

Appendix B: Test Results of Bluetooth Low Energy

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Appendix B.1: Test Results of Frequency Tolerance

Test Result

TestCondition	TestMode	Antenna	Freq(MHz)	Result[ppm]	Limit[ppm]	Verdict
NTNV	BLE_1M	Ant1	2402	0.00000	±50	PASS
			2440	-7.99180	±50	PASS
			2480	9.07258	±50	PASS
	BLE_2M	Ant1	2402	0.62448	±50	PASS
			2440	-9.83607	±50	PASS
			2480	-13.91129	±50	PASS
NTLV	BLE_1M	Ant1	2402	-4.37136	±50	PASS
			2440	-3.07377	±50	PASS
			2480	3.62903	±50	PASS
	BLE_2M	Ant1	2402	-9.99167	±50	PASS
			2440	-29.50820	±50	PASS
			2480	2.41936	±50	PASS
NTHV	BLE_1M	Ant1	2402	6.24480	±50	PASS
			2440	6.14754	±50	PASS
			2480	-5.44355	±50	PASS
	BLE_2M	Ant1	2402	-29.35054	±50	PASS
			2440	-10.45082	±50	PASS
			2480	1.20968	±50	PASS

Test Graphs





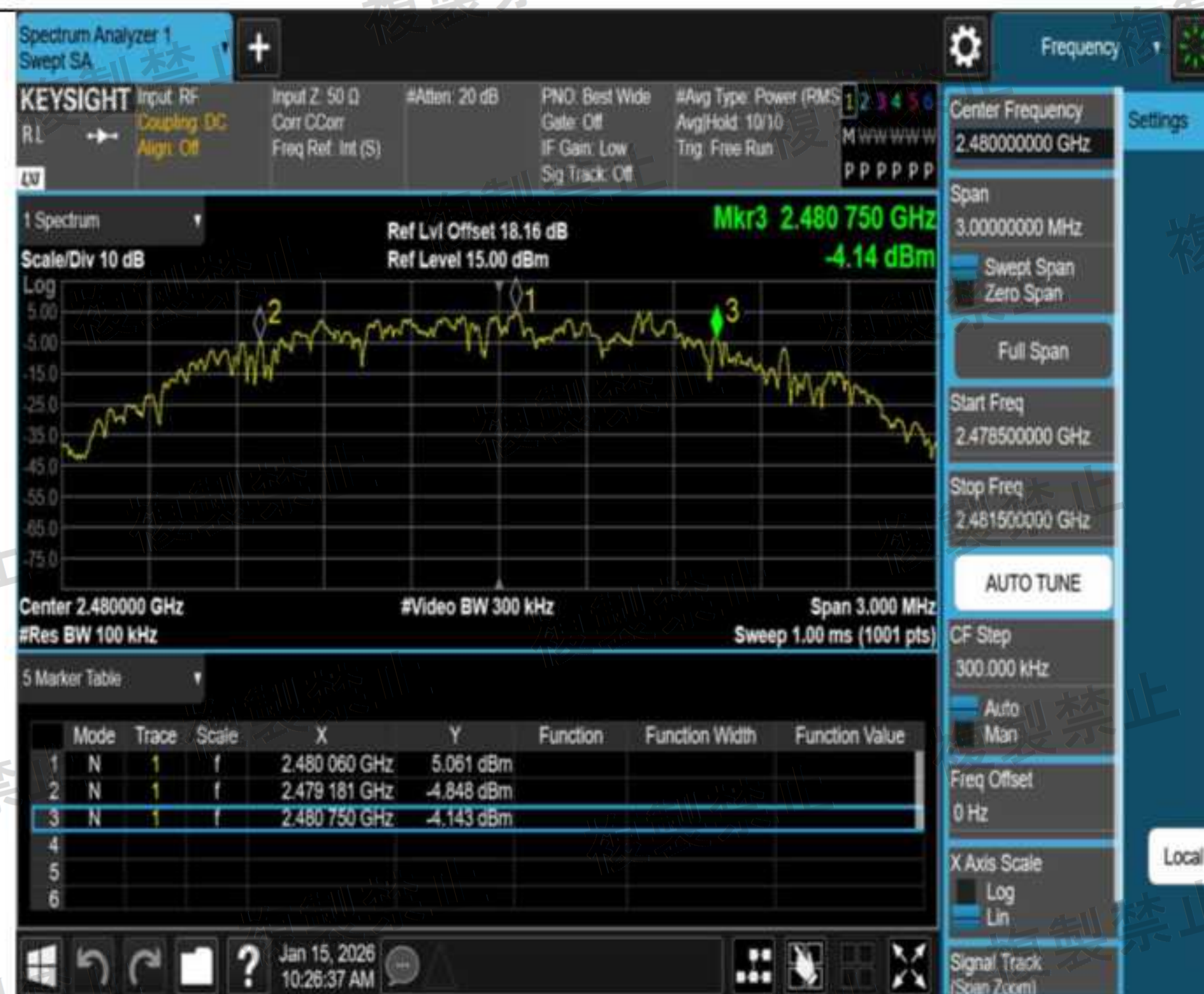
NTNV BLE 2M Ant1 2402



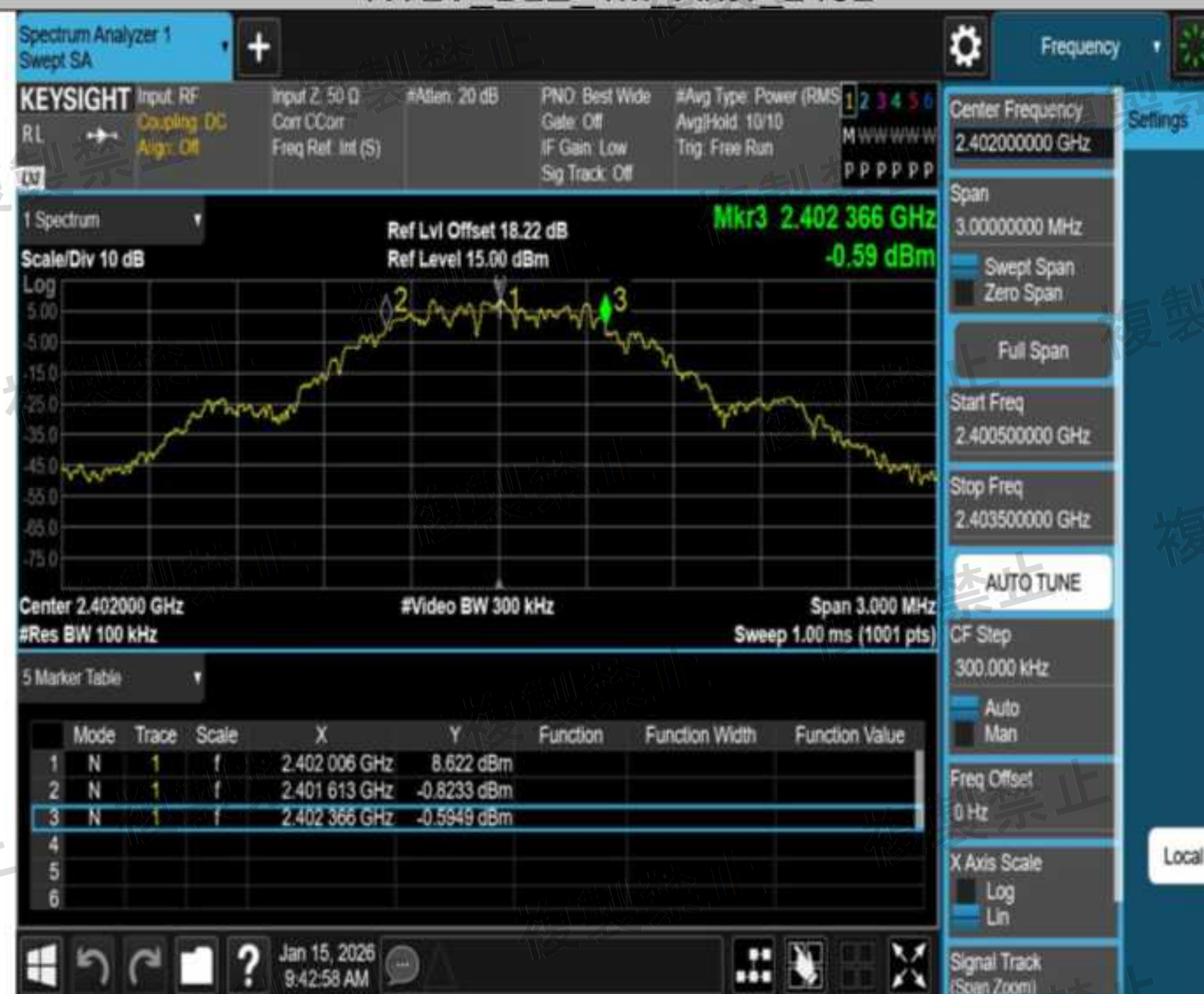
NTNV BLE 2M Ant1 2440



NTNV BLE 2M Ant1 2480



NTLV_BLE_1M_Ant1_2402



NTLV_BLE_1M_Ant1_2440

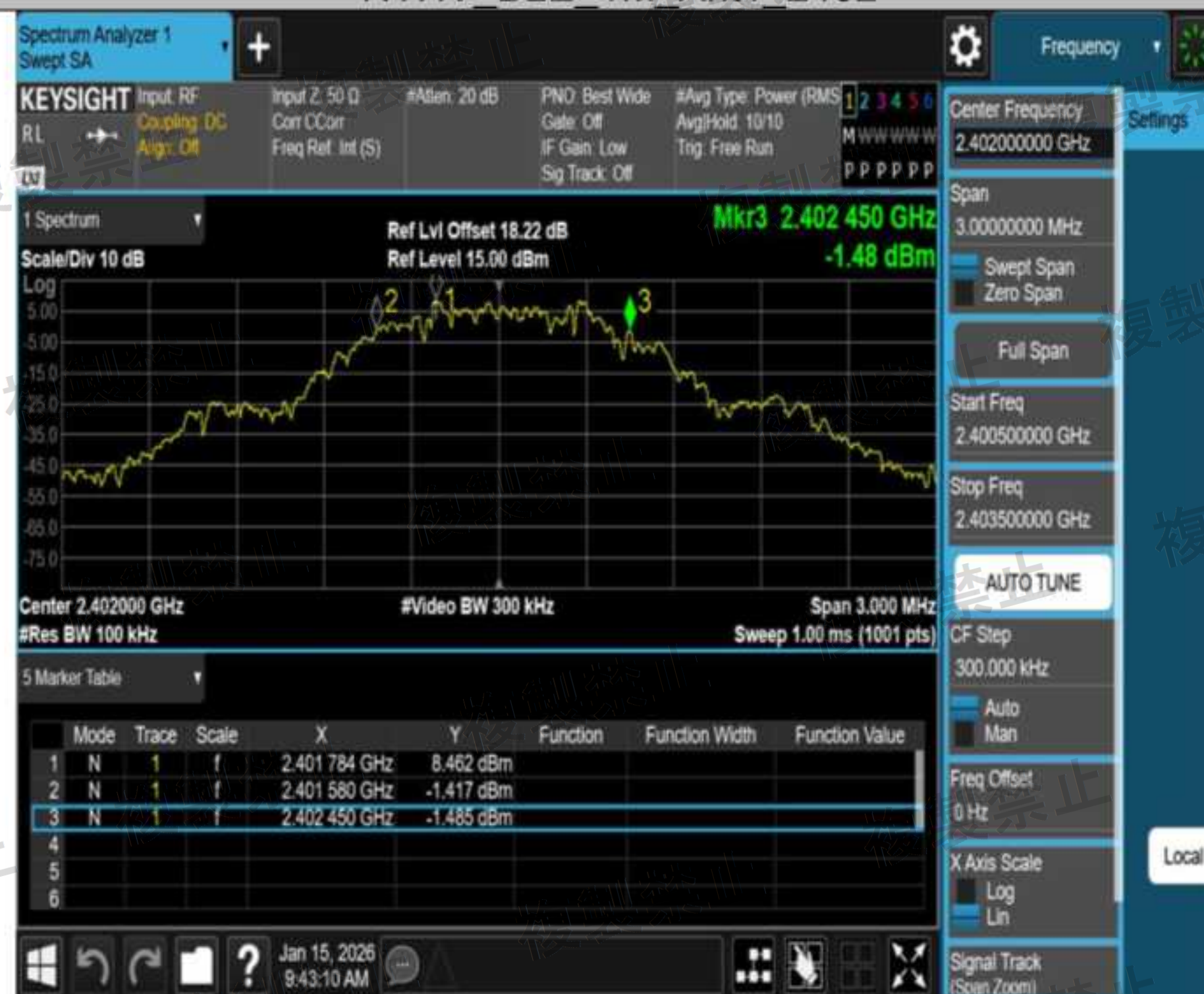


NTLV_BLE_1M_Ant1_2480





NTHV_BLE_1M_Ant1_2402



NTHV_BLE_1M_Ant1_2440



NTHV_BLE_1M_Ant1_2480



NTHV BLE 2M Ant1 2402



NTHV BLE 2M Ant1 2440



NTHV BLE 2M Ant1 2480



Appendix B.2: Test Results of Antenna Power

Test Result

Antenna Power							
TestCondition	TestMode	Antenna	Freq (MHz)	Result(dBm)	Result(mW)	Limit(mW)	Verdict
NTNV	BLE_1M	Ant1	2402	9.78	9.5060	≤10	PASS
			2440	9.65	9.2257	≤10	PASS
			2480	9.30	8.5114	≤10	PASS
	BLE_2M	Ant1	2402	9.59	9.0991	≤10	PASS
			2440	9.48	8.8716	≤10	PASS
			2480	9.15	8.2224	≤10	PASS
NTLV	BLE_1M	Ant1	2402	9.78	9.5060	≤10	PASS
			2440	9.65	9.2257	≤10	PASS
			2480	9.30	8.5114	≤10	PASS
	BLE_2M	Ant1	2402	9.59	9.0991	≤10	PASS
			2440	9.48	8.8716	≤10	PASS
			2480	9.16	8.2414	≤10	PASS
NTHV	BLE_1M	Ant1	2402	9.79	9.5280	≤10	PASS
			2440	9.65	9.2257	≤10	PASS
			2480	9.29	8.4918	≤10	PASS
	BLE_2M	Ant1	2402	9.59	9.0991	≤10	PASS
			2440	9.47	8.8512	≤10	PASS
			2480	9.16	8.2414	≤10	PASS

Tolerance								
Test Condition	Test Mode	Antenna	Freq(MHz)	Power (mW)	RatedPower (mW)	Result (%)	Limit (%)	Verdict
NTNV	BLE_1M	Ant1	2402	9.5060	10	-4.94	-80 to +20	PASS
			2440	9.2257	10	-7.74	-80 to +20	PASS
			2480	8.5114	10	-14.89	-80 to +20	PASS
	BLE_2M	Ant1	2402	9.0991	10	-9.01	-80 to +20	PASS
			2440	8.8716	10	-11.28	-80 to +20	PASS
			2480	8.2224	10	-17.78	-80 to +20	PASS
NTLV	BLE_1M	Ant1	2402	9.5060	10	-4.94	-80 to +20	PASS
			2440	9.2257	10	-7.74	-80 to +20	PASS
			2480	8.5114	10	-14.89	-80 to +20	PASS
	BLE_2M	Ant1	2402	9.0991	10	-9.01	-80 to +20	PASS
			2440	8.8716	10	-11.28	-80 to +20	PASS
			2480	8.2414	10	-17.59	-80 to +20	PASS
NTHV	BLE_1M	Ant1	2402	9.5280	10	-4.72	-80 to +20	PASS
			2440	9.2257	10	-7.74	-80 to +20	PASS
			2480	8.4918	10	-15.08	-80 to +20	PASS
	BLE_2M	Ant1	2402	9.0991	10	-9.01	-80 to +20	PASS
			2440	8.8512	10	-11.49	-80 to +20	PASS
			2480	8.2414	10	-17.59	-80 to +20	PASS

EIRP							
TestCondition	TestMode	Antenna	Freq(MHz)	Power (dBm)	EIRP(dBm)	Limit(dBm)	Verdict
NTNV	BLE_1M	Ant1	2402	9.78	7.08	≤12.14	PASS
			2440	9.65	6.95	≤12.14	PASS
			2480	9.30	6.60	≤12.14	PASS
	BLE_2M	Ant1	2402	9.59	6.89	≤12.14	PASS
			2440	9.48	6.78	≤12.14	PASS
			2480	9.15	6.45	≤12.14	PASS
NTLV	BLE_1M	Ant1	2402	9.78	7.08	≤12.14	PASS
			2440	9.65	6.95	≤12.14	PASS
			2480	9.30	6.60	≤12.14	PASS
	BLE_2M	Ant1	2402	9.59	6.89	≤12.14	PASS
			2440	9.48	6.78	≤12.14	PASS
			2480	9.16	6.46	≤12.14	PASS
NTHV	BLE_1M	Ant1	2402	9.79	7.09	≤12.14	PASS
			2440	9.65	6.95	≤12.14	PASS
			2480	9.29	6.59	≤12.14	PASS
	BLE_2M	Ant1	2402	9.59	6.89	≤12.14	PASS
			2440	9.47	6.77	≤12.14	PASS
			2480	9.16	6.46	≤12.14	PASS



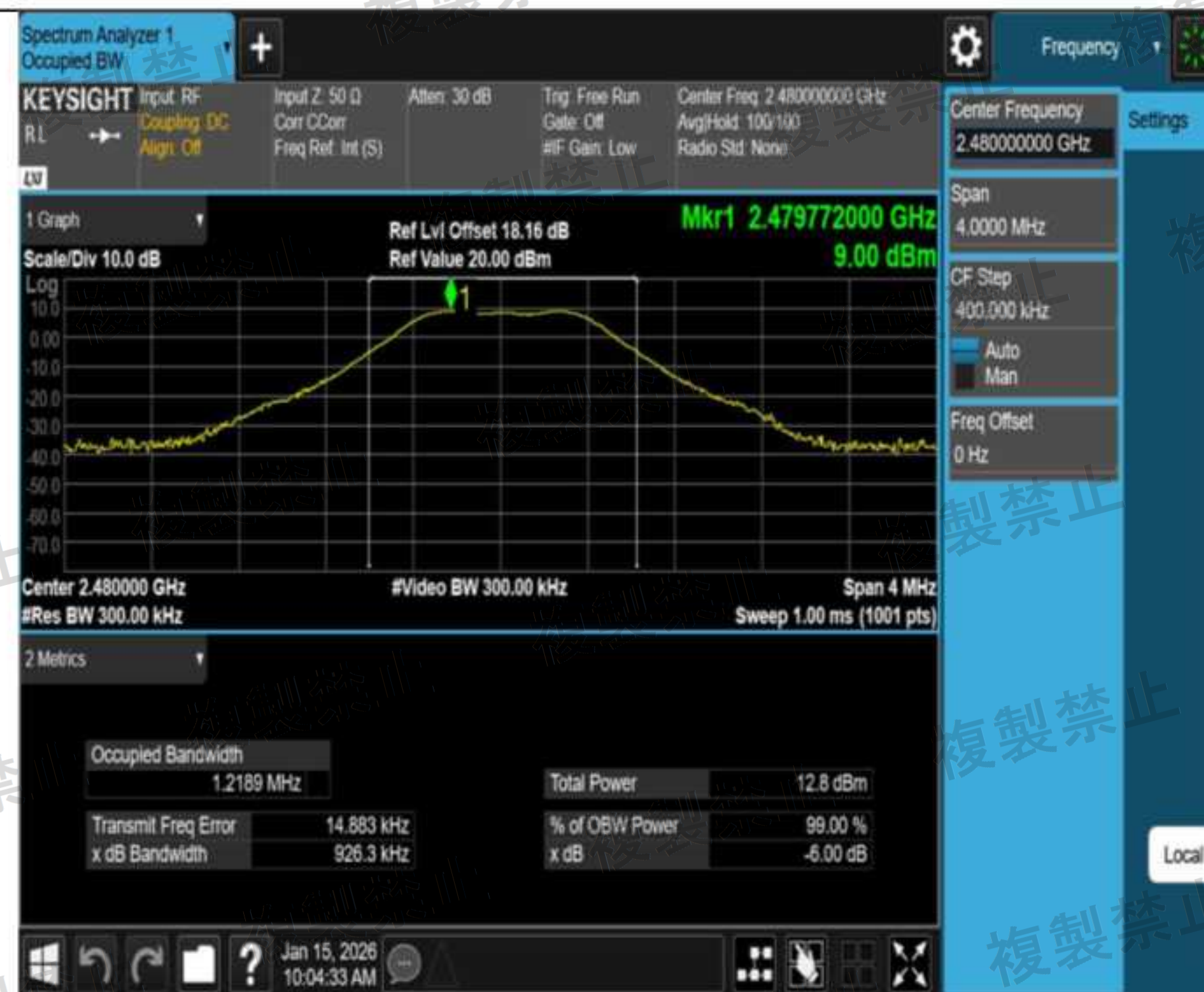
Appendix B.3: Test Results of Occupied Channel Bandwidth (99%)

Test Result

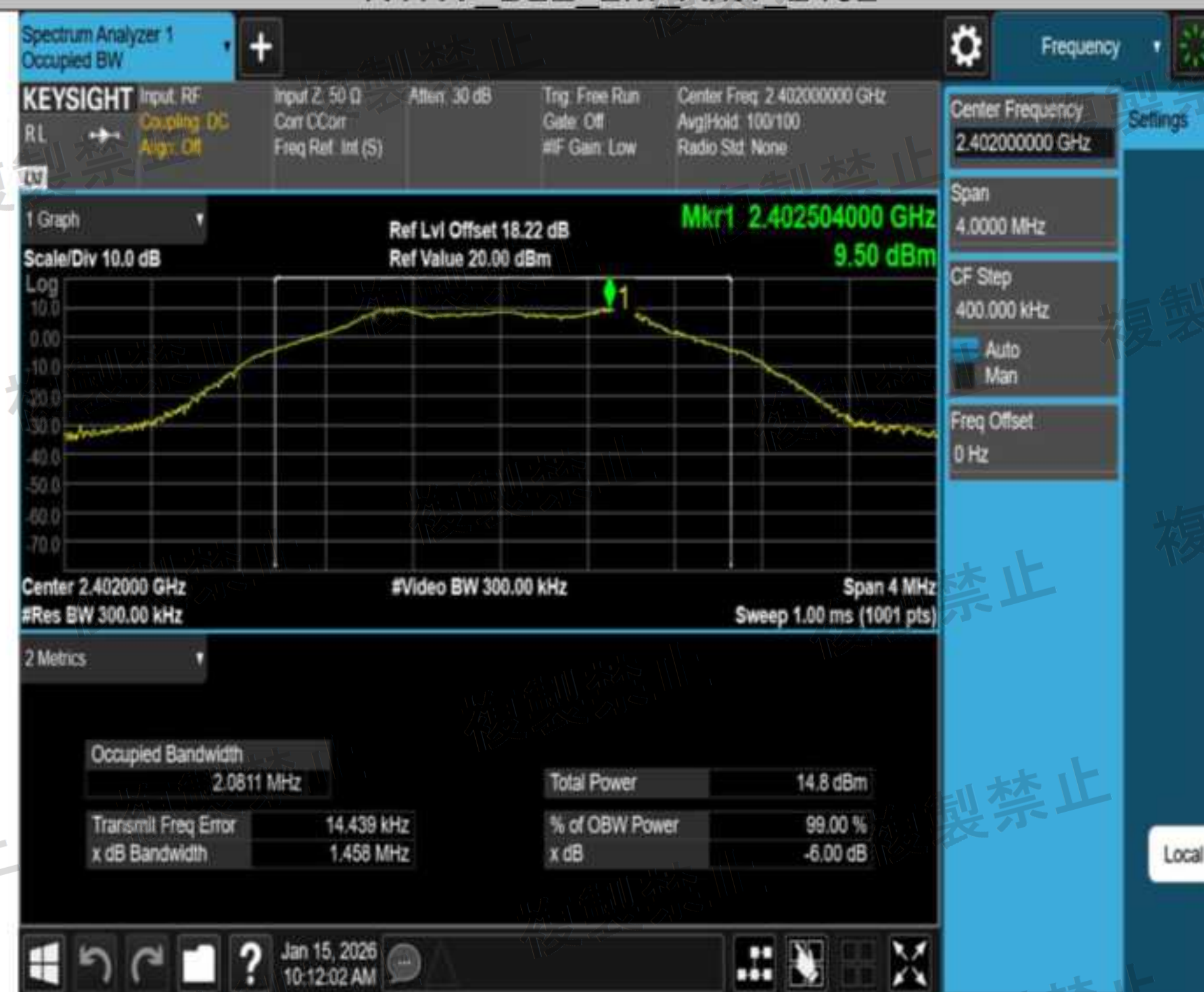
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	1.217	≤26	PASS
			2440	1.219	≤26	PASS
			2480	1.219	≤26	PASS
	BLE_2M	Ant1	2402	2.081	≤26	PASS
			2440	2.086	≤26	PASS
			2480	2.071	≤26	PASS
NTLV	BLE_1M	Ant1	2402	1.218	≤26	PASS
			2440	1.218	≤26	PASS
			2480	1.219	≤26	PASS
	BLE_2M	Ant1	2402	2.080	≤26	PASS
			2440	2.075	≤26	PASS
			2480	2.088	≤26	PASS
NTHV	BLE_1M	Ant1	2402	1.217	≤26	PASS
			2440	1.219	≤26	PASS
			2480	1.220	≤26	PASS
	BLE_2M	Ant1	2402	2.068	≤26	PASS
			2440	2.074	≤26	PASS
			2480	2.075	≤26	PASS

