



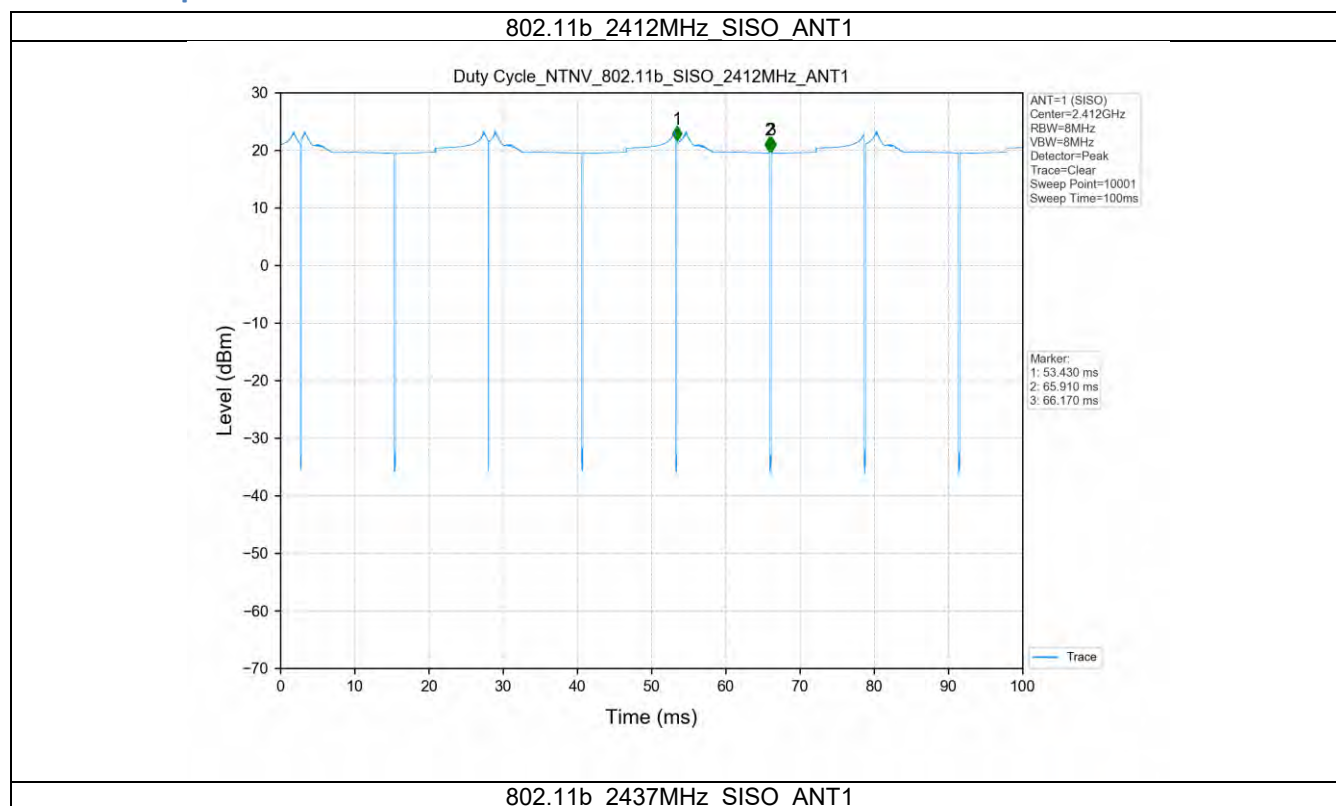
Appendix A for SHEM1911011858201

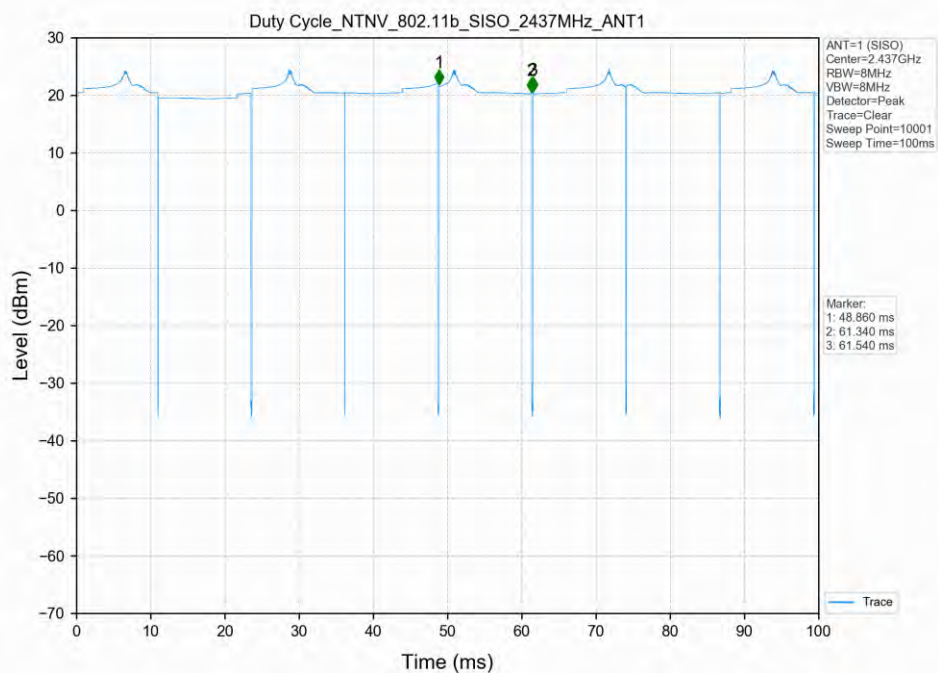
1. Duty Cycle

1.1 Test Result

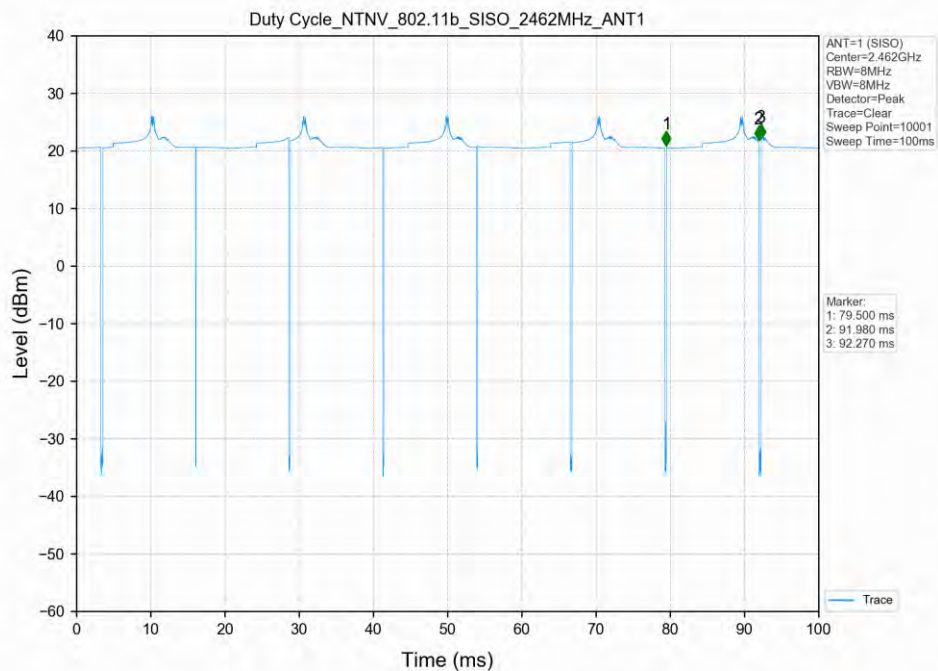
Test Mode	Channel Frequency(MHz)	TX Type	ANT No.	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
802.11b	2412	SISO	1	12.480	12.740	97.96	0.09
	2437	SISO	1	12.480	12.680	98.42	0.07
	2462	SISO	1	12.480	12.770	97.73	0.10
802.11g	2412	SISO	1	2.043	2.192	93.20	0.31
	2437	SISO	1	2.072	2.215	93.54	0.29
	2462	SISO	1	2.072	2.206	93.93	0.27
802.11n(HT20)	2412	SISO	1	1.932	2.102	91.91	0.37
	2437	SISO	1	1.902	2.060	92.33	0.35
	2462	SISO	1	1.900	2.068	91.88	0.37
802.11n(HT40)	2422	SISO	1	0.921	1.076	85.59	0.68
	2437	SISO	1	0.920	1.084	84.87	0.71
	2452	SISO	1	0.921	1.076	85.59	0.68

