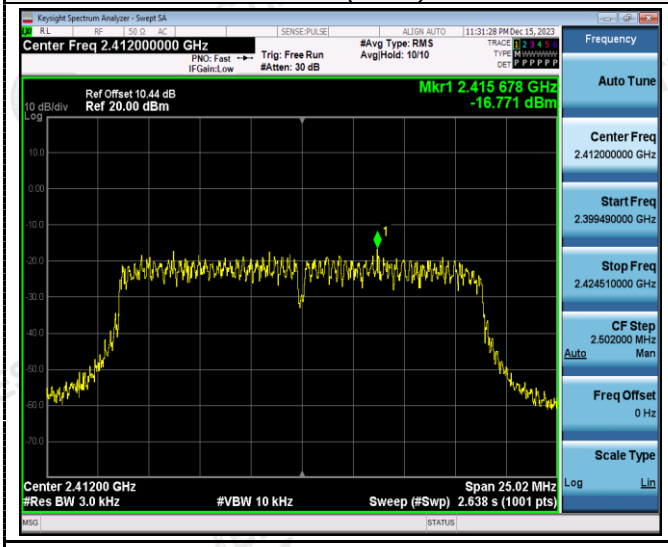
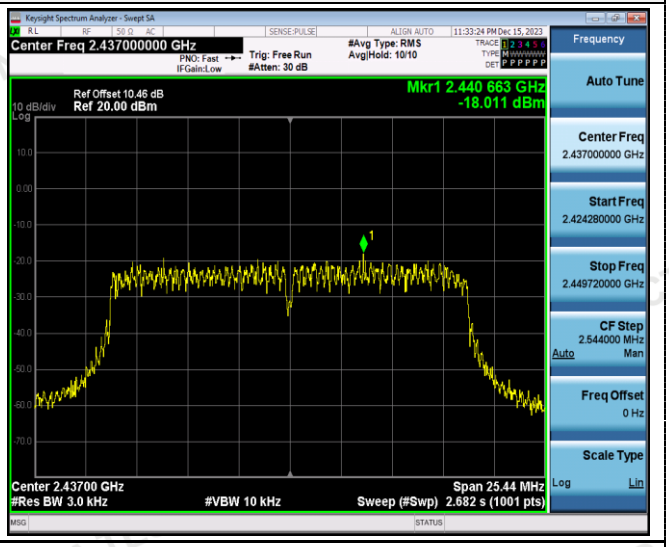
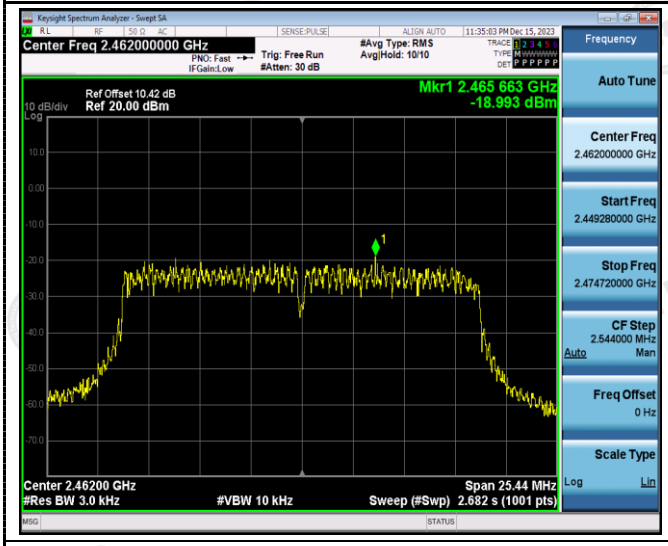
802.11n(HT20)



CH01



CH06



CH11

Ant 6:

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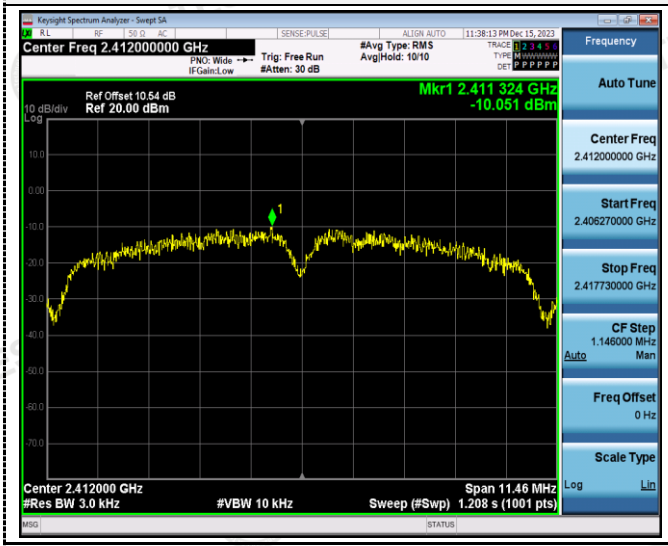	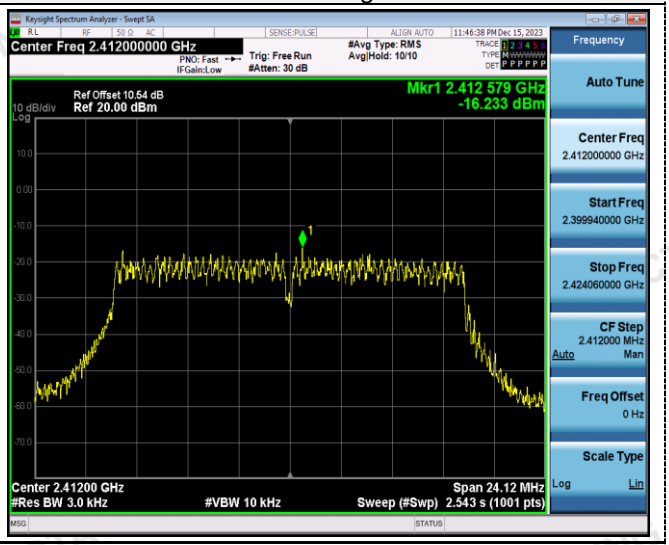
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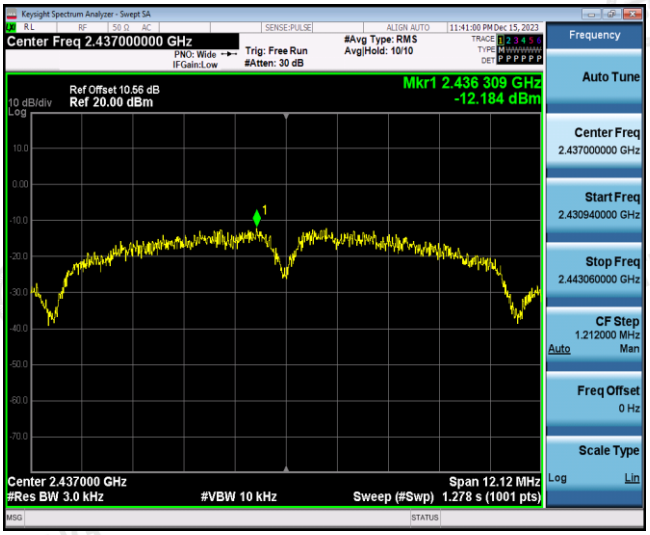	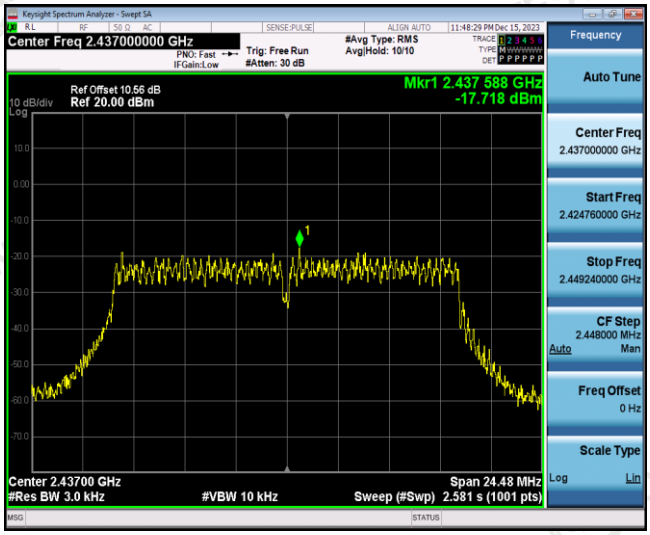
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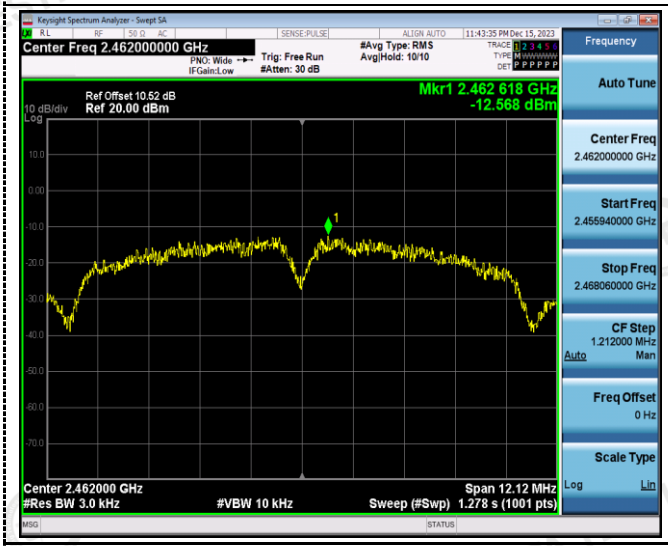
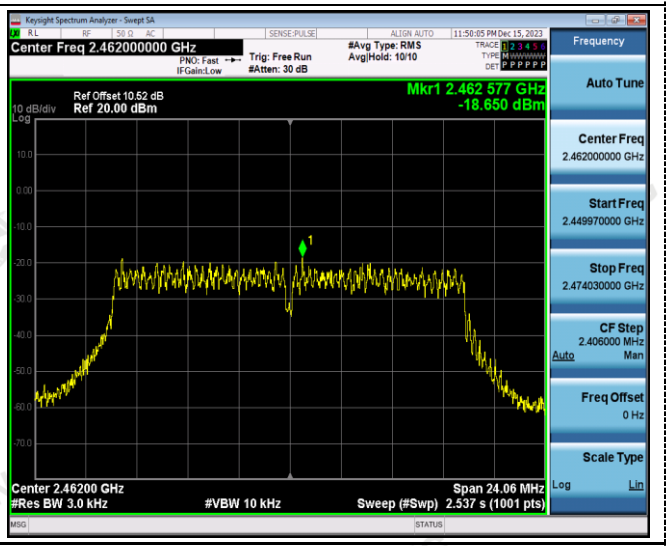
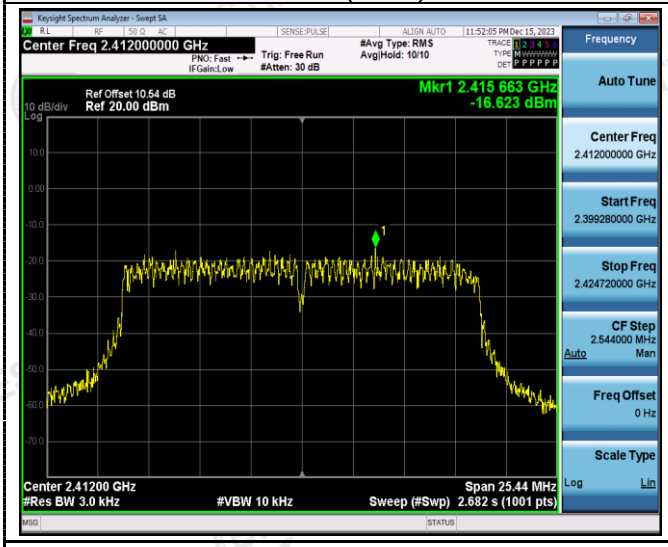
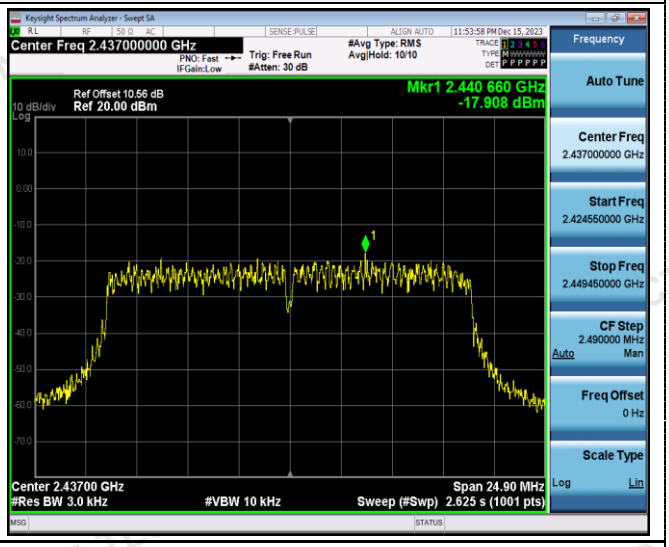
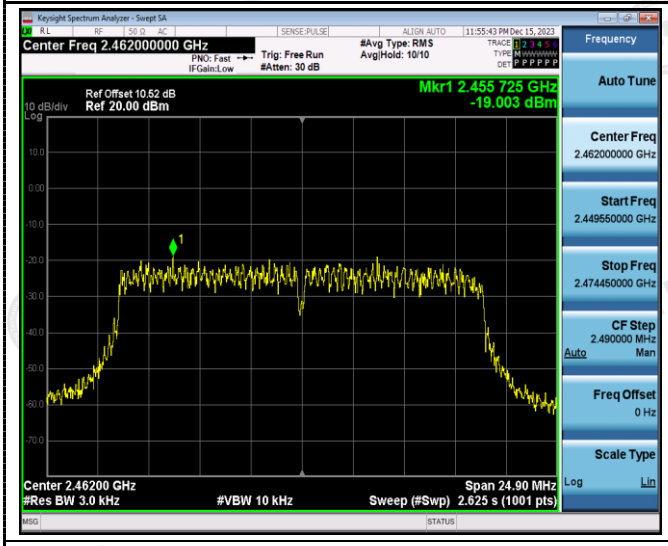
	
