



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 : DOSHISHA CORPORATION

EUT : SmartBadge

Model Number : EB181TSW

Report No. : CTA26052600401

Reviewed By : Eric Wang



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Appendix A: Frequency Error

Test Result

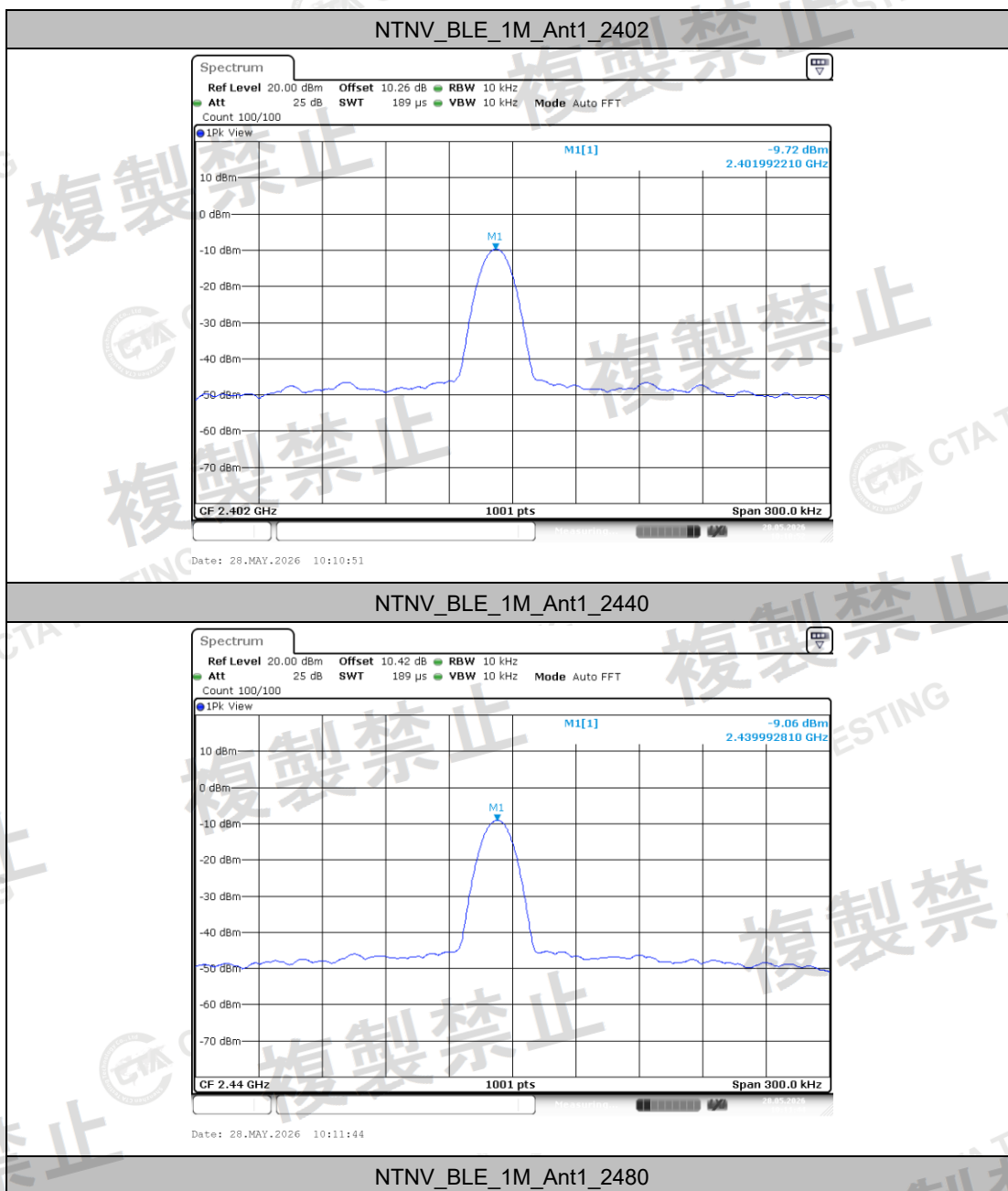
TestCondition	TestMode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTNV	BLE_1M	Ant1	2402	-3.24313	±50	PASS
			2440	-2.94672	±50	PASS
			2480	-3.14113	±50	PASS



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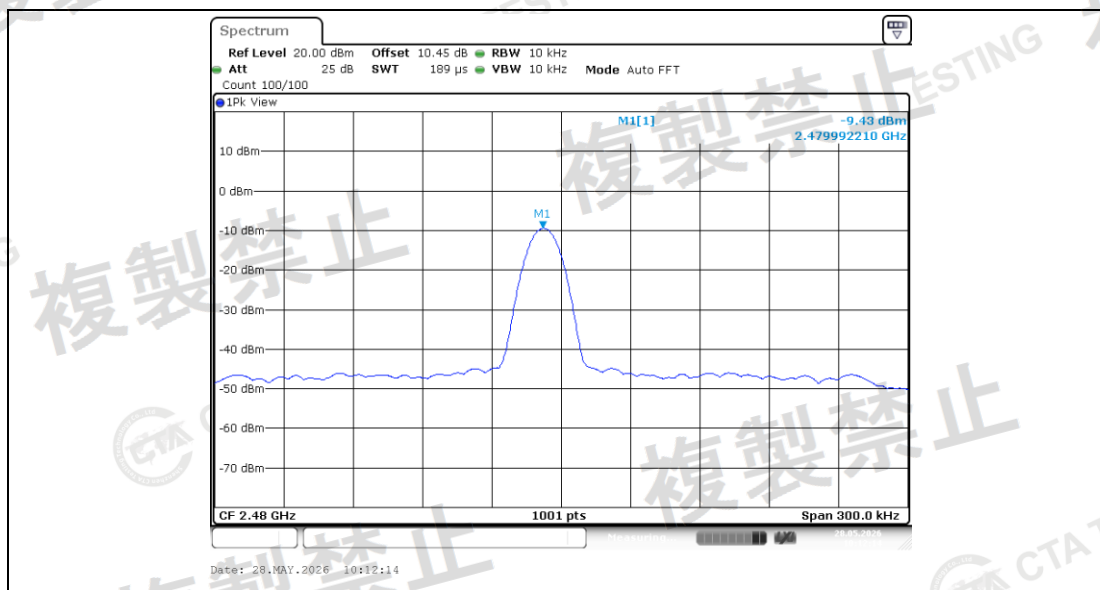
Test Graphs





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Appendix B: Occupied Bandwidth

