

Ant 2

Type	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	01	8.080	≥500	Pass
	06	8.040		
	11	8.040		
802.11g	01	15.680	≥500	Pass
	06	15.800		
	11	14.800		
802.11n HT20	01	16.320	≥500	Pass
	06	15.000		
	11	16.320		
802.11n HT40	03	33.840	≥500	Pass
	06	35.040		
	09	32.560		
802.11ax HE20	01	18.400	≥500	Pass
	06	18.240		
	11	15.800		
802.11ax HE40	03	36.240	≥500	Pass
	06	37.200		
	09	36.160		

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; 13.5Mbps at IEEE 802.11n HT40; 8.6Mbps at IEEE 802.11ax HE20; 17.2Mbps at IEEE 802.11ax HE40.

Please refer to following plots;

Ant 1

802.11b



802.11g



CH01



CH01



CH06



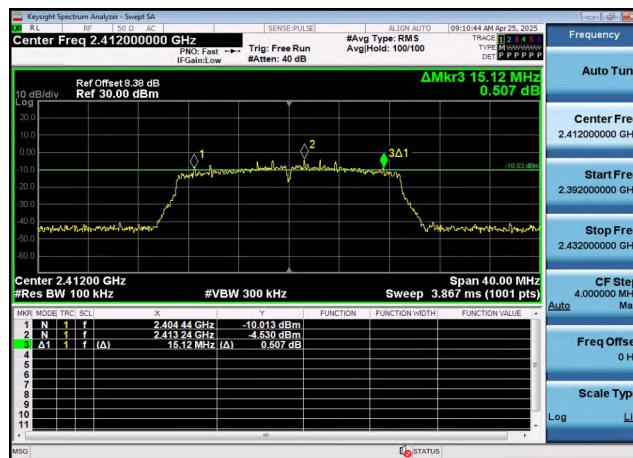
CH06



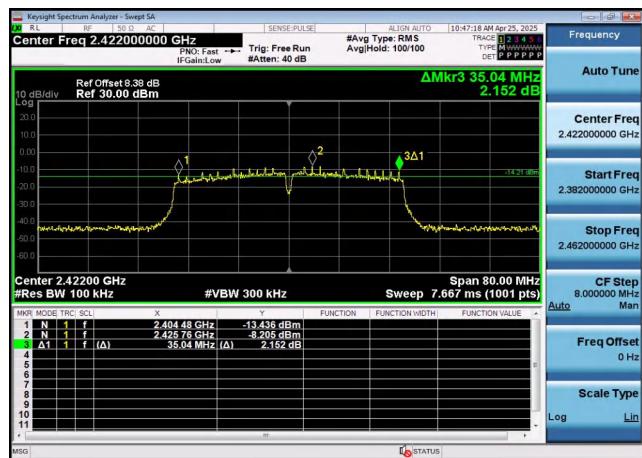
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802.11n HT20



