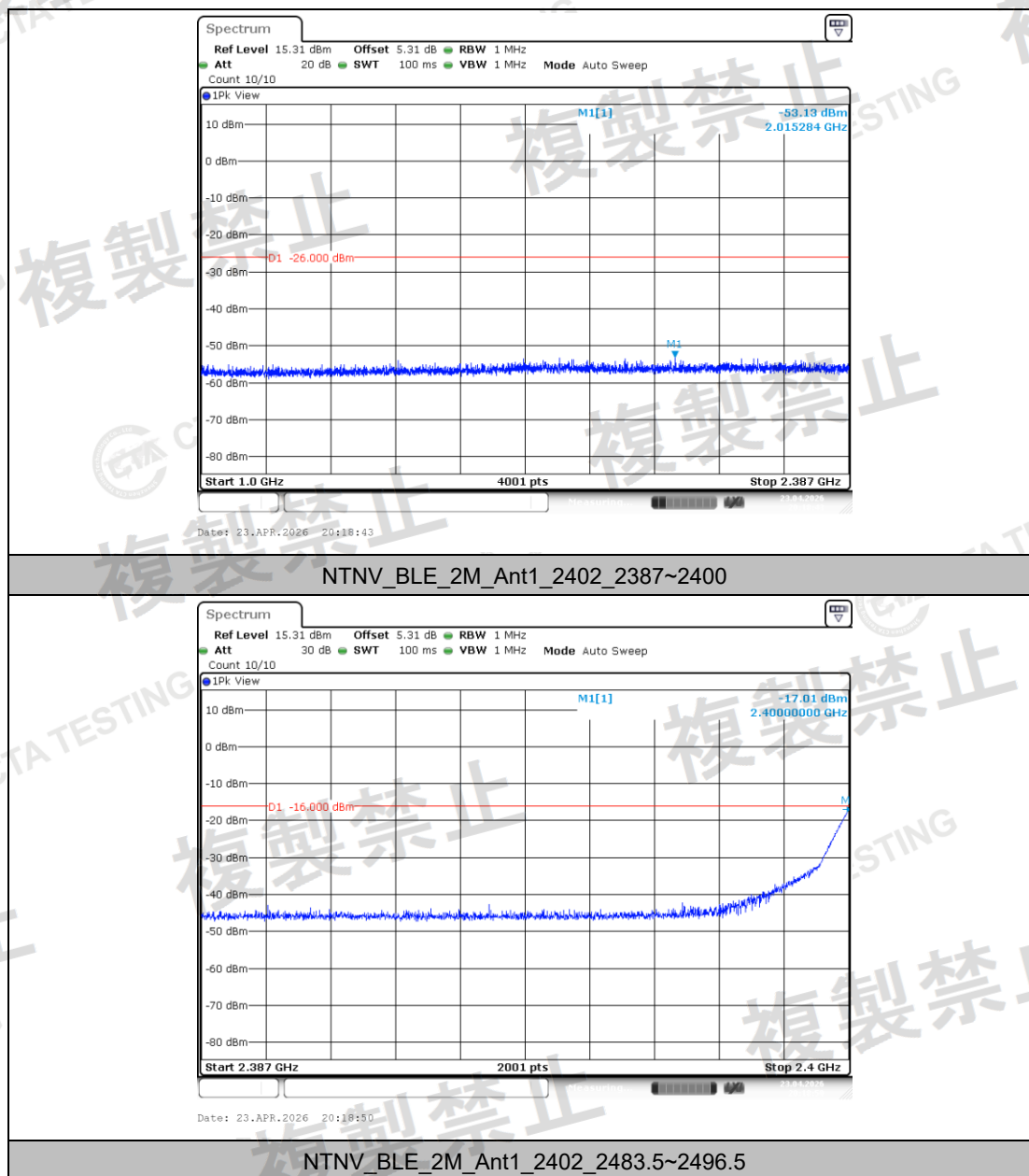
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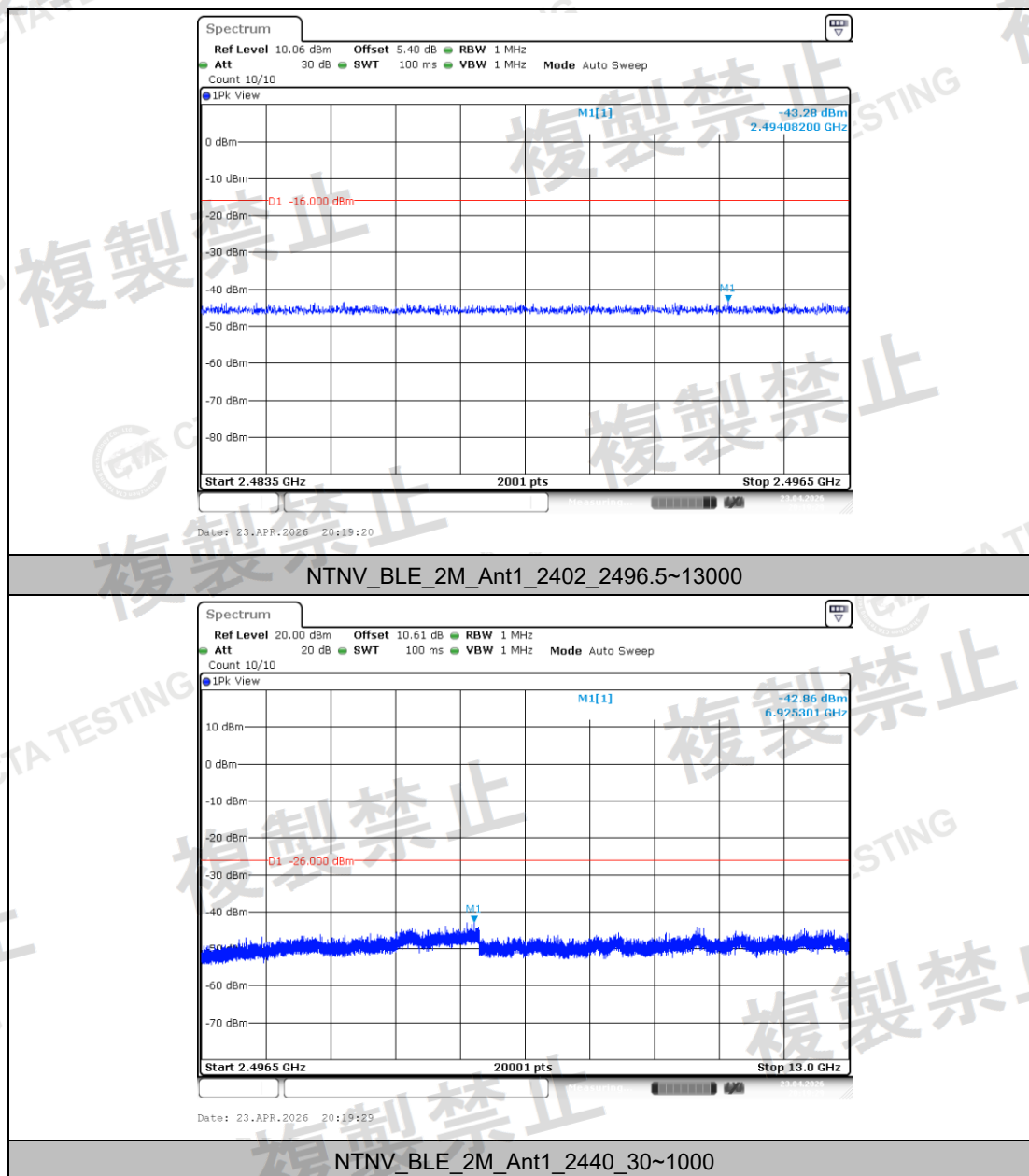
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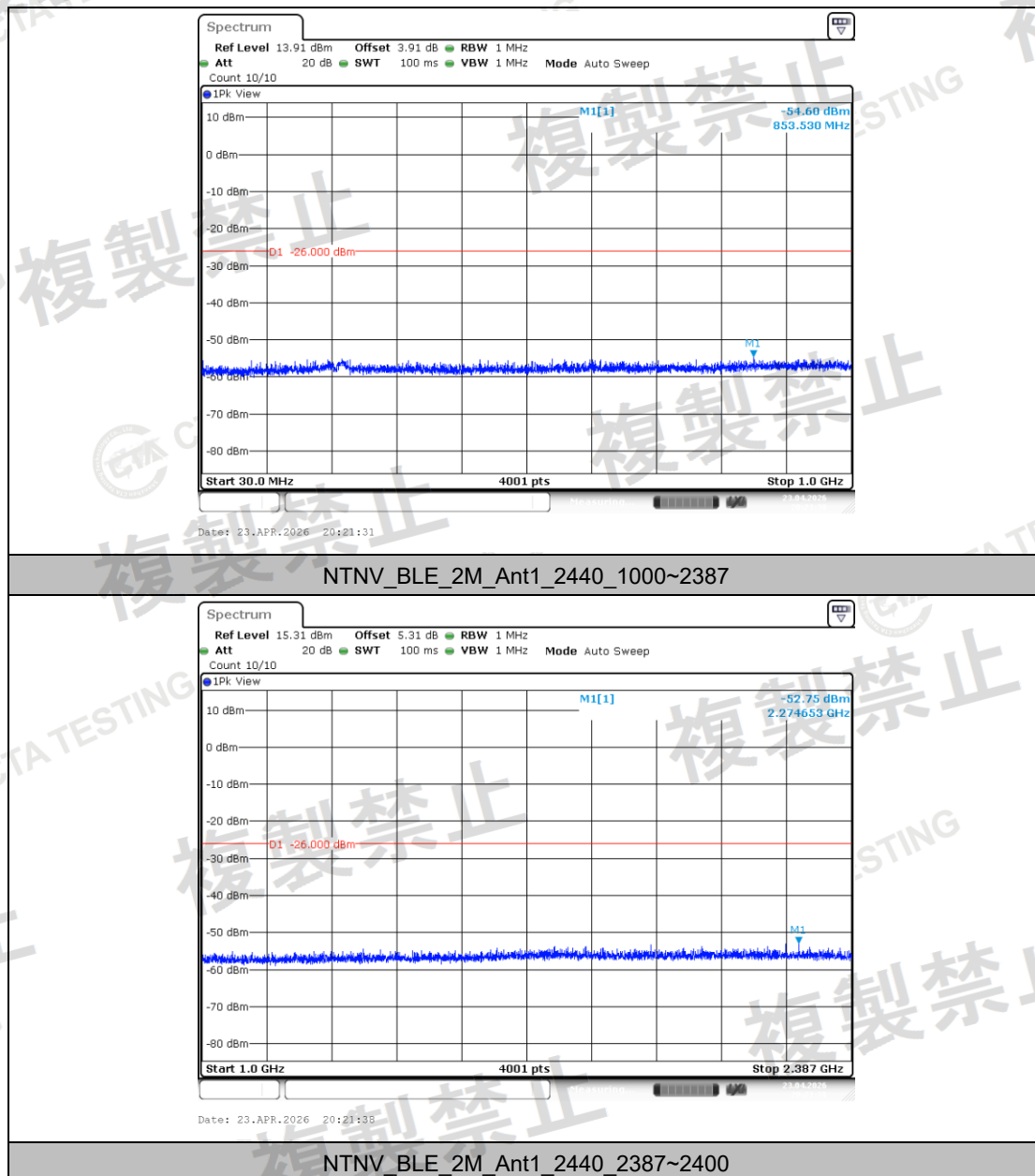
