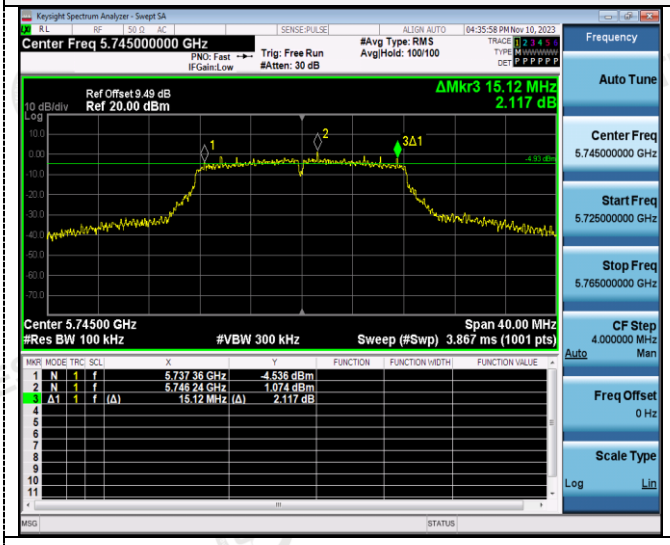
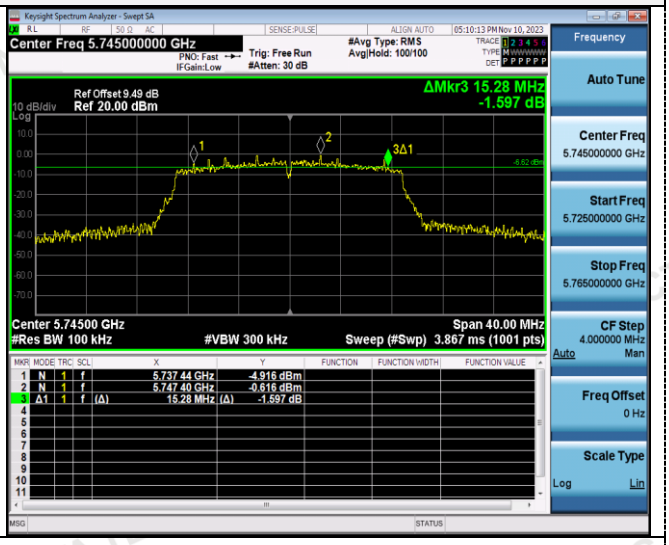
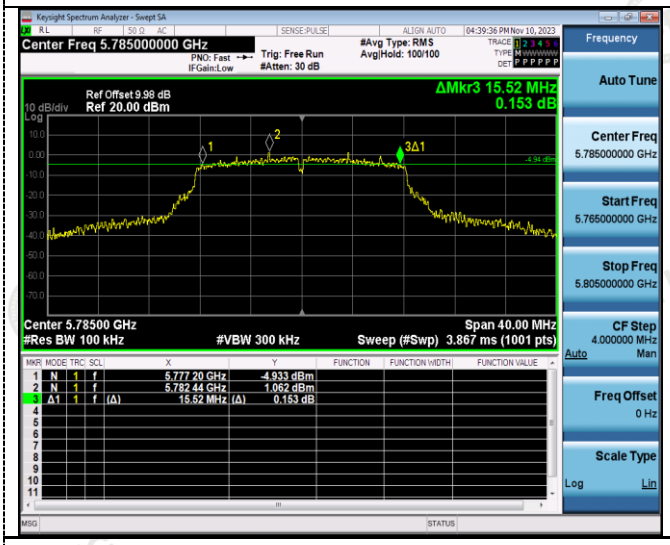
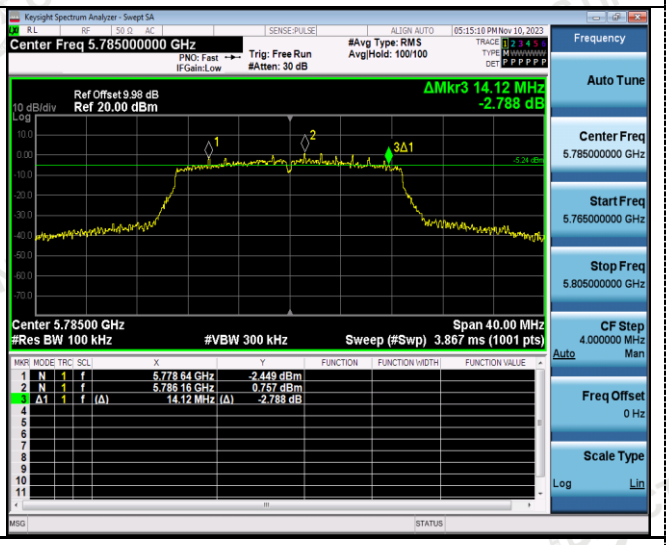
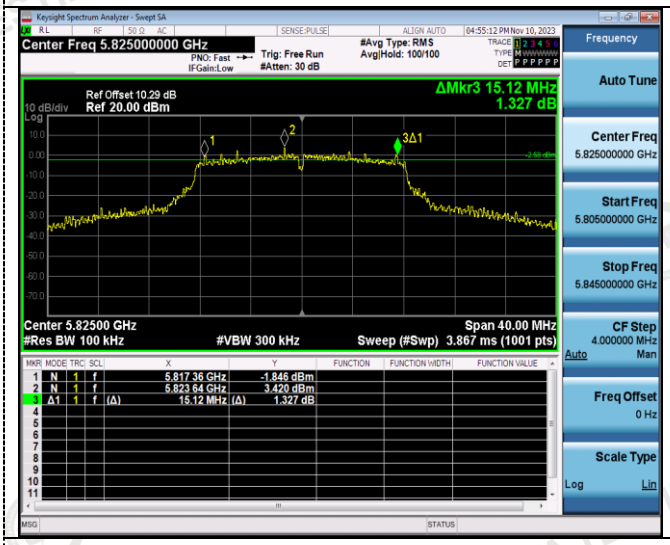
