

TEST REPORT

Report number : KR21250327A

Issue date : 2025/03/31

Applicant : BNCOM CO.LTD
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Gunpo-si, Gyeonggi-do, Republic of Korea
Tel. +82-70-427-6034 Fax. +82-31-427-8907

Model name : BCM-SR100-AS

Serial number : N/A

Standard : Radio equipment according to Certification Ordinance
Article 2 Section 1 No. 19

Test procedure : MIC Notice No.88 Appendix No.43

Date of test : 2025/3/25 ~ 2025/3/29

Name of facility : KRL Co., Ltd.

The results in this report are applicable only to the equipment tested.

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Tested by :


Moo-Hong, KIM

Approved by :


Kyu-Hyun, LEE

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1. Summary of Test Results

No.	Description	Result
1	Frequency Tolerance	Pass
2	Occupied Bandwidth	Pass
3	Unwanted Emission Intensity	Pass
4	RF Output Power / Tolerance	Pass
5	Limitation of Collateral Emission of Receiver	Pass
6	Radio Interference Prevention Function	Pass
7	Hopping Frequency Dwell Time	Pass

2. Measurement equipment list

USE	Equipment	Company	Model No.	Serial No.	Calibrated by	Cal. Method	Cal. Due	Cal. Date
X	FREQUENCY COUNTER	EIP	25B	9105-00535	KTICC	ㄱㄴ(c)	Oct. 17, 2025	Oct. 17, 2024
X	SYSTEM DC POWER SUPPLY	HP	6654A	3639A02180	BCS	ㄱㄴ(c)	Aug. 7, 2025	Aug. 7, 2024
X	TEMP & HUMI. CHAMBER	ESPEC CORP	SH-241	92007965	KTICC	ㄱㄴ(c)	Nov. 15, 2025	Nov. 15, 2024
X	MXA SPECTRUM ANALYZER	AGILENT	N9020A	US46470720	KTICC	ㄱㄴ(c)	Apr. 8, 2025	Apr. 8, 2024
X	USB Average Power Sensor	AGILENT	U2004A	MY53340013	KTICC	ㄱㄴ(c)	Oct. 15, 2025	Oct. 15, 2024
X	Digital Multimeter	HP	34401A	US36085076	BCS	ㄱㄴ(c)	Aug. 7, 2025	Aug. 7, 2024
	POWER DIVIDER	WILTRON	K240C	890093	KTICC	ㄱㄴ(c)	Oct. 16, 2025	Oct. 16, 2024
	STEP ATTENUATOR	AEROFLEX	AF9010-60-31	12987	BCS	ㄱㄴ(c)	Jan. 6, 2026	Jan. 6, 2025
	AC POWER SUPPLY	DAELIM	D-45	KRL-002	BCS	ㄷ(d)	Aug. 7, 2025	Aug. 7, 2024
	FIXED ATTENUATOR	XMA CORP	4882-6140-06	KRL-009	KTICC	ㄱㄴ(c)	Oct. 16, 2025	Oct. 16, 2024

Note1: The calibration of measurement equipment is valid for one year period.

Note2: "X" used equipment.

Note3: Cal.Method ... a); 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)

b); Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992)

c); 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)

d); Calibration conducted by using measuring instruments and other equipment listed in the right column of Table No. 3 attached hereto, which shall have been given any of calibration, etc. listed above from a) to c)

3. TEST RESULTS DATA

BLUETOOTH - BDR

Environment of test room	Date of test	2025-3-25
	Temperature	25 °C
	Humidity	50 %
Test Engineer	MooHong, Kim	

Modulation Type	GFSK
Type Emissions	78M2F1D

Peak Antenna Gain	2.13	dBi
Declaration Output Power	0.20	mW/MHz
Declaration Output Power	-6.99	dBm/MHz
E.I.R.P	-4.86	dBm/MHz
Input Power Voltage	3.30	VDC

Burst	Path Loss	1.70	dB
	ON TIME	2.879	msec
	OFF TIME	0.846	msec
Packet Type(Mode)	Ratio	77.29%	%
	DH5	mode	

3.1 Test Results

Measurement Frequency	MHz	2402			2441			2480			Result	Limit	Note
Channel Number	Ch.	0			39			78			---	---	
Supply Voltage	VDC	3.0	3.3	3.6	3.0	3.3	3.6	3.0	3.3	3.6	---	---	
Frequency Measurements	MHz	2401.995708	2401.995709	2401.995710	2440.995457	2440.995459	2440.995452	2479.995265	2479.995266	2479.995263	----	----	
Frequency Tolerance	ppm	-1.787	-1.786	-1.786	-1.861	-1.860	-1.863	-1.909	-1.909	-1.910	PASS	±50×10 ⁻⁶ (50ppm)	

Measurement Frequency		MHz	Hopping			Result	Limit	Note
Supply Voltage		VDC	3.0	3.3	3.6	---	---	
RF Output Power		mW/MHz	0.126	0.130	0.129	PASS	3mW/MHz or below	
RF Output Power Tolerance		%	-36.83	-35.06	-35.65	PASS	+20 to -80%	
Unwanted Emission Intensity	30 to 2387MHz	μW/MHz	0.028	0.029	0.034	PASS	2.5μW/MHz or below	
		MHz	2368.100	2384.600	2382.300	----	----	
	2387 to 2400MHz	μW/MHz	0.500	0.728	0.528	PASS	25μW/MHz or below	
		MHz	2400.000	2399.987	2400.000	----	----	
	2483.5 to 2496.5MHz	μW/MHz	0.026	0.030	0.027	PASS	25μW/MHz or below	
		MHz	-2483.799	-2485.359	-2483.838	----	----	
	2496.5 to 12500MHz	μW/MHz	0.137	0.146	0.176	PASS	2.5μW/MHz or below	
		MHz	-4857.000	4867.000	-4847.000	----	----	
Limitation of Collateral Emission of Receiver	30 to 1000MHz	nW	0.006	0.006	0.006	PASS	4nW or below	
		MHz	933.070	868.080	900.090	----	----	
	10000 to 12500MHz	nW	0.682	0.793	0.726	PASS	20nW or below	
		MHz	4807.000	4807.000	4807.000	----	----	
Occupied Bandwidth		MHz	78.201	78.193	78.196	PASS	83.5MHz or below	
Spread Spectrum Bandwidth		MHz	70.854	70.867	70.781	PASS	500kHz or more	
Spread Spectrum Factor		----	70.854	70.867	70.781	PASS	Spread Spectrum Factor Index greater than 1	
Hopping Dwell Time		msec	277.28	277.33	276.99	PASS	400 msec or below	
Interference Prevention Function		----	Good (Identification Code : F4:F0:7D:FF:FF:BC)			PASS	----	

4. TEST RESULTS DATA

BLUETOOTH - EDR

Environment of test room	Date of test	2025-3-25
	Temperature	25 °C
	Humidity	50 %
Test Engineer	MooHong, Kim	

Modulation Type	8DPSK
Type Emissions	78M2G1D

Peak Antenna Gain	2.13	dBi
Declaration Output Power	0.07	mW/MHz
Declaration Output Power	-11.55	dBm/MHz
E.I.R.P	-9.42	dBm/MHz
Input Power Voltage	3.30	VDC

Burst	Path Loss	1.70	dB
	ON TIME	2.880	msec
	OFF TIME	0.852	msec
Packet Type(Mode)	Ratio	77.17%	%
	3DH5	mode	

4.1 Test Results

Measurement Frequency	MHz	2402			2441			2480			Result	Limit	Note
Channel Number	Ch.	0			39			78			---	---	
Supply Voltage	VDC	3.0	3.3	3.6	3.0	3.3	3.6	3.0	3.3	3.6	---	---	
Frequency Measurements	MHz	2401.995713	2401.995714	2401.995711	2440.995452	2440.995451	2440.995456	2479.995265	2479.995263	2479.995267	----	----	
Frequency Tolerance	ppm	-1.785	-1.784	-1.786	-1.863	-1.864	-1.862	-1.909	-1.910	-1.908	PASS	±50×10 ⁻⁶ (50ppm)	

Measurement Frequency		MHz	Hopping			Result	Limit	Note
Supply Voltage		VDC	3.0	3.3	3.6	---	---	
RF Output Power		mW/MHz	0.051	0.051	0.052	PASS	3mW/MHz or below	
RF Output Power Tolerance		%	-26.98	-26.98	-25.79	PASS	+20 to -80%	
Unwanted Emission Intensity	30 to 2387MHz	μW/MHz	0.027	0.025	0.027	PASS	2.5μW/MHz or below	
		MHz	2306.900	2325.700	2014.600	----	----	
	2387 to 2400MHz	μW/MHz	1.804	1.505	1.599	PASS	25μW/MHz or below	
		MHz	2400.000	2400.000	2400.000	----	----	
	2483.5 to 2496.5MHz	μW/MHz	0.020	0.023	0.021	PASS	25μW/MHz or below	
		MHz	2484.150	2483.643	2483.786	----	----	
	2496.5 to 12500MHz	μW/MHz	0.063	0.066	0.058	PASS	2.5μW/MHz or below	
		MHz	4867.000	4857.000	4927.000	----	----	
Limitation of Collateral Emission of Receiver	30 to 1000MHz	nW	0.007	0.005	0.016	PASS	4nW or below	
		MHz	375.320	813.760	905.910	----	----	
	10000 to 12500MHz	nW	0.664	0.738	0.727	PASS	20nW or below	
		MHz	4807.000	4807.000	4807.000	----	----	
Occupied Bandwidth		MHz	78.201	78.193	78.196	PASS	83.5MHz or below	
Spread Spectrum Bandwidth		MHz	70.854	70.867	70.781	PASS	500kHz or more	
Spread Spectrum Factor		----	70.854	70.867	70.781	PASS	Spread Spectrum Factor (msec) is greater than 0.5	
Hopping Dwell Time		msec	276.85	276.90	276.57	PASS	400 msec or below	
Interference Prevention Function		----	Good (Identification Code : F4:F0:7D:FF:FF:BC)			PASS	----	

5. TEST RESULTS DATA

BLUETOOTH - LE (1 Mbps)

Environment of test room	Date of test	2025-3-25
	Temperature	25 °C
	Humidity	50 %
Test Engineer	MooHong, Kim	

Peak Antenna Gain	2.13	dBi
Declaration Output Power	10.00	mW
Declaration Output Power	10.00	dBm
E.I.R.P	12.13	dBm
Input Power Voltage	3.30	VDC

Modulation Type	GFSK
Type Emissions	1M04F1D

Burst	Path Loss	1.70	dB
	ON TIME	393.000	µsec
	OFF TIME	233.100	µsec
Packet Type(Mode)	Ratio	62.77%	%
	LE	mode	

5.1 Test Results

Measurement Frequency	MHz	2402			2440			2480			Result	Limit	Note
Channel Number	Ch.	0			19			39			---	---	
Supply Voltage	VDC	3.0	3.3	3.6	3.0	3.3	3.6	3.0	3.3	3.6	---	---	
Frequency Measurements	MHz	2401.995722	2401.995724	2401.995716	2439.995480	2439.995482	2439.995479	2479.995261	2479.995259	2479.995262	-----	-----	
Frequency Tolerance	ppm	-1.781	-1.780	-1.784	-1.852	-1.852	-1.853	-1.911	-1.912	-1.910	PASS	±50×10 ⁻⁶ (50ppm)	

Occupied Bandwidth	MHz	1.036	1.036	1.035	1.036	1.036	1.035	1.026	1.025	1.024	PASS	26MHz or below	
RF Output Power	mW	8.974	8.872	9.750	9.419	9.484	9.528	8.710	8.770	8.790	PASS	10mW or below	
RF Output Power Tolerance	%	-10.26	-11.28	-2.50	-5.81	-5.16	-4.72	-12.90	-12.30	-12.10	PASS	+20 to -80%	

Unwanted Emission Intensity	30 to 2387MHz	µW/MHz	0.034	0.030	0.028	0.028	0.023	0.024	0.027	0.024	0.023	PASS	2.5µW/MHz or below	
		MHz	1745.9000	2271.5000	2368.1000	2311.6000	2255.0000	2361.1000	2153.7000	2132.4000	2354.0000	-----	-----	
	2387 to 2400MHz	µW/MHz	1.922	1.774	1.869	0.019	0.021	0.019	0.022	0.019	0.020	PASS	25µW/MHz or below	
		MHz	2400.0000	2400.0000	2400.0000	2388.8460	2389.3660	2399.4670	2392.7980	2387.5850	2396.3340	-----	-----	
	2483.5 to 2496.5MHz	µW/MHz	0.019	0.019	0.017	0.019	0.020	0.021	0.046	0.045	0.052	PASS	25µW/MHz or below	
		MHz	2491.2870	2489.9480	2488.1280	2495.1350	2484.2020	2491.2480	2483.6690	2484.0980	2483.5650	-----	-----	
Limitation of Collateral Emission of Receiver	2496.5 to 12500MHz	µW/MHz	0.198	0.191	0.188	0.263	0.270	0.276	0.178	0.192	0.193	PASS	2.5µW/MHz or below	
		MHz	4807.0000	4807.0000	4807.0000	4877.0000	4877.0000	4877.0000	4957.0000	4957.0000	4957.0000	-----	-----	
	30 to 1000MHz	nW	0.013	0.014	0.018	0.015	0.014	0.012	0.016	0.015	0.016	PASS	4nW or below	
		MHz	747.8000	866.1400	455.8300	775.9300	995.1500	802.1200	793.3900	983.5100	895.2400	-----	-----	
	10000 to 12500MHz	nW	0.812	0.764	0.788	0.853	0.662	0.716	0.635	0.471	0.573	PASS	20nW or below	
		MHz	4807.0000	4807.0000	4807.0000	4876.0000	4876.0000	4876.0000	4956.0000	4956.0000	4956.0000	-----	-----	

Spread Spectrum Factor	-----	NA										N/A	-----	
Hopping Dwell Time	msec	NA										N/A	-----	
Interference Prevention Function	-----	Good (Identification Code : F4:F0:7D:FF:FF:BC)										PASS	-----	

6. TEST RESULTS DATA

BLUETOOTH - LE (2 Mbps)

Environment of test room	Date of test	2025-3-25
	Temperature	25 °C
	Humidity	50 %
Test Engineer	MooHong, Kim	

Modulation Type	GFSK
Type Emissions	2M06F1D

Peak Antenna Gain	2.13	dBi
Declaration Output Power	10.00	mW
Declaration Output Power	10.00	dBm
E.I.R.P	12.13	dBm
Input Power Voltage	3.30	VDC

Burst	Path Loss	1.70	dB
	ON TIME	208.100	µsec
	OFF TIME	418.000	µsec
Packet Type(Mode)	Ratio	33.24%	%
	LE	mode	

6.1 Test Results

Measurement Frequency	MHz	2404			2440			2478			Result	Limit	Note
Channel Number	Ch.	1			19			38			---	---	
Supply Voltage	VDC	3.0	3.3	3.6	3.0	3.3	3.6	3.0	3.3	3.6	---	---	
Frequency Measurements	MHz	2403.995716	2403.995721	2403.995716	2439.995481	2439.995477	2439.995478	2477.995271	2477.995267	2477.995270	-----	-----	
Frequency Tolerance	ppm	-1.782	-1.780	-1.782	-1.852	-1.854	-1.853	-1.908	-1.910	-1.909	PASS	±50×10 ⁻⁶ (50ppm)	

Occupied Bandwidth	MHz	2.036	2.036	2.035	2.064	2.064	2.064	2.058	2.059	2.058	PASS	26MHz or below	
RF Output Power	mW	9.162	9.247	9.311	9.886	9.886	9.954	9.099	9.247	9.247	PASS	10mW or below	
RF Output Power Tolerance	%	-8.38	-7.53	-6.89	-1.14	-1.14	-0.46	-9.01	-7.53	-7.53	PASS	+20 to -80%	

Unwanted Emission Intensity	30 to 2387MHz	µW/MHz	0.027	0.025	0.029	0.028	0.027	0.025	0.028	0.025	0.024	PASS	2.5µW/MHz or below	
		MHz	2262.1000	2179.6000	2382.3000	2384.6000	1736.5000	2354.0000	2379.9000	2351.6000	2191.4000	-----	-----	
	2387 to 2400MHz	µW/MHz	0.050	0.050	0.051	0.021	0.020	0.021	0.018	0.020	0.018	PASS	25µW/MHz or below	
		MHz	2399.9220	2399.9870	2399.1680	2398.4790	2396.2820	2399.4540	2398.3750	2393.6170	2398.5960	-----	-----	
	2483.5 to 2496.5MHz	µW/MHz	0.018	0.018	0.017	0.018	0.019	0.019	0.036	0.040	0.036	PASS	25µW/MHz or below	
		MHz	2493.4840	2494.1470	2487.2180	2489.1810	2485.7100	2490.8970	2483.7080	2483.7860	2483.5130	-----	-----	
Limitation of Collateral Emission of Receiver	2496.5 to 12500MHz	µW/MHz	0.164	0.163	0.168	0.271	0.272	0.302	0.012	0.165	0.177	PASS	2.5µW/MHz or below	
		MHz	4807.0000	4807.0000	4807.0000	4877.0000	4877.0000	4877.0000	4957.0000	4957.0000	4957.0000	-----	-----	
	30 to 1000MHz	nW	0.014	0.013	0.013	0.012	0.013	0.014	0.013	0.013	0.016	PASS	4nW or below	
		MHz	737.1300	918.5200	874.8700	949.5600	794.3600	861.2900	858.3800	816.6700	820.5500	-----	-----	
	10000 to 12500MHz	nW	0.811	0.843	0.869	0.772	0.700	0.757	0.596	0.571	0.588	PASS	20nW or below	
		MHz	4807.0000	4807.0000	4807.0000	4876.0000	4876.0000	4876.0000	4956.0000	4956.0000	4956.0000	-----	-----	

Spread Spectrum Factor	-----	NA										N/A	-----	
Hopping Dwell Time	msec	NA										N/A	-----	
Interference Prevention Function	-----	Good (Identification Code : F4:F0:7D:FF:FF:BC)										PASS	-----	

BDR(DH5) Test Results – Nominal Voltage (DC 3.3 V)

Frequency Tolerance

LOW



MID

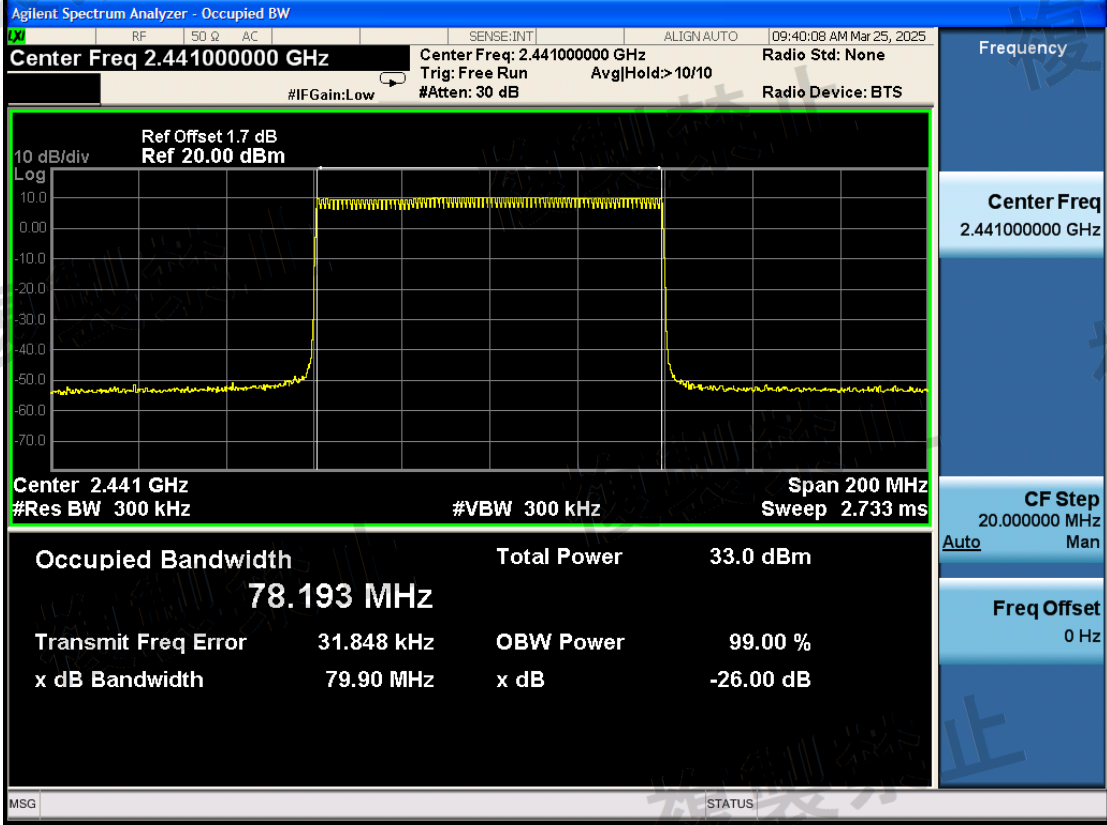


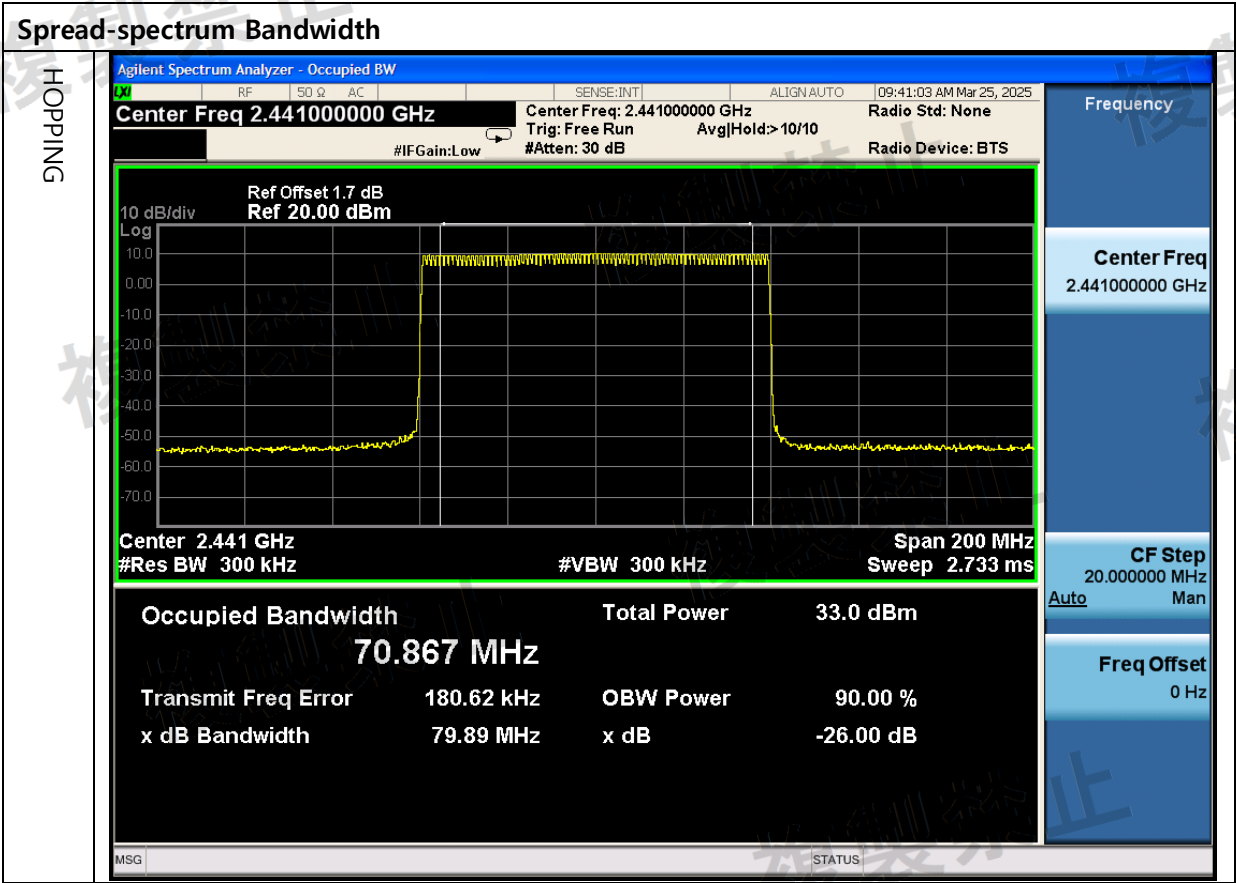
HIGH



Occupied Bandwidth

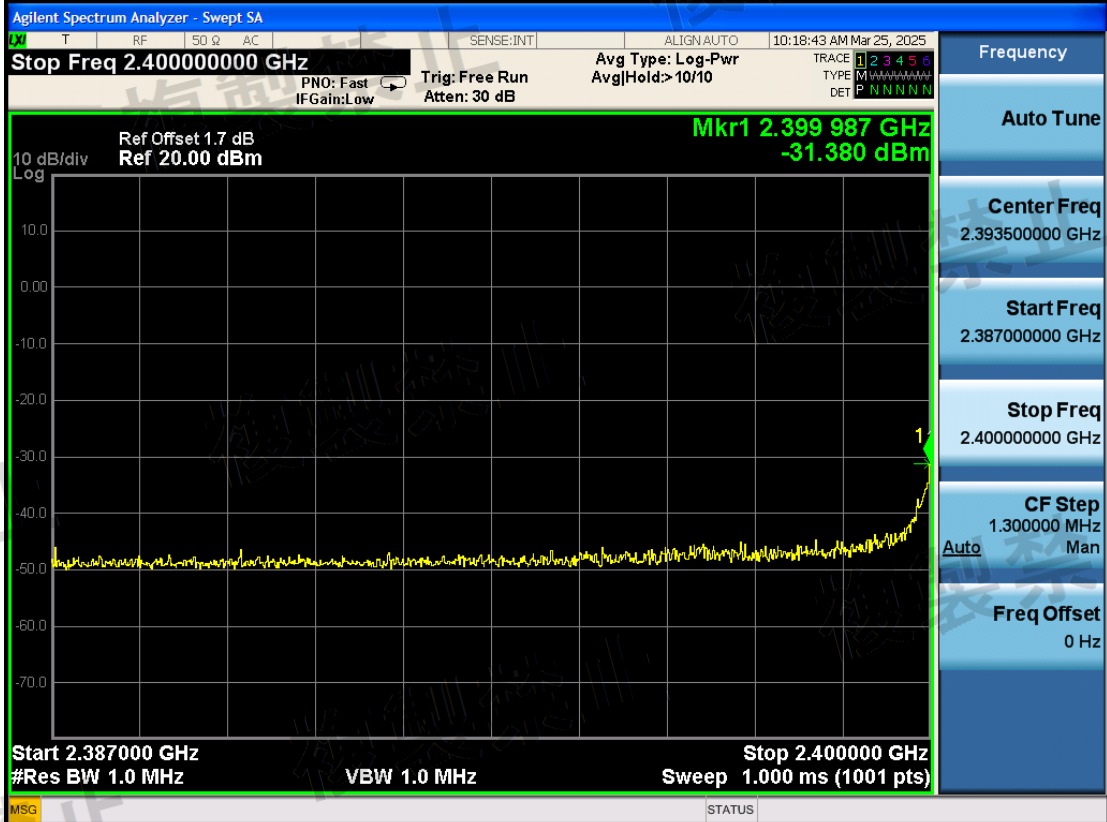
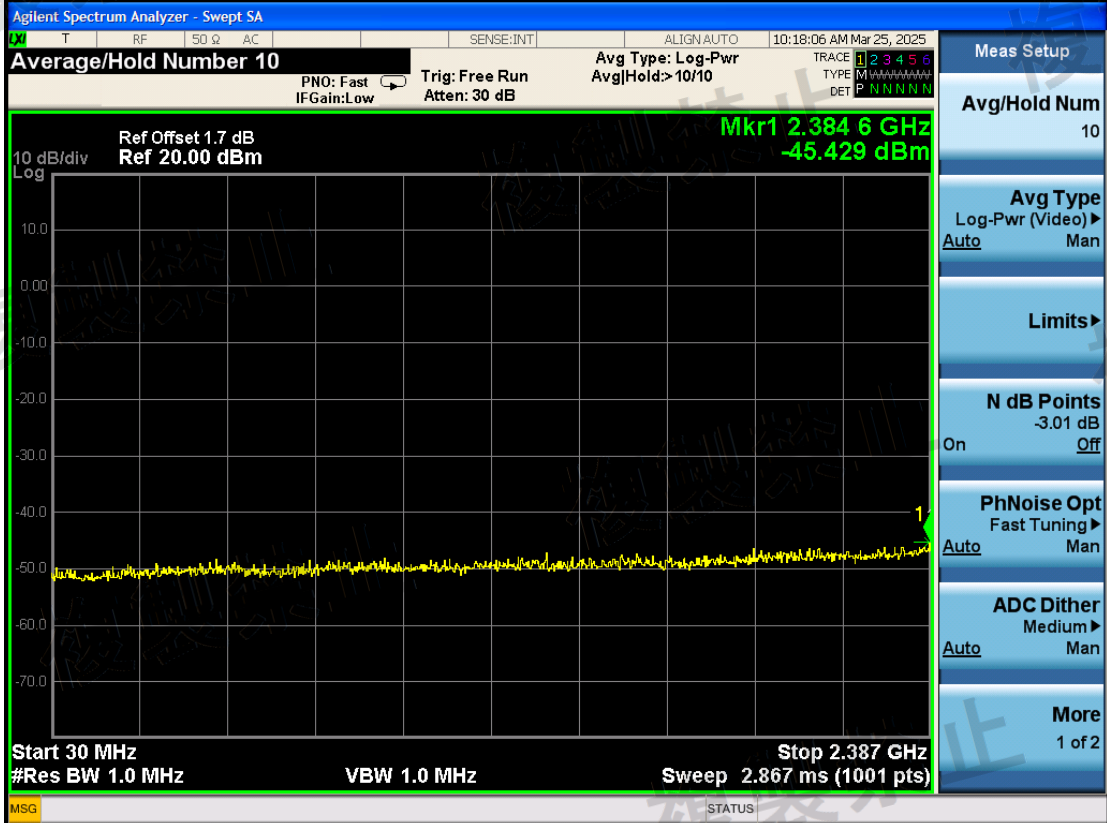
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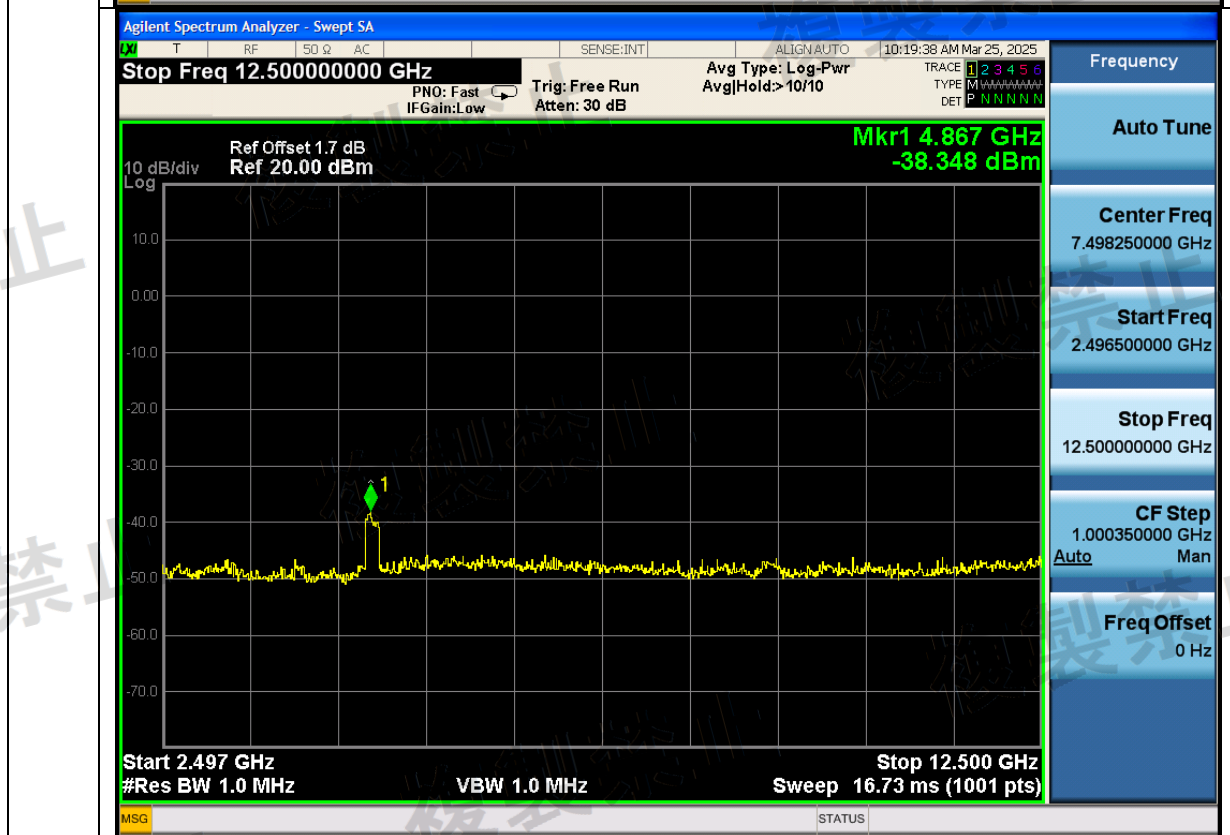
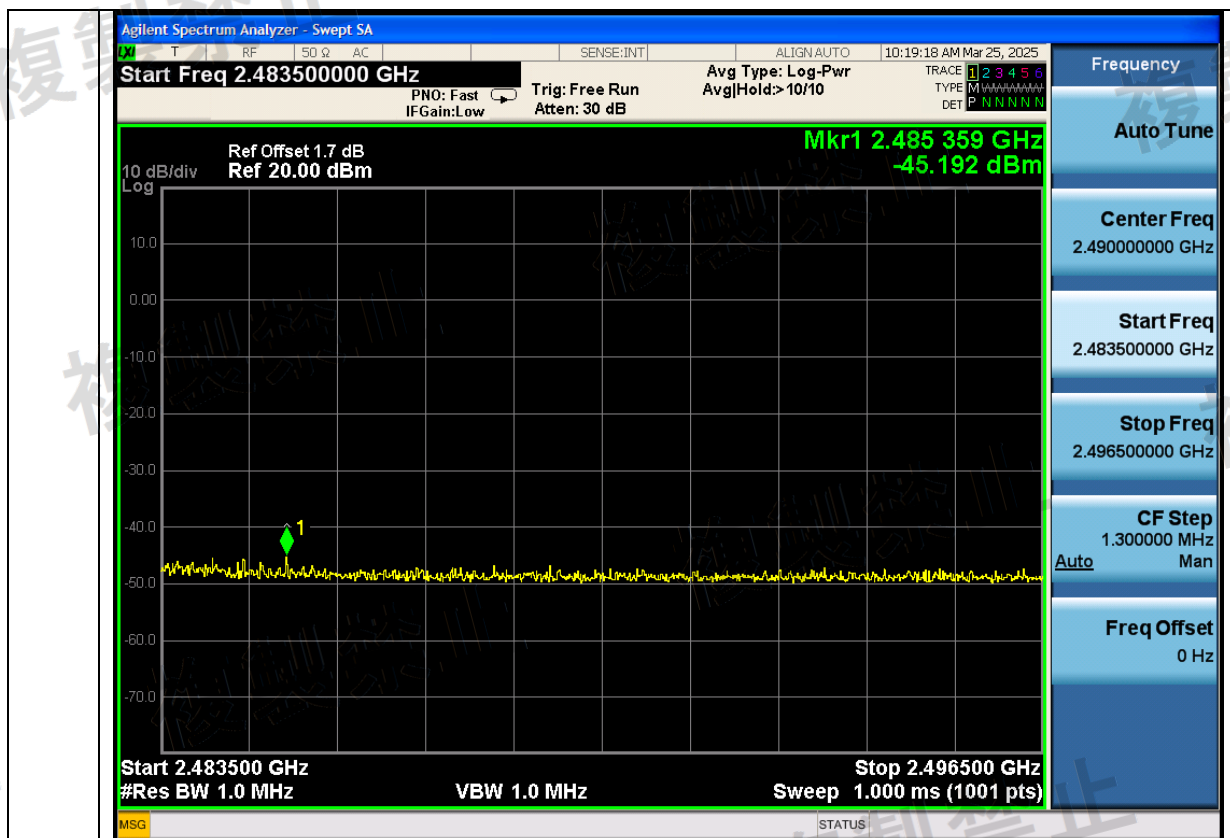




