

Appendix:Bluetooth LE

Contents

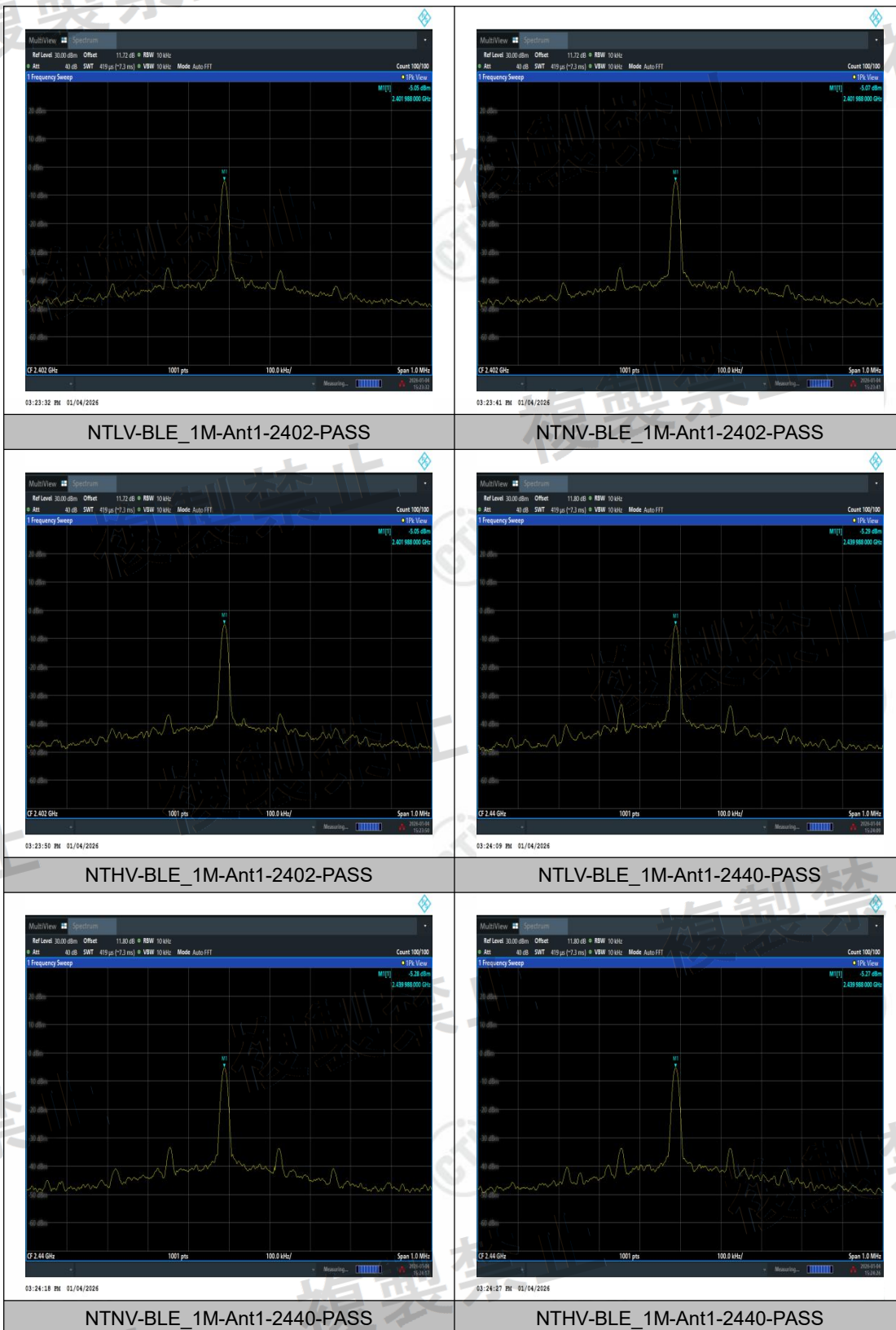
Appendix A: Frequency Error	3
Test Result	3
Test Graphs	4
Appendix B: Antenna Power	6
Test Result	6
Test Graphs	7
Appendix C: Occupied Bandwidth	10
Test Result	10
Test Graphs	11
Appendix D: Spread Bandwidth	13
Test Result	13
Test Graphs	14
Appendix E: Unwanted Emission Strength	16
Test Result	16
Test Graphs	18
Appendix F: Secondary Radiated Emission Strength	26
Test Result	26
Test Graphs	27

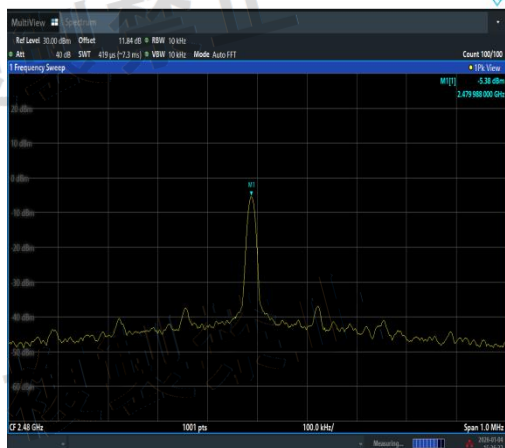
Appendix A: Frequency Error

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	CenterFreq [MHz]	Result[ppm]	Limit[ppm]	Verdict
NTLV	BLE_1M	Ant1	2402	2401.988	-4.99584	±50	PASS
NTNV	BLE_1M	Ant1	2402	2401.988	-4.99584	±50	PASS
NTHV	BLE_1M	Ant1	2402	2401.988	-4.99584	±50	PASS
NTLV	BLE_1M	Ant1	2440	2439.988	-4.91803	±50	PASS
NTNV	BLE_1M	Ant1	2440	2439.988	-4.91803	±50	PASS
NTHV	BLE_1M	Ant1	2440	2439.988	-4.91803	±50	PASS
NTLV	BLE_1M	Ant1	2480	2479.988	-4.83871	±50	PASS
NTNV	BLE_1M	Ant1	2480	2479.988	-4.83871	±50	PASS
NTHV	BLE_1M	Ant1	2480	2479.988	-4.83871	±50	PASS

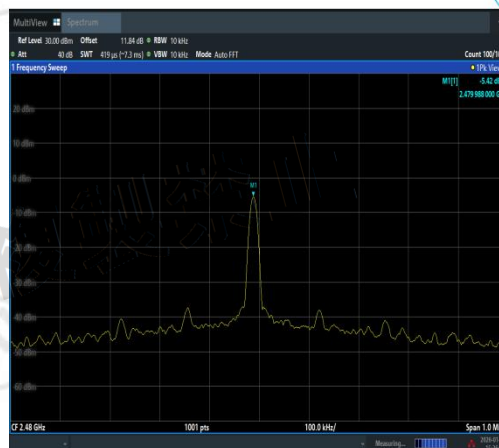
Test Graphs





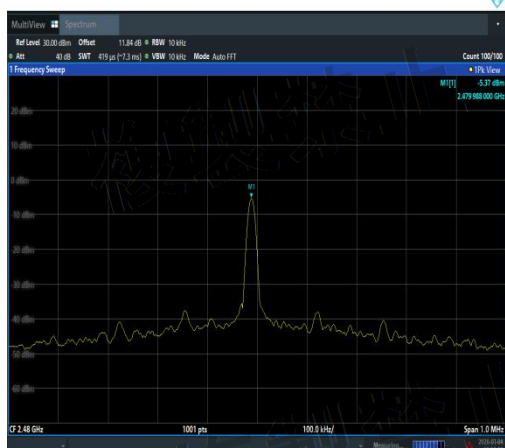
03:26:32 PM 01/04/2026

NTLV-BLE_1M-Ant1-2480-PASS



03:26:41 PM 01/04/2026

NTNV-BLE_1M-Ant1-2480-PASS



03:26:50 PM 01/04/2026

NTHV-BLE_1M-Ant1-2480-PASS

Appendix B: Antenna Power

Test Result

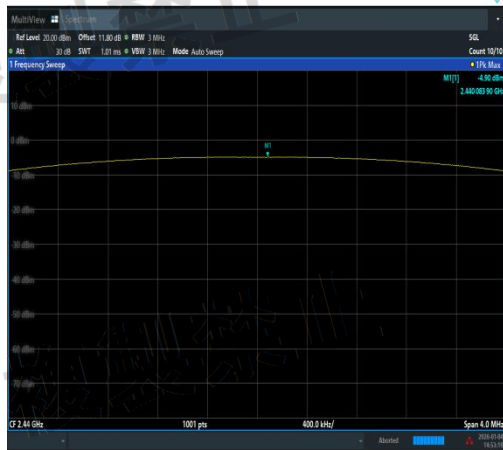
TestCondition	TestMode	Antenna	Freq(MHz)	Result(dBm)	Result(mW)	Limit(mW)	Verdict
NTLV	BLE_1M	Ant1	2402	-5.17	0.3041	≤10	PASS
NTNV	BLE_1M	Ant1	2402	-5.31	0.2944	≤10	PASS
NTHV	BLE_1M	Ant1	2402	-5.34	0.2924	≤10	PASS
NTLV	BLE_1M	Ant1	2440	-5.36	0.2911	≤10	PASS
NTNV	BLE_1M	Ant1	2440	-5.44	0.2858	≤10	PASS
NTHV	BLE_1M	Ant1	2440	-5.38	0.2897	≤10	PASS
NTLV	BLE_1M	Ant1	2480	-5.52	0.2805	≤10	PASS
NTNV	BLE_1M	Ant1	2480	-5.57	0.2773	≤10	PASS
NTHV	BLE_1M	Ant1	2480	-5.58	0.2767	≤10	PASS

Test Condition	Test Mode	Antenna	Freq(MHz)	Power (mW)	Rated Power (mW)	Result (%)	Limit (%)	Verdict
NTLV	BLE_1M	Ant1	2402	0.3041	0.3	1.37	20	PASS
NTNV	BLE_1M	Ant1	2402	0.2944	0.3	-1.87	20	PASS
NTHV	BLE_1M	Ant1	2402	0.2924	0.3	-2.53	20	PASS
NTLV	BLE_1M	Ant1	2440	0.2911	0.3	-2.97	20	PASS
NTNV	BLE_1M	Ant1	2440	0.2858	0.3	-4.73	20	PASS
NTHV	BLE_1M	Ant1	2440	0.2897	0.3	-3.43	20	PASS
NTLV	BLE_1M	Ant1	2480	0.2805	0.3	-6.50	20	PASS
NTNV	BLE_1M	Ant1	2480	0.2773	0.3	-7.57	20	PASS
NTHV	BLE_1M	Ant1	2480	0.2767	0.3	-7.77	20	PASS