Test Result

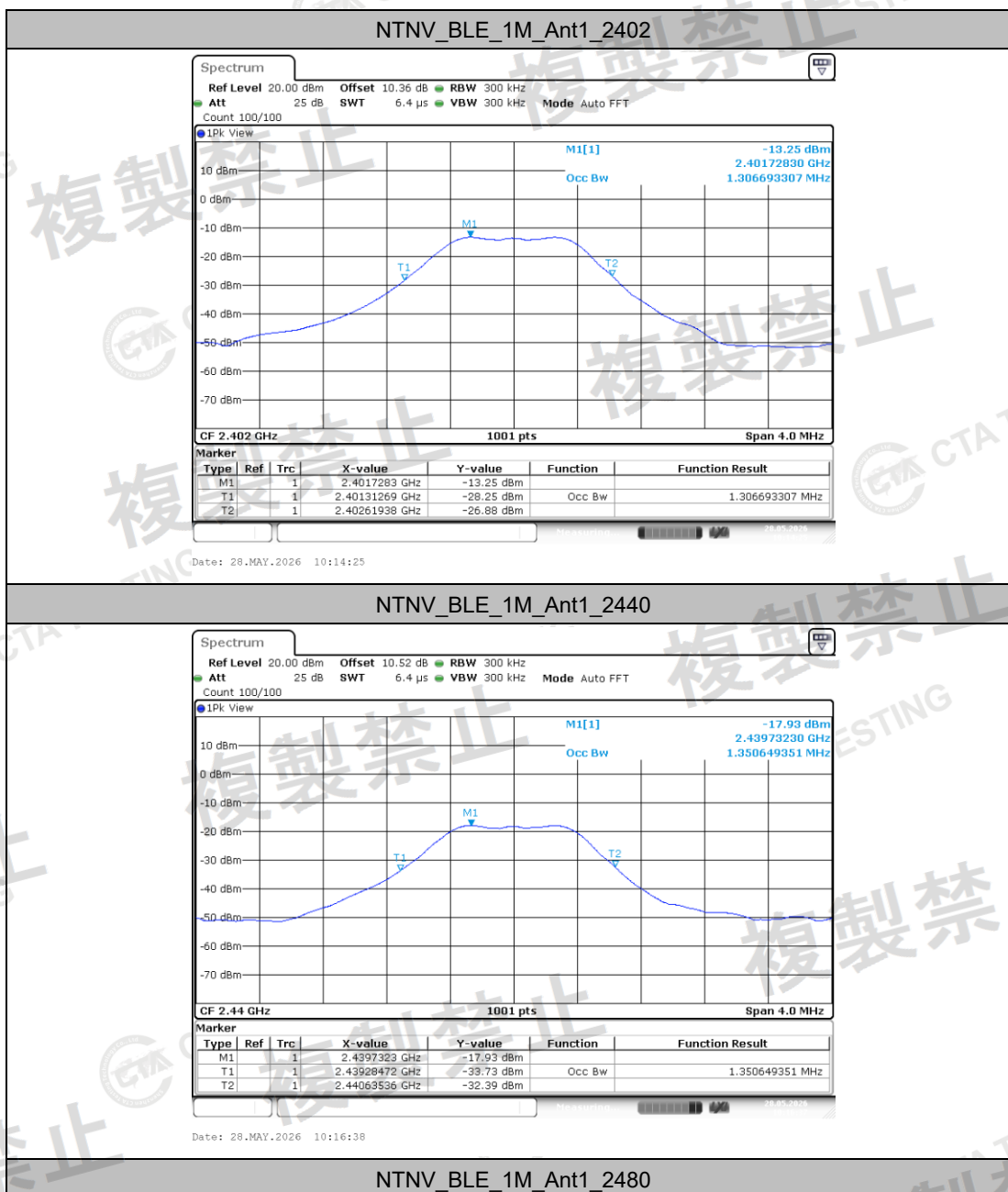
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	1.307	≤26	PASS
			2440	1.351	≤26	PASS
			2480	1.339	≤26	PASS



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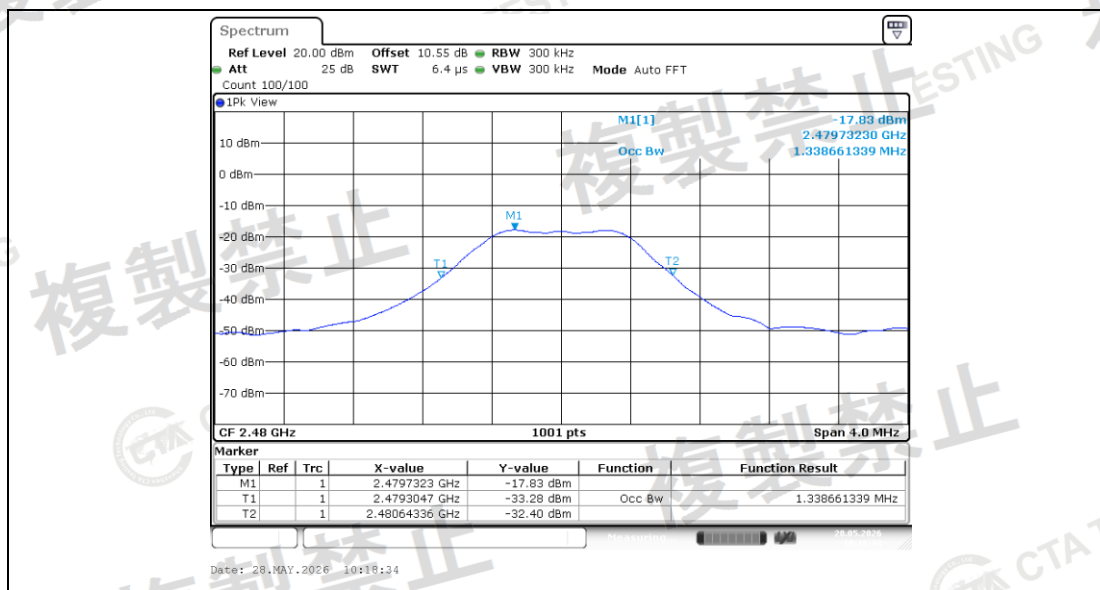
Test Graphs





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Appendix C: Spread Bandwidth

