



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 BR-EDR

Company : HIFIMAN KUNSHAN TECHNOLOGY GROUP CO.,
LTD.

EUT : True Wireless Earbuds

Model Number : Svanar wireless 2-L

Report No. : CTA26071301702

Reviewed By : Eric Wang



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Appendix A: Frequency_Error

Test Result

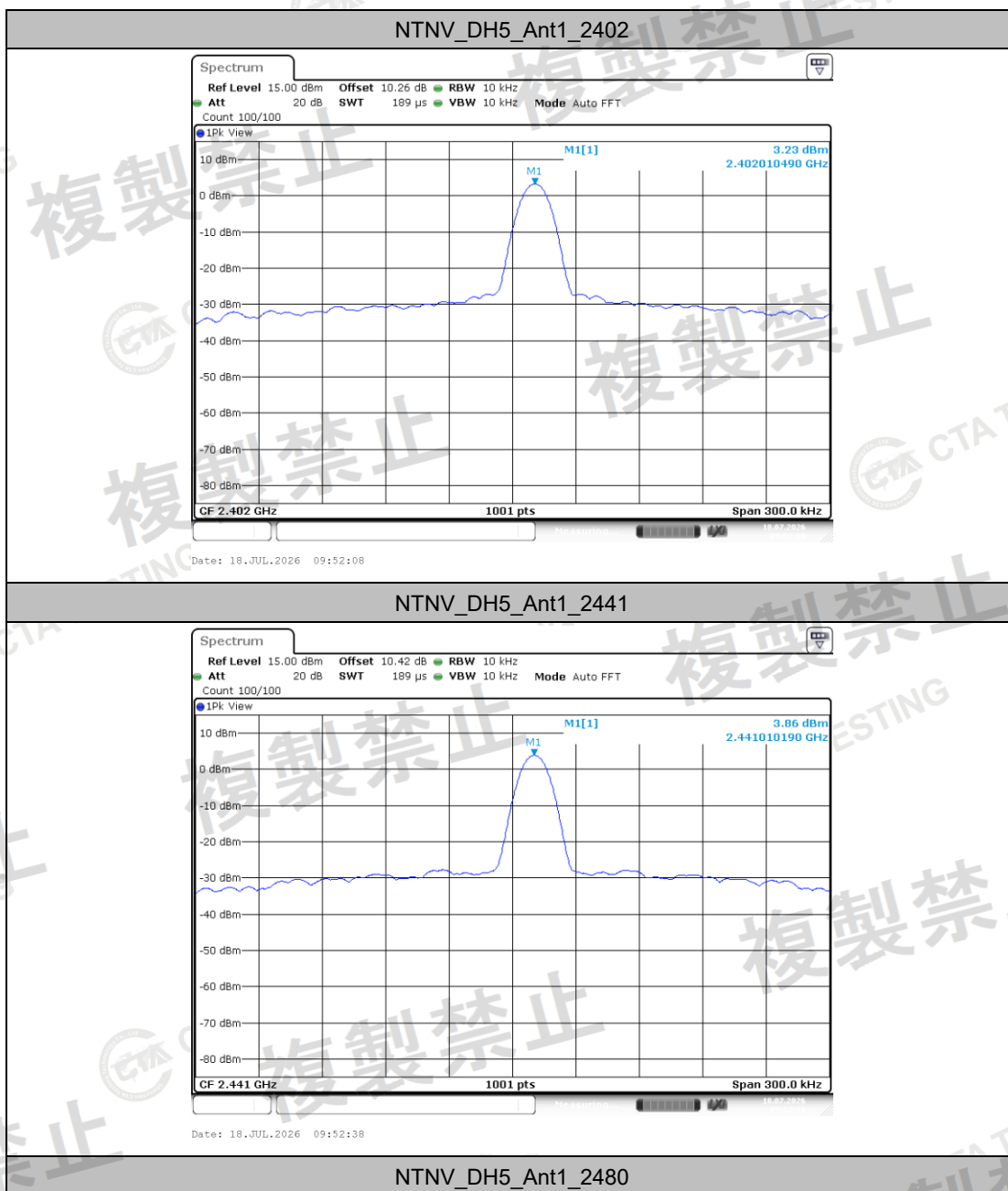
Test Condition	Test Mode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTNV	DH5	Ant1	2402	4.36719	±50	PASS
			2441	4.17452	±50	PASS
			2480	4.10887	±50	PASS
	2DH5	Ant1	2402	3.86761	±50	PASS
			2441	3.92872	±50	PASS
			2480	3.86694	±50	PASS
	3DH5	Ant1	2402	3.86761	±50	PASS
			2441	3.92872	±50	PASS
			2480	3.86694	±50	PASS



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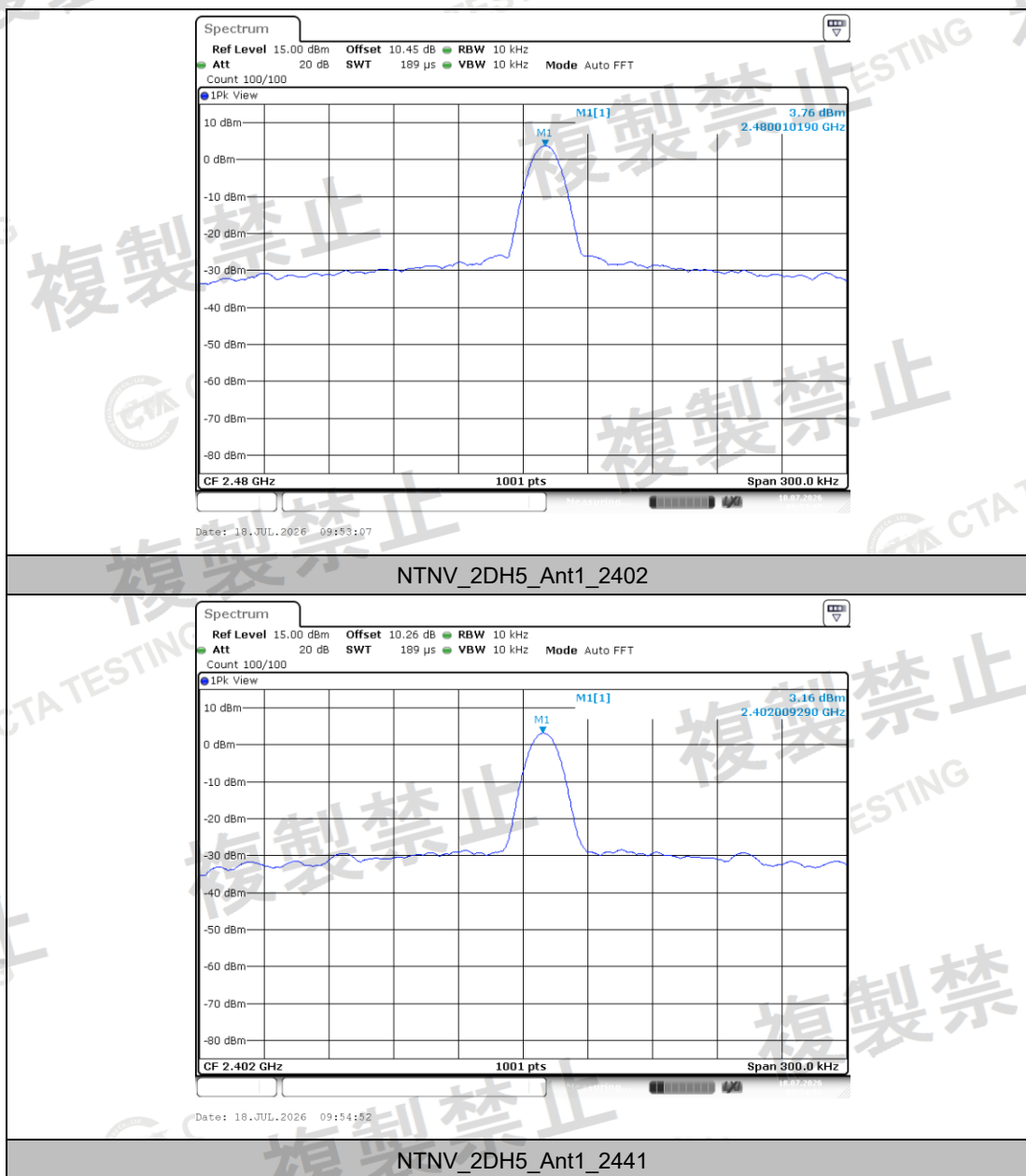
Test Graphs





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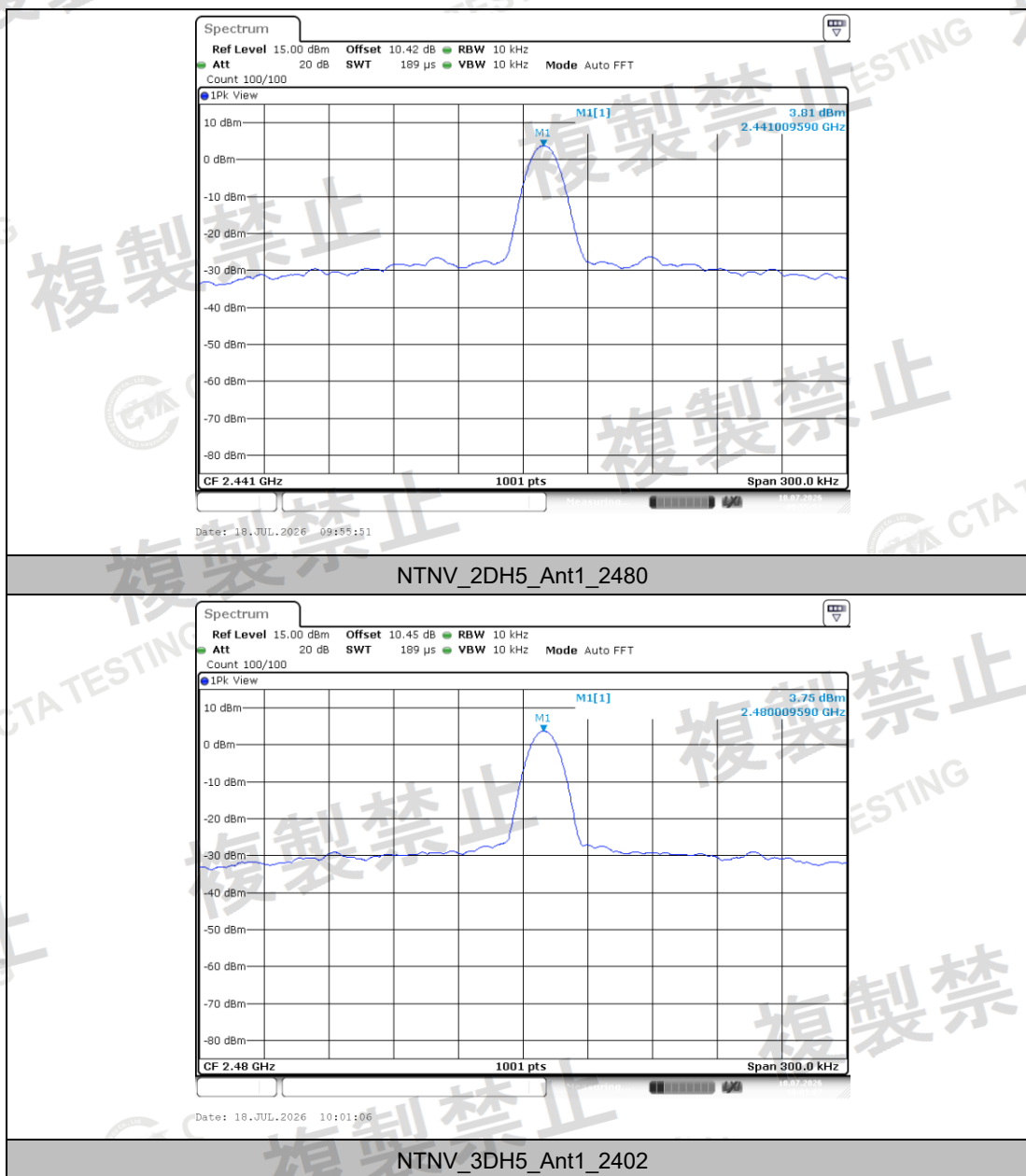
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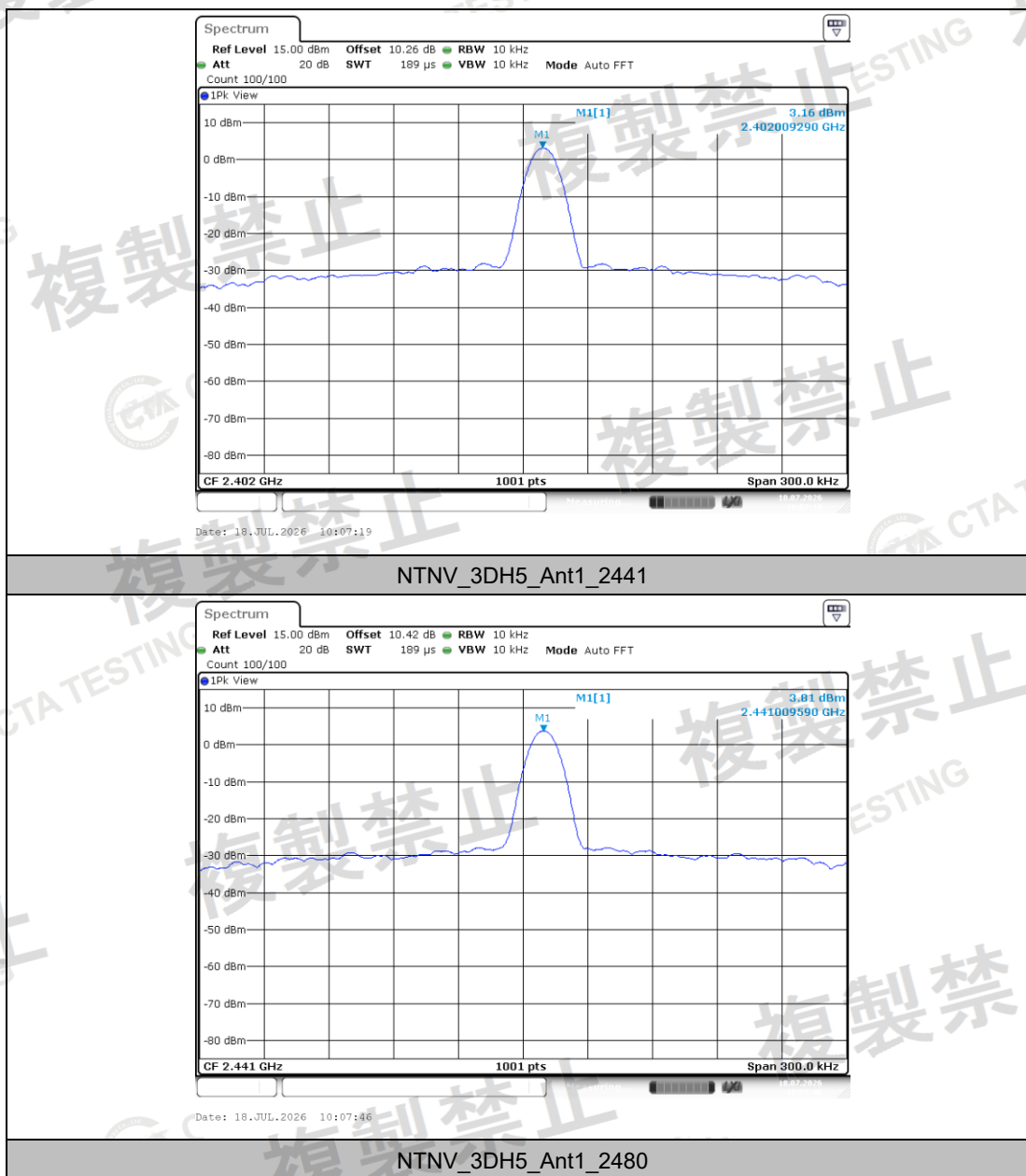
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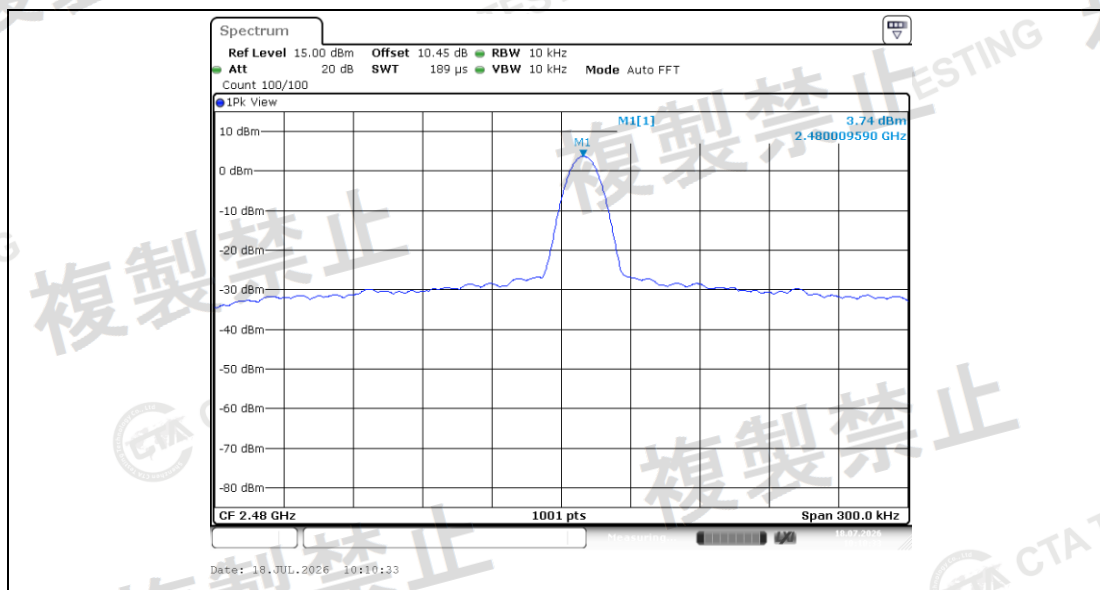
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Appendix B: Occupied Bandwidth

Test Result

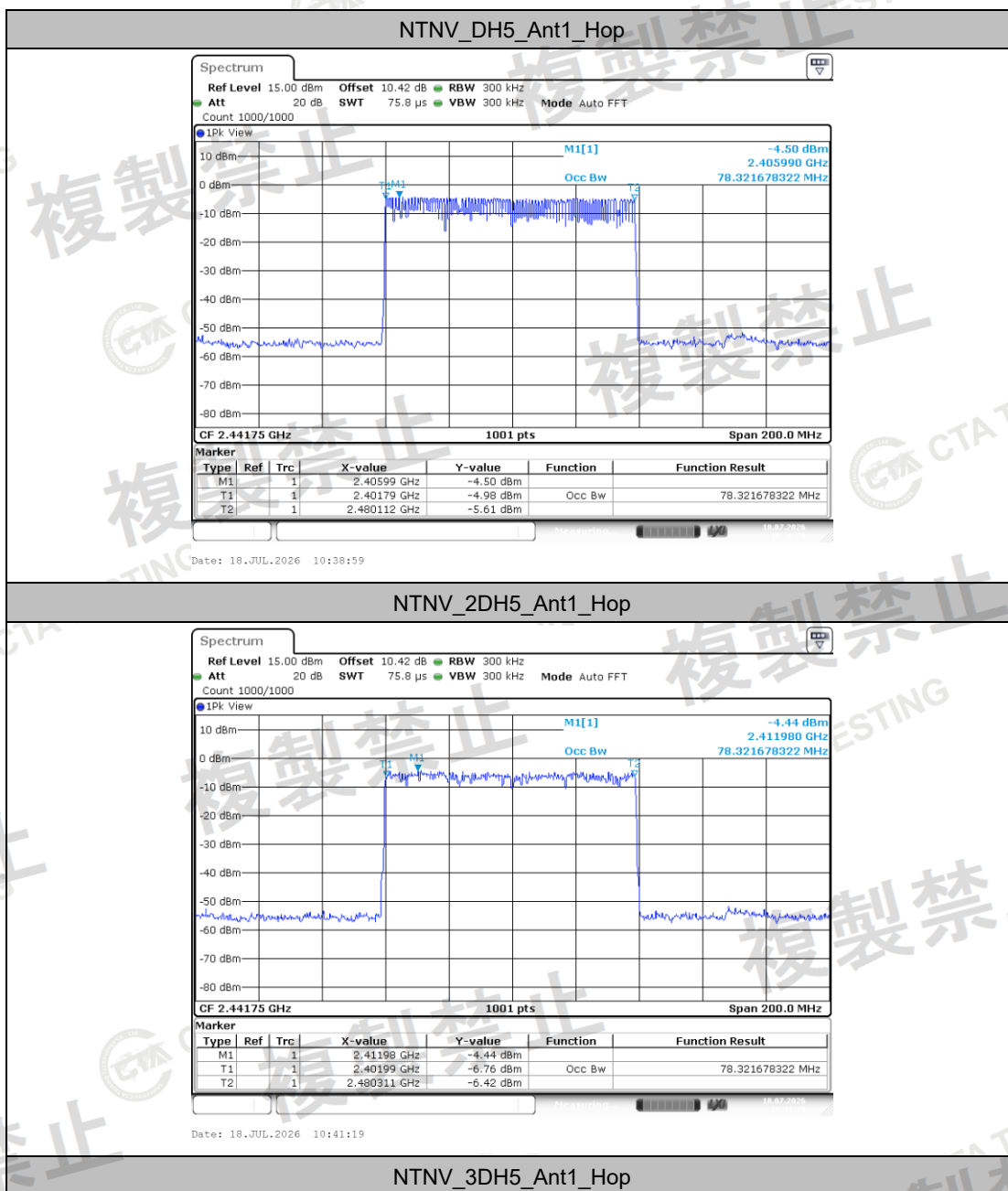
Test Condition	Test Mode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	DH5	Ant1	Hop	78.322	≤83.5	PASS
	2DH5	Ant1	Hop	78.322	≤83.5	PASS
	3DH5	Ant1	Hop	78.322	≤83.5	PASS



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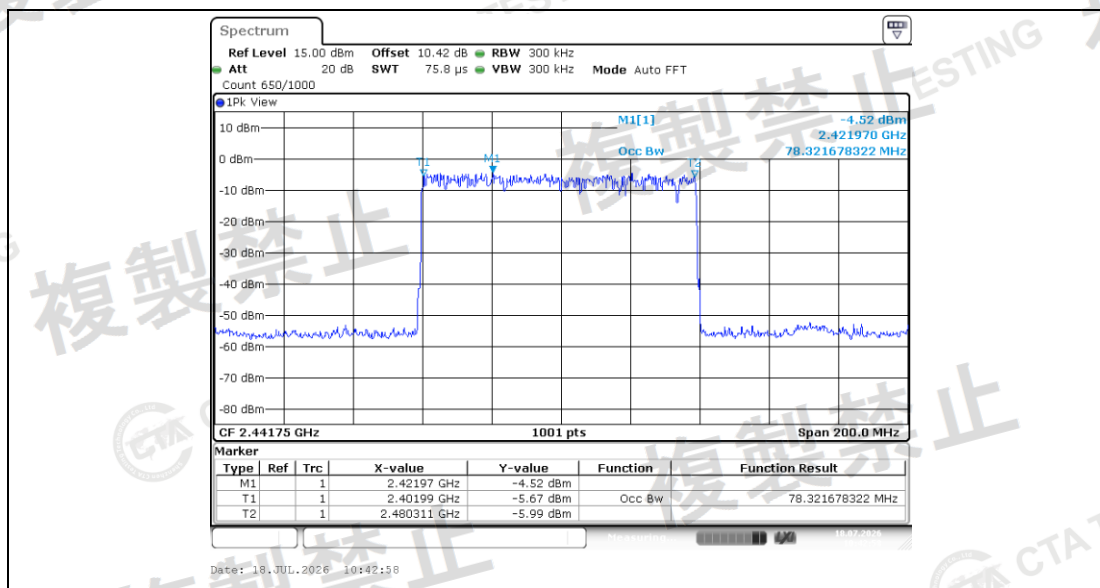
Test Graphs