CH11	CH11

802.11n(HT20)	
	
CH01	CH06
	
CH11	

4.5 6dB Bandwidth

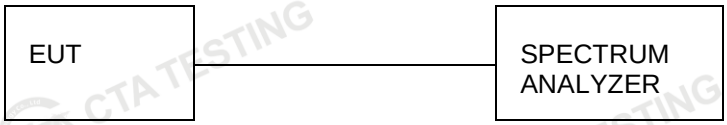
Limit

For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz

Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 KHz RBW and 300 KHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

Test Configuration



Test Results

Ant 1:

Type	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	01	8.560	≥500	Pass
	06	8.080		
	11	8.040		
802.11g	01	16.000	≥500	Pass
	06	16.280		
	11	16.320		
802.11n(HT20)	01	16.920	≥500	Pass
	06	16.600		
	11	16.080		

Ant 2:

Type	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	01	8.040	≥500	Pass
	06	8.000		
	11	7.560		
802.11g	01	16.040	≥500	Pass
	06	16.280		
	11	16.320		
802.11n(HT20)	01	16.640	≥500	Pass
	06	16.280		
	11	16.680		

Ant 3:

Type	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	01	8.040	≥500	Pass
	06	8.080		
	11	8.560		
802.11g	01	16.320	≥500	Pass
	06	16.280		
	11	16.080		
802.11n(HT20)	01	16.920	≥500	Pass
	06	16.600		
	11	16.600		

Ant 4:

Type	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	01	8.040	≥500	Pass
	06	7.120		
	11	8.080		
802.11g	01	16.320	≥500	Pass
	06	16.280		
	11	16.040		
802.11n(HT20)	01	16.280	≥500	Pass
	06	16.560		
	11	16.240		

Ant 5:

Type	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	01	8.080	≥500	Pass
	06	8.080		
	11	7.560		
802.11g	01	16.320	≥500	Pass
	06	16.320		
	11	16.000		
802.11n(HT20)	01	16.680	≥500	Pass
	06	16.960		
	11	16.960		

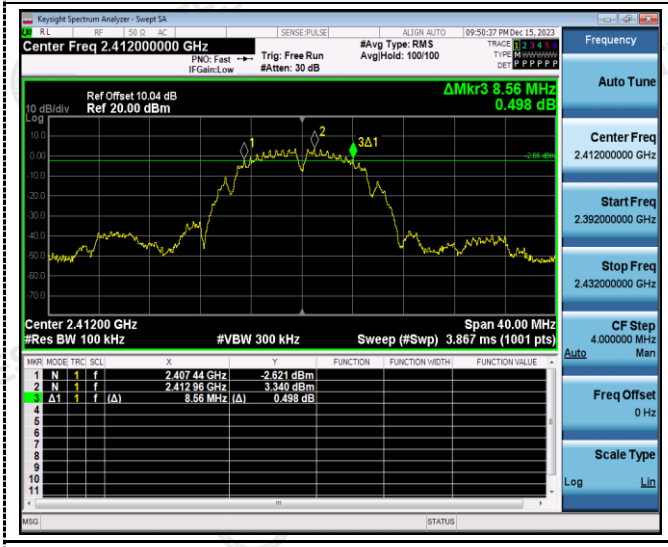
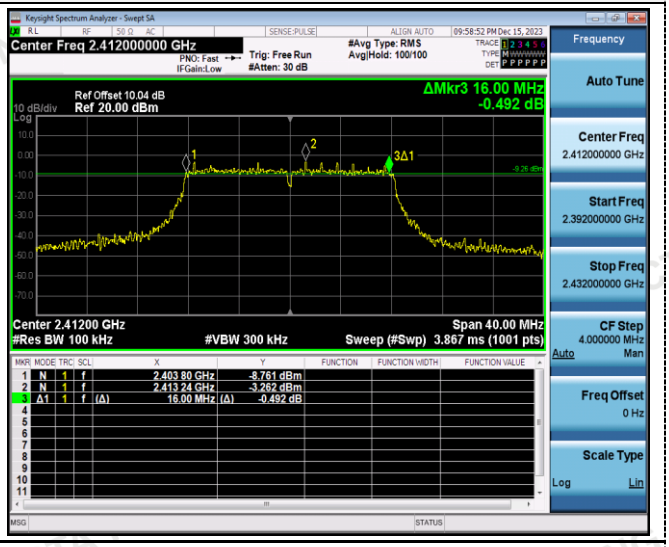
Ant 6:

Type	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	01	7.640	≥500	Pass
	06	8.080		
	11	8.080		
802.11g	01	16.080	≥500	Pass
	06	16.320		
	11	16.040		
802.11n(HT20)	01	16.960	≥500	Pass
	06	16.600		
	11	16.600		

Note:
1) Measured peak power spectrum density at difference data rate for each mode and recorded worst case for each mode.
2) Test results including cable loss;
3) Worst case data at 1Mbps at IEEE 802.11b; 6Mbps at IEEE 802.11g; 6.5Mbps at IEEE 802.11n HT20;

Please refer to following plots;

