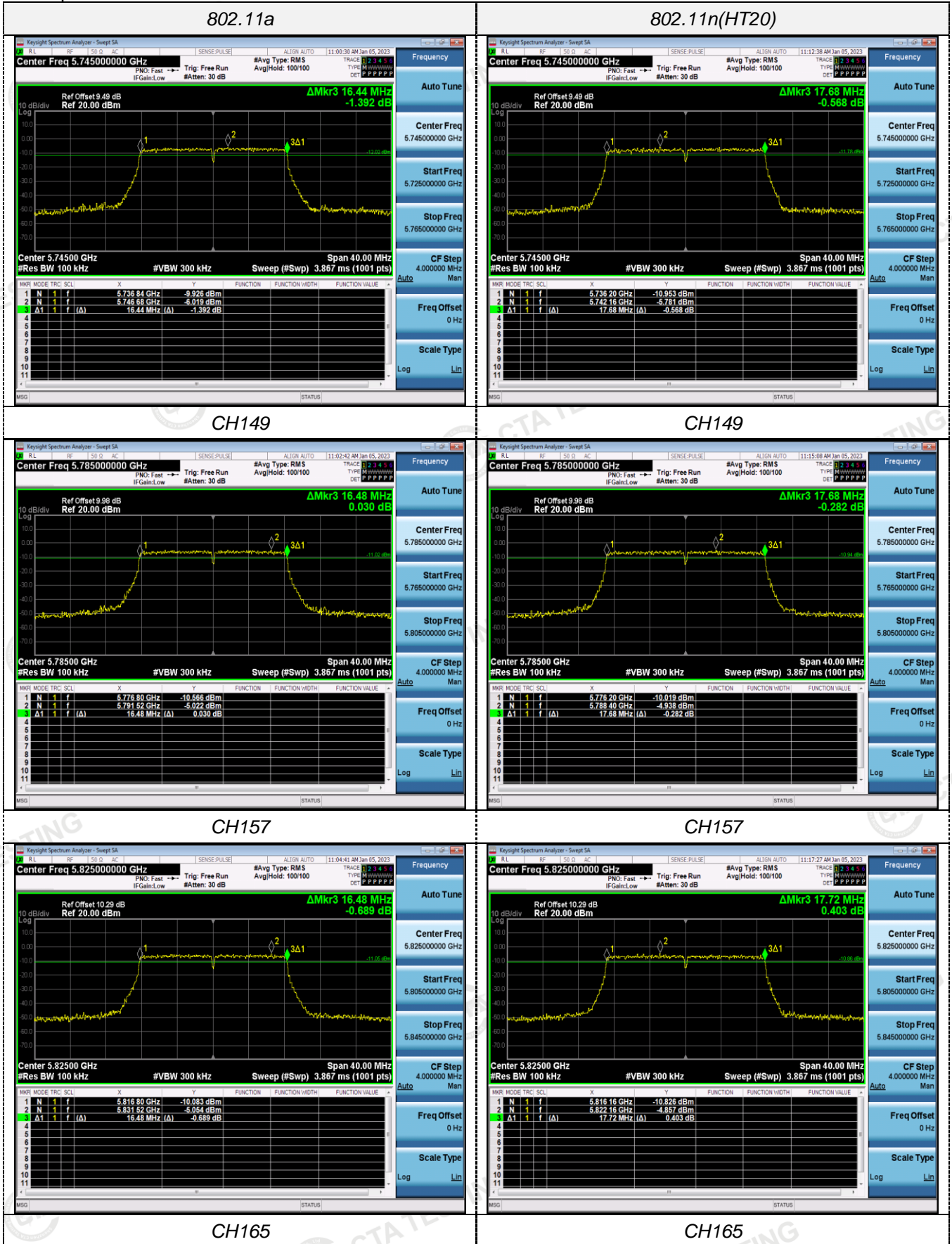
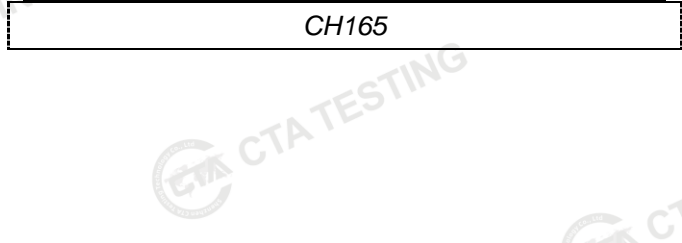