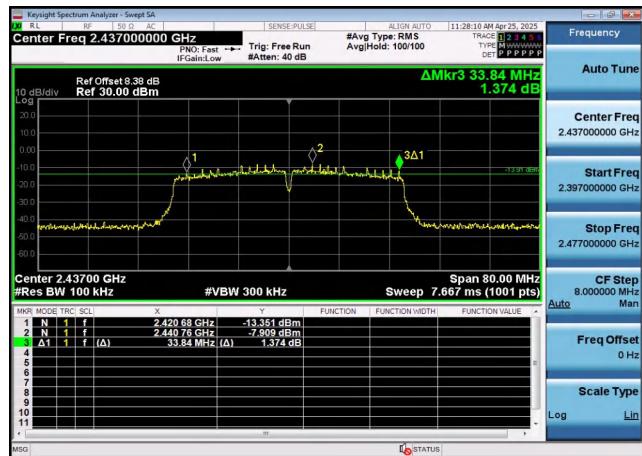
802.11n HT40



CH01



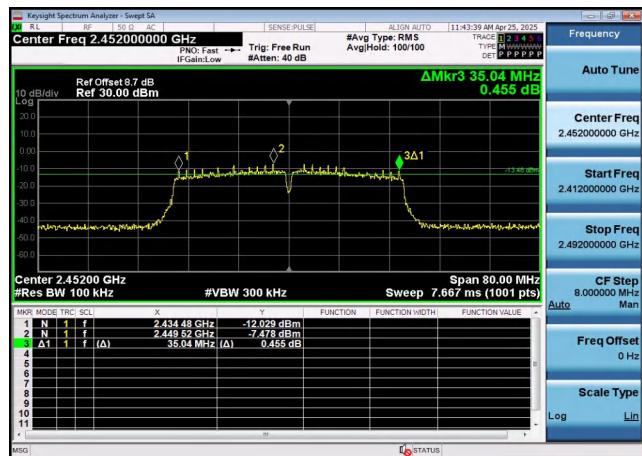
CH03



CH06



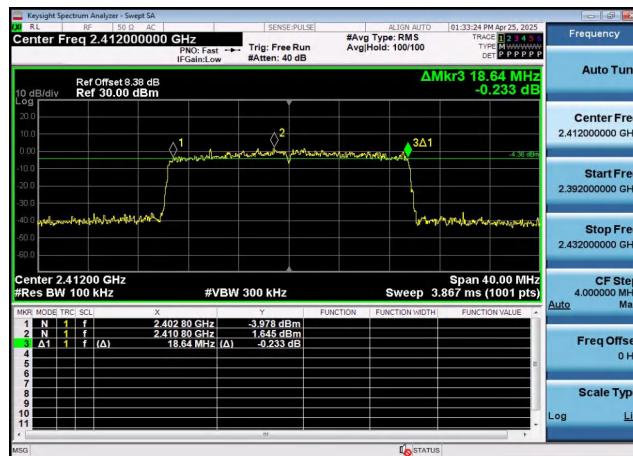
CH06



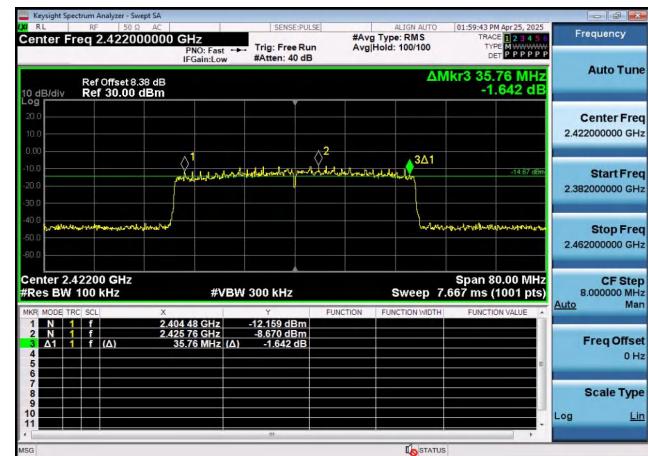
CH11

CH09

802.11ax HE20



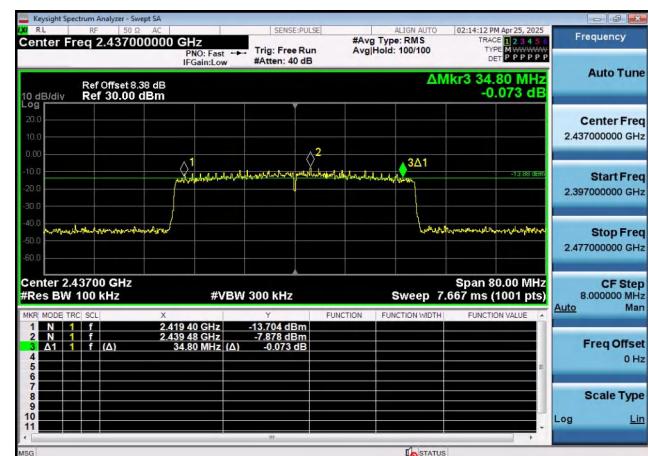
802.11ax HE40



CH01



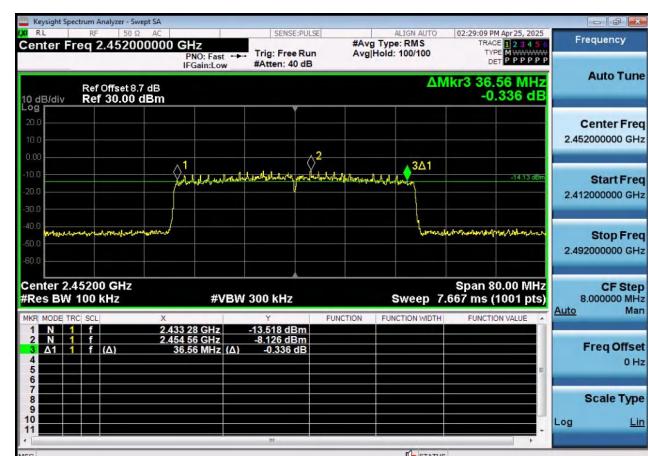
CH03



CH06



CH06



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Ant 2

802.11b



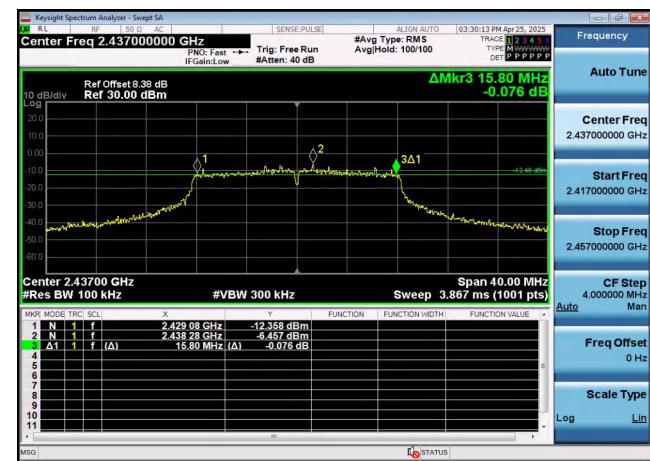
802.11g