1.2 Test Graph

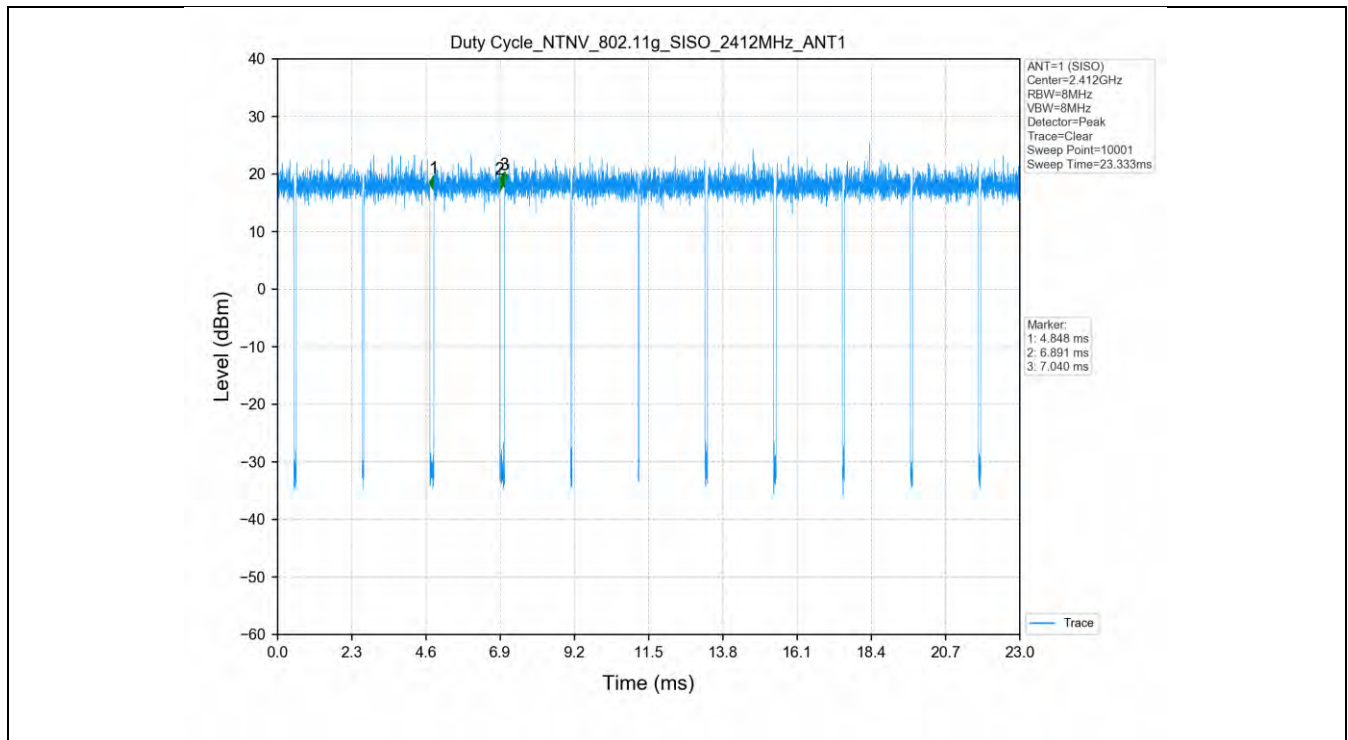




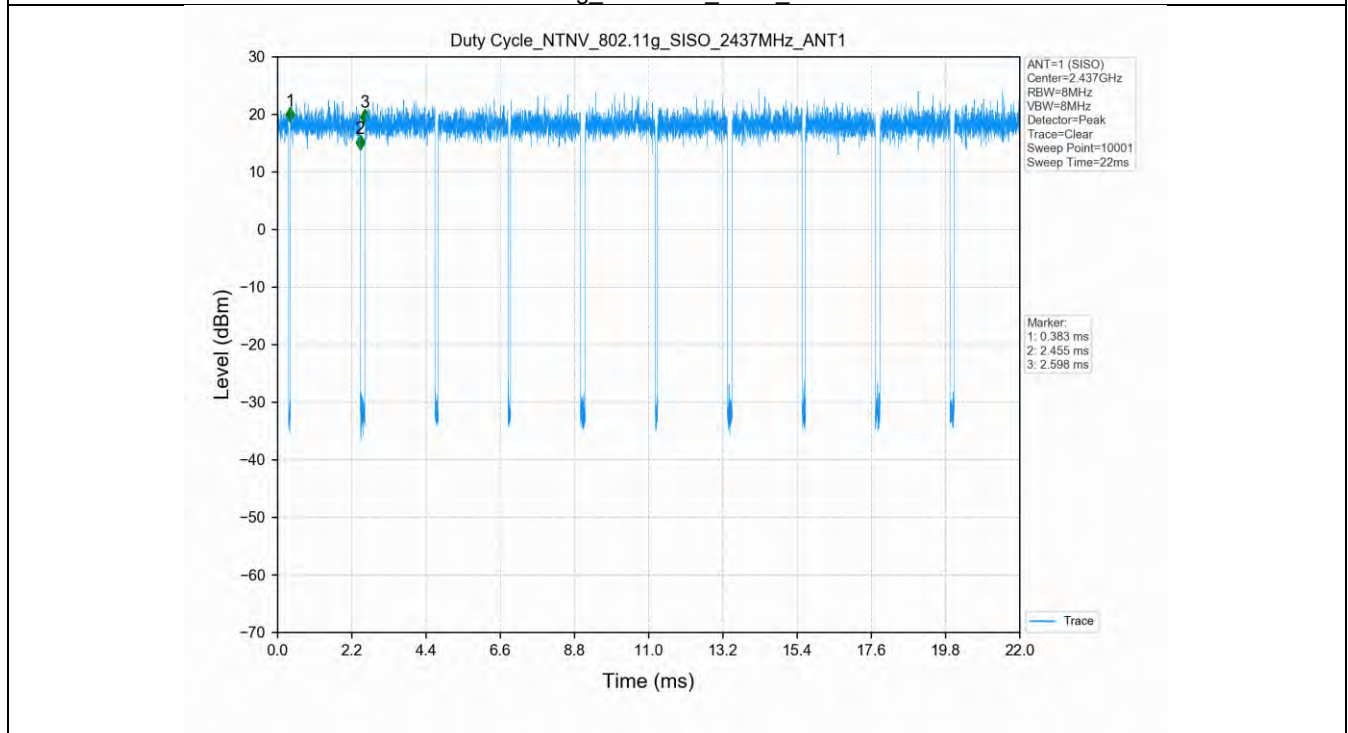
802.11b_2462MHz_SISO_ANT1



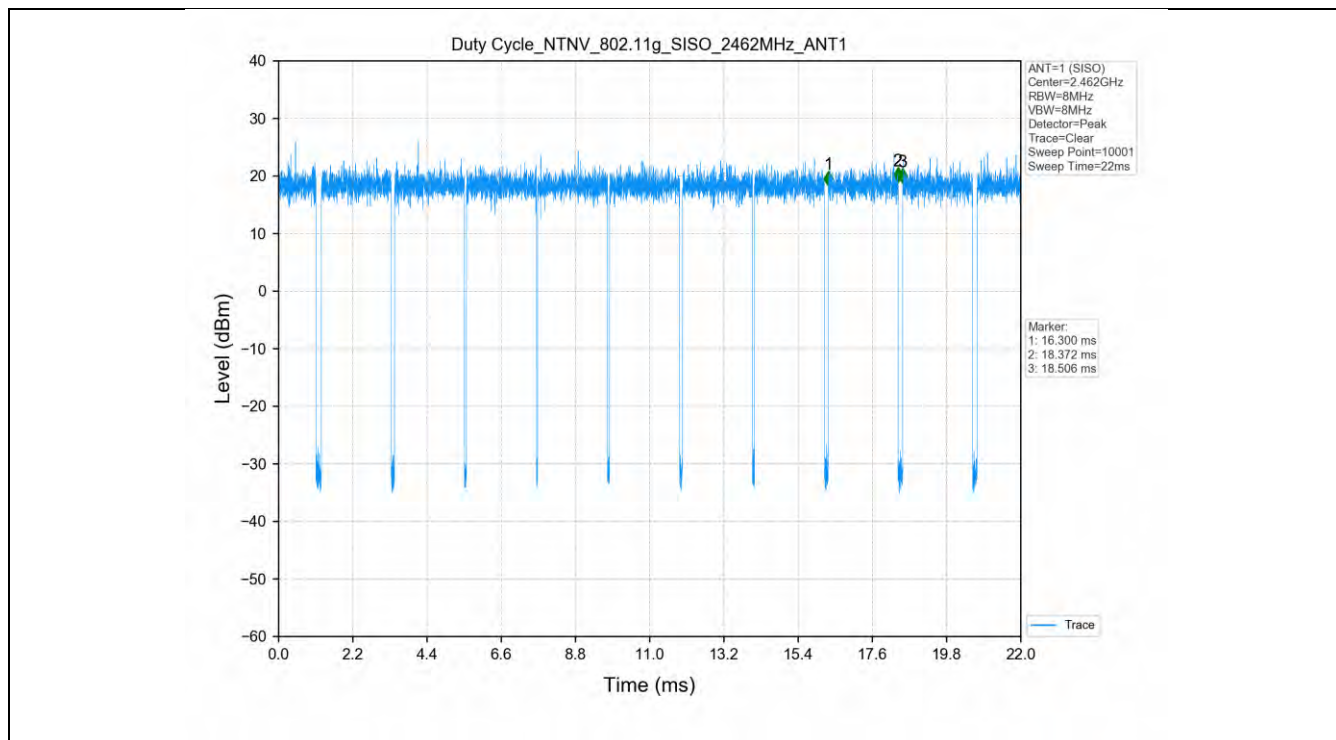
802.11g_2412MHz_SISO_ANT1



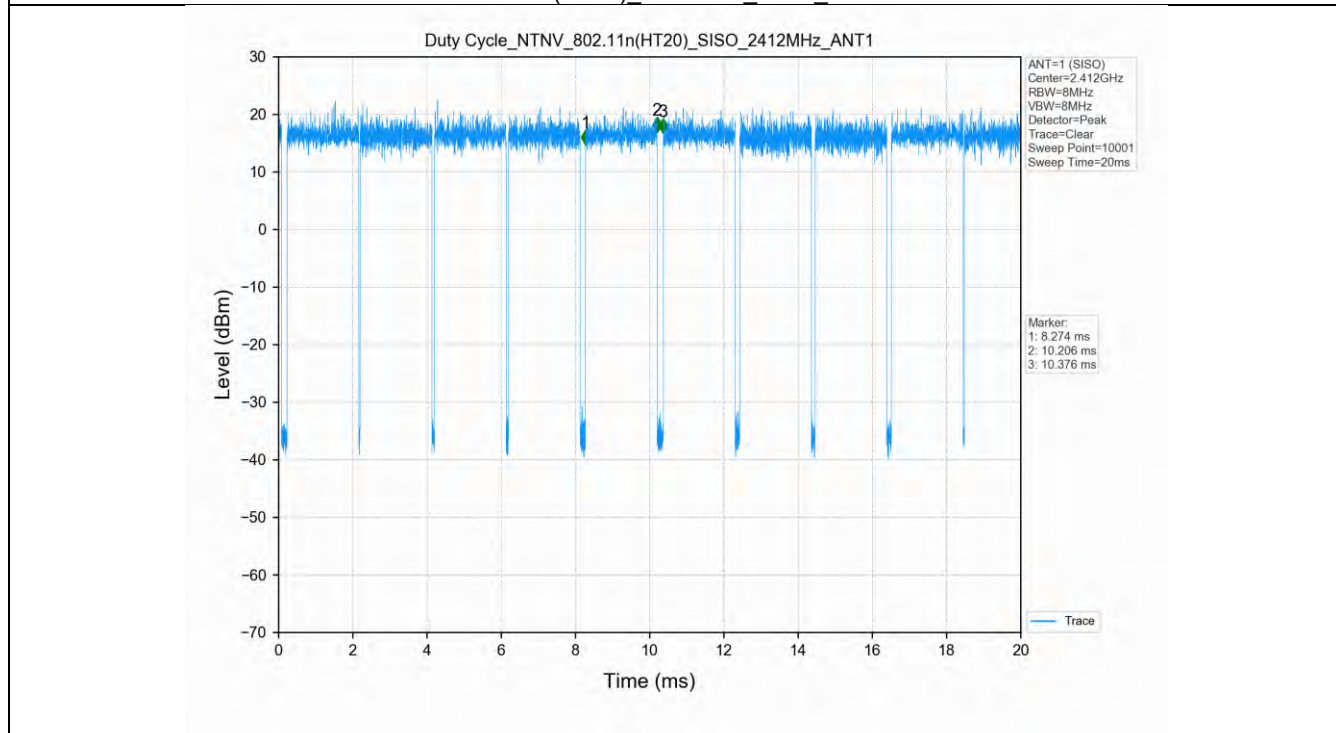
802.11g_2437MHz_SISO_ANT1



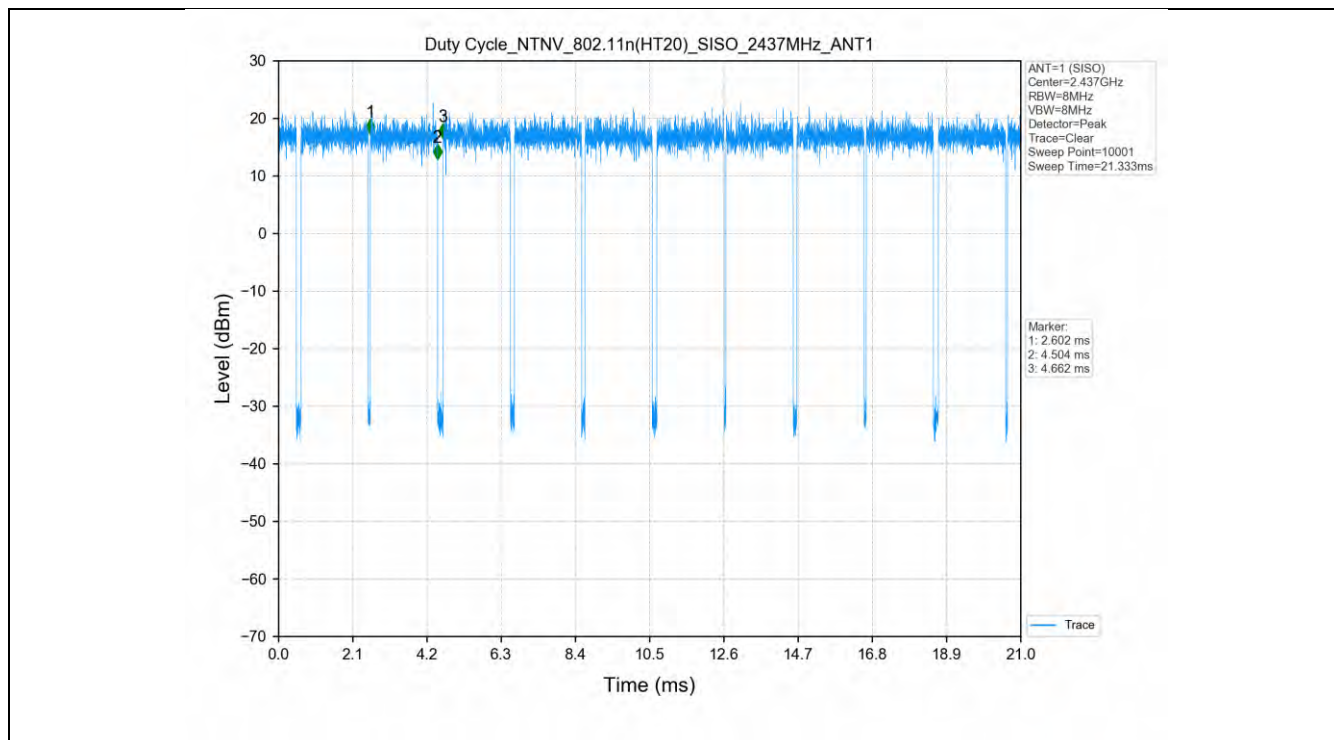
802.11g_2462MHz_SISO_ANT1



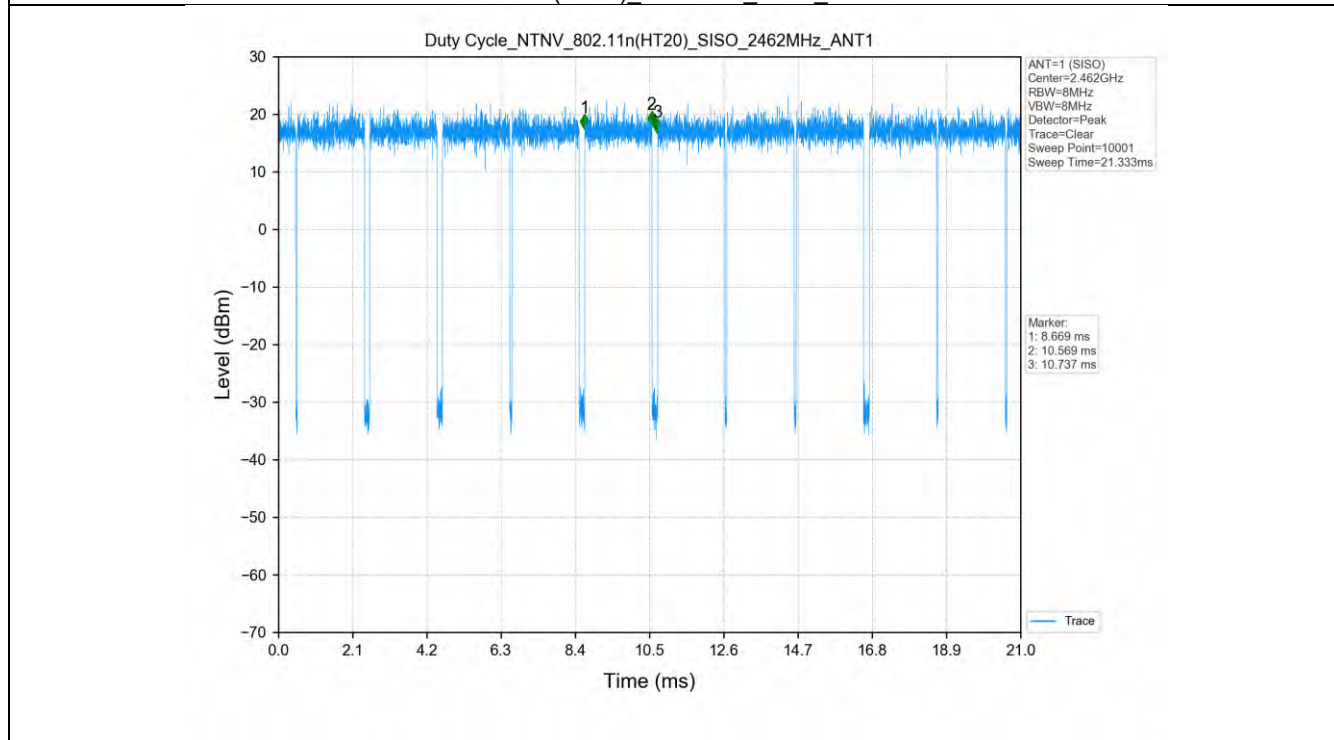
802.11n(HT20)_2412MHz_SISO_ANT1



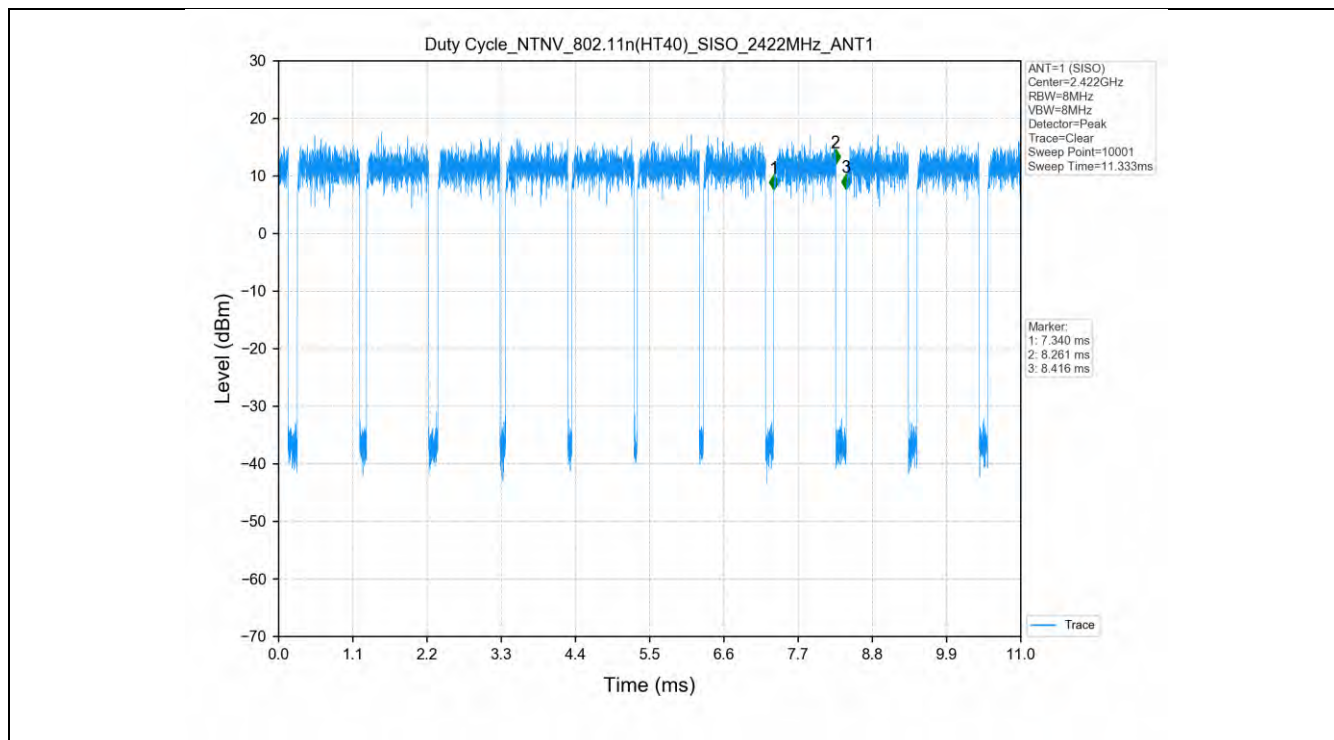
802.11n(HT20)_2437MHz_SISO_ANT1



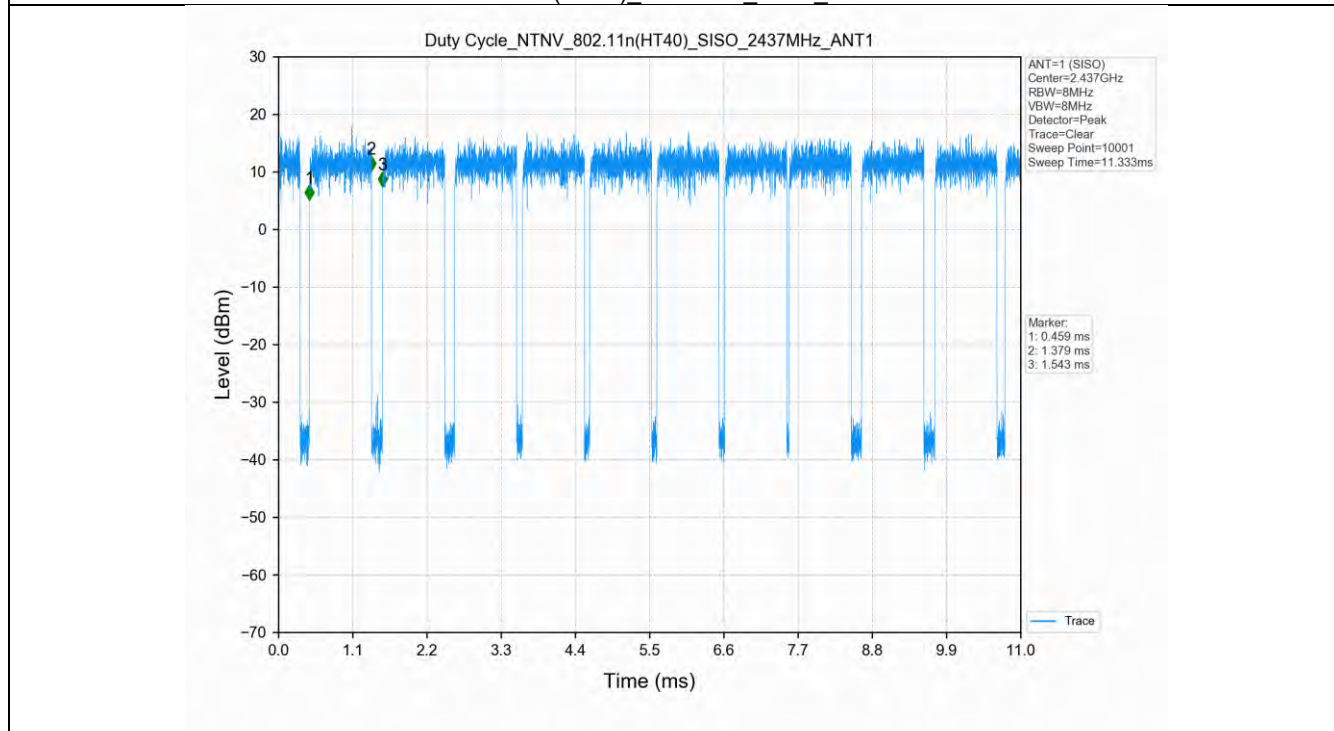
802.11n(HT20)_2462MHz_SISO_ANT1



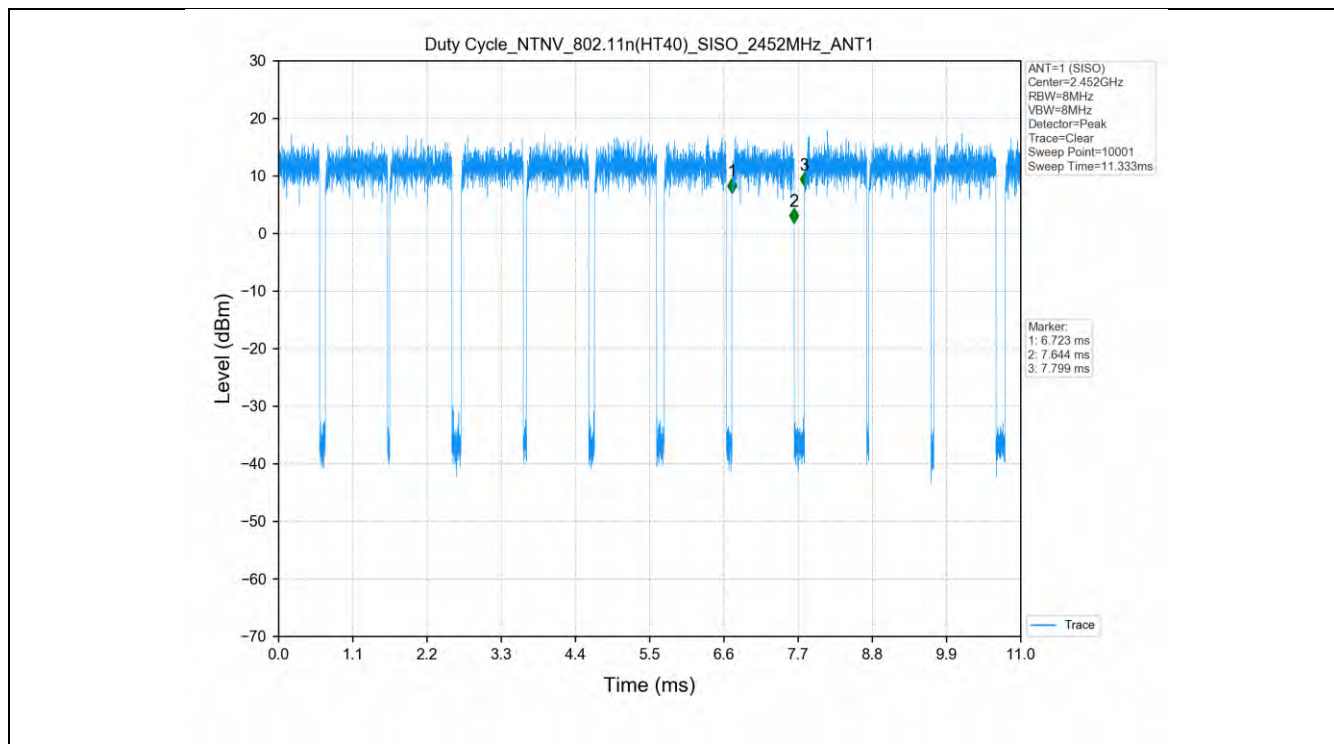
802.11n(HT40)_2422MHz_SISO_ANT1



802.11n(HT40)_2437MHz_SISO_ANT1



802.11n(HT40)_2452MHz_SISO_ANT1



2. Bandwidth

2.1 Test Result

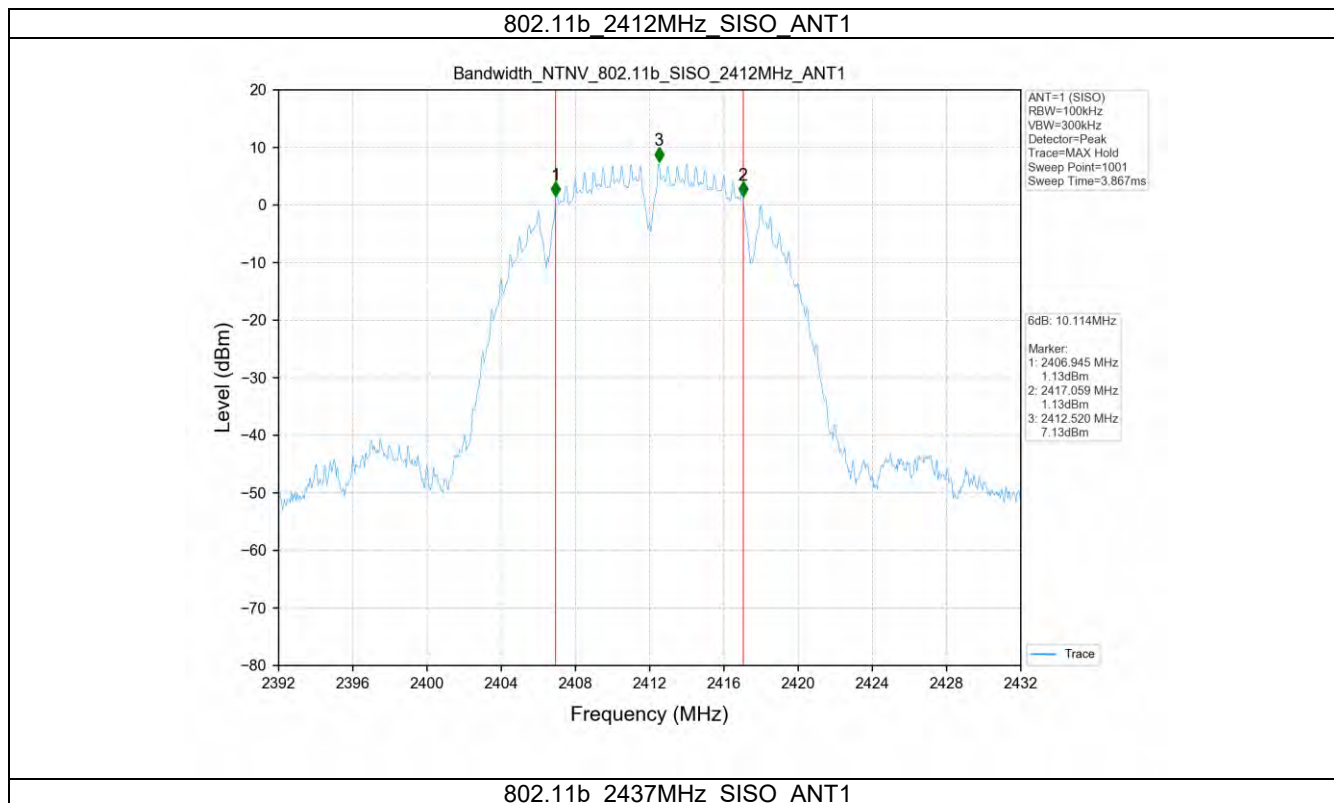
Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11b	2412	SISO	1	10.114	≥ 0.5	PASS
	2437	SISO	1	10.121	≥ 0.5	PASS
	2462	SISO	1	10.125	≥ 0.5	PASS
802.11g	2412	SISO	1	16.383	≥ 0.5	PASS
	2437	SISO	1	16.415	≥ 0.5	PASS
	2462	SISO	1	16.385	≥ 0.5	PASS
802.11n(HT20)	2412	SISO	1	17.573	≥ 0.5	PASS
	2437	SISO	1	17.593	≥ 0.5	PASS
	2462	SISO	1	17.616	≥ 0.5	PASS
802.11n(HT40)	2422	SISO	1	36.386	≥ 0.5	PASS
	2437	SISO	1	36.429	≥ 0.5	PASS
	2452	SISO	1	36.435	≥ 0.5	PASS

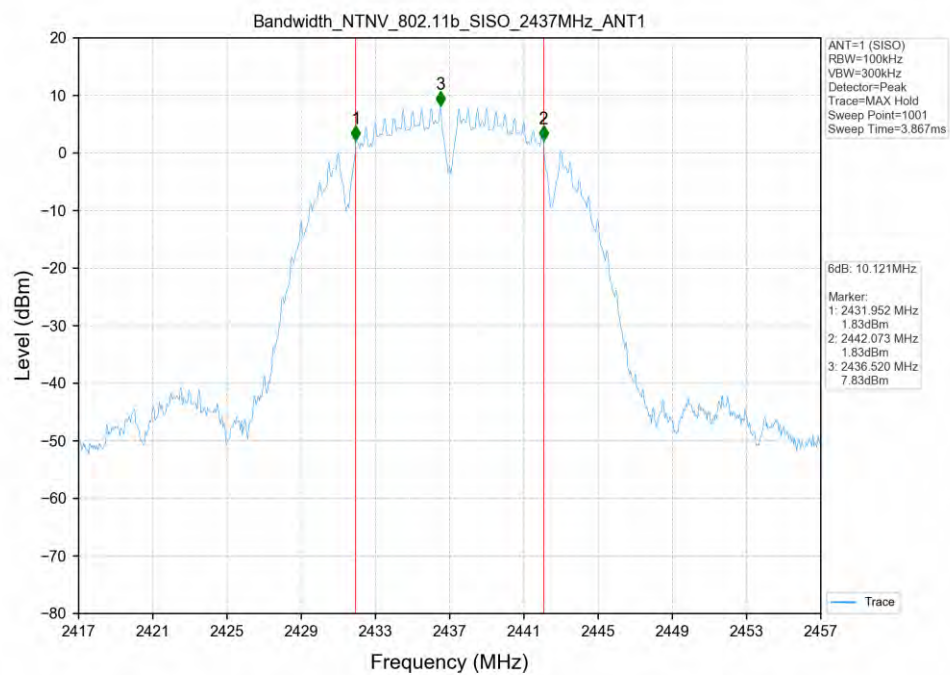
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11b	2412	SISO	1	13.926	Only for Report Use
	2437	SISO	1	13.921	Only for Report Use
	2462	SISO	1	13.926	Only for Report Use
802.11g	2412	SISO	1	17.082	Only for Report Use
	2437	SISO	1	17.060	Only for Report Use



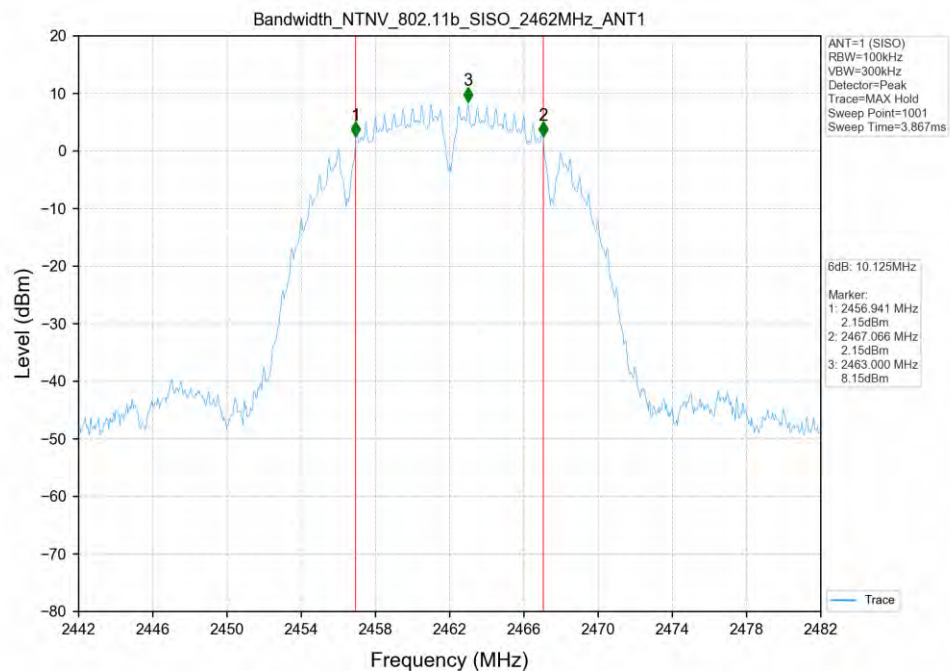
	2462	SISO	1	17.081	Only for Report Use
802.11n(HT20)	2412	SISO	1	18.154	Only for Report Use
	2437	SISO	1	18.131	Only for Report Use
	2462	SISO	1	18.128	Only for Report Use
	2422	SISO	1	38.786	Only for Report Use
802.11n(HT40)	2437	SISO	1	38.455	Only for Report Use
	2452	SISO	1	38.554	Only for Report Use

