

TEST REPORT

Product Name : MAGNETIC BRIXLINK WIRELESS SPEAKER
Model Number : SP-96, SOUNDBRIX PLUS

Prepared for : Amwood (Hong Kong) Limited
Address : ROOM 1206, 12/F., 299QRC, 287-299 QUEEN'S ROAD, CENTRAL, HONG KONG

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Date of sample receipt : June 23, 2026
Date(s) of Tests : June 23, 2026 to July 30, 2026
Date of issue : July 30, 2026

TEST RESULT CERTIFICATION

Applicant : Amwood (Hong Kong) Limited
Address : ROOM 1206, 12/F., 299QRC, 287-299 QUEEN'S ROAD, CENTRAL, HONG KONG
Manufacturer : Dongguan City Far east Audio Co.Ltd
Address : beihuan Road in No.49, Shipai Town, Dongguan City, Guangdong Province, China
Factory : Dongguan City Far east Audio Co.Ltd
Address : beihuan Road in No.49, Shipai Town, Dongguan City, Guangdong Province, China
EUT : MAGNETIC BRIXLINK WIRELESS SPEAKER
Model Name : SP-96, SOUNDBRIX PLUS
Trademark : Amwood, KODAK

Measurement Procedure Used:

APPLICABLE STANDARDS		
STANDARD	Test Procedure	TEST RESULT
Item 19 of Article 2 Paragraph 1	MIC public notice 88:2004, annex 43	PASS

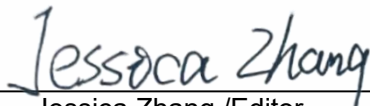
The device described above is tested by EMTEK (DONGGUAN) CO., LTD. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and EMTEK (DONGGUAN) CO., LTD. is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) was measured according to the test methods of Ordinance Concerning Technical Regulations Conformity Certification etc. of Specified Radio Equipment in Annex 1, the Ministry of Internal Affairs and Communication notification in Annex "43" of Article 88, Paragraph 1 or the test method more than equivalent and the result is technically compliant with the ARIB STD T-66 requirements.

The test results of this report relate only to the tested sample identified in this report

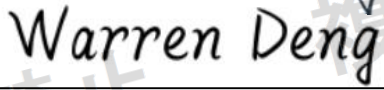
Date of Test :

June 23, 2026 to July 30, 2026

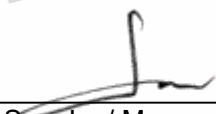
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Jessica Zhang /Editor

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Modified Information

Version	Report No.	Revision Date	Summary
V1.0	EDG2605290396E00101R	/	Original Report

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1 EUT TECHNICAL DESCRIPTION

Characteristics	Description
Product:	MAGNETIC BRIXLINK WIRELESS SPEAKER
Model Number:	SP-96, SOUNDBRIX PLUS (Note: These model are the same expect the model number and colors. Here select SP-96 for full test.)
Data Rate	1Mbps for GFSK modulation 2Mbps for $\pi/4$ -DQPSK modulation 3Mbps for 8DPSK modulation
Modulation:	GFSK modulation for BR(1Mbps) $\pi/4$ -DQPSK modulation for EDR(2Mbps) 8DPSK modulation for EDR (3Mbps)
Operating Frequency Range(s):	2402-2480MHz
Number of Channels:	79 channels
Rated Antenna Power:	0.02 mW/MHz
Antenna Type :	Rod Antenna
Antenna Gain:	2.77 dBi
Power Supply:	DC 5V from USB DC 7.4V from battery
Hardware version:	N/A
Software version:	N/A
Temperature Range	-10~45°C

Note: for more details, please refer to the user's manual of the EUT.

2 SUMMARY OF TEST RESULT

MIC RULES	DESCRIPTION OF TEST	RESULT
Item 19	RF Output Power	PASS
Item 19	Frequency Tolerance	PASS
Item 19	Occupied Bandwidth /Spreading Bandwidth/Spread Factor	PASS
Item 19	Holding time of hopping frequency	PASS
Item 19	Transmitter Spurious Emissions	PASS
Item 19	Receiver Spurious Emissions	PASS
Item 19	Interference Prevention Function	PASS
Item 19	Carrier Sending Function	N/A

3 TEST METHODOLOGY

3.1 GENERAL DESCRIPTION OF APPLIED STANDARDS

According to its specifications, the EUT must comply with the requirements of the following standards:
Item 19 of Article 2 Paragraph 1 of the TELEC rules for 2.4GHz band wide-band low-power data communication system. All measurements contained in this report were conducted with test method for radio equipment specified in MIC public notice 88:2004, annex 43 for certification. And measuring method for electric field intensity of radio station with remarkably weak radiowave transmitted.

3.2 MEASUREMENT EQUIPMENT USED

3.2.1 Radio Frequency Test Equipment

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval	Calibration Method
Wireless Connectivity Tester	R&S	CMW270	102543	2026/4/23	1Year	c
Automatic Control Unit	Tonscend	JS0806-2	21I8060480	2026/4/23	1Year	c
Signal Analyzer	KEYSIGHT	N9010B	MY60242456	2026/4/23	1Year	c
Analog Signal Generator	KEYSIGHT	N5173B	MY61252625	2026/4/23	1Year	c
UP/DOWN-Converter	R&S	CMW-Z800A	100274	2026/4/23	1Year	c
Vector Signal Generator	KEYSIGHT	N5182B	MY61252674	2026/4/23	1Year	c
Frequency Extender	KEYSIGHT	N5182BX07	MY59362541	2026/4/23	1Year	c
Temperature&Humidity test chamber	ESPEC	EL-02KA	12107166	2026/4/23	1 Year	c
6 db attenuator	AR-WORLWDI DE	6dB/50FH-006-1 00	324011	2026/4/23	1 Year	c

Calibration agency : Guangzhou LiSai Metrology & Test Co., Ltd.

Address : Address: No.8.South Street ShiJi Institute Guangzhou.Guangdong.China

Calibration Method:

- Calibration conducted by the National Institute of Information and Communications Technology (NICT) (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1).
- Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992).
- Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).
- Calibration conducted by using measuring instruments and other equipment listed Table attached hereto, which shall have been given any of calibration, etc. listed above from a) to c).

Remark: Each piece of equipment is scheduled for calibration once a year.

For measurement cables(It is from the antenna end of EUT to the test port of test equipment.)

Equipment	Manufacturer	cable loss	Application frequency band	Measurement data of line loss comes from	Last Cal.	Cal. Interval
measurement cable	Provided by the applicant	0.5 dBm	2402-2480MHz	Manufacturers claim themselves.	N/A	N/A

3.3 DESCRIPTION OF TEST MODES

The EUT has been tested under its typical operating condition.

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, and then record on this report.

Those data rates (1Mbps for BR GFSK modulation; 2Mbps for EDR $\pi/4$ -DQPSK modulation; 3Mbps for EDR 8DPSK modulation) were used for all tests.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Frequency and Channel list for BT:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	39	2441	...	...
1	2403	40	2442	76	2478
2	2404	41	2443	77	2479
...	...	...	...	78	2480
Note: $f_c = 2402\text{MHz} + k \times 1\text{MHz}$ $k=0$ to 78					

3.4 SUPPORT EQUIPMENT

EUT Cable List and Details			
Description	Manufacturer	Model	Serial Number
/	/	/	/

Auxiliary Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Notebook	Lenovo	E46L	11S168003748Z0LR0 6E0HG
/	/	/	/

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4 FACILITIES AND ACCREDITATIONS

4.1 FACILITIES

All measurement facilities used to collect the measurement data are located at:

EMTEK (DONGGUAN) CO., LTD.

Room 111&112, Building 8, -1&2/F., Office Building2, Zone A, Zhongda Marine Biotechnology Research and Development Base, No.9, Xincheng Avenue, Songshan Lake High-Tech Industrial Development Zone, Dongguan, Guangdong, China

4.2 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description

EMC Lab.

