

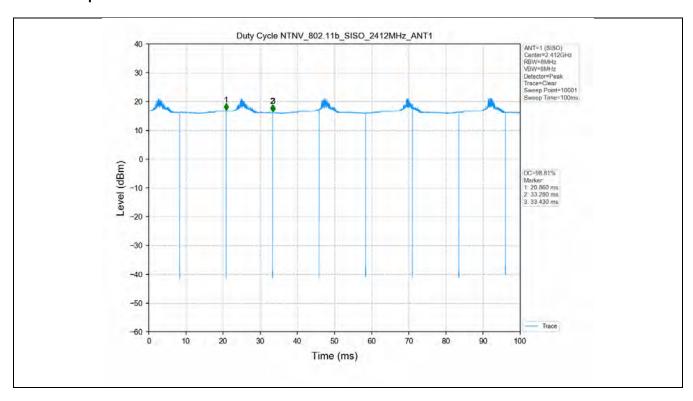
Appendix A for SHEM200400259301

1. Duty Cycle

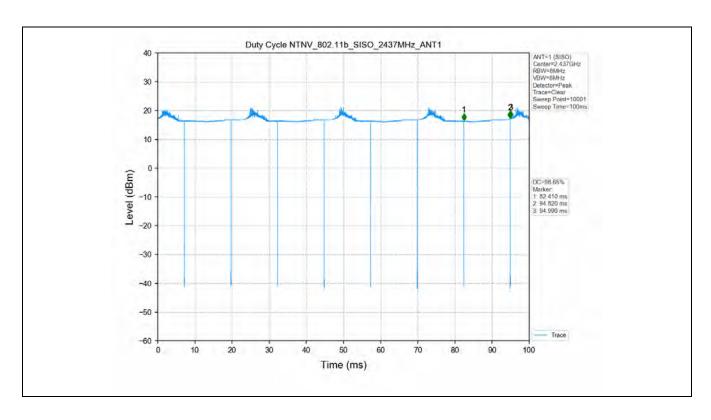
1.1 Test Result

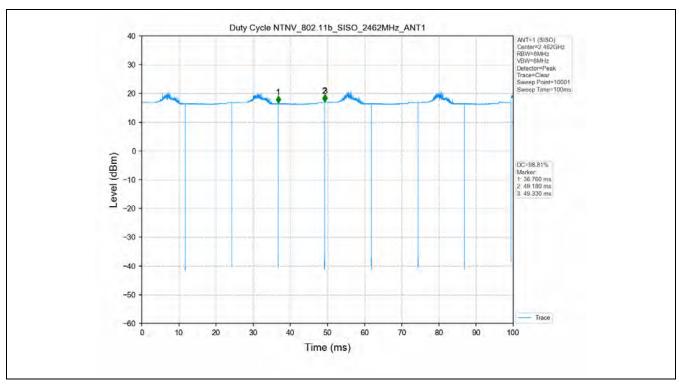
Test Mode	Channel Frequency(M Hz)	TX Type	ANT No.	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
	2412	SISO	1	12.420	12.570	98.81	0.05
802.11b	2437	SISO	1	12.410	12.580	98.65	0.06
	2462	SISO	1	12.420	12.570	98.81	0.05
	2412	SISO	1	2.064	2.226	92.72	0.33
802.11g	2437	SISO	1	2.038	2.189	93.10	0.31
	2462	SISO	1	2.042	2.202	92.73	0.33
802.11n(HT20)	2412	MIMO	1	2.038	2.200	92.64	0.33
	2437	MIMO	1	1.920	2.091	91.82	0.37
	2462	MIMO	1	1.920	2.044	93.93	0.27
802.11n(HT40)	2422	MIMO	1	0.920	1.086	84.71	0.72
	2437	MIMO	1	0.944	1.088	86.76	0.62
	2452	MIMO	1	0.943	1.114	84.65	0.72

1.2 Test Graph

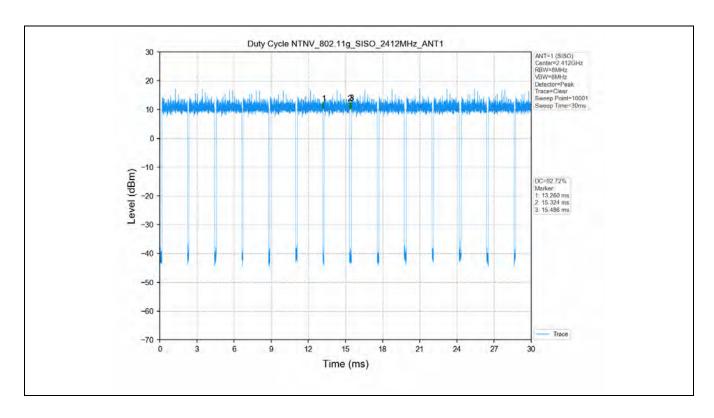


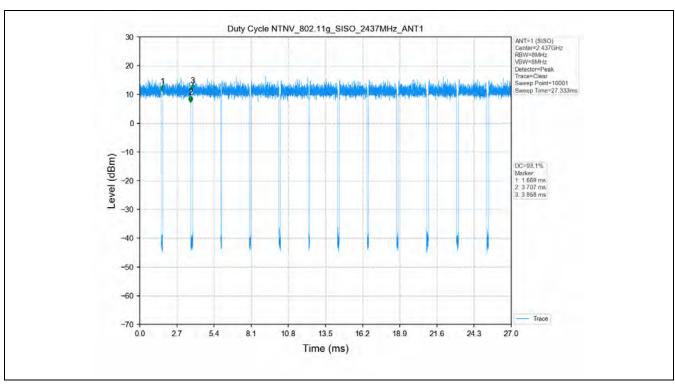




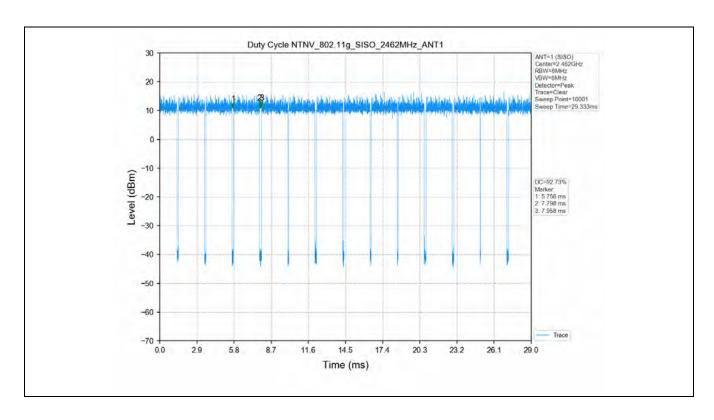


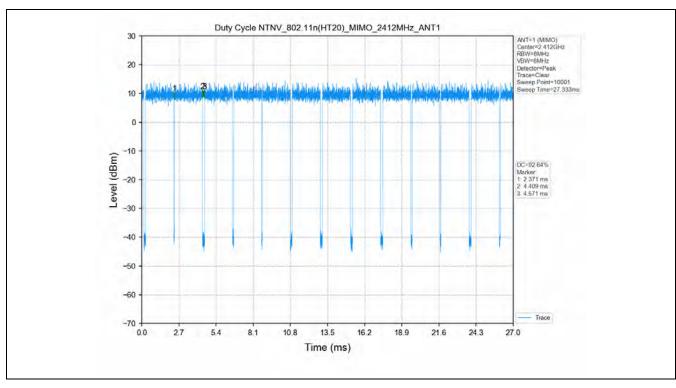




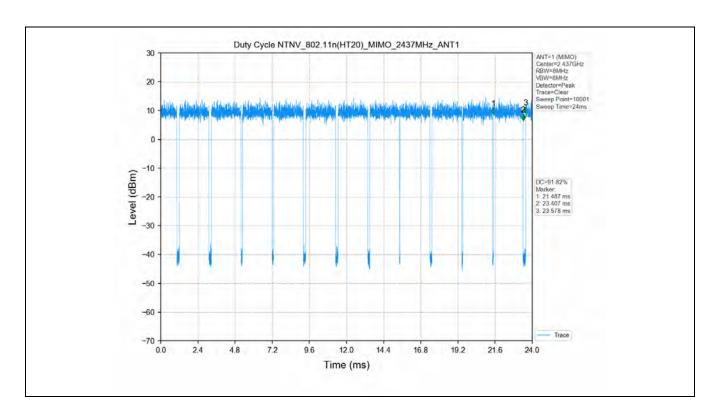


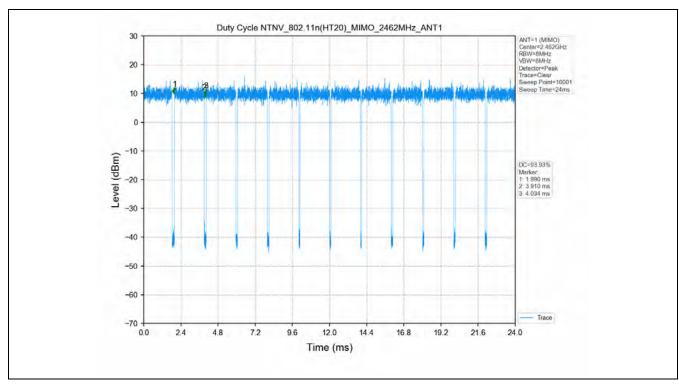




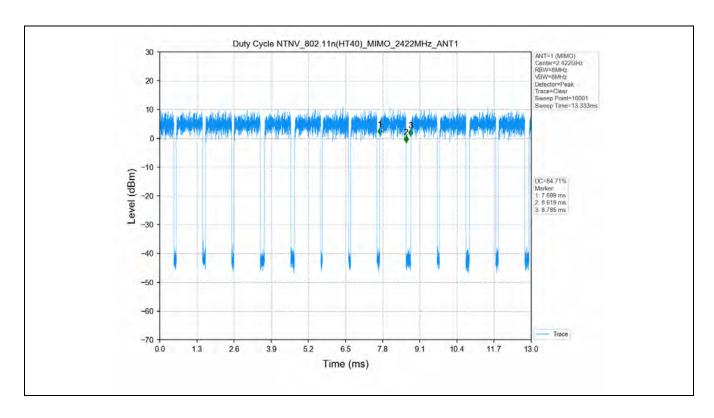


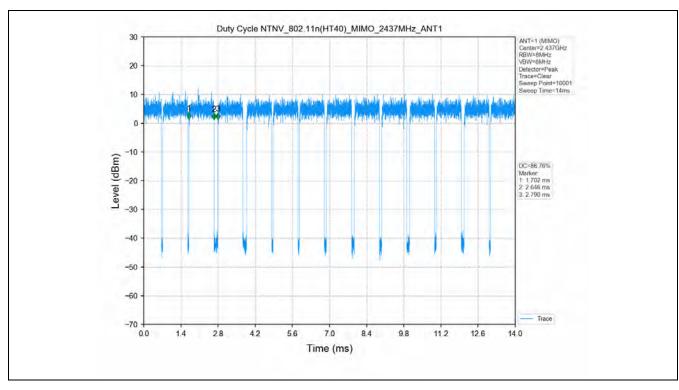




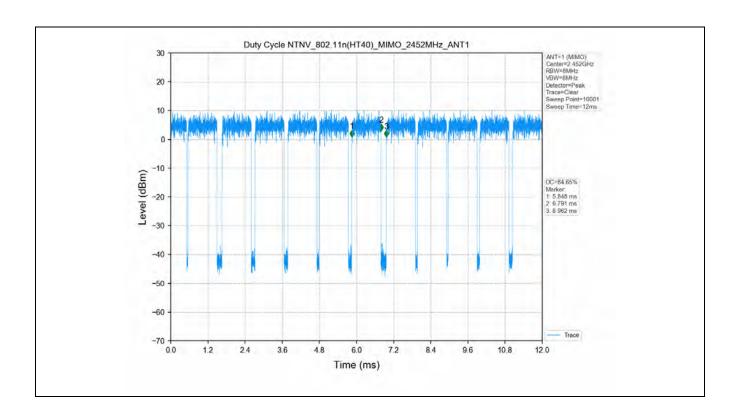












2. Bandwidth

2.1 Test Result

Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bar	\/a ==d: a4	
				Test Result (MHz)	Limits (MHz)	Verdict
	2412	SISO	1	9.605	≥0.5	PASS
			2	10.092	≥0.5	PASS
802.11b	0407	SISO	1	10.088	≥0.5	PASS
002.110	2437	3130	2	9.156	≥0.5	PASS
	2462	SISO	1	9.612	≥0.5	PASS
	2402		2	10.099	≥0.5	PASS
	2412	SISO	1	16.437	≥0.5	PASS
			2	16.426	≥0.5	PASS
000 44=	2437	SISO	1	16.403	≥0.5	PASS
802.11g			2	16.407	≥0.5	PASS
	2462	SISO	1	16.398	≥0.5	PASS
			2	16.410	≥0.5	PASS
802.11n(HT20)	2412	MIMO	1	16.401	≥0.5	PASS
			2	16.406	≥0.5	PASS
	2437	MIMO	1	17.631	≥0.5	PASS
			2	17.606	≥0.5	PASS
	2462	MIMO	1	17.635	≥0.5	PASS
			2	17.632	≥0.5	PASS
	2422	МІМО	1	35.862	≥0.5	PASS
802.11n(HT40)			2	35.826	≥0.5	PASS
	2437	MIMO	1	35.616	≥0.5	PASS