Test Graphs





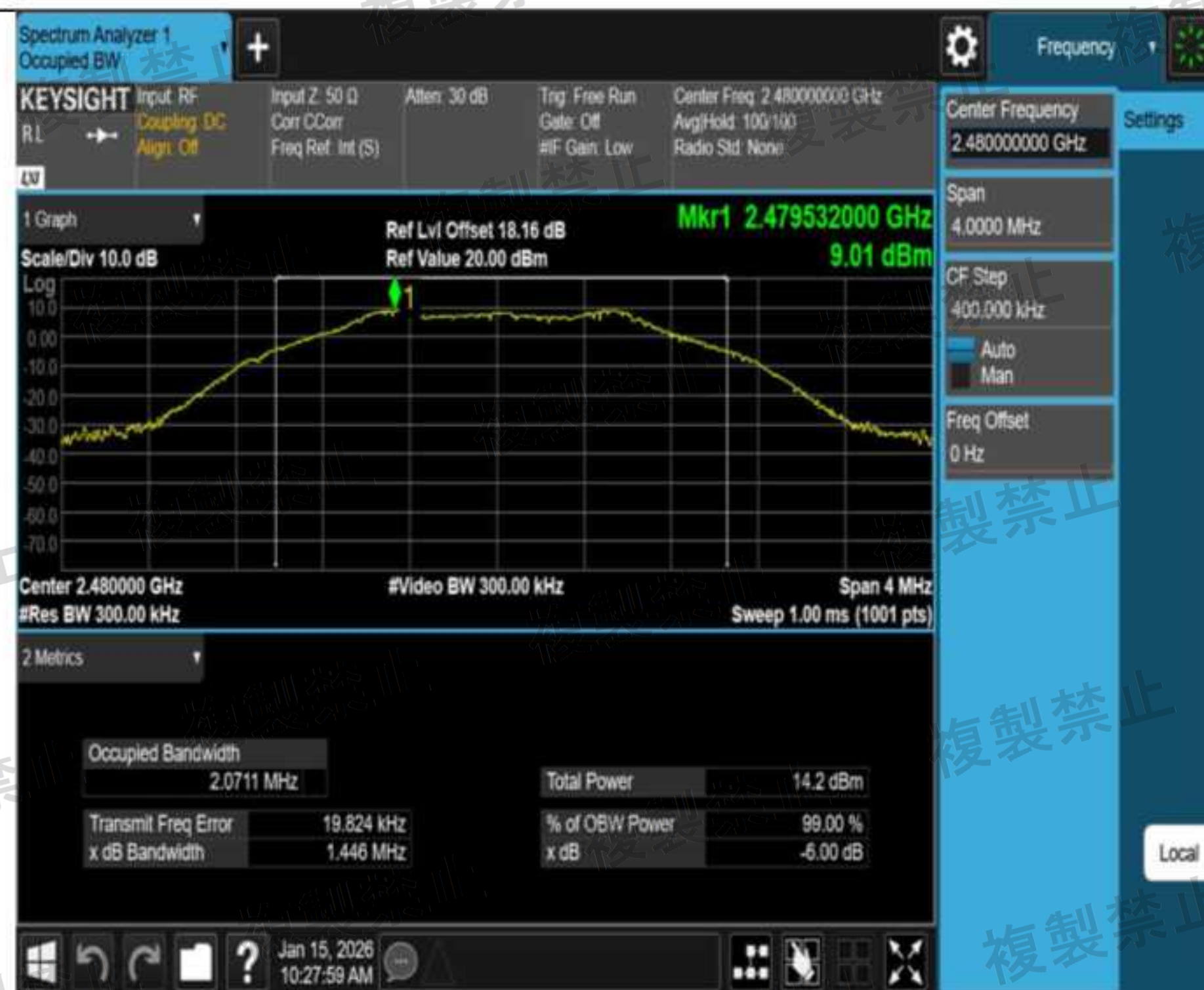
NTNV BLE 2M Ant1 2402



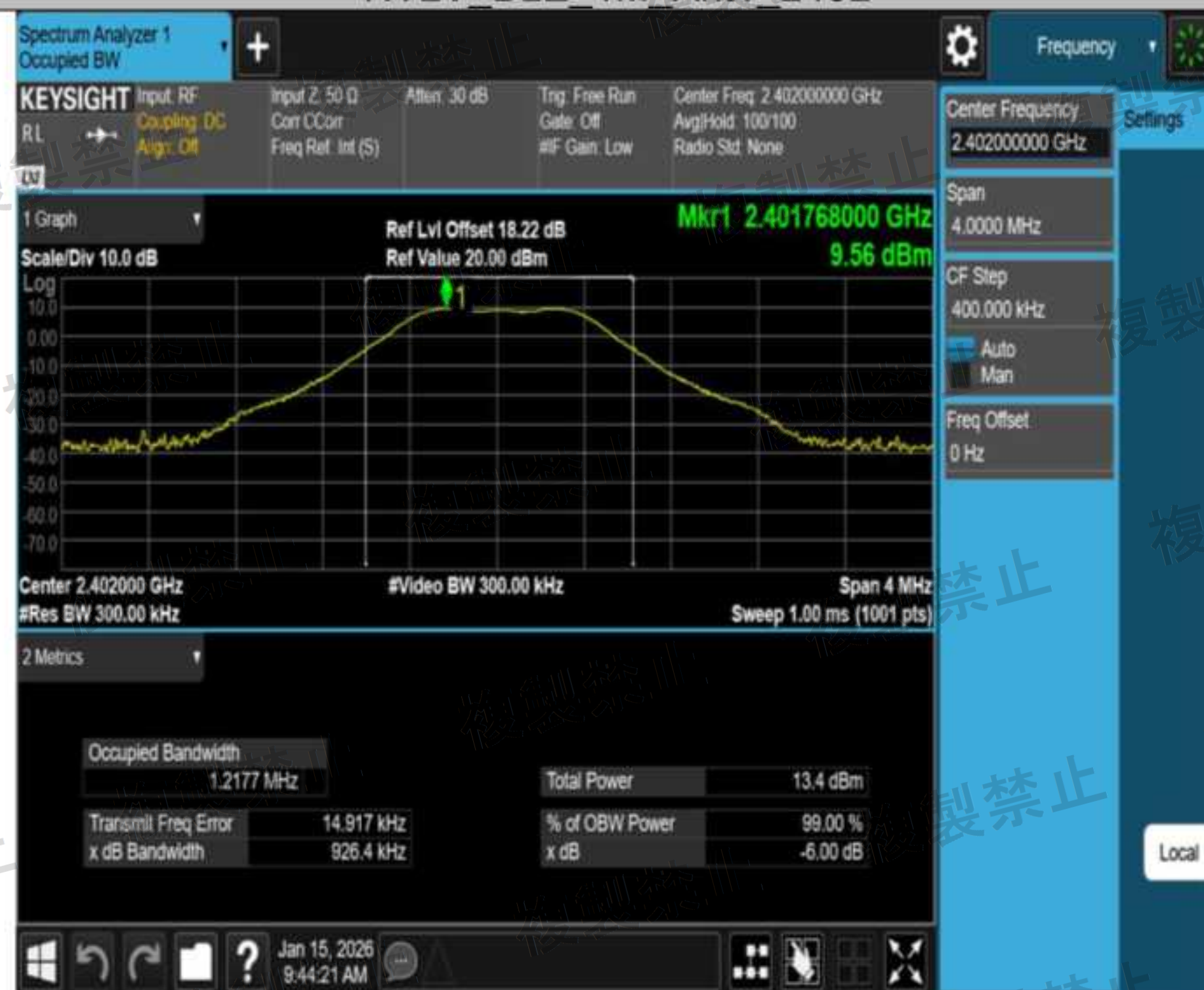
NTNV BLE 2M Ant1 2440



NTNV BLE 2M Ant1 2480



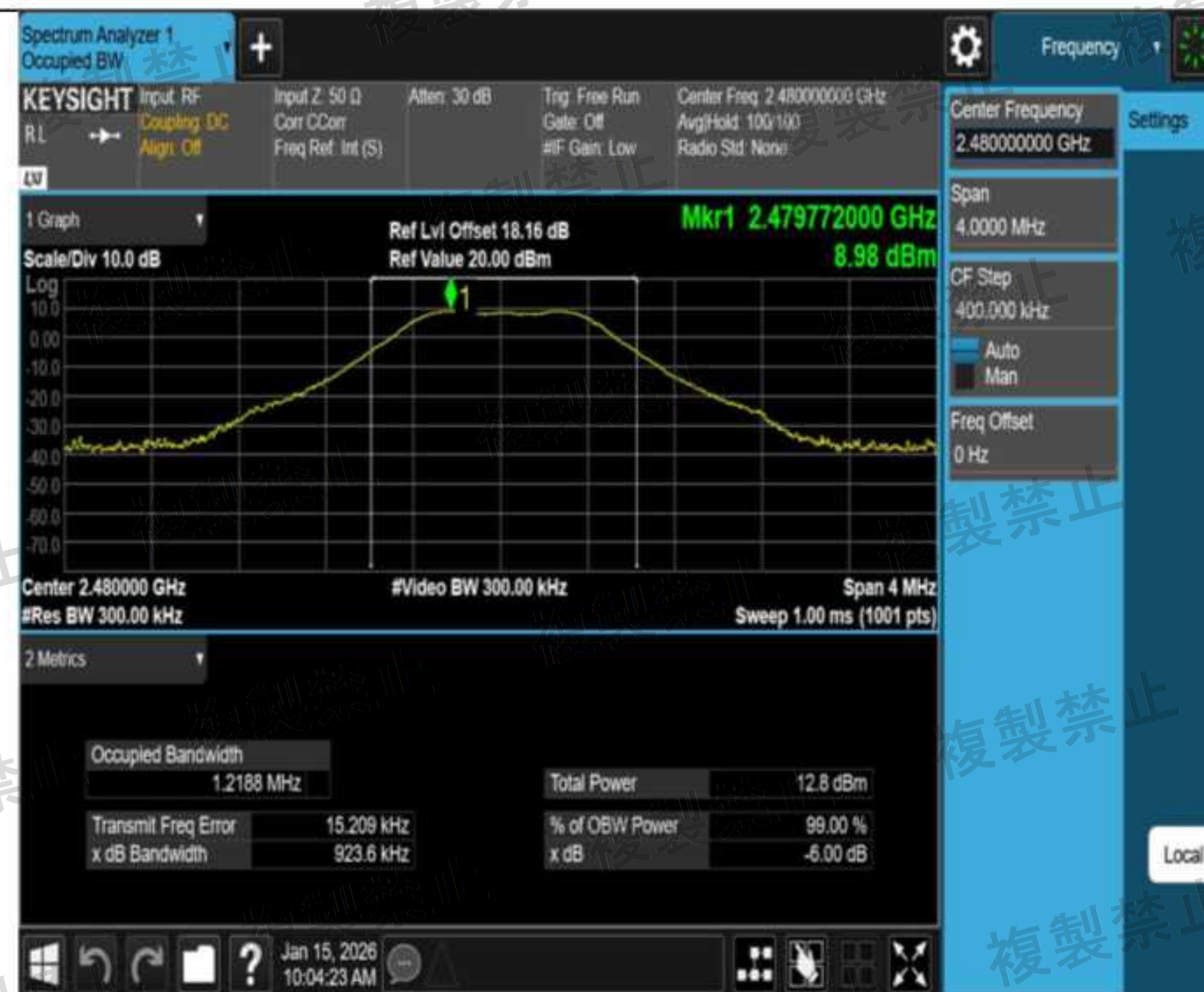
NTLV_BLE_1M_Ant1_2402



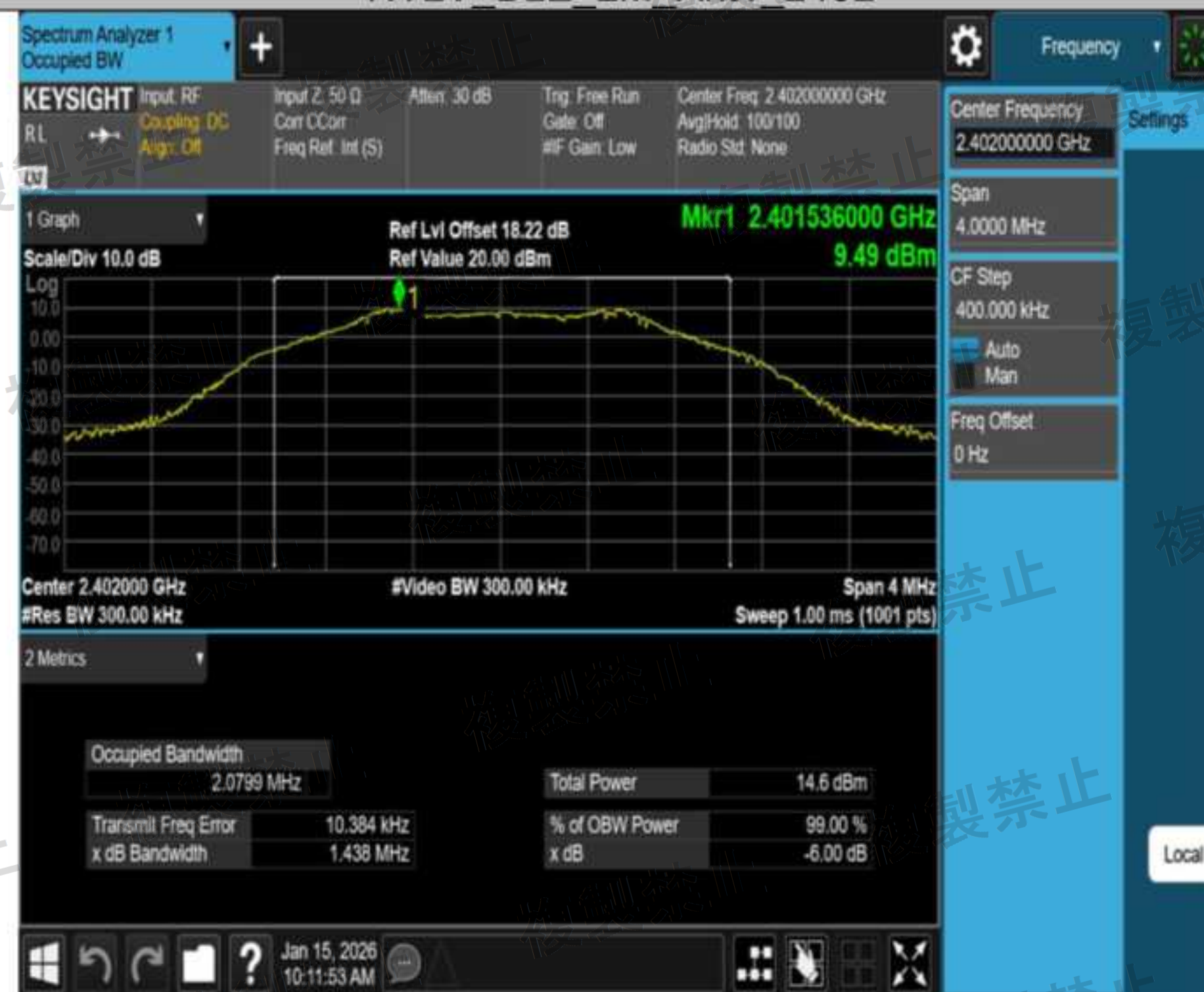
NTLV_BLE_1M_Ant1_2440



NTLV_BLE_1M_Ant1_2480



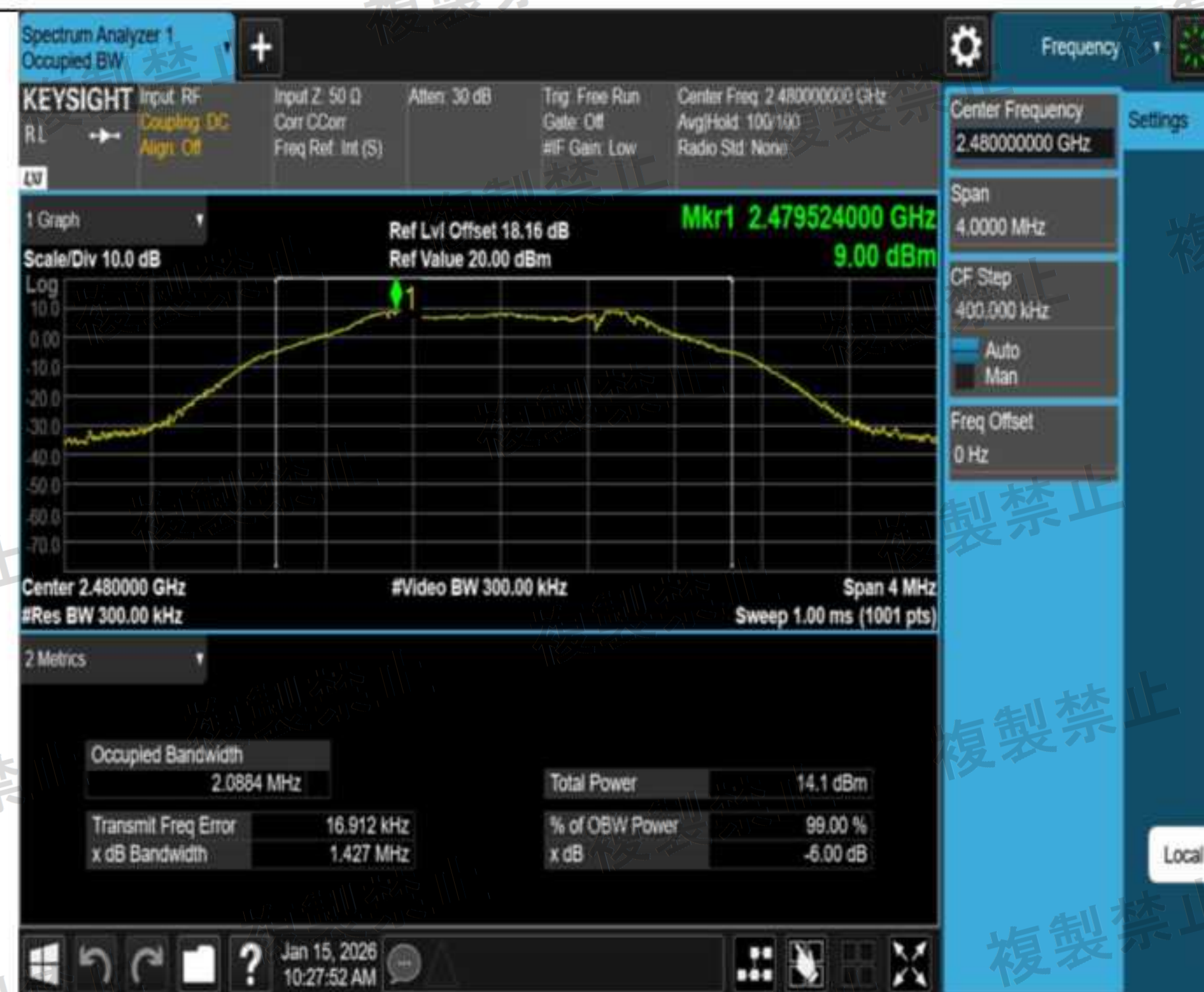
NTLV_BLE_2M_Ant1_2402



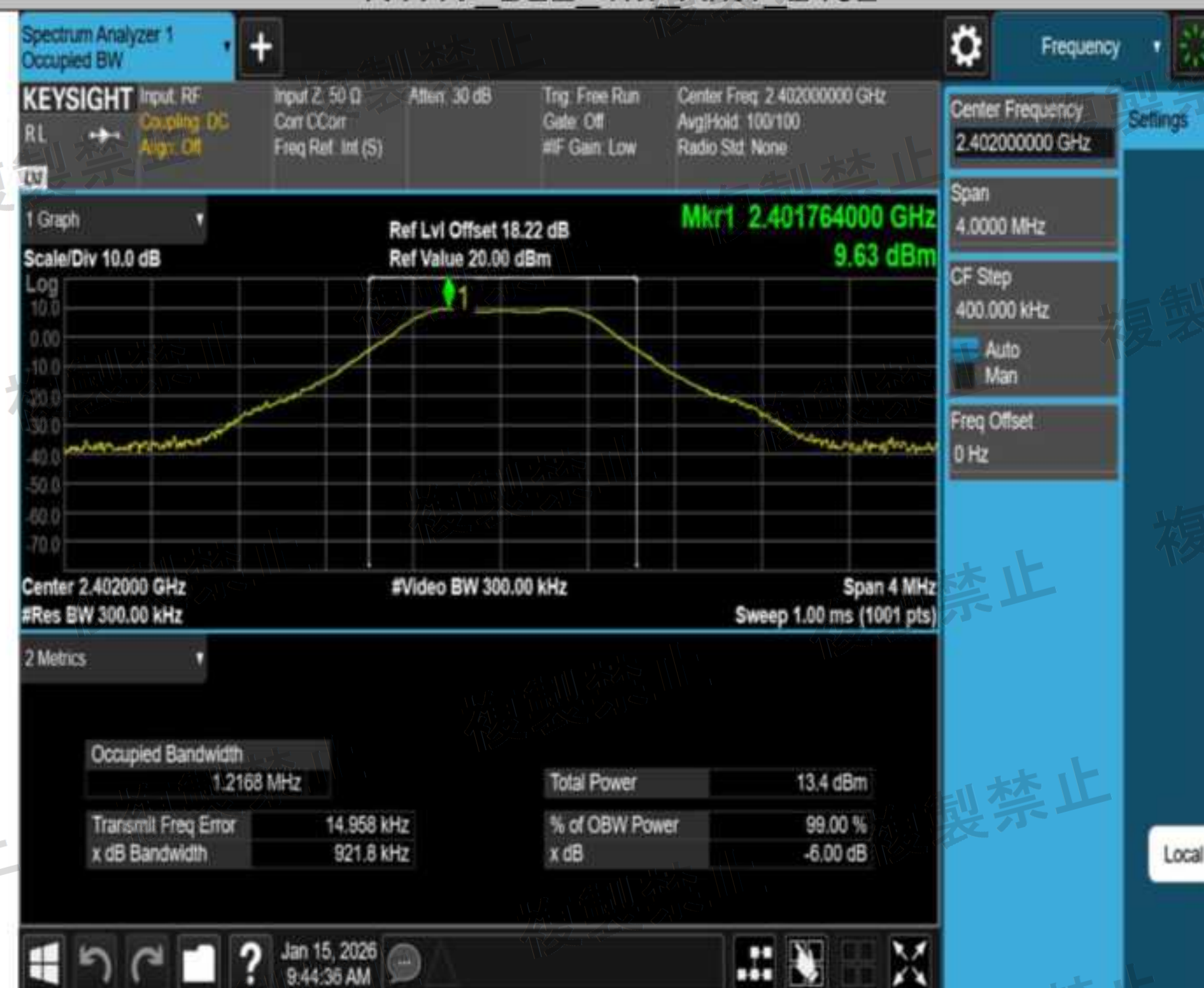
NTLV_BLE_2M_Ant1_2440



NTLV_BLE_2M_Ant1_2480



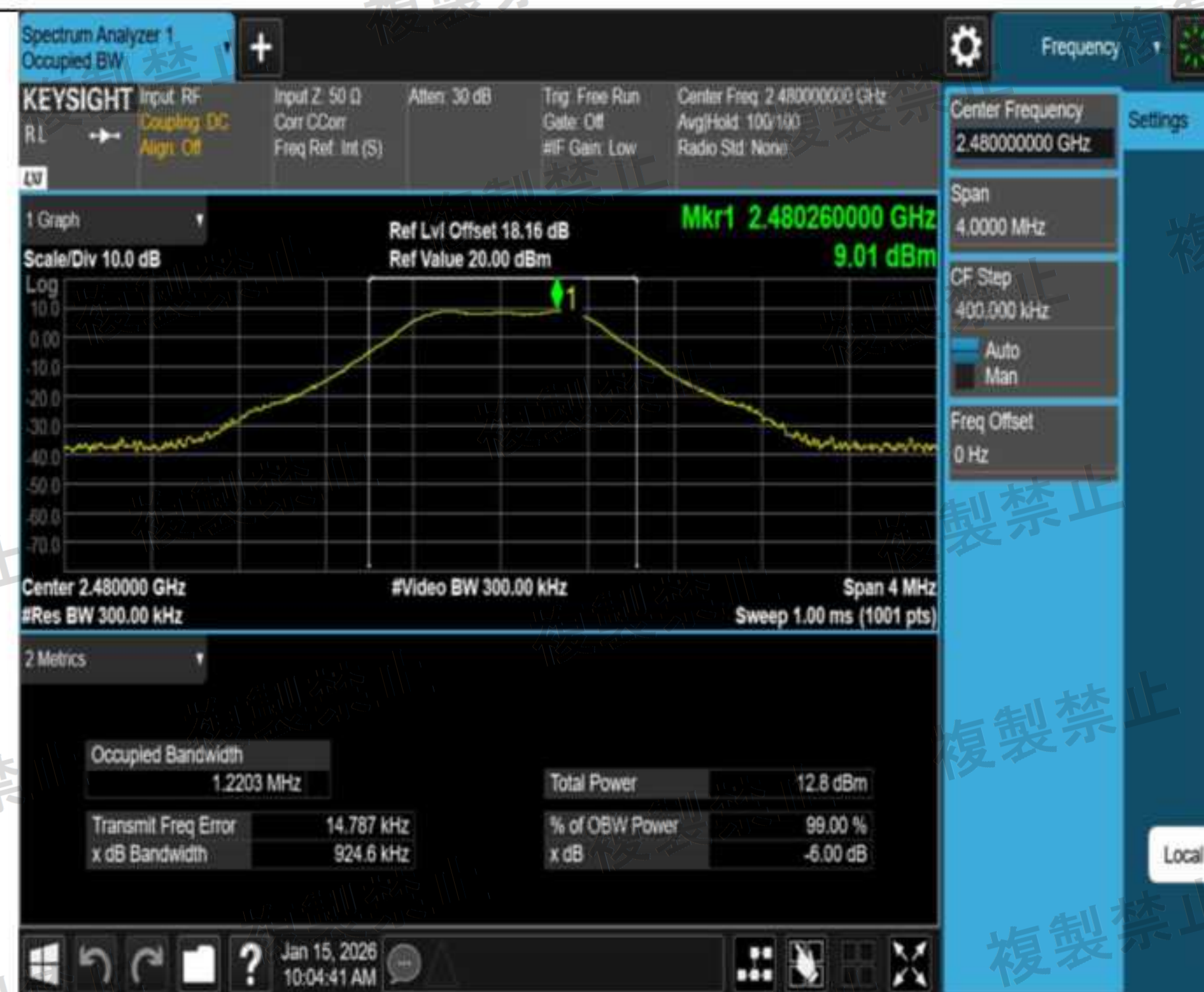
NTHV_BLE_1M_Ant1_2402



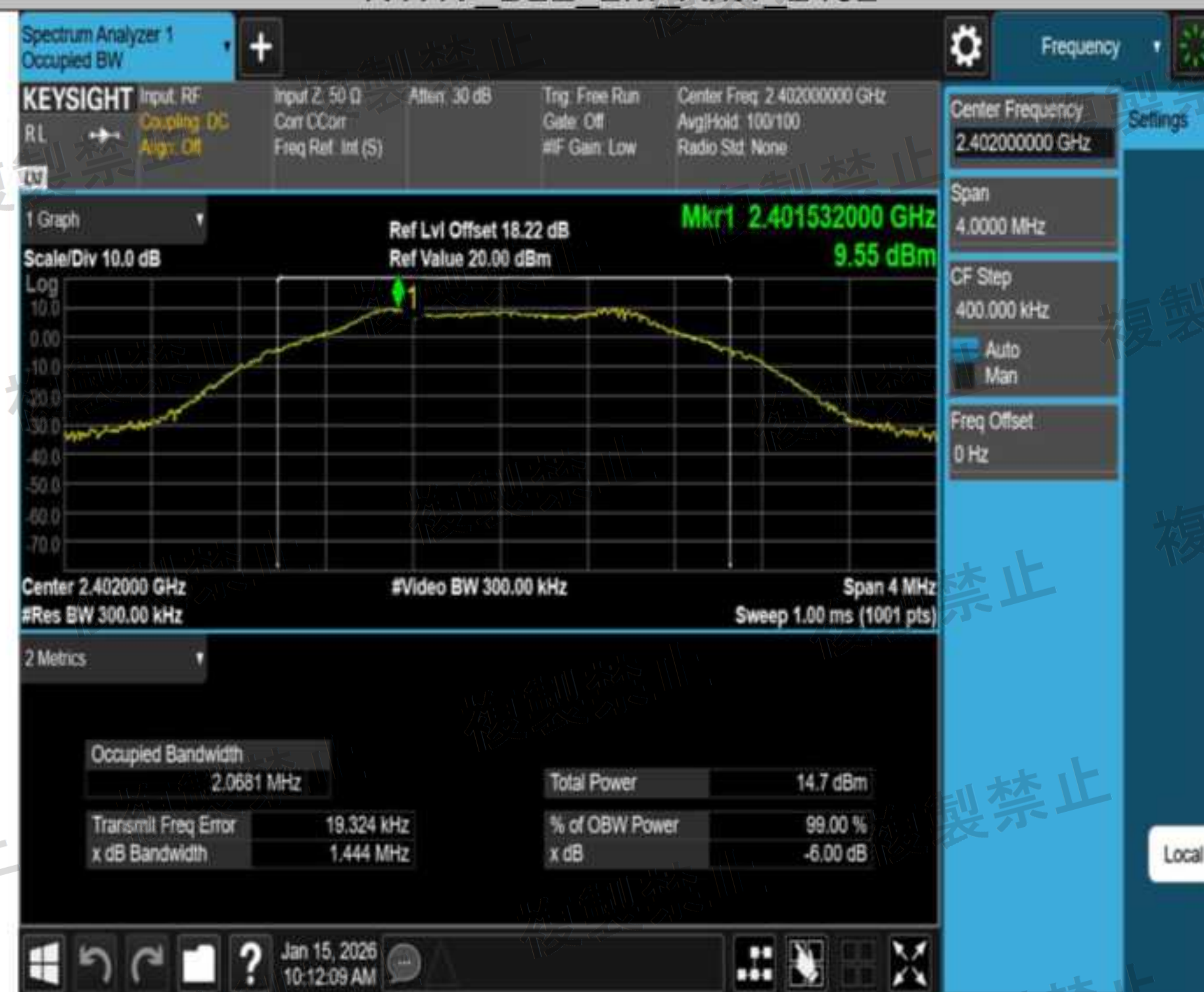
NTHV_BLE_1M_Ant1_2440



NTHV_BLE_1M_Ant1_2480



NTHV_BLE_2M_Ant1_2402



NTHV_BLE_2M_Ant1_2440



NTHV_BLE_2M_Ant1_2480



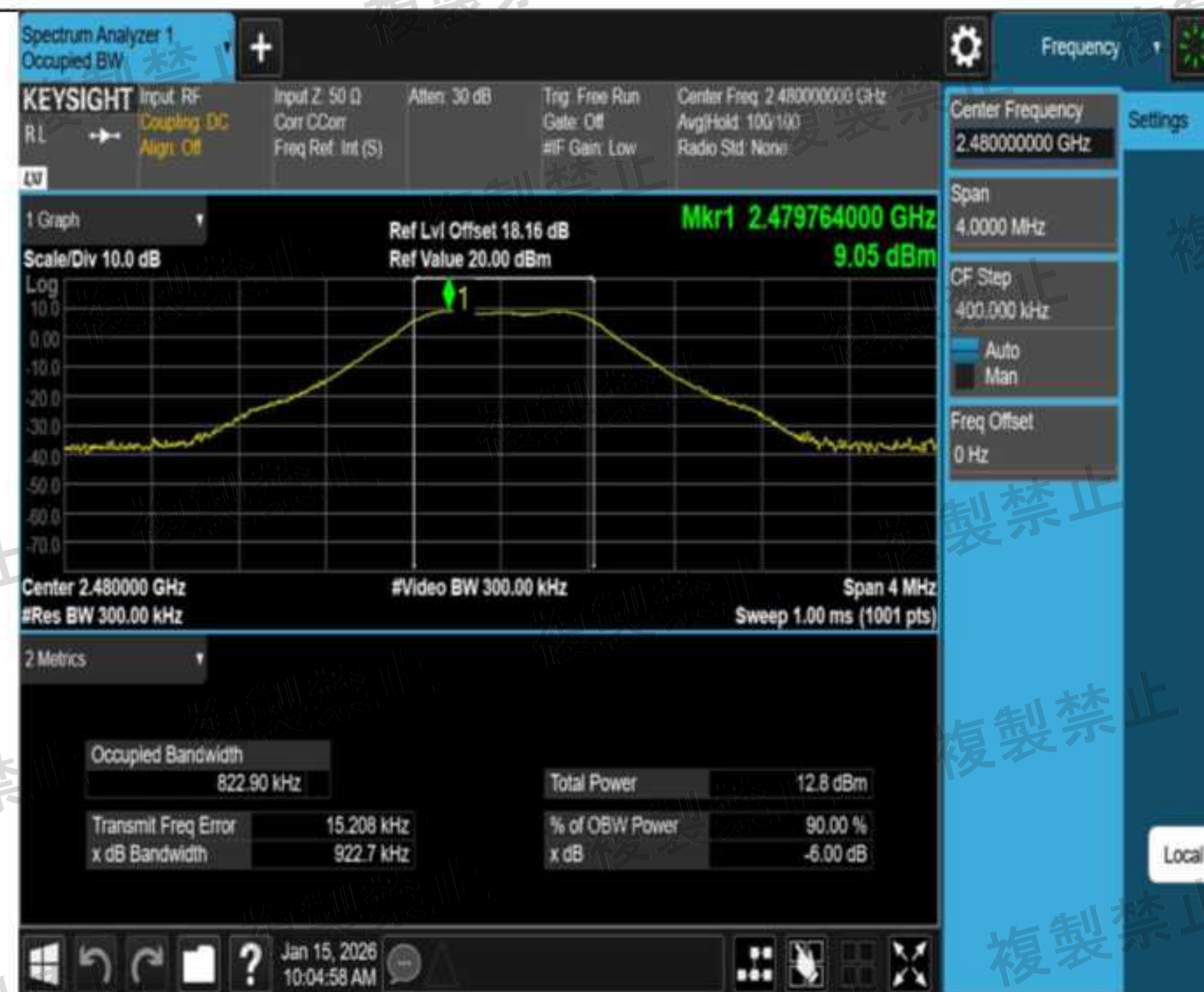
Appendix B.4: Test Results of Spread Bandwidth (90%)