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Appendix C: Spread Bandwidth

Test Result

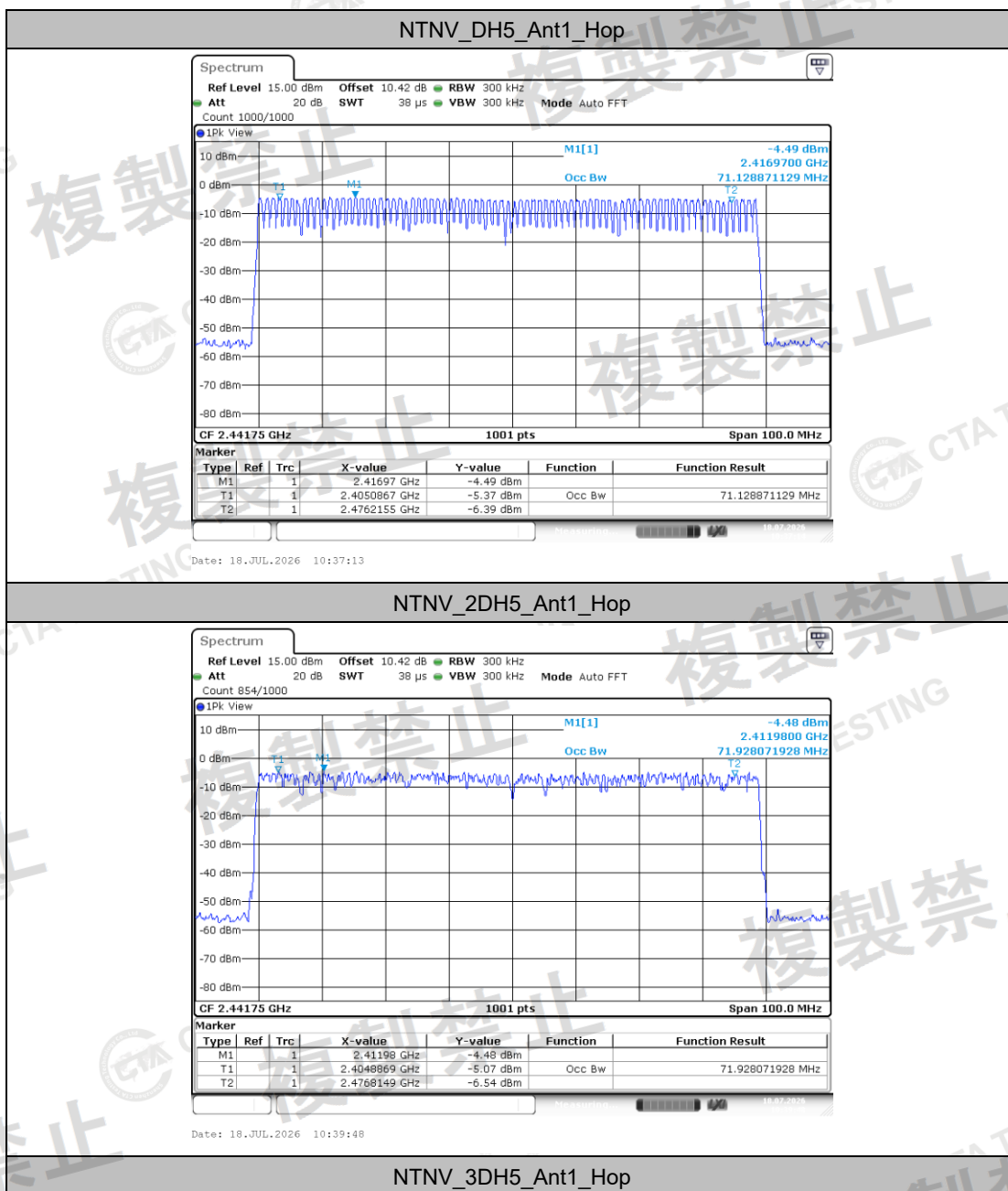
Test Condition	Test Mode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Spread Factor	Limit	Verdict
NTNV	DH5	Ant1	Hop	71.129	≥ 0.5	71.129	> 5	PASS
	2DH5	Ant1	Hop	71.928	≥ 0.5	71.928	> 5	PASS
	3DH5	Ant1	Hop	70.729	≥ 0.5	70.729	> 5	PASS



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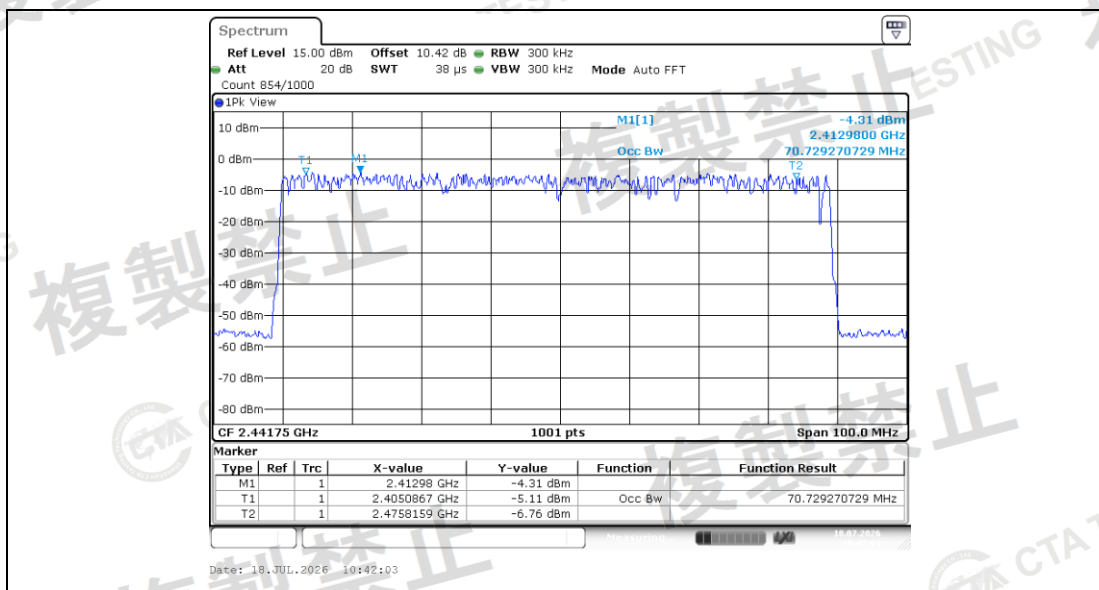
Test Graphs





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Appendix D: Spurious Emission of TX

Test Result

Test Condition	Test Mode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	DH5	Ant1	2402	30~1000	891.36	-54.77	≤-26	0.00333	≤2.5	PASS
				1000~2387	2380.76	-52.53	≤-26	0.00558	≤2.5	PASS
				2387~2400	2399.99	-33.06	≤-16	0.49431	≤25	PASS
				2483.5~2496.5	2491.27	-43.67	≤-16	0.04295	≤25	PASS
				2496.5~13000	4803.59	-36.44	≤-26	0.22699	≤2.5	PASS
			2441	30~1000	814.73	-52.37	≤-26	0.00579	≤2.5	PASS
				1000~2387	2188.66	-53.74	≤-26	0.00423	≤2.5	PASS
				2387~2400	2398.77	-43.50	≤-16	0.04467	≤25	PASS
				2483.5~2496.5	2485.35	-43.47	≤-16	0.04498	≤25	PASS
				2496.5~13000	4881.84	-36.41	≤-26	0.22856	≤2.5	PASS
			2480	30~1000	238.55	-54.37	≤-26	0.00366	≤2.5	PASS
				1000~2387	1636.63	-53.86	≤-26	0.00411	≤2.5	PASS
				2387~2400	2394.85	-44.03	≤-16	0.03954	≤25	PASS
				2483.5~2496.5	2484.33	-40.34	≤-16	0.09247	≤25	PASS
				2496.5~13000	4960.10	-35.19	≤-26	0.30269	≤2.5	PASS
	2DH5	Ant1	2402	30~1000	819.34	-52.16	≤-26	0.00608	≤2.5	PASS
				1000~2387	2384.57	-52.71	≤-26	0.00536	≤2.5	PASS
				2387~2400	2400.00	-30.14	≤-16	0.96828	≤25	PASS
				2483.5~2496.5	2487.76	-43.81	≤-16	0.04159	≤25	PASS
				2496.5~13000	4803.59	-38.96	≤-26	0.12706	≤2.5	PASS
			2441	30~1000	239.52	-54.28	≤-26	0.00373	≤2.5	PASS
				1000~2387	2148.09	-53.96	≤-26	0.00402	≤2.5	PASS
				2387~2400	2396.65	-43.70	≤-16	0.04266	≤25	PASS
				2483.5~2496.5	2493.97	-43.29	≤-16	0.04688	≤25	PASS
				2496.5~13000	4882.37	-37.75	≤-26	0.16788	≤2.5	PASS
			2480	30~1000	903.49	-53.89	≤-26	0.00408	≤2.5	PASS
				1000~2387	2117.23	-53.91	≤-26	0.00406	≤2.5	PASS
				2387~2400	2398.33	-43.99	≤-16	0.03990	≤25	PASS
				2483.5~2496.5	2495.92	-42.71	≤-16	0.05358	≤25	PASS
				2496.5~13000	4959.57	-38.84	≤-26	0.13062	≤2.5	PASS
	3DH5	Ant1	2402	30~1000	818.85	-52.45	≤-26	0.00569	≤2.5	PASS
				1000~2387	2373.13	-53.59	≤-26	0.00438	≤2.5	PASS
				2387~2400	2399.99	-30.23	≤-16	0.94842	≤25	PASS
				2483.5~2496.5	2488.62	-43.53	≤-16	0.04436	≤25	PASS
				2496.5~13000	4803.59	-39.60	≤-26	0.10965	≤2.5	PASS

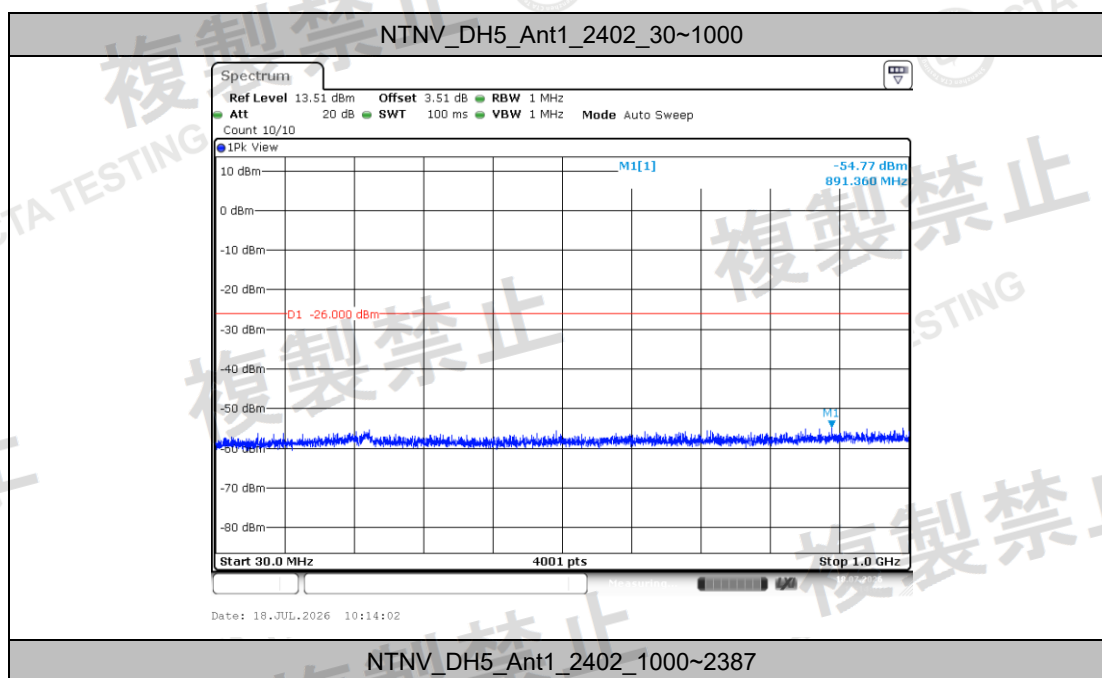


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		2441	30~1000	823.22	-54.16	≤-26	0.00384	≤2.5	PASS
			1000~2387	1710.84	-54.01	≤-26	0.00397	≤2.5	PASS
			2387~2400	2389.50	-43.84	≤-16	0.04130	≤25	PASS
			2483.5~2496.5	2488.89	-43.37	≤-16	0.04603	≤25	PASS
			2496.5~13000	4881.84	-38.03	≤-26	0.15740	≤2.5	PASS
		2480	30~1000	241.22	-54.64	≤-26	0.00344	≤2.5	PASS
			1000~2387	1684.83	-53.89	≤-26	0.00408	≤2.5	PASS
			2387~2400	2396.13	-43.63	≤-16	0.04335	≤25	PASS
			2483.5~2496.5	2484.61	-42.17	≤-16	0.06067	≤25	PASS
			2496.5~13000	4960.10	-38.45	≤-26	0.14289	≤2.5	PASS