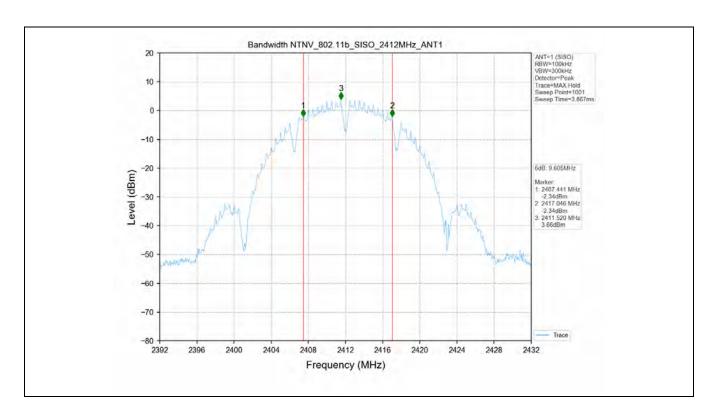


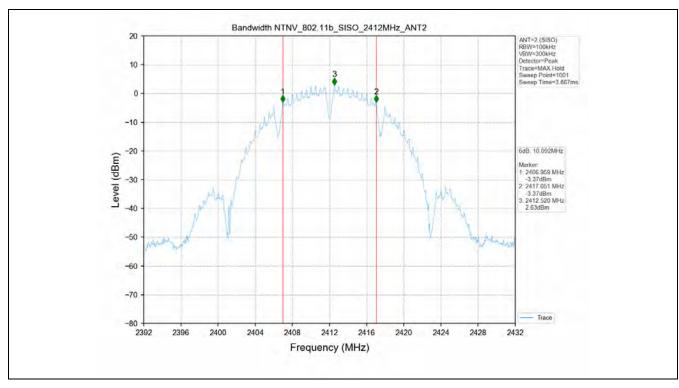
		2	35.790	≥0.5	PASS
2452	МІМО	1	35.813	≥0.5	PASS
		2	35.812	≥0.5	PASS

Test Mode	Frequency	iency TX Type	ANT No.	99% Occupied Bandwidth			
1 CSt WOOC	(MHz)	TX Type	ANT NO.	Test Result (MHz)			
	2412	SISO	1	15.099	Only for Report Use		
		5150	2	15.087	Only for Report Use		
802.11b	2437	SISO	1	15.093	Only for Report Use		
002.110			2	15.086	Only for Report Use		
	0.400	SISO	1	15.091	Only for Report Use		
	2462	5150	2	15.079	Only for Report Use		
	0440	SISO	1	16.950	Only for Report Use		
	2412		2	16.910	Only for Report Use		
000 44	0.407	SISO	1	17.190	Only for Report Use		
802.11g	2437		2	17.109	Only for Report Use		
	2462	SISO	1	16.926	Only for Report Use		
			2	16.870	Only for Report Use		
	2412	MIMO	1	16.909	Only for Report Use		
			2	16.878	Only for Report Use		
000 44 ·- (LITOO)	2437	MIMO	1	18.103	Only for Report Use		
802.11n(HT20)			2	18.134	Only for Report Use		
	2462	MIMO	1	18.012	Only for Report Use		
			2	17.973	Only for Report Use		
	2422	MIMO	1	36.519	Only for Report Use		
			2	36.469	Only for Report Use		
000 44/11740)	0.407	МІМО	1	36.635	Only for Report Use		
802.11n(HT40)	2437		2	36.605	Only for Report Use		
	2452	MIMO	1	36.465	Only for Report Use		
			2	36.548	Only for Report Use		

