



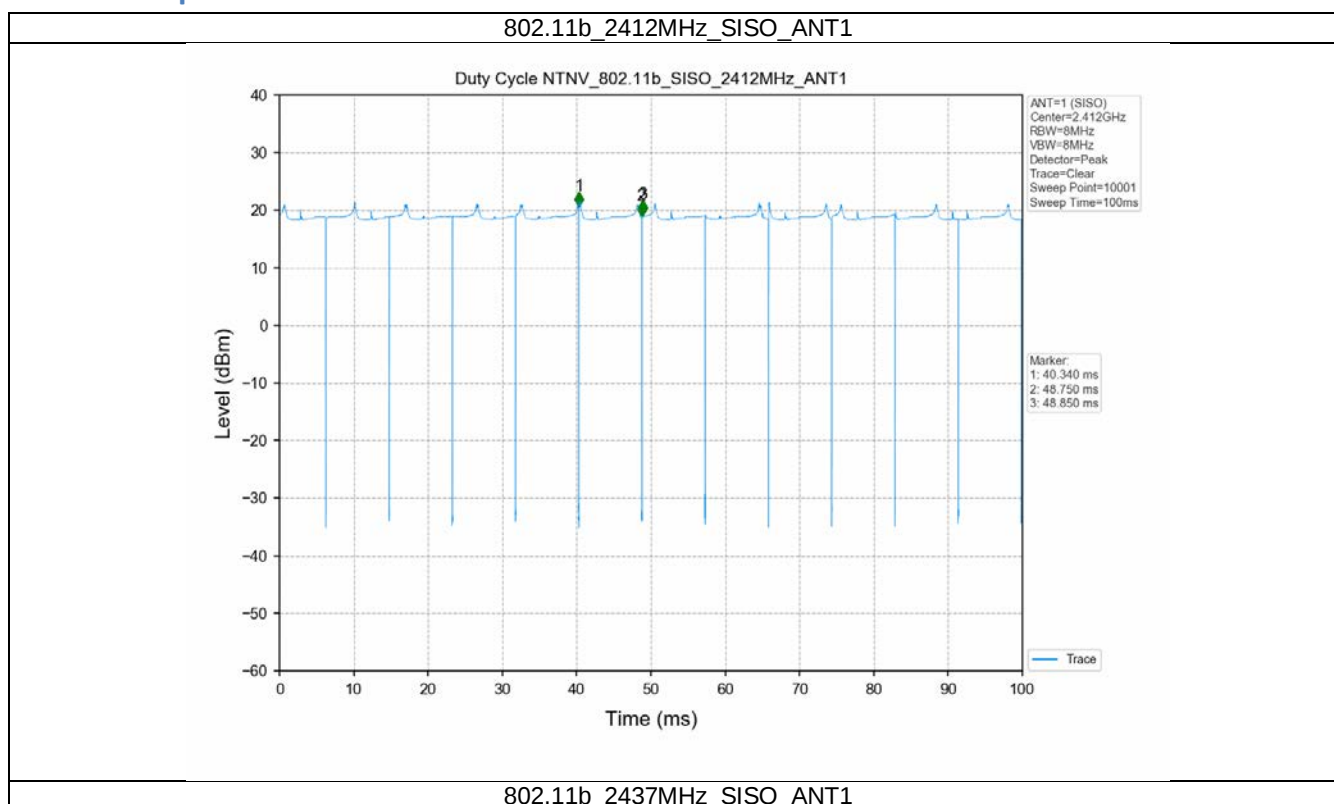
Appendix A for SHEM200300156701

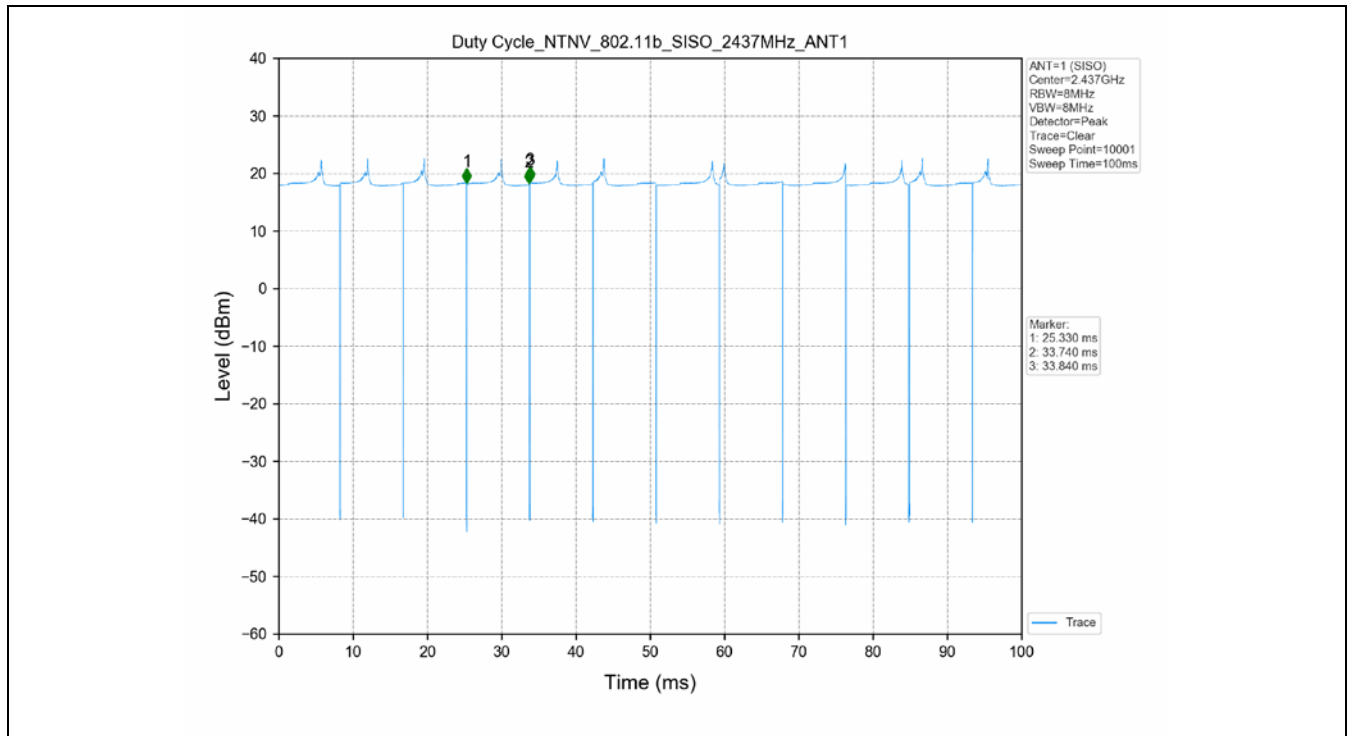
1. Duty Cycle

1.1 Test Result

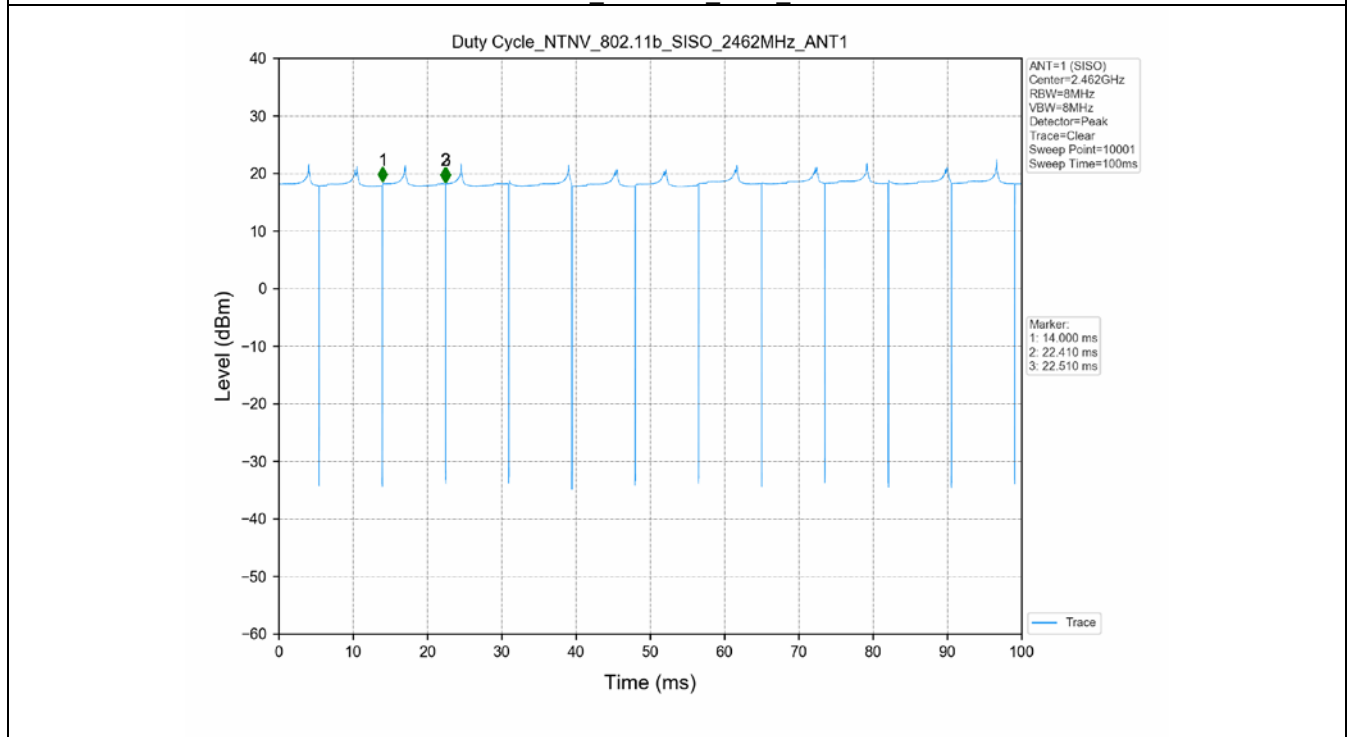
Test Mode	Channel Frequency(MHz)	TX Type	ANT No.	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
802.11b	2412	SISO	1	8.410	8.510	98.82	0.05
	2437	SISO	1	8.410	8.510	98.82	0.05
	2462	SISO	1	8.410	8.510	98.82	0.05
802.11g	2412	SISO	1	1.366	1.468	93.05	0.31
	2437	SISO	1	1.365	1.466	93.11	0.31
	2462	SISO	1	1.364	1.466	93.04	0.31
802.11n(HT20)	2412	SISO	1	1.307	1.411	92.63	0.33
	2437	SISO	1	1.307	1.411	92.63	0.33
	2462	SISO	1	1.308	1.412	92.63	0.33

