



MIC TEST REPORT

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Manufacturer: JWAWAKEN TECHNOLOGY CO., LTD.
Address of Manufacturer: Room 2403, East Tower, Lepu Building, No.60 Xingke Road, Xili Street, Nanshan District, Shenzhen City, Guangdong Province China
Factory: AnHui LingKeSen Electronics Co., Ltd.
Address of Factory: Factory Building A18, Wanyang Zhongchuang City, intersection of Shusheng Road and Huihuang Road, Guanting Town, Feixi County, Hefei City, Anhui Province
Product Name: Mini PC
Model No.: RE2, RE2 mini, RE2 PRO, RE2 ULTRA, RE2 MAX, RE2 AI
Trade Mark: JWAWAKEN
Applicable standards: Article 2 Paragraph 1 of Item 19-3
MIC notification No. 88 of 2004, annex 45
Date of Test: Jun.30, 2026-Jul.06, 2026
Date of report issued: Jul.07, 2026

Remark:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full without prior written permission of the company.

The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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1 Test Summary

Item	Description of Test	Result
1	Frequency Tolerance	Pass
2	Occupied Bandwidth and Spread-spectrum Bandwidth	Pass
3	Antenna Power Tolerance	Pass
4	Antenna Power & EIRP	Pass
5	Unwanted emission strength	Pass
6	Adjacent channel leakage power	Pass
7	Transmission burst length	Pass
8	Transmission data rate	Pass
8	Secondary Radiated Emissions	Pass
9	Interference Prevention Function	Pass
10	Carrier sense function	Pass
N/A is an abbreviation for Not Applicable.		

Pass: The EUT complies with the essential requirements in the standard.

N/A: Is an abbreviation for Not Applicable.

Note: Compliance determination rules

1). The Compliance determination of test results does not take into account measurement uncertainty. Measurement results are determined based on regulatory limitations or requirements specified by the applicant/manufacturer. If measurement uncertainty is taken into account, the applicant/manufacturer will bear all possible risks of non-compliance.

2). The measurement uncertainty please refer to each test result in the "Measurement Uncertainty"

Measurement Uncertainty

Test Item	Measurement Uncertainty	Notes
Bandwidth	$\pm 0.72\%$	(1)
Antenna Power	$\pm 0.67\text{dB}$	(1)
Frequency Tolerance	$\pm 6 \times 10^{-7}$	(1)
Conducted spurious emission	$\pm 0.64\text{dB}$	(1)
Spurious emissions, radiated ($> 1\text{G}$)	$\pm 4.16\text{dB}$	(1)
Spurious emissions, radiated ($< 1\text{G}$)	$\pm 4.88\text{dB}$	(1)
Time	$\pm 0.03\%$	(1)

Note (1): The measurement uncertainty is for coverage factor of $k=2$ and a level of confidence of 95%.



2 General Information

2.1 General Description of EUT

Product Name:	Mini PC
Model No.:	RE2, RE2 mini, RE2 PRO, RE2 ULTRA, RE2 MAX, RE2 AI
Difference of Model:	All models have the same electrical design (i.e. circuit design, PCB layout, RF module/circuit, antenna type and position, components on PCB, etc.), mechanical structure and design are the same, only the model name and color are different
Test model No.:	RE2
Hardware version:	N/A
Software version:	N/A
Sample(s) Status	Engineer sample
Operating frequency range:	5180-5240MHz
Channel numbers:	See 2.2 Operation Channel List
Channel separation:	5MHz
Modulation technology:	802.11n: OFDM (64QAM, 16QAM,QPSK,BPSK) 802.11a: OFDM (64QAM, 16QAM,QPSK,BPSK) 802.11ac: OFDM (256QAM,64QAM, 16QAM,QPSK,BPSK)
Antenna Type:	FPC antenna
Antenna gain:	3.42dBi (Note: Antenna information is provided by applicant, Testing lab is not responsible for the accuracy of the information.)
Battery:	N/A
Power supply:	DC 19V 3.42A
Adapter:	Model: E065-1R190342VU INPUT:AC 100-240V 50/60Hz 1.5A Output: DC 19.0V 3.42A

Remark: For more details, refer to the user's manual of the EUT.

2.2 Operation Channel List

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180MHz	38	5190MHz	40	5200MHz	42	5210MHz
44	5220MHz	46	5230MHz	48	5240MHz	/	/

2.3 Test channel frequency

Test channel	Frequency (MHz)		
	802.11a/802.11n20	802.11n40/ac40	802.11ac80
Lowest channel	5180MHz	5190MHz	5210MHz
Middle channel	5200MHz	/	/
Highest channel	5240MHz	5230MHz	/

2.4 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode
<i>Remark: During the test, the dutycycle >98%, the test voltage was tuned from 90% to 110% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.</i>	

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	Data rate
802.11a	54 Mbps
802.11n20	144.4Mbps
802.11n40	300 Mbps
802.11ac20	173.3 Mbps
802.11ac40	400Mbps
802.11ac80	866.7 Mbps

2.5 Description of Support Units

No.	Description	Manufacturer	Model	Serial Number
1	/	/	/	/
2	/	/	/	/
3	/	/	/	/

2.6 Environmental conditions

Temperature range:	23.7℃
Humidity range:	45%
Pressure range:	101.6kPa

2.7 Test voltage

Voltage Fluctuation test	Normal Voltage	+10% of Normal Voltage	-10% of Normal Voltage
DC Power	19V	20.9V	17.1V
RF Chip	3.3V	3.3V	3.3V

Note:

Voltage Variation (%) = (Output high or Low Voltage - Output Normal Voltage)/ Output Normal Voltage* 100

During the input supply voltage to the EUT from the power source is varied by +/- 10%, fluctuation of power supply to the RF circuit of EUT (excluding power source) is equal to or less than +/-1%, so only operated in normal voltage to test all regulations.



2.8 Test Facility

Test laboratory:	Shenzhen ETR Standard Technology Co., Ltd.
CNAS Registration No.:	L11864
Laboratory location:	103, Building A7 , Xinhe XinxingThird Industrial Area, Fuhai Road, Fuyong Street Bao'an District, Shenzhen

2.9 Additional Instructions

Test Software	DRTU.EXE
Power level setup	Default

3 Test Instruments list

Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	Spectrum analyzer	KEYSIGHT	N9020A	MY55370280	2026.03.05	2027.3.04
2	Power detector	MWRFTes	MW100-PSB	MW201020JYT	2026.3.05	2027.3.04
3	Signal generator	Agilent	N5182A	MY49060455	2026.3.05	2027.3.04
4	Oscilloscope	Tektronix	TDS3032B	B03245	2026.03.05	2027.3.04
5	DC Power Supply	LongWei	PS-305DF	170804961	2026.3.05	2027.3.04
6	Power Sensor	Keysight	U2021XA	MY54111006	2026.3.05	2027.3.04

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).
2. Power detector includes built-in attenuator
3. Test Instruments Calibration Information

Used	Calibration Company: Abbreviation	Full Name of-calibration company
☒	CCIC	CCIC(Shenzhen)Metrology & Testing service Co. Ltds
☒	SHITONG	GUANGDONG SHITONG MEASURED INSTRUMENTS SERVICE CO.,LTD.
Calibration Information (Article 24-2, Paragraph 4 of the Radio Act)		
☐	(a) Calibration, conducted by the National institute of information and communication Technology (NICT) or a designated calibration agency under Article 102-18-1 of the Radio-Act	
☐	(b) Calibration conducted based on the regulations of Article 135 -or-144 of the Measurement Act	
☒	(c) Calibration conducted in foreign countries, which is equivalent to calibration conducted by the NICT or a designated calibration agency under Article 102-18-1 -of-the Radio Act	
☐	(d) Calibration, etc. conducted by using measuring instruments and other facilities listed at the bottom of appended table 3 of the Radio Act, which is to have been calibrated as described in (a)through (c) above.	

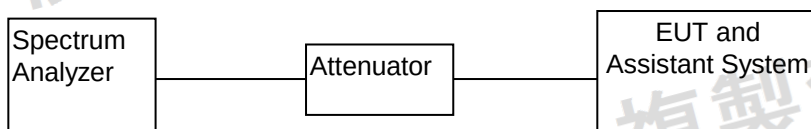
4 Test results and Measurement Data

4.1 Frequency Tolerance

4.1.1 Limit

Item	Limits
Frequency Tolerance	$\pm 20\text{ppm}$

4.1.2 Block diagram of test setup



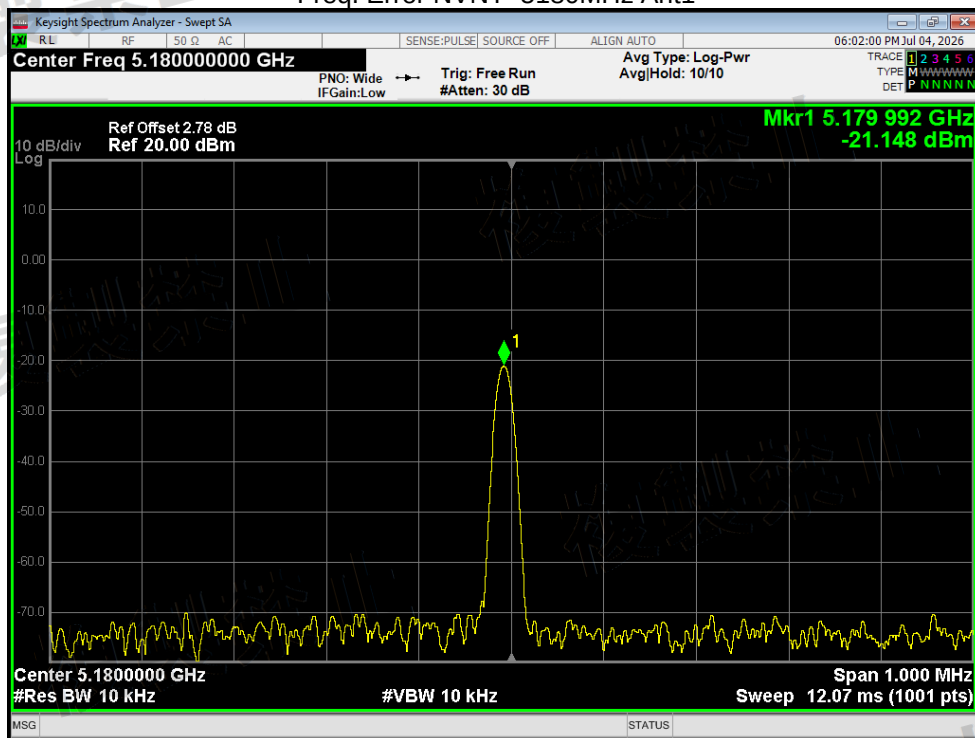
4.1.3 Test Procedure

- Frequency accuracy of instrument shall be less than 10% of limits tolerance (5ppm).
- Setting of SA is following as: RBW: 10kHz / VBW: 10kHz.
- The frequency tolerance test case is directly measured using spectrum analyzer. Then the frequency error formula is $(f-f_c)/f_c \times 10^6$ ppm and the limit is less than $\pm 20\text{ppm}$.

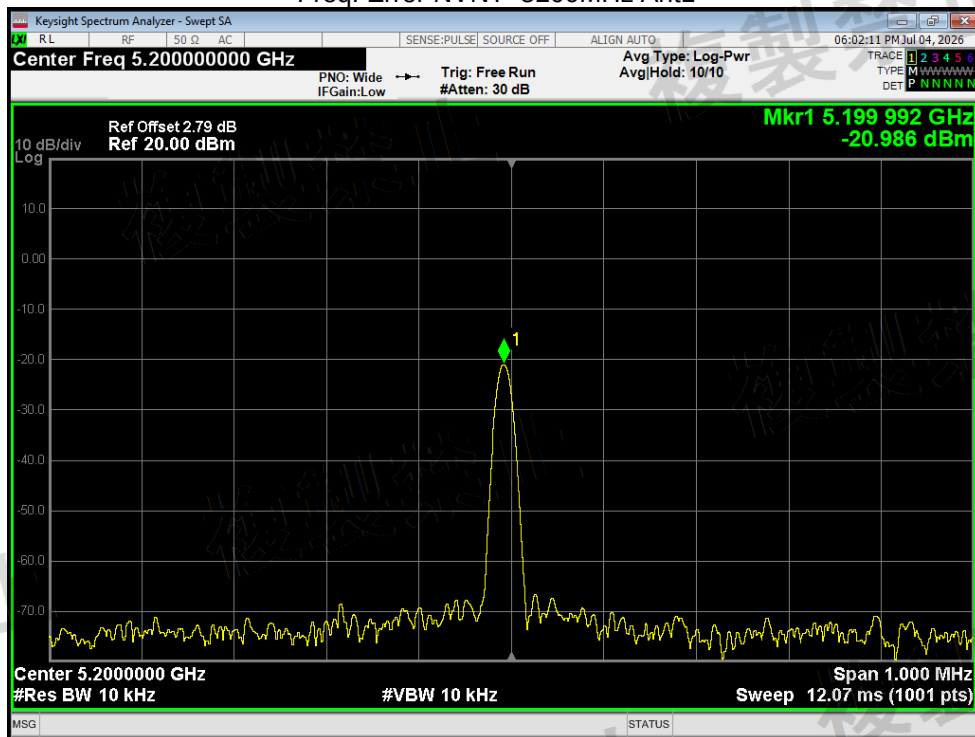
4.1.4 Test Result

Condition	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	5180	Ant1	5179.992	-6000	-1.54	50	Pass
NVNT	5200	Ant1	5199.992	-6000	-1.54	50	Pass
NVNT	5240	Ant1	5239.992	-7000	-1.53	50	Pass
NVNT	5190	Ant1	5189.993	-5000	-1.35	50	Pass
NVNT	5230	Ant1	5229.993	-6000	-1.34	50	Pass
NVNT	5210	Ant1	5209.993	-5000	-1.34	50	Pass

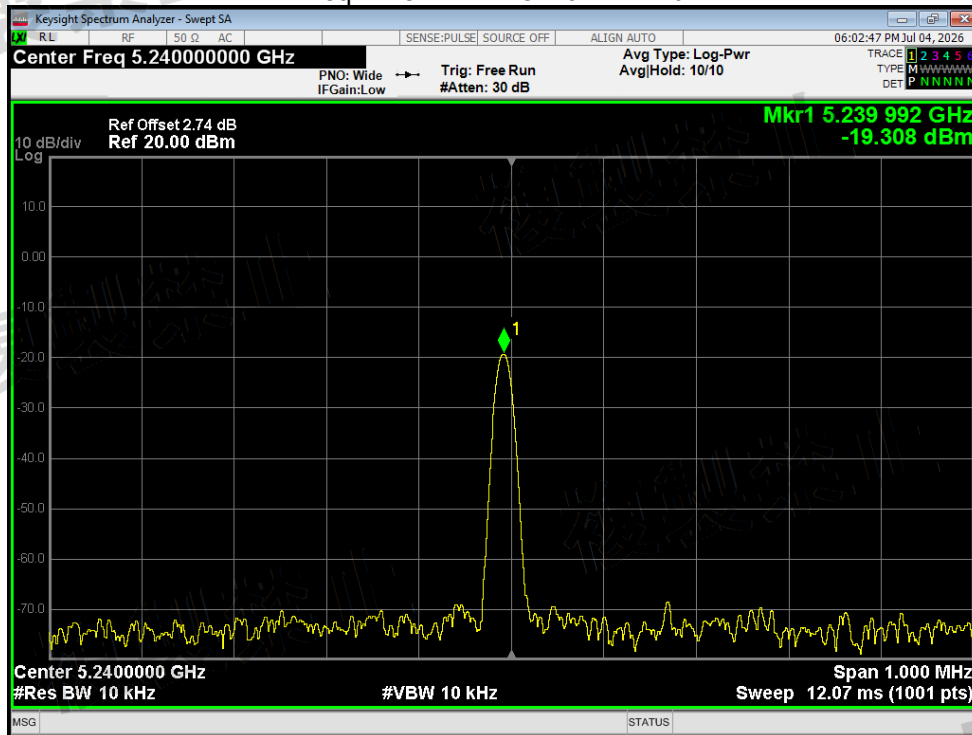
Freq. Error NVNT 5180MHz Ant1



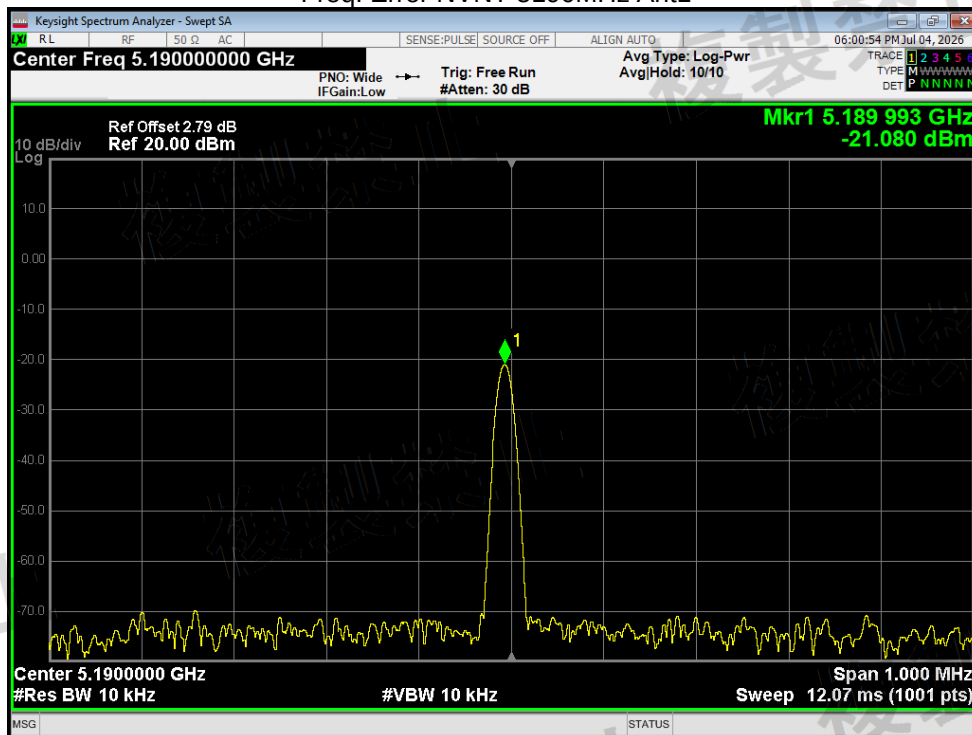
Freq. Error NVNT 5200MHz Ant1



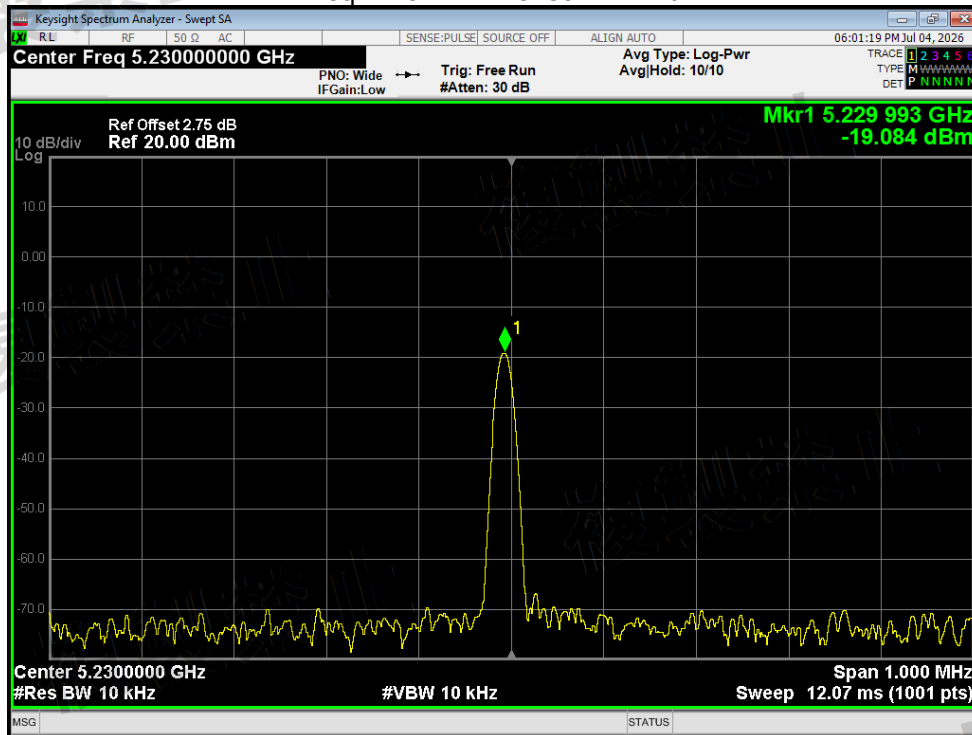
Freq. Error NVNT 5240MHz Ant1



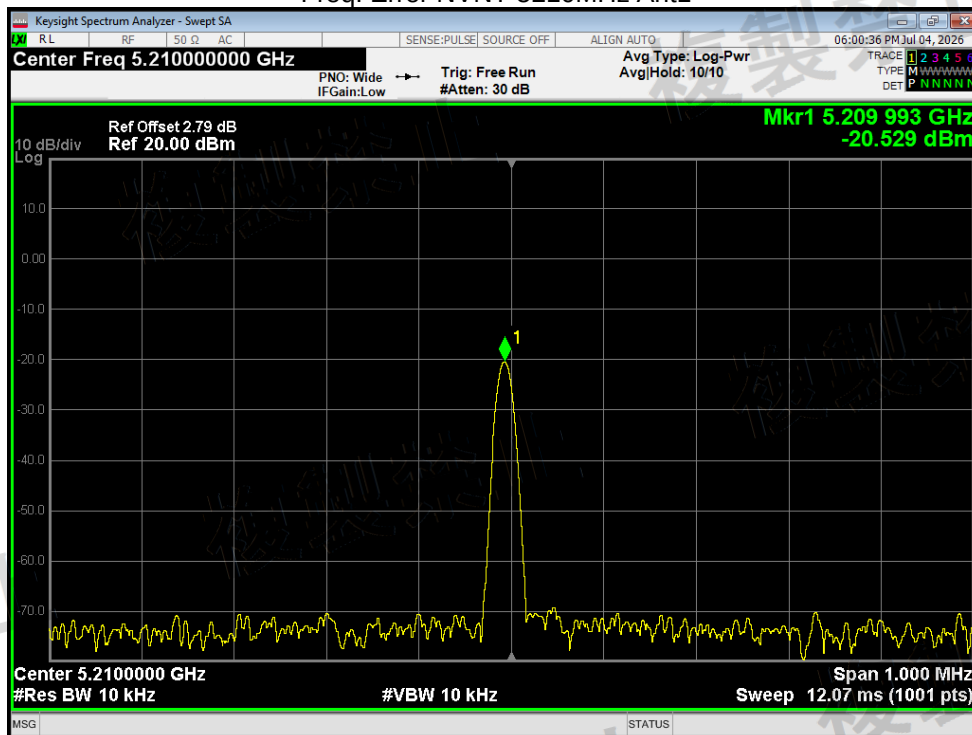
Freq. Error NVNT 5190MHz Ant1



Freq. Error NVNT 5230MHz Ant1



Freq. Error NVNT 5210MHz Ant1

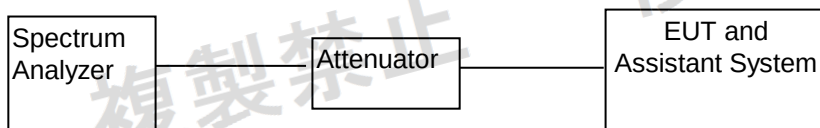


4.2 Occupied Frequency Bandwidth

4.2.1 Limit

5.2G band	5.3G band	5.6G band
20MHz system: OFDM: $\leq 20\text{MHz}$ Others: $\leq 18\text{MHz}$	20MHz system: OFDM: $\leq 20\text{MHz}$ Others: $\leq 18\text{MHz}$	20MHz system: OFDM: $\leq 20\text{MHz}$ Others: $\leq 18\text{MHz}$
40MHz system: OFDM: $\leq 40\text{MHz}$	40MHz system: OFDM: $\leq 40\text{MHz}$	40MHz system: OFDM: $\leq 40\text{MHz}$
80MHz system: OFDM: $\leq 80\text{MHz}$	80MHz system: OFDM: $\leq 80\text{MHz}$	80MHz system: OFDM: $\leq 80\text{MHz}$
160MHz system: OFDM: $\leq 160\text{MHz}$	160MHz system: OFDM: $\leq 160\text{MHz}$	160MHz system: OFDM: $\leq 160\text{MHz}$

4.2.2 Block diagram of test setup



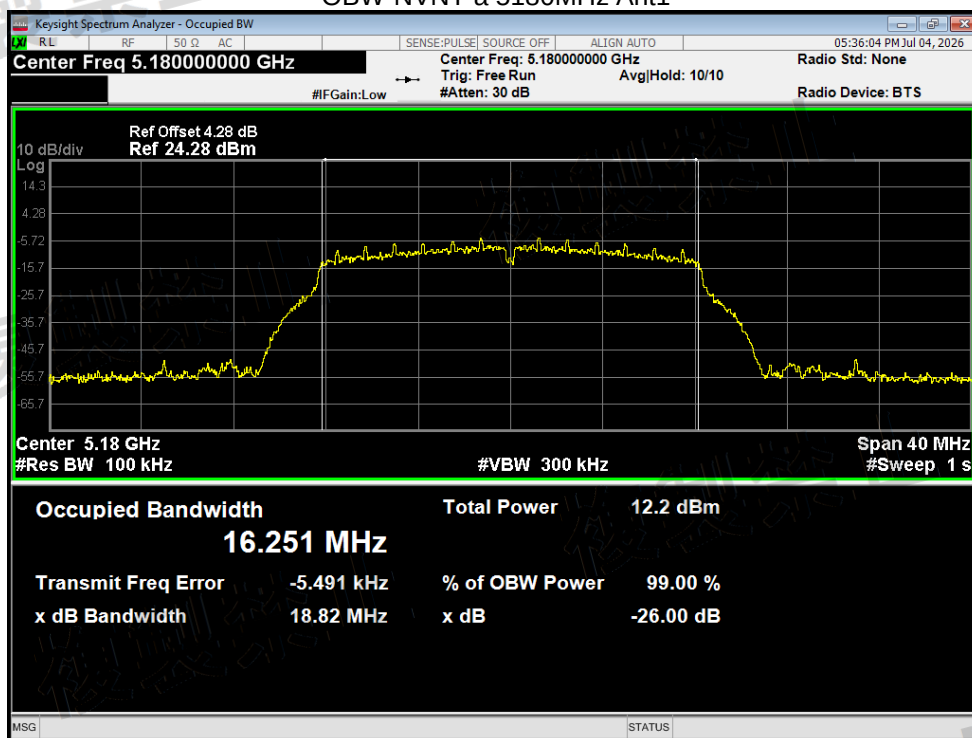
4.2.3 Test Procedures

- Setting of SA is following as:
 RBW: 300kHz, VBW: 300kHz
 Sweep Mode: Continuous sweep
 Detect mode: Positive peak
 Trace mode: Max hold.
- EUT have transmitted each modulation signal and fixed channelize (For DSSS or OFDM Device).SA set to 99% of occupied bandwidth to measure occupied bandwidth.

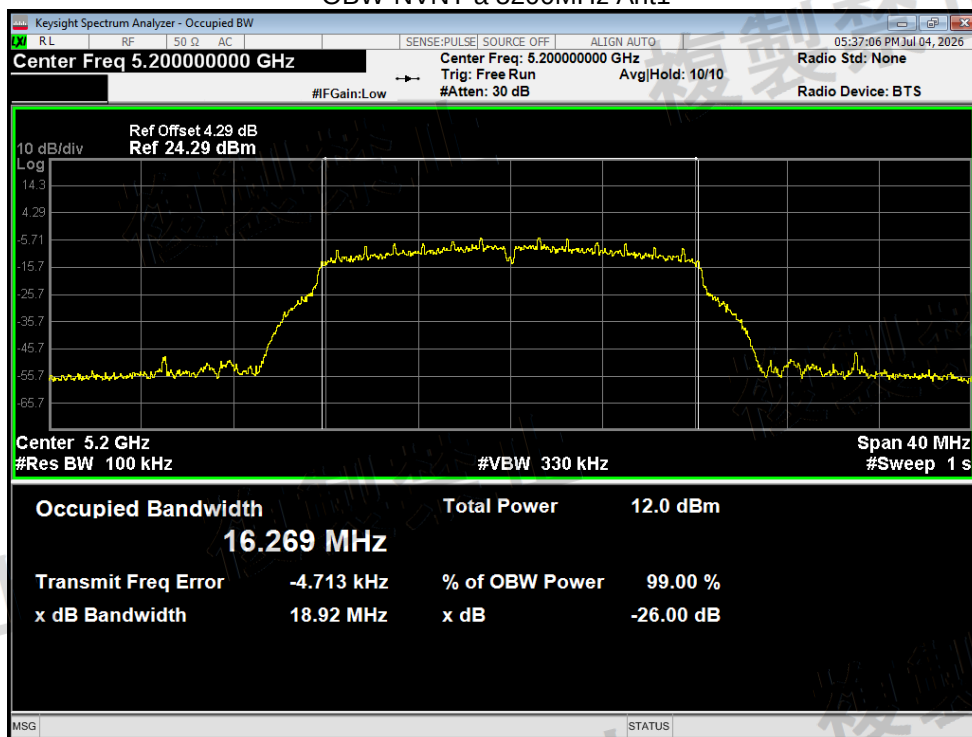
4.2.4 Test Result

Mode	Condition	Frequency MHz	99% Bandwidth (MHz)	Limit (MHz)
802.11a	nominal	5180	16.251	<=20MHz
		5200	16.269	<=20MHz
		5240	16.257	<=20MHz
802.11n20	nominal	5180	17.426	<=20MHz
		5200	17.425	<=20MHz
		5240	17.422	<=20MHz
802.11n40	nominal	5190	35.771	<=40MHz
		5230	35.729	<=40MHz
802.11ac20	nominal	5180	17.413	<=20MHz
		5200	17.425	<=20MHz
		5240	17.414	<=20MHz
802.11ac40	nominal	5190	35.771	<=40MHz
		5230	35.733	<=40MHz
802.11ac80	nominal	5210	75.446	<=80MHz
Conclusion: PASS				

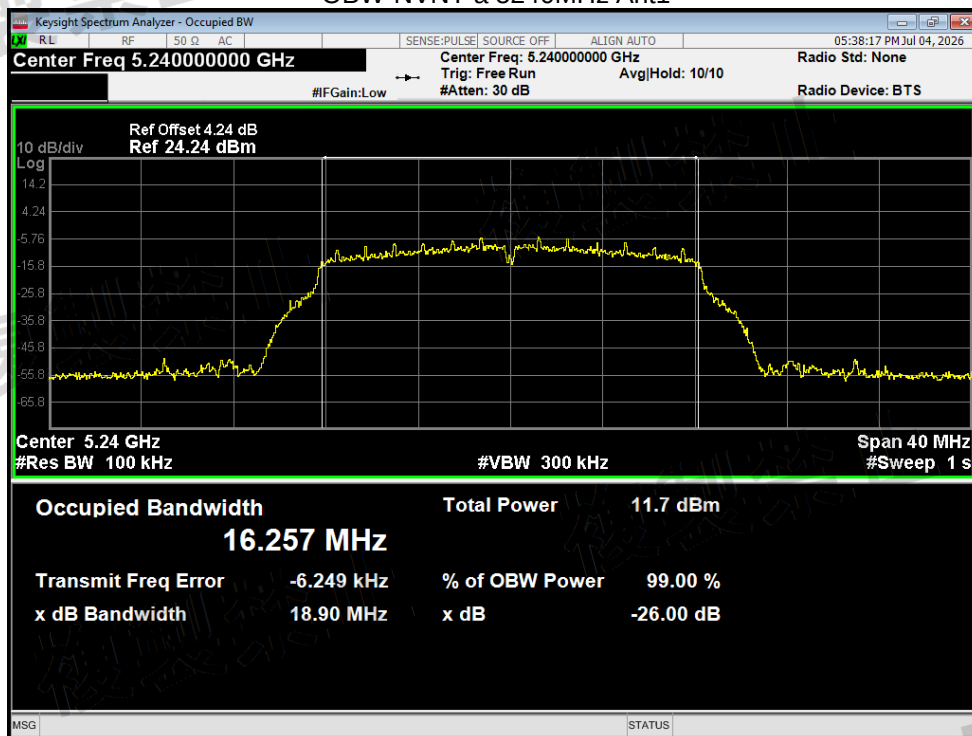
OBW NVNT a 5180MHz Ant1



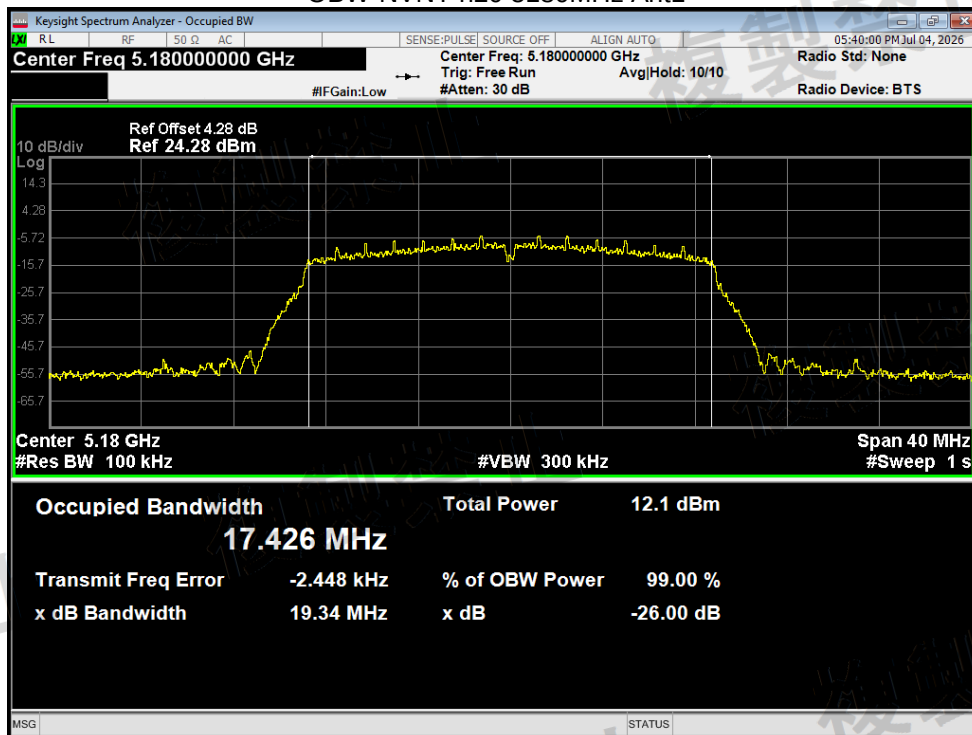
OBW NVNT a 5200MHz Ant1



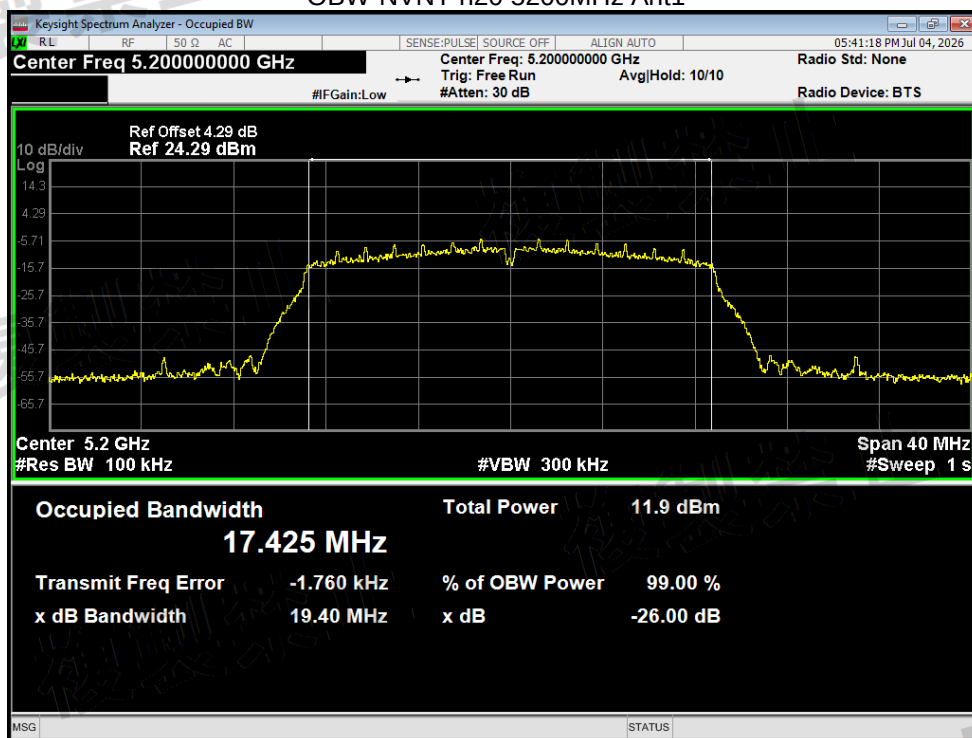
OBW NVNT a 5240MHz Ant1



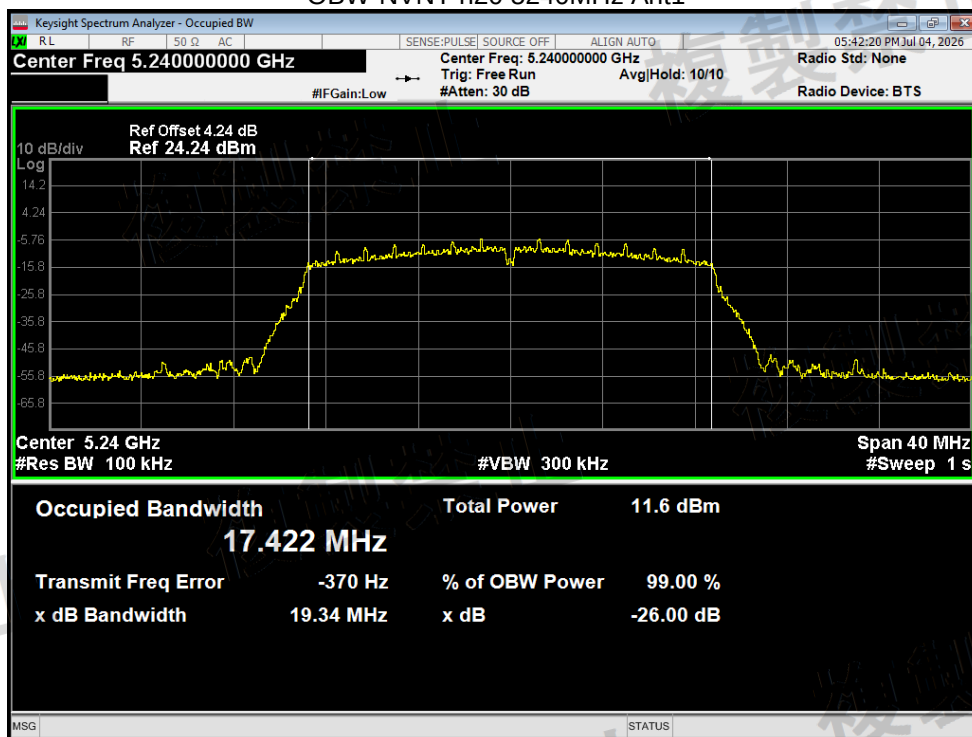
OBW NVNT n20 5180MHz Ant1



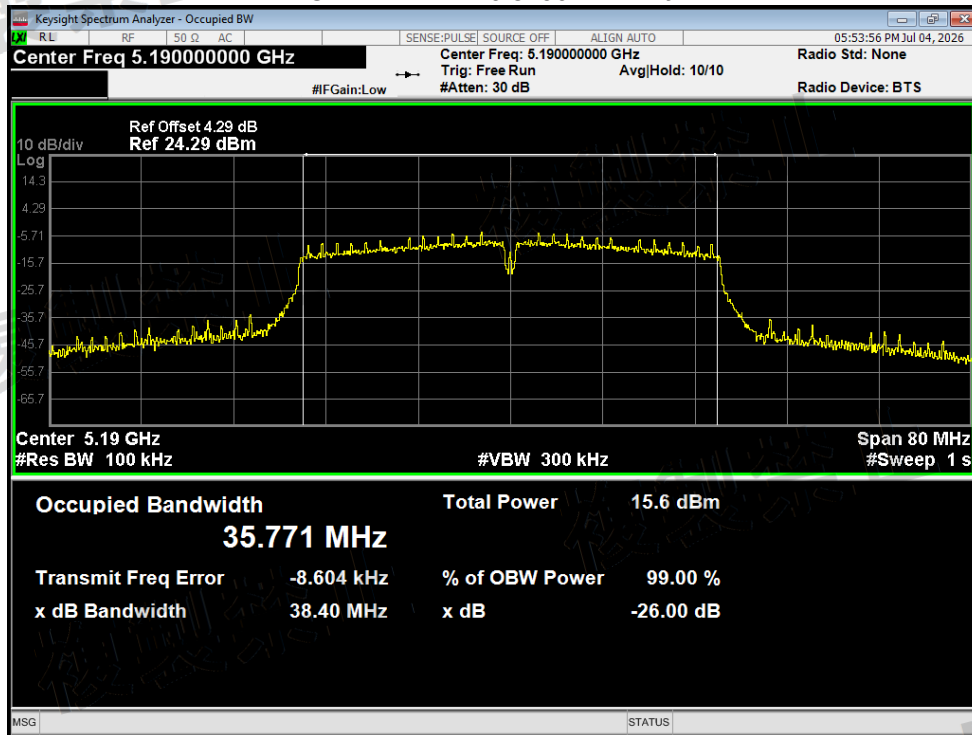
OBW NVNT n20 5200MHz Ant1



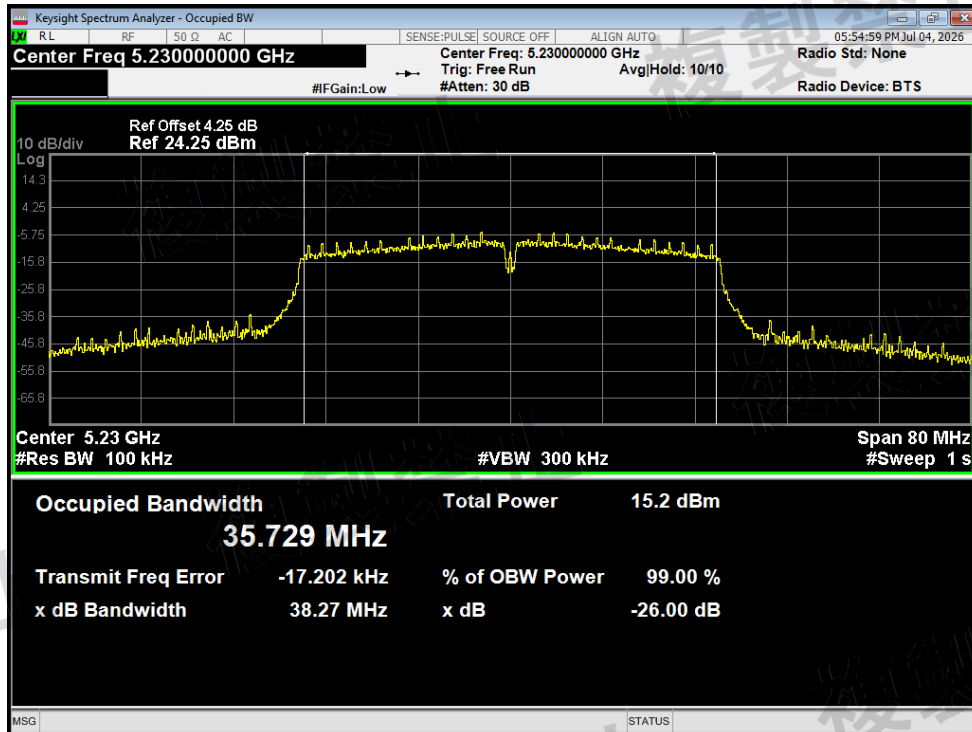
OBW NVNT n20 5240MHz Ant1



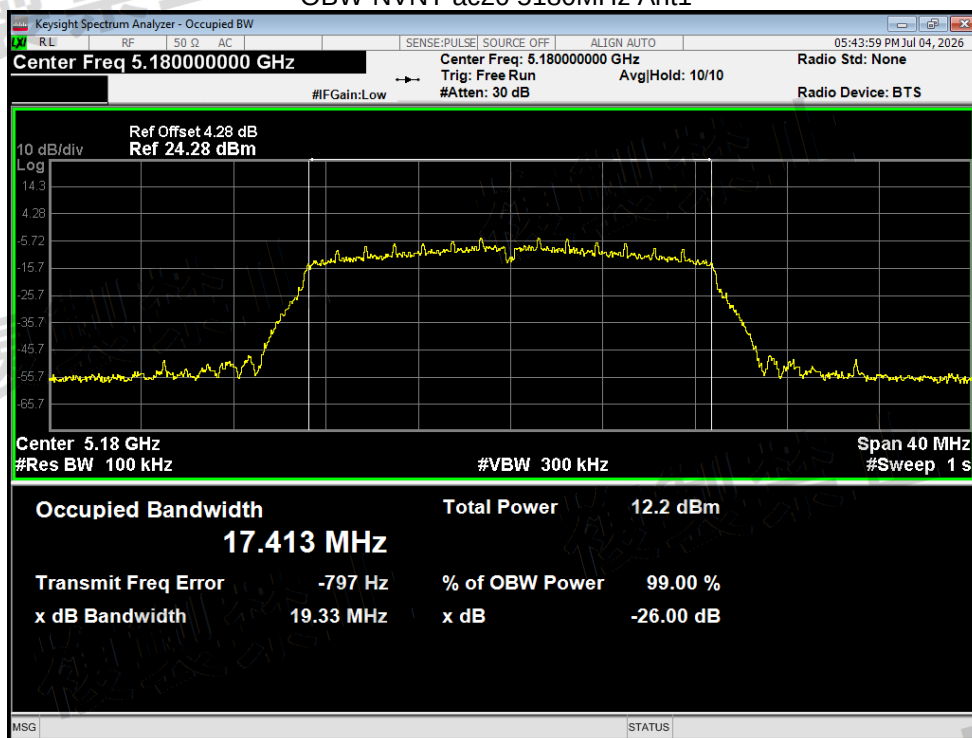
OBW NVNT n40 5190MHz Ant1



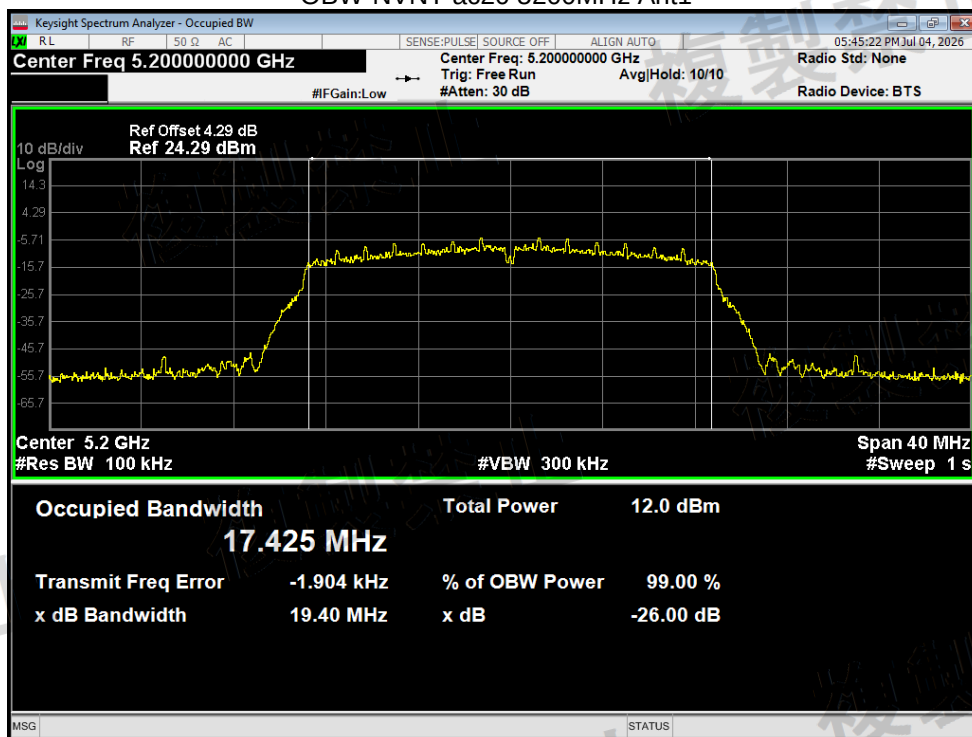
OBW NVNT n40 5230MHz Ant1



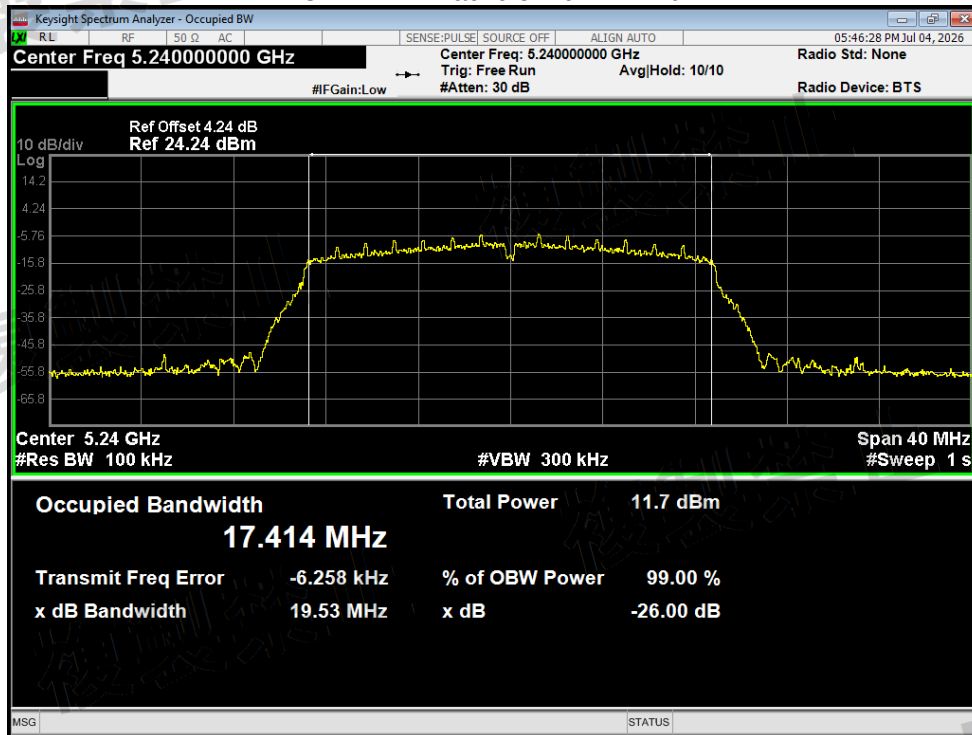
OBW NVNT ac20 5180MHz Ant1



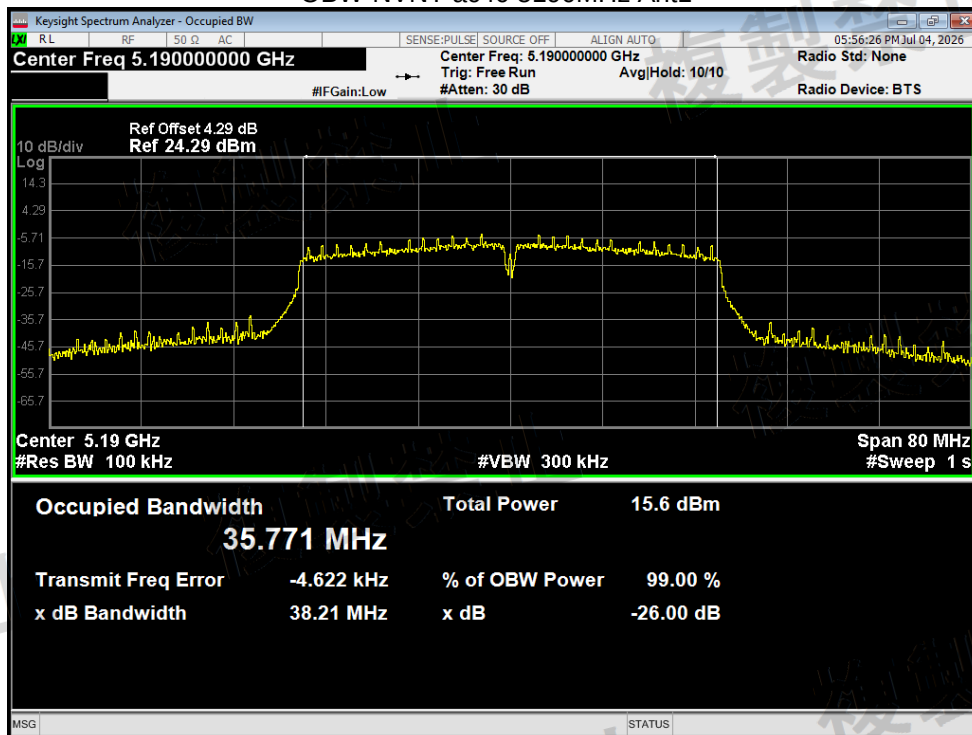
OBW NVNT ac20 5200MHz Ant1



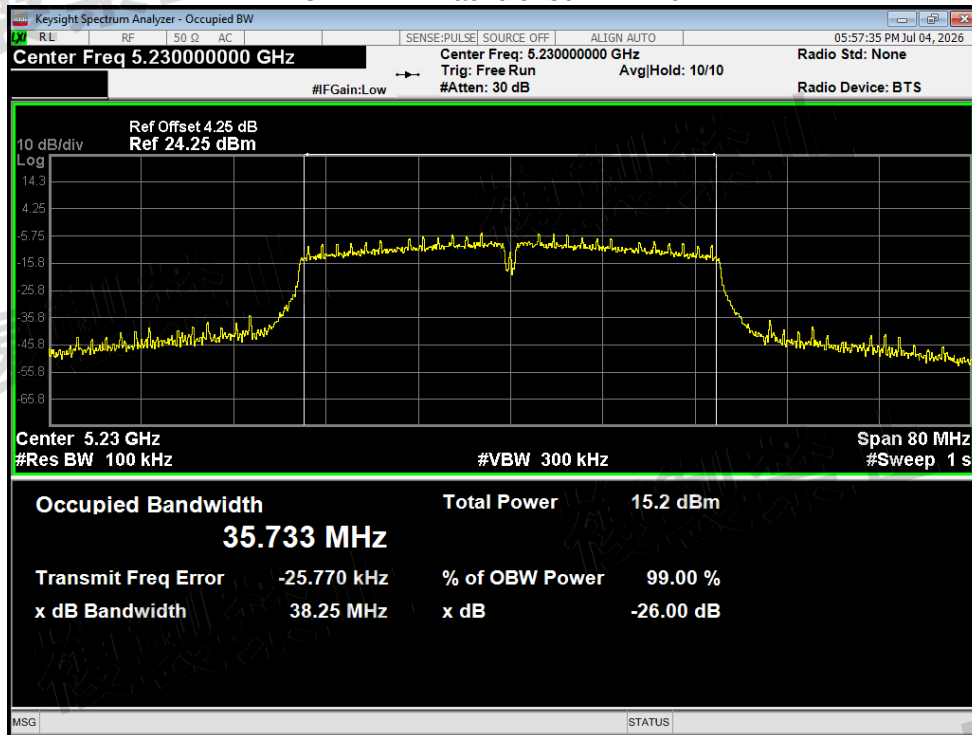
OBW NVNT ac20 5240MHz Ant1



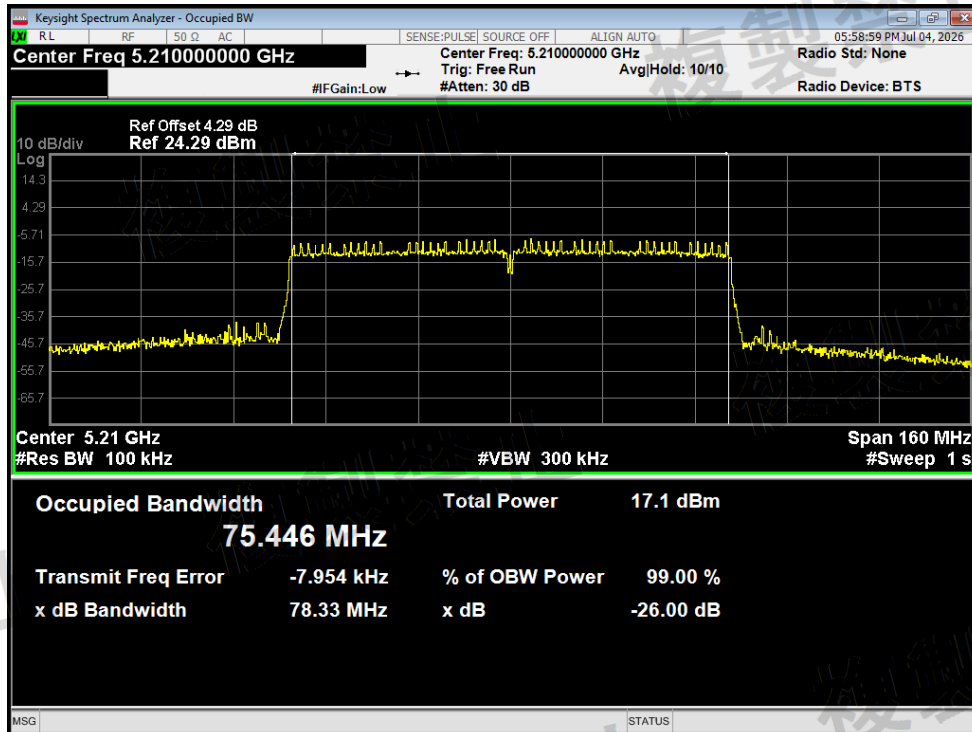
OBW NVNT ac40 5190MHz Ant1



OBW NVNT ac40 5230MHz Ant1



OBW NVNT ac80 5210MHz Ant1

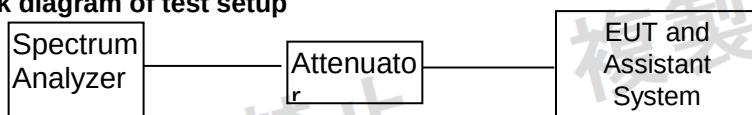


4.3 Transmitter Spurious Emissions (Conducted)

4.3.1 Limits

W52			
20MHz system		40MHz system	80MHz system
OBW : 18MHz or less	OBW : 18 - 20 MHz		
5,142 MHz or less : 2.5 μ W/MHz	5,142 MHz or less : 2.5 μ W/MHz	5,141.6 MHz or less : 2.5 μ W/MHz	5,123.2 MHz or less : 2.5 μ W/MHz
5,142 - 5,150 MHz : 15 μ W/MHz	5,142 - 5,150 MHz : 15 μ W/MHz	5,141.6 - 5,150 MHz : 15 μ W/MHz	5,123.2 - 5,150 MHz : 15 μ W/MHz
5,250 - 5,251 MHz : $10^{1-(f-5250)/10}$ mW/MHz	5,250.2 - 5,251 MHz : $10^{1-(f-5250)/10}$ mW/MHz	5,250 - 5,251 MHz : $10^{-(f-5250)+\log(1/2)}$ mW/MHz	5,250 - 5,251 MHz : $10^{-(f-5250)+\log(1/4)}$ mW/MHz
5,251 - 5,260 MHz : $10^{1-(f-5250)/10}$ mW/MHz	5,251 - 5,260 MHz : $10^{1-(f-5250)/10}$ mW/MHz	5,251 - 5,270 MHz : $10^{-(f-5250)/10}$ mW/MHz	5,251 - 5,290 MHz : $10^{-(f-5250)/10}$ mW/MHz
5,260 - 5,266.7 MHz : $10^{1-(f-5260)/10}$ mW/MHz	5,260 - 5,266.7 MHz : $10^{1-(f-5260)/10}$ mW/MHz	5,270 - 5,278.4 MHz : $10^{-(f-5270)/10}$ mW/MHz	5,290 - 5,296.7 MHz : $10^{-(f-5290)/10}$ mW/MHz
5,266.7 MHz or more : 2.5 μ W/MHz	5,266.7 MHz or more : 2.5 μ W/MHz	5,278.4 MHz or more : 2.5 μ W/MHz	5,296.7 MHz or more : 2.5 μ W/MHz
f = MHz, Difference from 5240 (MHz)	f = MHz, Difference from 5240 (MHz)	f = MHz, Difference from 5230 (MHz)	f = MHz, Difference from 5210 (MHz)

4.3.2 Block diagram of test setup



4.3.3 Test Procedures

- 1) EUT have transmitted the maximum power and fixed channelize.
- 2) Setting of SA is following as:
RBW: 1MHz / **VBW:** 1MHz
Sweep time: Auto /
Sweep Mode: Continuous sweep
Detect mode: Positive peak
Trace mode: Max hold.
- 3) Table No.45 related to Article 2 Paragraph 1 of Item 19-3 of Ordinance Concerning Technical Regulations Conformity Certification etc. of Specified Radio Equipment.