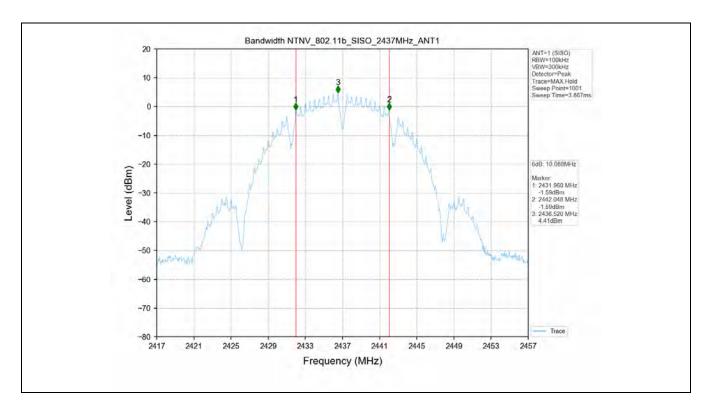
2.2 Test Graph - 6dB Bandwidth

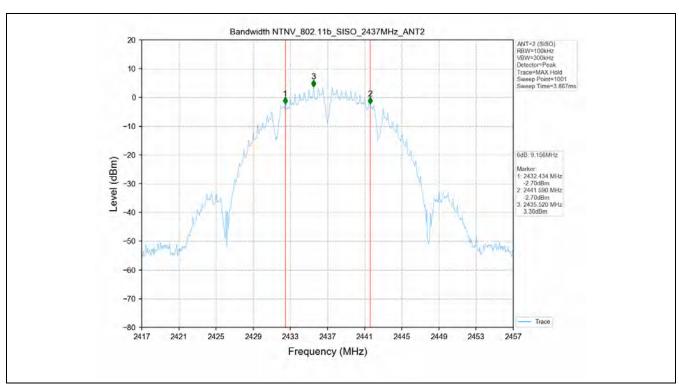




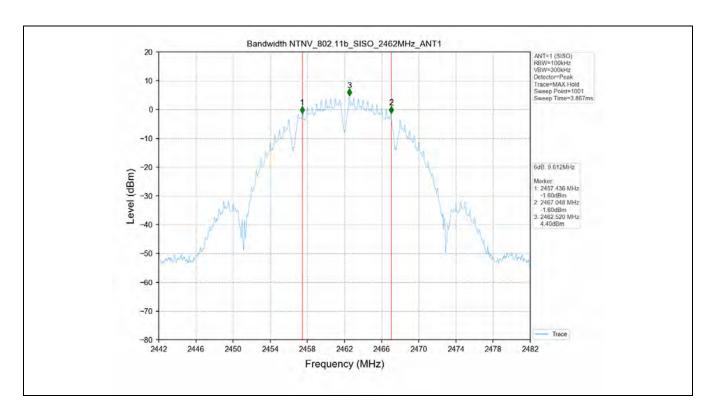


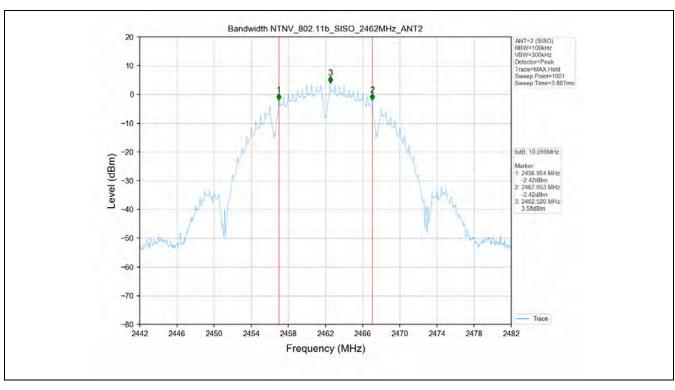




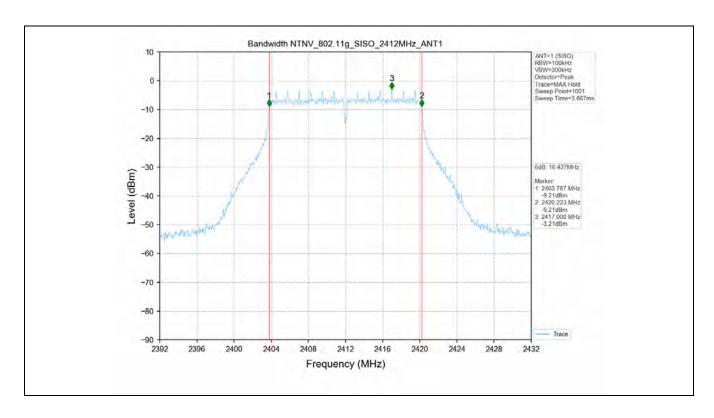


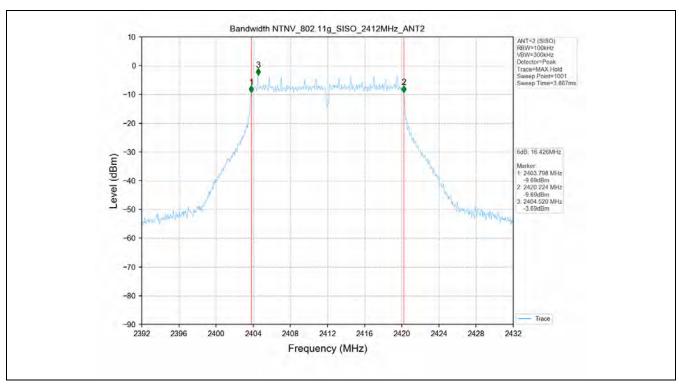




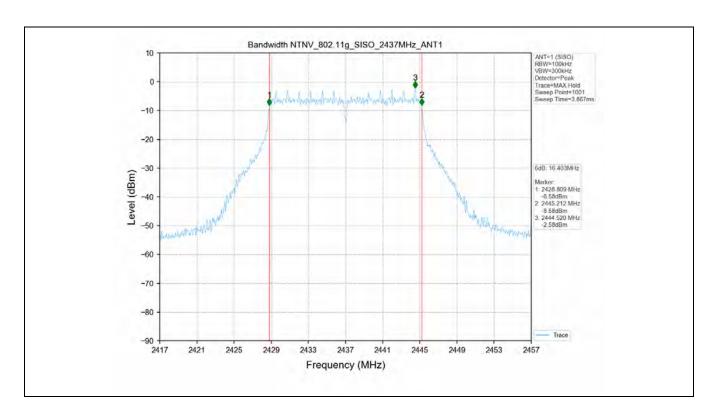


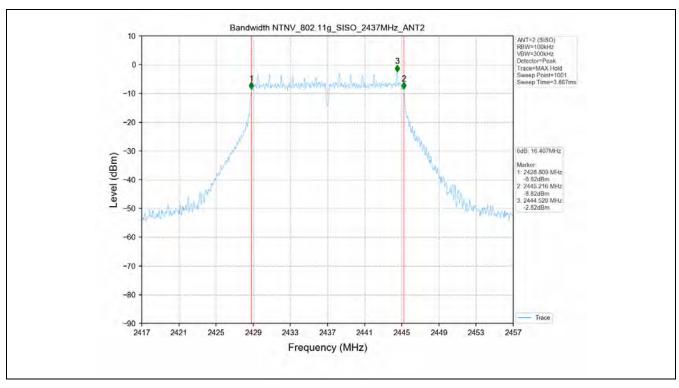




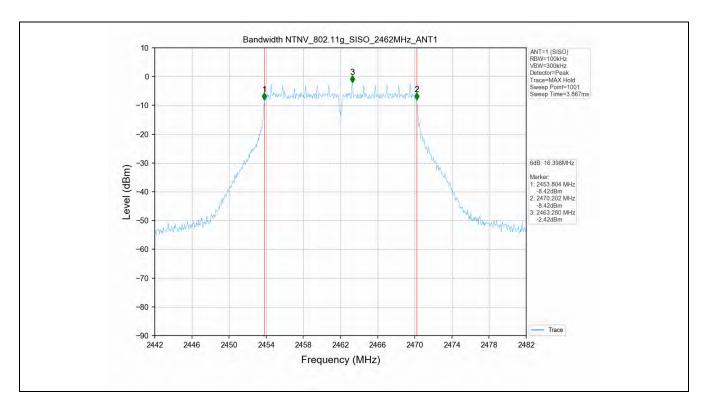


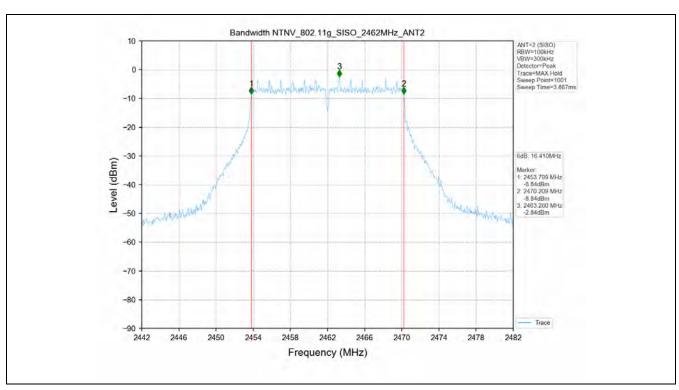




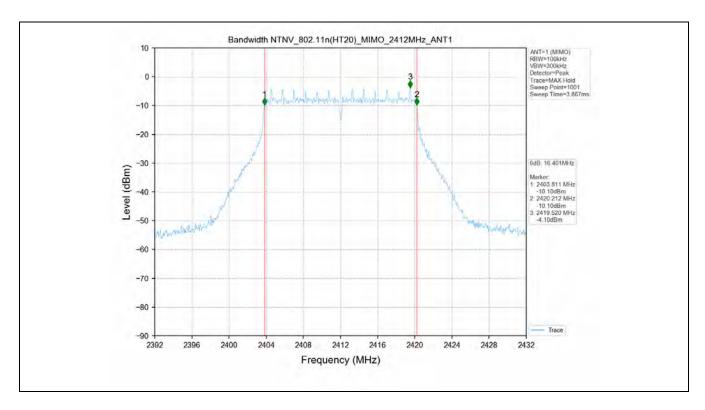


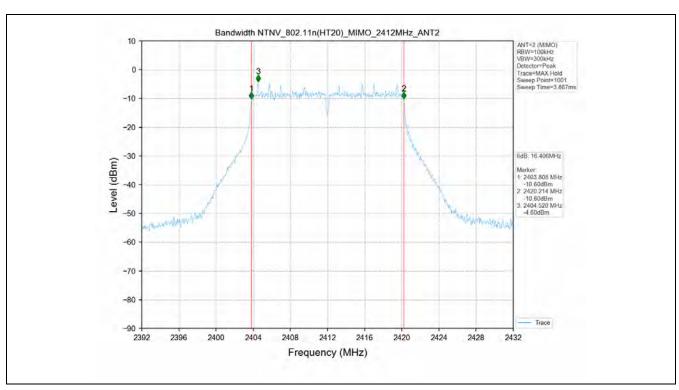




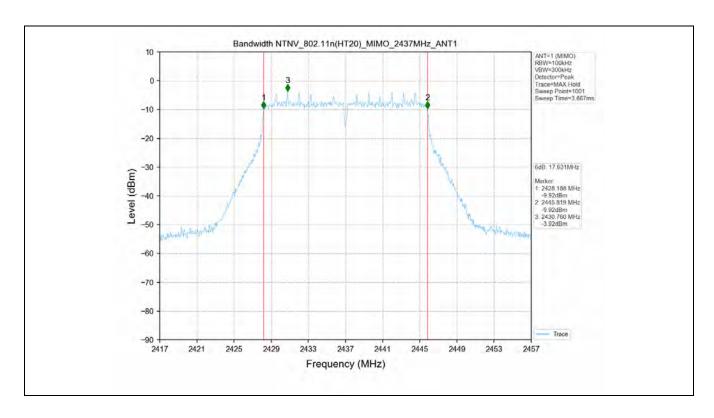


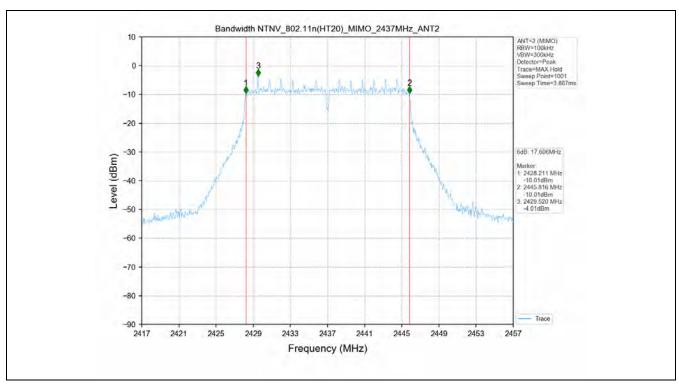




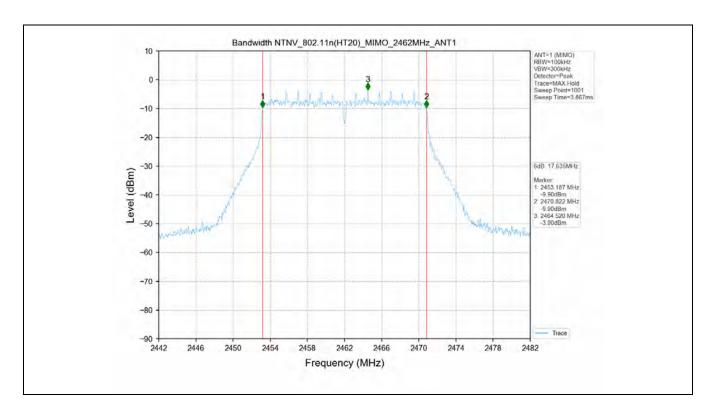


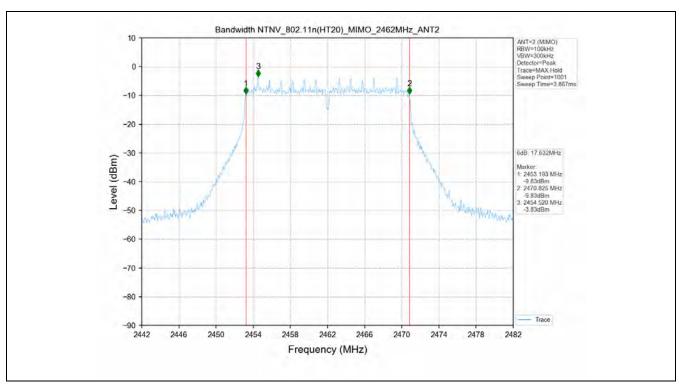




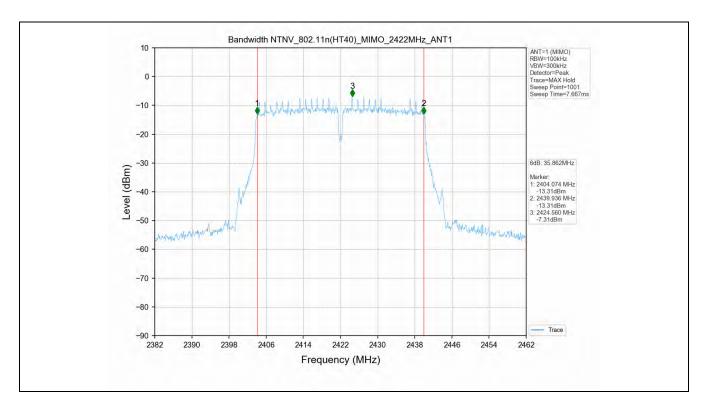


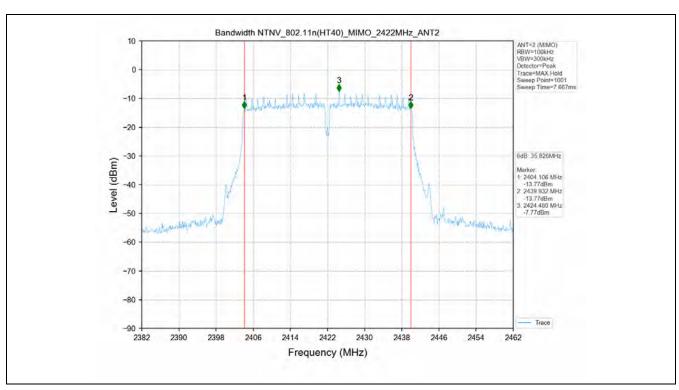




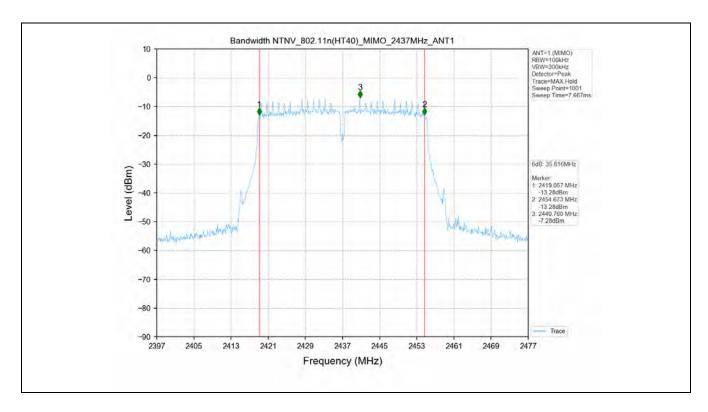


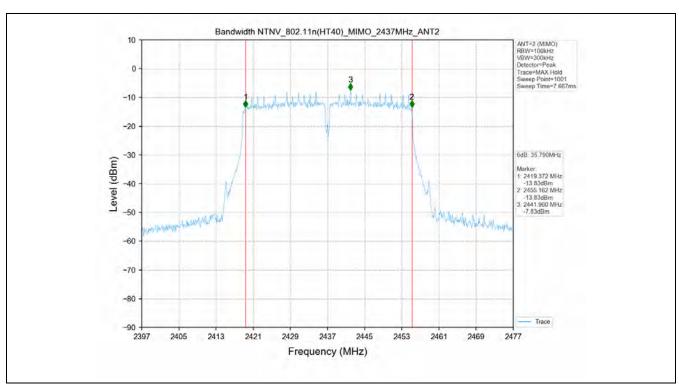




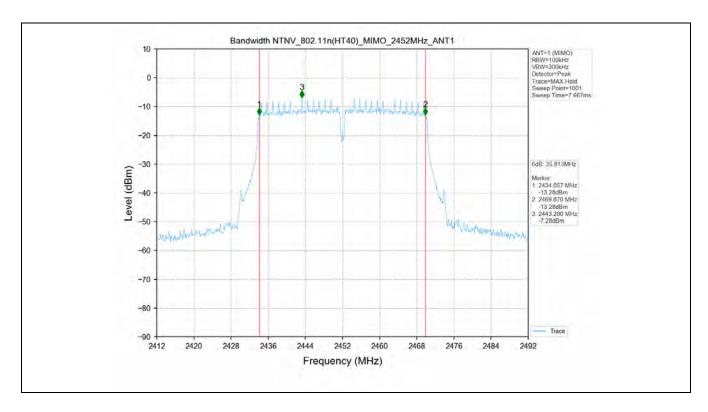