2.2 Test Graph - 6dB Bandwidth

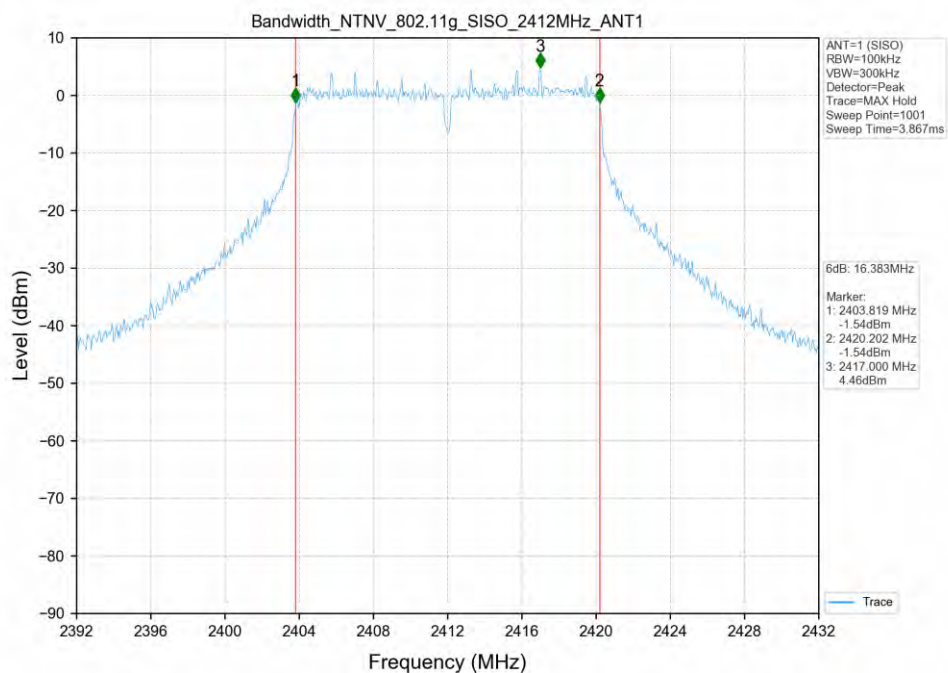




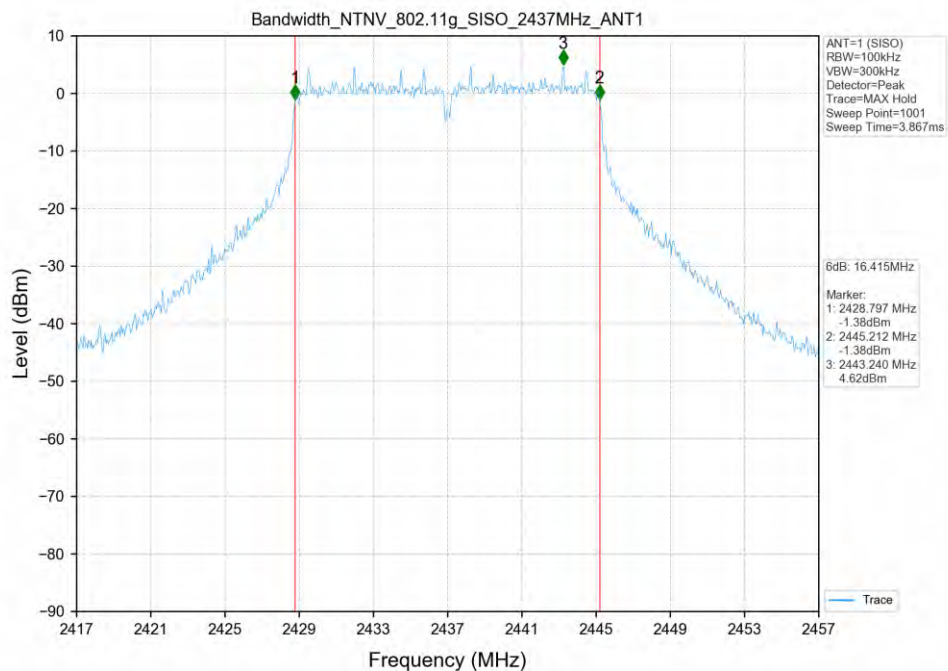
802.11b_2462MHz_SISO_ANT1



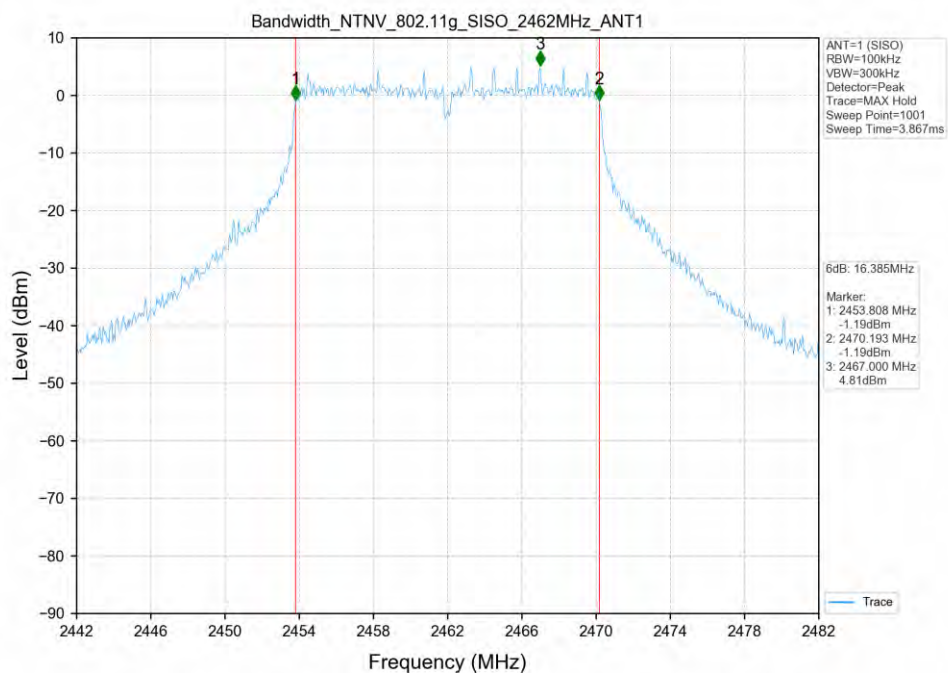
802.11g_2412MHz_SISO_ANT1



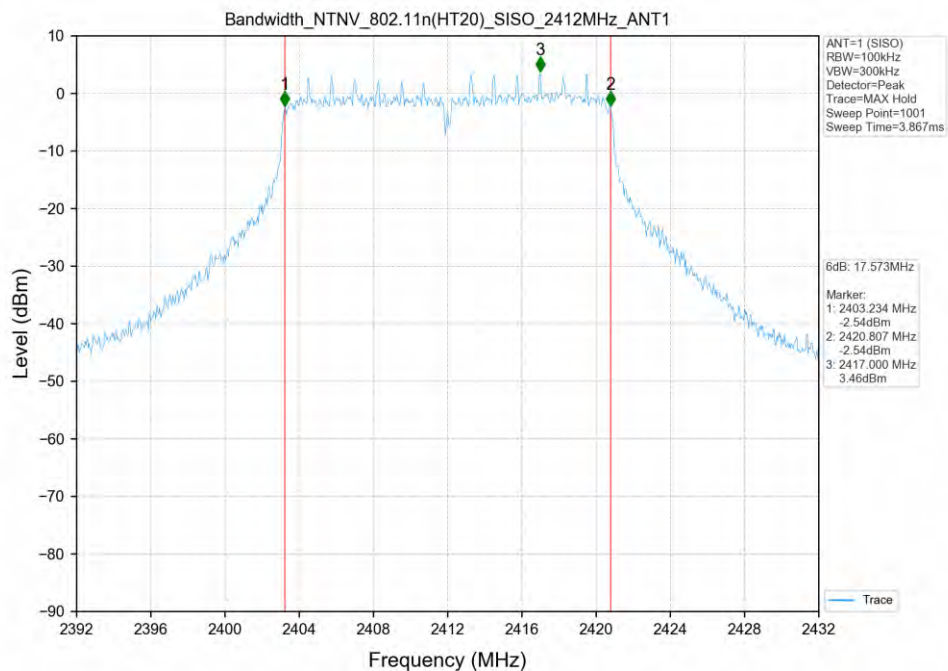
802.11g_2437MHz_SISO_ANT1



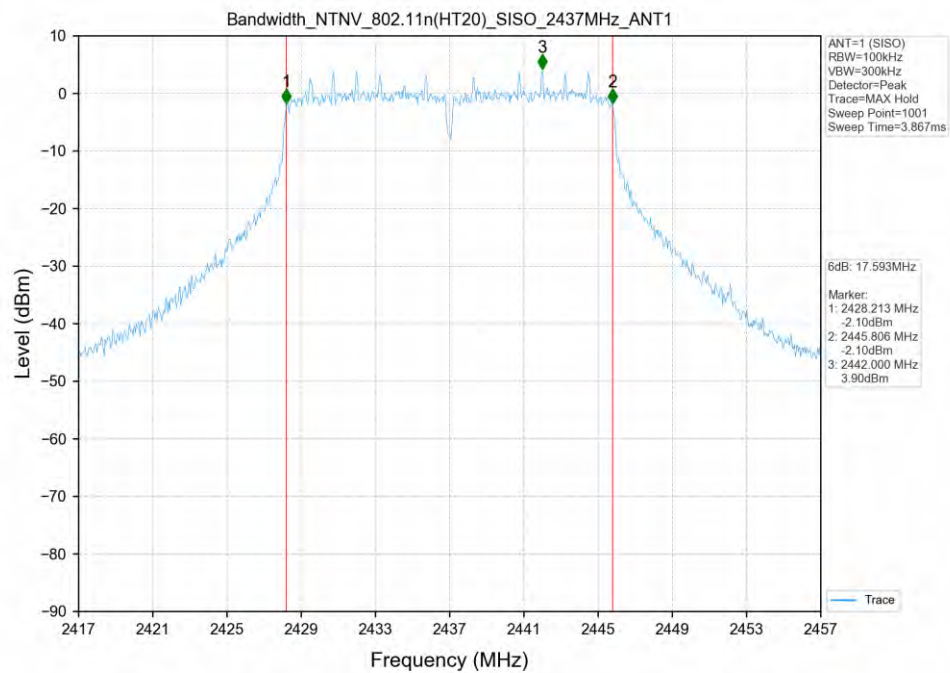
802.11g_2462MHz_SISO_ANT1



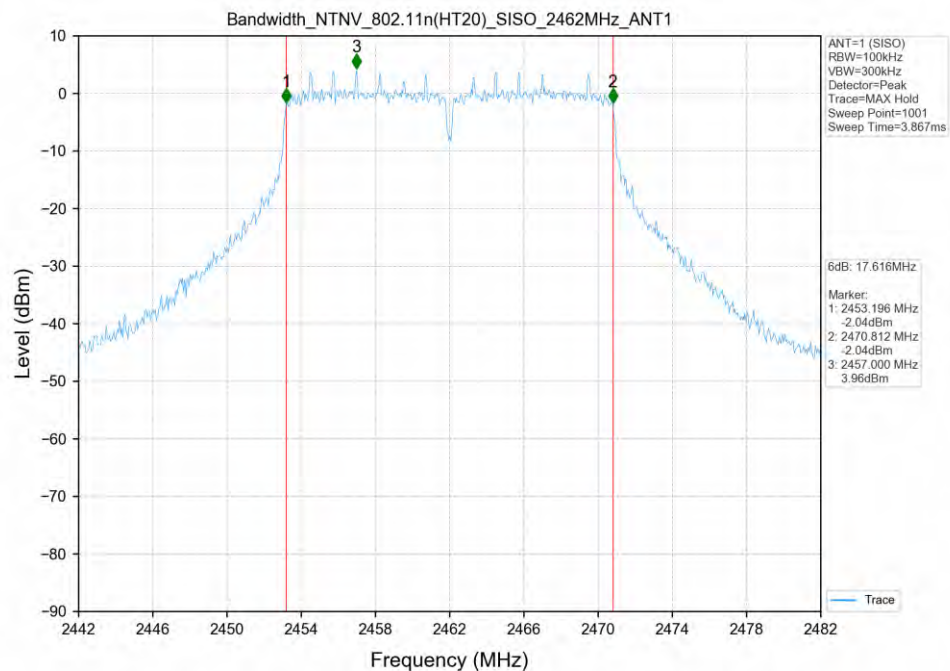
802.11n(HT20)_2412MHz_SISO_ANT1



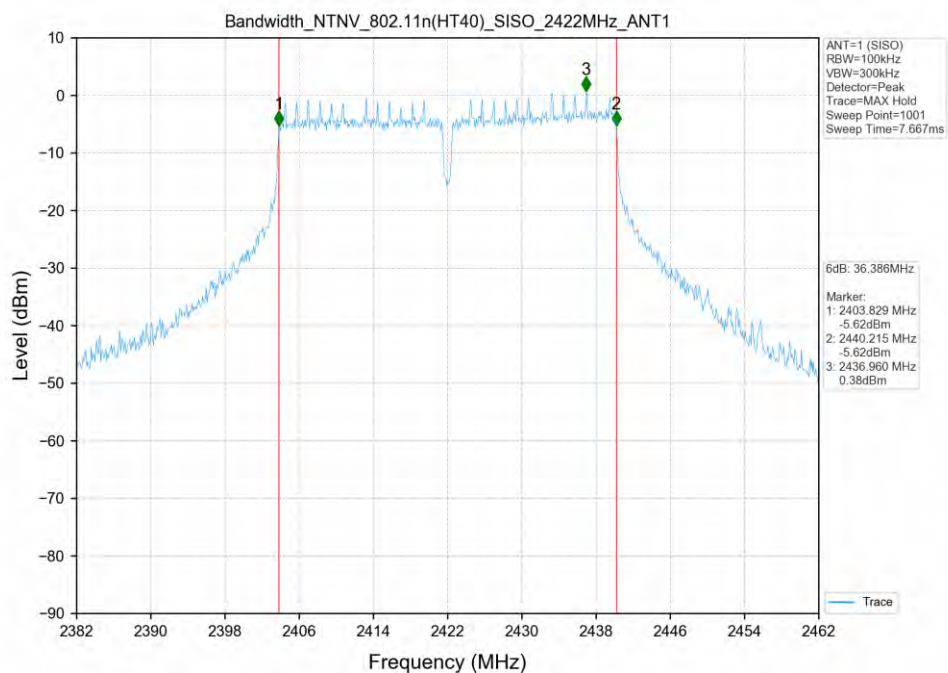
802.11n(HT20)_2437MHz_SISO_ANT1



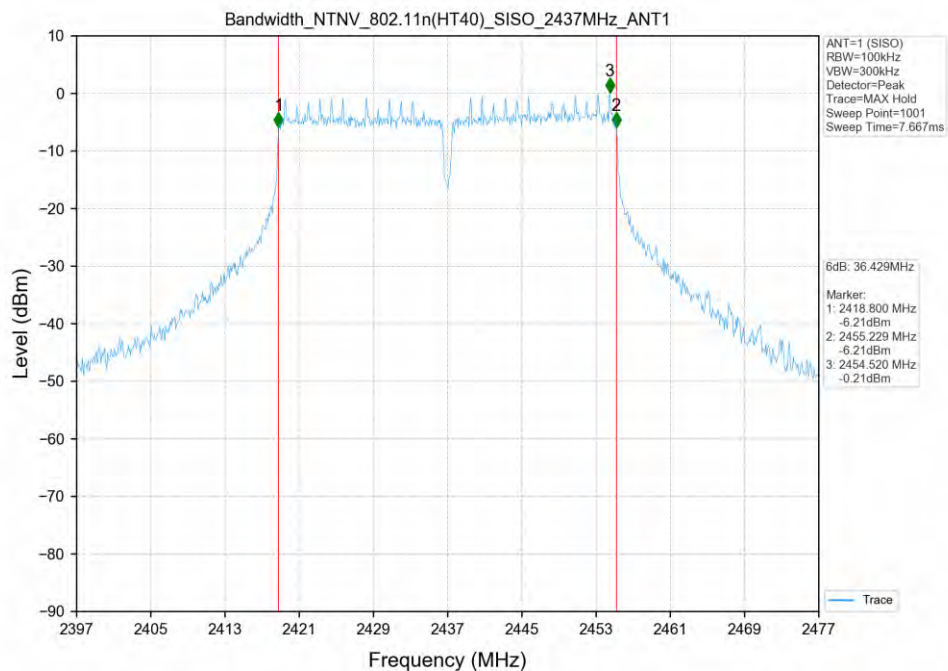
802.11n(HT20)_2462MHz_SISO_ANT1



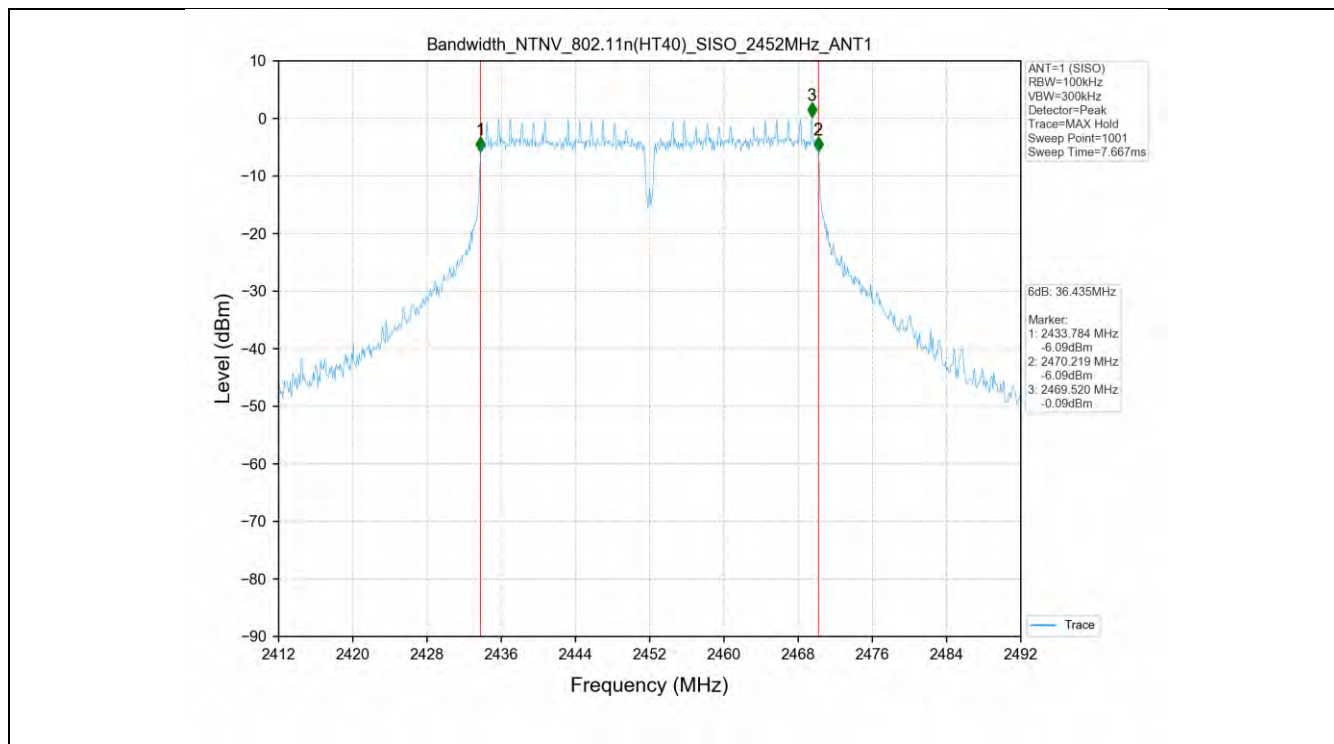
802.11n(HT40)_2422MHz_SISO_ANT1



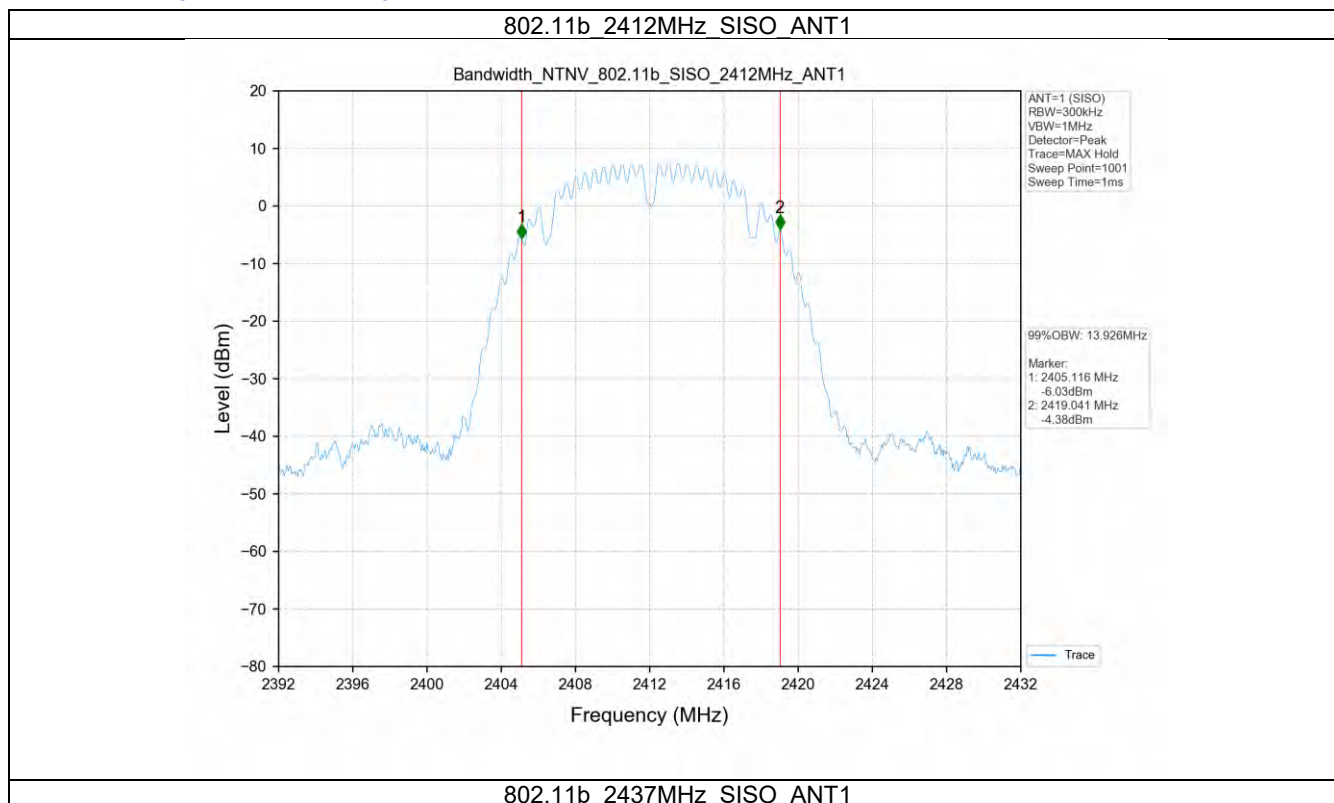
802.11n(HT40)_2437MHz_SISO_ANT1

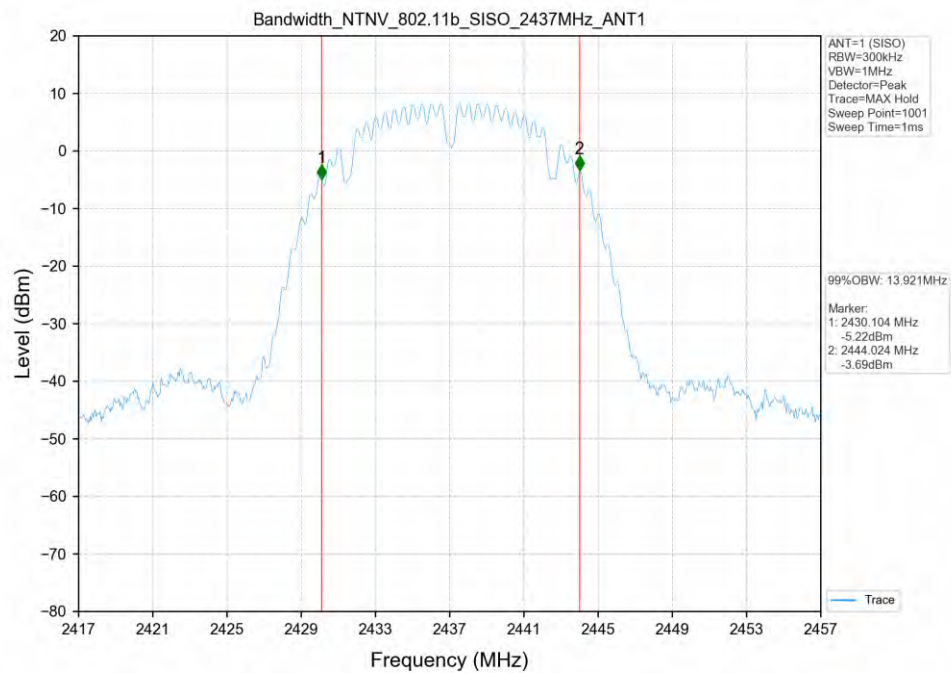


802.11n(HT40)_2452MHz_SISO_ANT1

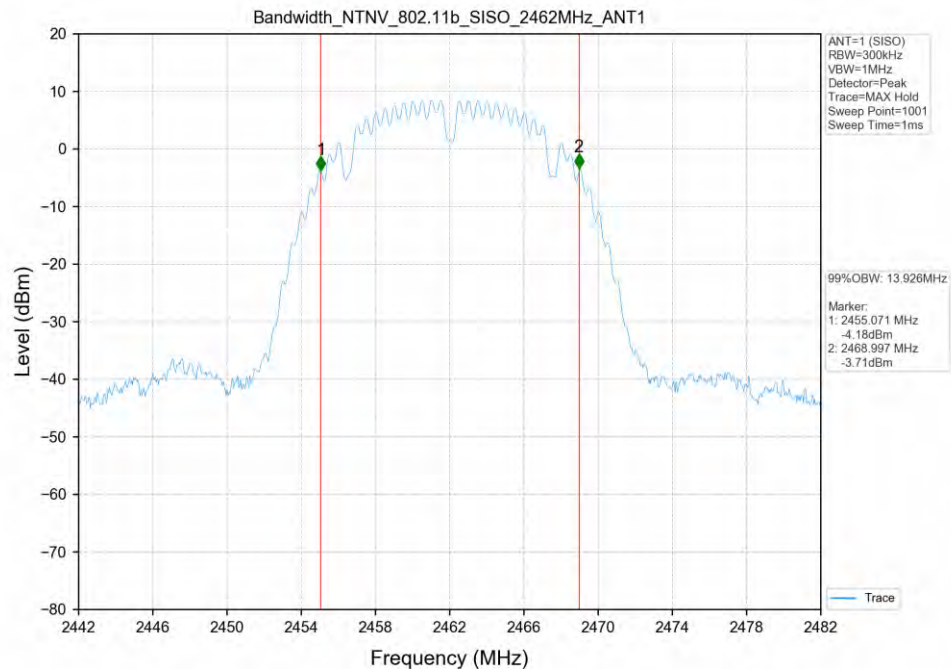


2.3 Test Graph - 99% Occupied Bandwidth

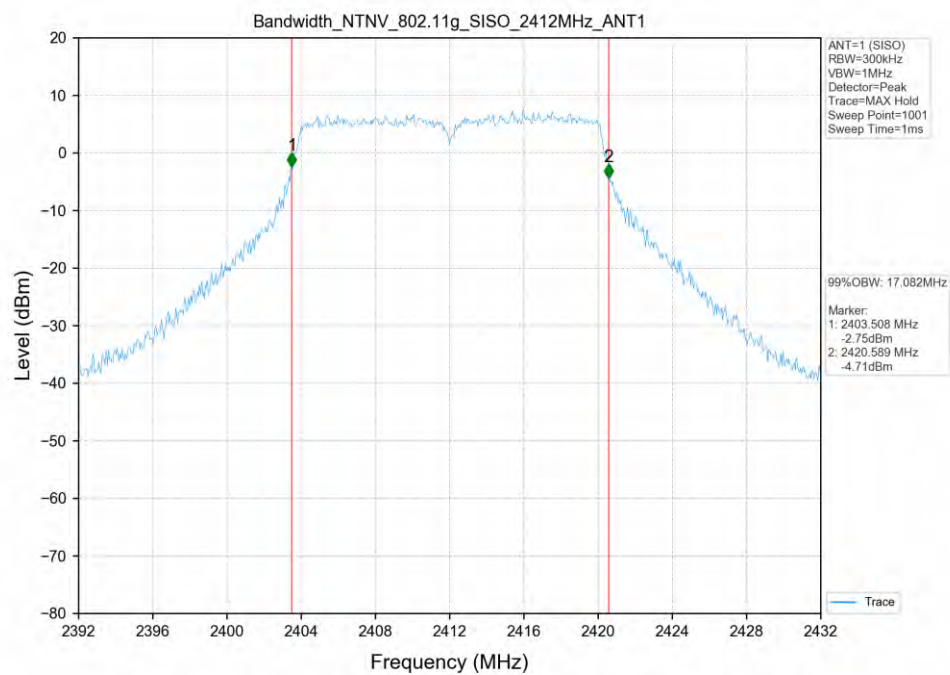




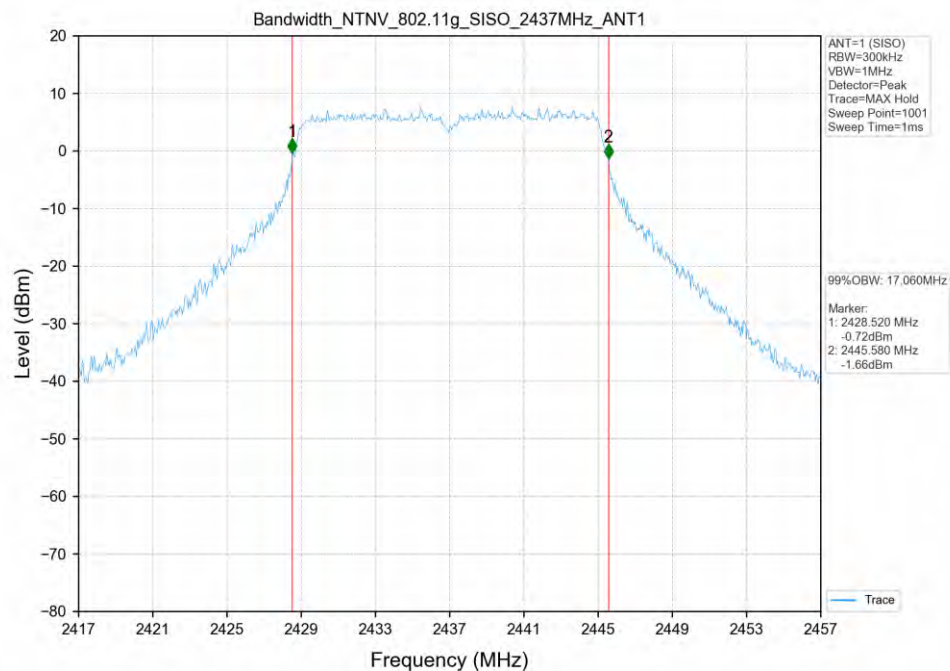
802.11b_2462MHz_SISO_ANT1



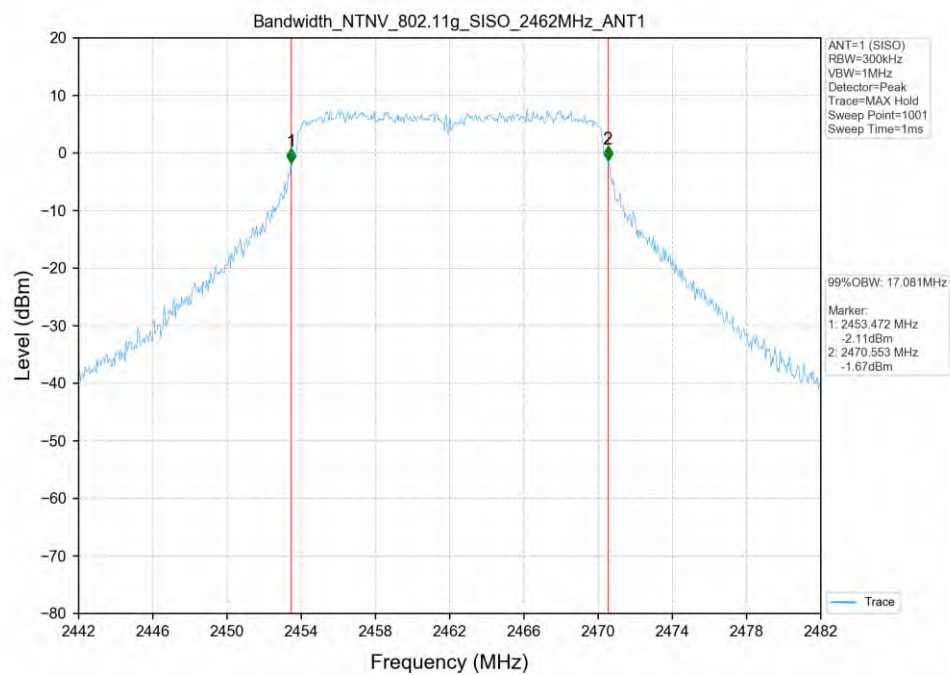
802.11g_2412MHz_SISO_ANT1