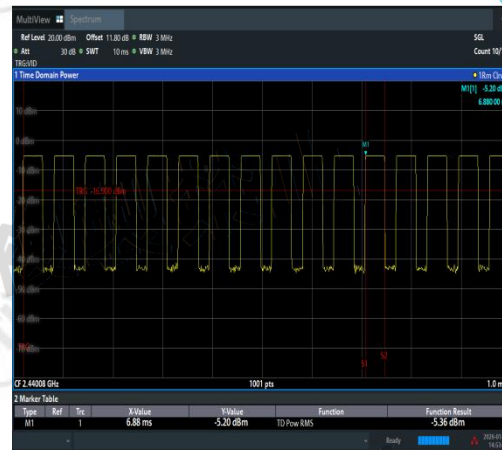
Test Condition	Test Mode	Antenna	Freq(MHz)	Result(dBm)	EIRP(dBm)	Limit(dBm)	Verdict
NTLV	BLE_1M	Ant1	2402	-5.17	-2.67	≤12.14	PASS
NTNV	BLE_1M	Ant1	2402	-5.31	-2.81	≤12.14	PASS
NTHV	BLE_1M	Ant1	2402	-5.34	-2.84	≤12.14	PASS
NTLV	BLE_1M	Ant1	2440	-5.36	-2.86	≤12.14	PASS
NTNV	BLE_1M	Ant1	2440	-5.44	-2.94	≤12.14	PASS
NTHV	BLE_1M	Ant1	2440	-5.38	-2.88	≤12.14	PASS
NTLV	BLE_1M	Ant1	2480	-5.52	-3.02	≤12.14	PASS
NTNV	BLE_1M	Ant1	2480	-5.57	-3.07	≤12.14	PASS
NTHV	BLE_1M	Ant1	2480	-5.58	-3.08	≤12.14	PASS

