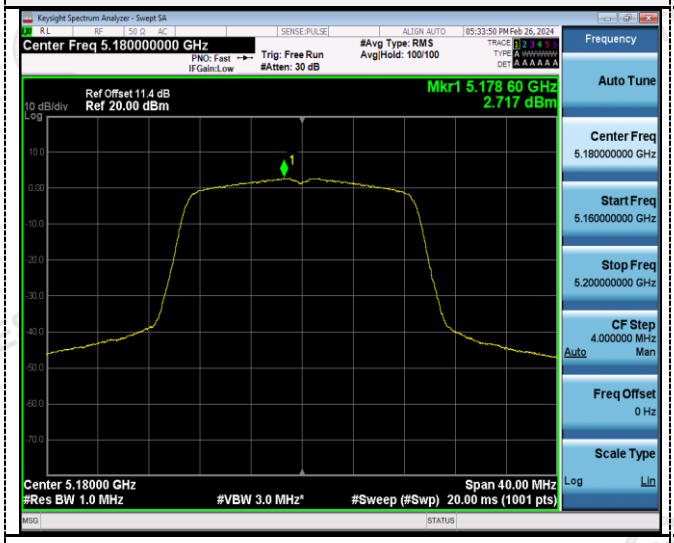
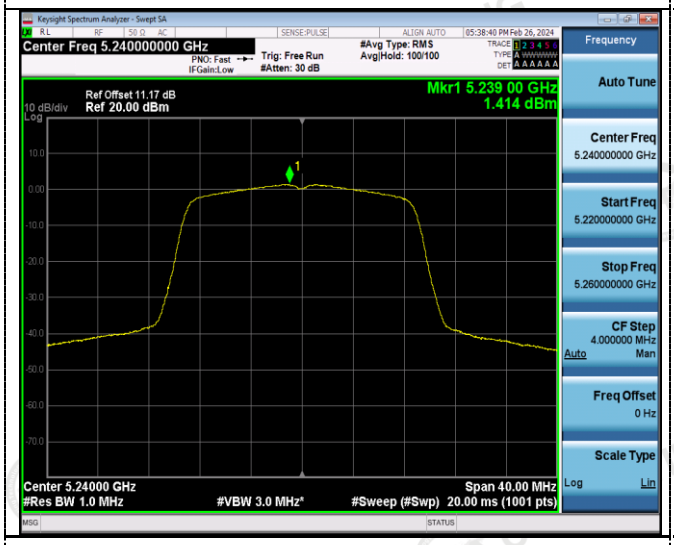
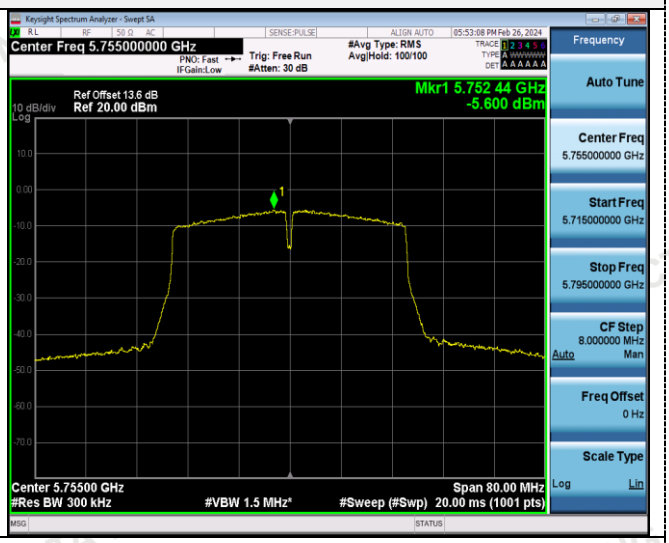
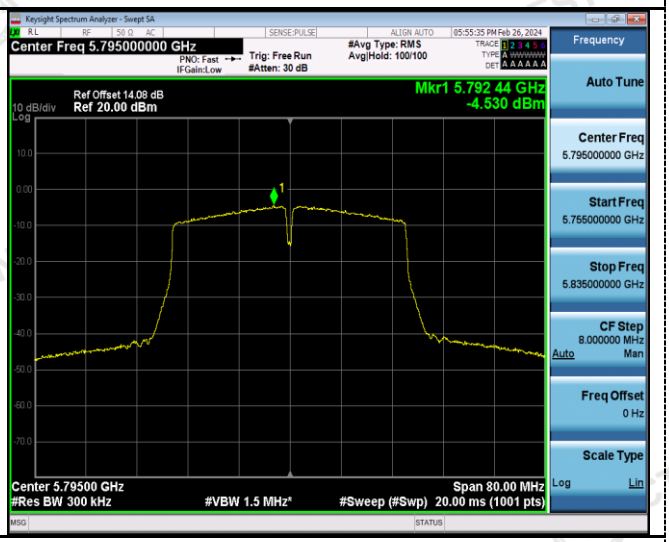
802.11ac(HT20)	
U-NII 1	U-NII 3
	