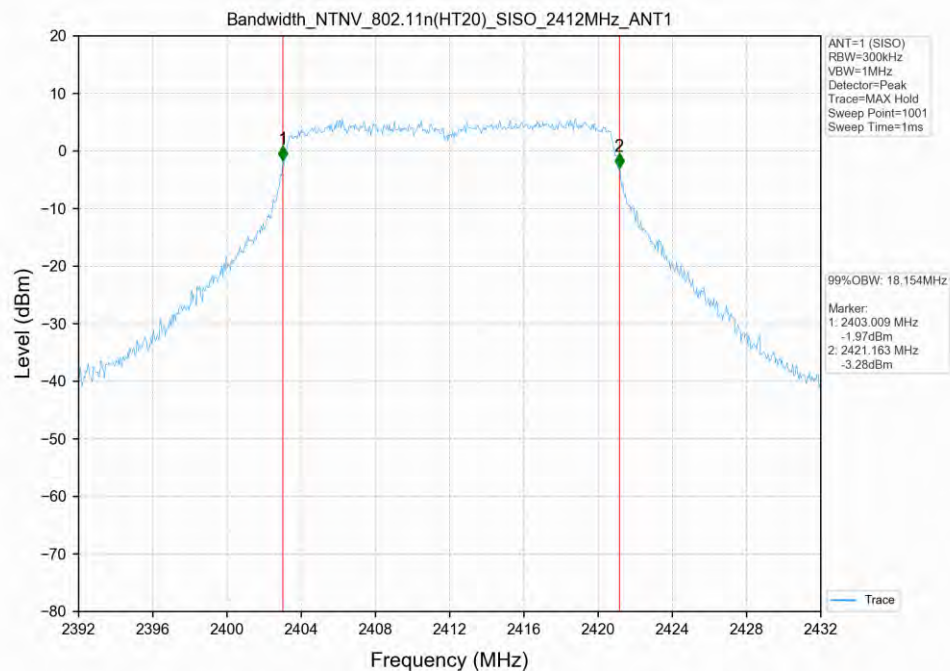
802.11g_2437MHz_SISO_ANT1



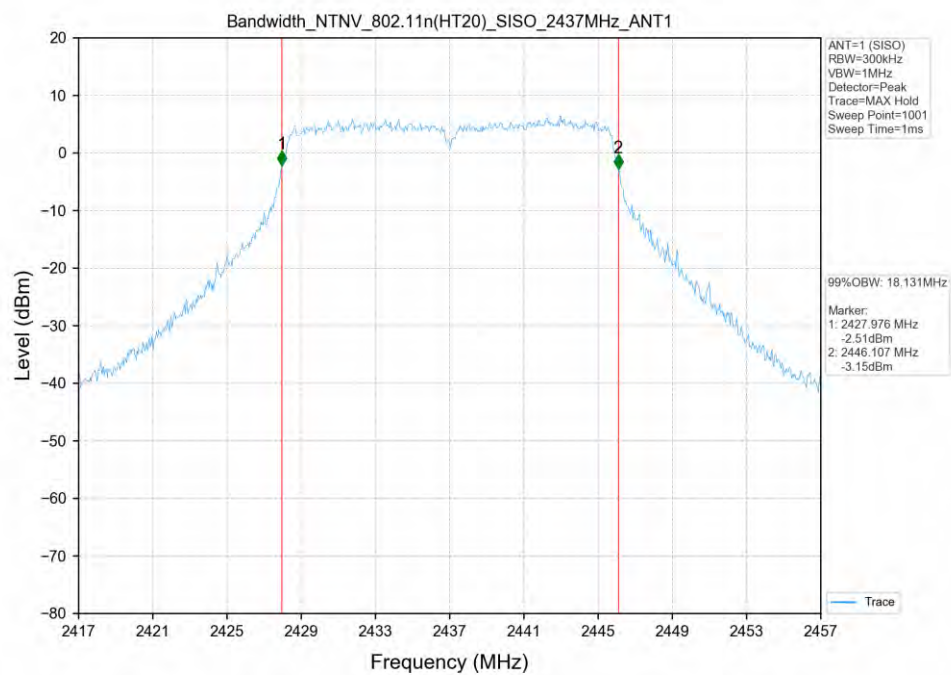
802.11g_2462MHz_SISO_ANT1



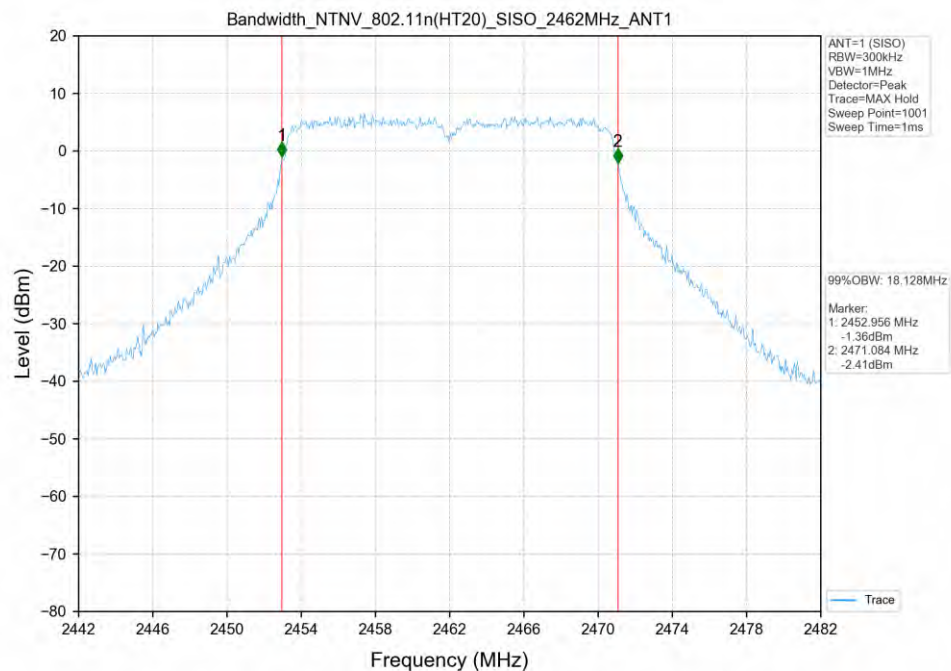
802.11n(HT20)_2412MHz_SISO_ANT1



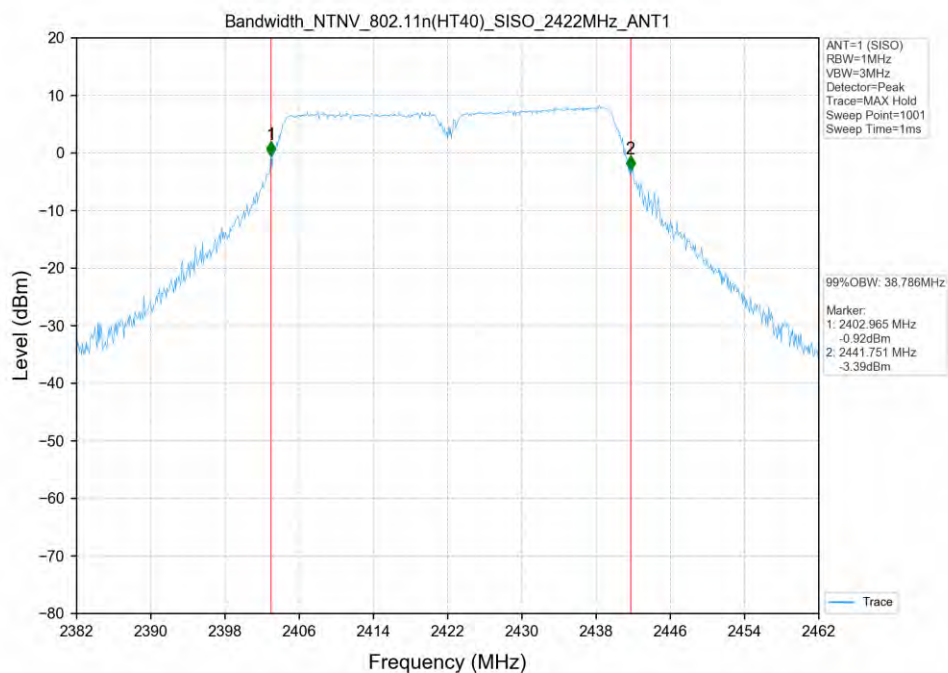
802.11n(HT20)_2437MHz_SISO_ANT1



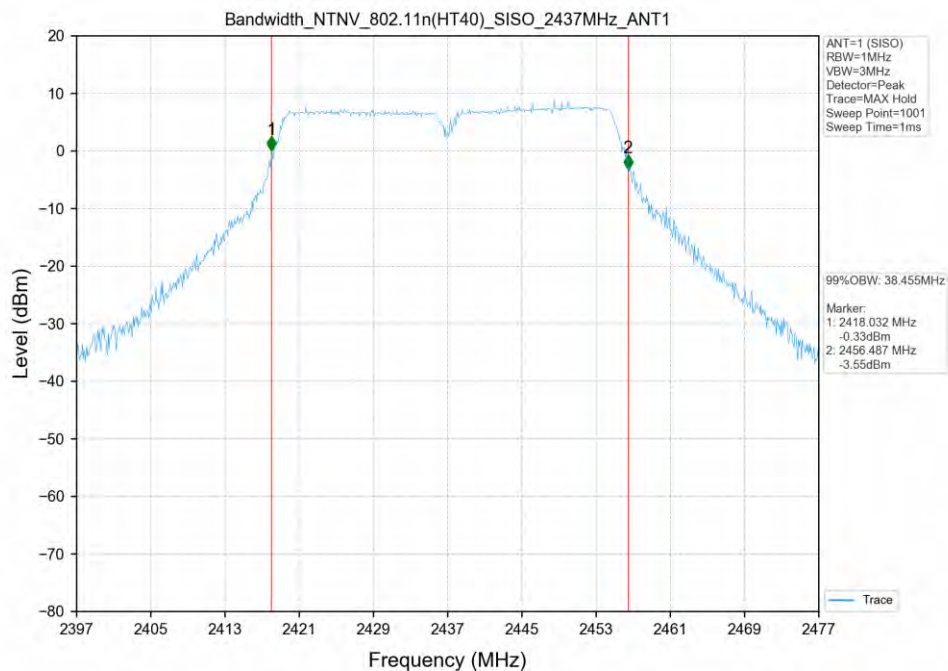
802.11n(HT20)_2462MHz_SISO_ANT1



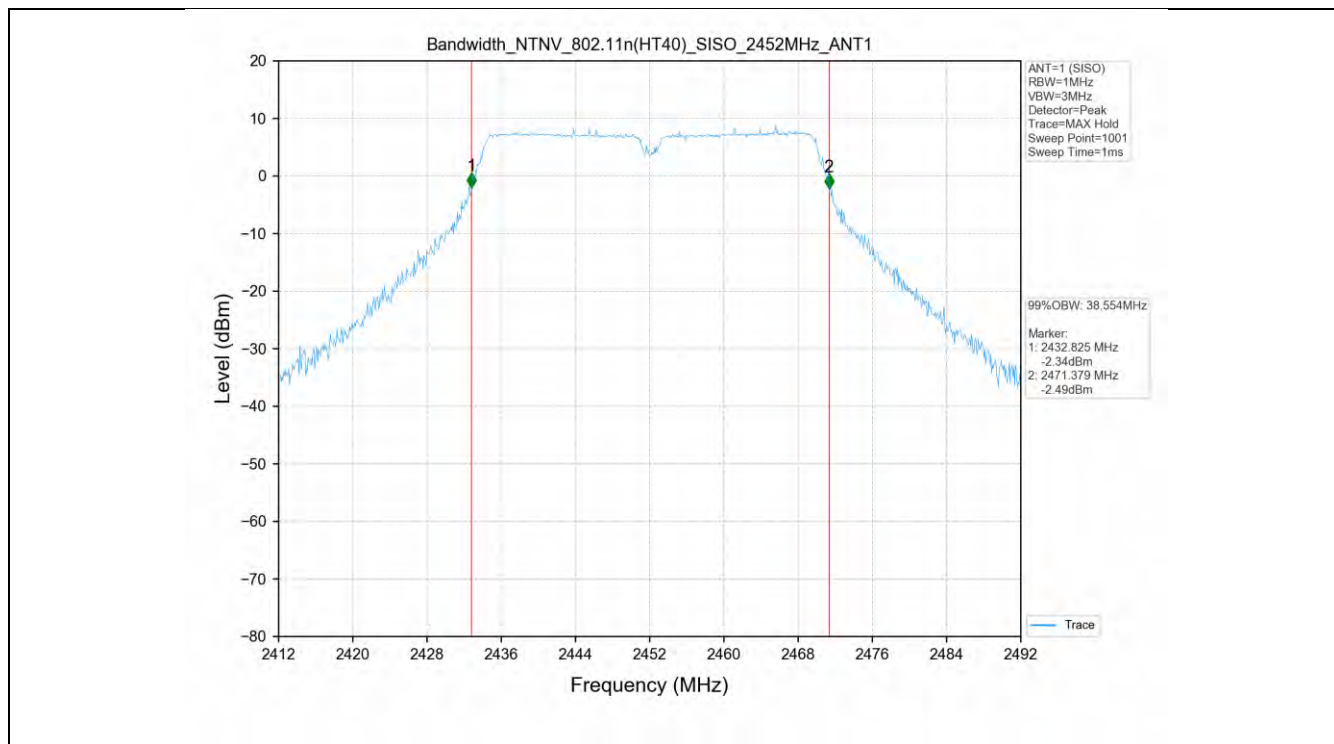
802.11n(HT40)_2422MHz_SISO_ANT1



802.11n(HT40)_2437MHz_SISO_ANT1



802.11n(HT40)_2452MHz_SISO_ANT1



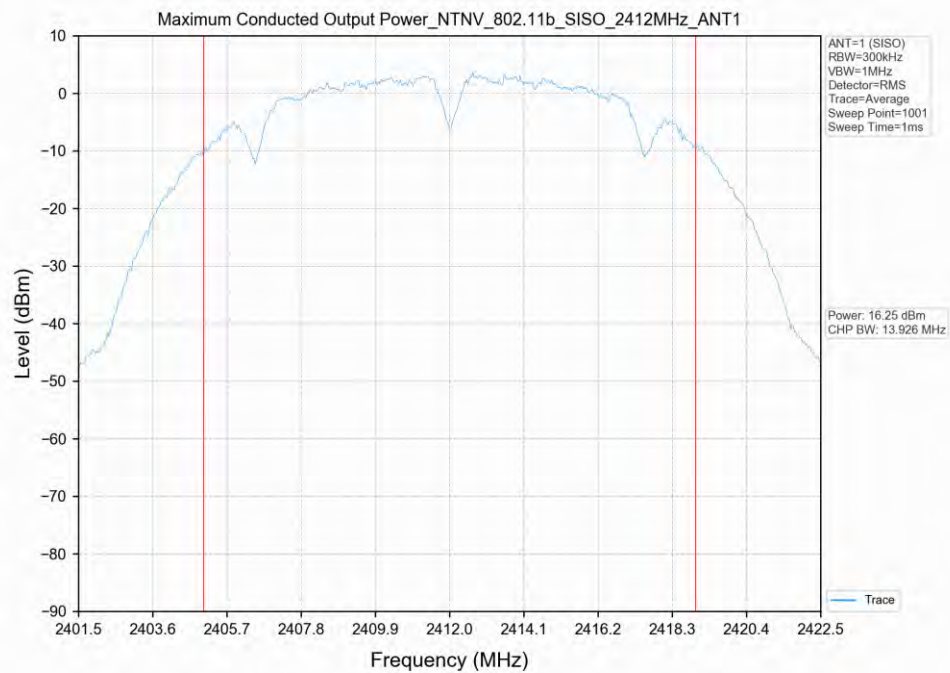
3. Maximum Conducted Output Power

3.1 Test Result

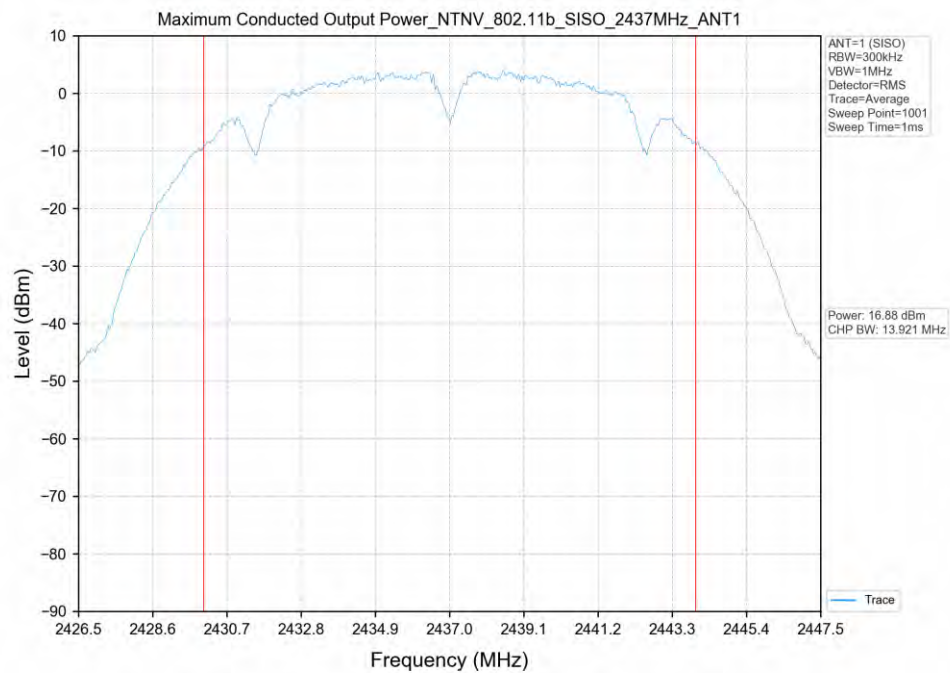
Test Mode	Frequency (MHz)	Tx Type	Measured Average Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
802.11b	2412	SISO	16.25	30	PASS
	2437	SISO	16.88	30	PASS
	2462	SISO	17.25	30	PASS
802.11g	2412	SISO	15.74	30	PASS
	2437	SISO	16.09	30	PASS
	2462	SISO	16.25	30	PASS
802.11n(HT20)	2412	SISO	14.51	30	PASS
	2437	SISO	15.04	30	PASS
	2462	SISO	15.28	30	PASS
802.11n(HT40)	2422	SISO	14.17	30	PASS
	2437	SISO	14.11	30	PASS
	2452	SISO	14.30	30	PASS

