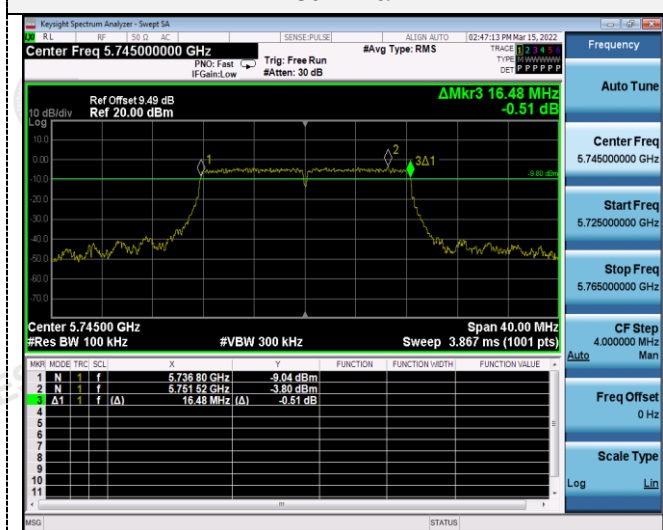
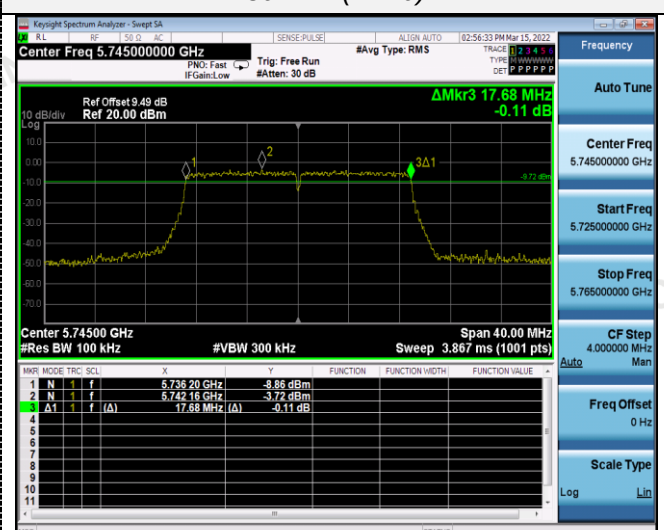


ANT 1

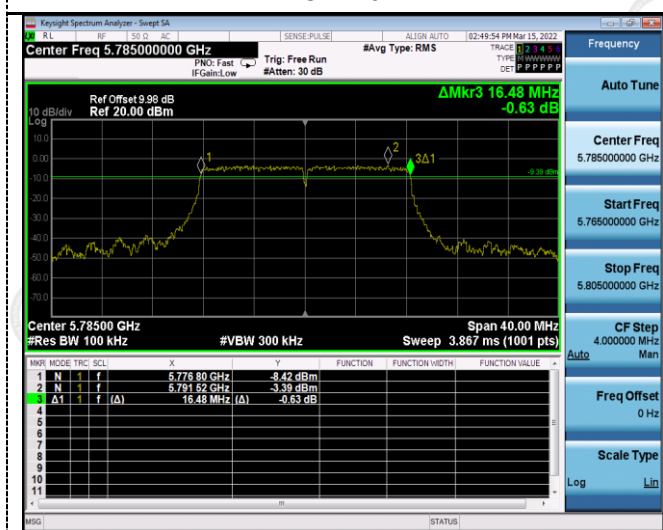
802.11a



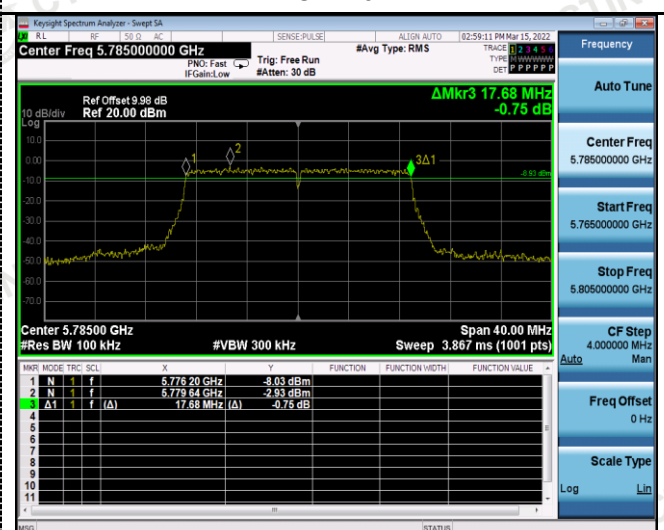
802.11n(HT20)