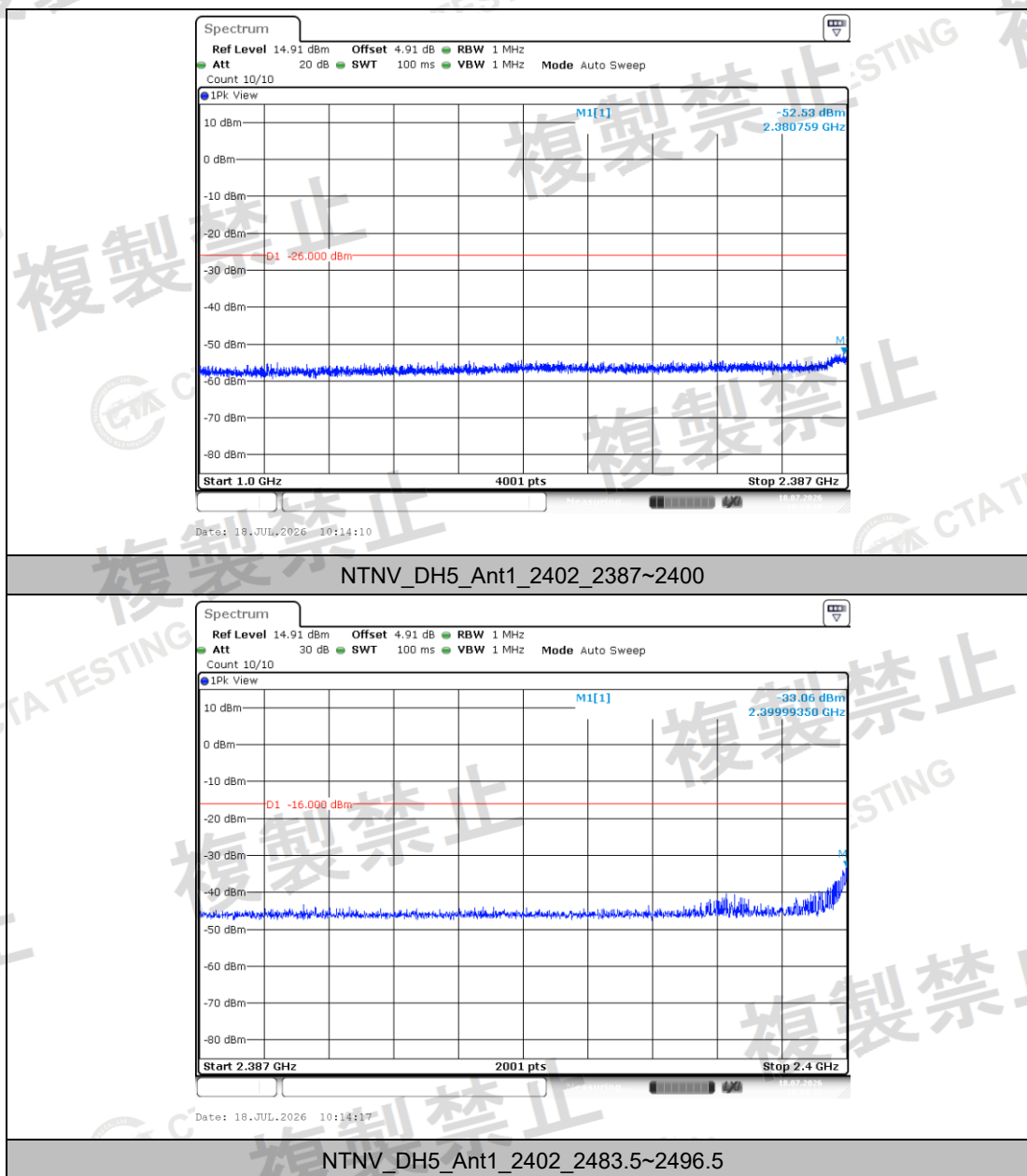
Test Graphs





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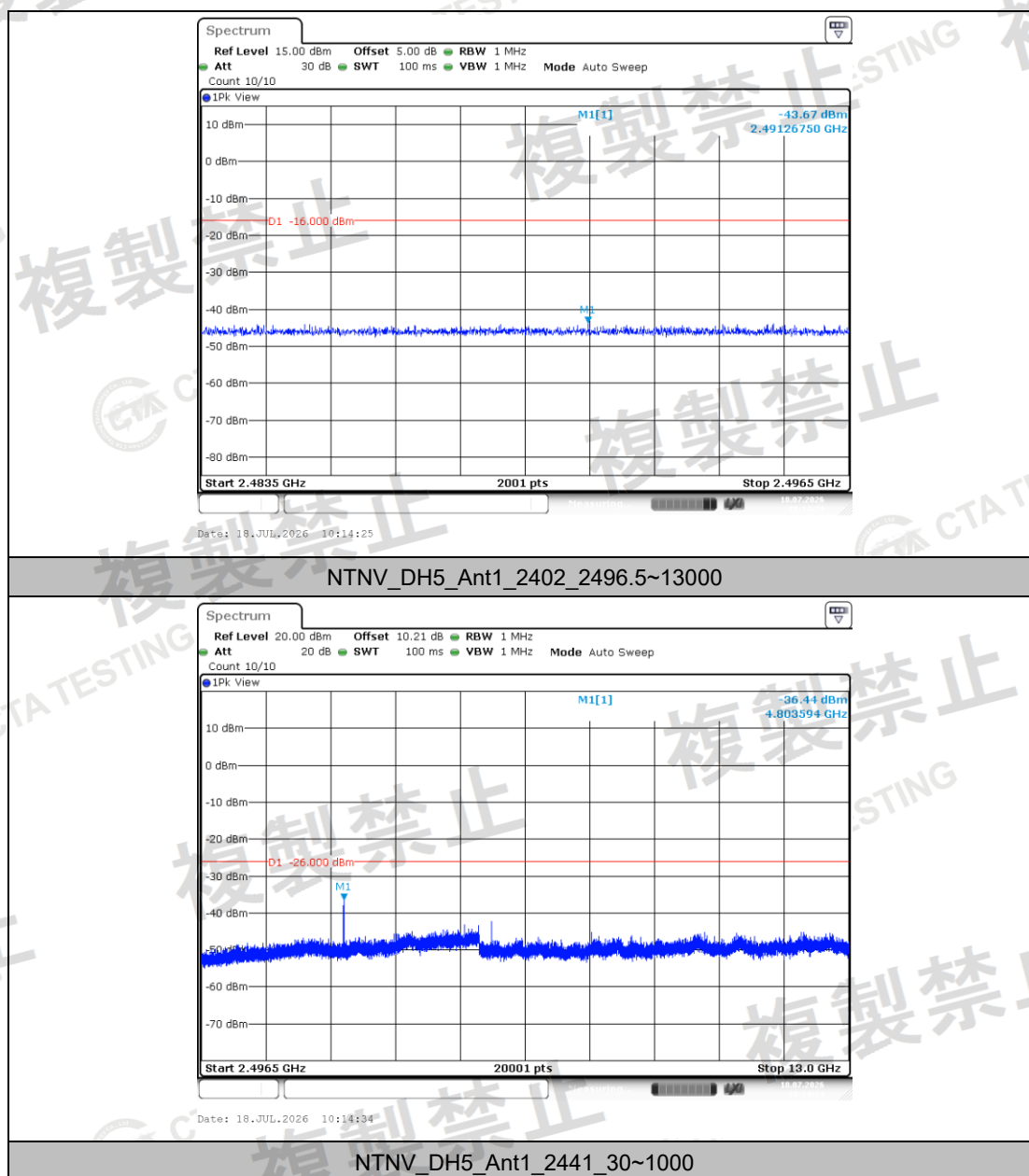
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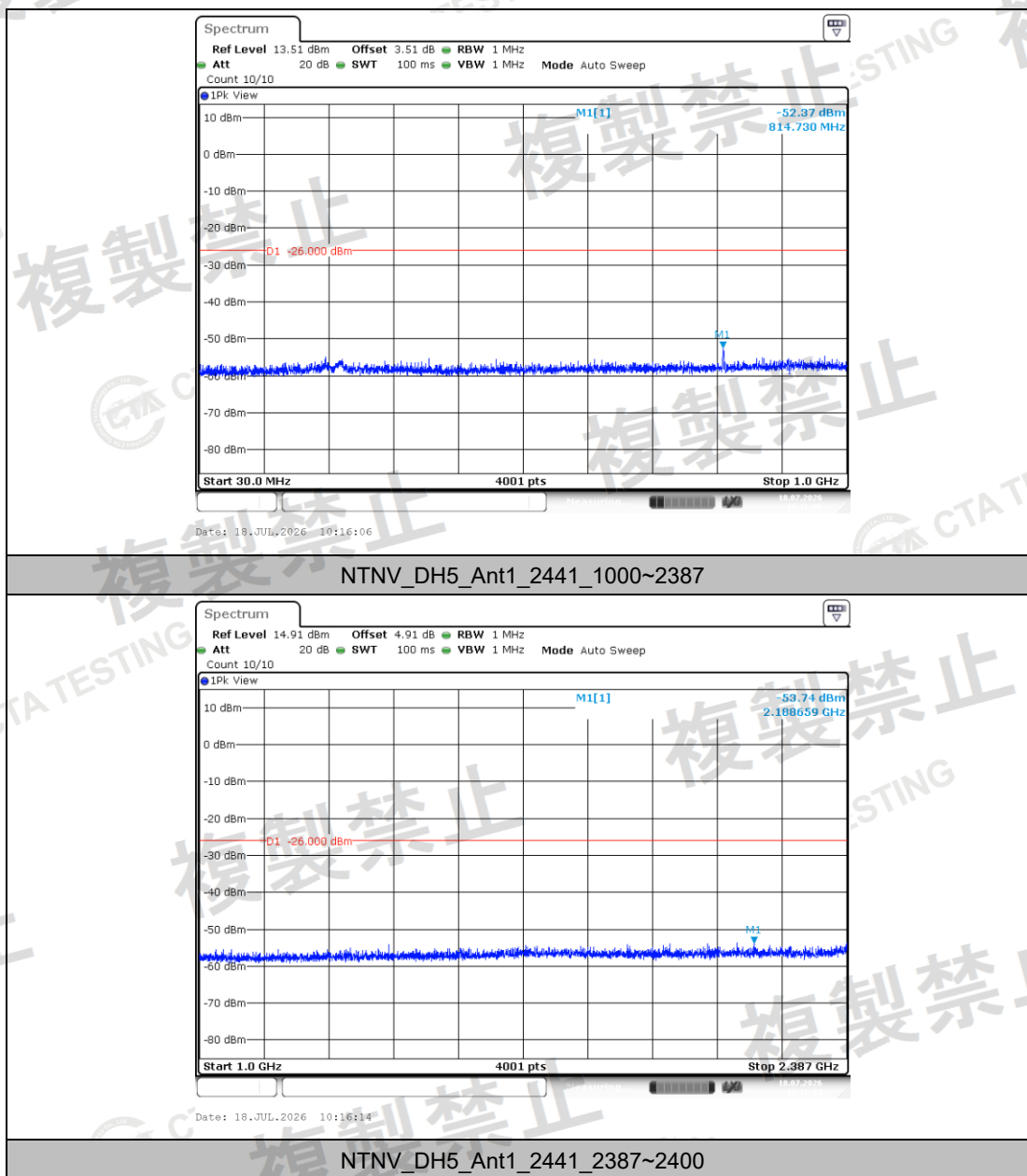
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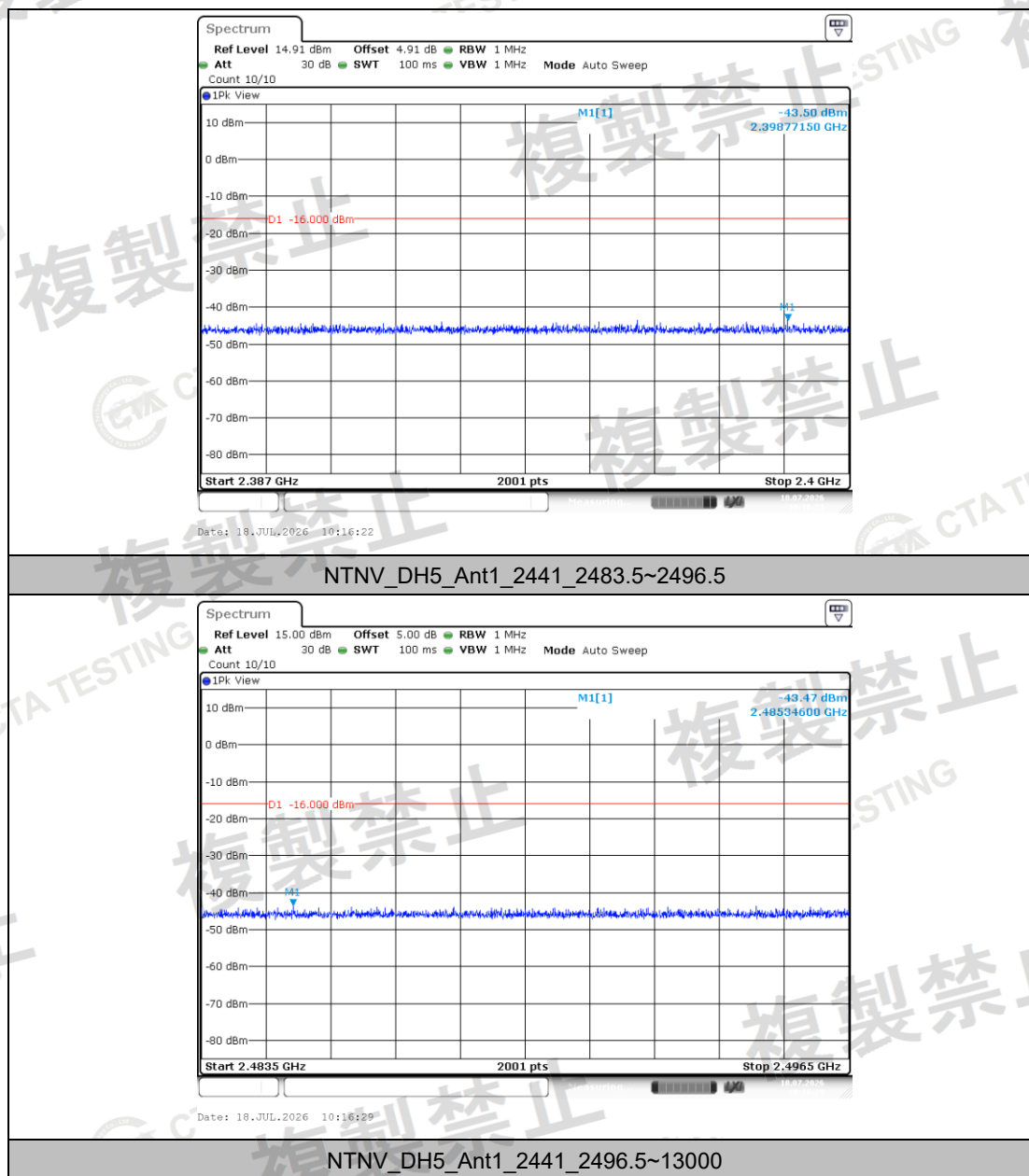
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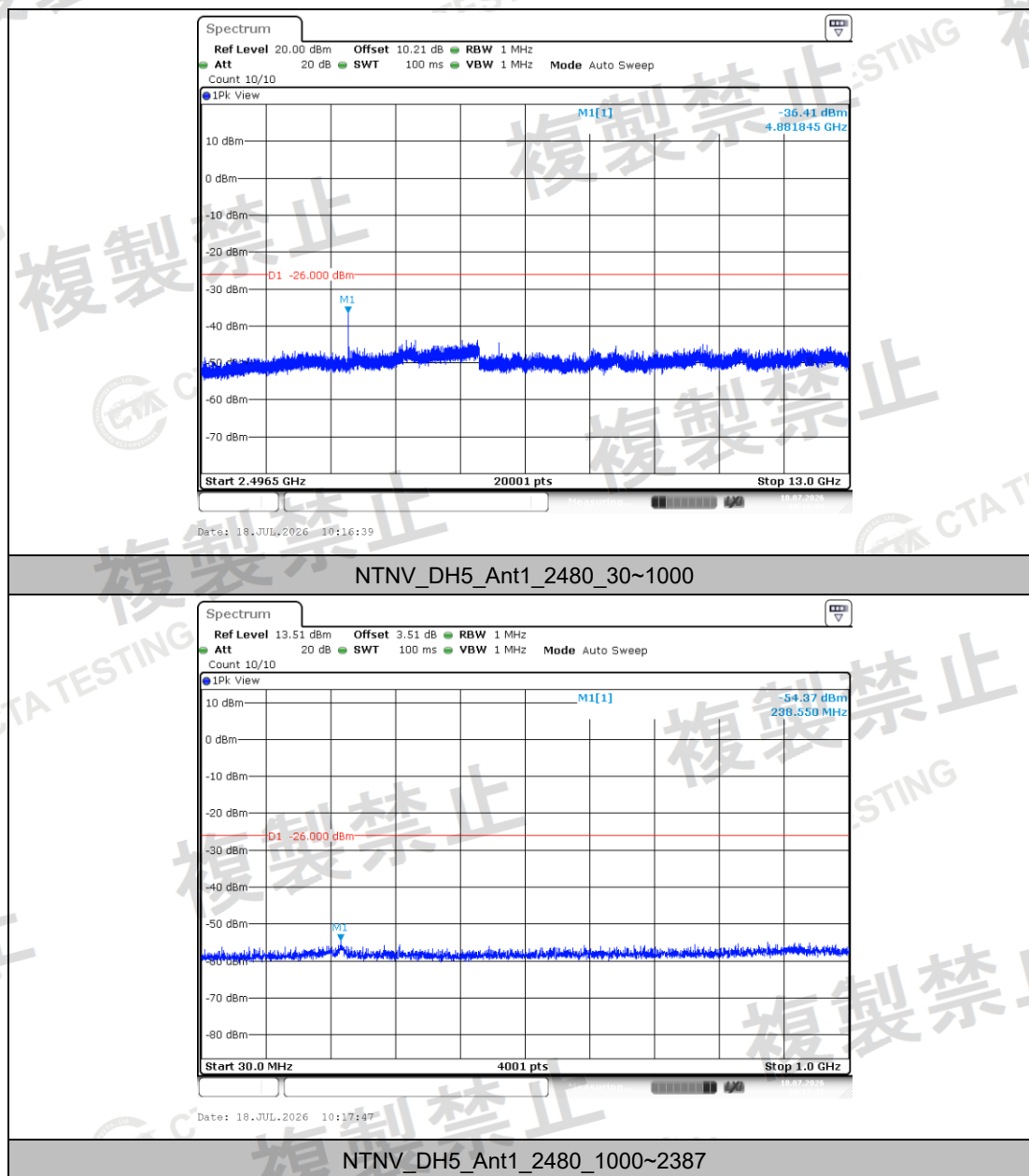
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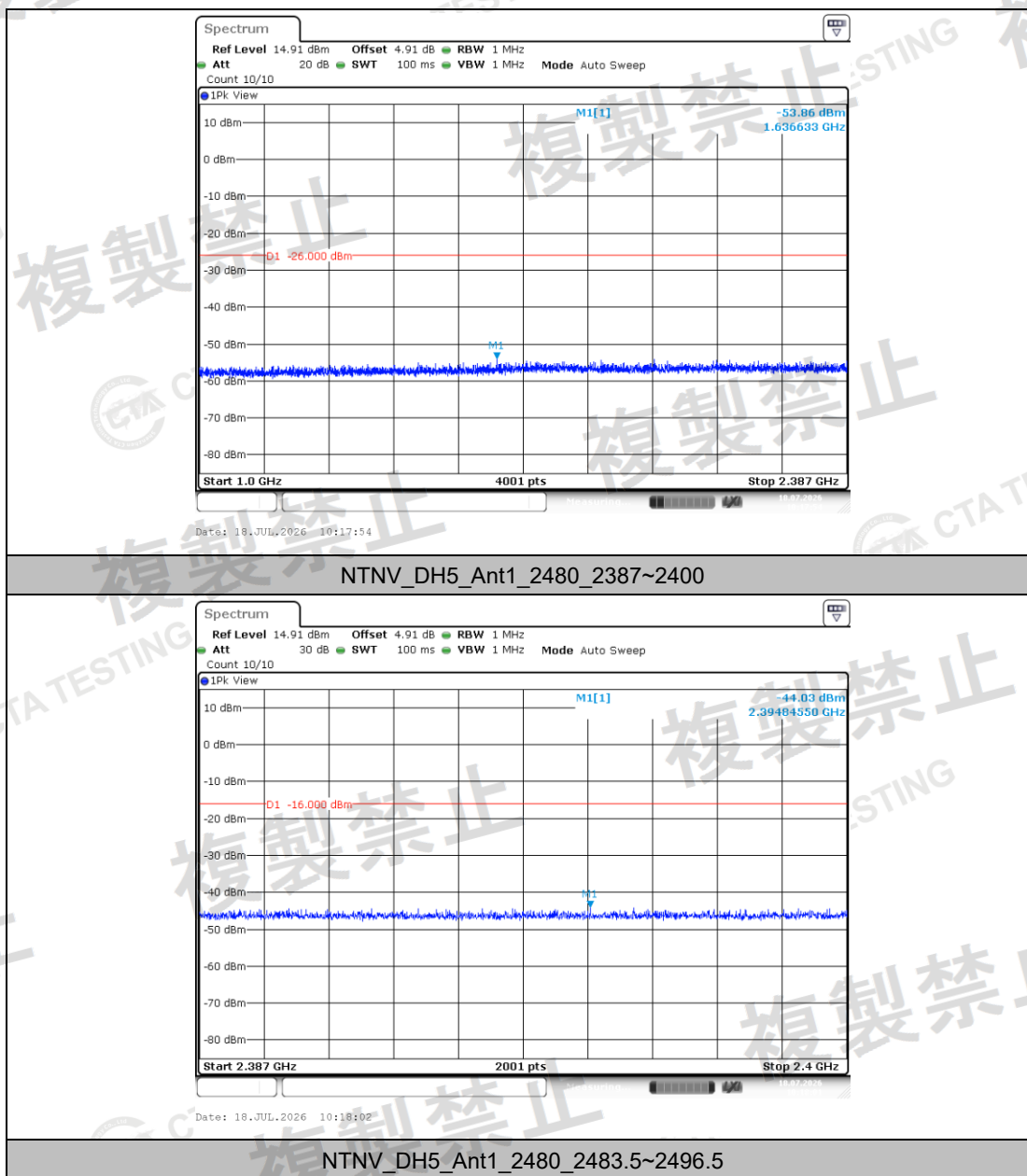
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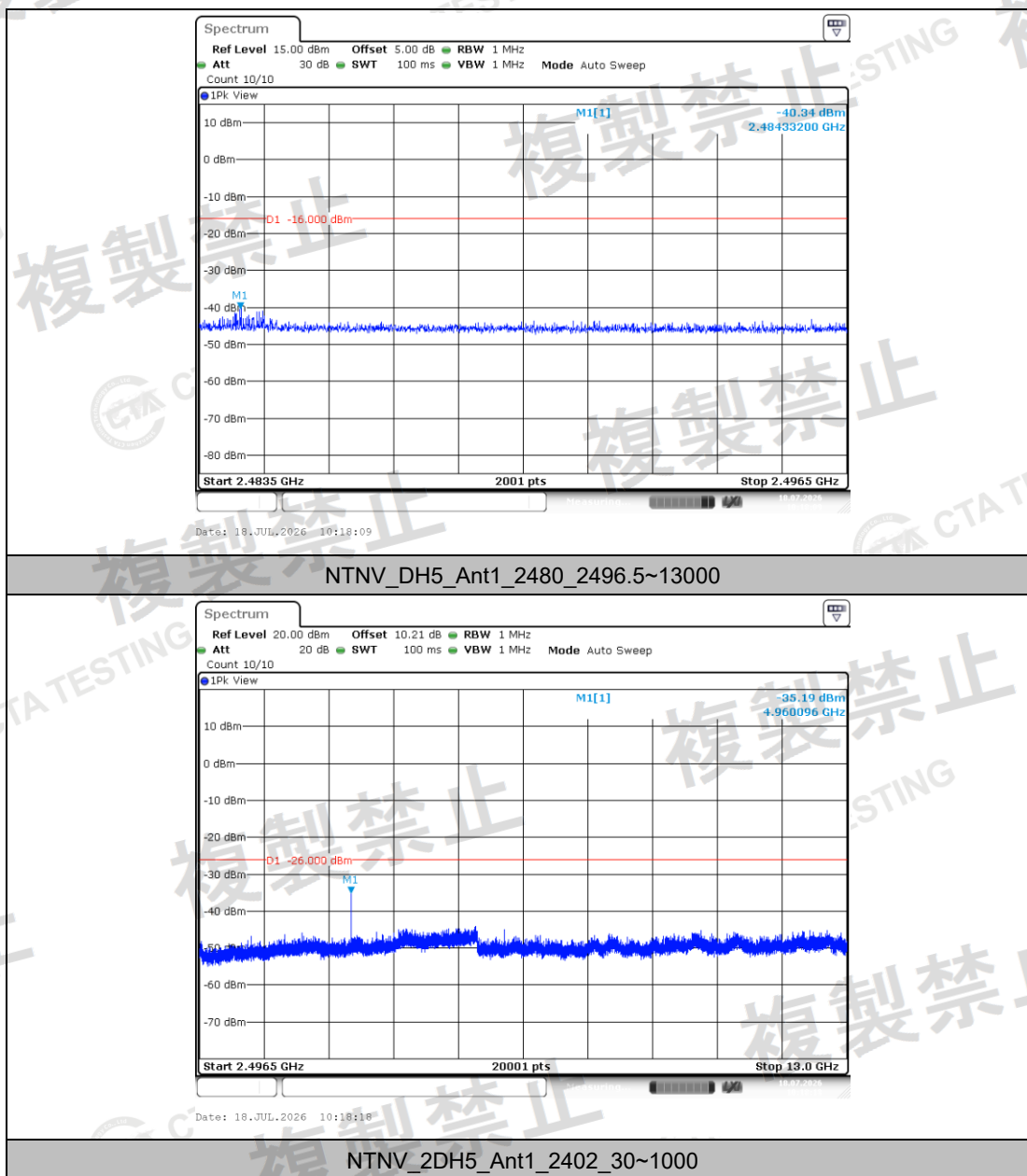
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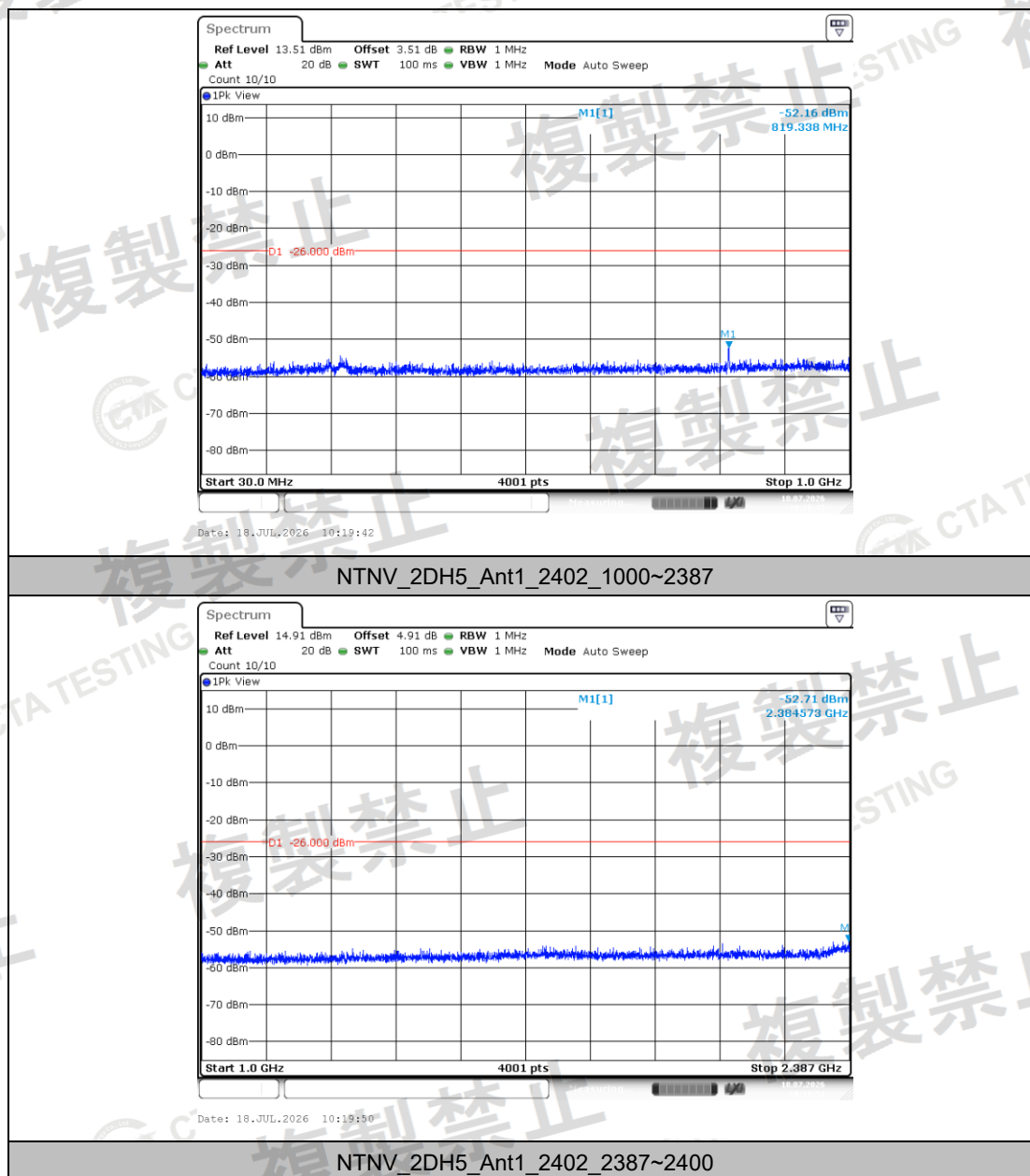
