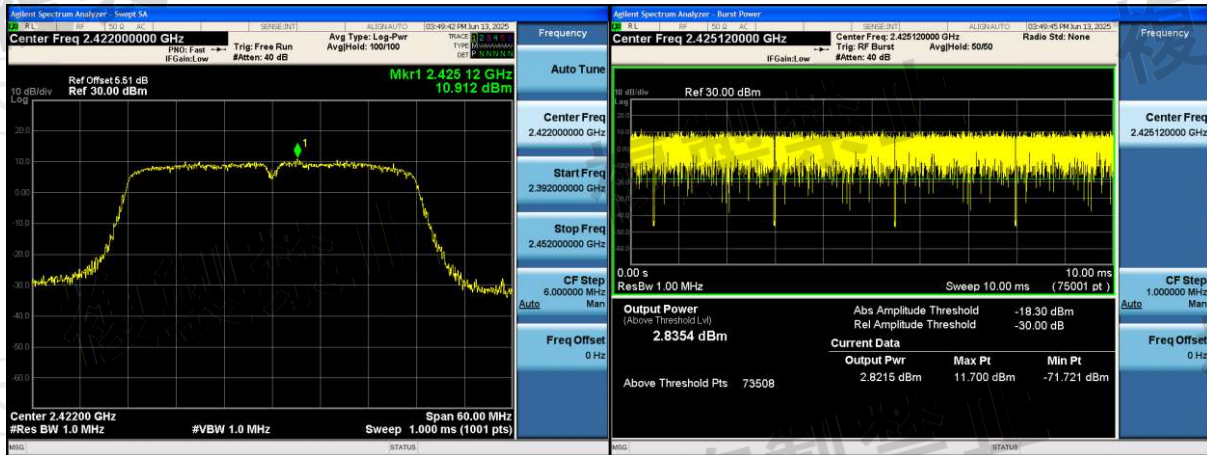
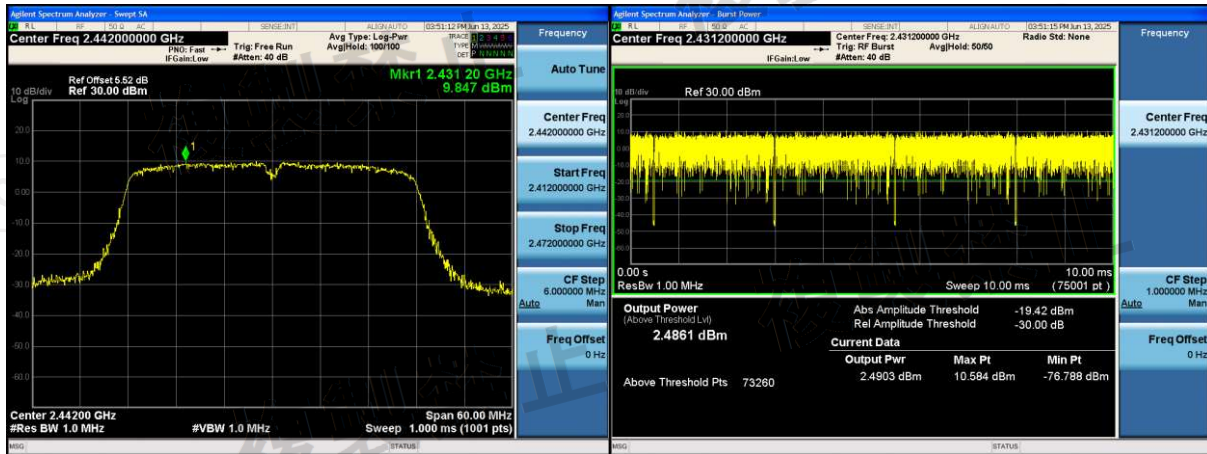


802.11n(HT40)

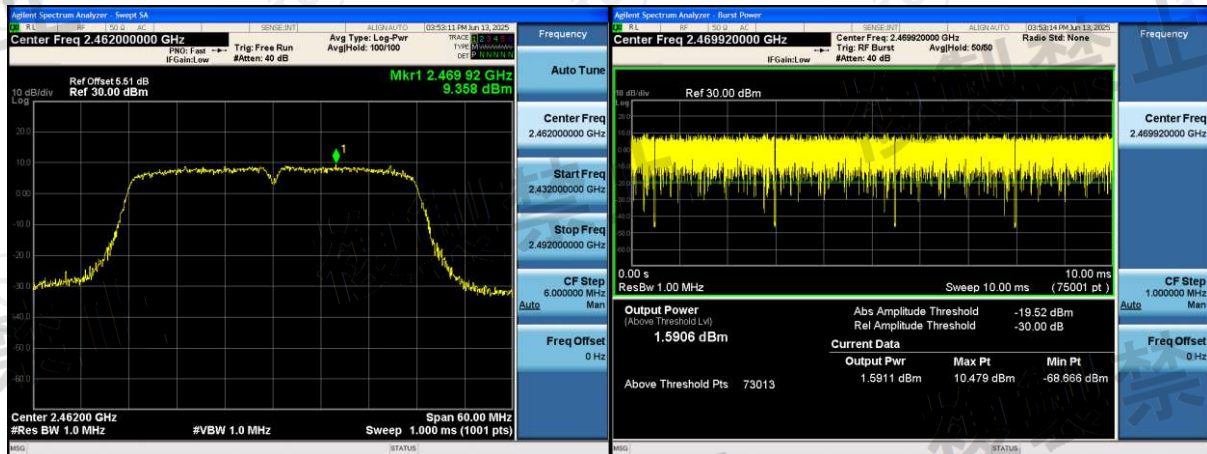
Lowest channel



Middle channel



Highest channel



EIRP Power

Test Condition	Channel	Antenna Power (dBm/MHz)	Antenna Gain(dBi)	EIRP (dBm/MHz)	Limit (dBm/MHz)	Result
100V, 25°C						
802.11b	Low	8.25	3.37	11.62	12.14	PASS
	Mid	8.64	3.37	12.01		PASS
	High	7.51	3.37	10.88		PASS

HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)

Test Condition	Channel	Antenna Power (dBm/MHz)	Antenna Gain(dBi)	EIRP (dBm/MHz)	Limit (dBm/MHz)	Result
100V, 25°C						
802.11g	Low	5.60	3.37	8.97	12.14	PASS
	Mid	5.58	3.37	8.95		PASS
	High	3.48	3.37	6.85		PASS

HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)

Test Condition	Channel	Antenna Power (dBm/MHz)	Antenna Gain(dBi)	EIRP (dBm/MHz)	Limit (dBm/MHz)	Result
100V, 25°C						
802.11n (HT20)	Low	4.16	3.37	7.53	12.14	PASS
	Mid	4.33	3.37	7.70		PASS
	High	3.19	3.37	6.56		PASS

HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)

Test Condition	Channel	Antenna Power (dBm/MHz)	Antenna Gain(dBi)	EIRP (dBm/MHz)	Limit (dBm/MHz)	Result
100V, 25°C						
802.11n (HT40)	Low	2.84	3.37	6.21	9.13	PASS
	Mid	2.49	3.37	5.86		PASS
	High	1.59	3.37	4.96		PASS

HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)

6.5. Spurious radiation or extraneous emission strength

6.5.1. Test Specification

Test Requirement:	Article 2 paragraph 1 item 19
Test Method:	Appendix No.43 Notification No.88 of MIC, 2004 section 5
Limit:	30MHz~1000MHz: 2.5 μ W/MHz(-26dBm) 1000MHz~2387MHz: 2.5 μ W/MHz(-26dBm) 2387MHz~2400MHz: 25 μ W/MHz(-16dBm) 2483.5MHz~2496.5MHz: 25 μ W/MHz(-16dBm) 2496.5MHz~12.75GHz: 2.5 μ W/MHz(-26dBm)
Test Setup:	 Spectrum Analyzer EUT
Test Procedure:	1. EUT have transmitted the maximum modulation signal and fixed channelize. 2. Setting of SA is following as: VBW: 1MHz RBW: 1MHz / VBW: 1MHz/ Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: RMS / Trace mode: Max hold. EUT have transmitted the maximum modulation signal and fixed channel (For DSSS or OFDM Device).
Test Result:	PASS

6.5.2. Test Data

802.11b

Lowest

Test Condition		Frequency Range (MHz)	Frequency (MHz)	Read Level (dBm)	Compensate for RBW(dB)	Result (dBm)	Result (μW/MHz)	Limit (μW/MHz)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	30-1000	807.94	-63.38	10	-53.38	0.005	2.5	PASS
		1000-2387	2385.60	-39.25	/	-39.25	0.119	2.5	
		2387-2400	2397.44	-30.25	/	-30.25	0.944	25	
		2483.5-2496.5	2484.57	-43.26	/	-43.26	0.047	25	
		2496.5-13000	2497.00	-43.24	/	-43.24	0.047	2.5	
Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW = 10*log10(Reference bandwidth/RBW at measurement) =10[dB], where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz									

Middle

Test Condition		Frequency Range (MHz)	Frequency (MHz)	Read Level (dBm)	Compensate for RBW(dB)	Result (dBm)	Result (μW/MHz)	Limit (μW/MHz)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	30-1000	865.17	-63.90	10	-53.90	0.004	2.5	PASS
		1000-2387	2360.60	-45.45	/	-45.45	0.029	2.5	
		2387-2400	2399.75	-41.80	/	-41.80	0.066	25	
		2483.5-2496.5	2488.39	-42.67	/	-42.67	0.054	25	
		2496.5-13000	2570.00	-42.48	/	-42.48	0.056	2.5	
Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW = 10*log10(Reference bandwidth/RBW at measurement) =10[dB], where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz									

Highest

Test Condition		Frequency Range (MHz)	Frequency (MHz)	Read Level (dBm)	Compensate for RBW(dB)	Result (dBm)	Result (μW/MHz)	Limit (μW/MHz)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	30-1000	734.22	-63.82	10	-53.82	0.004	2.5	PASS
		1000-2387	2387.00	-45.07	/	-45.07	0.031	2.5	
		2387-2400	2399.53	-42.86	/	-42.86	0.052	25	
		2483.5-2496.5	2483.64	-34.18	/	-34.18	0.382	25	
		2496.5-13000	2497.00	-38.95	/	-38.95	0.127	2.5	
Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW = 10*log10(Reference bandwidth/RBW at measurement) =10[dB], where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz									

802.11g

Lowest

Test Condition		Frequency Range (MHz)	Frequency (MHz)	Read Level (dBm)	Compensate for RBW(dB)	Result (dBm)	Result (μW/MHz)	Limit (μW/MHz)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	30-1000	876.81	-63.84	10	-53.84	0.004	2.5	PASS
		1000-2387	2387.00	-27.96	/	-27.96	1.600	2.5	
		2387-2400	2399.79	-18.84	/	-18.84	13.062	25	
		2483.5-2496.5	2495.25	-43.03	/	-43.03	0.050	25	
		2496.5-13000	2612.00	-40.28	/	-40.28	0.094	2.5	

Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW = $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$, where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

Middle

Test Condition		Frequency Range (MHz)	Frequency (MHz)	Read Level (dBm)	Compensate for RBW(dB)	Result (dBm)	Result (μW/MHz)	Limit (μW/MHz)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	30-1000	791.45	-63.15	10	-53.15	0.005	2.5	PASS
		1000-2387	2387.00	-44.24	/	-44.24	0.038	2.5	
		2387-2400	2399.78	-37.73	/	-37.73	0.169	25	
		2483.5-2496.5	2483.86	-37.72	/	-37.72	0.169	25	
		2496.5-13000	2518.00	-42.44	/	-42.44	0.057	2.5	

Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW = $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$, where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

Highest

Test Condition		Frequency Range (MHz)	Frequency (MHz)	Read Level (dBm)	Compensate for RBW(dB)	Result (dBm)	Result (μW/MHz)	Limit (μW/MHz)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	30-1000	870.99	-63.98	10	-53.98	0.004	2.5	PASS
		1000-2387	2387.00	-46.70	/	-46.70	0.021	2.5	
		2387-2400	2399.62	-44.00	/	-44.00	0.040	25	
		2483.5-2496.5	2483.51	-24.37	/	-24.37	3.656	25	
		2496.5-13000	2497.00	-31.82	/	-31.82	0.658	2.5	

Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW = $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$, where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

802.11n(HT20)

Lowest

Test Condition		Frequency Range (MHz)	Frequency (MHz)	Read Level (dBm)	Compensate for RBW(dB)	Result (dBm)	Result (μW/MHz)	Limit (μW/MHz)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	30-1000	881.66	-63.93	10	-53.93	0.004	2.5	PASS
		1000-2387	2387.00	-37.32	/	-37.32	0.185	2.5	
		2387-2400	2398.15	-23.94	/	-23.94	4.036	25	
		2483.5-2496.5	2486.23	-43.76	/	-43.76	0.042	25	
		2496.5-13000	2528.00	-44.42	/	-44.42	0.036	2.5	

Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW = $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$, where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

Middle

Test Condition		Frequency Range (MHz)	Frequency (MHz)	Read Level (dBm)	Compensate for RBW(dB)	Result (dBm)	Result (μW/MHz)	Limit (μW/MHz)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	30-1000	877.78	-62.98	10	-52.98	0.005	2.5	PASS
		1000-2387	2369.00	-45.50	/	-45.50	0.028	2.5	
		2387-2400	2399.73	-41.55	/	-41.55	0.070	25	
		2483.5-2496.5	2485.45	-42.14	/	-42.14	0.061	25	
		2496.5-13000	2497.00	-44.00	/	-44.00	0.040	2.5	

Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW = $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$, where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

Highest

Test Condition		Frequency Range (MHz)	Frequency (MHz)	Read Level (dBm)	Compensate for RBW(dB)	Result (dBm)	Result (μW/MHz)	Limit (μW/MHz)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	30-1000	886.51	-64.09	10	-54.09	0.004	2.5	PASS
		1000-2387	2385.60	-45.29	/	-45.29	0.030	2.5	
		2387-2400	2390.80	-43.08	/	-43.08	0.049	25	
		2483.5-2496.5	2483.67	-26.10	/	-26.10	2.455	25	
		2496.5-13000	2497.00	-35.64	/	-35.64	0.273	2.5	

Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW = $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$, where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

802.11n(HT40)

Lowest

Test Condition		Frequency Range (MHz)	Frequency (MHz)	Read Level (dBm)	Compensate for RBW(dB)	Result (dBm)	Result (μW/MHz)	Limit (μW/MHz)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	30-1000	30.00	-49.06	10	-39.06	0.124	2.5	PASS
		1000-2387	2387.00	-30.78	/	-30.78	0.836	2.5	
		2387-2400	2399.73	-21.38	/	-21.38	7.278	25	
		2483.5-2496.5	2483.79	-38.79	/	-38.79	0.132	25	
		2496.5-13000	2497.00	-42.71	/	-42.71	0.054	2.5	

Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW = $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$, where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

Middle

Test Condition		Frequency Range (MHz)	Frequency (MHz)	Read Level (dBm)	Compensate for RBW(dB)	Result (dBm)	Result (μW/MHz)	Limit (μW/MHz)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	30-1000	30.00	-49.39	10	-39.39	0.115	2.5	PASS
		1000-2387	2384.20	-37.36	/	-37.36	0.184	2.5	
		2387-2400	2399.96	-29.09	/	-29.09	1.233	25	
		2483.5-2496.5	2484.67	-31.80	/	-31.80	0.661	25	
		2496.5-13000	2612.00	-33.69	/	-33.69	0.428	2.5	

Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW = $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$, where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

Highest

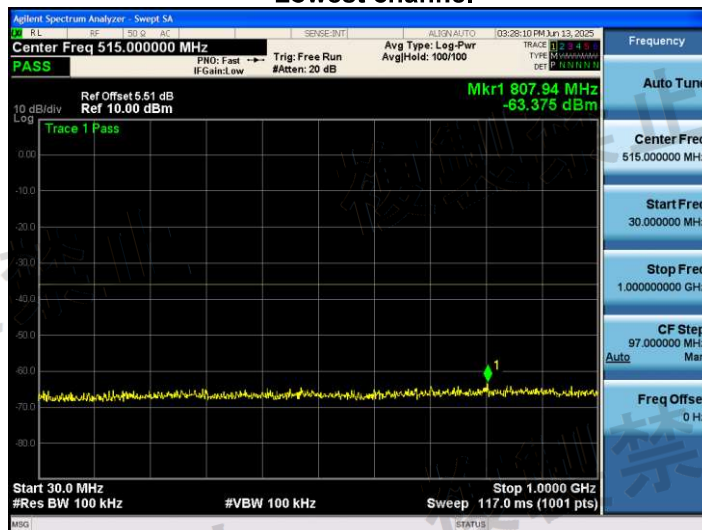
Test Condition		Frequency Range (MHz)	Frequency (MHz)	Read Level (dBm)	Compensate for RBW(dB)	Result (dBm)	Result (μW/MHz)	Limit (μW/MHz)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	30-1000	30.00	-49.96	10	-39.96	0.101	2.5	PASS
		1000-2387	2387.00	-42.36	/	-42.36	0.058	2.5	
		2387-2400	2399.94	-38.13	/	-38.13	0.154	25	
		2483.5-2496.5	2483.59	-20.28	/	-20.28	9.376	25	
		2496.5-13000	2497.00	-33.60	/	-33.60	0.437	2.5	

Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW = $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$, where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

Test plots as follows:

802.11b:

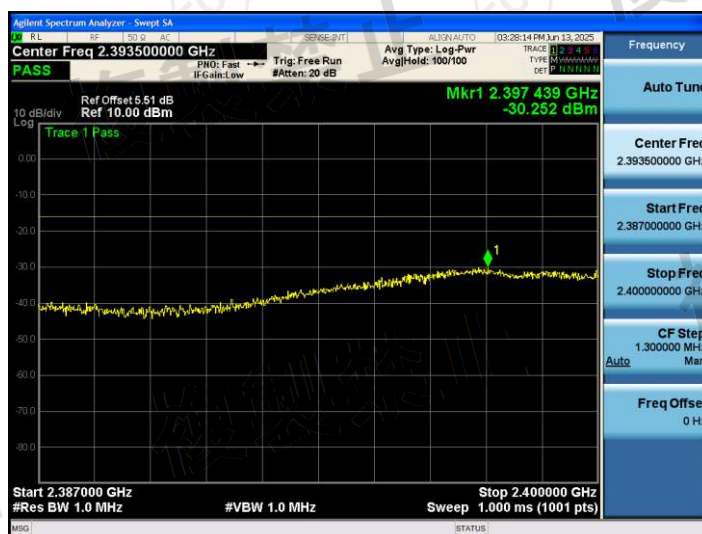
Lowest channel



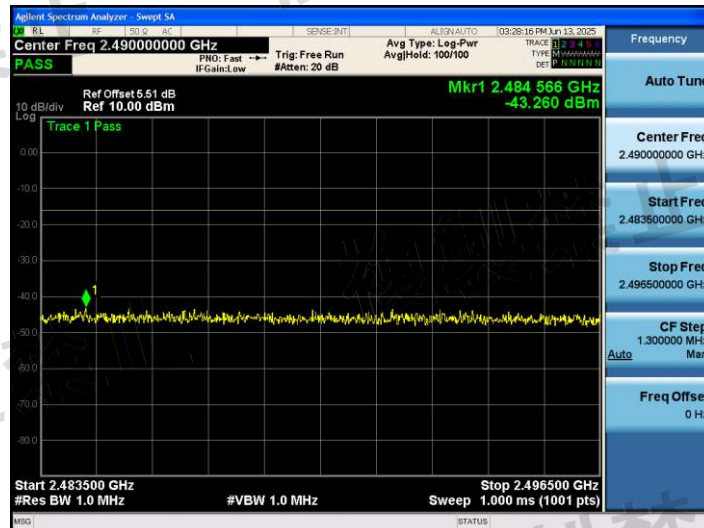
30 MHz – 1000 MHz



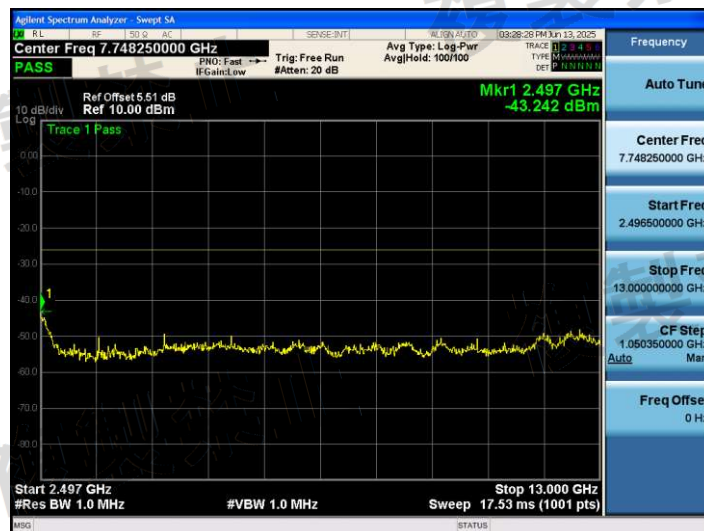
1000 MHz – 2387 MHz



2387 MHz – 2400 MHz

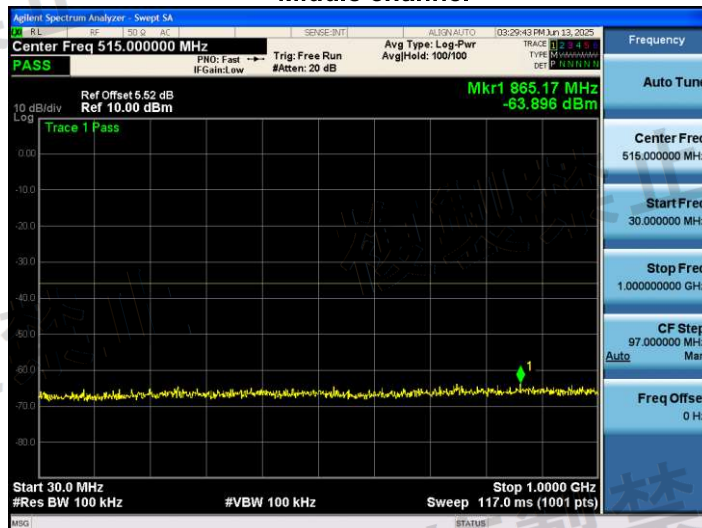


2483.5 MHz – 2496.5 MHz

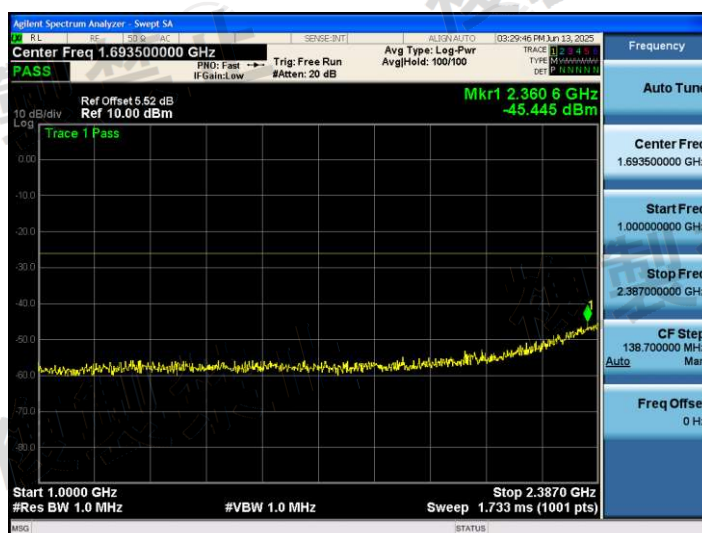


2496.5 MHz – 13000 MHz

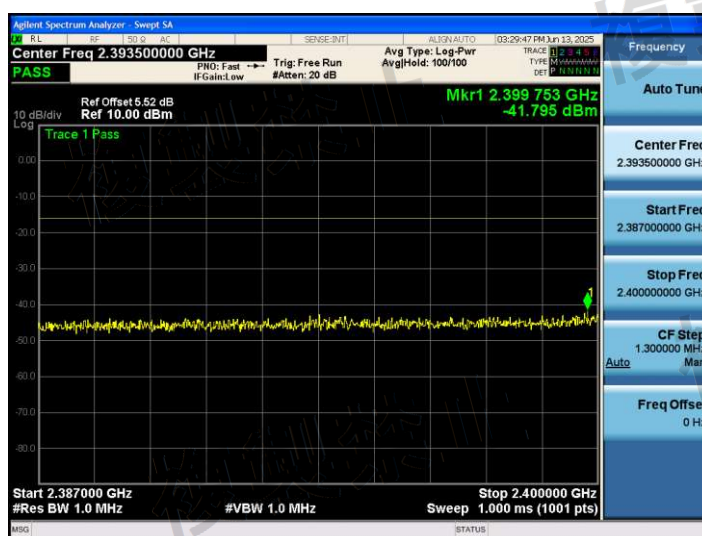
Middle channel



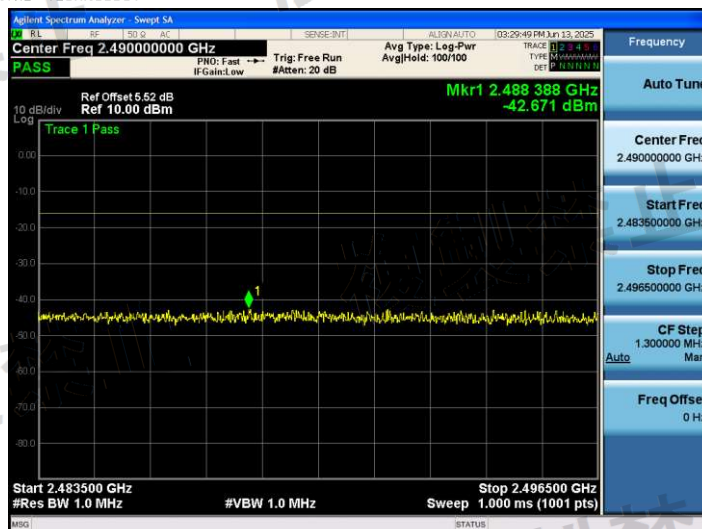
30 MHz – 1000 MHz



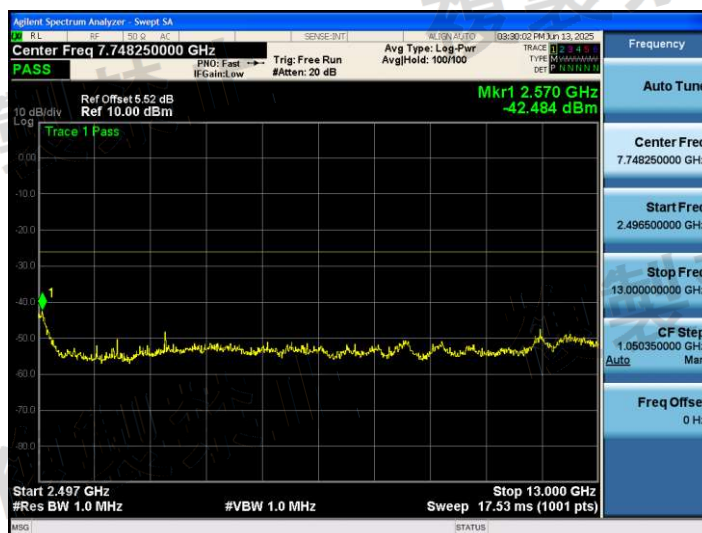
1000 MHz – 2387 MHz



2387 MHz – 2400 MHz

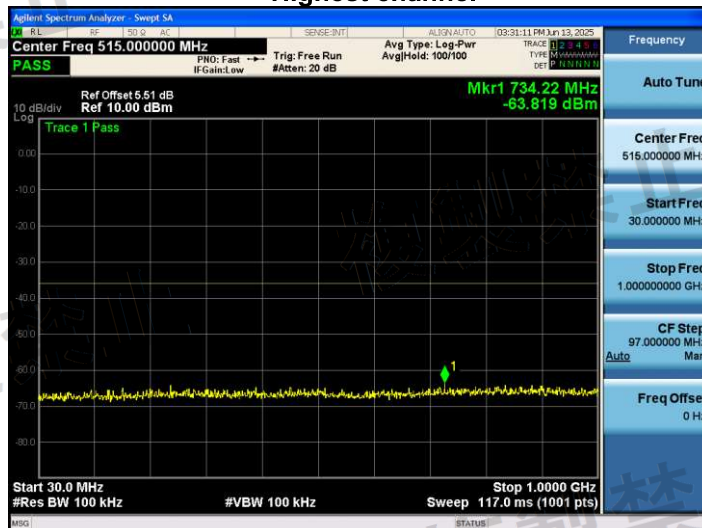


2483.5 MHz – 2496.5 MHz

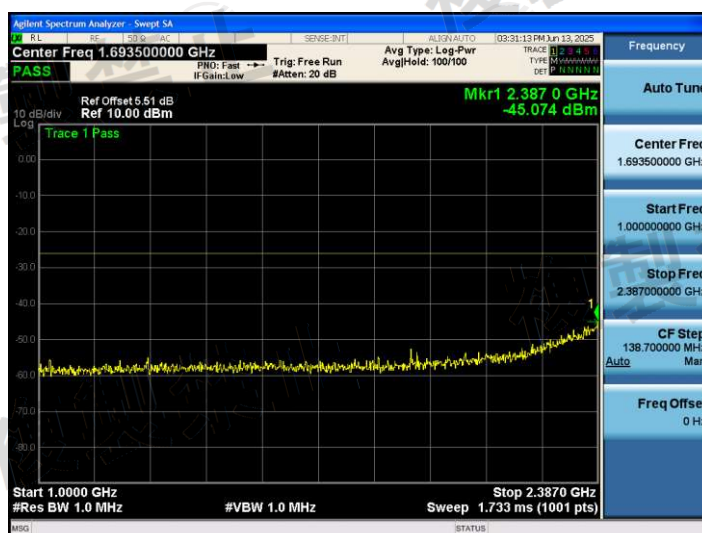


2496.5 MHz – 13000 MHz

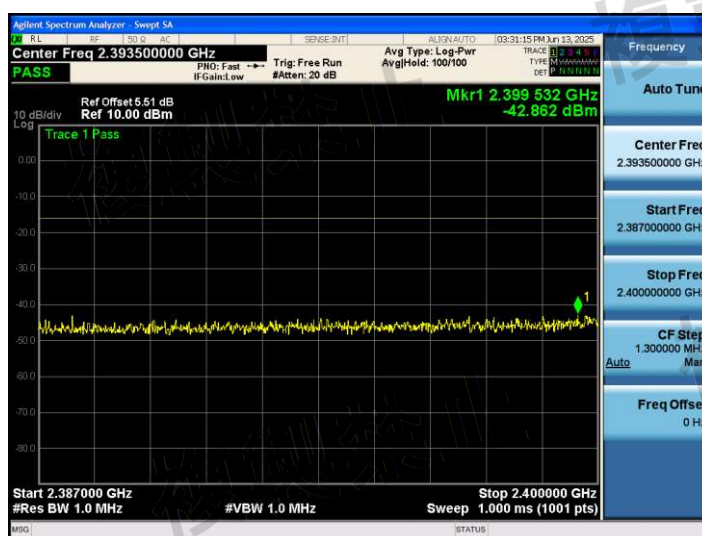
Highest channel



30 MHz – 1000 MHz



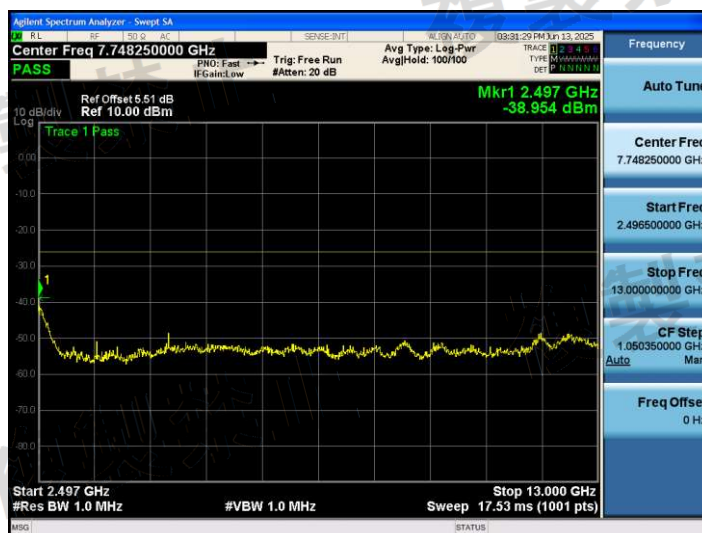
1000 MHz – 2387 MHz



2387 MHz – 2400 MHz

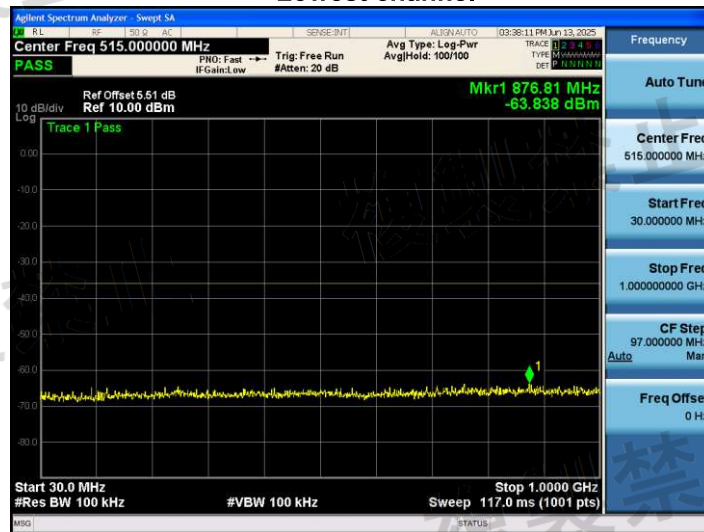


2483.5 MHz – 2496.5 MHz

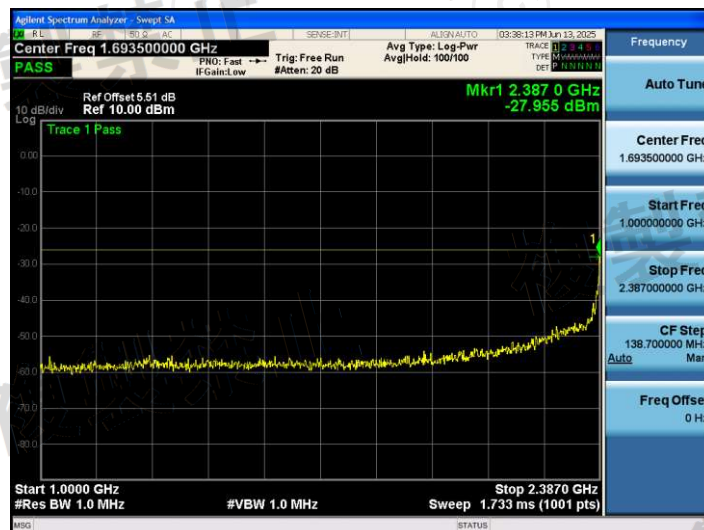


2496.5 MHz – 13000 MHz

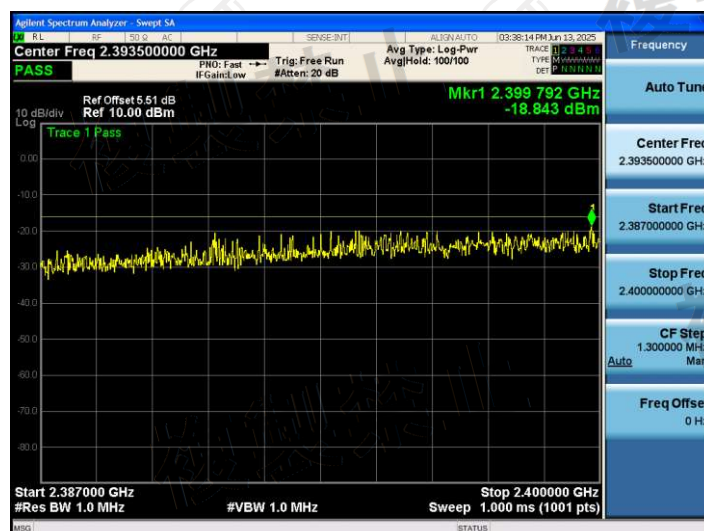
Lowest channel



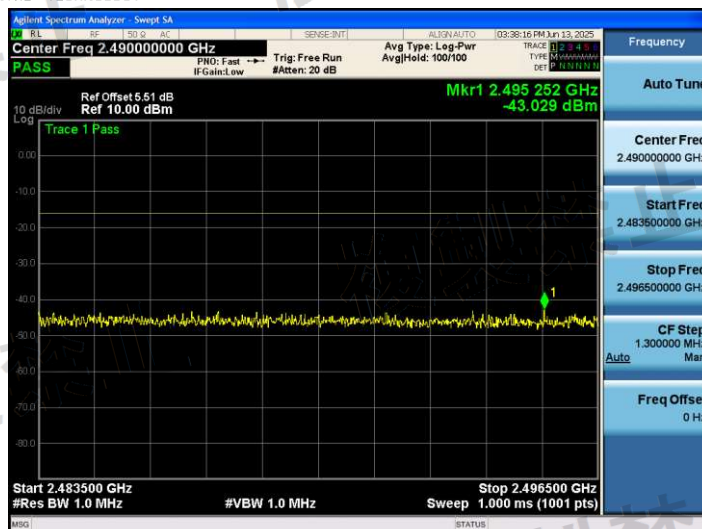
30 MHz – 1000 MHz



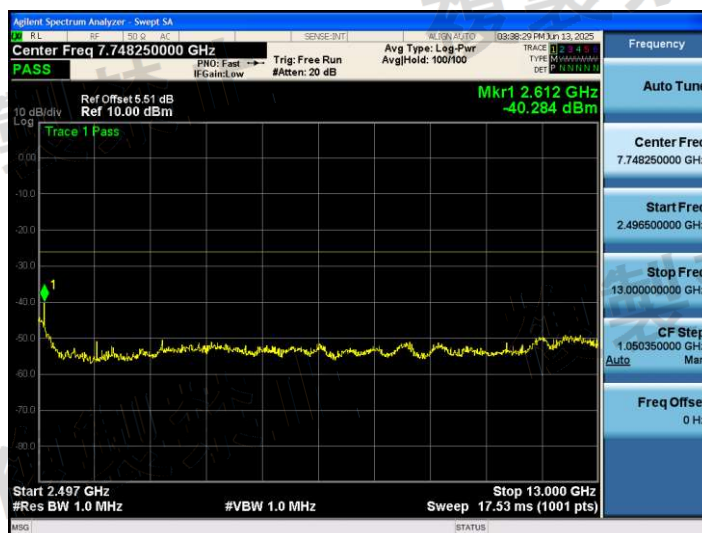
1000 MHz – 2387 MHz