: Accredited by CNAS, 2024.07.06

The certificate is valid until 2030.07.05

The Laboratory has been assessed and proved to be in compliance with
CNAS/CL01:2018

The Certificate Registration Number is L3150

Accredited by FCC

Designation Number: CN1451

Test Firm Registration Number: 846861

Accredited by A2LA

The Certificate Registration Number is 4321.02

Accredited by Industry Canada

The Certificate Registration Number is CN0113

Name of Firm

: EMTEK (DONGGUAN) Co., Ltd.

Site Location

: Room 111&112, Building 8, -1&2/F., Office Building2, Zone A, Zhongda Marine Biotechnology Research and Development Base, No.9, Xincheng Avenue, Songshan Lake High-Tech Industrial Development Zone, Dongguan, Guangdong, China

5 TEST SYSTEM UNCERTAINTY

The following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Parameter	Measurement Uncertainty
Radio Frequency	±1ppm
Maximum Peak Output Power Test	±1.0dB
Conducted Emissions Test	See below
Radiated Emission Test	±2.0dB
Power Density	±2.0dB
Occupied Bandwidth Test	±1.0dB
Band Edge Test	±3dB
All emission, radiated	See below
Antenna Port Emission	±3dB
Temperature	±0.5°C
Humidity	±3%

Measurement Uncertainty for a level of Confidence of 95%

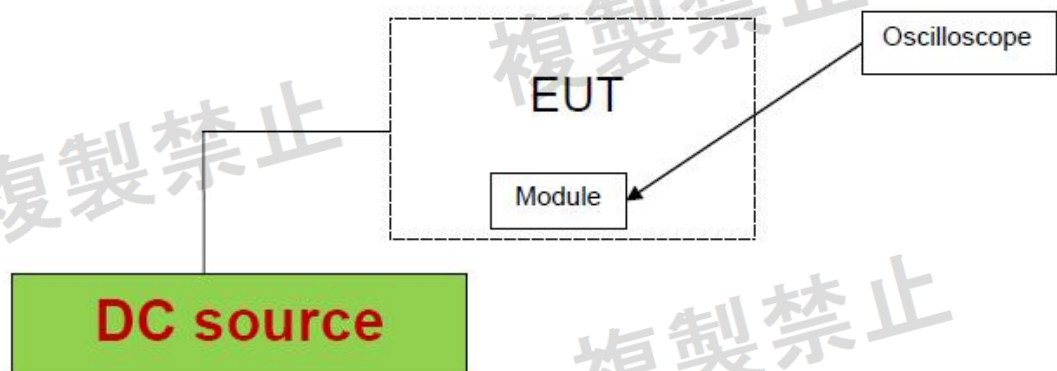
6 WIRELESS MODULE VOLTAGE TEST IN EXTREME CONDITIONS

6.1 Applicable Standard

When there is a fluctuation of $\pm 10\%$ input voltage from external power to the test equipment. If the fluctuation of input voltage to the circuit of the radio part (excl. power) in the test equipment is confirmed below $\pm 1\%$, Measurement shall be tested with the rated voltage.

6.2 Test Configuration

Config B



6.3 Test Results

Test Voltage	DC 4.50V	DC 5.0V	DC 5.50V
Module Test voltage	3.28	3.3	3.31
Module Rated voltage	3.3	3.3	3.3
The Range of Module Voltage (%)	0.6	0	0.3

Note: In extreme conditions, EUT module power is confirmed below $\pm 1\%$.

7 TEST REQUIREMENTS

7.1 FREQUENCY TOLERANCE

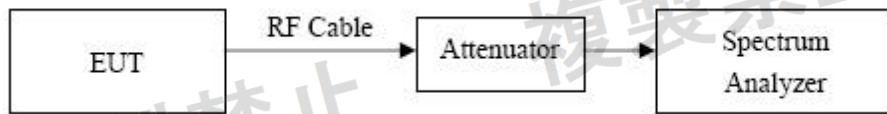
7.1.1 Applicable Standard

According to Item 19 of Article 2 Paragraph 1.

7.1.2 Conformance Limit

For the 2.4 GHz bands it shall be better than 50 ppm under the operational conditions

7.1.3 Test Setup Block Diagram



7.1.4 Test Procedure

If the fluctuation of input voltage to the circuit of the radio part (excl. power) in the test equipment is confirmed below $\pm 1\%$, Measurement shall be tested with the rated voltage.

When there is a fluctuation of $\pm 10\%$ input voltage from external power to the test equipment. In case the test equipment is designed to function only within the specified fluctuation range of $\pm 10\%$ for the voltage source tests shall be conducted applying the rated voltage and a respective specified maximum/minimum value of fluctuation range.

Set the EUT on the test frequency and transmit.

Set RBW = 10 kHz.

Set the video bandwidth (VBW) = 10 kHz.

Set Span = 1 MHz

Set Detector = Peak.

Set Trace mode = max hold.

Set Sweep = auto couple.

Stop the modulation (stop the spreading), set on "continuous transmission of no-modulated radiation" in principle. If impossible, on "continuous burst transmission of no-modulated radiation", or a modulation mode to generate a specific frequency spectrum so that the frequency can be measured using a spectrum analyzer (example: a wave of the sub-carrier).

In case of no-modulation (consecutive or continuous burst), direct measurement is conducted with the frequency meter.

In case of burst wave, the measurement is conducted for a time period to achieve a sufficient accuracy. The mean value is employed as the measurement value.

In case of a test mode generating specific frequency spectrum, the spectrum frequency is measured with the spectrum analyzer.