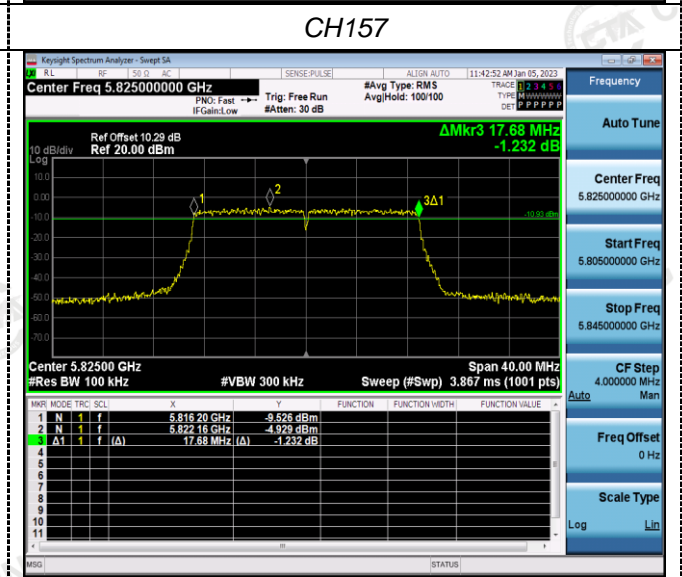
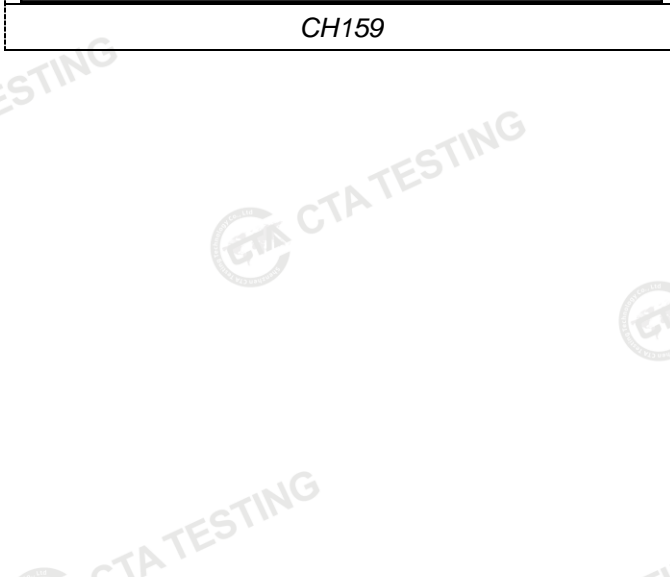
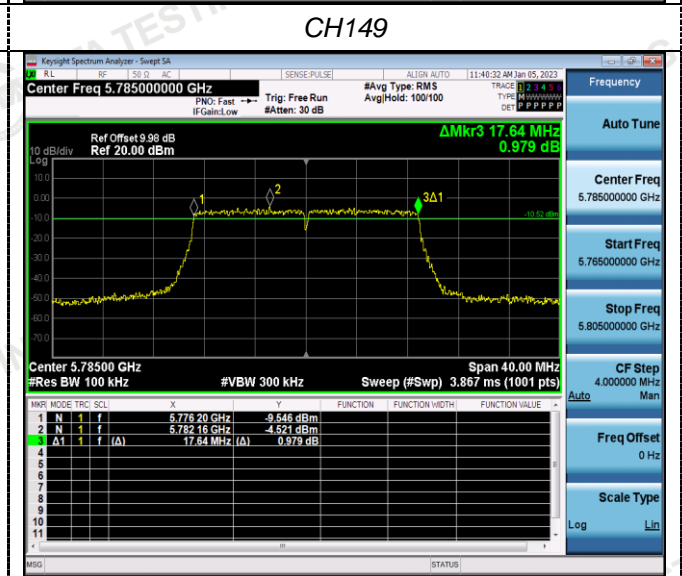