CH36	CH149
CH40	CH157
	
CH48	CH165

802.11ac(HT40)	
U-NII 1	U-NII 3
	
CH38	CH151
	
CH46	CH159

802.11ac(HT80)	
U-NII 1	U-NII 3
CH42	CH155

4.5 Emission Bandwidth (26dB Bandwidth)

Limit

N/A

Test Procedure

1. Set resolution bandwidth (RBW) = approximately 1 % of the EBW.
2. Set the video bandwidth (VBW) > RBW.
3. Detector = Peak.
4. Trace mode = Max hold.
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW / EBW ratio is approximately 1 %.

Test Configuration

Test Results

ANT 1

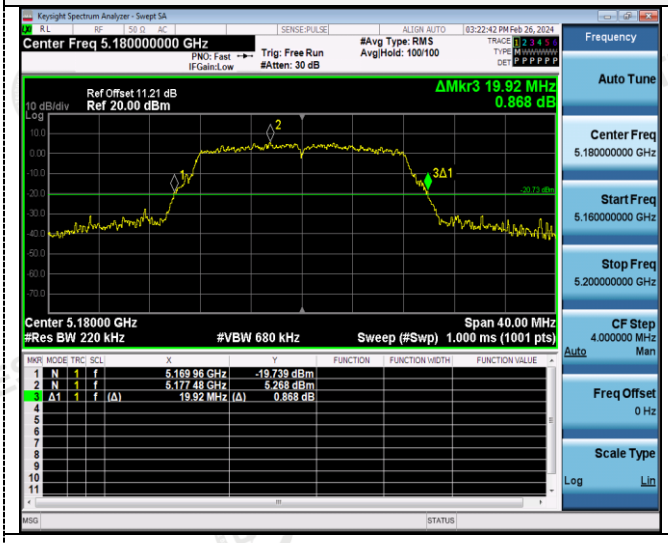
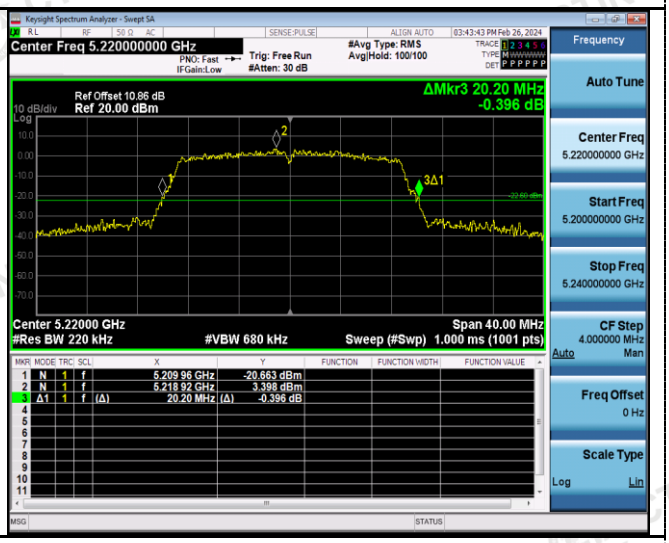
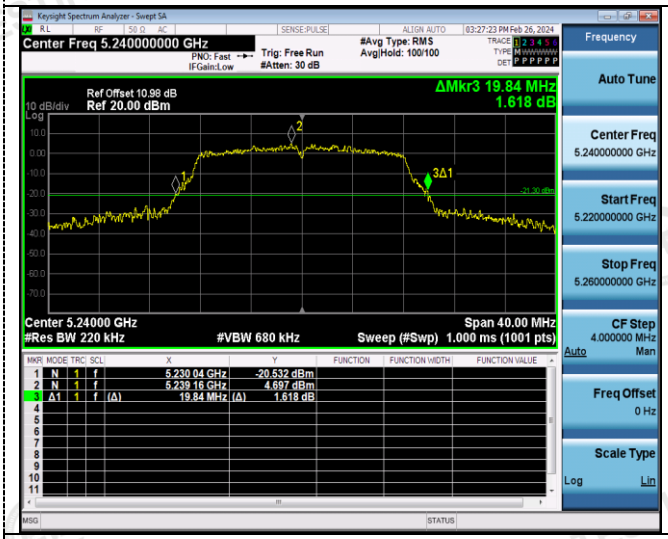
Type	Bands	Channel	26dB Bandwidth (MHz)	Limit (MHz)	Result
802.11a	U-NII 1	36	19.920	N/A	Pass
		44	19.760		
		48	19.840		
802.11n(HT20)	U-NII 1	36	20.240		
		44	20.200		
		48	20.280		
802.11n(HT40)	U-NII 1	38	40.400		
		46	40.640		
802.11ac(HT20)	U-NII 1	36	20.200		
		44	20.080		
		48	20.240		
802.11ac(HT40)	U-NII 1	38	40.320		
		46	40.400		
802.11ac(HT80)	U-NII 1	42	81.120		