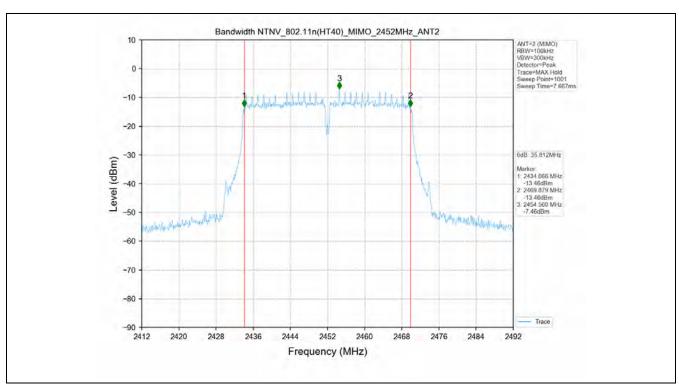






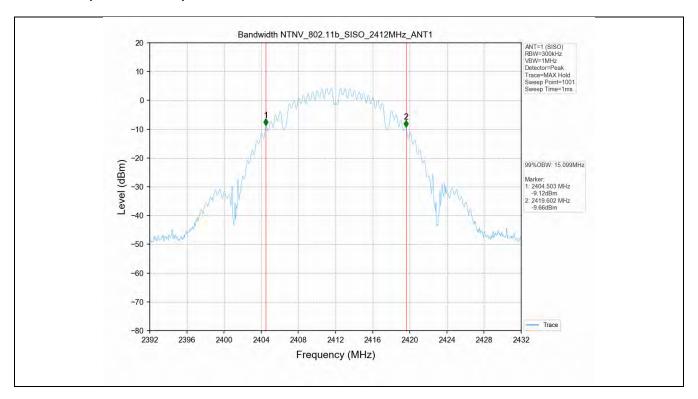


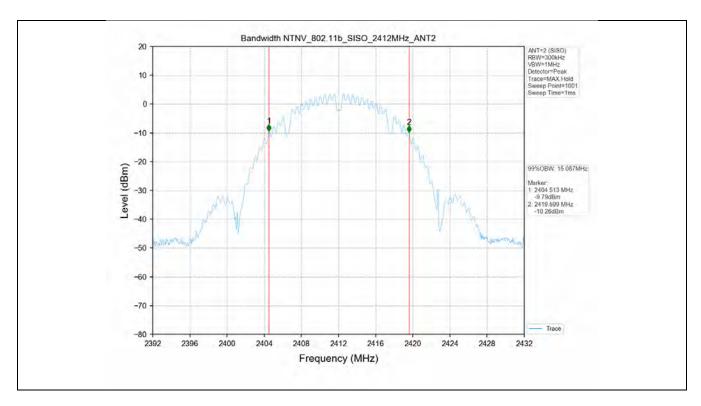




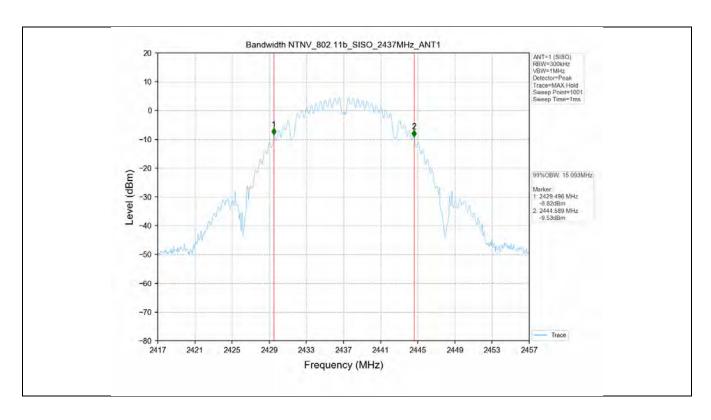


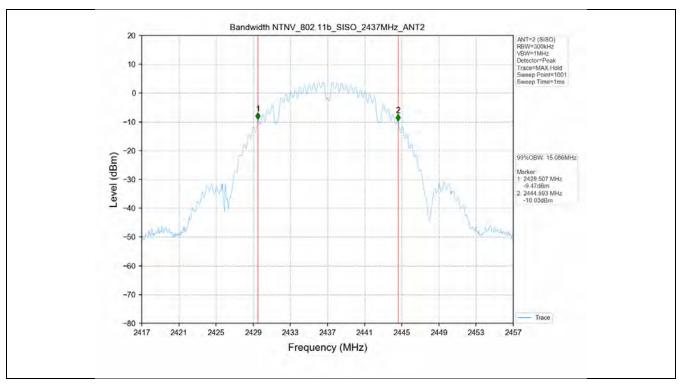
2.3 Test Graph - 99% Occupied Bandwidth



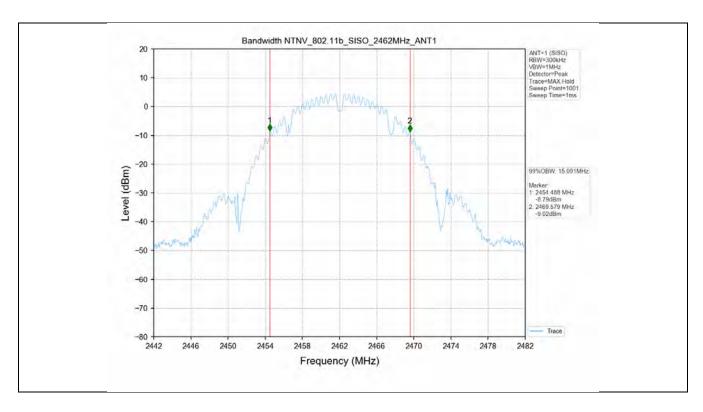


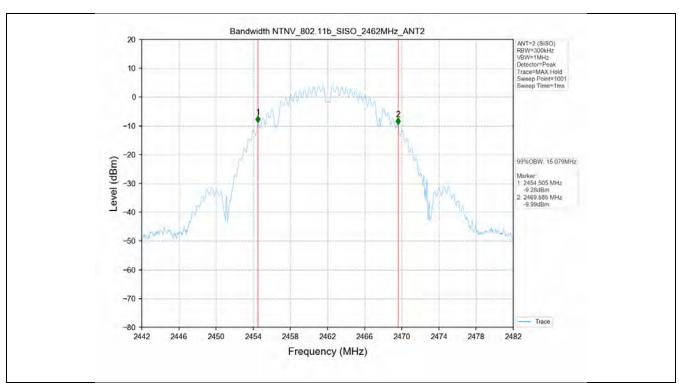




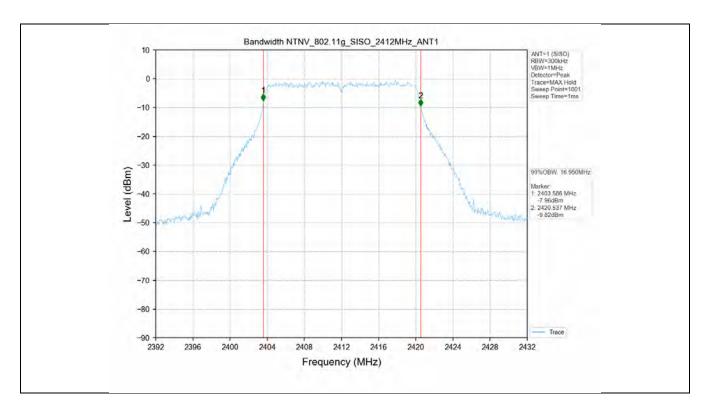


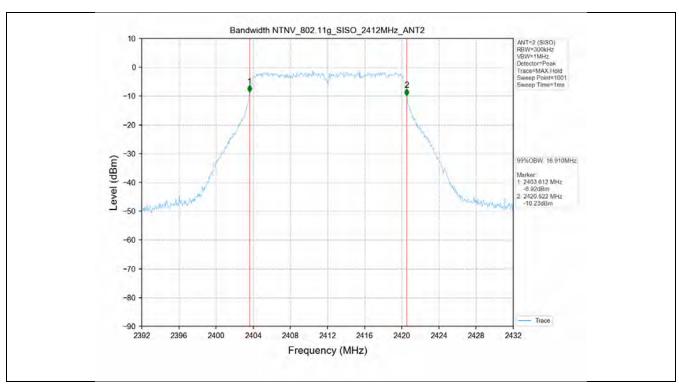




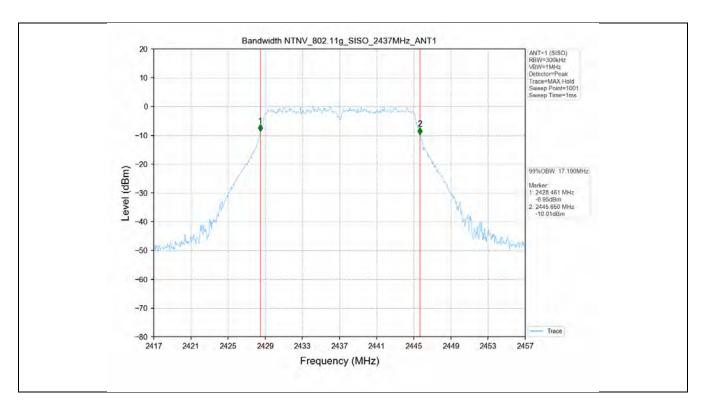


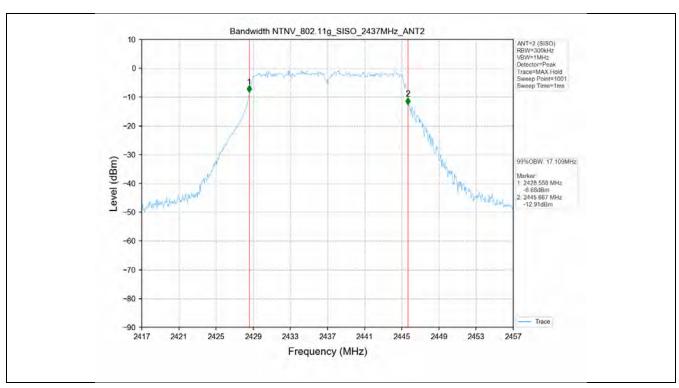




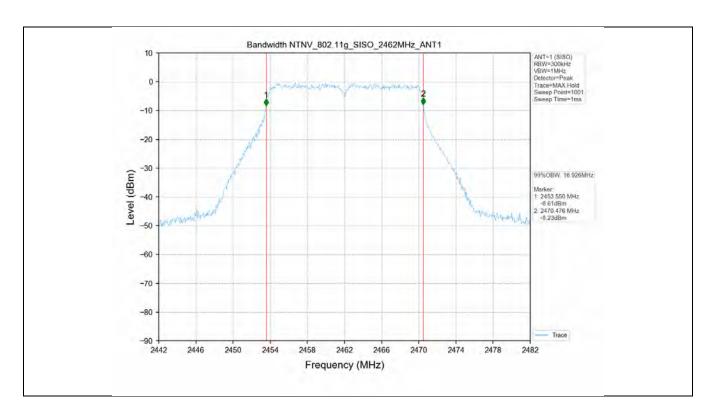


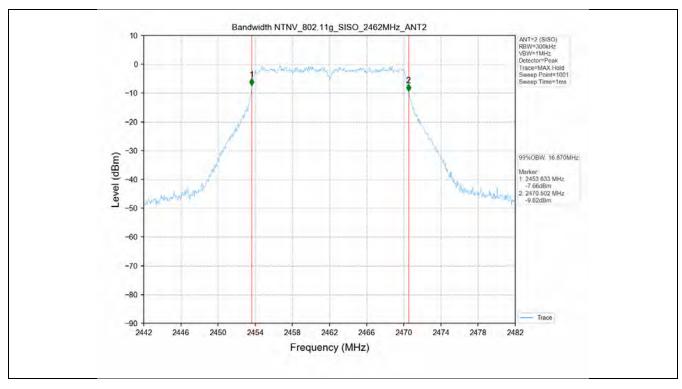




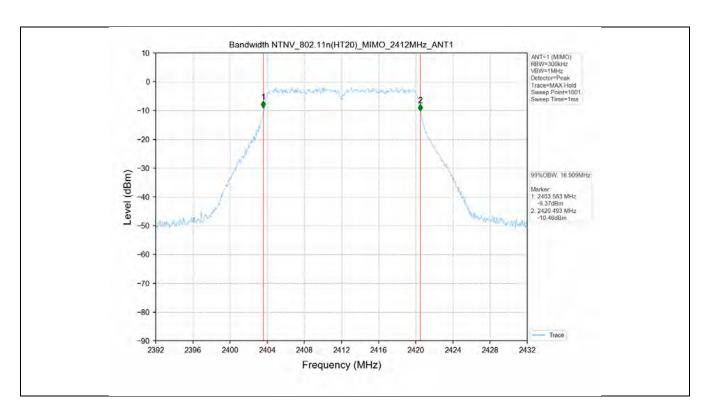


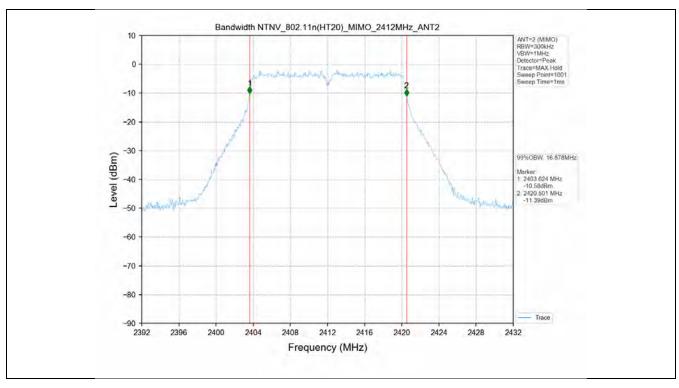




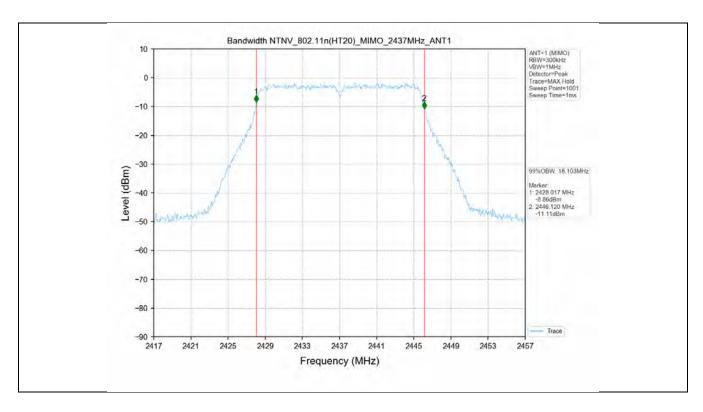


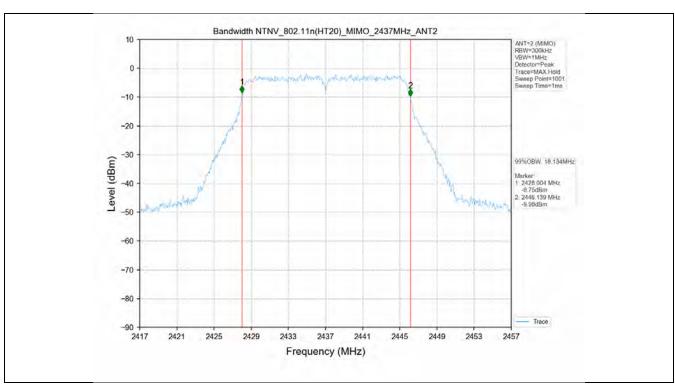




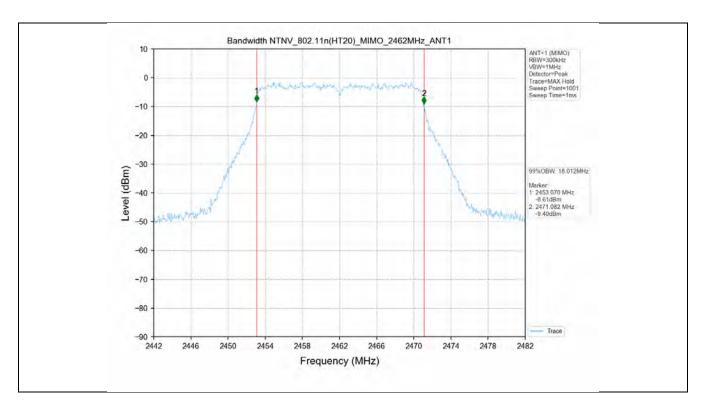


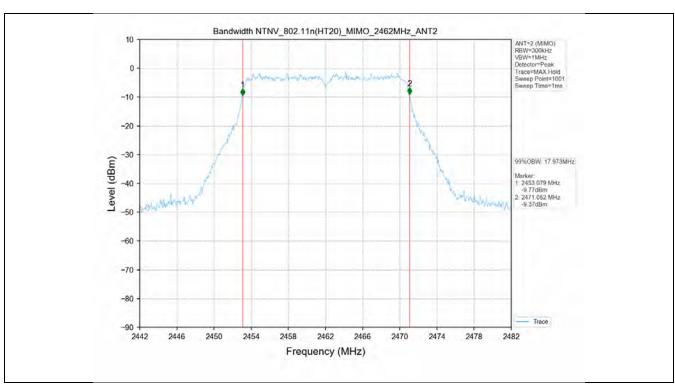




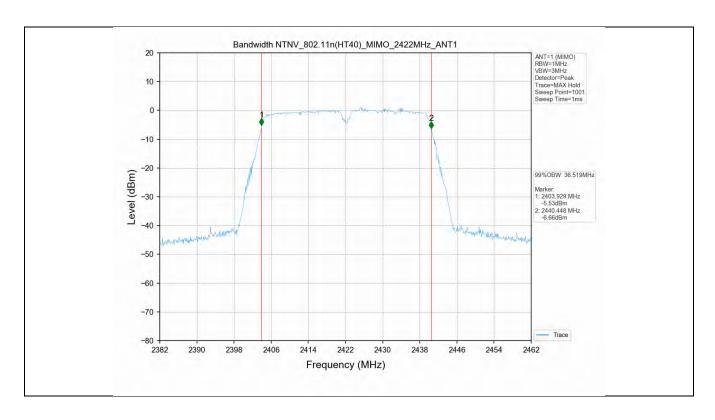


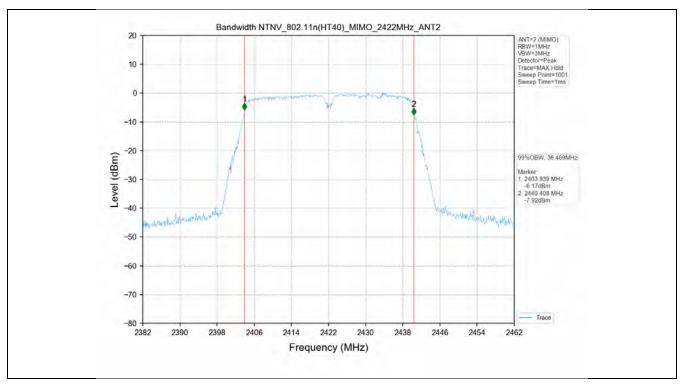




