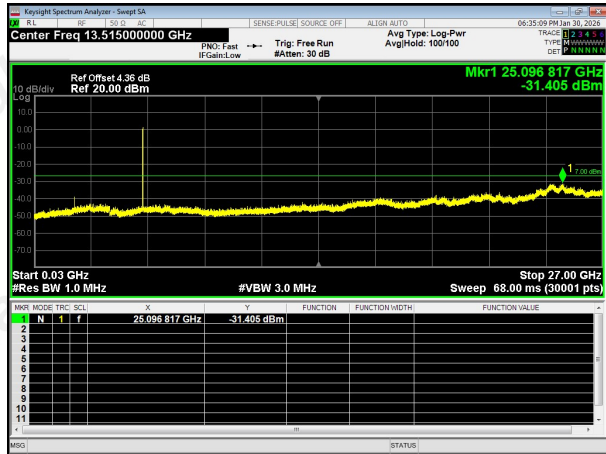
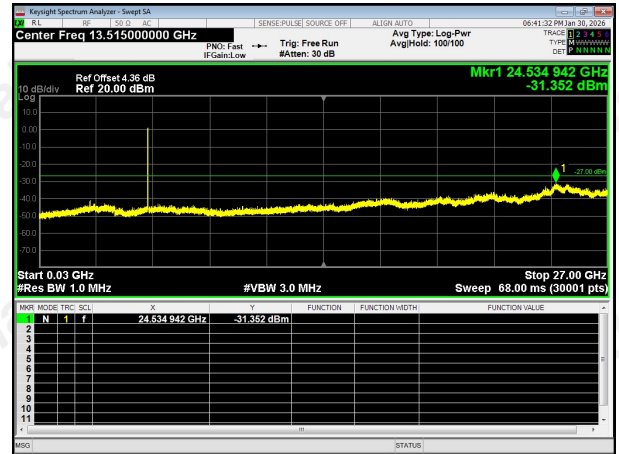


