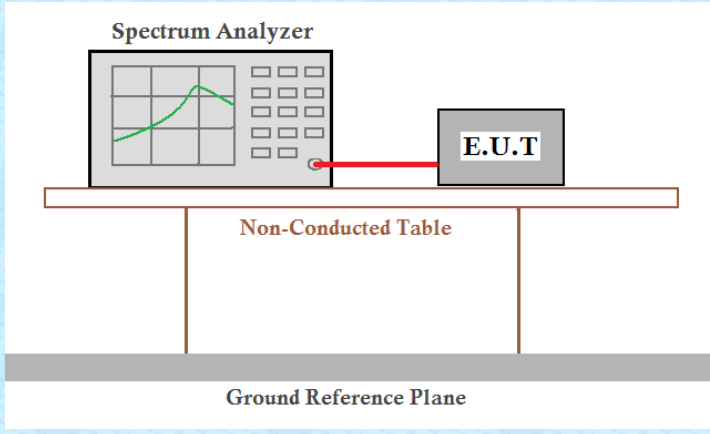


7.4 Power Spectral Density

Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	ANSI C63.10:2013 and KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	8dBm/3kHz
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement Data

Test CH	Power Spectral Density (dBm/3kHz)						Limit (dBm/3kHz)	Result
	802.11b			802.11g				
	ANT A	ANT B	ANT A+B	ANT A	ANT B	ANT A+B		
01	-11.543	-12.427	-8.952	-12.966	-14.454	-10.636	6.17	Pass
06	-12.917	-11.265	-9.003	-13.49	-13.425	-10.447		
11	-12.119	-11.258	-8.657	-15.322	-15.305	-12.303		

Test CH	Power Spectral Density (dBm/3kHz)			Limit (dBm/3kHz)	Result
	802.11n(HT20)				
	ANT A	ANT B	ANT A+B		
01	-15.91	-16.078	-12.983	6.17	Pass
06	-16.239	-16.097	-13.157		
11	-16.418	-15.531	-12.942		

Test CH	Power Spectral Density (dBm/3kHz)			Limit (dBm/3kHz)	Result
	802.11n(HT40)				
	ANT A	ANT B	ANT A+B		
03	-18.263	-18.513	-15.376	6.17	Pass
06	-18.438	-17.876	-15.138		
09	-19.976	-19.921	-16.938		

Test CH	Power Spectral Density (dBm/3kHz)			Limit (dBm/3kHz)	Result
	802.11ax(HE20)				
	ANT A	ANT B	ANT A+B		
01	-20.186	-18.932	-16.504	6.17	Pass
06	-21.25	-19.555	-17.31		
11	-20.226	-20.033	-17.118		

Test CH	Power Spectral Density (dBm/3kHz)			Limit (dBm/3kHz)	Result
	802.11ax(HE40)				
	ANT A	ANT B	ANT A+B		
03	-21.856	-21.811	-18.823	6.17	Pass
06	-21.616	-21.99	-18.789		
09	-22.687	-23.717	-20.161		

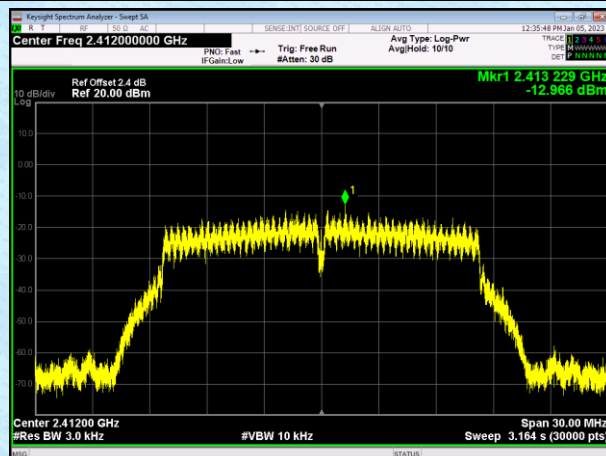
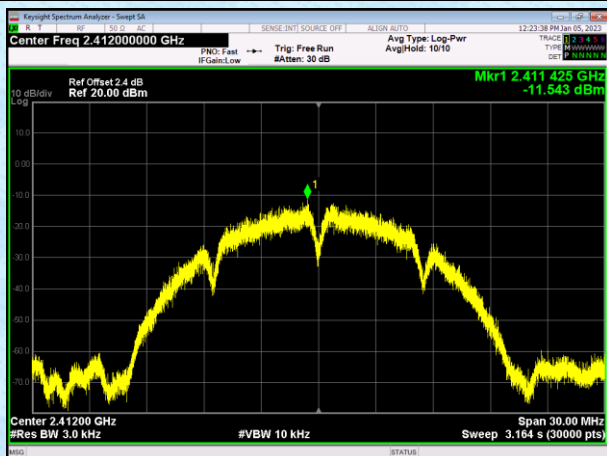
Note:

Power directional gain=7.83dBi, So Limit=8-1.83=6.17dBm

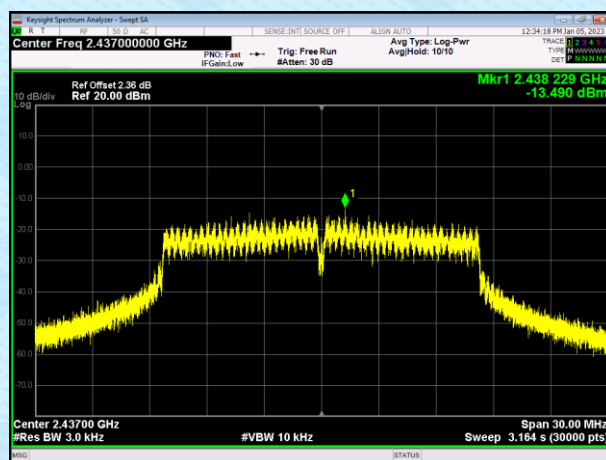
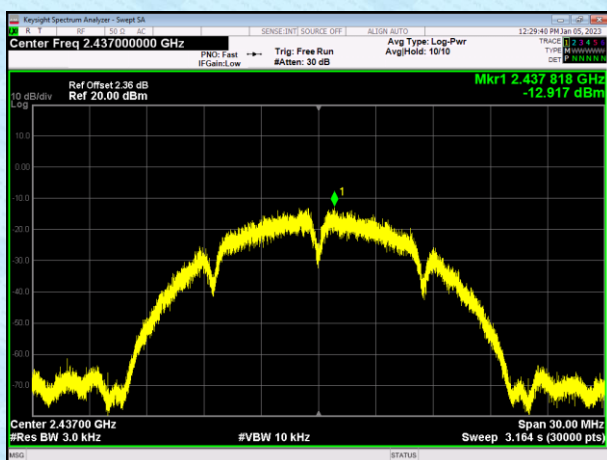
Beamforming Factor is 0 dB, and the results are unchanged

Test plot as follows (ANT A):

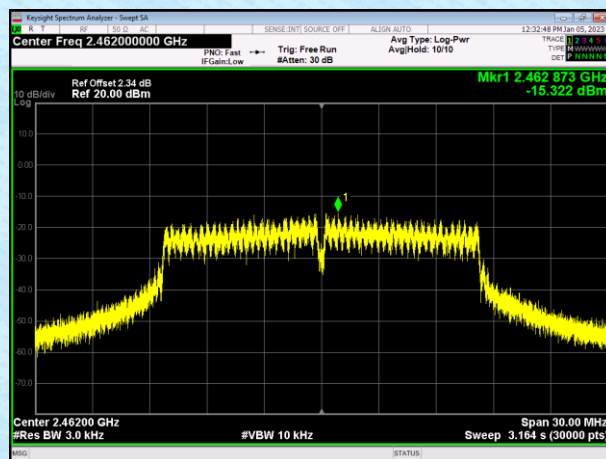
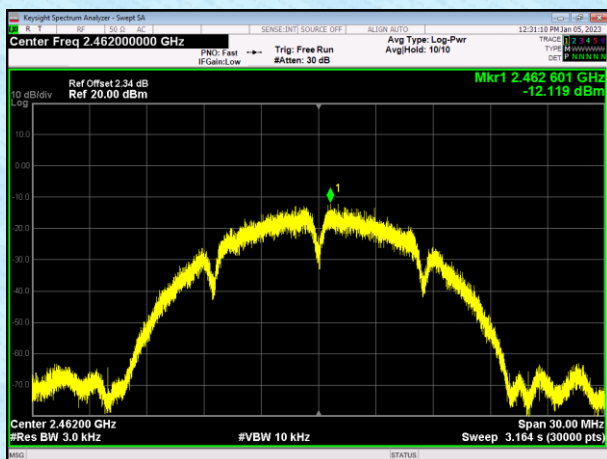
Test mode:	802.11b	Test mode:	802.11g
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Lowest channel