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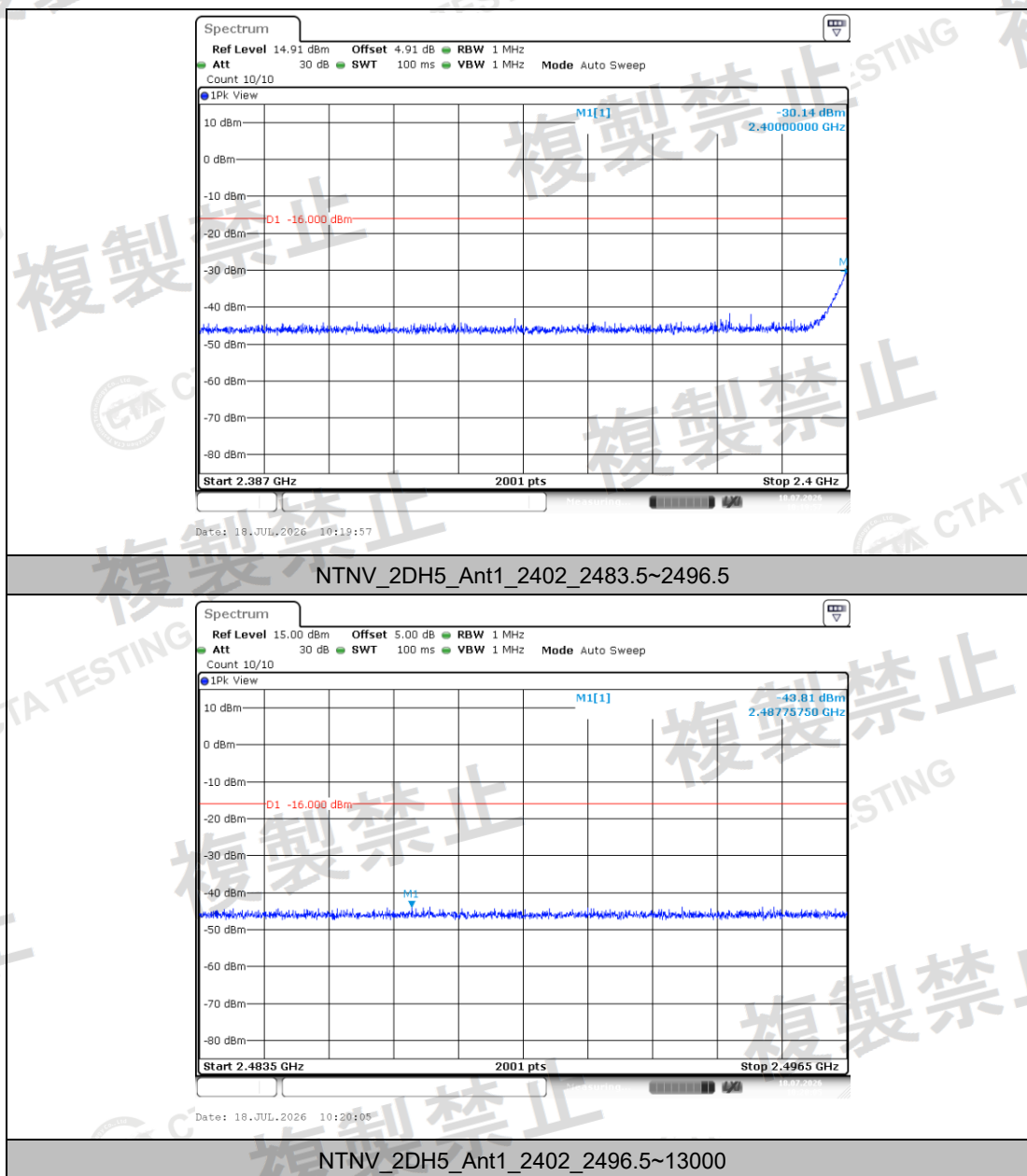
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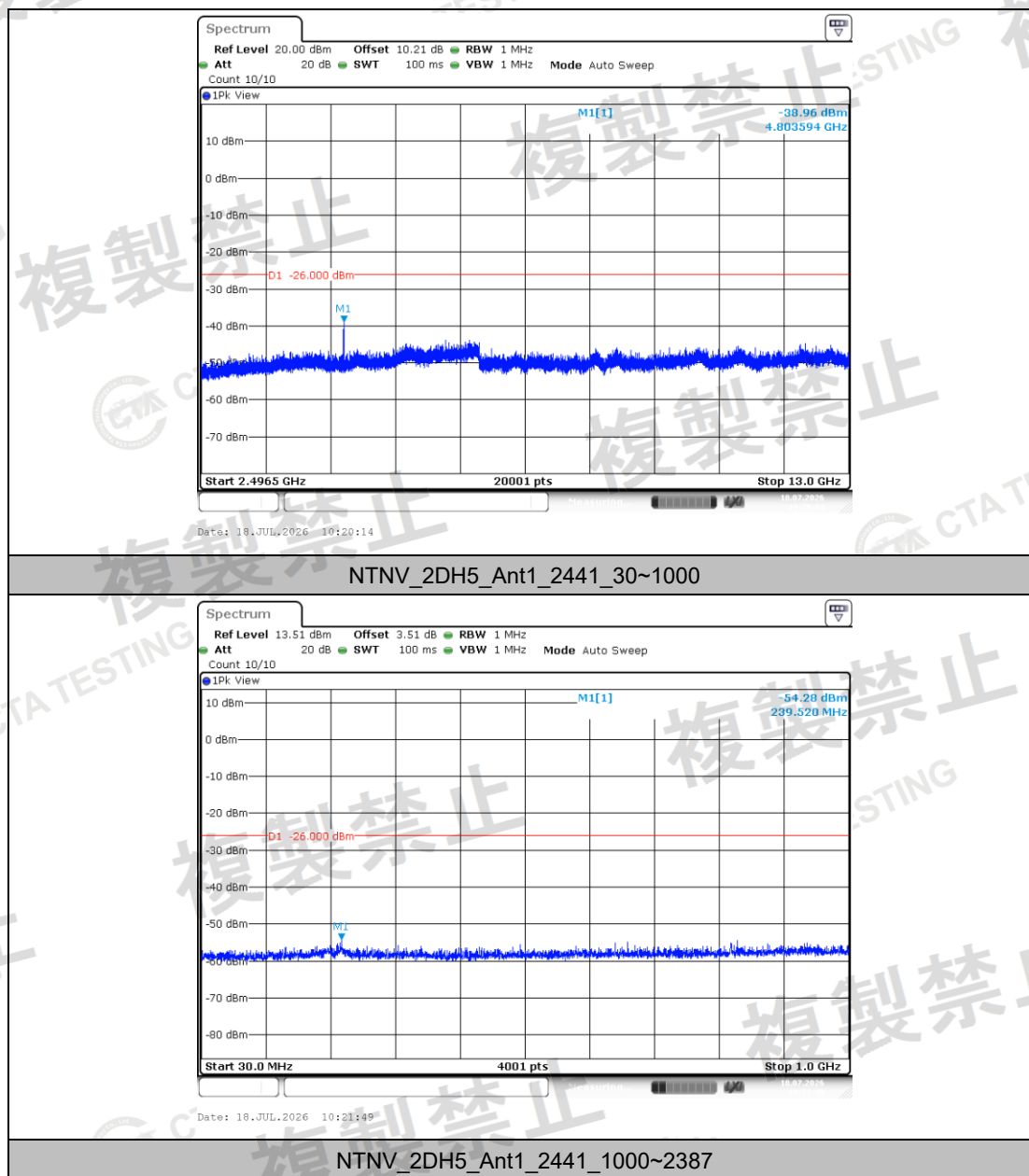
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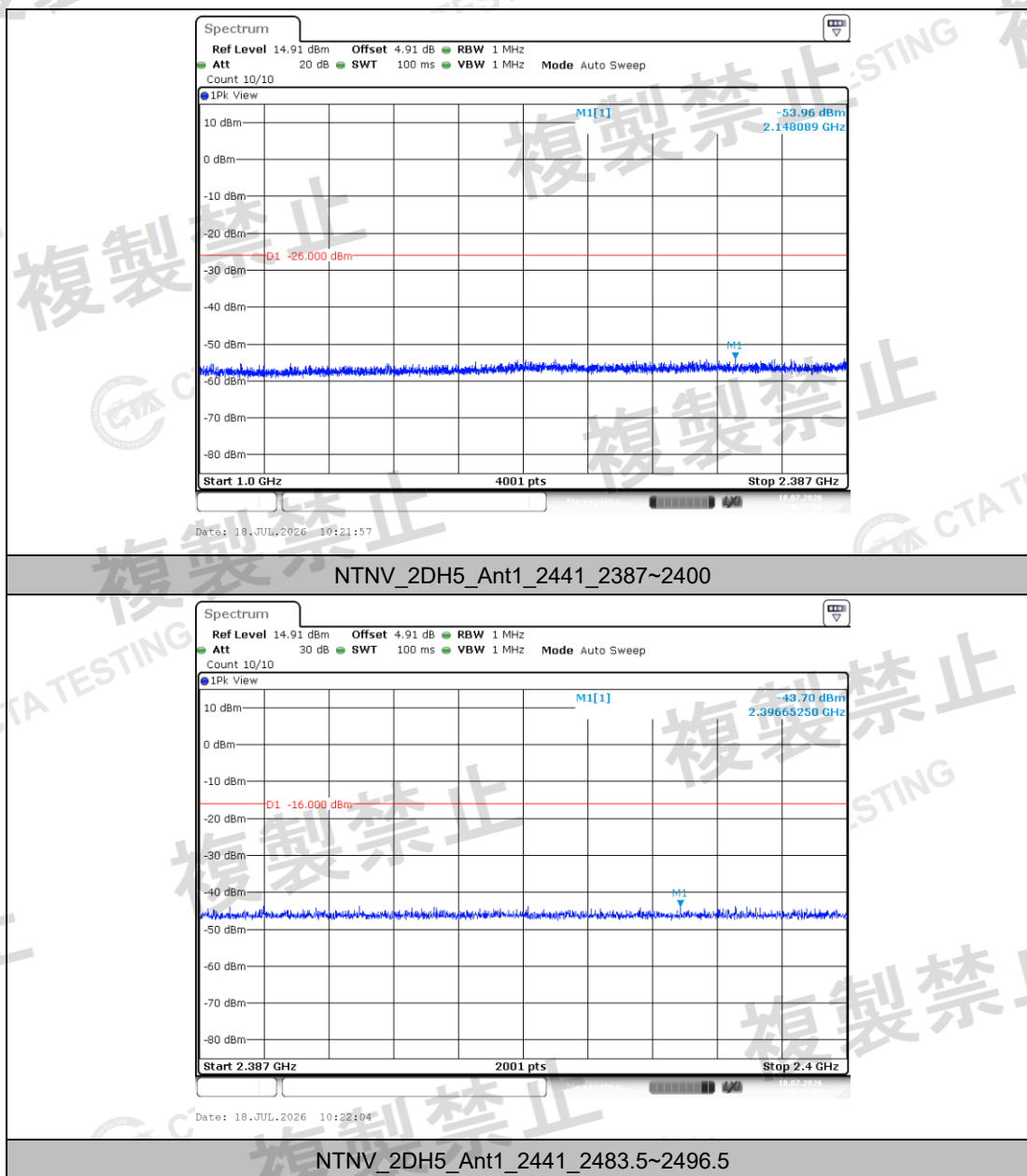
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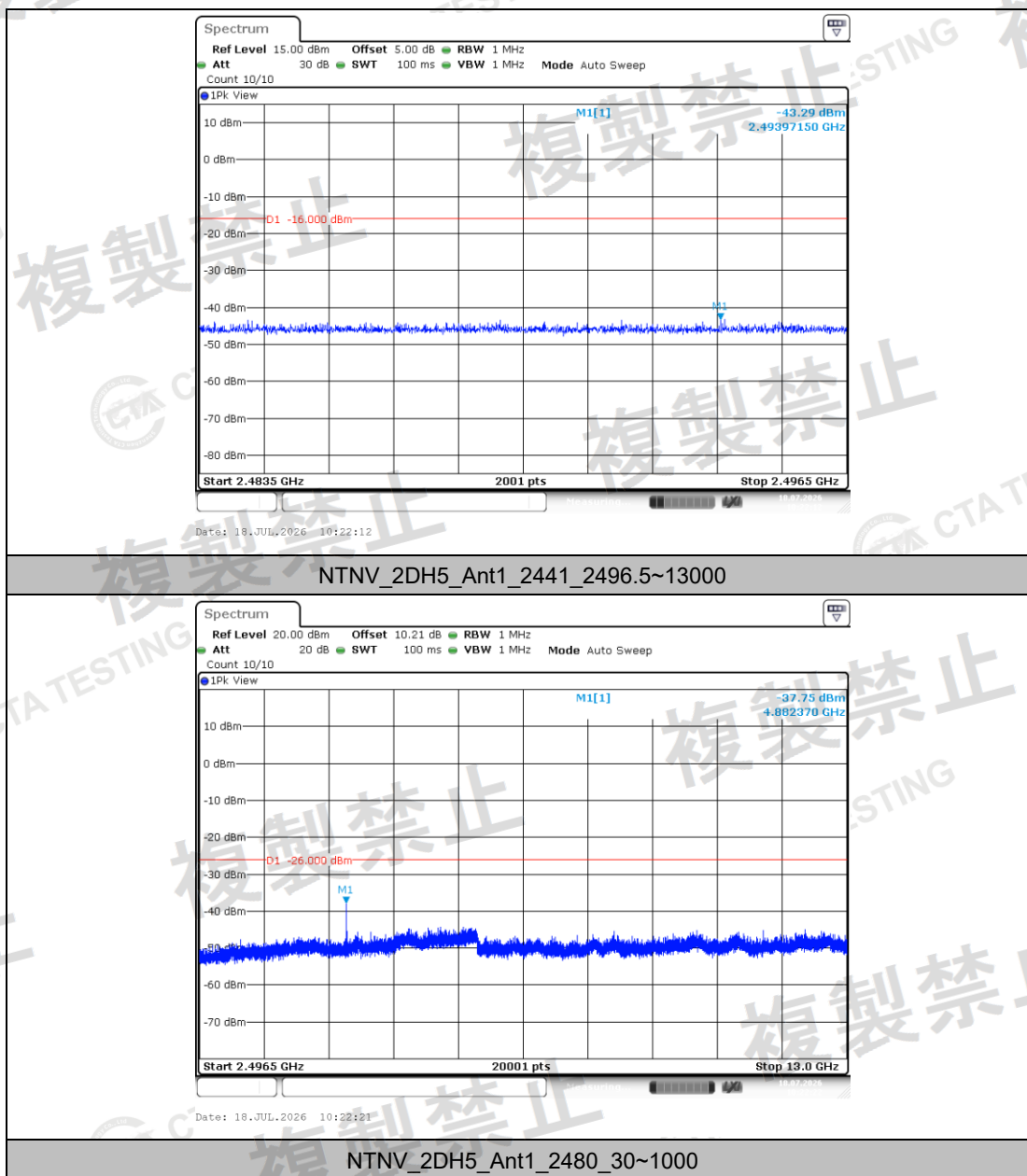
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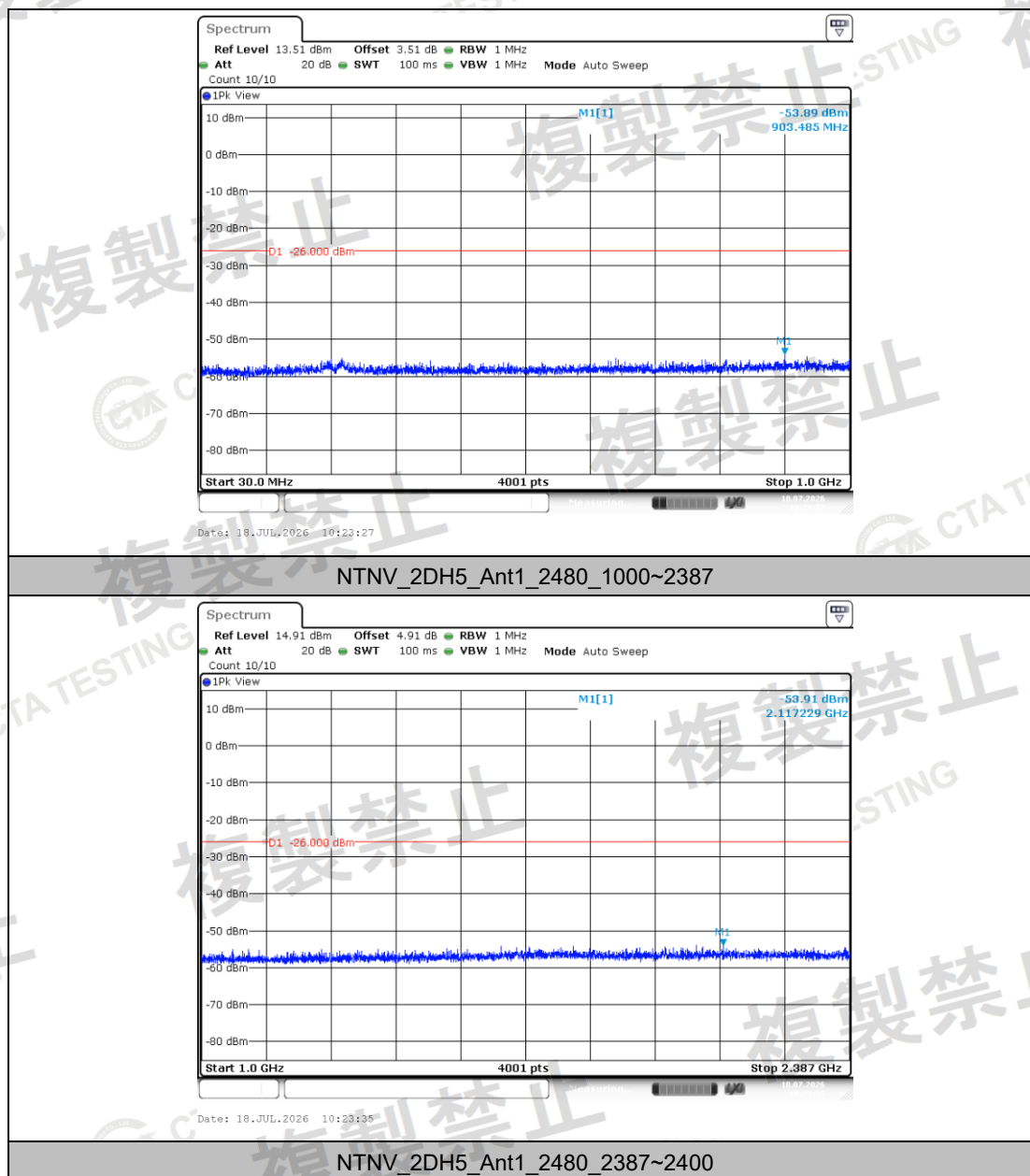
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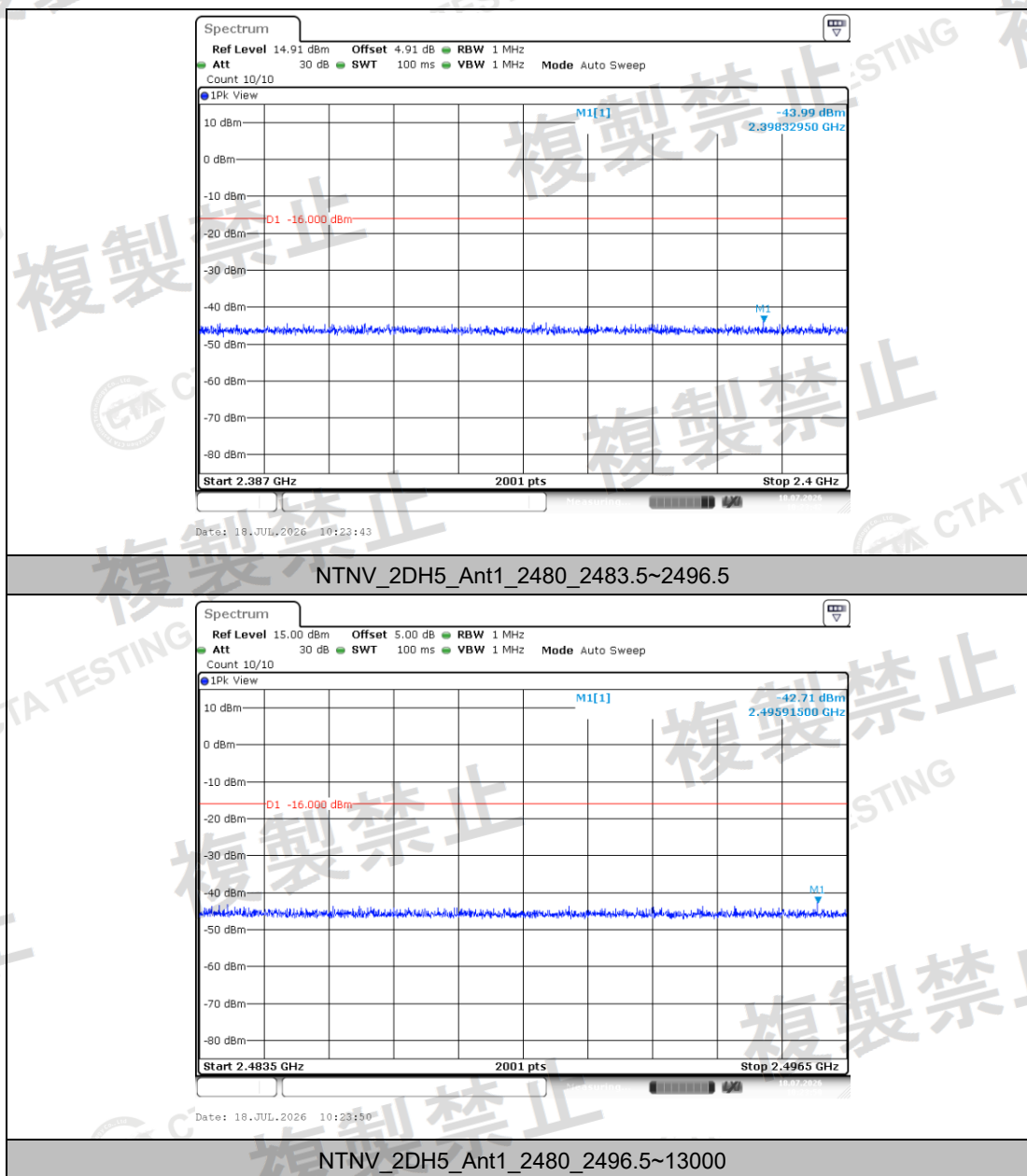
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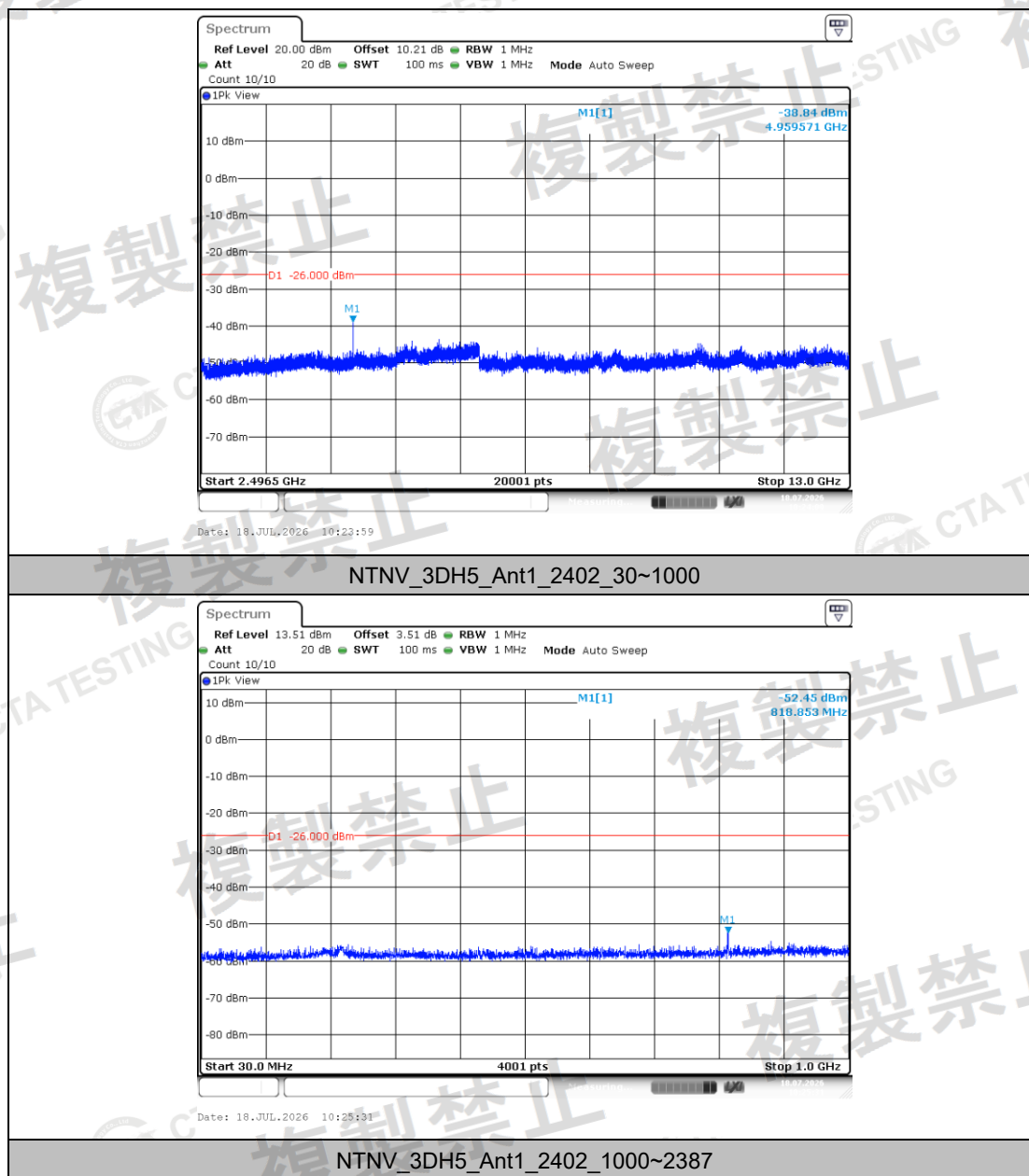