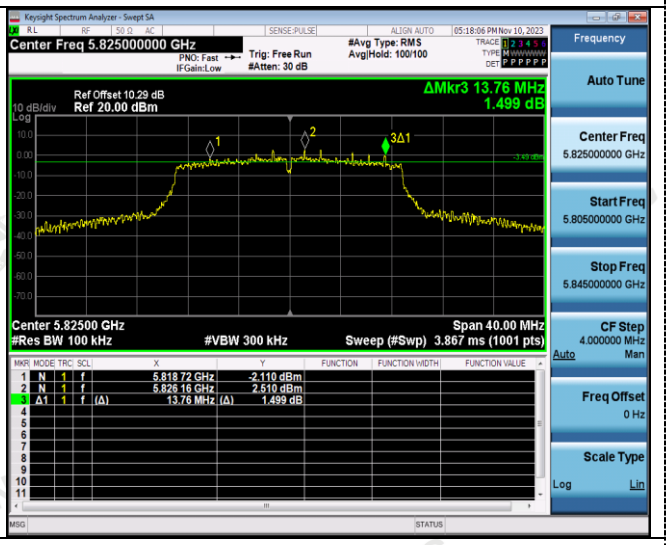
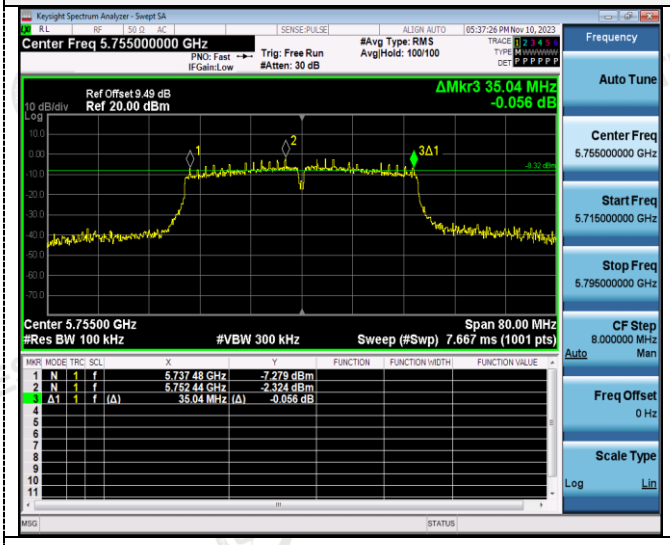
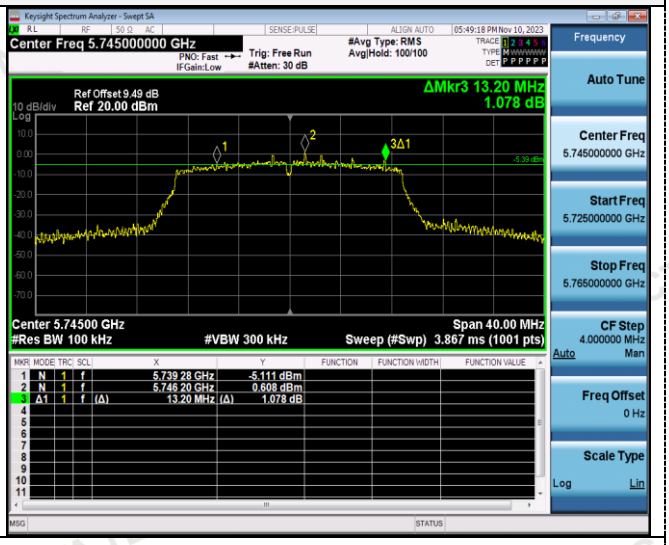
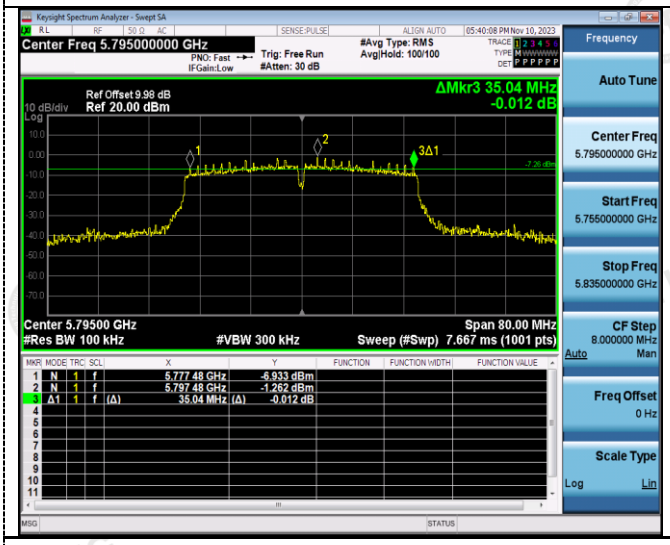
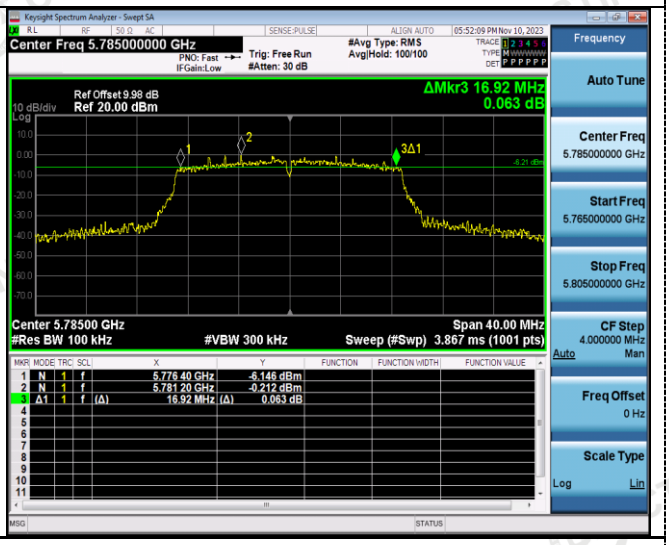
ANT 1