Test Result

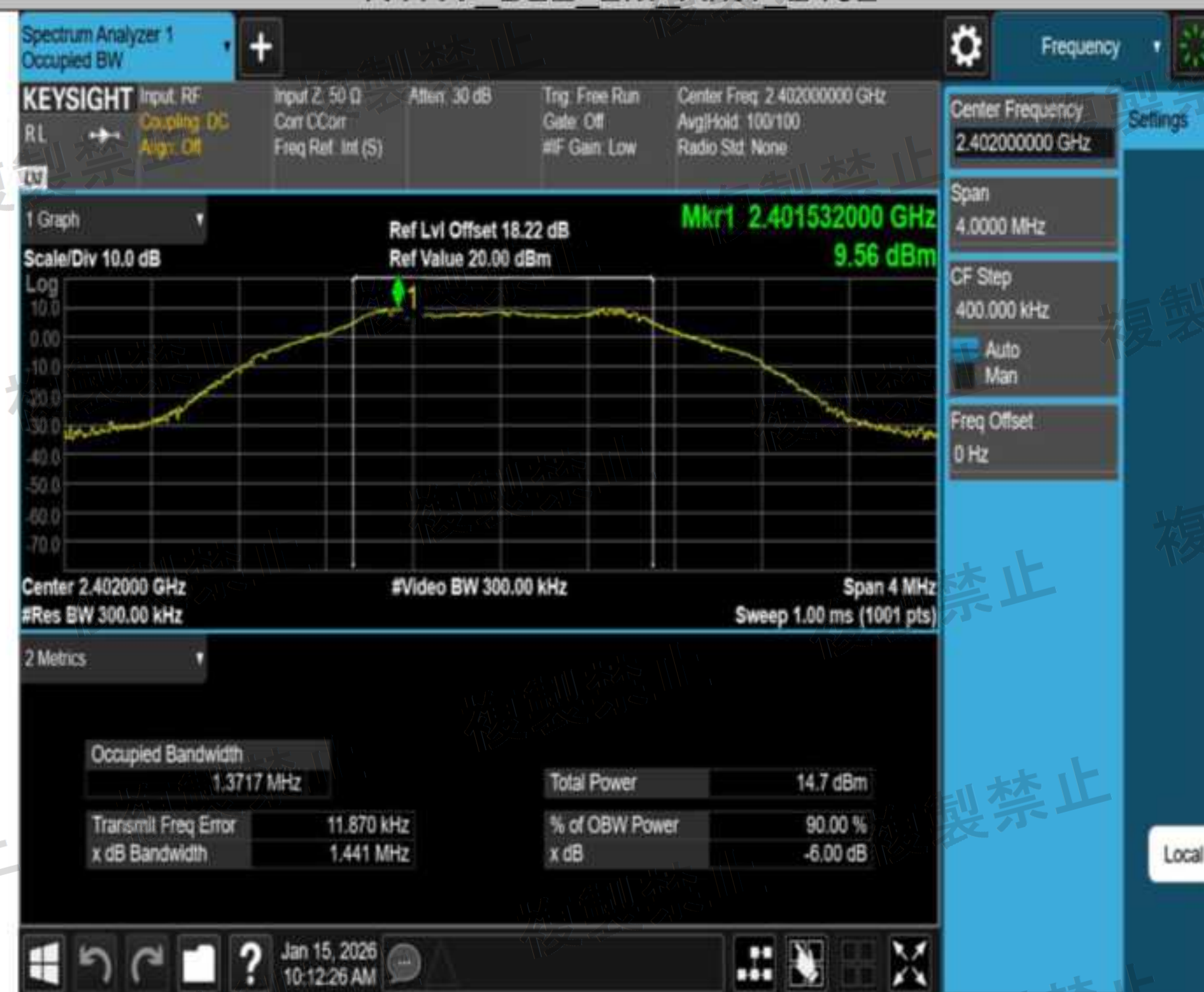
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	BLE_1M	Ant1	2402	0.823	≥0.5	PASS
			2440	0.823	≥0.5	PASS
			2480	0.823	≥0.5	PASS
	BLE_2M	Ant1	2402	1.372	≥0.5	PASS
			2440	1.370	≥0.5	PASS
			2480	1.365	≥0.5	PASS
NTLV	BLE_1M	Ant1	2402	0.823	≥0.5	PASS
			2440	0.823	≥0.5	PASS
			2480	0.823	≥0.5	PASS
	BLE_2M	Ant1	2402	1.370	≥0.5	PASS
			2440	1.361	≥0.5	PASS
			2480	1.367	≥0.5	PASS
NTHV	BLE_1M	Ant1	2402	0.823	≥0.5	PASS
			2440	0.822	≥0.5	PASS
			2480	0.823	≥0.5	PASS
	BLE_2M	Ant1	2402	1.363	≥0.5	PASS
			2440	1.370	≥0.5	PASS
			2480	1.362	≥0.5	PASS