Test Graphs

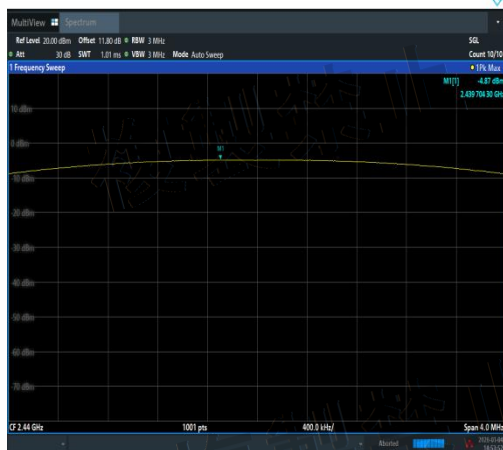




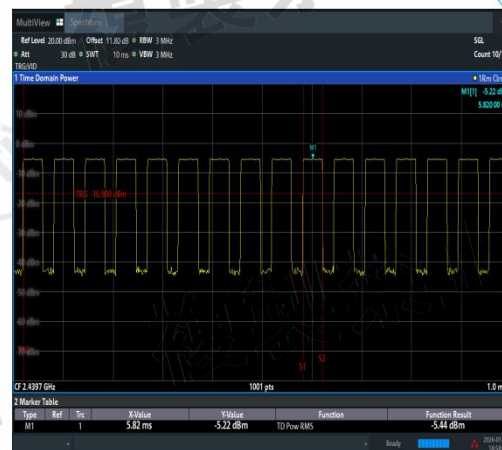
NTLV-BLE_1M-Ant1-2440-PASS



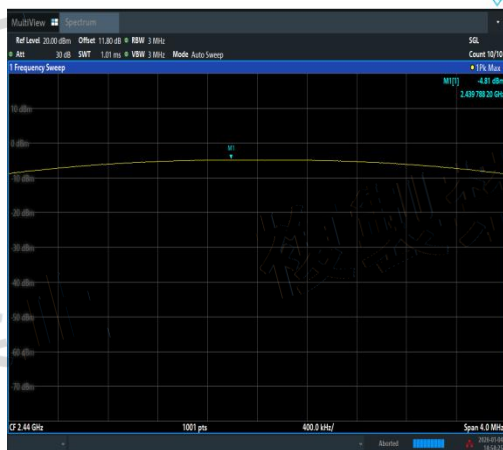
NTLV-BLE_1M-Ant1-2440-PASS



NTNV-BLE_1M-Ant1-2440-PASS



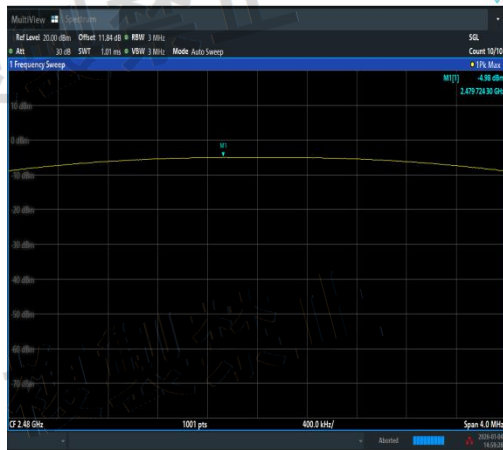
NTNV-BLE_1M-Ant1-2440-PASS



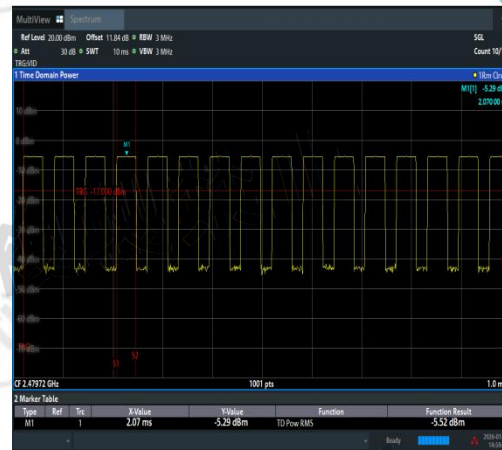
NTHV-BLE_1M-Ant1-2440-PASS



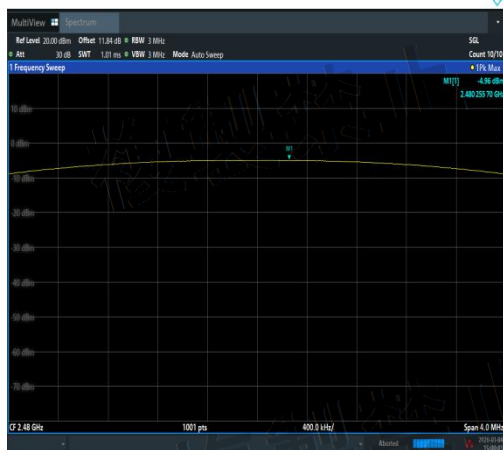
NTHV-BLE_1M-Ant1-2440-PASS



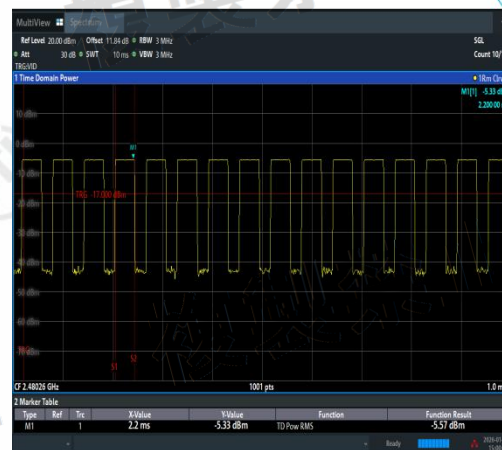
NTLV-BLE_1M-Ant1-2480-PASS



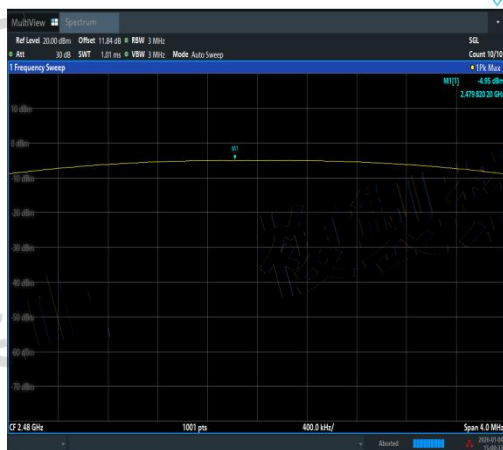
NTLV-BLE_1M-Ant1-2480-PASS



NTNV-BLE_1M-Ant1-2480-PASS



NTNV-BLE_1M-Ant1-2480-PASS



NTHV-BLE_1M-Ant1-2480-PASS

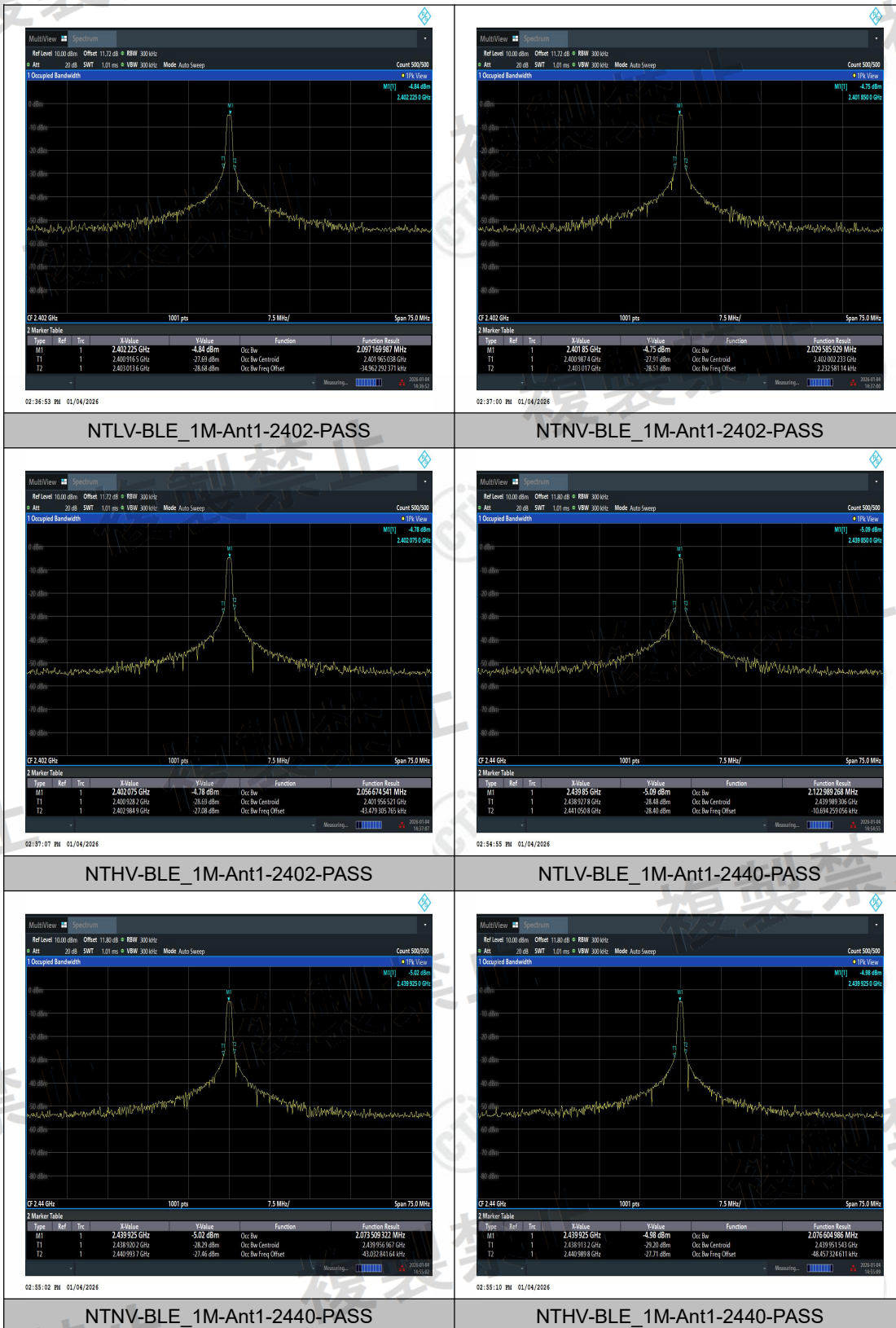


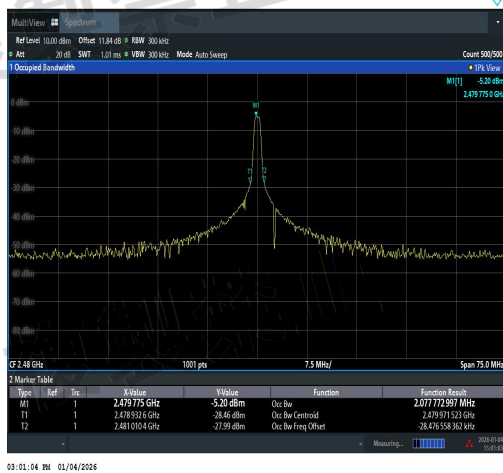
NTHV-BLE_1M-Ant1-2480-PASS

Appendix C: Occupied Bandwidth**Test Result**

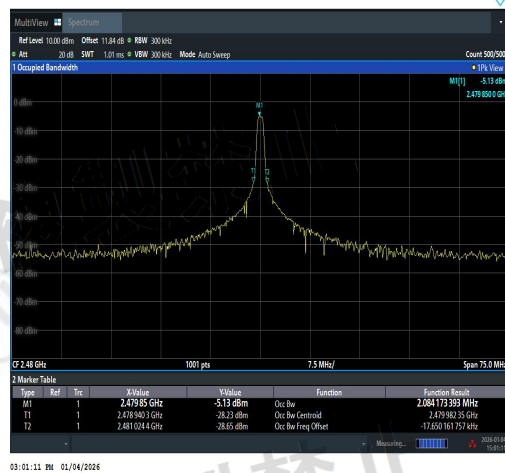
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTLV	BLE_1M	Ant1	2402	2.097	≤26	PASS
NTNV	BLE_1M	Ant1	2402	2.030	≤26	PASS
NTHV	BLE_1M	Ant1	2402	2.057	≤26	PASS
NTLV	BLE_1M	Ant1	2440	2.123	≤26	PASS
NTNV	BLE_1M	Ant1	2440	2.074	≤26	PASS
NTHV	BLE_1M	Ant1	2440	2.077	≤26	PASS
NTLV	BLE_1M	Ant1	2480	2.078	≤26	PASS
NTNV	BLE_1M	Ant1	2480	2.084	≤26	PASS
NTHV	BLE_1M	Ant1	2480	2.097	≤26	PASS