2387 MHz – 2400 MHz

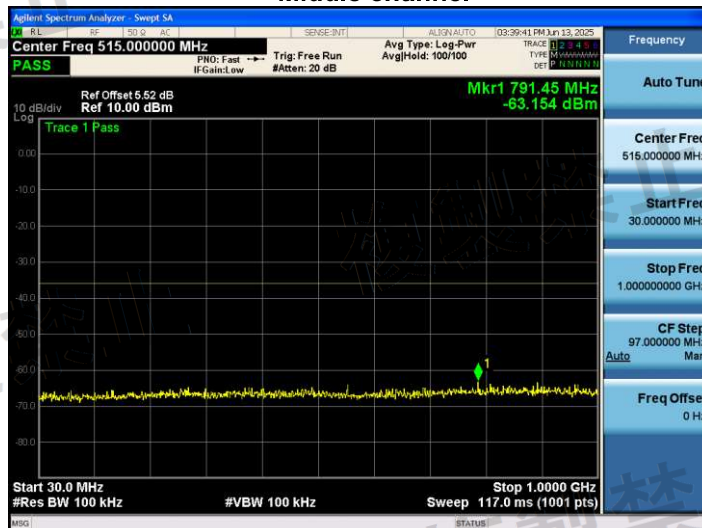


2483.5 MHz – 2496.5 MHz



2496.5 MHz – 13000 MHz

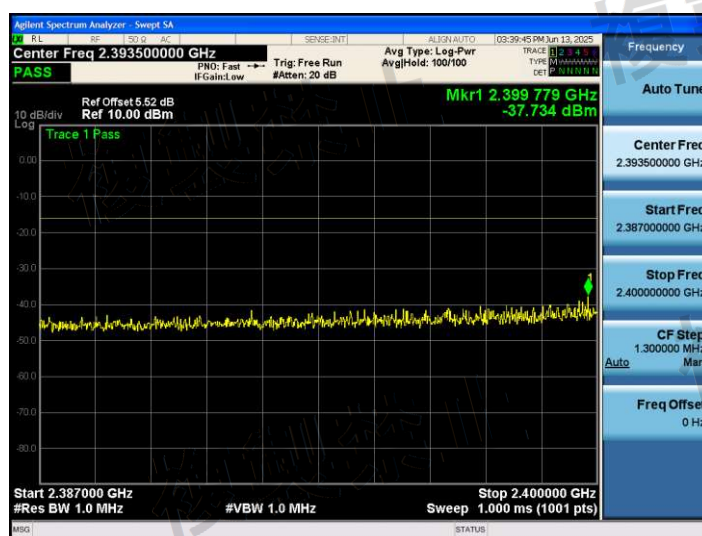
Middle channel



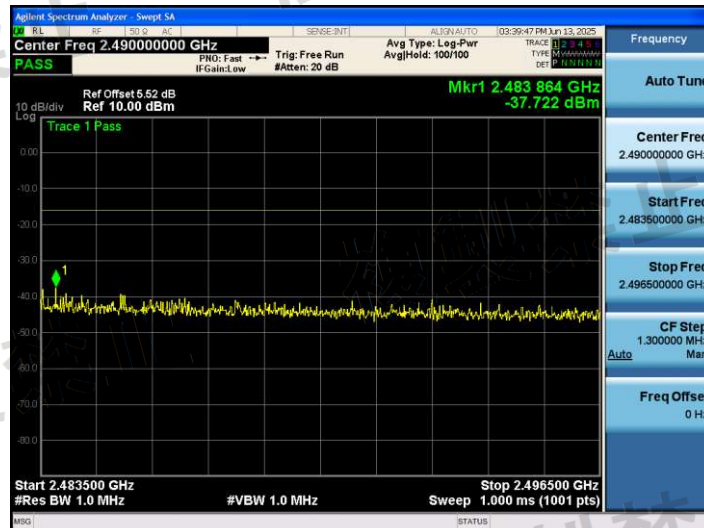
30 MHz – 1000 MHz



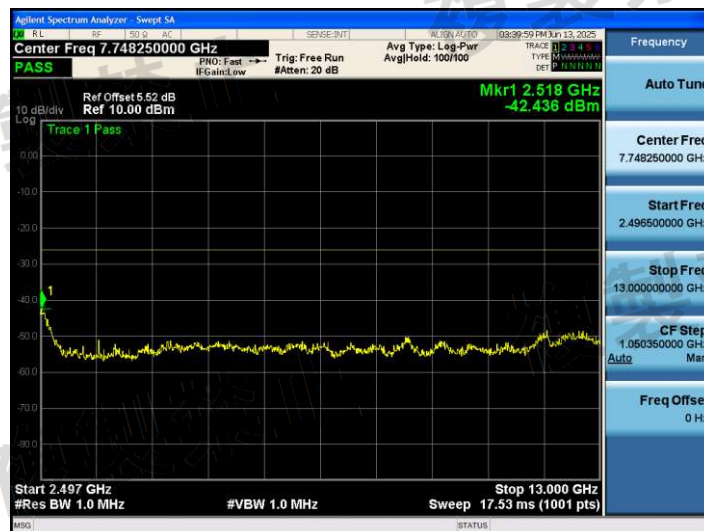
1000 MHz – 2387 MHz



2387 MHz – 2400 MHz

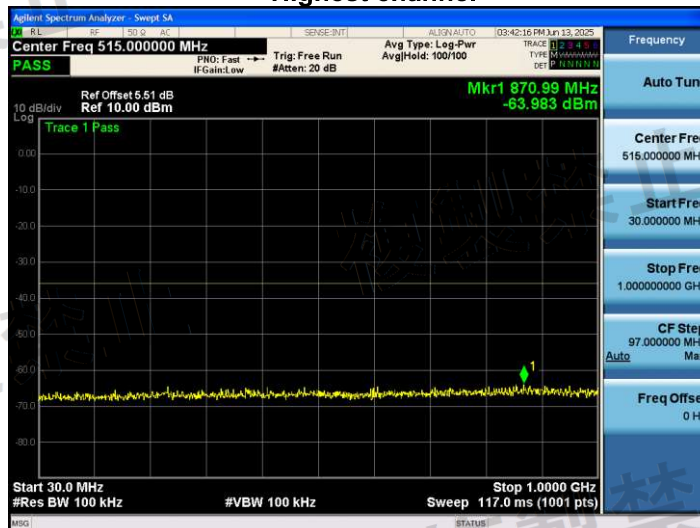


2483.5 MHz – 2496.5 MHz

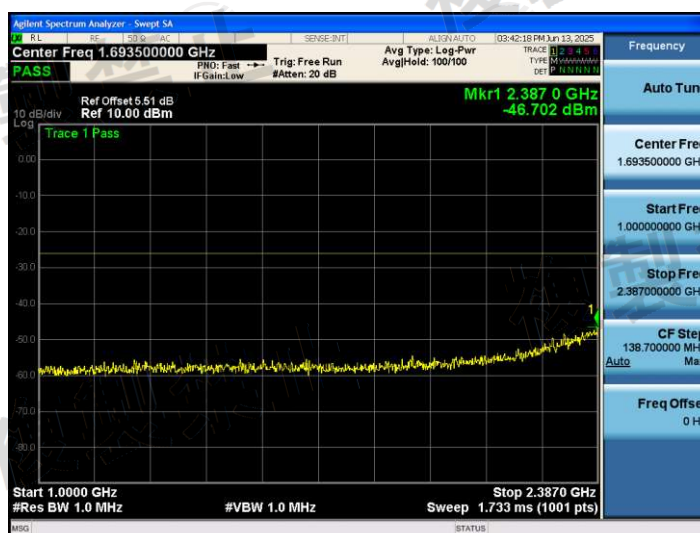


2496.5 MHz – 13000 MHz

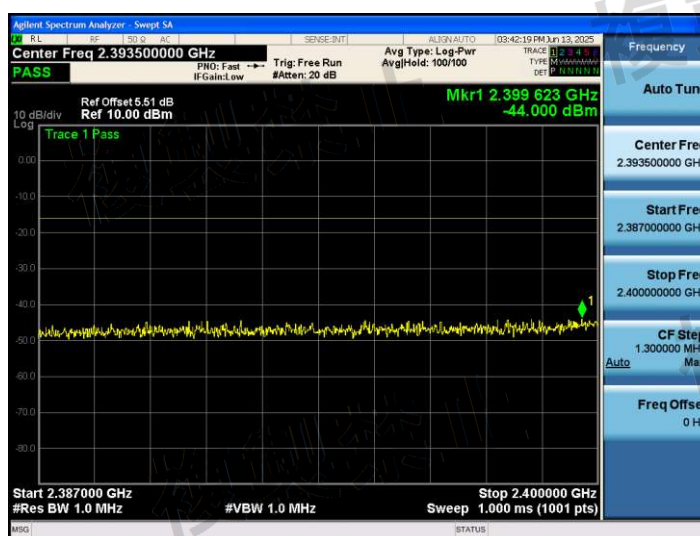
Highest channel



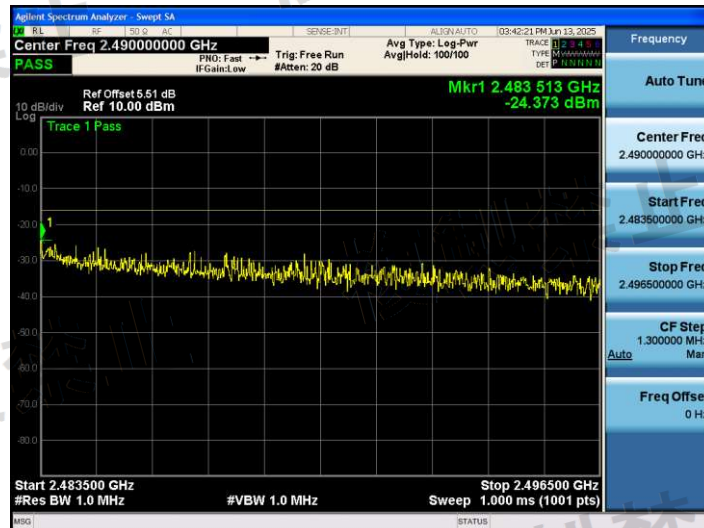
30 MHz – 1000 MHz



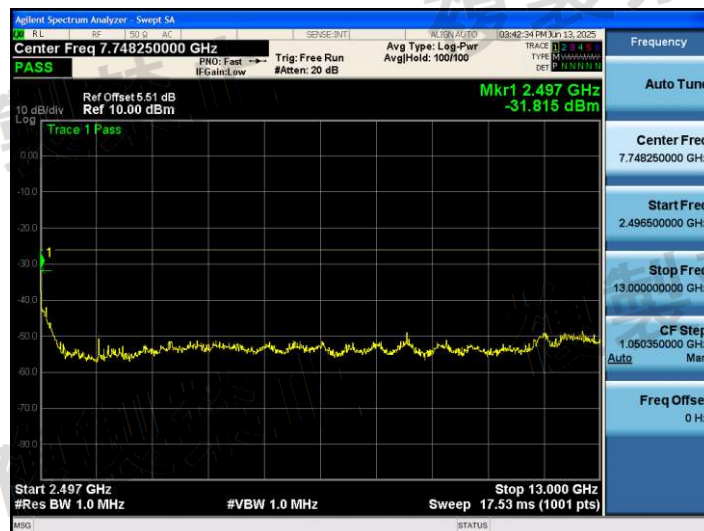
1000 MHz – 2387 MHz



2387 MHz – 2400 MHz



2483.5 MHz – 2496.5 MHz

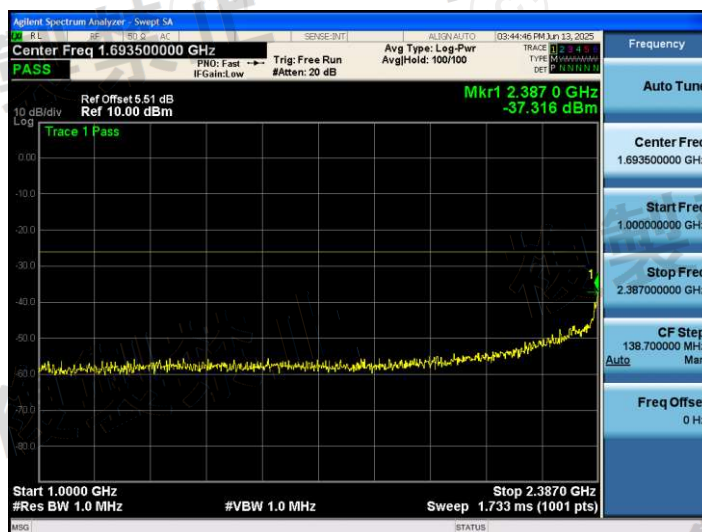


2496.5 MHz – 13000 MHz

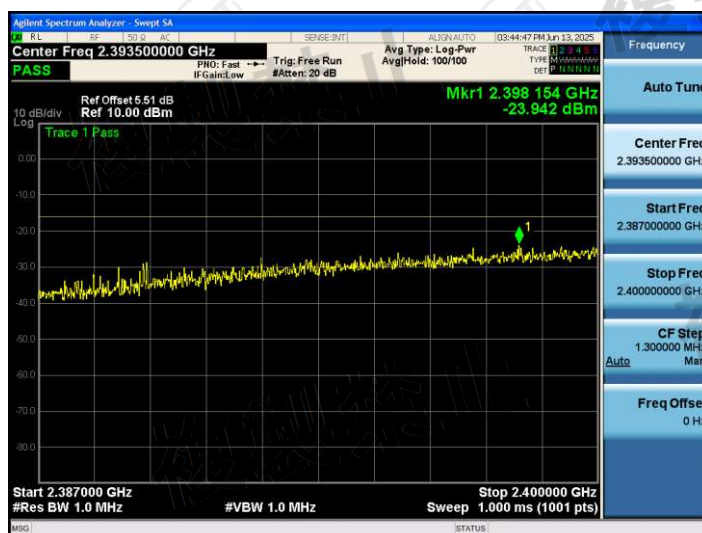
Lowest channel



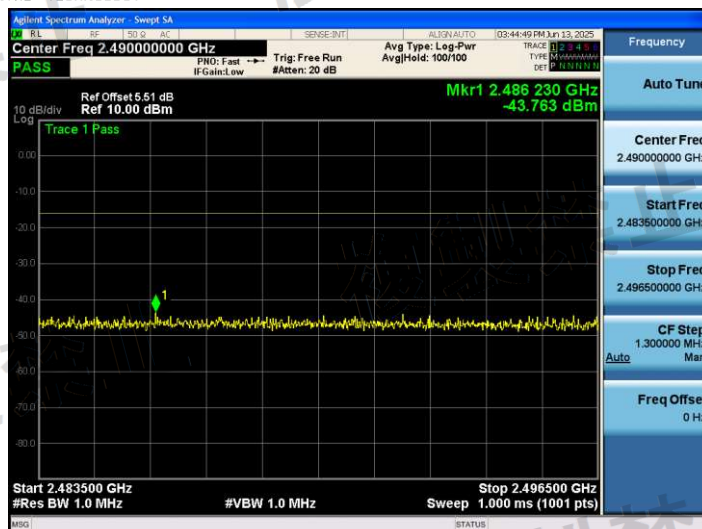
30 MHz – 1000 MHz



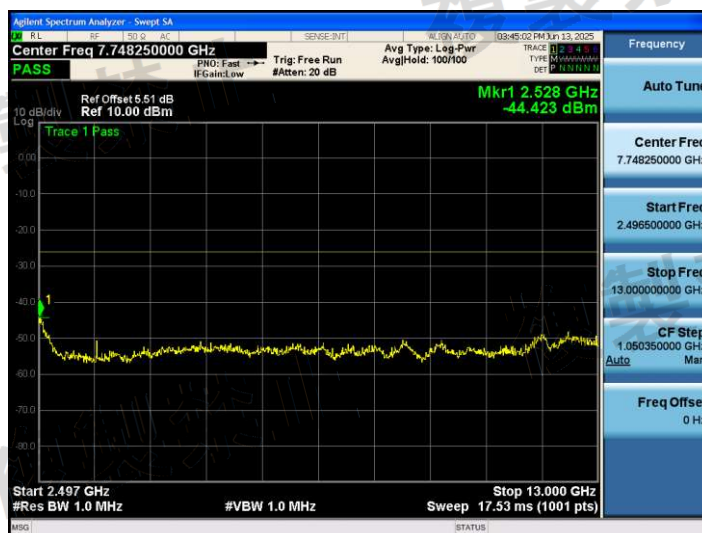
1000 MHz – 2387 MHz



2387 MHz – 2400 MHz

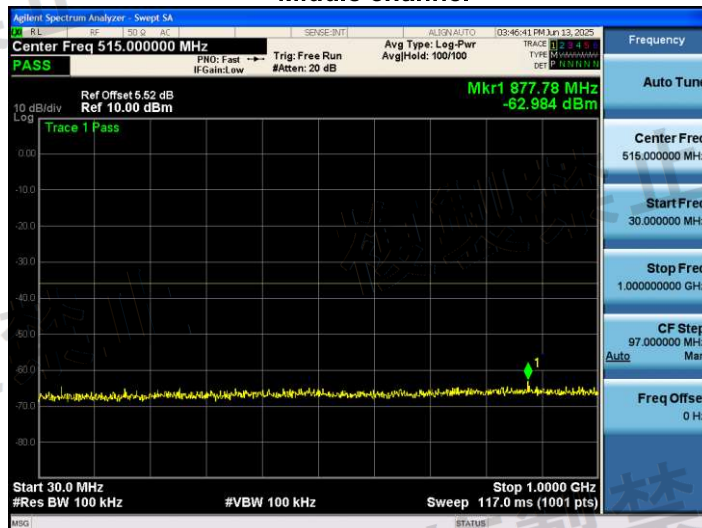


2483.5 MHz – 2496.5 MHz

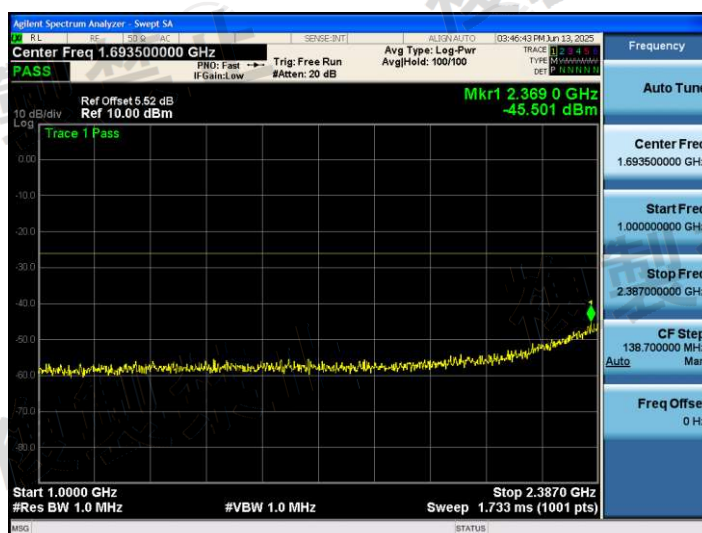


2496.5 MHz – 13000 MHz

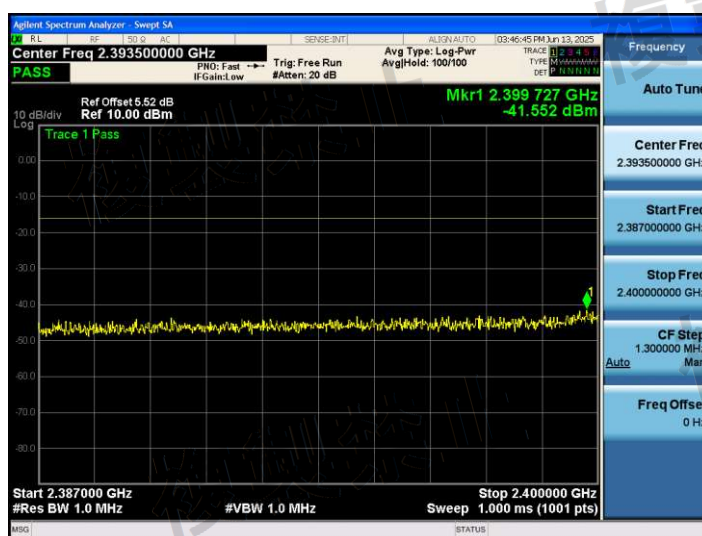
Middle channel



