



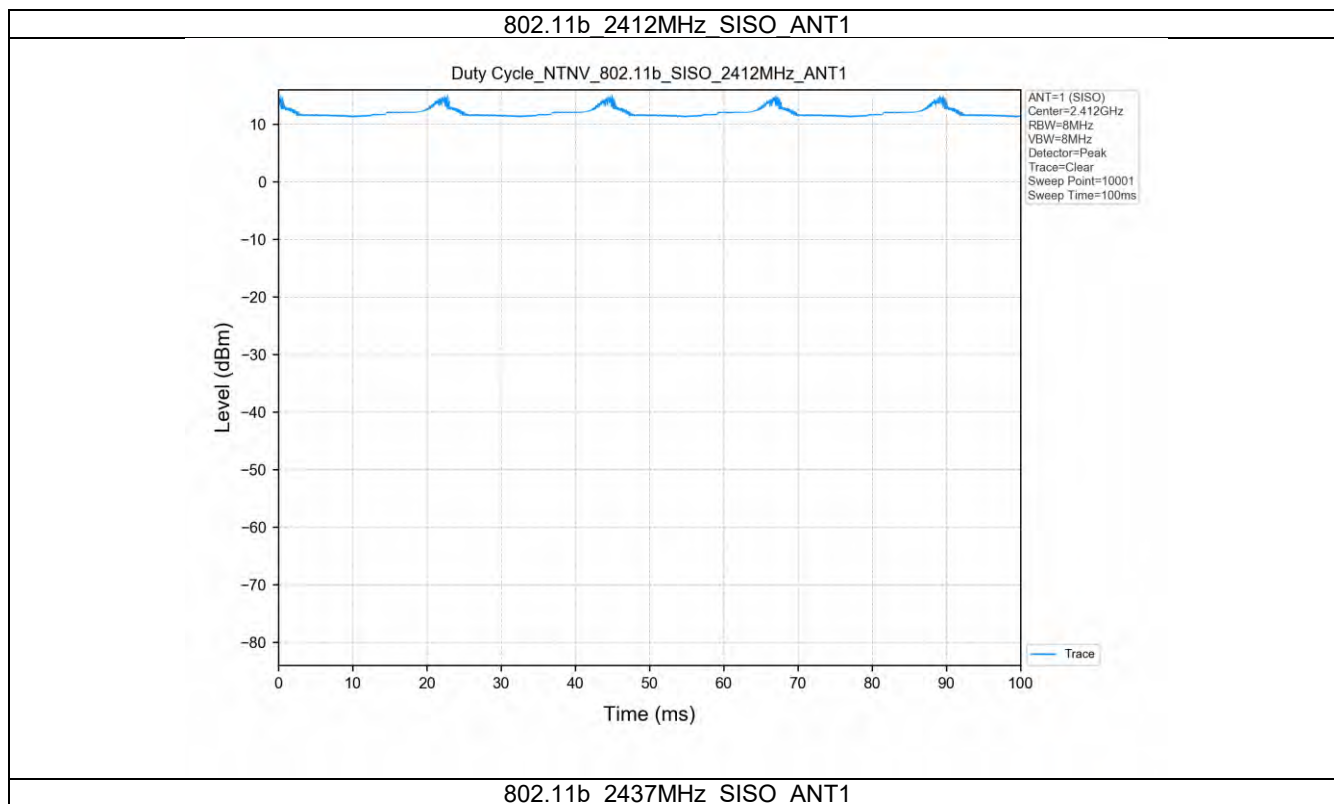
Appendix A for SHEM191001838501

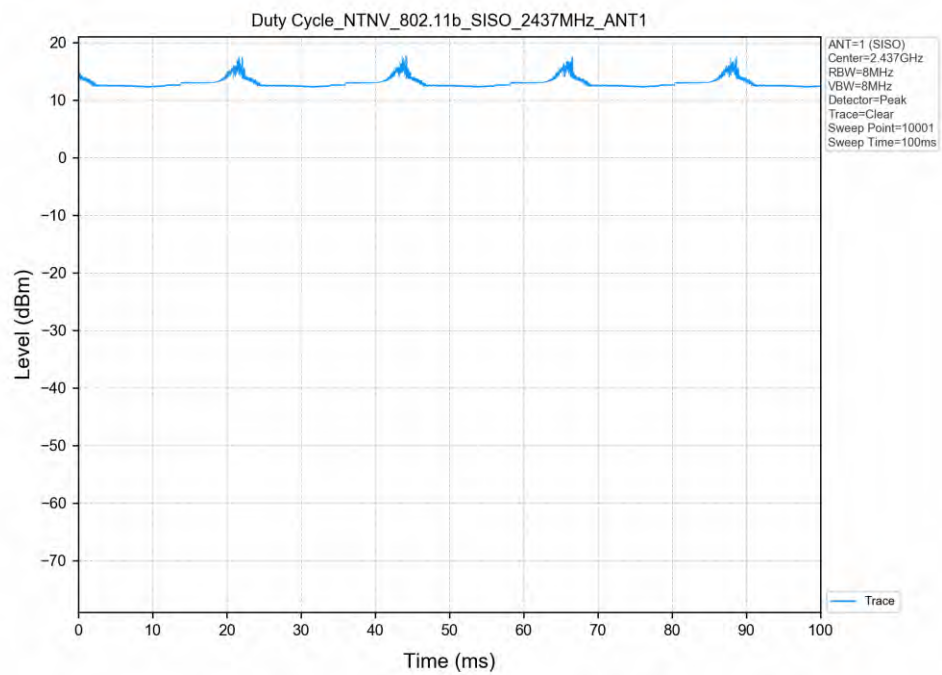
1. Duty Cycle

1.1 Test Result

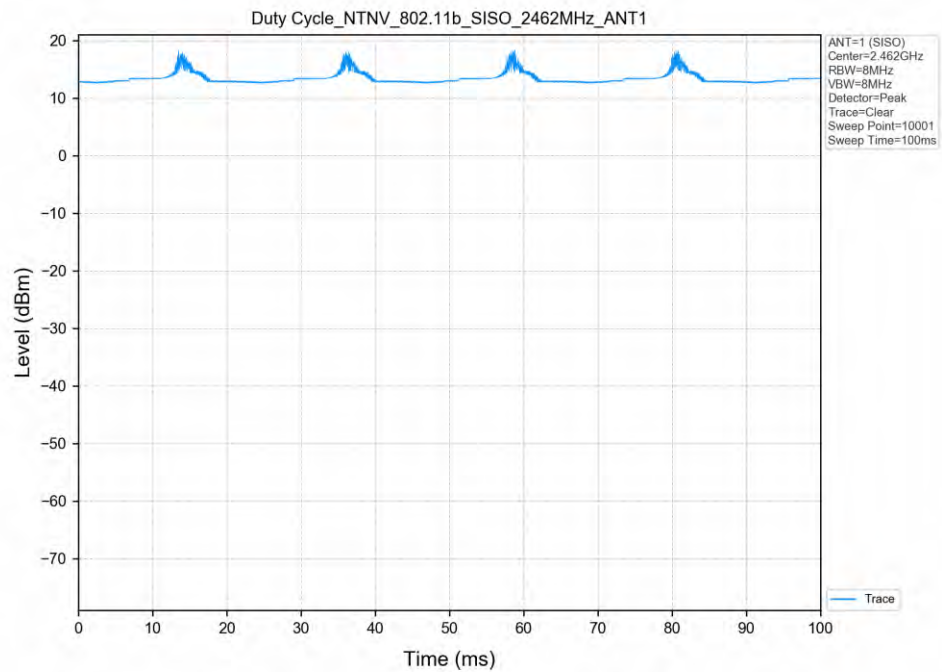
Test Mode	Channel Frequency(MHz)	TX Type	ANT No.	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
802.11b	2412	SISO	1	100.000	100.000	100.00	0.00
	2437	SISO	1	100.000	100.000	100.00	0.00
	2462	SISO	1	100.000	100.000	100.00	0.00
802.11g	2412	SISO	1	100.000	100.000	100.00	0.00
	2437	SISO	1	100.000	100.000	100.00	0.00
	2462	SISO	1	100.000	100.000	100.00	0.00
802.11n(HT20)	2412	SISO	1	100.000	100.000	100.00	0.00
	2437	SISO	1	100.000	100.000	100.00	0.00
	2462	SISO	1	100.000	100.000	100.00	0.00
802.11n(HT40)	2422	SISO	1	100.000	100.000	100.00	0.00
	2437	SISO	1	100.000	100.000	100.00	0.00
	2452	SISO	1	100.000	100.000	100.00	0.00