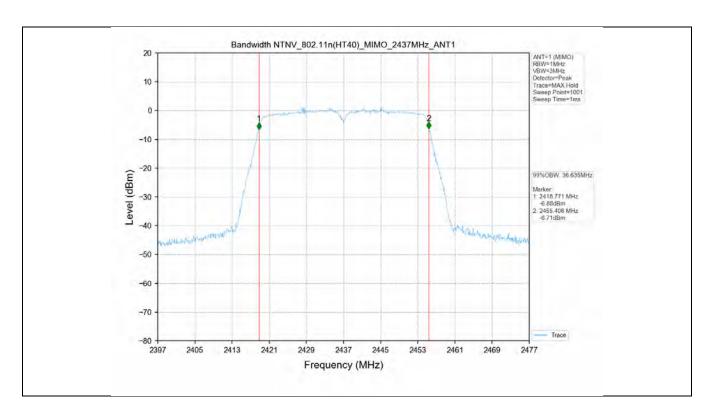


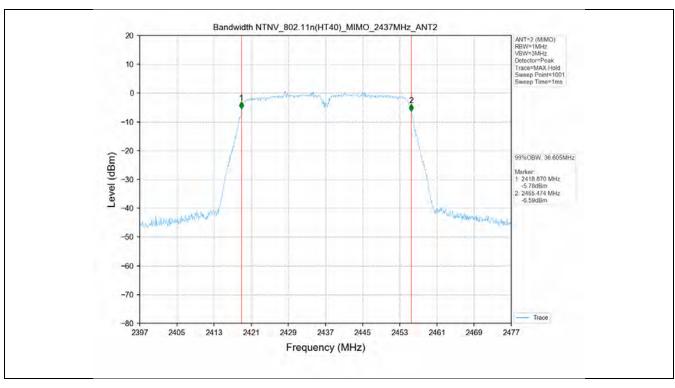




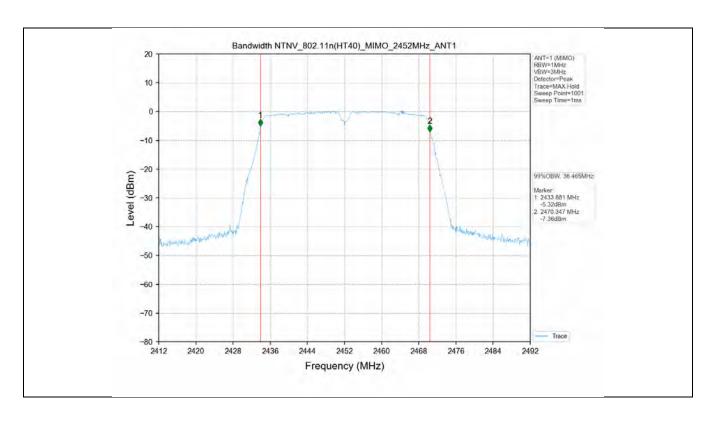


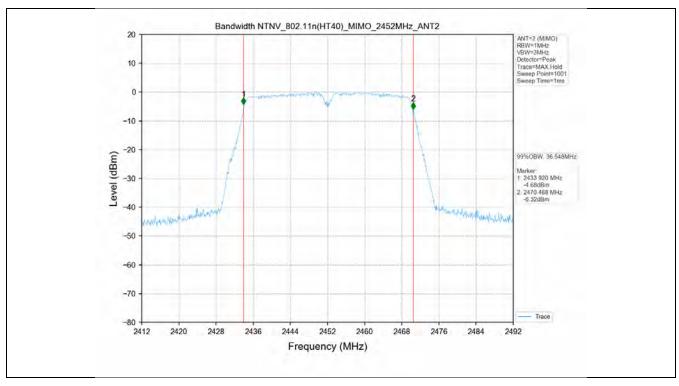












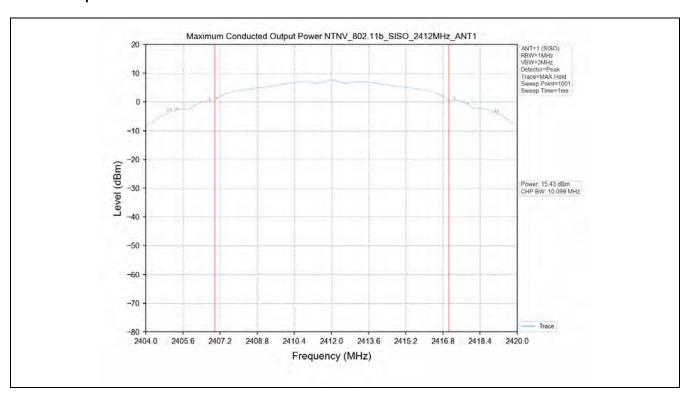


3. Maximum Conducted Output Power

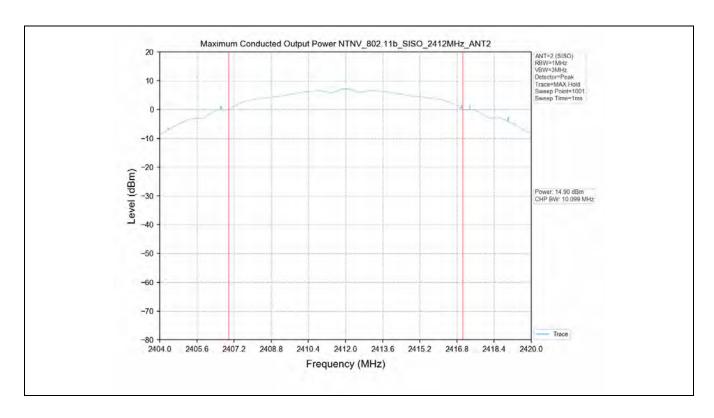
3.1 Test Result

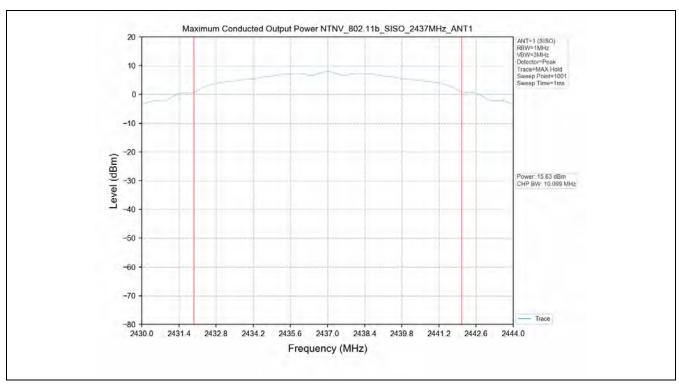
Test Mode	Frequency Tx Type		Measured Peak Output Power (dBm)			Limita (dPm)	Verdict
	(MHz)	1x Type	Ant 1	Ant 2	Total	Limits (dBm)	Verdict
	2412	SISO	15.43	14.90	1	30	PASS
802.11b	2437	SISO	15.63	14.97	1	30	PASS
	2462	SISO	15.75	15.20	1	30	PASS
	2412	SISO	15.86	15.35	1	30	PASS
802.11g	2437	SISO	16.13	15.64	1	30	PASS
	2462	SISO	16.34	15.95	1	30	PASS
802.11n(HT20)	2412	MIMO	13.84	13.52	16.69	30	PASS
	2437	MIMO	14.19	13.83	17.02	30	PASS
	2462	MIMO	14.29	14.05	17.18	30	PASS
802.11n(HT40)	2422	MIMO	14.36	13.81	17.10	30	PASS
	2437	MIMO	14.43	13.97	17.22	30	PASS
	2452	MIMO	14.37	13.95	17.18	30	PASS