Unwanted Emission Intensity

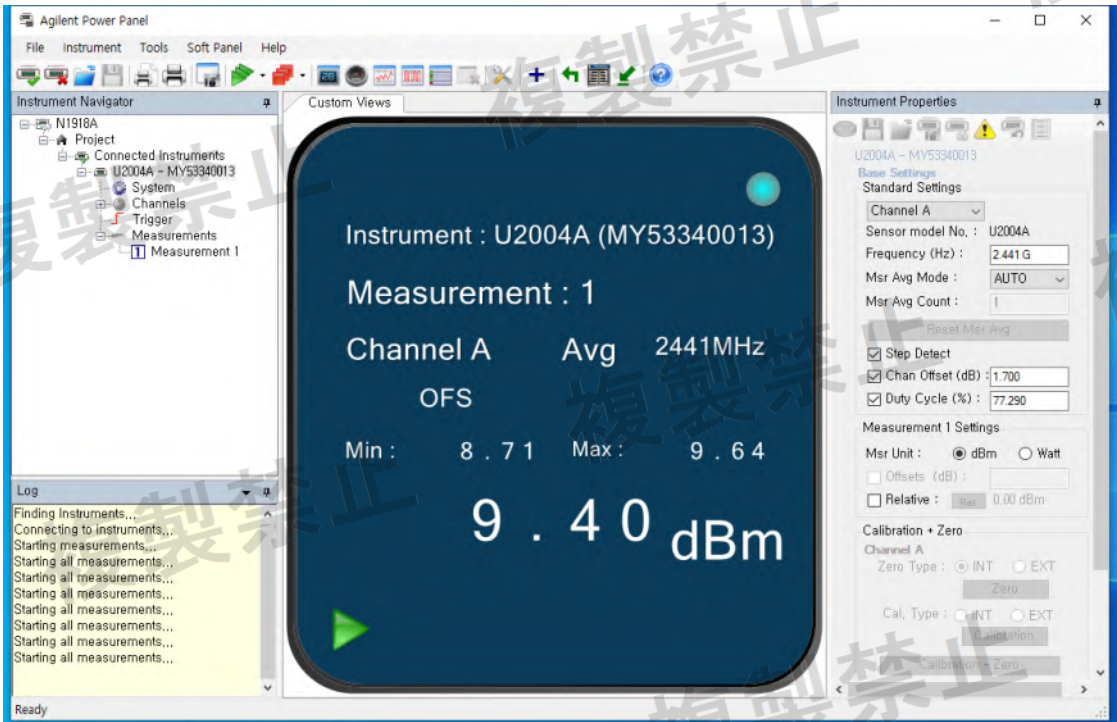
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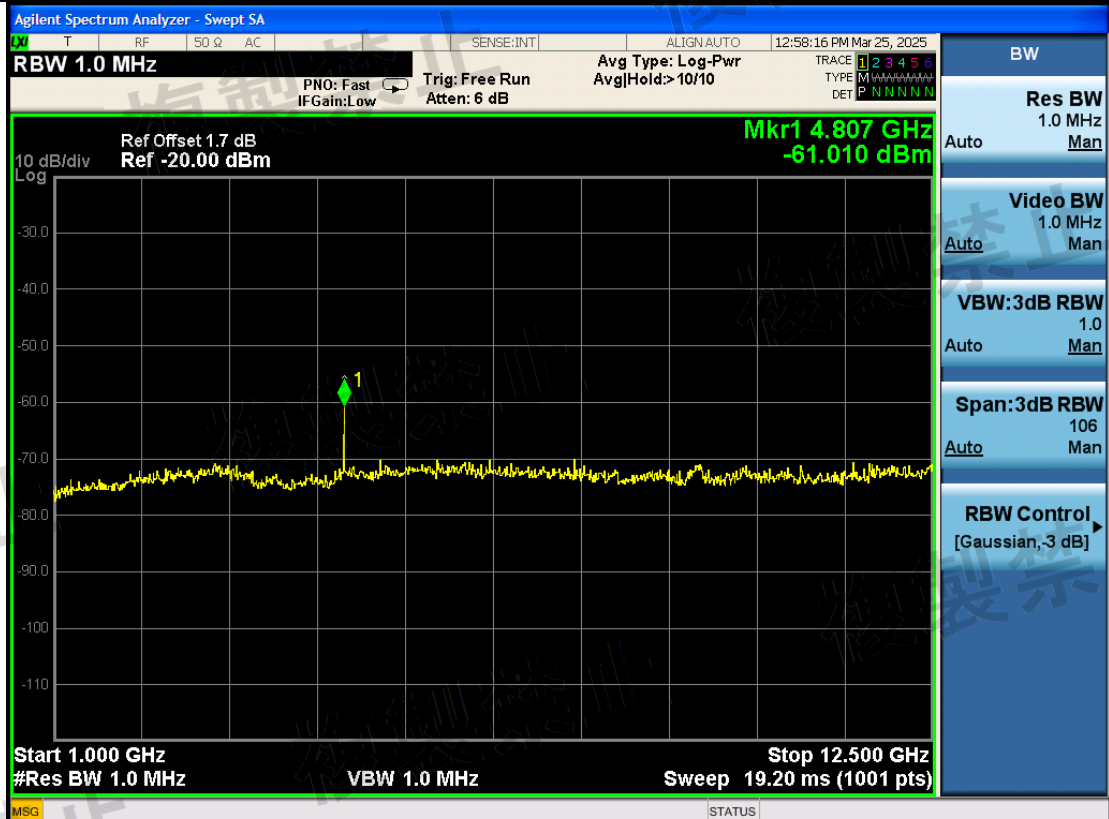
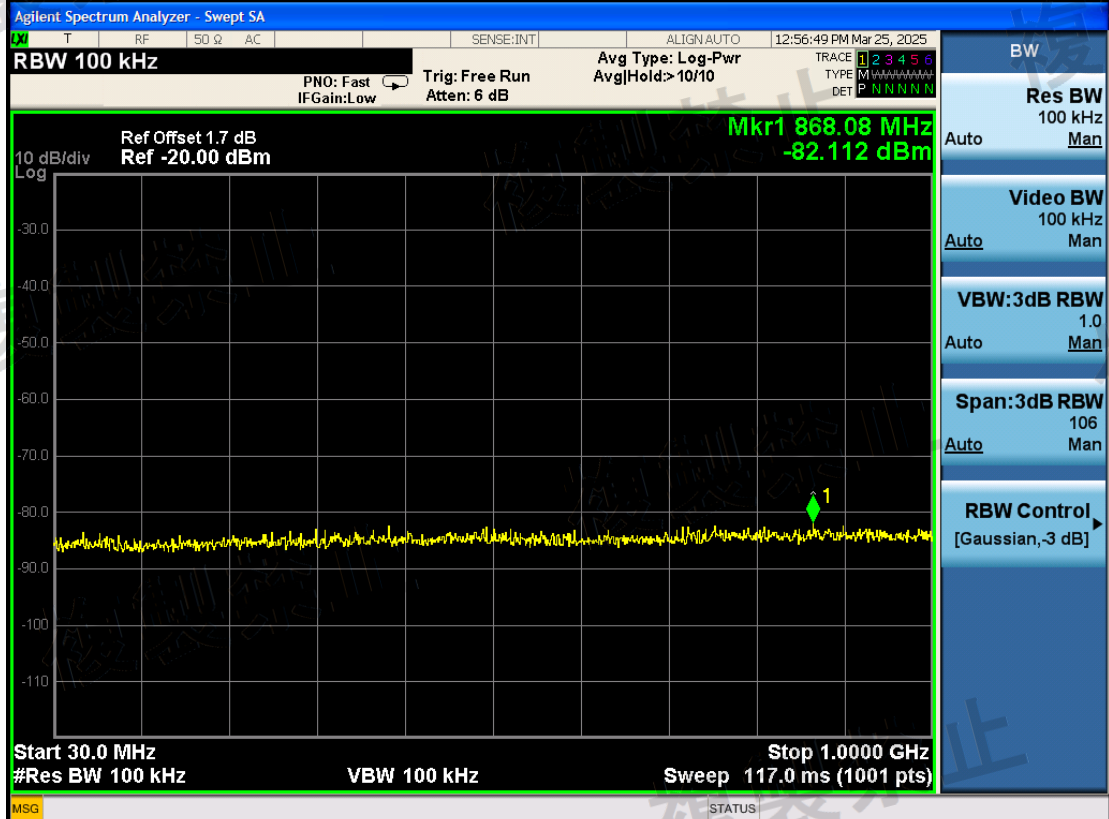


RF Output Power

HOPPING

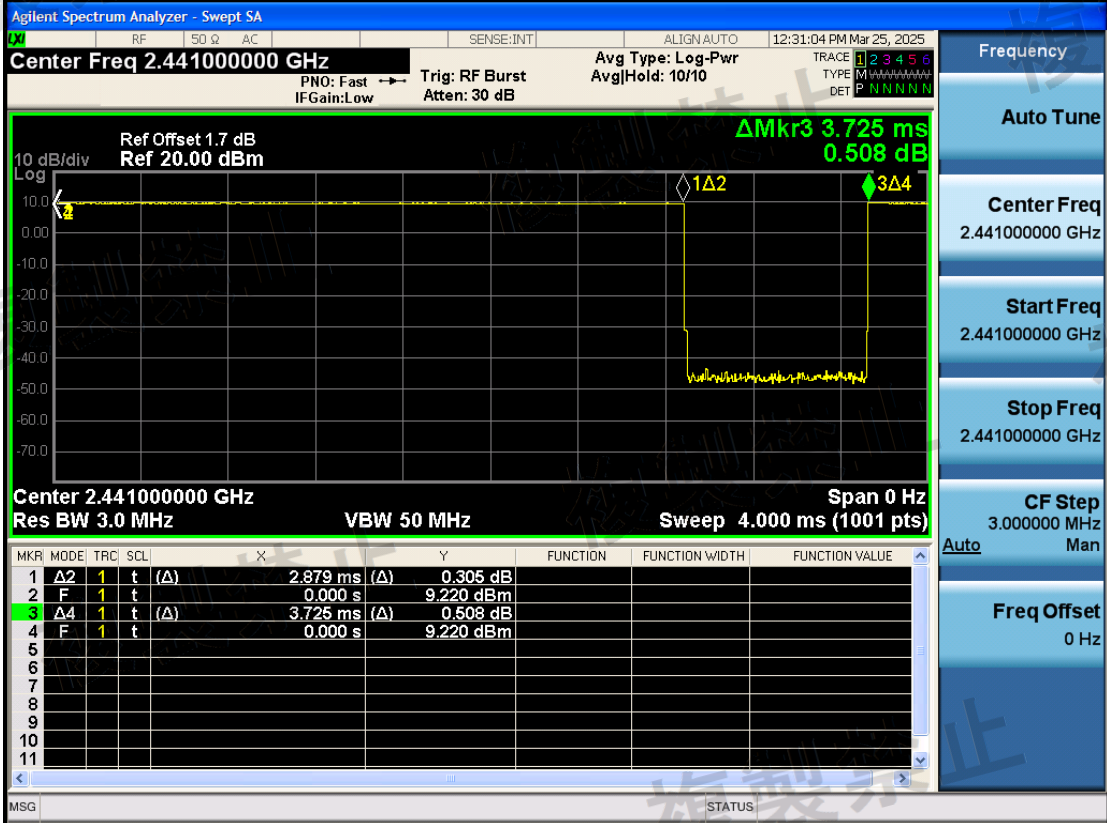


Limitation of Collateral Emission of Receiver



Hopping Frequency Dwell Time

HOPPING



BDR(DH5) Test Results – High Voltage (DC 3.6 V)

Frequency Tolerance

LOW

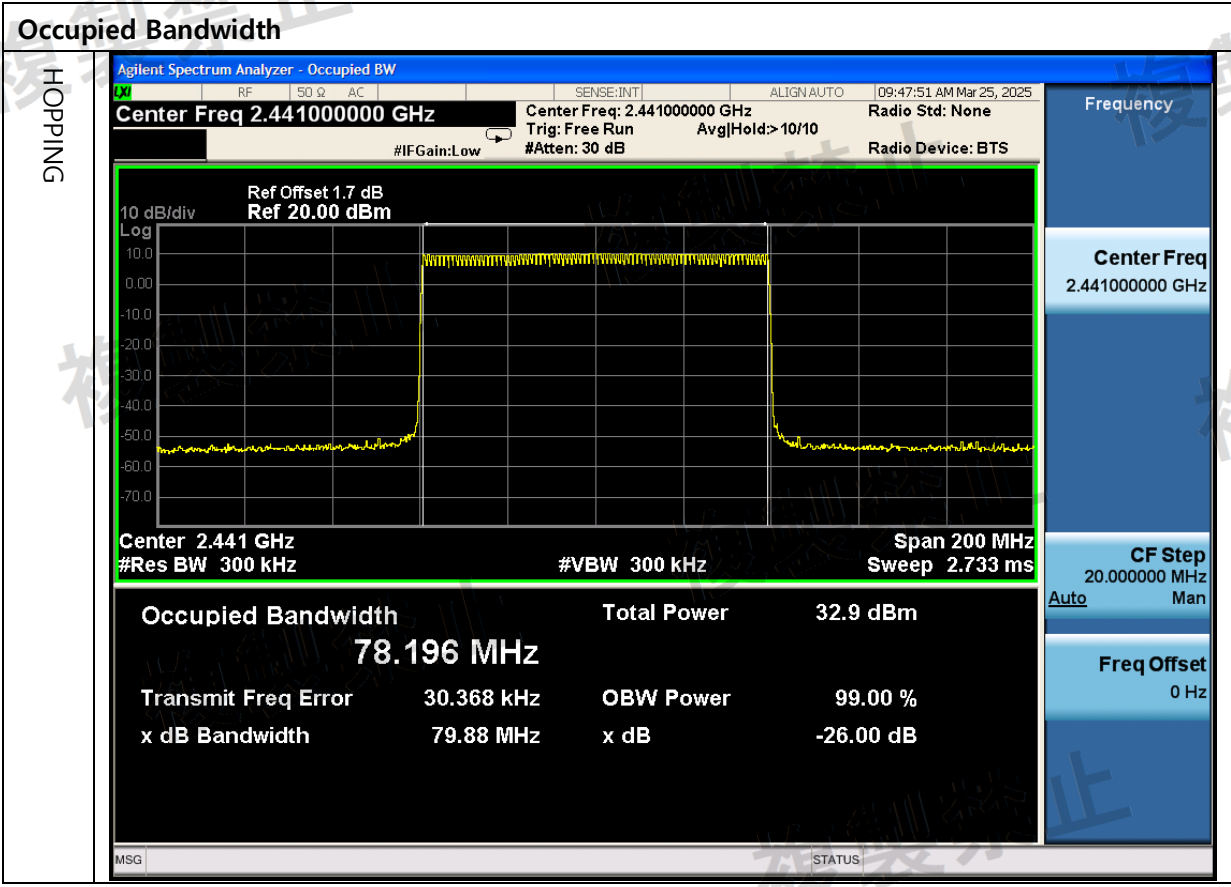


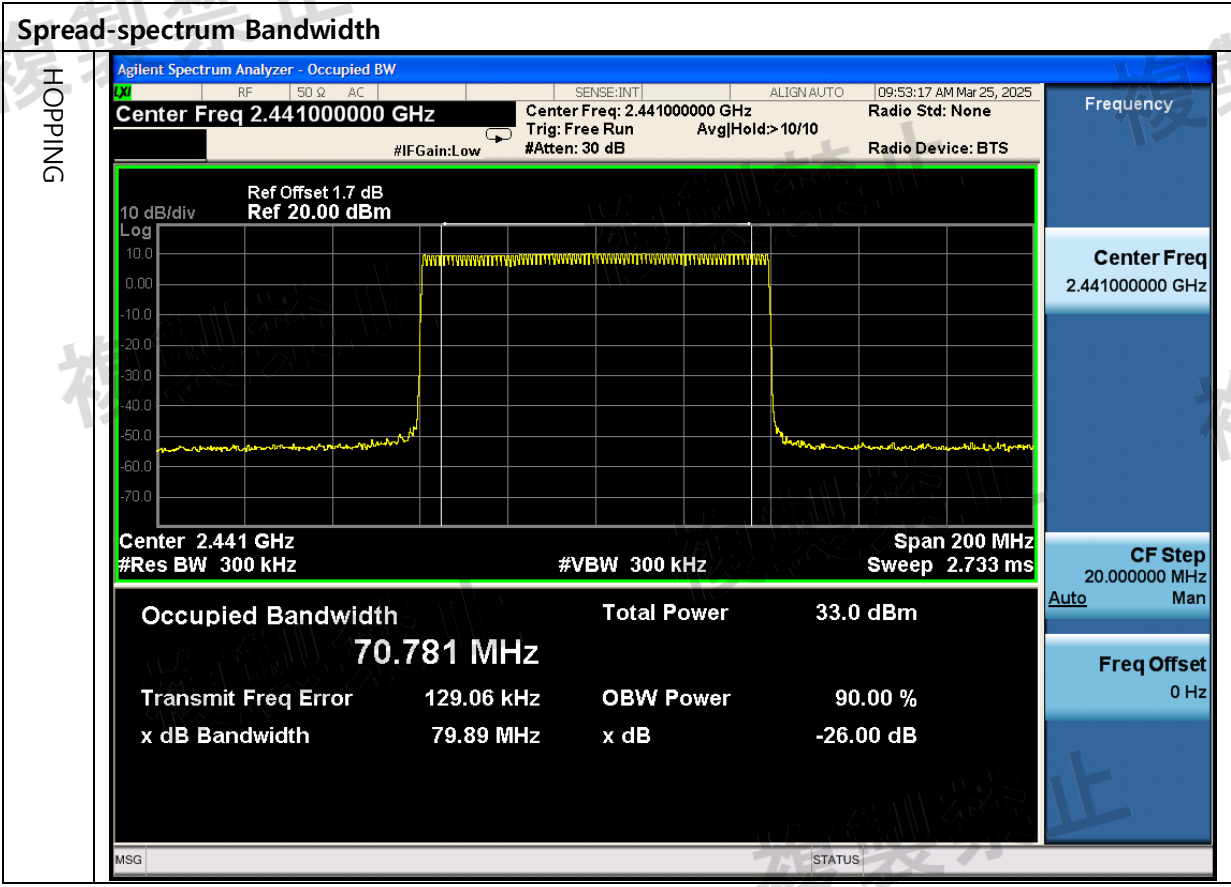
MID



HIGH

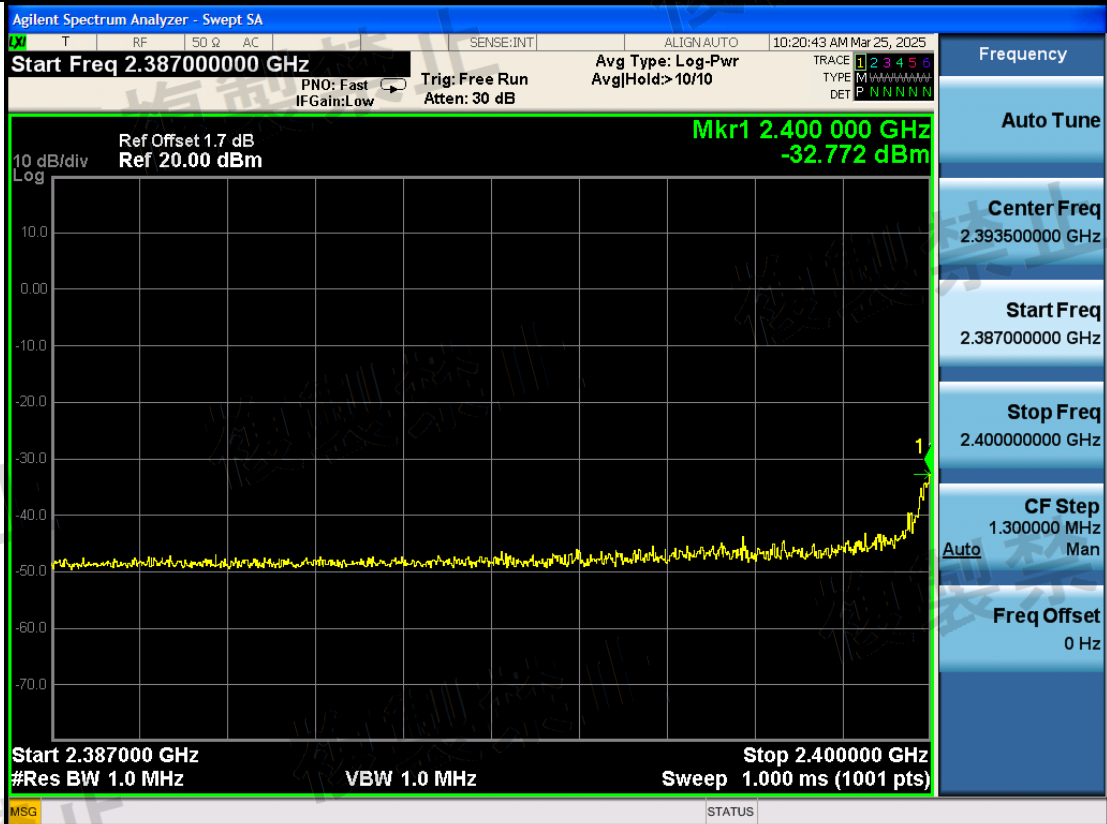
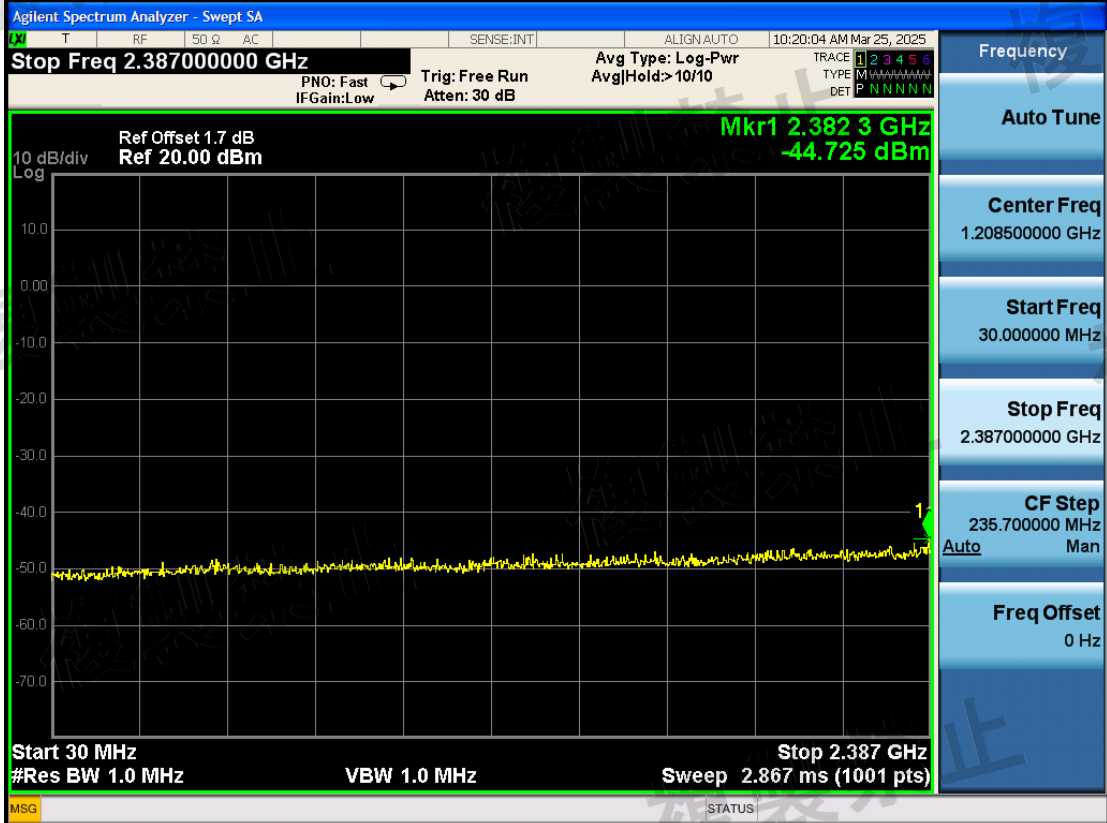


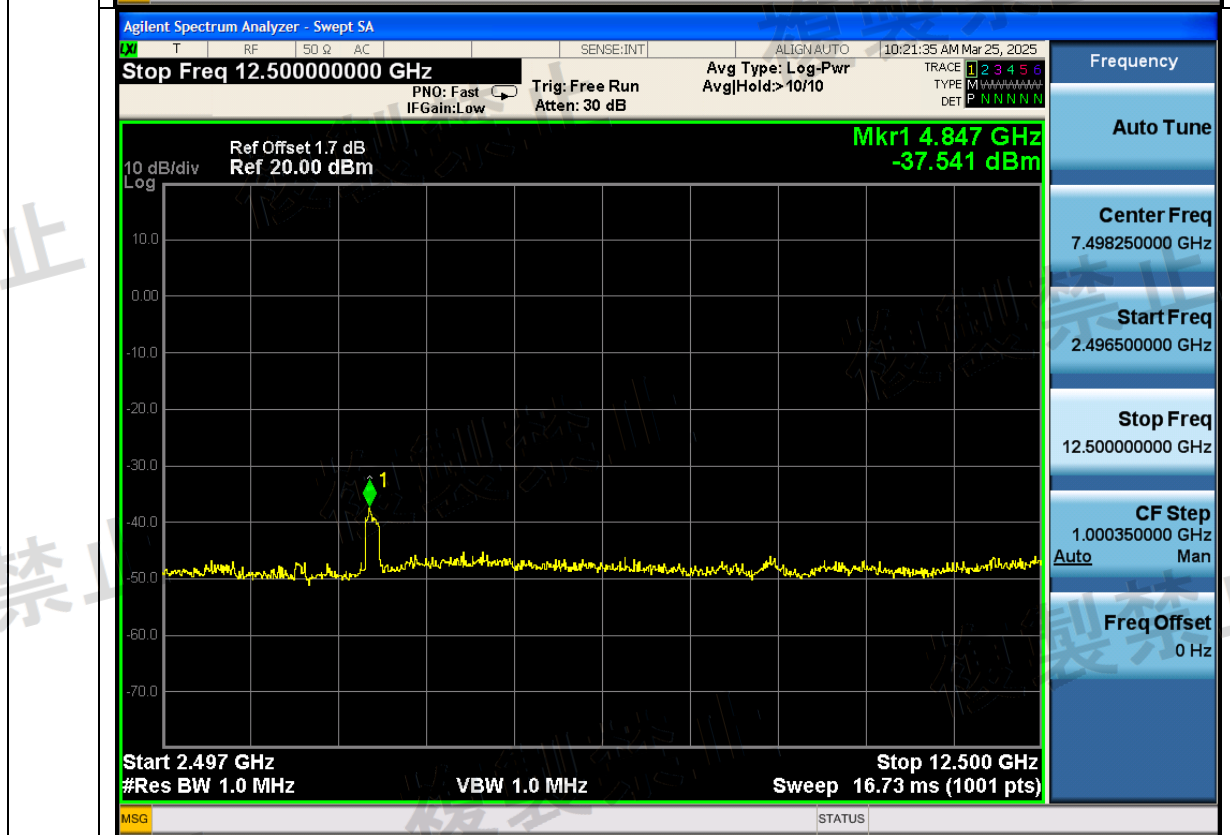
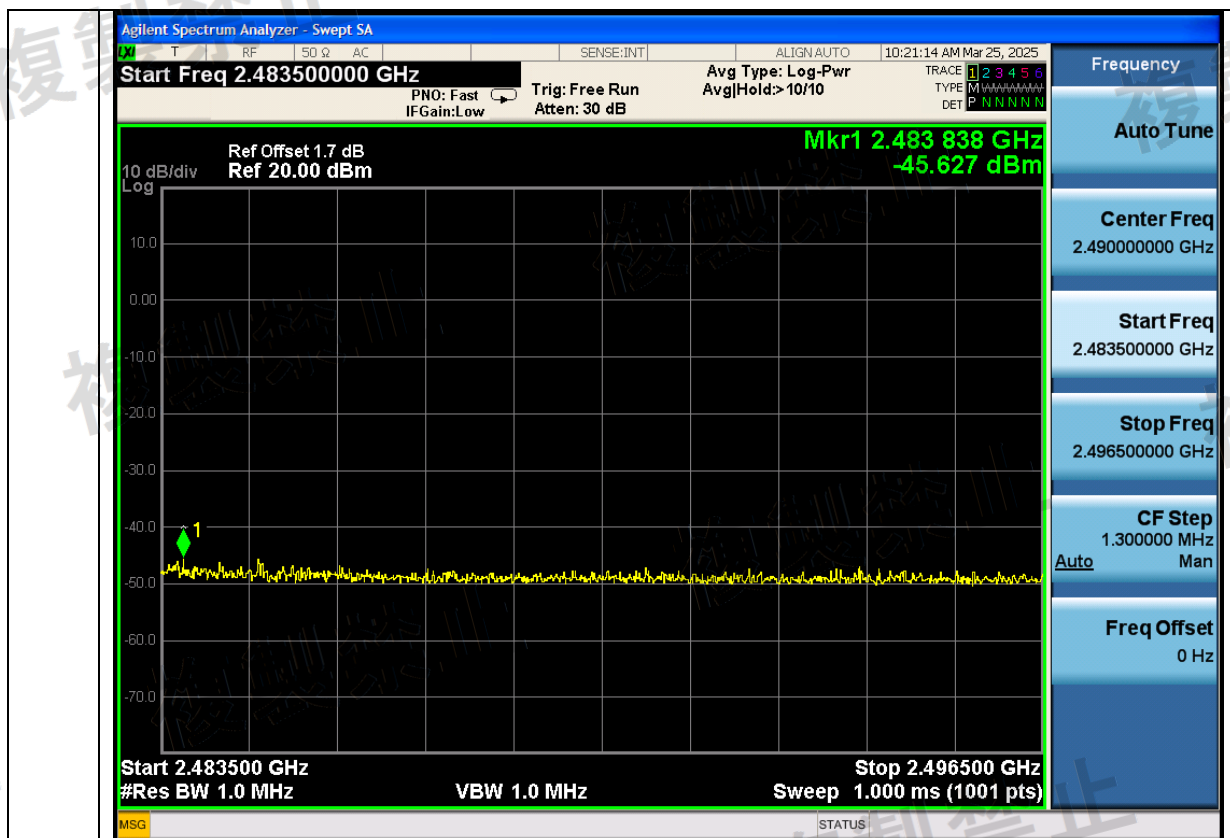