802.11a	802.11n(HT20)
	
CH149	CH149
	
CH157	CH157
	
CH165	CH165

802.11n(HT40)	802.11ac(HT20)
	
CH151	CH149
	
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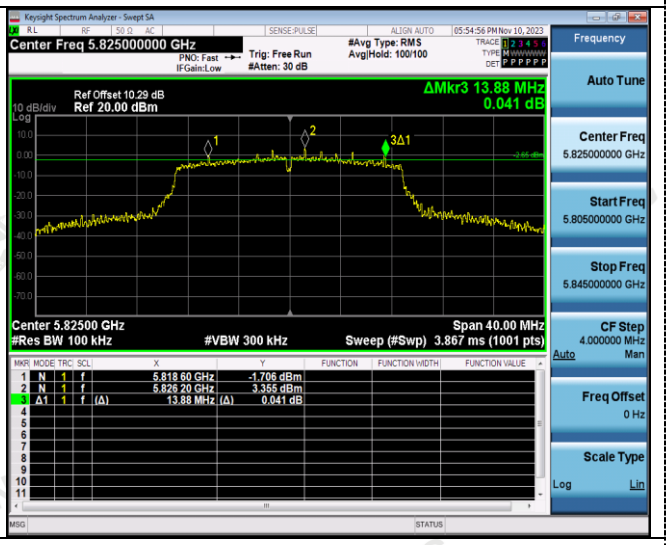