Ant 1：

802.11b	802.11g
	
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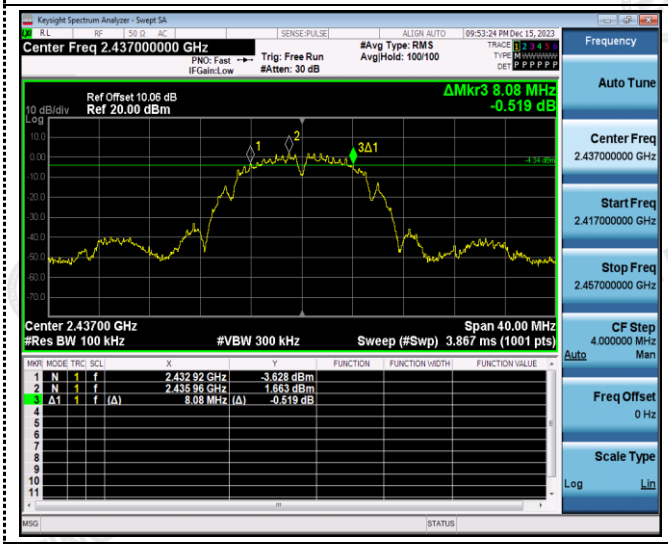	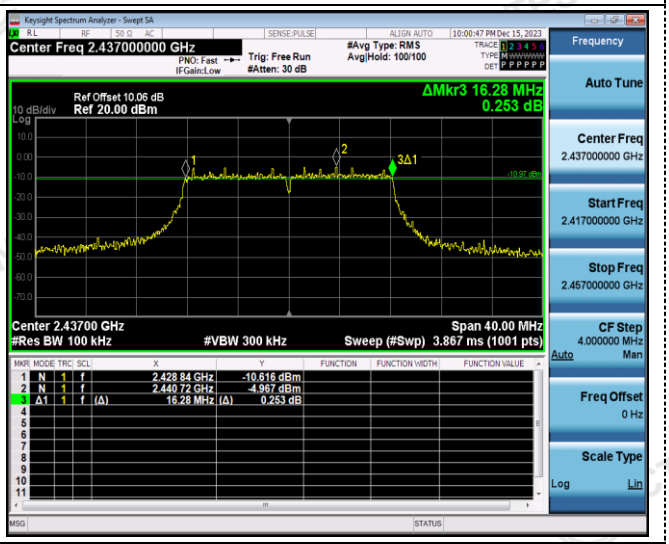
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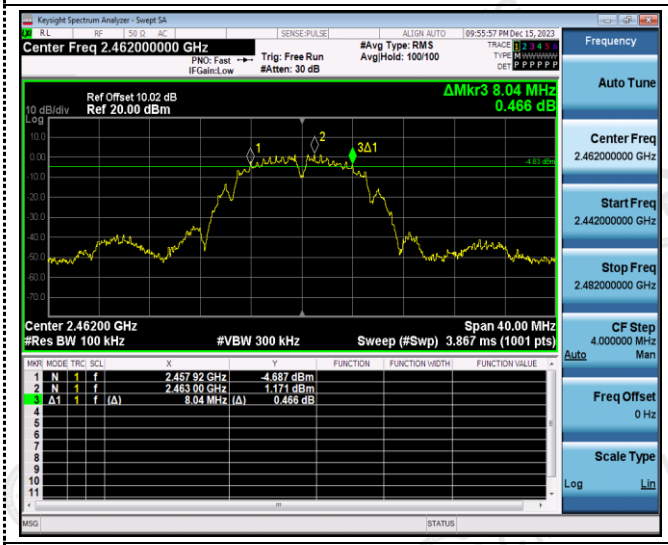
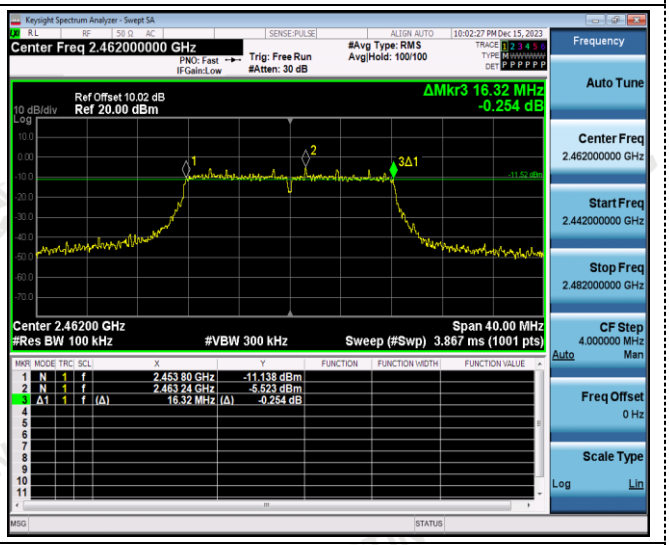
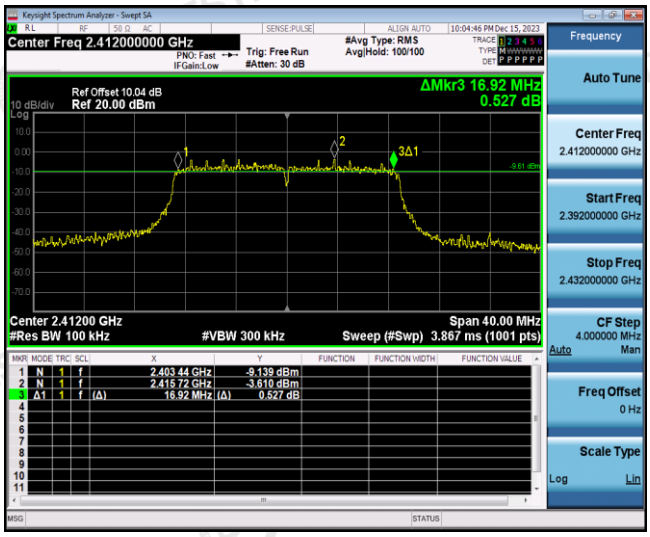
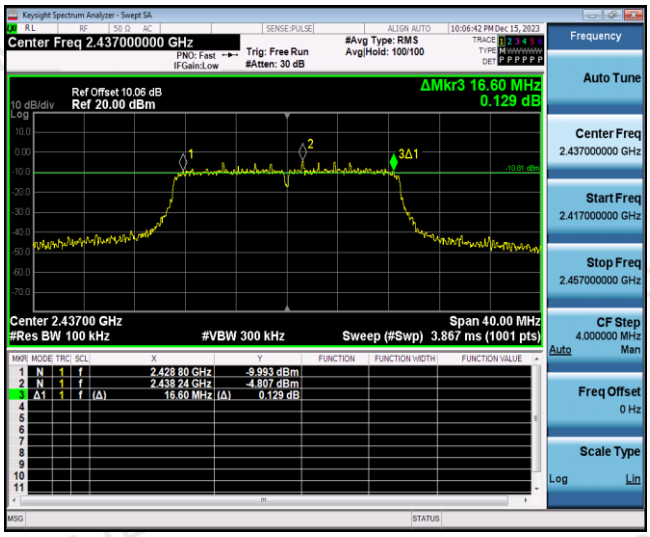
	
CH11	CH11

802.11n(HT20)	802.11n(HT20)
	