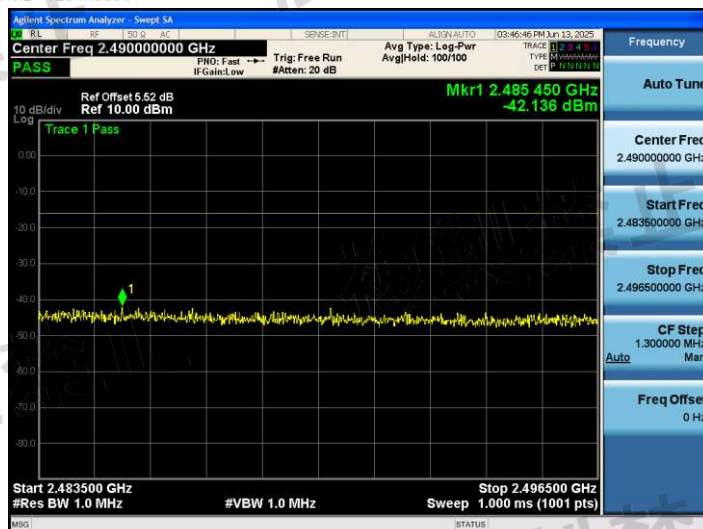
30 MHz – 1000 MHz



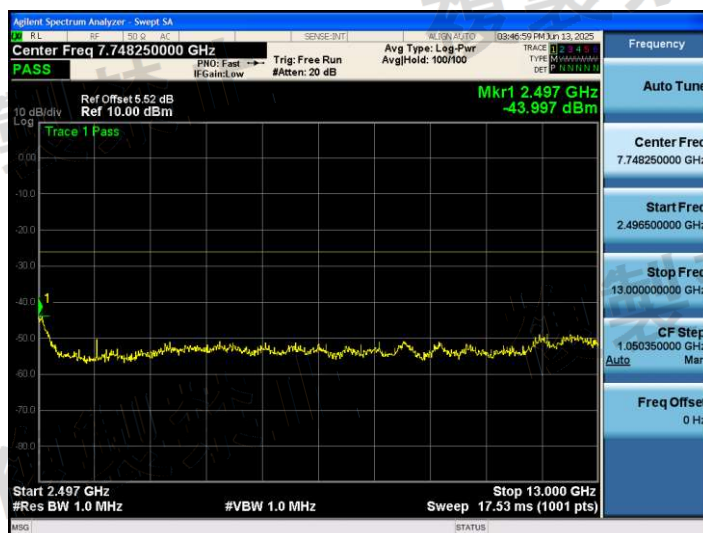
1000 MHz – 2387 MHz



2387 MHz – 2400 MHz

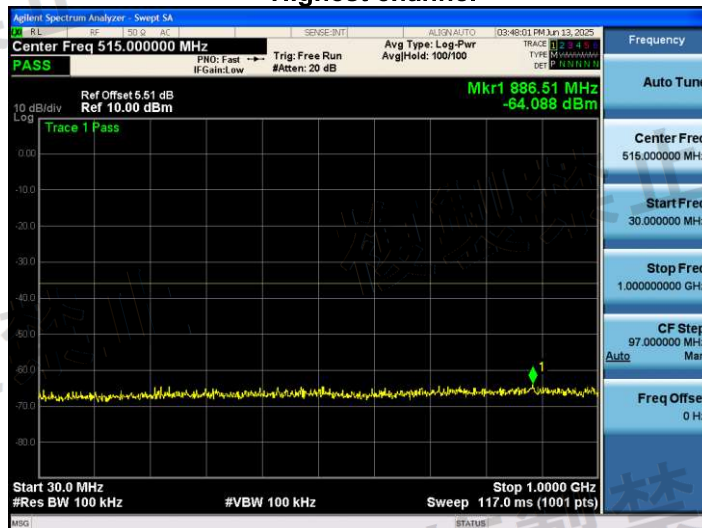


2483.5 MHz – 2496.5 MHz



2496.5 MHz – 13000 MHz

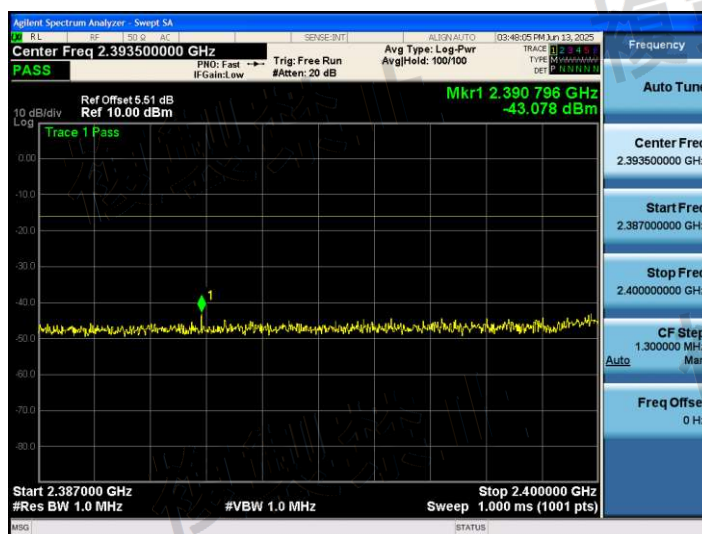
Highest channel



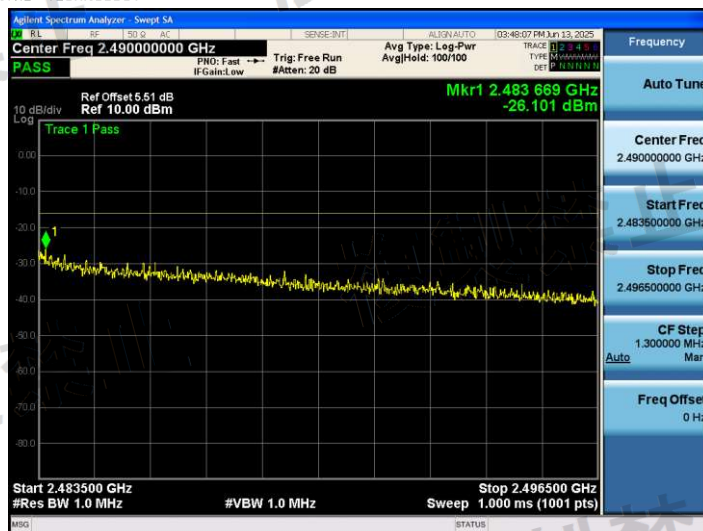
30 MHz – 1000 MHz



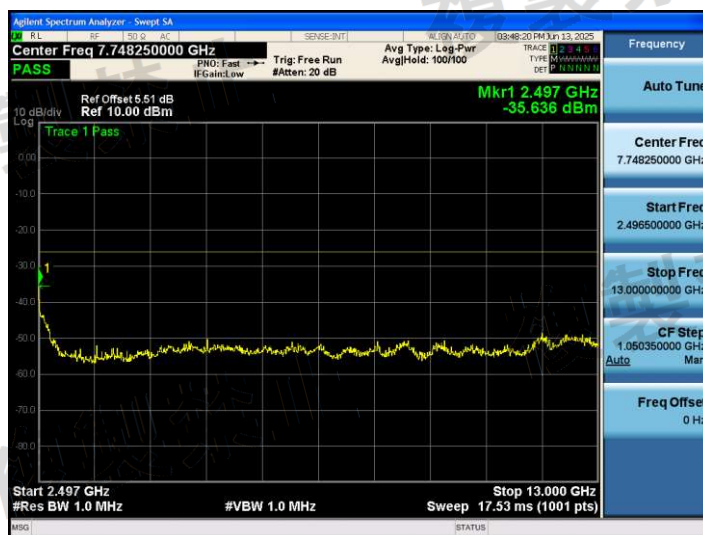
1000 MHz – 2387 MHz



2387 MHz – 2400 MHz



2483.5 MHz – 2496.5 MHz

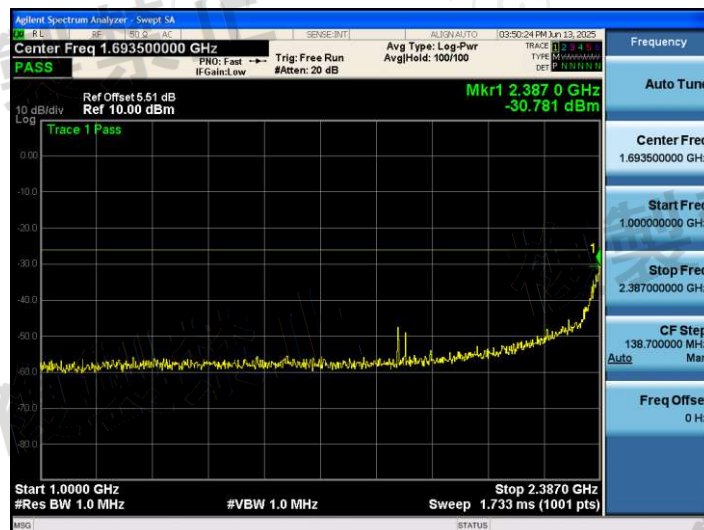


2496.5 MHz – 13000 MHz

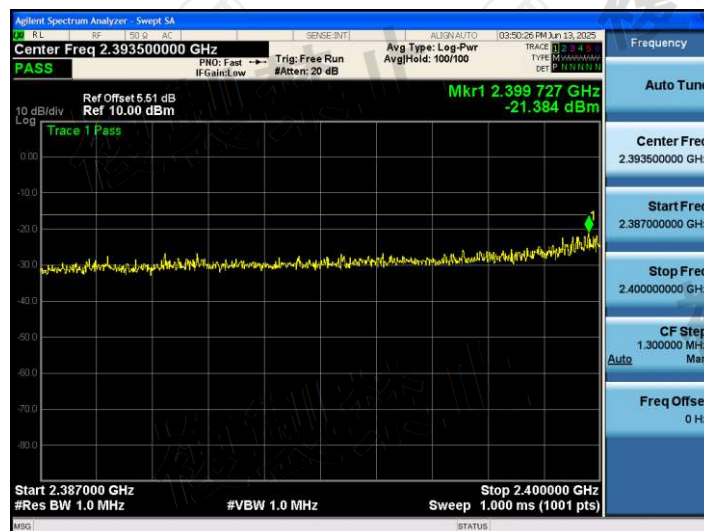
Lowest channel



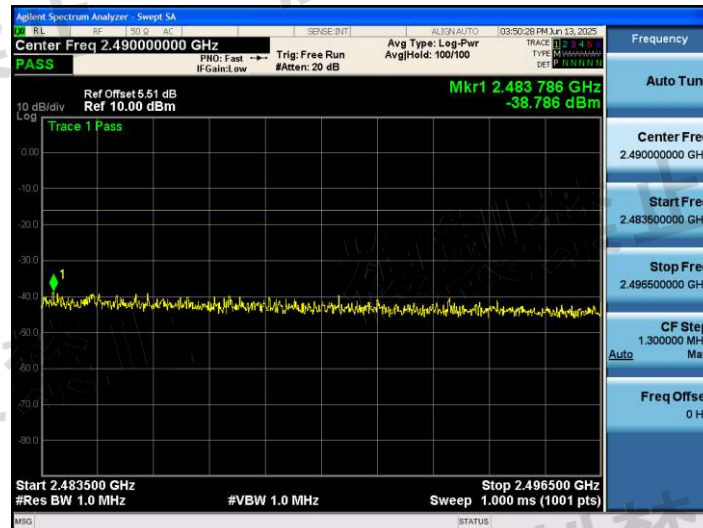
30 MHz – 1000 MHz



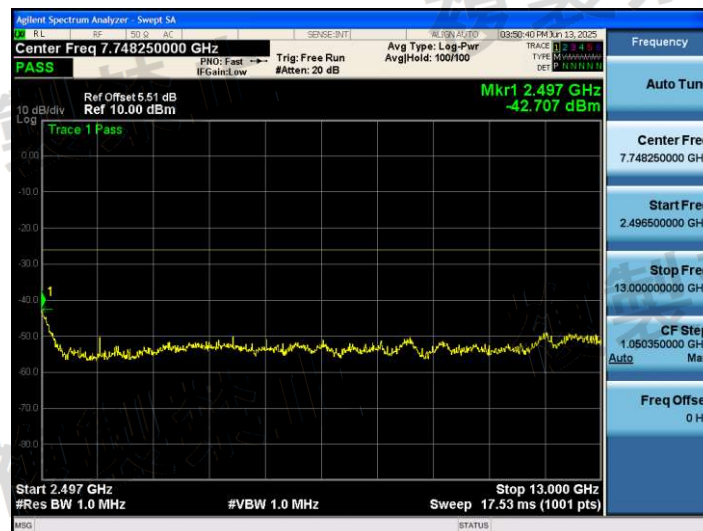
1000 MHz – 2387 MHz



2387 MHz – 2400 MHz

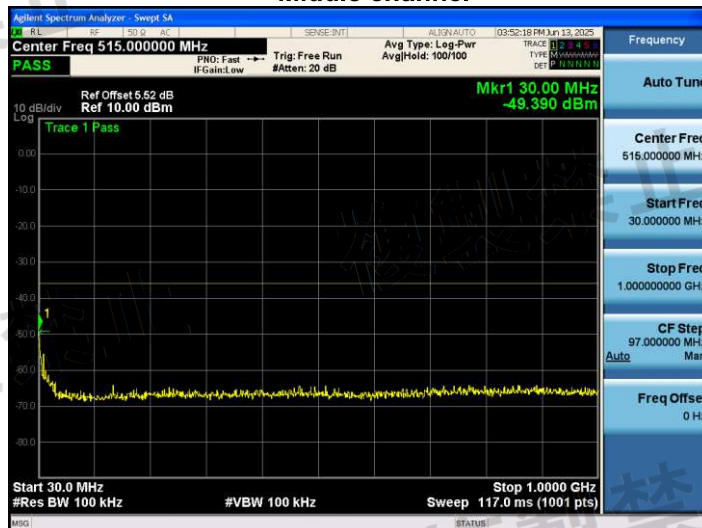


2483.5 MHz – 2496.5 MHz

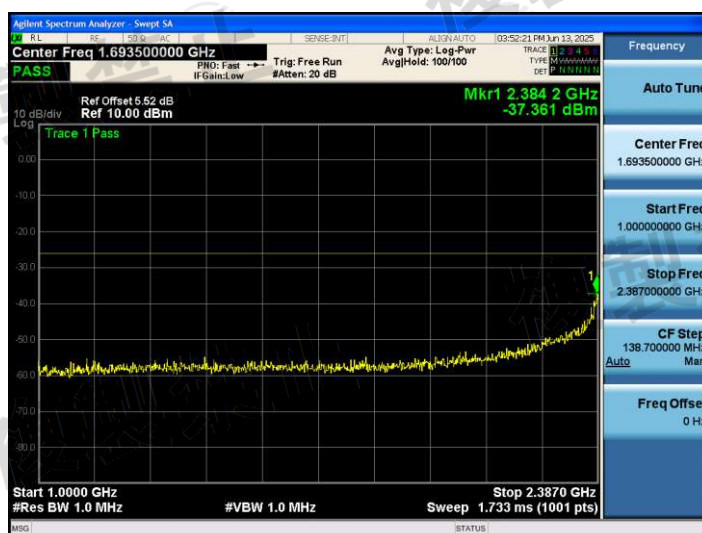


2496.5 MHz – 13000 MHz

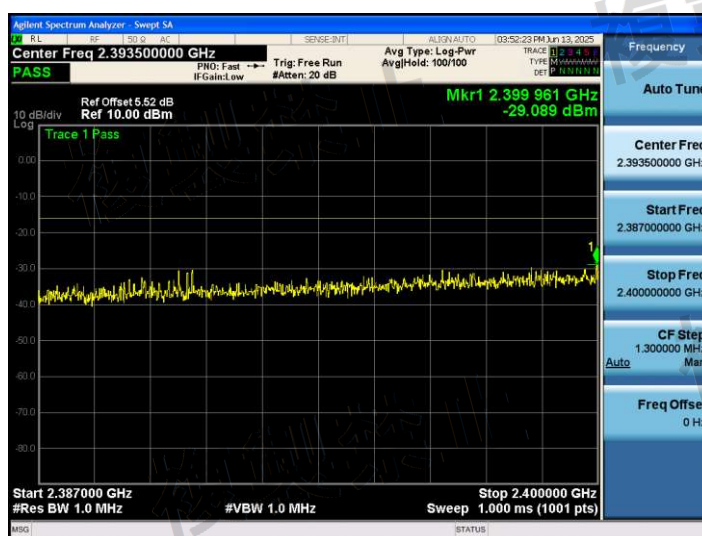
Middle channel



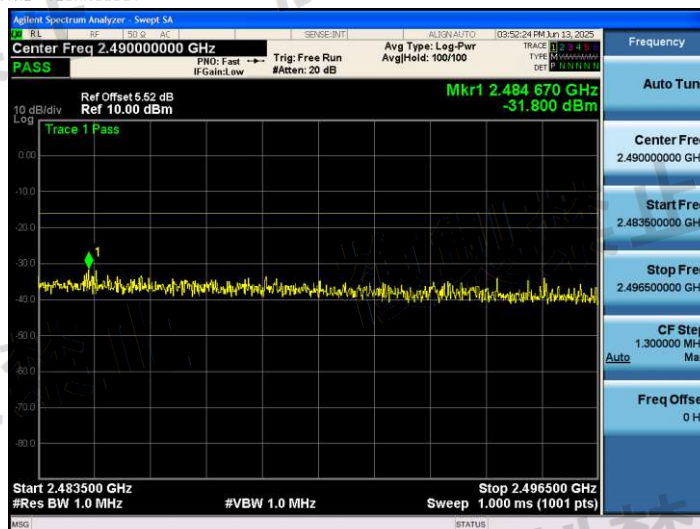
30 MHz – 1000 MHz



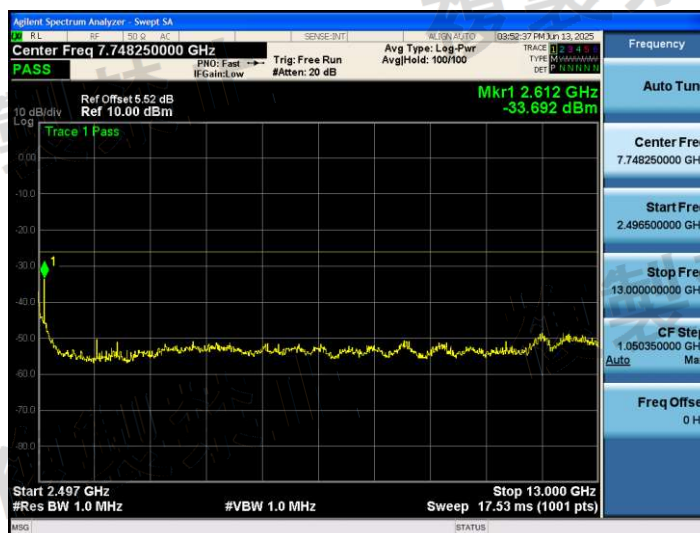
1000 MHz – 2387 MHz



2387 MHz – 2400 MHz

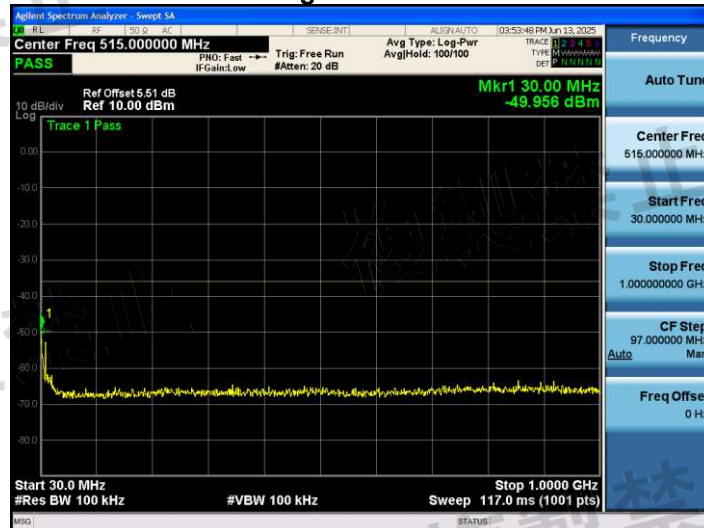


2483.5 MHz – 2496.5 MHz

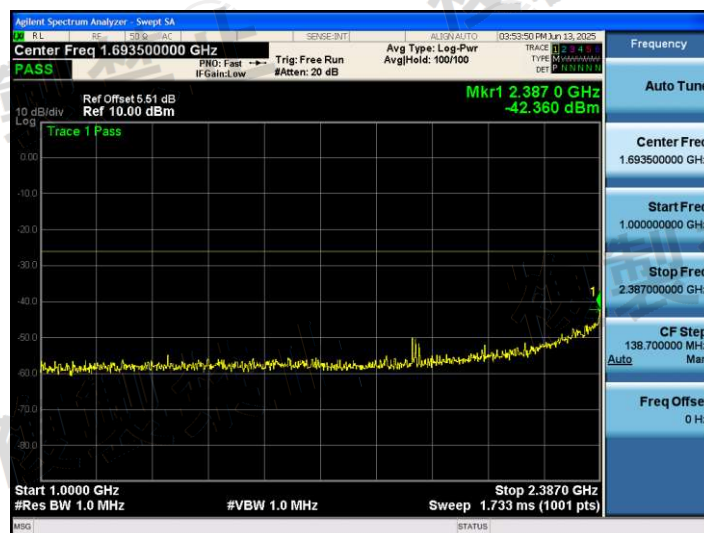


