

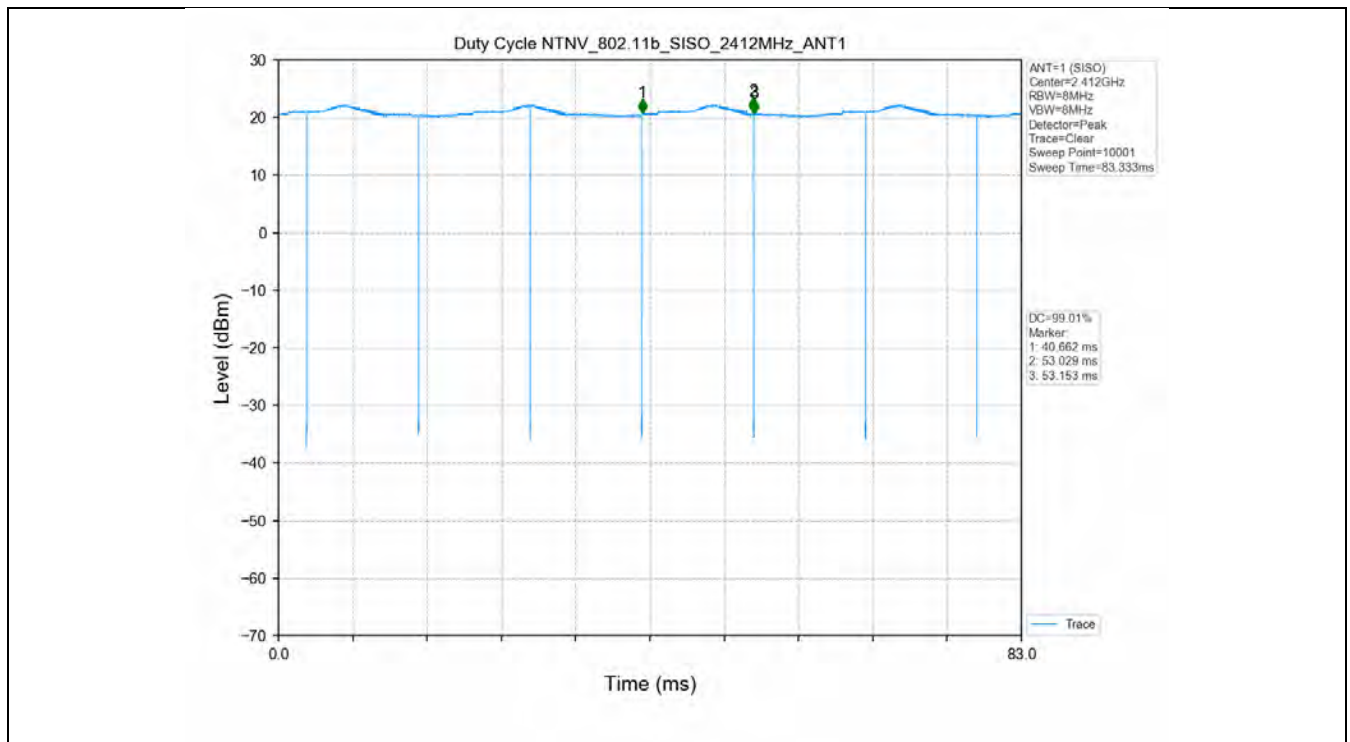
Appendix A for SHEM200800661901

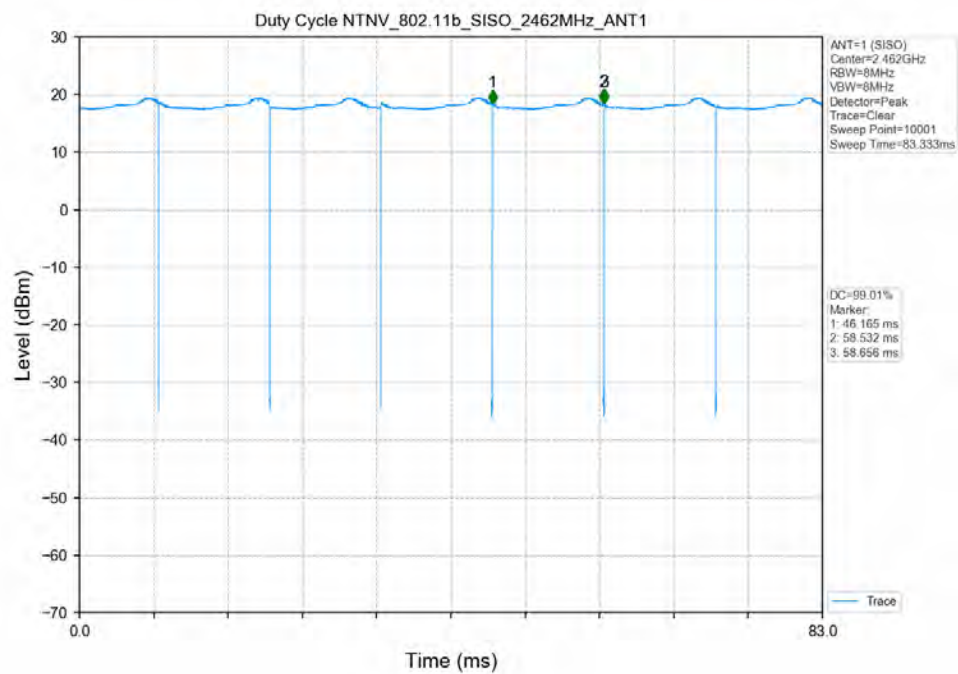
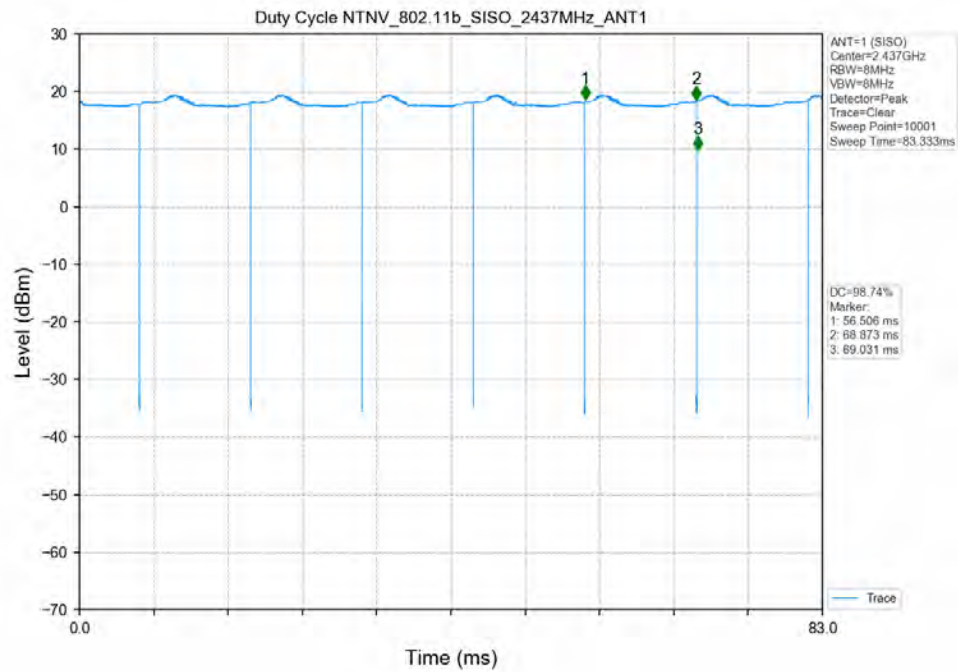
1. Duty Cycle

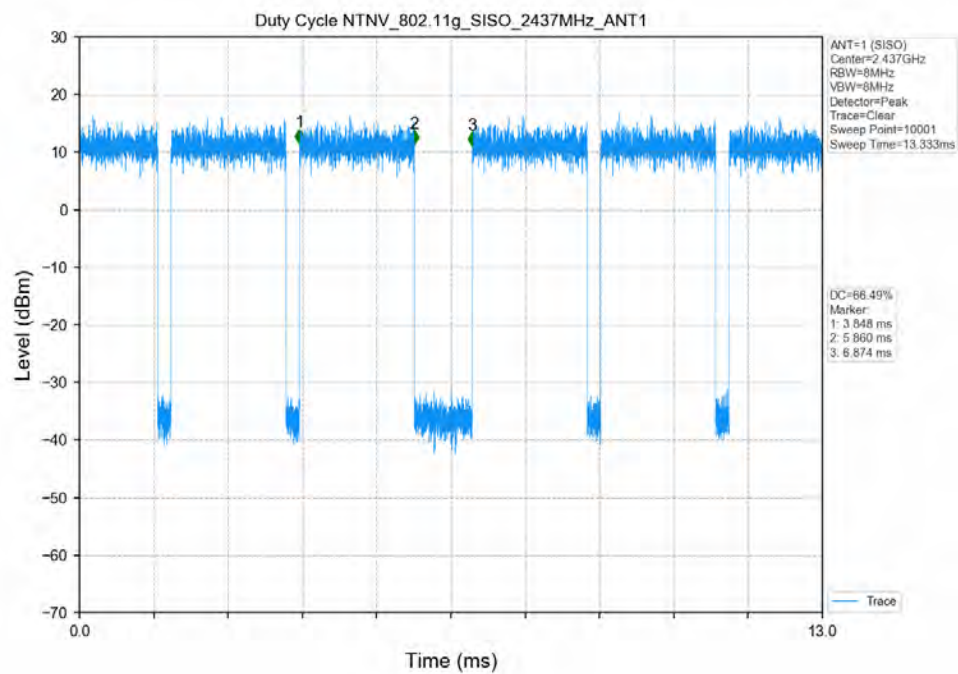
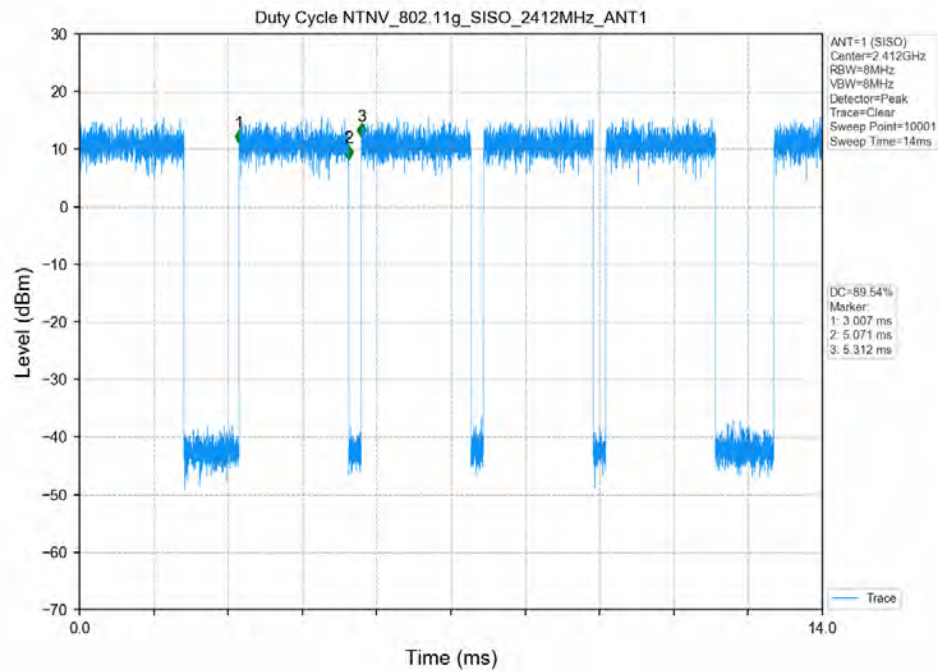
1.1 Test Result

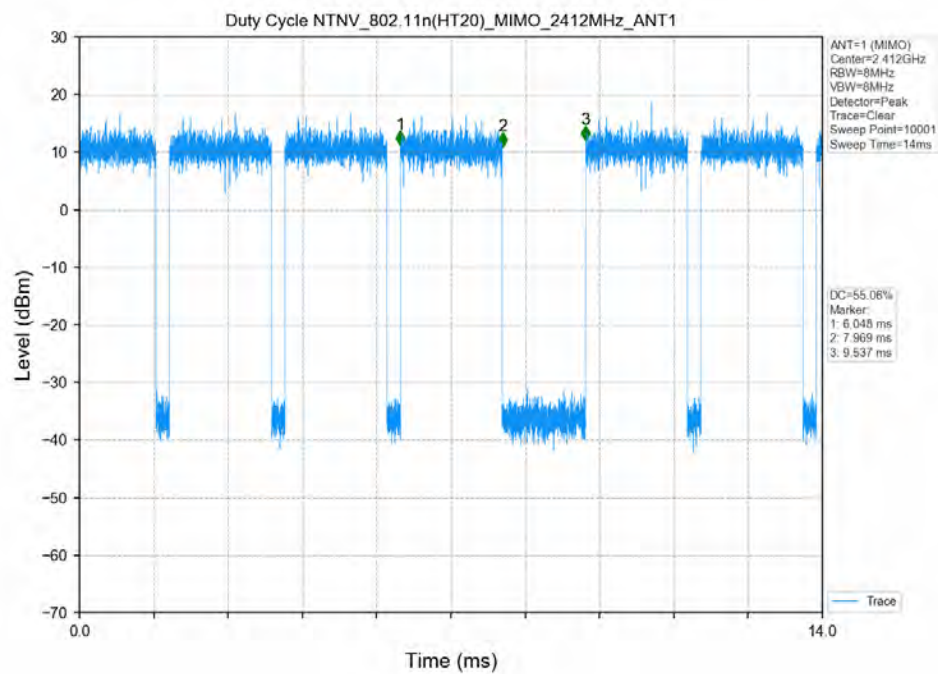
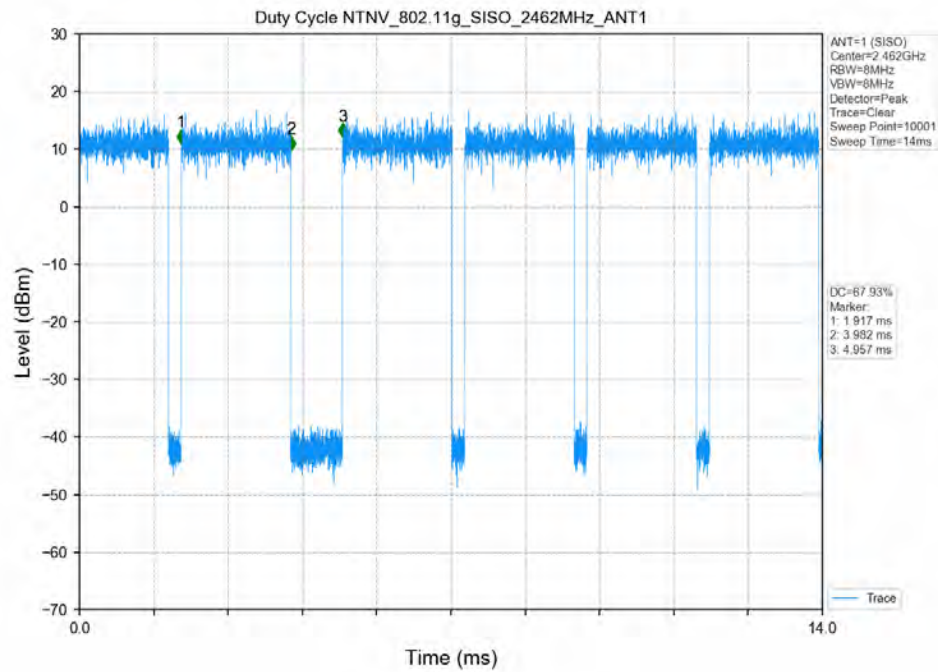
Test Mode	Channel Frequency(M Hz)	TX Type	ANT No.	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
802.11b	2412	SISO	1	12.367	12.491	99.01	0.04
	2437	SISO	1	12.367	12.525	98.74	0.06
	2462	SISO	1	12.367	12.491	99.01	0.04
802.11g	2412	SISO	1	2.064	2.305	89.54	0.48
	2437	SISO	1	2.012	3.026	66.49	1.77
	2462	SISO	1	2.065	3.040	67.93	1.68
802.11n(HT20)	2412	MIMO	1	1.921	3.489	55.06	2.59
	2437	MIMO	1	1.920	2.176	88.24	0.54
	2462	MIMO	1	1.919	3.423	56.06	2.51
802.11n(HT40)	2422	MIMO	1	0.943	1.183	79.71	0.98
	2437	MIMO	1	0.943	1.184	79.65	0.99
	2452	MIMO	1	0.943	1.184	79.65	0.99

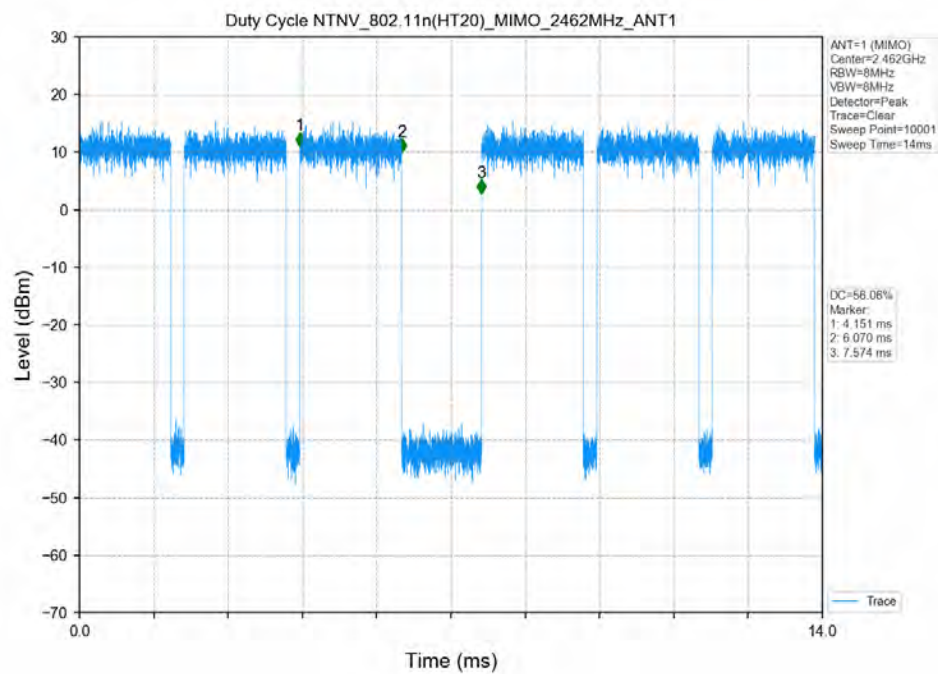
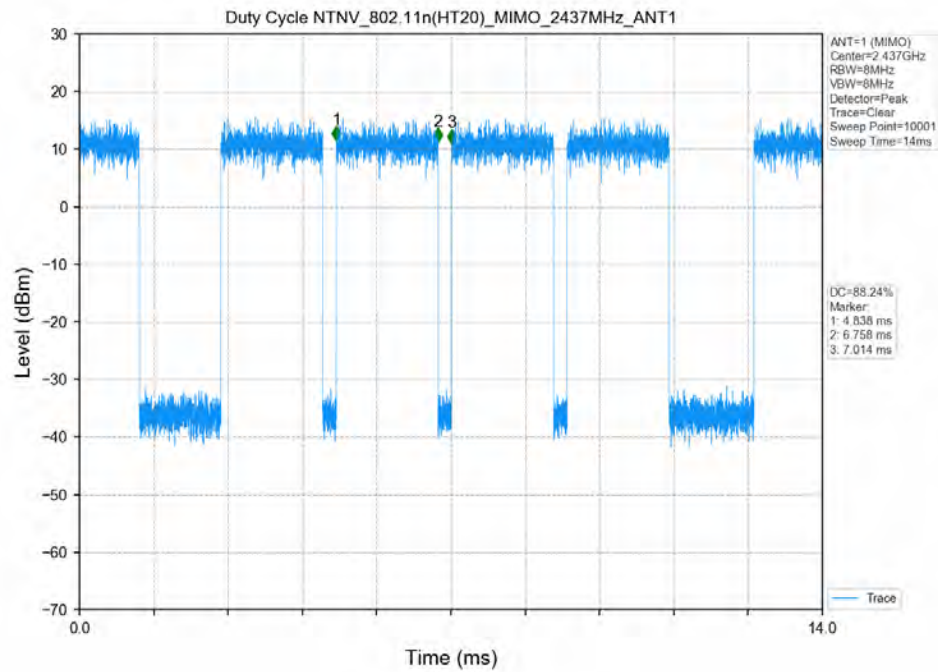
1.2 Test Graph

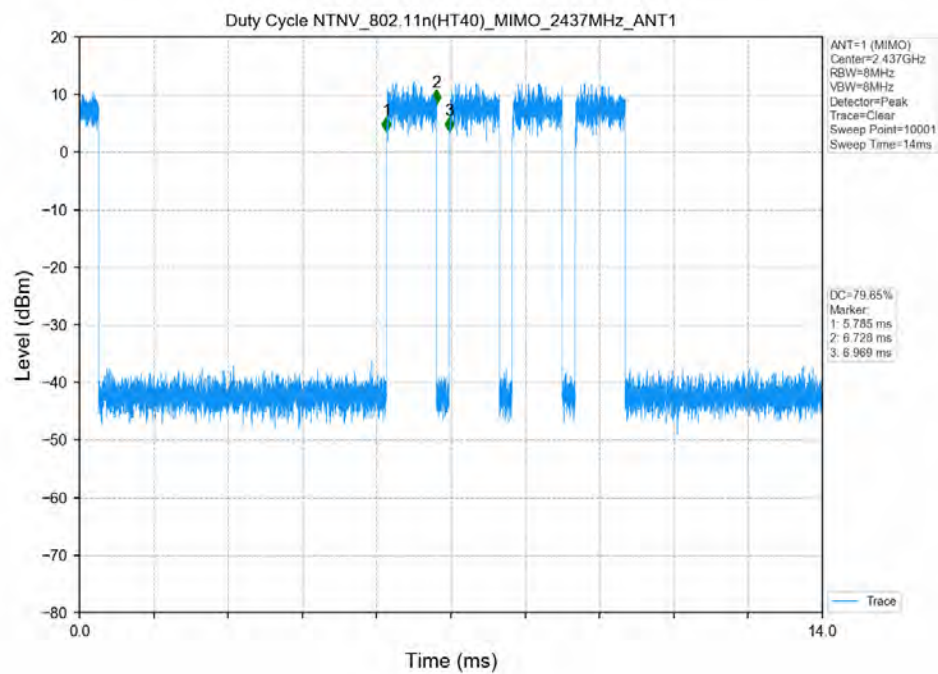
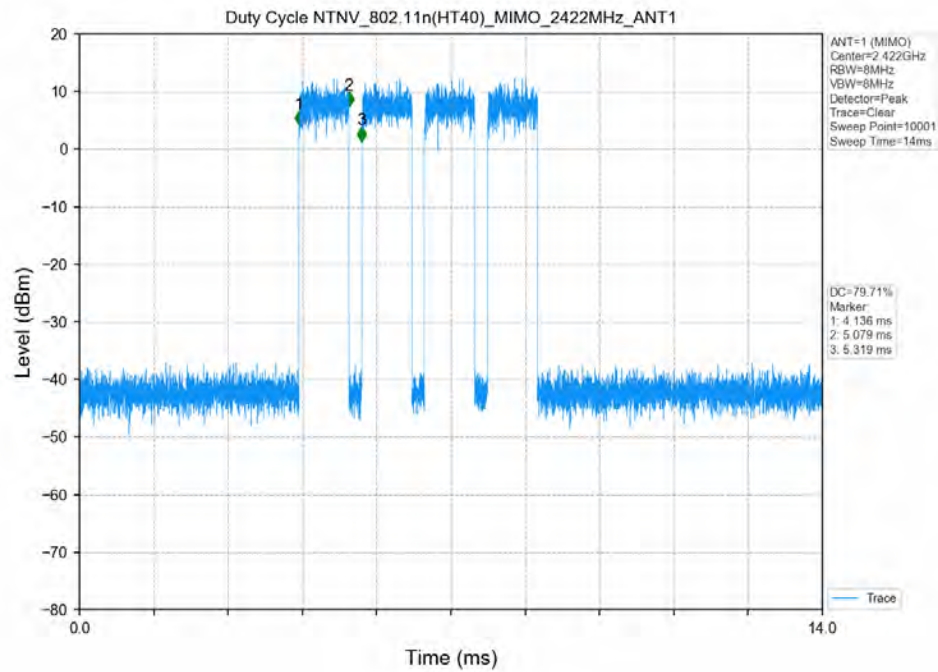


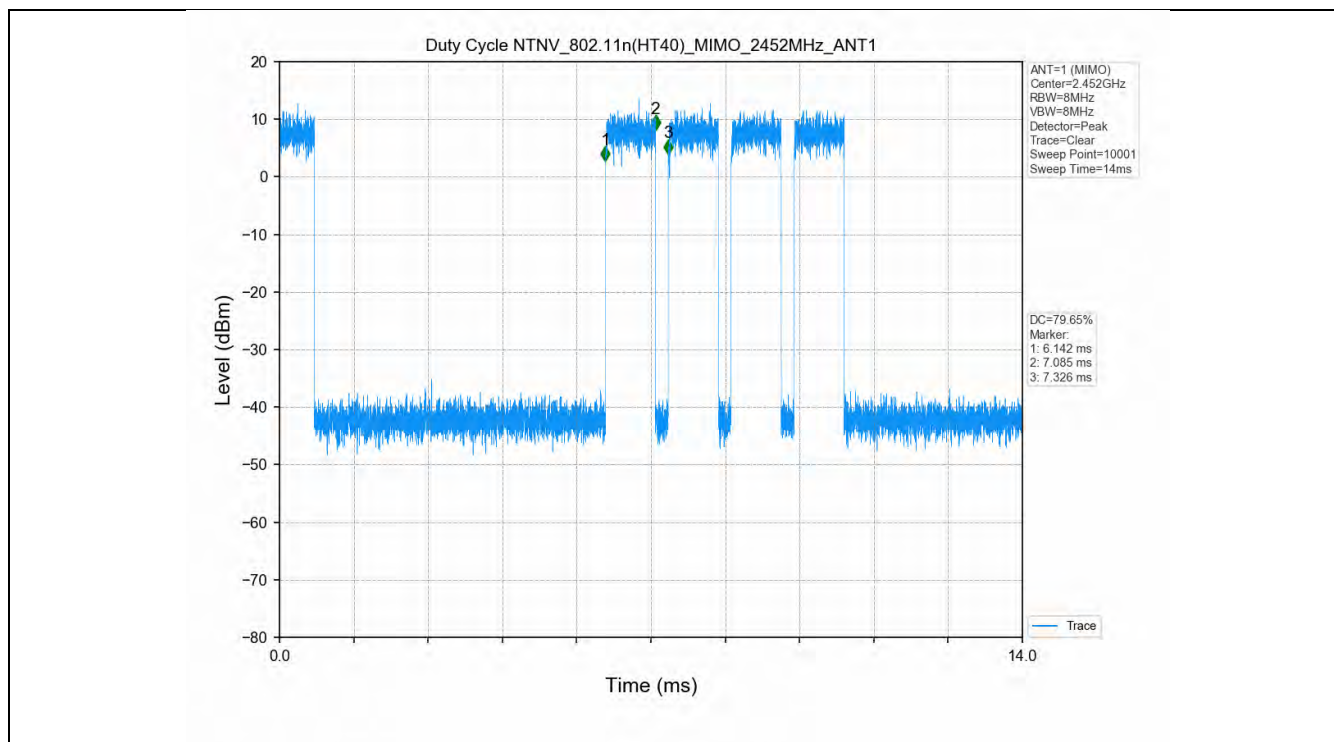












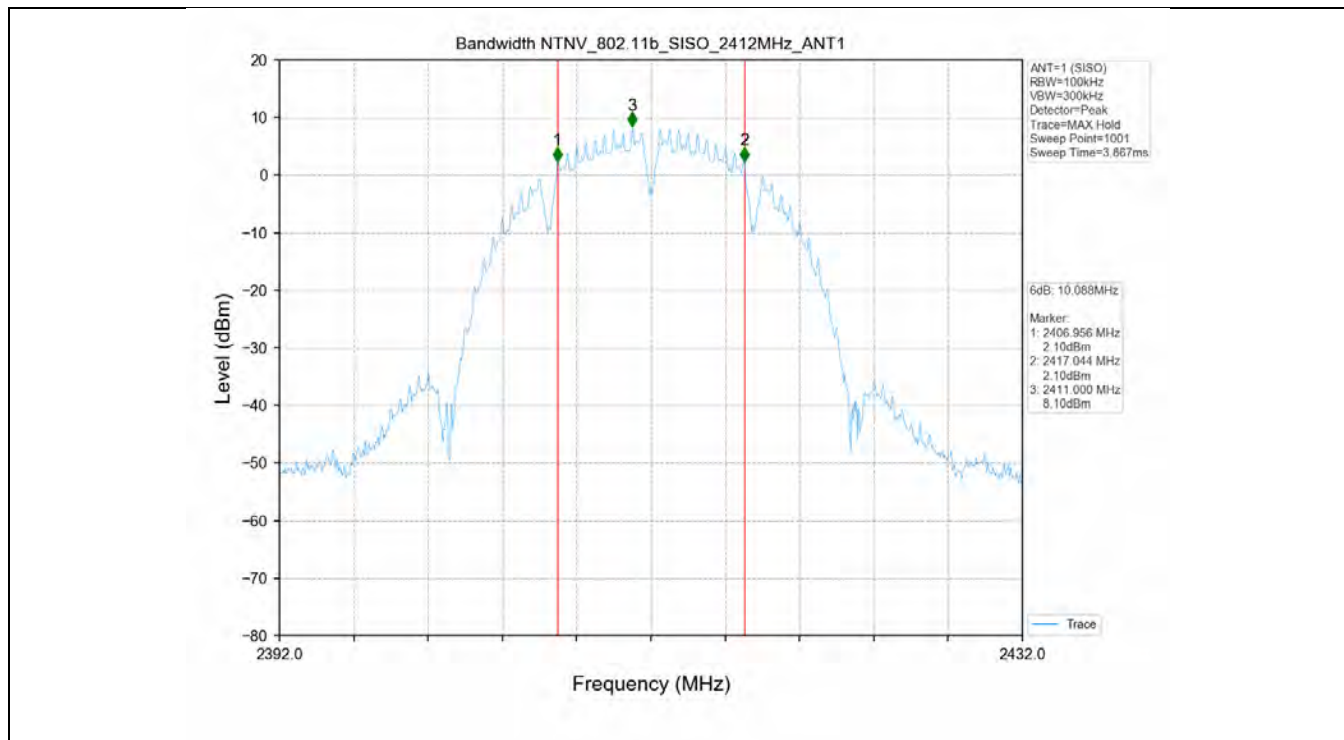
2. Bandwidth

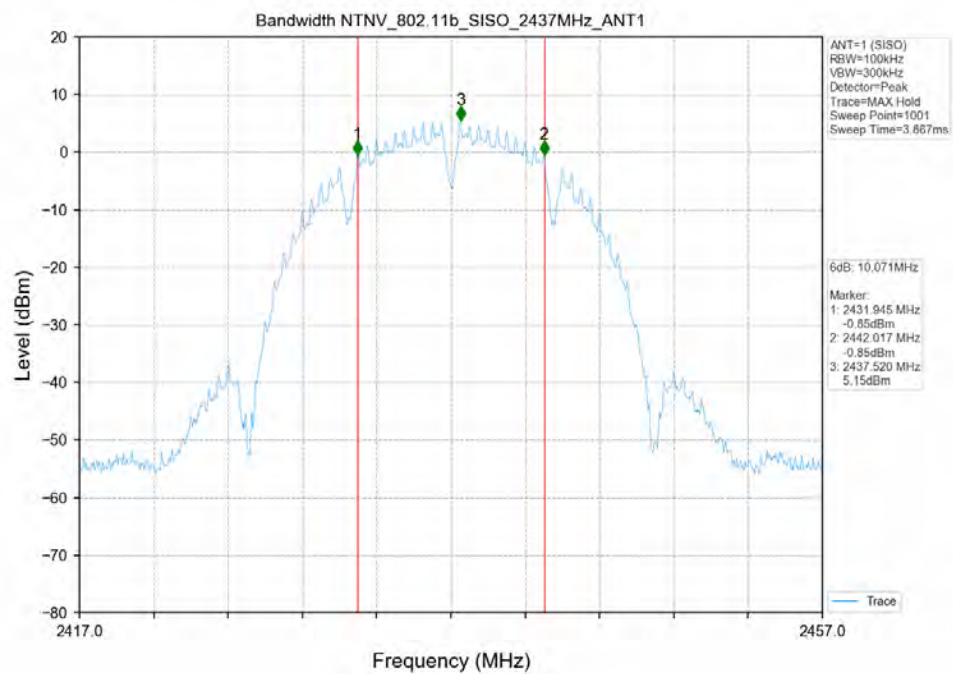
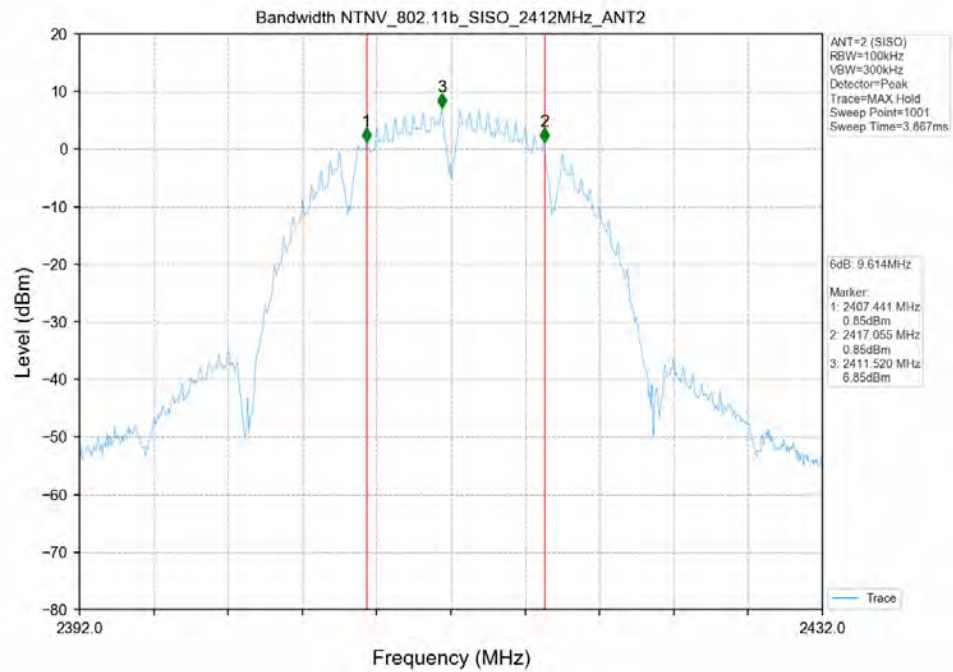
2.1 Test Result

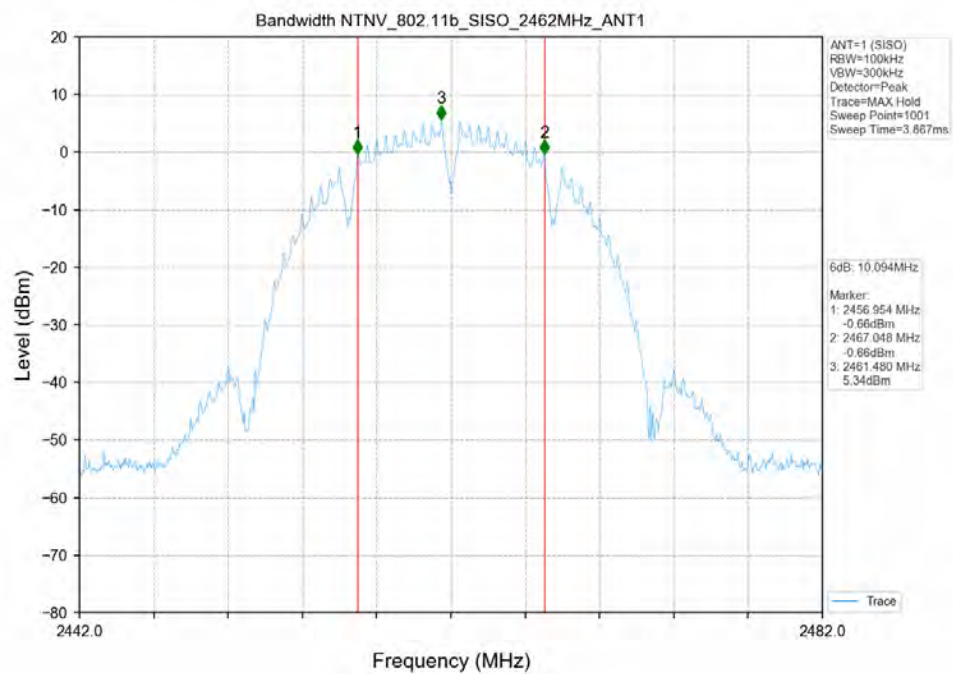
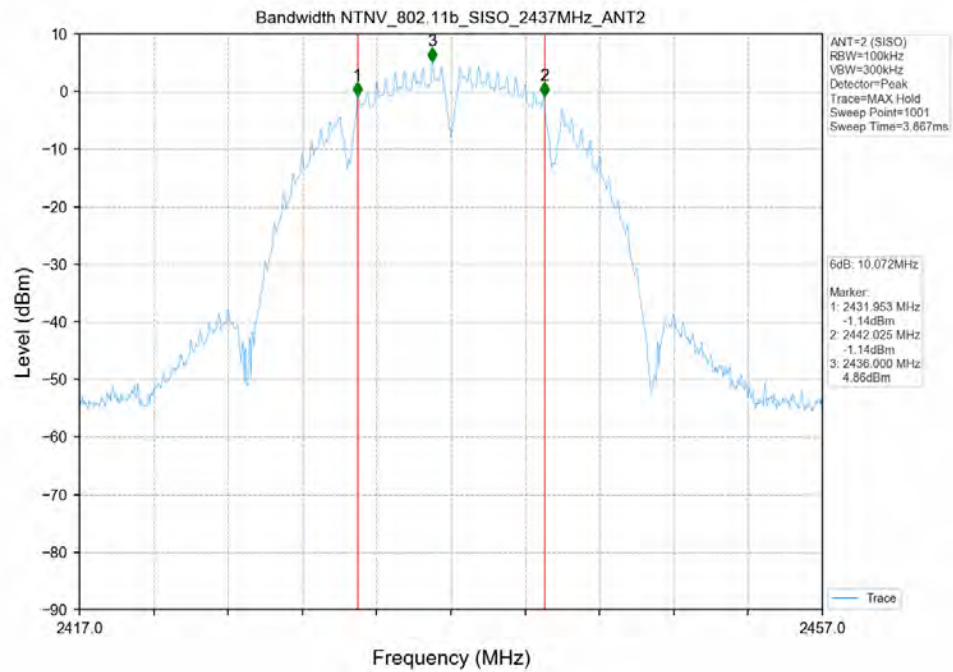
Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11b	2412	SISO	1	10.088	≥ 0.5	PASS
			2	9.614	≥ 0.5	PASS
	2437	SISO	1	10.071	≥ 0.5	PASS
			2	10.072	≥ 0.5	PASS
	2462	SISO	1	10.094	≥ 0.5	PASS
			2	10.093	≥ 0.5	PASS
802.11g	2412	SISO	1	16.387	≥ 0.5	PASS
			2	16.392	≥ 0.5	PASS
	2437	SISO	1	16.419	≥ 0.5	PASS
			2	16.369	≥ 0.5	PASS
	2462	SISO	1	16.384	≥ 0.5	PASS
			2	16.381	≥ 0.5	PASS
802.11n(HT20)	2412	MIMO	1	17.549	≥ 0.5	PASS
			2	17.571	≥ 0.5	PASS
	2437	MIMO	1	17.543	≥ 0.5	PASS
			2	17.544	≥ 0.5	PASS
	2462	MIMO	1	17.546	≥ 0.5	PASS
			2	17.349	≥ 0.5	PASS
802.11n(HT40)	2422	MIMO	1	35.387	≥ 0.5	PASS
			2	35.296	≥ 0.5	PASS
	2437	MIMO	1	35.252	≥ 0.5	PASS
			2	35.342	≥ 0.5	PASS
	2452	MIMO	1	35.425	≥ 0.5	PASS
			2	35.297	≥ 0.5	PASS

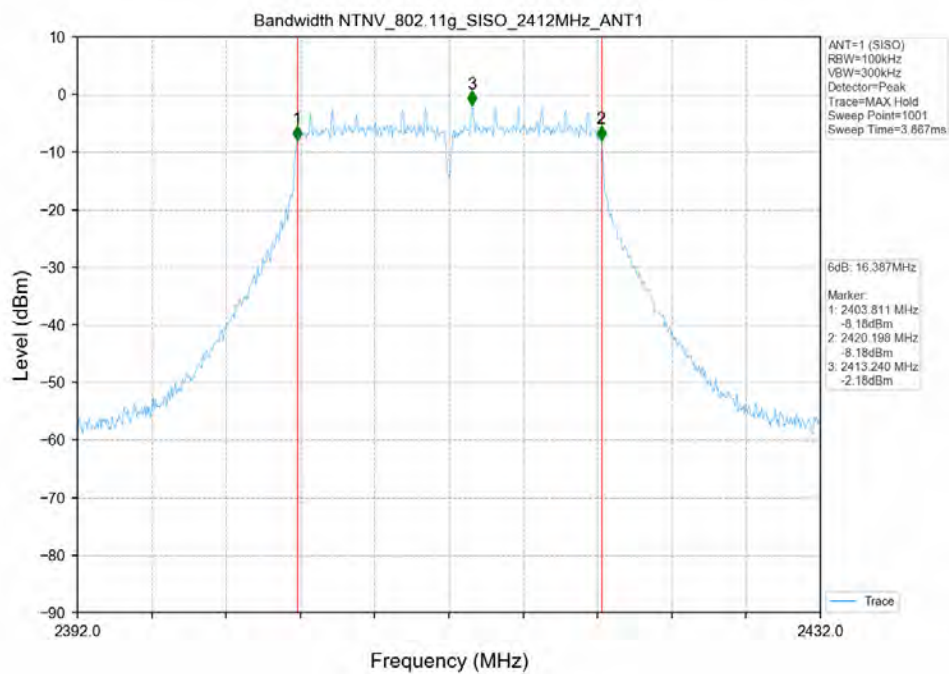
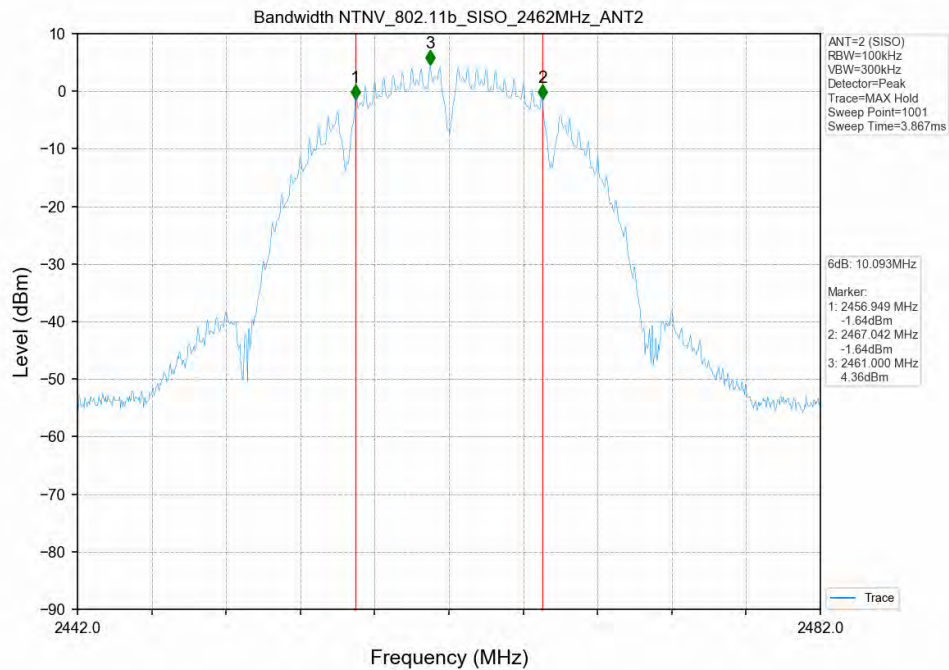
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11b	2412	SISO	1	14.890	Only for Report Use
			2	14.897	Only for Report Use
	2437	SISO	1	14.874	Only for Report Use
			2	14.912	Only for Report Use
	2462	SISO	1	14.876	Only for Report Use
			2	14.910	Only for Report Use
802.11g	2412	SISO	1	16.814	Only for Report Use
			2	16.742	Only for Report Use
	2437	SISO	1	16.942	Only for Report Use
			2	16.789	Only for Report Use
	2462	SISO	1	16.834	Only for Report Use
			2	16.749	Only for Report Use
802.11n(HT20)	2412	MIMO	1	17.877	Only for Report Use
			2	17.858	Only for Report Use
	2437	MIMO	1	17.895	Only for Report Use
			2	17.878	Only for Report Use
	2462	MIMO	1	17.913	Only for Report Use
			2	17.888	Only for Report Use
802.11n(HT40)	2422	MIMO	1	35.979	Only for Report Use
			2	35.988	Only for Report Use
	2437	MIMO	1	36.014	Only for Report Use
			2	36.039	Only for Report Use
	2452	MIMO	1	35.970	Only for Report Use
			2	35.991	Only for Report Use

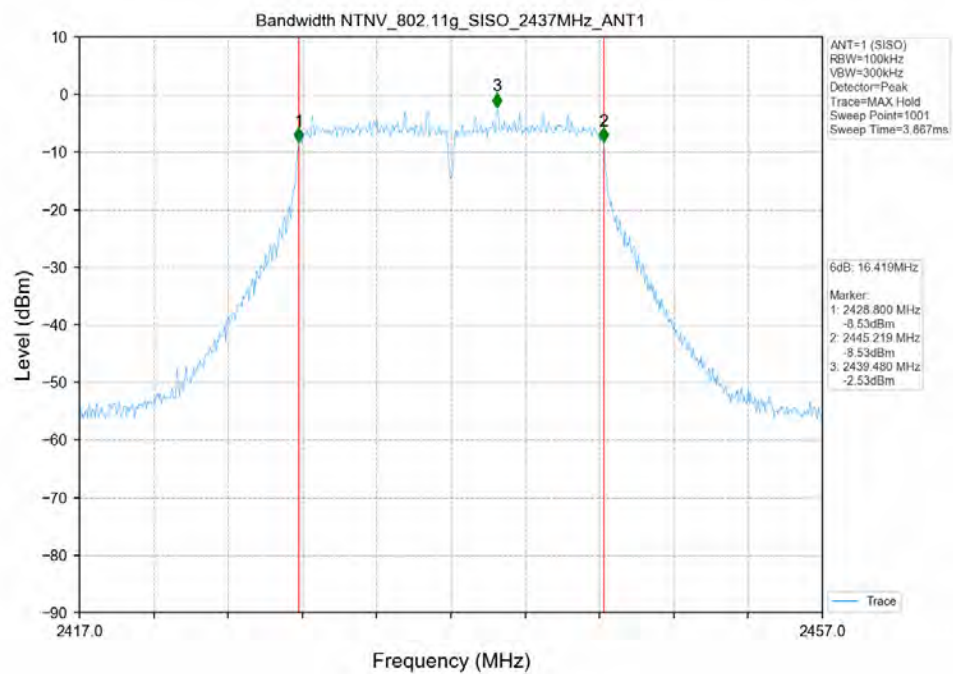
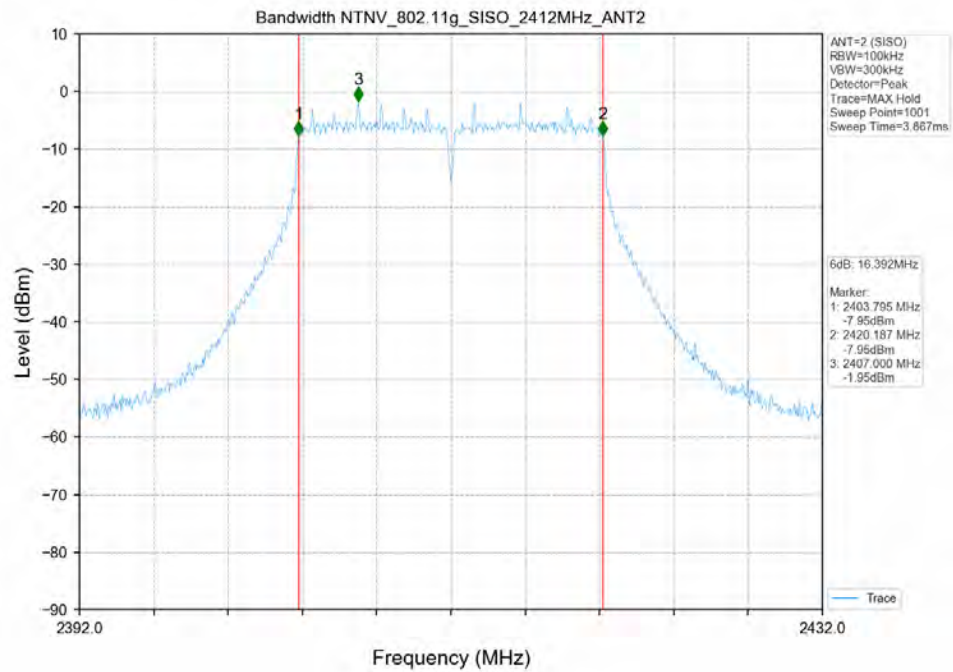
2.2 Test Graph - 6dB Bandwidth

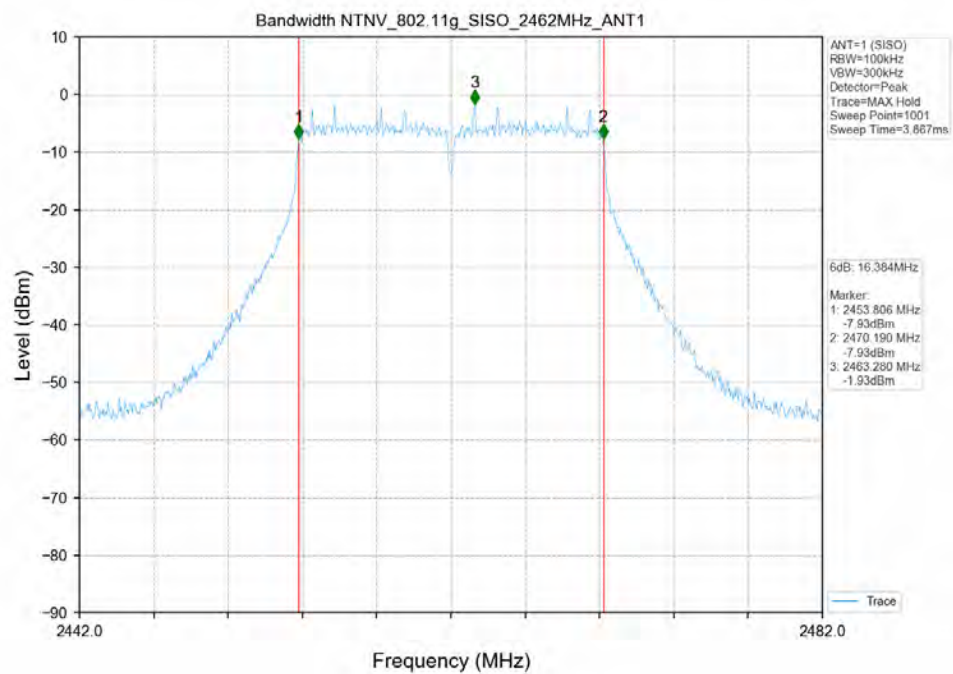
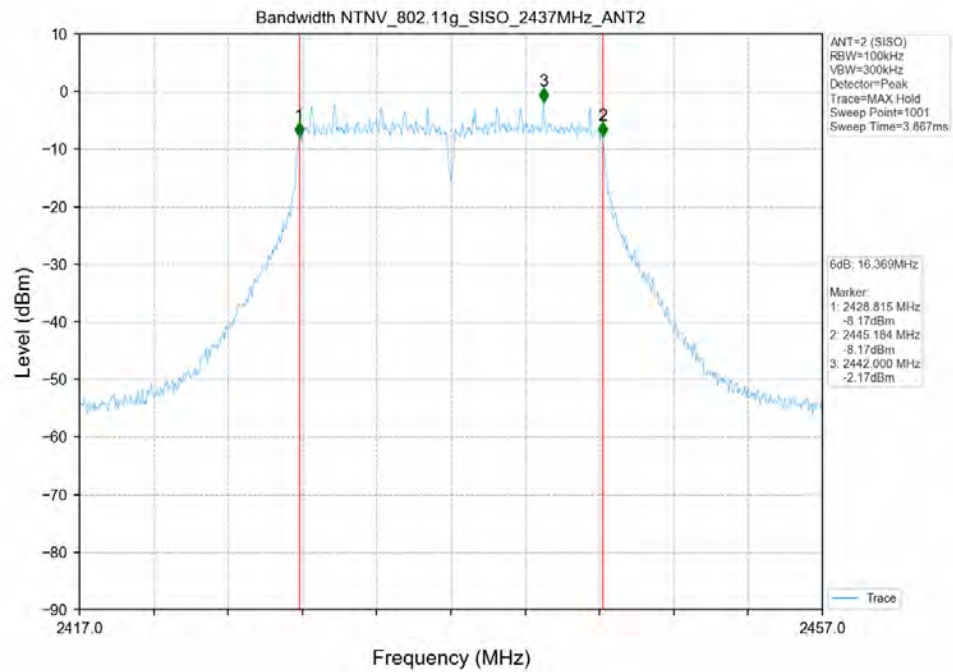


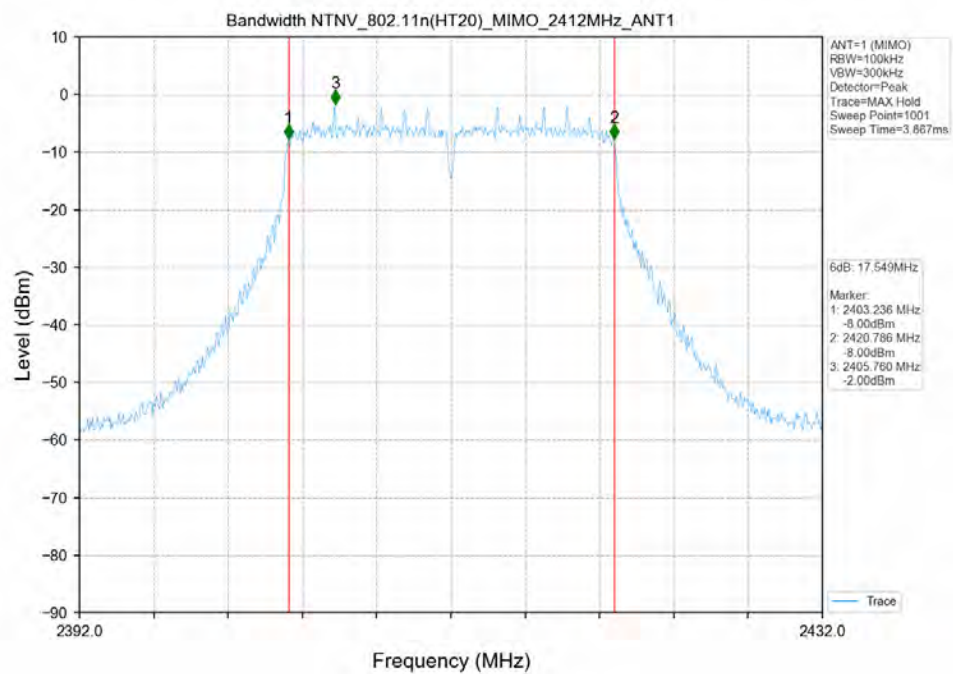
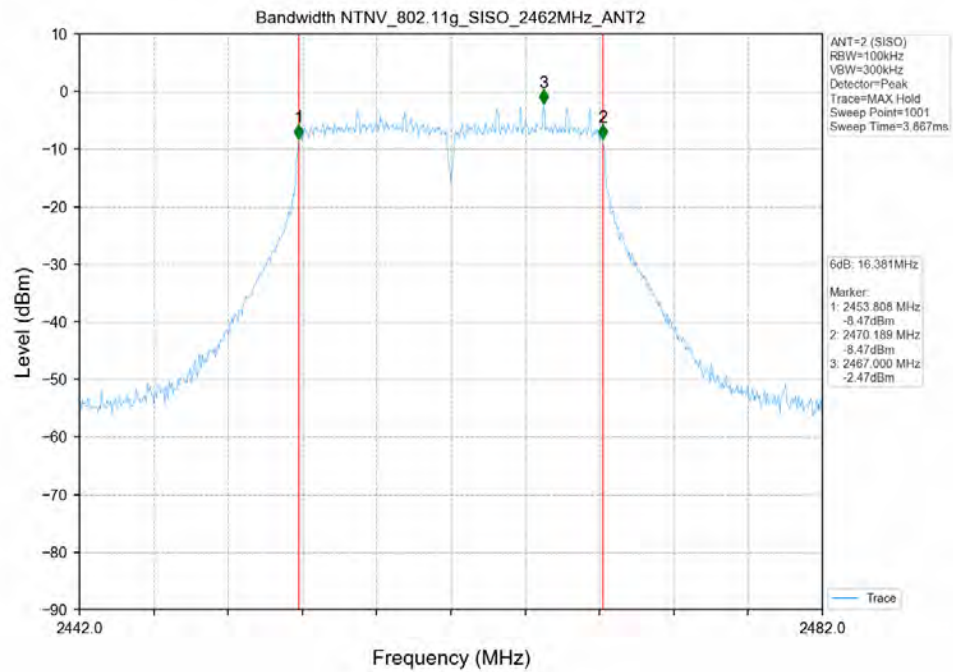


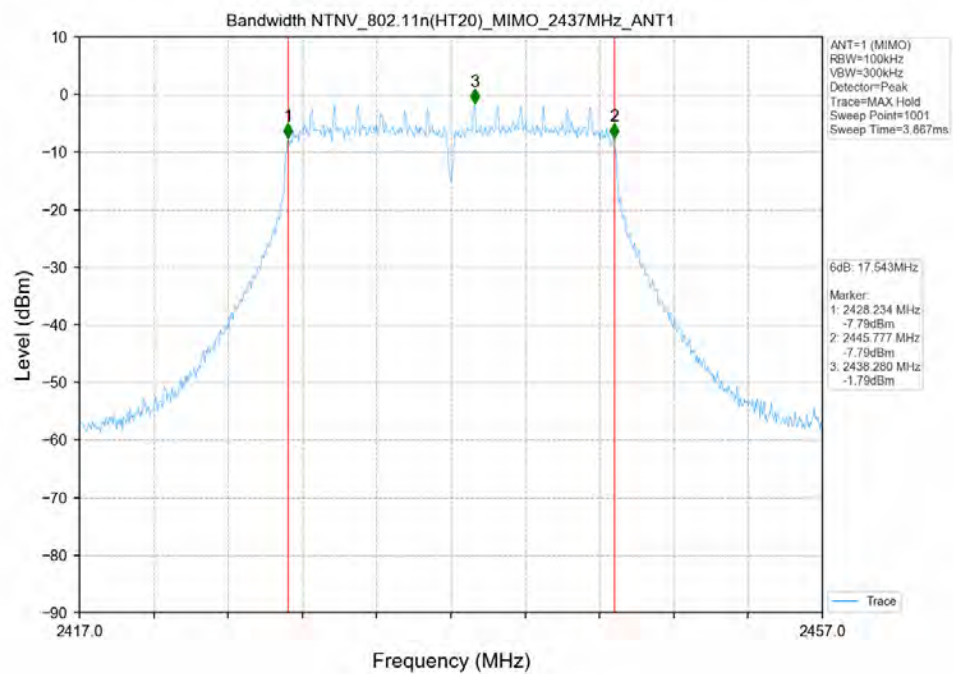
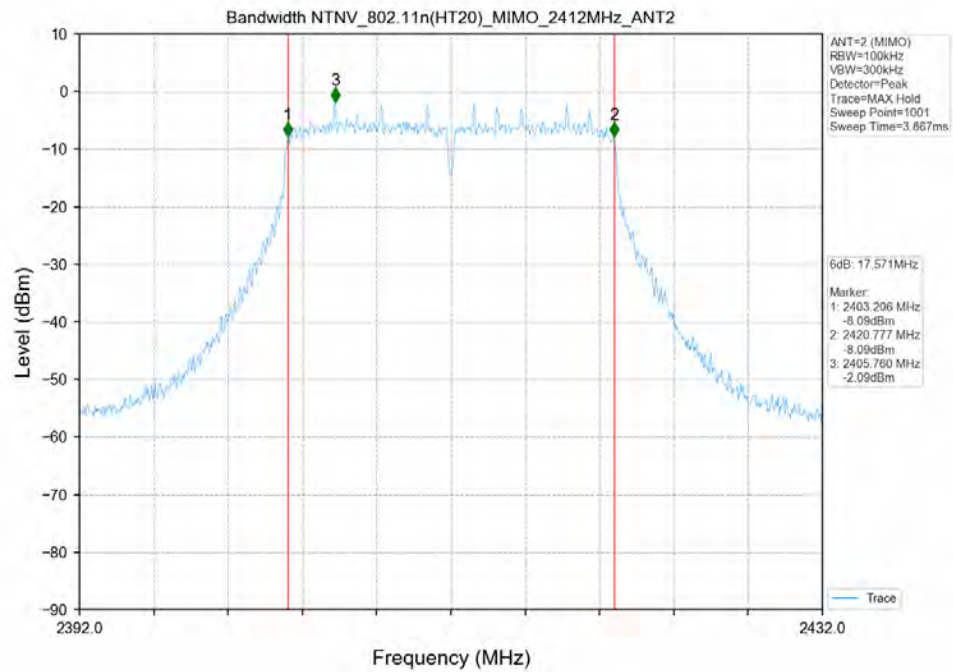


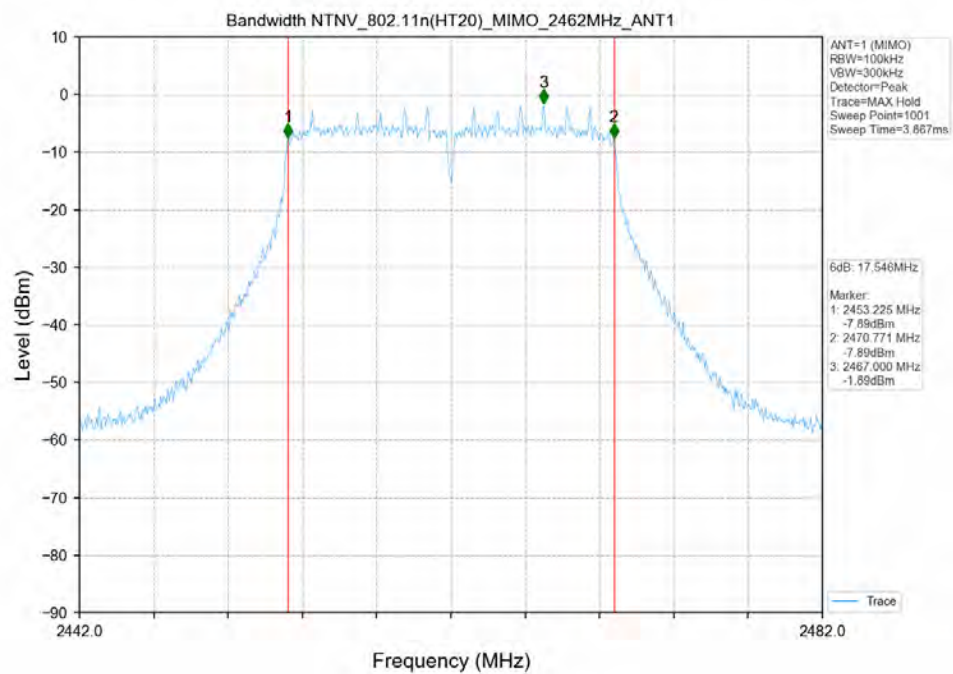
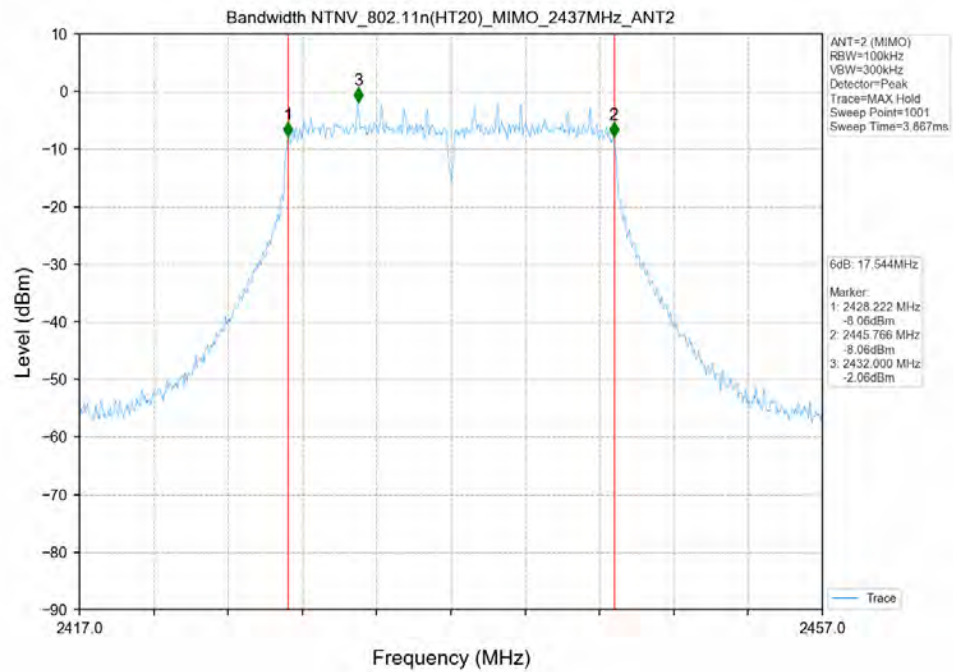


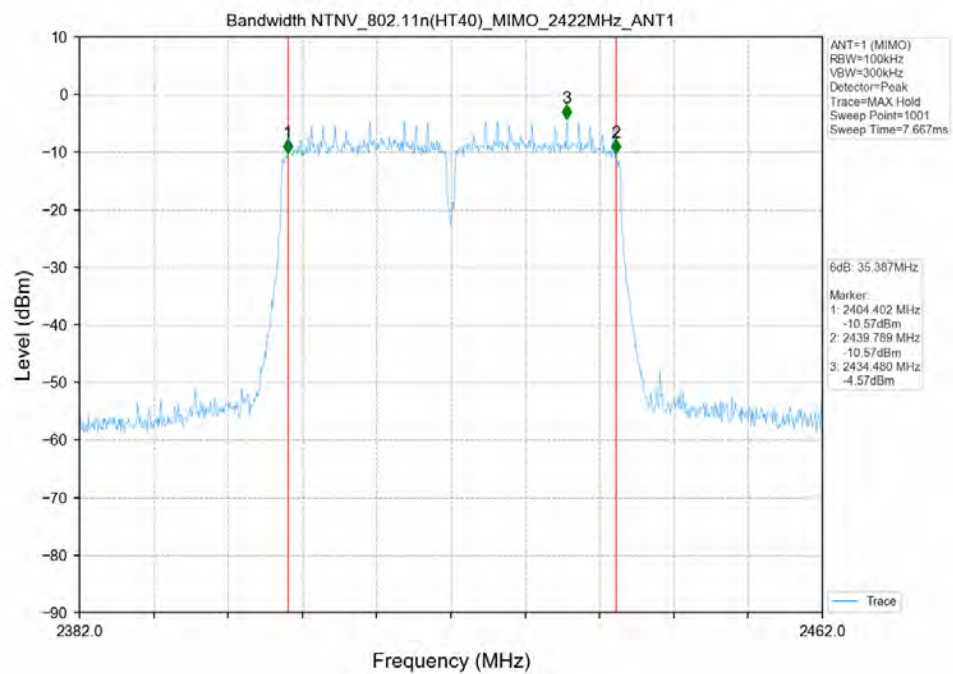
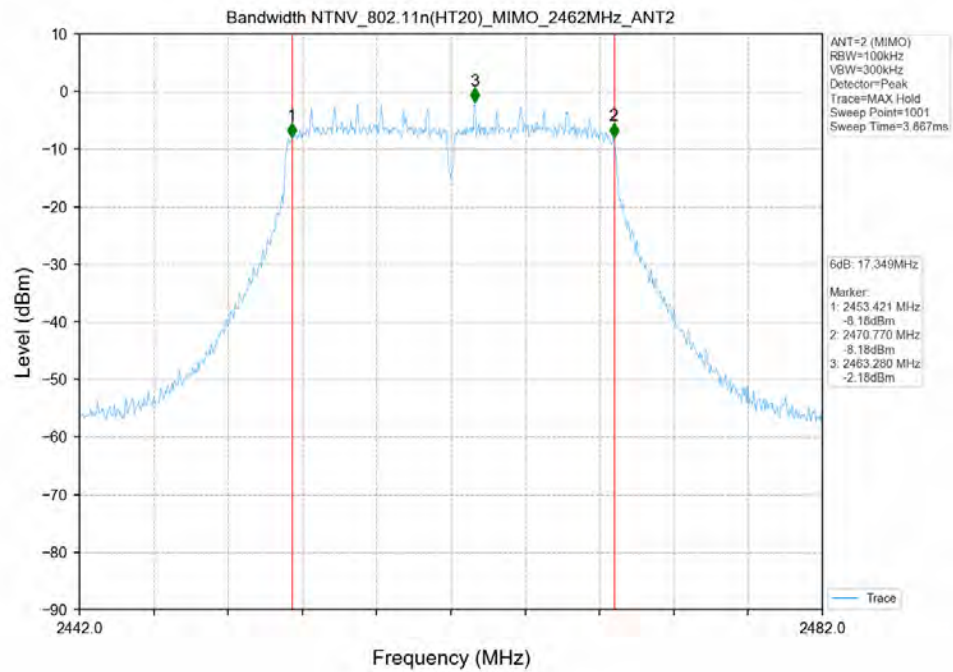


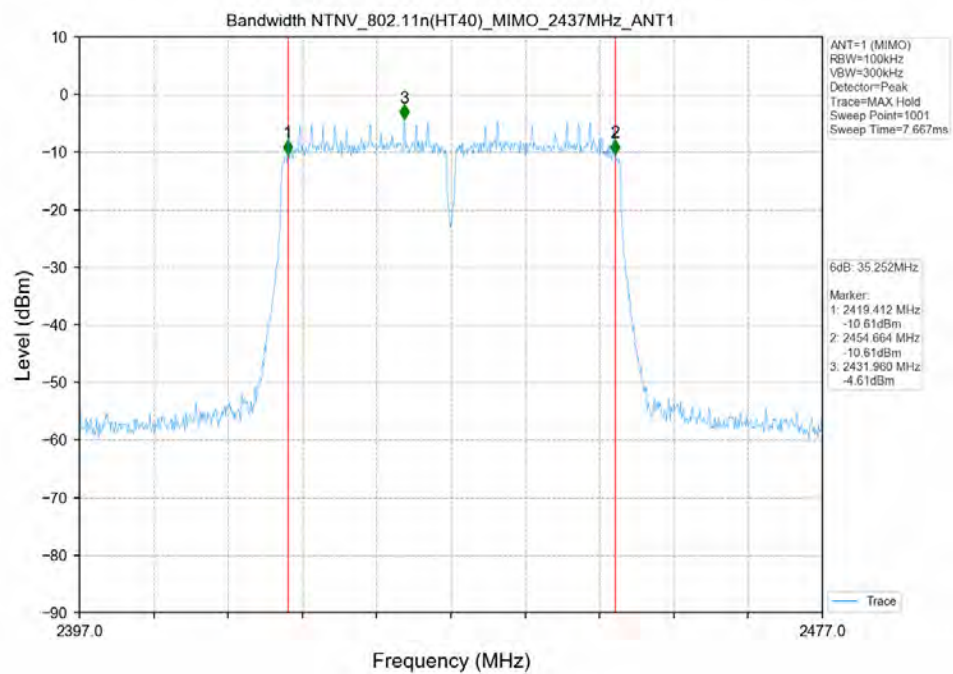
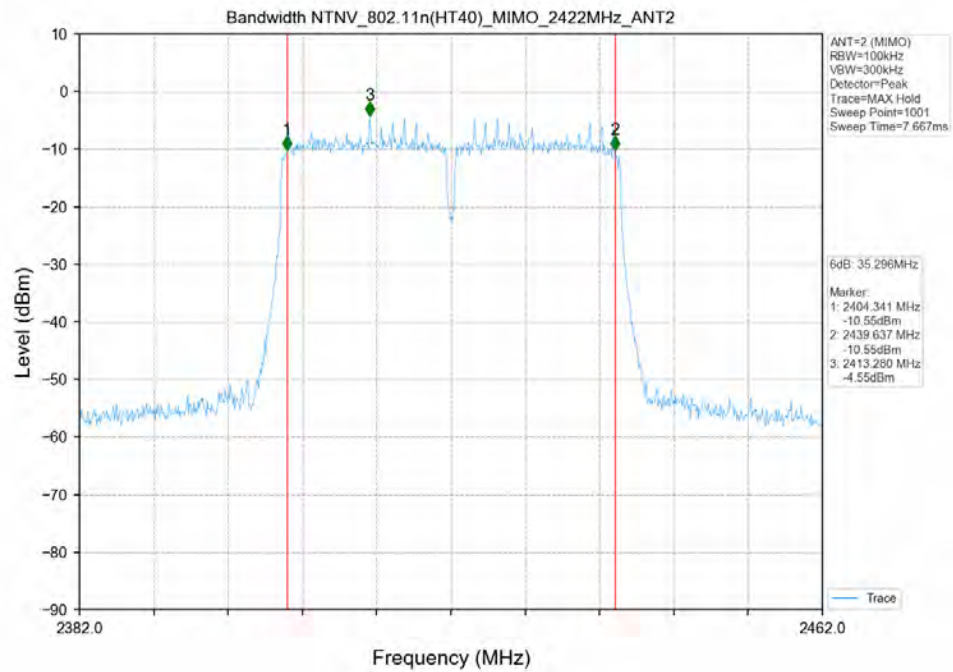


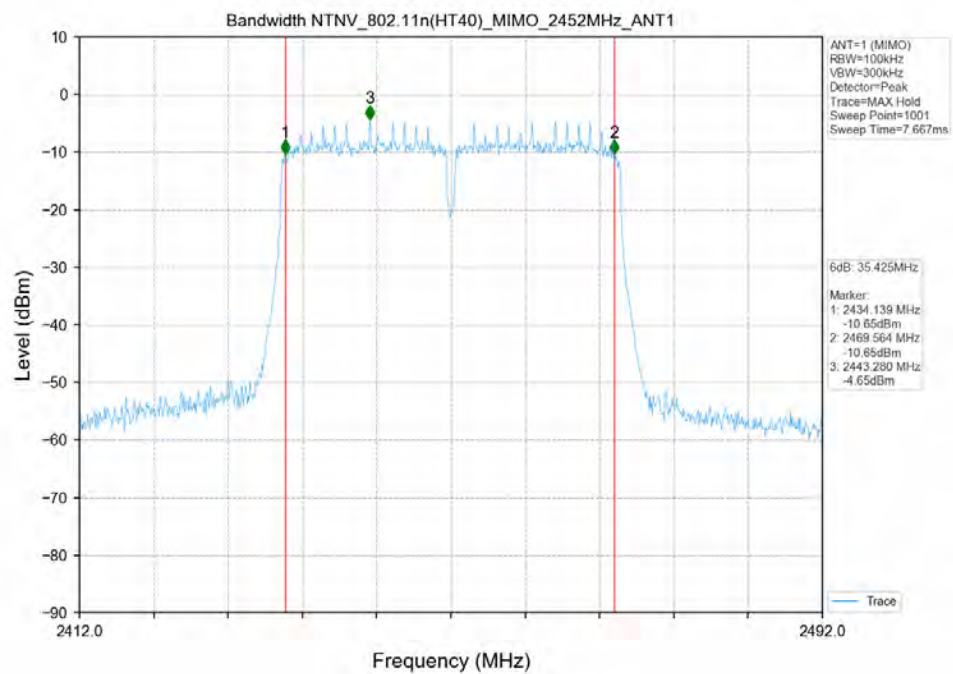
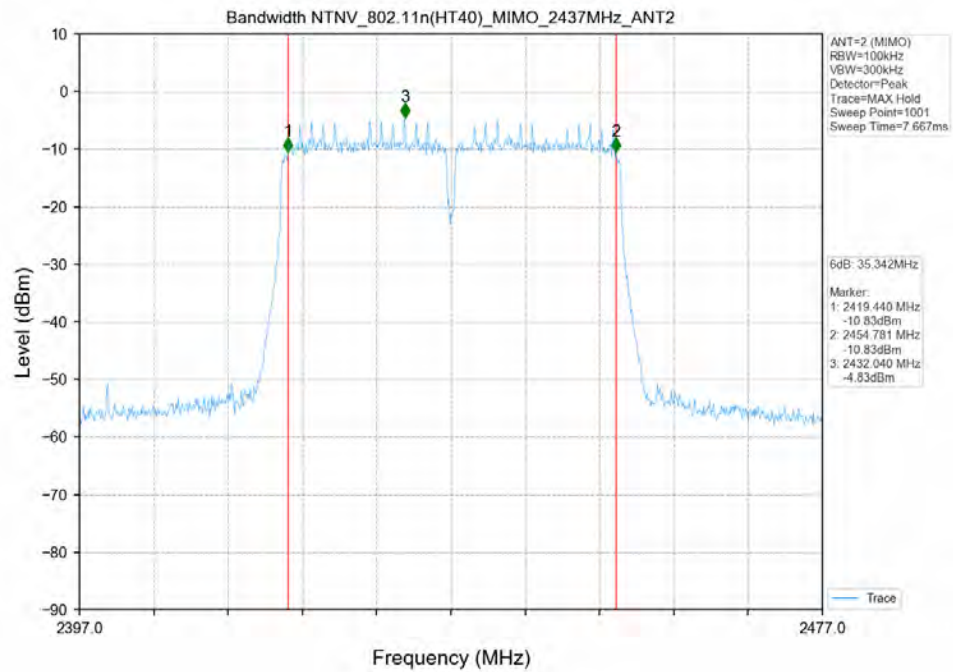


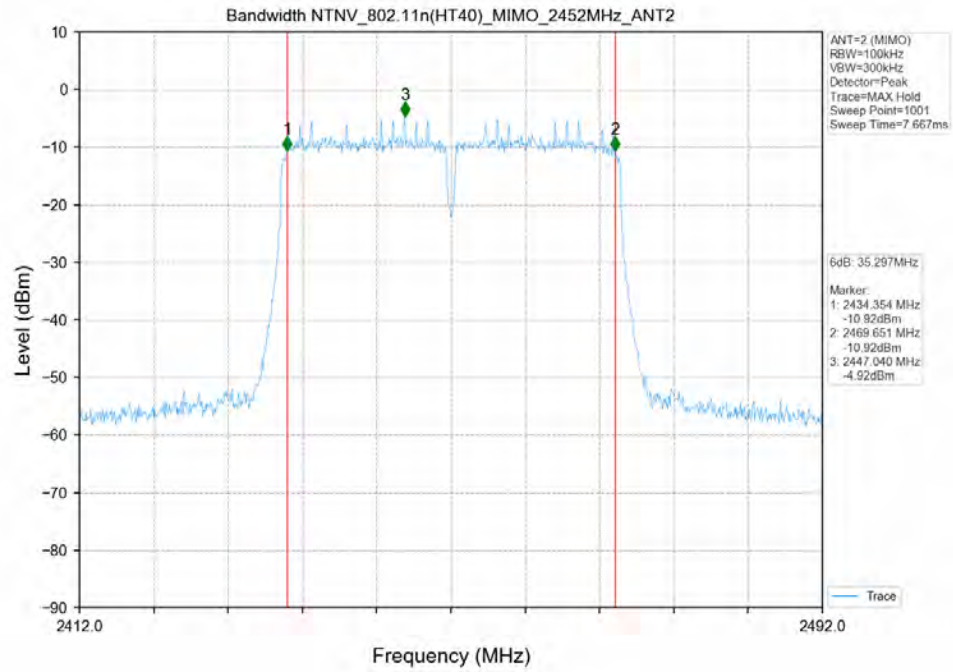




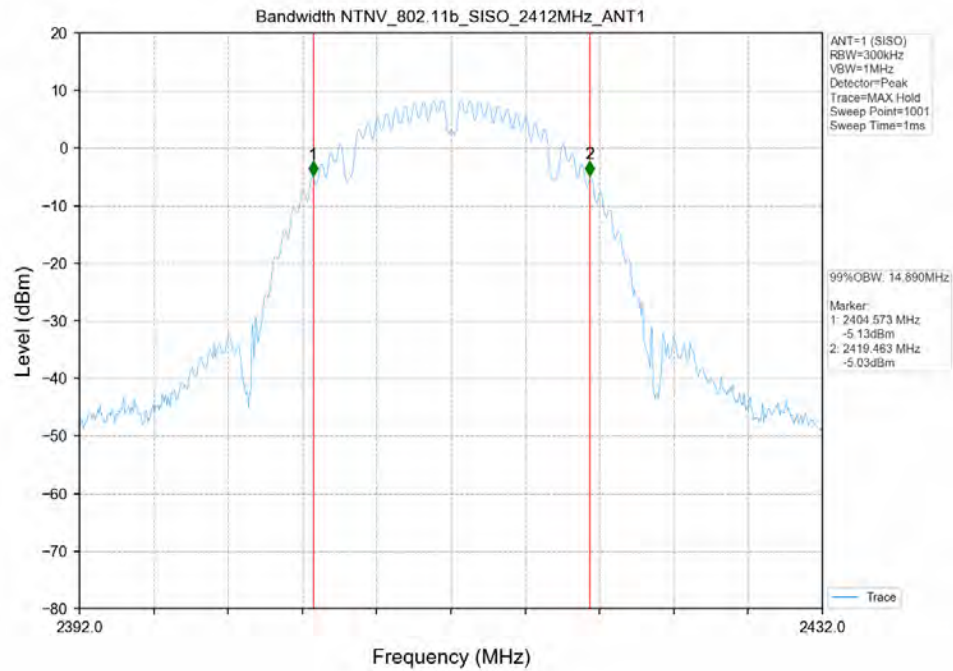


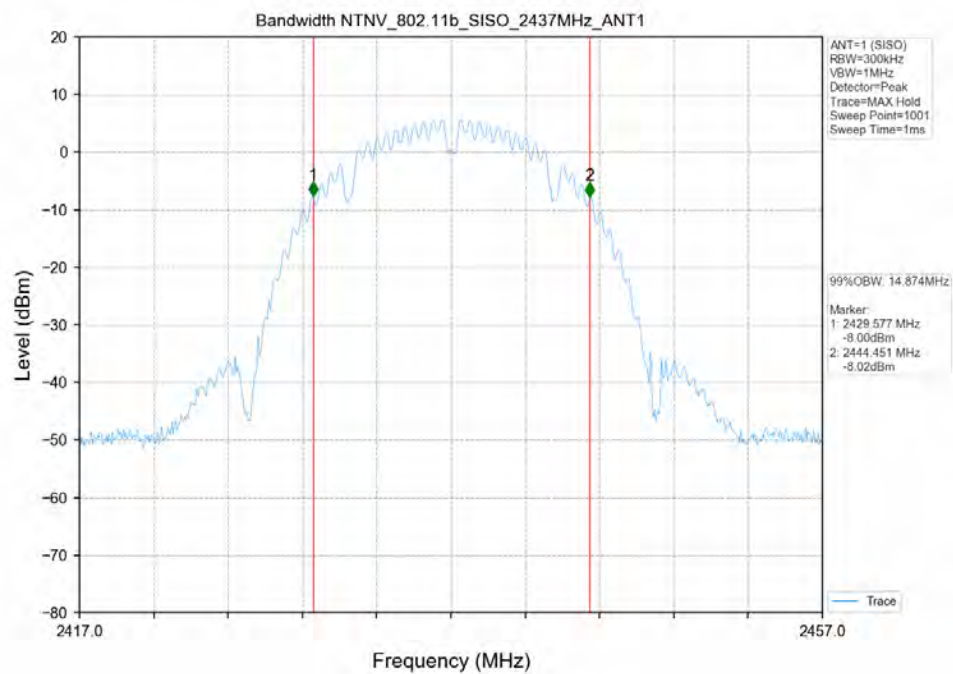
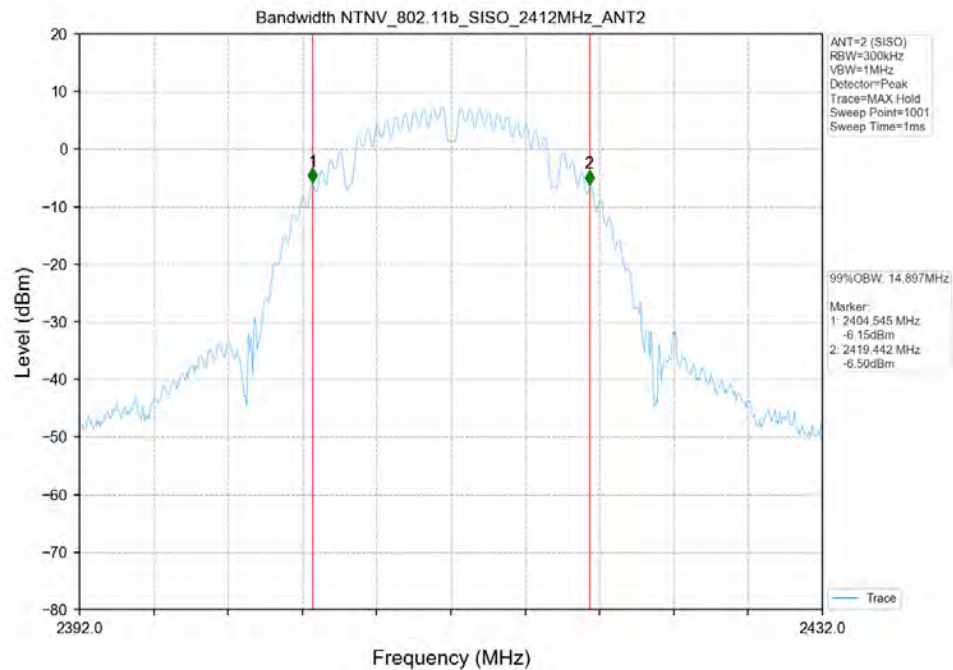


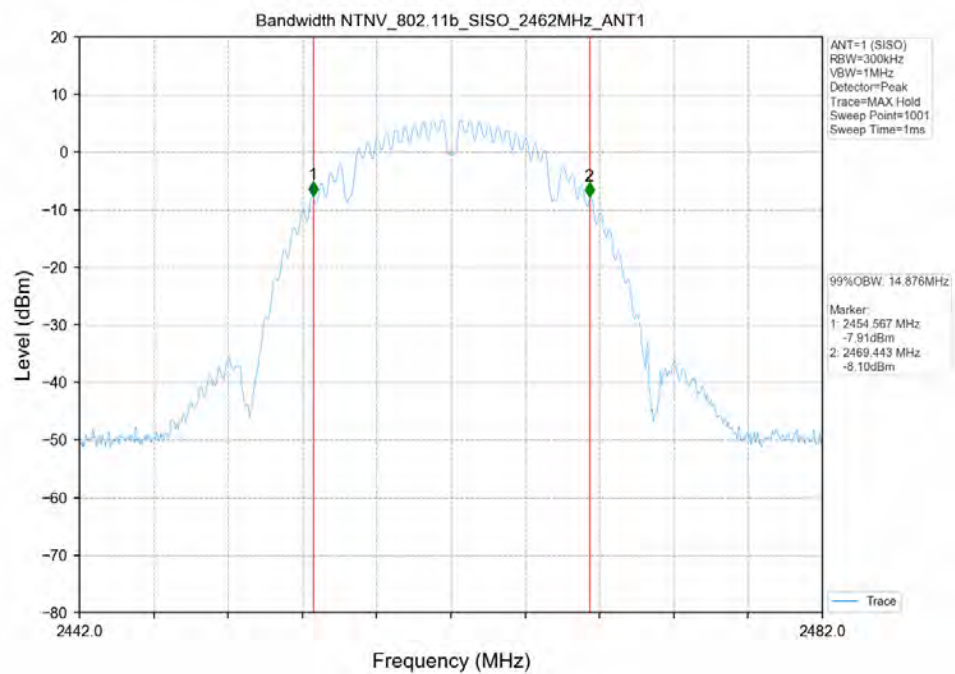
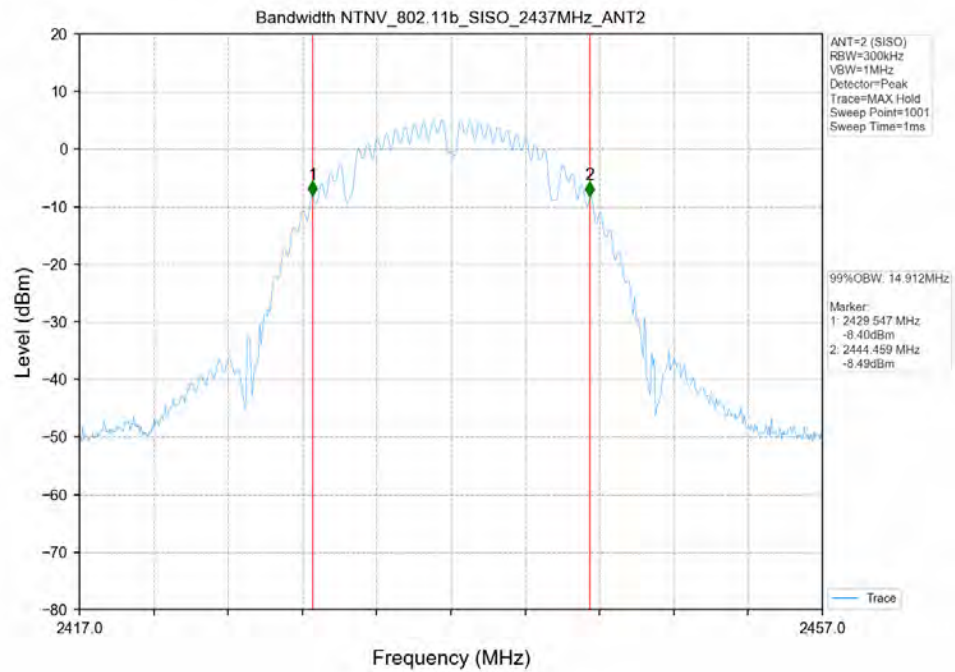


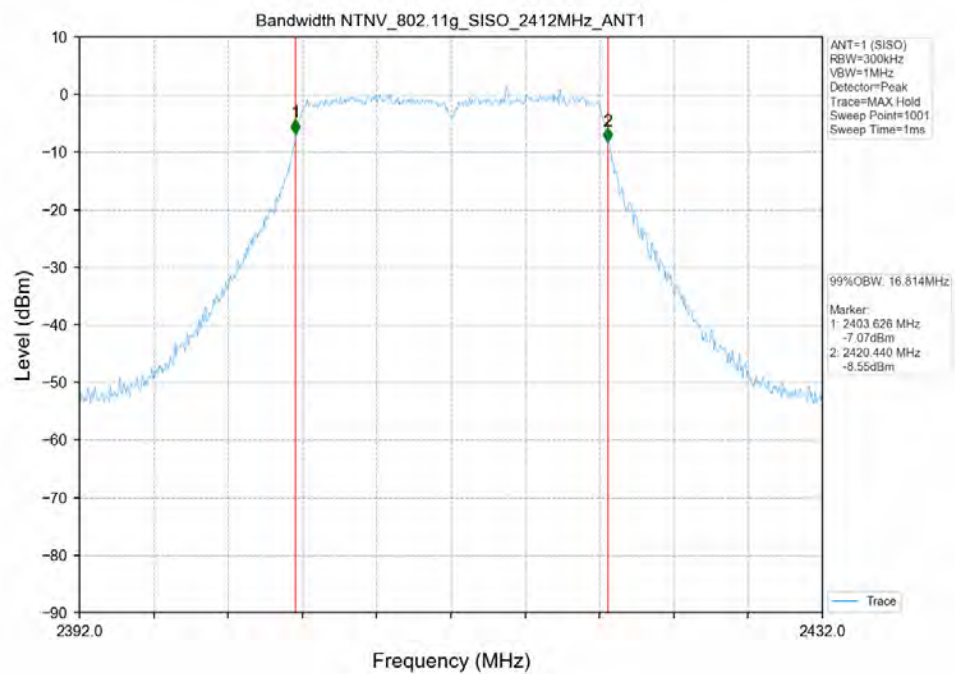
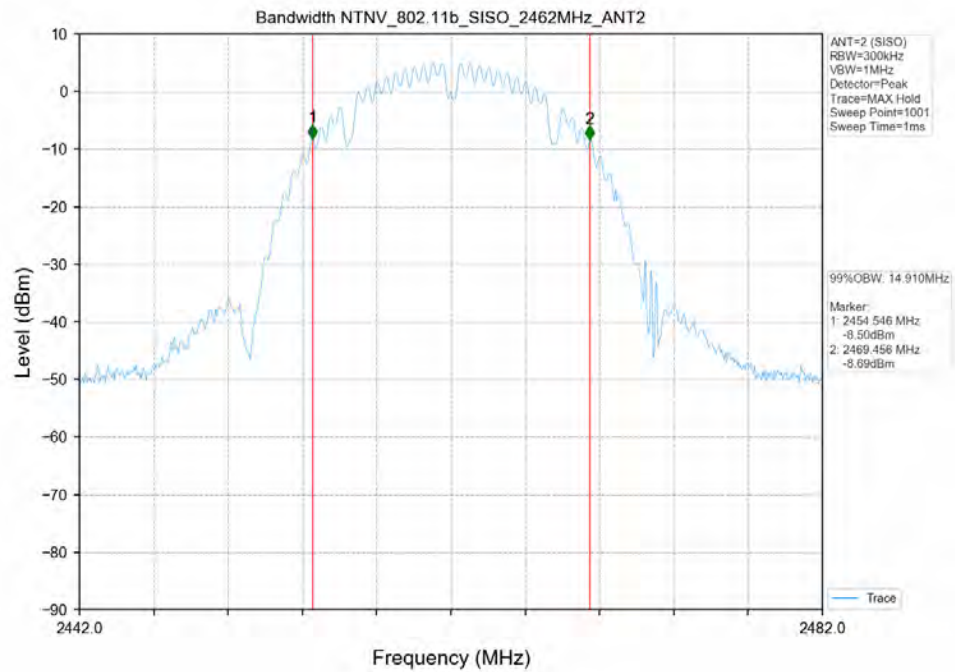


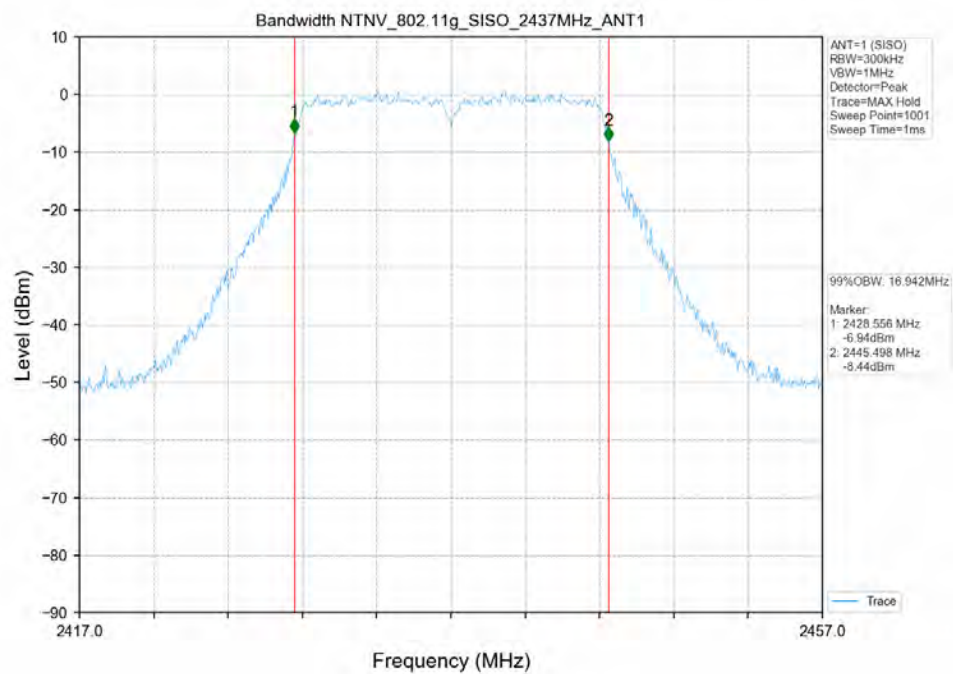
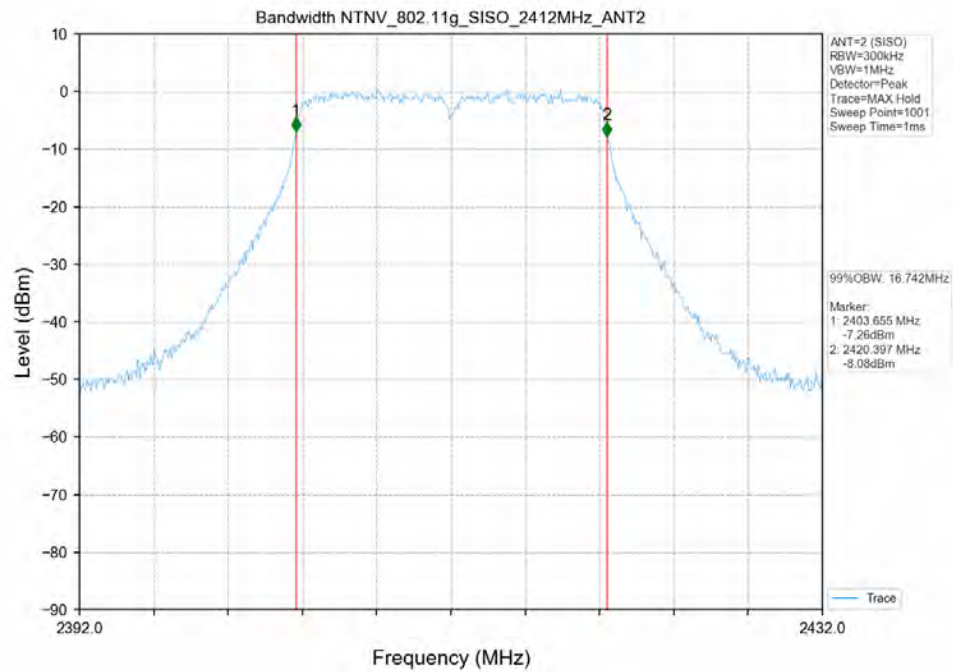
2.3 Test Graph - 99% Occupied Bandwidth

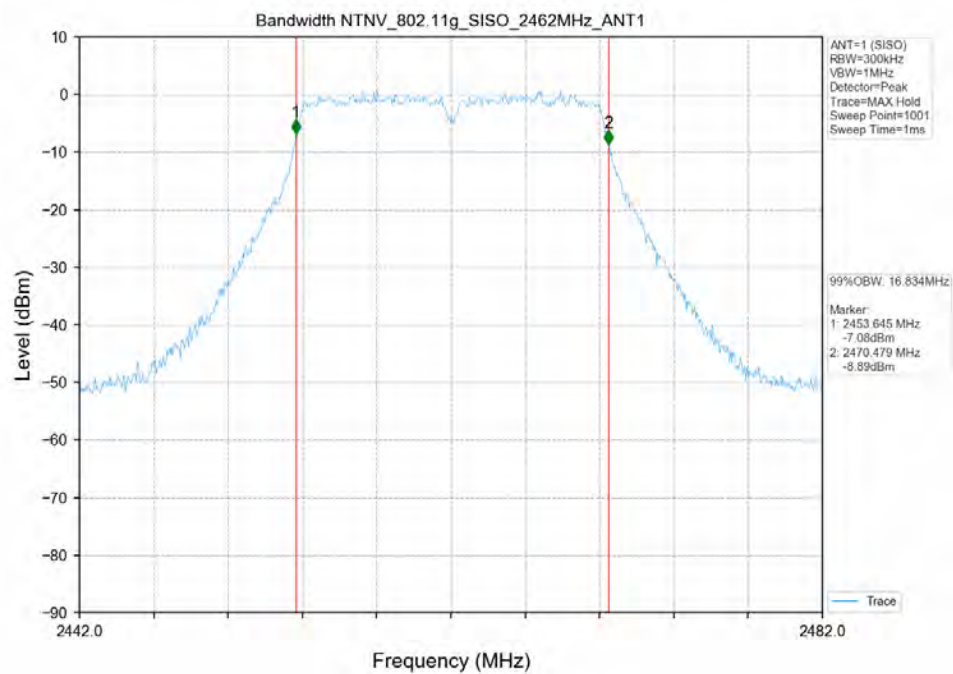
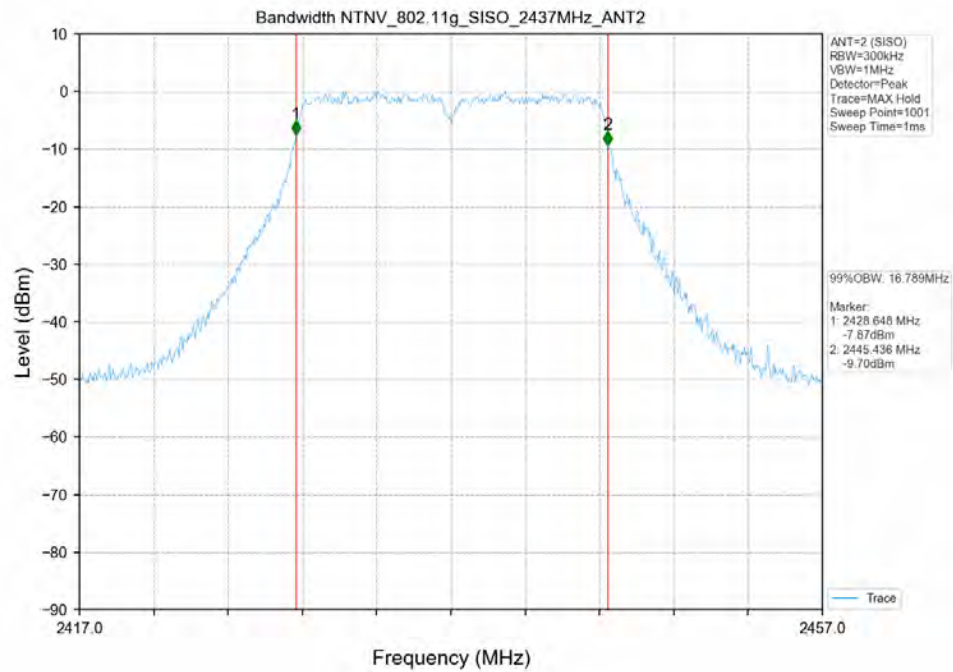


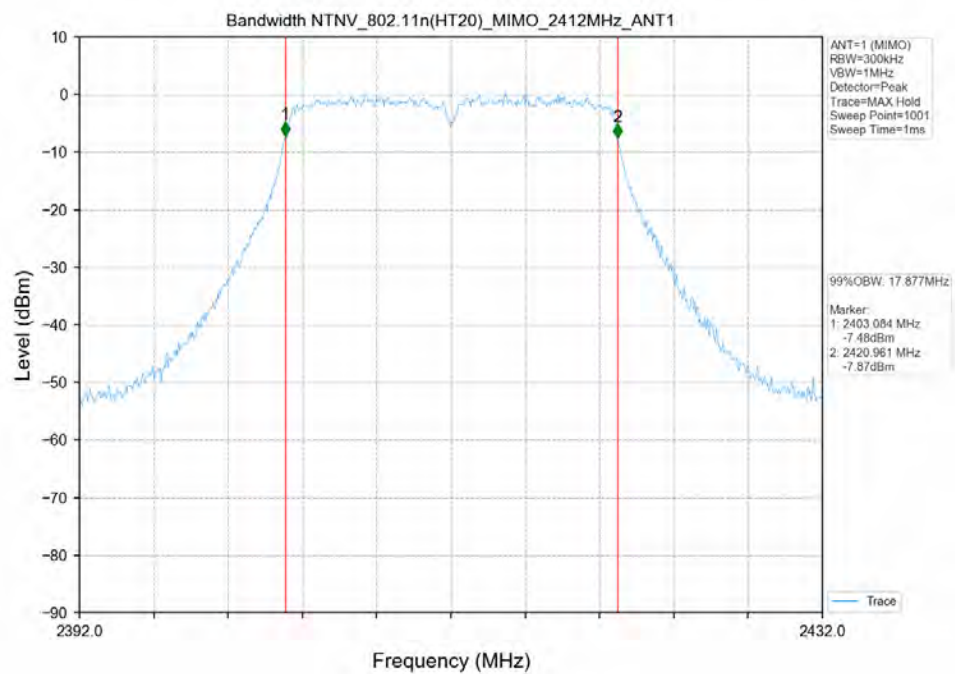
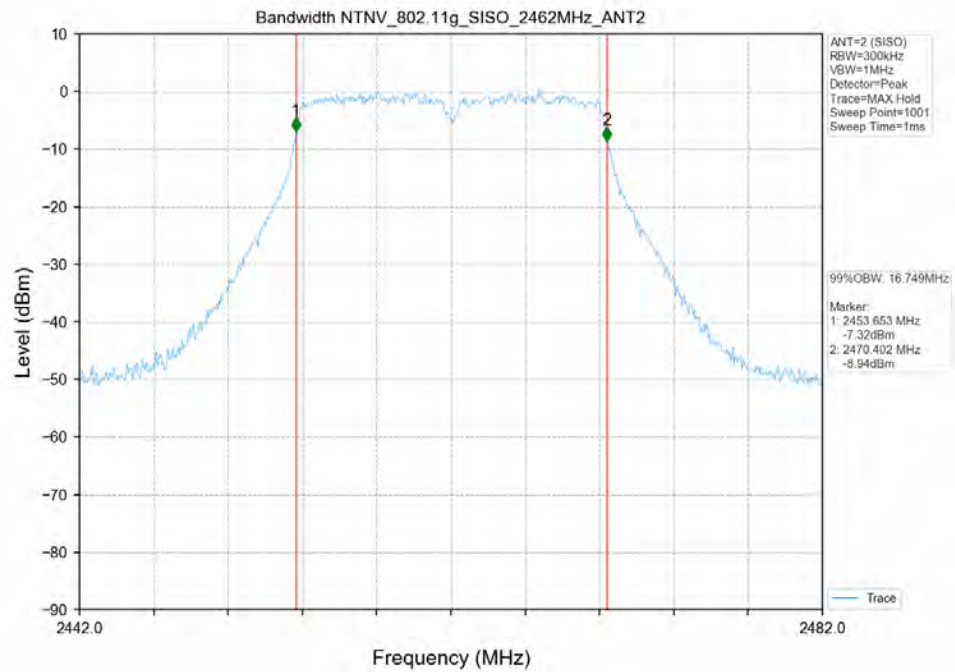


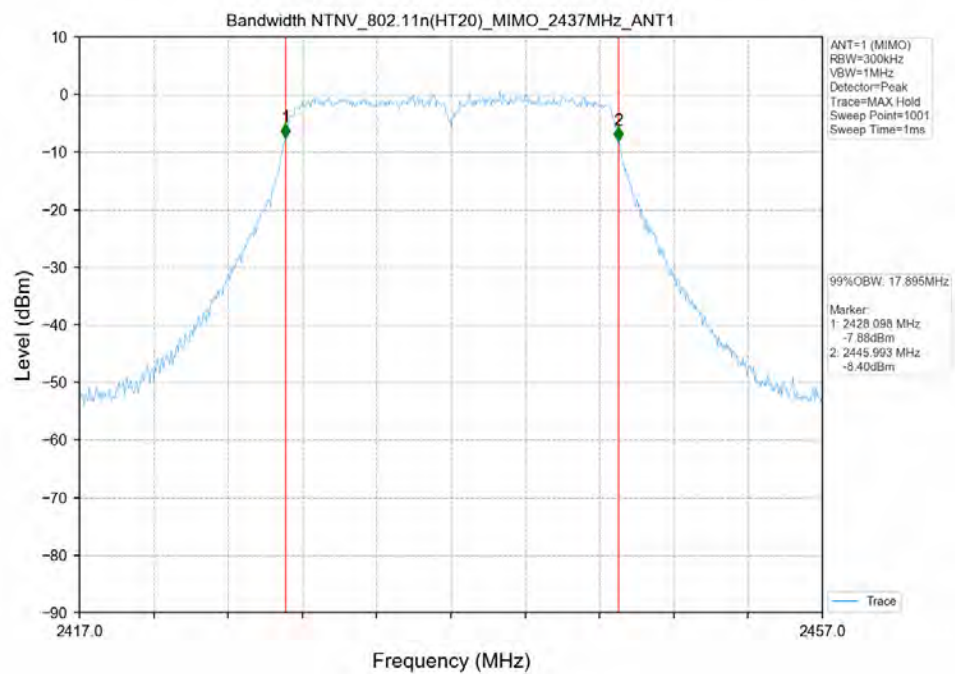
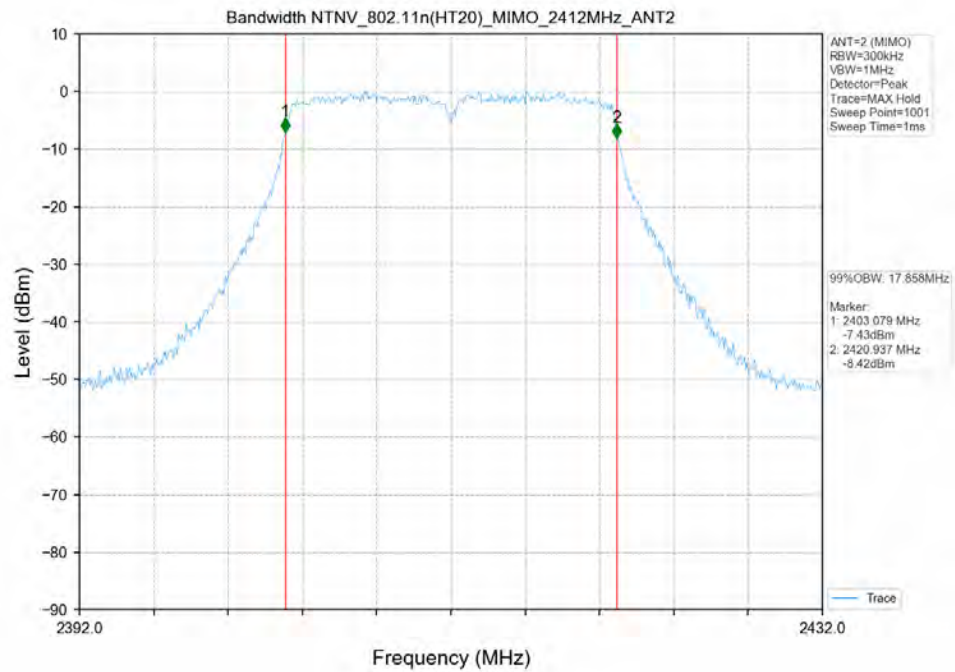


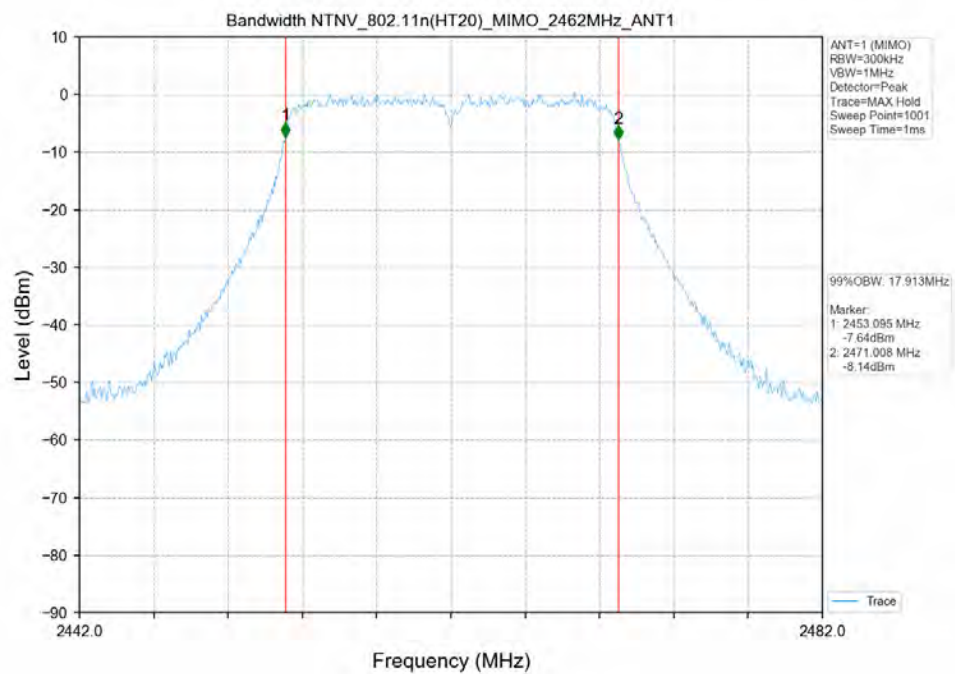
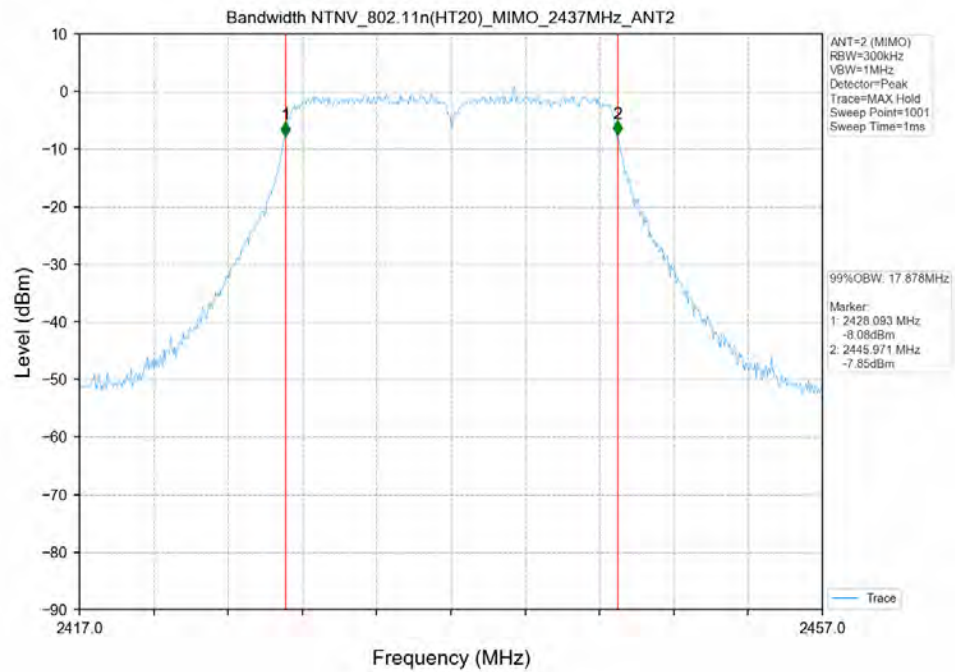


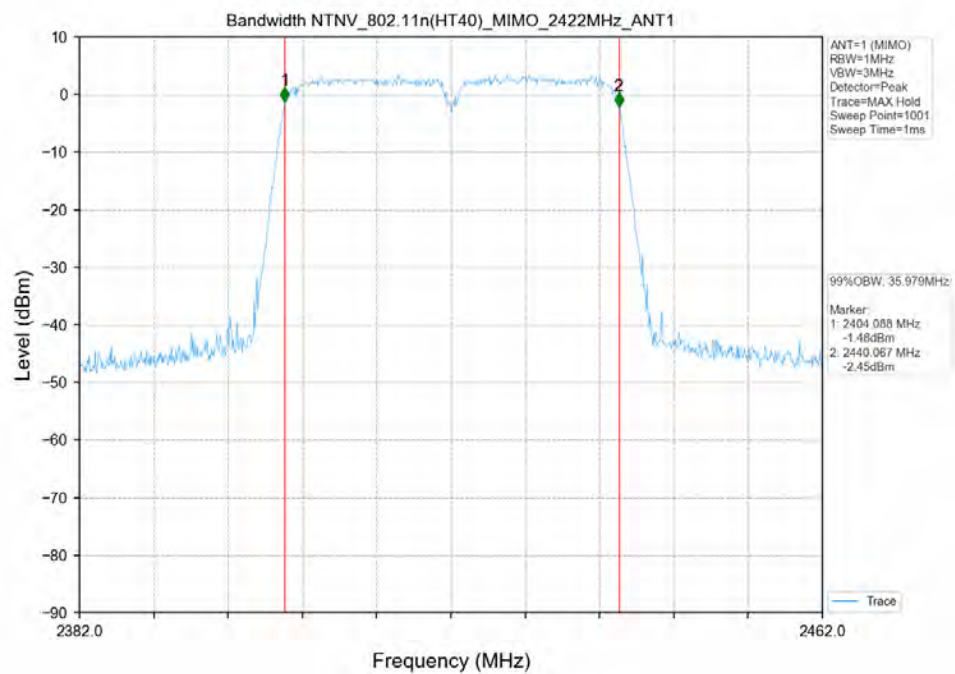
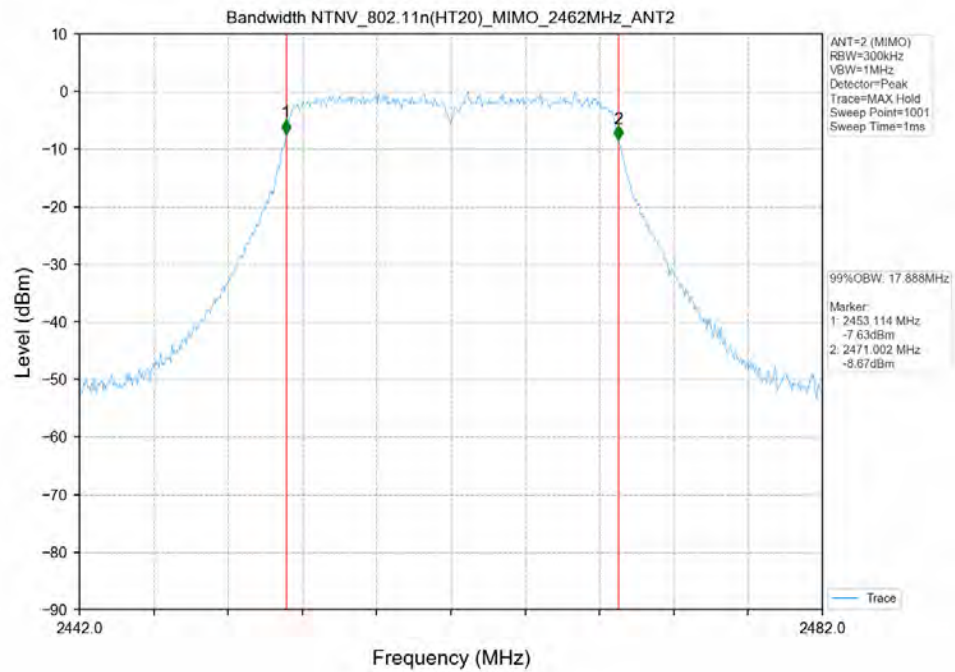


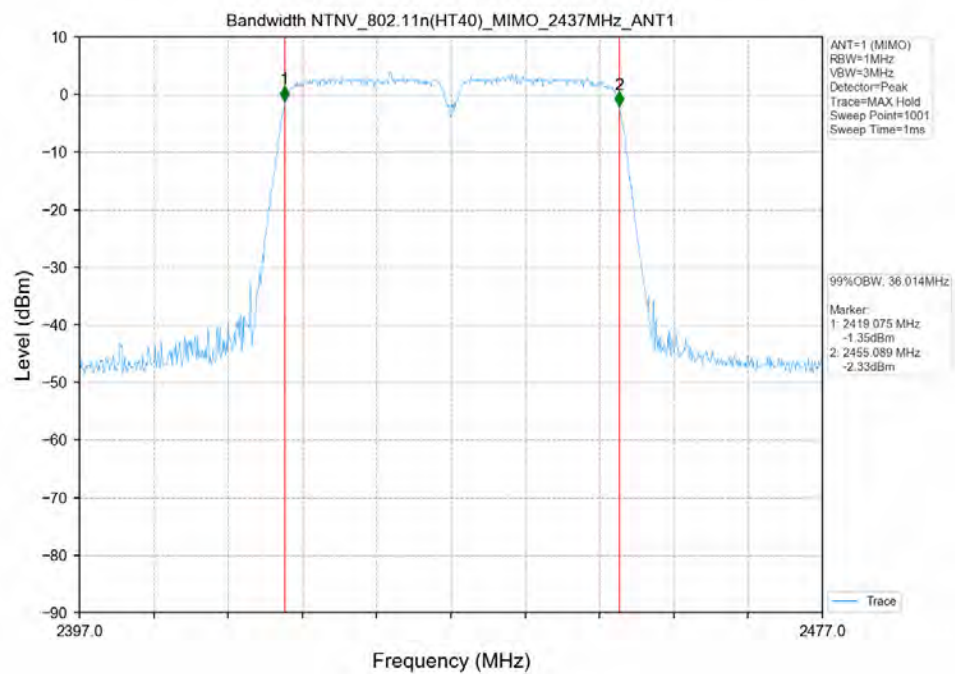
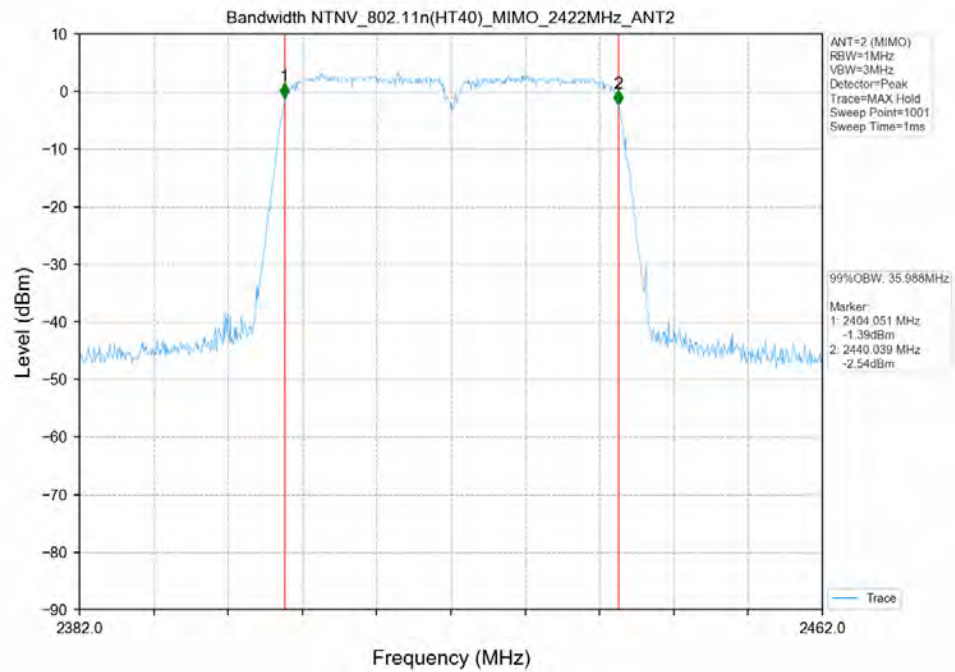


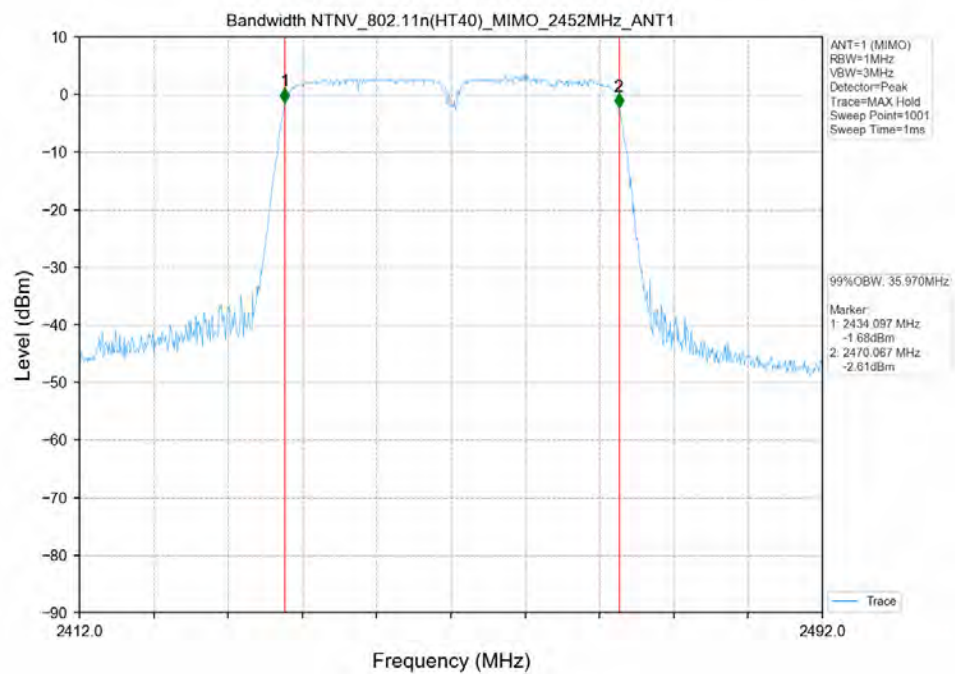
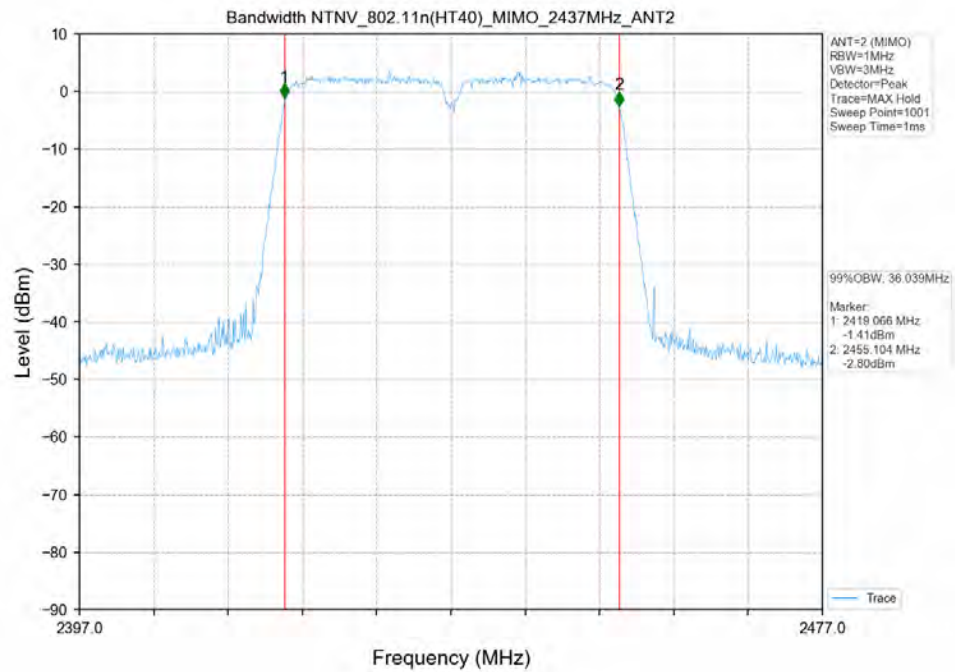


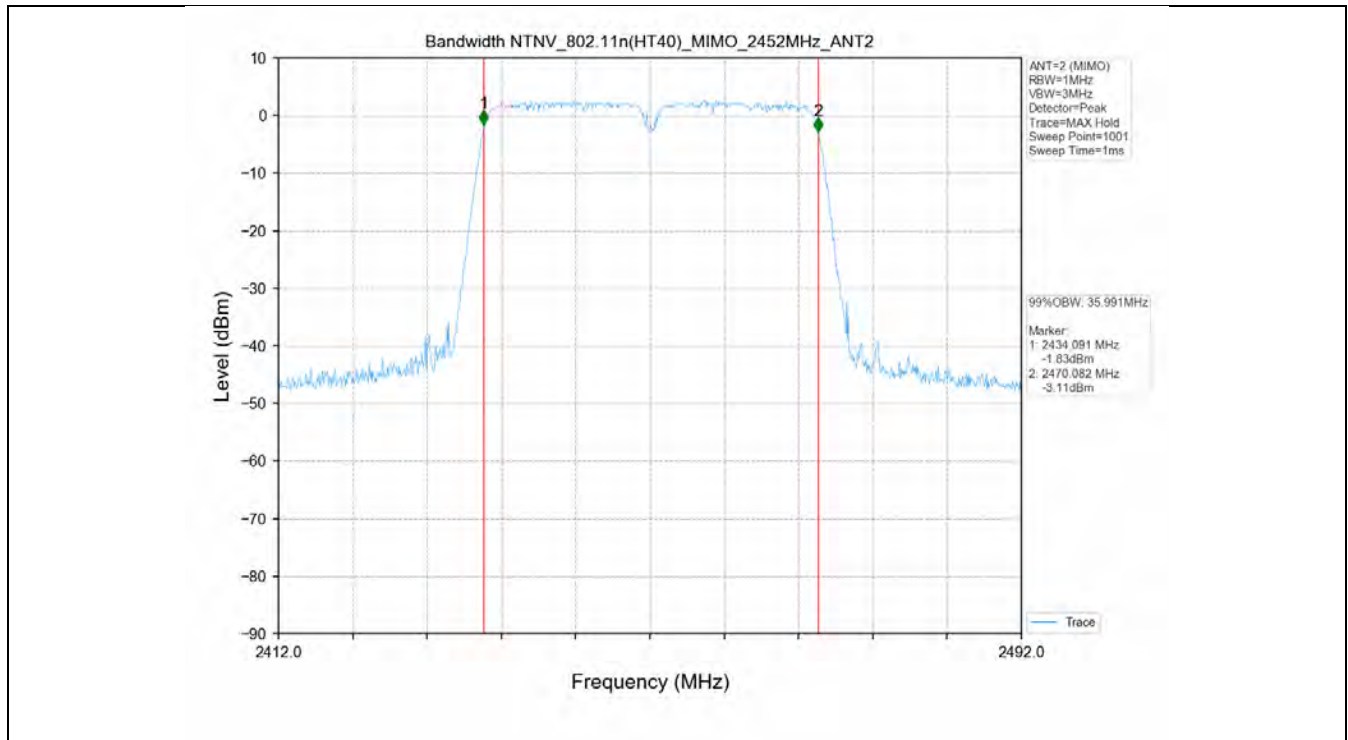










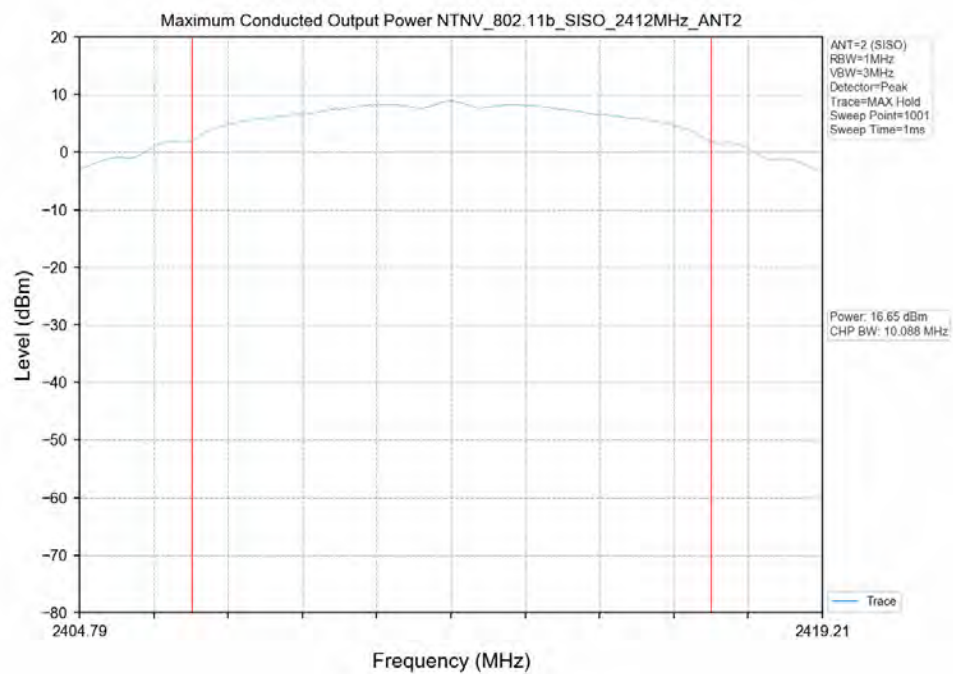
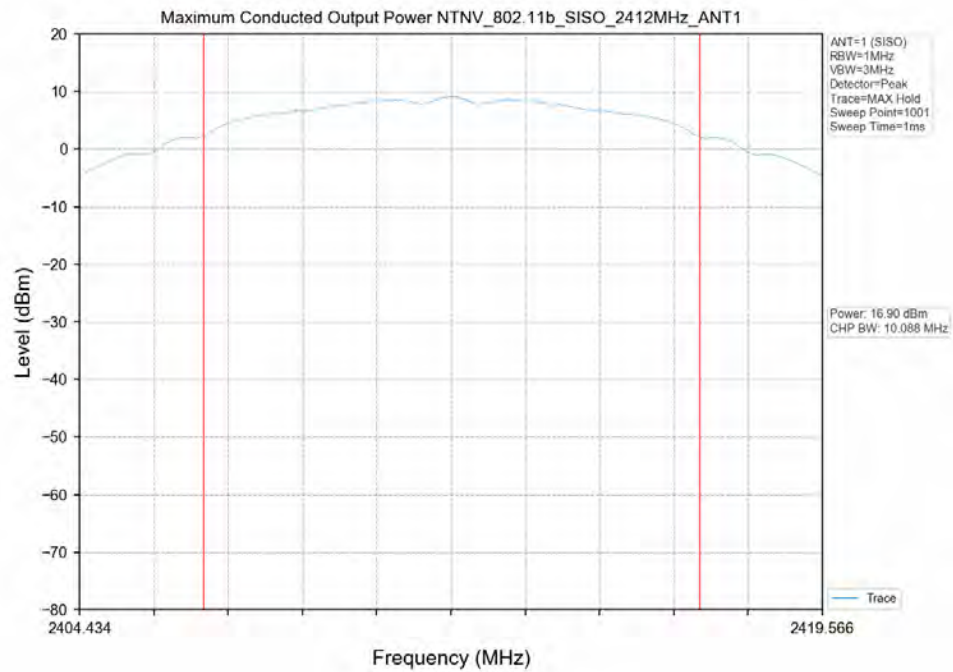


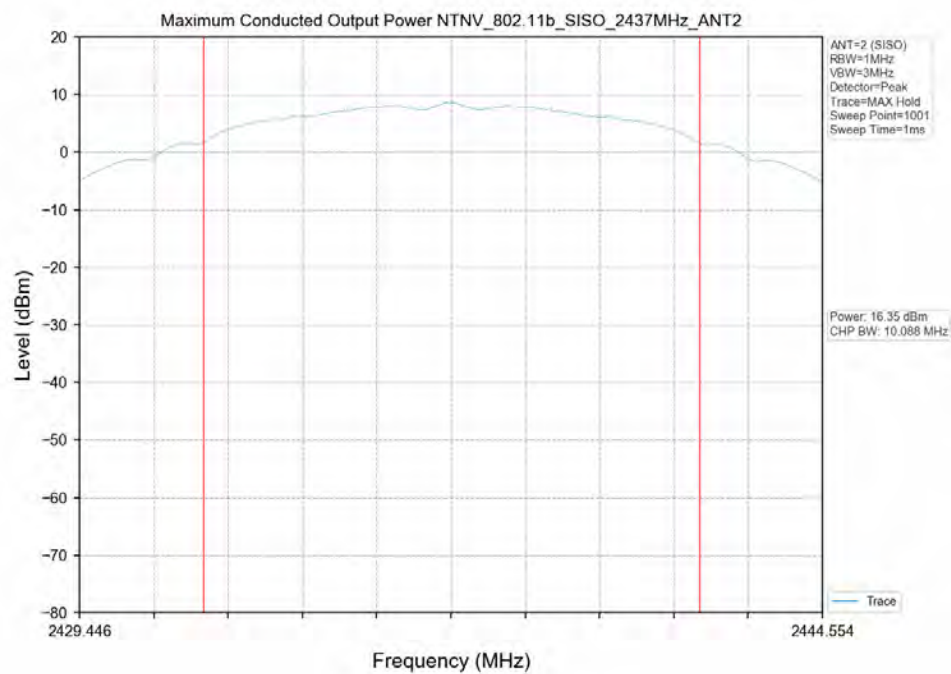
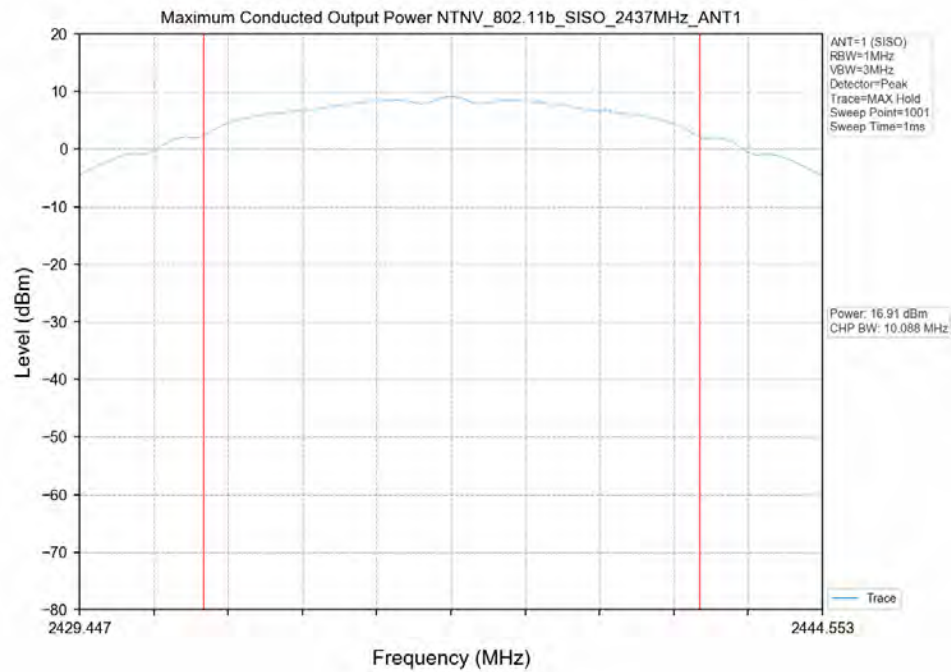
3. Maximum Conducted Output Power

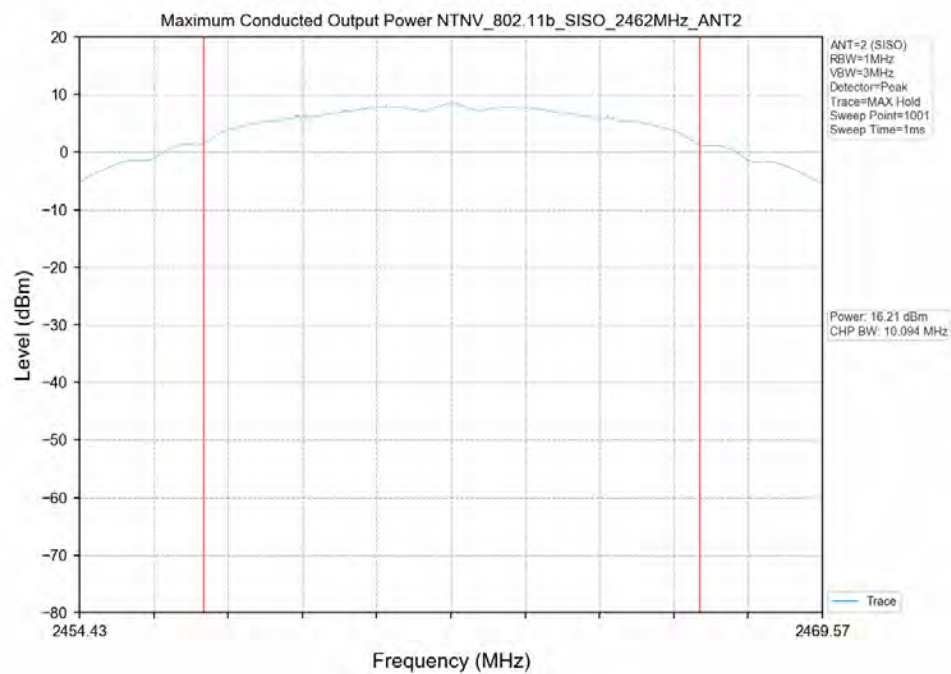
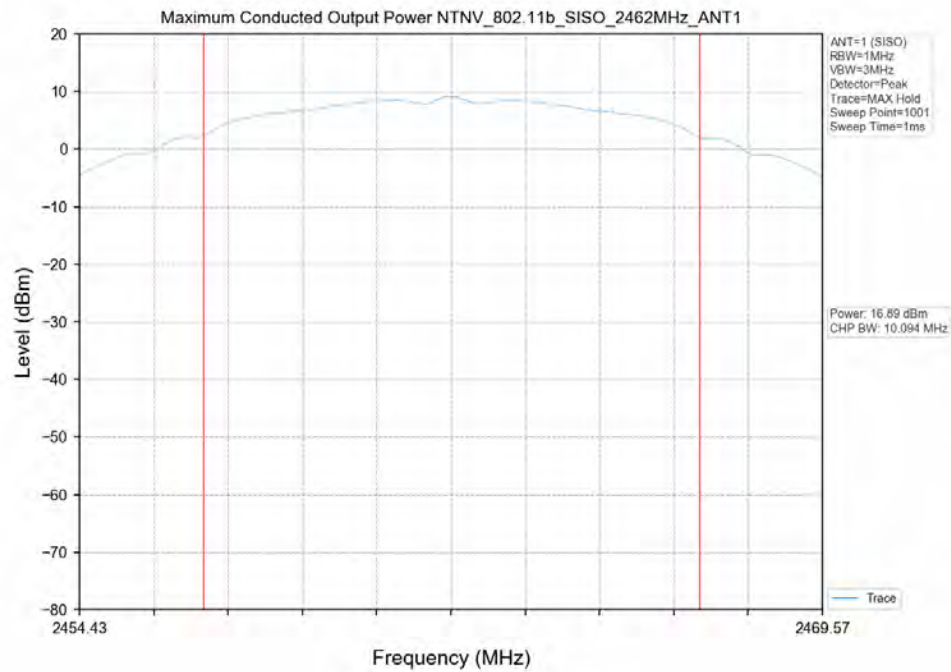
3.1 Test Result

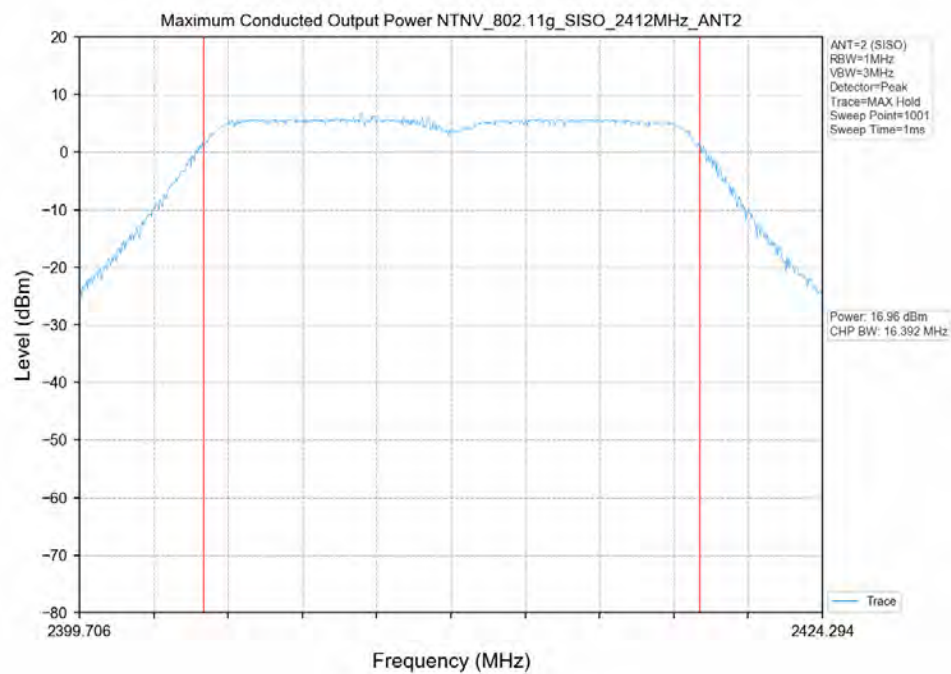
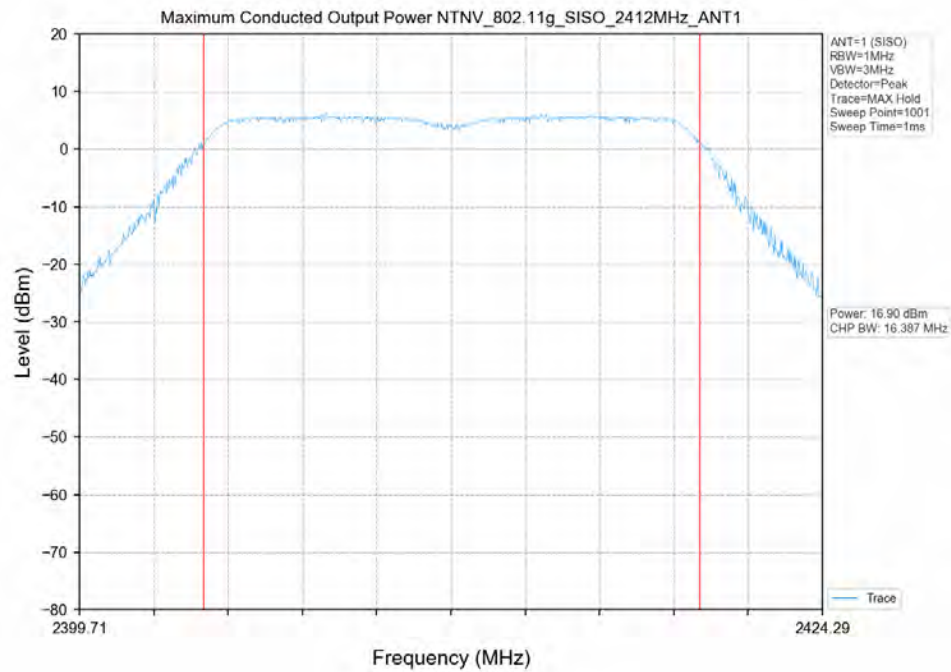
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)			Limits (dBm)	Verdict
			Ant 1	Ant 2	Total		
802.11b	2412	SISO	16.90	16.65	/	30	PASS
	2437	SISO	16.91	16.35	/	30	PASS
	2462	SISO	16.89	16.21	/	30	PASS
802.11g	2412	SISO	16.90	16.96	/	30	PASS
	2437	SISO	16.91	16.65	/	30	PASS
	2462	SISO	16.94	16.60	/	30	PASS
802.11n(HT20)	2412	MIMO	16.92	16.96	19.95	30	PASS
	2437	MIMO	17.04	16.72	19.89	30	PASS
	2462	MIMO	16.93	16.62	19.79	30	PASS
802.11n(HT40)	2422	MIMO	17.11	16.85	19.99	30	PASS
	2437	MIMO	17.14	16.69	19.93	30	PASS
	2452	MIMO	17.06	16.63	19.86	30	PASS

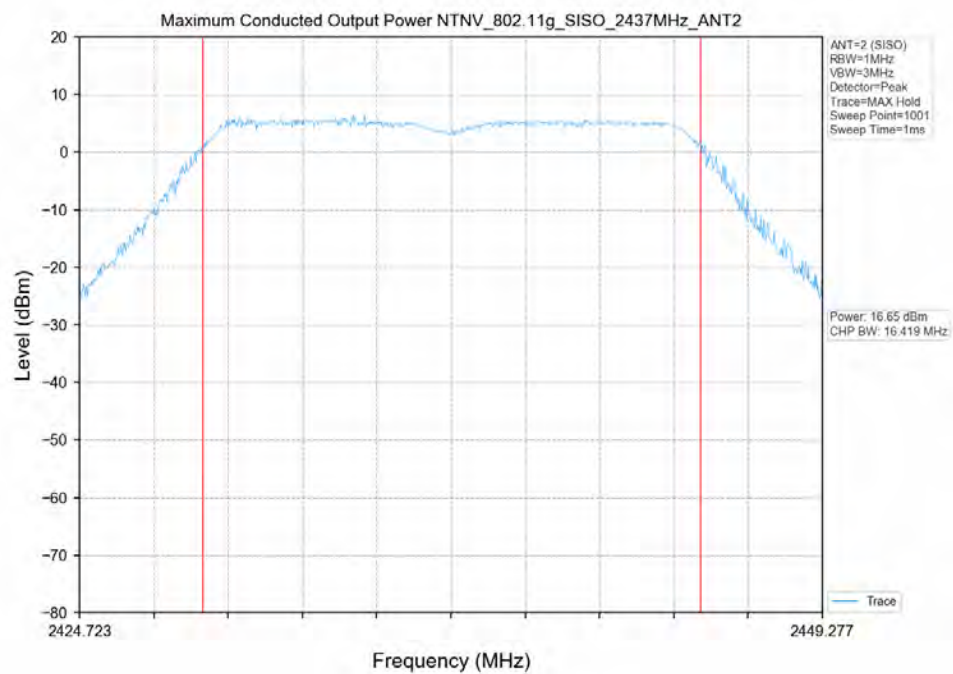
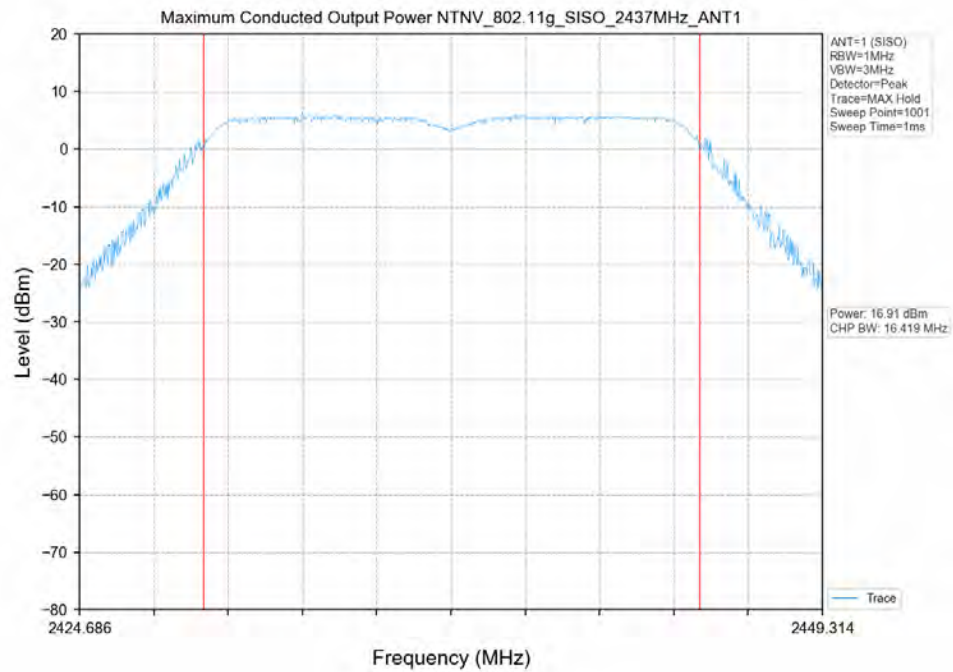
3.2 Test Graph

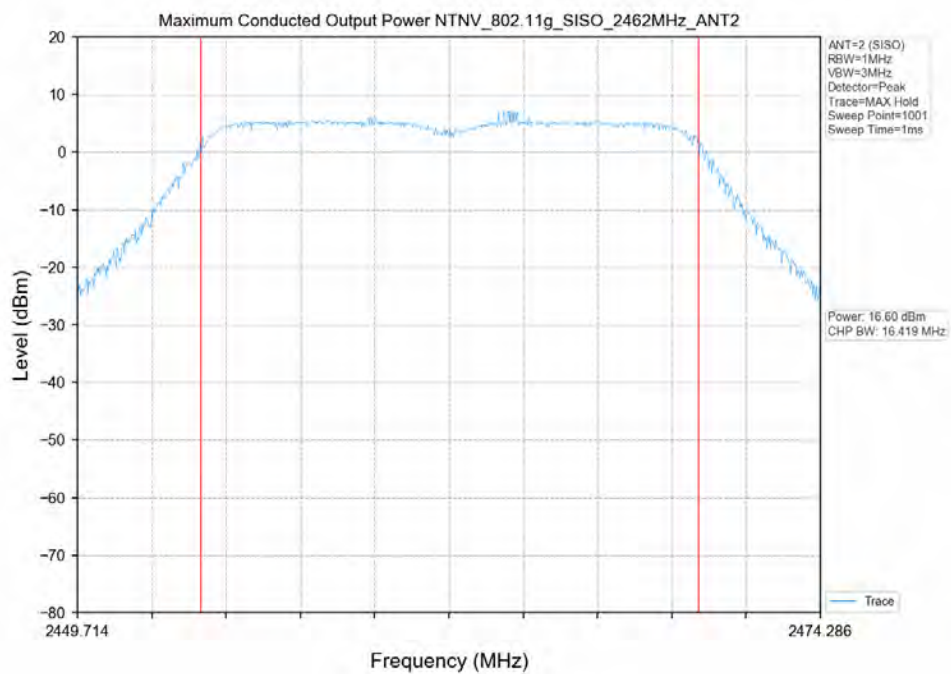
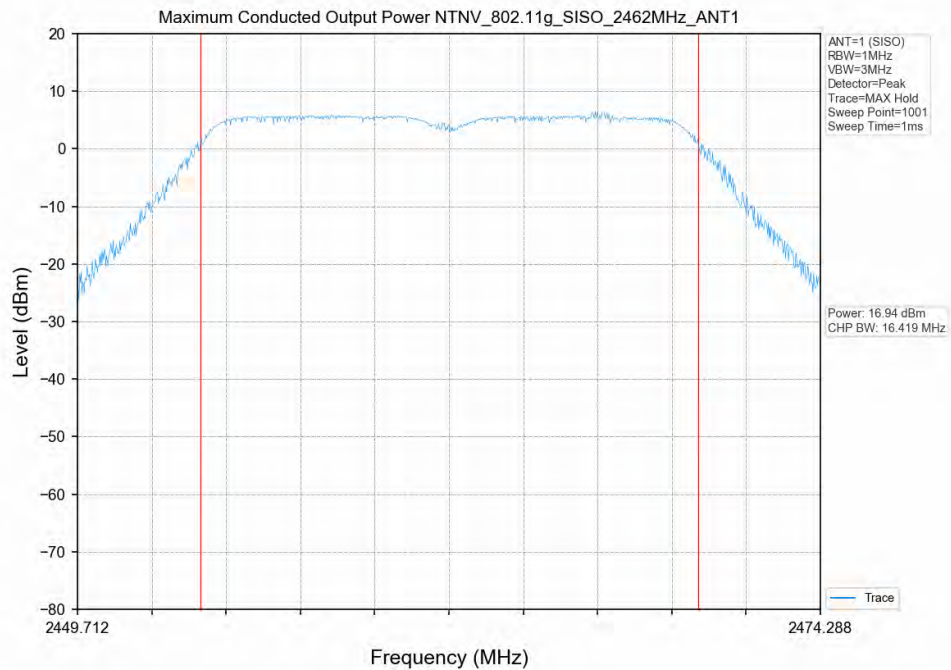


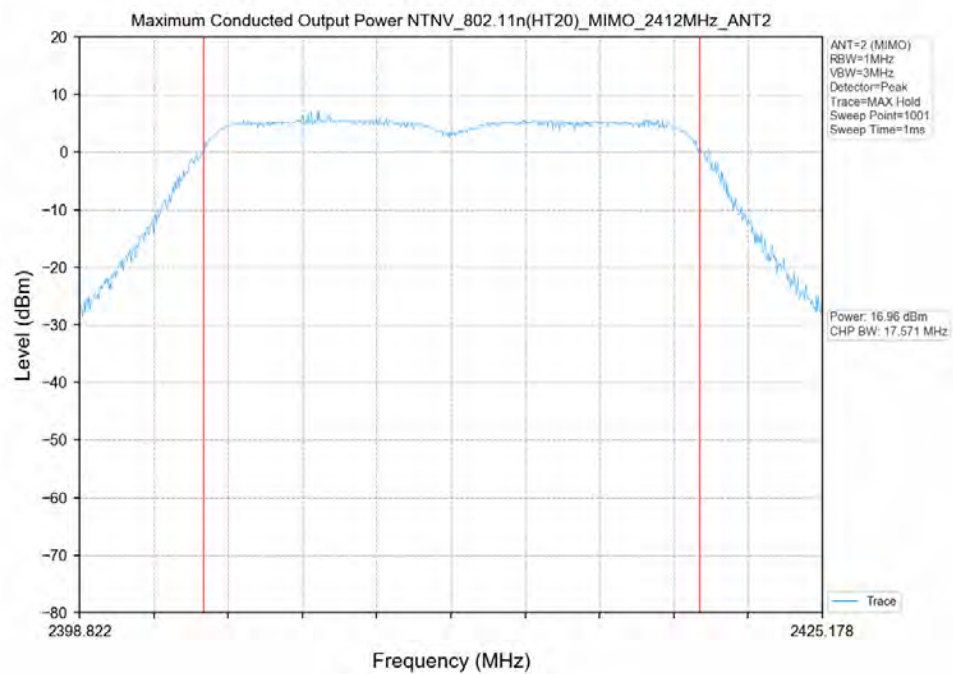
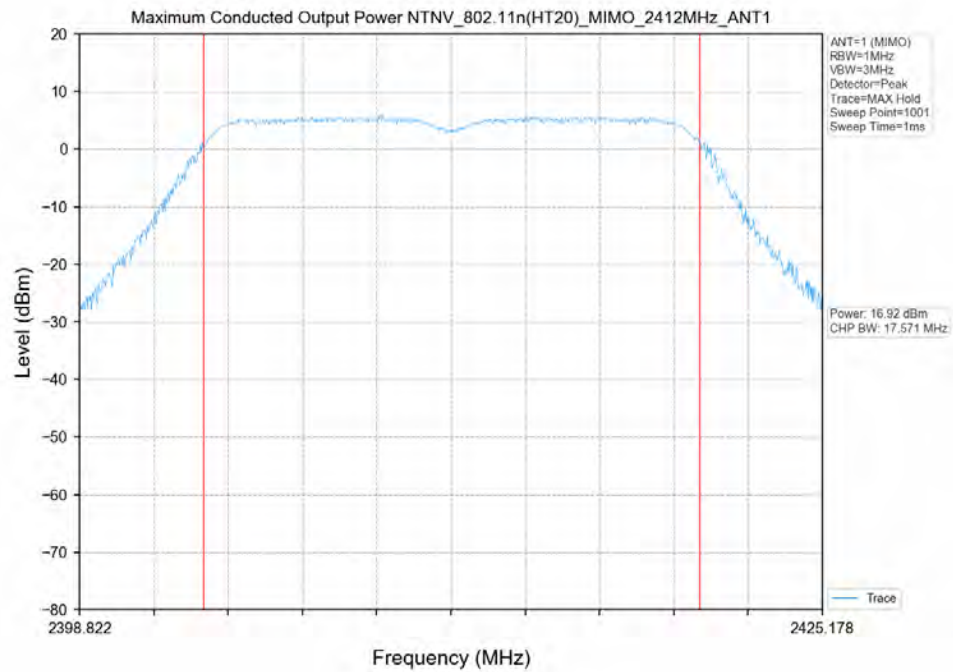


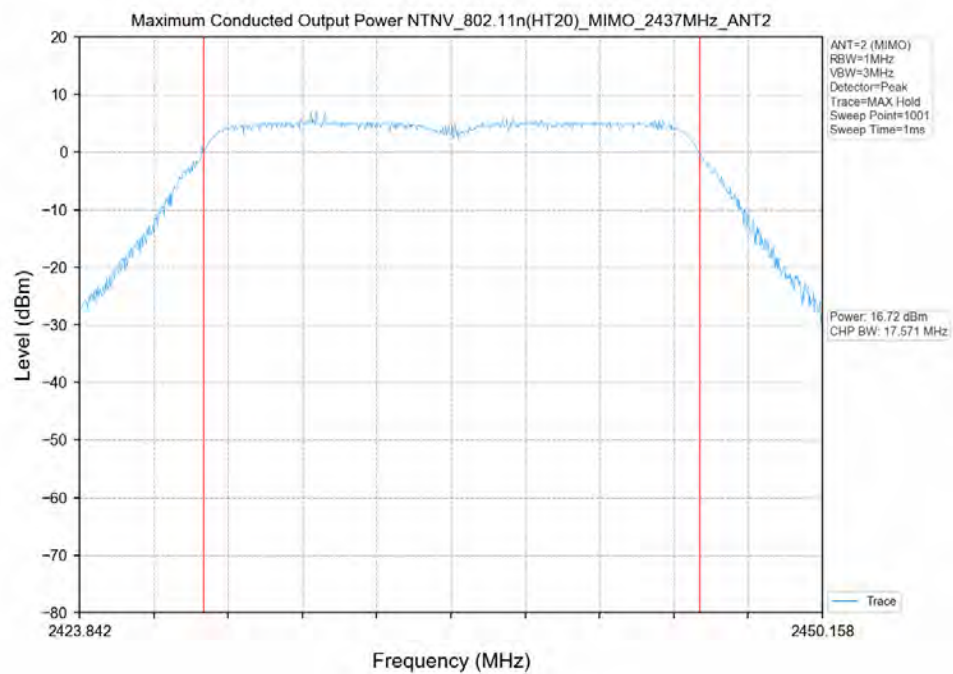
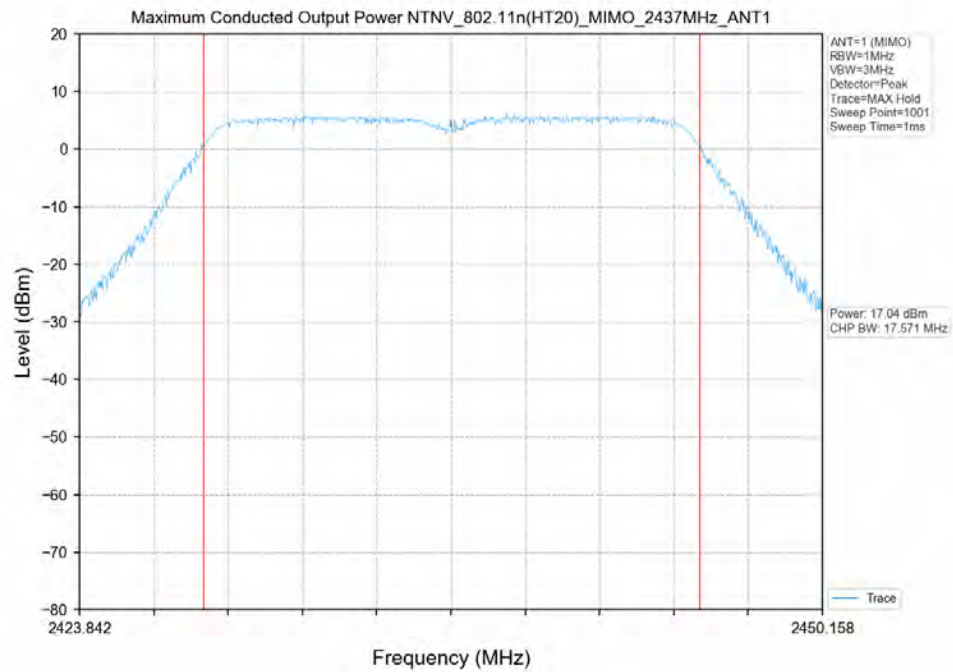


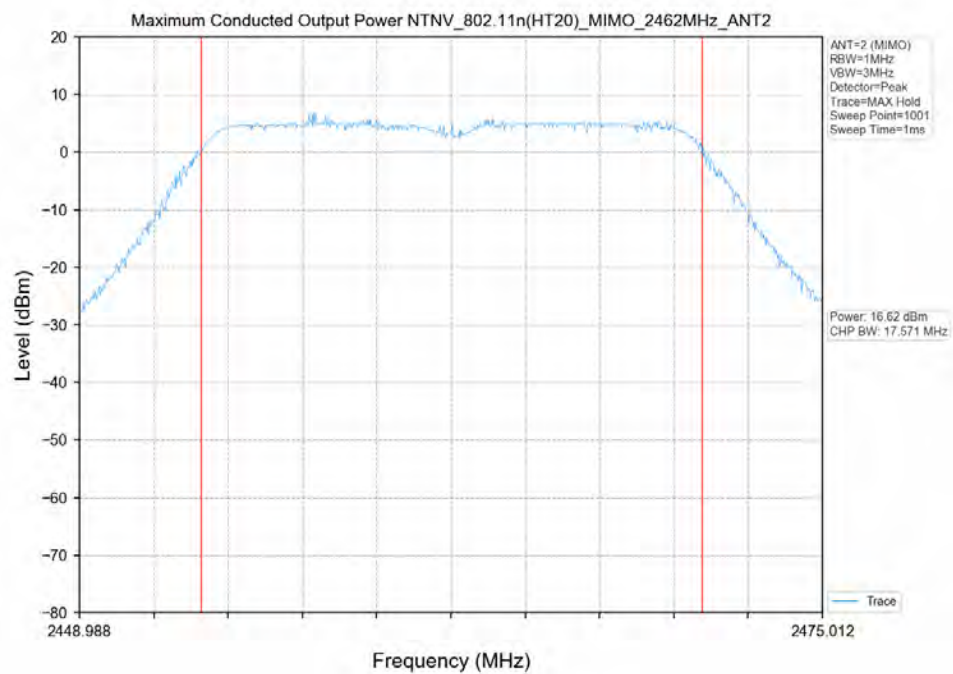


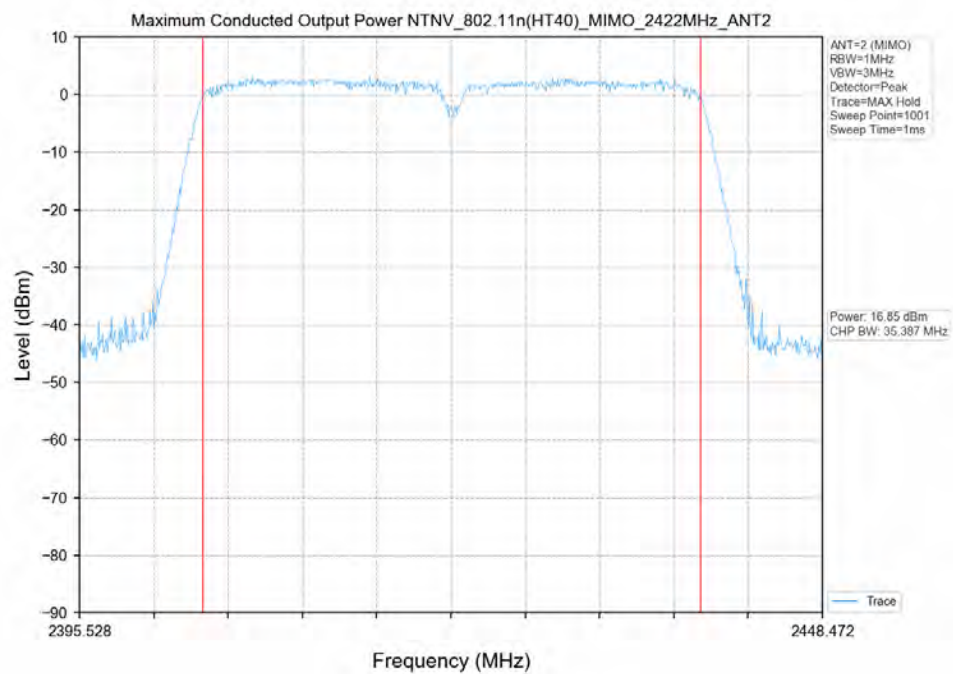
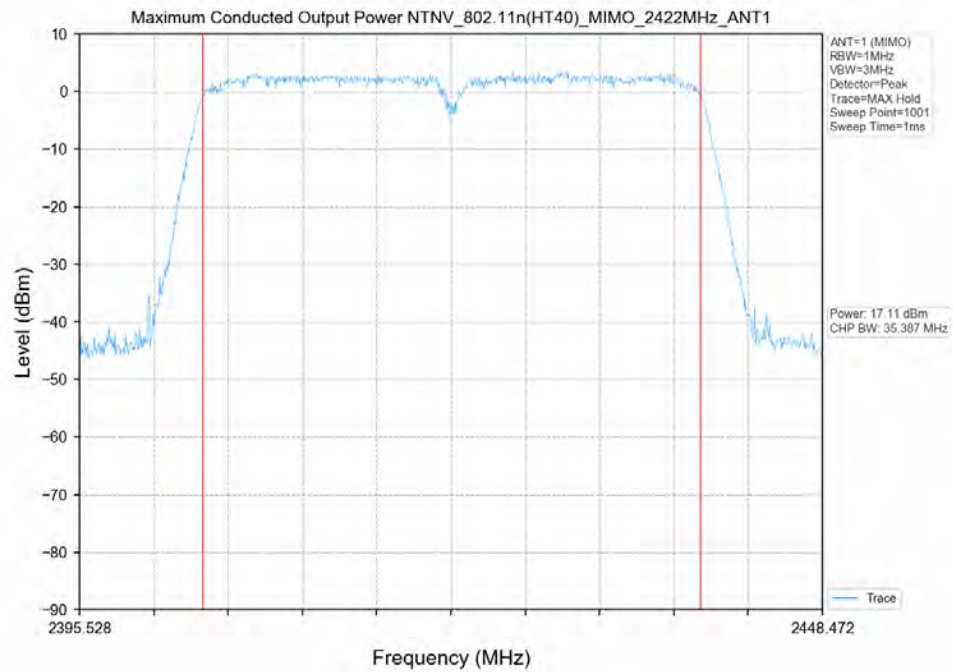


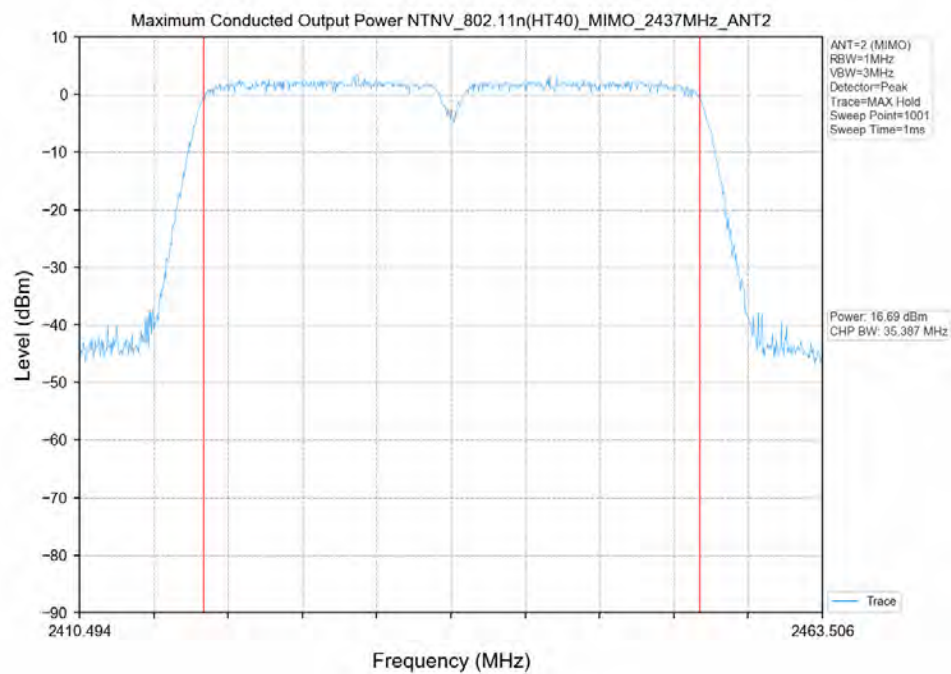
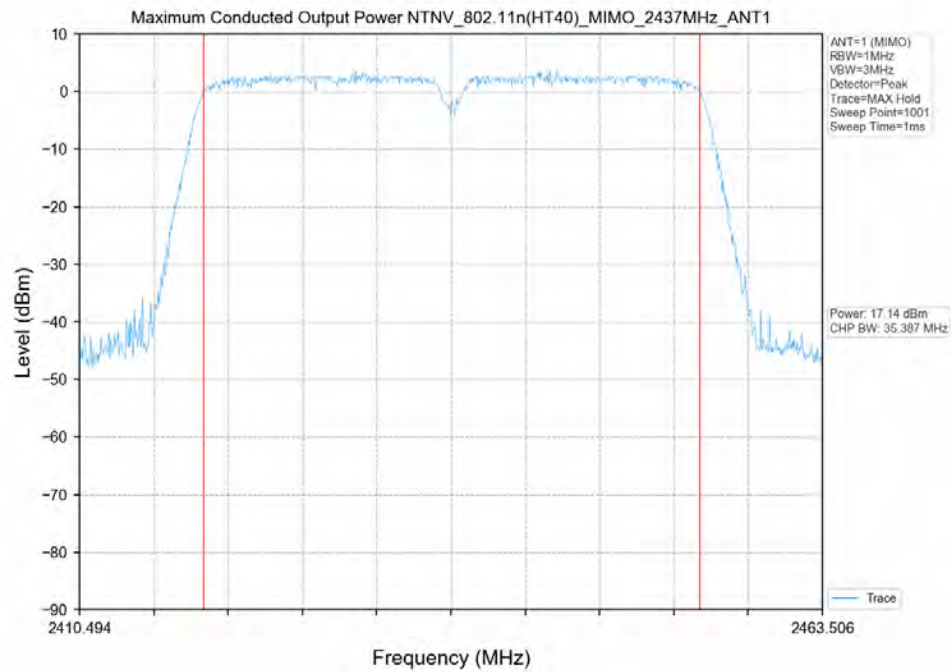


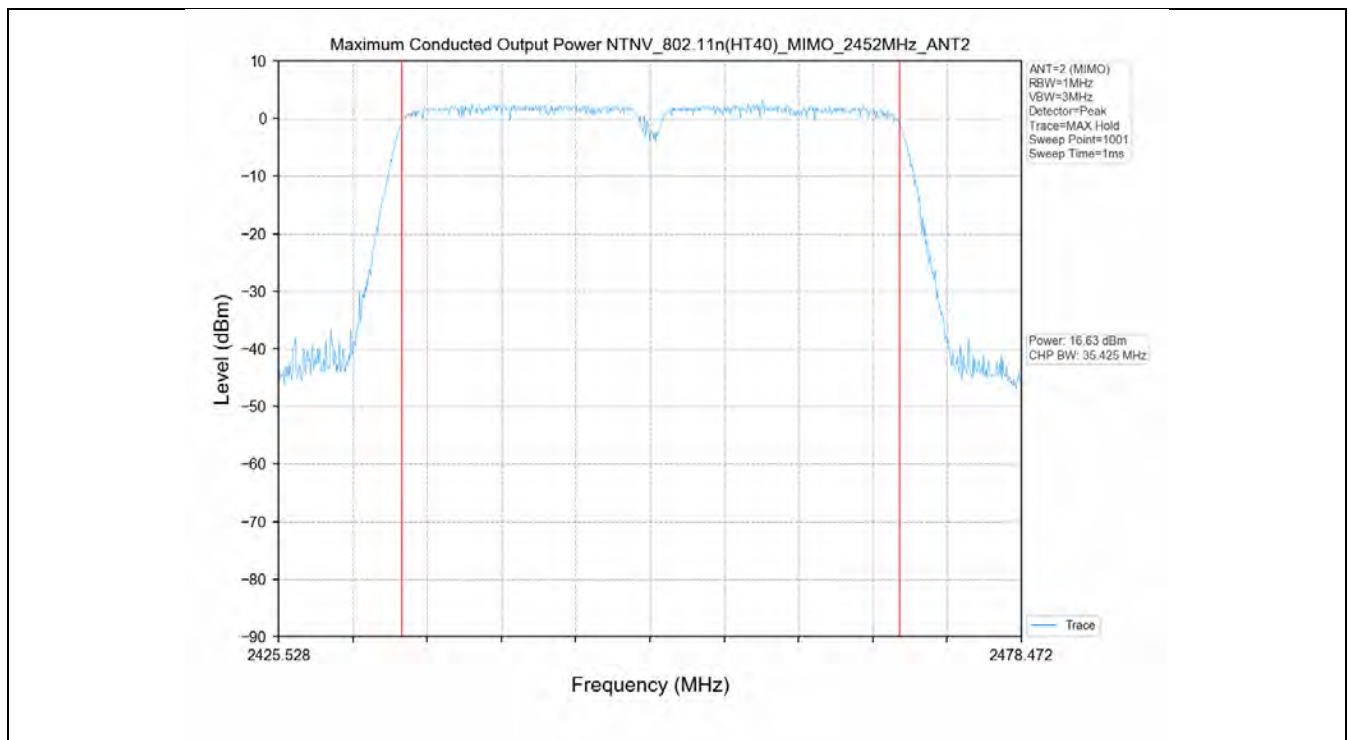
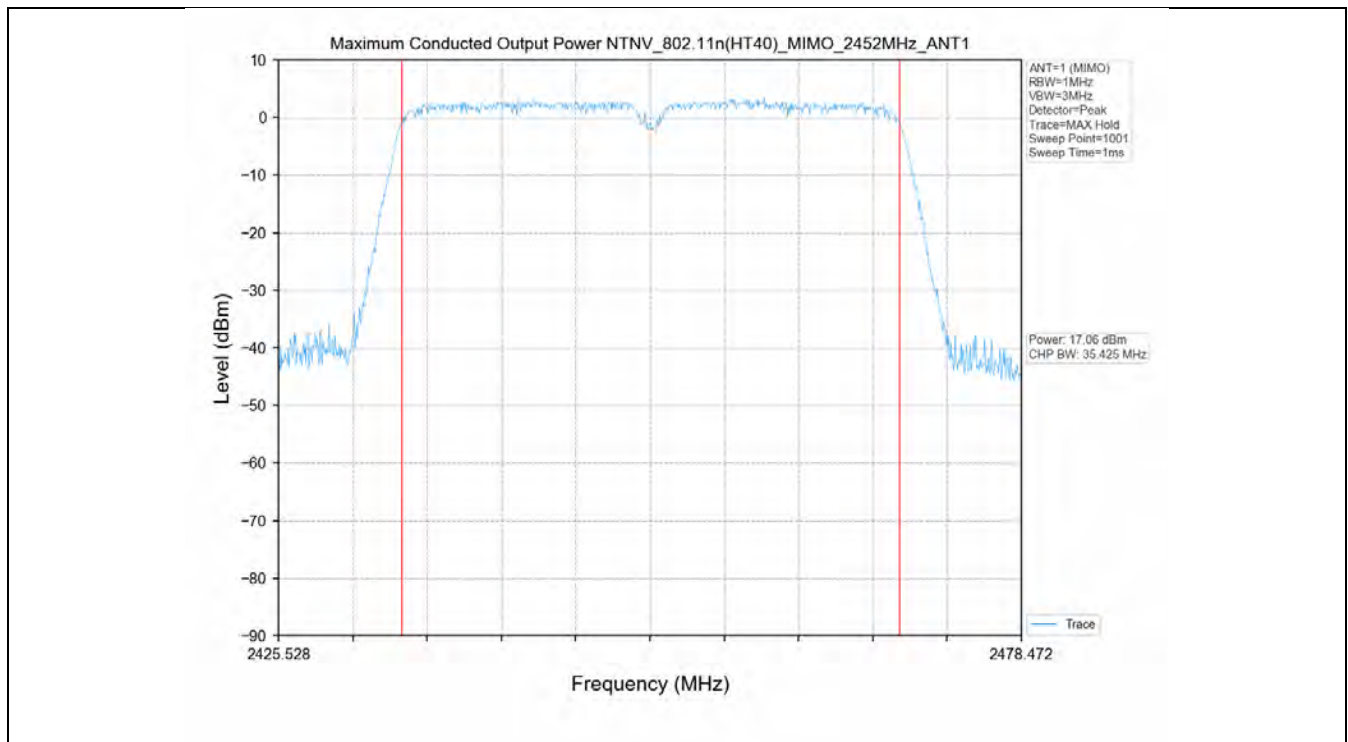










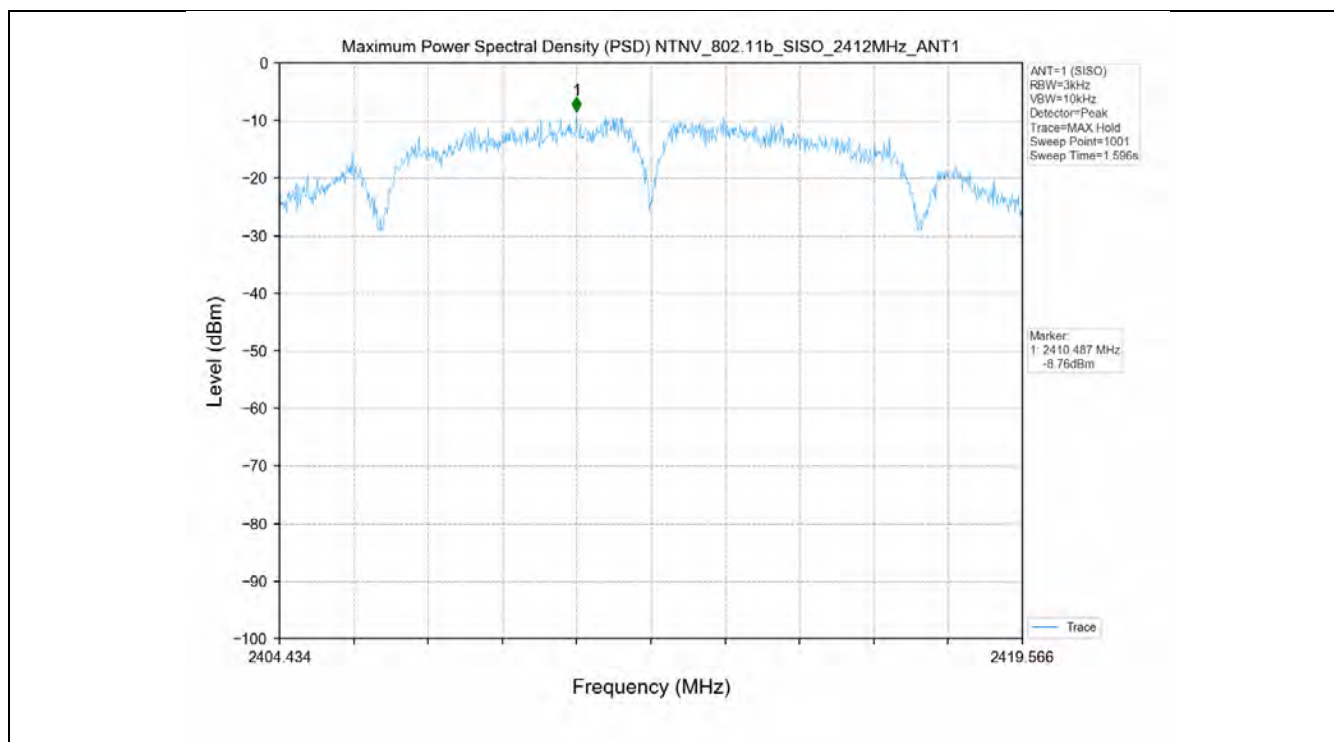


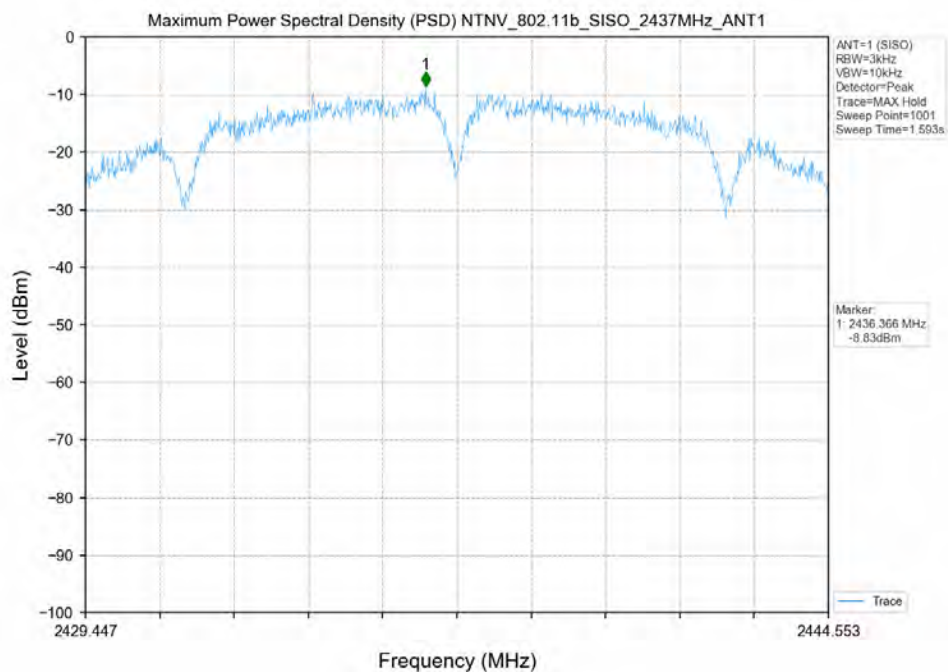
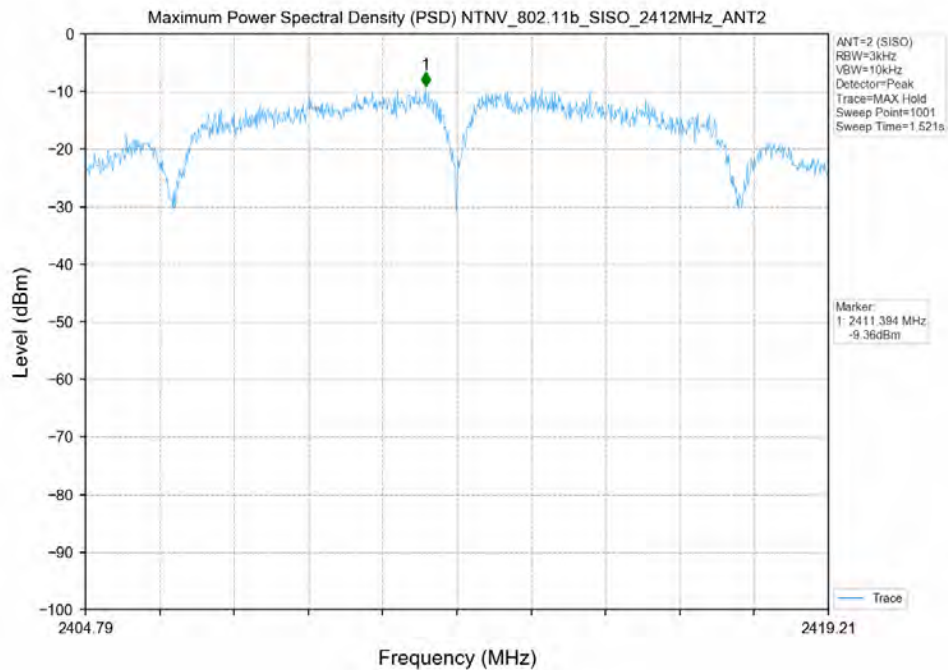
4. Maximum Power Spectral Density (PSD)

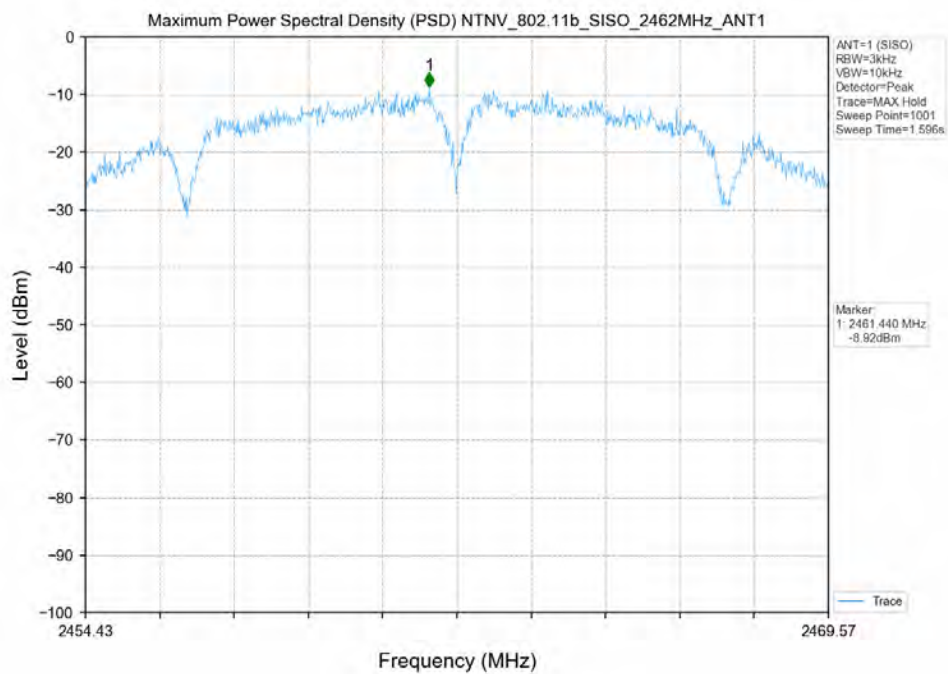
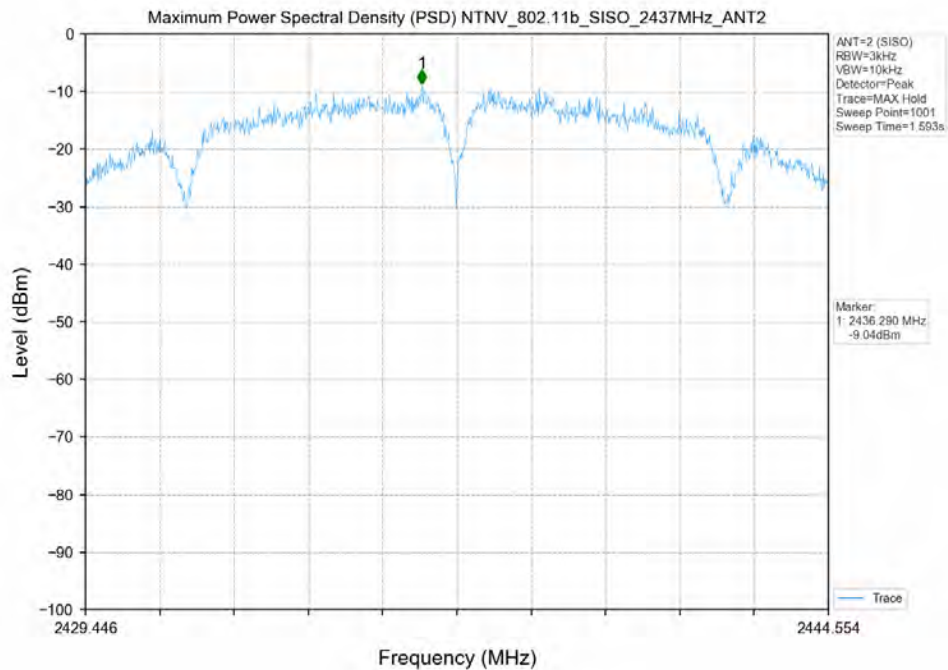
4.1 Test Result

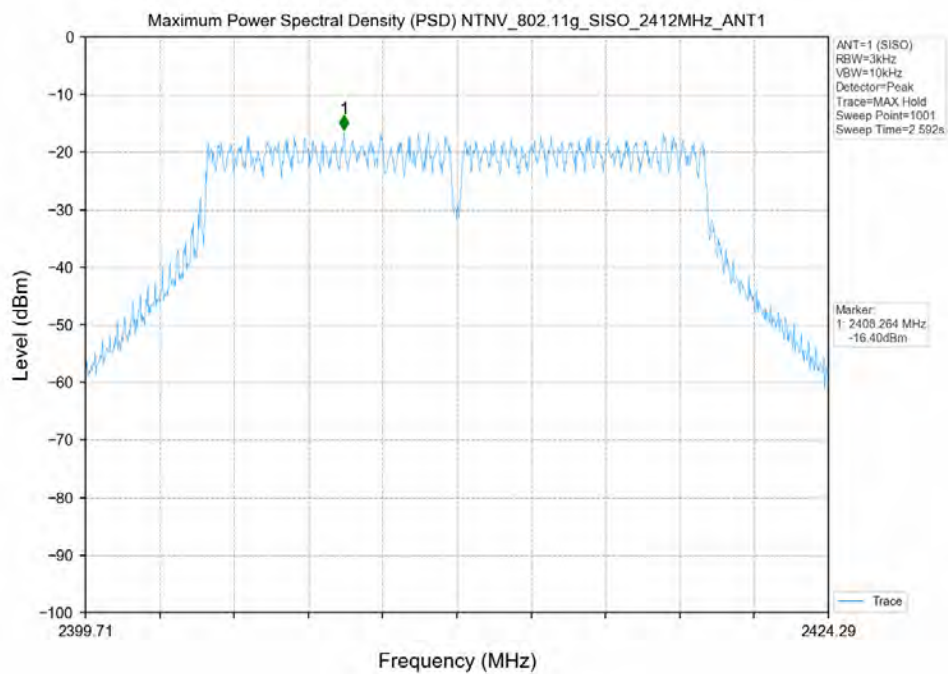
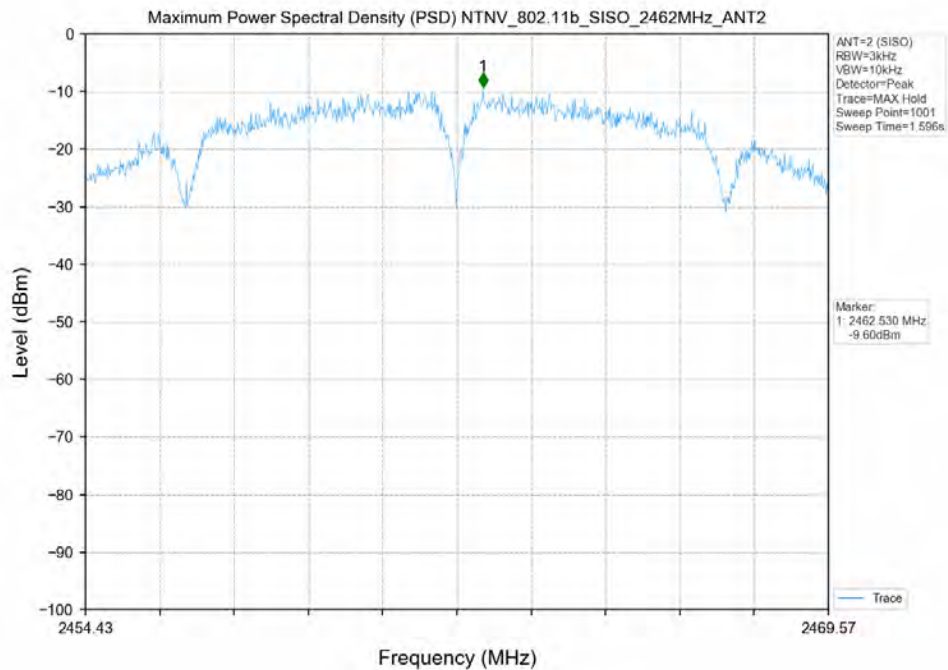
Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)			Limits (dBm/3kHz)	Verdict
			Ant 1	Ant 2	Total		
802.11b	2412	SISO	-8.76	-9.36	/	≤8	PASS
	2437	SISO	-8.83	-9.04	/	≤8	PASS
	2462	SISO	-8.92	-9.60	/	≤8	PASS
802.11g	2412	SISO	-16.40	-16.21	/	≤8	PASS
	2437	SISO	-15.55	-15.95	/	≤8	PASS
	2462	SISO	-16.26	-16.73	/	≤8	PASS
802.11n(HT20)	2412	MIMO	-15.59	-15.86	-12.71	≤8	PASS
	2437	MIMO	-15.48	-15.89	-12.67	≤8	PASS
	2462	MIMO	-16.11	-15.99	-13.51	≤8	PASS
802.11n(HT40)	2422	MIMO	-18.91	-18.42	-15.74	≤8	PASS
	2437	MIMO	-18.70	-19.01	-15.99	≤8	PASS
	2452	MIMO	-17.67	-19.72	-15.98	≤8	PASS

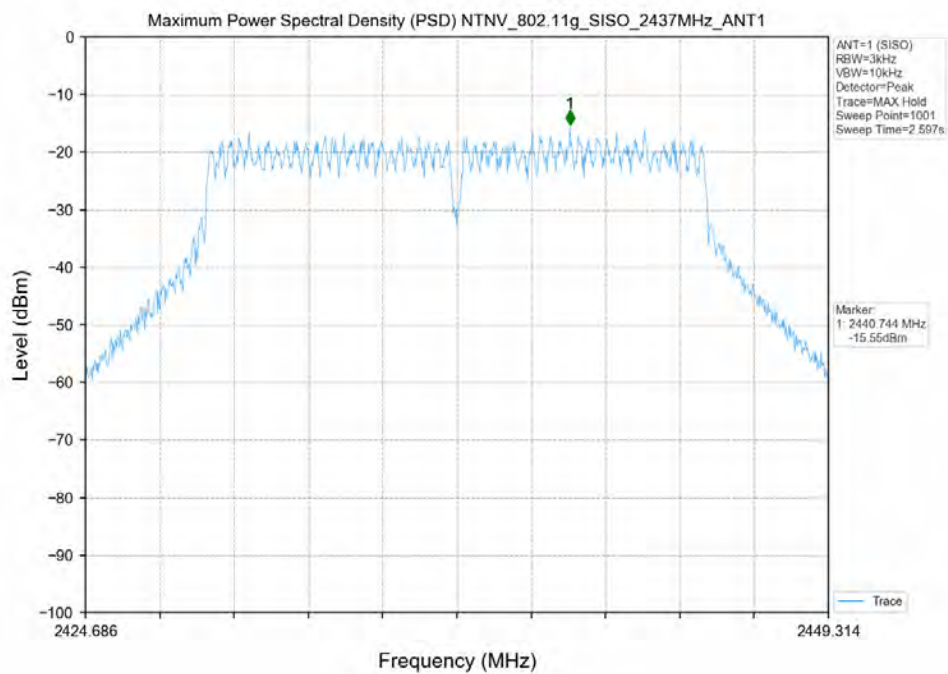
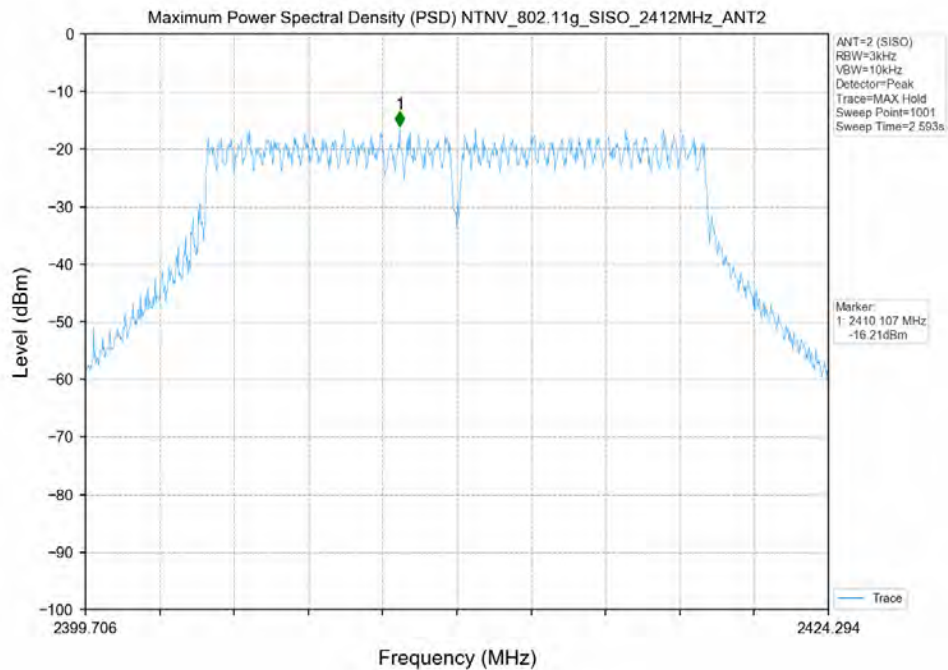
4.2 Test Graph

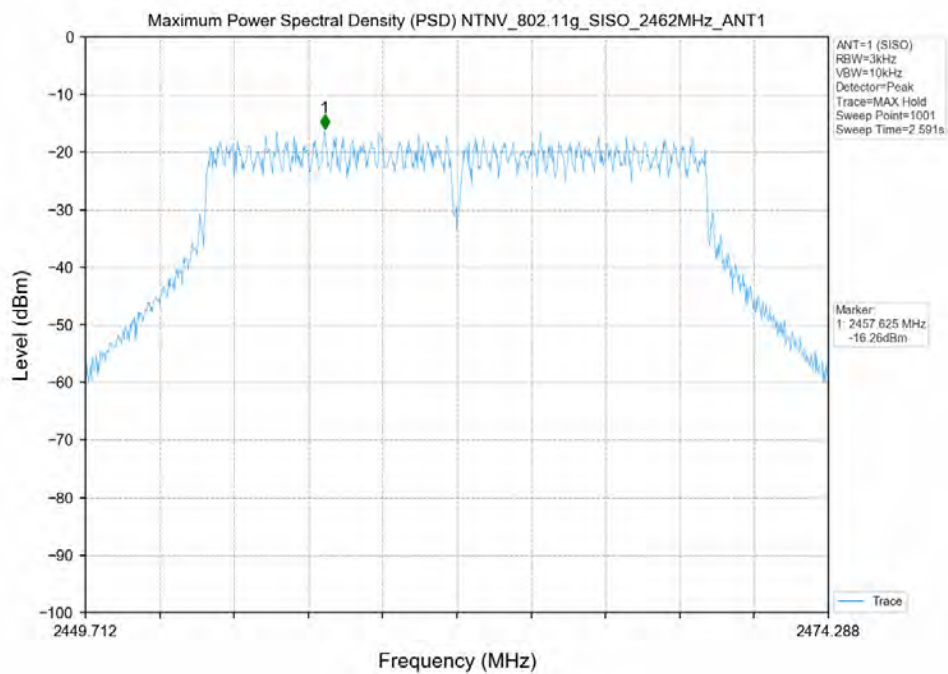
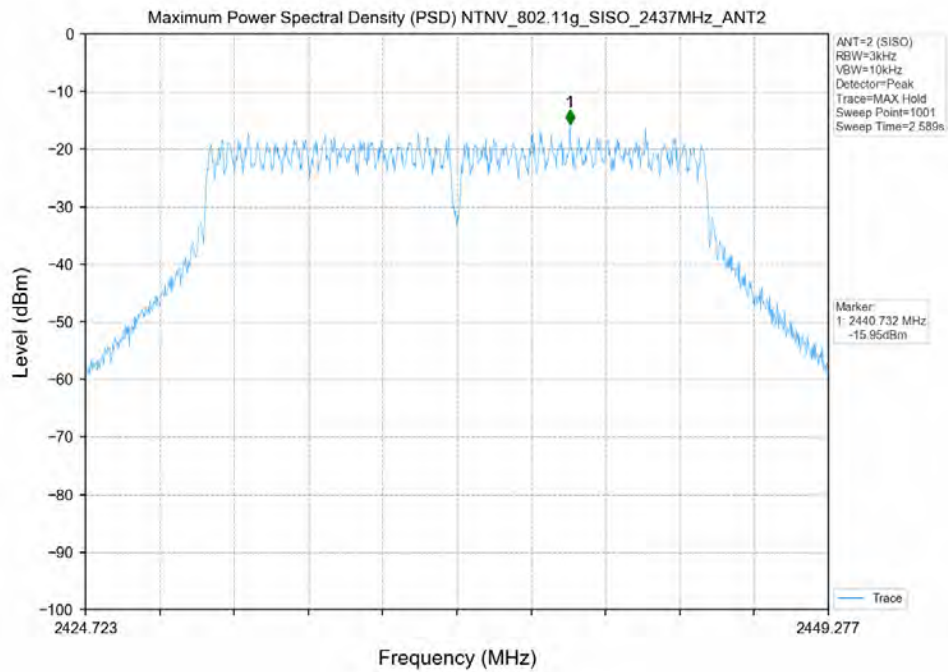


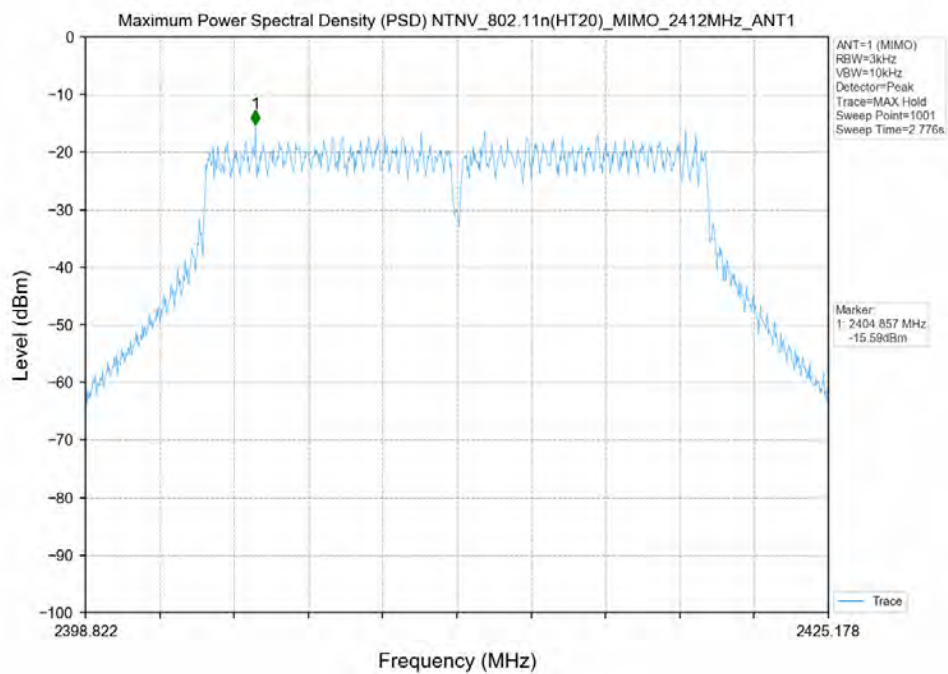
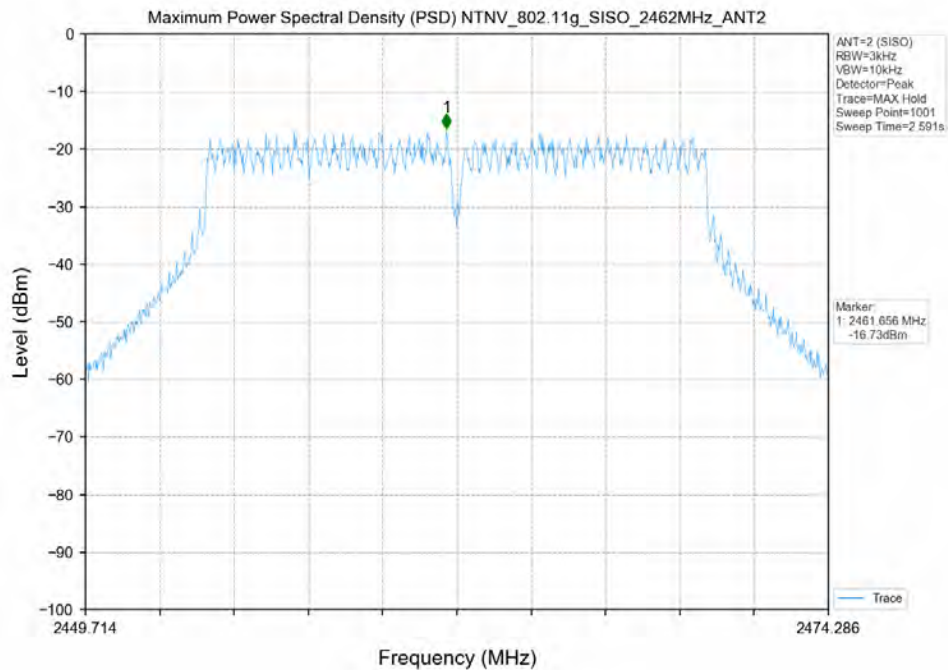


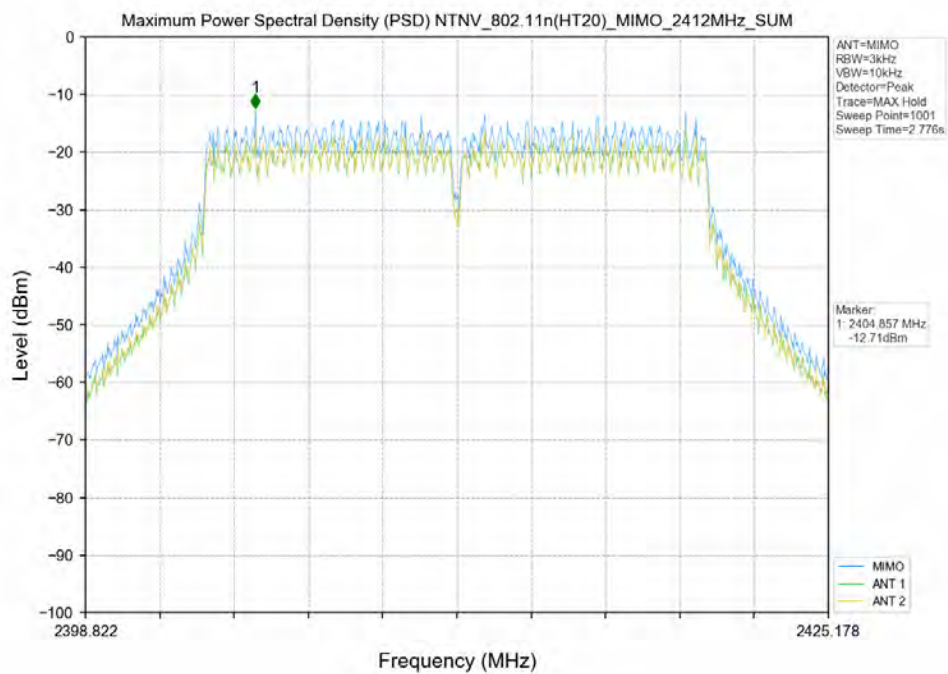
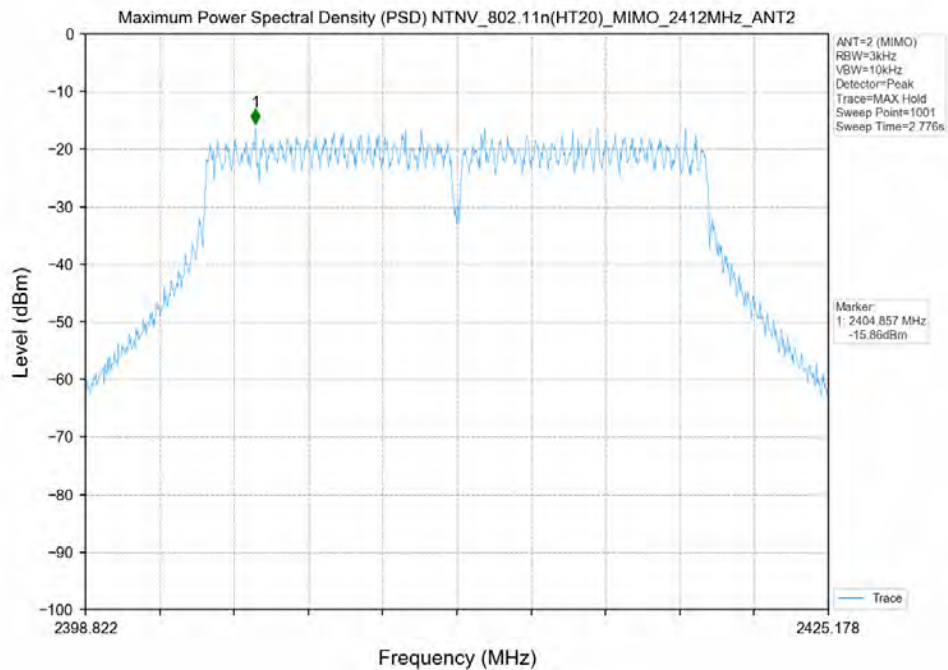


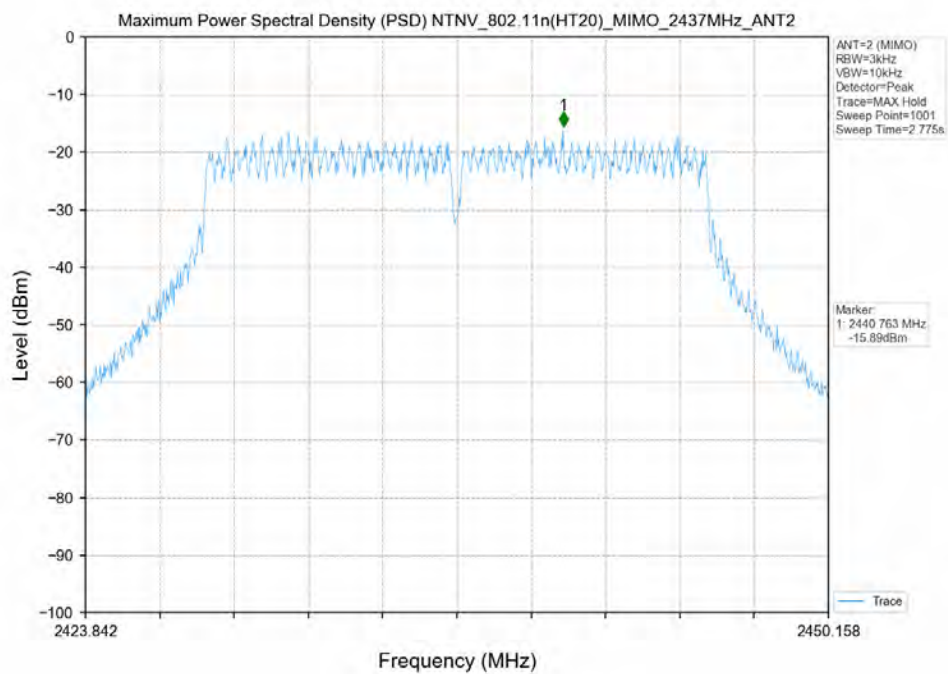
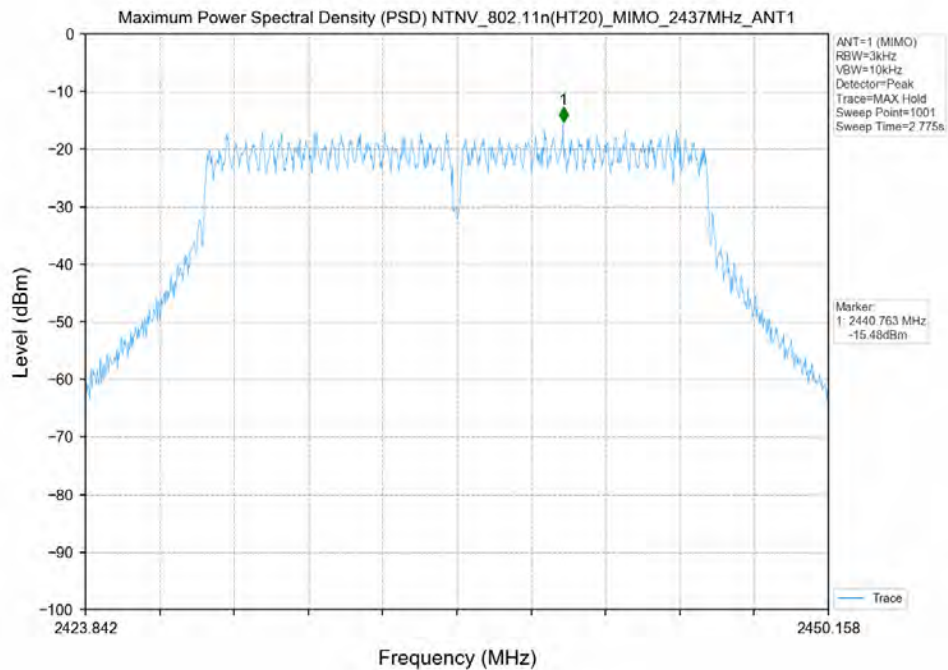


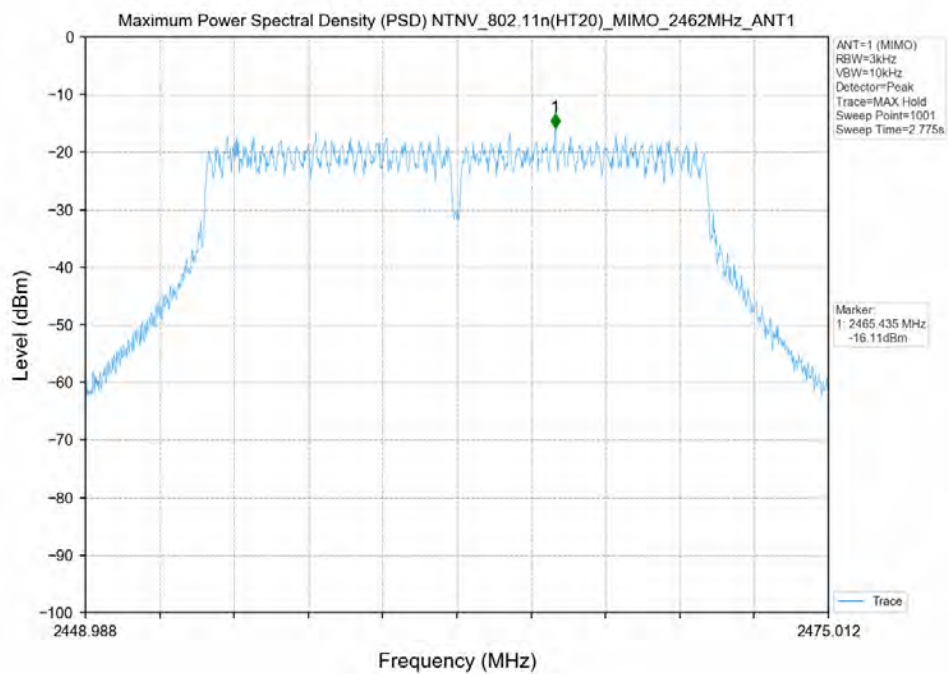
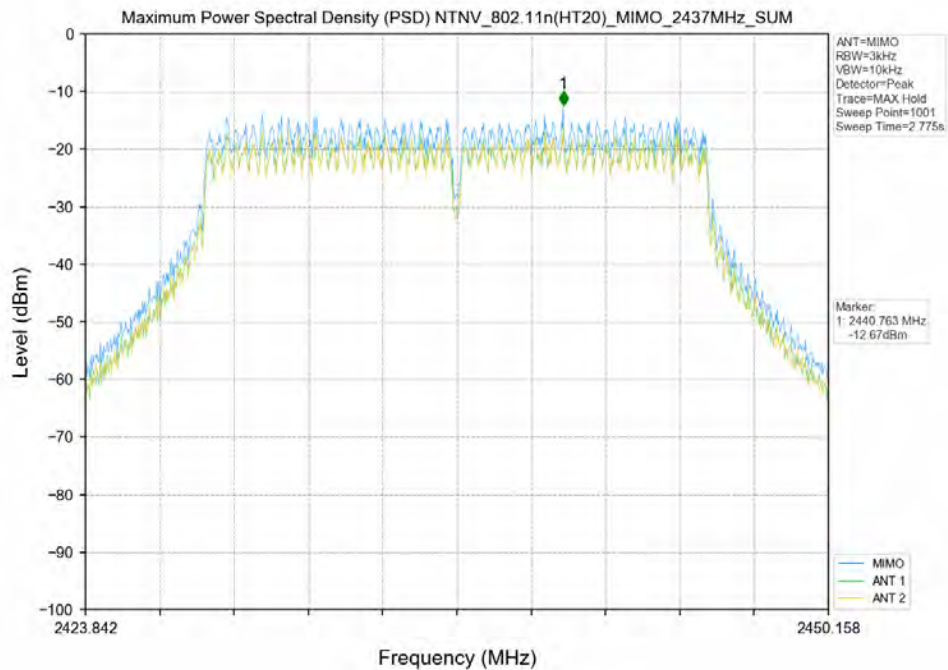


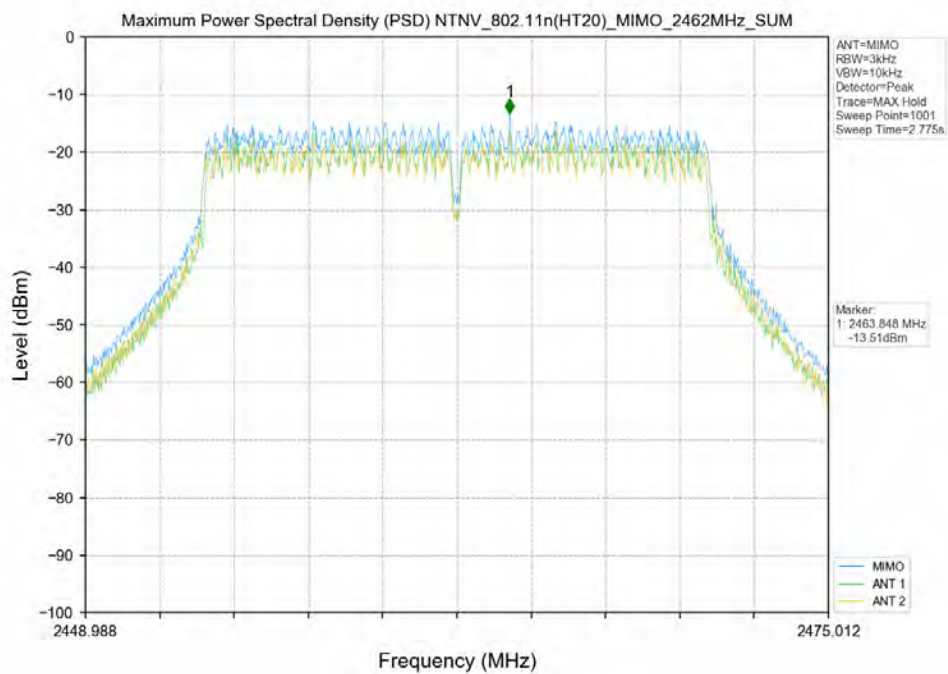
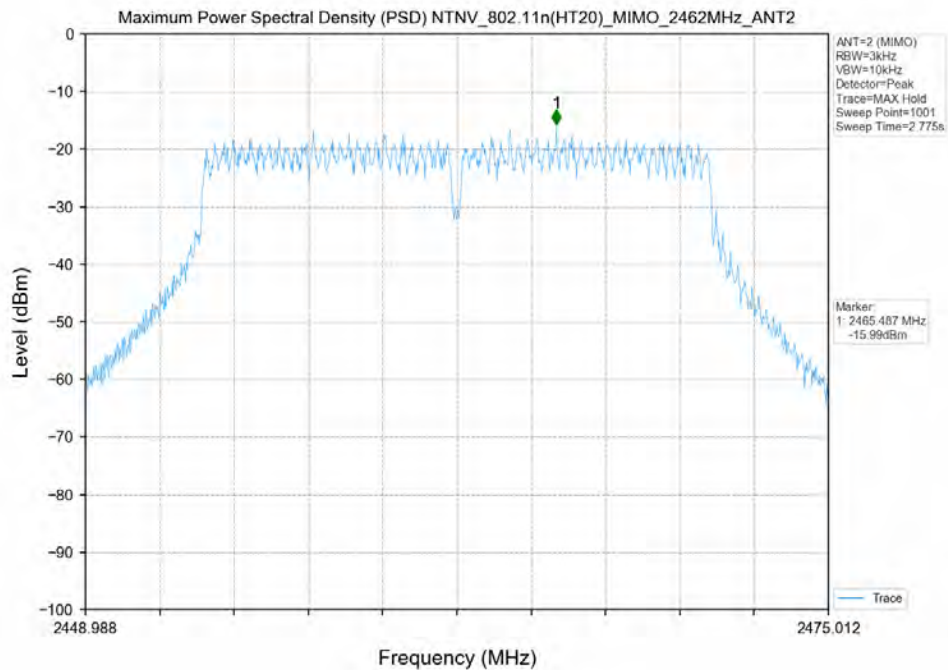


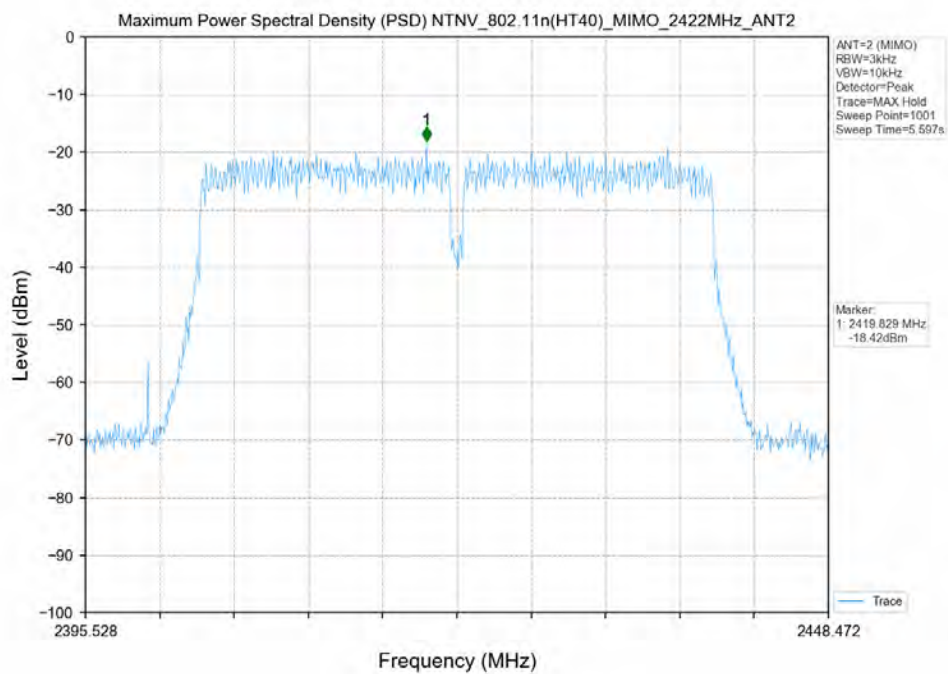
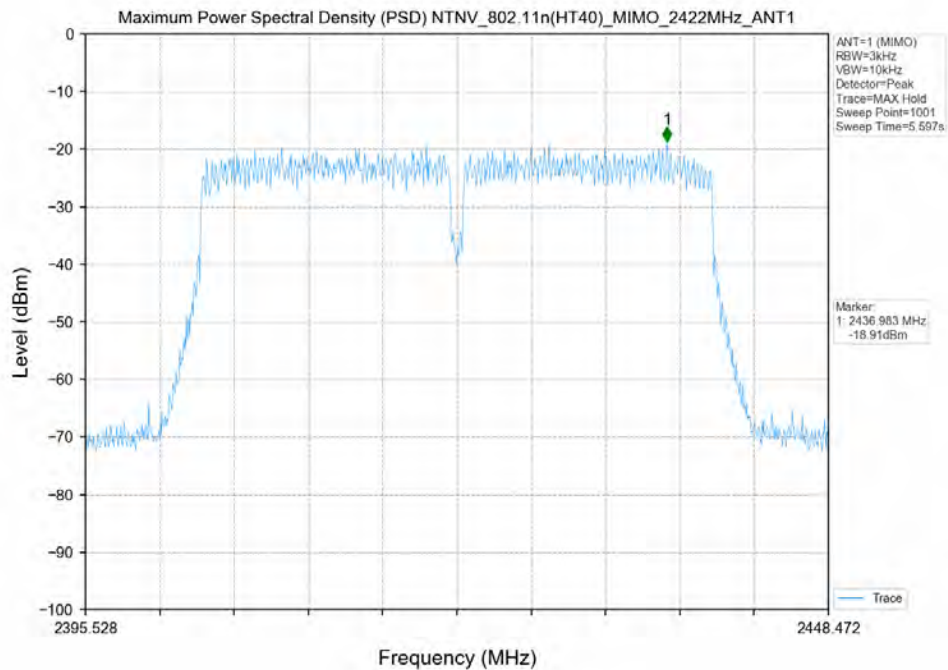


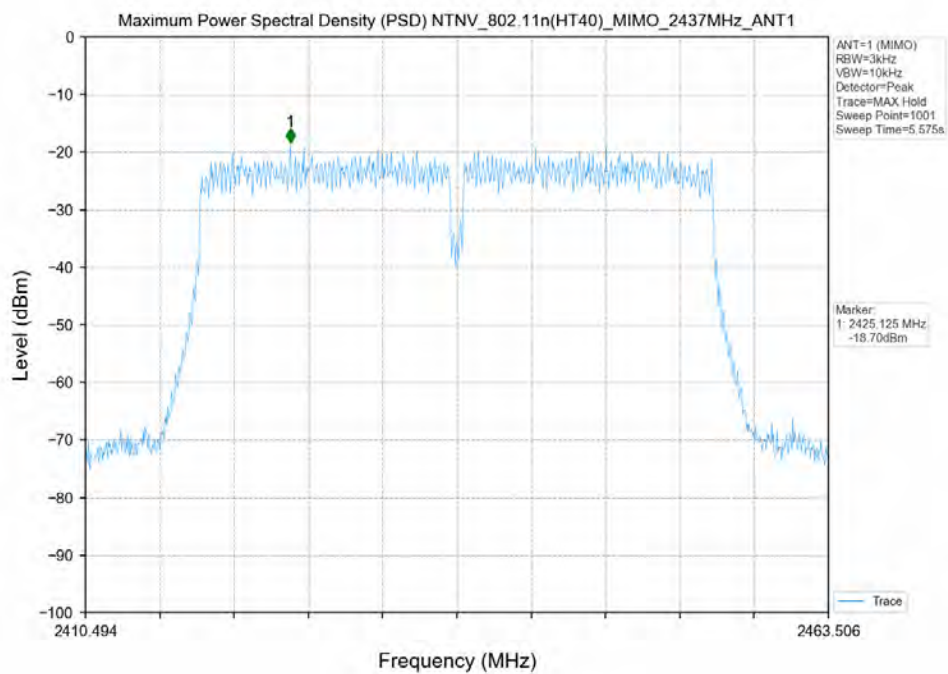
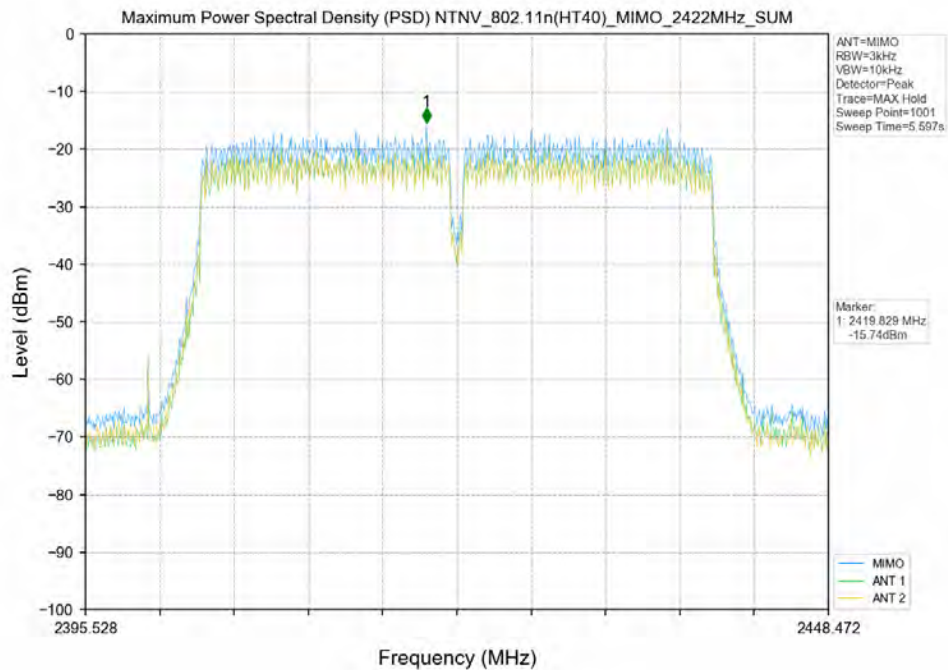


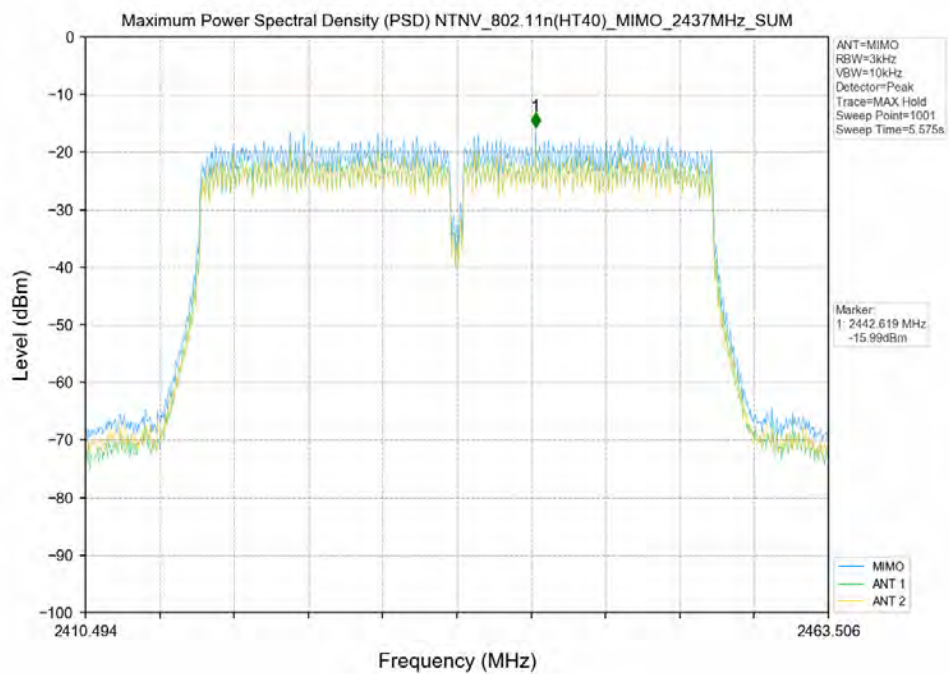
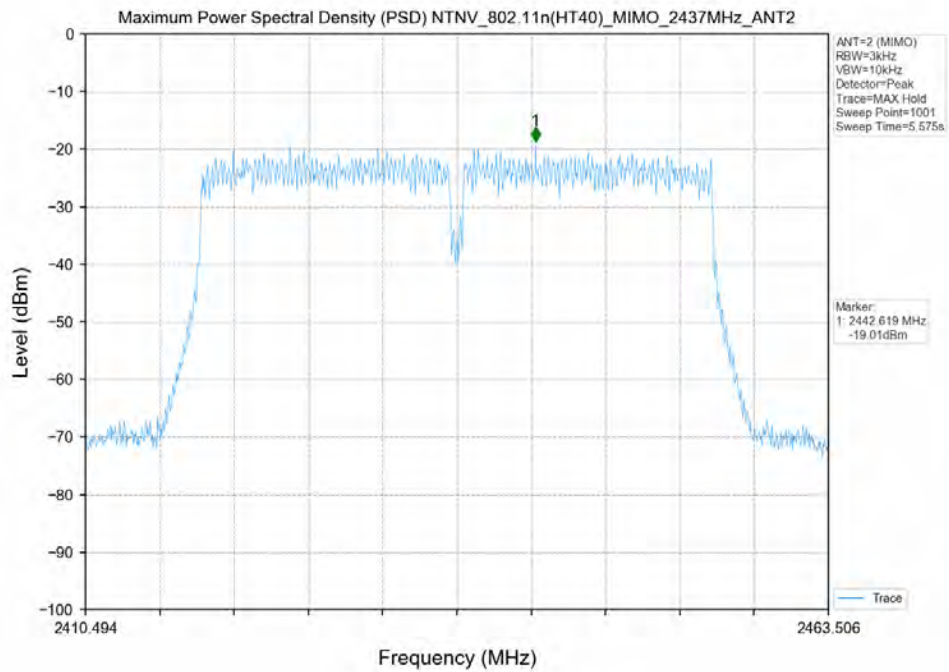


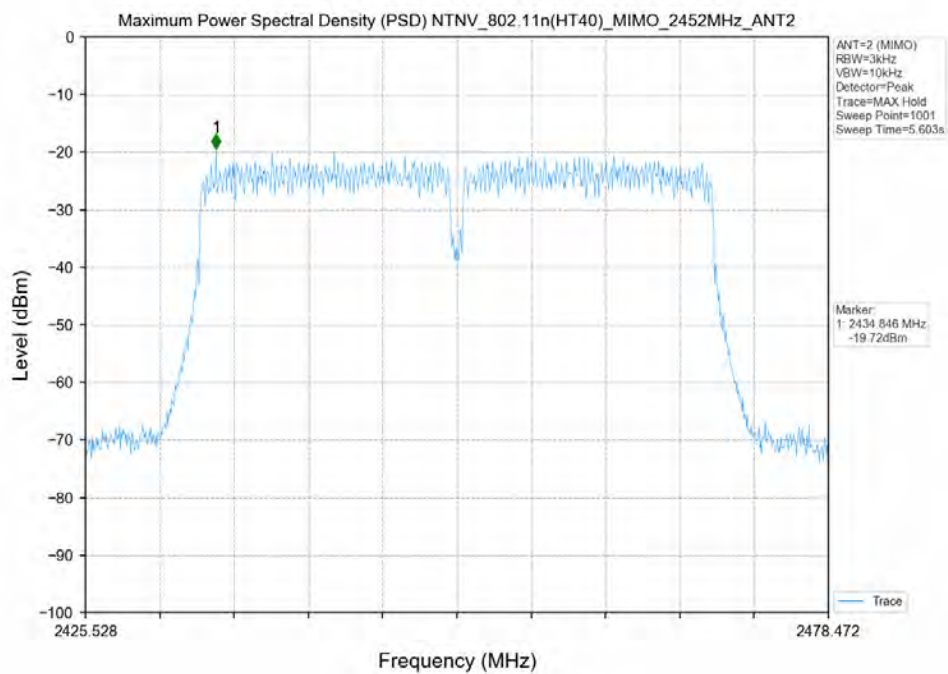
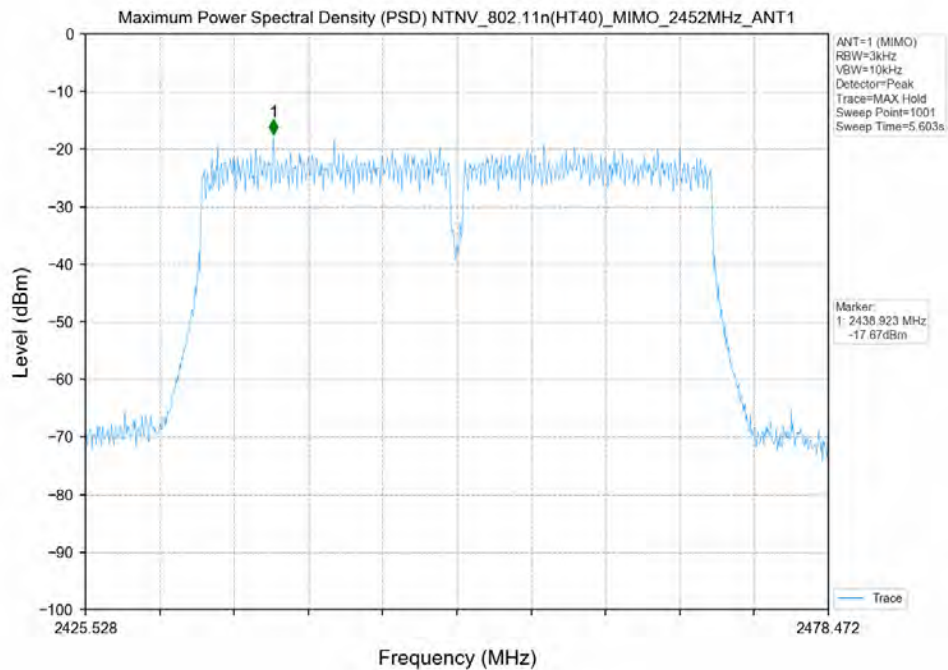


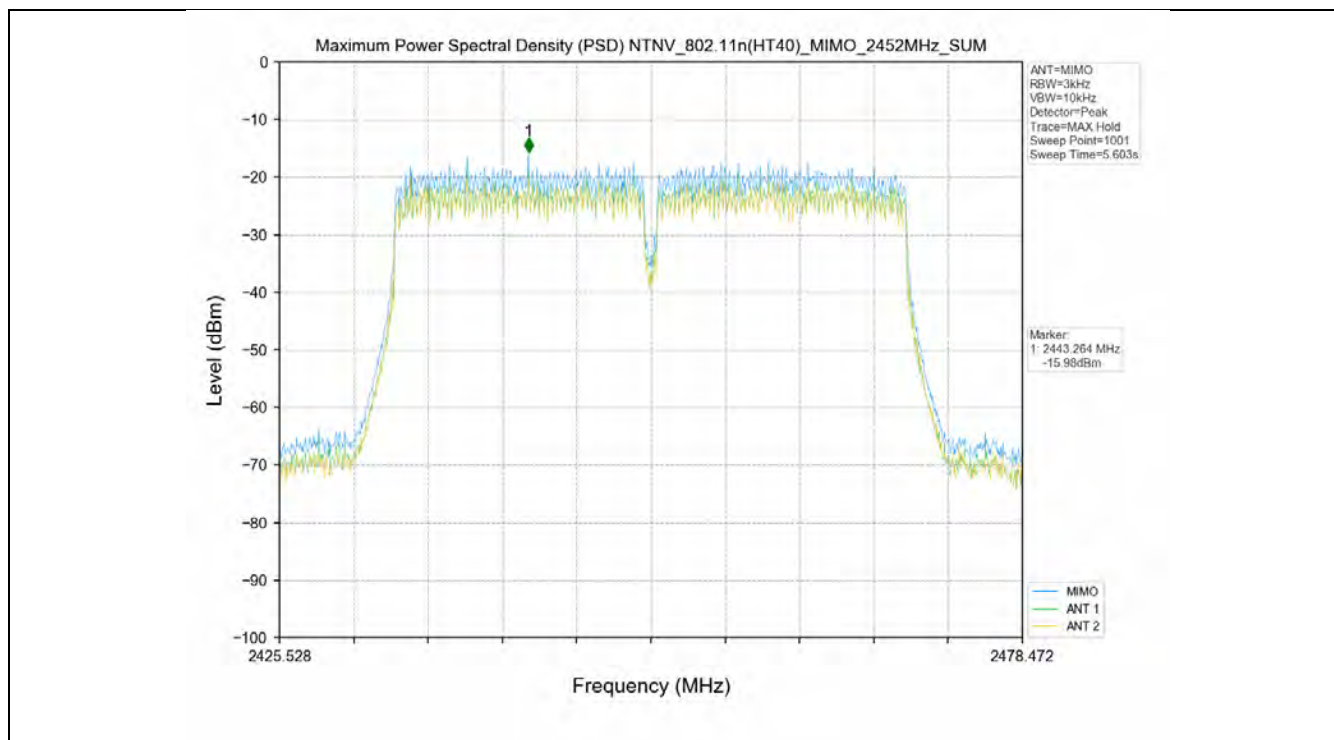










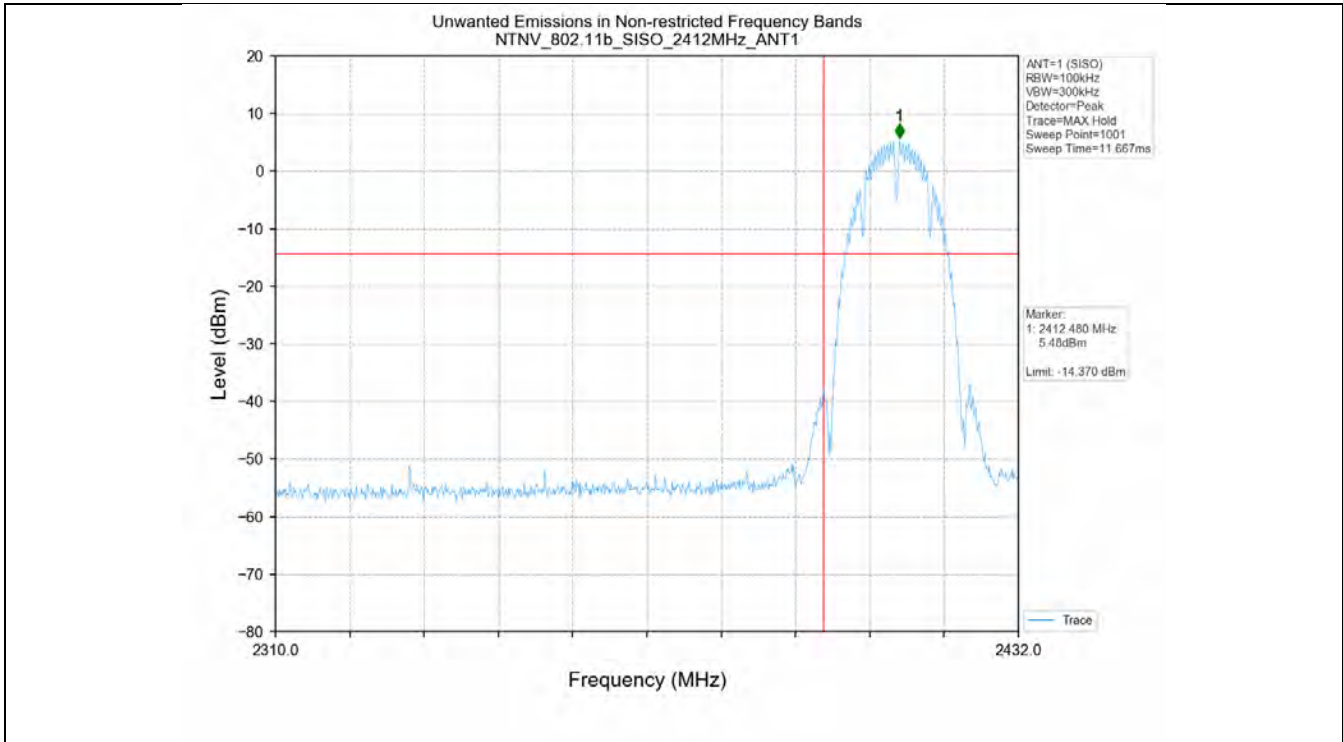
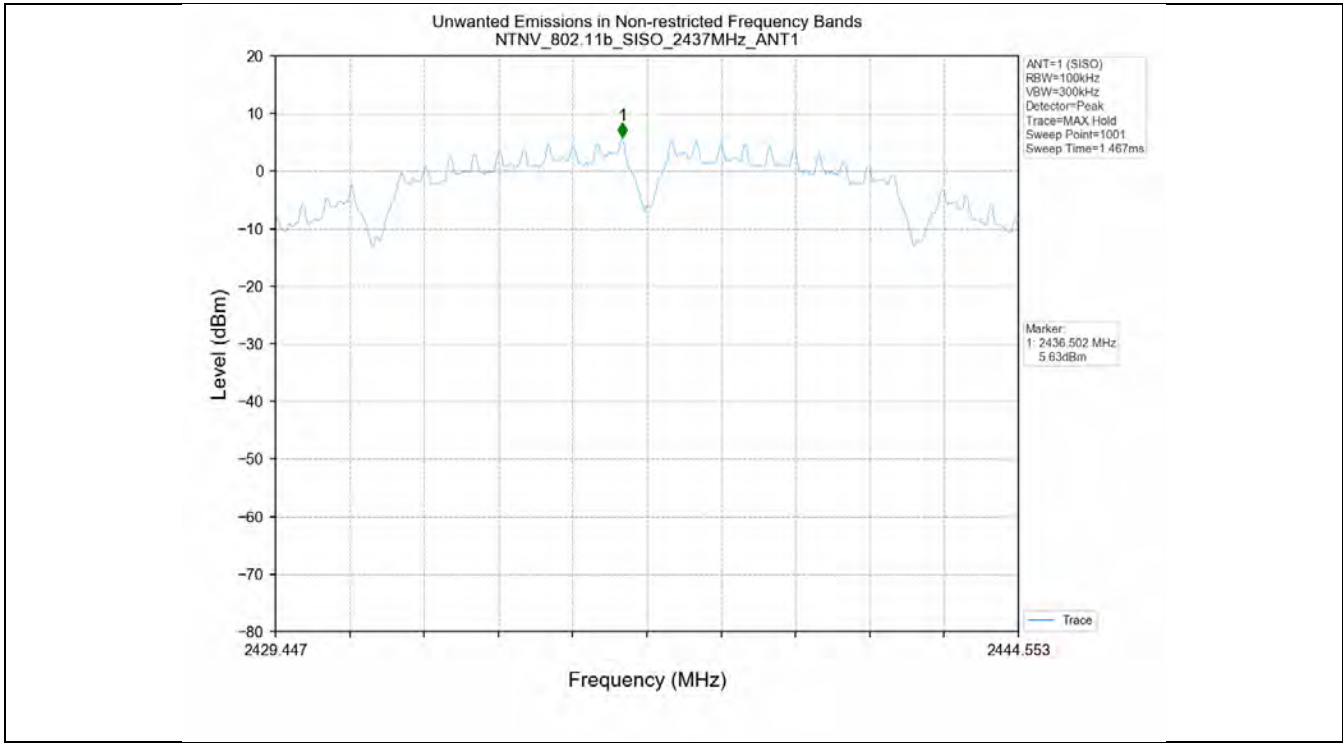


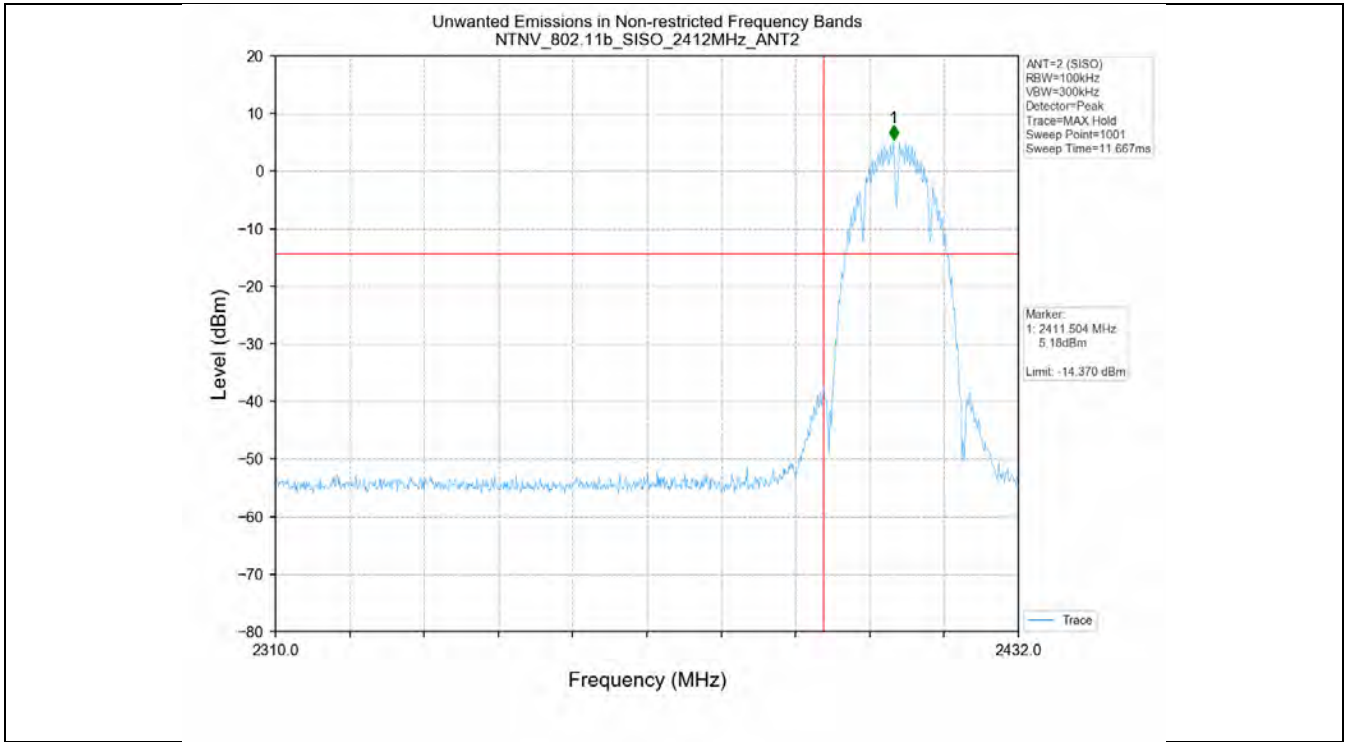
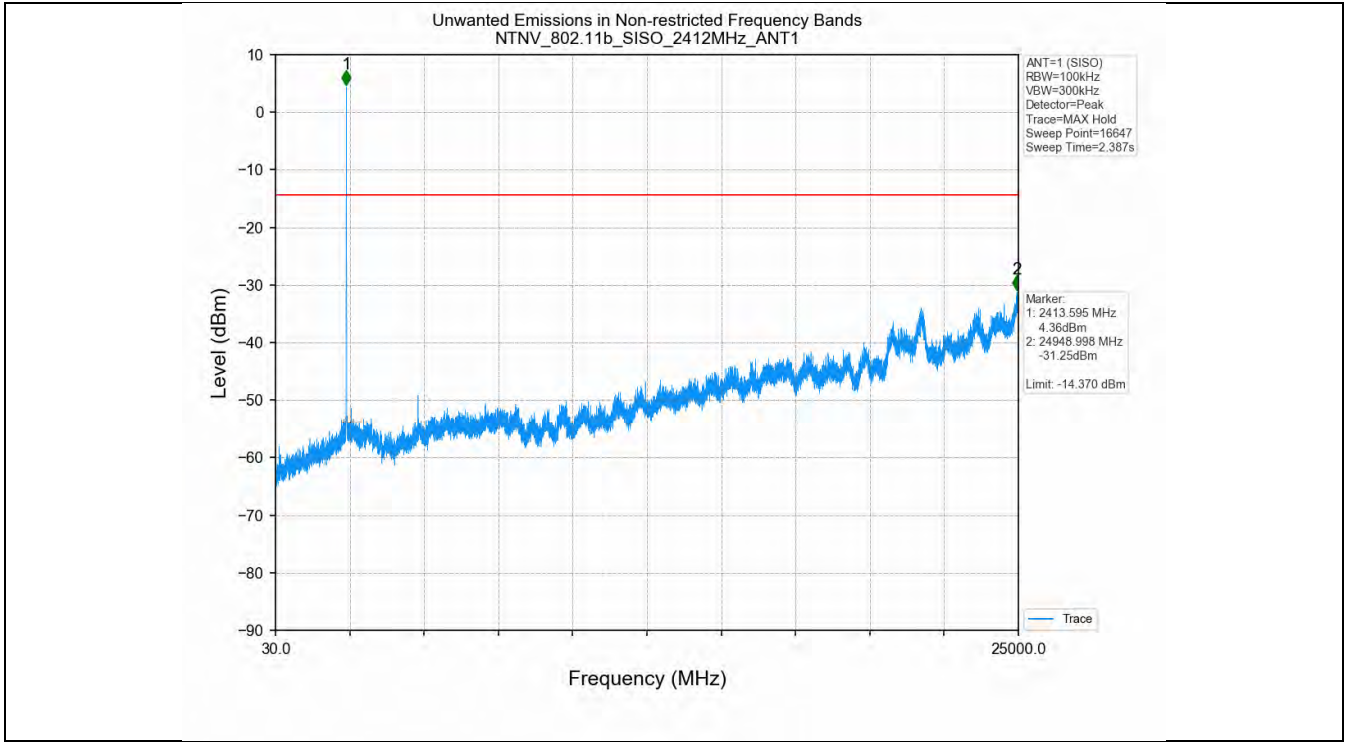
5. Unwanted Emissions in Non-restricted Frequency Bands

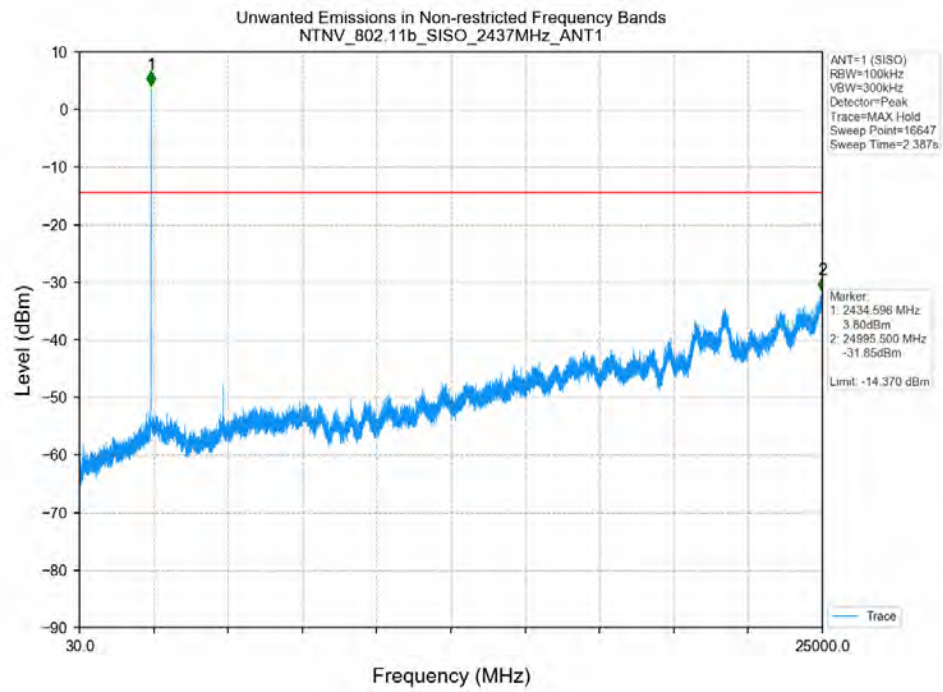
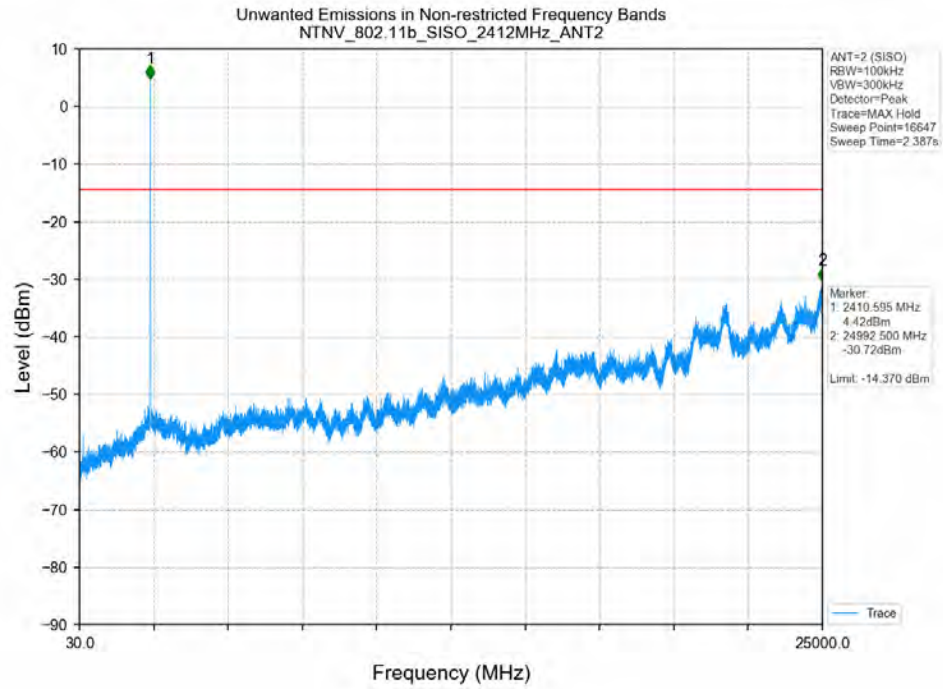
5.1 Test Result

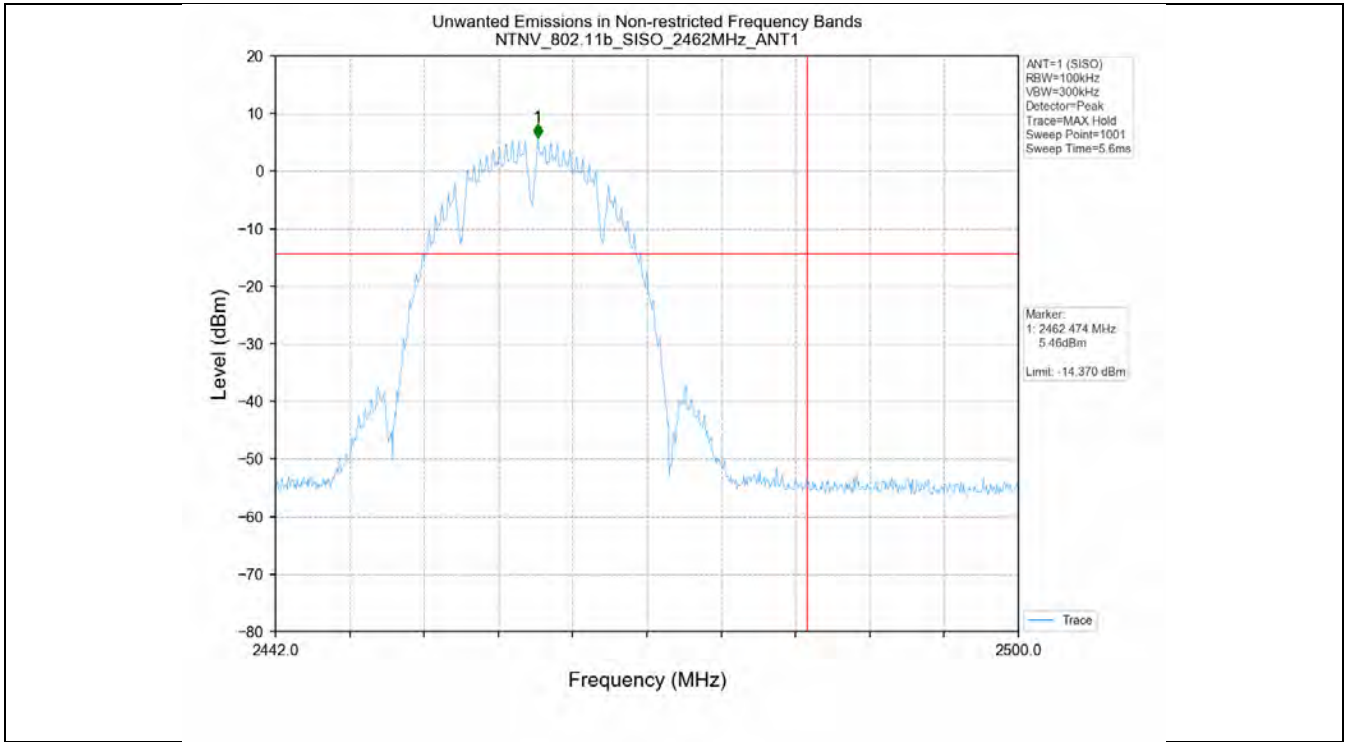
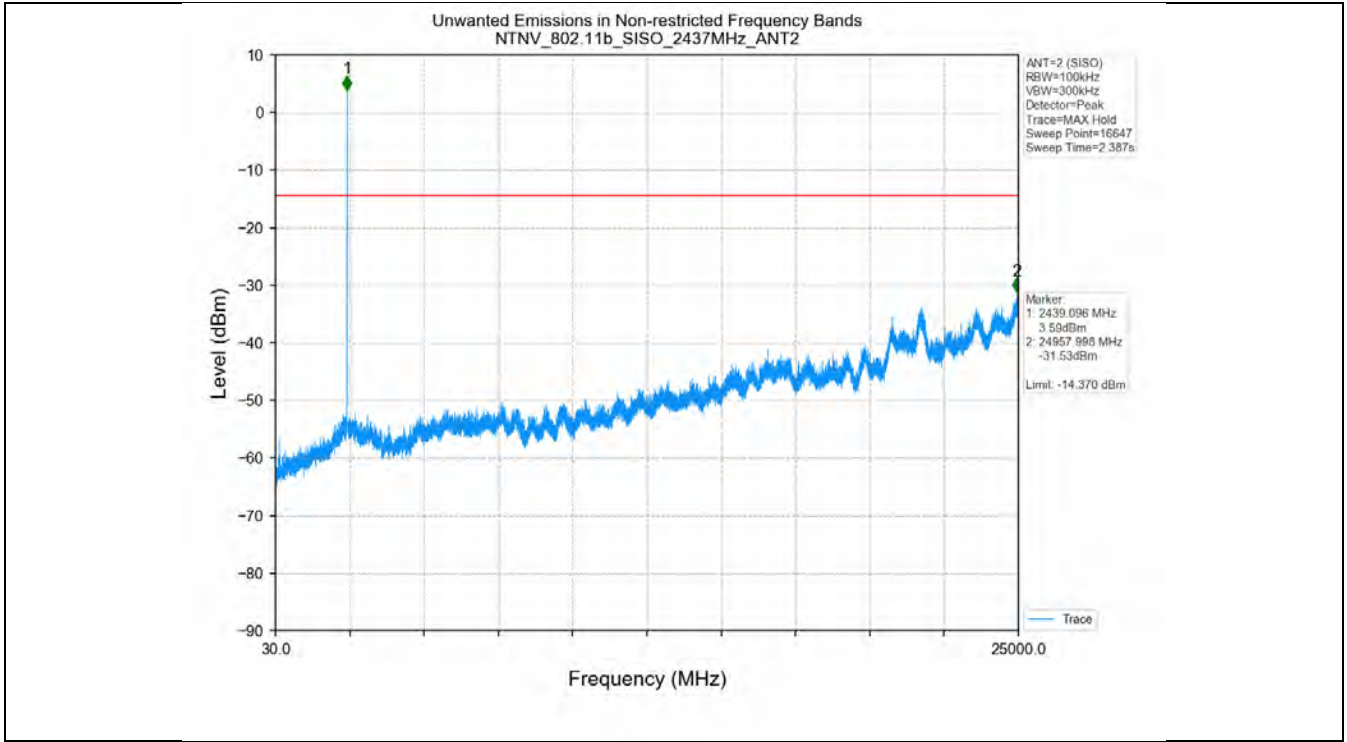
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
802.11b	2412	SISO	1	Refer to test graph	-14.37	PASS
			2	Refer to test graph	-14.37	PASS
	2437	SISO	1	Refer to test graph	-14.37	PASS
			2	Refer to test graph	-14.37	PASS
	2462	SISO	1	Refer to test graph	-14.37	PASS
			2	Refer to test graph	-14.37	PASS
802.11g	2412	SISO	1	Refer to test graph	-21.88	PASS
			2	Refer to test graph	-21.88	PASS
	2437	SISO	1	Refer to test graph	-21.88	PASS
			2	Refer to test graph	-21.88	PASS
	2462	SISO	1	Refer to test graph	-21.88	PASS
			2	Refer to test graph	-21.88	PASS
802.11n(HT20)	2412	MIMO	1	Refer to test graph	-21.75	PASS
			2	Refer to test graph	-21.75	PASS
	2437	MIMO	1	Refer to test graph	-21.75	PASS
			2	Refer to test graph	-21.75	PASS
	2462	MIMO	1	Refer to test graph	-21.75	PASS
			2	Refer to test graph	-21.75	PASS
802.11n(HT40)	2422	MIMO	1	Refer to test graph	-24.55	PASS
			2	Refer to test graph	-24.55	PASS
	2437	MIMO	1	Refer to test graph	-24.55	PASS
			2	Refer to test graph	-24.55	PASS
	2452	MIMO	1	Refer to test graph	-24.55	PASS
			2	Refer to test graph	-24.55	PASS

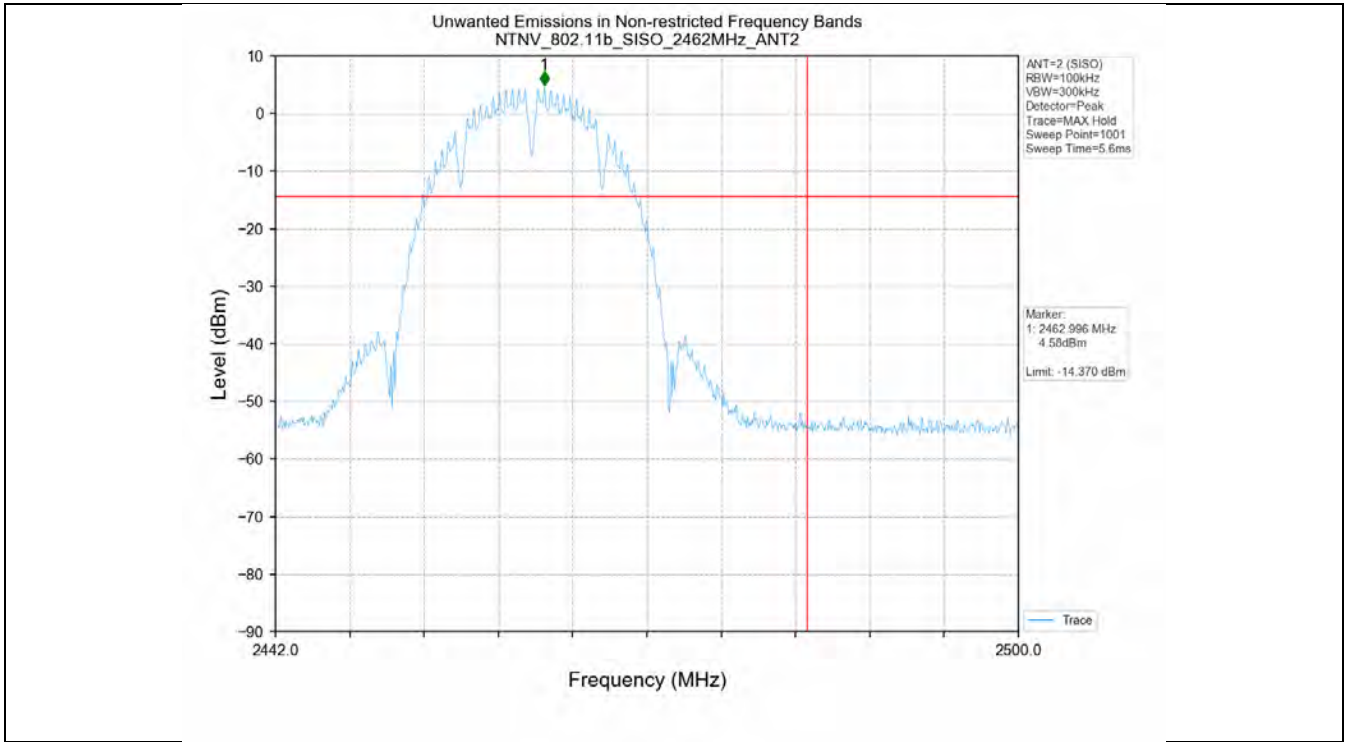
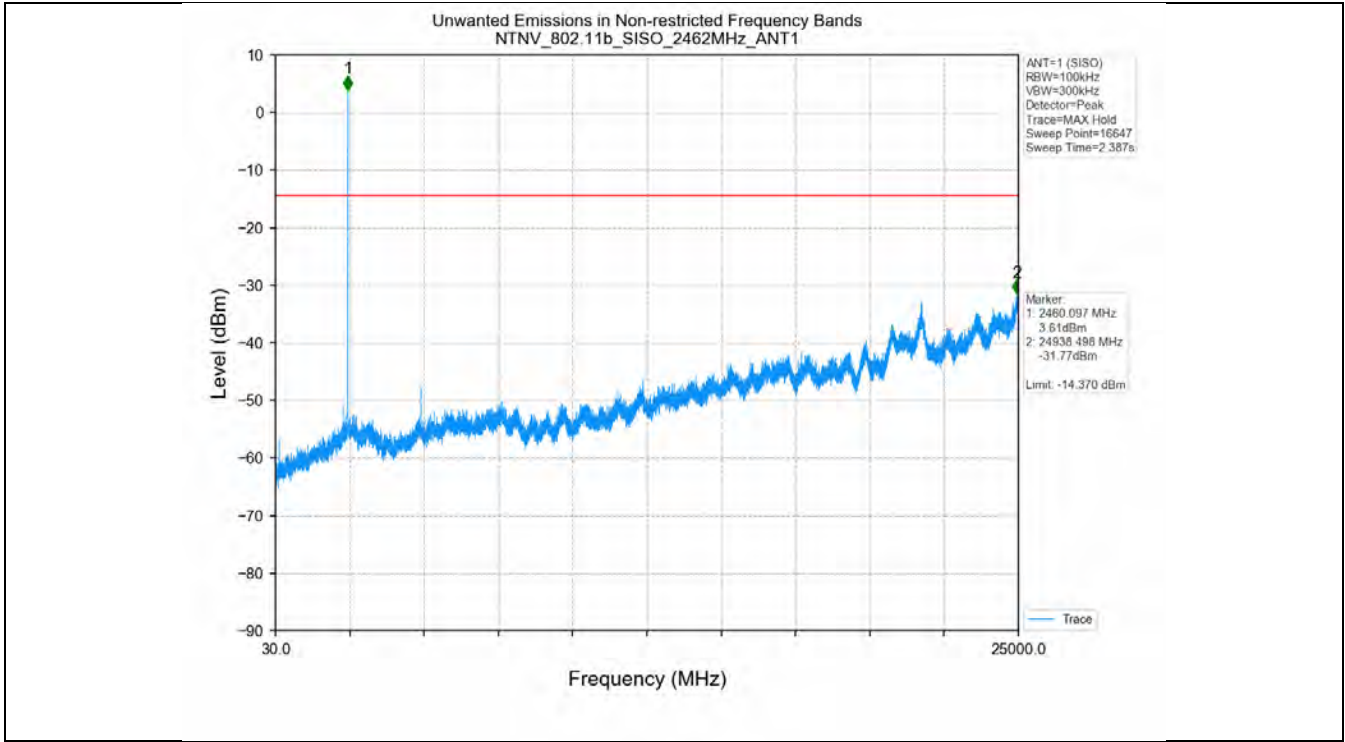
5.2 Test Graph

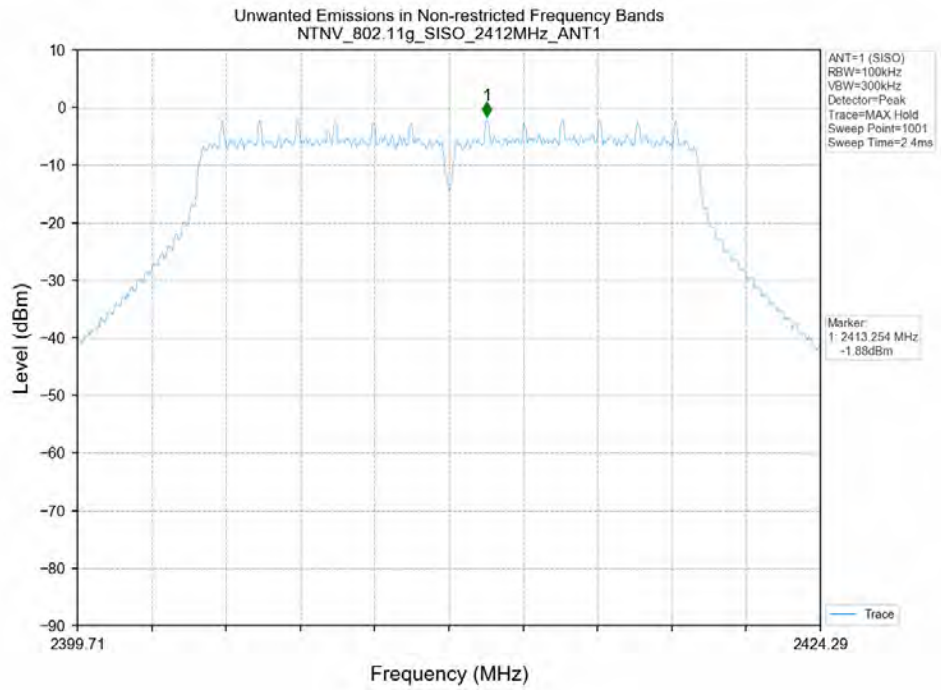
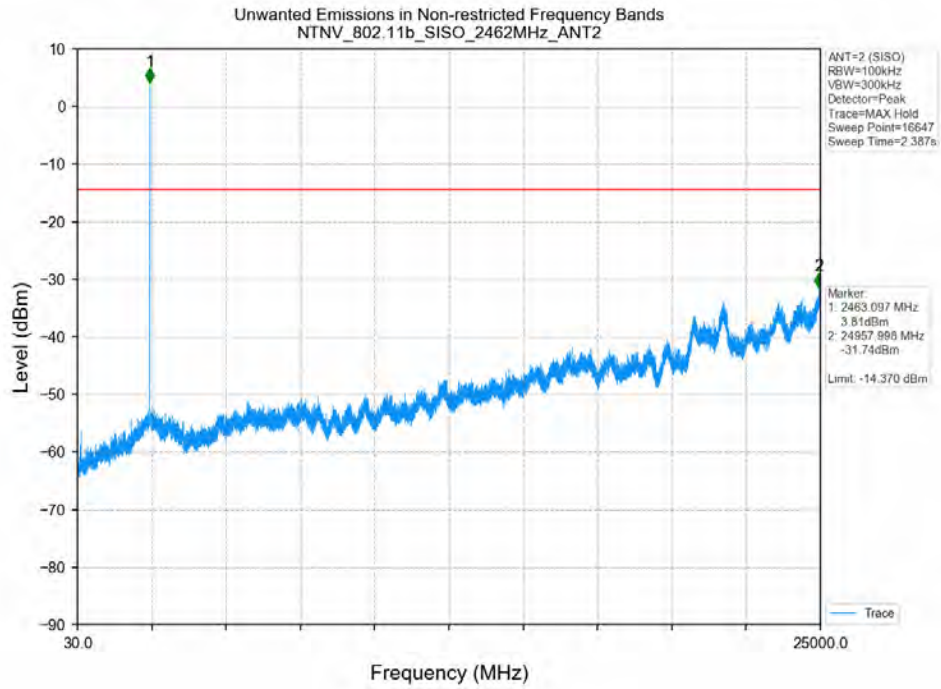


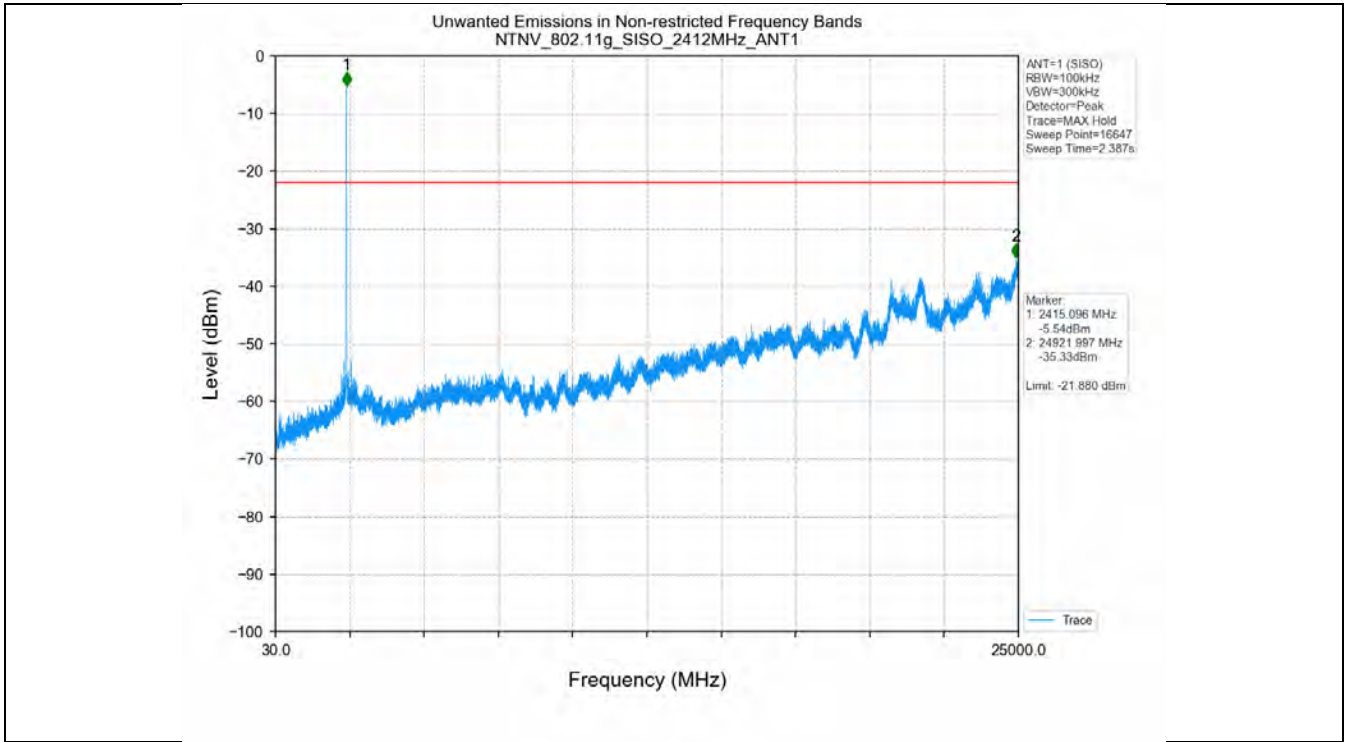
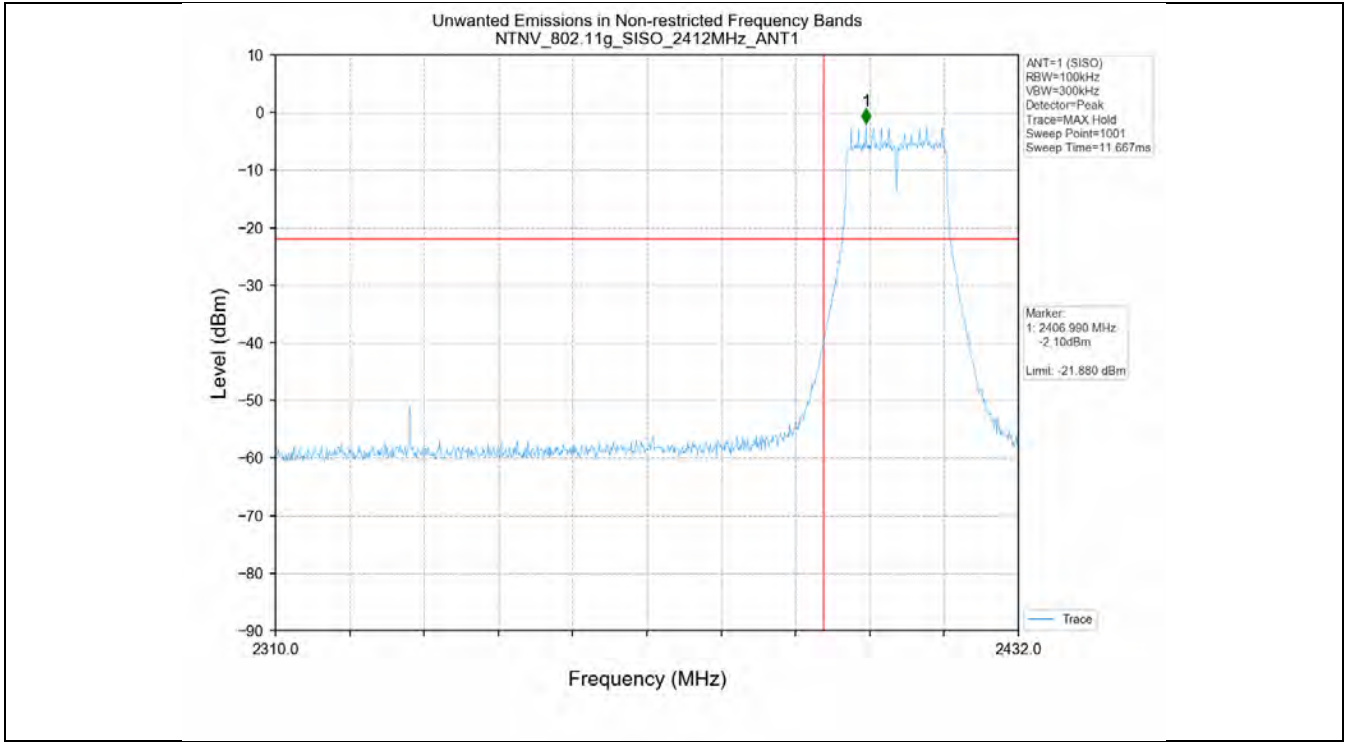


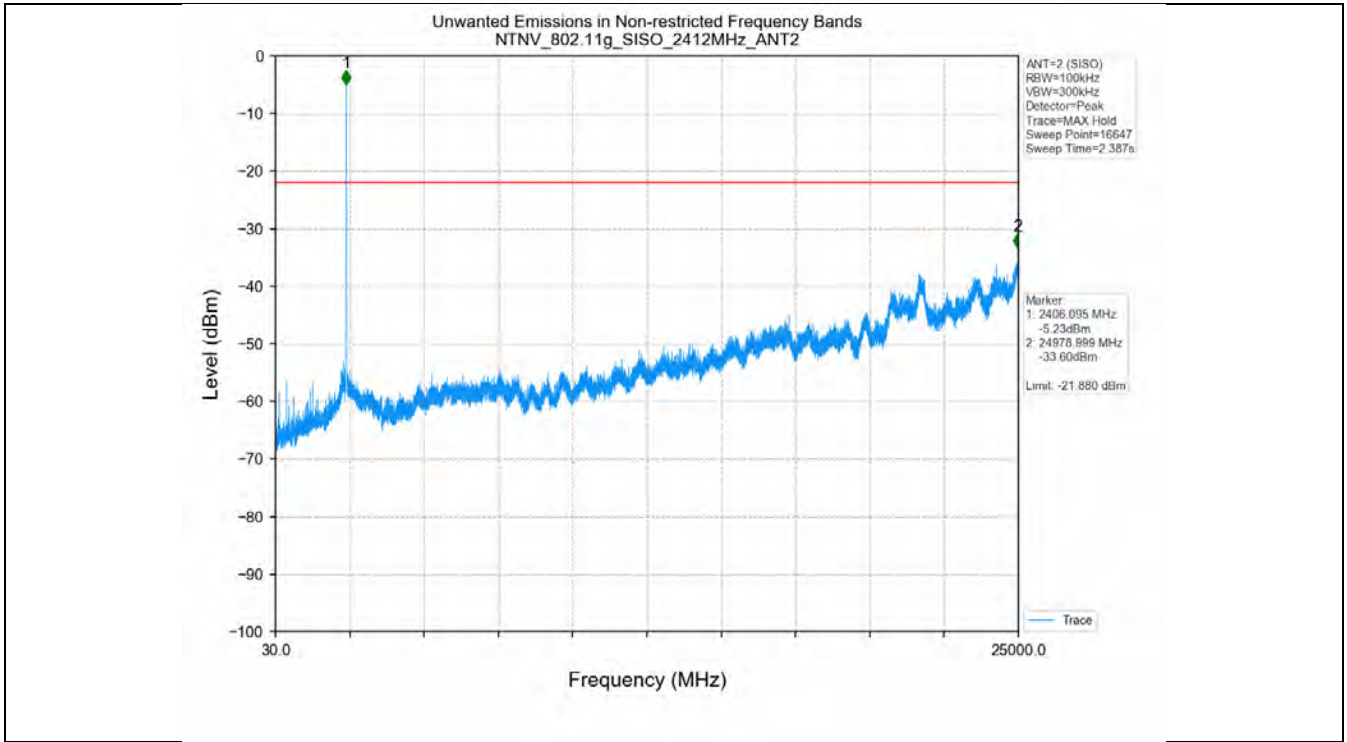
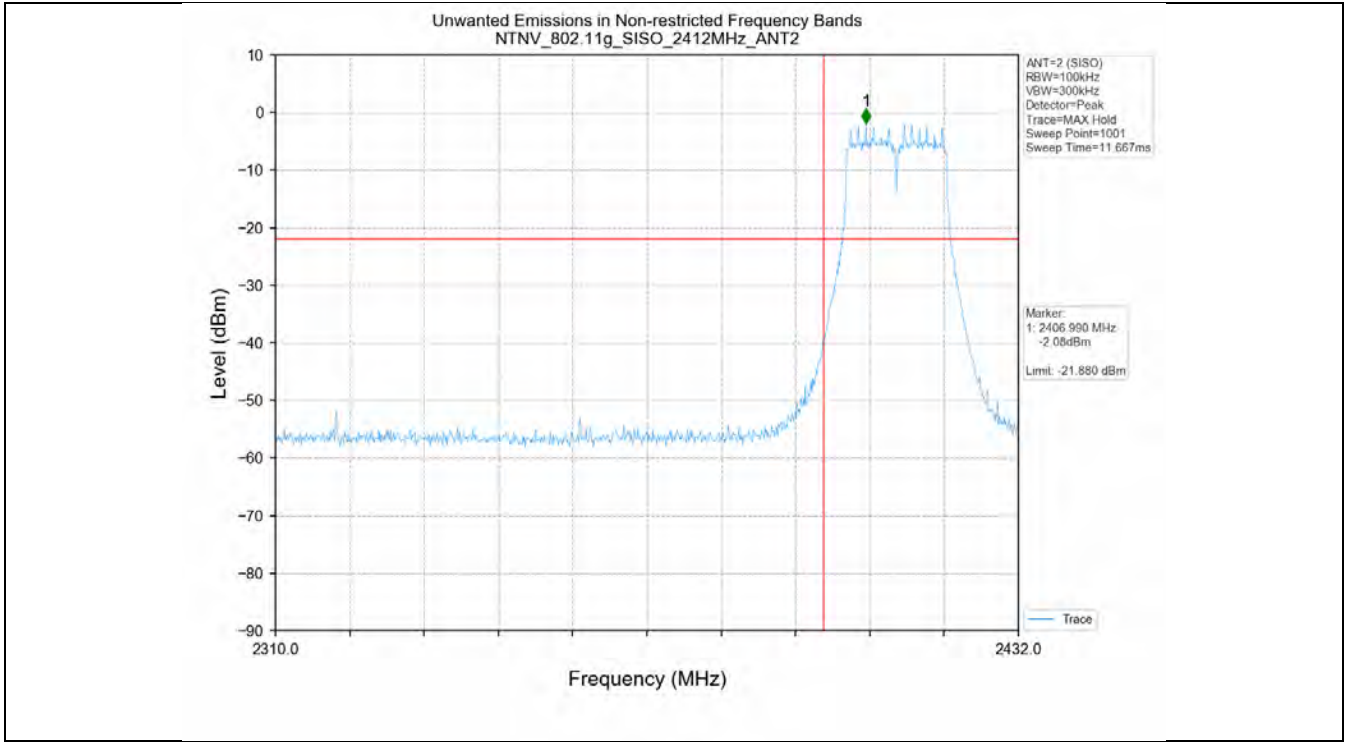