Test Result

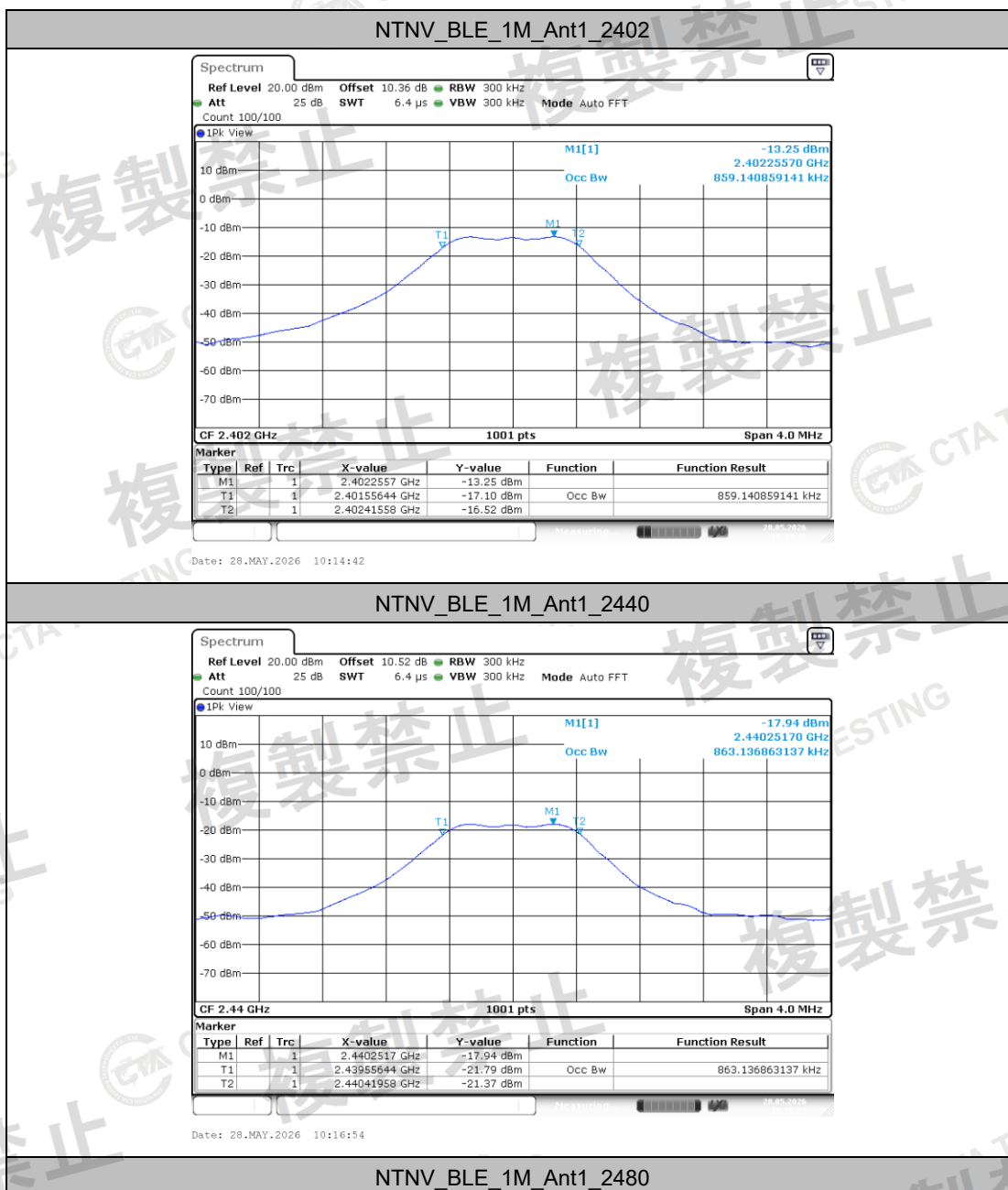
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	0.859	≥ 0.5	PASS
			2440	0.863	≥ 0.5	PASS
			2480	0.863	≥ 0.5	PASS



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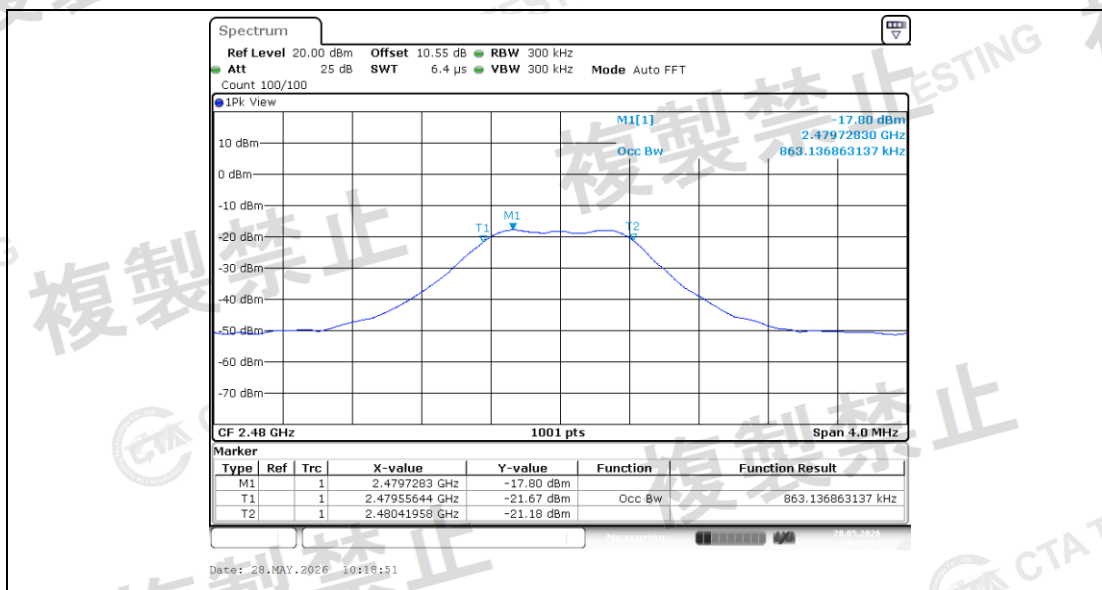
Test Graphs





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Appendix D: Spurious Emission of TX

Test Result

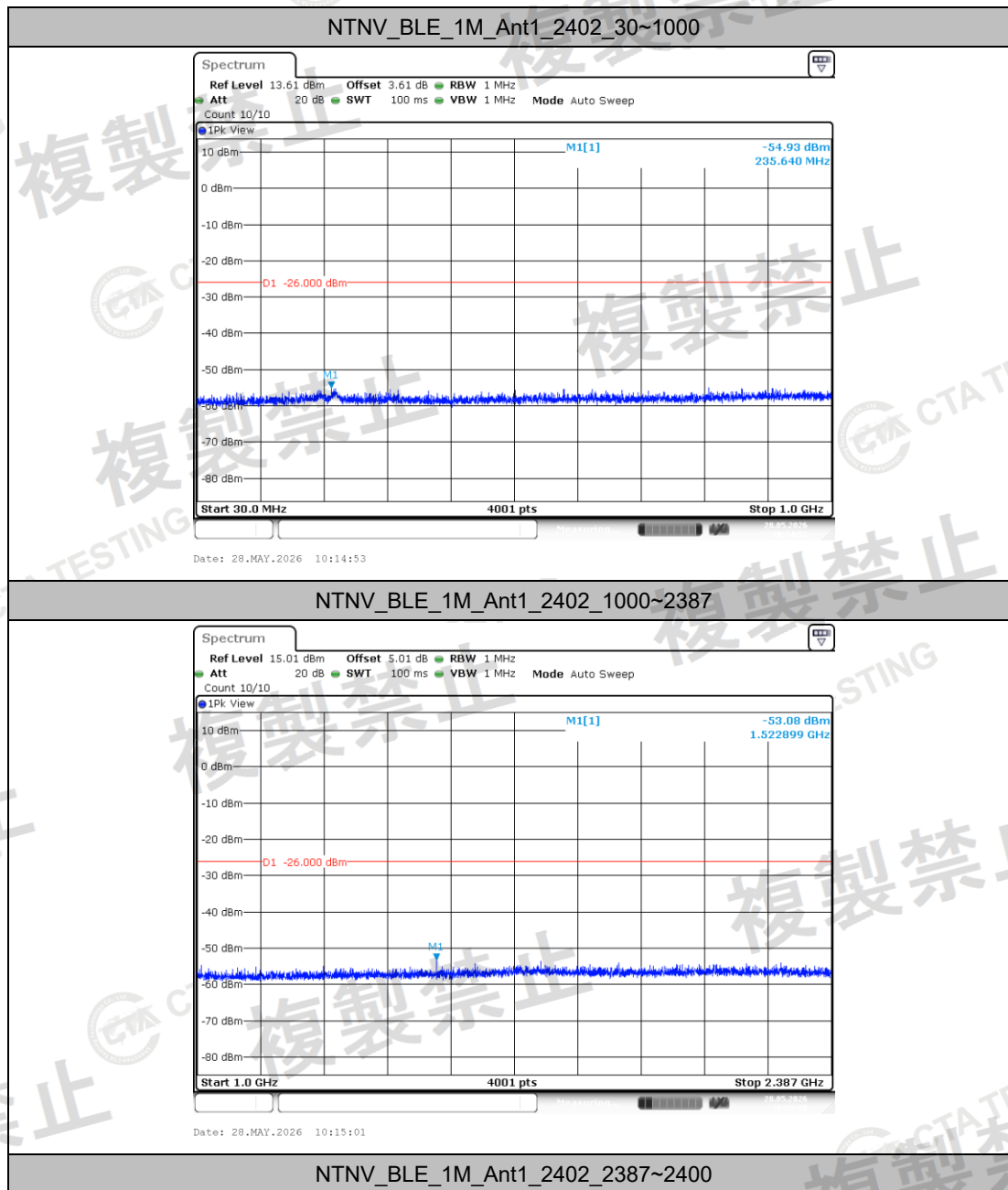
TestCondition	TestMode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	235.64	-54.93	≤-26	0.00321	≤2.5	PASS
				1000~2387	1522.90	-53.08	≤-26	0.00492	≤2.5	PASS
				2387~2400	2400.00	-37.24	≤-16	0.18880	≤25	PASS
				2483.5~2496.5	2489.38	-43.01	≤-16	0.05000	≤25	PASS
				2496.5~13000	6759.35	-44.10	≤-26	0.03890	≤2.5	PASS
			2440	30~1000	792.91	-54.21	≤-26	0.00379	≤2.5	PASS
				1000~2387	1779.84	-53.25	≤-26	0.00473	≤2.5	PASS
				2387~2400	2395.35	-43.80	≤-16	0.04169	≤25	PASS
				2483.5~2496.5	2495.45	-43.04	≤-16	0.04966	≤25	PASS
				2496.5~13000	5825.06	-43.64	≤-26	0.04325	≤2.5	PASS
			2480	30~1000	304.75	-54.99	≤-26	0.00317	≤2.5	PASS
				1000~2387	2254.54	-54.00	≤-26	0.00398	≤2.5	PASS
				2387~2400	2397.06	-43.94	≤-16	0.04036	≤25	PASS
				2483.5~2496.5	2493.00	-43.38	≤-16	0.04592	≤25	PASS
				2496.5~13000	6983.60	-44.06	≤-26	0.03926	≤2.5	PASS