CH01



CH01



CH06



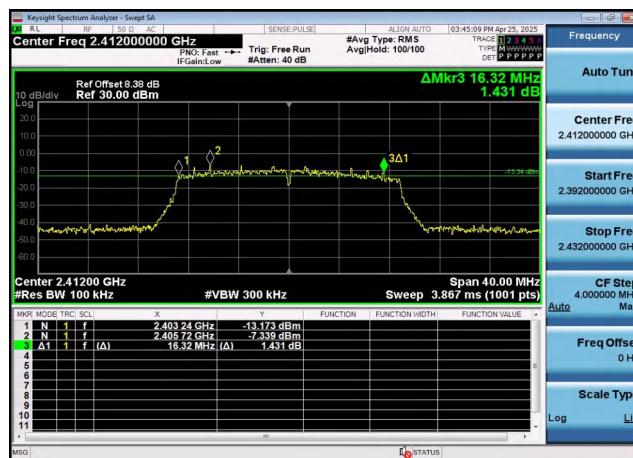
CH06



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CH11

802.11n HT20



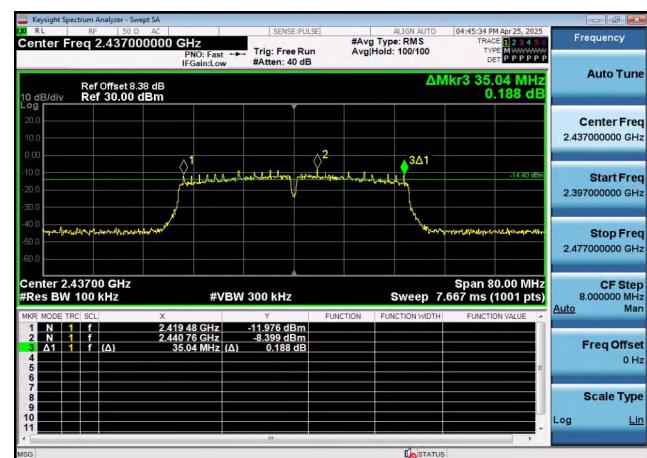
802.11n HT40



CH01



CH03



CH06



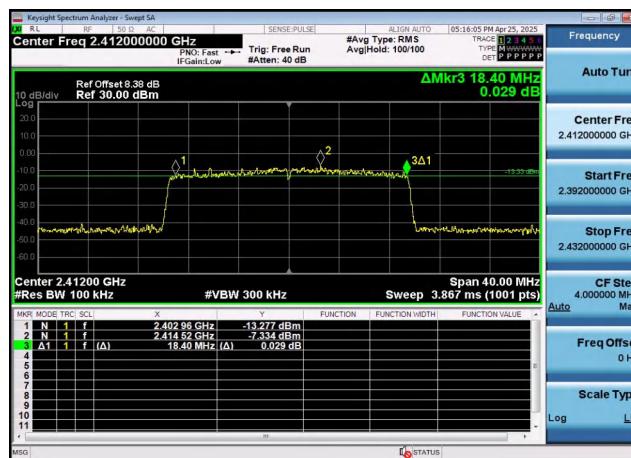
CH06



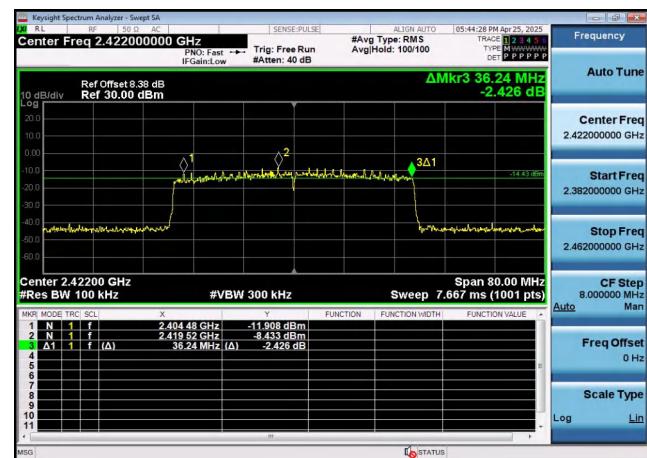
CH11

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802.11ax HE20



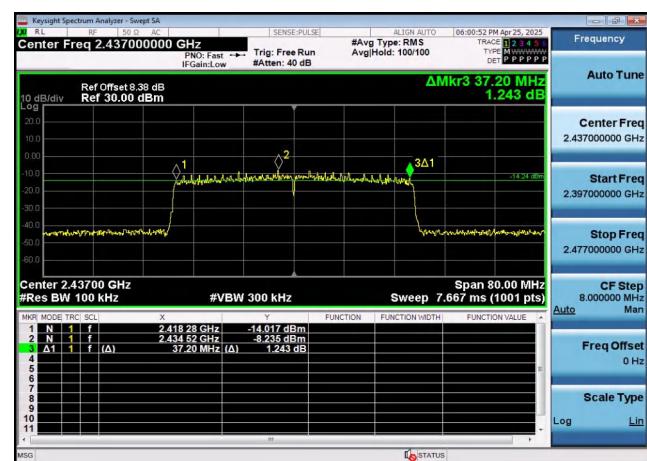
802.11ax HE40



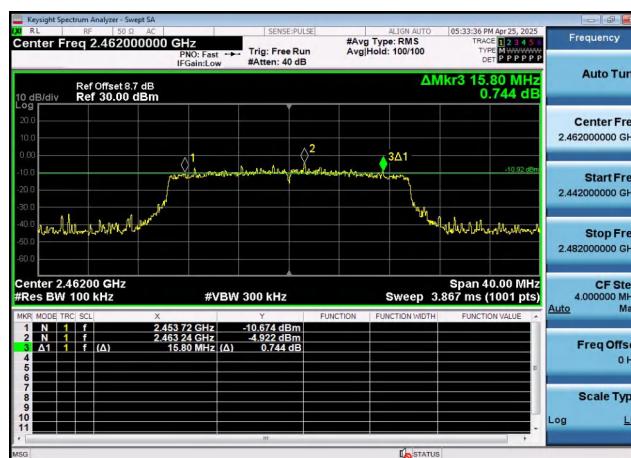