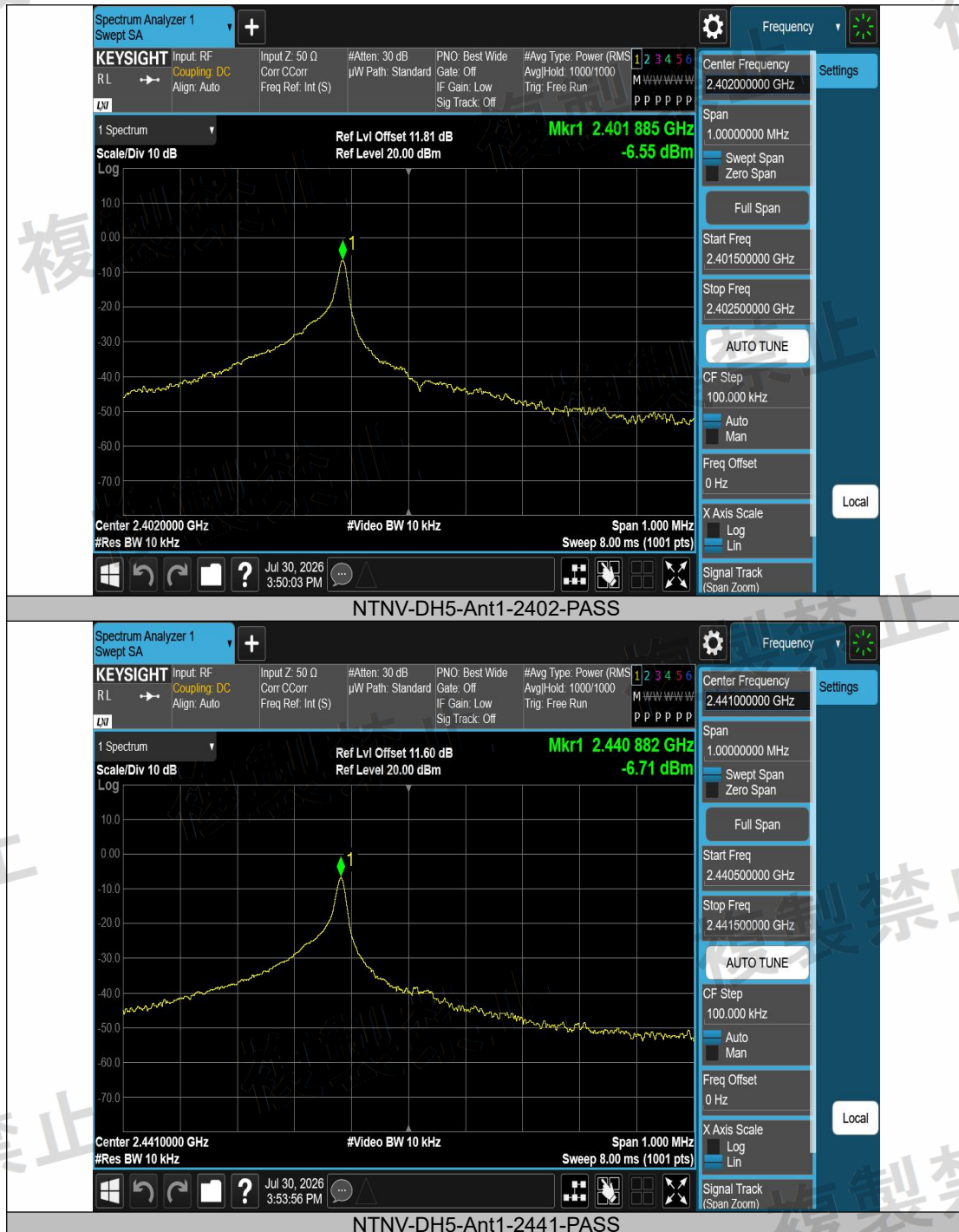
7.1.5 Environmental Conditions

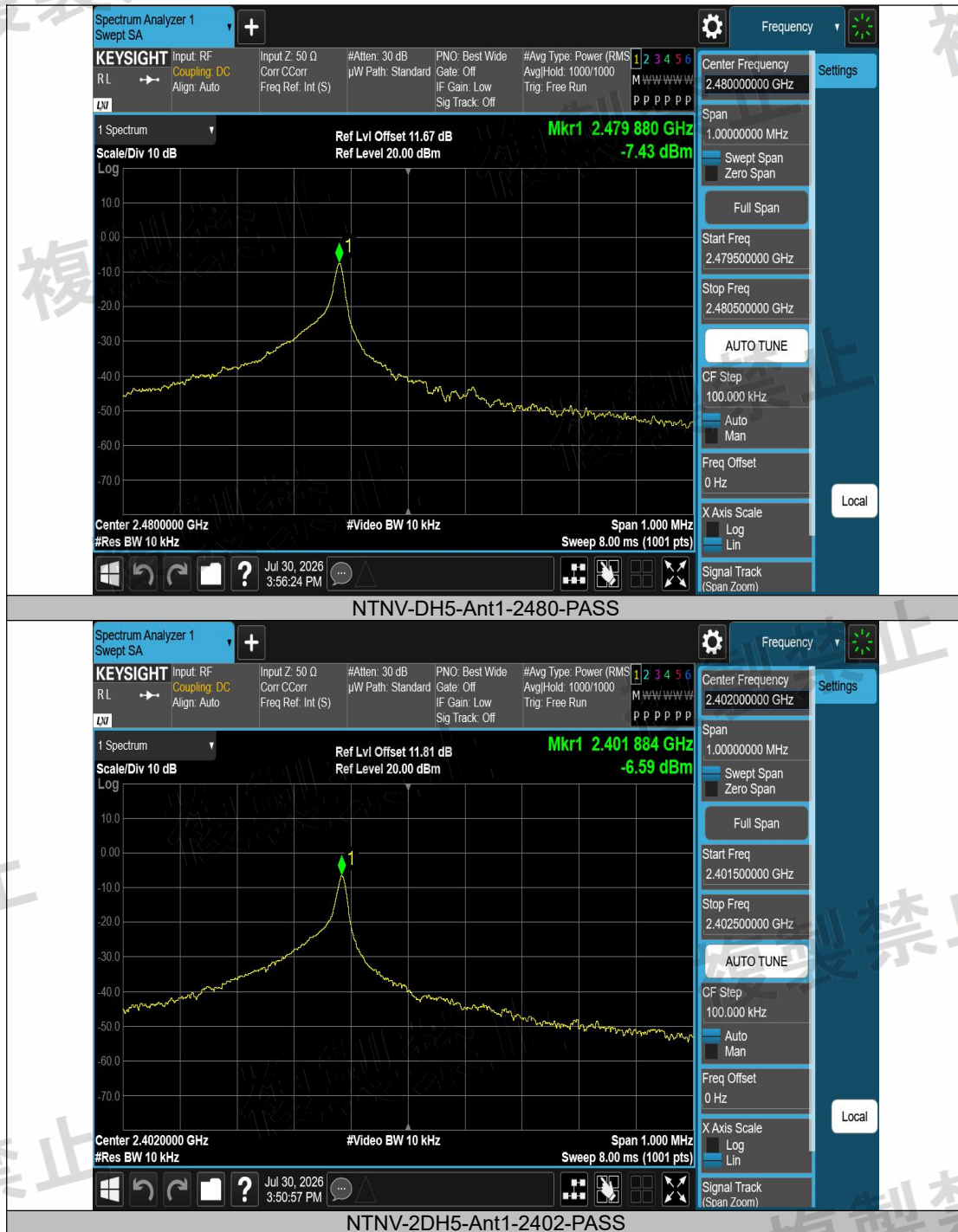
Temperature:	25°C
Relative Humidity:	45%
ATM Pressure:	1011 mbar