3.2 Test Graph

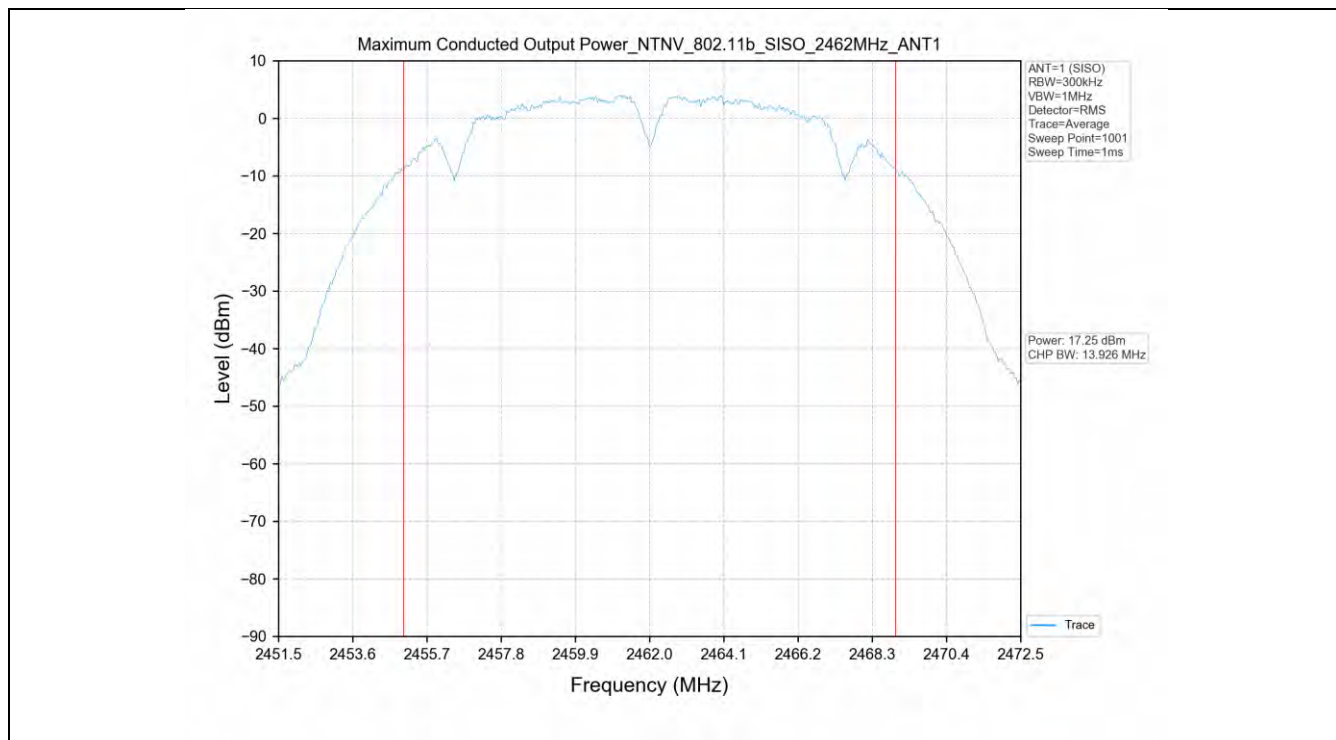
802.11b_2412MHz_SISO_ANT1



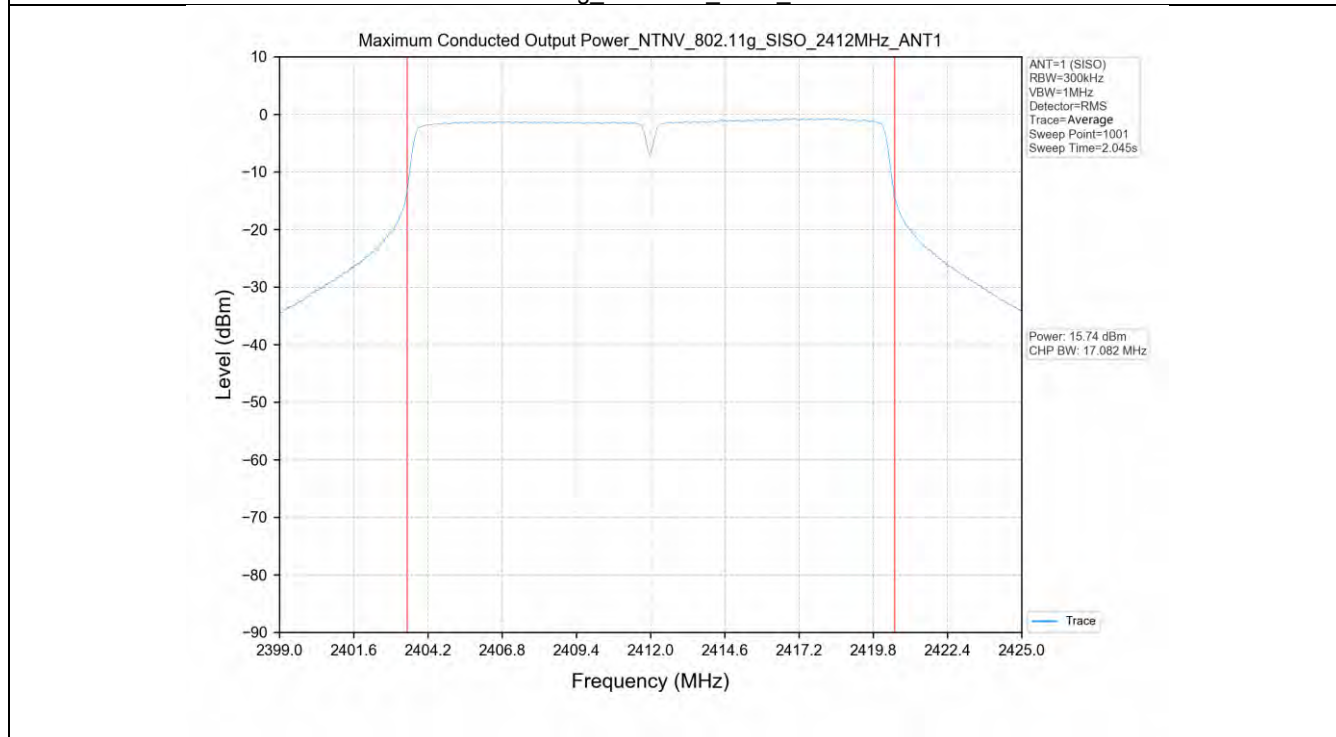
802.11b_2437MHz_SISO_ANT1



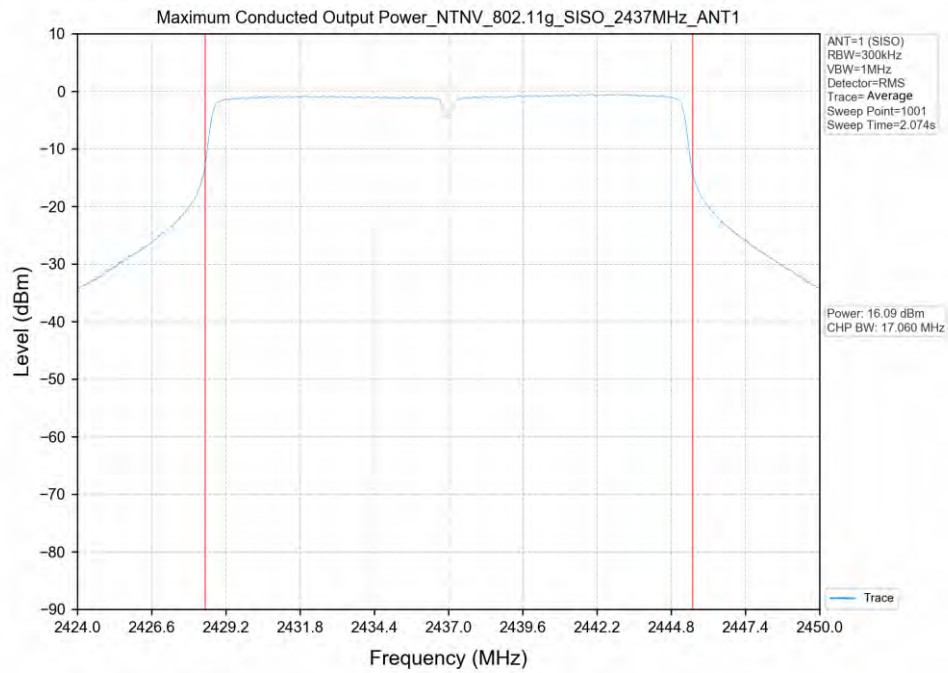
802.11b_2462MHz_SISO_ANT1



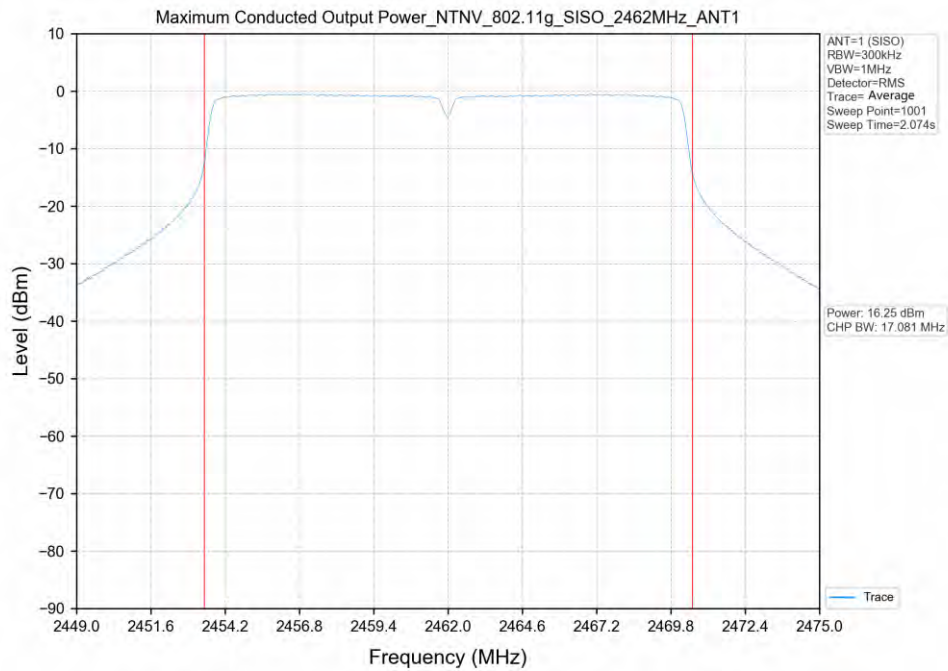
802.11g_2412MHz_SISO_ANT1



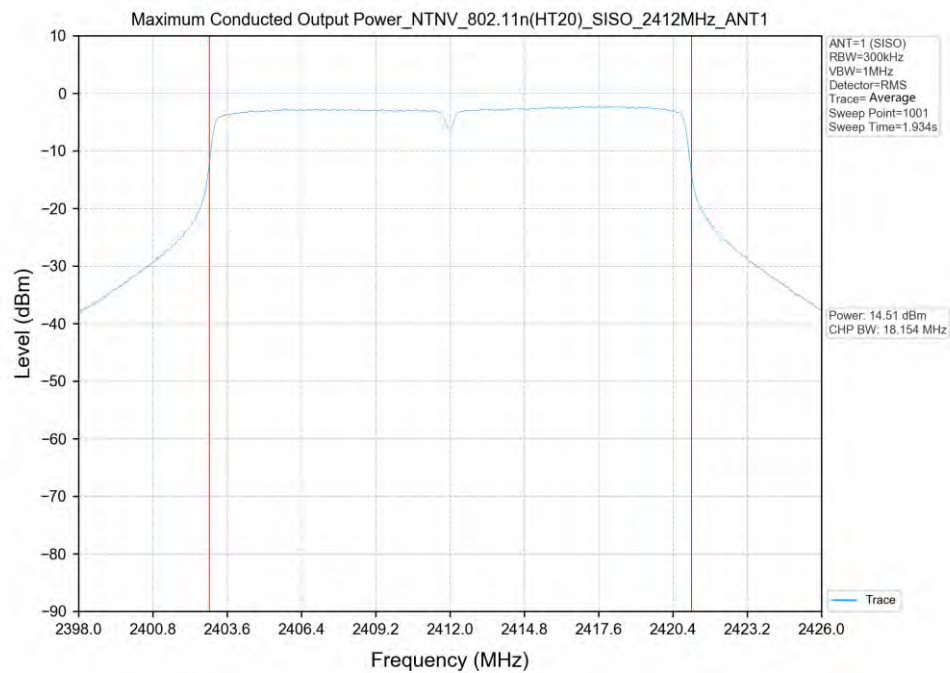
802.11g_2437MHz_SISO_ANT1



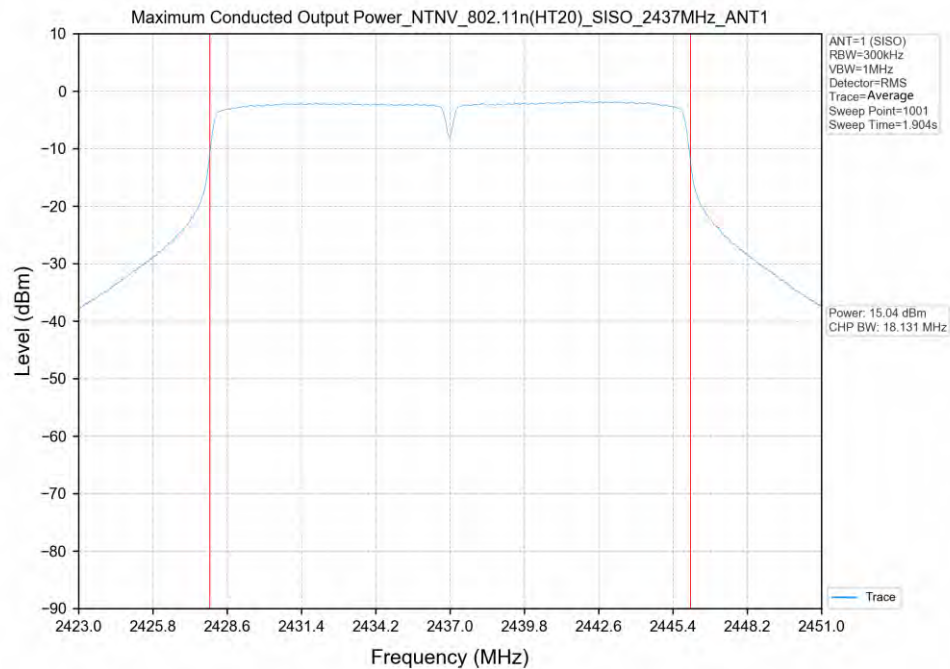
802.11g 2462MHz SISO ANT1



802.11n(HT20)_2412MHz_SISO_ANT1



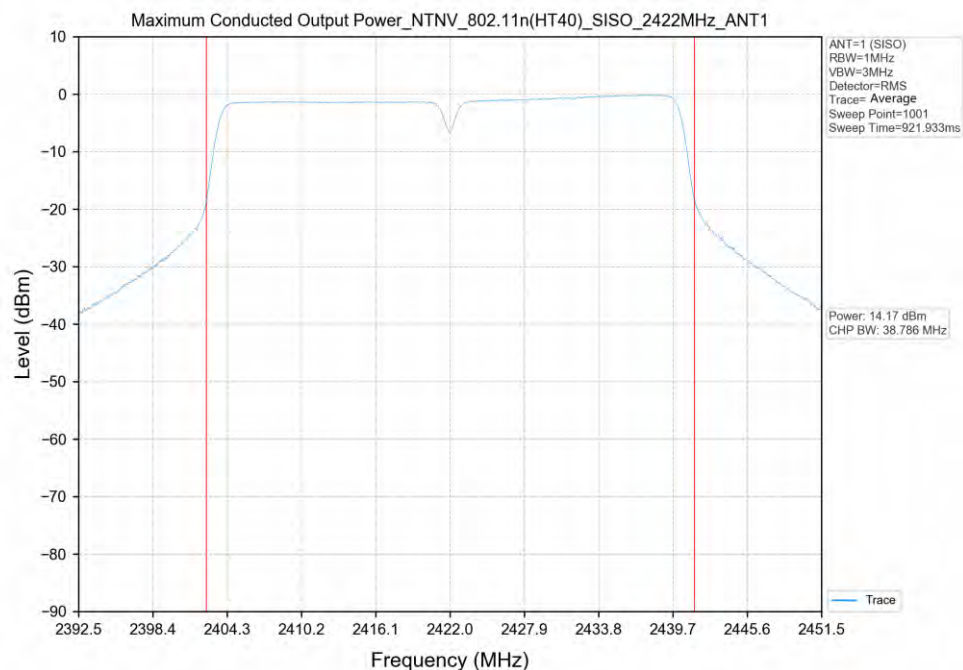
802.11n(HT20) 2437MHz SISO ANT1



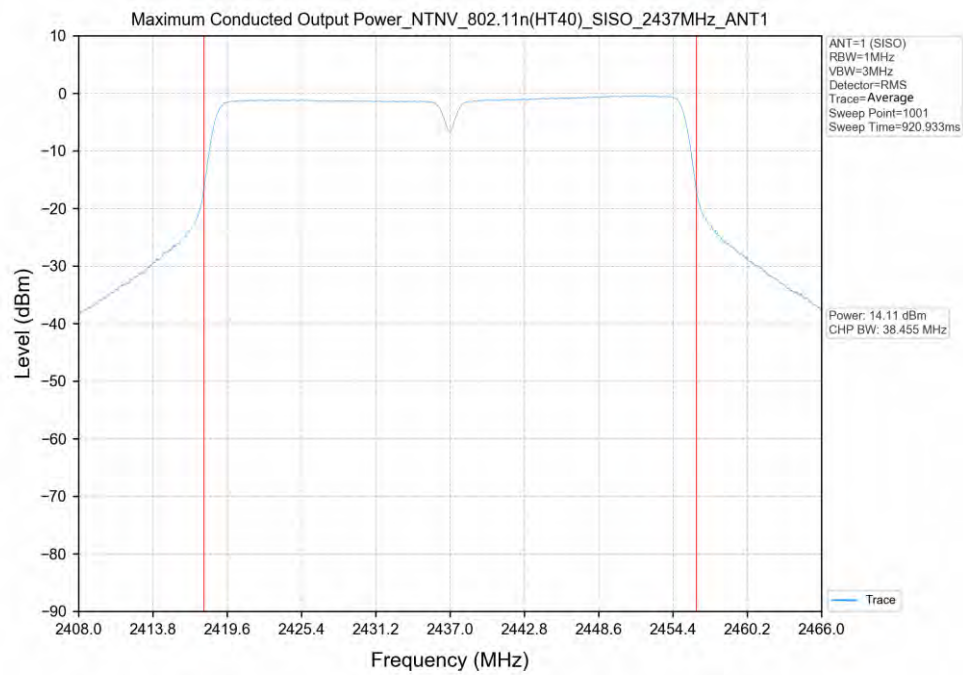
802.11n(HT20) 2462MHz SISO ANT1



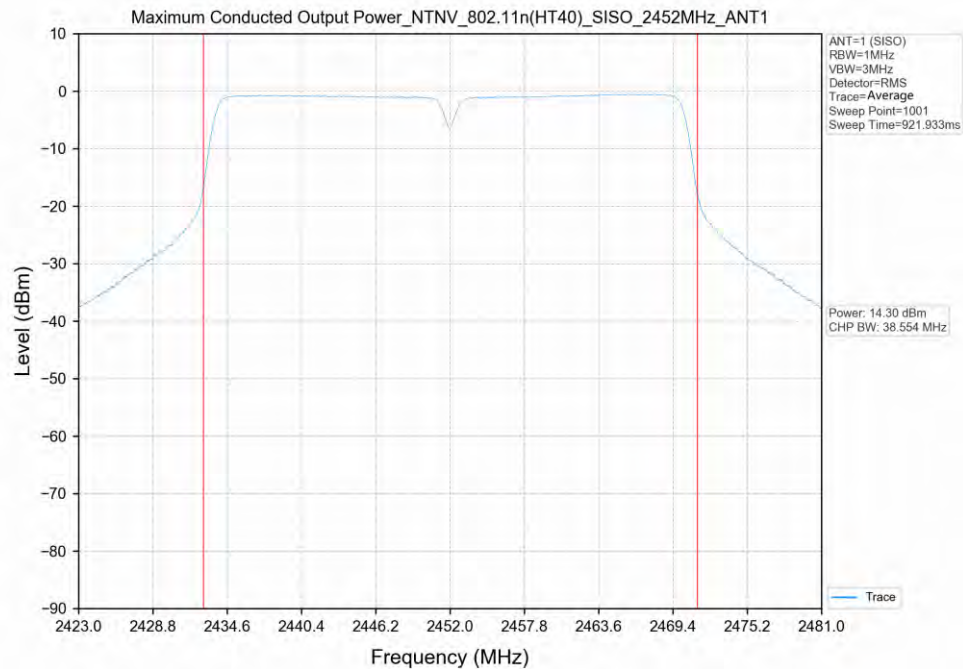
802.11n(HT40) 2422MHz SISO ANT1



802.11n(HT40) 2437MHz SISO ANT1



802.11n(HT40) 2452MHz SISO ANT1



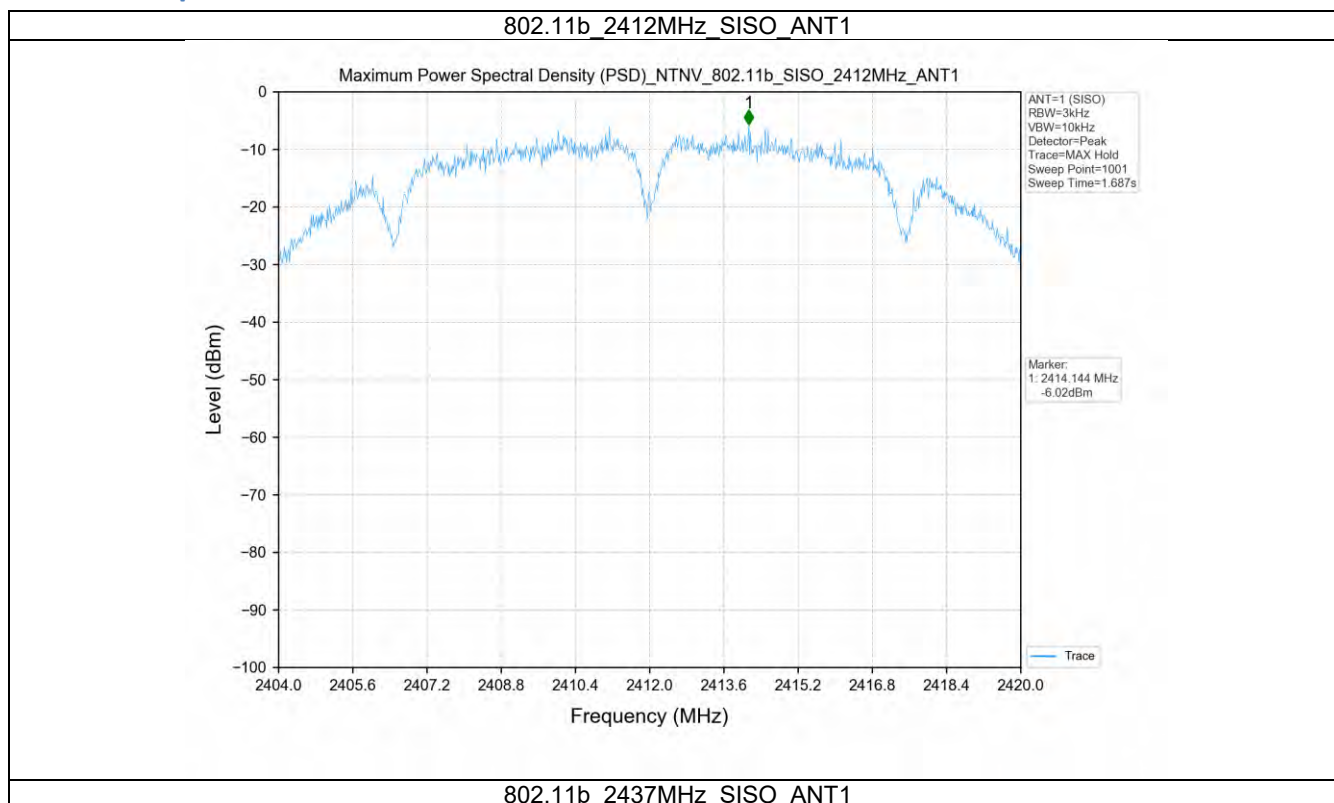


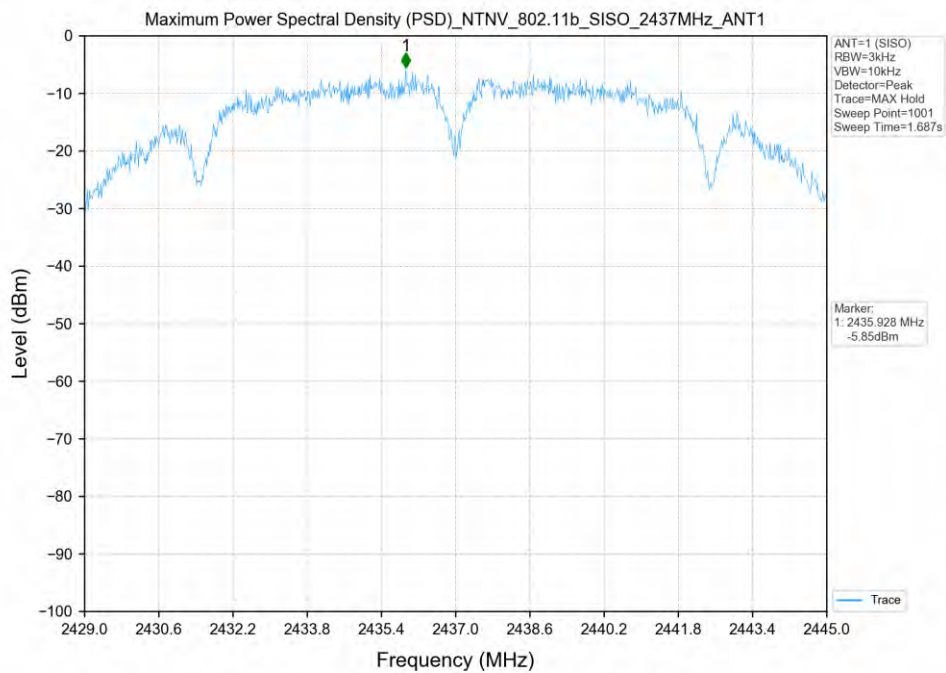
4. Maximum Power Spectral Density (PSD)