CH01



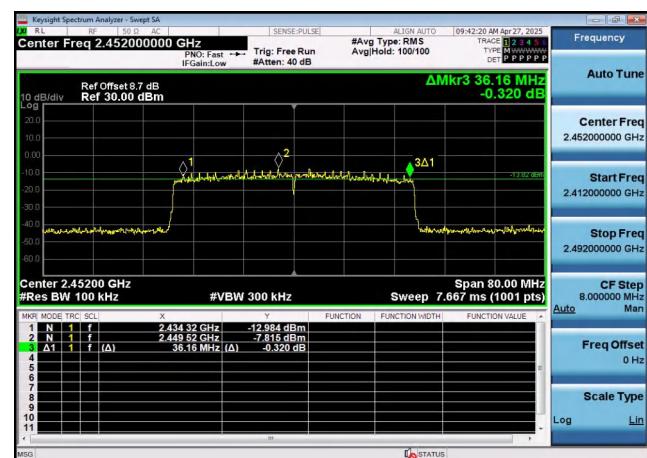
CH03



CH06



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4.6 Out-of-band Emissions

Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

Test Procedure

Connect the transmitter output to spectrum analyzer using a low loss RF cable, and set the spectrum analyzer to RBW=100 kHz, VBW= 300 kHz, peak detector , and max hold. Measurements utilizing these setting are made of the in-band reference level, bandedge and out-of-band emissions.