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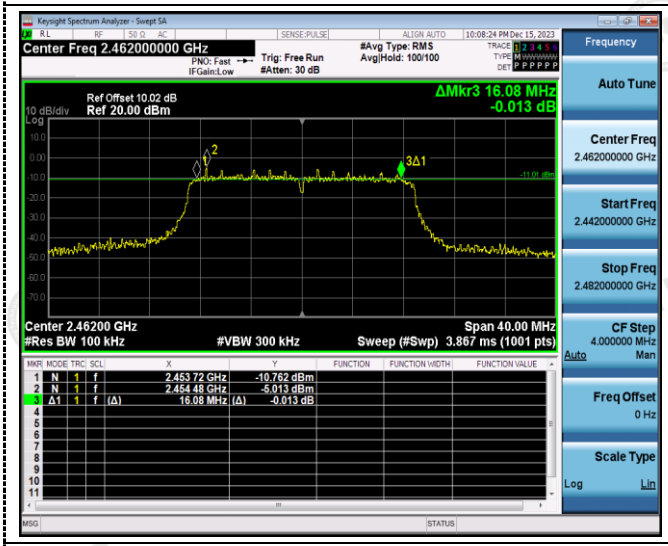	/
CH11	

Ant 2：

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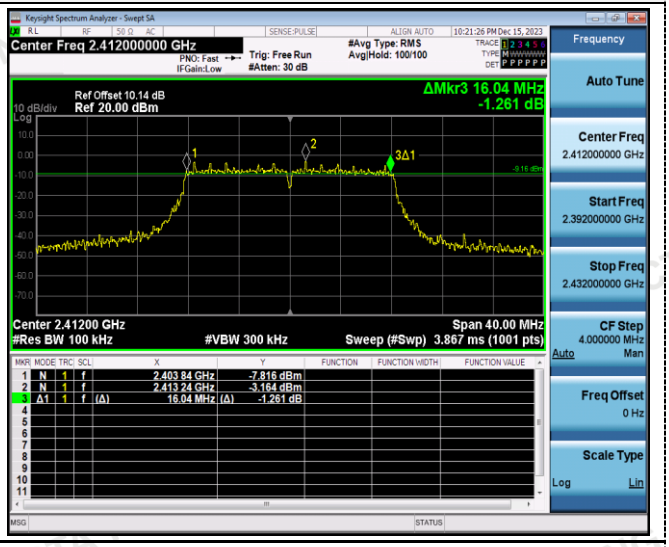
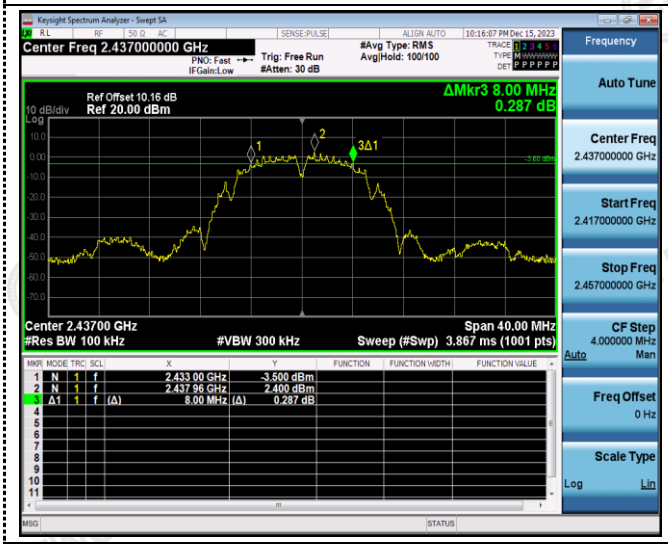
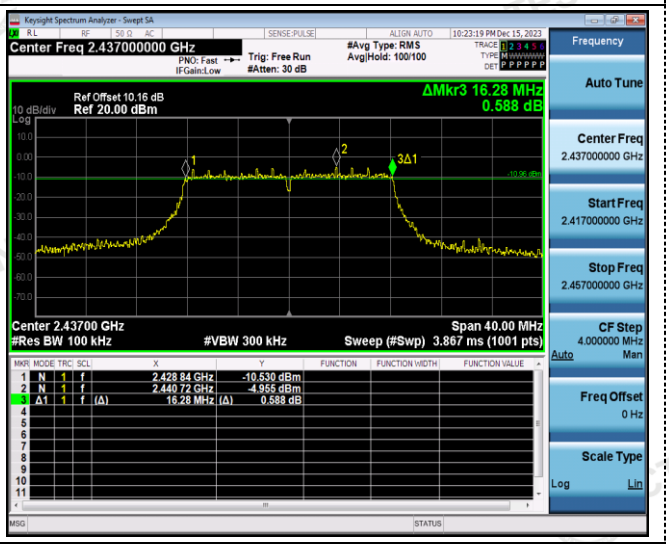
	