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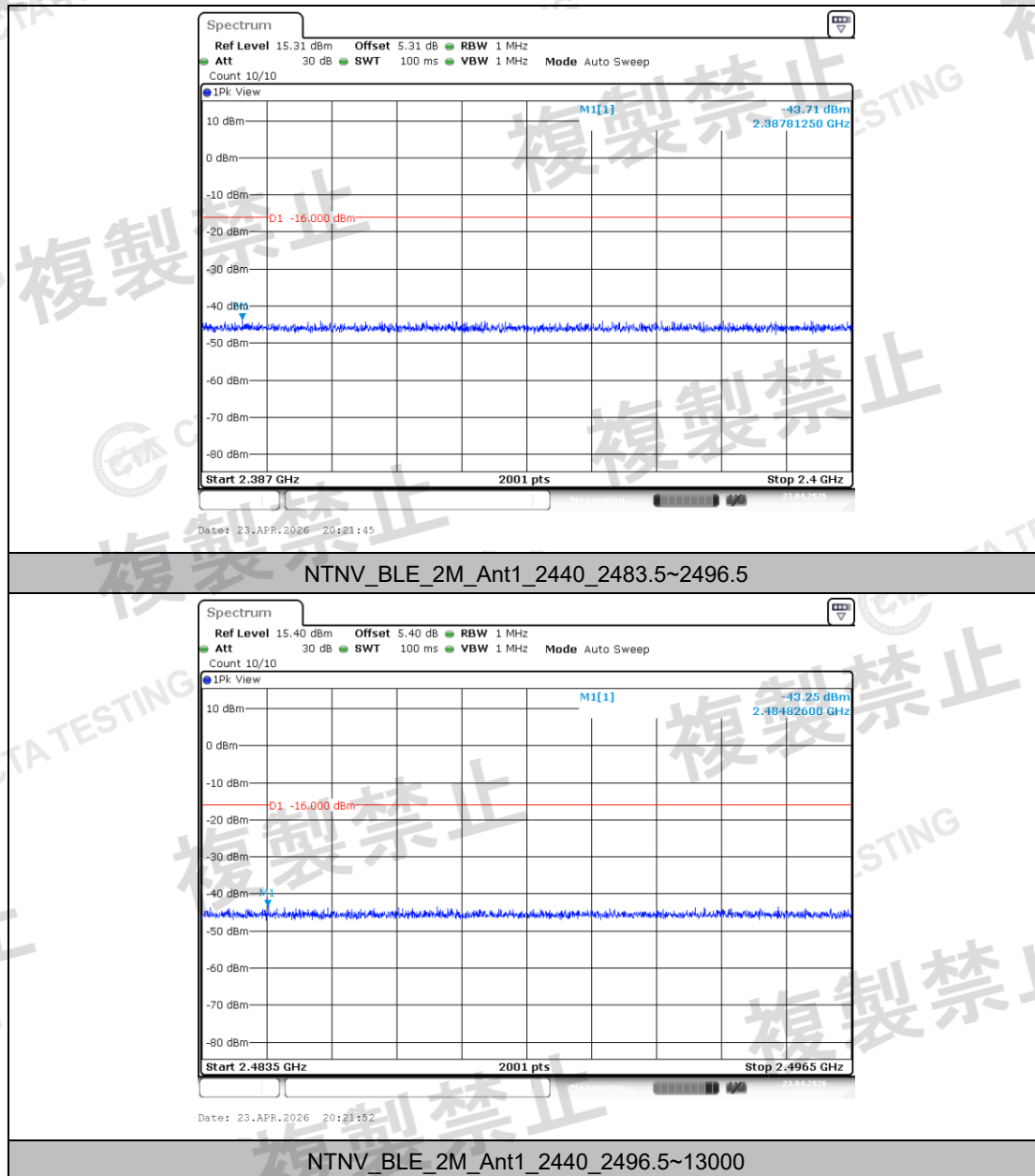
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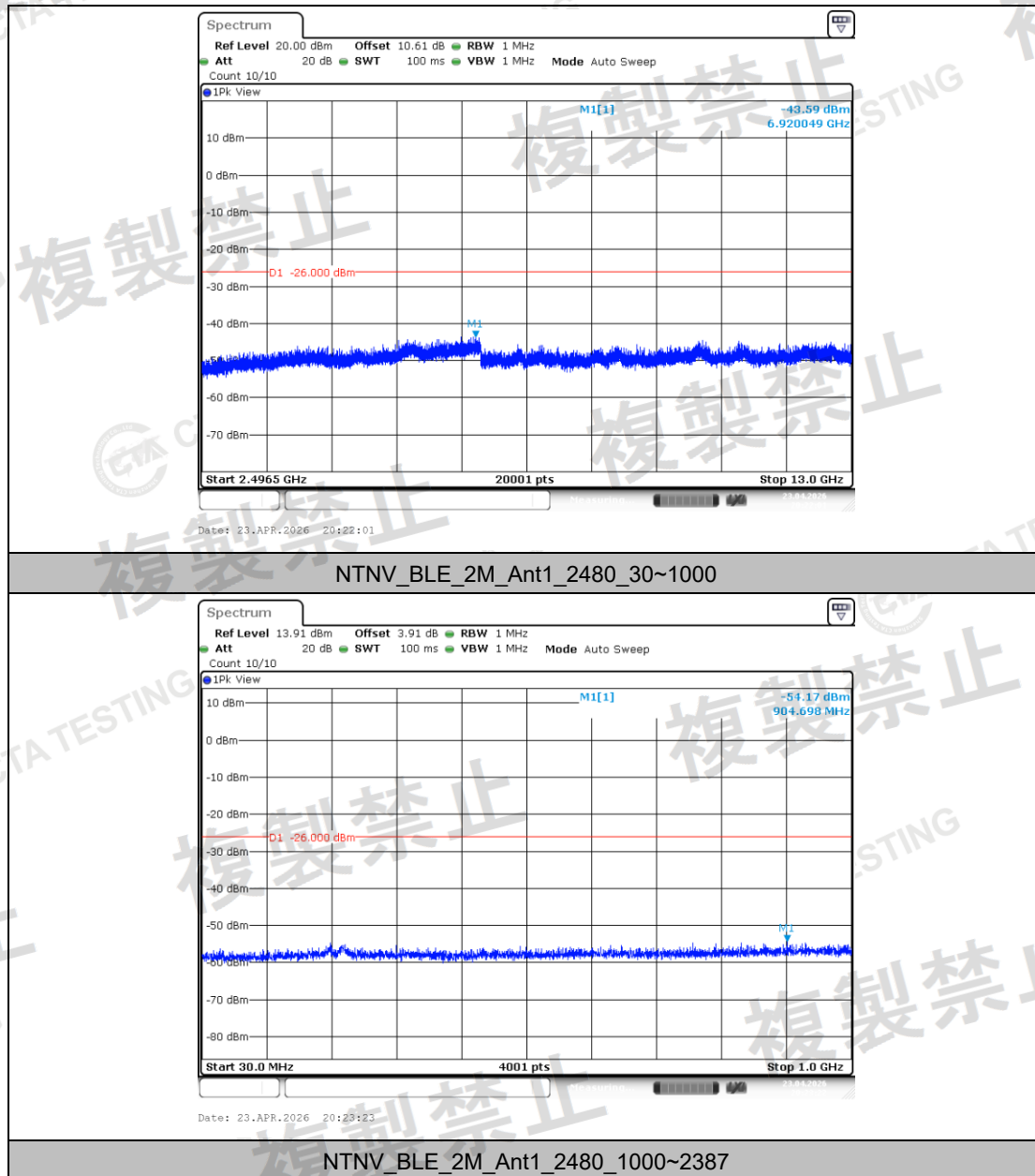
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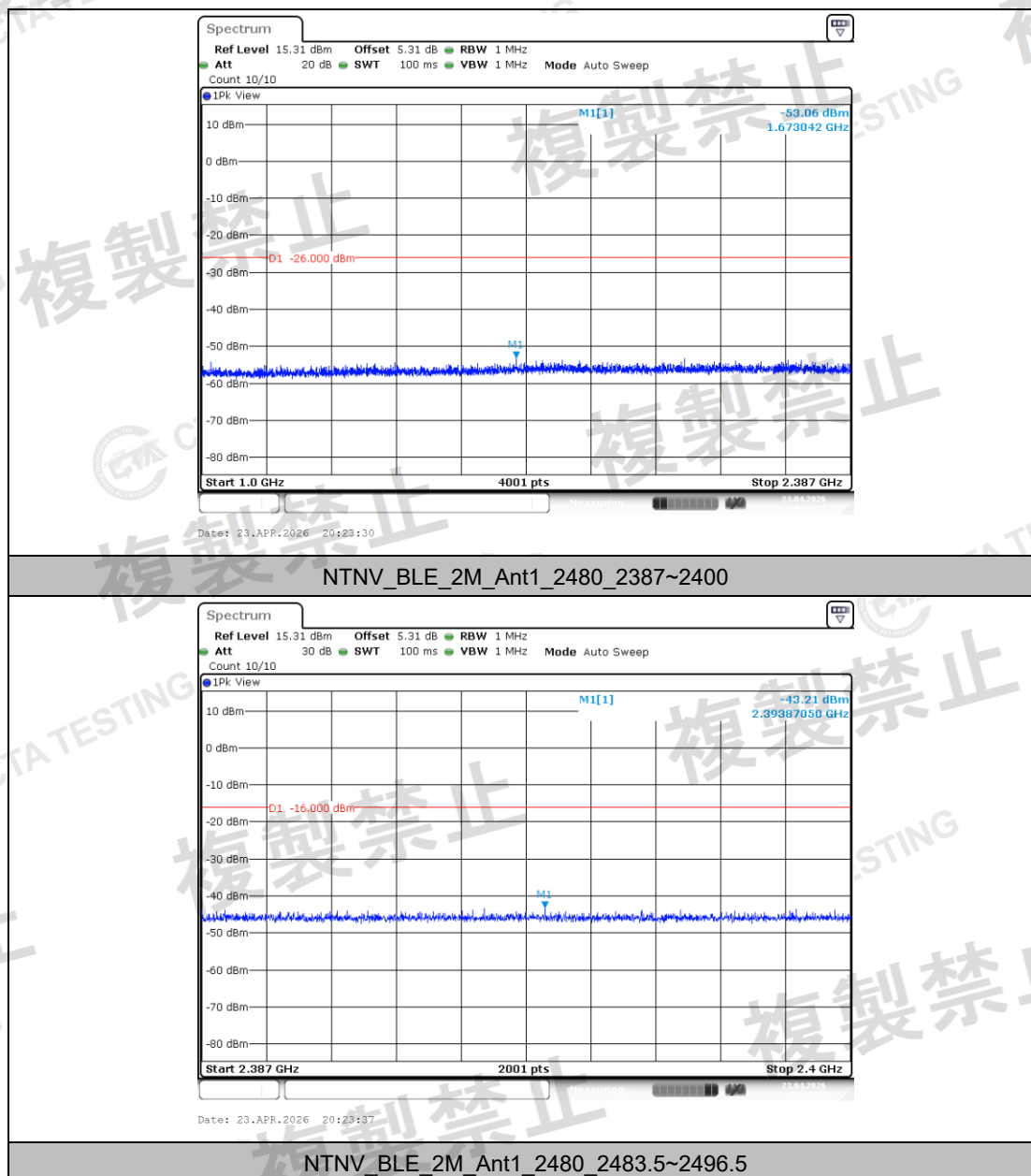