1.2 Test Graph

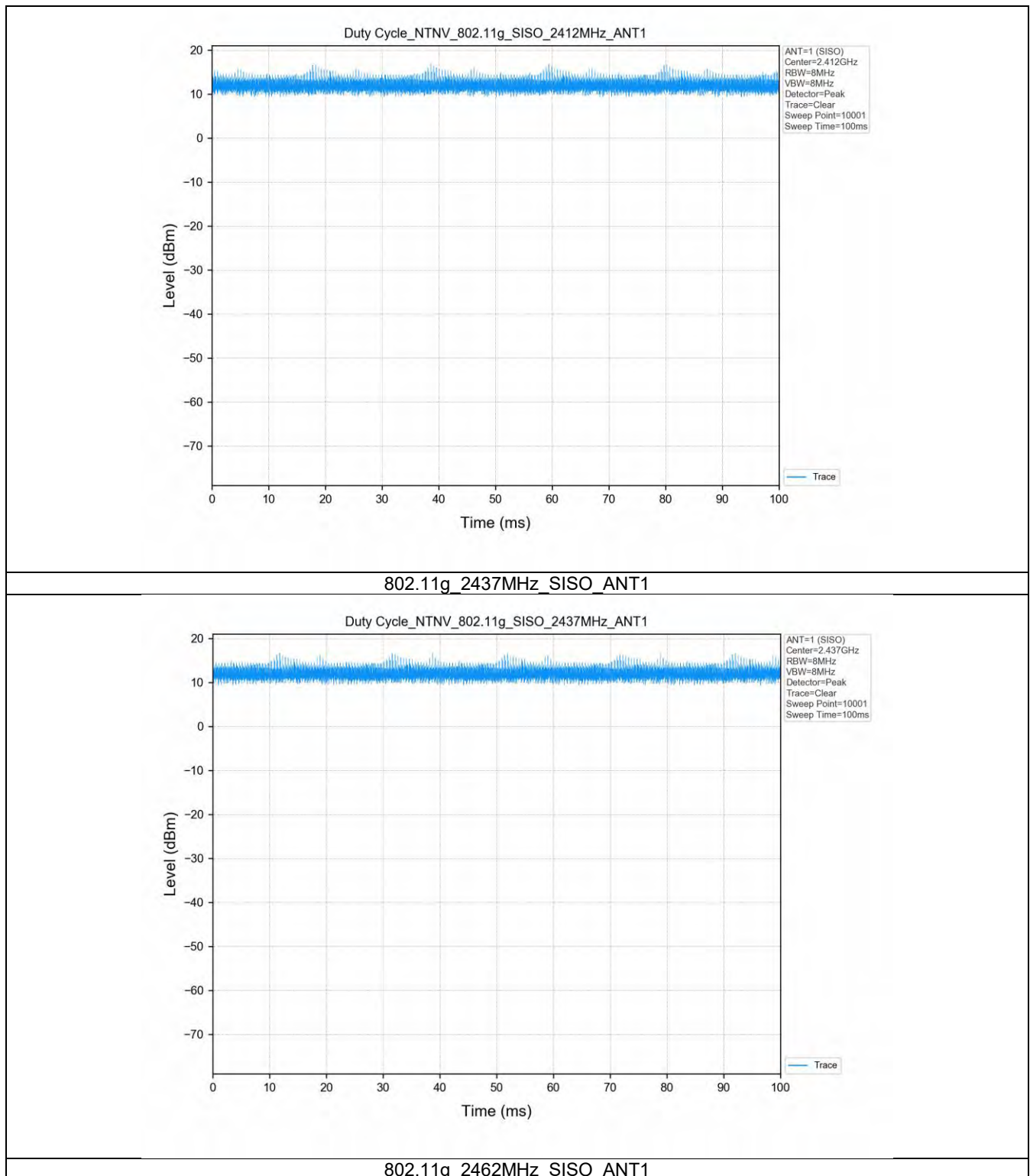


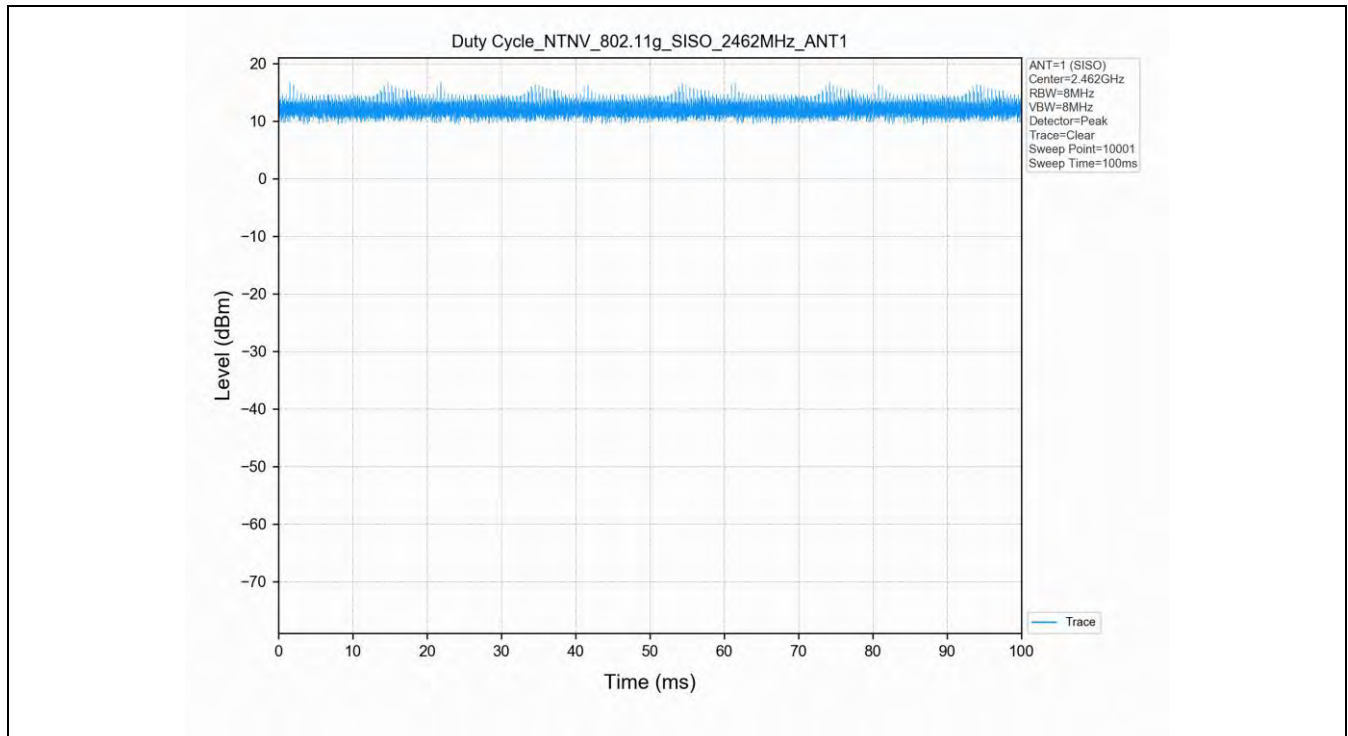


802.11b_2462MHz_SISO_ANT1

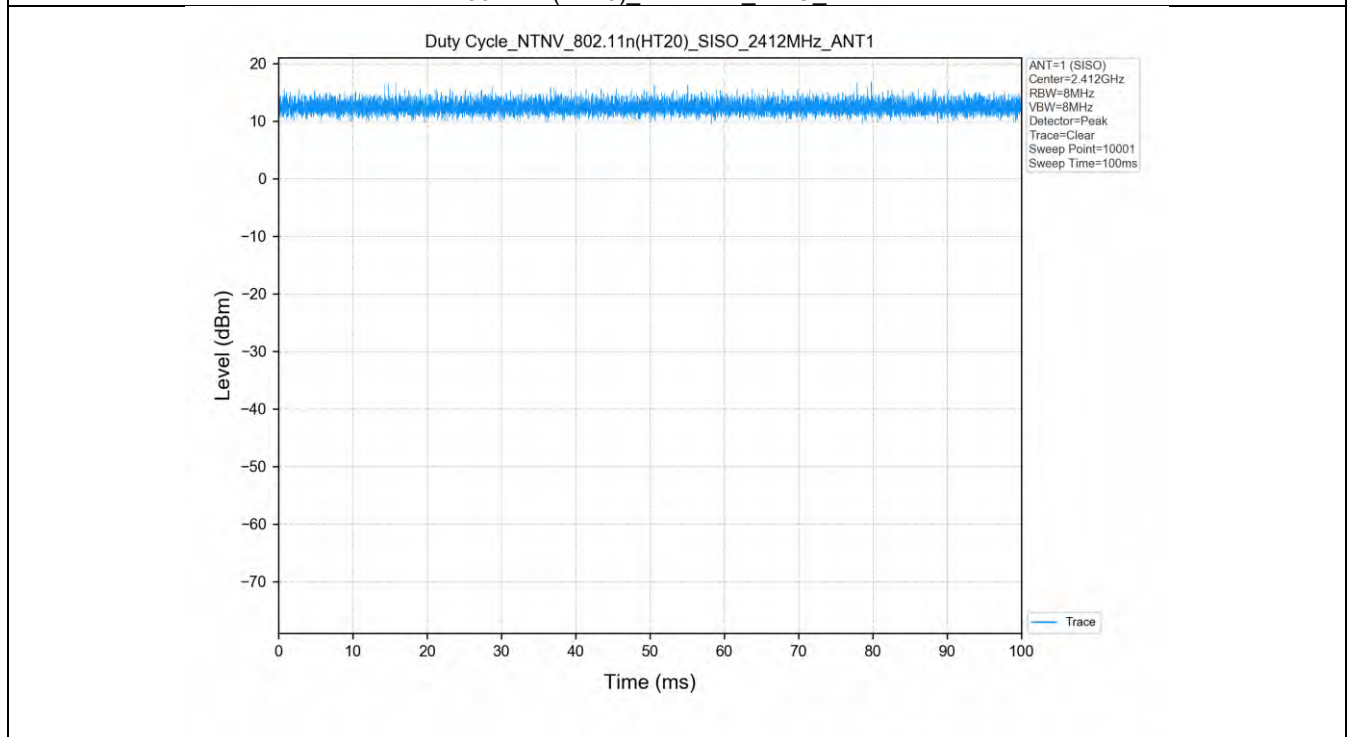


802.11g_2412MHz_SISO_ANT1

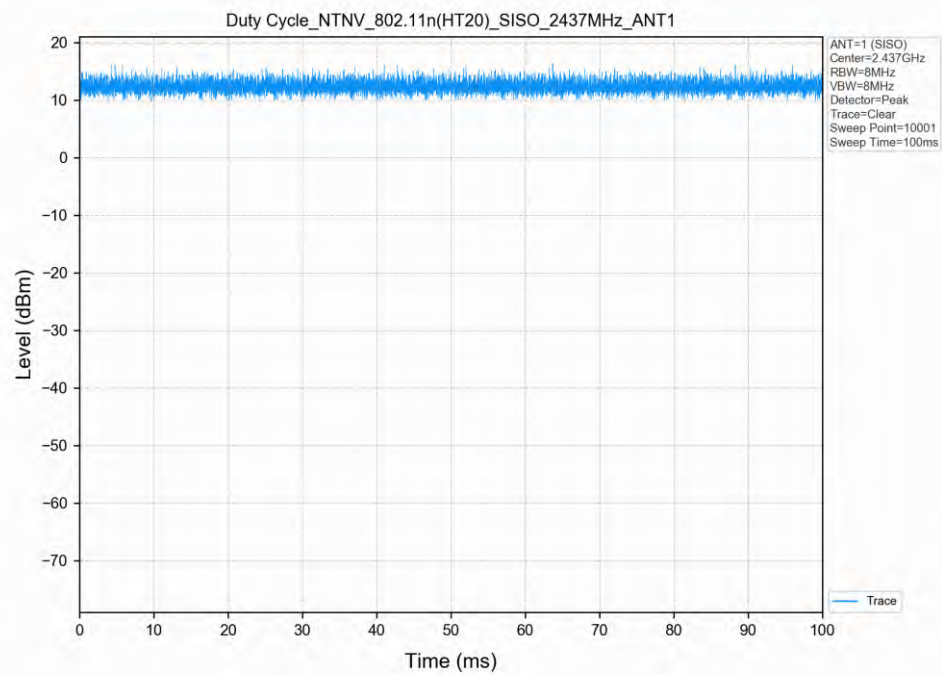




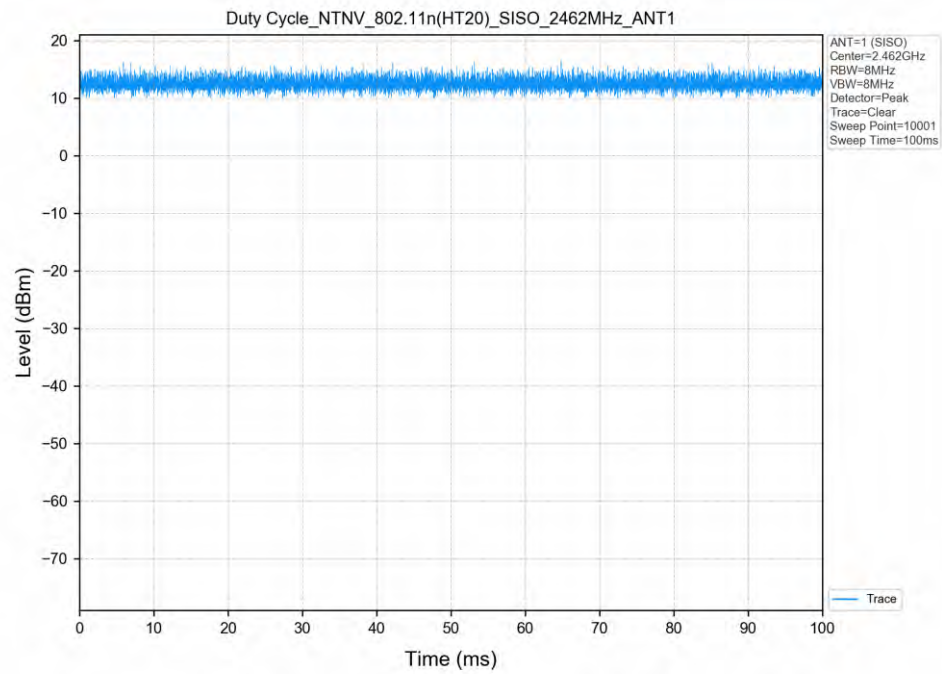
802.11n(HT20)_2412MHz_SISO_ANT1



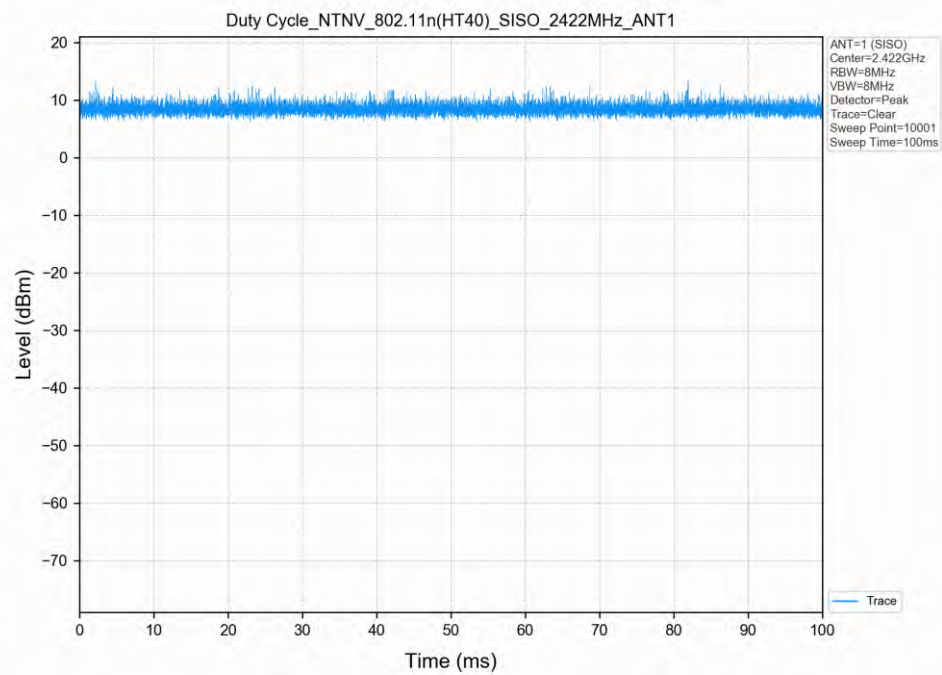
802.11n(HT20)_2437MHz_SISO_ANT1



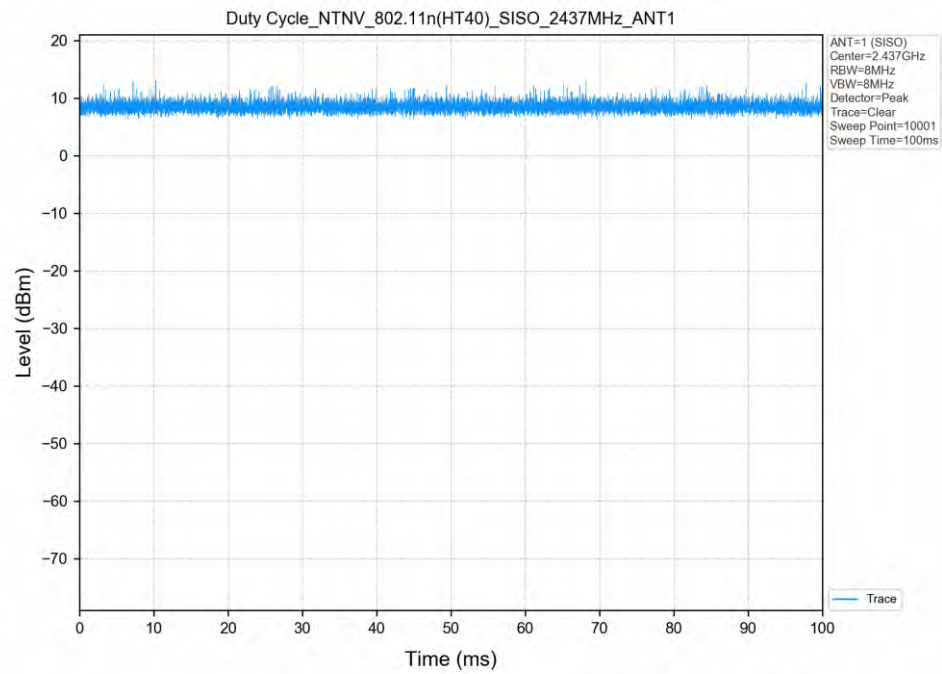
802.11n(HT20)_2462MHz_SISO_ANT1



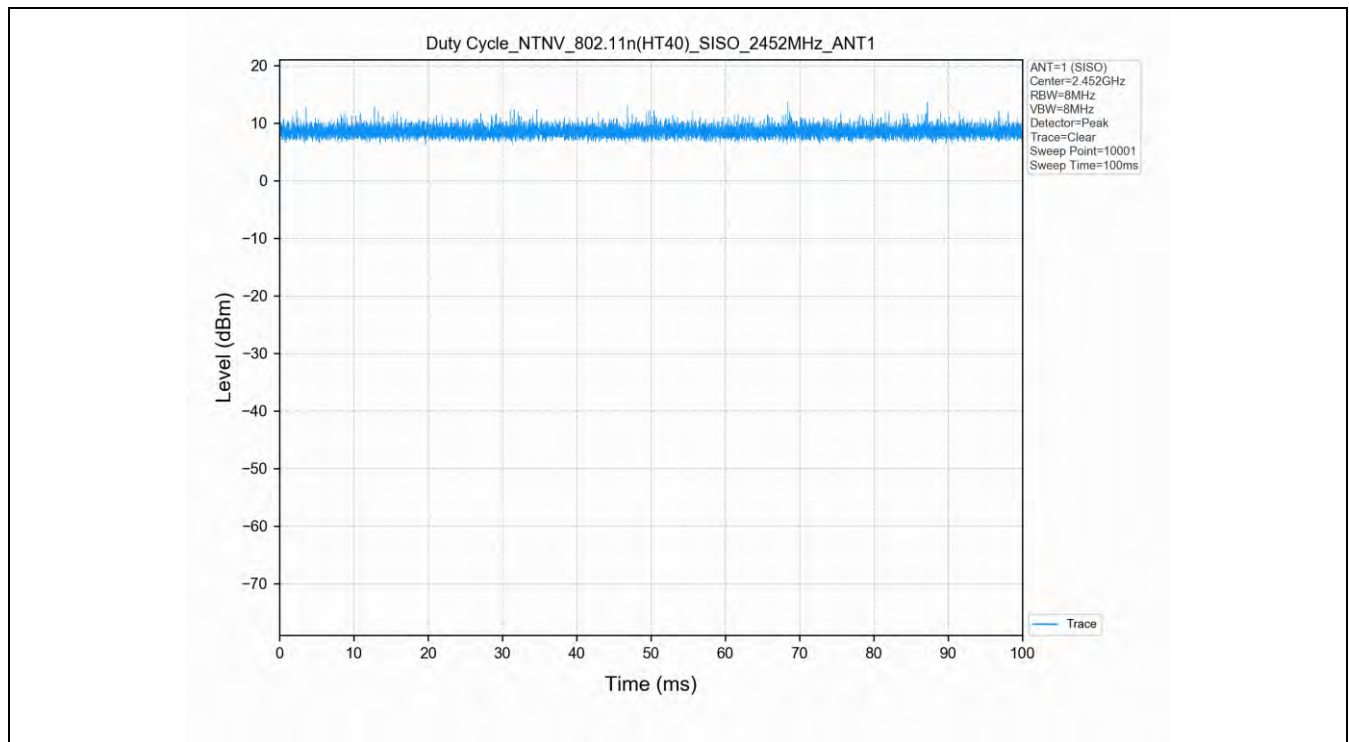
802.11n(HT40)_2422MHz_SISO_ANT1



802.11n(HT40)_2437MHz_SISO_ANT1



802.11n(HT40)_2452MHz_SISO_ANT1



2. Bandwidth

2.1 Test Result

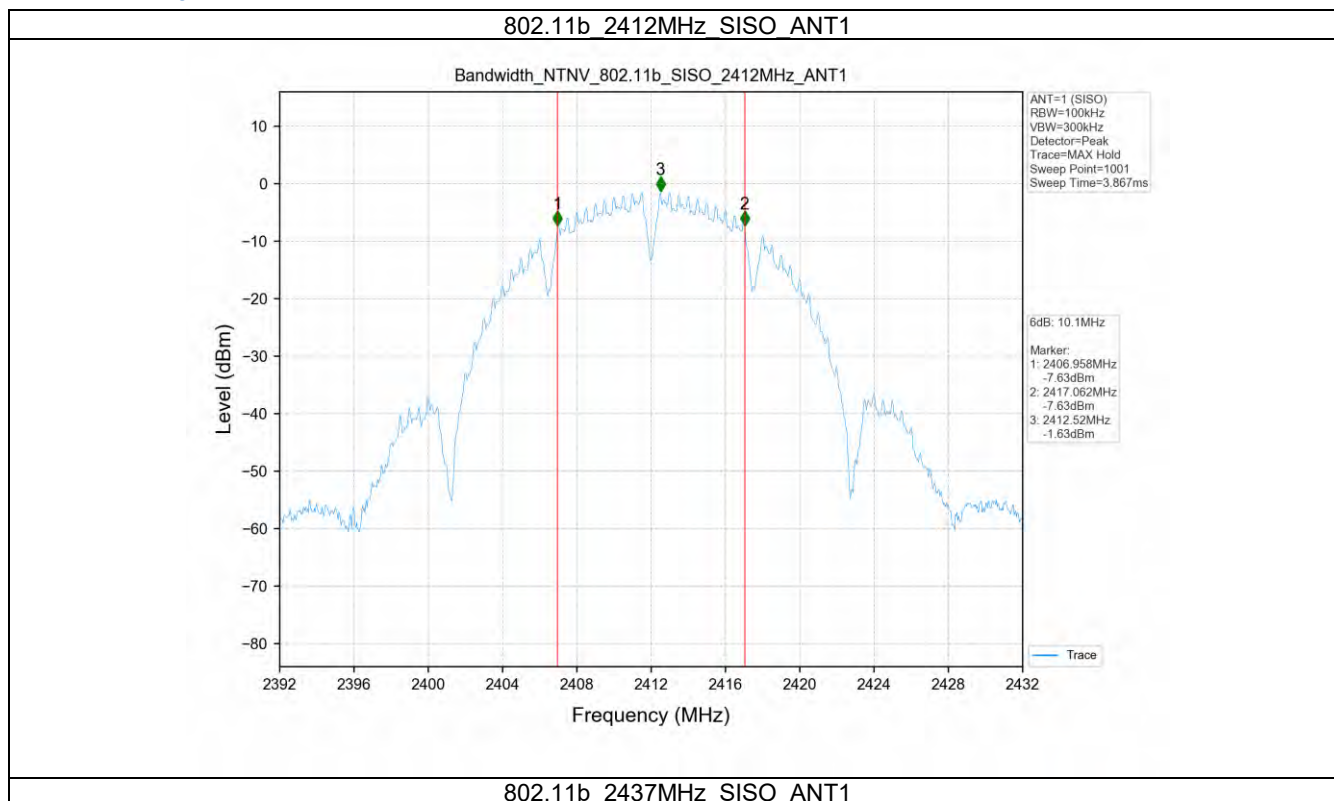
Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11b	2412	SISO	1	10.100	≥ 0.5	PASS
	2437	SISO	1	10.100	≥ 0.5	PASS
	2462	SISO	1	10.090	≥ 0.5	PASS
802.11g	2412	SISO	1	16.620	≥ 0.5	PASS
	2437	SISO	1	16.610	≥ 0.5	PASS
	2462	SISO	1	16.600	≥ 0.5	PASS
802.11n(HT20)	2412	SISO	1	17.820	≥ 0.5	PASS
	2437	SISO	1	17.850	≥ 0.5	PASS
	2462	SISO	1	17.830	≥ 0.5	PASS
802.11n(HT40)	2422	SISO	1	36.460	≥ 0.5	PASS
	2437	SISO	1	36.480	≥ 0.5	PASS
	2452	SISO	1	36.450	≥ 0.5	PASS

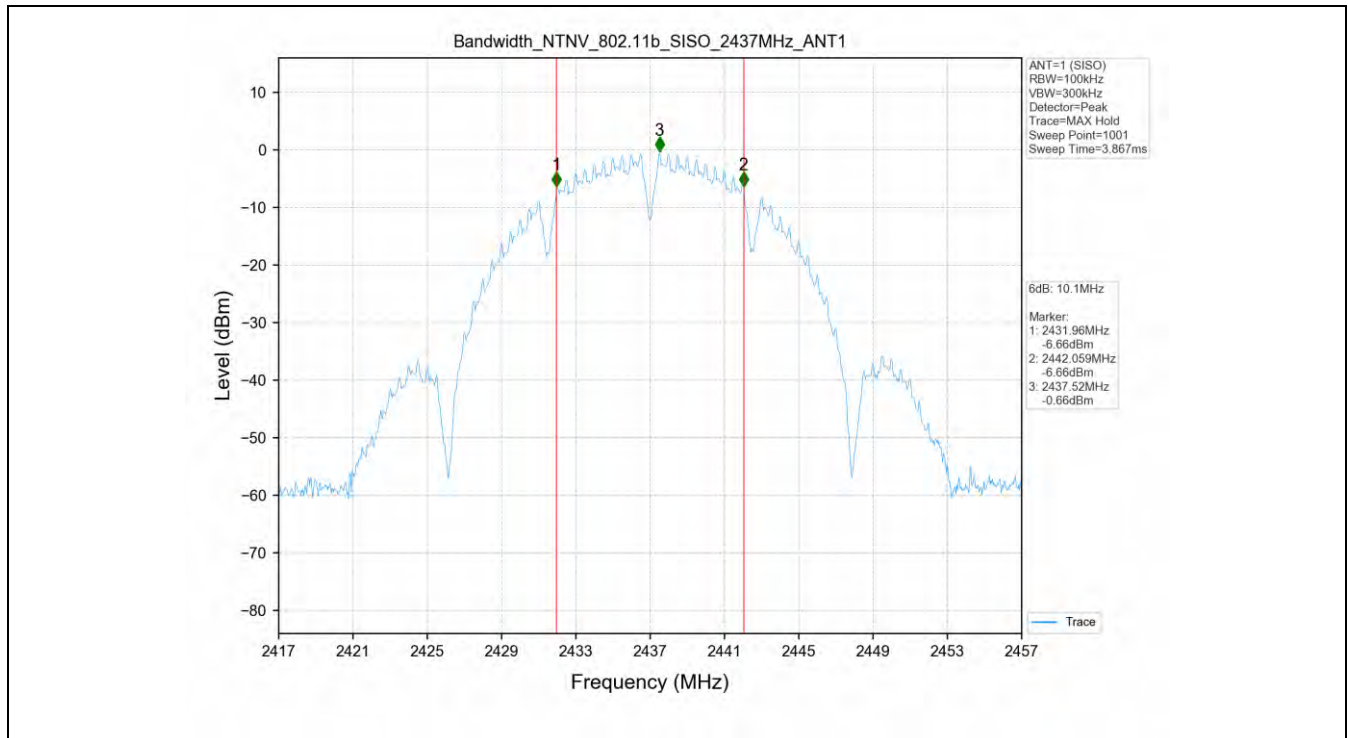
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11b	2412	SISO	1	15.110	Only for Report Use
	2437	SISO	1	15.080	Only for Report Use
	2462	SISO	1	15.090	Only for Report Use
802.11g	2412	SISO	1	16.990	Only for Report Use
	2437	SISO	1	16.970	Only for Report Use



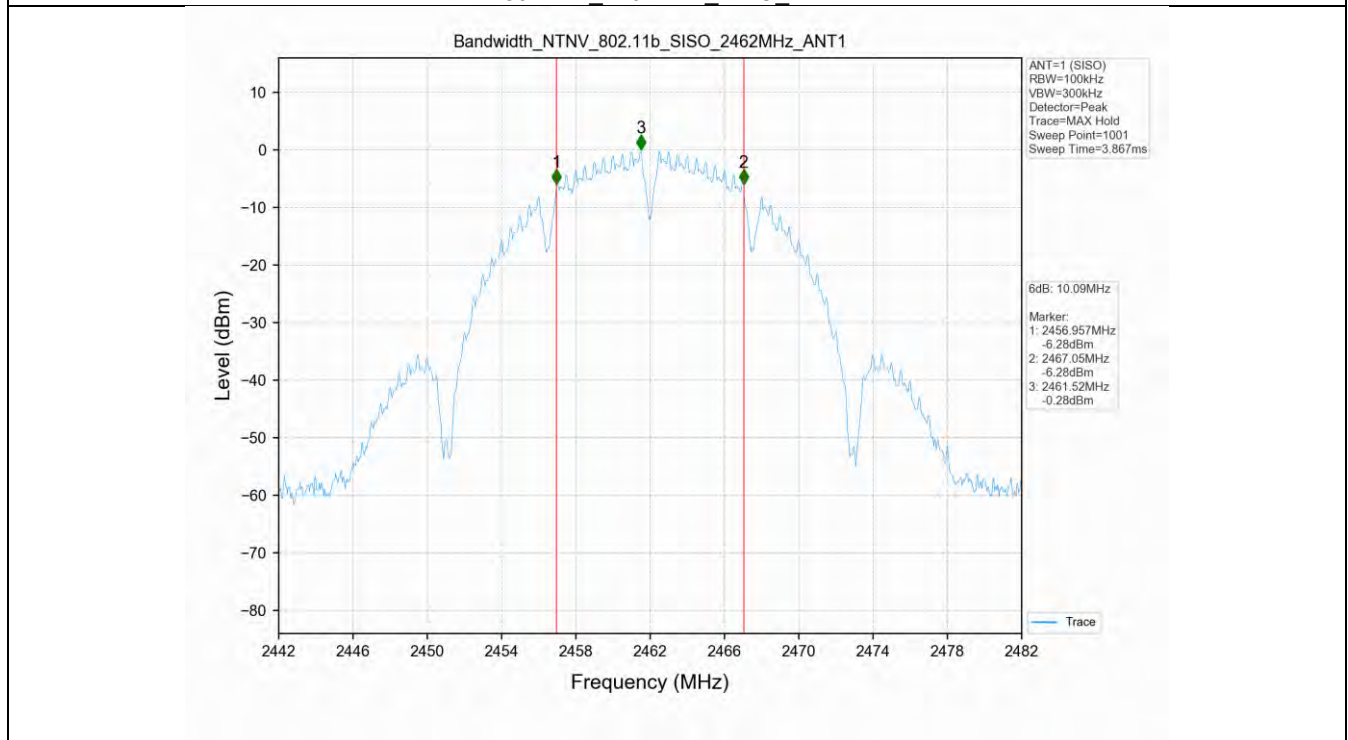
	2462	SISO	1	16.990	Only for Report Use
802.11n(HT20)	2412	SISO	1	18.010	Only for Report Use
	2437	SISO	1	18.030	Only for Report Use
	2462	SISO	1	18.010	Only for Report Use
	2422	SISO	1	36.610	Only for Report Use
802.11n(HT40)	2437	SISO	1	36.580	Only for Report Use
	2452	SISO	1	36.620	Only for Report Use