2496.5 MHz – 13000 MHz

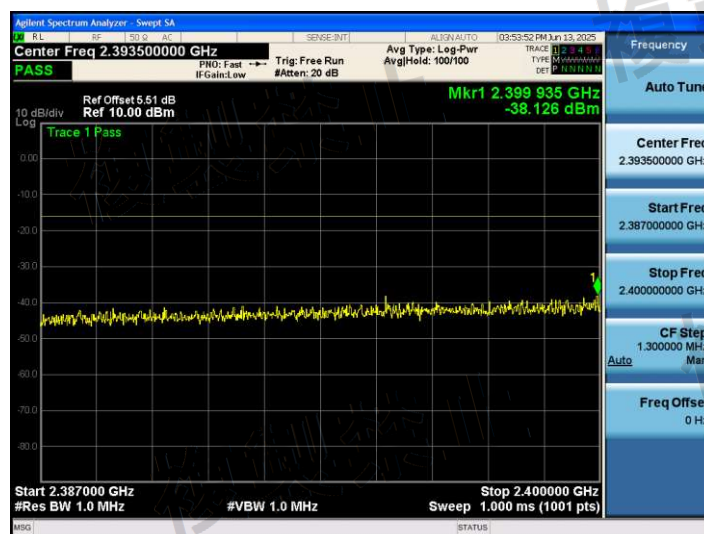
Highest channel



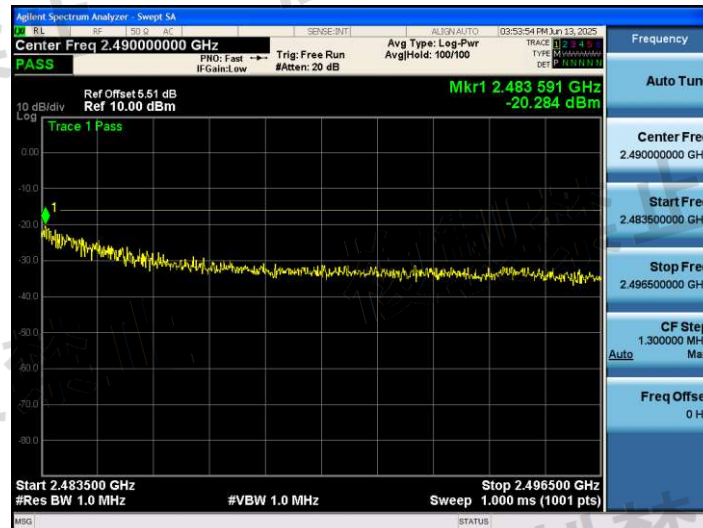
30 MHz – 1000 MHz



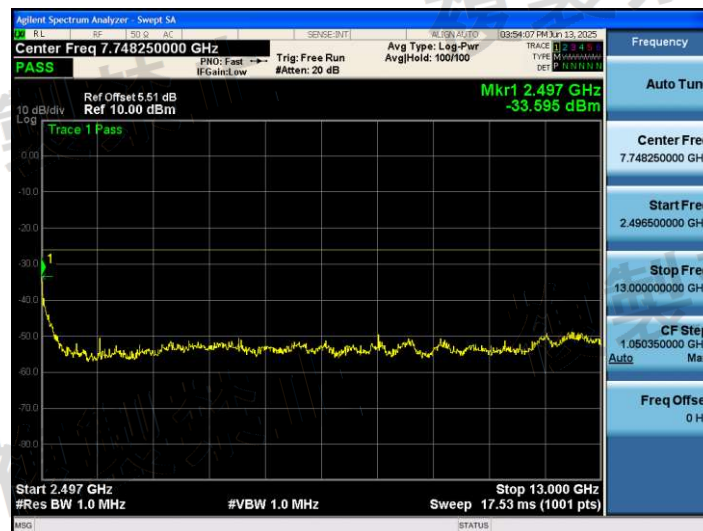
1000 MHz – 2387 MHz



2387 MHz – 2400 MHz



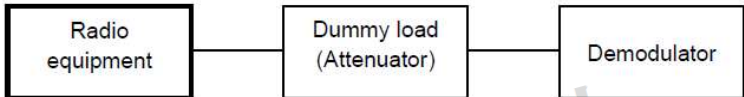
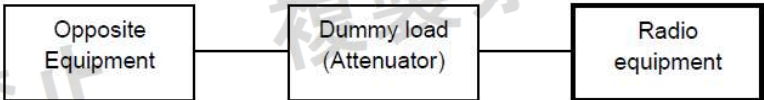
2483.5 MHz – 2496.5 MHz



2496.5 MHz – 13000 MHz

6.6. Interference suppression function

6.6.1. Test Specification

Test Requirement:	Article 2 paragraph 1 item 19
Test Method:	Appendix No.43 Notification No.88 of MIC, 2004 section 10
Operation Mode:	Usual operation condition.
Test setup:	(1) Transmission of identification code  <pre> graph LR A[Radio equipment] --- B[Dummy load (Attenuator)] B --- C[Demodulator] </pre> (2) Reception of identification code  <pre> graph LR A[Opposite Equipment] --- B[Dummy load (Attenuator)] B --- C[Radio equipment] </pre>
Test Procedure:	- The radio equipment with automatic transmitting function of identification code - Transmit the assigned identification code from the radio equipment. - Confirm the identification code received by the demodulator. - The radio equipment with automatic receiving