ANT 2

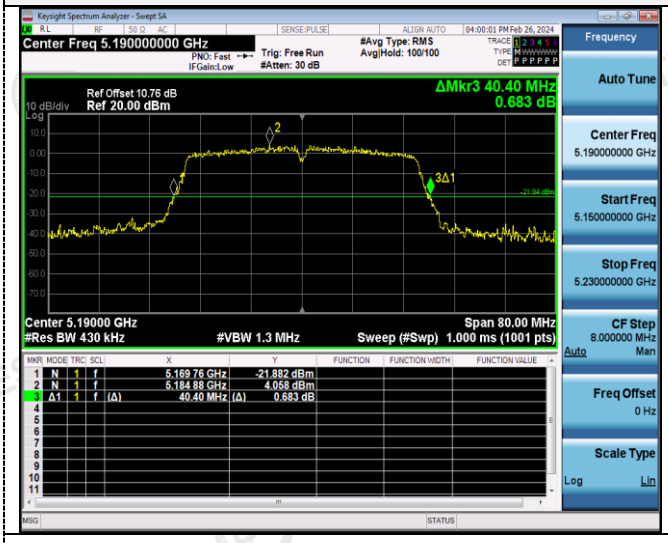
Type	Bands	Channel	26dB Bandwidth (MHz)	Limit (MHz)	Result
802.11a	U-NII 1	36	19.960	N/A	Pass
		44	19.920		
		48	19.880		
802.11n(HT20)	U-NII 1	36	20.280		
		44	20.080		
		48	20.080		
802.11n(HT40)	U-NII 1	38	40.240		
		46	40.720		
802.11ac(HT20)	U-NII 1	36	20.000		
		44	19.800		
		48	20.200		
802.11ac(HT40)	U-NII 1	38	40.560		
		46	40.400		
802.11ac(HT80)	U-NII 1	42	80.800		

Test plot as follows:

ANT 1

802.11a	*802.11n(HT20)*
	
CH36	*CH36*
	
CH40	*CH40*
	
CH48	*CH48*

802.11n(HT40)