4.1 Test Result

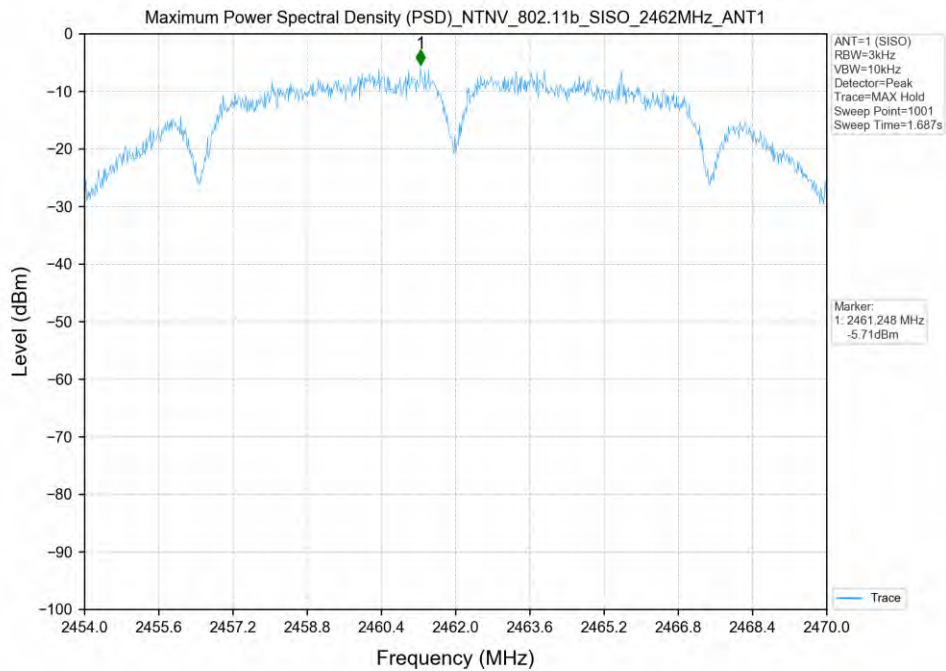
Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)	Limits (dBm/3KHz)	Verdict
			Ant 1		
802.11b	2412	SISO	-6.02	≤8	PASS
	2437	SISO	-5.85	≤8	PASS
	2462	SISO	-5.71	≤8	PASS
802.11g	2412	SISO	-9.71	≤8	PASS
	2437	SISO	-8.53	≤8	PASS
	2462	SISO	-7.41	≤8	PASS
802.11n(HT20)	2412	SISO	-9.69	≤8	PASS
	2437	SISO	-10.50	≤8	PASS
	2462	SISO	-10.03	≤8	PASS
802.11n(HT40)	2422	SISO	-14.32	≤8	PASS
	2437	SISO	-14.42	≤8	PASS
	2452	SISO	-13.89	≤8	PASS

4.2 Test Graph

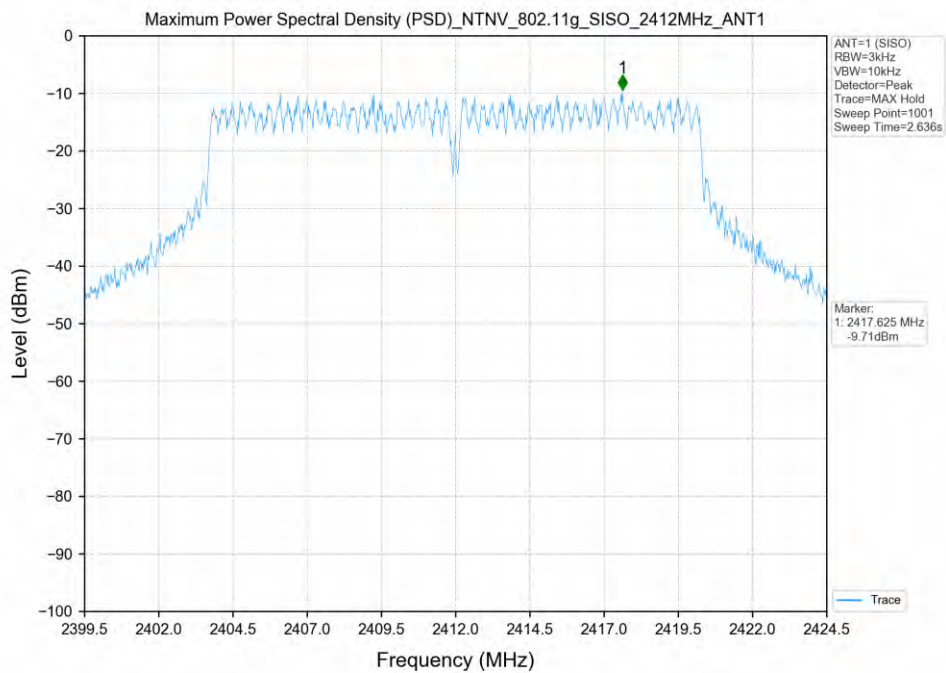




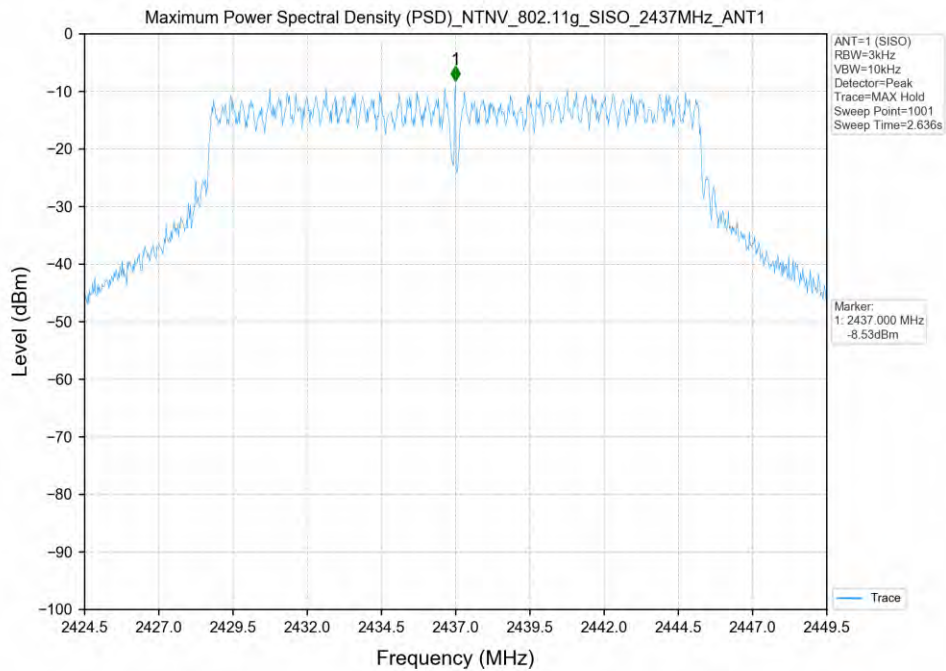
802.11b_2462MHz_SISO_ANT1



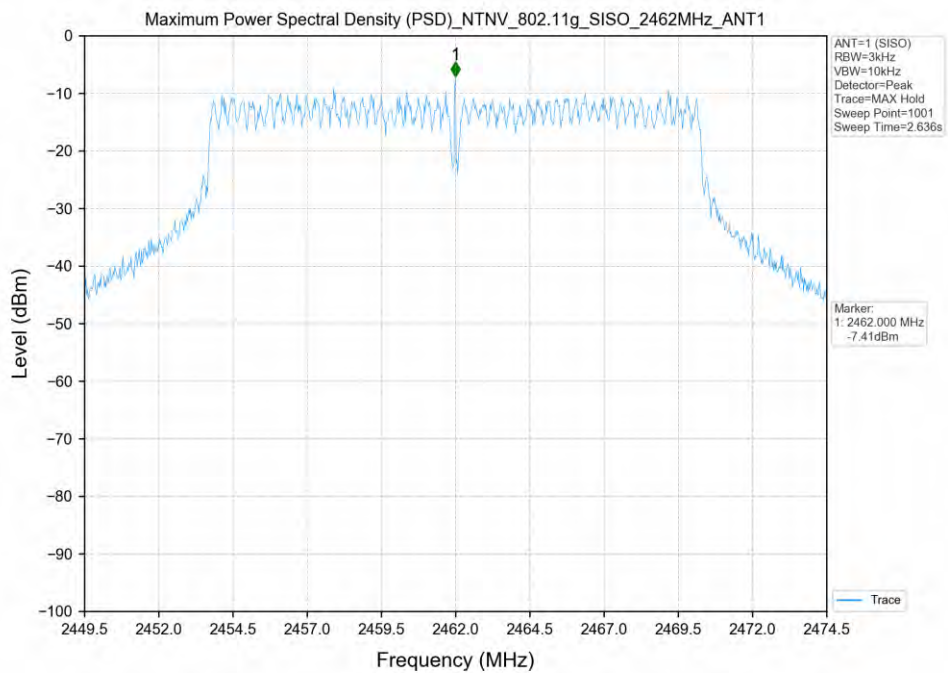
802.11g_2412MHz_SISO_ANT1



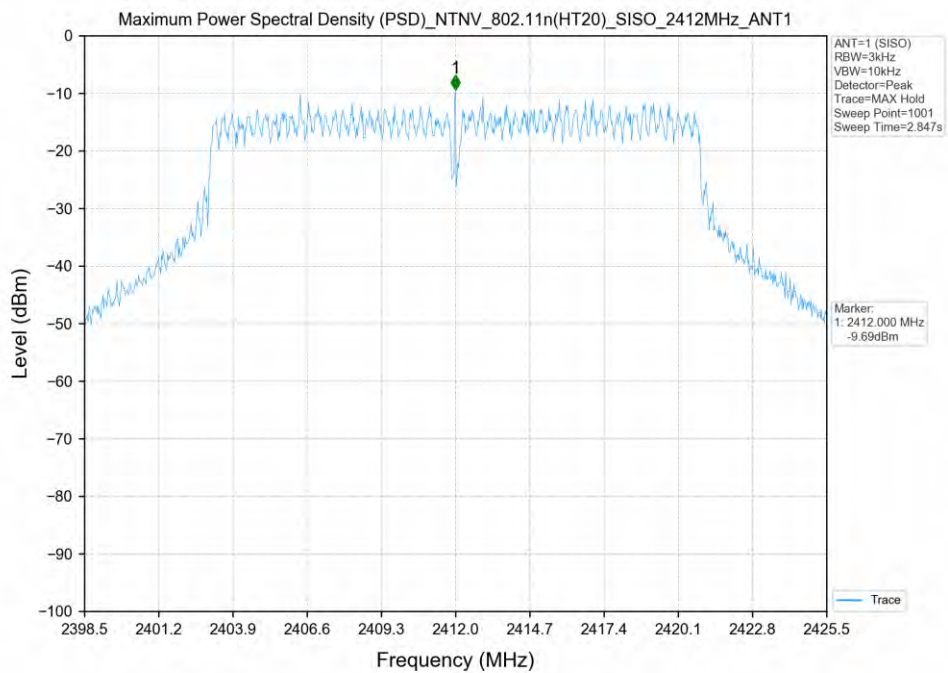
802.11g_2437MHz_SISO_ANT1



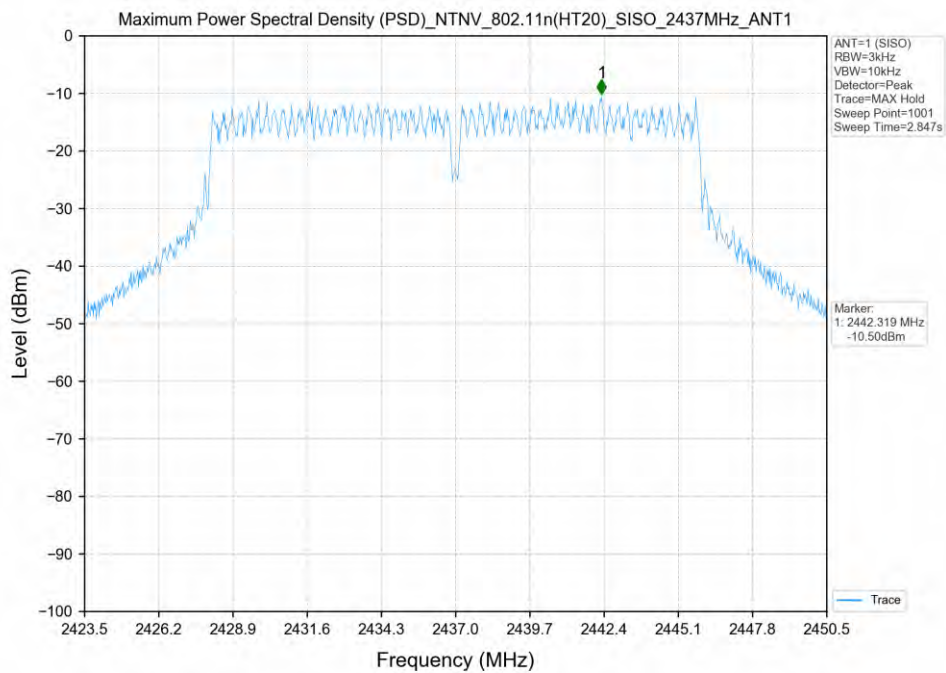
802.11g_2462MHz_SISO_ANT1



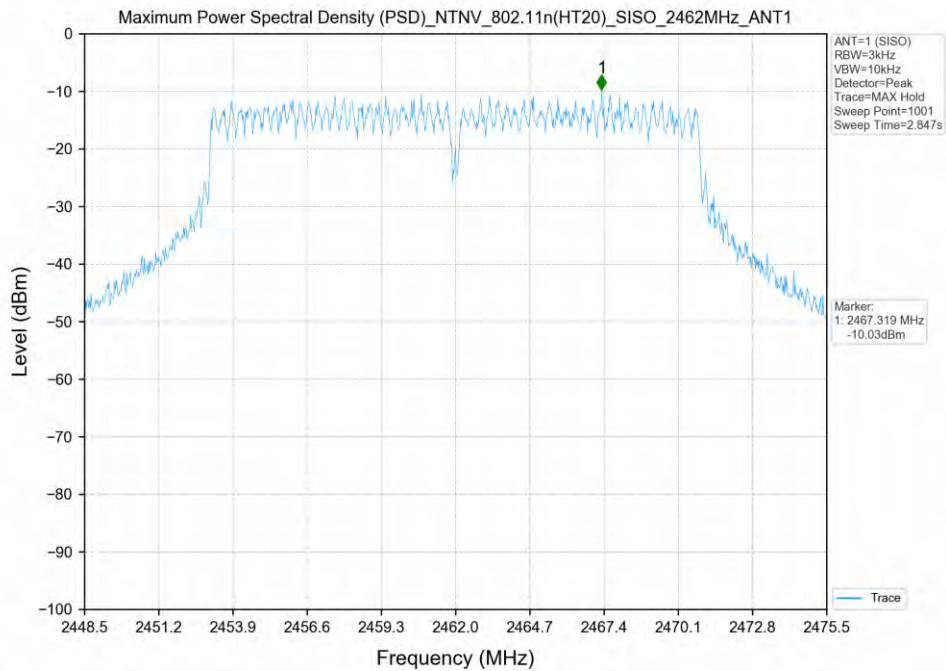
802.11n(HT20)_2412MHz_SISO_ANT1



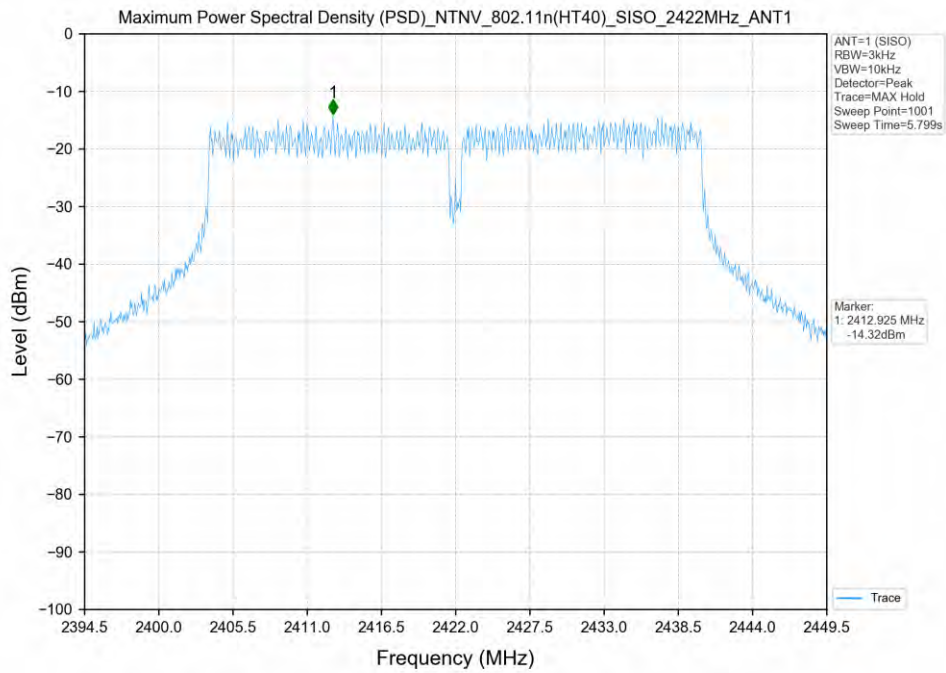
802.11n(HT20)_2437MHz_SISO_ANT1



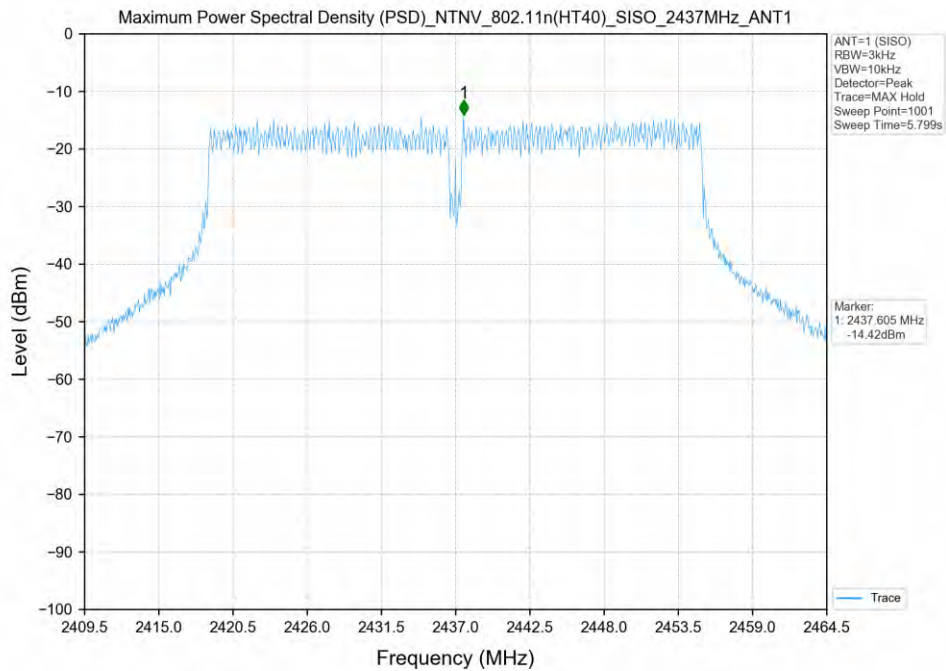
802.11n(HT20)_2462MHz_SISO_ANT1



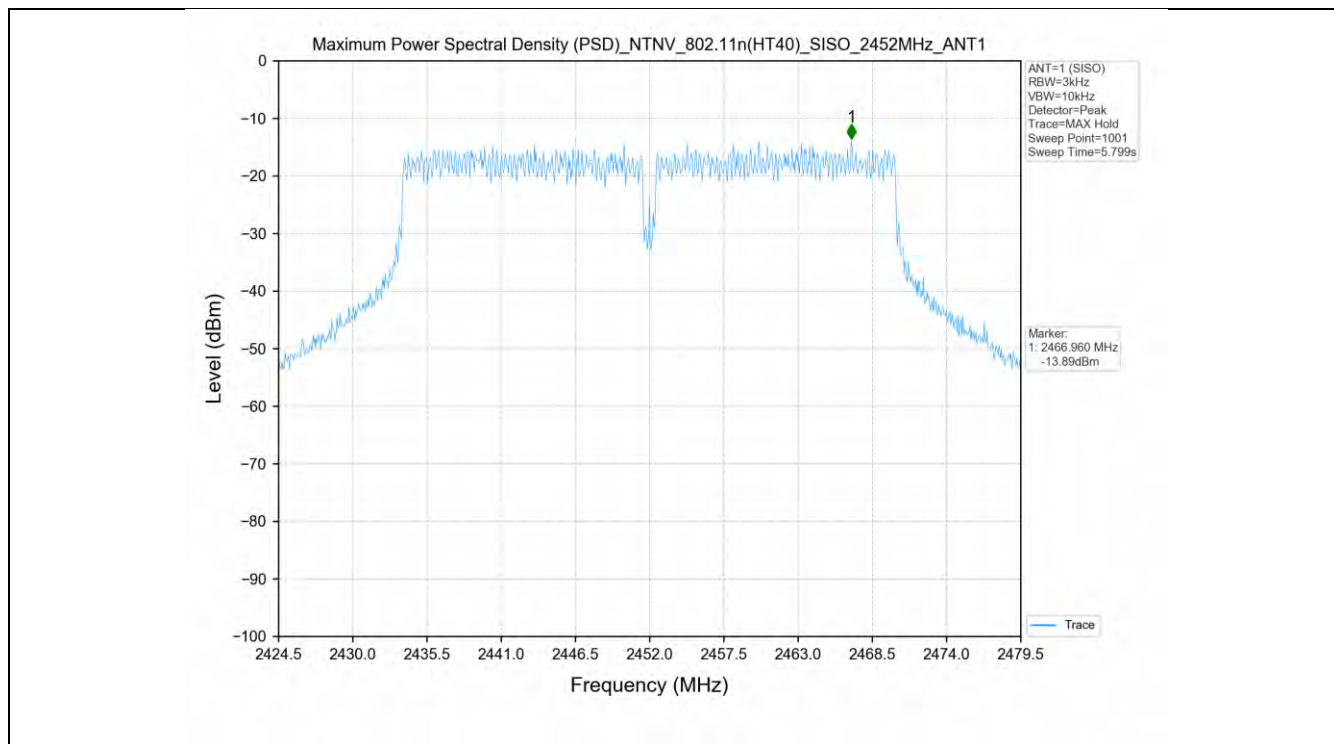
802.11n(HT40)_2422MHz_SISO_ANT1



802.11n(HT40)_2437MHz_SISO_ANT1



802.11n(HT40)_2452MHz_SISO_ANT1



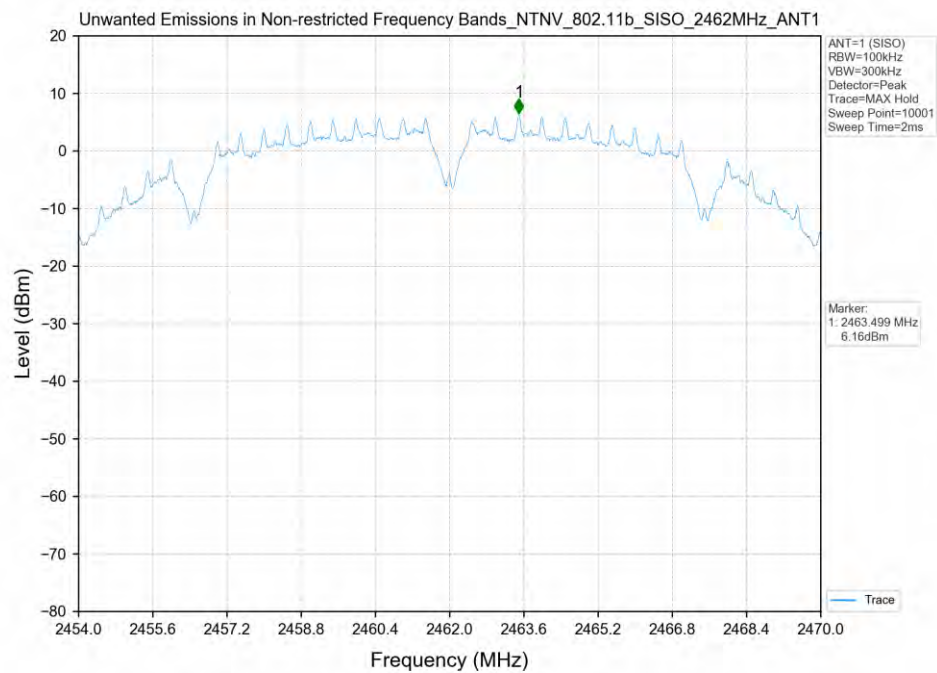
5. Unwanted Emissions in Non-restricted Frequency Bands