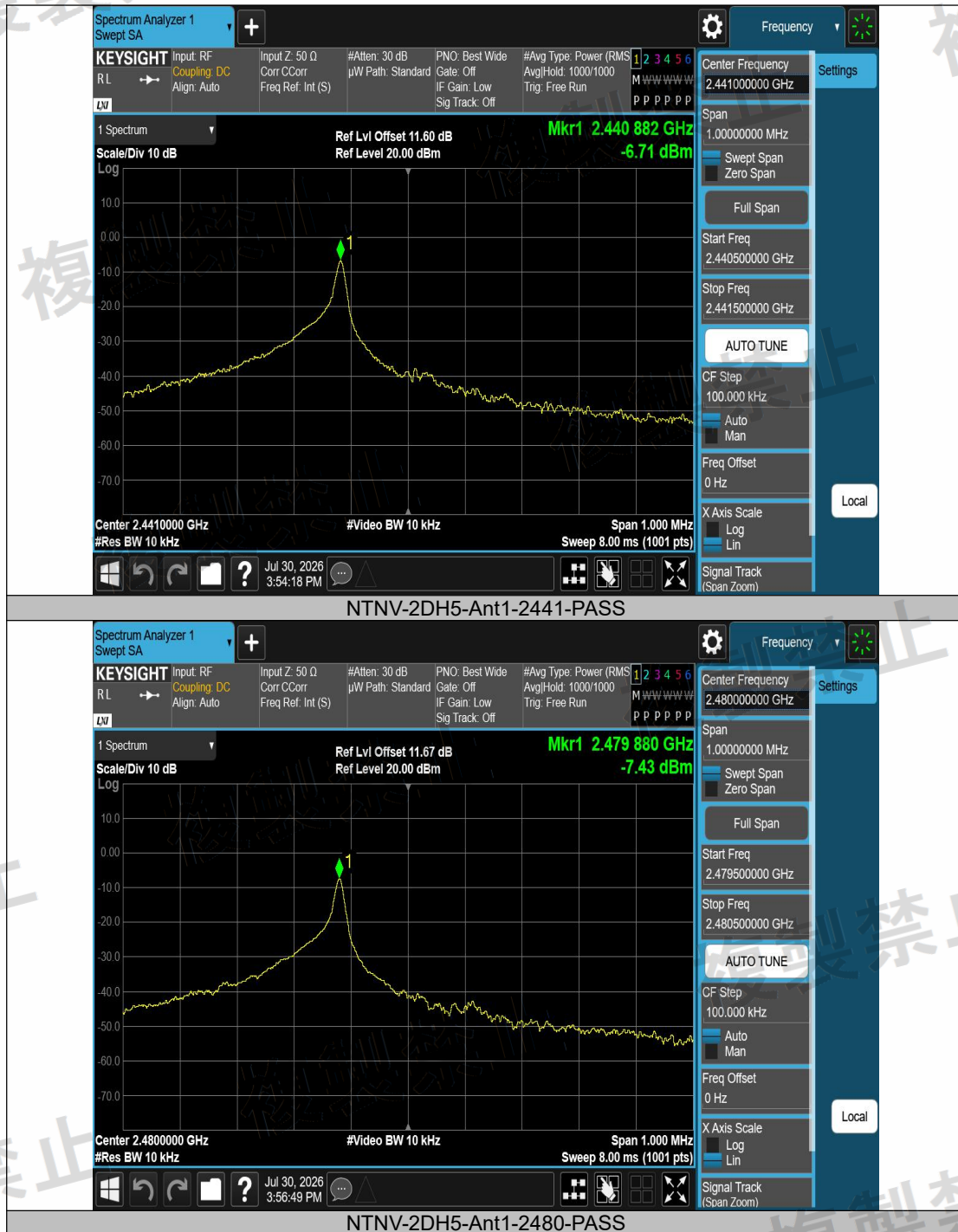
7.1.6 Test Results

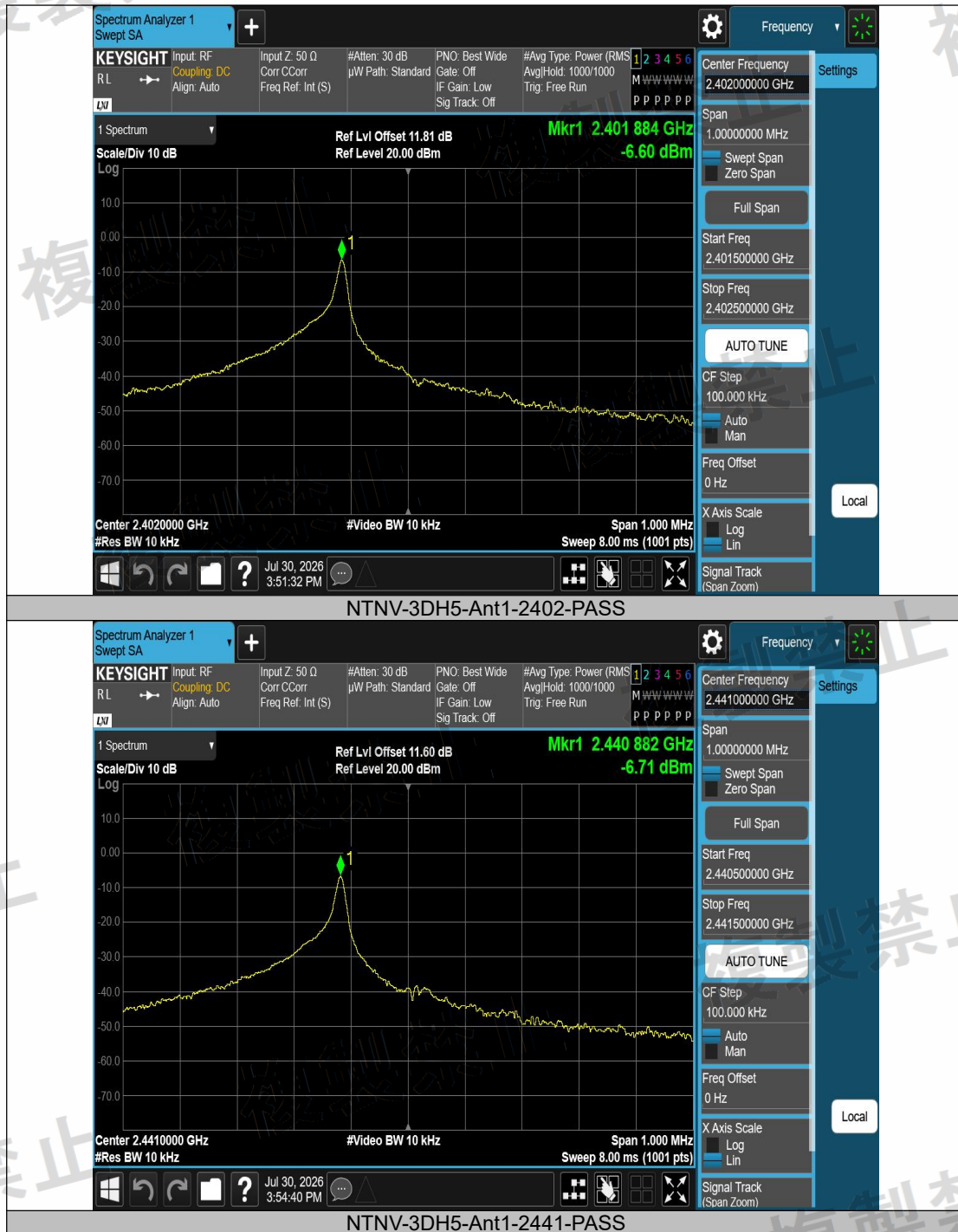
All the modes were tested and recorded, the results of the test item are good.

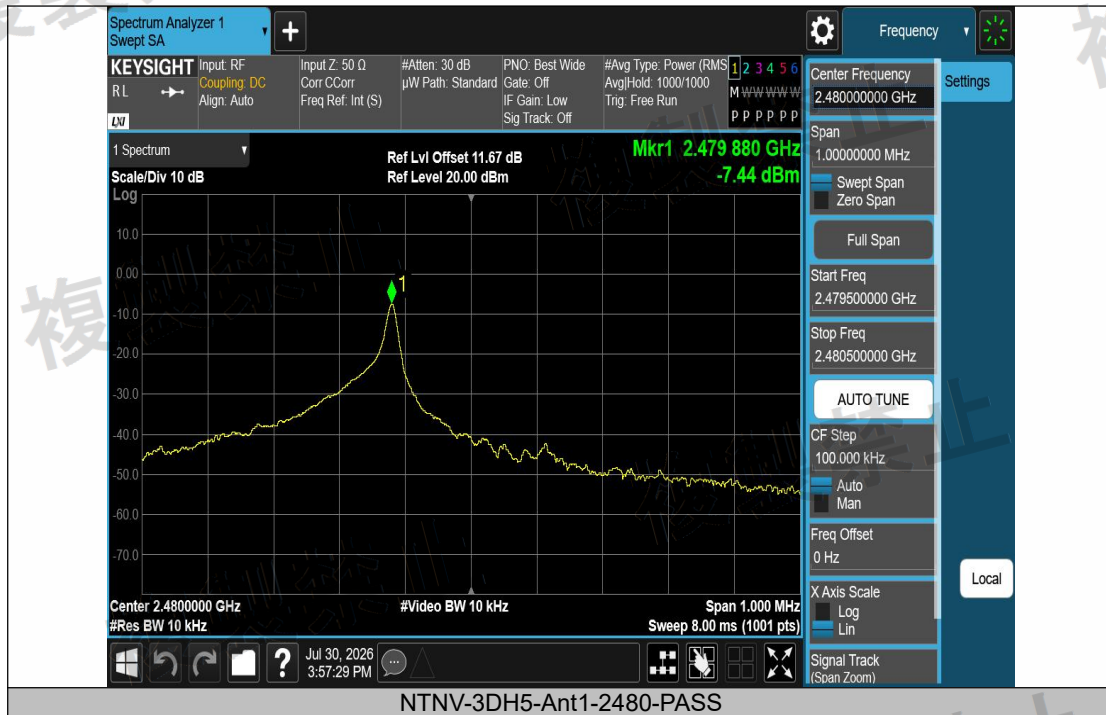
Test Condition	Test Mode	Antenna	Frequency[MHz]	CenterFreq [MHz]	Result[ppm]	Limit[ppm]	Verdict
NTNV	DH5	Ant1	2402	2401.885	-47.87677	±50	PASS
NTNV	DH5	Ant1	2441	2440.882	-48.34084	±50	PASS
NTNV	DH5	Ant1	2480	2479.88	-48.38710	±50	PASS
NTNV	2DH5	Ant1	2402	2401.884	-48.29309	±50	PASS
NTNV	2DH5	Ant1	2441	2440.882	-48.34084	±50	PASS
NTNV	2DH5	Ant1	2480	2479.88	-48.38710	±50	PASS
NTNV	3DH5	Ant1	2402	2401.884	-48.29309	±50	PASS
NTNV	3DH5	Ant1	2441	2440.882	-48.34084	±50	PASS
NTNV	3DH5	Ant1	2480	2479.88	-48.38710	±50	PASS











7.2 OCCUPIED BANDWIDTH & SPREADING BANDWIDTH

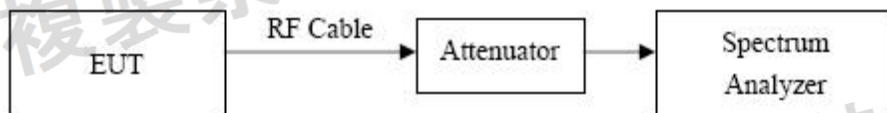
7.2.1 Applicable Standard

According to Item 19 of Article 2 Paragraph 1.