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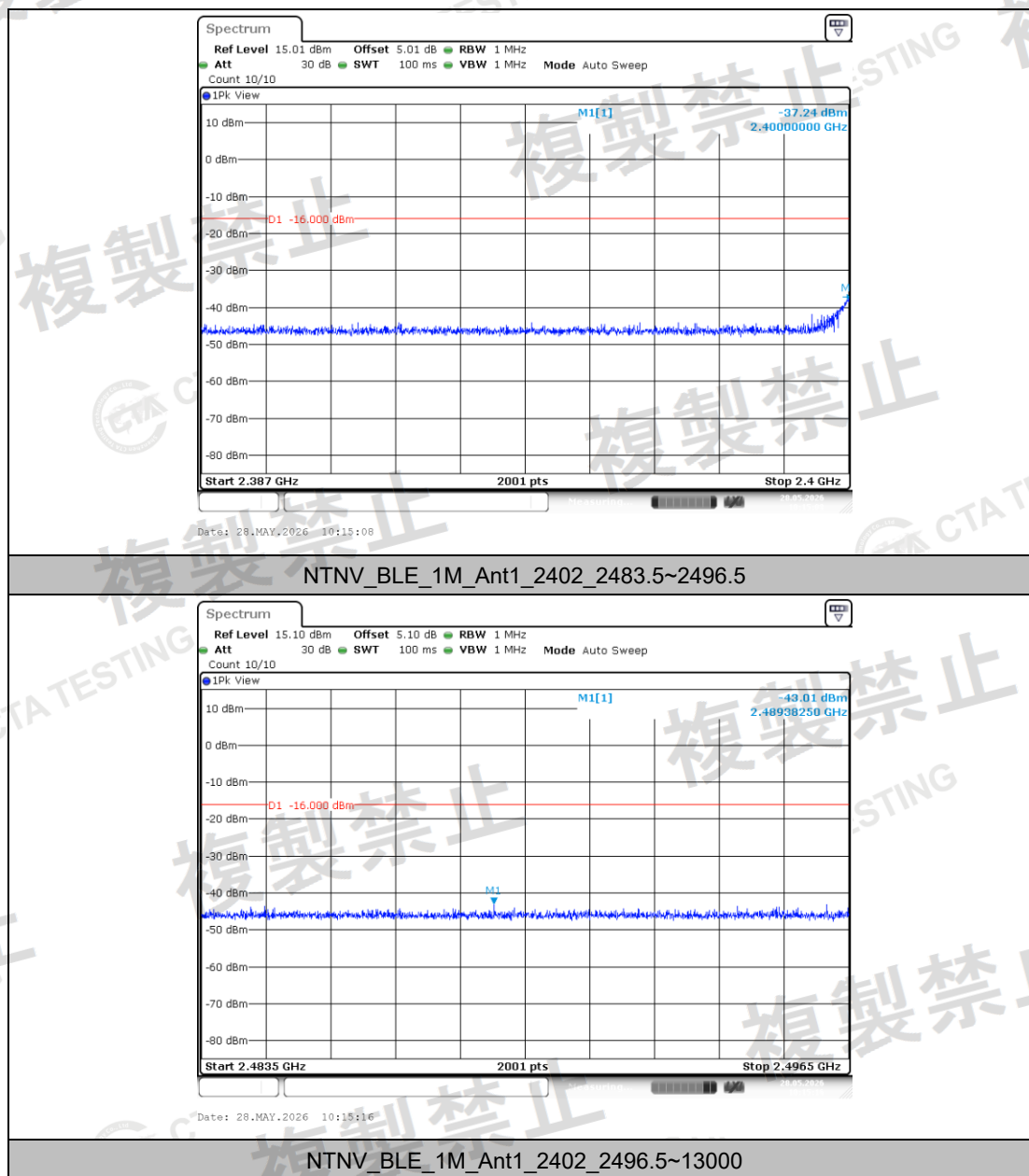
Test Graphs