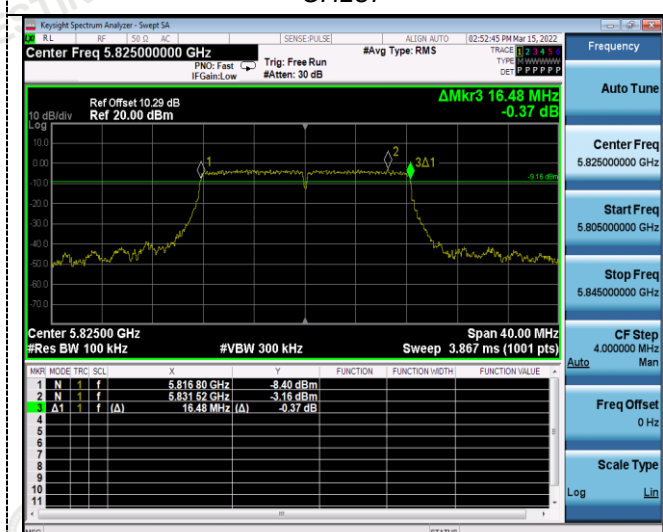
CH149



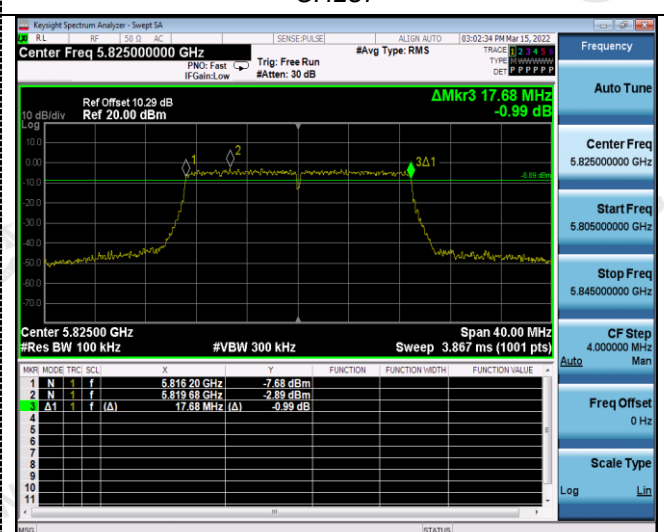
CH149



CH157



CH157



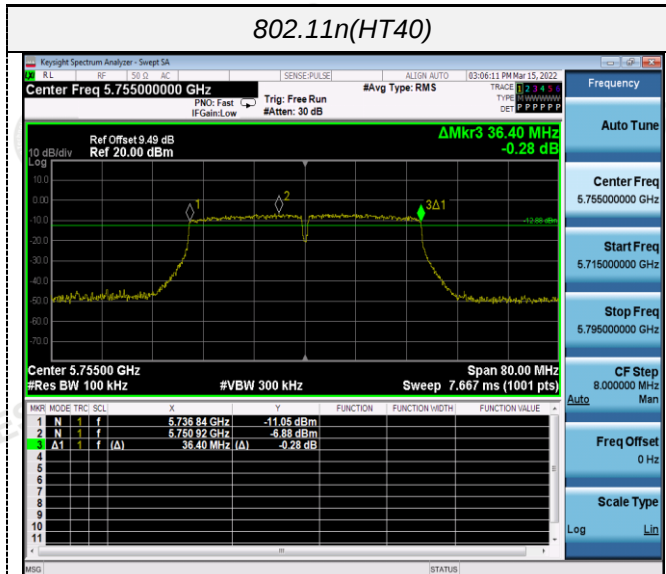
CH165



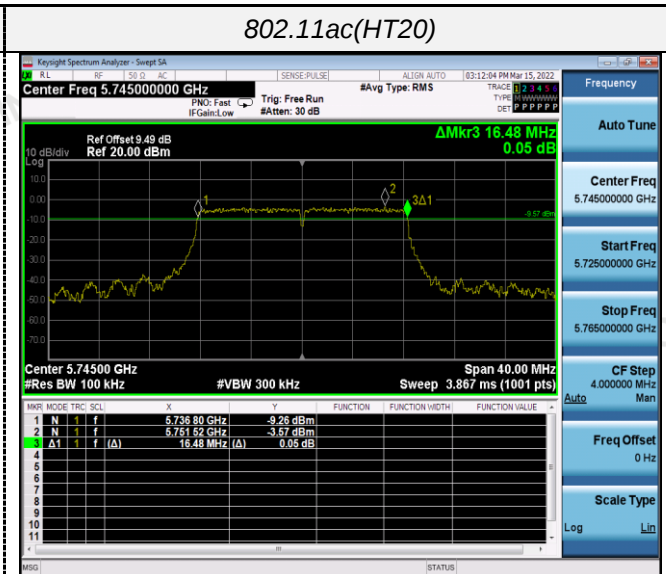
CH165



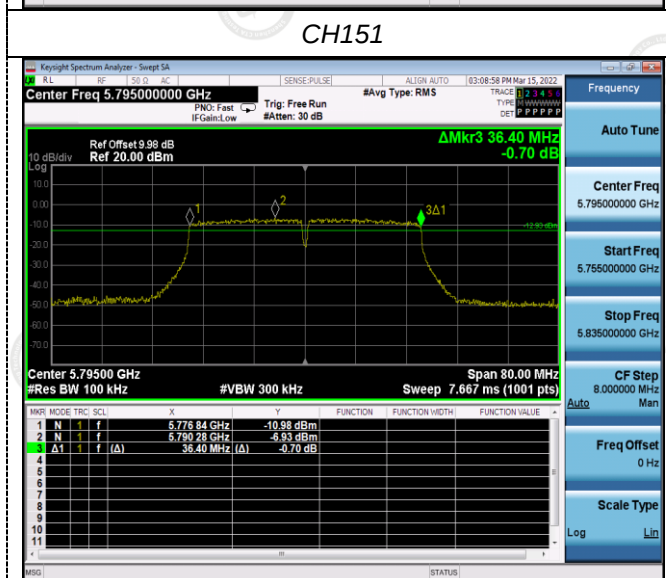
802.11n(HT40)