Unwanted Emission Intensity

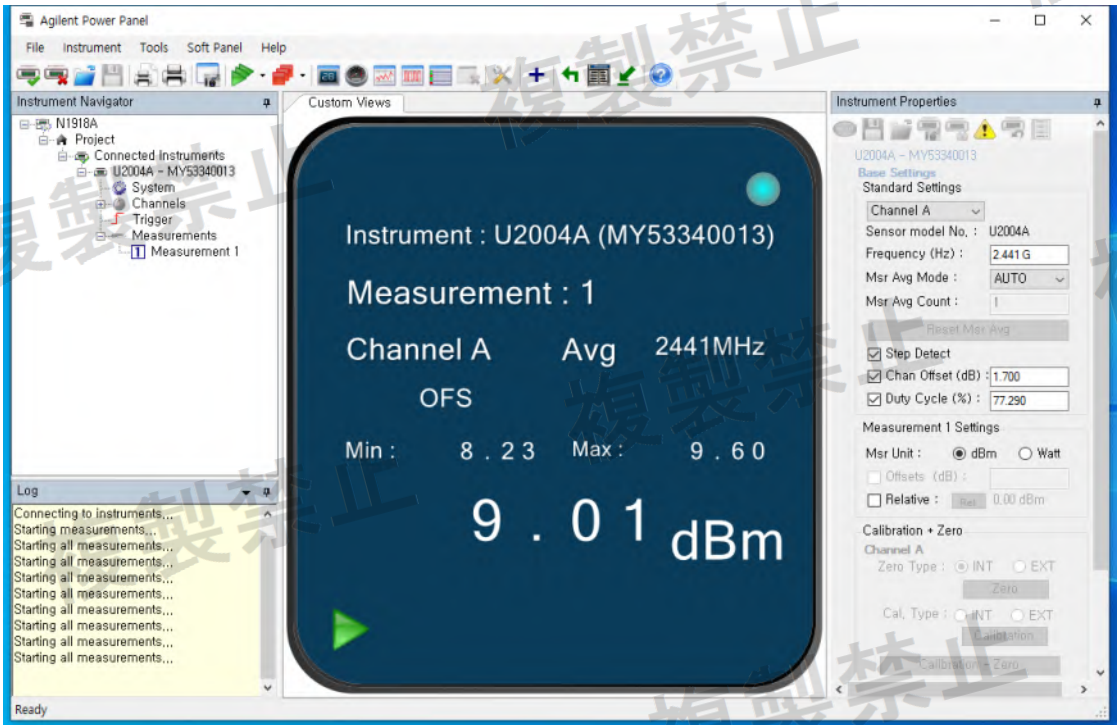
HOPPING



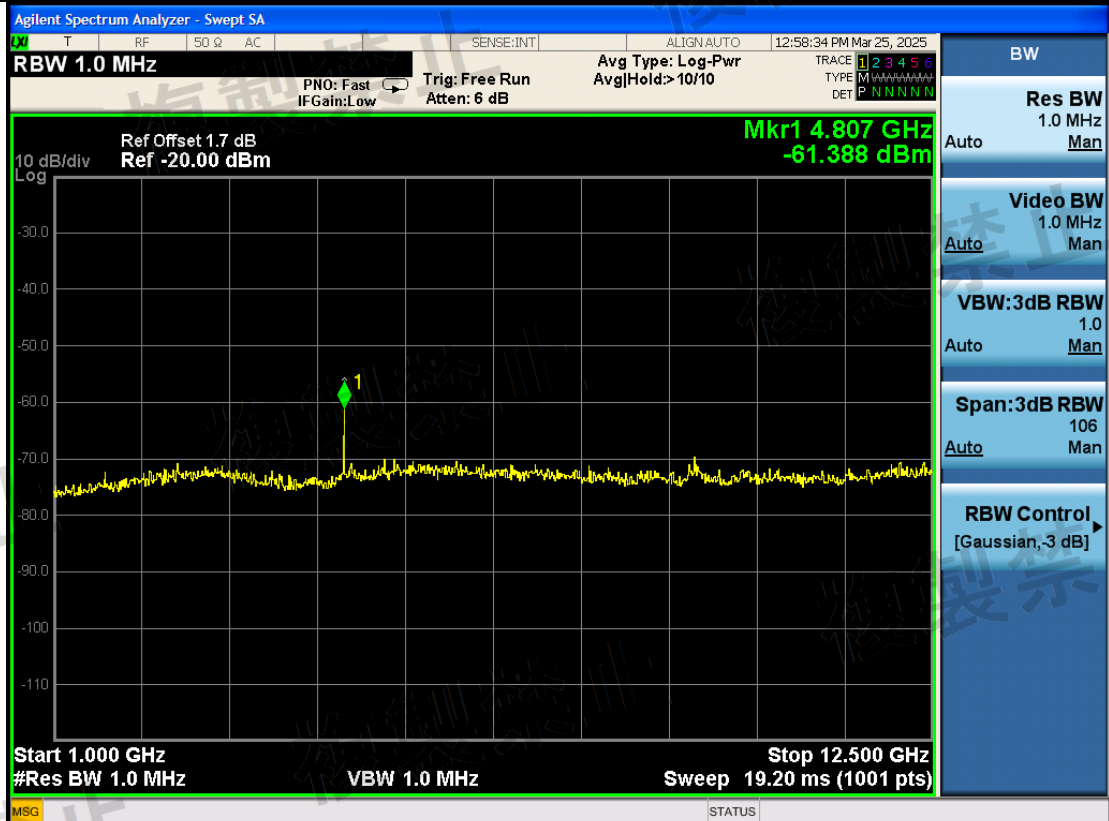
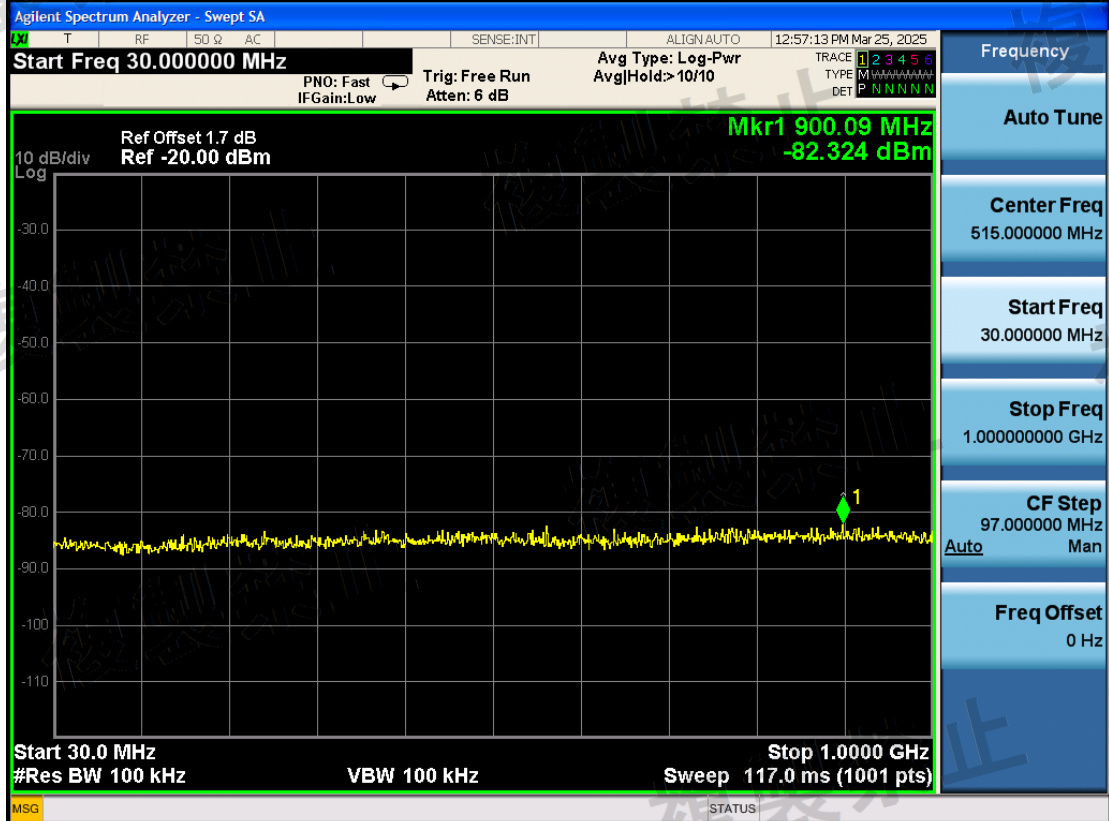


RF Output Power

HOPPING

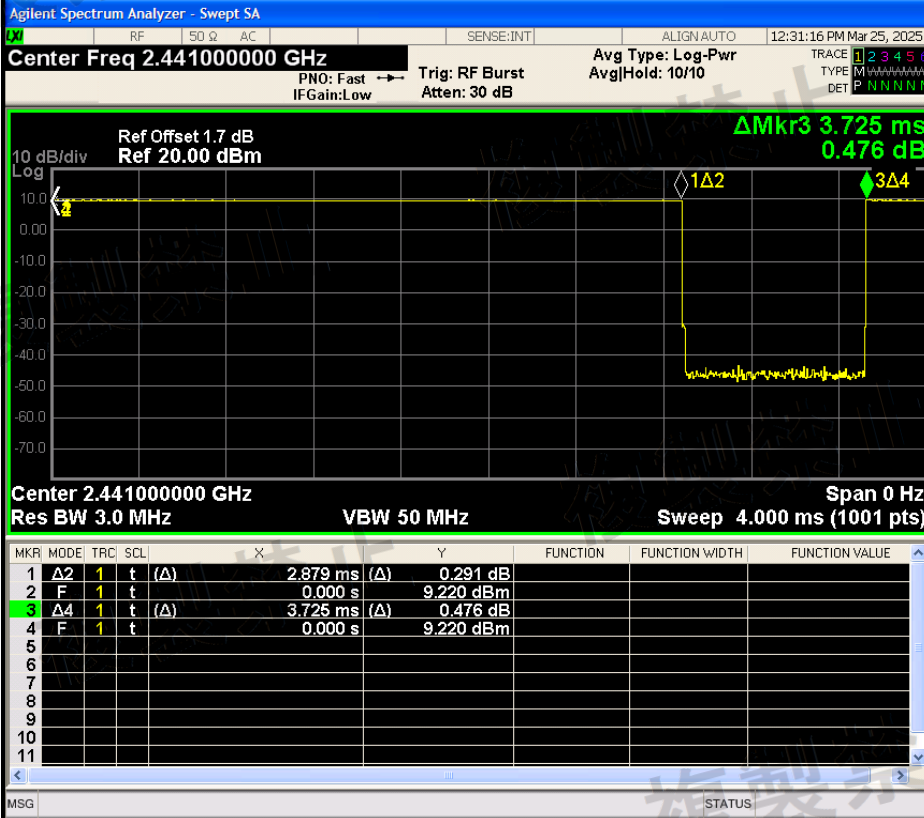


Limitation of Collateral Emission of Receiver



Hopping Frequency Dwell Time

HOPPING



Frequency

Auto Tune

Center Freq
2.441000000 GHz

Start Freq
2.441000000 GHz

Stop Freq
2.441000000 GHz

CF Step
3.000000 MHz
Auto Man

Freq Offset
0 Hz

BDR(DH5) Test Results – Low Voltage (DC 3.0 V)

Frequency Tolerance

LOW

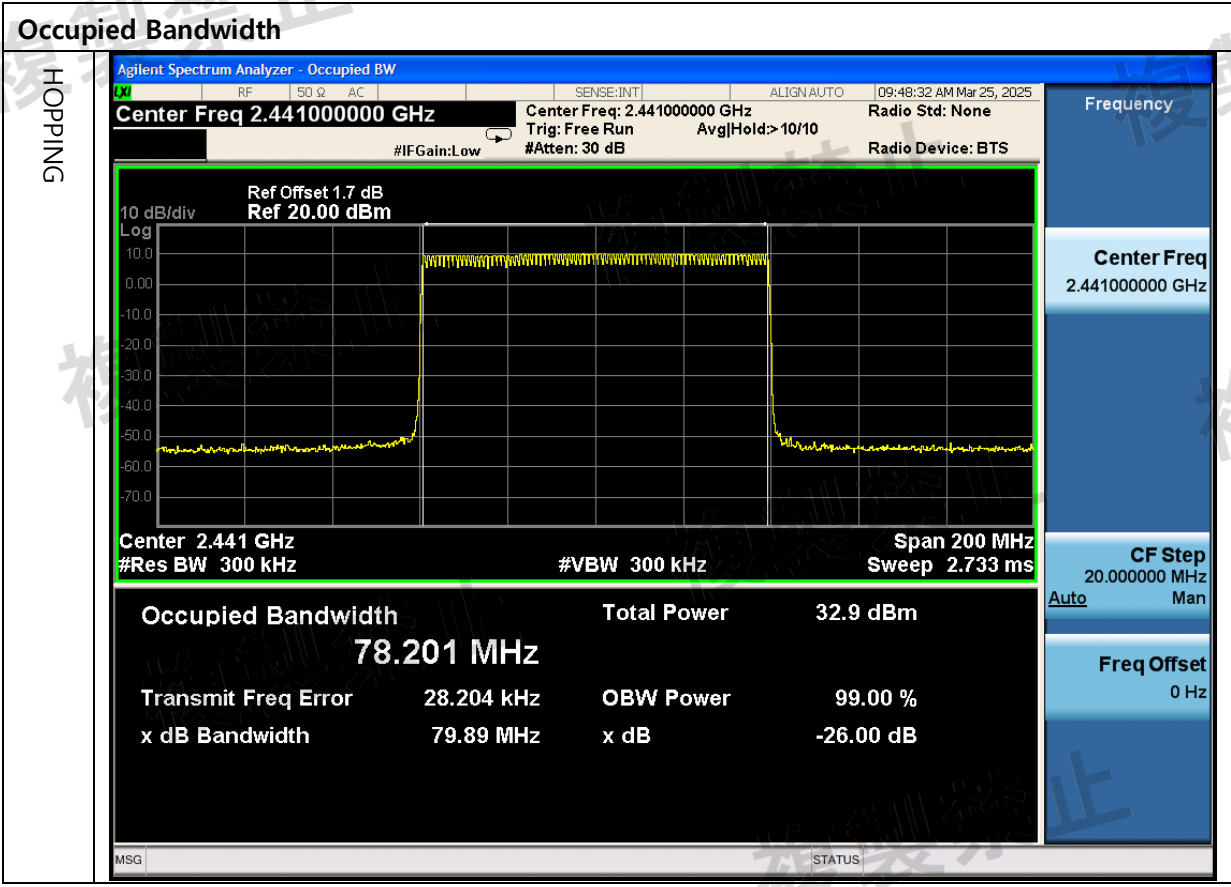


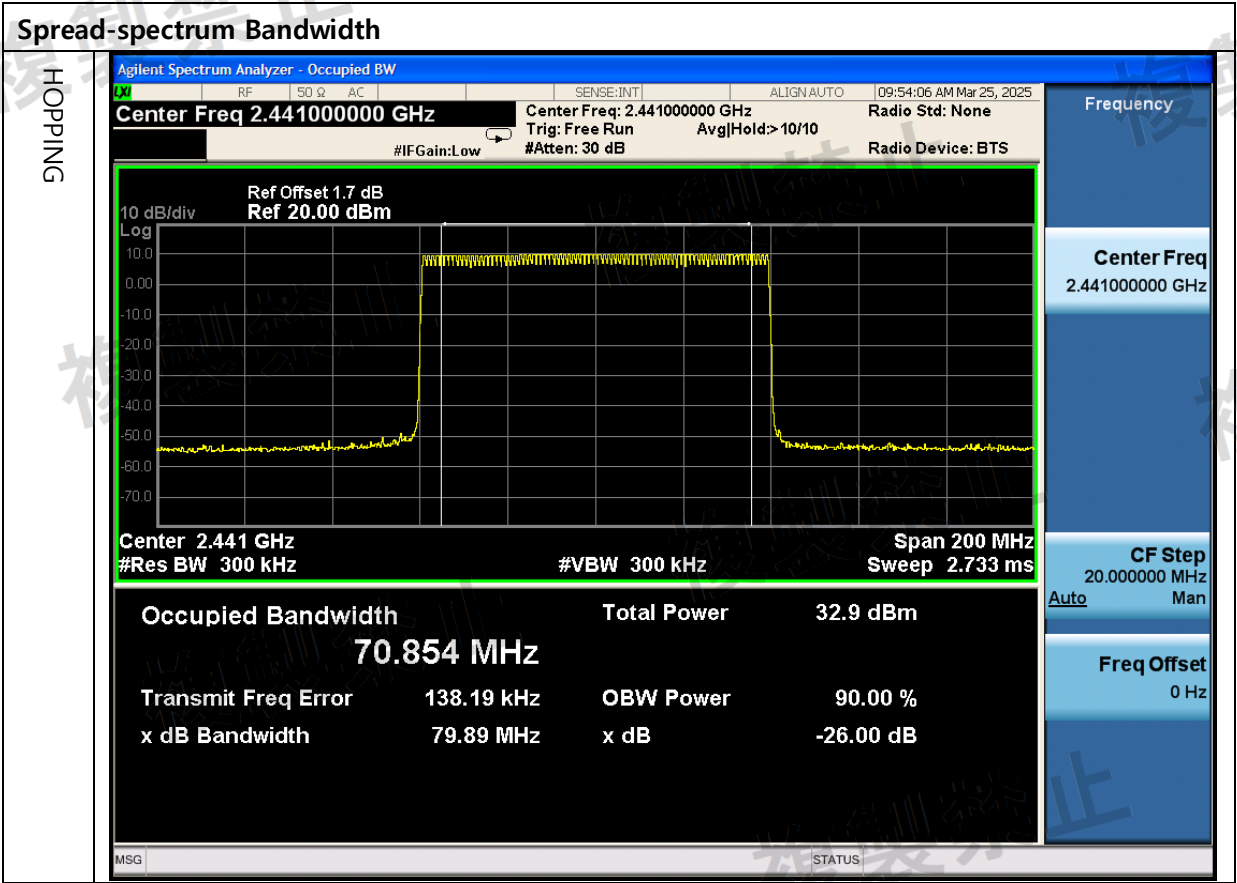
MID



HIGH

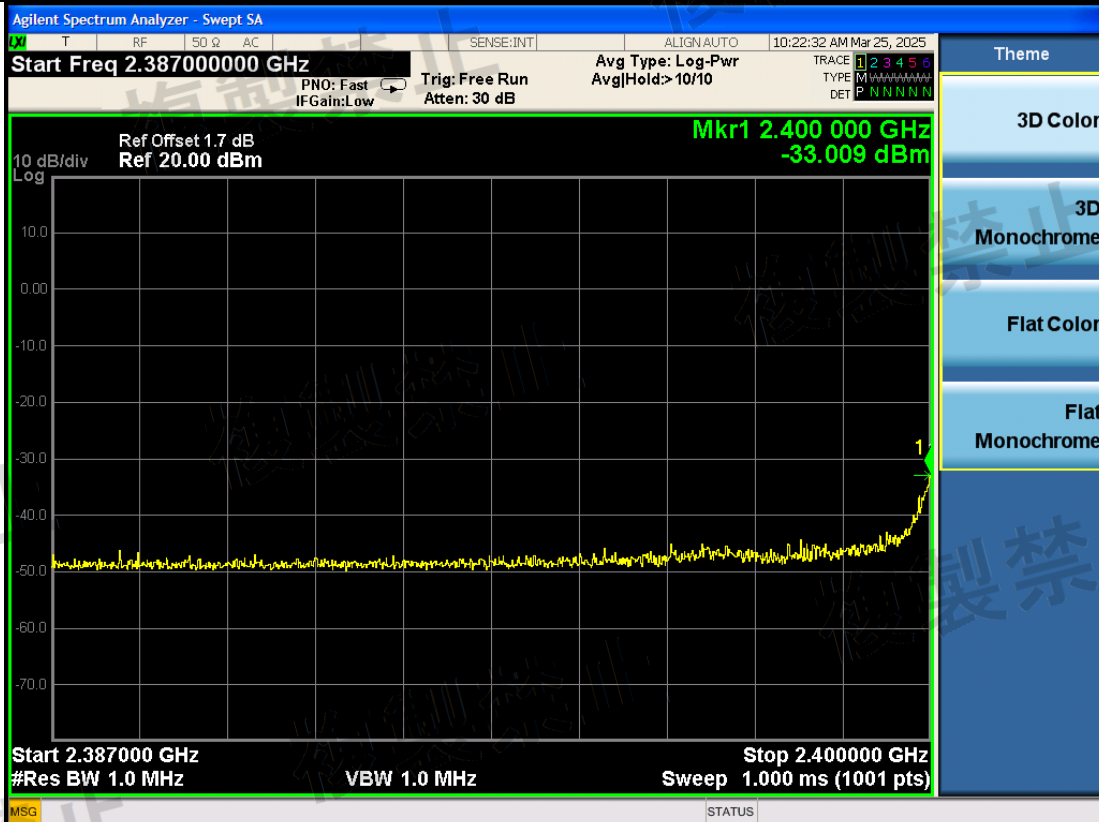
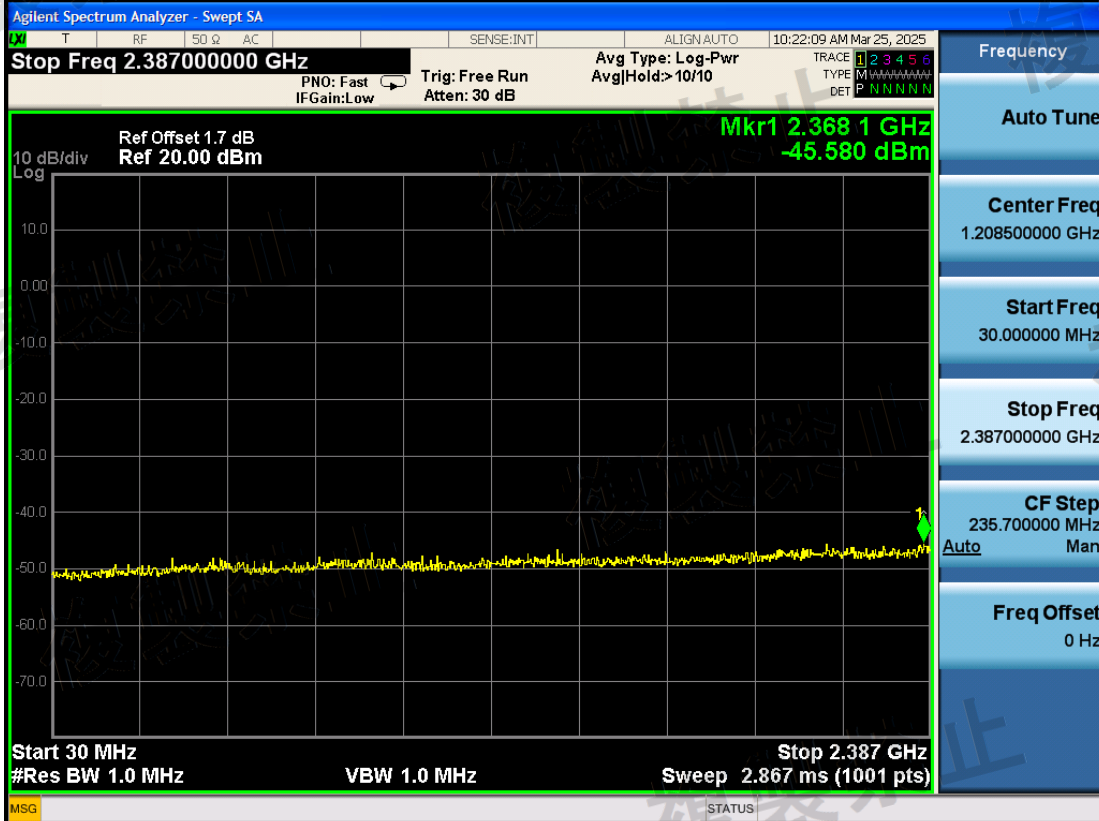


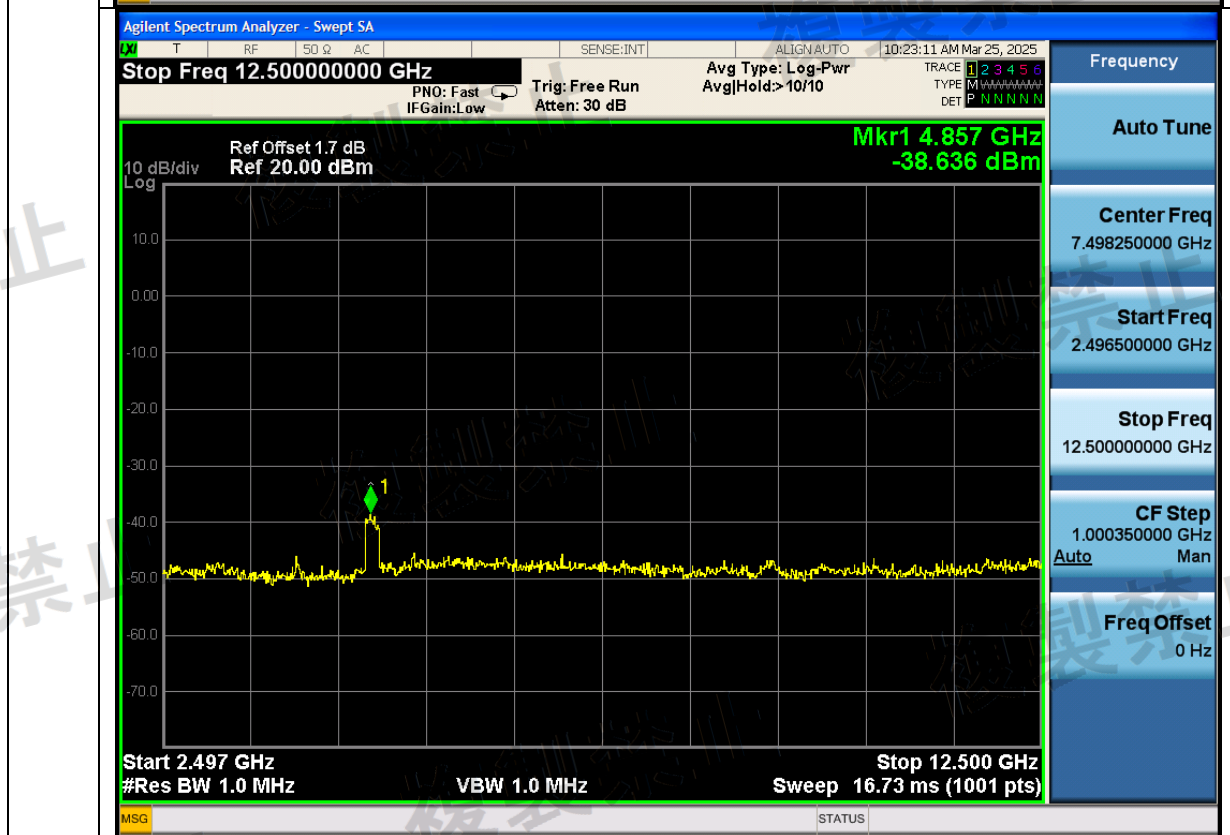
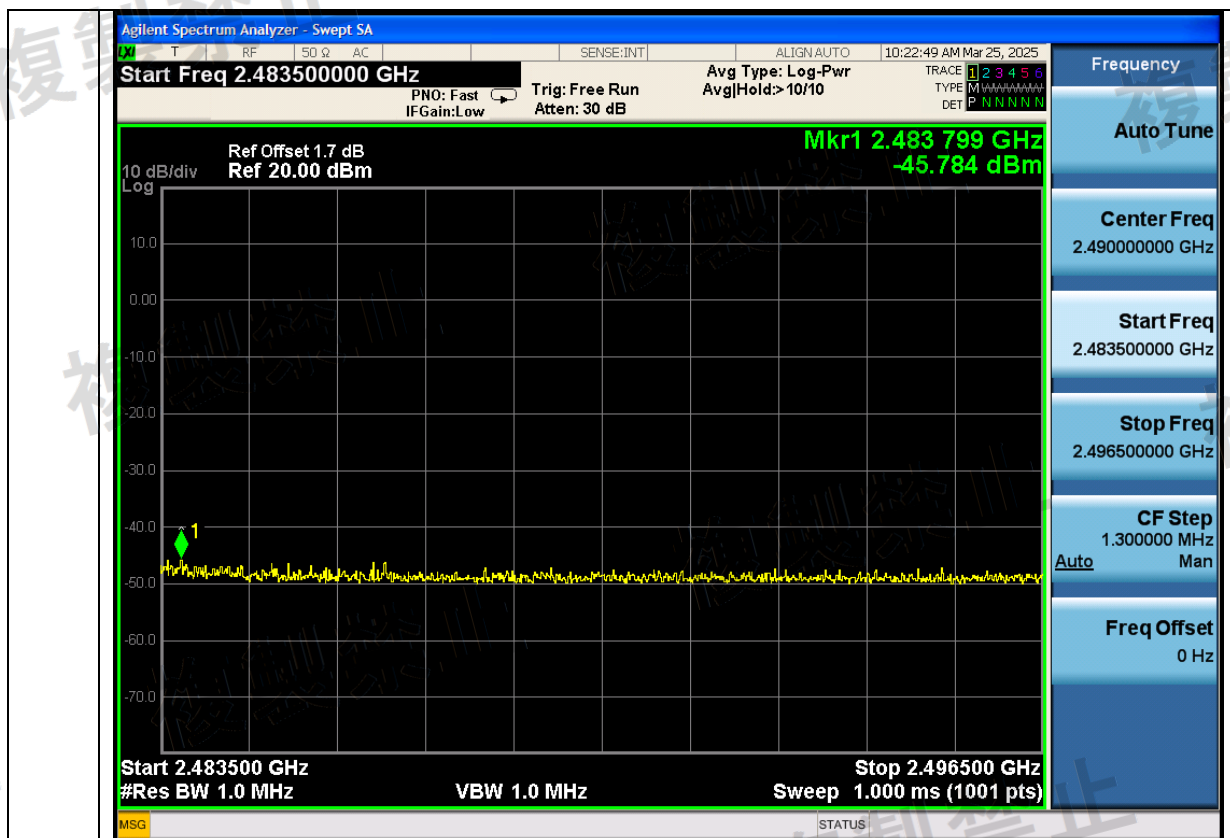