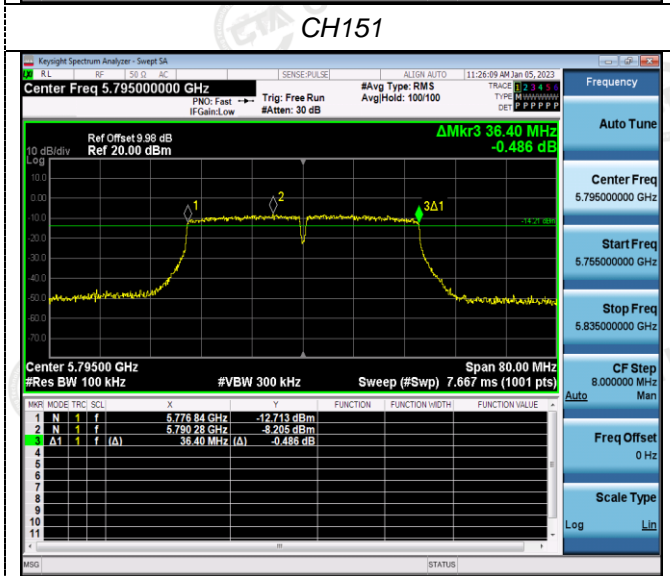
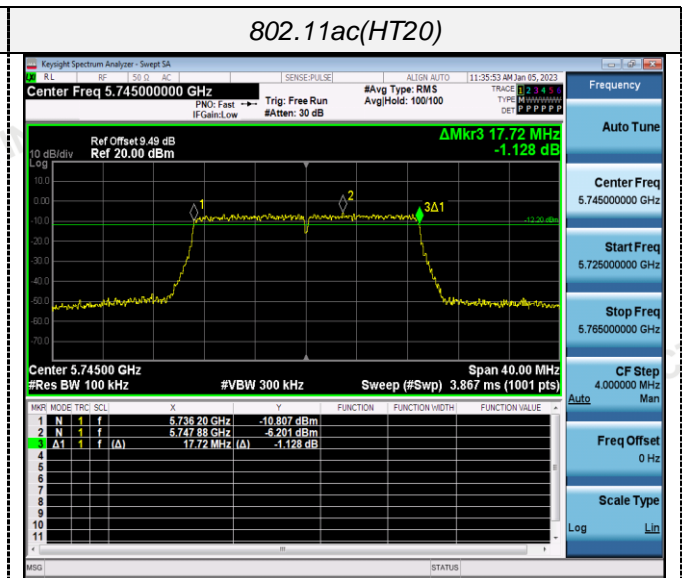