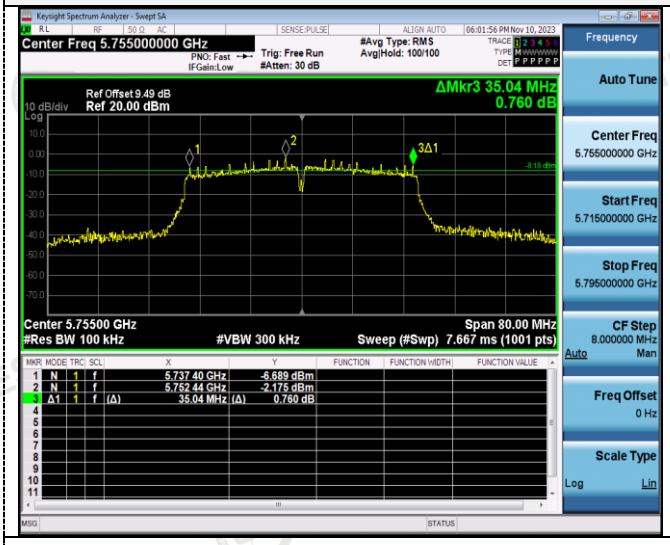
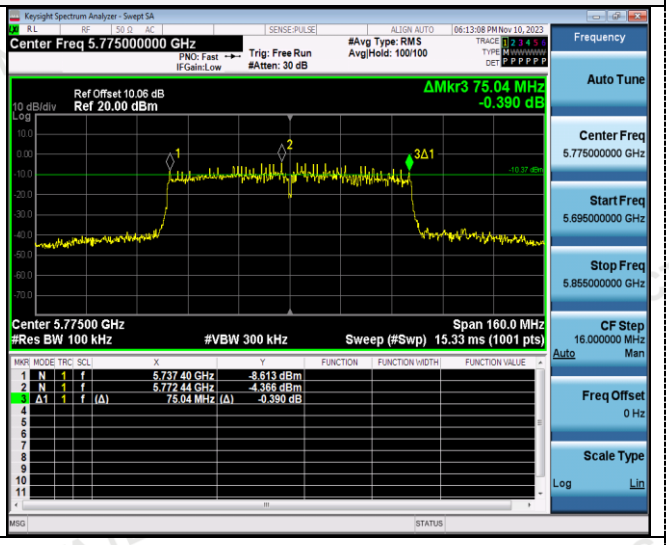
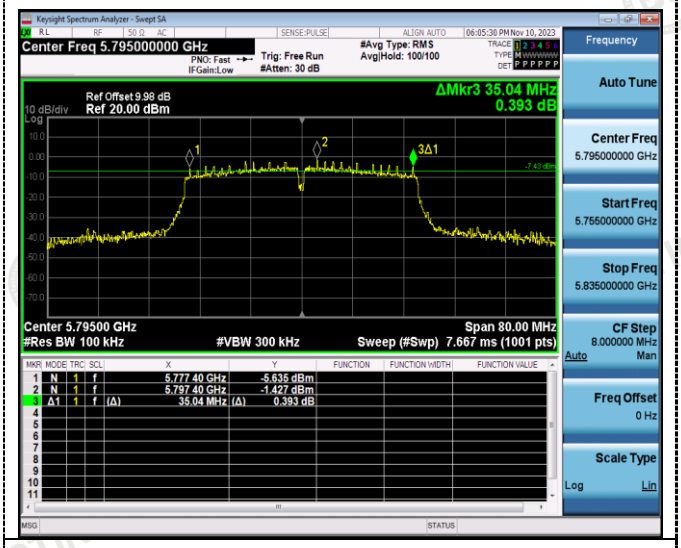
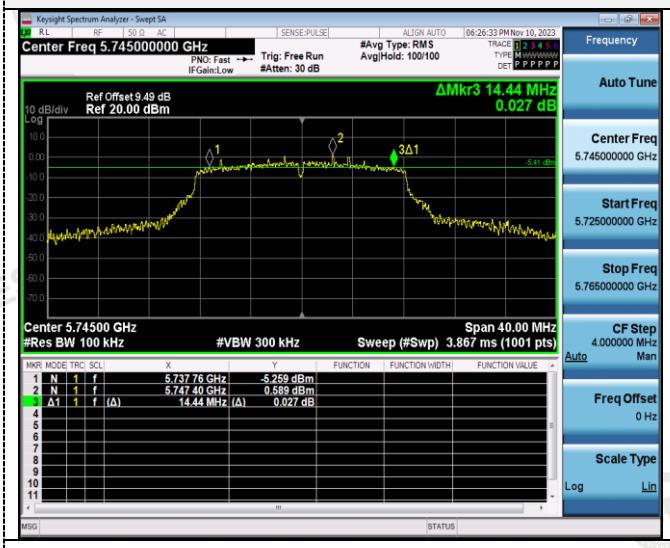
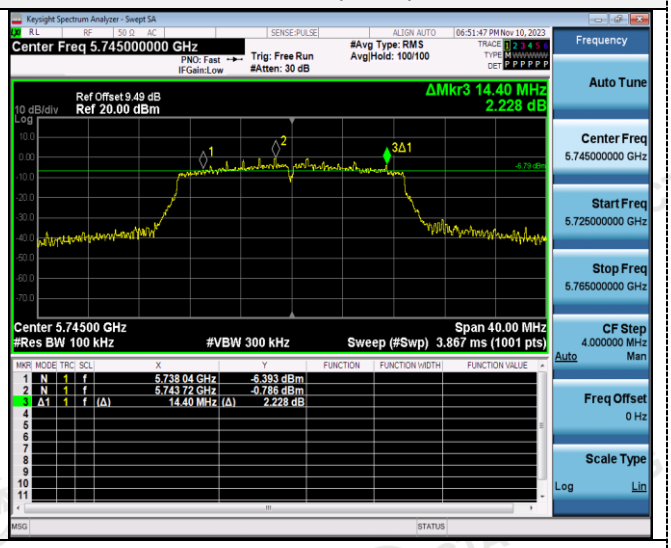
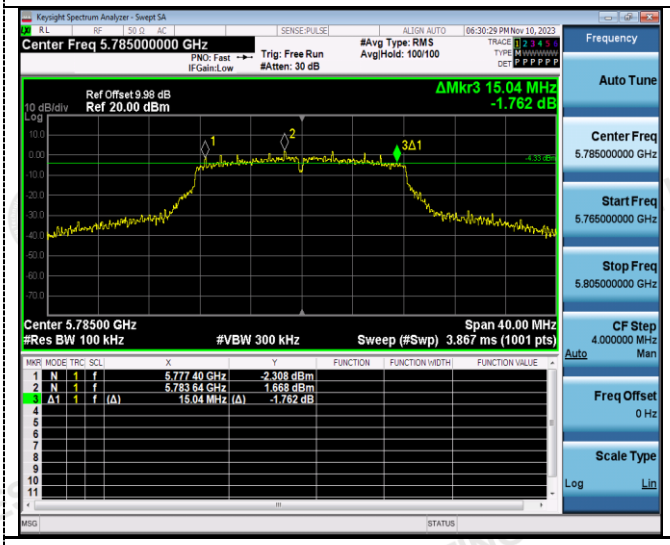