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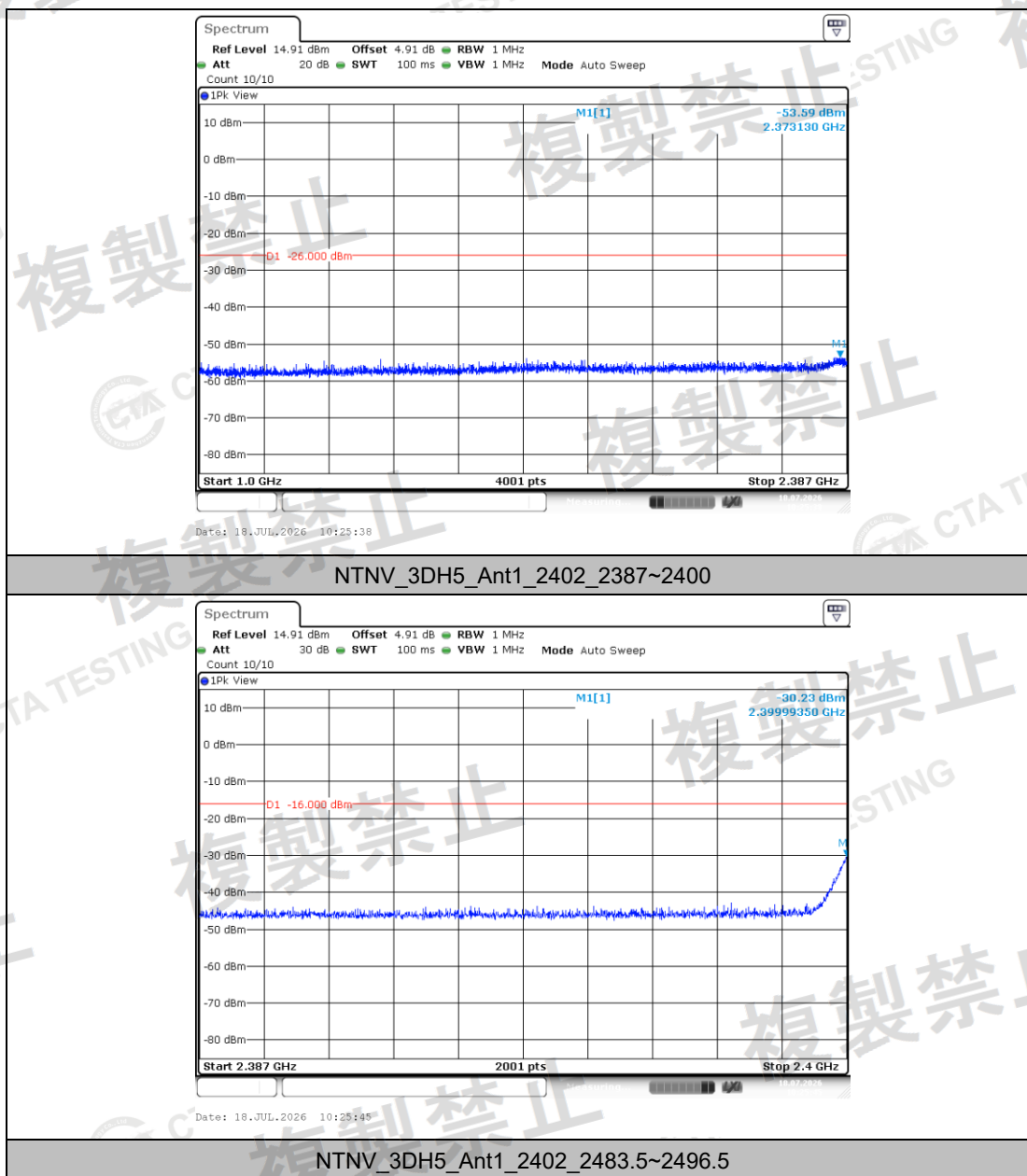
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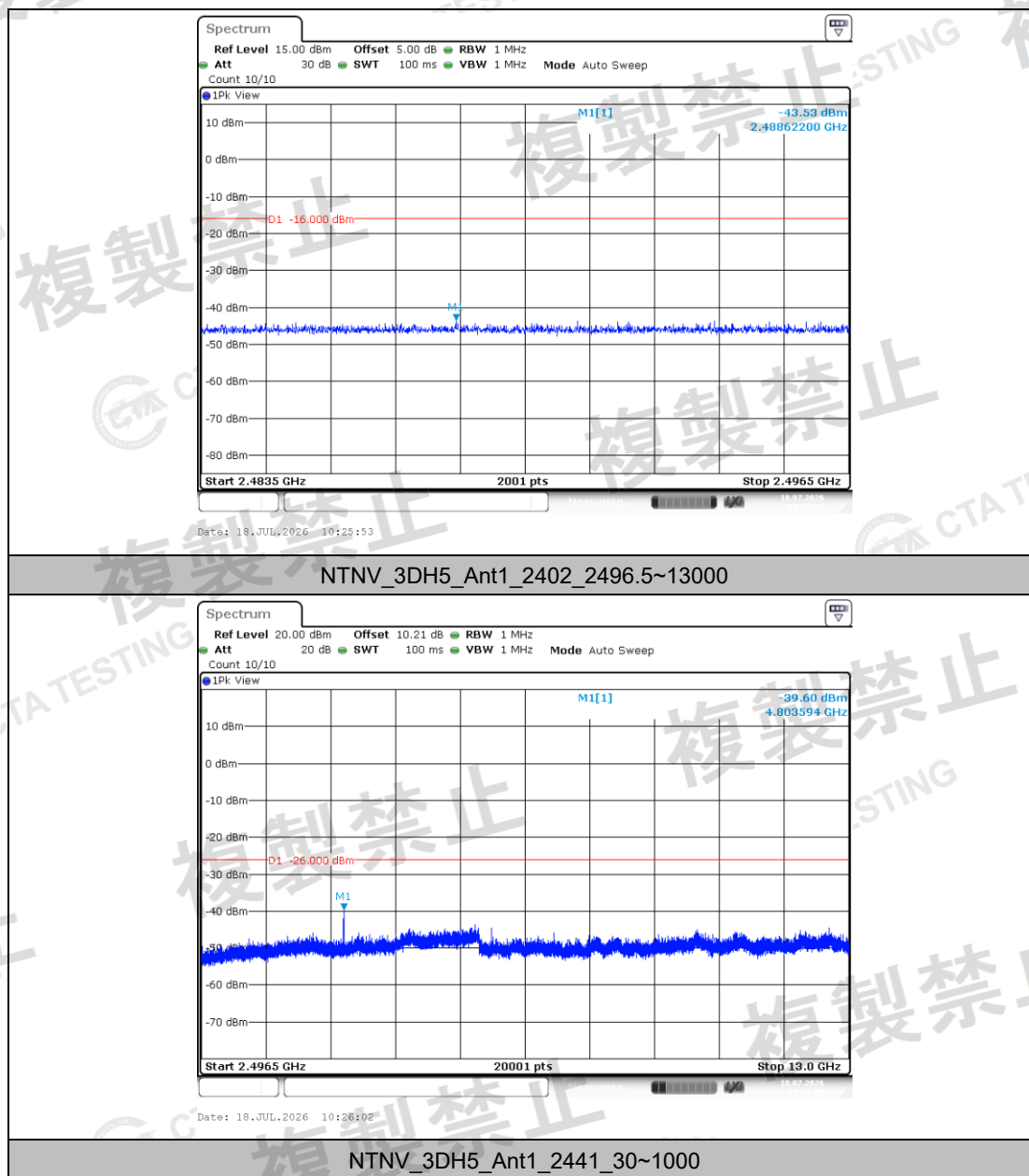
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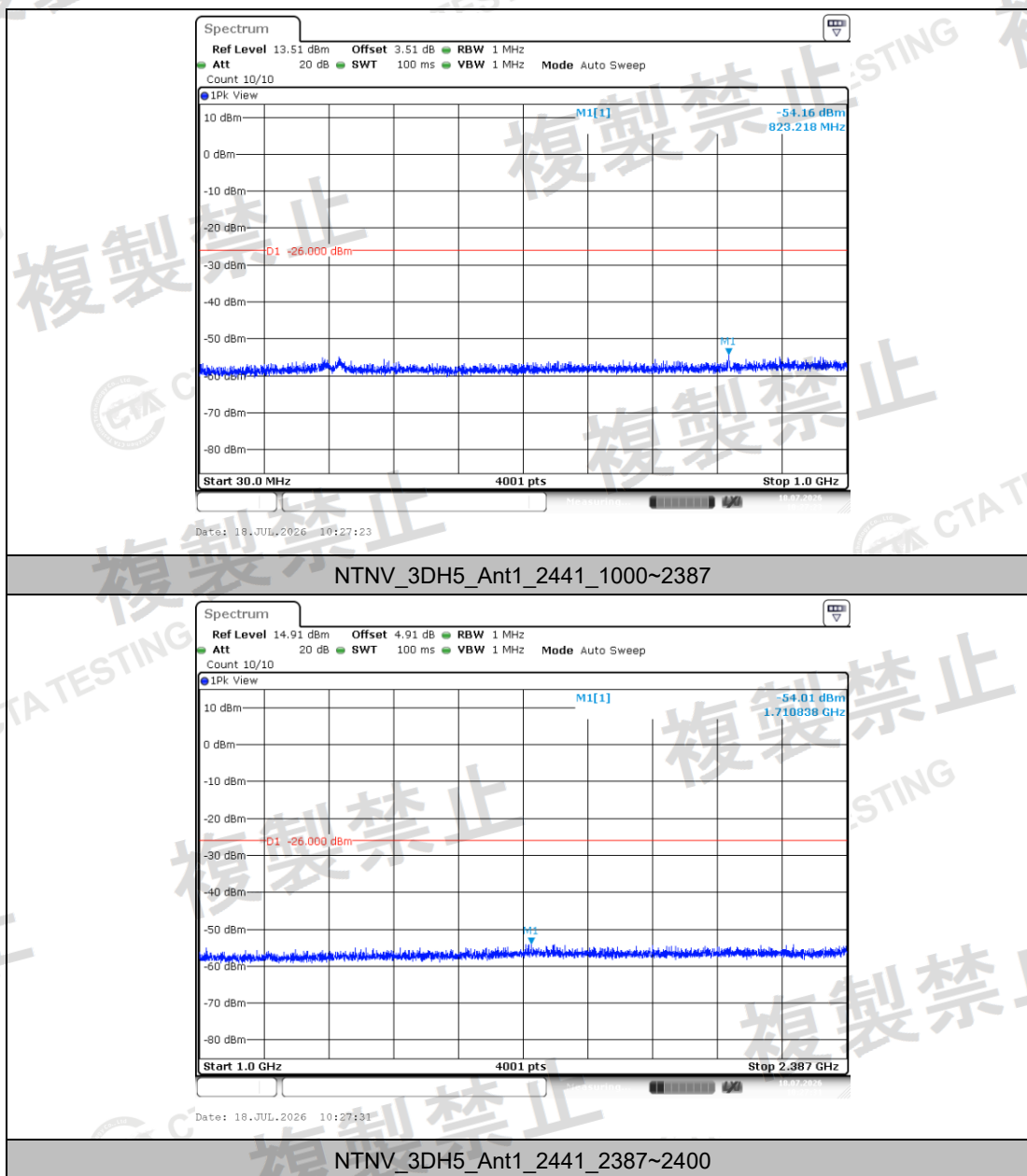
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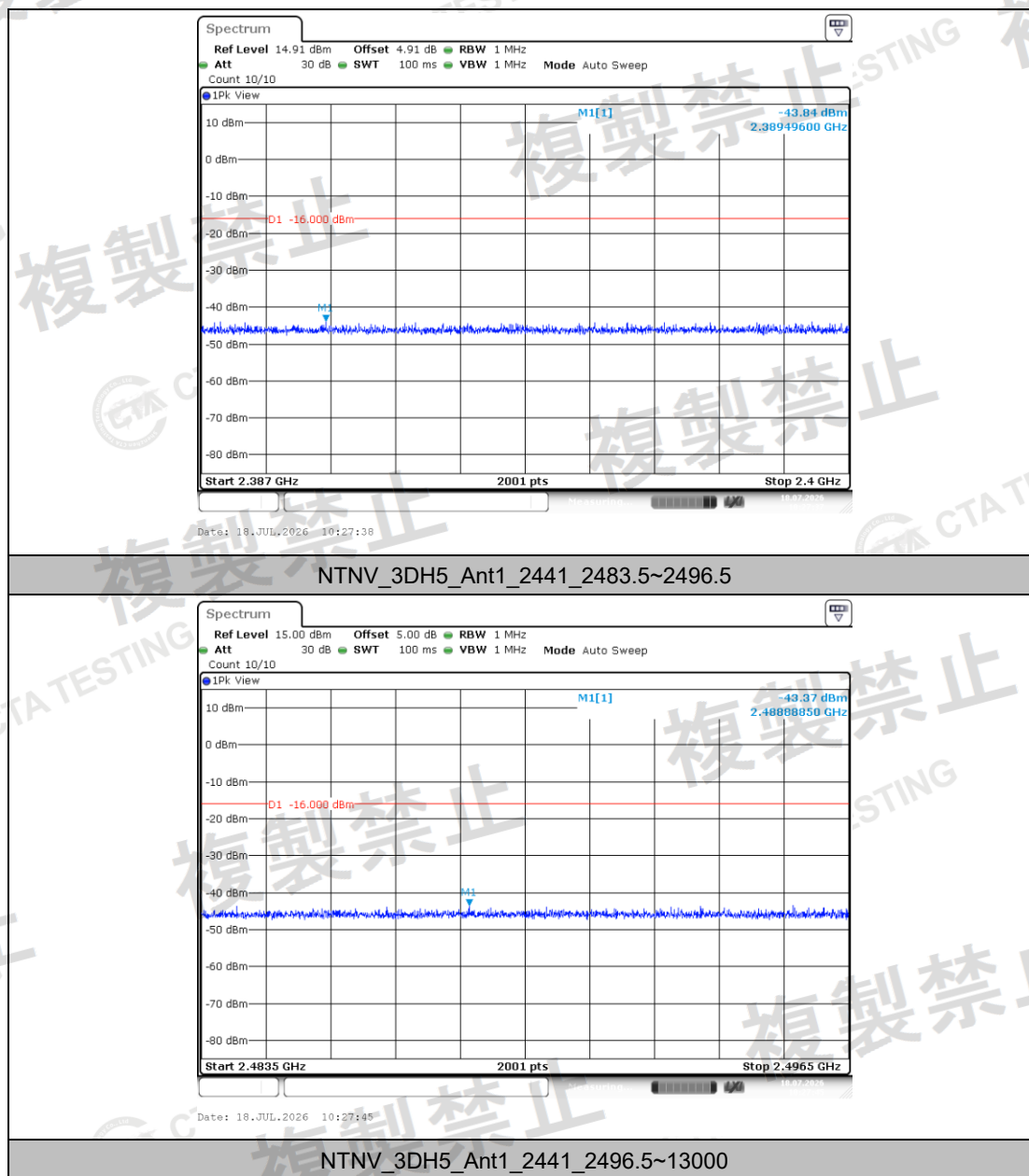
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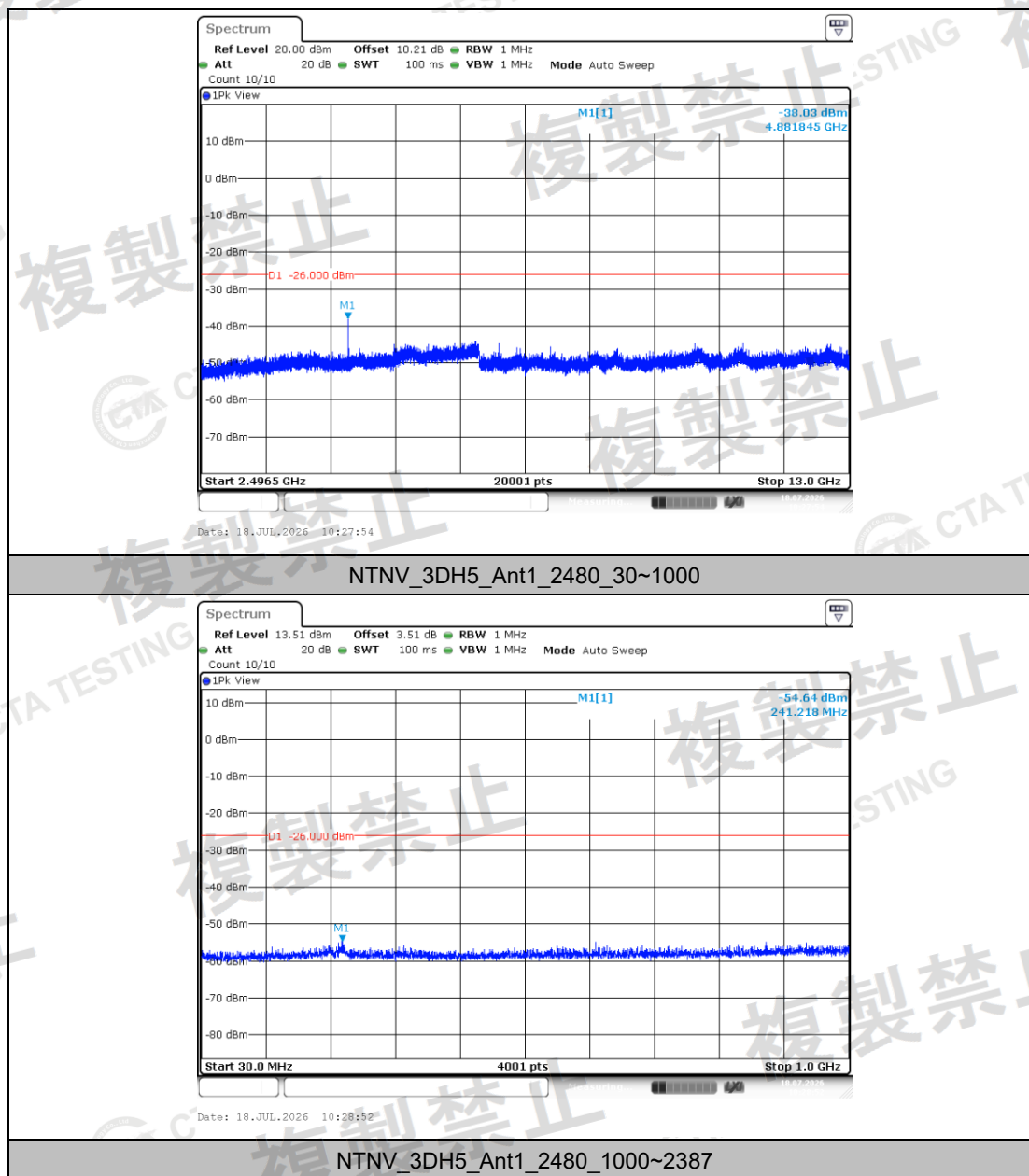
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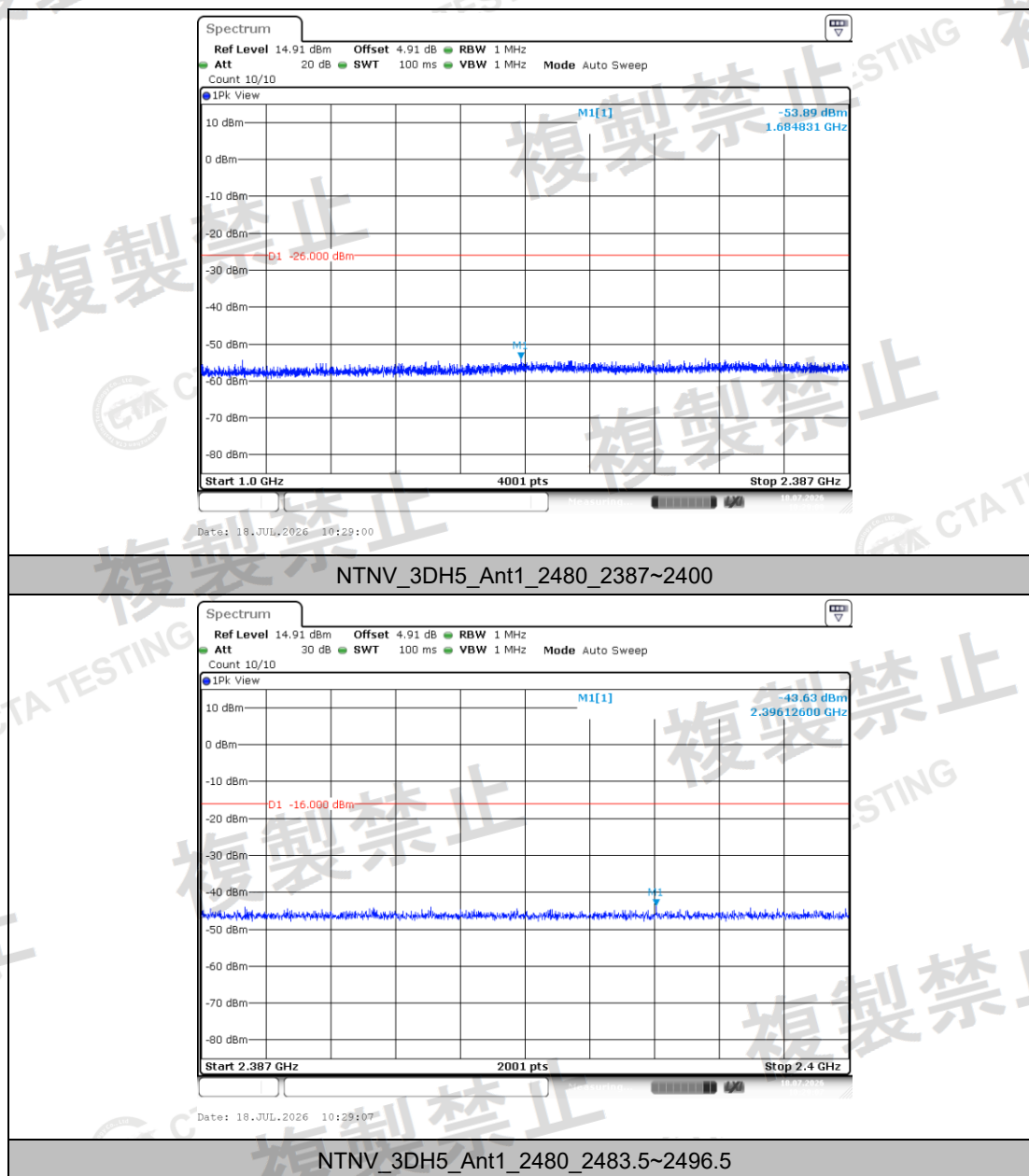
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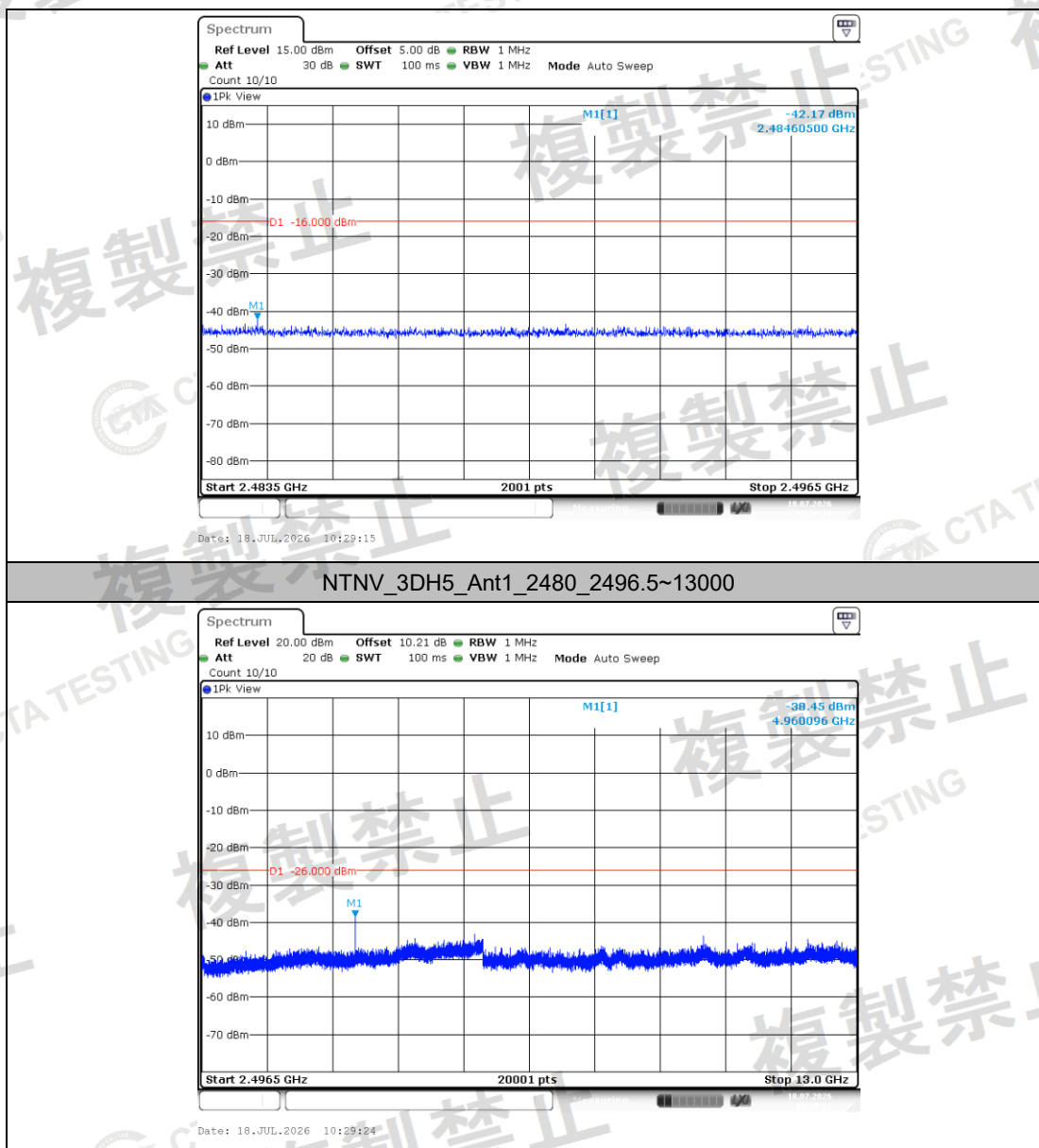
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Appendix E: Spurious Emission of RX