1.2 Test Graph

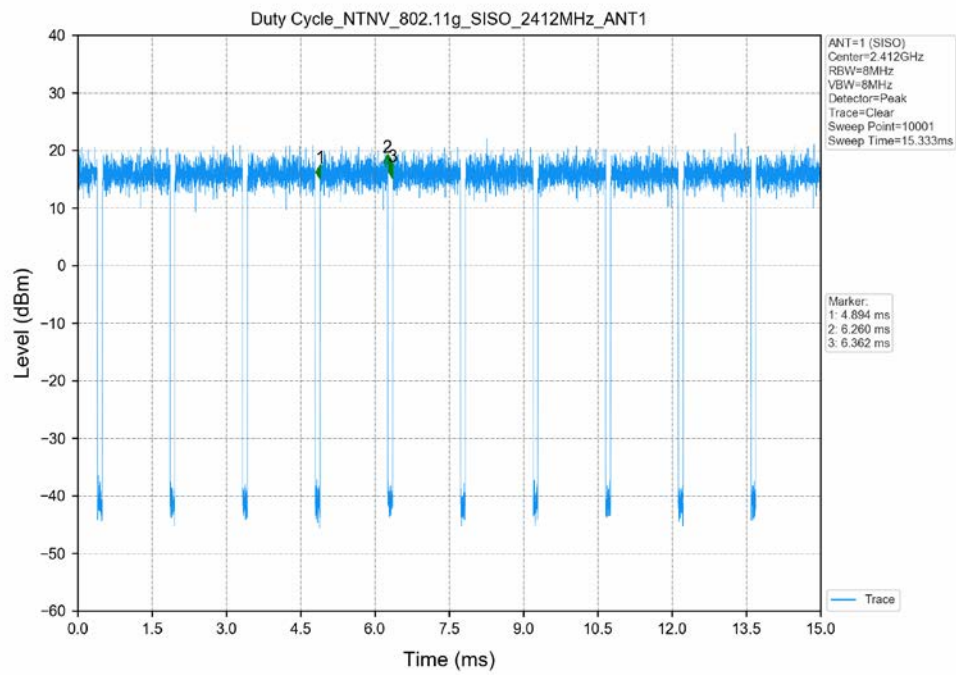




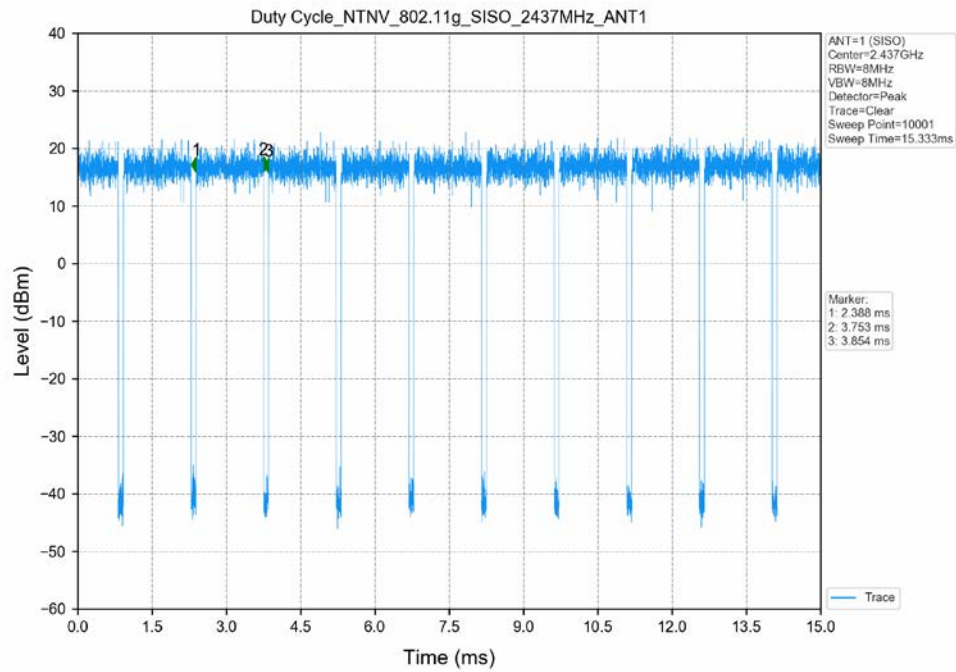
802.11b_2462MHz_SISO_ANT1



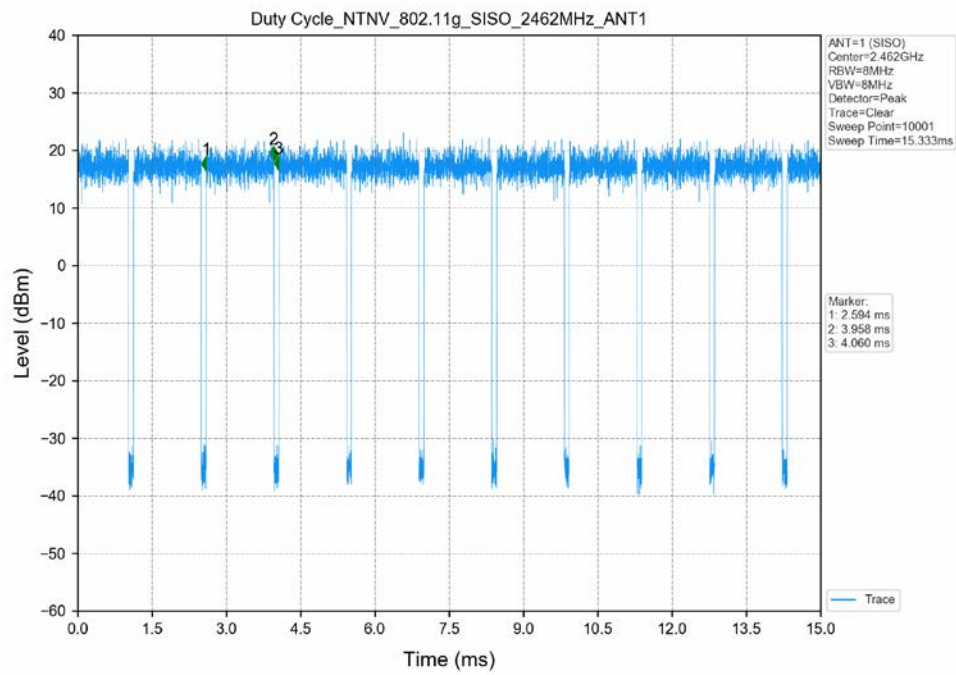
802.11g_2412MHz_SISO_ANT1



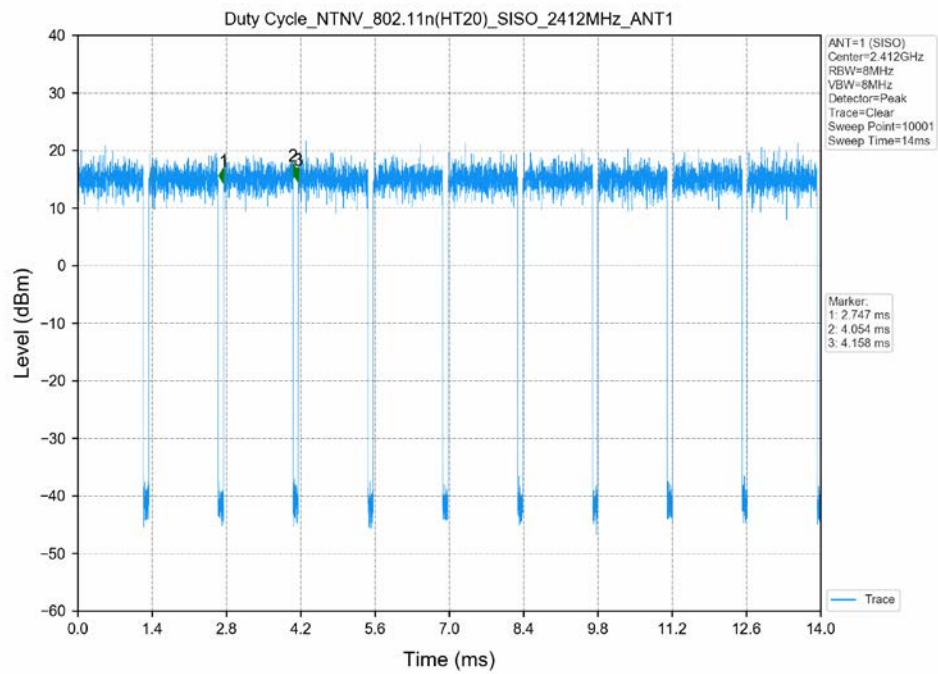
802.11g_2437MHz_SISO_ANT1



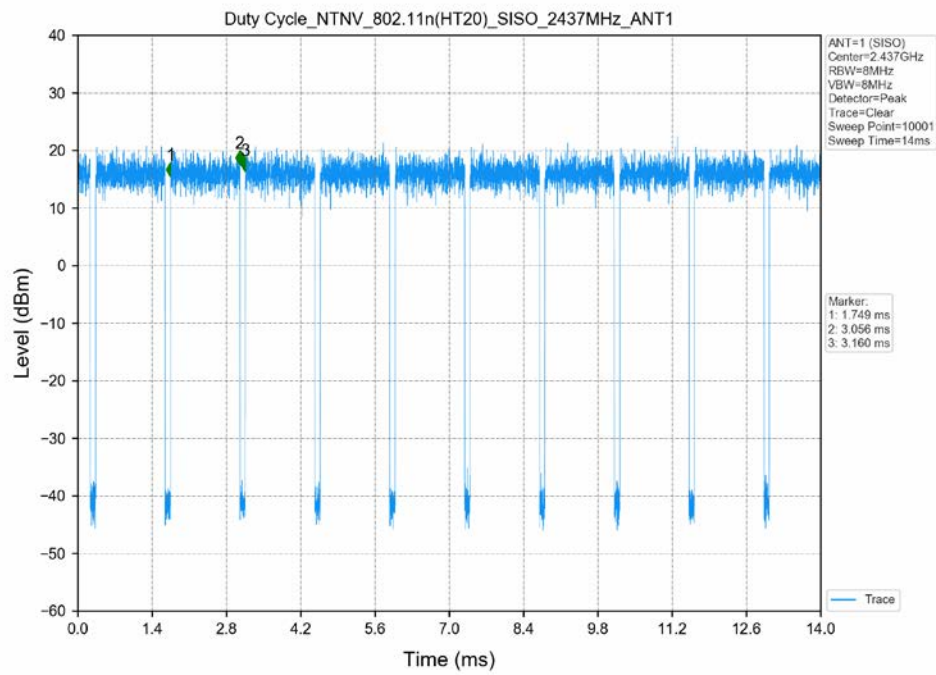
802.11g_2462MHz_SISO_ANT1



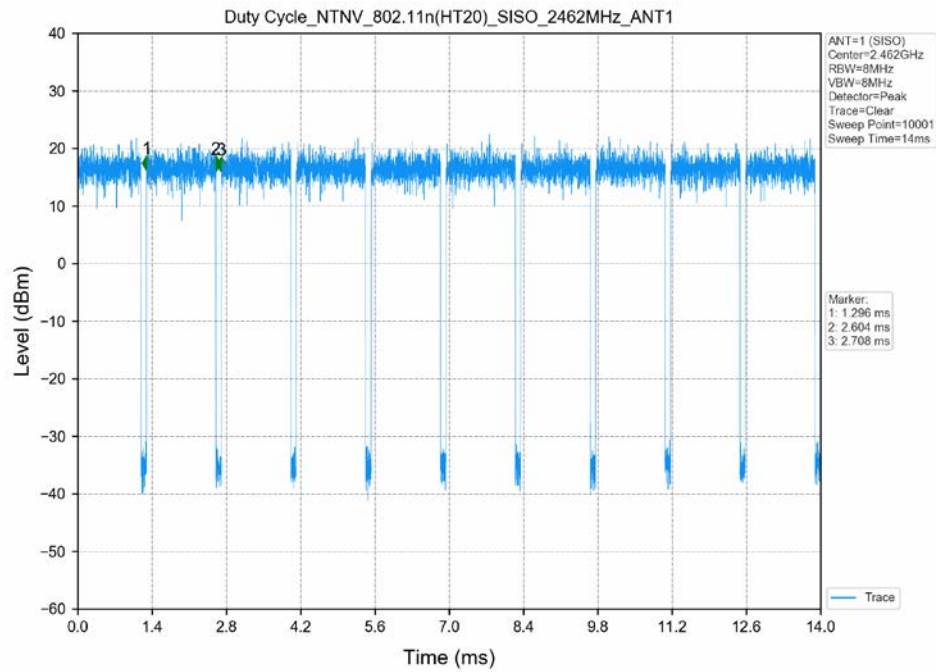
802.11n(HT20)_2412MHz_SISO_ANT1



802.11n(HT20)_2437MHz_SISO_ANT1



802.11n(HT20)_2462MHz_SISO_ANT1





2. Bandwidth

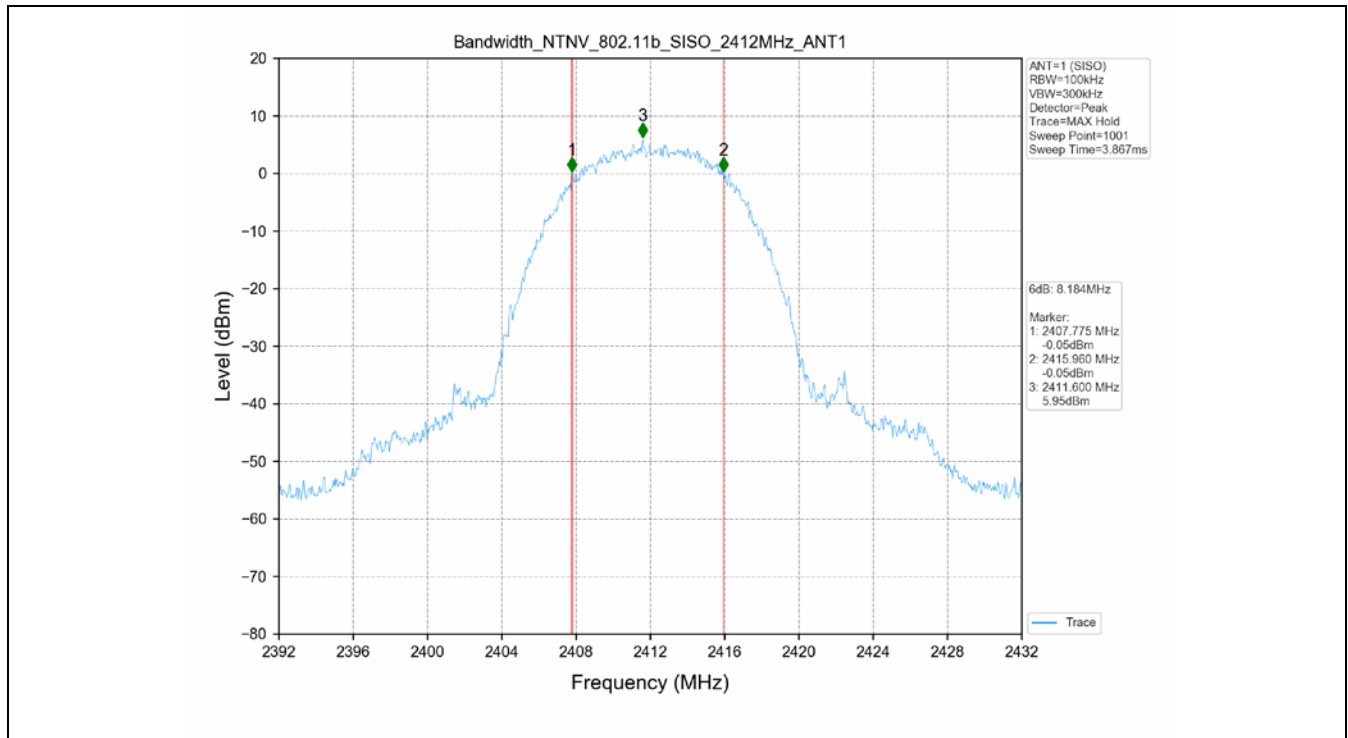
2.1 Test Result

Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11b	2412	SISO	1	8.184	≥0.5	PASS
	2437	SISO	1	8.086	≥0.5	PASS
	2462	SISO	1	8.110	≥0.5	PASS
802.11g	2412	SISO	1	16.052	≥0.5	PASS
	2437	SISO	1	16.336	≥0.5	PASS
	2462	SISO	1	15.833	≥0.5	PASS
802.11n(HT20)	2412	SISO	1	16.387	≥0.5	PASS
	2437	SISO	1	16.651	≥0.5	PASS
	2462	SISO	1	15.475	≥0.5	PASS

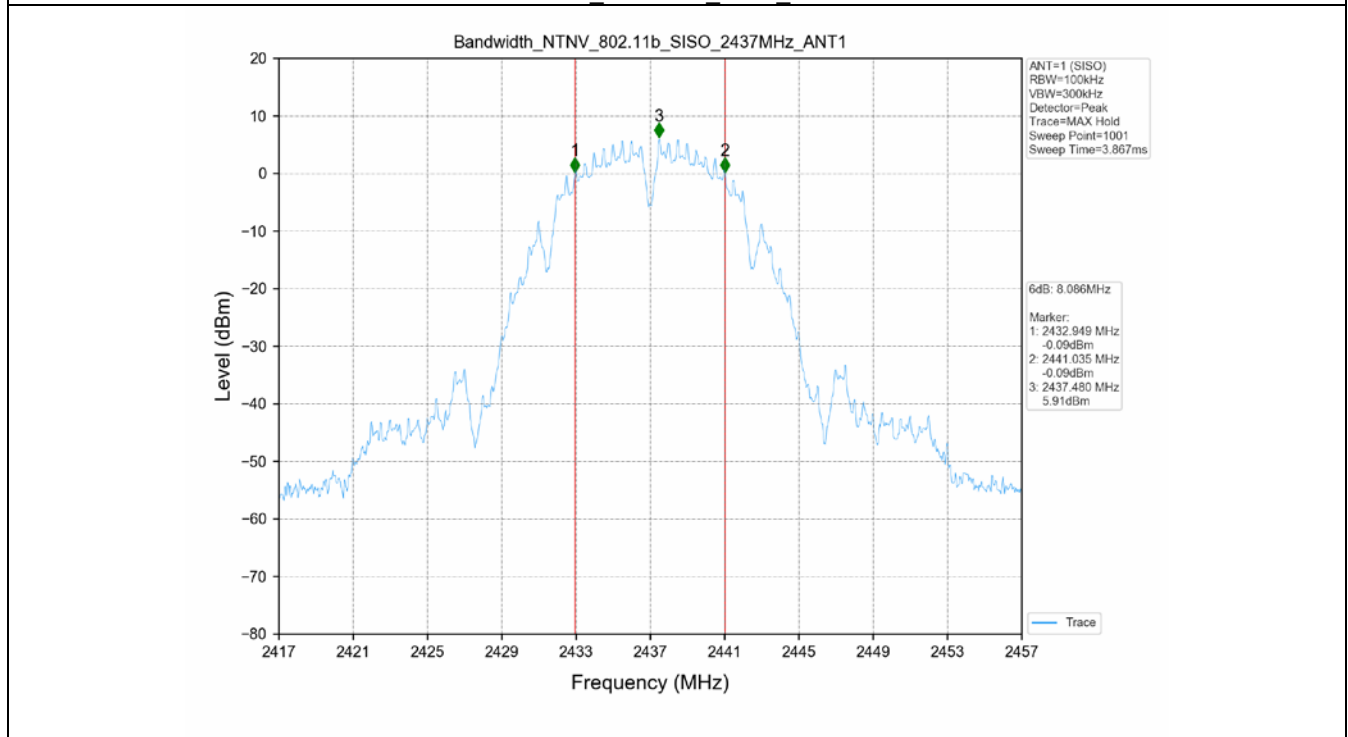
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11b	2412	SISO	1	11.244	Only for Report Use
	2437	SISO	1	11.518	Only for Report Use
	2462	SISO	1	11.597	Only for Report Use
802.11g	2412	SISO	1	16.955	Only for Report Use
	2437	SISO	1	17.005	Only for Report Use
	2462	SISO	1	16.837	Only for Report Use
802.11n(HT20)	2412	SISO	1	17.995	Only for Report Use
	2437	SISO	1	17.954	Only for Report Use
	2462	SISO	1	17.859	Only for Report Use

