

Appendix RF Test Data for BR-EDR

Company : Artec Co.,Ltd.

EUT : microphone with built-in speaker

Model Number : 52313

Report No. : CTA26040700802

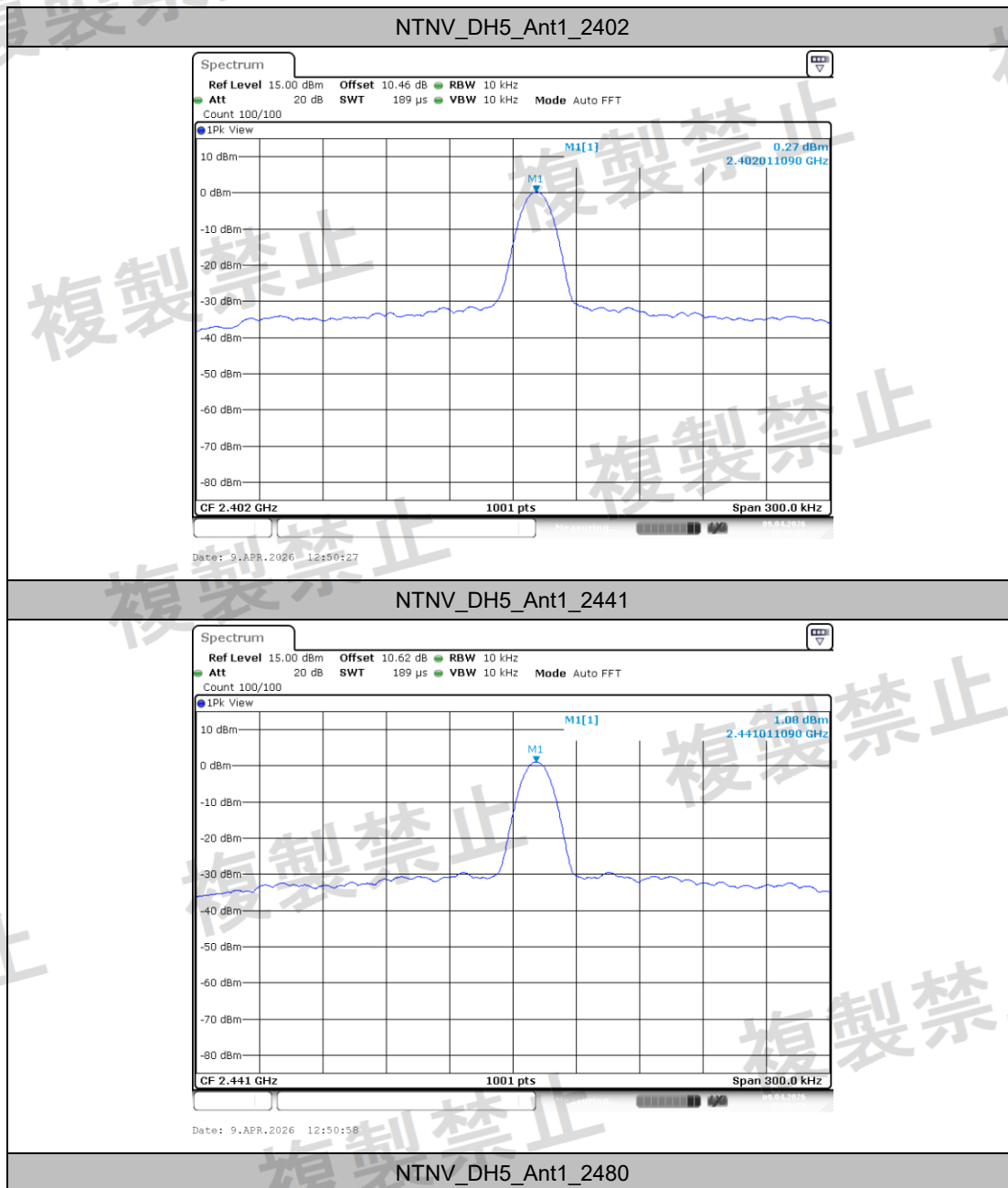
Reviewed By : Eric Wang

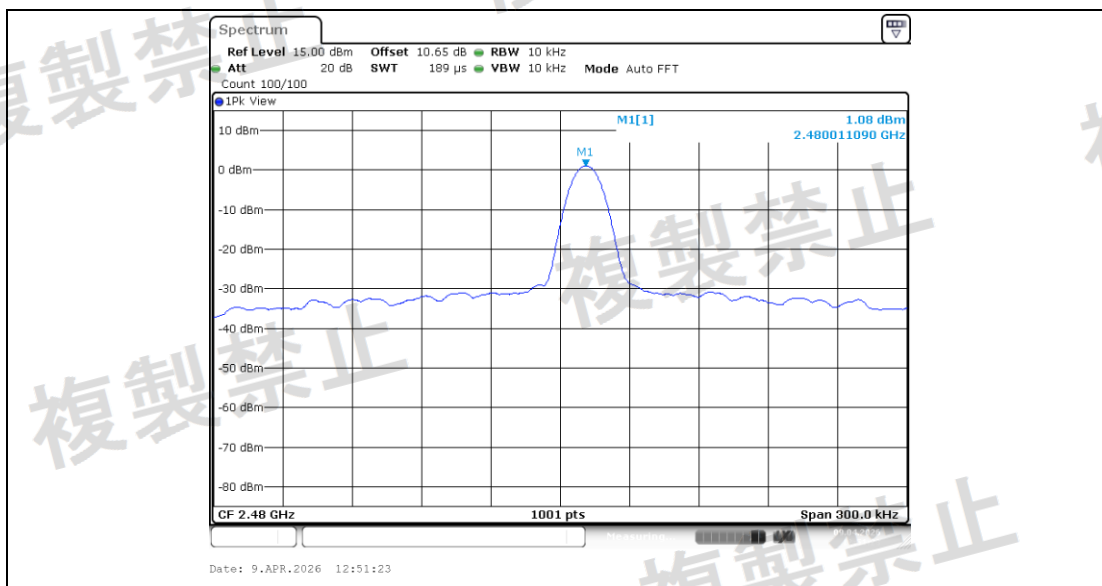
Appendix A: Frequency_Error

Test Result

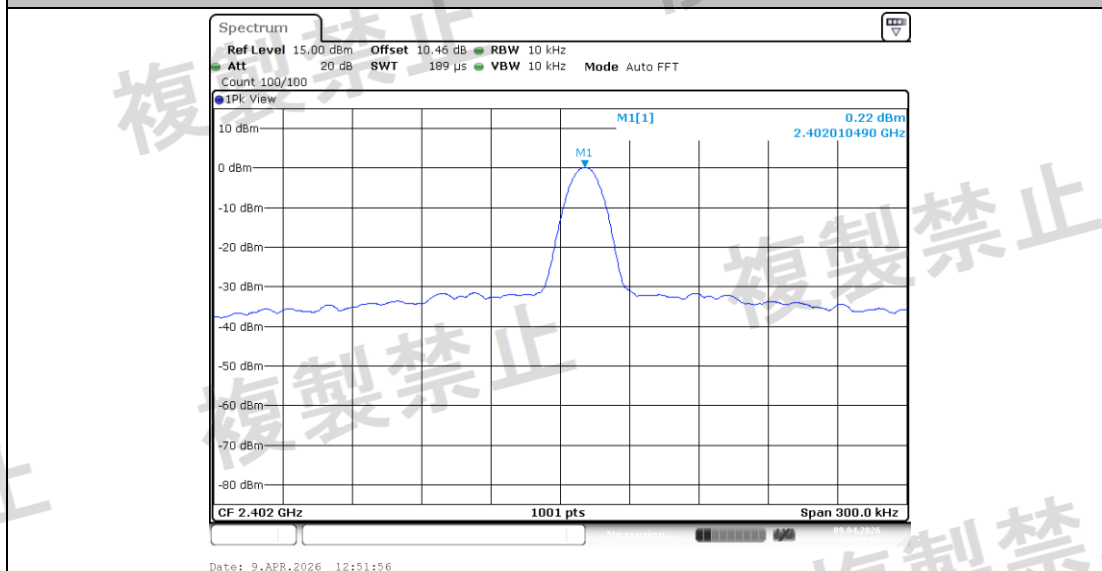
Test Condition	Test Mode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTNV	DH5	Ant1	2402	4.61699	±50	PASS
			2441	4.54322	±50	PASS
			2480	4.47177	±50	PASS
	2DH5	Ant1	2402	4.36719	±50	PASS
			2441	4.42032	±50	PASS
			2480	4.35081	±50	PASS
	3DH5	Ant1	2402	4.36719	±50	PASS
			2441	4.42032	±50	PASS
			2480	4.35081	±50	PASS

Test Graphs

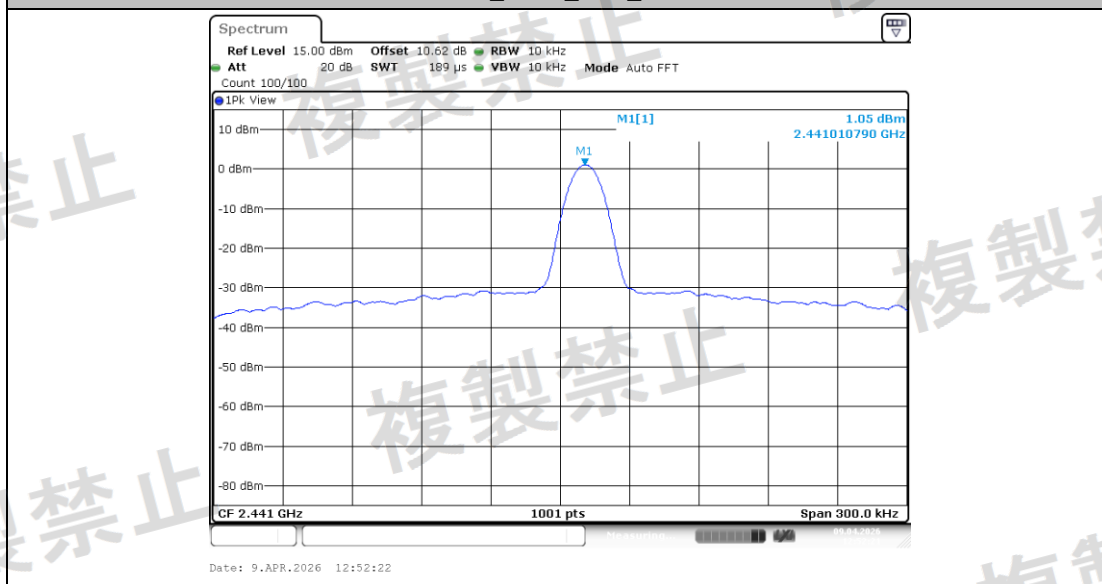


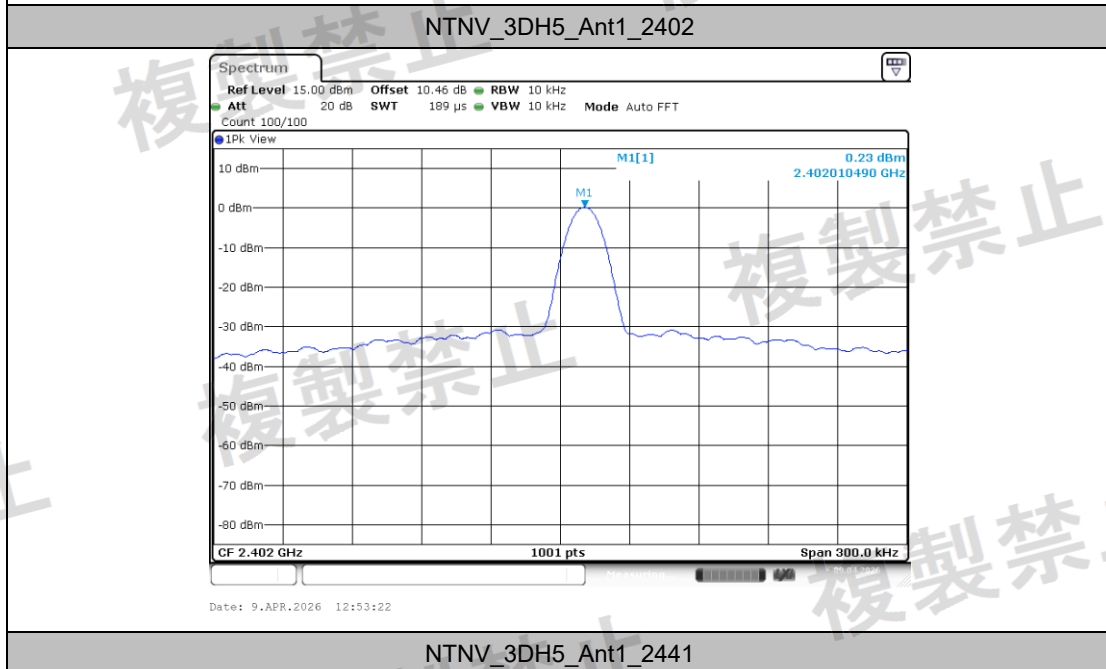
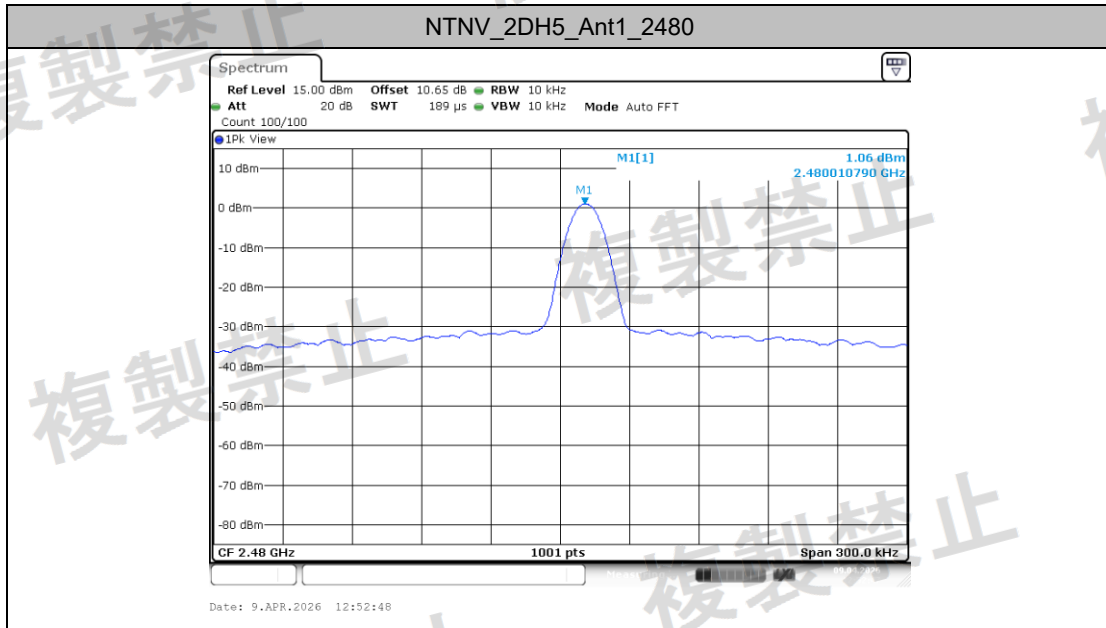


NTVN_2DH5_Ant1_2402

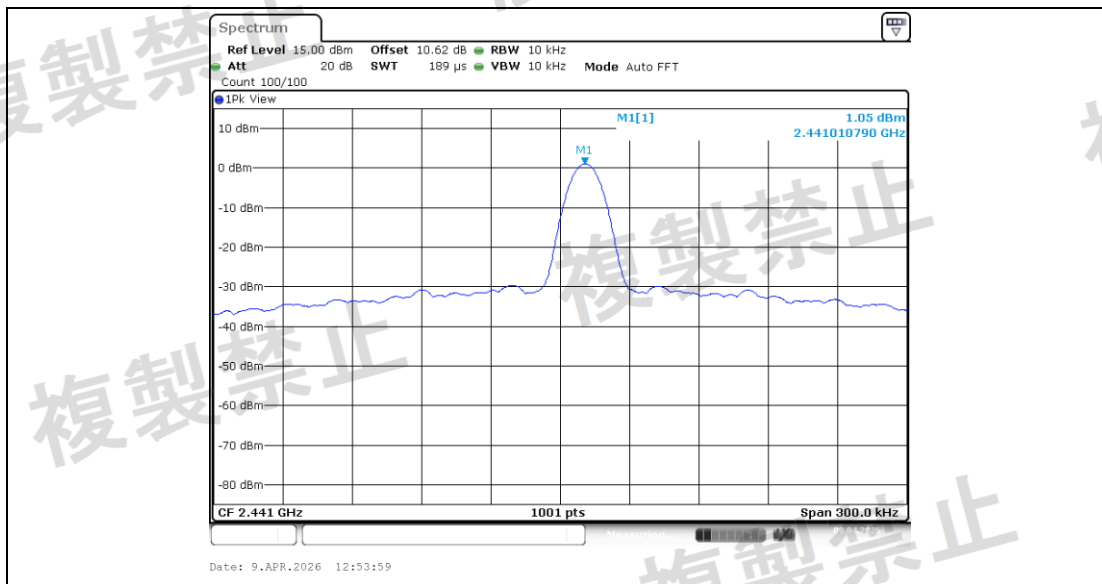


NTVN_2DH5_Ant1_2441

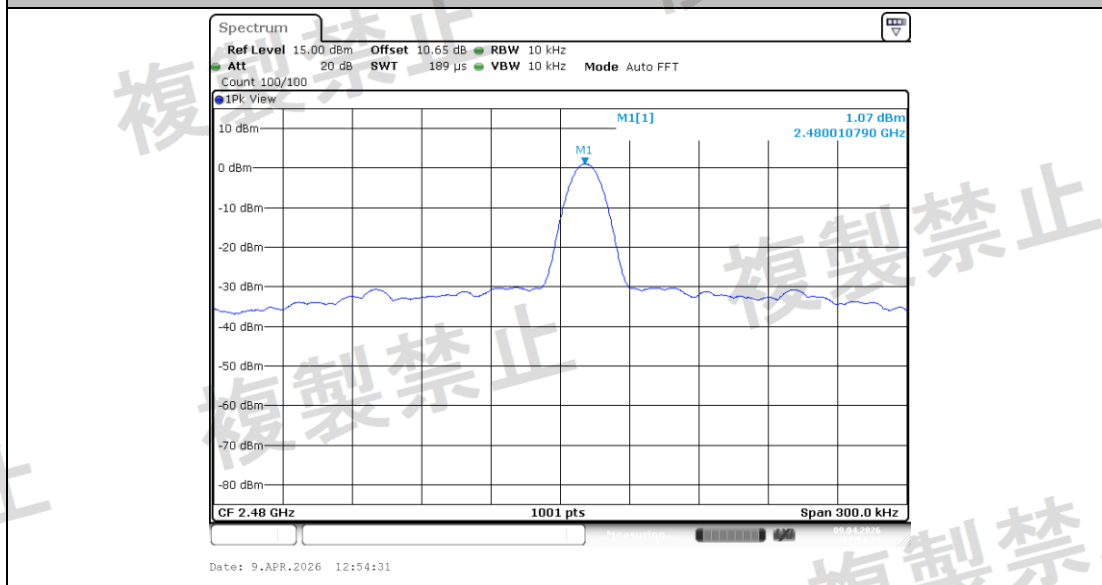




NTNV_3DH5_Ant1_2441



NTNV_3DH5_Ant1_2480

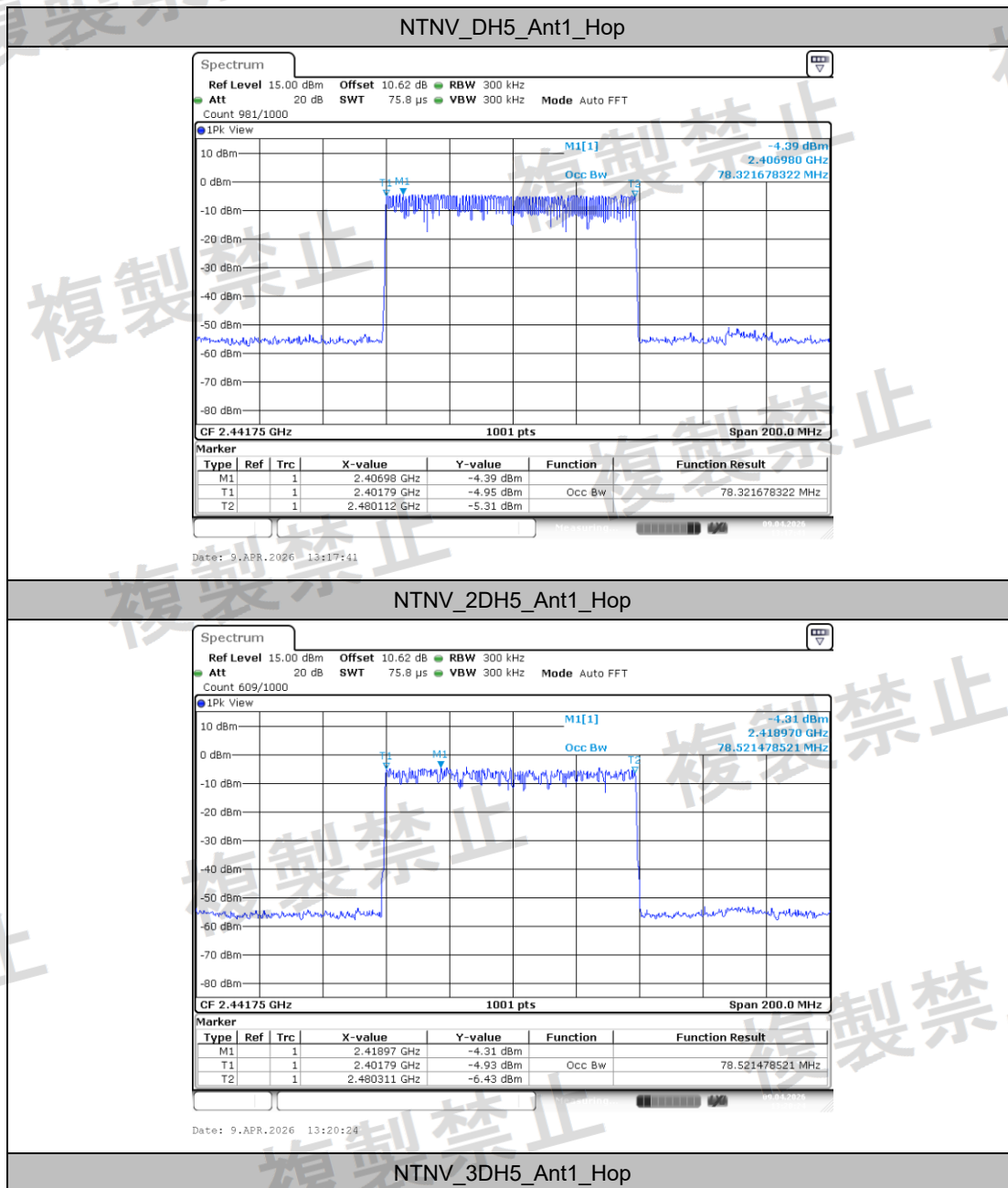


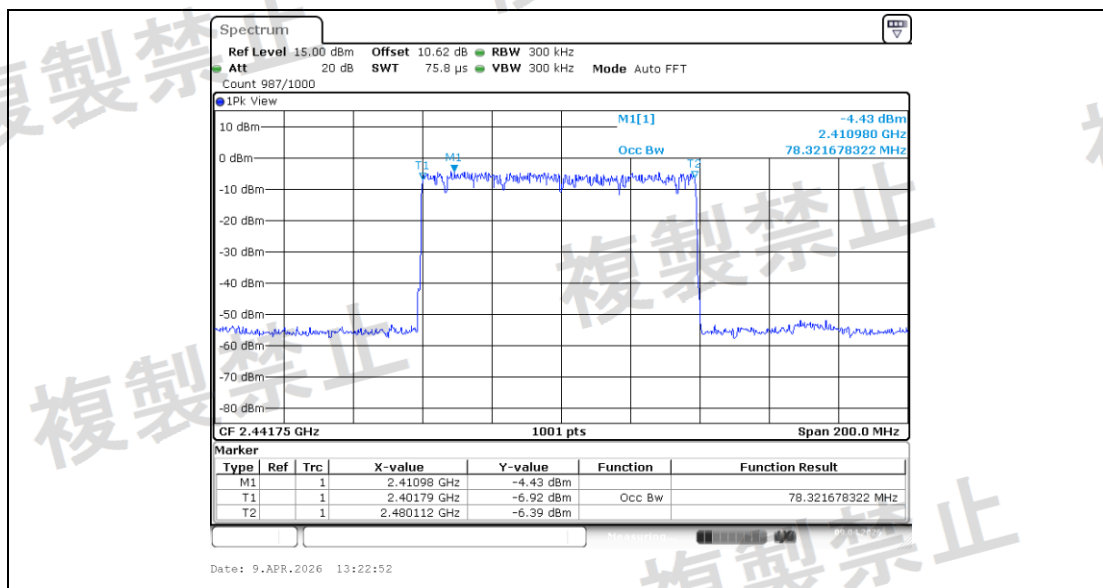
Appendix B: Occupied Bandwidth

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	78.521	≤83.5	PASS
	3DH5	Ant1	Hop	78.322	≤83.5	PASS