4.3.4 Test Result.

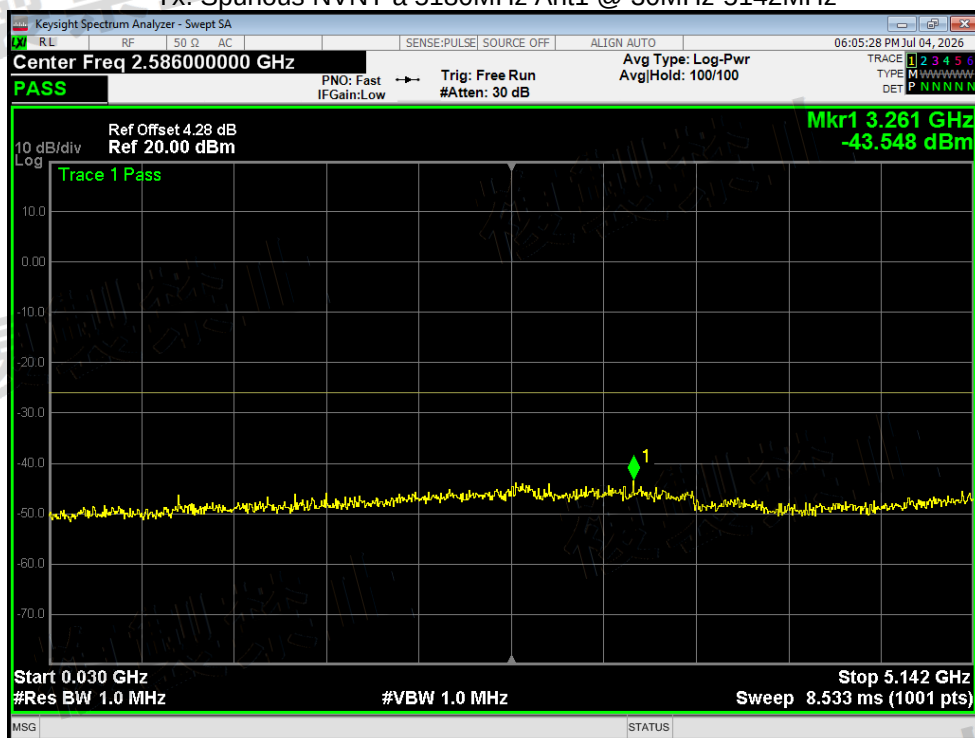
Condition	Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Value (dBm)	EIRP MAX Value (dBm)	EIRP MAX Value (μW/MHz)	Limit (μW/MHz)	Verdict
NVNT	a	5180	30-5142	3260.784	-43.548	-40.128	0.097	2.5	Pass
NVNT	a	5180	5142-5150	5148.568	-46.716	-43.296	0.047	15	Pass
NVNT	a	5180	5250-5251	5250.657	-46.592	-43.172	0.048	1000	Pass
NVNT	a	5180	5251-5260	5258.992	-46.11	-42.69	0.054	100	Pass
NVNT	a	5180	5260-5266.7	5263.645	-46.805	-43.385	0.046	15	Pass
NVNT	a	5180	5266.7-26000	25087.735	-32.643	-29.223	1.196	2.5	Pass
NVNT	a	5200	30-5142	2770.032	-43.536	-40.116	0.097	2.5	Pass
NVNT	a	5200	5142-5150	5145.656	-46.421	-43.001	0.050	15	Pass
NVNT	a	5200	5250-5251	5250.609	-46.633	-43.213	0.048	1000	Pass
NVNT	a	5200	5251-5260	5259.442	-47.547	-44.127	0.039	100	Pass
NVNT	a	5200	5260-5266.7	5265.782	-46.86	-43.44	0.045	15	Pass
NVNT	a	5200	5266.7-26000	24507.202	-32.824	-29.404	1.147	2.5	Pass
NVNT	a	5240	30-5142	2601.336	-43.79	-40.37	0.092	2.5	Pass
NVNT	a	5240	5142-5150	5142.776	-47.038	-43.618	0.043	15	Pass
NVNT	a	5240	5250-5251	5250.7	-45.944	-42.524	0.056	1000	Pass
NVNT	a	5240	5251-5260	5256.157	-46.16	-42.74	0.053	100	Pass
NVNT	a	5240	5260-5266.7	5261.307	-46.837	-43.417	0.046	15	Pass
NVNT	a	5240	5266.7-26000	24527.936	-31.635	-28.215	1.508	2.5	Pass
NVNT	n20	5180	30-5142	2621.784	-43.919	-40.499	0.089	2.5	Pass
NVNT	n20	5180	5142-5150	5146.64	-46.592	-43.172	0.048	15	Pass
NVNT	n20	5180	5250-5251	5250.84	-46.723	-43.303	0.047	1000	Pass
NVNT	n20	5180	5251-5260	5258.83	-46.746	-43.326	0.046	100	Pass
NVNT	n20	5180	5260-5266.7	5264.114	-46.829	-43.409	0.046	15	Pass
NVNT	n20	5180	5266.7-26000	25108.468	-31.328	-27.908	1.619	2.5	Pass
NVNT	n20	5200	30-5142	3158.544	-43.543	-40.123	0.097	2.5	Pass
NVNT	n20	5200	5142-5150	5147.592	-46.452	-43.032	0.050	15	Pass
NVNT	n20	5200	5250-5251	5250.526	-46.235	-42.815	0.052	1000	Pass
NVNT	n20	5200	5251-5260	5257.129	-47.23	-43.81	0.042	100	Pass
NVNT	n20	5200	5260-5266.7	5265.601	-46.398	-42.978	0.050	15	Pass
NVNT	n20	5200	5266.7-26000	24569.402	-32.555	-29.135	1.220	2.5	Pass
NVNT	n20	5240	30-5142	2637.12	-43.525	-40.105	0.098	2.5	Pass
NVNT	n20	5240	5142-5150	5147.968	-47.019	-43.599	0.044	15	Pass
NVNT	n20	5240	5250-5251	5250.342	-46.384	-42.964	0.051	1000	Pass
NVNT	n20	5240	5251-5260	5253.349	-46.983	-43.563	0.044	100	Pass
NVNT	n20	5240	5260-5266.7	5262.425	-45.813	-42.393	0.058	15	Pass
NVNT	n20	5240	5266.7-26000	24507.202	-32.505	-29.085	1.235	2.5	Pass
NVNT	n40	5190	30-5141.6	2631.804	-42.495	-39.075	0.124	2.5	Pass
NVNT	n40	5190	5141.6-5150	5147.648	-46.554	-43.134	0.049	15	Pass
NVNT	n40	5190	5250-5251	5250.37	-46.874	-43.454	0.045	1000	Pass
NVNT	n40	5190	5251-5270	5269.867	-44.977	-41.557	0.070	100	Pass
NVNT	n40	5190	5270-5278.4	5276.006	-45.486	-42.066	0.062	15	Pass
NVNT	n40	5190	5278.4-26000	25067.528	-31.352	-27.932	1.610	2.5	Pass
NVNT	n40	5230	30-5141.6	3270.754	-42.954	-39.534	0.111	2.5	Pass



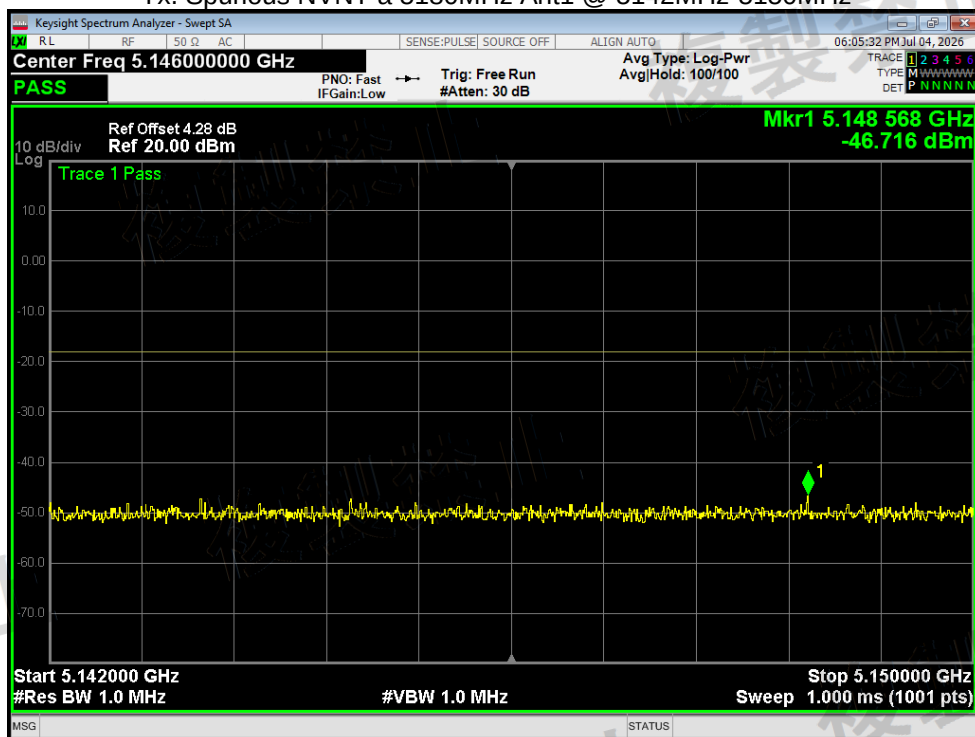
NVNT	n40	5230	5141.6-5150	5145.279	-46.698	-43.278	0.047	15	Pass
NVNT	n40	5230	5250-5251	5250.335	-46.06	-42.64	0.054	1000	Pass
NVNT	n40	5230	5251-5270	5258.391	-46.508	-43.088	0.049	100	Pass
NVNT	n40	5230	5270-5278.4	5274.771	-45.814	-42.394	0.058	15	Pass
NVNT	n40	5230	5278.4-26000	25067.528	-31.465	-28.045	1.569	2.5	Pass
NVNT	ac20	5180	30-5142	2657.568	-44.192	-40.772	0.084	2.5	Pass
NVNT	ac20	5180	5142-5150	5149.584	-46.766	-43.346	0.046	15	Pass
NVNT	ac20	5180	5250-5251	5250.356	-46.183	-42.763	0.053	1000	Pass
NVNT	ac20	5180	5251-5260	5256.292	-46.328	-42.908	0.051	100	Pass
NVNT	ac20	5180	5260-5266.7	5263.987	-46.791	-43.371	0.046	15	Pass
NVNT	ac20	5180	5266.7-26000	24631.602	-32.573	-29.153	1.215	2.5	Pass
NVNT	ac20	5200	30-5142	3178.992	-42.713	-39.293	0.118	2.5	Pass
NVNT	ac20	5200	5142-5150	5146.04	-46.272	-42.852	0.052	15	Pass
NVNT	ac20	5200	5250-5251	5250.181	-45.977	-42.557	0.056	1000	Pass
NVNT	ac20	5200	5251-5260	5258.155	-46.095	-42.675	0.054	100	Pass
NVNT	ac20	5200	5260-5266.7	5262.003	-46.465	-43.045	0.050	15	Pass
NVNT	ac20	5200	5266.7-26000	24673.069	-31.85	-28.43	1.435	2.5	Pass
NVNT	ac20	5240	30-5142	3127.872	-41.57	-38.15	0.153	2.5	Pass
NVNT	ac20	5240	5142-5150	5147.288	-46.668	-43.248	0.047	15	Pass
NVNT	ac20	5240	5250-5251	5250.401	-46.313	-42.893	0.051	1000	Pass
NVNT	ac20	5240	5251-5260	5253.943	-46.611	-43.191	0.048	100	Pass
NVNT	ac20	5240	5260-5266.7	5262.647	-46.364	-42.944	0.051	15	Pass
NVNT	ac20	5240	5266.7-26000	24527.936	-31.752	-28.332	1.468	2.5	Pass
NVNT	ac40	5190	30-5141.6	3265.643	-43.639	-40.219	0.095	2.5	Pass
NVNT	ac40	5190	5141.6-5150	5142.994	-46.574	-43.154	0.048	15	Pass
NVNT	ac40	5190	5250-5251	5250.256	-45.727	-42.307	0.059	1000	Pass
NVNT	ac40	5190	5251-5270	5255.655	-46.478	-43.058	0.049	100	Pass
NVNT	ac40	5190	5270-5278.4	5271.781	-46.358	-42.938	0.051	15	Pass
NVNT	ac40	5190	5278.4-26000	24611.653	-31.594	-28.174	1.523	2.5	Pass
NVNT	ac40	5230	30-5141.6	3270.754	-43.485	-40.065	0.099	2.5	Pass
NVNT	ac40	5230	5141.6-5150	5145.733	-46.377	-42.957	0.051	15	Pass
NVNT	ac40	5230	5250-5251	5250.922	-46.254	-42.834	0.052	1000	Pass
NVNT	ac40	5230	5251-5270	5258.258	-45.93	-42.51	0.056	100	Pass
NVNT	ac40	5230	5270-5278.4	5270.319	-46.408	-42.988	0.050	15	Pass
NVNT	ac40	5230	5278.4-26000	24549.488	-32.067	-28.647	1.366	2.5	Pass
NVNT	ac80	5210	30-5123.2	2586.786	-43.118	-39.698	0.107	2.5	Pass
NVNT	ac80	5210	5123.2-5150	5145.524	-45.922	-42.502	0.056	15	Pass
NVNT	ac80	5210	5250-5251	5250.779	-46.23	-42.81	0.052	1000	Pass
NVNT	ac80	5210	5251-5290	5279.314	-46.107	-42.687	0.054	100	Pass
NVNT	ac80	5210	5290-5296.7	5294.449	-45.927	-42.507	0.056	15	Pass
NVNT	ac80	5210	5296.7-26000	25047.648	-31.354	-27.934	1.609	2.5	Pass

Remark: EIRP MAX Value (dBm)= Max Value (dBm)+ Antenna Gain(dBi)

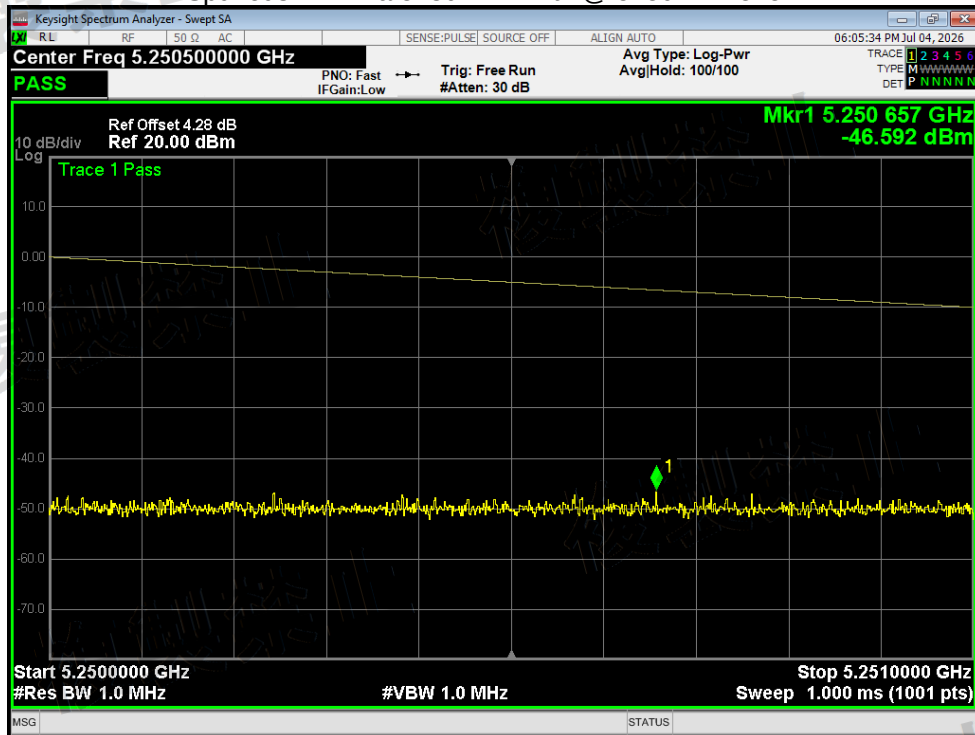
Tx. Spurious NVNT a 5180MHz Ant1 @ 30MHz-5142MHz



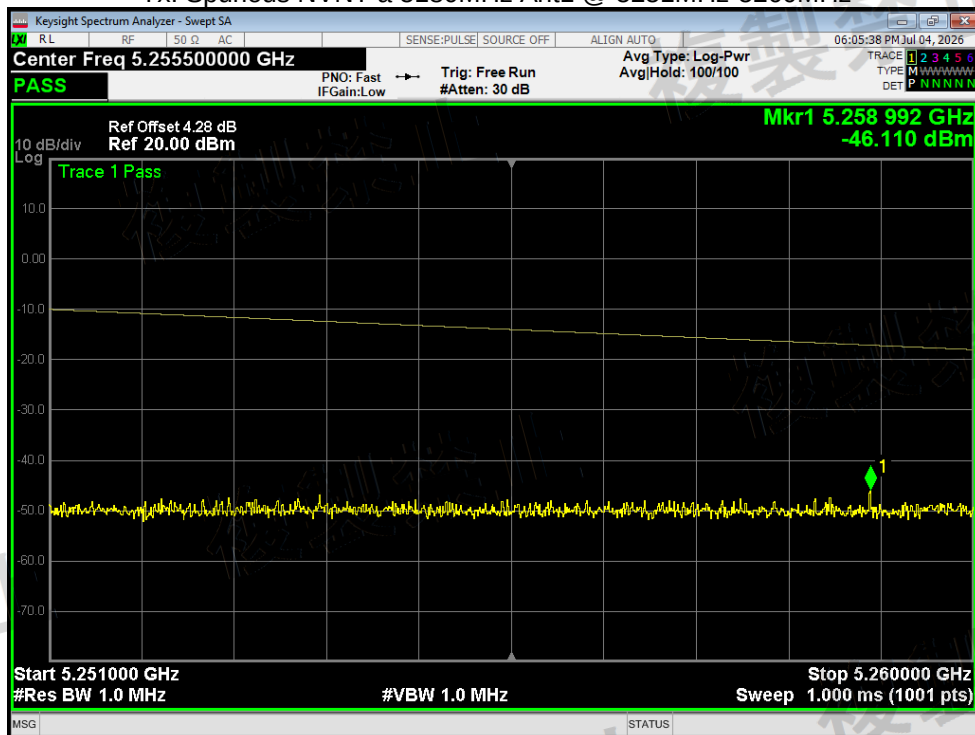
Tx. Spurious NVNT a 5180MHz Ant1 @ 5142MHz-5150MHz



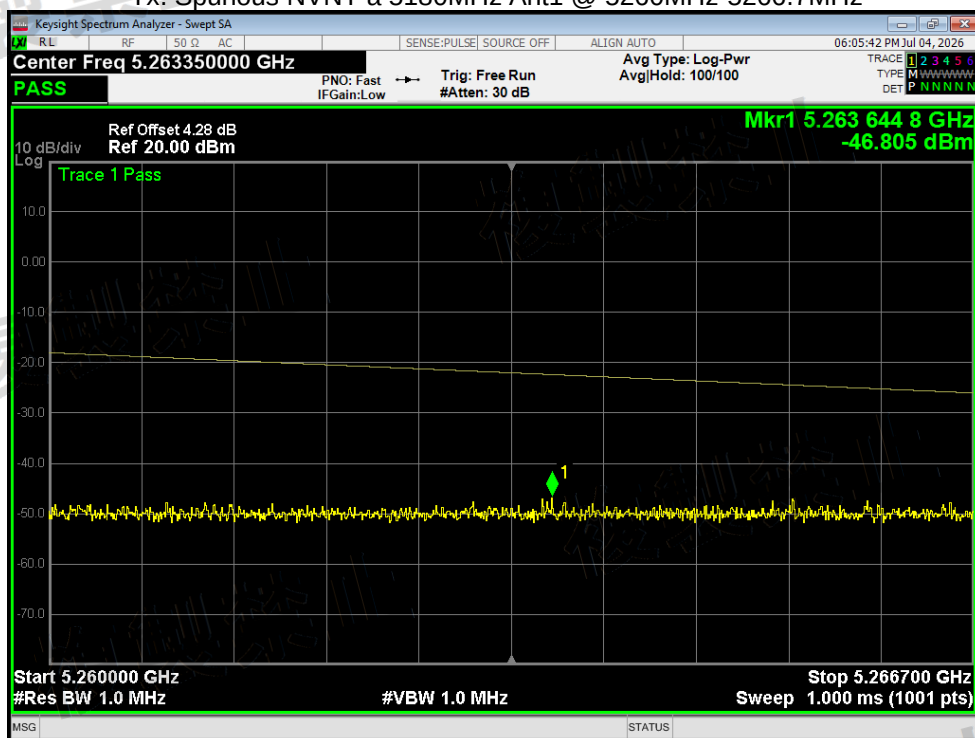
Tx. Spurious NVNT a 5180MHz Ant1 @ 5250MHz-5251MHz



Tx. Spurious NVNT a 5180MHz Ant1 @ 5251MHz-5260MHz



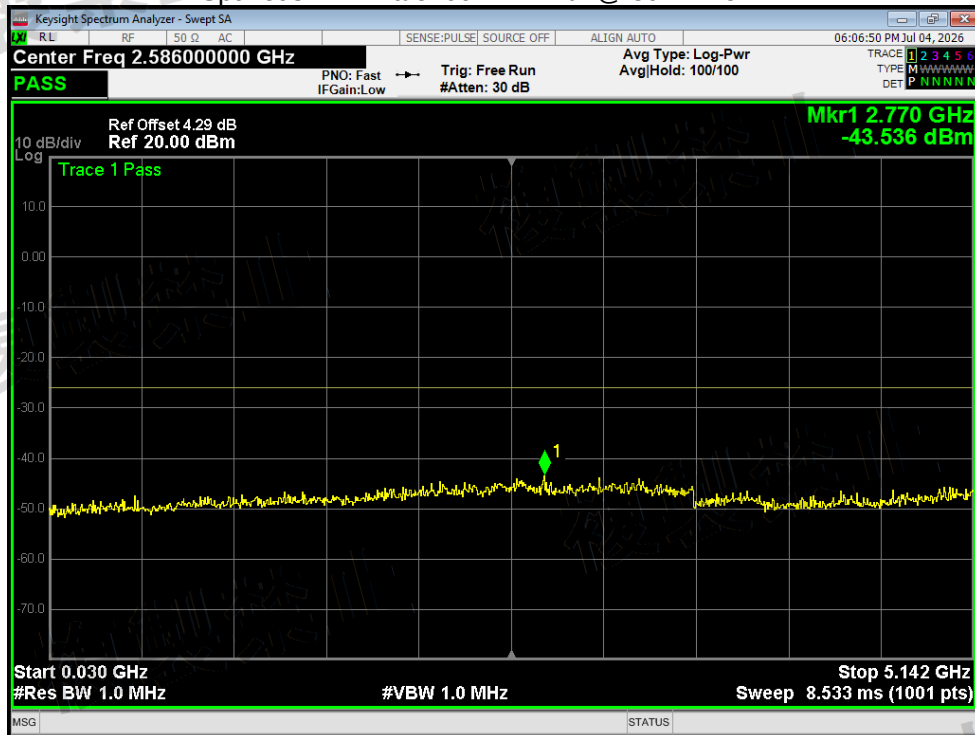
Tx. Spurious NVNT a 5180MHz Ant1 @ 5260MHz-5266.7MHz



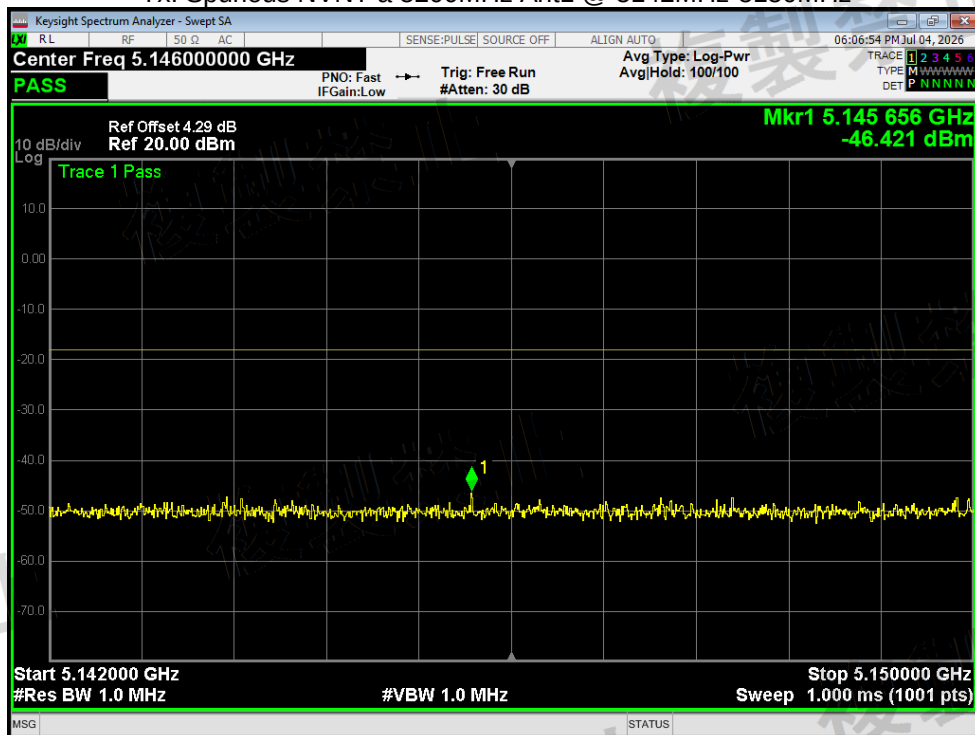
Tx. Spurious NVNT a 5180MHz Ant1 @ 5266.7MHz-26000MHz



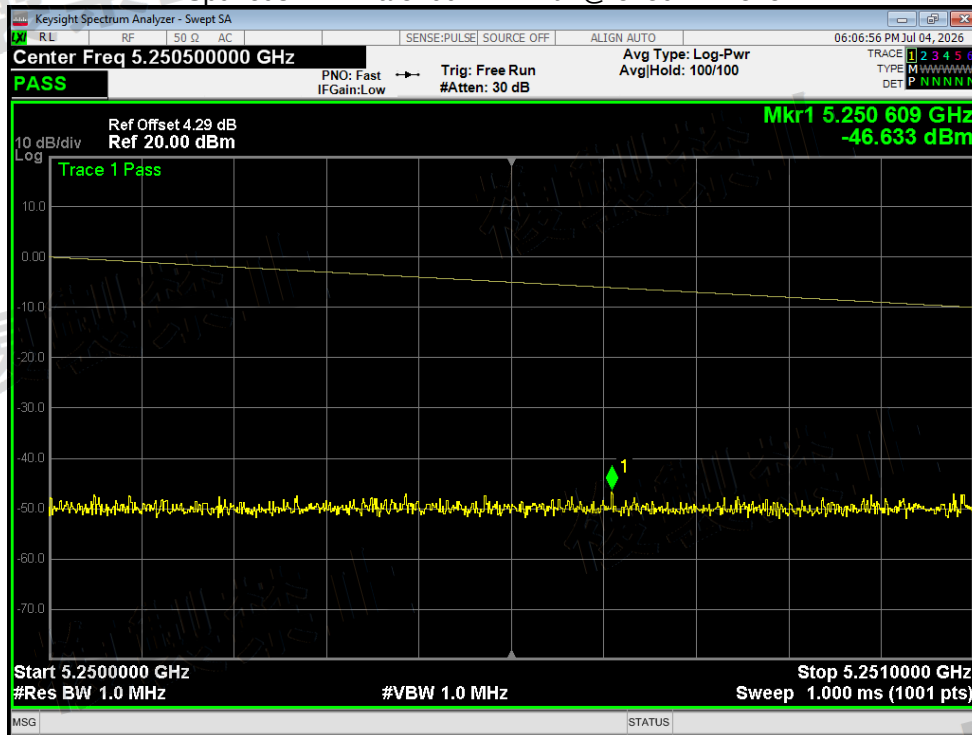
Tx. Spurious NVNT a 5200MHz Ant1 @ 30MHz-5142MHz



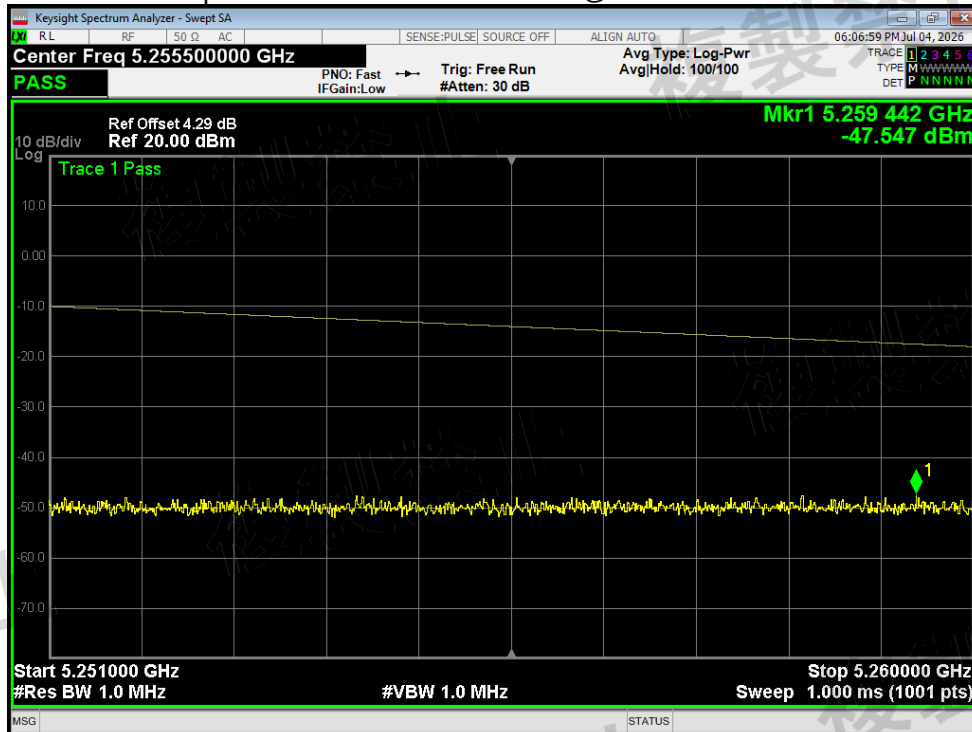
Tx. Spurious NVNT a 5200MHz Ant1 @ 5142MHz-5150MHz



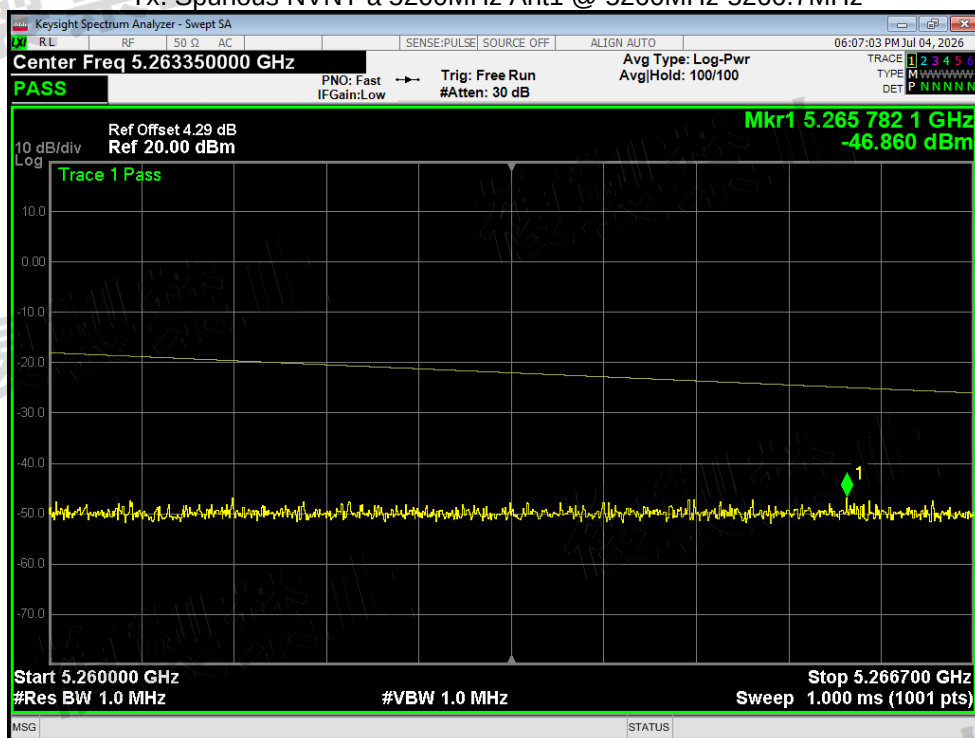
Tx. Spurious NVNT a 5200MHz Ant1 @ 5250MHz-5251MHz



Tx. Spurious NVNT a 5200MHz Ant1 @ 5251MHz-5260MHz



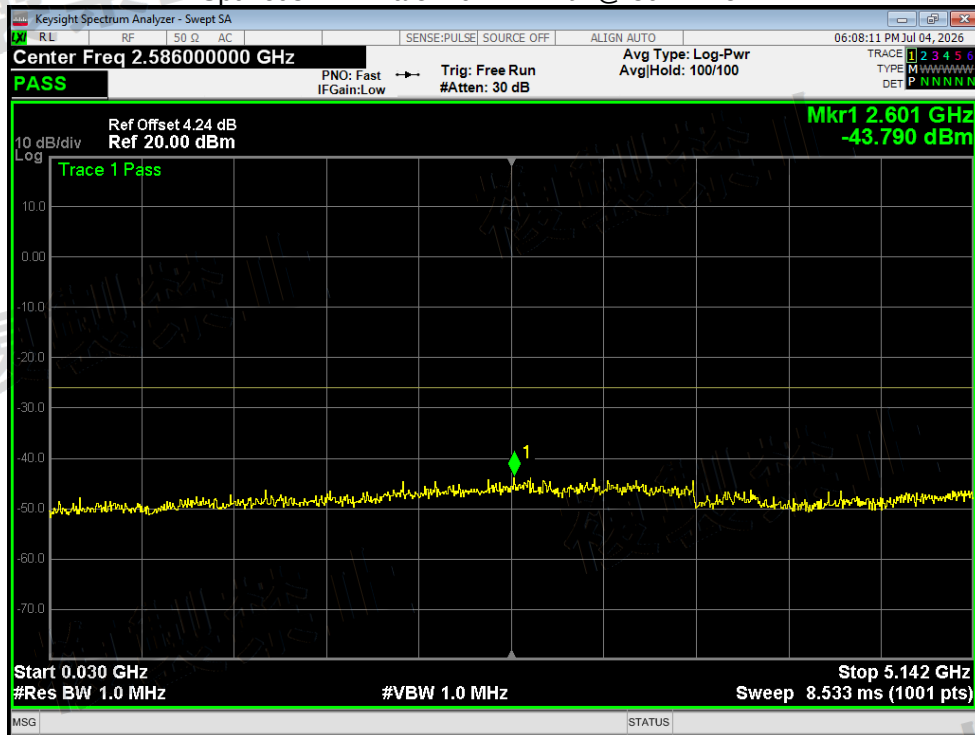
Tx. Spurious NVNT a 5200MHz Ant1 @ 5260MHz-5266.7MHz



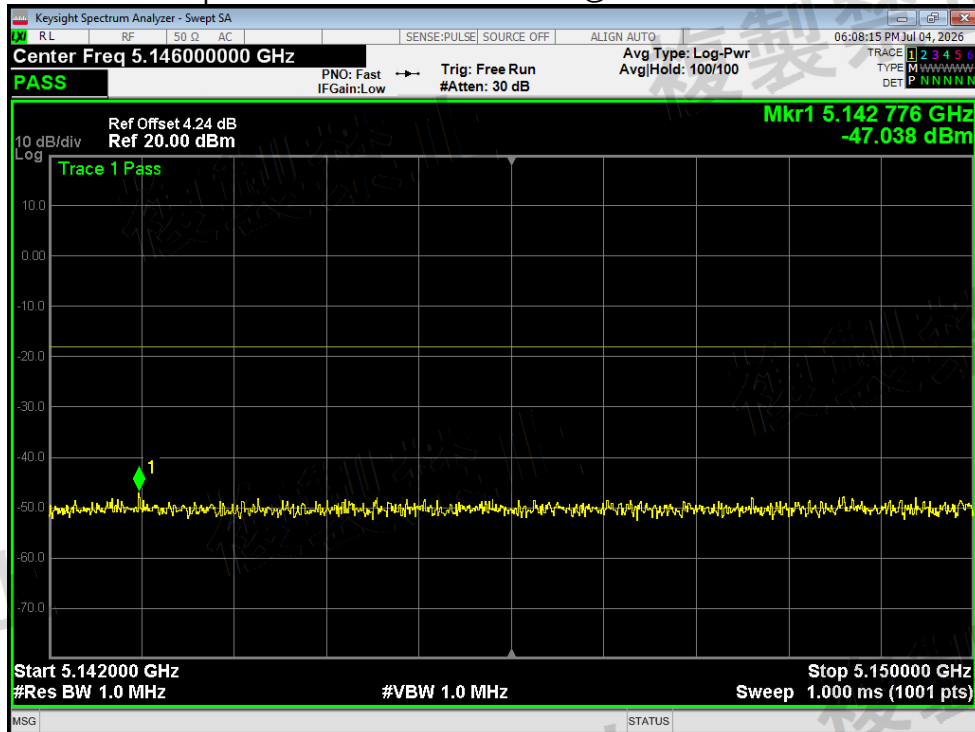
Tx. Spurious NVNT a 5200MHz Ant1 @ 5266.7MHz-26000MHz



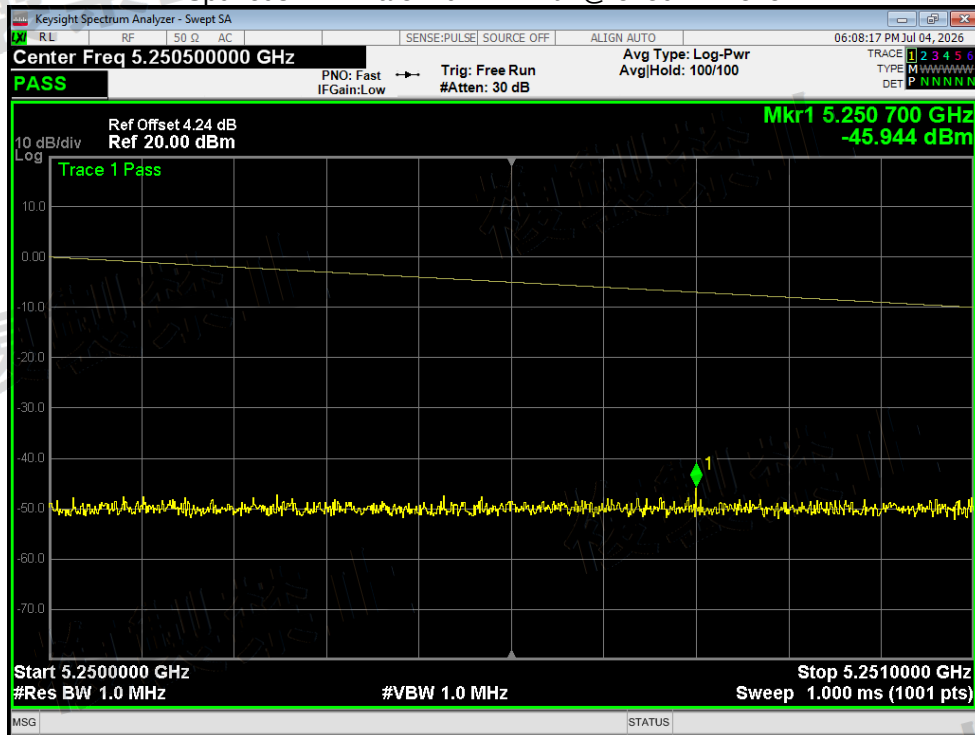
Tx. Spurious NVNT a 5240MHz Ant1 @ 30MHz-5142MHz



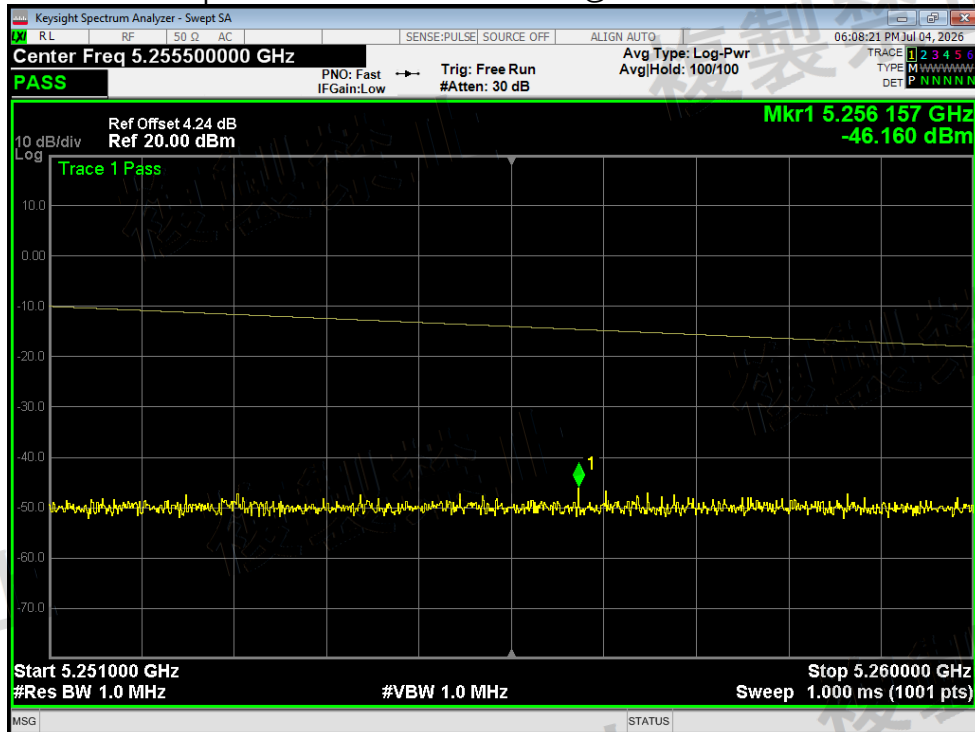
Tx. Spurious NVNT a 5240MHz Ant1 @ 5142MHz-5150MHz



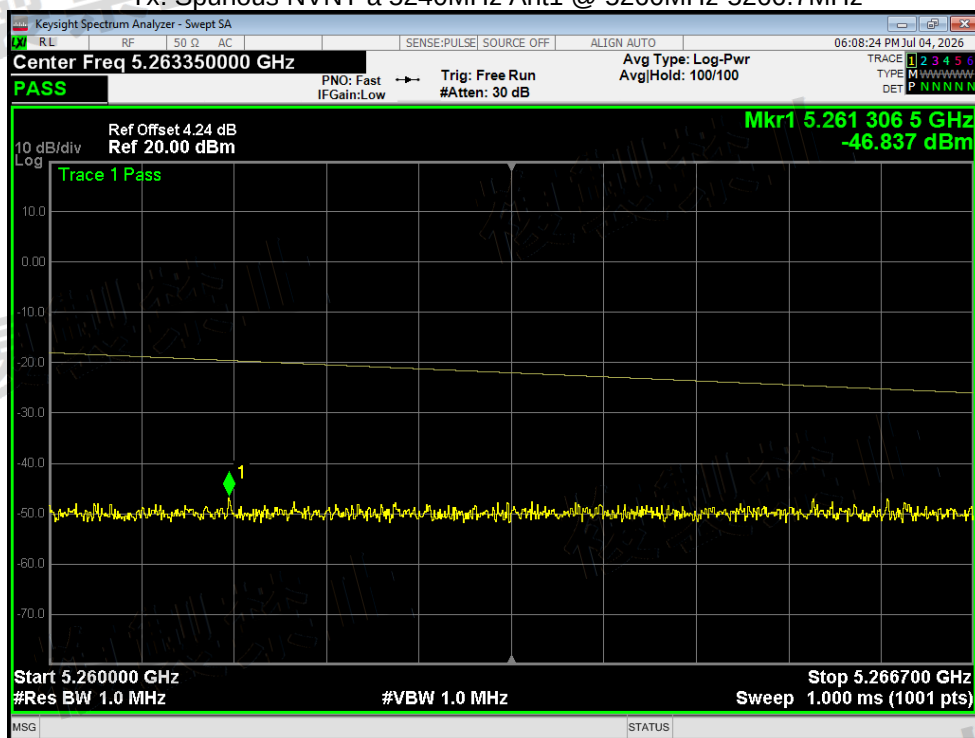
Tx. Spurious NVNT a 5240MHz Ant1 @ 5250MHz-5251MHz



Tx. Spurious NVNT a 5240MHz Ant1 @ 5251MHz-5260MHz



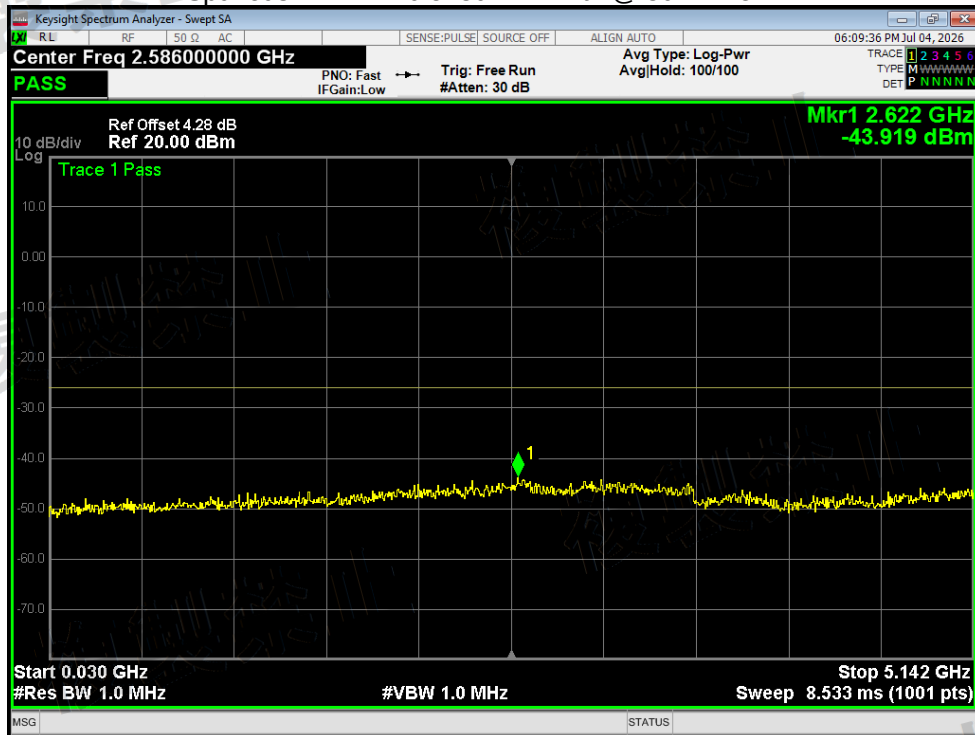
Tx. Spurious NVNT a 5240MHz Ant1 @ 5260MHz-5266.7MHz



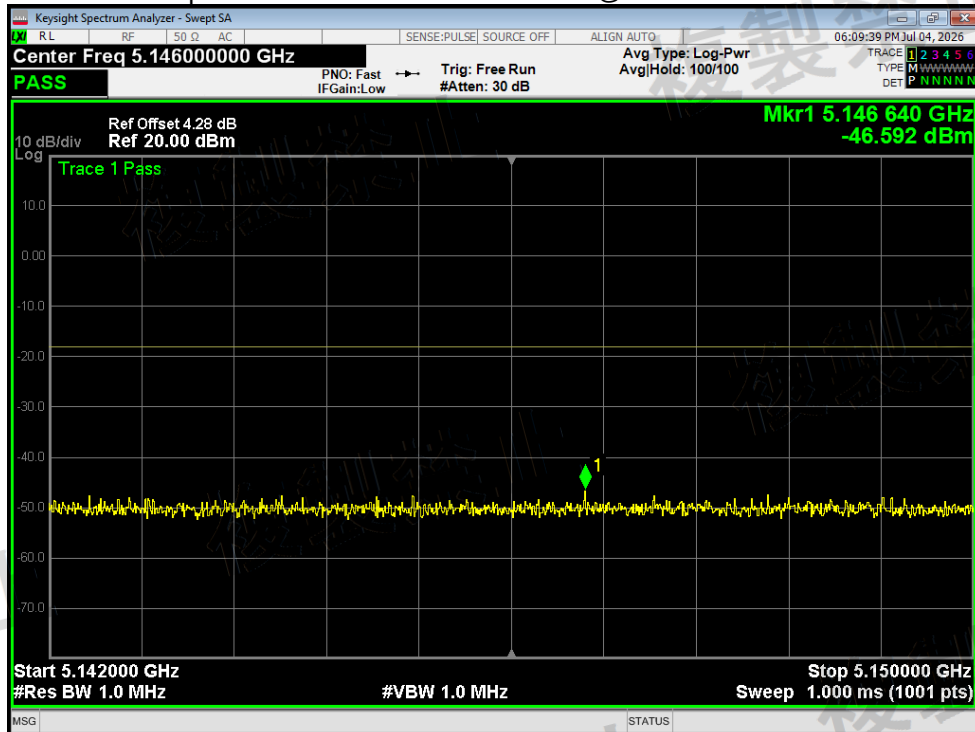
Tx. Spurious NVNT a 5240MHz Ant1 @ 5266.7MHz-26000MHz