3.2 Test Graph

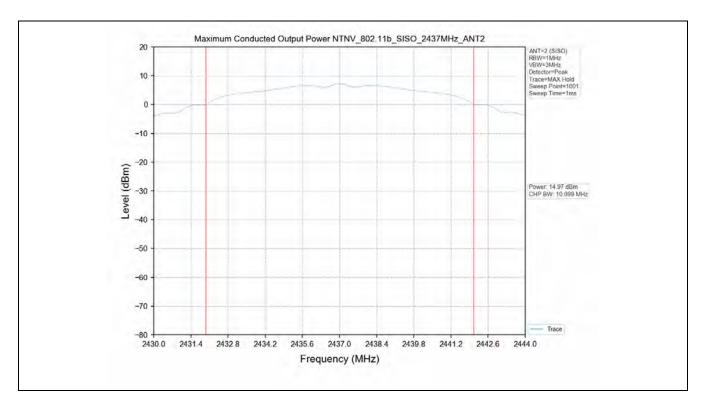


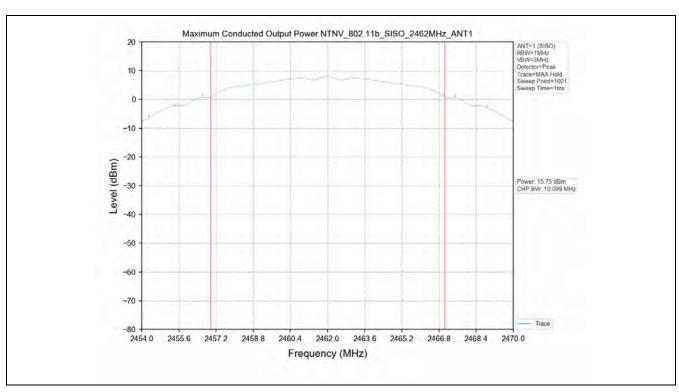




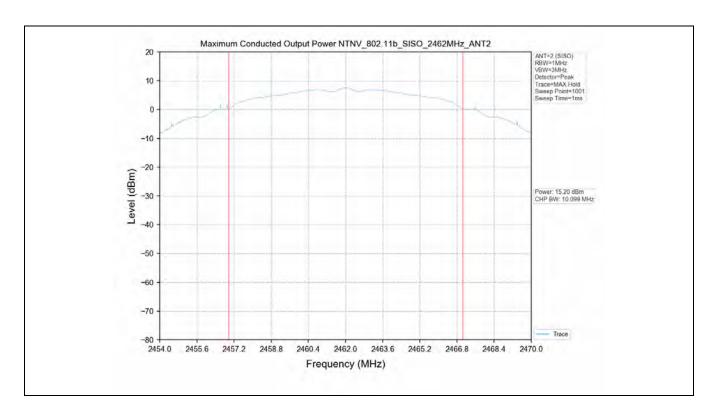


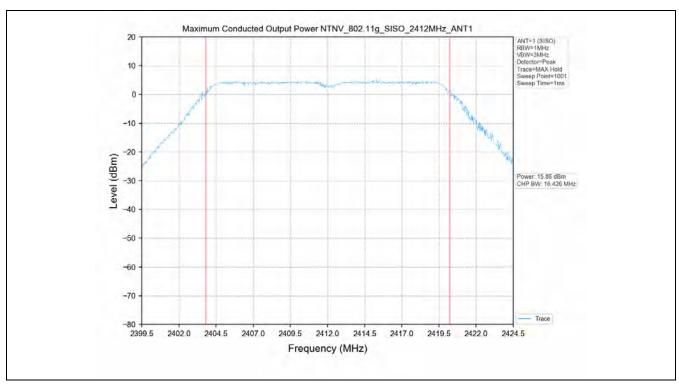




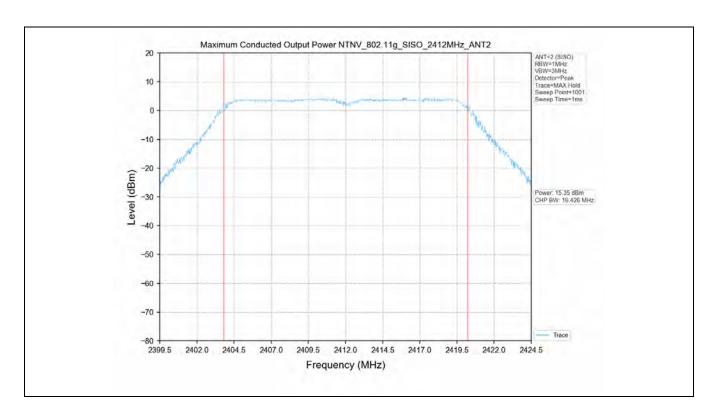


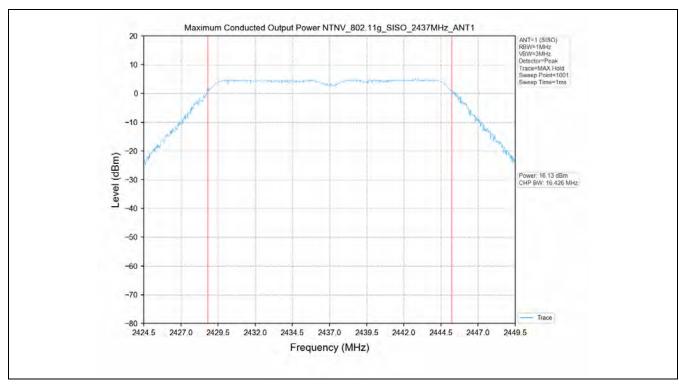




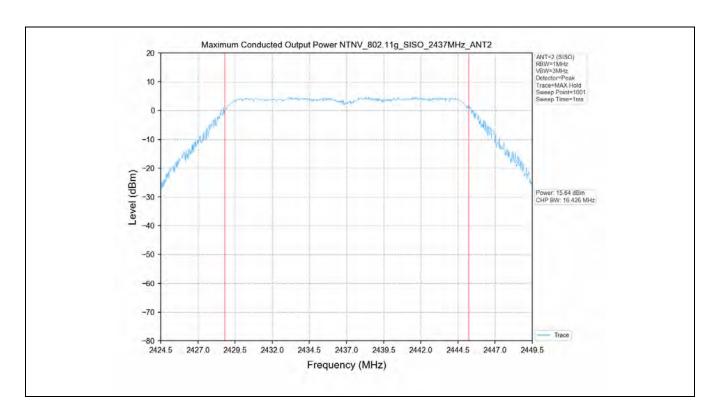


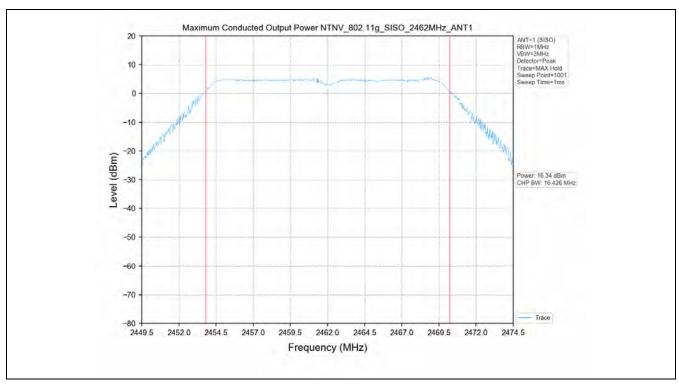




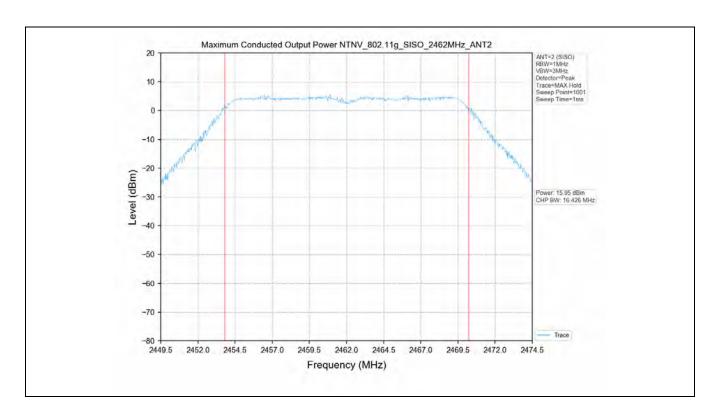


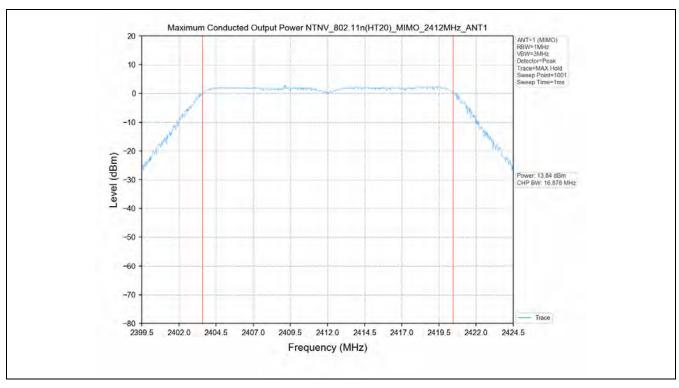




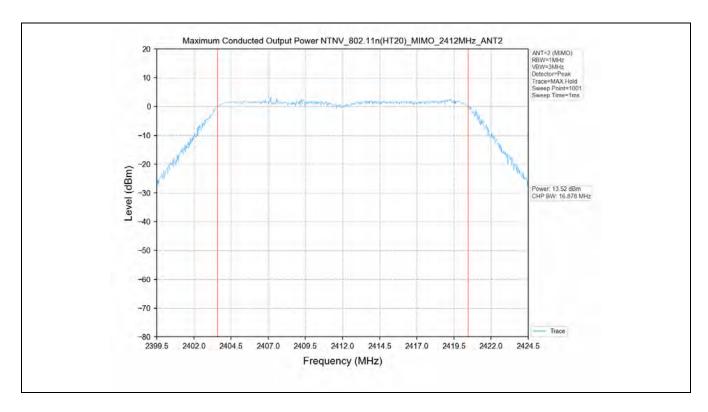


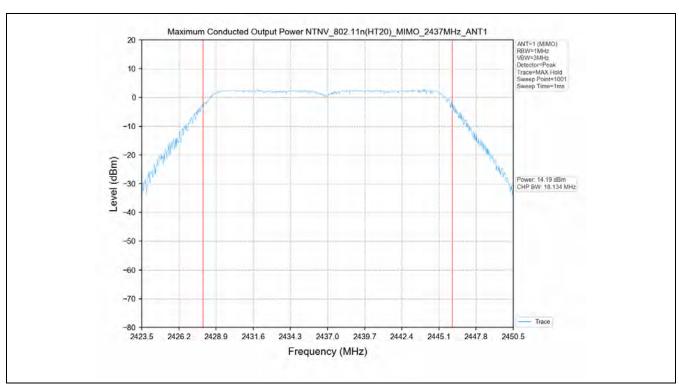




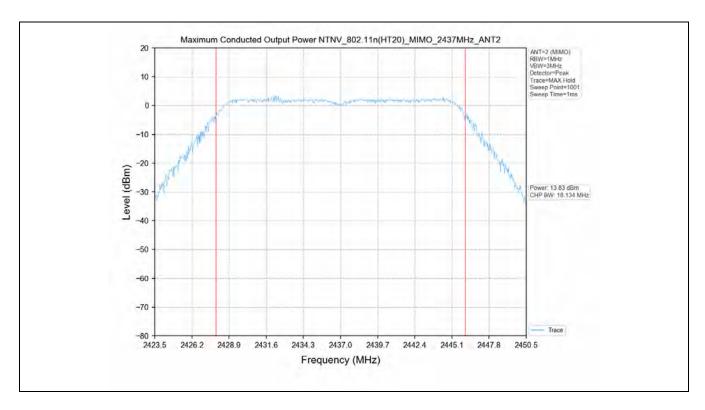


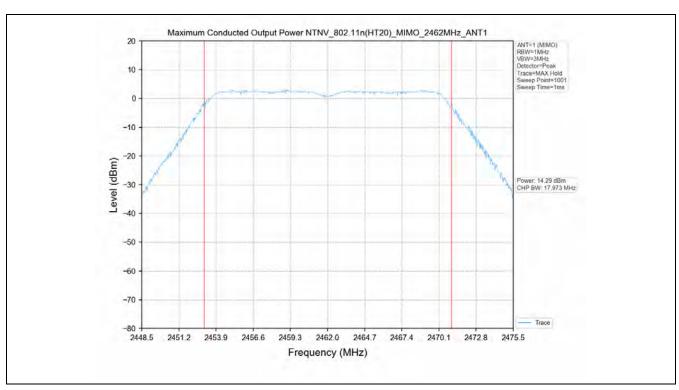




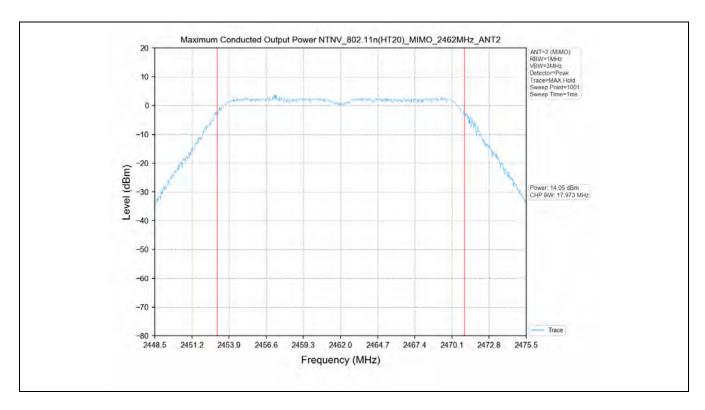


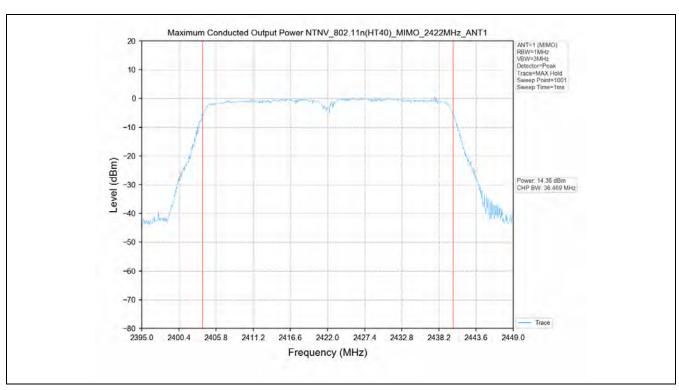




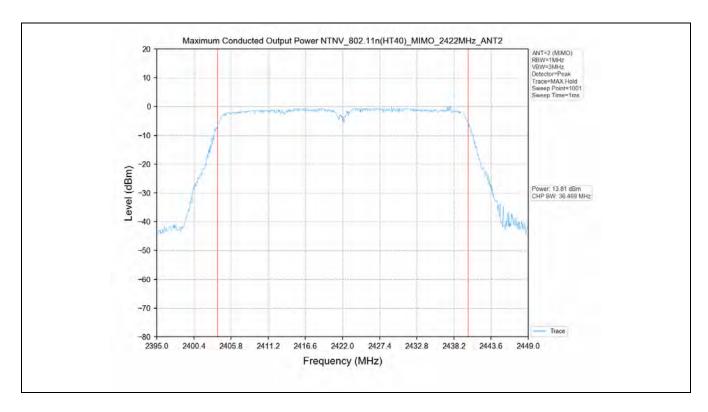


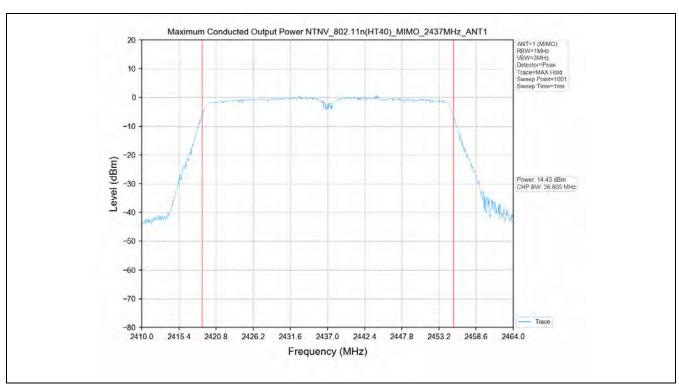




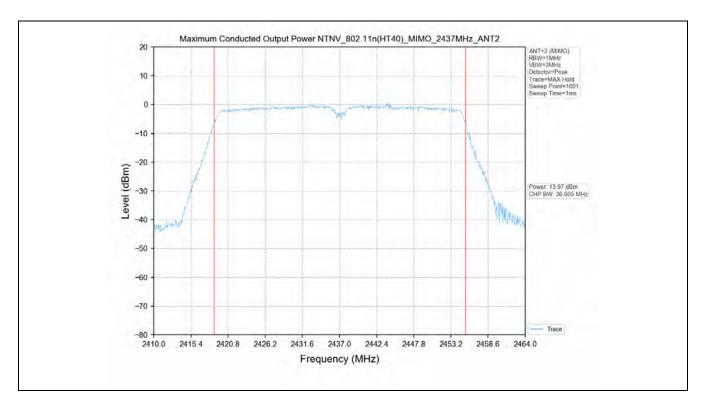


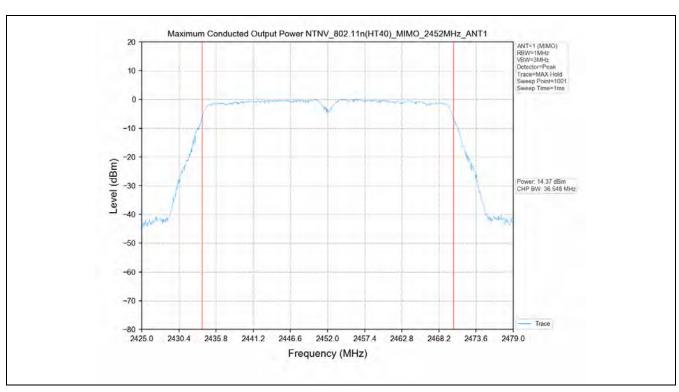




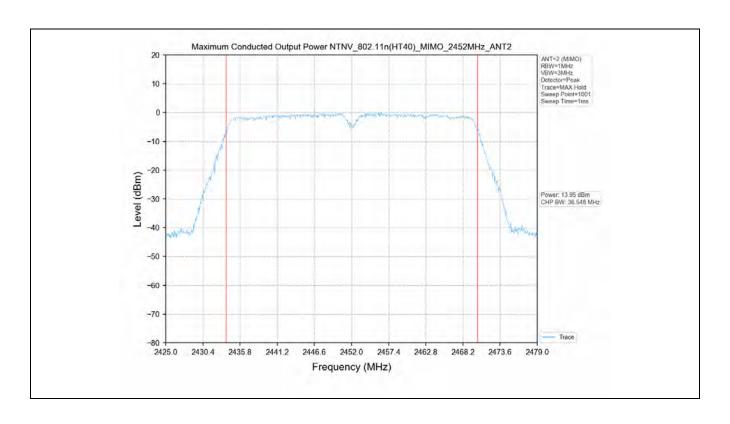












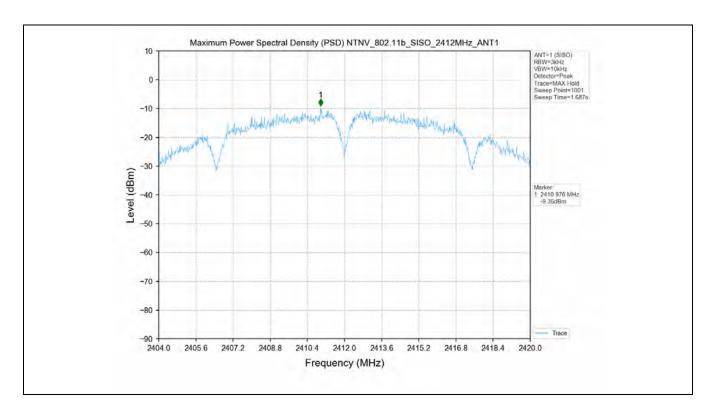
4. Maximum Power Spectral Density (PSD)

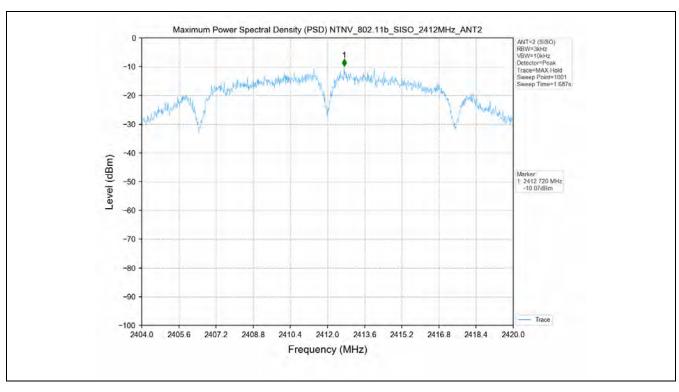
4.1 Test Result

Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)			Limits	Verdict
			Ant 1	Ant 2	Total	(dBm/3kHz)	
802.11b	2412	SISO	-9.35	-10.07	1	≤8	PASS
	2437	SISO	-9.26	-11.38	1	≤8	PASS
	2462	SISO	-9.75	-10.68	1	≤8	PASS
802.11g	2412	SISO	-15.95	-16.85	1	≤8	PASS
	2437	SISO	-16.31	-17.09	1	≤8	PASS
	2462	SISO	-16.89	-17.47	1	≤8	PASS
802.11n(HT20)	2412	MIMO	-18.56	-19.22	-15.87	≤8	PASS
	2437	MIMO	-18.69	-19.66	-17.16	≤8	PASS
	2462	MIMO	-17.81	-17.51	-14.65	≤8	PASS
802.11n(HT40)	2422	MIMO	-22.29	-23.12	-19.86	≤8	PASS
	2437	MIMO	-21.39	-22.09	-18.88	≤8	PASS
	2452	MIMO	-21.58	-22.45	-18.98	≤8	PASS

