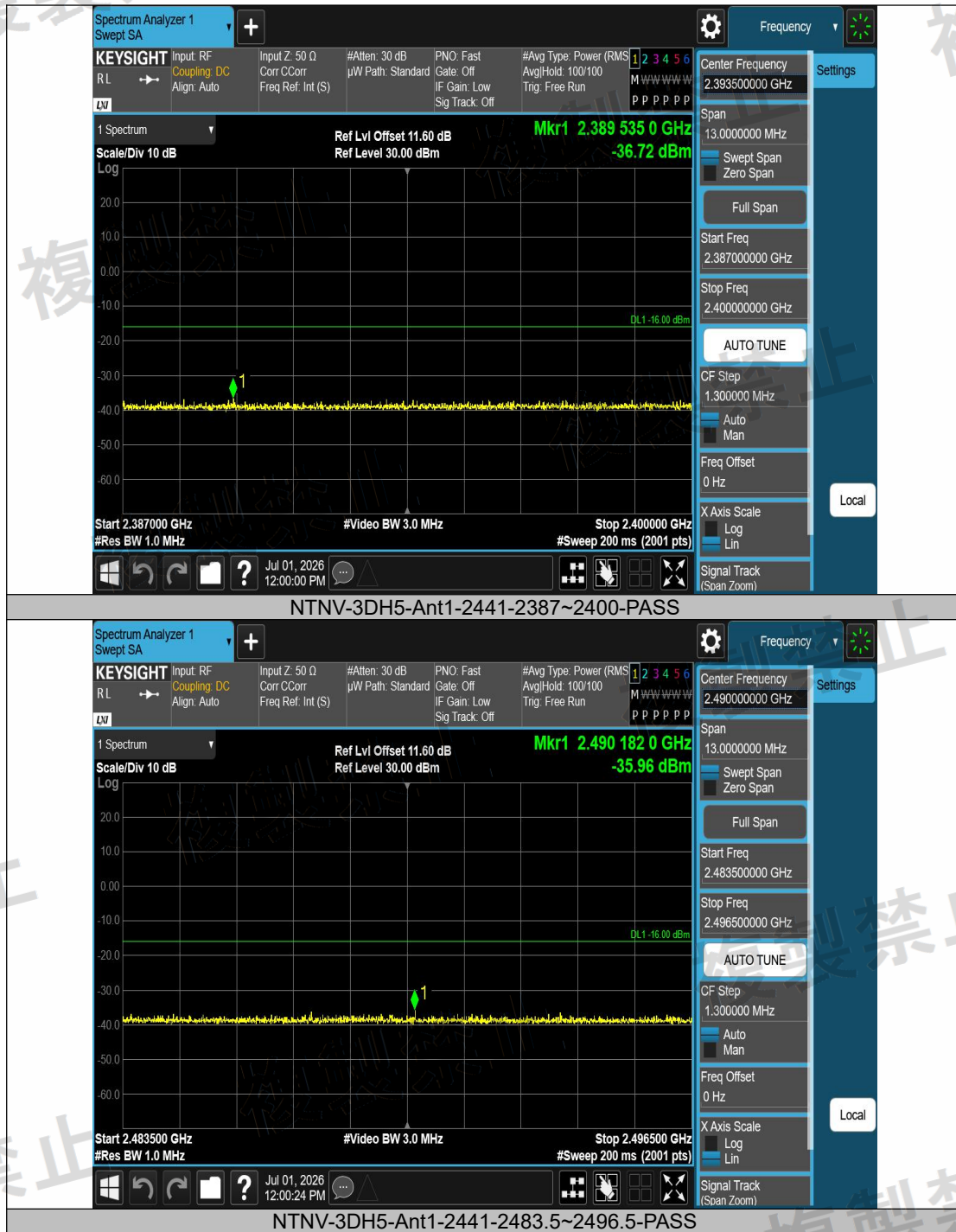
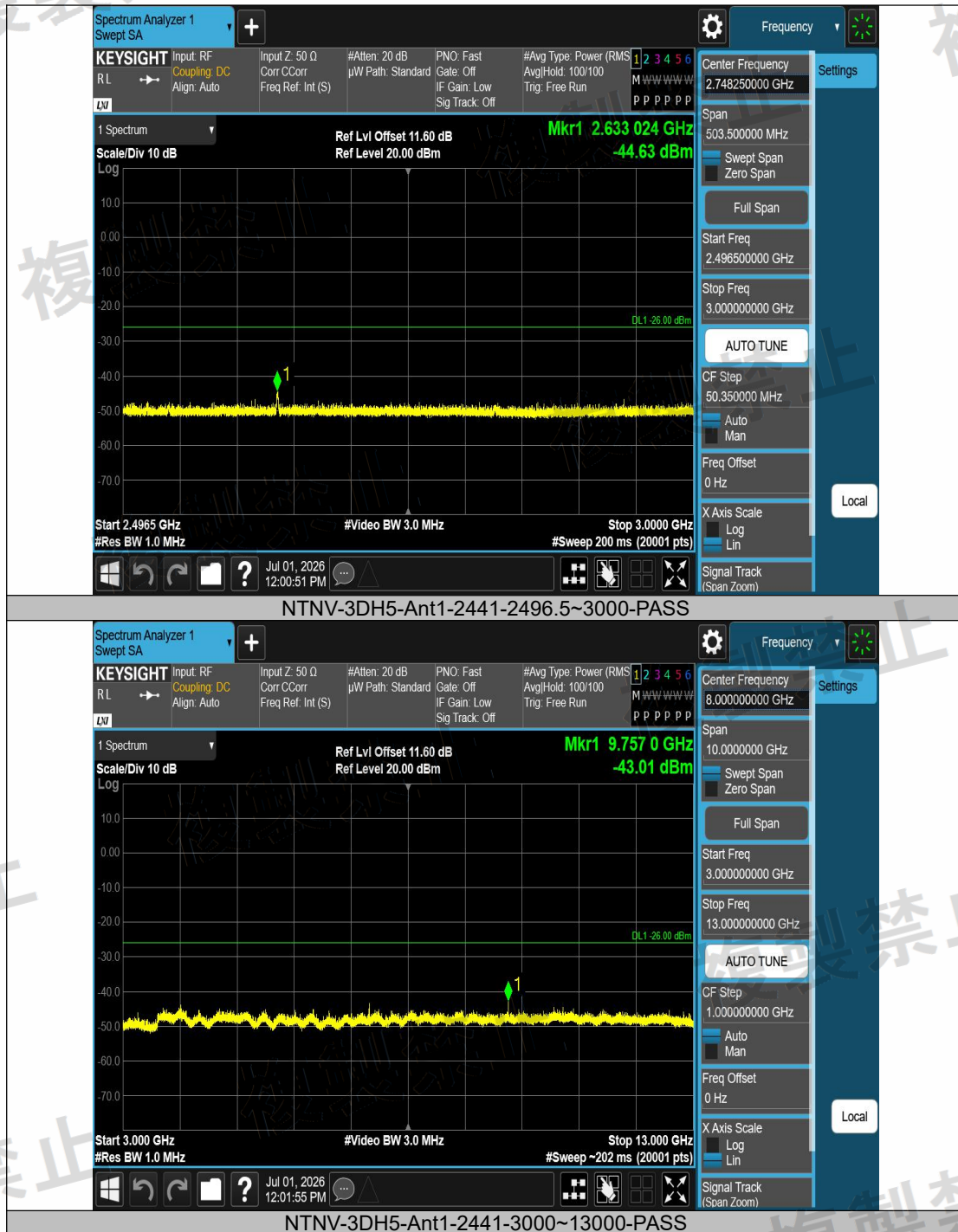
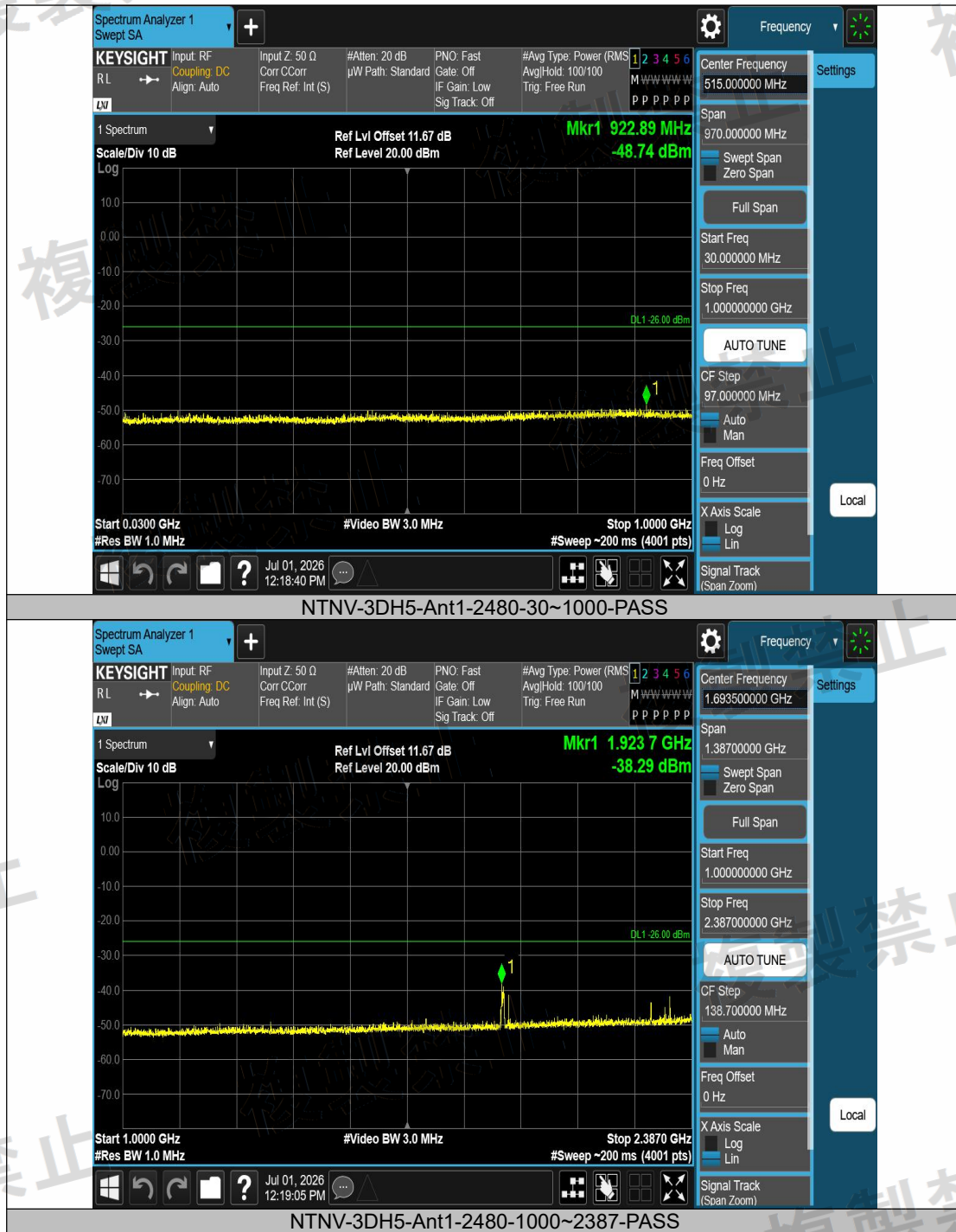