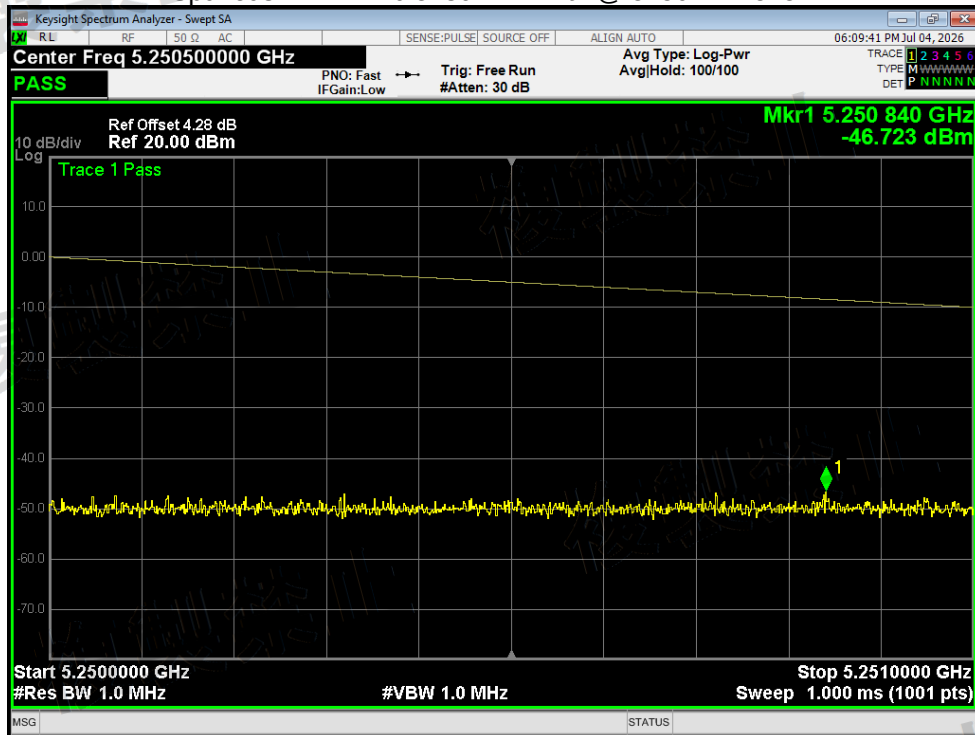
Tx. Spurious NVNT n20 5180MHz Ant1 @ 30MHz-5142MHz



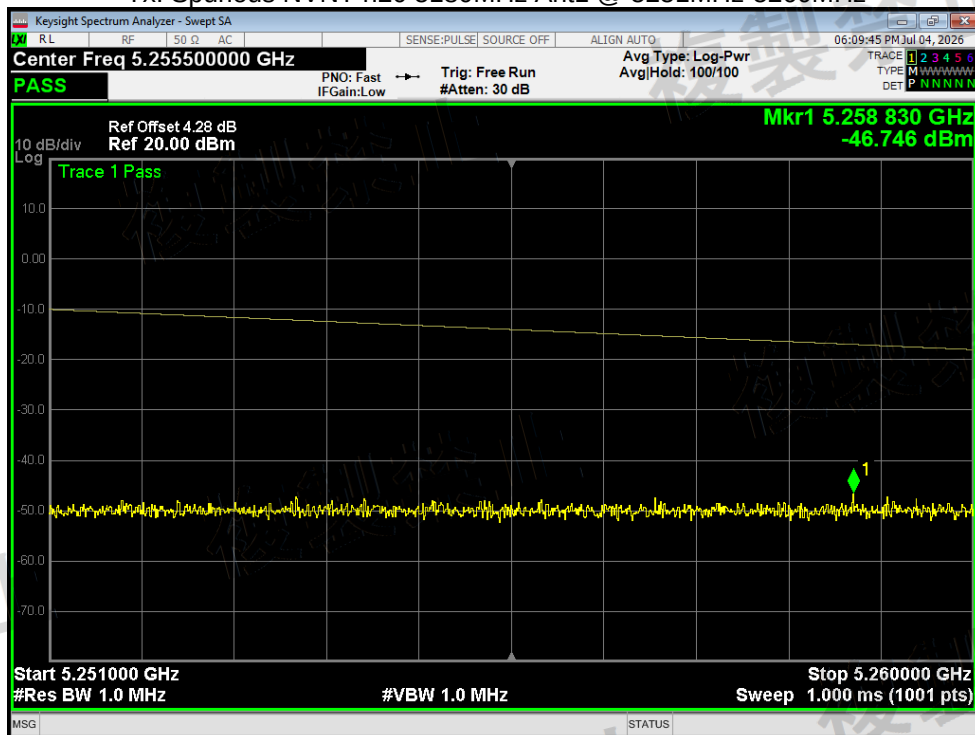
Tx. Spurious NVNT n20 5180MHz Ant1 @ 5142MHz-5150MHz



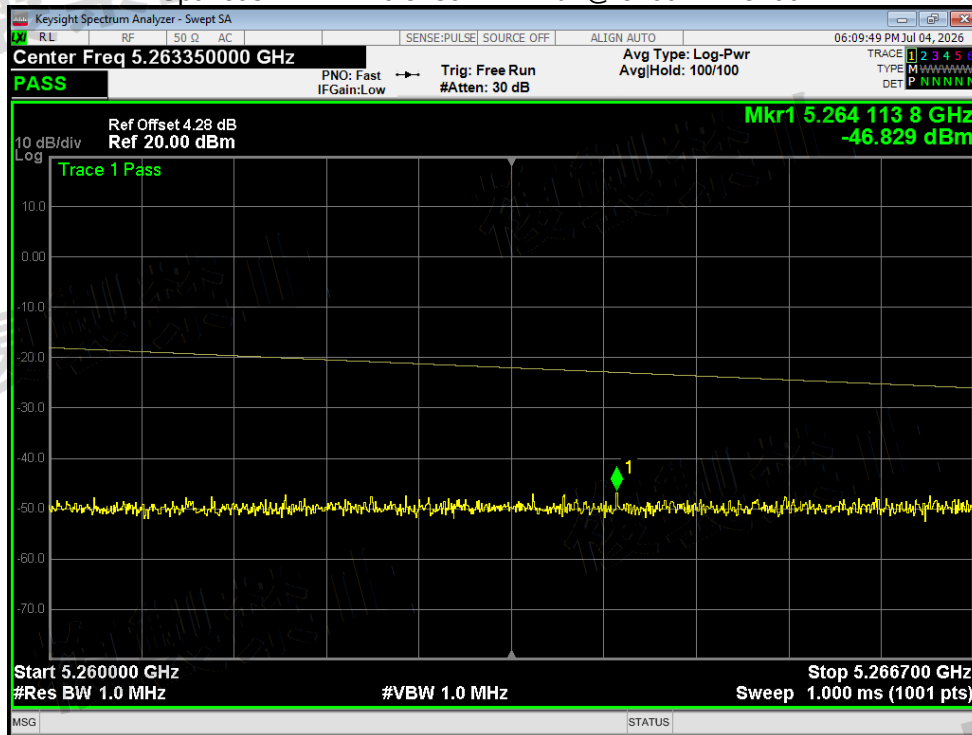
Tx. Spurious NVNT n20 5180MHz Ant1 @ 5250MHz-5251MHz



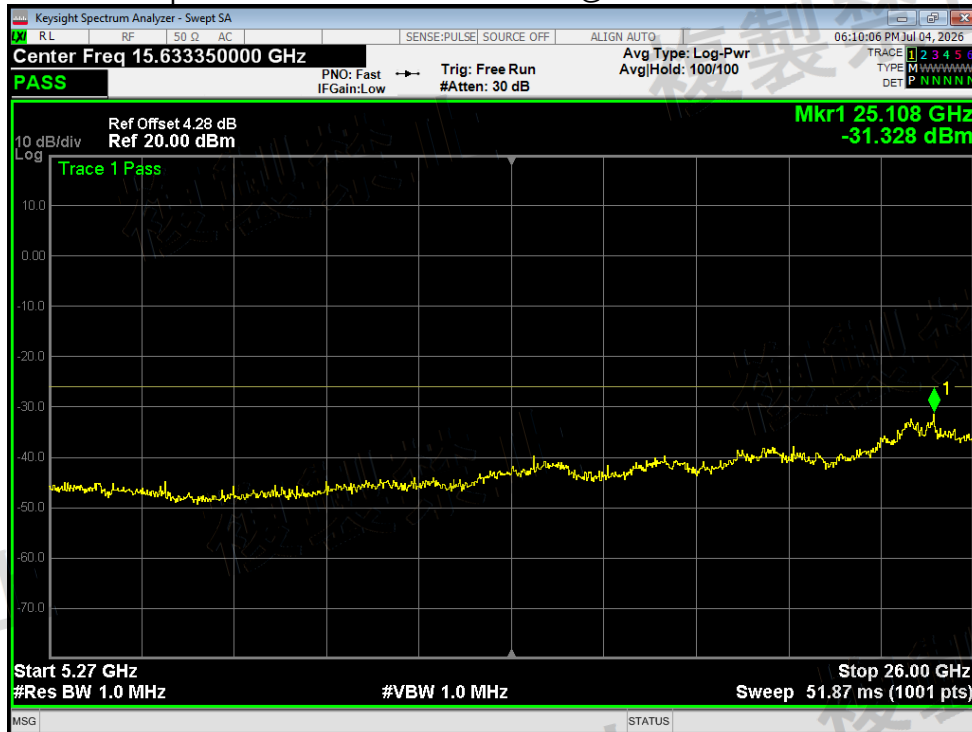
Tx. Spurious NVNT n20 5180MHz Ant1 @ 5251MHz-5260MHz



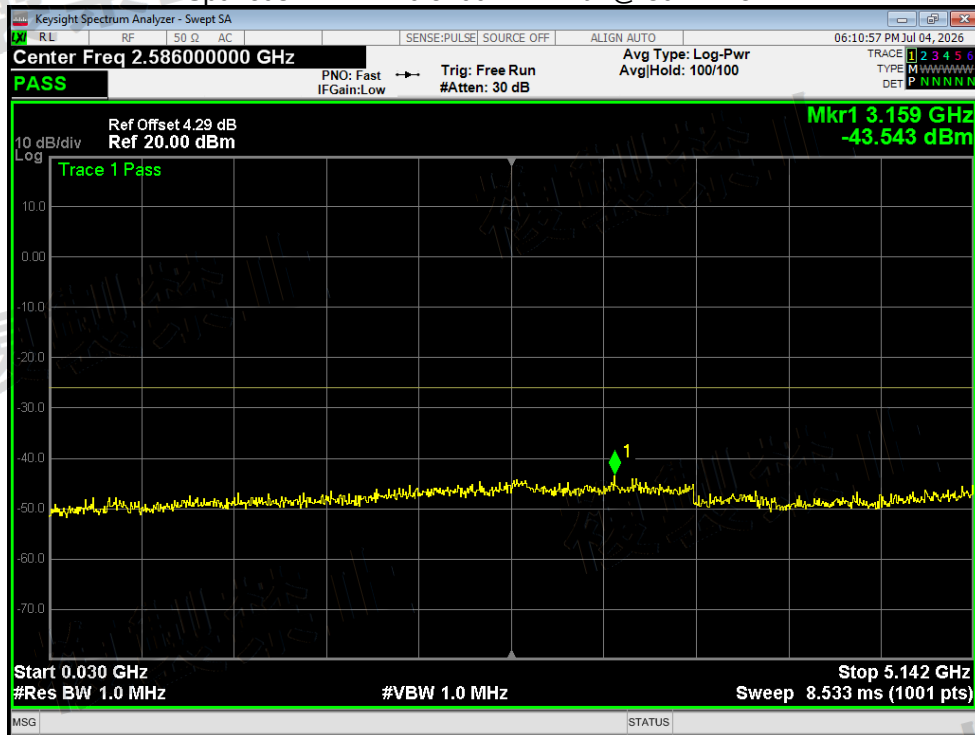
Tx. Spurious NVNT n20 5180MHz Ant1 @ 5260MHz-5266.7MHz



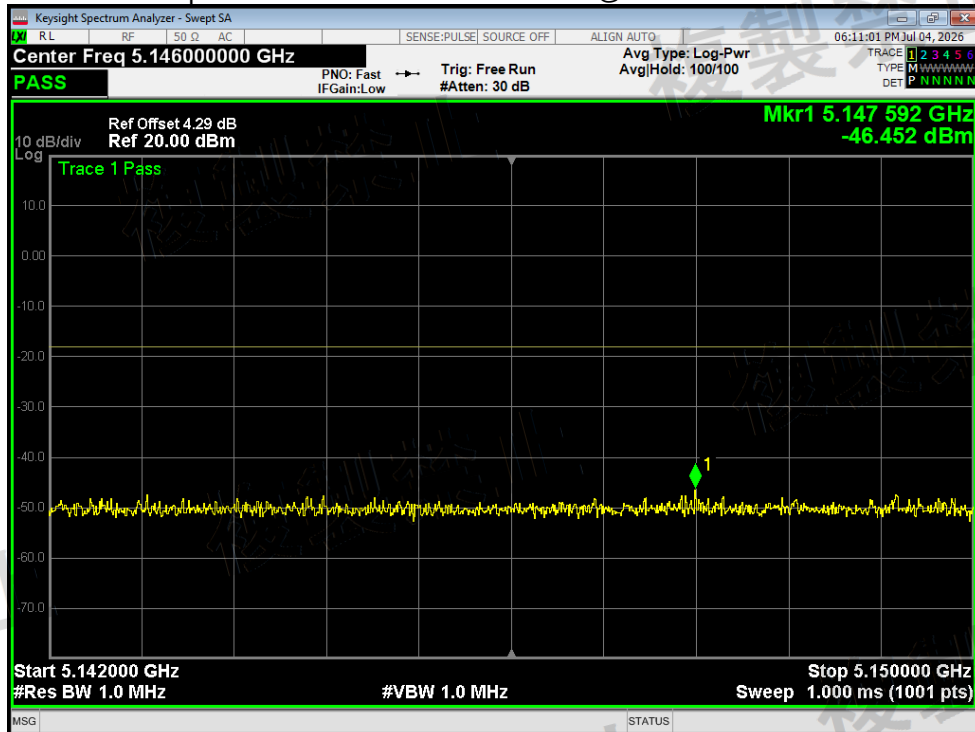
Tx. Spurious NVNT n20 5180MHz Ant1 @ 5266.7MHz-26000MHz



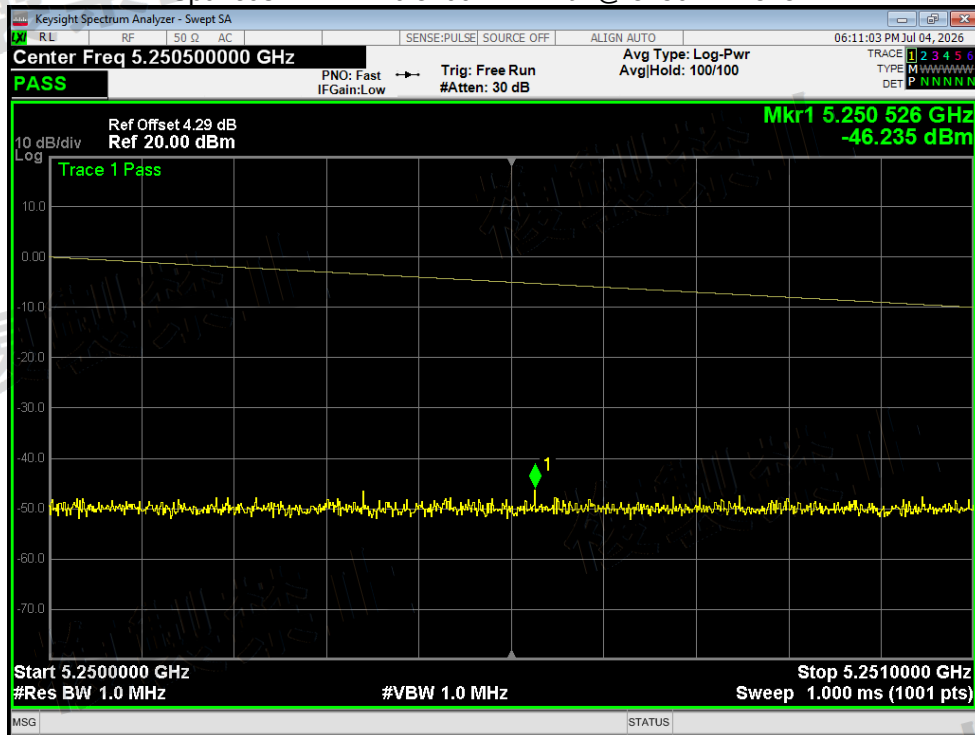
Tx. Spurious NVNT n20 5200MHz Ant1 @ 30MHz-5142MHz



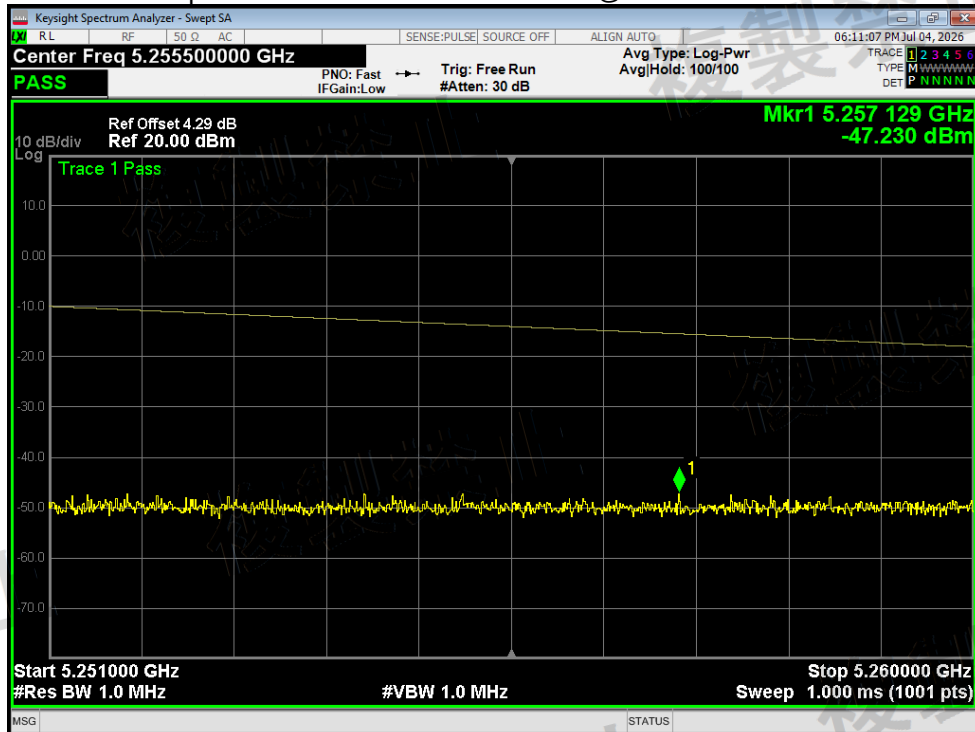
Tx. Spurious NVNT n20 5200MHz Ant1 @ 5142MHz-5150MHz



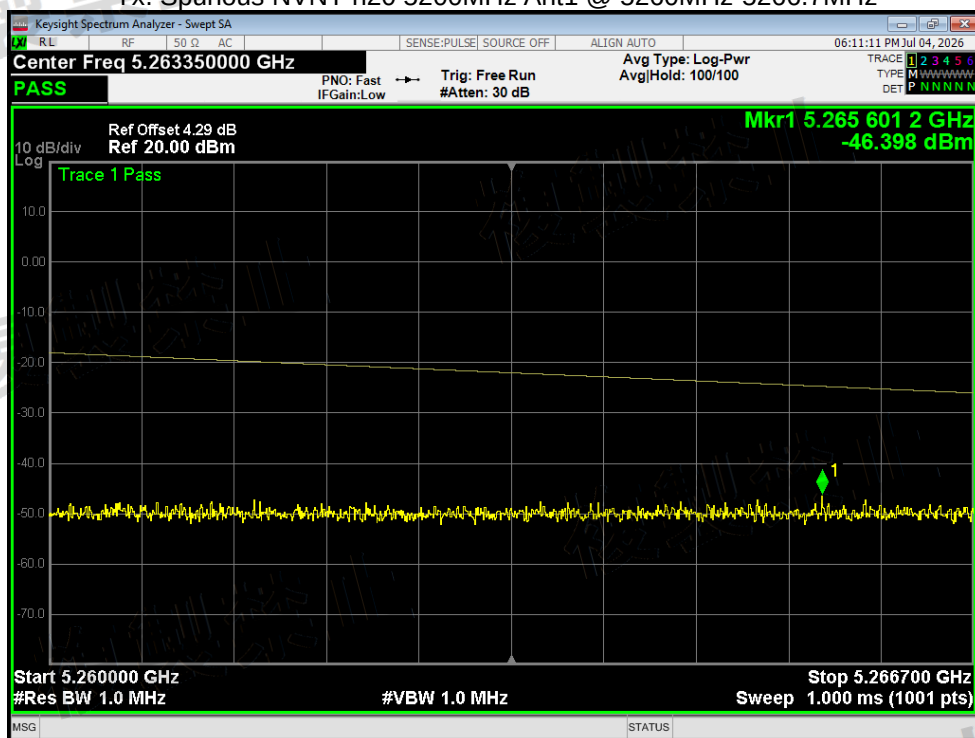
Tx. Spurious NVNT n20 5200MHz Ant1 @ 5250MHz-5251MHz



Tx. Spurious NVNT n20 5200MHz Ant1 @ 5251MHz-5260MHz



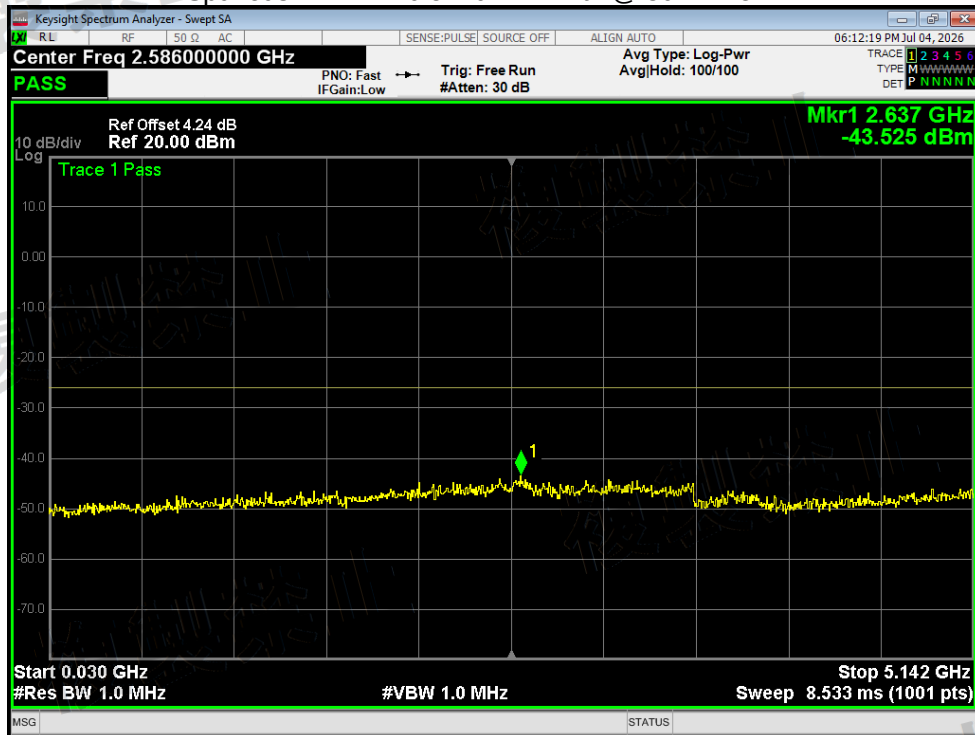
Tx. Spurious NVNT n20 5200MHz Ant1 @ 5260MHz-5266.7MHz



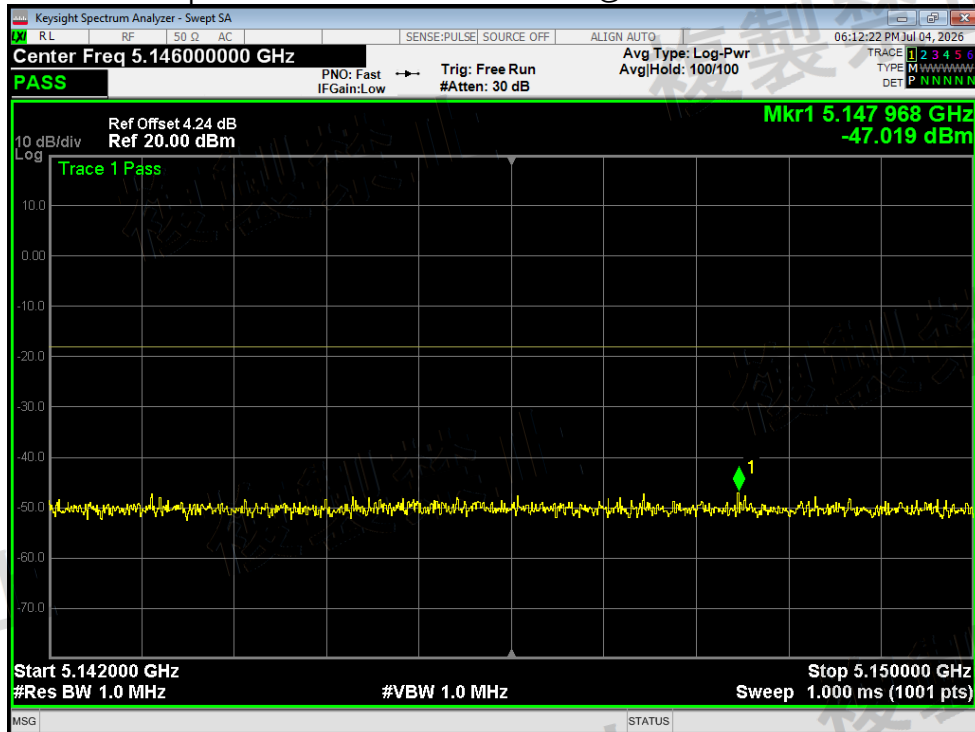
Tx. Spurious NVNT n20 5200MHz Ant1 @ 5266.7MHz-26000MHz



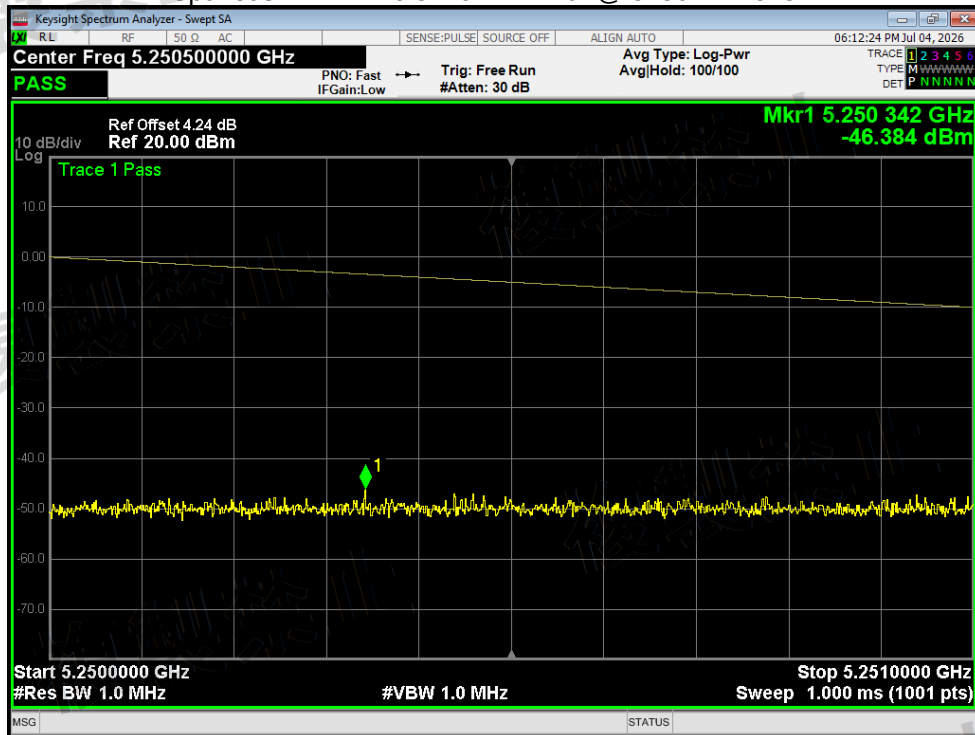
Tx. Spurious NVNT n20 5240MHz Ant1 @ 30MHz-5142MHz



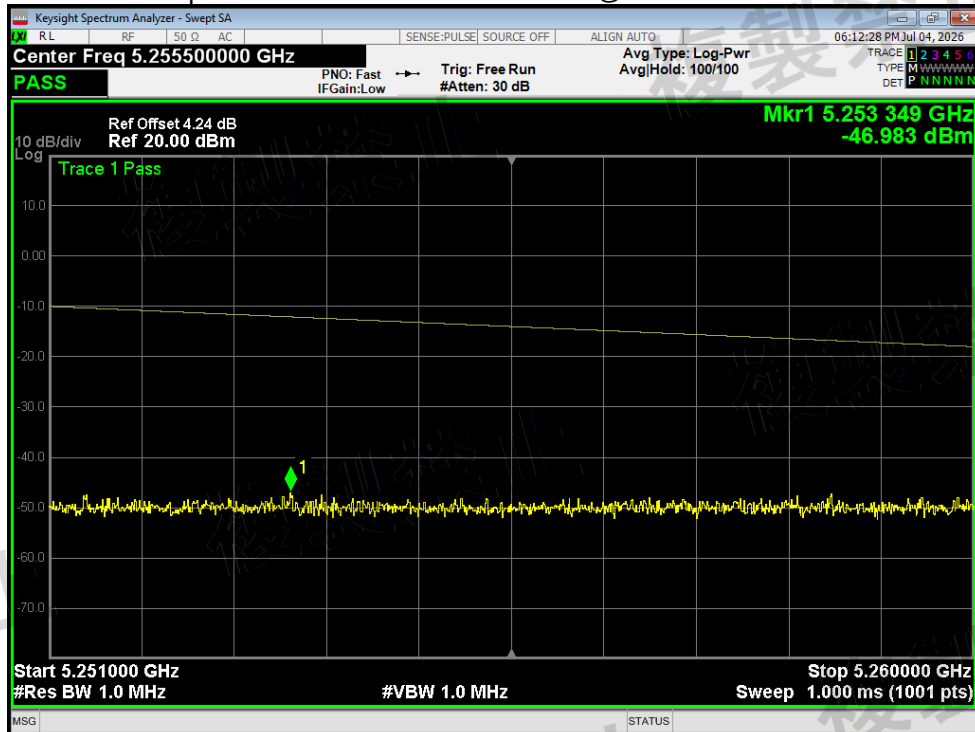
Tx. Spurious NVNT n20 5240MHz Ant1 @ 5142MHz-5150MHz



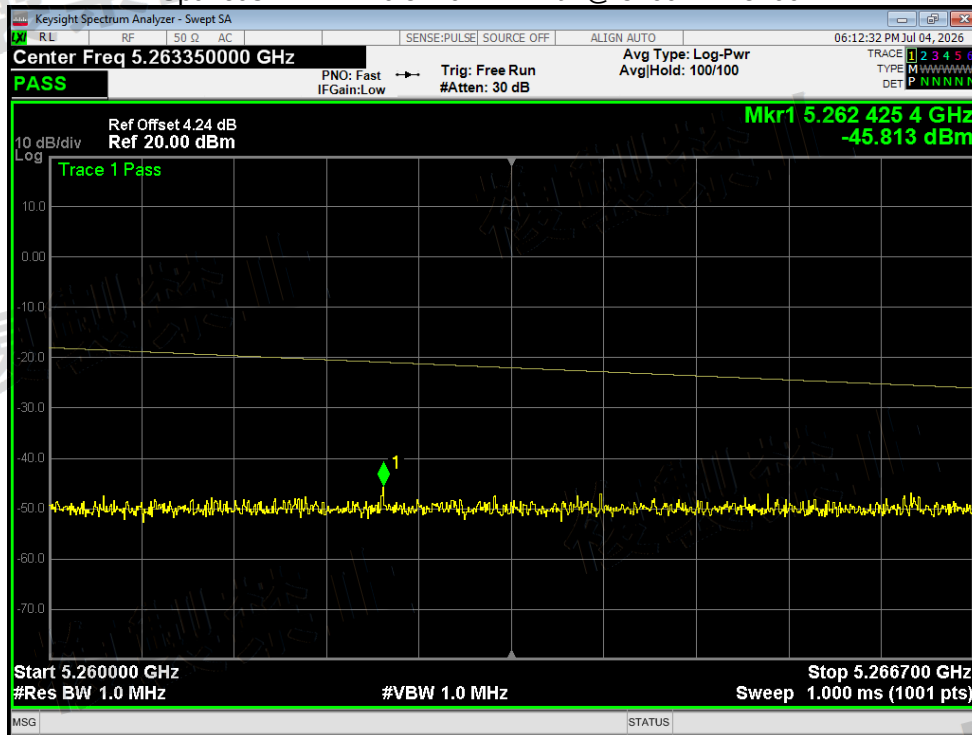
Tx. Spurious NVNT n20 5240MHz Ant1 @ 5250MHz-5251MHz



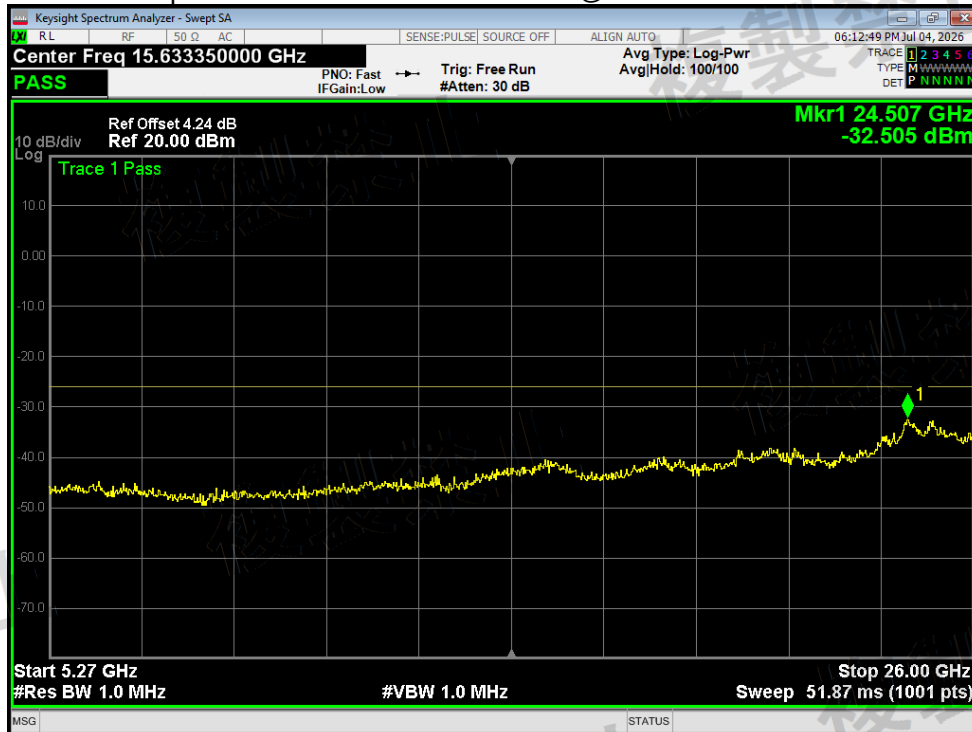
Tx. Spurious NVNT n20 5240MHz Ant1 @ 5251MHz-5260MHz



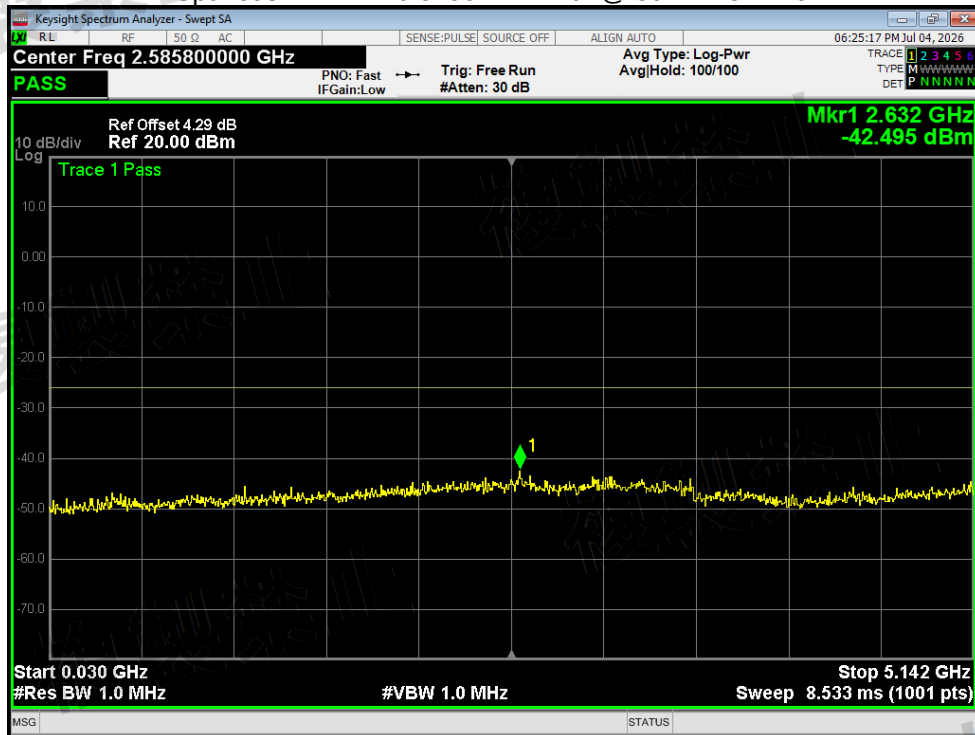
Tx. Spurious NVNT n20 5240MHz Ant1 @ 5260MHz-5266.7MHz



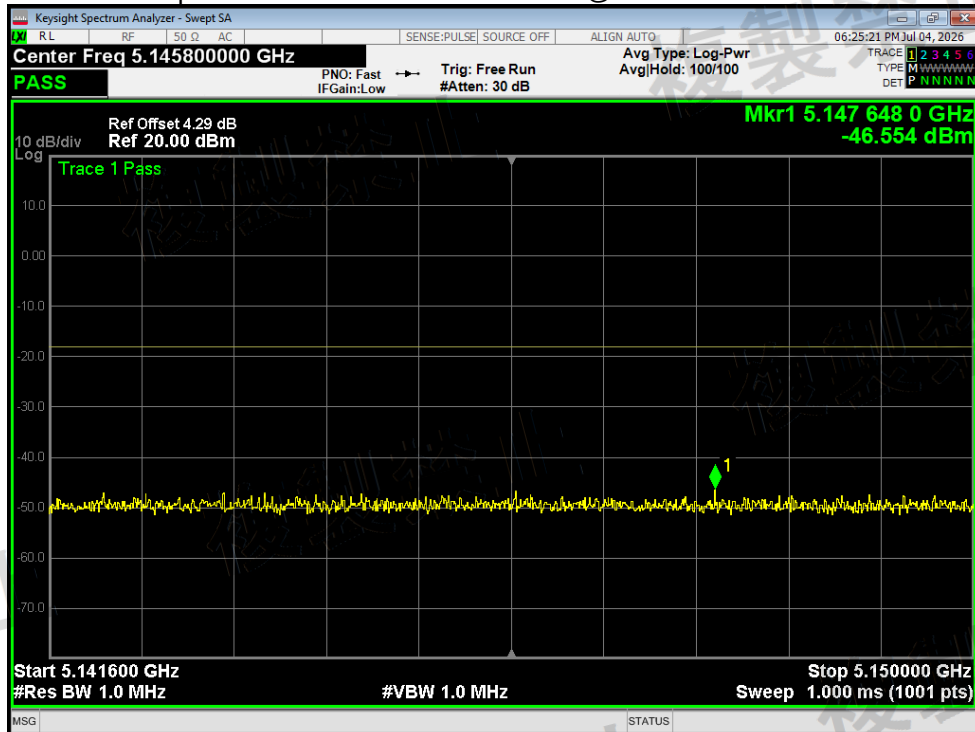
Tx. Spurious NVNT n20 5240MHz Ant1 @ 5266.7MHz-26000MHz



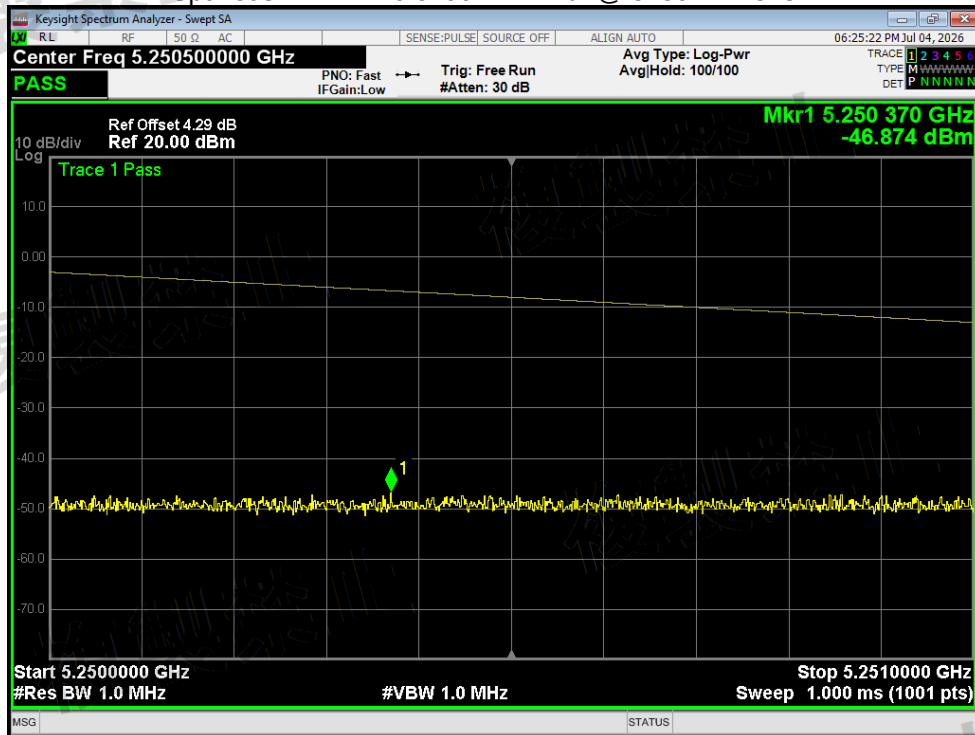
Tx. Spurious NVNT n40 5190MHz Ant1 @ 30MHz-5141.6MHz



Tx. Spurious NVNT n40 5190MHz Ant1 @ 5141.6MHz-5150MHz



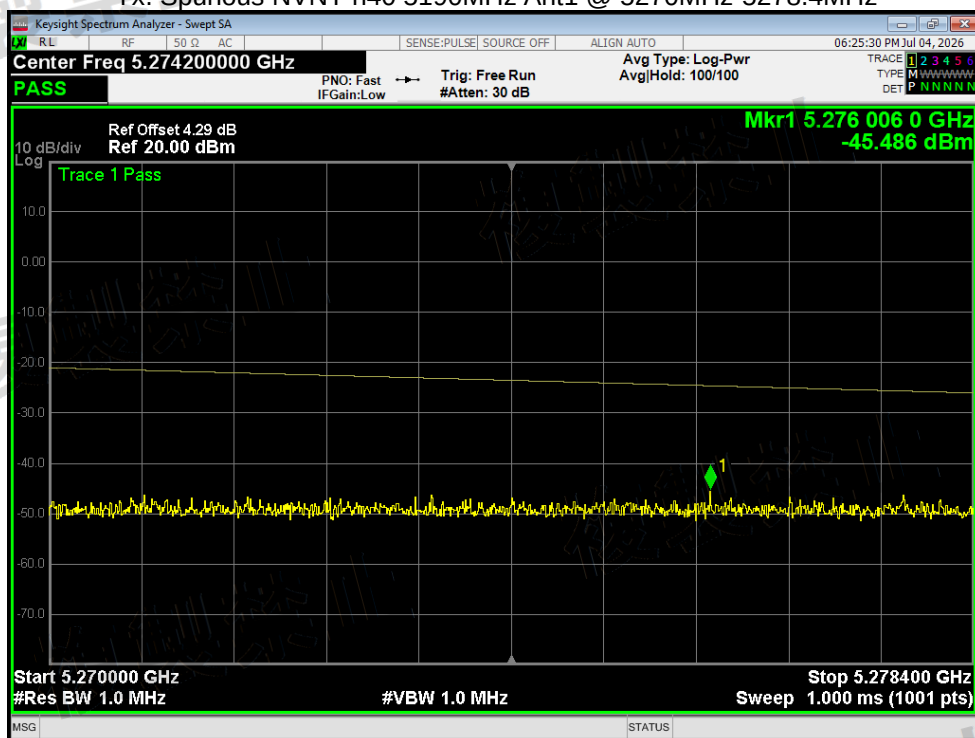
Tx. Spurious NVNT n40 5190MHz Ant1 @ 5250MHz-5251MHz



Tx. Spurious NVNT n40 5190MHz Ant1 @ 5251MHz-5270MHz



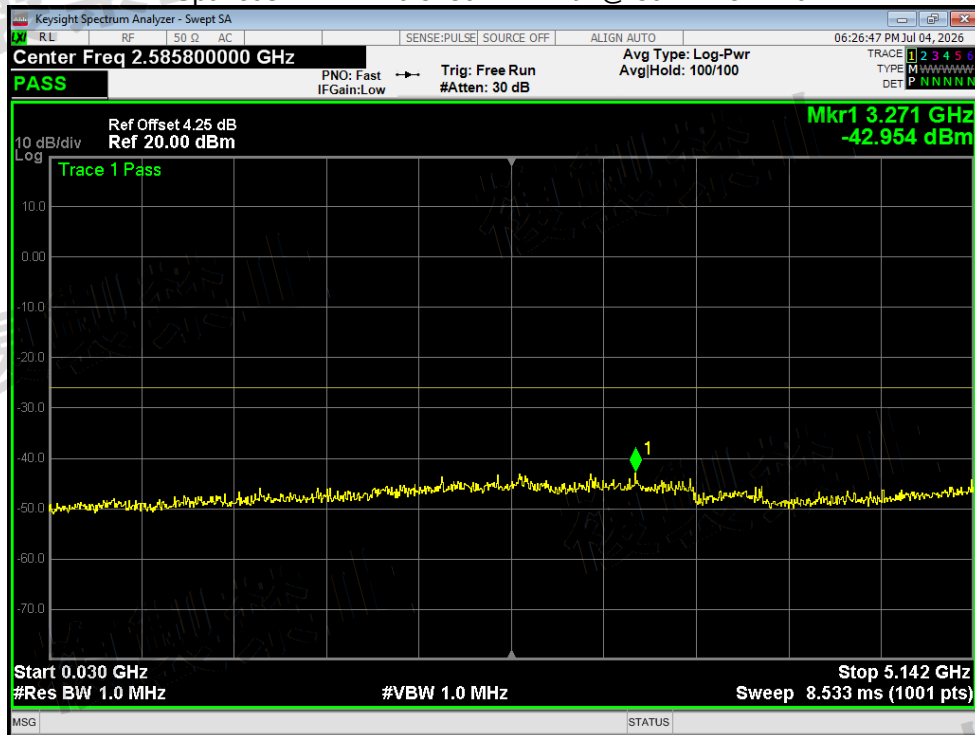
Tx. Spurious NVNT n40 5190MHz Ant1 @ 5270MHz-5278.4MHz



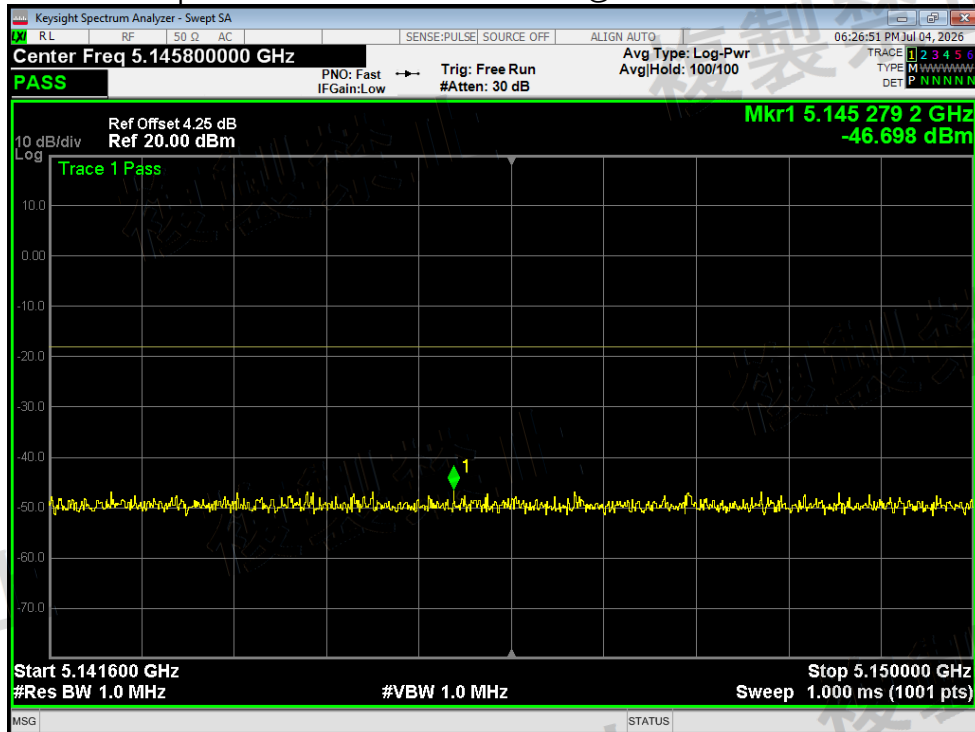
Tx. Spurious NVNT n40 5190MHz Ant1 @ 5278.4MHz-26000MHz



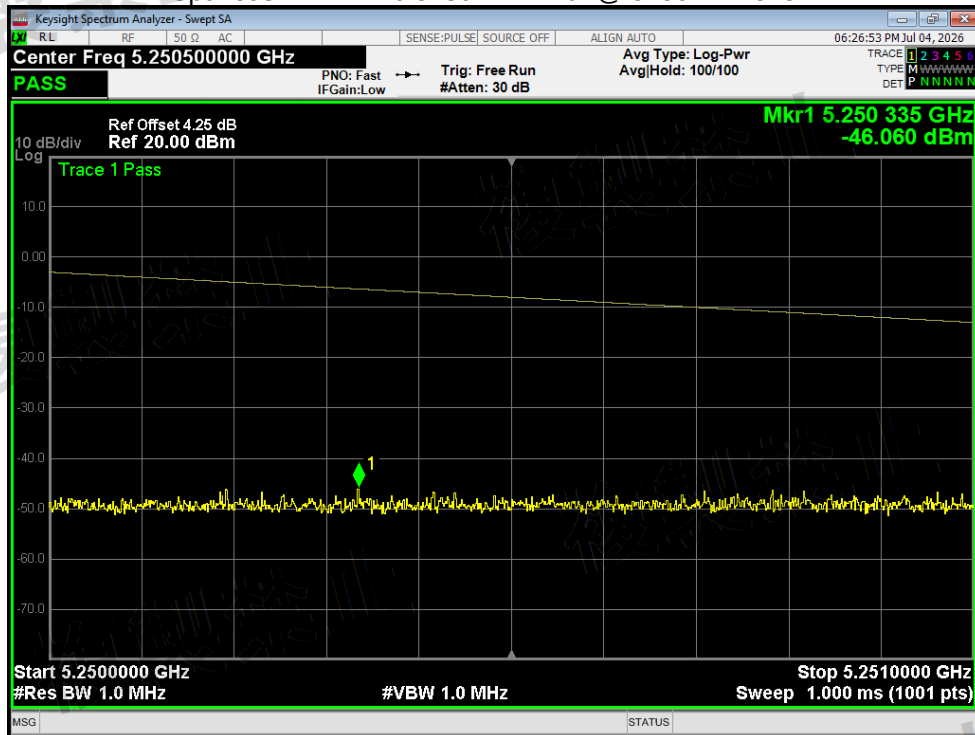
Tx. Spurious NVNT n40 5230MHz Ant1 @ 30MHz-5141.6MHz



Tx. Spurious NVNT n40 5230MHz Ant1 @ 5141.6MHz-5150MHz



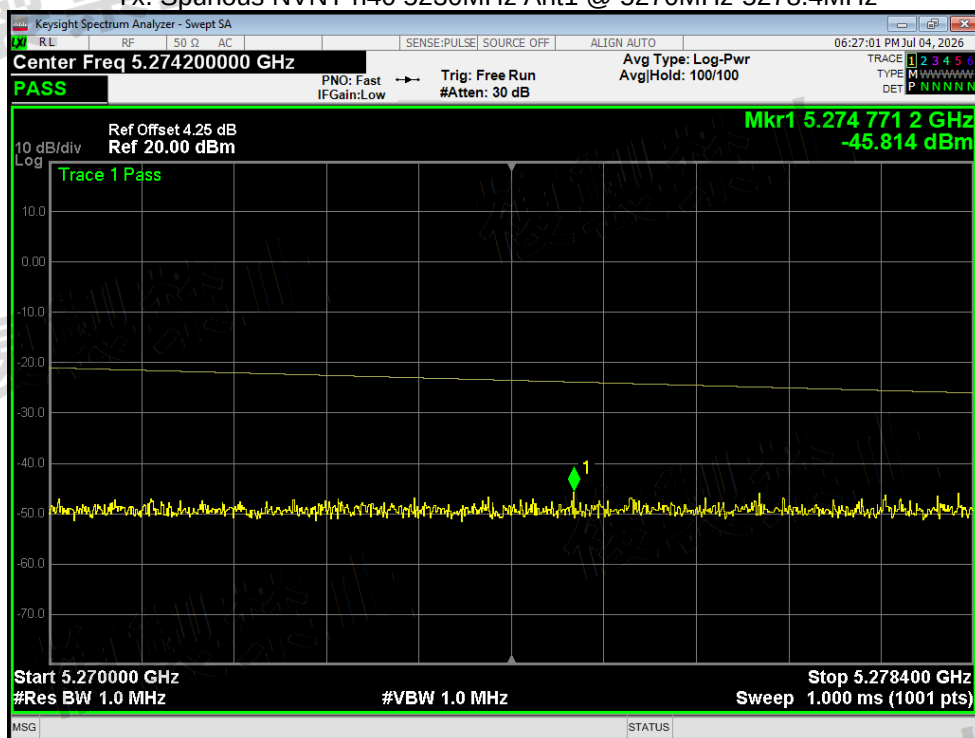
Tx. Spurious NVNT n40 5230MHz Ant1 @ 5250MHz-5251MHz



Tx. Spurious NVNT n40 5230MHz Ant1 @ 5251MHz-5270MHz



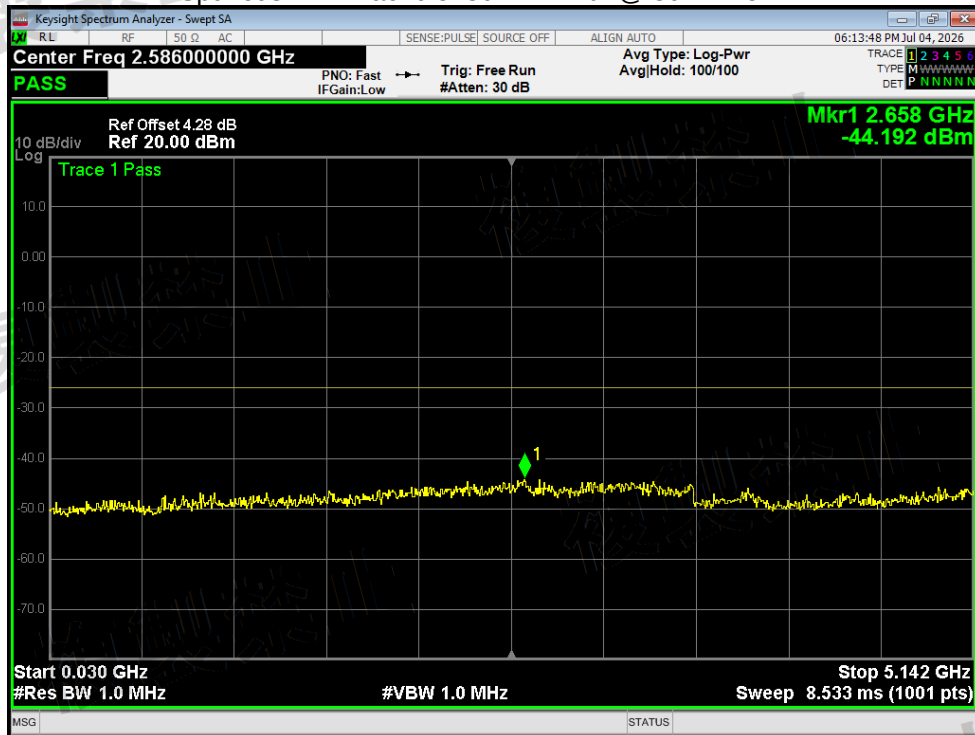
Tx. Spurious NVNT n40 5230MHz Ant1 @ 5270MHz-5278.4MHz