Test Graphs





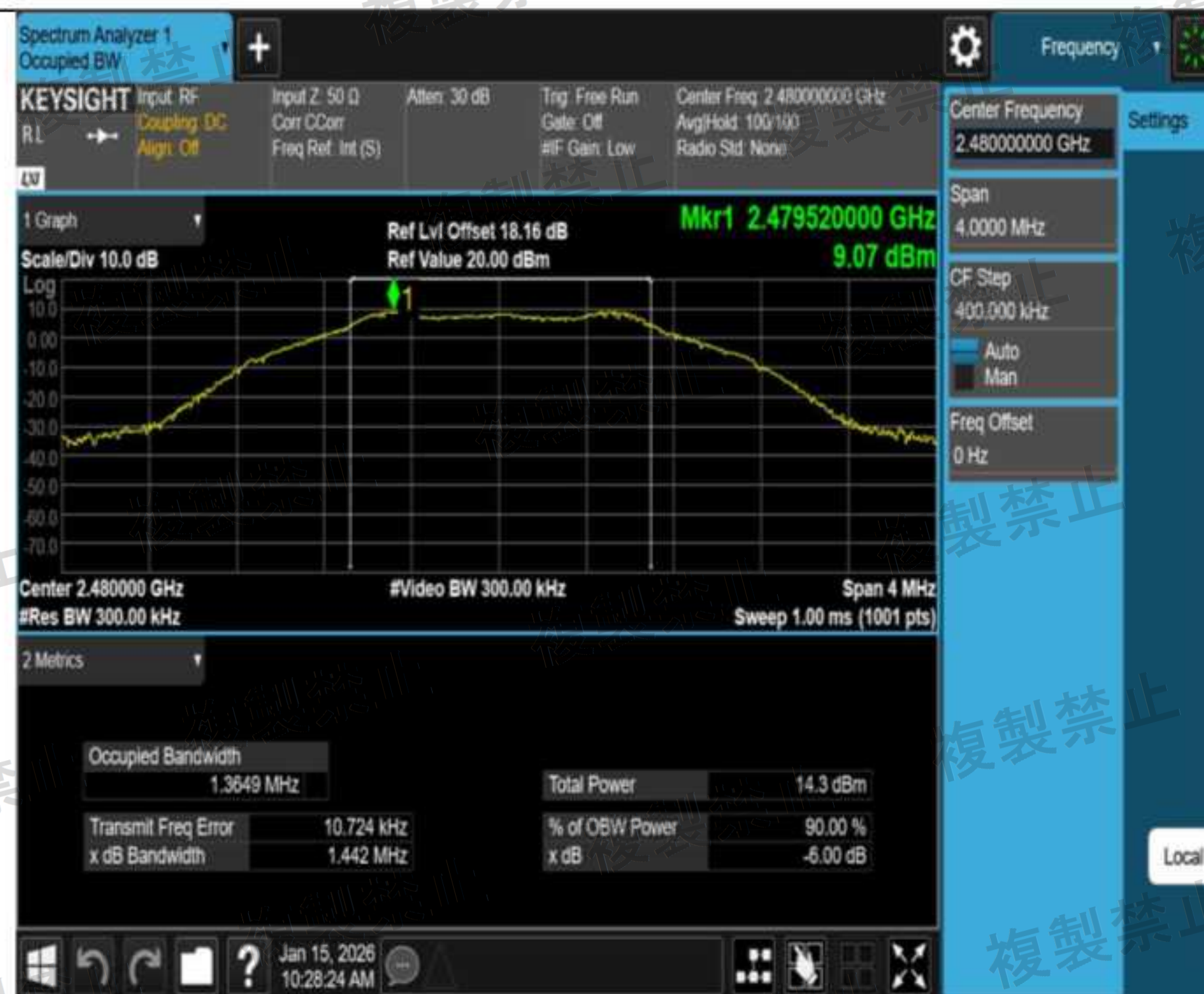
NTNV BLE 2M Ant1 2402



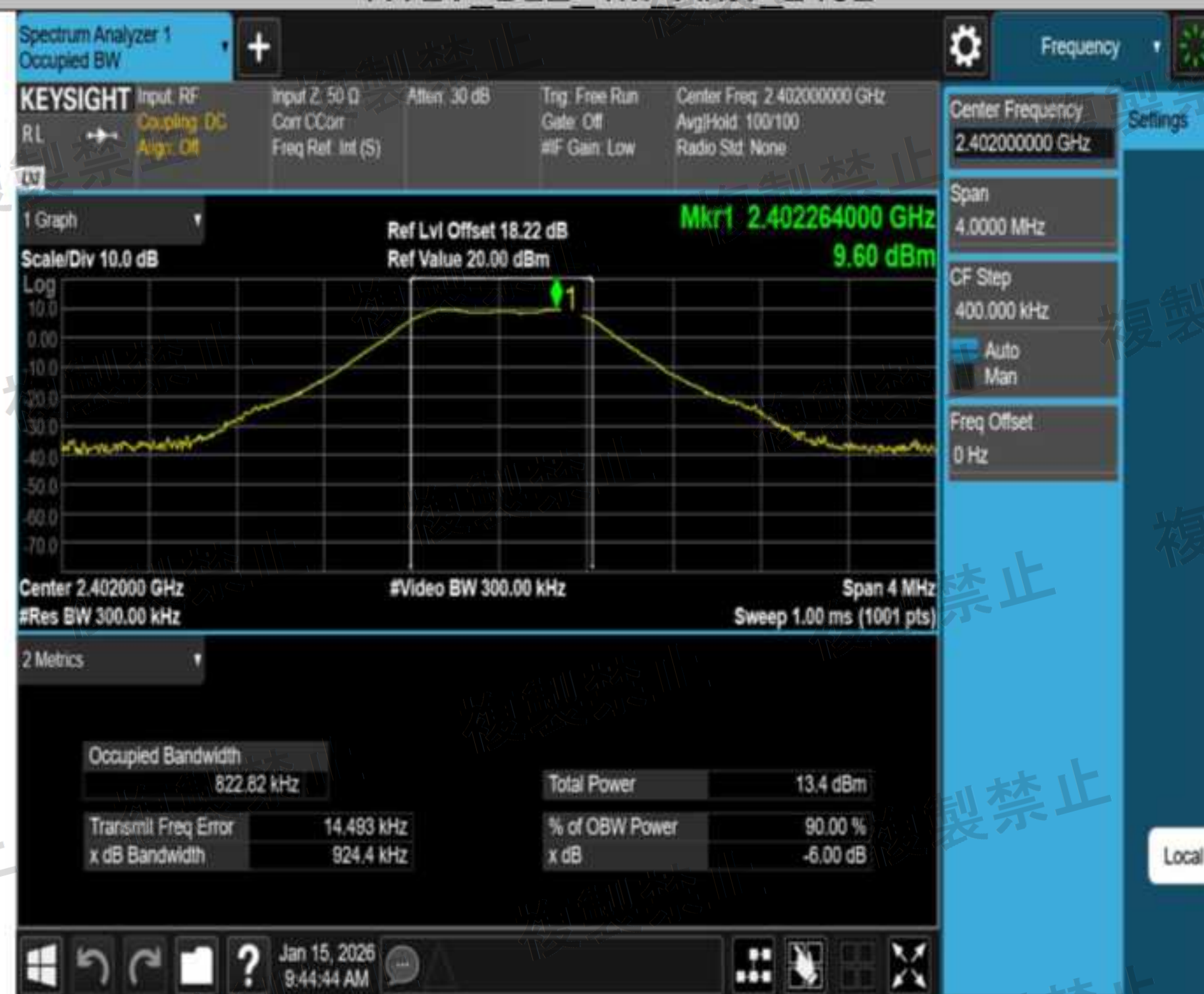
NTNV BLE 2M Ant1 2440



NTNV BLE 2M Ant1 2480



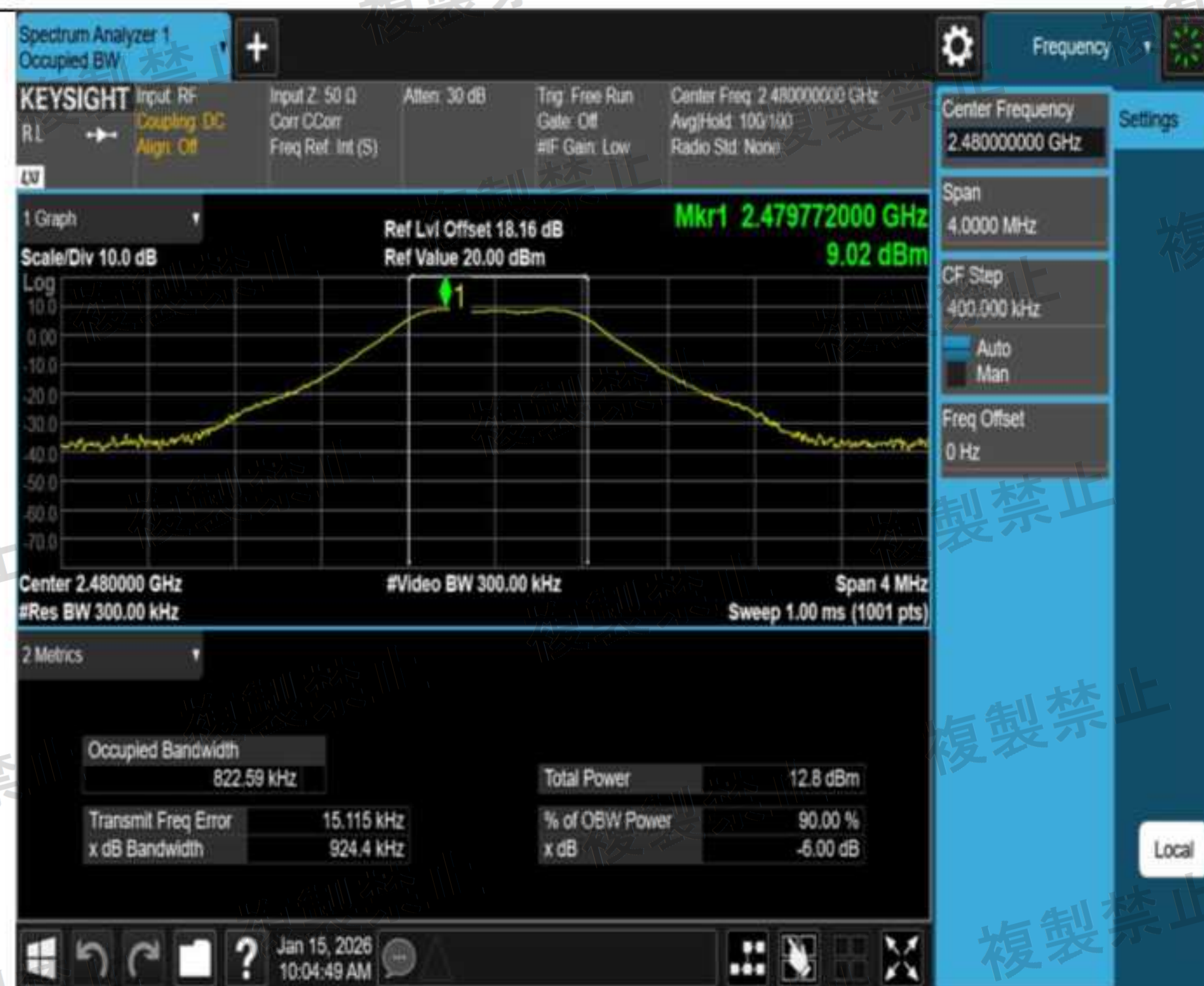
NTLV_BLE_1M_Ant1_2402



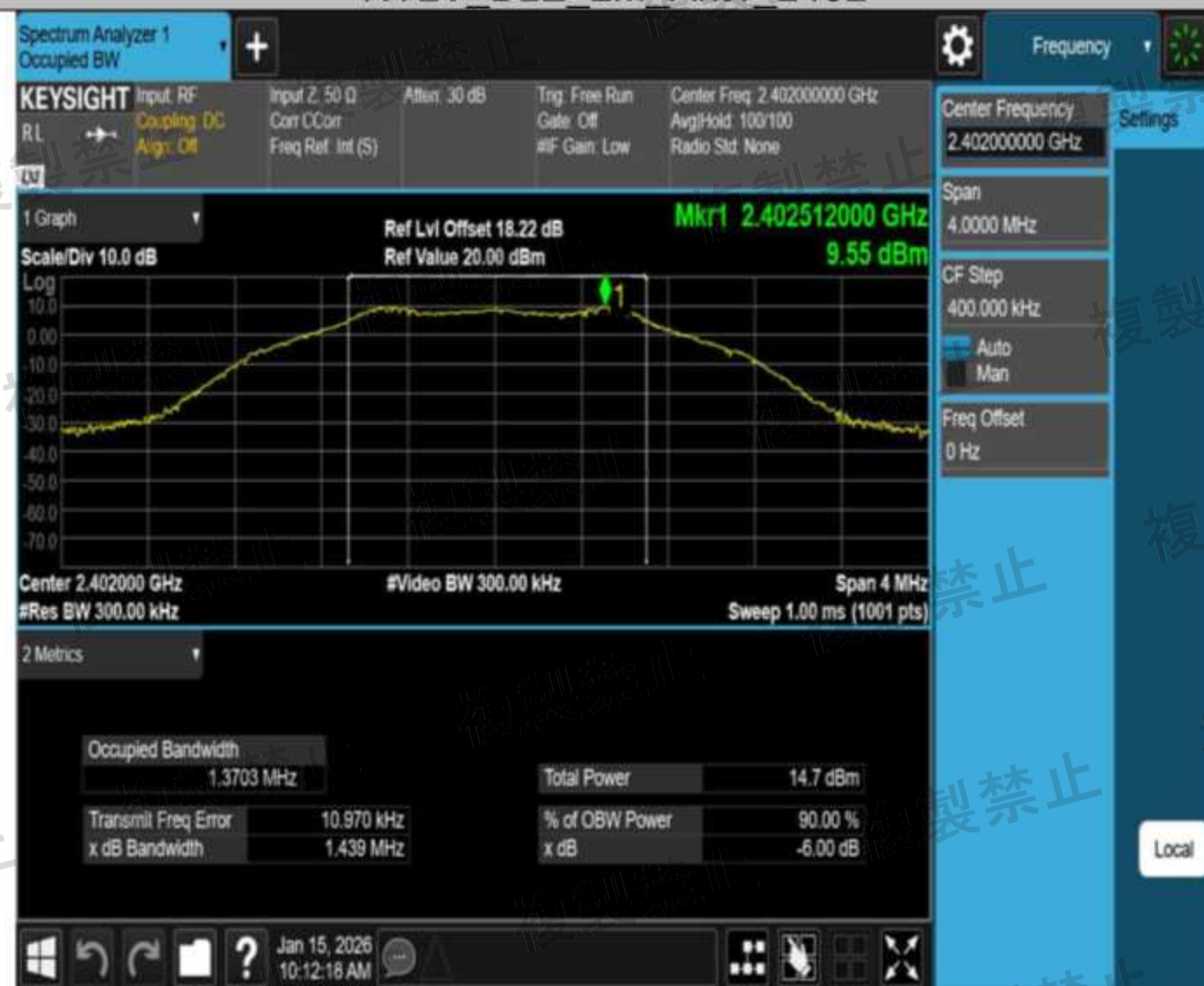
NTLV_BLE_1M_Ant1_2440



NTLV_BLE_1M_Ant1_2480



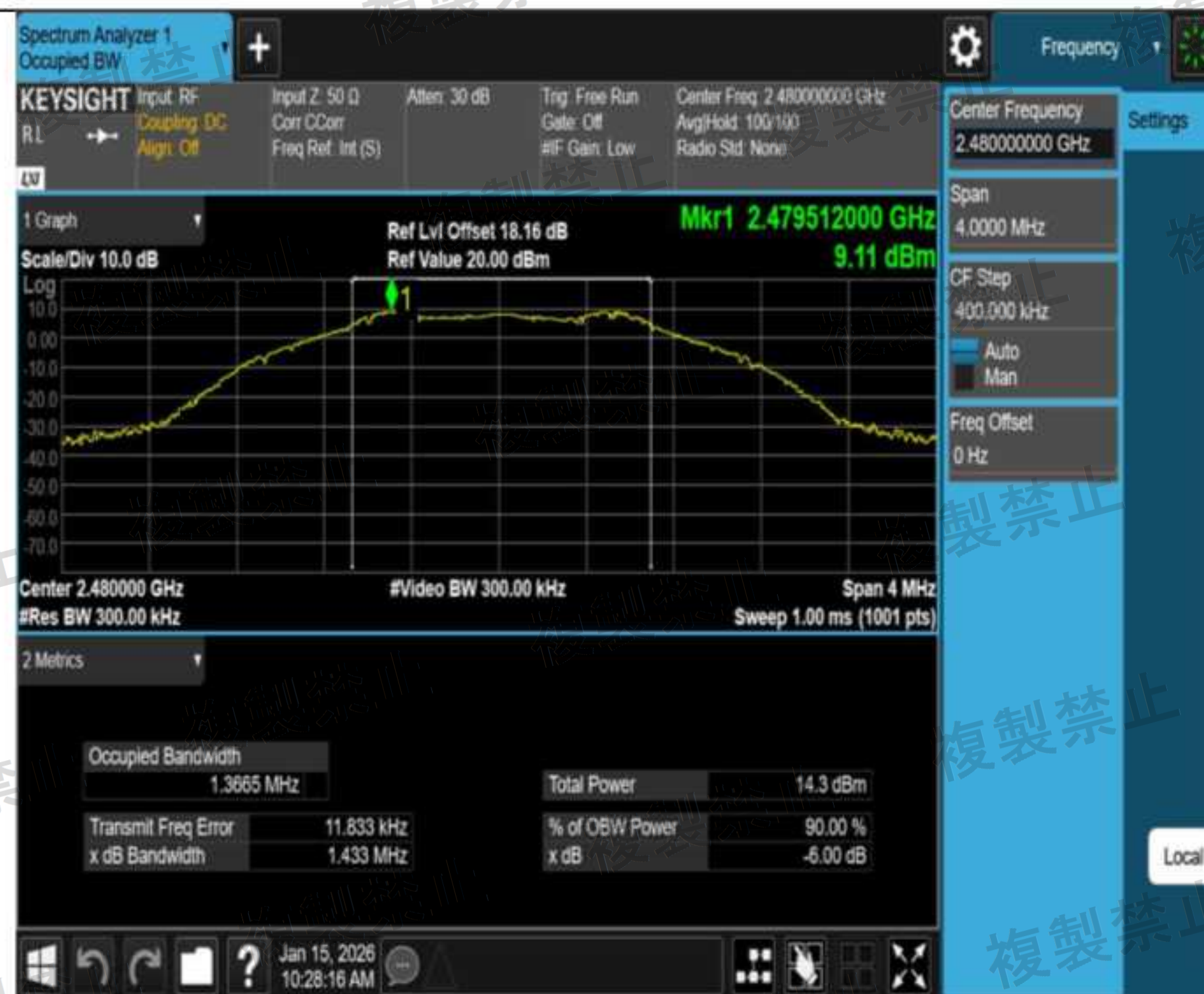
NTLV_BLE_2M_Ant1_2402



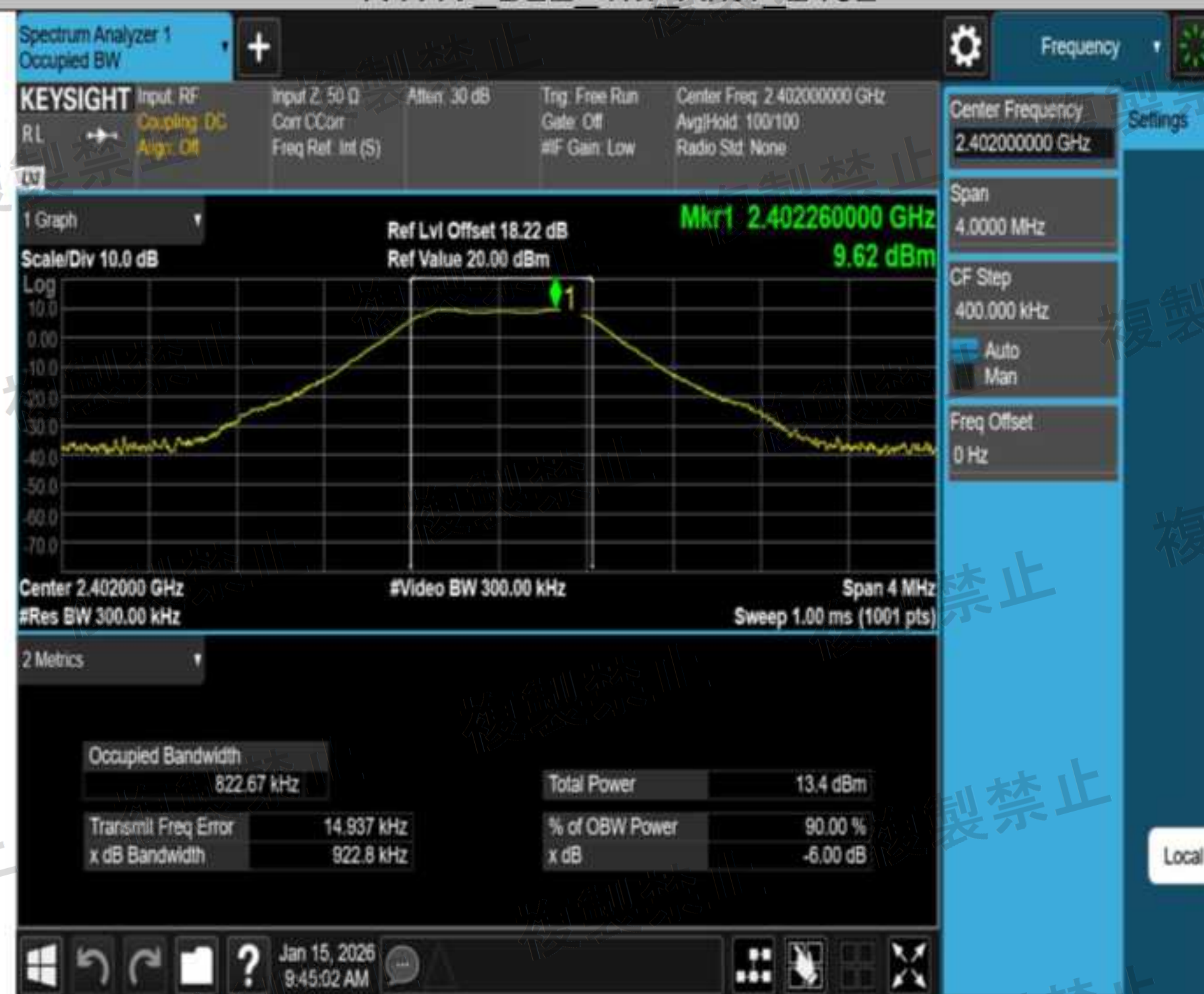
NTLV_BLE_2M_Ant1_2440



NTLV_BLE_2M_Ant1_2480



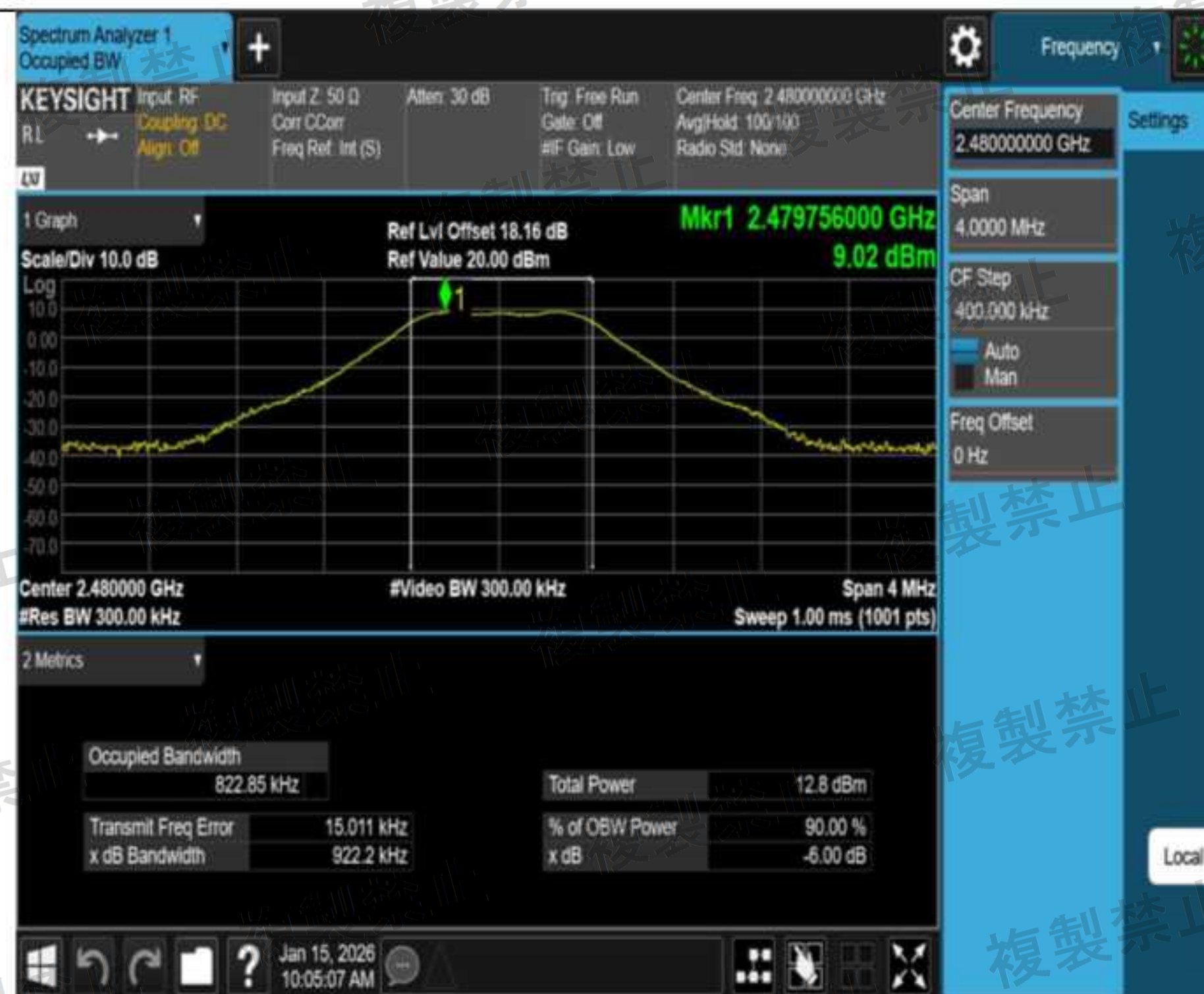
NTHV_BLE_1M_Ant1_2402



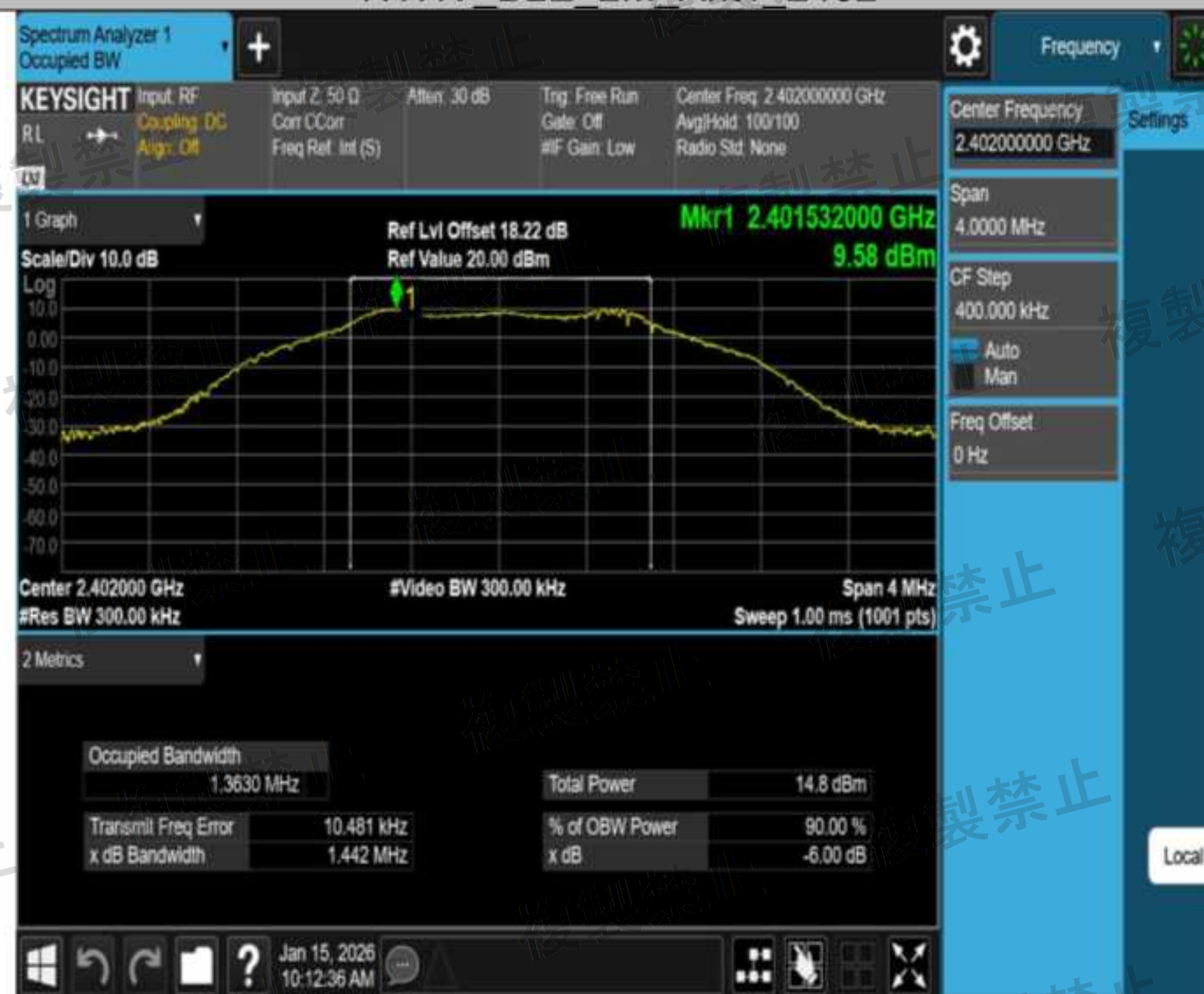
NTHV_BLE_1M_Ant1_2440



NTHV_BLE_1M_Ant1_2480



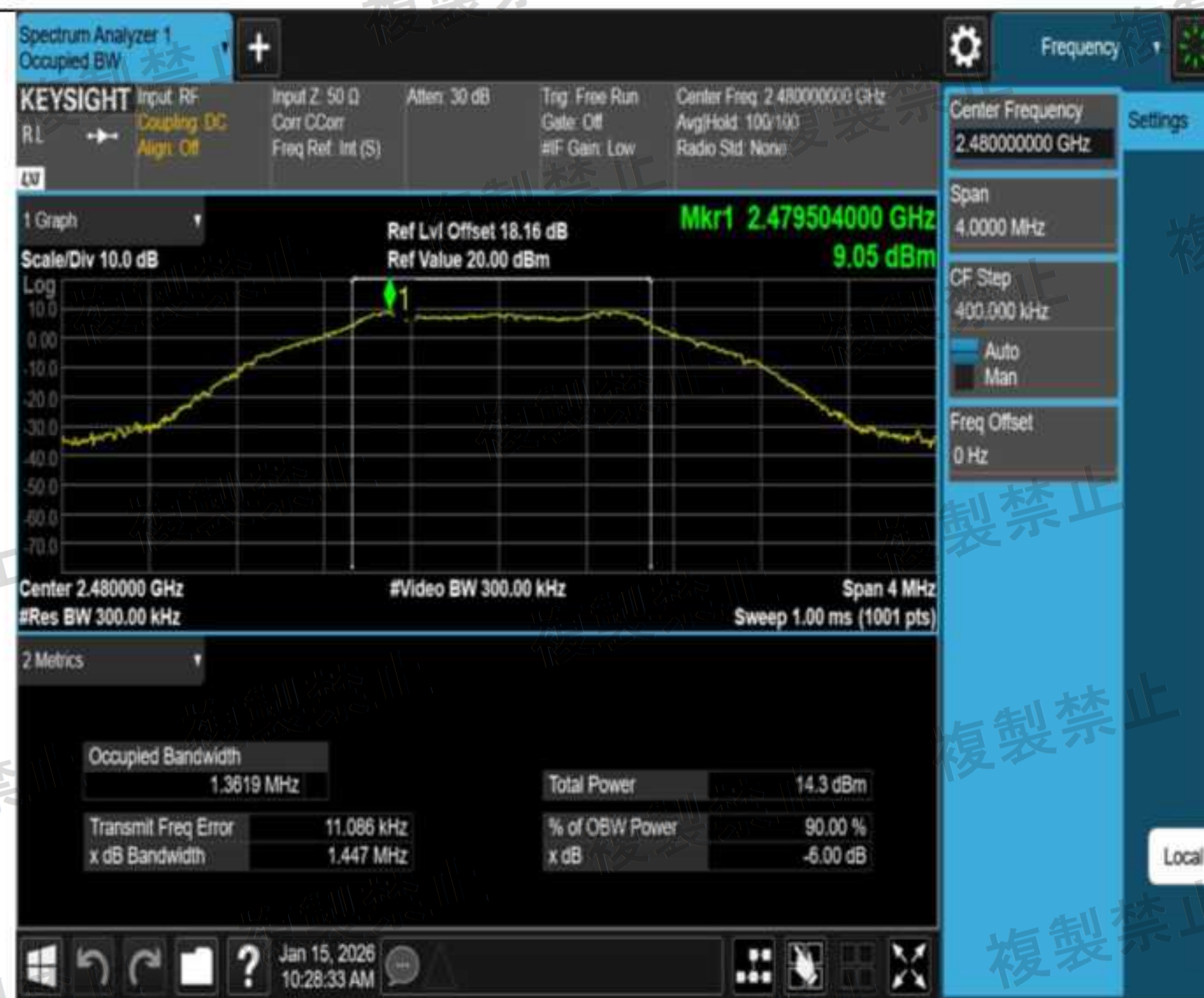
NTHV_BLE_2M_Ant1_2402



NTHV_BLE_2M_Ant1_2440



NTHV_BLE_2M_Ant1_2480



Appendix B.5: Test Results of Spurious Emissions for Transmitter

Test Result

Test Condition	Test Mode	Antenna	Freq (MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~500	180.28	-48.22	≤-26	0.01507	≤2.5	PASS
				500~1000	521.50	-55.04	≤-26	0.00313	≤2.5	PASS
				1000~2387	2387.00	-49.53	≤-26	0.01114	≤2.5	PASS
				2387~2400	2400.00	-26.87	≤-16	2.05589	≤25	PASS
				2483.5~2496.5	2492.95	-53.31	≤-16	0.00467	≤25	PASS
				2496.5~13000	4804.64	-48.35	≤-26	0.01462	≤2.5	PASS
			2440	30~500	185.69	-47.51	≤-26	0.01774	≤2.5	PASS
				500~1000	872.25	-54.63	≤-26	0.00344	≤2.5	PASS
				1000~2387	2045.45	-53.24	≤-26	0.00474	≤2.5	PASS
				2387~2400	2391.60	-51.25	≤-16	0.00750	≤25	PASS
				2483.5~2496.5	2488.00	-52.36	≤-16	0.00581	≤25	PASS
				2496.5~13000	4880.79	-47.31	≤-26	0.01858	≤2.5	PASS
			2480	30~500	190.27	-47.96	≤-26	0.01600	≤2.5	PASS
				500~1000	525.63	-53.88	≤-26	0.00409	≤2.5	PASS
				1000~2387	1893.92	-53.84	≤-26	0.00413	≤2.5	PASS
				2387~2400	2399.99	-52.56	≤-16	0.00555	≤25	PASS
				2483.5~2496.5	2483.83	-38.93	≤-16	0.12794	≤25	PASS
				2496.5~13000	4960.62	-48.19	≤-26	0.01517	≤2.5	PASS
	BLE_2M	Ant1	2402	30~500	41.16	-48.23	≤-26	0.01503	≤2.5	PASS
				500~1000	501.38	-53.19	≤-26	0.00480	≤2.5	PASS
				1000~2387	2385.27	-49.80	≤-26	0.01047	≤2.5	PASS
				2387~2400	2400	-15.06	≤-16	31.1889 0	≤25	See table below
				2483.5~2496.5	2485.98	-53.81	≤-16	0.00416	≤25	PASS
				2496.5~13000	3849.35	-53.49	≤-26	0.00448	≤2.5	PASS
			2440	30~500	77.59	-48.48	≤-26	0.01419	≤2.5	PASS
				500~1000	636.25	-53.35	≤-26	0.00462	≤2.5	PASS
				1000~2387	2160.23	-53.76	≤-26	0.00421	≤2.5	PASS
				2387~2400	2389.93	-51.93	≤-16	0.00641	≤25	PASS
				2483.5~2496.5	2487.60	-52.02	≤-16	0.00628	≤25	PASS
				2496.5~13000	4881.32	-48.84	≤-26	0.01306	≤2.5	PASS
			2480	30~500	176.52	-48.90	≤-26	0.01288	≤2.5	PASS
				500~1000	626.00	-54.70	≤-26	0.00339	≤2.5	PASS
				1000~2387	2115.49	-53.54	≤-26	0.00443	≤2.5	PASS
				2387~2400	2389.86	-53.20	≤-16	0.00479	≤25	PASS
				2483.5~2496.5	2483.79	-38.70	≤-16	0.13490	≤25	PASS
				2496.5~13000	4959.57	-49.14	≤-26	0.01219	≤2.5	PASS
NTLV	BLE_1M	Ant1	2402	30~500	196.85	-47.70	≤-26	0.01698	≤2.5	PASS
				500~1000	505.13	-54.99	≤-26	0.00317	≤2.5	PASS
				1000~2387	2384.23	-49.84	≤-26	0.01038	≤2.5	PASS
				2387~2400	2400.00	-26.65	≤-16	2.16272	≤25	PASS
				2483.5~2496.5	2490.11	-53.38	≤-16	0.00459	≤25	PASS
				2496.5~13000	4804.12	-48.40	≤-26	0.01445	≤2.5	PASS
			2440	30~500	212.48	-48.54	≤-26	0.01400	≤2.5	PASS
				500~1000	549.88	-55.00	≤-26	0.00316	≤2.5	PASS
				1000~2387	2376.25	-53.35	≤-26	0.00462	≤2.5	PASS
				2387~2400	2399.79	-51.98	≤-16	0.00634	≤25	PASS
				2483.5~2496.5	2483.72	-51.60	≤-16	0.00692	≤25	PASS
				2496.5~13000	4880.27	-48.25	≤-26	0.01496	≤2.5	PASS
	BLE_2M	Ant1	2402	30~500	186.98	-48.13	≤-26	0.01538	≤2.5	PASS
				500~1000	604.63	-54.48	≤-26	0.00356	≤2.5	PASS
				1000~2387	2010.08	-53.43	≤-26	0.00454	≤2.5	PASS
				2387~2400	2394.68	-53.15	≤-16	0.00484	≤25	PASS
				2483.5~2496.5	2483.86	-38.88	≤-16	0.12942	≤25	PASS
				2496.5~13000	4960.62	-48.33	≤-26	0.01469	≤2.5	PASS
				30~500	191.68	-48.36	≤-26	0.01459	≤2.5	PASS

NTHV	BLE_1M	Ant1	2402	500~1000	571.00	-54.64	≤-26	0.00344	≤2.5	PASS
				1000~2387	2385.61	-48.75	≤-26	0.01334	≤2.5	PASS
				2387~2400	2400	-15.27	≤-16	29.7166 6	≤25	See table below
				2483.5~2496.5	2487.07	-54.24	≤-16	0.00377	≤25	PASS
				2496.5~13000	3690.75	-54.81	≤-26	0.00330	≤2.5	PASS
				30~500	225.40	-48.49	≤-26	0.01416	≤2.5	PASS
			2440	500~1000	586.50	-53.76	≤-26	0.00421	≤2.5	PASS
				1000~2387	2149.48	-53.57	≤-26	0.00440	≤2.5	PASS
				2387~2400	2399.58	-52.52	≤-16	0.00560	≤25	PASS
				2483.5~2496.5	2487.30	-51.86	≤-16	0.00652	≤25	PASS
				2496.5~13000	4880.79	-48.49	≤-26	0.01416	≤2.5	PASS
				30~500	202.96	-48.57	≤-26	0.01390	≤2.5	PASS
			2480	500~1000	576.75	-54.89	≤-26	0.00324	≤2.5	PASS
				1000~2387	2021.87	-53.16	≤-26	0.00483	≤2.5	PASS
				2387~2400	2398.52	-53.35	≤-16	0.00462	≤25	PASS
				2483.5~2496.5	2483.73	-38.71	≤-16	0.13459	≤25	PASS
				2496.5~13000	4961.15	-48.77	≤-26	0.01327	≤2.5	PASS
				30~500	190.86	-47.73	≤-26	0.01687	≤2.5	PASS
NTHV	BLE_1M	Ant1	2402	500~1000	699.00	-54.65	≤-26	0.00343	≤2.5	PASS
				1000~2387	2384.57	-51.03	≤-26	0.00789	≤2.5	PASS
				2387~2400	2400.00	-27.03	≤-16	1.98153	≤25	PASS
				2483.5~2496.5	2494.37	-53.05	≤-16	0.00495	≤25	PASS
				2496.5~13000	4803.59	-48.31	≤-26	0.01476	≤2.5	PASS
				30~500	181.22	-47.71	≤-26	0.01694	≤2.5	PASS
			2440	500~1000	563.75	-53.91	≤-26	0.00406	≤2.5	PASS
				1000~2387	2040.25	-53.90	≤-26	0.00407	≤2.5	PASS
				2387~2400	2399.82	-52.14	≤-16	0.00611	≤25	PASS
				2483.5~2496.5	2491.83	-52.20	≤-16	0.00603	≤25	PASS
				2496.5~13000	4879.22	-48.20	≤-26	0.01514	≤2.5	PASS
				30~500	159.72	-48.25	≤-26	0.01496	≤2.5	PASS
	BLE_2M	Ant1	2480	500~1000	720.50	-54.60	≤-26	0.00347	≤2.5	PASS
				1000~2387	2112.03	-53.60	≤-26	0.00437	≤2.5	PASS
				2387~2400	2389.49	-53.02	≤-16	0.00499	≤25	PASS
				2483.5~2496.5	2483.55	-38.72	≤-16	0.13428	≤25	PASS
				2496.5~13000	4960.10	-48.67	≤-26	0.01358	≤2.5	PASS
				30~500	188.39	-48.50	≤-26	0.01413	≤2.5	PASS
			2402	500~1000	503.88	-54.06	≤-26	0.00393	≤2.5	PASS
				1000~2387	2381.80	-50.07	≤-26	0.00984	≤2.5	PASS
				2387~2400	2400	-15.23	≤-16	29.9916 3	≤25	See table below
				2483.5~2496.5	2489.79	-54.64	≤-16	0.00344	≤25	PASS
				2496.5~13000	3787.91	-53.91	≤-26	0.00406	≤2.5	PASS
				30~500	185.57	-48.36	≤-26	0.01459	≤2.5	PASS
			2440	500~1000	584.50	-53.68	≤-26	0.00429	≤2.5	PASS
				1000~2387	2368.28	-53.14	≤-26	0.00485	≤2.5	PASS
				2387~2400	2399.79	-52.13	≤-16	0.00612	≤25	PASS
				2483.5~2496.5	2487.25	-51.98	≤-16	0.00634	≤25	PASS
				2496.5~13000	4878.69	-48.06	≤-26	0.01563	≤2.5	PASS
				30~500	188.86	-48.38	≤-26	0.01452	≤2.5	PASS
			2480	500~1000	534.75	-54.90	≤-26	0.00324	≤2.5	PASS
				1000~2387	2083.94	-53.83	≤-26	0.00414	≤2.5	PASS
				2387~2400	2399.55	-52.46	≤-16	0.00568	≤25	PASS
				2483.5~2496.5	2483.55	-38.67	≤-16	0.13583	≤25	PASS
				2496.5~13000	4959.05	-48.71	≤-26	0.01346	≤2.5	PASS

Test Result_Step2

Test Condition	Test Mode	Antenna	Freq (MHz)	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	BLE_2M	Ant1	2402	2400.00	-22.93	≤-16	5.09331	≤25	PASS
NTLV	BLE_2M	Ant1	2402	2400.00	-22.95	≤-16	5.06991	≤25	PASS
NTHV	BLE_2M	Ant1	2402	2400.00	-22.94	≤-16	5.08159	≤25	PASS

Test Graphs



NTNV BLE 1M Ant1 2402 1000~2387



NTNV BLE 1M Ant1 2402 2387~2400



NTNV BLE 1M Ant1 2402 2483.5~2496.5



NTNV BLE 1M Ant1 2402 2496.5~13000



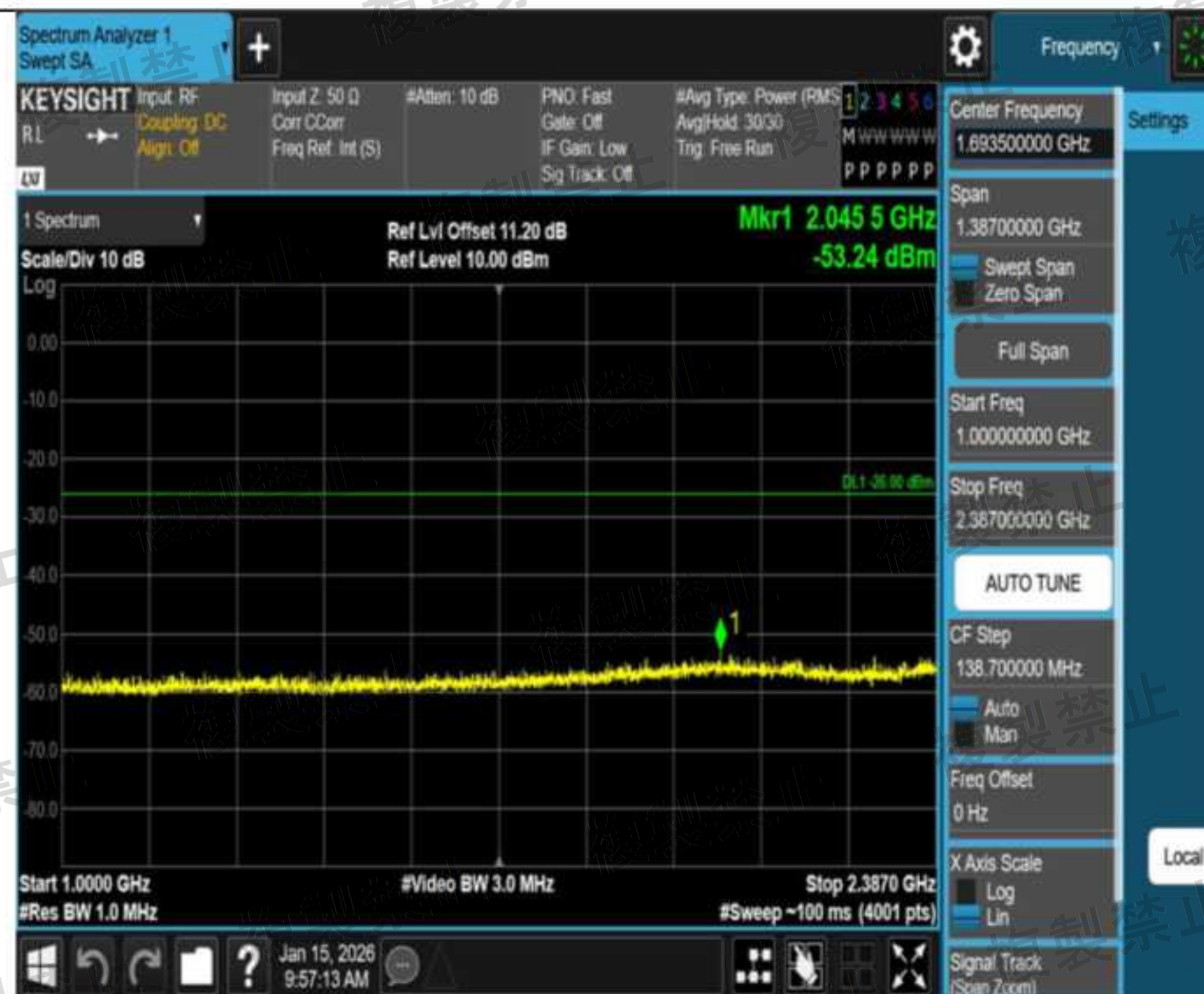
NTNV BLE 1M Ant1 2440 30~500



NTNV BLE 1M Ant1 2440 500~1000



NTNV BLE 1M Ant1 2440 1000~2387



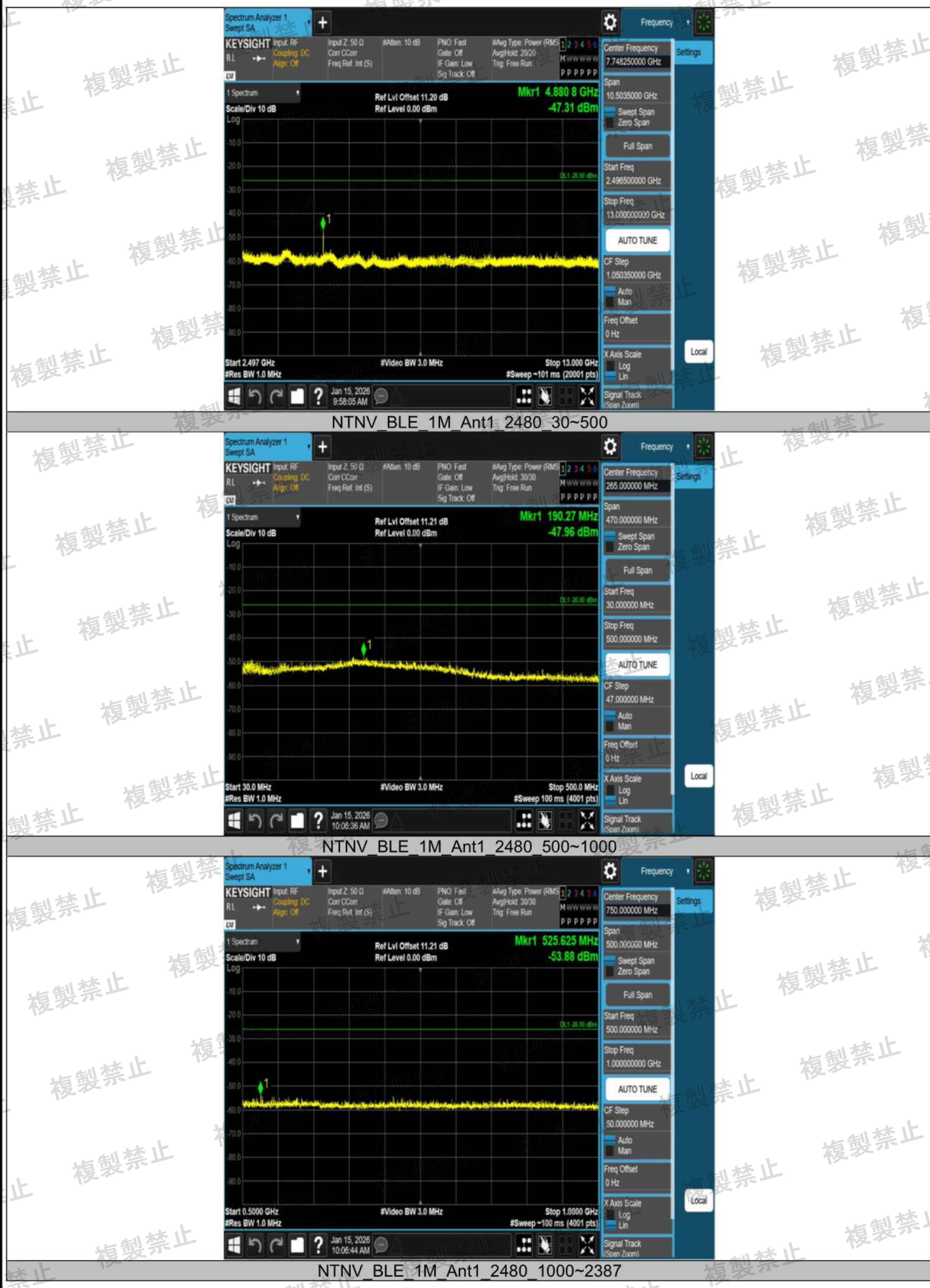
NTNV BLE 1M Ant1 2440 2387~2400

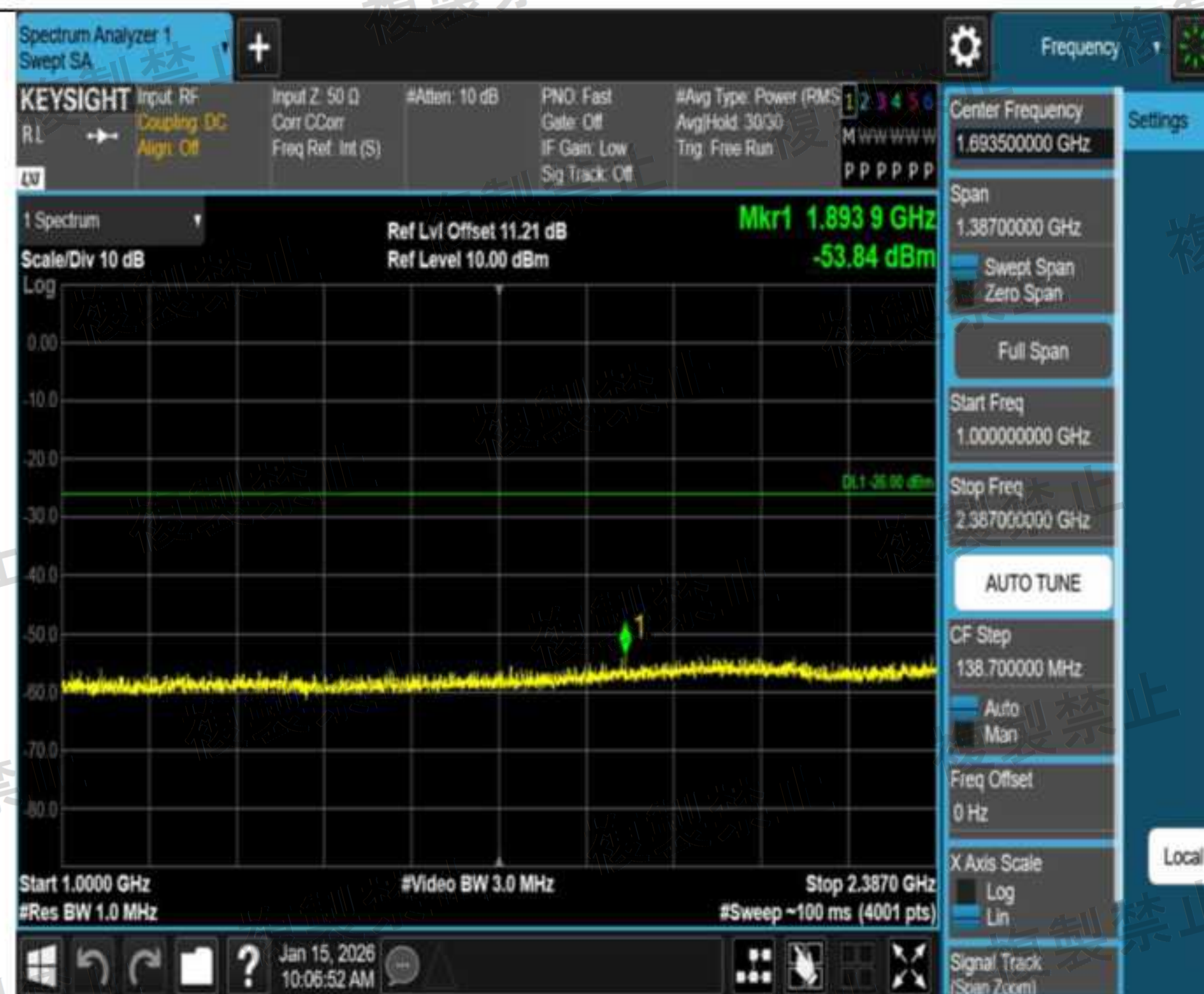


NTNV BLE 1M Ant1 2440 2483.5~2496.5



NTNV BLE 1M Ant1 2440 2496.5~13000





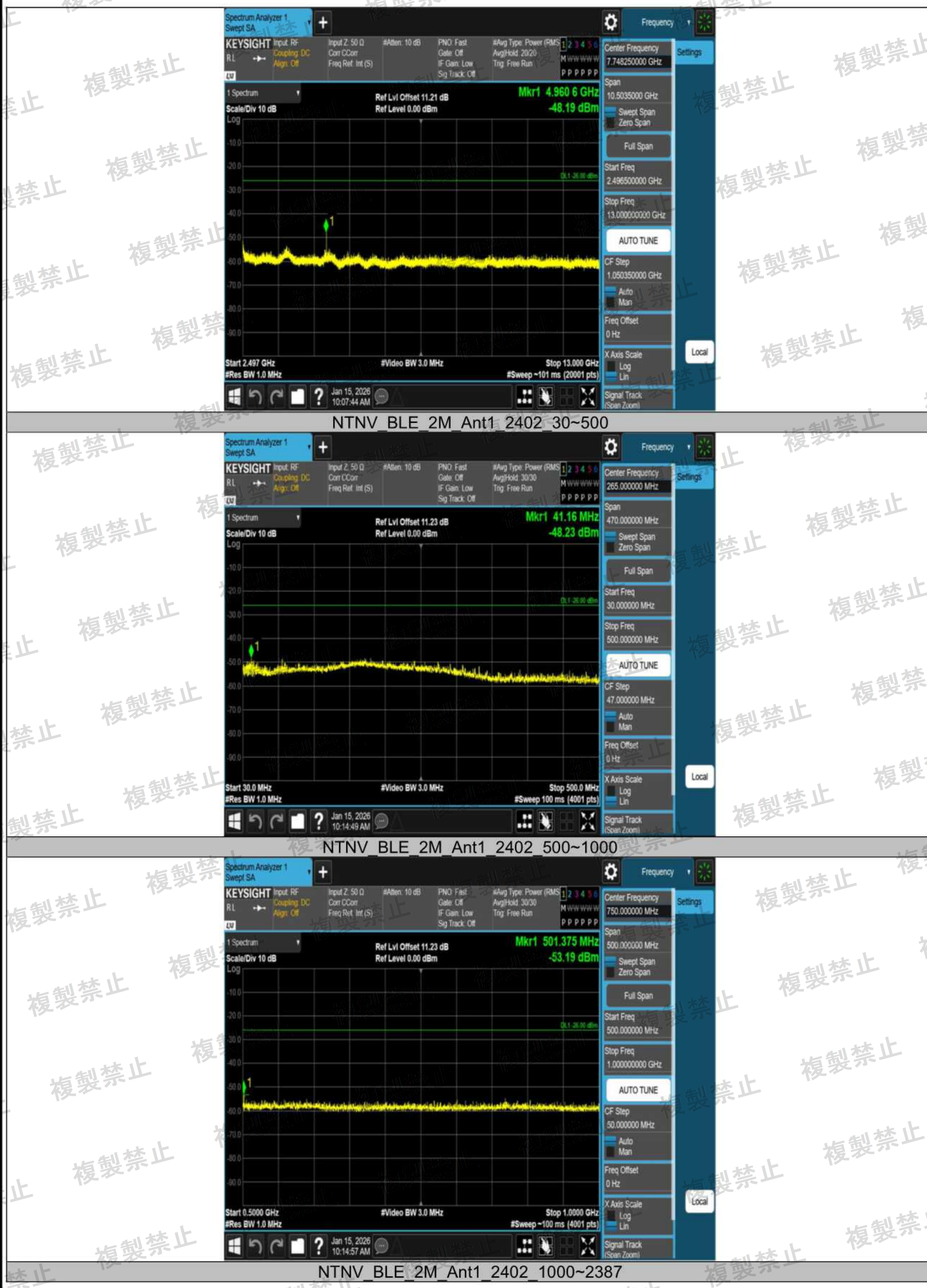
NTNV BLE 1M Ant1 2480 2387~2400

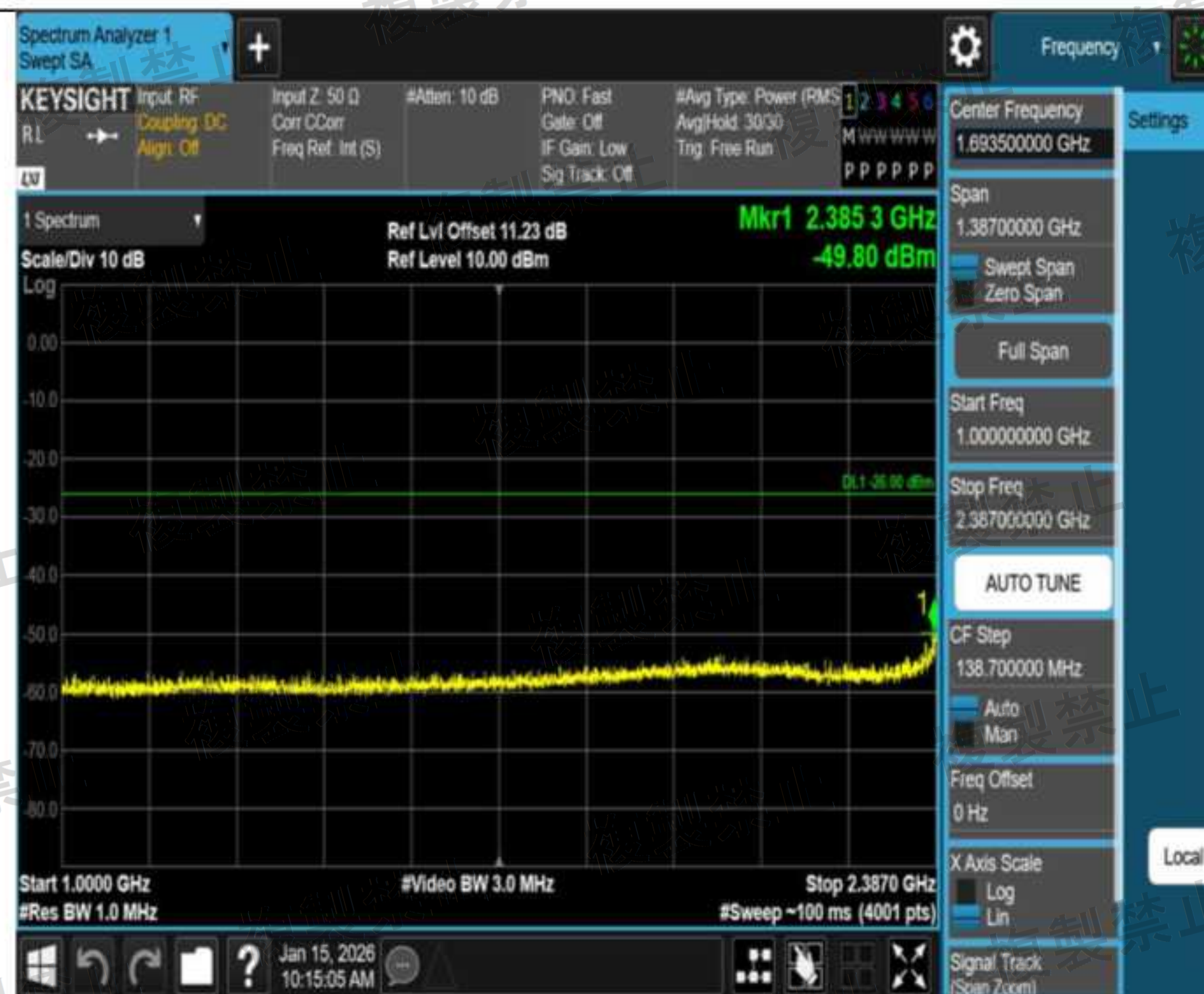


NTNV BLE 1M Ant1 2480 2483.5~2496.5



NTNV BLE 1M Ant1 2480 2496.5~13000





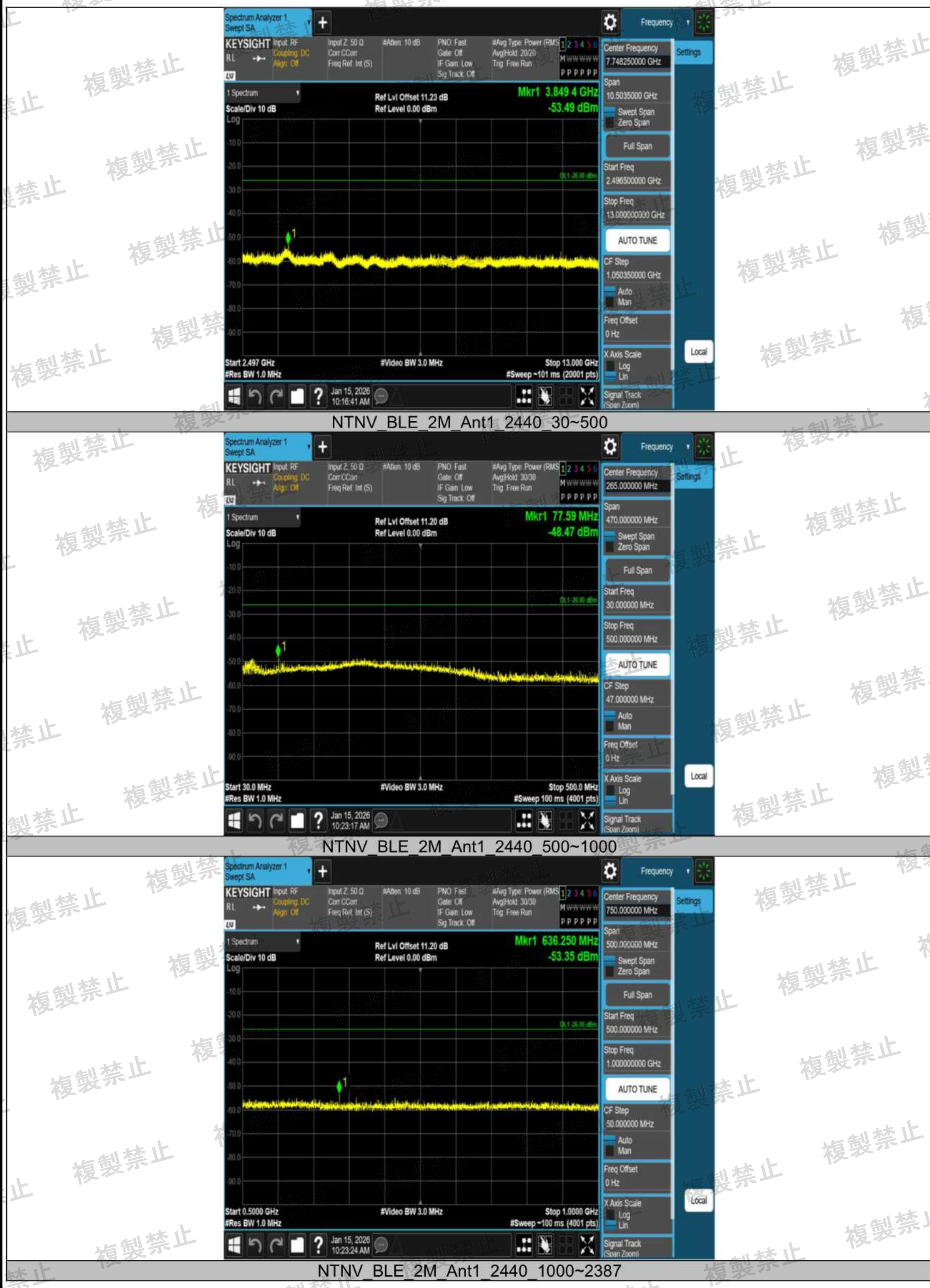
NTNV BLE 2M Ant1 2402 2387~2400

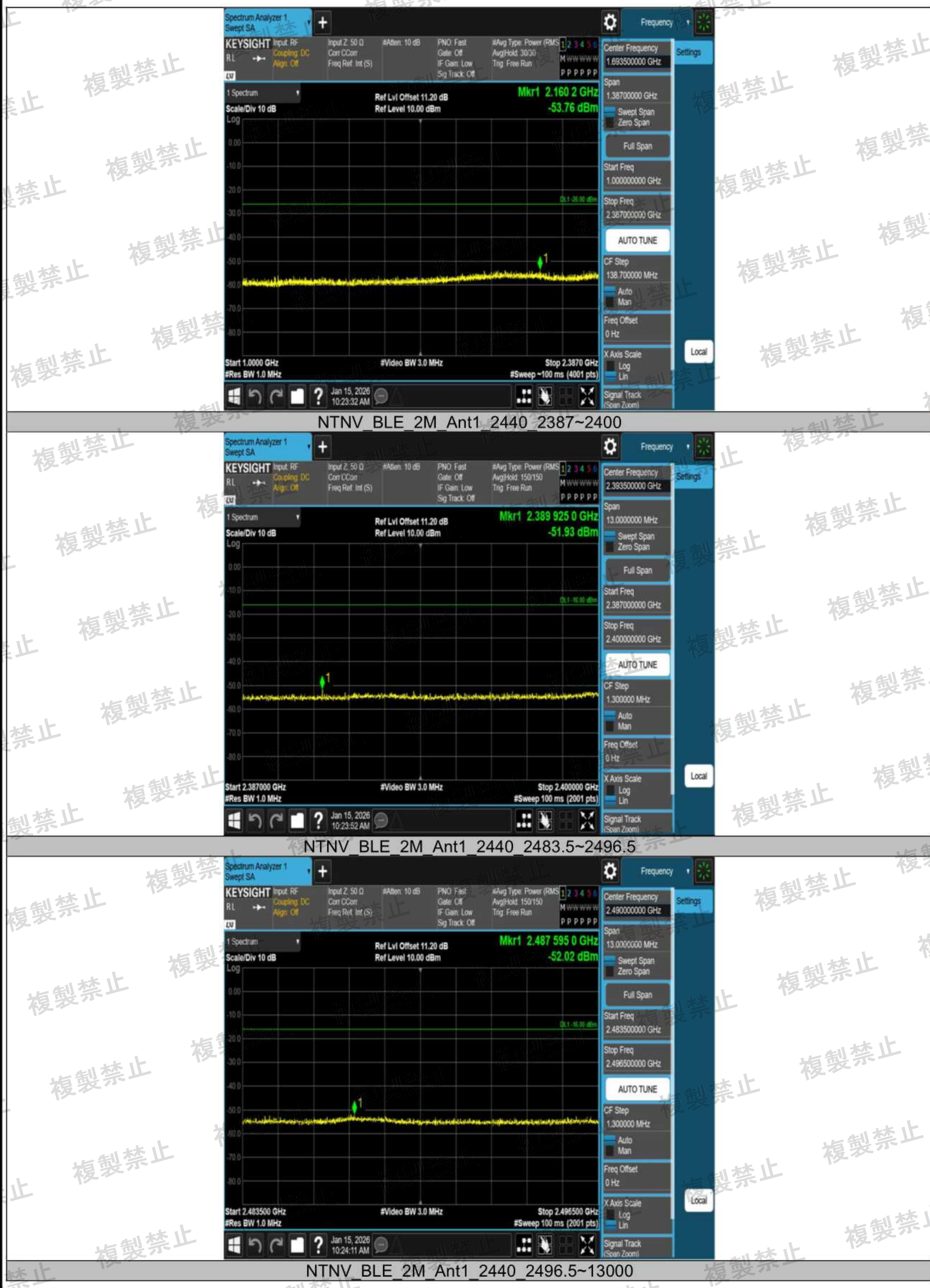


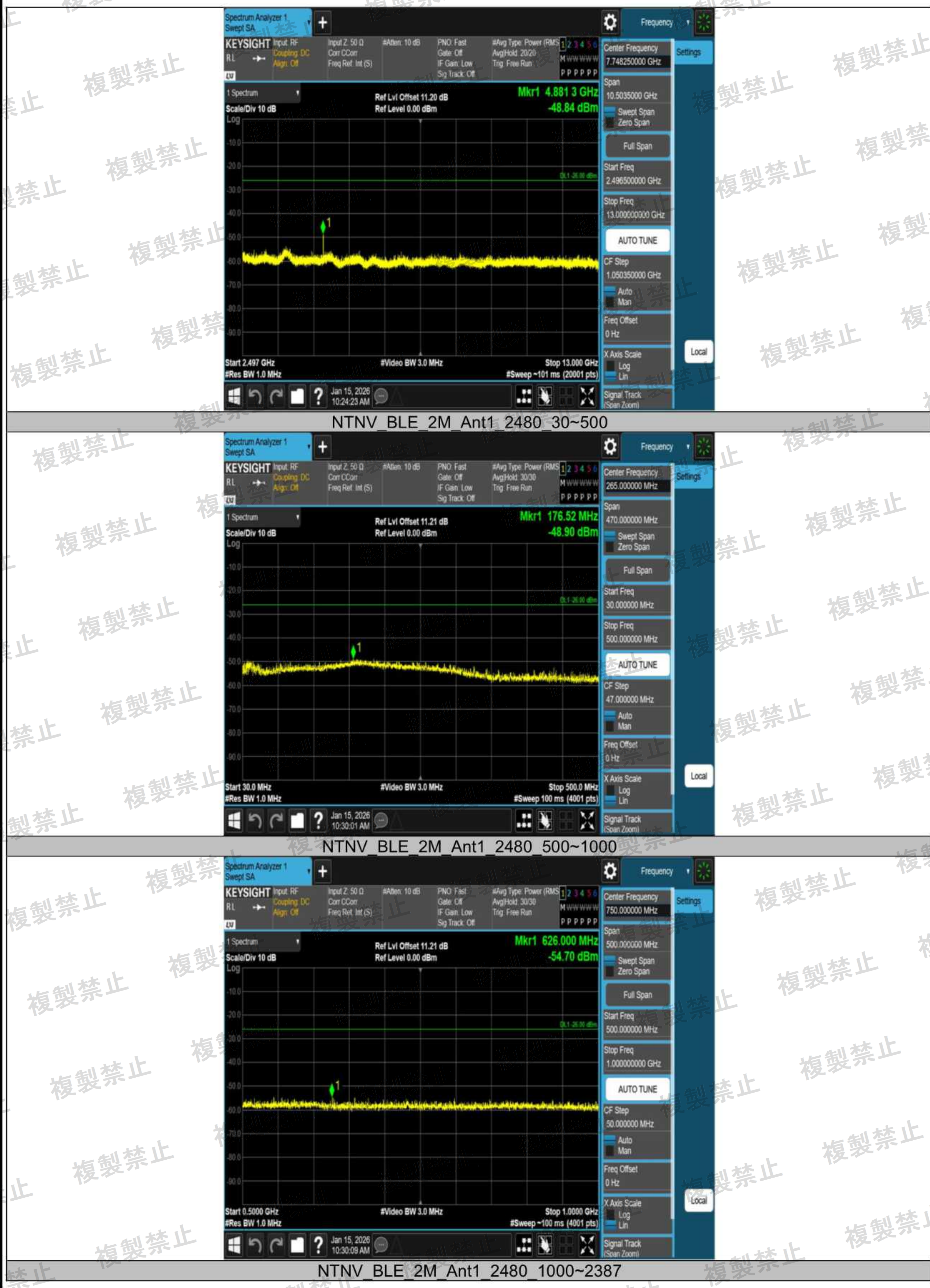
NTNV BLE 2M Ant1 2402 2483.5~2496.5



NTNV BLE 2M Ant1 2402 2496.5~13000









NTNV BLE 2M Ant1 2480 2387~2400



NTNV BLE 2M Ant1 2480 2483.5~2496.5



NTNV BLE 2M Ant1 2480 2496.5~13000





NTLV BLE 1M Ant1 2402 2387~2400



NTLV BLE 1M Ant1 2402 2483.5~2496.5



NTLV BLE 1M Ant1 2402 2496.5~13000



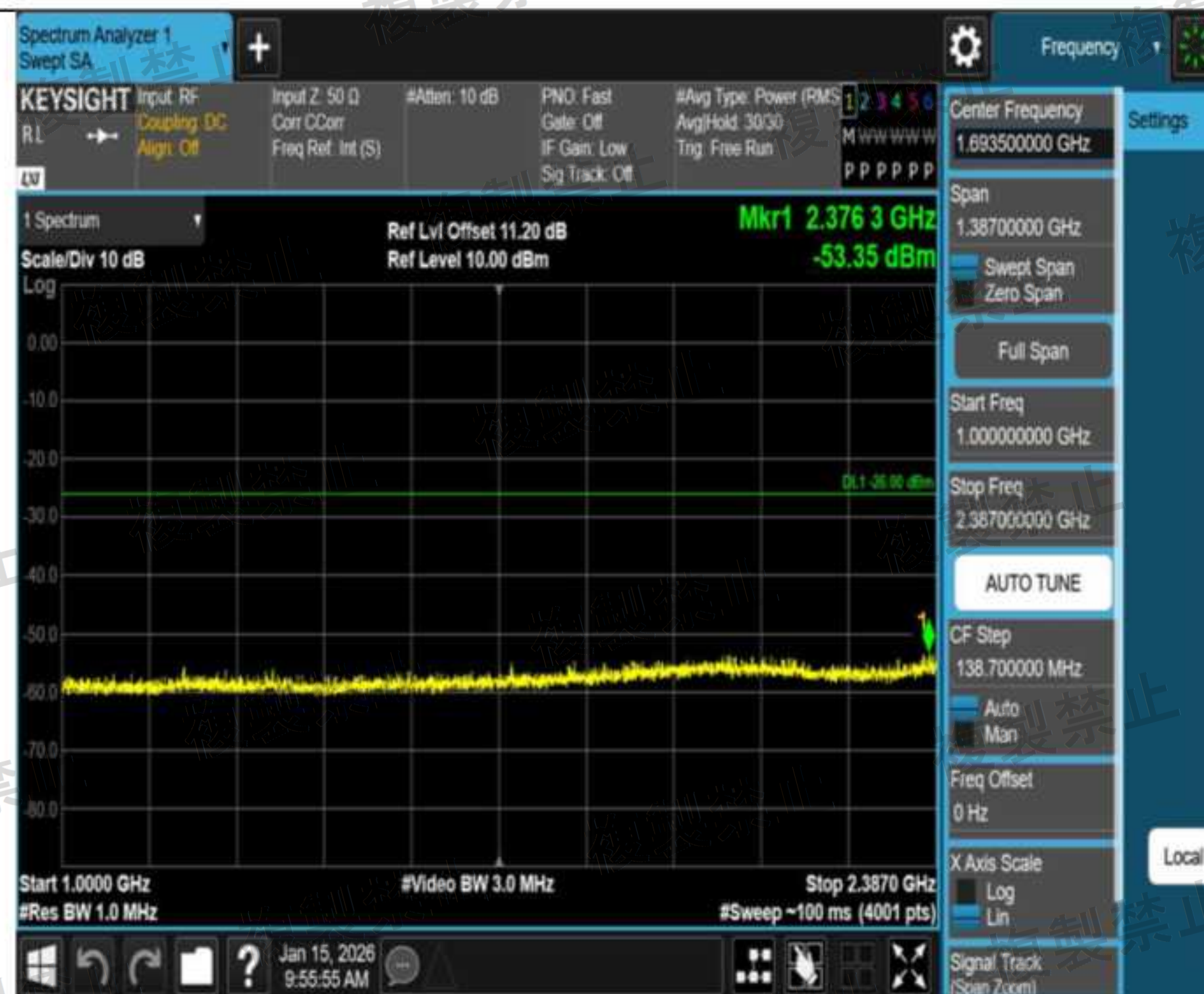
NTLV BLE 1M Ant1 2440 30~500



NTLV BLE 1M Ant1 2440 500~1000



NTLV BLE 1M Ant1 2440 1000~2387



NTLV BLE 1M Ant1 2440 2387~2400



NTLV BLE 1M Ant1 2440 2483.5~2496.5



NTLV BLE 1M Ant1 2440 2496.5~13000



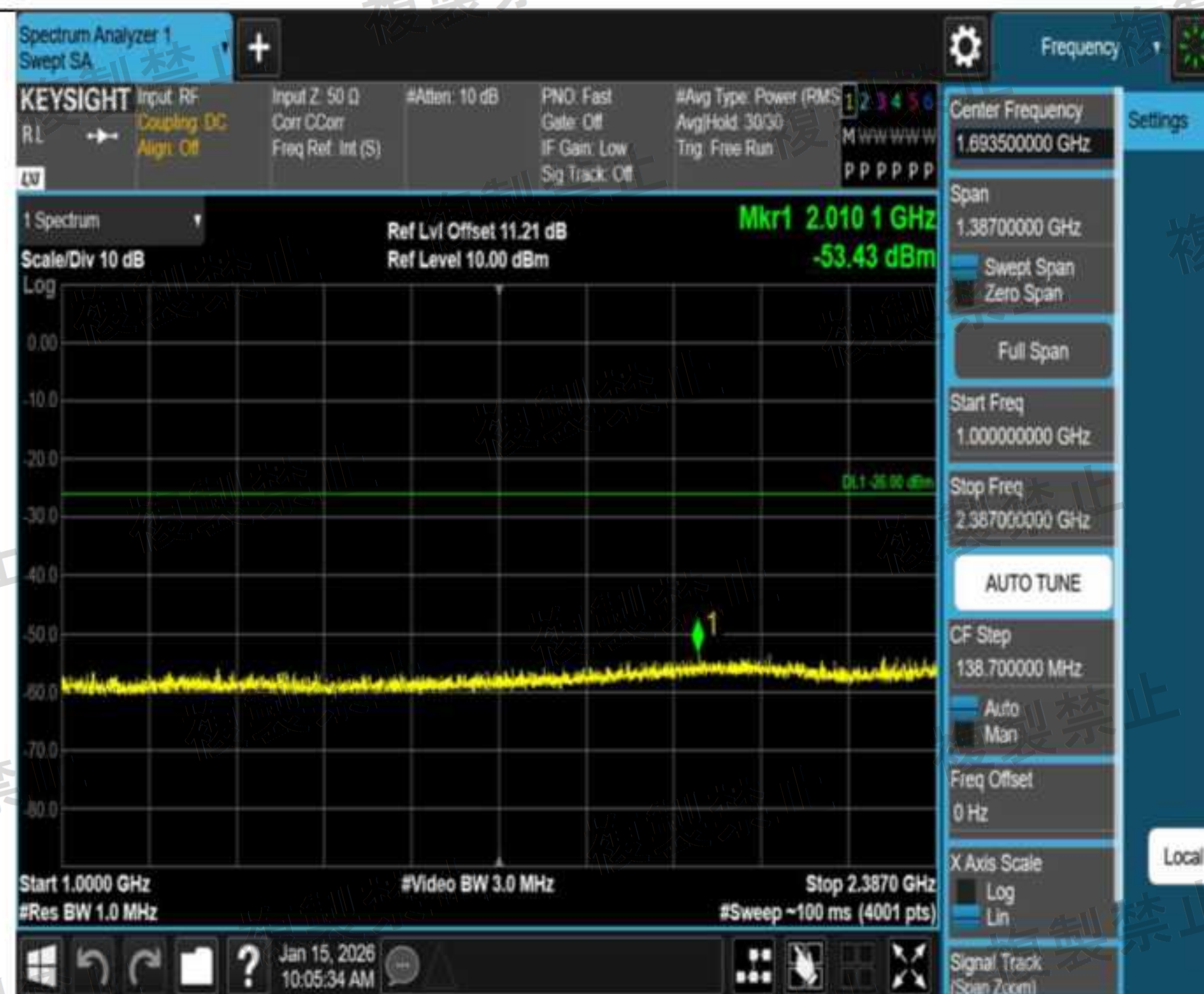
NTLV BLE 1M Ant1 2480 30~500



NTLV BLE 1M Ant1 2480 500~1000



NTLV BLE 1M Ant1 2480 1000~2387



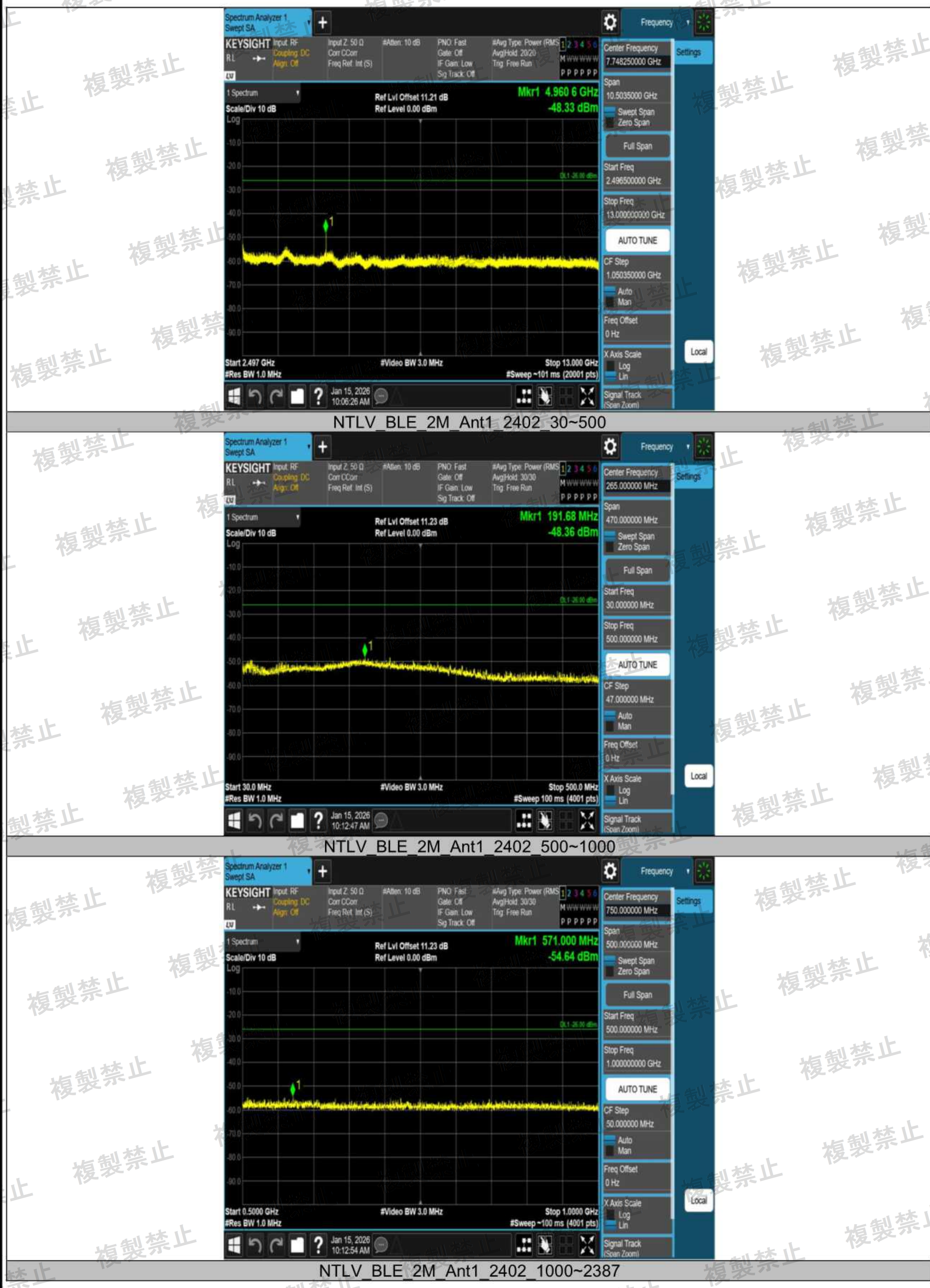
NTLV BLE 1M Ant1 2480 2387~2400

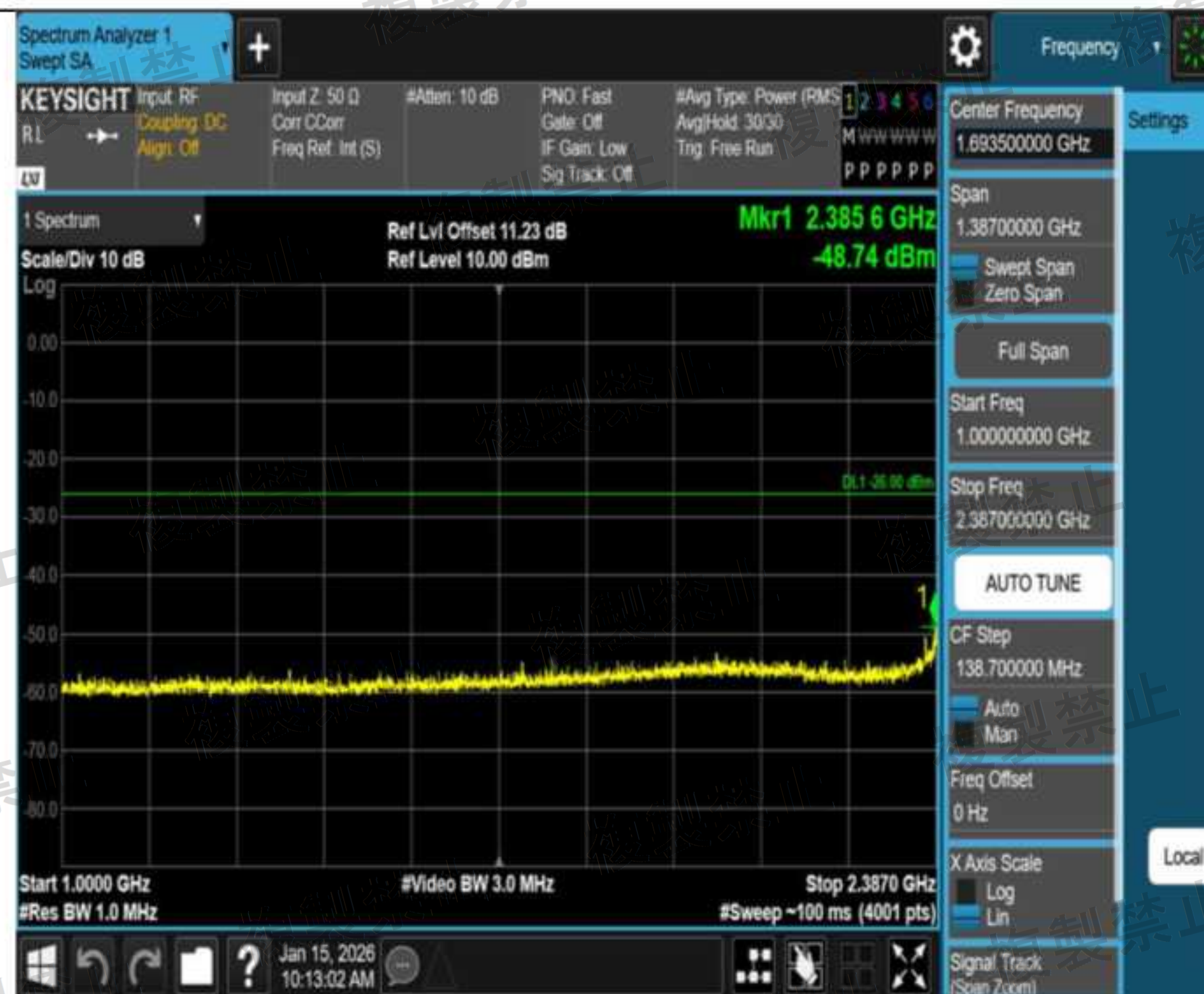


NTLV BLE 1M Ant1 2480 2483.5~2496.5



NTLV BLE 1M Ant1 2480 2496.5~13000





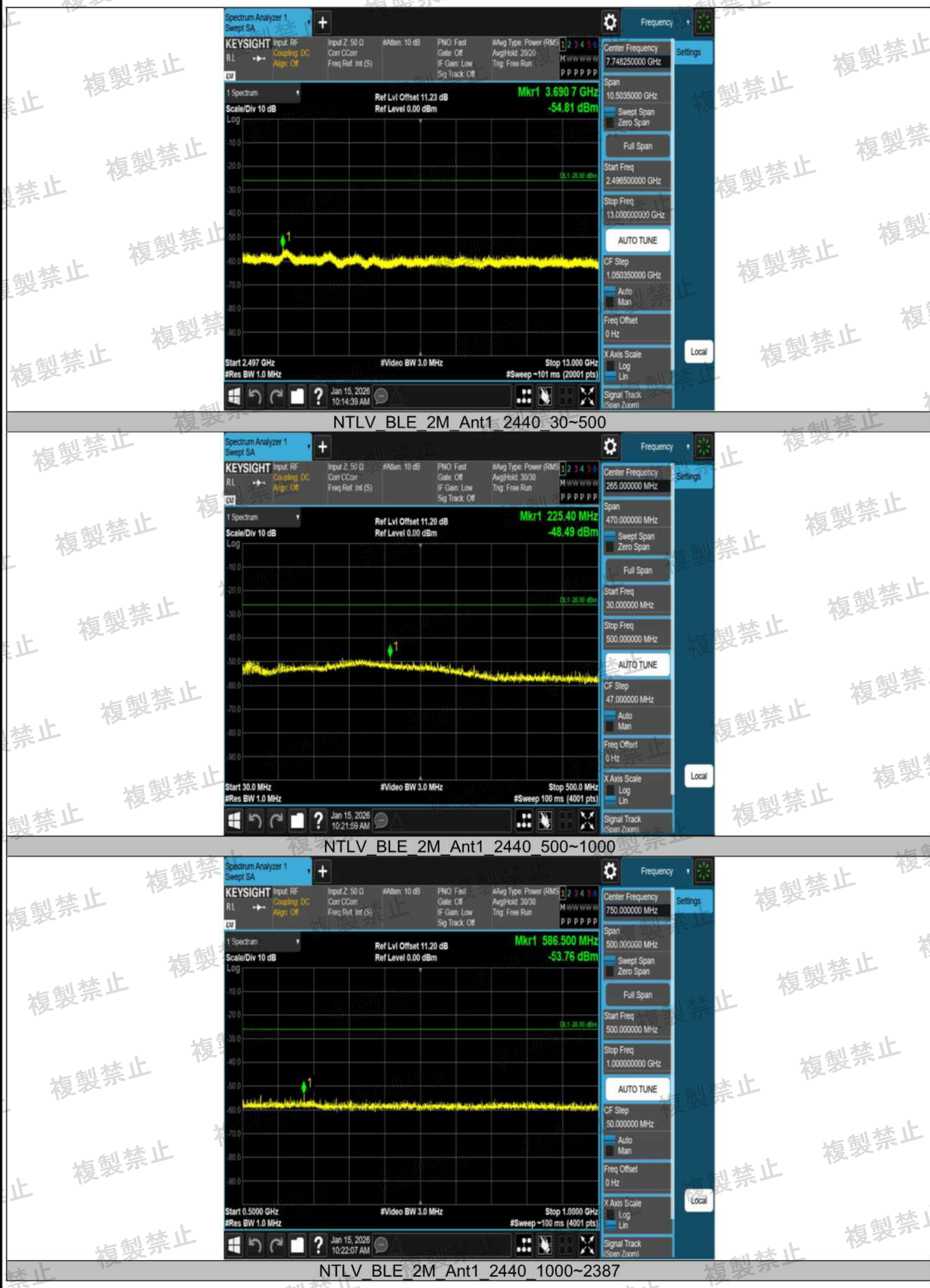
NTLV BLE 2M Ant1 2402 2387~2400



NTLV BLE 2M Ant1 2402 2483.5~2496.5



NTLV BLE 2M Ant1 2402 2496.5~13000





NTLV BLE 2M Ant1 2440 2387~2400



NTLV BLE 2M Ant1 2440 2483.5~2496.5



NTLV BLE 2M Ant1 2440 2496.5~13000



NTLV BLE 2M Ant1 2480 30~500



NTLV BLE 2M Ant1 2480 500~1000



NTLV BLE 2M Ant1 2480 1000~2387



NTLV BLE 2M Ant1 2480 2387~2400



NTLV BLE 2M Ant1 2480 2483.5~2496.5



NTLV BLE 2M Ant1 2480 2496.5~13000



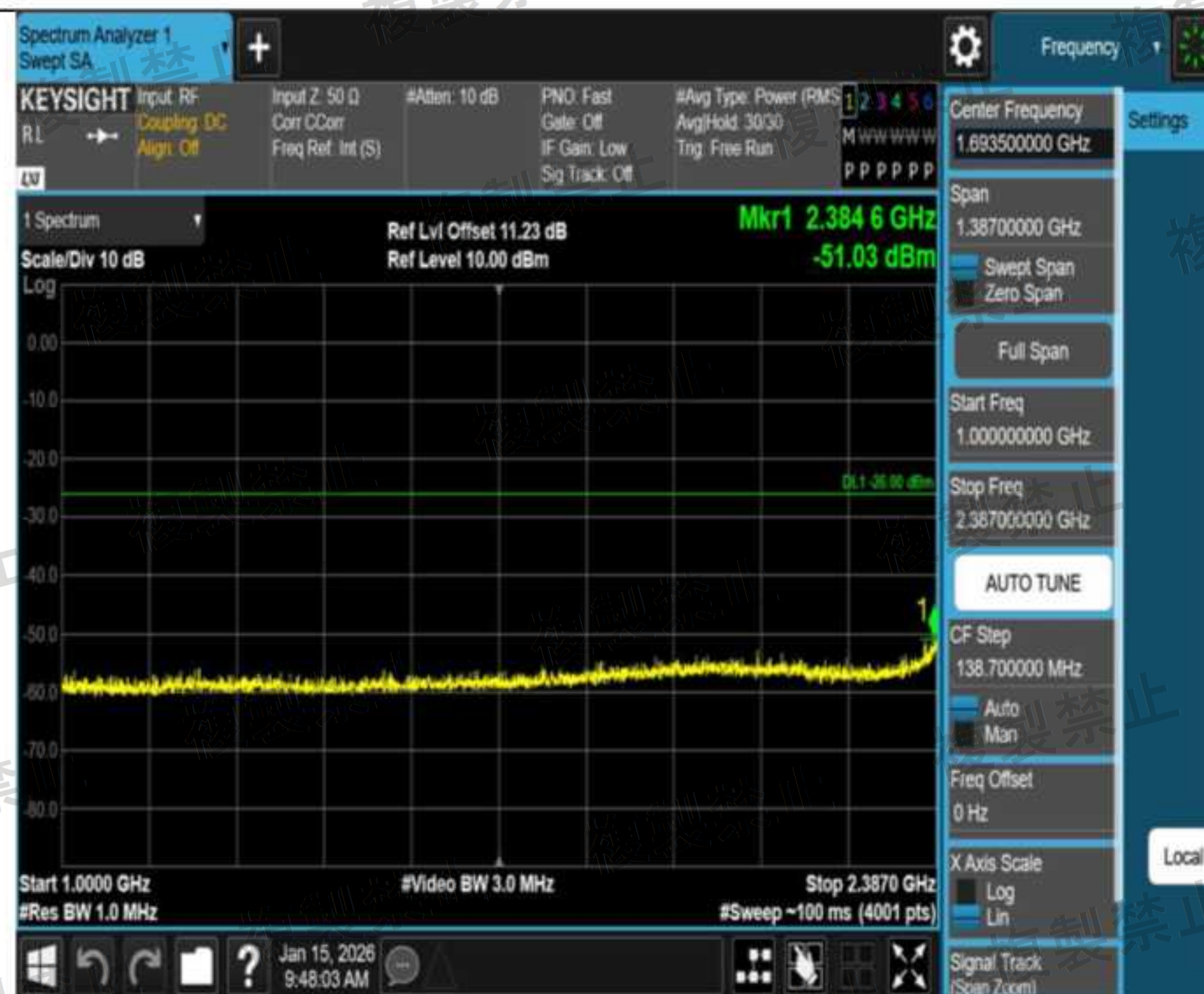
NTHV BLE 1M Ant1 2402 30~500



NTHV BLE 1M Ant1 2402 500~1000



NTHV BLE 1M Ant1 2402 1000~2387



NTHV BLE 1M Ant1 2402 2387~2400



NTHV BLE 1M Ant1 2402 2483.5~2496.5



NTHV BLE 1M Ant1 2402 2496.5~13000



NTHV BLE 1M Ant1 2440 30~500



NTHV BLE 1M Ant1 2440 500~1000



NTHV BLE 1M Ant1 2440 1000~2387



NTHV BLE 1M Ant1 2440 2387~2400



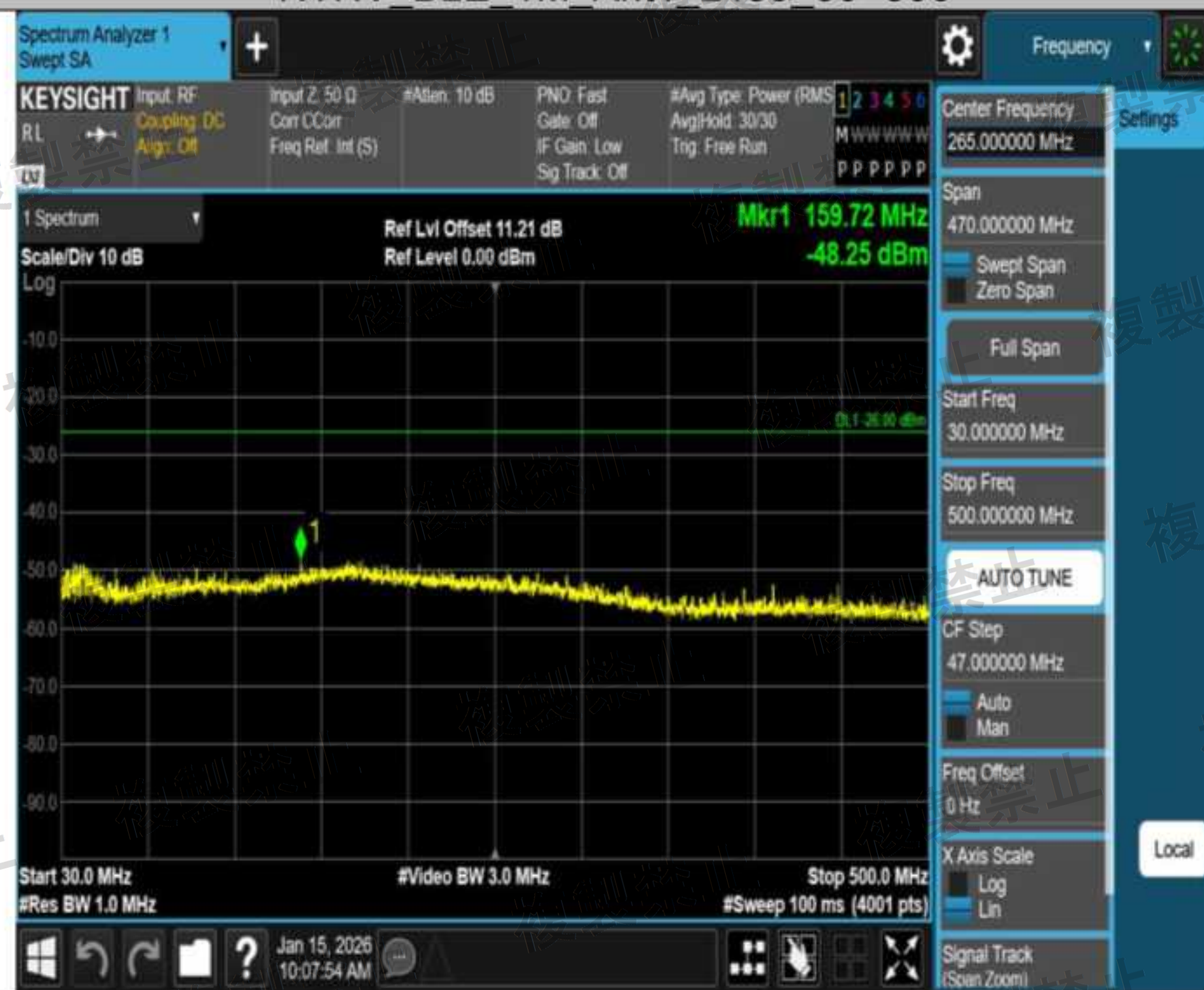
NTHV BLE 1M Ant1 2440 2483.5~2496.5



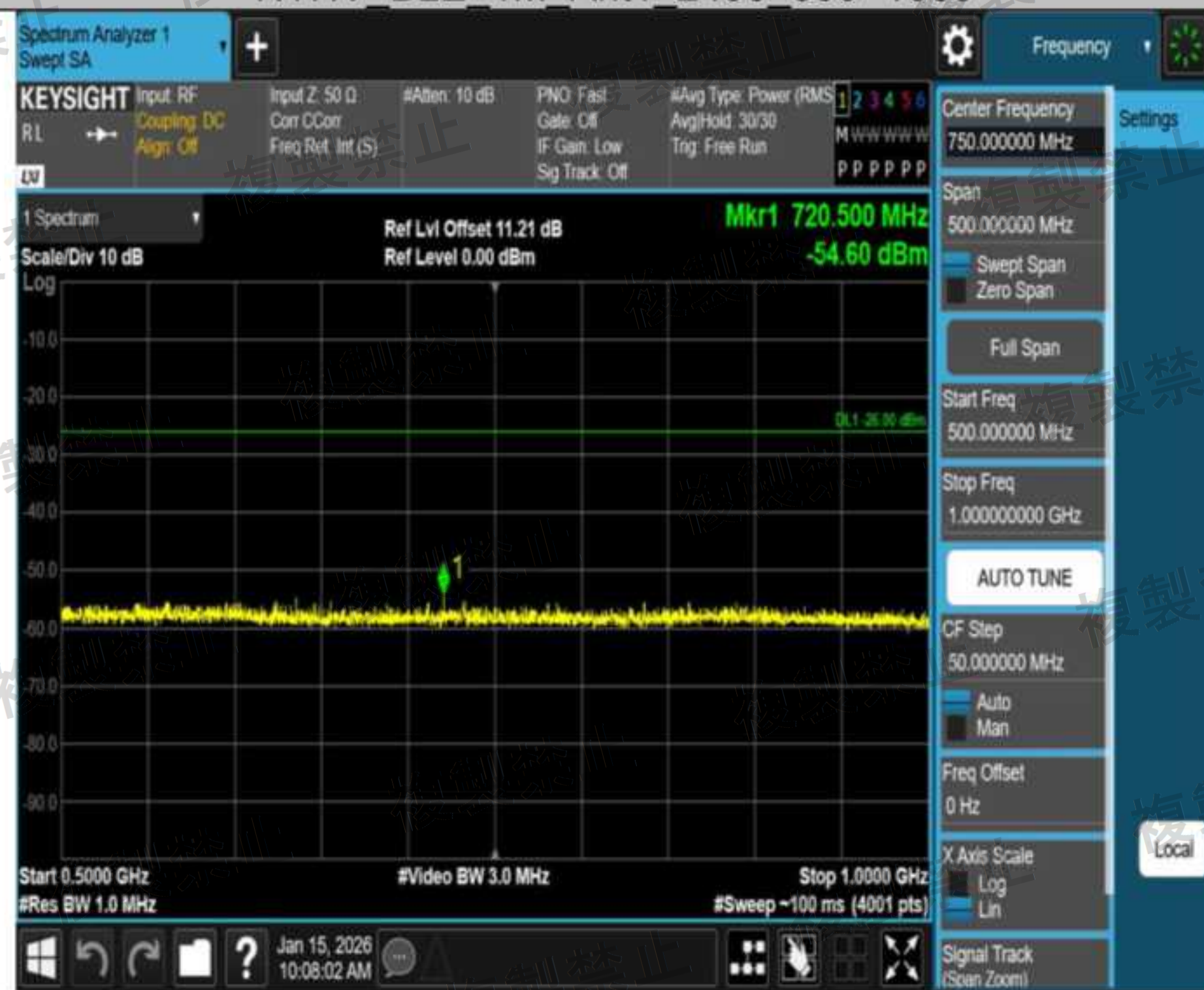
NTHV BLE 1M Ant1 2440 2496.5~13000



NTHV BLE 1M Ant1 2480 30~500



NTHV BLE 1M Ant1 2480 500~1000



NTHV BLE 1M Ant1 2480 1000~2387



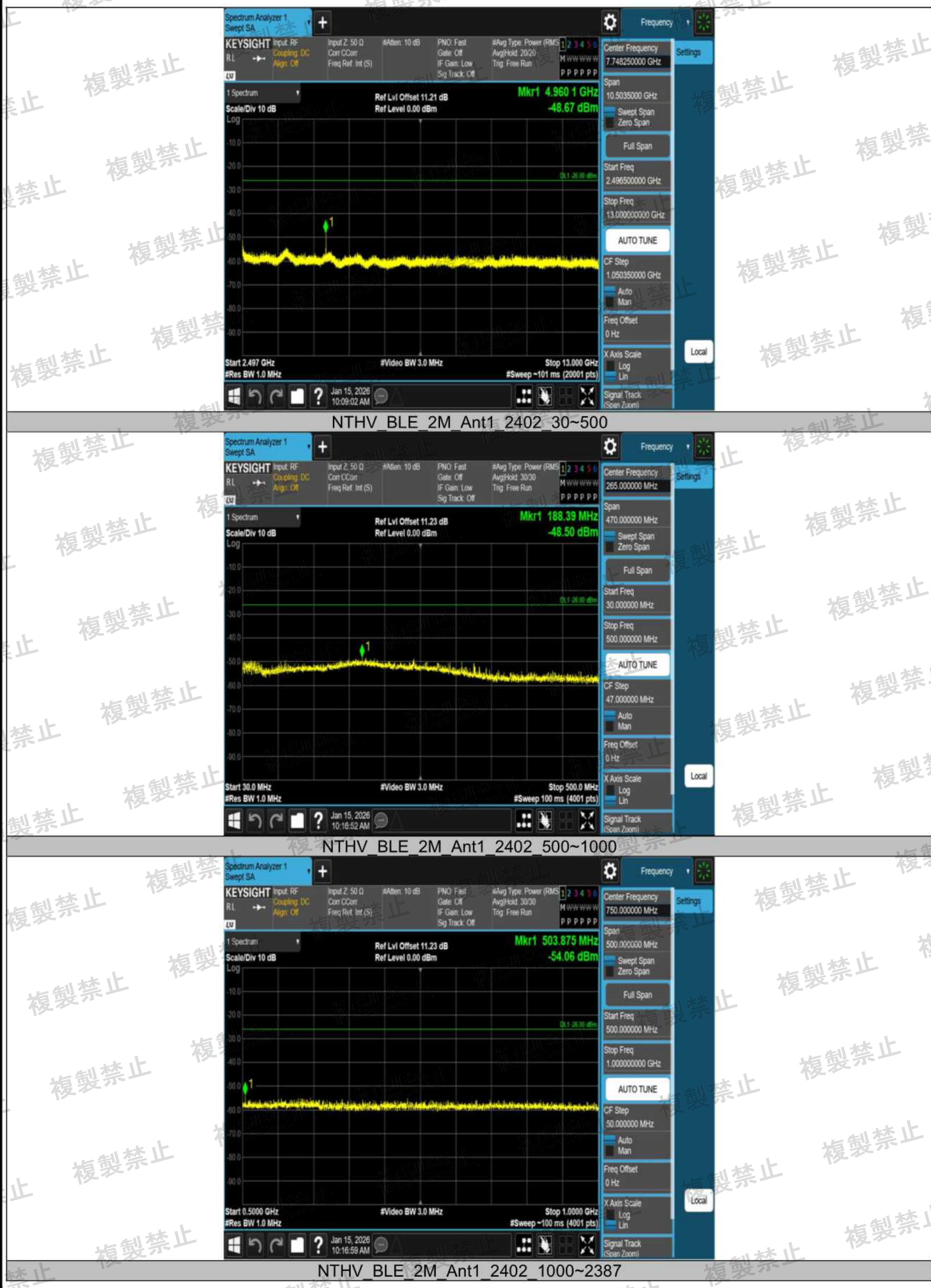
NTHV BLE 1M Ant1 2480 2387~2400

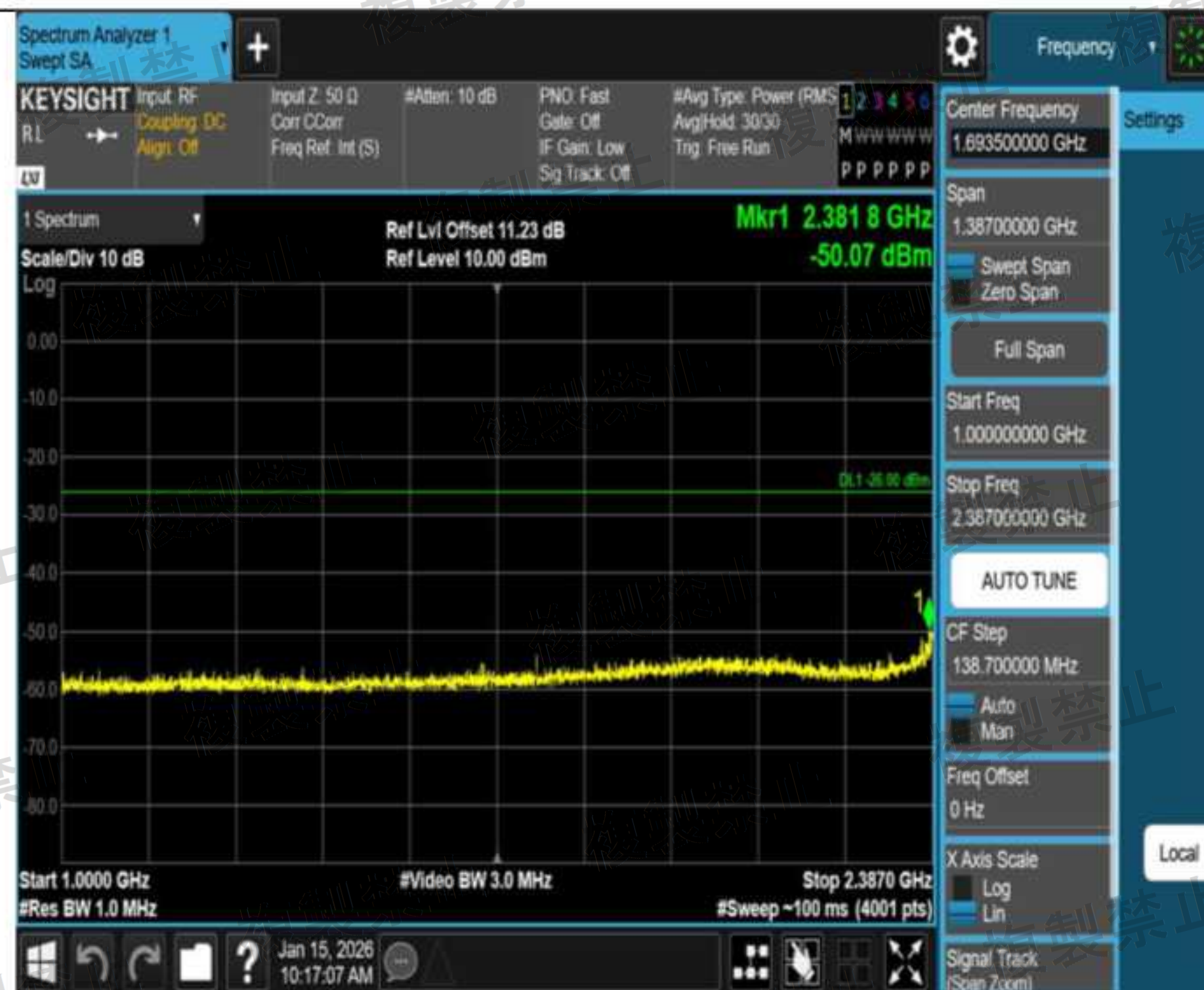


NTHV BLE 1M Ant1 2480 2483.5~2496.5



NTHV BLE 1M Ant1 2480 2496.5~13000





NTHV BLE 2M Ant1 2402 2387~2400



NTHV BLE 2M Ant1 2402 2483.5~2496.5



NTHV BLE 2M Ant1 2402 2496.5~13000



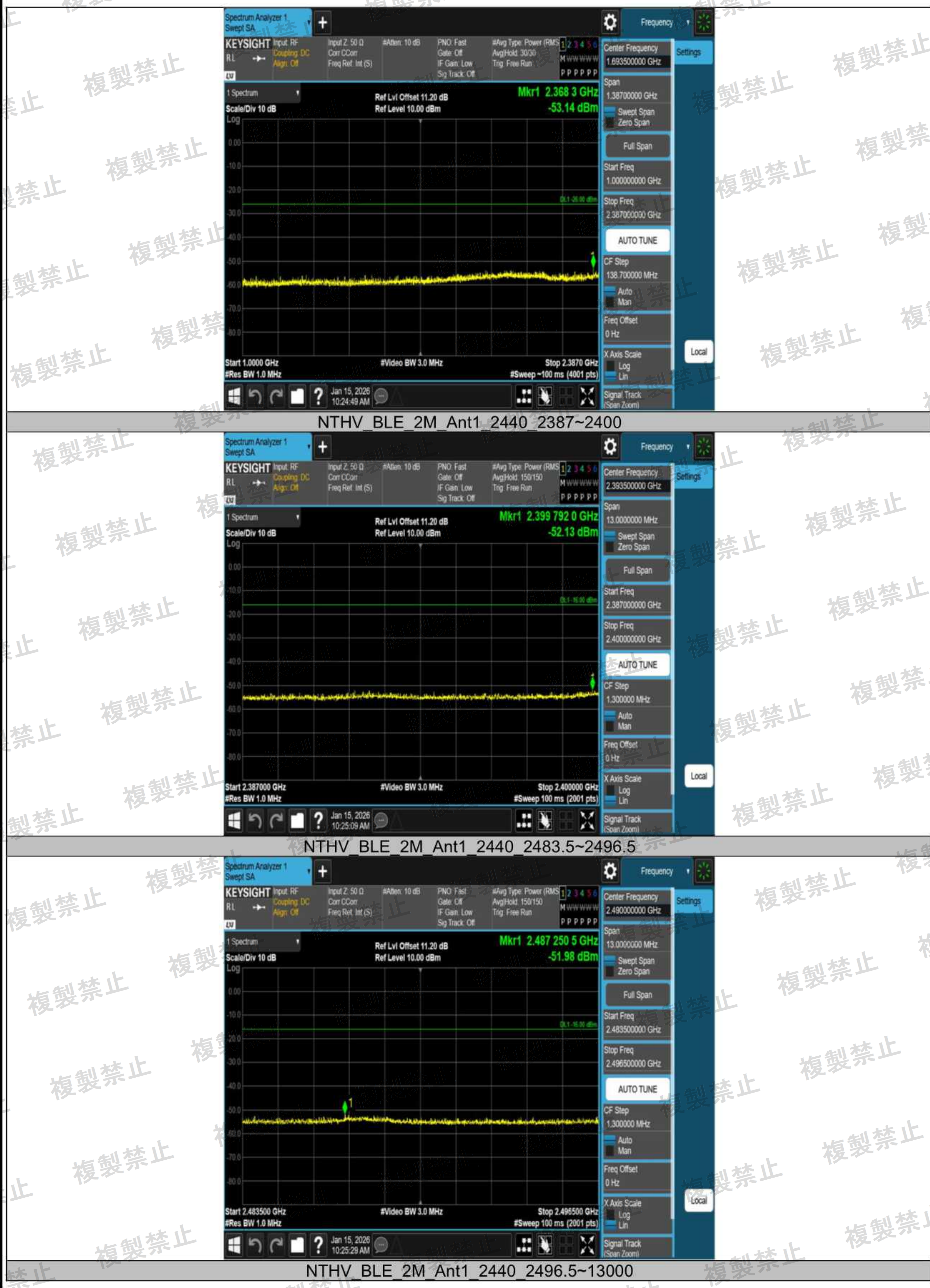
NTHV BLE 2M Ant1 2440 30~500

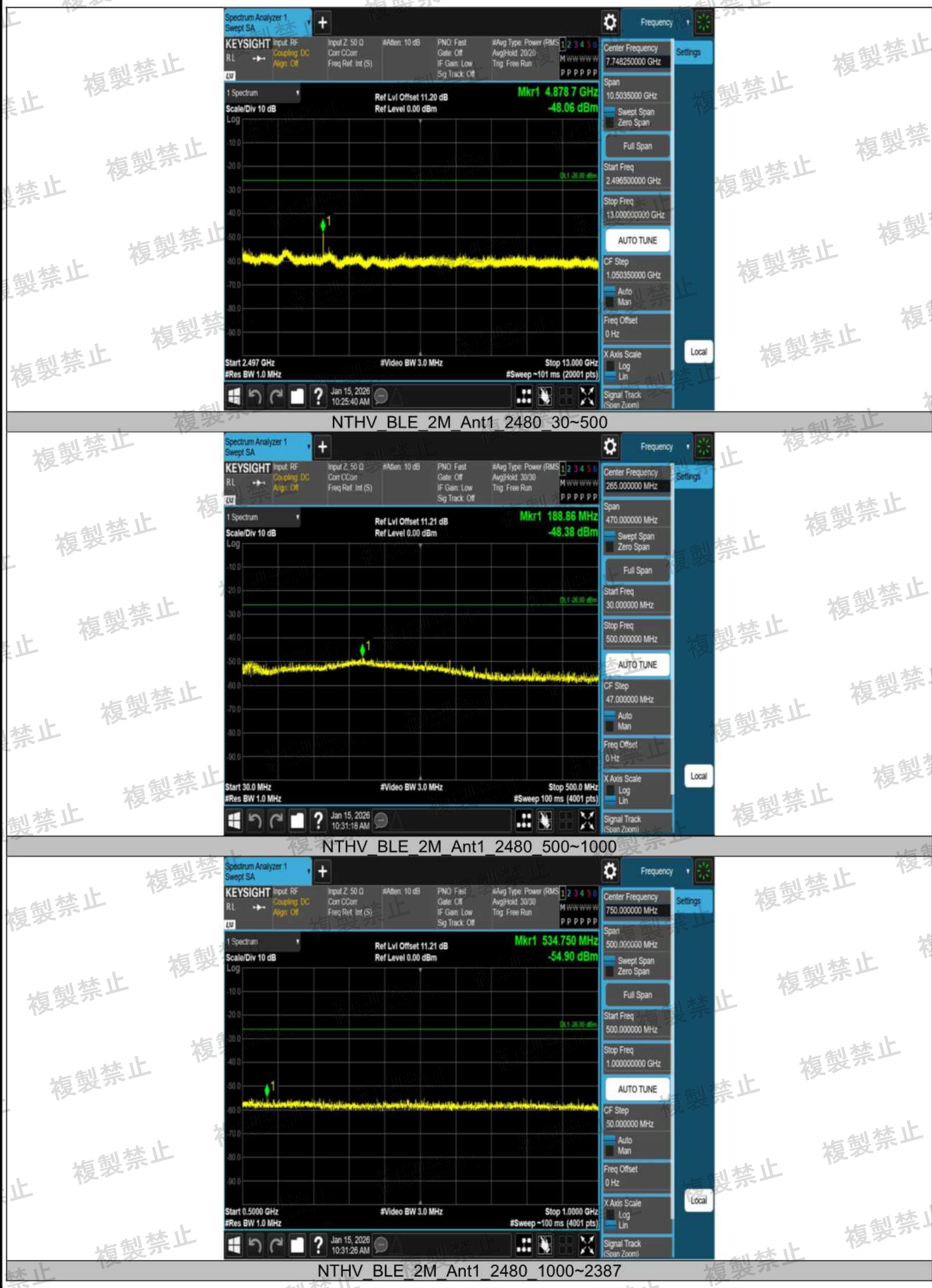


NTHV BLE 2M Ant1 2440 500~1000



NTHV BLE 2M Ant1 2440 1000~2387







NTHV BLE 2M Ant1 2480 2387~2400



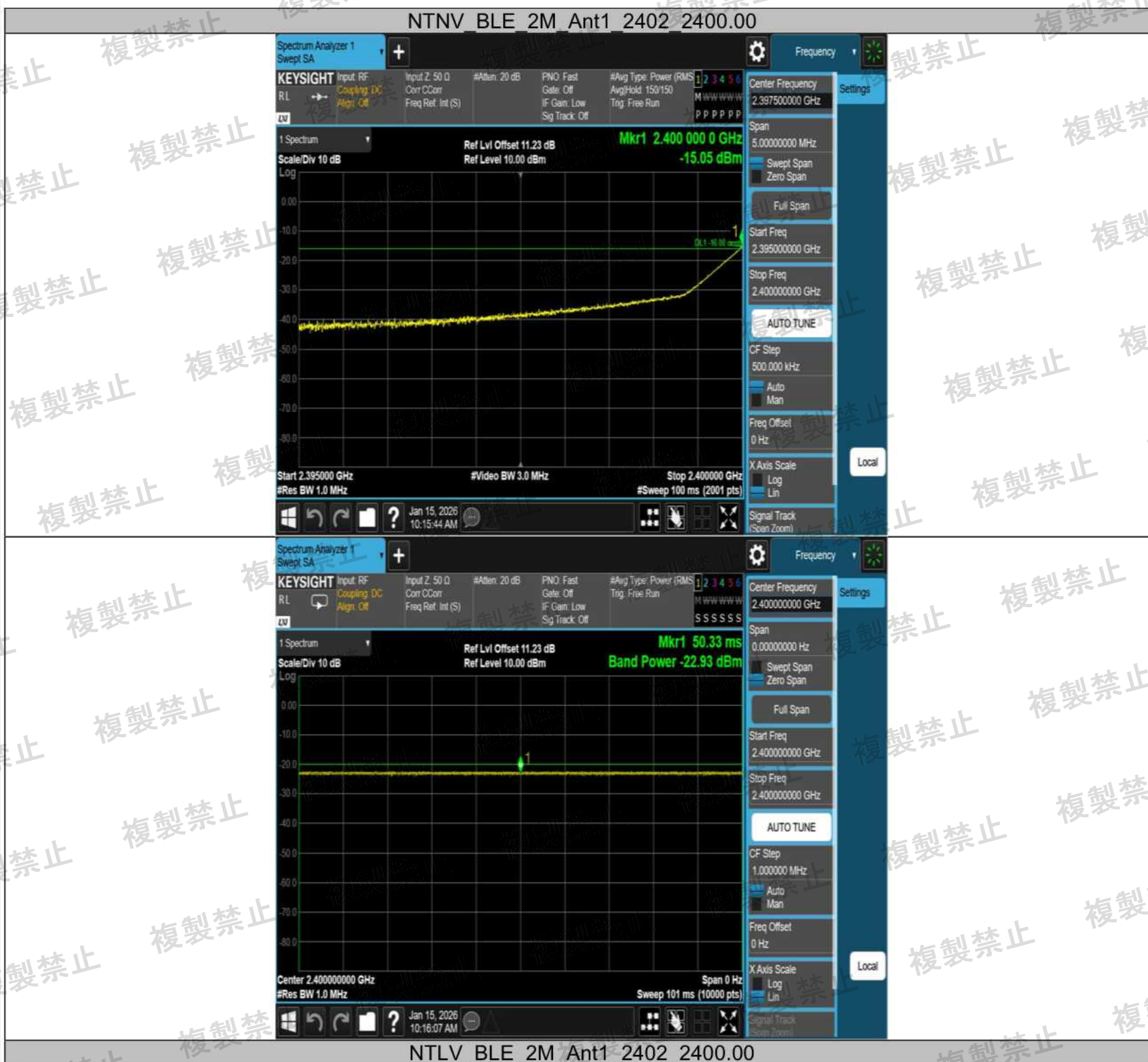
NTHV BLE 2M Ant1 2480 2483.5~2496.5



NTHV BLE 2M Ant1 2480 2496.5~13000



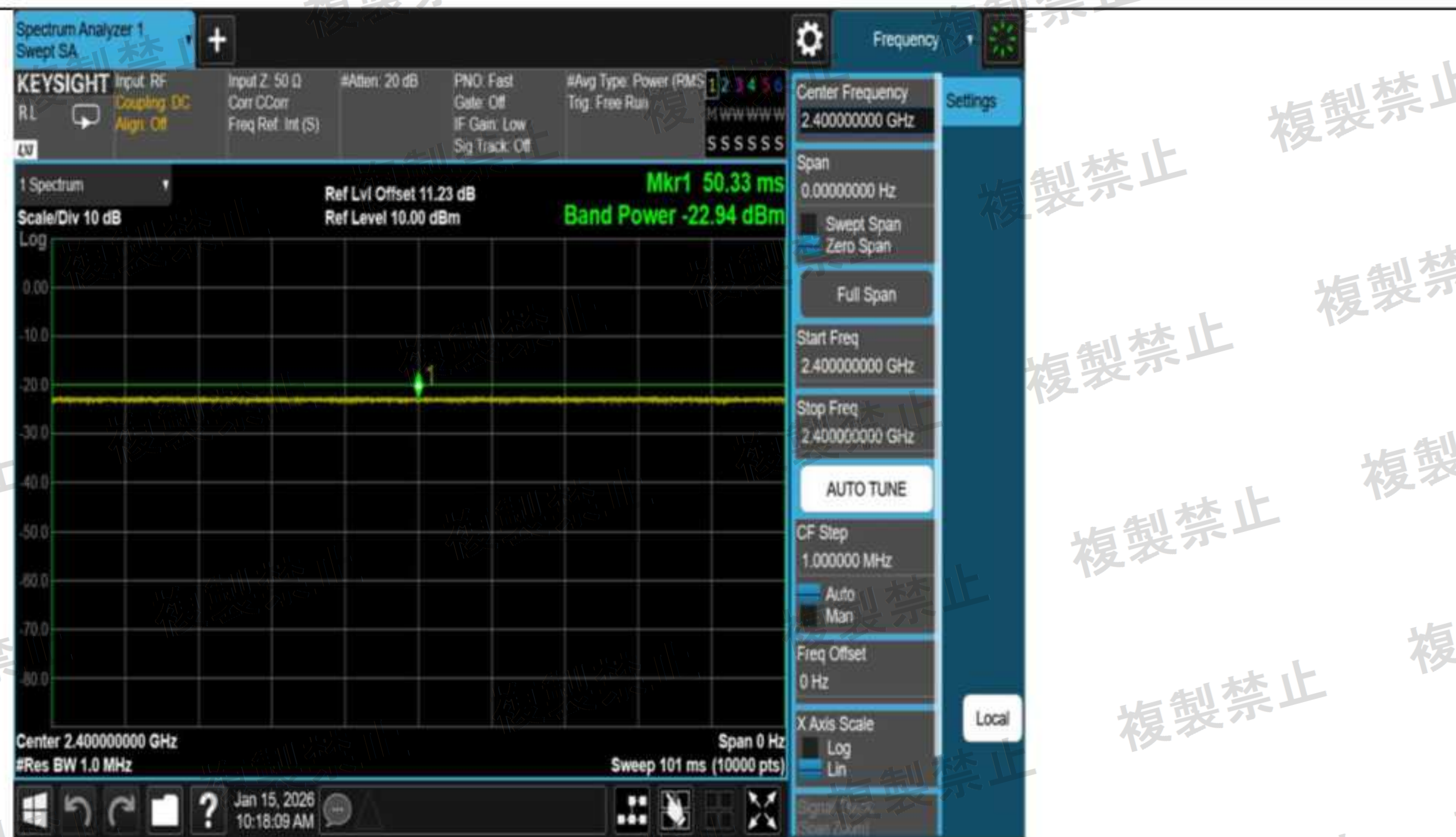
Test Graphs_Step2





NTHV_BLE_2M_Ant1_2402_2400.00



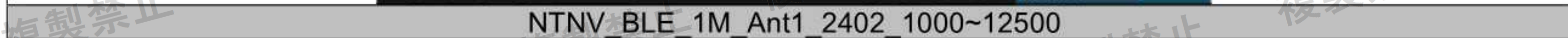


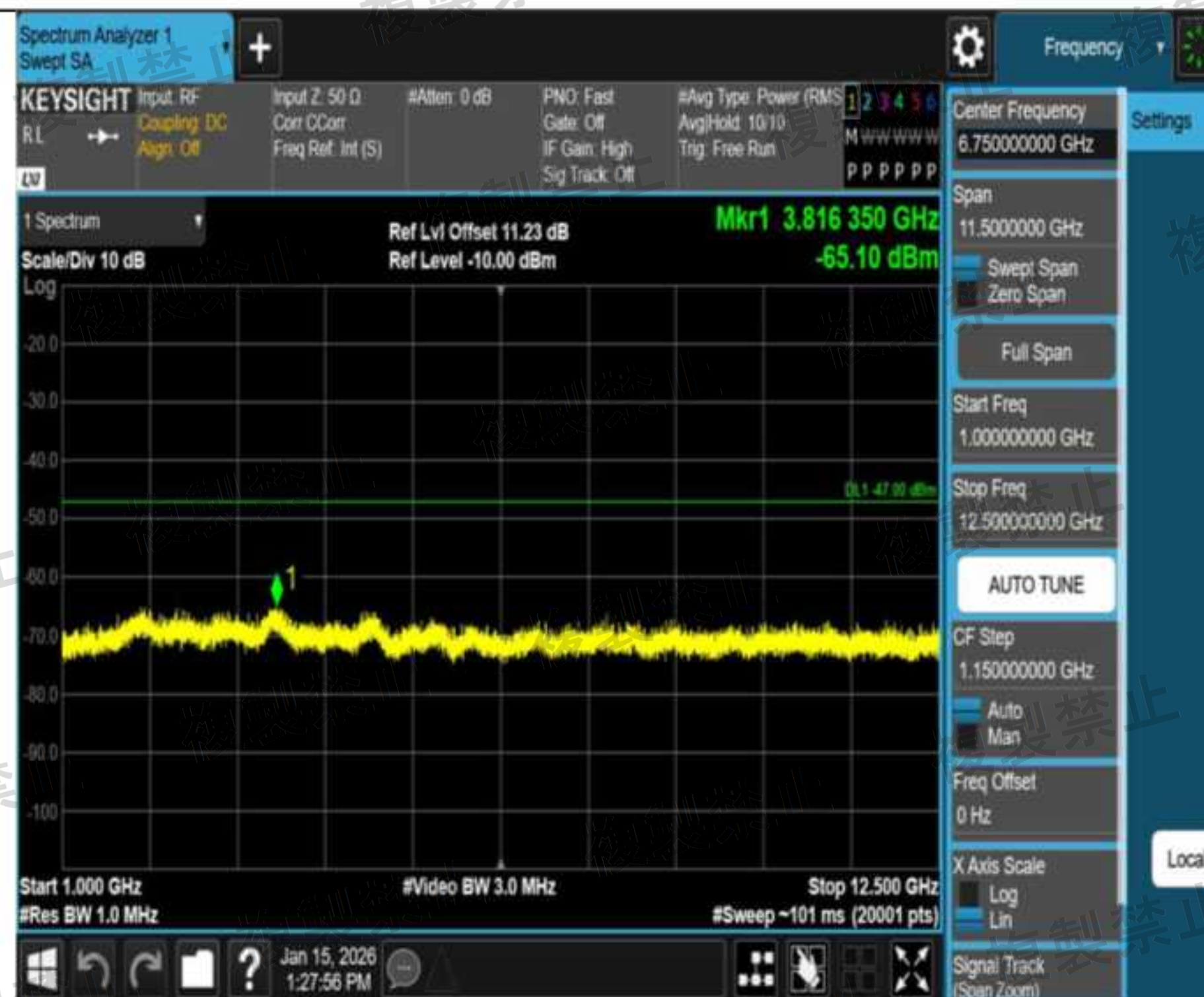
Appendix B.6: Test Results of Spurious Emissions for Receiver

Test Result

Test Condition	Test Mode	Antenna	Freq (MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	BLE_1M	Ant1	2402	30~500	175.70	-68.26	≤-54	0.14928	≤4	PASS
				500~1000	731.75	-76.64	≤-54	0.02168	≤4	PASS
				1000~12500	3816.35	-65.11	≤-47	0.30832	≤20	PASS
			2440	30~500	191.45	-68.39	≤-54	0.14488	≤4	PASS
				500~1000	591.75	-76.73	≤-54	0.02123	≤4	PASS
				1000~12500	3838.78	-64.21	≤-47	0.37931	≤20	PASS
			2480	30~500	182.05	-68.34	≤-54	0.14655	≤4	PASS
				500~1000	731.75	-76.97	≤-54	0.02009	≤4	PASS
				1000~12500	3741.60	-64.16	≤-47	0.38371	≤20	PASS
	BLE_2M	Ant1	2402	30~500	188.86	-69.02	≤-54	0.12531	≤4	PASS
				500~1000	731.75	-74.28	≤-54	0.03733	≤4	PASS
				1000~12500	3780.13	-63.79	≤-47	0.41783	≤20	PASS
			2440	30~500	180.40	-68.57	≤-54	0.13900	≤4	PASS
				500~1000	731.75	-75.32	≤-54	0.02938	≤4	PASS
				1000~12500	3792.78	-64.77	≤-47	0.33343	≤20	PASS
			2480	30~500	142.57	-68.87	≤-54	0.12972	≤4	PASS
				500~1000	731.75	-77.00	≤-54	0.01995	≤4	PASS
				1000~12500	3780.70	-64.05	≤-47	0.39355	≤20	PASS
NTLV	BLE_1M	Ant1	2402	30~500	193.33	-69.52	≤-54	0.11169	≤4	PASS
				500~1000	731.75	-76.90	≤-54	0.02042	≤4	PASS
				1000~12500	3760.58	-65.07	≤-47	0.31117	≤20	PASS
			2440	30~500	186.75	-68.26	≤-54	0.14928	≤4	PASS
				500~1000	731.75	-76.65	≤-54	0.02163	≤4	PASS
				1000~12500	2676.13	-64.70	≤-47	0.33884	≤20	PASS
			2480	30~500	182.05	-68.83	≤-54	0.13092	≤4	PASS
				500~1000	731.75	-76.68	≤-54	0.02148	≤4	PASS
				1000~12500	3821.53	-64.21	≤-47	0.37931	≤20	PASS
	BLE_2M	Ant1	2402	30~500	192.62	-67.51	≤-54	0.17742	≤4	PASS
				500~1000	731.75	-76.35	≤-54	0.02317	≤4	PASS
				1000~12500	3724.93	-63.31	≤-47	0.46666	≤20	PASS
			2440	30~500	176.41	-68.37	≤-54	0.14555	≤4	PASS
				500~1000	731.75	-76.07	≤-54	0.02472	≤4	PASS
				1000~12500	3789.33	-64.32	≤-47	0.36983	≤20	PASS
			2480	30~500	195.21	-69.34	≤-54	0.11641	≤4	PASS
				500~1000	731.75	-76.68	≤-54	0.02148	≤4	PASS
				1000~12500	3752.53	-63.68	≤-47	0.42855	≤20	PASS
NTHV	BLE_1M	Ant1	2402	30~500	198.26	-69.41	≤-54	0.11455	≤4	PASS
				500~1000	731.75	-74.79	≤-54	0.03319	≤4	PASS
				1000~12500	3738.73	-63.87	≤-47	0.41020	≤20	PASS
			2440	30~500	190.04	-68.56	≤-54	0.13932	≤4	PASS
				500~1000	731.75	-75.36	≤-54	0.02911	≤4	PASS
				1000~12500	3820.38	-64.16	≤-47	0.38371	≤20	PASS
			2480	30~500	178.52	-68.76	≤-54	0.13305	≤4	PASS
				500~1000	731.75	-75.08	≤-54	0.03105	≤4	PASS
				1000~12500	3844.53	-64.58	≤-47	0.34834	≤20	PASS
	BLE_2M	Ant1	2402	30~500	142.57	-68.89	≤-54	0.12912	≤4	PASS
				500~1000	731.75	-76.83	≤-54	0.02075	≤4	PASS
				1000~12500	3811.18	-64.10	≤-47	0.38905	≤20	PASS
			2440	30~500	186.28	-68.28	≤-54	0.14859	≤4	PASS
				500~1000	731.75	-76.81	≤-54	0.02084	≤4	PASS
				1000~12500	3813.48	-64.37	≤-47	0.36559	≤20	PASS
			2480	30~500	191.68	-69.08	≤-54	0.12359	≤4	PASS
				500~1000	731.75	-76.40	≤-54	0.02291	≤4	PASS
				1000~12500	3806.00	-64.53	≤-47	0.35237	≤20	PASS