CH01	CH01
	
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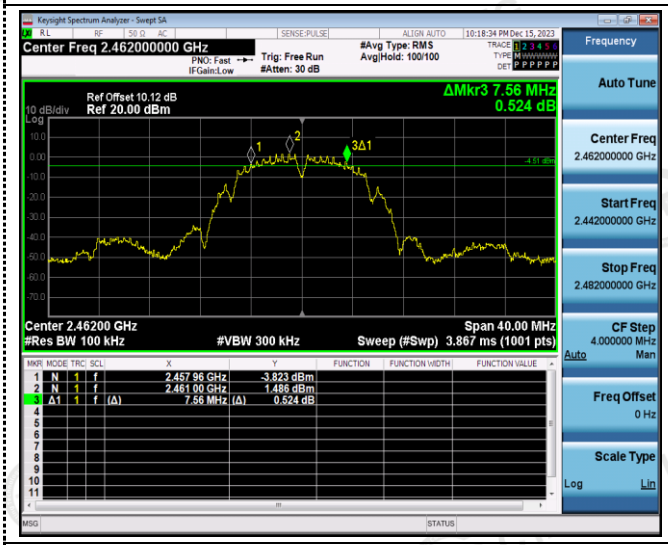
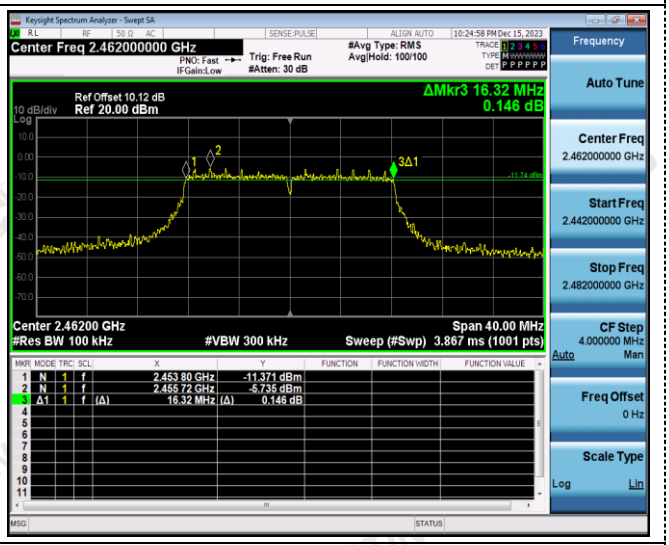
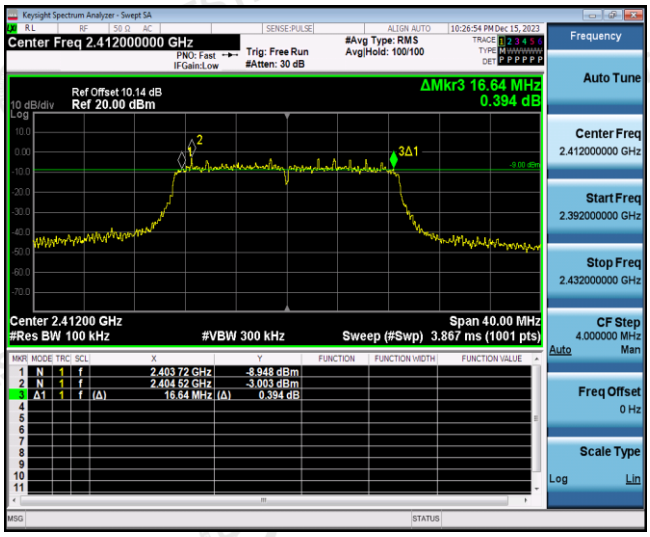
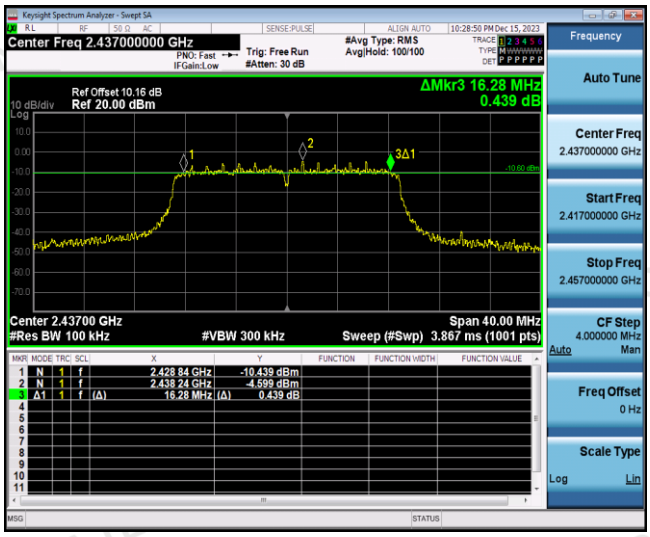
	
CH11	CH11

802.11n(HT20)	802.11n(HT20)
	
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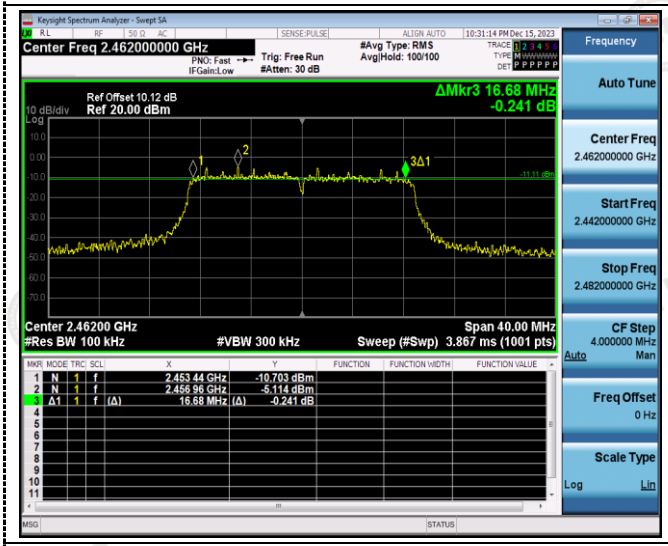	/
CH11	