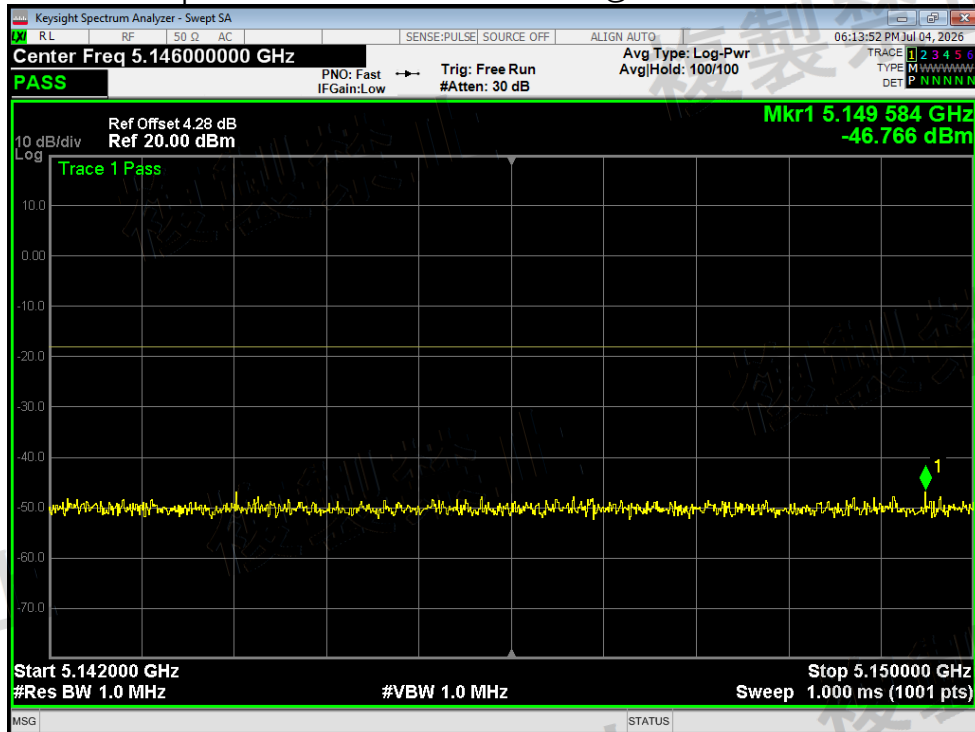
Tx. Spurious NVNT n40 5230MHz Ant1 @ 5278.4MHz-26000MHz



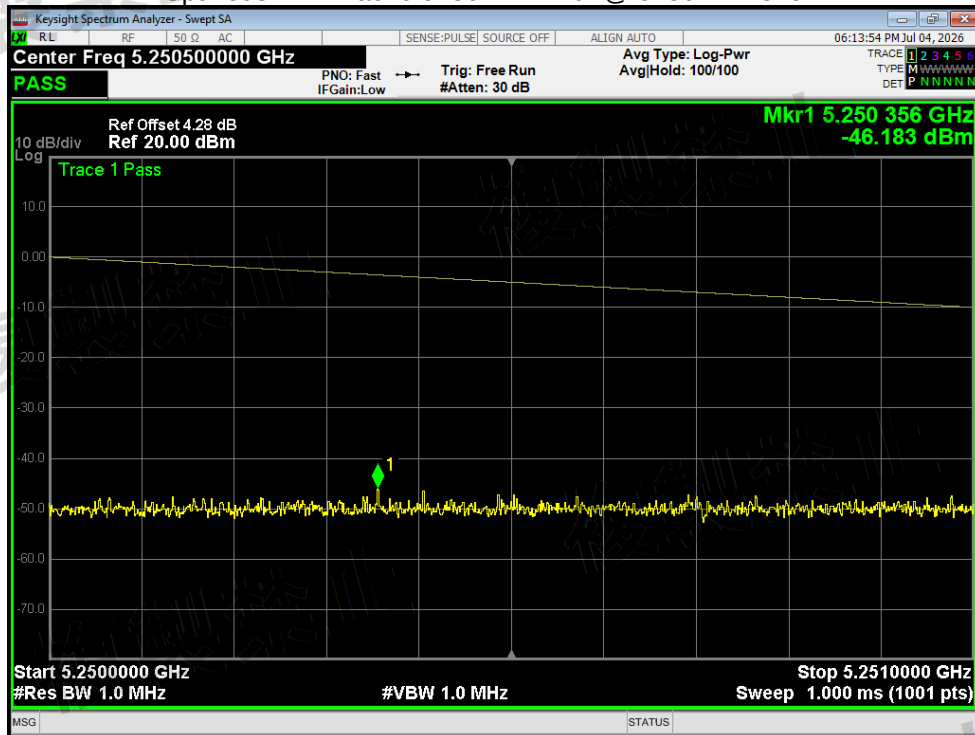
Tx. Spurious NVNT ac20 5180MHz Ant1 @ 30MHz-5142MHz



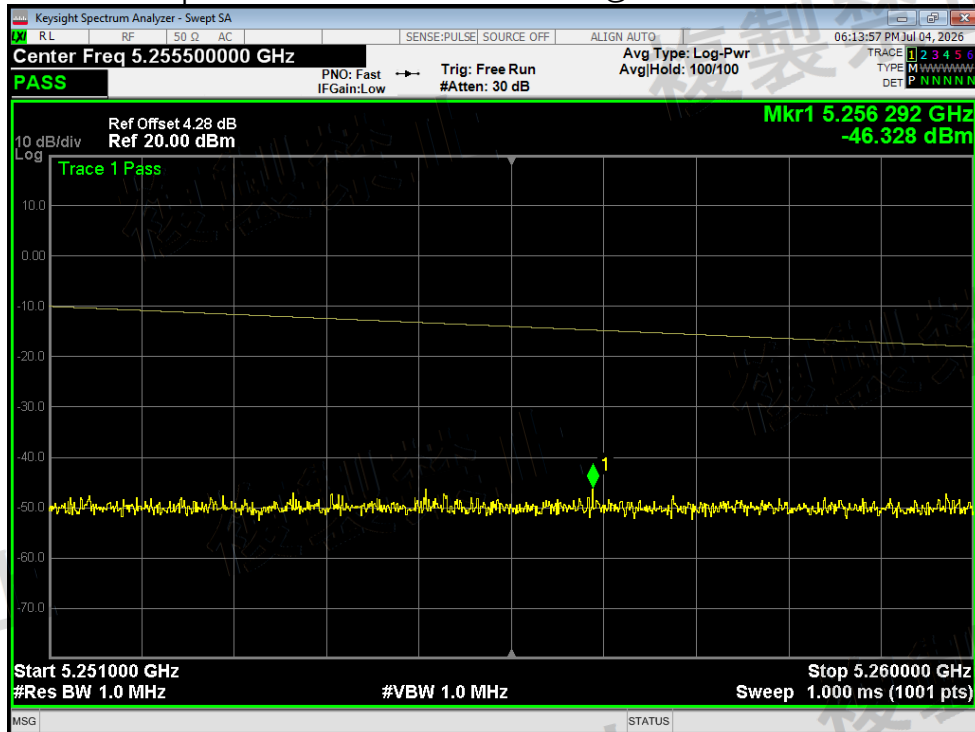
Tx. Spurious NVNT ac20 5180MHz Ant1 @ 5142MHz-5150MHz



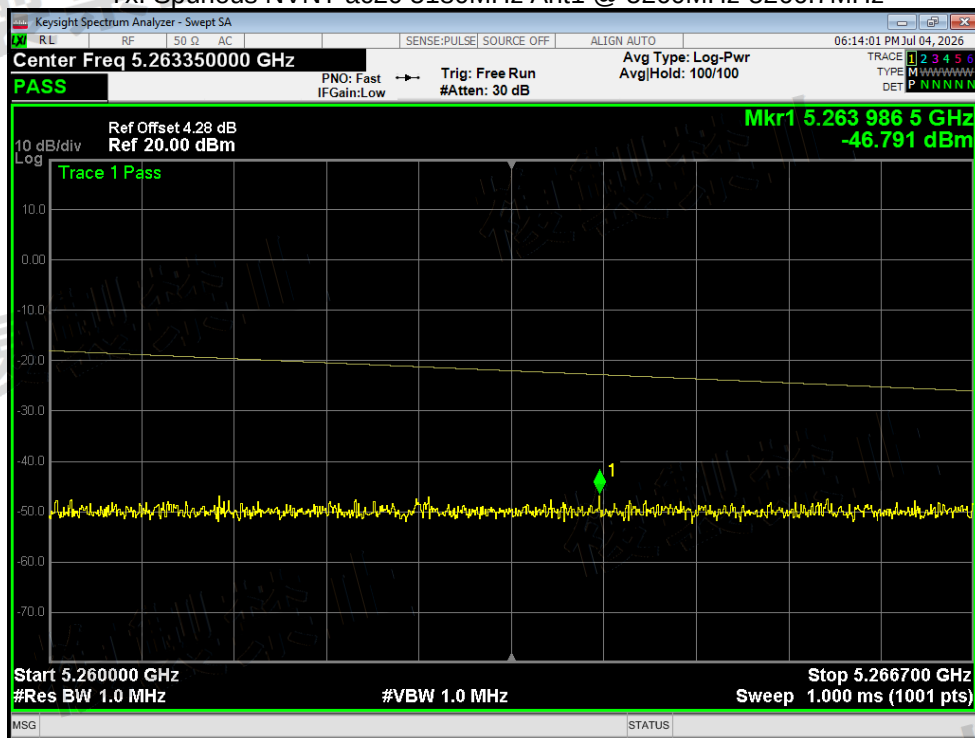
Tx. Spurious NVNT ac20 5180MHz Ant1 @ 5250MHz-5251MHz



Tx. Spurious NVNT ac20 5180MHz Ant1 @ 5251MHz-5260MHz



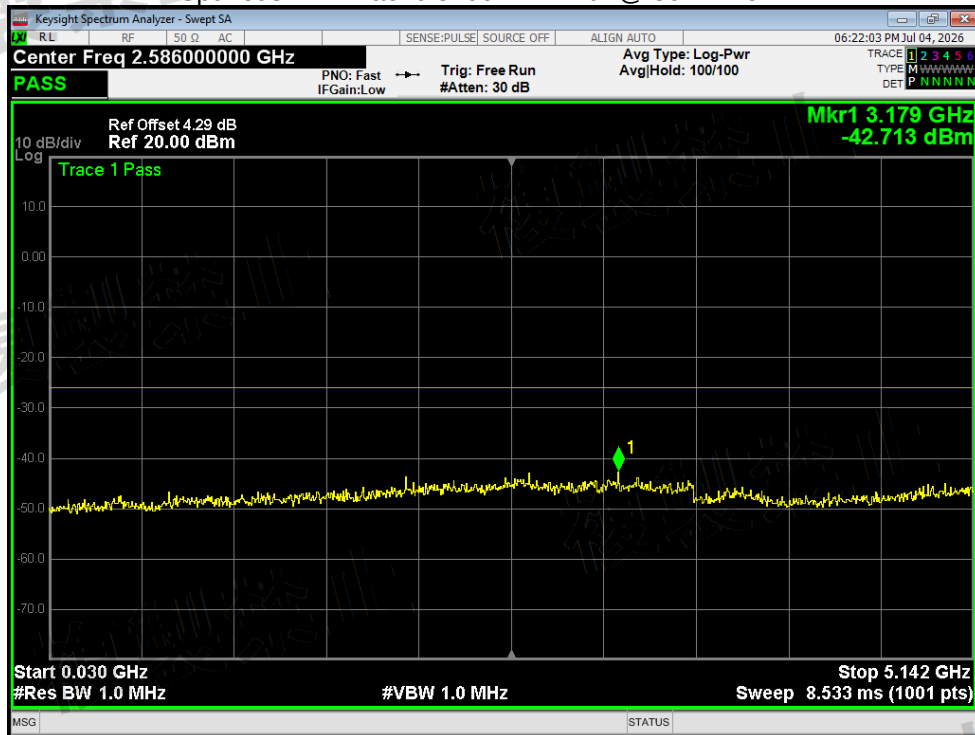
Tx. Spurious NVNT ac20 5180MHz Ant1 @ 5260MHz-5266.7MHz



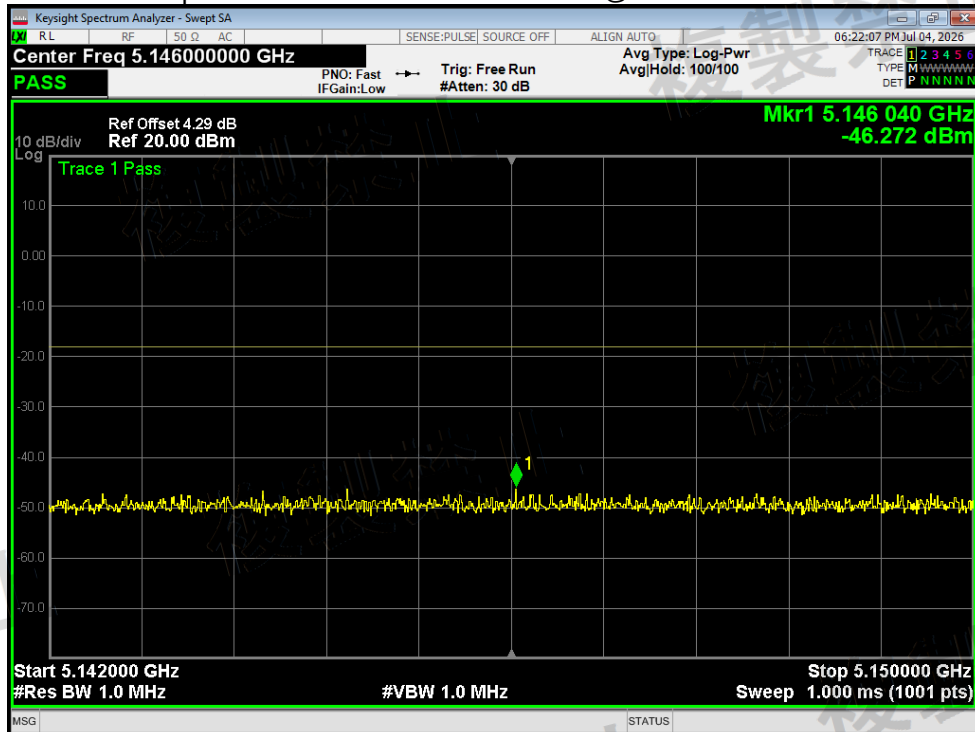
Tx. Spurious NVNT ac20 5180MHz Ant1 @ 5266.7MHz-26000MHz



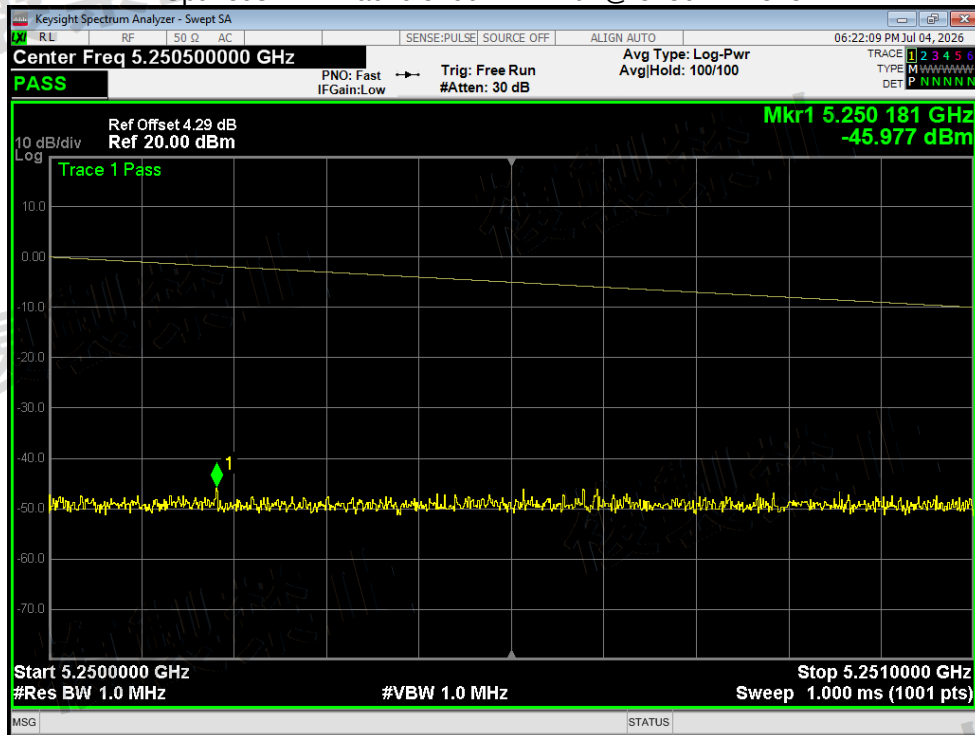
Tx. Spurious NVNT ac20 5200MHz Ant1 @ 30MHz-5142MHz



Tx. Spurious NVNT ac20 5200MHz Ant1 @ 5142MHz-5150MHz



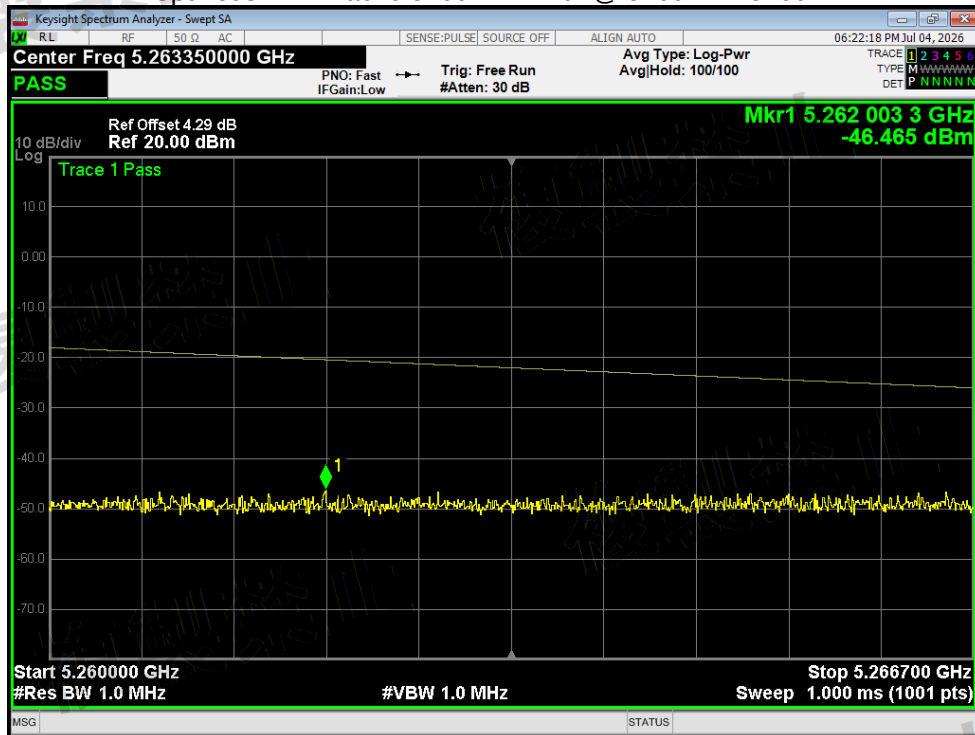
Tx. Spurious NVNT ac20 5200MHz Ant1 @ 5250MHz-5251MHz



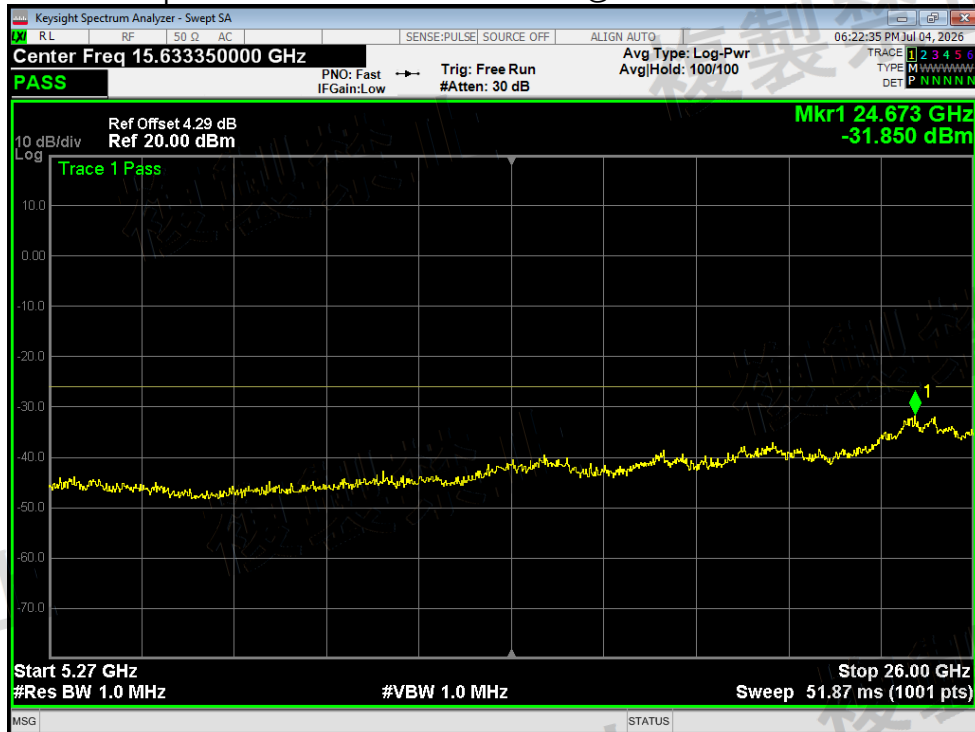
Tx. Spurious NVNT ac20 5200MHz Ant1 @ 5251MHz-5260MHz



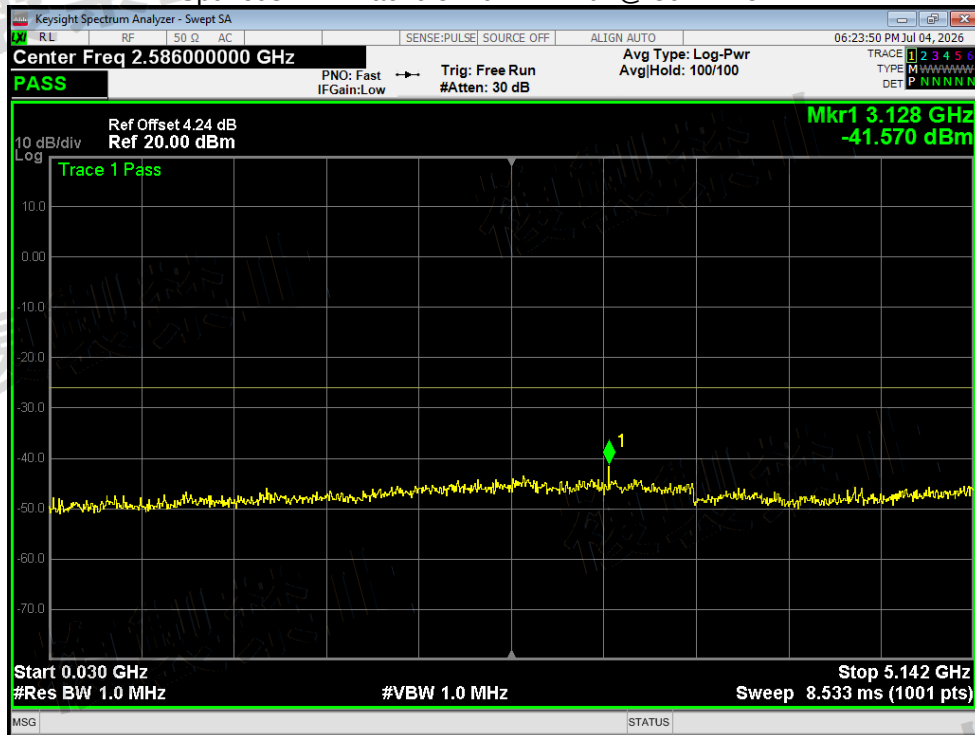
Tx. Spurious NVNT ac20 5200MHz Ant1 @ 5260MHz-5266.7MHz



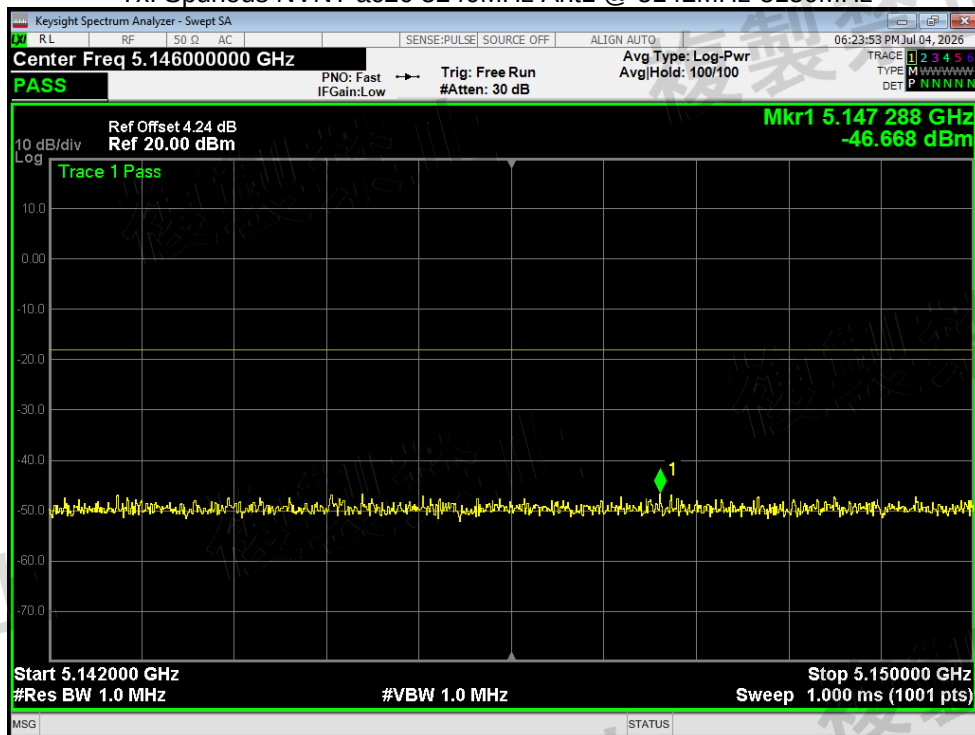
Tx. Spurious NVNT ac20 5200MHz Ant1 @ 5266.7MHz-26000MHz



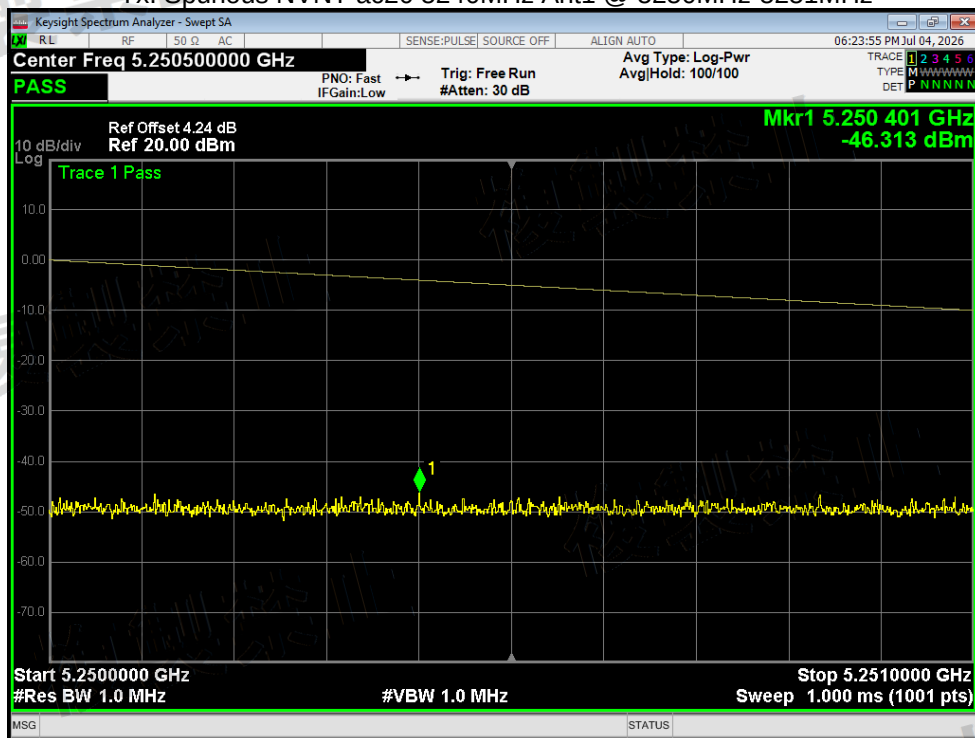
Tx. Spurious NVNT ac20 5240MHz Ant1 @ 30MHz-5142MHz



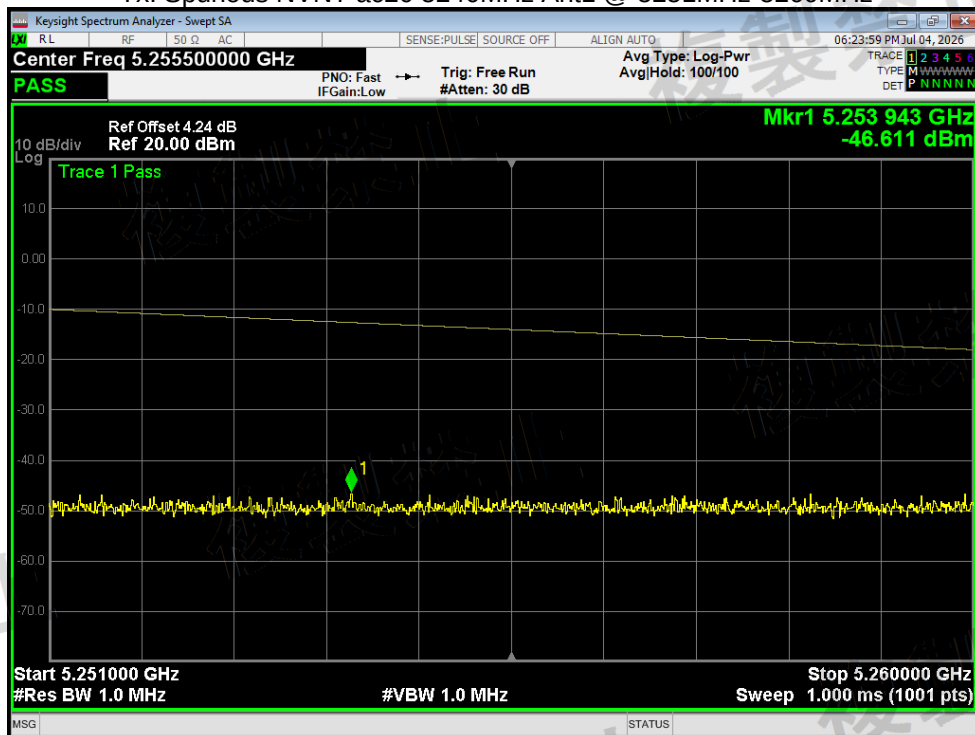
Tx. Spurious NVNT ac20 5240MHz Ant1 @ 5142MHz-5150MHz



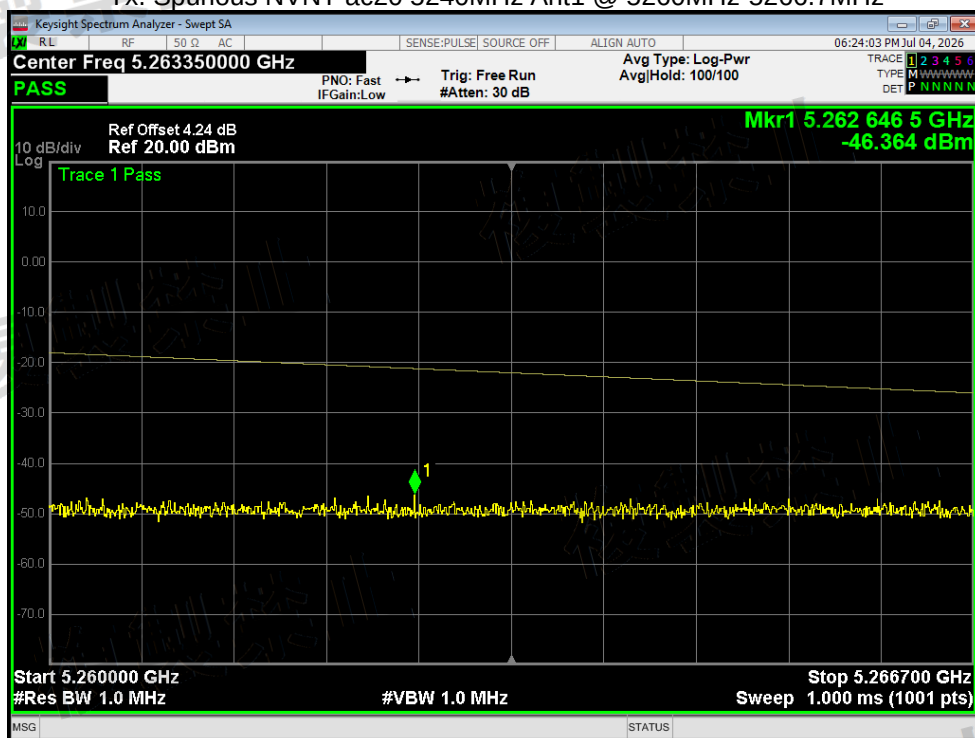
Tx. Spurious NVNT ac20 5240MHz Ant1 @ 5250MHz-5251MHz



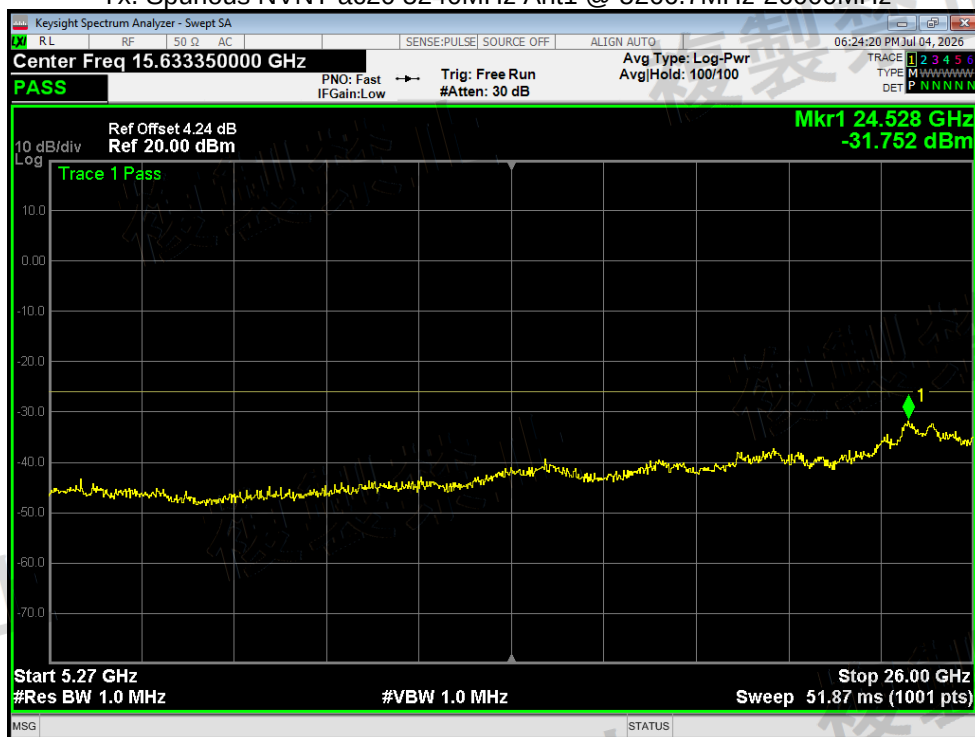
Tx. Spurious NVNT ac20 5240MHz Ant1 @ 5251MHz-5260MHz



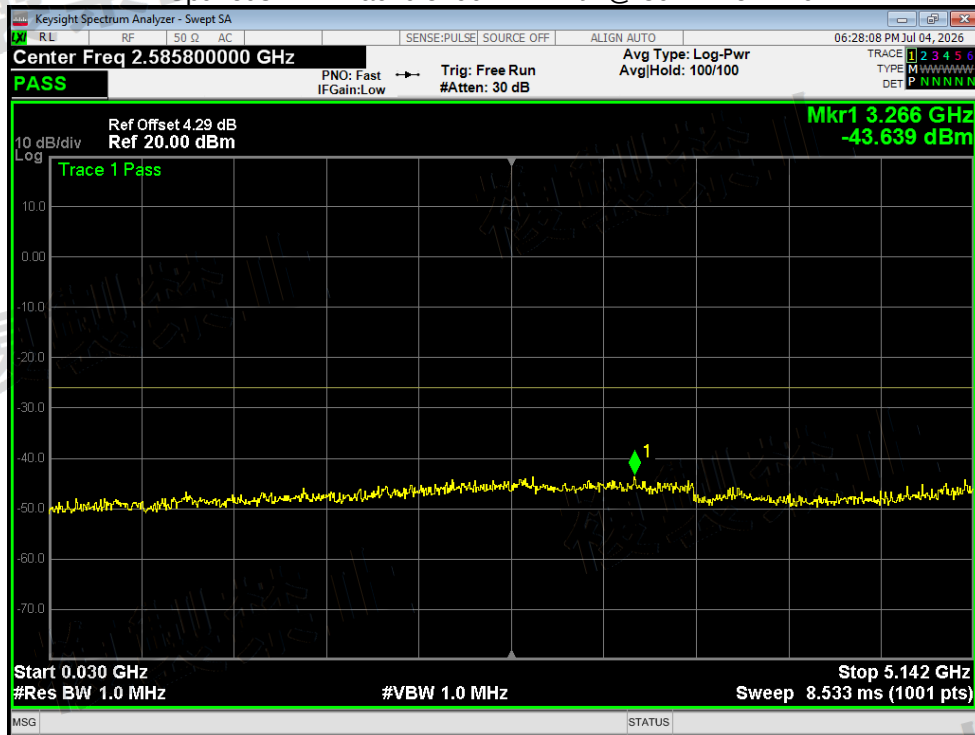
Tx. Spurious NVNT ac20 5240MHz Ant1 @ 5260MHz-5266.7MHz



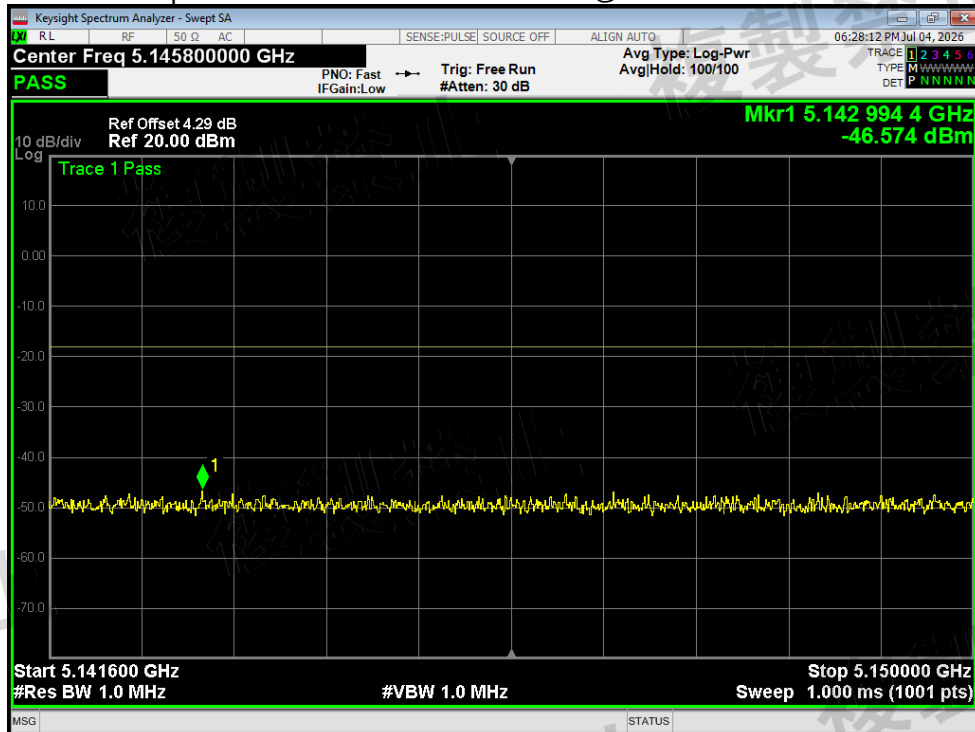
Tx. Spurious NVNT ac20 5240MHz Ant1 @ 5266.7MHz-26000MHz



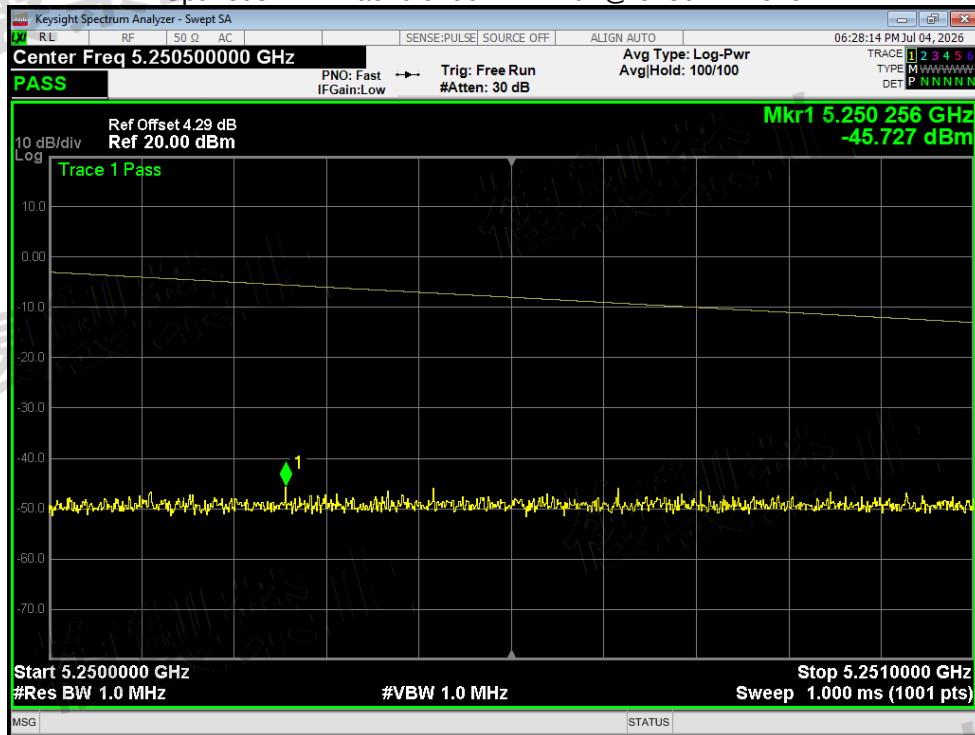
Tx. Spurious NVNT ac40 5190MHz Ant1 @ 30MHz-5141.6MHz



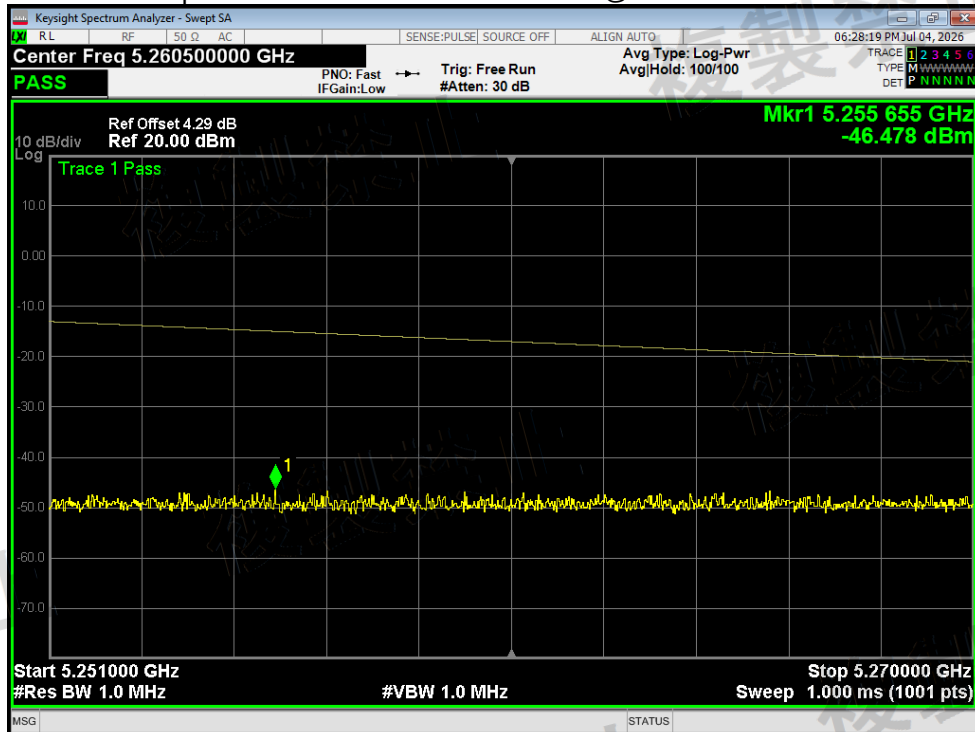
Tx. Spurious NVNT ac40 5190MHz Ant1 @ 5141.6MHz-5150MHz



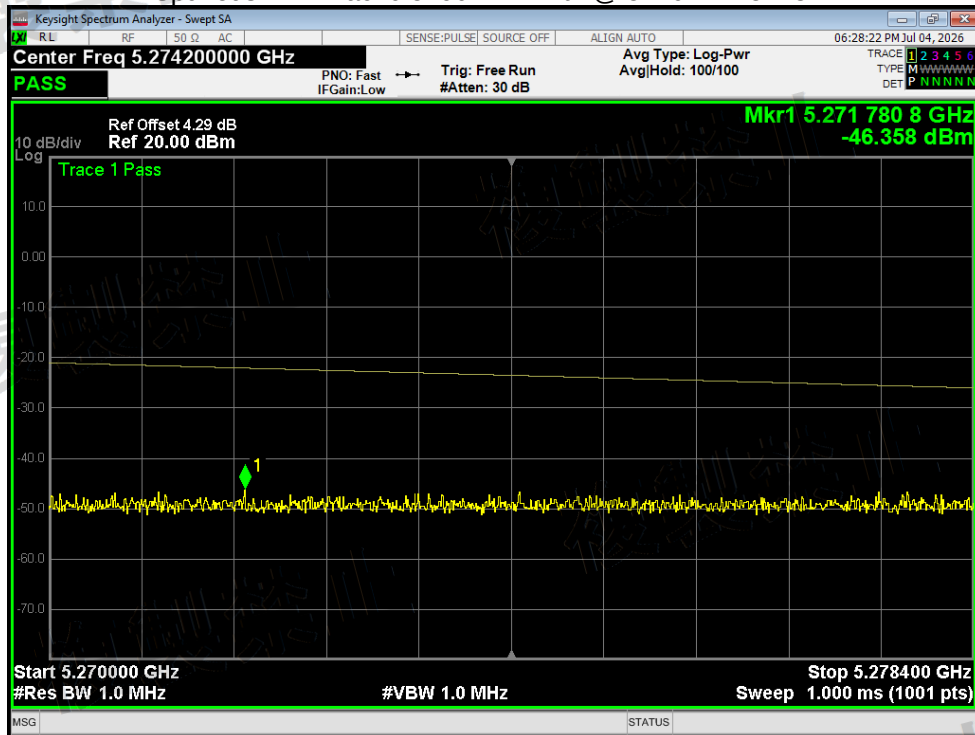
Tx. Spurious NVNT ac40 5190MHz Ant1 @ 5250MHz-5251MHz



Tx. Spurious NVNT ac40 5190MHz Ant1 @ 5251MHz-5270MHz



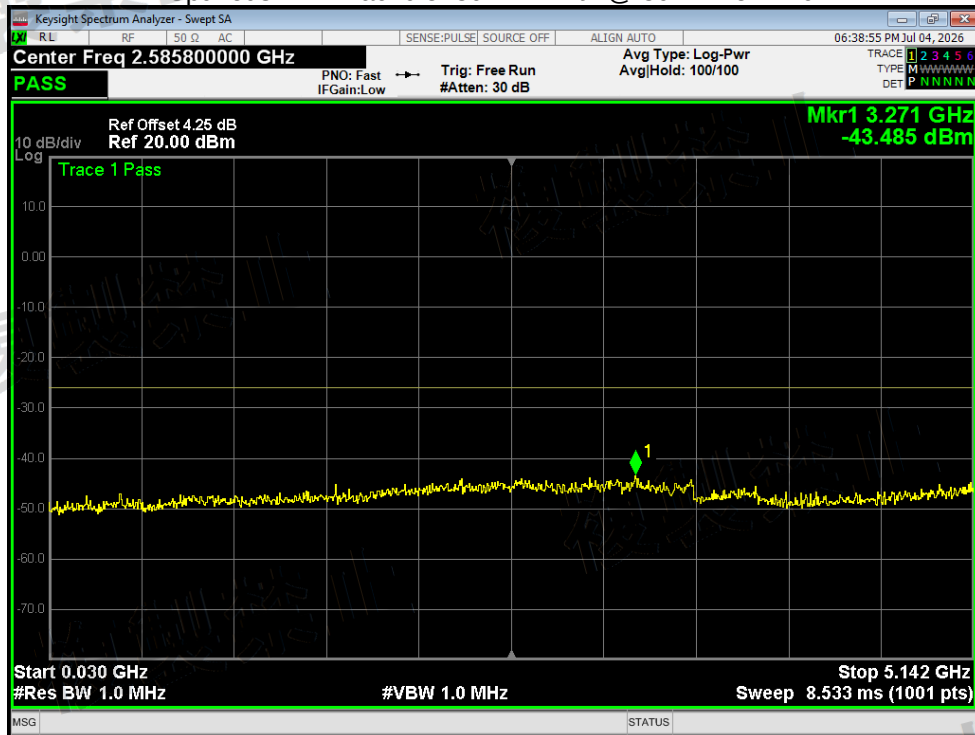
Tx. Spurious NVNT ac40 5190MHz Ant1 @ 5270MHz-5278.4MHz



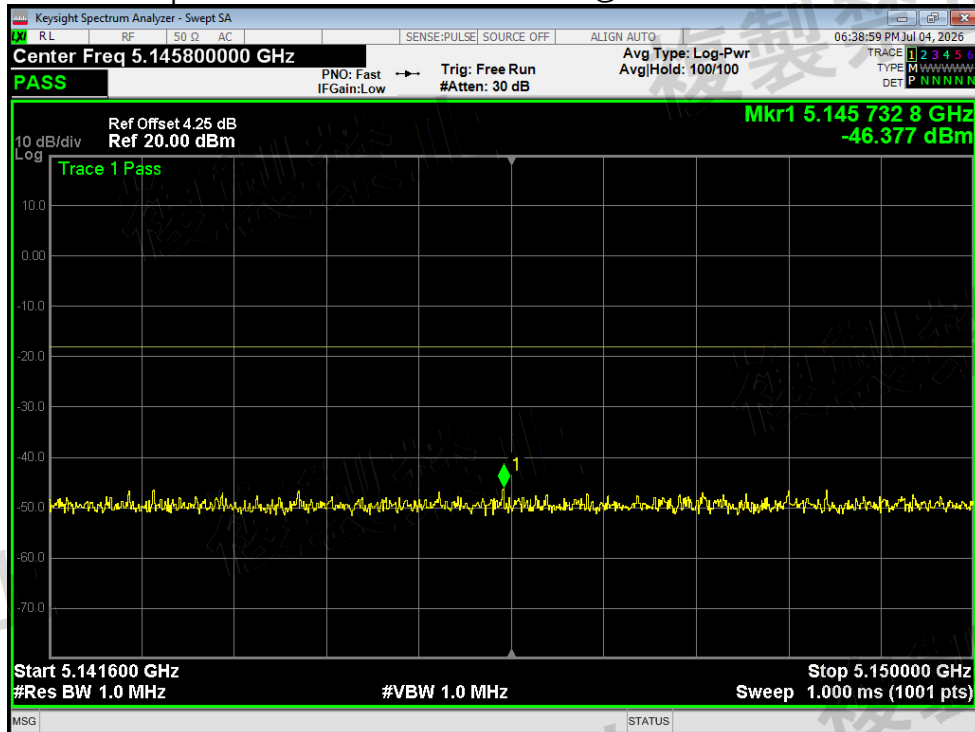
Tx. Spurious NVNT ac40 5190MHz Ant1 @ 5278.4MHz-26000MHz



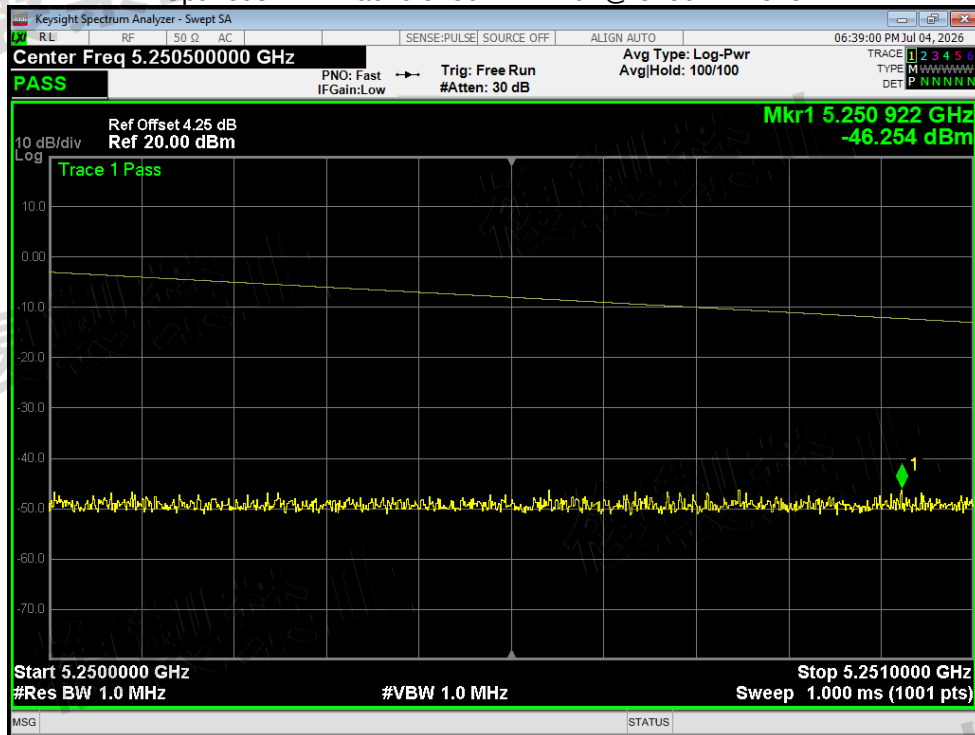
Tx. Spurious NVNT ac40 5230MHz Ant1 @ 30MHz-5141.6MHz