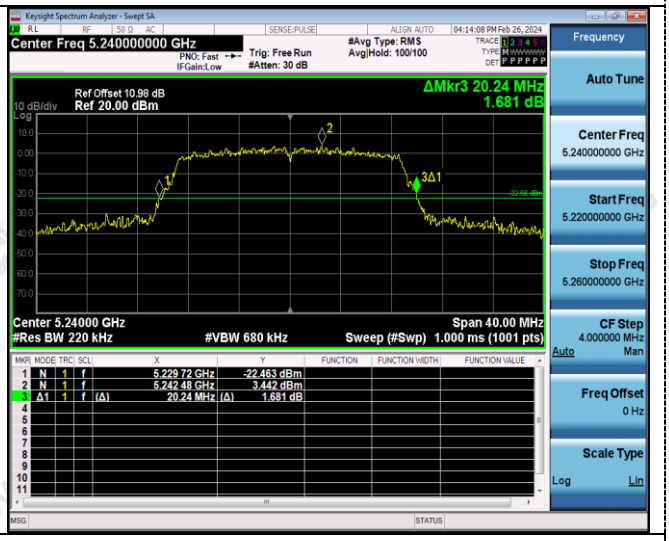
802.11ac(HT20)

CH38

CH36

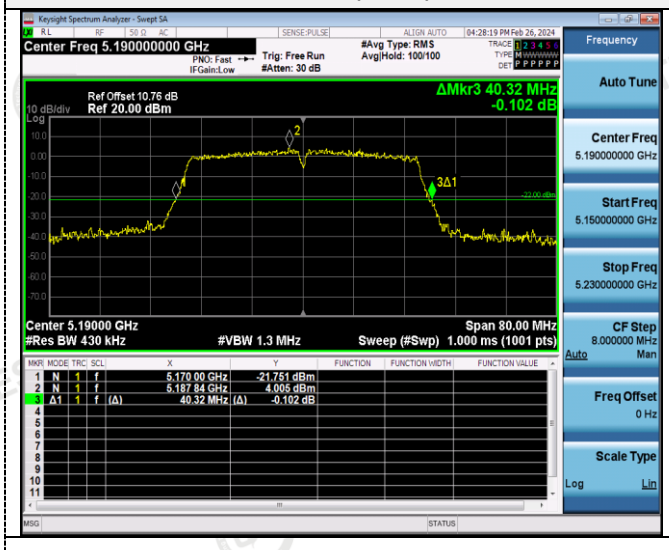
CH46

CH40



CH48

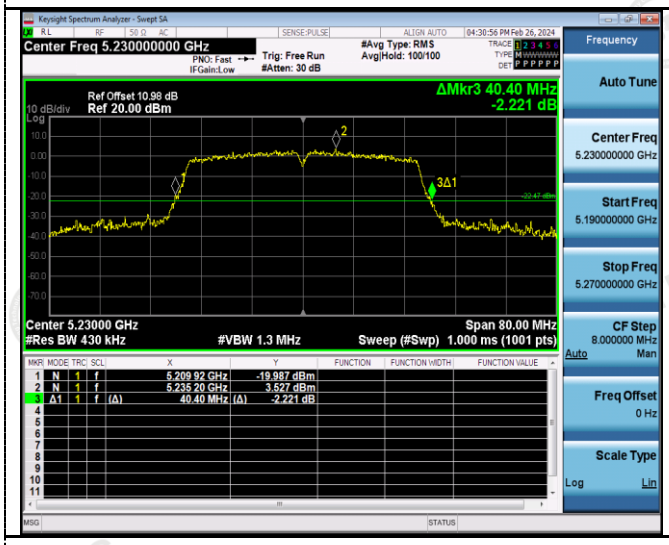
802.11ac(HT40)