Test Plot

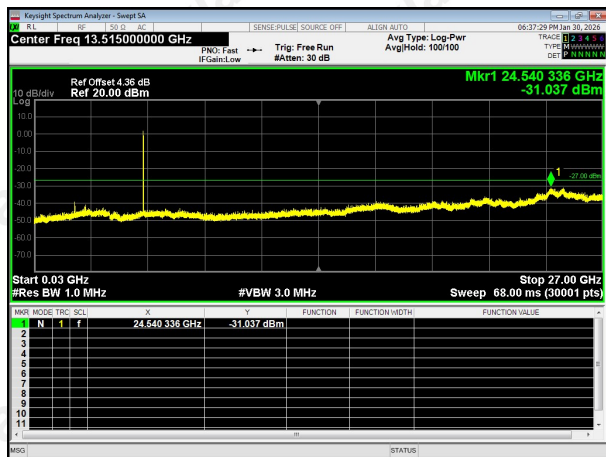
802.11a on channel 36



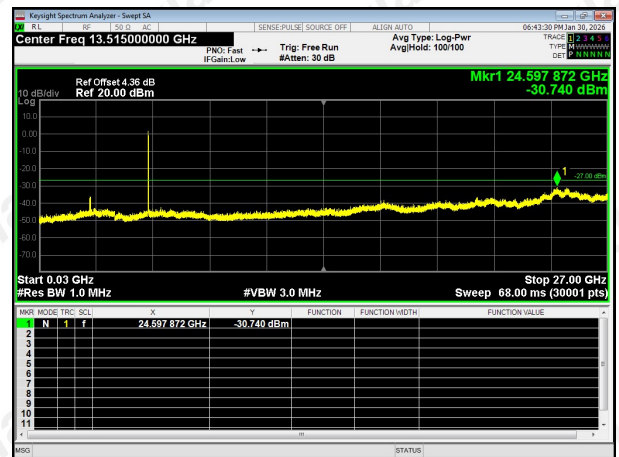
802.11n20 on channel 36



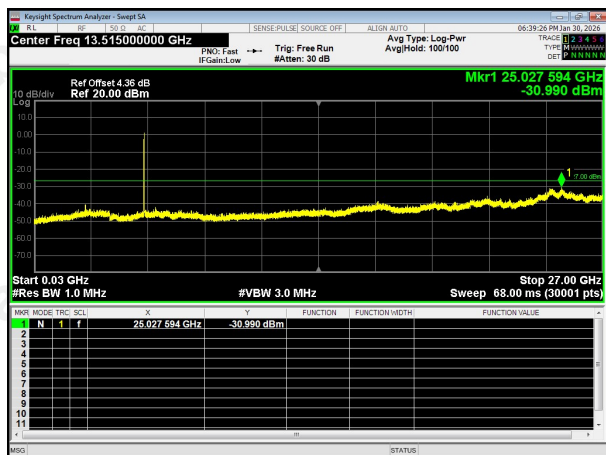
802.11a on channel 40



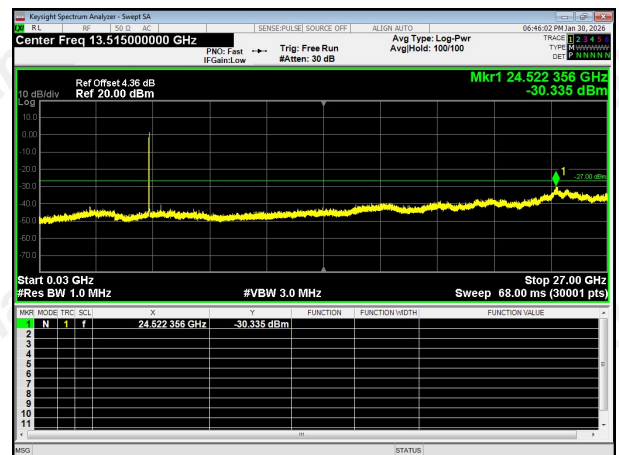
802.11n20 on channel 40



802.11a on channel 48

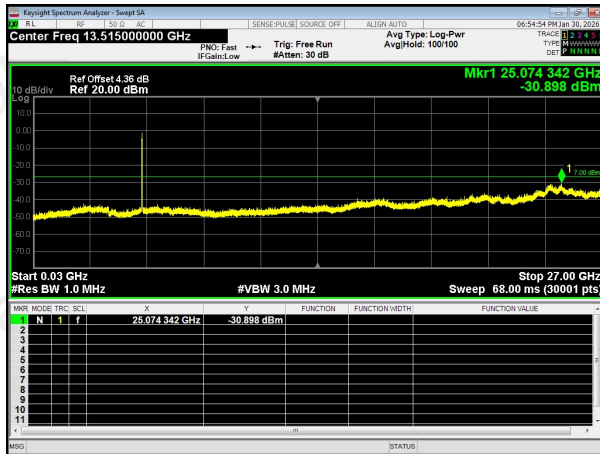


802.11n20 on channel 48

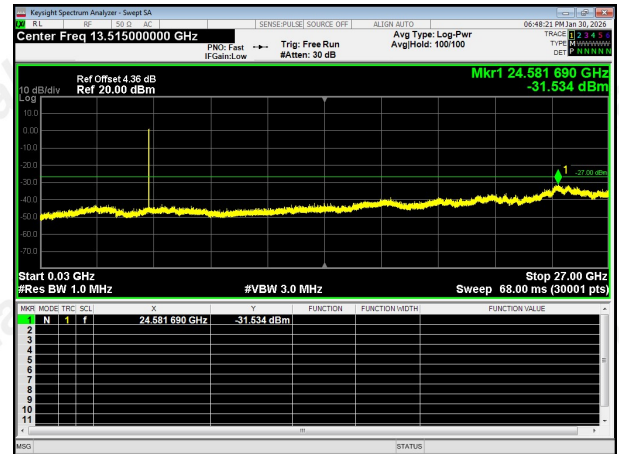


Test Plot

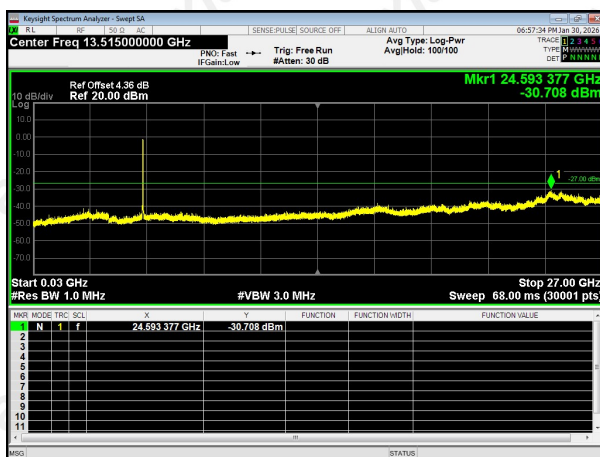
802.11n40 on channel 38



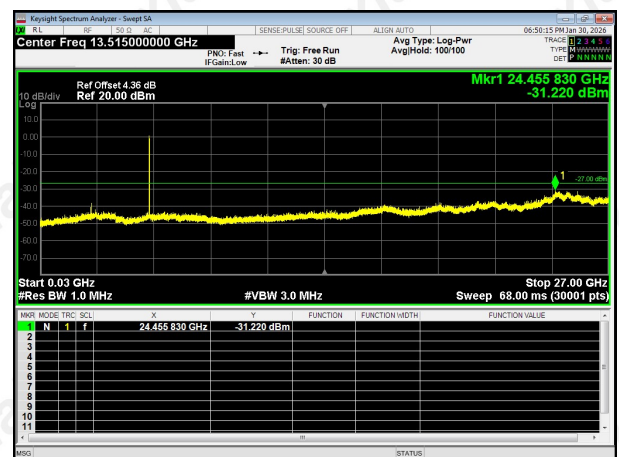
802.11ac20 on channel 36



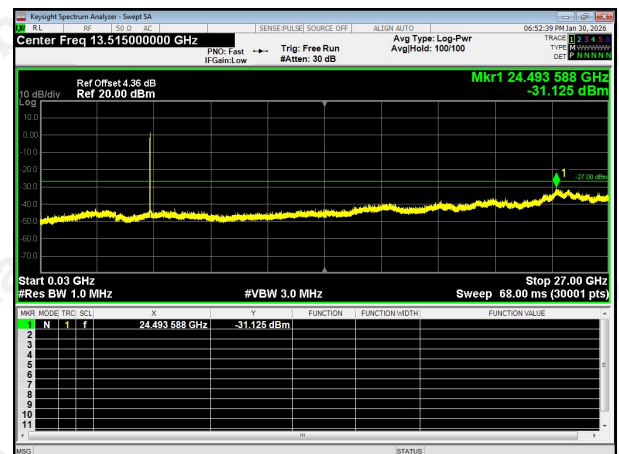
802.11n40 on channel 46



802.11ac20 on channel 40

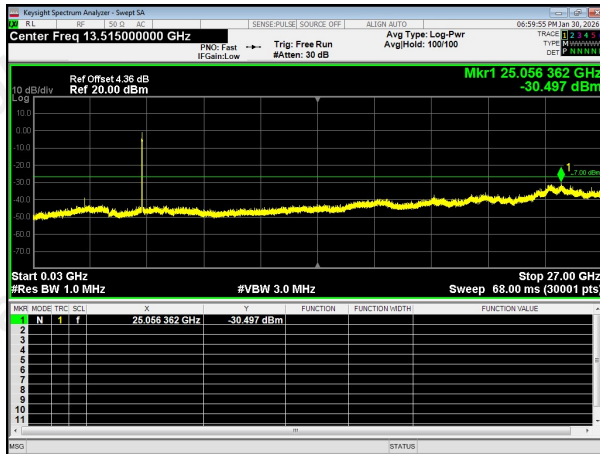


802.11ac20 on channel 48