7.2.2 Conformance Limit

Permissible value for occupied bandwidth using the FH system, a hybrid systems combining DS and FH systems or hybrid system combining FH and OFDM systems shall be 83.5MHz or less, In spread spectrum systems, spread bandwidth (which refers to a frequency bandwidth with an upper limit and lower limit such that each of the mean powers radiated above the upper frequency limit and below the lower frequency limit is equal to 5% of the total mean power radiated ,this also applies hereafter) shall be 500kHz or more.

7.2.3 Test Setup Block Diagram



7.2.4 Test Procedure

Spectrum analyzer is set as below

Central Frequency	Test frequency
Sweeping Bandwidth	2 to 3.5 times the allowable value (SPAN=60MHz)
Resolution Bandwidth	Lower than 3 % of allowable value (RBW=1MHz)
Video Bandwidth	Same level as Resolution Bandwidth
Y-Axis Scale	10 dB/Div
Input Level	Carrier level is sufficiently higher than spectrum analyzer noise
Sweep Time	Minimum time to assure the measurement accuracy (In case of burst wave, 1 burst per 1 sample)
Sampling points	More than 400 points
Sweep Mode	Consecutive sweep
Phase-Detection Mode	Positive peak
Trigger Condition	Max-hold

The measured value of the spectrum analyzer is processed by the computer internally or externally

Conditions of EUT

Set the test frequency and the modulation is performed with the standard coded test signal. In case of OFDM with burst wave, the modulation is conducted to minimize the rate of the time that the number of sub-carrier is less (short preamble).

After a repetition of sweep so that no variation is found, values of all the data points are loaded into the array variable on the computer.

For all the data, the dB values are converted to antilogarithm of power dimension.

Power summation of all the data is estimated and stored as "total power value".

Starting with the data of the minimum frequency, the power is summed sequentially, and the limiting data point where the value achieves 0.5% of the total power is sensed. The limiting point is converted to frequency, stored as "lower limit".

Starting with the data of the maximum frequency, the power is summed sequentially, and the limiting data

point where the value achieves 0.5% of the total power is sensed. The limiting point is converted to frequency, stored as "upper limit"

7.2.5 Environmental Conditions

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

7.2.6 Test Results

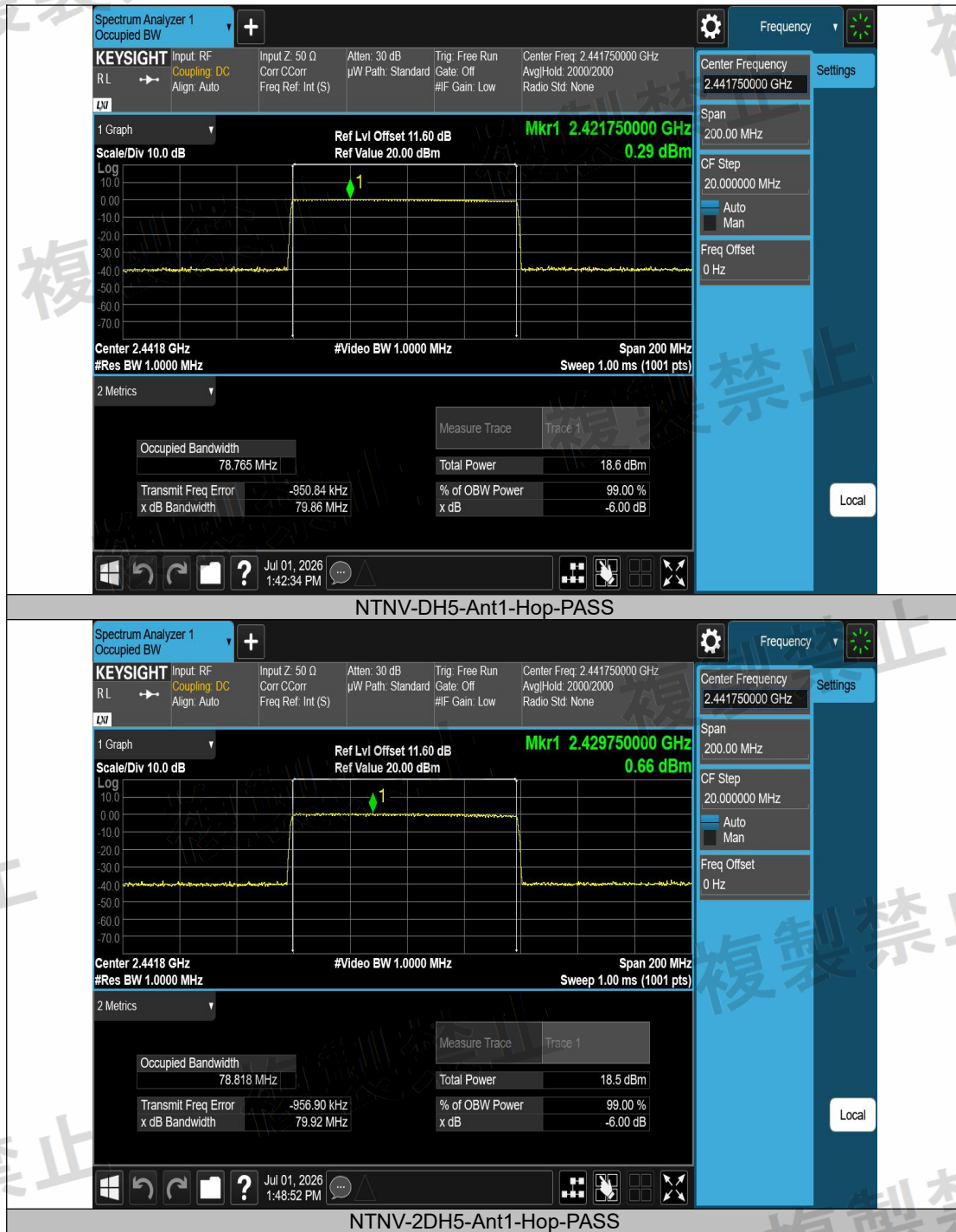
All the modes were tested and recorded, the results of the test item are good.