2.2 Test Graph - 6dB Bandwidth

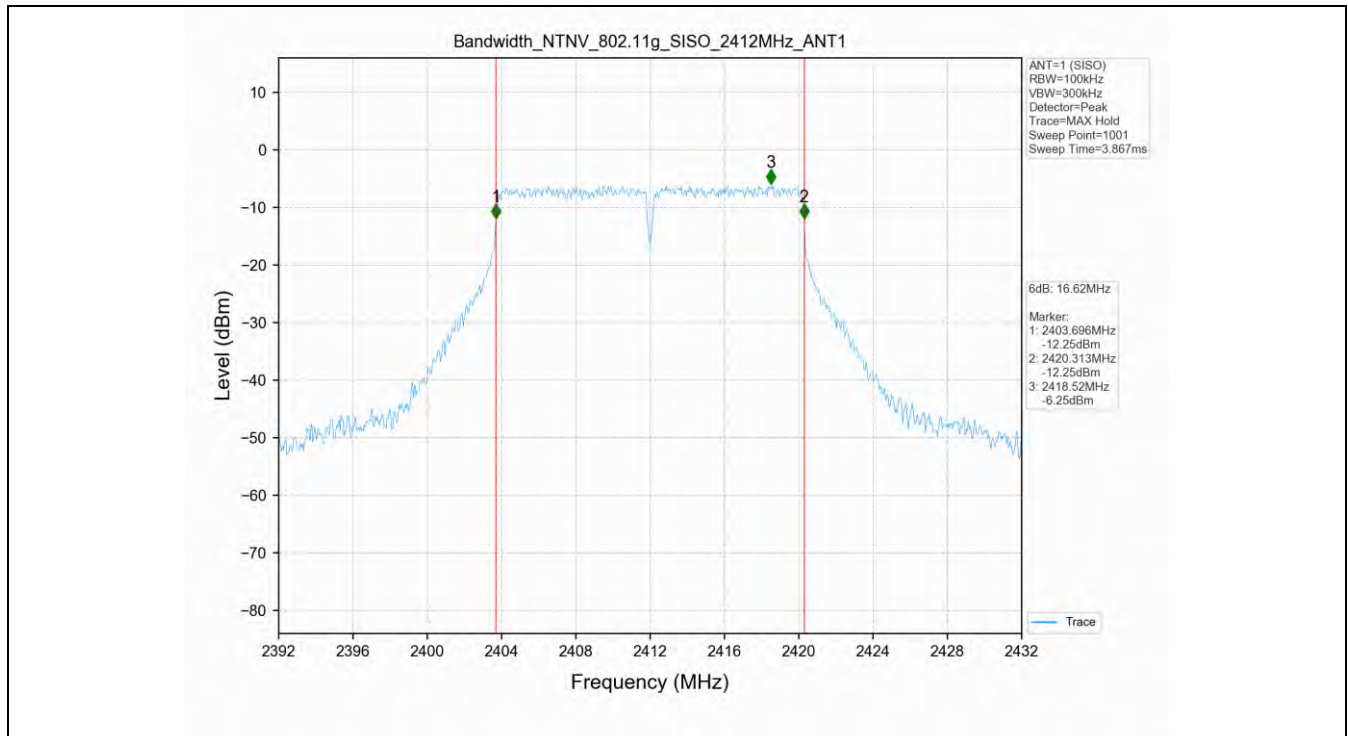




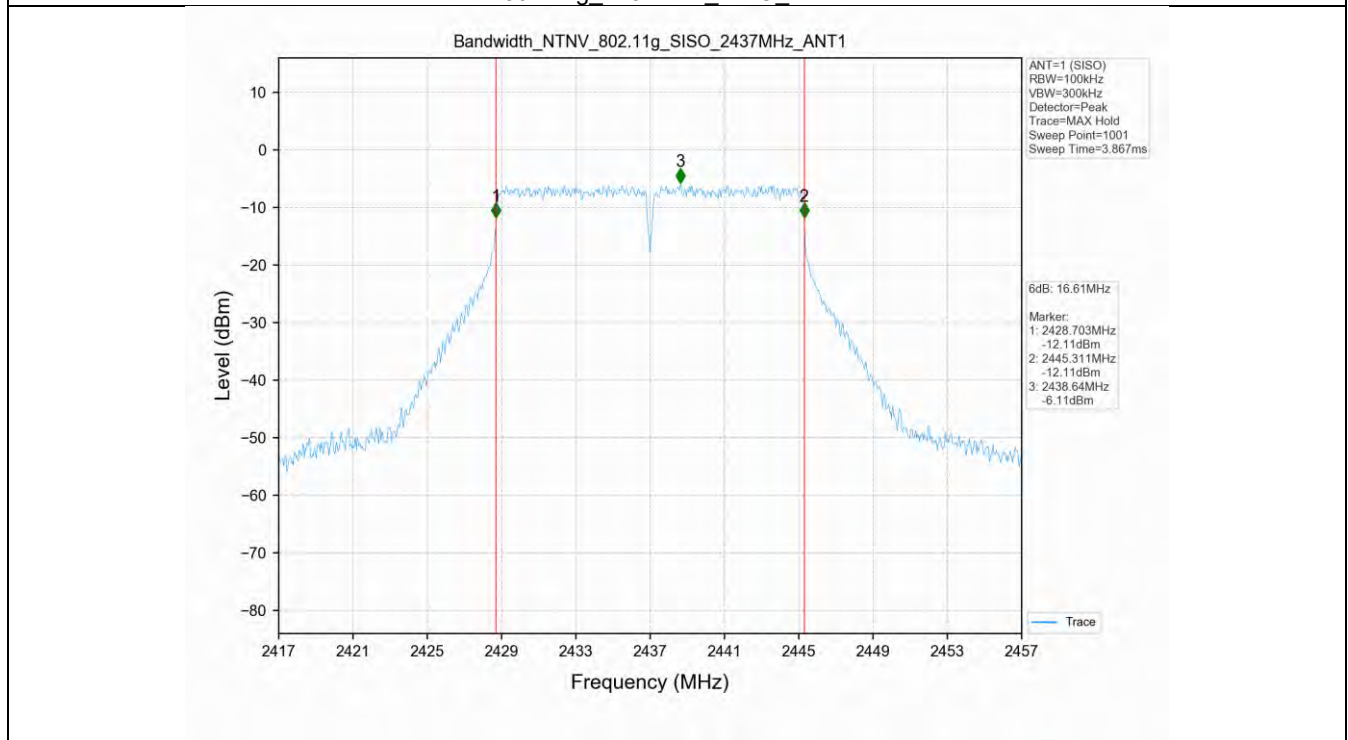
802.11b_2462MHz_SISO_ANT1



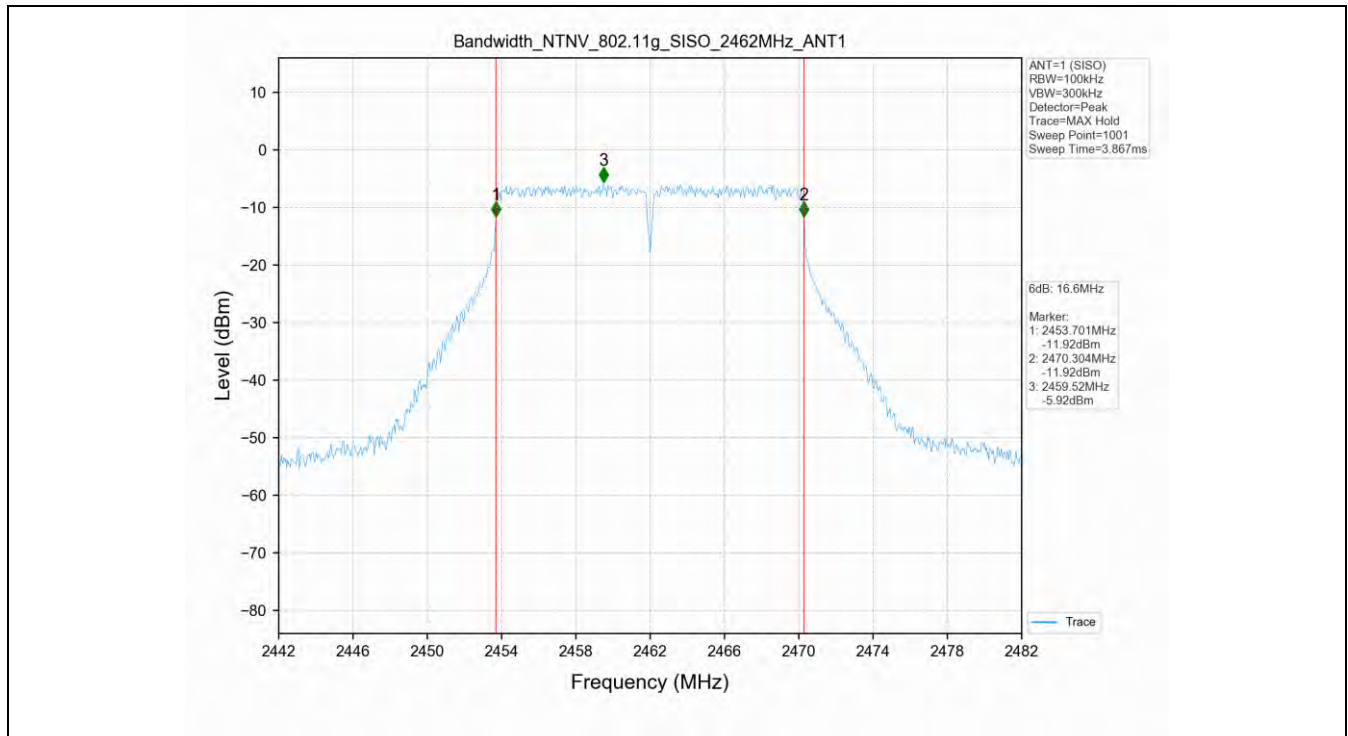
802.11g_2412MHz_SISO_ANT1



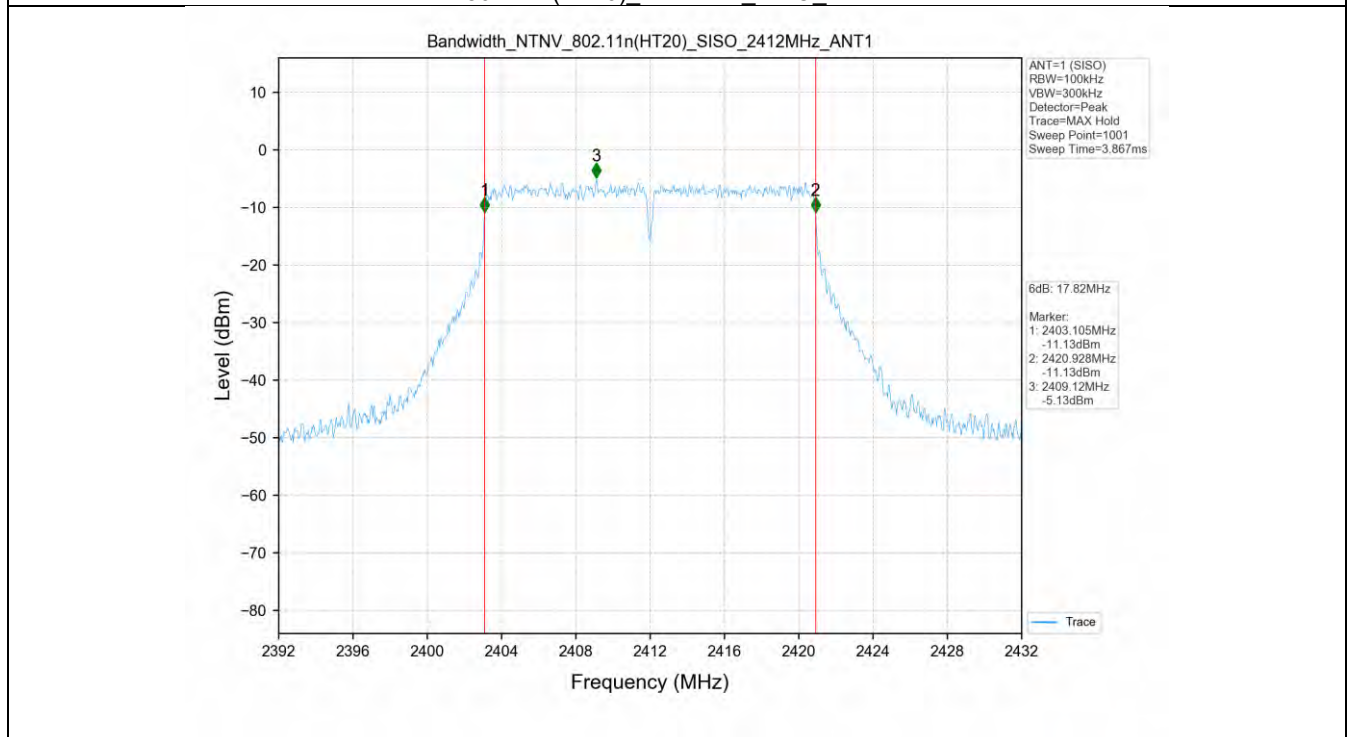
802.11g_2437MHz_SISO_ANT1



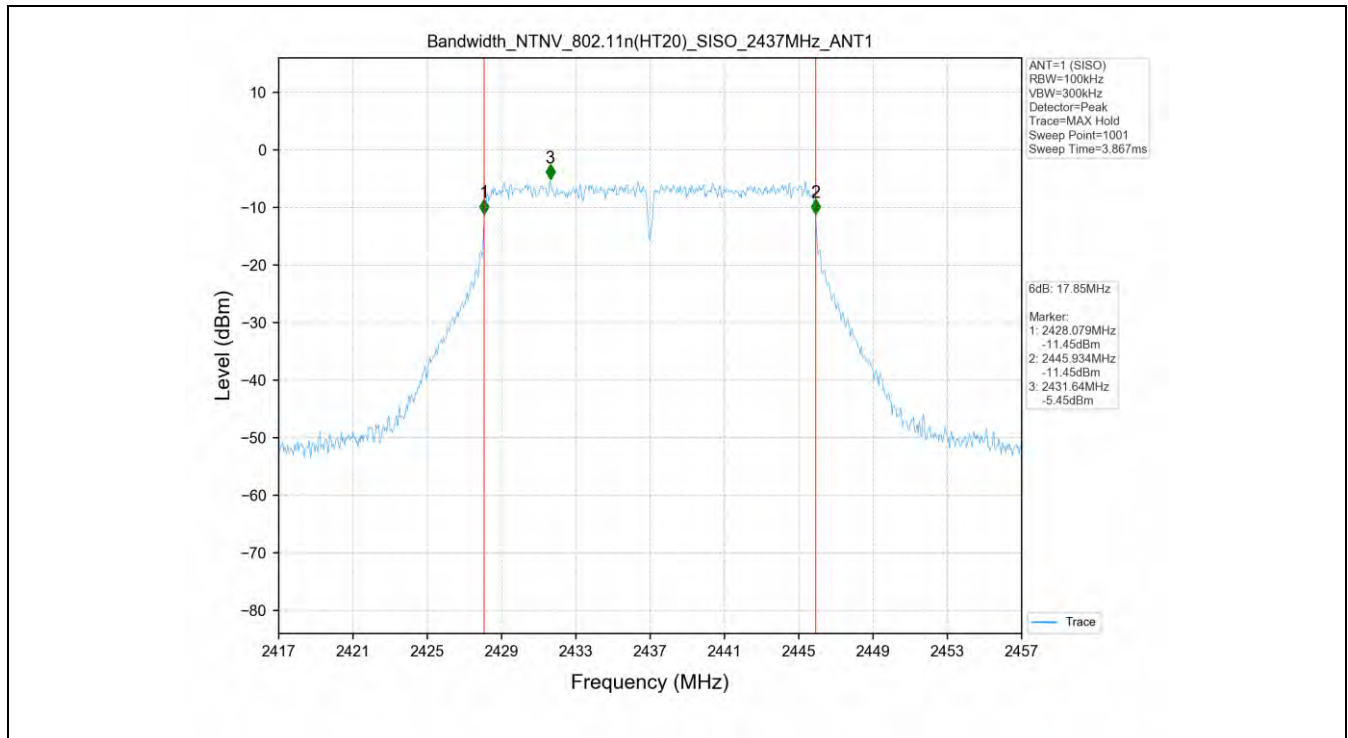
802.11g_2462MHz_SISO_ANT1



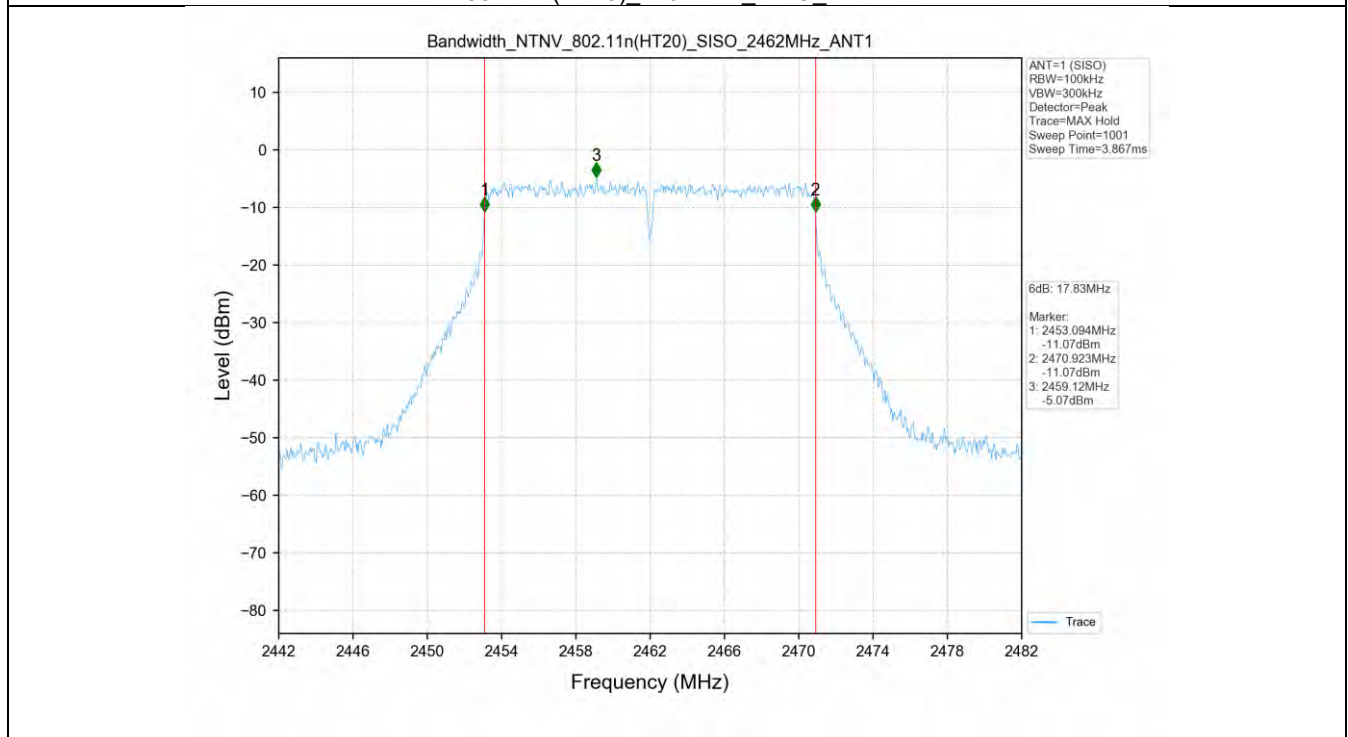
802.11n(HT20)_2412MHz_SISO_ANT1



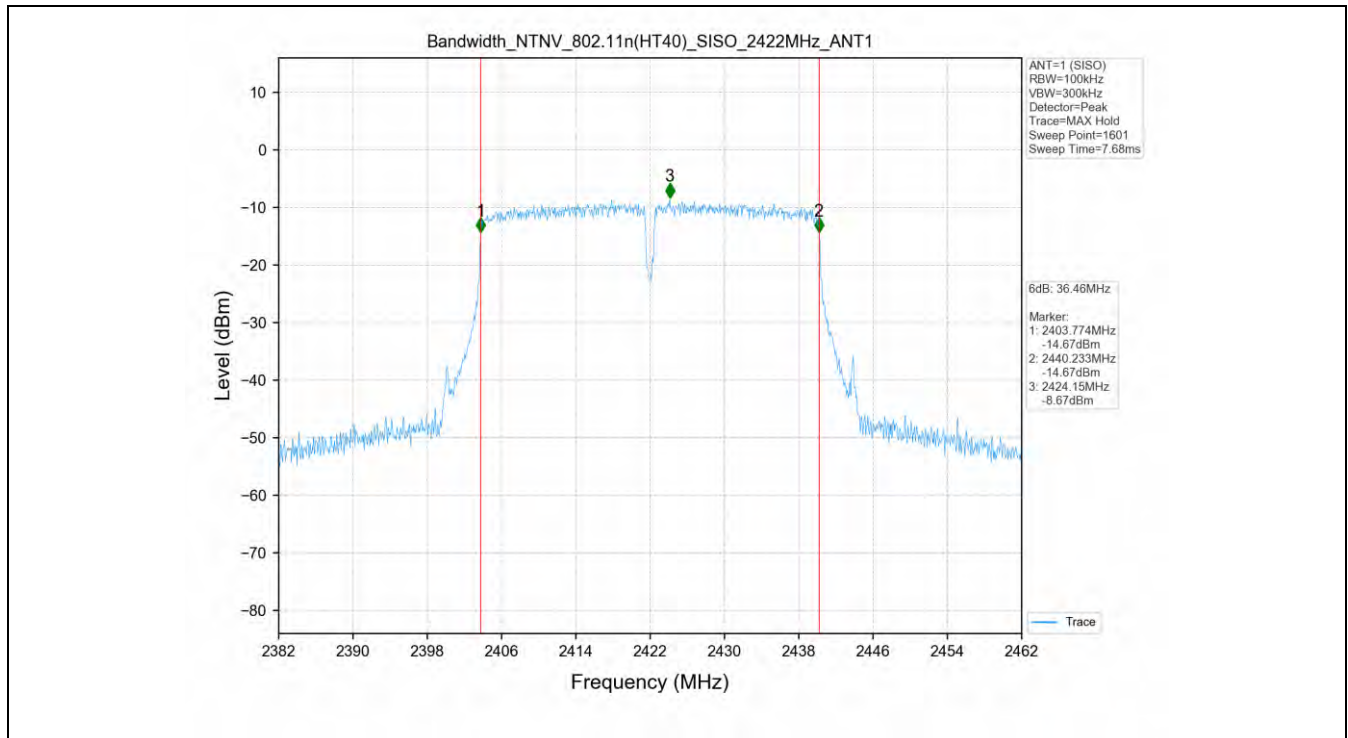
802.11n(HT20)_2437MHz_SISO_ANT1



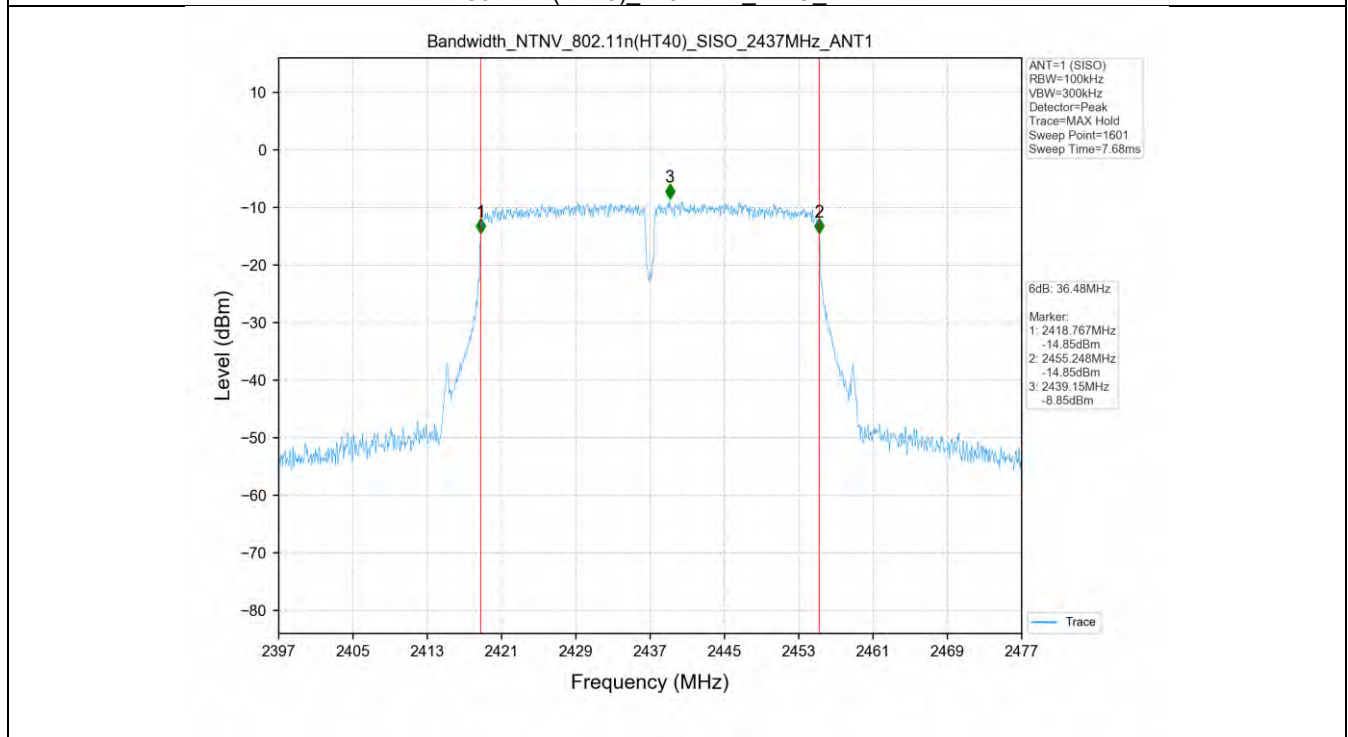
802.11n(HT20)_2462MHz_SISO_ANT1



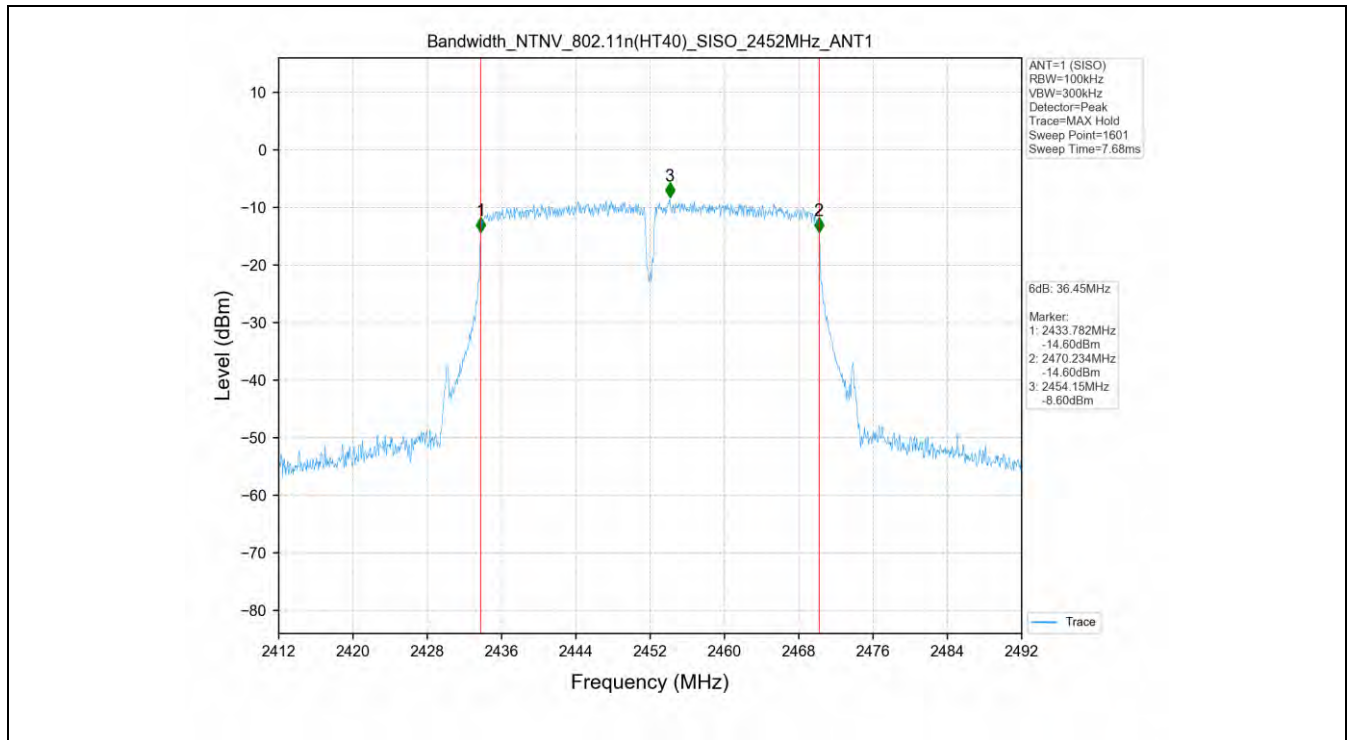
802.11n(HT40)_2422MHz_SISO_ANT1



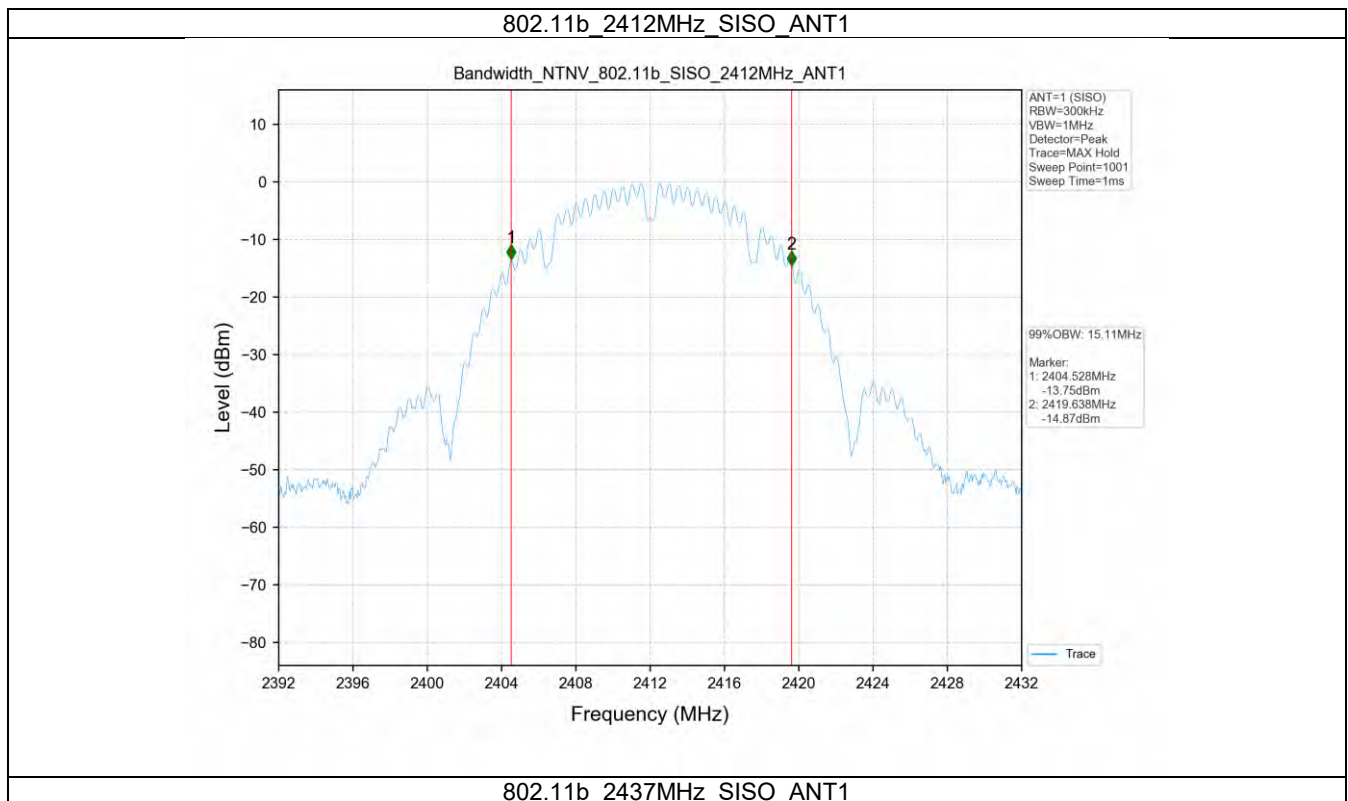
802.11n(HT40)_2437MHz_SISO_ANT1

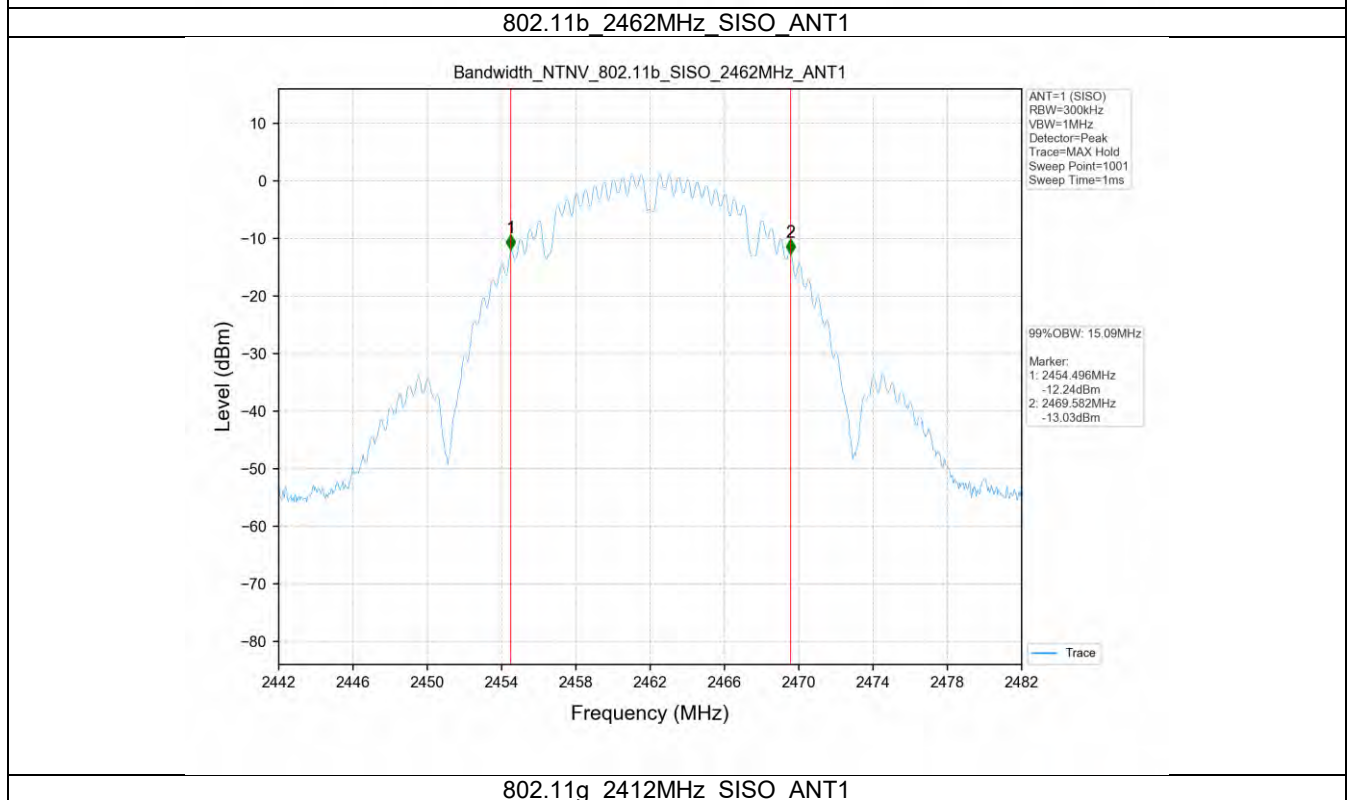
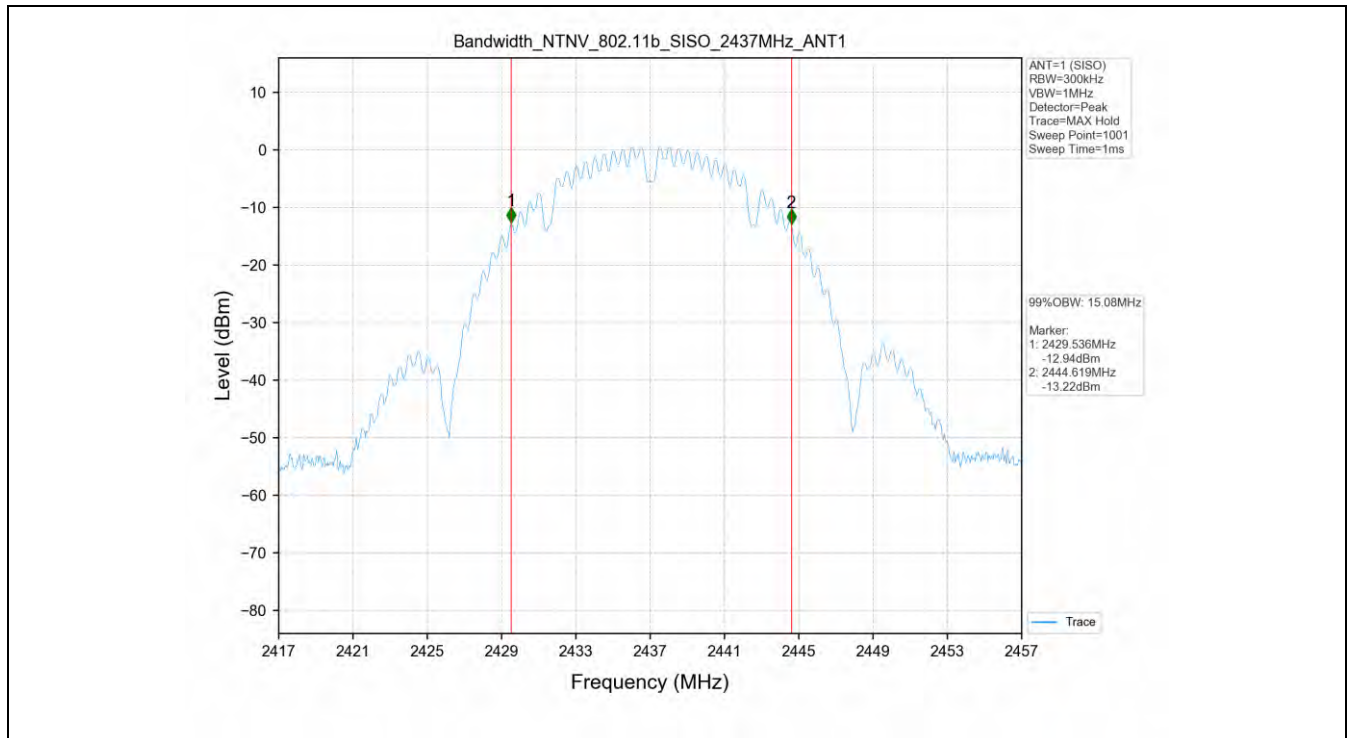