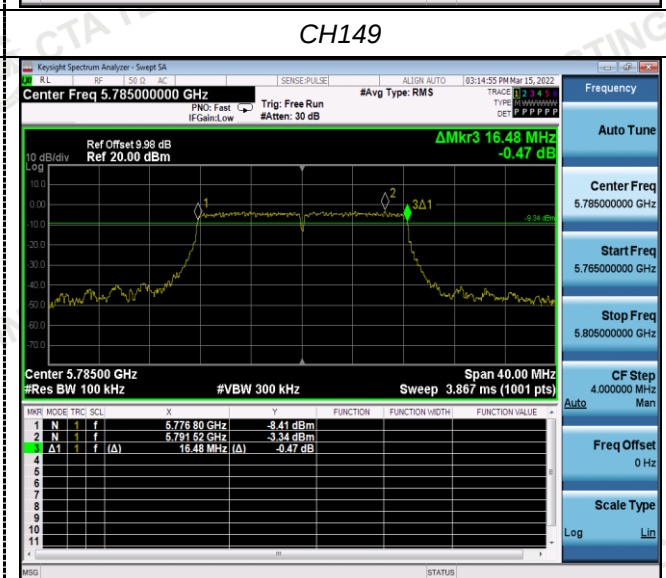
802.11ac(HT20)



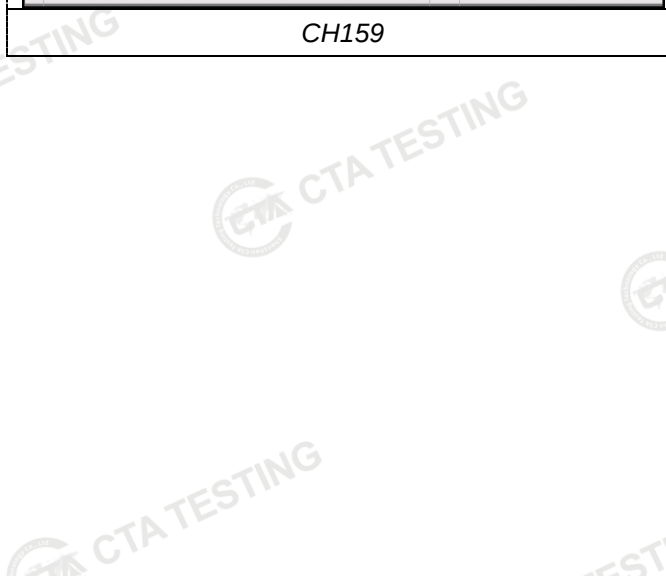
CH151



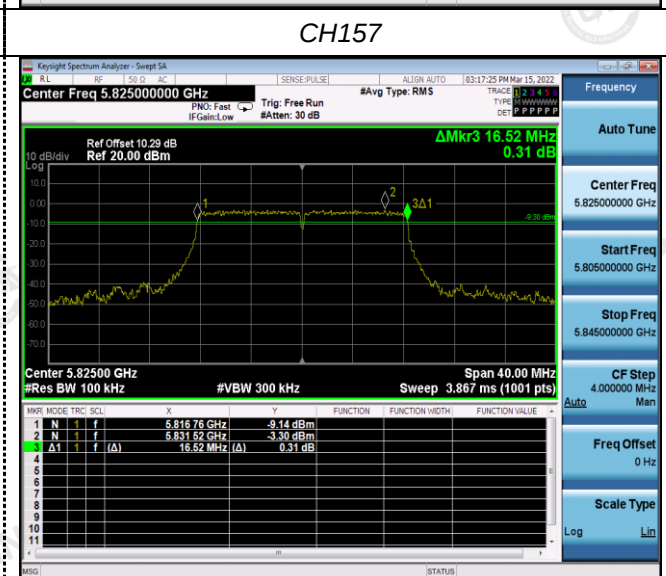
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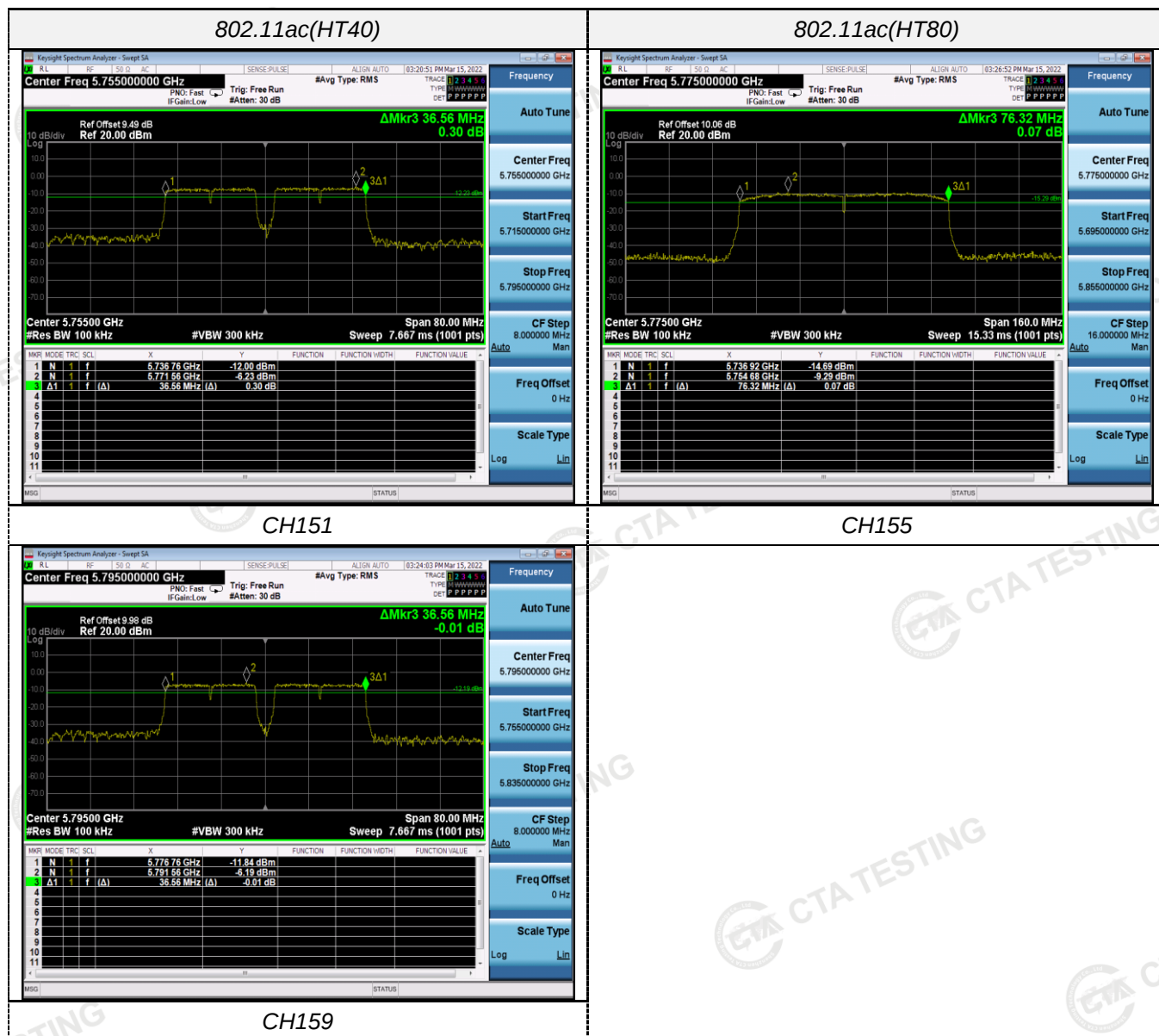
CH159