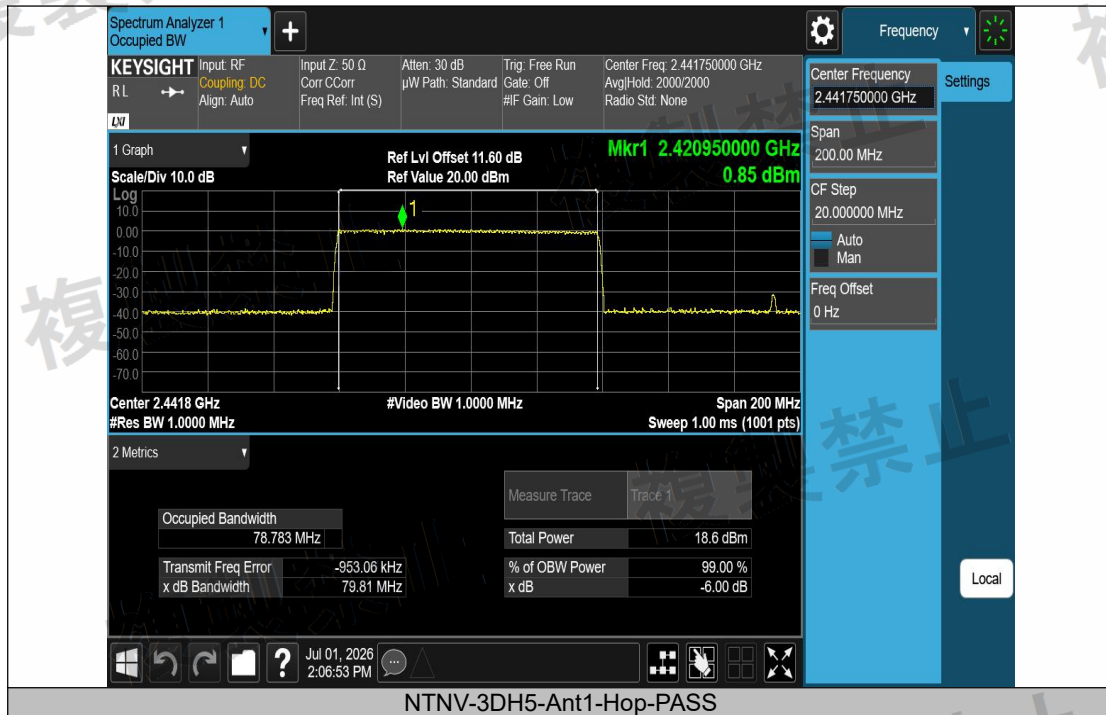
Occupied Bandwidth (99% Emission bandwidth)

Test Condition	Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Verdict
NTNV	DH5	Ant1	Hop	78.765	≤83.5	PASS
NTNV	2DH5	Ant1	Hop	78.818	≤83.5	PASS
NTNV	3DH5	Ant1	Hop	78.783	≤83.5	PASS

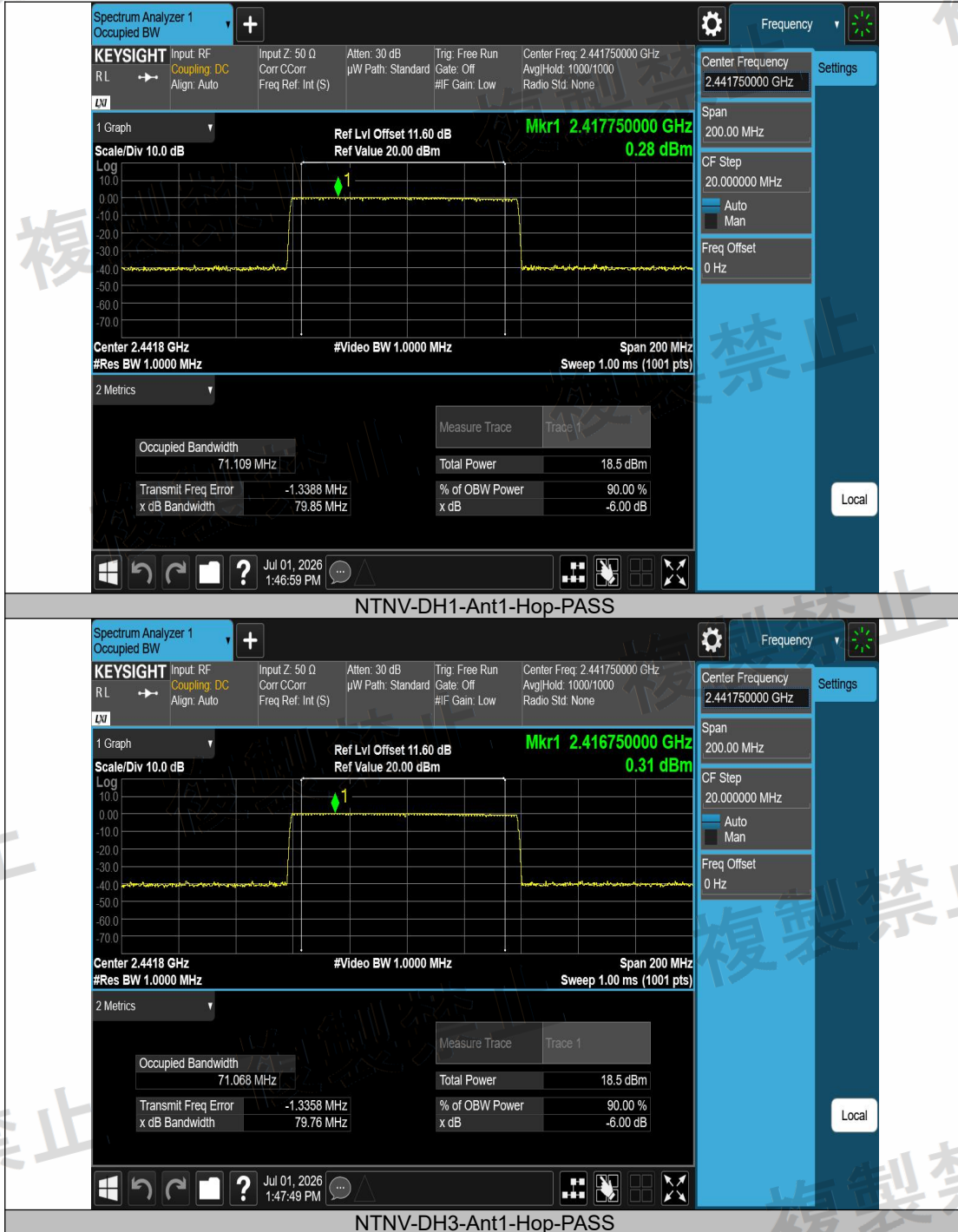
Spread Bandwidth (90% Emission bandwidth) & Spread Factor

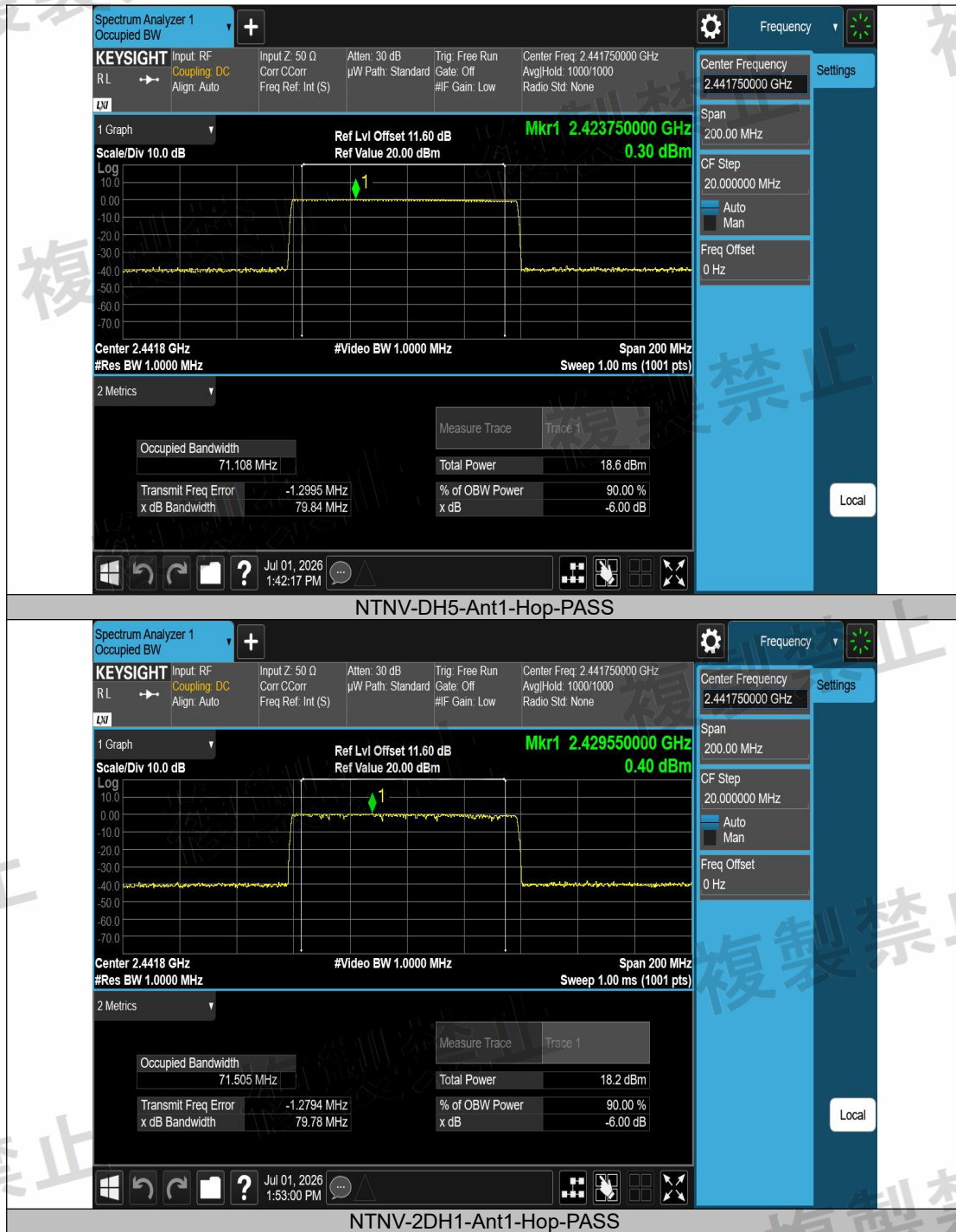
Test Condition	Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Spread Factor	Limit	Verdict
NTNV	DH1	Ant1	Hop	71.109	≥0.5	71.109	>5	PASS
NTNV	DH3	Ant1	Hop	71.068	≥0.5	71.068	>5	PASS
NTNV	DH5	Ant1	Hop	71.108	≥0.5	71.108	>5	PASS
NTNV	2DH1	Ant1	Hop	71.505	≥0.5	71.505	>5	PASS
NTNV	2DH3	Ant1	Hop	71.012	≥0.5	71.012	>5	PASS
NTNV	2DH5	Ant1	Hop	71.040	≥0.5	71.040	>5	PASS
NTNV	3DH1	Ant1	Hop	70.742	≥0.5	70.742	>5	PASS
NTNV	3DH3	Ant1	Hop	71.079	≥0.5	71.079	>5	PASS
NTNV	3DH5	Ant1	Hop	71.152	≥0.5	71.152	>5	PASS

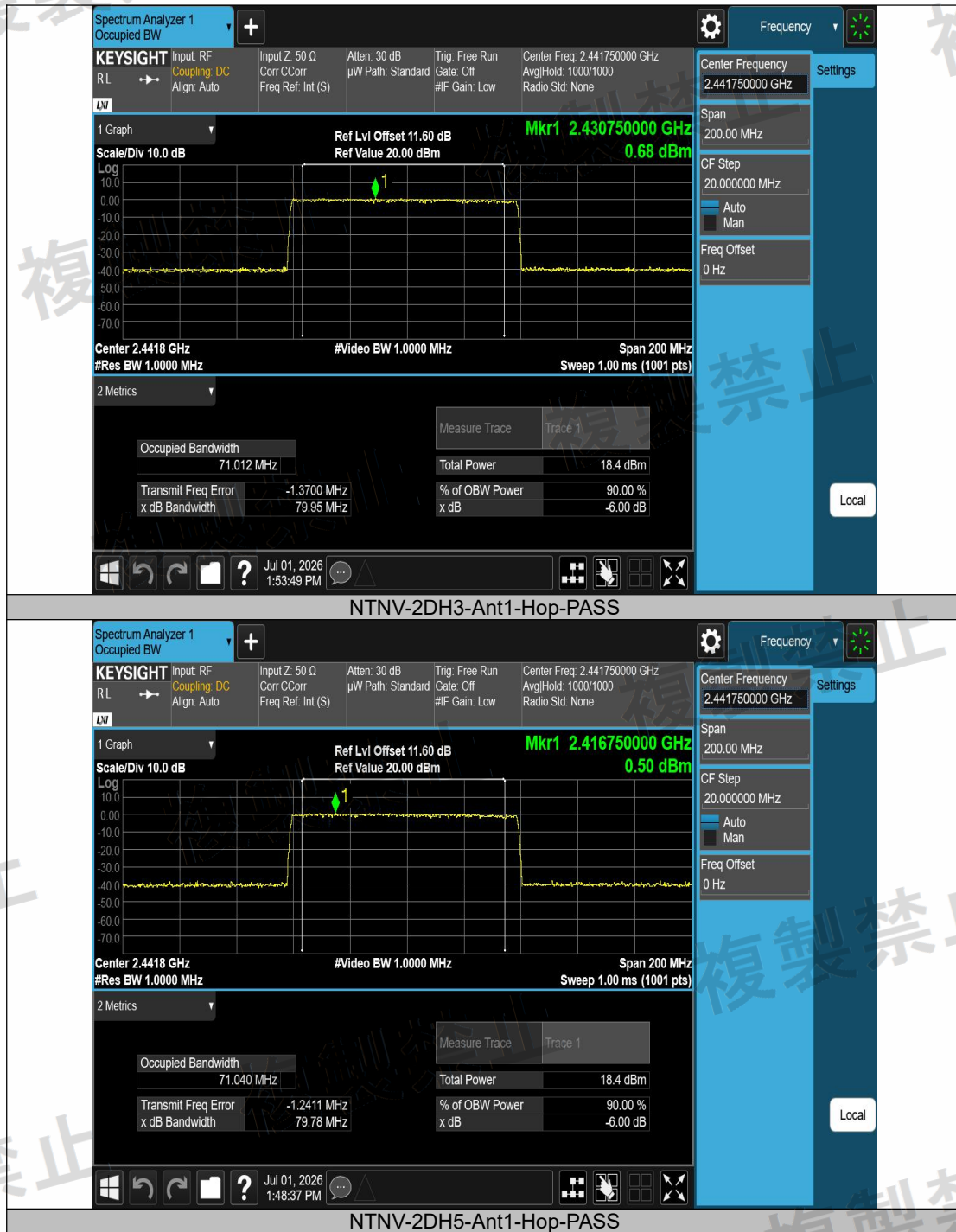


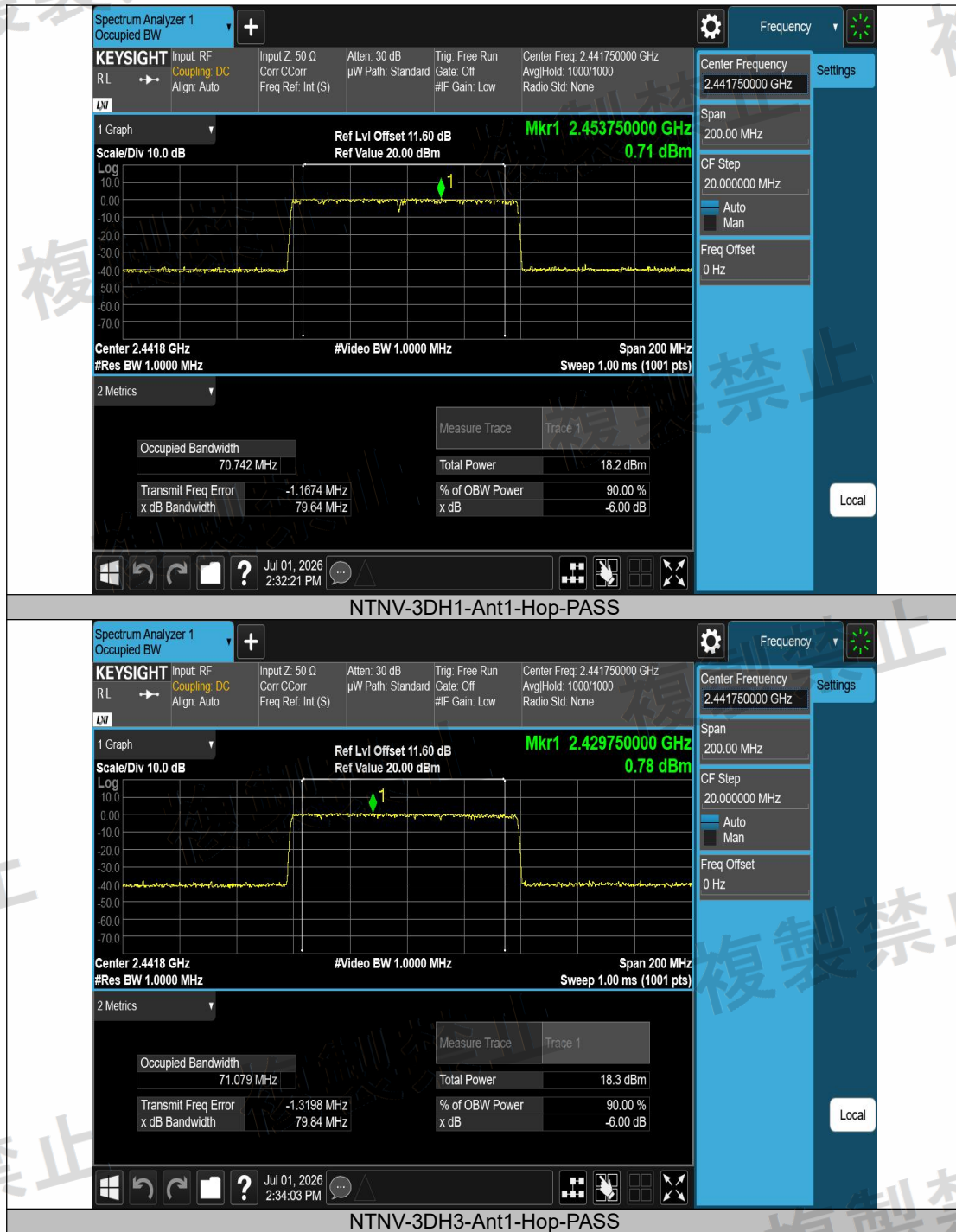


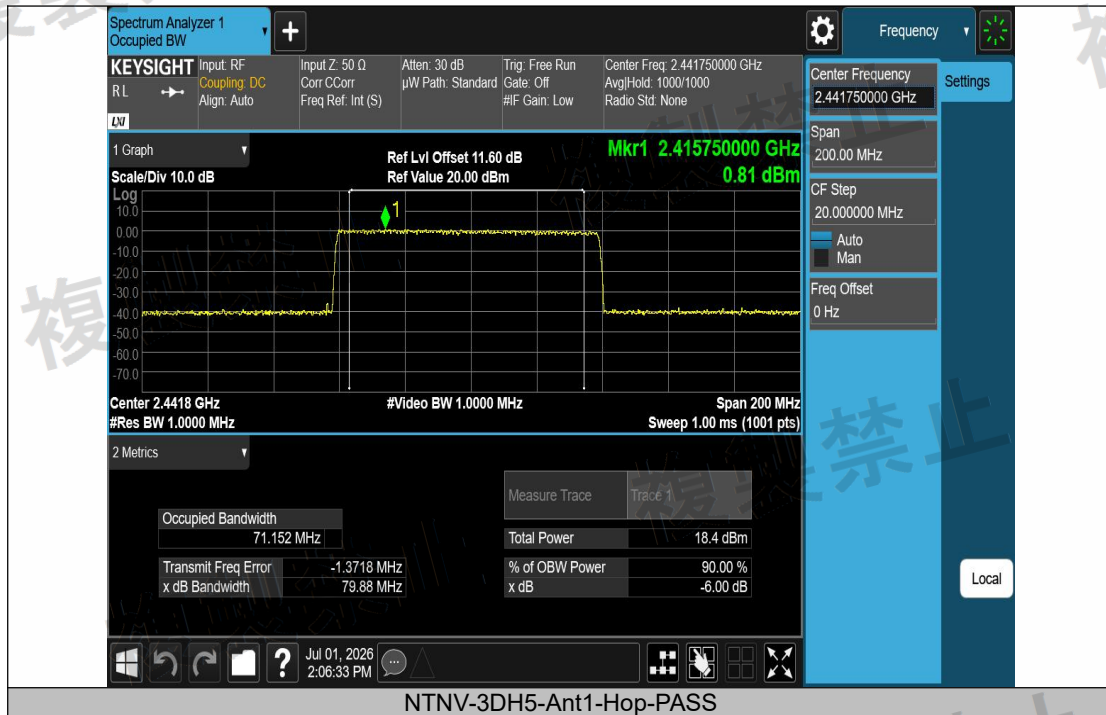
Spread Bandwidth











7.3 HOPPING FREQUENCY STAYING TIME (DWELL TIME)

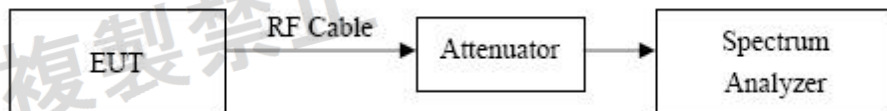
7.3.1 Applicable Standard

According to Item 19 of Article 2 Paragraph 1.

7.3.2 Conformance Limit

Frequency dwell time (time during which radio waves continue to be emitted at a specified frequency) of a transmitting equipment using the FH system shall be 0.4 seconds or less. When a simple system (except hybrid system) is used, total frequency dwell time at an arbitrary frequency within the time period obtained by multiplying 0.4 seconds by the process gain shall be 0.4 seconds or less.

7.3.3 Test Setup Block Diagram



7.3.4 Test Procedure

Set the EUT at the test frequency with test spreading code(Frequency Hopping), then modulation is performed with standard PN test signal
Spectrum analyzer is set as below

Central Frequency	Measurement hopping frequency
Sweep Frequency Bandwidth	0 MHz
Resolution Bandwidth	Approx. 1 MHz
Video Bandwidth	Same level as resolution bandwidth
Y-Axis Scale	10 dB/Div
Sweep Time	Hopping period
Sweep Mode	Single sweep
Trigger Condition	Video trigger
Phase-Detection Mode	Positive peak

Set the spectrum analyzer as in 2 above, wait for the hopping signal at the frequency to hop to.
Read the staying time from the trajectory on the screen at the frequency to hop in the hopping period by using marker, confirm the summation of the staying time to be less than 0.4 seconds.
In the same manner as (2), read the integral of the staying time at the frequency to hop in the hopping period.
Calculate the total of the frequency staying time at the frequency to hop to as described in the equation below.
Repeat the measurement for each frequency to hop.

7.3.5 Environmental Conditions

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

7.3.6 Test Results

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

Test Condition	Test Mode	Antenna	Frequency [MHz]	SBW [MHz]	Duty Cycle [%]	Result [s]	Limit [s]	Verdict
NTNV	DH1	Ant1	Hop	71.109	30.4	0.109	≤0.4	PASS
NTNV	DH3	Ant1	Hop	71.068	65.6	0.236	≤0.4	PASS
NTNV	DH5	Ant1	Hop	71.108	77.07	0.277	≤0.4	PASS
NTNV	2DH1	Ant1	Hop	71.505	31.2	0.113	≤0.4	PASS
NTNV	2DH3	Ant1	Hop	71.012	65.6	0.236	≤0.4	PASS
NTNV	2DH5	Ant1	Hop	71.04	77.07	0.277	≤0.4	PASS
NTNV	3DH1	Ant1	Hop	70.742	31.2	0.112	≤0.4	PASS
NTNV	3DH3	Ant1	Hop	71.079	65.6	0.236	≤0.4	PASS
NTNV	3DH5	Ant1	Hop	71.152	77.07	0.278	≤0.4	PASS

NOTE: Result[s]=0.4*SBW/79*DUTY Cycle