CH38

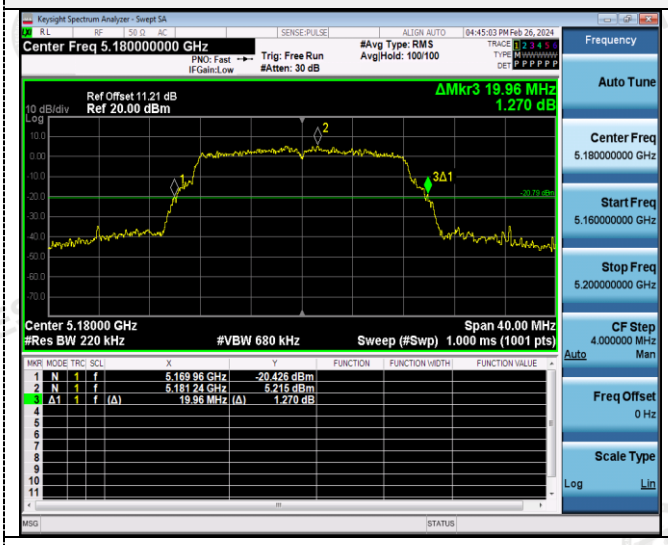
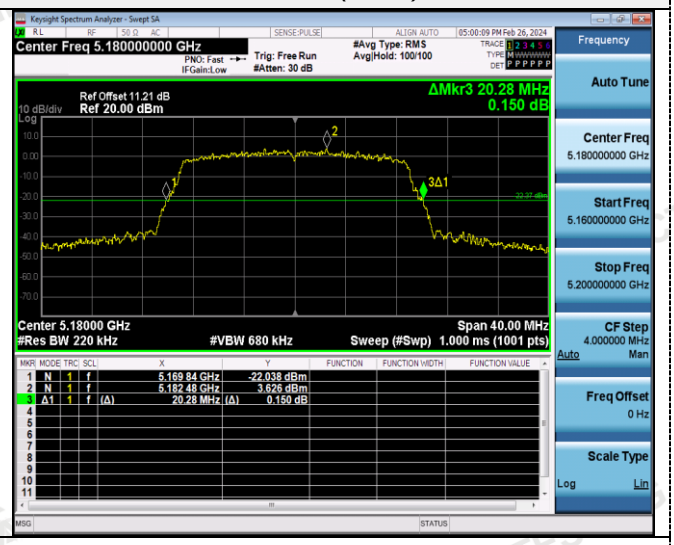
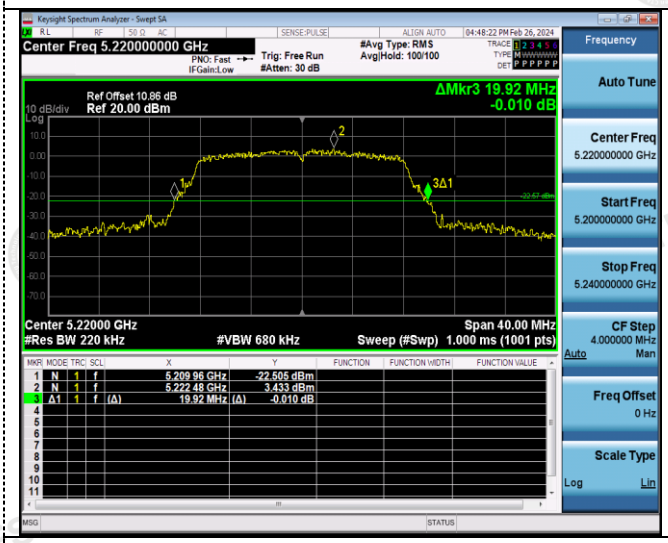
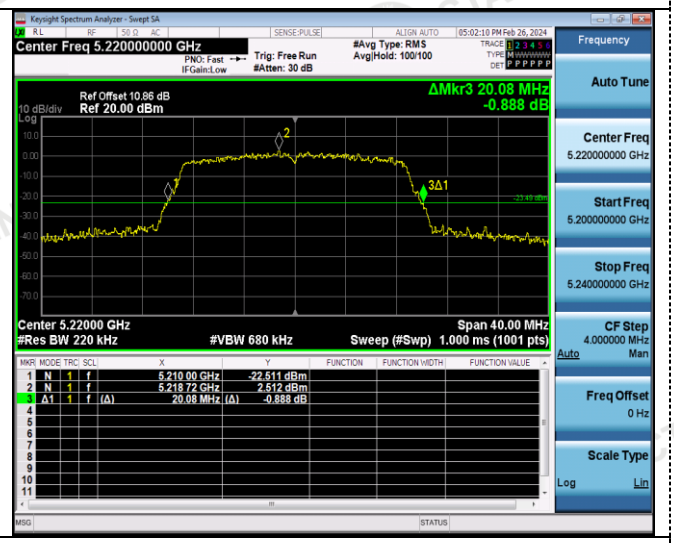
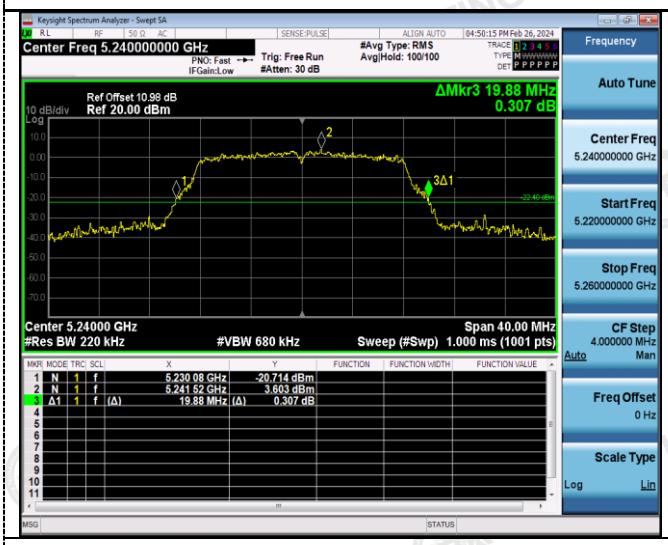
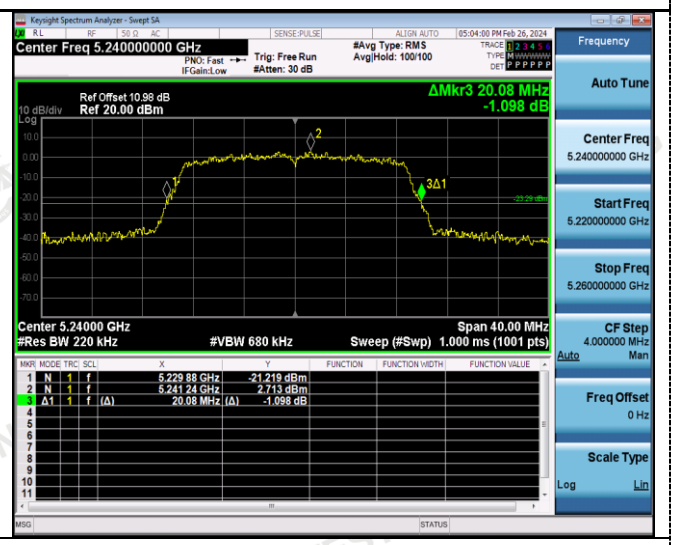
802.11ac(HT80)