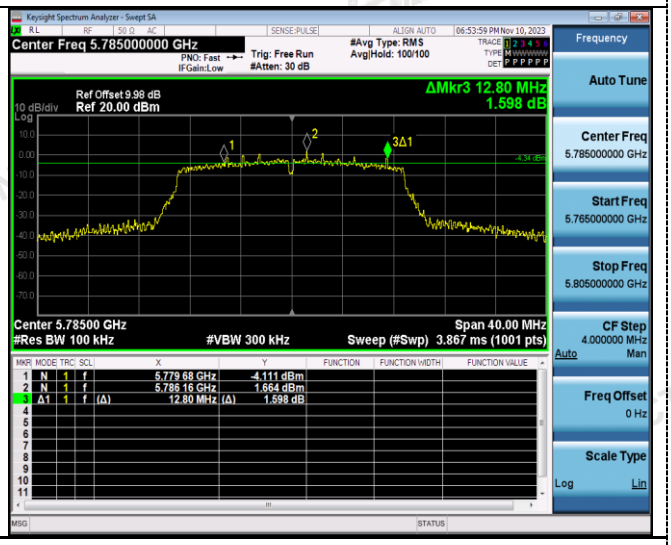
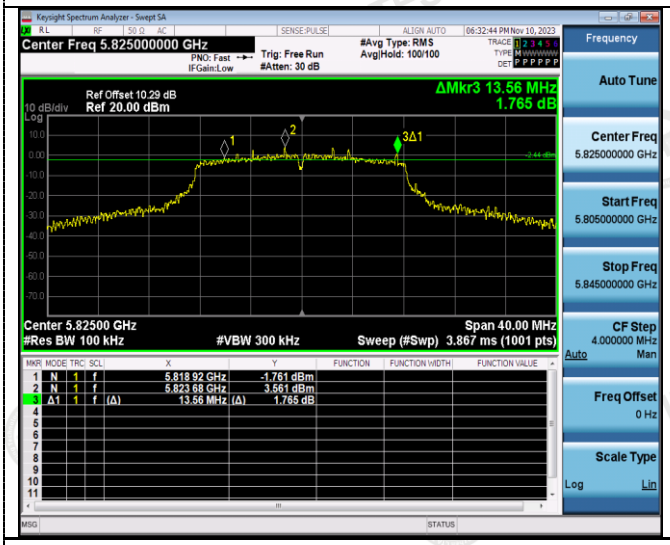
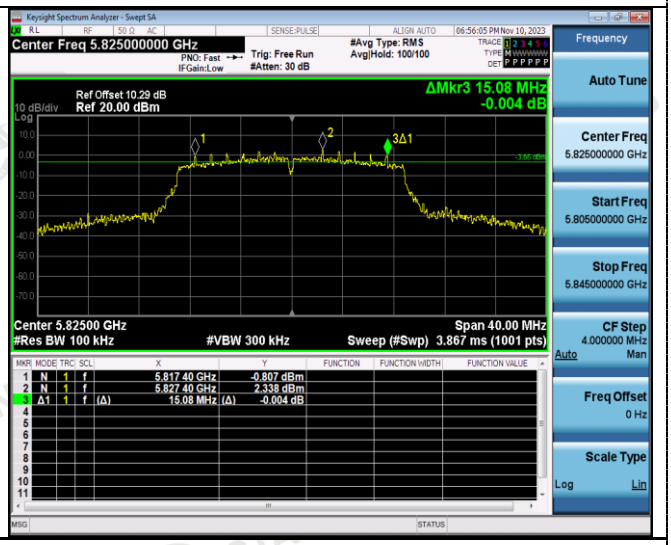
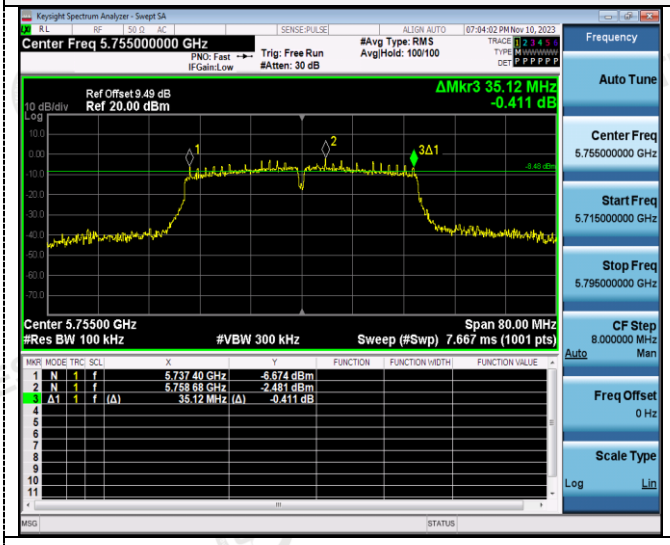
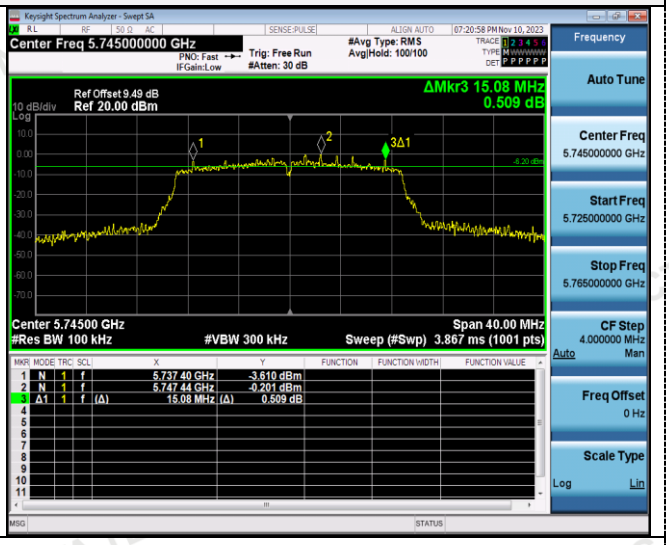
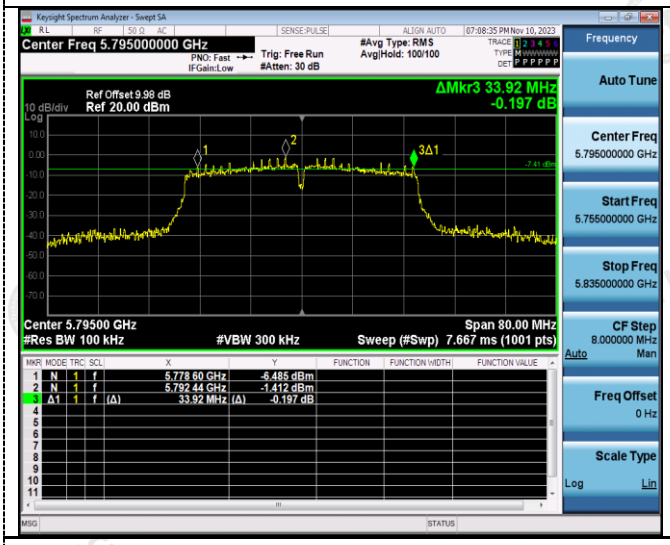
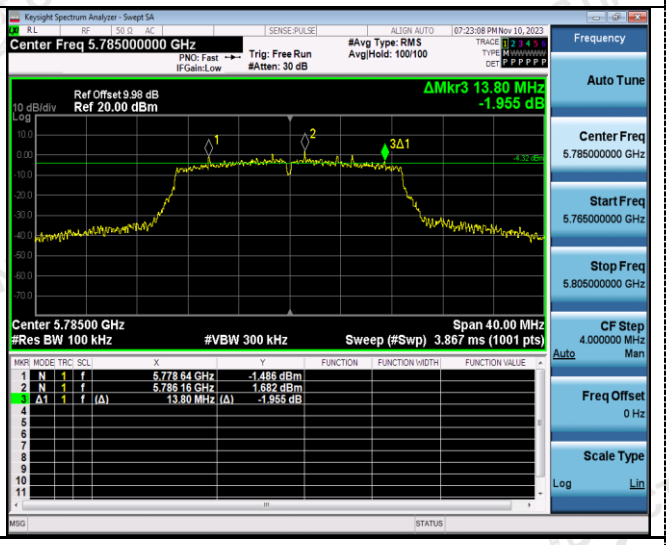
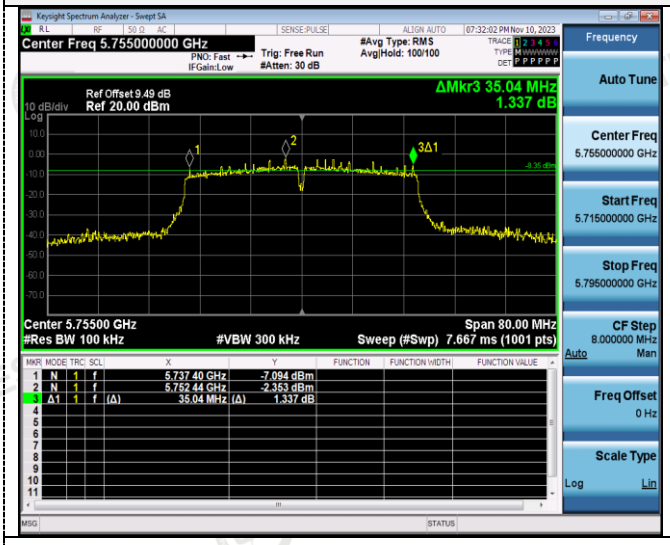
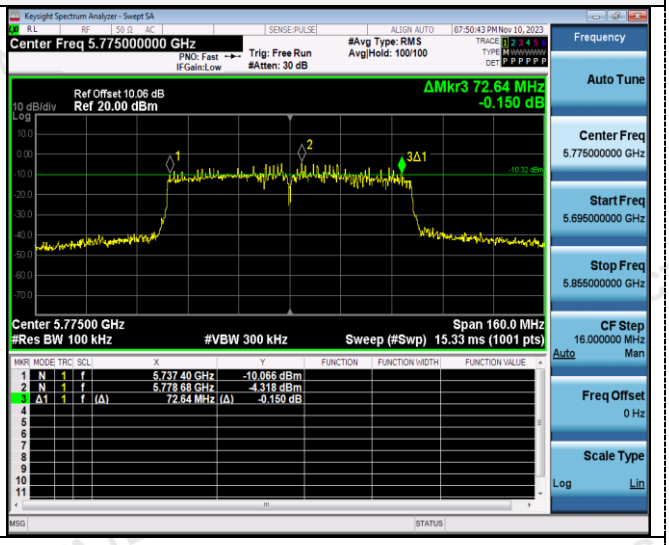
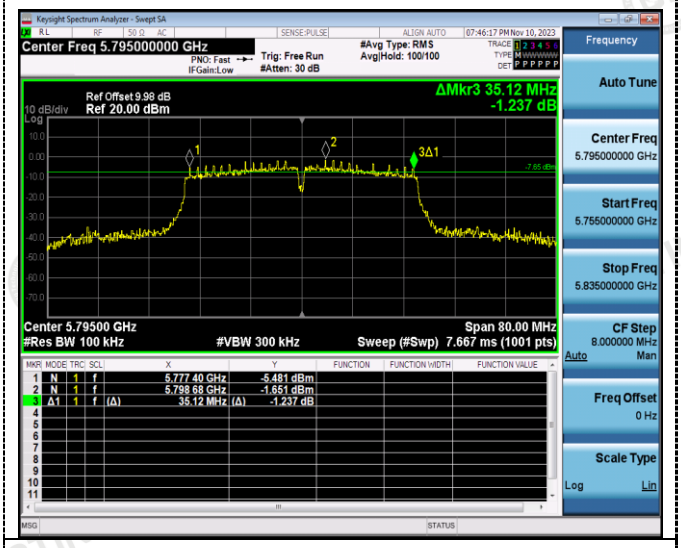
	
	CH165

802.11ac(HT40)	802.11ac(HT80)
	
CH151	CH155
	
CH159	

ANT 2

802.11a	802.11n(HT20)
	
CH149	CH149
	
CH157	CH157
	
CH165	CH165

802.11n(HT40)	802.11ac(HT20)
	
CH151	CH149
	
CH159	CH157
	
	CH165

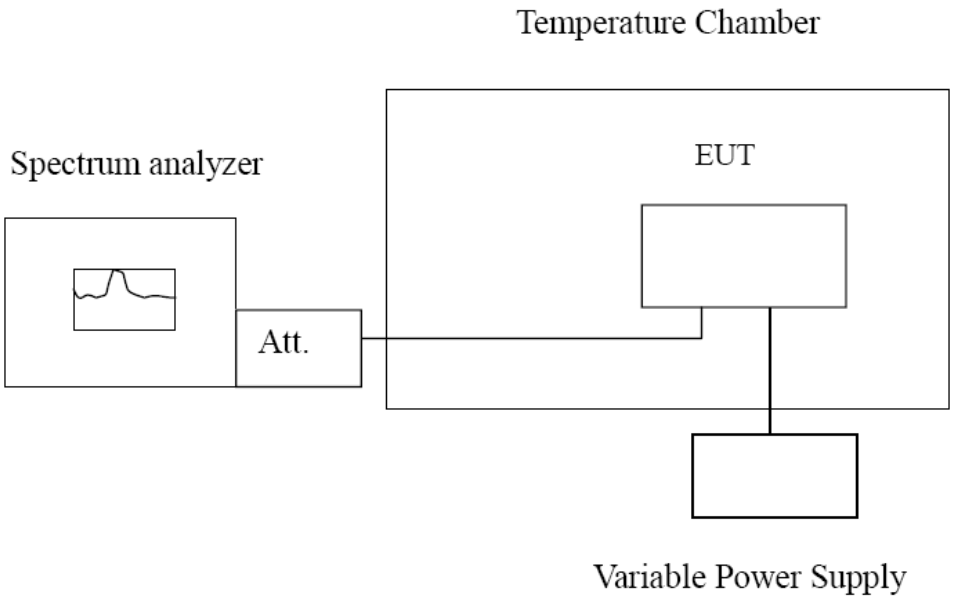
802.11ac(HT40)	802.11ac(HT80)
	