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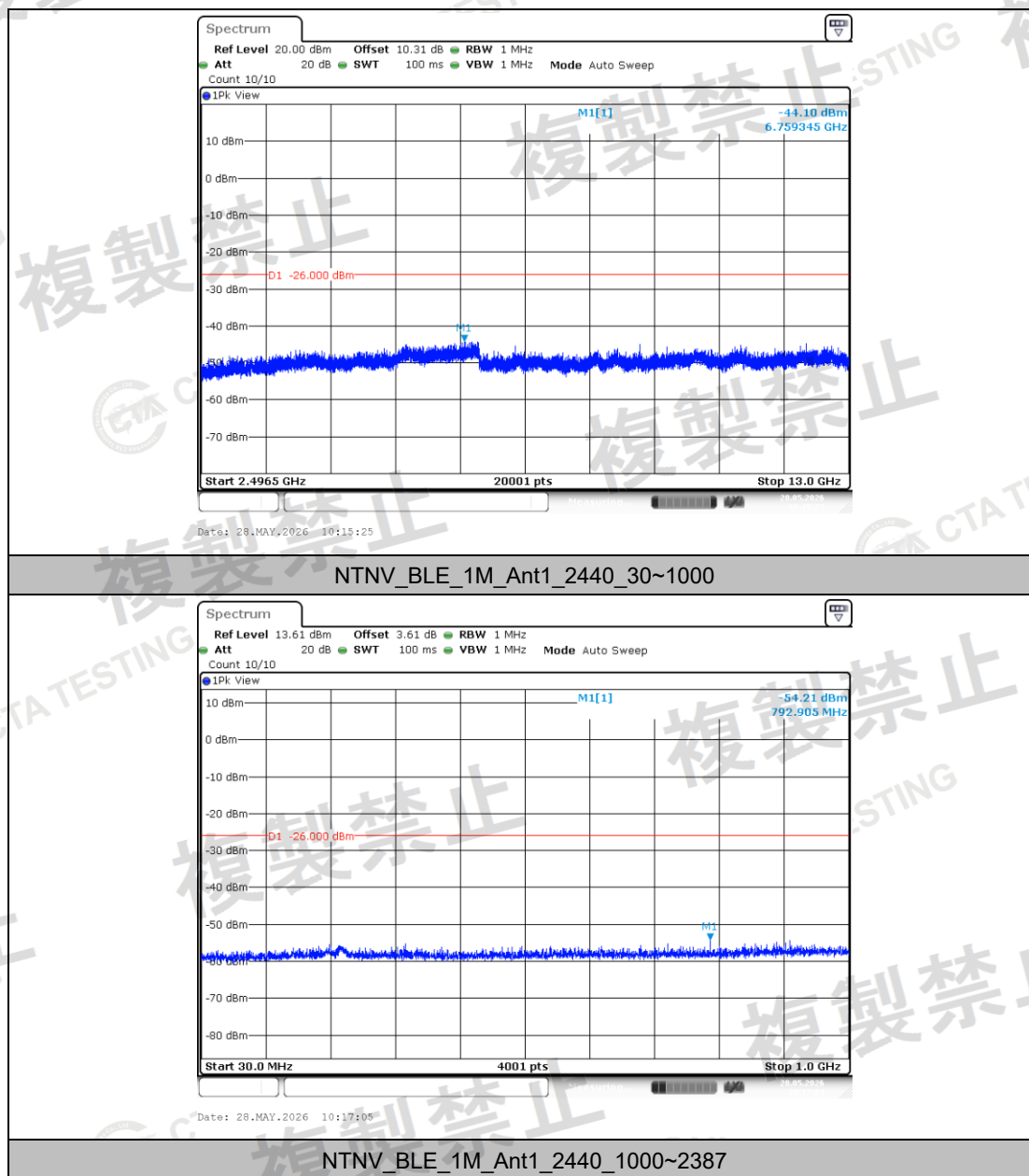
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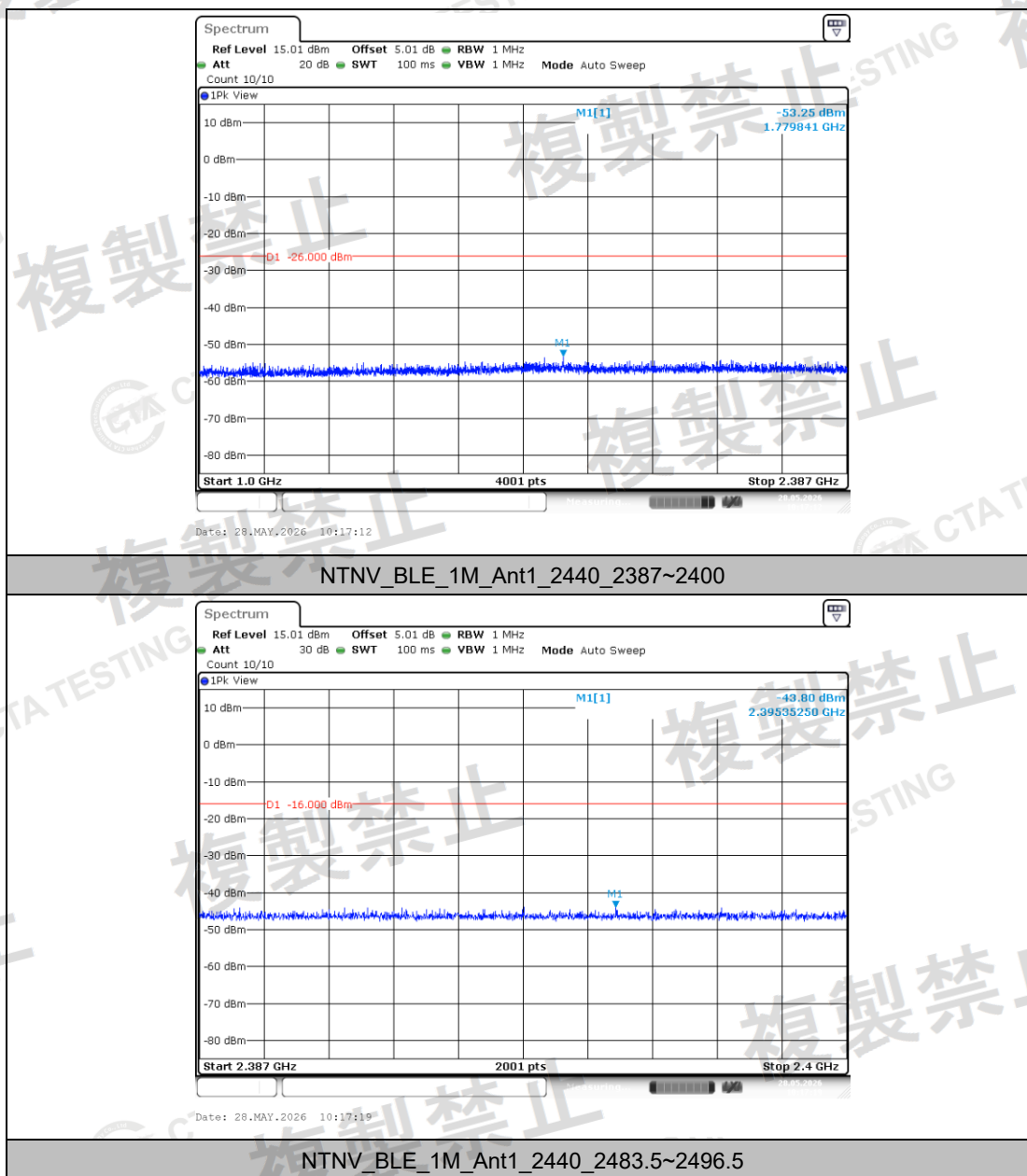