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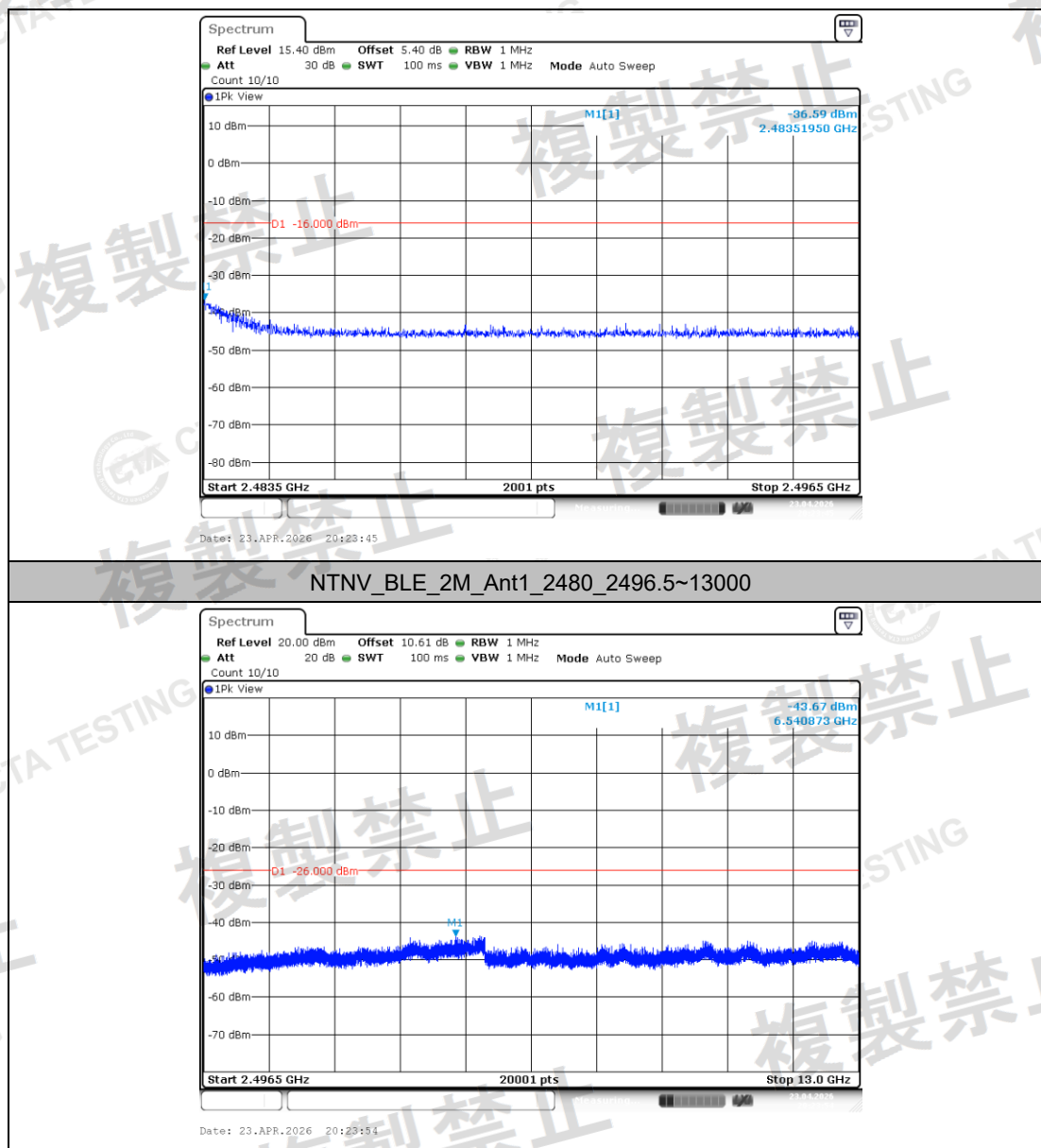
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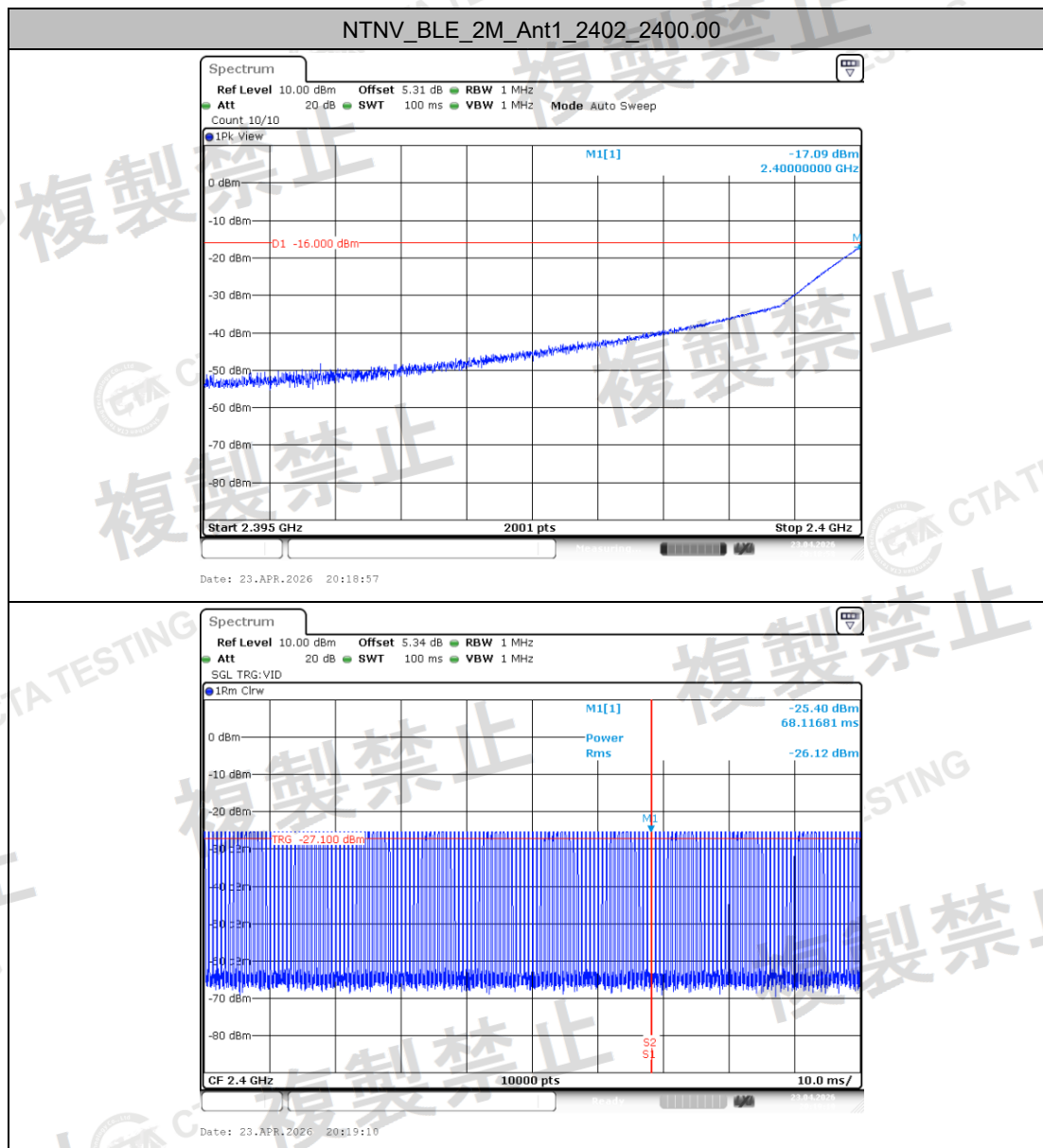




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Test Graphs_Step2