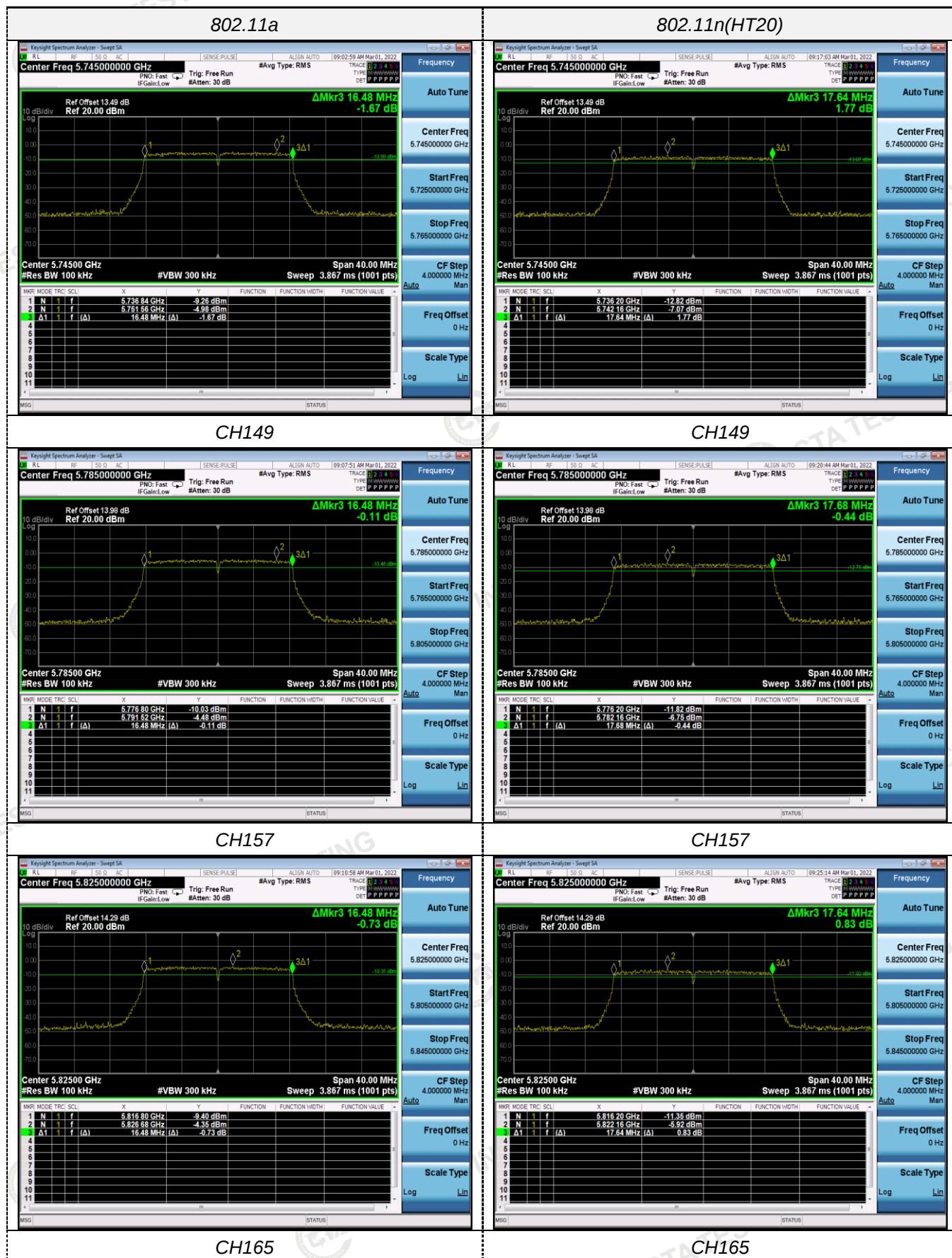
CH157



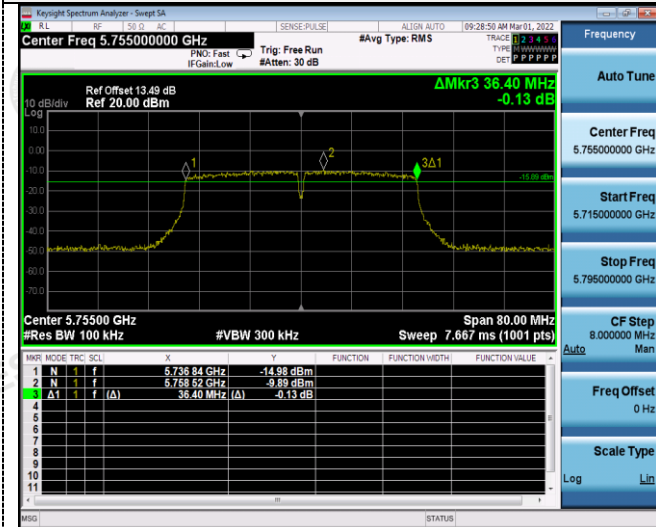
CH165



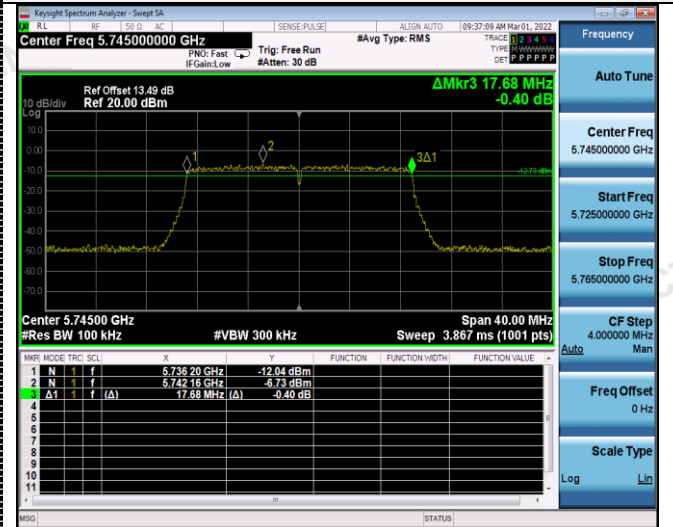