2.2 Test Graph - 6dB Bandwidth

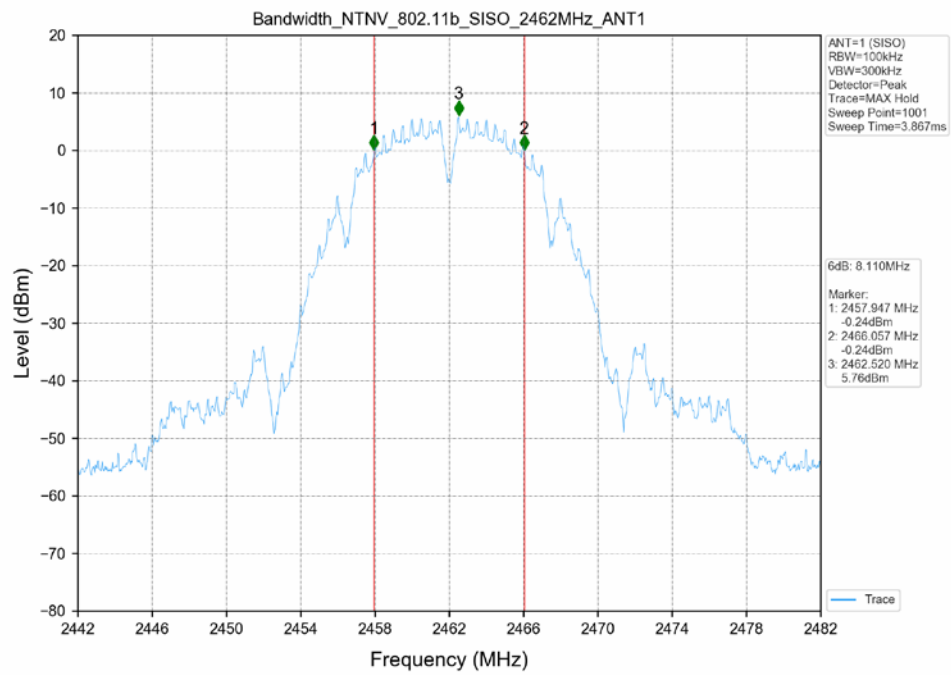
802.11b_2412MHz_SISO_ANT1



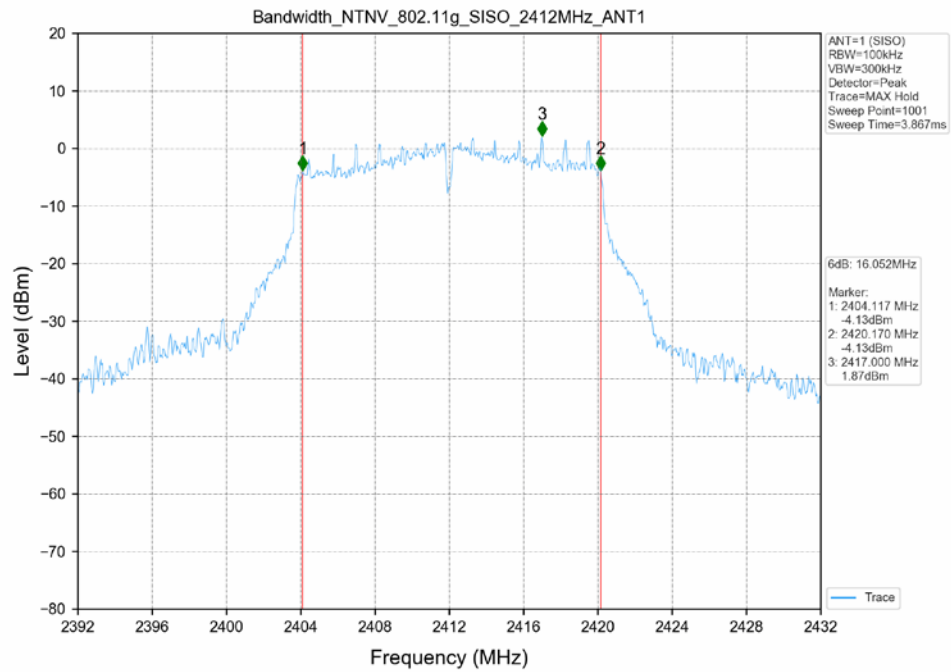
802.11b_2437MHz_SISO_ANT1



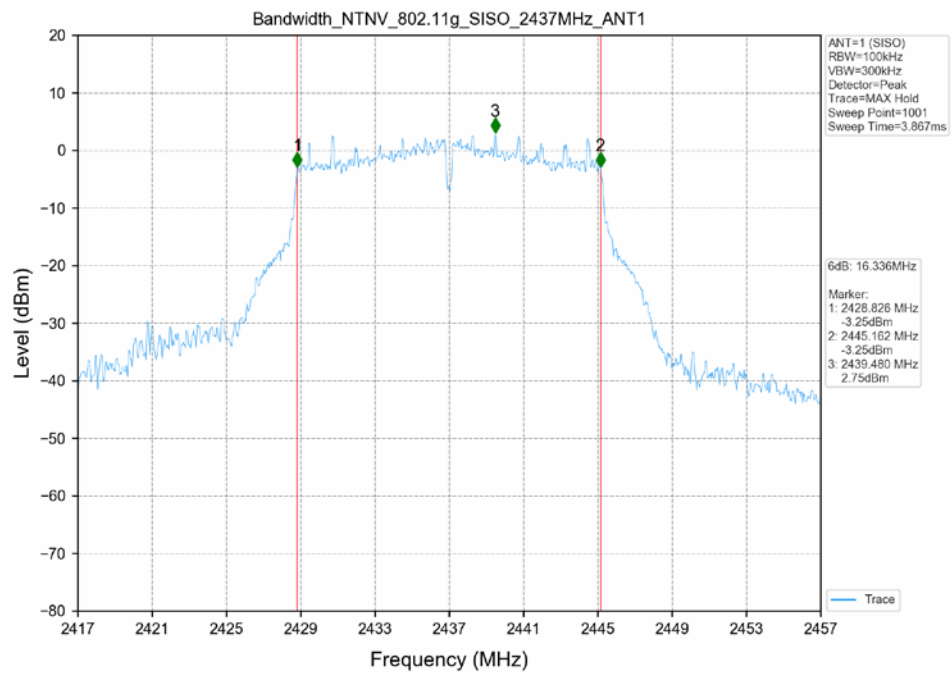
802.11b_2462MHz_SISO_ANT1



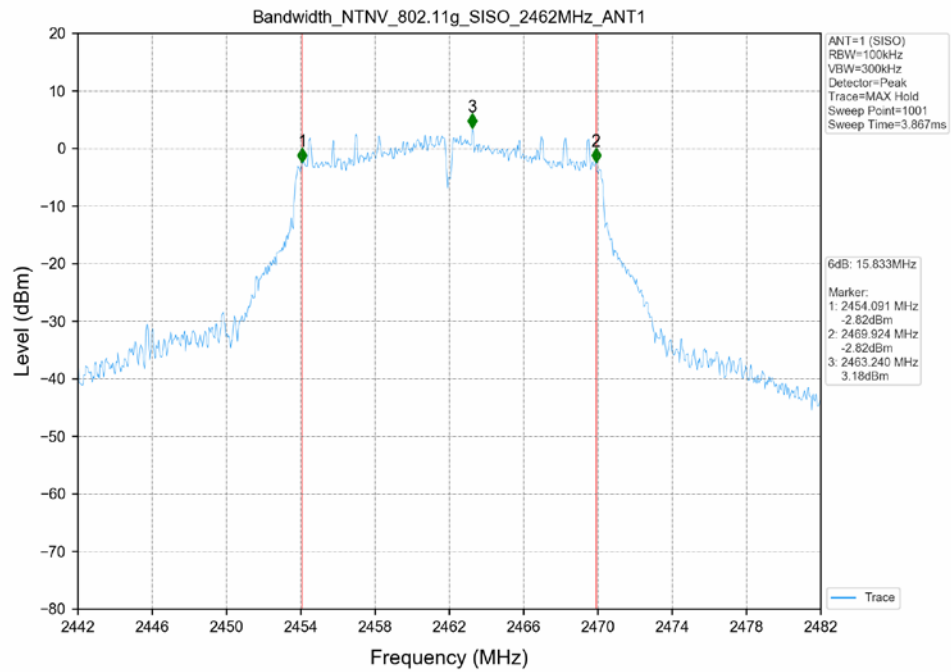
802.11g_2412MHz_SISO_ANT1



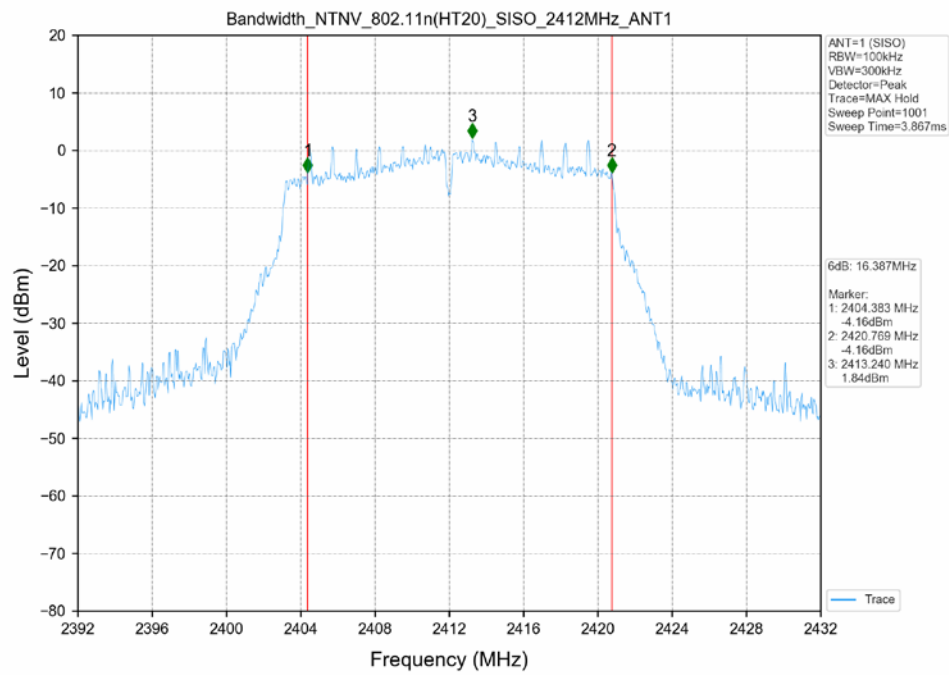
802.11g_2437MHz_SISO_ANT1



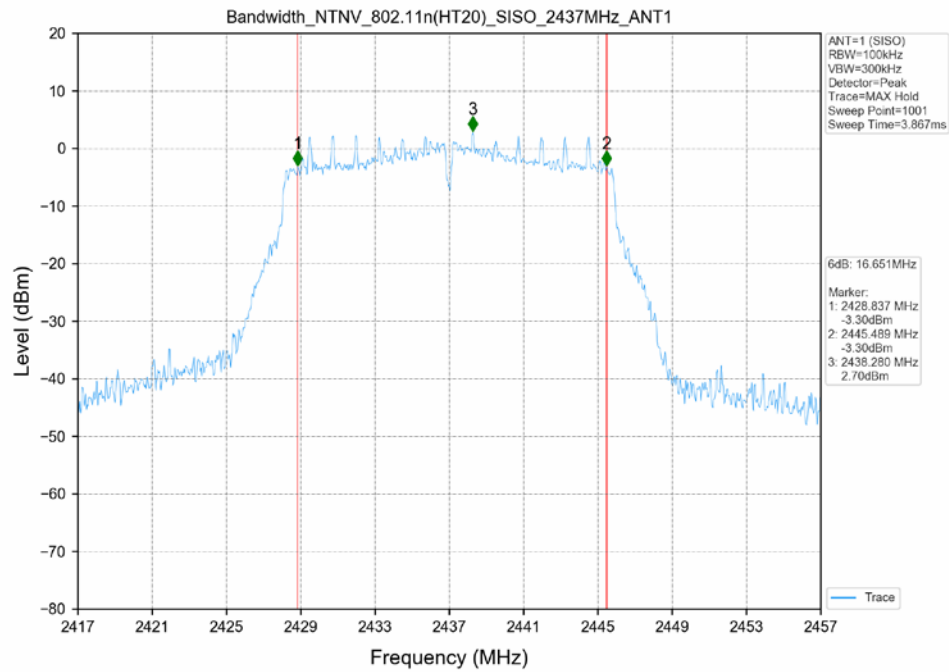
802.11g_2462MHz_SISO_ANT1



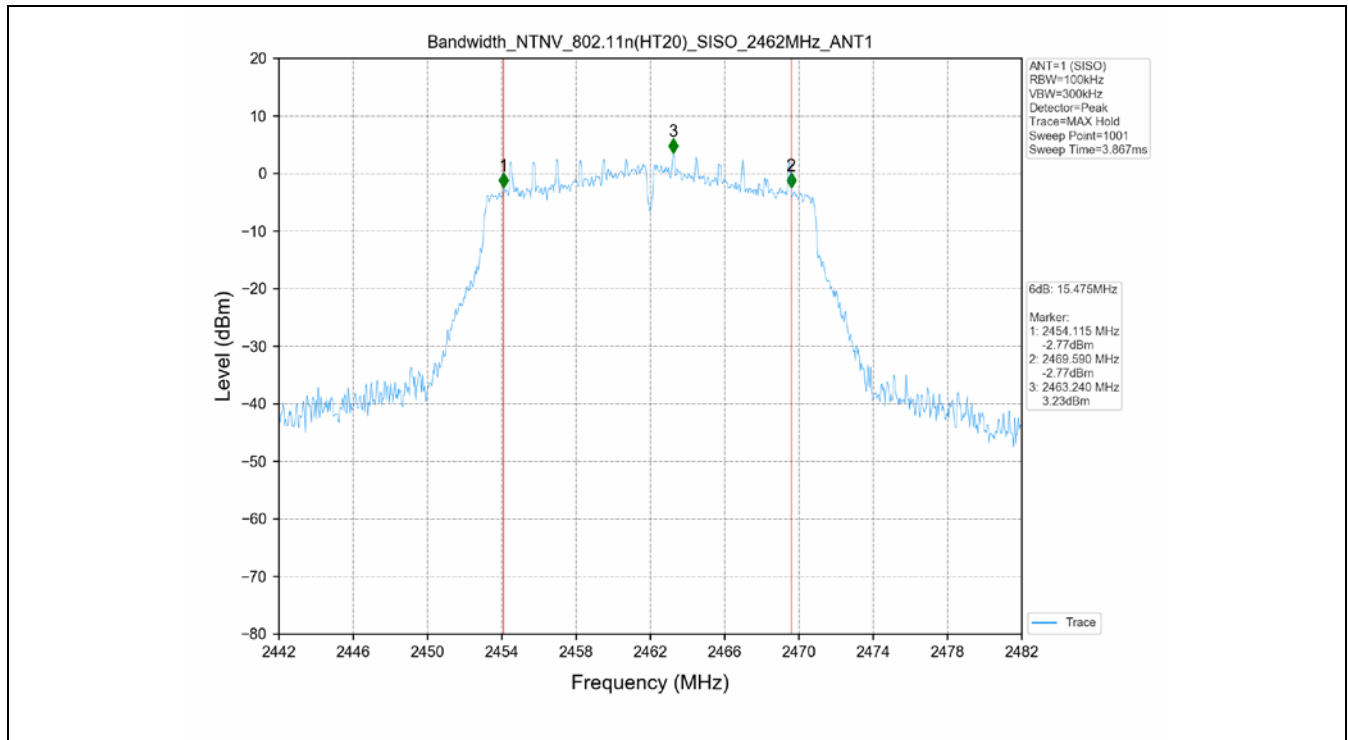
802.11n(HT20)_2412MHz_SISO_ANT1



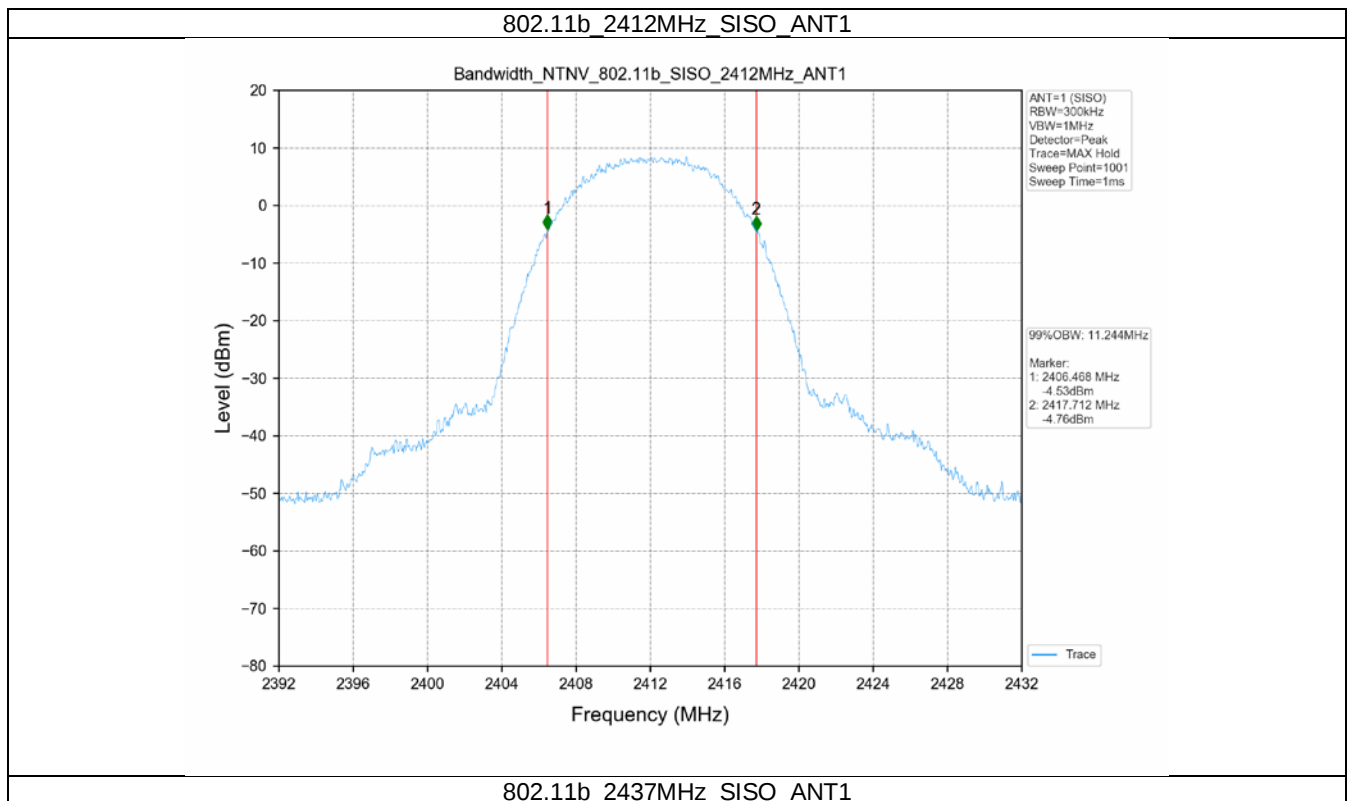
802.11n(HT20)_2437MHz_SISO_ANT1

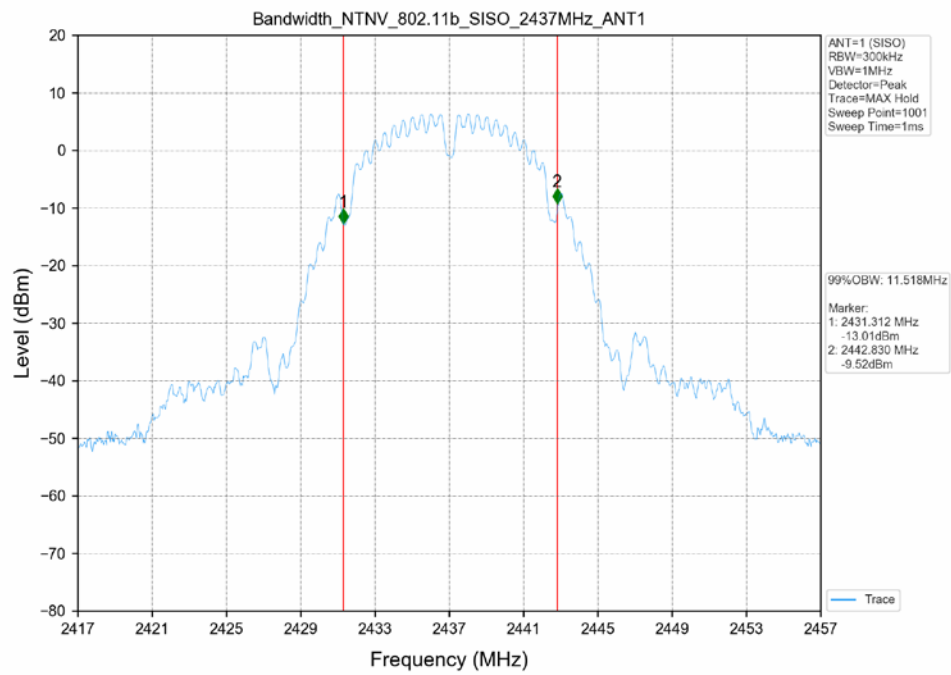


802.11n(HT20)_2462MHz_SISO_ANT1

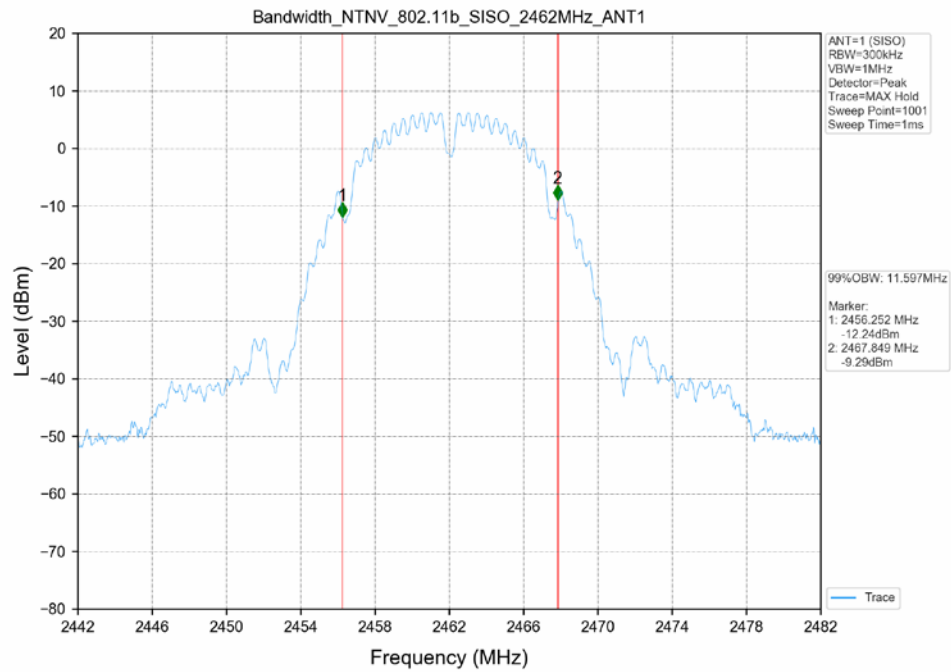


2.3 Test Graph - 99% Occupied Bandwidth

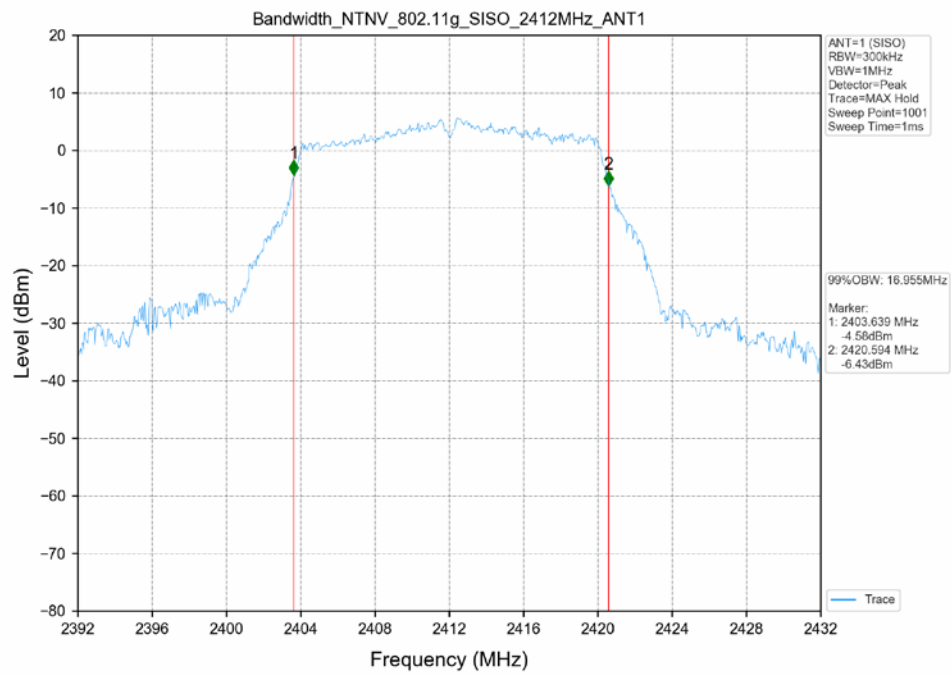




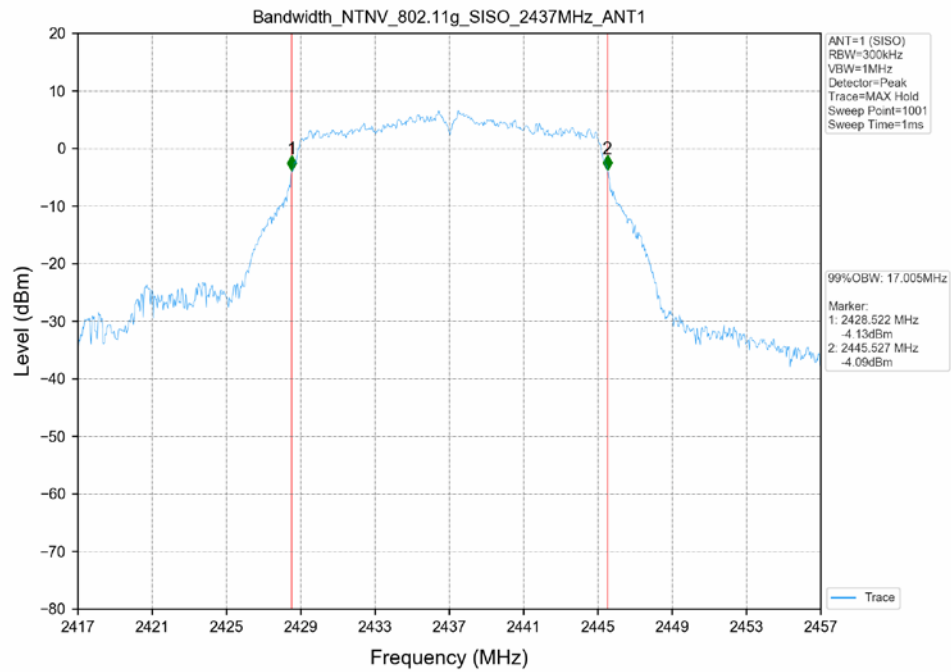