Test Configuration

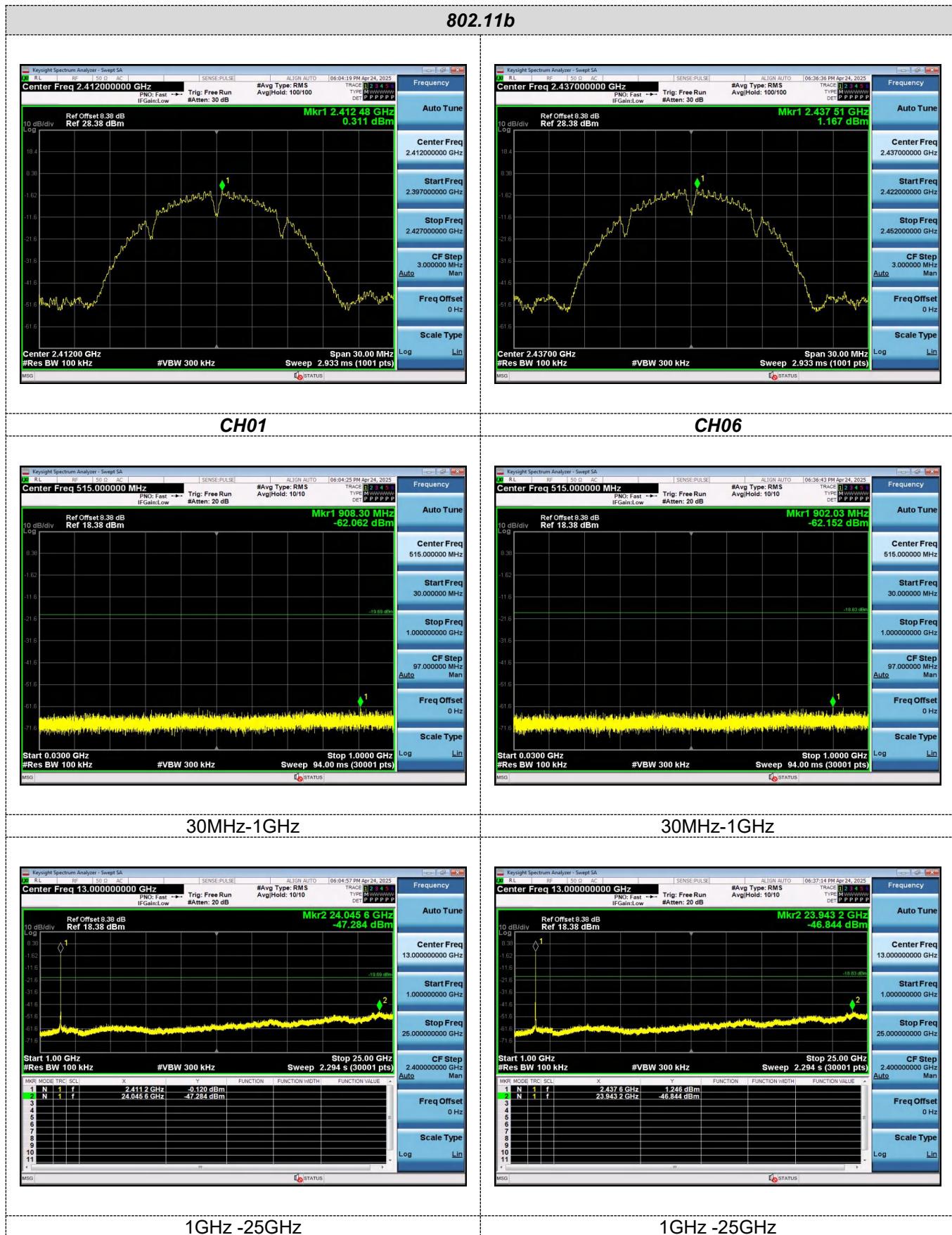


Test Results

Remark: The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and bandage measurement data. And record the worst data in the report.

Test plot as follows:

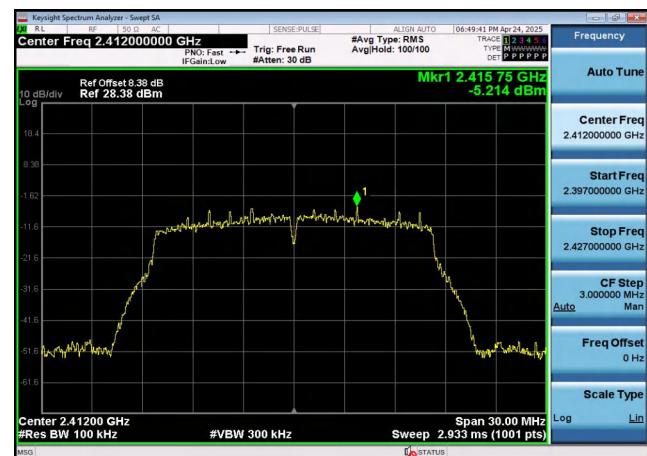
Ant 1



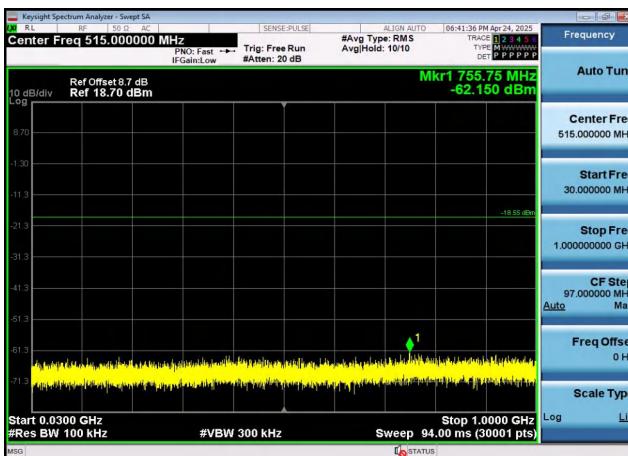
802.11b



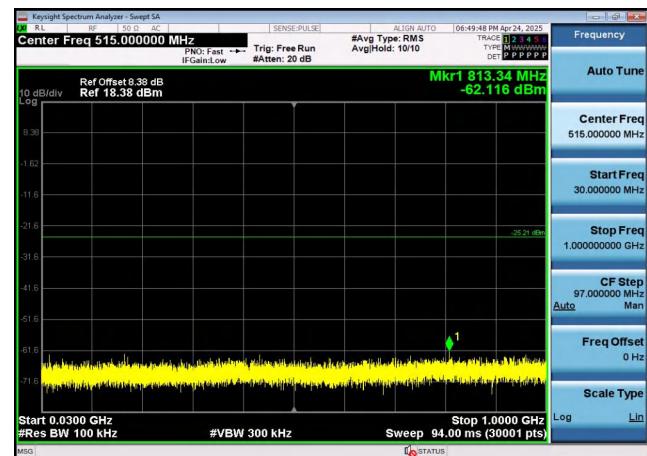
802.11g



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CH01



30MHz-1GHz



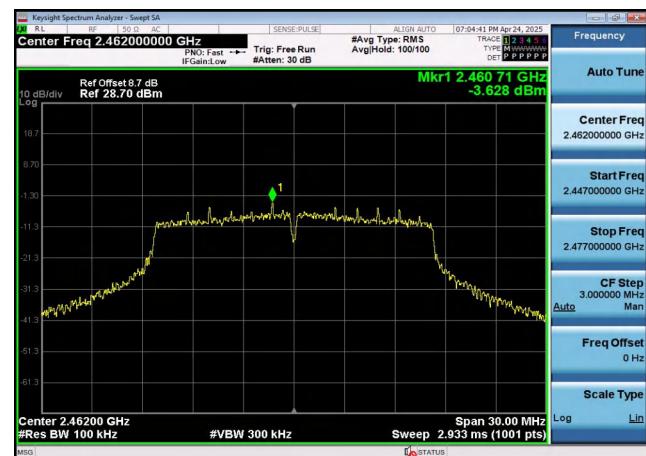