CH42

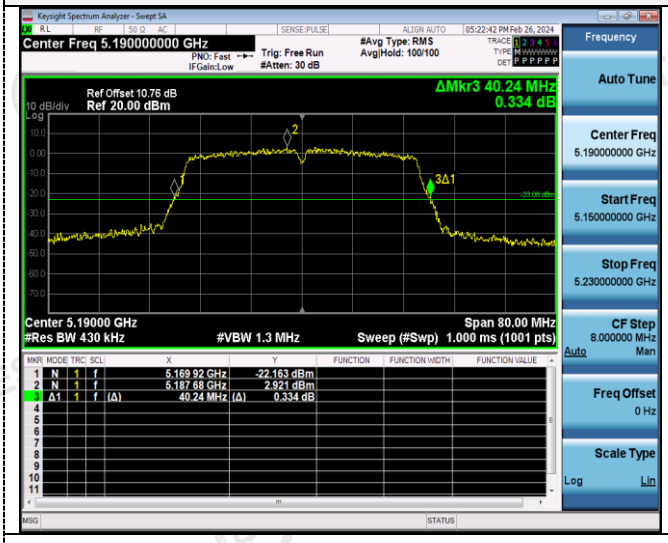


CH46

ANT 2

802.11a	802.11n(HT20)
	