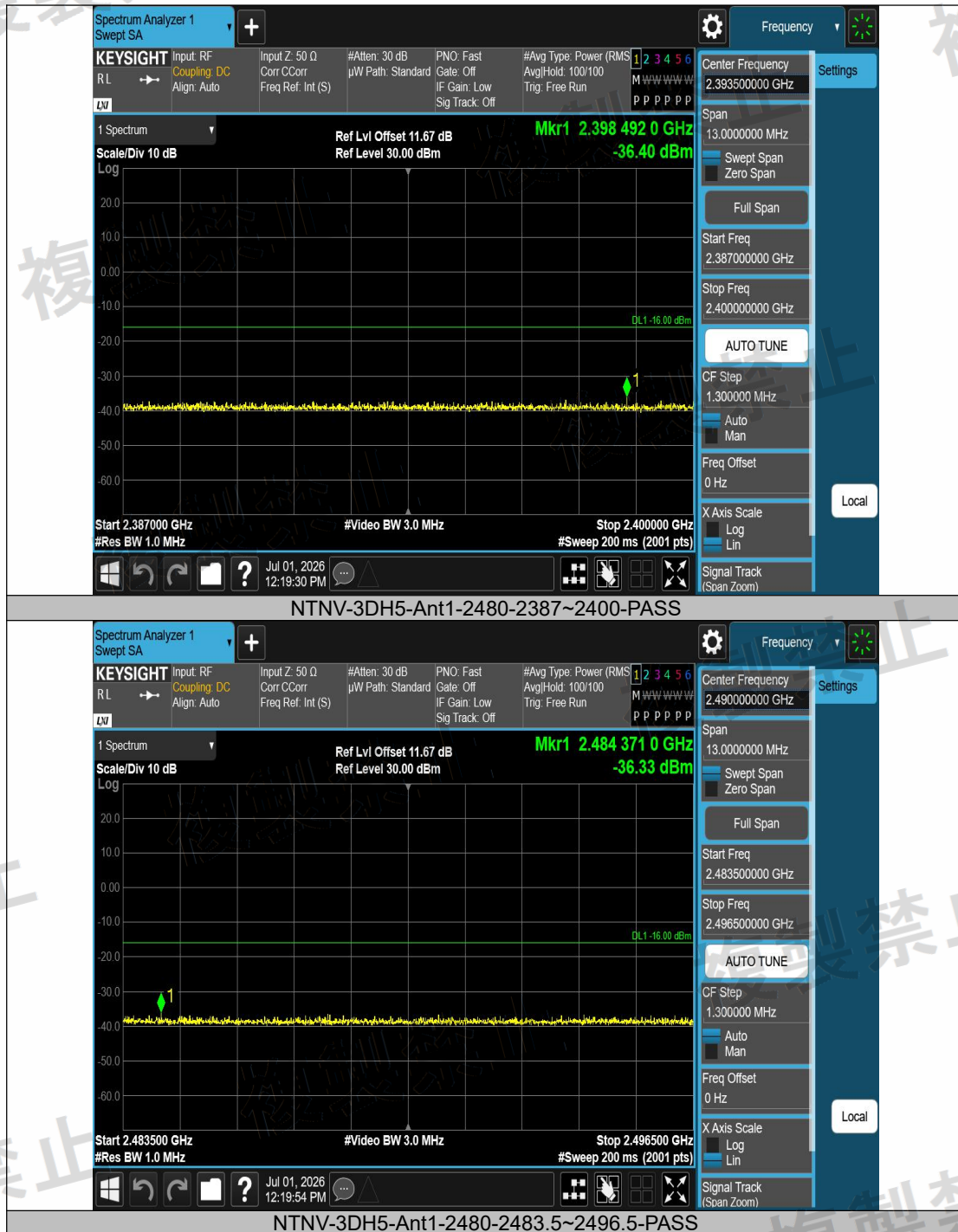
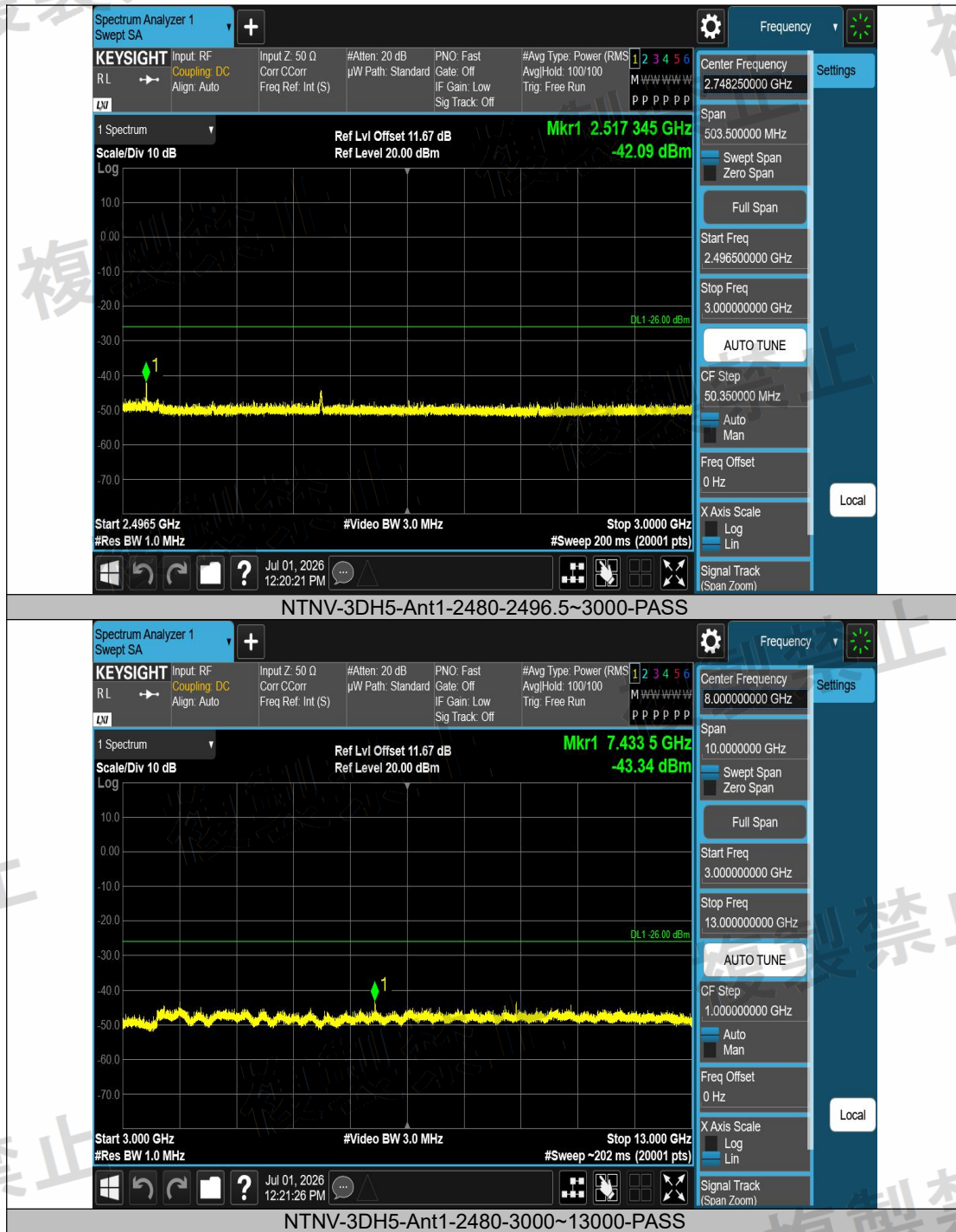