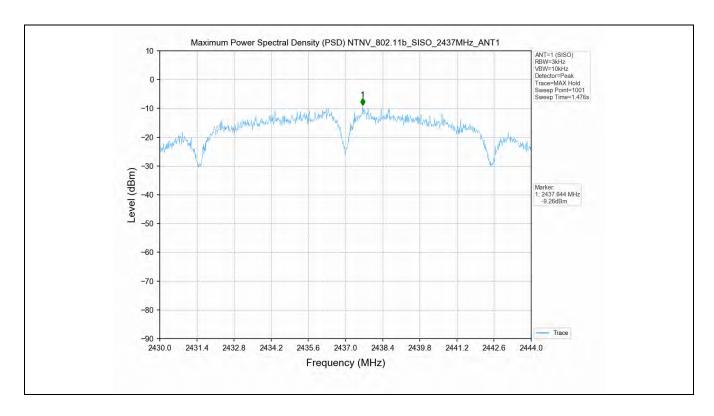
4.2 Test Graph

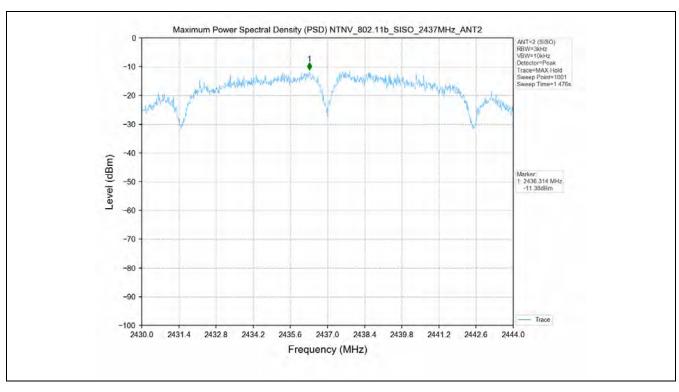




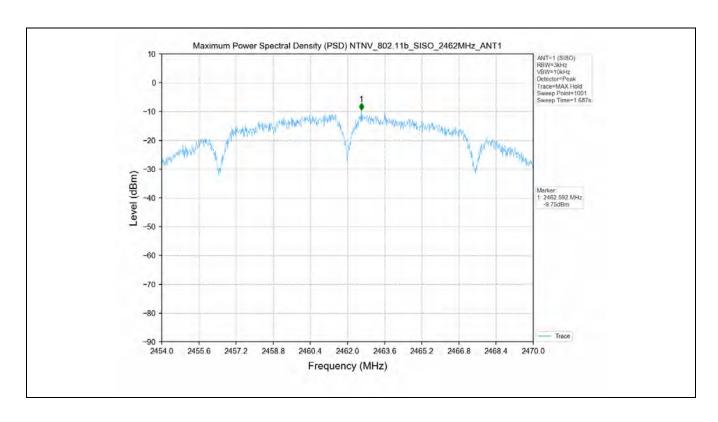


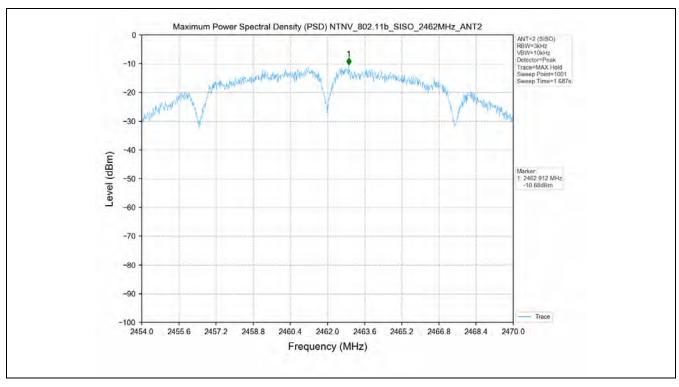




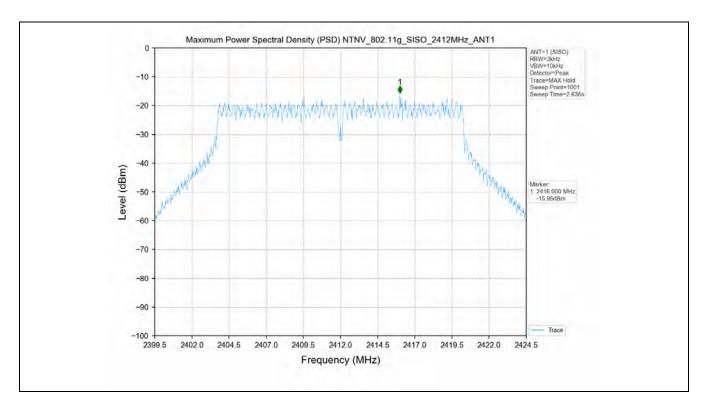


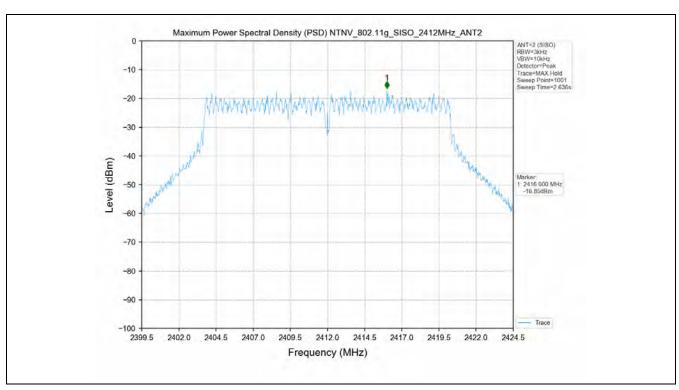




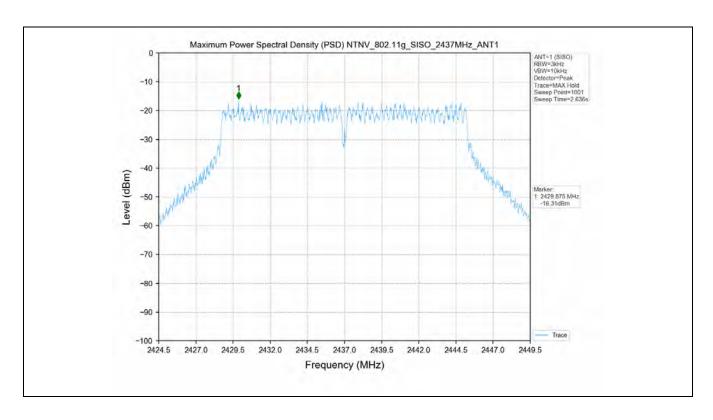


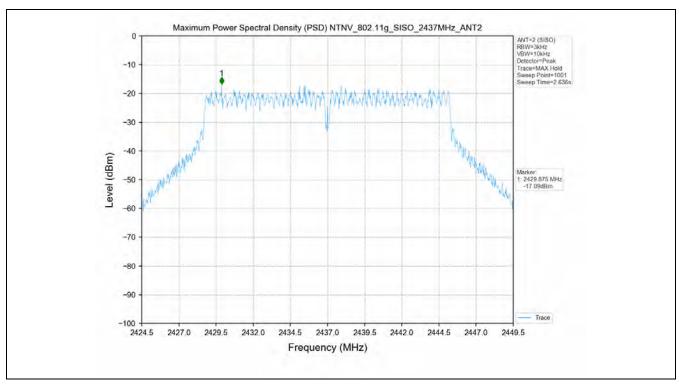




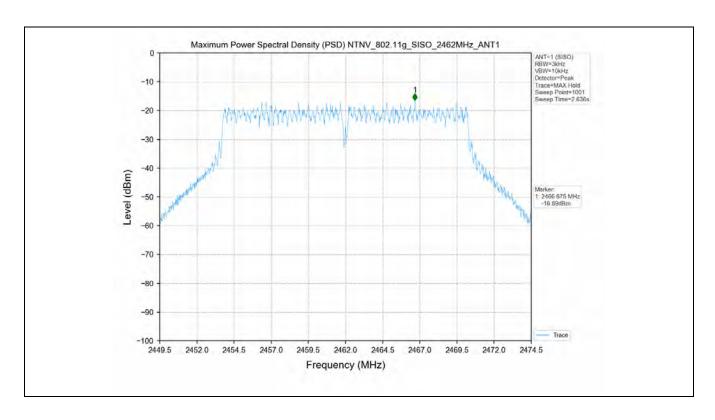


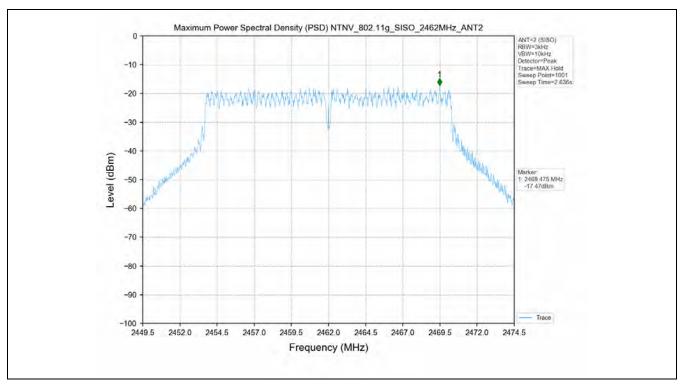




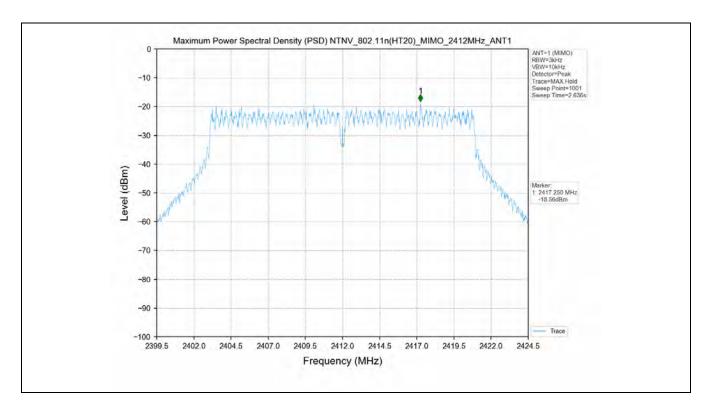


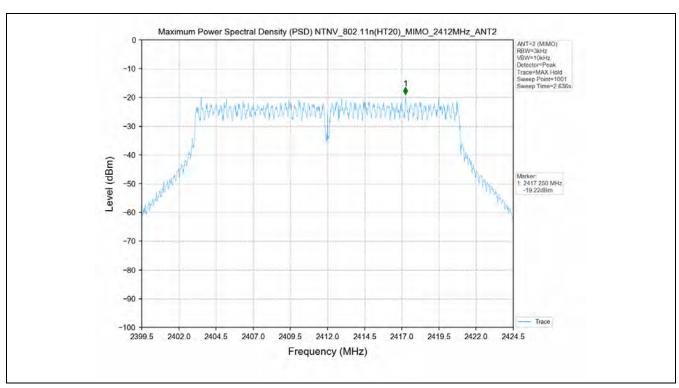




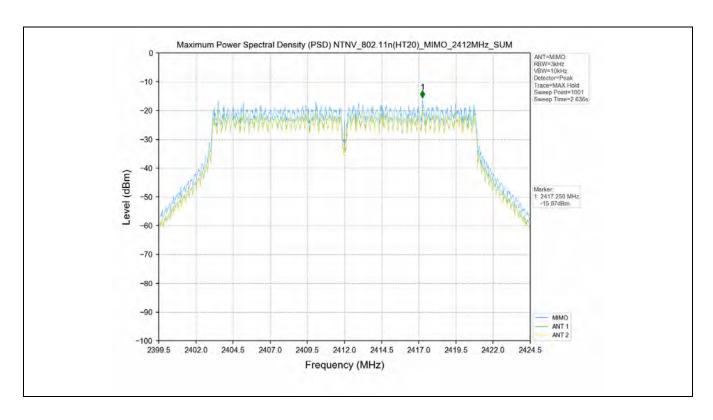


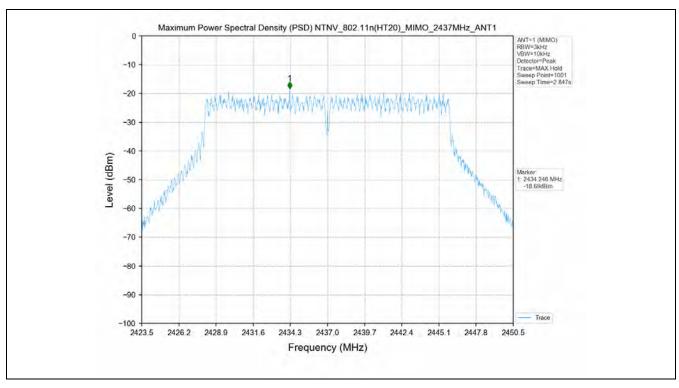




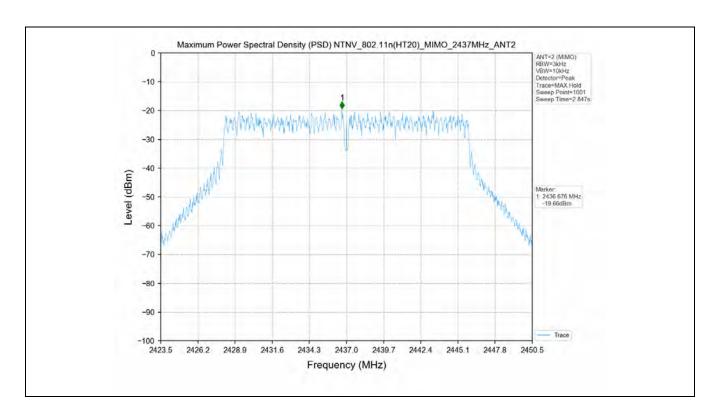


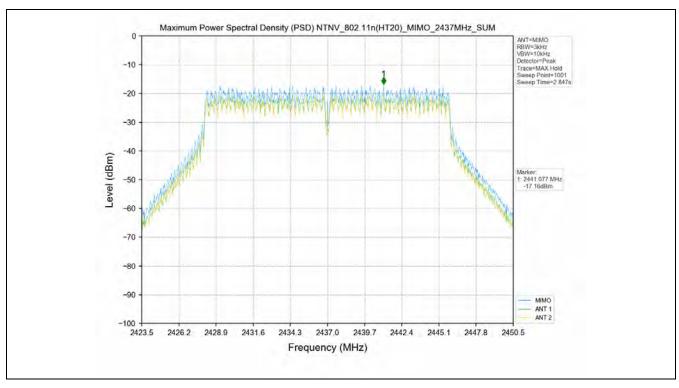




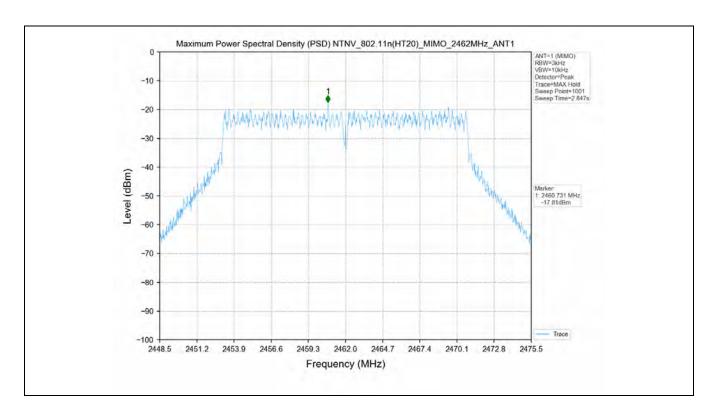


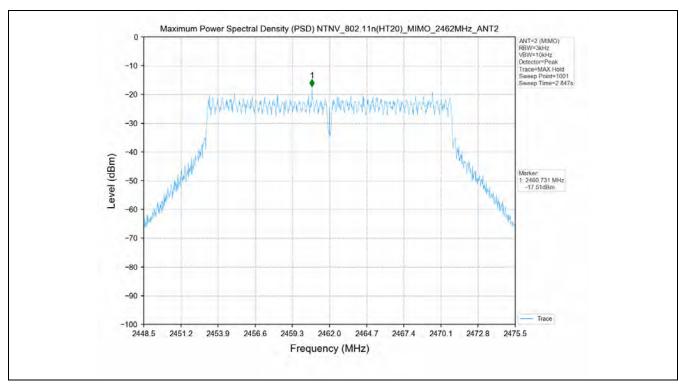




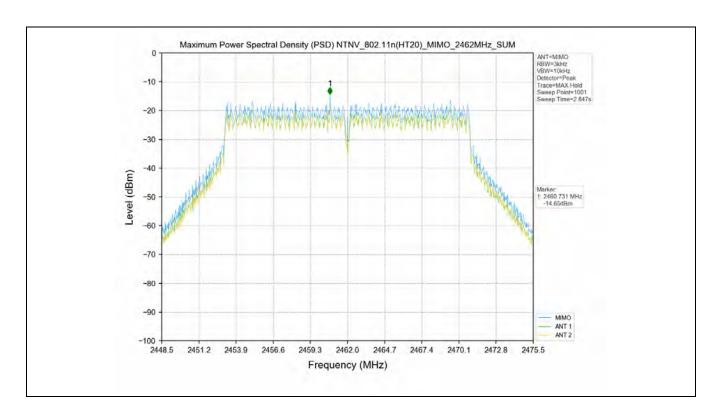


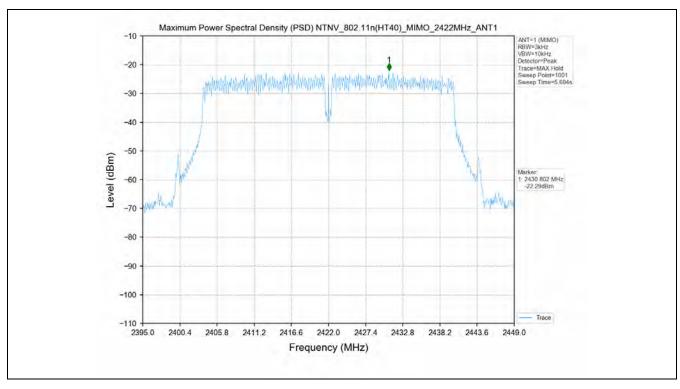




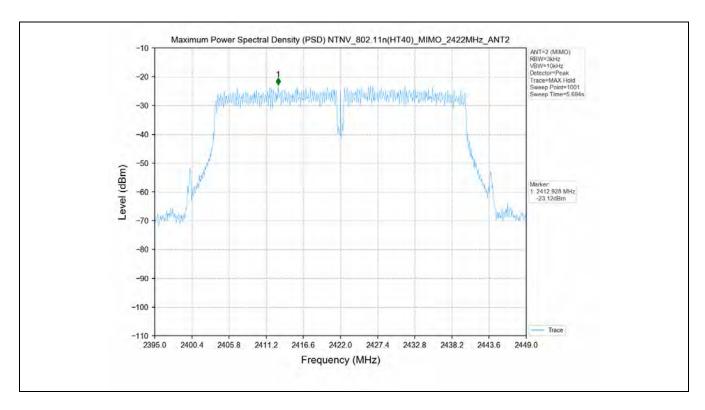


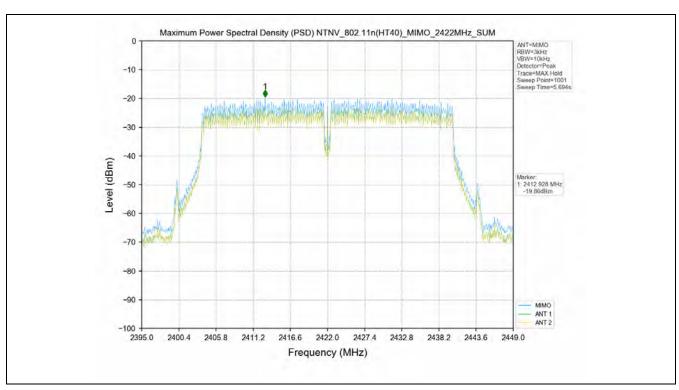




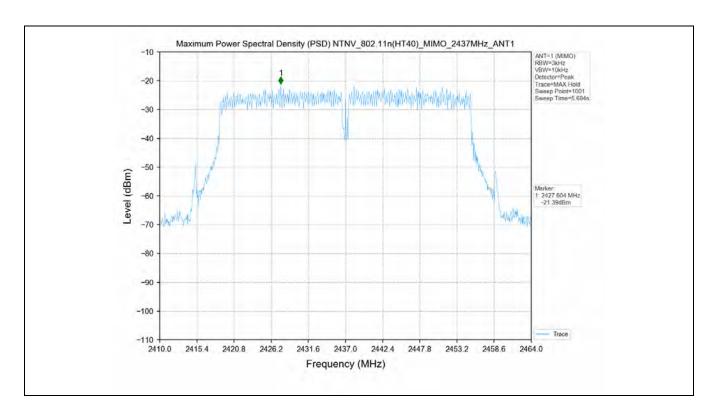


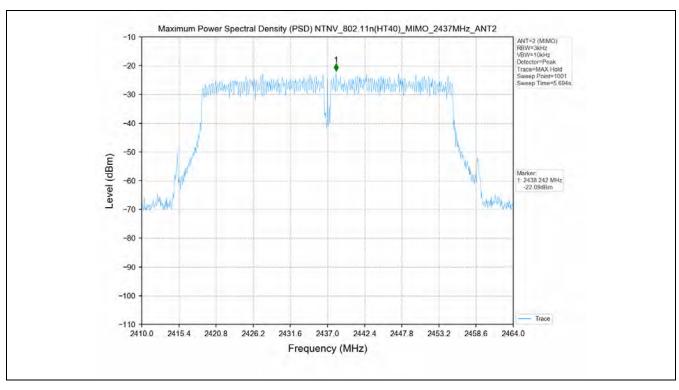




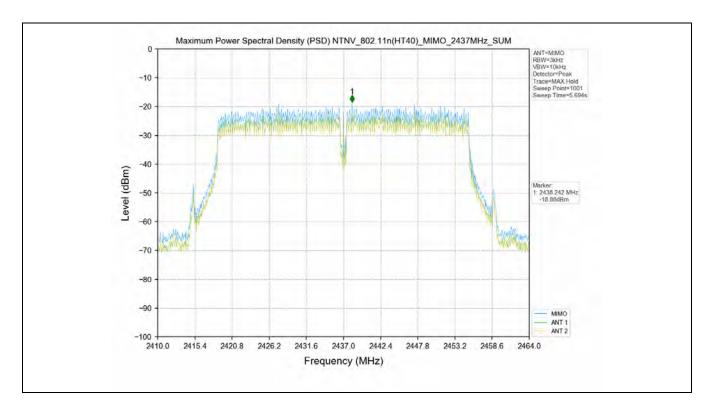


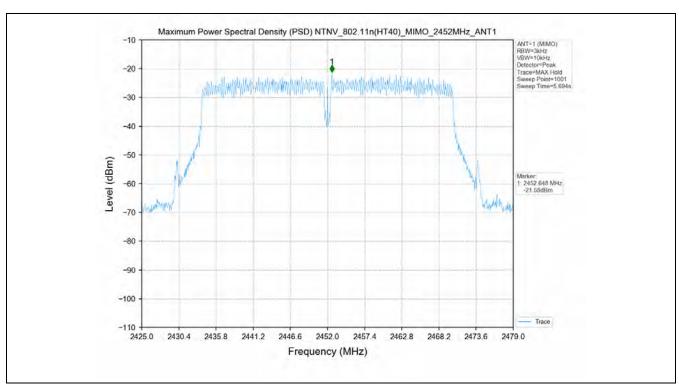




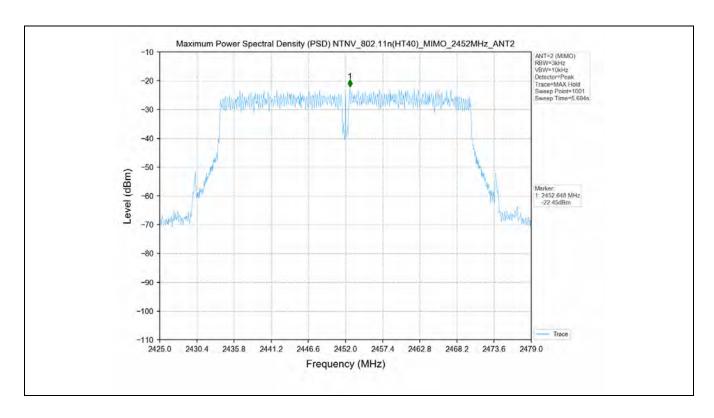