30MHz-1GHz



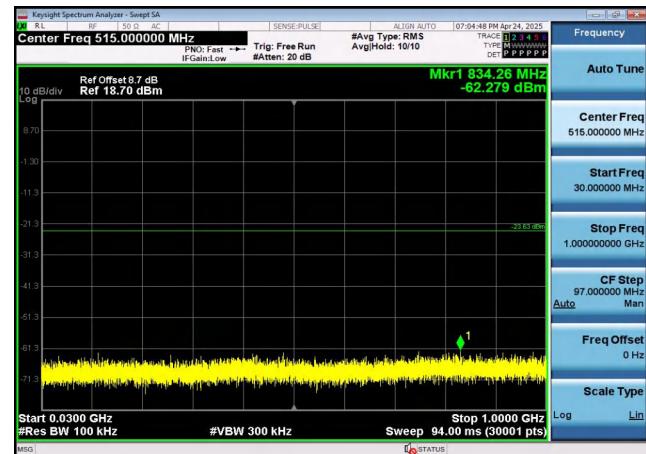
1GHz -25GHz

1GHz -25GHz

802.11g



CH06



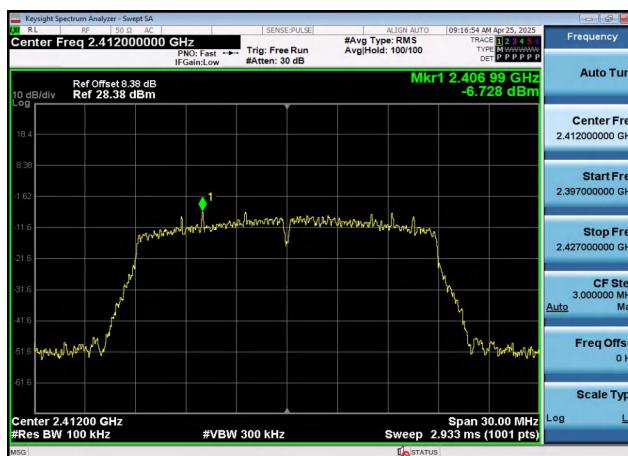
30MHz-1GHz



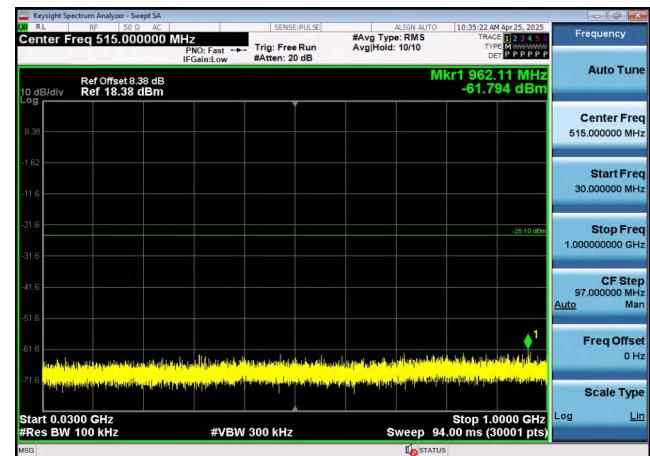
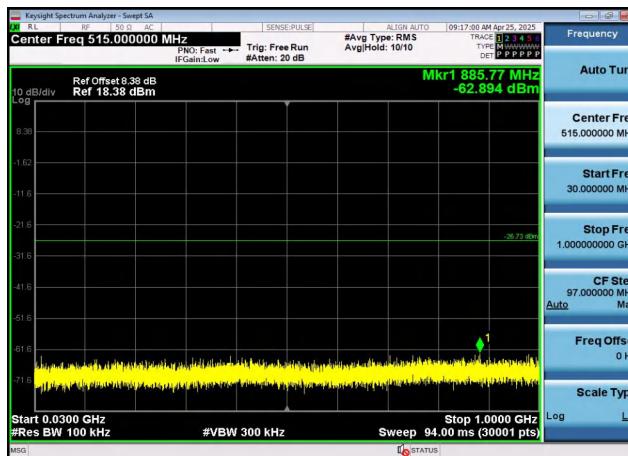
1GHz -25GHz