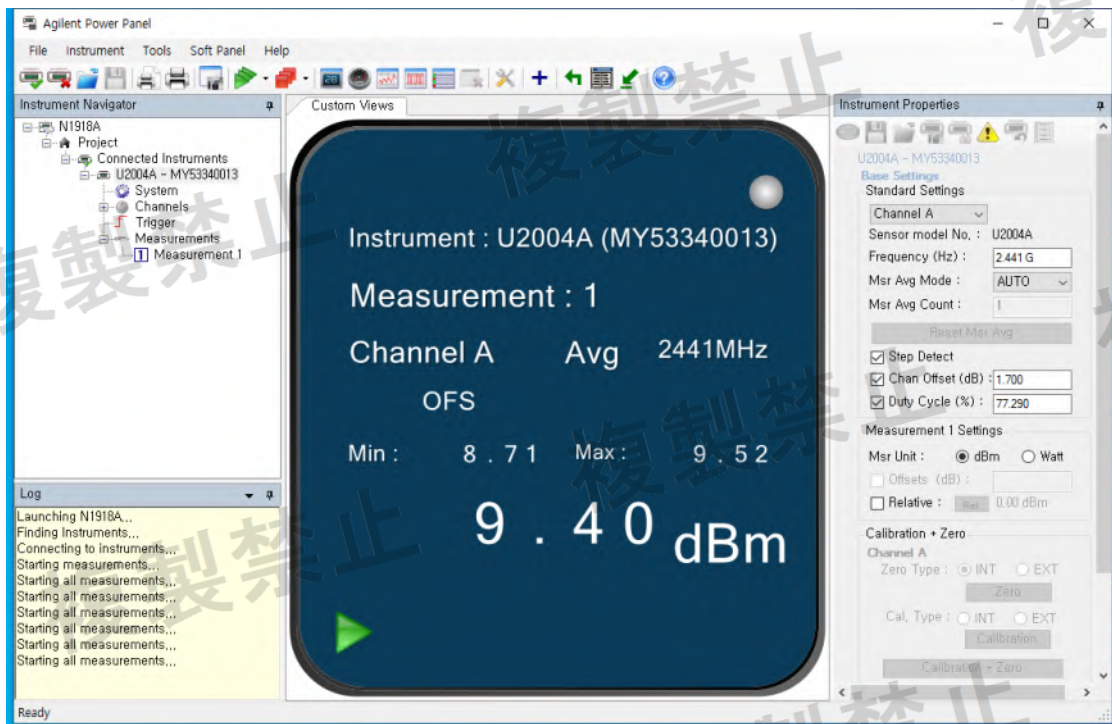
Unwanted Emission Intensity

HOPPING

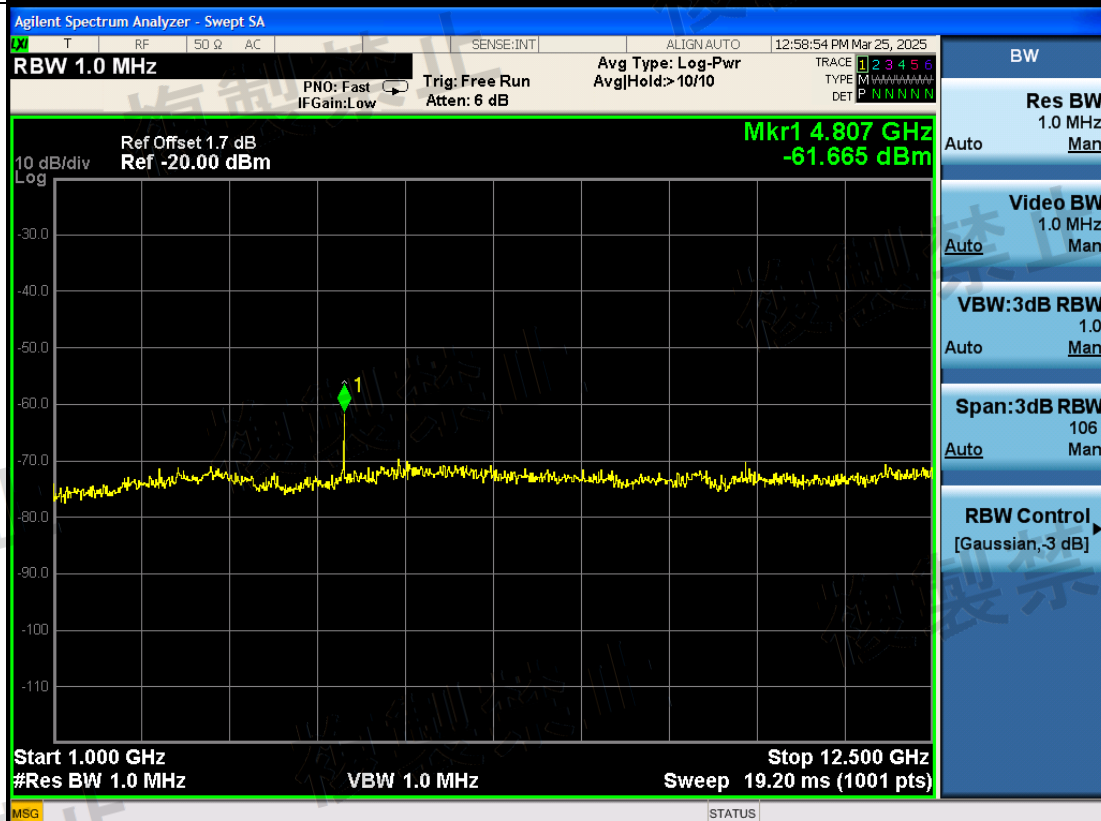
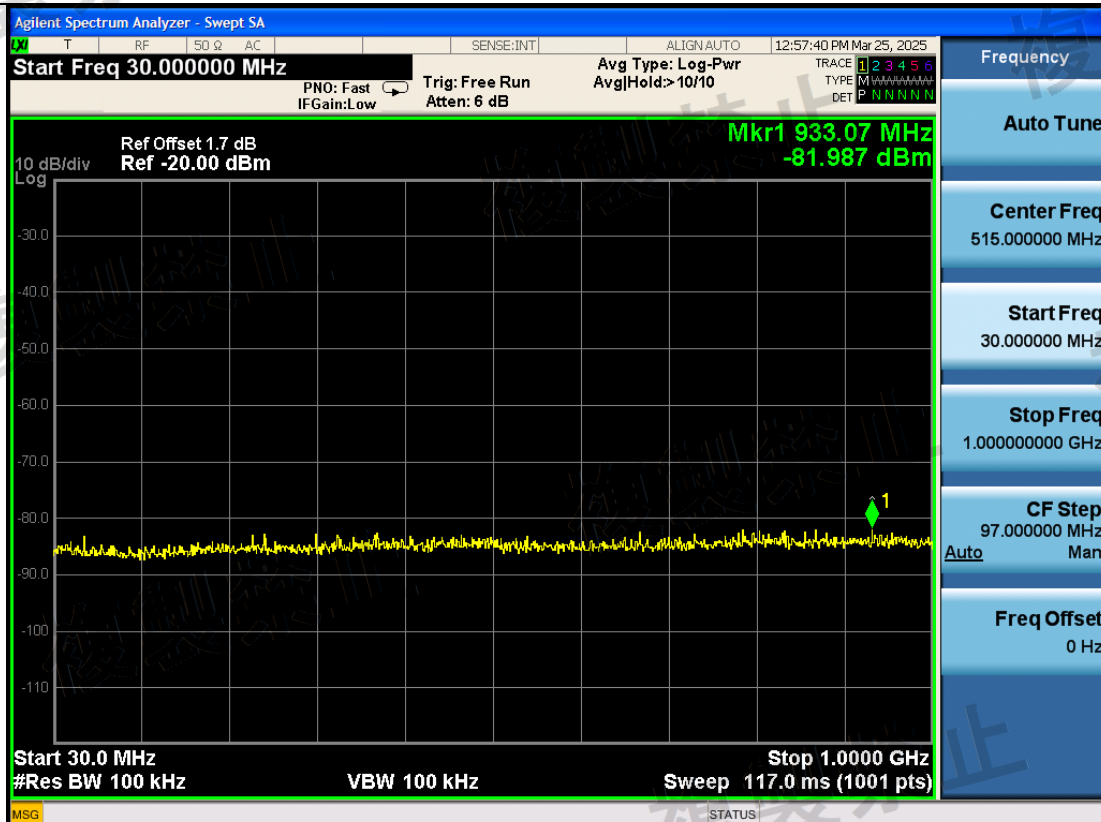




HOPPING

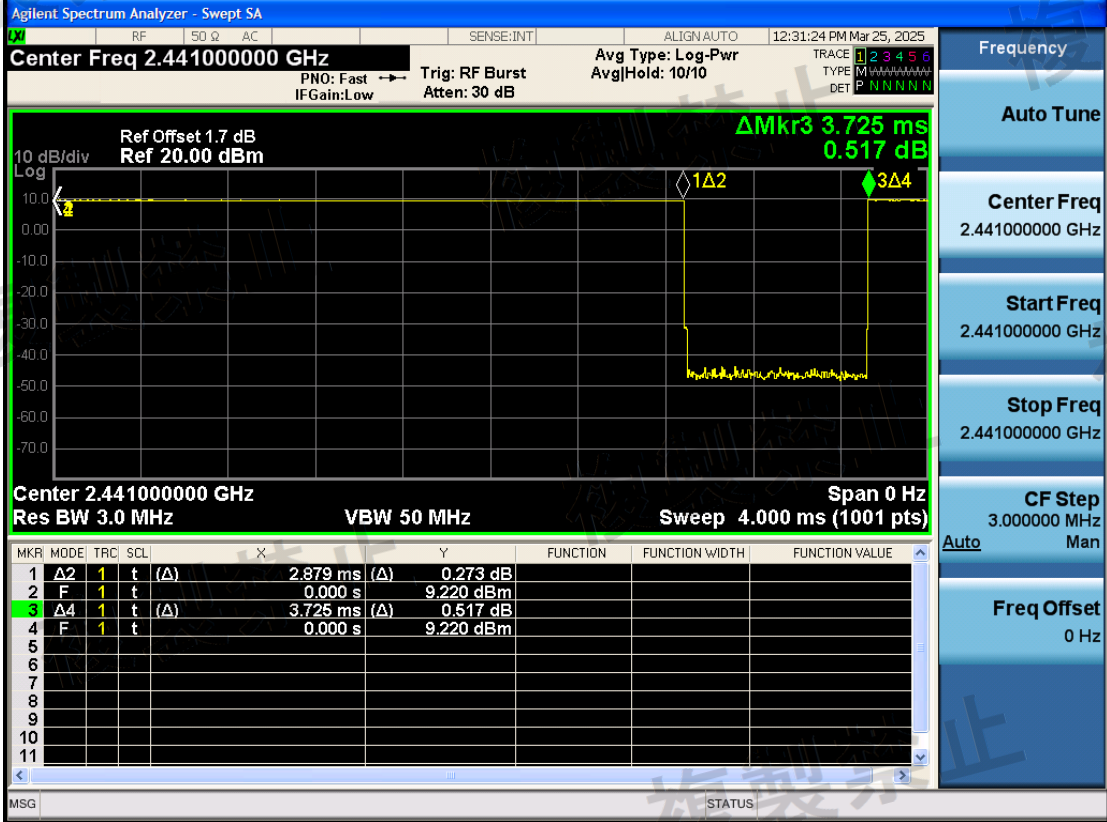


Limitation of Collateral Emission of Receiver



Hopping Frequency Dwell Time

HOPPING



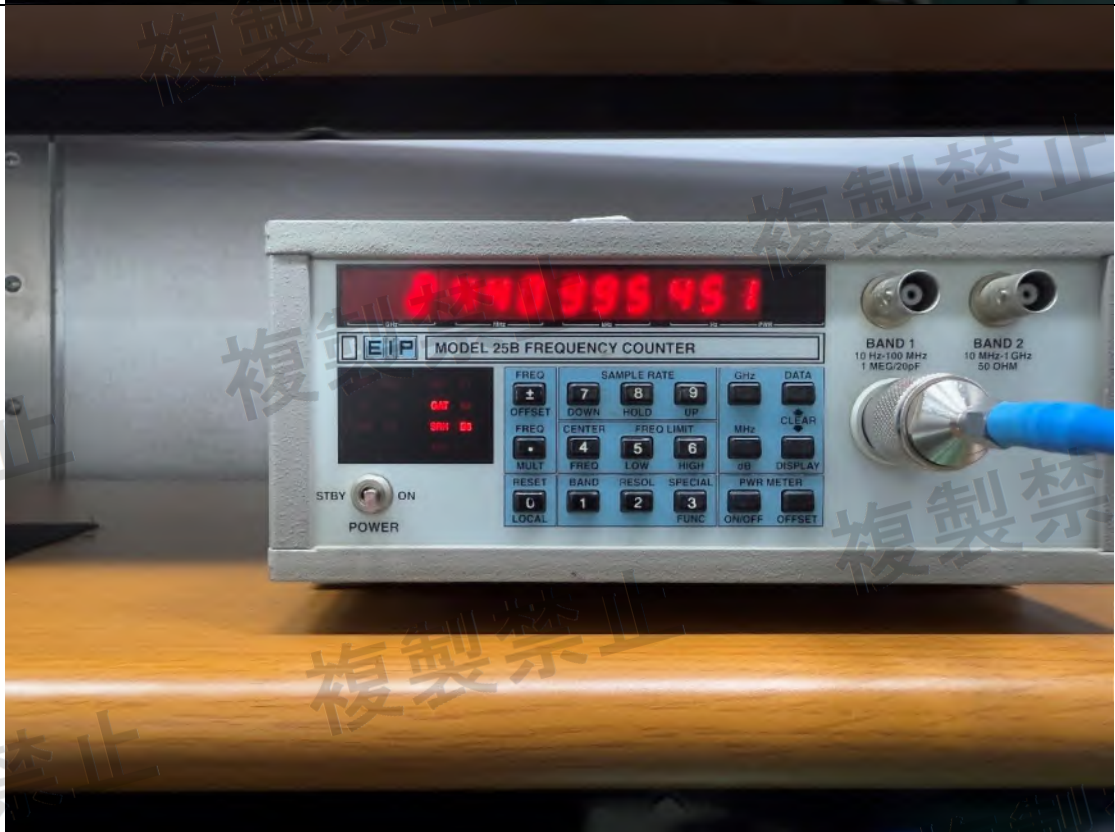
EDR(3DH5) Test Results – Nominal Voltage (DC 3.3 V)

Frequency Tolerance

LOW



MID

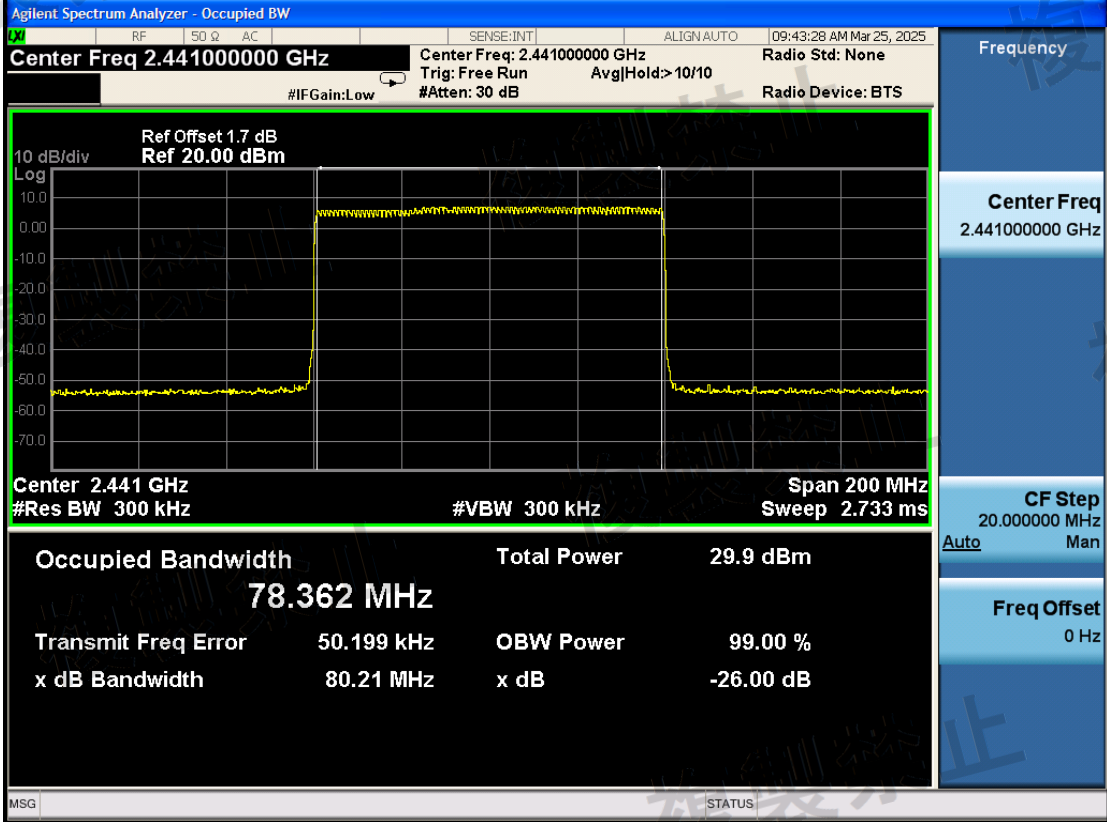


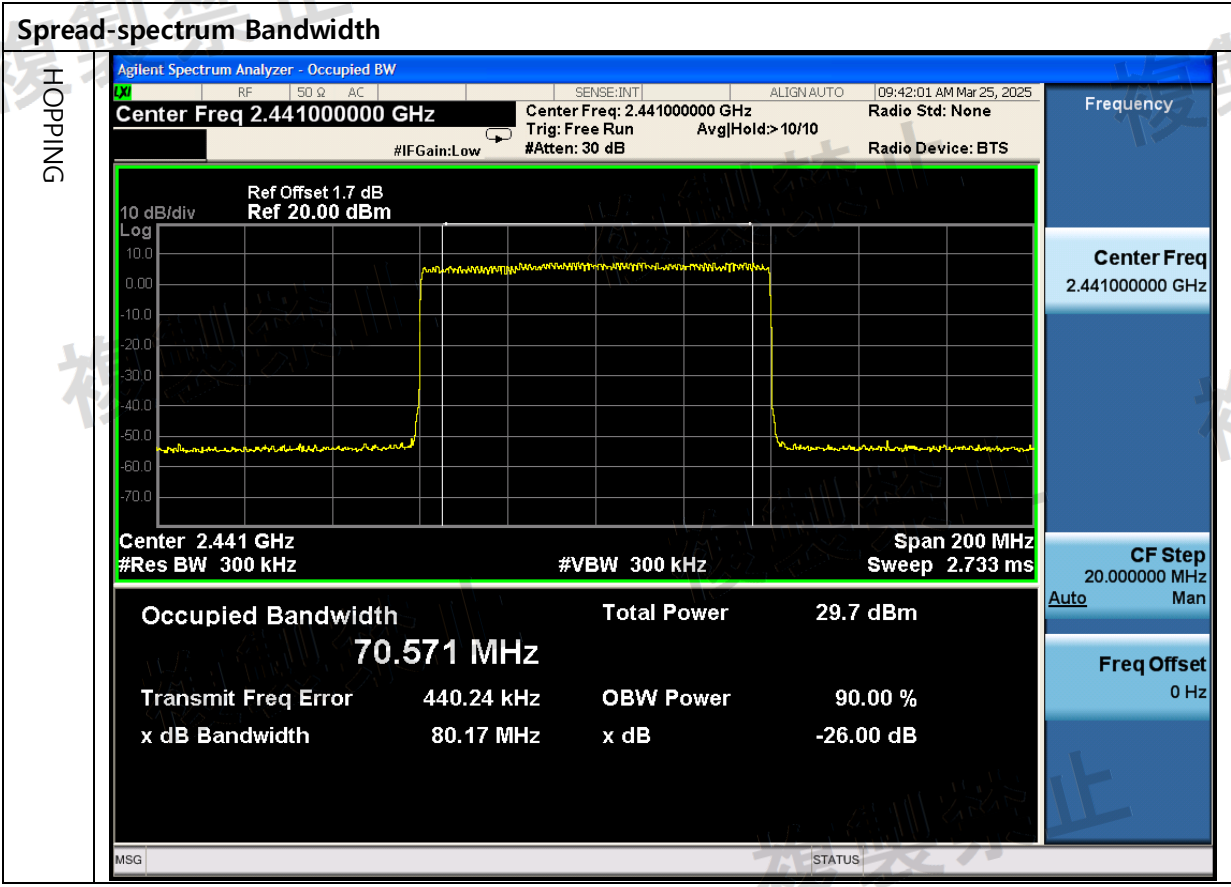
HIGH



Occupied Bandwidth

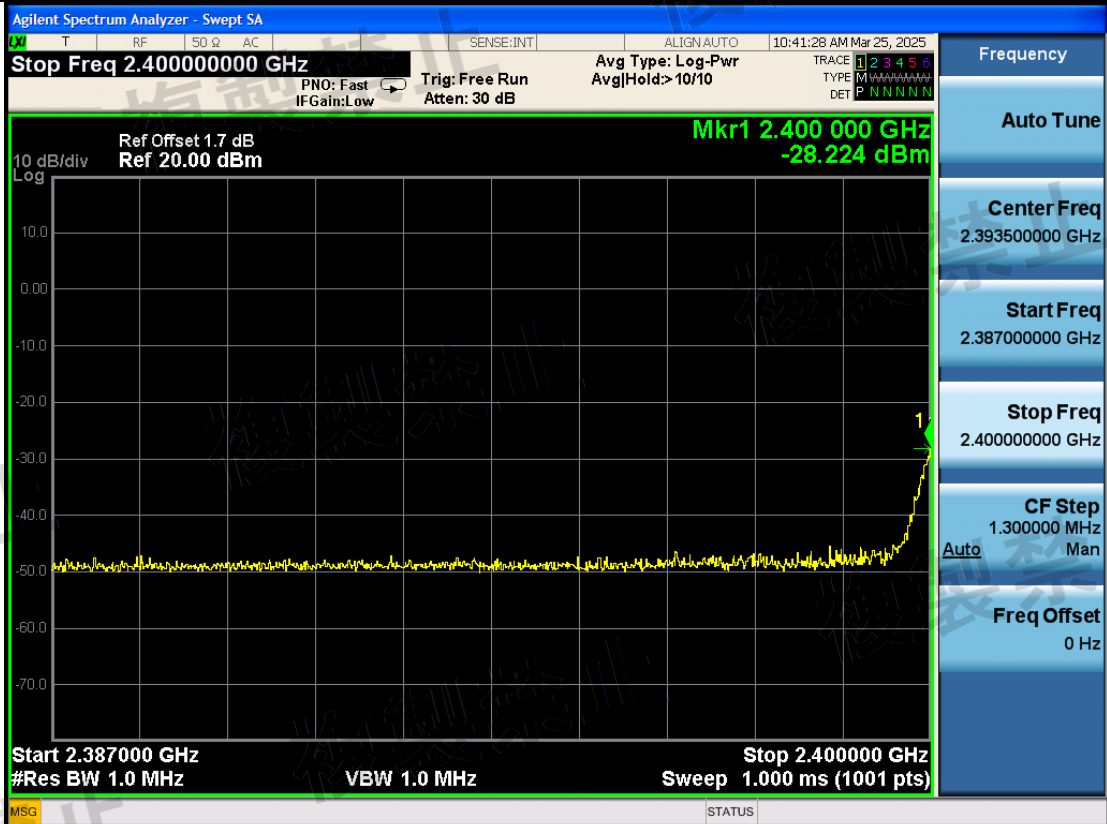
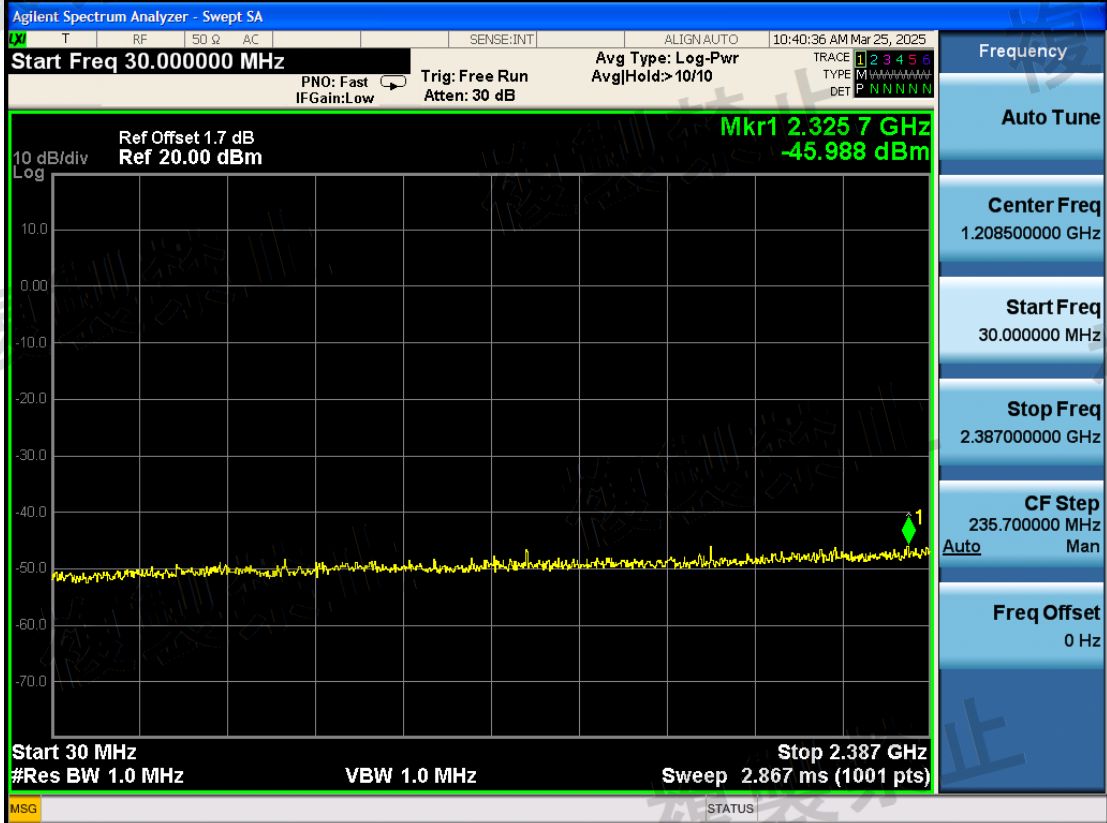
HOPPING

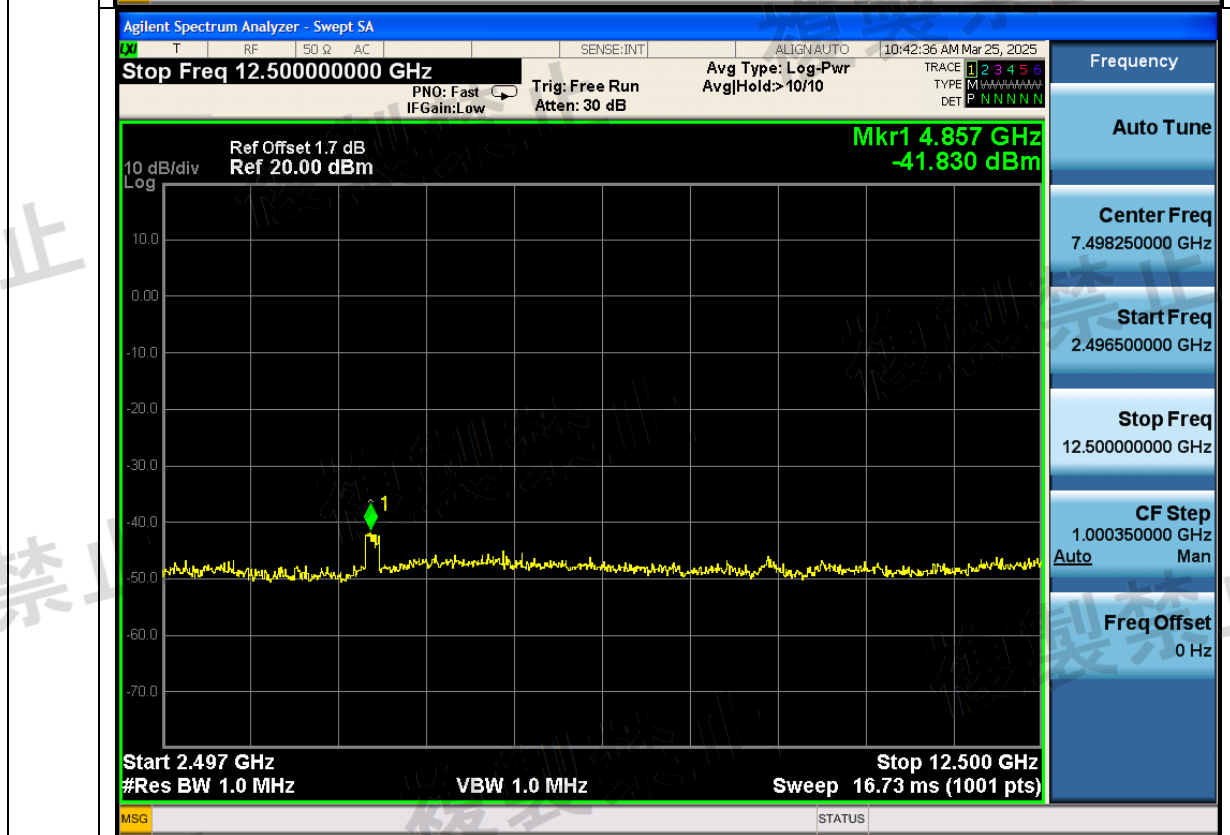
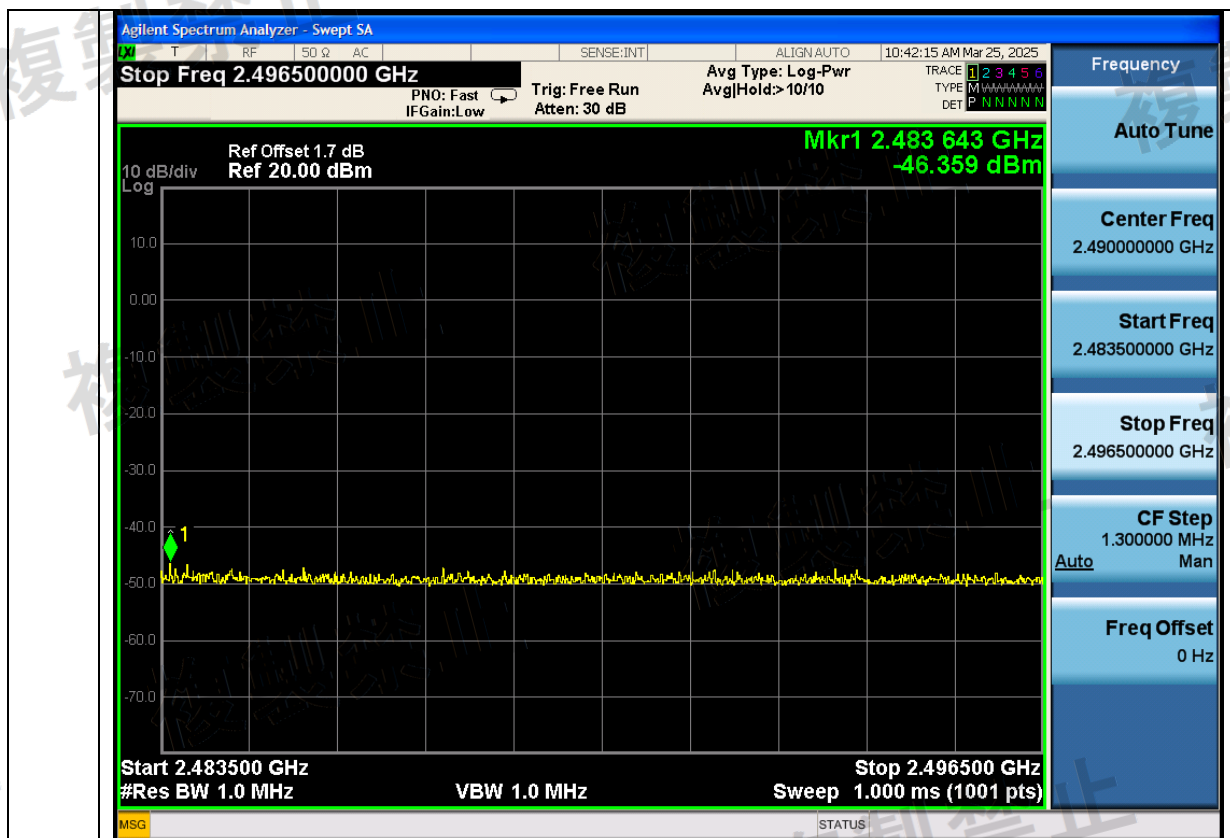