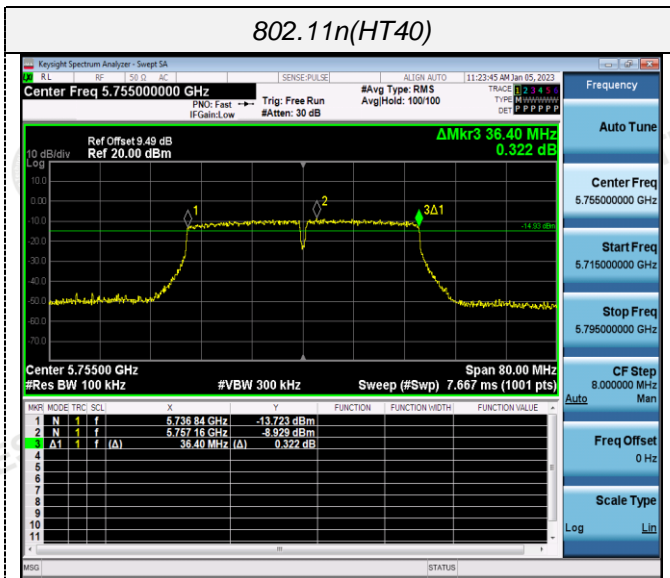
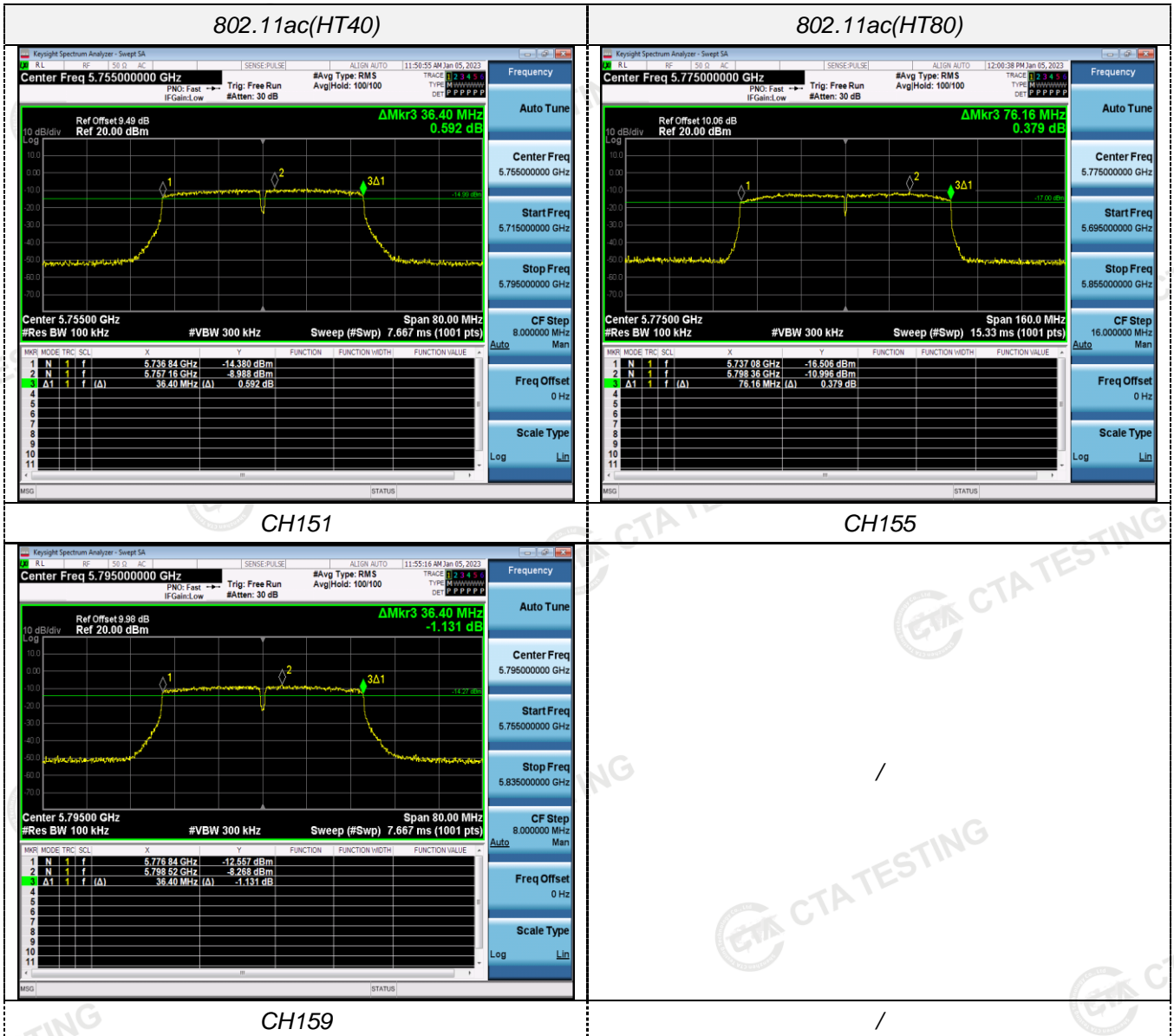