Test Graphs

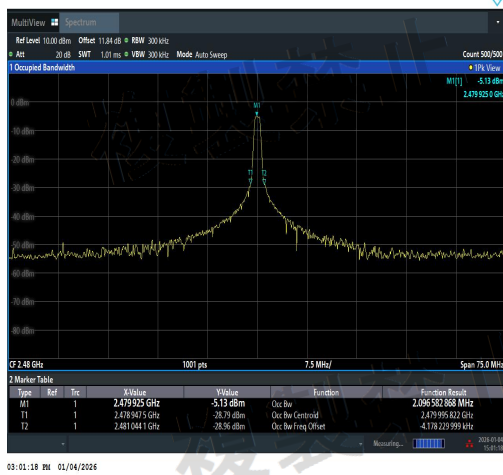




NTLV-BLE_1M-Ant1-2480-PASS



NTNV-BLE_1M-Ant1-2480-PASS



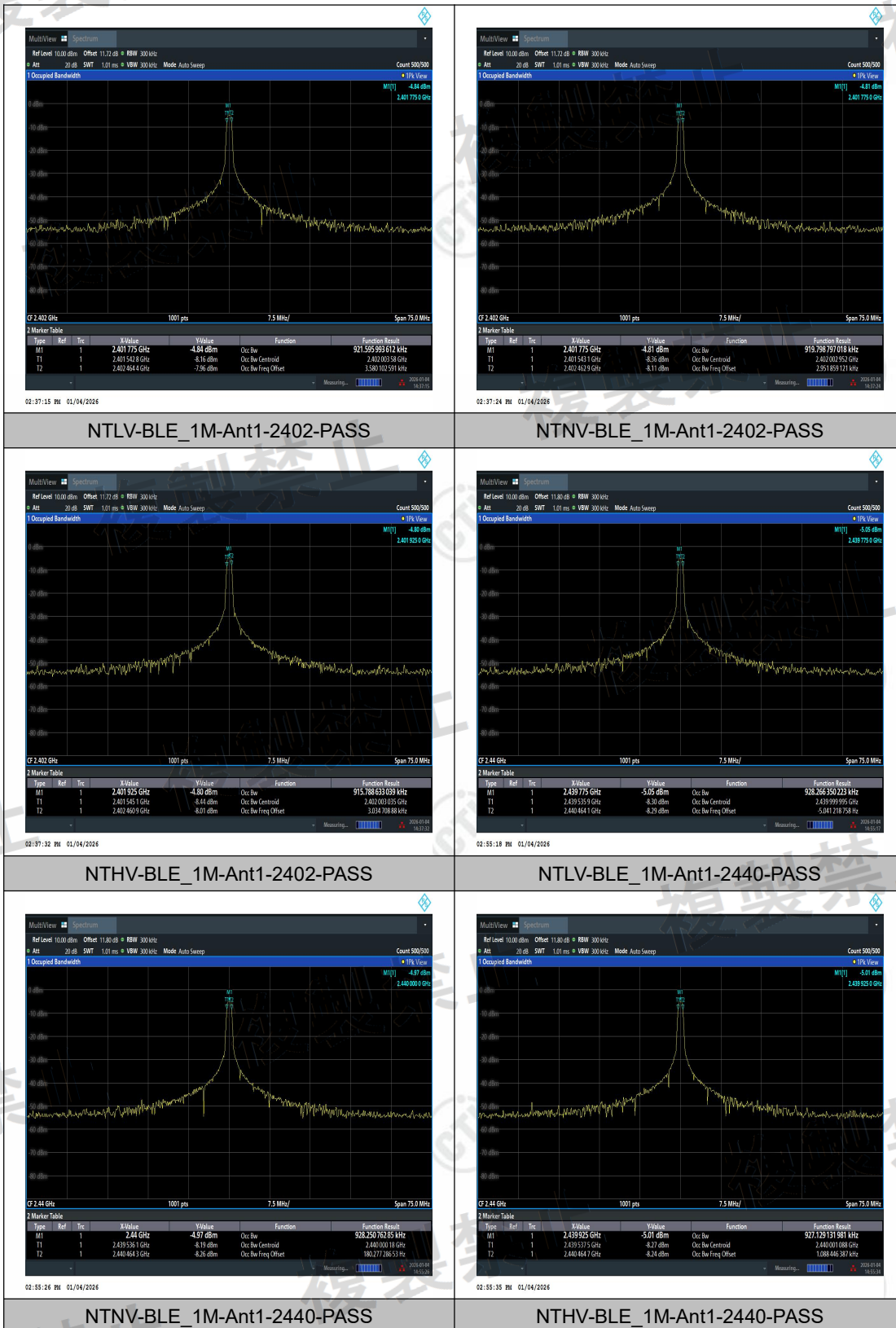
NTHV-BLE_1M-Ant1-2480-PASS

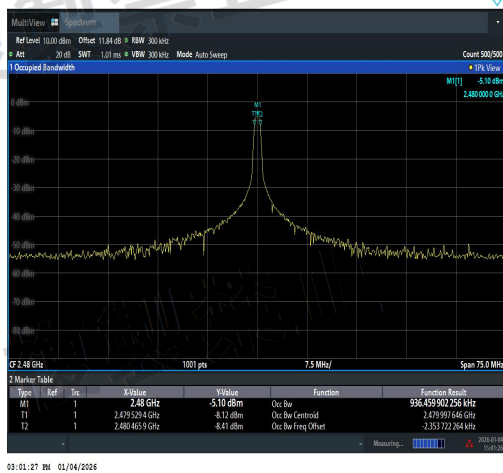
Appendix D: Spread Bandwidth

Test Result

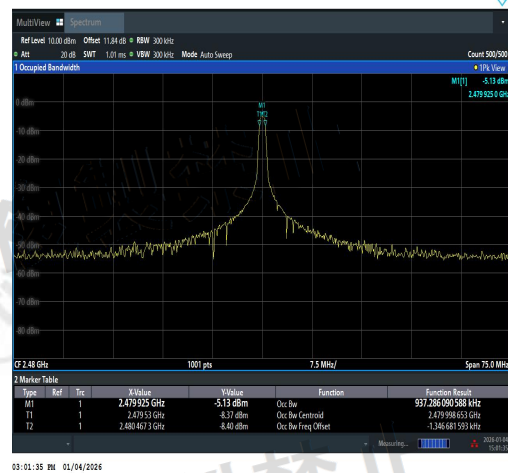
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]
NTLV	BLE_1M	Ant1	2402	0.922
NTNV	BLE_1M	Ant1	2402	0.920
NTHV	BLE_1M	Ant1	2402	0.916
NTLV	BLE_1M	Ant1	2440	0.928
NTNV	BLE_1M	Ant1	2440	0.928
NTHV	BLE_1M	Ant1	2440	0.927
NTLV	BLE_1M	Ant1	2480	0.936
NTNV	BLE_1M	Ant1	2480	0.937
NTHV	BLE_1M	Ant1	2480	0.939

Test Graphs

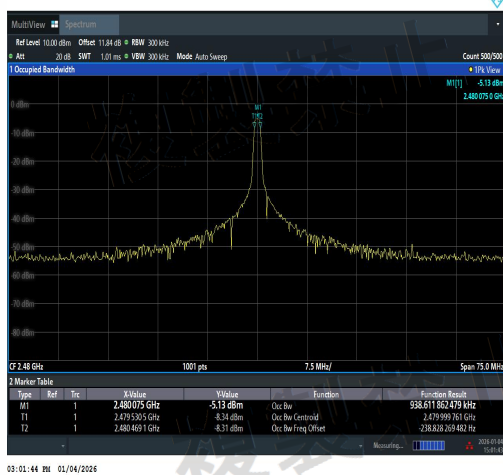




NTLV-BLE_1M-Ant1-2480-PASS



NTNV-BLE_1M-Ant1-2480-PASS



NTHV-BLE_1M-Ant1-2480-PASS

Appendix E: Unwanted Emission Strength

Test Result

Test Condition	TestMode	Antenna	Freq(MHz)	Freq.Range [MHz]	ResultFreq (MHz)	Result [dBm/MHz]	Result [μW/MHz]	Limit [μW/MHz]	Verdict
NTLV	BLE_1M	Ant1	2402	30~1000	31.70	-55.11	0.00308	≤2.5	PASS
NTNV	BLE_1M	Ant1	2402	30~1000	109.54	-54.13	0.00386	≤2.5	PASS
NTHV	BLE_1M	Ant1	2402	30~1000	40.67	-54.73	0.00337	≤2.5	PASS
NTLV	BLE_1M	Ant1	2402	1000~2387	2387.00	-39.89	0.10257	≤2.5	PASS
NTNV	BLE_1M	Ant1	2402	1000~2387	2385.27	-39.92	0.10186	≤2.5	PASS
NTHV	BLE_1M	Ant1	2402	1000~2387	2386.65	-40.42	0.09078	≤2.5	PASS
NTLV	BLE_1M	Ant1	2402	2387~2400	2399.99	-21.46	7.14496	≤25	PASS
NTNV	BLE_1M	Ant1	2402	2387~2400	2399.98	-21.48	7.11214	≤25	PASS
NTHV	BLE_1M	Ant1	2402	2387~2400	2399.98	-21.83	6.56145	≤25	PASS
NTLV	BLE_1M	Ant1	2402	2483.5~2496.5	2484.23	-34.93	0.32137	≤25	PASS
NTNV	BLE_1M	Ant1	2402	2483.5~2496.5	2483.89	-34.57	0.34914	≤25	PASS
NTHV	BLE_1M	Ant1	2402	2483.5~2496.5	2487.45	-34.70	0.33884	≤25	PASS
NTLV	BLE_1M	Ant1	2402	2496.5~13000	8674.66	-43.37	0.04603	≤2.5	PASS
NTNV	BLE_1M	Ant1	2402	2496.5~13000	4804.12	-43.43	0.04539	≤2.5	PASS
NTHV	BLE_1M	Ant1	2402	2496.5~13000	8713.00	-43.36	0.04613	≤2.5	PASS
NTLV	BLE_1M	Ant1	2440	30~1000	34.61	-54.28	0.00373	≤2.5	PASS
NTNV	BLE_1M	Ant1	2440	30~1000	32.91	-54.83	0.00329	≤2.5	PASS
NTHV	BLE_1M	Ant1	2440	30~1000	34.85	-54.43	0.00361	≤2.5	PASS
NTLV	BLE_1M	Ant1	2440	1000~2387	1768.74	-44.49	0.03556	≤2.5	PASS
NTNV	BLE_1M	Ant1	2440	1000~2387	2340.19	-44.41	0.03622	≤2.5	PASS
NTHV	BLE_1M	Ant1	2440	1000~2387	1724.36	-44.82	0.03296	≤2.5	PASS
NTLV	BLE_1M	Ant1	2440	2387~2400	2395.00	-34.93	0.32137	≤25	PASS
NTNV	BLE_1M	Ant1	2440	2387~2400	2393.10	-34.68	0.34041	≤25	PASS
NTHV	BLE_1M	Ant1	2440	2387~2400	2387.38	-35.25	0.29854	≤25	PASS
NTLV	BLE_1M	Ant1	2440	2483.5~2496.5	2485.48	-35.06	0.31189	≤25	PASS
NTNV	BLE_1M	Ant1	2440	2483.5~2496.5	2494.71	-34.64	0.34356	≤25	PASS
NTHV	BLE_1M	Ant1	2440	2483.5~2496.5	2484.09	-34.84	0.32810	≤25	PASS
NTLV	BLE_1M	Ant1	2440	2496.5~13000	4879.74	-42.23	0.05984	≤2.5	PASS
NTNV	BLE_1M	Ant1	2440	2496.5~13000	8654.70	-42.48	0.05649	≤2.5	PASS
NTHV	BLE_1M	Ant1	2440	2496.5~13000	8735.58	-43.02	0.04989	≤2.5	PASS
NTLV	BLE_1M	Ant1	2480	30~1000	50.86	-54.89	0.00324	≤2.5	PASS
NTNV	BLE_1M	Ant1	2480	30~1000	34.61	-53.21	0.00478	≤2.5	PASS
NTHV	BLE_1M	Ant1	2480	30~1000	55.22	-54.51	0.00354	≤2.5	PASS
NTLV	BLE_1M	Ant1	2480	1000~2387	2296.85	-44.41	0.03622	≤2.5	PASS
NTNV	BLE_1M	Ant1	2480	1000~2387	2007.31	-44.57	0.03491	≤2.5	PASS

NTHV	BLE_1M	Ant1	2480	1000~2387	2342.27	-44.29	0.03724	≤2.5	PASS
NTLV	BLE_1M	Ant1	2480	2387~2400	2399.94	-34.49	0.35563	≤25	PASS
NTNV	BLE_1M	Ant1	2480	2387~2400	2387.45	-35.05	0.31261	≤25	PASS
NTHV	BLE_1M	Ant1	2480	2387~2400	2394.90	-34.53	0.35237	≤25	PASS
NTLV	BLE_1M	Ant1	2480	2483.5~2496.5	2483.53	-26.96	2.01372	≤25	PASS
NTNV	BLE_1M	Ant1	2480	2483.5~2496.5	2483.63	-26.60	2.18776	≤25	PASS
NTHV	BLE_1M	Ant1	2480	2483.5~2496.5	2483.52	-27.19	1.90985	≤25	PASS
NTLV	BLE_1M	Ant1	2480	2496.5~13000	8624.77	-42.83	0.05212	≤2.5	PASS
NTNV	BLE_1M	Ant1	2480	2496.5~13000	8798.60	-43.12	0.04875	≤2.5	PASS
NTHV	BLE_1M	Ant1	2480	2496.5~13000	2497.03	-42.56	0.05546	≤2.5	PASS