CH36	CH36
	
CH40	CH40
	
CH48	CH48

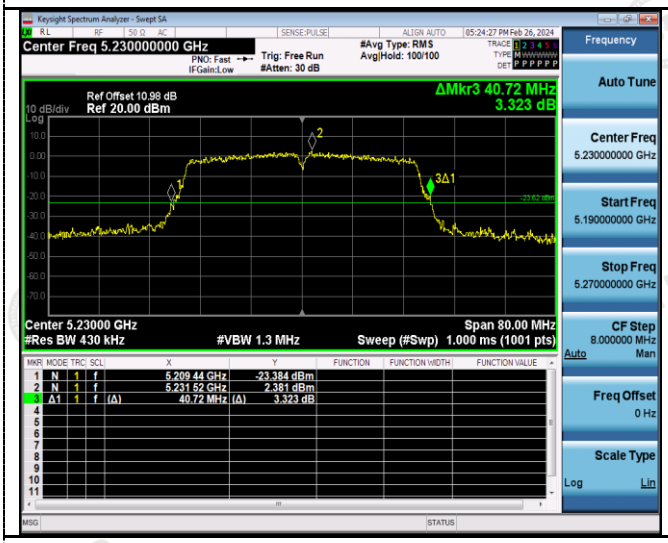
802.11n(HT40)



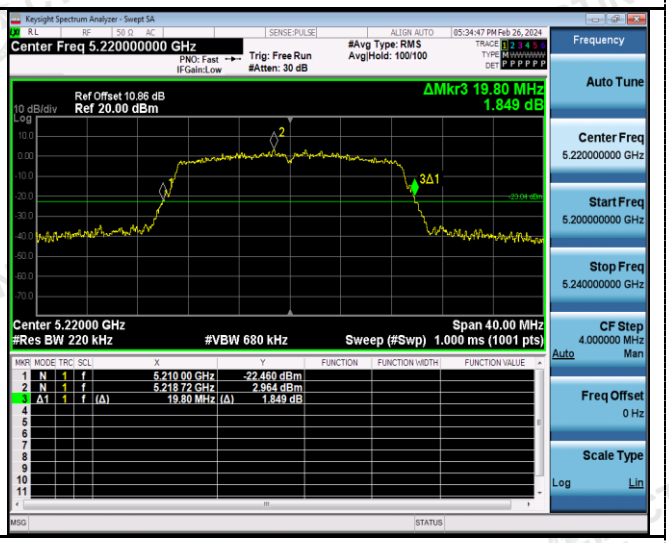
CH38

802.11ac(HT20)