ANT 2



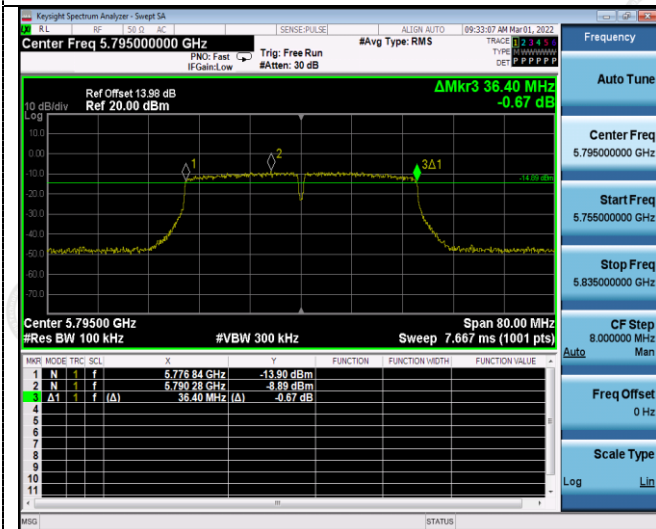
802.11n(HT40)



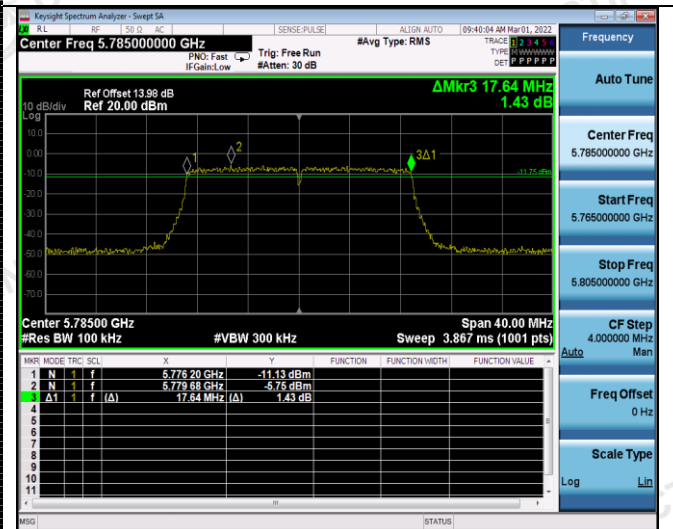
802.11ac(HT20)