802.11b_2462MHz_SISO_ANT1



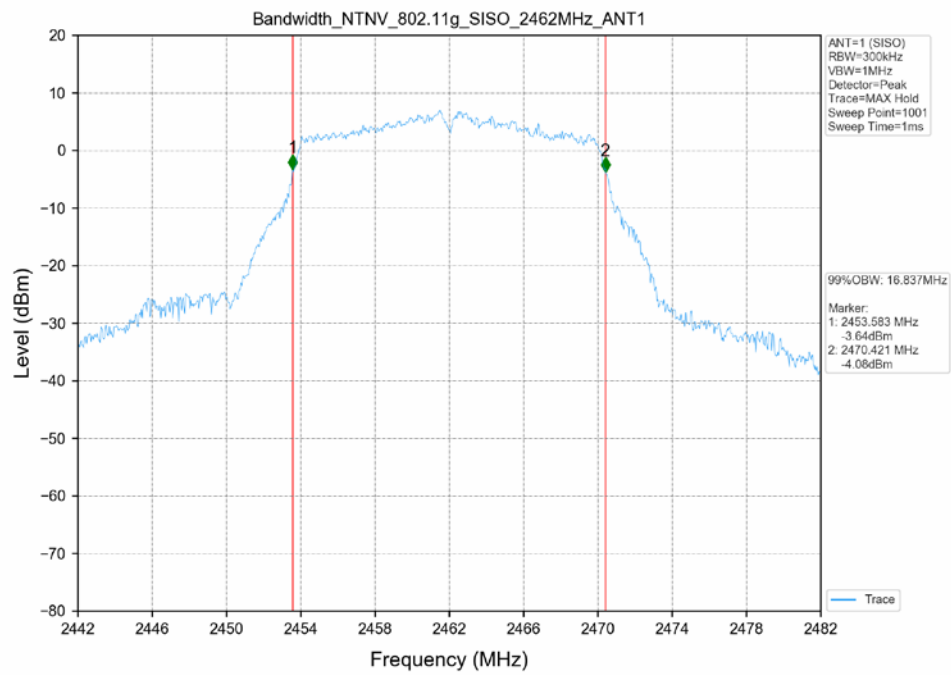
802.11g_2412MHz_SISO_ANT1



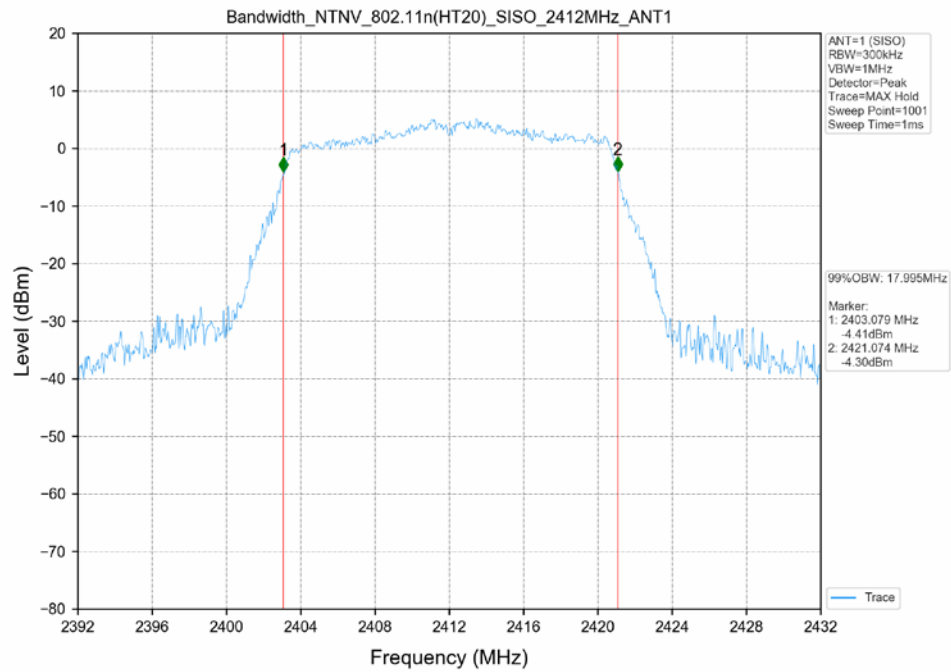
802.11g_2437MHz_SISO_ANT1



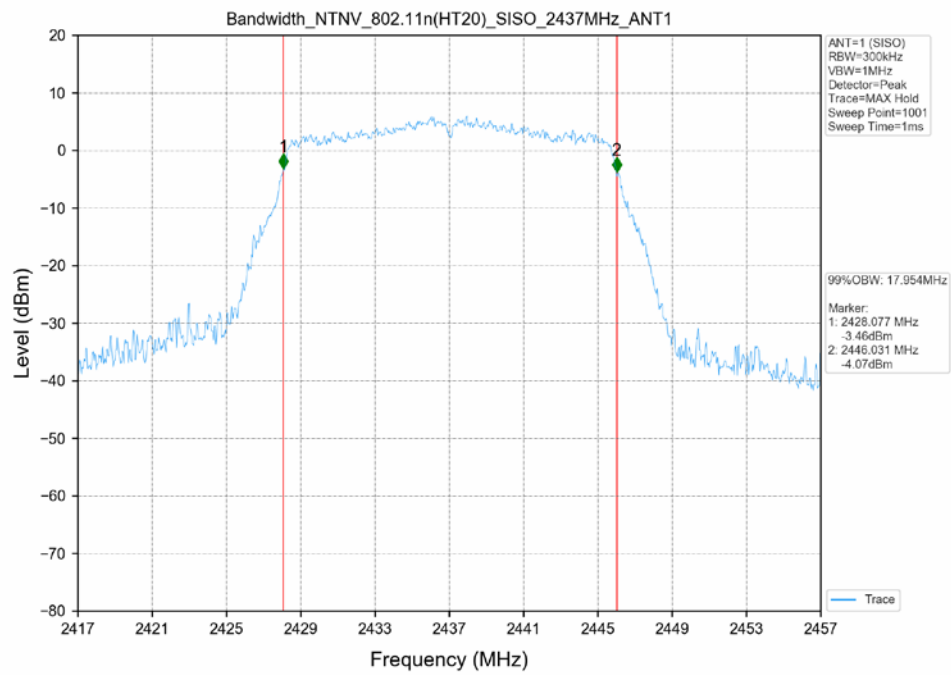
802.11g_2462MHz_SISO_ANT1



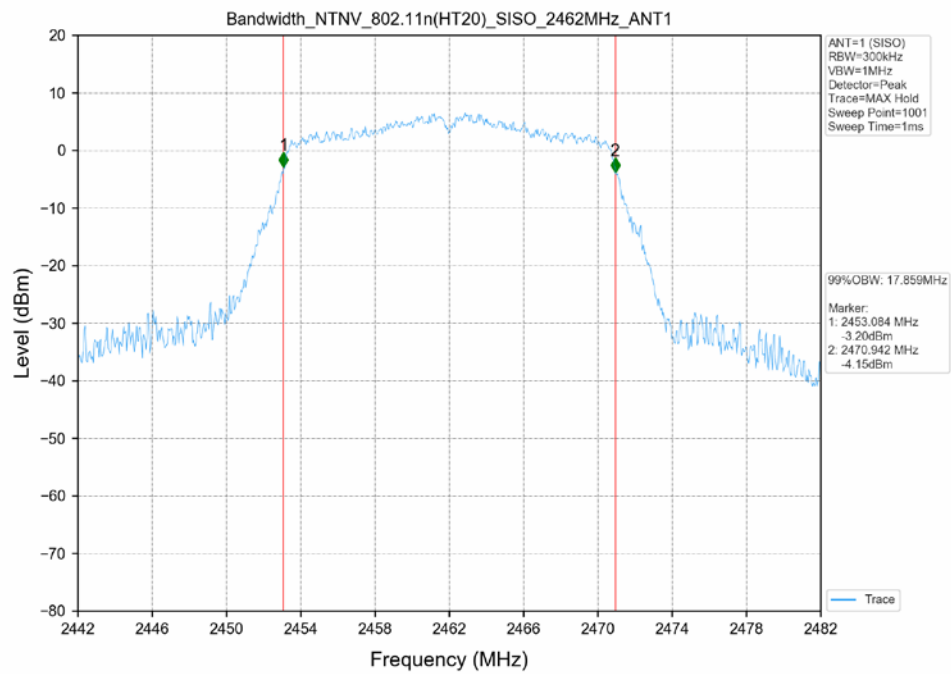
802.11n(HT20)_2412MHz_SISO_ANT1



802.11n(HT20)_2437MHz_SISO_ANT1



802.11n(HT20)_2462MHz_SISO_ANT1



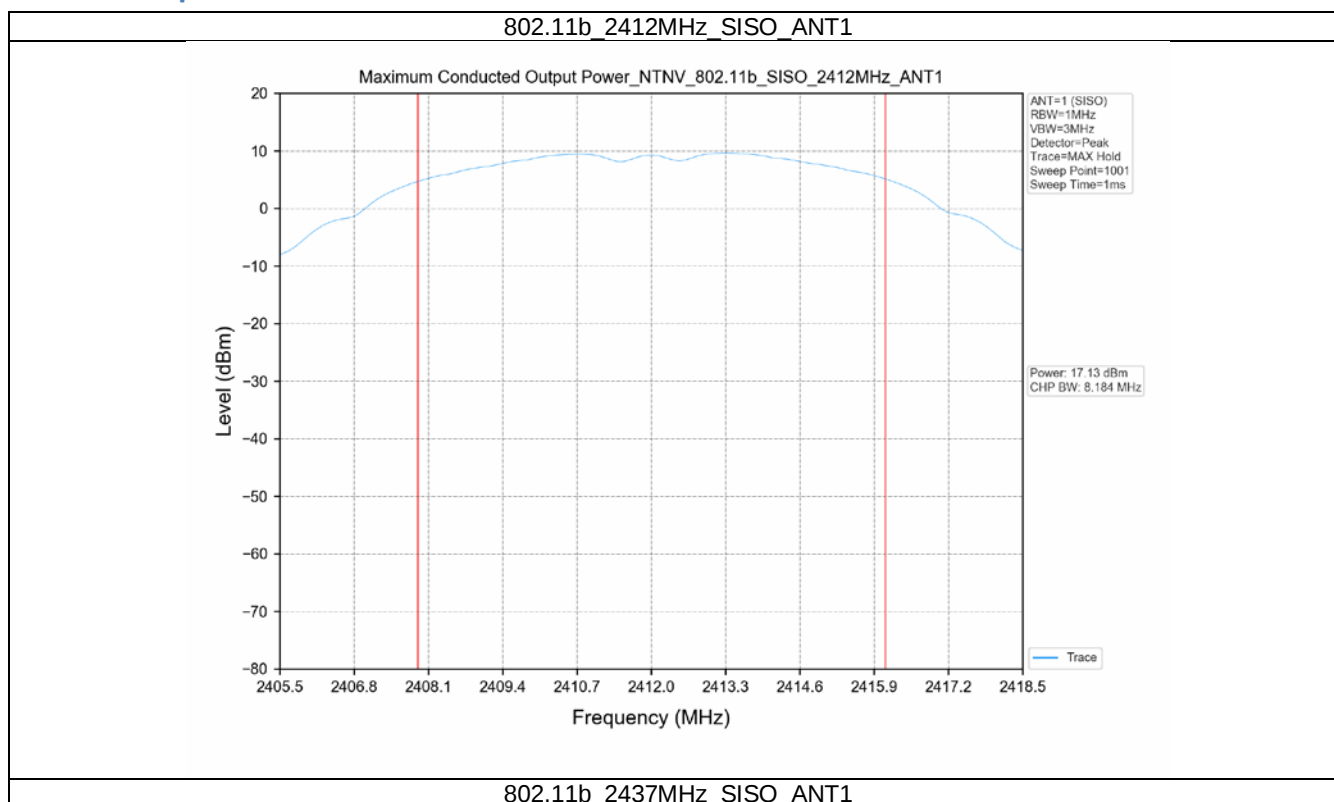


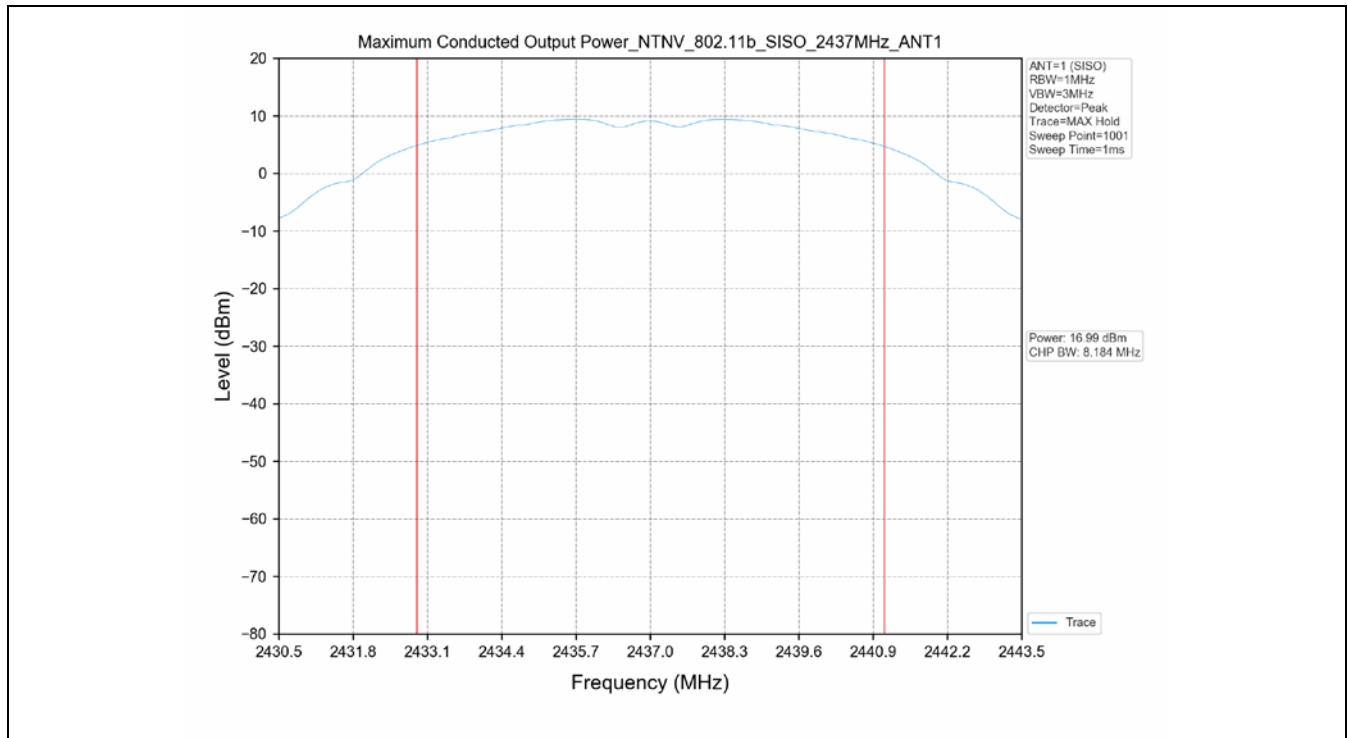
3. Maximum Conducted Output Power

3.1 Test Result

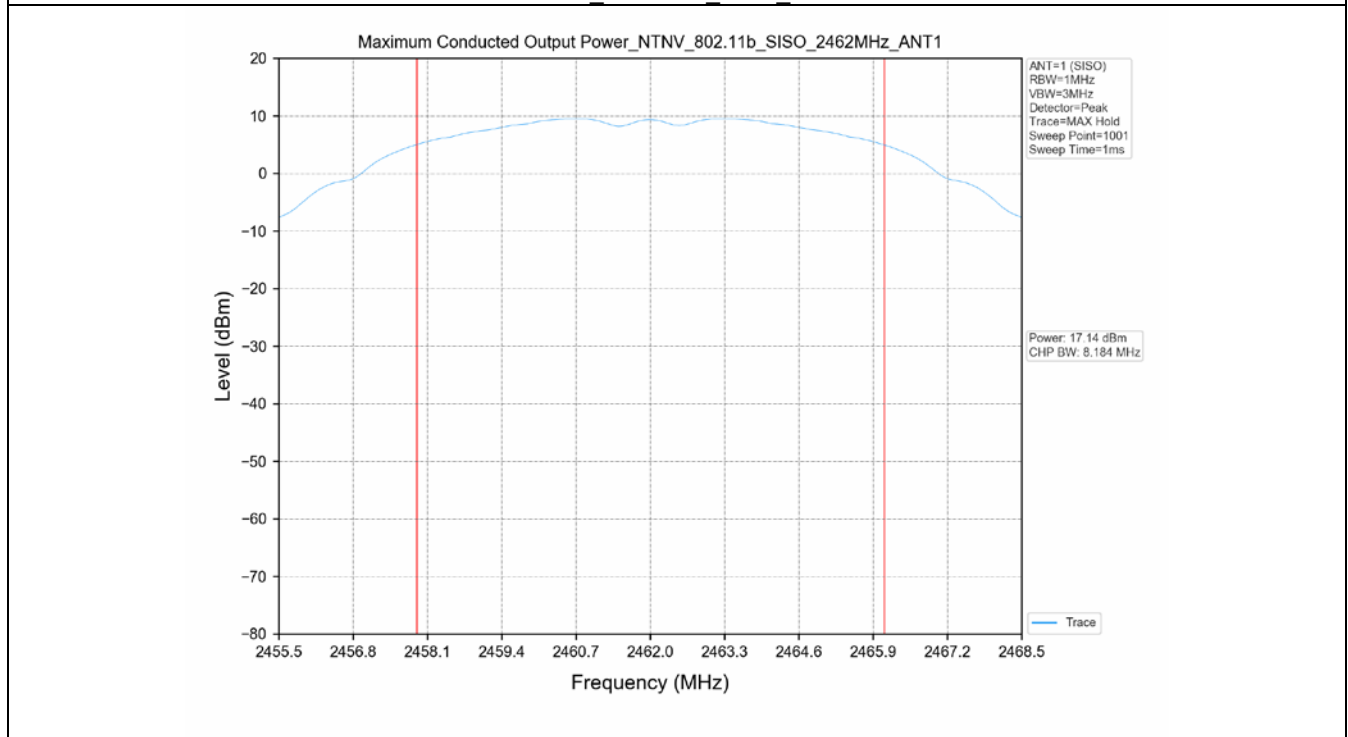
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
802.11b	2412	SISO	17.13	30	PASS
	2437	SISO	16.99	30	PASS
	2462	SISO	17.14	30	PASS
802.11g	2412	SISO	17.05	30	PASS
	2437	SISO	17.88	30	PASS
	2462	SISO	18.18	30	PASS
802.11n(HT20)	2412	SISO	17.13	30	PASS
	2437	SISO	17.48	30	PASS
	2462	SISO	17.48	30	PASS

3.2 Test Graph

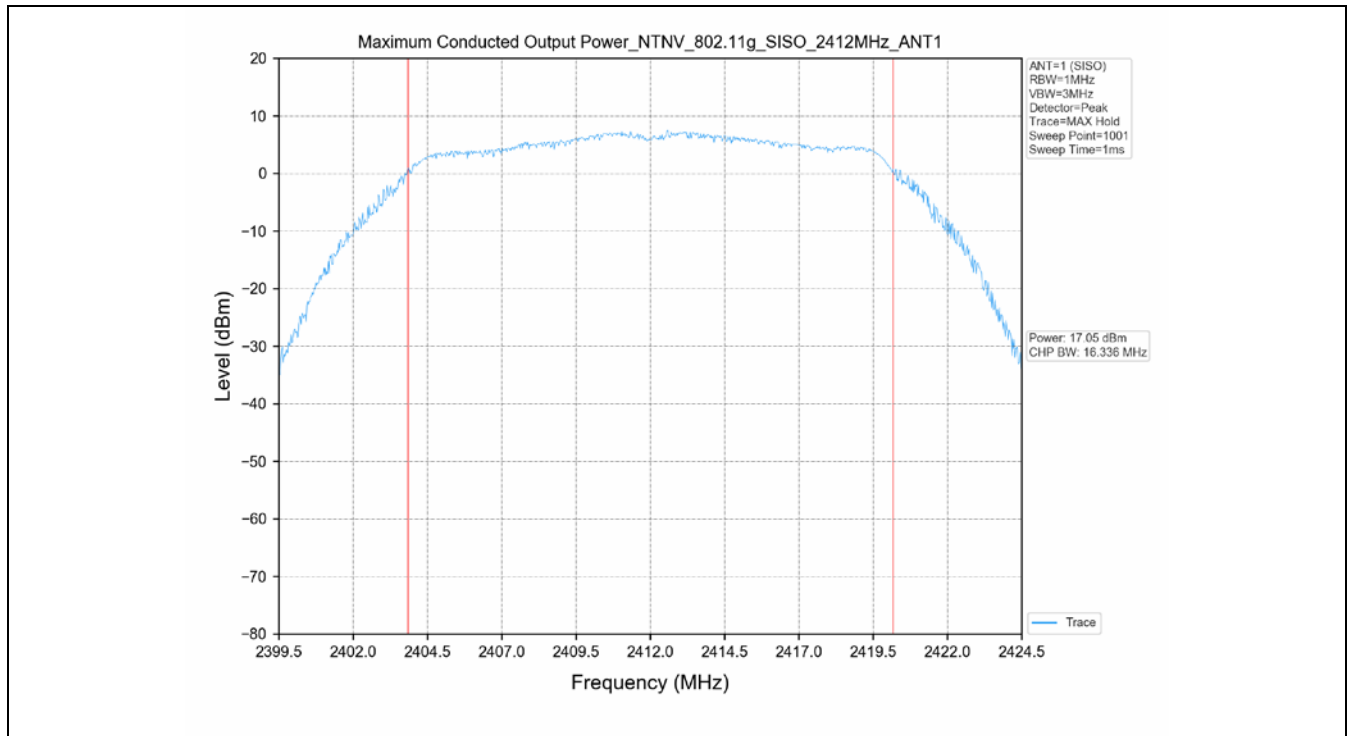




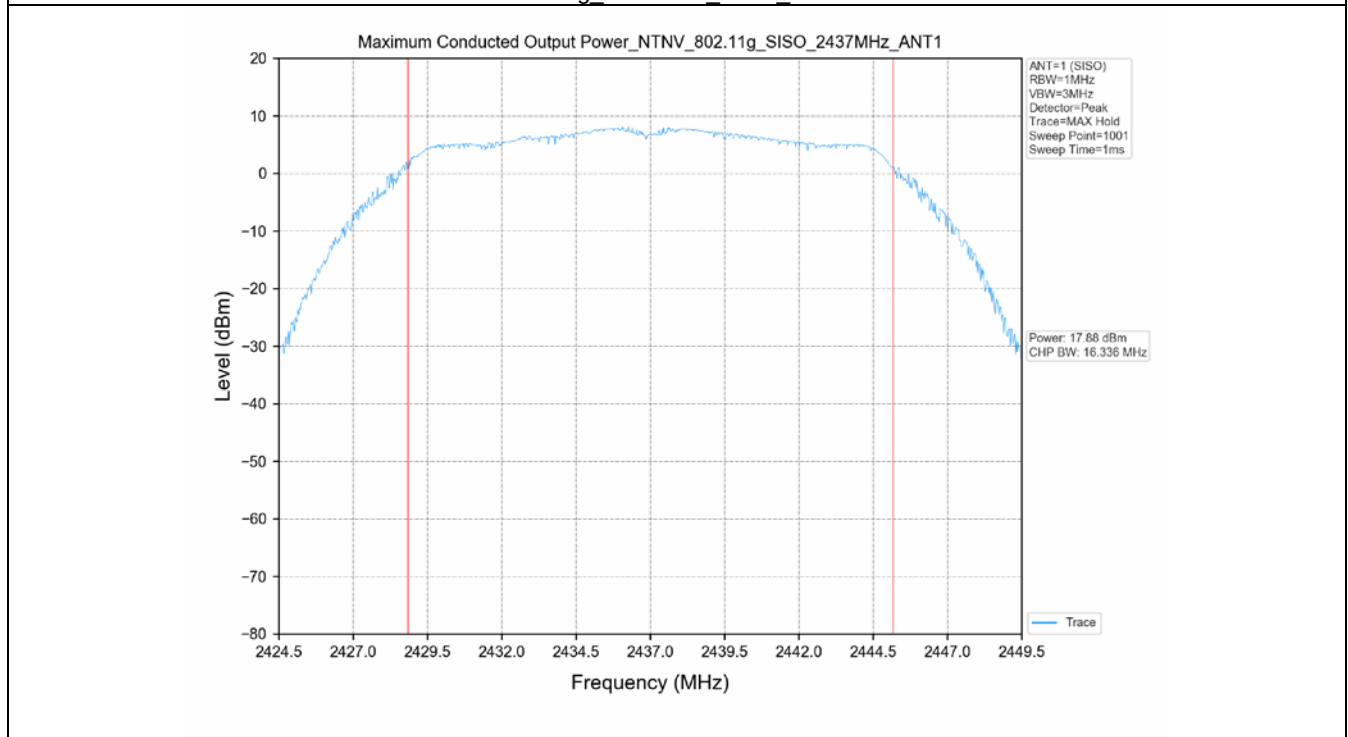
802.11b_2462MHz_SISO_ANT1



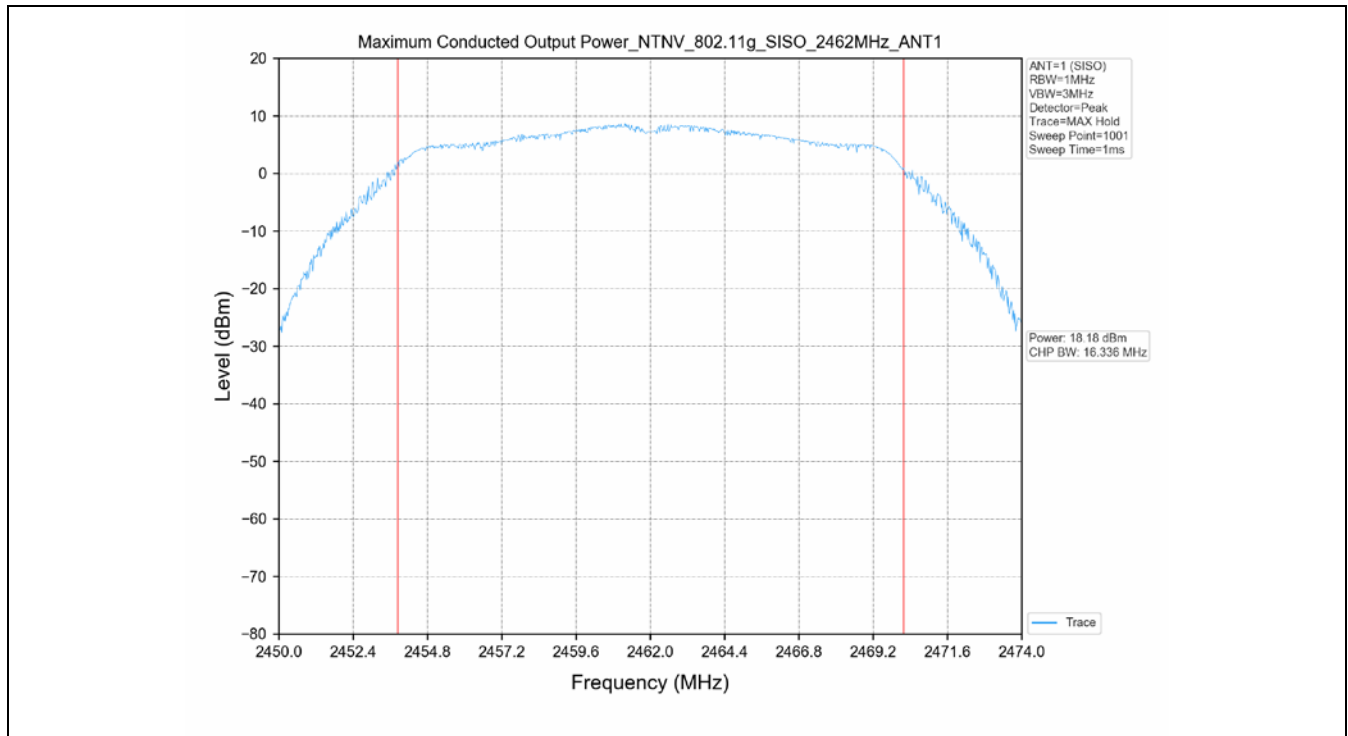
802.11g_2412MHz_SISO_ANT1



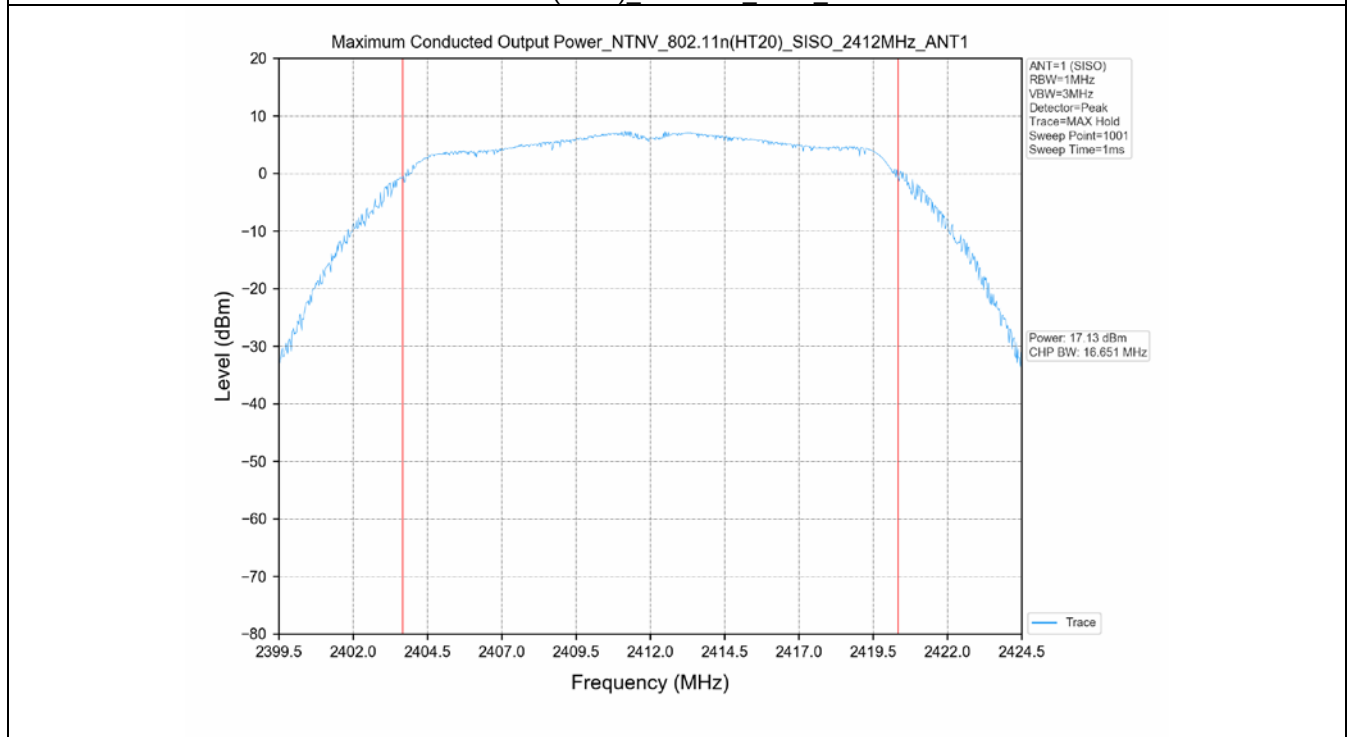
802.11g_2437MHz_SISO_ANT1



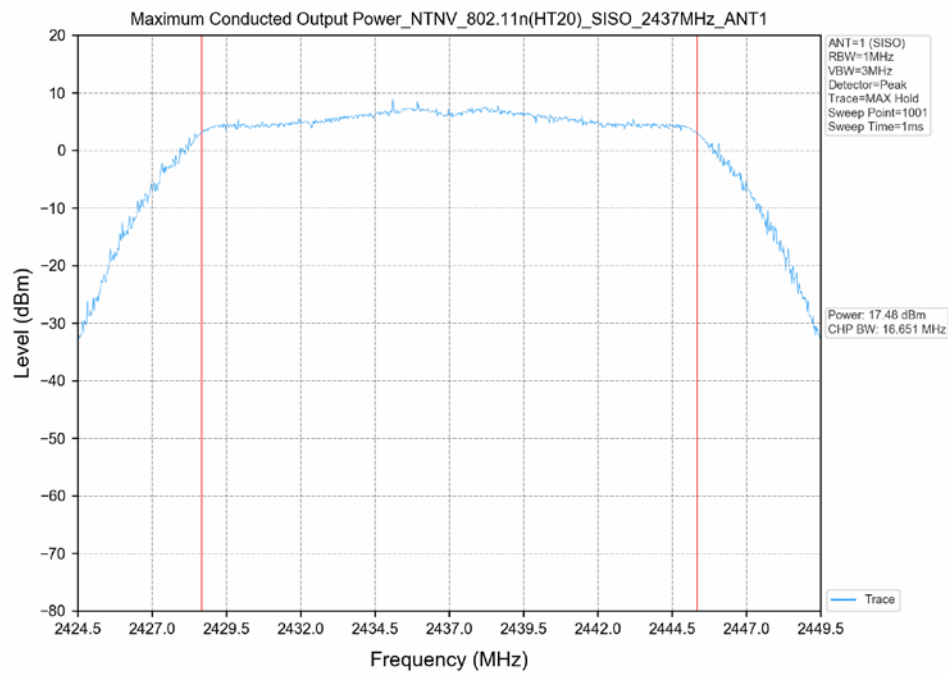
802.11g_2462MHz_SISO_ANT1



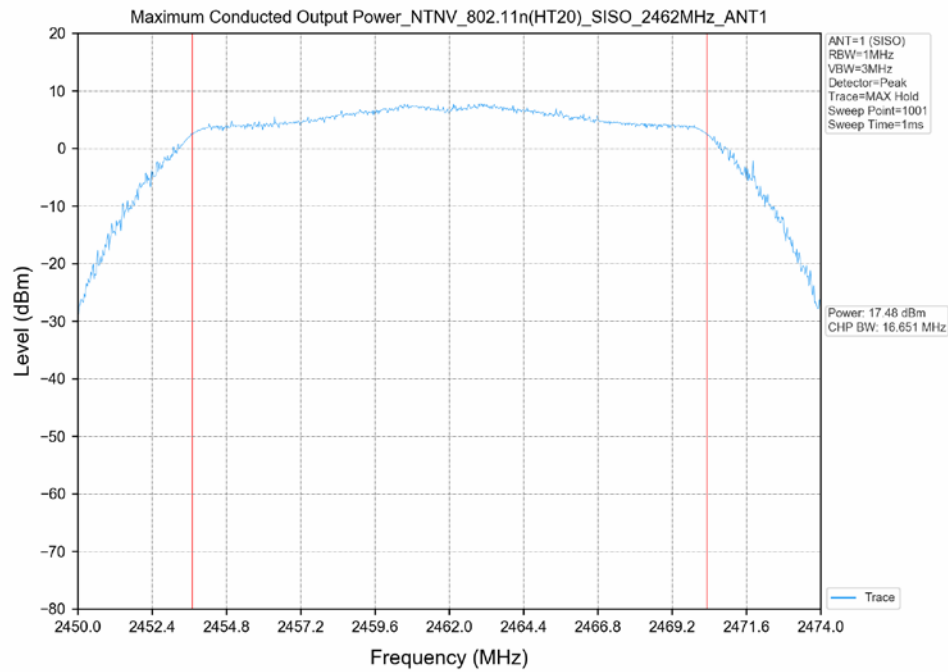
802.11n(HT20)_2412MHz_SISO_ANT1



802.11n(HT20)_2437MHz_SISO_ANT1



802.11n(HT20)_2462MHz_SISO_ANT1



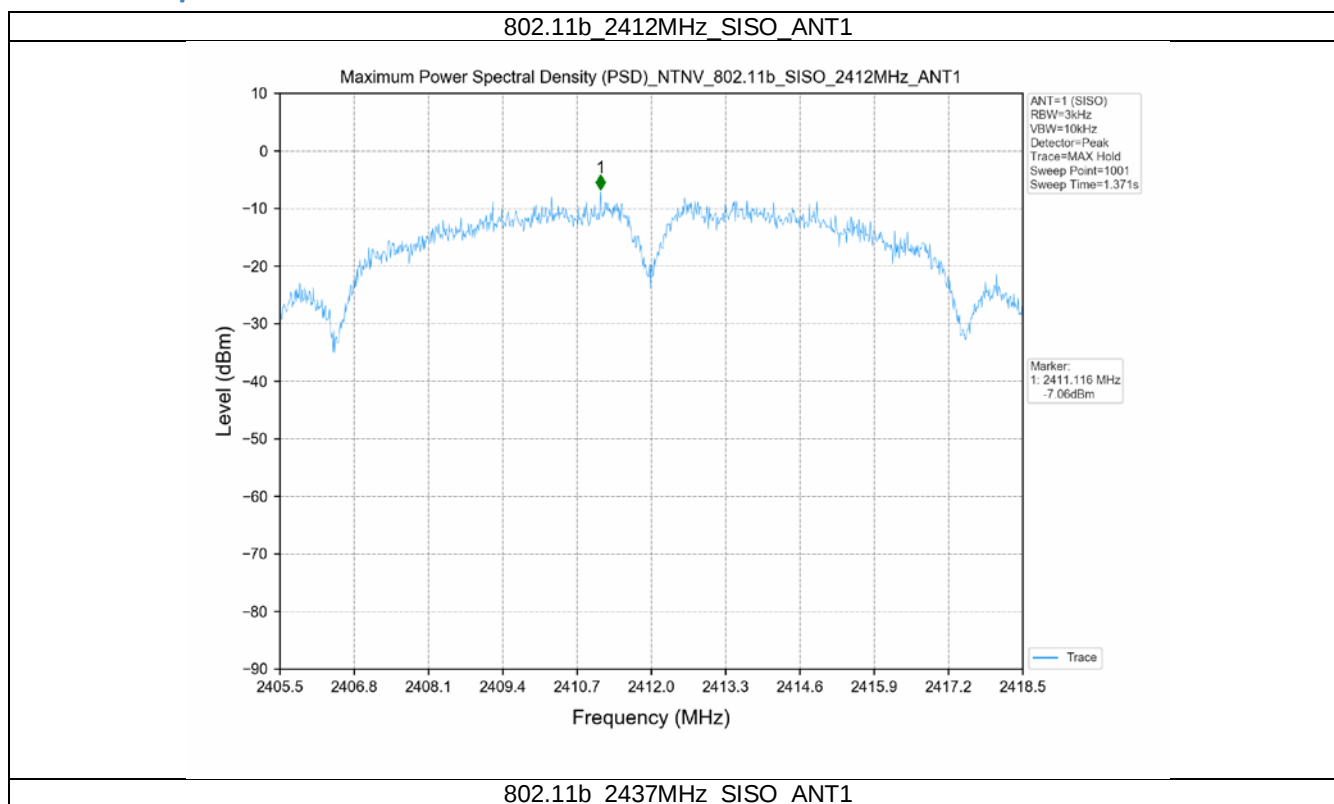


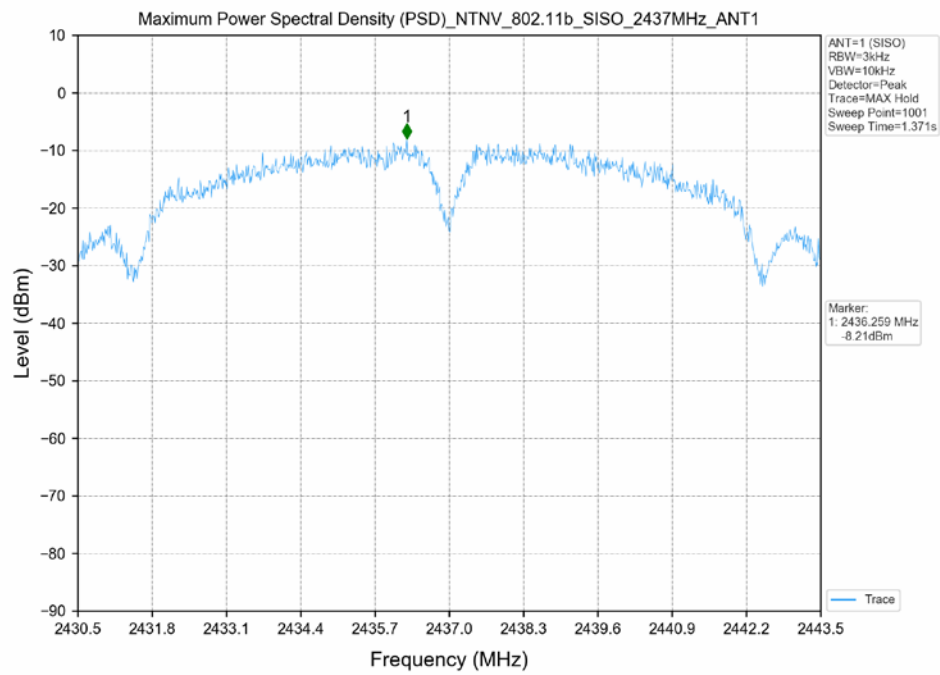
4. Maximum Power Spectral Density (PSD)

4.1 Test Result

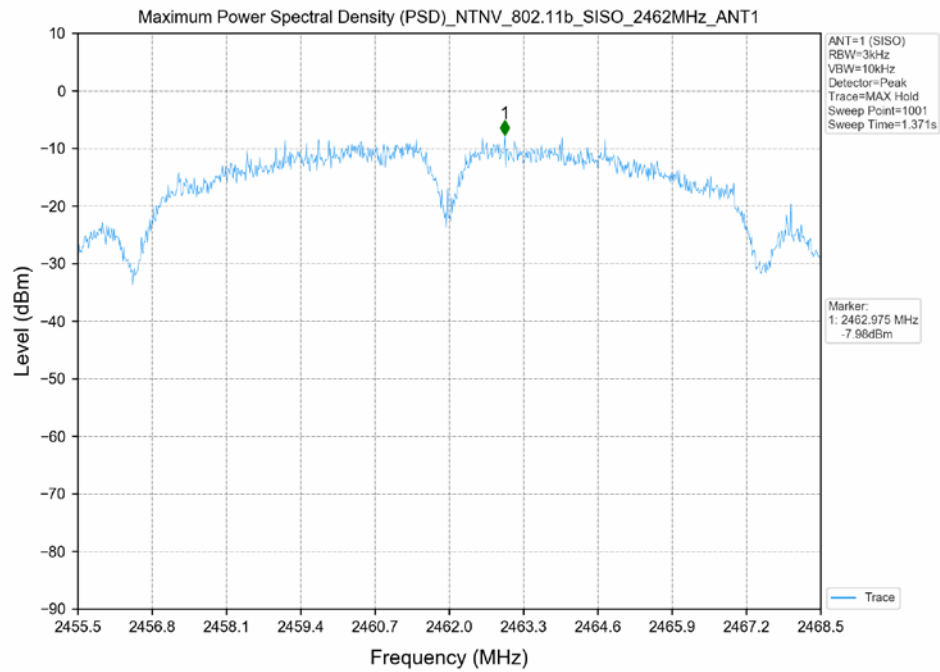
Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)	Limits (dBm/3kHz)	Verdict
			Ant 1		
802.11b	2412	SISO	-7.06	≤8	PASS
	2437	SISO	-8.21	≤8	PASS
	2462	SISO	-7.98	≤8	PASS
802.11g	2412	SISO	-14.58	≤8	PASS
	2437	SISO	-13.24	≤8	PASS
	2462	SISO	-12.72	≤8	PASS
802.11n(HT20)	2412	SISO	-13.83	≤8	PASS
	2437	SISO	-13.99	≤8	PASS
	2462	SISO	-13.09	≤8	PASS

4.2 Test Graph

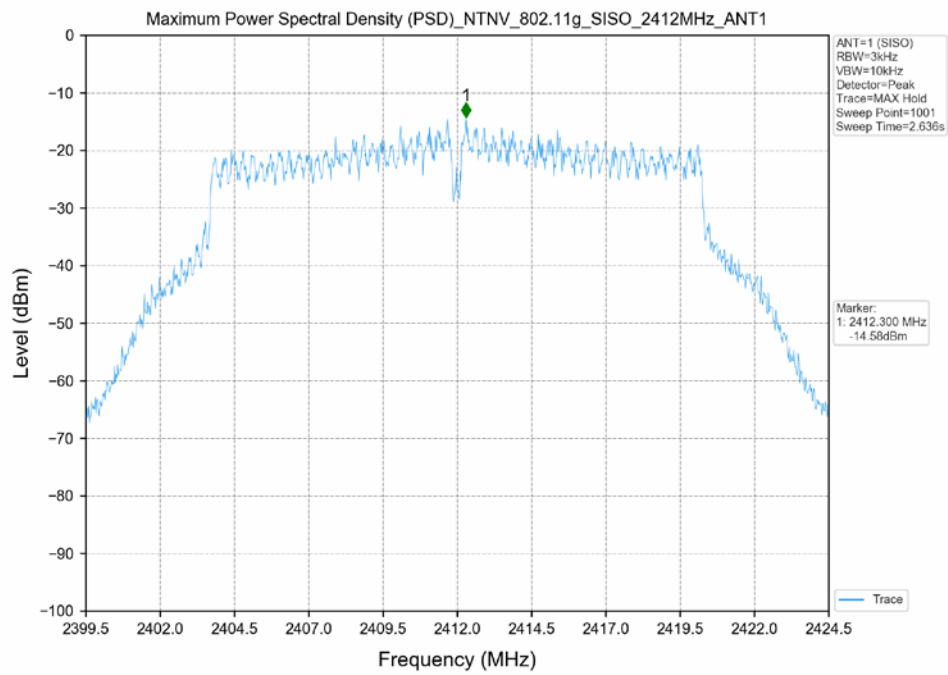




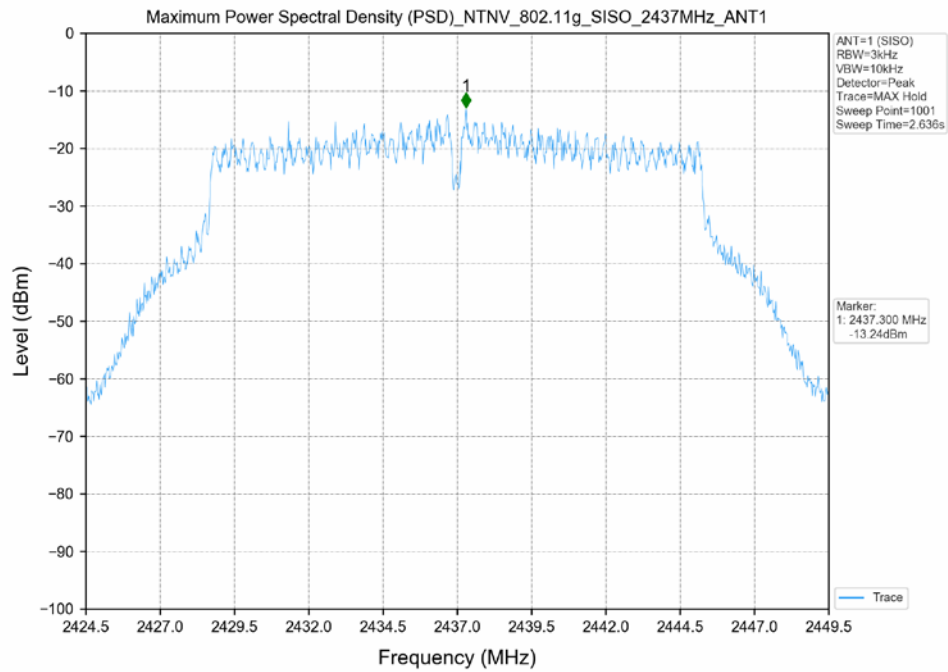
802.11b_2462MHz_SISO_ANT1



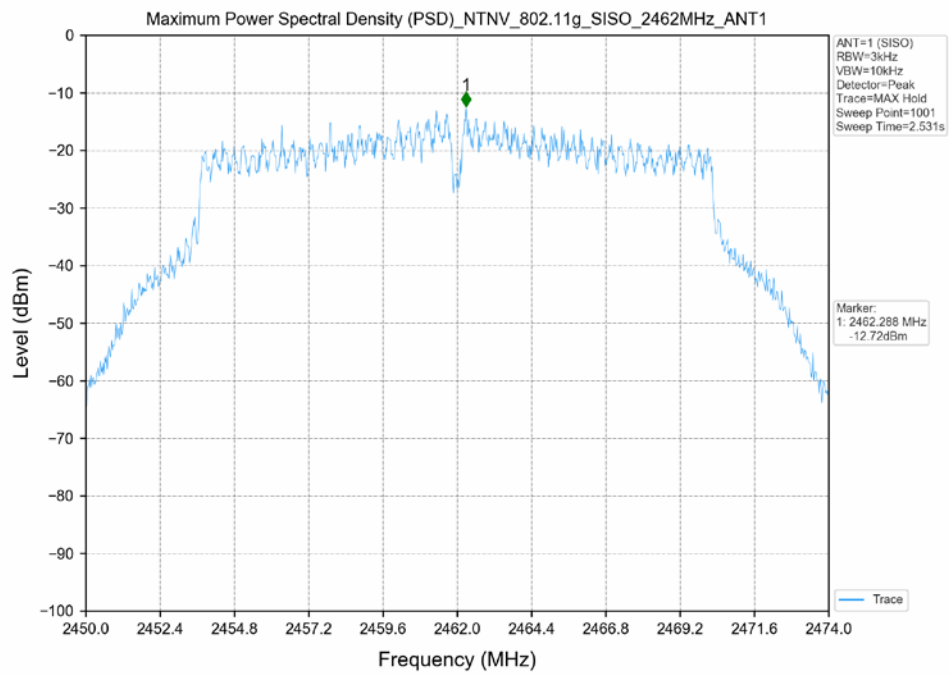
802.11g_2412MHz_SISO_ANT1



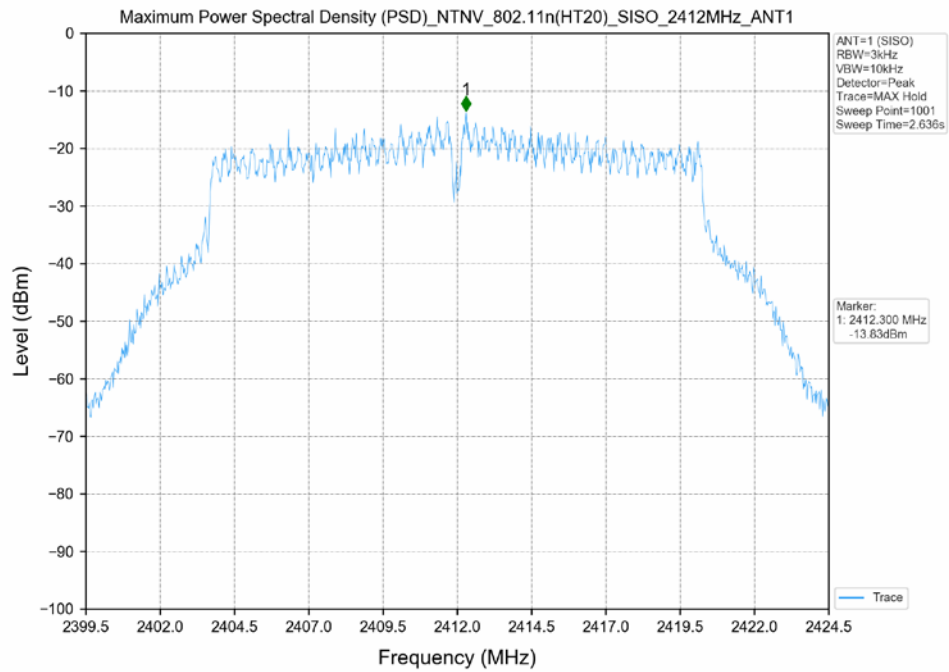
802.11g_2437MHz_SISO_ANT1



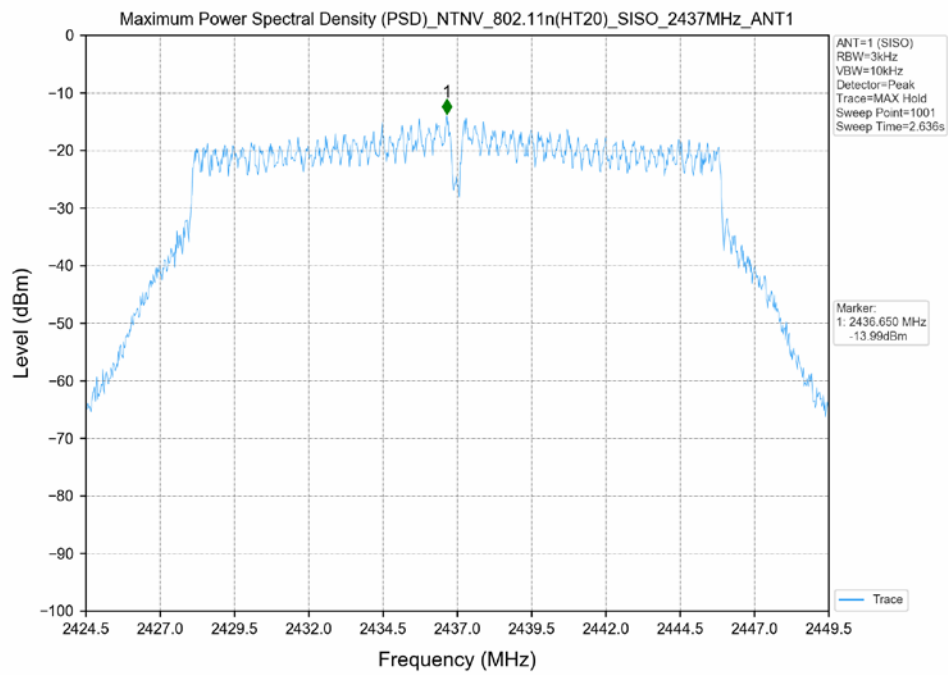
802.11g_2462MHz_SISO_ANT1



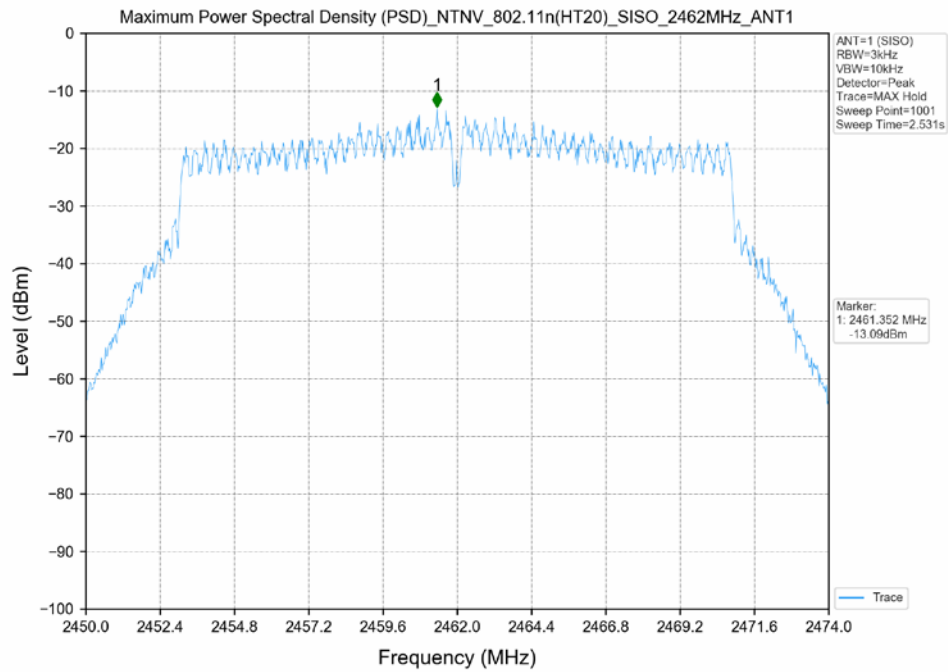
802.11n(HT20)_2412MHz_SISO_ANT1



802.11n(HT20)_2437MHz_SISO_ANT1



802.11n(HT20)_2462MHz_SISO_ANT1



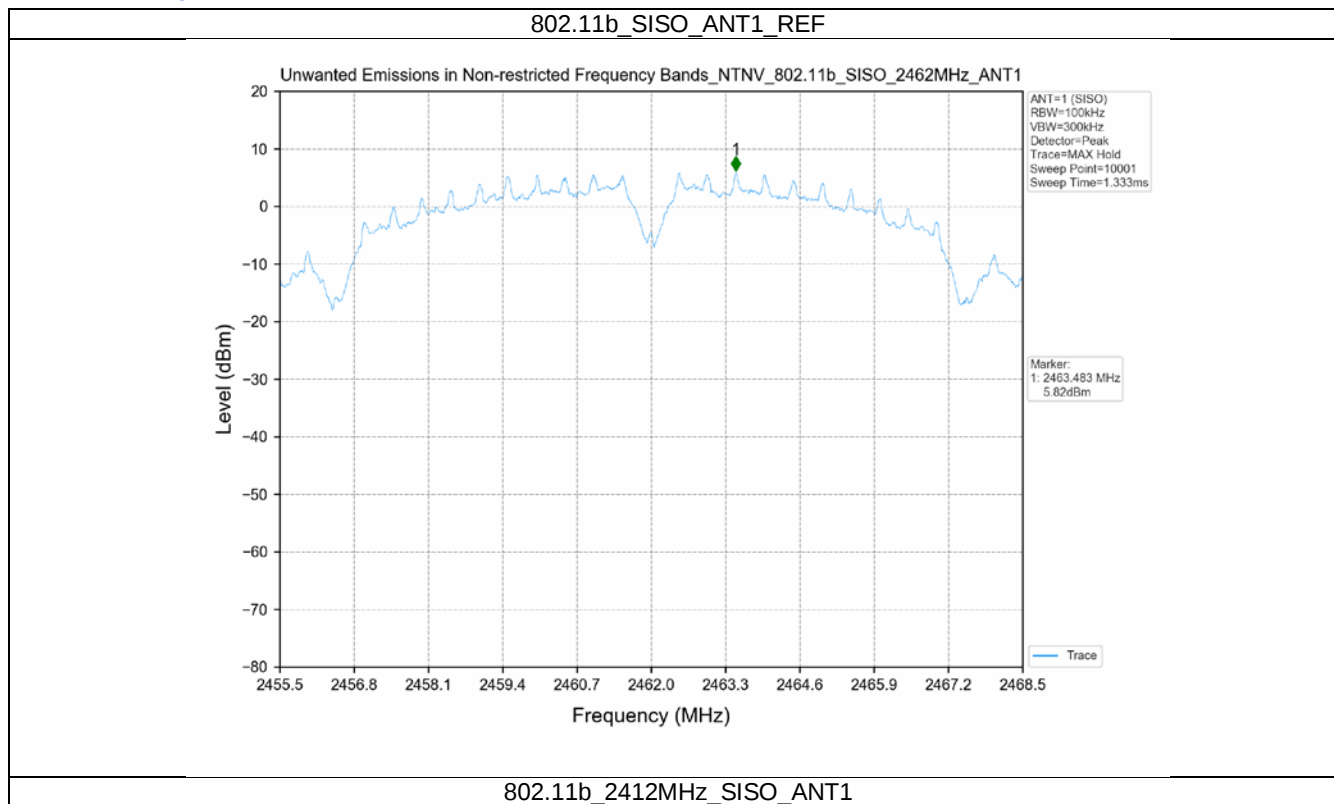


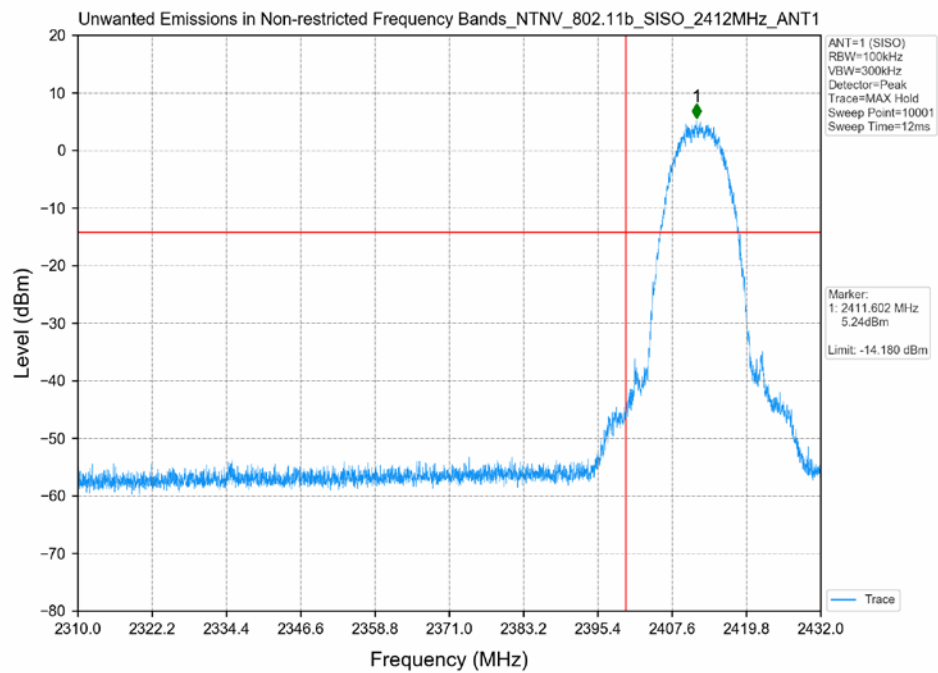
5. Unwanted Emissions in Non-restricted Frequency Bands

5.1 Test Result

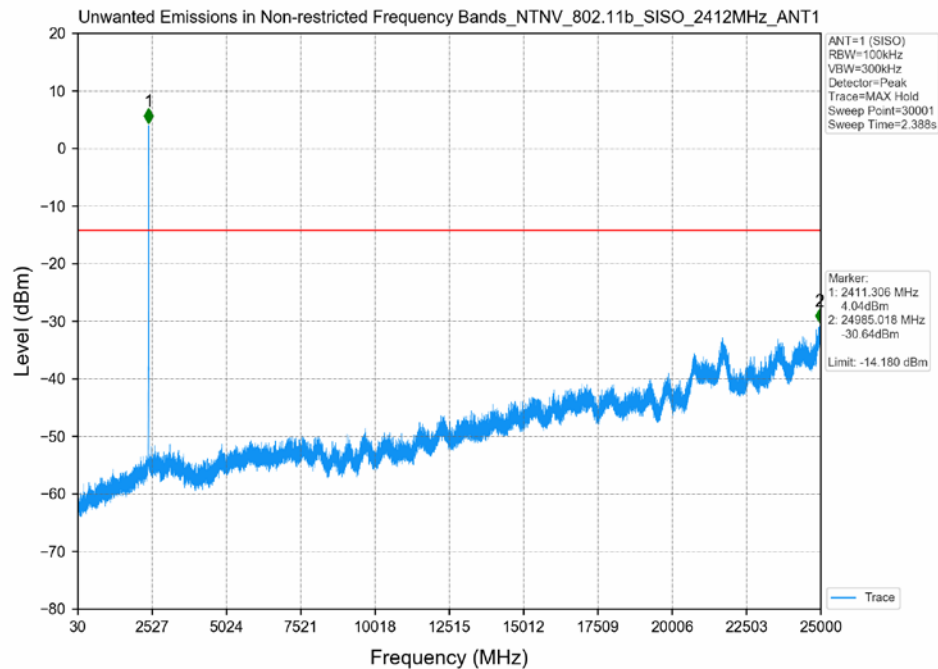
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBc)	Verdict
802.11b	2412	SISO	1	Refer to test graph	-20	PASS
	2437	SISO	1	Refer to test graph	-20	PASS
	2462	SISO	1	Refer to test graph	-20	PASS
802.11g	2412	SISO	1	Refer to test graph	-20	PASS
	2437	SISO	1	Refer to test graph	-20	PASS
	2462	SISO	1	Refer to test graph	-20	PASS
802.11n(HT20)	2412	SISO	1	Refer to test graph	-20	PASS
	2437	SISO	1	Refer to test graph	-20	PASS
	2462	SISO	1	Refer to test graph	-20	PASS