function of identification code - Transmit the assigned identification code from the opposite equipment. - Confirm that the usual communication is available. - Transmit the identification code distinct from the assigned one from the opposite equipment. - Confirm that the radio equipment is stopped or an indication is displayed as the identification code is different.
Test results:	GOOD, The device has the function of automatic transmission and reception of identification sign. The MAC address is 58:20:59:be:42:69.

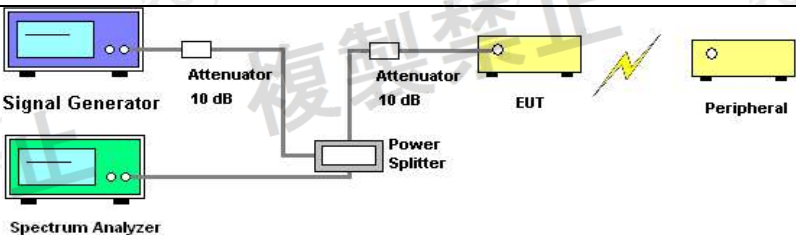
6.7. Number of Carrier

6.7.1. Test Specification

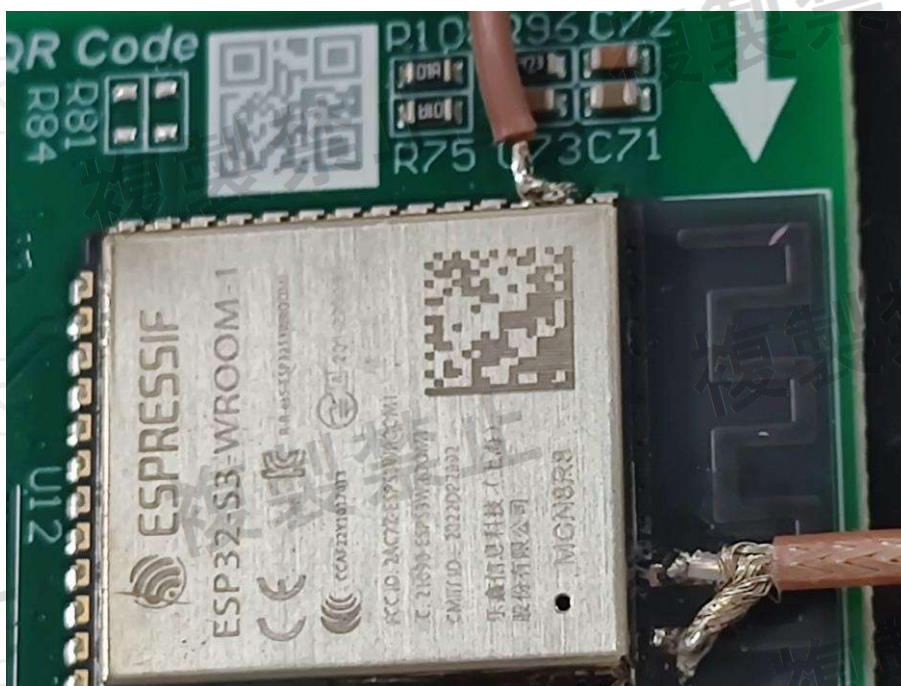
Test Requirement:	Article 2 paragraph 1 item 19
Test Method:	Appendix No.43 Notification No.88 of MIC, 2004 section 11
Limit:	1 or more / MHz
Test Setup:	 Spectrum Analyzer EUT
Test Procedure:	Setting of SA is following as: RBW:1 MHz / VBW: 3 MHz / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
Test Result:	This device has more than 1 subcarrier in 1MHz, compliances with the requirement.

6.8. Carrier sensing function

6.8.1. Test Specification

Test Requirement:	Article 2 paragraph 1 item 19