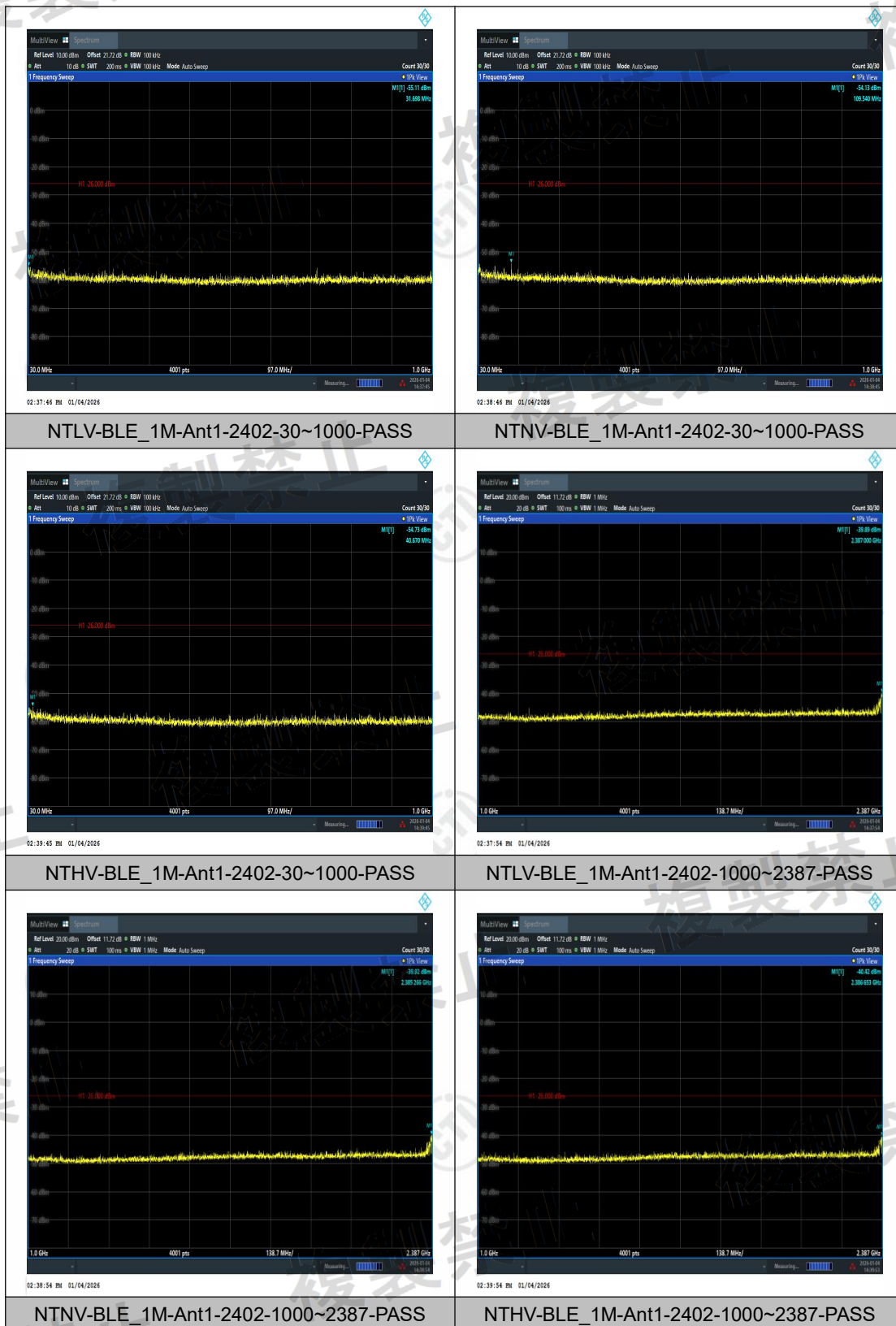
Note:

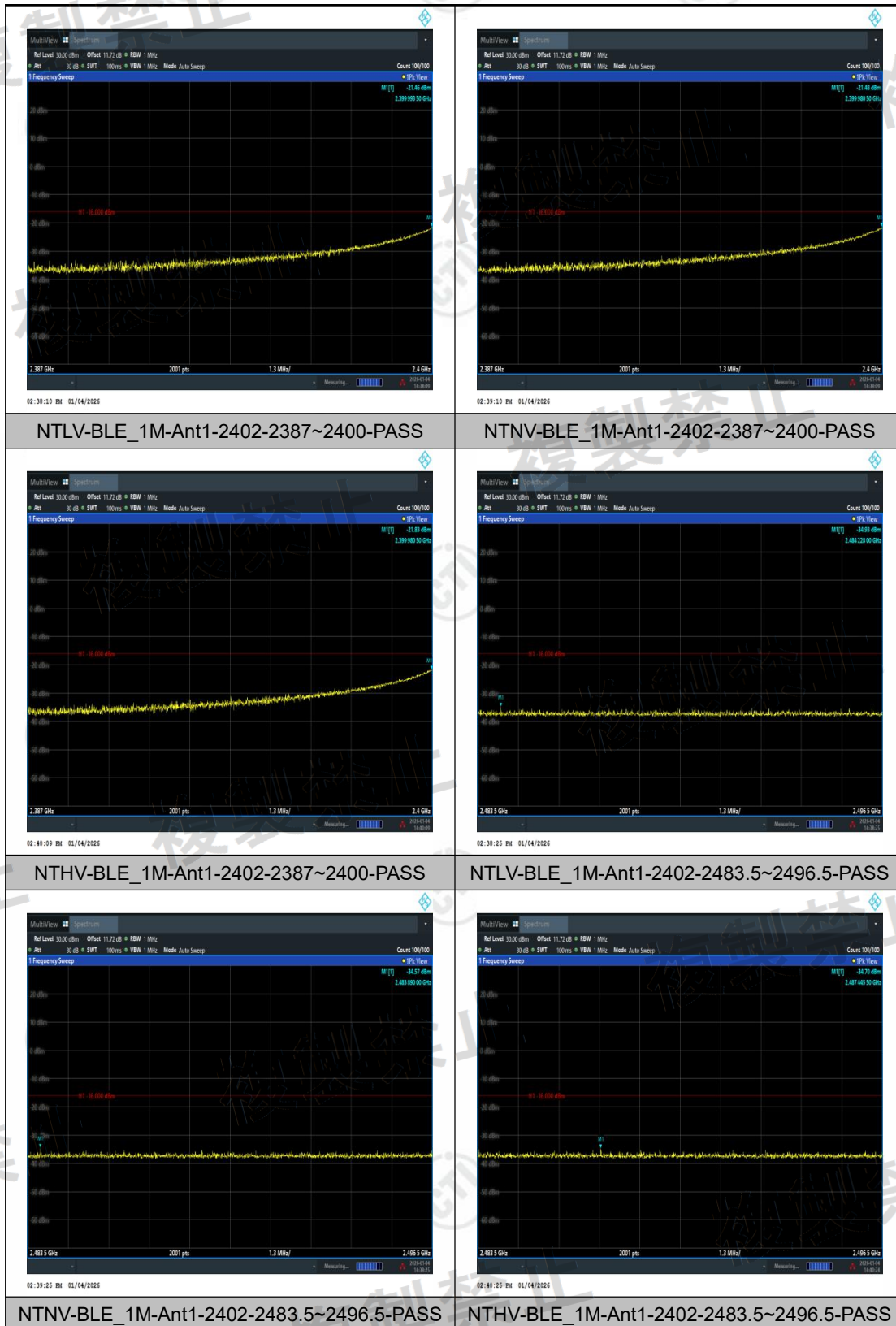
$\text{dBm}/1\text{MHz} = \text{dBm}/100\text{kHz} + 10 \times \log_{10} (1\text{MHz}/100\text{kHz})$

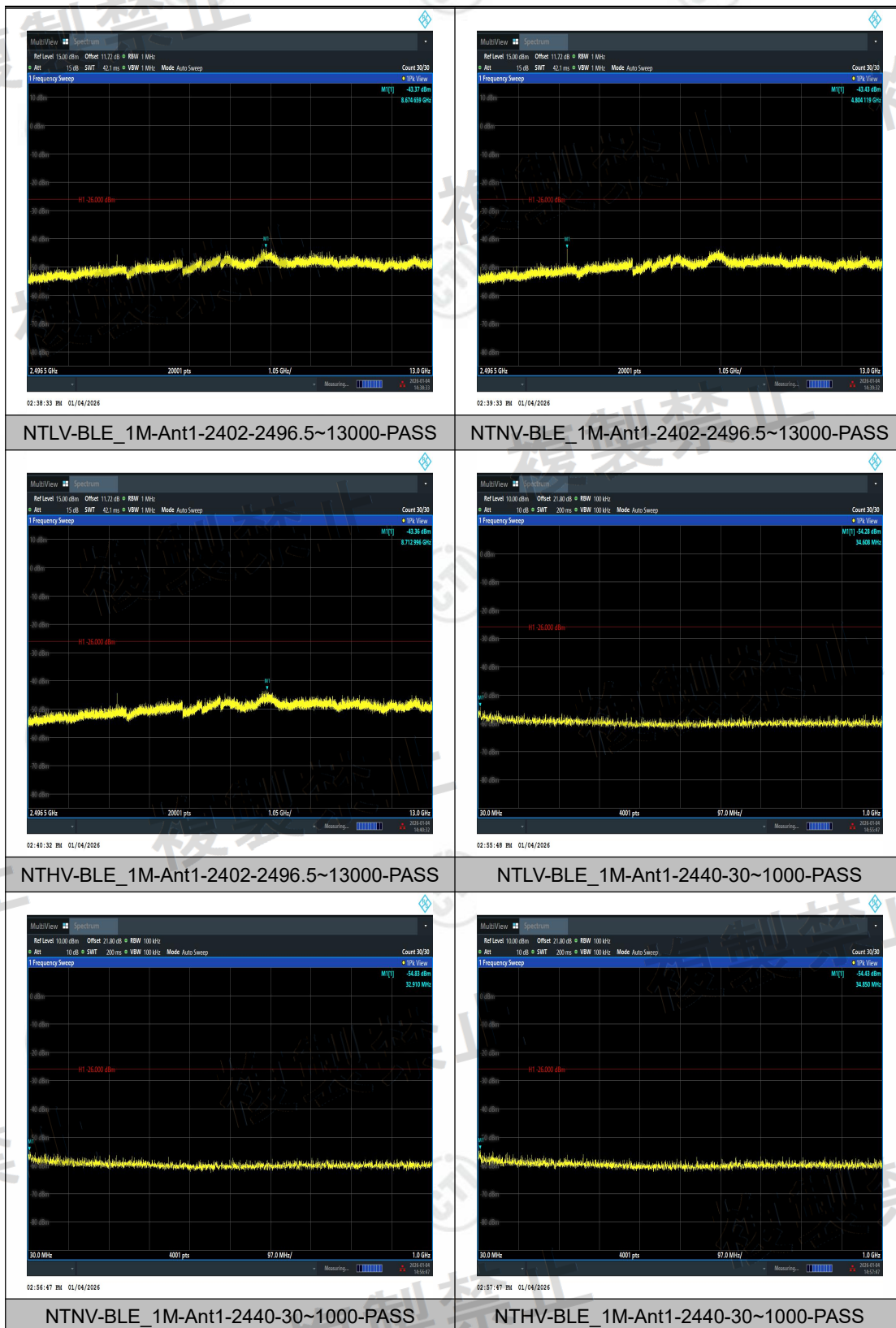
$\text{dBm}/1\text{MHz} = \text{dBm}/100\text{kHz} + 10$

During the 30M-1000M testing process, a 10 dB factor was added for the test.

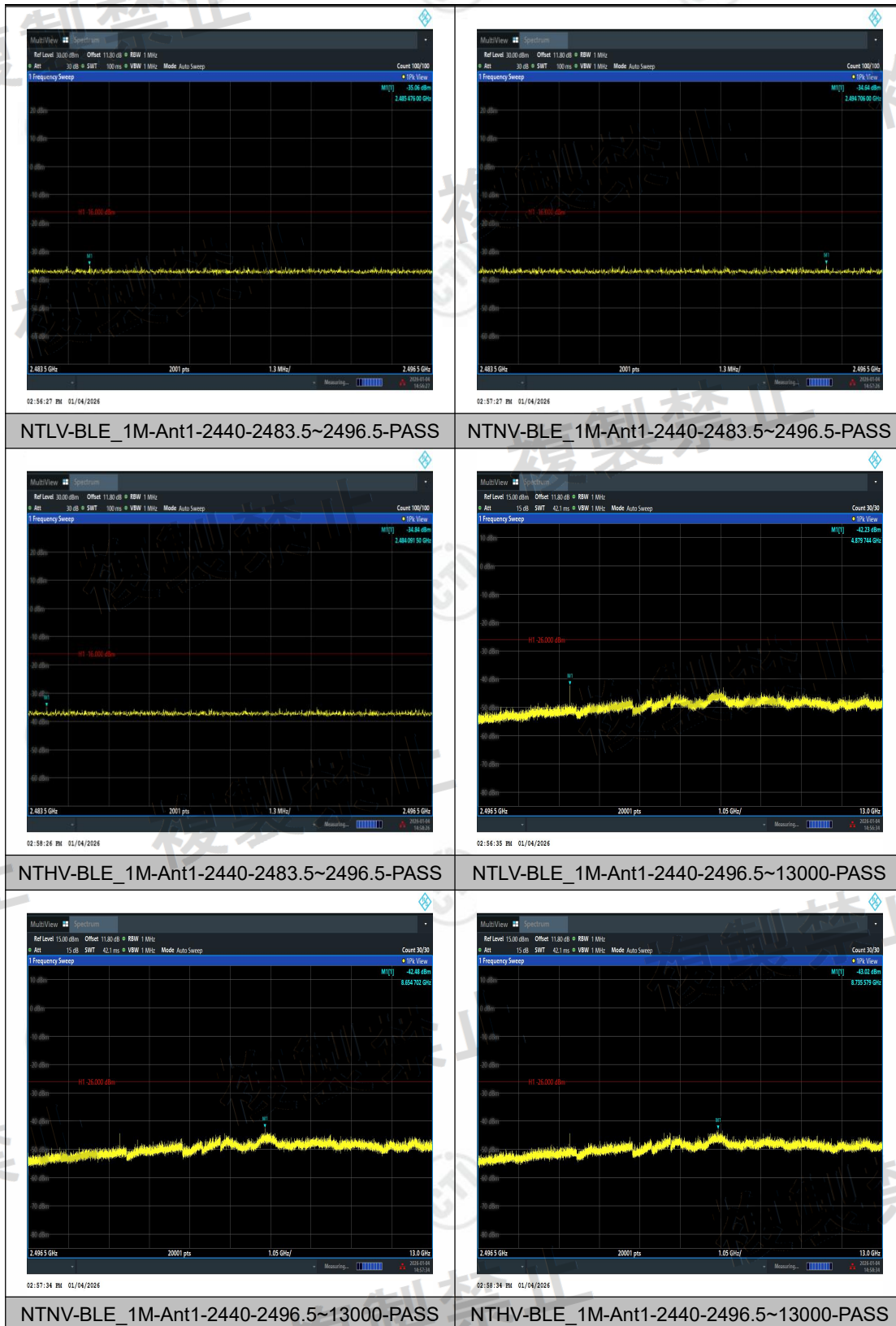
Test Graphs

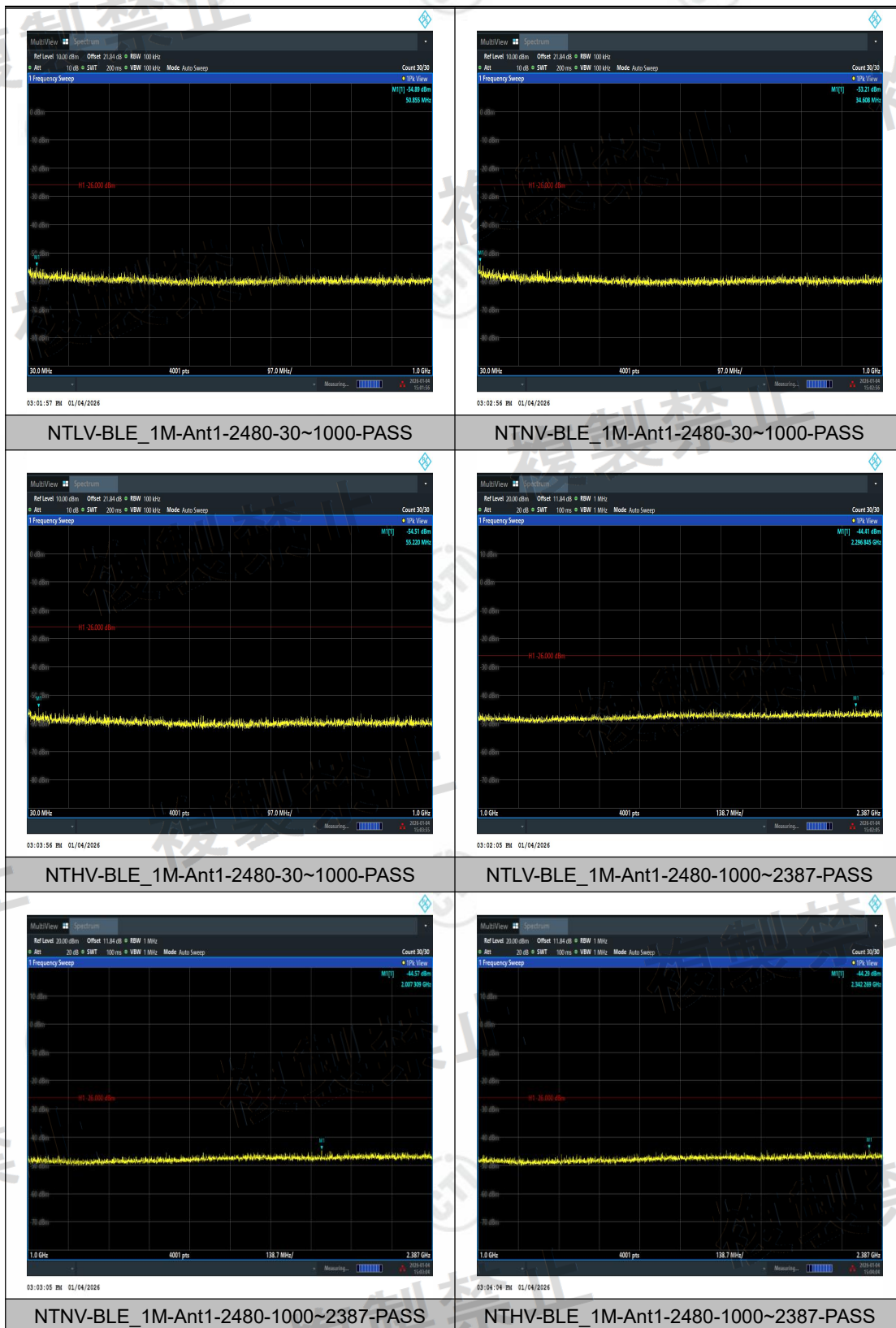


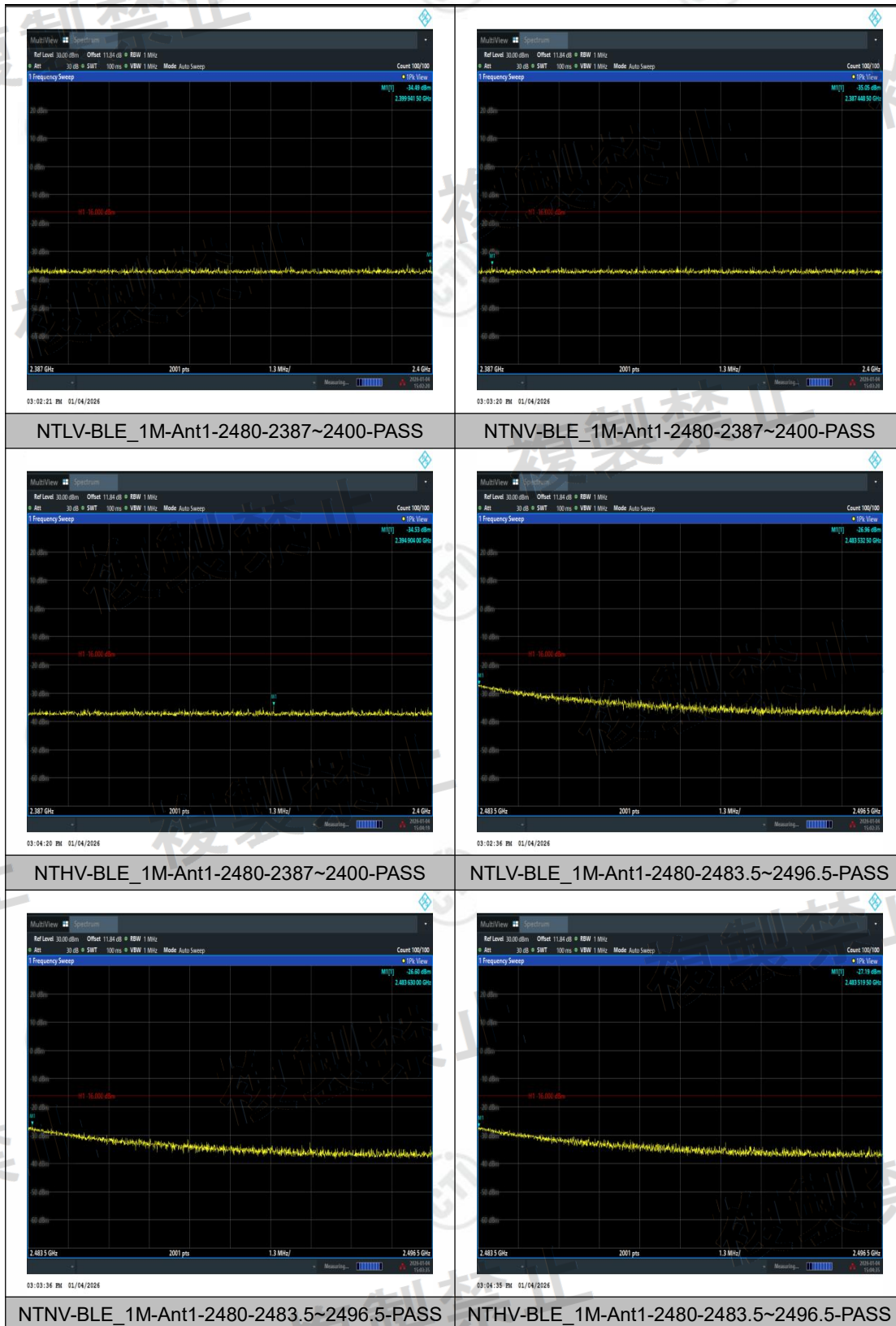


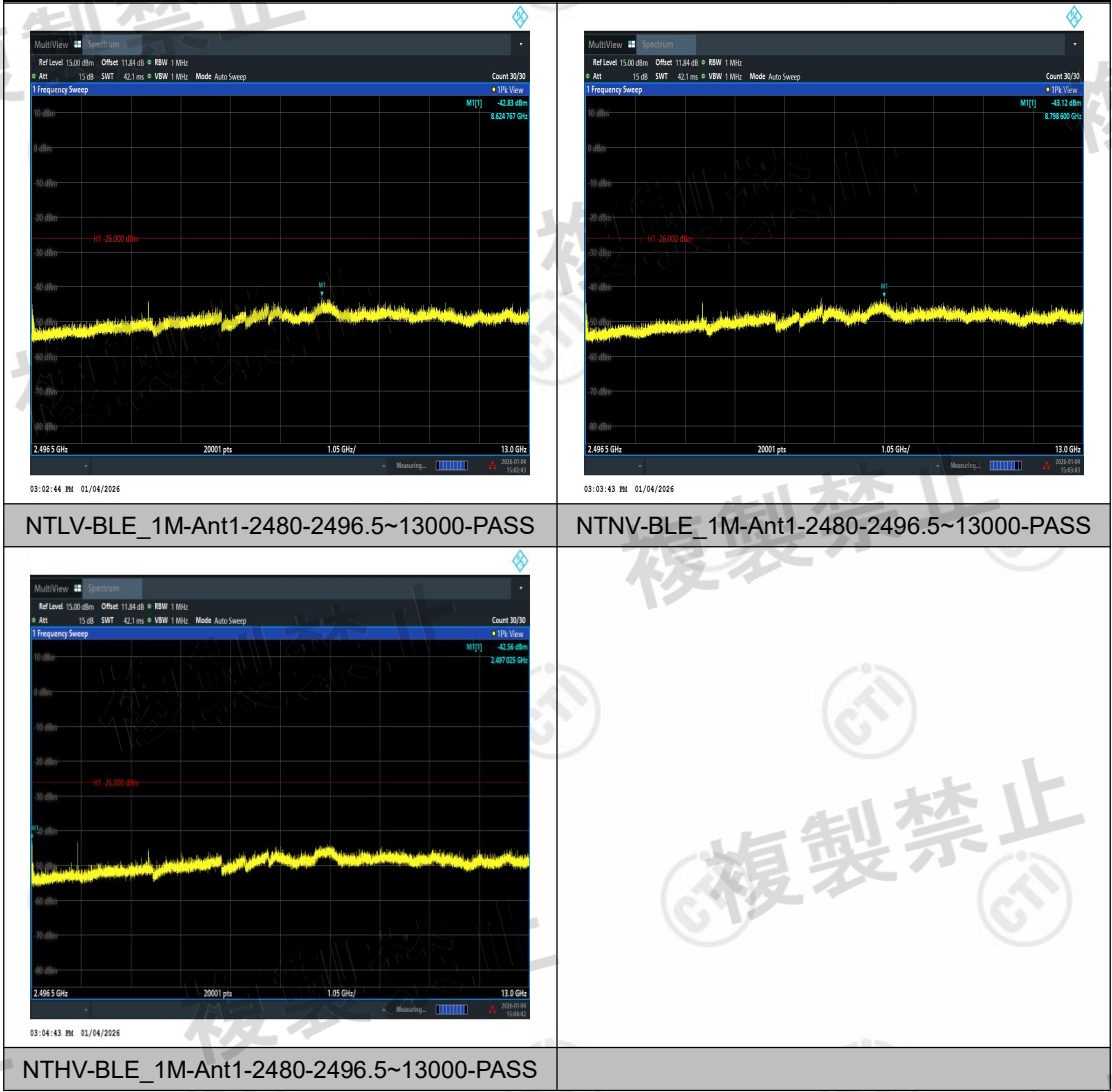










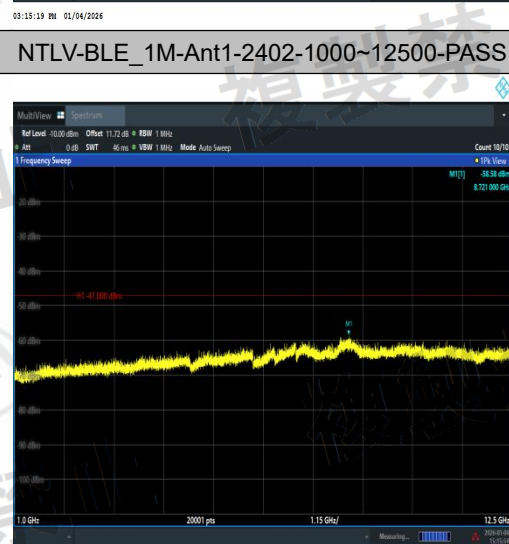