Test Result

Test Condition	Test Mode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	DH5	Ant1	2402	30~1000	904.75	-78.84	≤-54	0.01306	≤4	PASS
				1000~12500	6994.36	-69.41	≤-47	0.11455	≤20	PASS
			2441	30~1000	214.45	-83.80	≤-54	0.00417	≤4	PASS
				1000~12500	6291.75	-69.04	≤-47	0.12474	≤20	PASS
			2480	30~1000	240.63	-83.76	≤-54	0.00421	≤4	PASS
				1000~12500	12273.75	-68.58	≤-47	0.13868	≤20	PASS
	2DH5	Ant1	2402	30~1000	551.84	-84.19	≤-54	0.00381	≤4	PASS
				1000~12500	5940.44	-69.60	≤-47	0.10965	≤20	PASS
			2441	30~1000	990.55	-83.60	≤-54	0.00437	≤4	PASS
				1000~12500	5855.34	-68.68	≤-47	0.13552	≤20	PASS
			2480	30~1000	912.02	-83.64	≤-54	0.00433	≤4	PASS
				1000~12500	6616.61	-69.56	≤-47	0.11066	≤20	PASS
	3DH5	Ant1	2402	30~1000	970.67	-83.88	≤-54	0.00409	≤4	PASS
				1000~12500	6409.62	-69.46	≤-47	0.11324	≤20	PASS
			2441	30~1000	894.57	-83.95	≤-54	0.00403	≤4	PASS
				1000~12500	6904.67	-69.29	≤-47	0.11776	≤20	PASS
			2480	30~1000	236.26	-83.53	≤-54	0.00444	≤4	PASS
				1000~12500	6852.3	-68.61	≤-47	0.1377	≤20	PASS

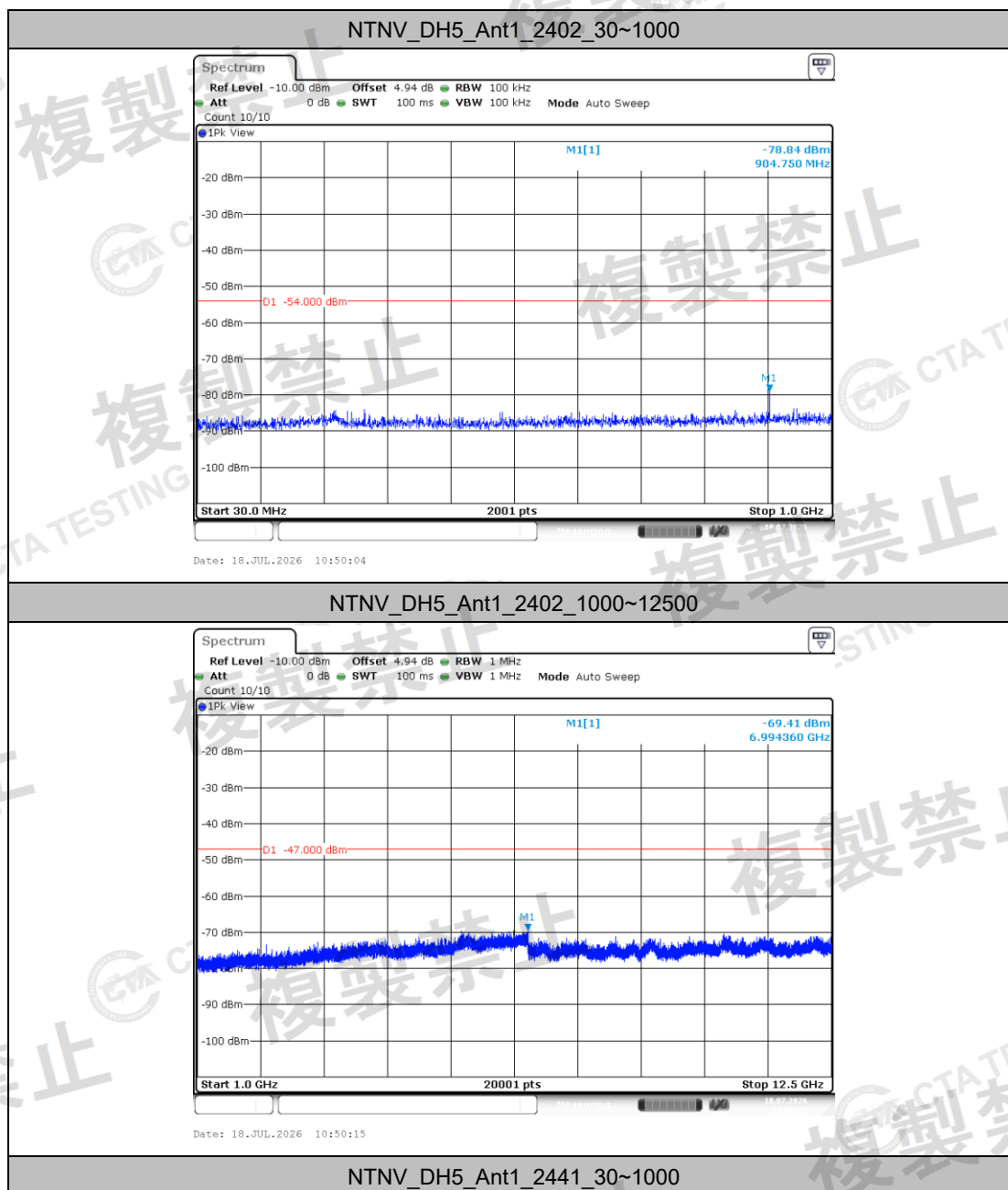


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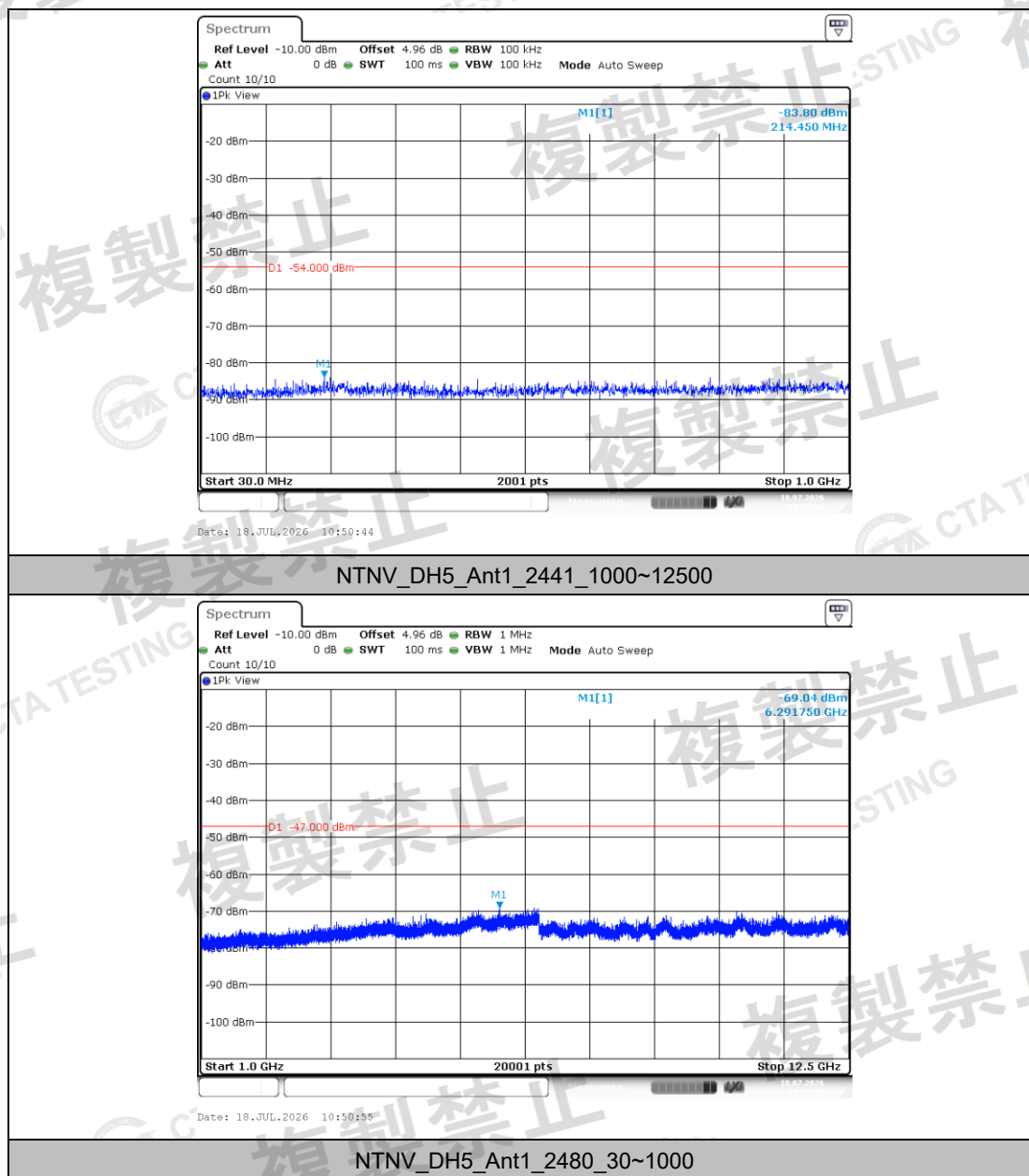
Test Graphs