802.11n(HT40)_2452MHz_SISO_ANT1

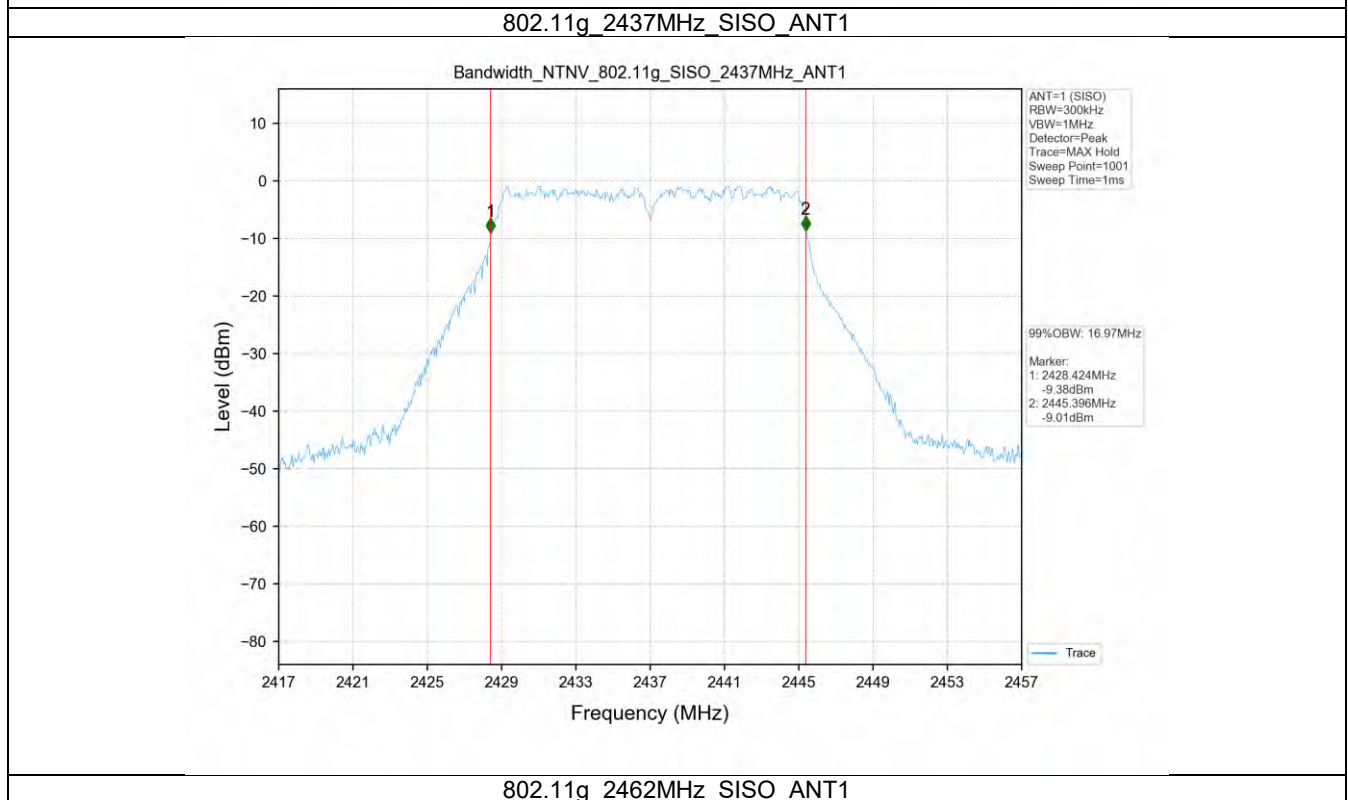
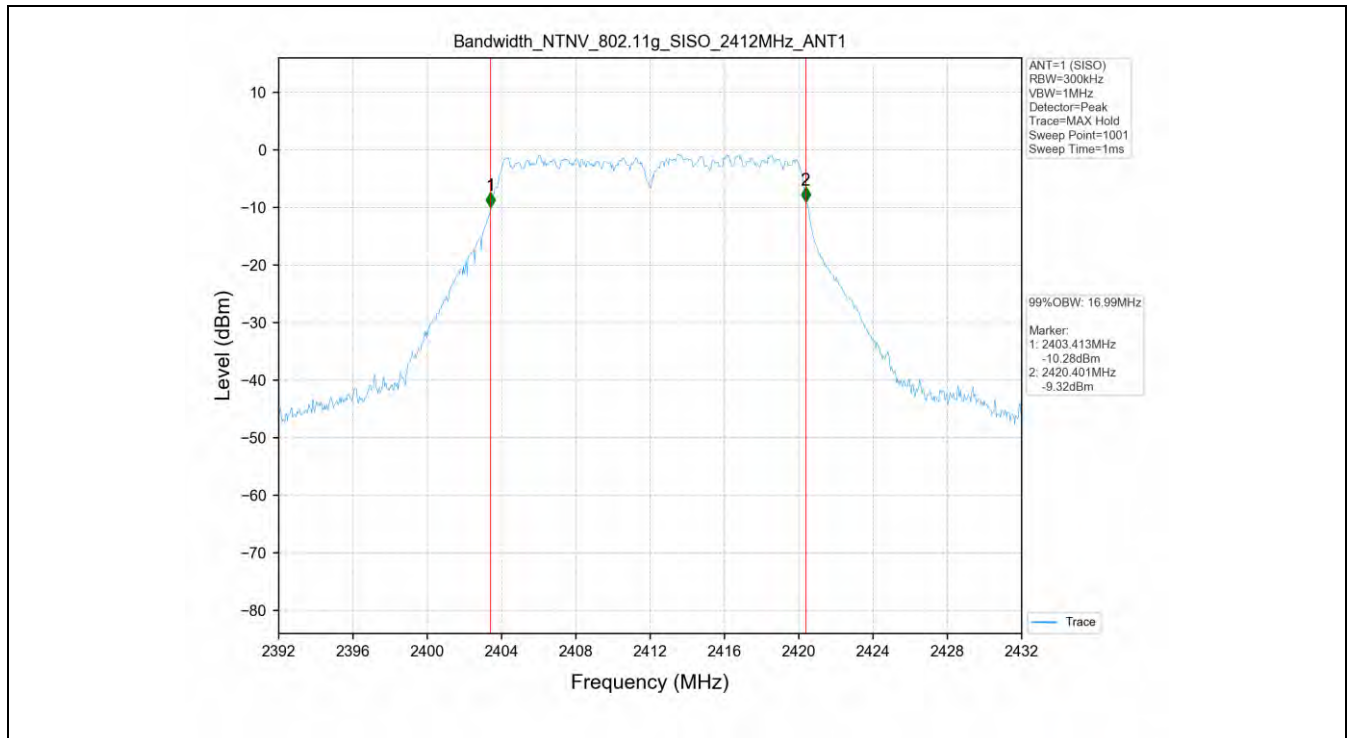


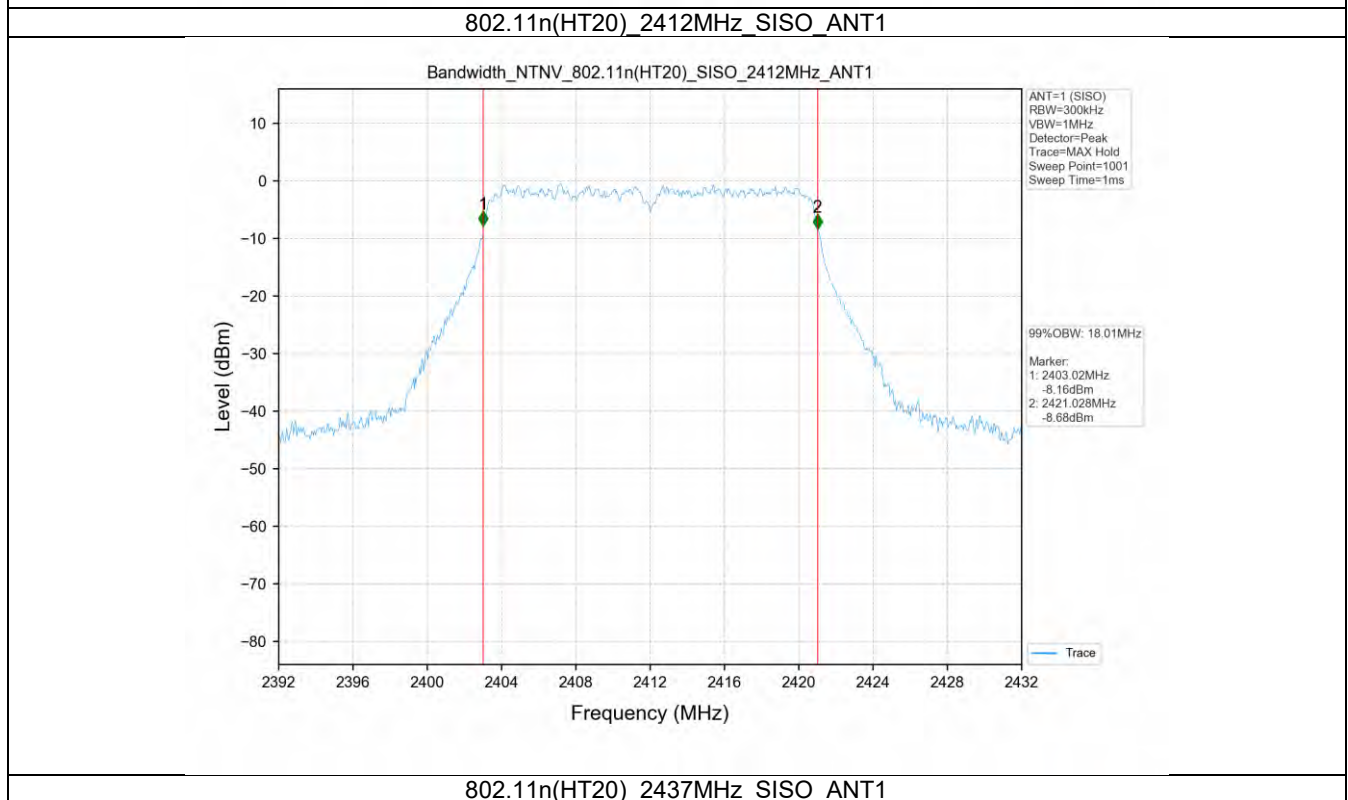
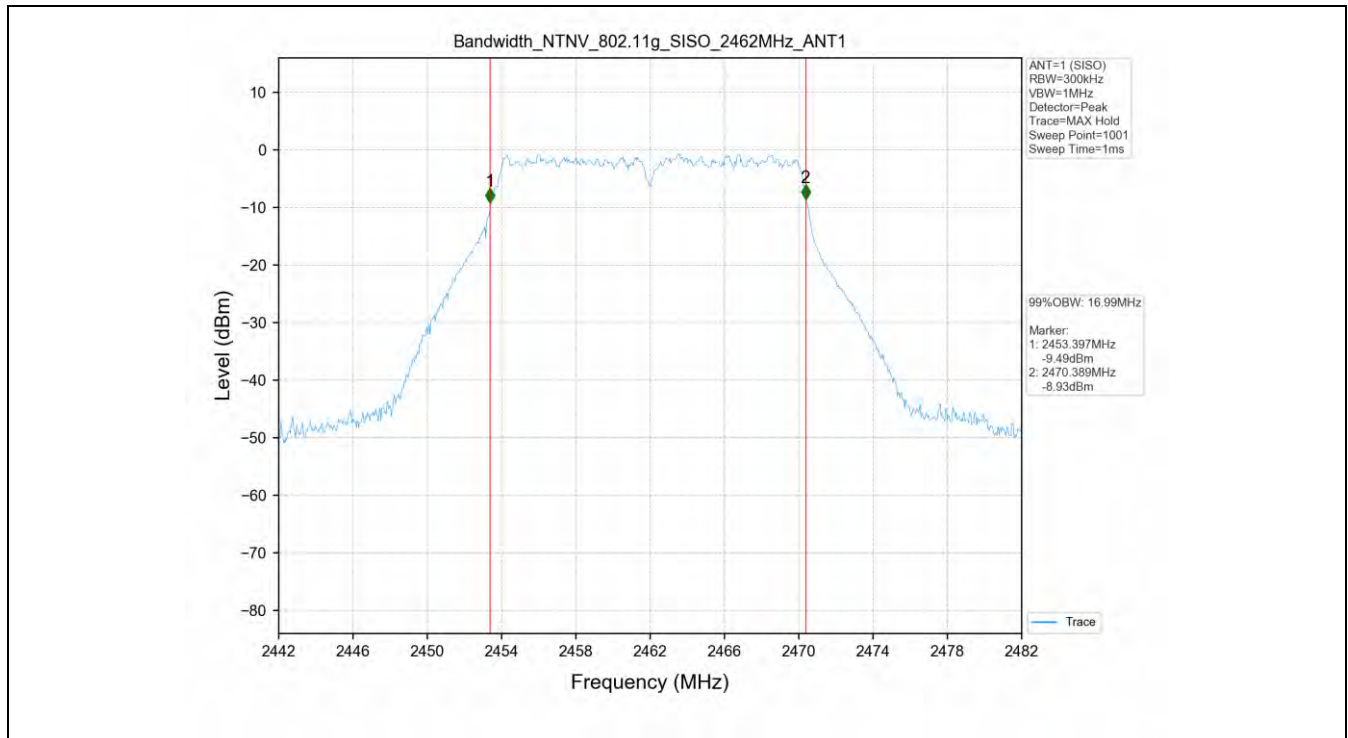
2.3 Test Graph - 99% Occupied Bandwidth

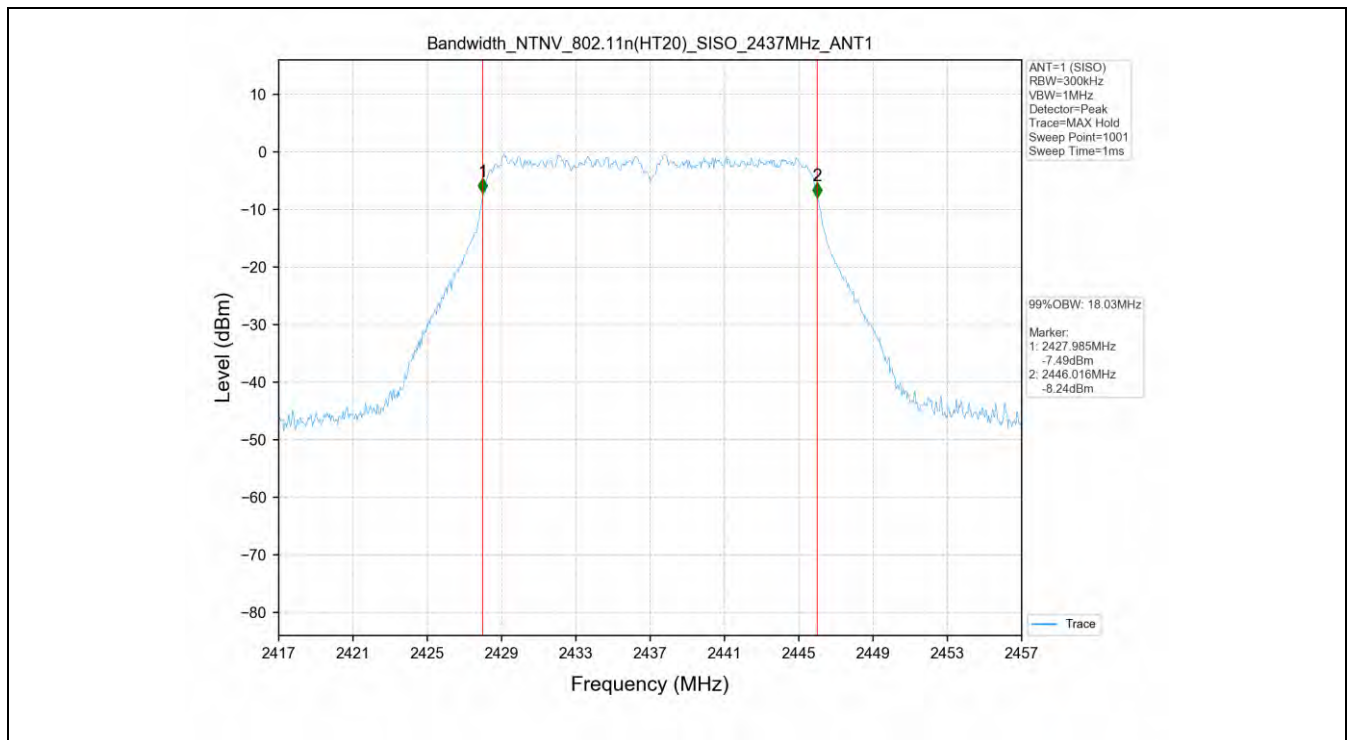




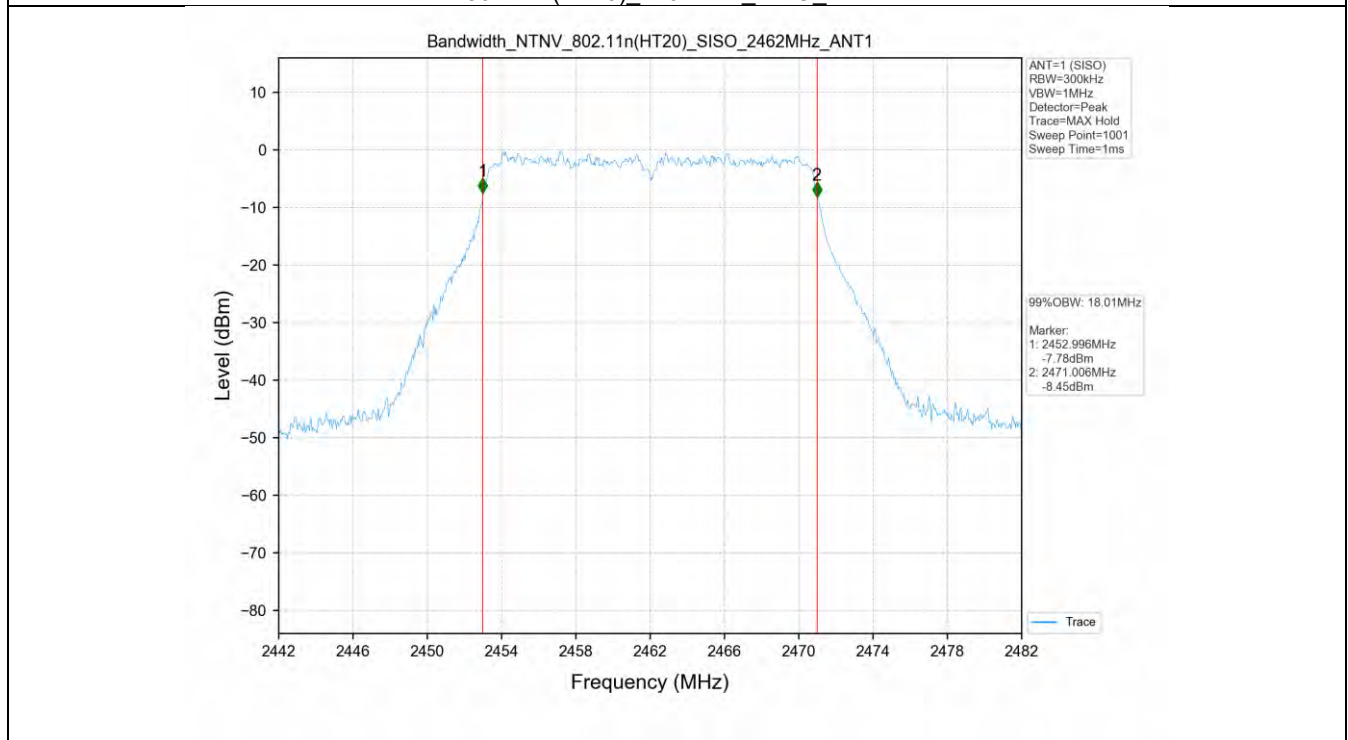
802.11g_2412MHz_SISO_ANT1



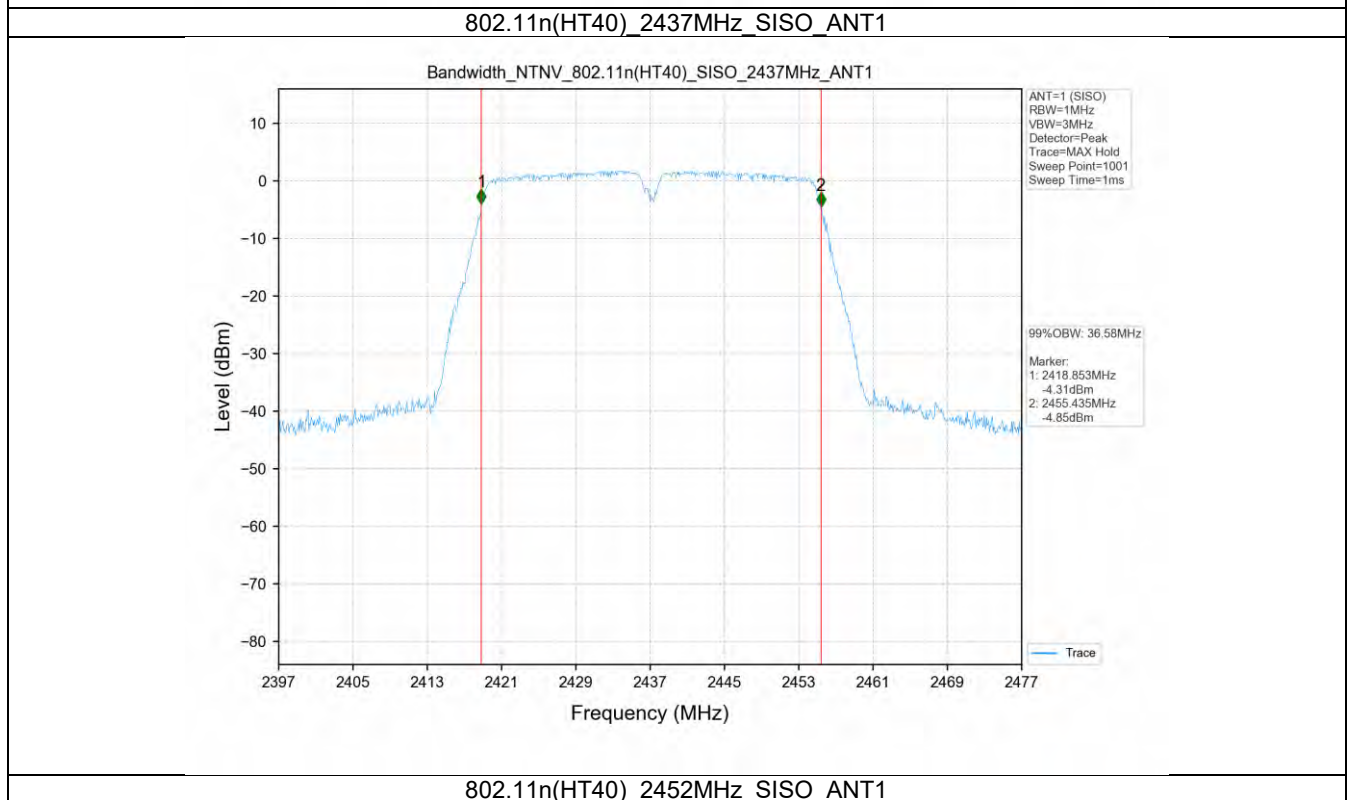
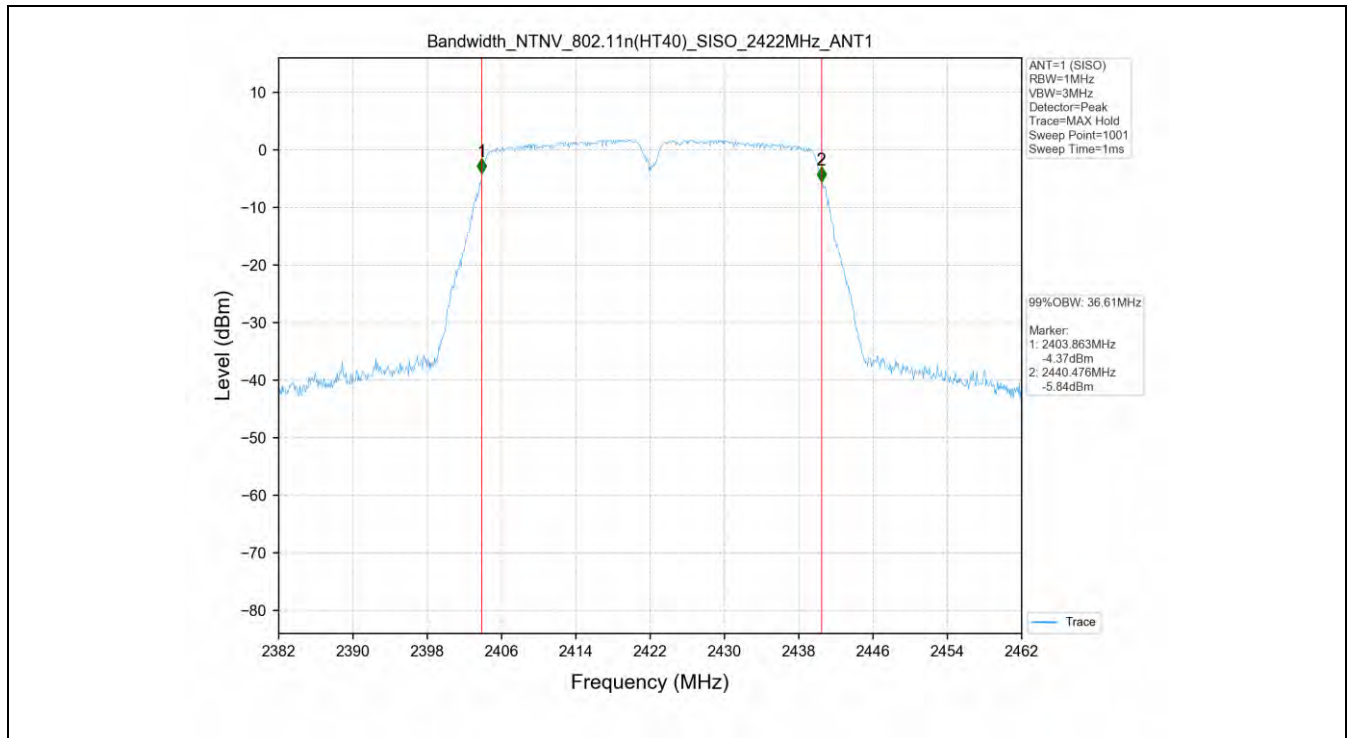