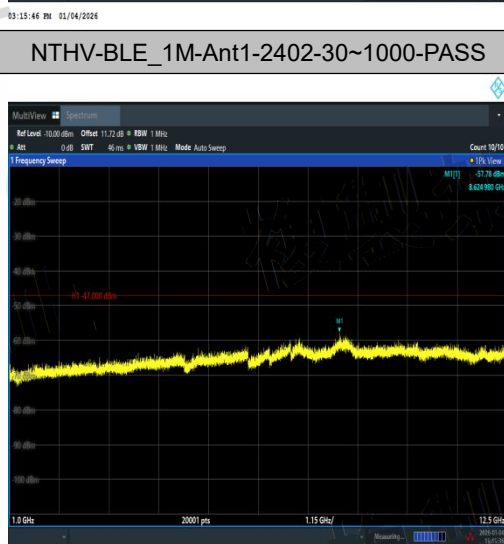
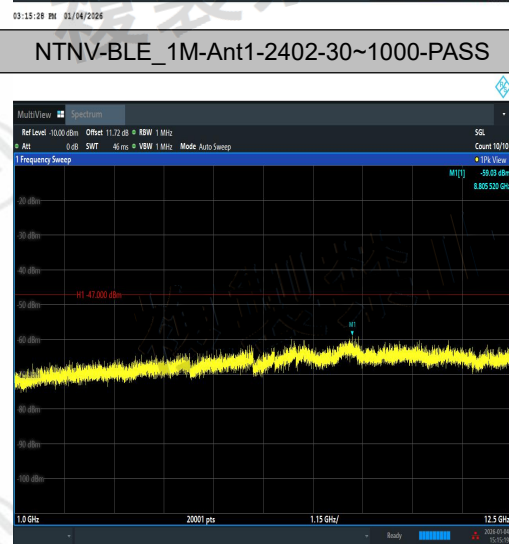
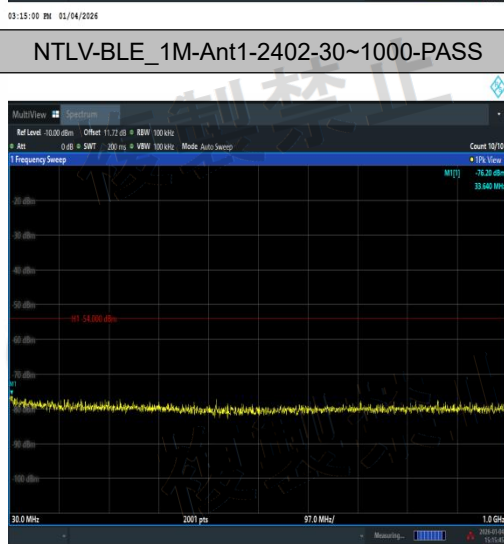
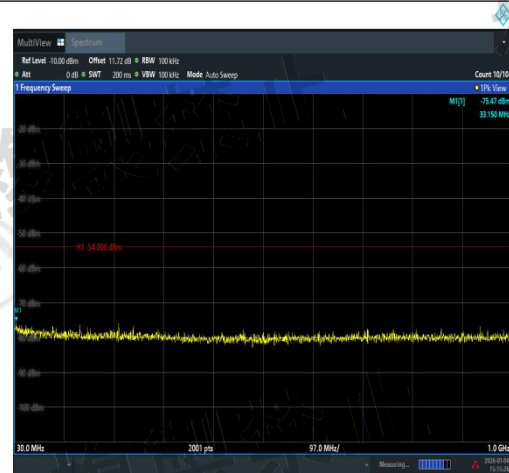
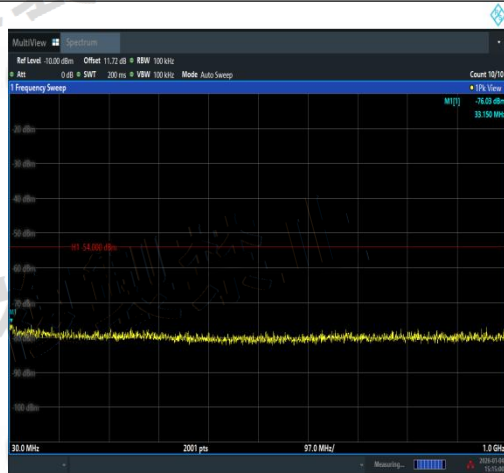