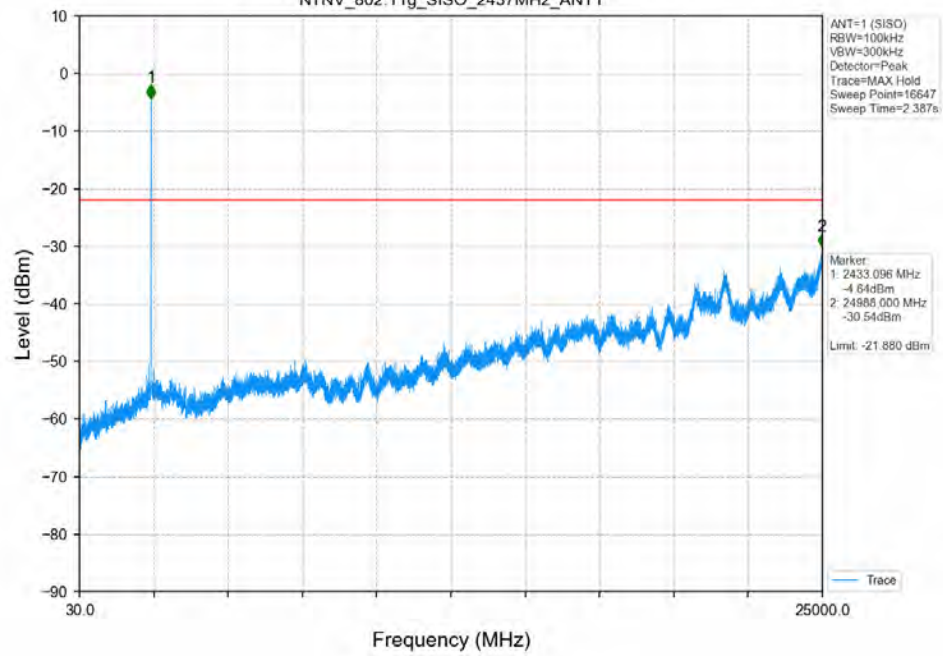




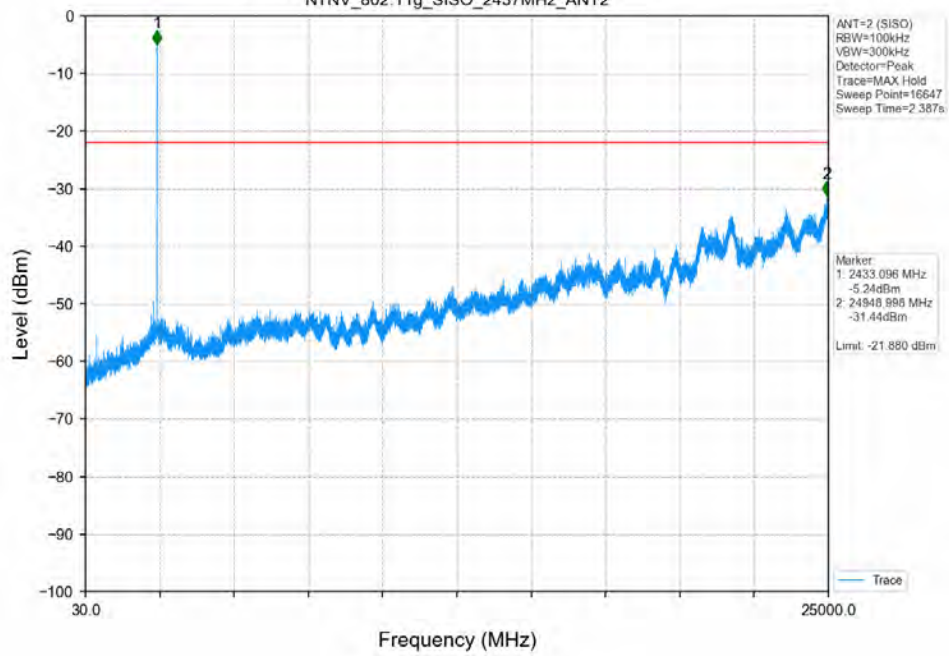


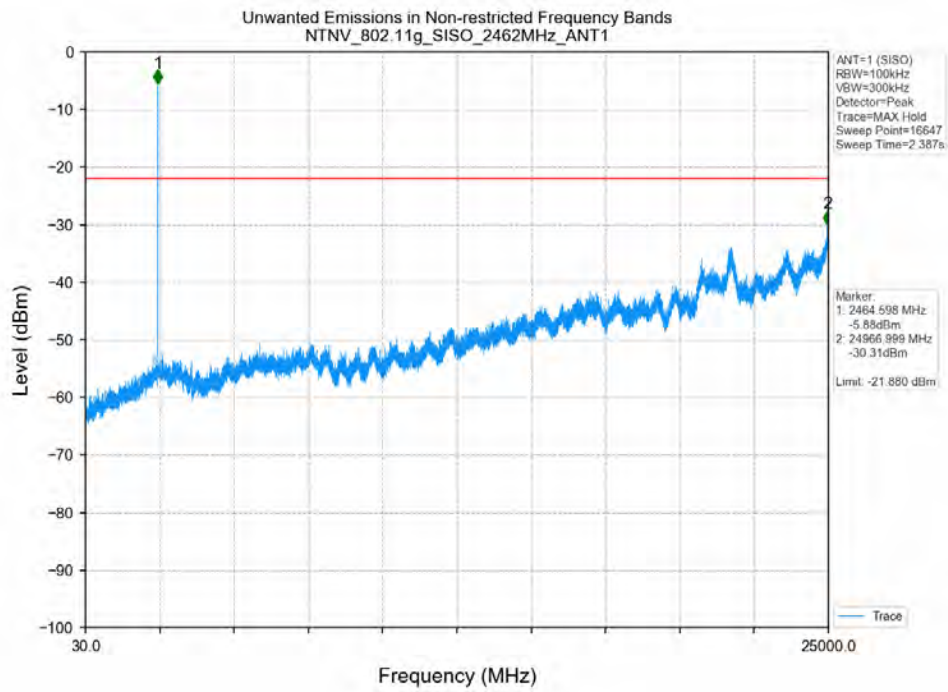
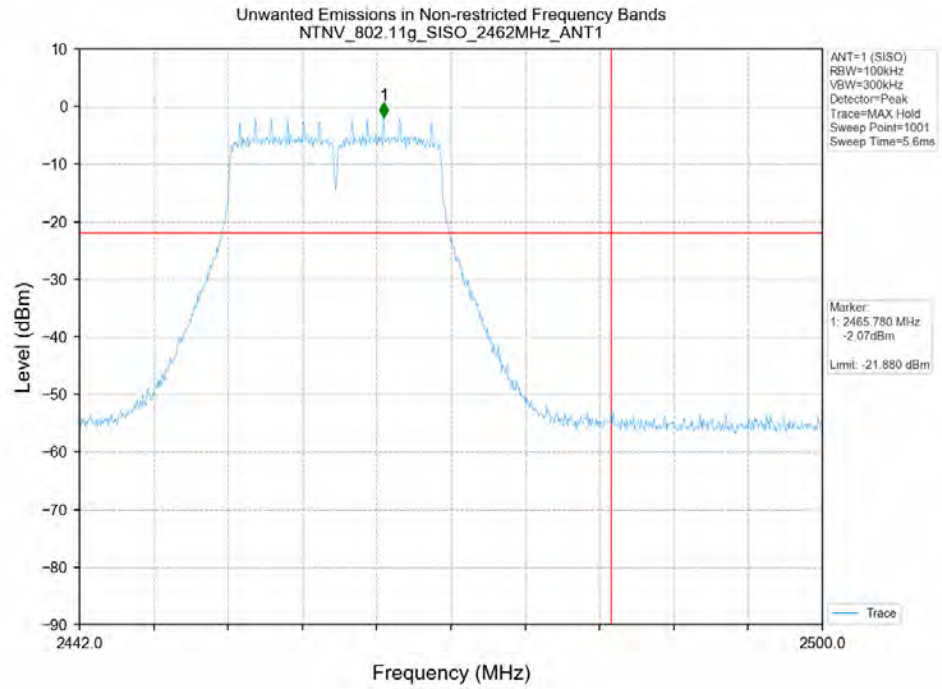


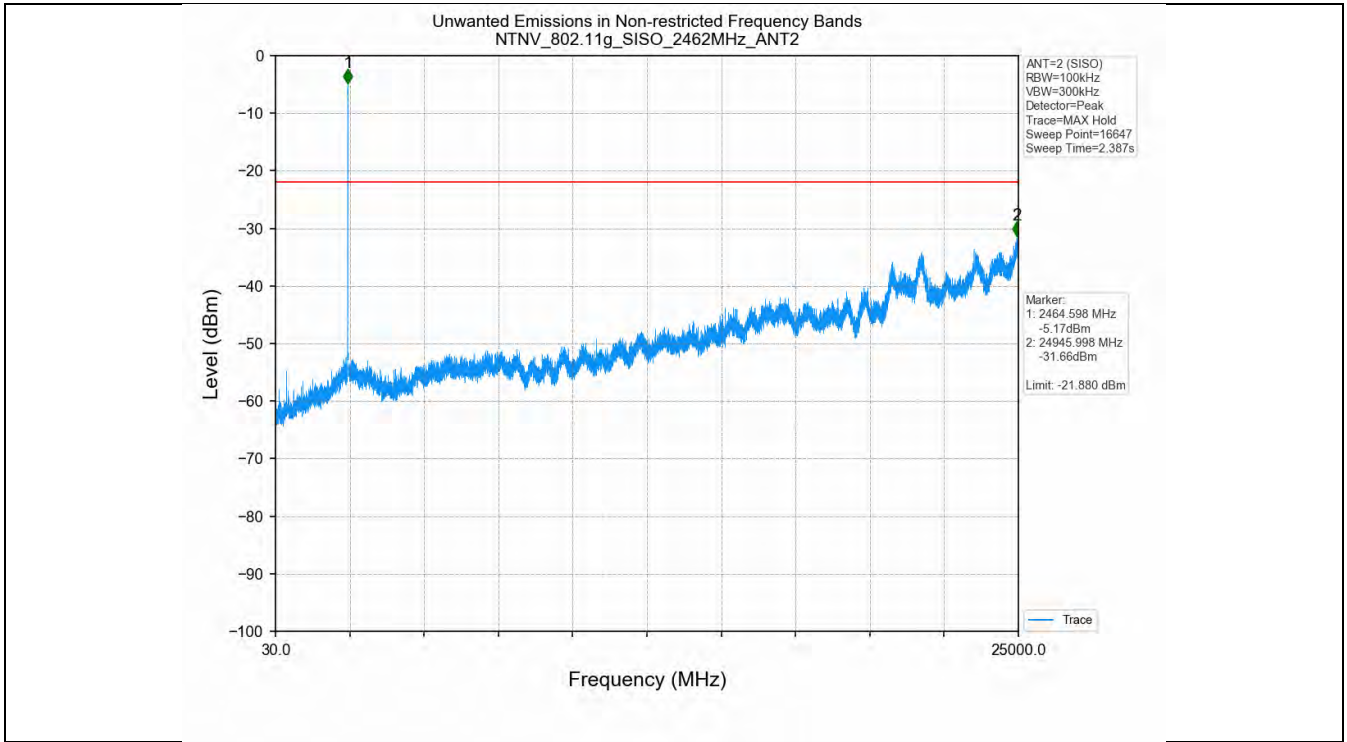
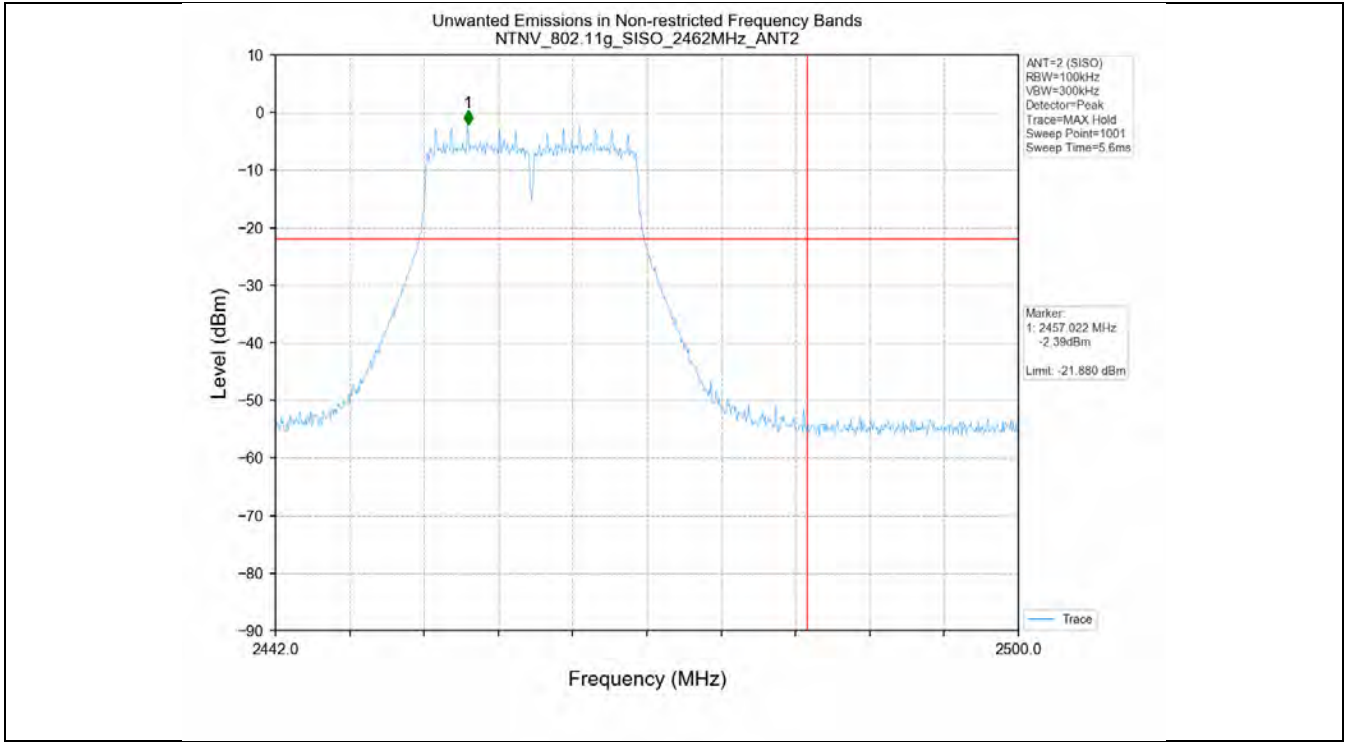
Unwanted Emissions in Non-restricted Frequency Bands
NTNV_802.11g_SISO_2437MHz_ANT1

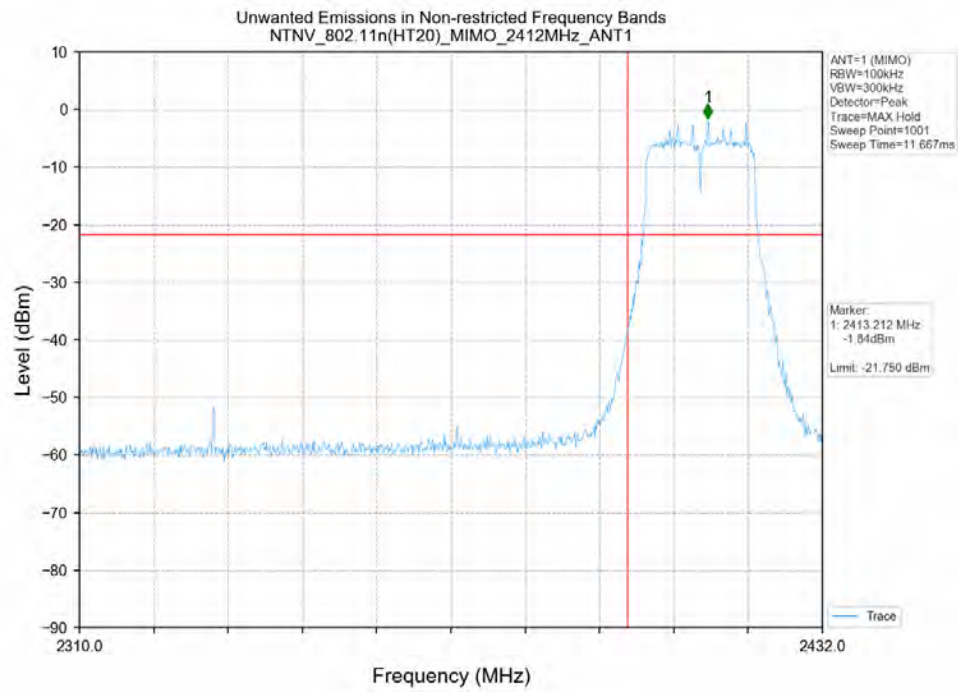
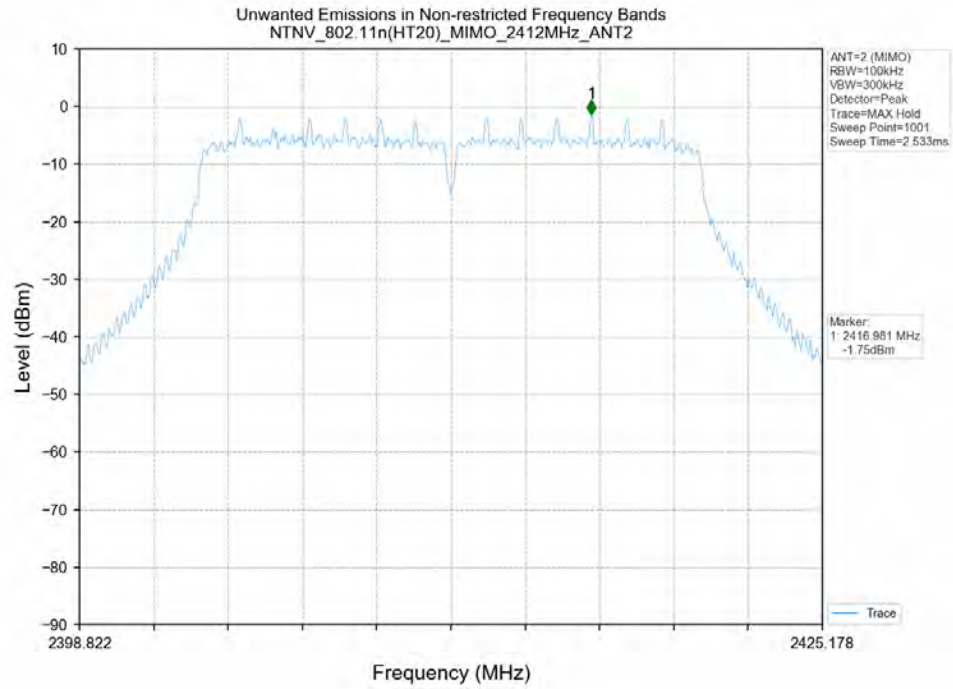


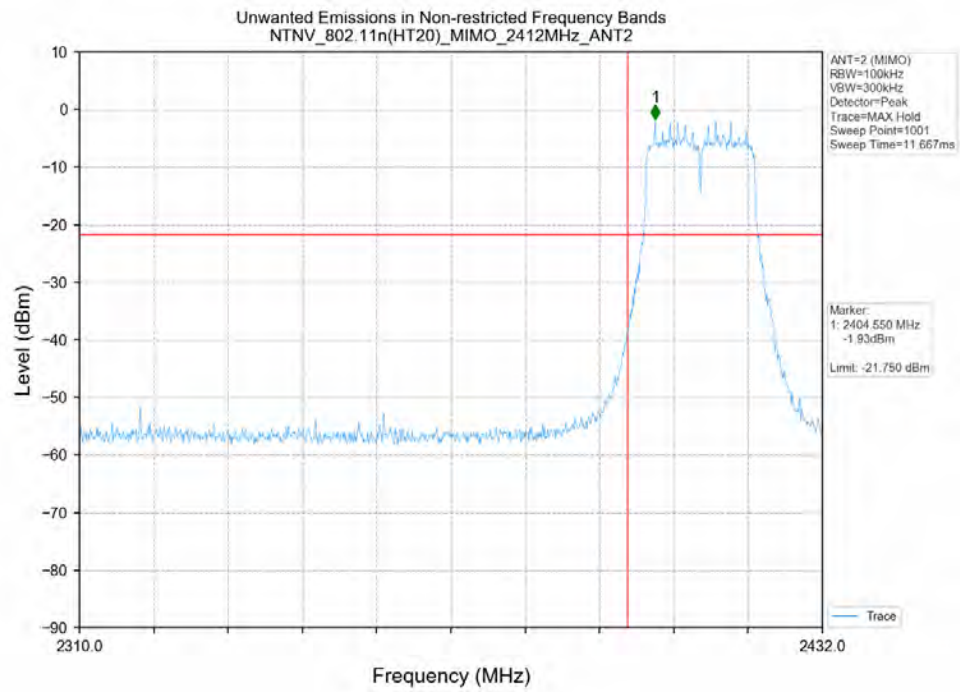
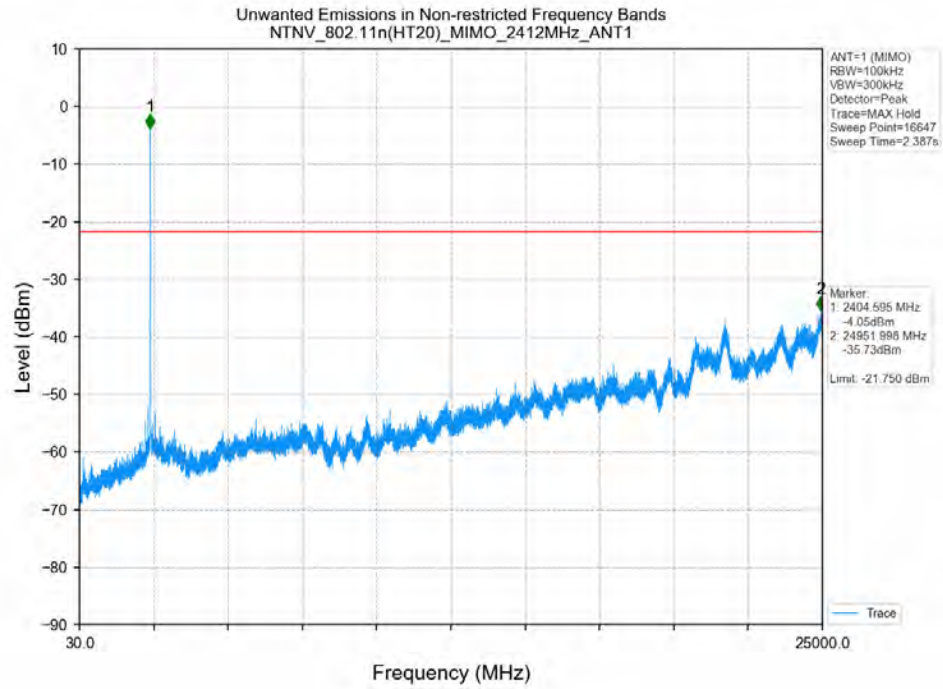
Unwanted Emissions in Non-restricted Frequency Bands
NTNV_802.11g_SISO_2437MHz_ANT2

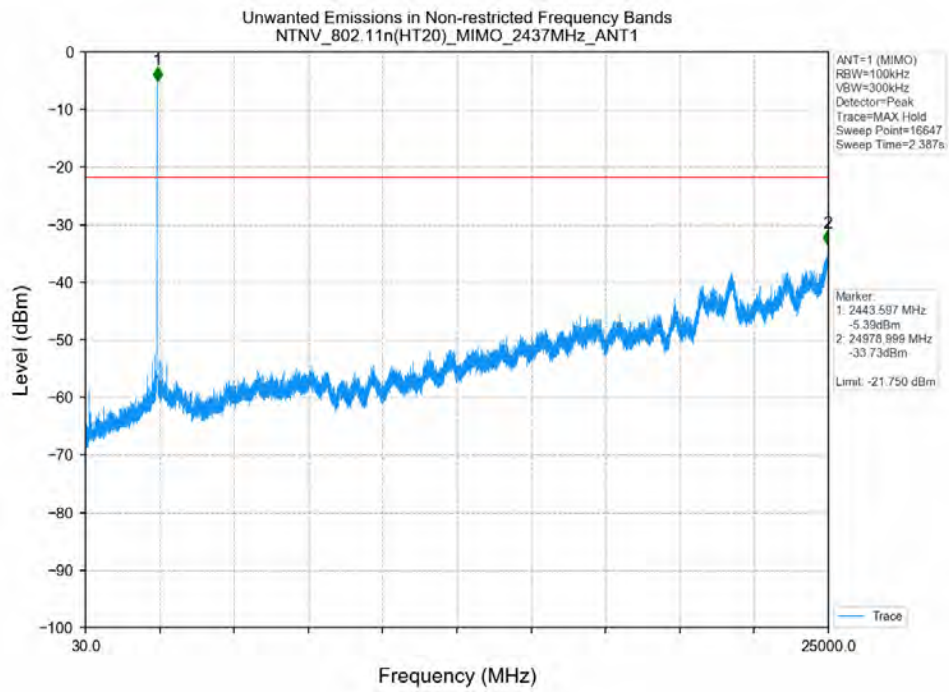
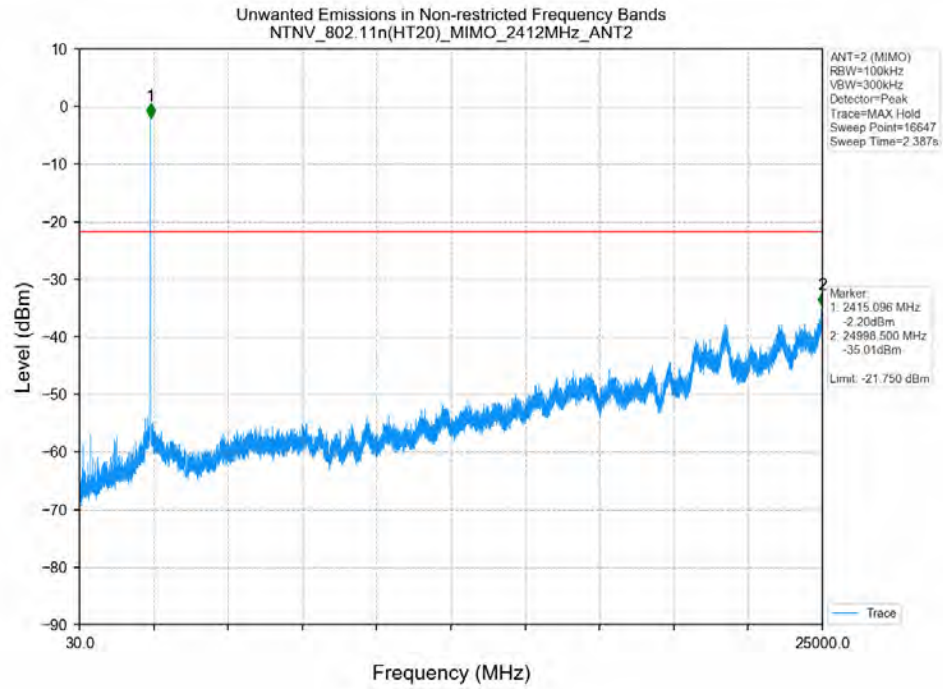


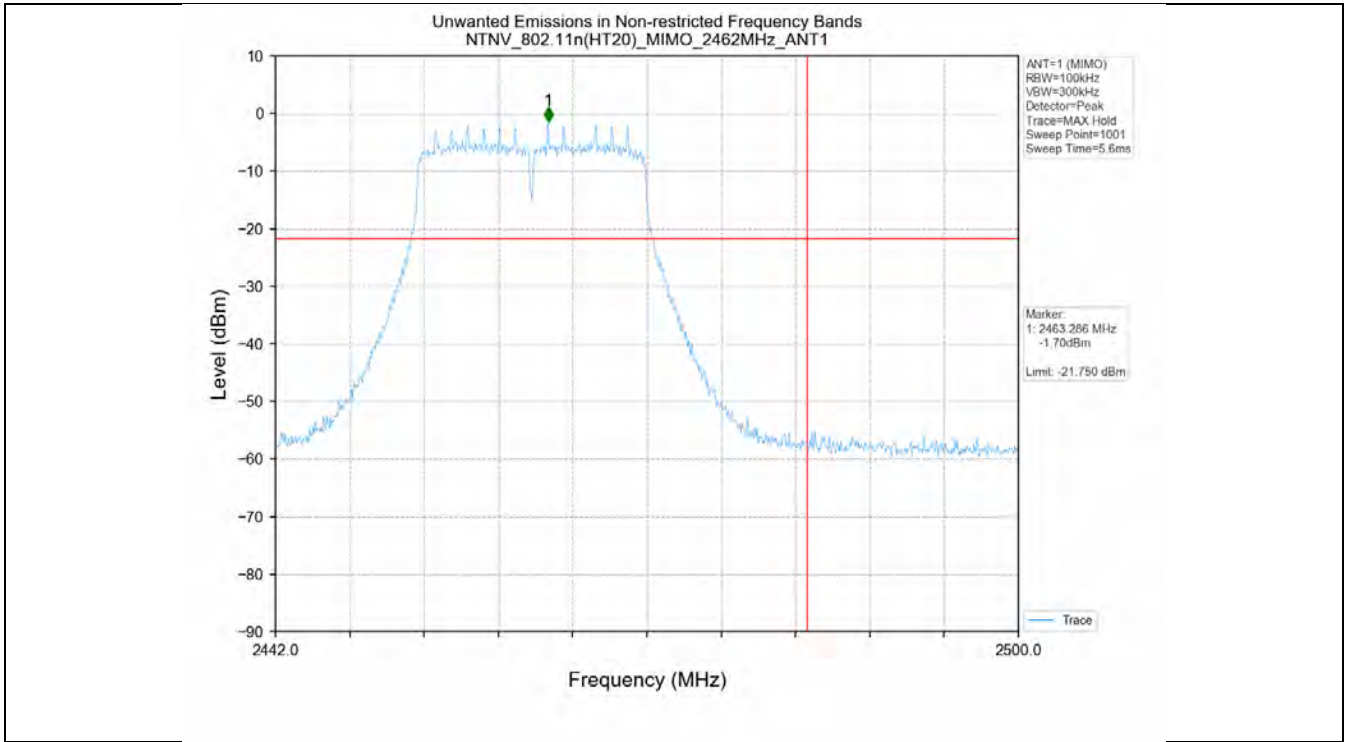
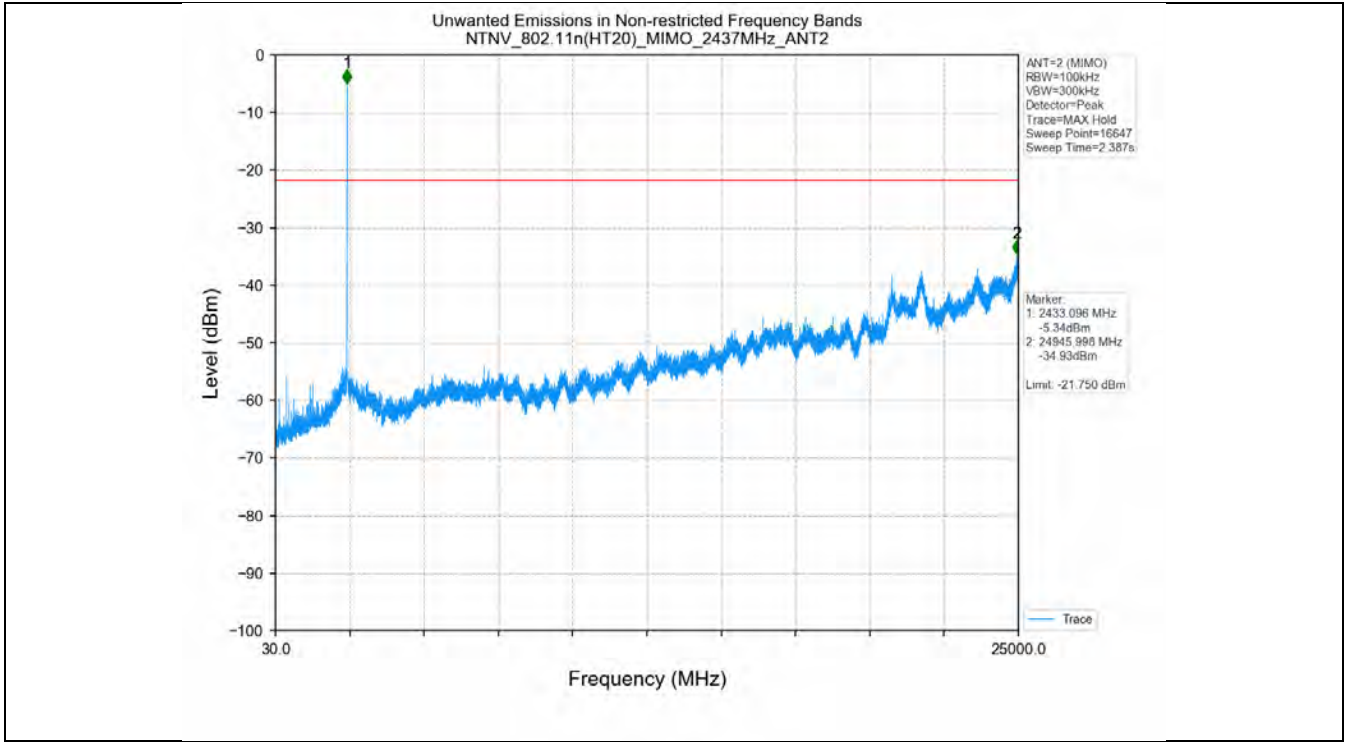




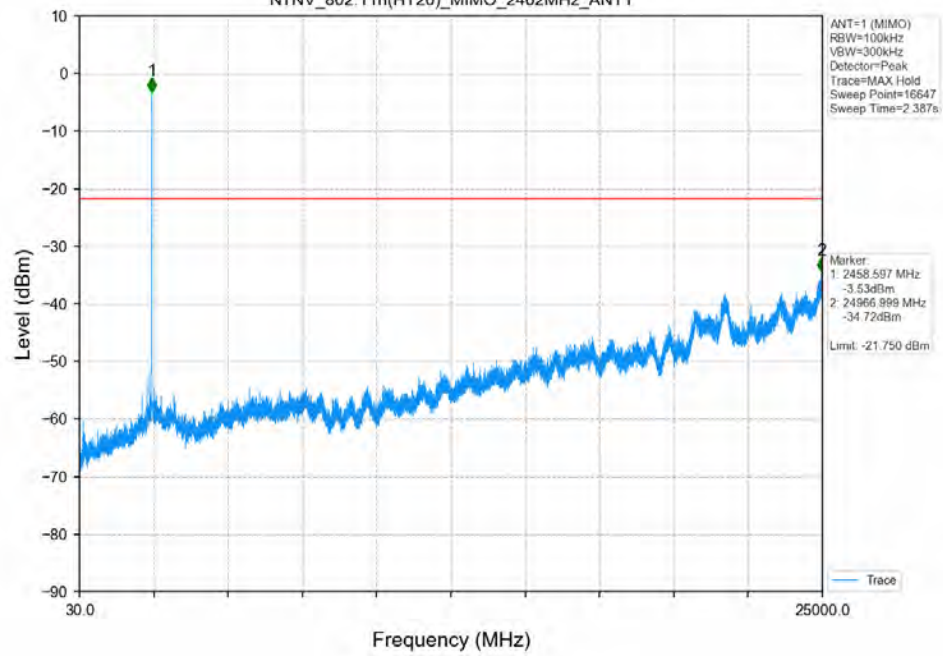




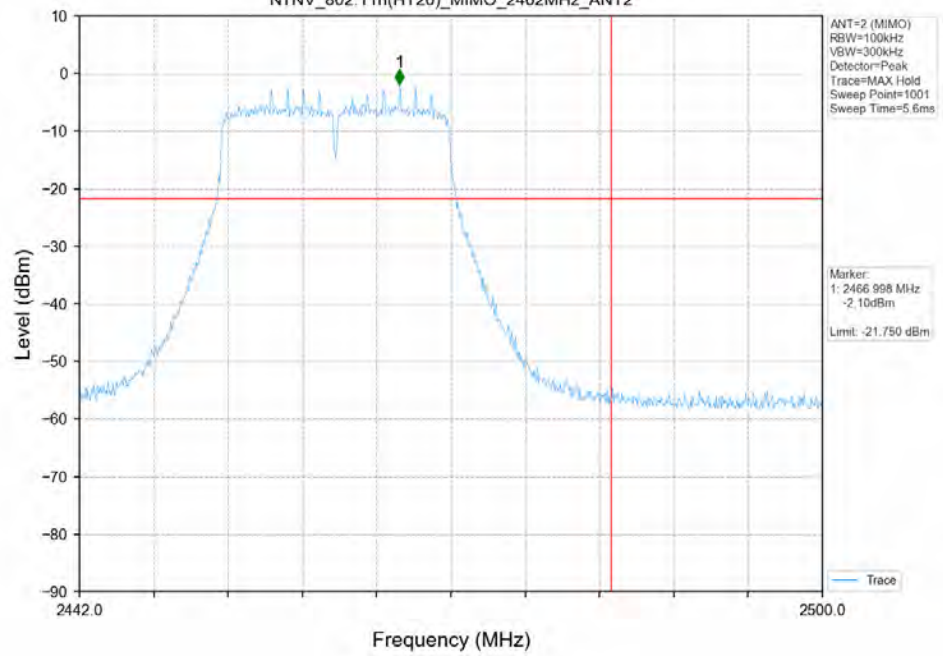




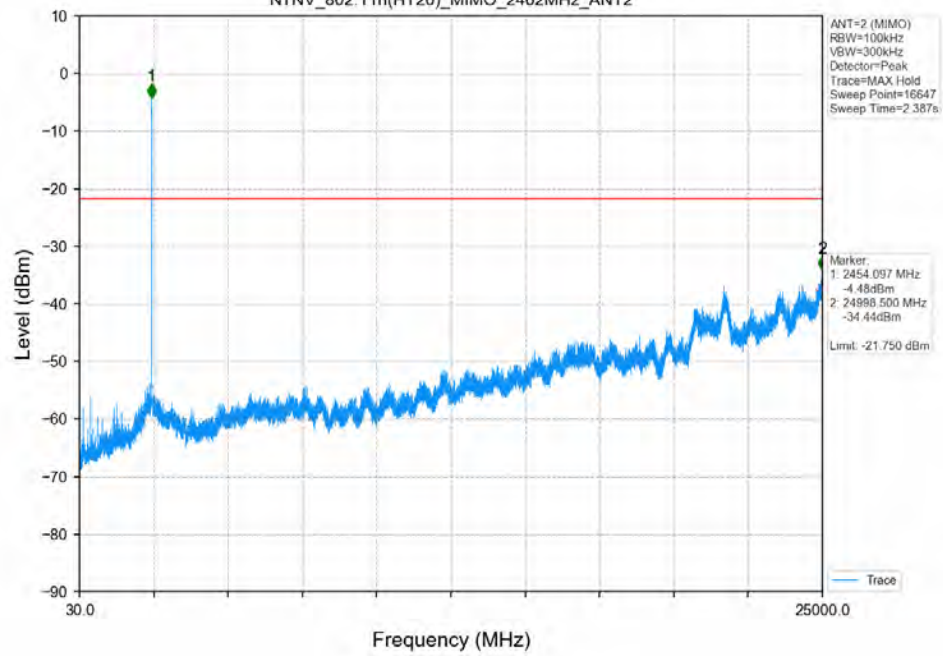
Unwanted Emissions in Non-restricted Frequency Bands
NTNV_802.11n(HT20)_MIMO_2462MHz_ANT1



Unwanted Emissions in Non-restricted Frequency Bands
NTNV_802.11n(HT20)_MIMO_2462MHz_ANT2



Unwanted Emissions in Non-restricted Frequency Bands
NTNV_802.11n(HT20)_MIMO_2462MHz_ANT2



Unwanted Emissions in Non-restricted Frequency Bands
NTNV_802.11n(HT40)_MIMO_2422MHz_ANT2