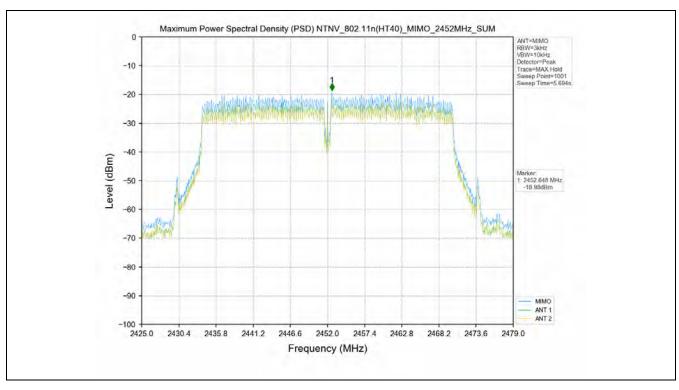














5. Unwanted Emissions in Non-restricted Frequency Bands

5.1 Test Result

Test Mode	Frequency (MHz)	ТХ Туре	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBc)	Verdict
802.11b	2412	SISO	1	Refer to test graph	-20	PASS
			2	Refer to test graph	-20	PASS
	2437	SISO	1	Refer to test graph	-20	PASS
			2	Refer to test graph	-20	PASS
	2462	SISO	1	Refer to test graph	-20	PASS
			2	Refer to test graph	-20	PASS
802.11g	2412	SISO	1	Refer to test graph	-20	PASS
			2	Refer to test graph	-20	PASS
	2437	SISO	1	Refer to test graph	-20	PASS
			2	Refer to test graph	-20	PASS
	2462	SISO	1	Refer to test graph	-20	PASS
			2	Refer to test graph	-20	PASS
802.11n(HT20)	2412	MIMO	1	Refer to test graph	-20	PASS
			2	Refer to test graph	-20	PASS
	2437	MIMO	1	Refer to test graph	-20	PASS
			2	Refer to test graph	-20	PASS
	2462	MIMO	1	Refer to test graph	-20	PASS
			2	Refer to test graph	-20	PASS
802.11n(HT40)	2422	MIMO	1	Refer to test graph	-20	PASS
			2	Refer to test graph	-20	PASS
	2437	MIMO	1	Refer to test graph	-20	PASS
			2	Refer to test graph	-20	PASS
	2452	MIMO	1	Refer to test graph	-20	PASS
			2	Refer to test graph	-20	PASS

5.2 Test Graph