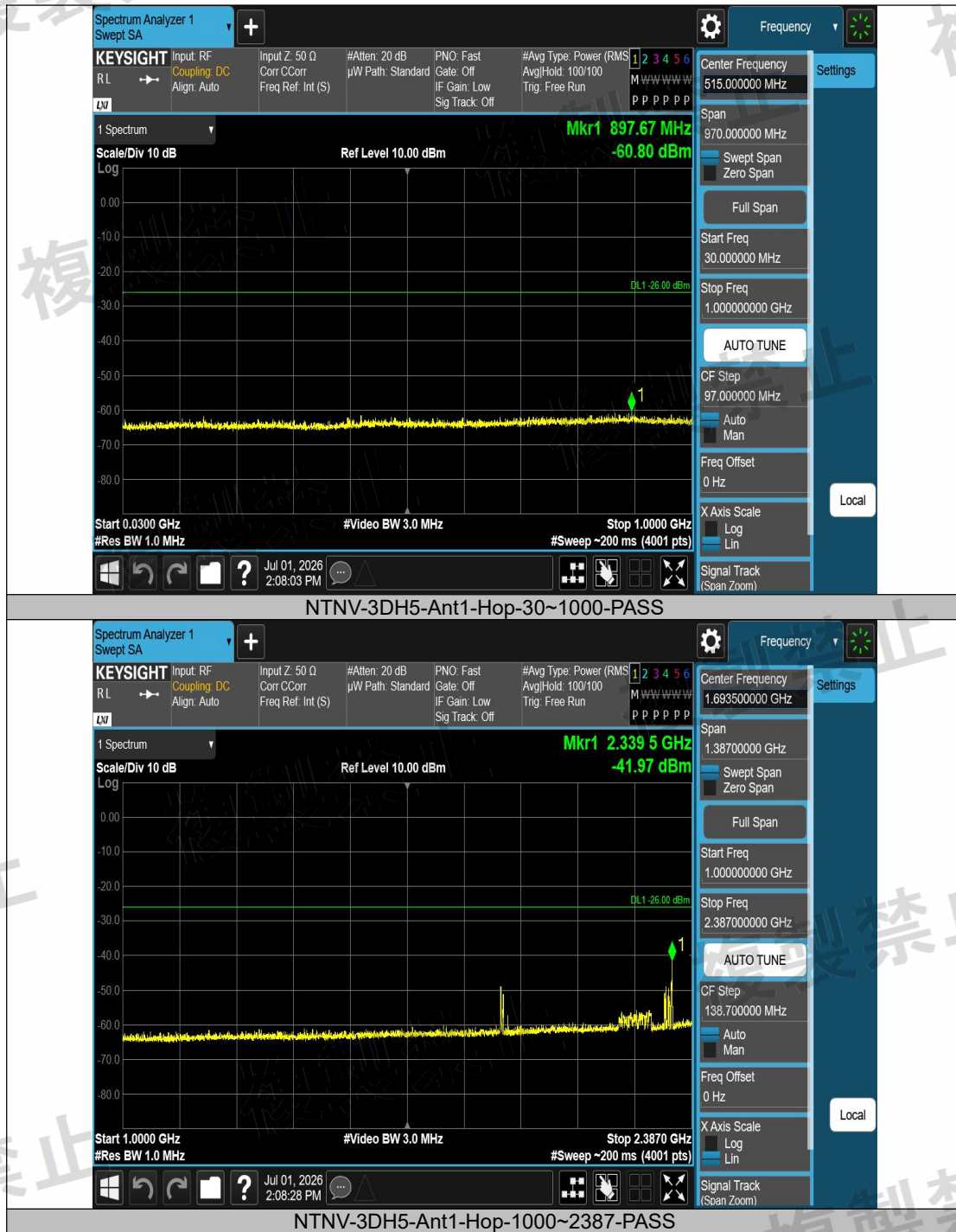


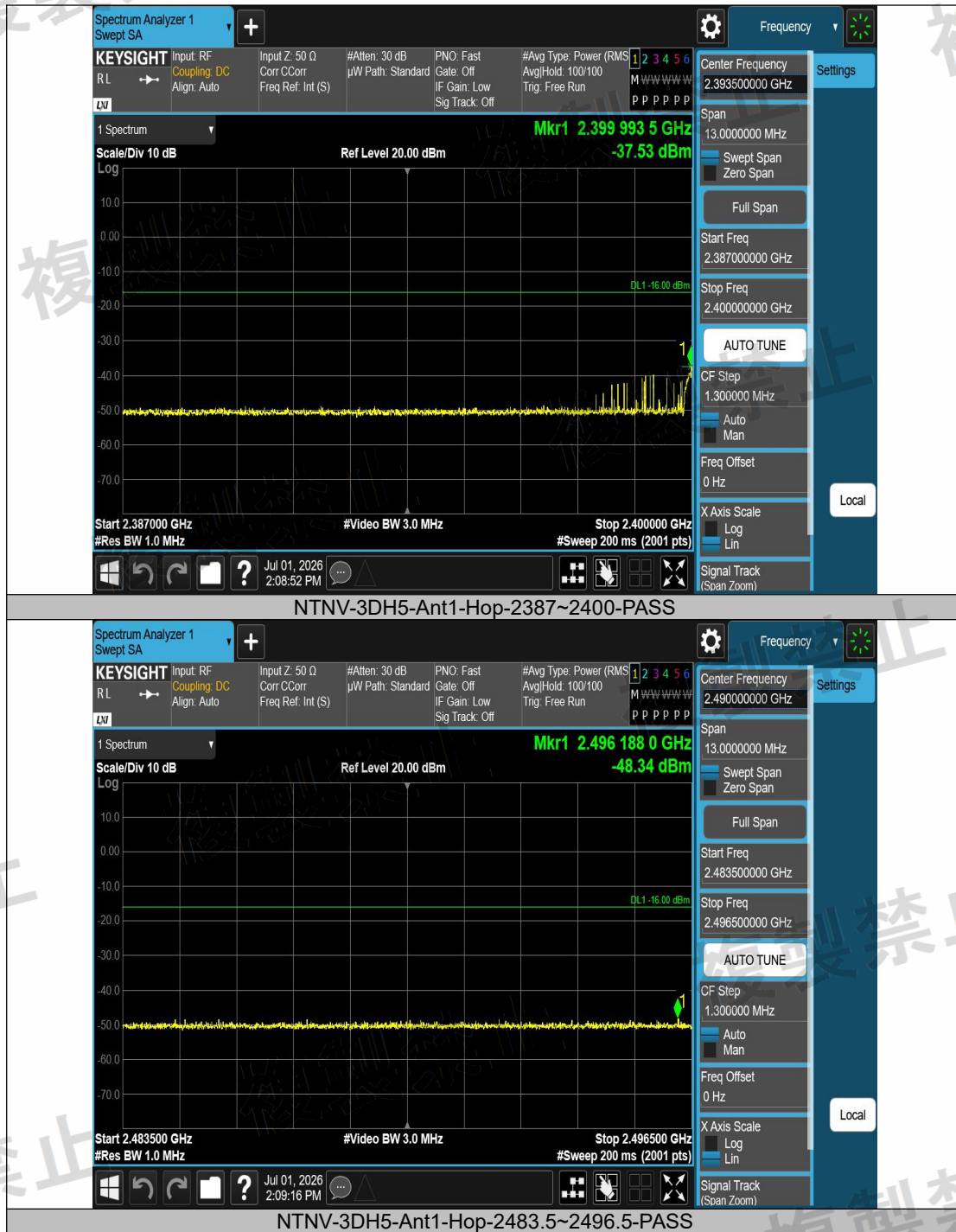


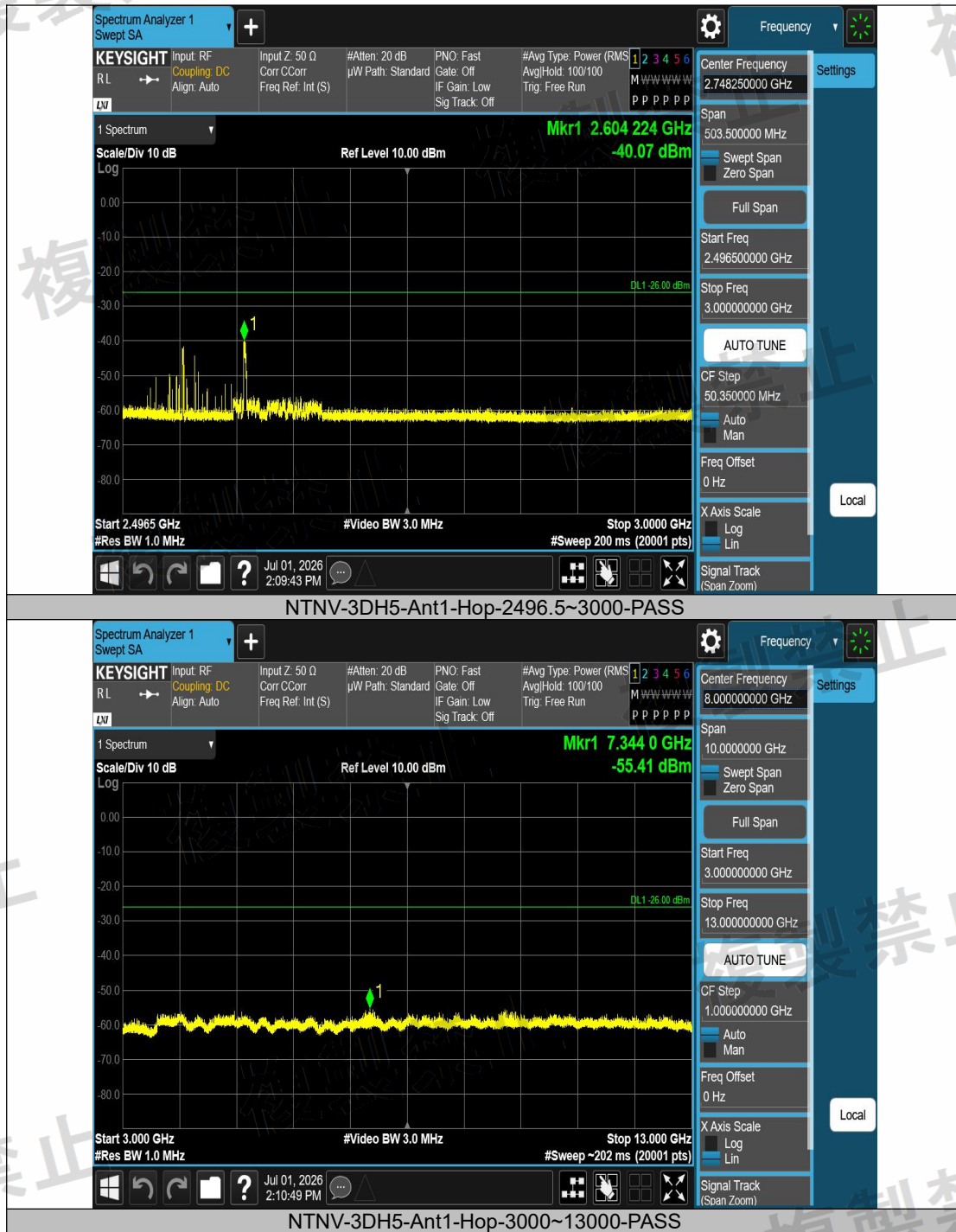












7.6 COLLATERAL EMISSIONS OF RECEIVER

7.6.1 Applicable Standard

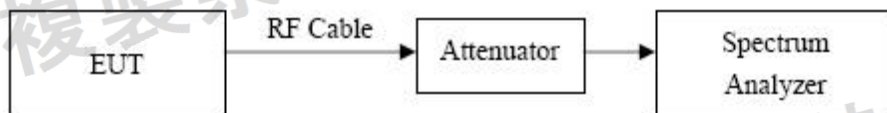
According to Item 19 of Article 2 Paragraph 1.

7.6.2 Conformance Limit

The limit on secondary emissions radiated from the receiving equipment within which the function of other radio equipment will not be impaired shall be, in terms of the power of a dummy antenna circuit that has the same electrical constant as the receiving antenna, 4 nW (-54dBm) or less at a frequency below 1 GHz and 20 nW(-47dBm) or less at a frequency of 1 GHz or higher as measured using the circuit.

- | | |
|----------------------|-----------------------|
| a. 30 MHz - 1000 MHz | 4 nW (-54dBm) or less |
| b. 1GHz – 12.5 GHz | 20 nW(-47dBm) or less |

7.6.3 Test Setup Block Diagram



7.6.4 Test Procedure

Set the EUT so that the test frequency is can be measured receipt consecutively all the time.

(1) Set the attenuation value of the dummy load lowest as possible, due to low level of the measured object.

(2) Set Spectrum analyzer for seeking the collateral emission is set as below.

Sweeping Bandwidth	30MHz to 5 times of carrier frequency
Resolution Bandwidth	In case of frequency lower than 1 GHz, 100 kHz In case of frequency higher than 1 MHz
Video Bandwidth	Same level as the resolution bandwidth
Sweep Time	Minimum time to assure the measurement accuracy
Y-Axis Scale	10 dB/Div
Sweep Mode	Single sweep
Phase-Detection Mode	Positive peak

(3) Spectrum analyzer for measuring the collateral emission is set as below.

Central Frequency	Collateral emission frequency
Sweeping Bandwidth	0 Hz
Resolution Bandwidth	In case of frequency lower than 1 GHz, 100 kHz In case of frequency higher than 1 MHz
Video Bandwidth	Same level as the resolution bandwidth
Sweep Mode	Single sweep
Detection Mode	Sample

Set the spectrum analyzer as (2), seek the maximum amplitude of the collateral emission.

In case of sought result lower than 1/10 limit value, employ the sought value as the measured value.

In case the sought value exceeds 1/10 limit value, seek the collateral emission frequency by narrowing the sweeping band sequentially to 1/10 for the purpose of higher accuracy of the spectrum analyzer. Set the

spectrum analyzer as (3).

7.6.5 Environmental Conditions

Temperature:	25 °C
Relative Humidity:	45%
ATM Pressure:	1011 mbar

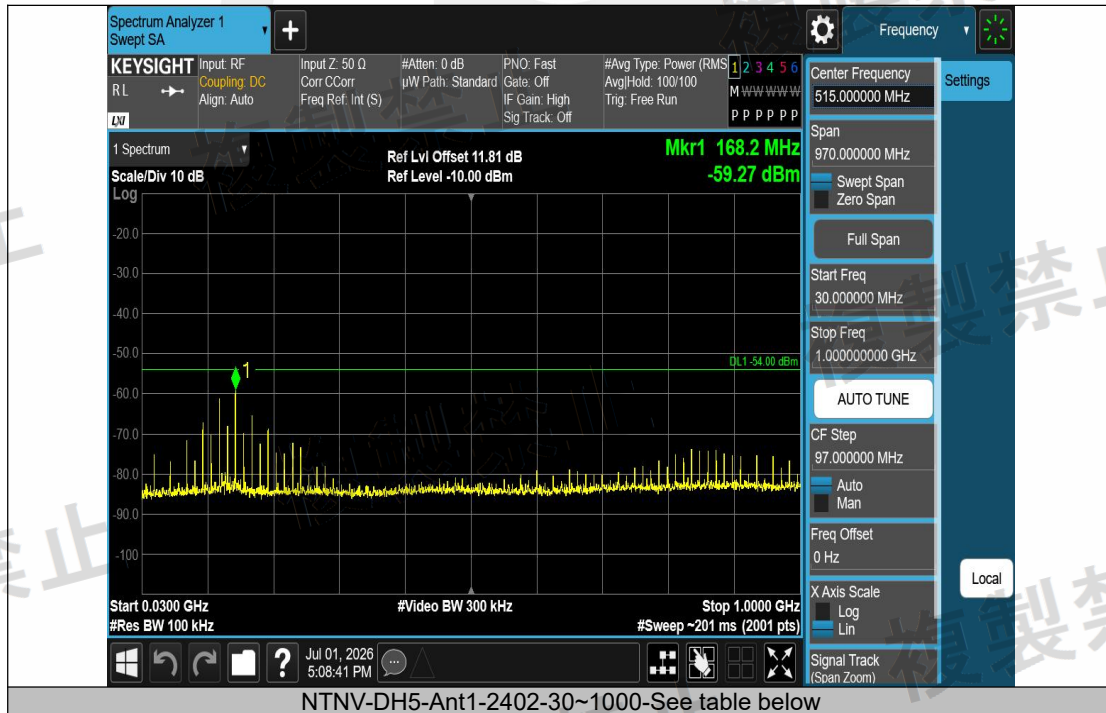
7.6.6 Test Results

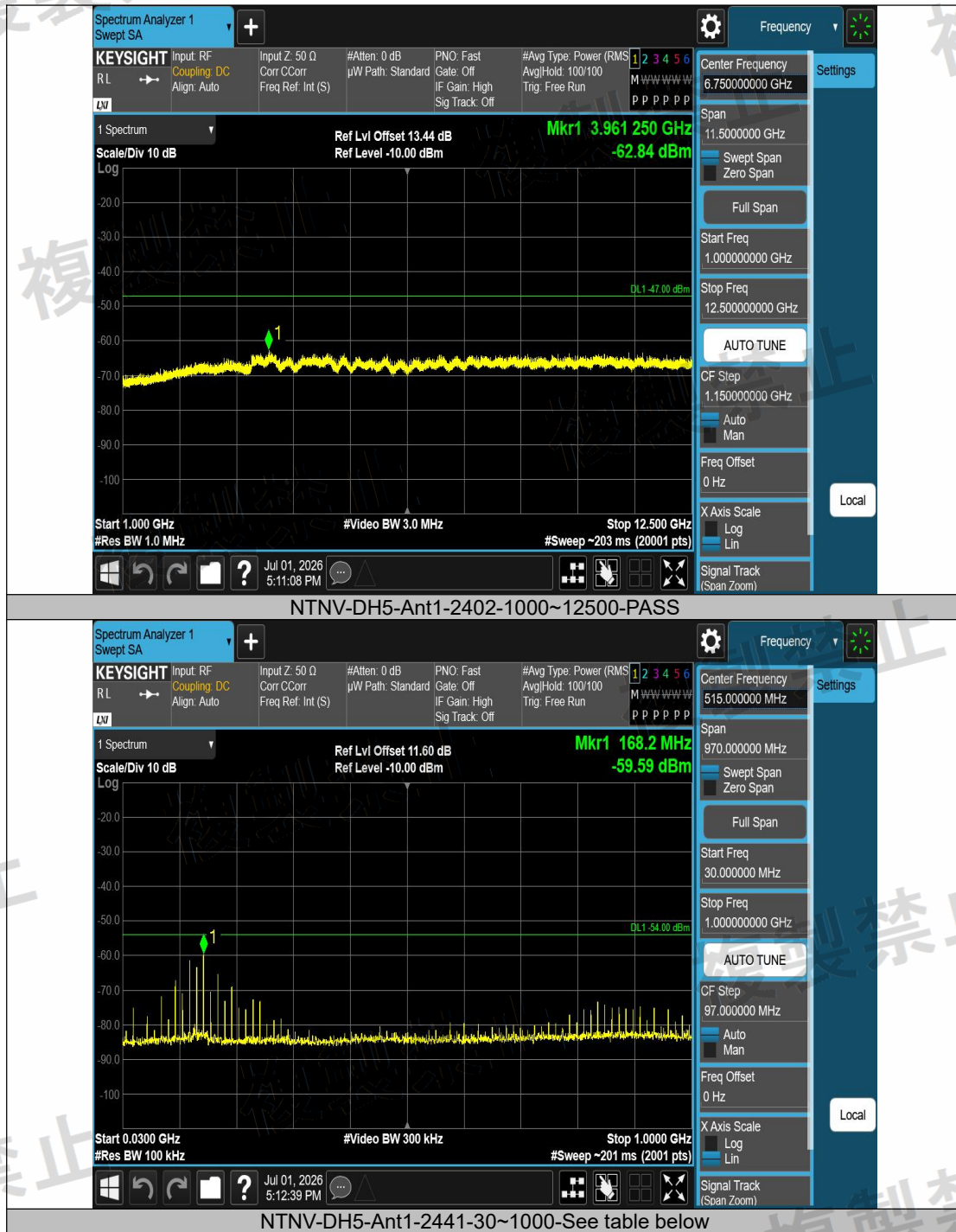
All the modes were tested and recorded, the results of the test item are good.

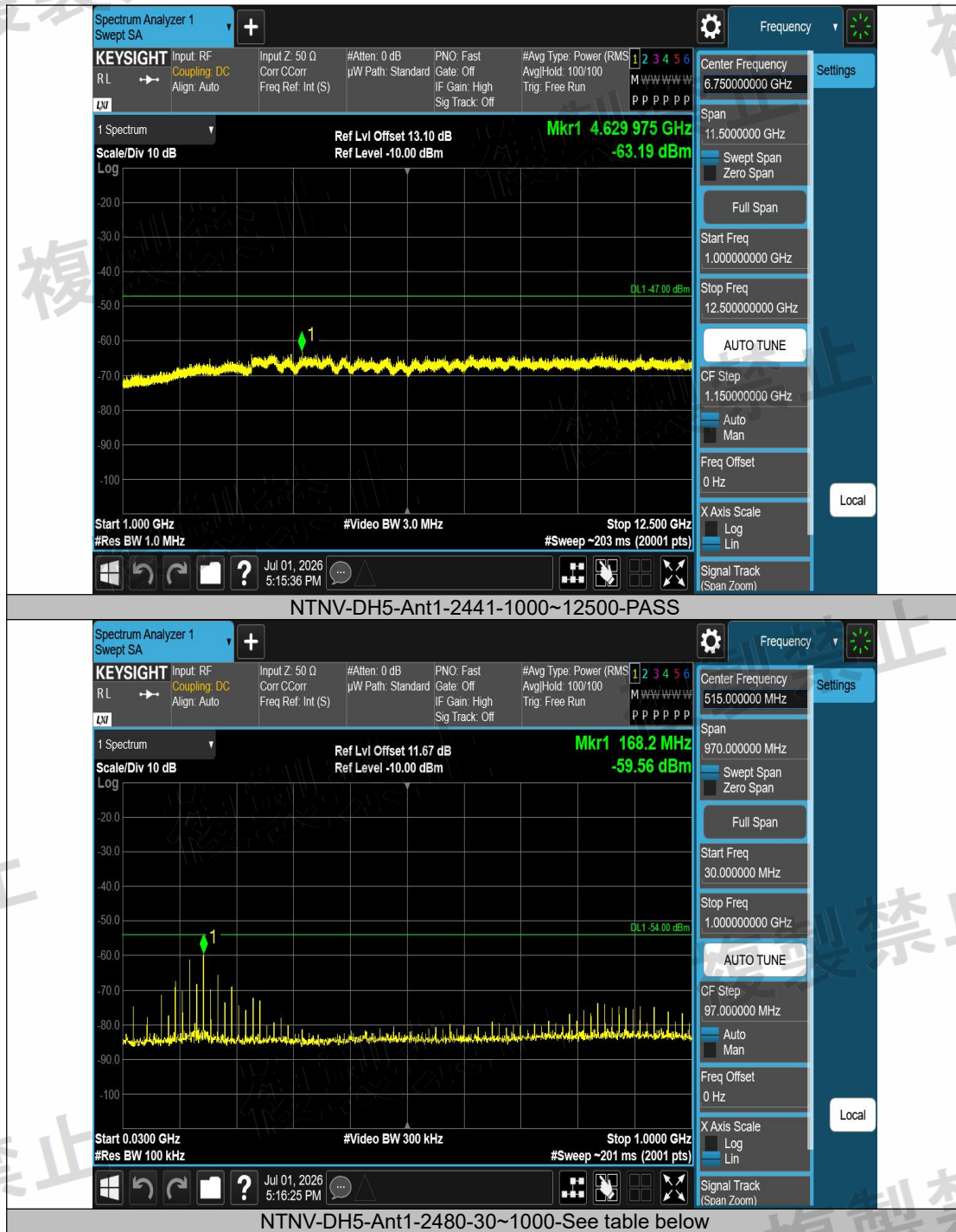
Test Condition	Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	DH5	Ant1	2402	30~1000	168.23	-59.27	≤-54	1.18304	≤4	See table below
NTNV	DH5	Ant1	2402	1000~12500	3961.25	-62.84	≤-47	0.52000	≤20	PASS
NTNV	DH5	Ant1	2441	30~1000	168.23	-59.59	≤-54	1.09901	≤4	See table below
NTNV	DH5	Ant1	2441	1000~12500	4629.98	-63.19	≤-47	0.47973	≤20	PASS
NTNV	DH5	Ant1	2480	30~1000	168.23	-59.56	≤-54	1.10662	≤4	See table below
NTNV	DH5	Ant1	2480	1000~12500	3742.75	-63.64	≤-47	0.43251	≤20	PASS
NTNV	DH5	Ant1	Hop	30~1000	168.23	-71.22	≤-54	0.07551	≤4	PASS
NTNV	DH5	Ant1	Hop	1000~12500	3984.25	-76.33	≤-47	0.02328	≤20	PASS
NTNV	2DH5	Ant1	2402	30~1000	168.23	-59.29	≤-54	1.17761	≤4	See table below
NTNV	2DH5	Ant1	2402	1000~12500	10530.05	-63.03	≤-47	0.49774	≤20	PASS
NTNV	2DH5	Ant1	2441	30~1000	168.23	-59.41	≤-54	1.14551	≤4	See table below
NTNV	2DH5	Ant1	2441	1000~12500	5111.25	-61.76	≤-47	0.66681	≤20	PASS
NTNV	2DH5	Ant1	2480	30~1000	168.23	-59.49	≤-54	1.12460	≤4	See table below
NTNV	2DH5	Ant1	2480	1000~12500	4049.23	-63.12	≤-47	0.48753	≤20	PASS
NTNV	2DH5	Ant1	Hop	30~1000	168.23	-71.18	≤-54	0.07621	≤4	PASS
NTNV	2DH5	Ant1	Hop	1000~12500	3953.20	-76.12	≤-47	0.02443	≤20	PASS
NTNV	3DH5	Ant1	2402	30~1000	168.23	-59.34	≤-54	1.16413	≤4	See table below
NTNV	3DH5	Ant1	2402	1000~12500	4002.65	-63.32	≤-47	0.46559	≤20	PASS
NTNV	3DH5	Ant1	2441	30~1000	168.23	-59.47	≤-54	1.12980	≤4	See table below
NTNV	3DH5	Ant1	2441	1000~12500	3954.35	-62.44	≤-47	0.57016	≤20	PASS
NTNV	3DH5	Ant1	2480	30~1000	168.23	-59.38	≤-54	1.15345	≤4	See table below
NTNV	3DH5	Ant1	2480	1000~12500	4010.13	-63.39	≤-47	0.45814	≤20	PASS
NTNV	3DH5	Ant1	Hop	30~1000	168.23	-71.11	≤-54	0.07745	≤4	PASS
NTNV	3DH5	Ant1	Hop	1000~12500	3974.48	-76.50	≤-47	0.02239	≤20	PASS

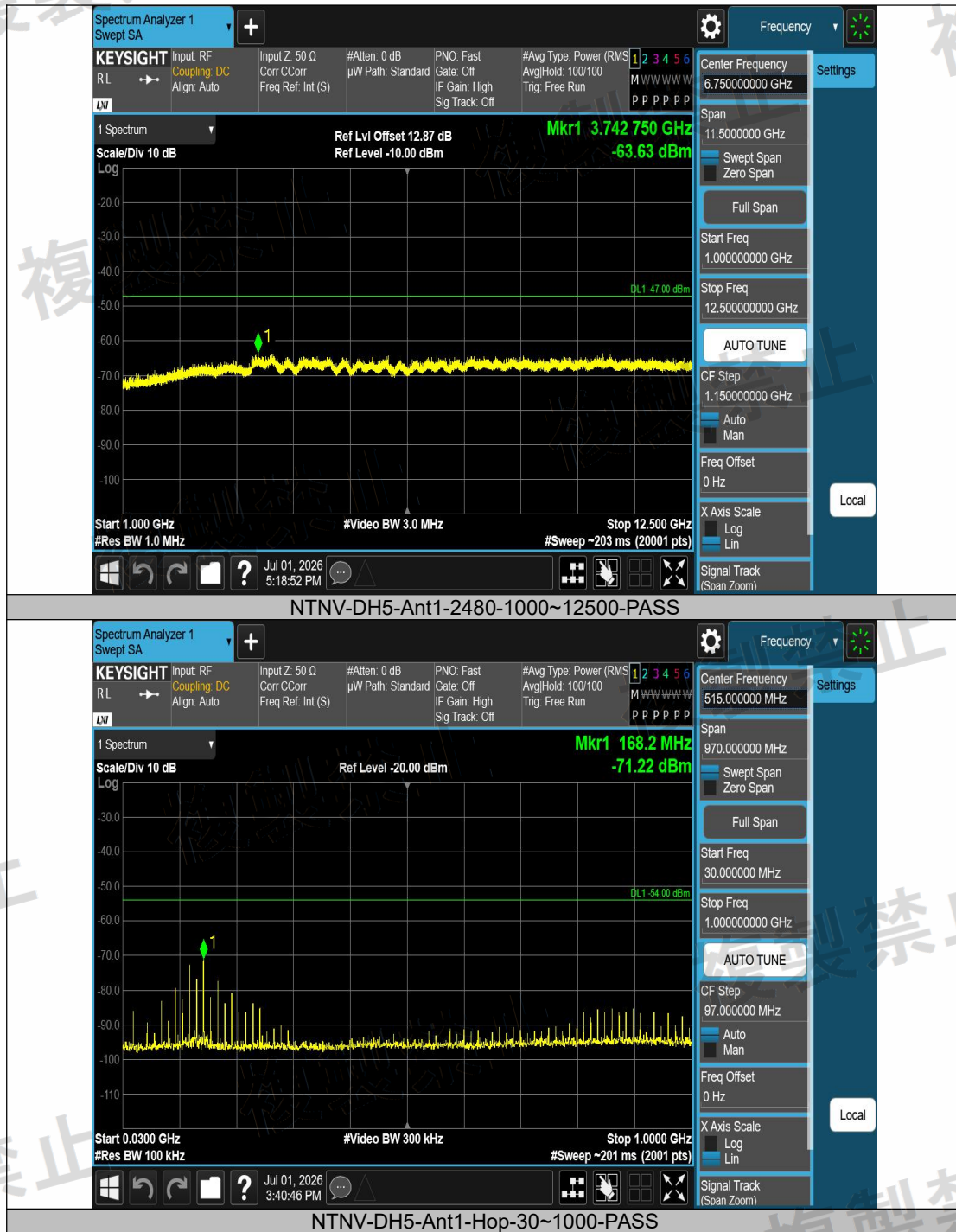
Test Result Step2

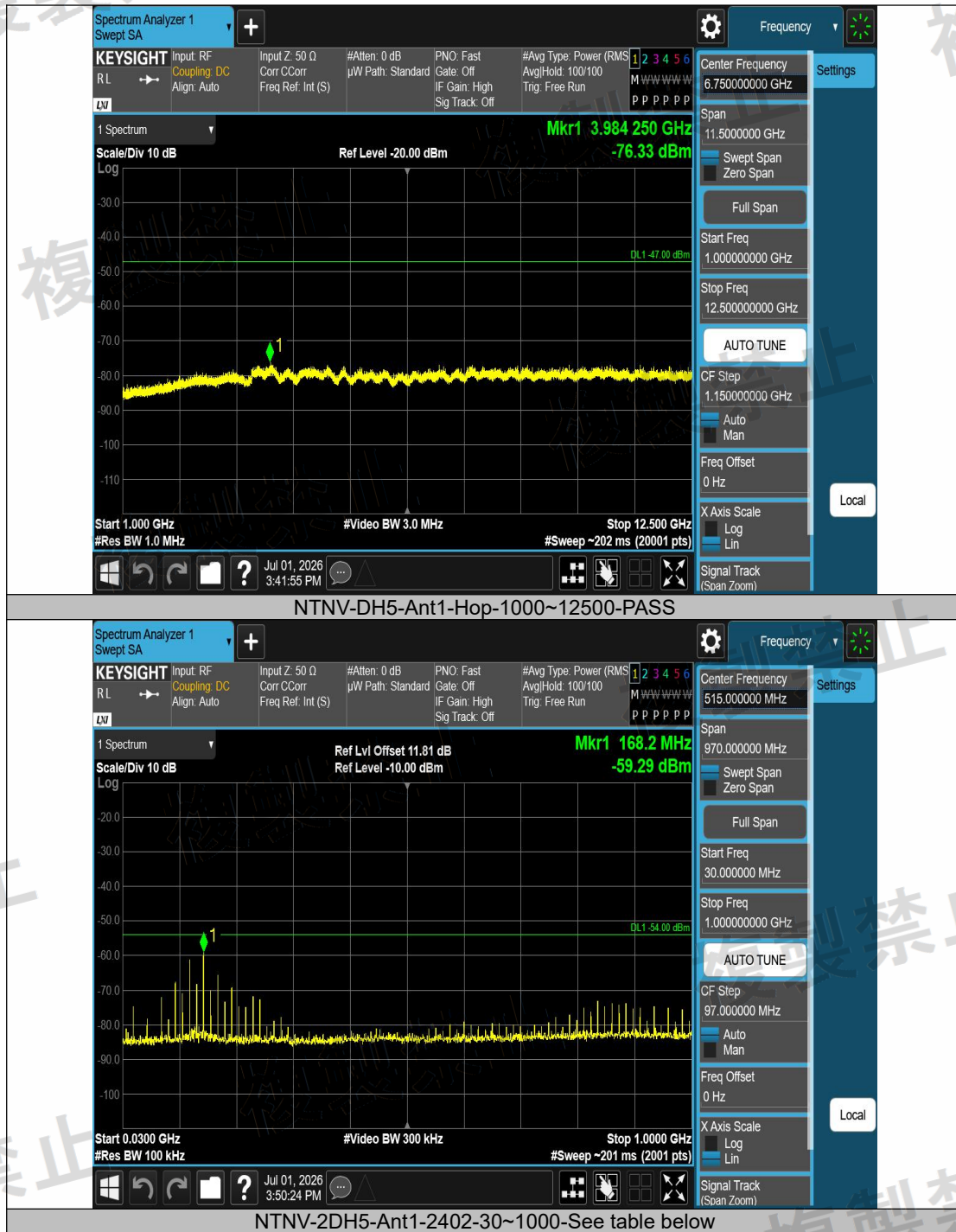
Test Condition	Test Mode	Antenna	Frequency [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Verdict
NTNV	DH5	Ant1	2402	143.98	-92.37	≤-54	0.00058	≤4	PASS
NTNV	DH5	Ant1	2402	168.23	-92.41	≤-54	0.00057	≤4	PASS
NTNV	DH5	Ant1	2441	143.98	-92.90	≤-54	0.00051	≤4	PASS
NTNV	DH5	Ant1	2441	156.10	-93.03	≤-54	0.00050	≤4	PASS
NTNV	DH5	Ant1	2441	168.23	-92.23	≤-54	0.00060	≤4	PASS
NTNV	DH5	Ant1	2480	143.98	-92.96	≤-54	0.00051	≤4	PASS
NTNV	DH5	Ant1	2480	168.23	-92.96	≤-54	0.00051	≤4	PASS
NTNV	2DH5	Ant1	2402	143.98	-92.45	≤-54	0.00057	≤4	PASS
NTNV	2DH5	Ant1	2402	168.23	-92.48	≤-54	0.00056	≤4	PASS
NTNV	2DH5	Ant1	2441	143.98	-92.79	≤-54	0.00053	≤4	PASS
NTNV	2DH5	Ant1	2441	168.23	-92.65	≤-54	0.00054	≤4	PASS
NTNV	2DH5	Ant1	2480	143.98	-92.95	≤-54	0.00051	≤4	PASS
NTNV	2DH5	Ant1	2480	168.23	-92.73	≤-54	0.00053	≤4	PASS
NTNV	3DH5	Ant1	2402	143.98	-92.70	≤-54	0.00054	≤4	PASS
NTNV	3DH5	Ant1	2402	156.10	-92.22	≤-54	0.00060	≤4	PASS
NTNV	3DH5	Ant1	2402	168.23	-92.63	≤-54	0.00055	≤4	PASS
NTNV	3DH5	Ant1	2441	143.98	-92.83	≤-54	0.00052	≤4	PASS
NTNV	3DH5	Ant1	2441	156.10	-92.83	≤-54	0.00052	≤4	PASS
NTNV	3DH5	Ant1	2441	168.23	-93.02	≤-54	0.00050	≤4	PASS
NTNV	3DH5	Ant1	2480	143.98	-93.01	≤-54	0.00050	≤4	PASS
NTNV	3DH5	Ant1	2480	168.23	-92.97	≤-54	0.00050	≤4	PASS

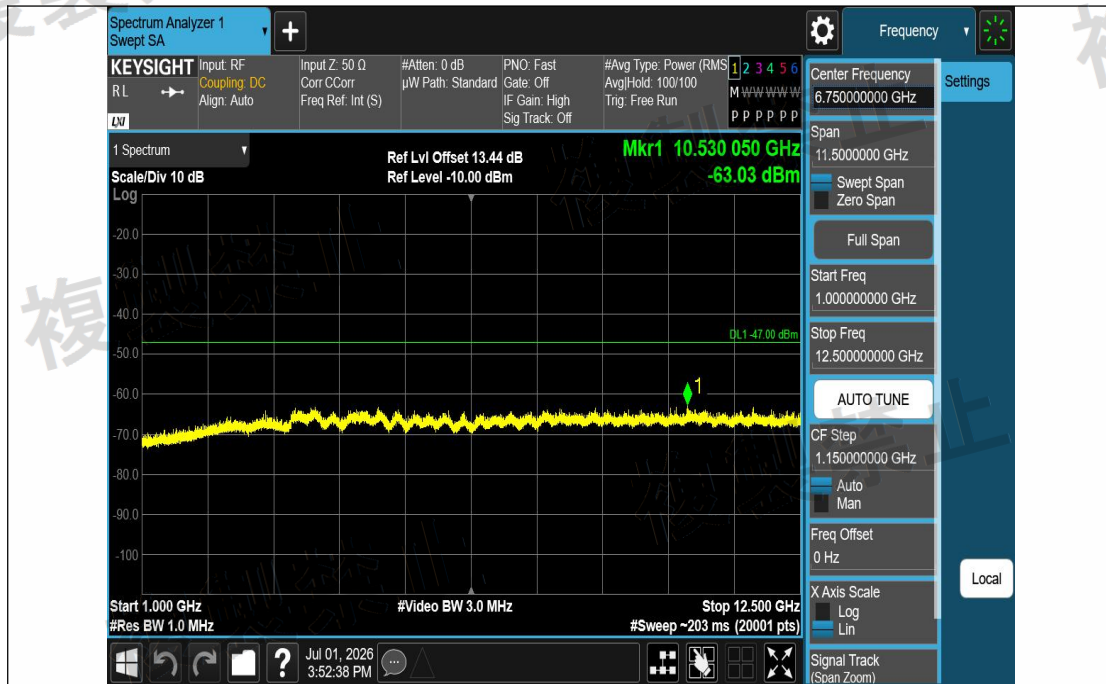




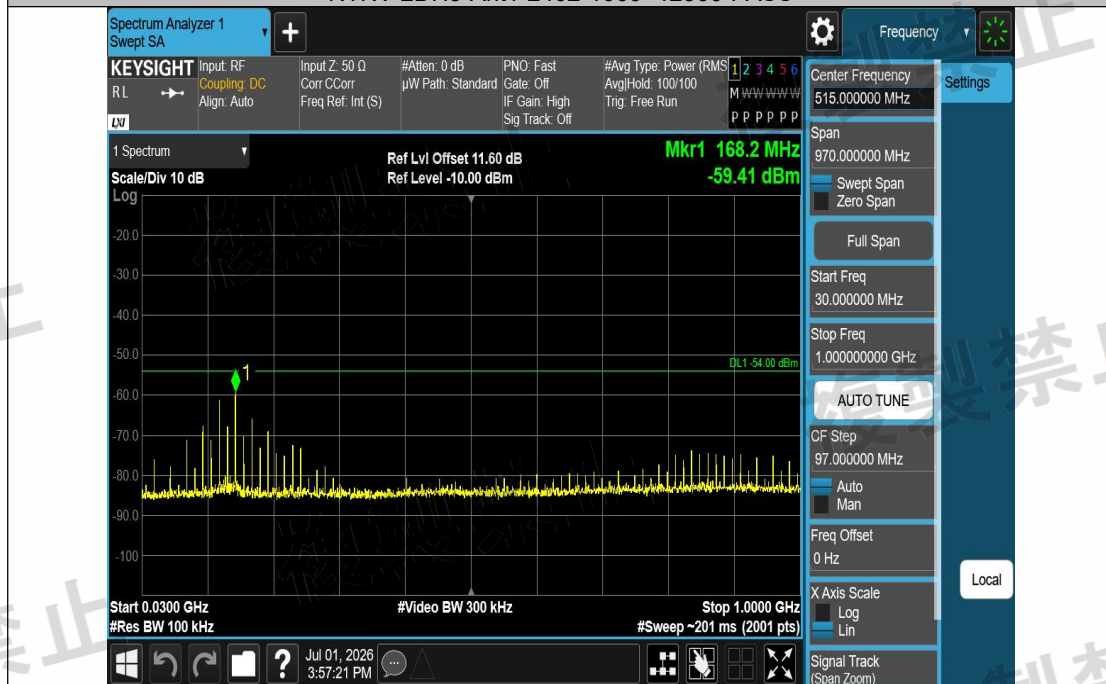




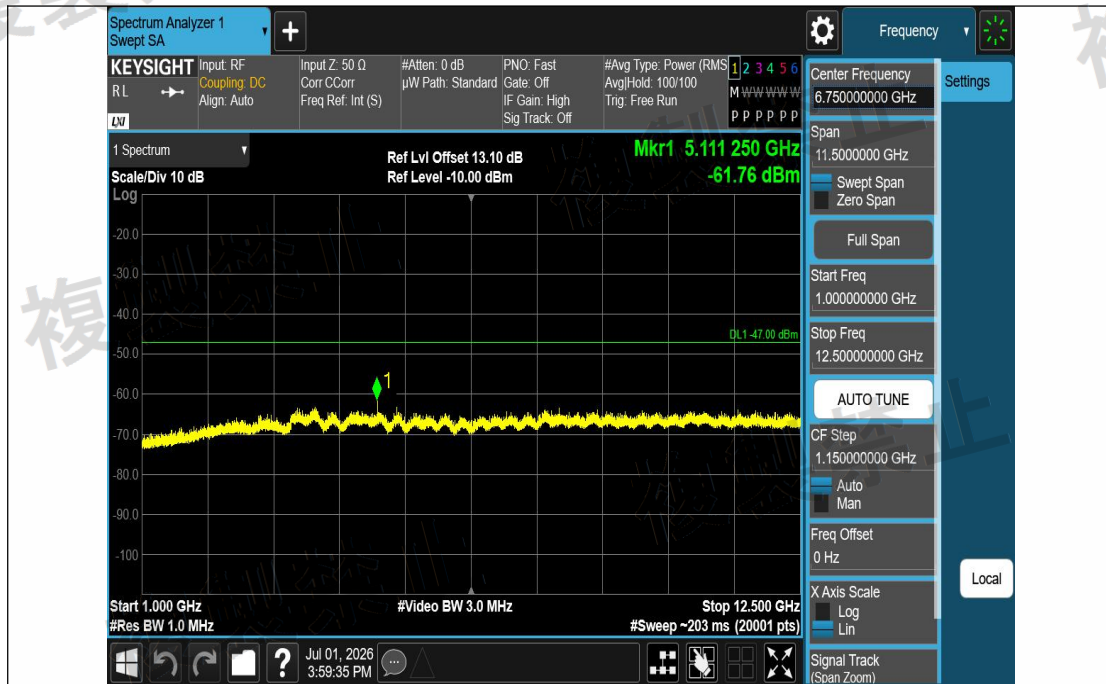




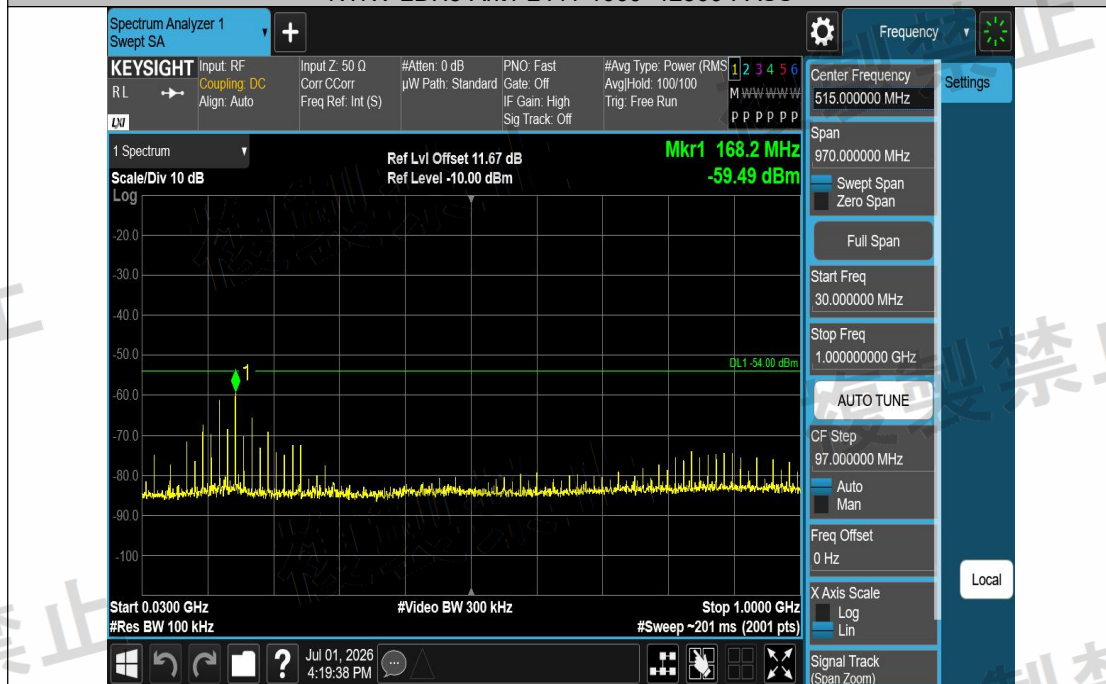
NTNV-2DH5-Ant1-2402-1000~12500-PASS



NTNV-2DH5-Ant1-2441-30~1000-See table below



NTNV-2DH5-Ant1-2441-1000~12500-PASS



NTNV-2DH5-Ant1-2480-30~1000-See table below