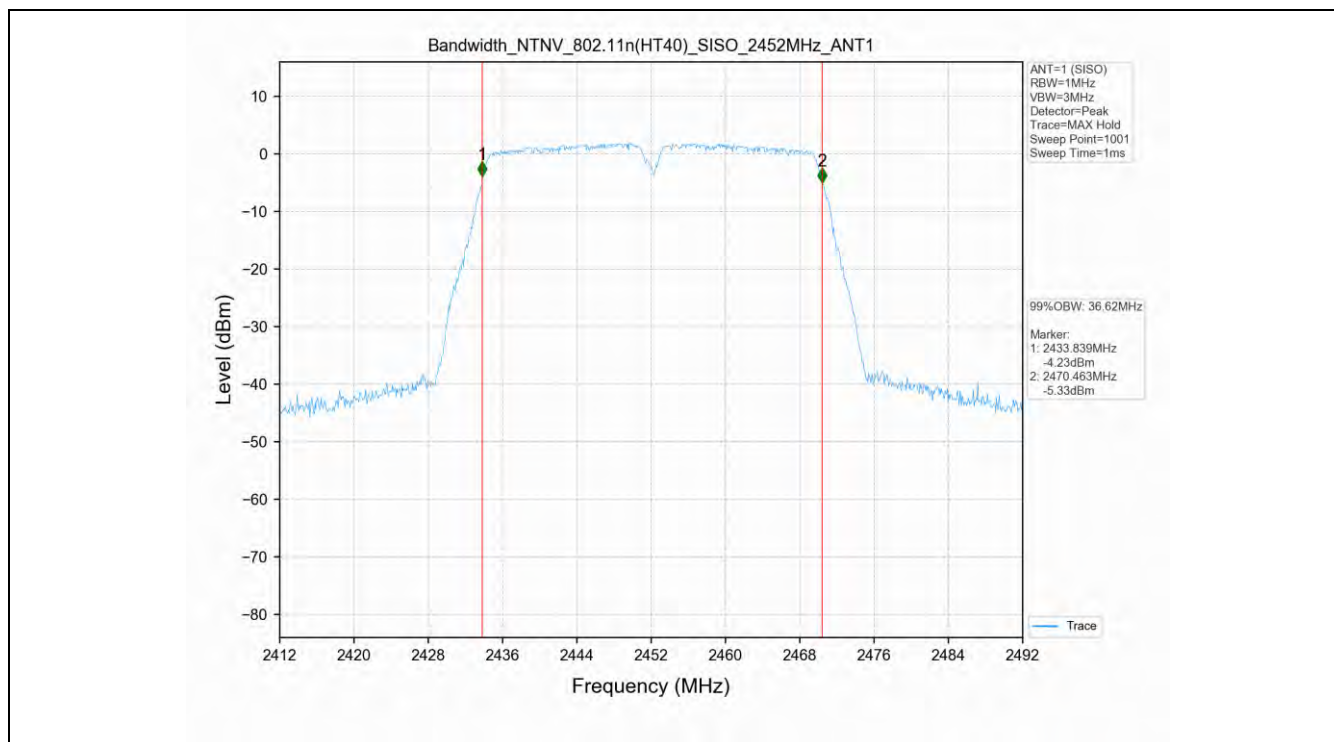


802.11n(HT20)_2462MHz_SISO_ANT1



802.11n(HT40)_2422MHz_SISO_ANT1





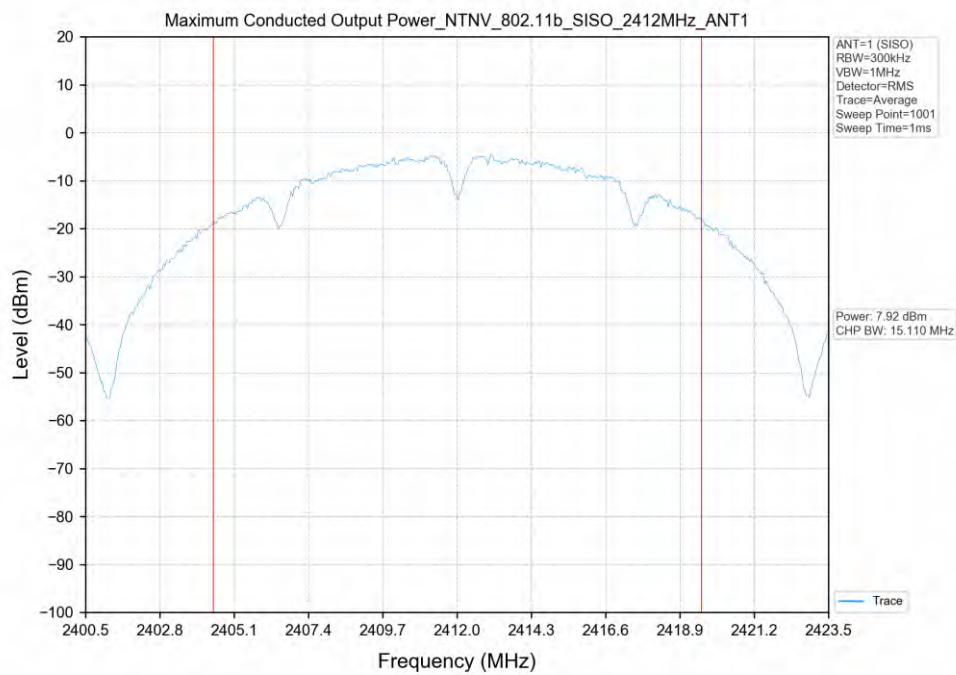
3. Maximum Conducted Output Power

3.1 Test Result

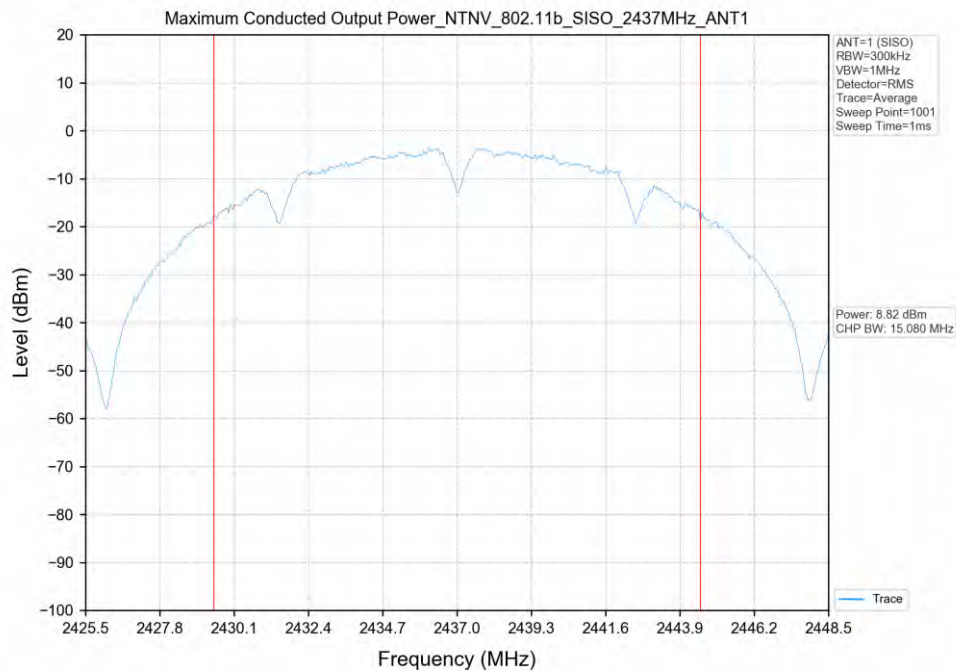
Test Mode	Frequency (MHz)	Tx Type	Measured Average Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
802.11b	2412	SISO	7.92	≤30	PASS
	2437	SISO	8.82	≤30	PASS
	2462	SISO	9.20	≤30	PASS
802.11g	2412	SISO	8.30	≤30	PASS
	2437	SISO	8.38	≤30	PASS
	2462	SISO	8.45	≤30	PASS
802.11n(HT20)	2412	SISO	8.95	≤30	PASS
	2437	SISO	8.91	≤30	PASS
	2462	SISO	8.99	≤30	PASS
802.11n(HT40)	2422	SISO	8.42	≤30	PASS
	2437	SISO	8.43	≤30	PASS
	2452	SISO	8.45	≤30	PASS