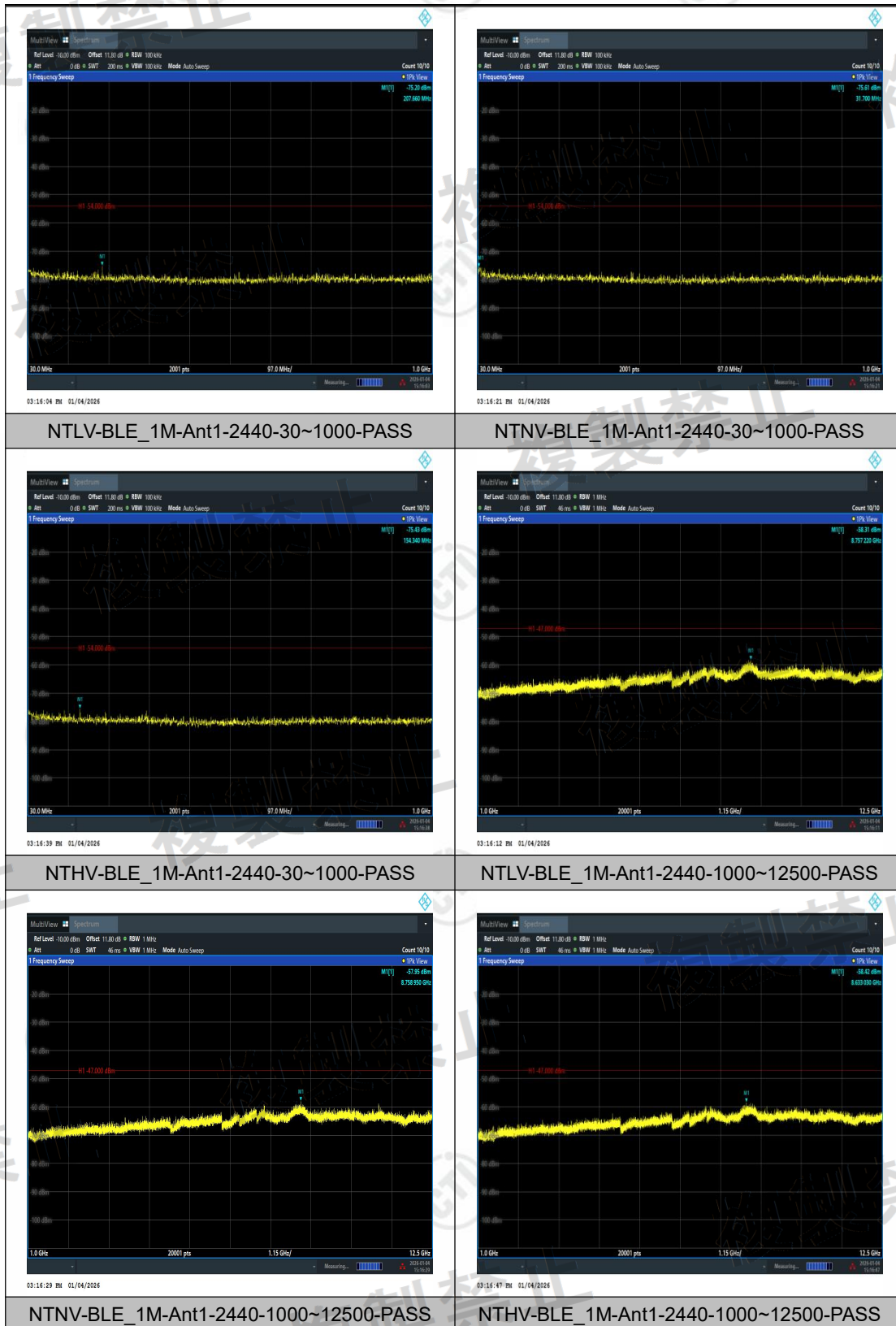
Appendix F: Secondary Radiated Emission Strength

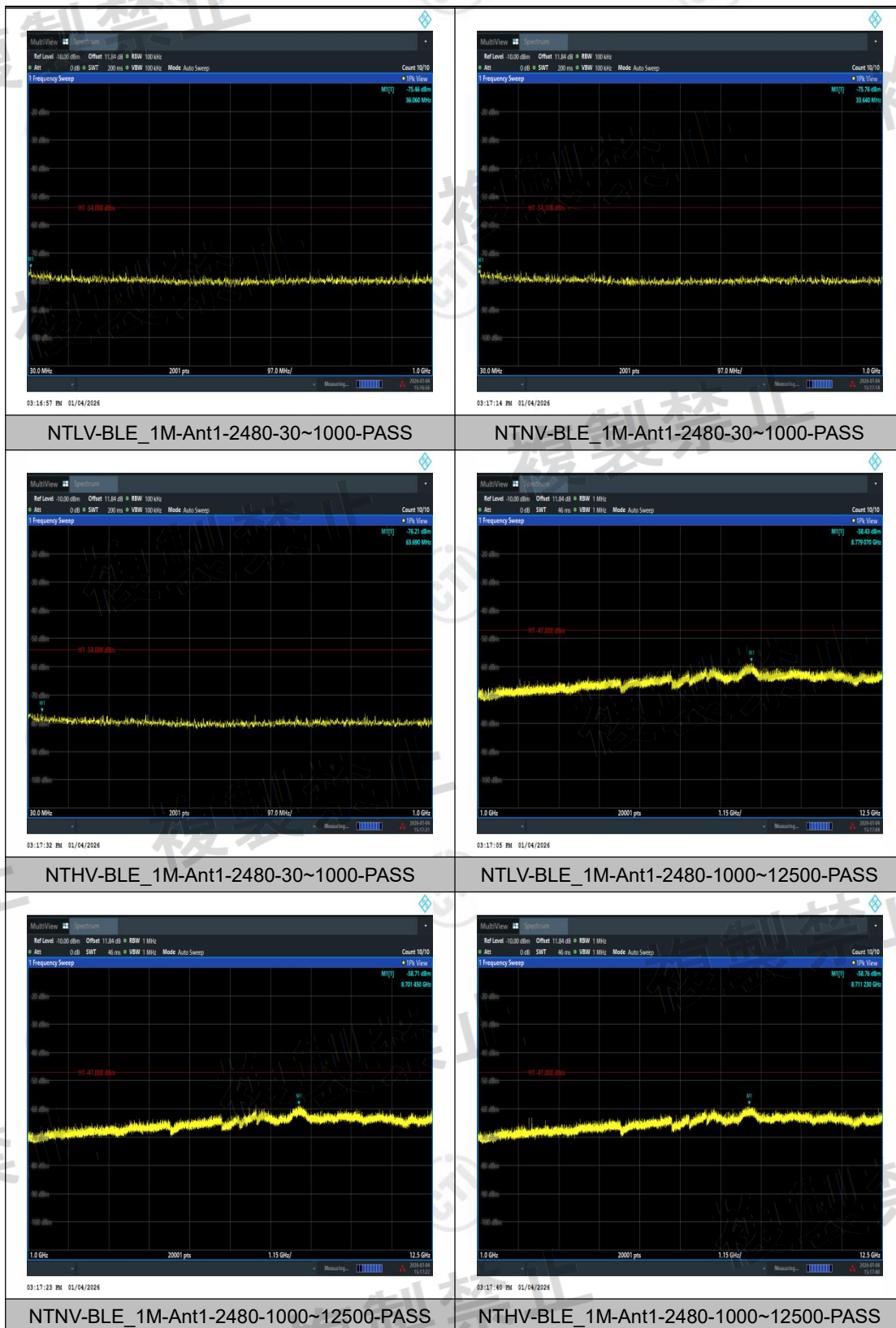
Test Result

Test Condition	TestMode	Antenna	Freq(MHz)	Freq.Range [MHz]	ResultFreq (MHz)	Result [dBm]	Result [nW]	Limit [nW]	Verdict
NTLV	BLE_1M	Ant1	2402	30~1000	33.15	-76.03	0.02495	≤4	PASS
NTNV	BLE_1M	Ant1	2402	30~1000	33.15	-75.47	0.02838	≤4	PASS
NTHV	BLE_1M	Ant1	2402	30~1000	33.64	-76.20	0.02399	≤4	PASS
NTLV	BLE_1M	Ant1	2402	1000~12500	8805.52	-59.03	1.25026	≤20	PASS
NTNV	BLE_1M	Ant1	2402	1000~12500	8624.98	-57.78	1.66725	≤20	PASS
NTHV	BLE_1M	Ant1	2402	1000~12500	8721.00	-58.58	1.38676	≤20	PASS
NTLV	BLE_1M	Ant1	2440	30~1000	207.66	-75.20	0.03020	≤4	PASS
NTNV	BLE_1M	Ant1	2440	30~1000	31.70	-75.61	0.02748	≤4	PASS
NTHV	BLE_1M	Ant1	2440	30~1000	154.34	-75.43	0.02864	≤4	PASS
NTLV	BLE_1M	Ant1	2440	1000~12500	8757.22	-58.31	1.47571	≤20	PASS
NTNV	BLE_1M	Ant1	2440	1000~12500	8758.95	-57.95	1.60325	≤20	PASS
NTHV	BLE_1M	Ant1	2440	1000~12500	8633.03	-58.42	1.43880	≤20	PASS
NTLV	BLE_1M	Ant1	2480	30~1000	36.06	-75.46	0.02844	≤4	PASS
NTNV	BLE_1M	Ant1	2480	30~1000	33.64	-75.76	0.02655	≤4	PASS
NTHV	BLE_1M	Ant1	2480	30~1000	63.69	-76.21	0.02393	≤4	PASS
NTLV	BLE_1M	Ant1	2480	1000~12500	8779.07	-58.43	1.43549	≤20	PASS
NTNV	BLE_1M	Ant1	2480	1000~12500	8701.45	-58.71	1.34586	≤20	PASS
NTHV	BLE_1M	Ant1	2480	1000~12500	8711.23	-58.76	1.33045	≤20	PASS

Test Graphs







*** End of Report ***