5.1 Test Result

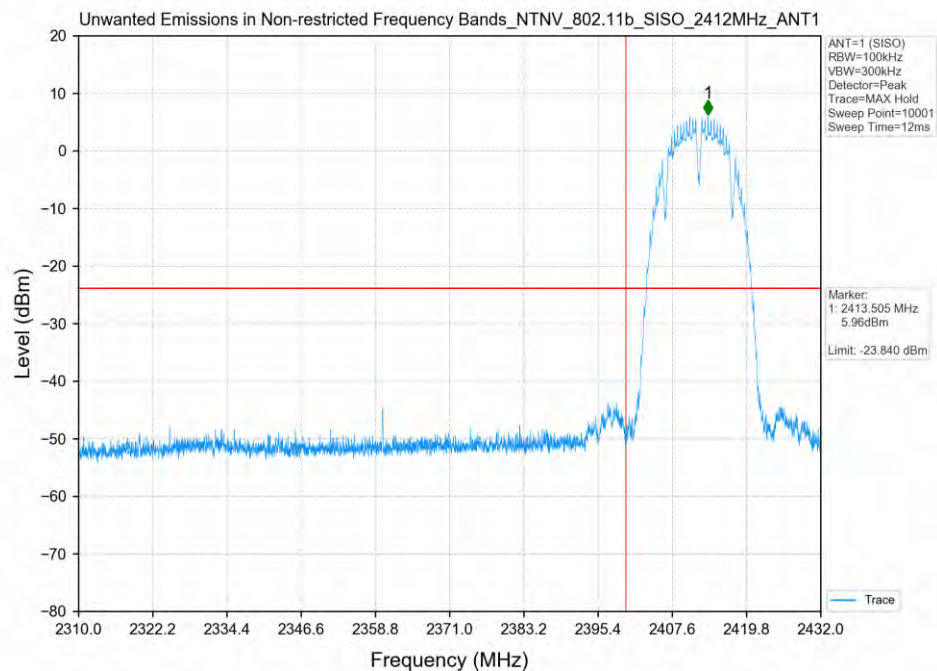
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBc)	Verdict
802.11b	2412	SISO	1	Refer to test graph	≤ -30	PASS
	2437	SISO	1	Refer to test graph	≤ -30	PASS
	2462	SISO	1	Refer to test graph	≤ -30	PASS
802.11g	2412	SISO	1	Refer to test graph	≤ -30	PASS
	2437	SISO	1	Refer to test graph	≤ -30	PASS
	2462	SISO	1	Refer to test graph	≤ -30	PASS
802.11n(HT20)	2412	SISO	1	Refer to test graph	≤ -30	PASS
	2437	SISO	1	Refer to test graph	≤ -30	PASS
	2462	SISO	1	Refer to test graph	≤ -30	PASS
802.11n(HT40)	2422	SISO	1	Refer to test graph	≤ -30	PASS
	2437	SISO	1	Refer to test graph	≤ -30	PASS
	2452	SISO	1	Refer to test graph	≤ -30	PASS

5.2 Test Graph

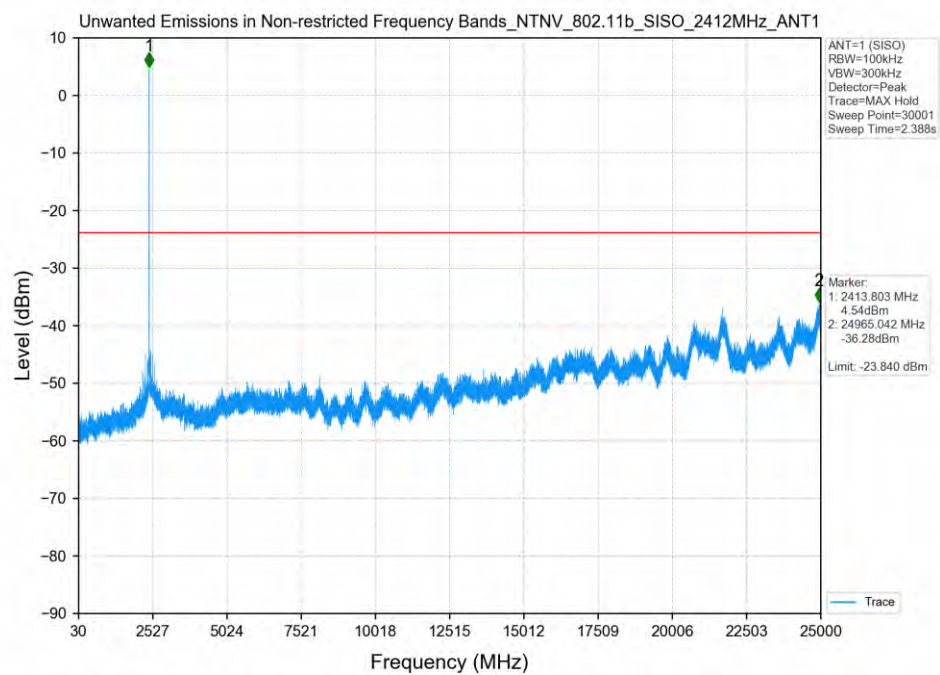
802.11b_SISO_ANT1_REF



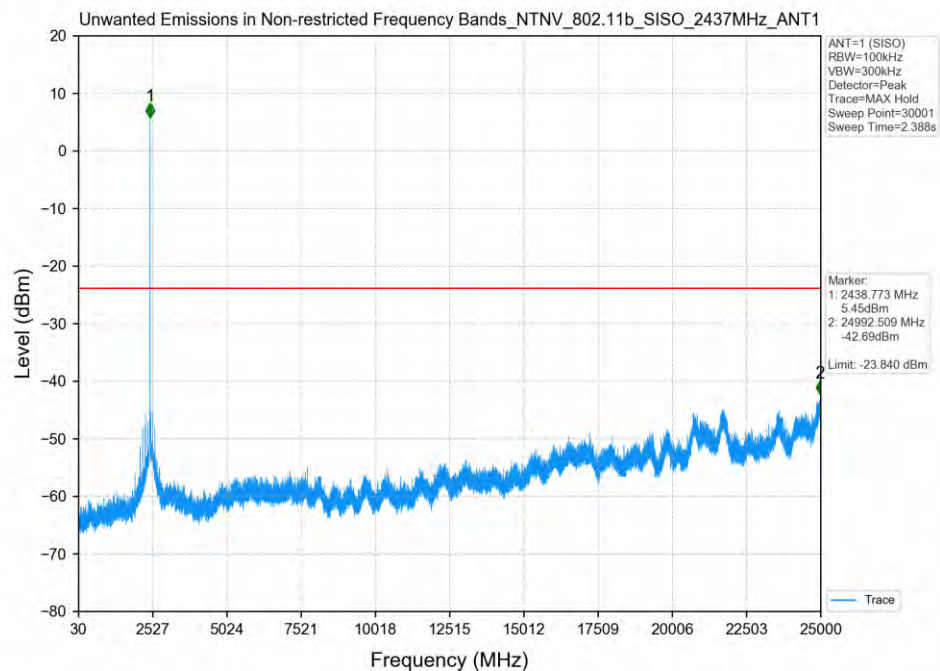
802.11b_2412MHz_SISO_ANT1



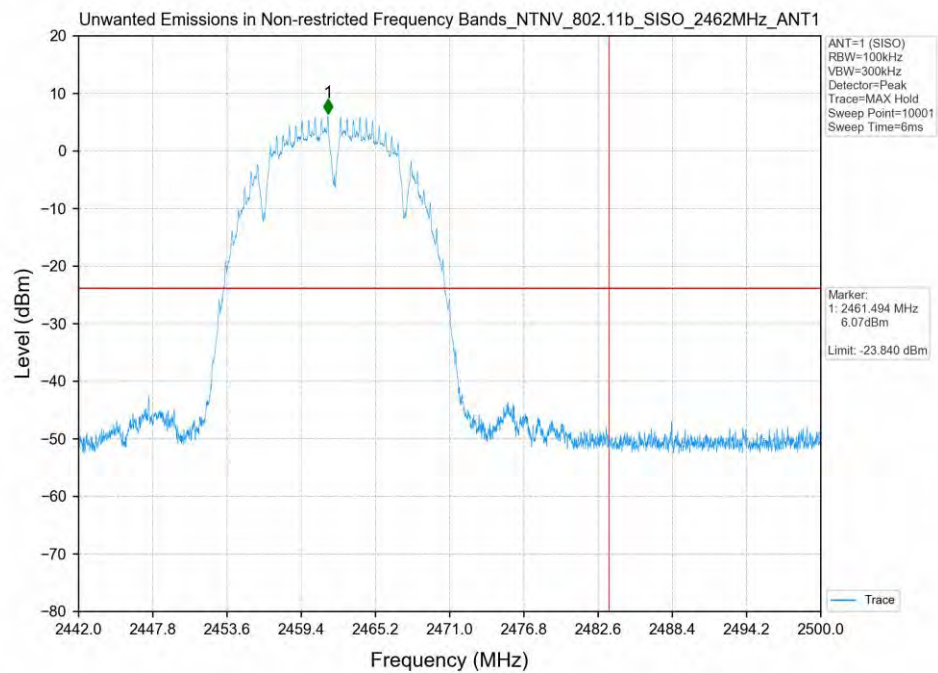
802.11b_2412MHz_SISO_ANT1



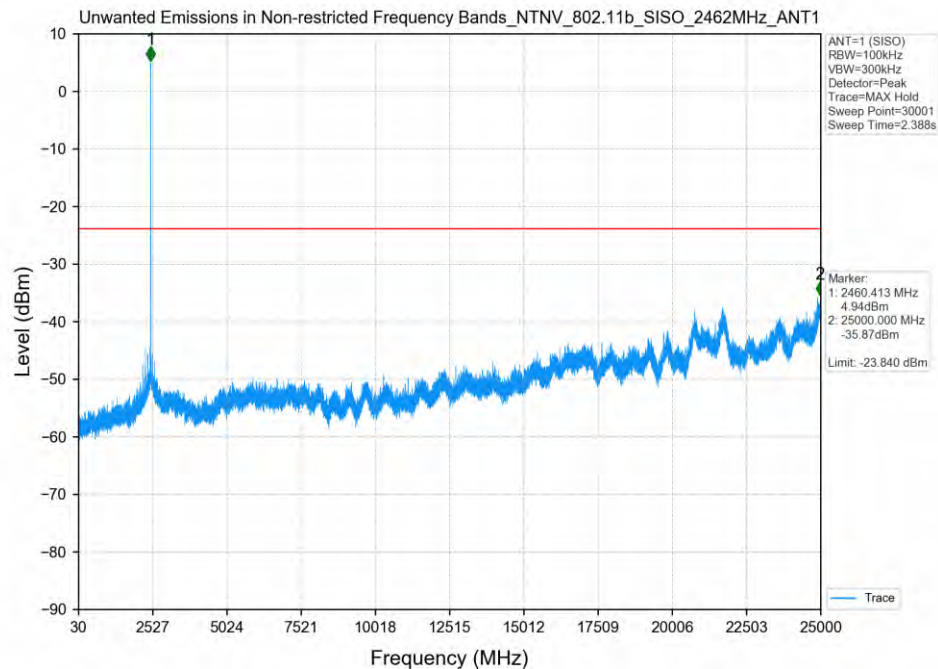
802.11b_2437MHz_SISO_ANT1



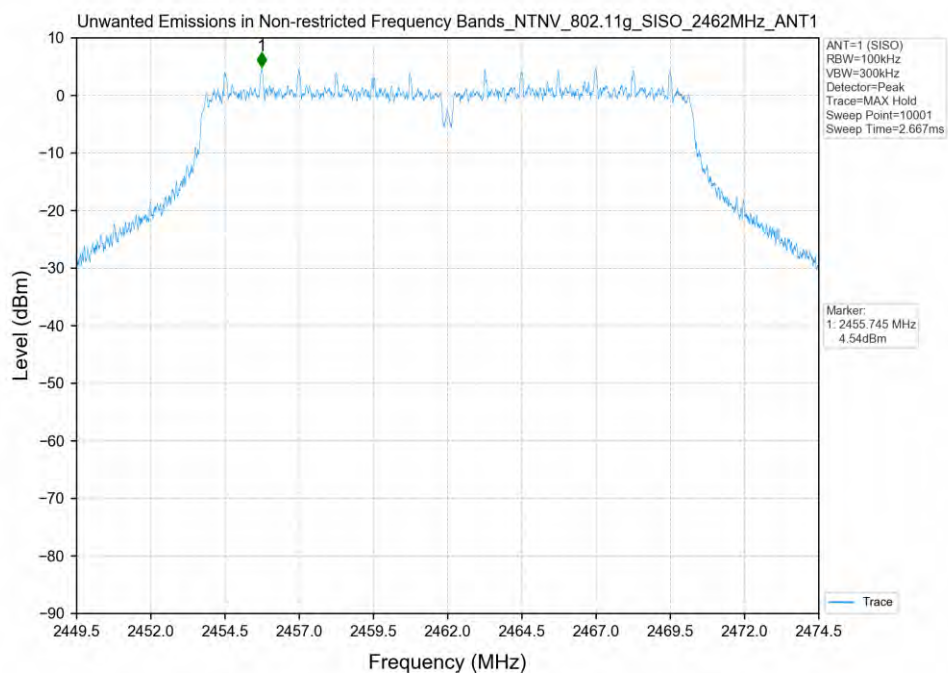
802.11b_2462MHz_SISO_ANT1



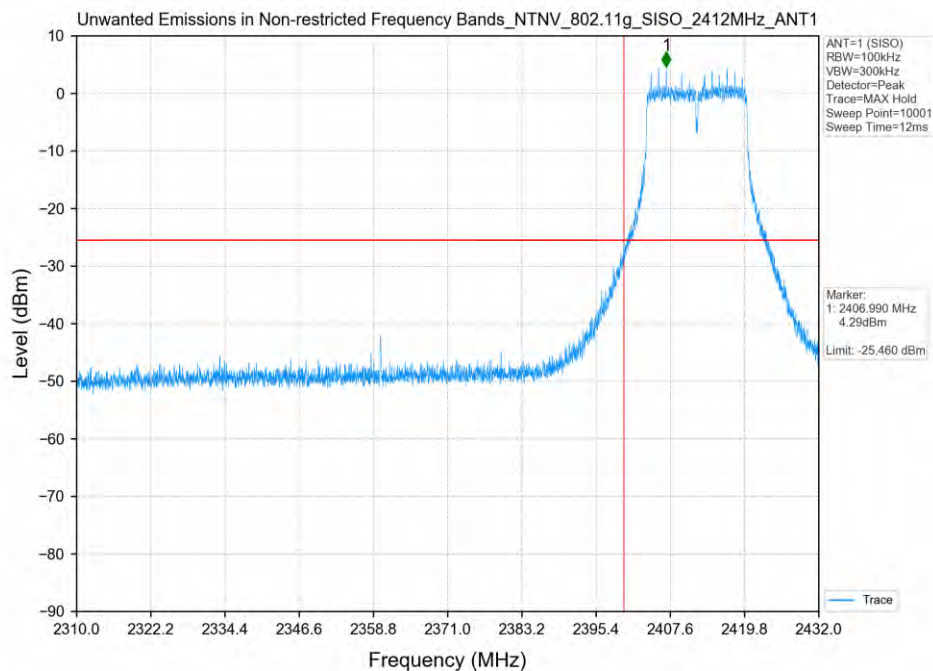
802.11b_2462MHz_SISO_ANT1



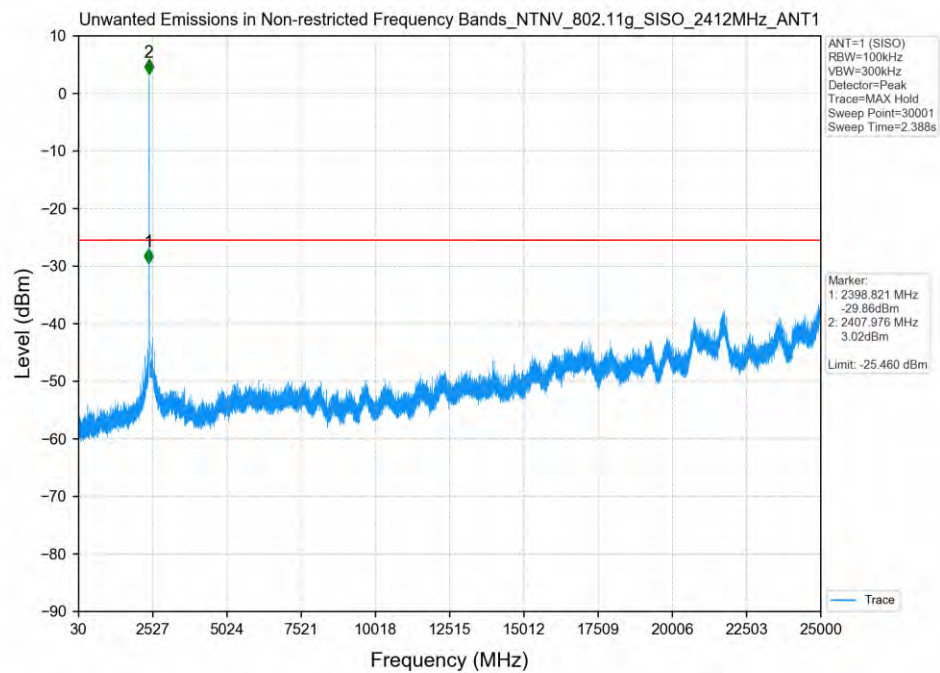
802.11g_SISO_ANT1_REF



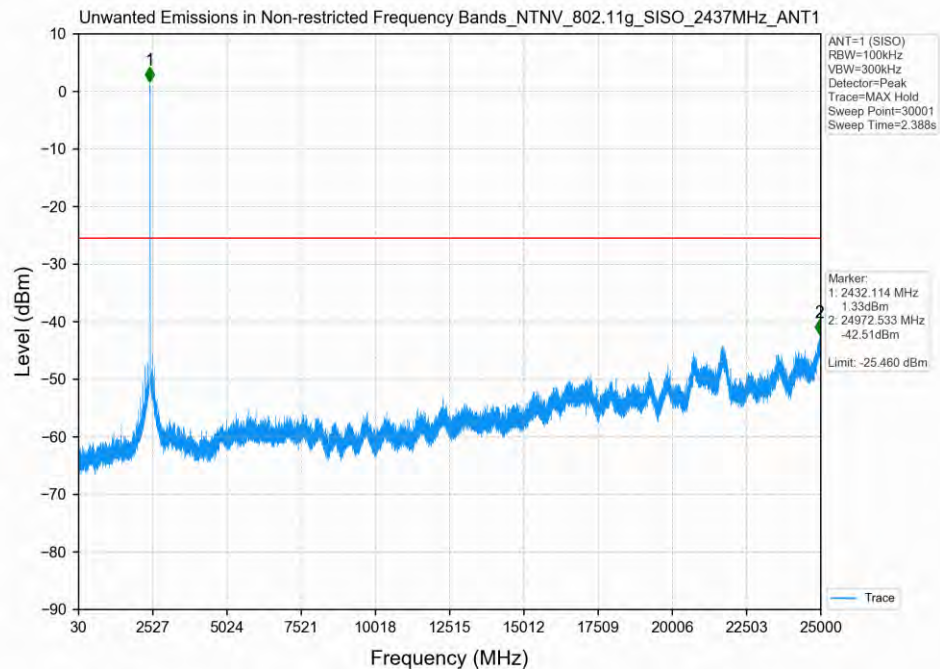
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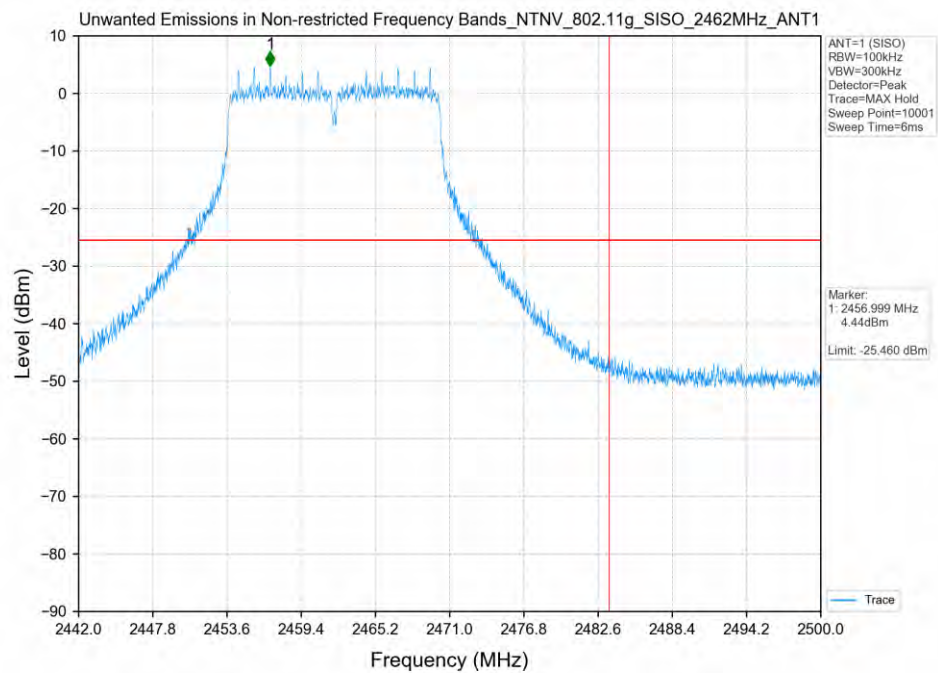
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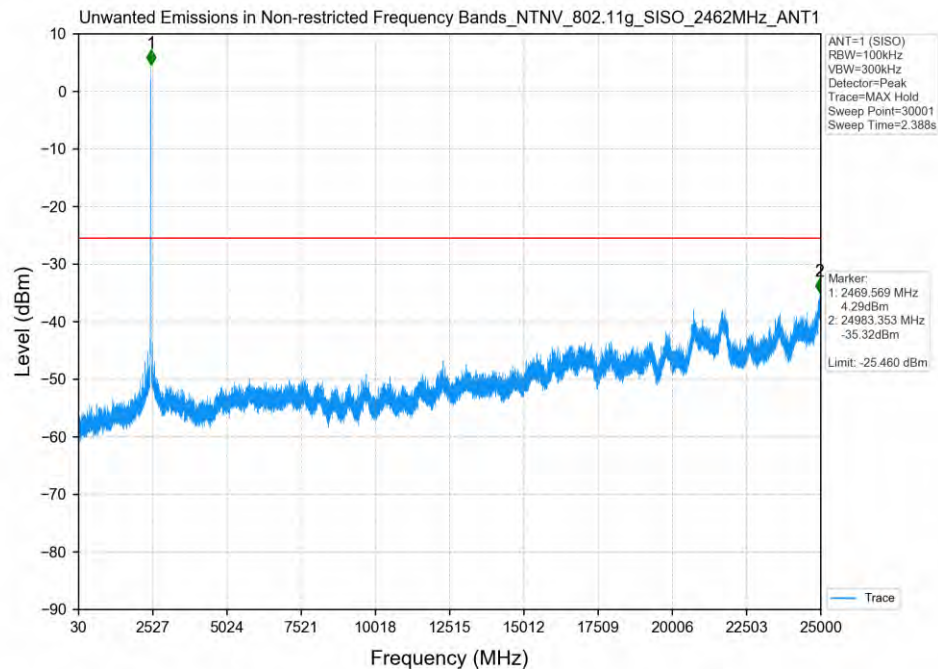
802.11g_2437MHz_SISO_ANT1