5.2 Test Graph

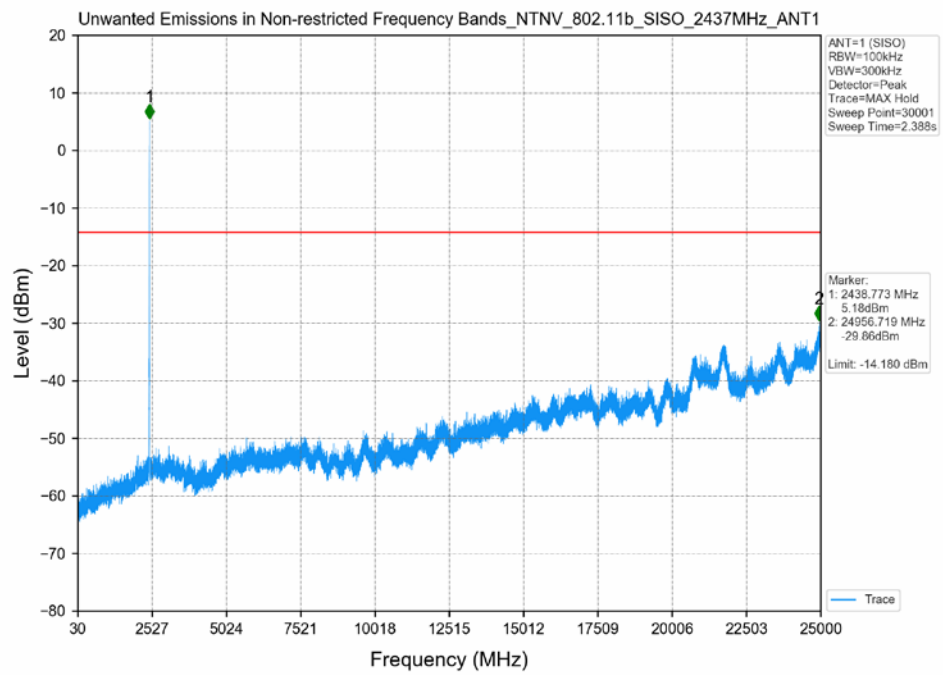




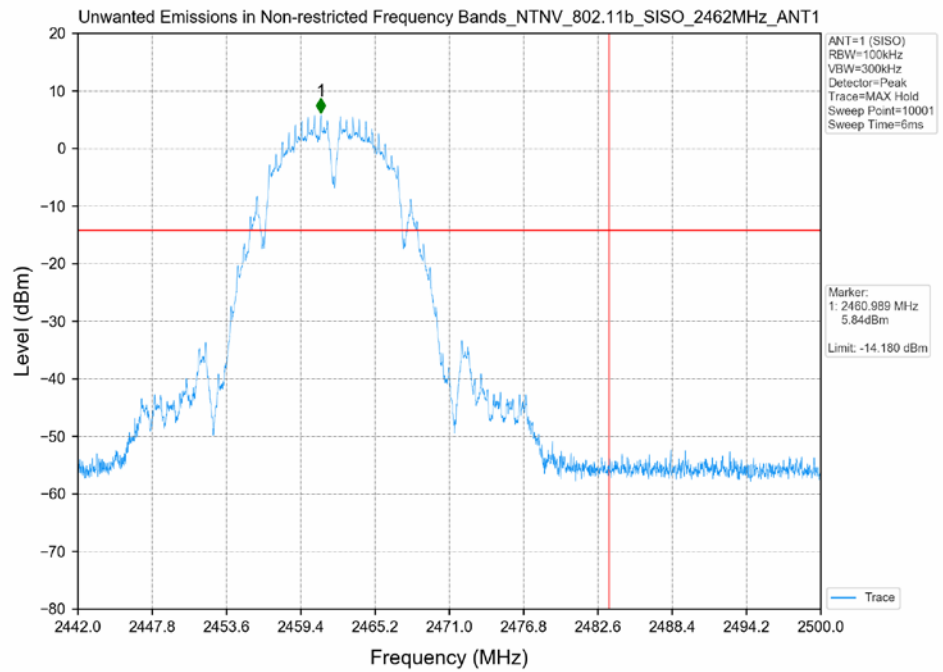
802.11b_2412MHz_SISO_ANT1



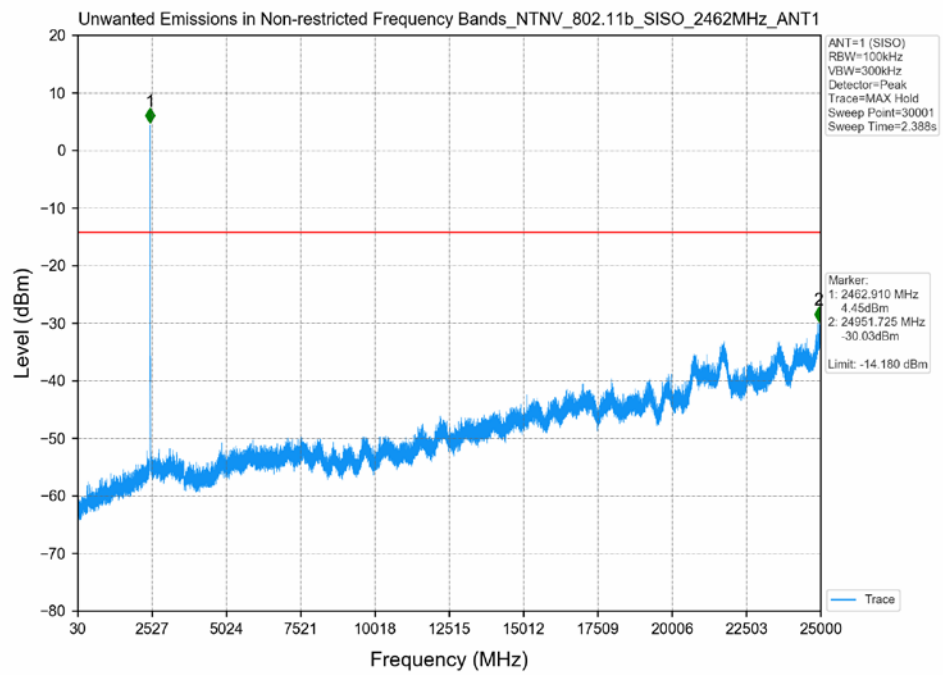
802.11b_2437MHz_SISO_ANT1



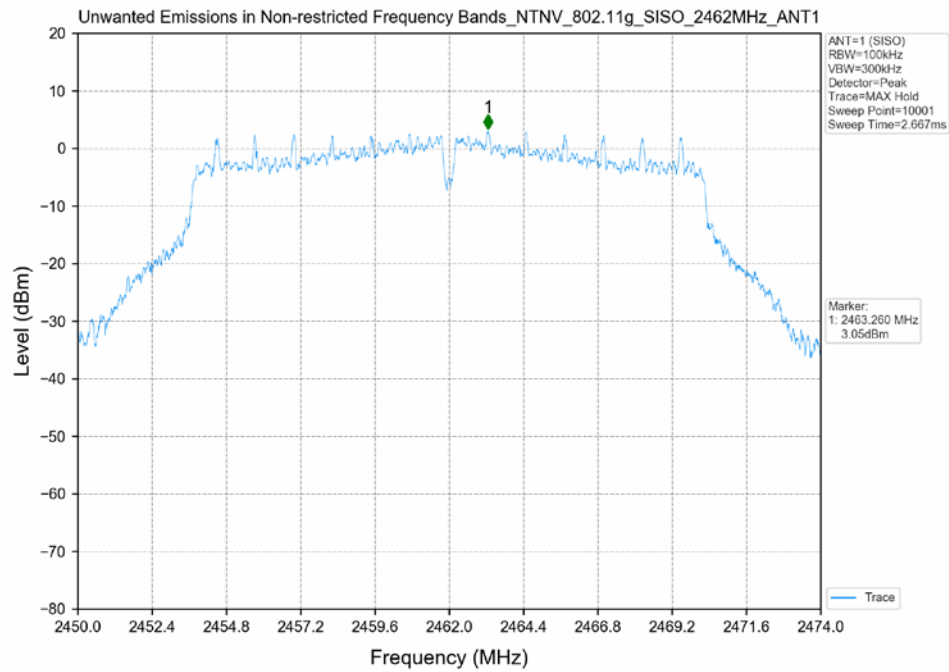
802.11b_2462MHz_SISO_ANT1



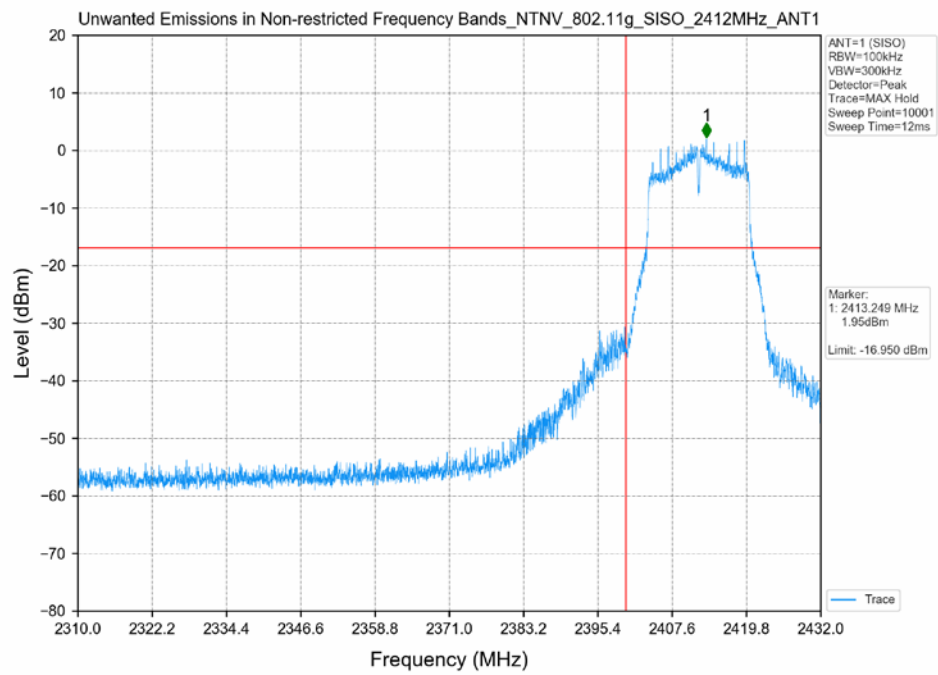
802.11b_2462MHz_SISO_ANT1



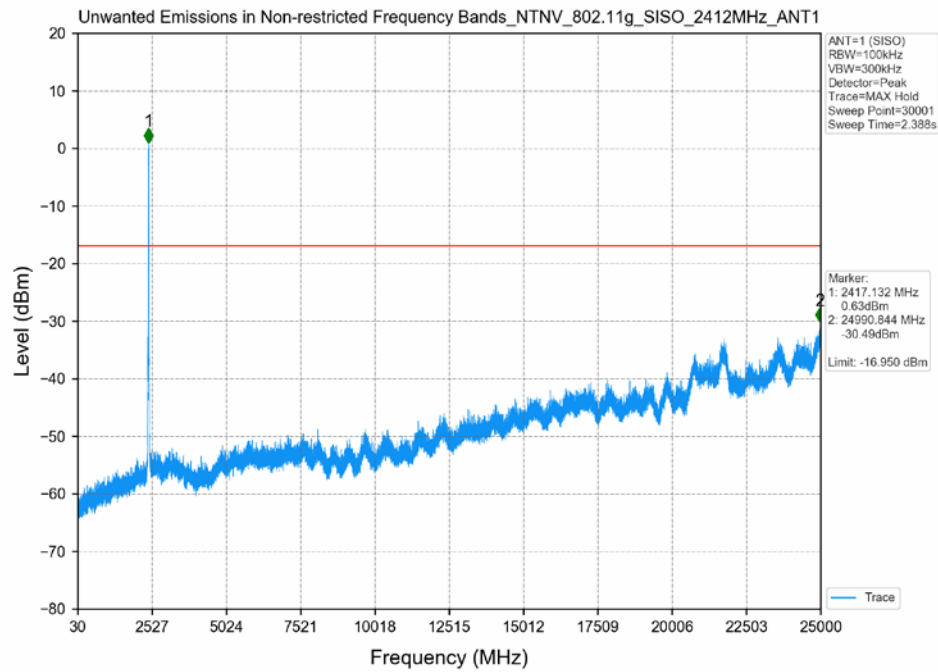
802.11g_SISO_ANT1_REF



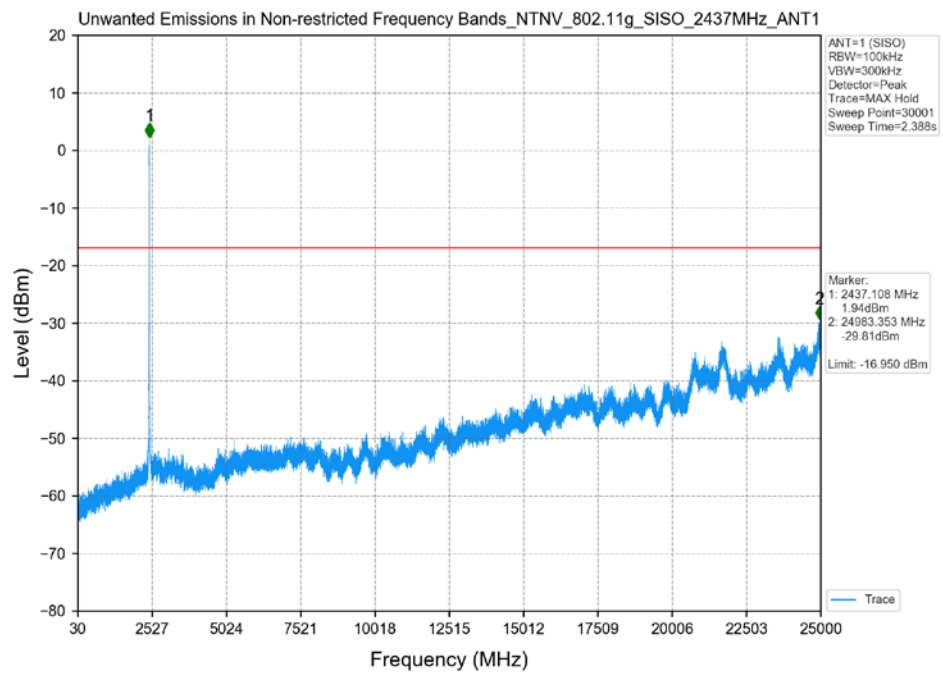
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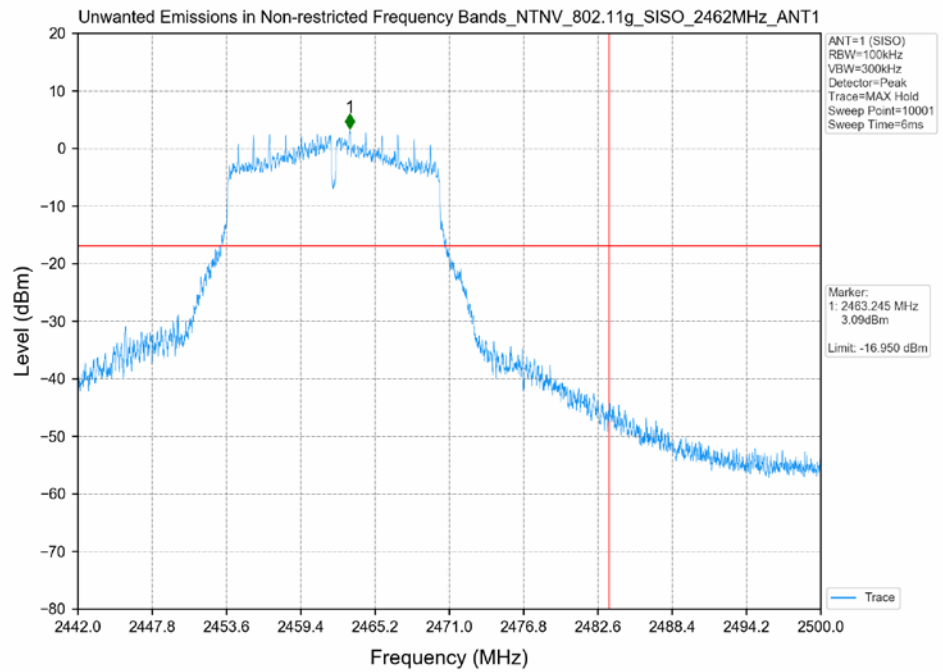