Unwanted Emission Intensity

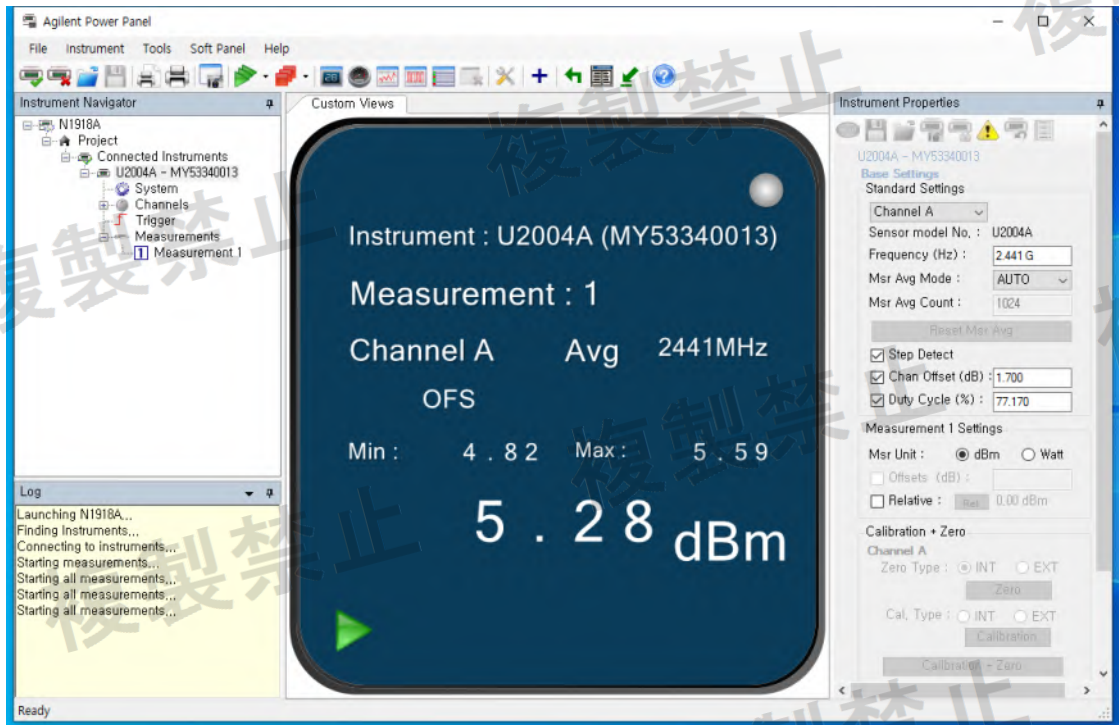
HOPPING



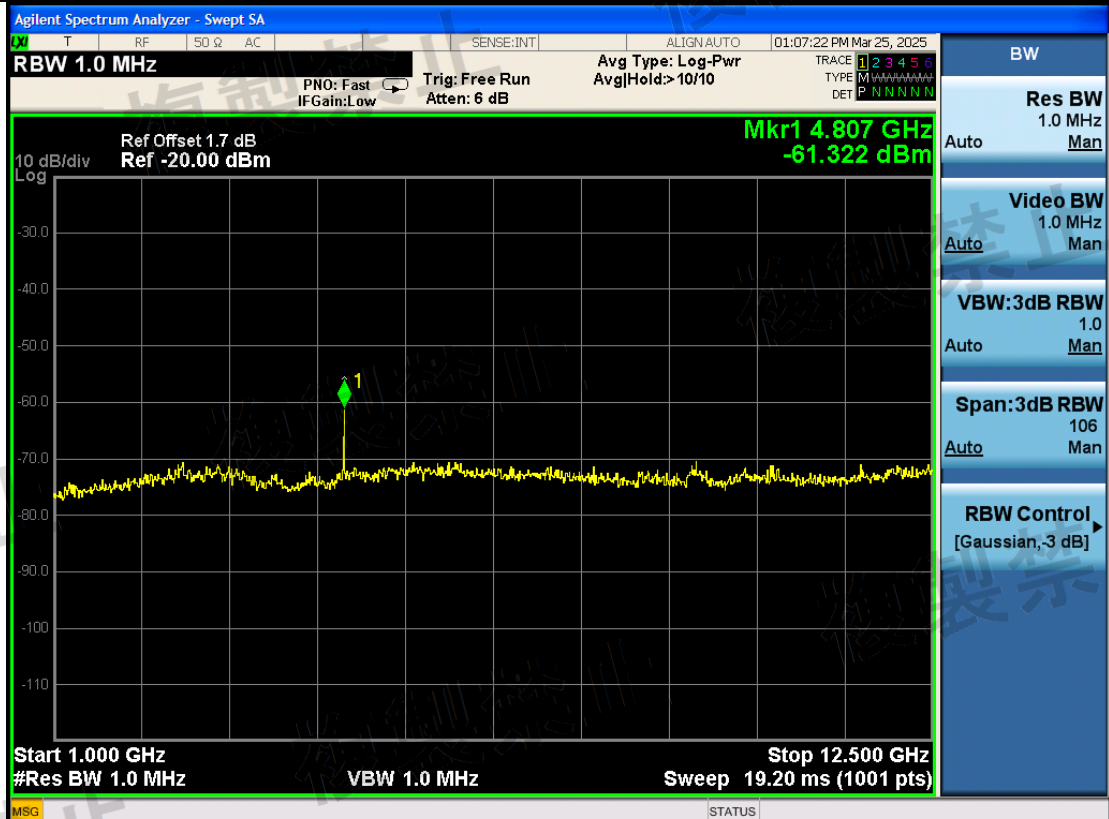
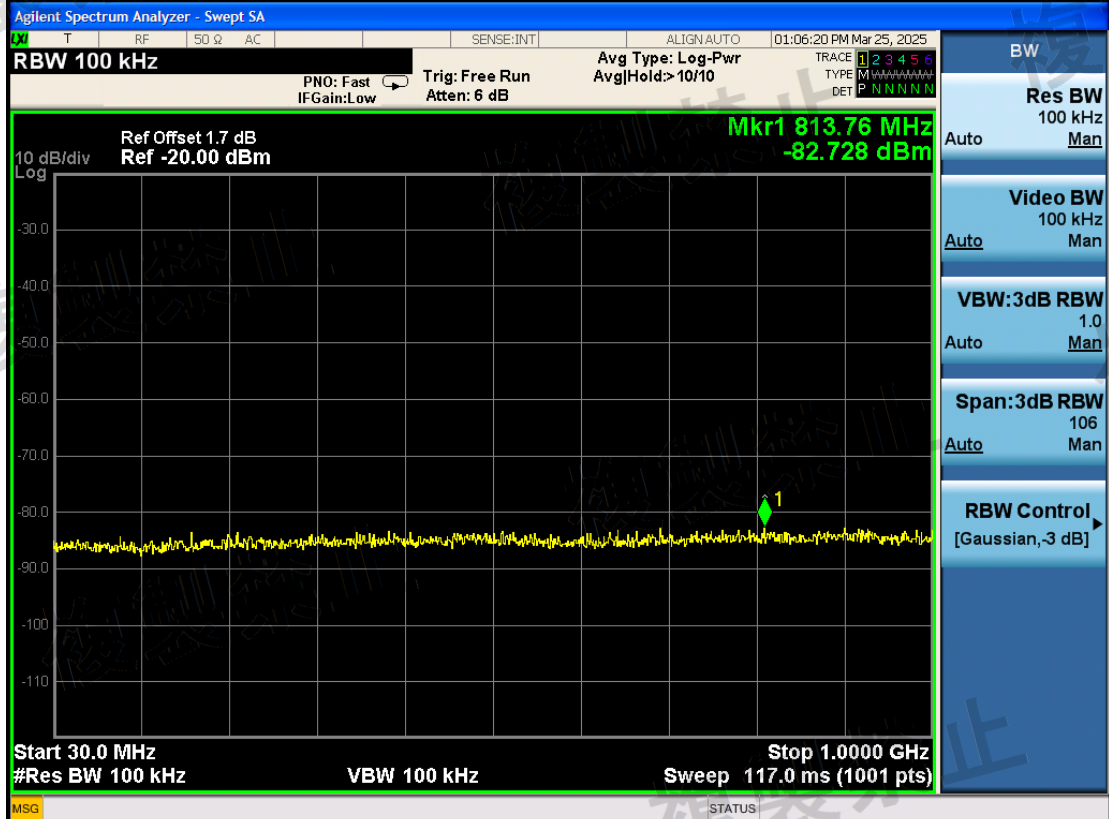


RF Output Power

LOW

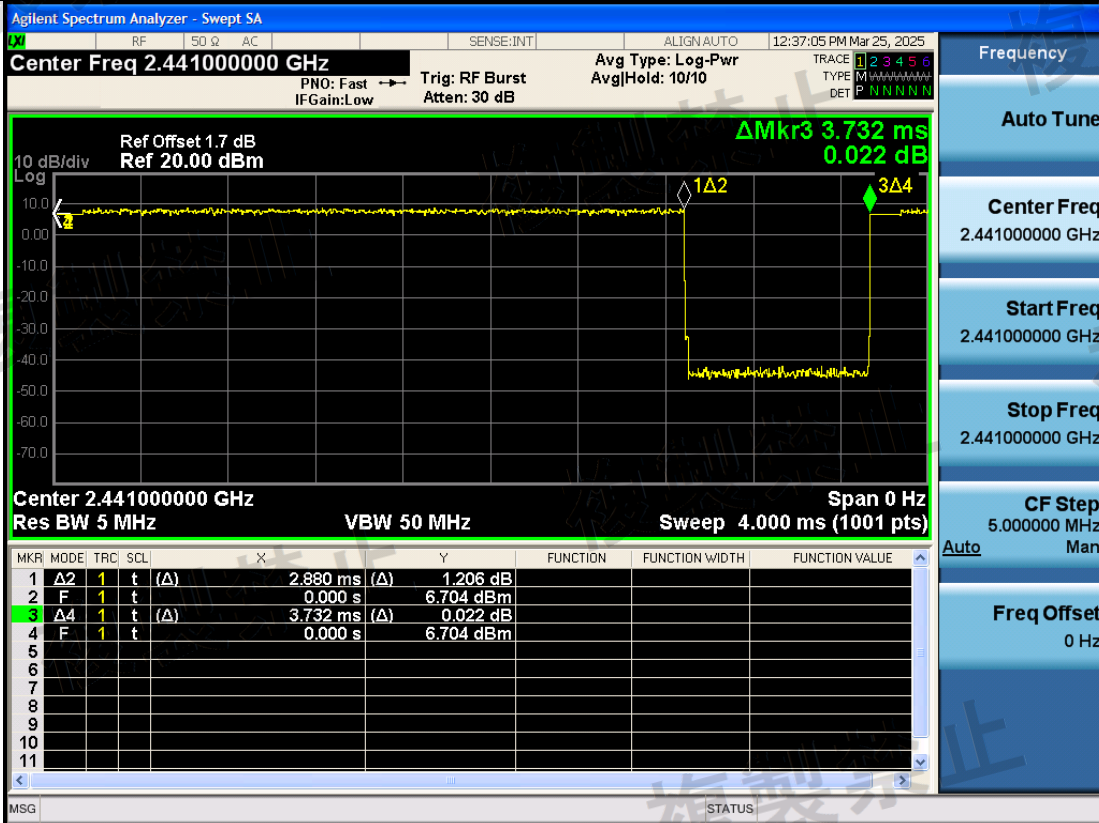


Limitation of Collateral Emission of Receiver



Hopping Frequency Dwell Time

HOPPING



EDR(3DH5) Test Results – High Voltage (DC 3.6 V)

Frequency Tolerance

LOW



MID

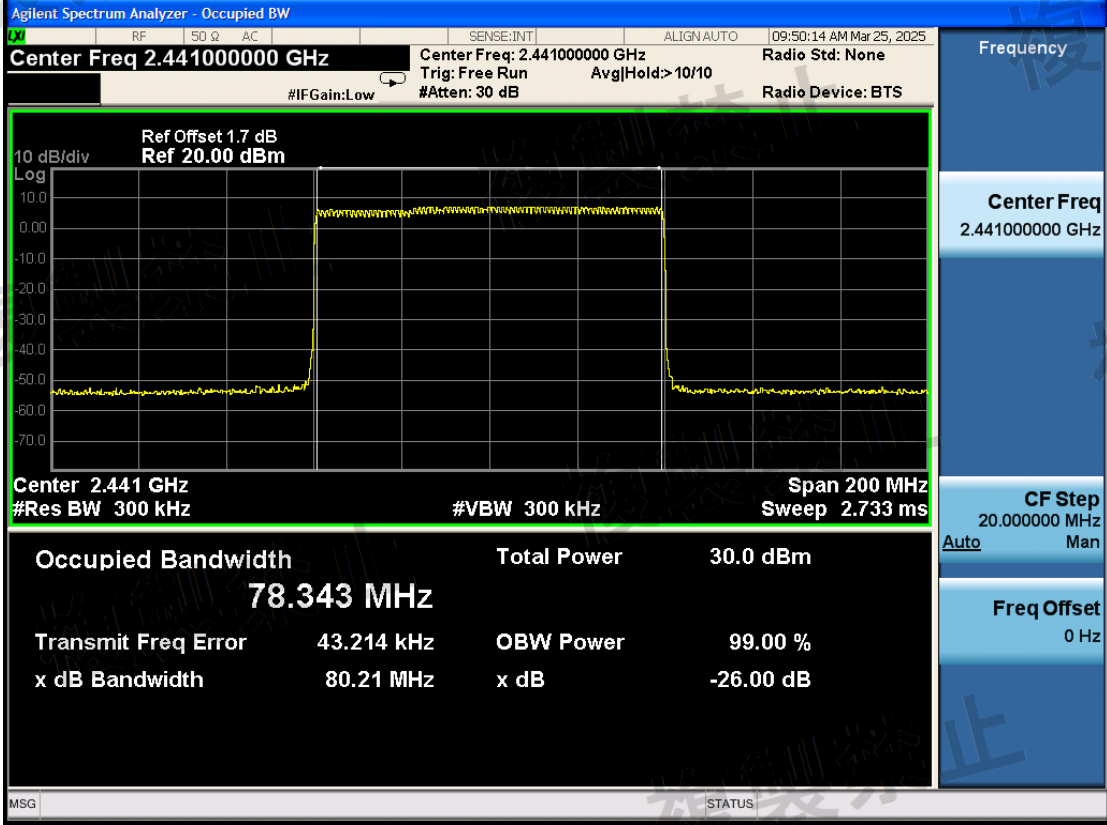


HIGH



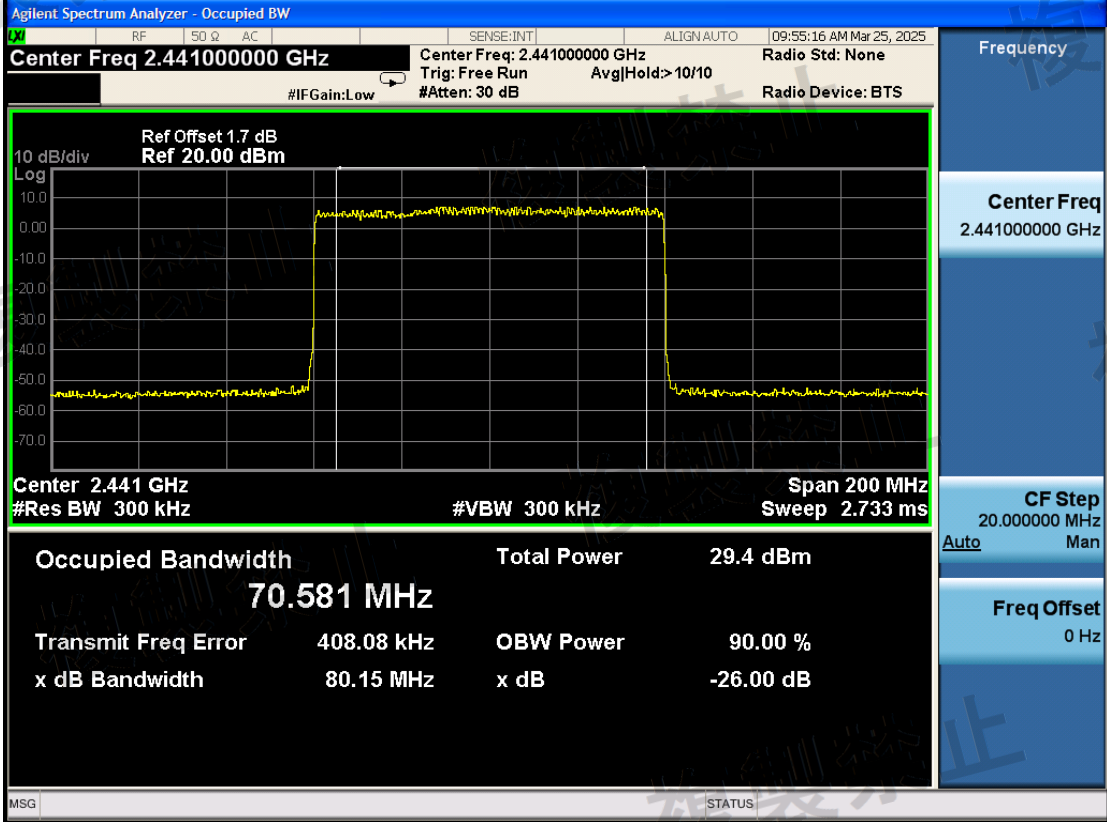
Occupied Bandwidth

HOPPING



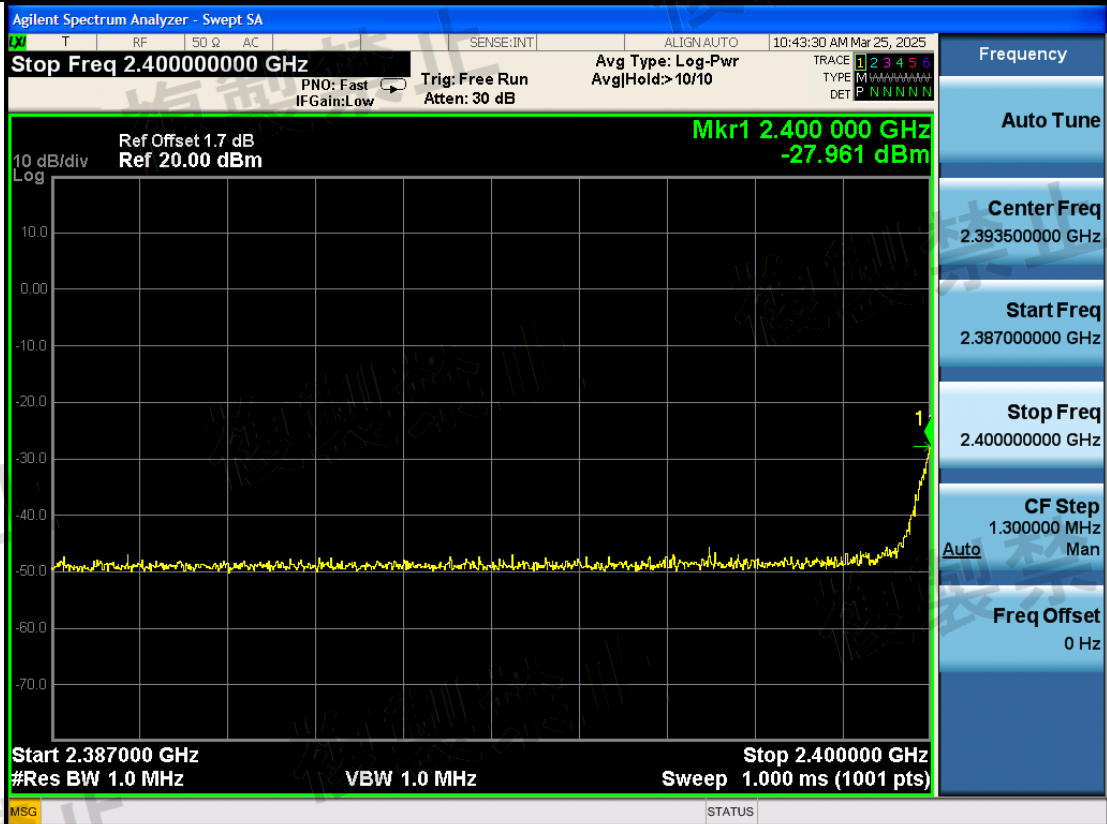
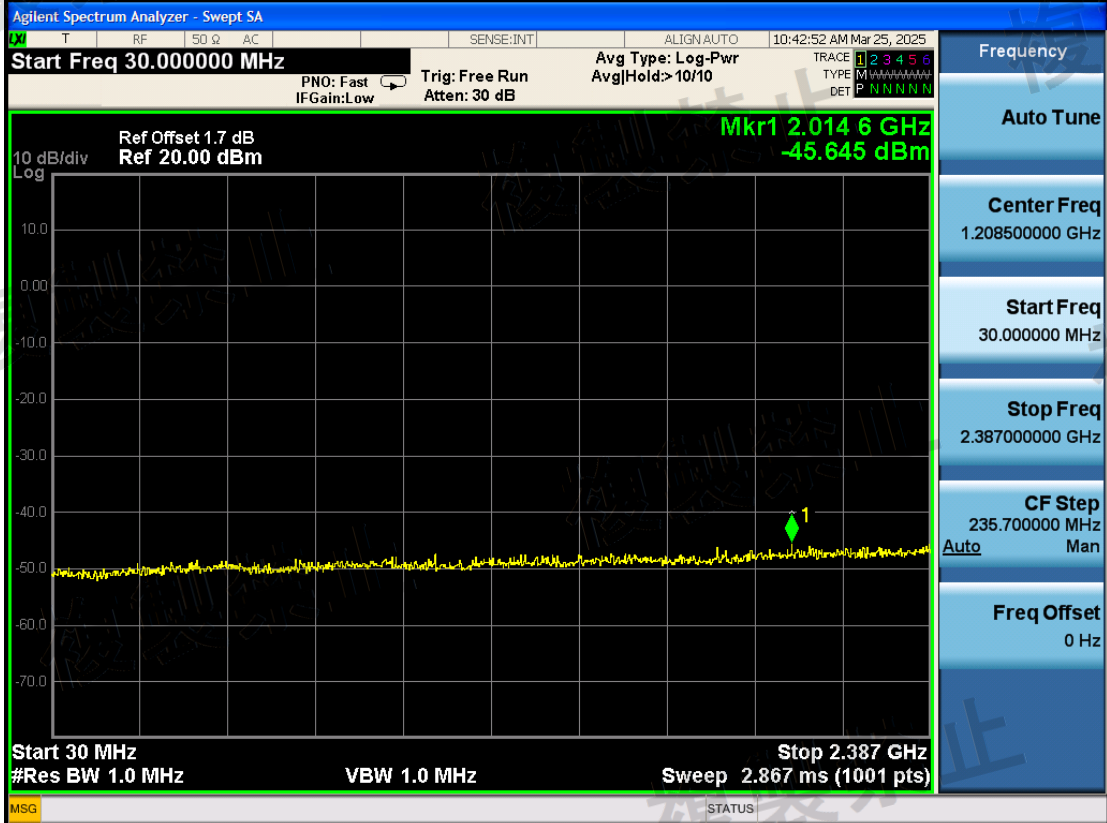
Spread-spectrum Bandwidth

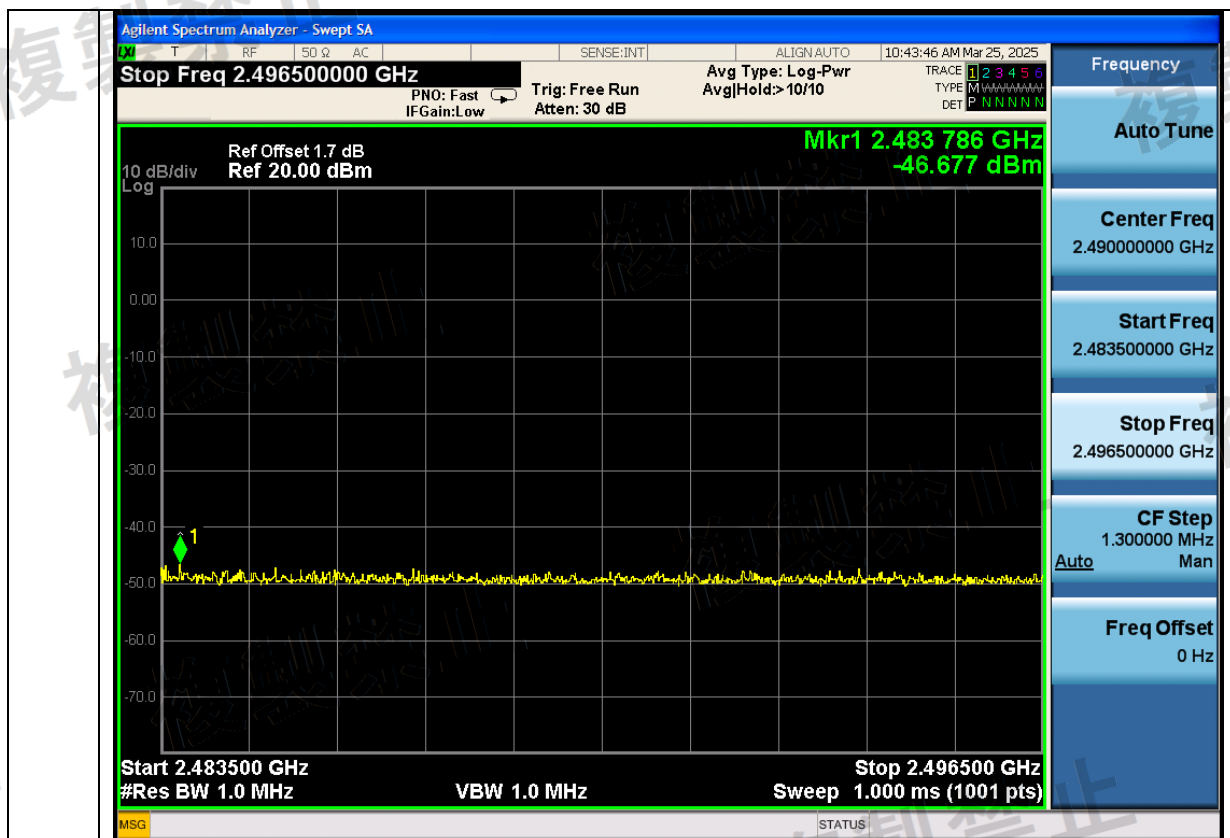
HOPPING



Unwanted Emission Intensity

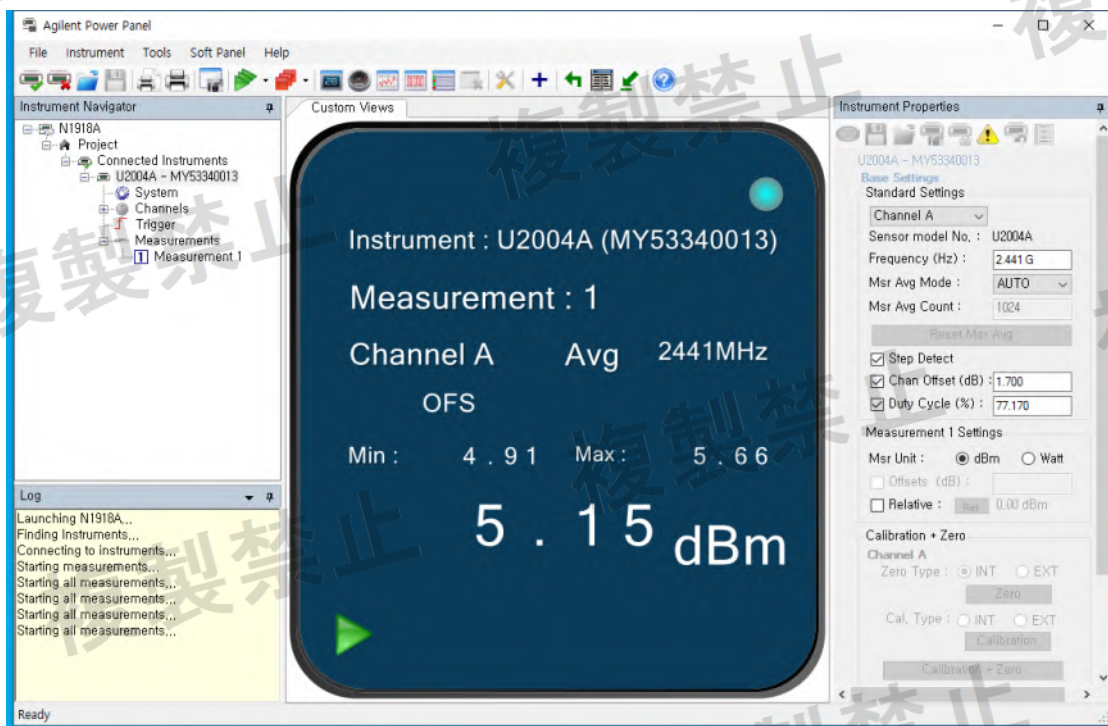
HOPPING



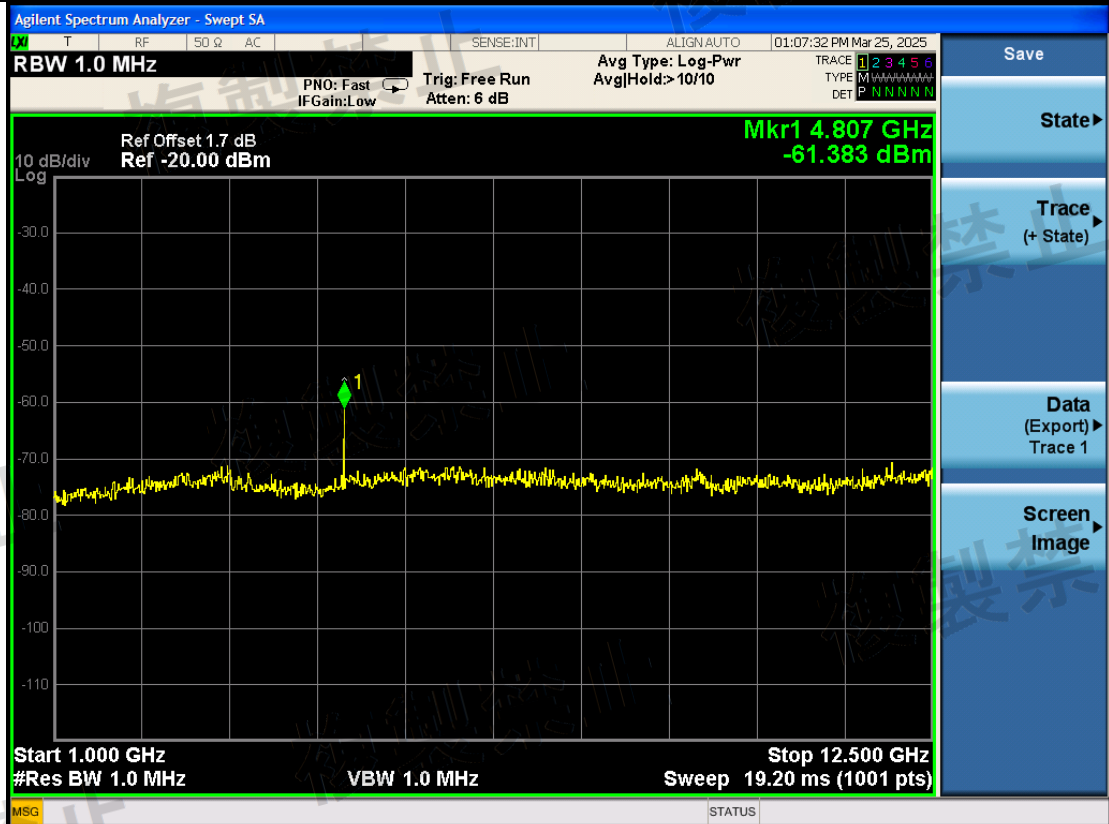
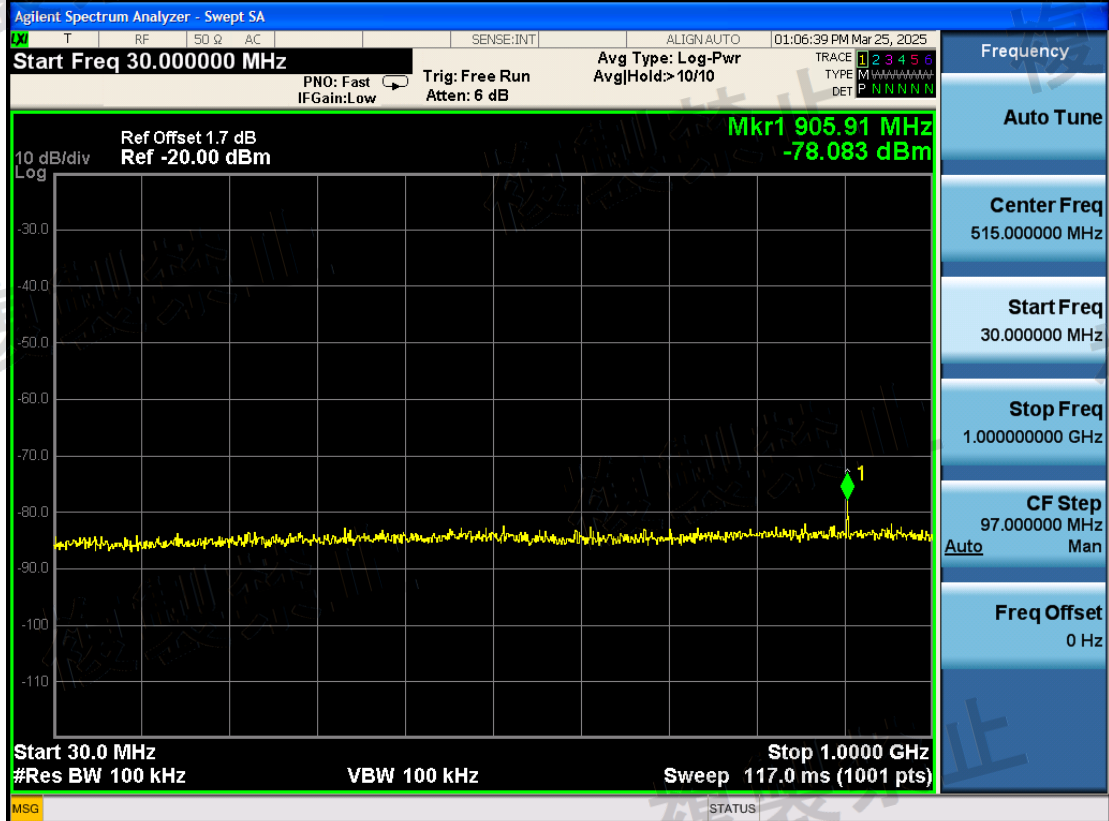