Test Graphs



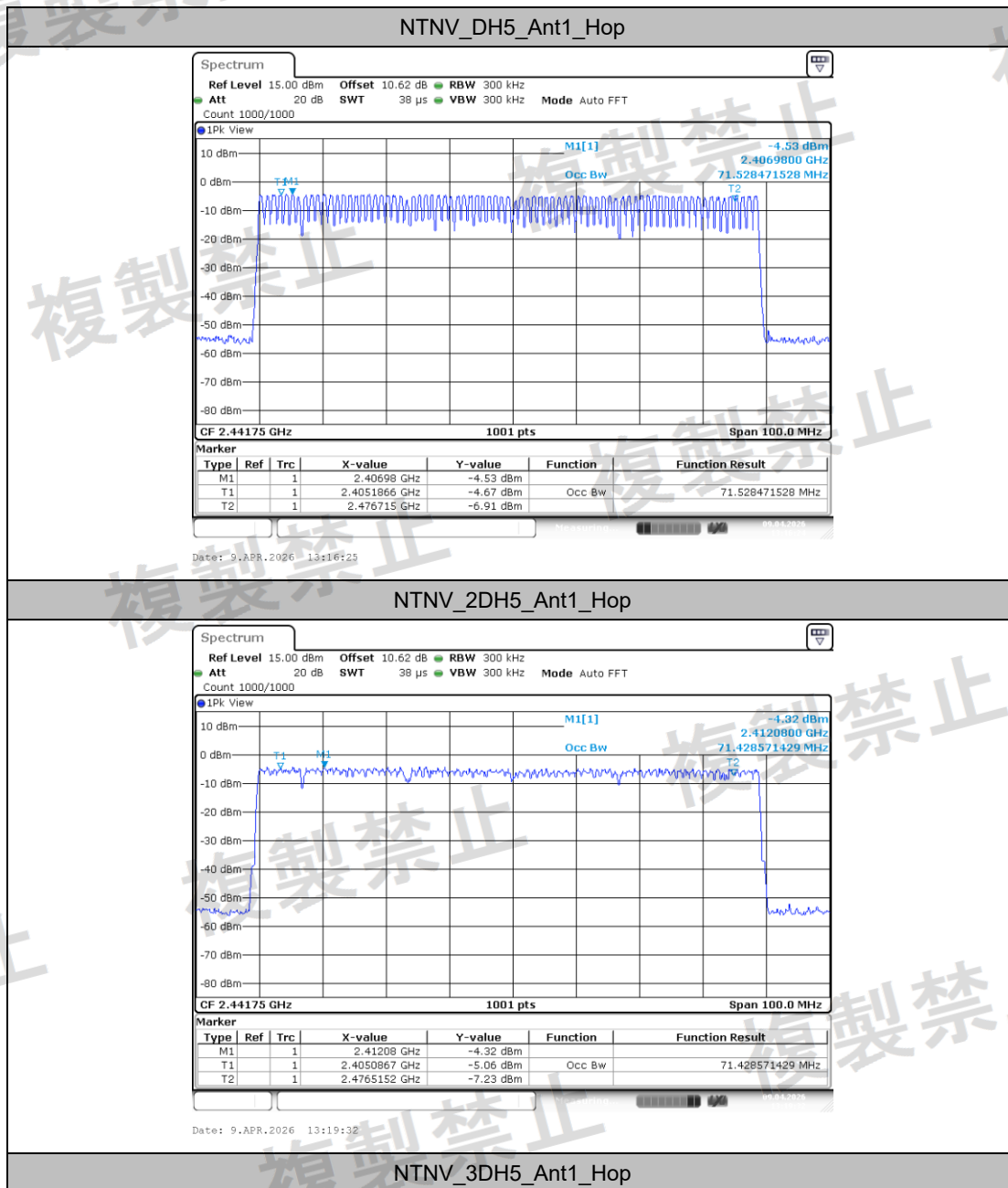


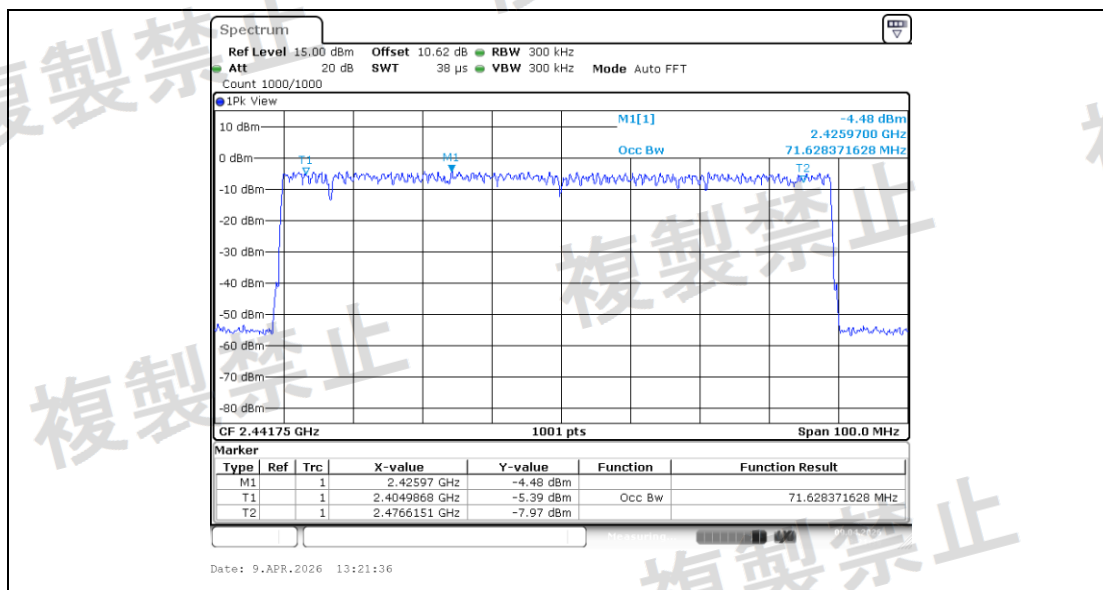
Appendix C: Spread Bandwidth

Test Result

Test Condition	Test Mode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Spread Factor	Limit	Verdict
NTNV	DH5	Ant1	Hop	71.528	≥0.5	71.528	>5	PASS
	2DH5	Ant1	Hop	71.429	≥0.5	71.429	>5	PASS
	3DH5	Ant1	Hop	71.628	≥0.5	71.628	>5	PASS

Test Graphs





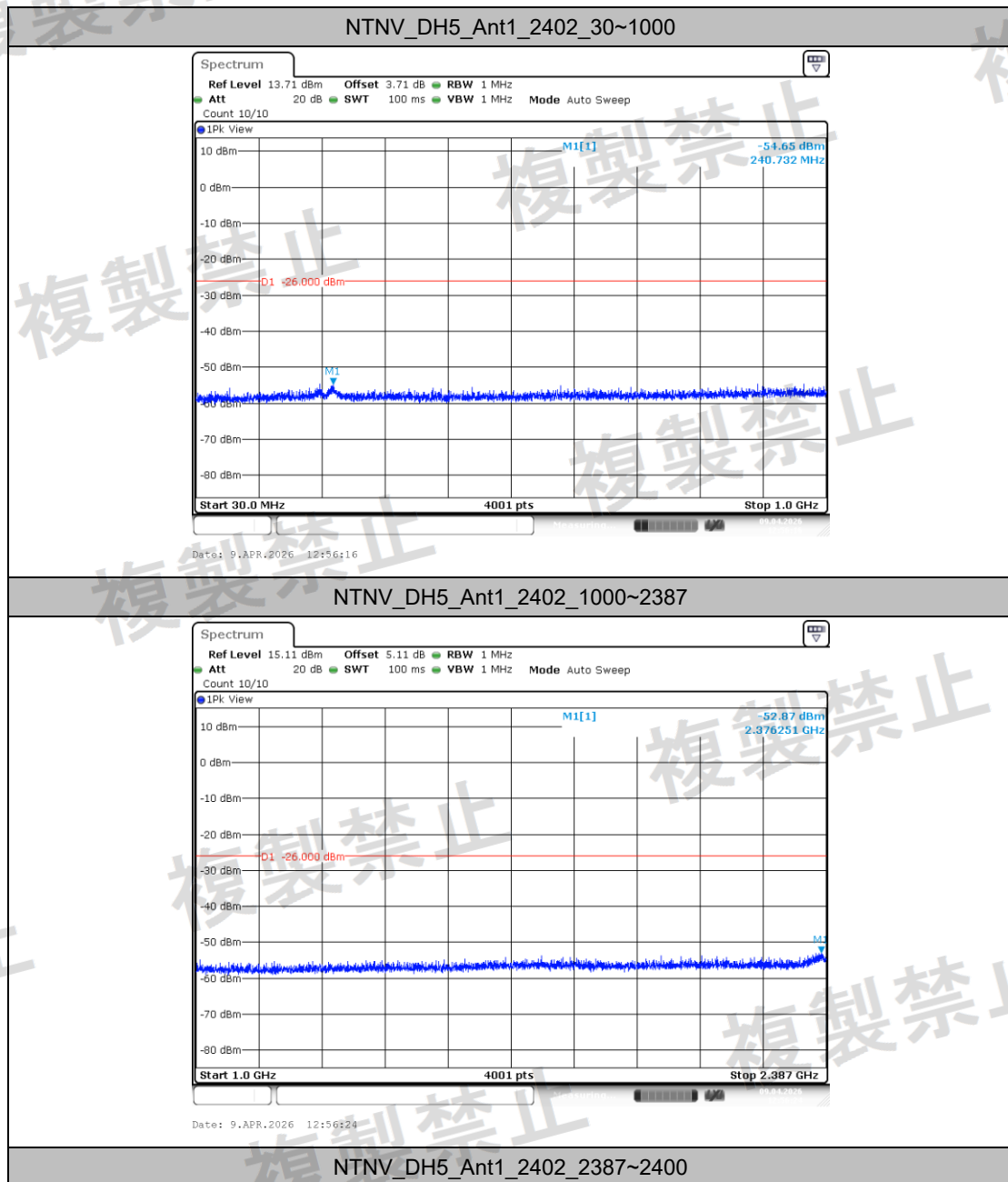
Appendix D: Spurious Emission of TX

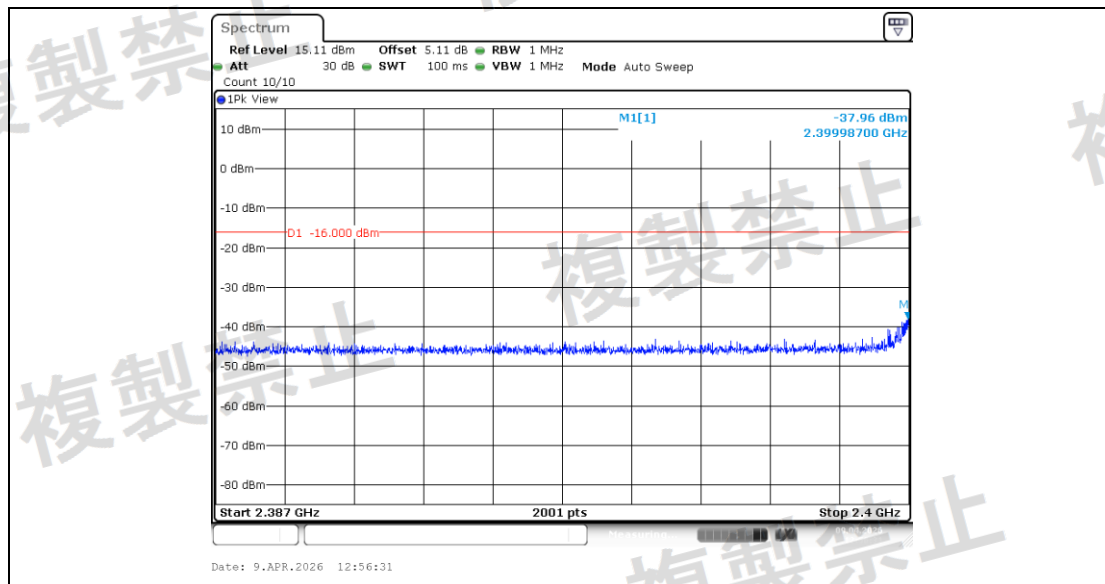
Test Result

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	240.73	-54.65	≤-26	0.00343	≤2.5	PASS
				1000~2387	2376.25	-52.87	≤-26	0.00516	≤2.5	PASS
				2387~2400	2399.99	-37.96	≤-16	0.15996	≤25	PASS
				2483.5~2496.5	2493.17	-42.71	≤-16	0.05358	≤25	PASS
				2496.5~13000	5224.78	-37.59	≤-26	0.17418	≤2.5	PASS
			2441	30~1000	949.32	-53.77	≤-26	0.00420	≤2.5	PASS
				1000~2387	2118.62	-53.74	≤-26	0.00423	≤2.5	PASS
				2387~2400	2395.70	-43.47	≤-16	0.04498	≤25	PASS
				2483.5~2496.5	2487.63	-42.76	≤-16	0.05297	≤25	PASS
				2496.5~13000	4881.84	-39.69	≤-26	0.10740	≤2.5	PASS
			2480	30~1000	824.92	-49.46	≤-26	0.01132	≤2.5	PASS
				1000~2387	2202.18	-53.53	≤-26	0.00444	≤2.5	PASS
				2387~2400	2399.67	-42.79	≤-16	0.05260	≤25	PASS
				2483.5~2496.5	2490.27	-42.90	≤-16	0.05129	≤25	PASS
				2496.5~13000	4960.10	-40.26	≤-26	0.09419	≤2.5	PASS
	2DH5	Ant1	2402	30~1000	927.74	-54.40	≤-26	0.00363	≤2.5	PASS
				1000~2387	2363.77	-52.87	≤-26	0.00516	≤2.5	PASS
				2387~2400	2400.00	-30.33	≤-16	0.92683	≤25	PASS
				2483.5~2496.5	2486.72	-43.28	≤-16	0.04699	≤25	PASS
				2496.5~13000	4803.59	-39.69	≤-26	0.10740	≤2.5	PASS
			2441	30~1000	954.17	-54.89	≤-26	0.00324	≤2.5	PASS
				1000~2387	1933.10	-53.81	≤-26	0.00416	≤2.5	PASS
				2387~2400	2399.98	-43.63	≤-16	0.04335	≤25	PASS
				2483.5~2496.5	2492.25	-42.80	≤-16	0.05248	≤25	PASS
				2496.5~13000	4882.37	-37.87	≤-26	0.16331	≤2.5	PASS
			2480	30~1000	240.25	-53.61	≤-26	0.00436	≤2.5	PASS
				1000~2387	1820.06	-53.33	≤-26	0.00465	≤2.5	PASS
				2387~2400	2389.48	-43.68	≤-16	0.04285	≤25	PASS
				2483.5~2496.5	2484.76	-41.79	≤-16	0.06622	≤25	PASS
				2496.5~13000	4960.10	-37.71	≤-26	0.16943	≤2.5	PASS
	3DH5	Ant1	2402	30~1000	935.25	-54.48	≤-26	0.00356	≤2.5	PASS
				1000~2387	2376.94	-52.12	≤-26	0.00614	≤2.5	PASS
				2387~2400	2400.00	-30.16	≤-16	0.96383	≤25	PASS
				2483.5~2496.5	2486.95	-43.63	≤-16	0.04335	≤25	PASS
				2496.5~13000	4804.12	-38.77	≤-26	0.13274	≤2.5	PASS
			2441	30~1000	749.50	-54.32	≤-26	0.00370	≤2.5	PASS
				1000~2387	1511.46	-53.61	≤-26	0.00436	≤2.5	PASS

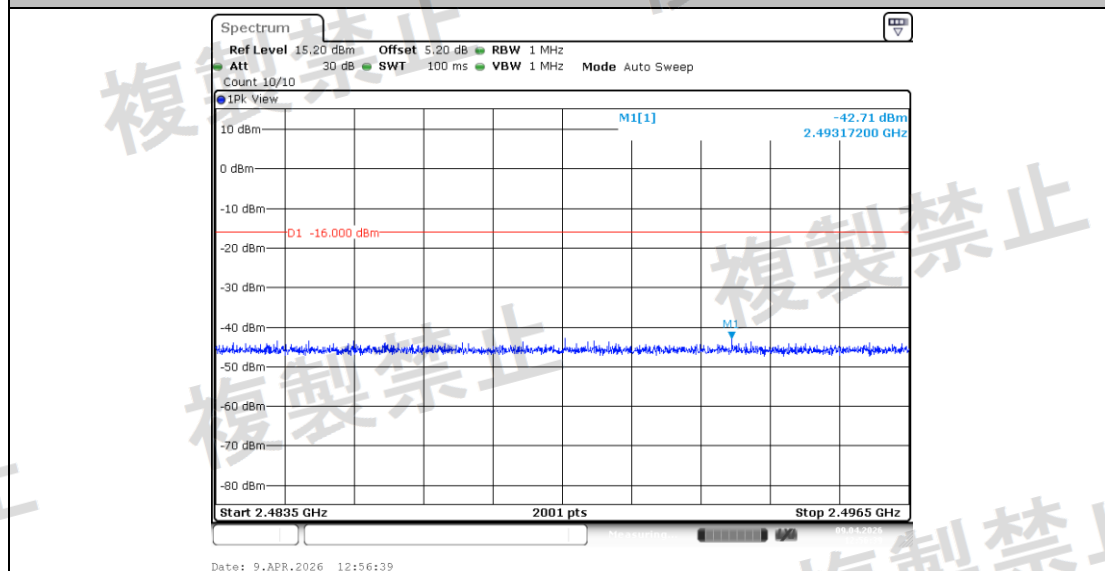
			2387~2400	2388.51	-43.77	≤-16	0.04198	≤25	PASS
			2483.5~2496.5	2490.05	-43.07	≤-16	0.04932	≤25	PASS
			2496.5~13000	4881.84	-39.86	≤-26	0.10328	≤2.5	PASS
		2480	30~1000	786.60	-54.74	≤-26	0.00336	≤2.5	PASS
			1000~2387	1906.75	-52.73	≤-26	0.00533	≤2.5	PASS
			2387~2400	2387.01	-43.35	≤-16	0.04624	≤25	PASS
			2483.5~2496.5	2484.86	-42.85	≤-16	0.05188	≤25	PASS
			2496.5~13000	5224.78	-35.59	≤-26	0.27606	≤2.5	PASS

Test Graphs

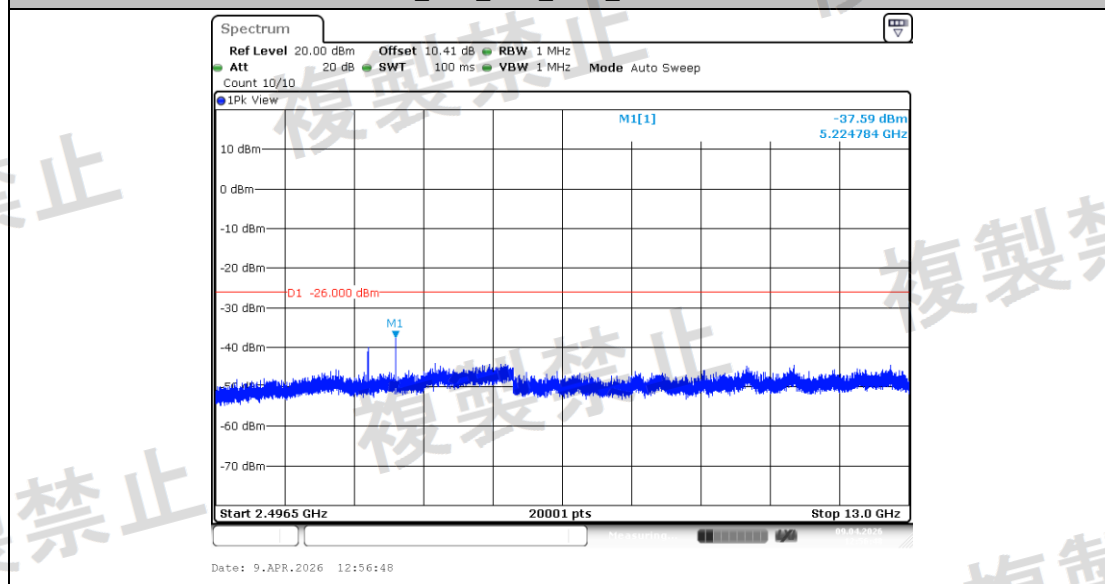


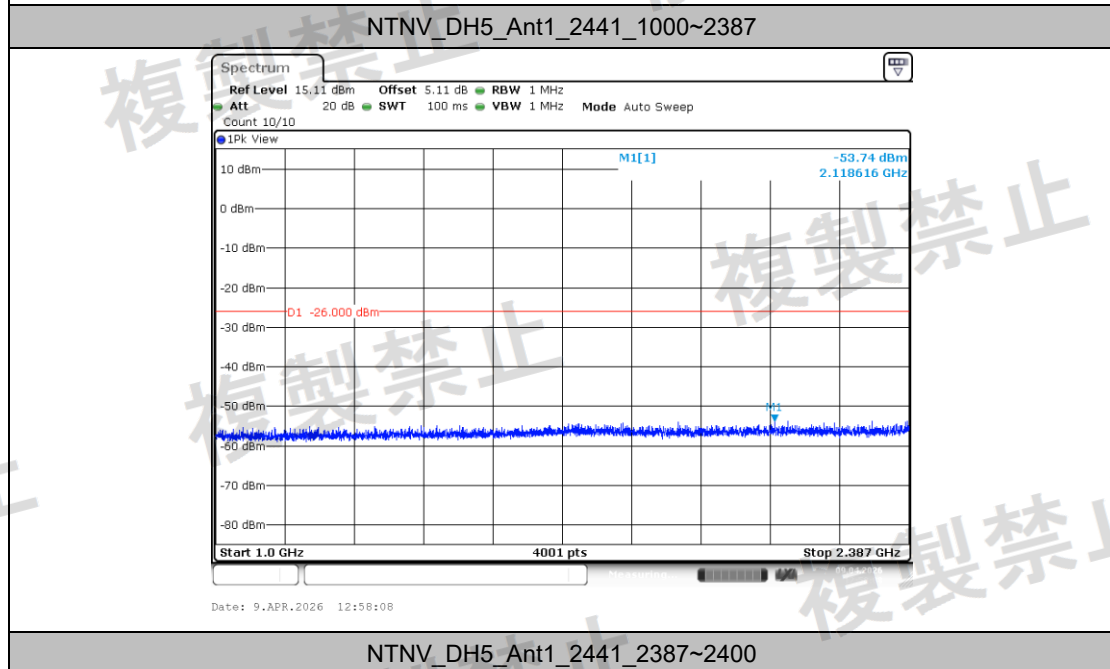
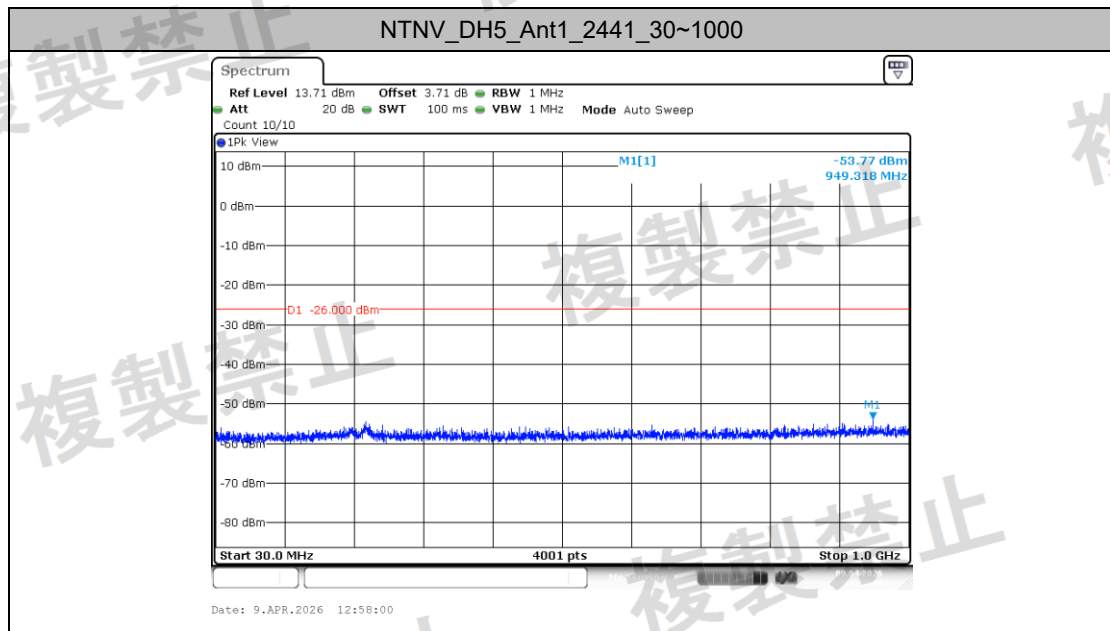