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Appendix E: Spurious Emission of RX

Test Result

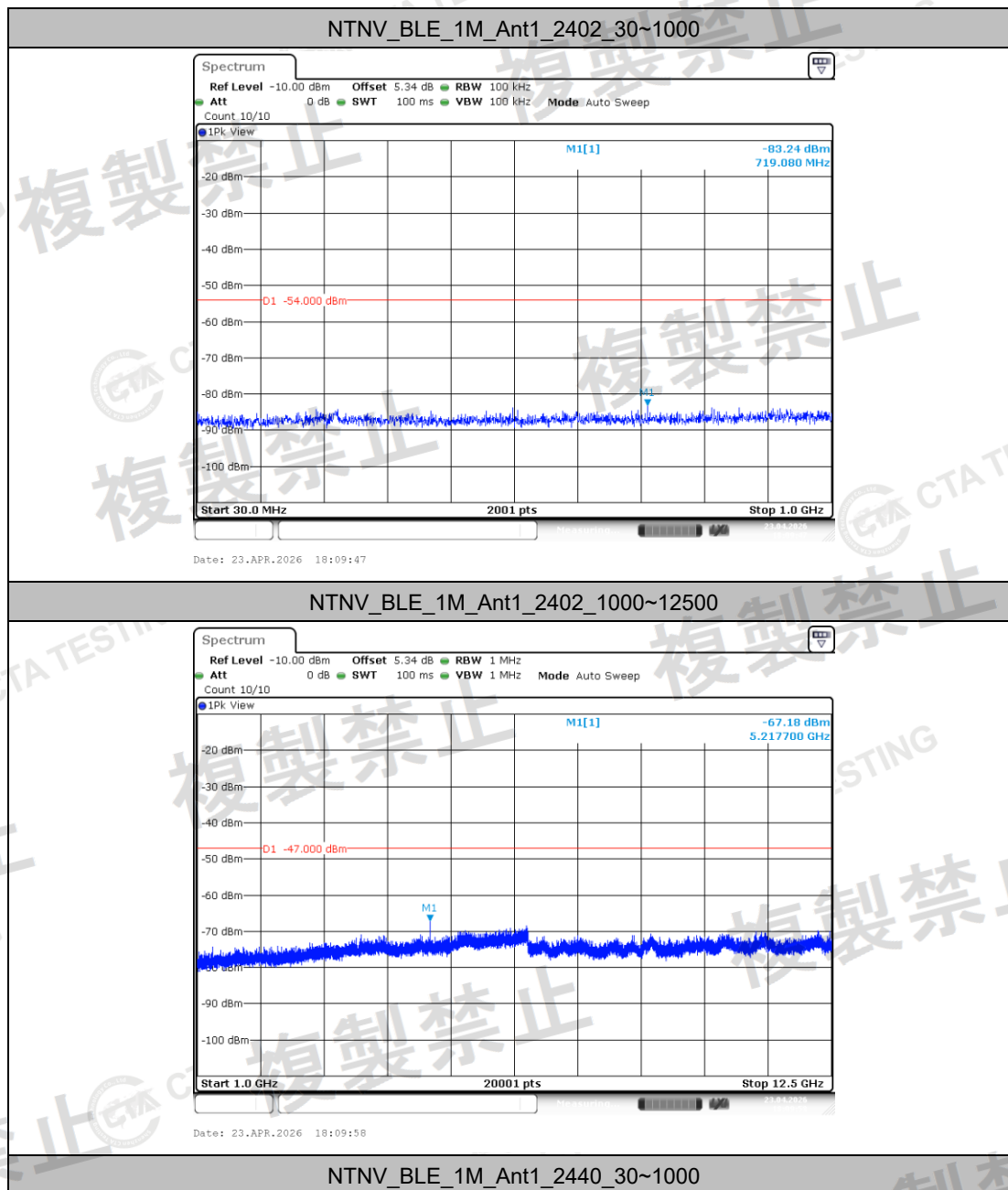
TestCondition	TestMode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	719.08	-83.24	≤-54	0.00474	≤4	PASS