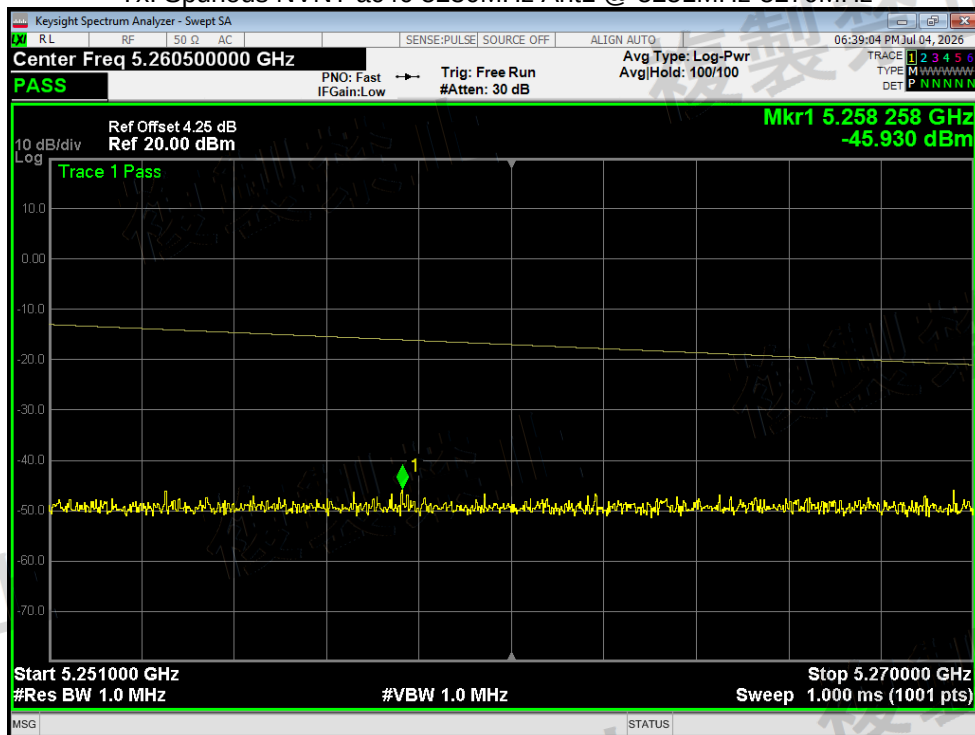
Tx. Spurious NVNT ac40 5230MHz Ant1 @ 5141.6MHz-5150MHz



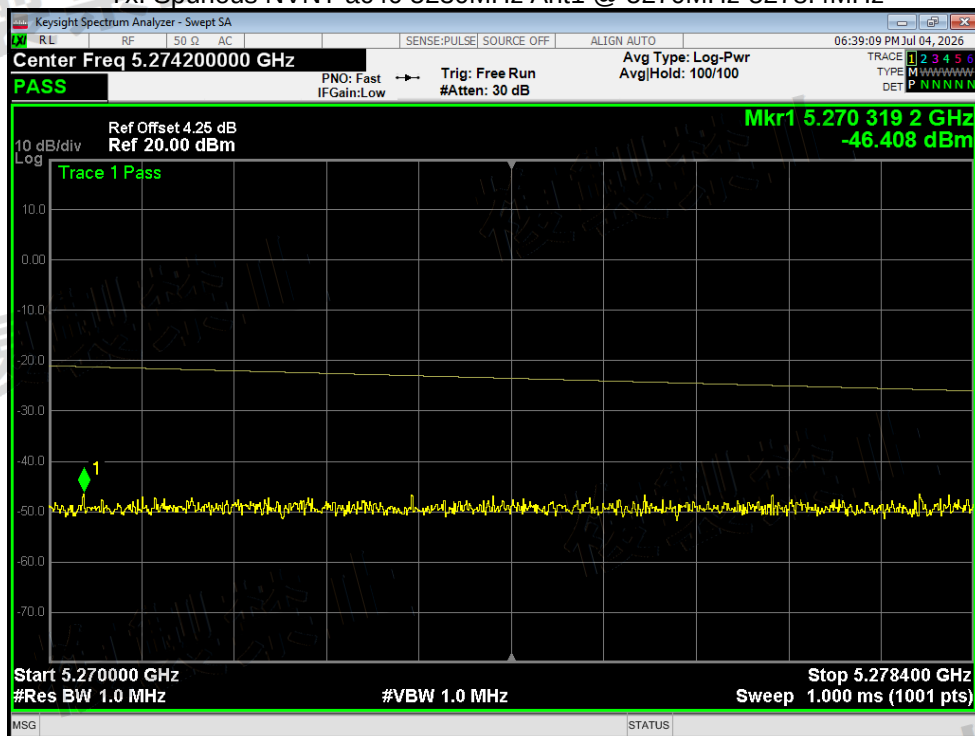
Tx. Spurious NVNT ac40 5230MHz Ant1 @ 5250MHz-5251MHz



Tx. Spurious NVNT ac40 5230MHz Ant1 @ 5251MHz-5270MHz



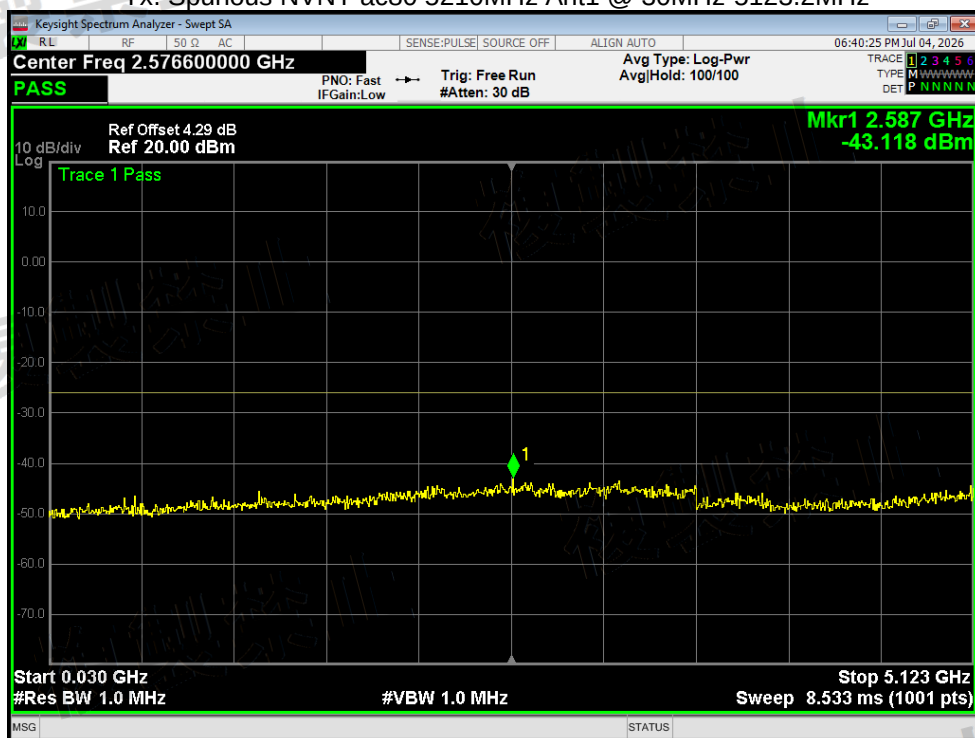
Tx. Spurious NVNT ac40 5230MHz Ant1 @ 5270MHz-5278.4MHz



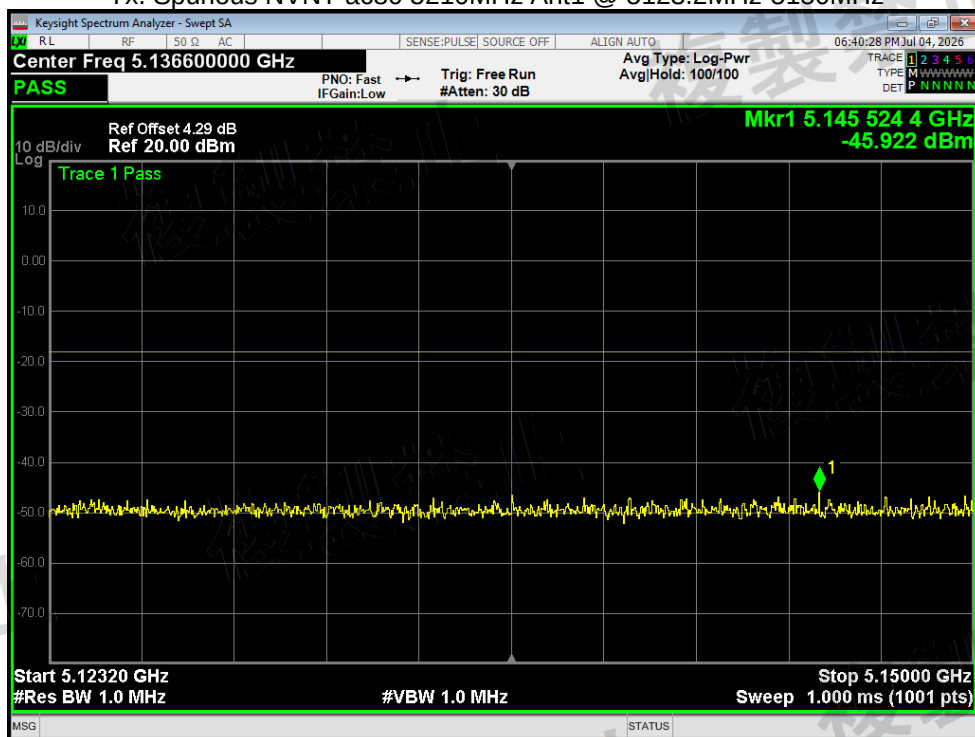
Tx. Spurious NVNT ac40 5230MHz Ant1 @ 5278.4MHz-26000MHz



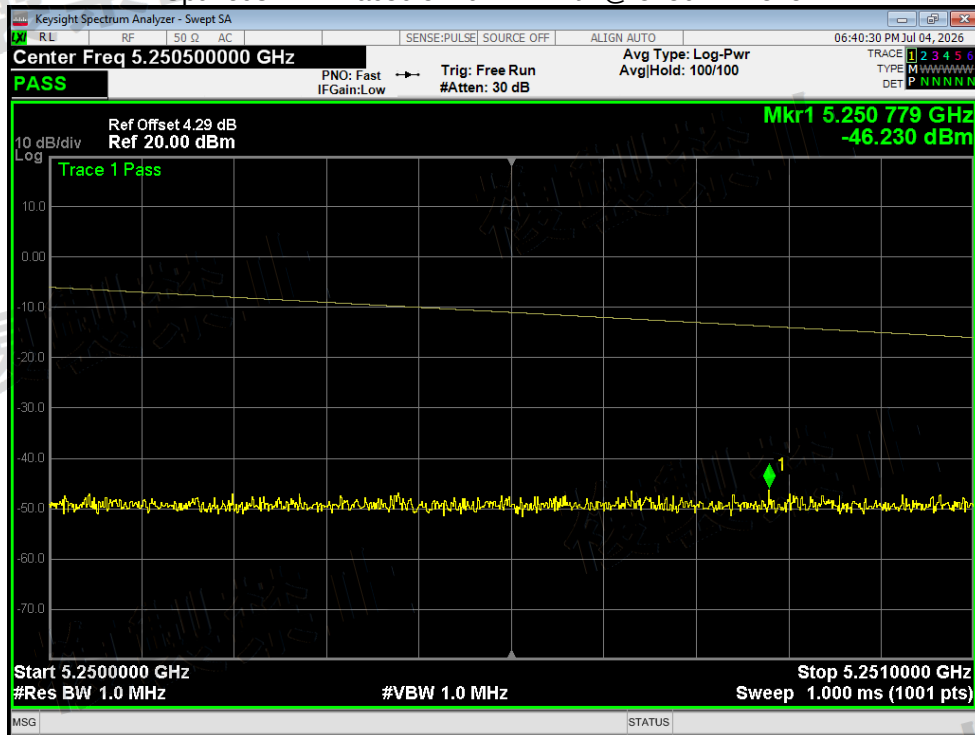
Tx. Spurious NVNT ac80 5210MHz Ant1 @ 30MHz-5123.2MHz



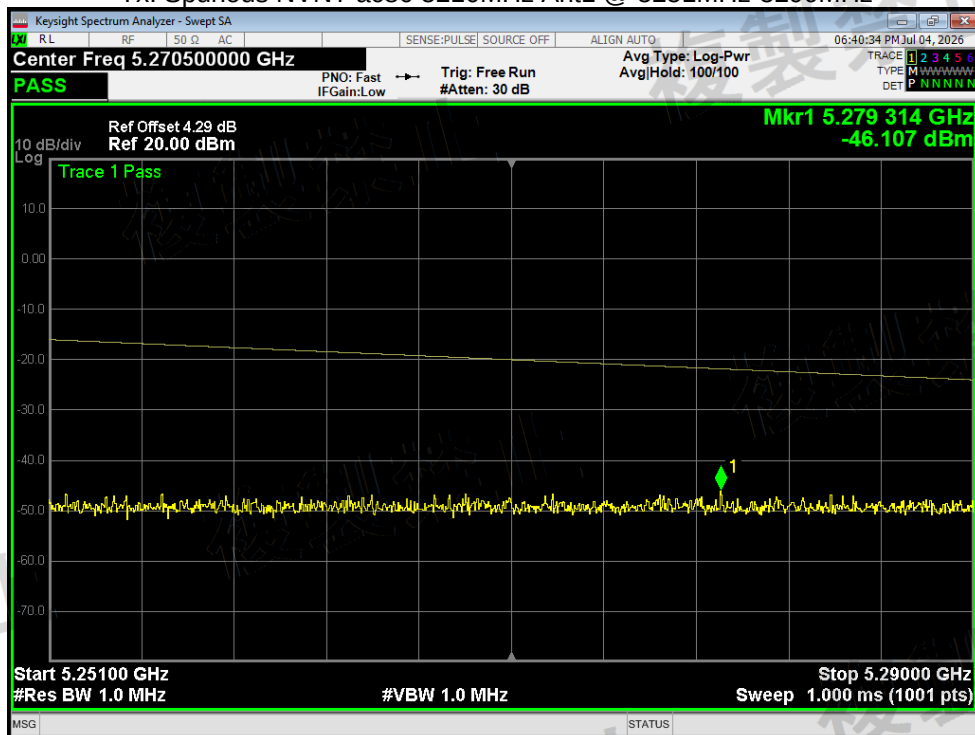
Tx. Spurious NVNT ac80 5210MHz Ant1 @ 5123.2MHz-5150MHz



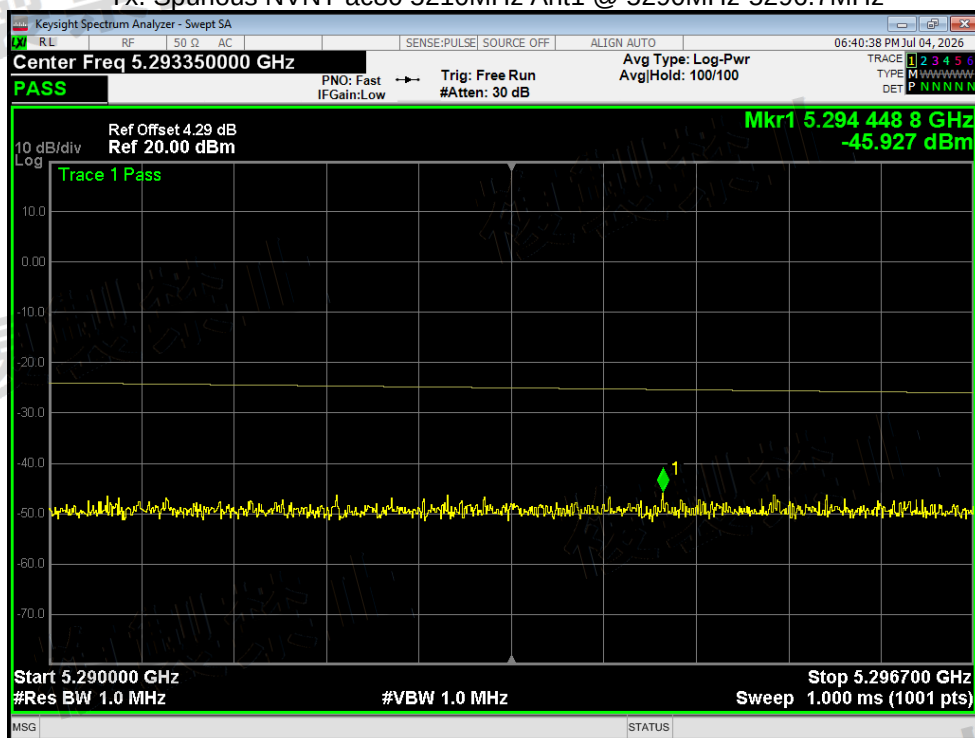
Tx. Spurious NVNT ac80 5210MHz Ant1 @ 5250MHz-5251MHz



Tx. Spurious NVNT ac80 5210MHz Ant1 @ 5251MHz-5290MHz



Tx. Spurious NVNT ac80 5210MHz Ant1 @ 5290MHz-5296.7MHz



Tx. Spurious NVNT ac80 5210MHz Ant1 @ 5296.7MHz-26000MHz

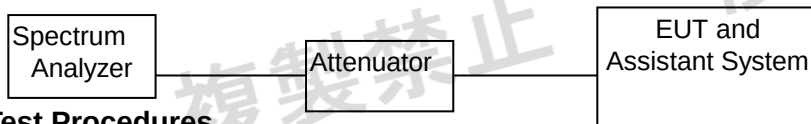


4.4 Antenna power and Antenna Power Tolerance &E.I.R.P

4.4.1 Limits

5.2G /5.3G band	5.6G band
W52 20MHz system: $\leq 10\text{mW/MHz}$ 40MHz system: $\leq 5\text{mW/MHz}$ 80MHz system: $\leq 2.5\text{mW/MHz}$ 160MHz system: $\leq 1.25\text{mW/MHz}$ W53 20MHz system: $\leq 10\text{mW/MHz}$ with TPC $\leq 5\text{mW/MHz}$ without TPC 40MHz system: $\leq 5\text{mW/MHz}$ with TPC $\leq 2.5\text{mW/MHz}$ without TPC 80MHz system: $\leq 2.5\text{mW/MHz}$ with TPC $\leq 1.25\text{mW/MHz}$ without TPC 160MHz system: $\leq 1.25\text{mW/MHz}$ with TPC $\leq 0.625\text{mW/MHz}$ without TPC	20MHz system: $\leq 50\text{mW/MHz}$ with TPC $\leq 25\text{mW/MHz}$ without TPC 40MHz system: $\leq 25\text{mW/MHz}$ with TPC $\leq 12.5\text{mW/MHz}$ without TPC 80MHz system: $\leq 12.5\text{mW/MHz}$ with TPC $\leq 6.25\text{mW/MHz}$ without TPC 160MHz system: $\leq 6.25\text{mW/MHz}$ with TPC $\leq 3.125\text{mW/MHz}$ without TPC
Tolerance	5.2G/5.3G band: +20%,-80% 5.6G band: +50%,-50%

4.4.2 Block Diagram of Test Setup



4.4.3 Test Procedures

(1) Step 1

Connect the UUT to the spectrum analyzer and use the following settings:

Center Frequency: The center frequency of the UUT test channel

RBW: 1MHz VBW: 1MHz

Span: Wide enough to cover the total power envelope of the signal of the UUT

Detector: Peak

Trance Mode: Max Hold

Find the Peak value for the power envelope and record the frequency.

(2)Step 2

Change the spectrum analyzer and use the following settings:

Center Frequency: Record frequency of step 1.

RBW: 1MHz VBW: 1MHz

Span: 0Hz

Sweep time: enough to capture the signal burst.

Detector: RMS

Trace Mode: Single

Capture the burst signal power and record it.

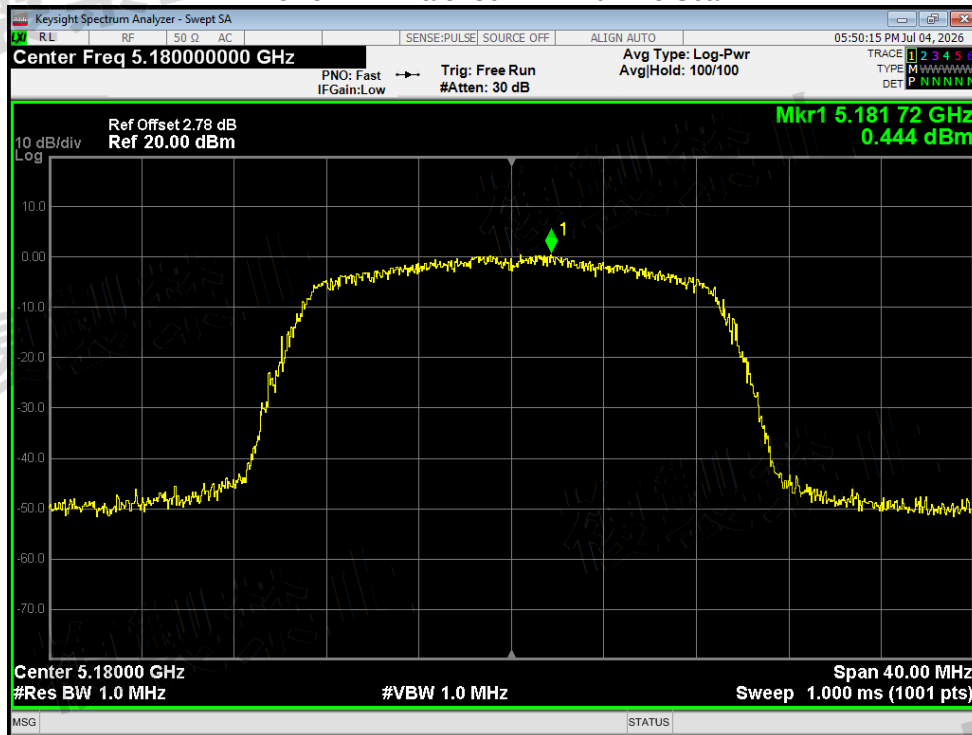
4.4.4 Test Result

Mode	Condition	Frequency (MHz)	Test Result (dBm/MHz)	Test Result (mW/MHz)	Limit (mW/MHz)	Tolerance (%)	Limit (%)
11a	nominal	5180	-2.04	0.62	≤10	-37.51	-80%~+20%
		5200	-2.22	0.60	≤10	-40.01	-80%~+20%
		5240	-2.59	0.55	≤10	-44.93	-80%~+20%
11n 20	nominal	5180	-2.06	0.62	≤10	-37.77	-80%~+20%
		5200	-2.16	0.61	≤10	-39.20	-80%~+20%
		5240	-2.70	0.54	≤10	-46.35	-80%~+20%
11n 40	nominal	5190	-1.92	0.64	≤5	-35.67	-80%~+20%
		5230	-2.60	0.55	≤5	-45.06	-80%~+20%
11ac 20	nominal	5180	-2.02	0.63	≤10	-37.24	-80%~+20%
		5200	-2.35	0.58	≤10	-41.83	-80%~+20%
		5240	-2.49	0.56	≤10	-43.62	-80%~+20%
11ac 40	nominal	5190	-1.89	0.65	≤5	-35.30	-80%~+20%
		5230	-2.30	0.59	≤5	-41.06	-80%~+20%
11ac 80	nominal	5210	-4.93	0.32	≤2.5	-67.83	-80%~+20%
Rated Power:20MHz OB: 1.0mW/MHz							
Rated Power:40MHz OB: 1.0mW/MHz							
Rated Power:80MHz OB: 1.0mW/MHz							
Conclusion: PASS							

EIPR POWER

Mode	Condition	Frequency (MHz)	Power (dBm/MHz)	Antenna Gain (dBi)	EIRP (dBm/MHz)	EIRP (mW/MHz)	Limit (mW/MHz)
11a	nominal	5180	-2.04	3.42	1.38	1.37	≤10
		5200	-2.22	3.42	1.20	1.32	≤10
		5240	-2.59	3.42	0.83	1.21	≤10
11n 20	nominal	5180	-2.06	3.42	1.36	1.37	≤10
		5200	-2.16	3.42	1.26	1.34	≤10
		5240	-2.70	3.42	0.72	1.18	≤10
11n 40	nominal	5190	-1.92	3.42	1.50	1.41	≤5
		5230	-2.60	3.42	0.82	1.21	≤5
11ac 20	nominal	5180	-2.02	3.42	1.40	1.38	≤10
		5200	-2.35	3.42	1.07	1.28	≤10
		5240	-2.49	3.42	0.93	1.24	≤10
11ac 40	nominal	5190	-1.89	3.42	1.53	1.42	≤5
		5230	-2.30	3.42	1.12	1.29	≤5
11ac 80	nominal	5210	-4.93	3.42	-1.51	0.71	≤2.5