NTNV_DH5_Ant1_2402_2483.5~2496.5

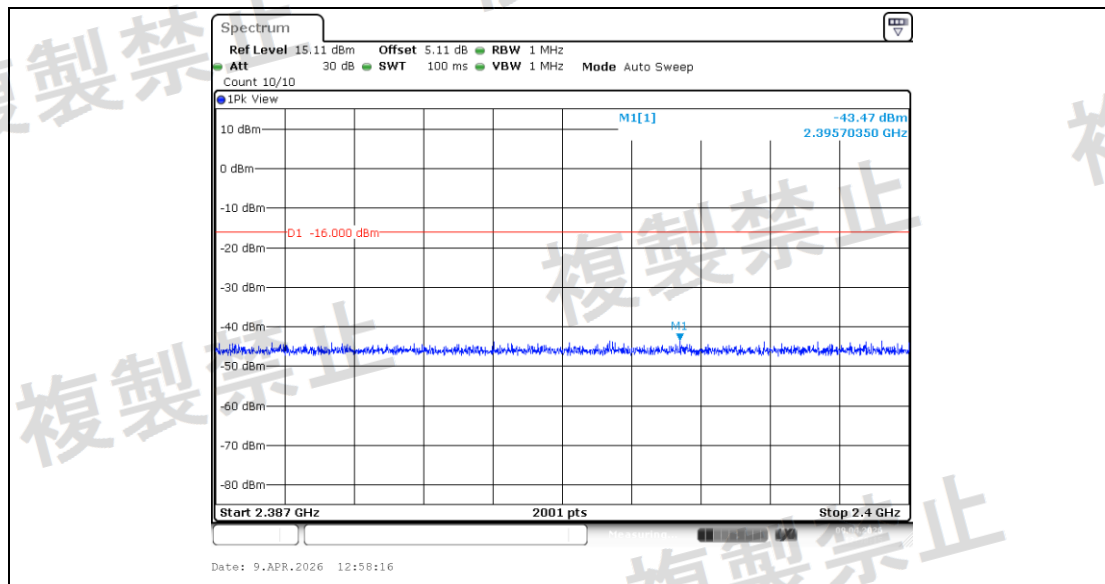


NTNV_DH5_Ant1_2402_2496.5~13000

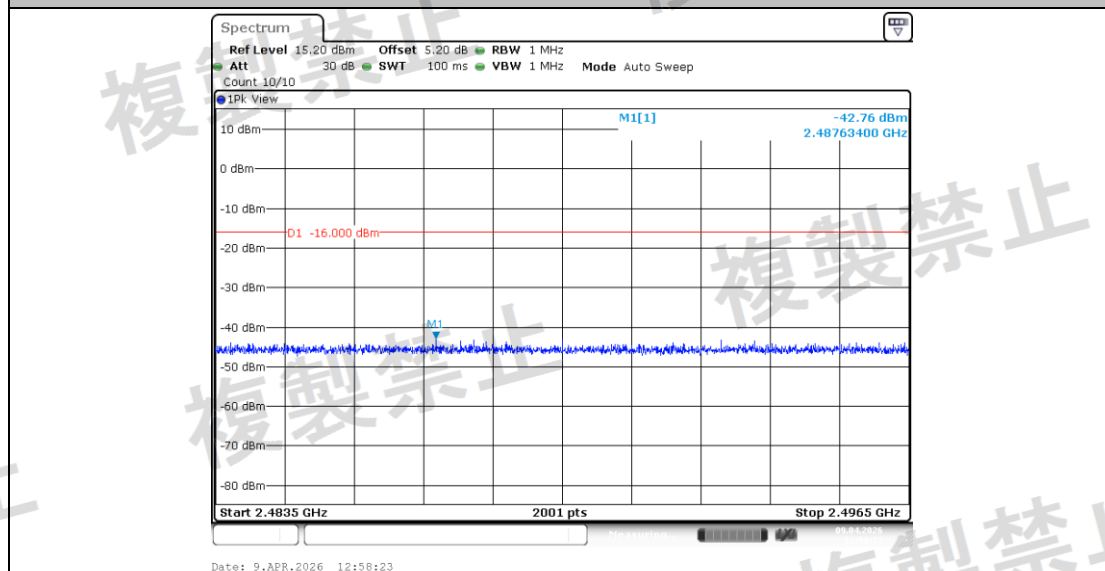




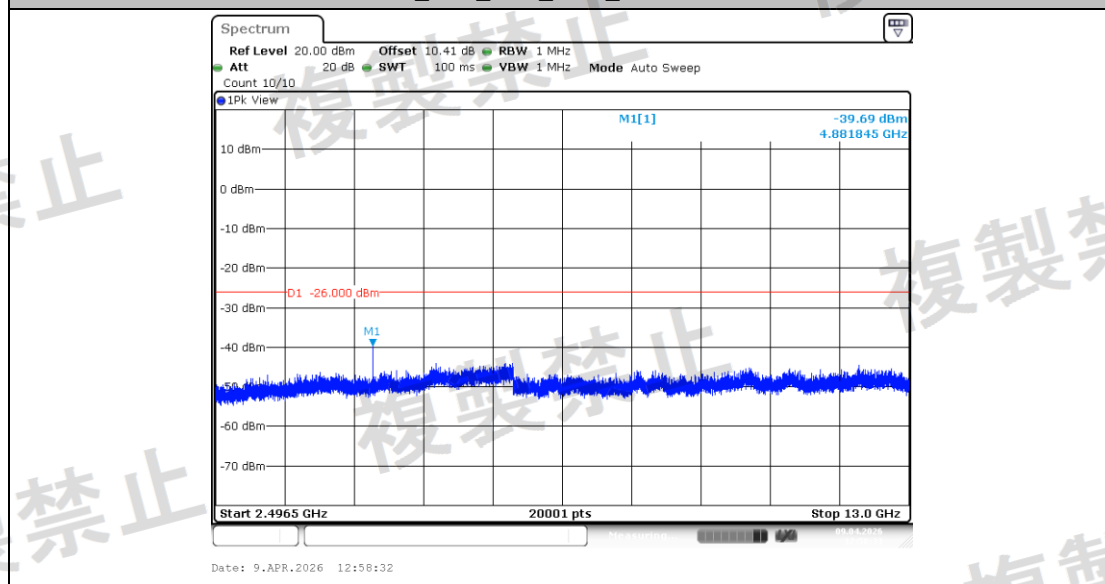
NTNV_DH5_Ant1_2441_2387~2400

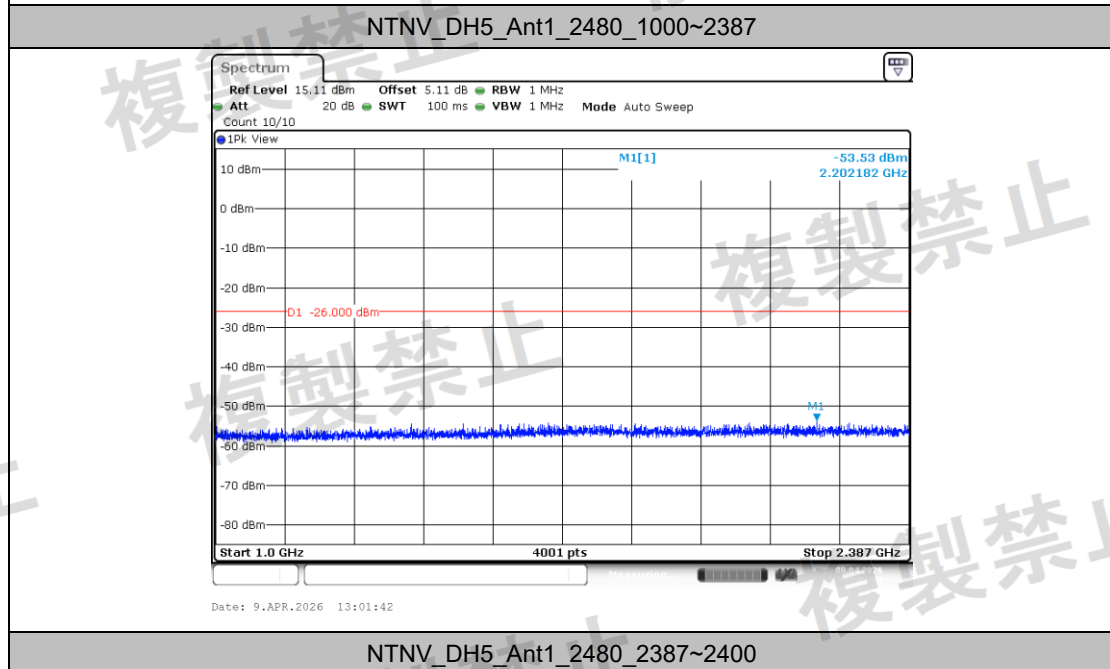
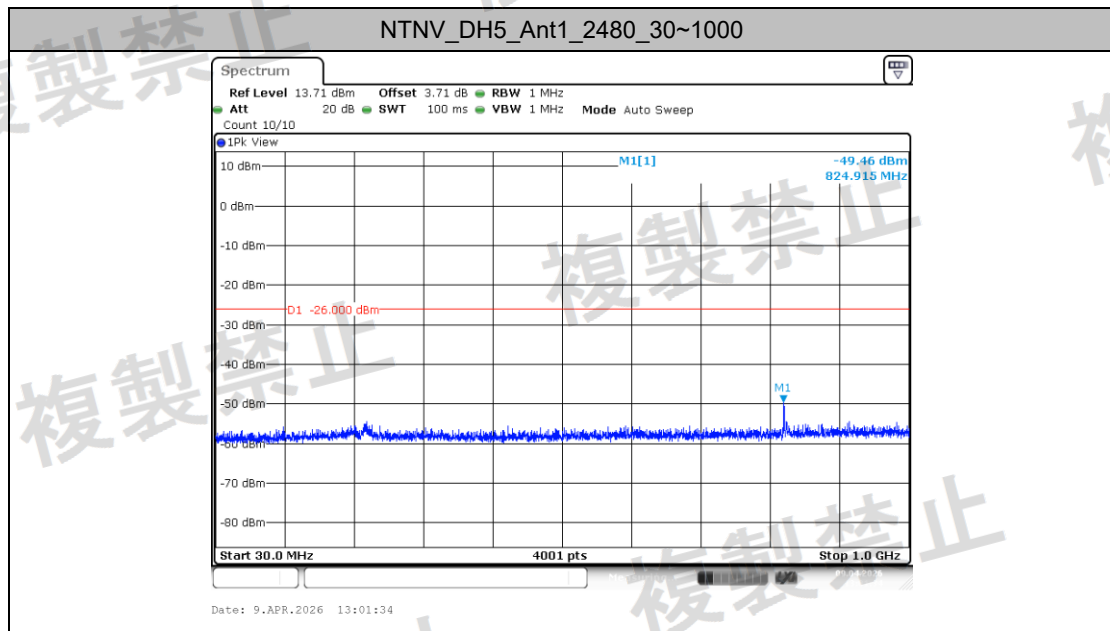


NTNV_DH5_Ant1_2441_2483.5~2496.5

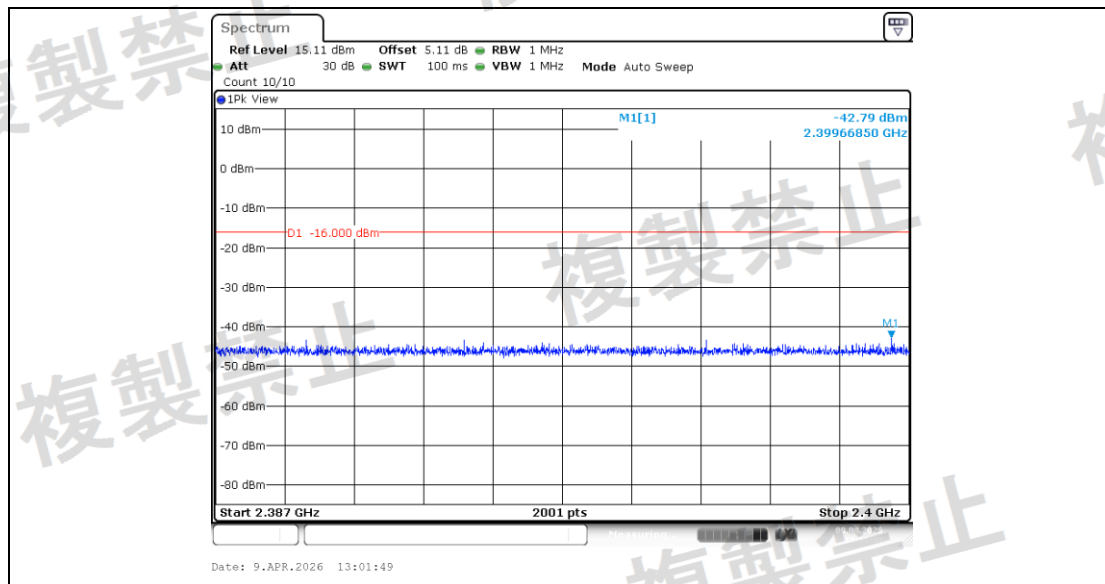


NTNV_DH5_Ant1_2441_2496.5~13000

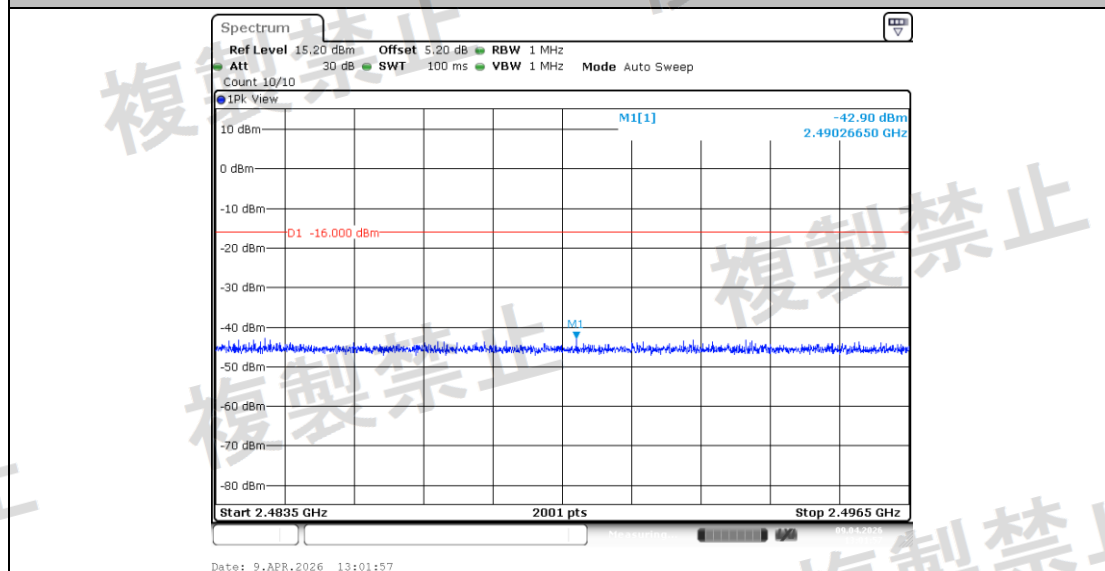




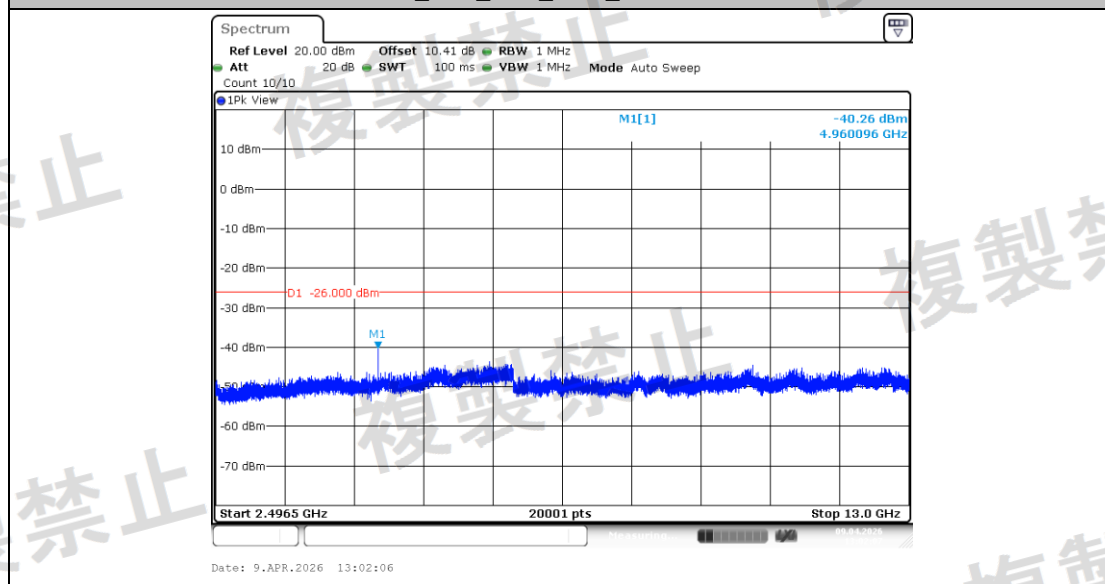
NTNV_DH5_Ant1_2480_2387~2400

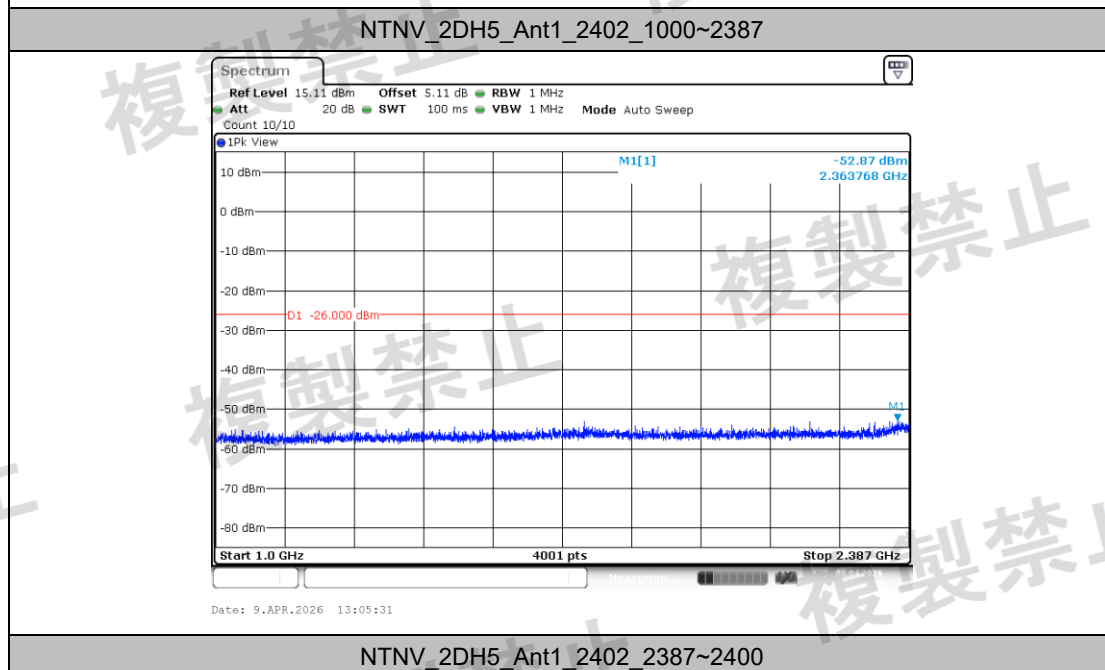
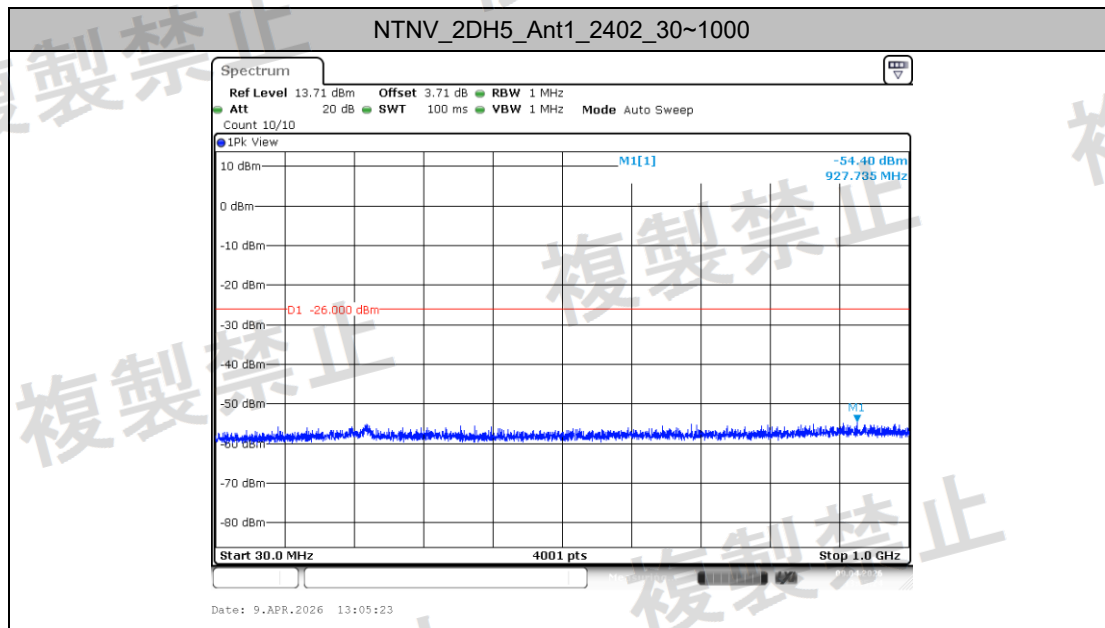


NTNV_DH5_Ant1_2480_2483.5~2496.5

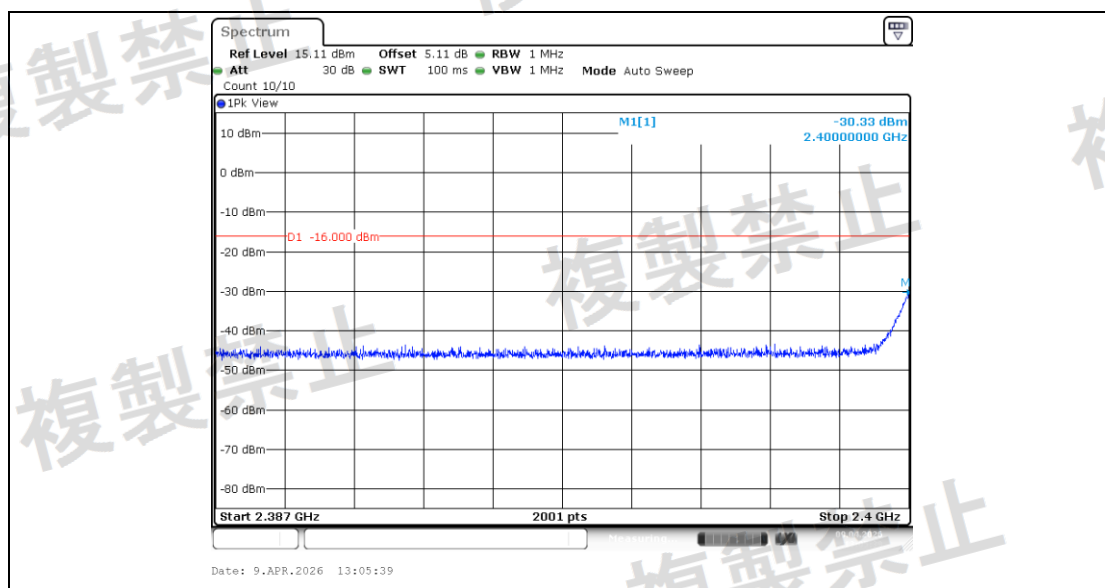


NTNV_DH5_Ant1_2480_2496.5~13000

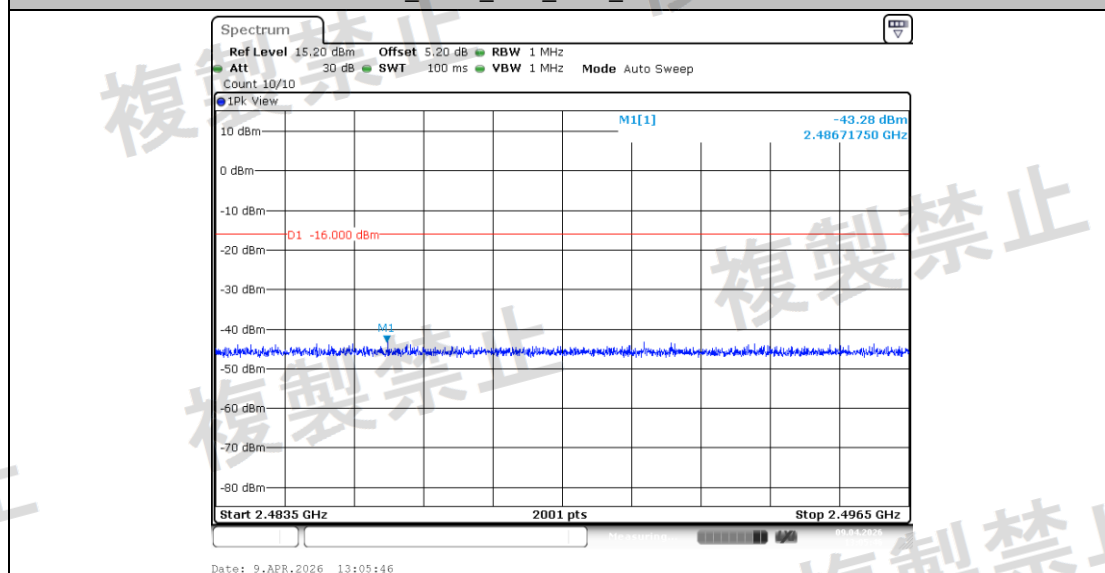




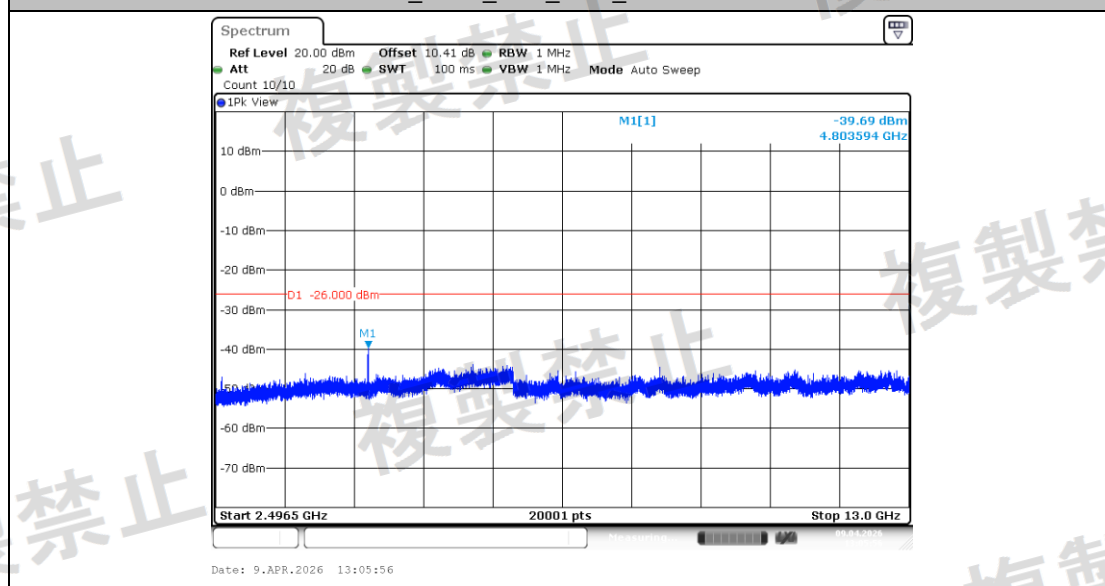
NTNV_2DH5_Ant1_2402_2387~2400

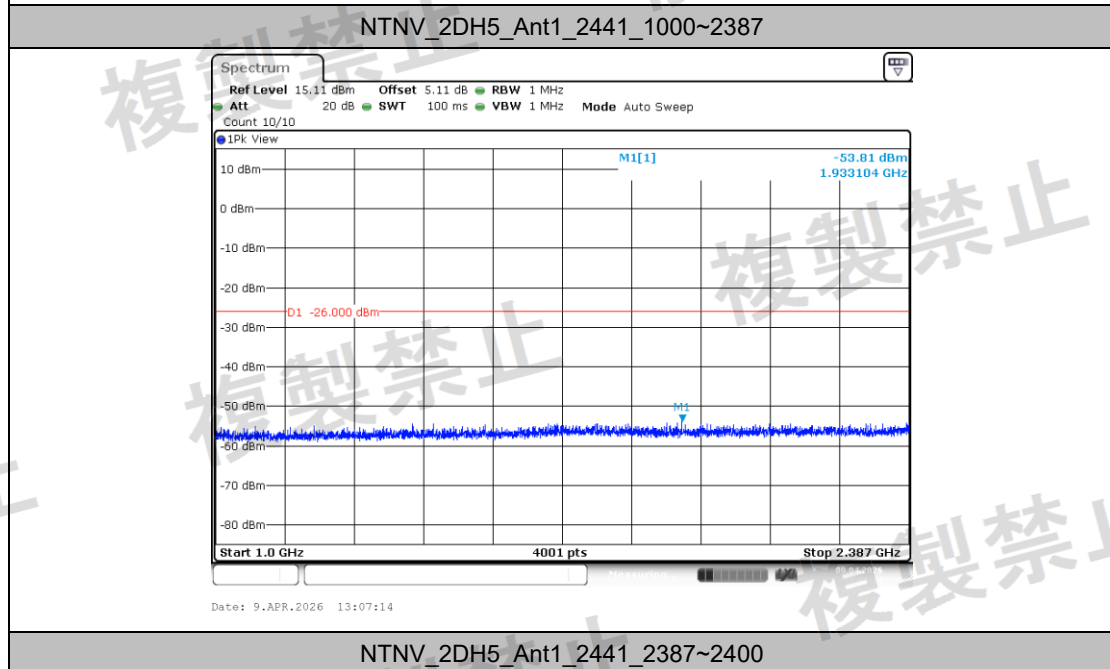
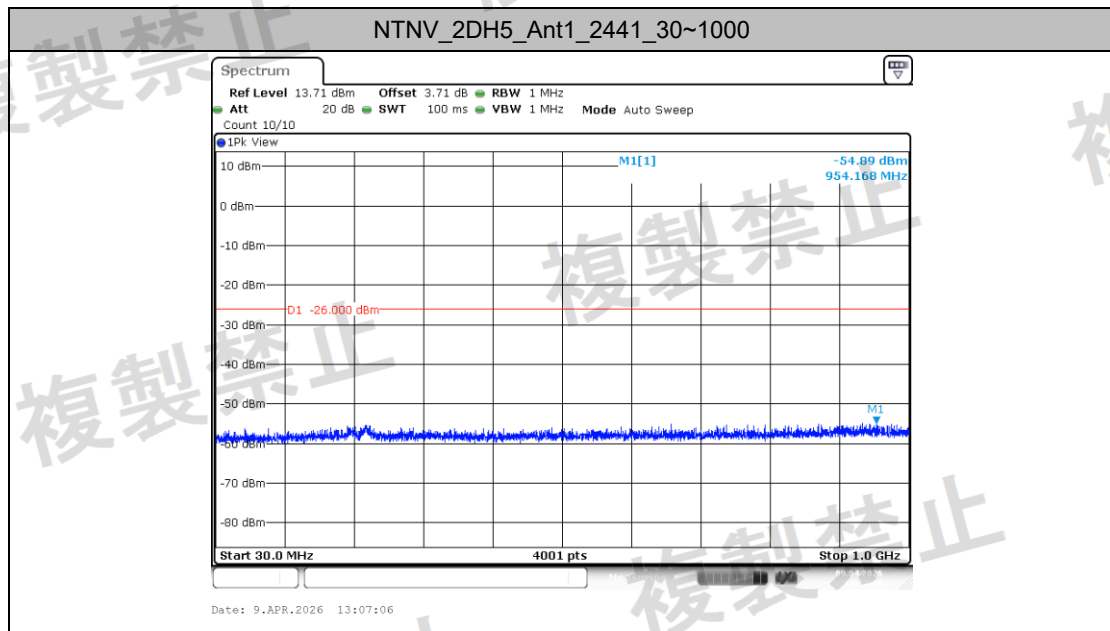


NTNV_2DH5_Ant1_2402_2483.5~2496.5

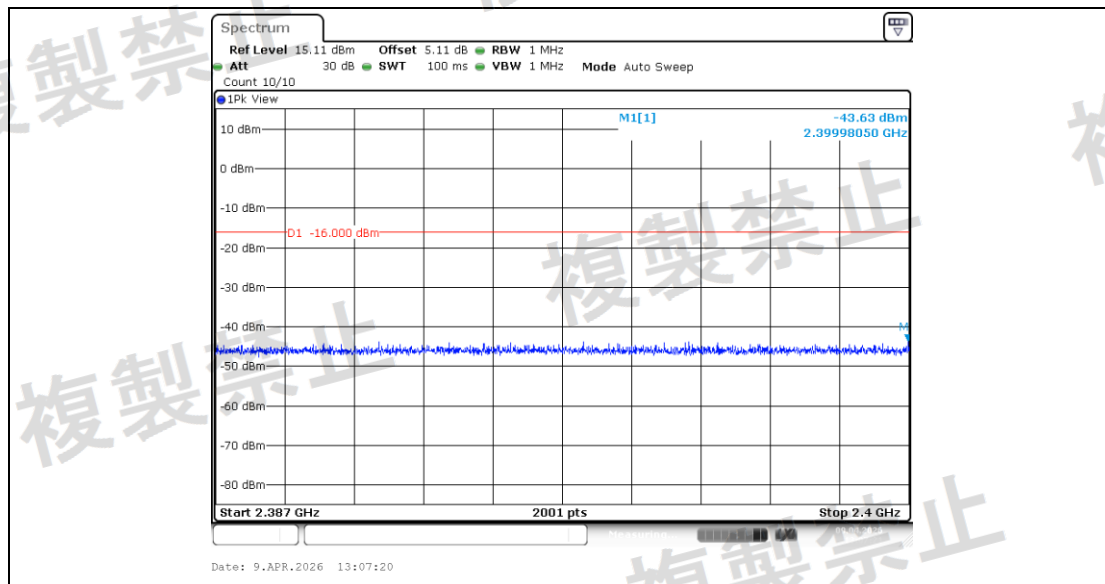


NTNV_2DH5_Ant1_2402_2496.5~13000

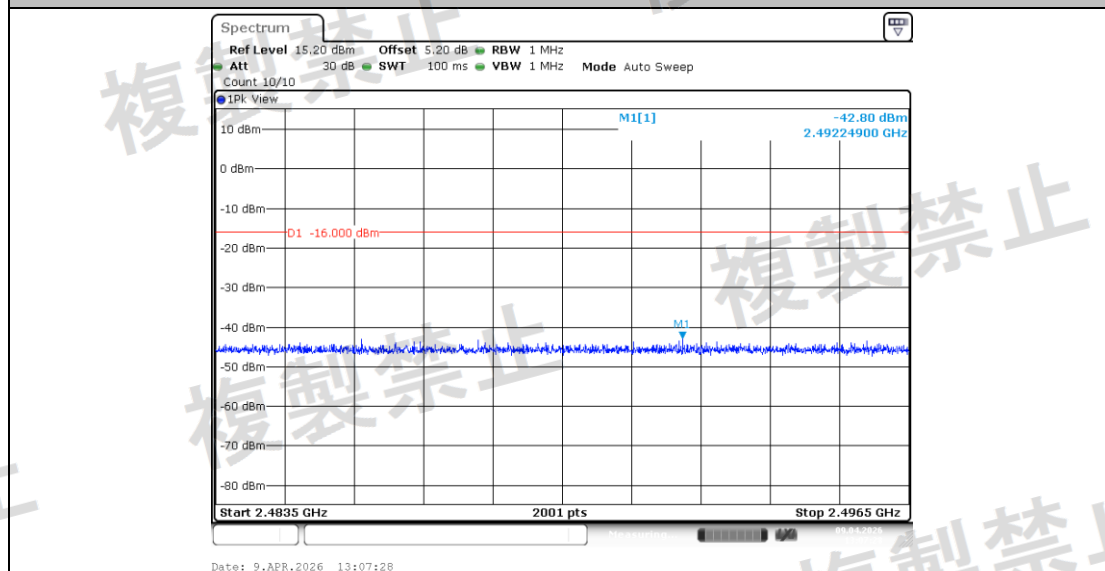




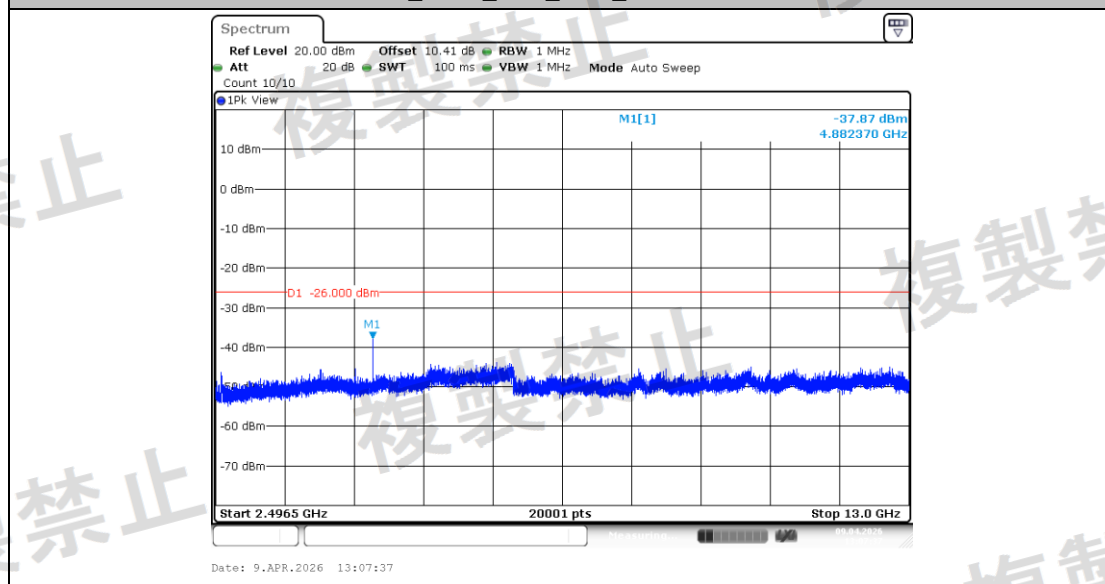
NTNV_2DH5_Ant1_2441_2387~2400

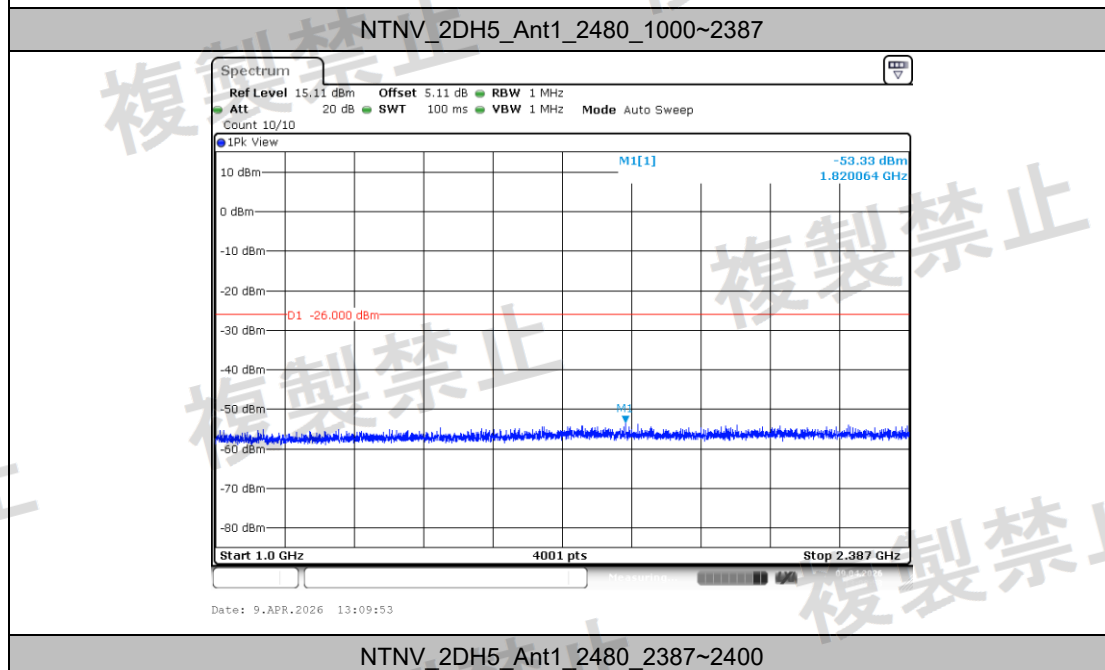
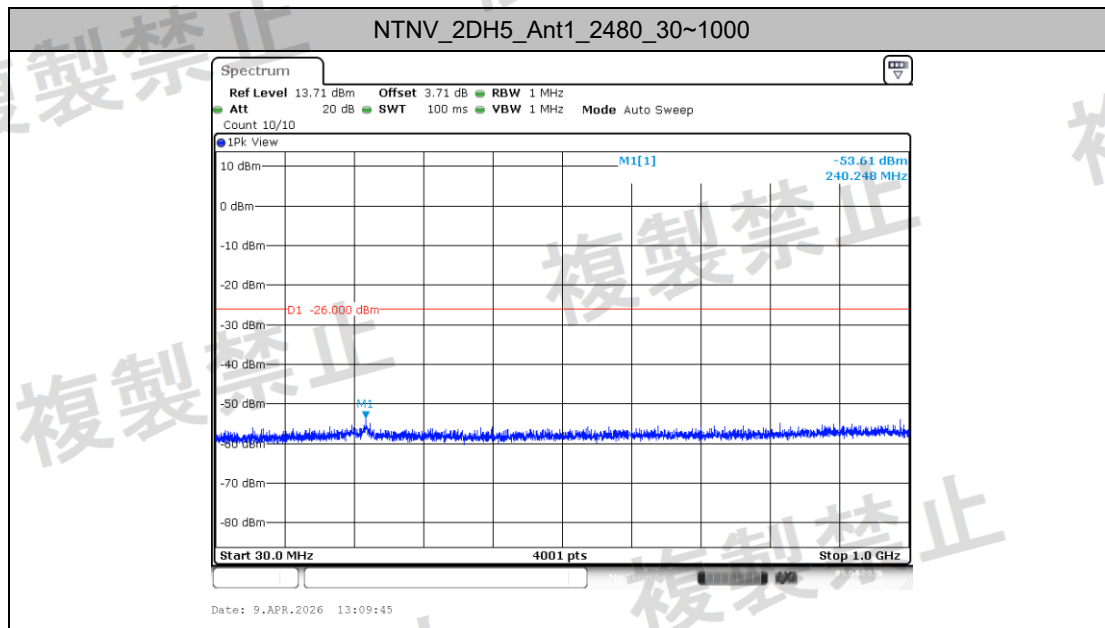


NTNV_2DH5_Ant1_2441_2483.5~2496.5

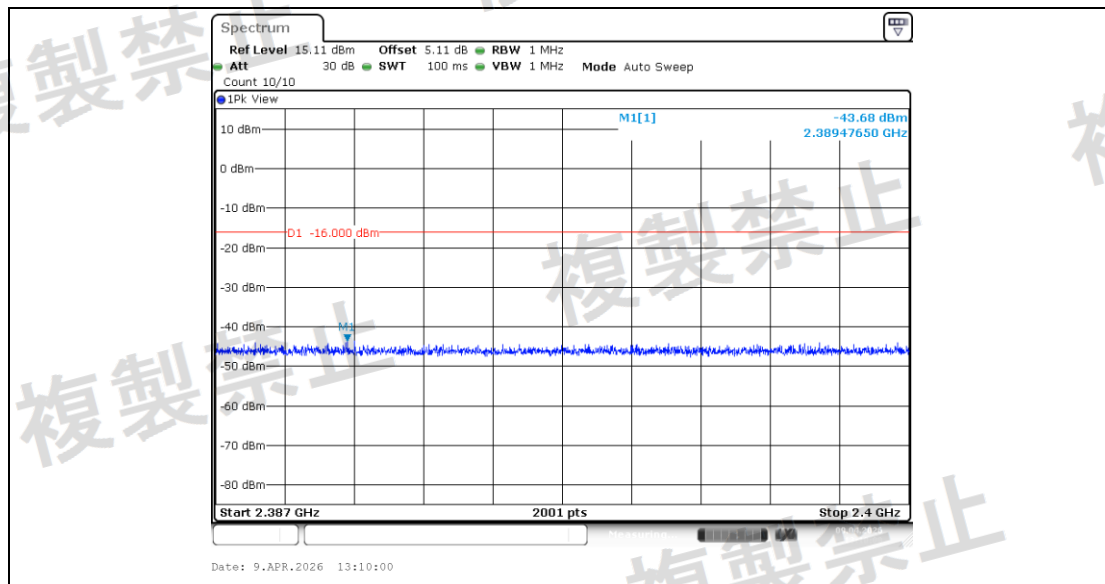


NTNV_2DH5_Ant1_2441_2496.5~13000

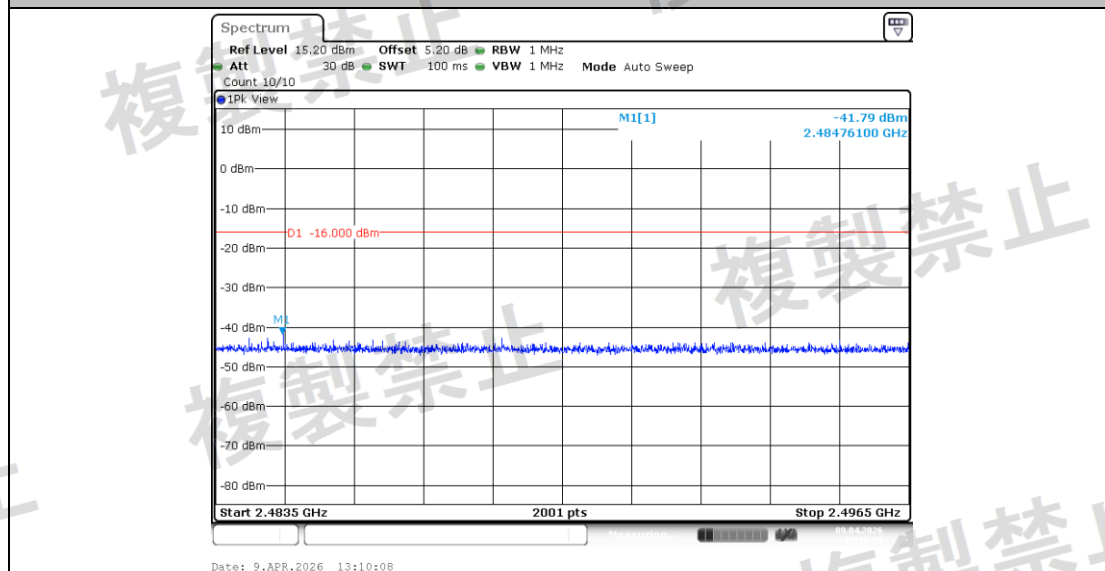




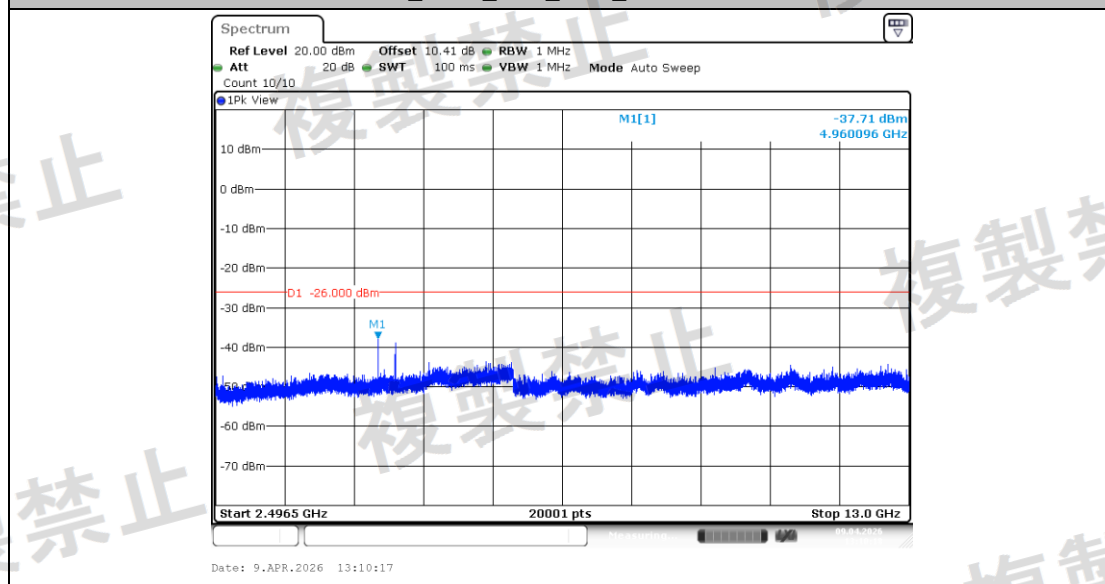
NTNV_2DH5_Ant1_2480_2387~2400

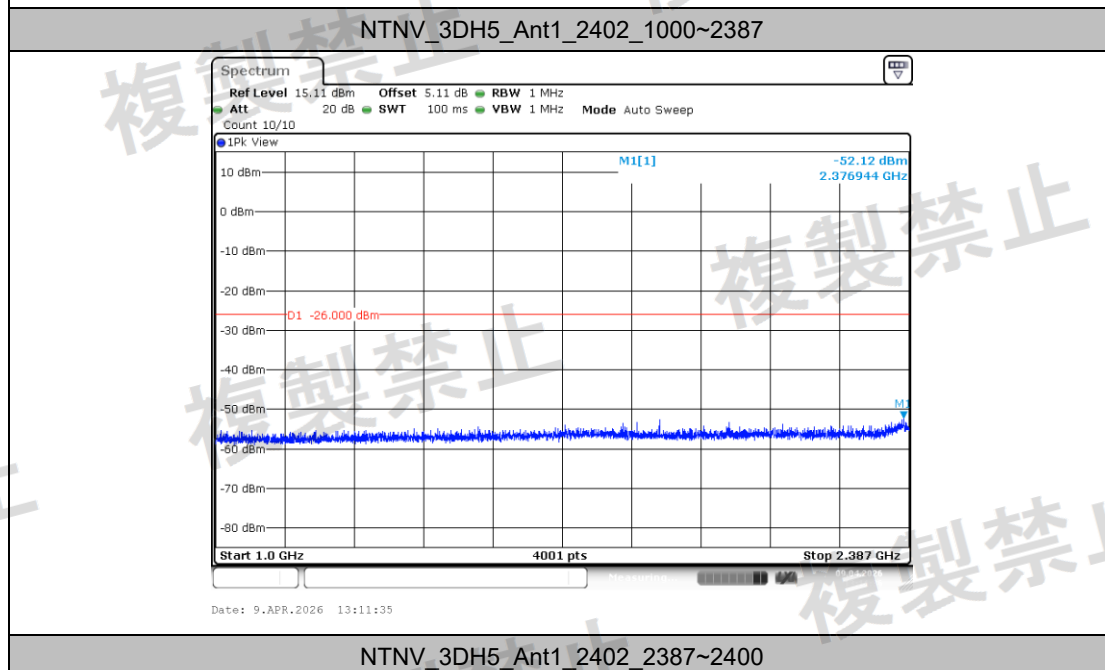
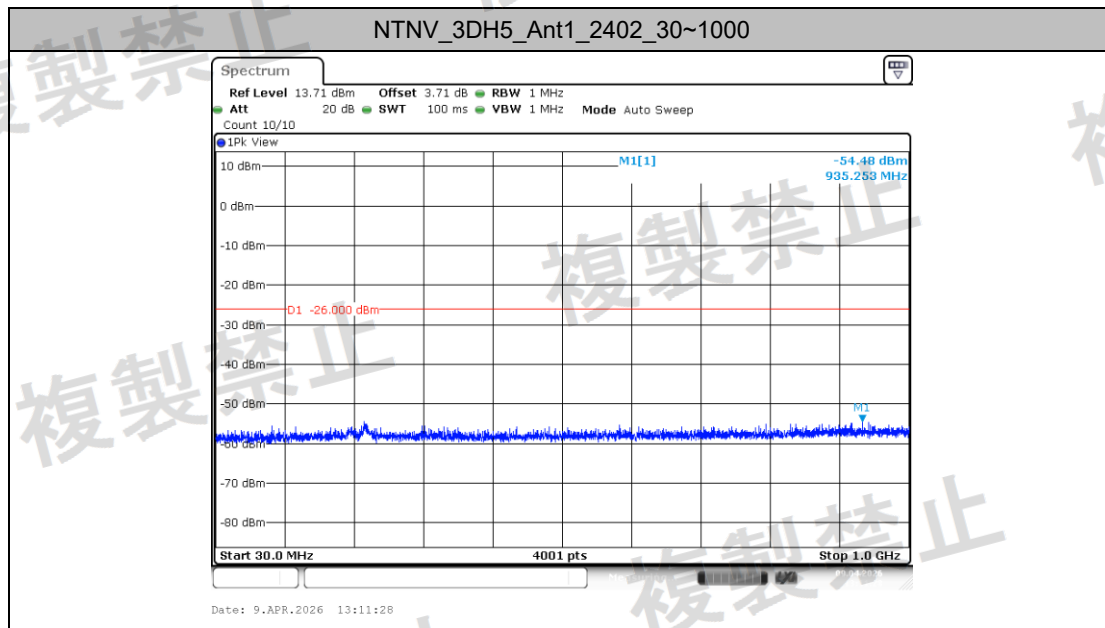