Ant 3：

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	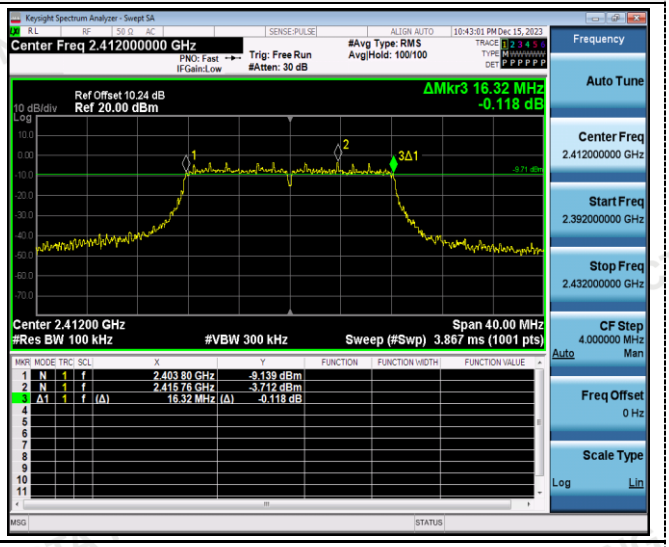
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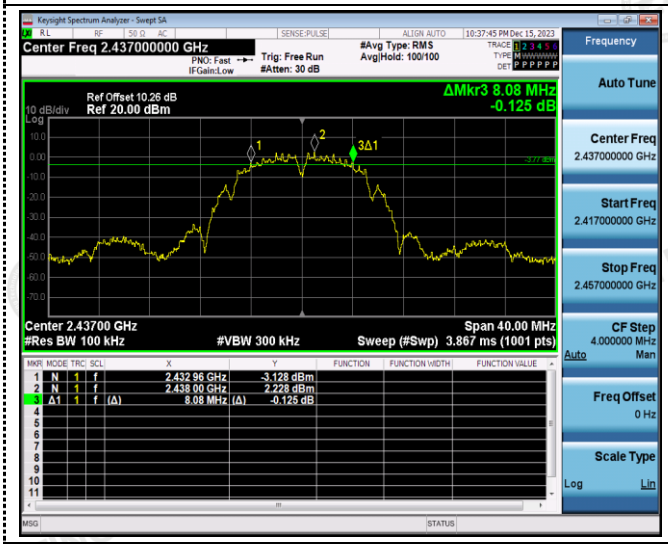	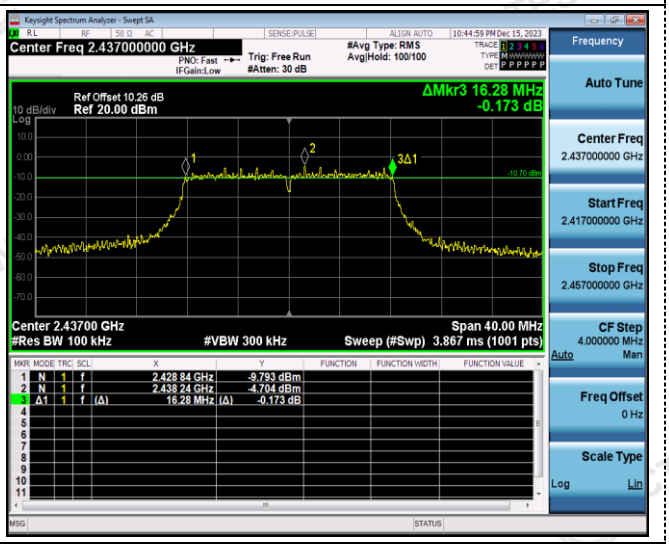
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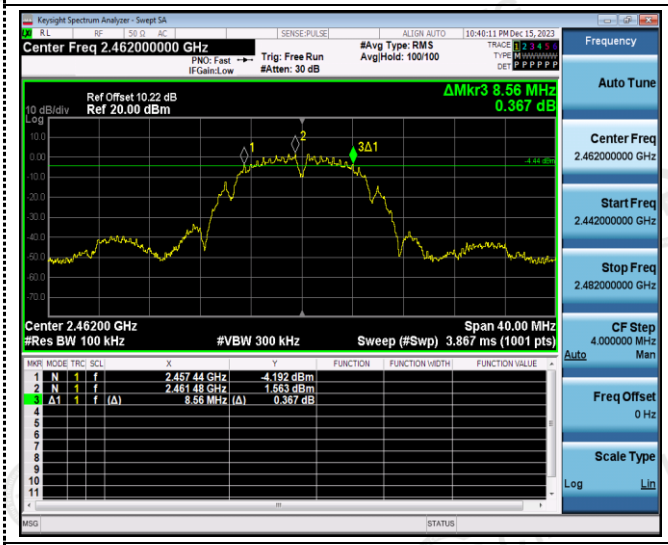
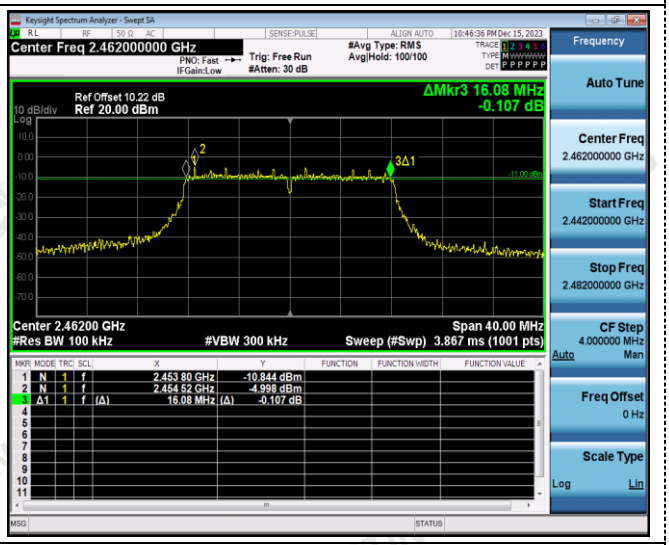
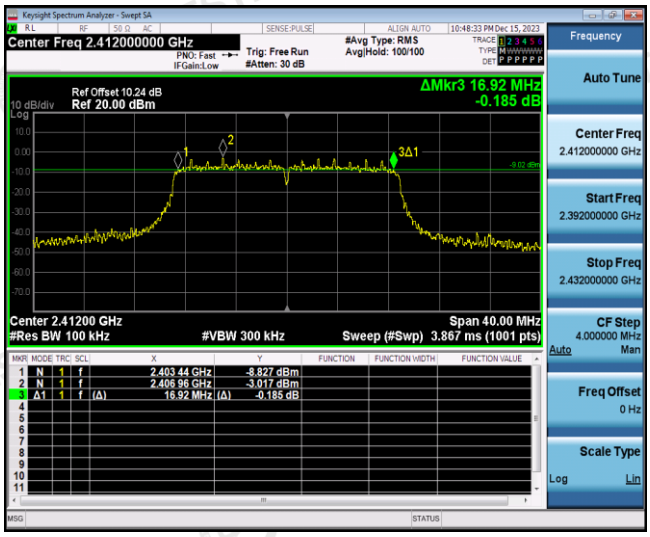
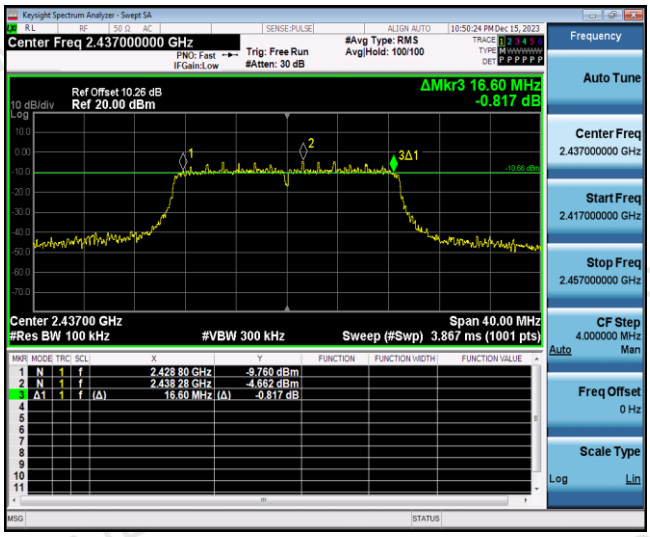
	
CH11	*CH11*

802.11n(HT20)	802.11n(HT20)
	