RF Output Power

HOPPING



Limitation of Collateral Emission of Receiver



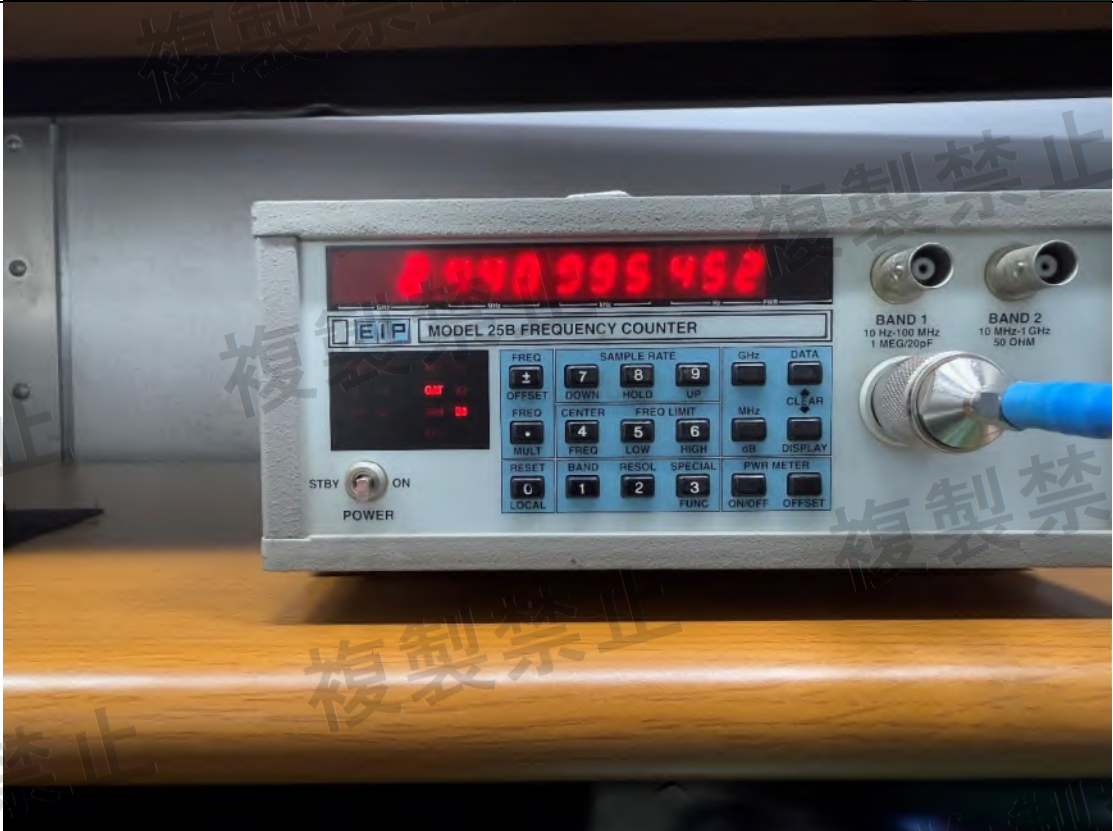
EDR(3DH5) Test Results – Low Voltage (DC 3.0 V)

Frequency Tolerance

LOW



MID

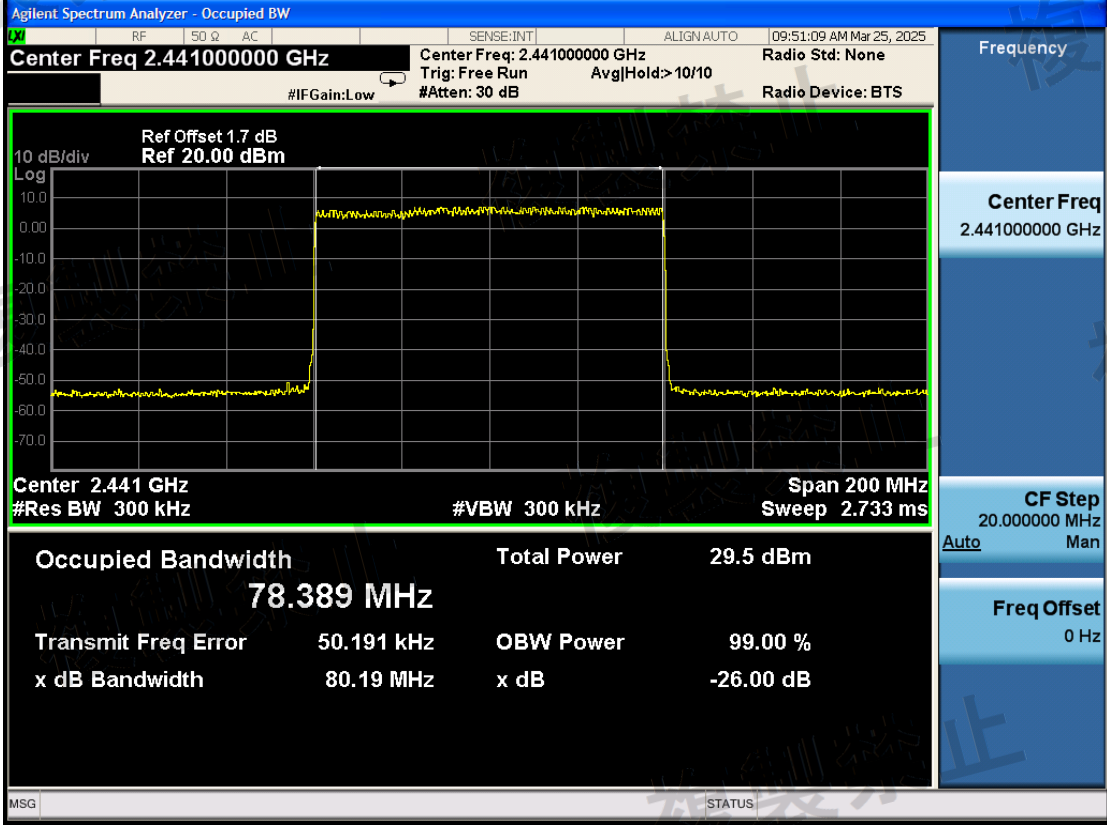


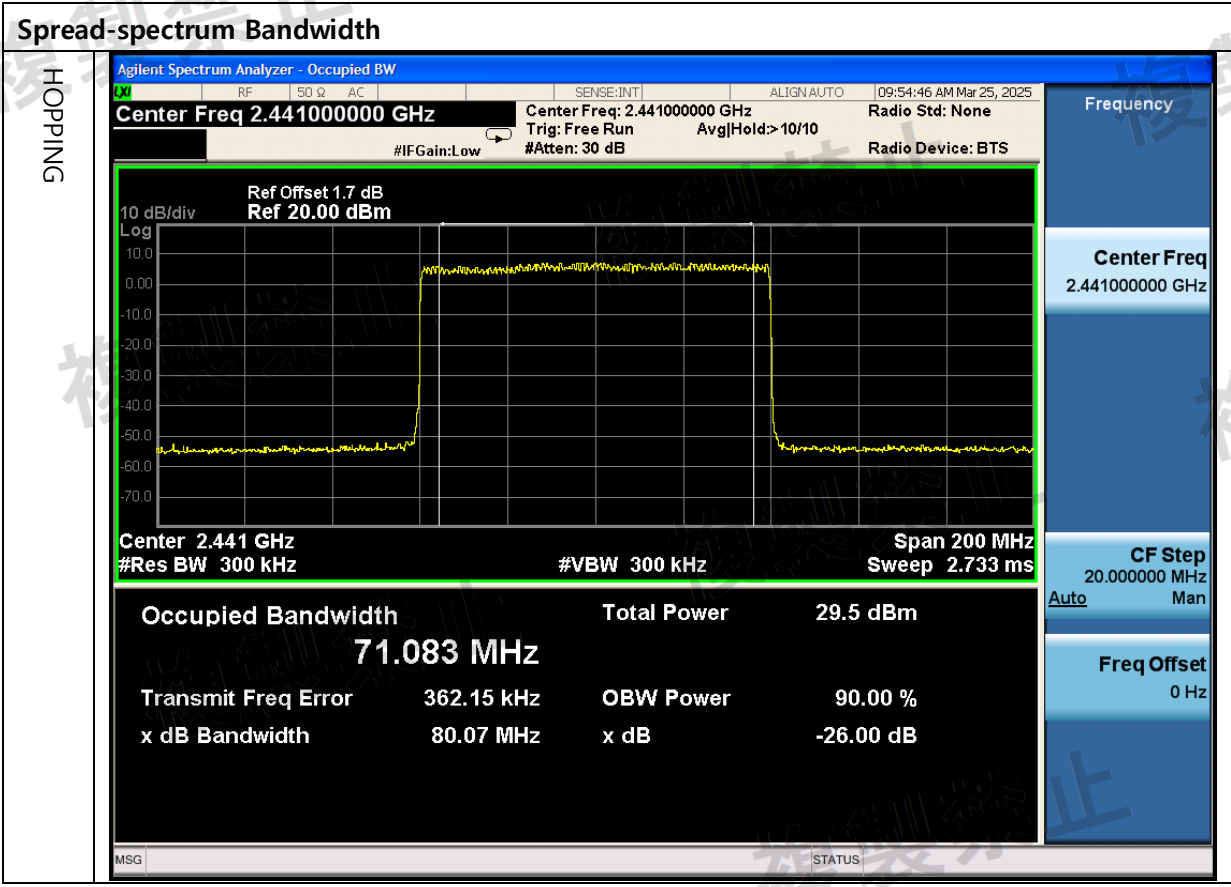
HIGH



Occupied Bandwidth

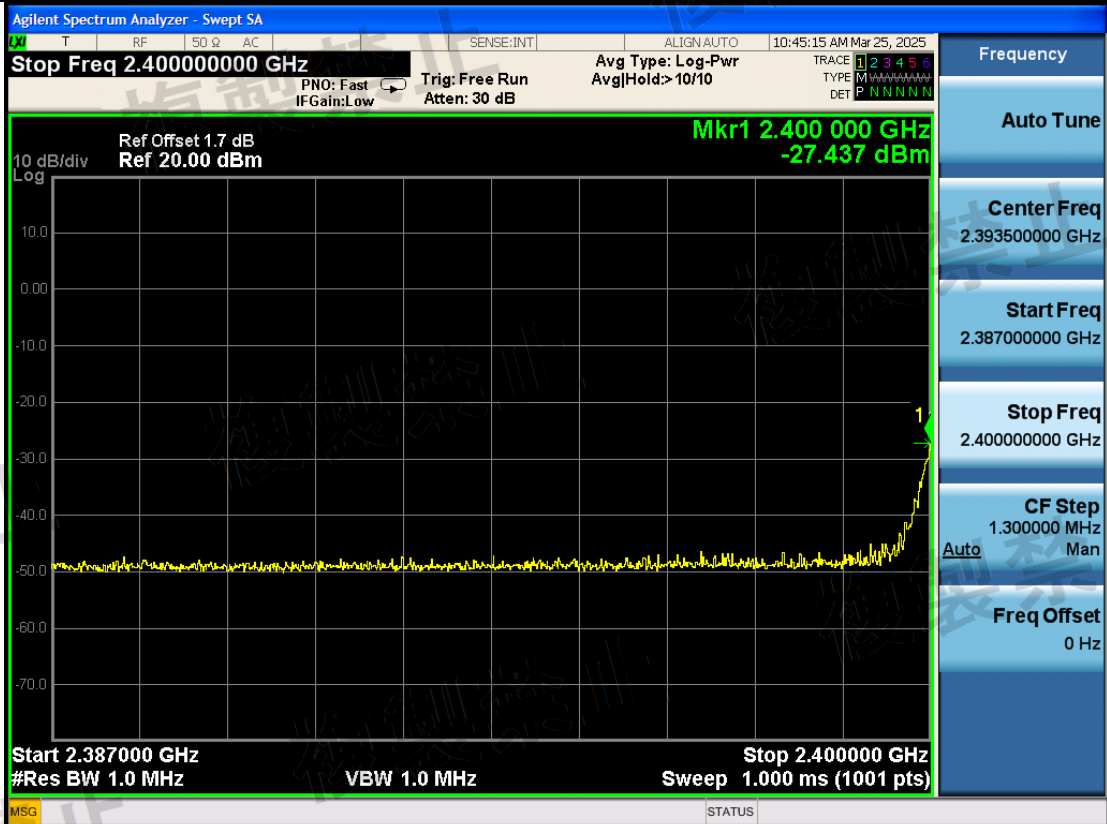
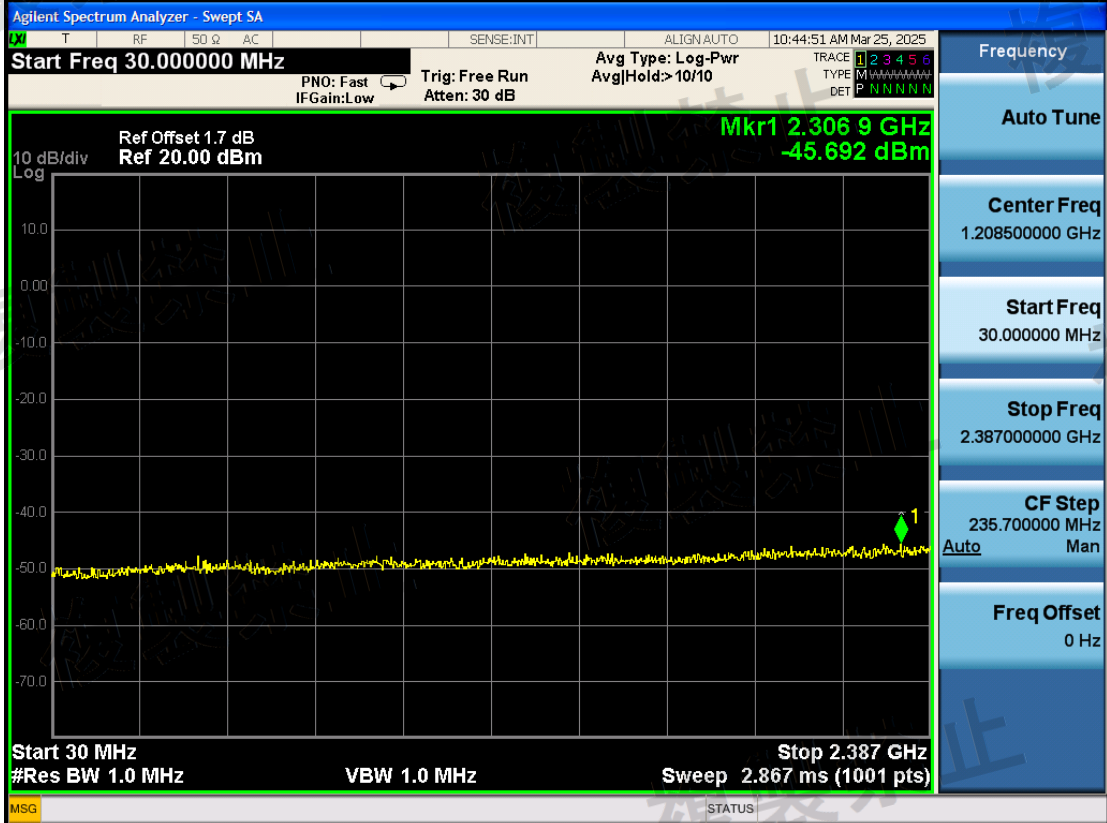
HOPPING

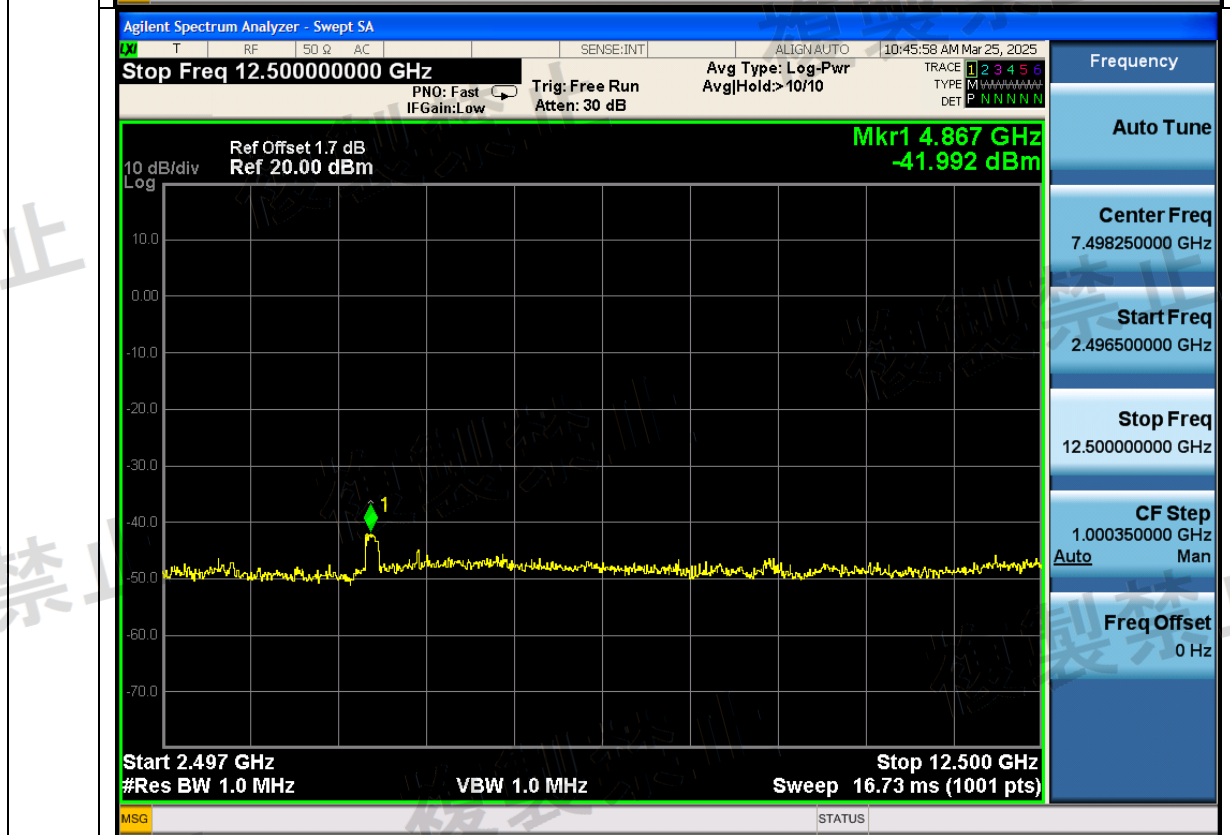
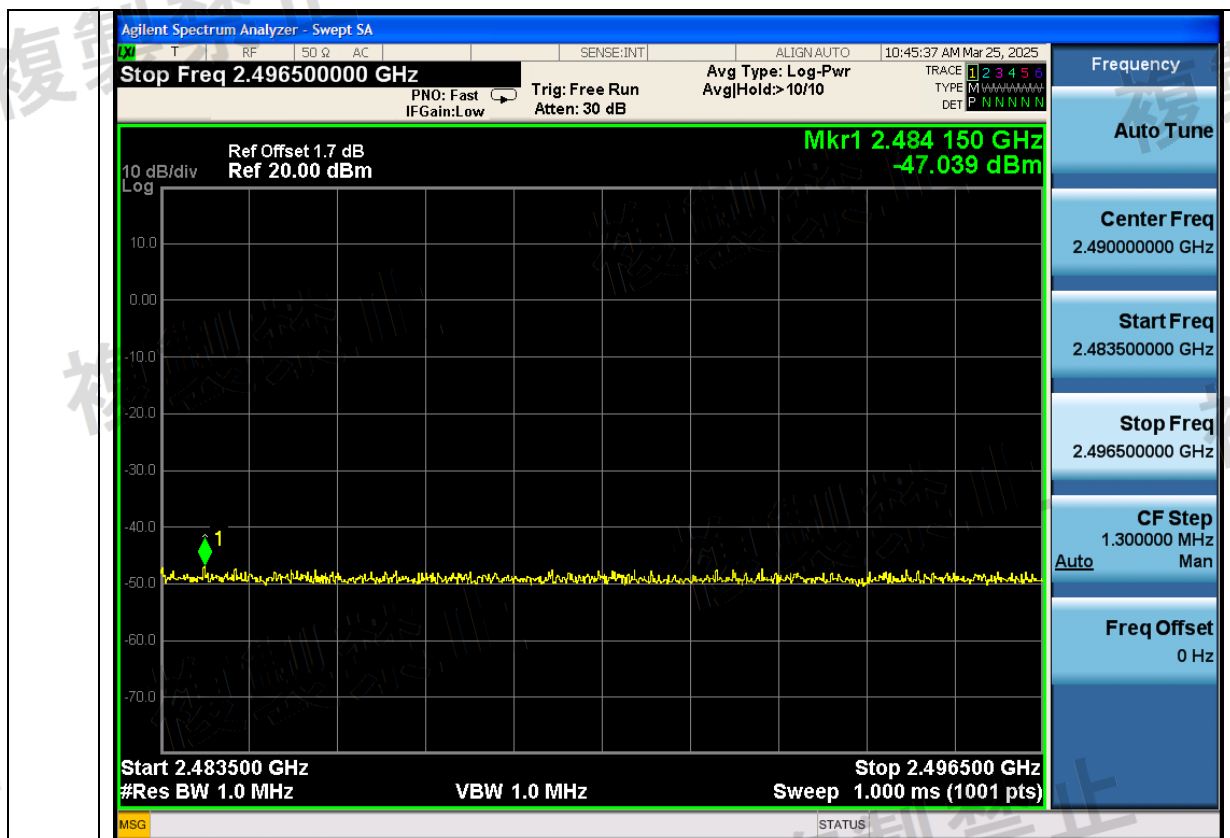




Unwanted Emission Intensity

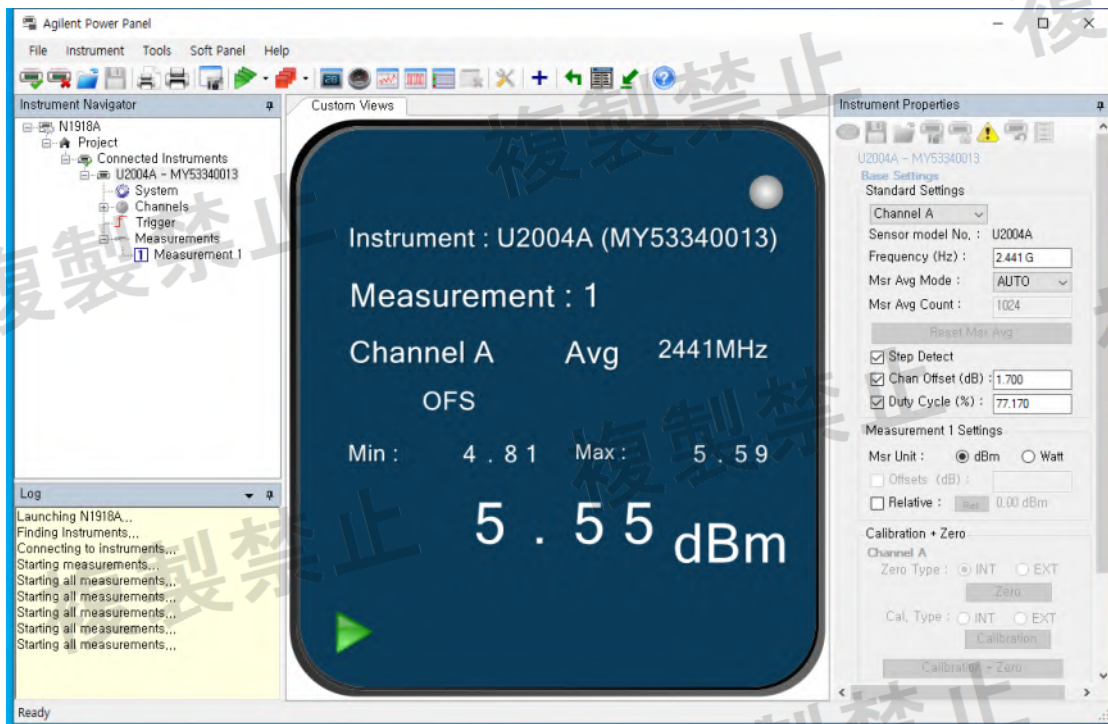
HOPPING



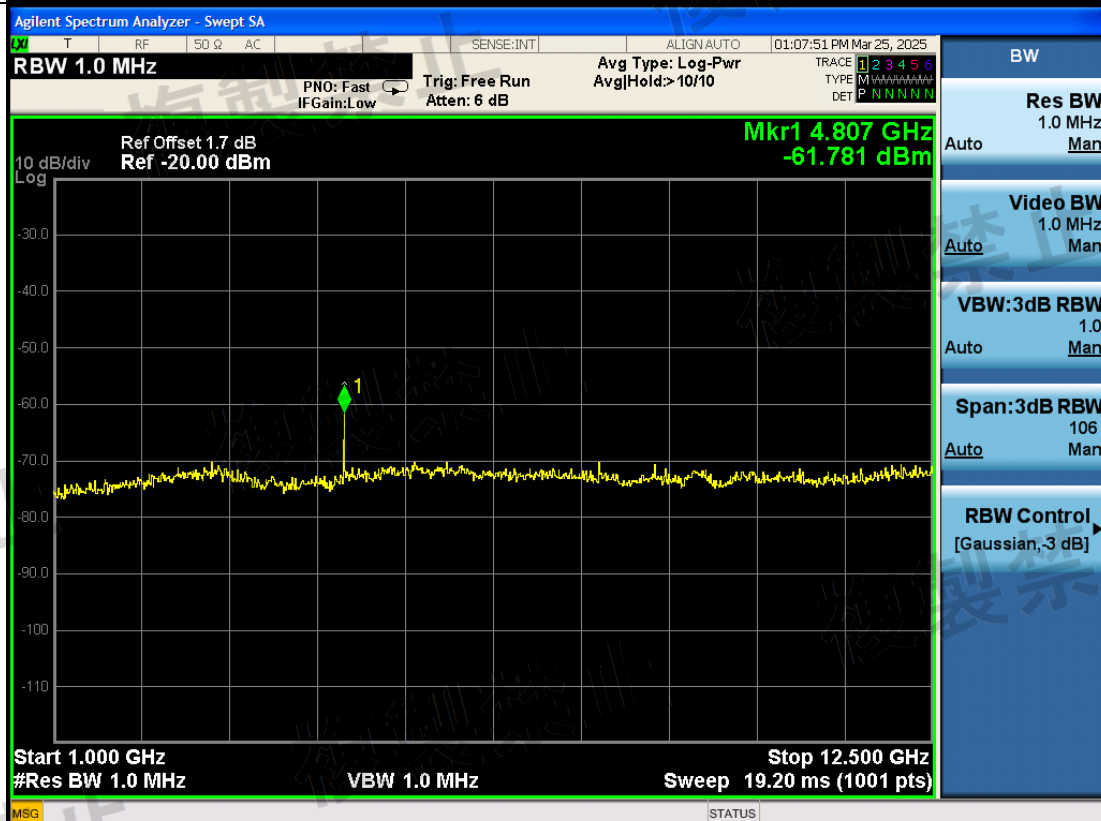
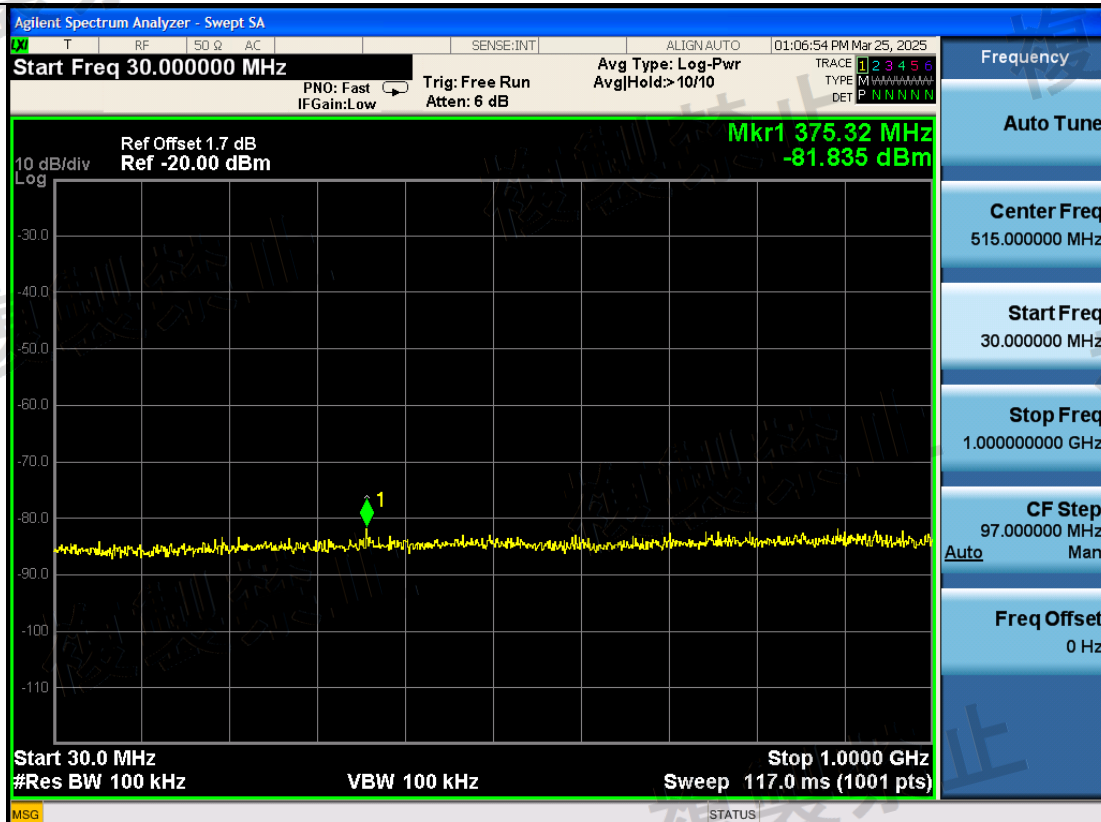


RF Output Power

HOPPING

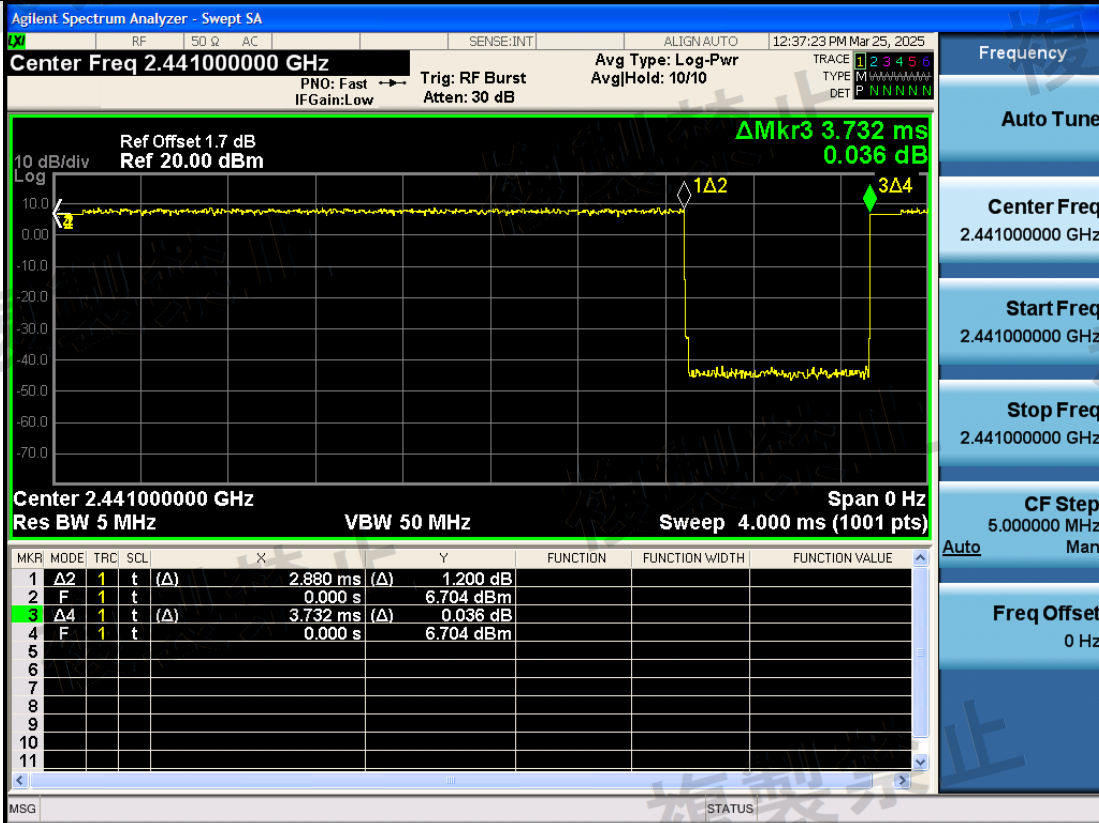


Limitation of Collateral Emission of Receiver



Hopping Frequency Dwell Time

HOPPING



LE_1 Mbps Test Results_Nominal Voltage (DC 3.3 V)

Frequency Tolerance

LOW



MID

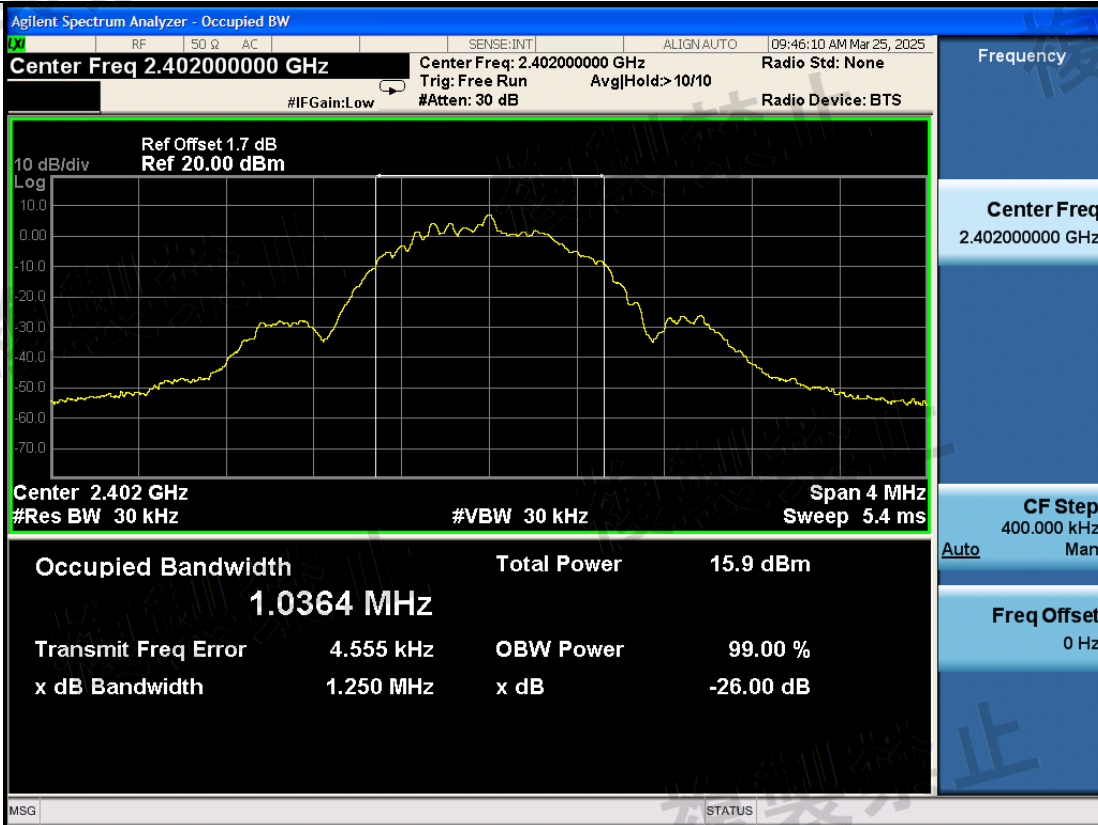


HIGH

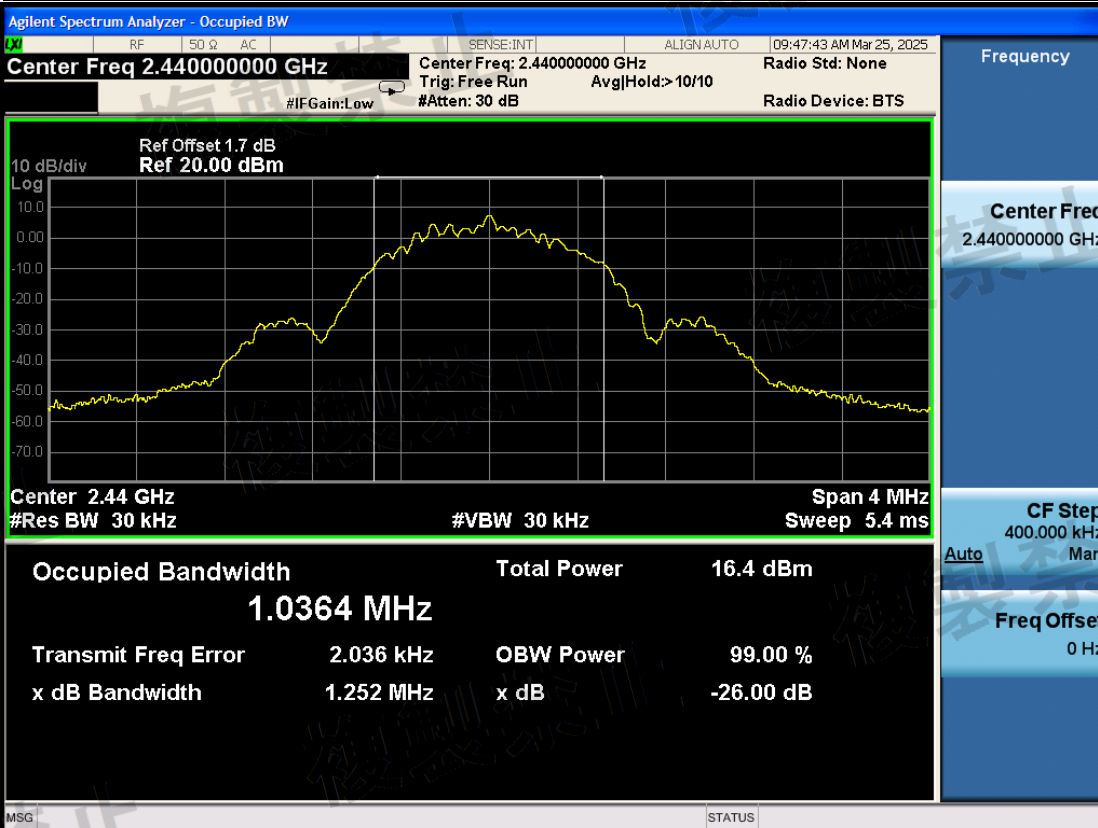


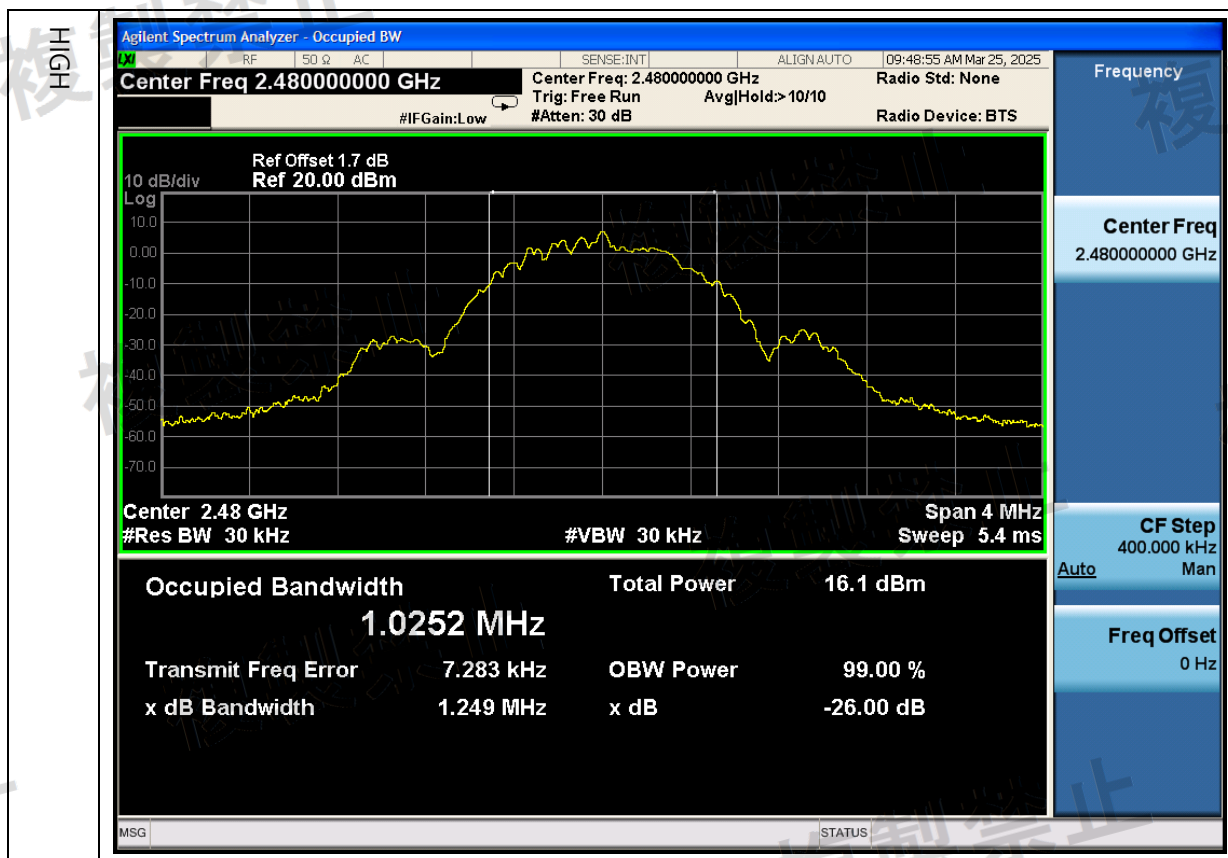
Occupied Bandwidth

LOW



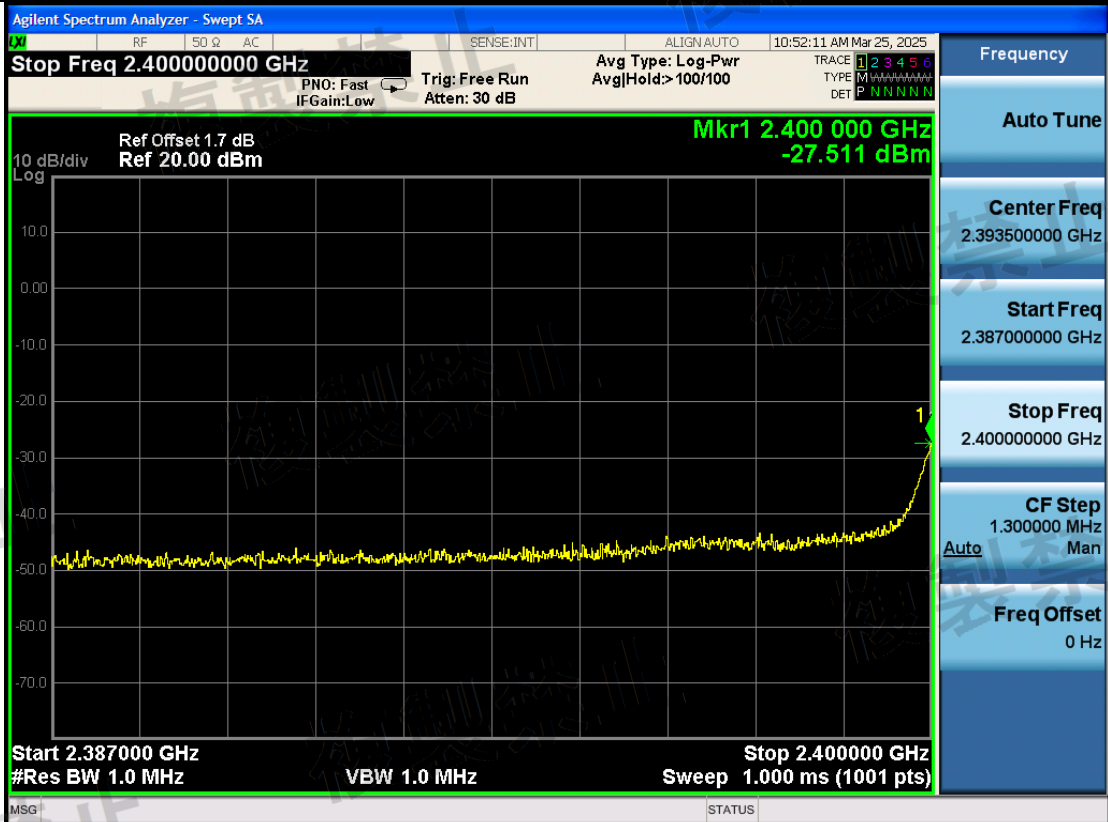
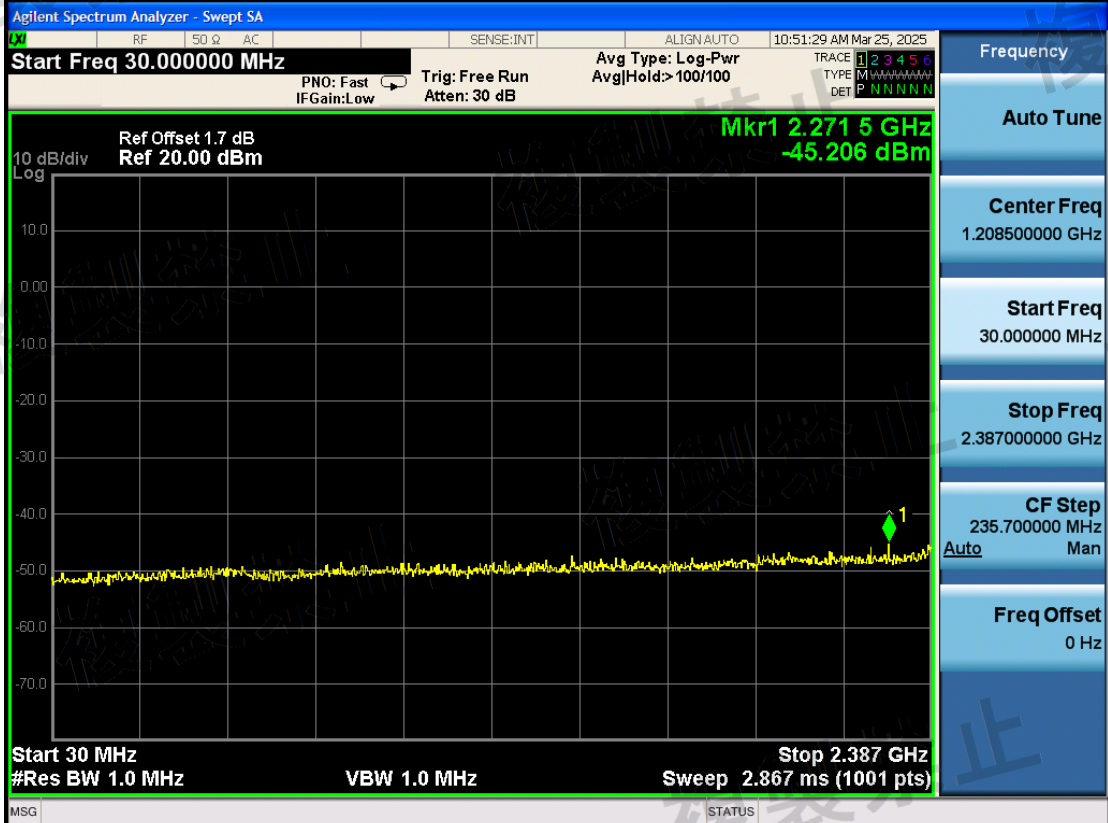
MID

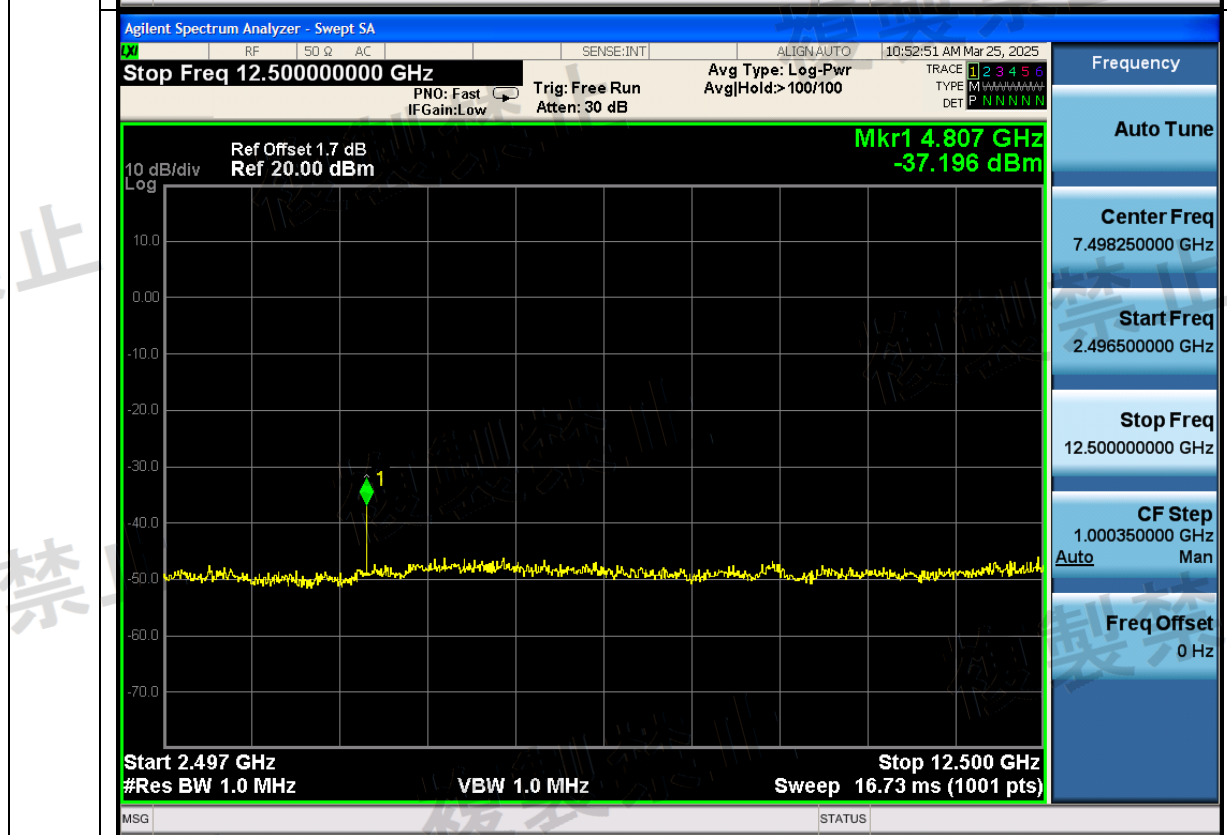
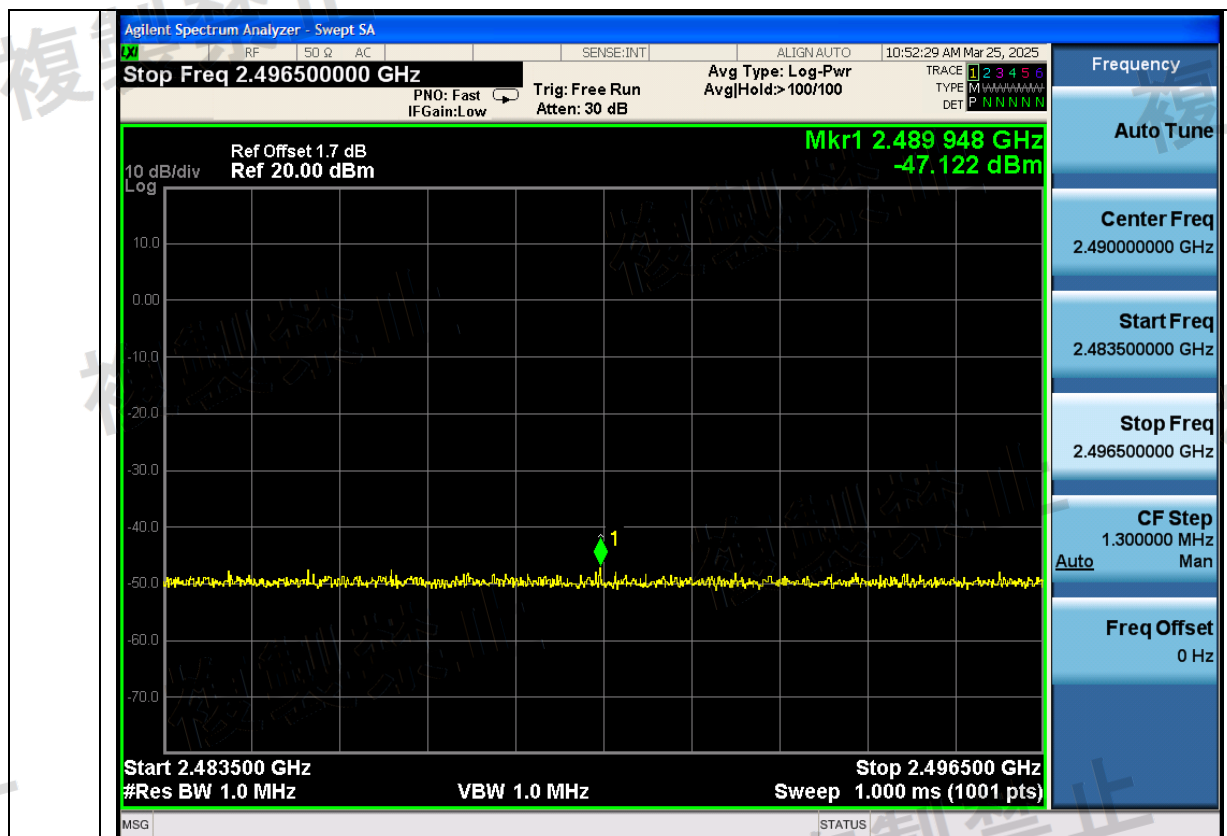




Unwanted Emission Intensity

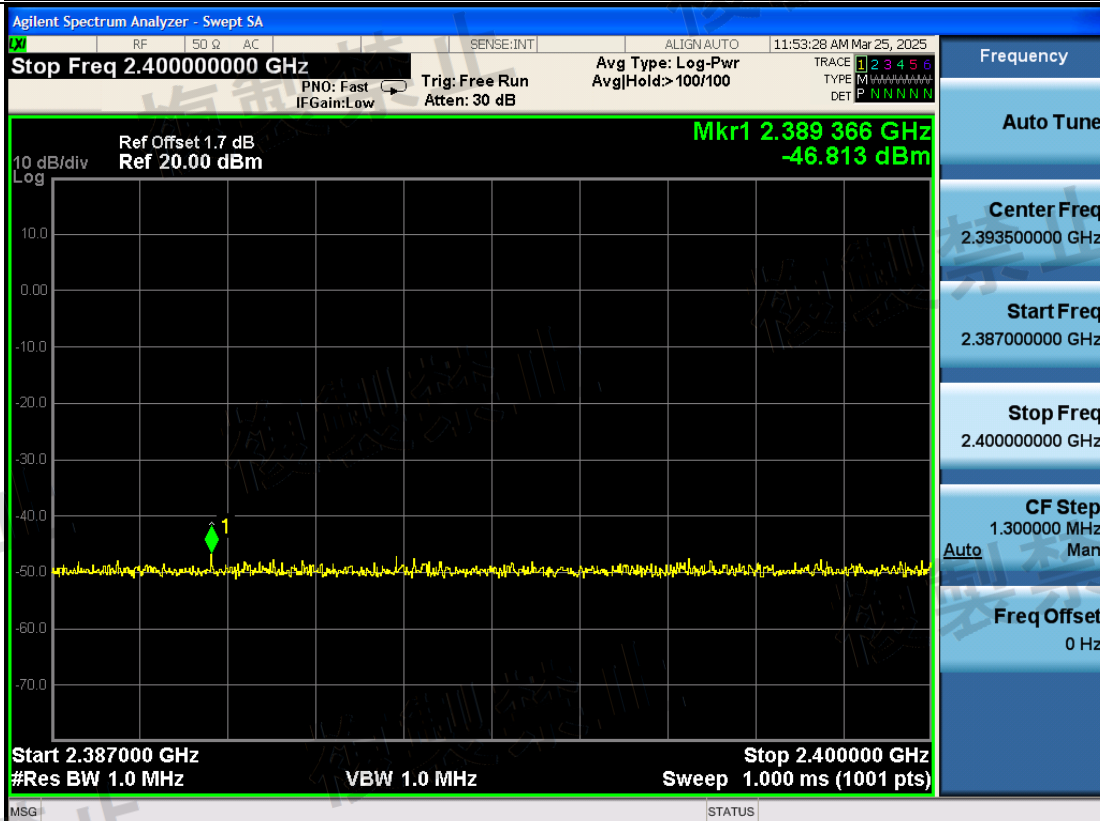
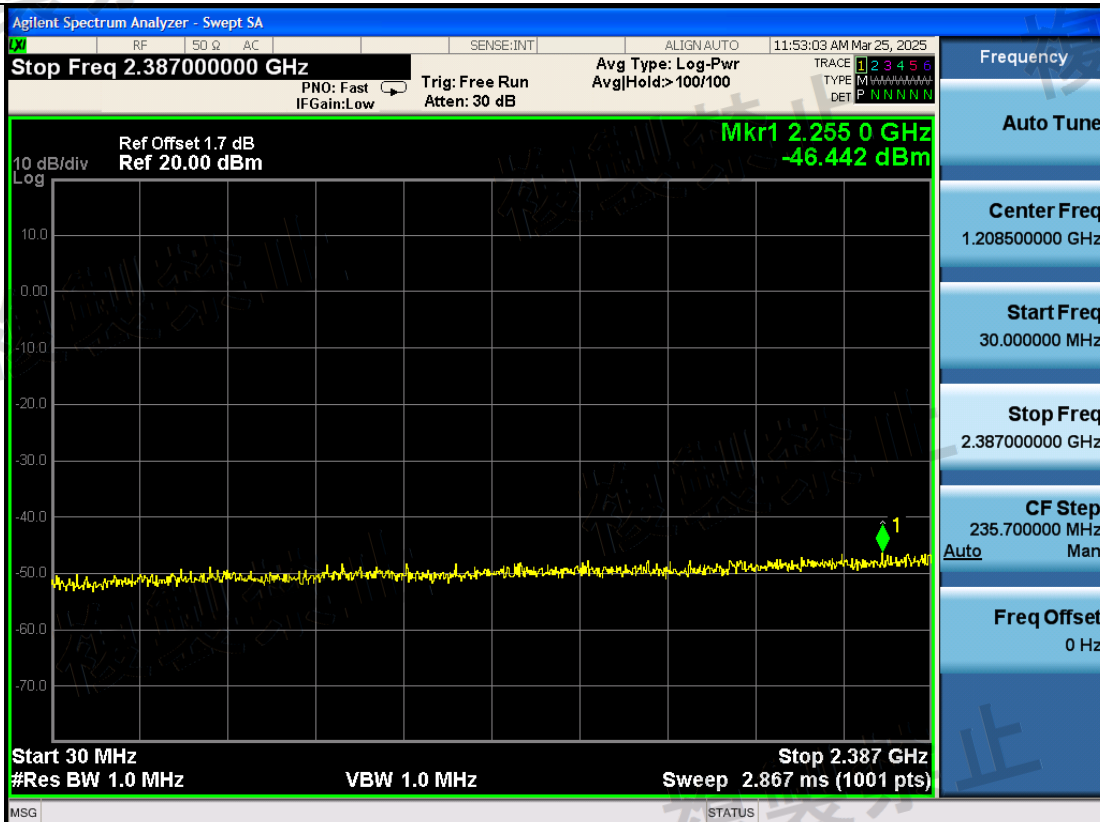
LOW

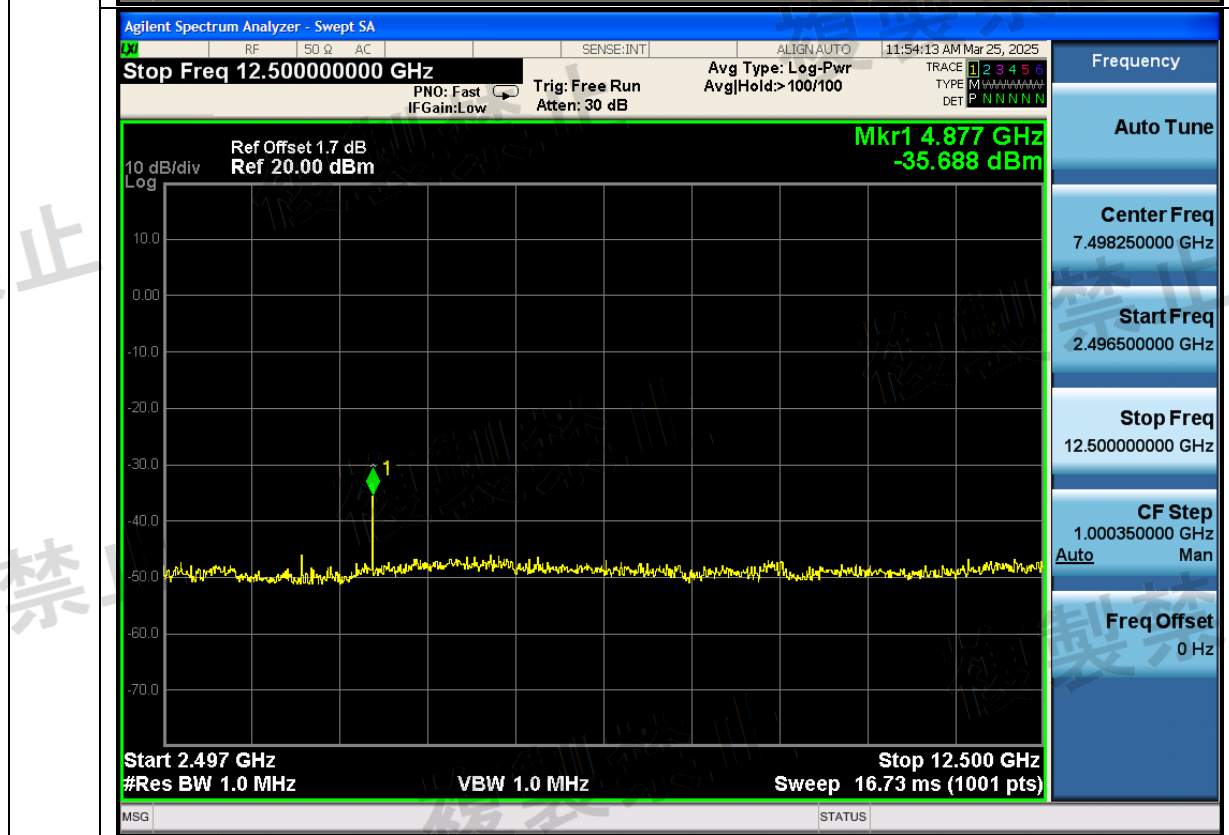
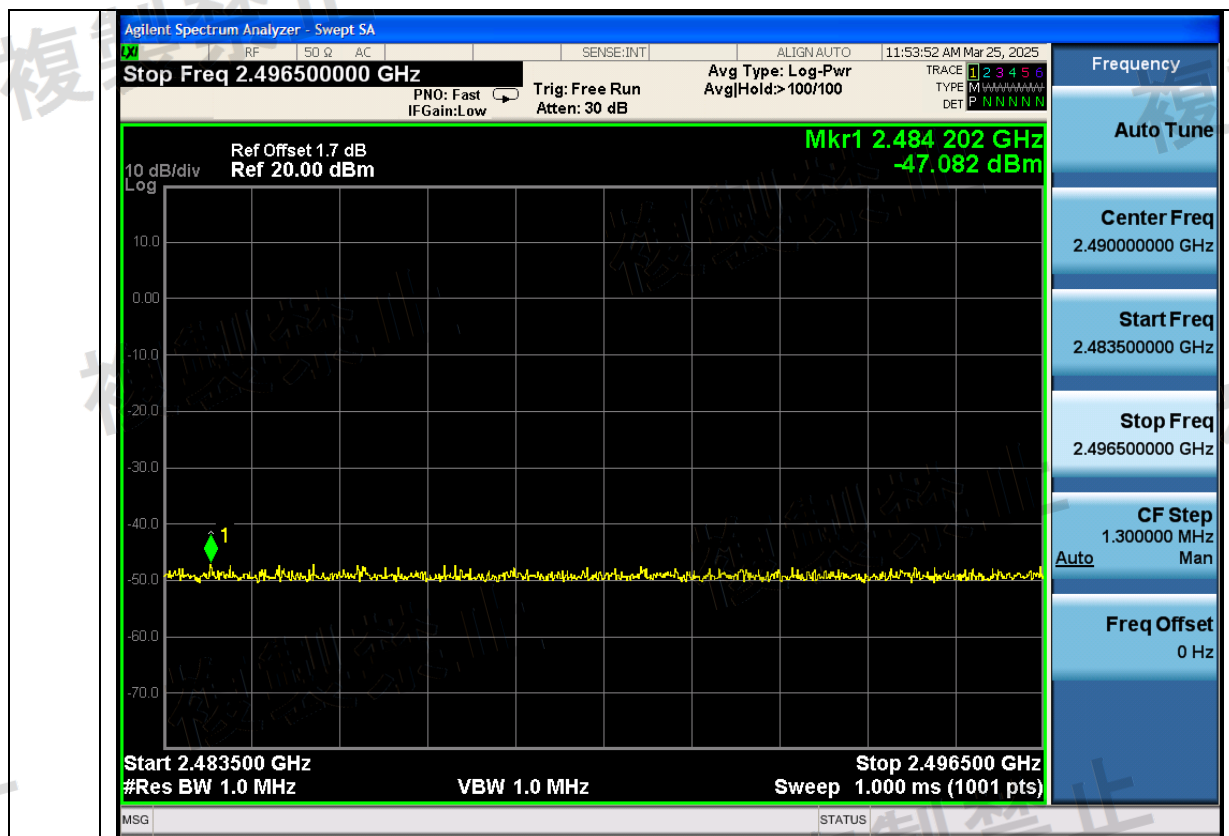