NTNV_2DH5_Ant1_2480_2483.5~2496.5

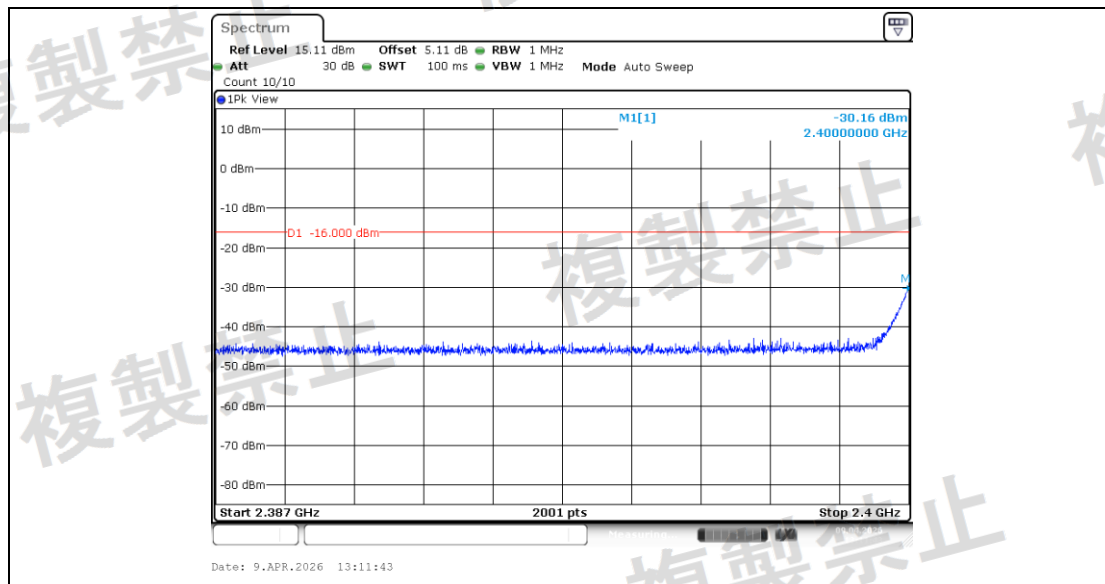


NTNV_2DH5_Ant1_2480_2496.5~13000

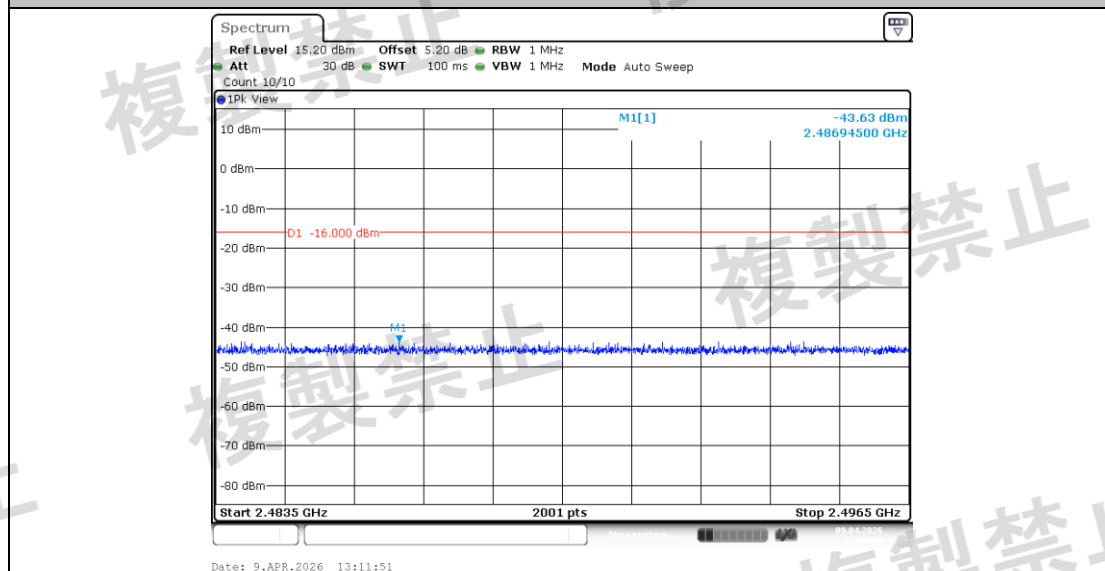




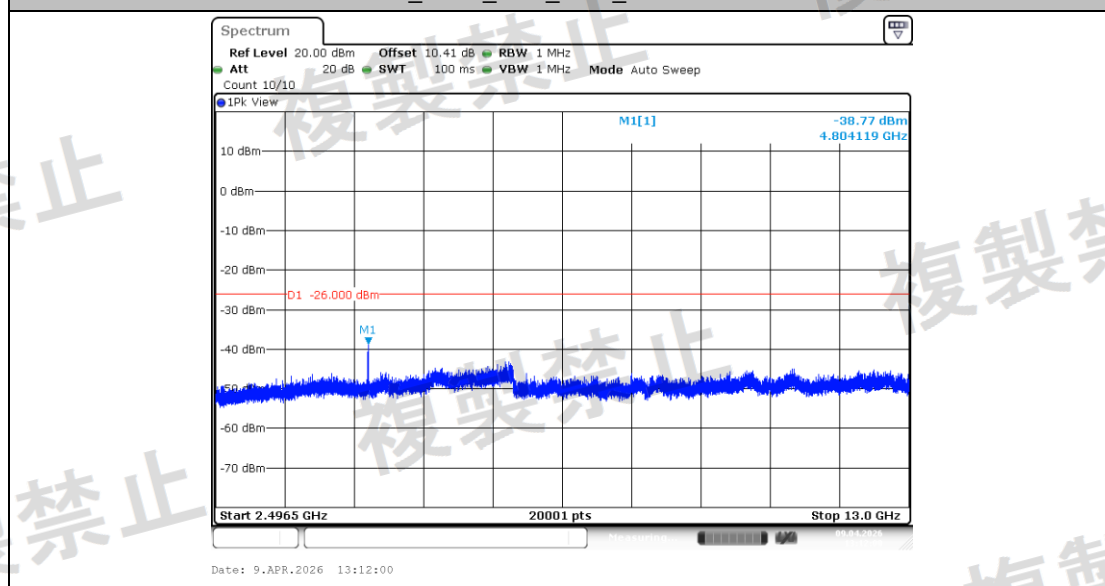
NTNV_3DH5_Ant1_2402_2387~2400

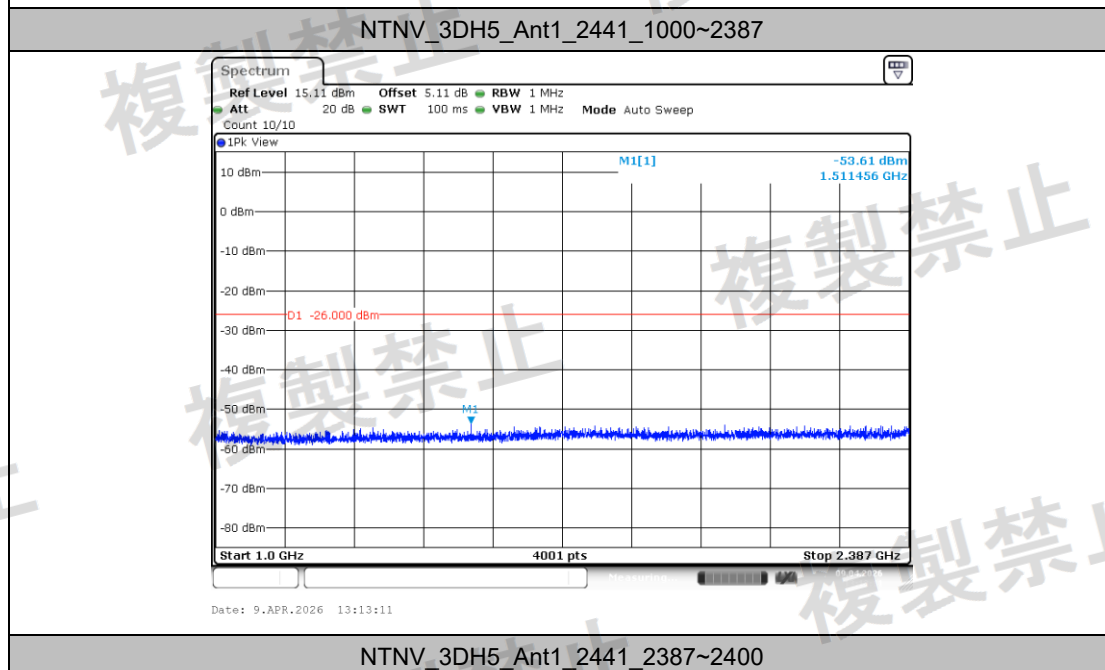
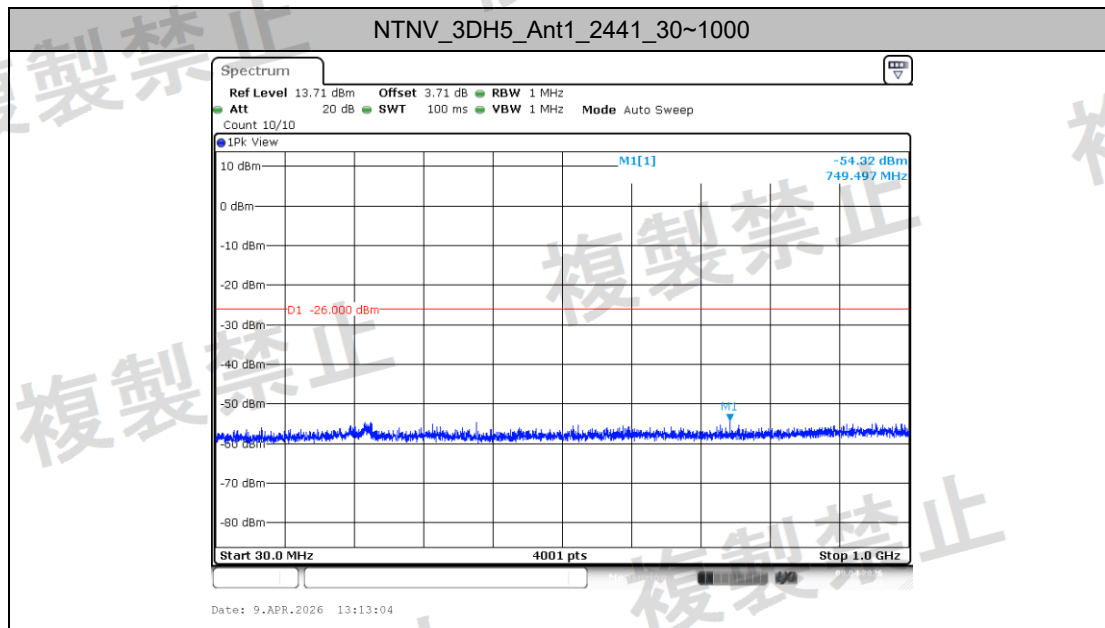


NTNV_3DH5_Ant1_2402_2483.5~2496.5

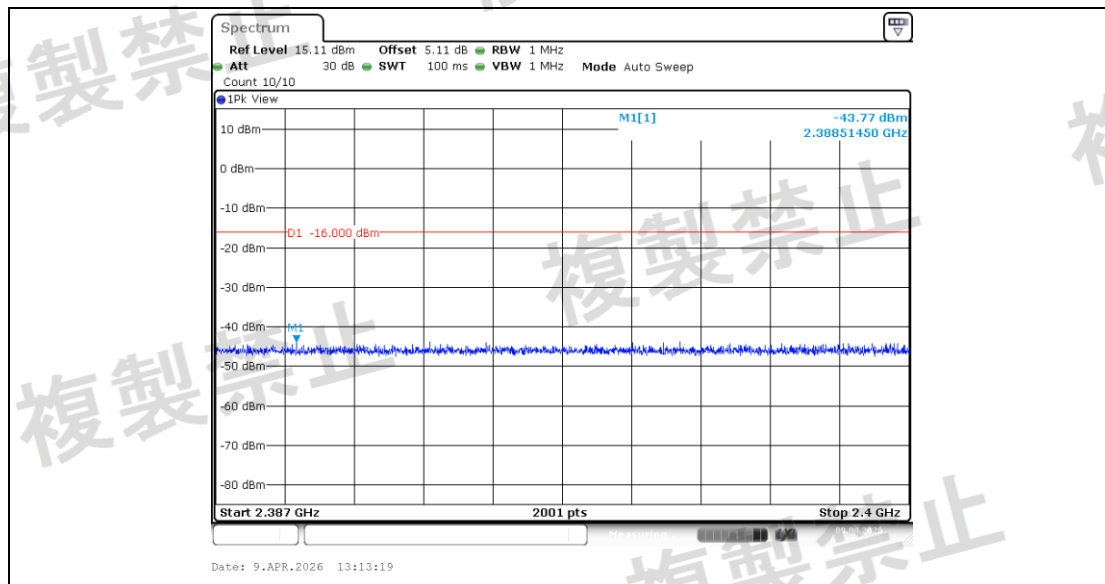


NTNV_3DH5_Ant1_2402_2496.5~13000

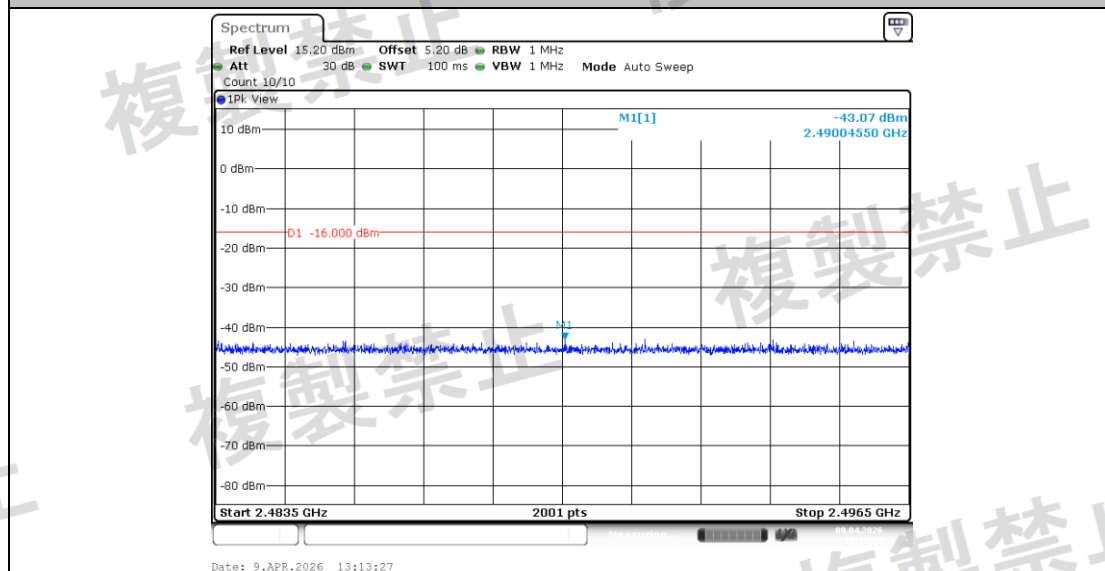




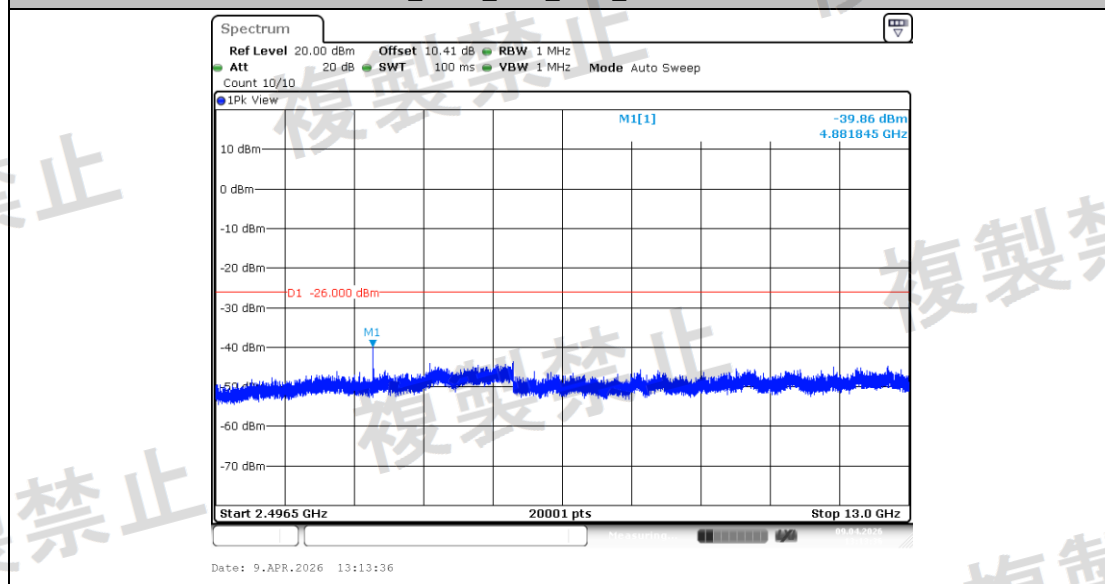
NTNV_3DH5_Ant1_2441_2387~2400

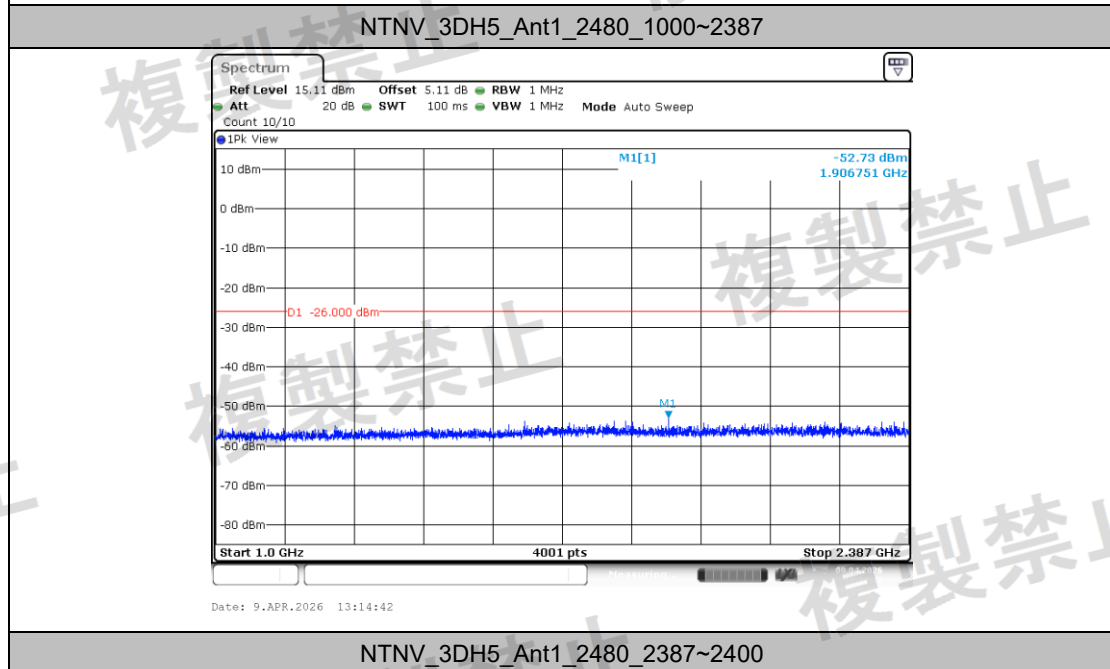
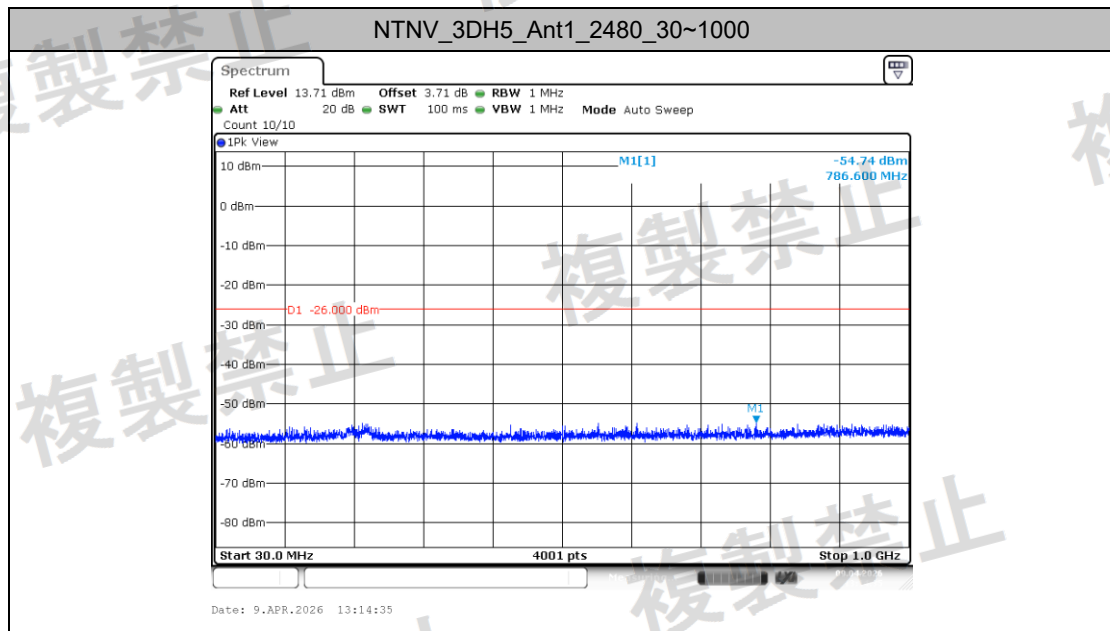