Limit	Good – EUT stop RF transmission signal after carrier inject to EUT. (On $22.79 + Gr - 20 \cdot \log(f)$ [dBm] (Gr: dBi; f: MHz) or 100mV/m)
Operation Mode:	The EUT was programmed to be in normal transmitting mode.
Test setup:	 Signal Generator, Attenuator 10 dB, Power Splitter, Attenuator 10 dB, EUT, Peripheral, Spectrum Analyzer
Test Procedure:	- SSG adjusted the frequency as same as the EUT transmitted signal and emitted the absence of modulation from SSG and power level is (On $22.79 + Gr - 20 \cdot \log(f)$ [dBm] (Gr: dBi; f: MHz). Then turn off the function RF signal of SSG. - EUT have transmitted the maximum modulation signal and fixed channelize. - Setting of SA is following as: RB:1MHz / VB:1MHz / SPAN: 50MHz / AT: 10dB / Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak. - SSG RF Signal On. - EUT shall be stop the transmitted any signal and SSG RF Signal Off. Then EUT will be continuous transmitted signal.
Test results:	GOOD. The test mode is 802.11n(HT40), EUT stop RF transmission signal after carrier inject to EUT.

7. Photographs of Test Configuration



8. Photographs of EUT

Refer to the test report No. TCT250212E001

*****END OF REPORT*****