				1000~12500	5217.70	-67.18	≤-47	0.19143	≤20	PASS
			2440	30~1000	924.62	-83.50	≤-54	0.00447	≤4	PASS
				1000~12500	6905.82	-68.46	≤-47	0.14256	≤20	PASS
			2480	30~1000	982.79	-83.29	≤-54	0.00469	≤4	PASS
				1000~12500	6680.43	-68.51	≤-47	0.14093	≤20	PASS
	BLE_2M	Ant1	2402	30~1000	237.72	-81.36	≤-54	0.00731	≤4	PASS
				1000~12500	10497.09	-68.57	≤-47	0.13900	≤20	PASS
			2440	30~1000	238.69	-81.95	≤-54	0.00638	≤4	PASS
				1000~12500	6862.12	-68.44	≤-47	0.14322	≤20	PASS
			2480	30~1000	236.26	-83.33	≤-54	0.00465	≤4	PASS
				1000~12500	6674.10	-69.18	≤-47	0.12078	≤20	PASS



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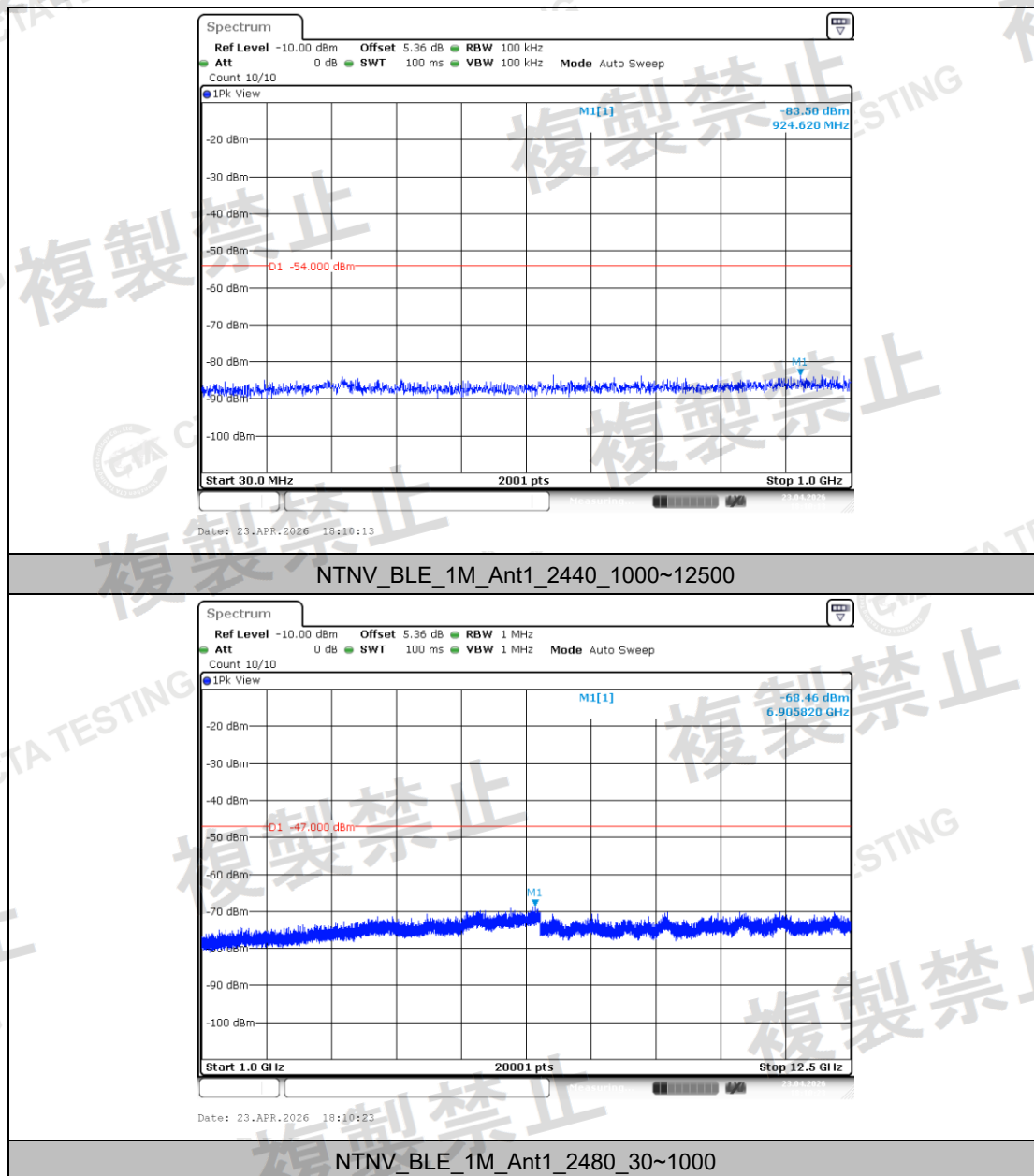
Test Graphs





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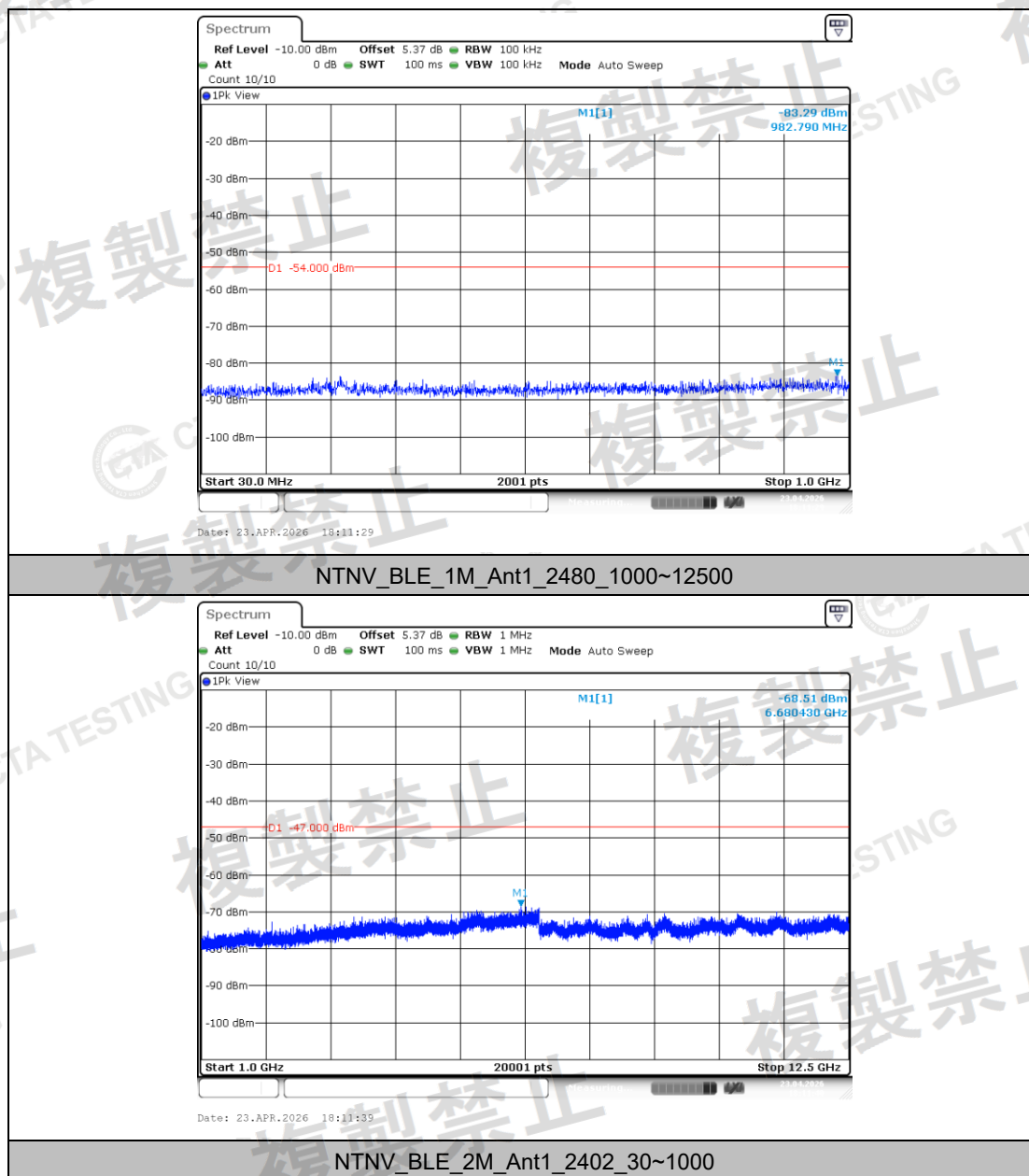