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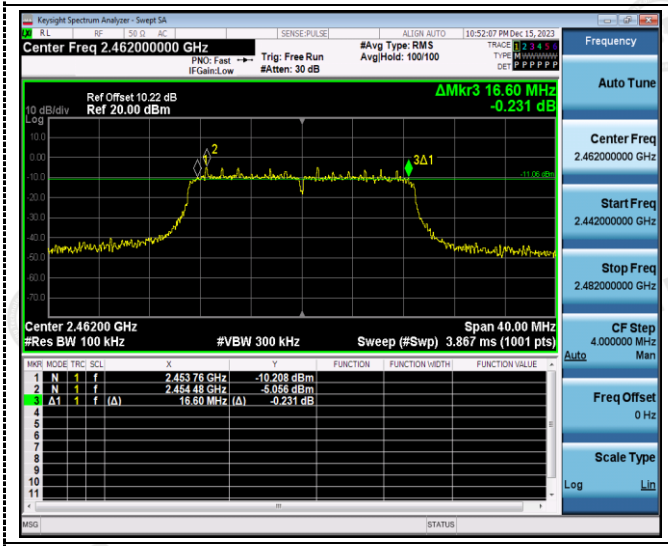	/
CH11	

Ant 4：

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	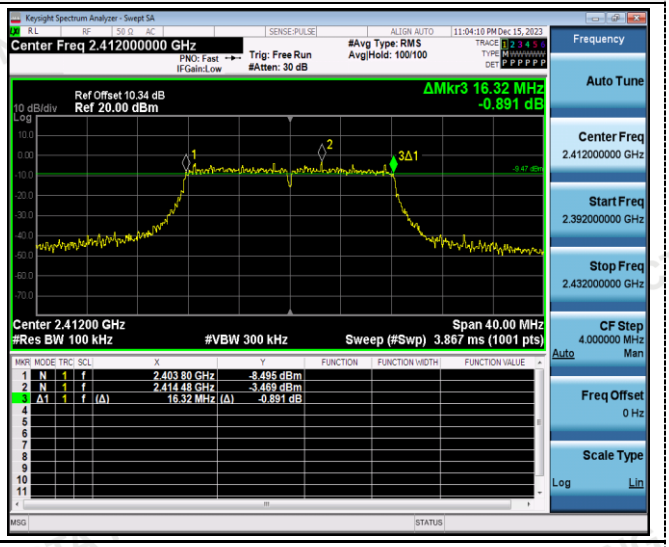
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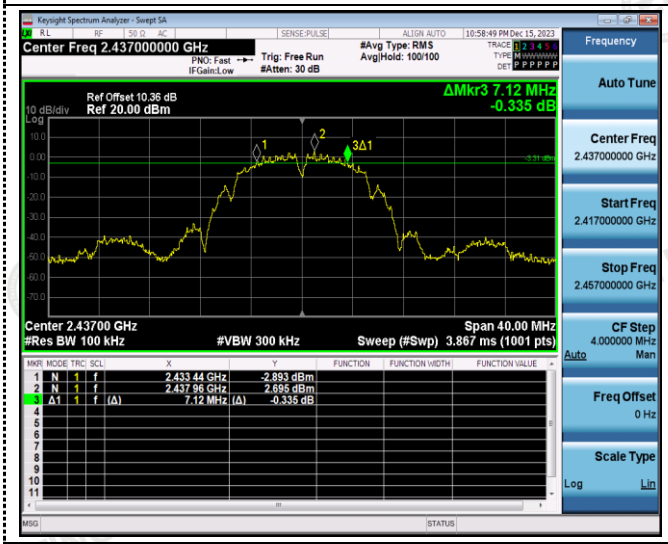	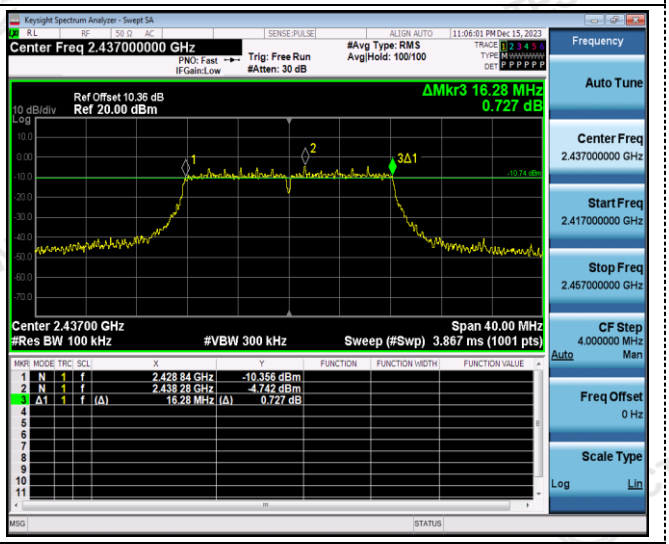
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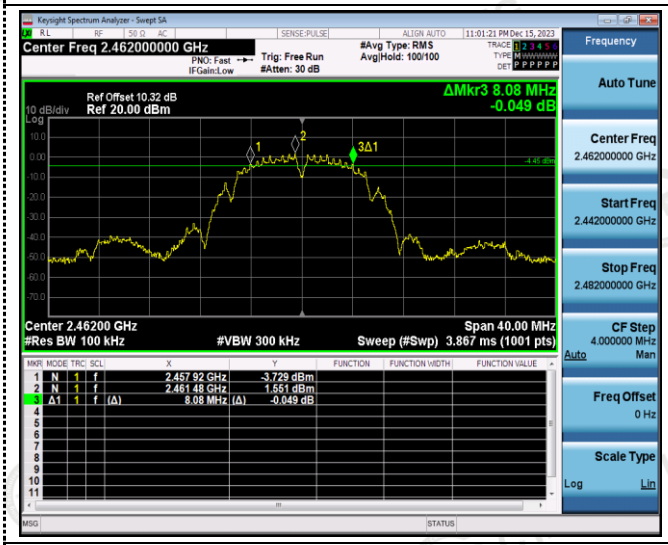	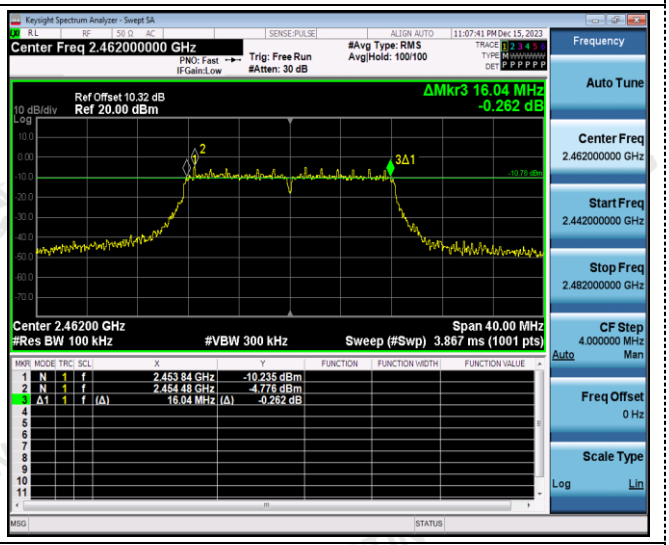
CH11	*CH11*