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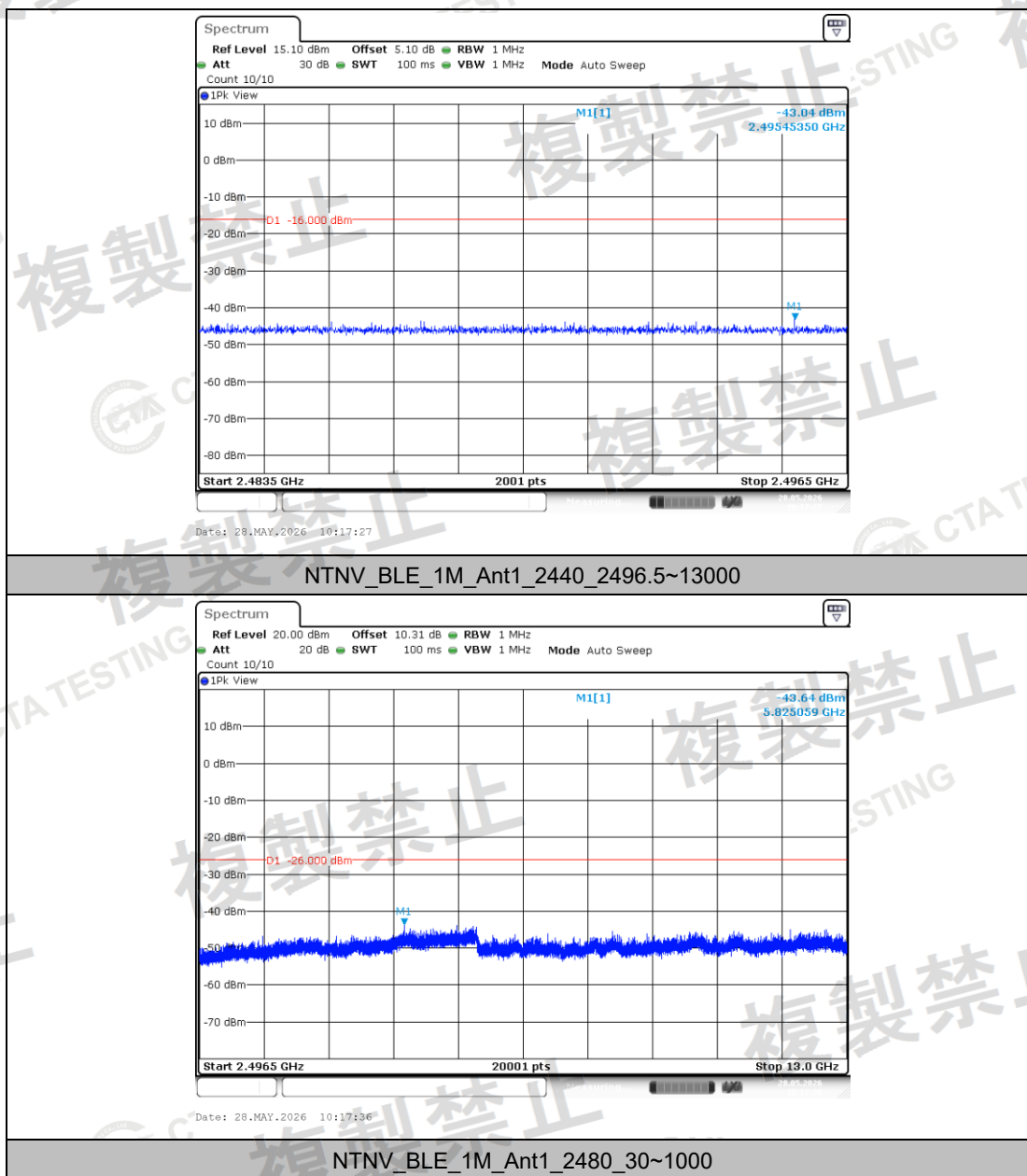
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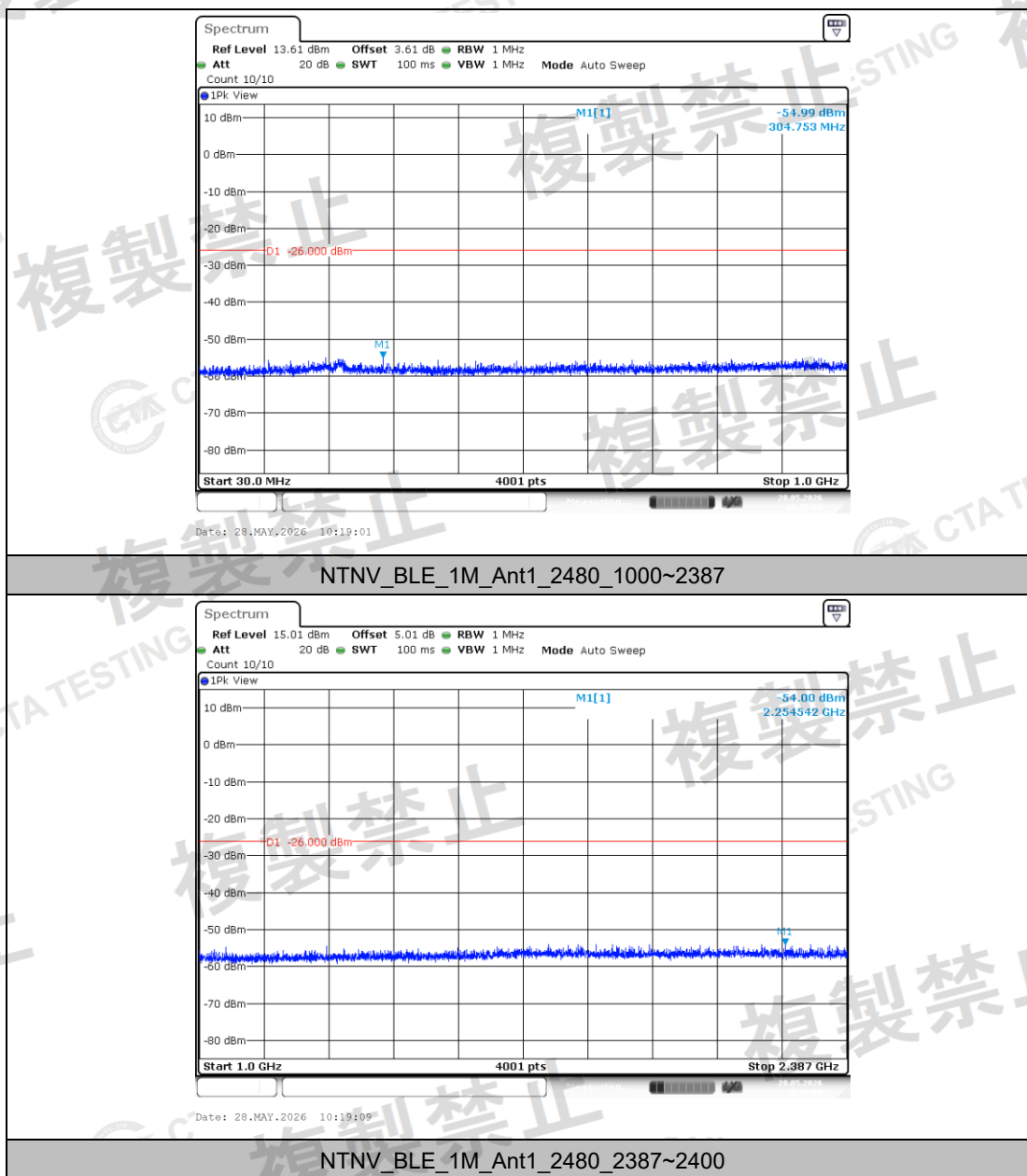
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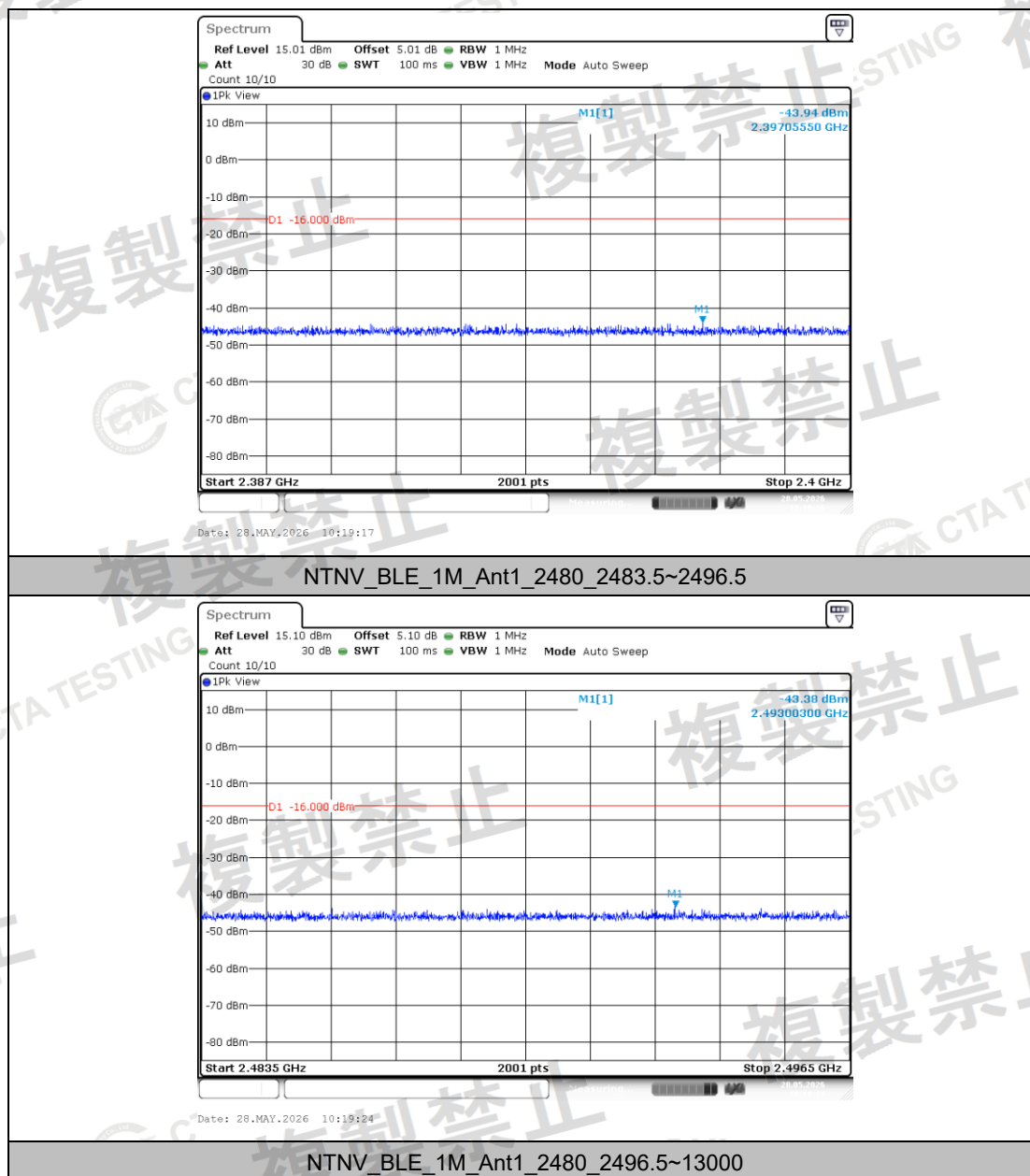
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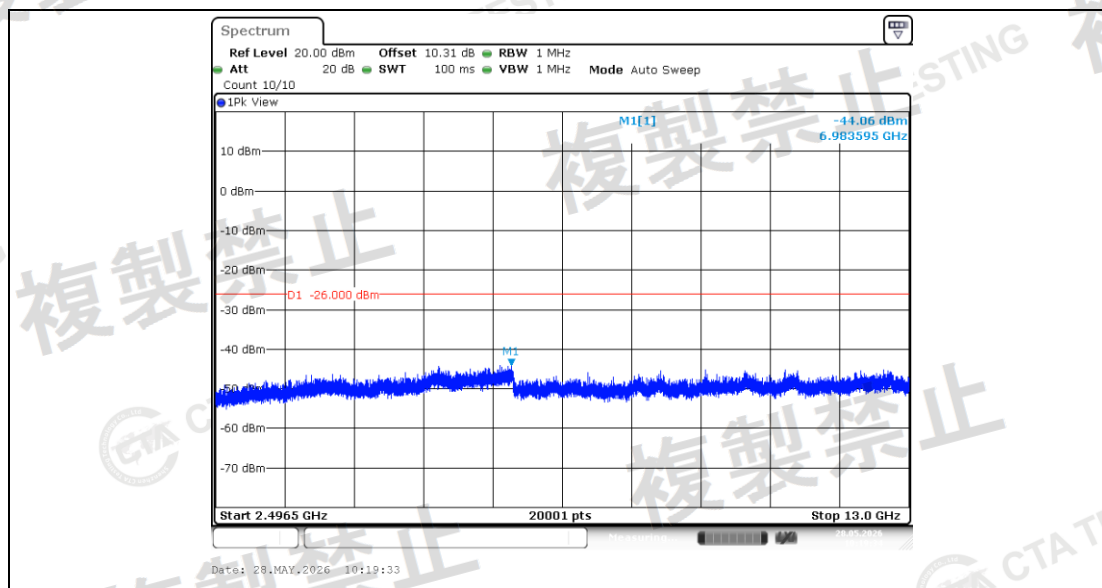
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Appendix E: Spurious Emission of RX

Test Result

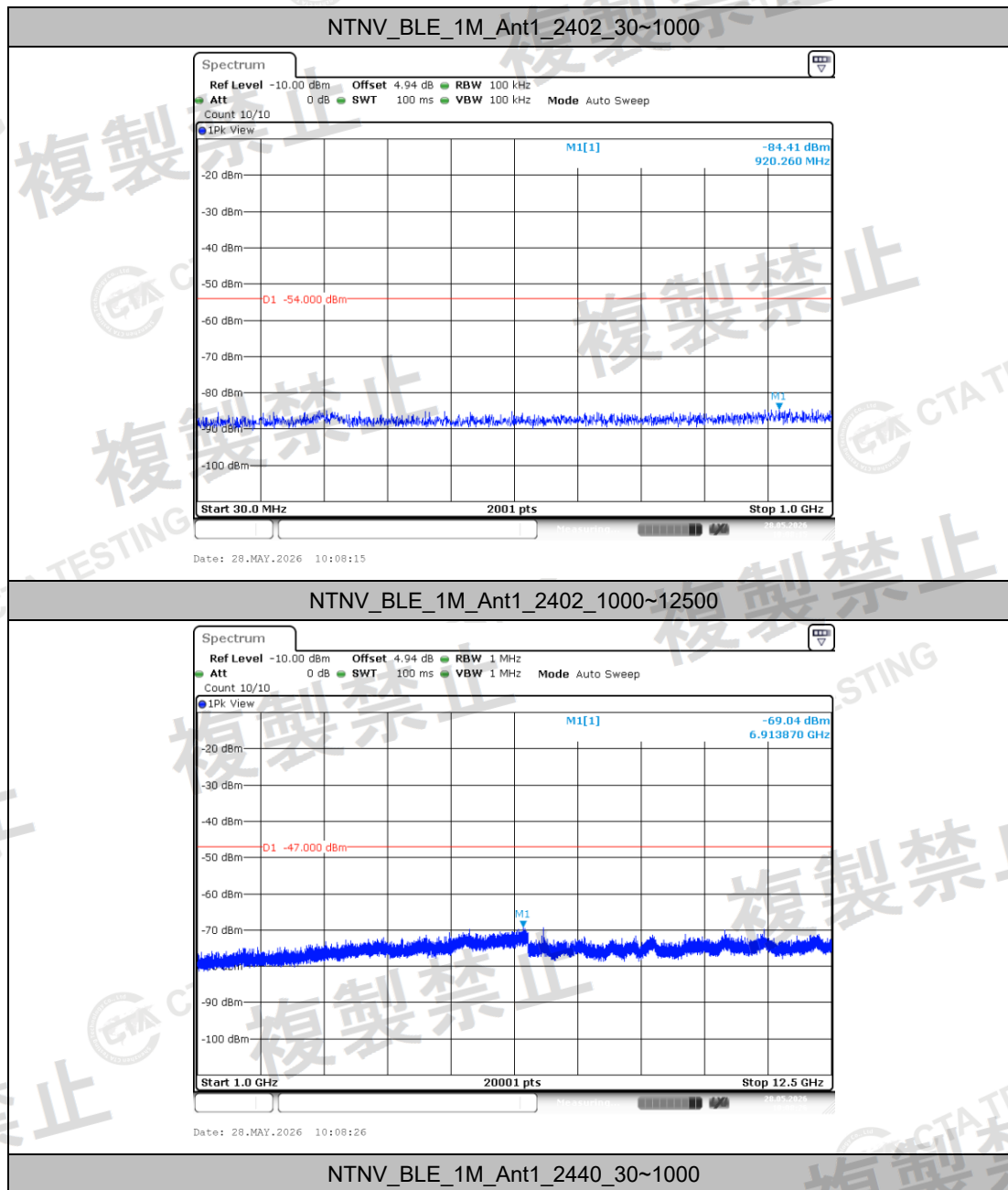
TestCondition	TestMode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~1000	920.26	-84.41	≤-54	0.0036 2	≤4	PASS
				1000~12500	6913.8 7	-69.04	≤-47	0.1247 4	≤20	PASS
			2440	30~1000	236.26	-83.46	≤-54	0.0045 1	≤4	PASS
				1000~12500	6579.8 1	-69.03	≤-47	0.1250 3	≤20	PASS
			2480	30~1000	916.38	-83.37	≤-54	0.0046 0	≤4	PASS
				1000~12500	6855.2 2	-69.54	≤-47	0.11117	≤20	PASS



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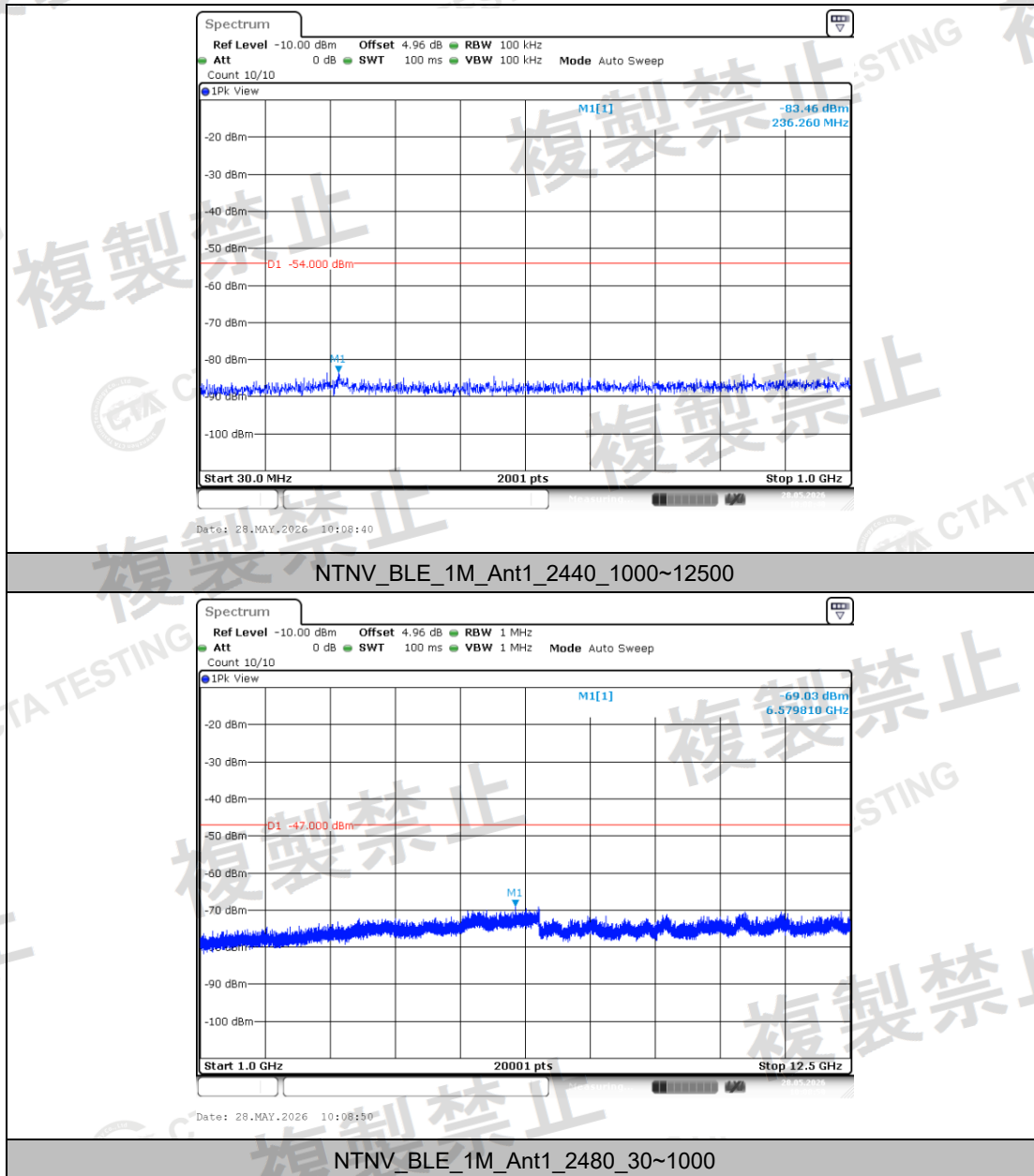
Test Graphs





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