CH151



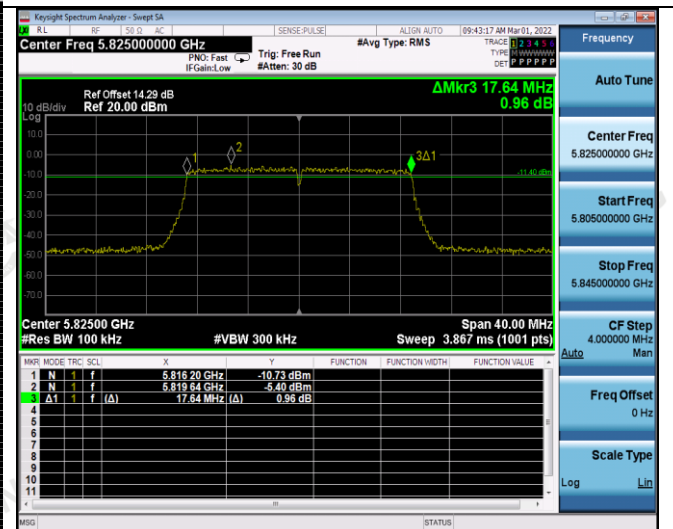
CH149



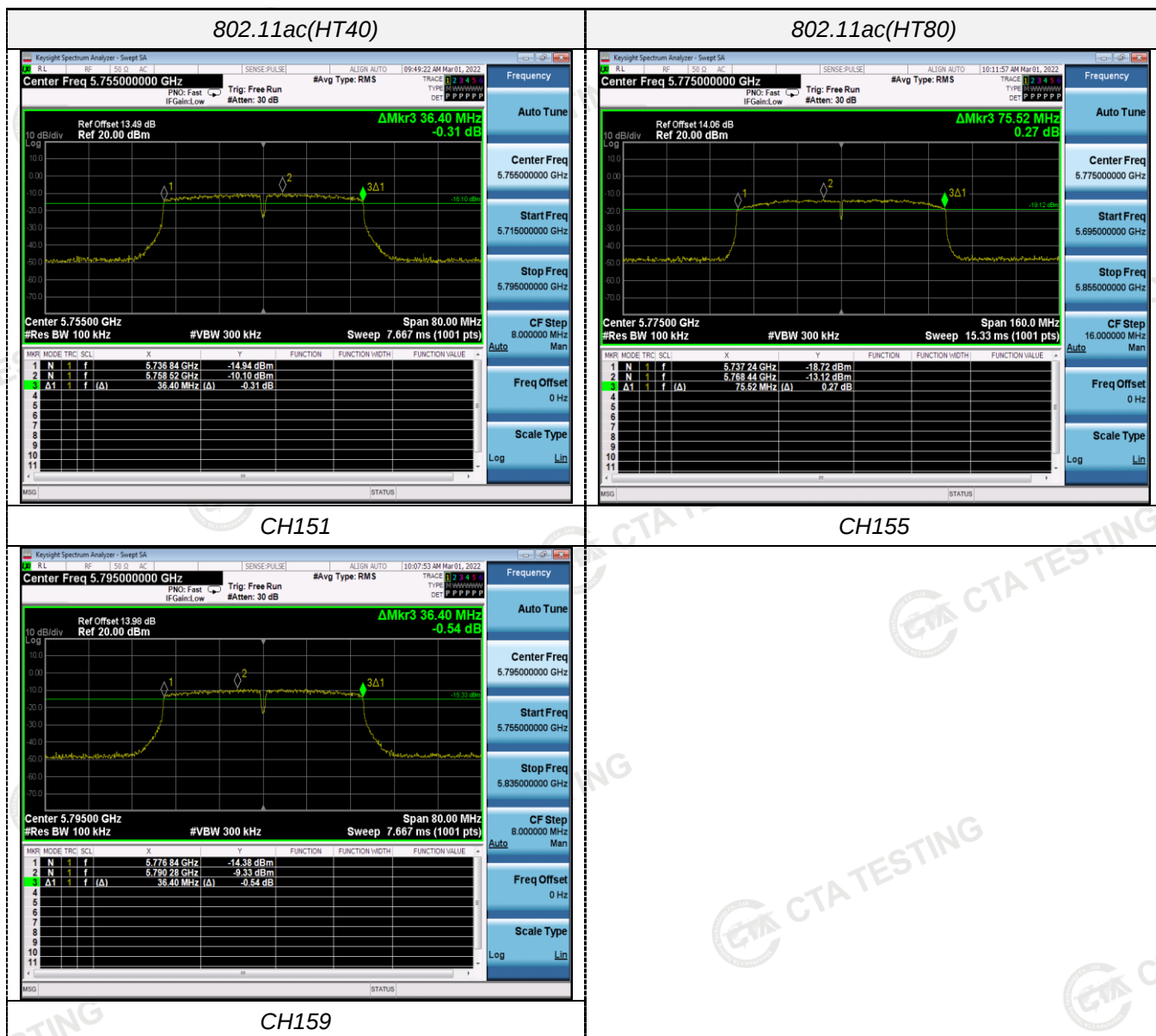
CH159



CH157



CH165

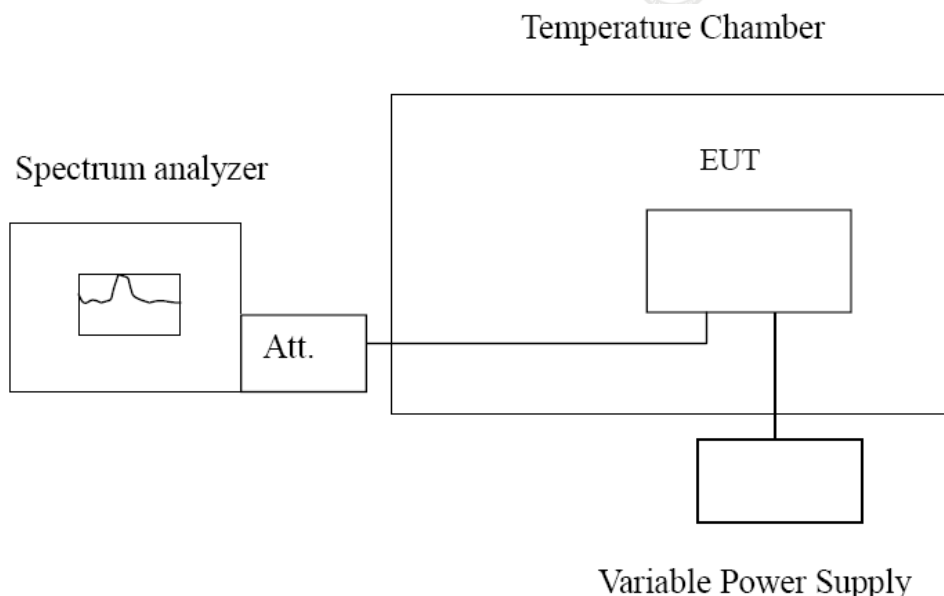


4.6 Frequency Stability

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:

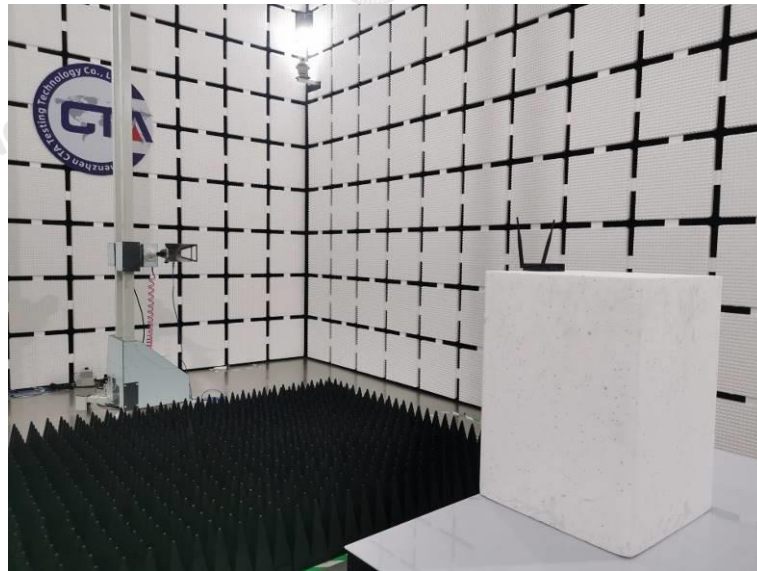
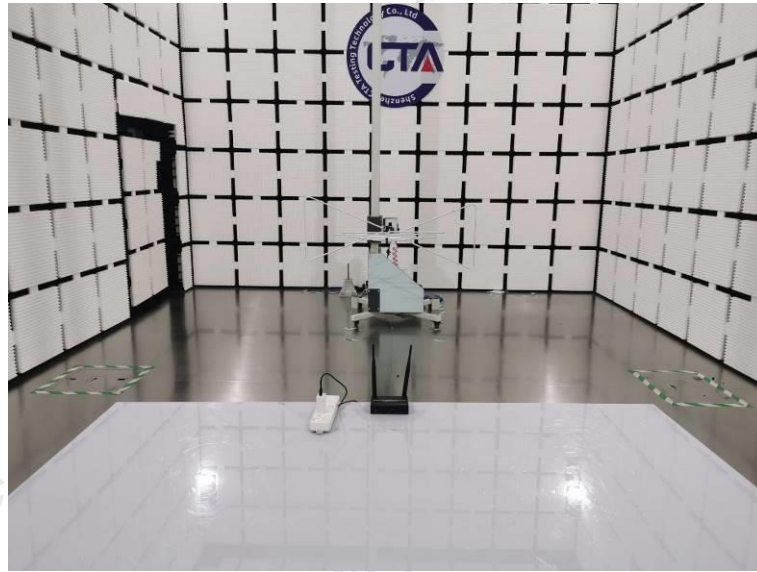
Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

TEST RESULTS

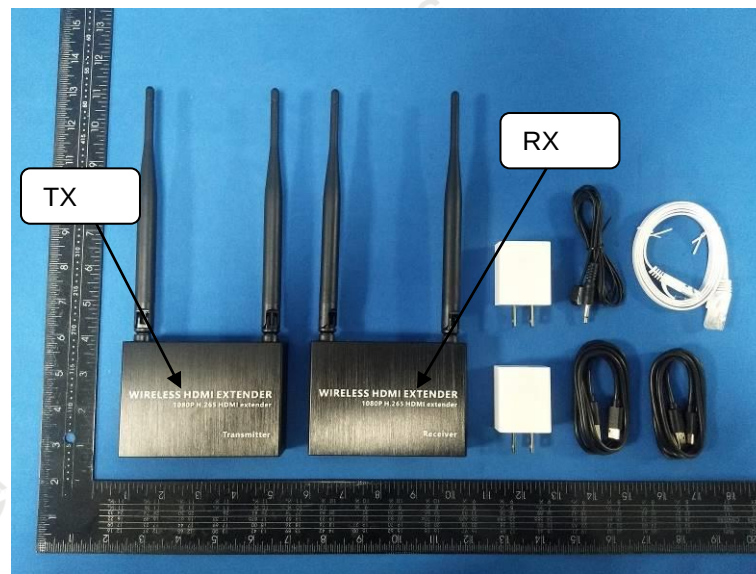
Record worst case as below:

Reference Frequency: 802.11ac channel=149 frequency=5745MHz					
Voltage (V)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
AC120	-30	142.76	0.024849	Within the band of operation	Pass
	-20	131.86	0.022952		
	-10	159.38	0.027742		
	0	161.73	0.028151		
	10	135.62	0.023607		
	20	125.29	0.021809		
	30	133.49	0.023236		
	40	161.63	0.028134		
	50	153.83	0.026776		
AC132	25	141.86	0.024693	Within the band of operation	Pass
AC108	25	136.82	0.023815		