1GHz -25GHz

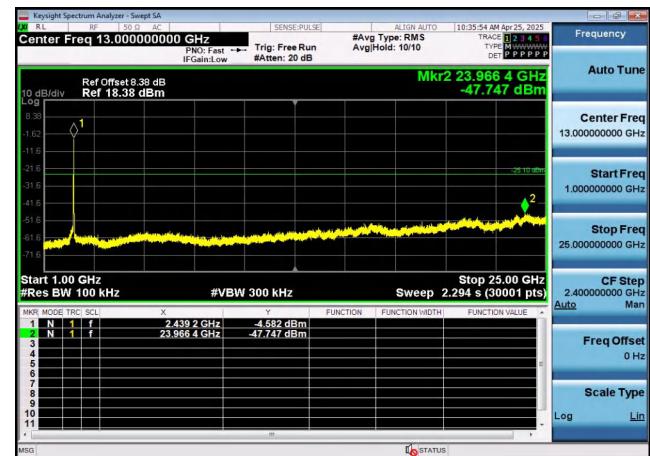
802.11n HT20



CH01



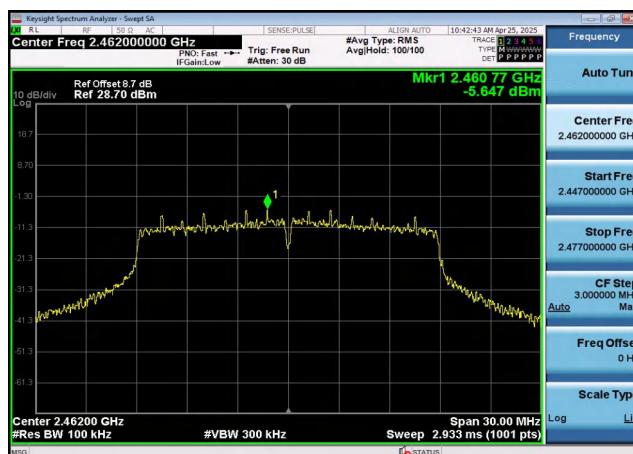
30MHz-1GHz



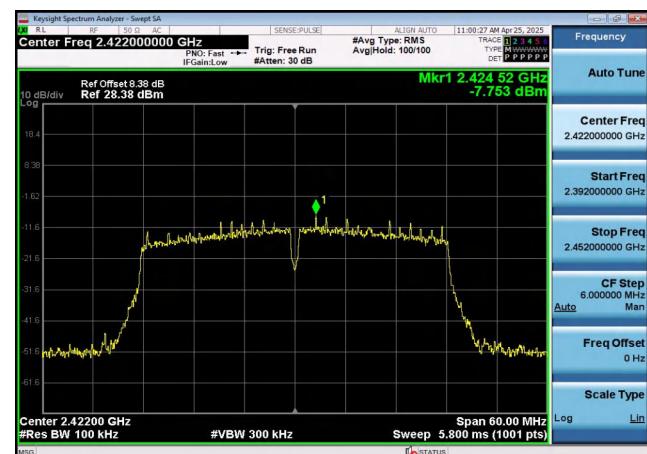
1GHz -25GHz

1GHz -25GHz

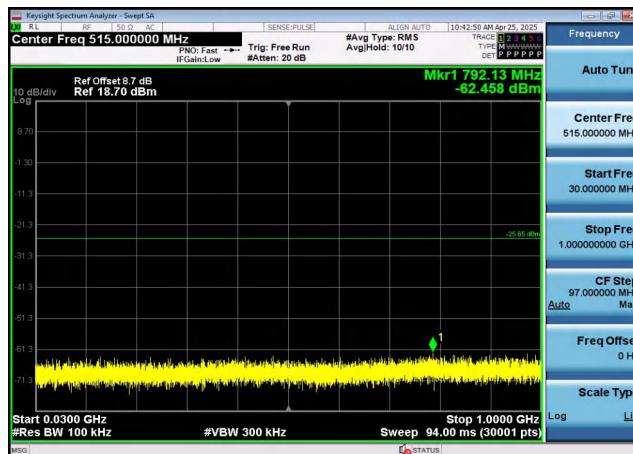
802.11n HT20



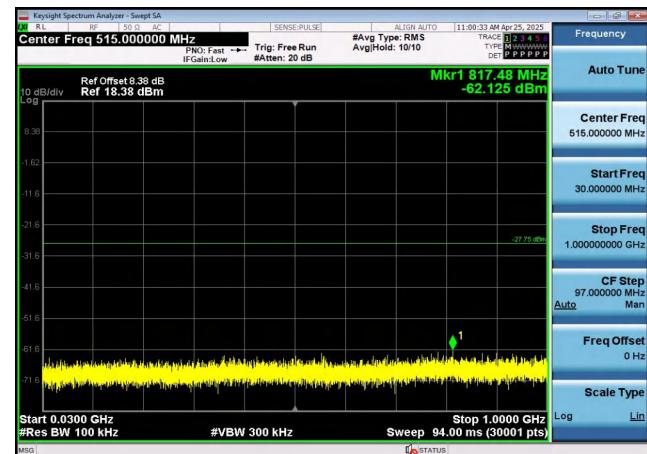
802.11n HT40



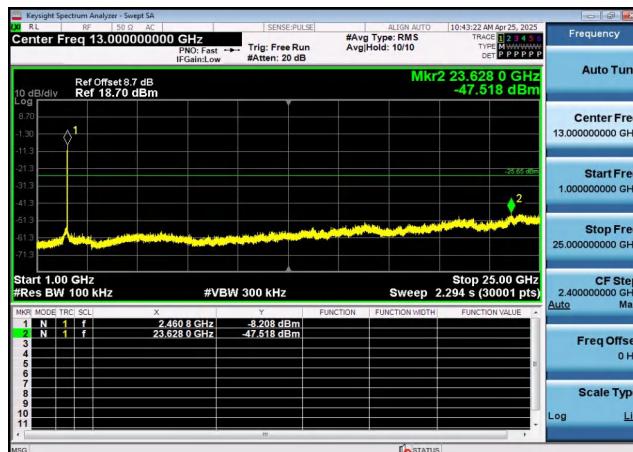
CH11



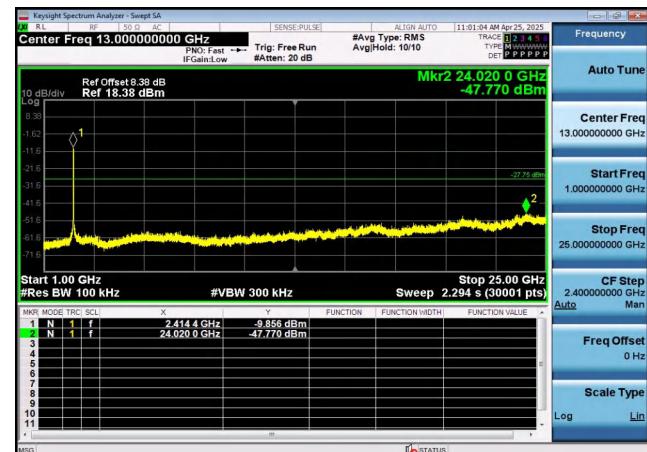
CH03



30MHz-1GHz



30MHz-1GHz



1GHz -25GHz

1GHz -25GHz