3.2 Test Graph

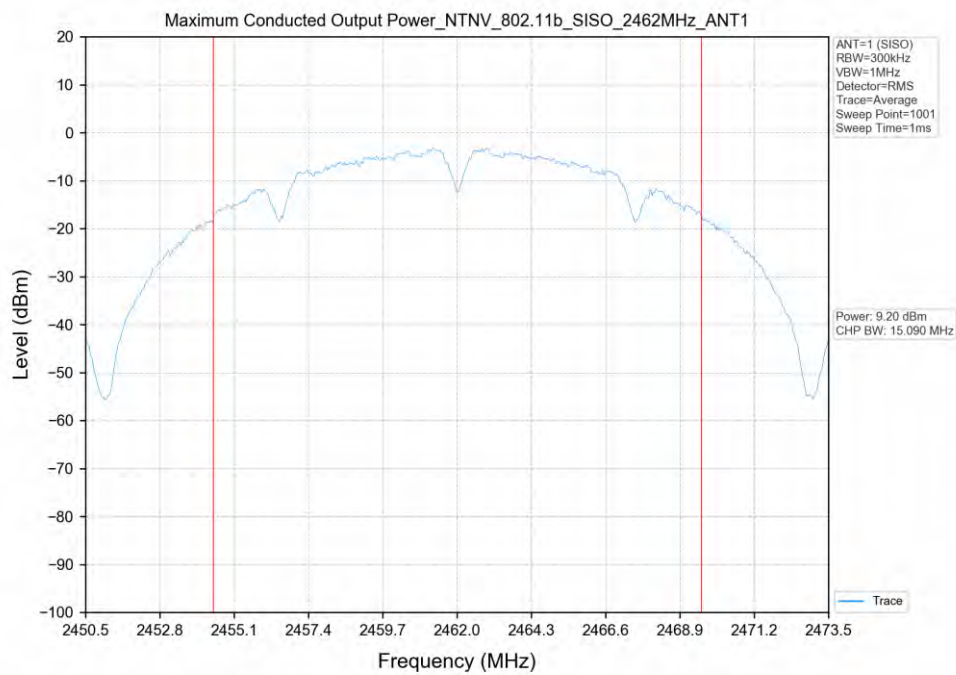
802.11b_2412MHz_SISO_ANT1



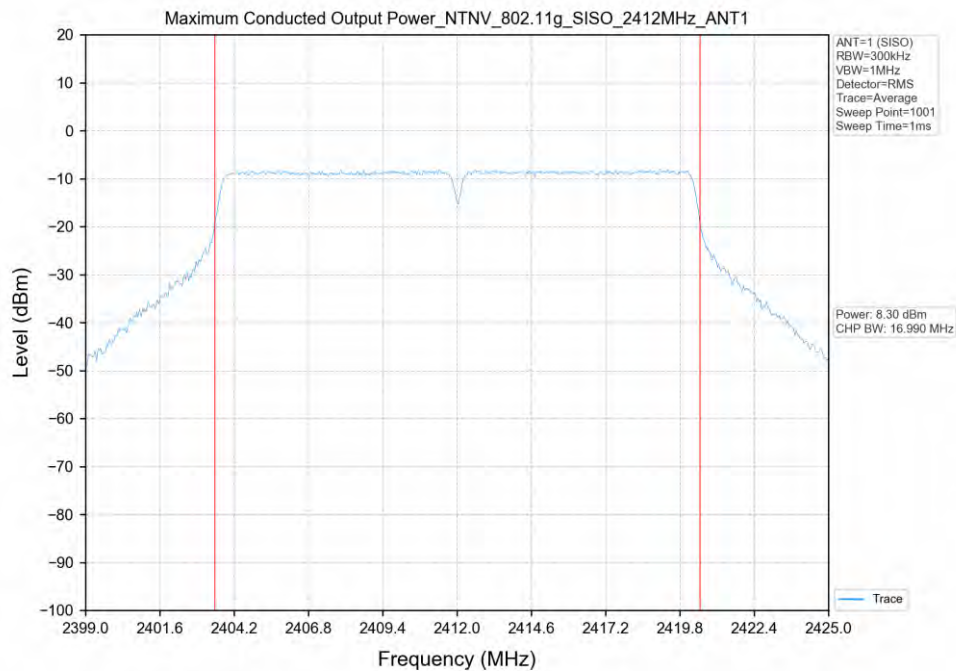
802.11b_2437MHz_SISO_ANT1



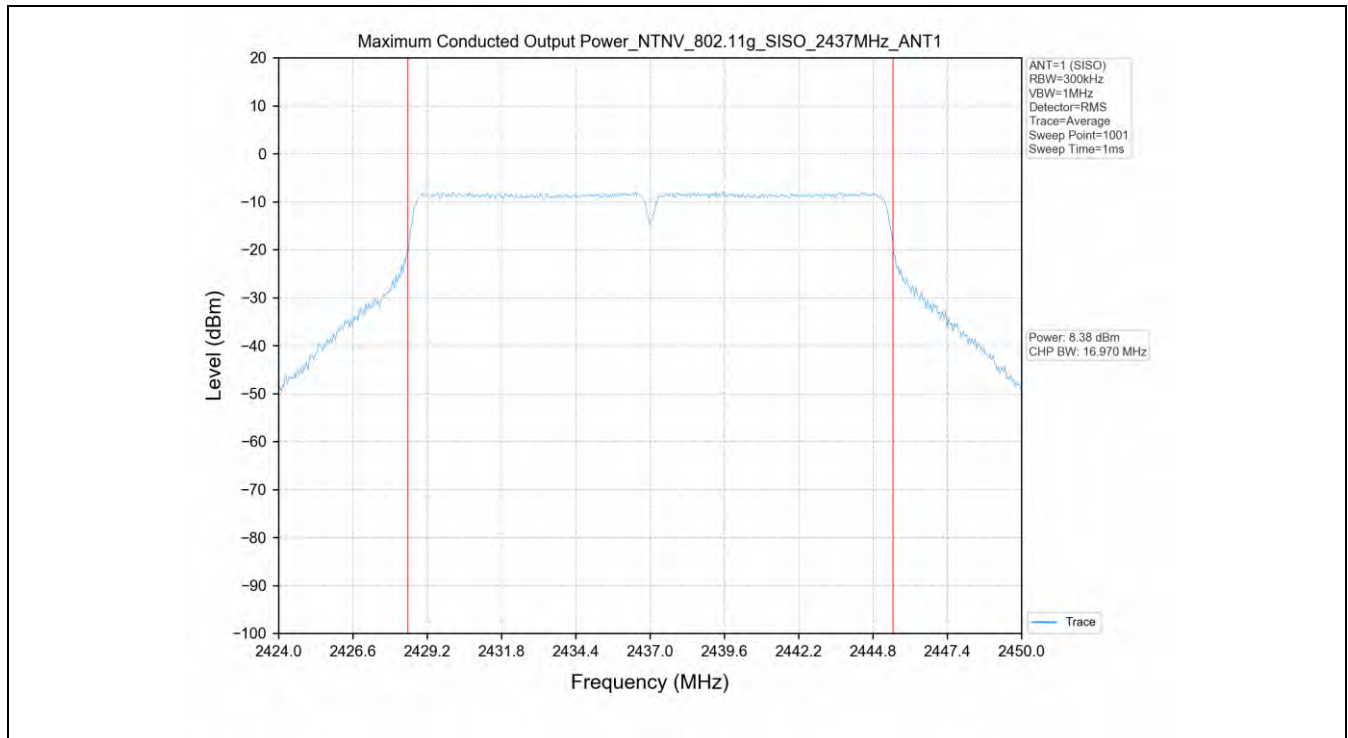
802.11b_2462MHz_SISO_ANT1



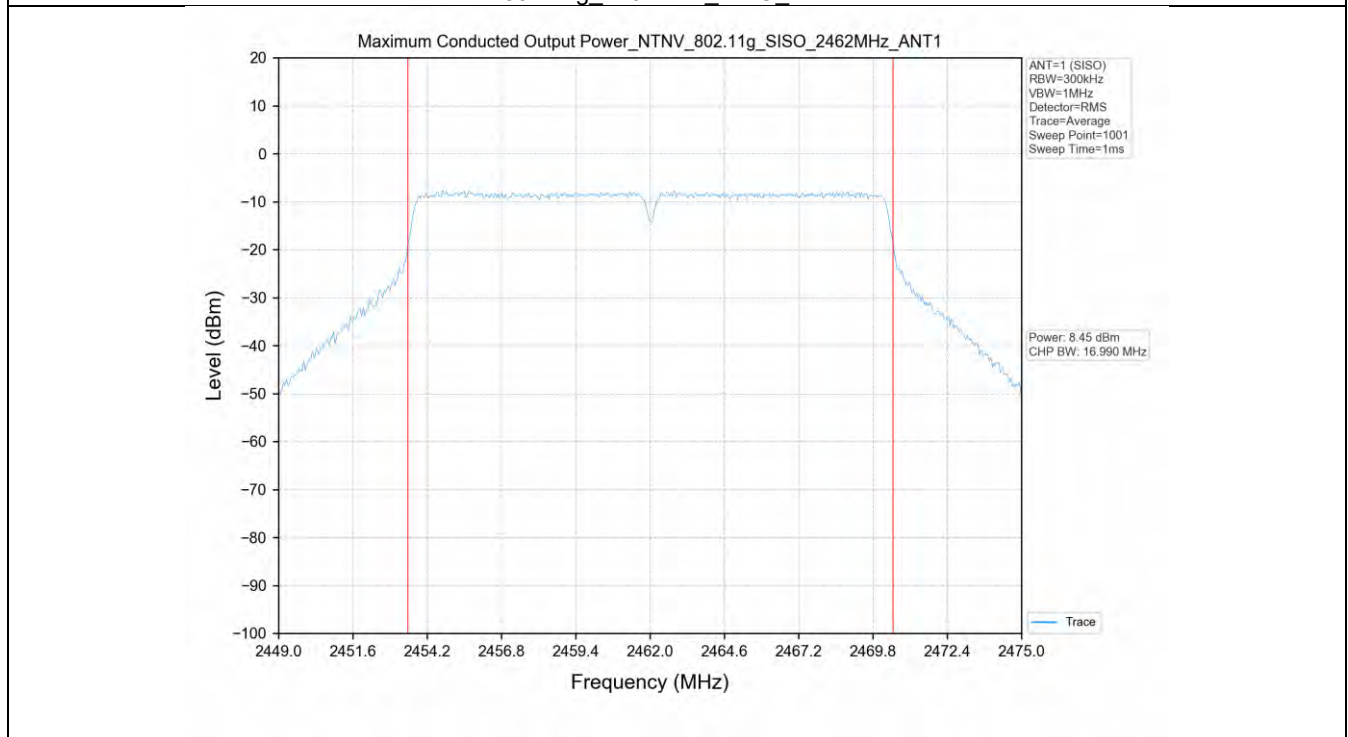
802.11g_2412MHz_SISO_ANT1



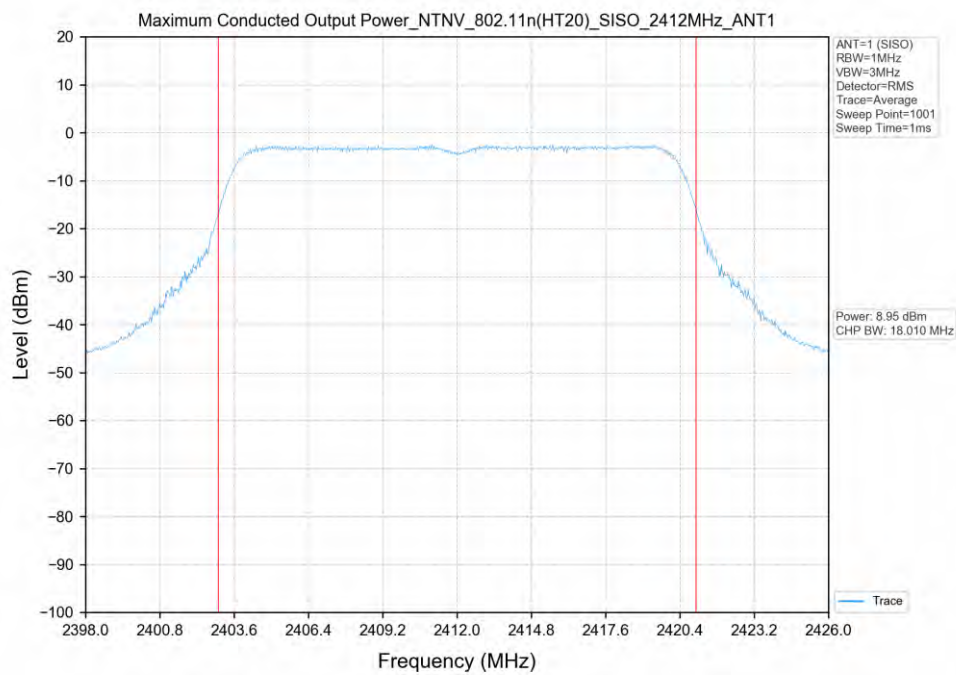
802.11g_2437MHz_SISO_ANT1



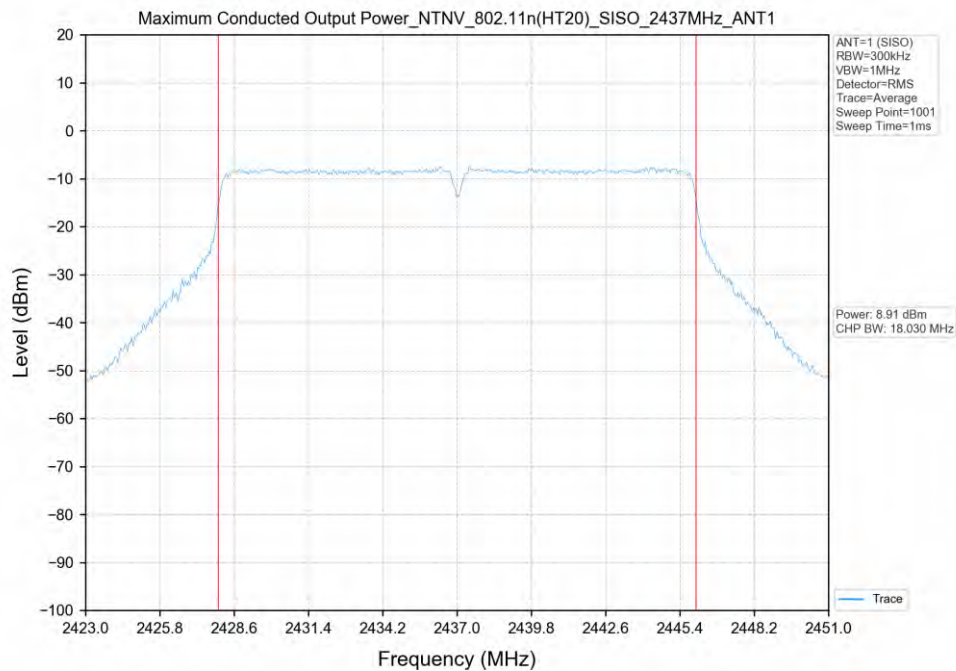
802.11g_2462MHz_SISO_ANT1



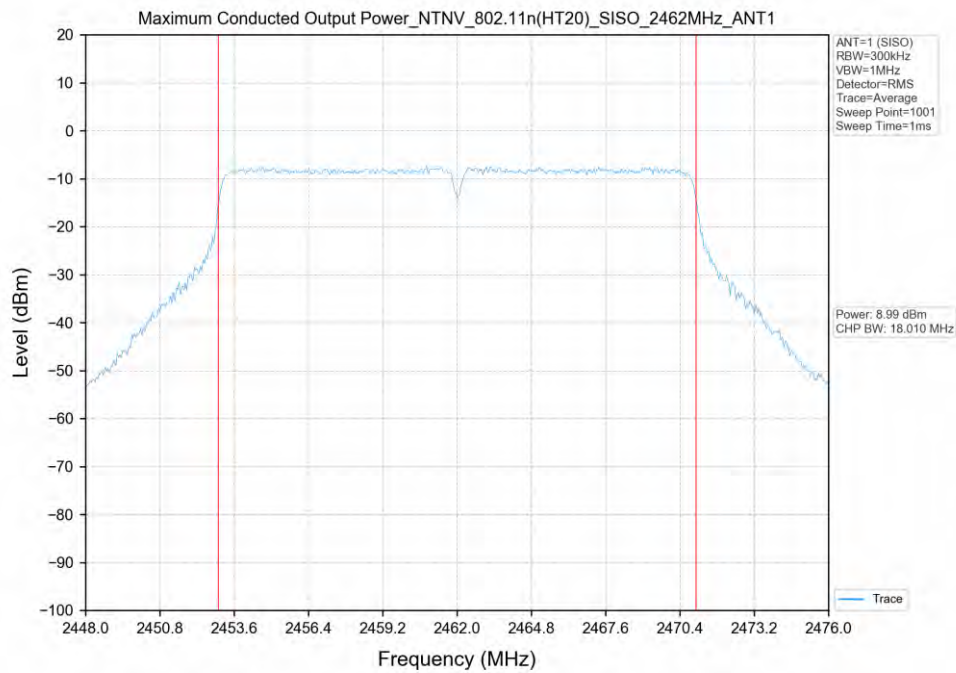
802.11n(HT20)_2412MHz_SISO_ANT1



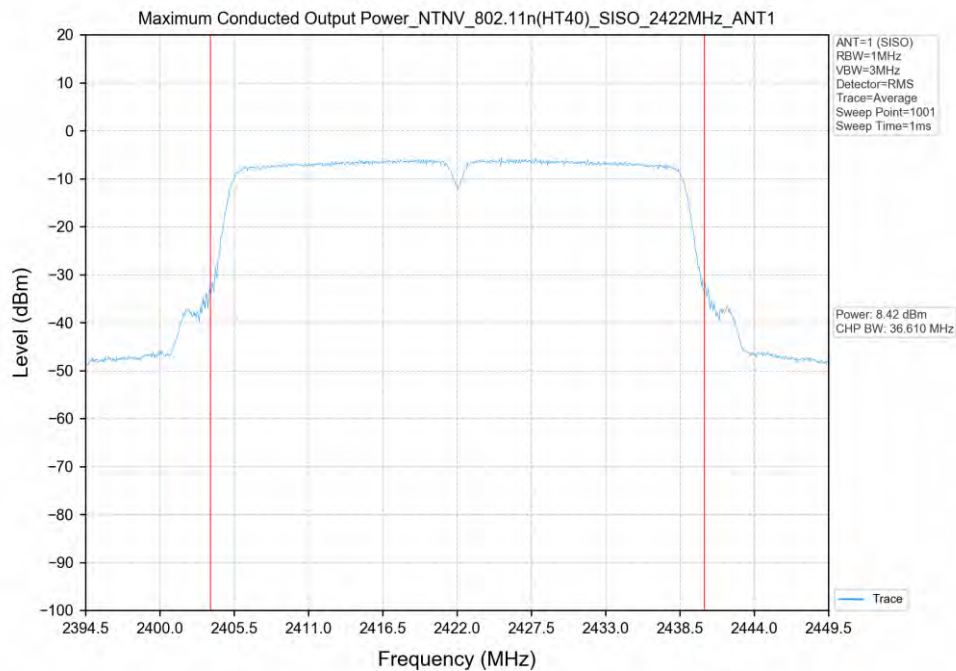
802.11n(HT20)_2437MHz_SISO_ANT1



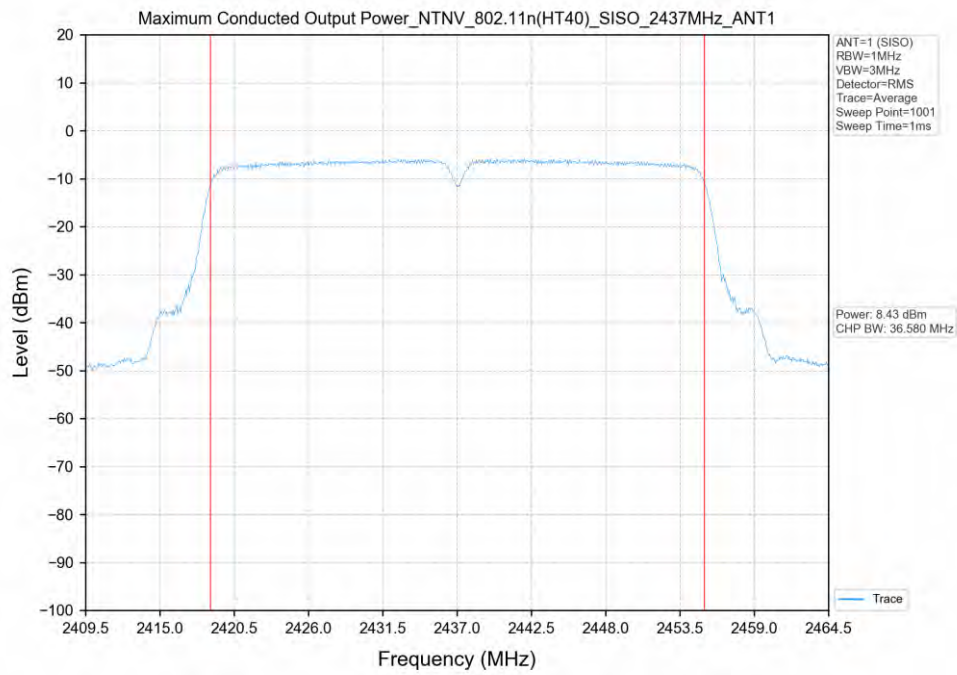
802.11n(HT20)_2462MHz_SISO_ANT1



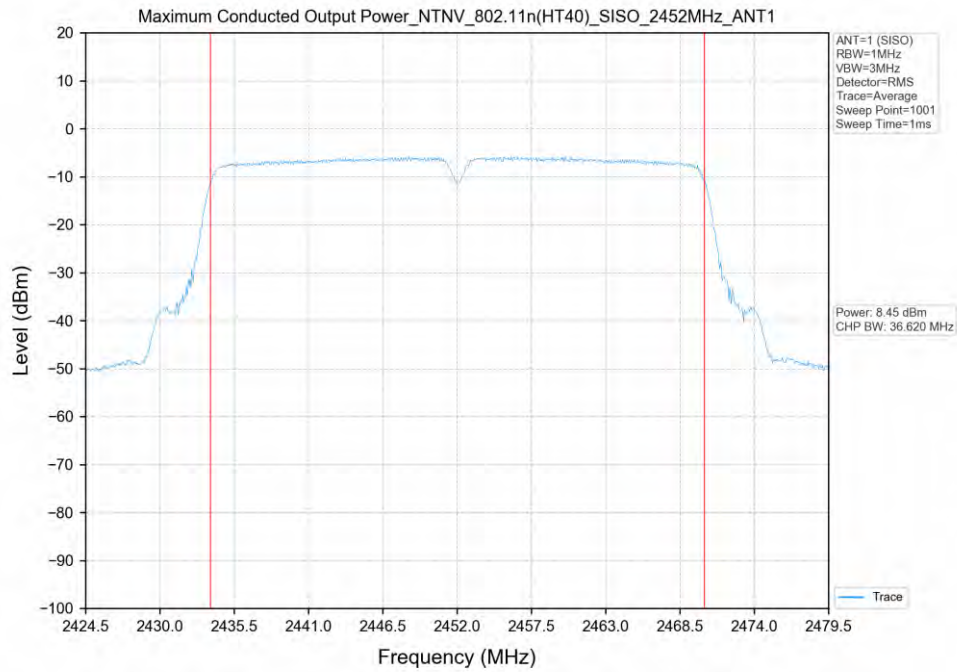
802.11n(HT40)_2422MHz_SISO_ANT1



802.11n(HT40)_2437MHz_SISO_ANT1



802.11n(HT40)_2452MHz_SISO_ANT1





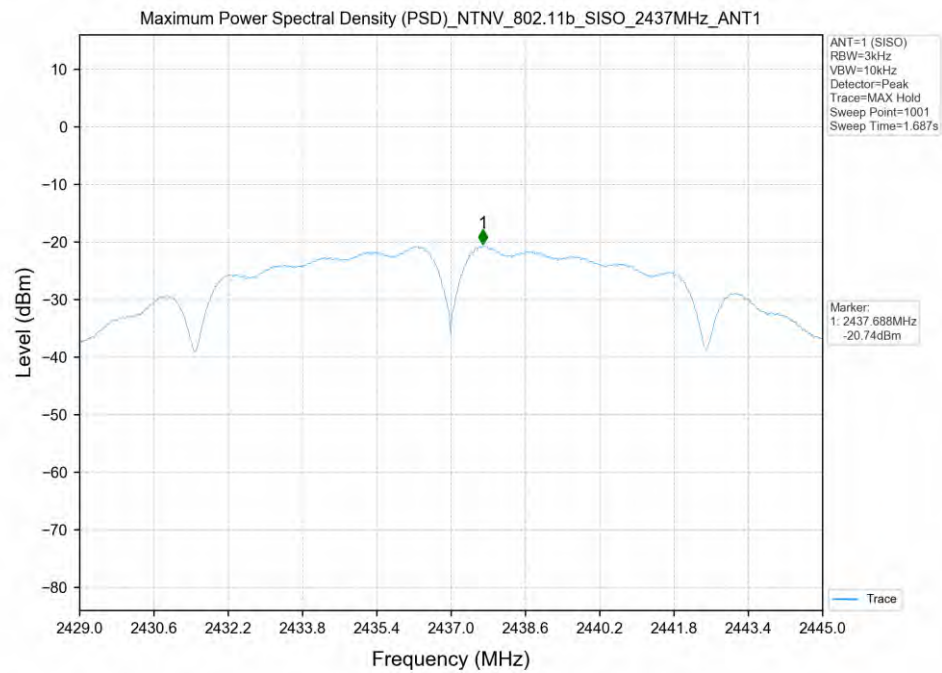
4. Maximum Power Spectral Density (PSD)

4.1 Test Result

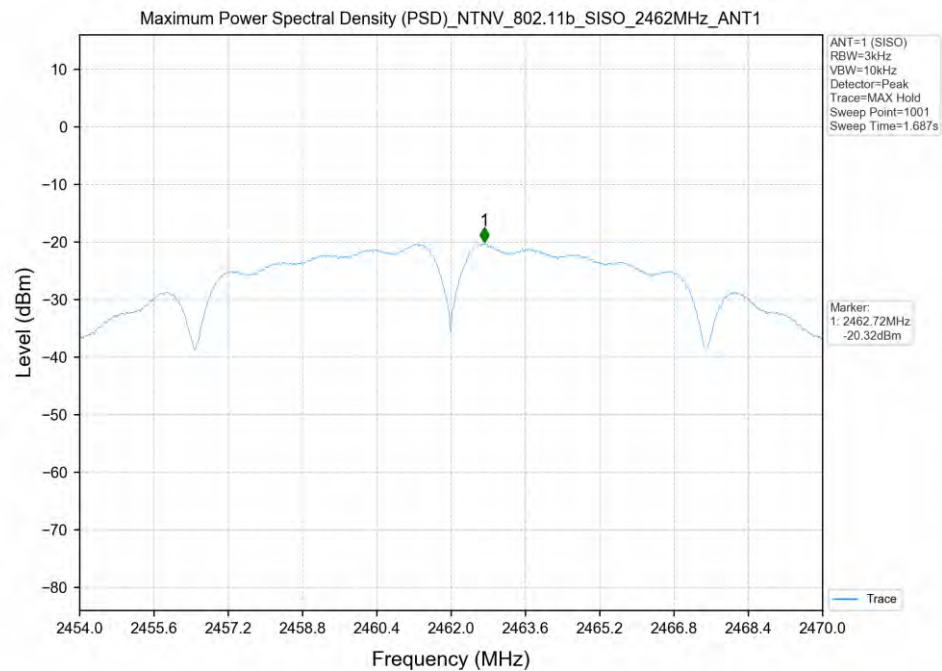
Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)	Limits (dBm/3KHz)	Verdict
			Ant 1		
802.11b	2412	SISO	-21.64	≤8	PASS
	2437	SISO	-20.74	≤8	PASS
	2462	SISO	-20.32	≤8	PASS
802.11g	2412	SISO	-20.08	≤8	PASS
	2437	SISO	-20.12	≤8	PASS
	2462	SISO	-19.95	≤8	PASS
802.11n(HT20)	2412	SISO	-19.25	≤8	PASS
	2437	SISO	-19.02	≤8	PASS
	2462	SISO	-18.78	≤8	PASS
802.11n(HT40)	2422	SISO	-20.33	≤8	PASS
	2437	SISO	-21.65	≤8	PASS
	2452	SISO	-21.50	≤8	PASS