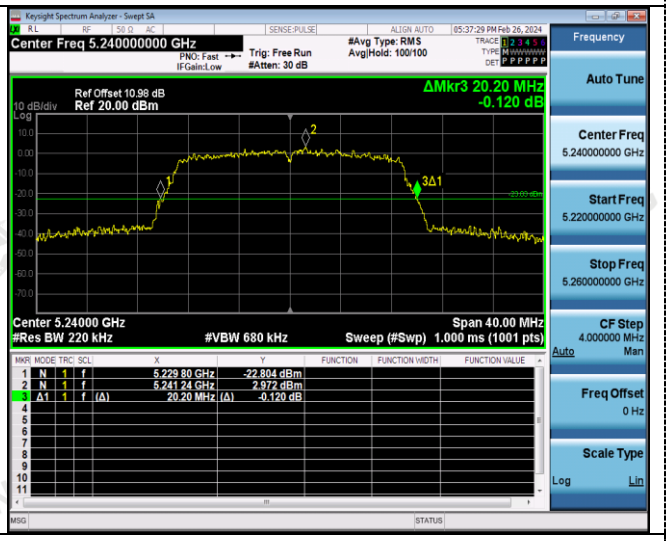
CH36



CH46

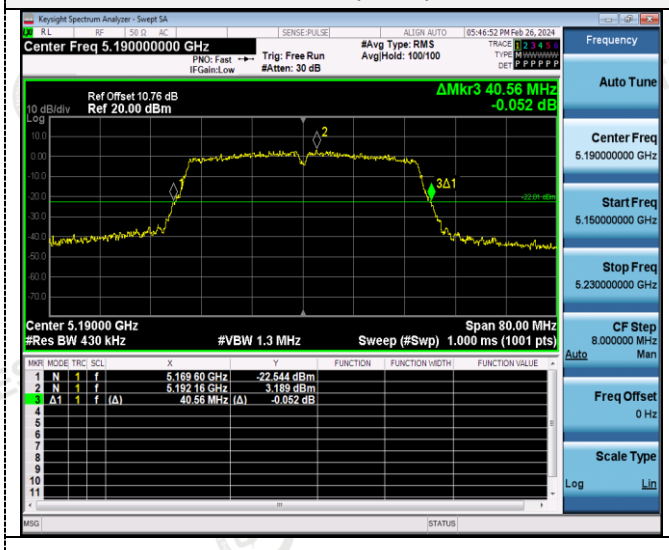


CH40



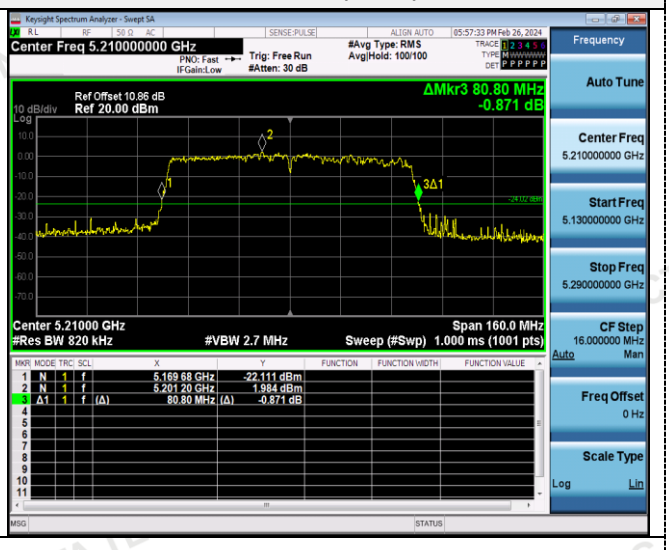
CH48

802.11ac(HT40)

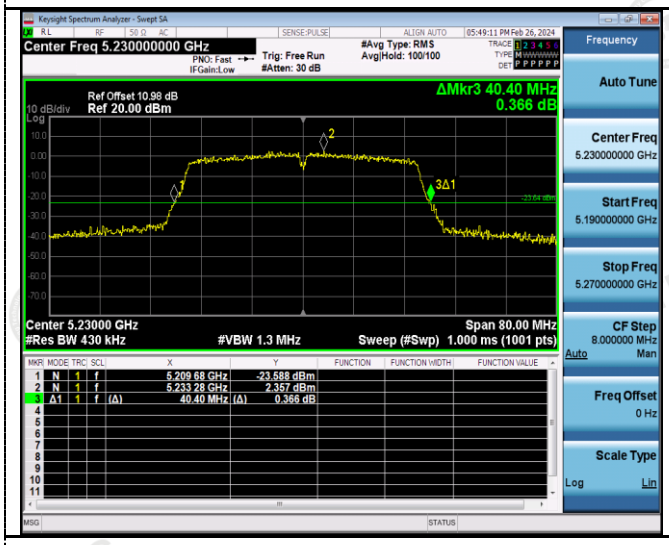


CH38

802.11ac(HT80)



CH42



CH46

4.6 Minimum Emission Bandwidth (6dB Bandwidth)

Limit

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure

1. Set resolution bandwidth (RBW) = 100 kHz
2. Set the video bandwidth 3 x RBW.
3. Detector = Peak.
4. Trace mode = Max hold.
5. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Test Configuration

Test Results

ANT 1

Type	Bands	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11a	U-NII 3	149	14.640	≥500KHz	Pass
		157	13.760		
		165	15.080		
802.11n(HT20)	U-NII 3	149	15.400		
		157	12.960		
		165	13.760		
802.11n(HT40)	U-NII 3	151	35.040		
		159	33.760		
802.11ac(HT20)	U-NII 3	149	14.120		
		157	15.720		
		165	15.080		
802.11ac(HT40)	U-NII 3	151	35.040		
		159	34.880		
802.11ac(HT80)	U-NII 3	155	73.760		

ANT 2

Type	Bands	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11a	U-NII 3	149	14.400	≥500KHz	Pass
		157	15.440		
		165	15.080		
802.11n(HT20)	U-NII 3	149	14.720		
		157	15.120		
		165	13.920		
802.11n(HT40)	U-NII 3	151	33.840		
		159	35.120		
802.11ac(HT20)	U-NII 3	149	15.240		
		157	13.840		
		165	13.840		
802.11ac(HT40)	U-NII 3	151	33.840		
		159	35.040		
802.11ac(HT80)	U-NII 3	155	75.040		

Test plot as follows: