

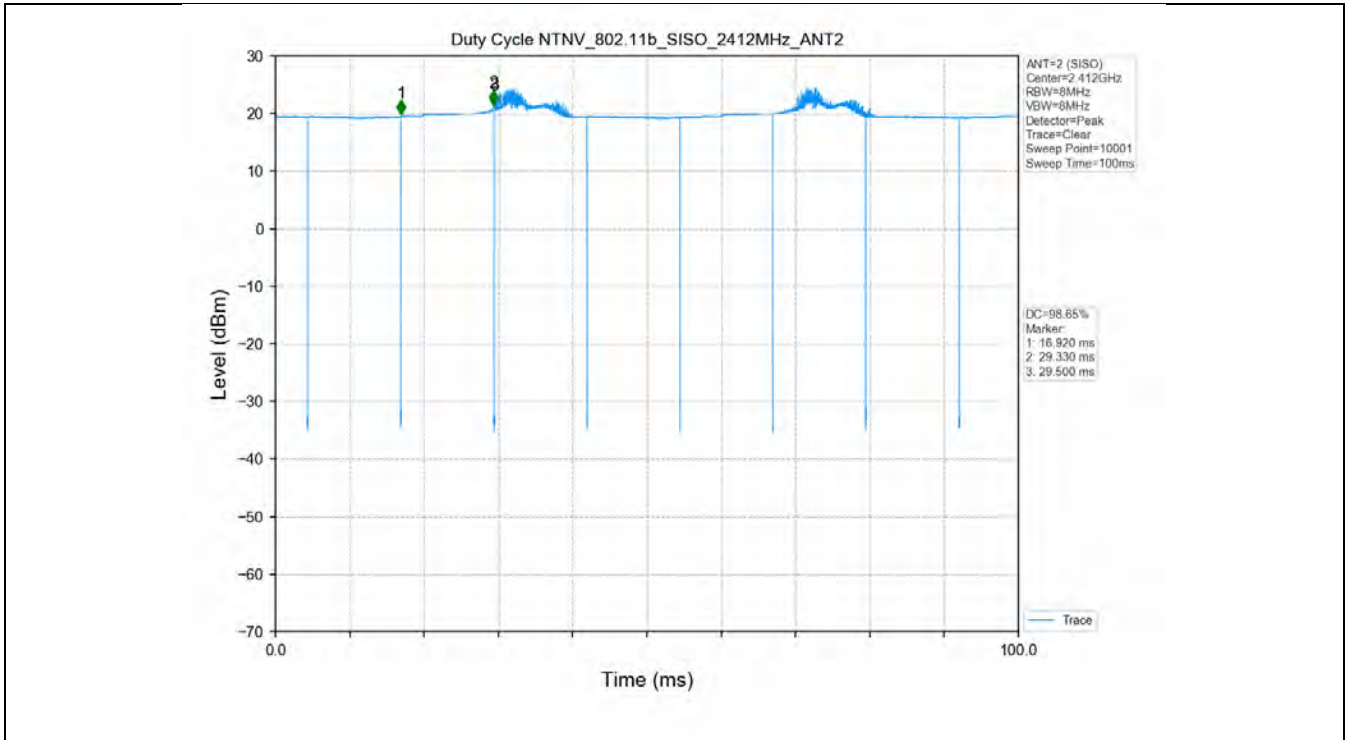
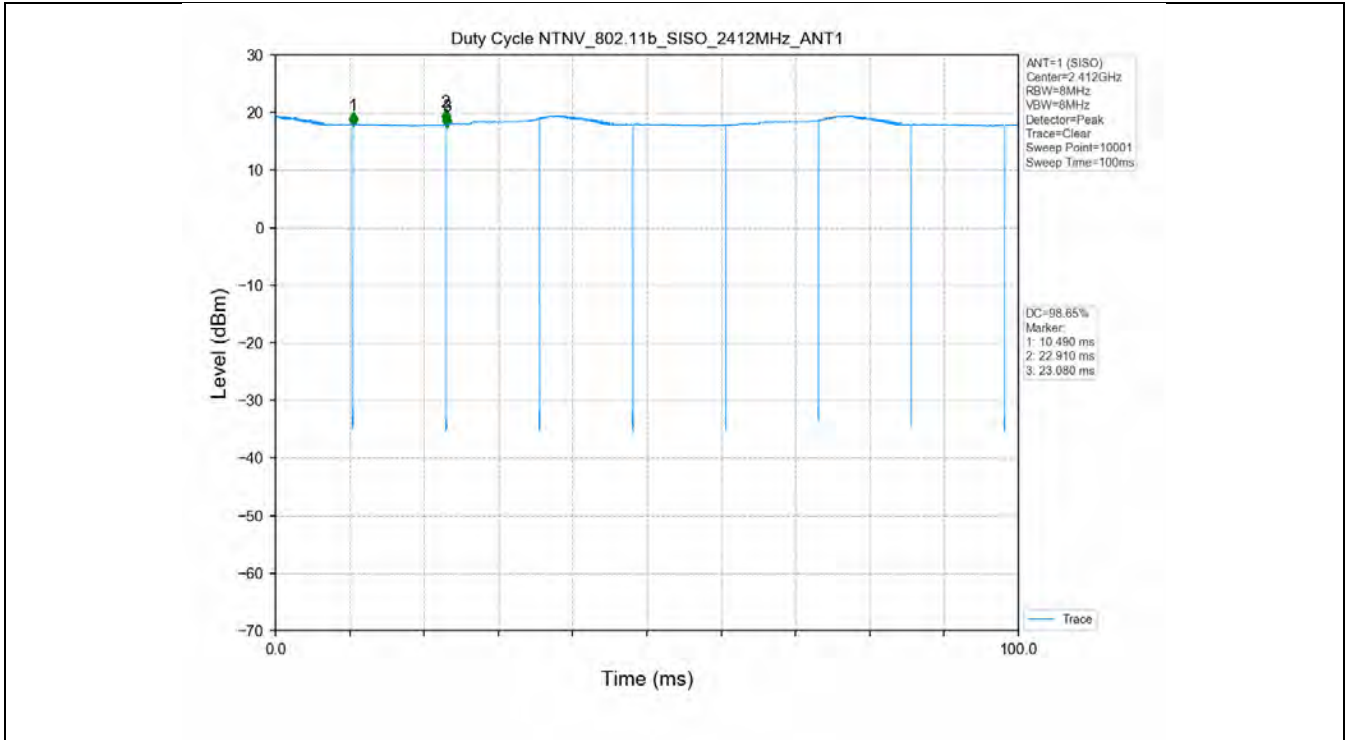
Appendix A for SHEM201000910501

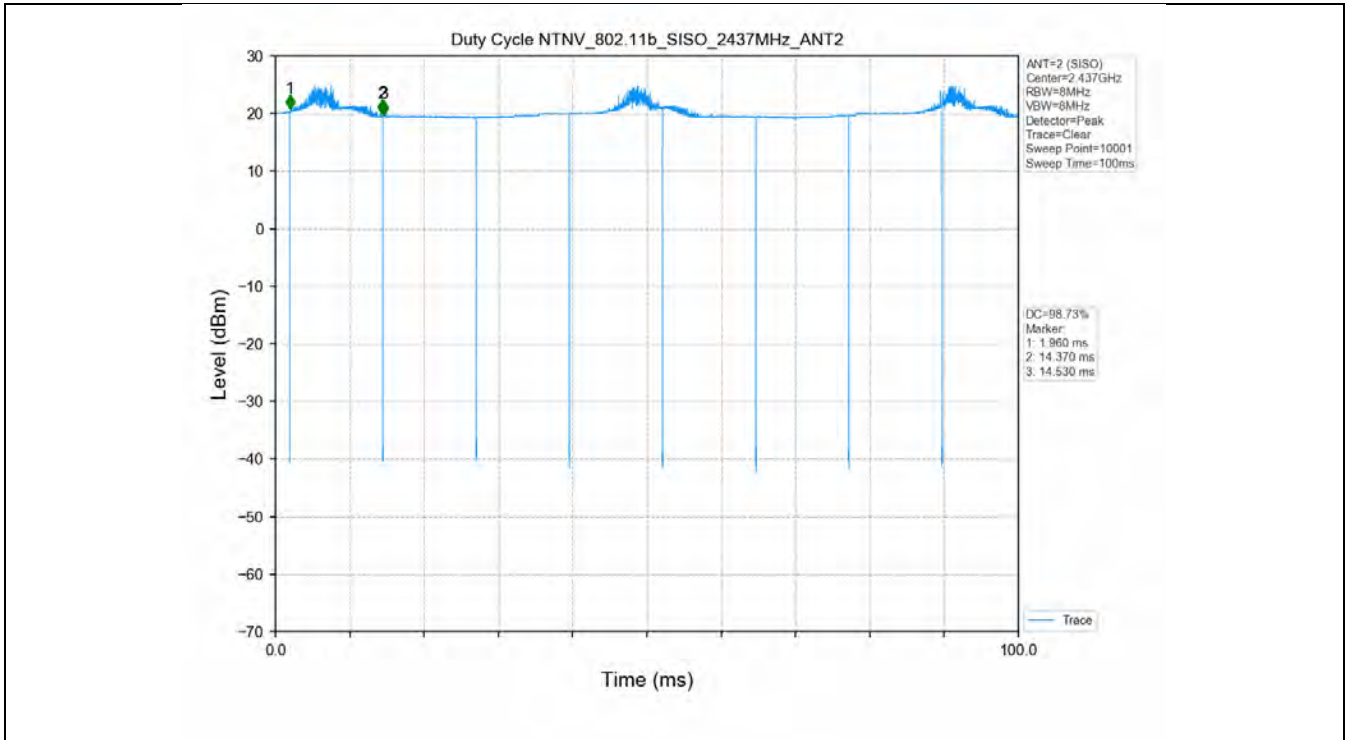
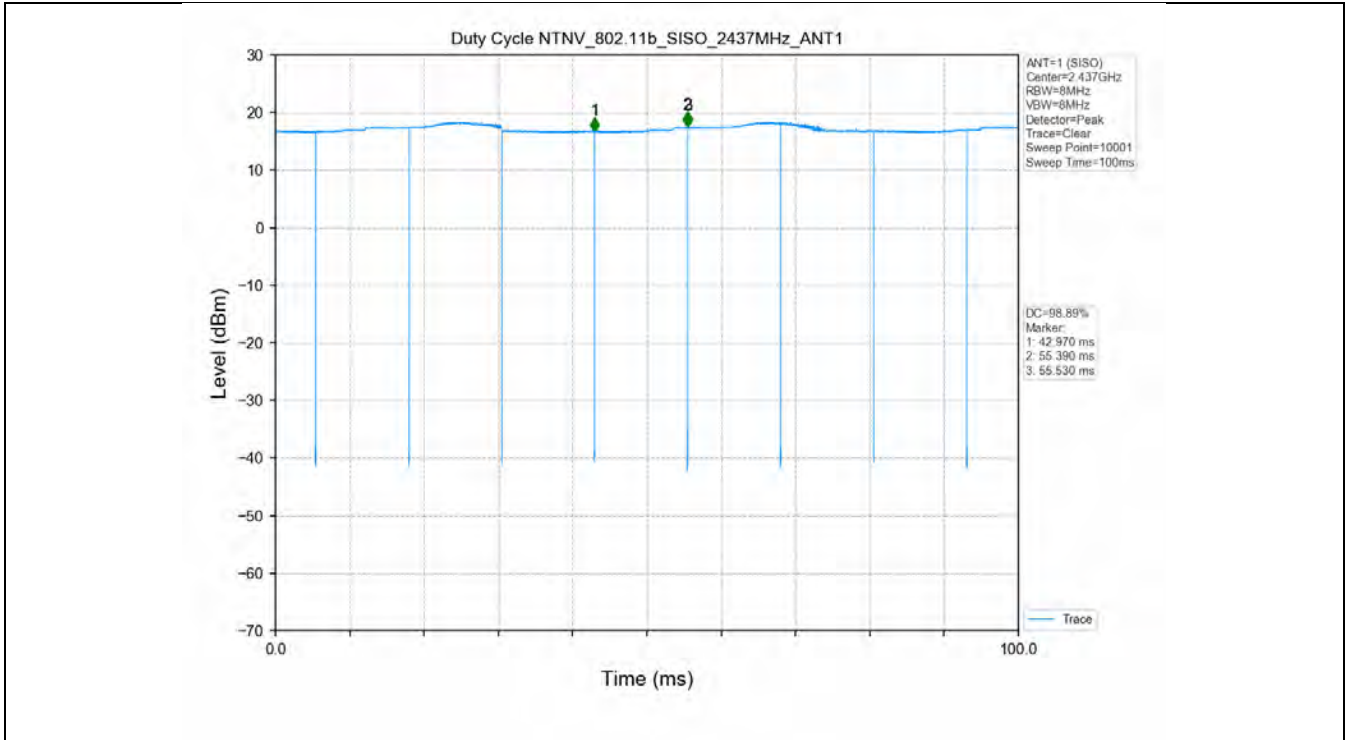
1. Duty Cycle

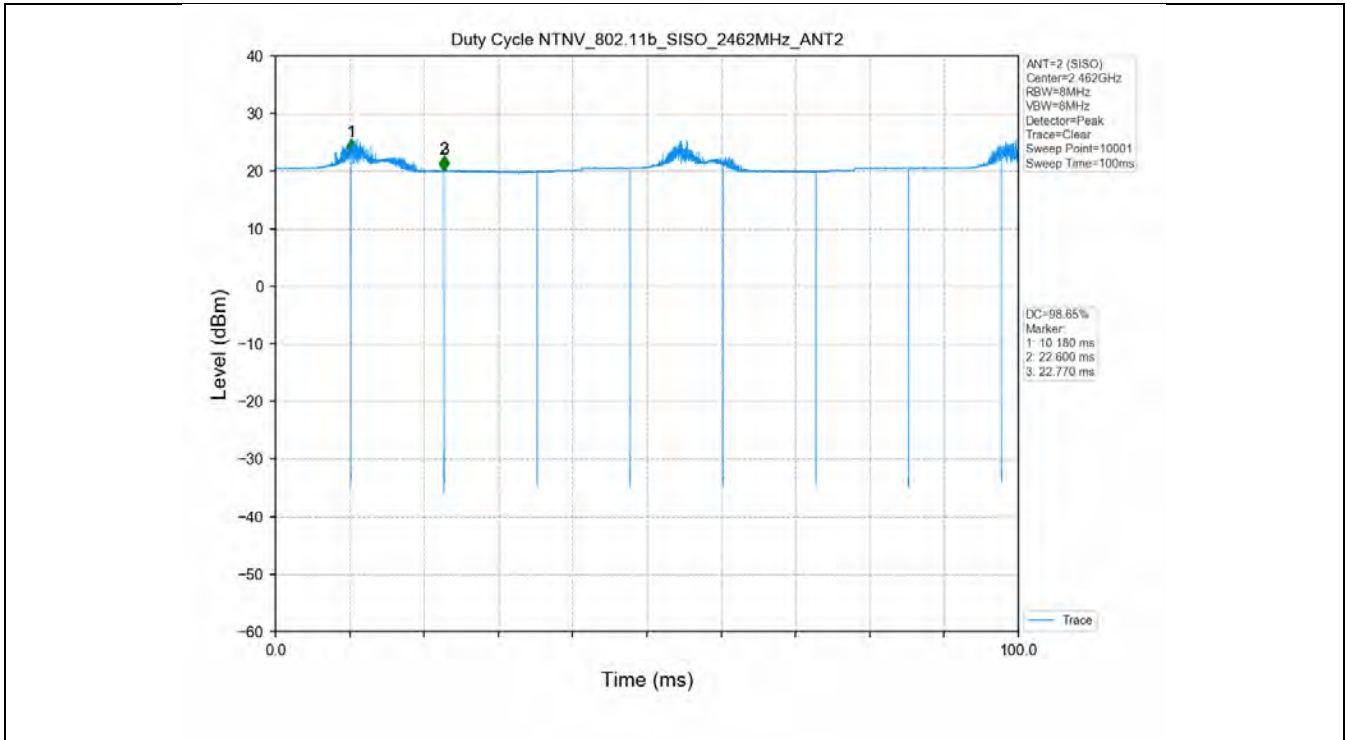
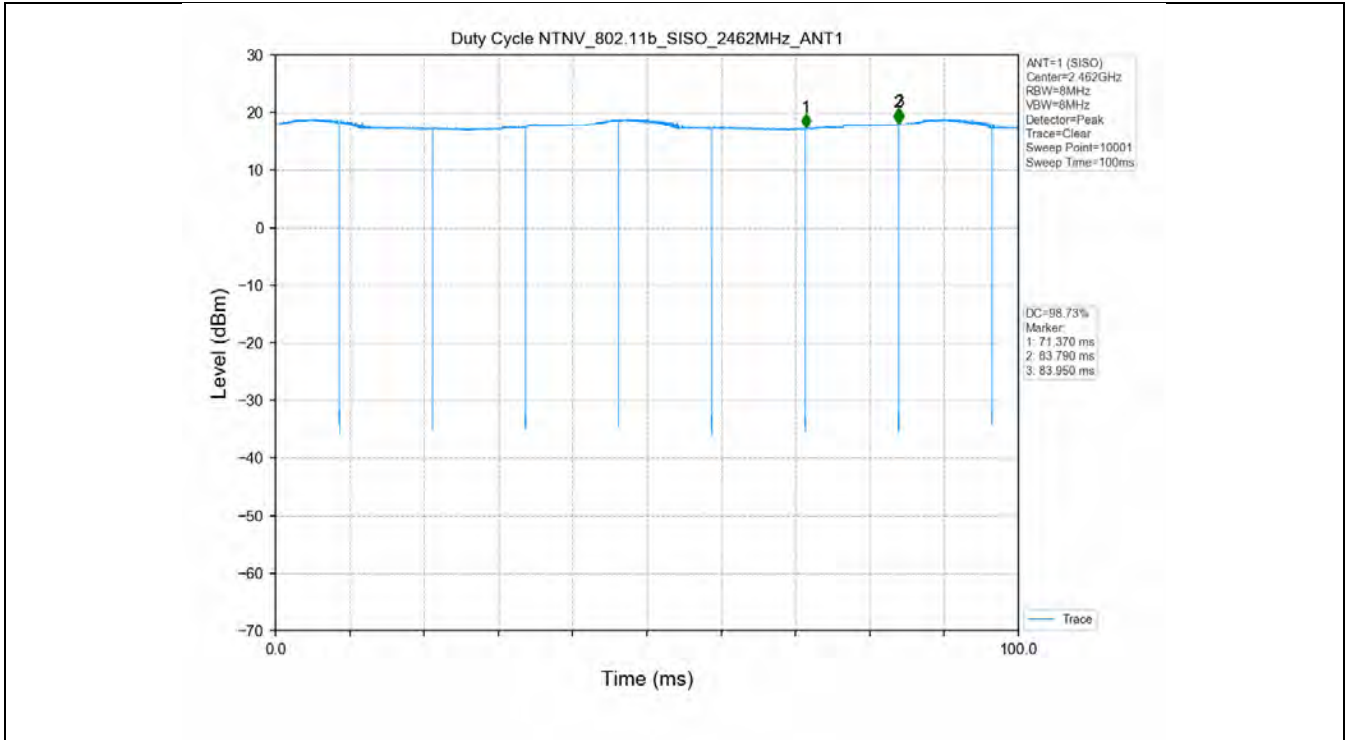
1.1 Test Result

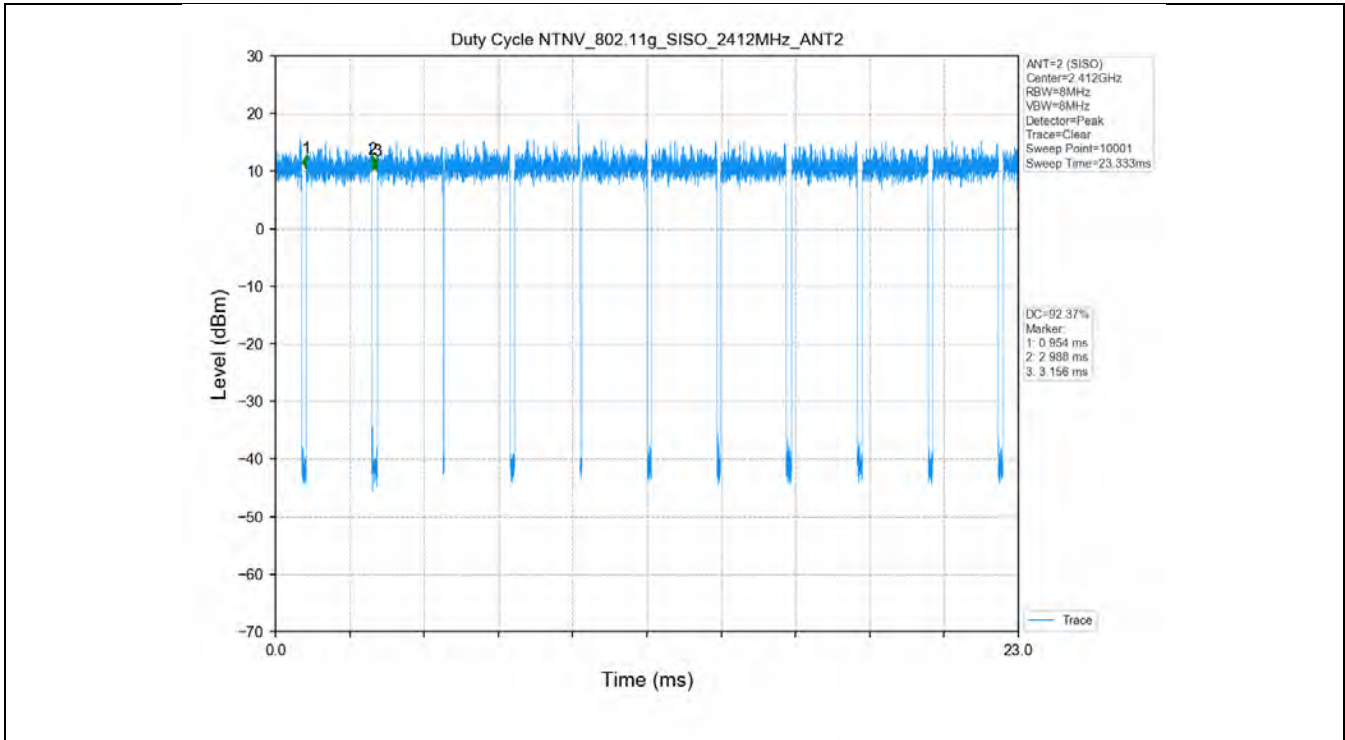
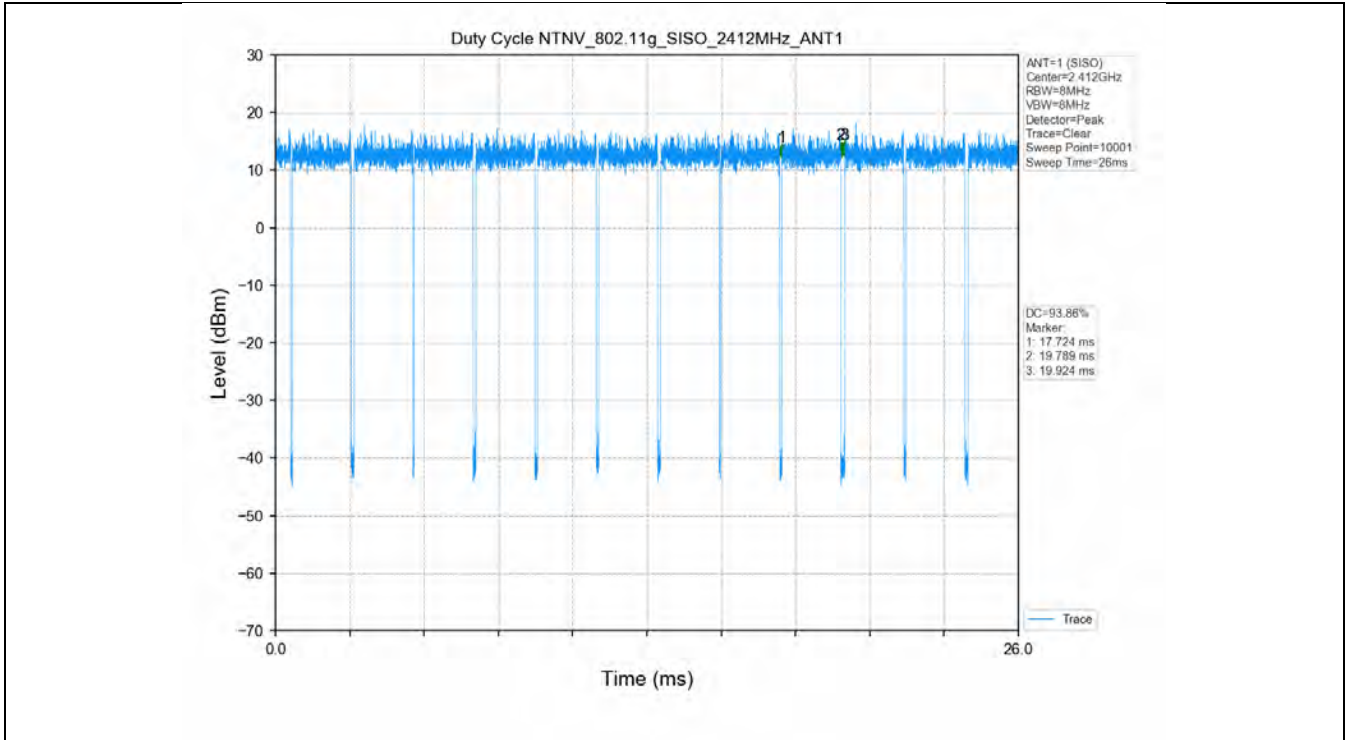
Test Mode	Channel Frequency(MHz)	TX Type	ANT No.	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
802.11b	2412	SISO	1	12.420	12.590	98.65	0.06
			2	12.410	12.580	98.65	0.06
	2437	SISO	1	12.420	12.560	98.89	0.05
			2	12.410	12.570	98.73	0.06
	2462	SISO	1	12.420	12.580	98.73	0.06
			2	12.420	12.590	98.65	0.06
802.11g	2412	SISO	1	2.065	2.200	93.86	0.28
			2	2.034	2.202	92.37	0.34
	2437	SISO	1	2.063	2.226	92.68	0.33
			2	2.063	2.234	92.35	0.35
	2462	SISO	1	2.064	2.235	92.35	0.35
			2	2.041	2.210	92.35	0.35
802.11n(HT20)	2412	MIMO	1	1.890	2.022	93.47	0.29
			2	1.890	2.058	91.84	0.37
	2437	MIMO	1	1.890	2.056	91.93	0.37
			2	1.887	2.039	92.55	0.34
	2462	MIMO	1	1.895	2.035	93.12	0.31
			2	1.888	2.056	91.83	0.37
802.11n(HT40)	2422	MIMO	1	0.944	1.097	86.05	0.65
			2	0.916	1.072	85.45	0.68
	2437	MIMO	1	0.916	1.046	87.57	0.58
			2	0.919	1.076	85.41	0.68
	2452	MIMO	1	0.920	1.085	84.79	0.72
			2	0.943	1.104	85.42	0.68

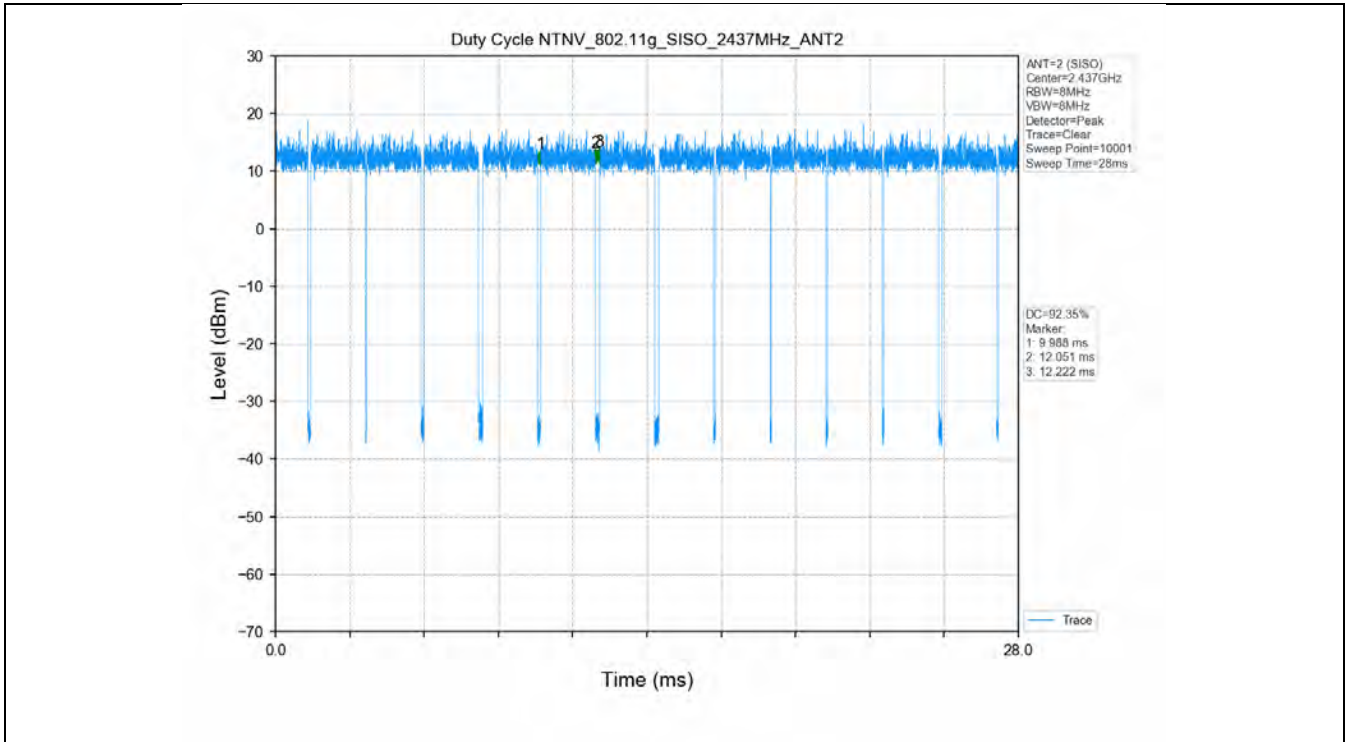
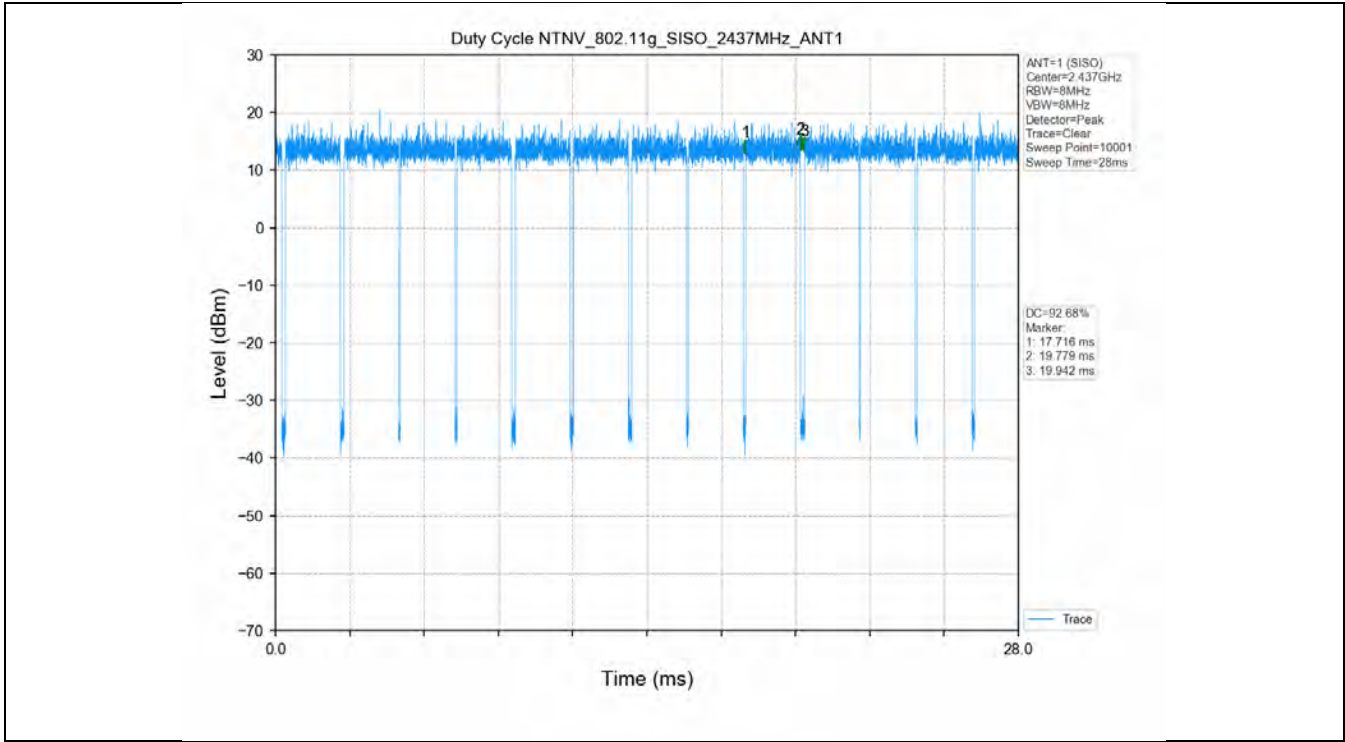
1.2 Test Graph

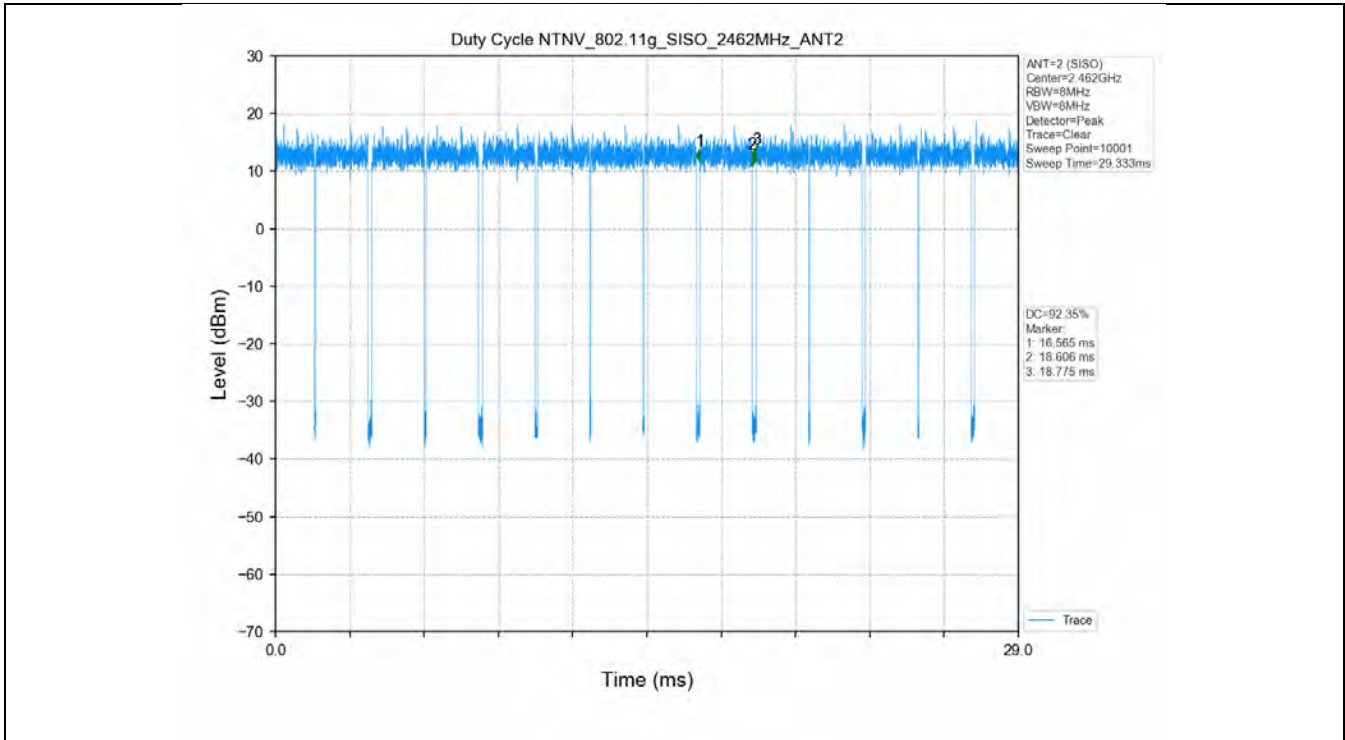
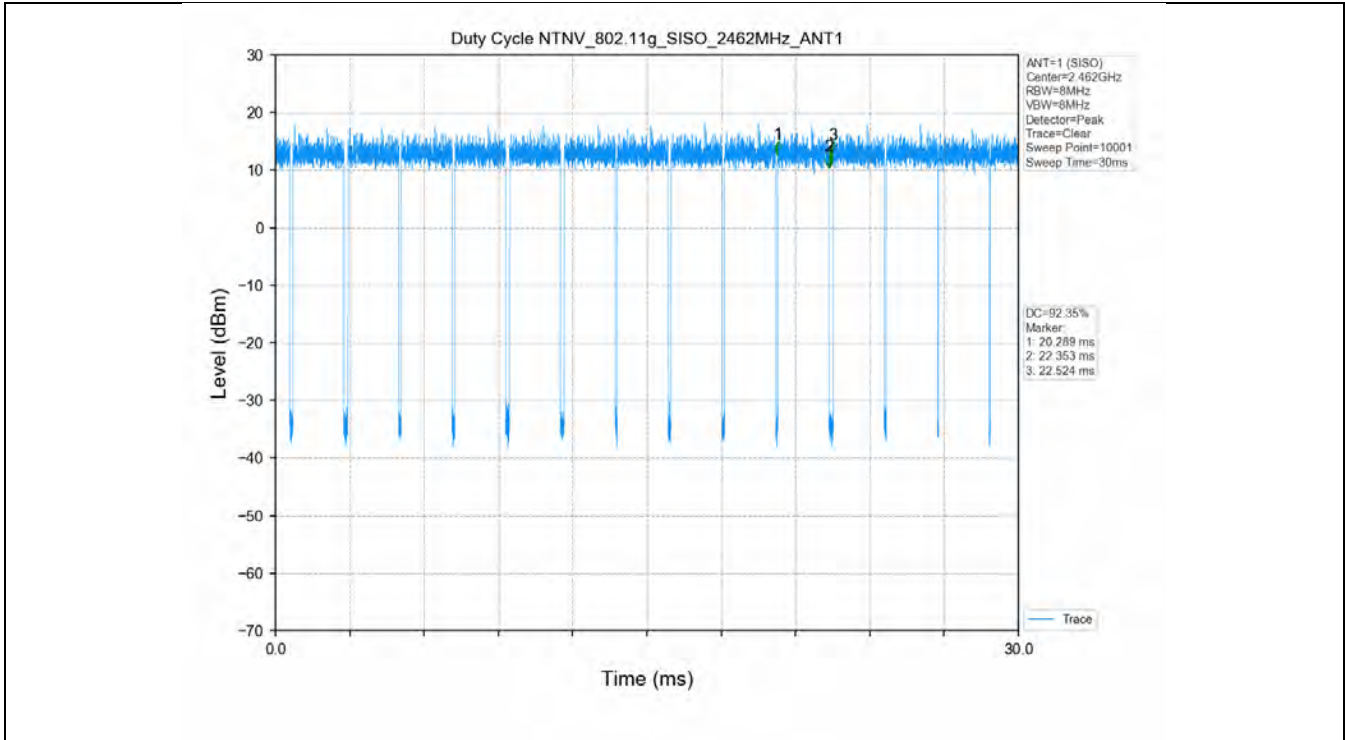


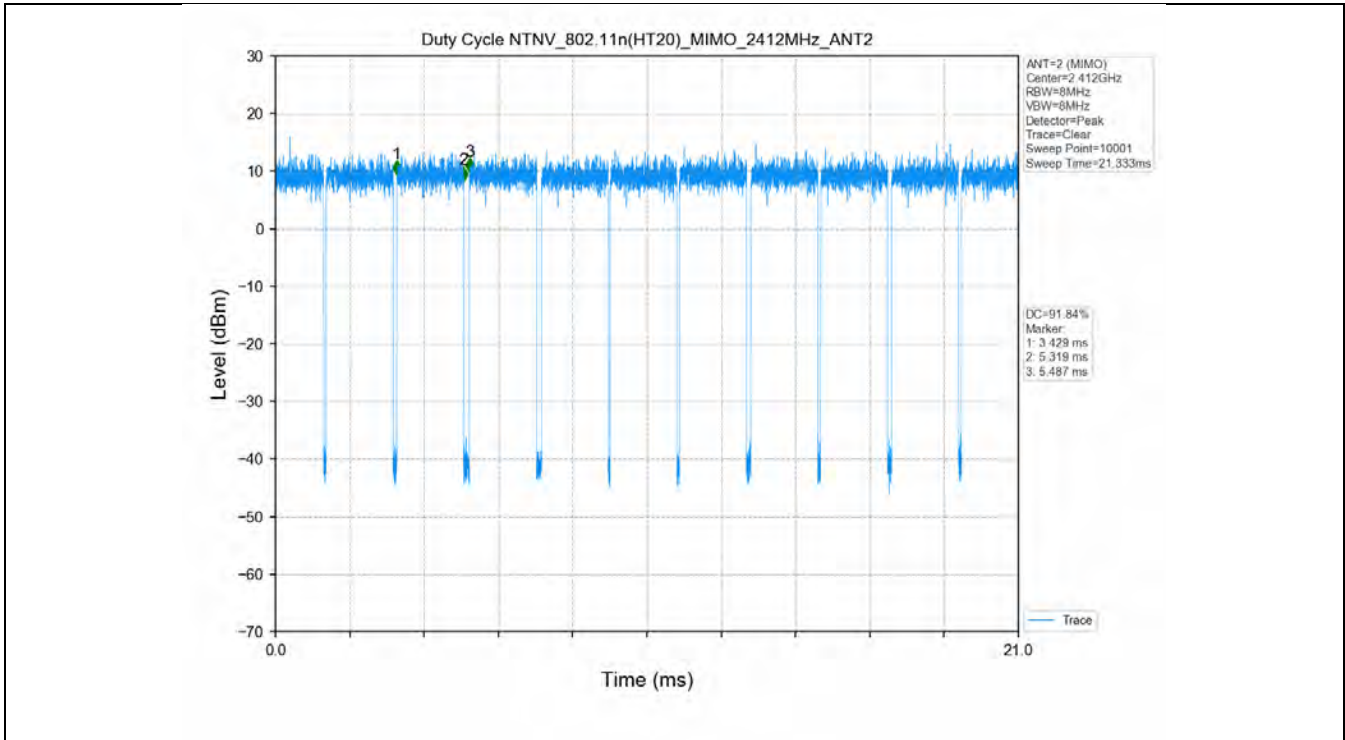
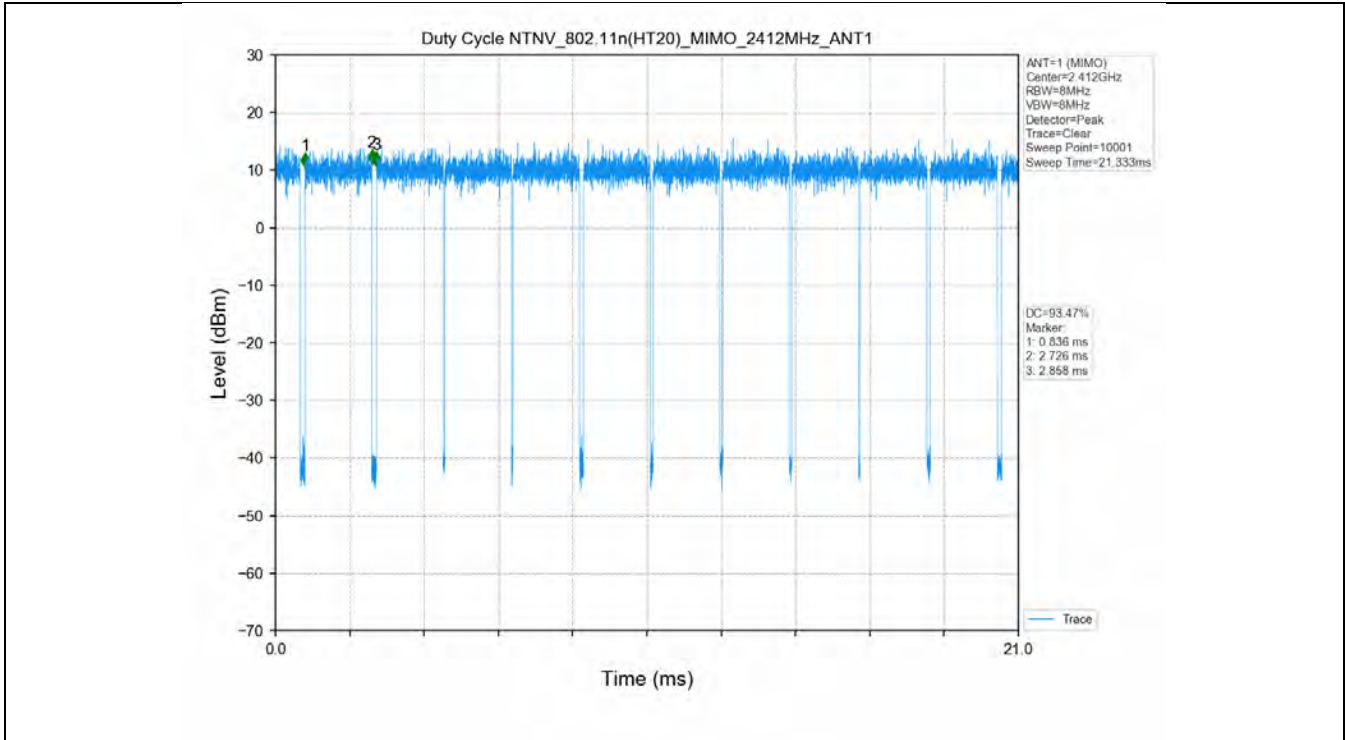


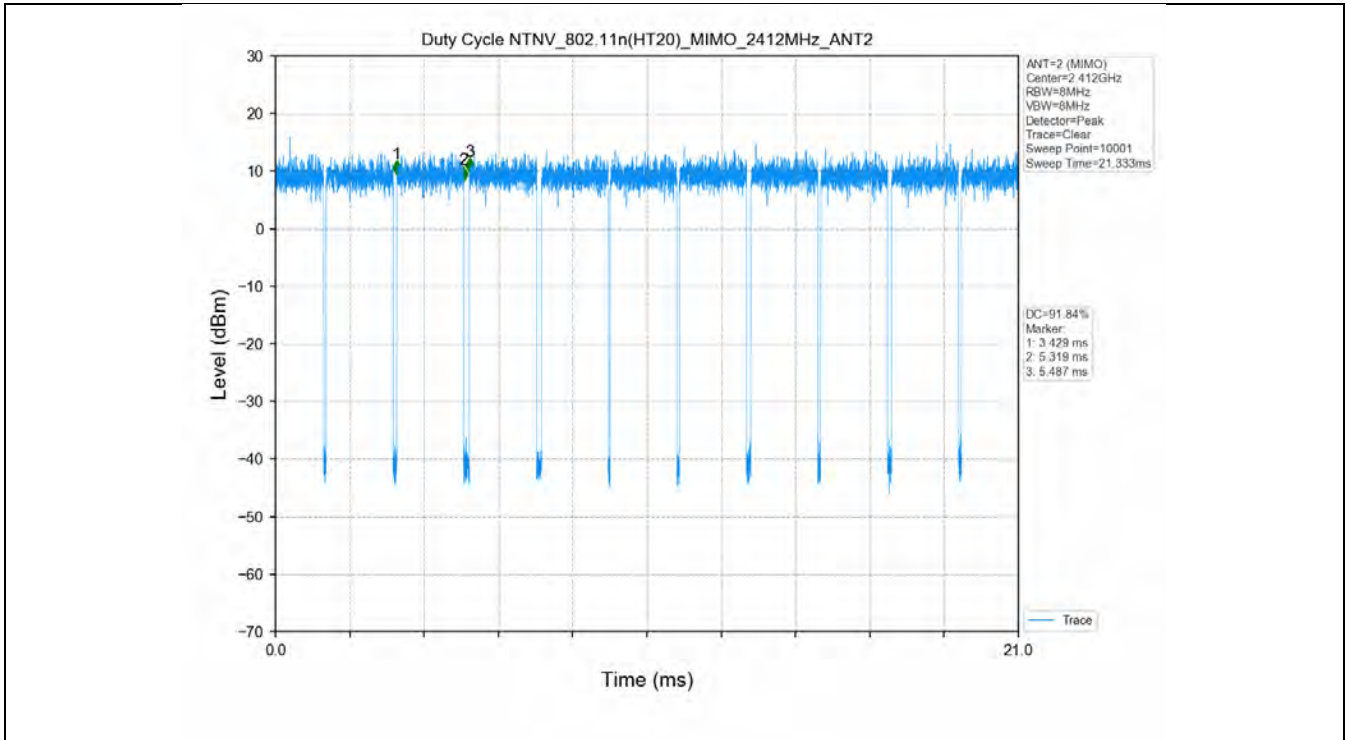
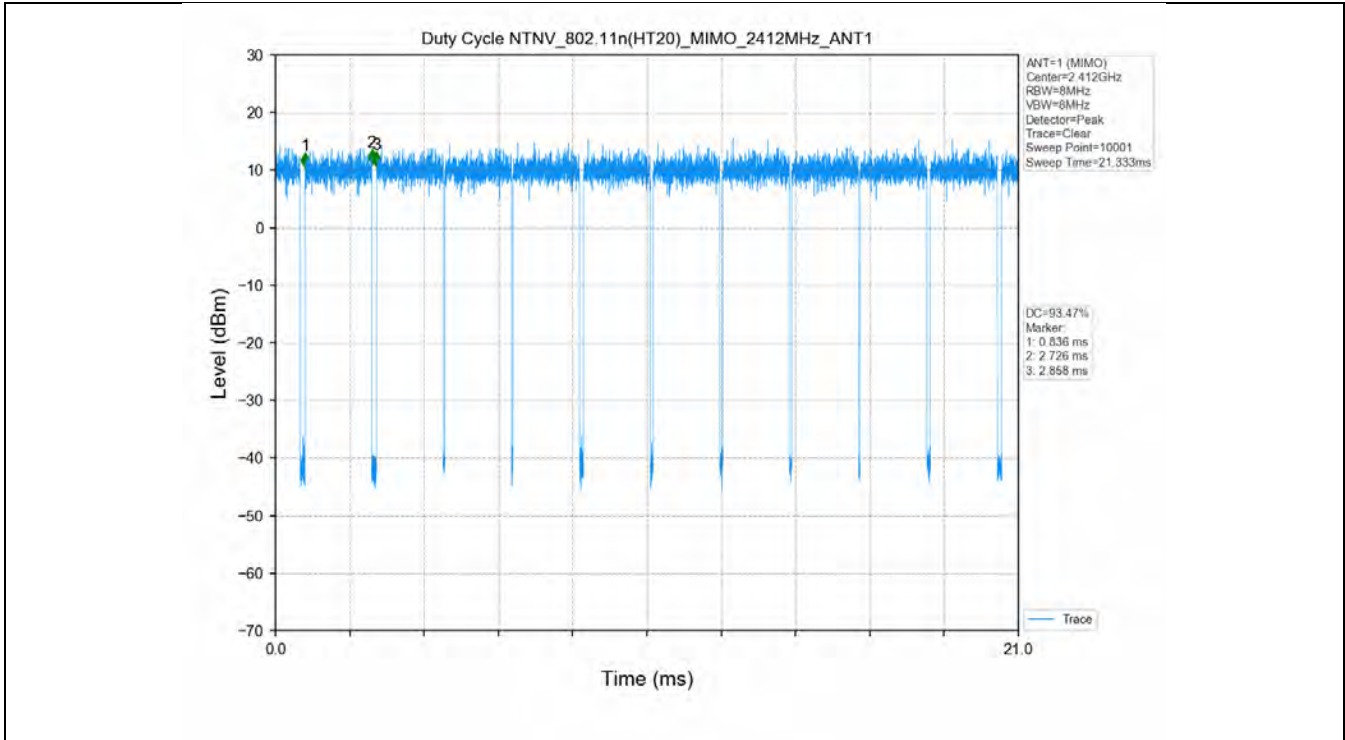


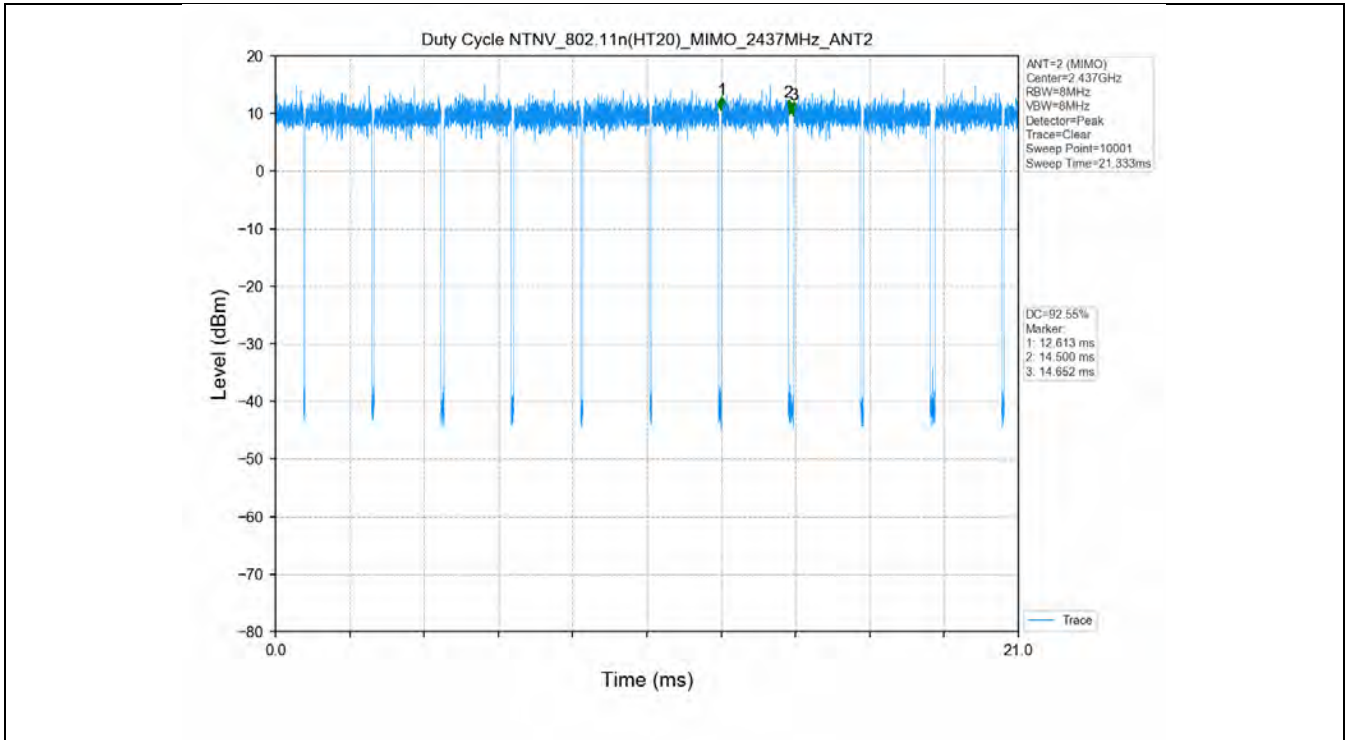
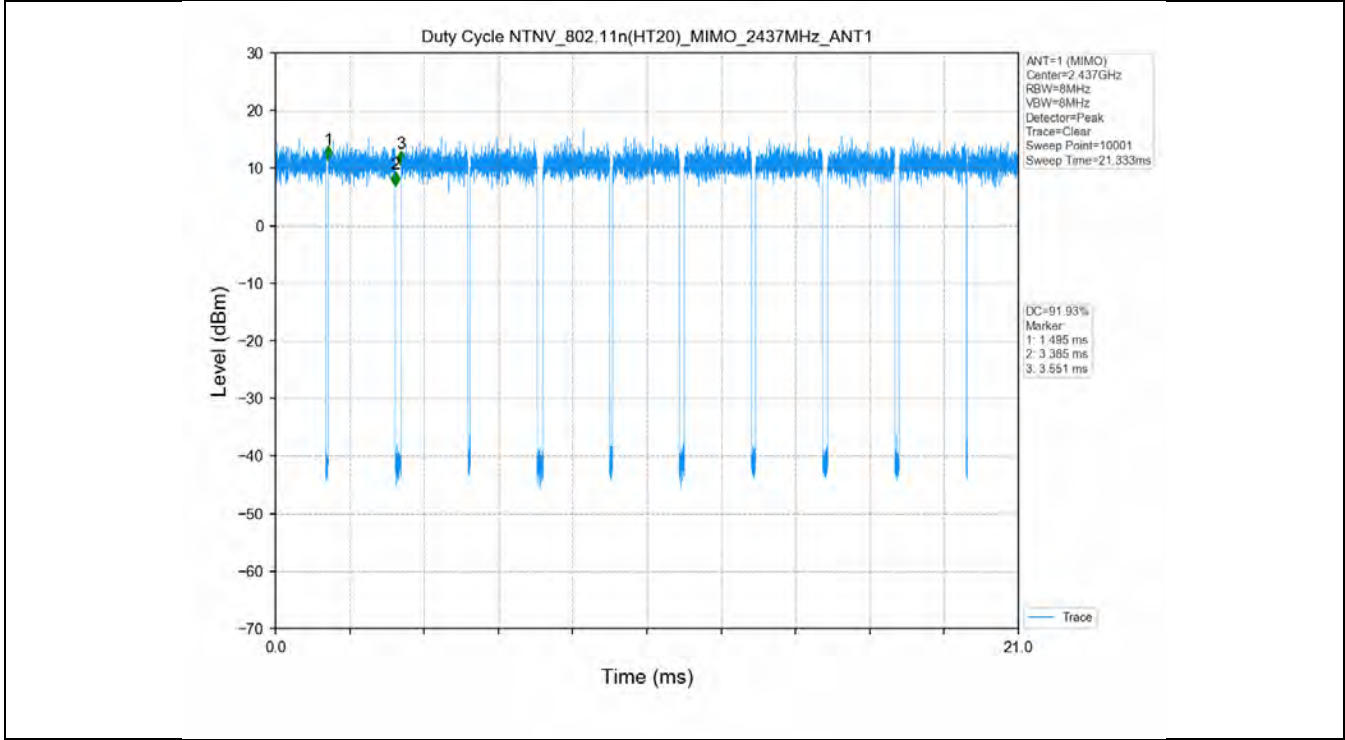


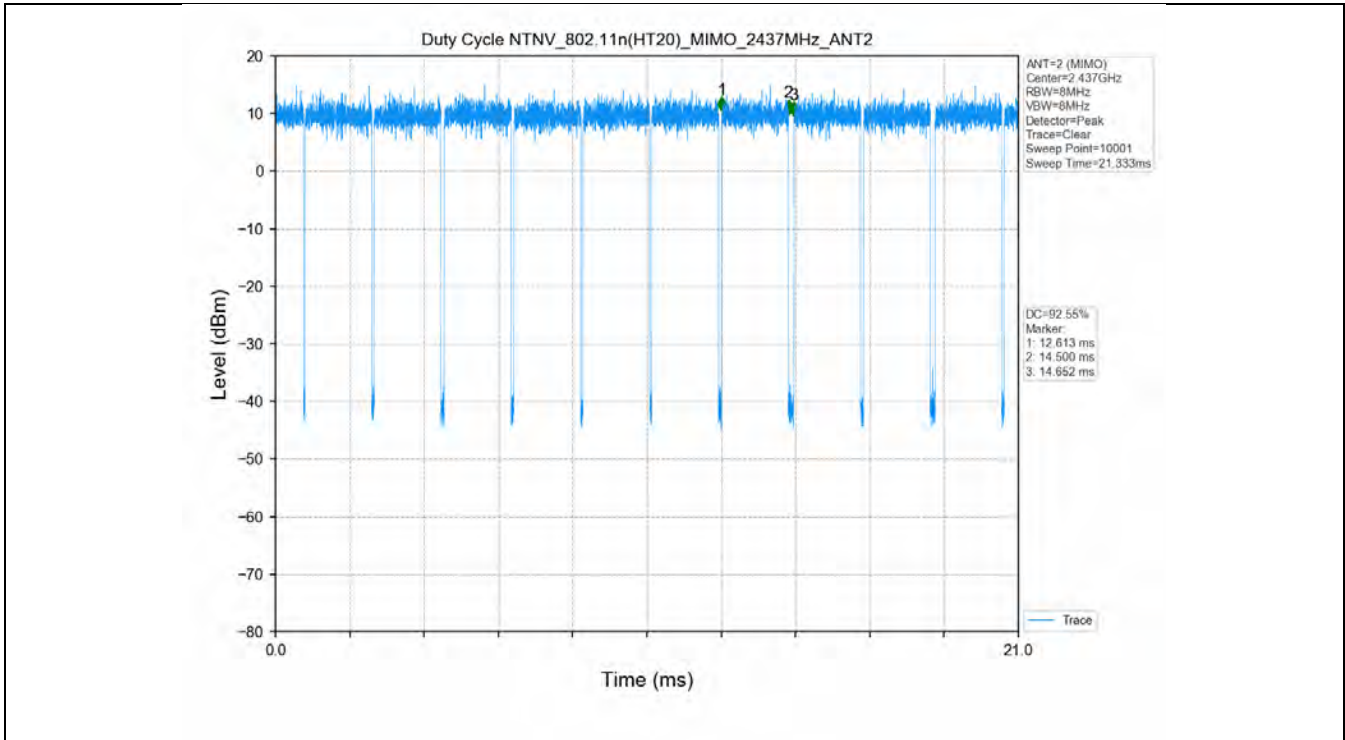
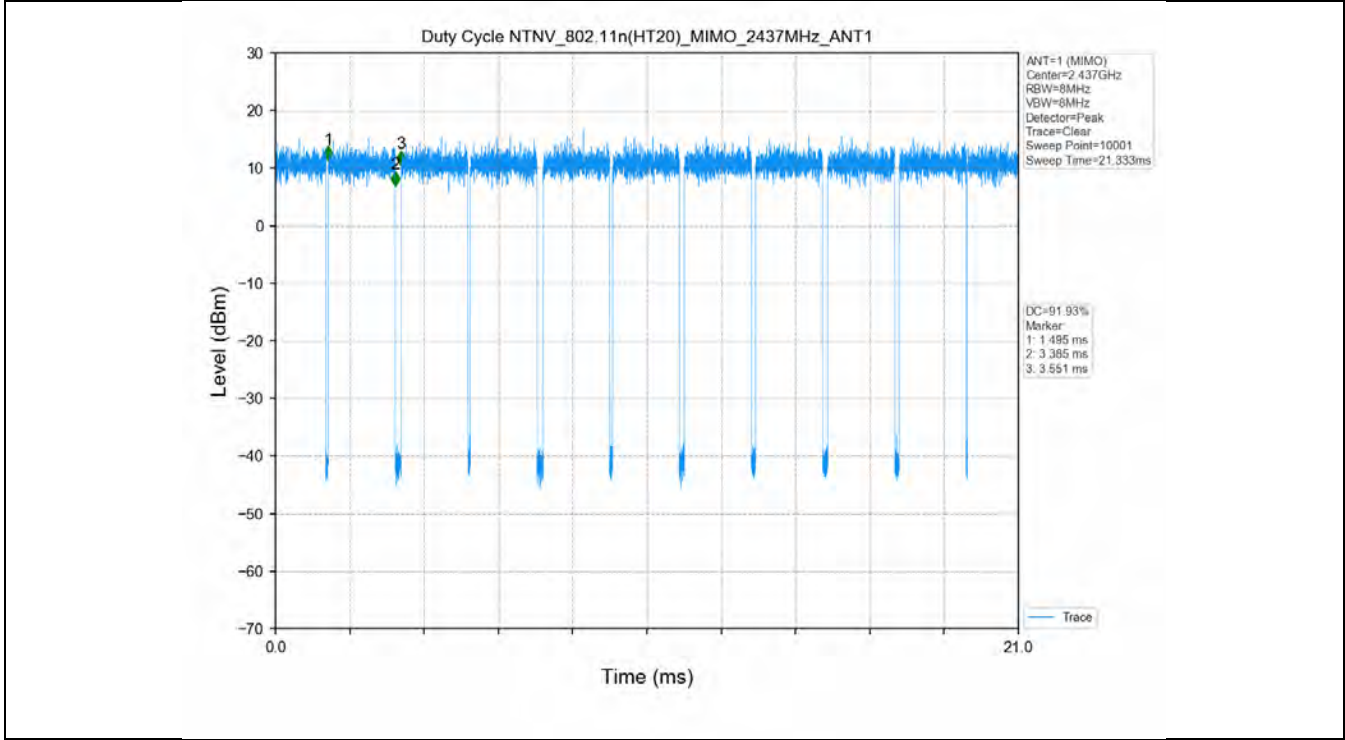


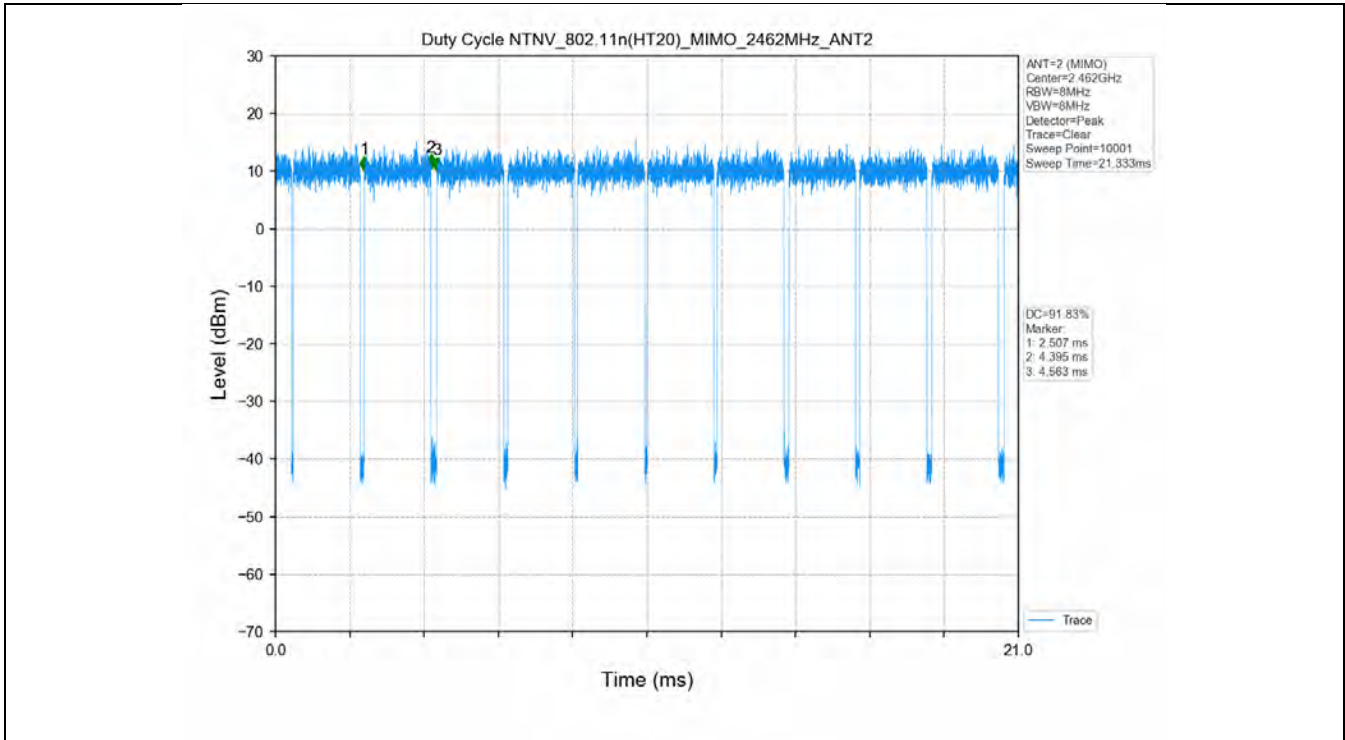
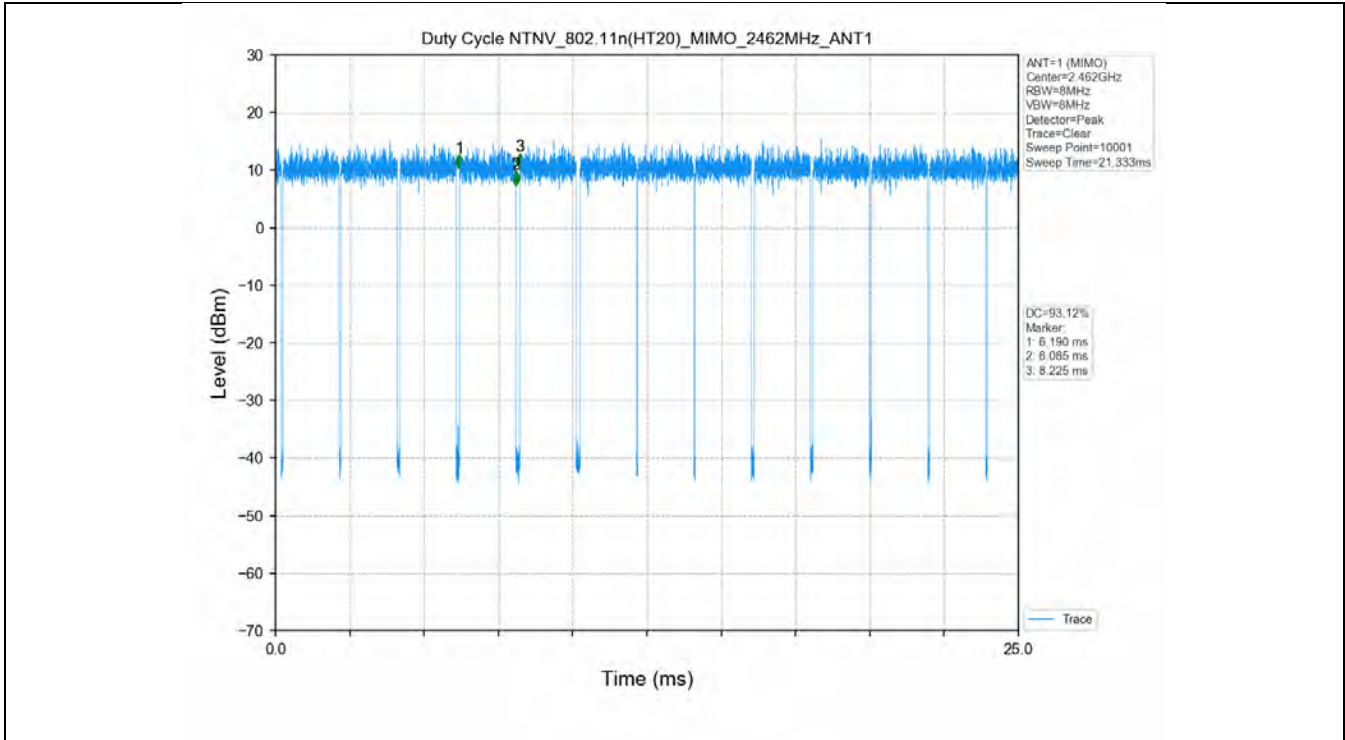


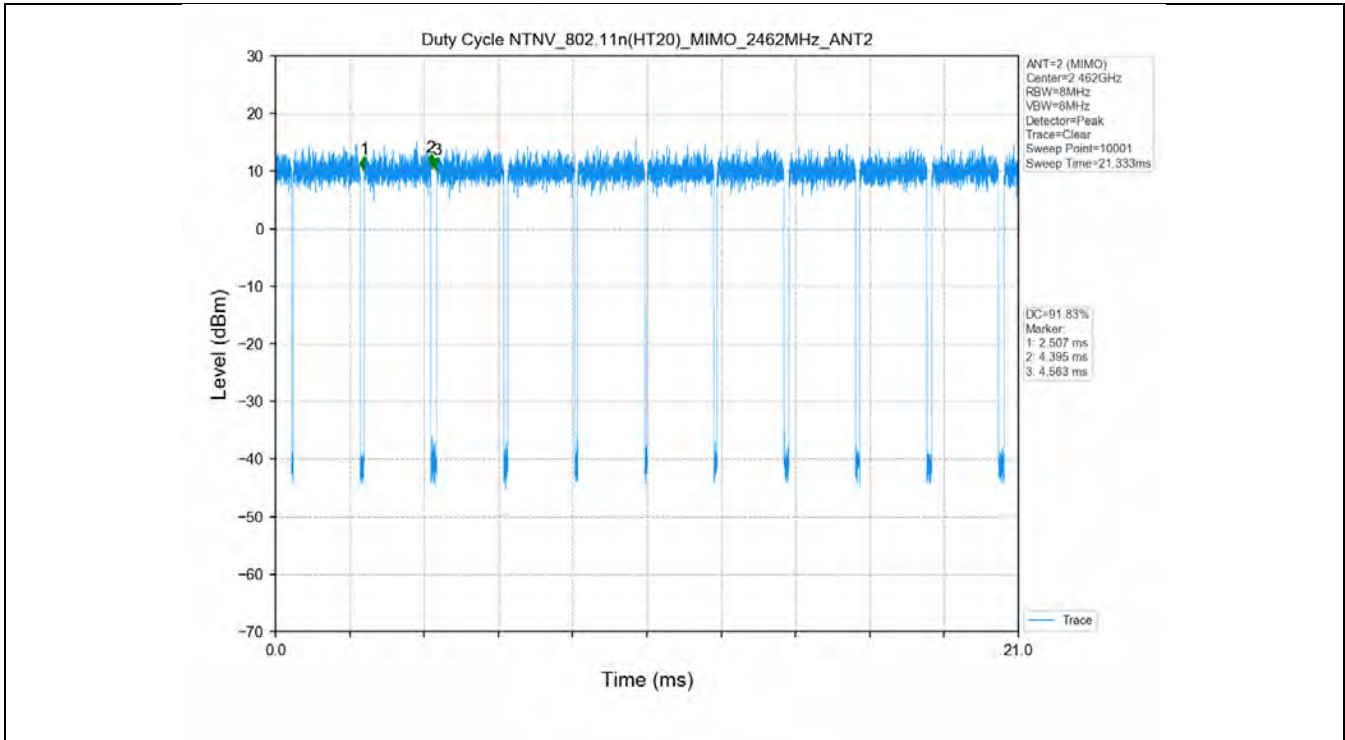
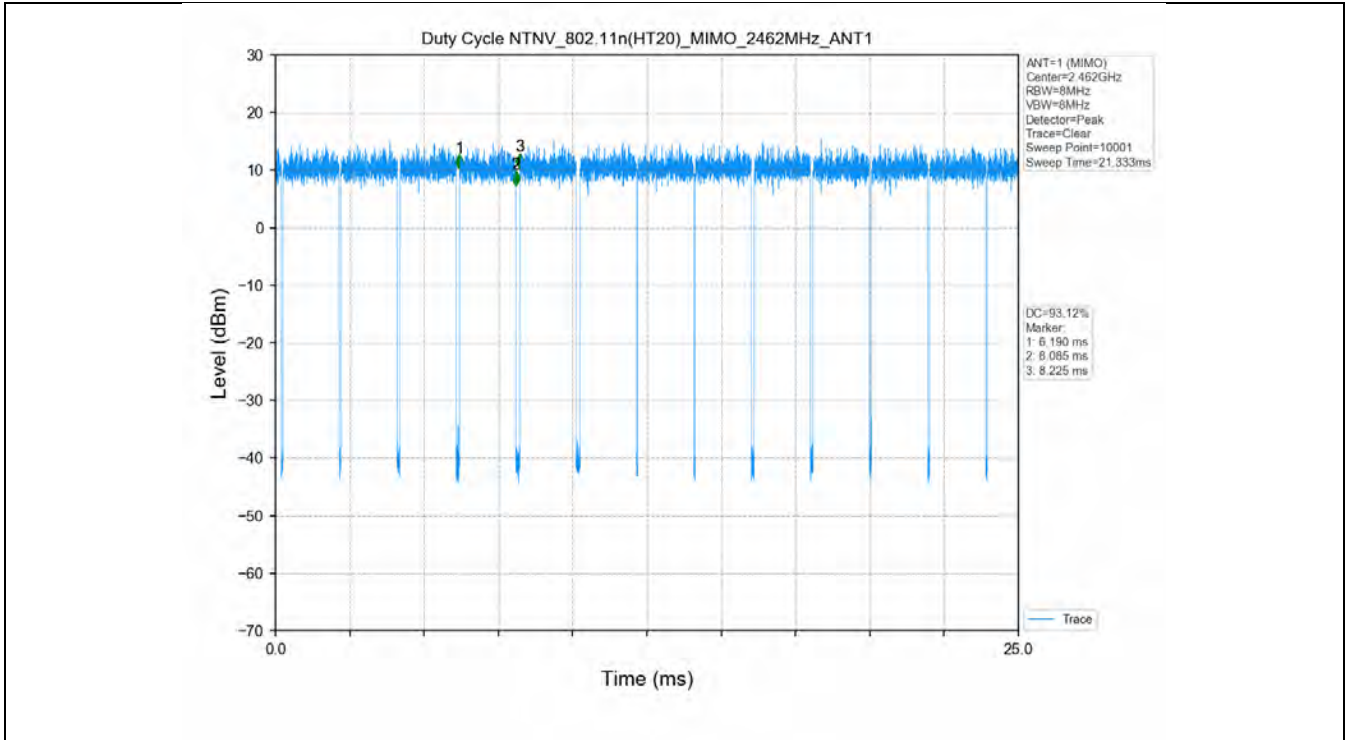


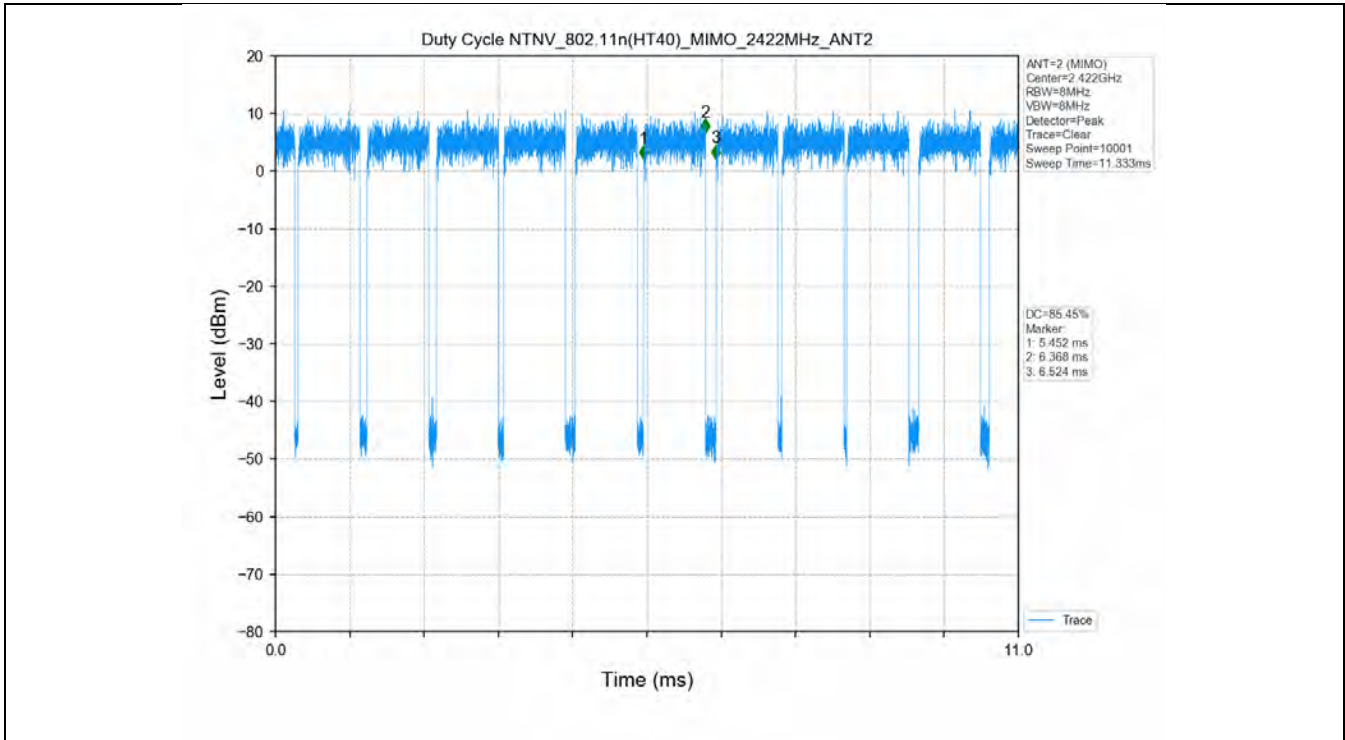
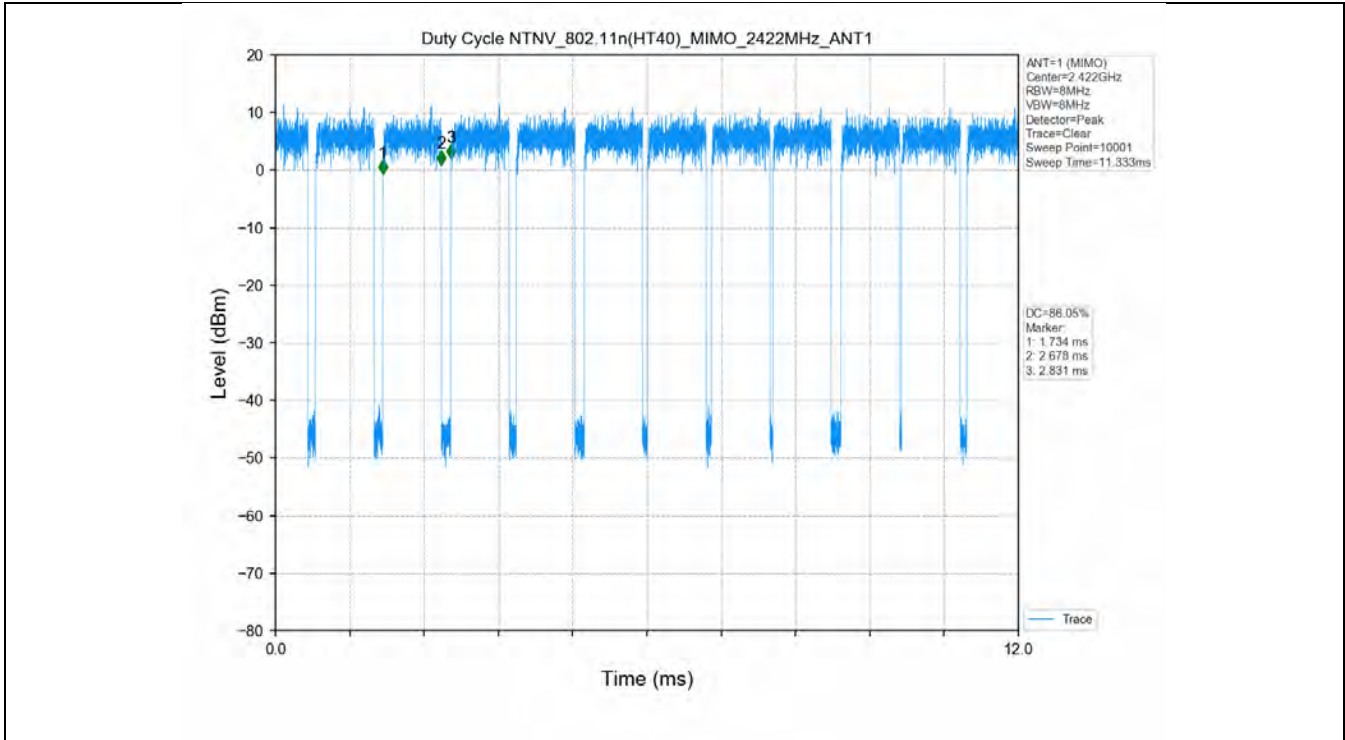


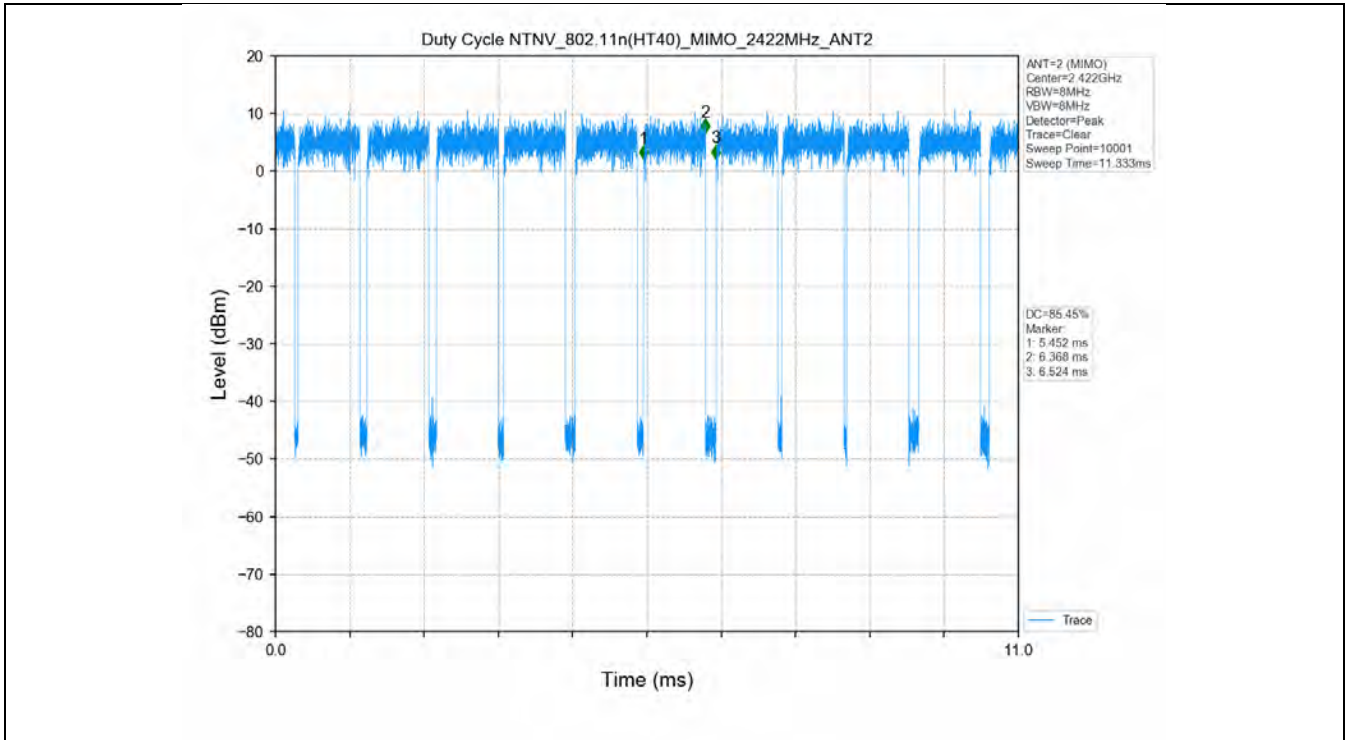
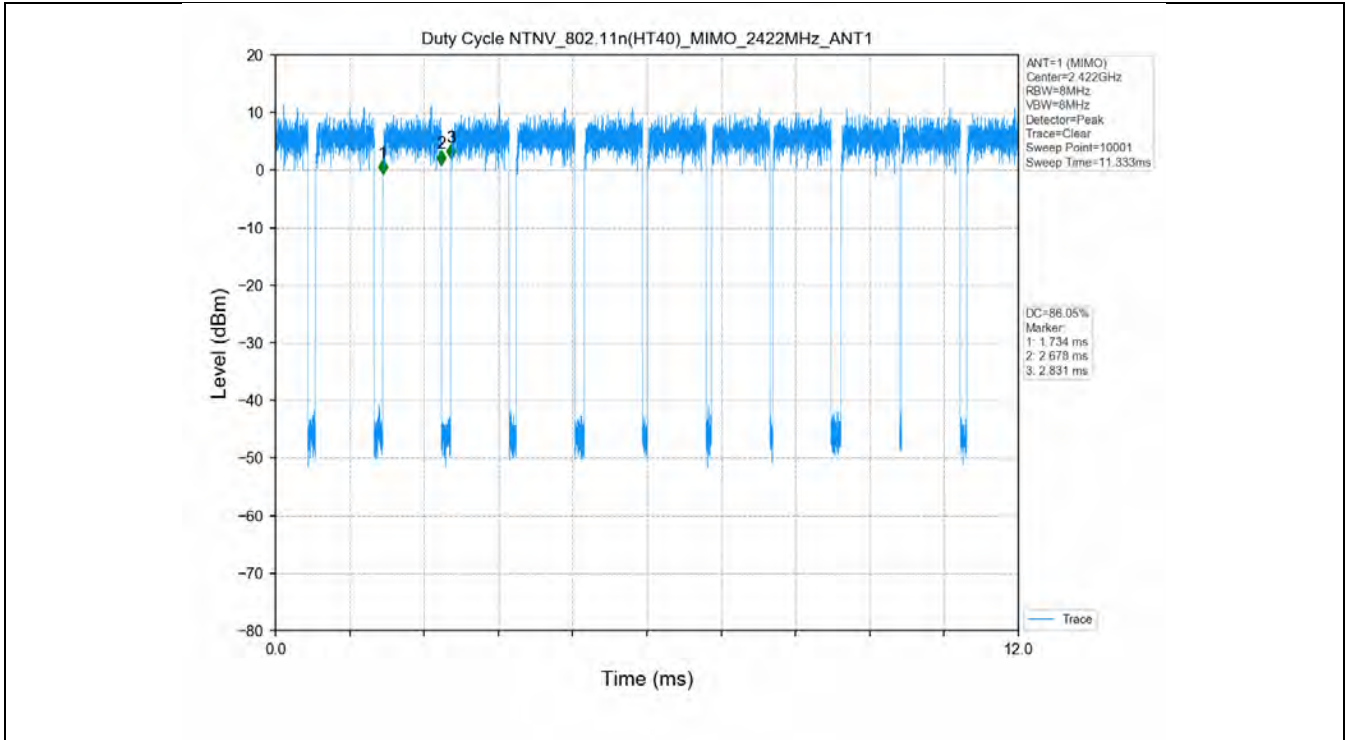


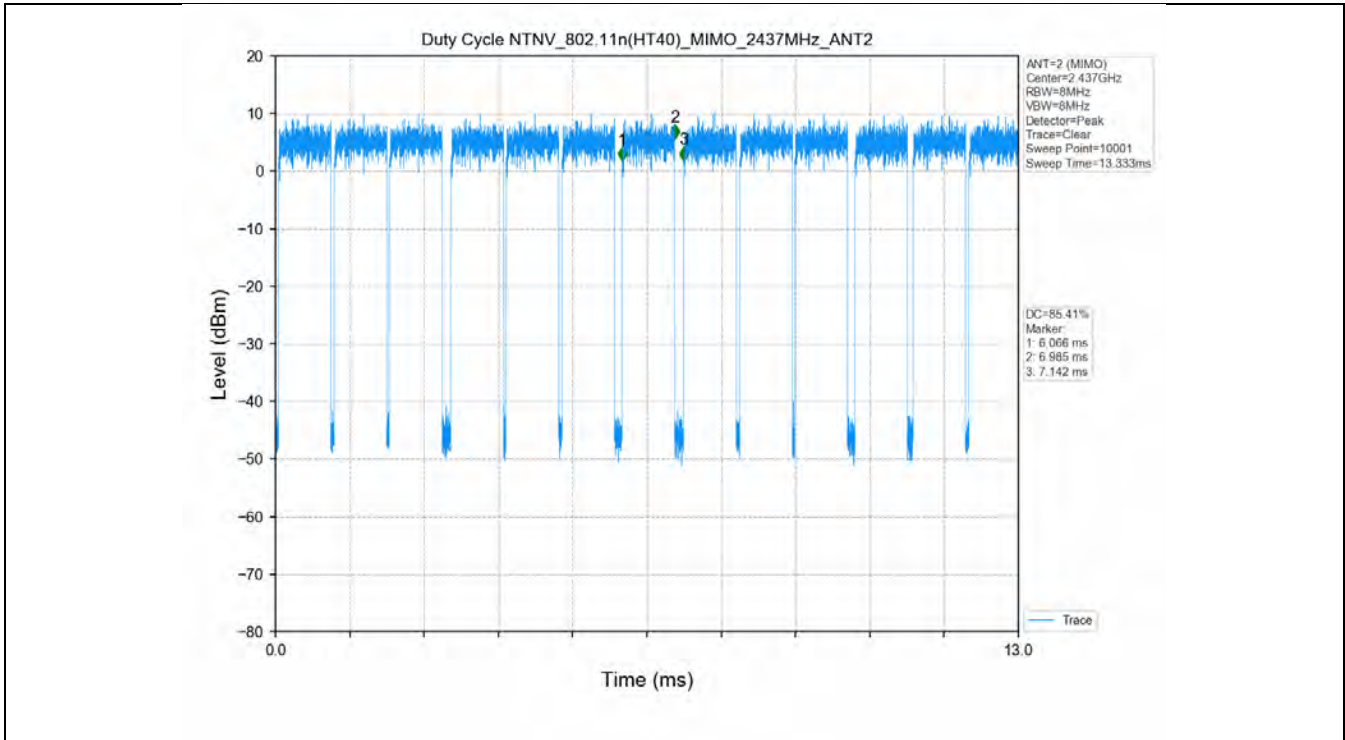
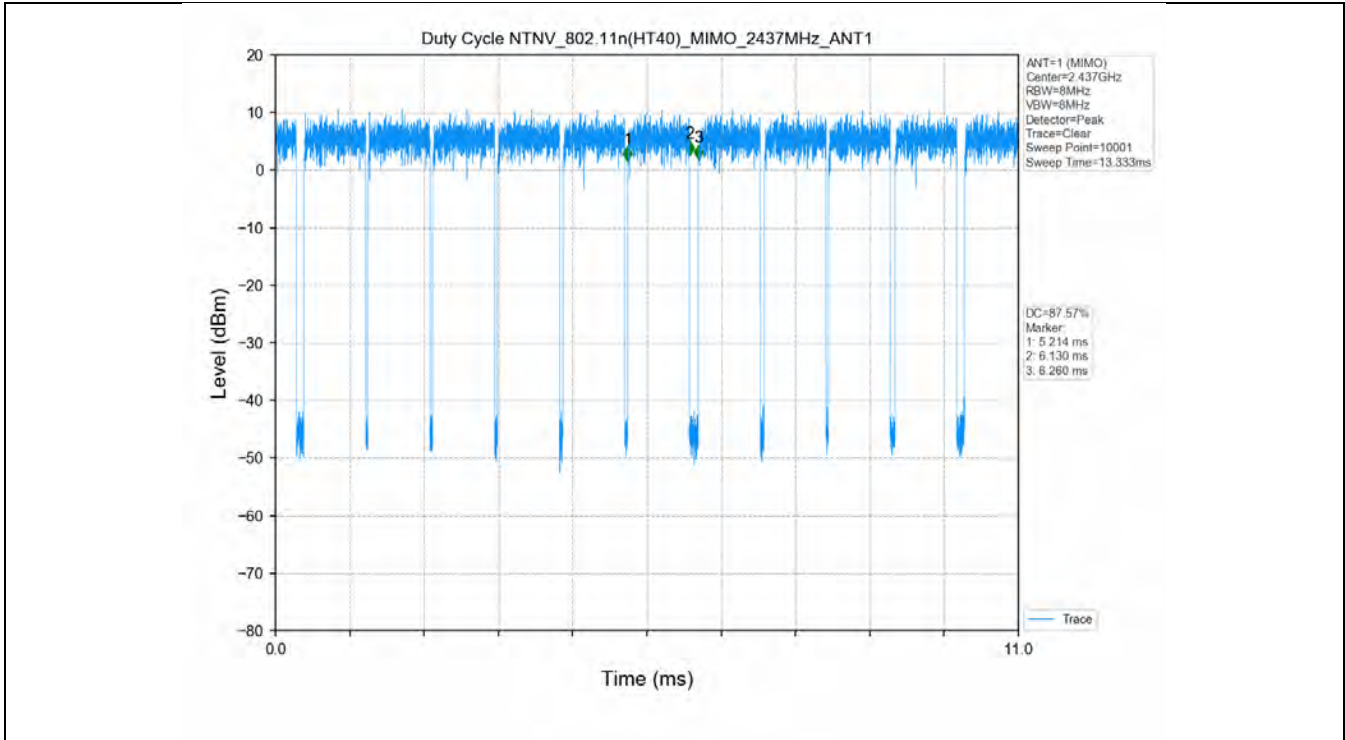


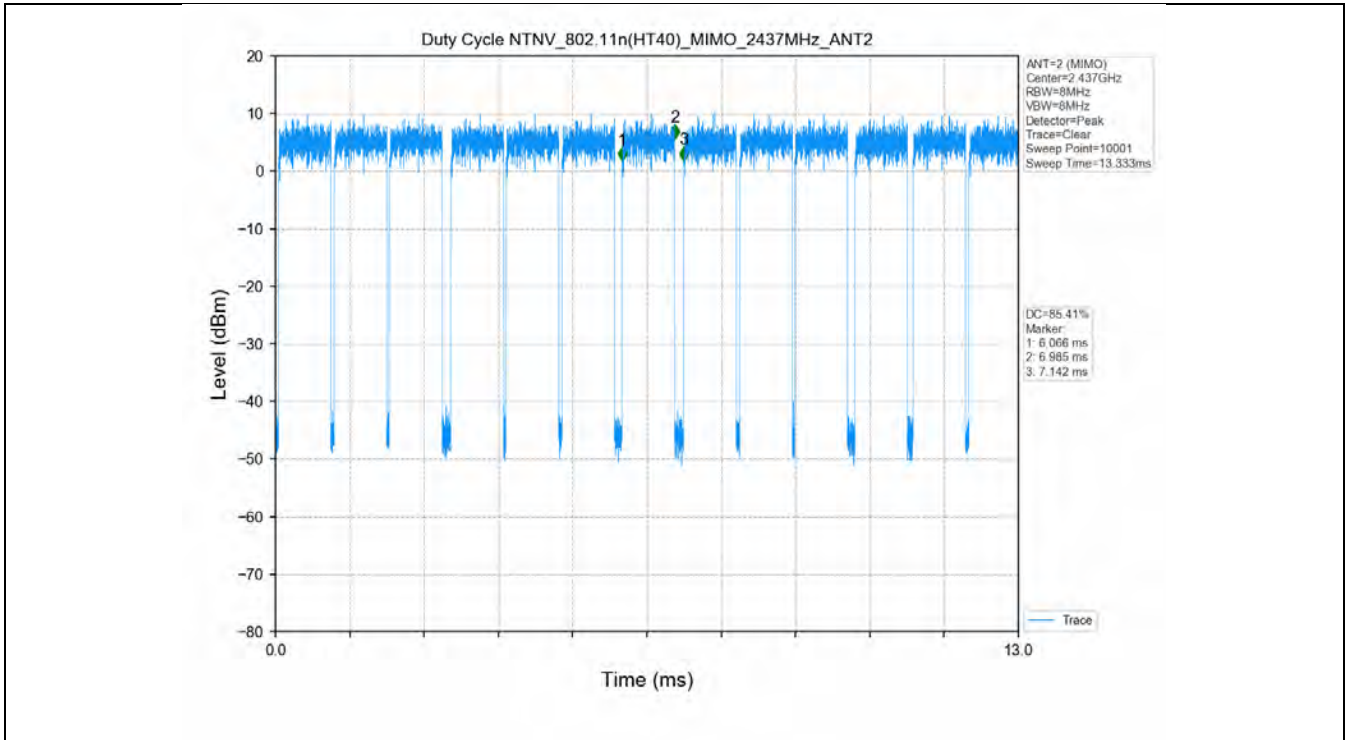
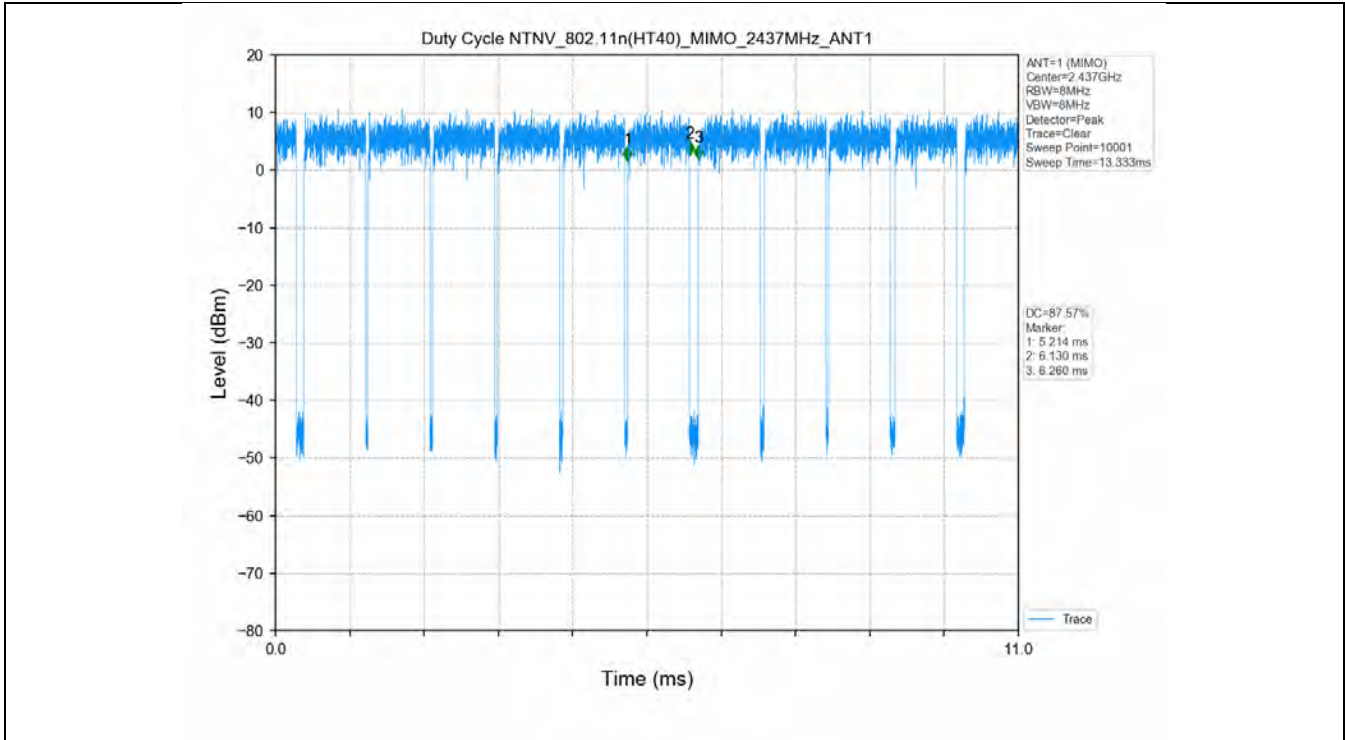


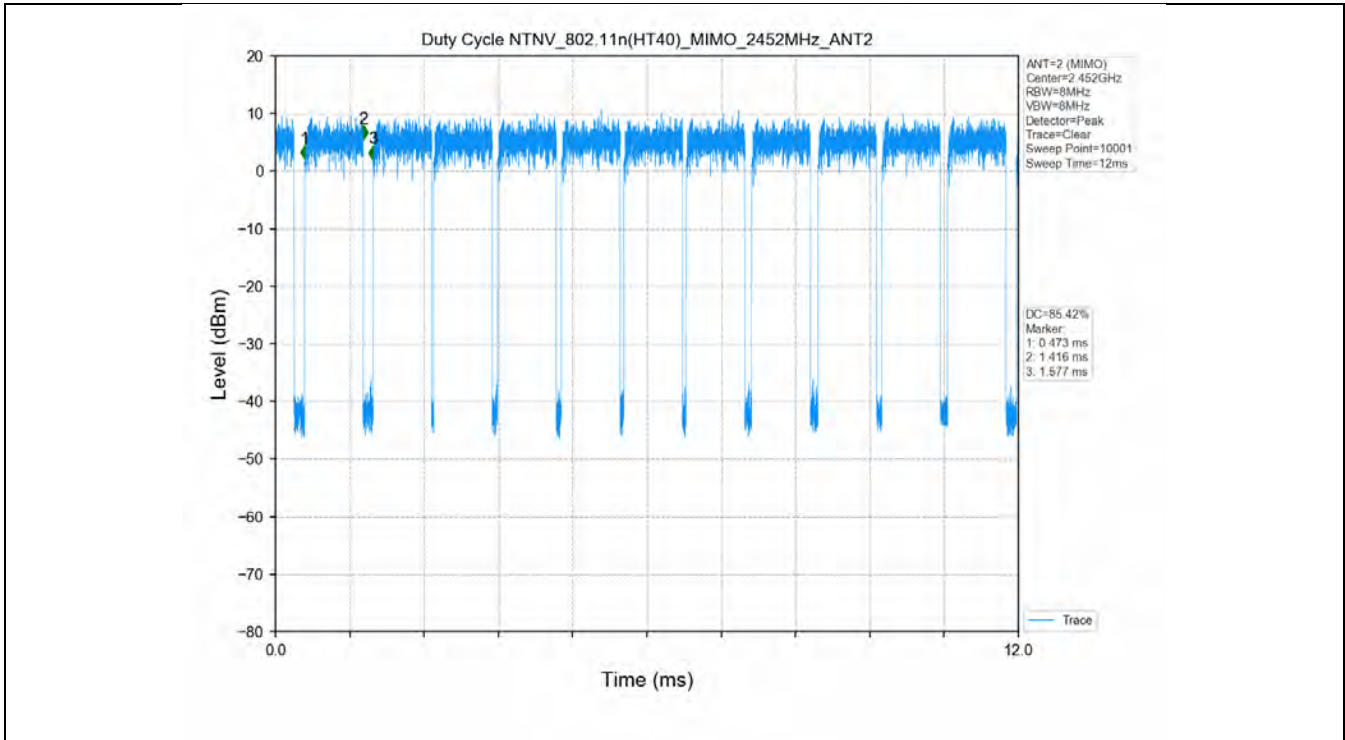
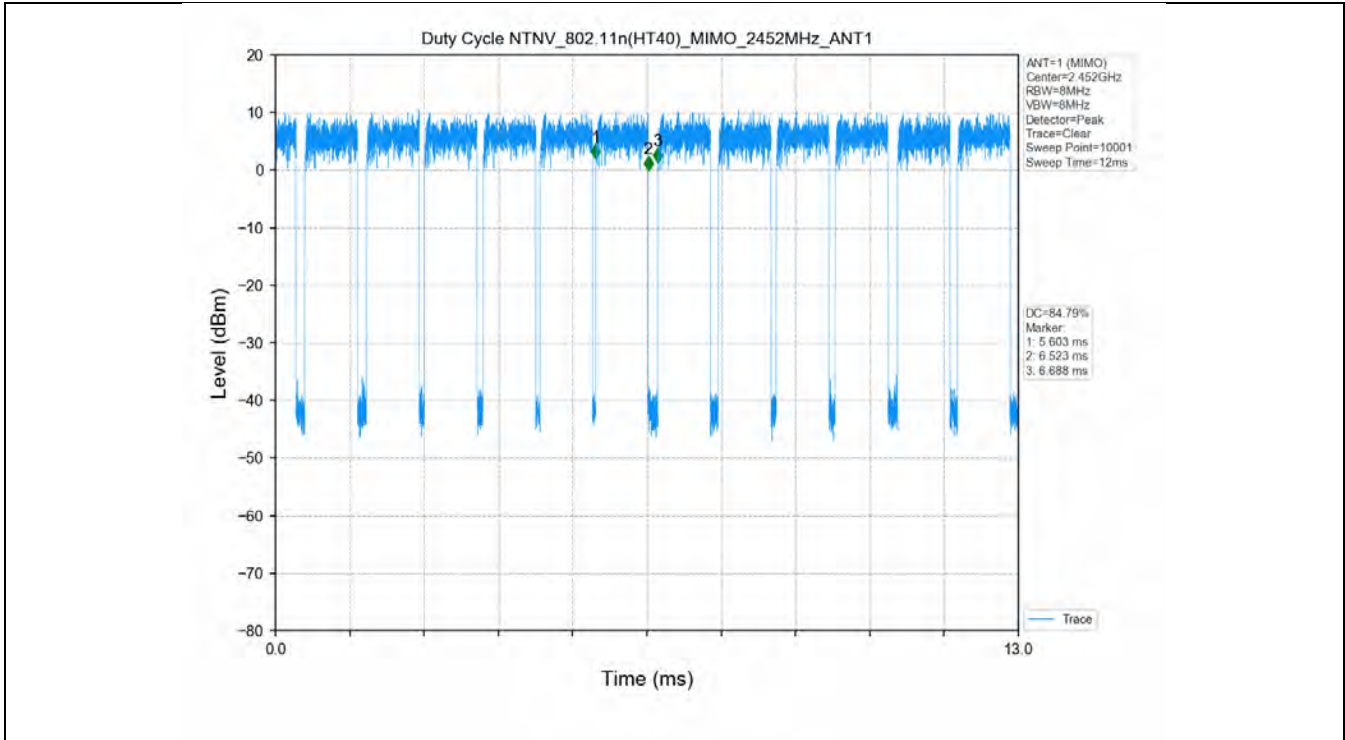


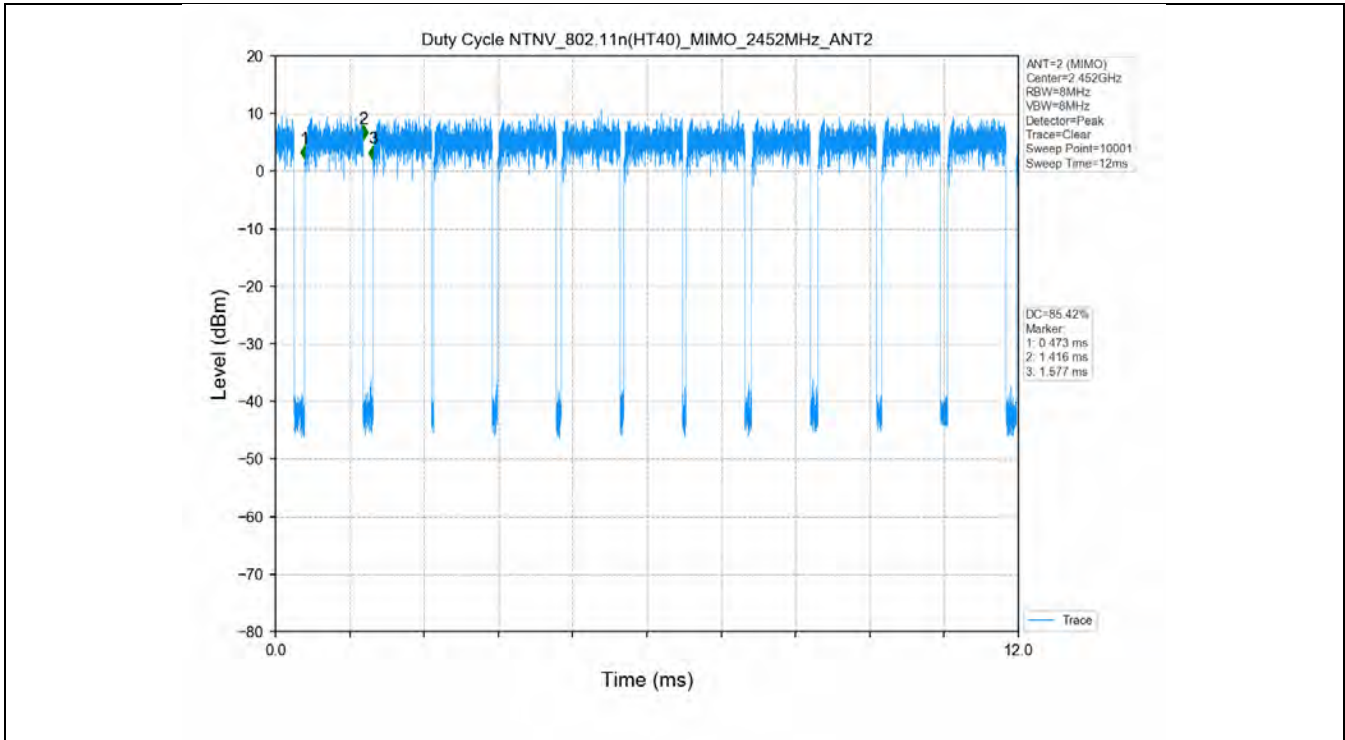
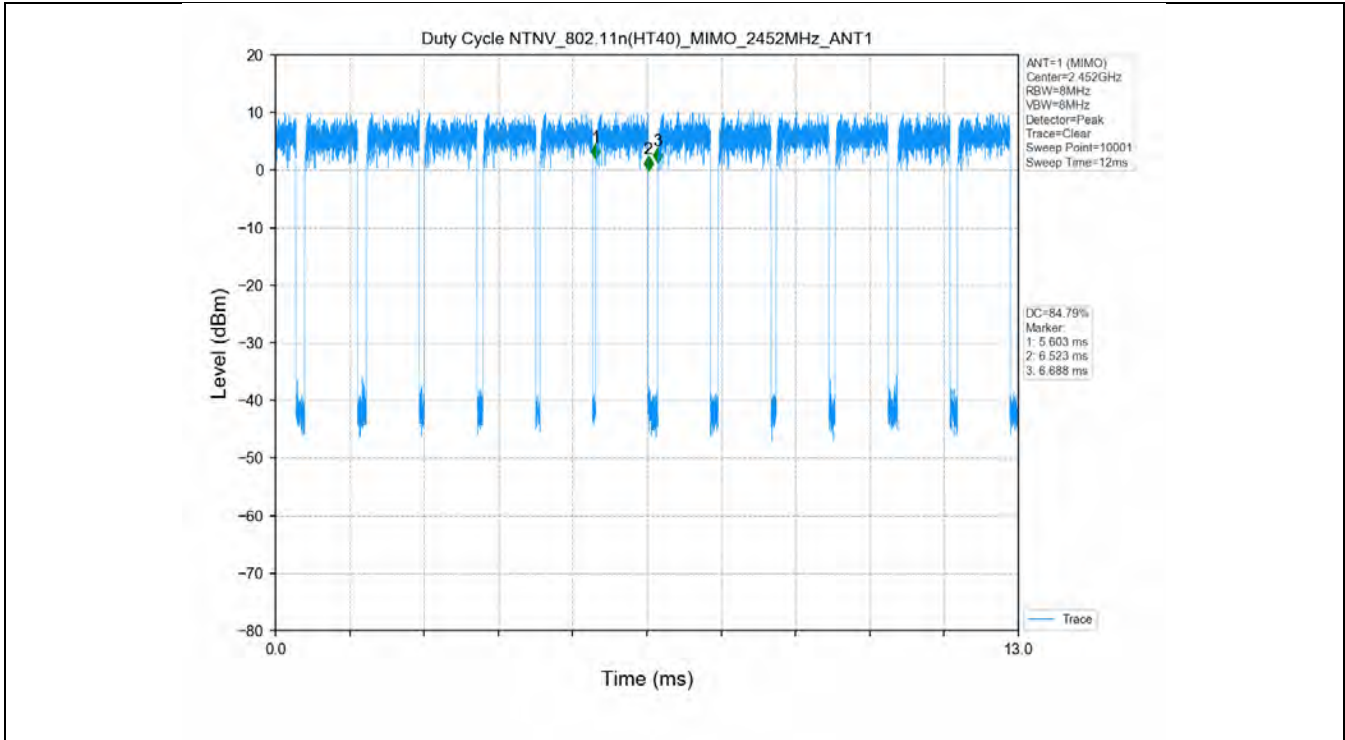












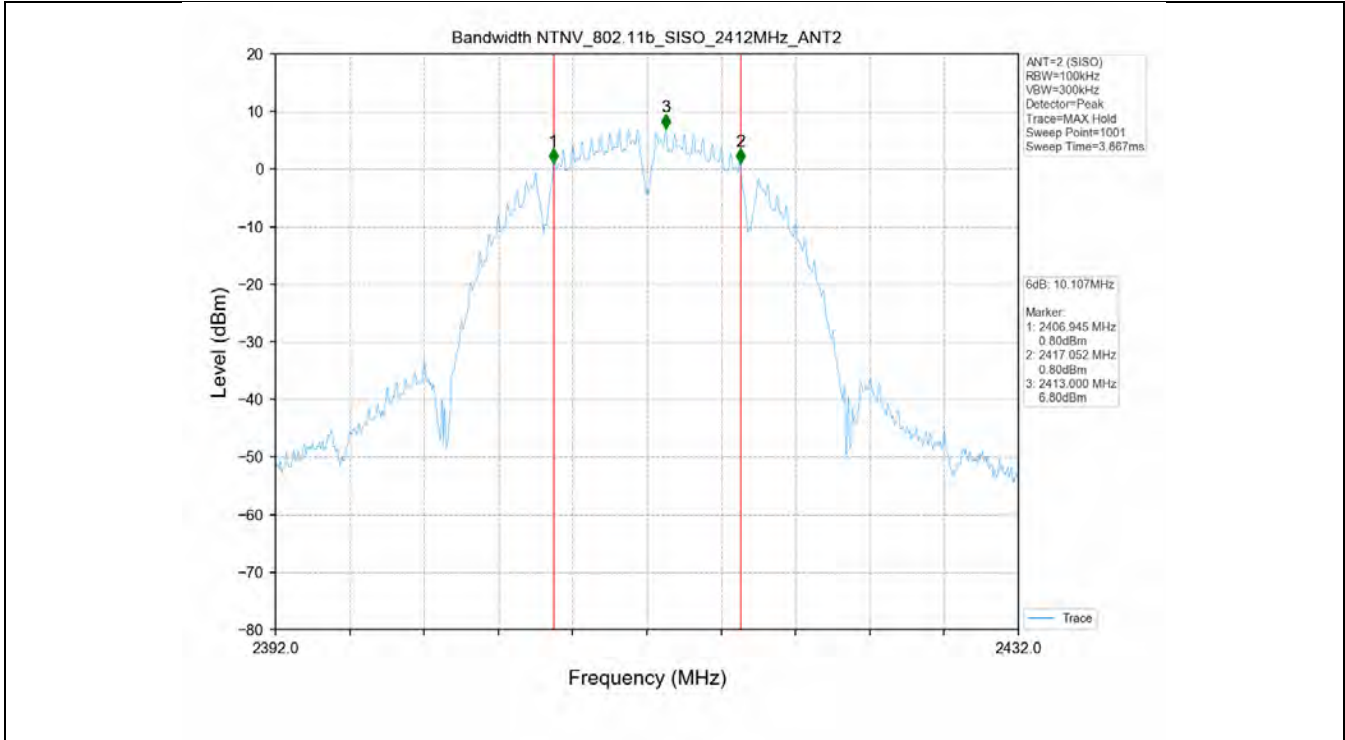
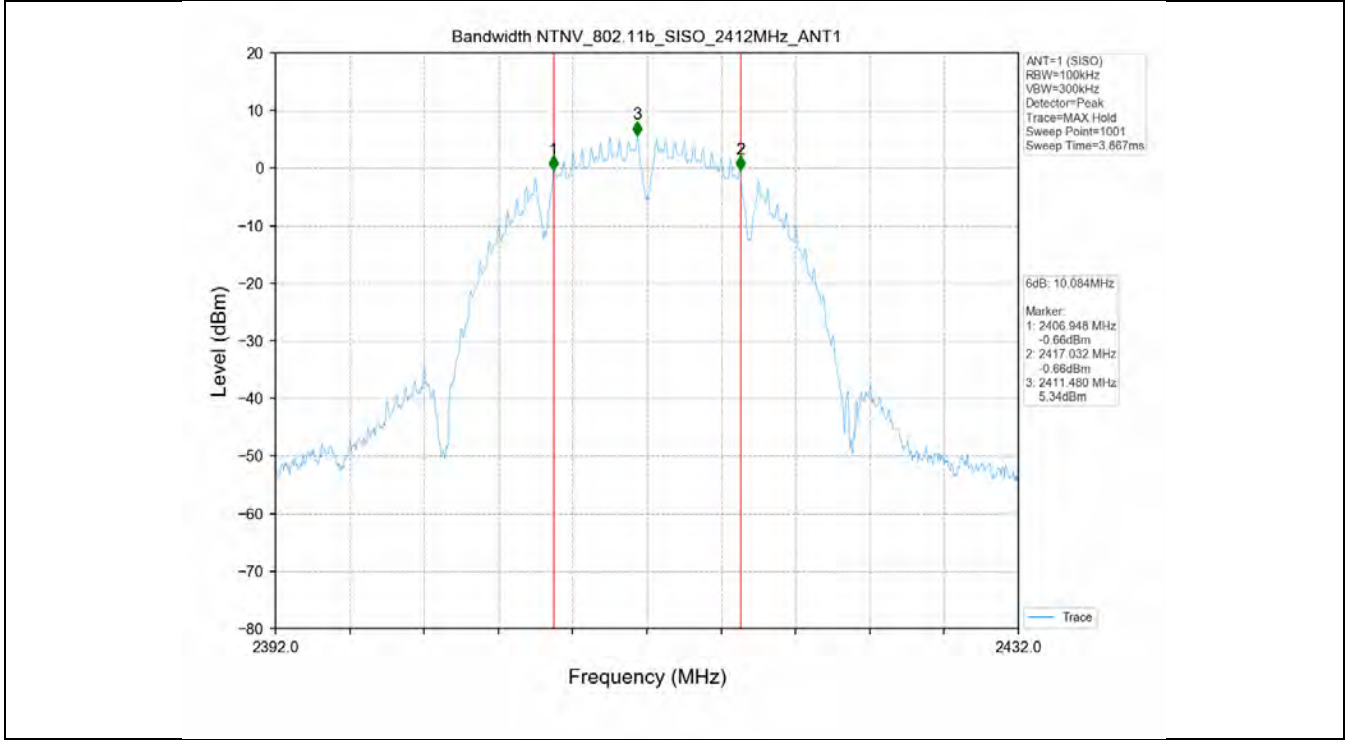
2. Bandwidth

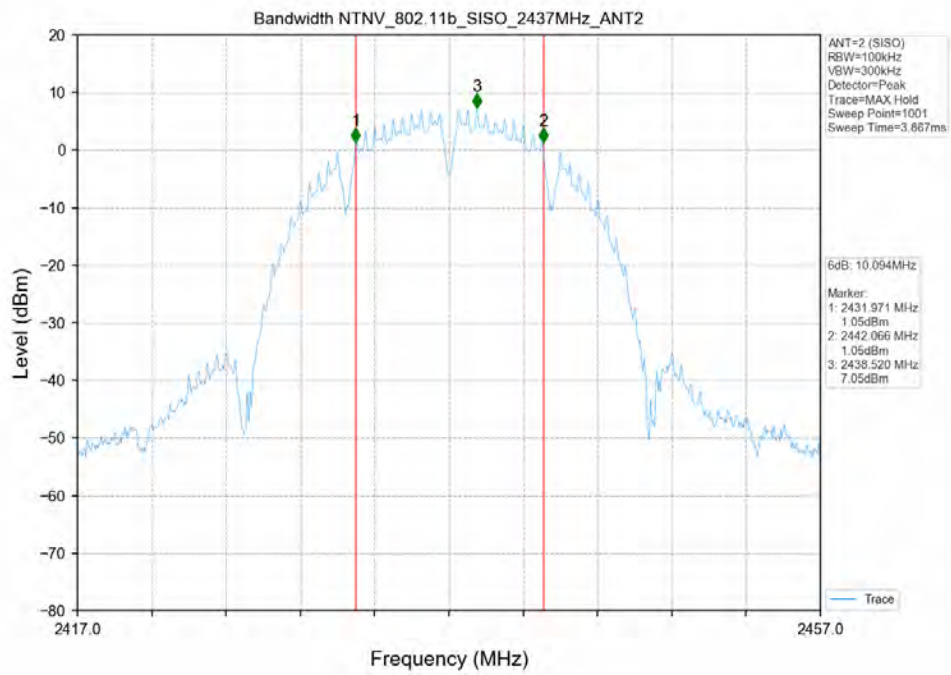
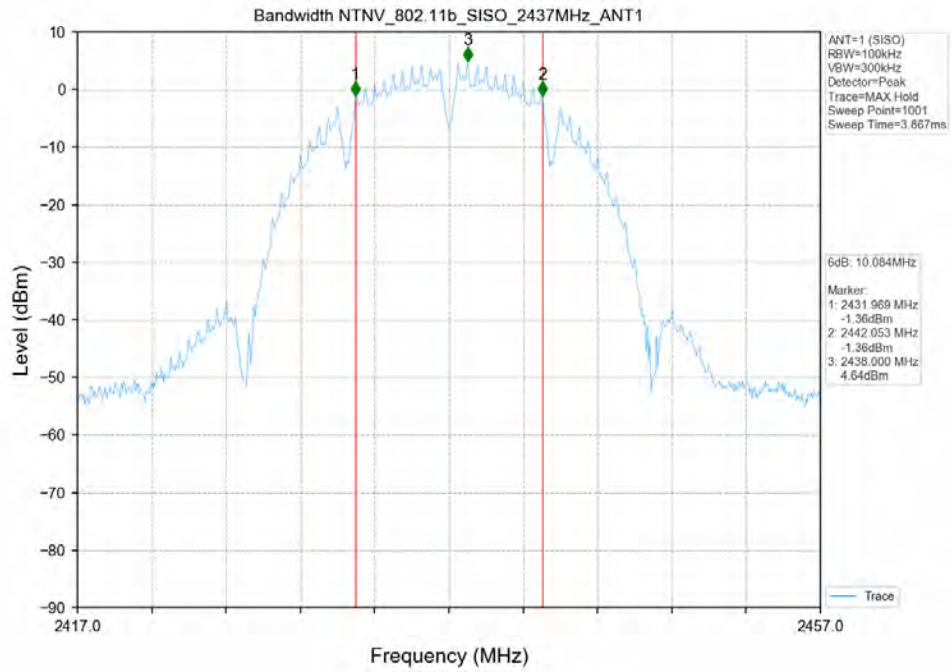
2.1 Test Result

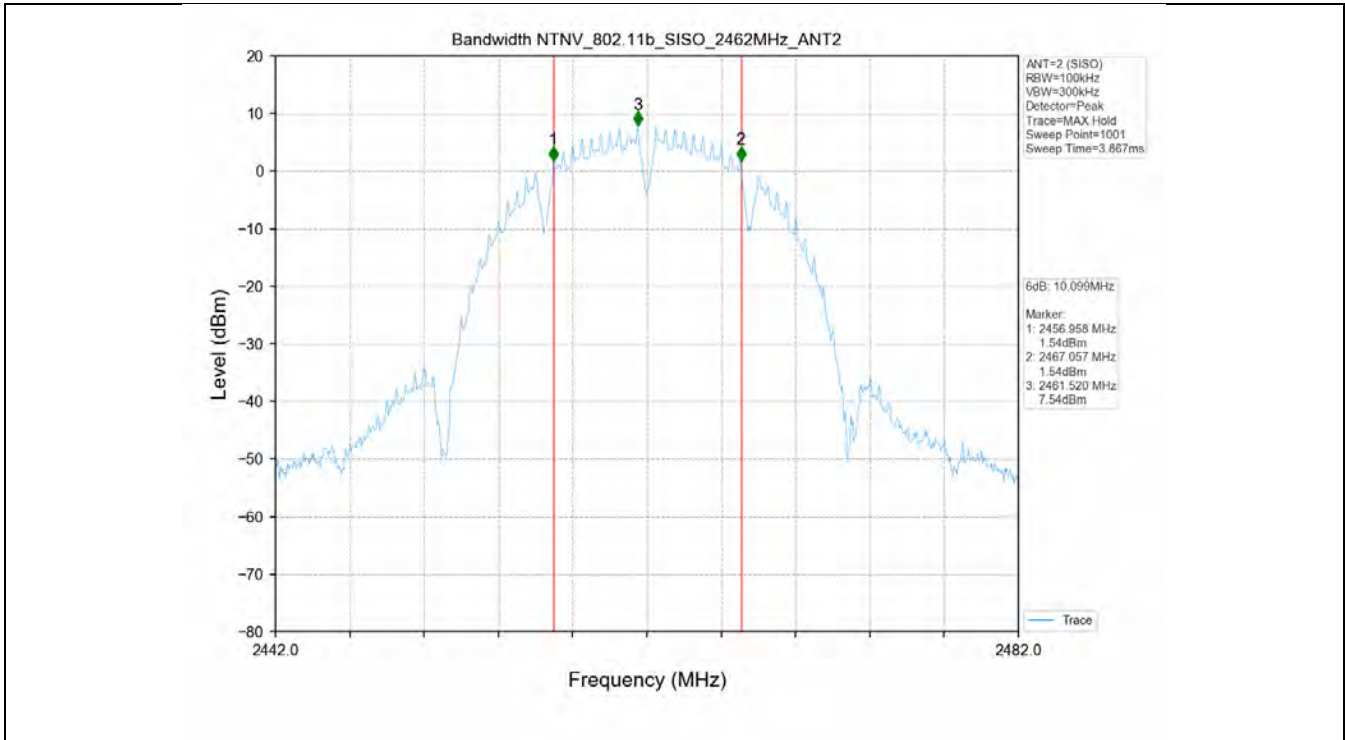
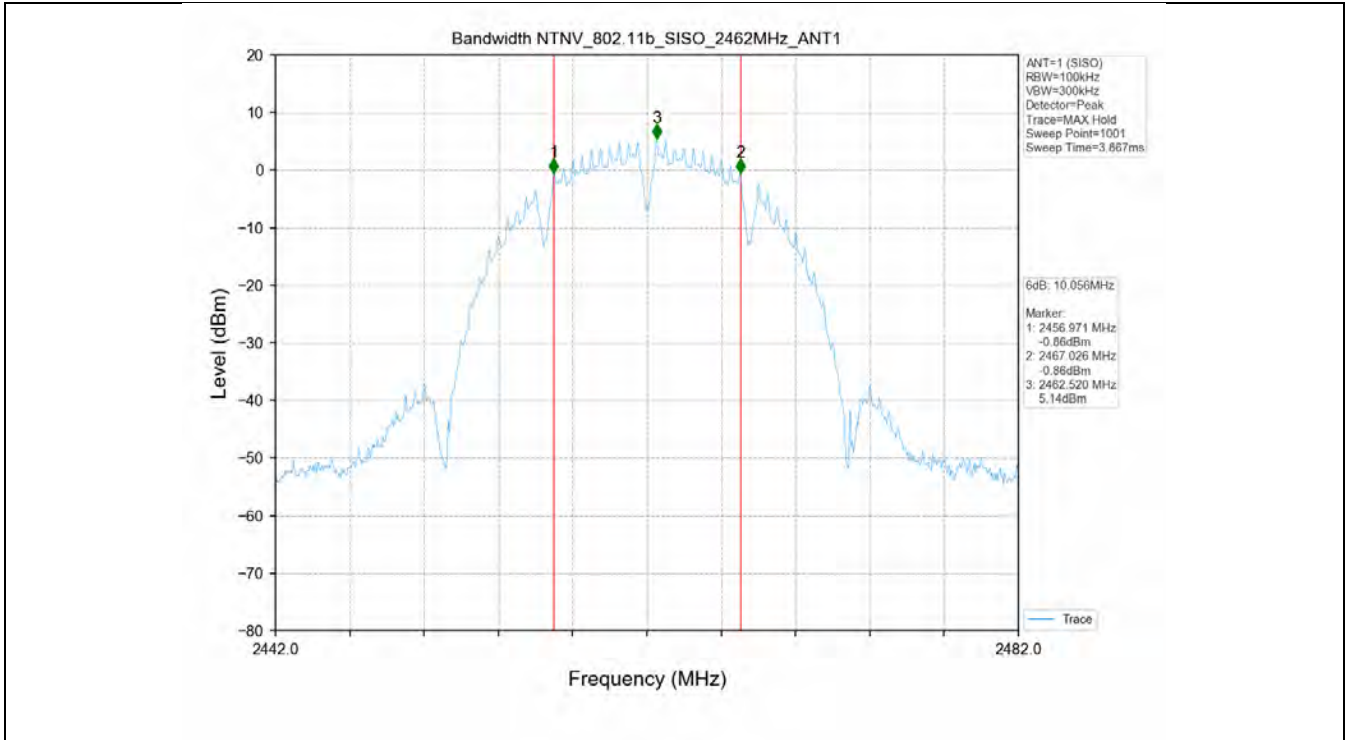
Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11b	2412	SISO	1	10.084	≥0.5	PASS
			2	10.107	≥0.5	PASS
	2437	SISO	1	10.084	≥0.5	PASS
			2	10.094	≥0.5	PASS
	2462	SISO	1	10.056	≥0.5	PASS
			2	10.099	≥0.5	PASS
802.11g	2412	SISO	1	16.395	≥0.5	PASS
			2	16.392	≥0.5	PASS
	2437	SISO	1	16.382	≥0.5	PASS
			2	16.398	≥0.5	PASS
	2462	SISO	1	16.382	≥0.5	PASS
			2	16.408	≥0.5	PASS
802.11n(HT20)	2412	MIMO	1	17.577	≥0.5	PASS
			2	17.623	≥0.5	PASS
	2437	MIMO	1	17.540	≥0.5	PASS
			2	17.120	≥0.5	PASS
	2462	MIMO	1	17.586	≥0.5	PASS
			2	17.594	≥0.5	PASS
802.11n(HT40)	2422	MIMO	1	35.901	≥0.5	PASS
			2	36.112	≥0.5	PASS
	2437	MIMO	1	35.639	≥0.5	PASS
			2	35.862	≥0.5	PASS
	2452	MIMO	1	35.705	≥0.5	PASS
			2	35.644	≥0.5	PASS

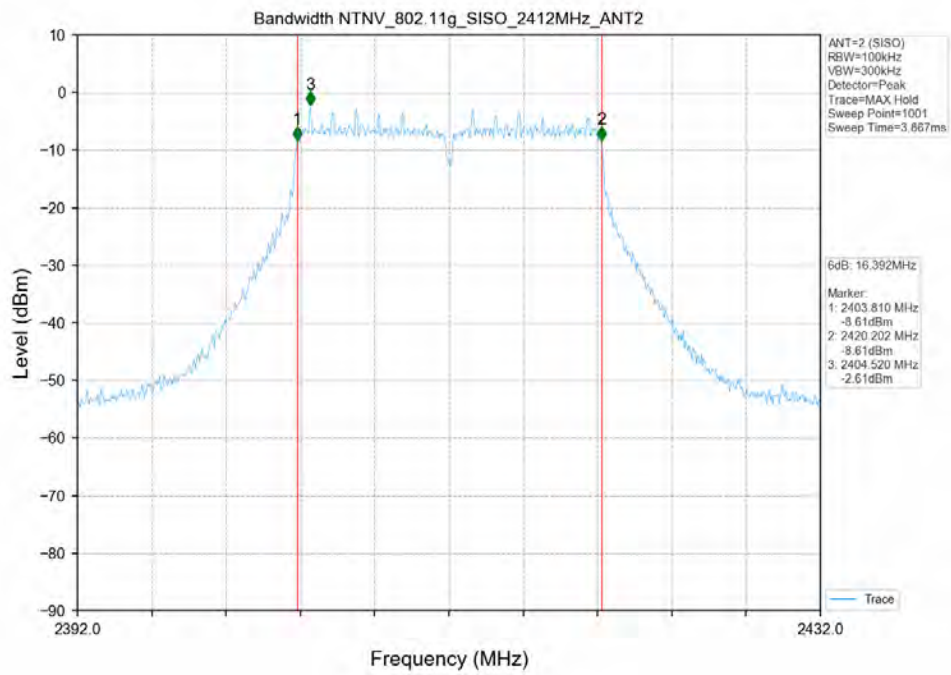
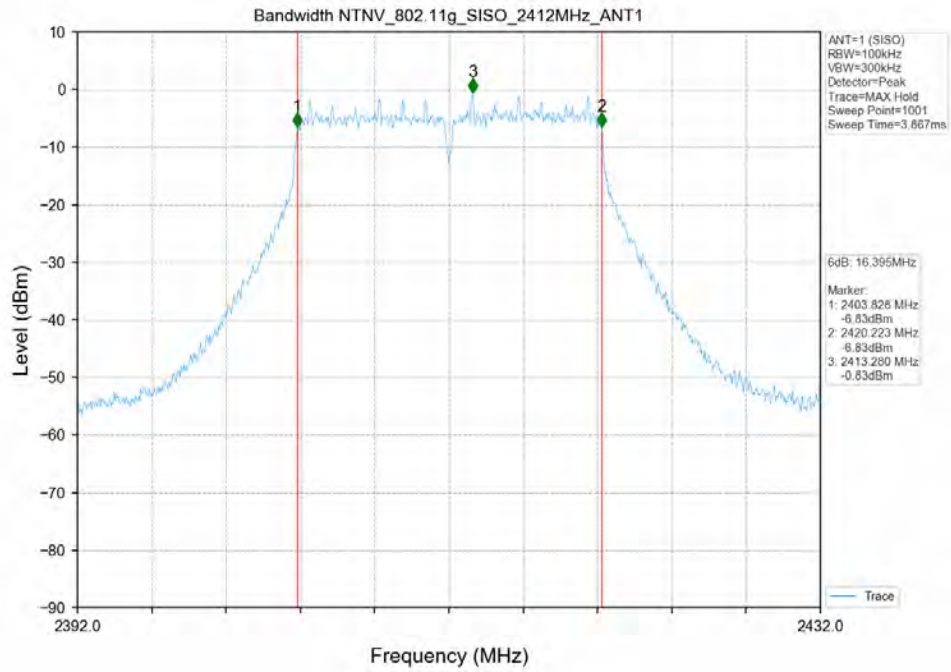
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11b	2412	SISO	1	14.992	Only for Report Use
			2	14.978	Only for Report Use
	2437	SISO	1	14.979	Only for Report Use
			2	14.962	Only for Report Use
	2462	SISO	1	14.945	Only for Report Use
			2	14.929	Only for Report Use
802.11g	2412	SISO	1	16.908	Only for Report Use
			2	16.902	Only for Report Use
	2437	SISO	1	16.877	Only for Report Use
			2	16.854	Only for Report Use
	2462	SISO	1	16.876	Only for Report Use
			2	16.866	Only for Report Use
802.11n(HT20)	2412	MIMO	1	18.033	Only for Report Use
			2	18.116	Only for Report Use
	2437	MIMO	1	17.908	Only for Report Use
			2	17.946	Only for Report Use
	2462	MIMO	1	17.901	Only for Report Use
			2	17.939	Only for Report Use
802.11n(HT40)	2422	MIMO	1	36.113	Only for Report Use
			2	36.242	Only for Report Use
	2437	MIMO	1	36.031	Only for Report Use
			2	36.145	Only for Report Use
	2452	MIMO	1	36.033	Only for Report Use
			2	36.136	Only for Report Use

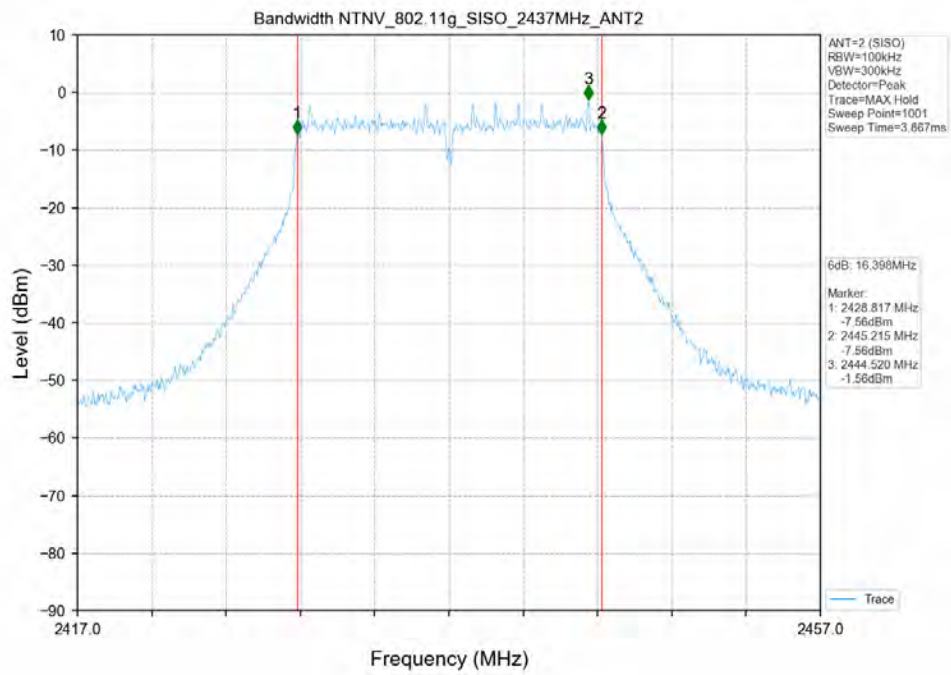
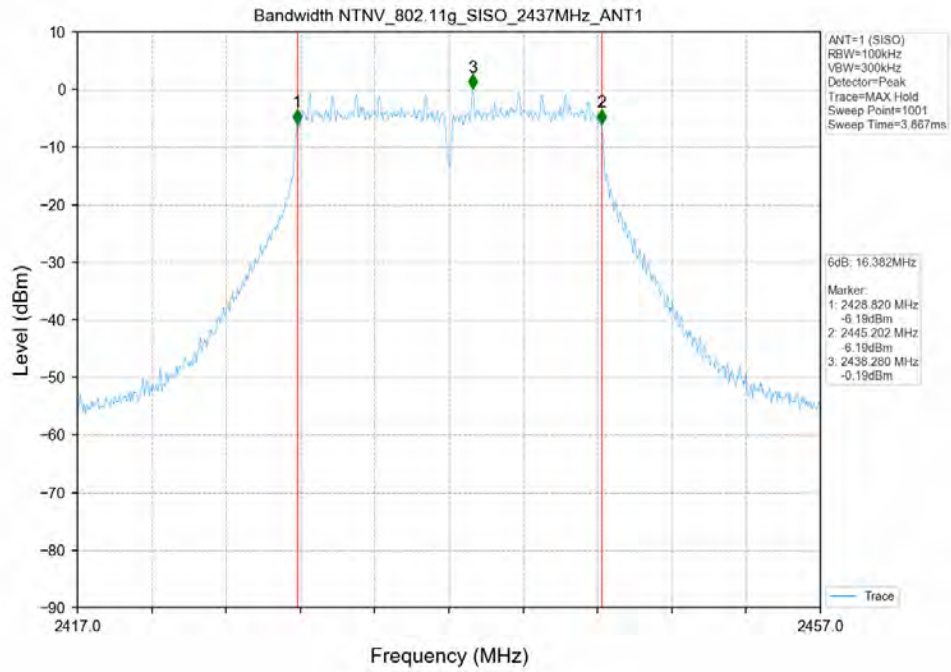
2.2 Test Graph - 6dB Bandwidth

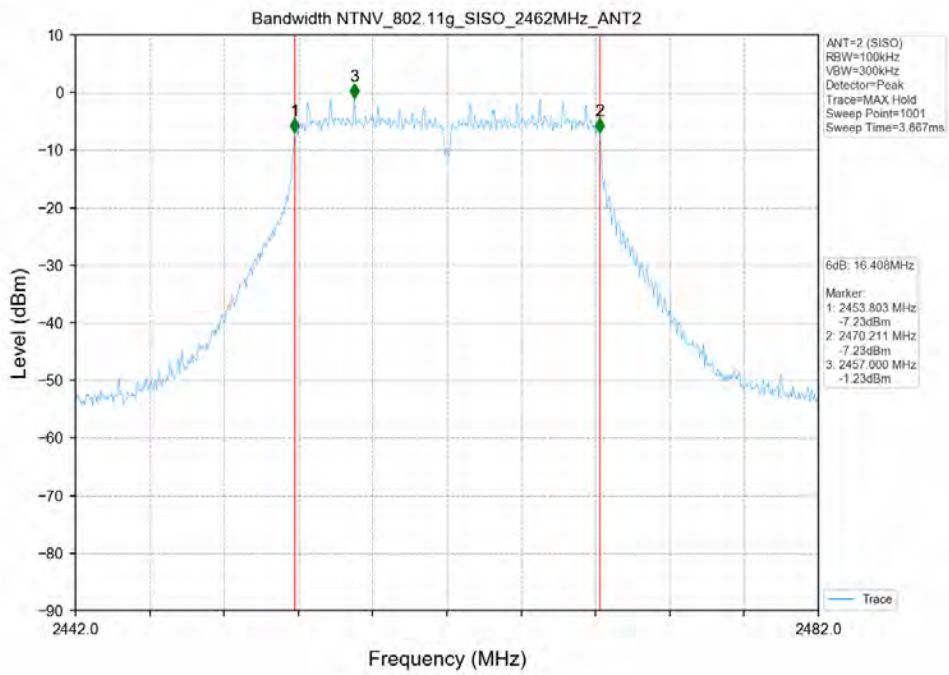
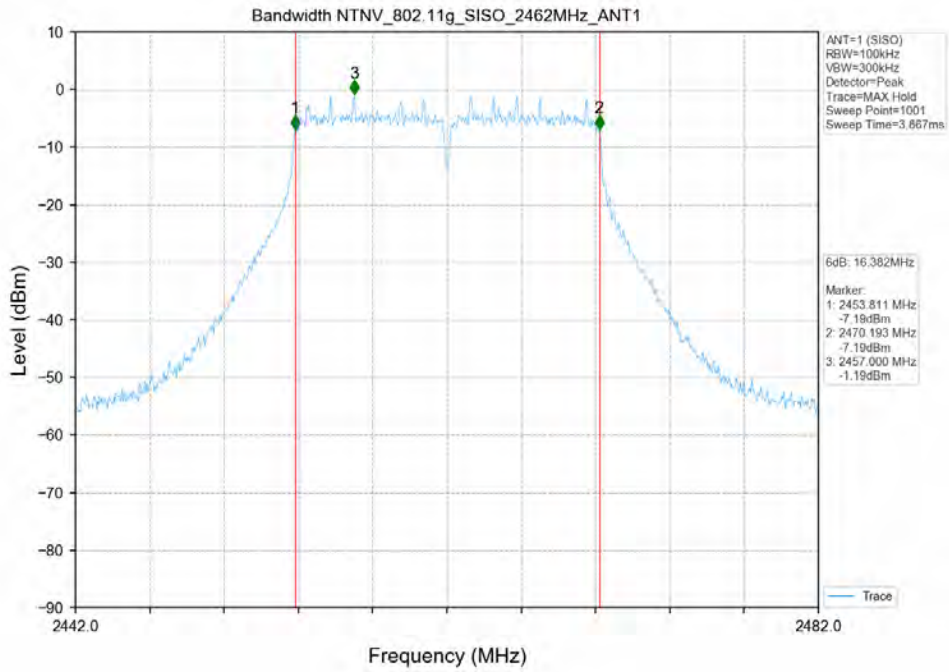


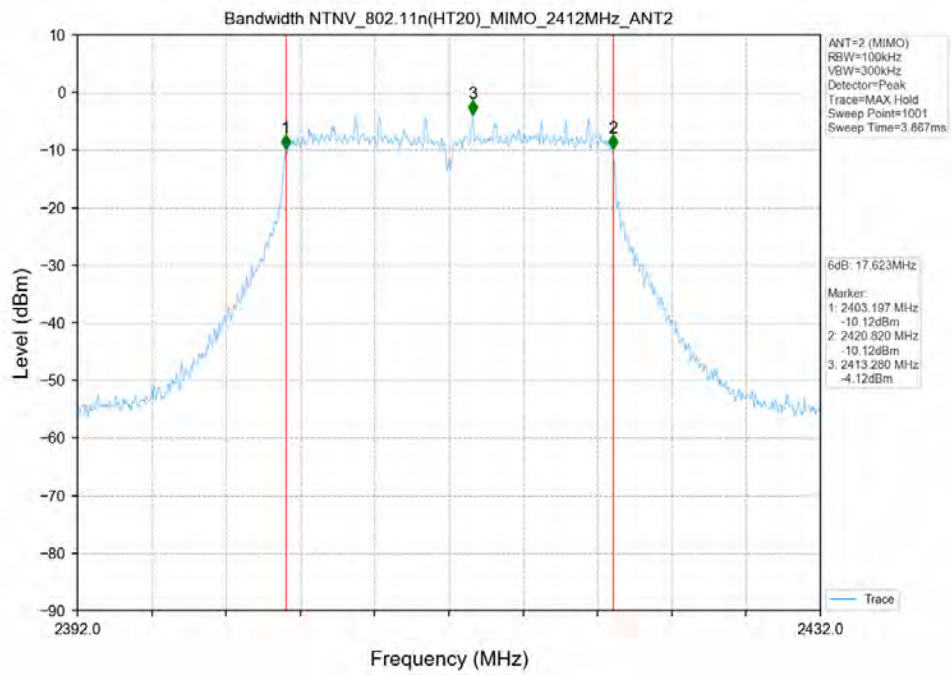
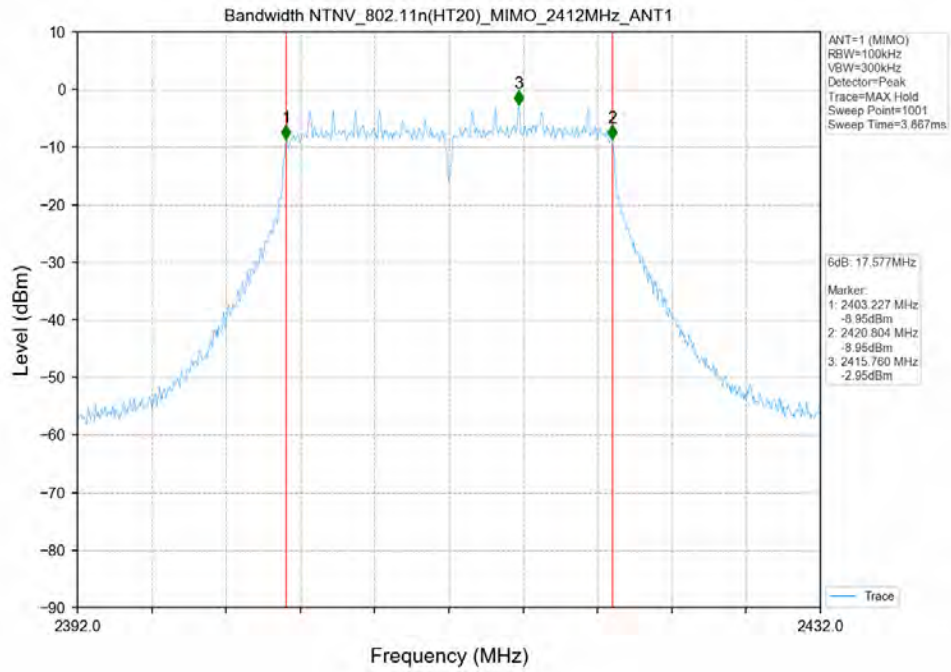


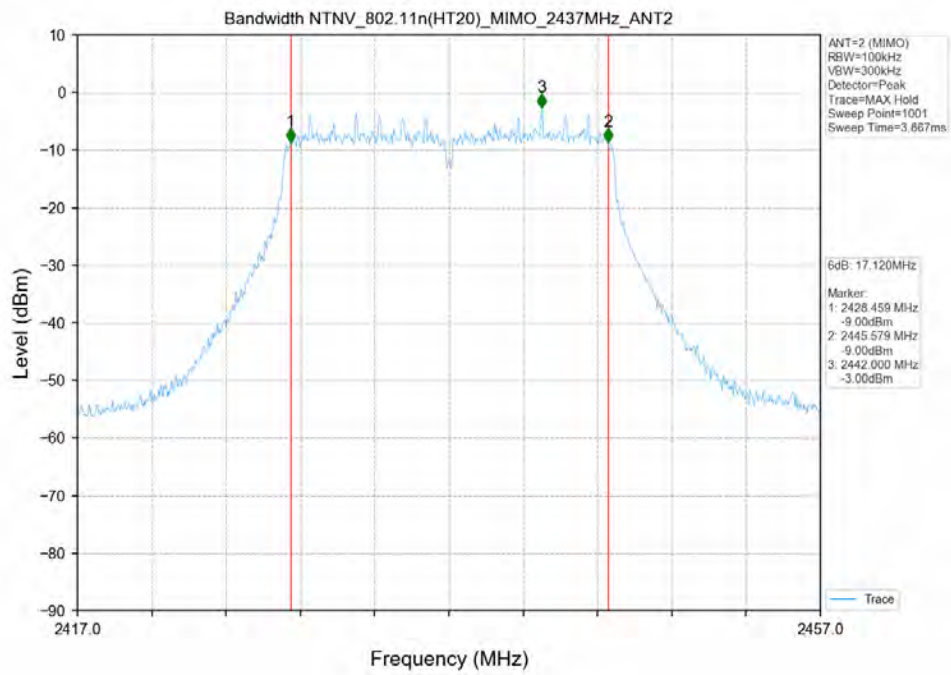
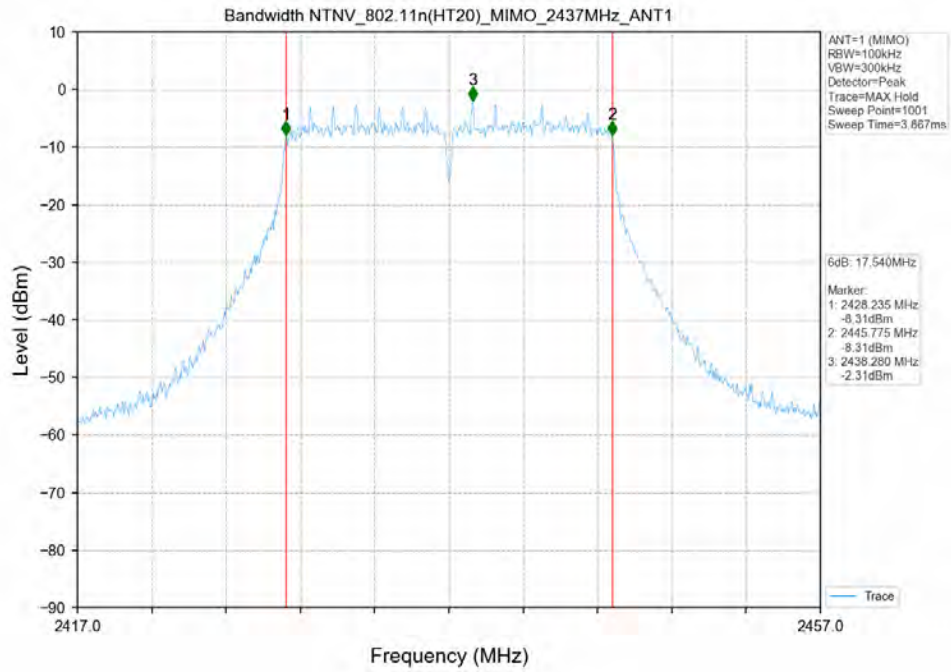


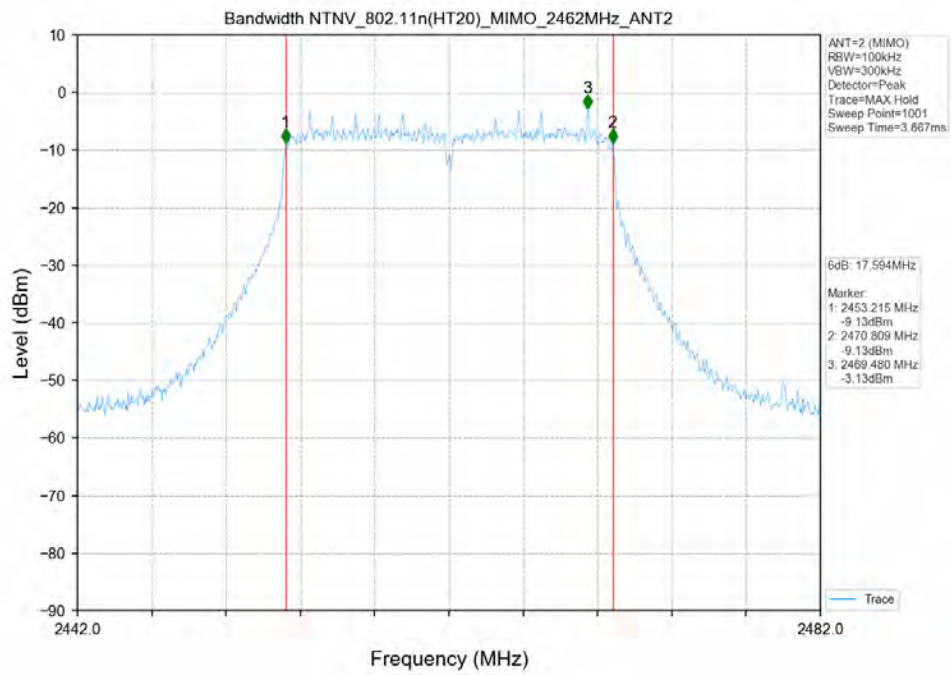
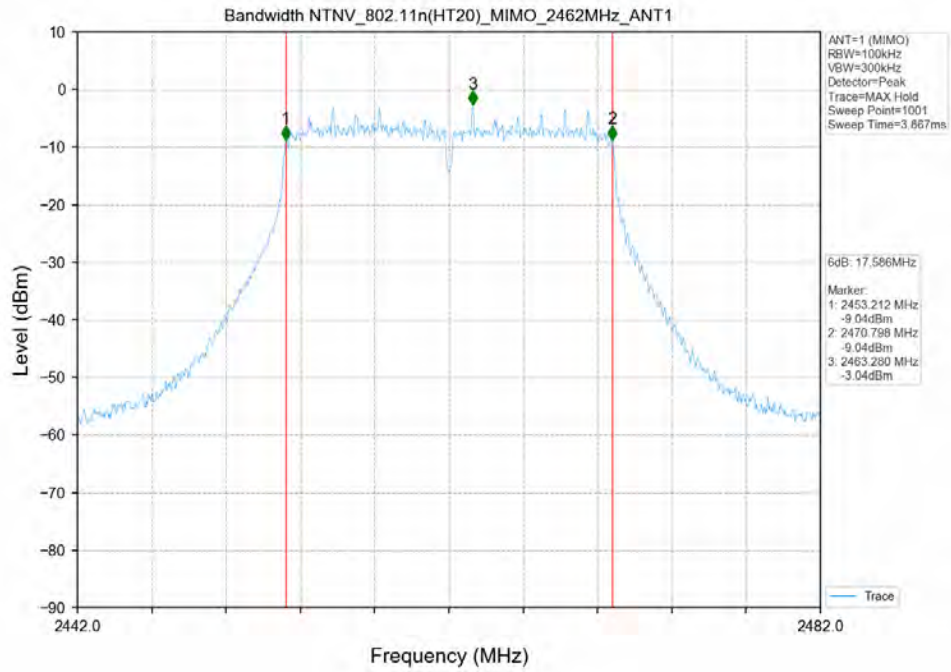


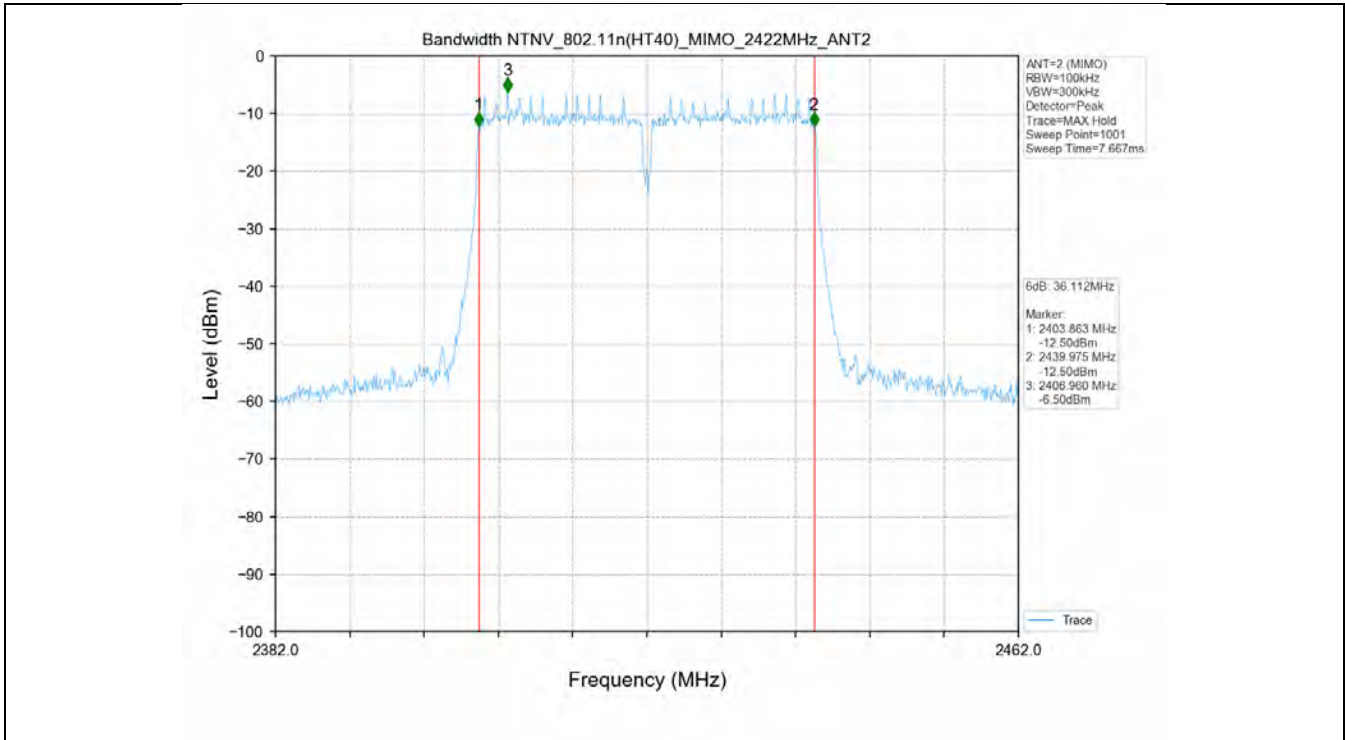
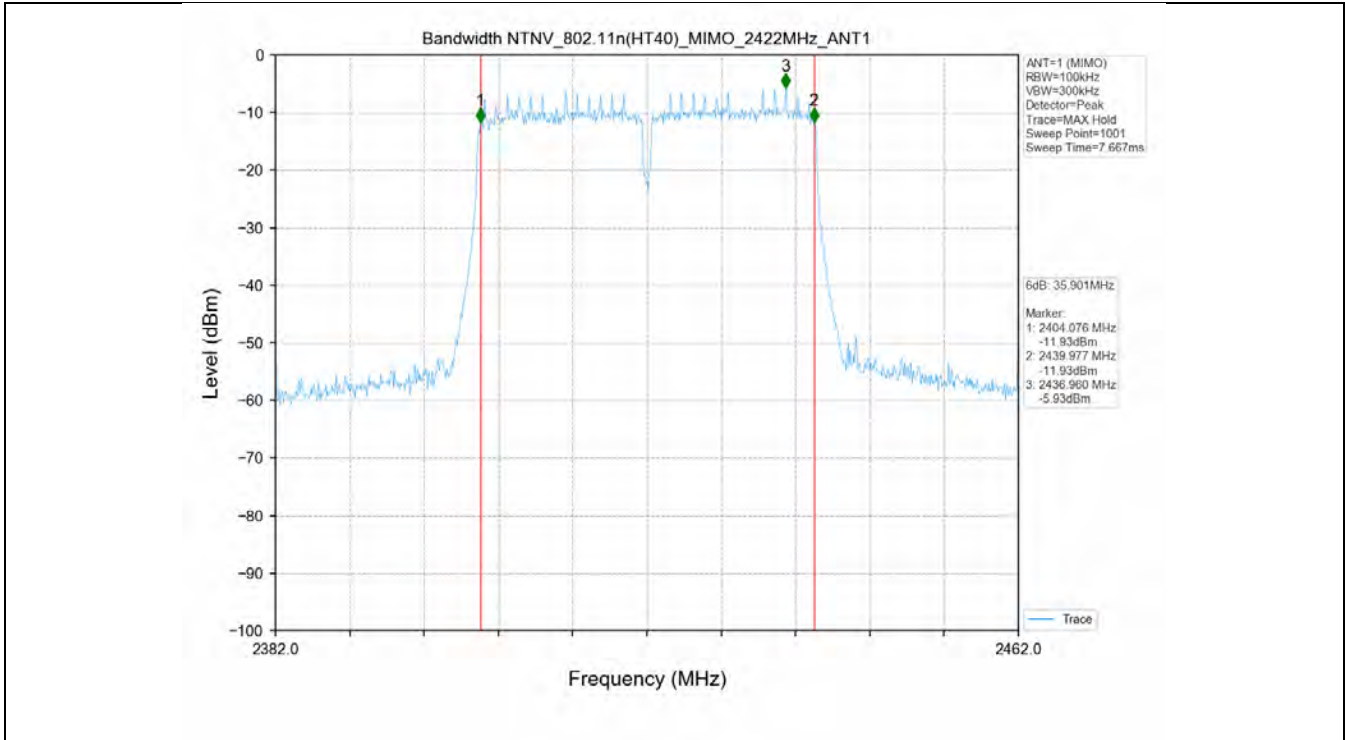


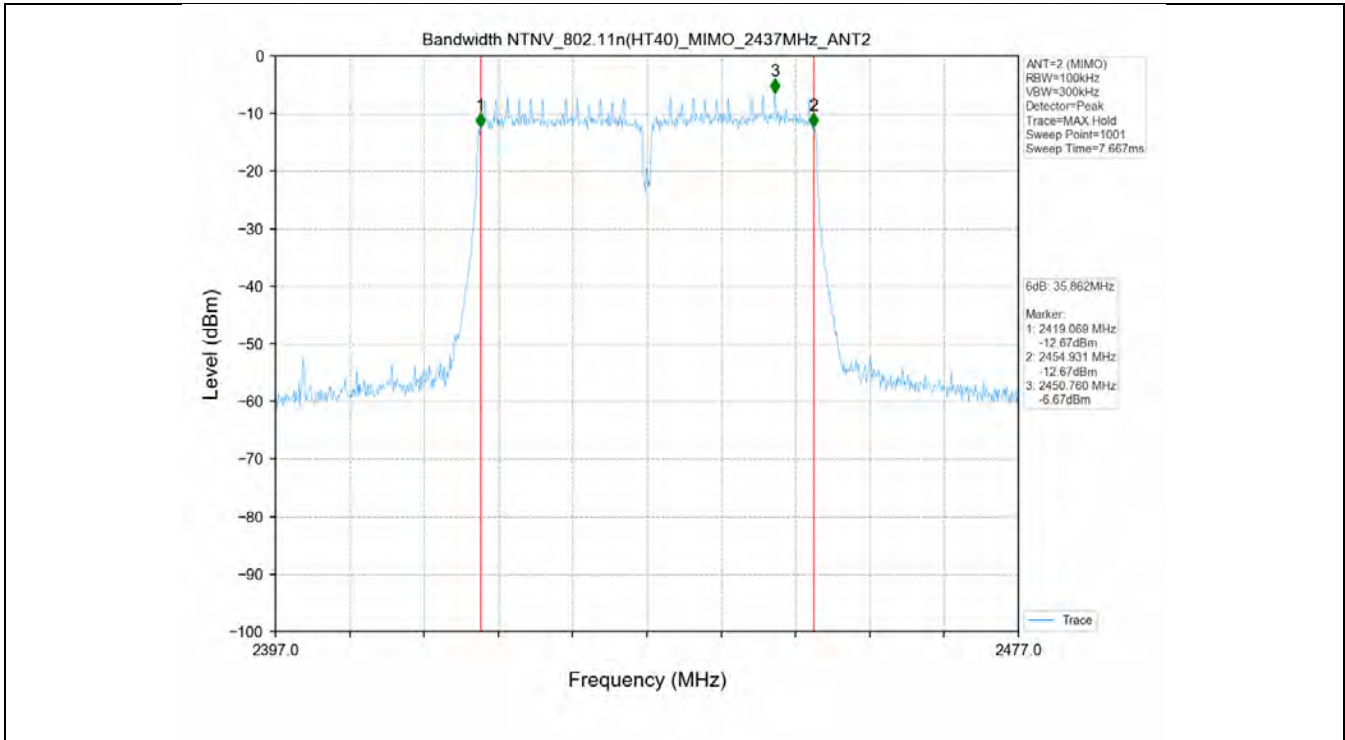
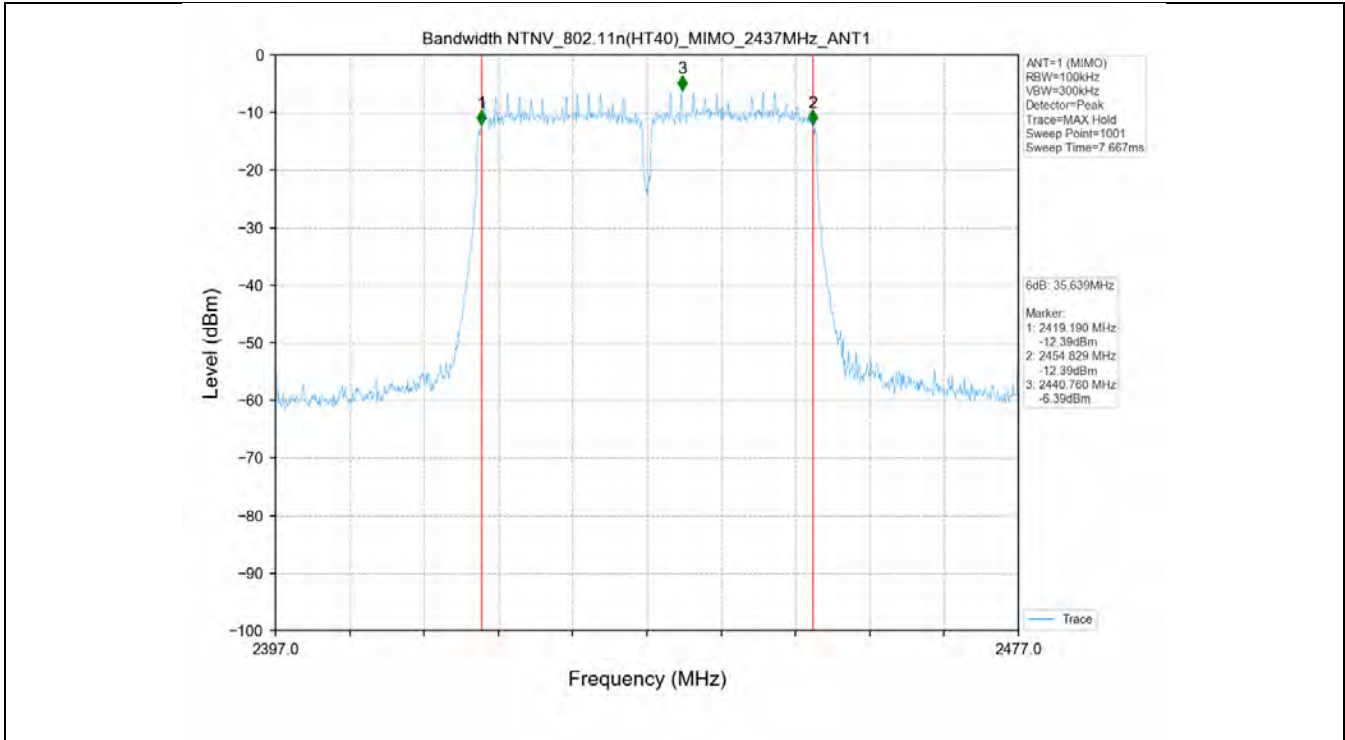


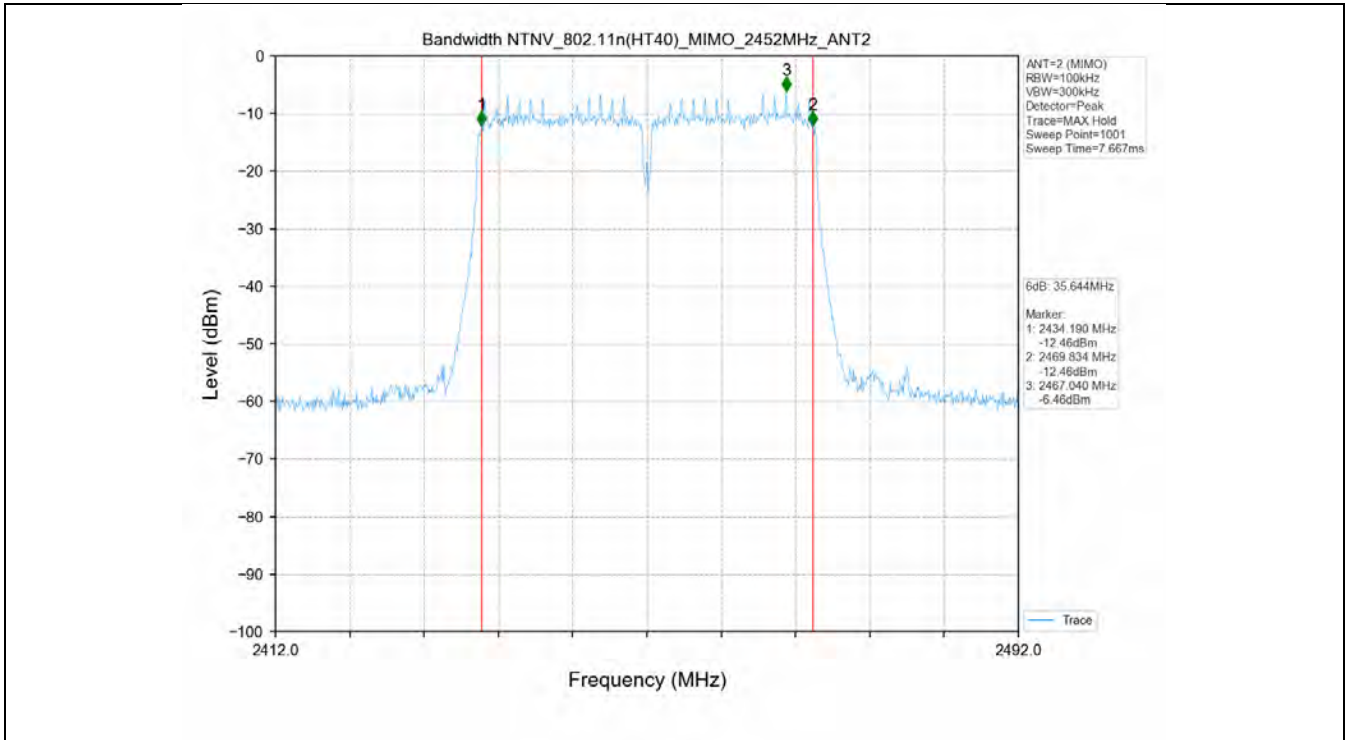
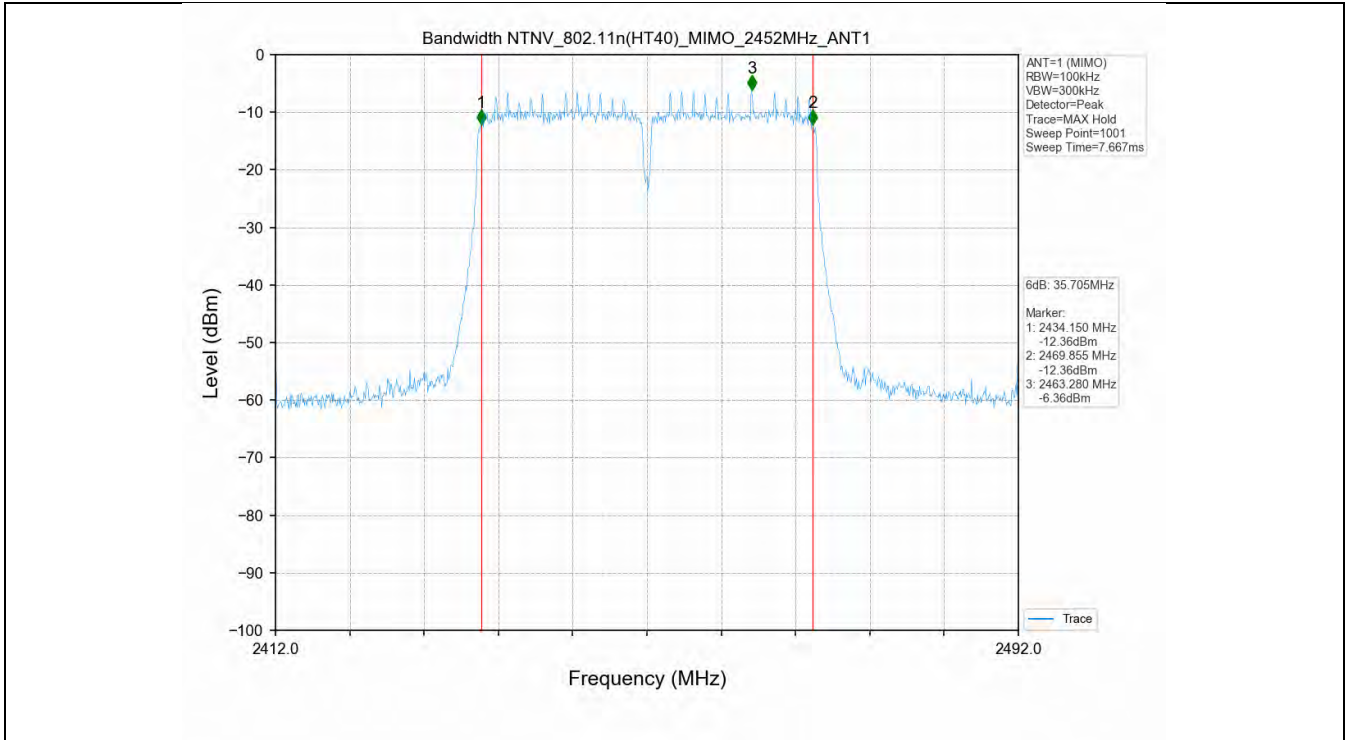




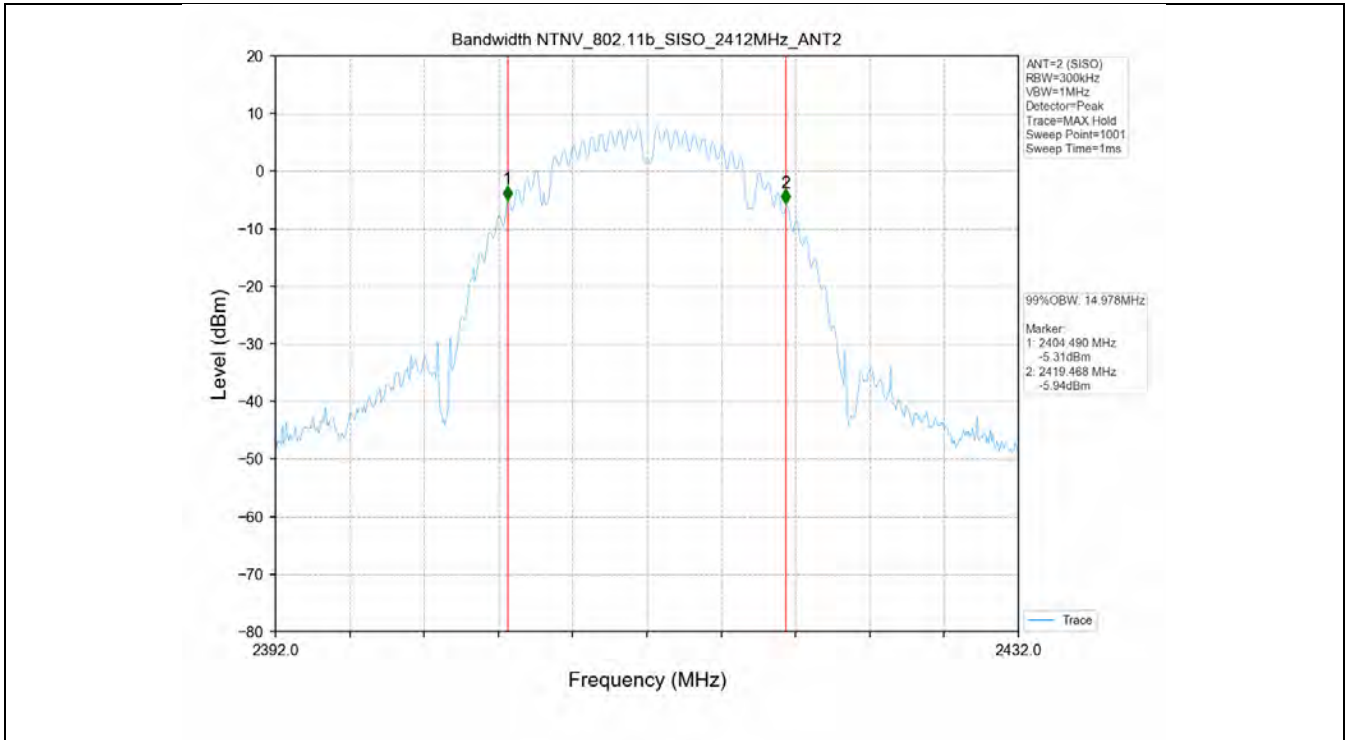
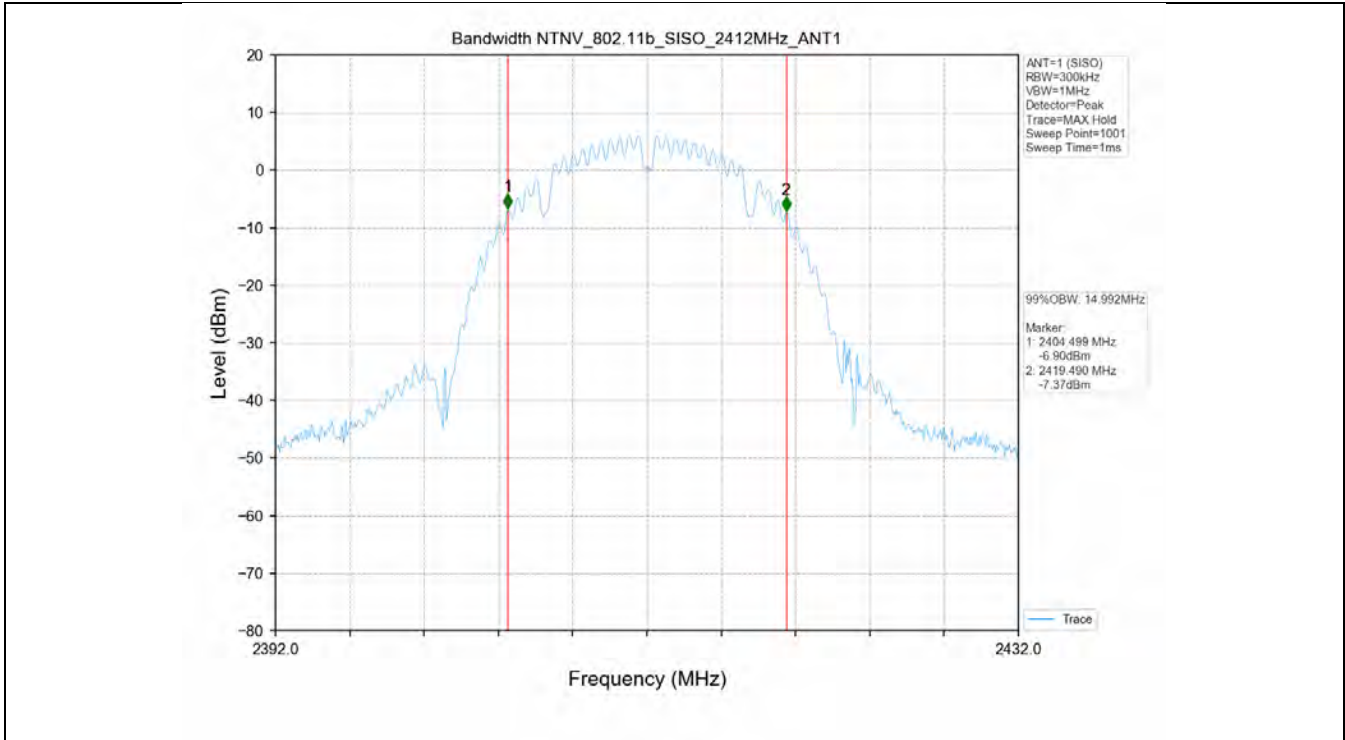


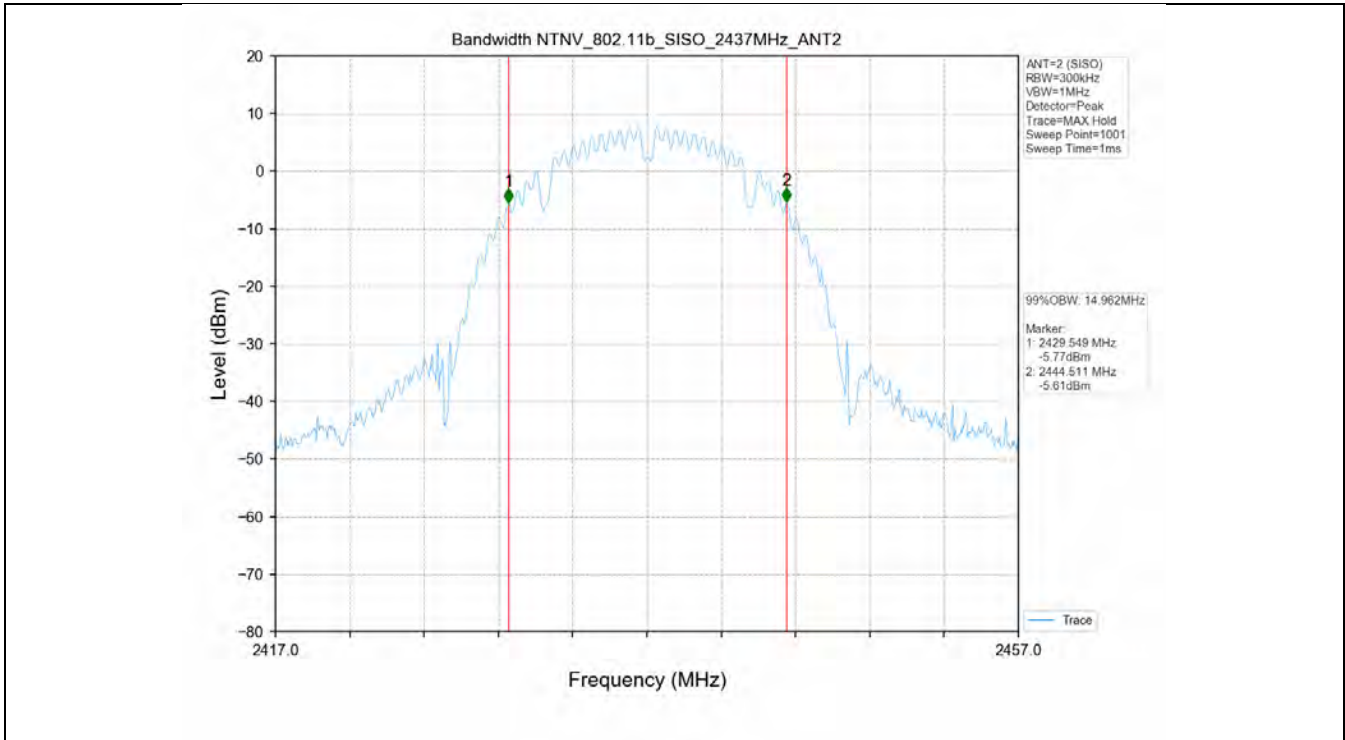
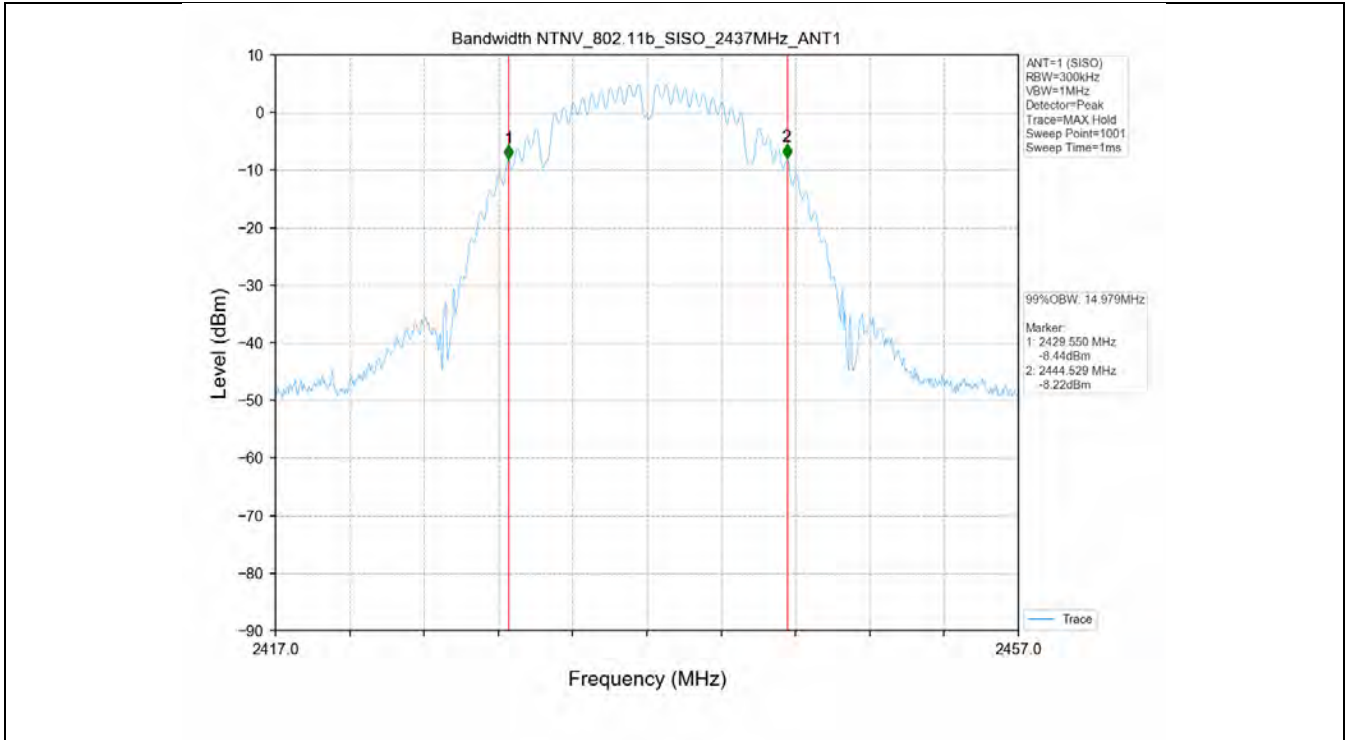


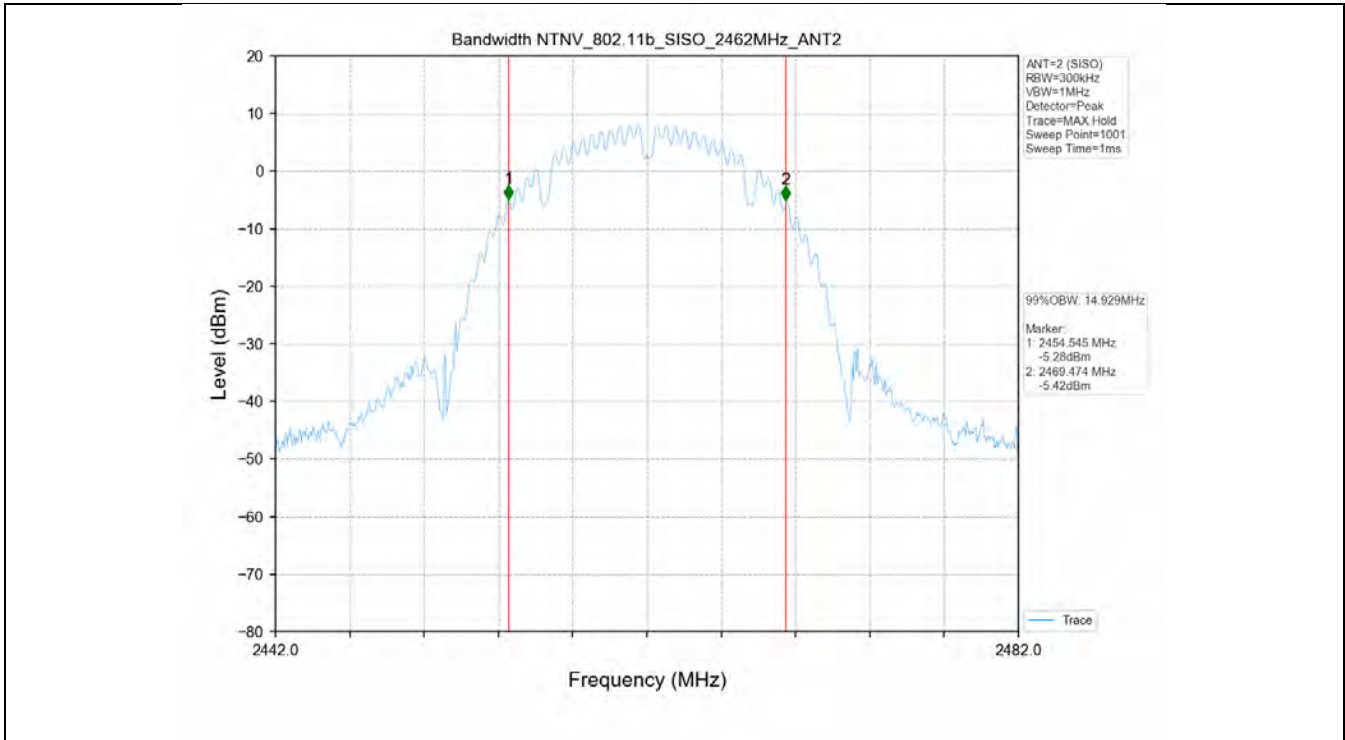
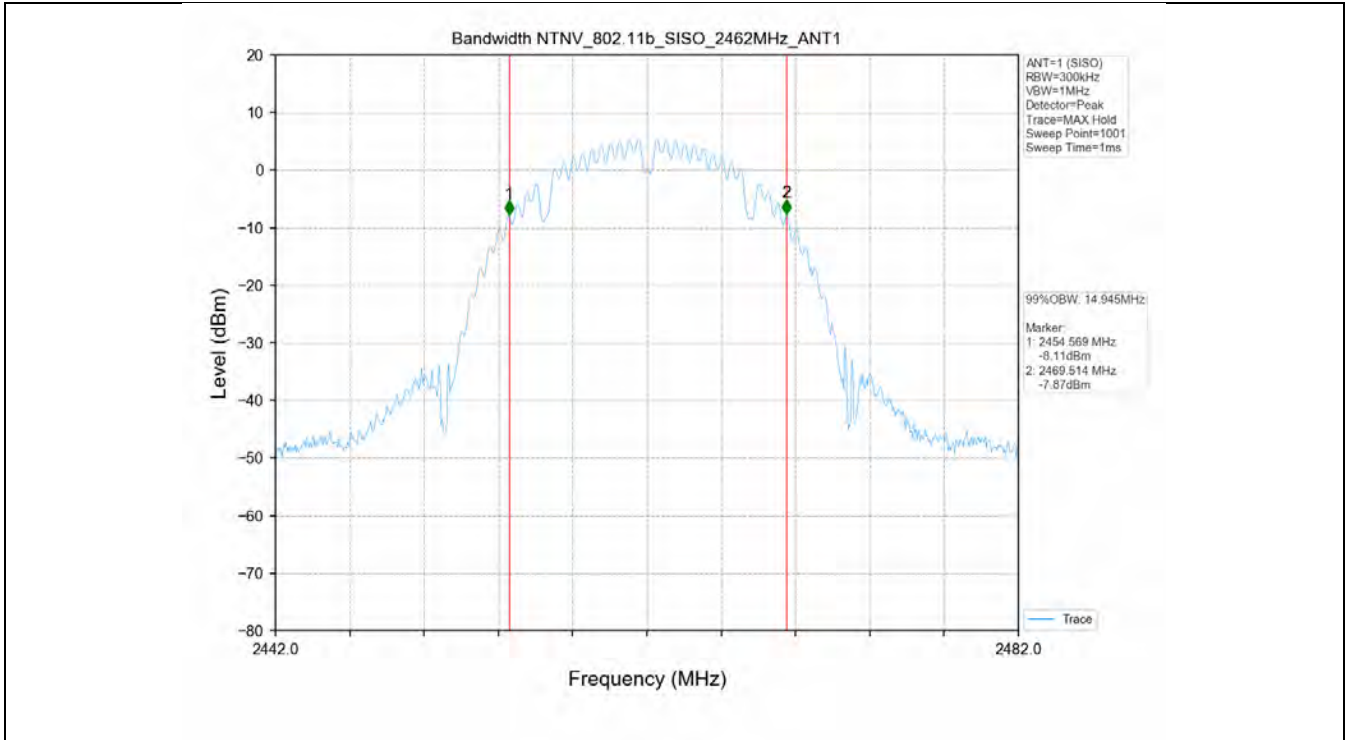


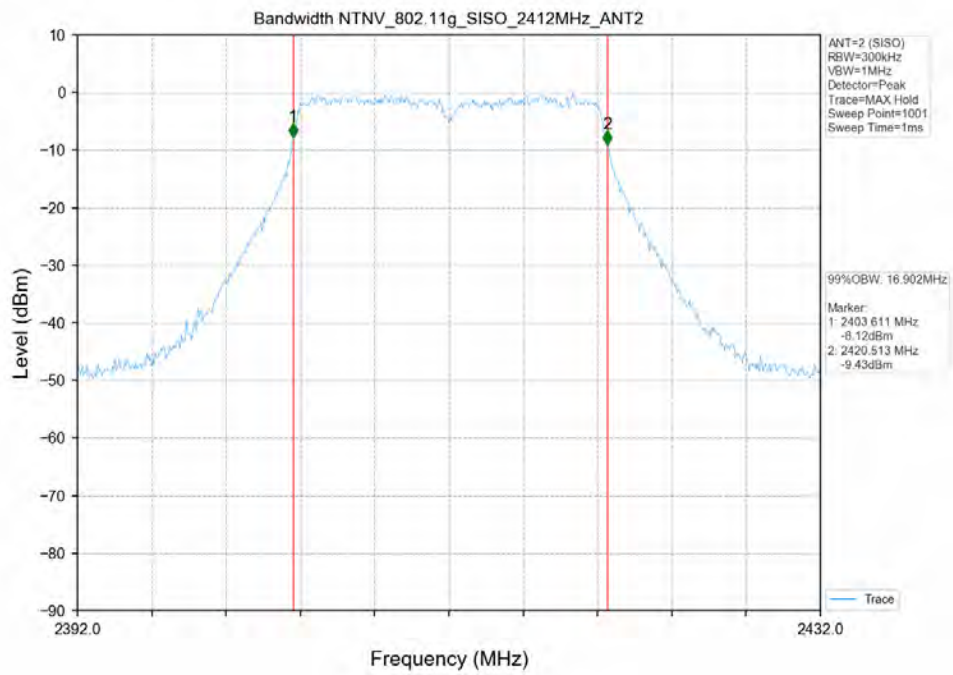
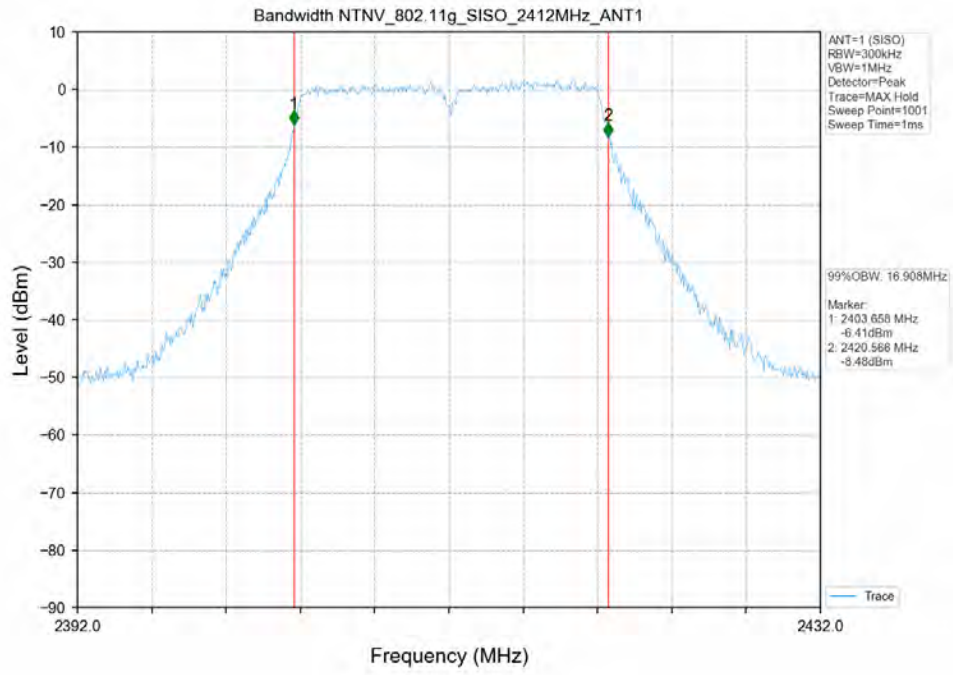


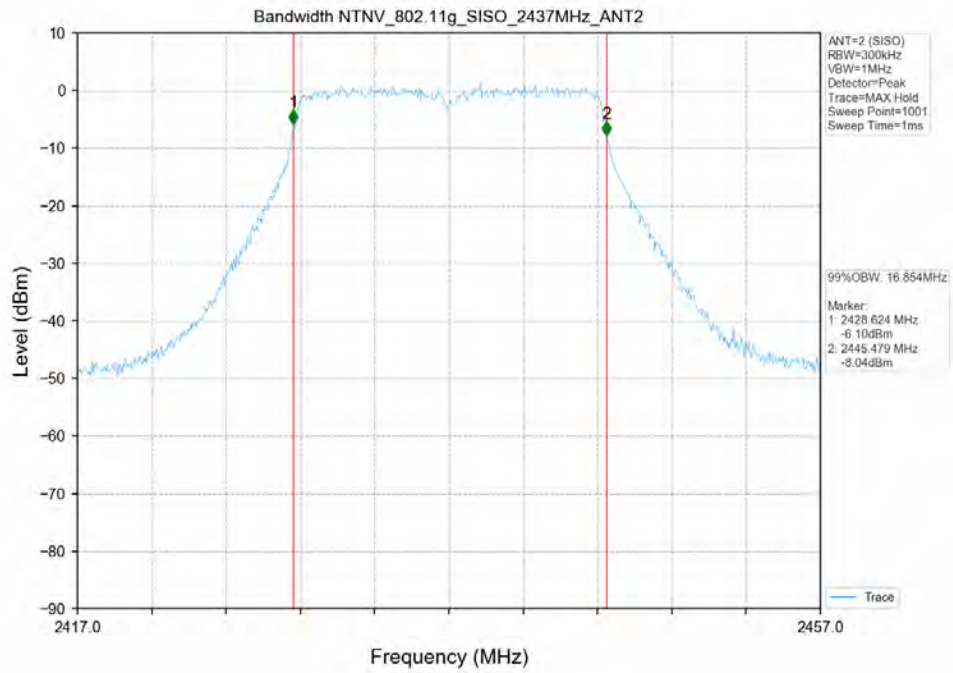
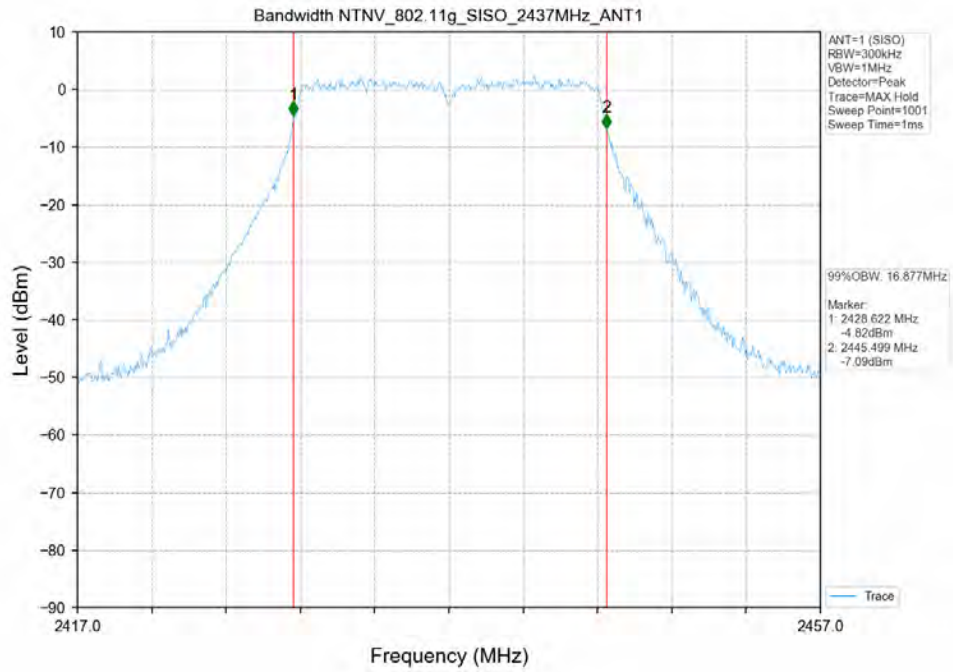
2.3 Test Graph - 99% Occupied Bandwidth

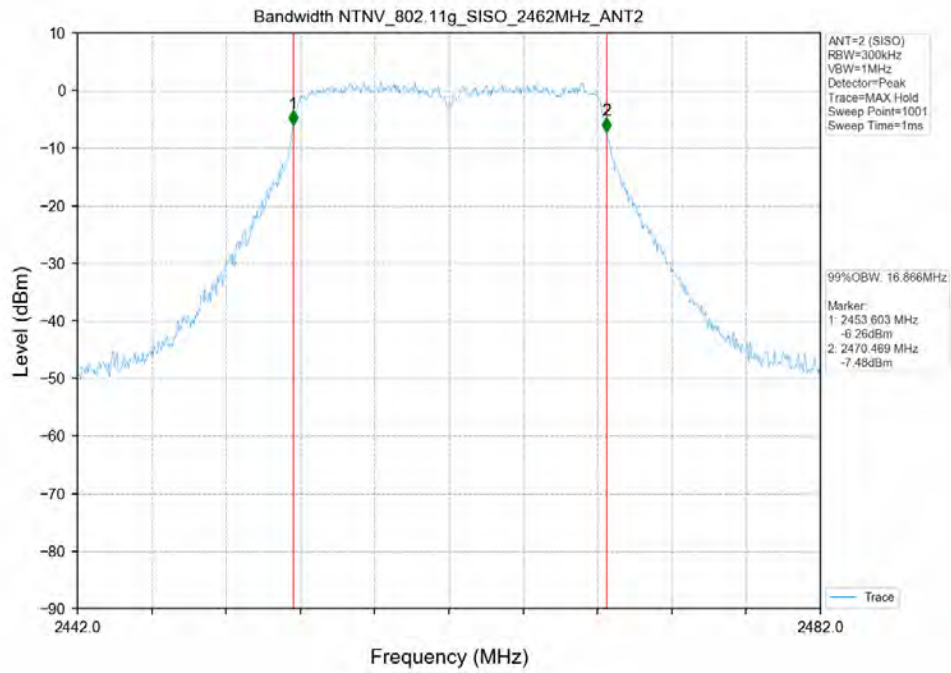
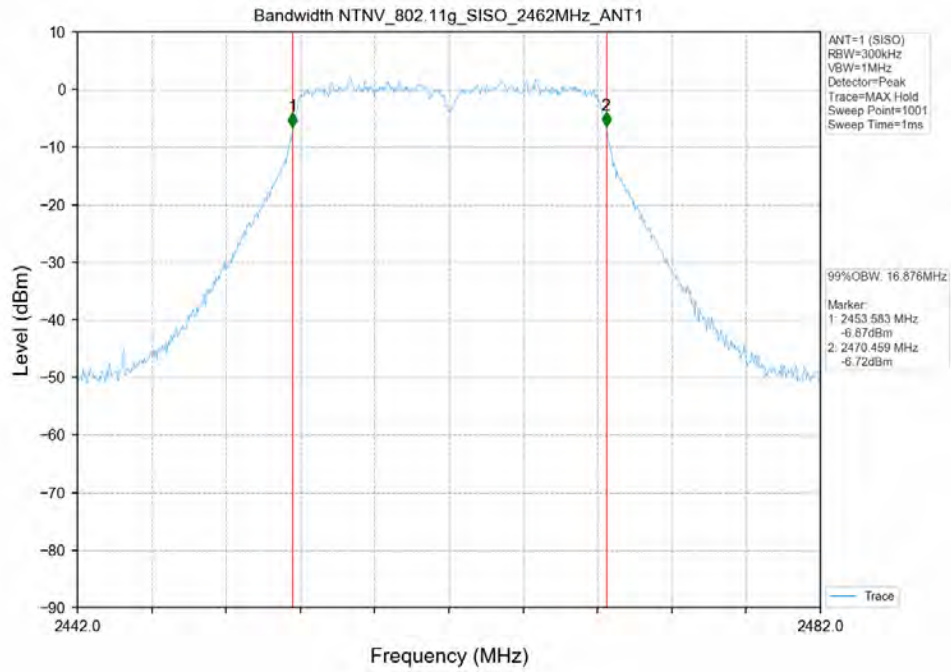


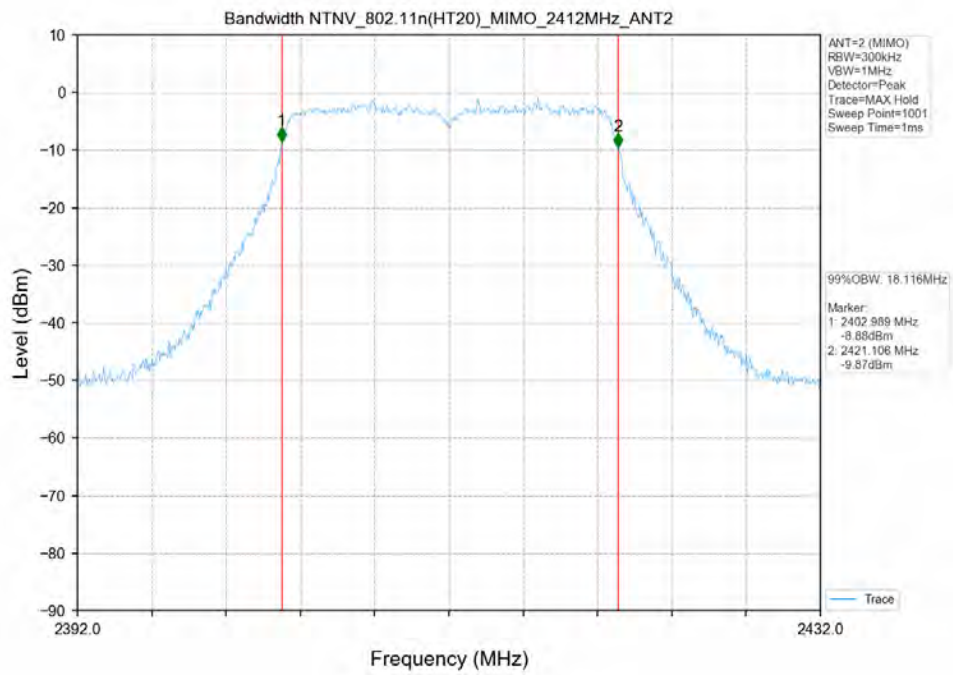
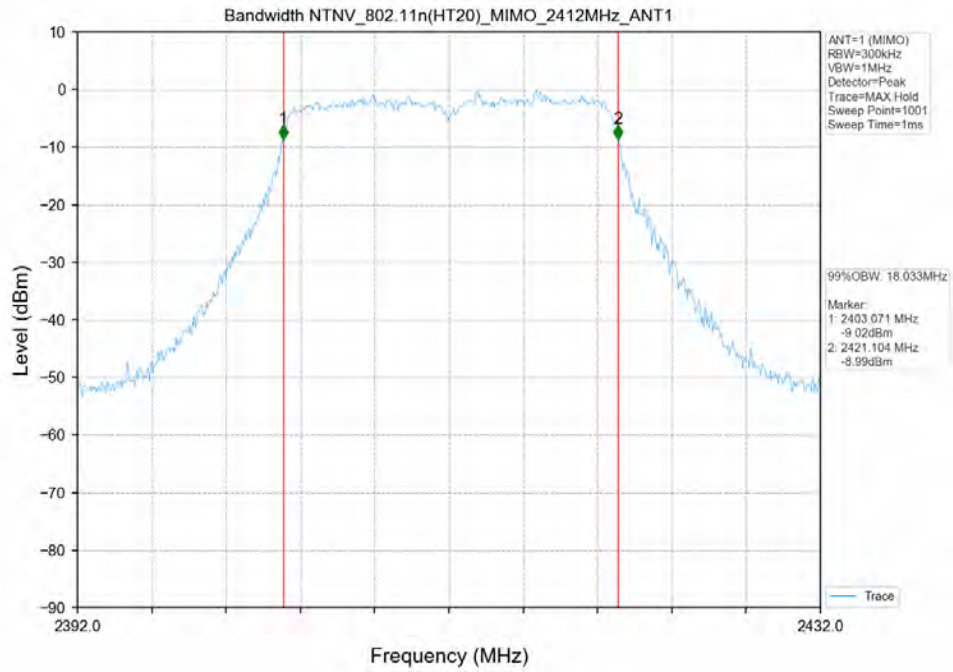


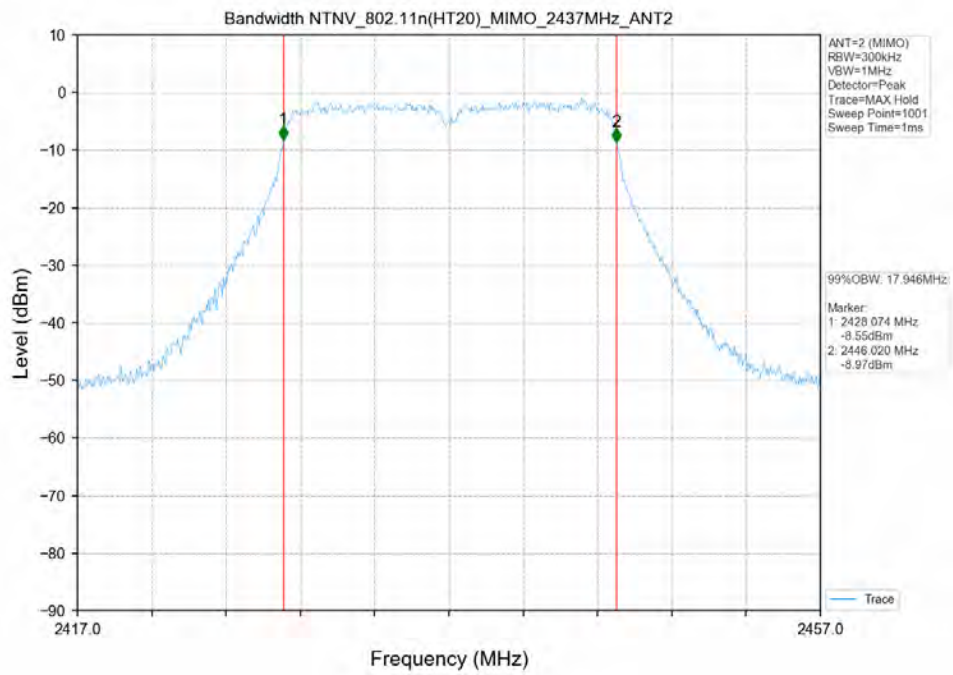
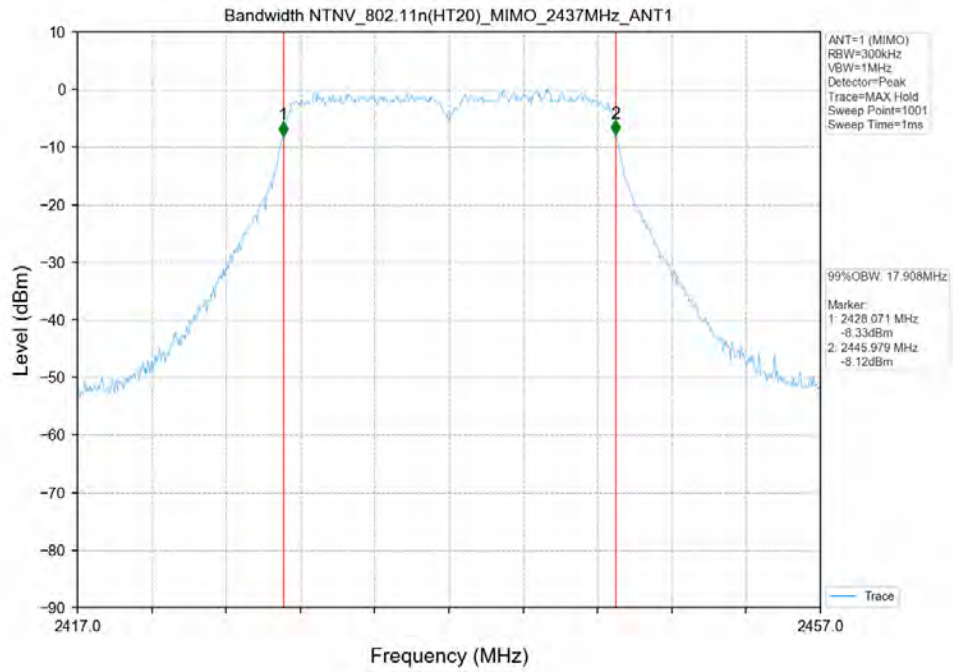


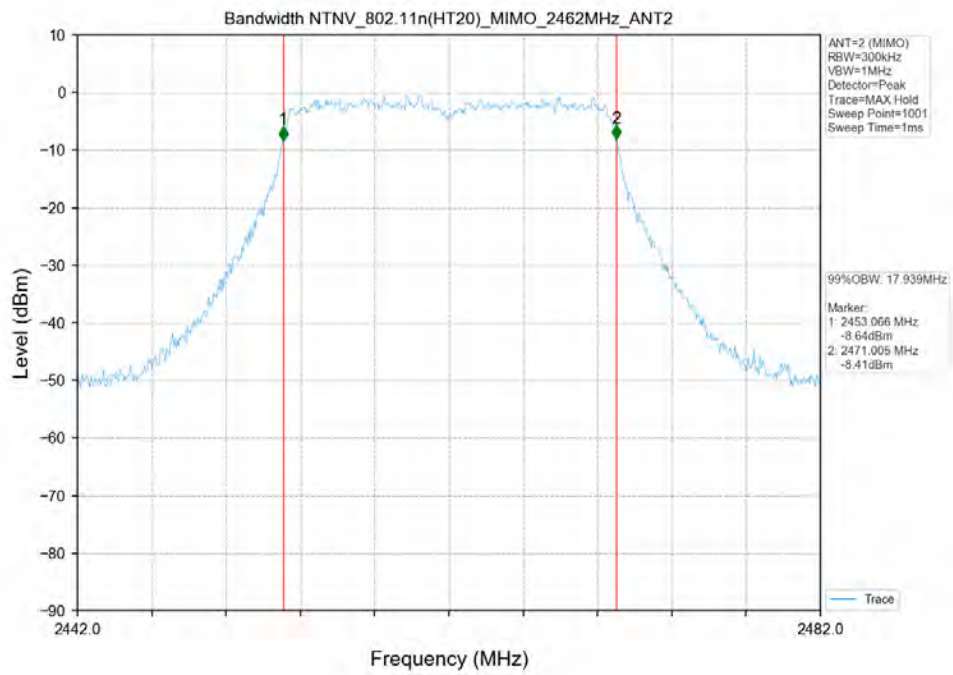
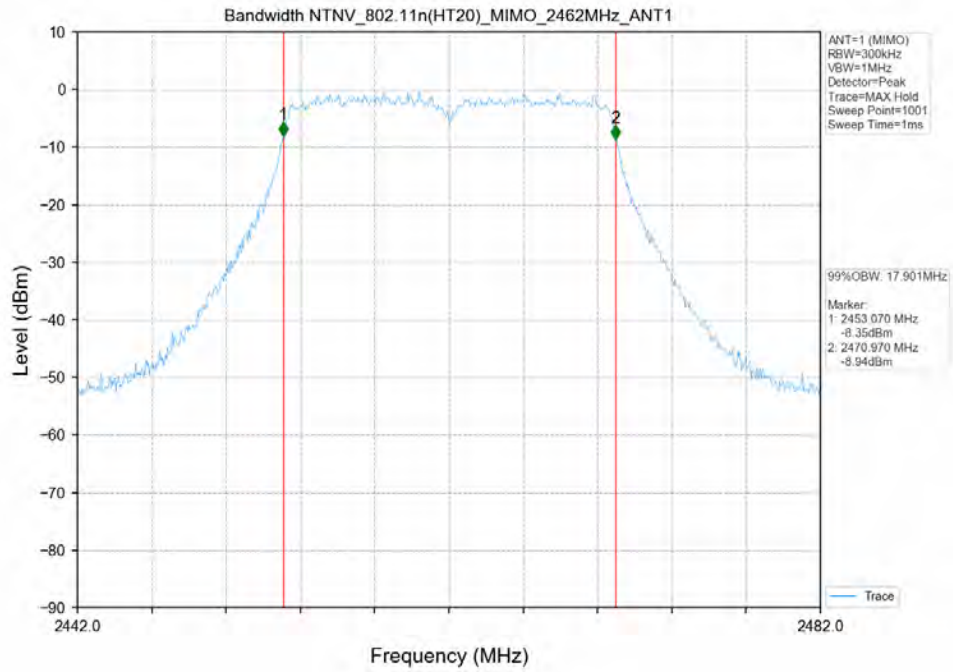


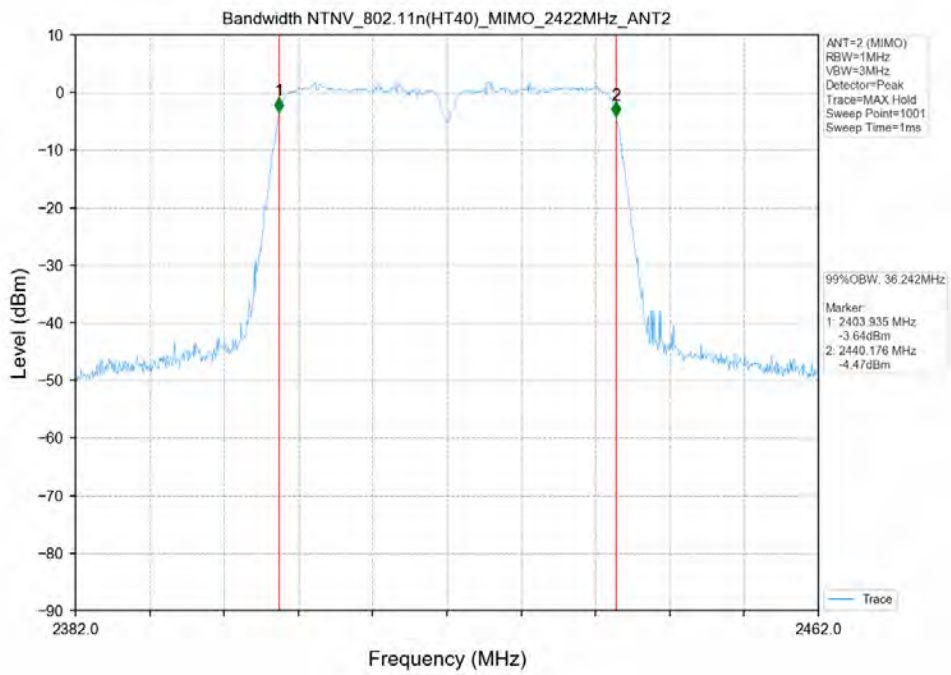
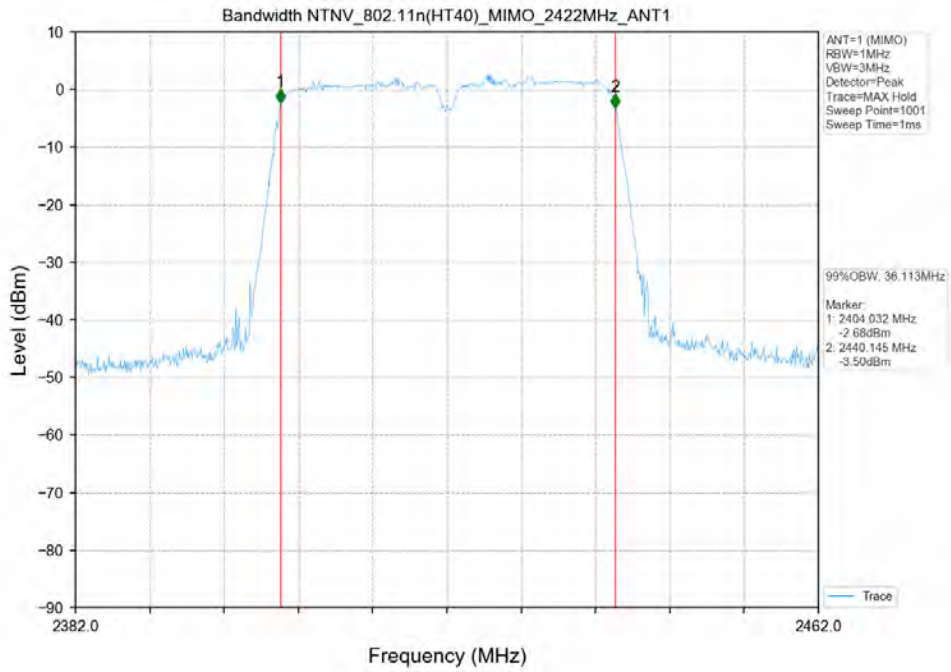


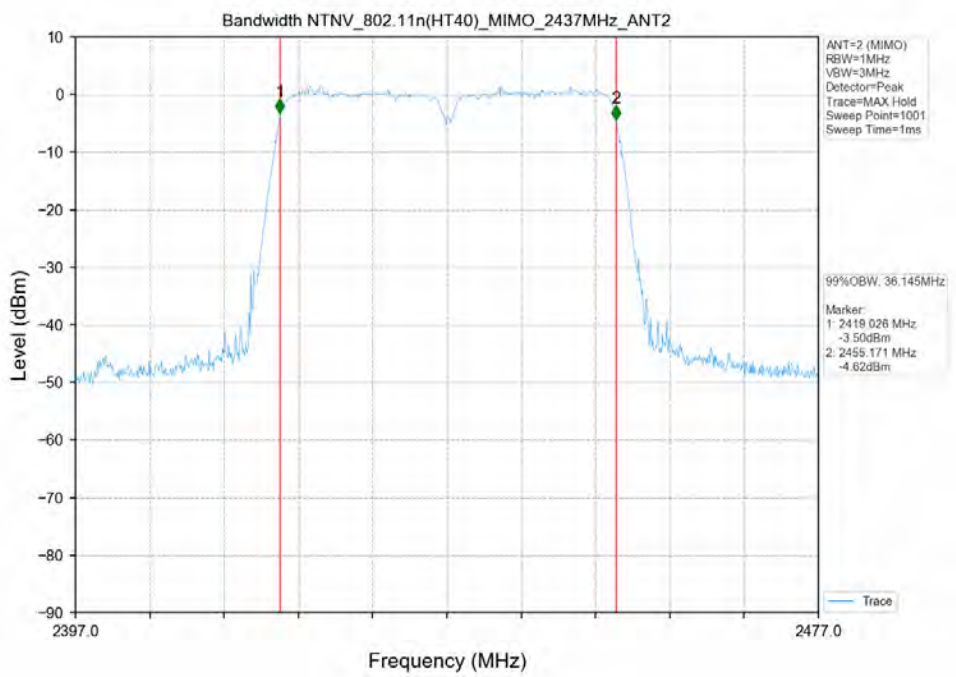
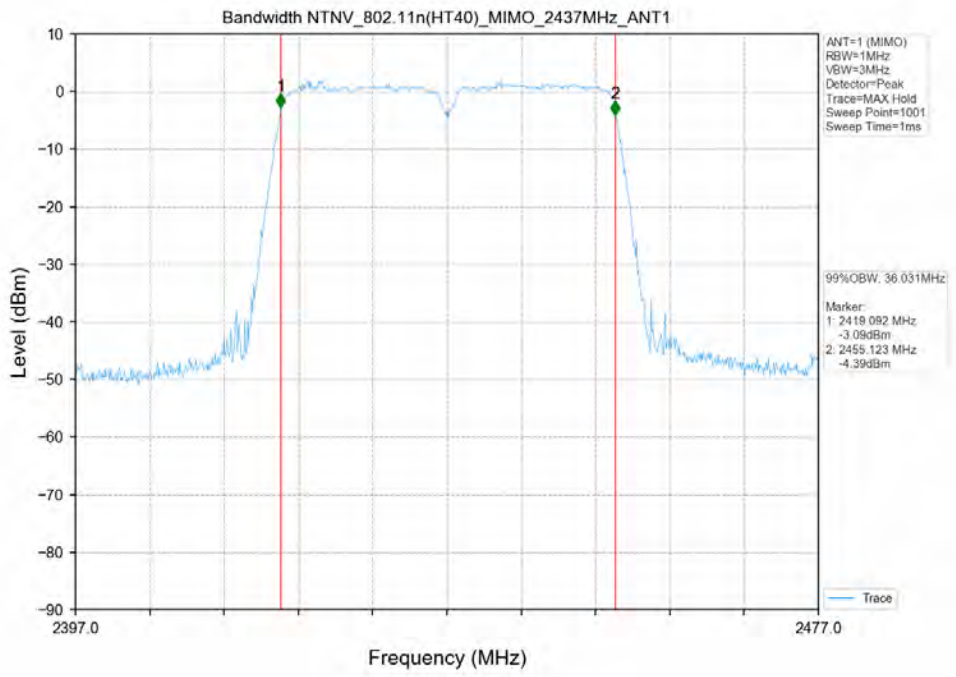


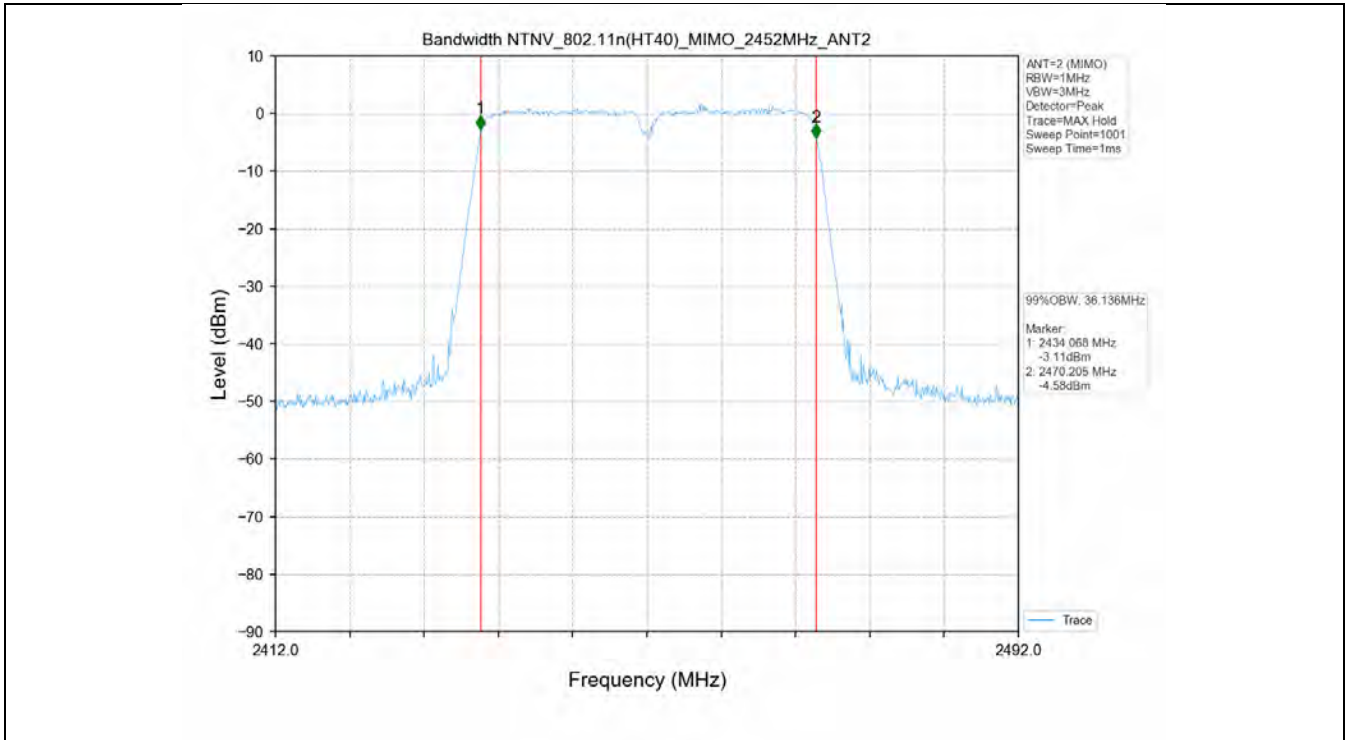
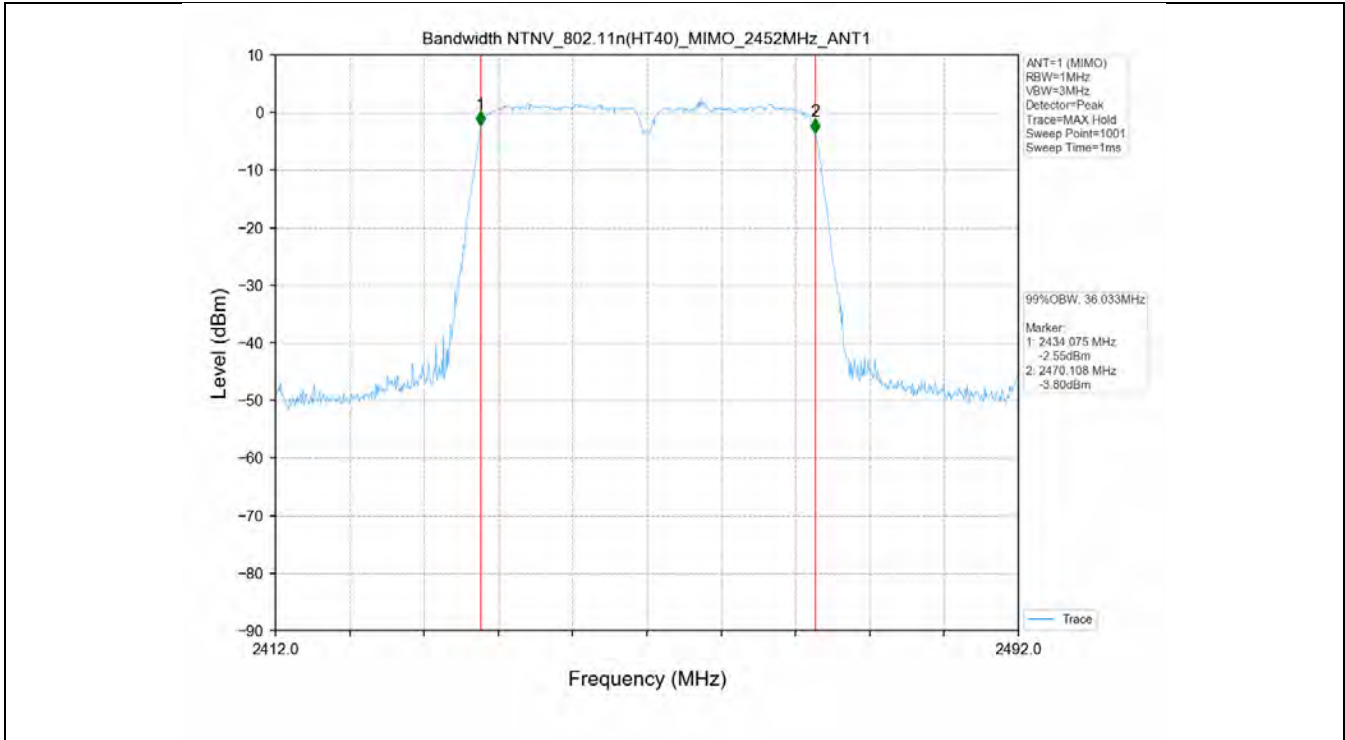










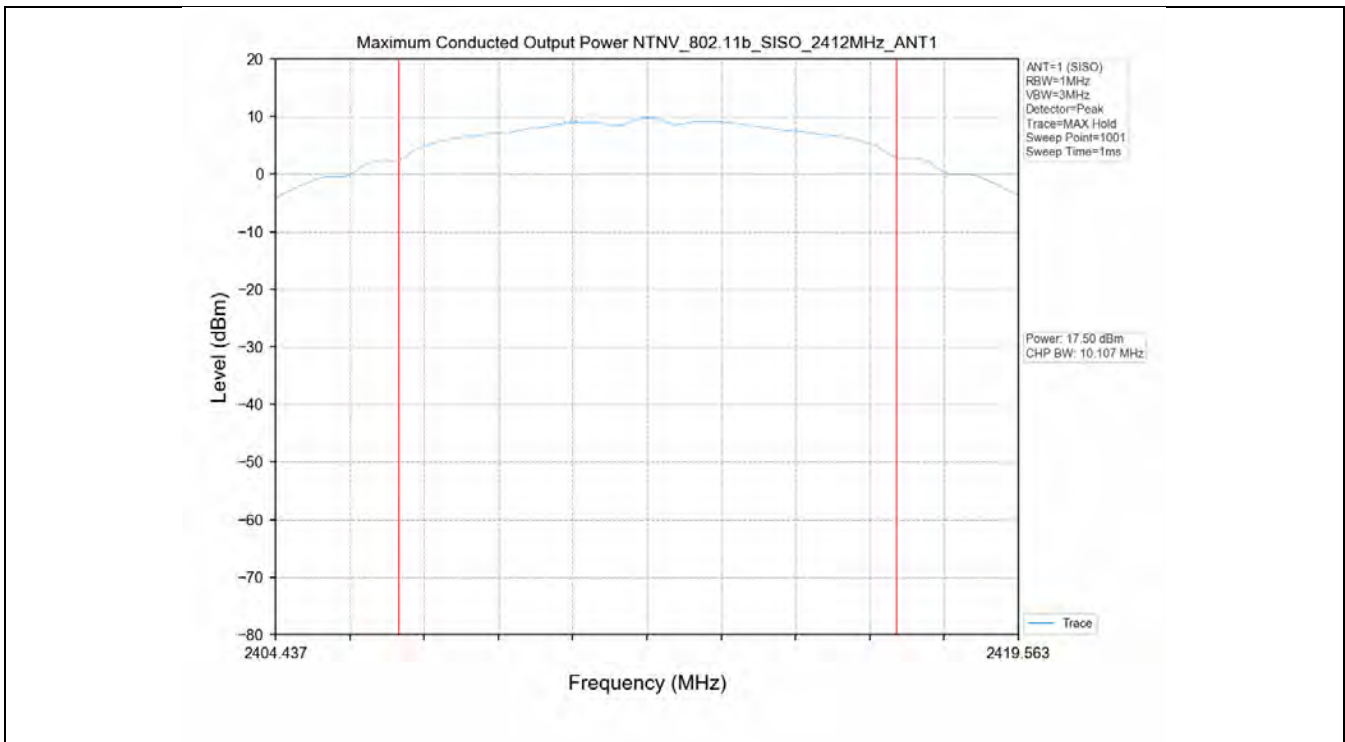


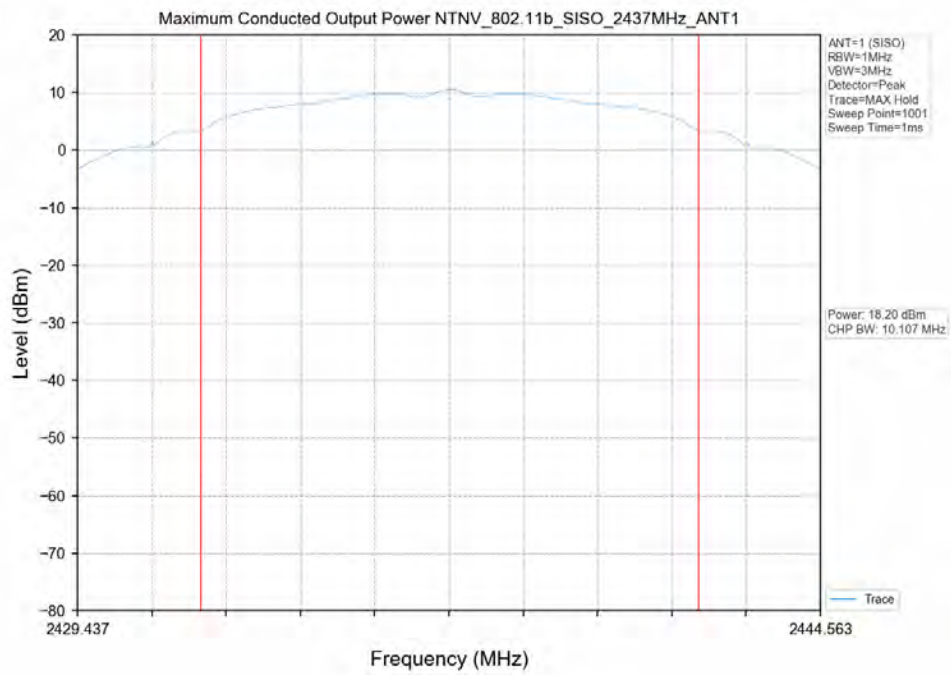
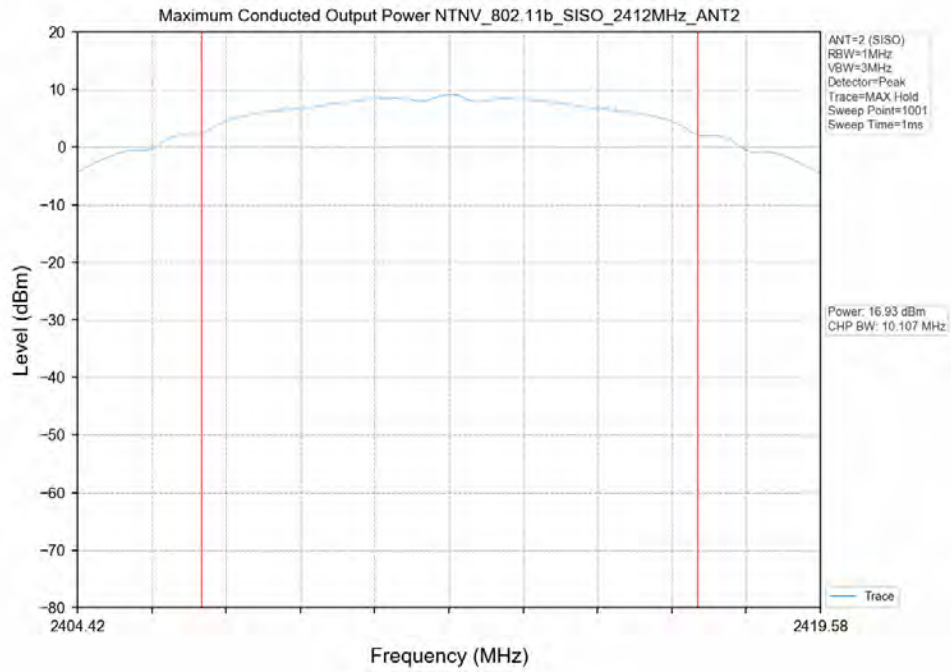
3. Maximum Conducted Output Power

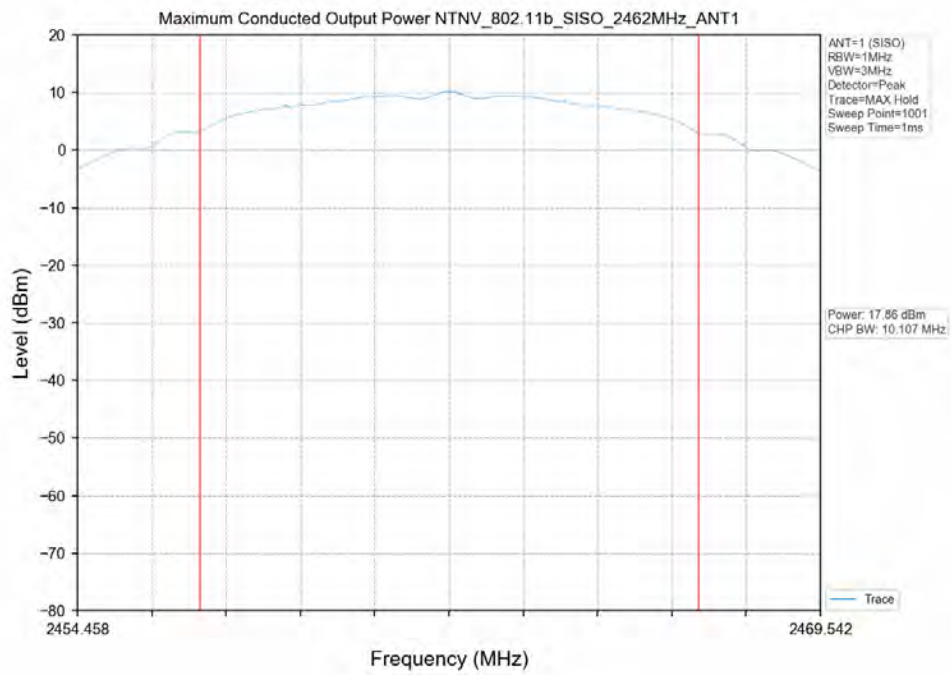
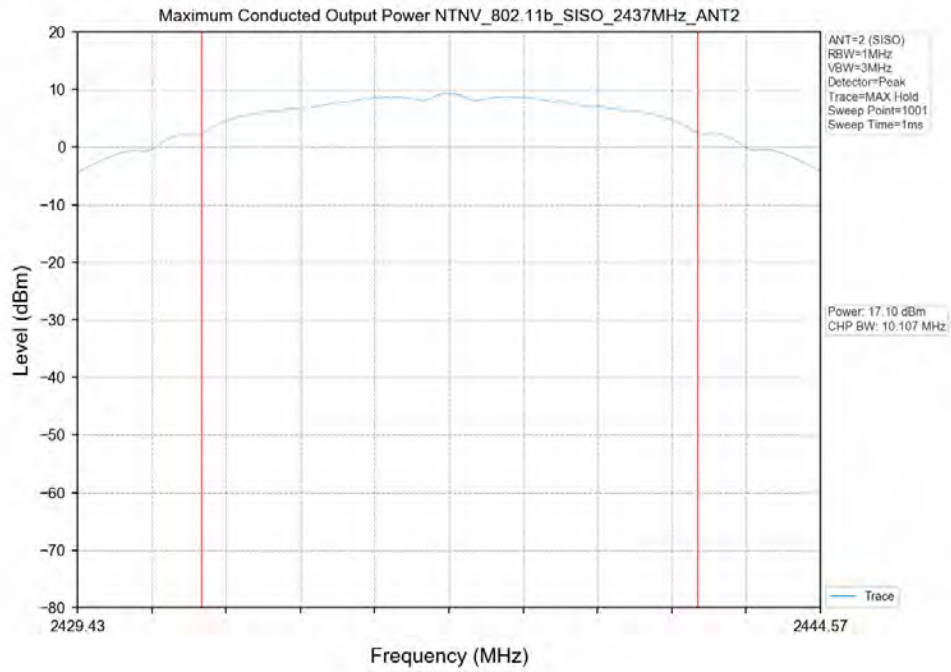
3.1 Test Result

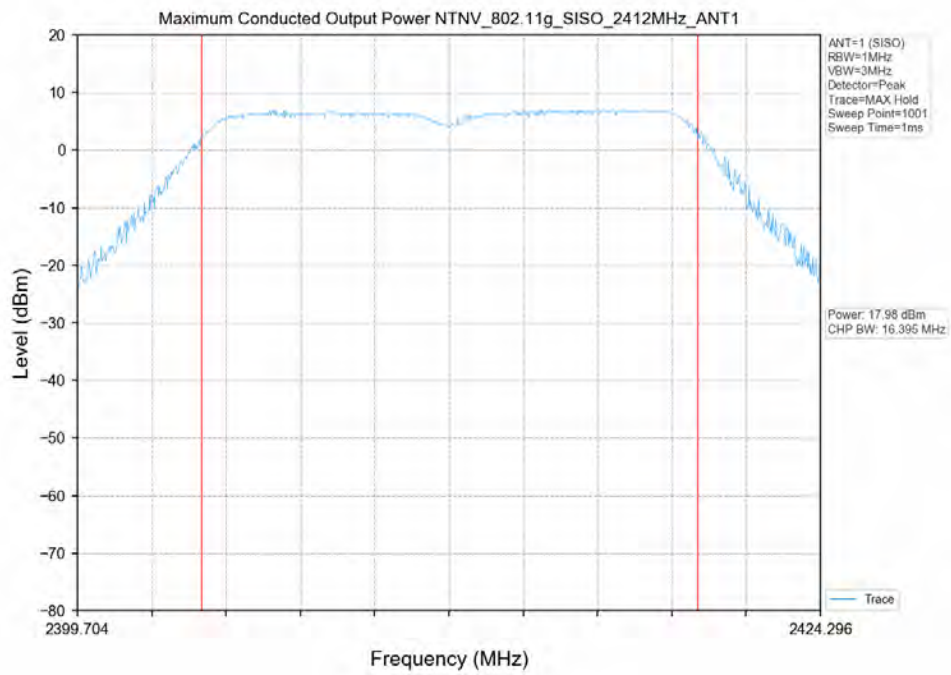
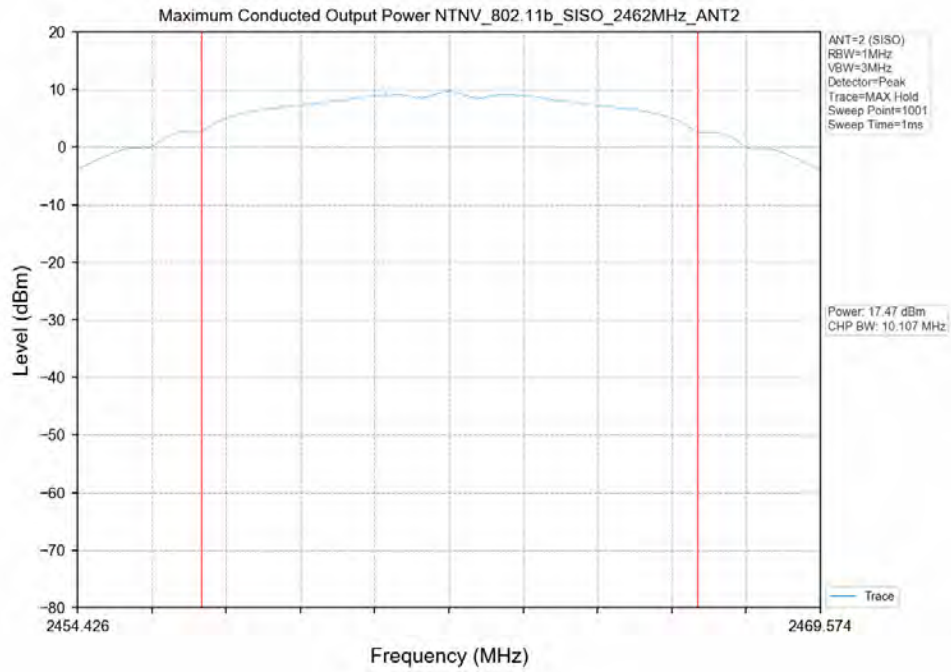
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)			Limits (dBm)	Verdict
			Ant 1	Ant 2	Total		
802.11b	2412	SISO	17.50	16.93	/	30	PASS
	2437	SISO	18.20	17.10	/	30	PASS
	2462	SISO	17.86	17.47	/	30	PASS
802.11g	2412	SISO	17.98	16.33	/	30	PASS
	2437	SISO	18.60	17.48	/	30	PASS
	2462	SISO	17.86	17.86	/	30	PASS
802.11n(HT20)	2412	MIMO	15.09	15.00	18.06	30	PASS
	2437	MIMO	15.68	15.28	18.49	30	PASS
	2462	MIMO	15.65	15.89	18.78	30	PASS
802.11n(HT40)	2422	MIMO	15.88	15.46	18.69	30	PASS
	2437	MIMO	15.67	15.13	18.42	30	PASS
	2452	MIMO	15.71	15.26	18.50	30	PASS

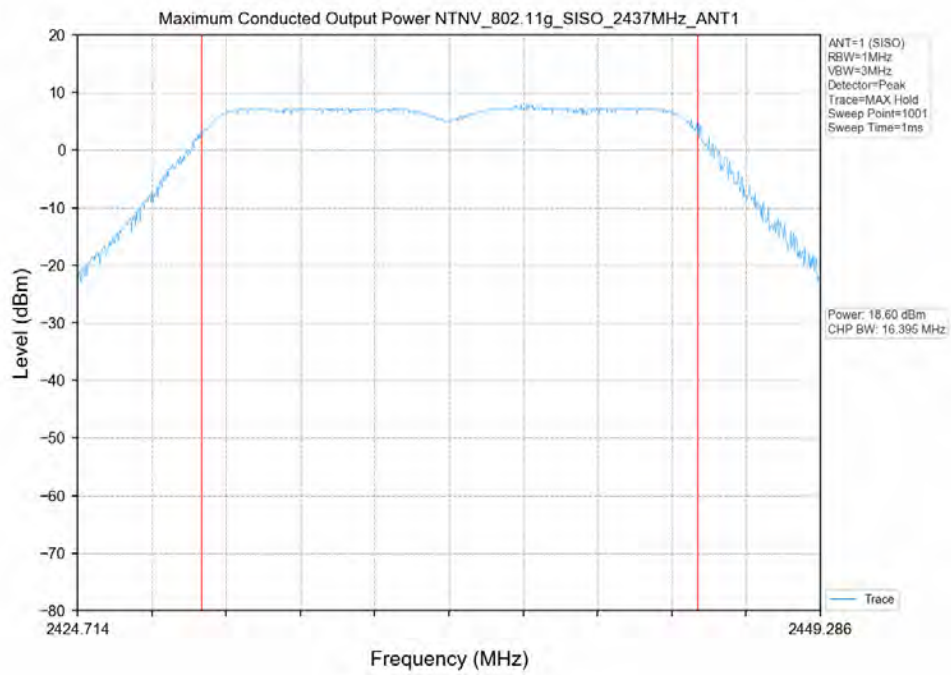
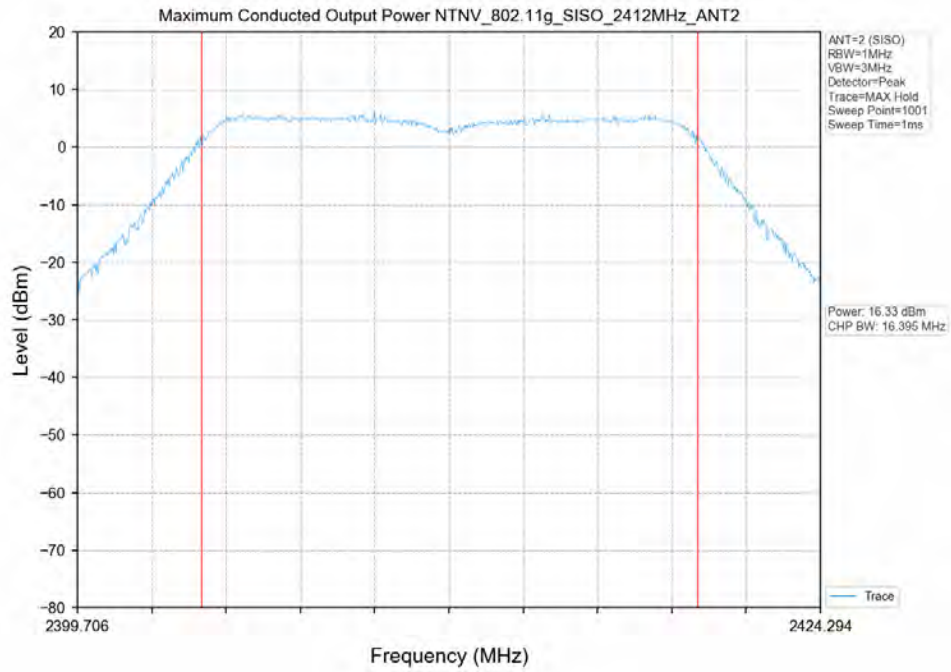
3.2 Test Graph

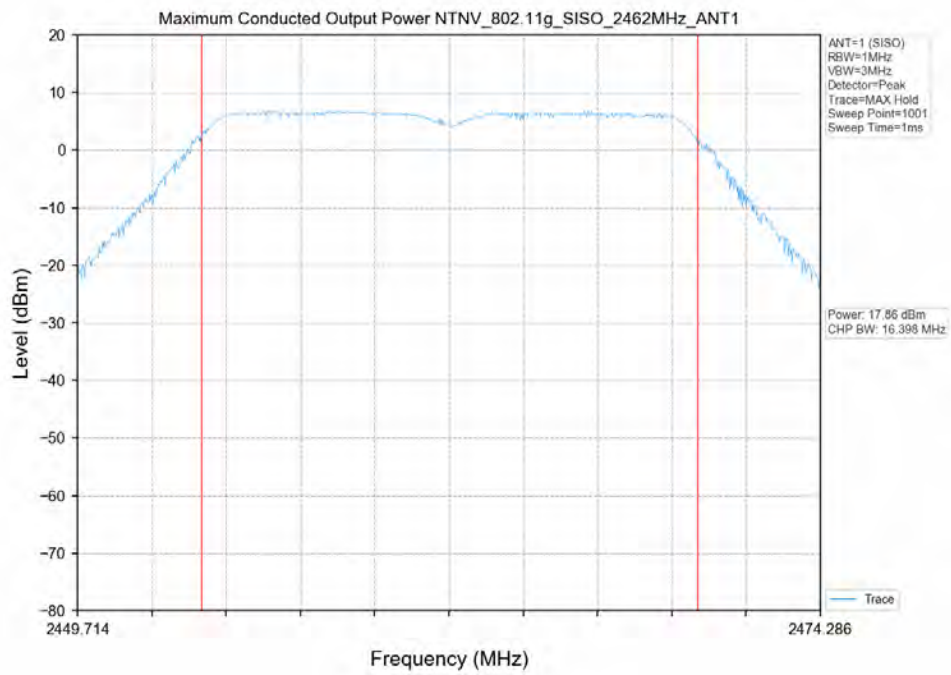
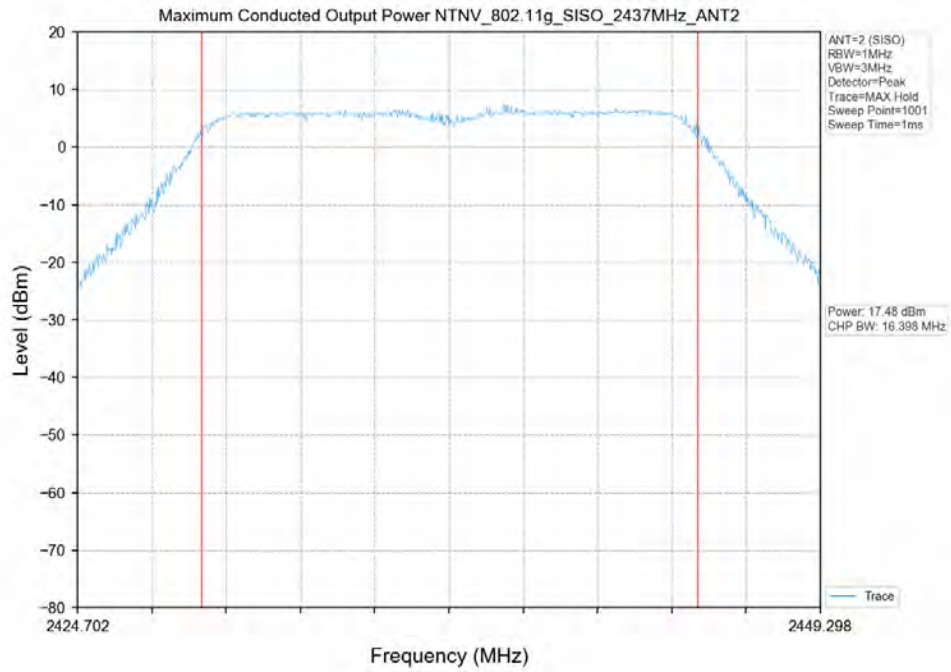


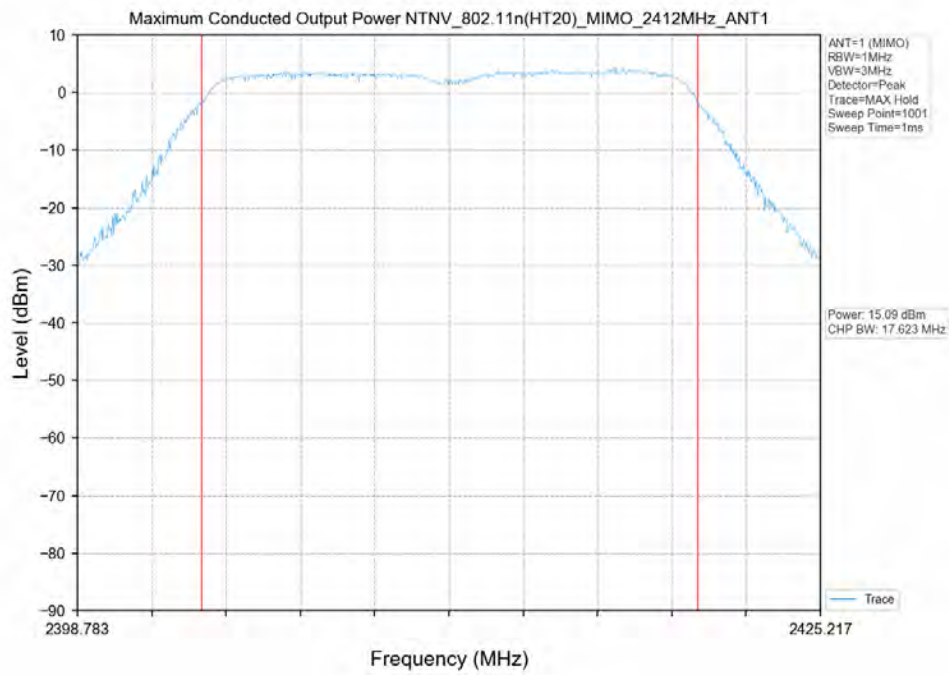
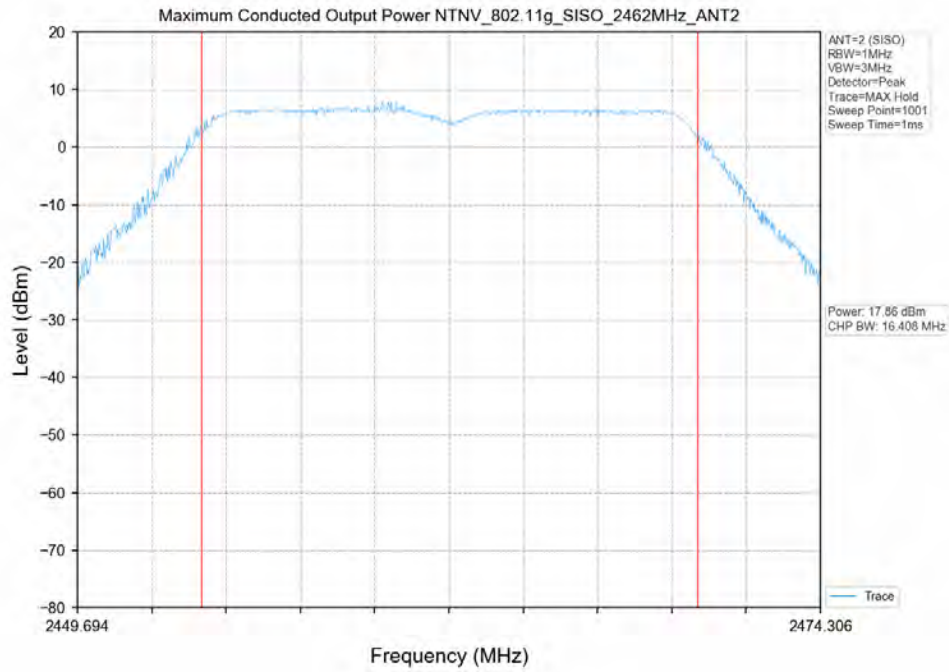


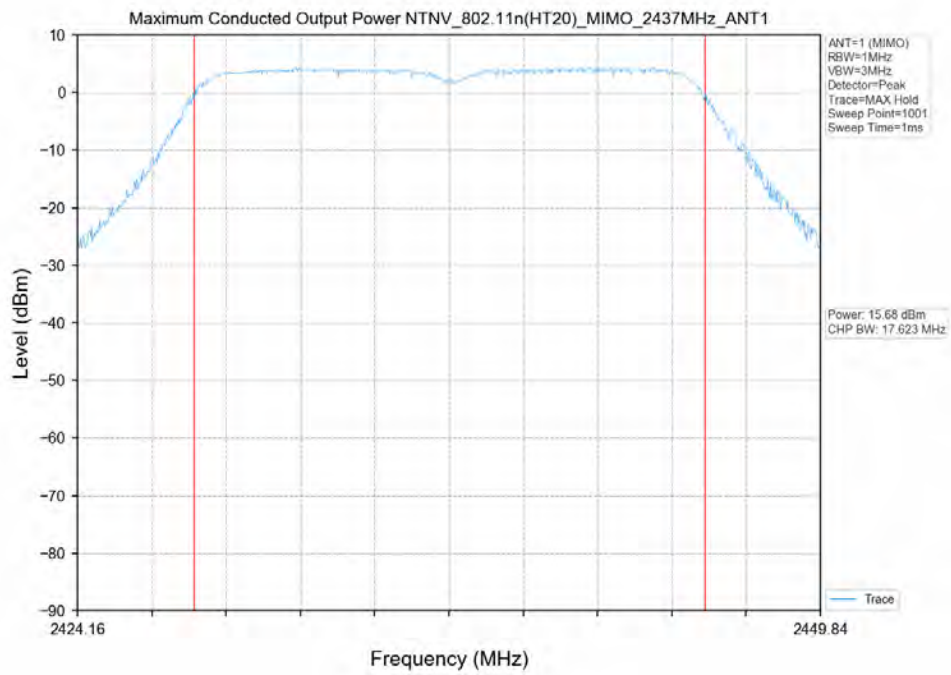
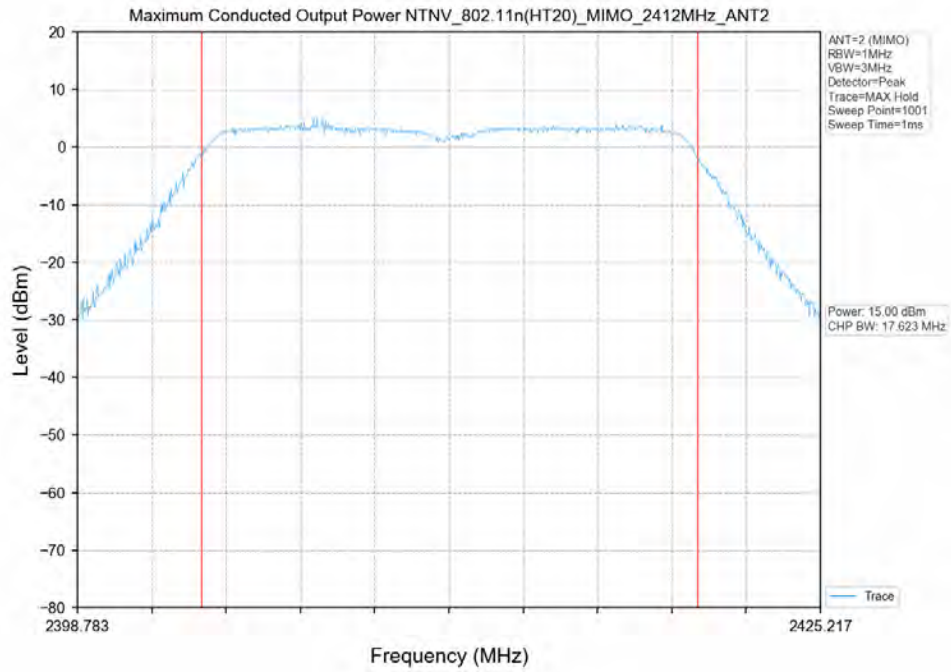


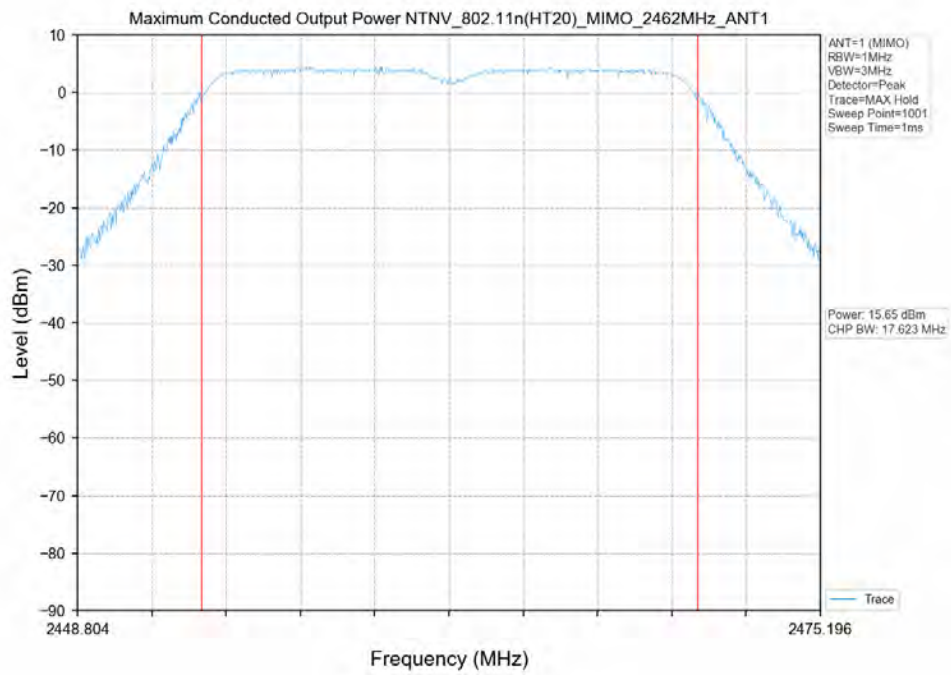
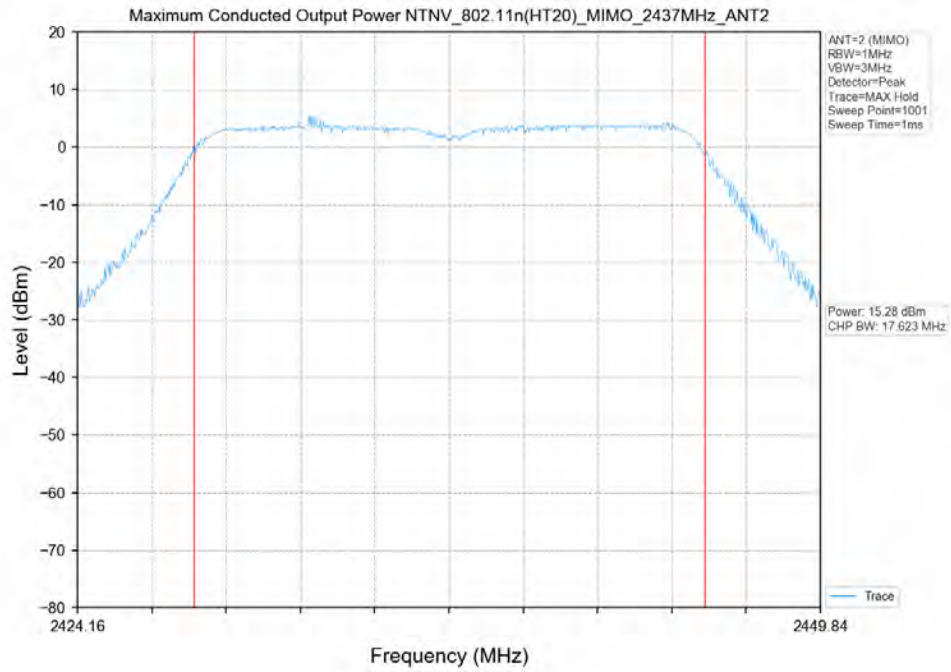


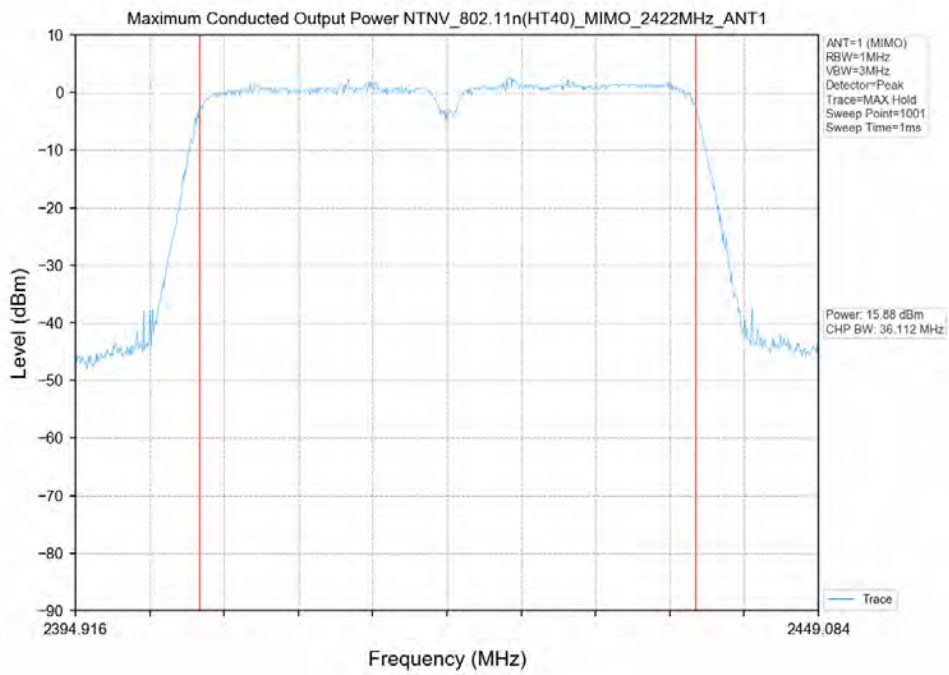
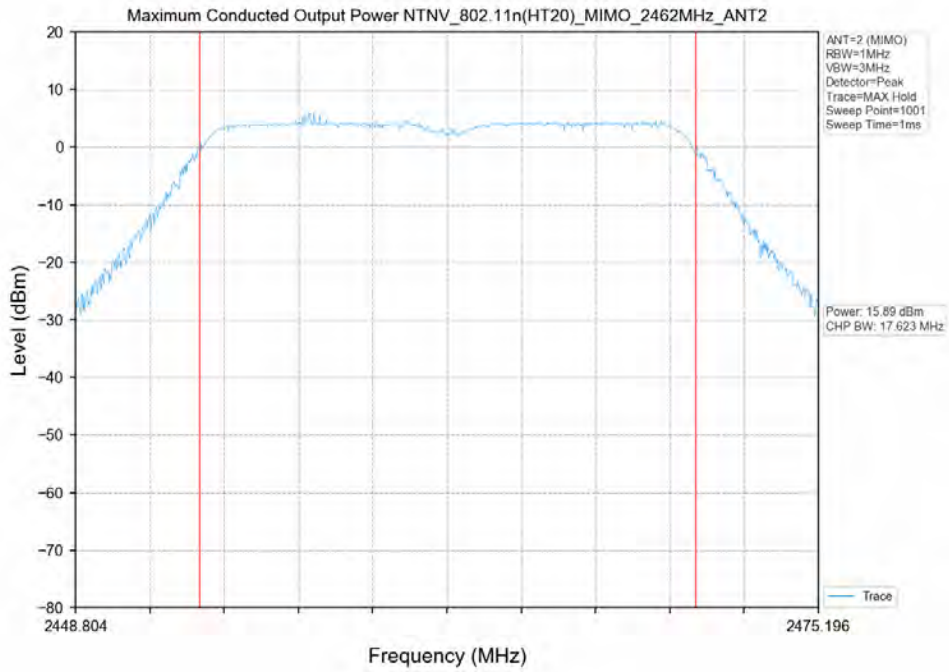


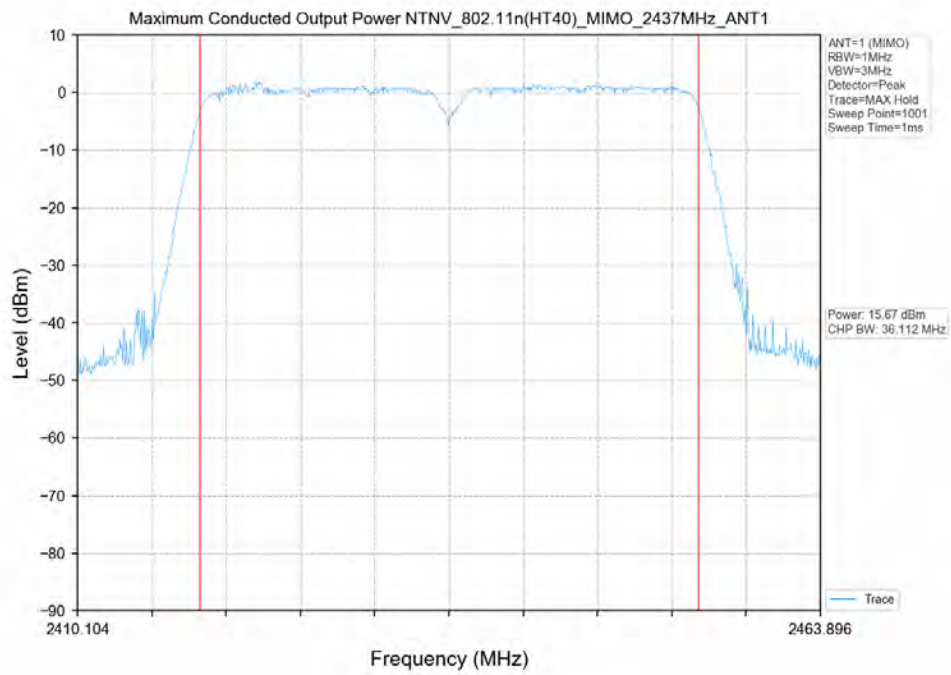
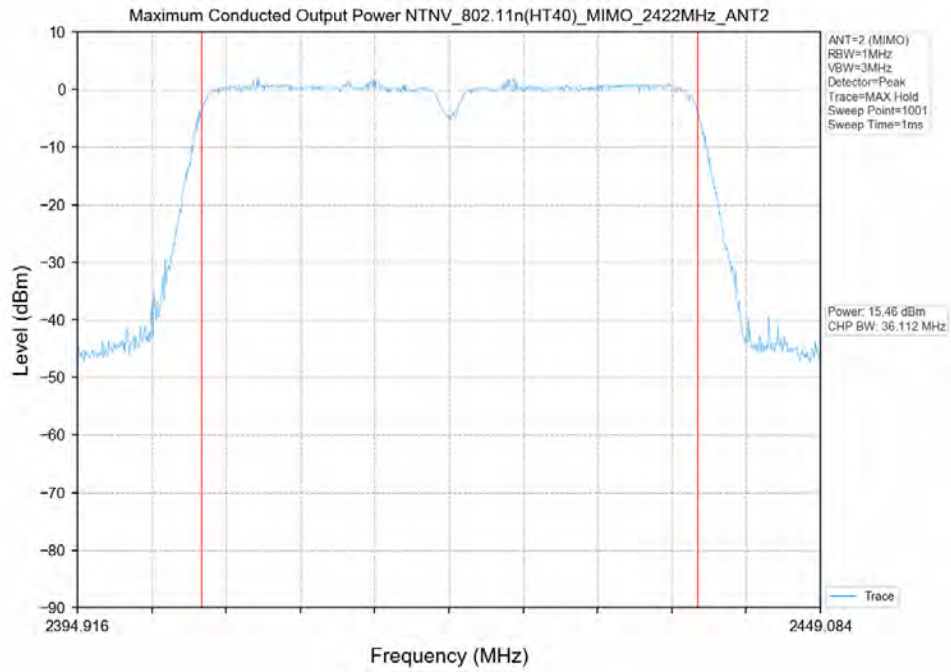


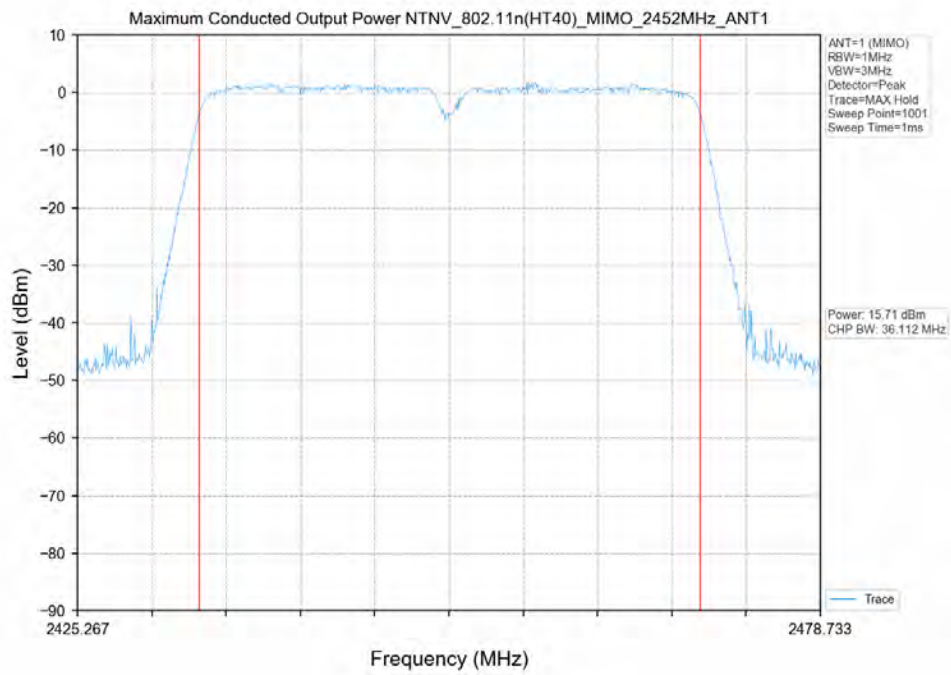
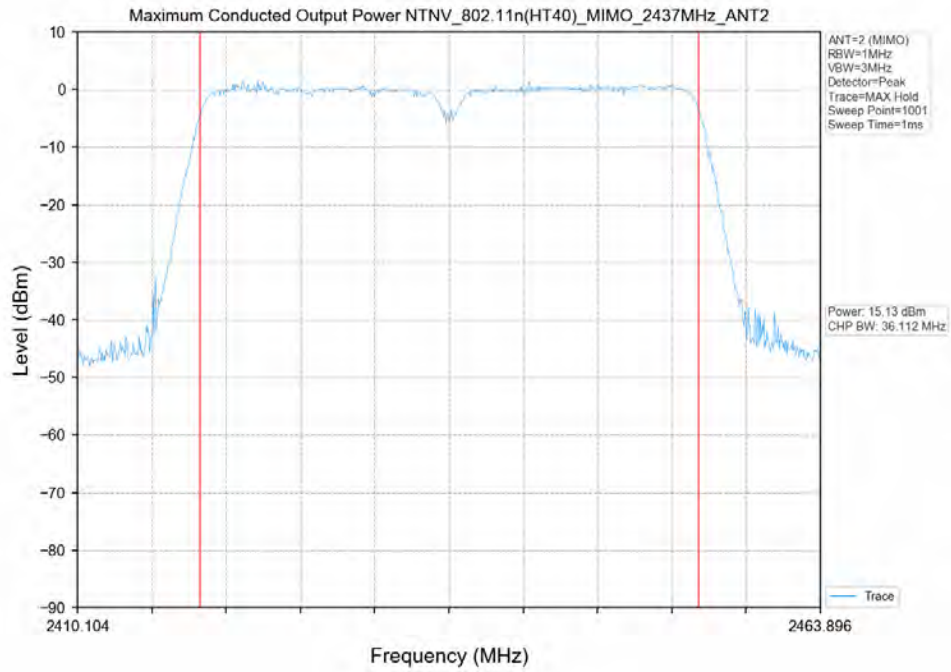


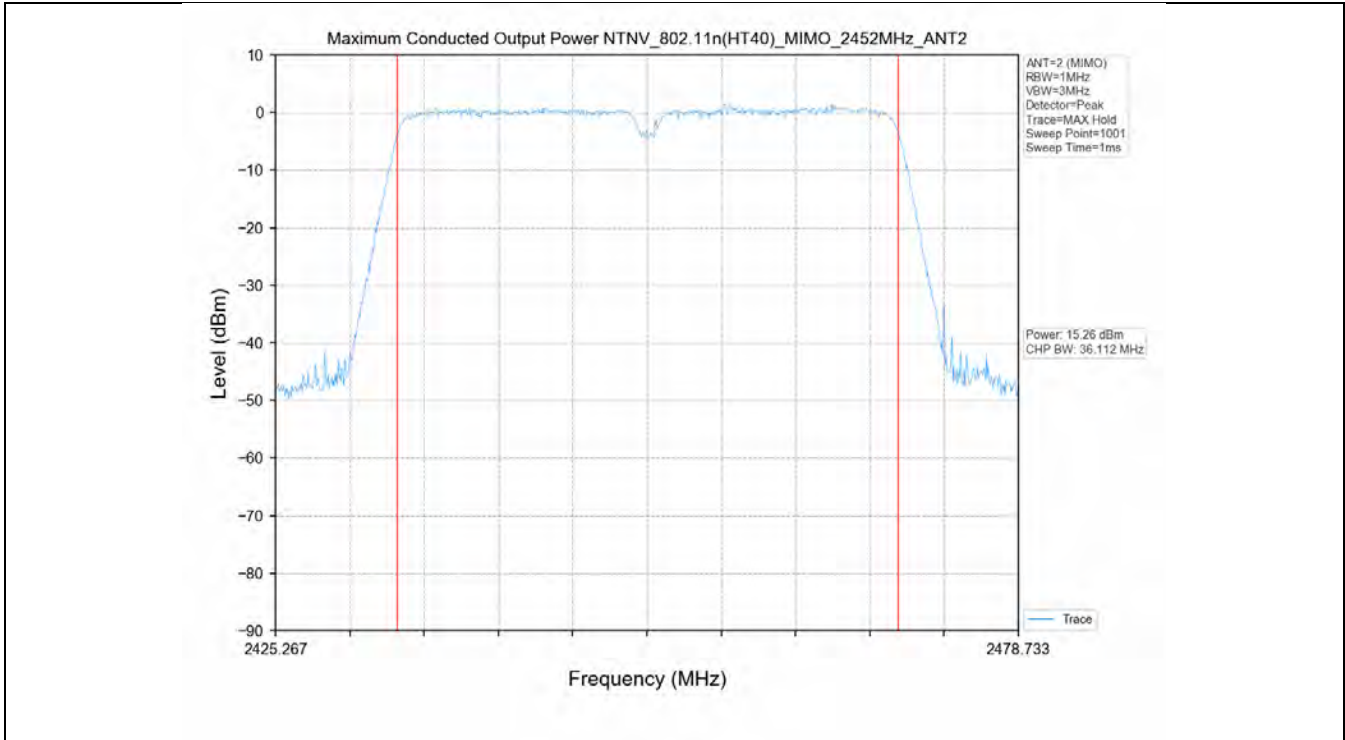










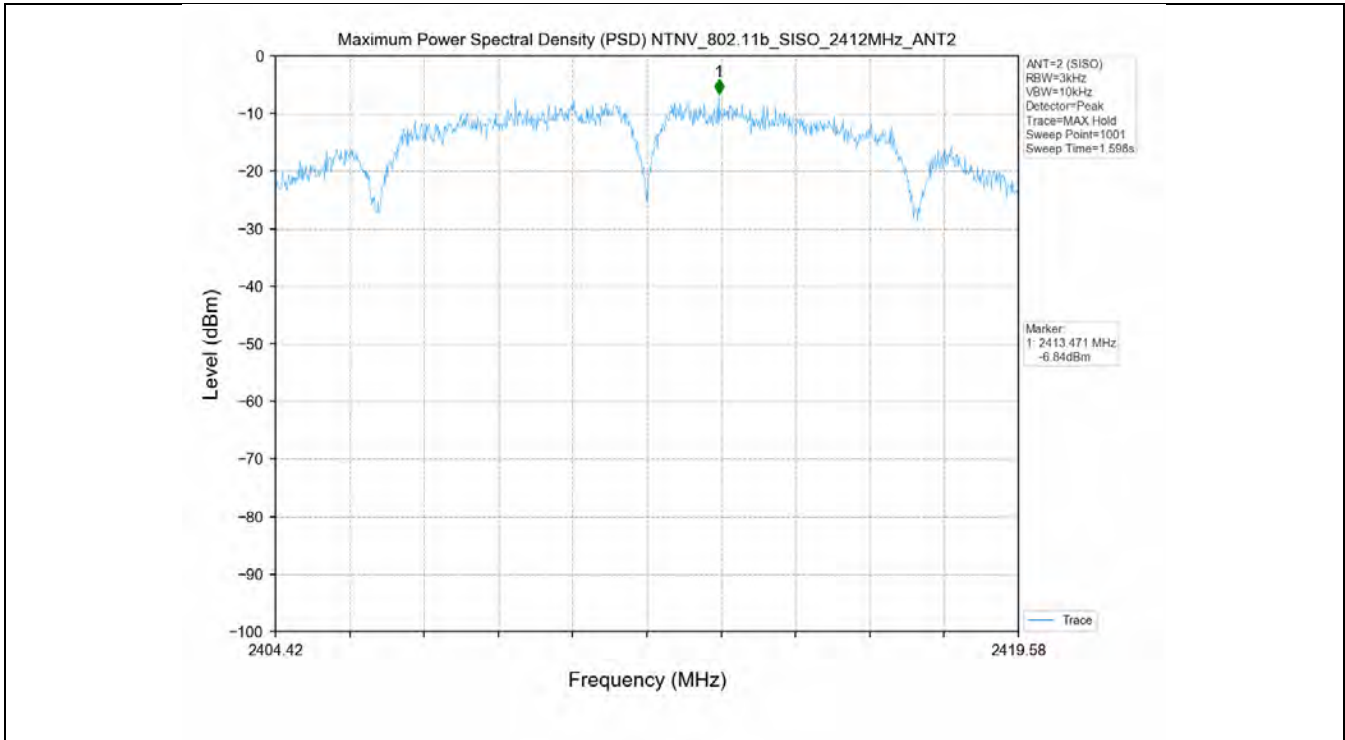
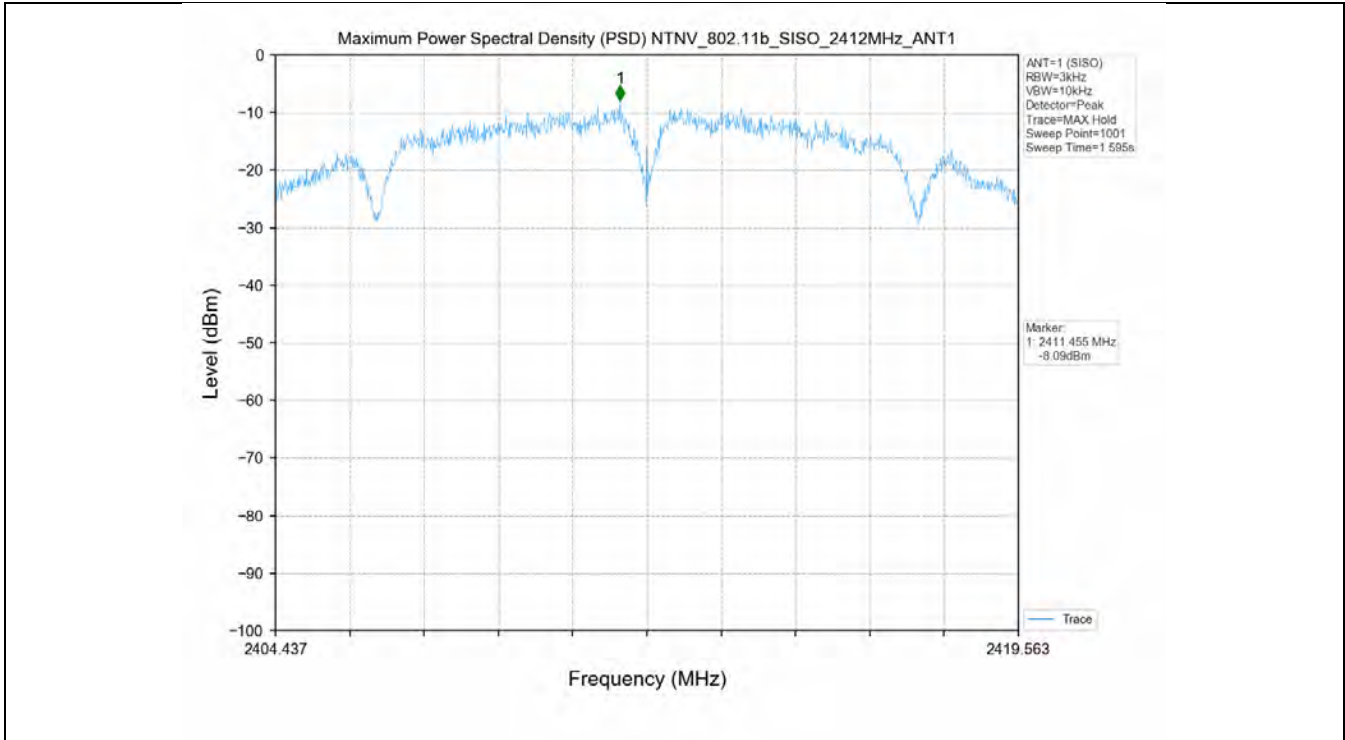


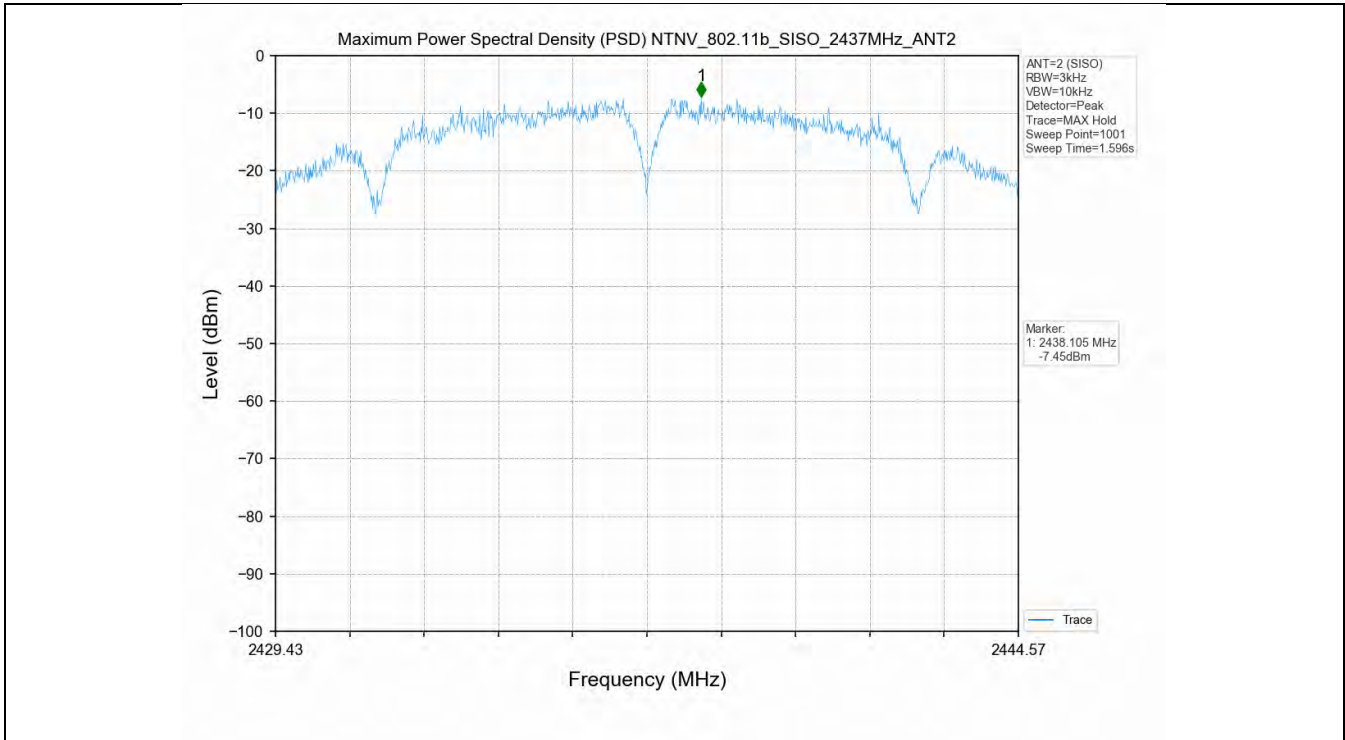
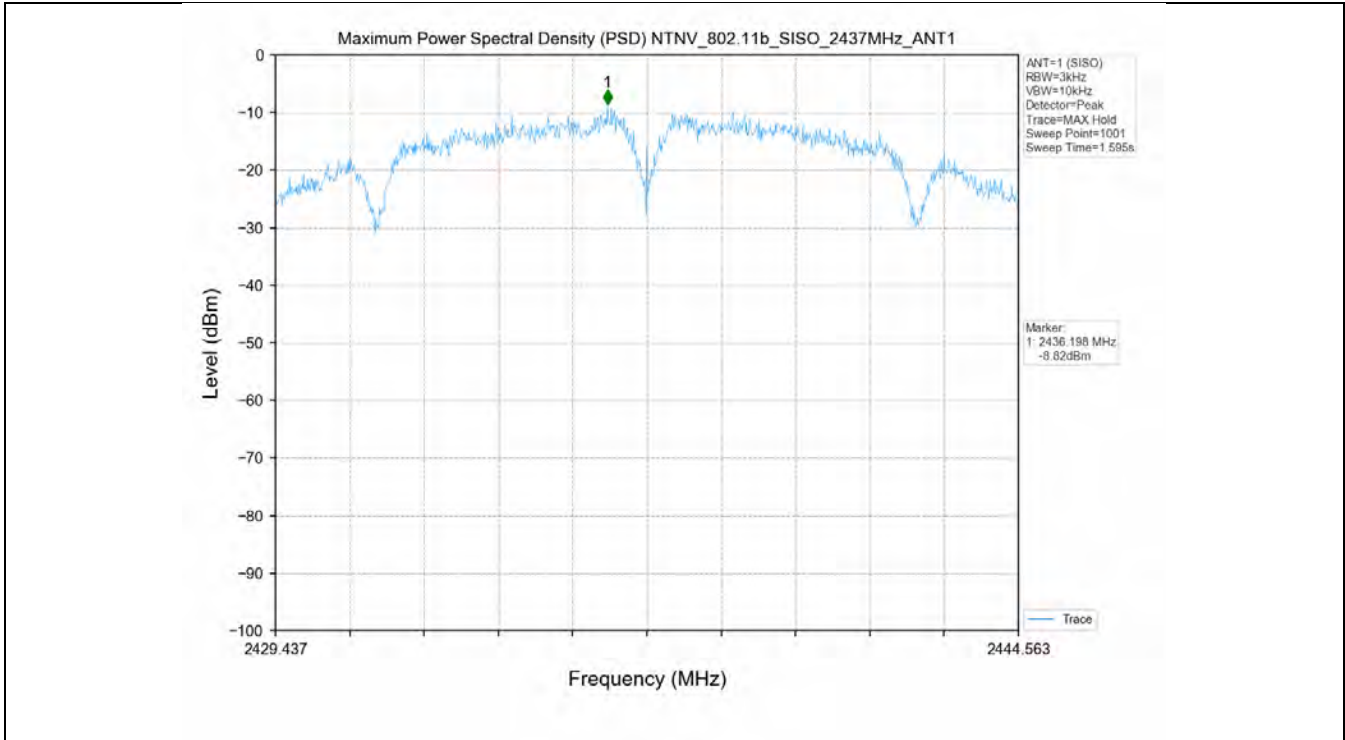
4. Maximum Power Spectral Density (PSD)

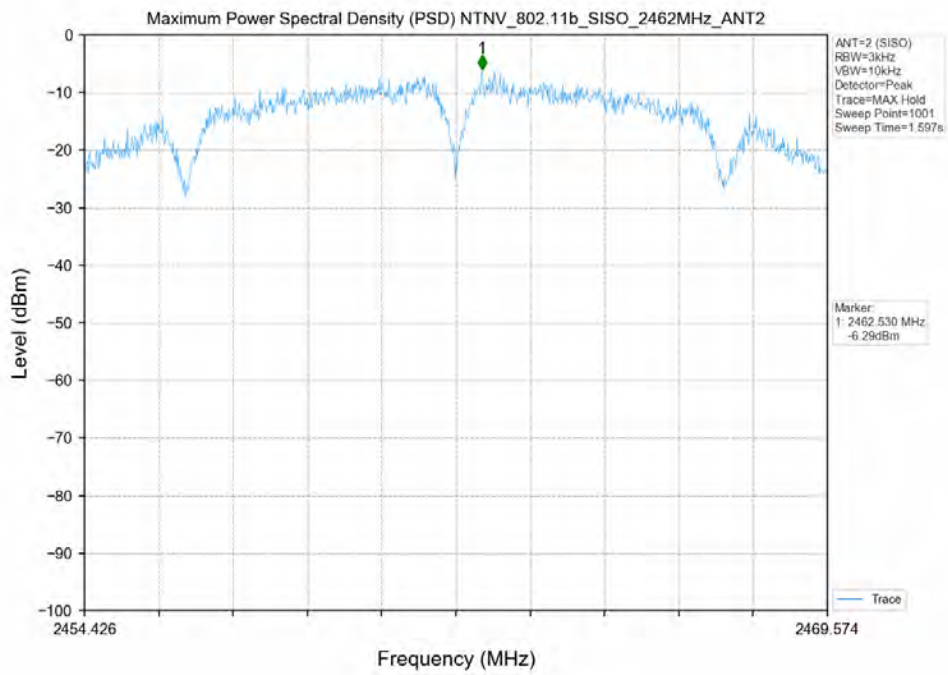
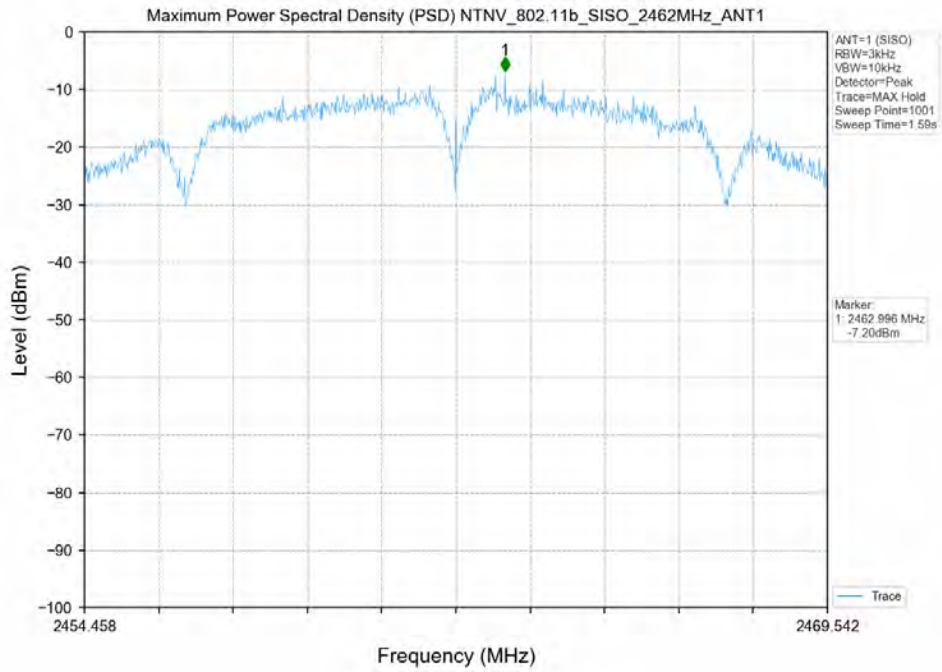
4.1 Test Result

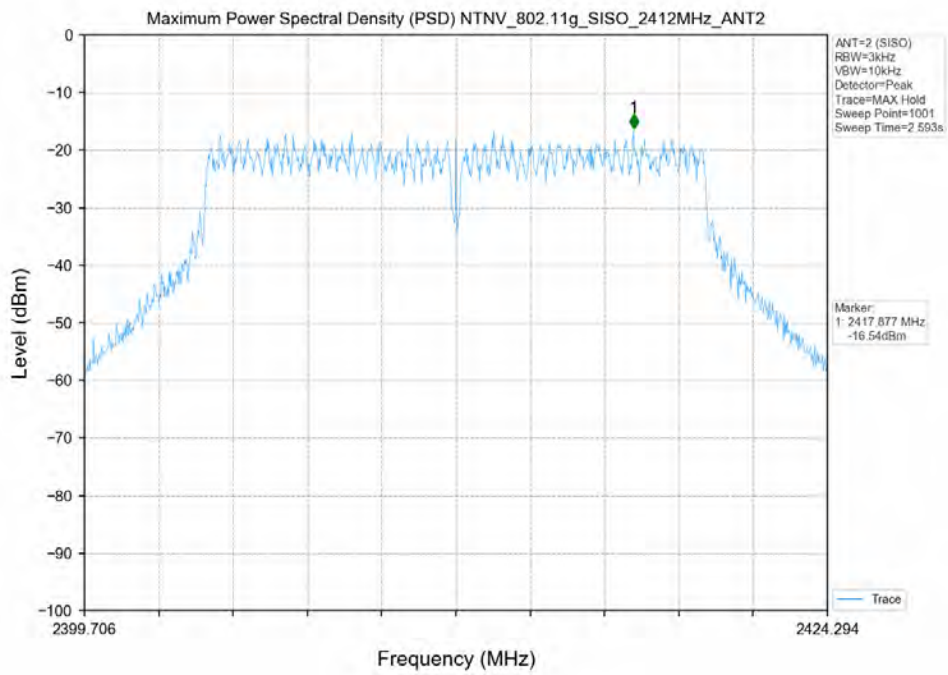
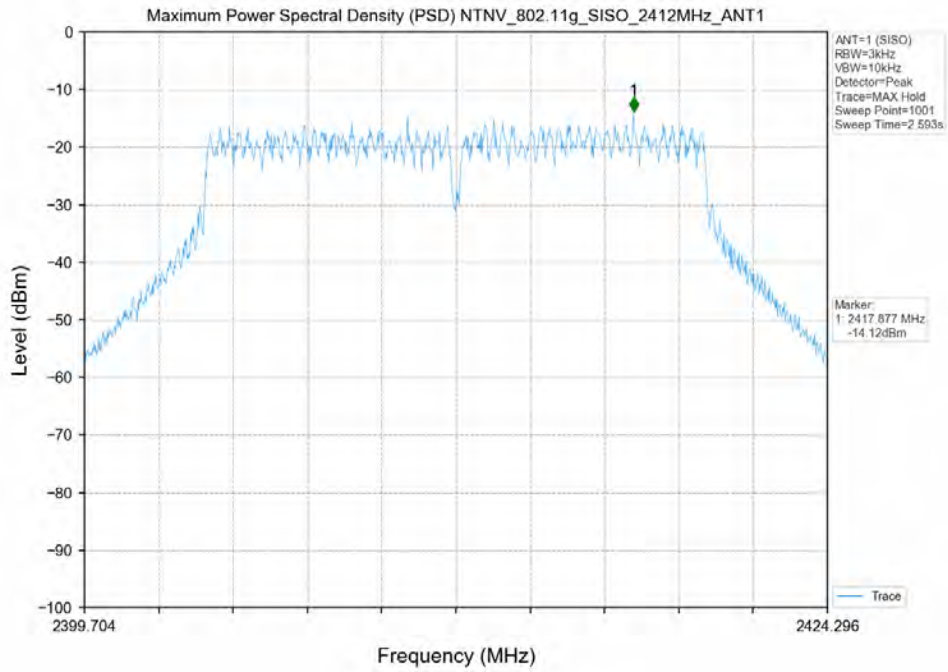
Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)			Limits (dBm/3kHz)	Verdict
			Ant 1	Ant 2	Total		
802.11b	2412	SISO	-8.09	-6.84	/	≤8	PASS
	2437	SISO	-8.82	-7.45	/	≤8	PASS
	2462	SISO	-7.20	-6.29	/	≤8	PASS
802.11g	2412	SISO	-14.12	-16.54	/	≤8	PASS
	2437	SISO	-14.28	-15.89	/	≤8	PASS
	2462	SISO	-14.65	-14.96	/	≤8	PASS
802.11n(HT20)	2412	MIMO	-16.92	-17.87	-15.33	≤8	PASS
	2437	MIMO	-15.37	-16.85	-14.83	≤8	PASS
	2462	MIMO	-16.54	-16.90	-13.84	≤8	PASS
802.11n(HT40)	2422	MIMO	-20.04	-20.64	-18.29	≤8	PASS
	2437	MIMO	-20.82	-21.34	-18.22	≤8	PASS
	2452	MIMO	-20.24	-20.84	-17.66	≤8	PASS

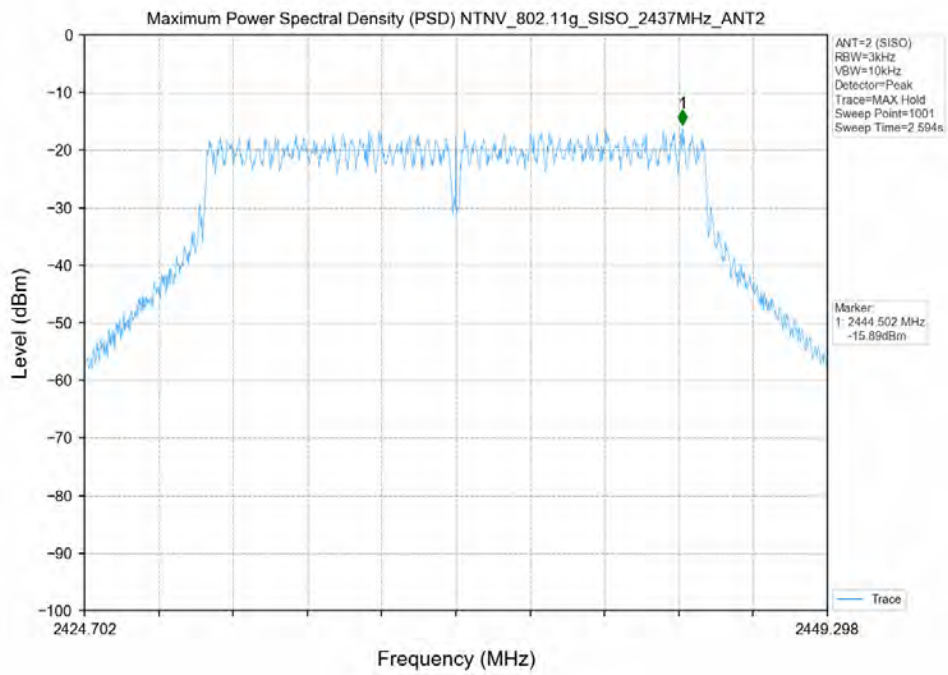
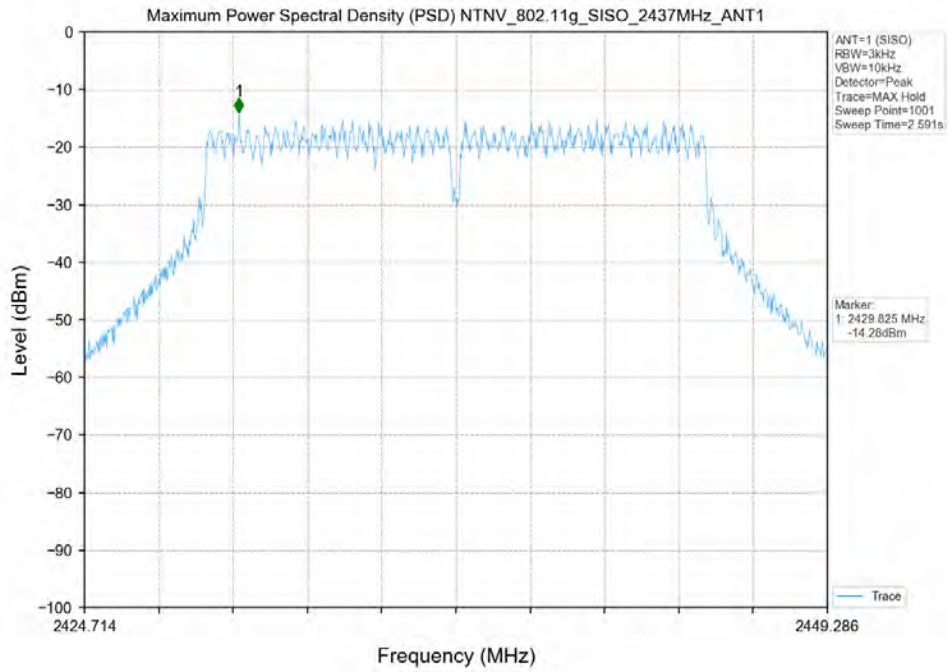
4.2 Test Graph

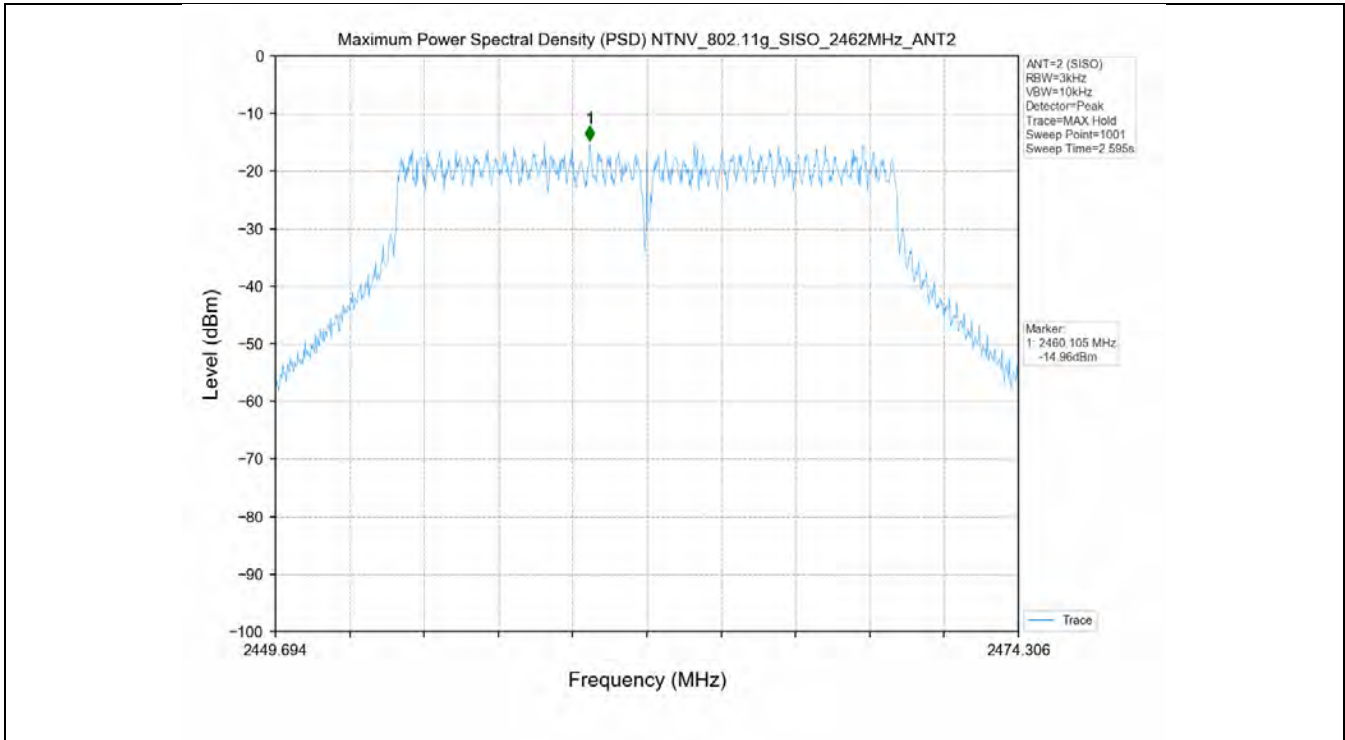
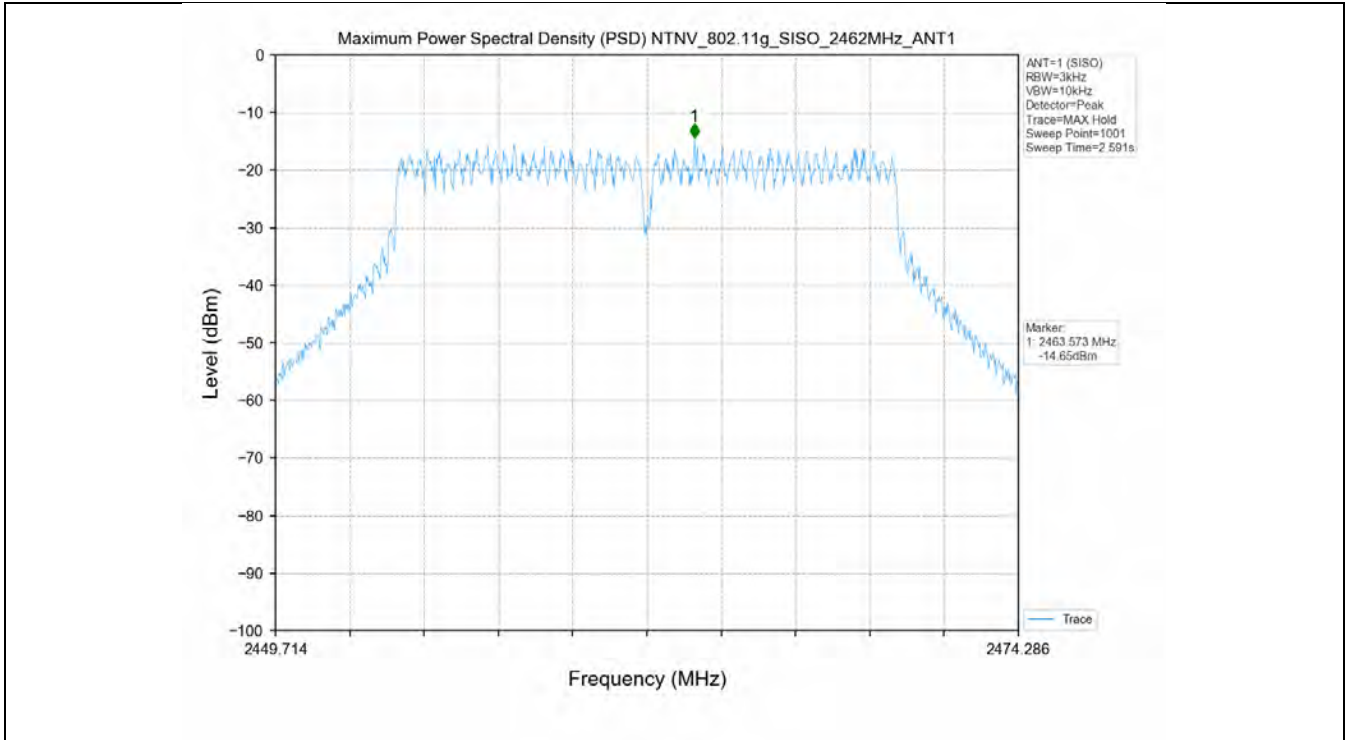


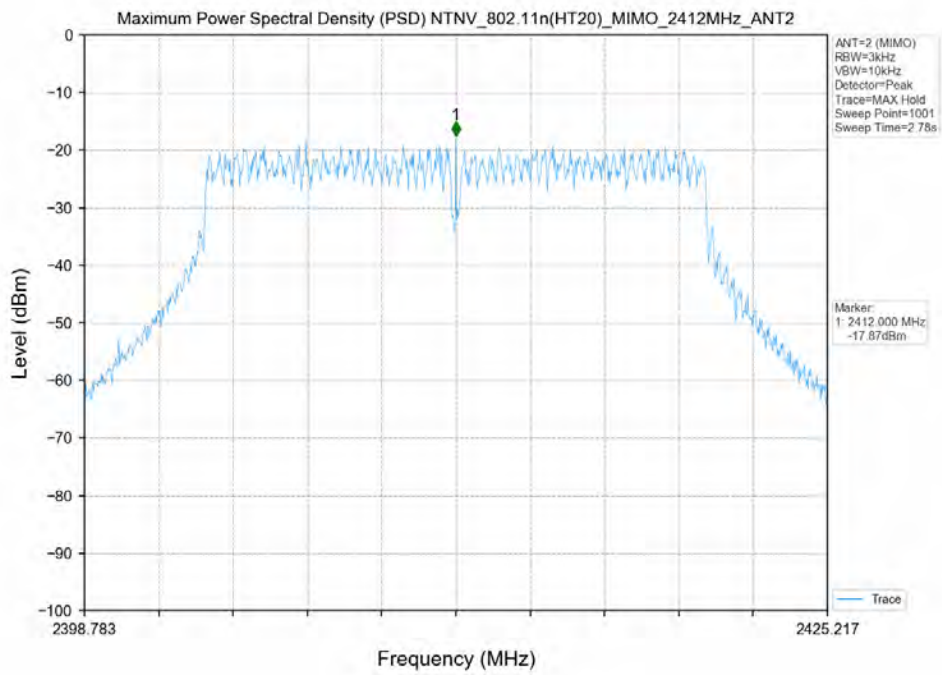
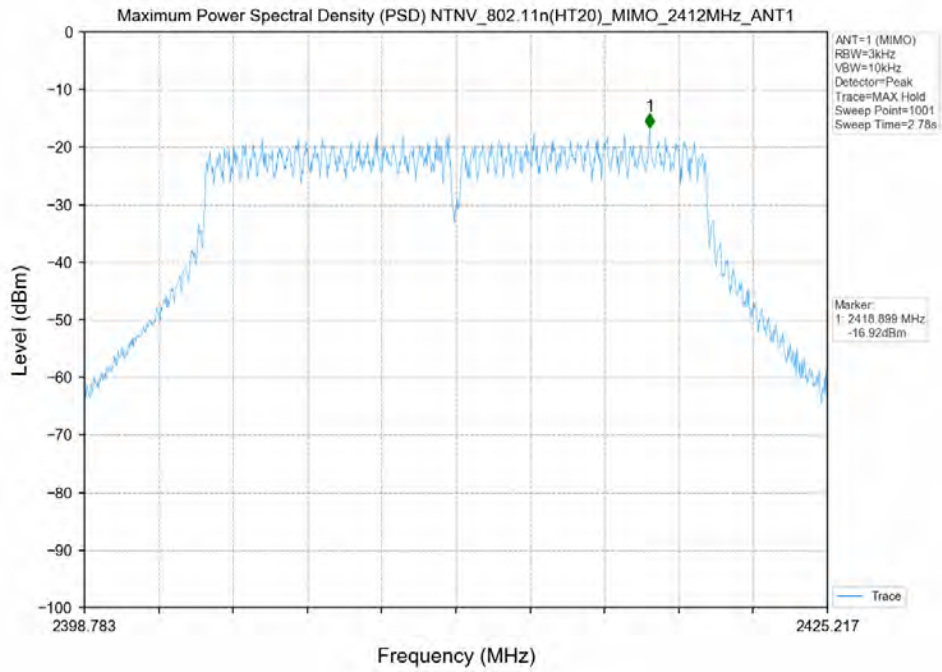


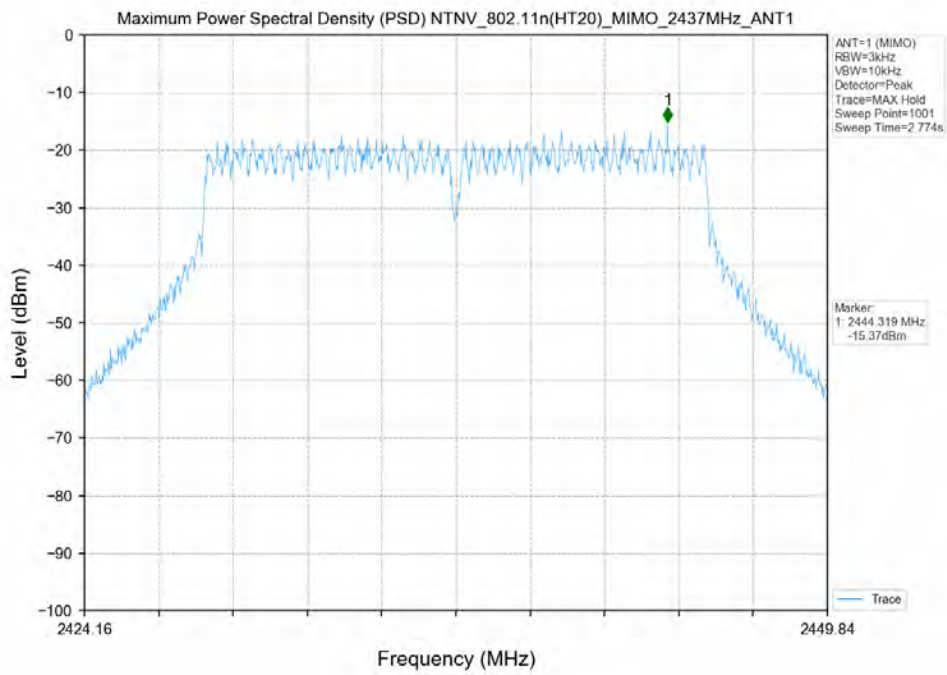
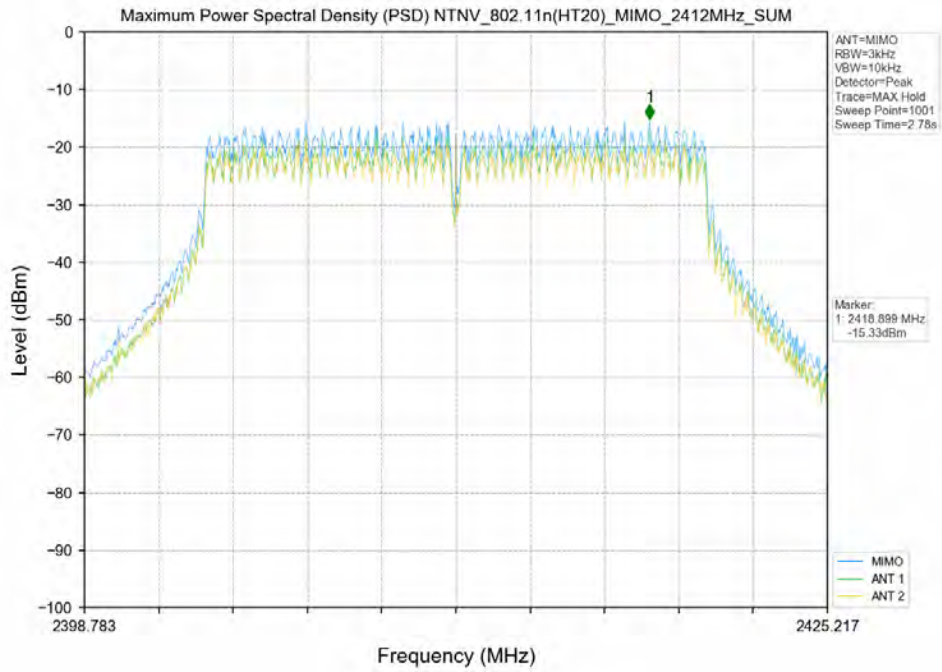


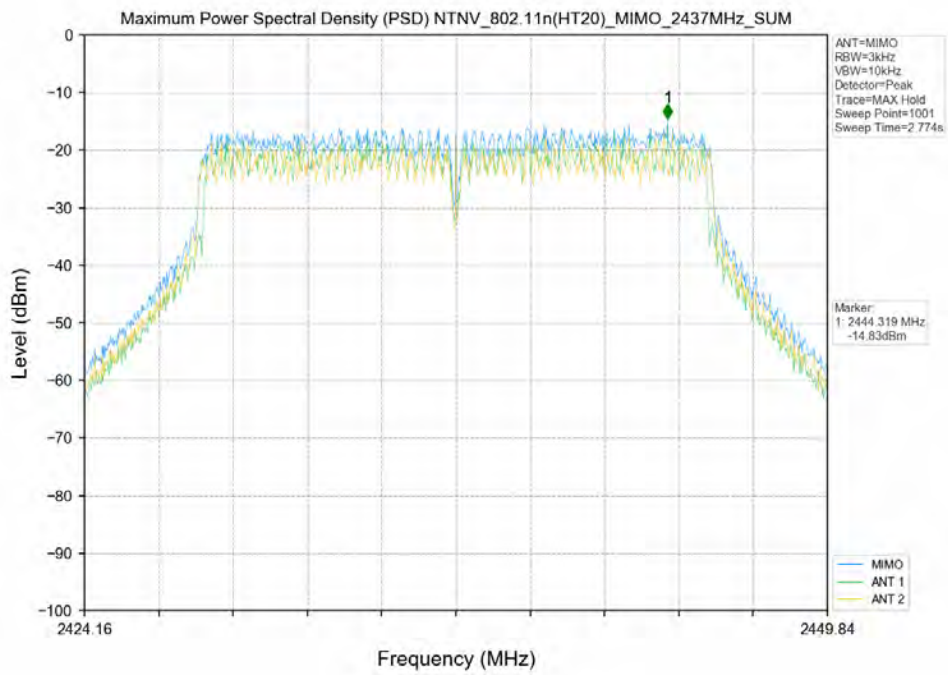
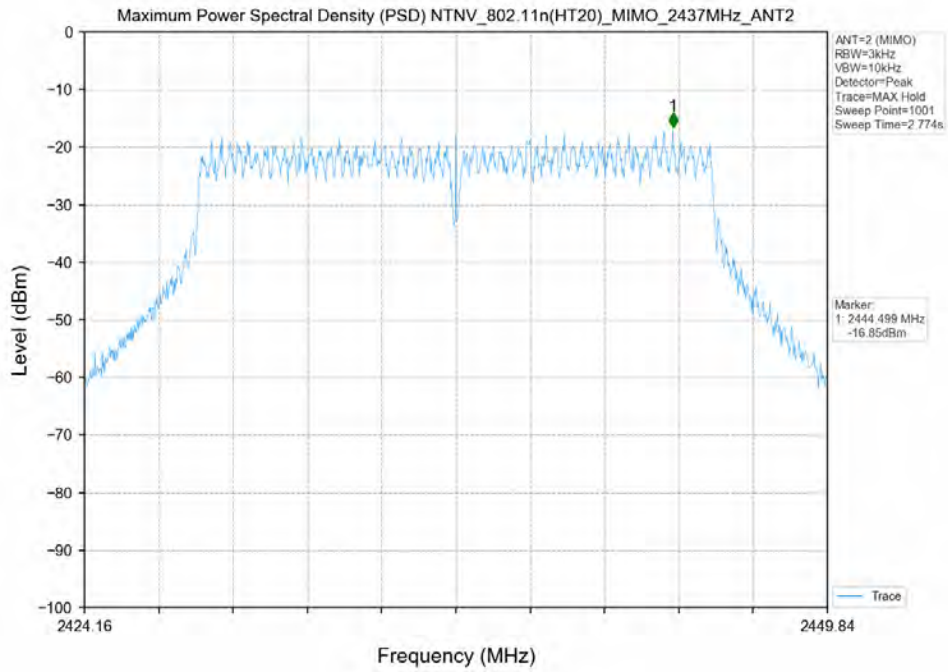


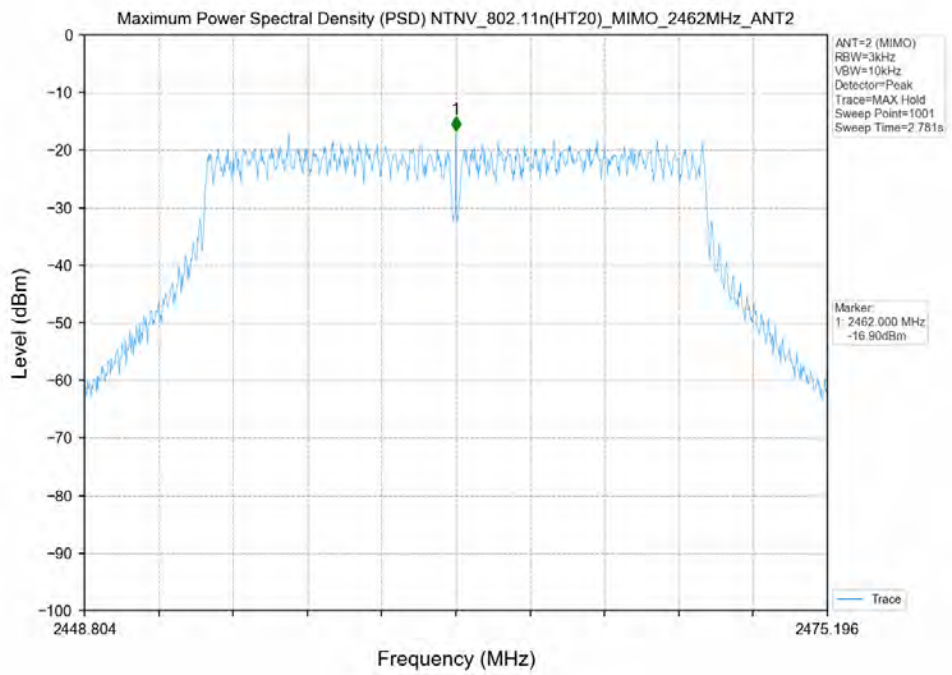
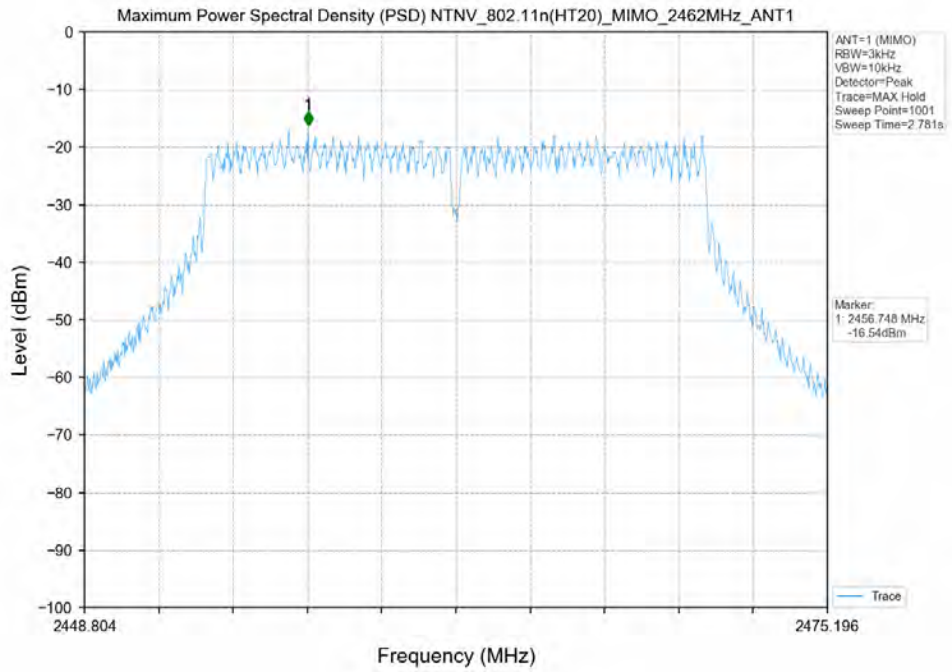


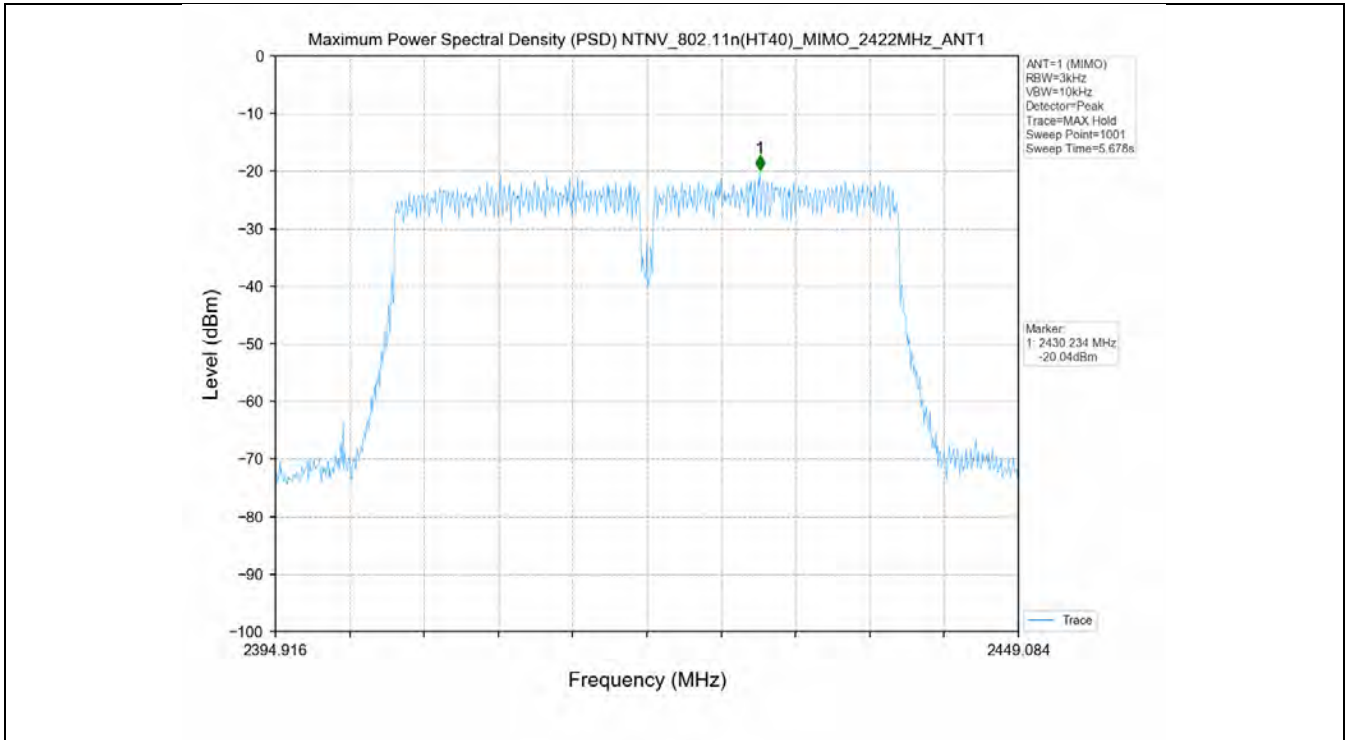
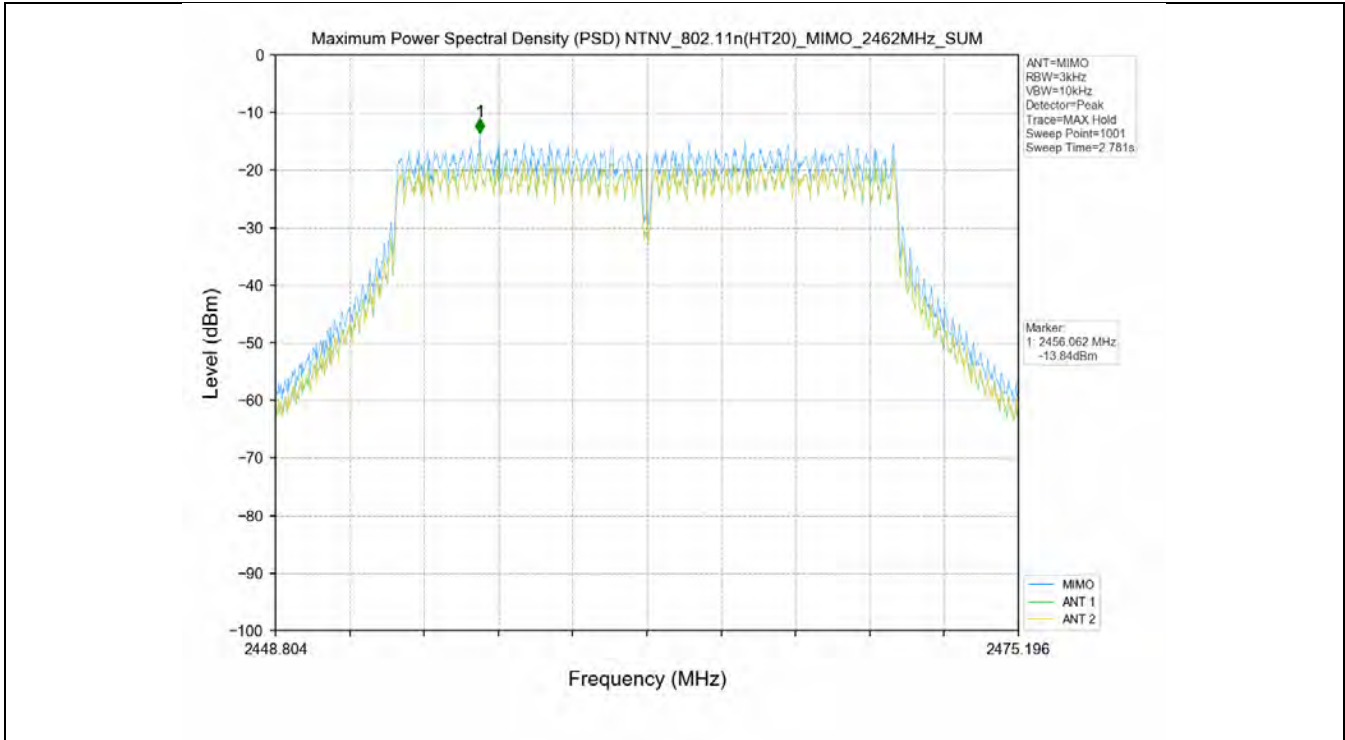


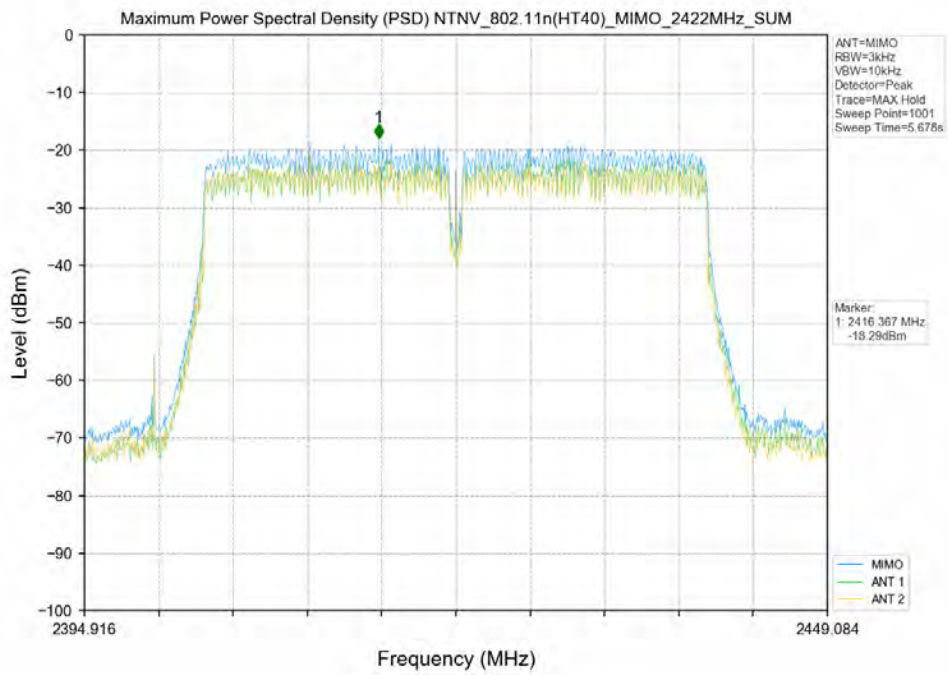
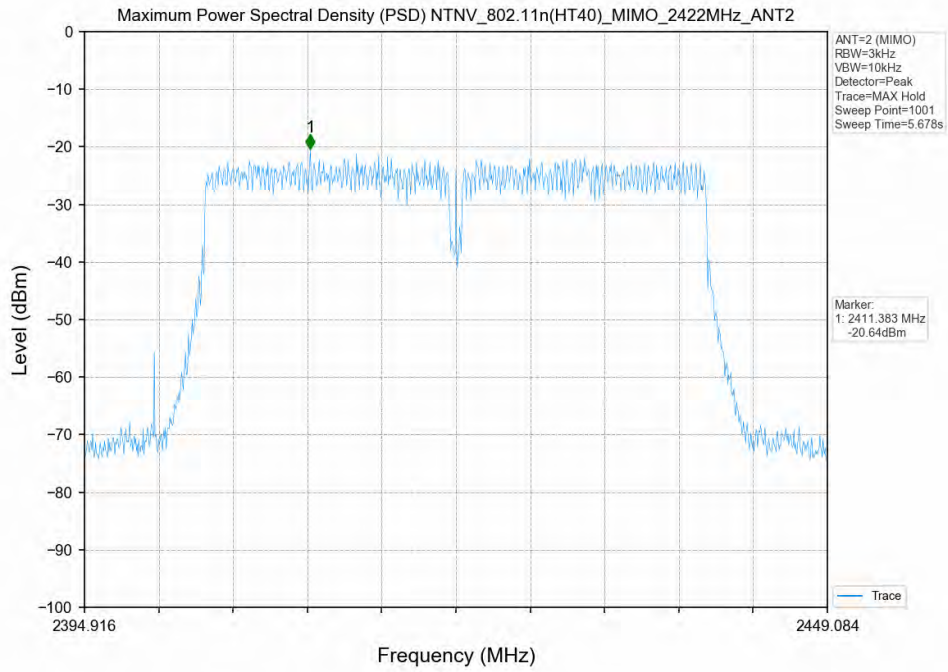


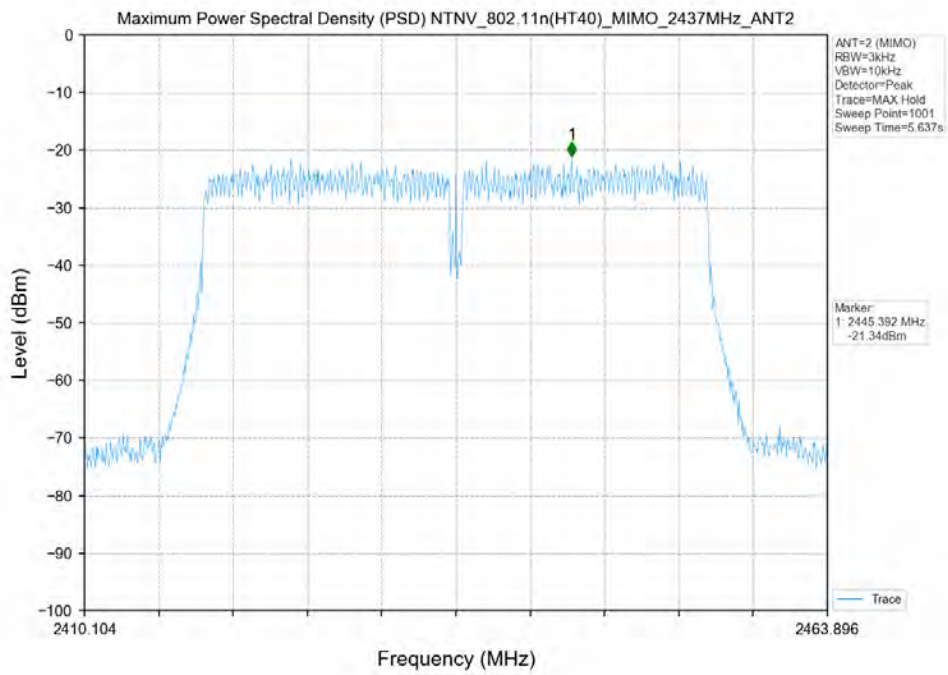
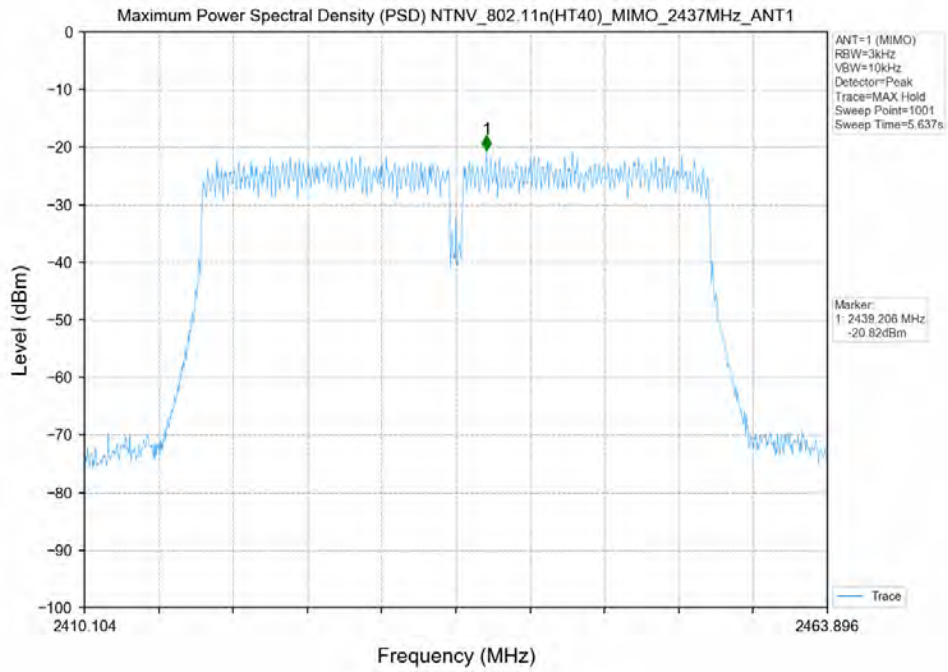


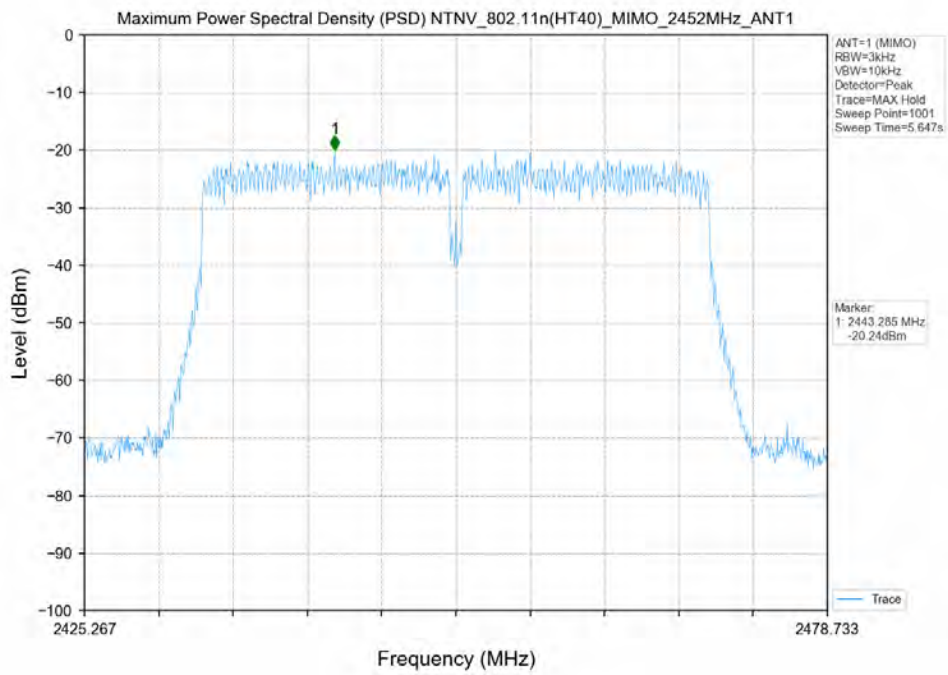
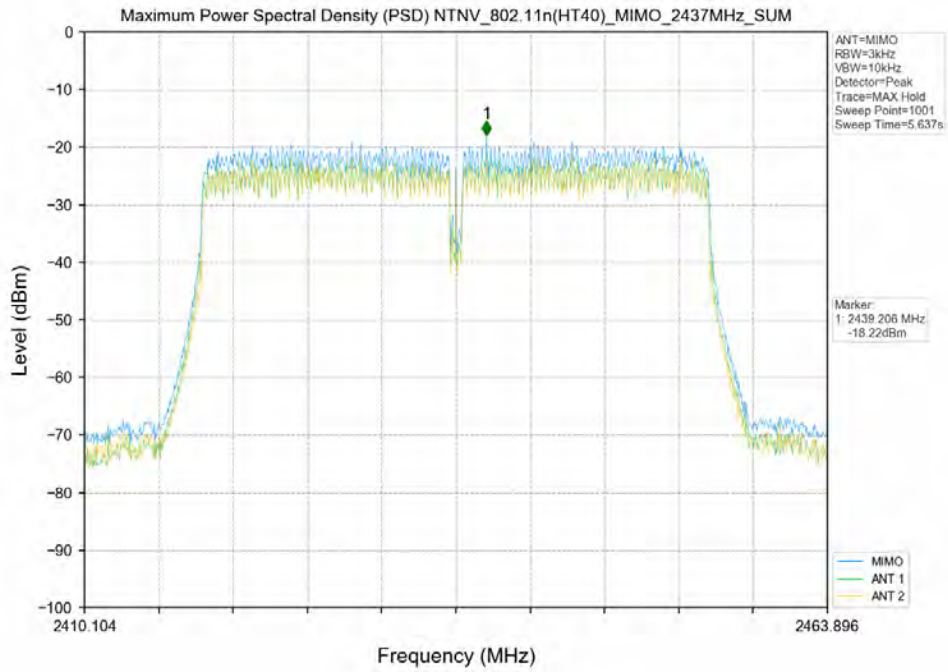


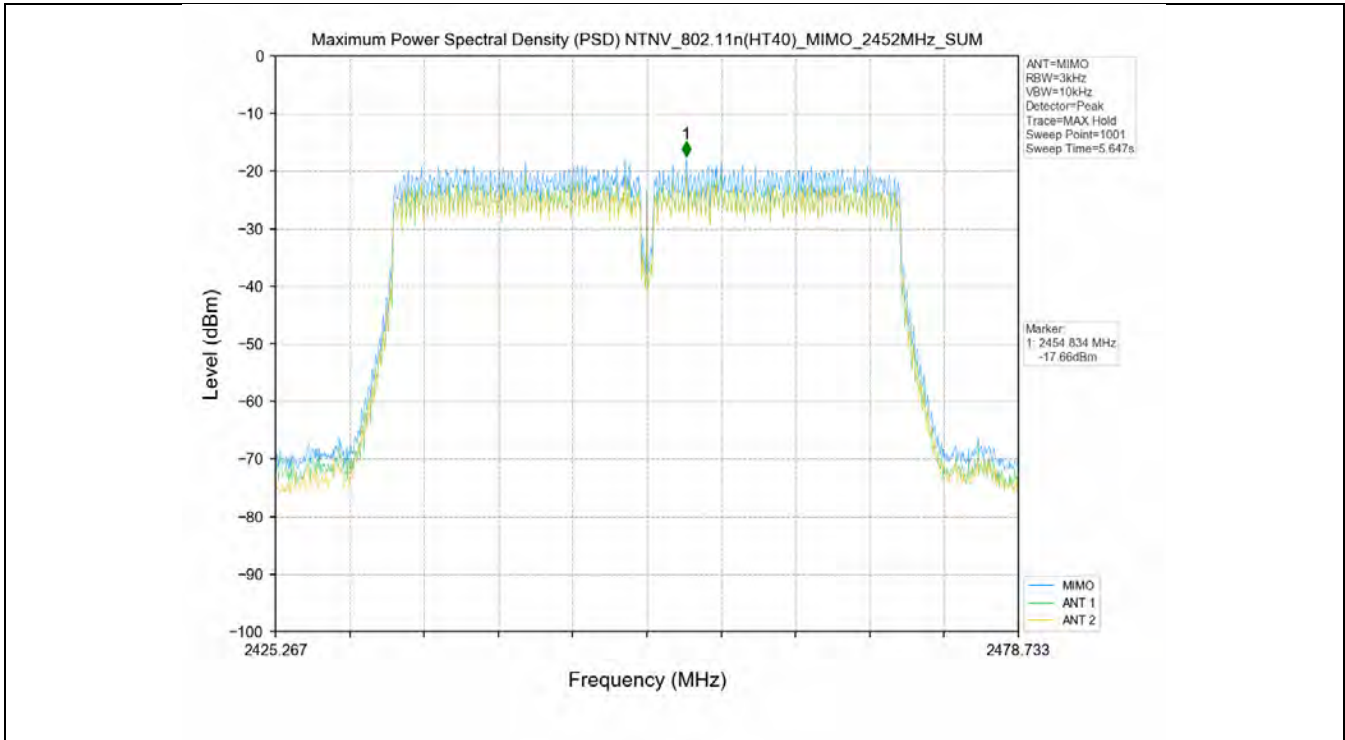
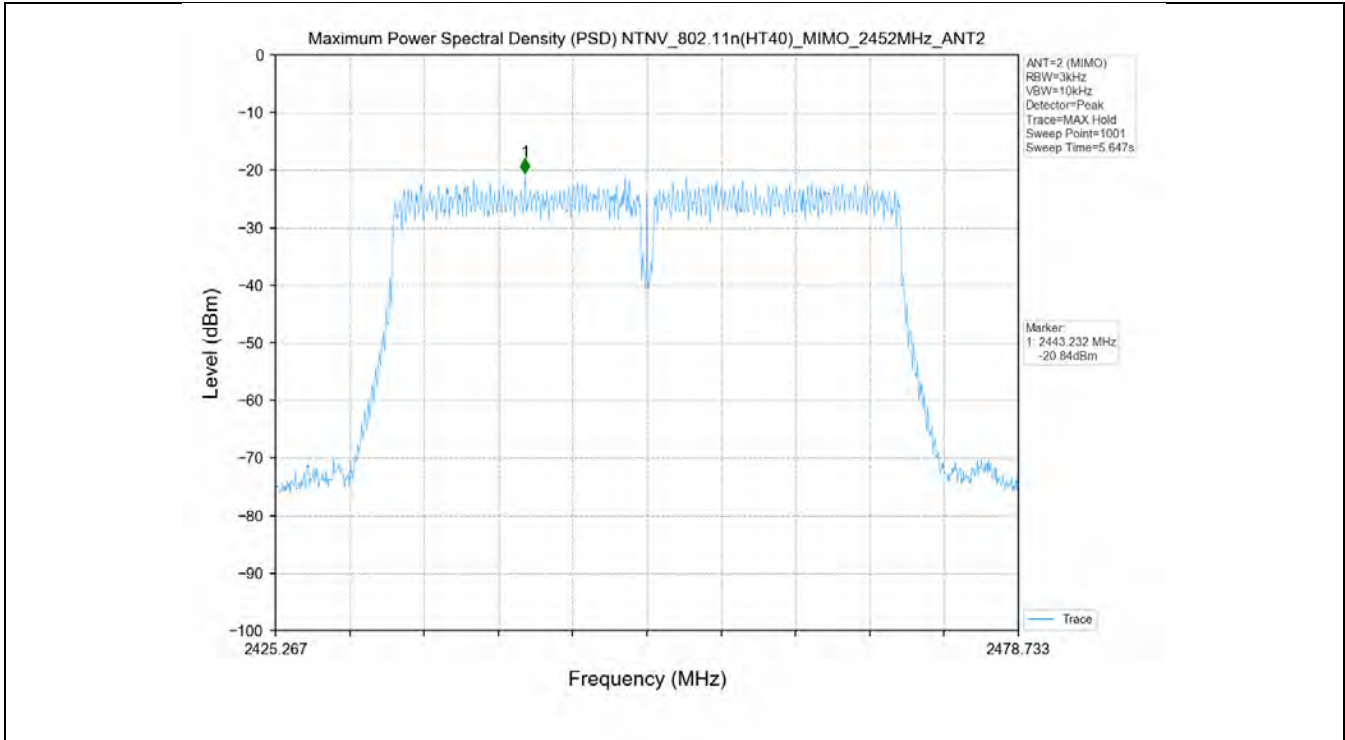










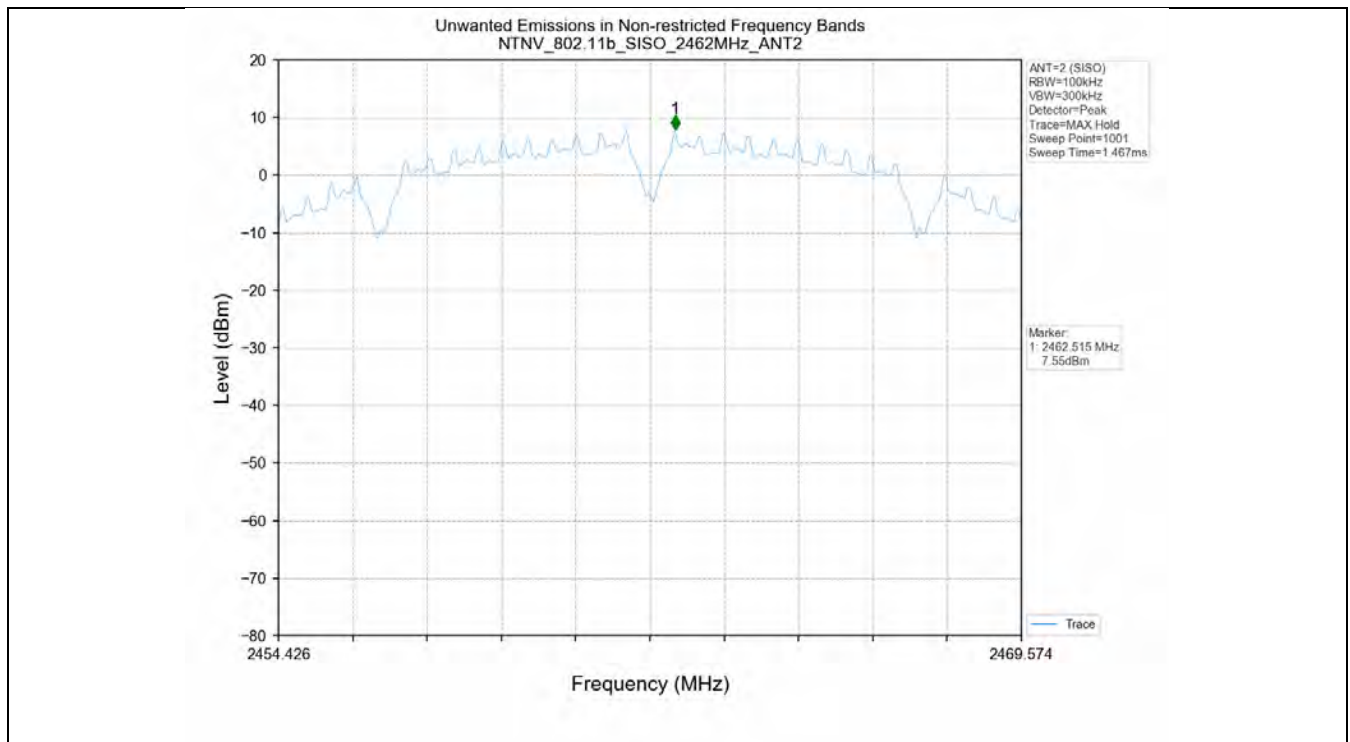


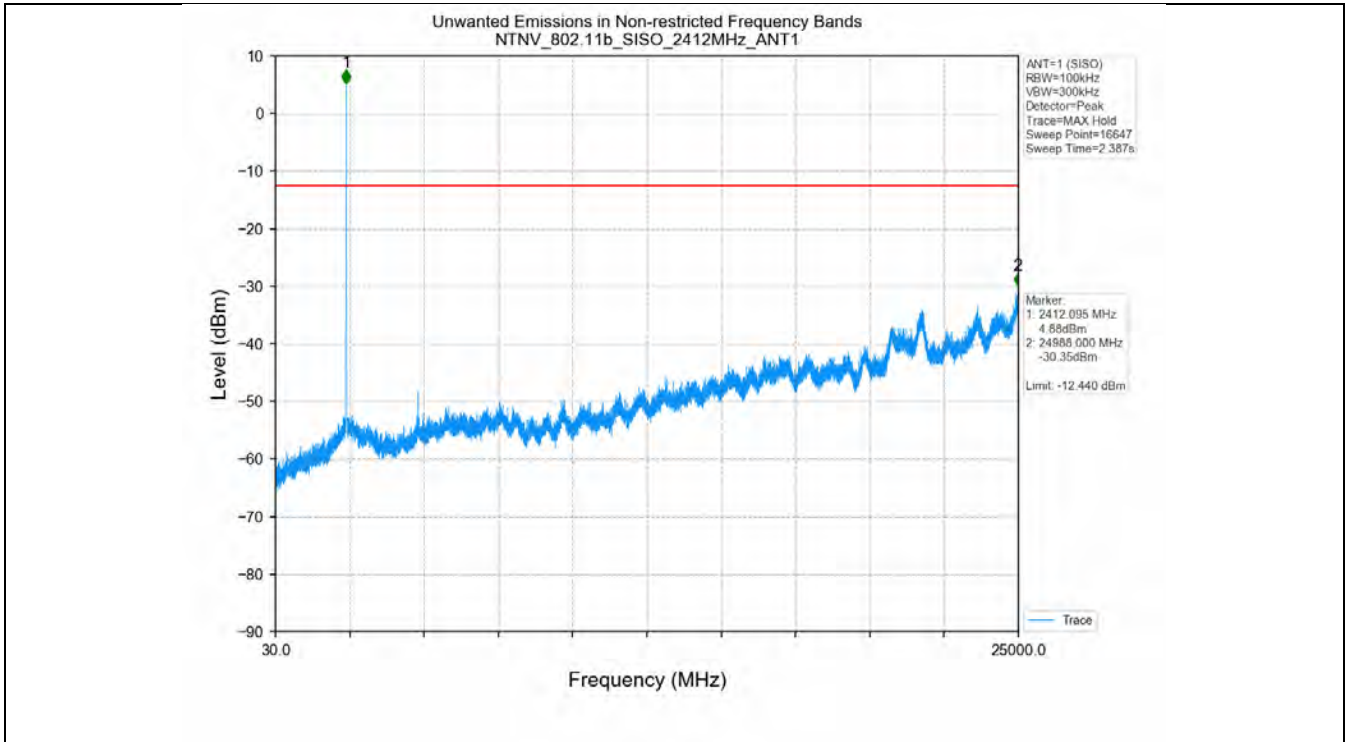
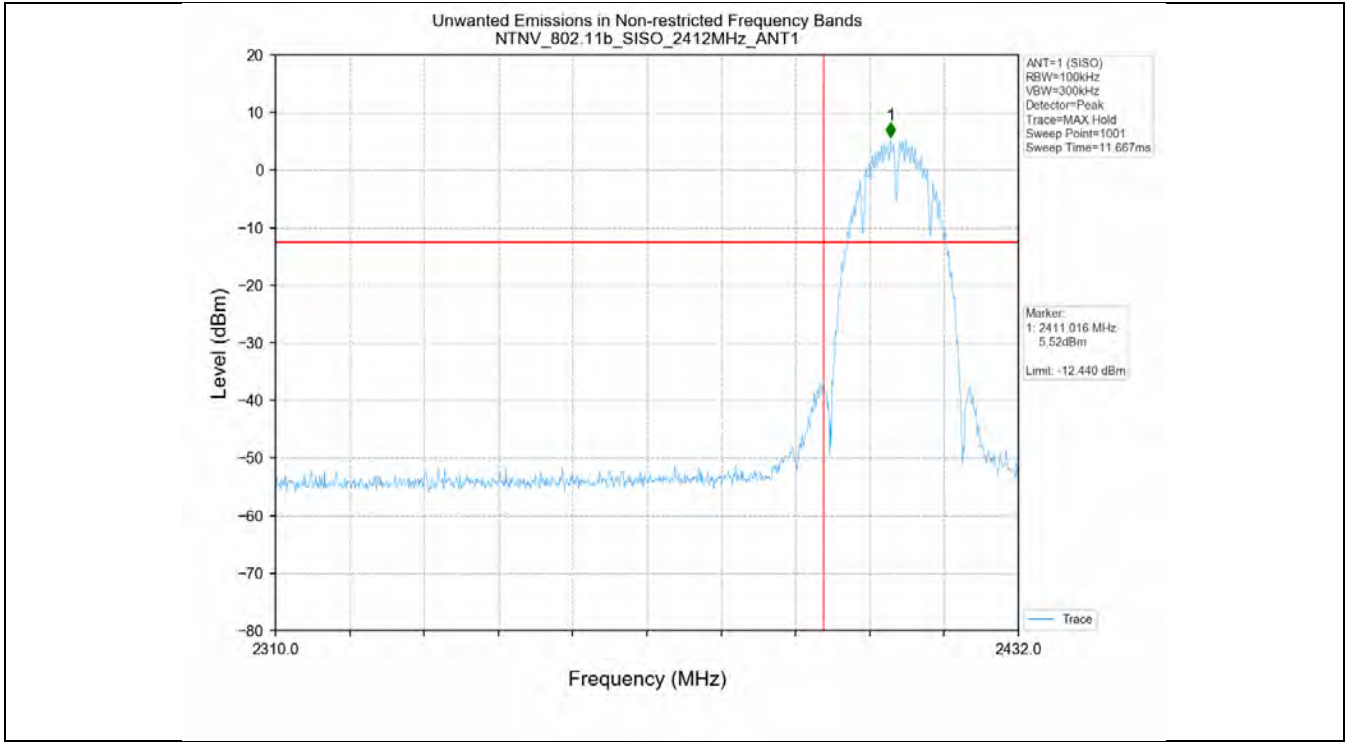
5. Unwanted Emissions in Non-restricted Frequency Bands

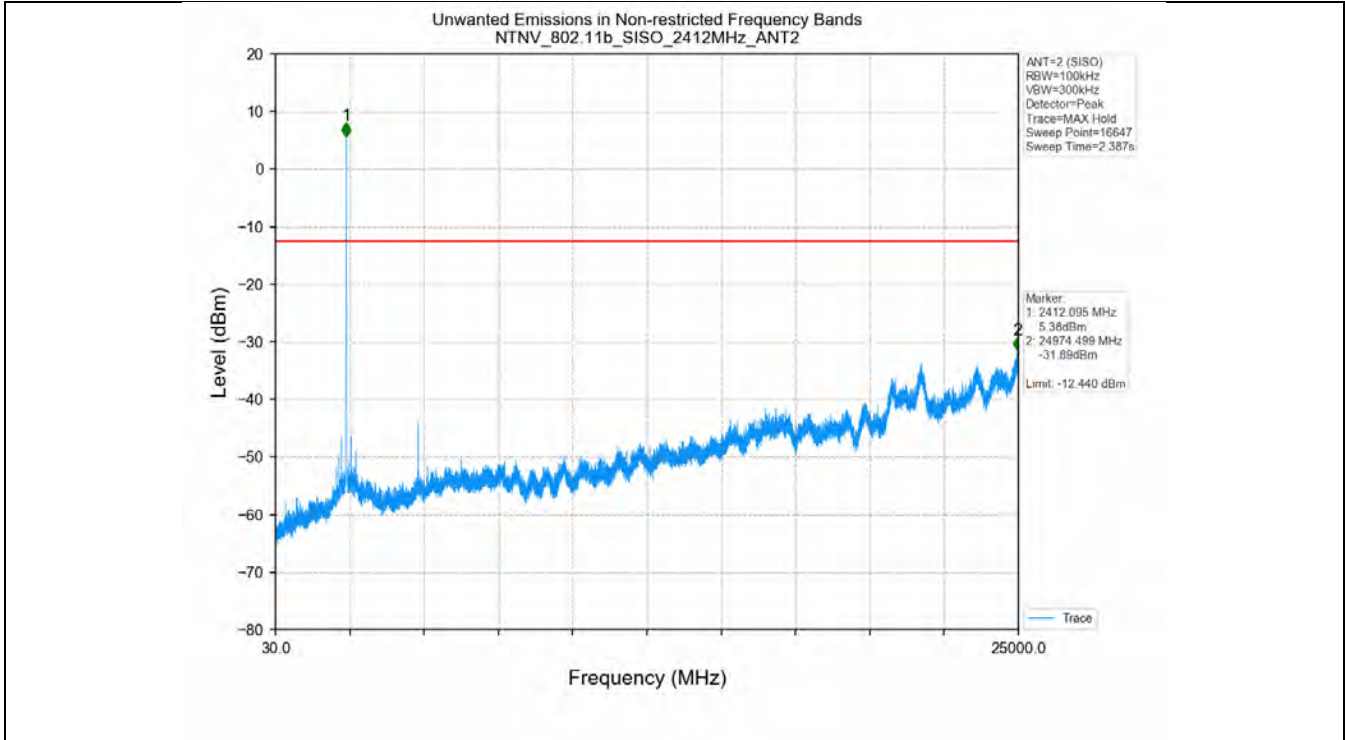
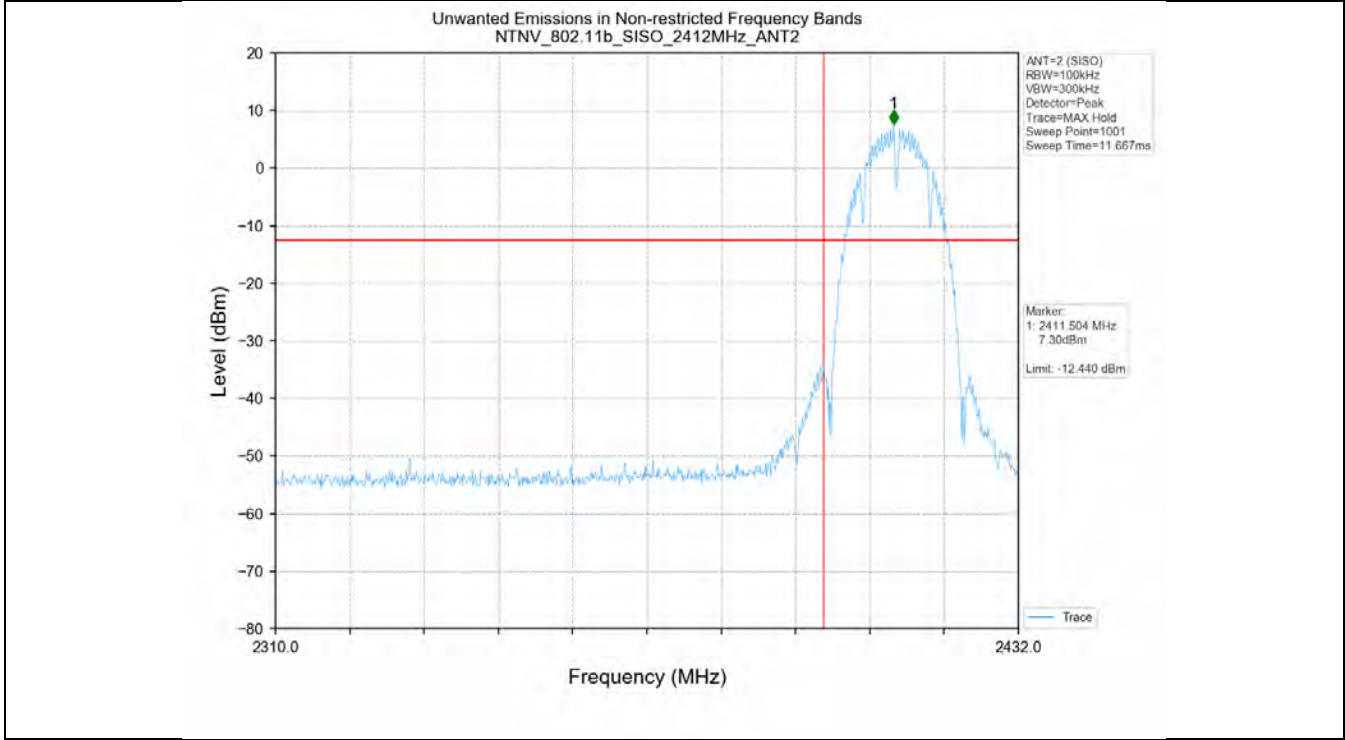
5.1 Test Result

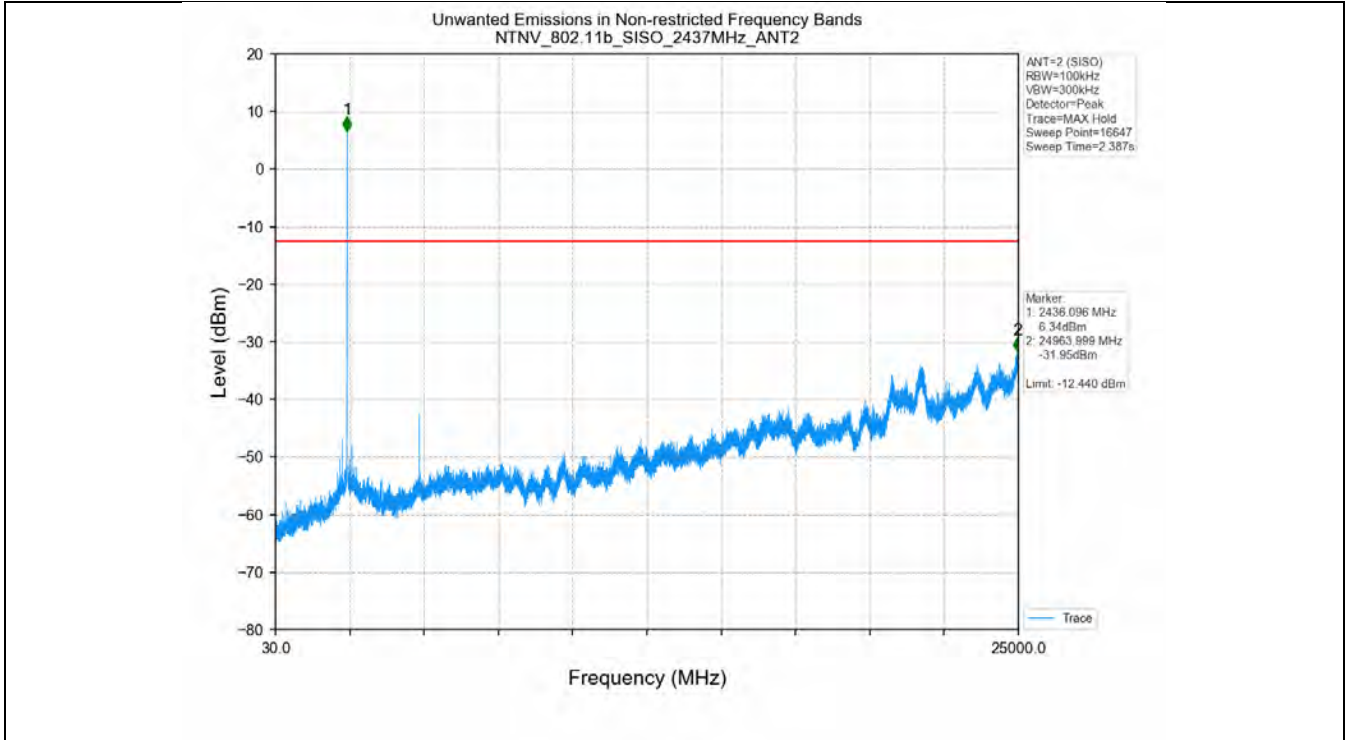
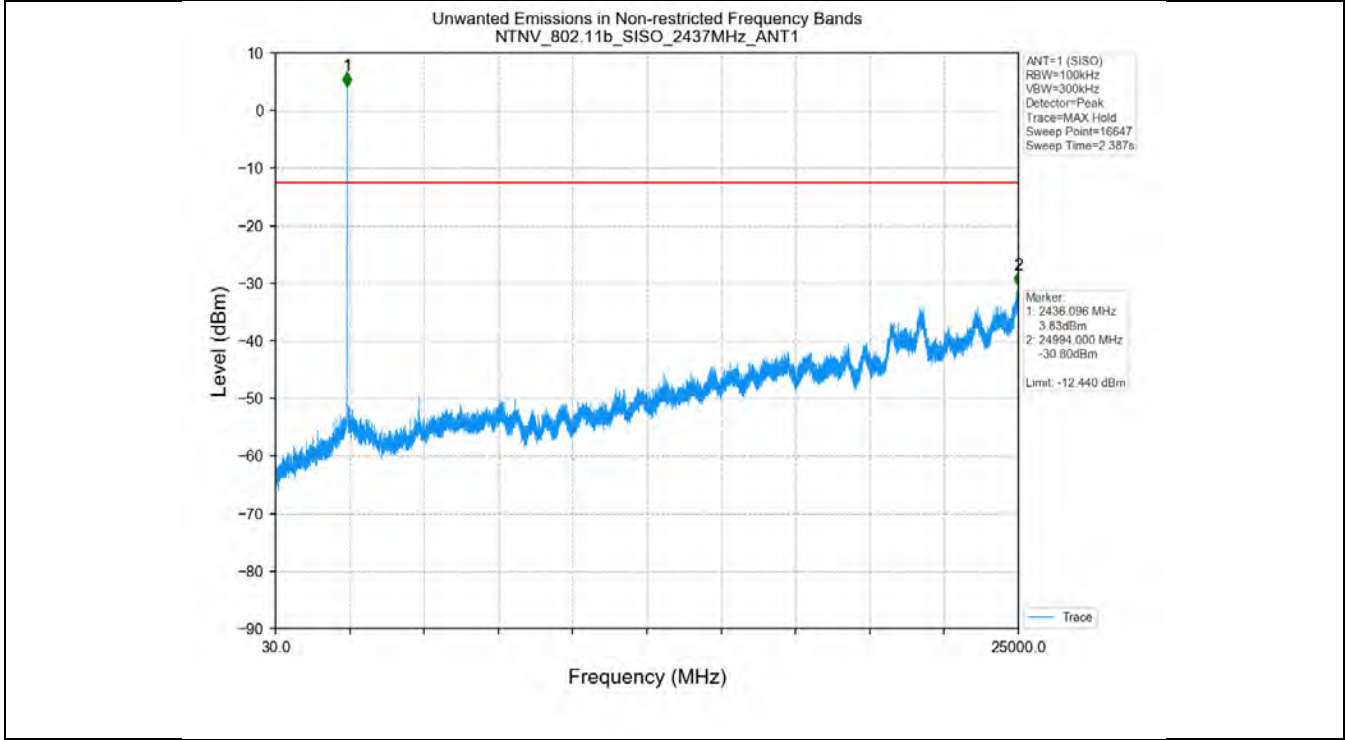
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
802.11b	2412	SISO	1	Refer to test graph	-12.44	PASS
			2	Refer to test graph	-12.44	PASS
	2437	SISO	1	Refer to test graph	-12.44	PASS
			2	Refer to test graph	-12.44	PASS
	2462	SISO	1	Refer to test graph	-12.44	PASS
			2	Refer to test graph	-12.44	PASS
802.11g	2412	SISO	1	Refer to test graph	-20.26	PASS
			2	Refer to test graph	-20.26	PASS
	2437	SISO	1	Refer to test graph	-20.26	PASS
			2	Refer to test graph	-20.26	PASS
	2462	SISO	1	Refer to test graph	-20.26	PASS
			2	Refer to test graph	-20.26	PASS
802.11n(HT20)	2412	MIMO	1	Refer to test graph	-22.72	PASS
			2	Refer to test graph	-22.72	PASS
	2437	MIMO	1	Refer to test graph	-22.72	PASS
			2	Refer to test graph	-22.72	PASS
	2462	MIMO	1	Refer to test graph	-22.72	PASS
			2	Refer to test graph	-22.72	PASS
802.11n(HT40)	2422	MIMO	1	Refer to test graph	-26.27	PASS
			2	Refer to test graph	-26.27	PASS
	2437	MIMO	1	Refer to test graph	-26.27	PASS
			2	Refer to test graph	-26.27	PASS
	2452	MIMO	1	Refer to test graph	-26.27	PASS
			2	Refer to test graph	-26.27	PASS

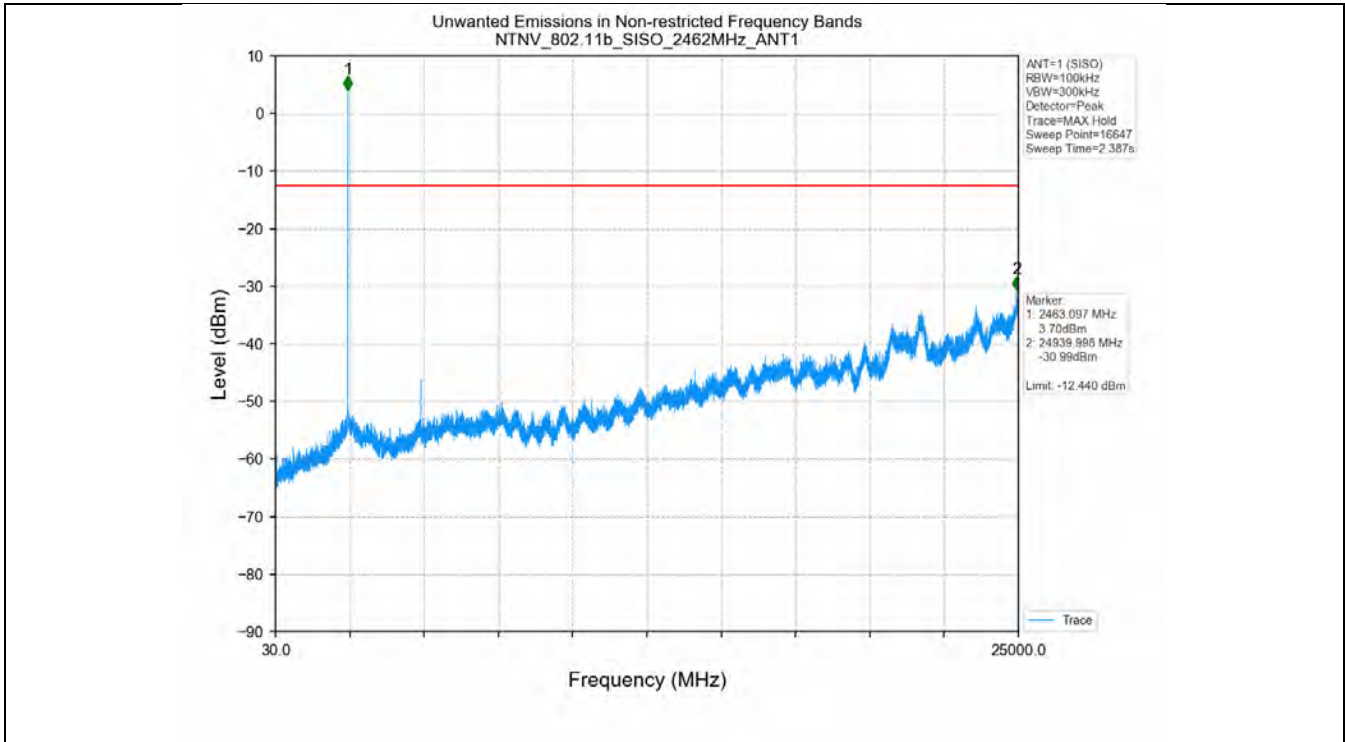
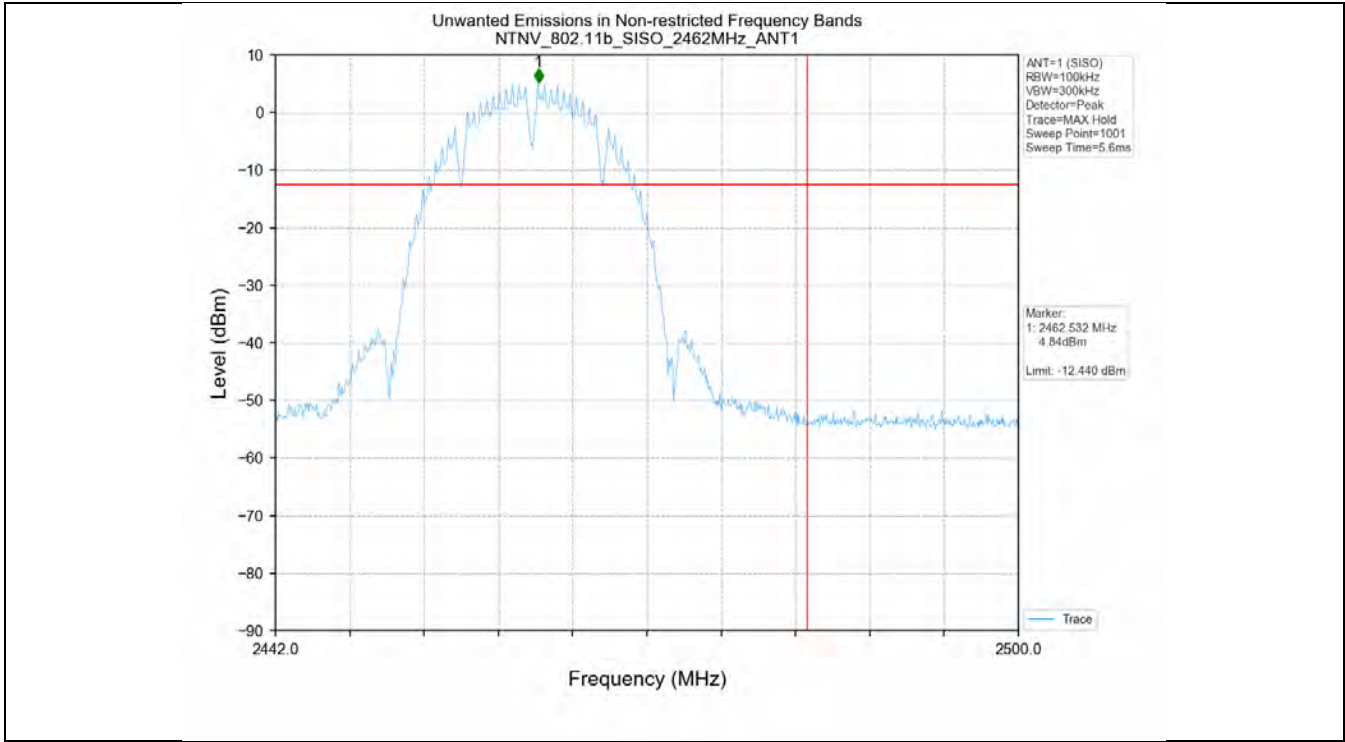
5.2 Test Graph

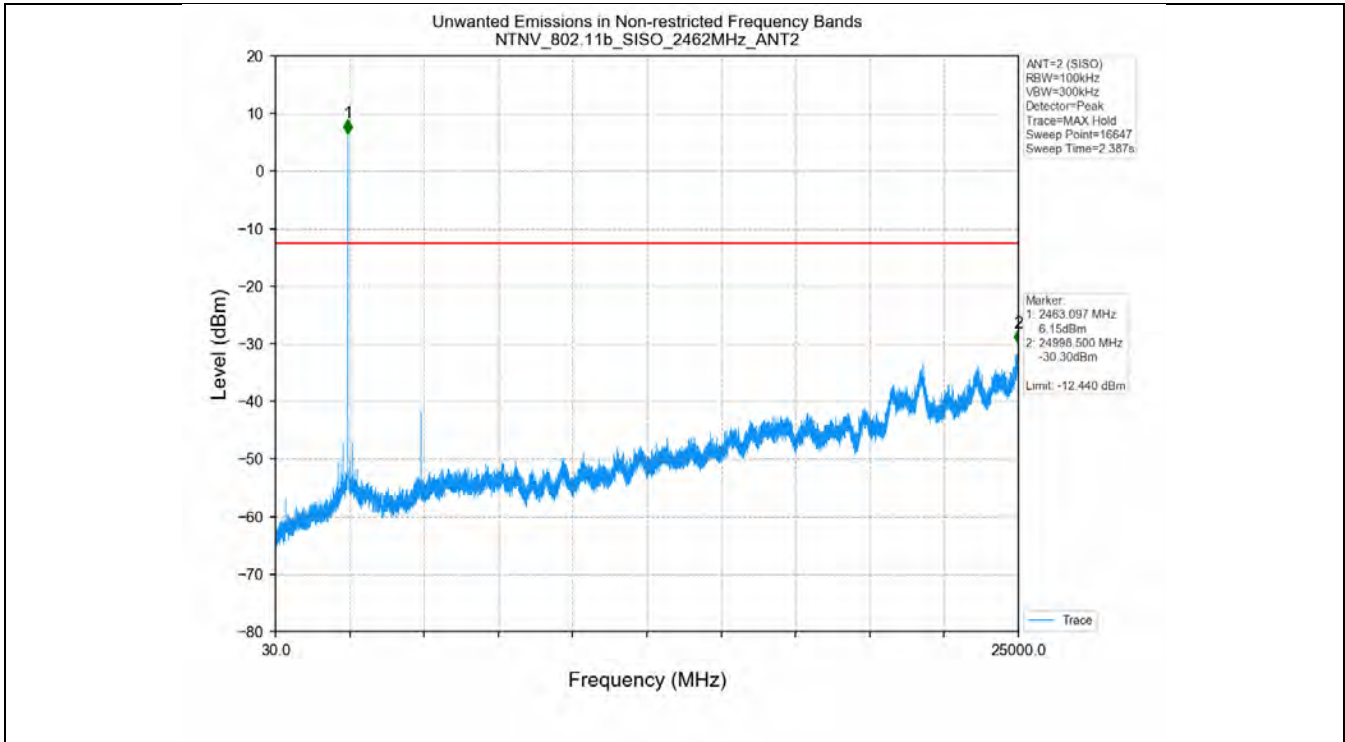
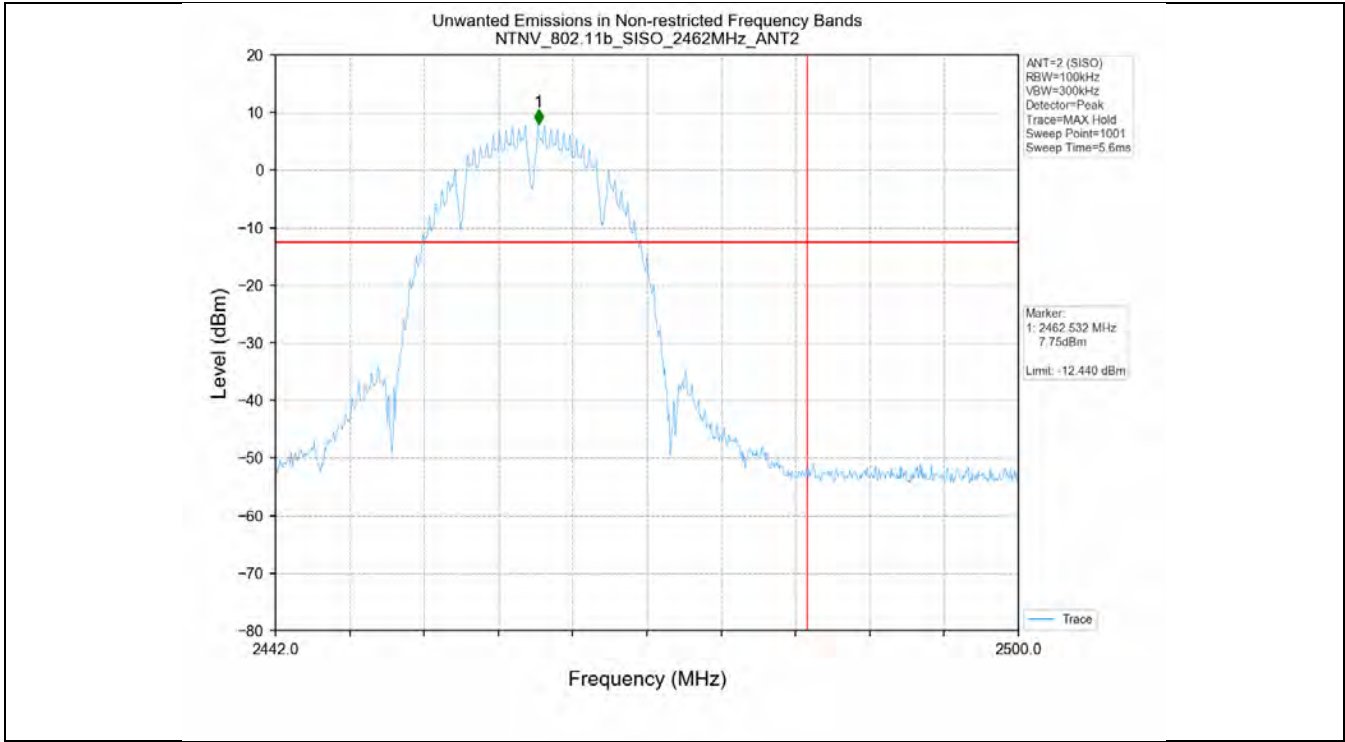


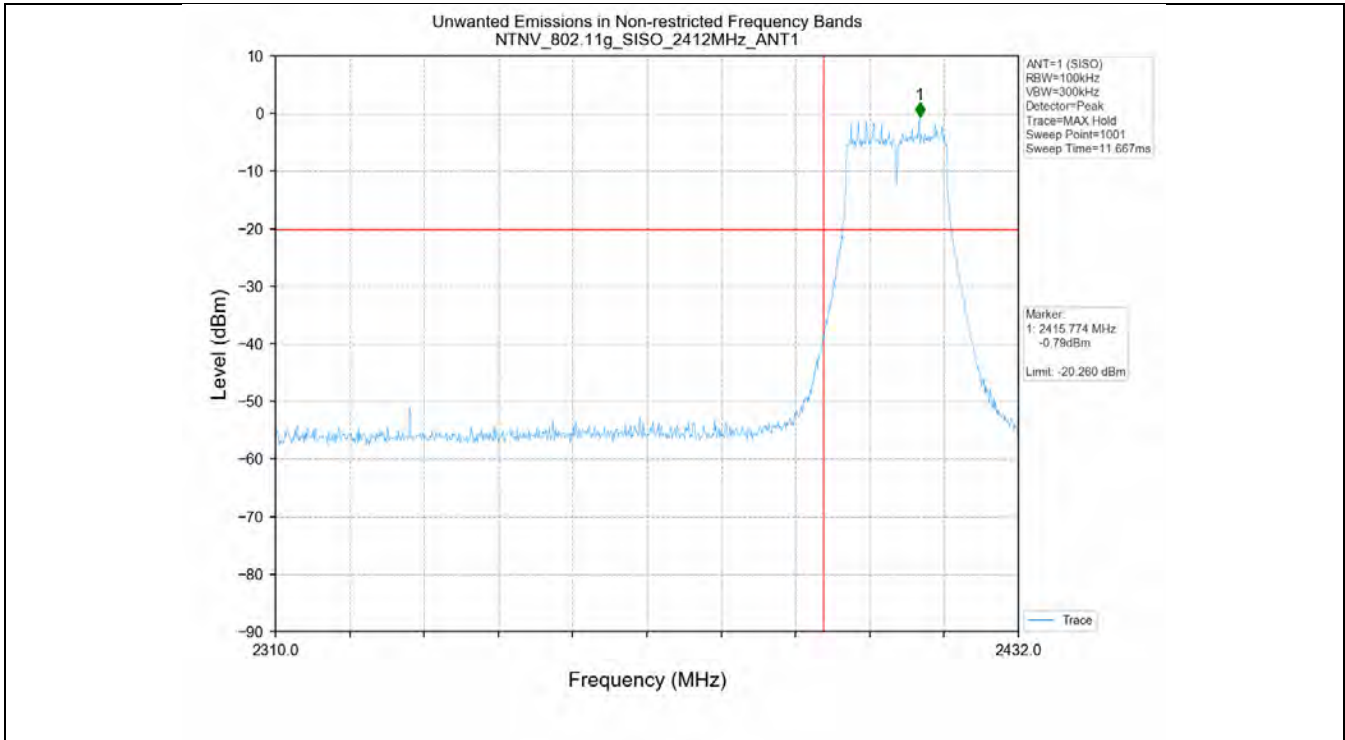
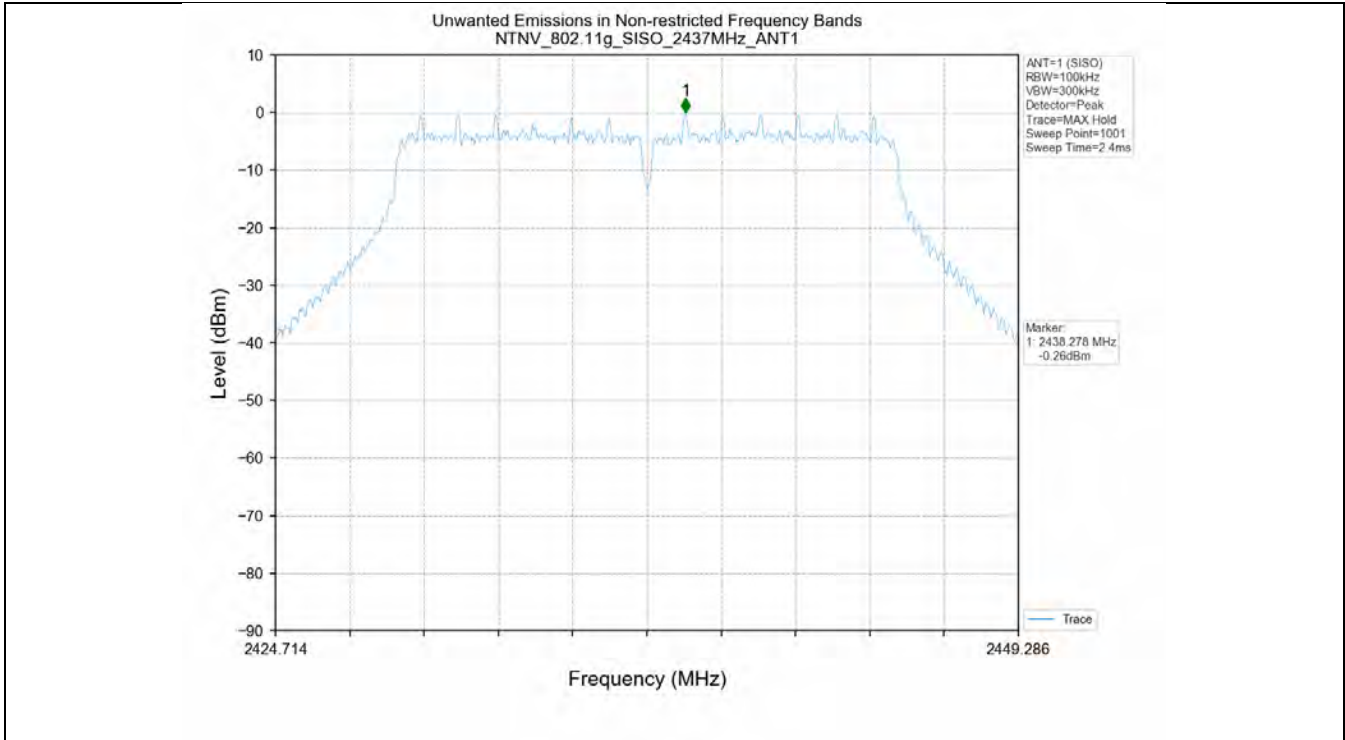


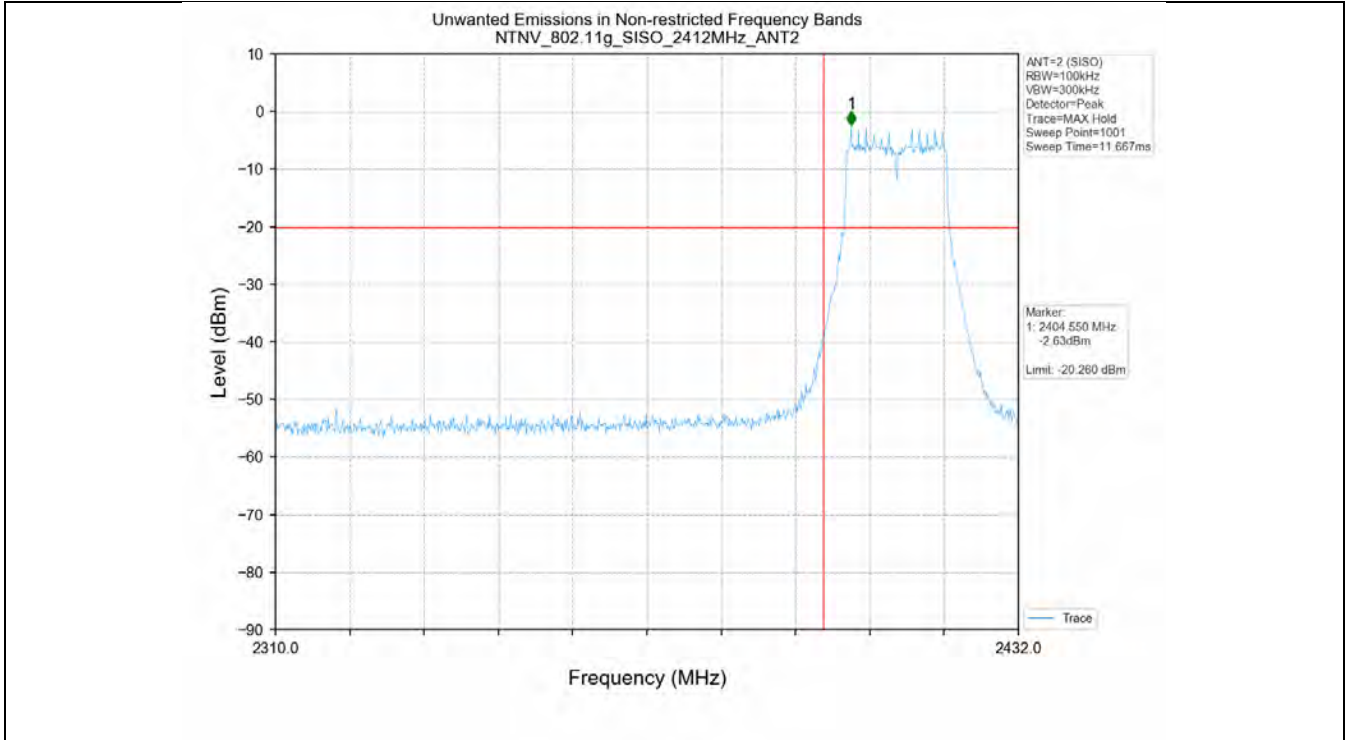
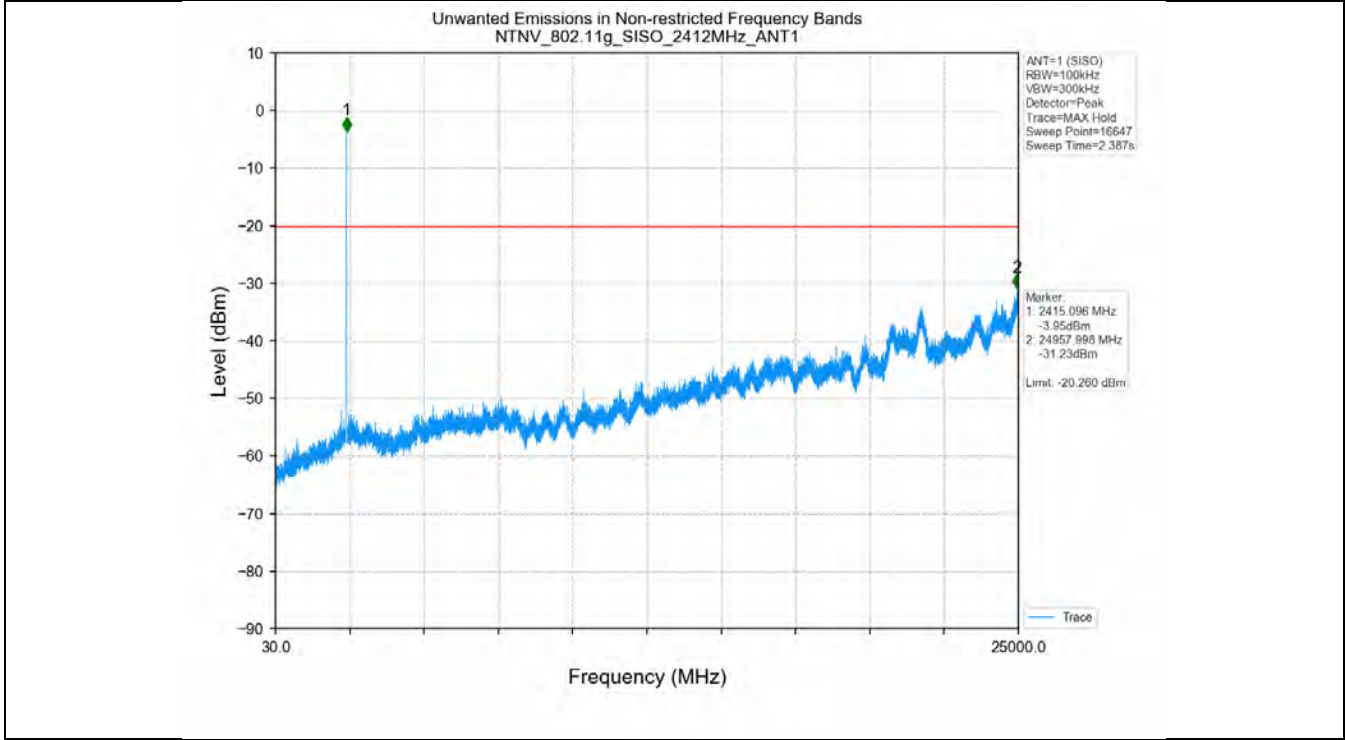


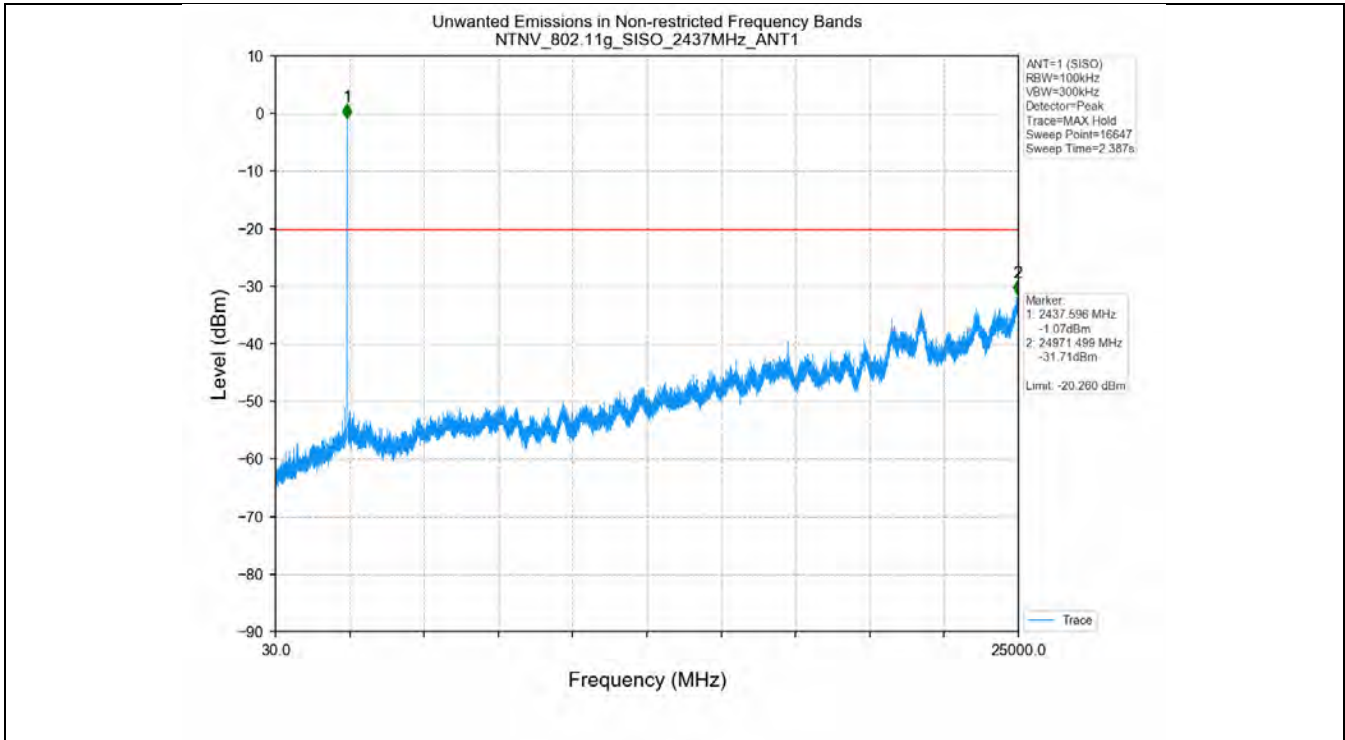
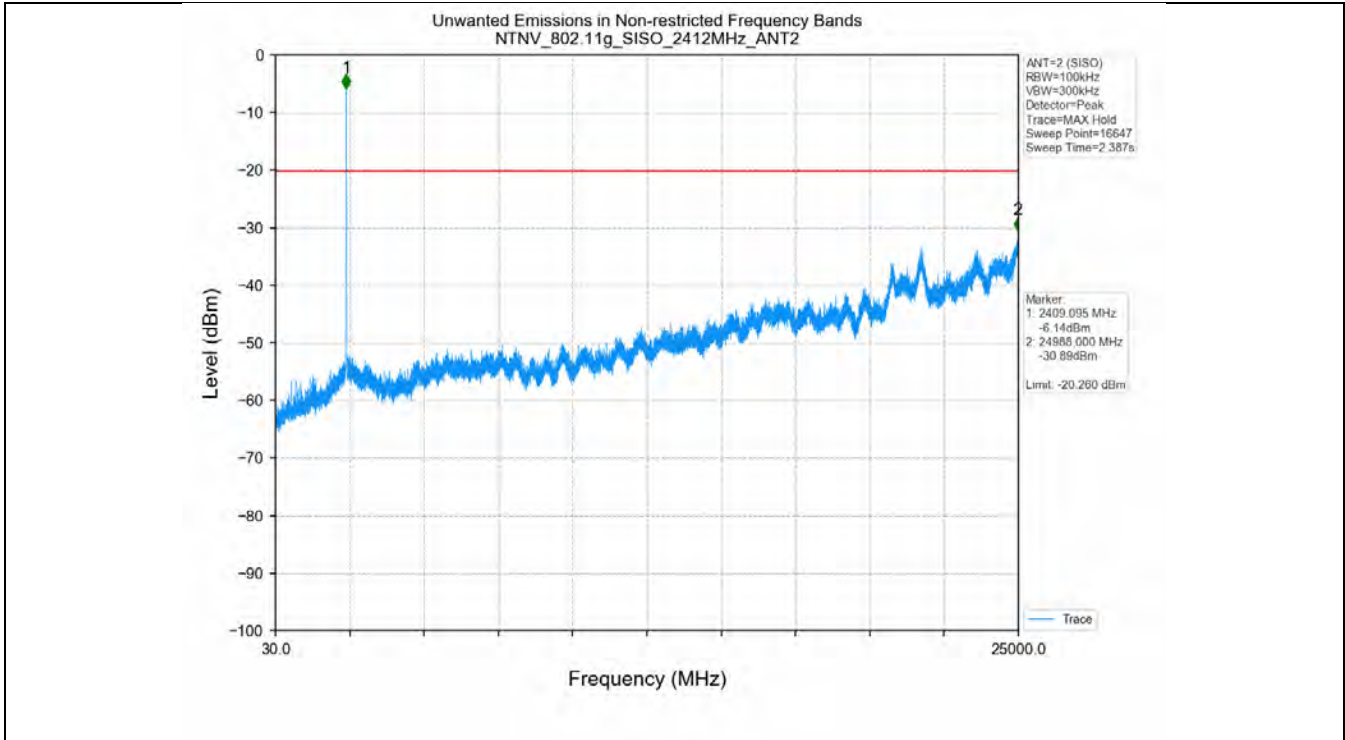


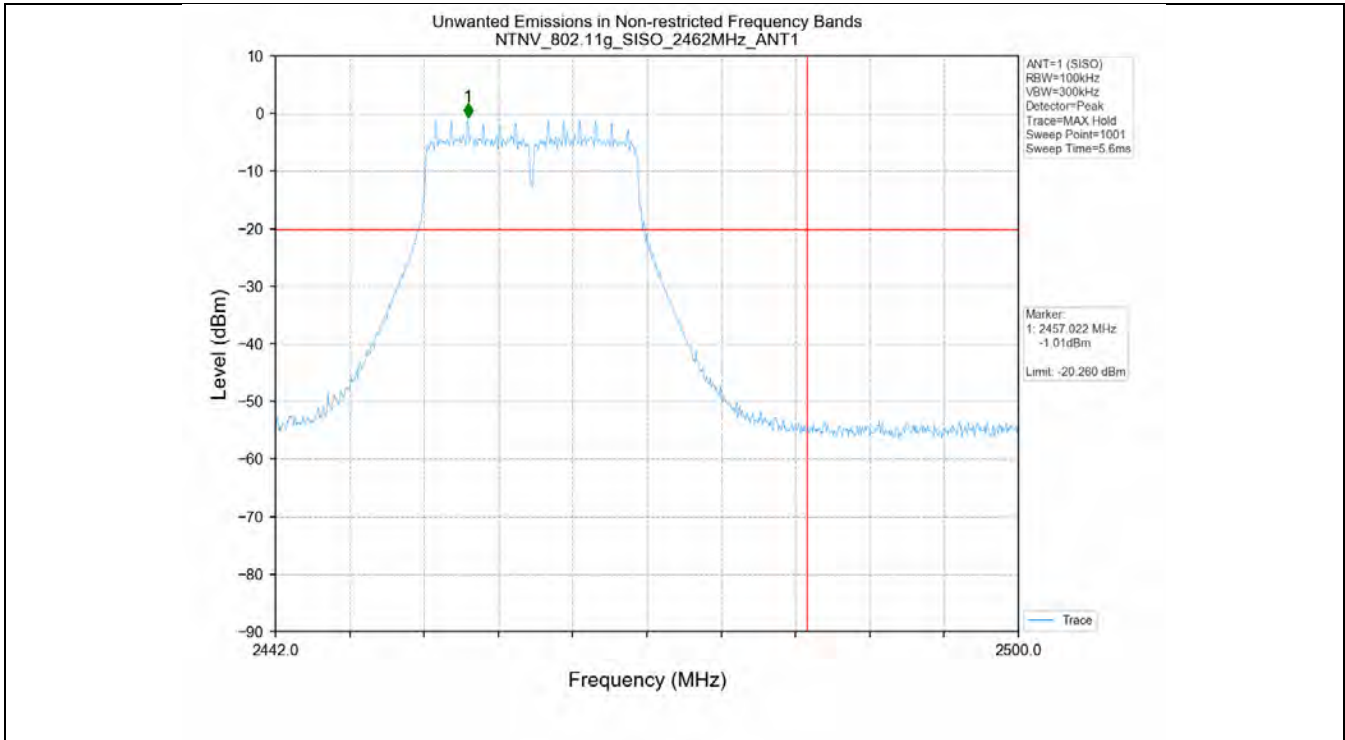
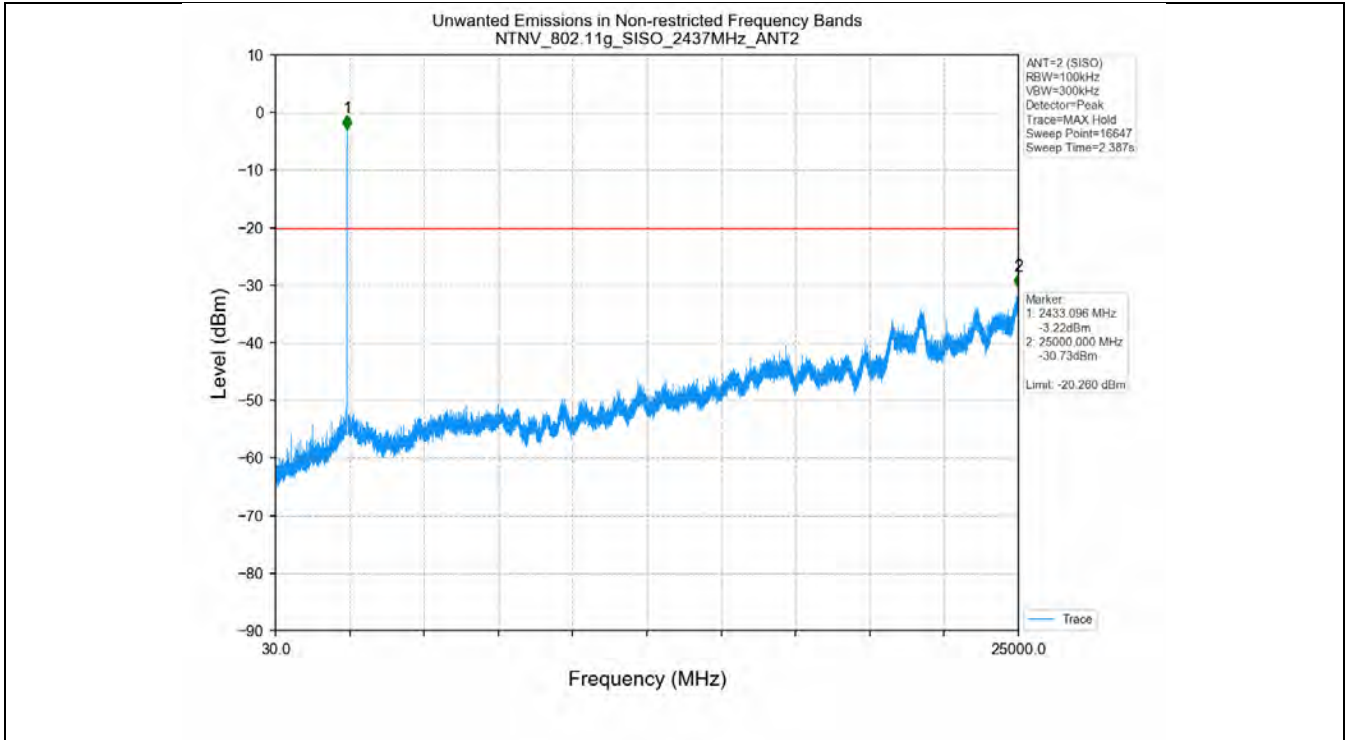


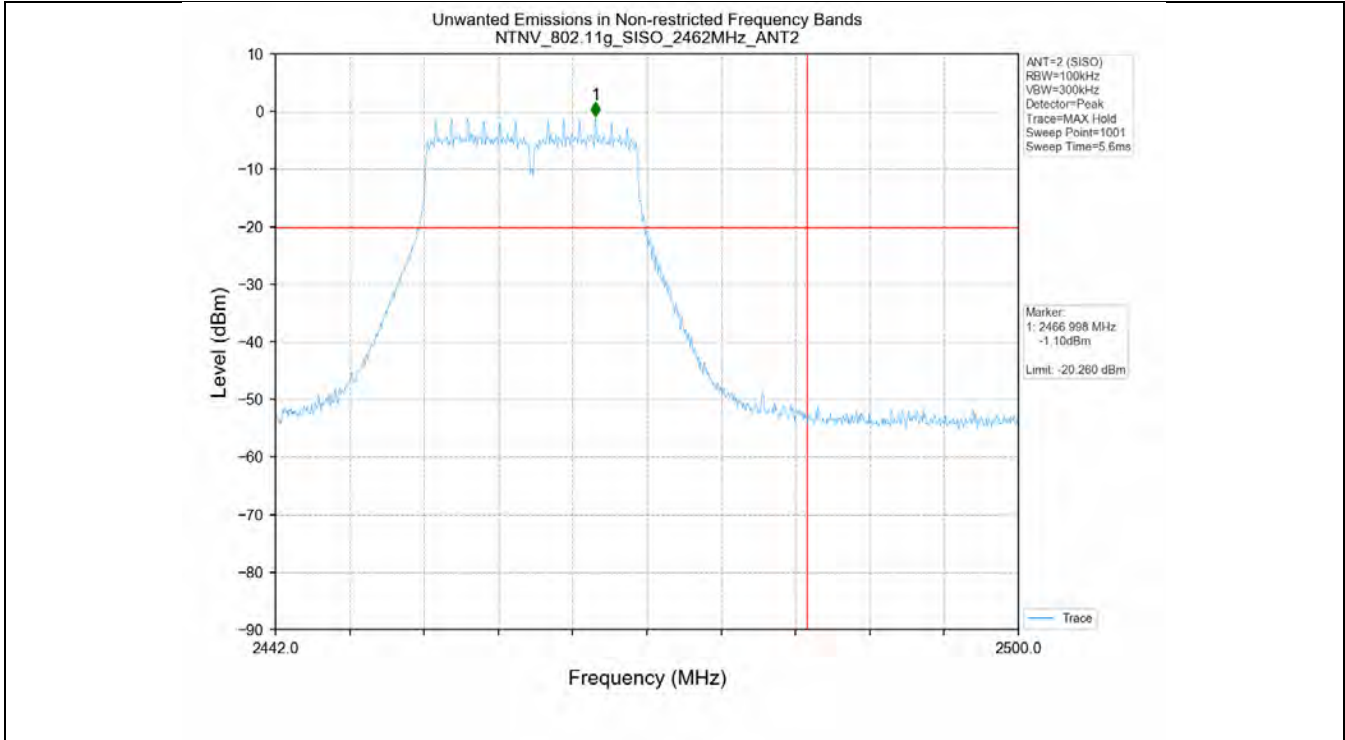
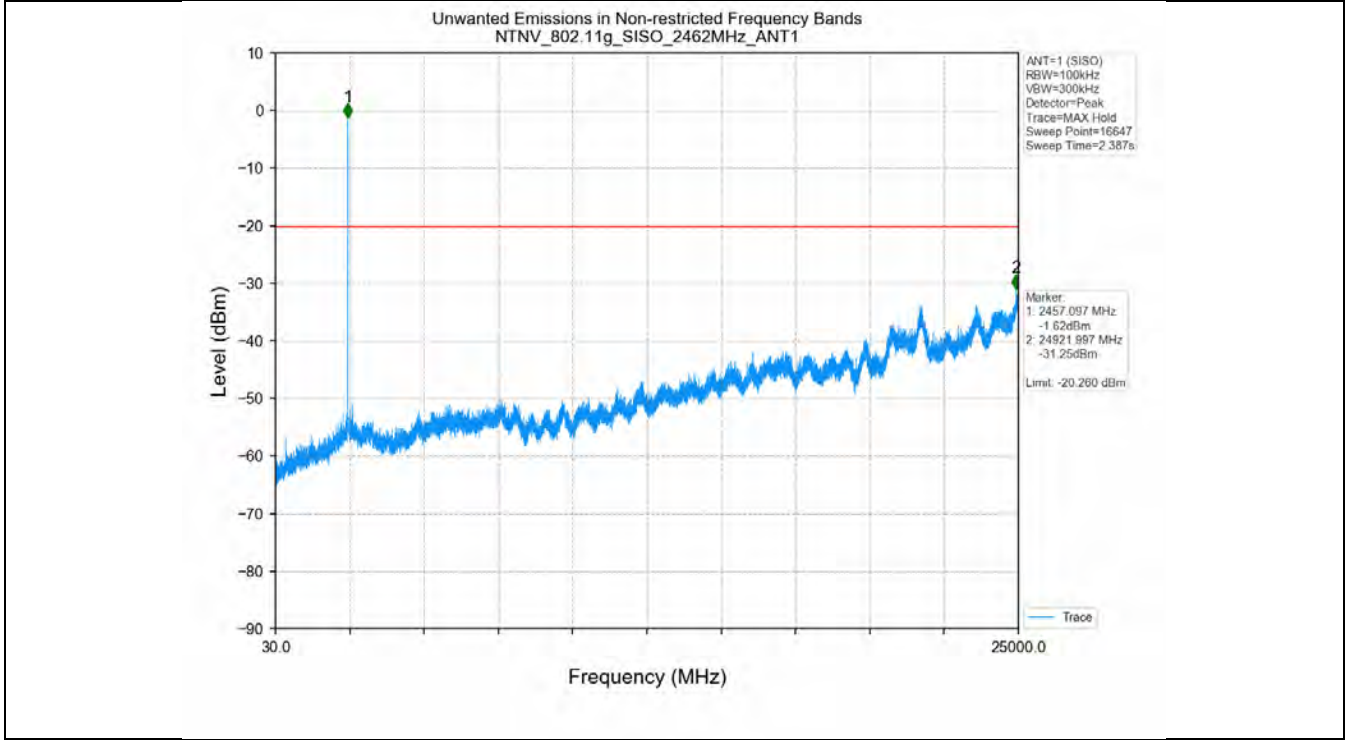


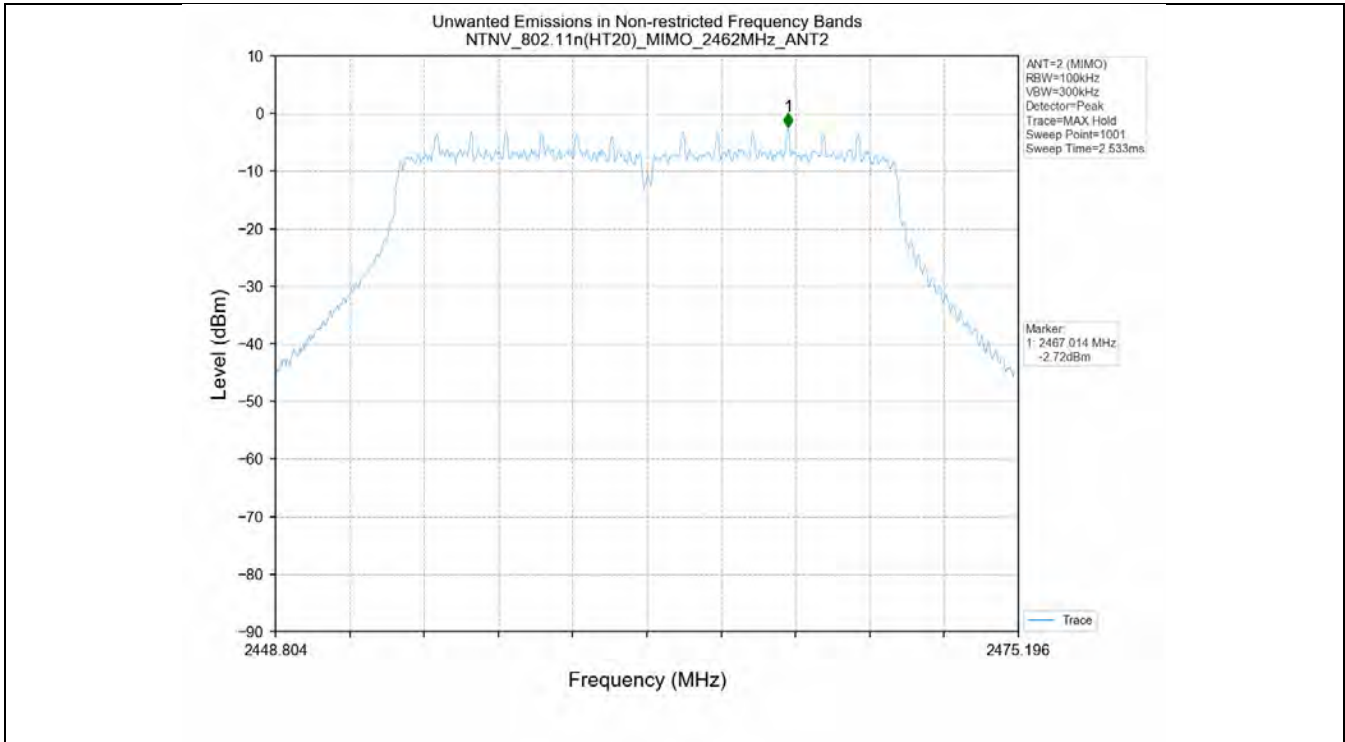
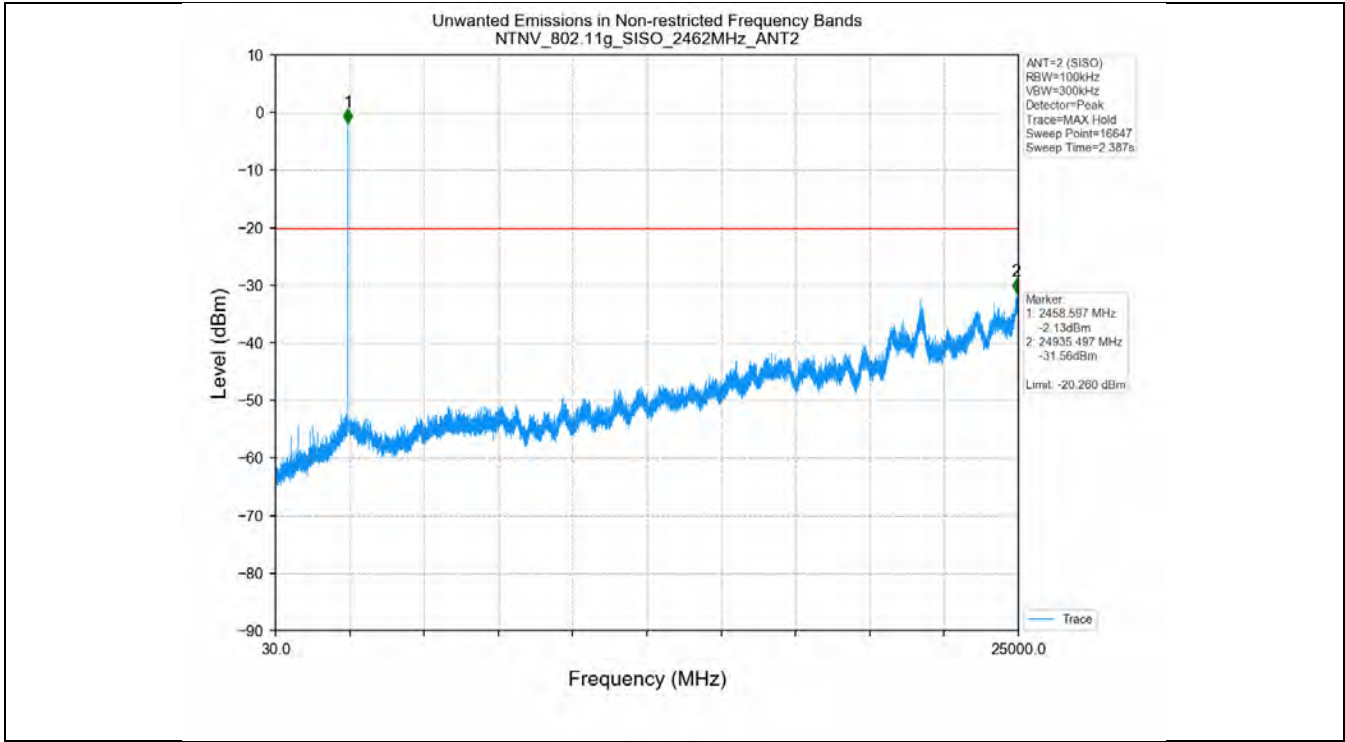