4.2 Test Graph

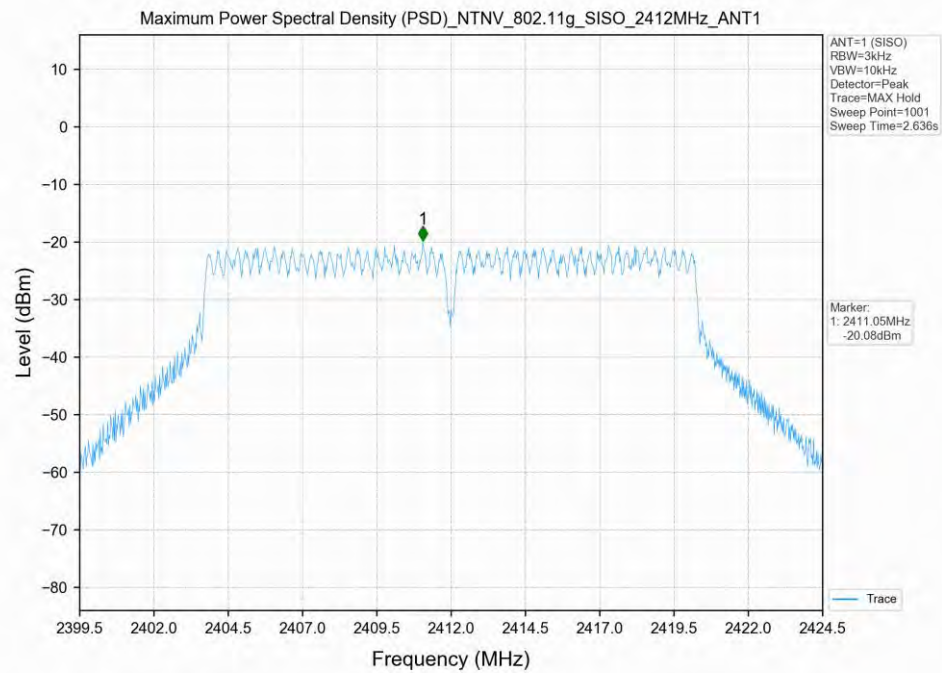




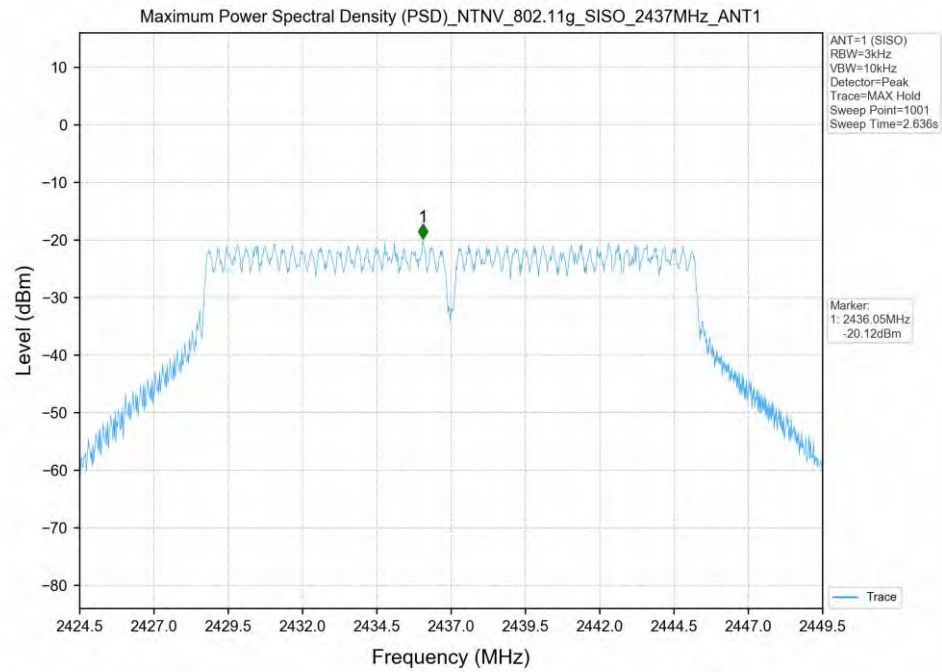
802.11b_2462MHz_SISO_ANT1



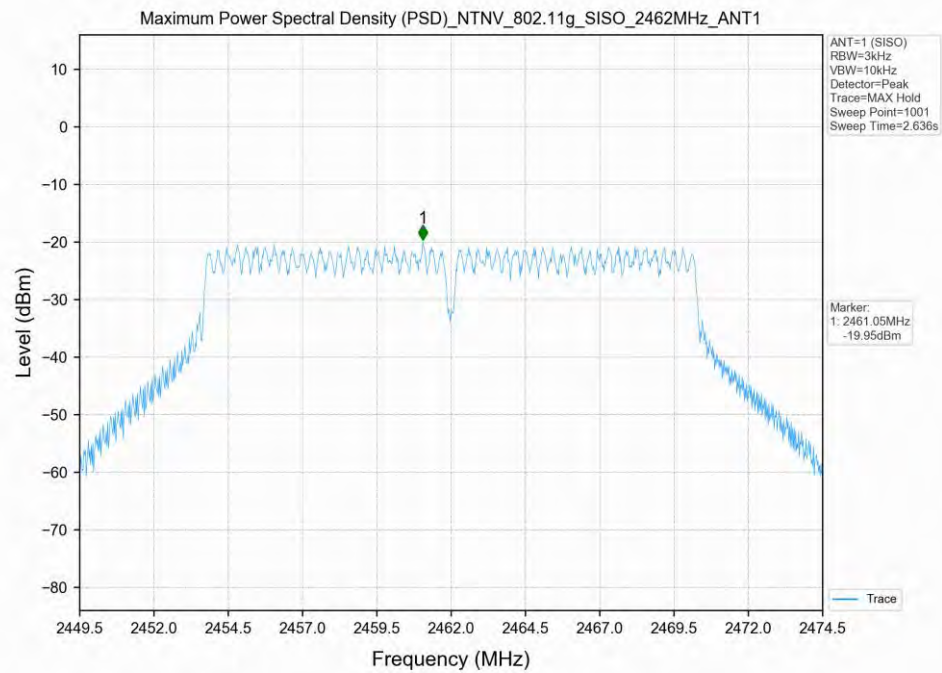
802.11g_2412MHz_SISO_ANT1



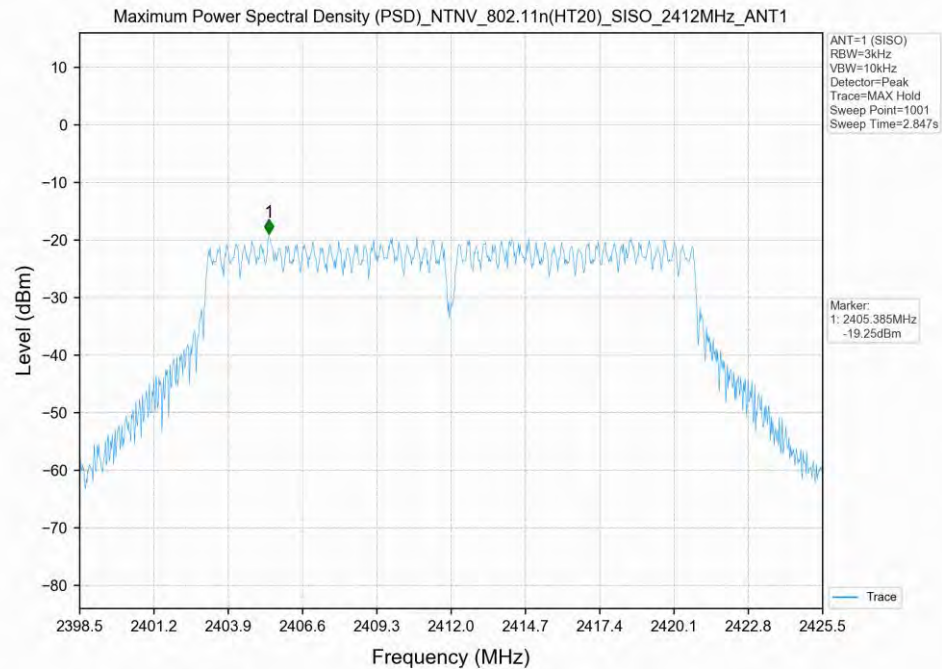
802.11g_2437MHz_SISO_ANT1



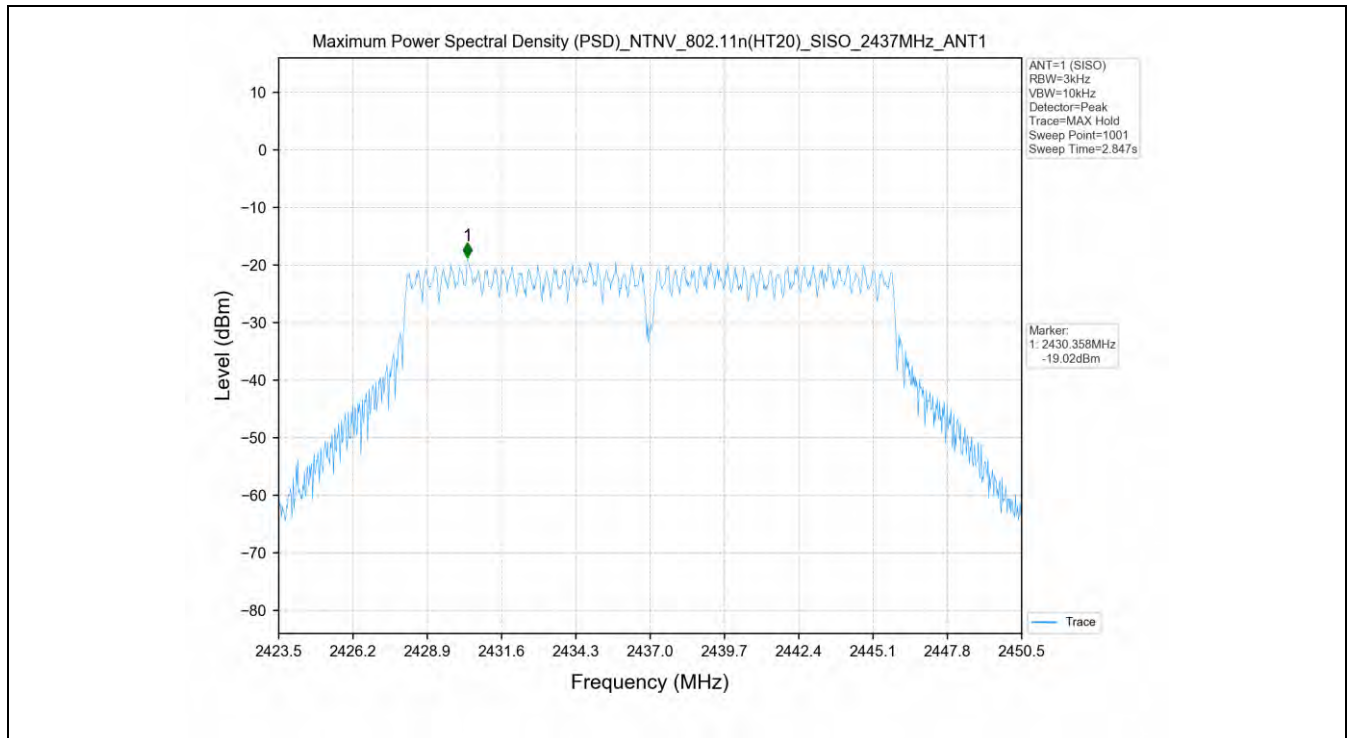
802.11g_2462MHz_SISO_ANT1



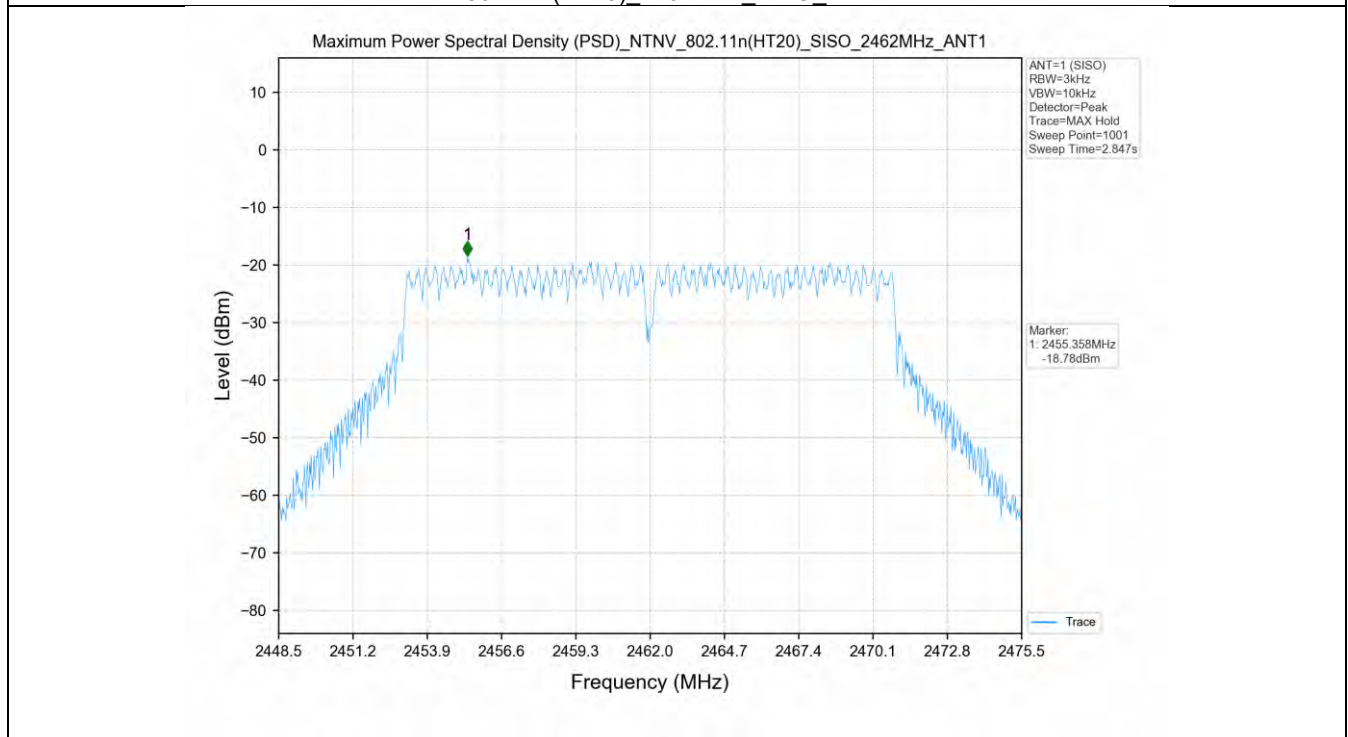
802.11n(HT20)_2412MHz_SISO_ANT1



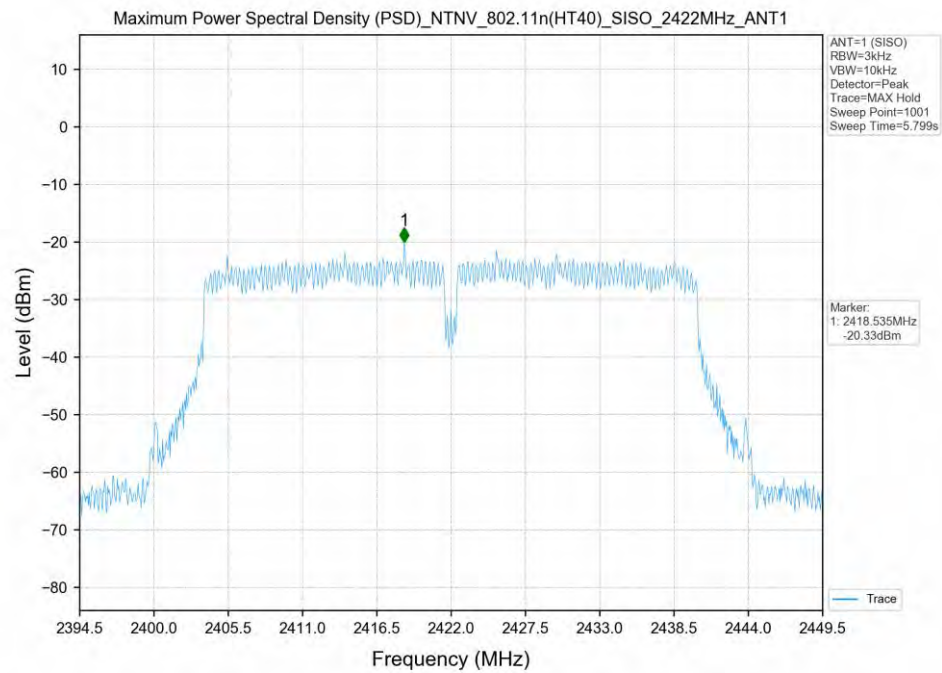
802.11n(HT20)_2437MHz_SISO_ANT1



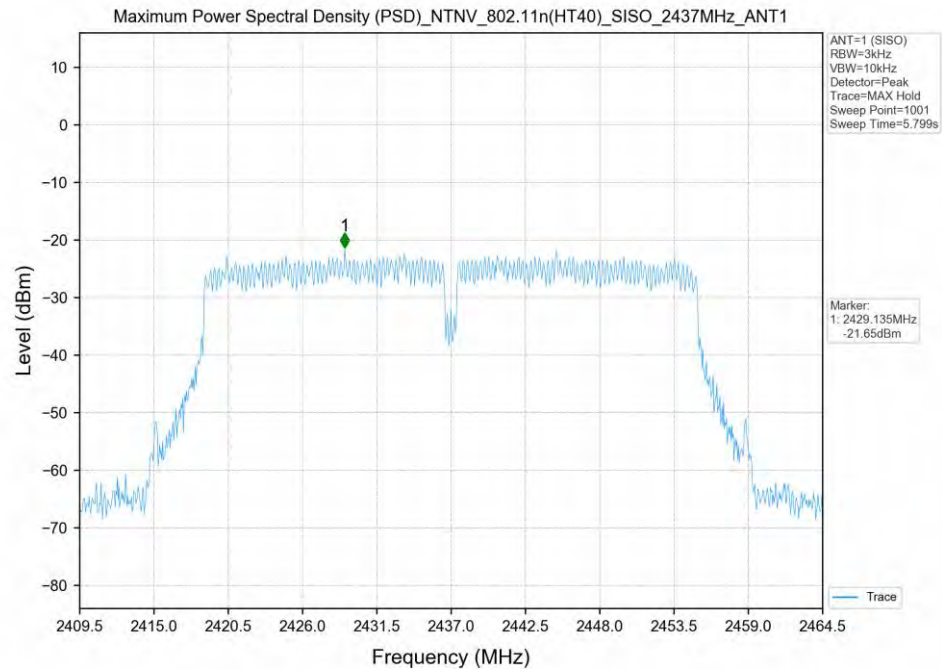
802.11n(HT20)_2462MHz_SISO_ANT1



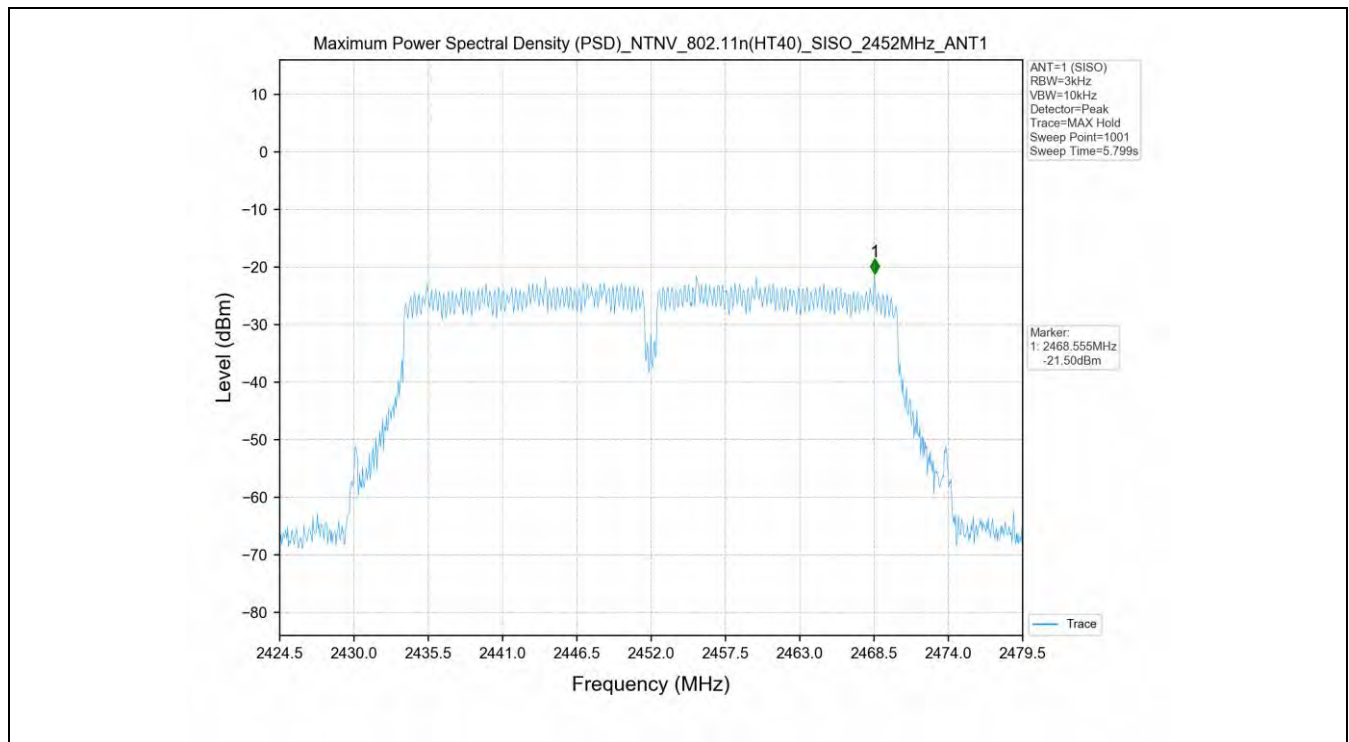
802.11n(HT40)_2422MHz_SISO_ANT1



802.11n(HT40)_2437MHz_SISO_ANT1



802.11n(HT40)_2452MHz_SISO_ANT1



5. Unwanted Emissions in Non-restricted Frequency Bands

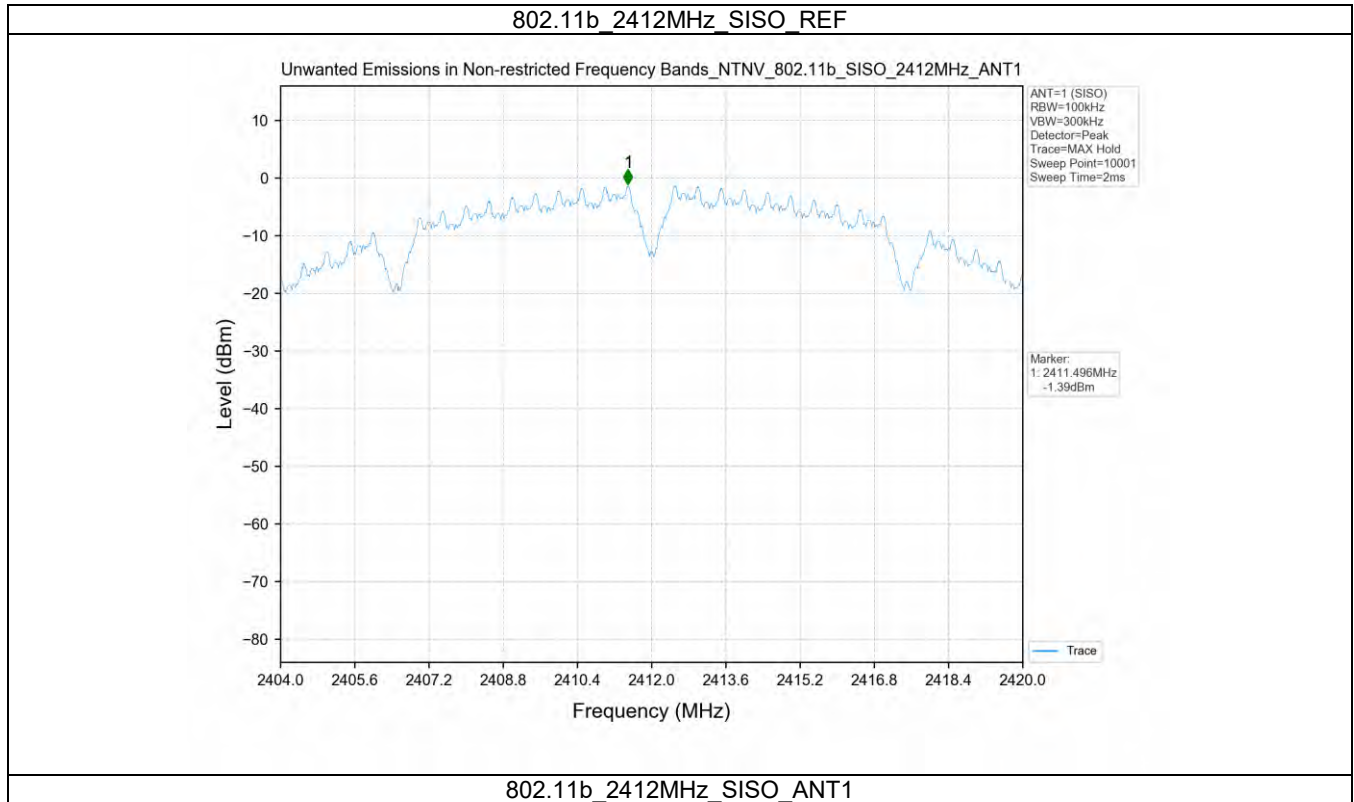
5.1 Test Result

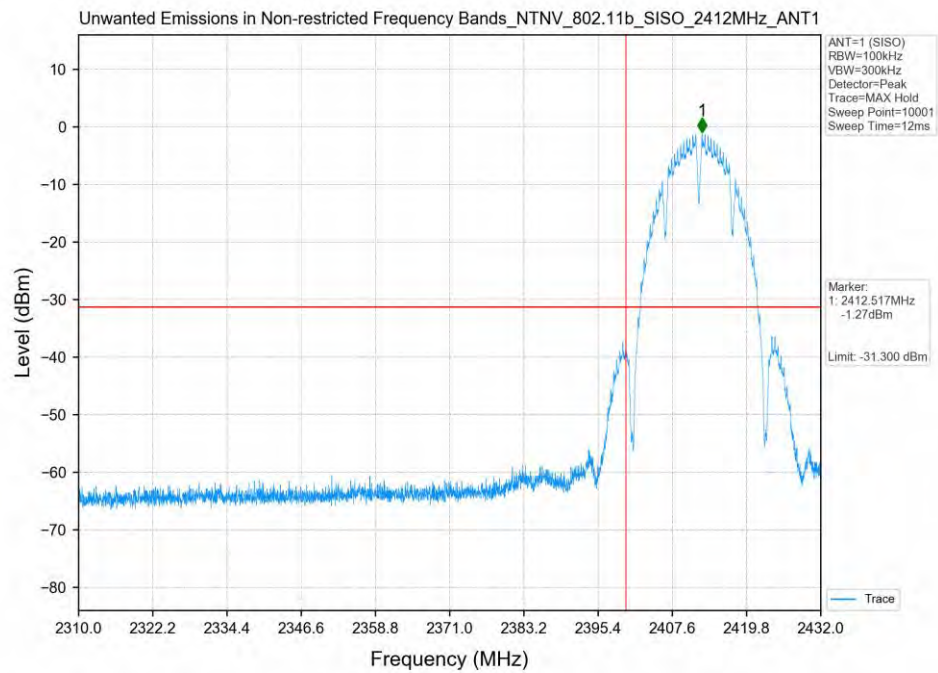
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBc)	Limits (dBc)	Verdict
802.11b	2412	SISO	1	Refer to test graph	≤ -30	PASS
	2437	SISO	1	Refer to test graph	≤ -30	PASS
	2462	SISO	1	Refer to test graph	≤ -30	PASS
802.11g	2412	SISO	1	Refer to test graph	≤ -30	PASS
	2437	SISO	1	Refer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



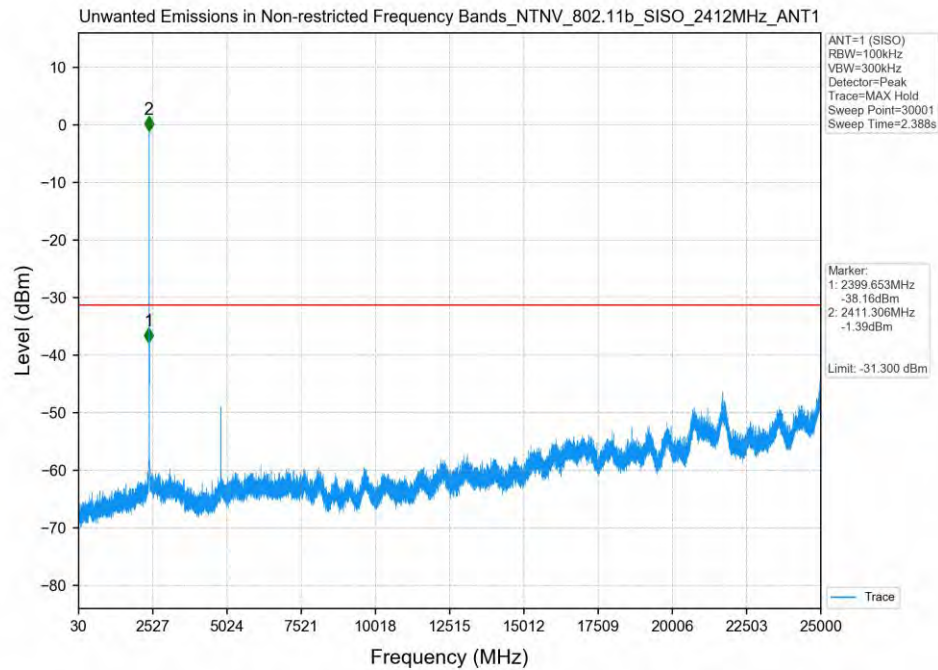
				graph		
	2452	SISO	1	Refer to test graph	≤-30	PASS