Test Graphs





NTNV BLE 1M Ant1 2440 30~500



NTNV BLE 1M Ant1 2440 500~1000



NTNV BLE 1M Ant1 2440 1000~12500



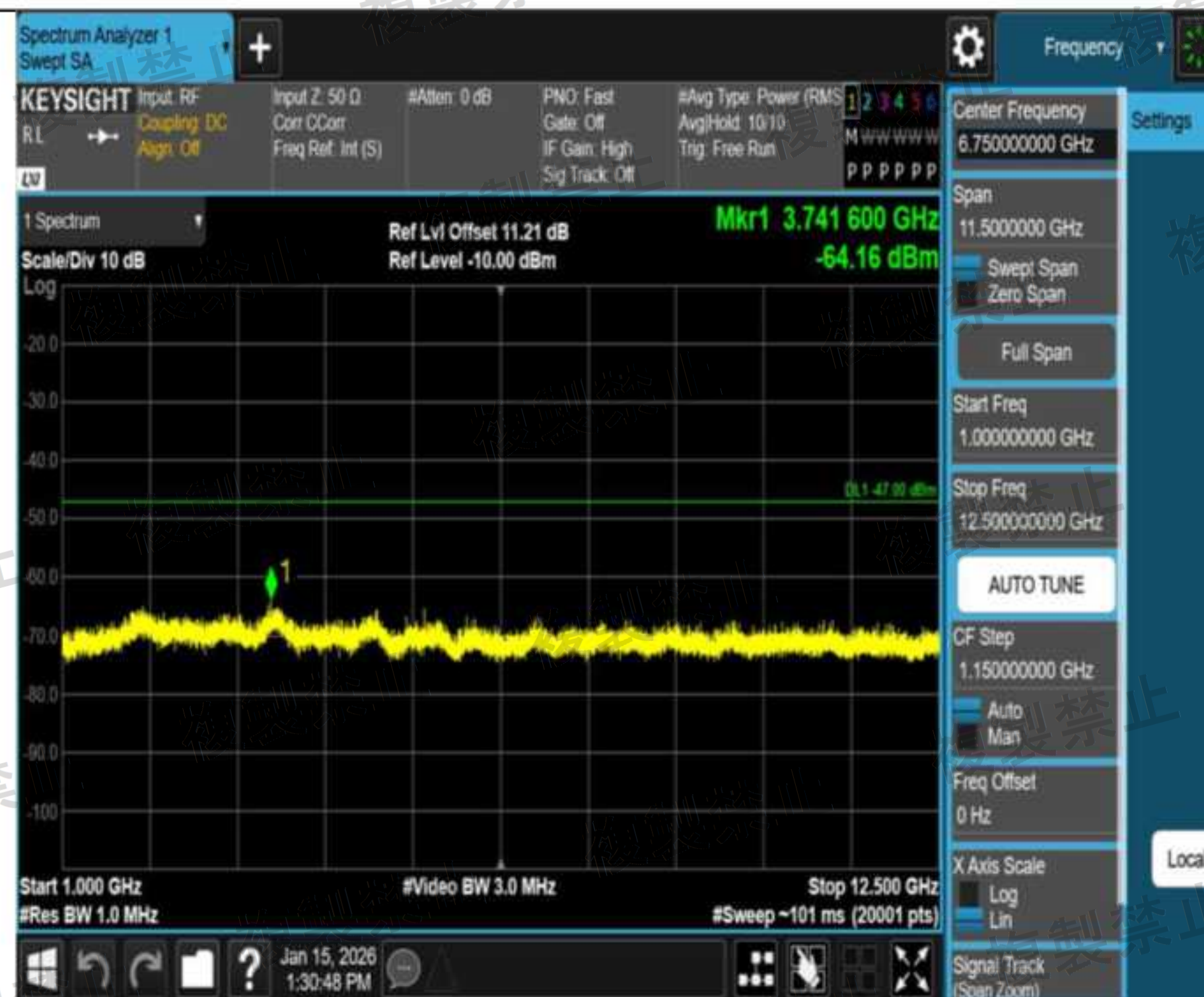
NTNV BLE 1M Ant1 2480 30~500



NTNV BLE 1M Ant1 2480 500~1000



NTNV BLE 1M Ant1 2480 1000~12500



NTNV BLE 2M Ant1 2402 30~500



NTNV BLE 2M Ant1 2402 500~1000



NTNV BLE 2M Ant1 2402 1000~12500



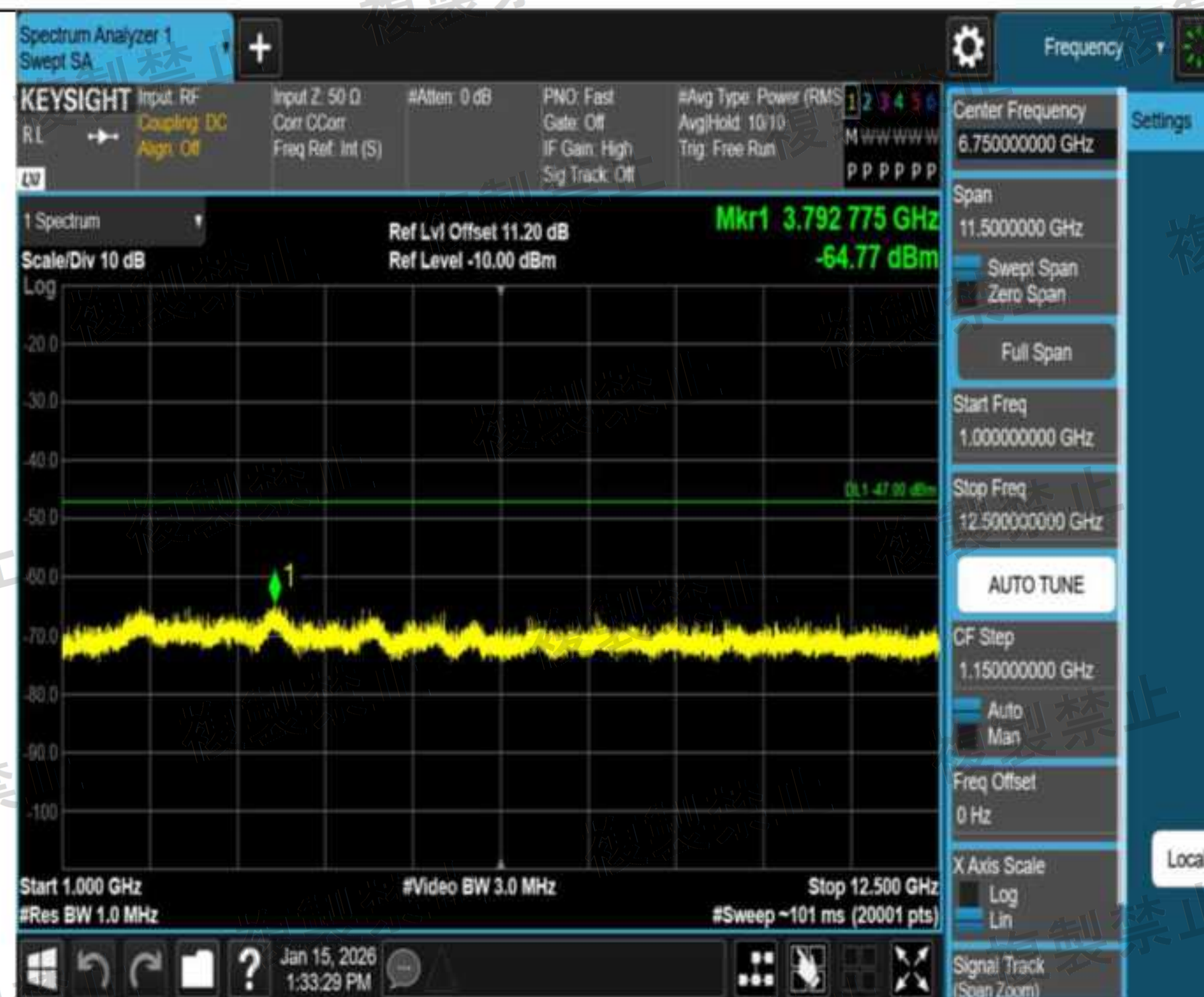
NTNV BLE 2M Ant1 2440 30~500



NTNV BLE 2M Ant1 2440 500~1000



NTNV BLE 2M Ant1 2440 1000~12500



NTNV BLE 2M Ant1 2480 30~500



NTNV BLE 2M Ant1 2480 500~1000



NTNV BLE 2M Ant1 2480 1000~12500



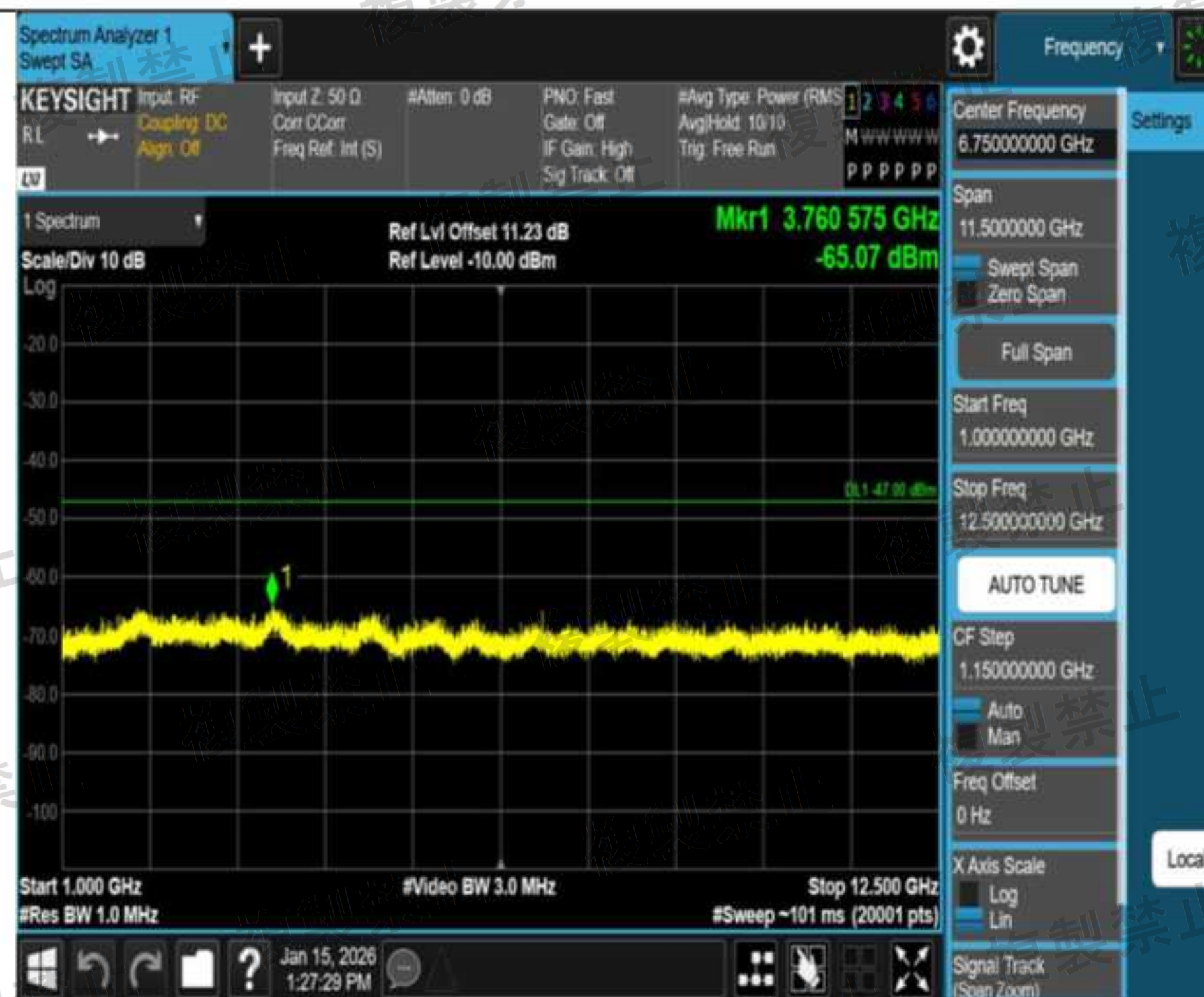
NTLV BLE 1M Ant1 2402 30~500



NTLV BLE 1M Ant1 2402 500~1000



NTLV BLE 1M Ant1 2402 1000~12500



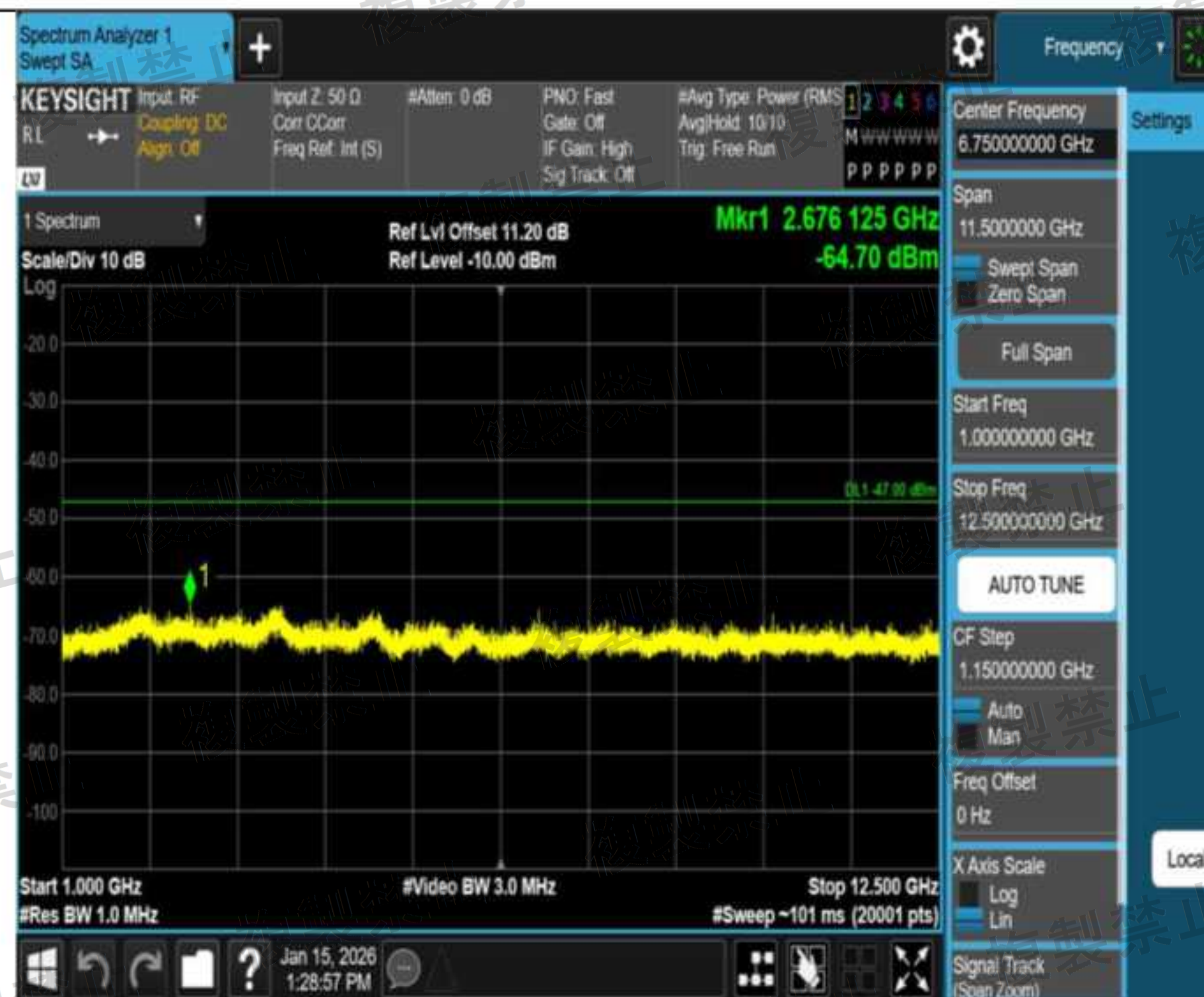
NTLV BLE 1M Ant1 2440 30~500



NTLV BLE 1M Ant1 2440 500~1000



NTLV BLE 1M Ant1 2440 1000~12500



NTLV BLE 1M Ant1 2480 30~500



NTLV BLE 1M Ant1 2480 500~1000



NTLV BLE 1M Ant1 2480 1000~12500



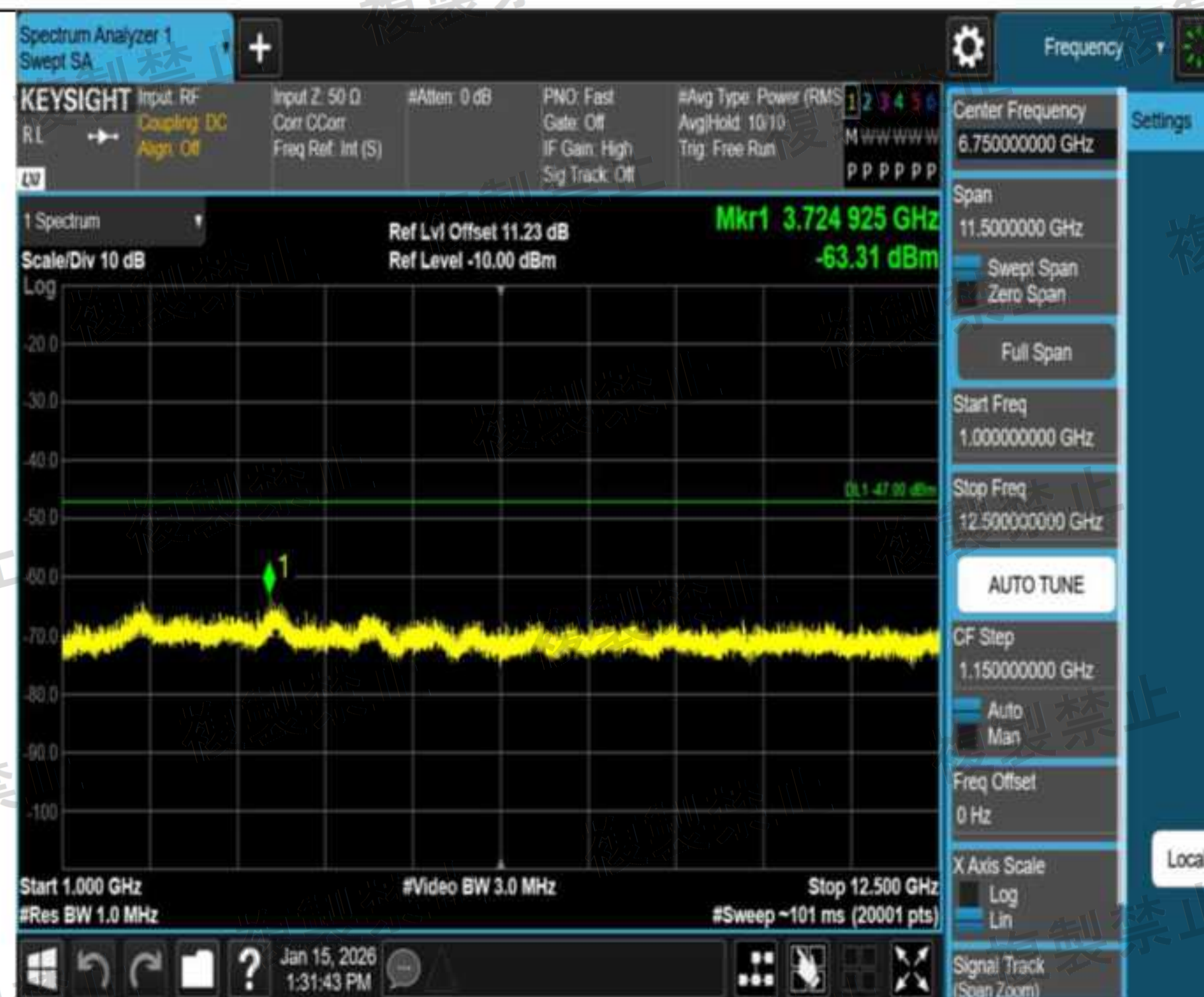
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NTLV BLE 2M Ant1 2402 500~1000



NTLV BLE 2M Ant1 2402 1000~12500



NTLV BLE 2M Ant1 2440 30~500



NTLV BLE 2M Ant1 2440 500~1000



NTLV BLE 2M Ant1 2440 1000~12500



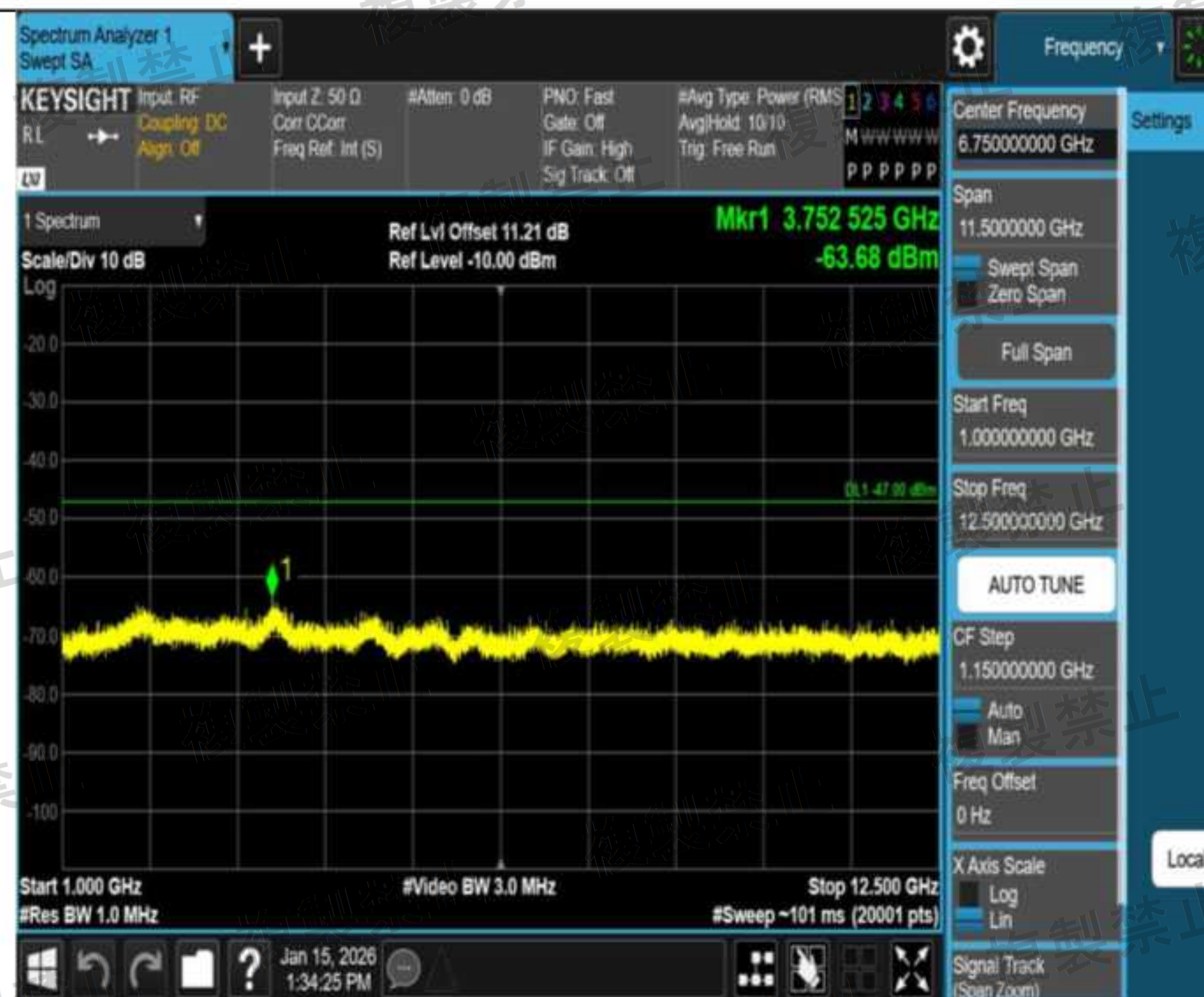
NTLV BLE 2M Ant1 2480 30~500



NTLV BLE 2M Ant1 2480 500~1000



NTLV BLE 2M Ant1 2480 1000~12500



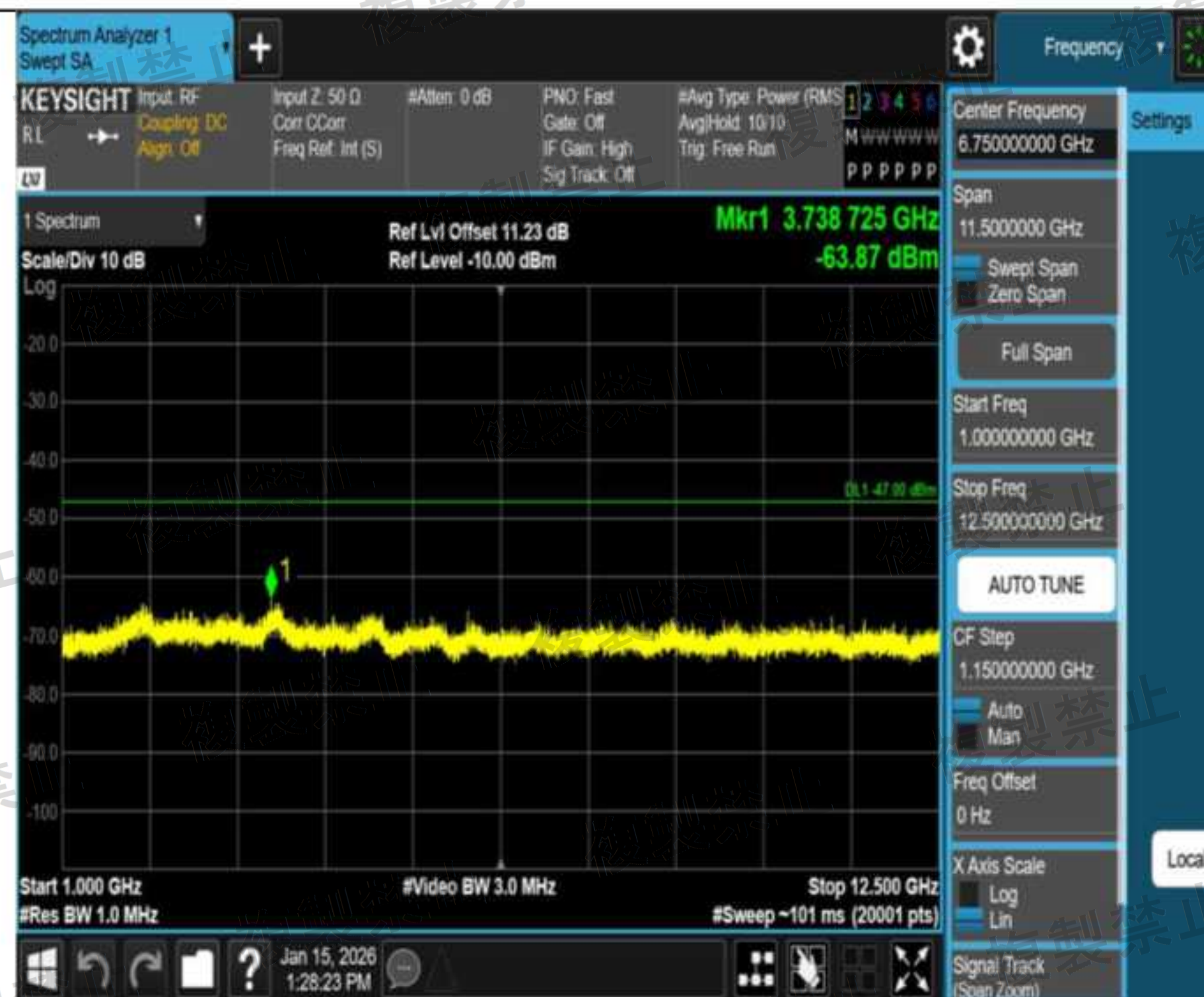
NTHV BLE 1M Ant1 2402 30~500



NTHV BLE 1M Ant1 2402 500~1000



NTHV BLE 1M Ant1 2402 1000~12500



NTHV BLE 1M Ant1 2440 30~500



NTHV BLE 1M Ant1 2440 500~1000



NTHV BLE 1M Ant1 2440 1000~12500



NTHV BLE 1M Ant1 2480 30~500



NTHV BLE 1M Ant1 2480 500~1000



NTHV BLE 1M Ant1 2480 1000~12500



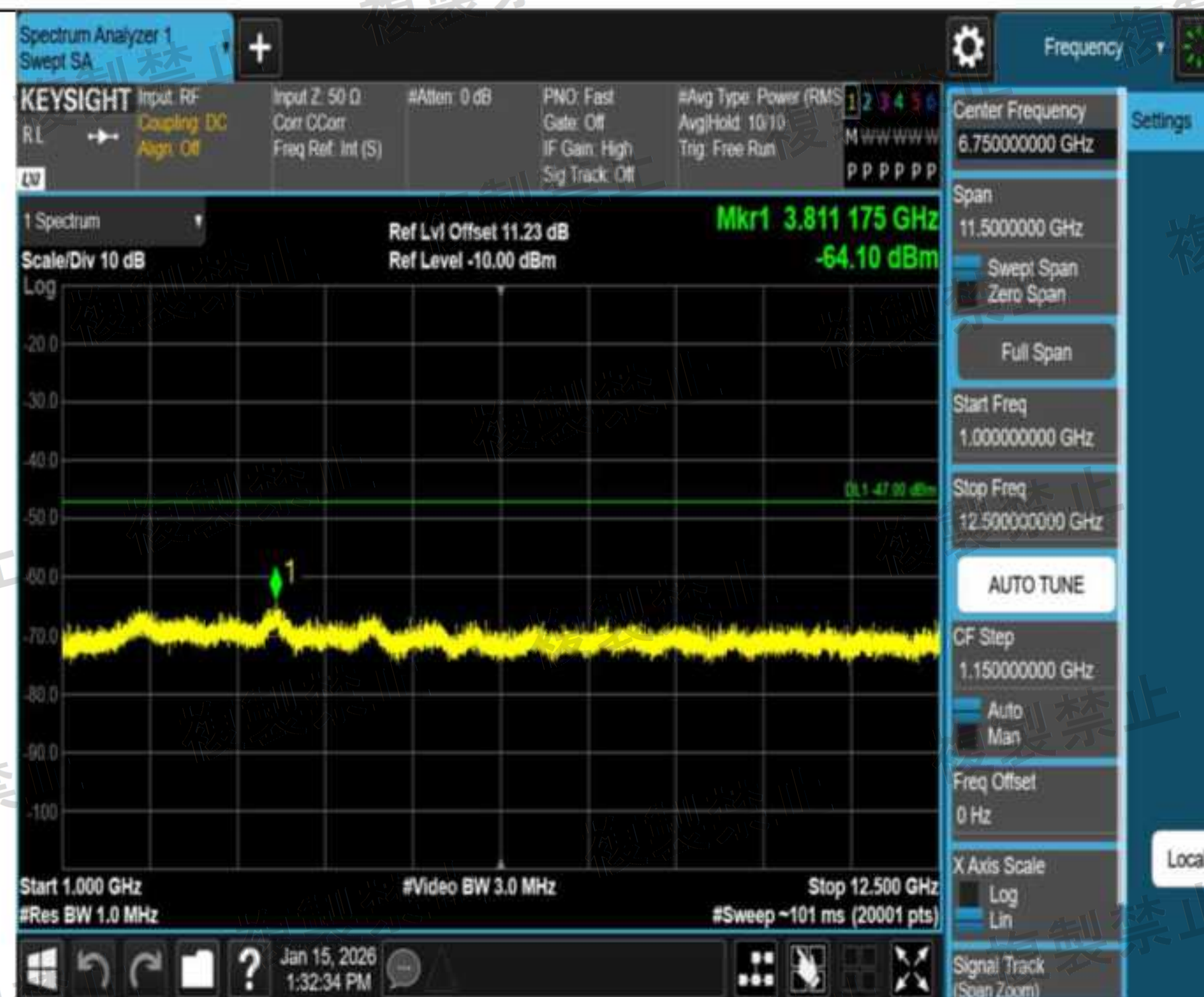
NTHV BLE 2M Ant1 2402 30~500



NTHV BLE 2M Ant1 2402 500~1000



NTHV BLE 2M Ant1 2402 1000~12500



NTHV BLE 2M Ant1 2440 30~500



NTHV BLE 2M Ant1 2440 500~1000



NTHV BLE 2M Ant1 2440 1000~12500



NTHV BLE 2M Ant1 2480 30~500



NTHV BLE 2M Ant1 2480 500~1000



NTHV BLE 2M Ant1 2480 1000~12500