Unwanted Emission Intensity

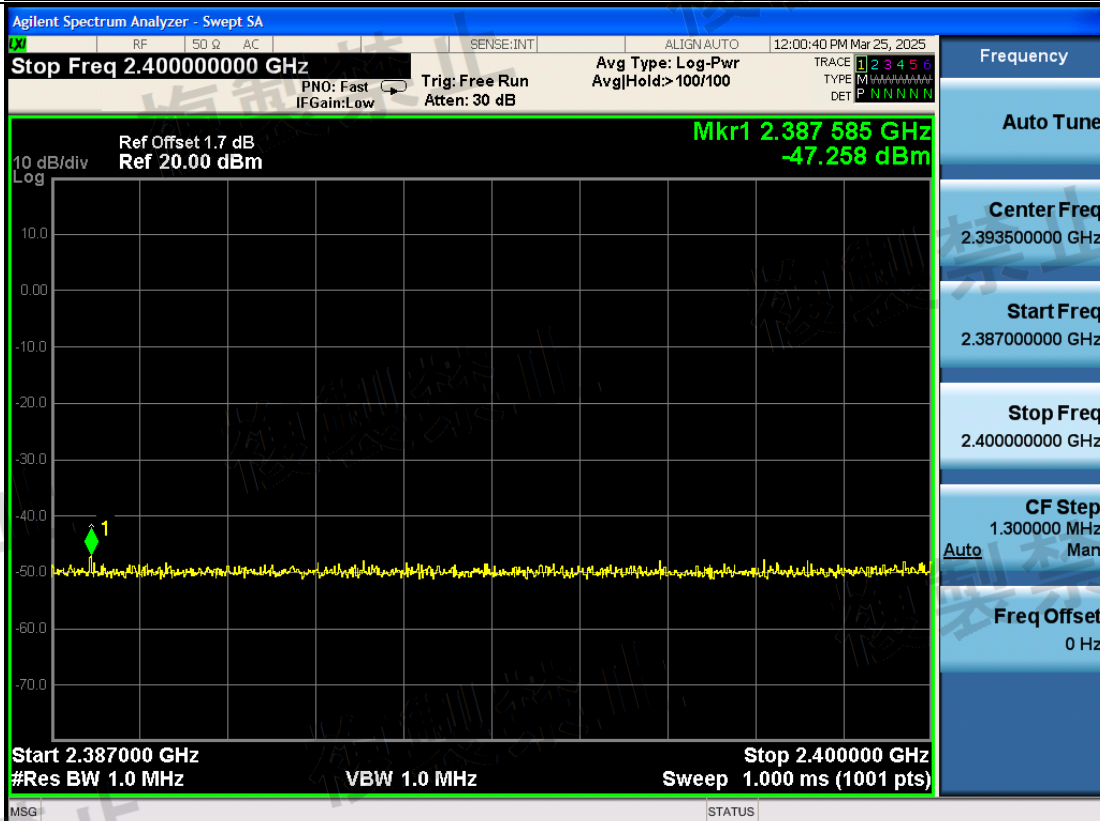
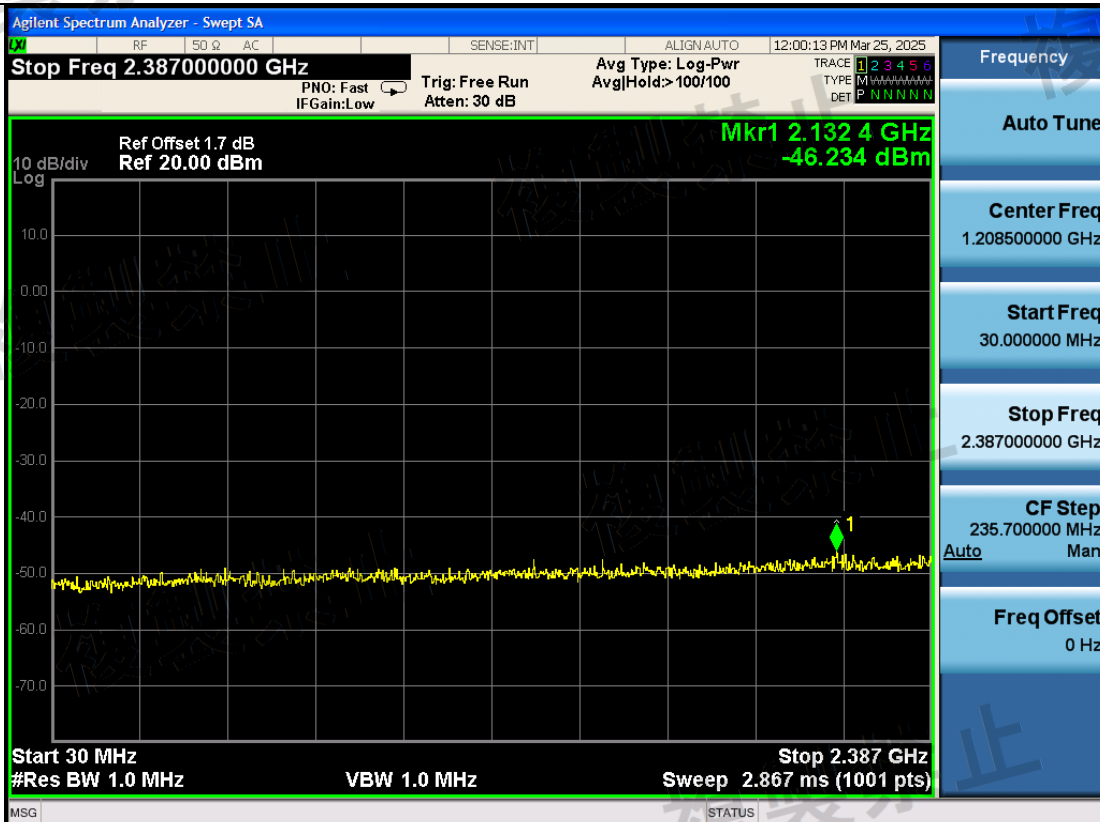
MID

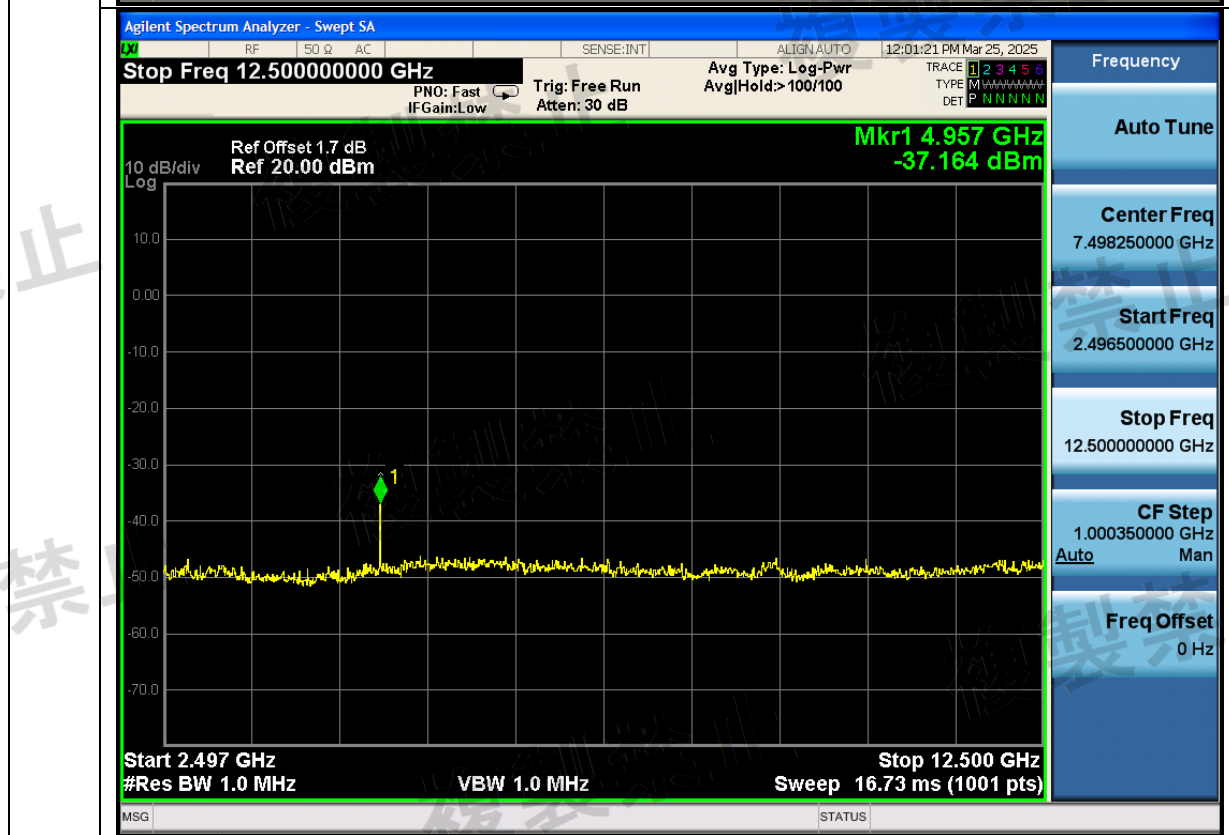
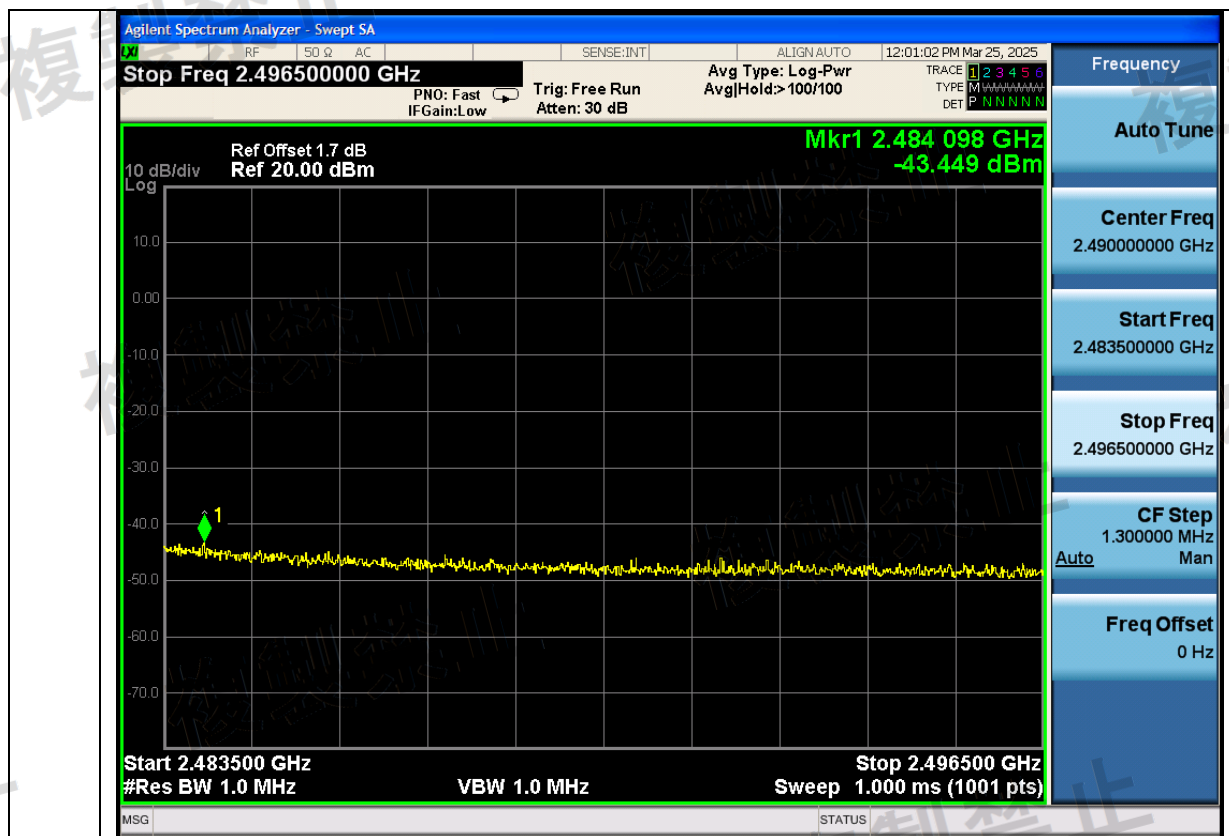




Unwanted Emission Intensity

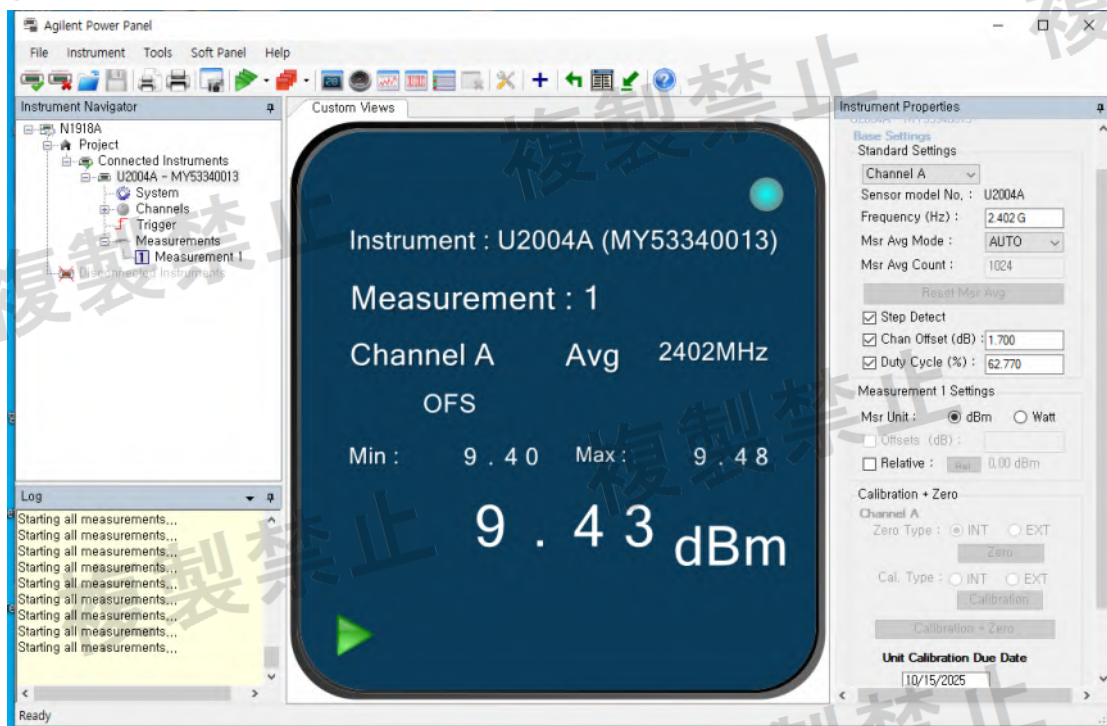
HIGH



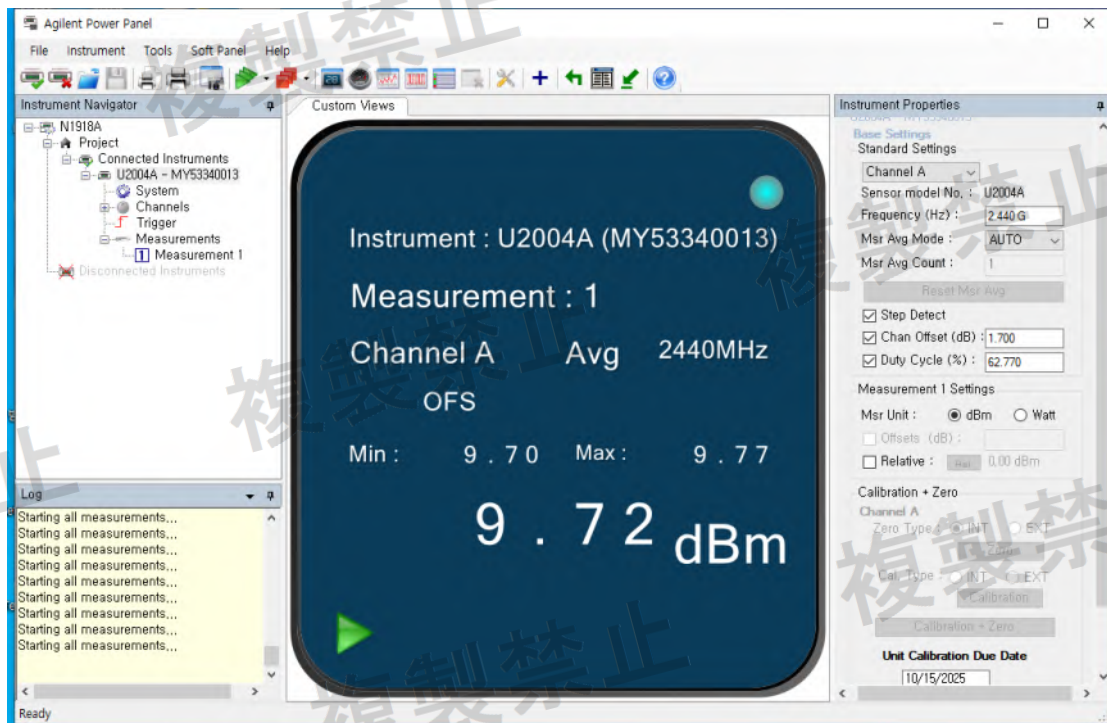


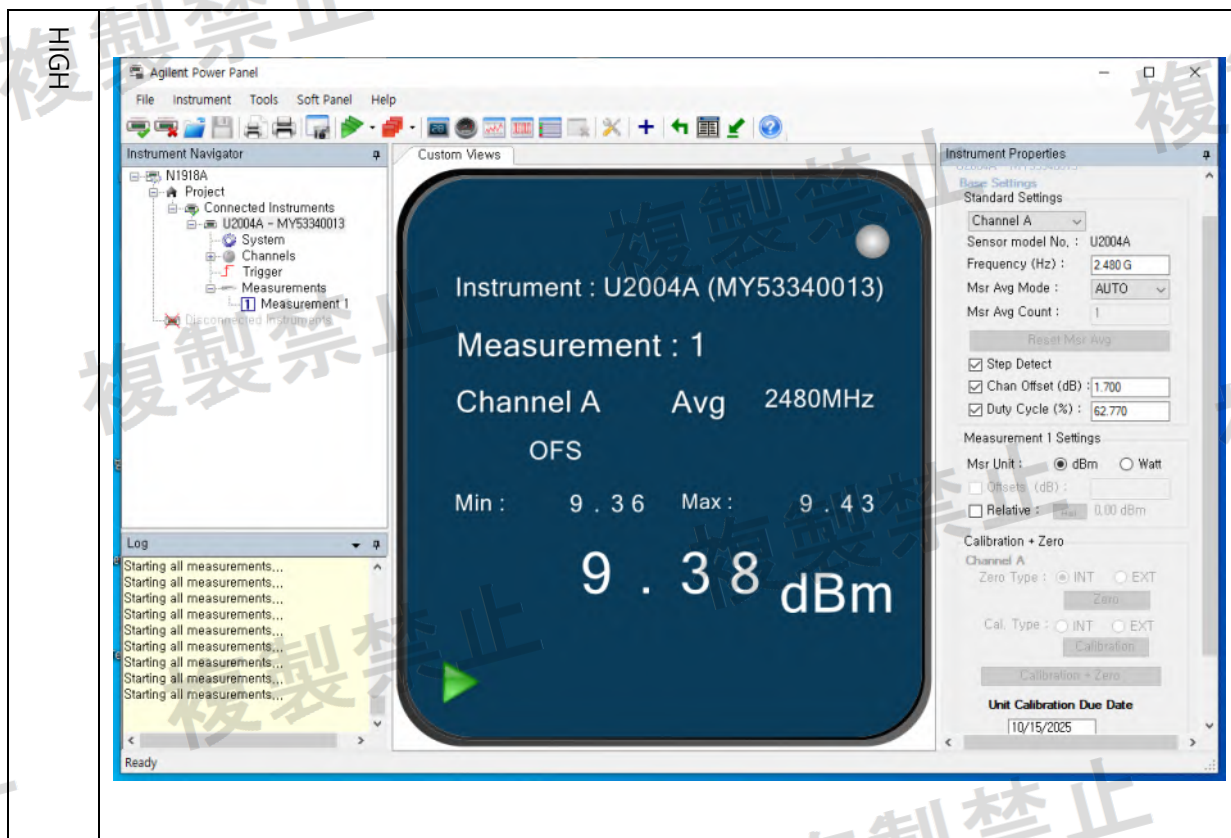
RF Output Power

LOW



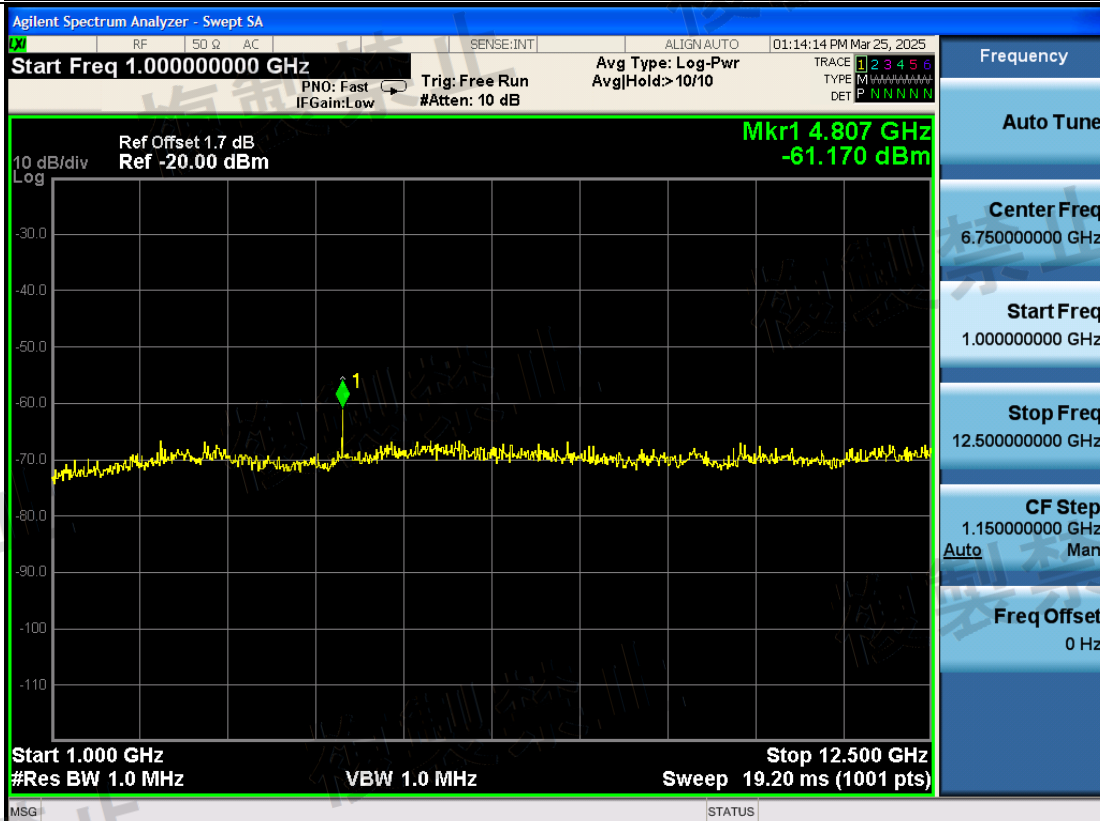
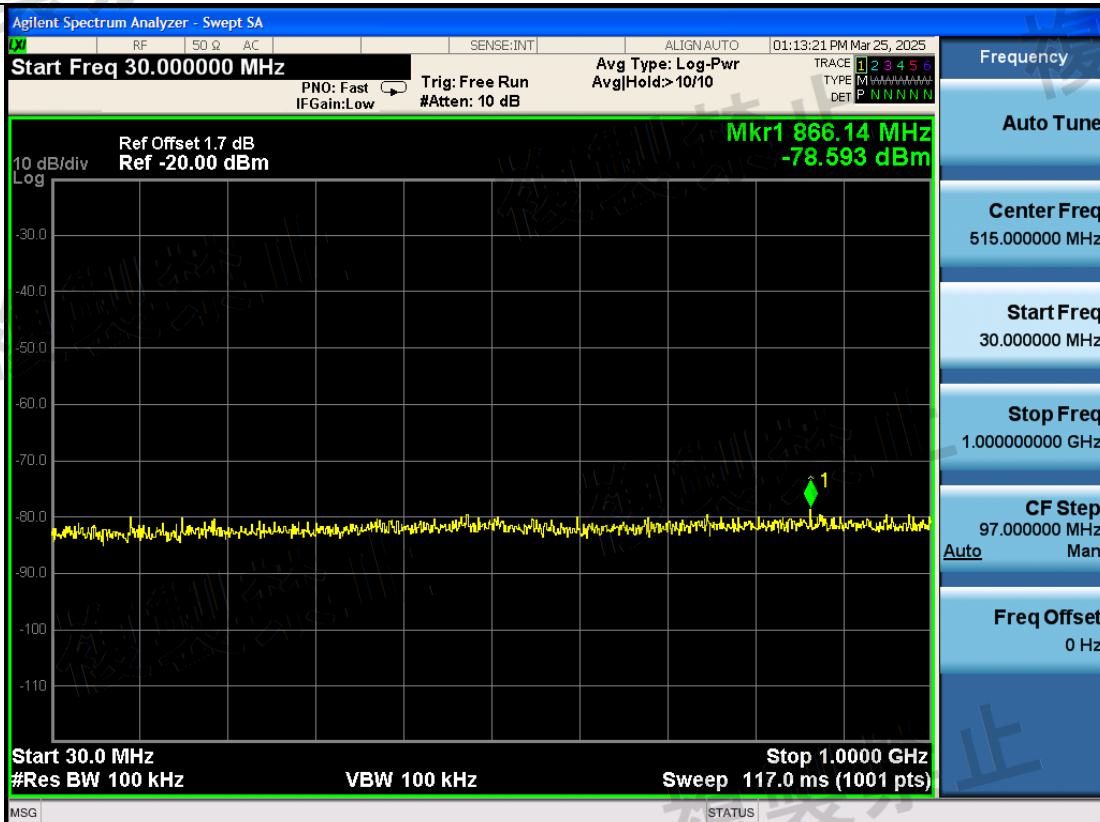
MID





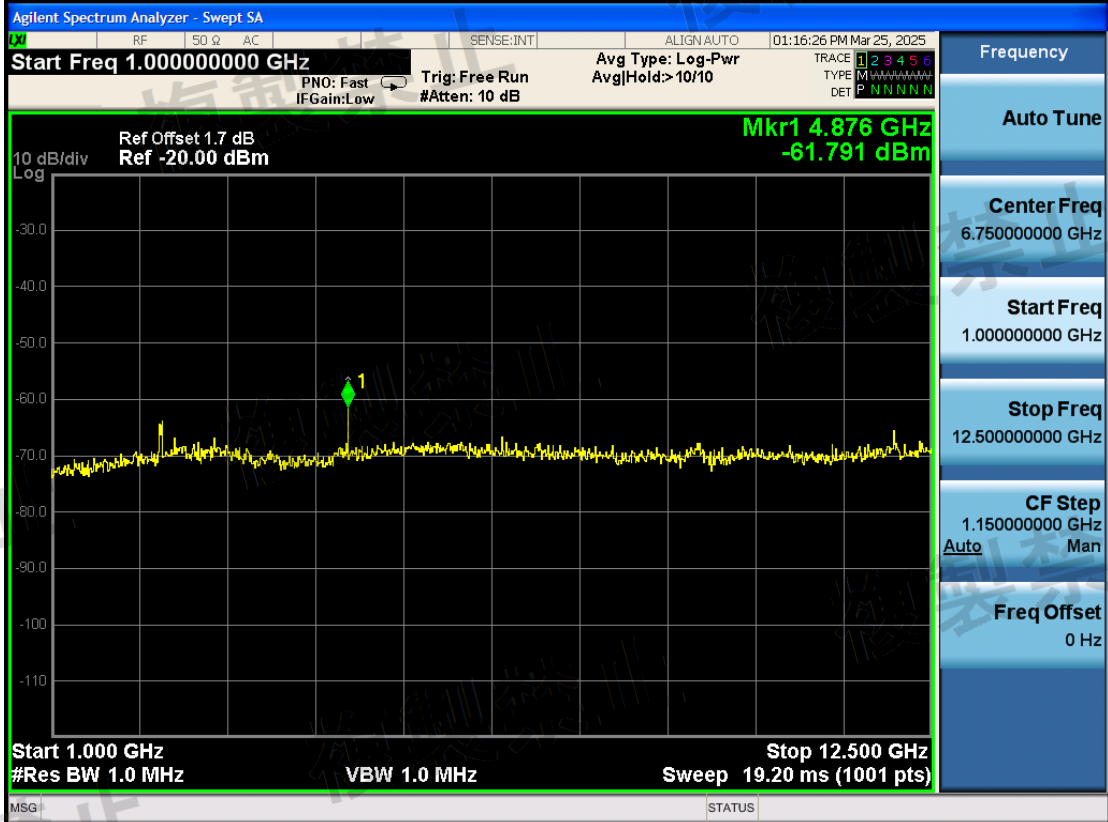
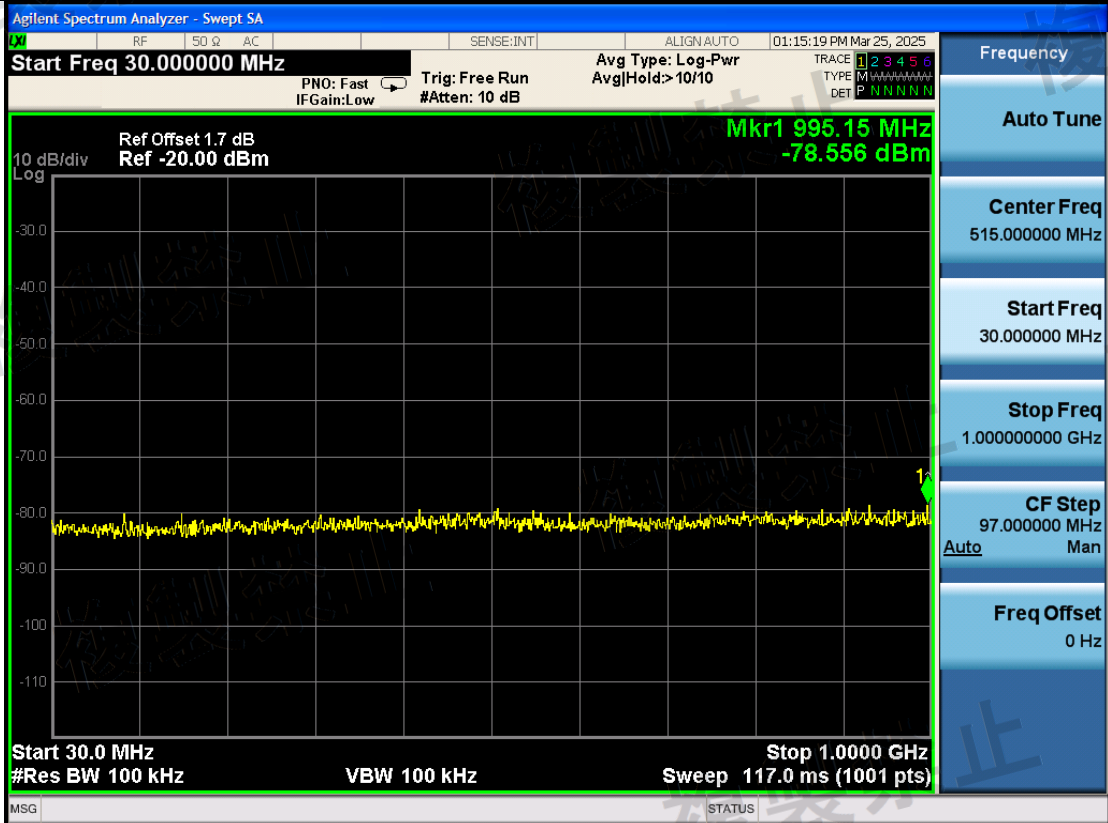
Limitation of Collateral Emission of Receiver

LOW



Limitation of Collateral Emission of Receiver

MID



Limitation of Collateral Emission of Receiver

HIGH