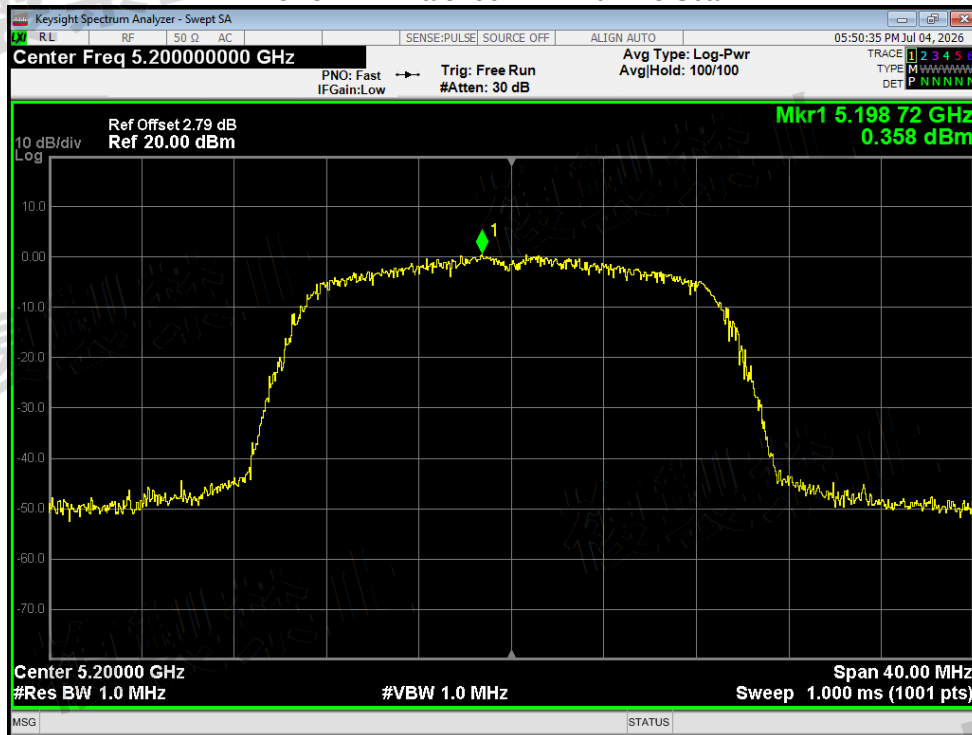
Power NVNT a 5180MHz Ant1 Pre Scan



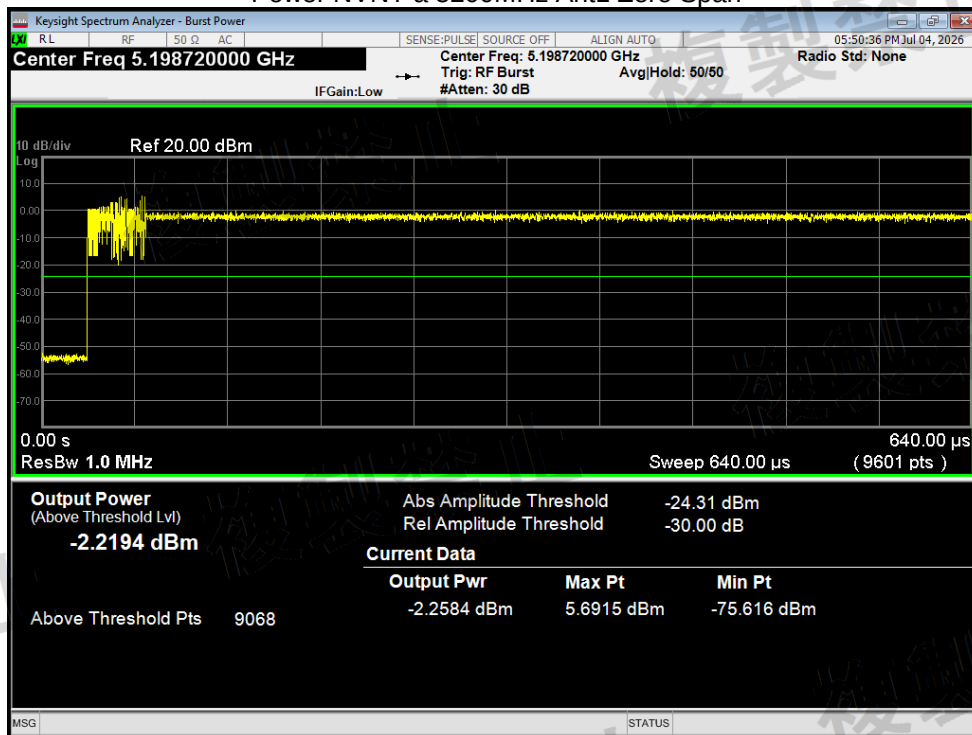
Power NVNT a 5180MHz Ant1 Zero Span



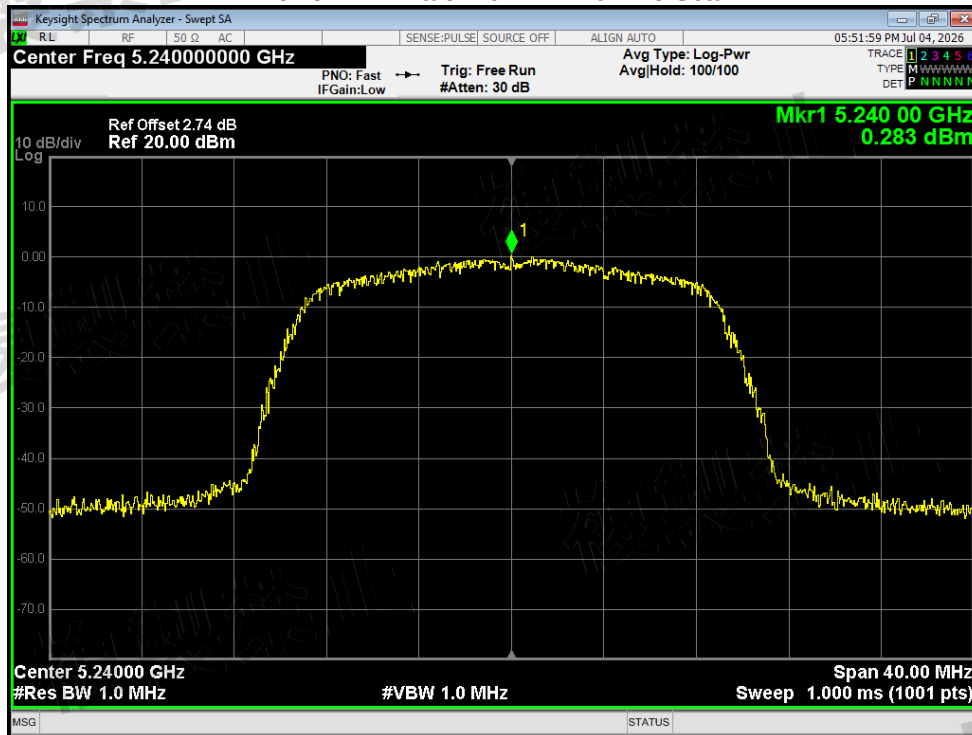
Power NVNT a 5200MHz Ant1 Pre Scan



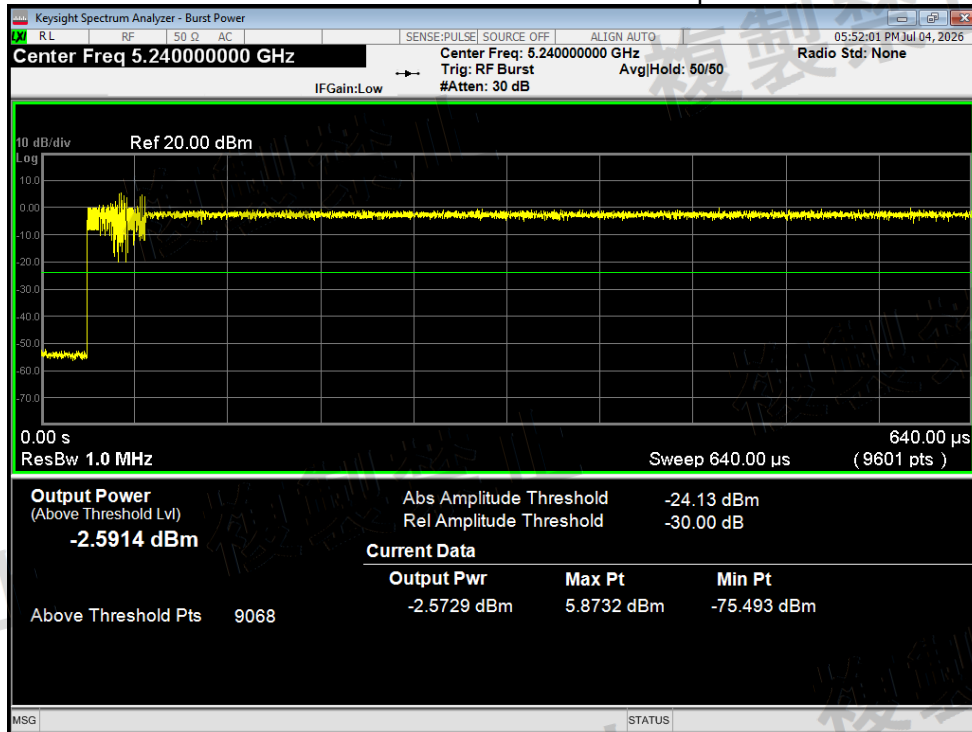
Power NVNT a 5200MHz Ant1 Zero Span



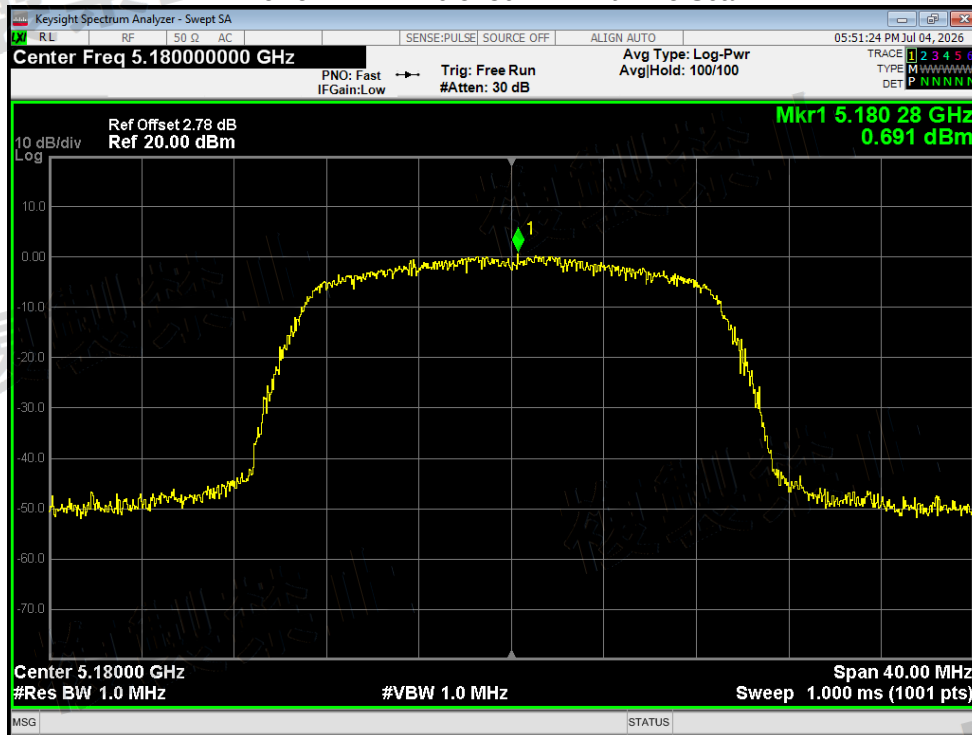
Power NVNT a 5240MHz Ant1 Pre Scan



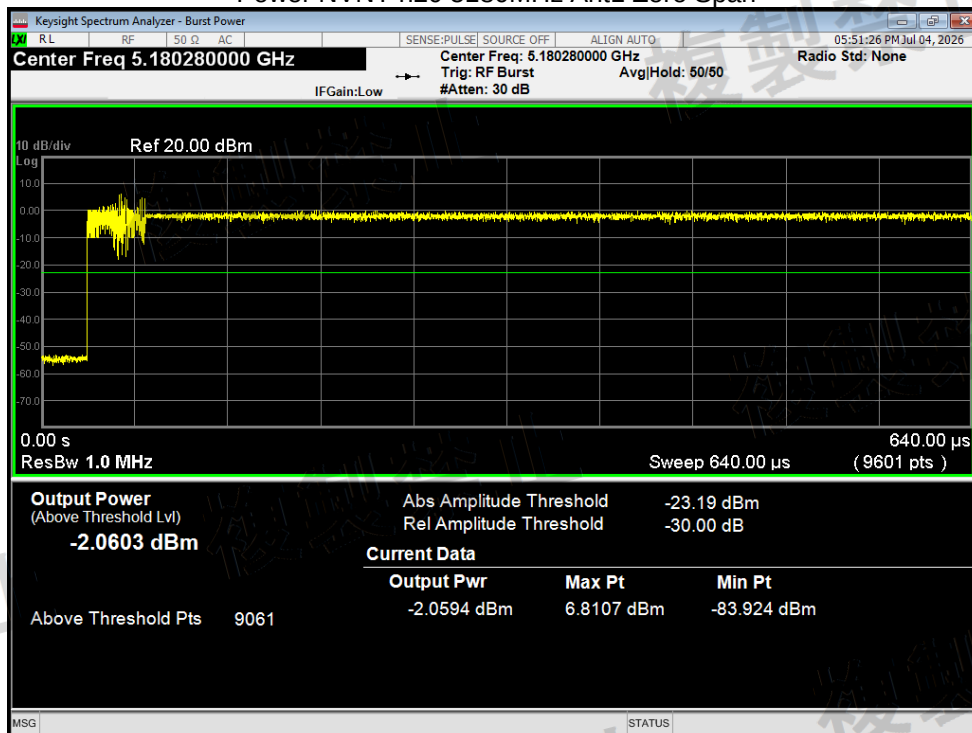
Power NVNT a 5240MHz Ant1 Zero Span



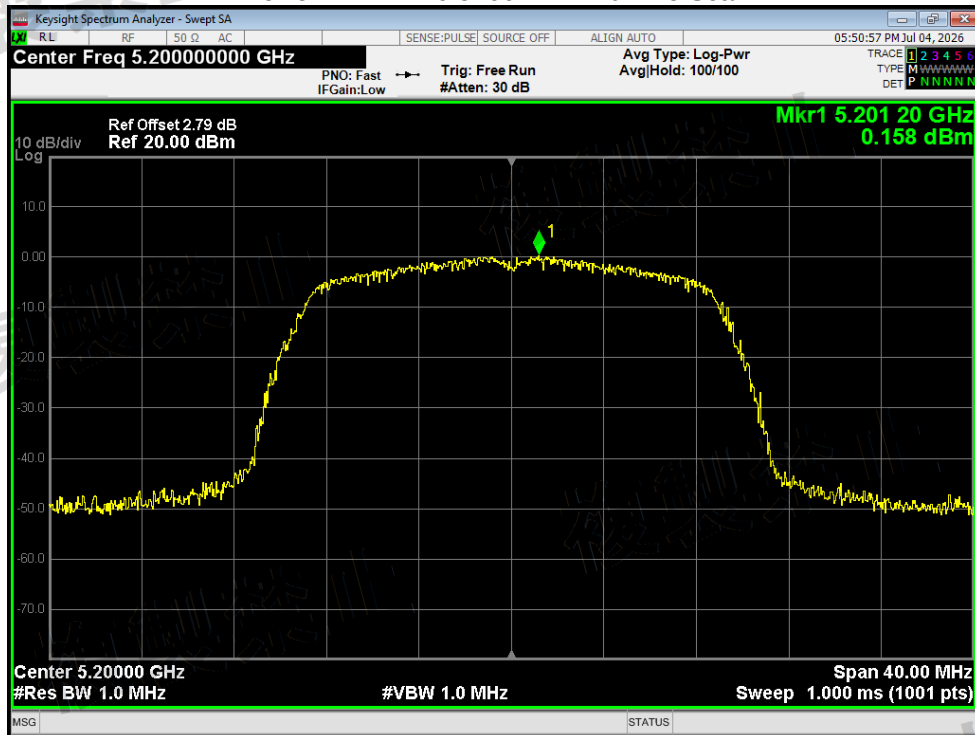
Power NVNT n20 5180MHz Ant1 Pre Scan



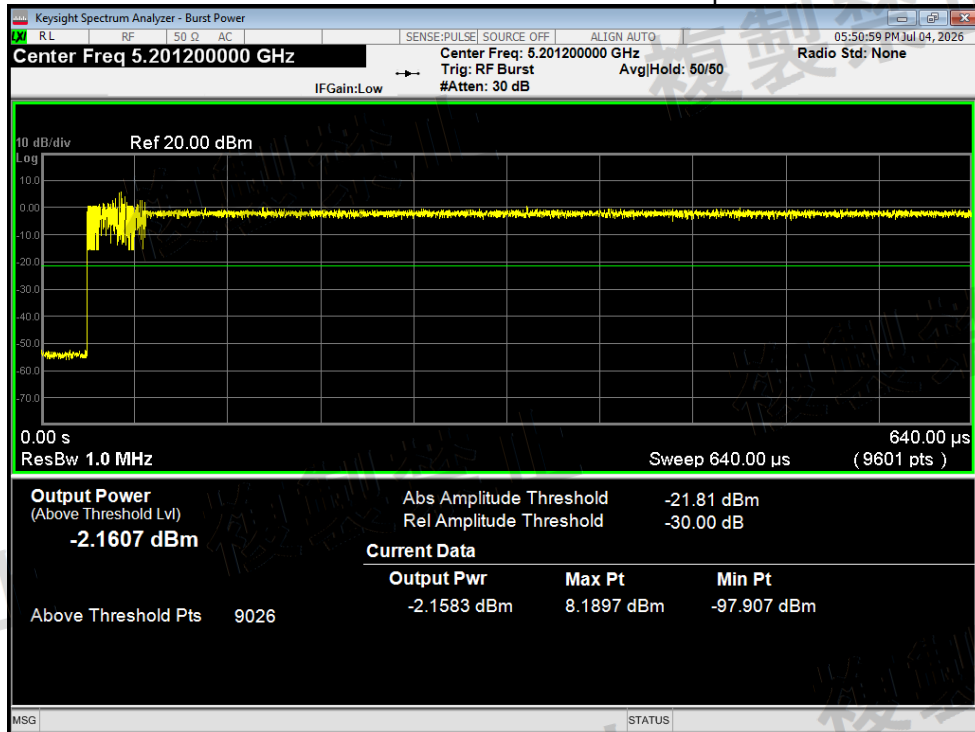
Power NVNT n20 5180MHz Ant1 Zero Span



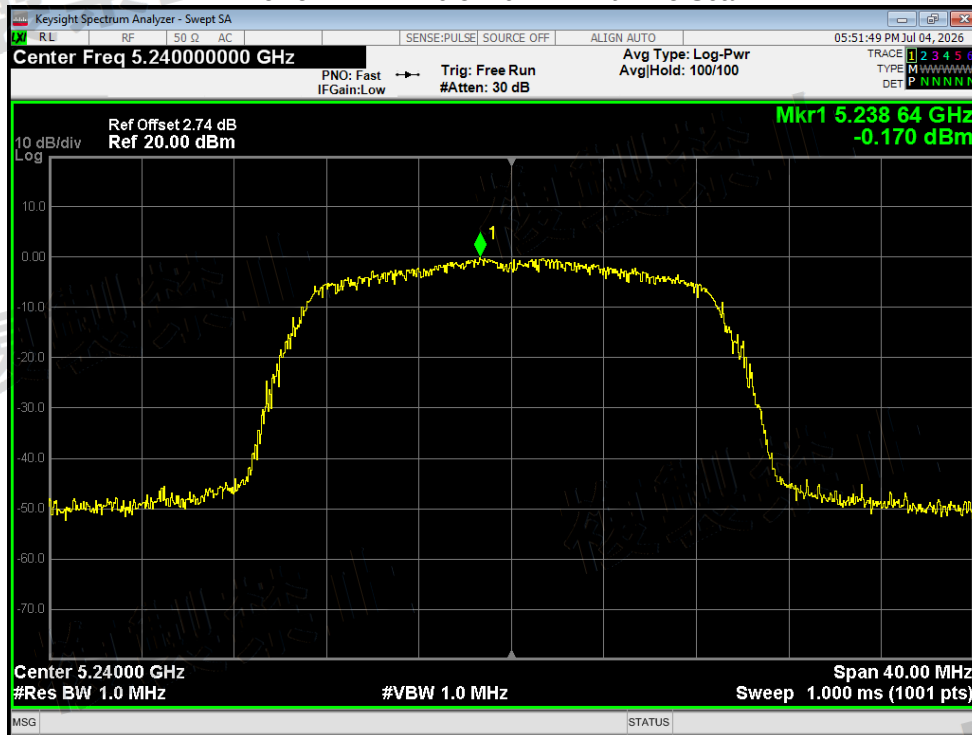
Power NVNT n20 5200MHz Ant1 Pre Scan



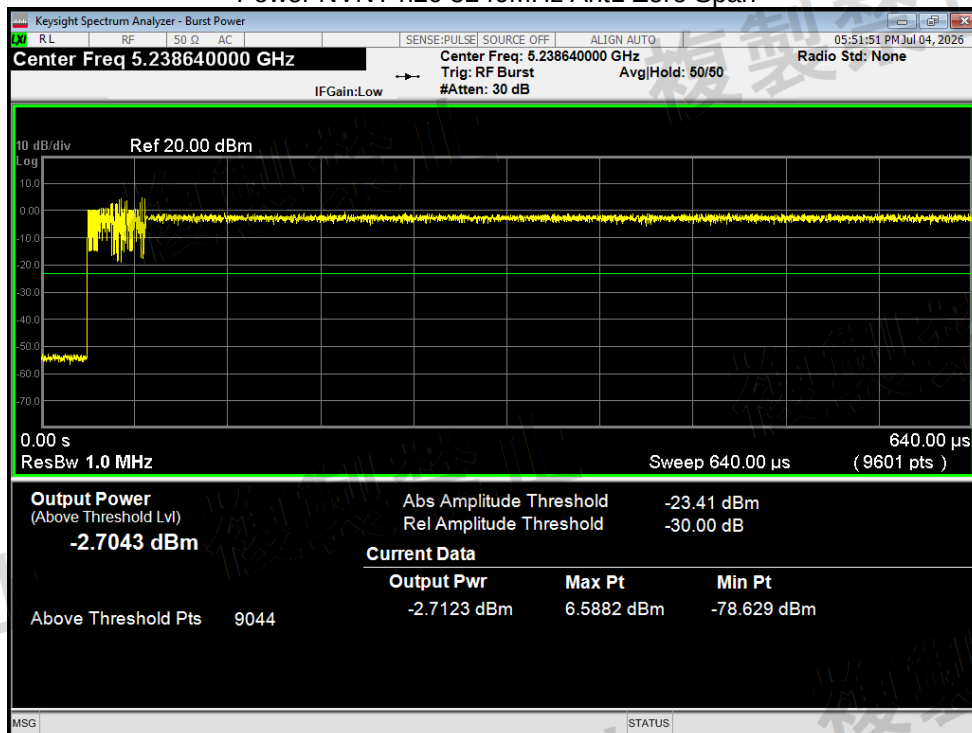
Power NVNT n20 5200MHz Ant1 Zero Span



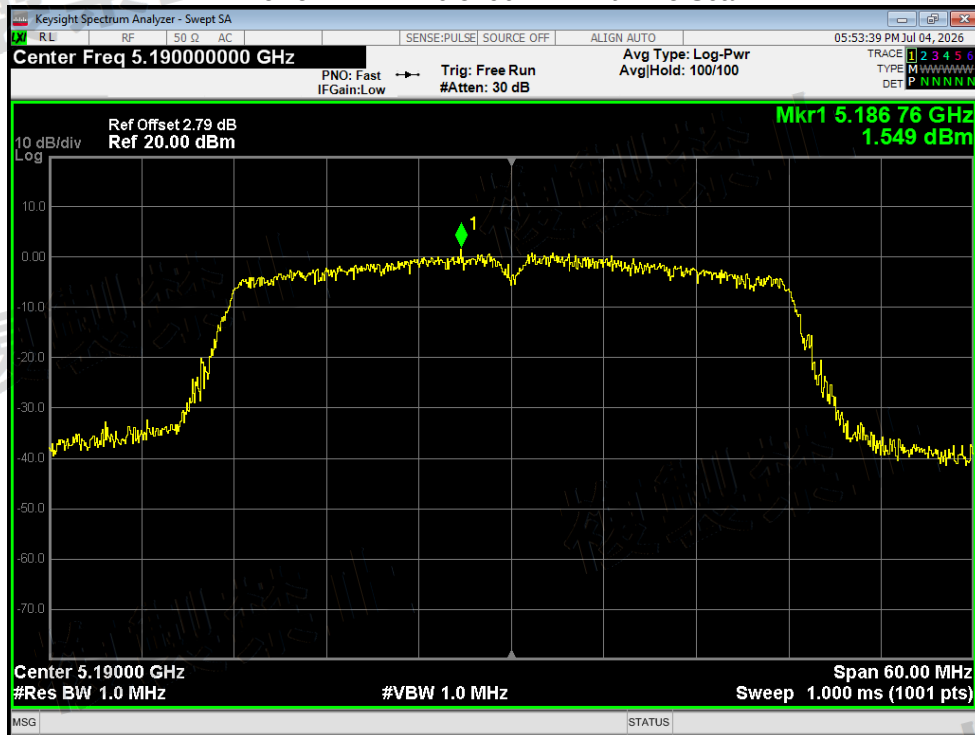
Power NVNT n20 5240MHz Ant1 Pre Scan



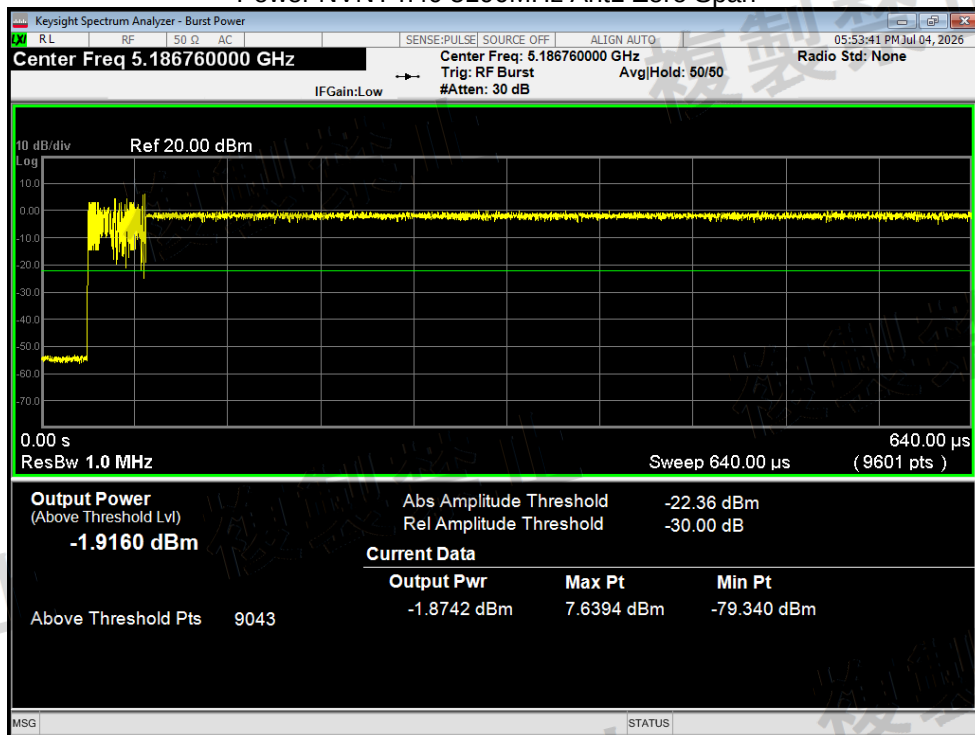
Power NVNT n20 5240MHz Ant1 Zero Span



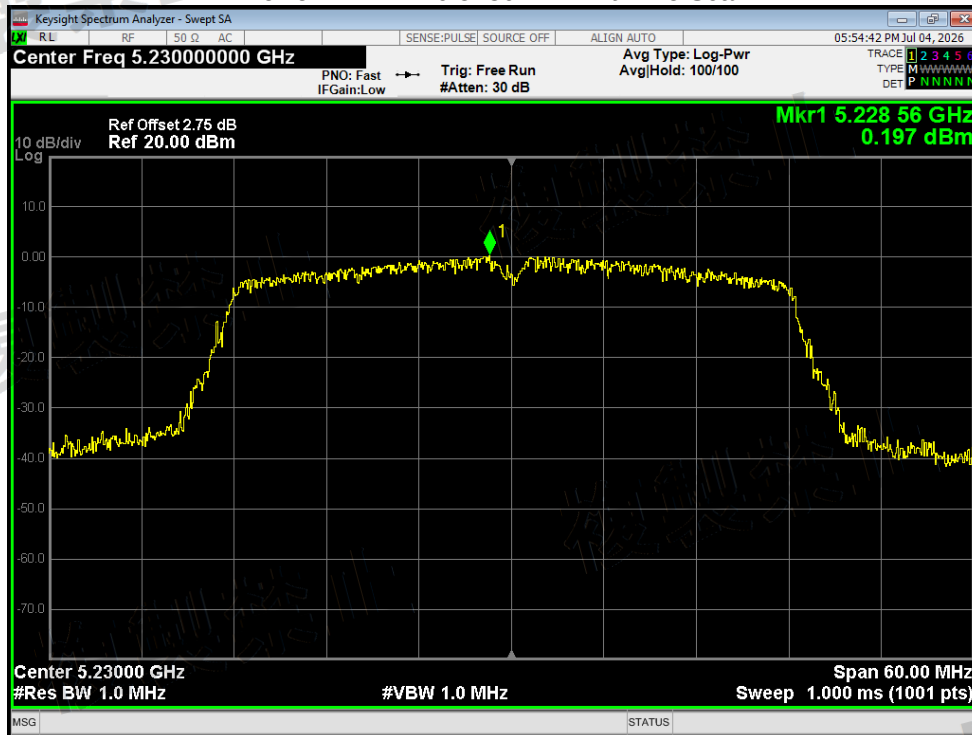
Power NVNT n40 5190MHz Ant1 Pre Scan



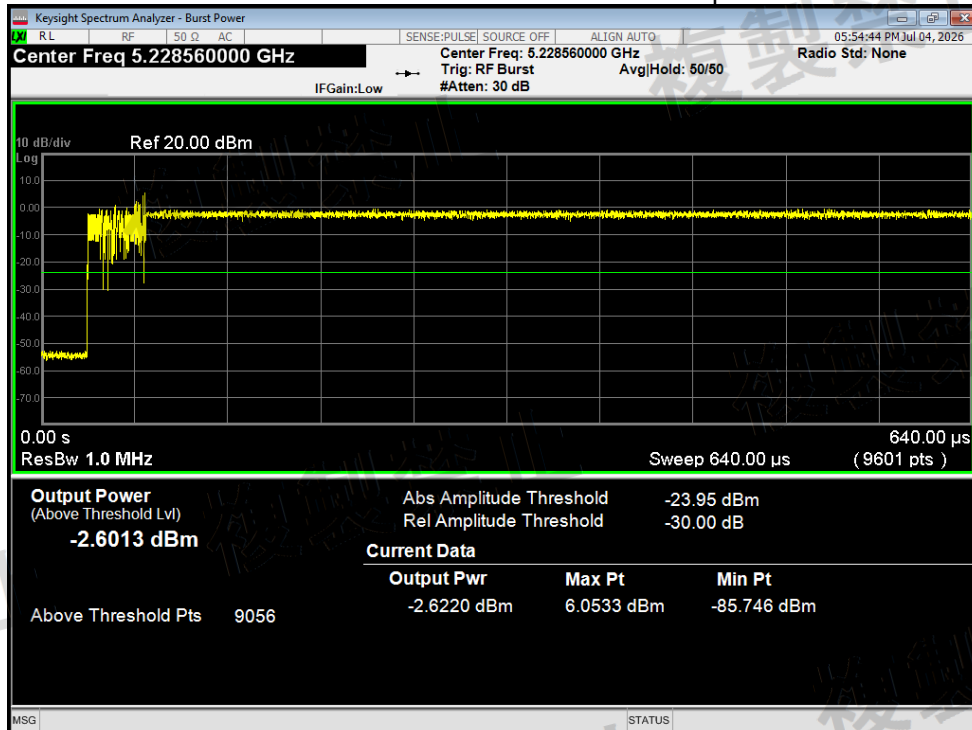
Power NVNT n40 5190MHz Ant1 Zero Span



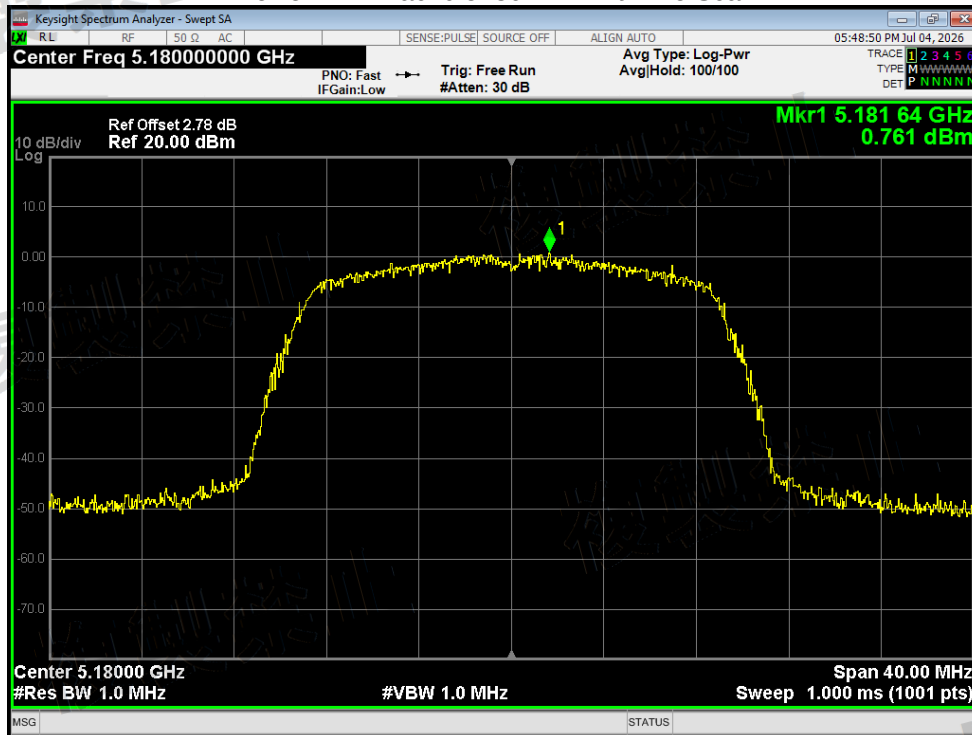
Power NVNT n40 5230MHz Ant1 Pre Scan



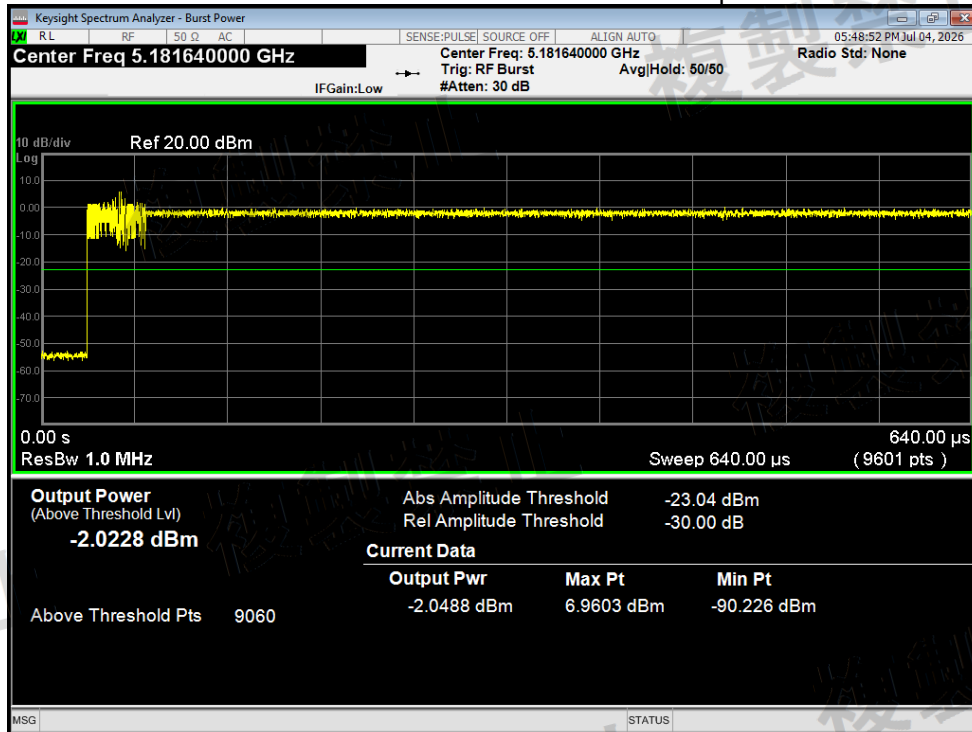
Power NVNT n40 5230MHz Ant1 Zero Span



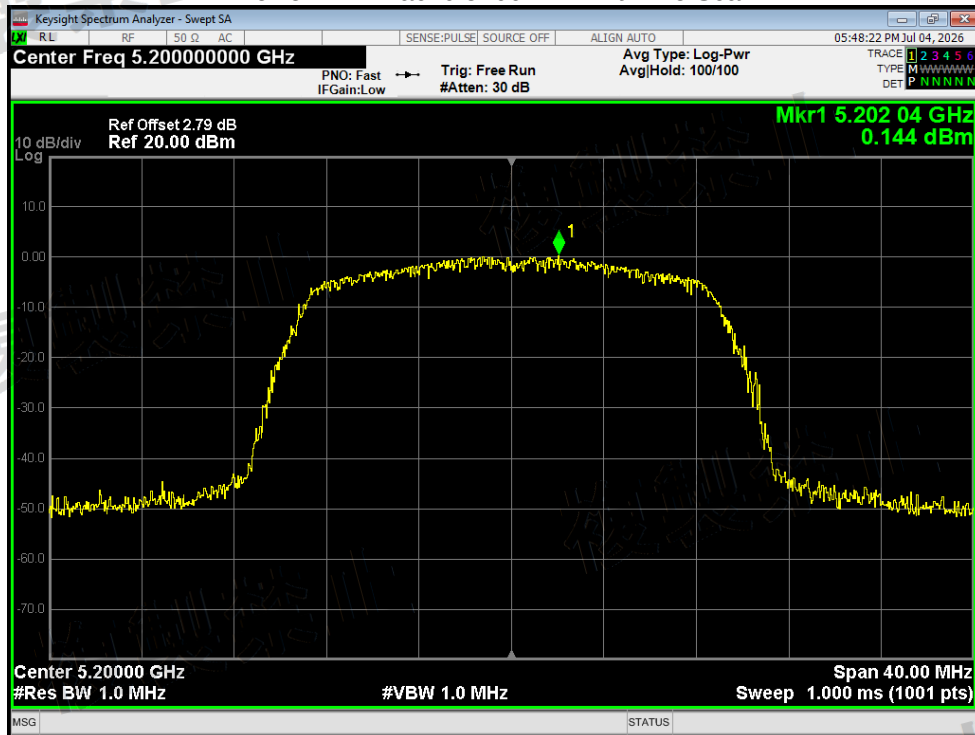
Power NVNT ac20 5180MHz Ant1 Pre Scan



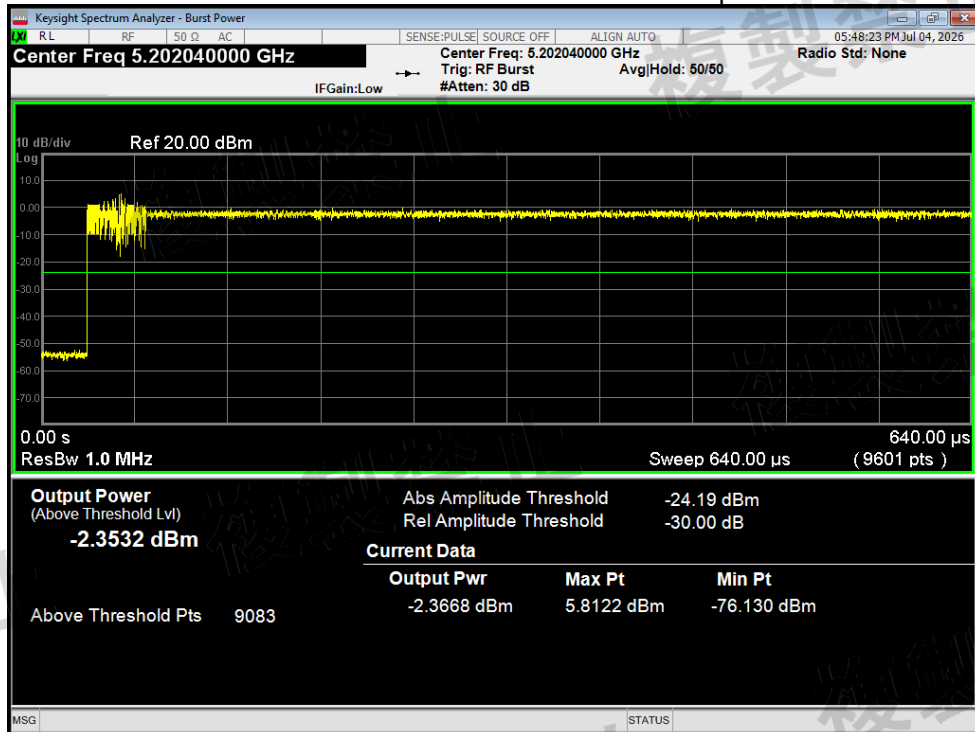
Power NVNT ac20 5180MHz Ant1 Zero Span



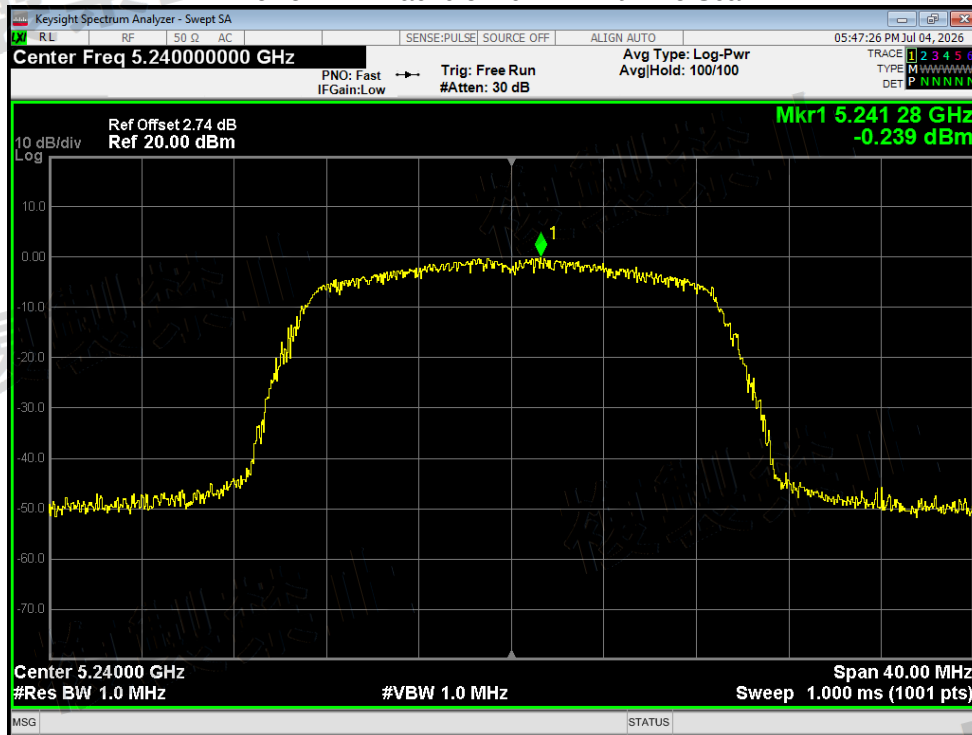
Power NVNT ac20 5200MHz Ant1 Pre Scan



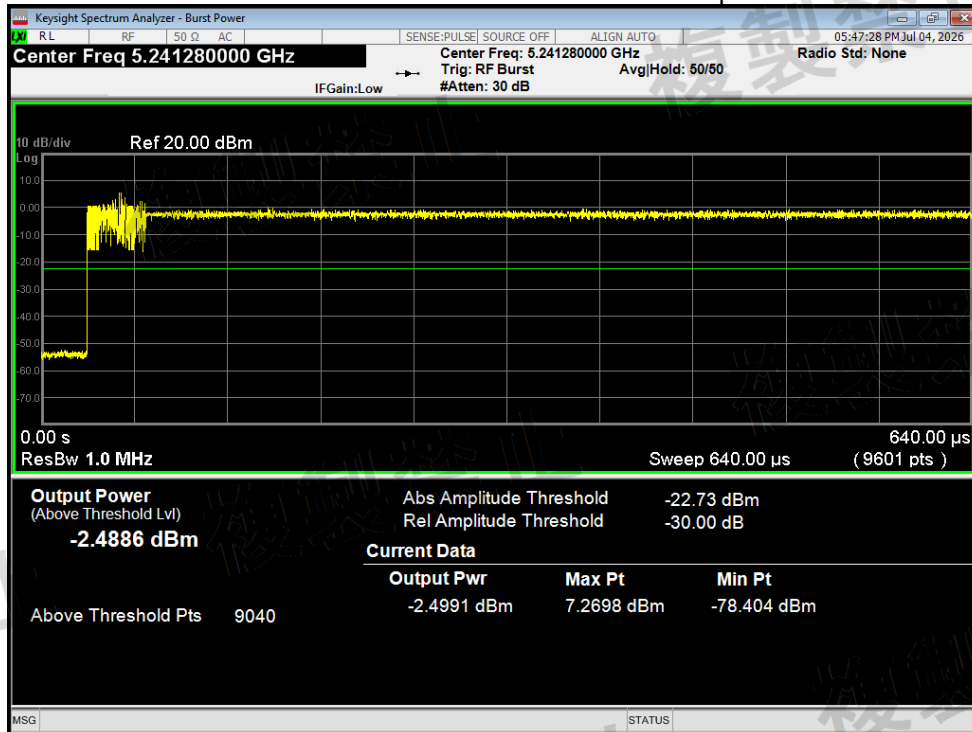
Power NVNT ac20 5200MHz Ant1 Zero Span



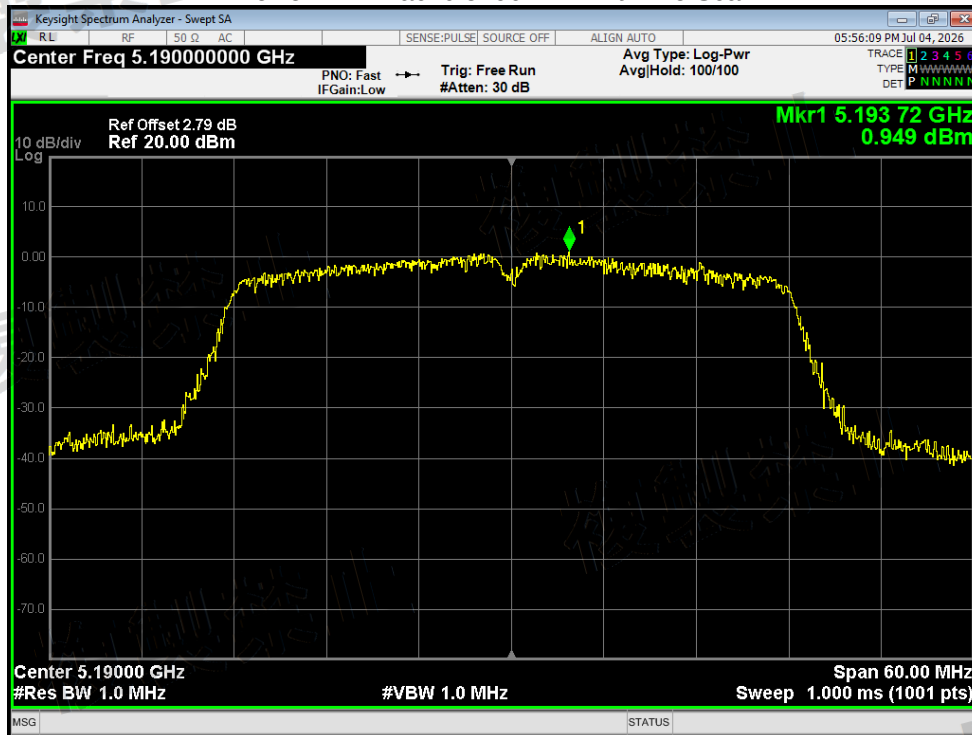
Power NVNT ac20 5240MHz Ant1 Pre Scan



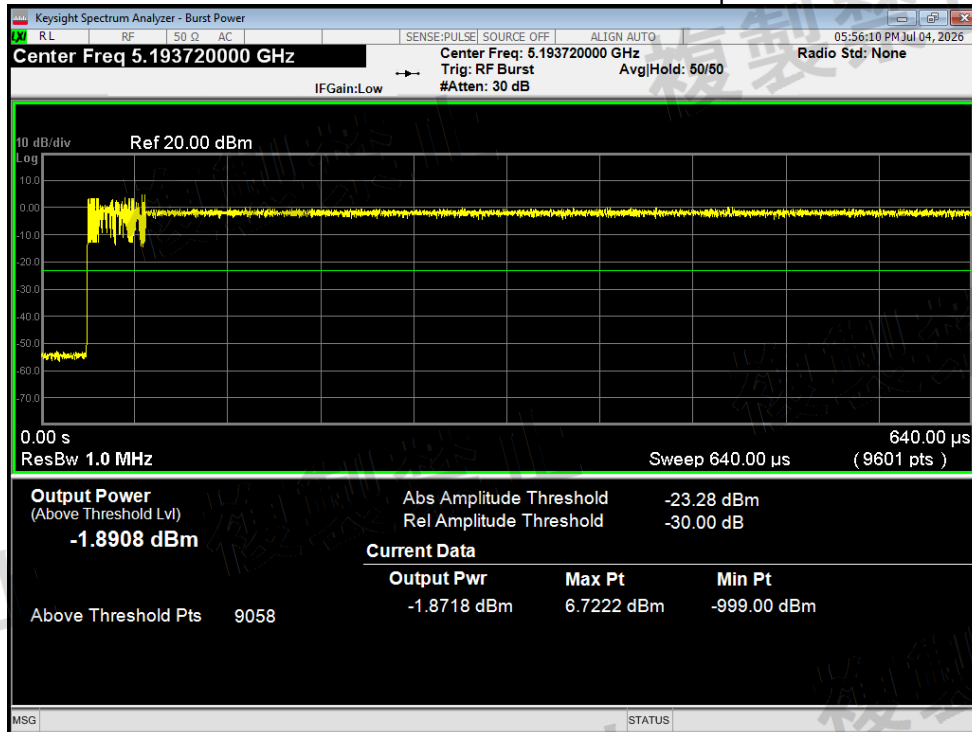
Power NVNT ac20 5240MHz Ant1 Zero Span

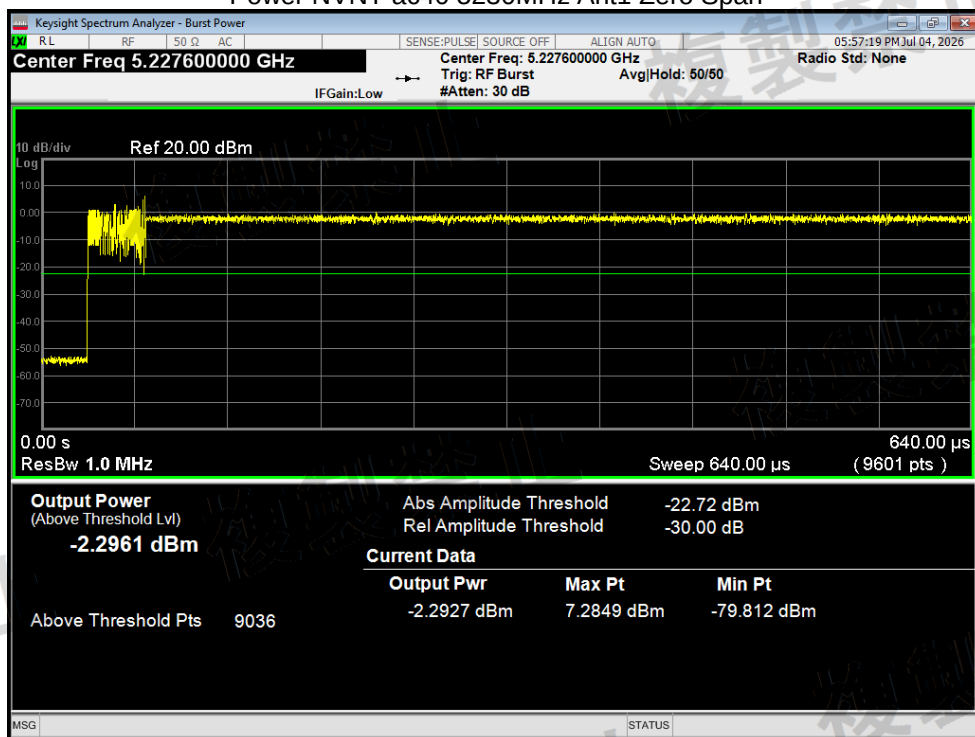
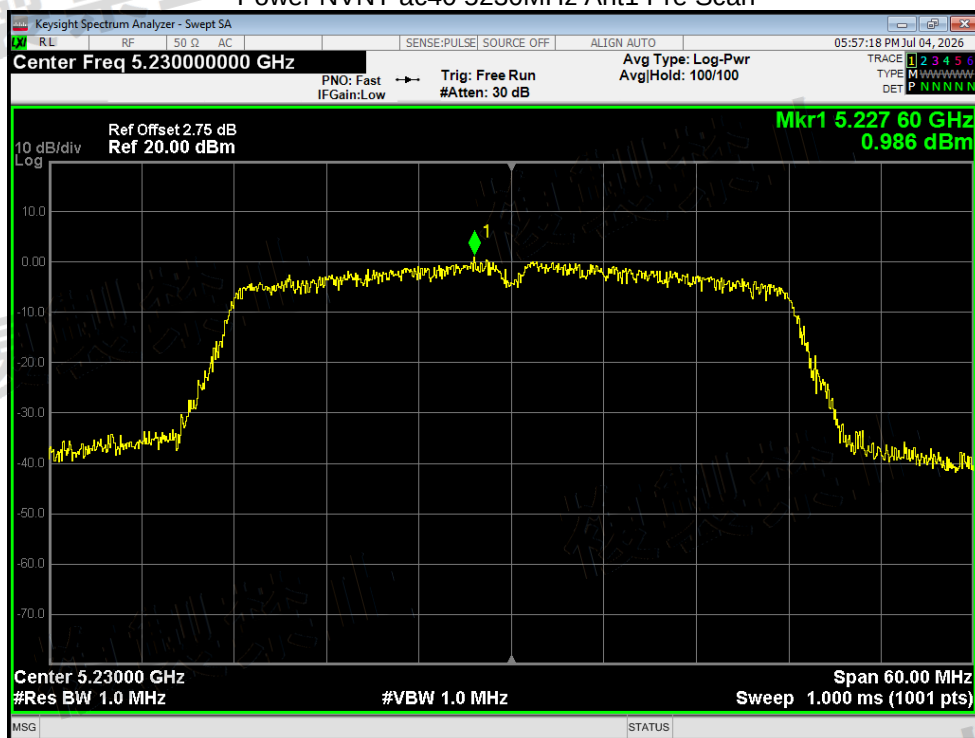


Power NVNT ac40 5190MHz Ant1 Pre Scan

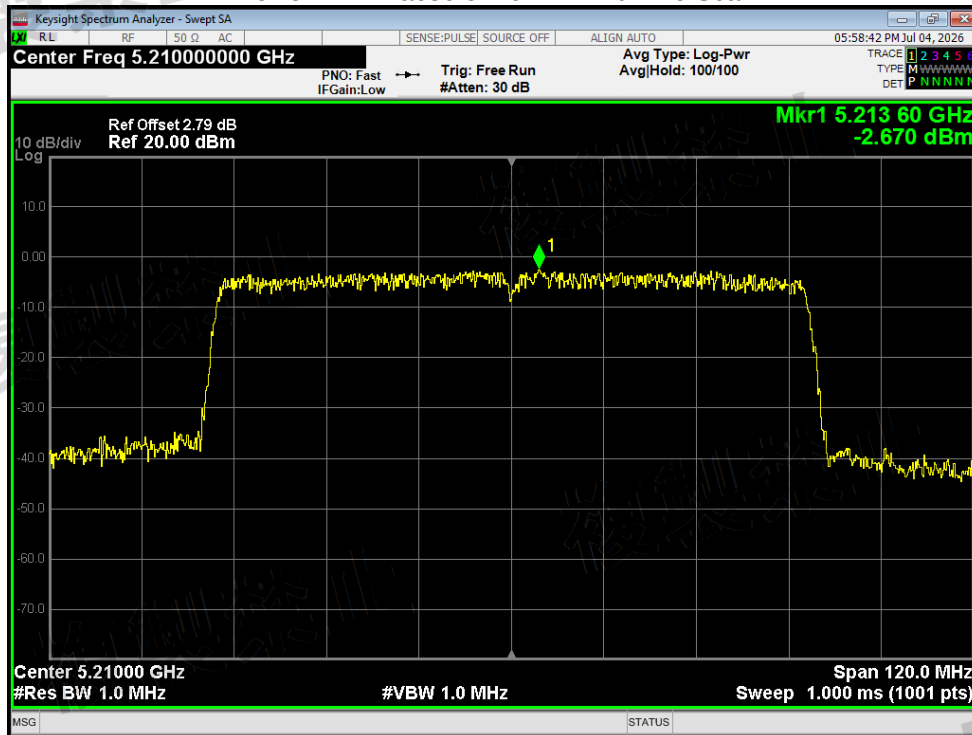


Power NVNT ac40 5190MHz Ant1 Zero Span

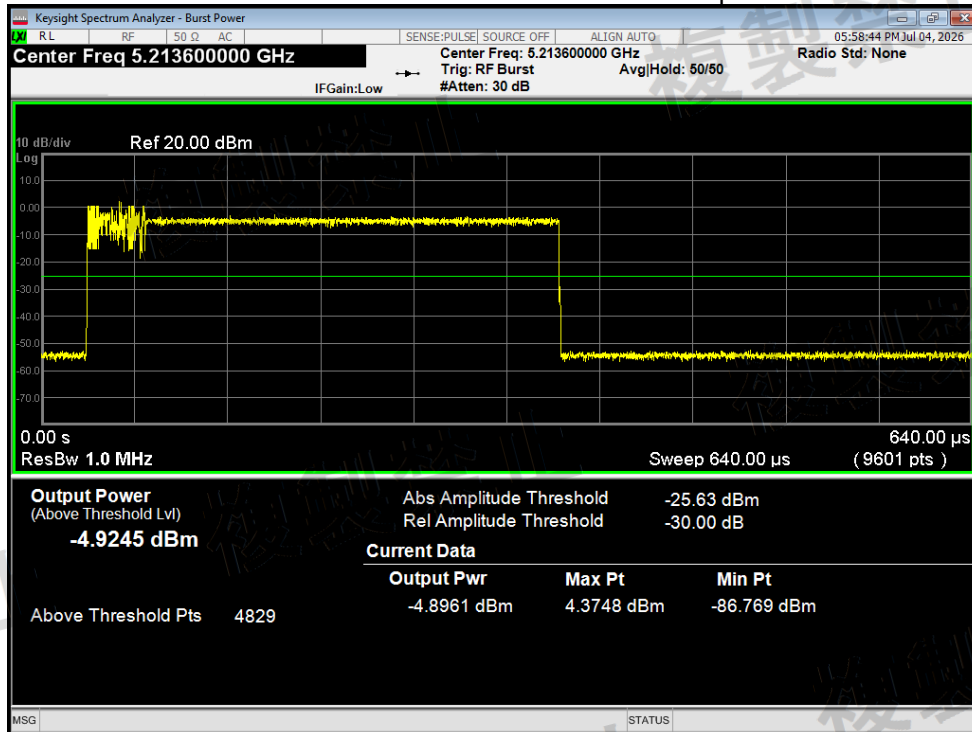




Power NVNT ac80 5210MHz Ant1 Pre Scan



Power NVNT ac80 5210MHz Ant1 Zero Span

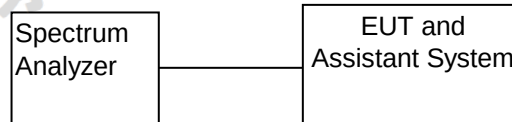


4.5 Adjacent channel leakage power

4.5.1 Limits

Adjacent Channel Emitted Power	Fc ± 20MHz ±9MHz BW : -25dBc	Fc ± 20MHz ±10MHz BW : -25dBc	Fc ± 40MHz ±20MHz BW : -25dBc	Fc ± 80MHz ±40MHz BW : -25dBc	Fc ± 80MHz ±40MHz BW : -25dBc
	Fc ± 40MHz ±9MHz BW : -40dBc	Fc ± 40MHz ±10MHz BW : -40dBc	Fc ± 80MHz ±20MHz BW : -40dBc		

4.5.2 Block Diagram of Test Setup



4.5.3 Test Procedures

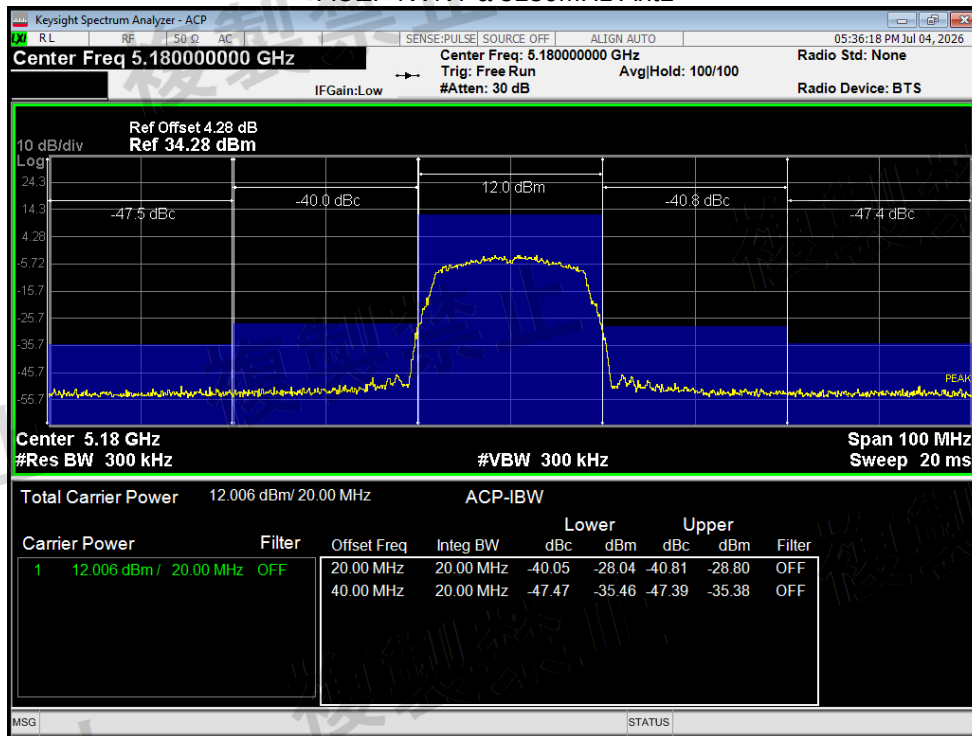
Table No.45 related to Article 2 Paragraph 1 of Item 19-3 of Ordinance Concerning Technical Regulations Conformity Certification etc. of Specified Radio Equipment.

4.5.4 Test Result

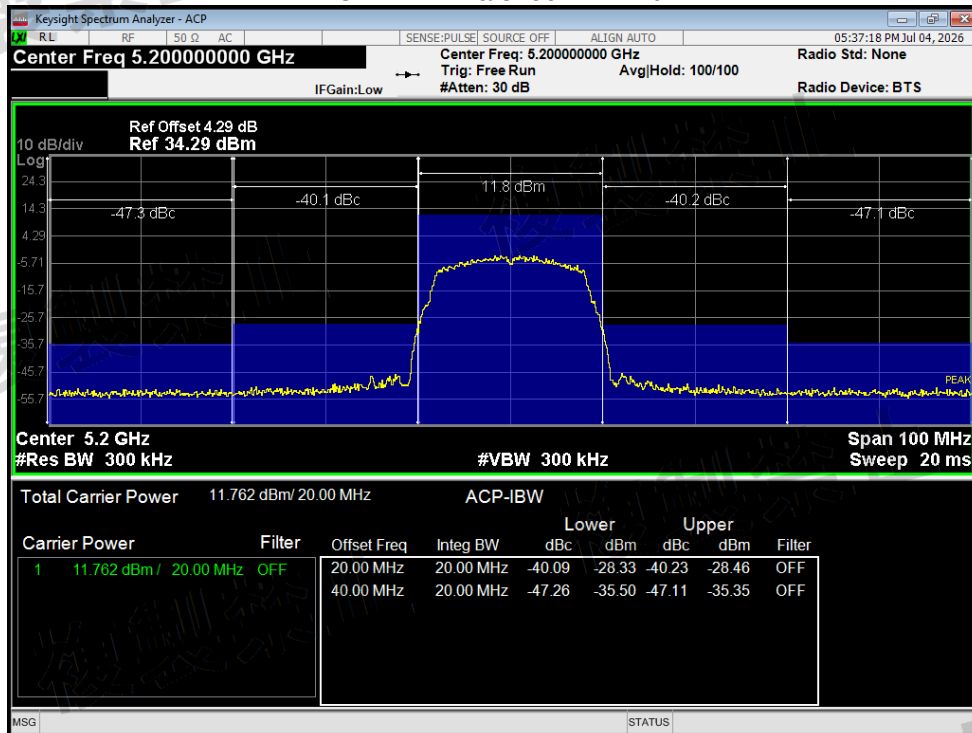
Condition	Mode	Frequency (MHz)	Antenna	Offset (MHz)	Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5180	Ant1	-20	-40.05	-25	Pass
NVNT	a	5180	Ant1	-40	-47.47	-40	Pass
NVNT	a	5180	Ant1	20	-40.81	-25	Pass
NVNT	a	5180	Ant1	40	-47.39	-40	Pass
NVNT	a	5200	Ant1	-20	-40.09	-25	Pass
NVNT	a	5200	Ant1	-40	-47.26	-40	Pass
NVNT	a	5200	Ant1	20	-40.23	-25	Pass
NVNT	a	5200	Ant1	40	-47.11	-40	Pass
NVNT	a	5240	Ant1	-20	-40.18	-25	Pass
NVNT	a	5240	Ant1	-40	-46.92	-40	Pass
NVNT	a	5240	Ant1	20	-40.7	-25	Pass
NVNT	a	5240	Ant1	40	-46.91	-40	Pass
NVNT	n20	5180	Ant1	-20	-38.64	-25	Pass
NVNT	n20	5180	Ant1	-40	-47.41	-40	Pass
NVNT	n20	5180	Ant1	20	-38.77	-25	Pass
NVNT	n20	5180	Ant1	40	-47.3	-40	Pass
NVNT	n20	5200	Ant1	-20	-38.63	-25	Pass
NVNT	n20	5200	Ant1	-40	-47.04	-40	Pass
NVNT	n20	5200	Ant1	20	-38.19	-25	Pass
NVNT	n20	5200	Ant1	40	-46.95	-40	Pass
NVNT	n20	5240	Ant1	-20	-38.7	-25	Pass
NVNT	n20	5240	Ant1	-40	-46.84	-40	Pass
NVNT	n20	5240	Ant1	20	-38.47	-25	Pass
NVNT	n20	5240	Ant1	40	-46.78	-40	Pass
NVNT	n40	5190	Ant1	-40	-34.96	-25	Pass
NVNT	n40	5190	Ant1	-80	-47.31	-40	Pass
NVNT	n40	5190	Ant1	40	-36.53	-25	Pass
NVNT	n40	5190	Ant1	80	-47.35	-40	Pass
NVNT	n40	5230	Ant1	-40	-35.04	-25	Pass
NVNT	n40	5230	Ant1	-80	-46.94	-40	Pass

NVNT	n40	5230	Ant1	40	-36.72	-25	Pass
NVNT	n40	5230	Ant1	80	-47.27	-40	Pass
NVNT	ac20	5180	Ant1	-20	-38.85	-25	Pass
NVNT	ac20	5180	Ant1	-40	-47.38	-40	Pass
NVNT	ac20	5180	Ant1	20	-38.24	-25	Pass
NVNT	ac20	5180	Ant1	40	-47.38	-40	Pass
NVNT	ac20	5200	Ant1	-20	-38.78	-25	Pass
NVNT	ac20	5200	Ant1	-40	-47.01	-40	Pass
NVNT	ac20	5200	Ant1	20	-38.48	-25	Pass
NVNT	ac20	5200	Ant1	40	-47.02	-40	Pass
NVNT	ac20	5240	Ant1	-20	-38.73	-25	Pass
NVNT	ac20	5240	Ant1	-40	-46.86	-40	Pass
NVNT	ac20	5240	Ant1	20	-38.98	-25	Pass
NVNT	ac20	5240	Ant1	40	-46.79	-40	Pass
NVNT	ac40	5190	Ant1	-40	-35.25	-25	Pass
NVNT	ac40	5190	Ant1	-80	-47.26	-40	Pass
NVNT	ac40	5190	Ant1	40	-36.44	-25	Pass
NVNT	ac40	5190	Ant1	80	-47.46	-40	Pass
NVNT	ac40	5230	Ant1	-40	-35.1	-25	Pass
NVNT	ac40	5230	Ant1	-80	-46.88	-40	Pass
NVNT	ac40	5230	Ant1	40	-36.78	-25	Pass
NVNT	ac40	5230	Ant1	80	-47.19	-40	Pass
NVNT	ac80	5210	Ant1	-80	-35.04	-25	Pass
NVNT	ac80	5210	Ant1	-160	-46.05	-40	Pass
NVNT	ac80	5210	Ant1	80	-38.59	-25	Pass
NVNT	ac80	5210	Ant1	160	-46.02	-40	Pass

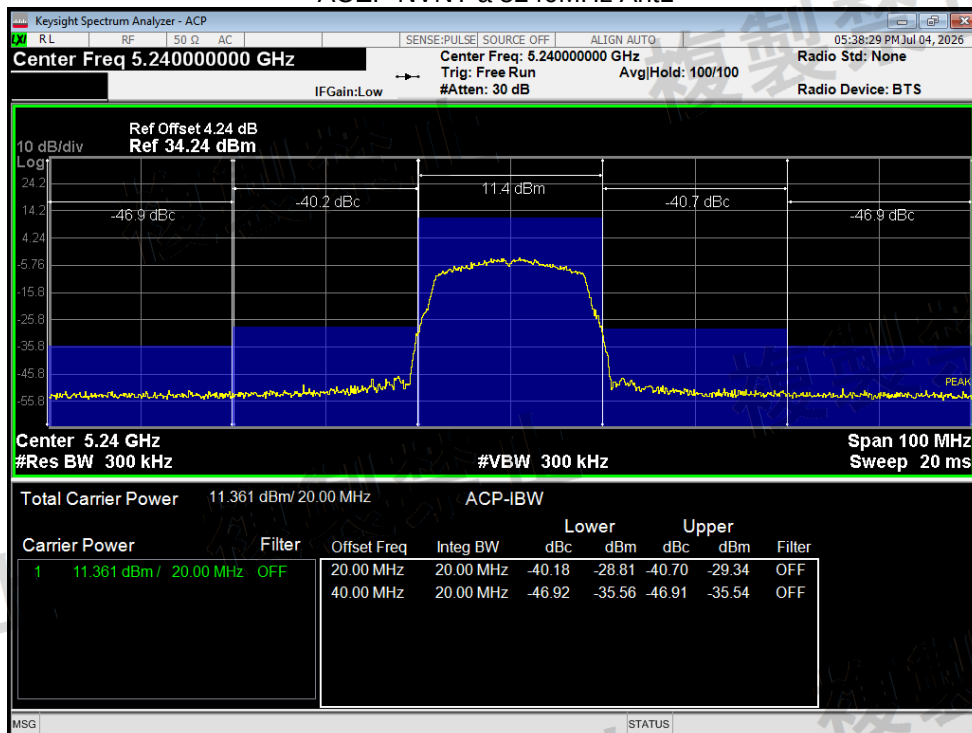
ACEP NVNT a 5180MHz Ant1



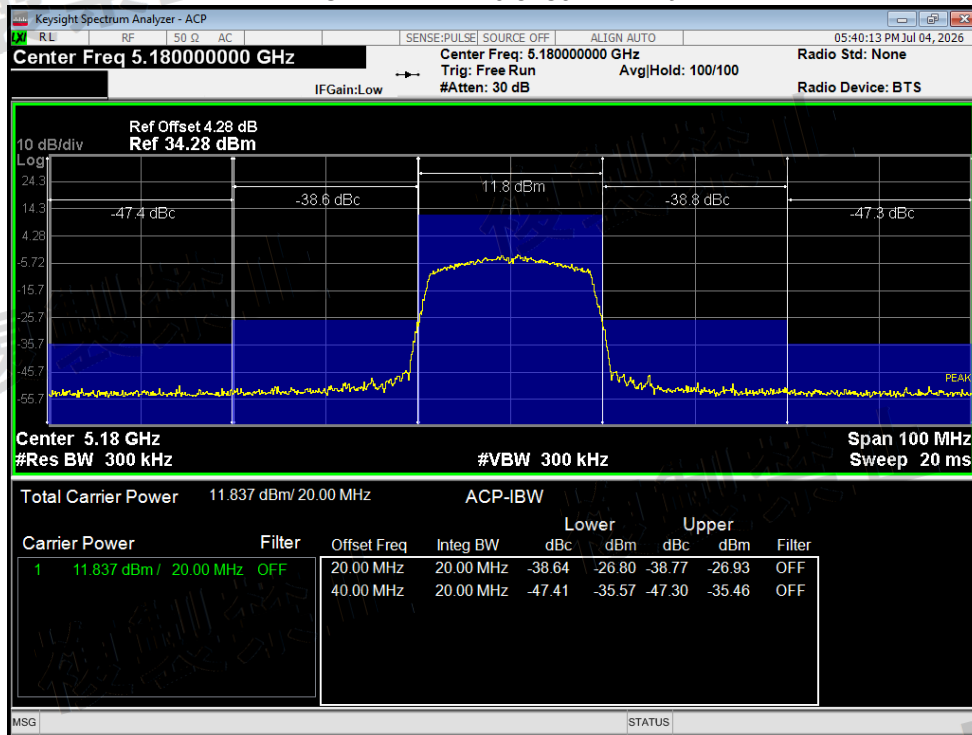
ACEP NVNT a 5200MHz Ant1



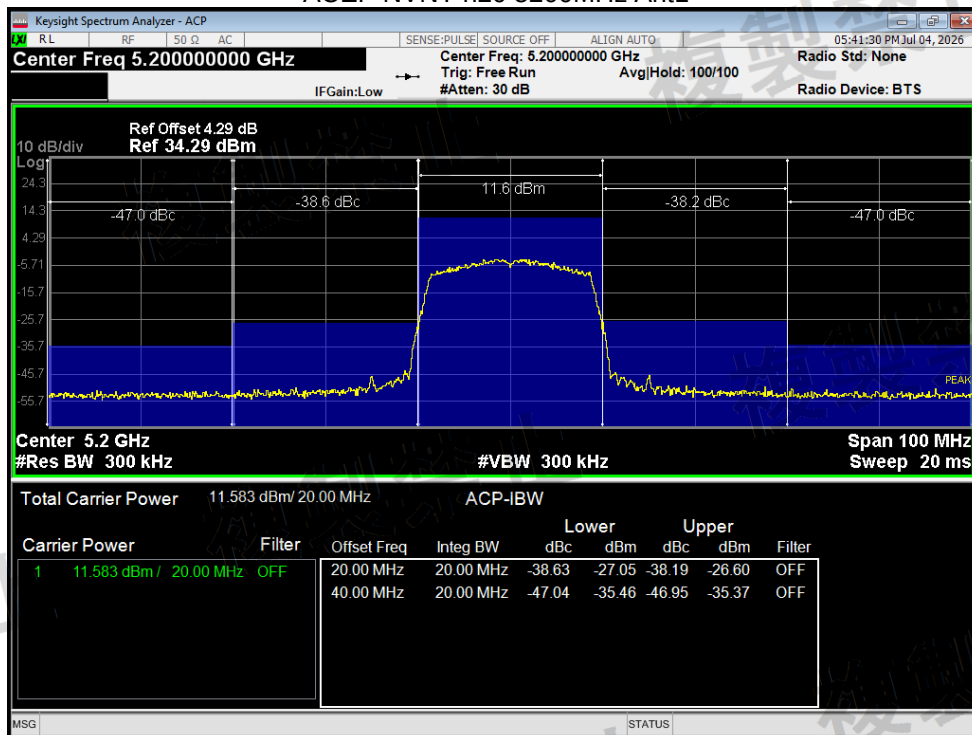
ACEP NVNT a 5240MHz Ant1



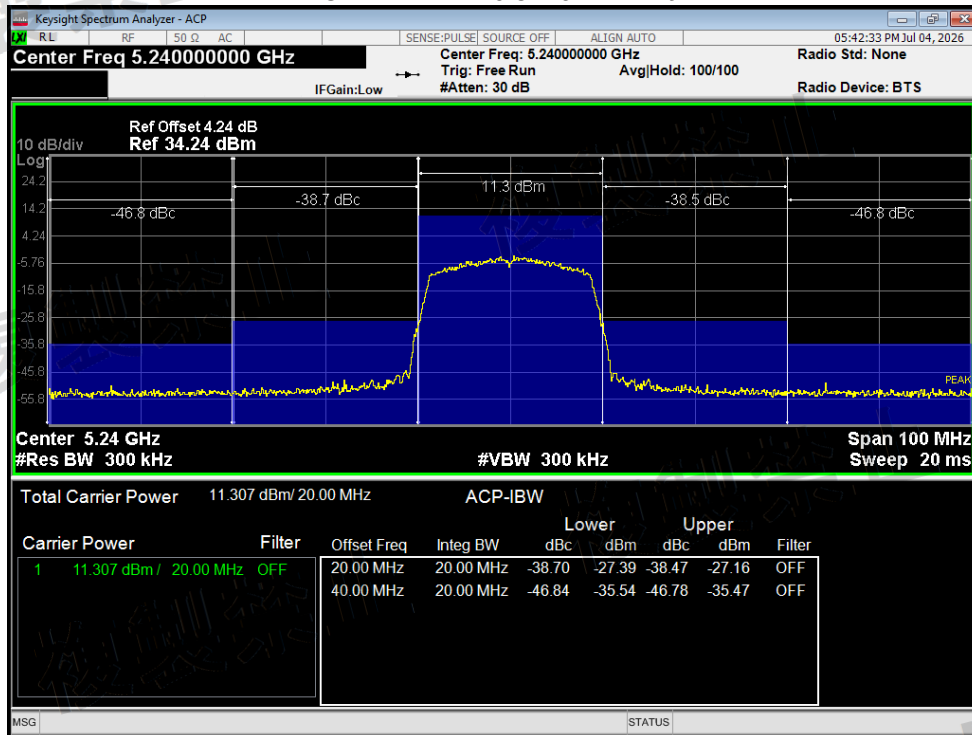
ACEP NVNT n20 5180MHz Ant1



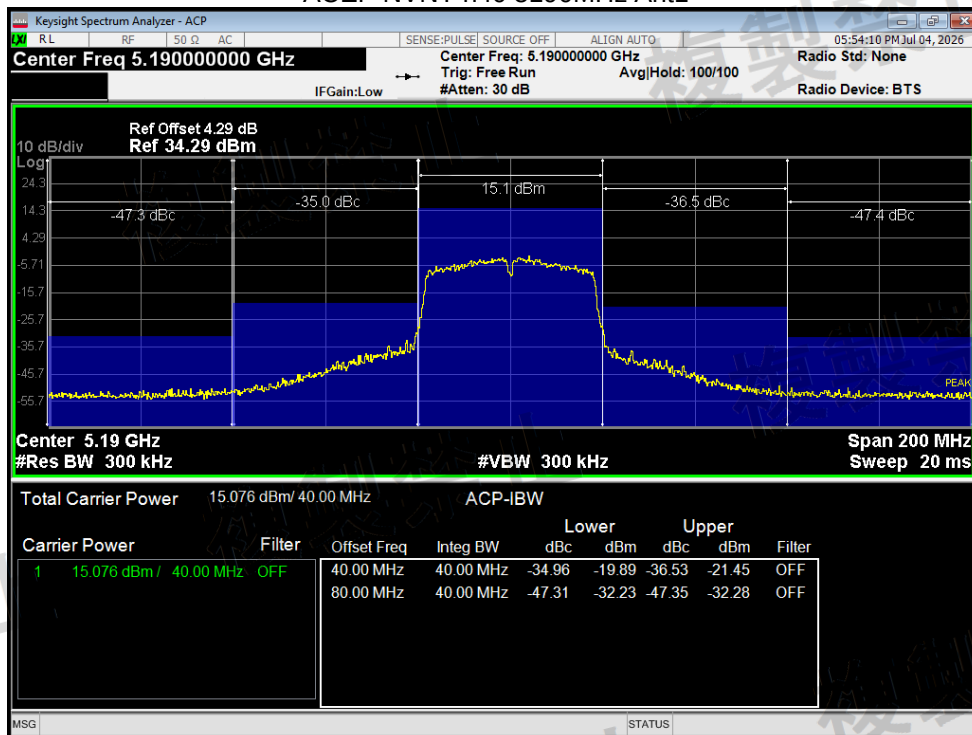
ACEP NVNT n20 5200MHz Ant1



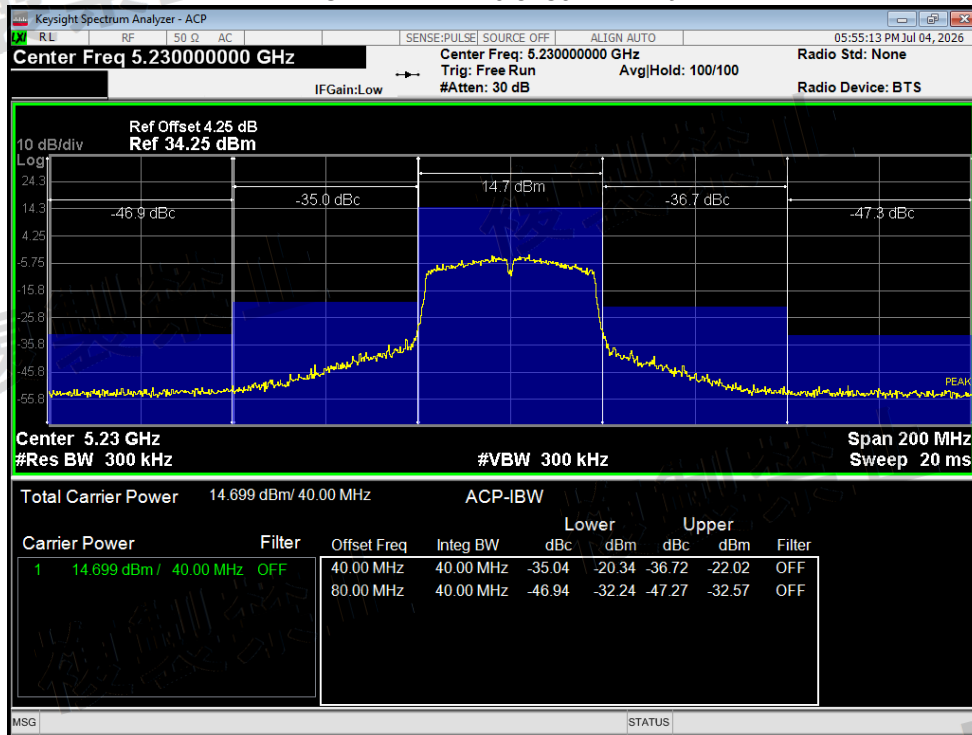
ACEP NVNT n20 5240MHz Ant1



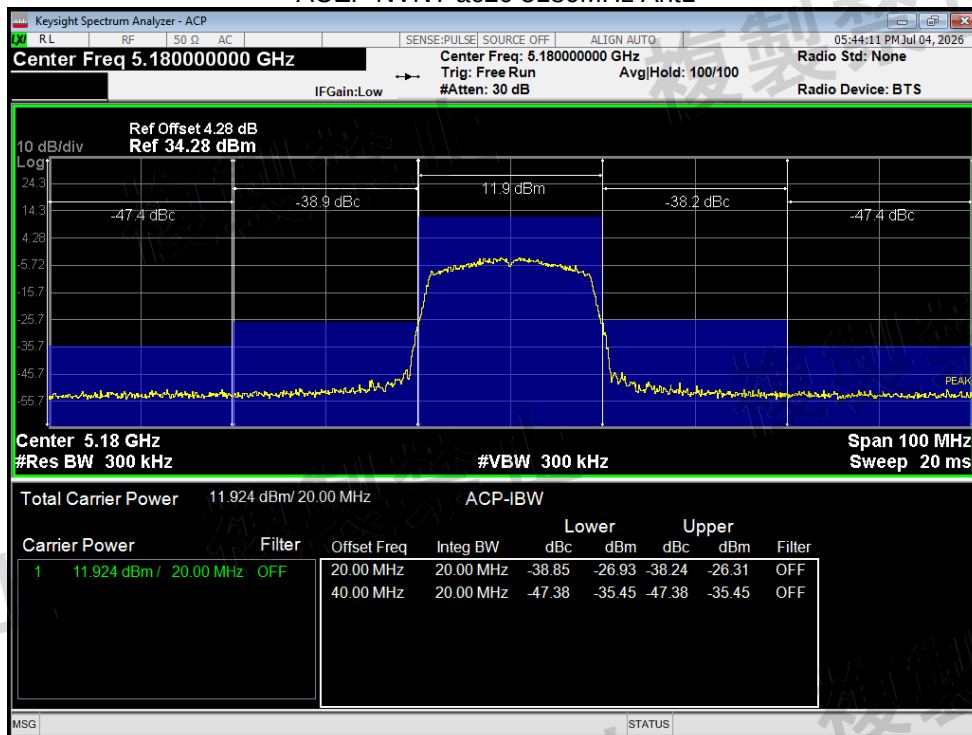
ACEP NVNT n40 5190MHz Ant1



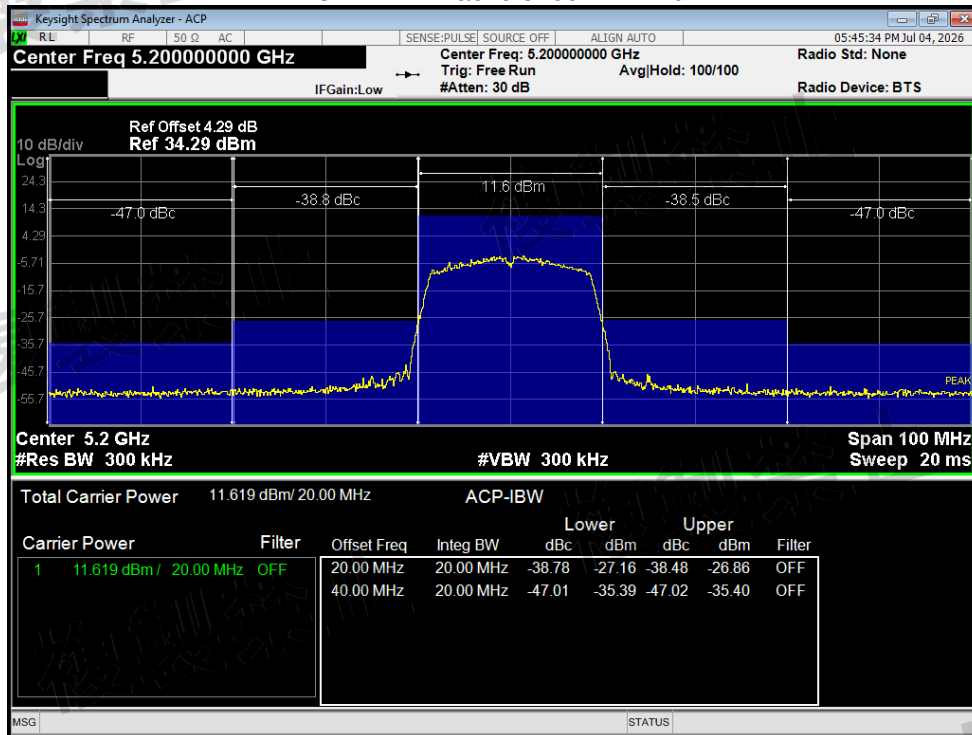
ACEP NVNT n40 5230MHz Ant1



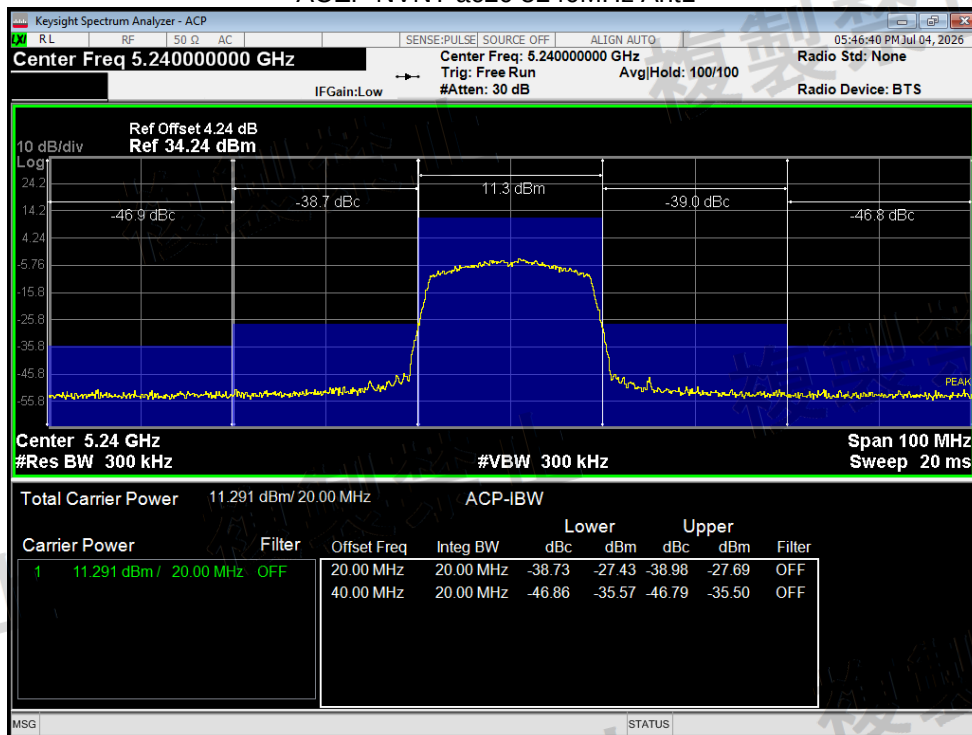
ACEP NVNT ac20 5180MHz Ant1



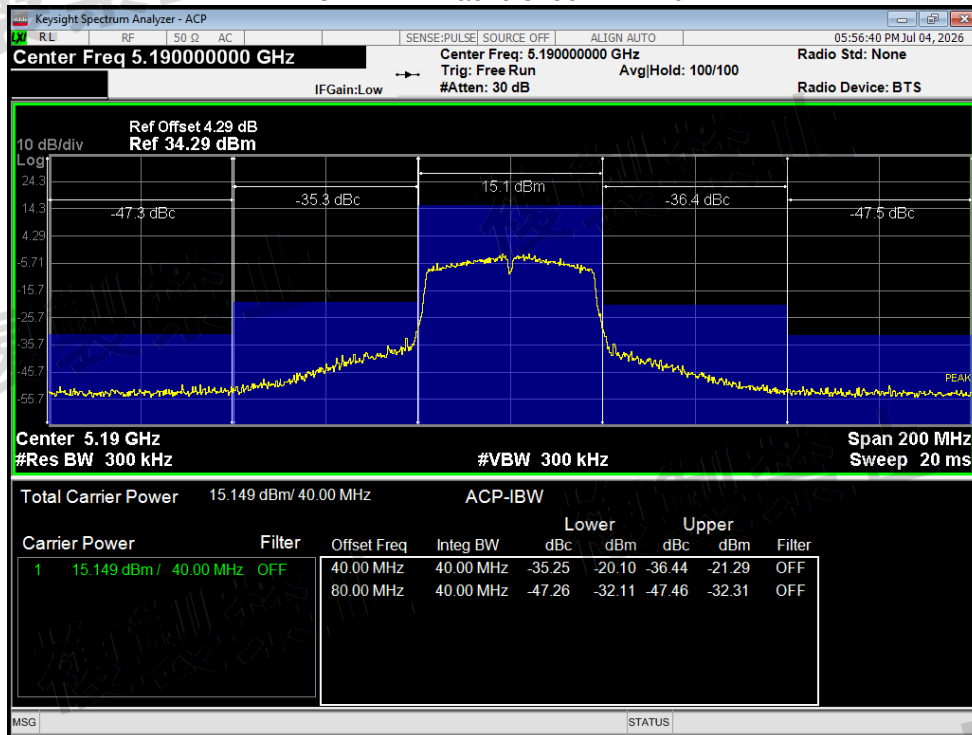
ACEP NVNT ac20 5200MHz Ant1



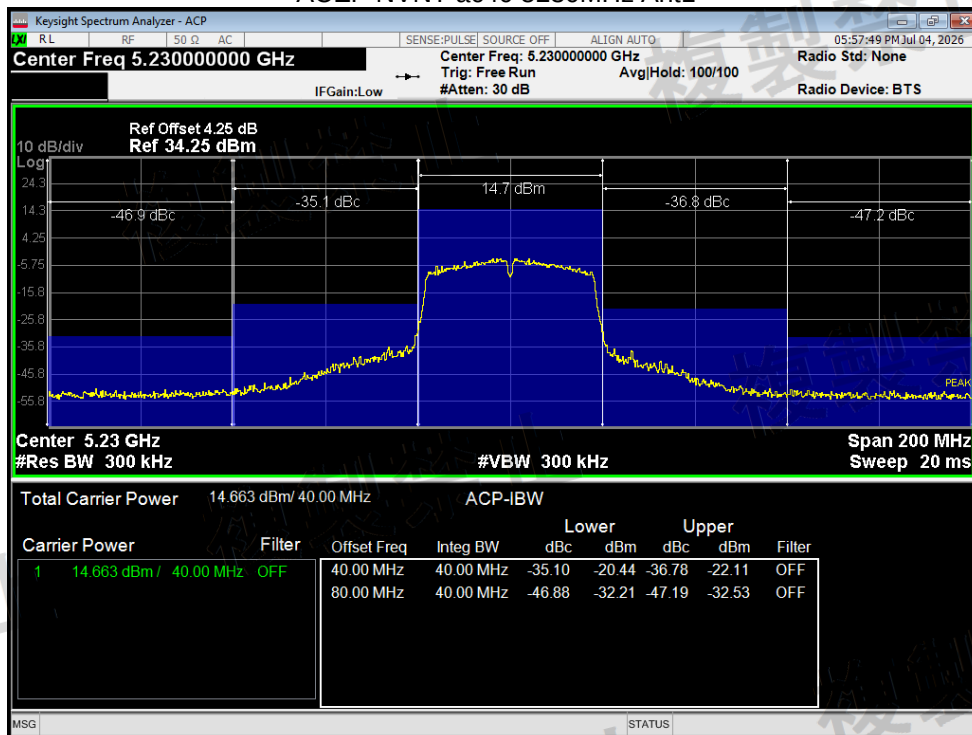
ACEP NVNT ac20 5240MHz Ant1



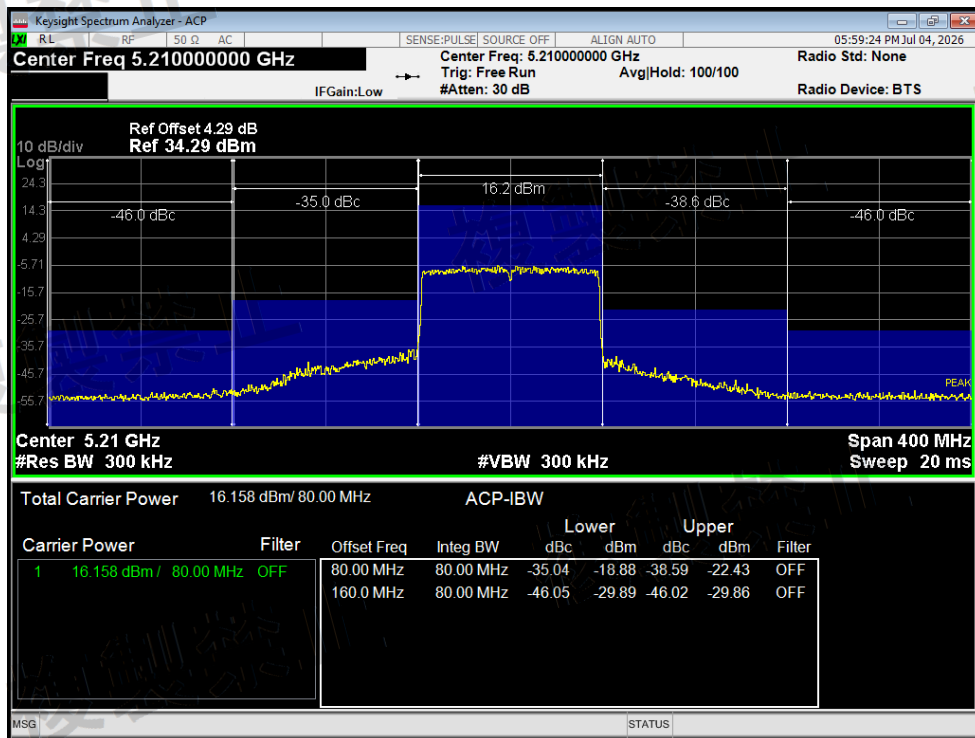
ACEP NVNT ac40 5190MHz Ant1



ACEP NVNT ac40 5230MHz Ant1



ACEP NVNT ac80 5210MHz Ant1



4.6 Transmission burst length

4.6.1 Limit

8ms or less

4.6.2 Block Diagram of Test Setup



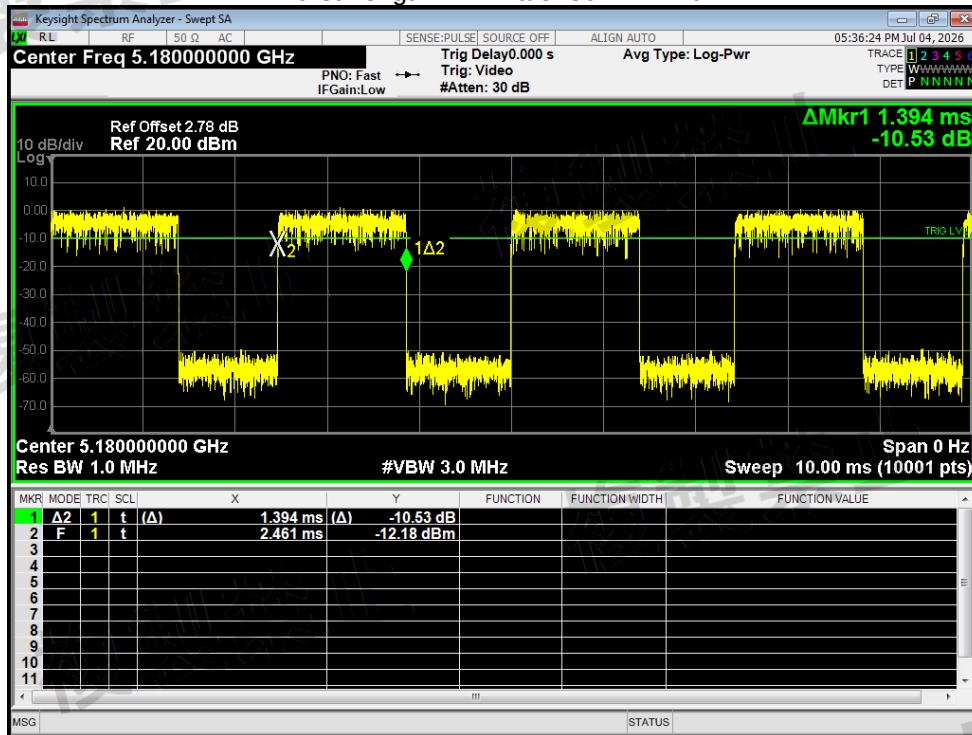
4.6.3 Test Procedures

Table No.45 related to Article 2 Paragraph 1 of Item 19-3 of Ordinance Concerning Technical Regulations Conformity Certification etc. of Specified Radio Equipment.

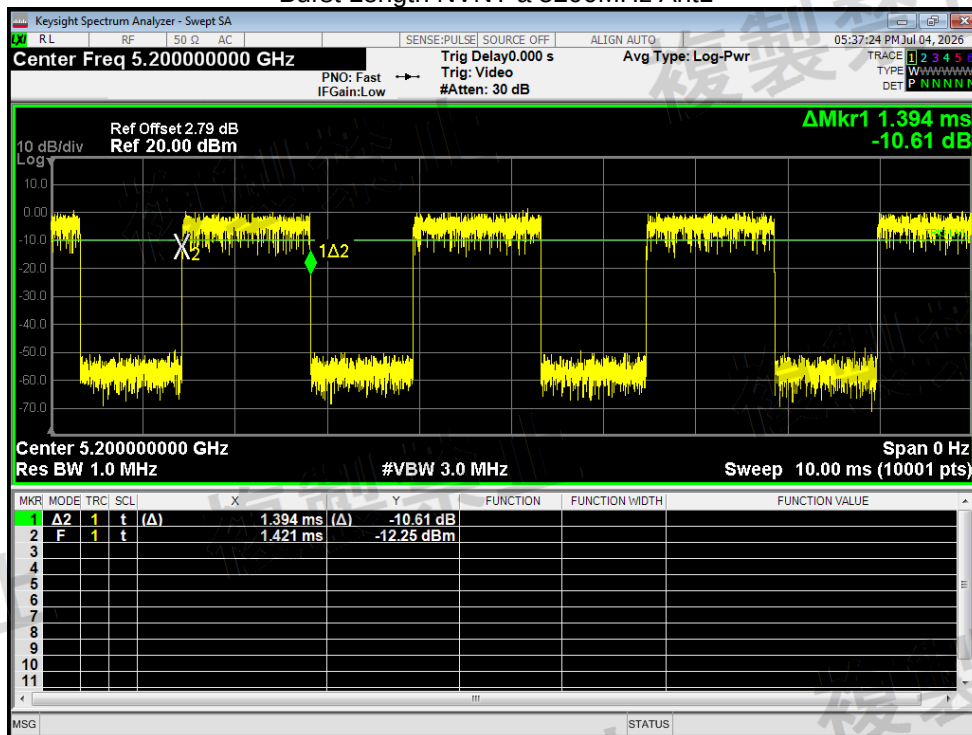
4.6.4 Test Result

Mode	Condition	CH	Frequency (MHz)	Test Result (ms)	Limit (ms)
11a	nominal	CH36	5180	1.394	≤8.0
		CH40	5200	1.394	≤8.0
		CH48	5240	1.394	≤8.0
11n20	nominal	CH36	5180	1.302	≤8.0
		CH40	5200	1.302	≤8.0
		CH48	5240	1.302	≤8.0
11n40	nominal	CH38	5190	0.655	≤8.0
		CH46	5230	0.654	≤8.0
11ac20	nominal	CH36	5180	1.31	≤8.0
		CH40	5200	1.311	≤8.0
		CH48	5240	1.31	≤8.0
11ac40	nominal	CH38	5190	0.654	≤8.0
		CH46	5230	0.654	≤8.0
11ac80	nominal	CH42	5210	0.325	≤8.0
Conclusion: PASS					

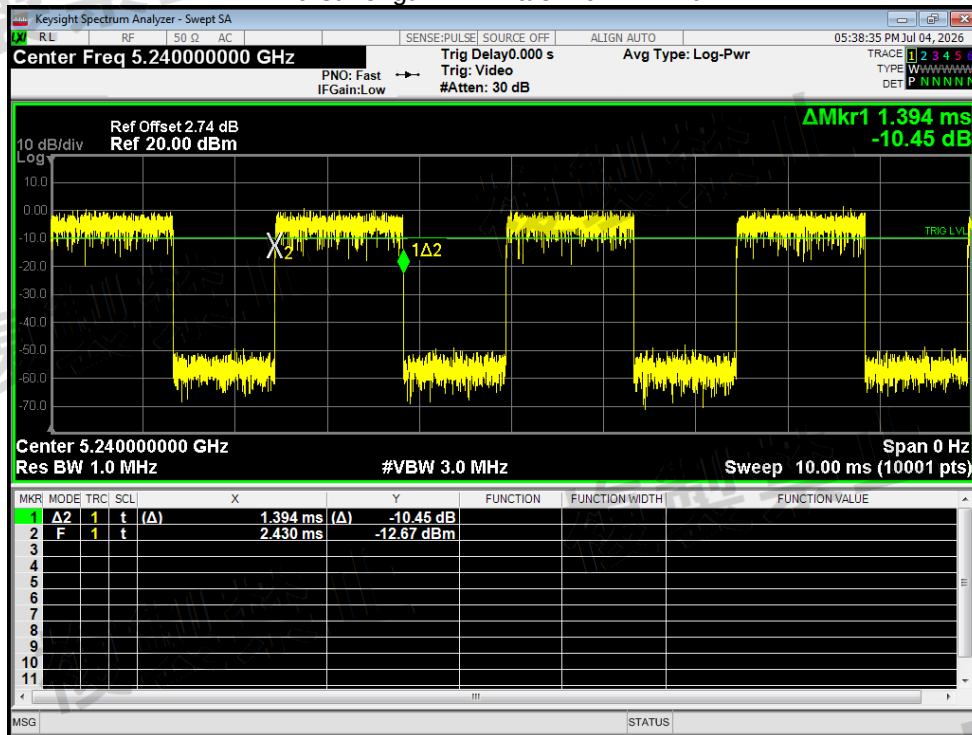
Burst Length NVNT a 5180MHz Ant1



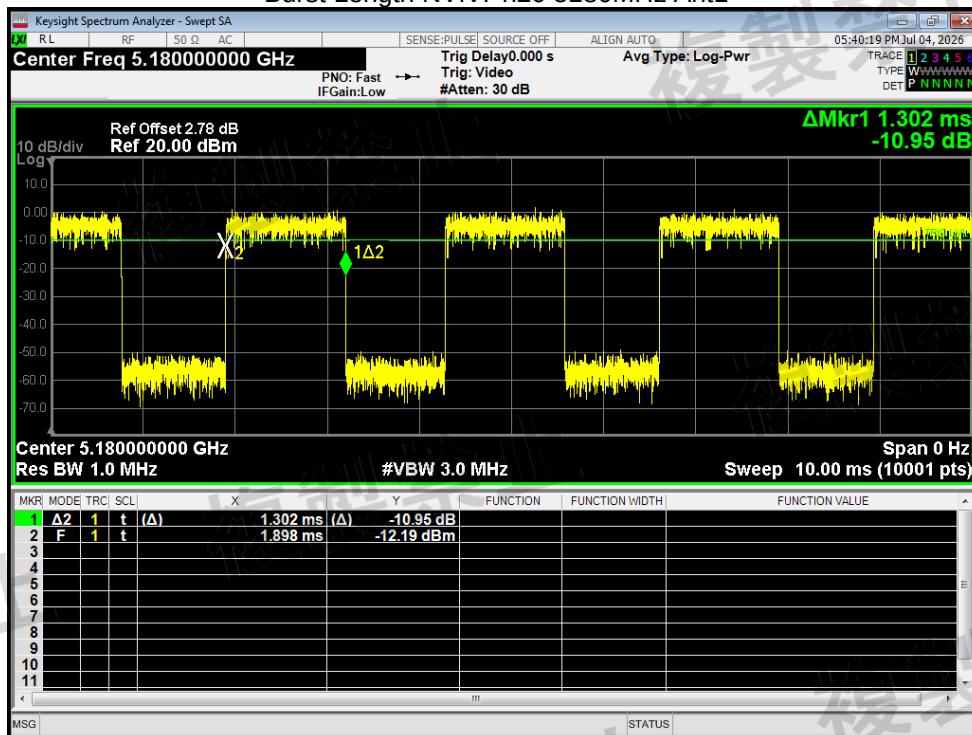
Burst Length NVNT a 5200MHz Ant1



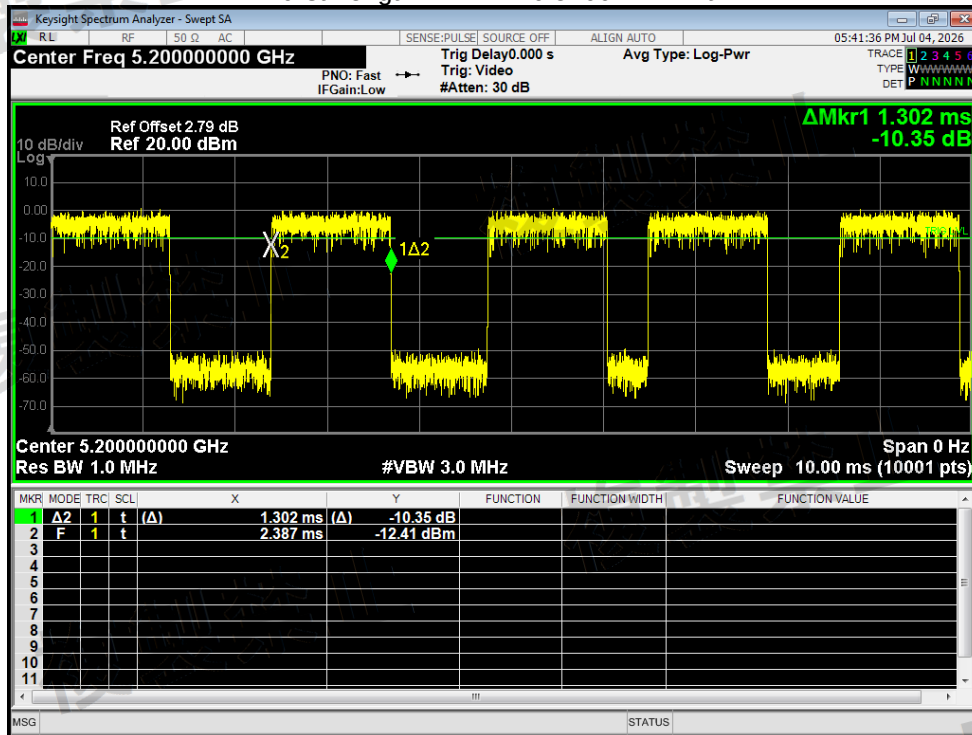
Burst Length NVNT a 5240MHz Ant1



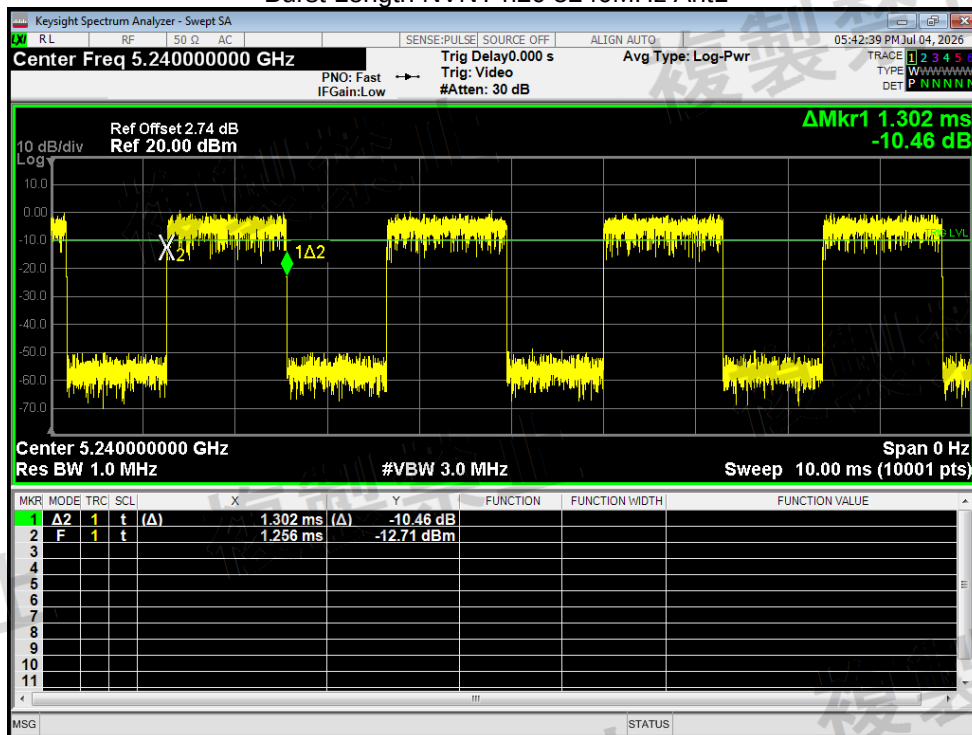
Burst Length NVNT n20 5180MHz Ant1



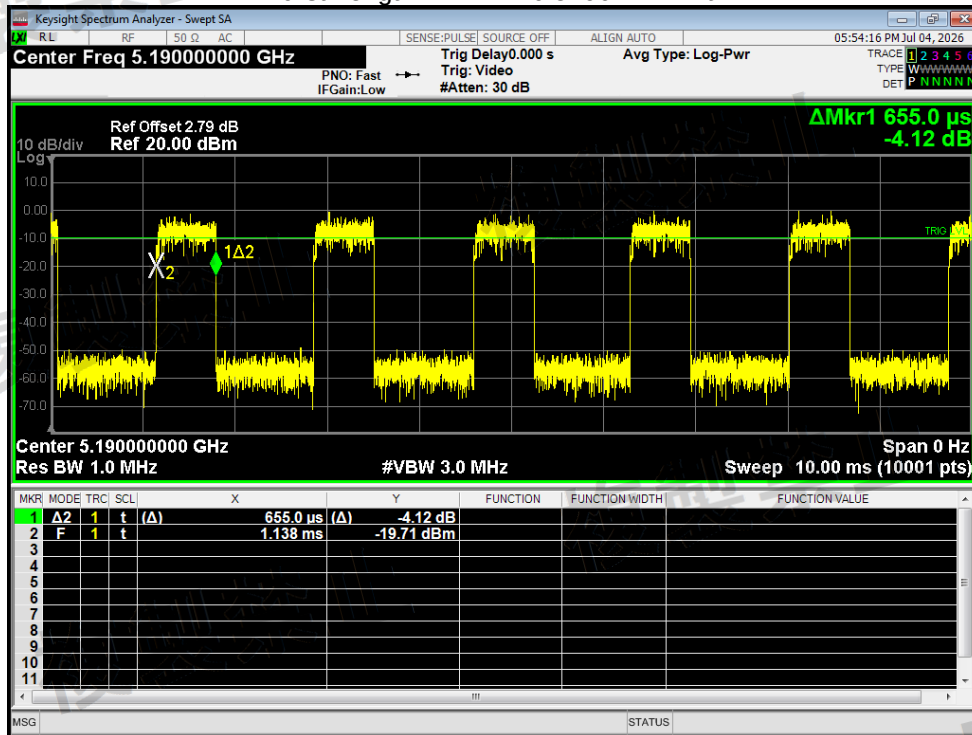
Burst Length NVNT n20 5200MHz Ant1



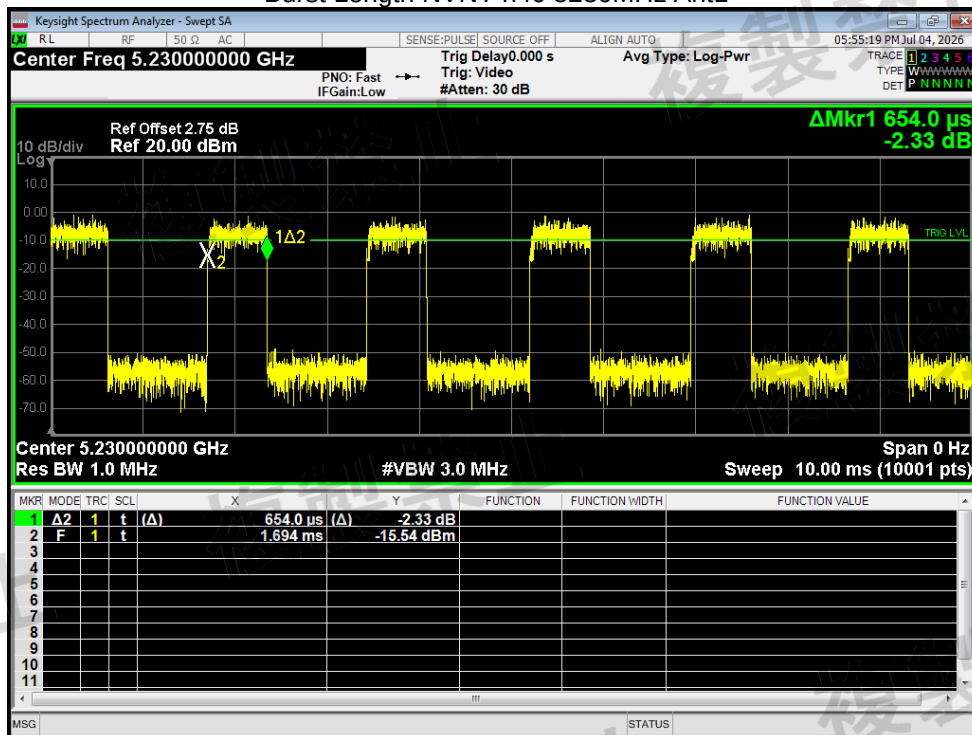
Burst Length NVNT n20 5240MHz Ant1



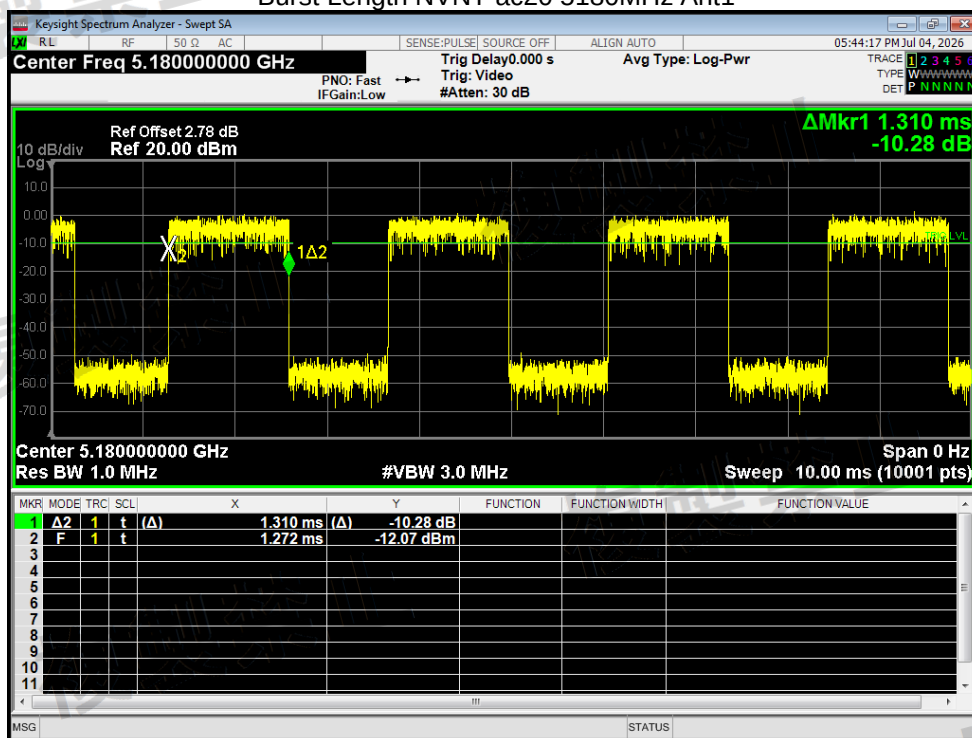
Burst Length NVNT n40 5190MHz Ant1



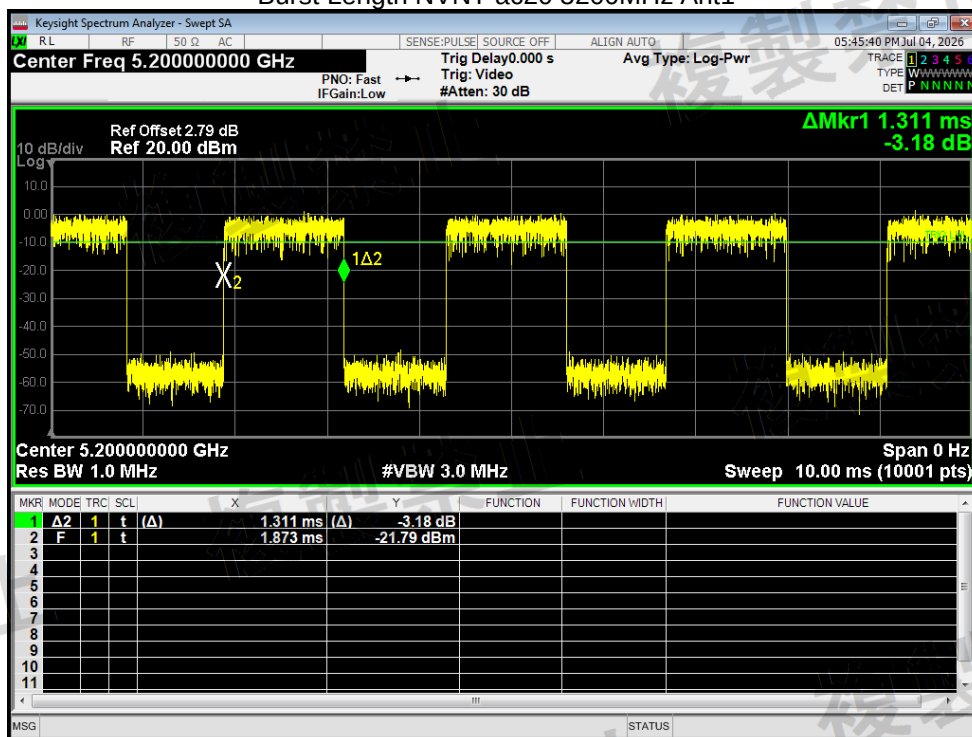
Burst Length NVNT n40 5230MHz Ant1



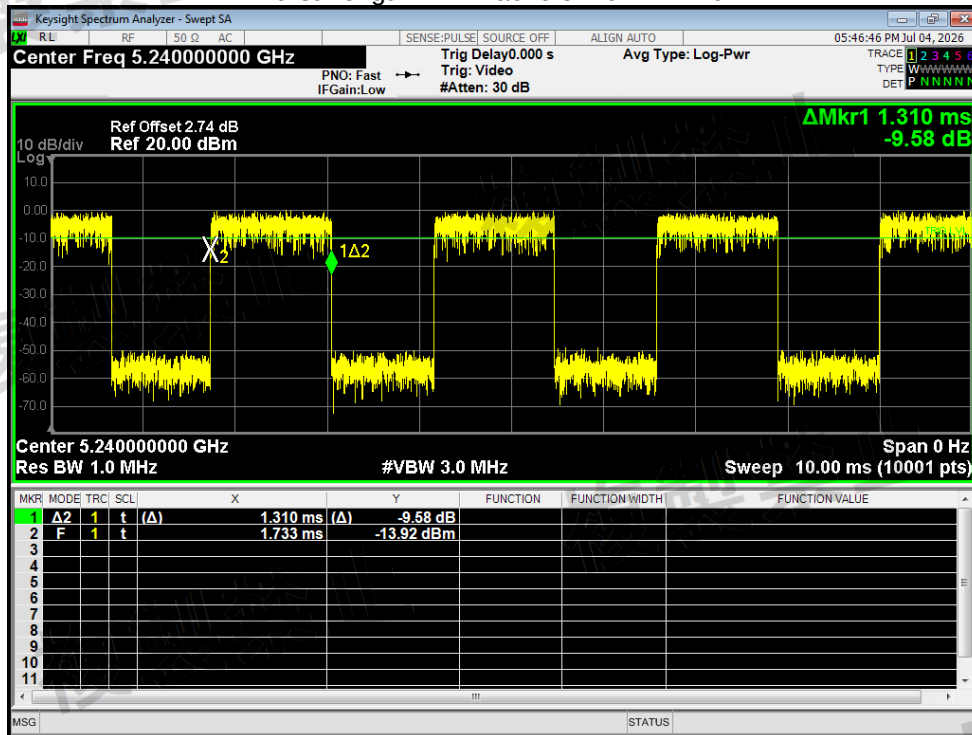
Burst Length NVNT ac20 5180MHz Ant1



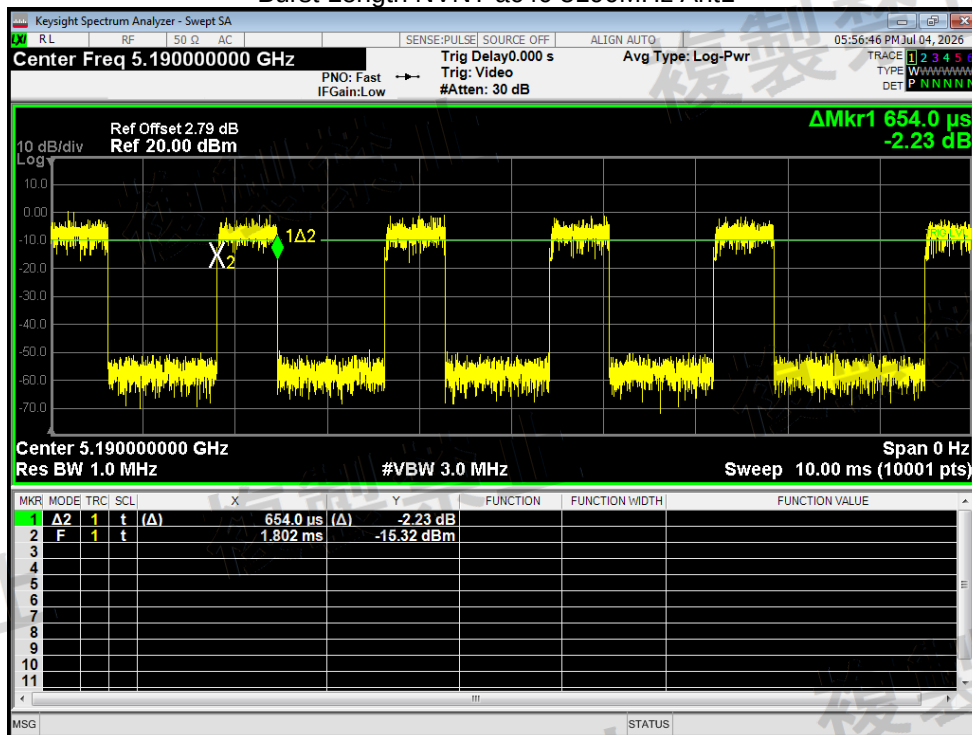
Burst Length NVNT ac20 5200MHz Ant1



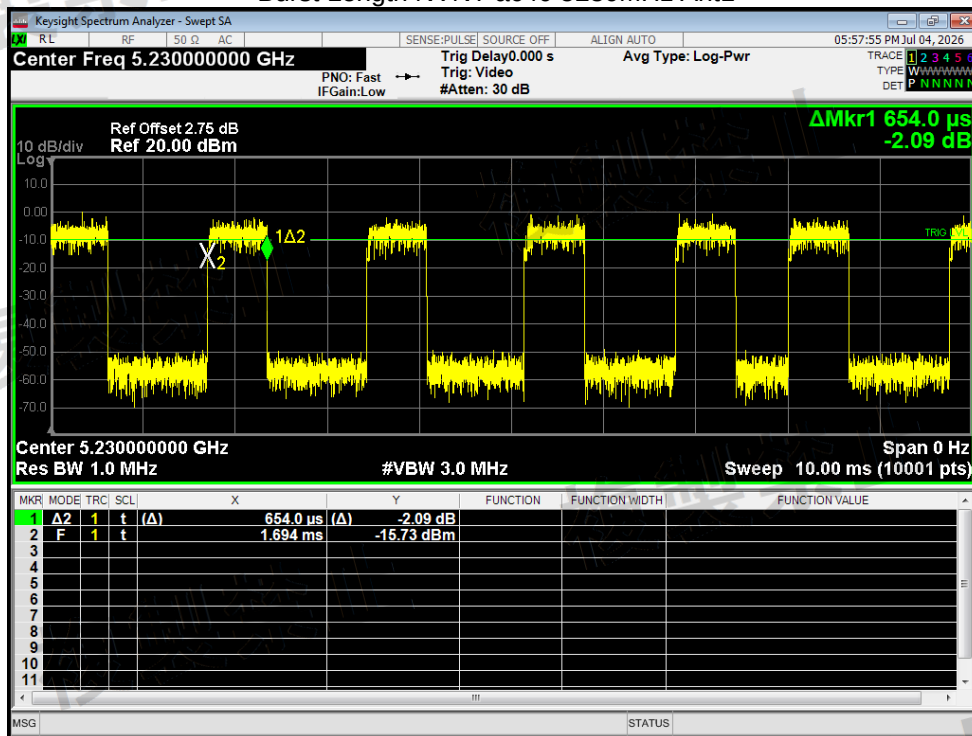
Burst Length NVNT ac20 5240MHz Ant1



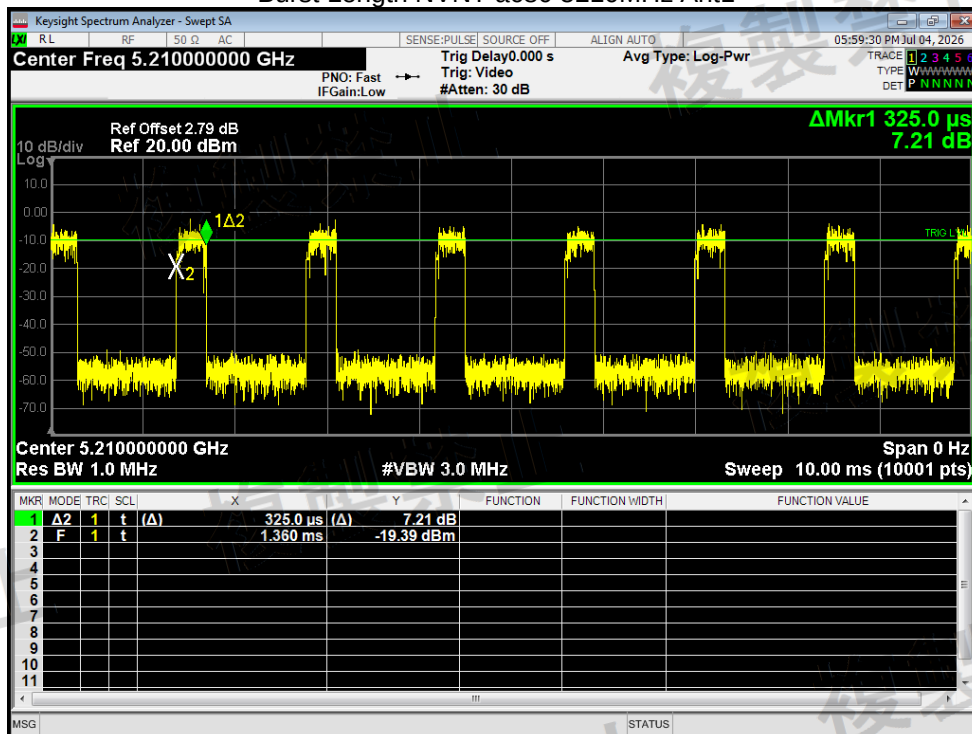
Burst Length NVNT ac40 5190MHz Ant1



Burst Length NVNT ac40 5230MHz Ant1



Burst Length NVNT ac80 5210MHz Ant1

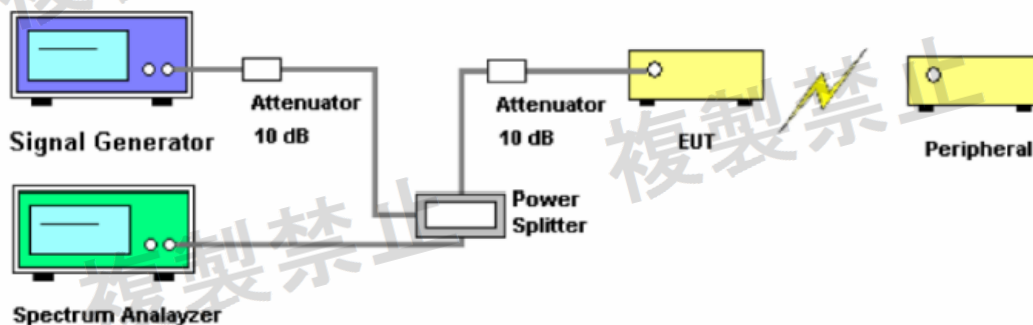


4.7 Carrier sense function

4.7.1 Limit

The radio equipment connected to telecommunication circuit equipment shall be equipped with a device which detects emissions radiated from another radio station and prevents interference, or a device which prevents interference by operation on a receive signal and a signal for diffusion for signal level detection.

4.7.2 Block diagram of test setup



4.7.3 Test Procedure

1. Set the EUT link with a peripheral.
2. Set a signal generator (simulate a radio device which co-exists with EUT) at same frequency channel, with a proper signal level (exceeding 100mV/m) output to act as interference signal.
3. Monitor the signal transmission between the EUT and peripheral, while the interference signal presents. The EUT would stop transmitting once it detects interference signal over the air, then record it pass, otherwise, the result is fail.

4.7.4 Test result

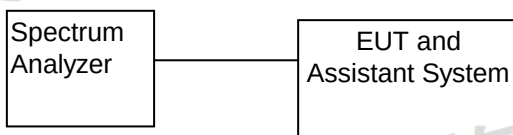
Mode	Frequency (MHz)	Interference power	Result
802.11a	5180	-7dBm	PASS
	5200	-7dBm	PASS
	5240	-7dBm	PASS
802.11n20	5180	-7dBm	PASS
	5200	-7dBm	PASS
	5240	-7dBm	PASS
802.11n40	5190	-7dBm	PASS
	5230	-7dBm	PASS
802.11ac20	5180	-7dBm	PASS
	5200	-7dBm	PASS
	5240	-7dBm	PASS
802.11ac40	5190	-7dBm	PASS
	5230	-7dBm	PASS
802.11ac80	5210	-7dBm	PASS

4.8 Secondary Radiated Emissions (Conducted)

4.8.1 Limits

Item	Limit
Rx Spurious Emission	$\leq 4\text{nW}(-54\text{dBm}) (f < 1\text{GHz})$
	$\leq 20\text{nW}(-47\text{dBm})(1\text{GHz} \leq f)$

4.8.2 Block Diagram of Test Setup



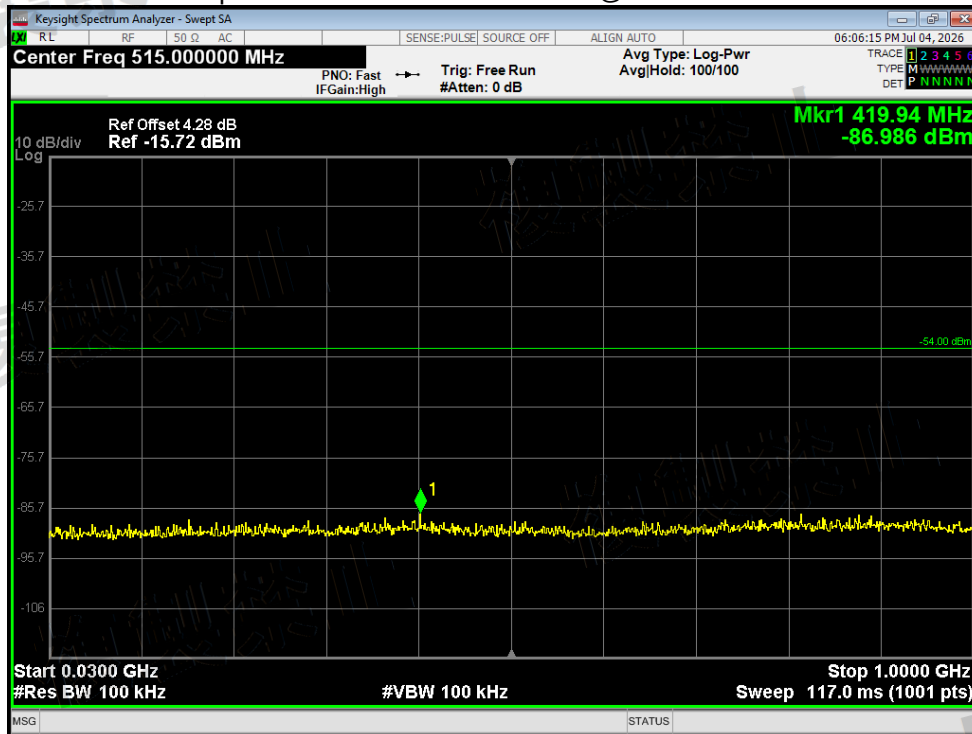
4.8.3 Test Procedures

1. EUT has the continuous reception mode and fixed only one channelize.
2. SA set **RBW**: 100kHz and **VBW**: 100kHz. Then adjust to start frequency 30MHz and stop frequency 1000MHz. Search to mark peak reading value + cable loss shall be less than 4nW.
3. SA set **RBW**: 1MHz and **VBW**: 1MHz. Then adjust to start frequency 1000MHz and stop frequency 13000MHz. Search to mark peak reading value + cable loss shall be less than 20nW.
4. If power level of lower emissions are more than 1/10 of limit(0.4nW for $f < 1\text{GHz}$, 2nW for $f \geq 1\text{GHz}$), all those are to be indicated in the 2nd and 3rd lines. If other values exceed 1 / 10 of the limit or less, no indication is required.