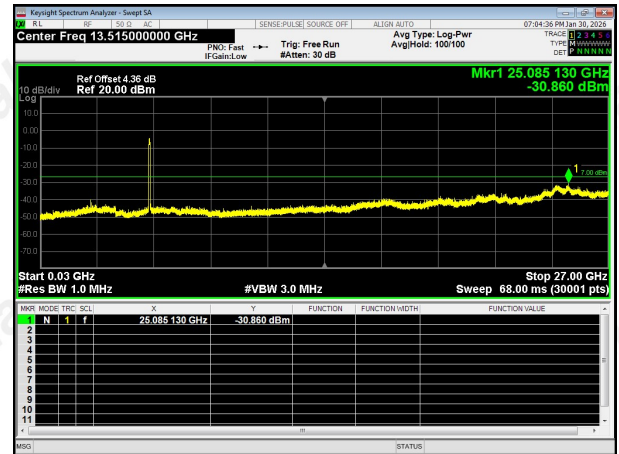


Test Plot

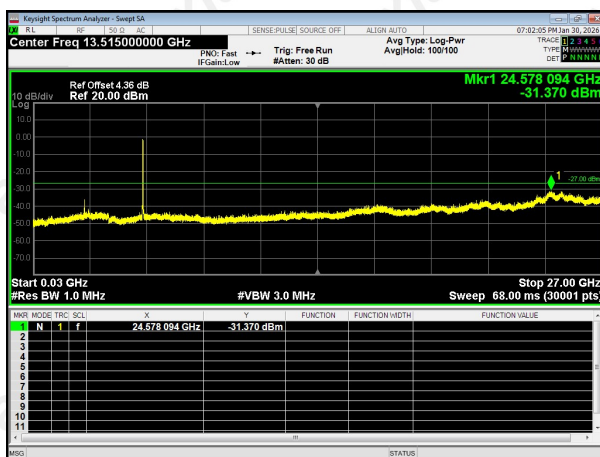
802.11ac40 on channel 38



802.11ac80 on channel 42



802.11ac40 on channel 46

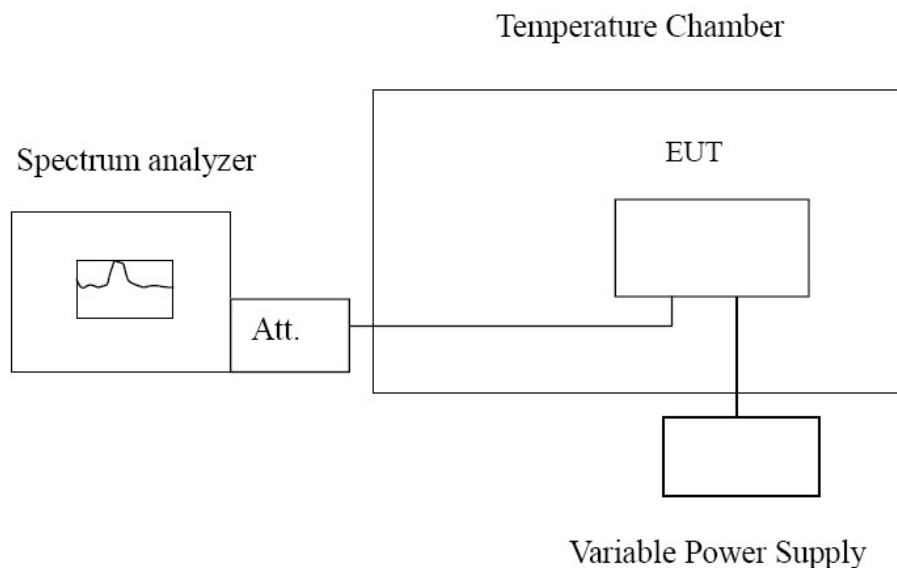


4.9 Frequency Stability

Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

TEST CONFIGURATION



TEST PROCEDURE

Frequency Stability under Temperature Variations:

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Frequency Stability under Voltage Variations:

Set chamber temperature to 25°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

Reference Frequency: 802.11ac channel=36 frequency=5180MHz					
Voltage (V)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
120	-30	51.22	0.010	Within the band of operation	Pass
	-20	101.48	0.020		
	-10	82.76	0.016		
	0	70.14	0.014		
	10	69.82	0.013		
	20	73.96	0.014		
	30	64.83	0.013		
	40	71.22	0.014		
	50	64.58	0.012		
132	25	84.02	0.016	Within the band of operation	Pass
108	25	72.56	0.014		

4.10 Antenna Requirement

Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited

Test Result:

The maximum gain of antenna is 5.28 dBi.

Remark: The antenna gain is provided by the customer, if the data provided by the customer is not accurate, MAXLAB Testing Co.,Ltd. does not assume any responsibility.

5 Test Setup Photos of the EUT

Reference to the appendix I for details.

6 Photos of the EUT

Reference to the appendix II for details.

***** End of Report *****