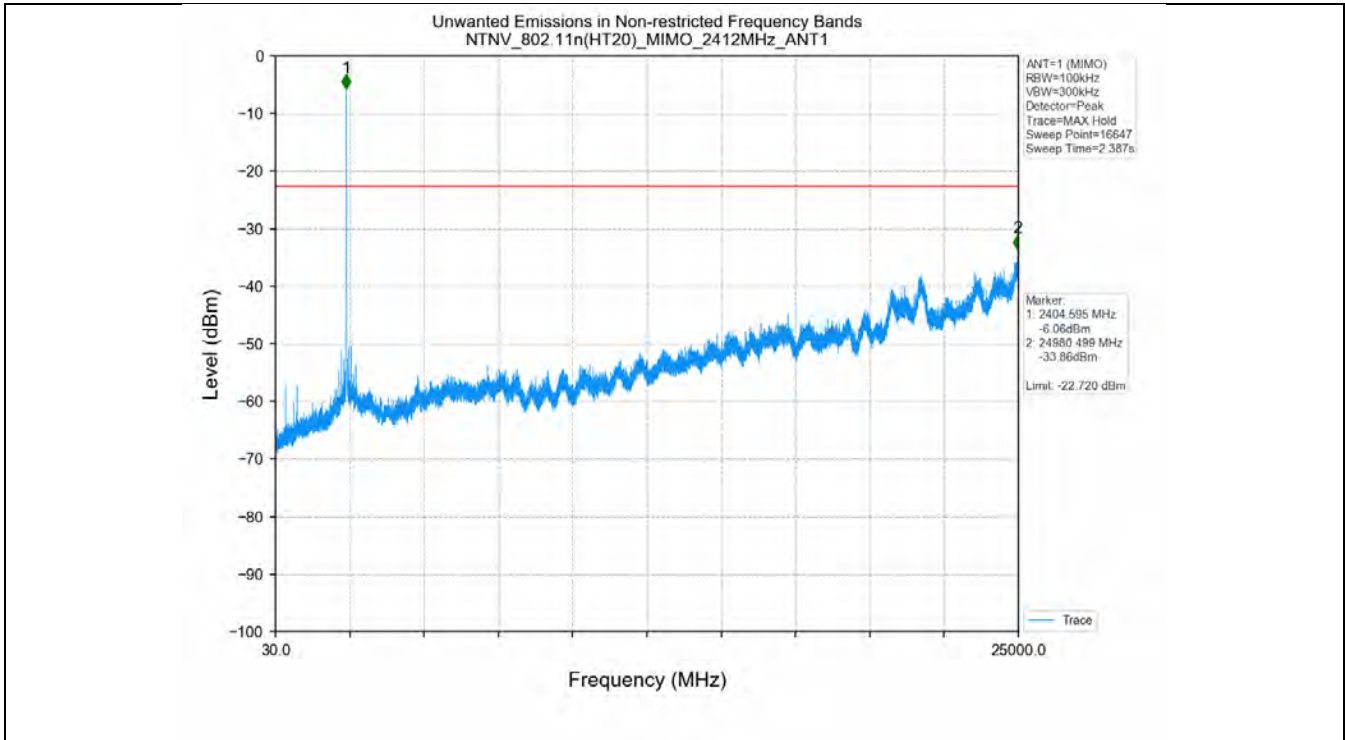
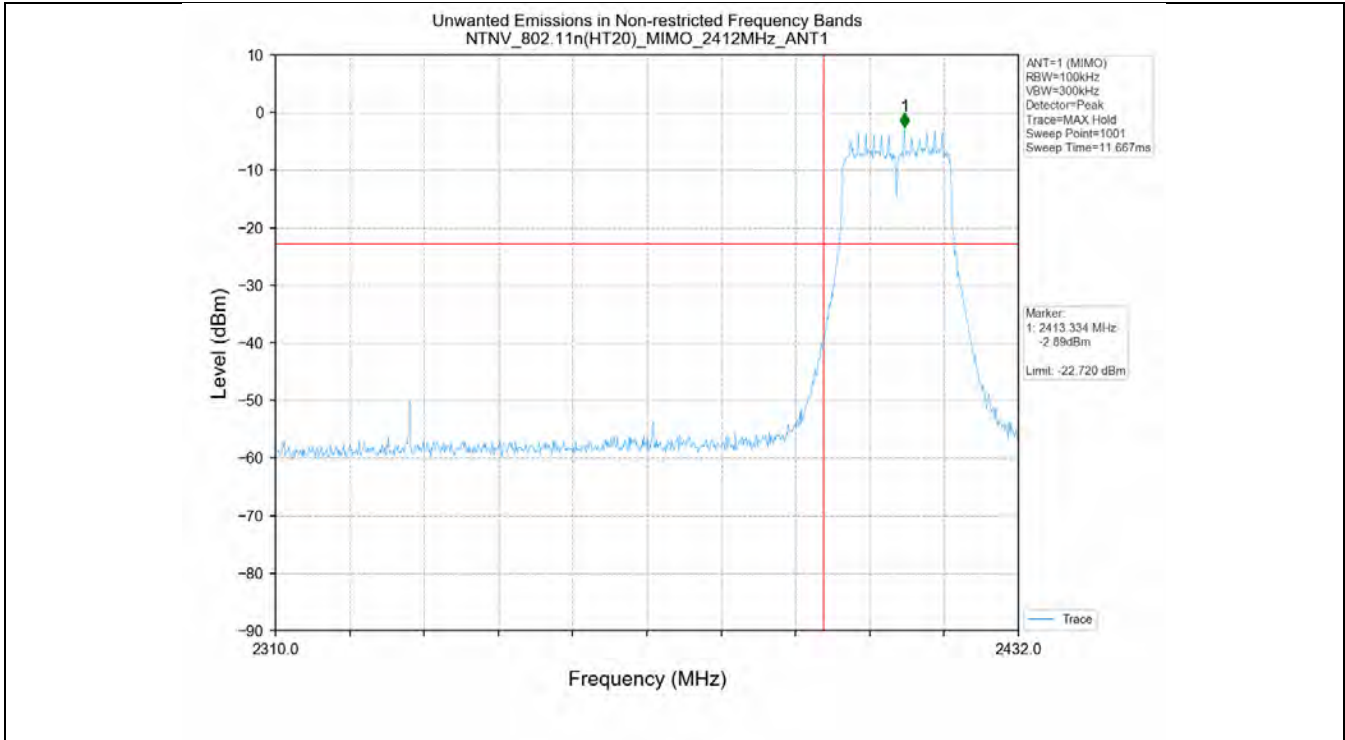


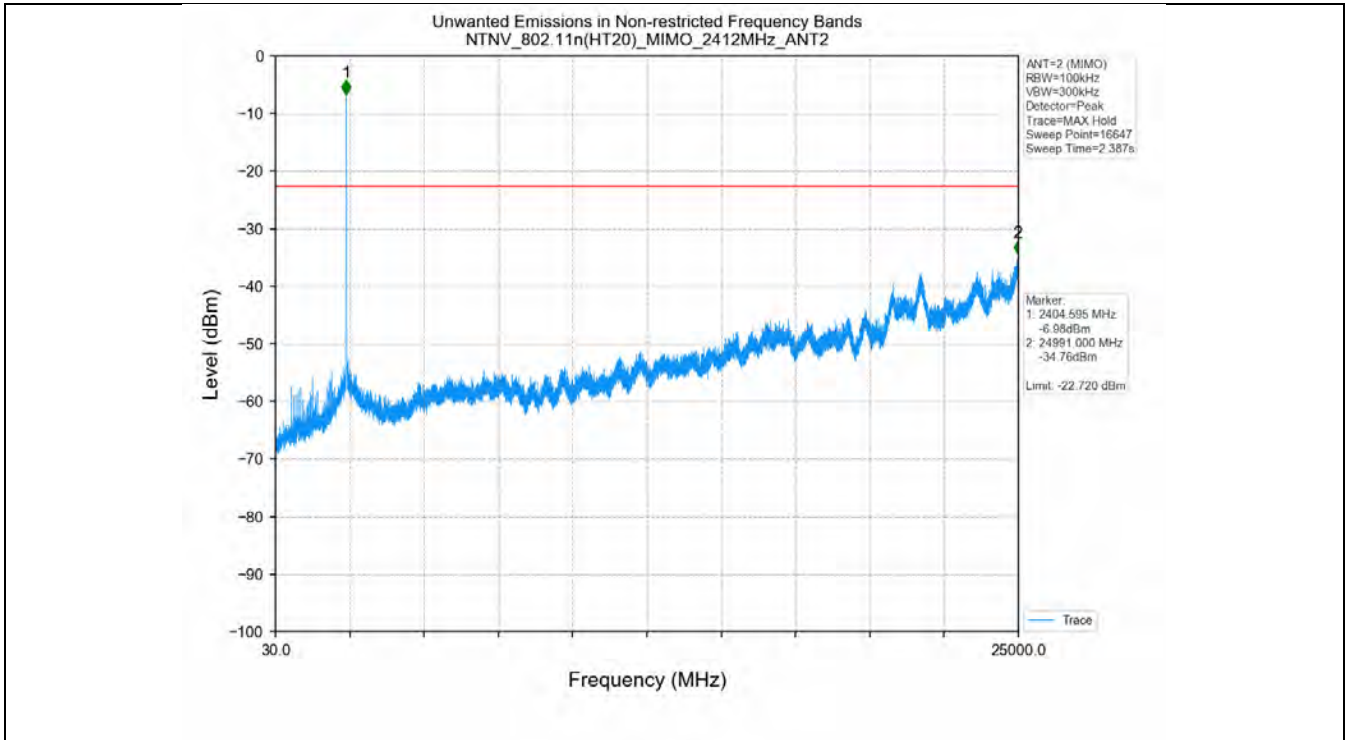
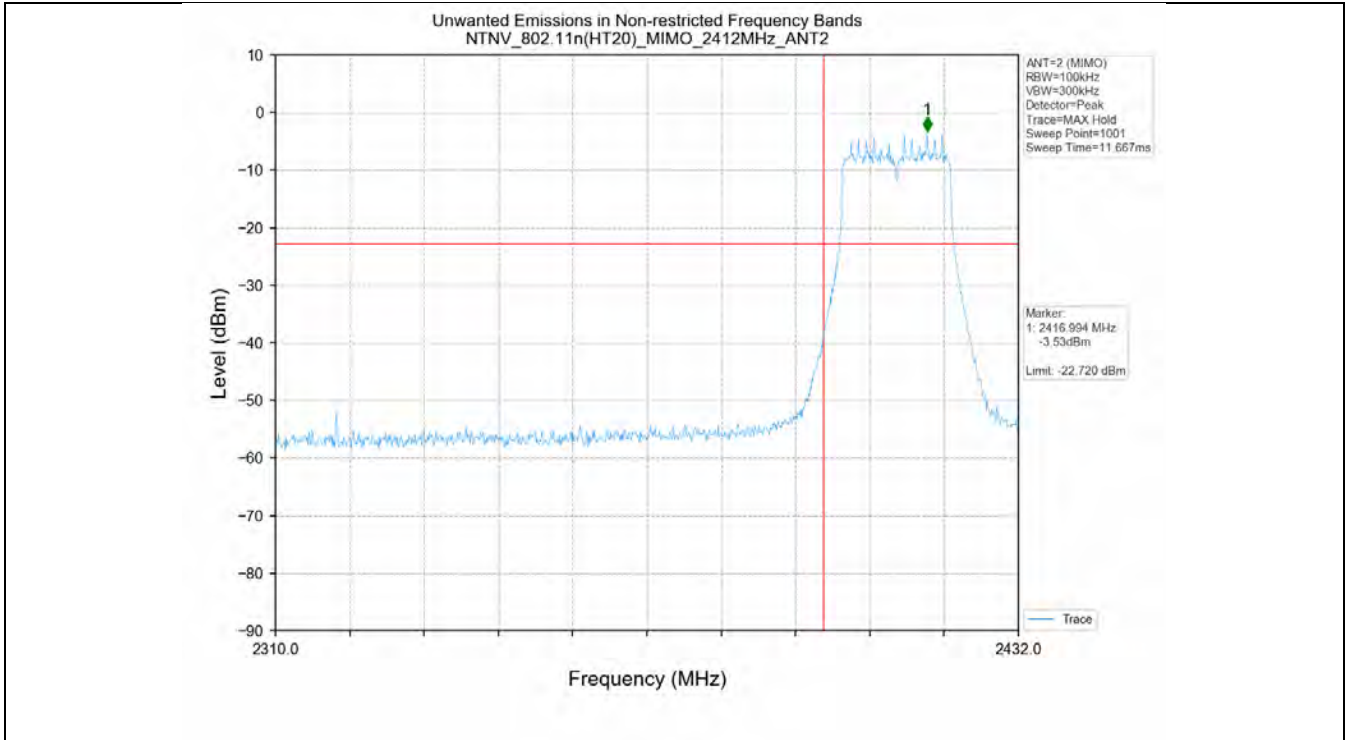




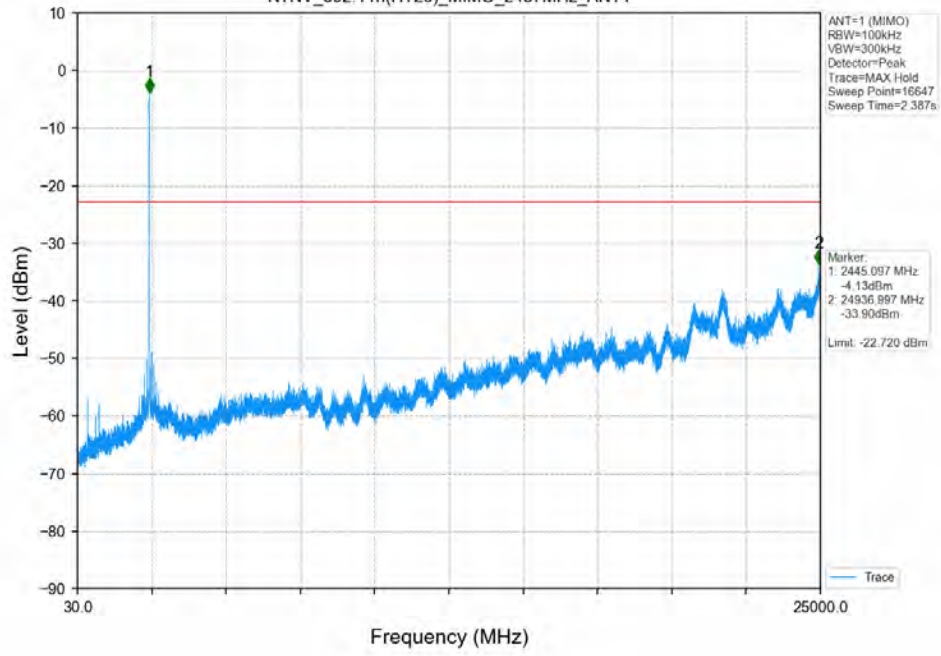




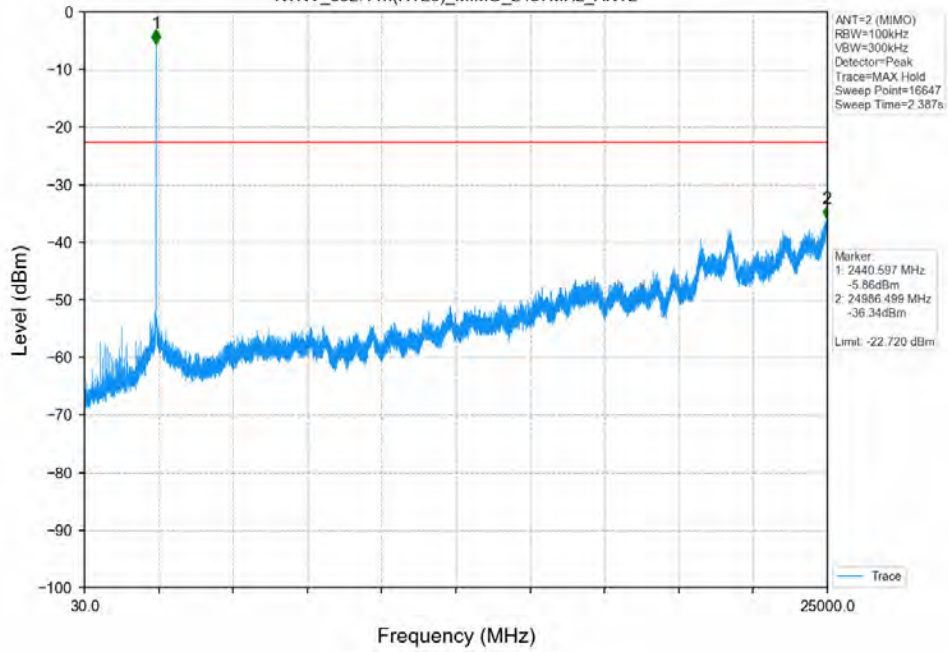


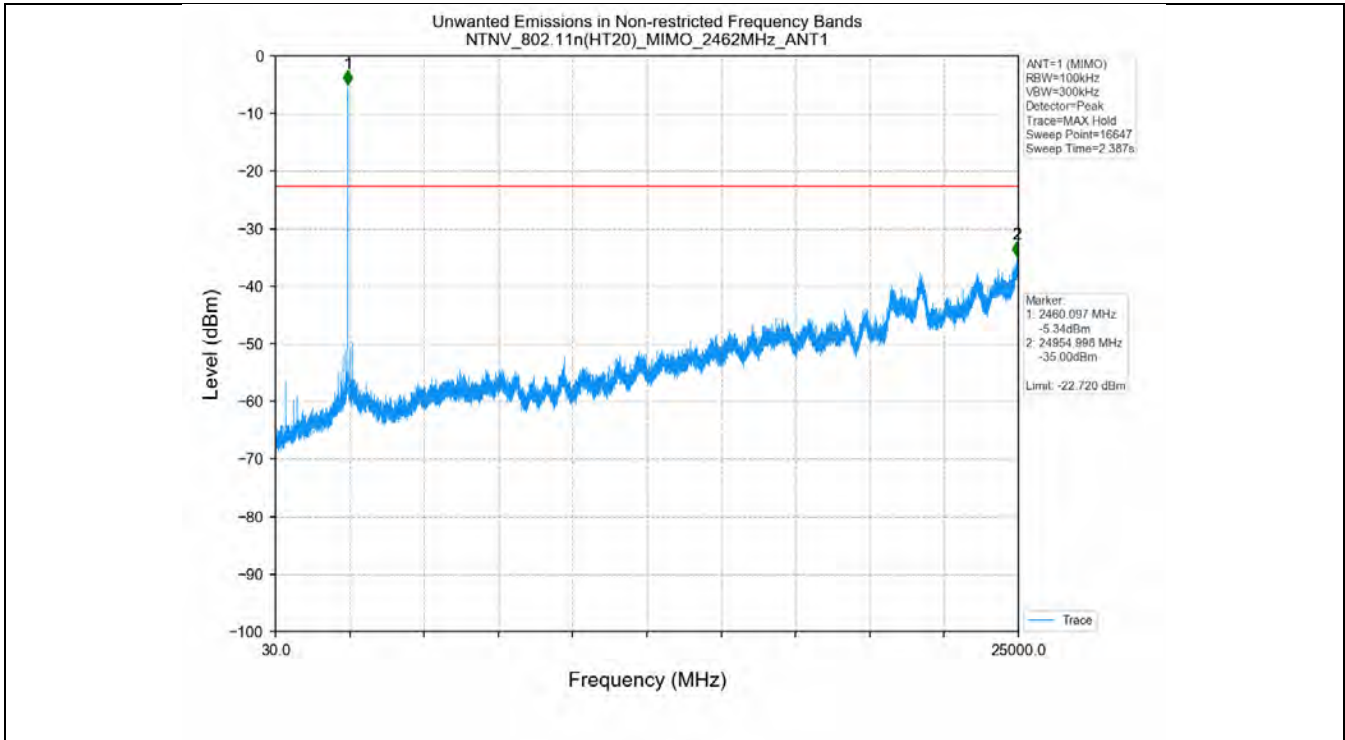
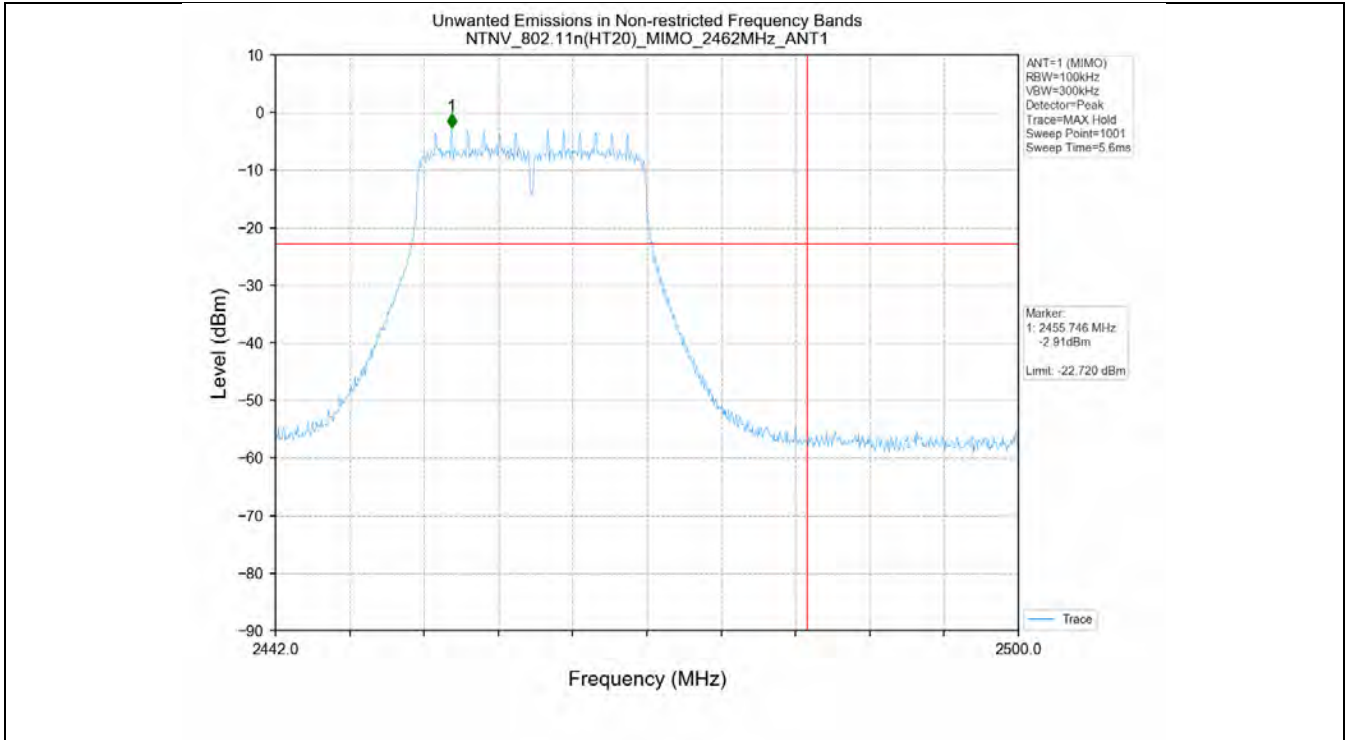


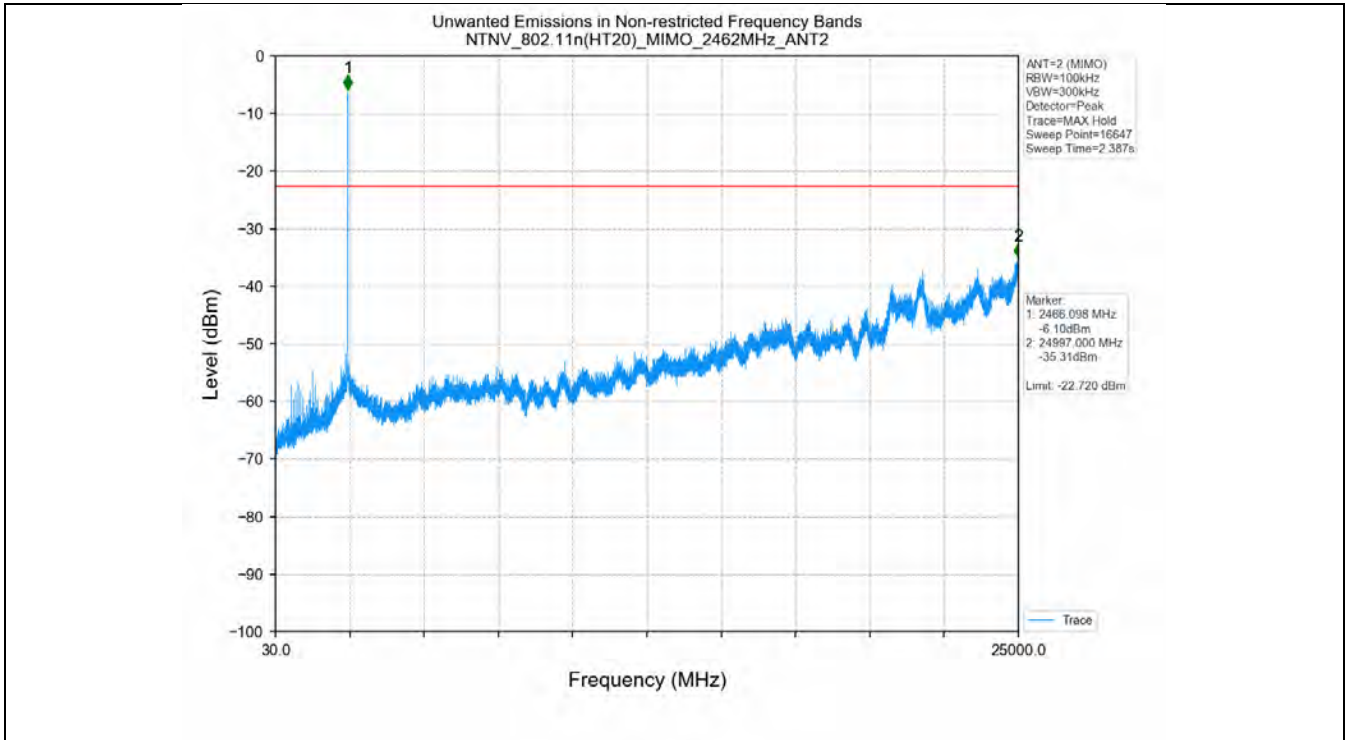
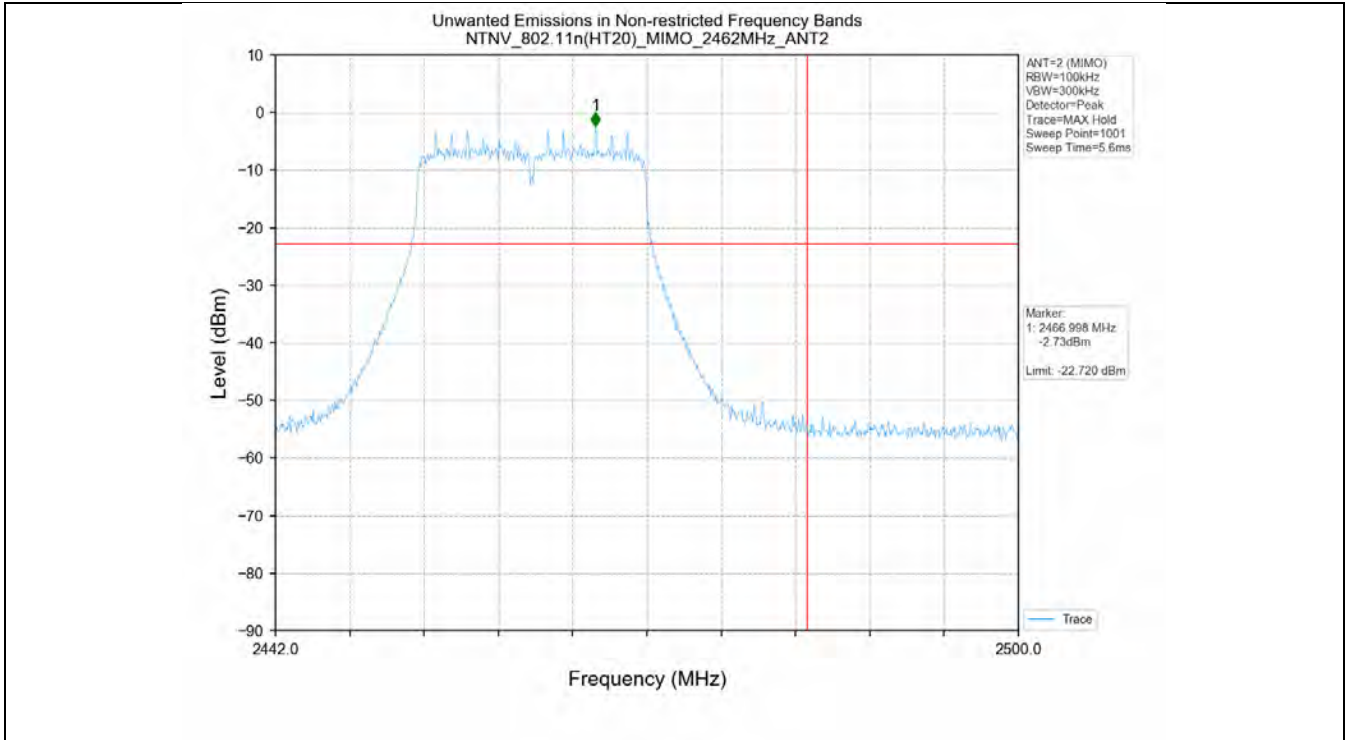
Unwanted Emissions in Non-restricted Frequency Bands
NTNV_802.11n(HT20)_MIMO_2437MHz_ANT1

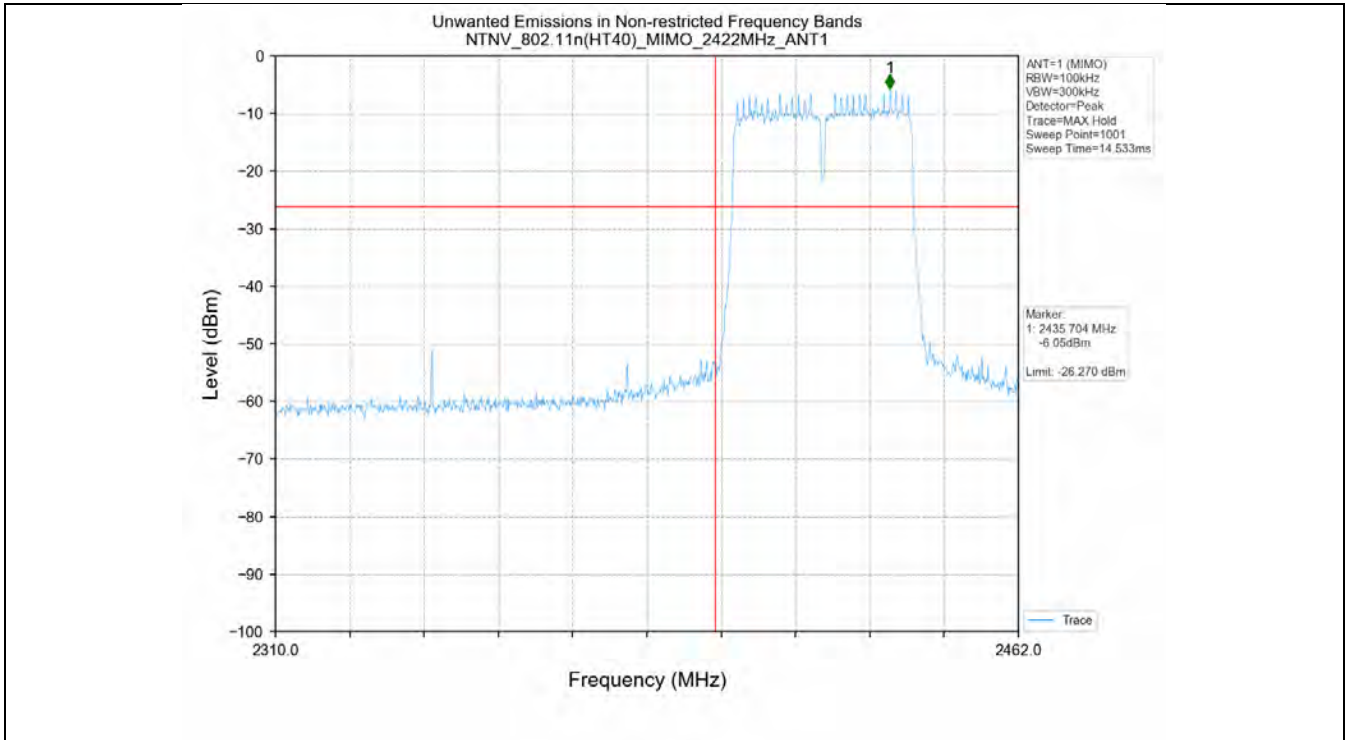
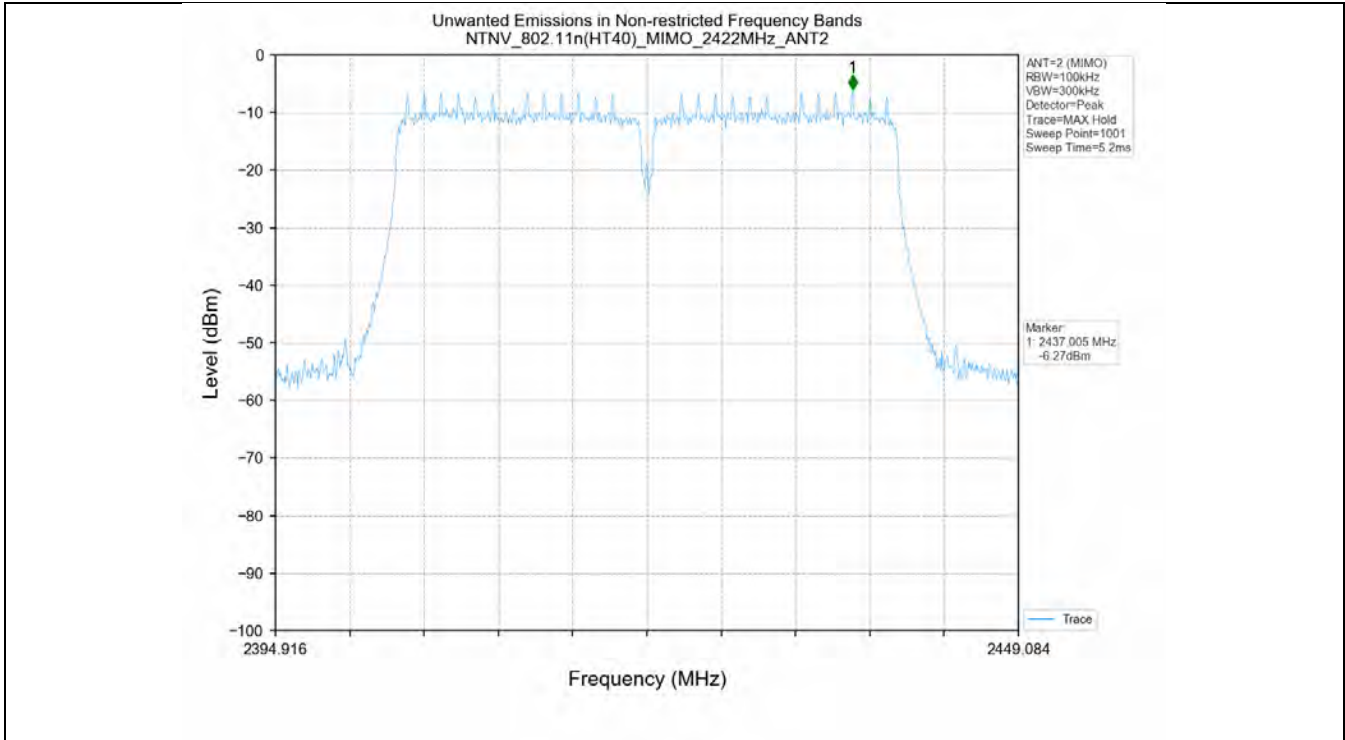


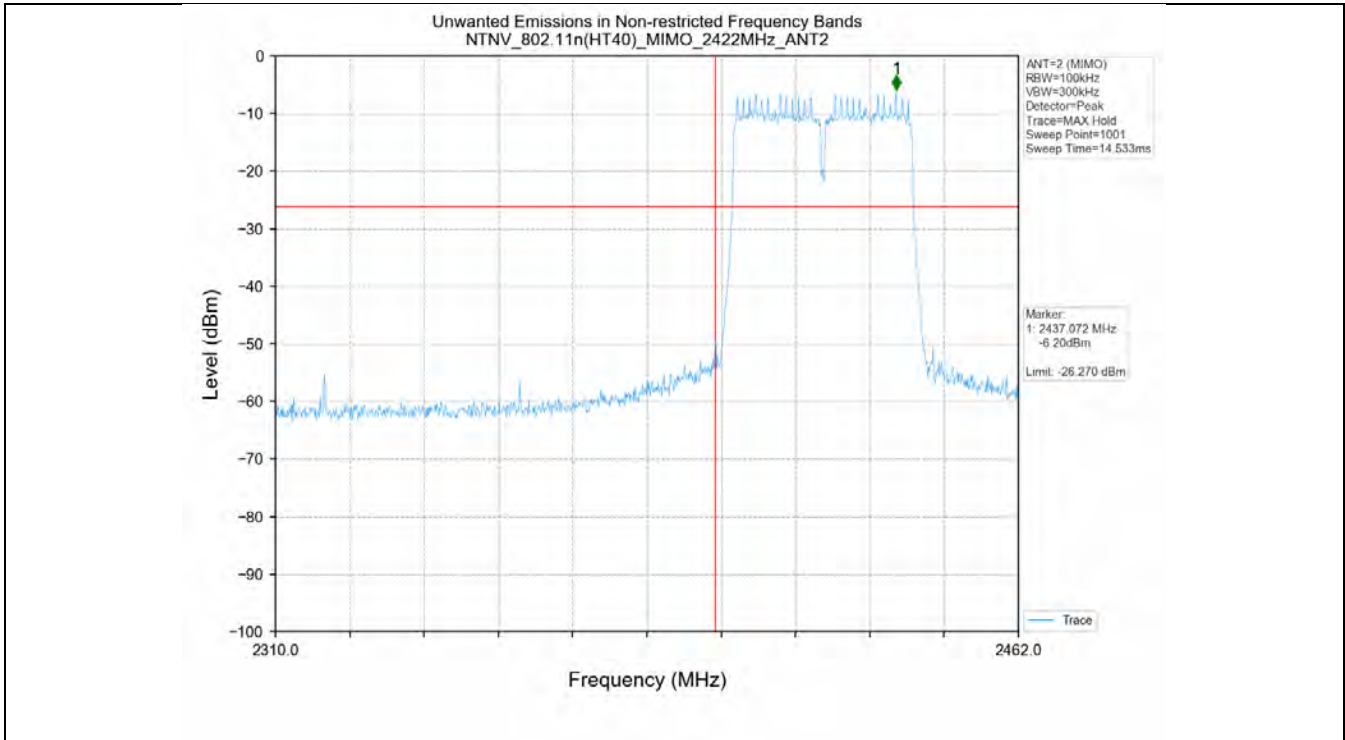
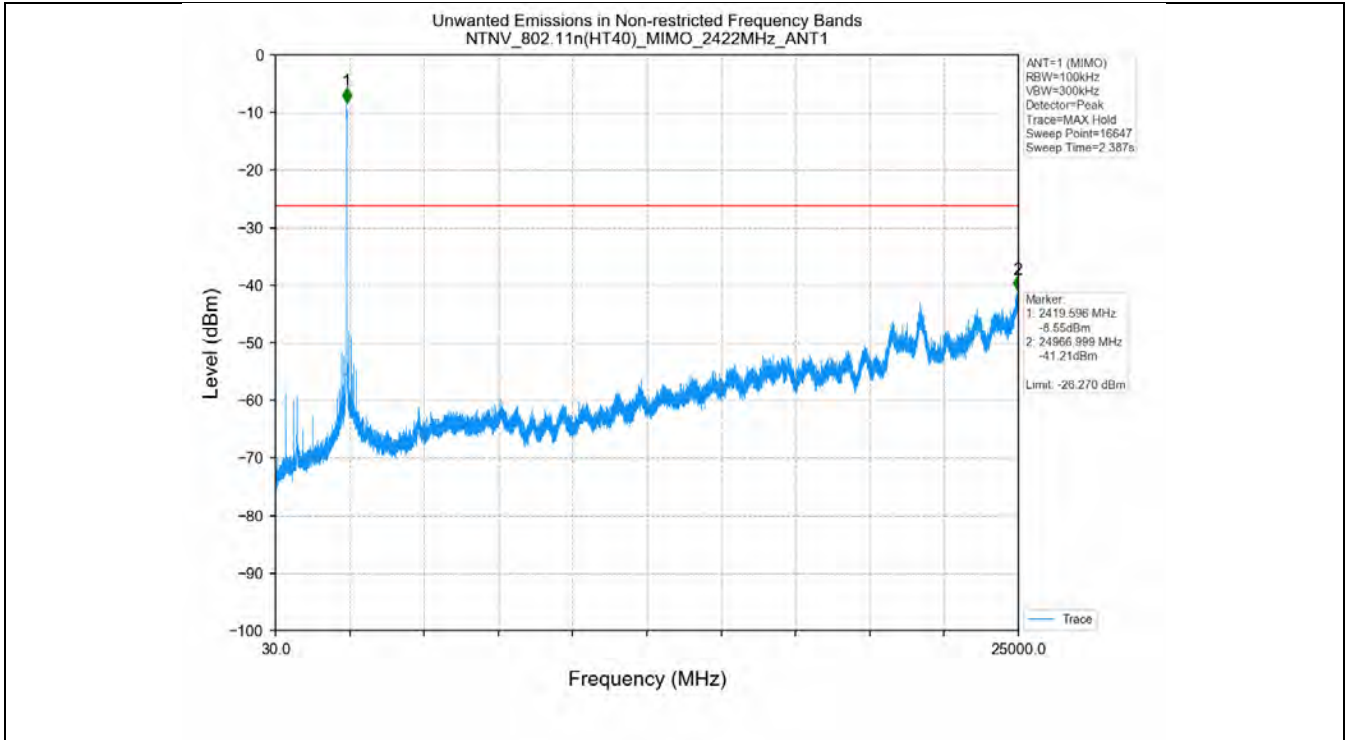
Unwanted Emissions in Non-restricted Frequency Bands
NTNV_802.11n(HT20)_MIMO_2437MHz_ANT2

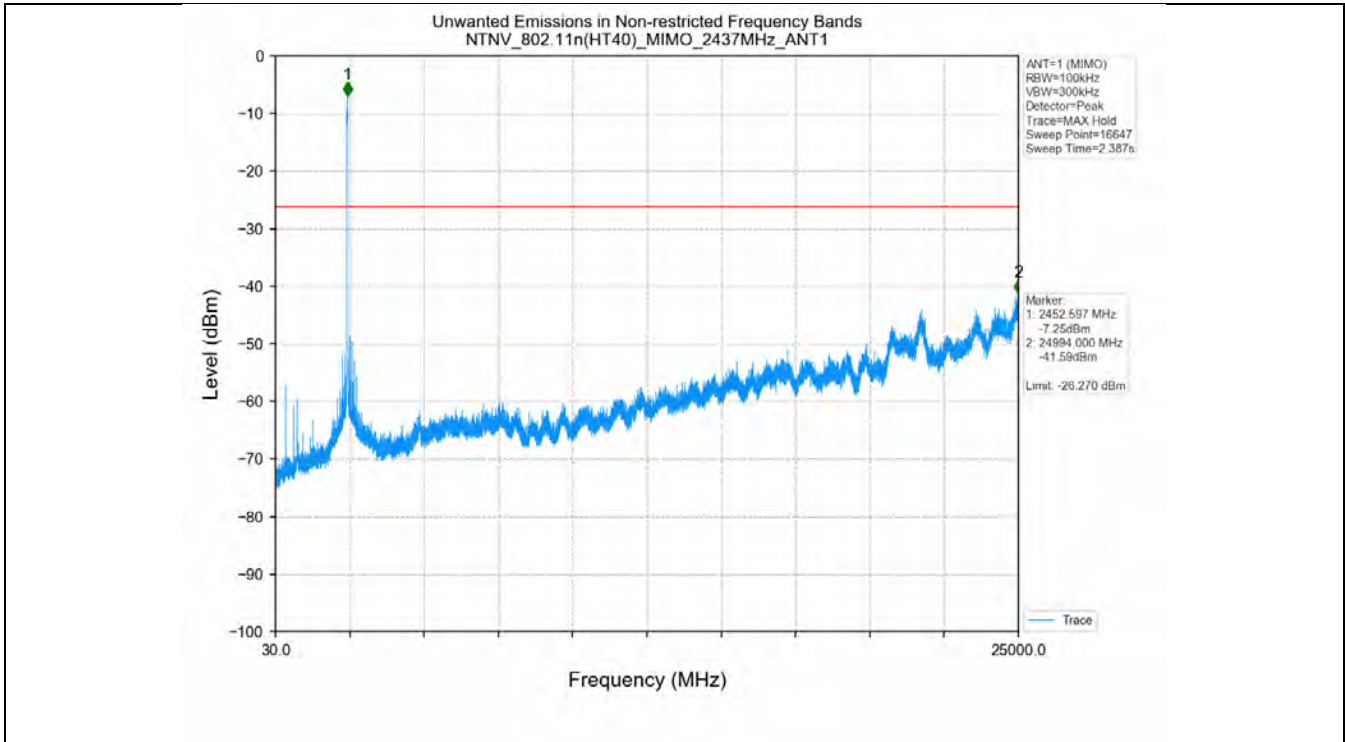
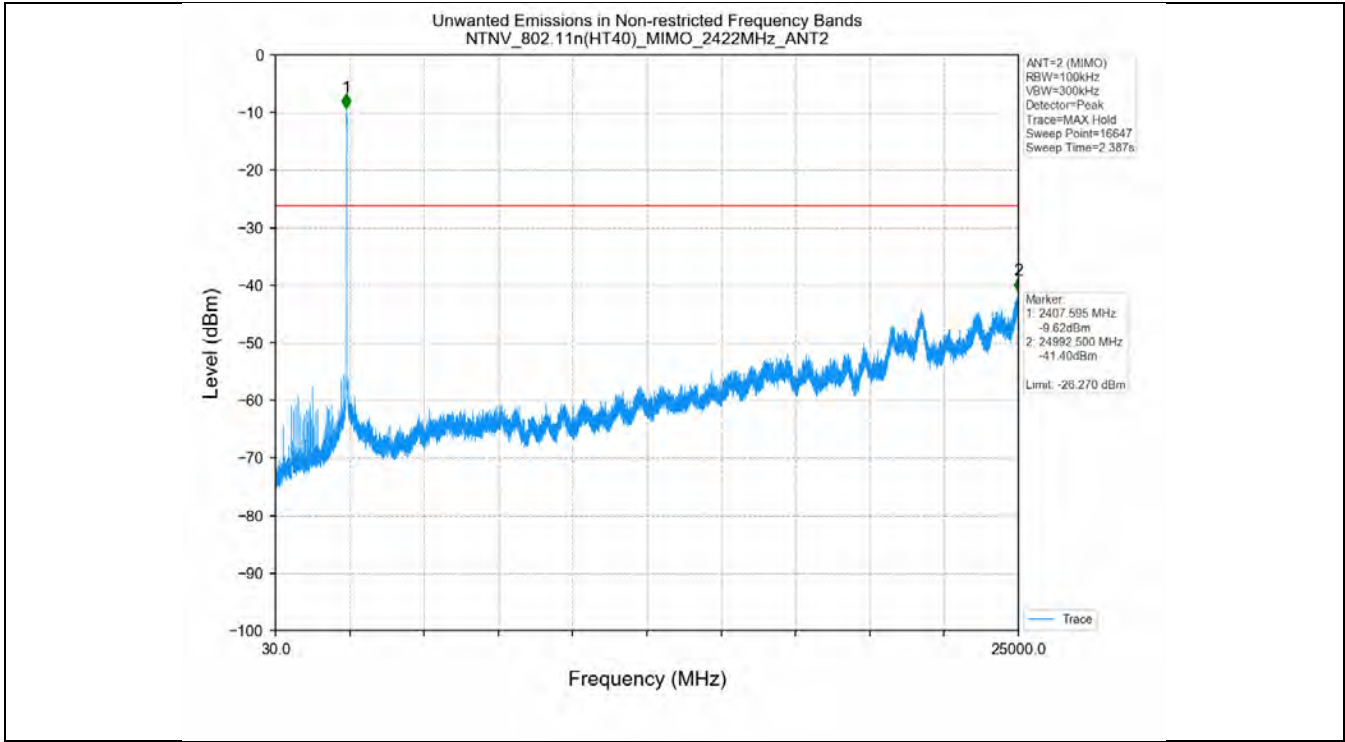


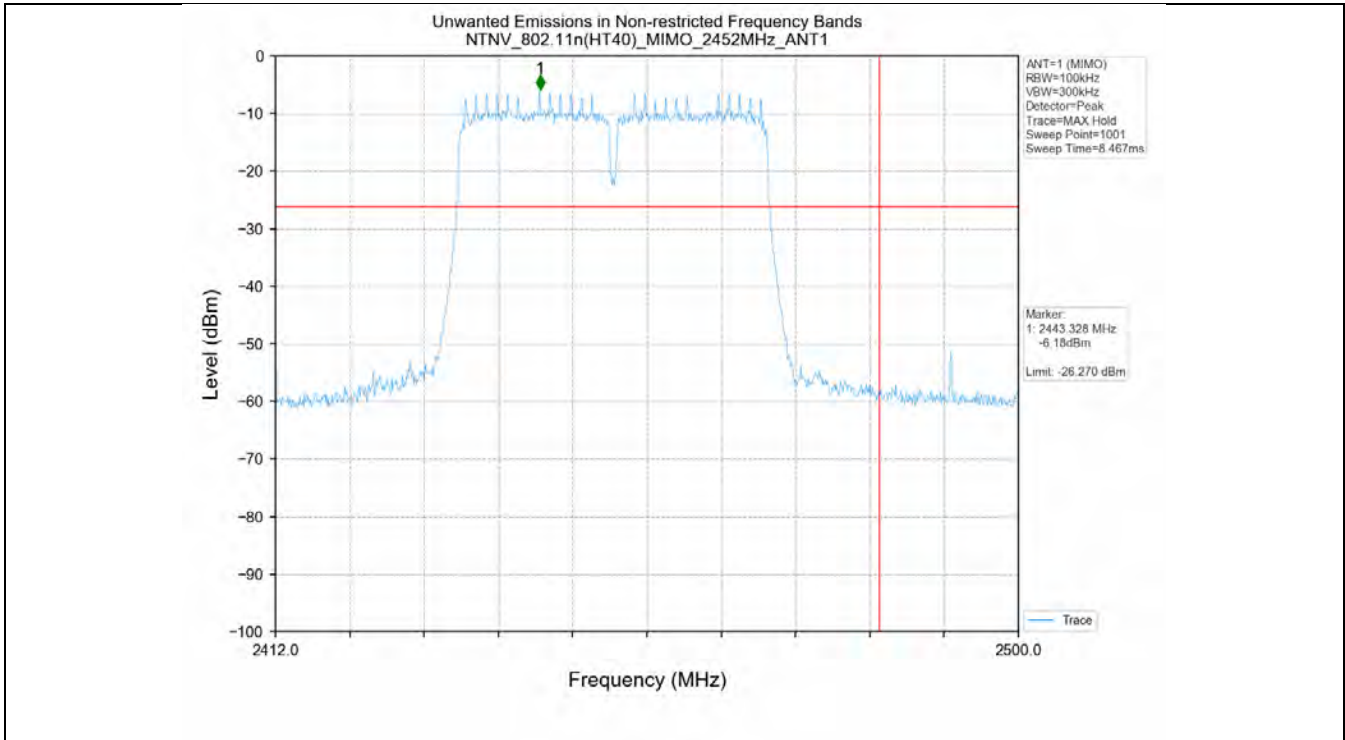
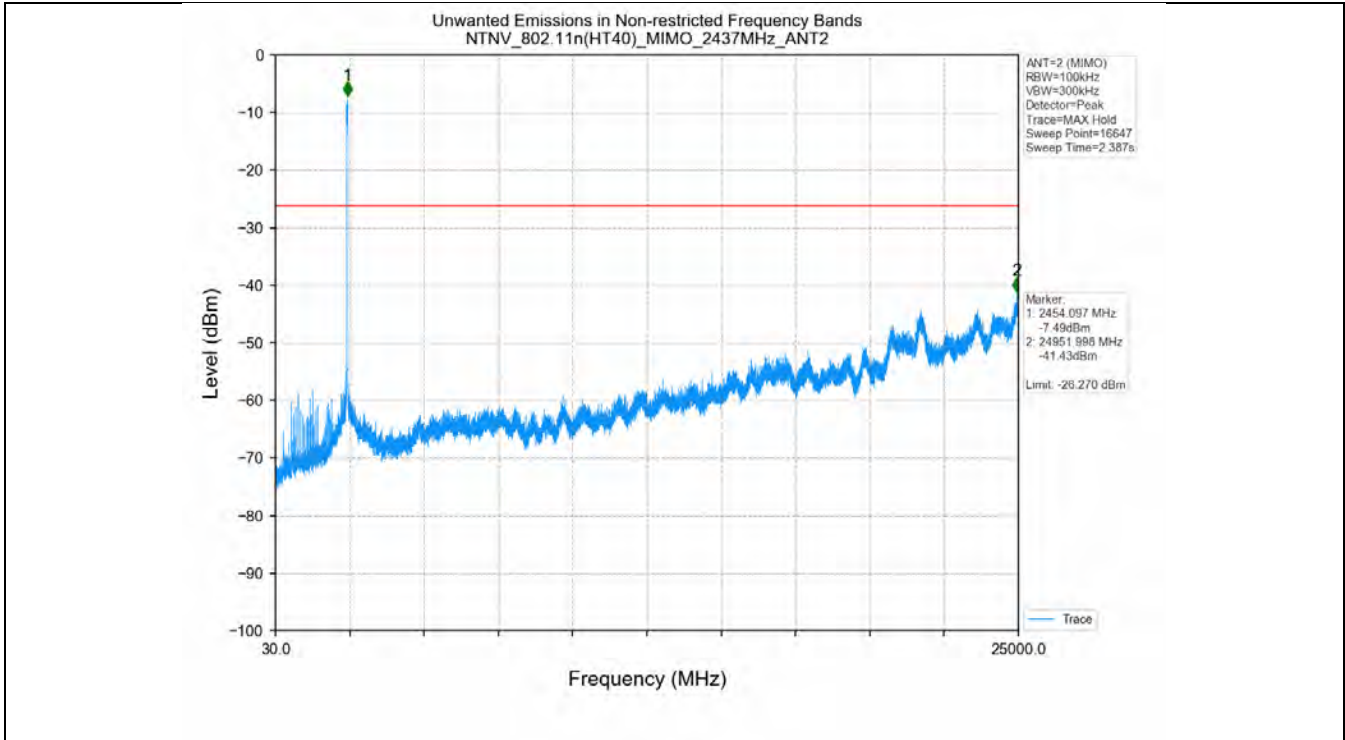


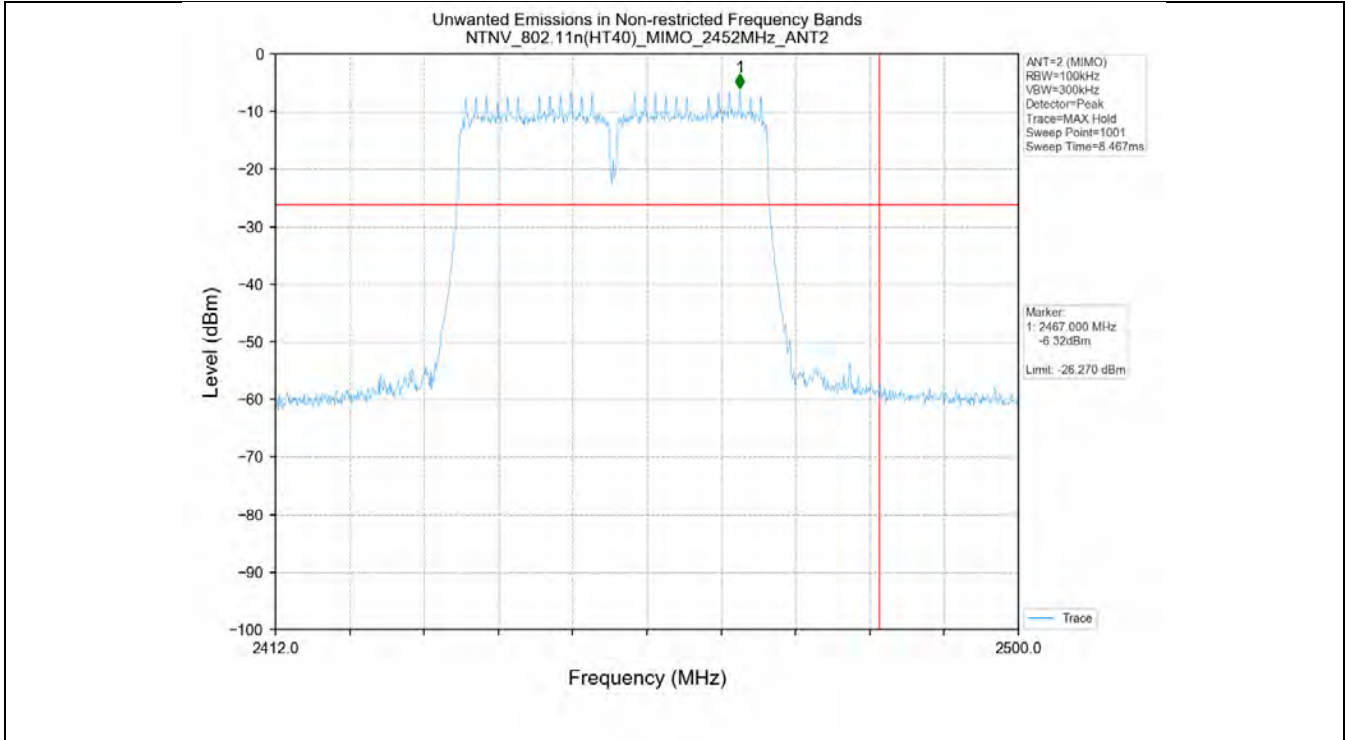
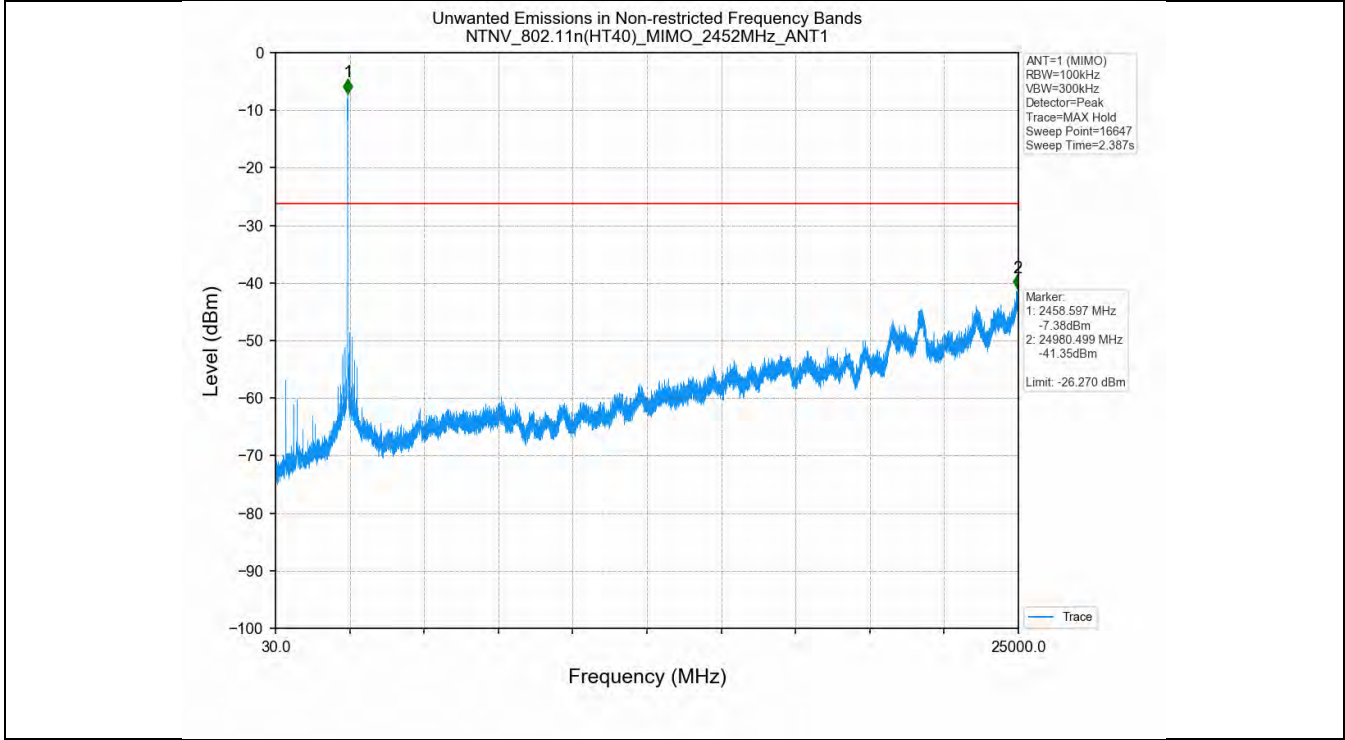












Unwanted Emissions in Non-restricted Frequency Bands
NTNV_802.11n(HT40)_MIMO_2452MHz_ANT2