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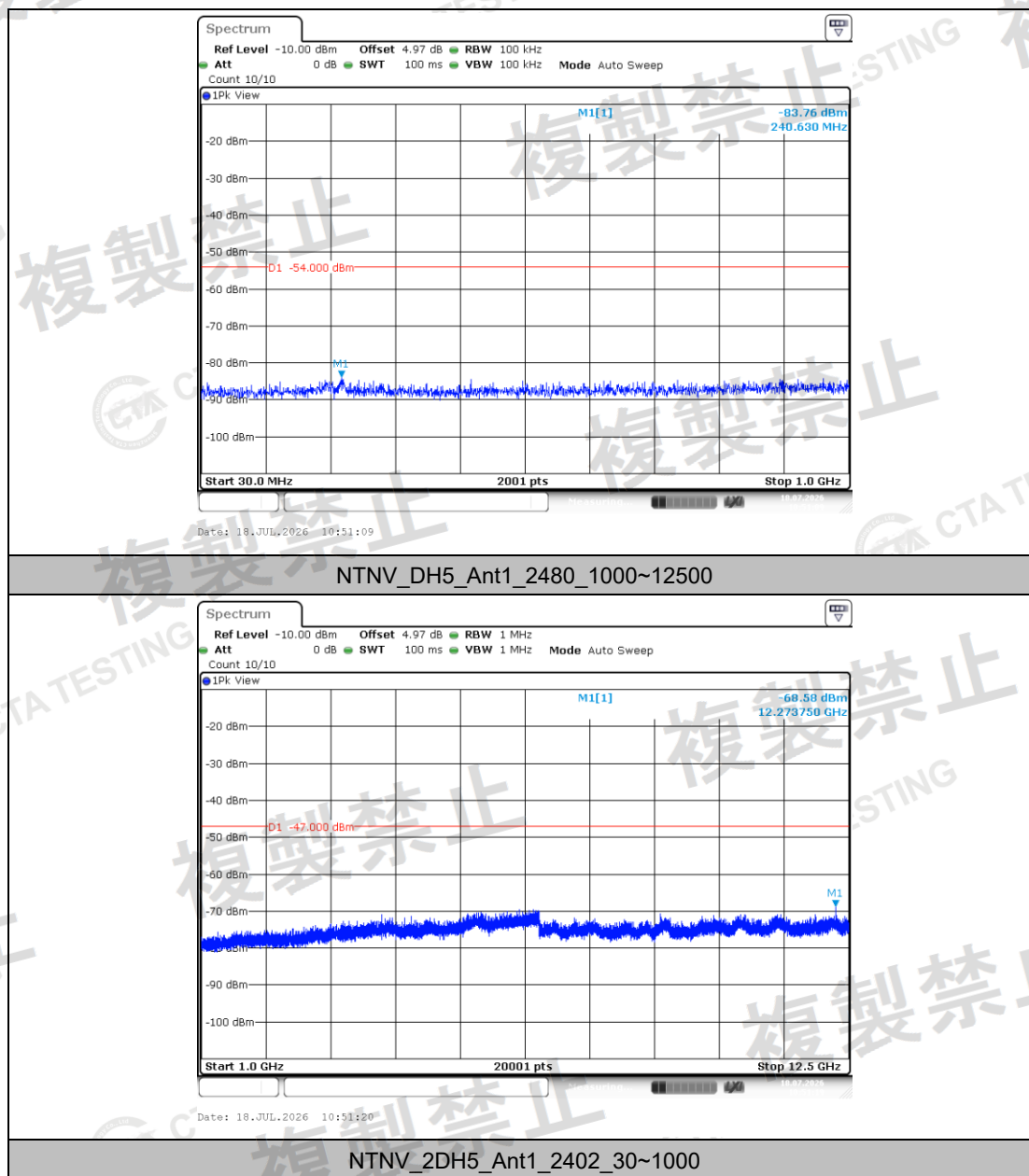
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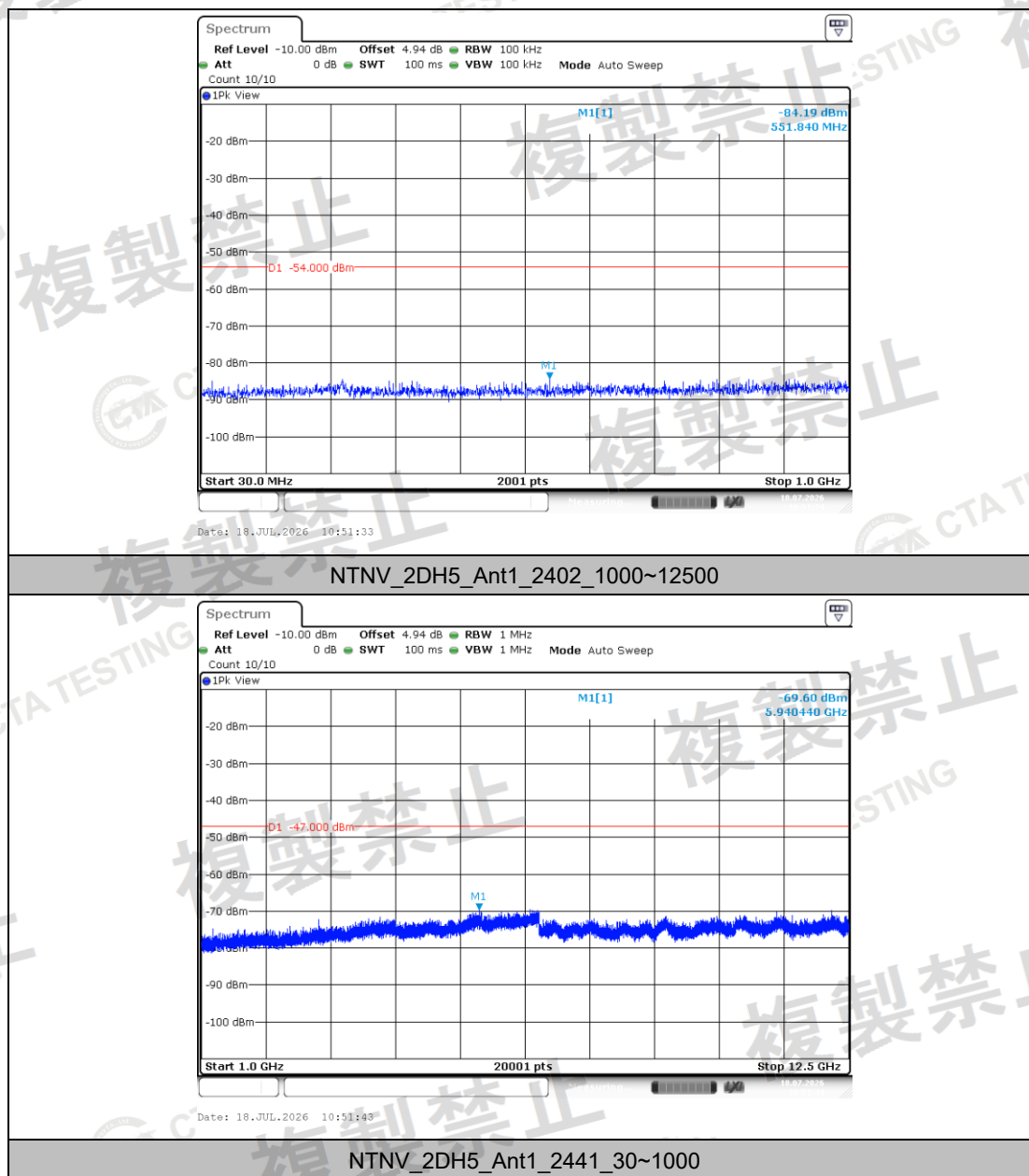
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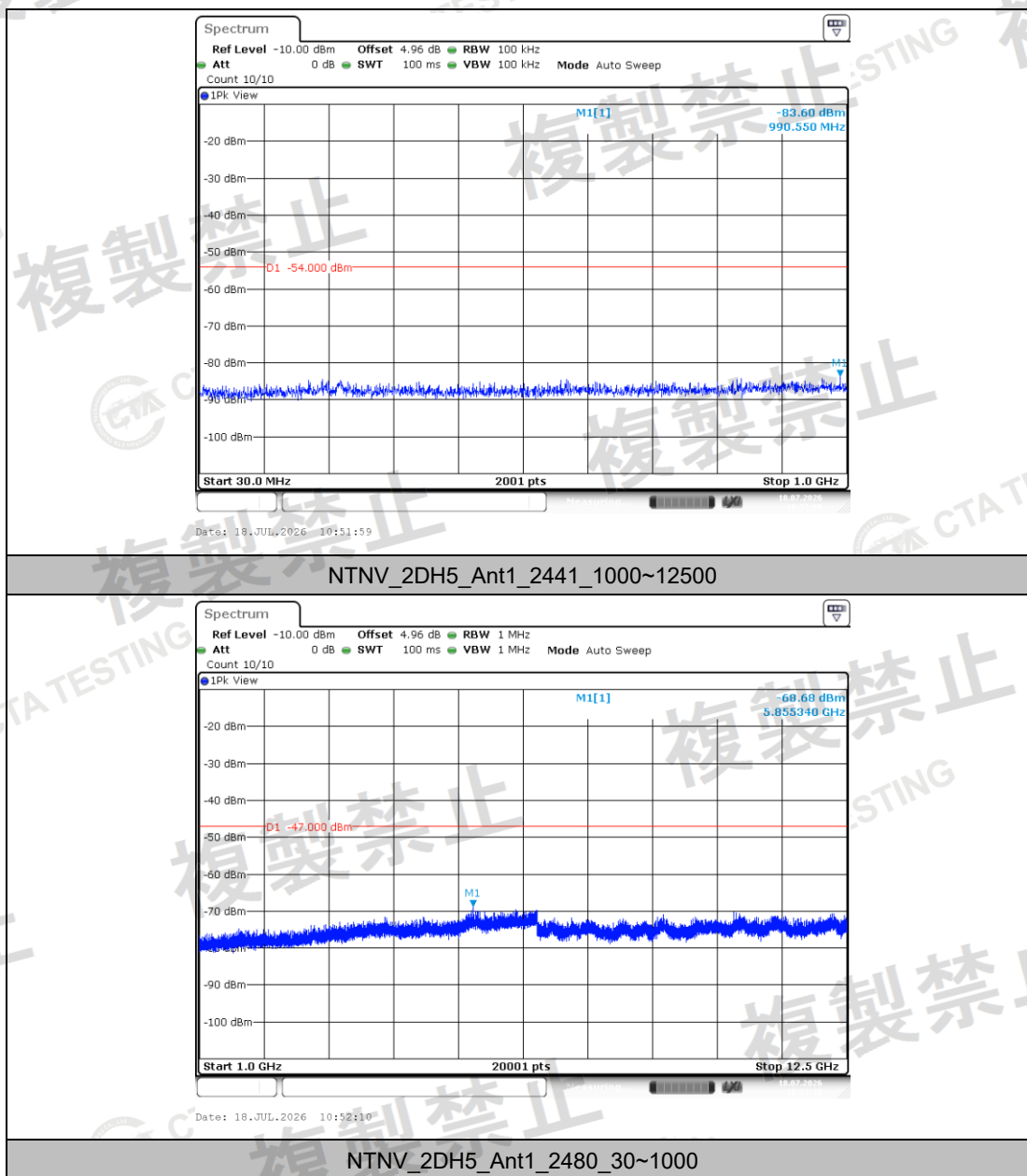
Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community,
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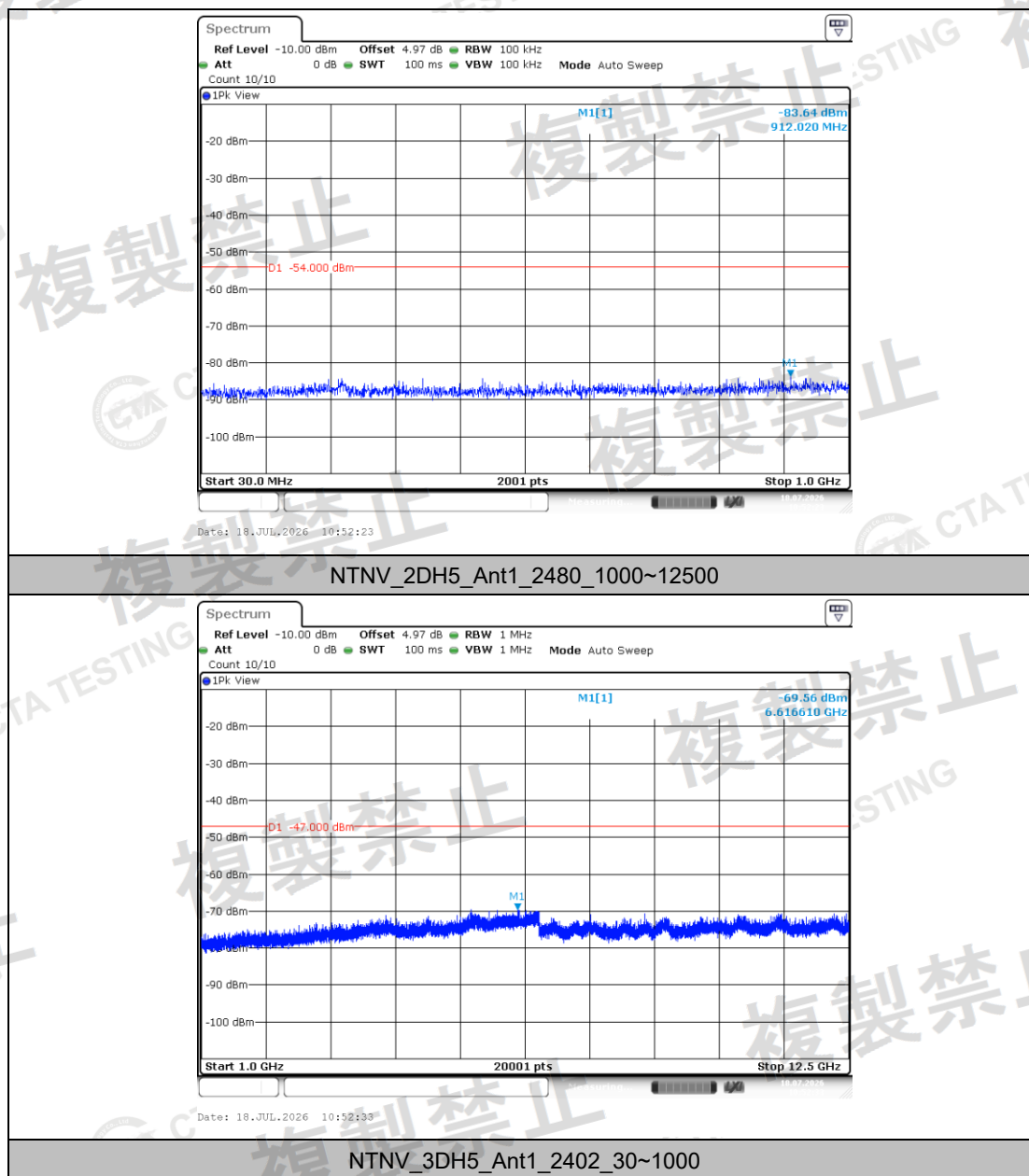
Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community,
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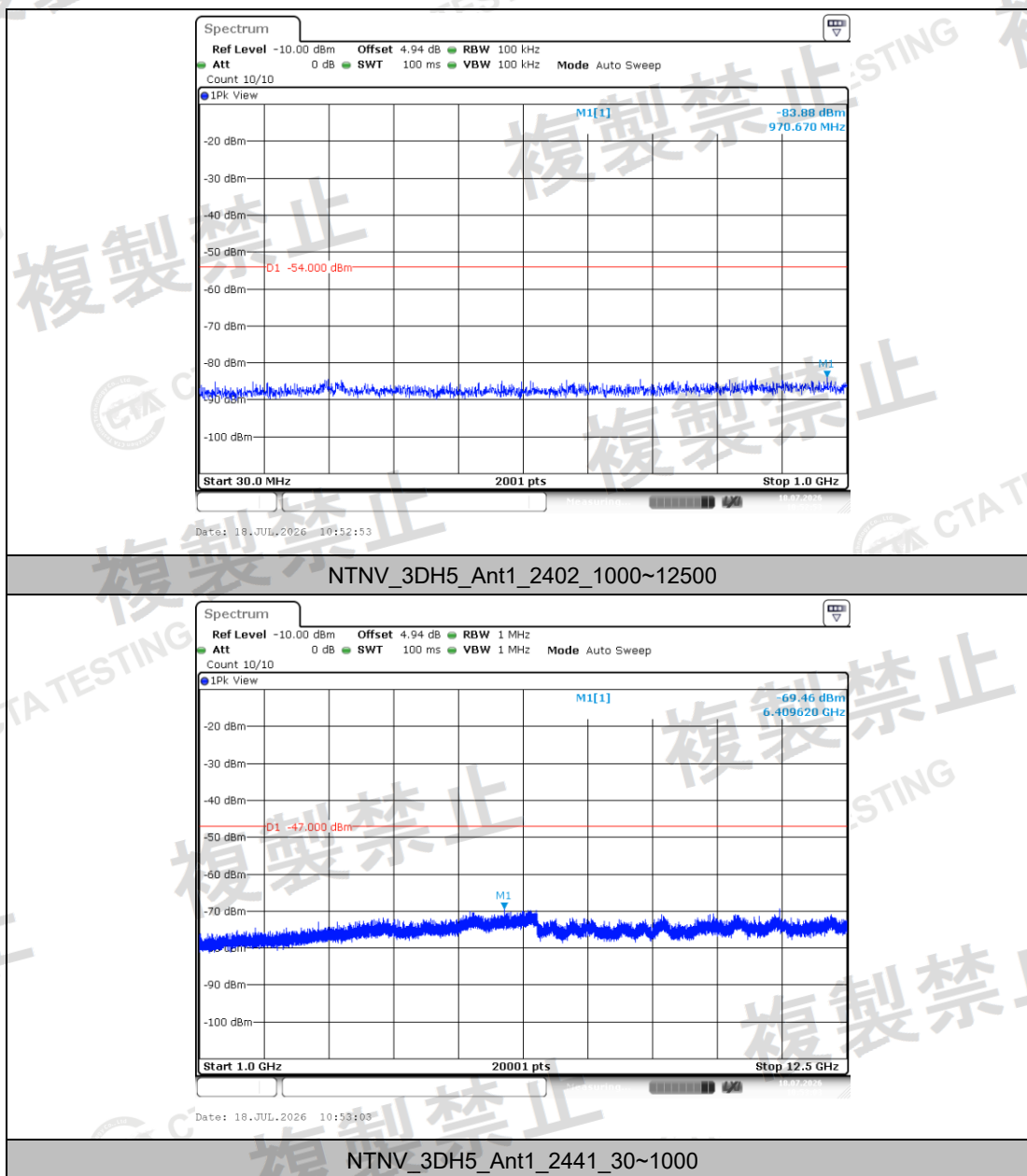
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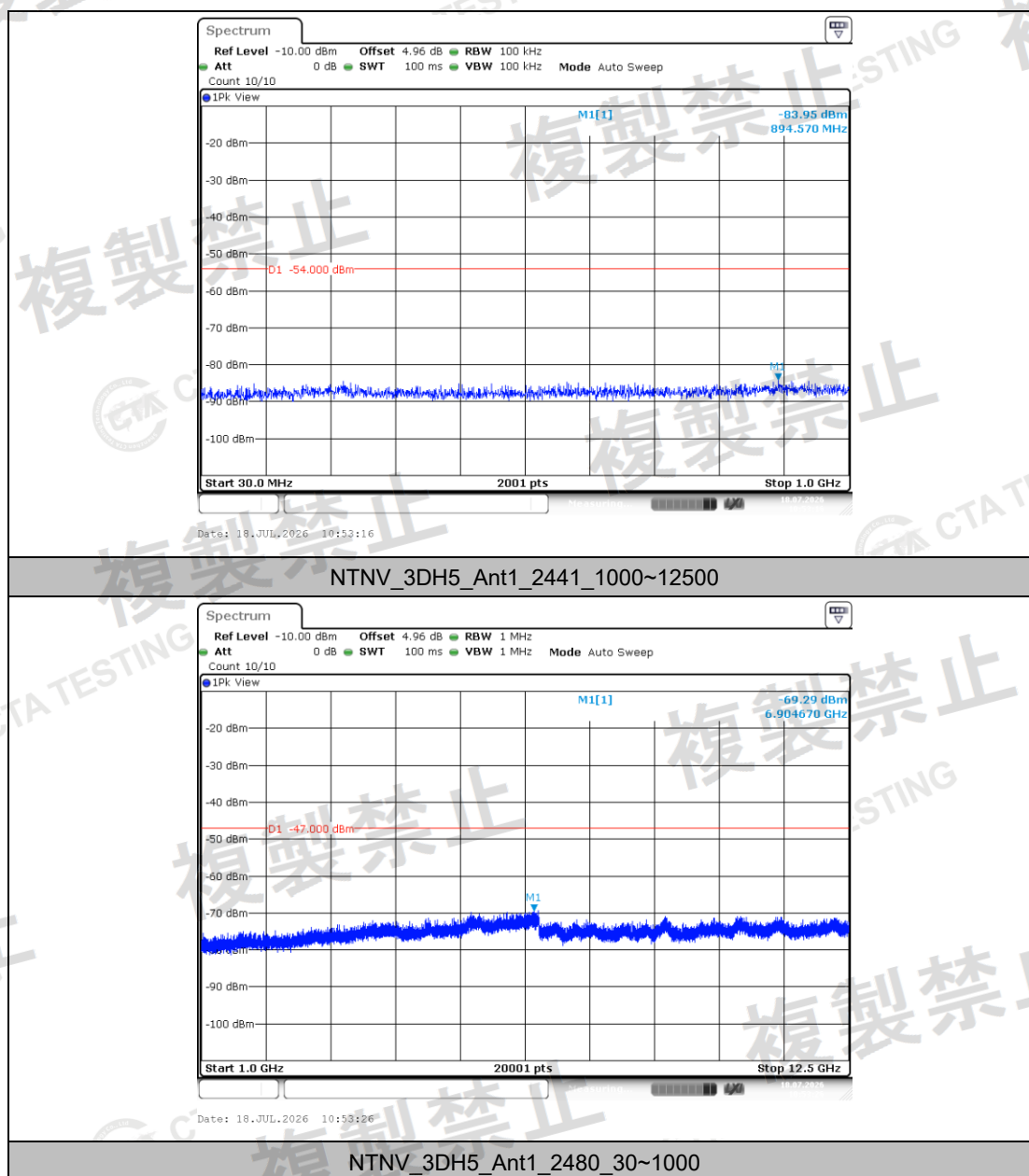
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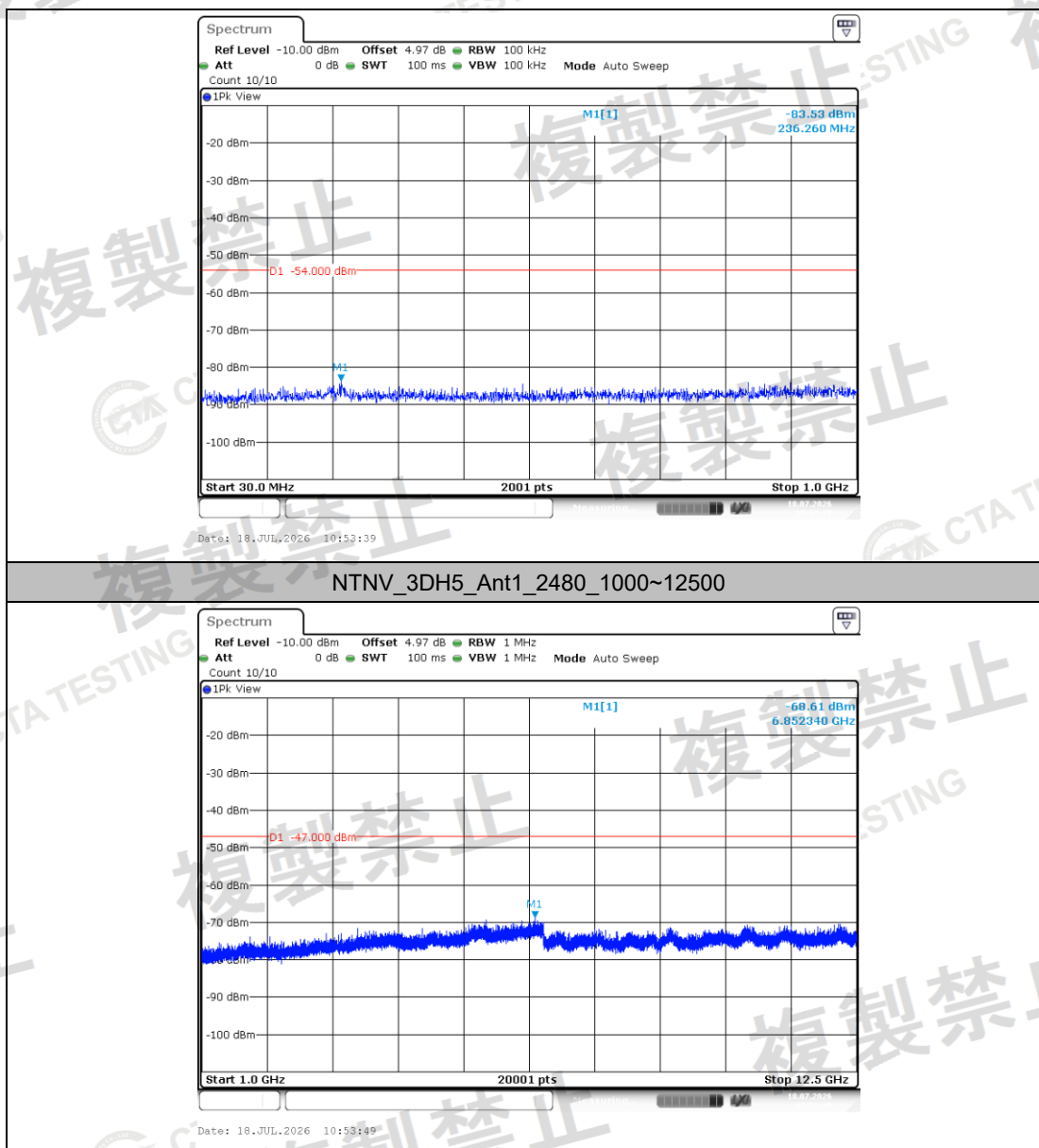
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Appendix F: Dwell Time

Test Result

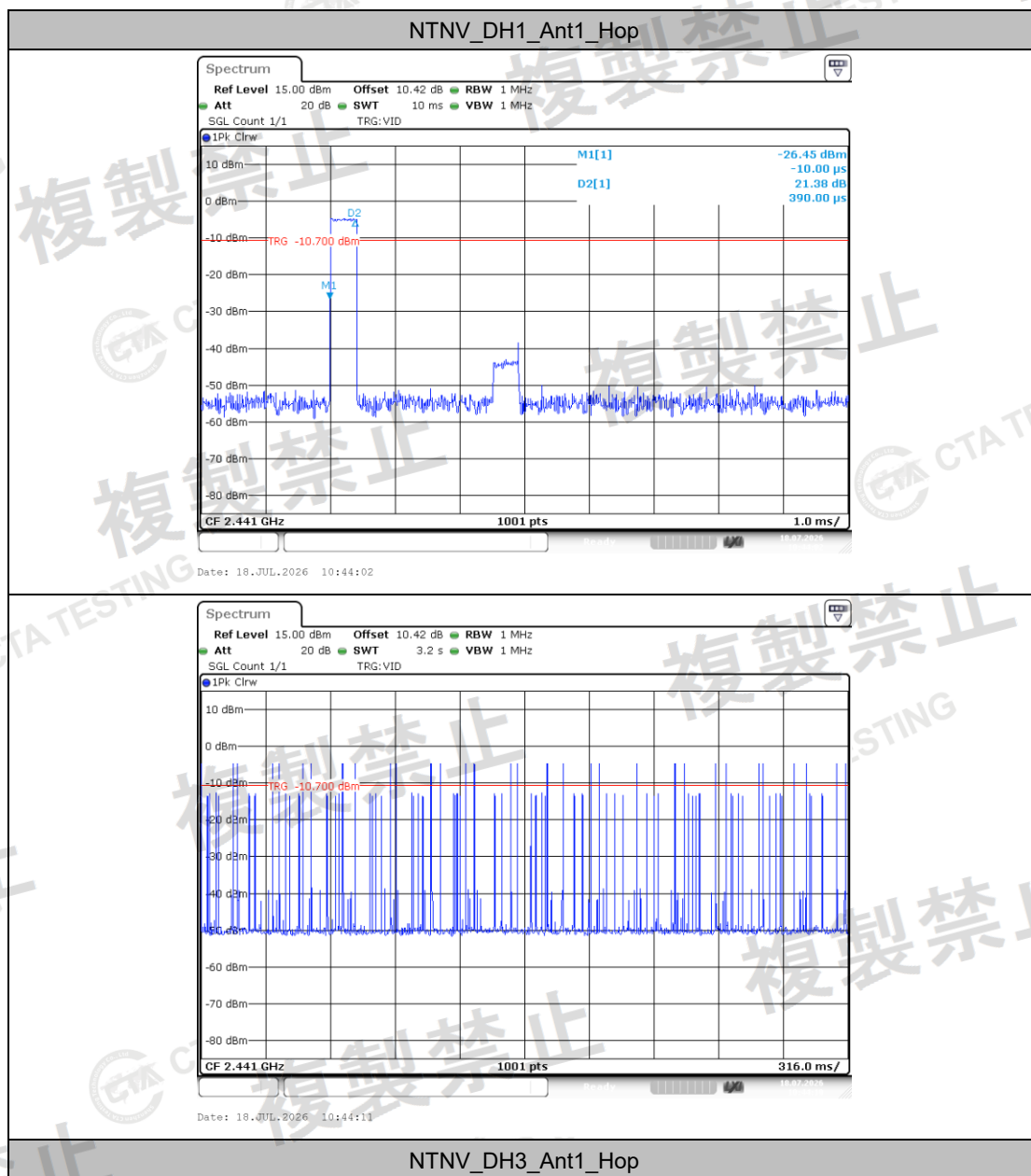
Test Condition	Test Mode	Antenna	Freq(M Hz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit [s]	Verdict
NTNV	DH1	Ant1	Hop	0.39	310	0.121	≤0.4	PASS
	DH3	Ant1	Hop	1.65	210	0.347	≤0.4	PASS
	DH5	Ant1	Hop	2.90	100	0.29	≤0.4	PASS
	2DH1	Ant1	Hop	0.40	300	0.12	≤0.4	PASS
	2DH3	Ant1	Hop	1.66	150	0.249	≤0.4	PASS
	2DH5	Ant1	Hop	2.90	100	0.29	≤0.4	PASS
	3DH1	Ant1	Hop	0.39	310	0.121	≤0.4	PASS
	3DH3	Ant1	Hop	1.65	190	0.314	≤0.4	PASS
	3DH5	Ant1	Hop	2.90	110	0.319	≤0.4	PASS



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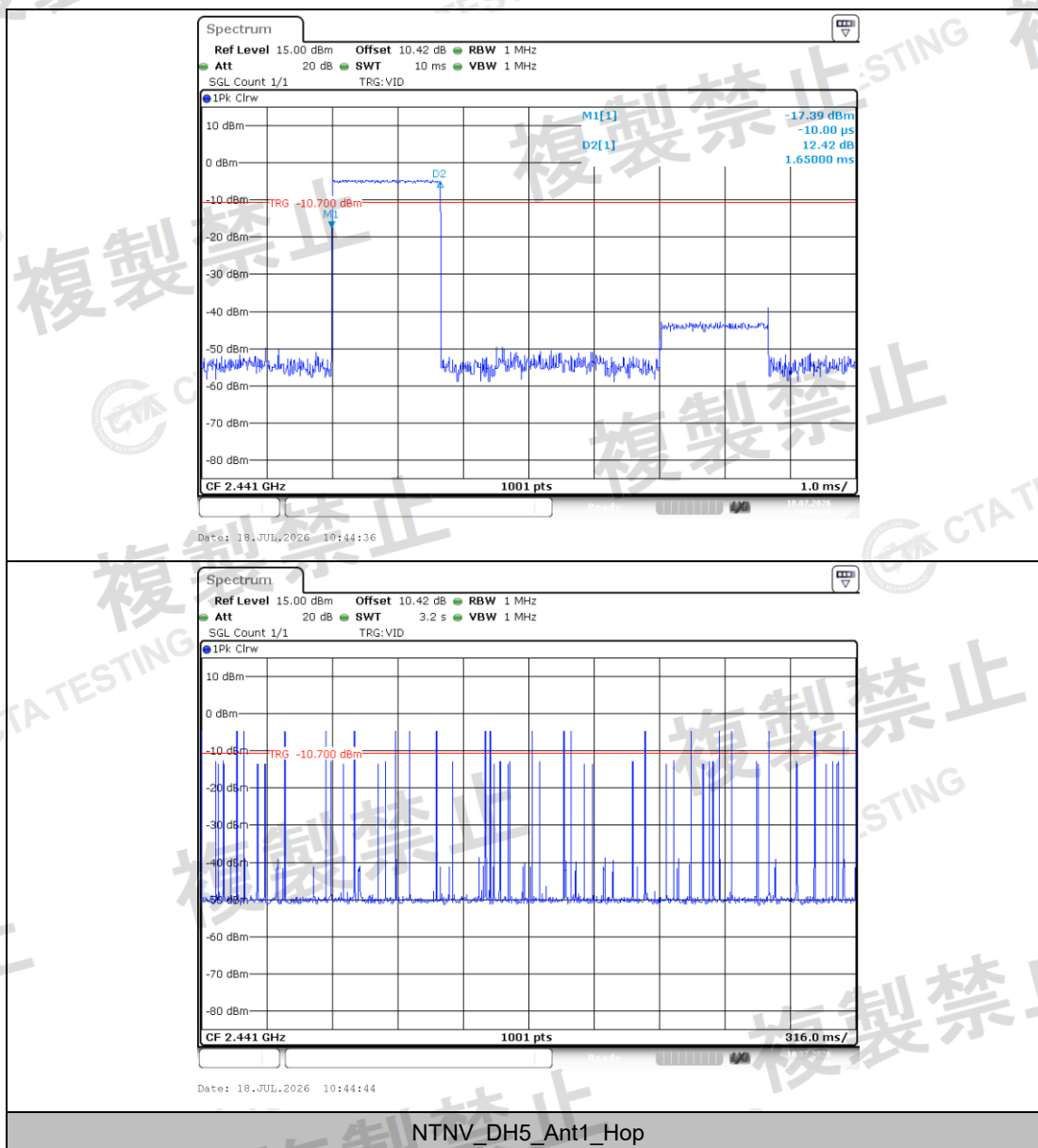
Test Graphs