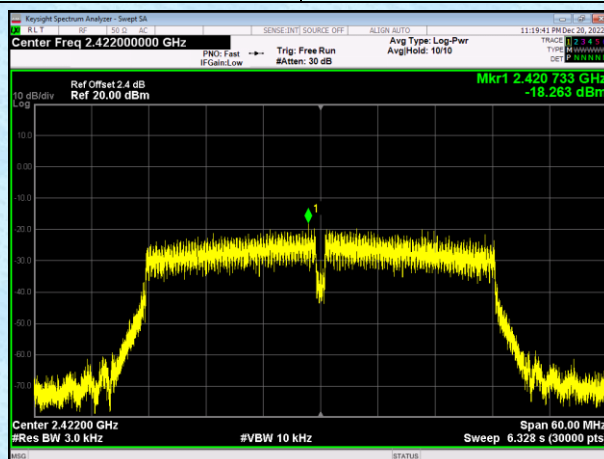
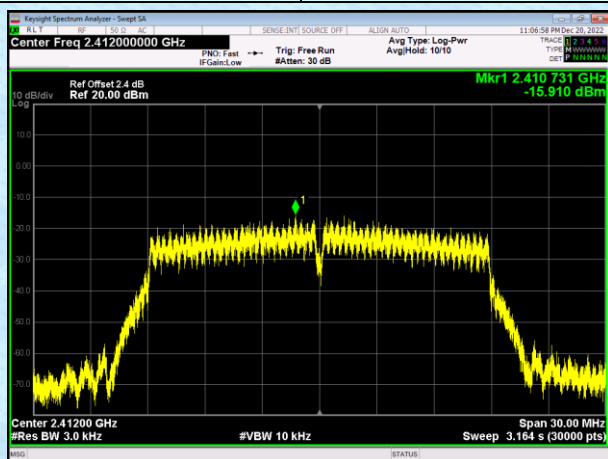


Middle channel

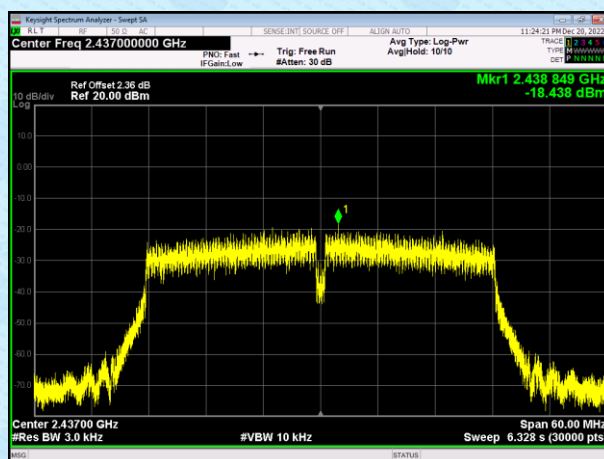
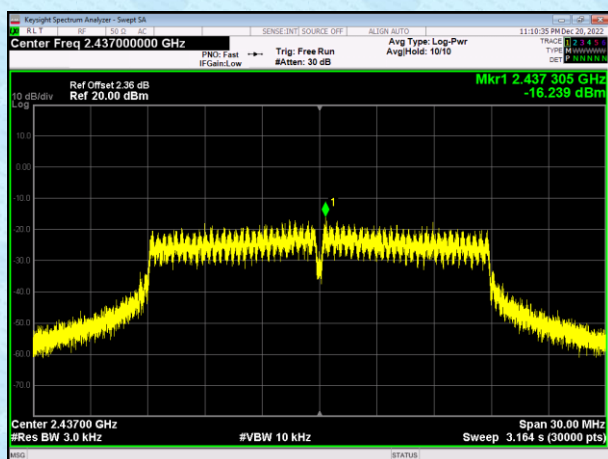


Highest channel

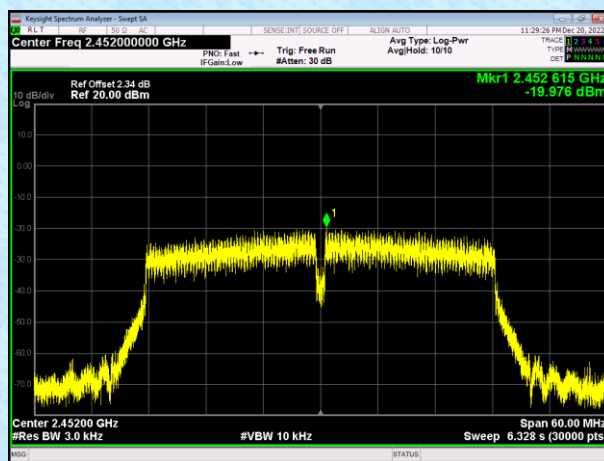
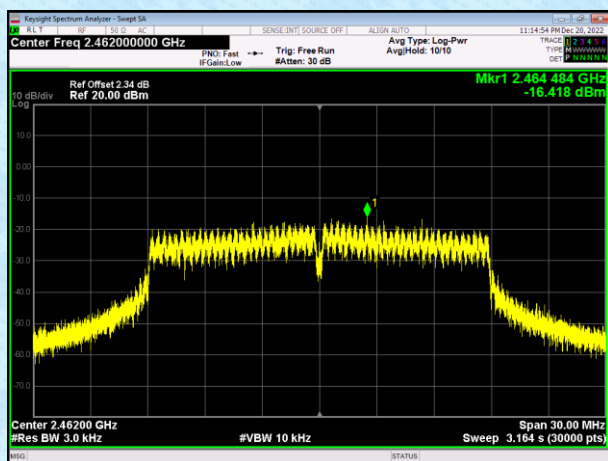
Test mode:	802.11n(HT20)	Test mode:	802.11n(HT40)
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Lowest channel

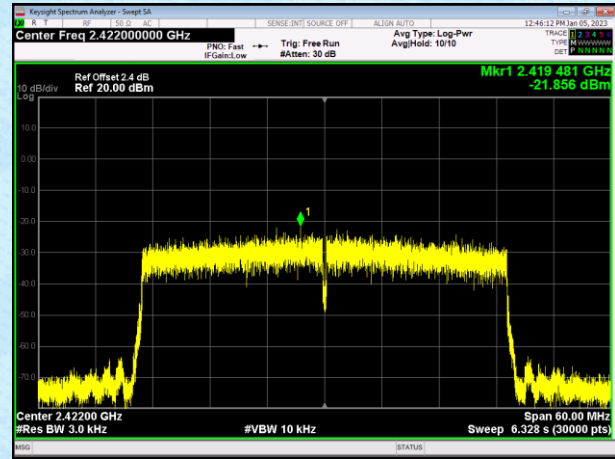
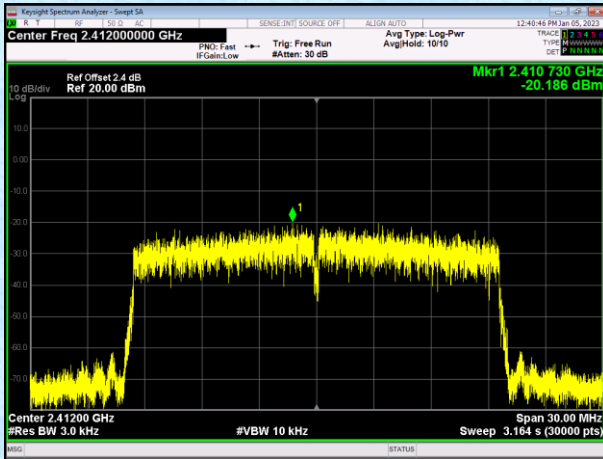


Middle channel

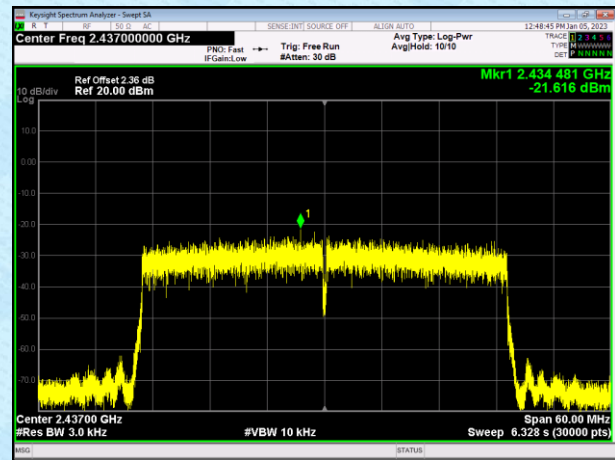
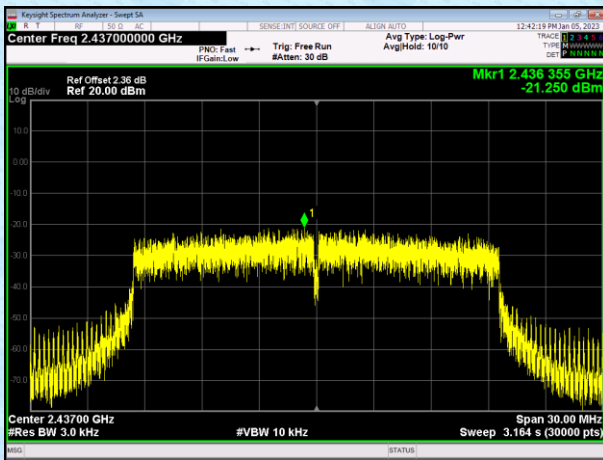


Highest channel

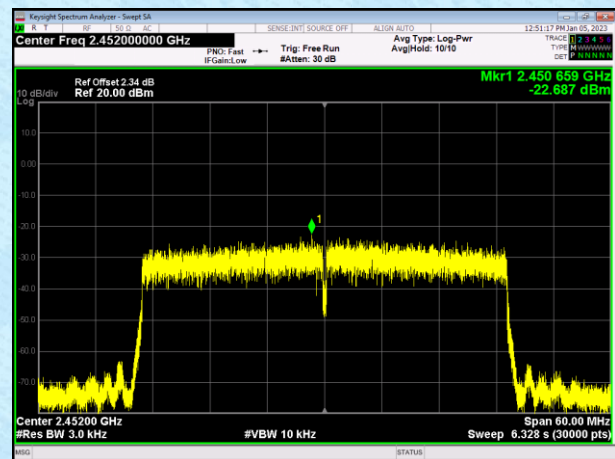
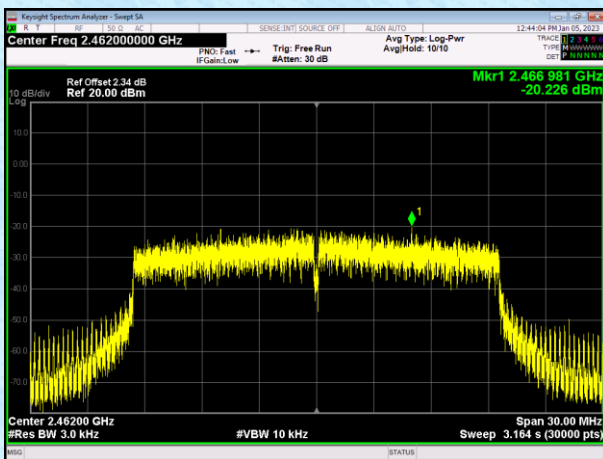
Test mode:	802.11ax(HE20)	Test mode:	802.11ax(HE40)
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Lowest channel



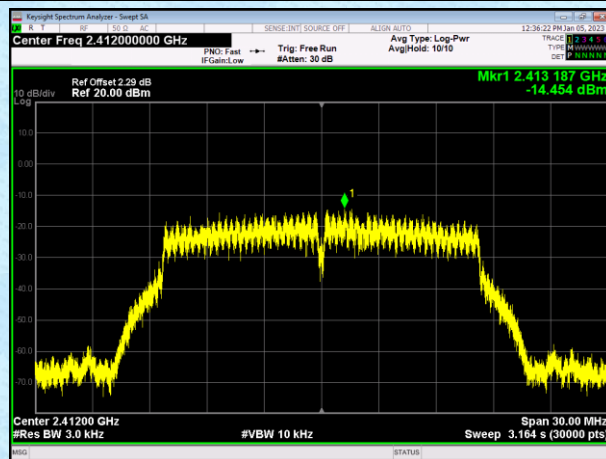
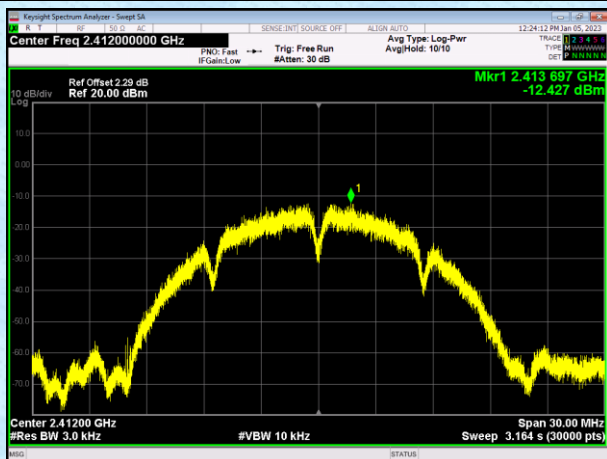
Middle channel



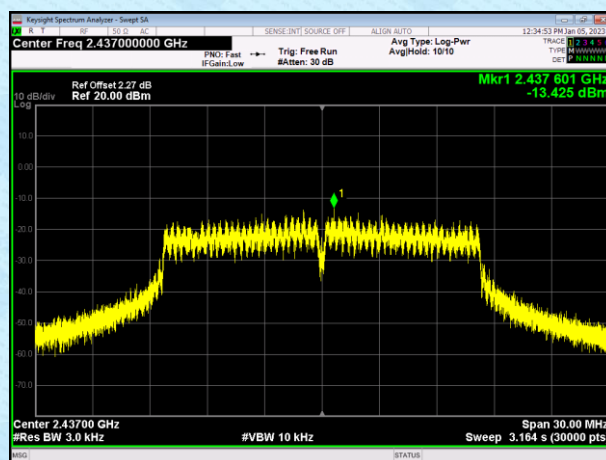
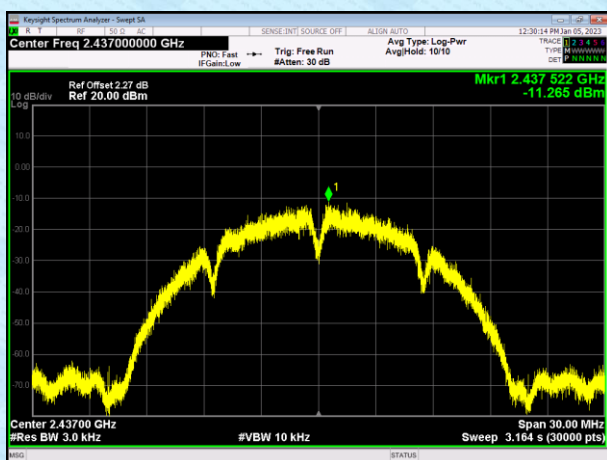
Highest channel

Test plot as follows (ANT B):

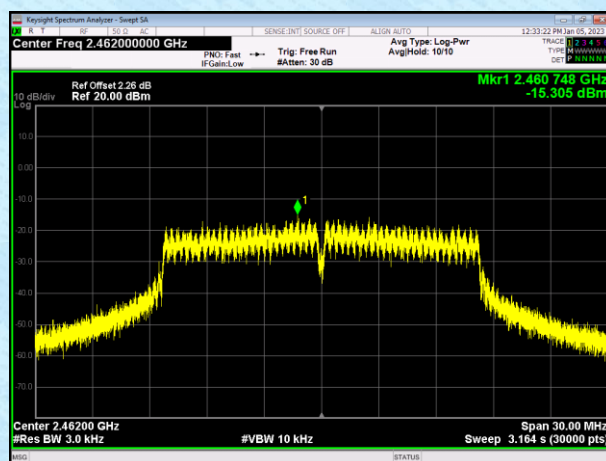
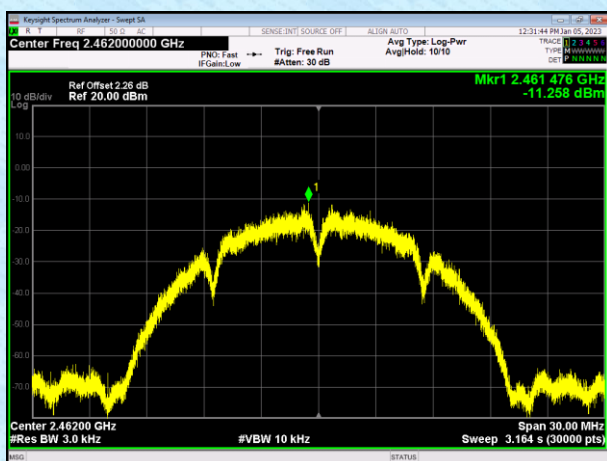
Test mode:	802.11b	Test mode:	802.11g
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Lowest channel

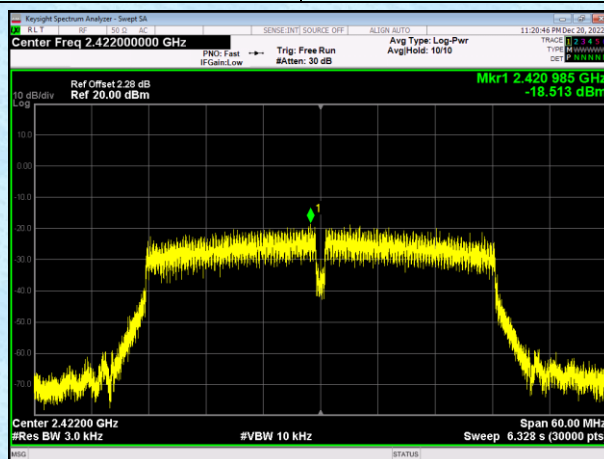
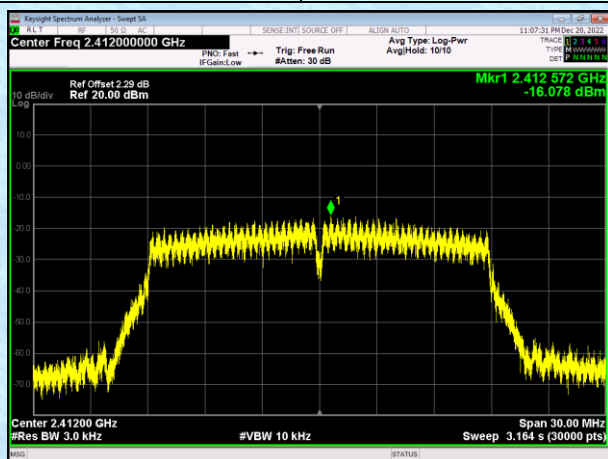


Middle channel

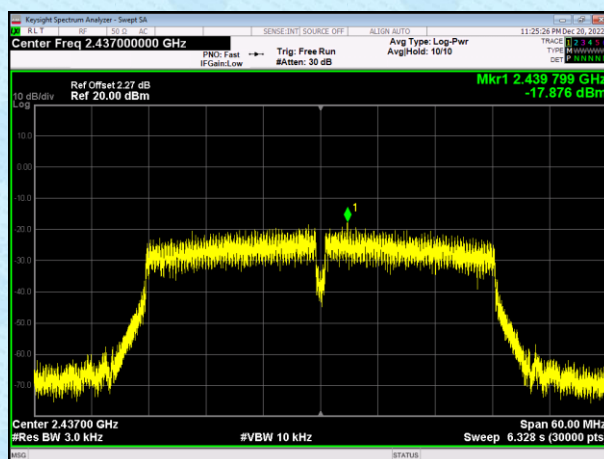
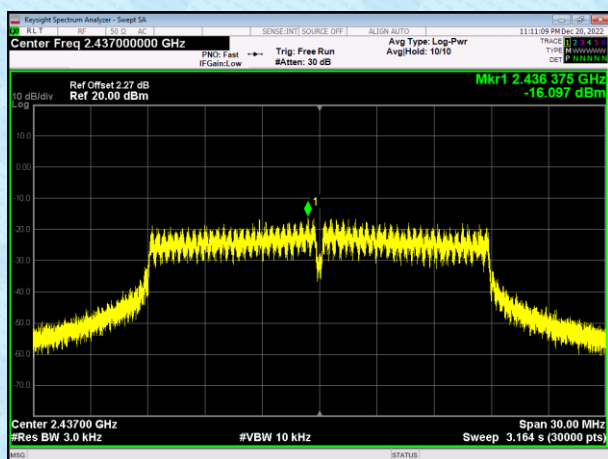


Highest channel

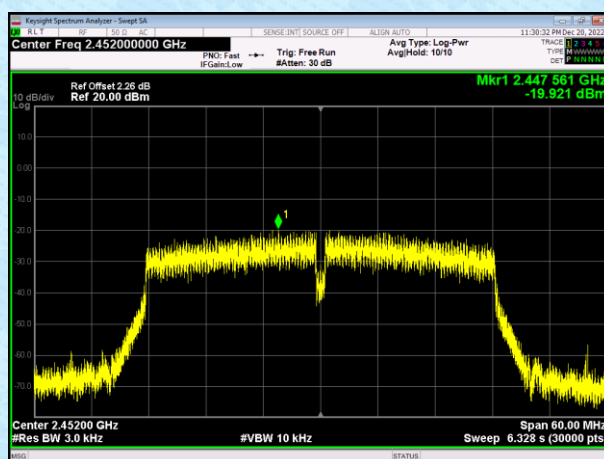
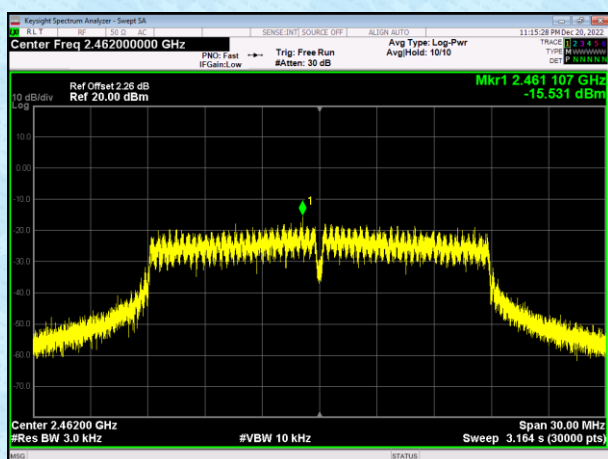
Test mode:	802.11n(HT20)	Test mode:	802.11n(HT40)
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Lowest channel

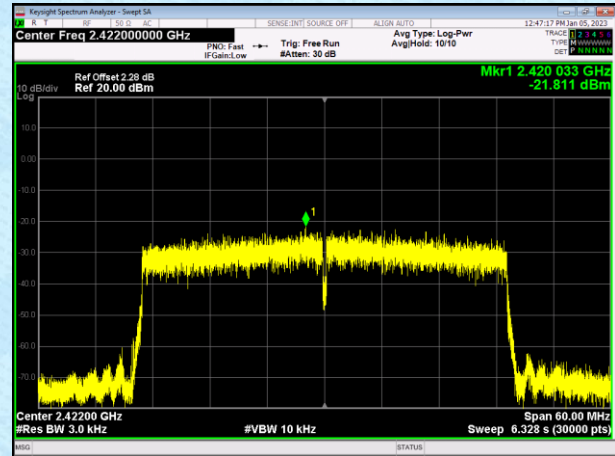
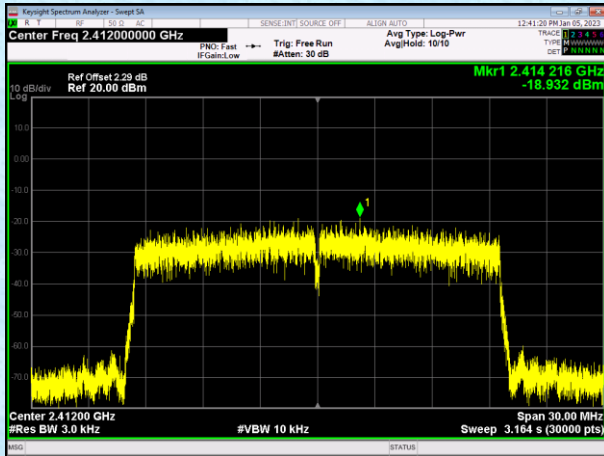


Middle channel

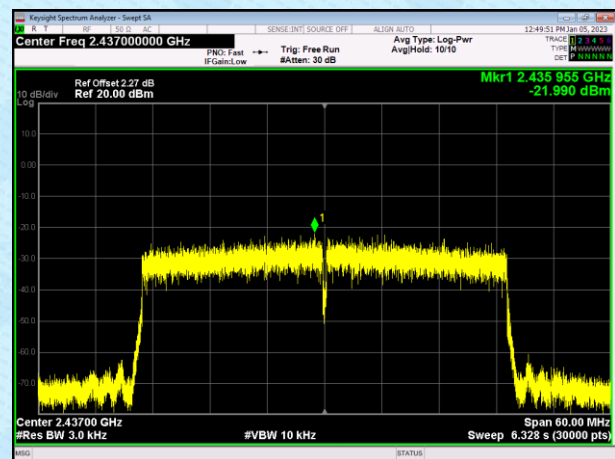
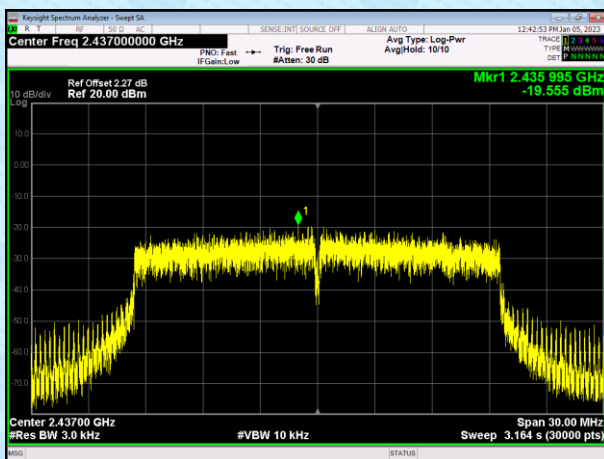


Highest channel

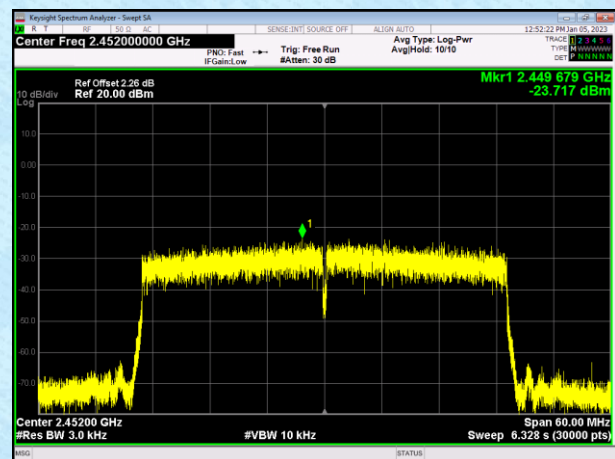
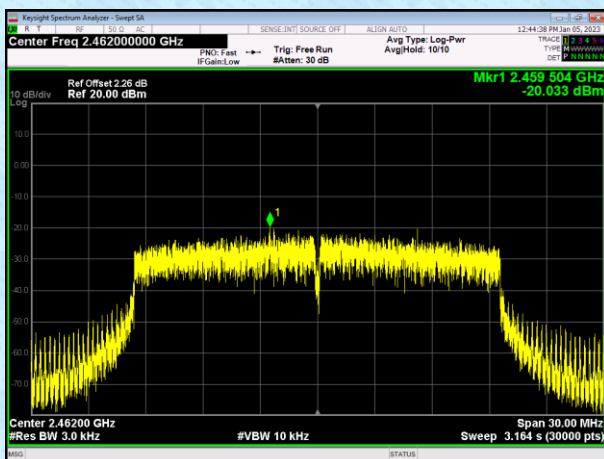
Test mode:	802.11ax(HE20)	Test mode:	802.11ax(HE40)
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Lowest channel



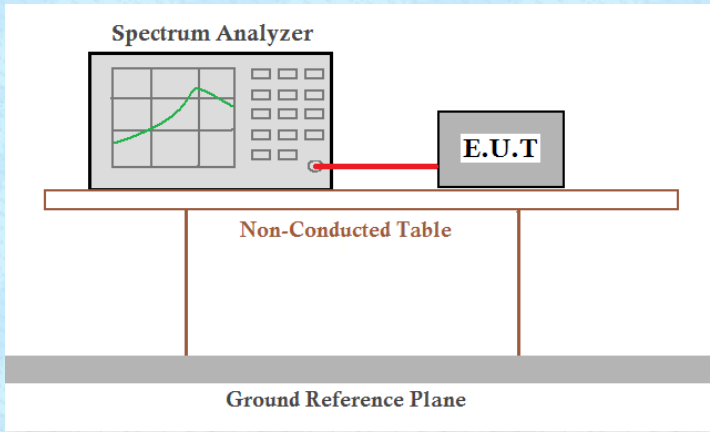
Middle channel



Highest channel

7.5 Spurious Emission in Non-restricted & restricted Bands

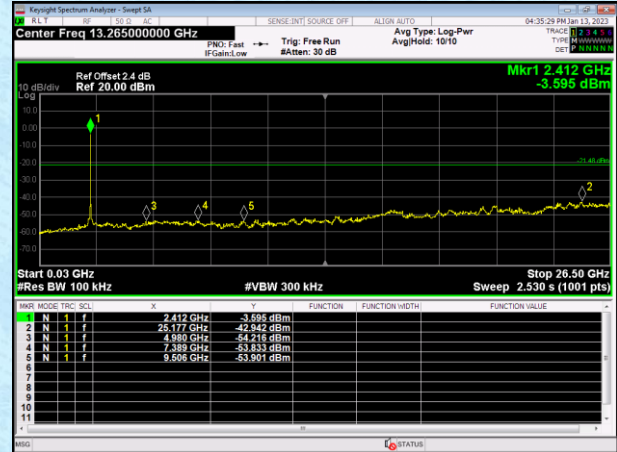
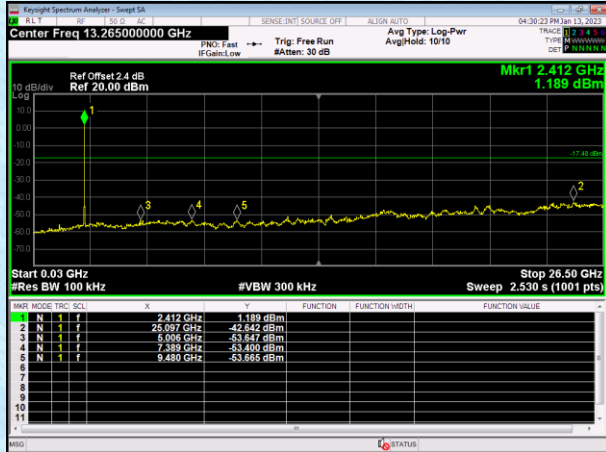
7.5.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.10:2013 and KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Test plot as follows (ANT A):

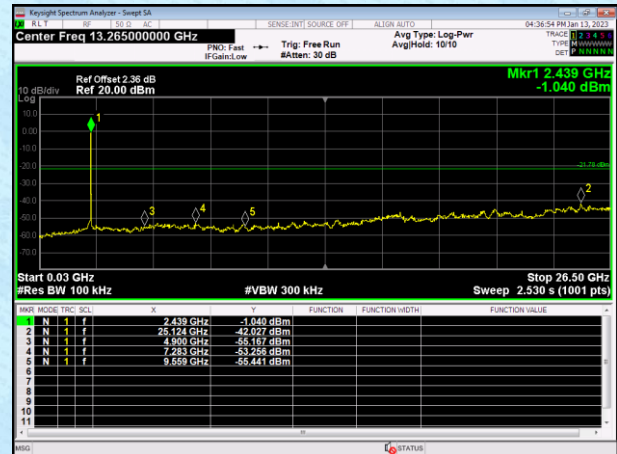
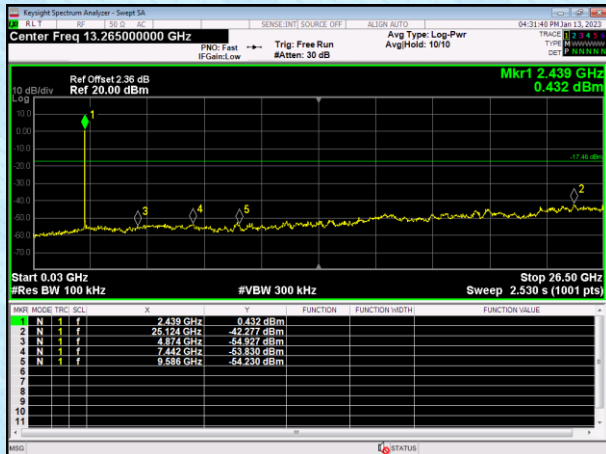
Test mode:	802.11b	Test mode:	802.11g
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Lowest channel



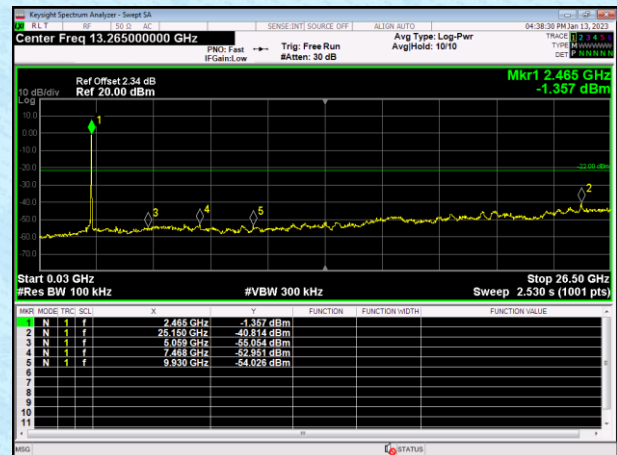
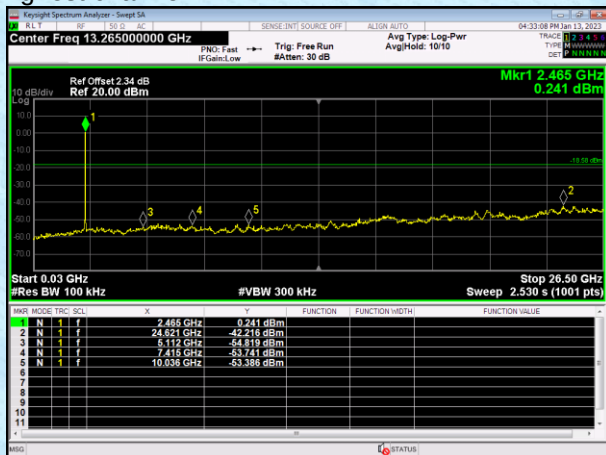
30MHz~26.5GHz

Middle channel



30MHz~26.5GHz

Highest channel



30MHz~26.5GHz

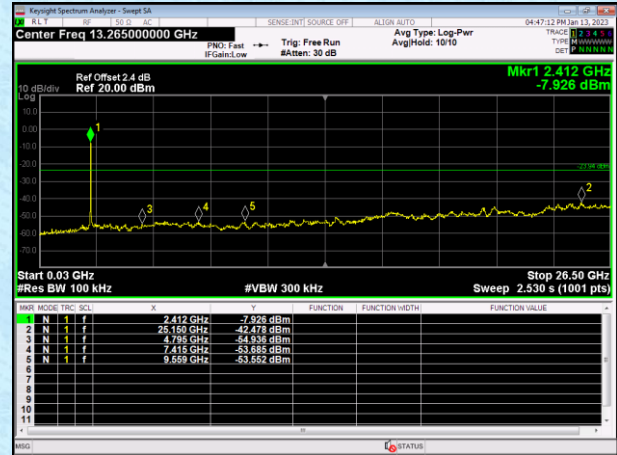
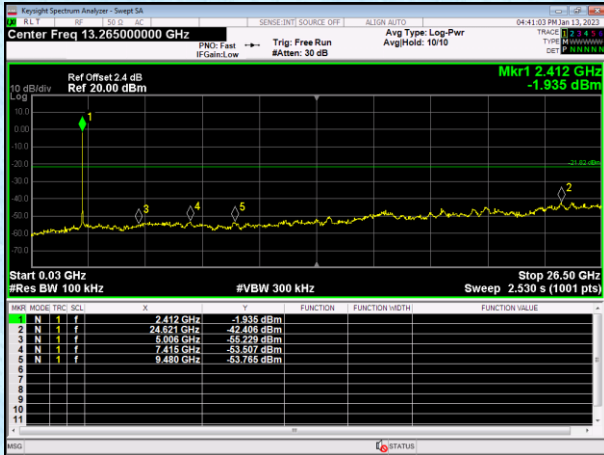
Test mode:

802.11n(HT20)

Test mode:

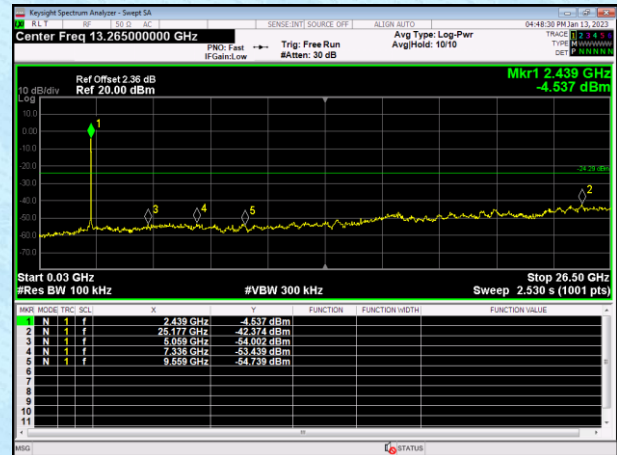
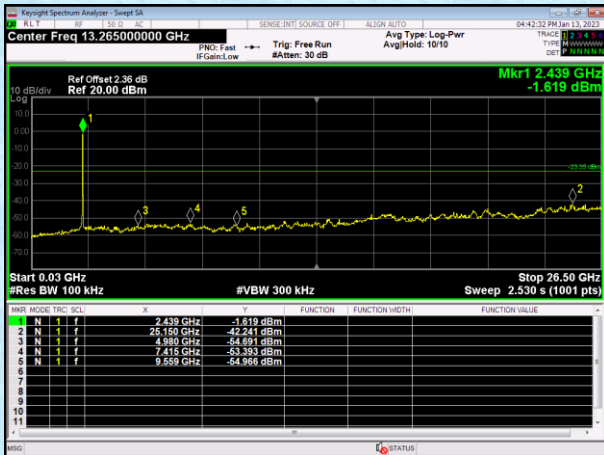
802.11n(HT40)

Lowest channel



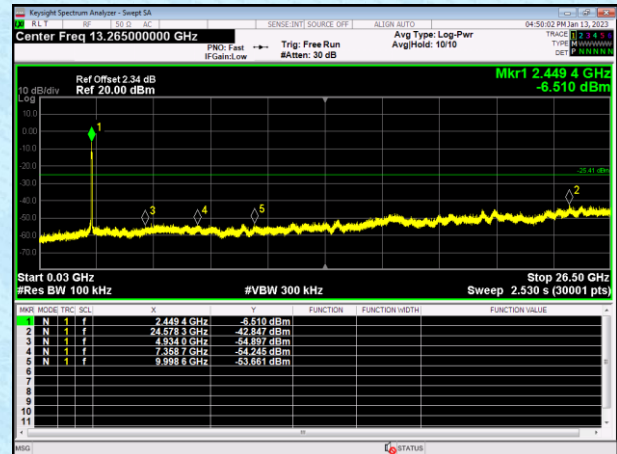
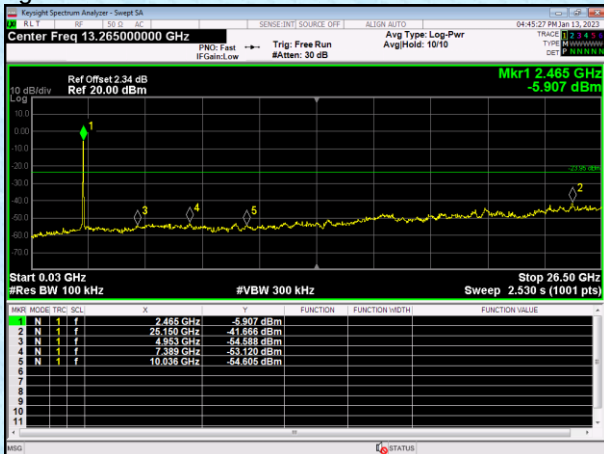
30MHz~26.5GHz

Middle channel



30MHz~26.5GHz

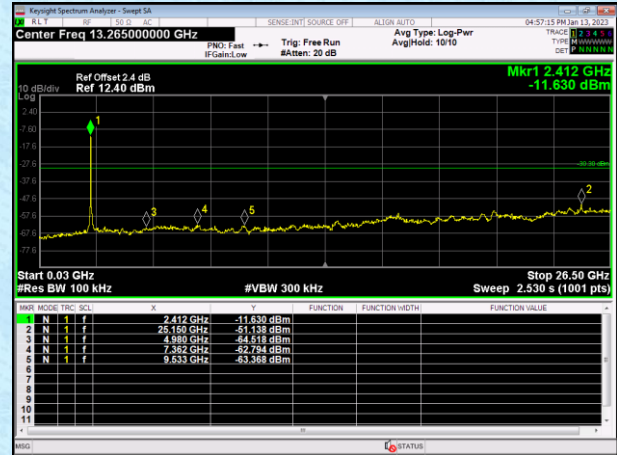
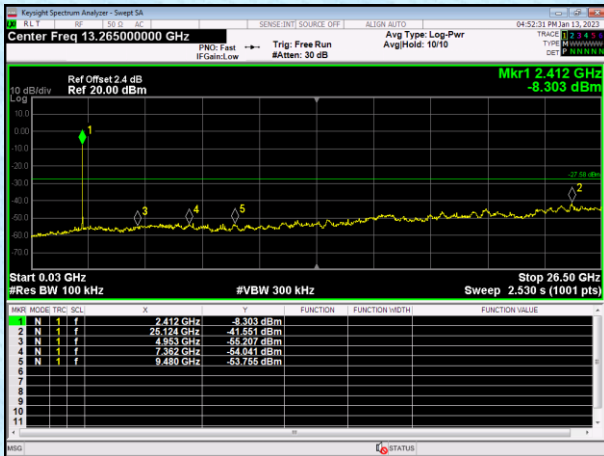
Highest channel



30MHz~26.5GHz

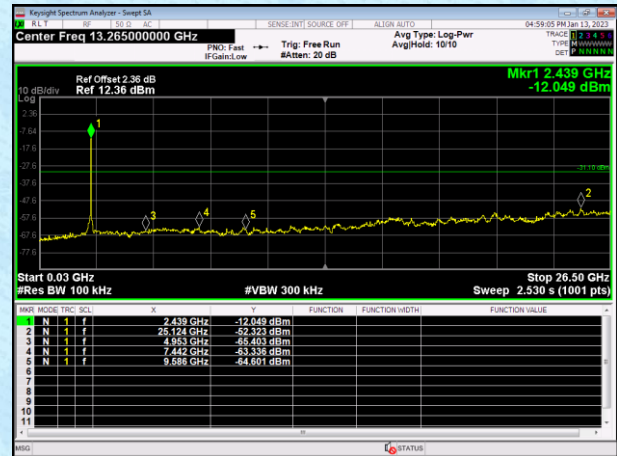
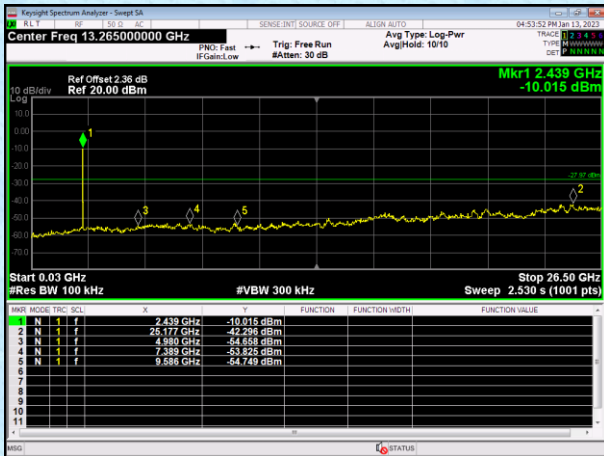
Test mode:	802.11ax(HE20)	Test mode:	802.11ax(HE40)
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Lowest channel



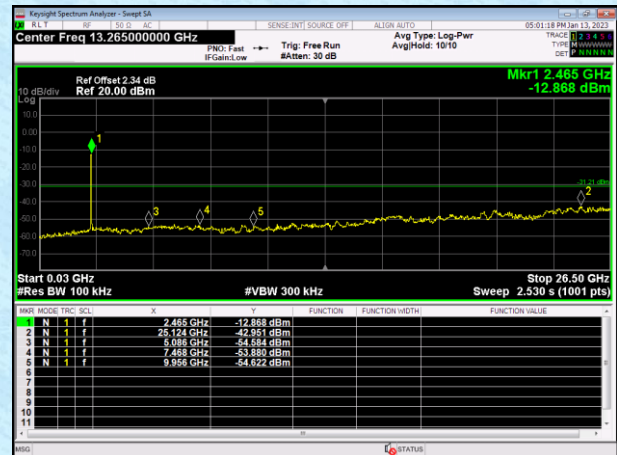
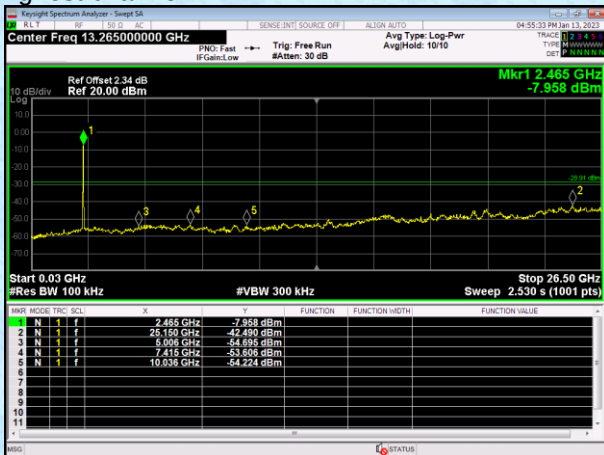
30MHz~26.5GHz

Middle channel



30MHz~26.5GHz

Highest channel

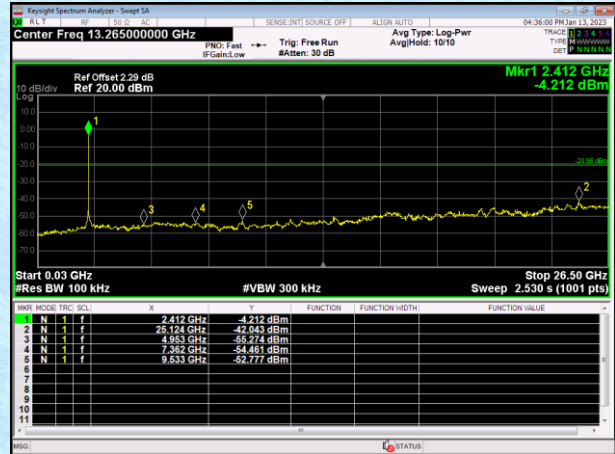
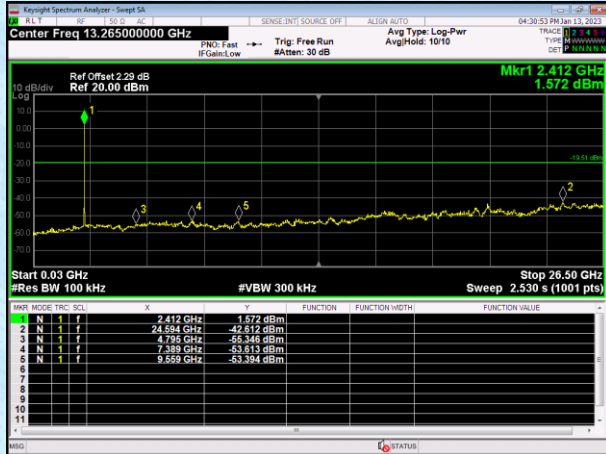


30MHz~26.5GHz

Test plot as follows (ANT B):

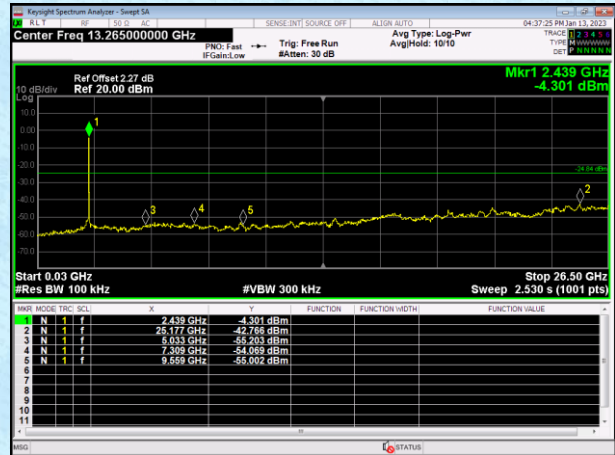
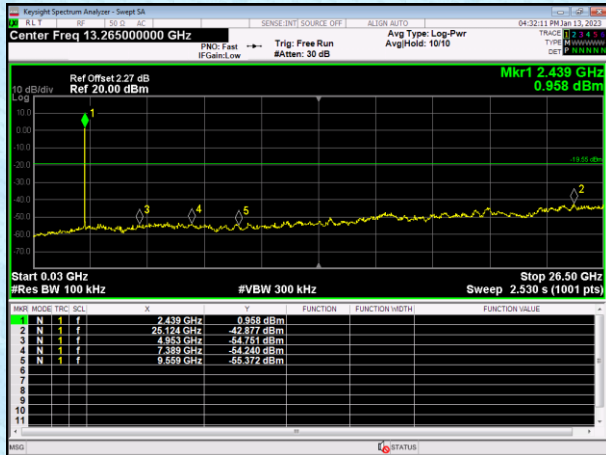
Test mode:	802.11b	Test mode:	802.11g
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Lowest channel



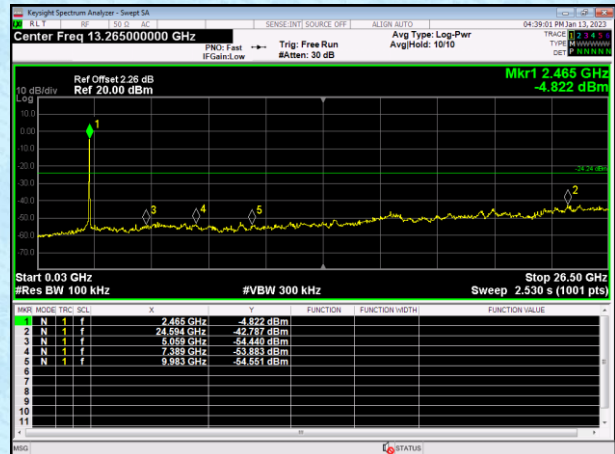
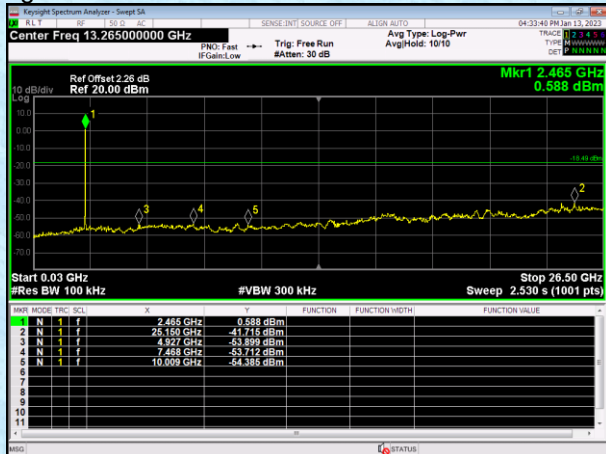
30MHz~26.5GHz

Middle channel



30MHz~26.5GHz

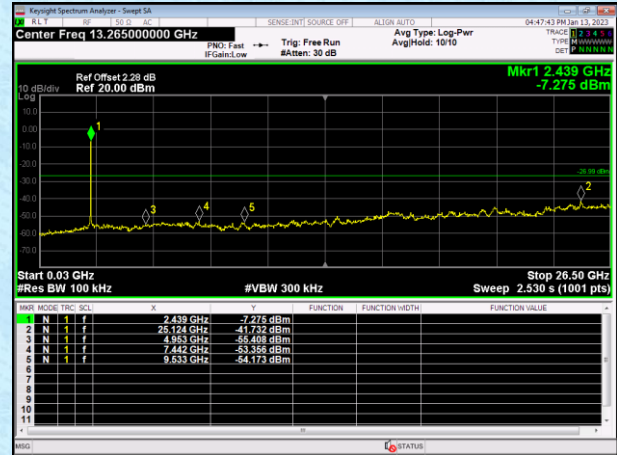
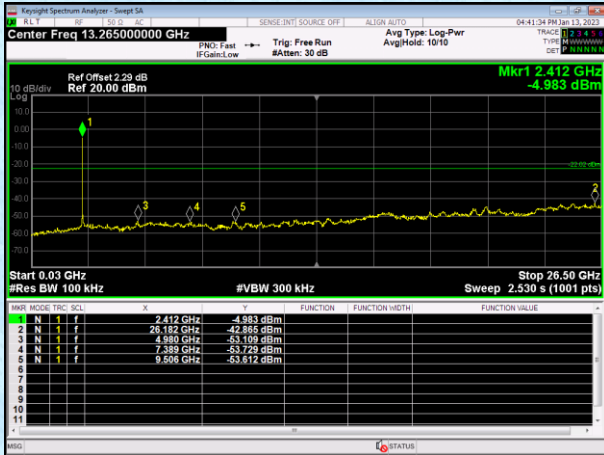
Highest channel



30MHz~26.5GHz

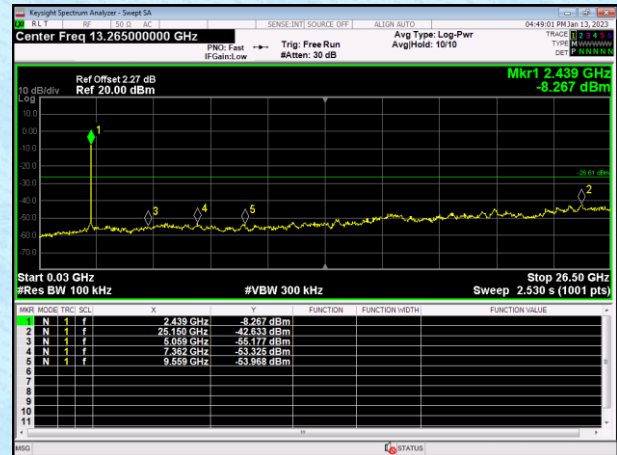
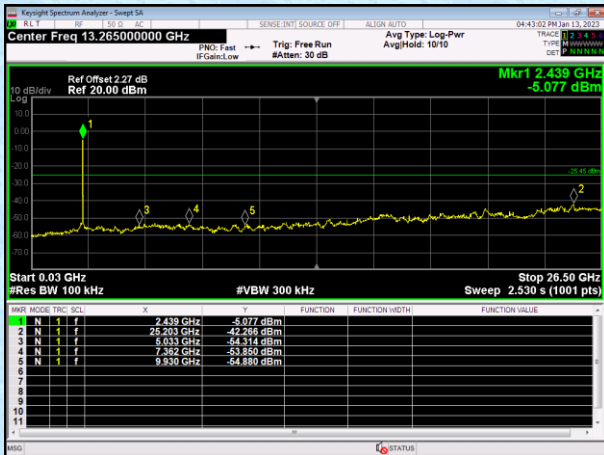
Test mode:	802.11n(HT20)	Test mode:	802.11n(HT40)
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Lowest channel



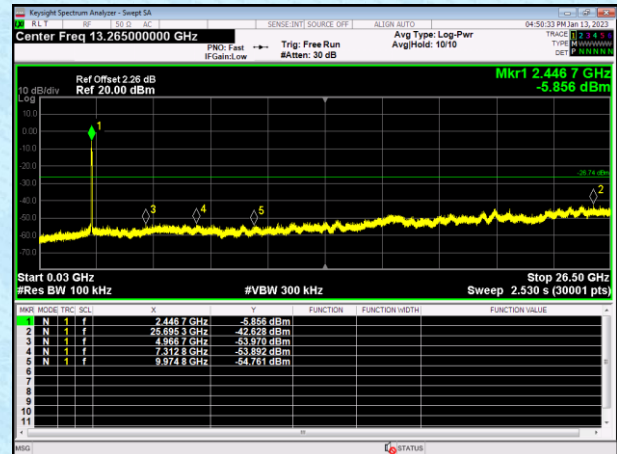
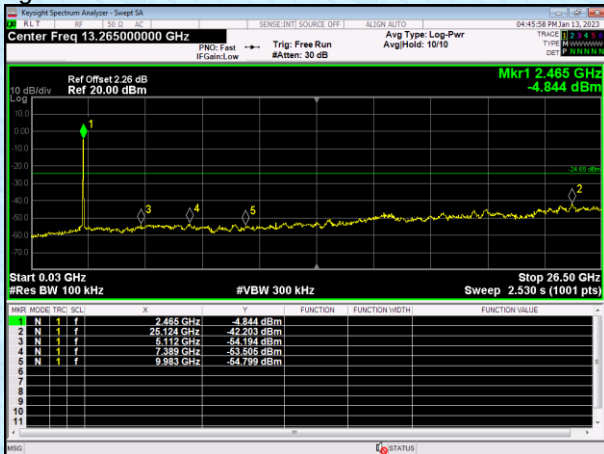
30MHz~26.5GHz

Middle channel



30MHz~26.5GHz

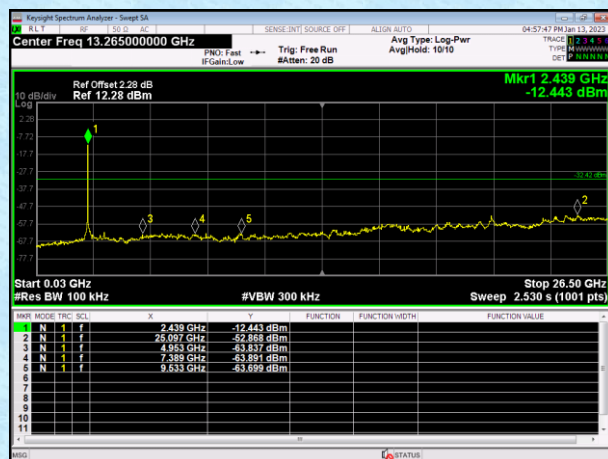
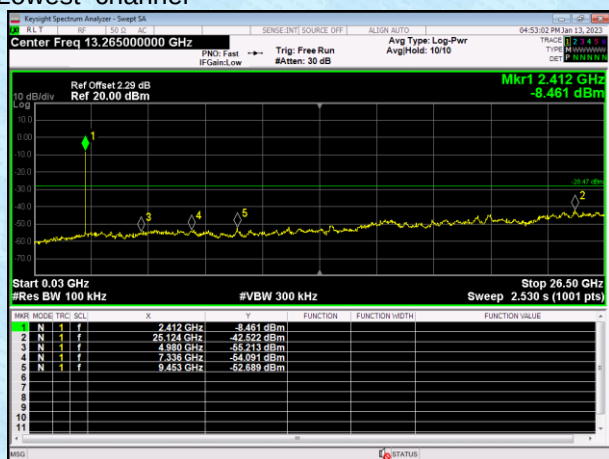
Highest channel



30MHz~26.5GHz

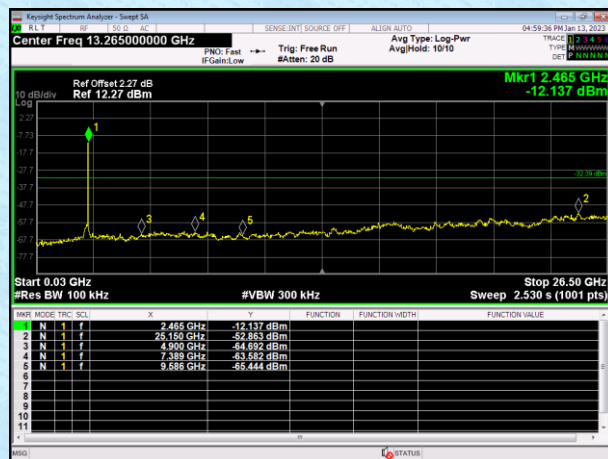
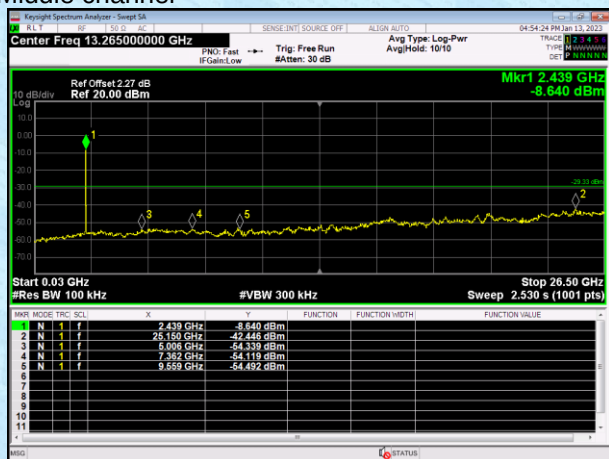
Test mode:	802.11ax(HE20)	Test mode:	802.11ax(HE40)
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Lowest channel



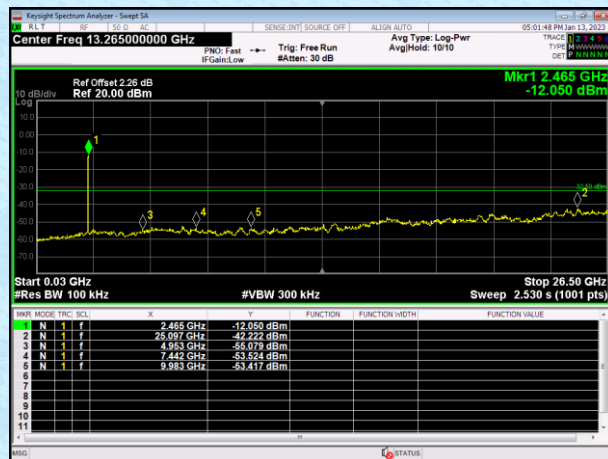
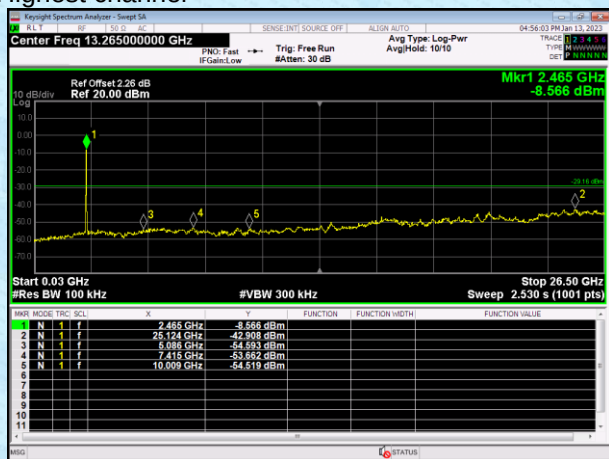
30MHz~26.5GHz

Middle channel



30MHz~26.5GHz

Highest channel



30MHz~26.5GHz