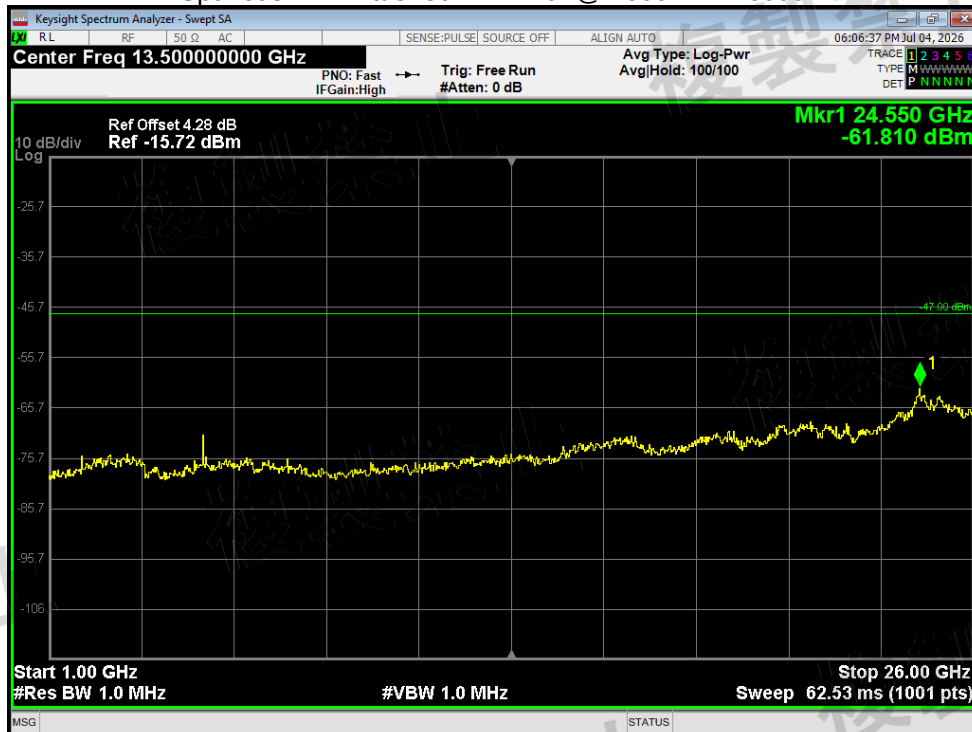
4.8.4 Test Result

Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Value (dBm)	Max Value (nW)	Limit (nW)	Verdict
a	5180	30-1000	419.94	-86.986	0.002	4	Pass
a	5180	1000-26000	24550	-61.81	0.659	20	Pass
a	5200	30-1000	829.28	-86.59	0.002	4	Pass
a	5200	1000-26000	24475	-63.112	0.488	20	Pass
a	5240	30-1000	884.57	-87.321	0.002	4	Pass
a	5240	1000-26000	24550	-63.198	0.479	20	Pass
n20	5180	30-1000	911.73	-87.51	0.002	4	Pass
n20	5180	1000-26000	24475	-62.696	0.538	20	Pass
n20	5200	30-1000	787.57	-87.347	0.002	4	Pass
n20	5200	1000-26000	25000	-62.73	0.533	20	Pass
n20	5240	30-1000	900.09	-86.353	0.002	4	Pass
n20	5240	1000-26000	24525	-63.248	0.473	20	Pass
n40	5190	30-1000	886.51	-86.444	0.002	4	Pass
n40	5190	1000-26000	25075	-61.563	0.698	20	Pass
n40	5230	30-1000	815.7	-86.663	0.002	4	Pass
n40	5230	1000-26000	25100	-61.551	0.700	20	Pass
ac20	5180	30-1000	814.73	-86.588	0.002	4	Pass
ac20	5180	1000-26000	25050	-62.228	0.599	20	Pass
ac20	5200	30-1000	692.51	-86.986	0.002	4	Pass
ac20	5200	1000-26000	24575	-61.871	0.650	20	Pass
ac20	5240	30-1000	798.24	-86.41	0.002	4	Pass
ac20	5240	1000-26000	24575	-61.902	0.645	20	Pass
ac40	5190	30-1000	837.04	-86.992	0.002	4	Pass
ac40	5190	1000-26000	25050	-62.515	0.560	20	Pass
ac40	5230	30-1000	790.48	-86.998	0.002	4	Pass
ac40	5230	1000-26000	25050	-61.824	0.657	20	Pass
ac80	5210	30-1000	931.13	-86.934	0.002	4	Pass
ac80	5210	1000-26000	25125	-62.343	0.583	20	Pass

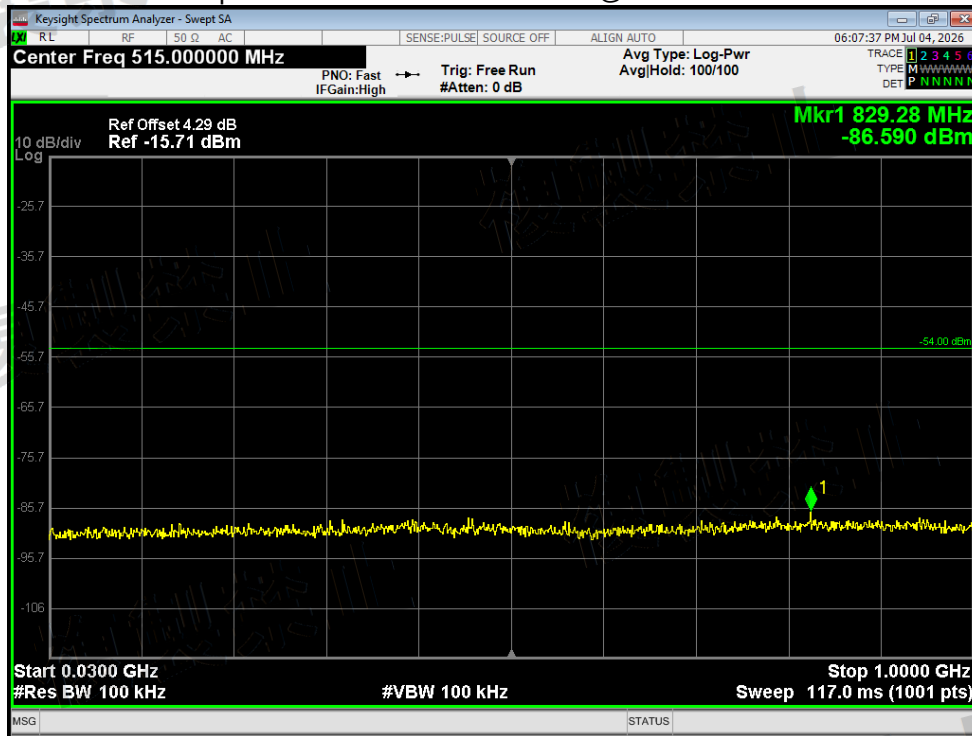
Rx. Spurious NVNT a 5180MHz Ant1 @ 30MHz-1000MHz



Rx. Spurious NVNT a 5180MHz Ant1 @ 1000MHz-26000MHz



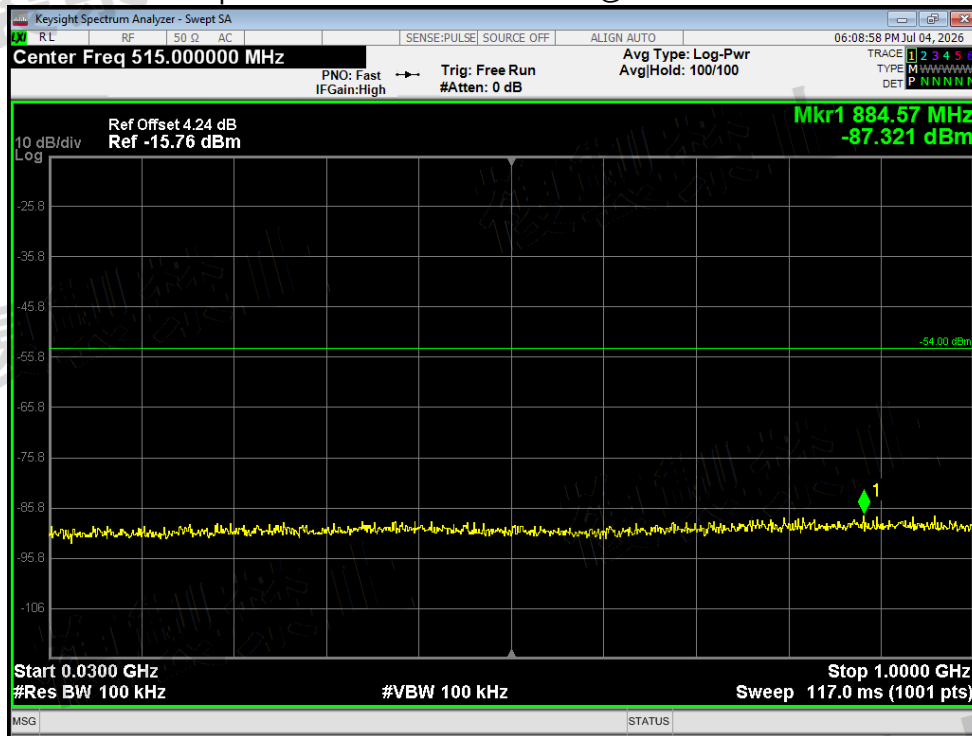
Rx. Spurious NVNT a 5200MHz Ant1 @ 30MHz-1000MHz



Rx. Spurious NVNT a 5200MHz Ant1 @ 1000MHz-26000MHz



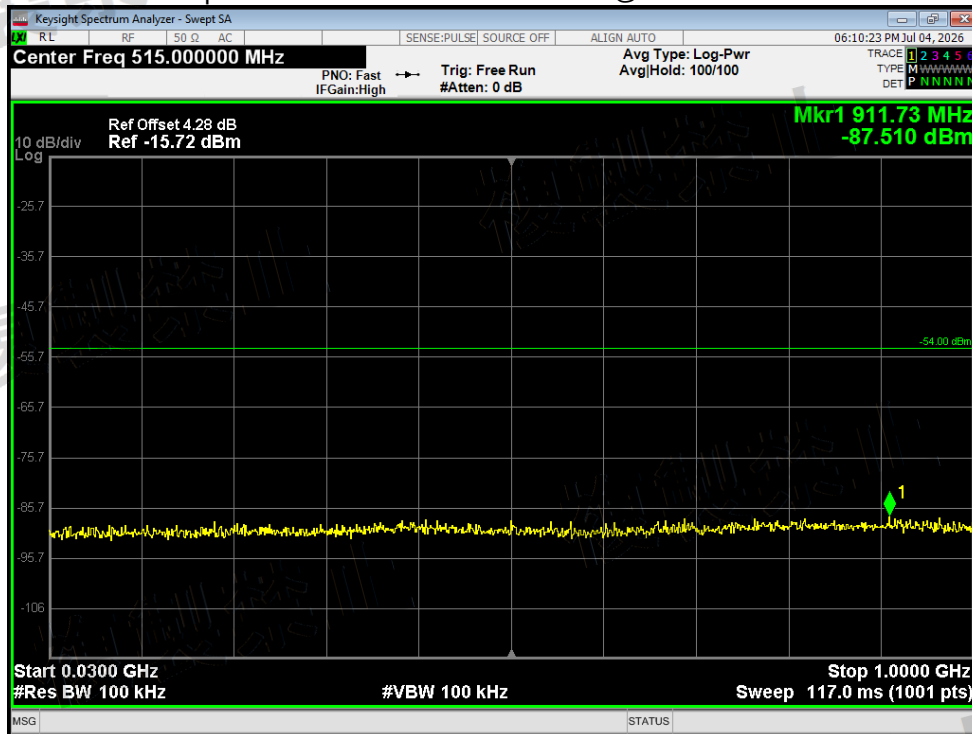
Rx. Spurious NVNT a 5240MHz Ant1 @ 30MHz-1000MHz



Rx. Spurious NVNT a 5240MHz Ant1 @ 1000MHz-26000MHz



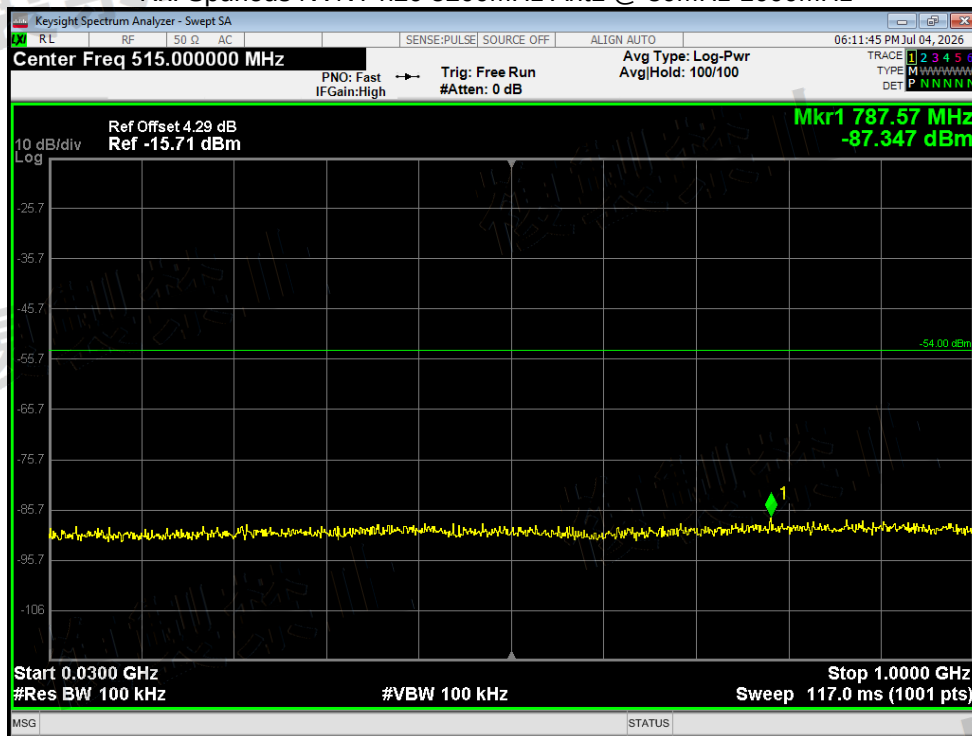
Rx. Spurious NVNT n20 5180MHz Ant1 @ 30MHz-1000MHz



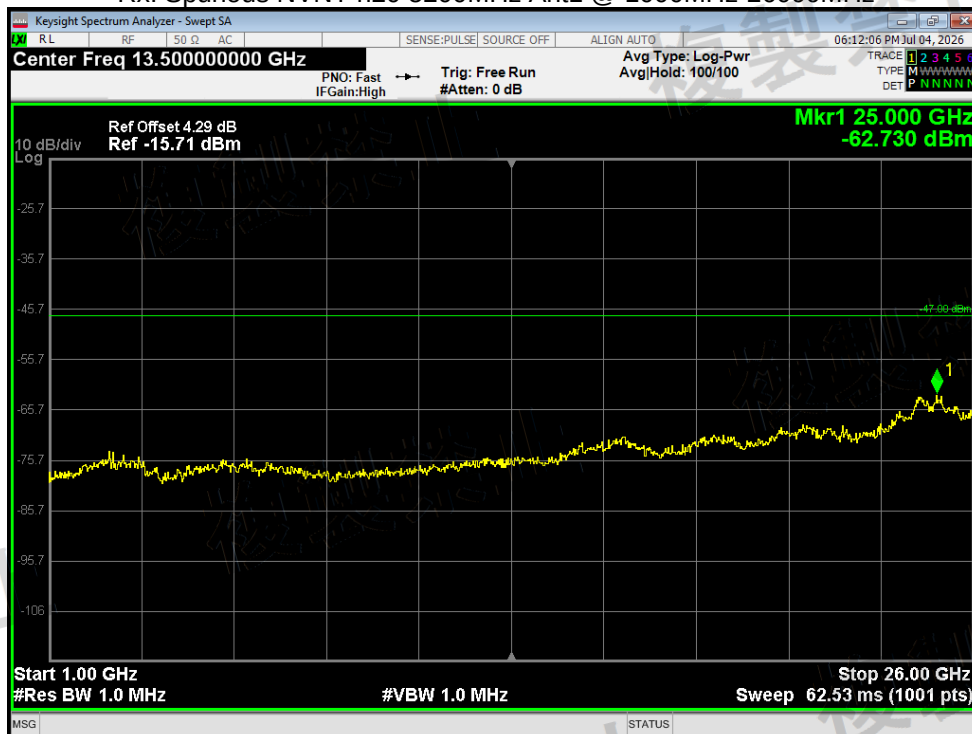
Rx. Spurious NVNT n20 5180MHz Ant1 @ 1000MHz-26000MHz



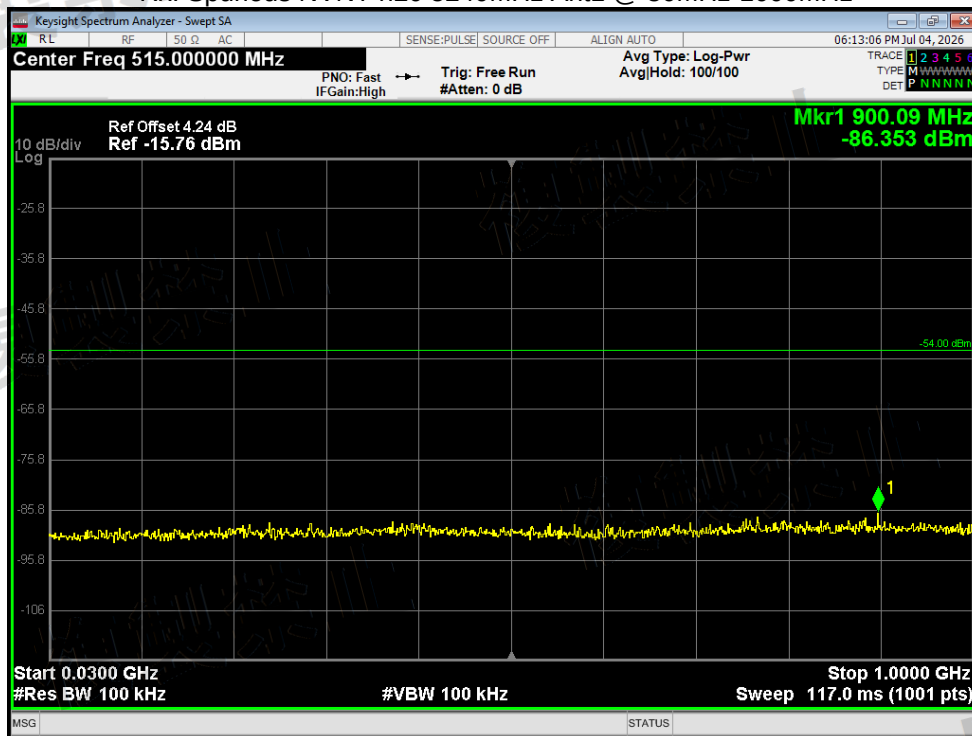
Rx. Spurious NVNT n20 5200MHz Ant1 @ 30MHz-1000MHz



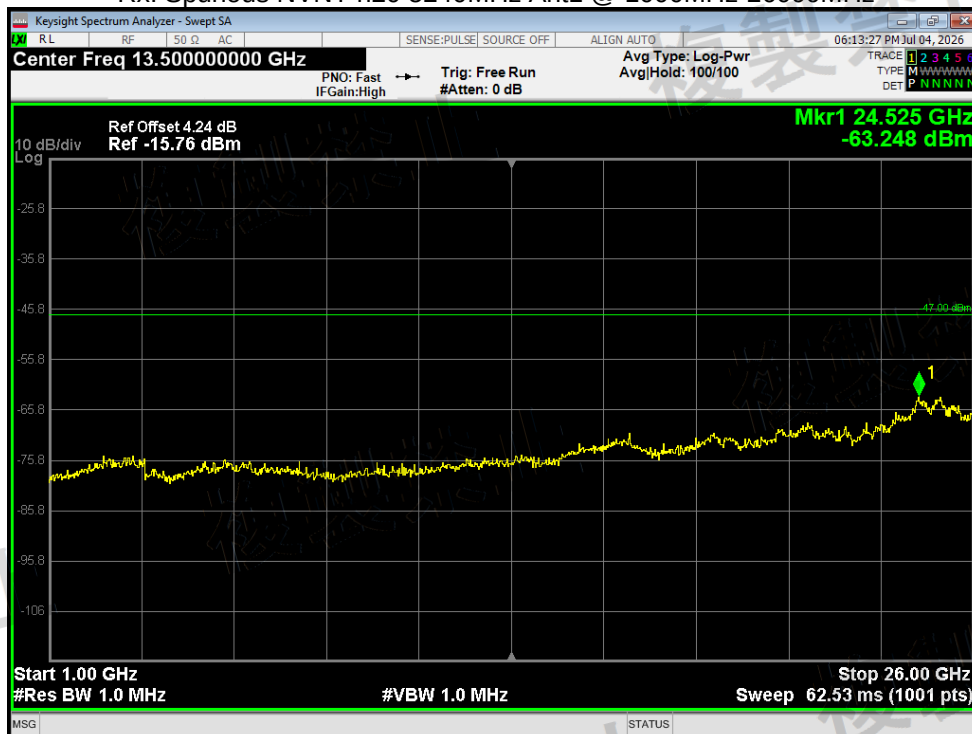
Rx. Spurious NVNT n20 5200MHz Ant1 @ 1000MHz-26000MHz



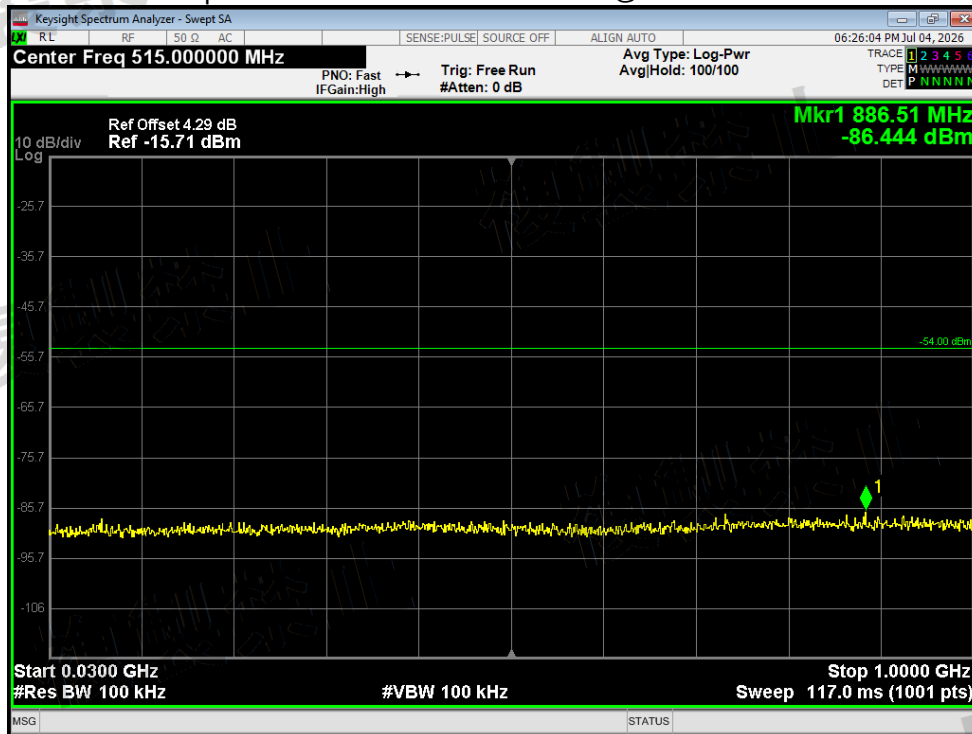
Rx. Spurious NVNT n20 5240MHz Ant1 @ 30MHz-1000MHz



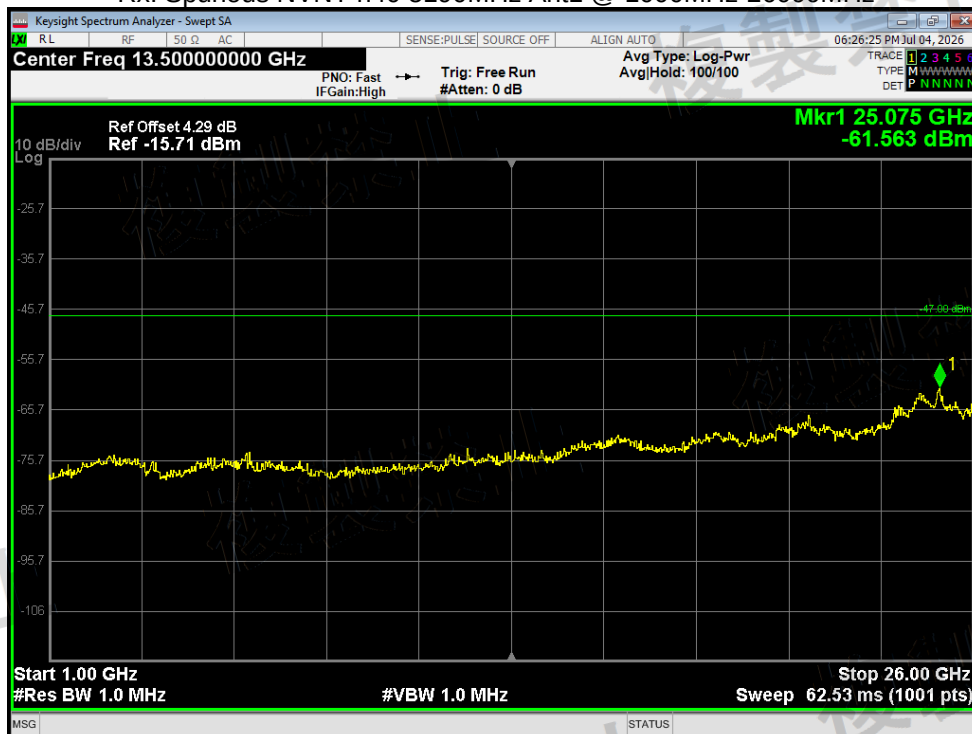
Rx. Spurious NVNT n20 5240MHz Ant1 @ 1000MHz-26000MHz



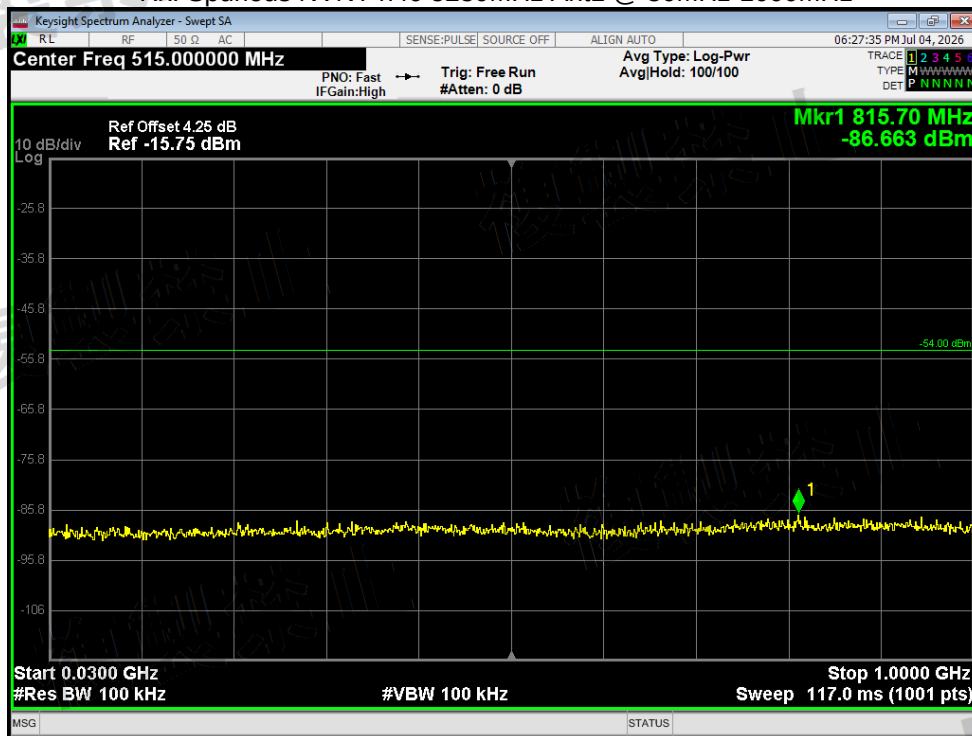
Rx. Spurious NVNT n40 5190MHz Ant1 @ 30MHz-1000MHz



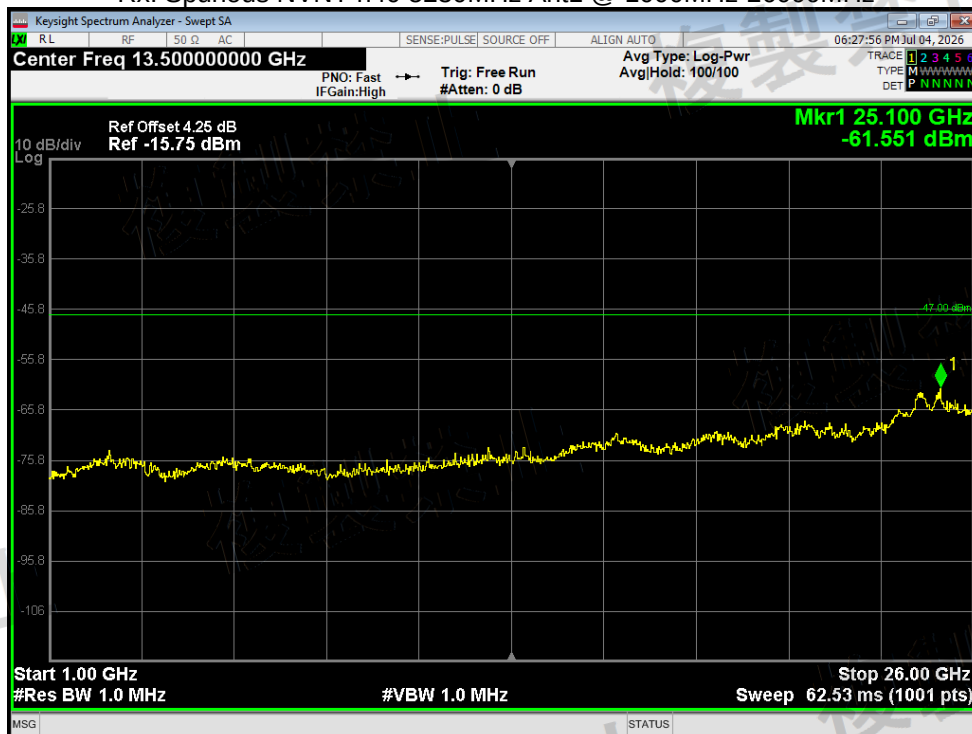
Rx. Spurious NVNT n40 5190MHz Ant1 @ 1000MHz-26000MHz



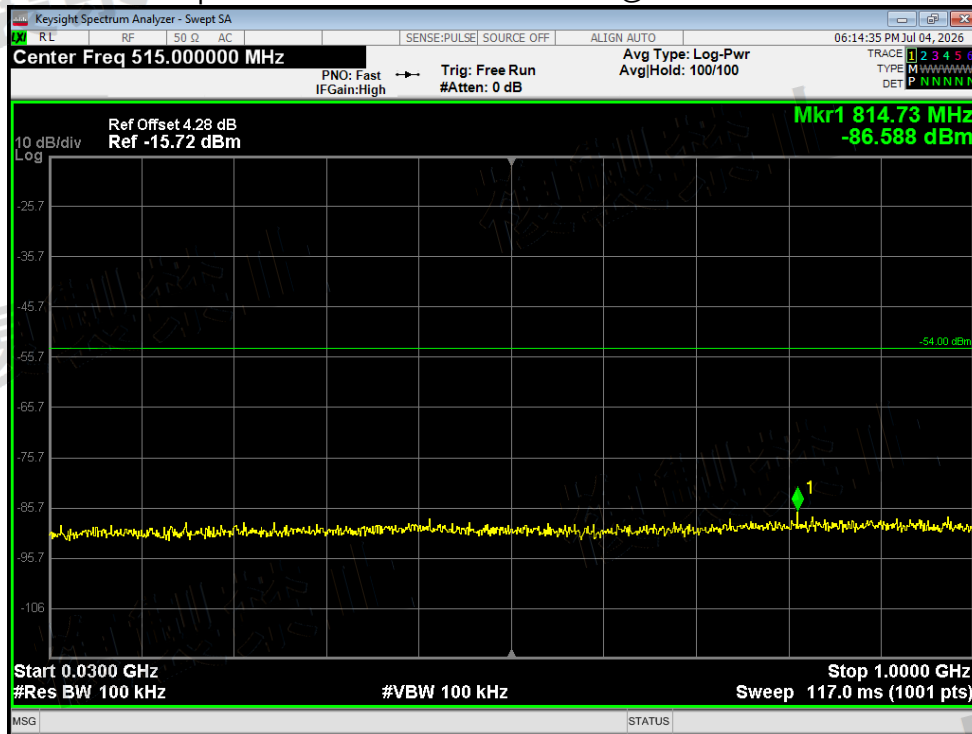
Rx. Spurious NVNT n40 5230MHz Ant1 @ 30MHz-1000MHz



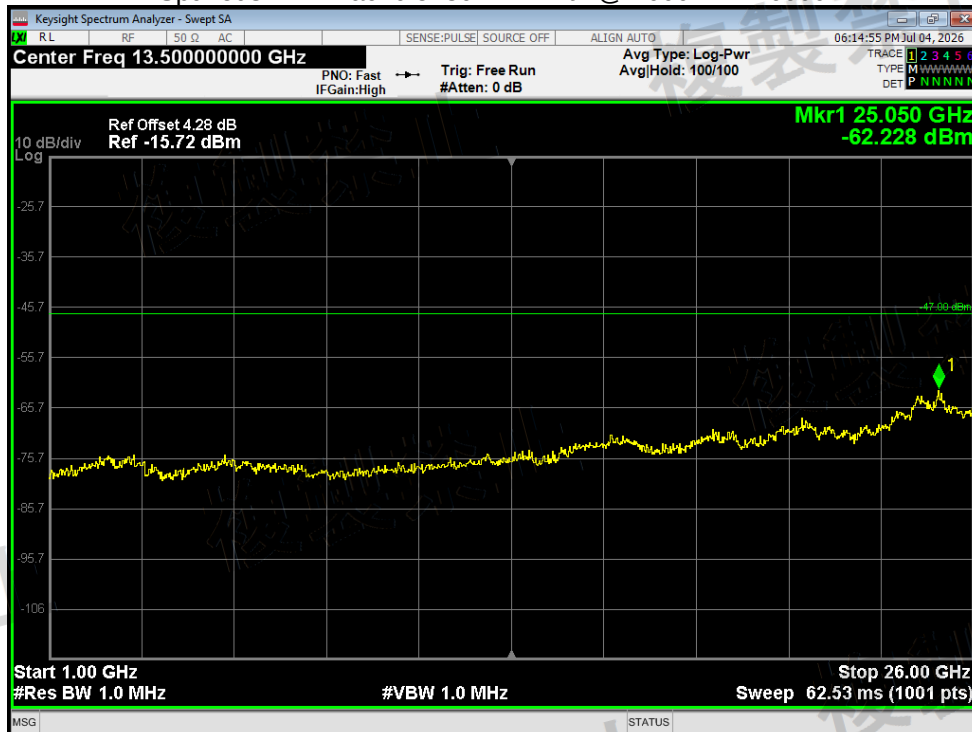
Rx. Spurious NVNT n40 5230MHz Ant1 @ 1000MHz-26000MHz



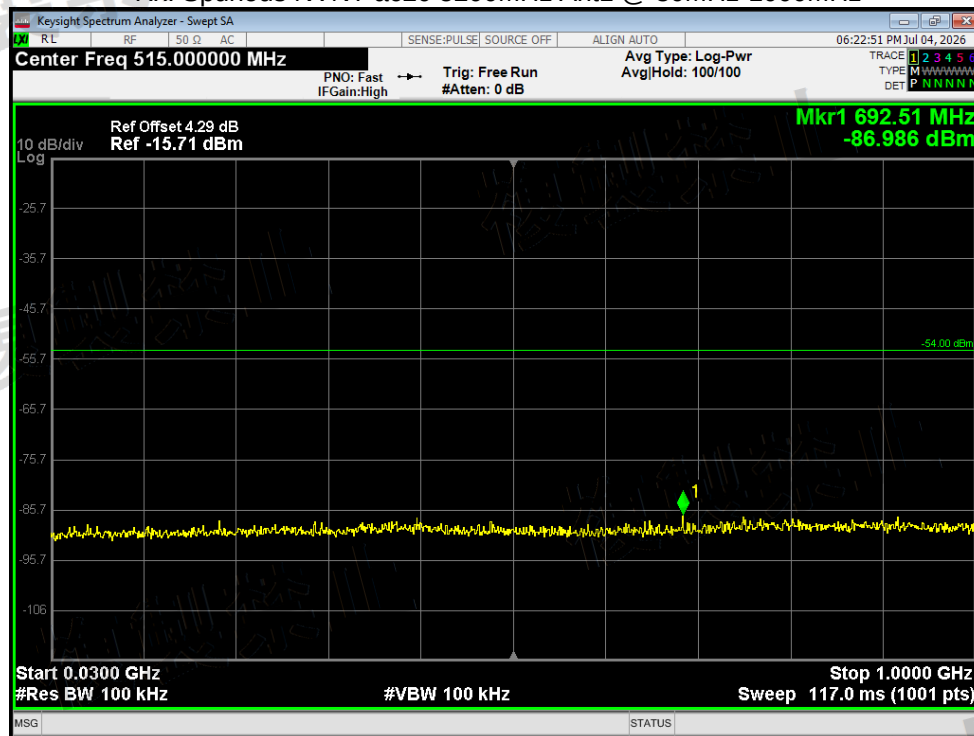
Rx. Spurious NVNT ac20 5180MHz Ant1 @ 30MHz-1000MHz



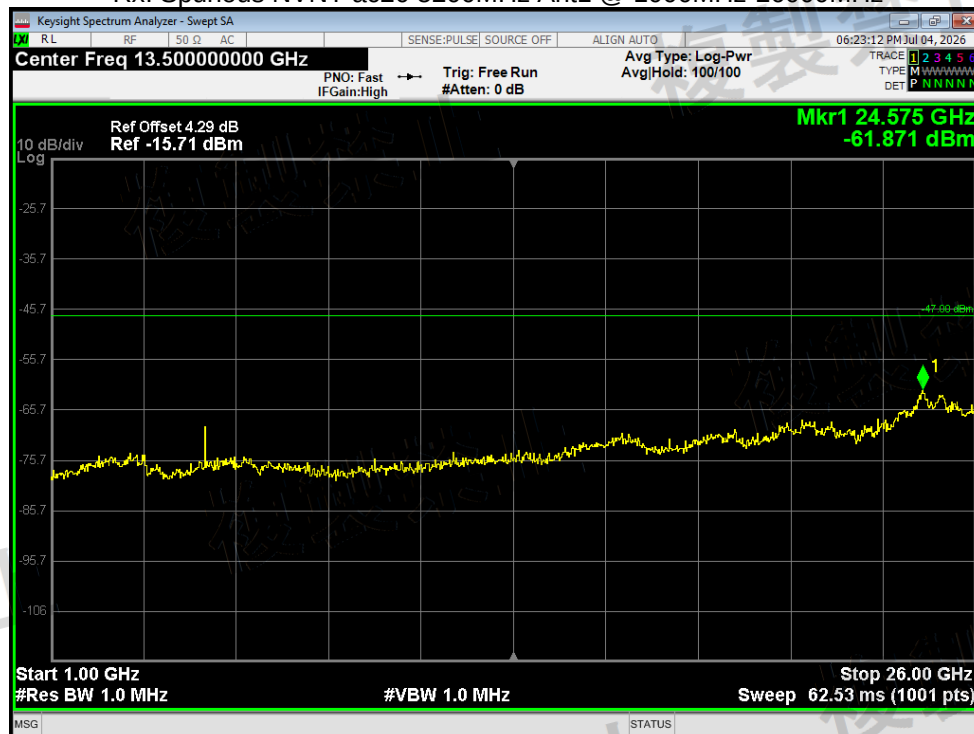
Rx. Spurious NVNT ac20 5180MHz Ant1 @ 1000MHz-26000MHz



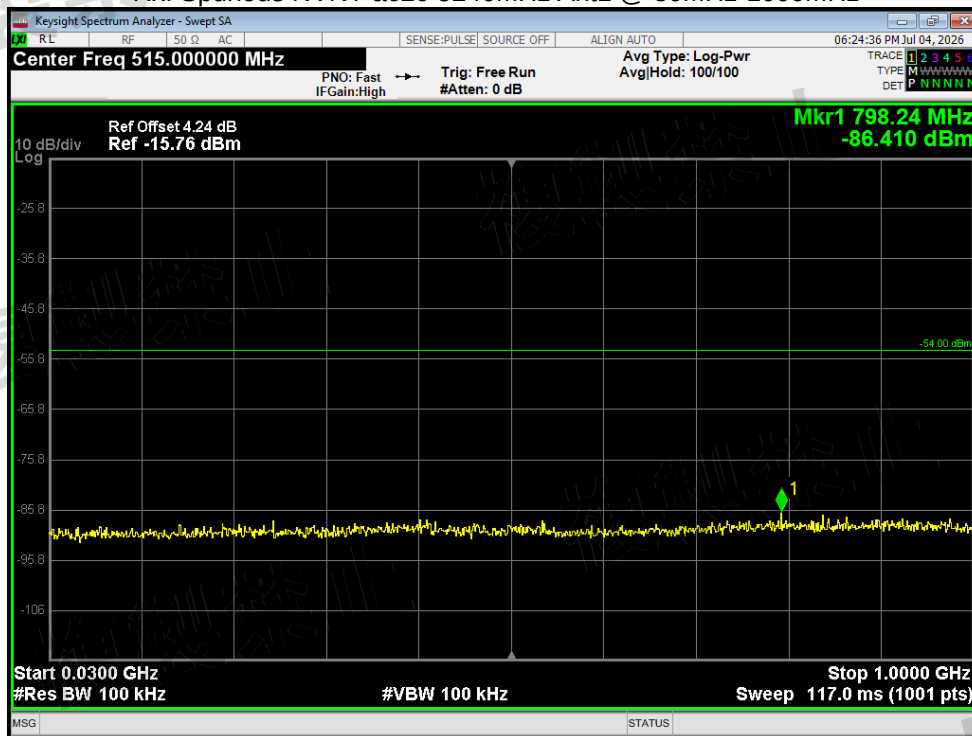
Rx. Spurious NVNT ac20 5200MHz Ant1 @ 30MHz-1000MHz



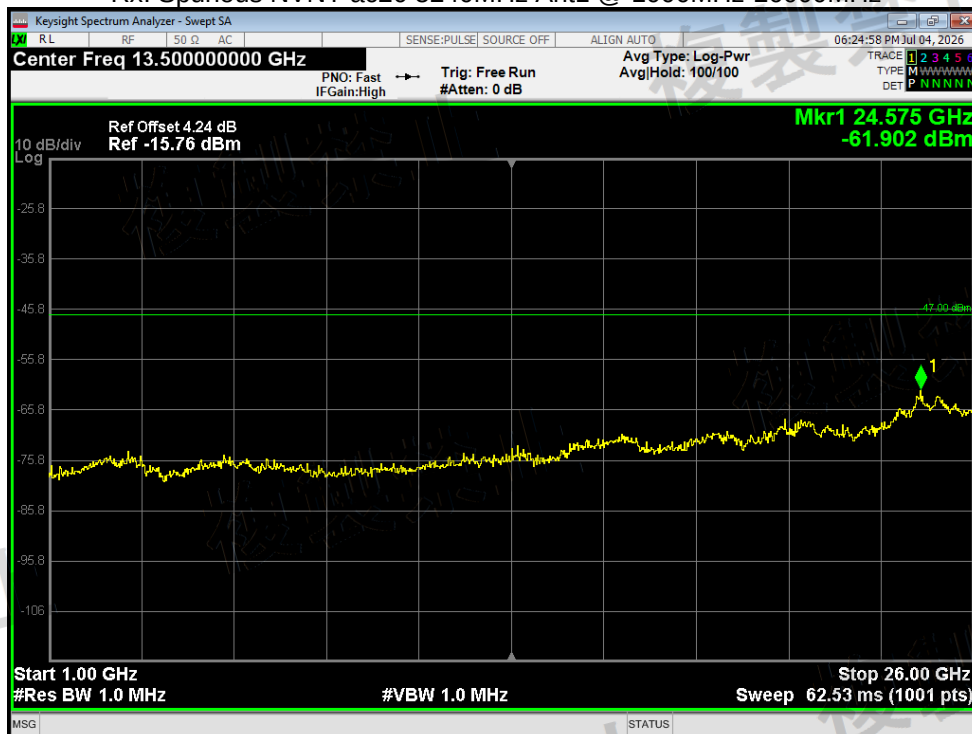
Rx. Spurious NVNT ac20 5200MHz Ant1 @ 1000MHz-26000MHz



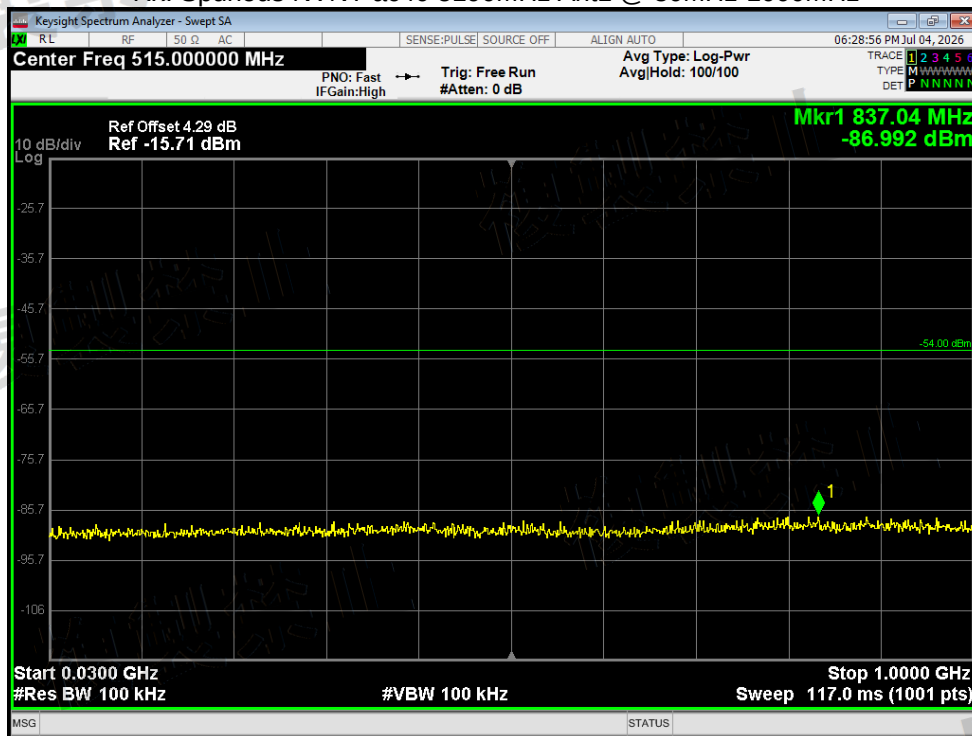
Rx. Spurious NVNT ac20 5240MHz Ant1 @ 30MHz-1000MHz



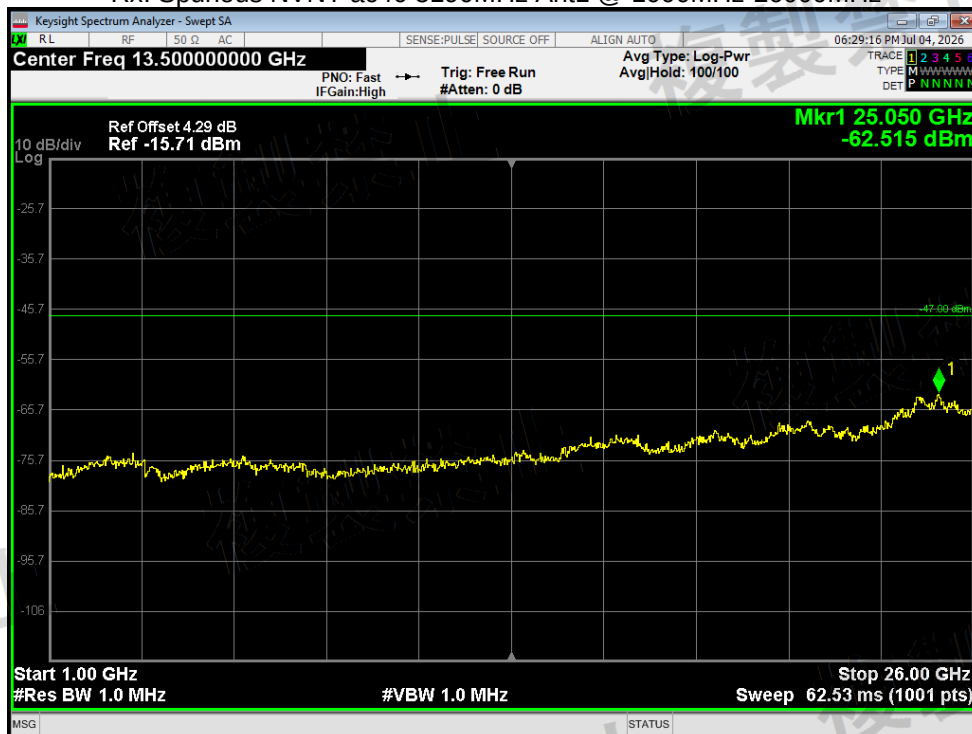
Rx. Spurious NVNT ac20 5240MHz Ant1 @ 1000MHz-26000MHz



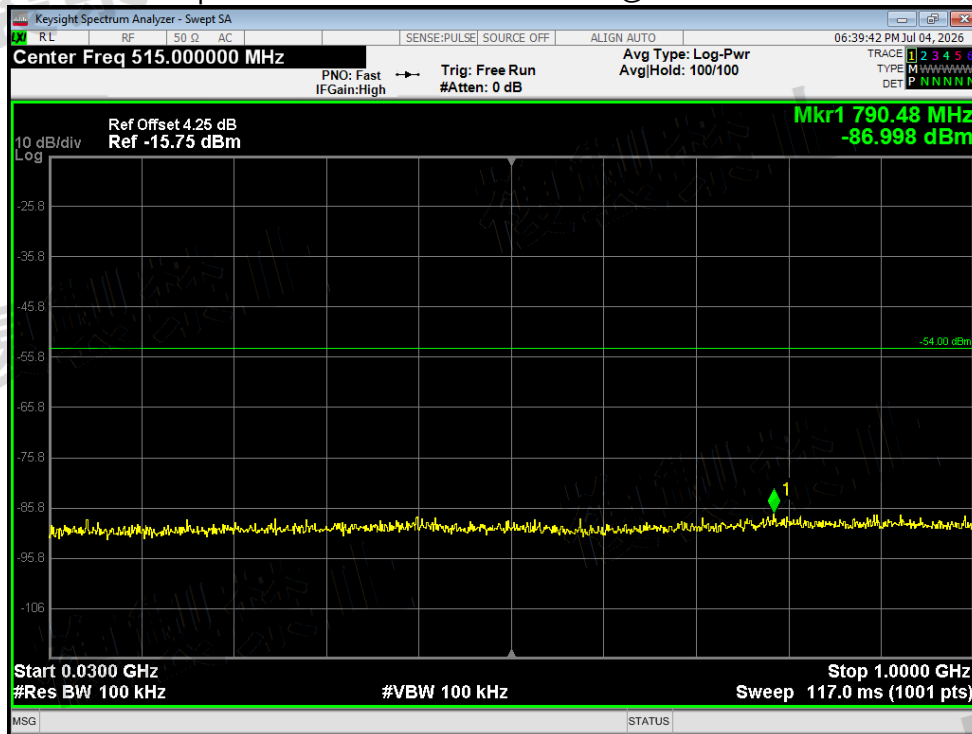
Rx. Spurious NVNT ac40 5190MHz Ant1 @ 30MHz-1000MHz



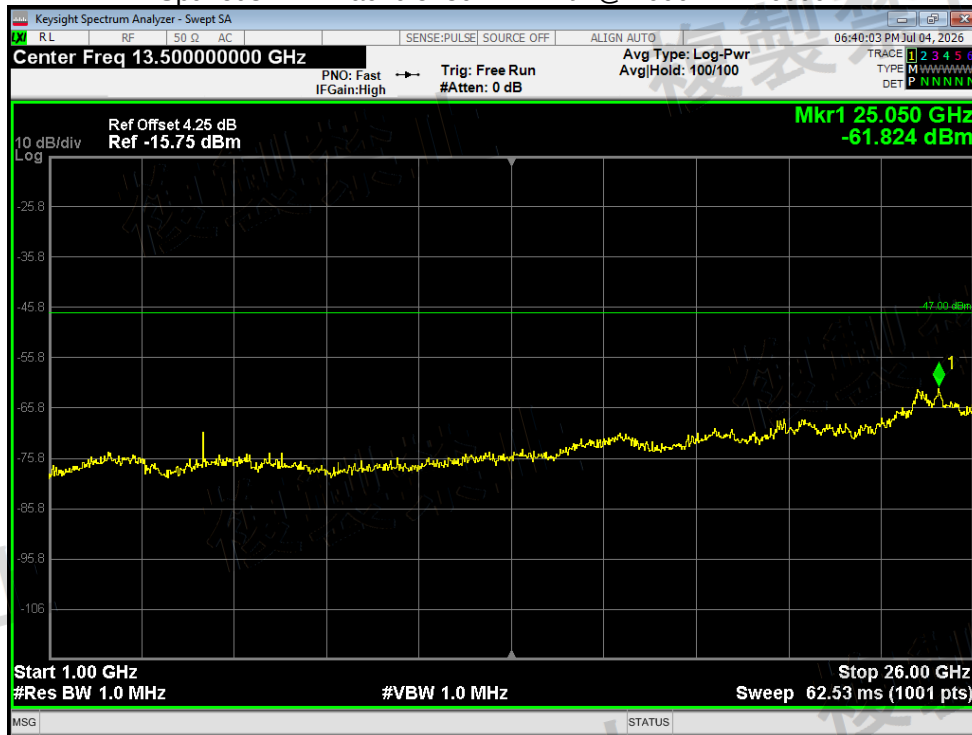
Rx. Spurious NVNT ac40 5190MHz Ant1 @ 1000MHz-26000MHz



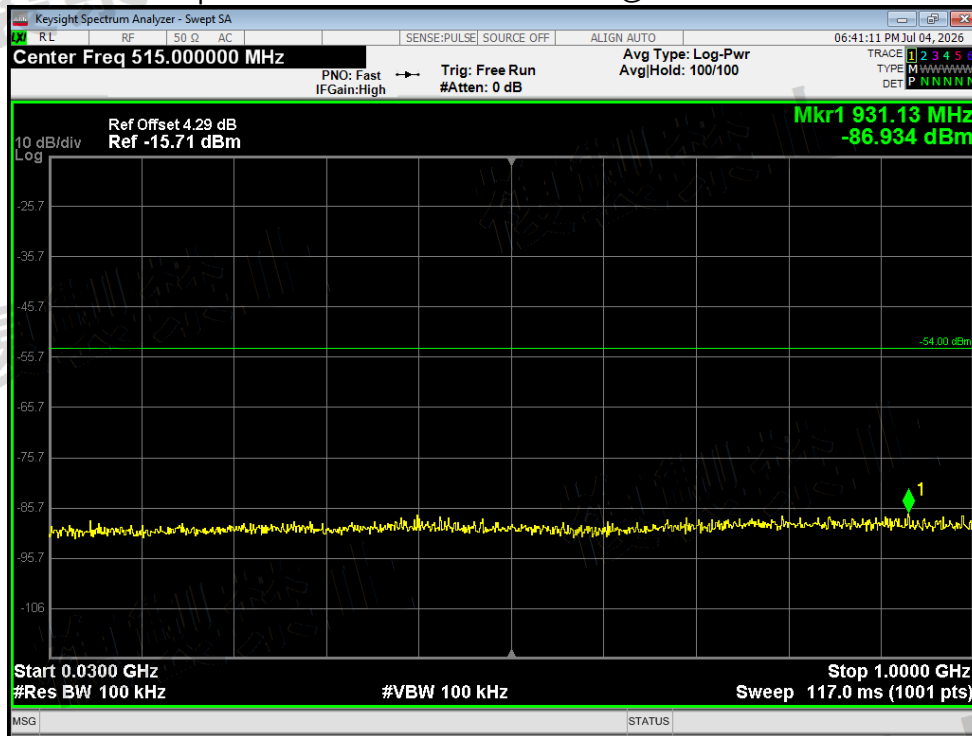
Rx. Spurious NVNT ac40 5230MHz Ant1 @ 30MHz-1000MHz



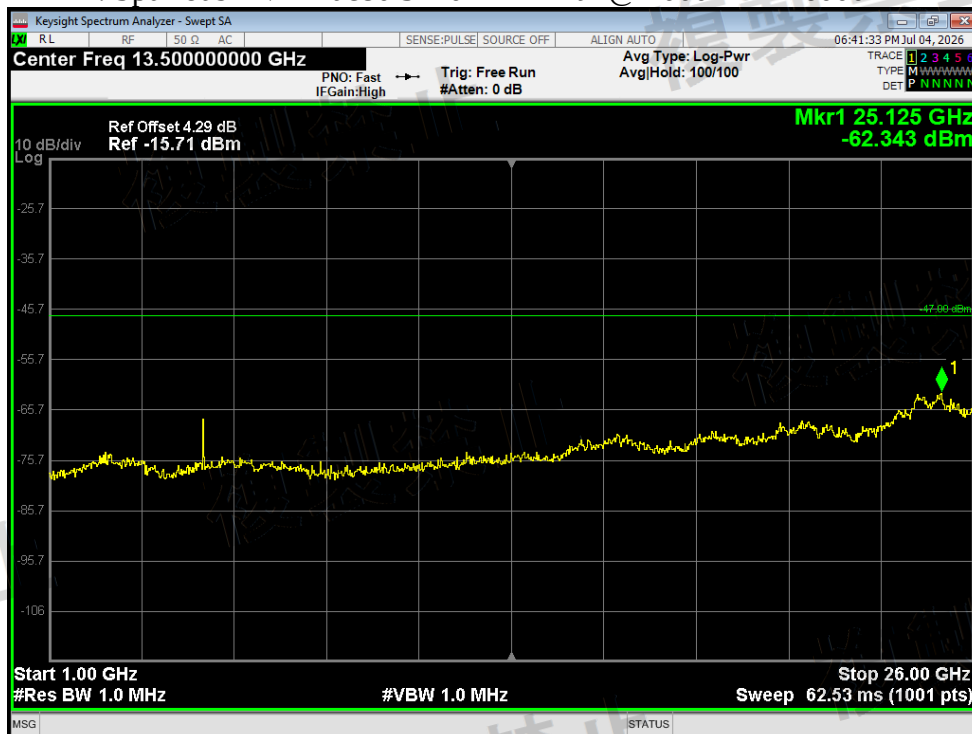
Rx. Spurious NVNT ac40 5230MHz Ant1 @ 1000MHz-26000MHz



Rx. Spurious NVNT ac80 5210MHz Ant1 @ 30MHz-1000MHz



Rx. Spurious NVNT ac80 5210MHz Ant1 @ 1000MHz-26000MHz

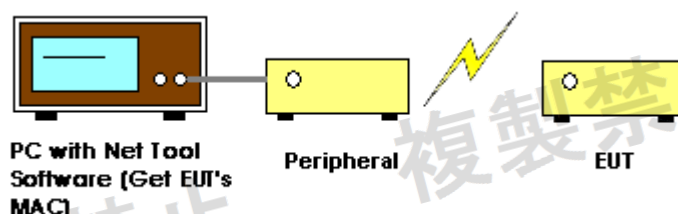


4.9 Interference prevention function

4.9.1 Limit

Chiefly, the one automatically to transmit and to receive identification code with the wireless equipment of the wireless station used in the same premises.

4.9.2 Diagram of test setup



4.9.3 Test Procedure

- In the case that the EUT has the function of automatically transmitting the identification code: a. Transmit the predetermined identification codes from EUT. b. Check the transmitted identification codes with the demodulator.
- In the case of receiving the identification code: a. Transmit the predetermined identification codes from the counterpart. b. Check if communication is normal. c. Transmit the signals other than predetermined ID codes from the counterpart. d. Check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

4.9.4 Test result

EUT:	Mini PC		
Temperature:	25.2°C	Humidity:	52%RH
MAC	F8:B5:4D:59:09:21		
Test result:	PASS		



5 Test Setup Photo

Reference to the file No.: ET-26063045SP for details.

6 EUT Constructional Details

Reference to the file No.: ET-26063045EP and ET-26063045IP for details.

-----End-----