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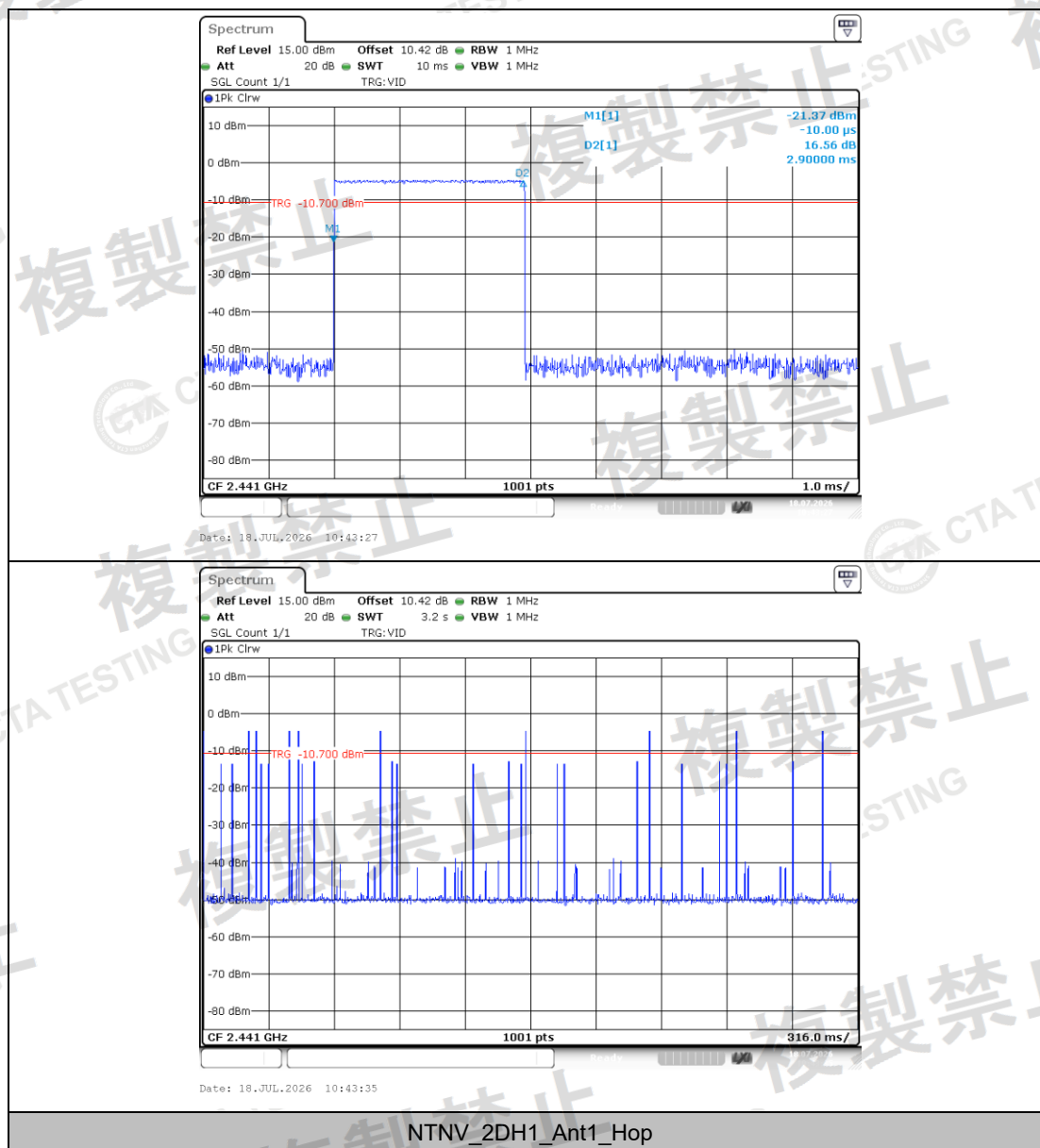
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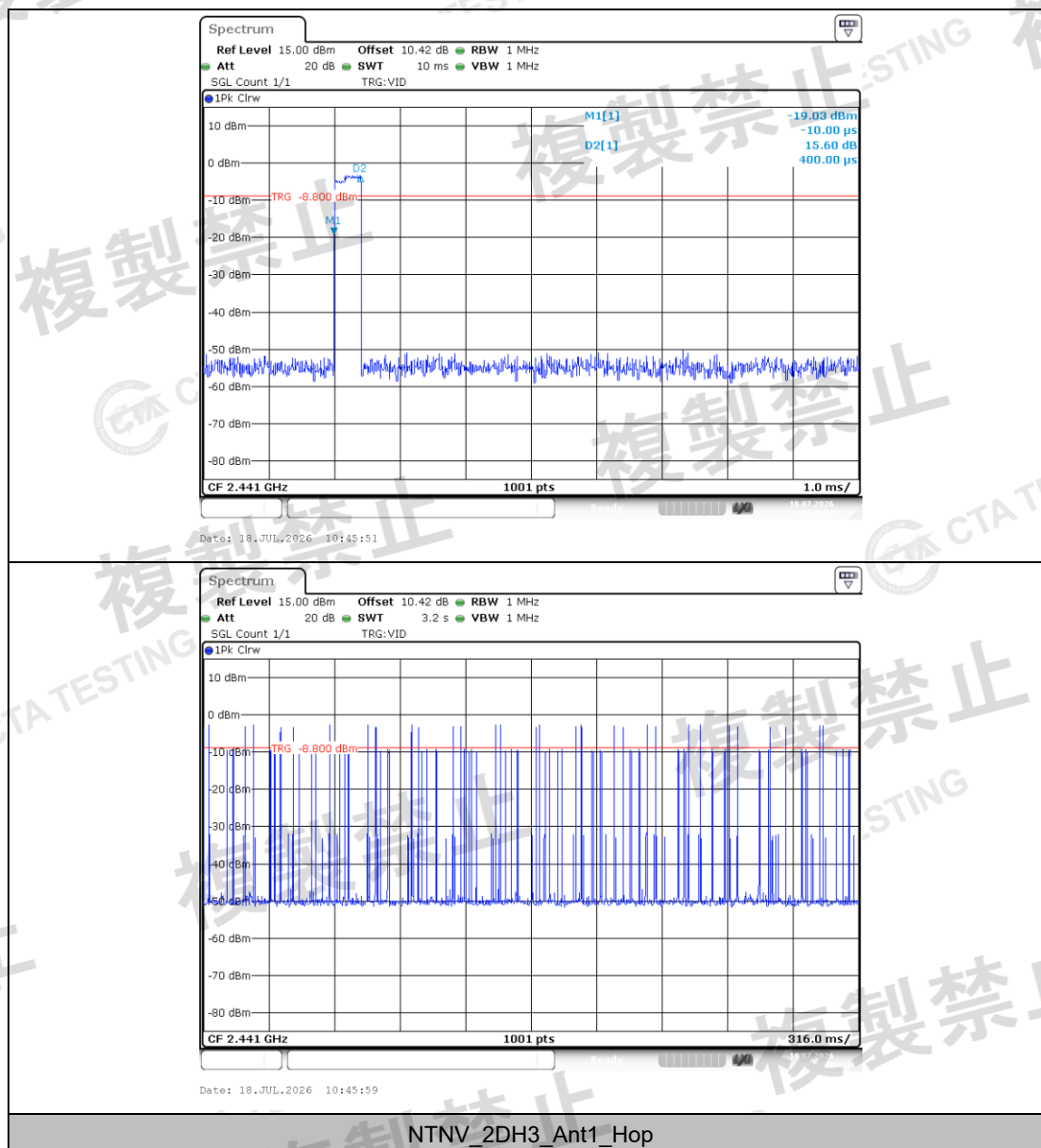
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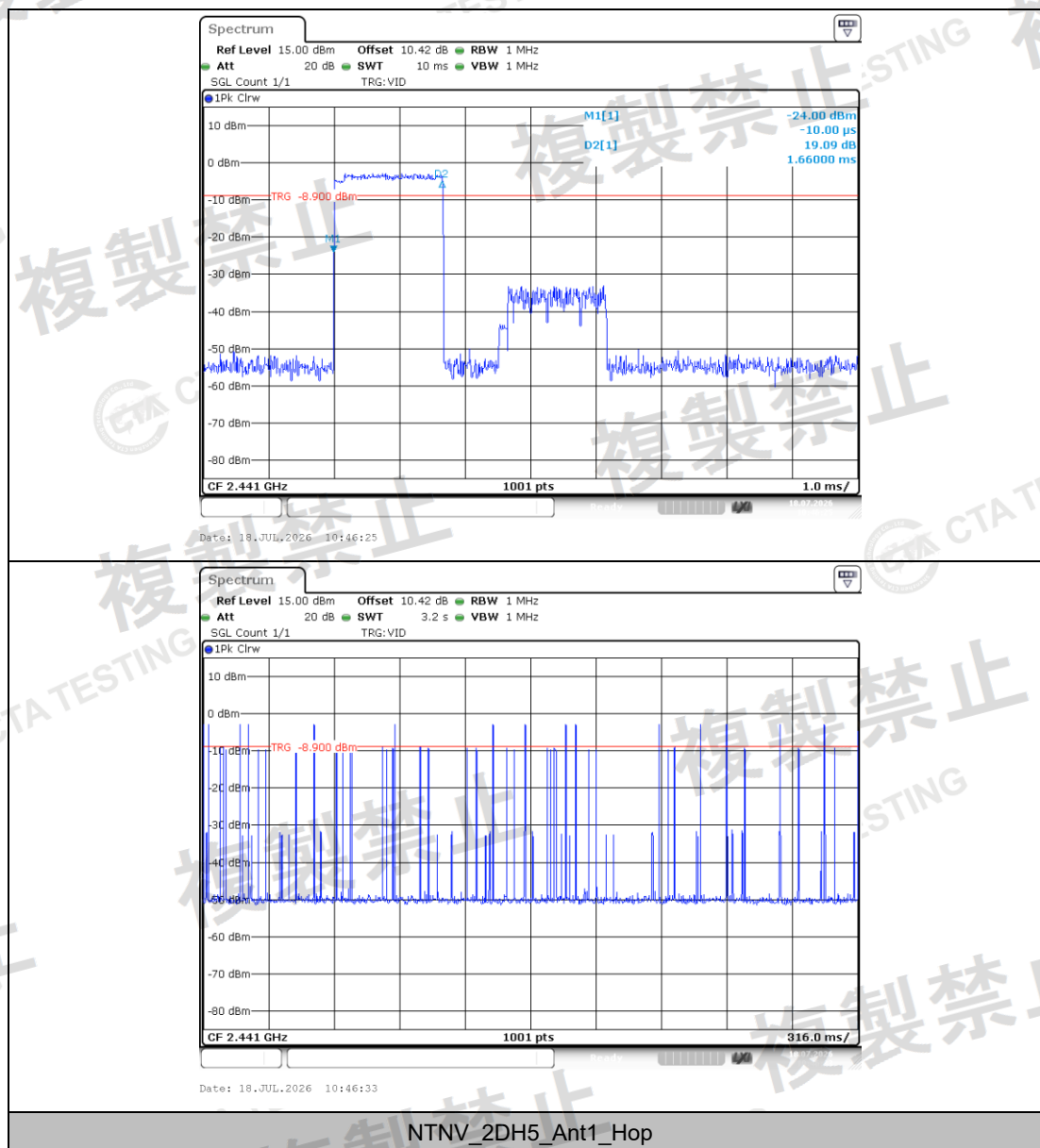
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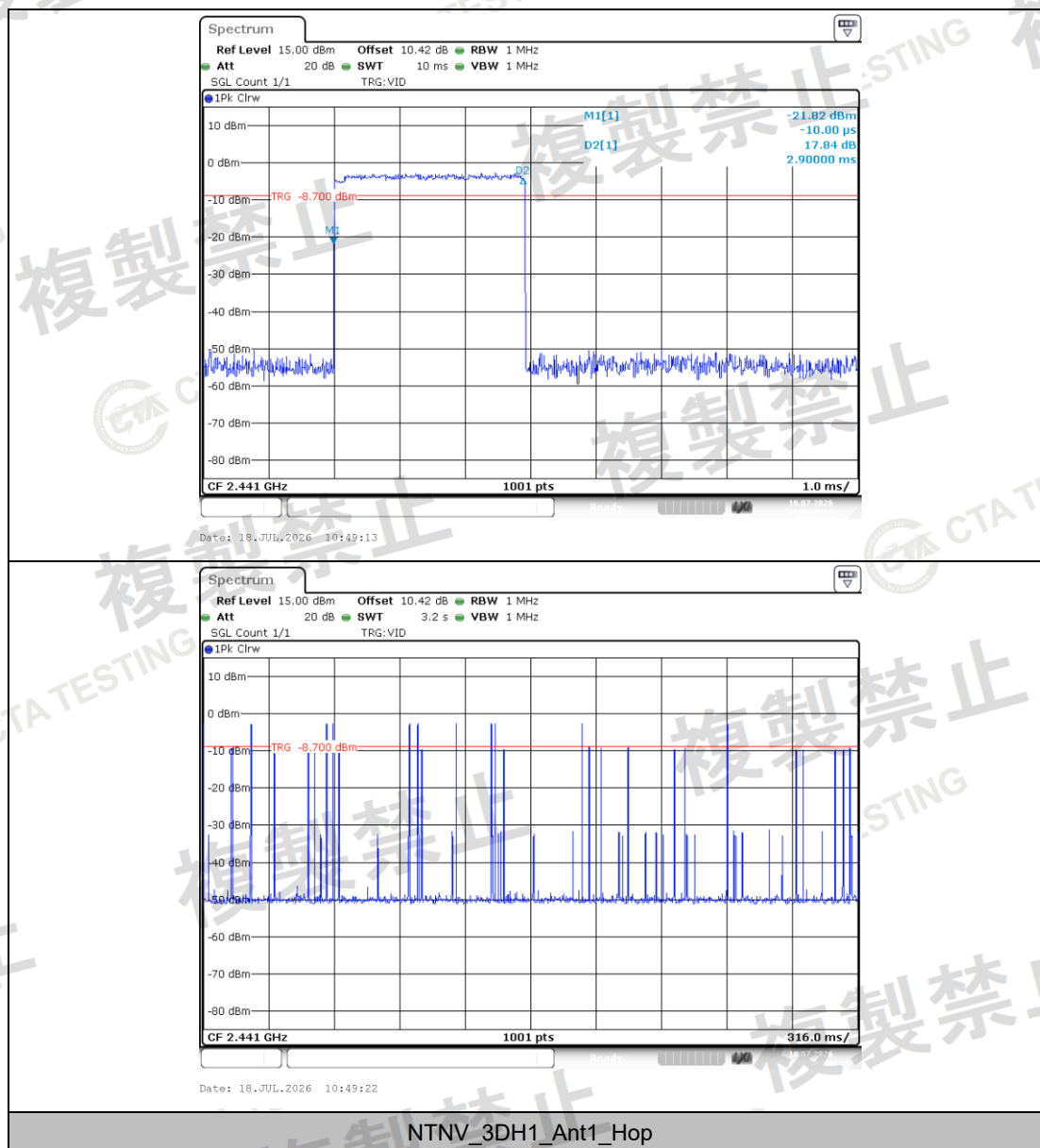
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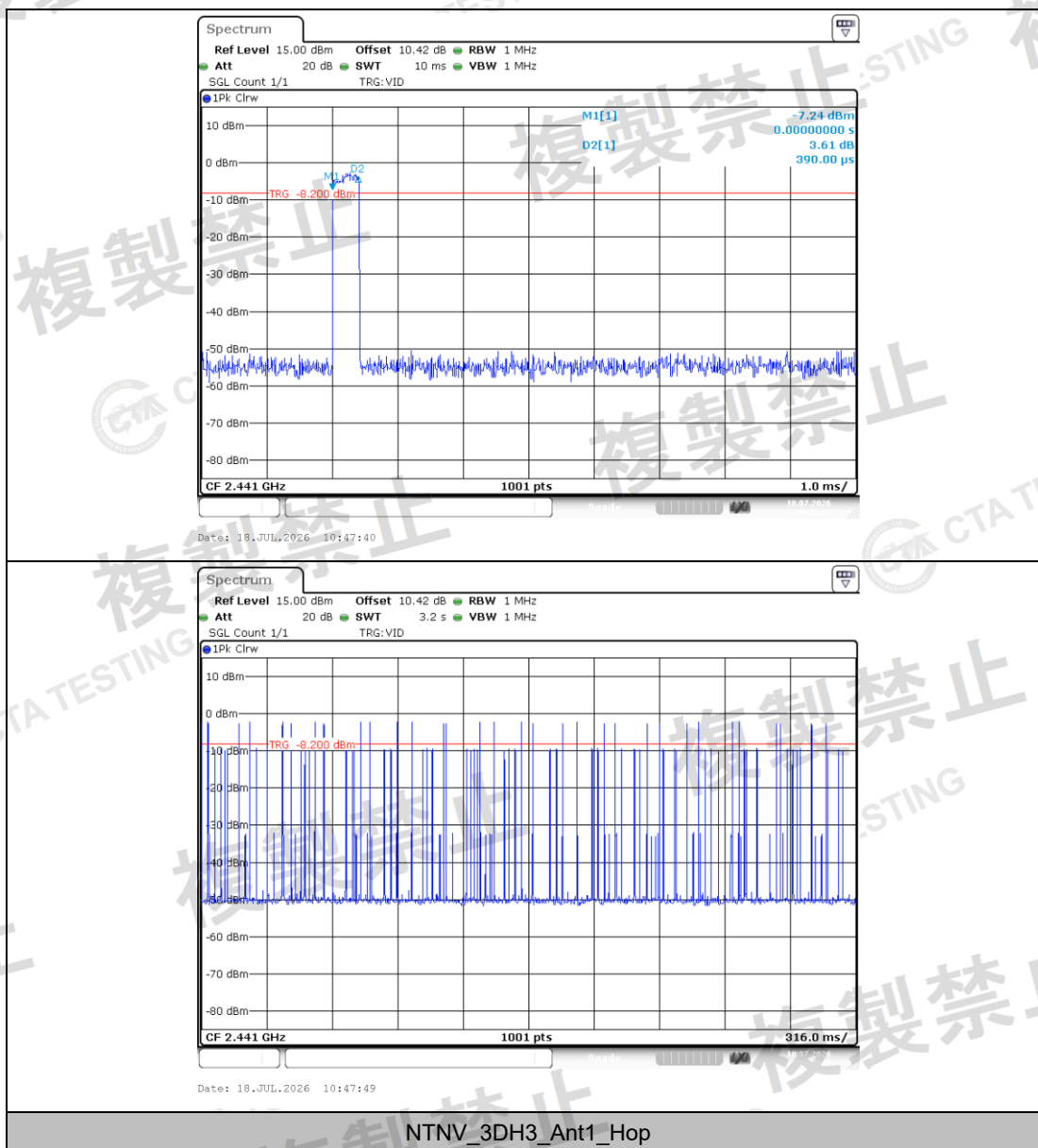
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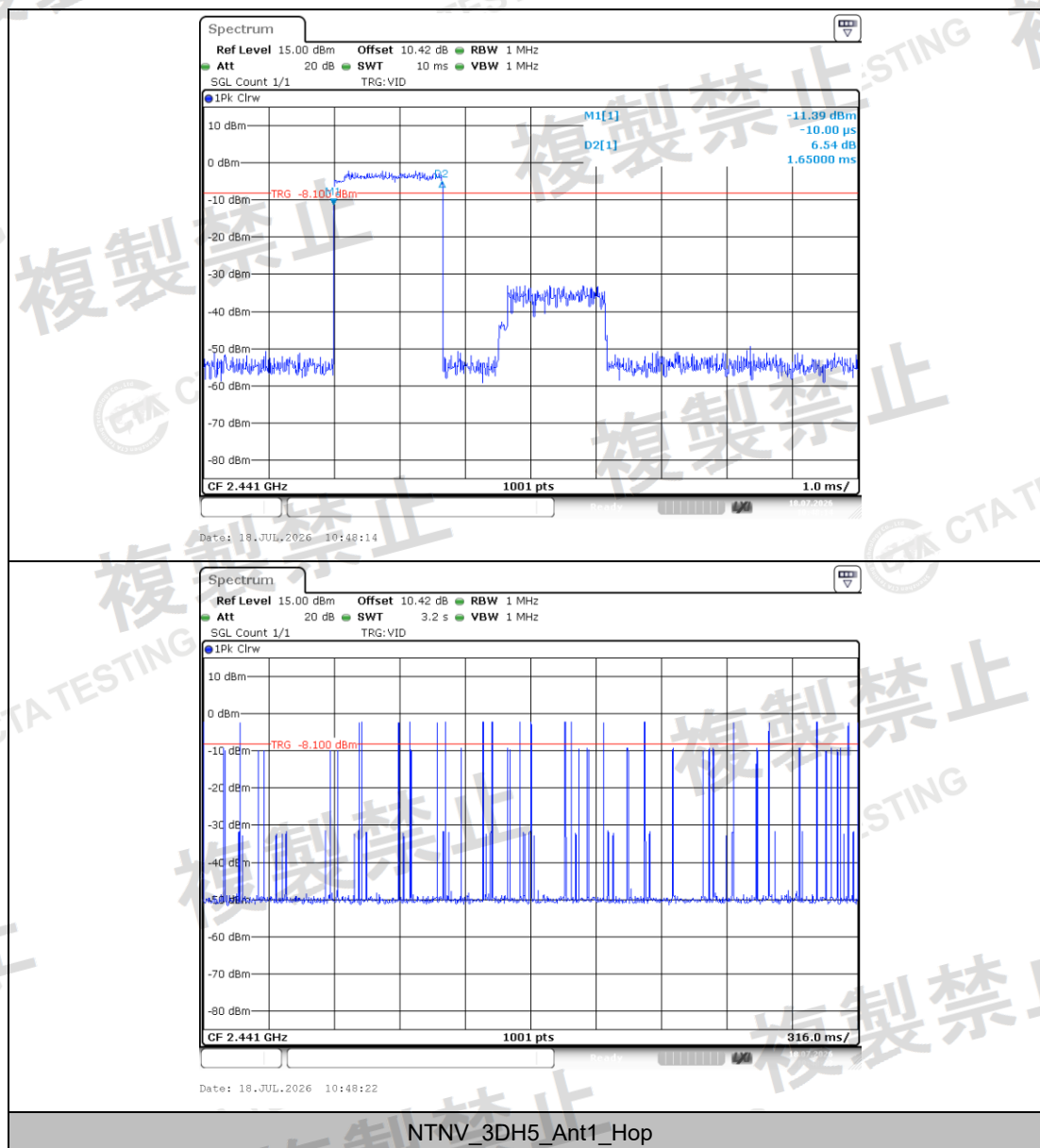
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