5 Test Setup Photos of the EUT



6 Photos of the EUT

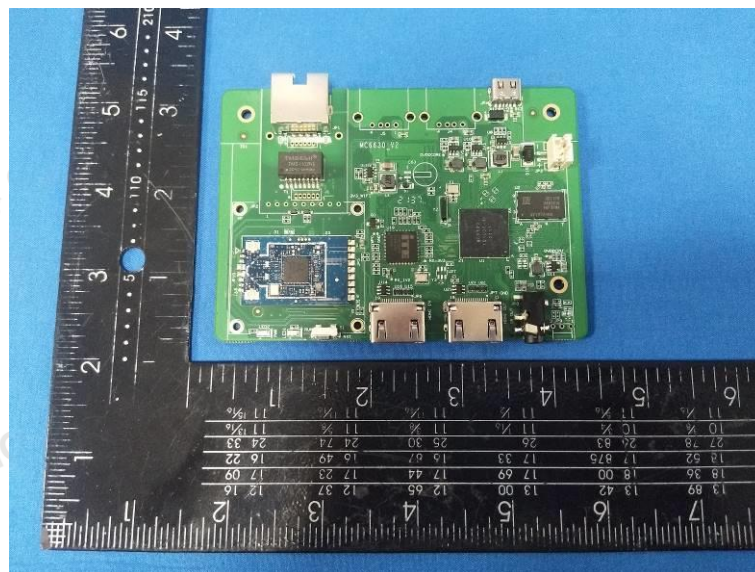
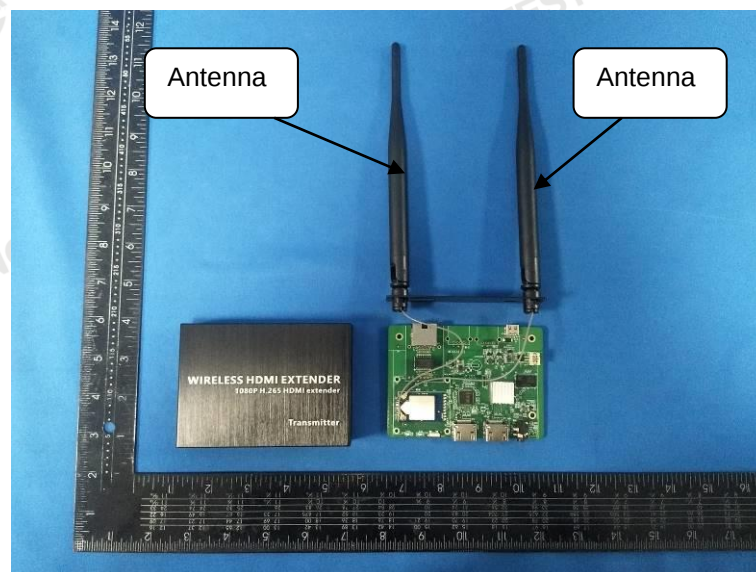
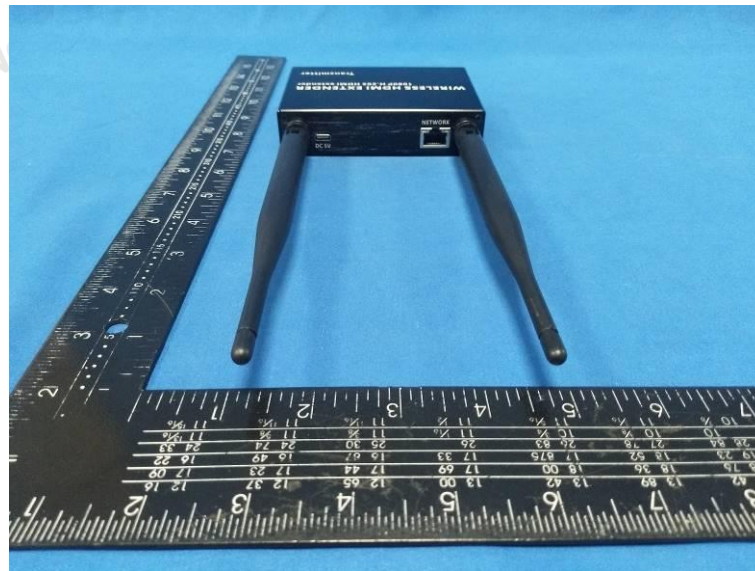


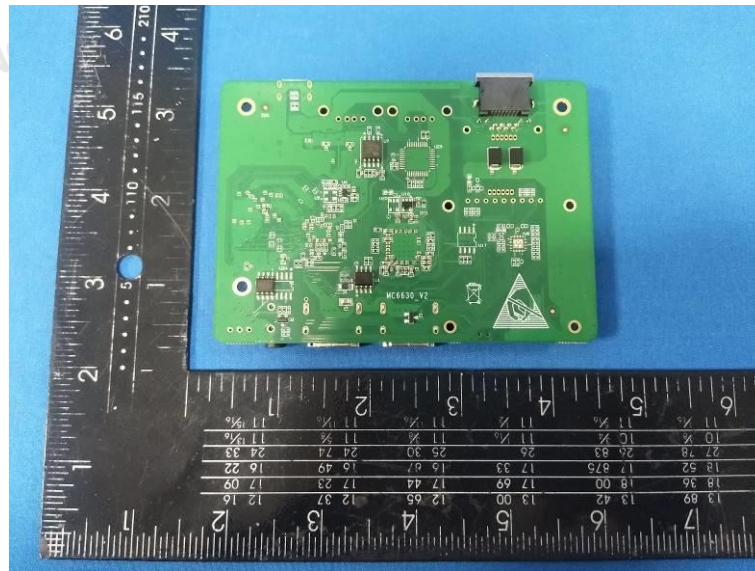
Shenzhen CTA Testing Technology Co., Ltd.

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

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