NTVN_3DH5_Ant1_2441_2483.5~2496.5

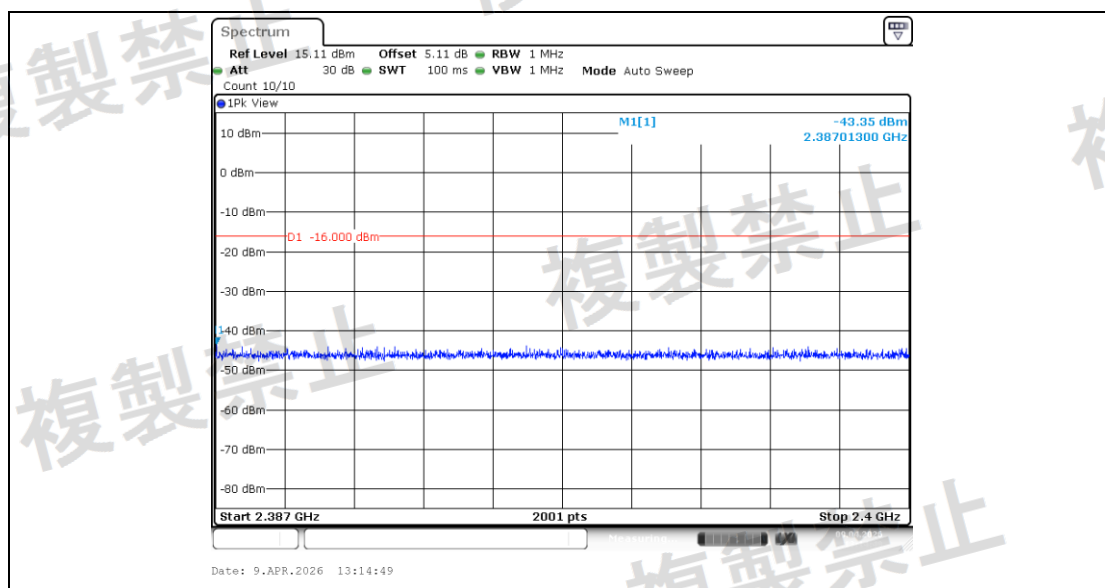


NTVN_3DH5_Ant1_2441_2496.5~13000

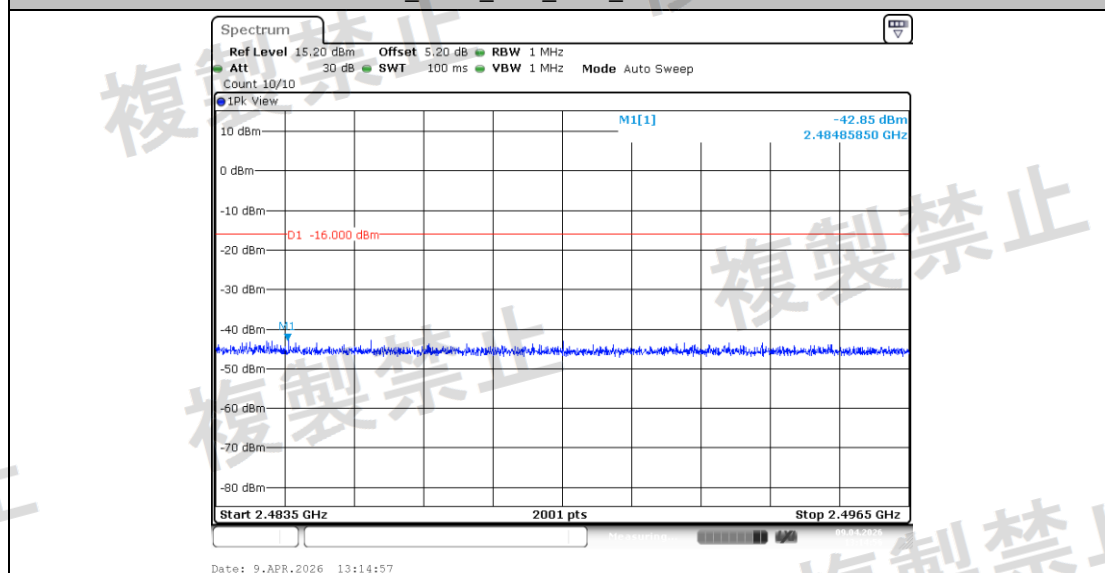




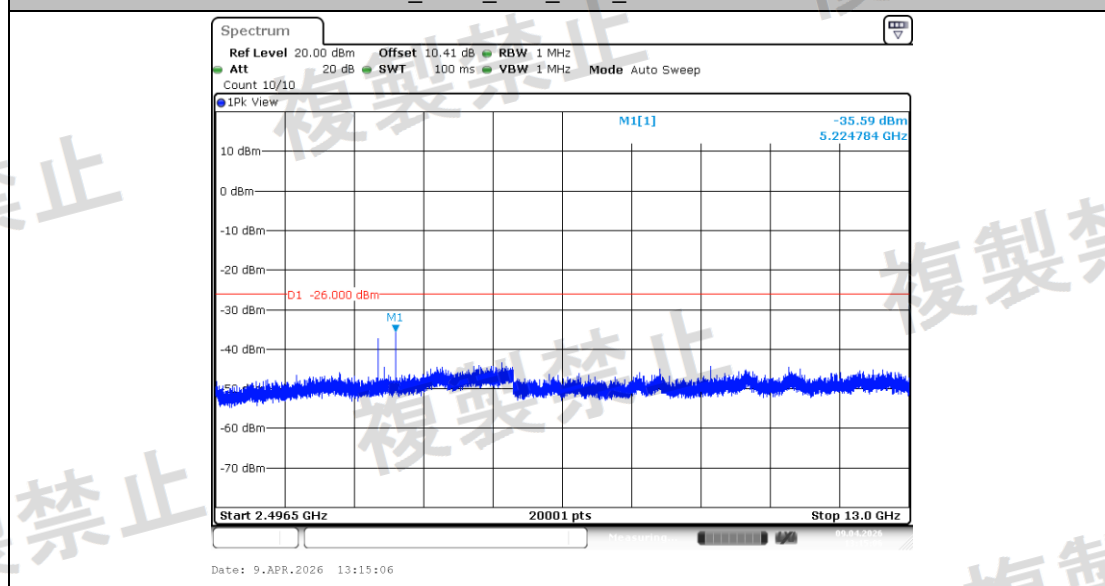
NTNV_3DH5_Ant1_2480_2387~2400



NTVN_3DH5_Ant1_2480_2483.5~2496.5



NTVN_3DH5_Ant1_2480_2496.5~13000

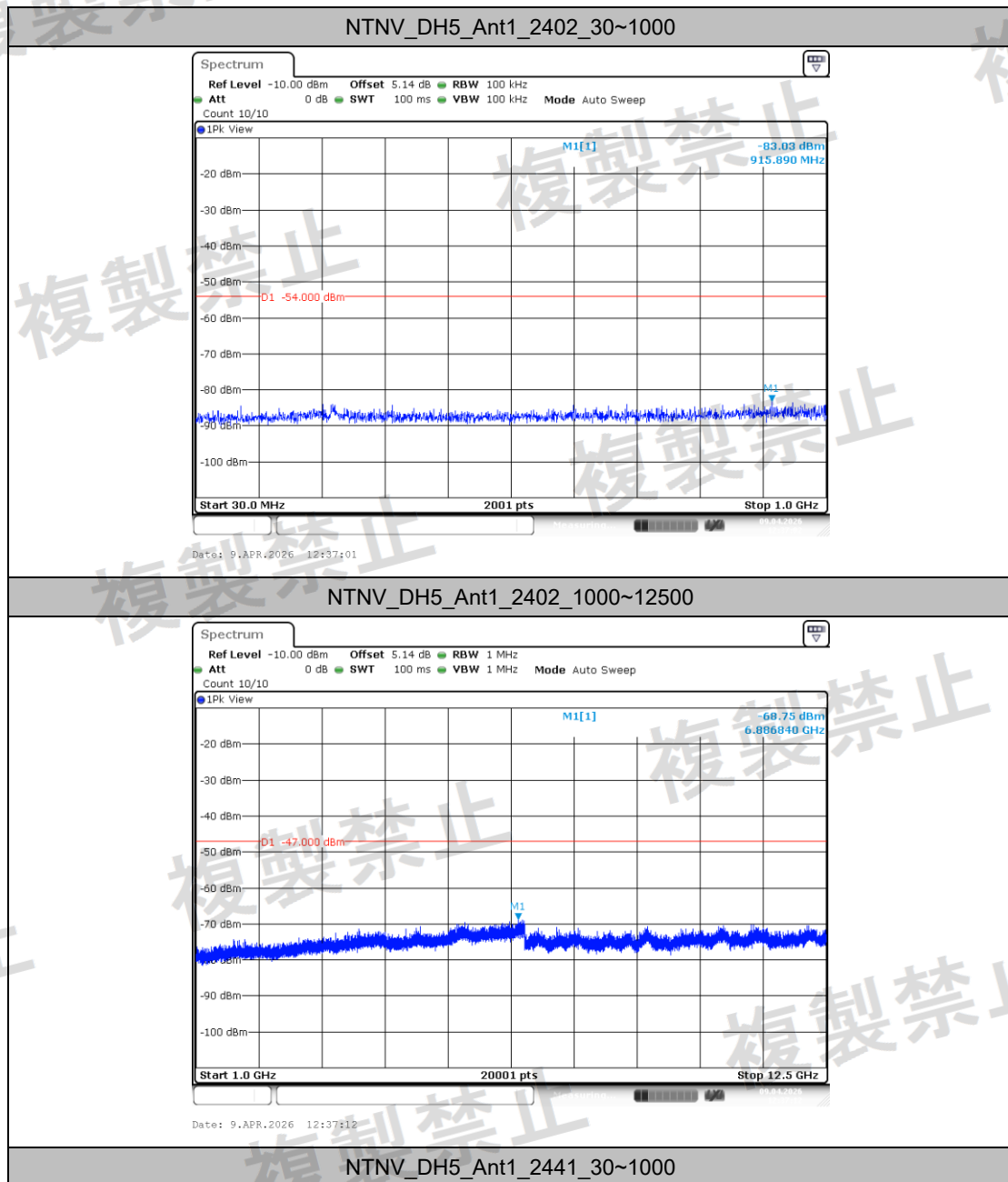


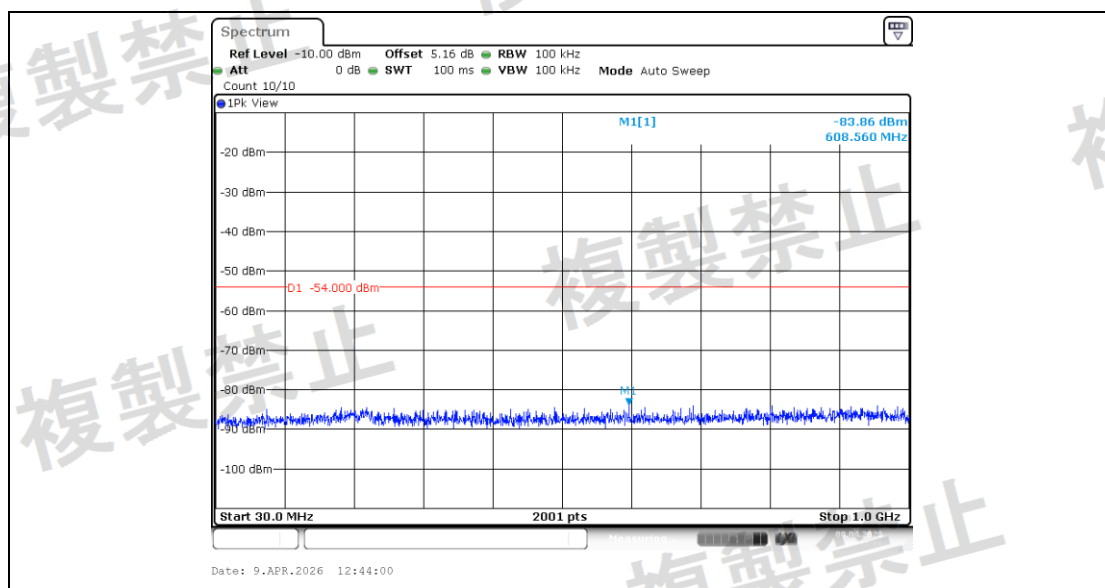
Appendix E: Spurious Emission of RX

Test Result

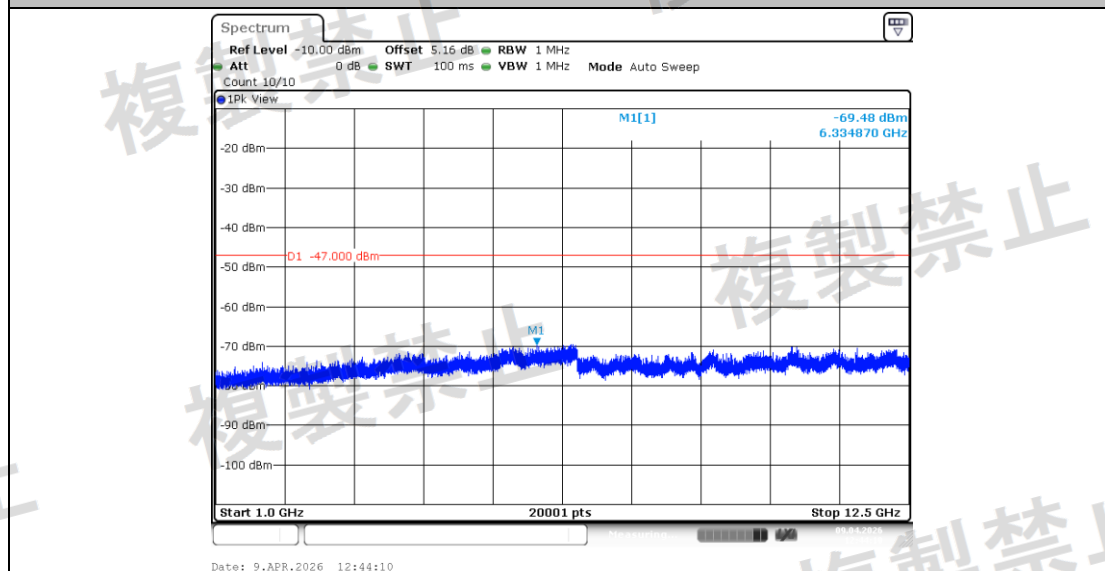
Test Condition	Test Mode	Antenna	Freq(M Hz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	DH5	Ant1	2402	30~1000	915.89	-83.03	≤-54	0.00498	≤4	PASS
				1000~12500	6886.84	-68.75	≤-47	0.13335	≤20	PASS
			2441	30~1000	608.56	-83.86	≤-54	0.00411	≤4	PASS
				1000~12500	6334.87	-69.48	≤-47	0.11272	≤20	PASS
			2480	30~1000	956.61	-83.17	≤-54	0.00482	≤4	PASS
				1000~12500	6447.57	-69.11	≤-47	0.12274	≤20	PASS
	2DH5	Ant1	2402	30~1000	236.75	-83.59	≤-54	0.00438	≤4	PASS
				1000~12500	6955.26	-68.86	≤-47	0.13002	≤20	PASS
			2441	30~1000	241.11	-83.73	≤-54	0.00424	≤4	PASS
				1000~12500	6985.16	-68.76	≤-47	0.13305	≤20	PASS
			2480	30~1000	996.85	-83.42	≤-54	0.00455	≤4	PASS
				1000~12500	6920.19	-69.15	≤-47	0.12162	≤20	PASS
	3DH5	Ant1	2402	30~1000	985.70	-83.37	≤-54	0.00460	≤4	PASS
				1000~12500	6897.77	-67.26	≤-47	0.18793	≤20	PASS
			2441	30~1000	884.39	-83.74	≤-54	0.00423	≤4	PASS
				1000~12500	6903.52	-68.31	≤-47	0.14757	≤20	PASS
			2480	30~1000	821.85	-84.16	≤-54	0.00384	≤4	PASS
				1000~12500	6869.59	-68.88	≤-47	0.12942	≤20	PASS

Test Graphs

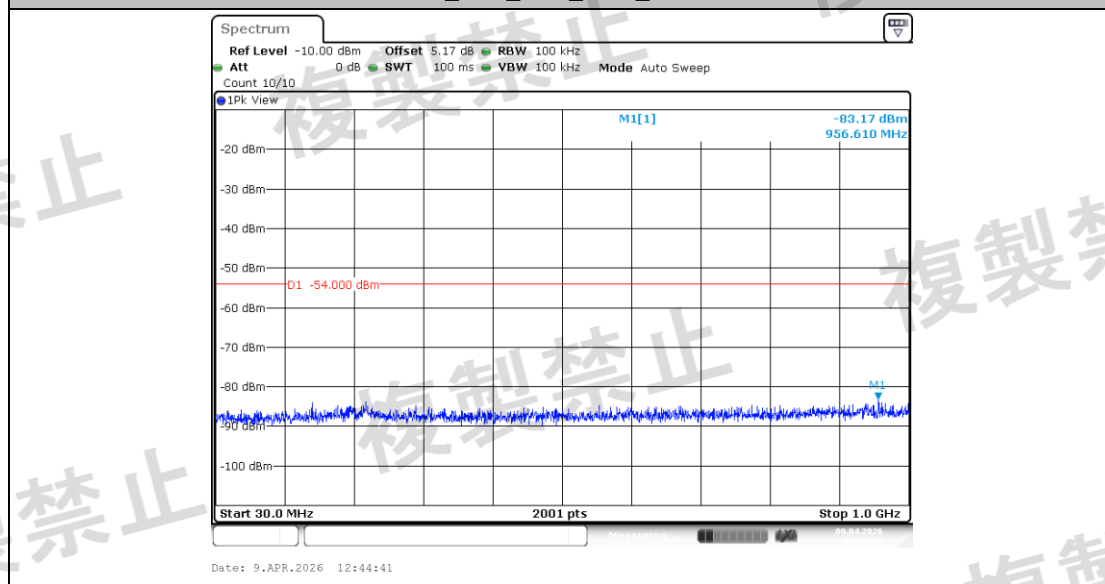


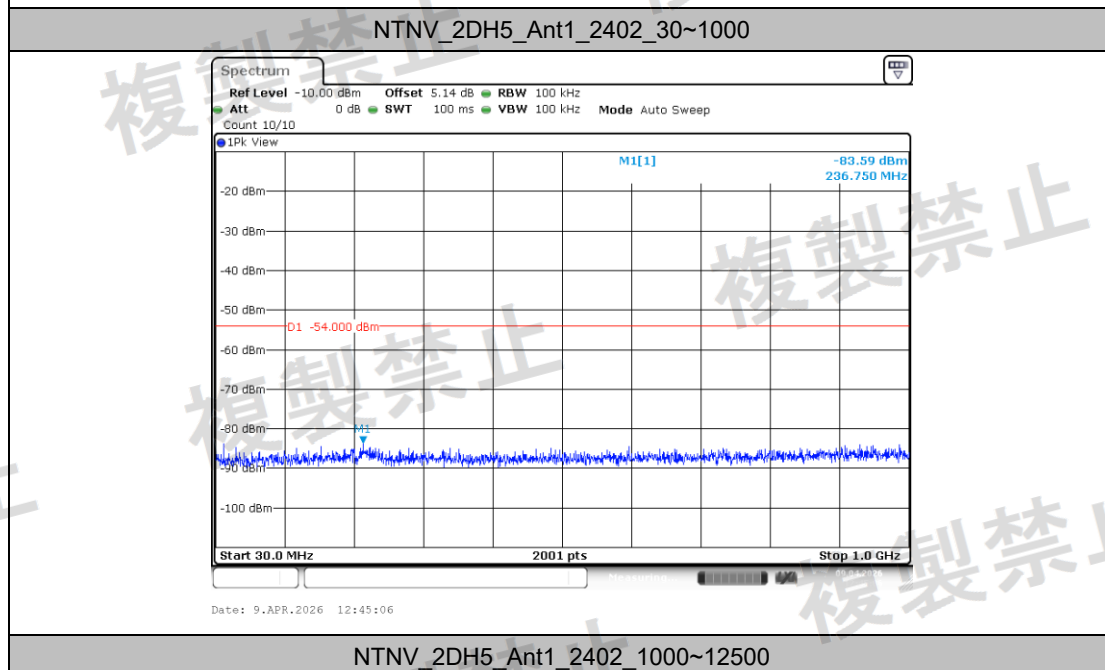
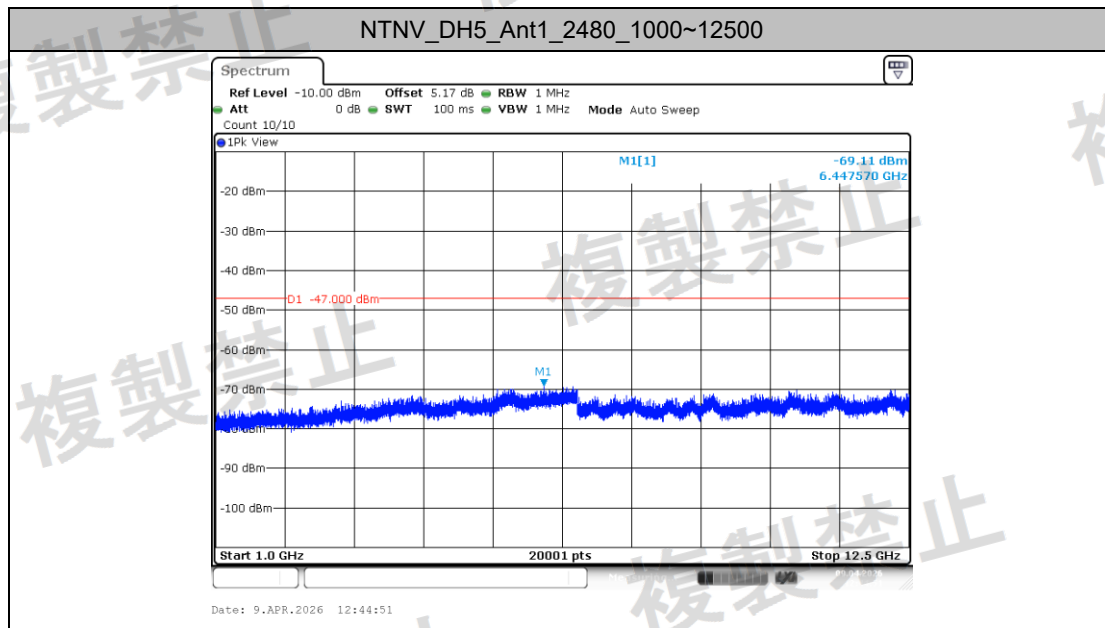


NTNV_DH5_Ant1_2441_1000~12500

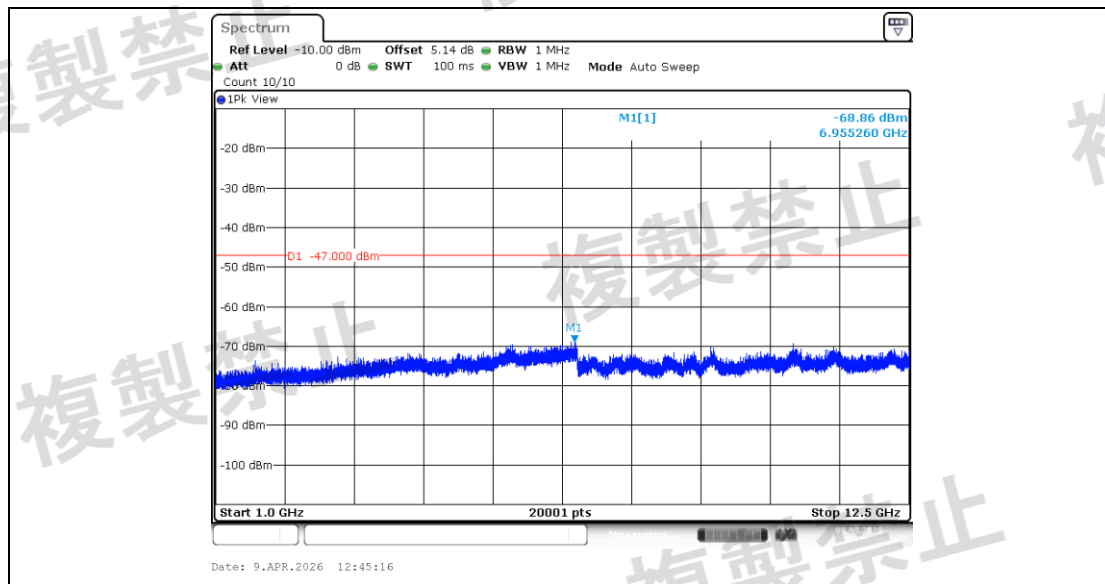


NTNV_DH5_Ant1_2480_30~1000

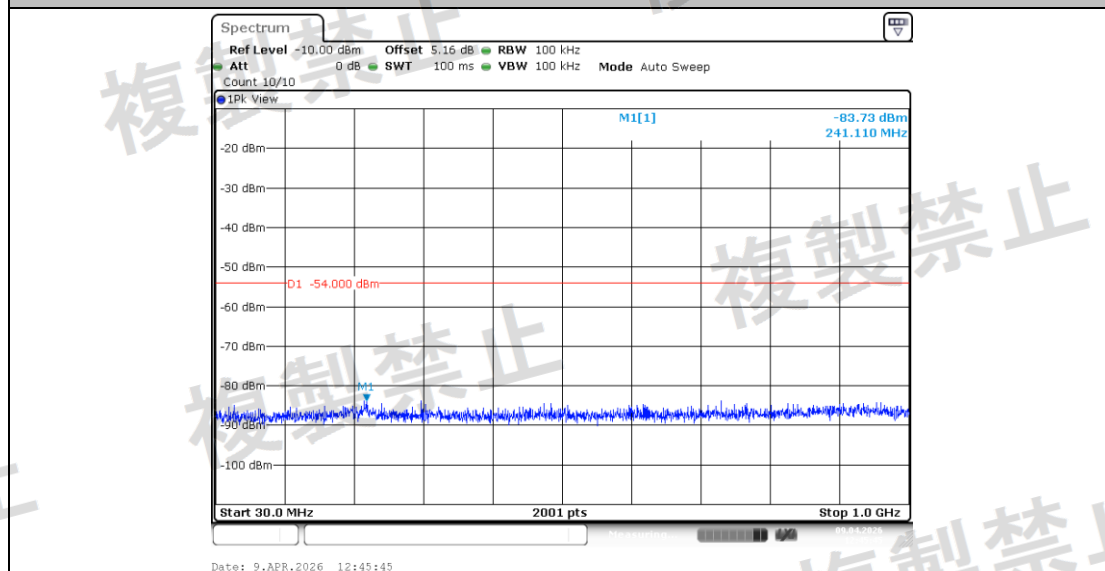




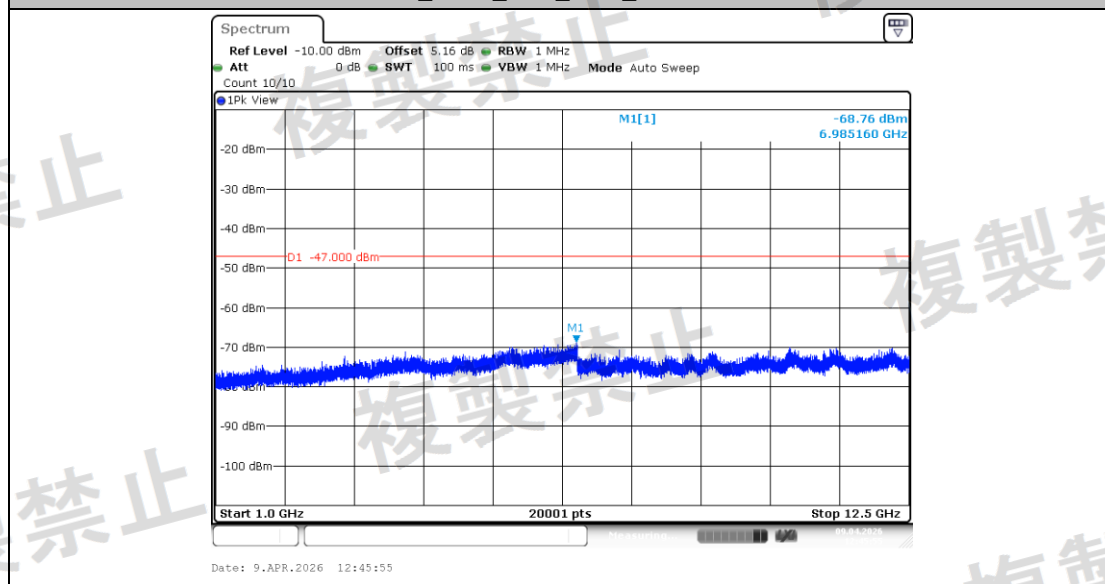
NTNV_2DH5_Ant1_2402_1000~12500

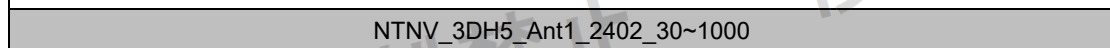
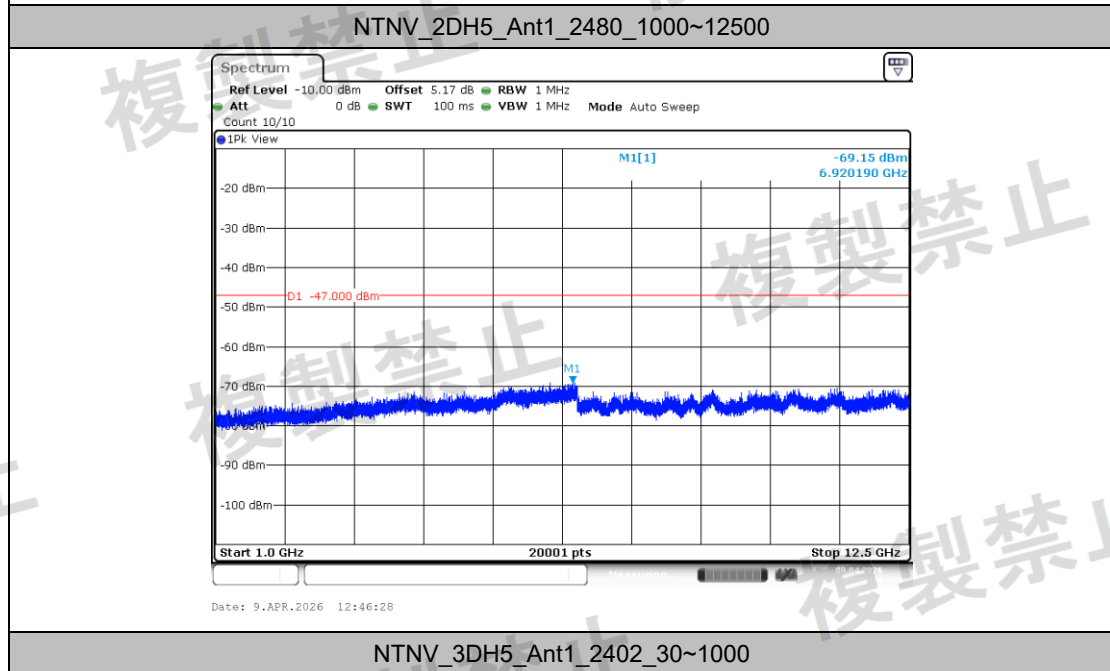
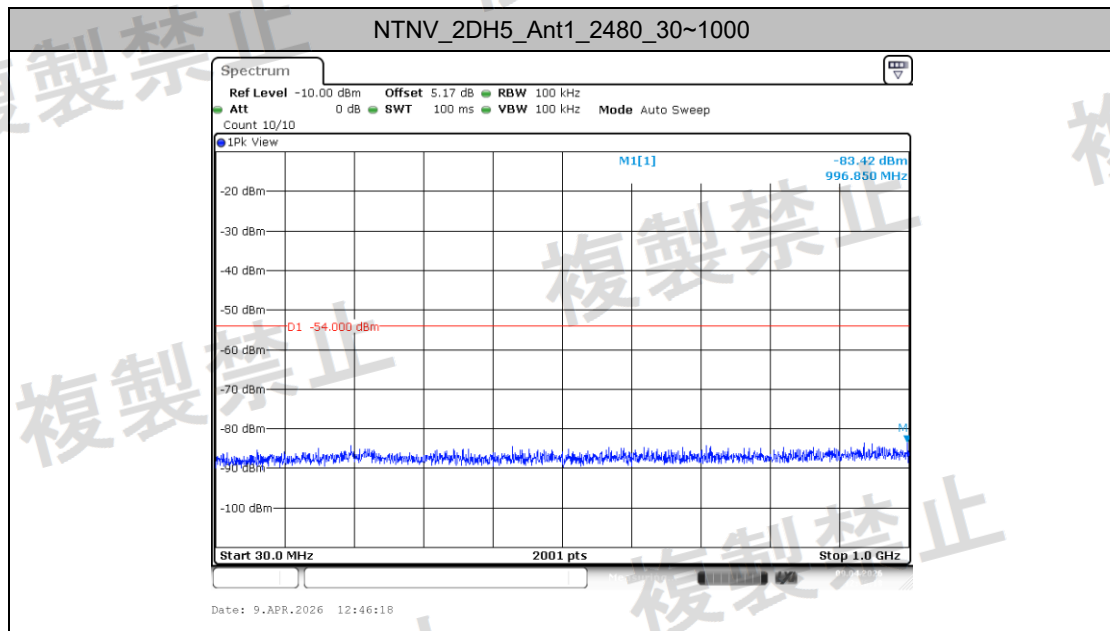


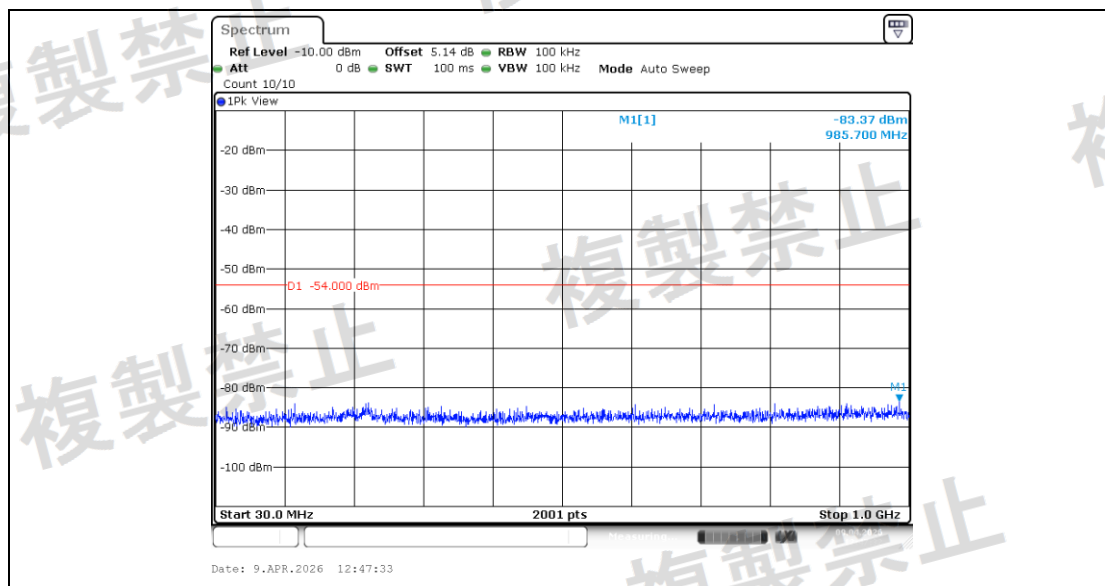
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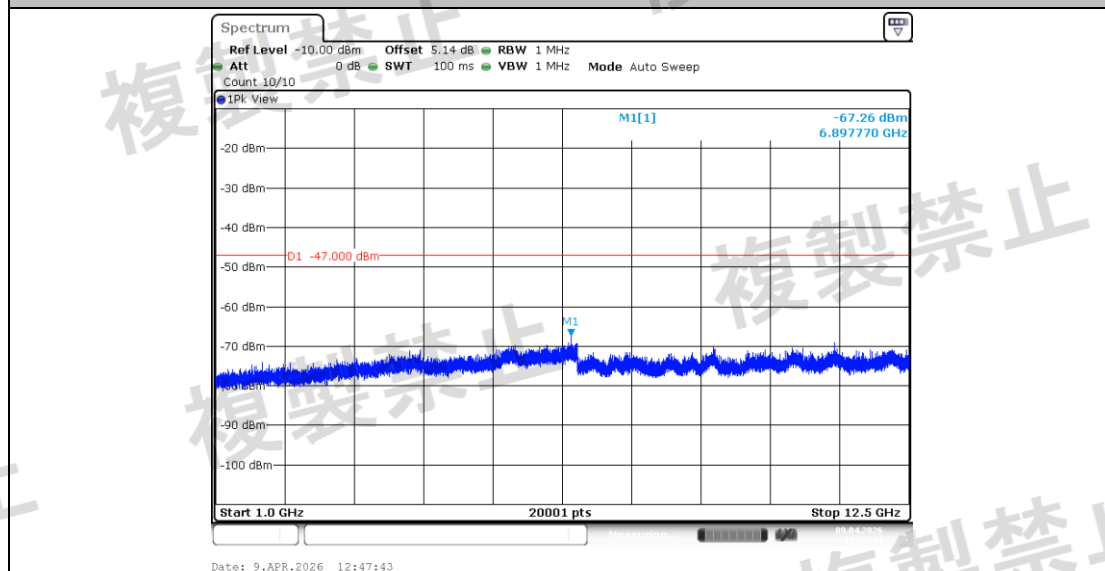
NTNV_2DH5_Ant1_2441_1000~12500



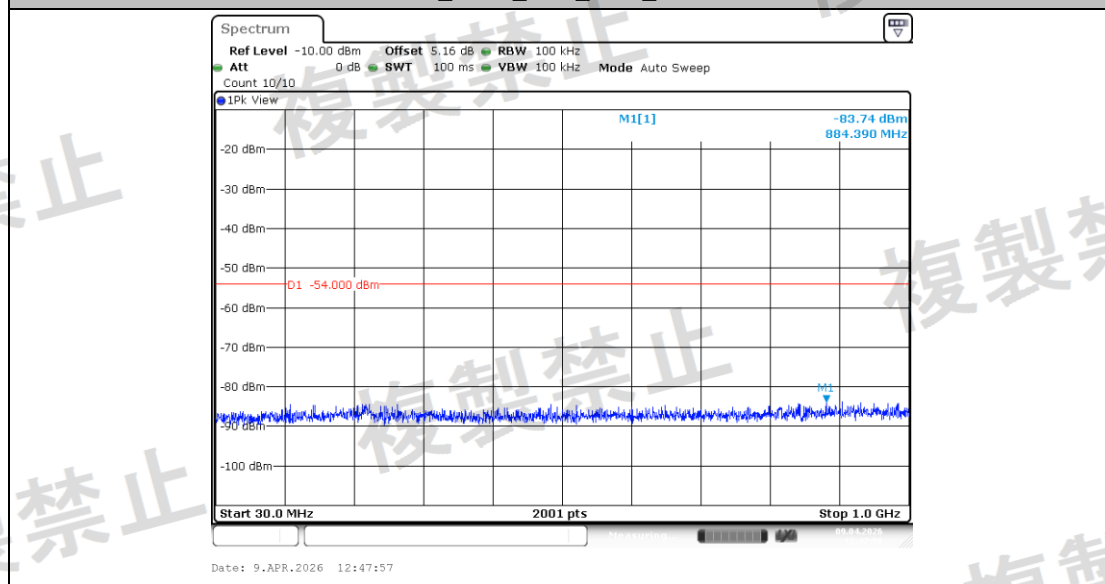


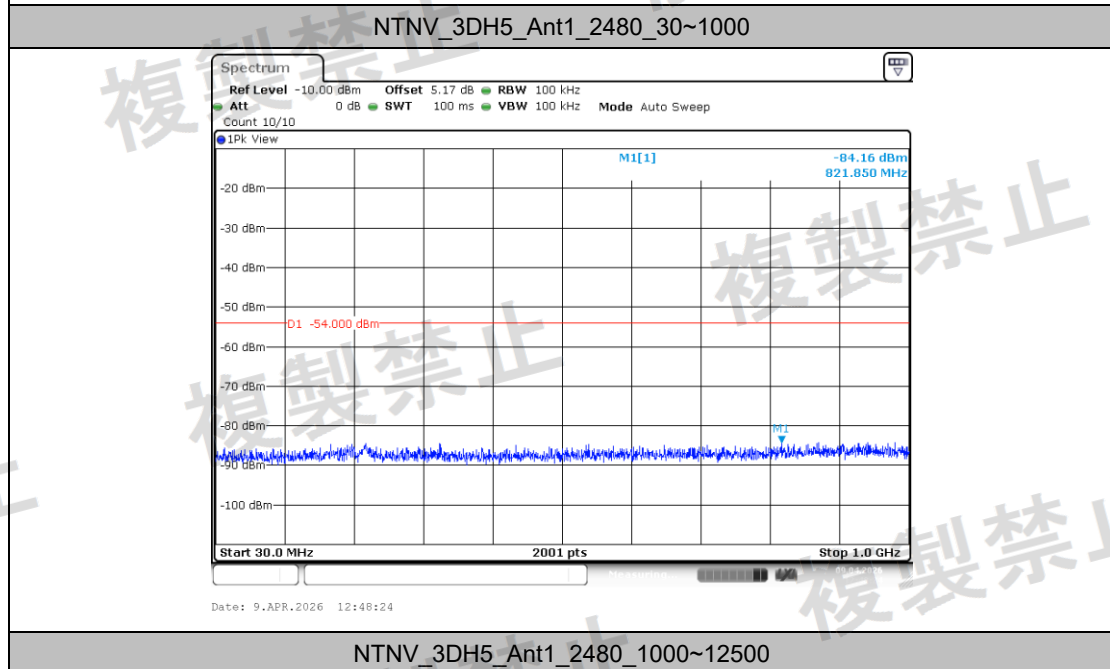
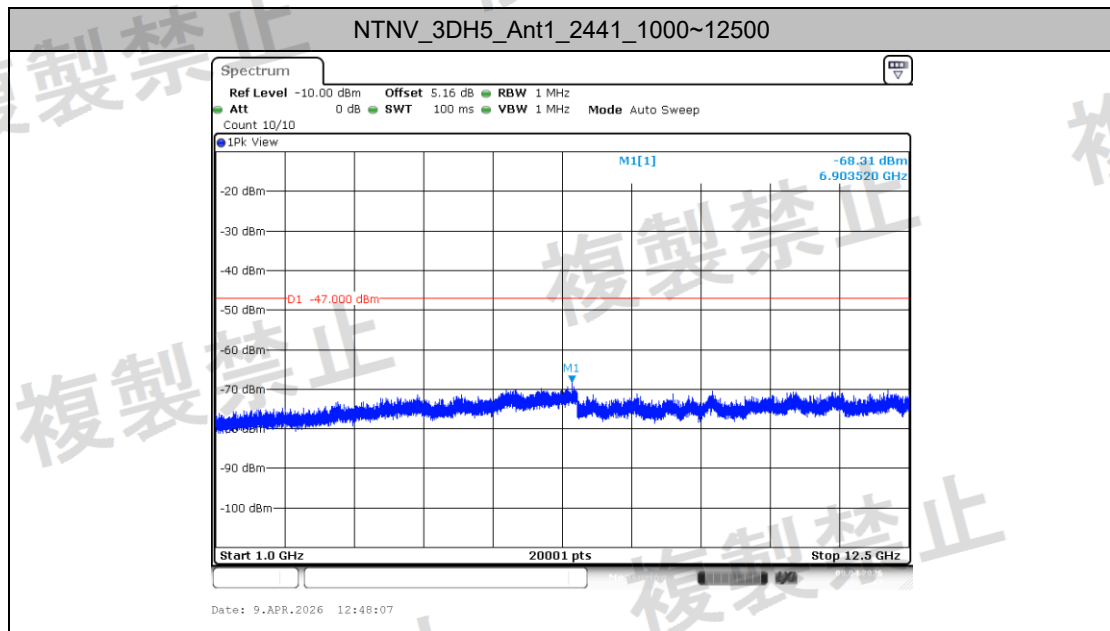


NTNV_3DH5_Ant1_2402_1000~12500

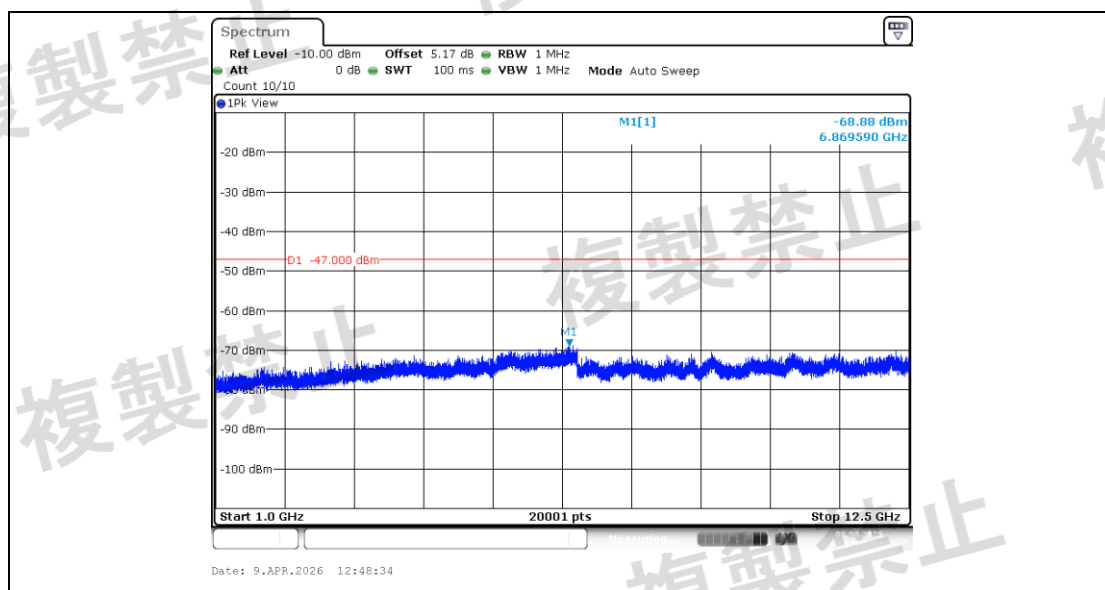


NTNV_3DH5_Ant1_2441_30~1000





NTNV_3DH5_Ant1_2480_1000~12500

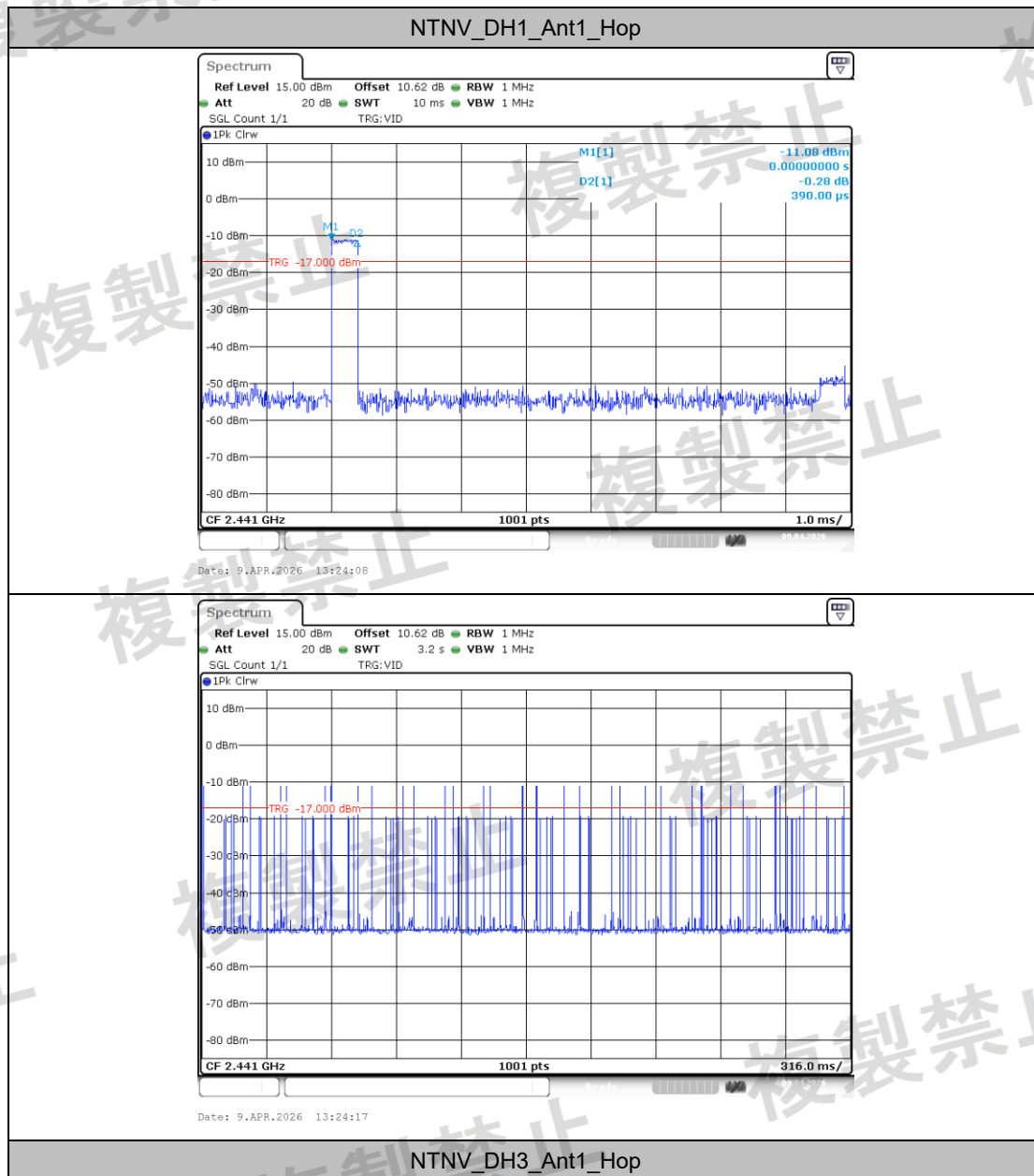


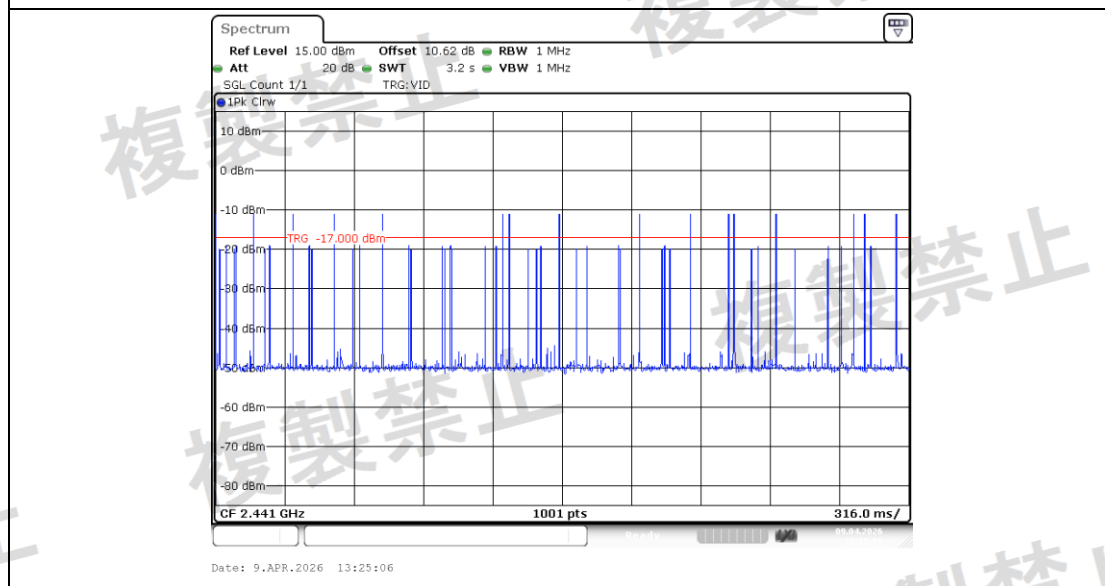
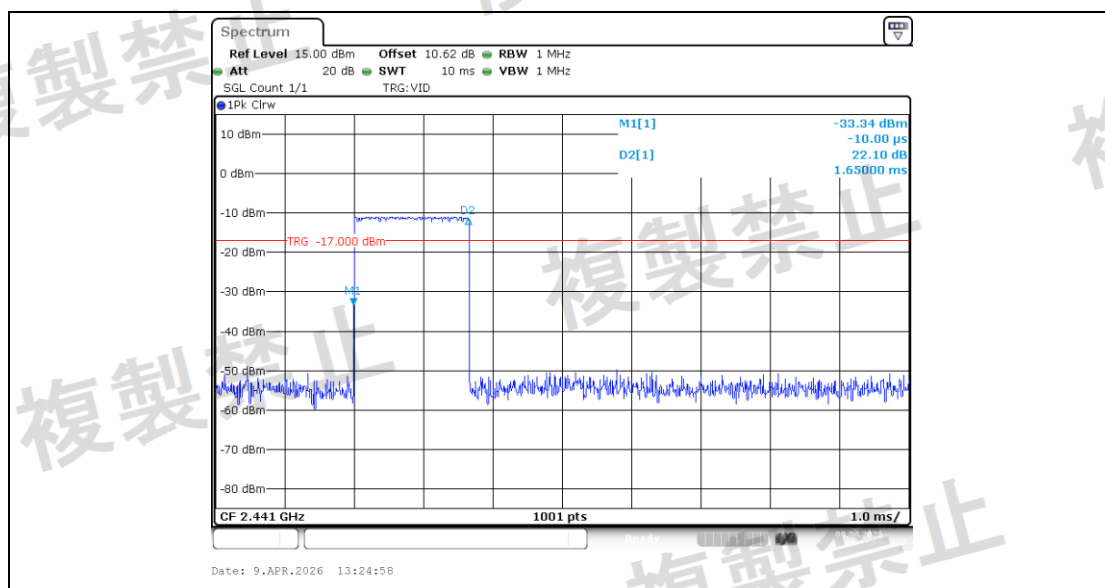
Appendix F: Dwell Time