CH151	CH155
	
CH159	

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℃ operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30℃. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10℃ increased per stage until the highest temperature of +50℃ reached.

Frequency Stability under Voltage Variations:
Set chamber temperature to 20℃. 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 (±15%) and endpoint, record the maximum frequency change.

TEST RESULTS

Record worst case as below:

Ant1:

Reference Frequency: 802.11ac channel=36 frequency=5180MHz					
Voltage (V)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
AC 120	-30	110.54	0.021340	Within the band of operation	Pass
	-20	174.62	0.033710		
	-10	145.43	0.028075		
	0	146.47	0.028276		
	10	145.77	0.028141		
	20	99.62	0.019232		
	30	167.48	0.032332		
	40	129.28	0.024958		
	50	128.46	0.024799		
AC 132	25	195.83	0.037805		
AC 108	25	118.82	0.022938		

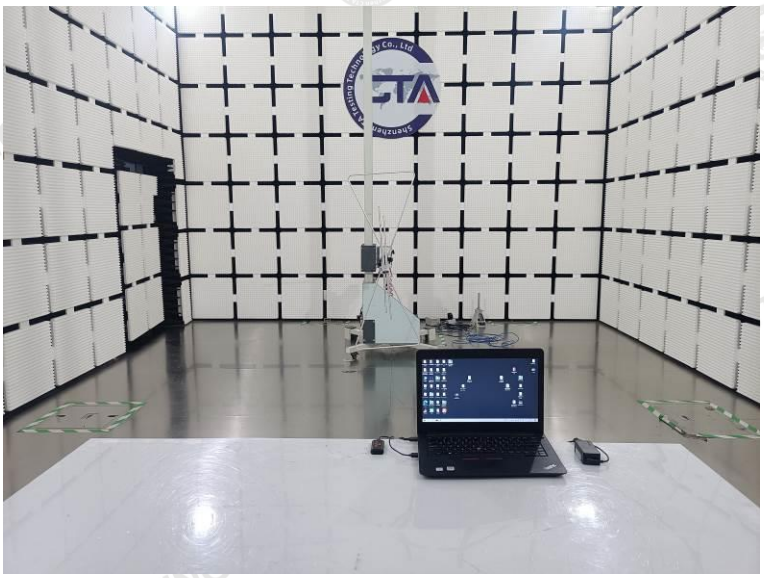
Reference Frequency: 802.11ac channel=149 frequency=5745MHz					
Voltage (V)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
AC 120	-30	135.78	0.023634	Within the band of operation	Pass
	-20	129.61	0.022560		
	-10	167.23	0.029109		
	0	169.77	0.029551		
	10	136.54	0.023767		
	20	144.94	0.025229		
	30	116.58	0.020292		
	40	168.27	0.029290		
	50	160.42	0.027923		
AC 132	25	150.73	0.026237		
AC 108	25	129.94	0.022618		

Ant2:

Reference Frequency: 802.11ac channel=36 frequency=5180MHz					
Voltage (V)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
AC 120	-30	110.47	0.021326	Within the band of operation	Pass
	-20	174.30	0.033649		
	-10	145.17	0.028025		
	0	146.55	0.028292		
	10	146.16	0.028216		
	20	99.75	0.019257		
	30	167.42	0.032320		
	40	129.42	0.024985		
	50	128.80	0.024865		
AC 132	25	195.50	0.037741		
AC 108	25	118.82	0.022938		

Reference Frequency: 802.11ac channel=149 frequency=5745MHz					
Voltage (V)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
AC 120	-30	135.53	0.023591	Within the band of operation	Pass
	-20	129.78	0.022590		
	-10	167.10	0.029086		
	0	169.50	0.029504		
	10	136.71	0.023796		
	20	144.83	0.025210		
	30	116.35	0.020252		
	40	168.68	0.029361		
	50	160.60	0.027955		
AC 132	25	150.87	0.026261		
AC 108	25	129.44	0.022531		

5 Test Setup Photos of the EUT



6 Photos of the EUT

Reference to the test report No.**CTA23110600801.**

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