Test plot as follows:





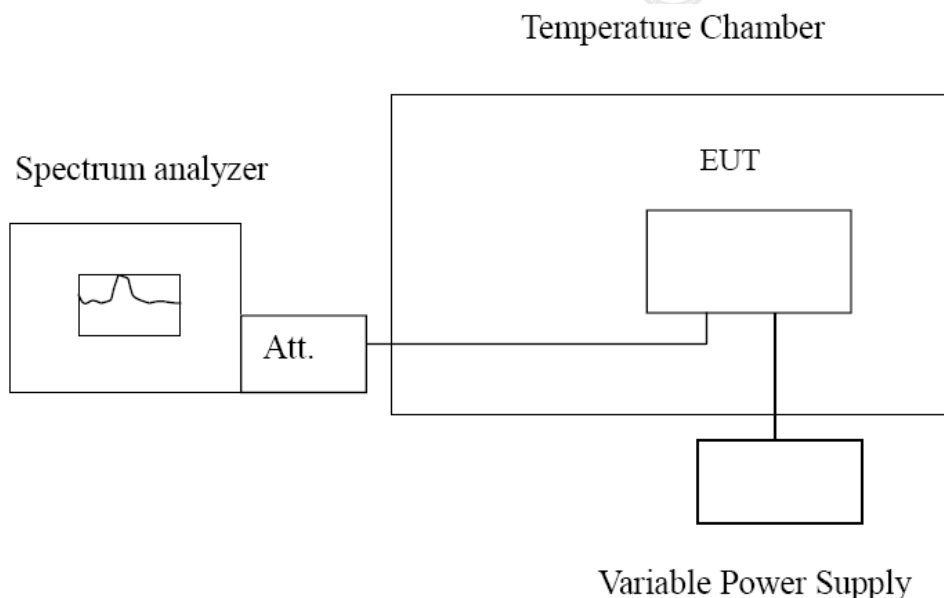


4.7 Frequency Stability

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 20°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 20°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.

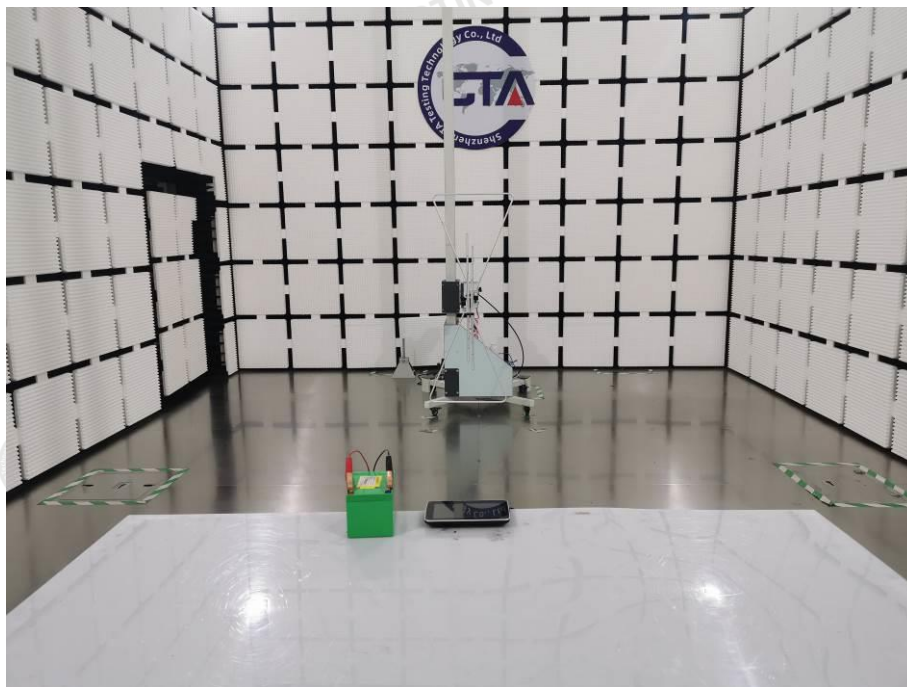
TEST RESULTS

Record worst case as below:

Reference Frequency: 802.11ac channel=36 frequency=5180MHz					
Voltage (V)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
DC12.0	-30	110.75	0.021380	Within the band of operation	Pass
	-20	174.43	0.033674		
	-10	145.19	0.028029		
	0	146.68	0.028317		
	10	145.92	0.028170		
	20	99.75	0.019257		
	30	167.54	0.032344		
	40	129.30	0.024961		
DC13.2	25	194.53	0.037554		
DC10.8	25	118.27	0.022832		

Reference Frequency: 802.11ac channel=149 frequency=5745MHz					
Voltage (V)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
DC12.0	-30	135.89	0.023654	Within the band of operation	Pass
	-20	130.56	0.022726		
	-10	167.74	0.029198		
	0	169.28	0.029466		
	10	137.46	0.023927		
	20	143.39	0.024959		
	30	117.85	0.020513		
	40	169.21	0.029453		
DC13.2	25	150.94	0.026273		
DC10.8	25	130.56	0.022726		

5 Test Setup Photos of the EUT



6 Photos of the EUT

Reference to the test report No. **CTA22123001204**

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