Test Result

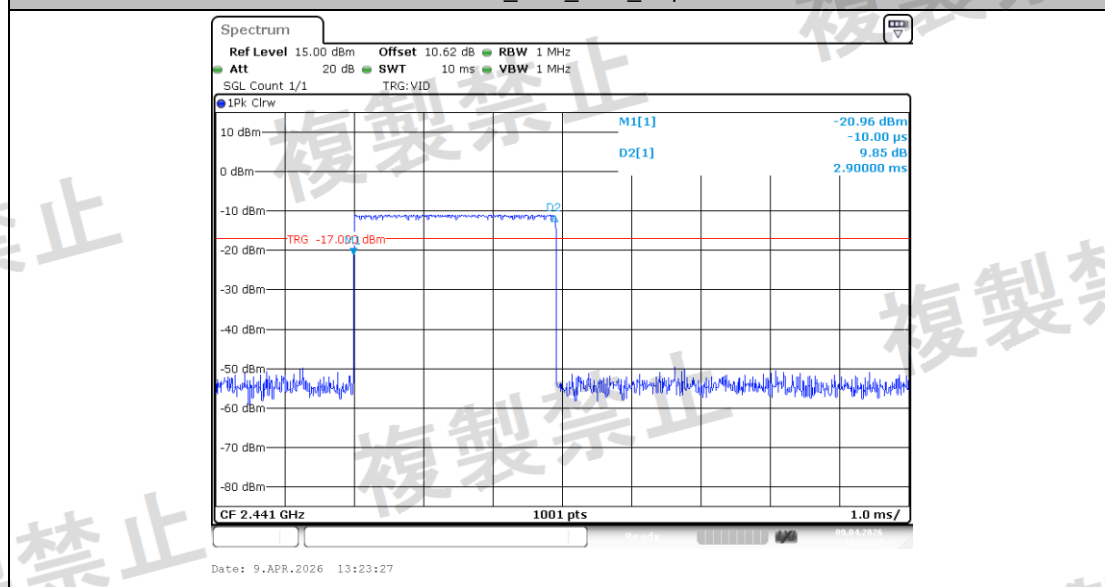
Test Condition	Test Mode	Antenna	Freq(M Hz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit [s]	Verdict
NTNV	DH1	Ant1	Hop	0.39	320	0.125	≤0.4	PASS
	DH3	Ant1	Hop	1.65	160	0.264	≤0.4	PASS
	DH5	Ant1	Hop	2.90	90	0.261	≤0.4	PASS
	2DH1	Ant1	Hop	0.40	300	0.12	≤0.4	PASS
	2DH3	Ant1	Hop	1.65	140	0.231	≤0.4	PASS
	2DH5	Ant1	Hop	2.90	120	0.348	≤0.4	PASS
	3DH1	Ant1	Hop	0.40	310	0.124	≤0.4	PASS
	3DH3	Ant1	Hop	1.65	140	0.231	≤0.4	PASS
	3DH5	Ant1	Hop	2.90	100	0.29	≤0.4	PASS

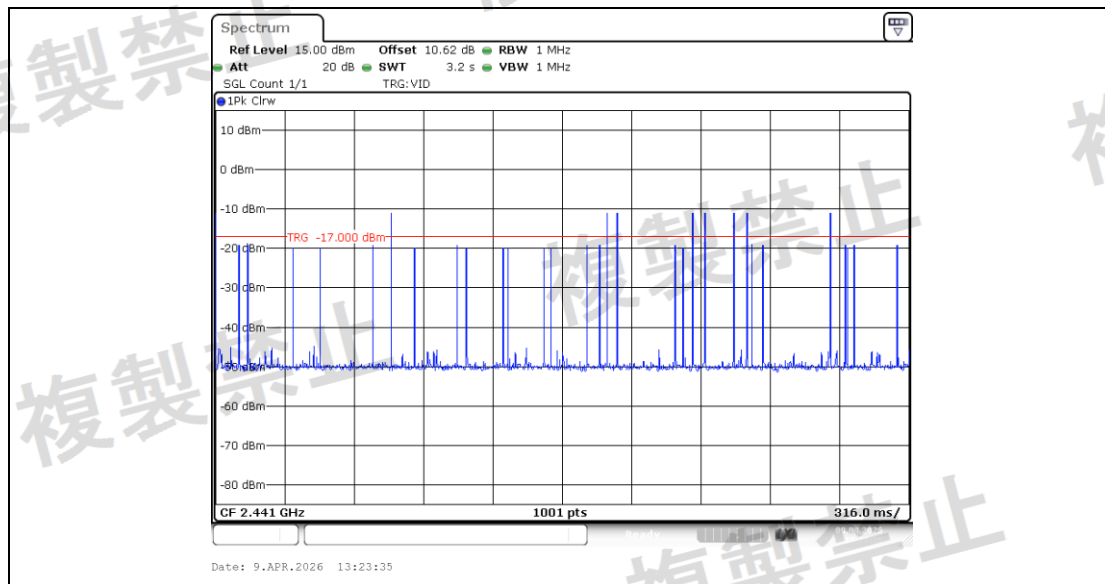
Test Graphs



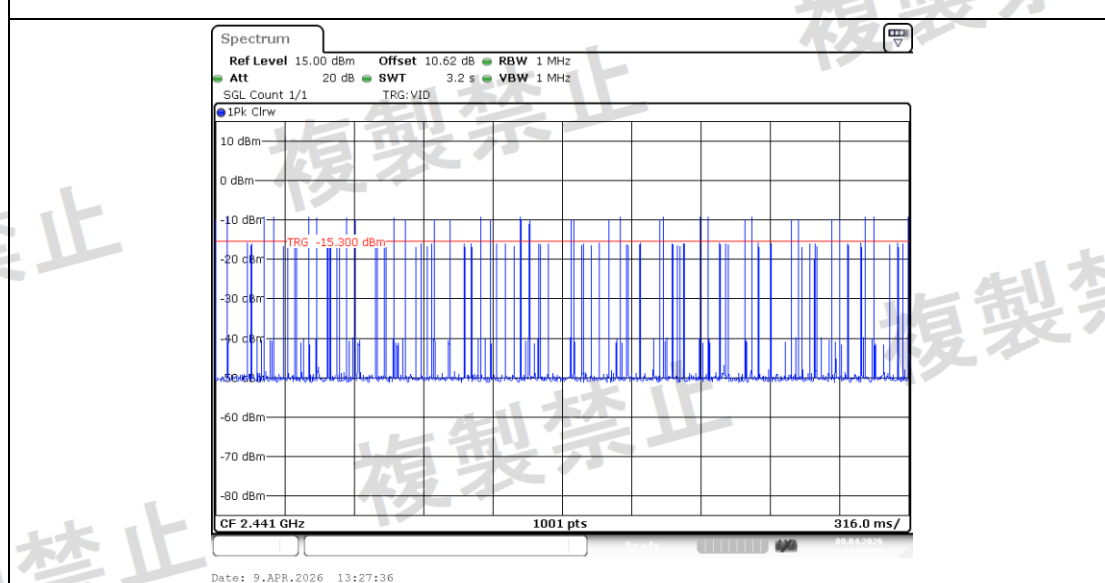
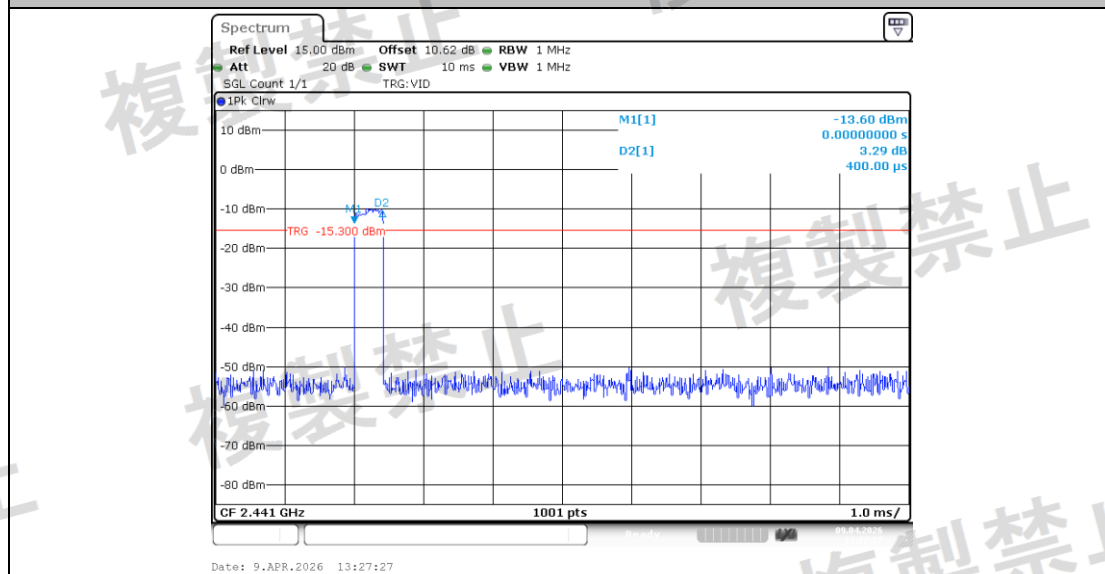


NTNV_DH5_Ant1_Hop

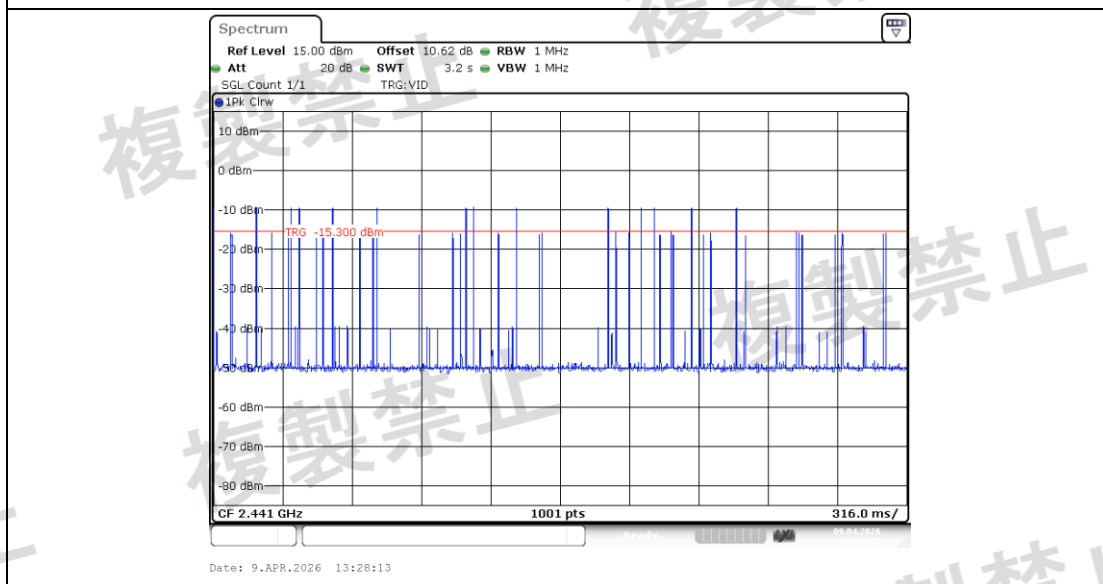
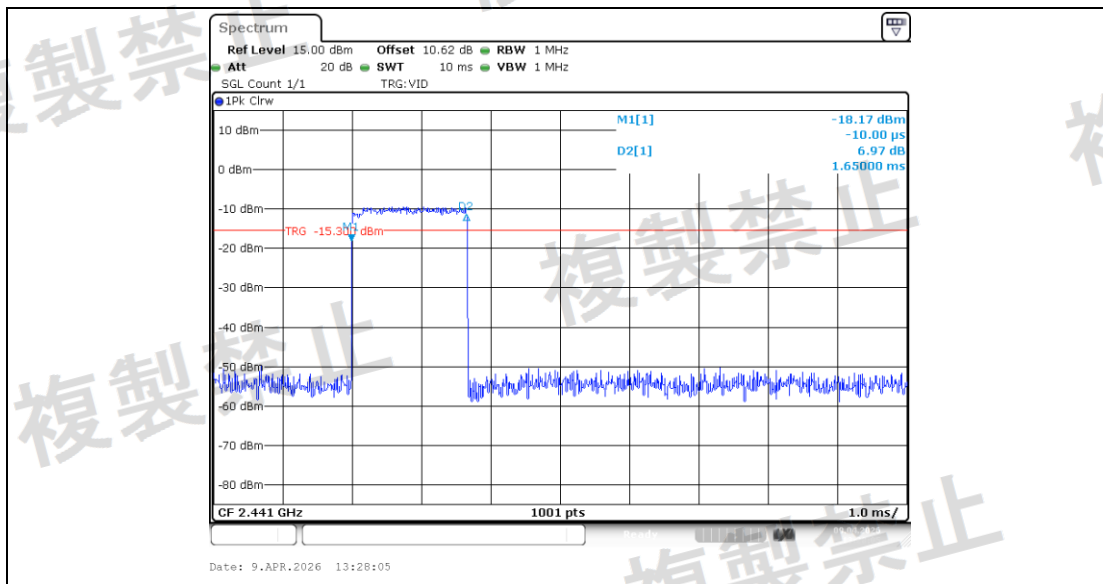




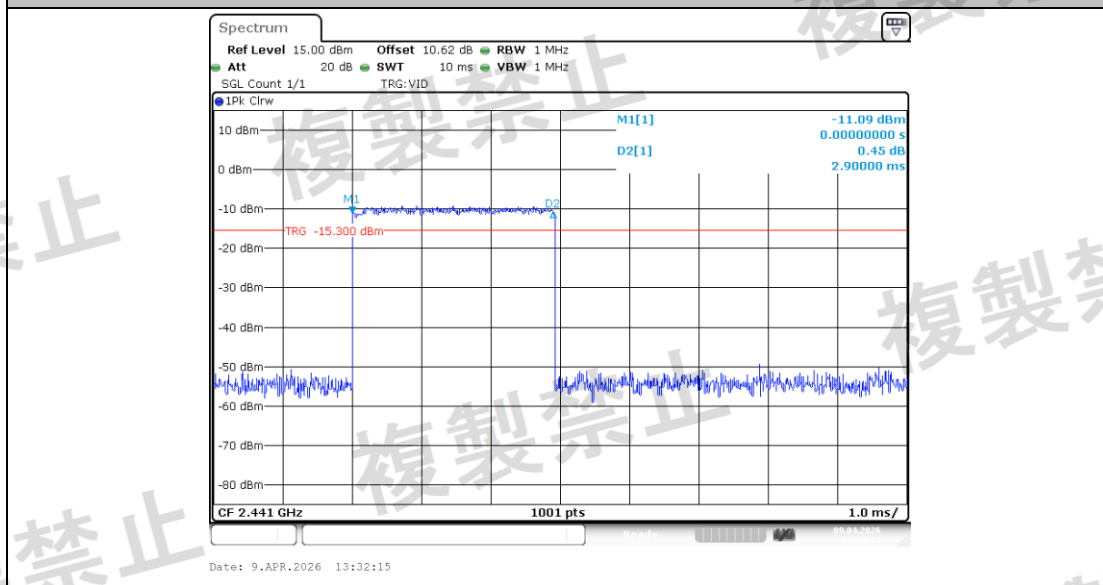
NTNV_2DH1_Ant1_Hop



NTNV_2DH3_Ant1_Hop

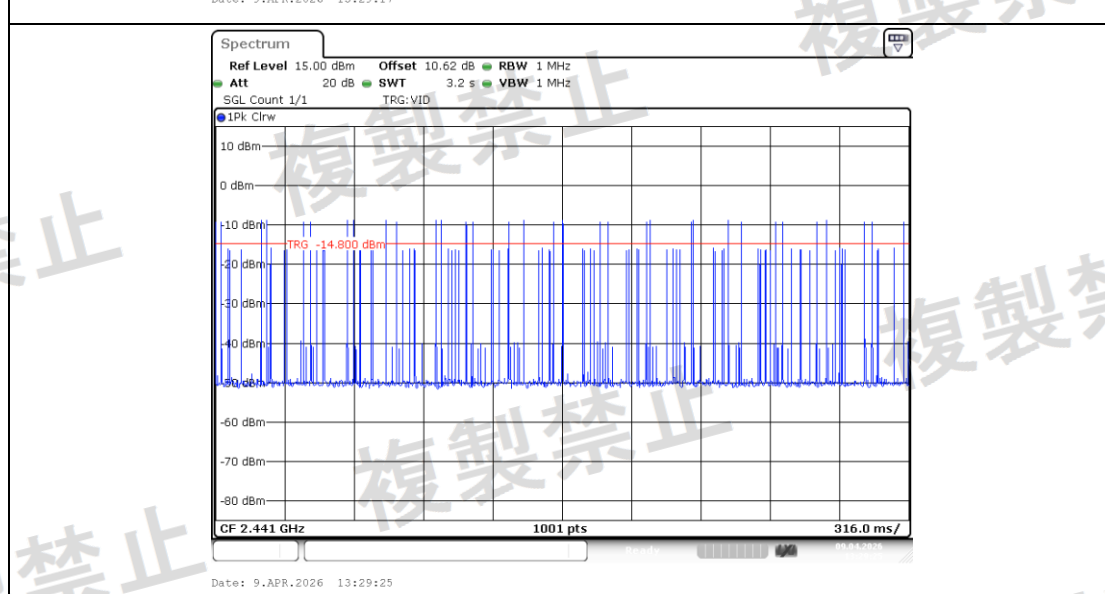
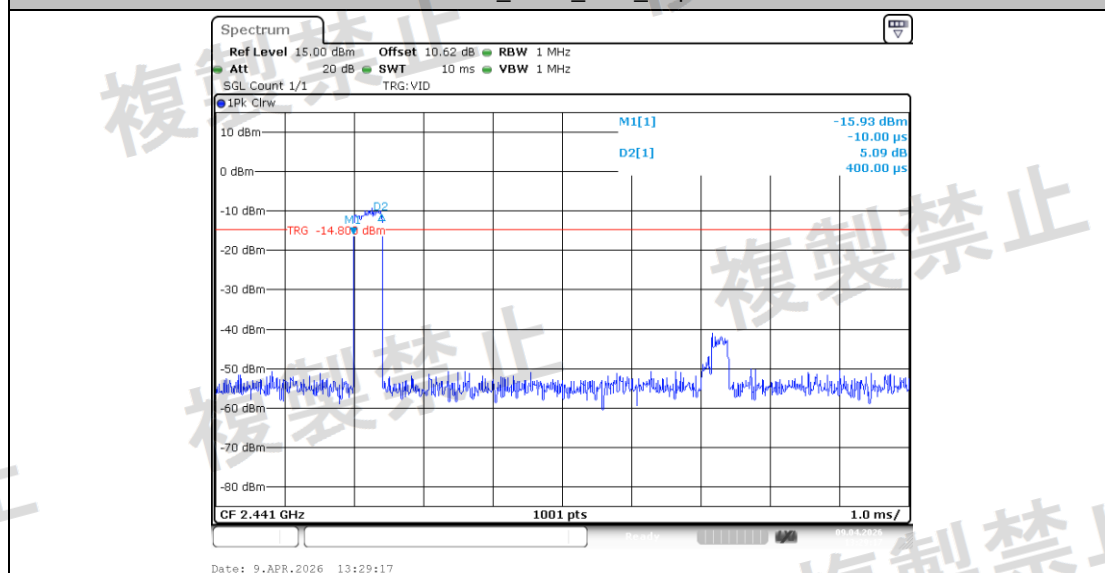


NTNV_2DH5_Ant1_Hop

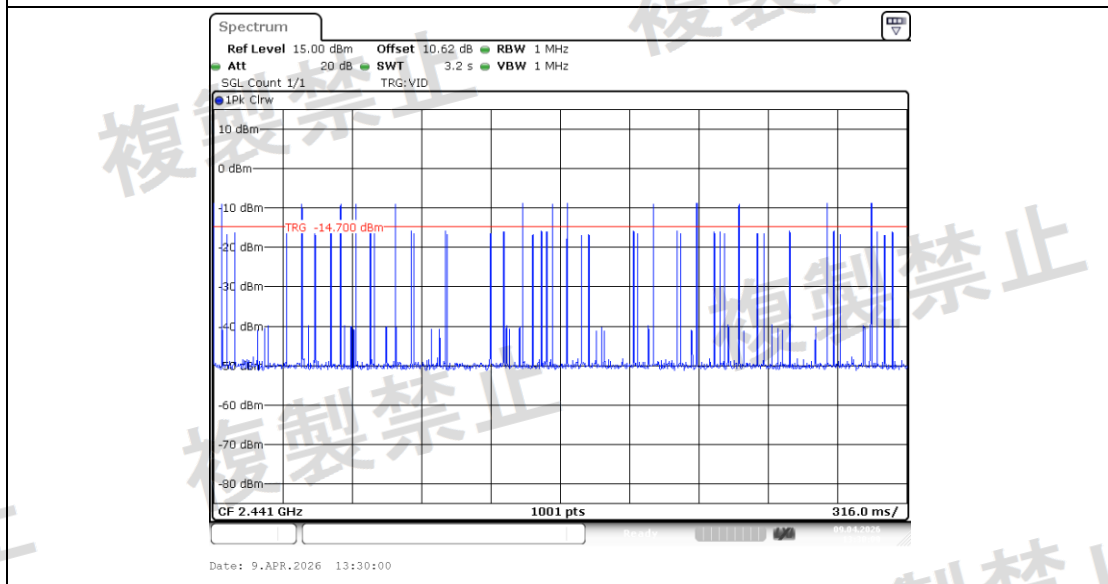
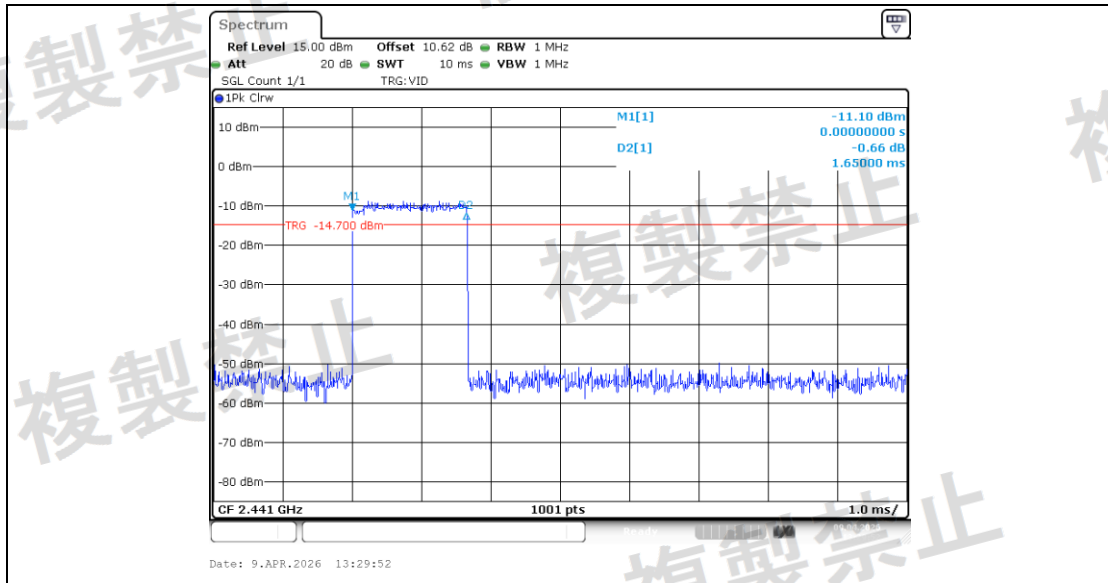




NTNV_3DH1_Ant1_Hop



NTNV_3DH3_Ant1_Hop



NTNV_3DH5_Ant1_Hop