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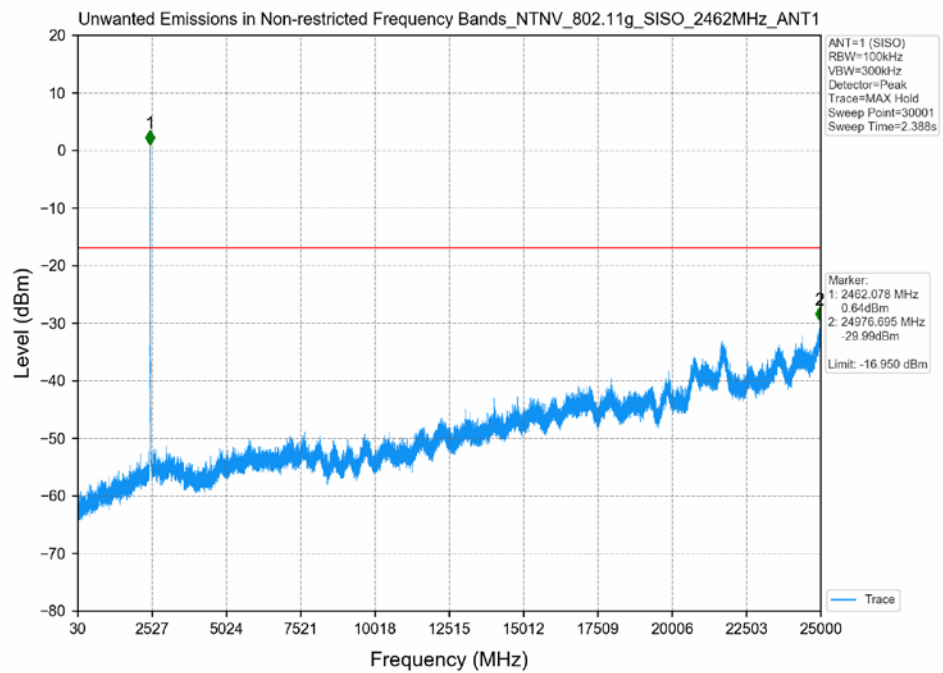
802.11g_2437MHz_SISO_ANT1



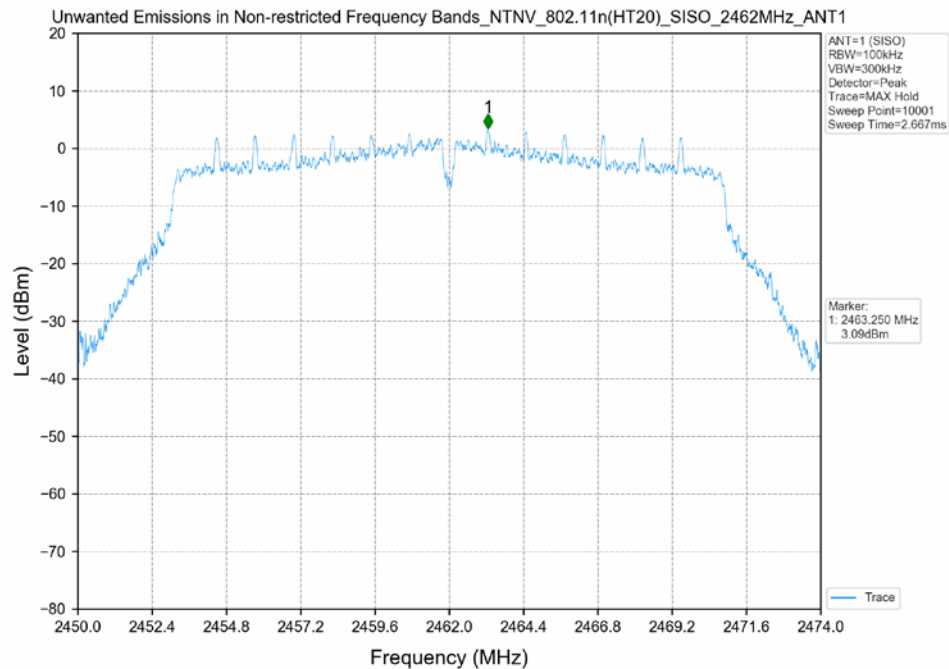
802.11g_2462MHz_SISO_ANT1



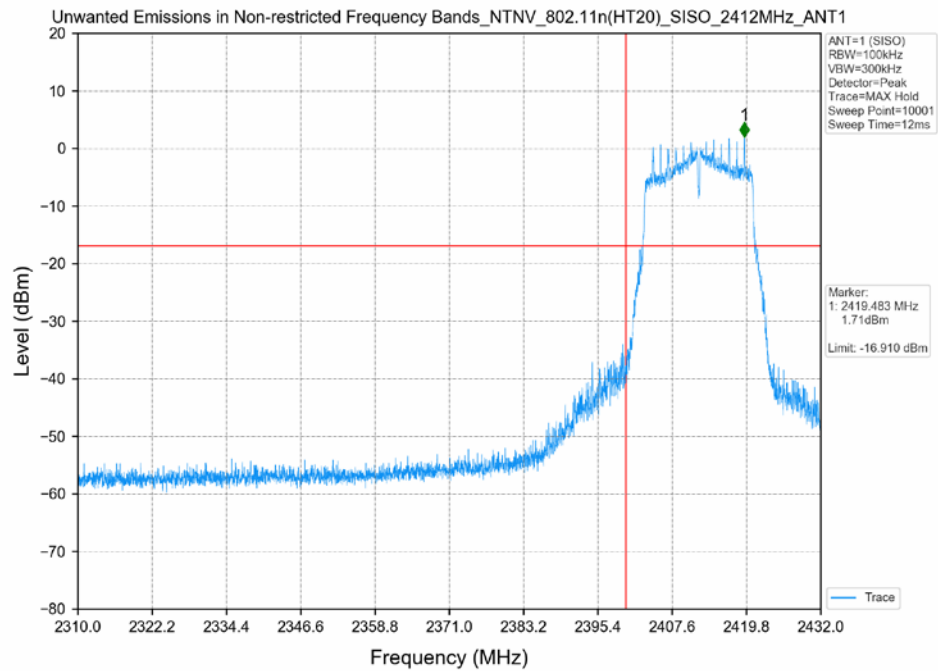
802.11g_2462MHz_SISO_ANT1



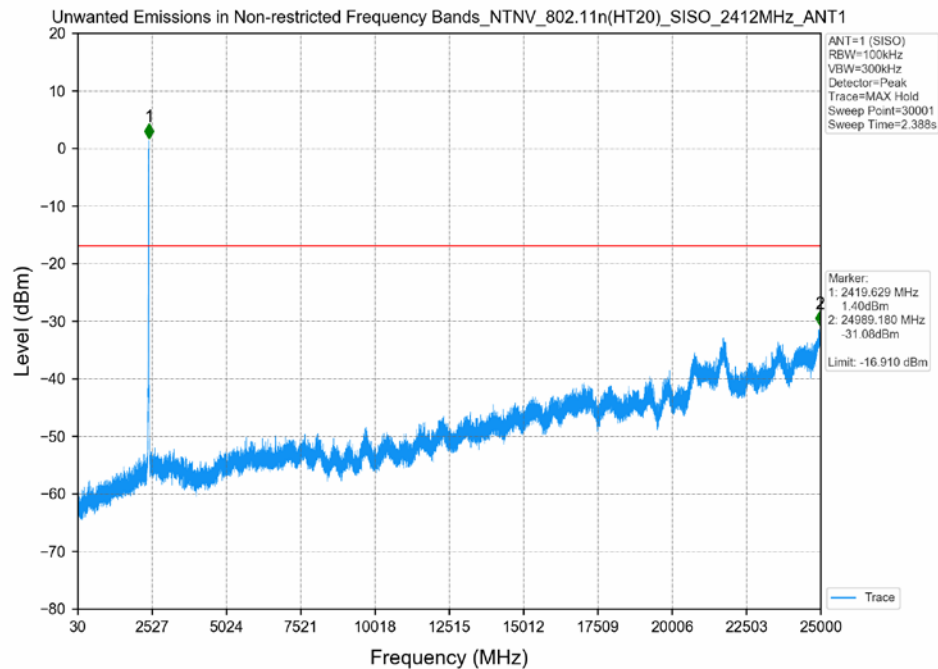
802.11n(HT20)_SISO_ANT1_REF



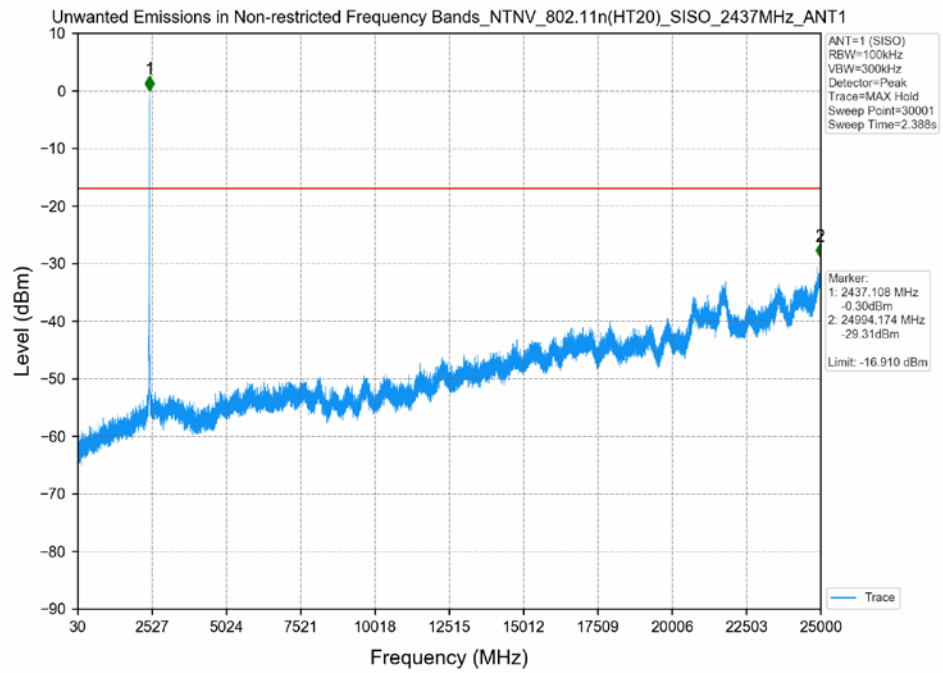
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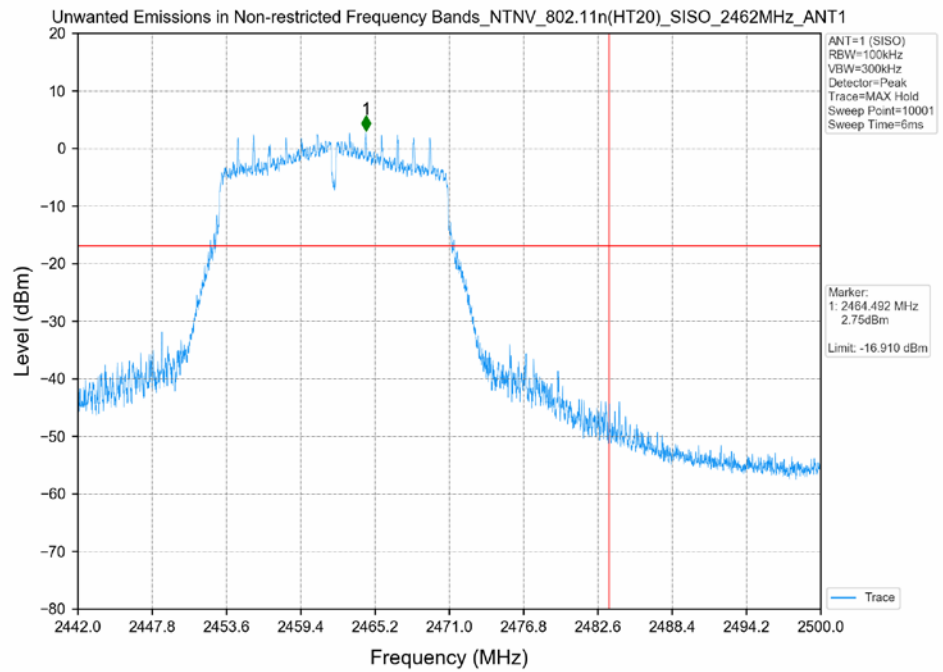
802.11n(HT20)_2412MHz_SISO_ANT1



802.11n(HT20)_2437MHz_SISO_ANT1



802.11n(HT20)_2462MHz_SISO_ANT1



802.11n(HT20)_2462MHz_SISO_ANT1