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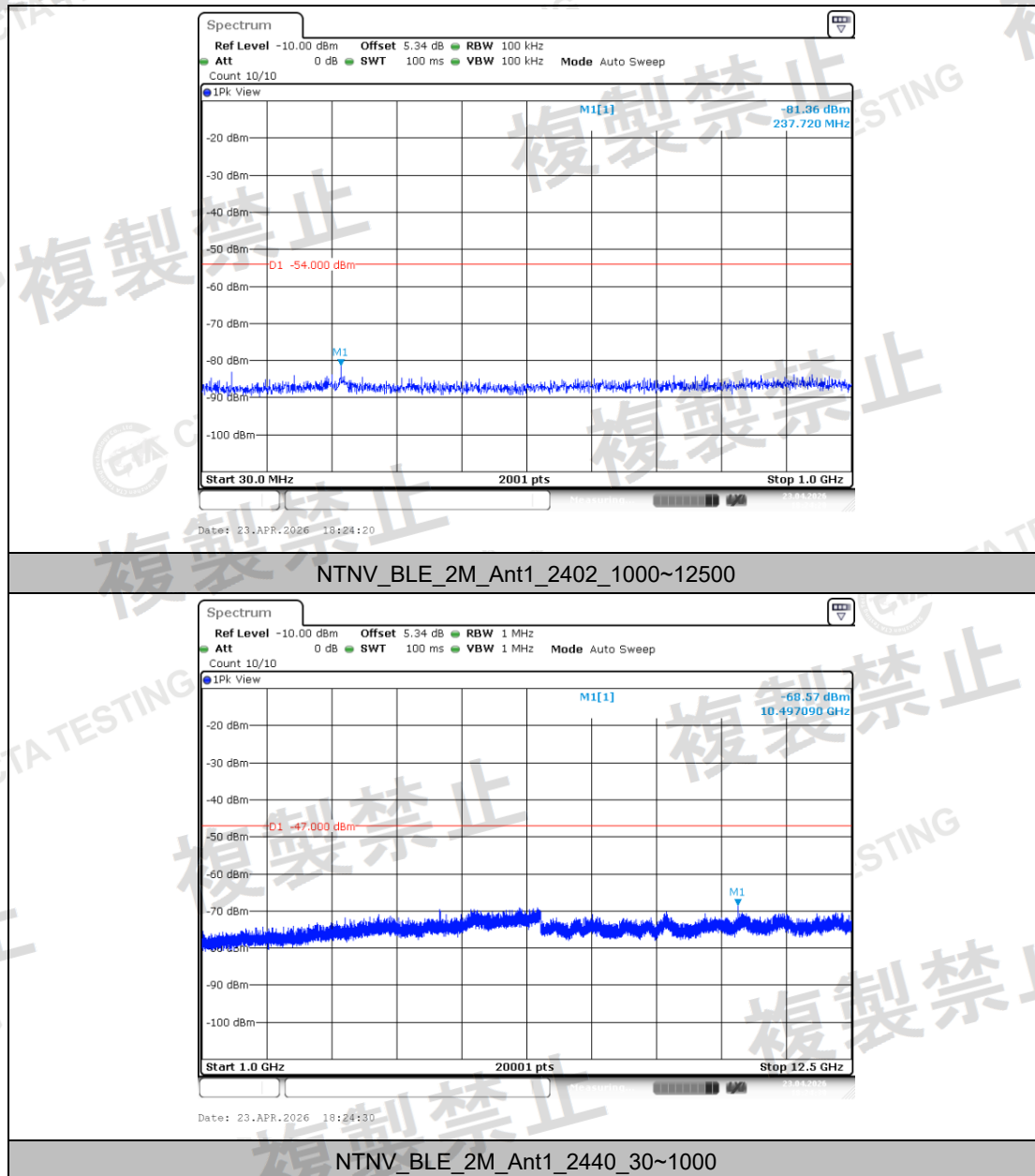
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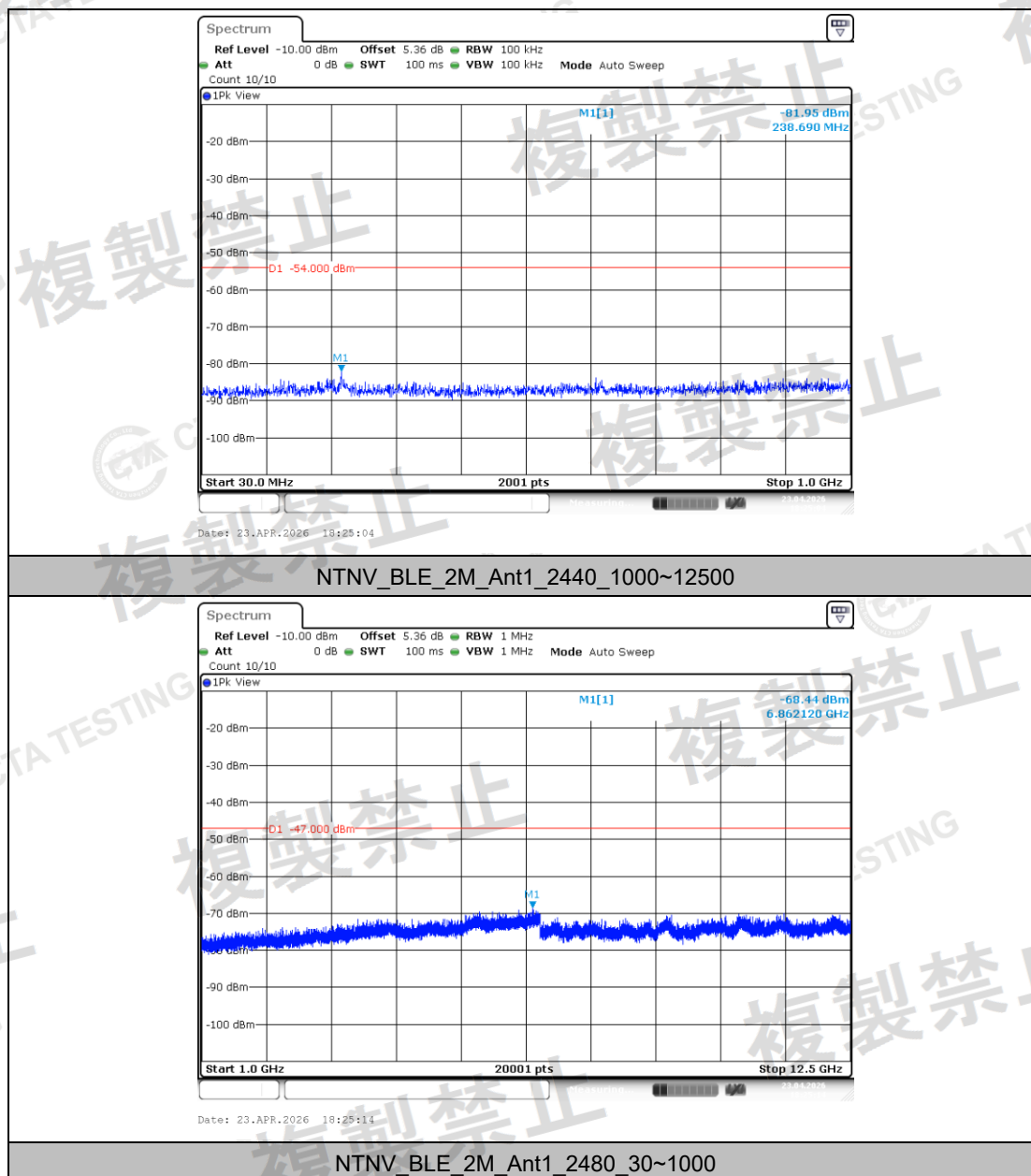
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