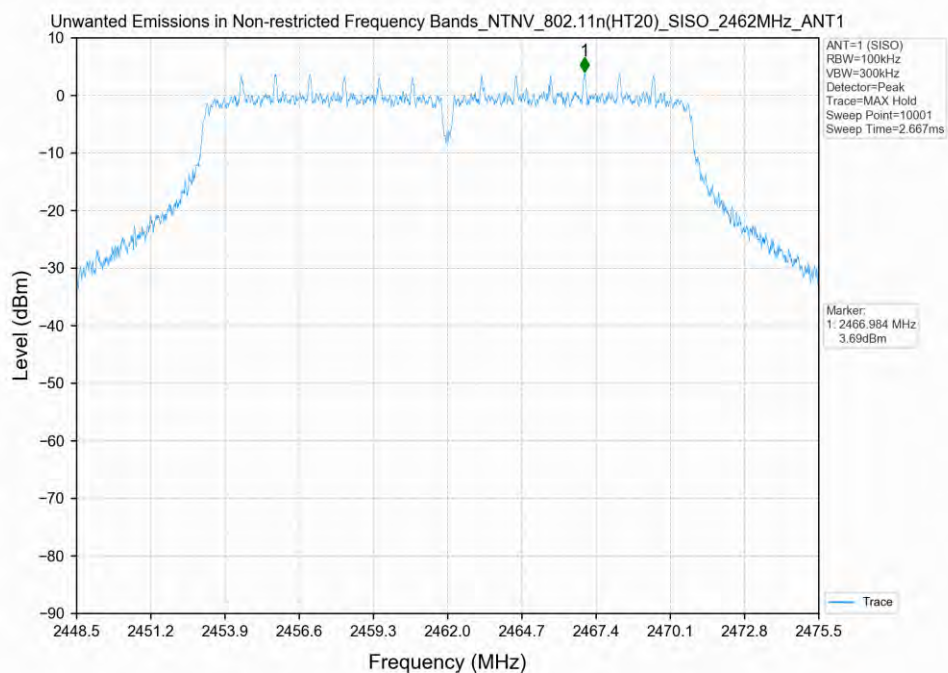
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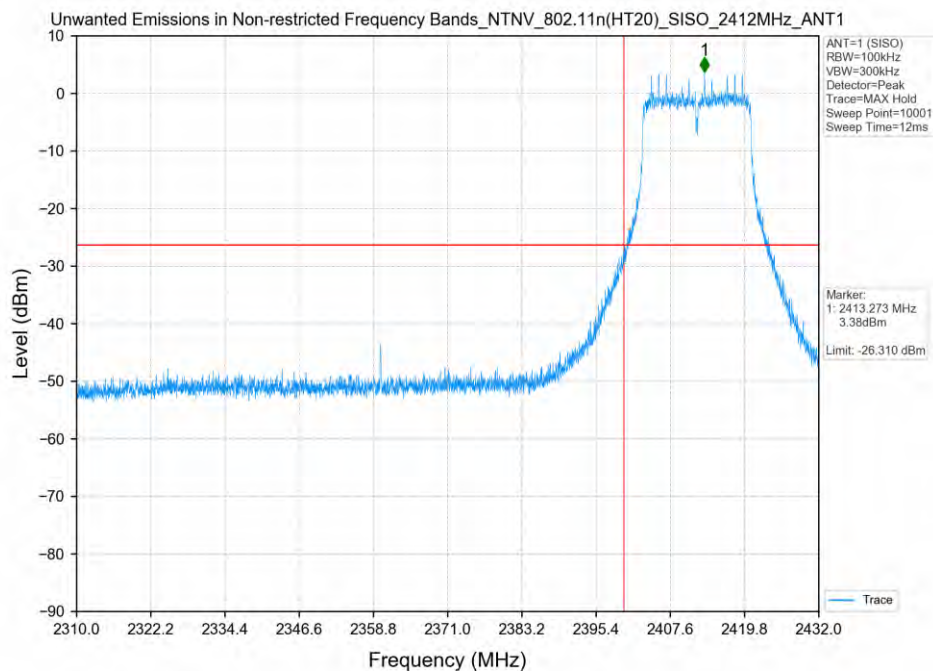
802.11g_2462MHz_SISO_ANT1



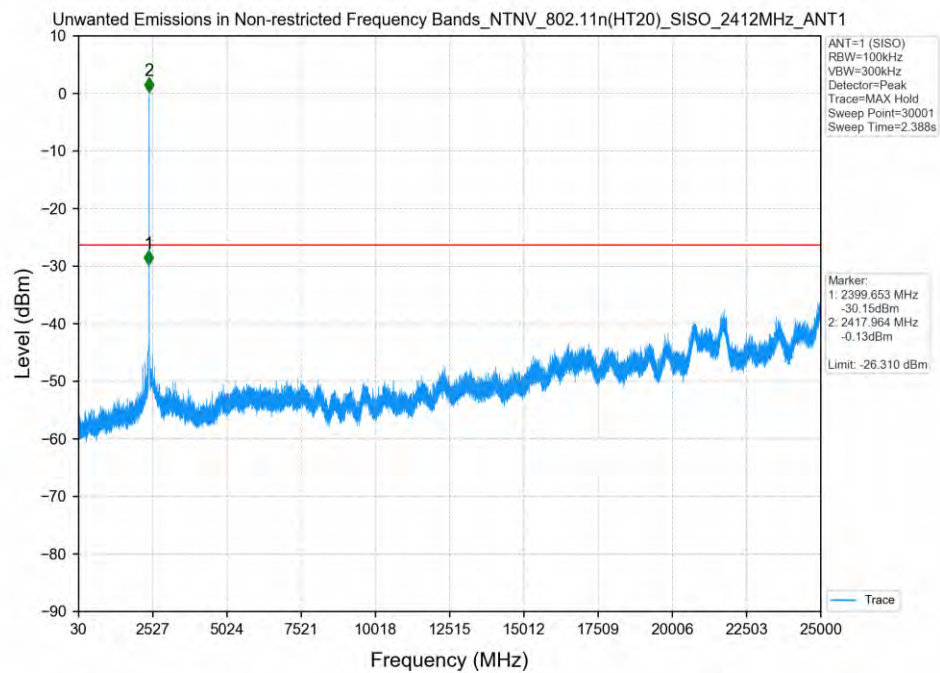
802.11n(HT20)_SISO_ANT1_REF



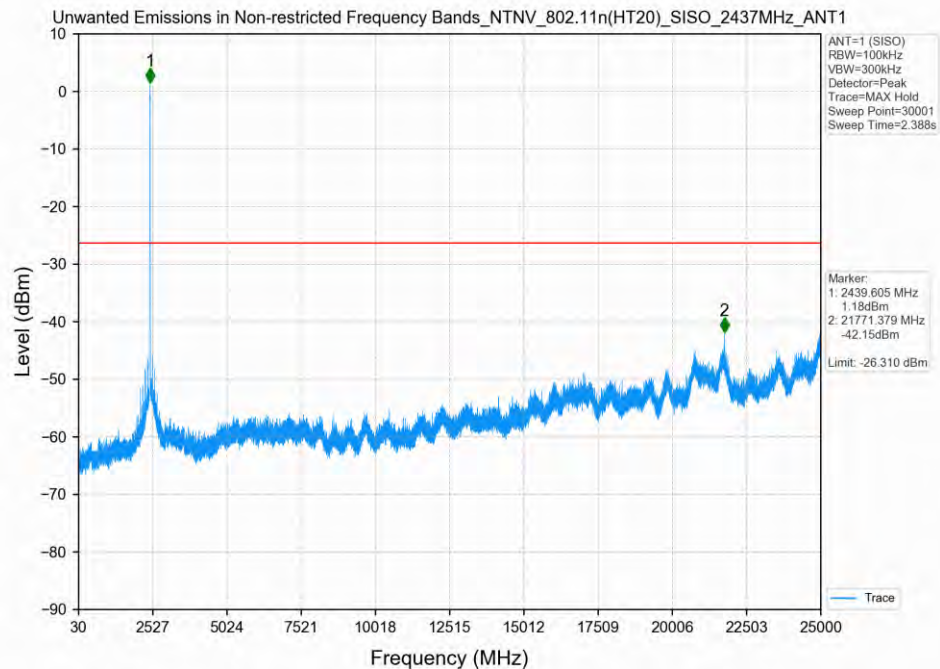
802.11n(HT20)_2412MHz_SISO_ANT1



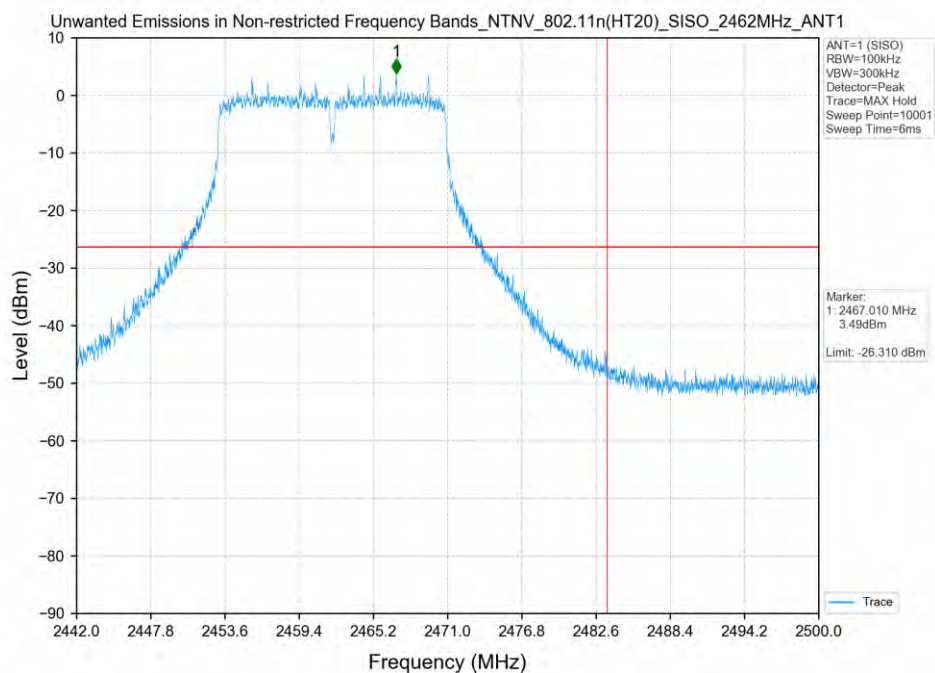
802.11n(HT20)_2412MHz_SISO_ANT1



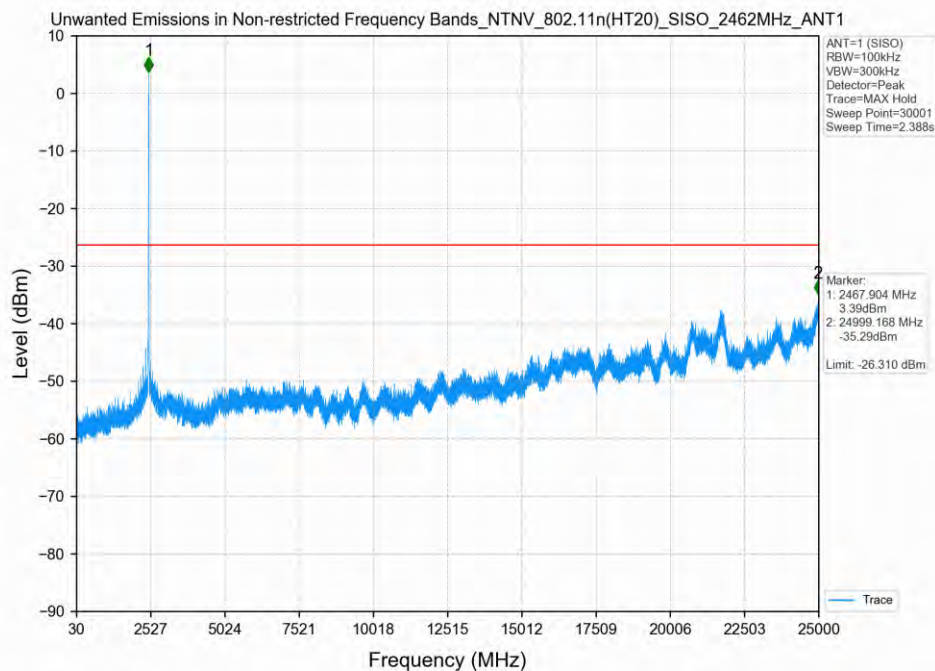
802.11n(HT20)_2437MHz_SISO_ANT1



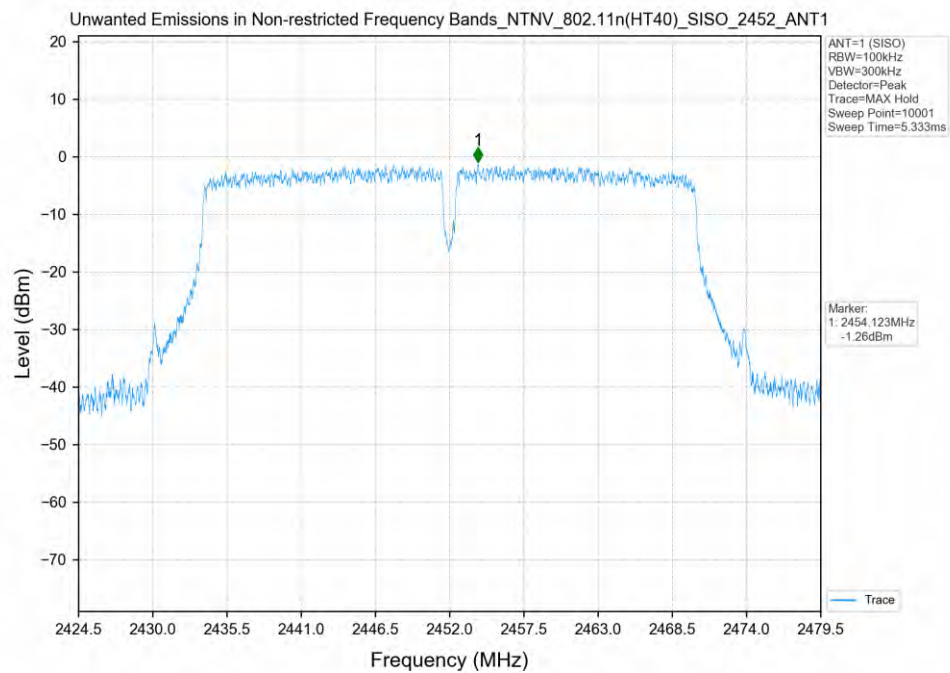
802.11n(HT20)_2462MHz_SISO_ANT1



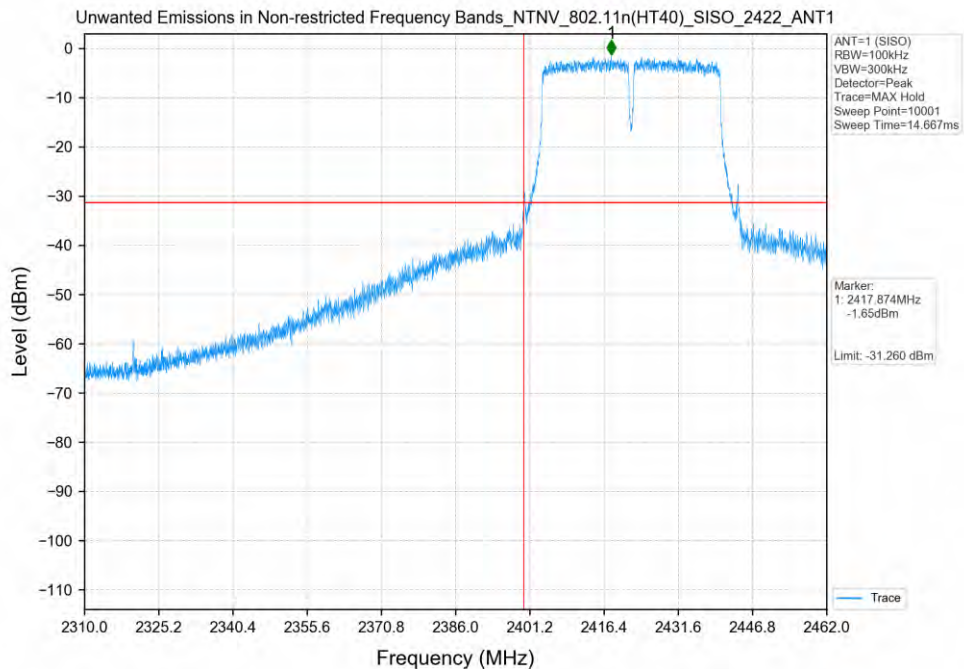
802.11n(HT20)_2462MHz_SISO_ANT1



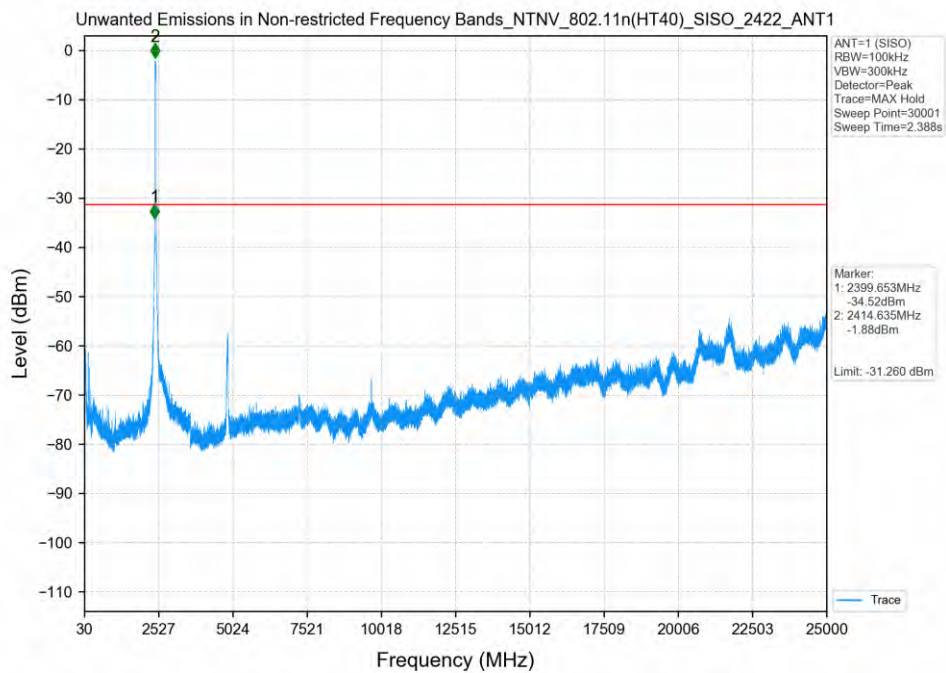
802.11n(HT40)_SISO_ANT1_REF



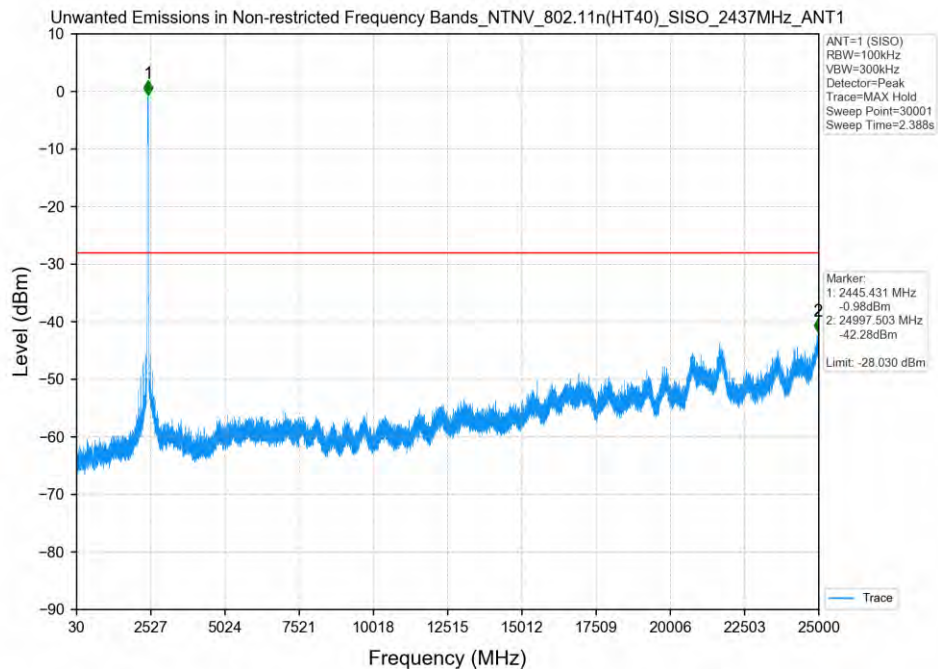
802.11n(HT40)_2422MHz_SISO_ANT1



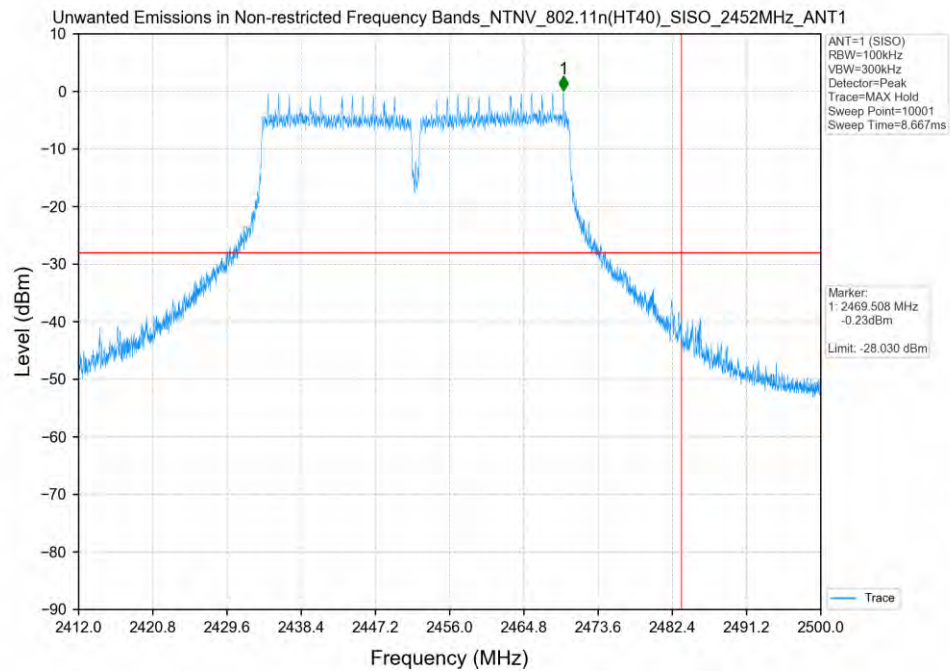
802.11n(HT40)_2422MHz_SISO_ANT1



802.11n(HT40)_2437MHz_SISO_ANT1



802.11n(HT40)_2452MHz_SISO_ANT1



802.11n(HT40)_2452MHz_SISO_ANT1