5.2 Test Graph

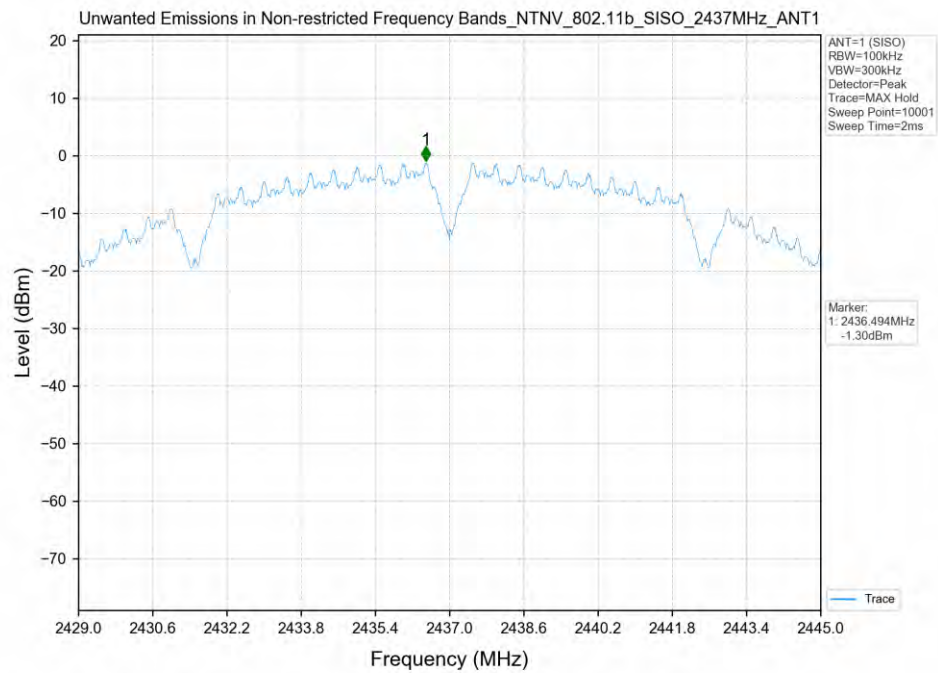




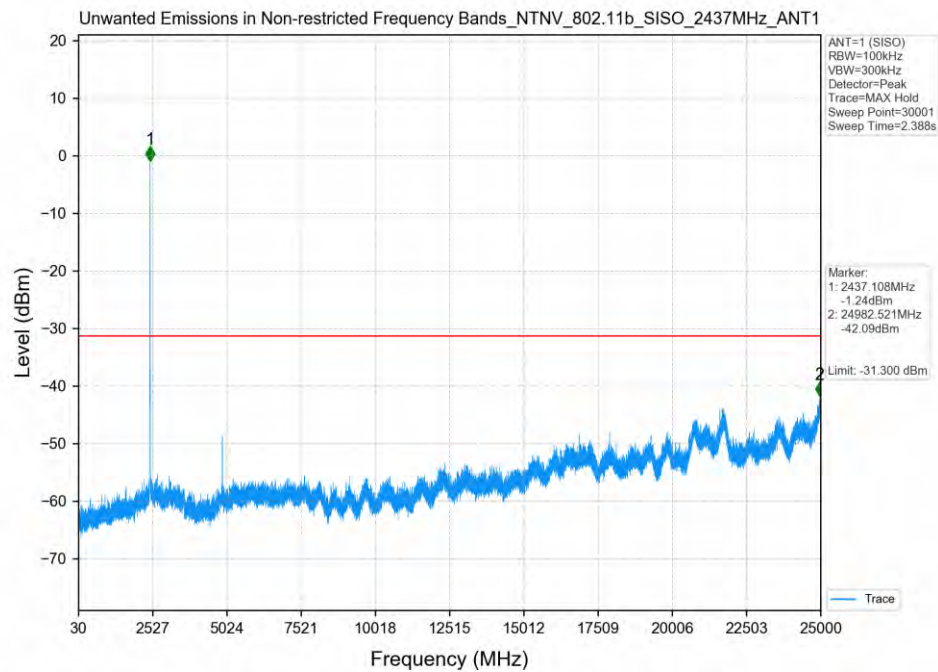
802.11b_2412MHz_SISO_ANT1



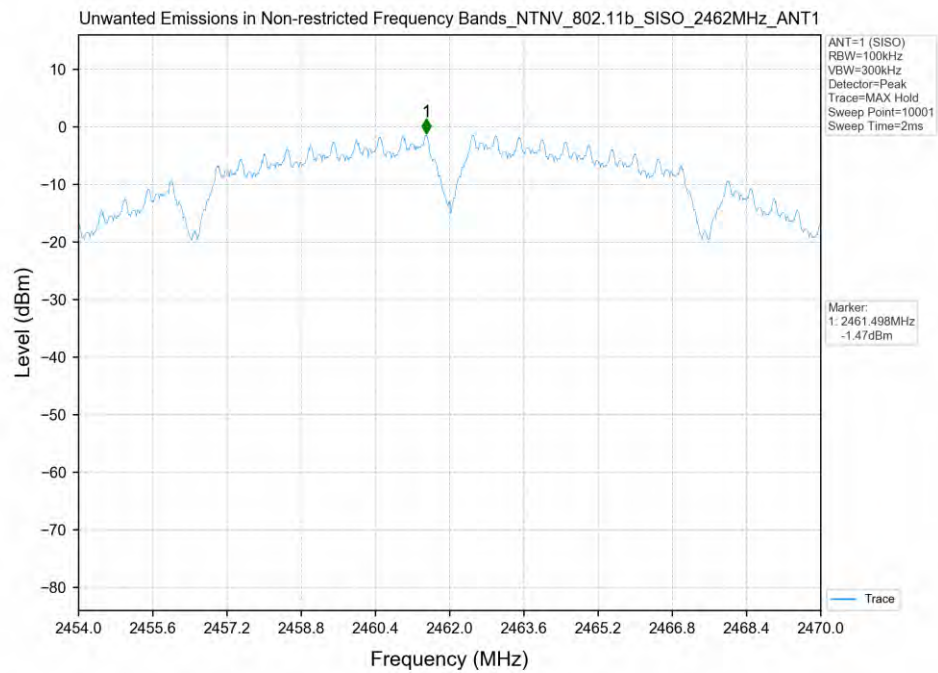
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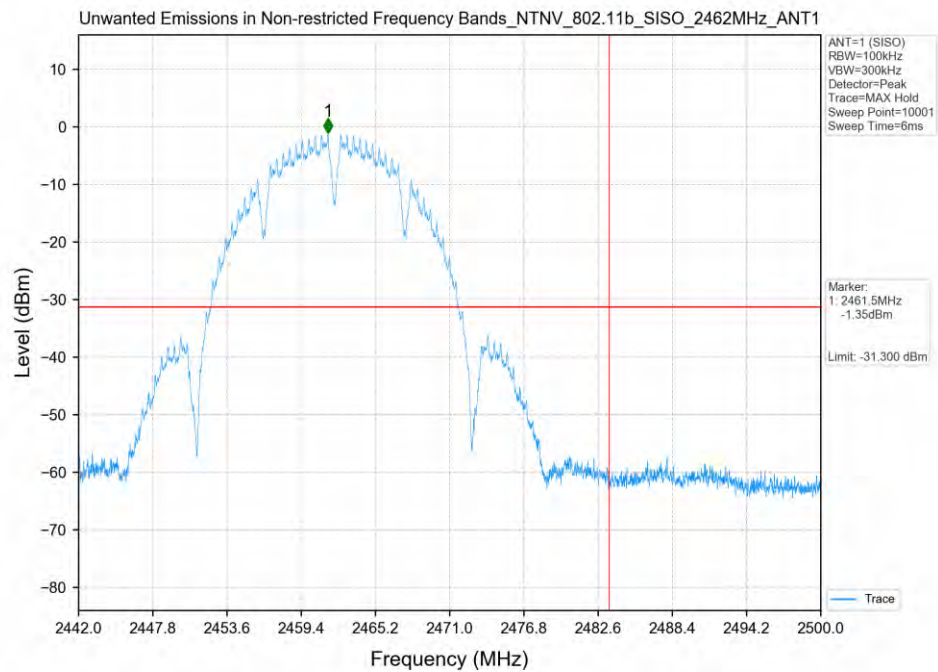
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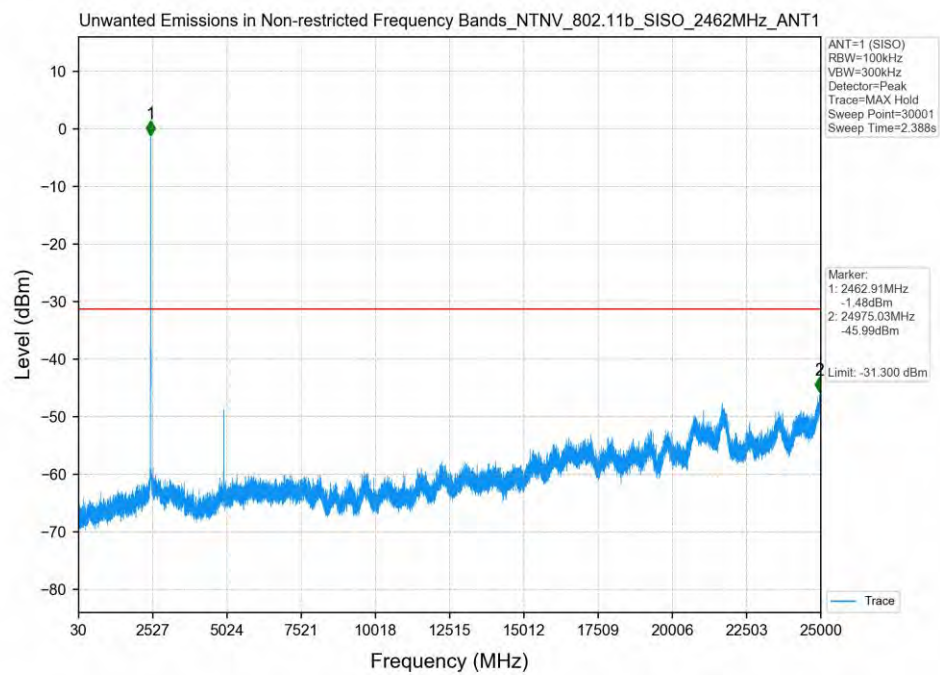
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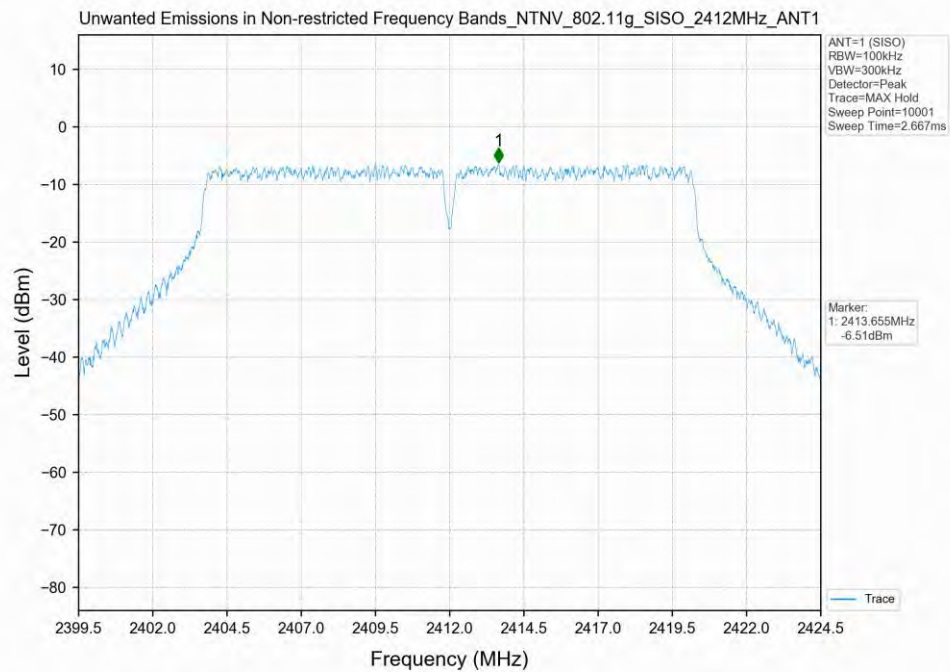
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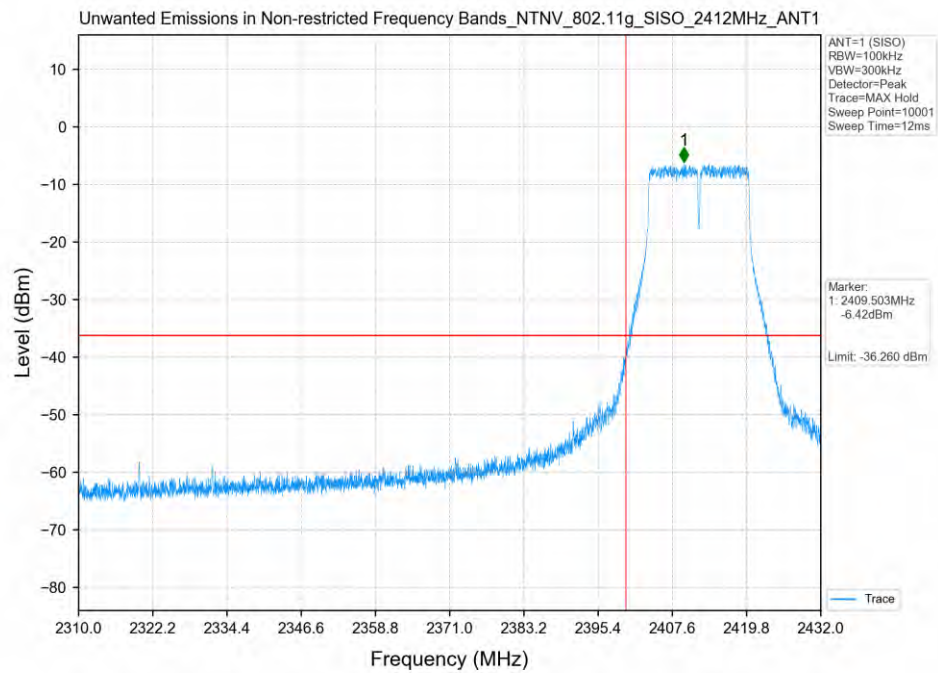
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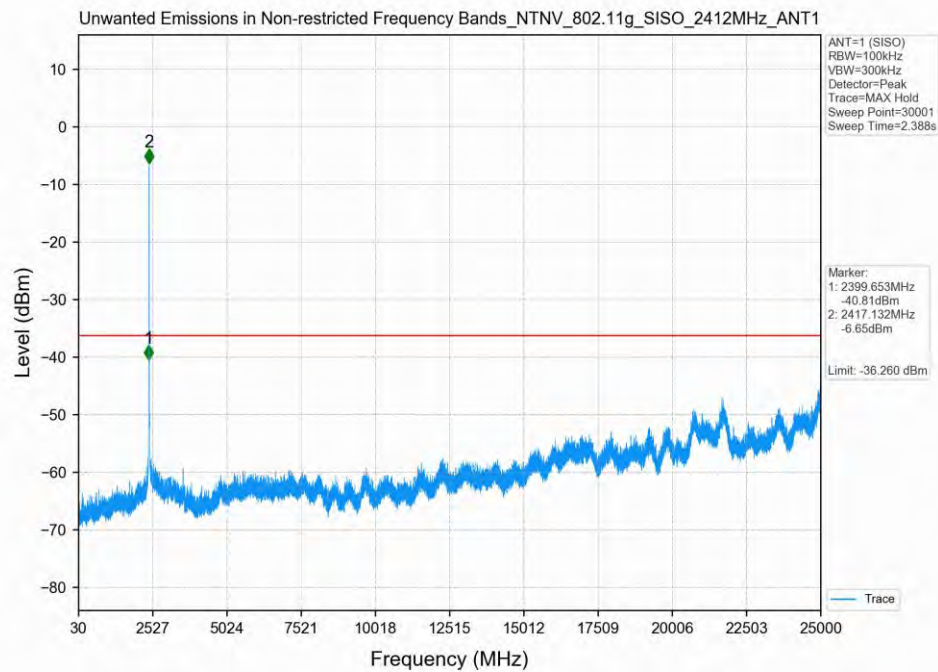
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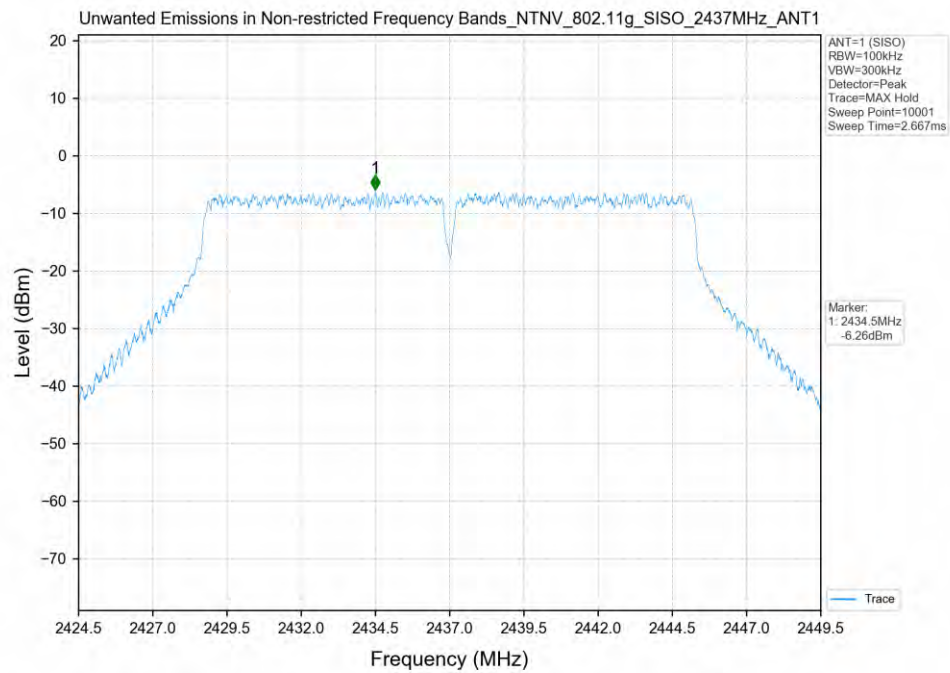
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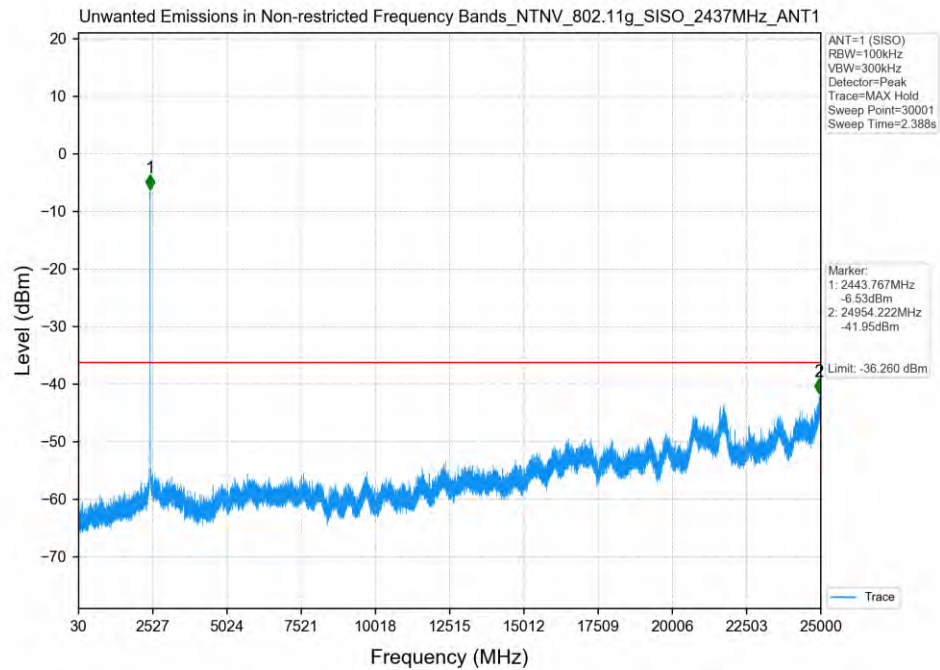
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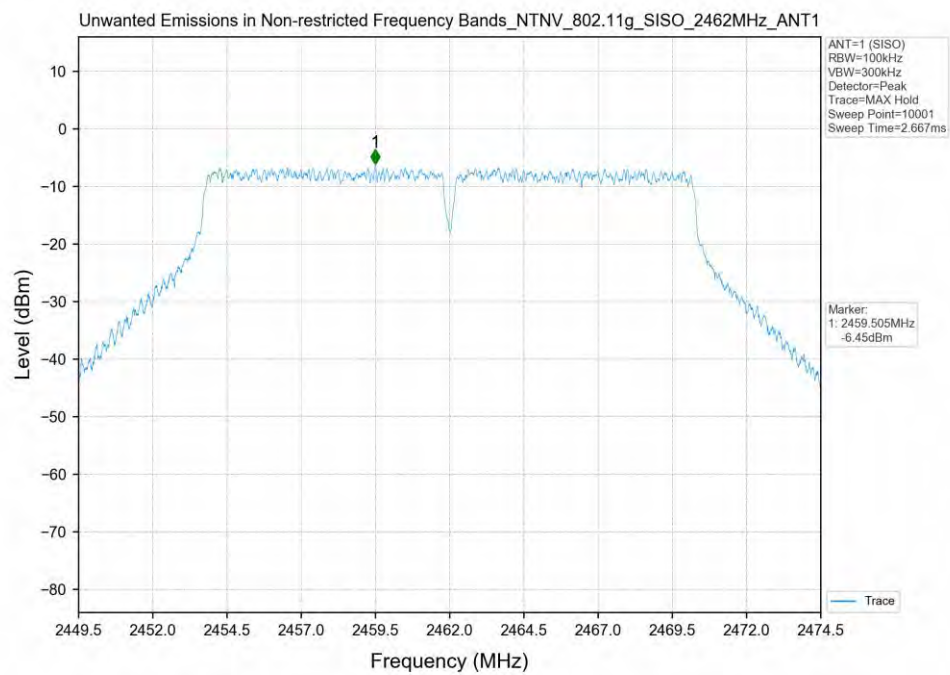
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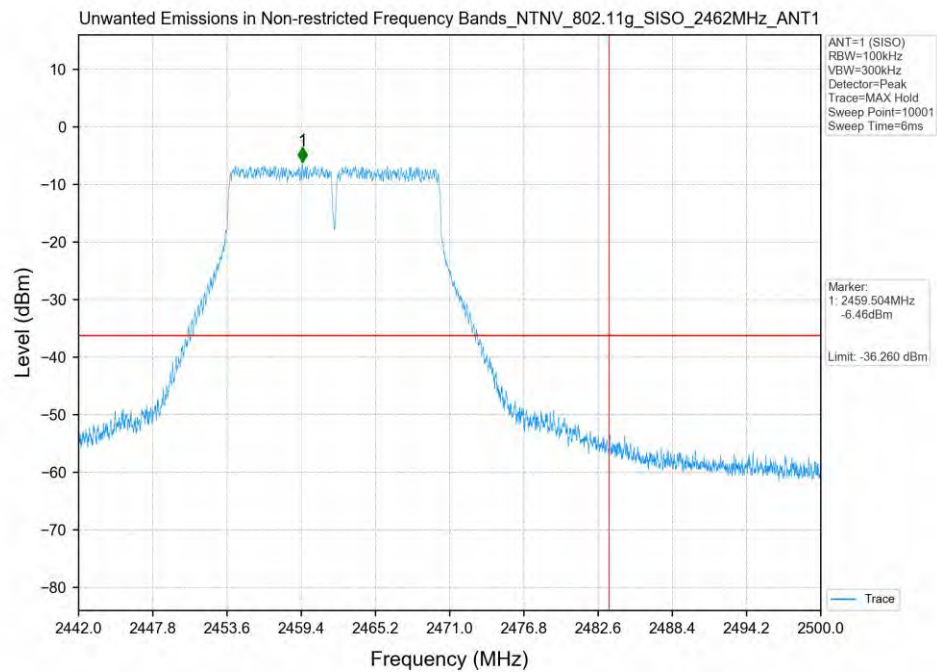
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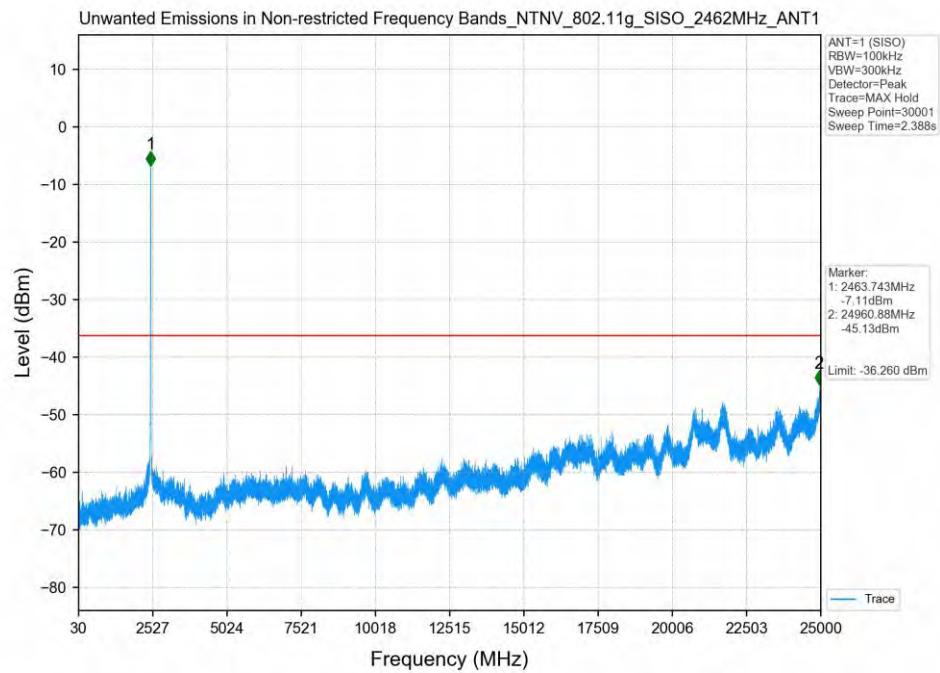
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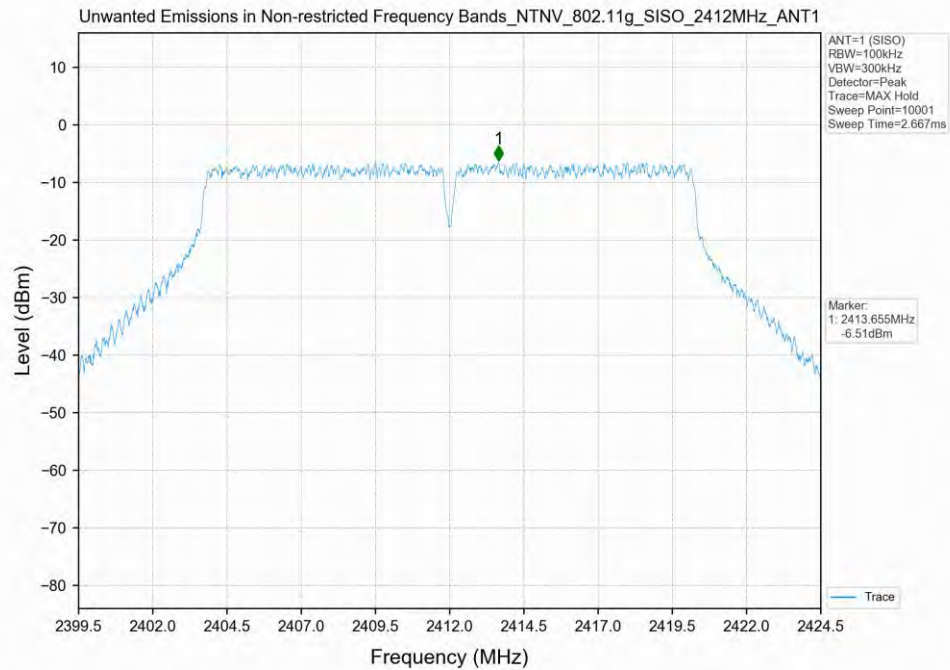
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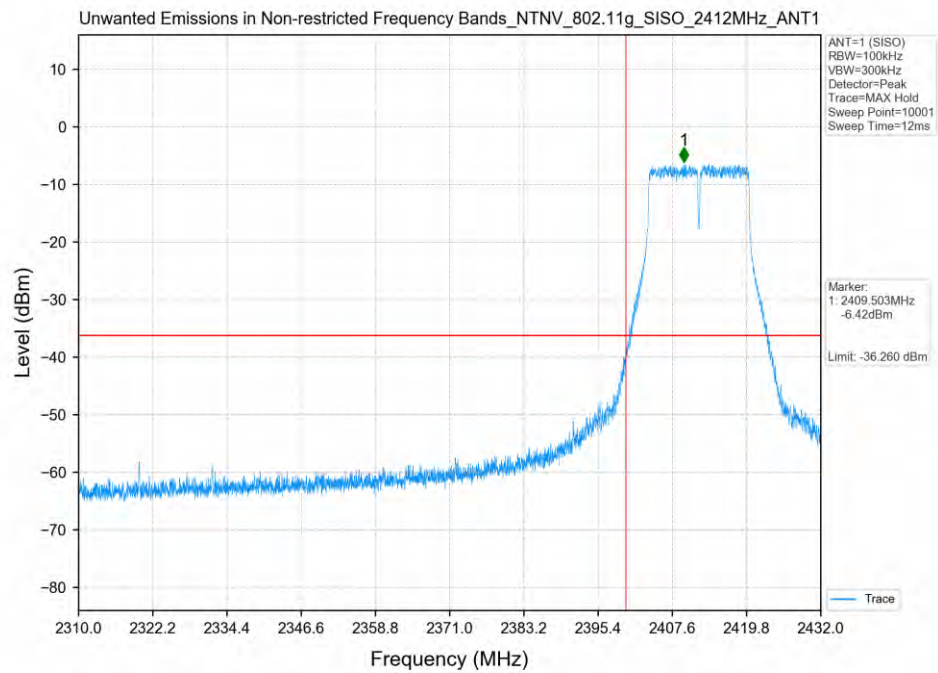
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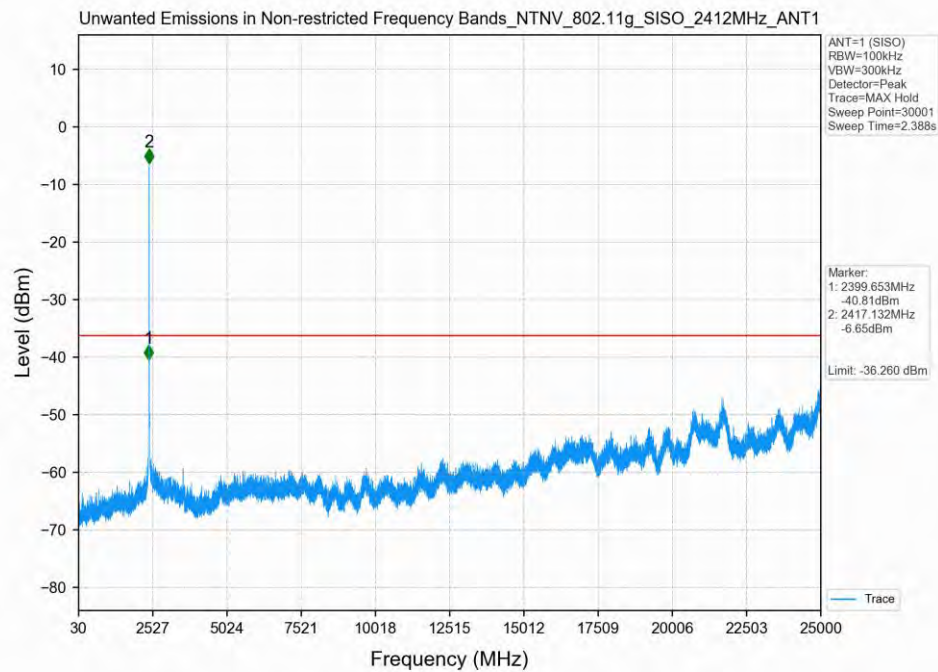
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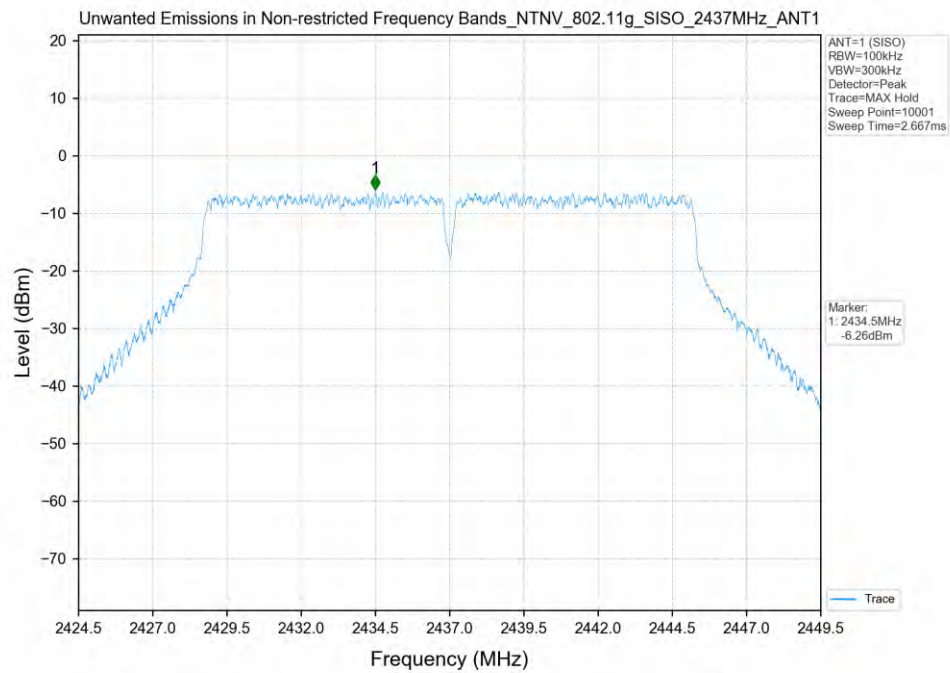
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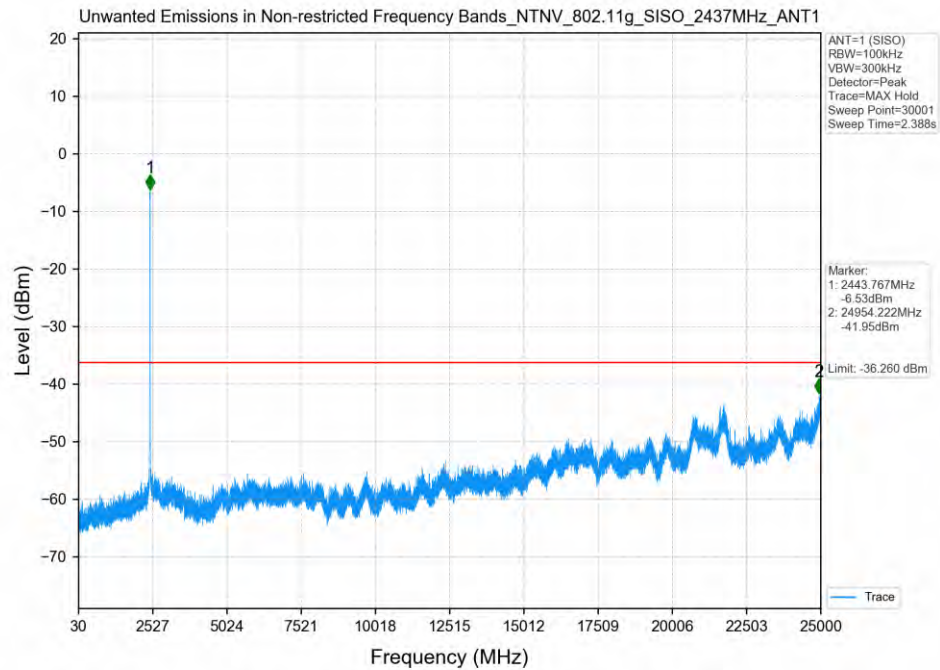
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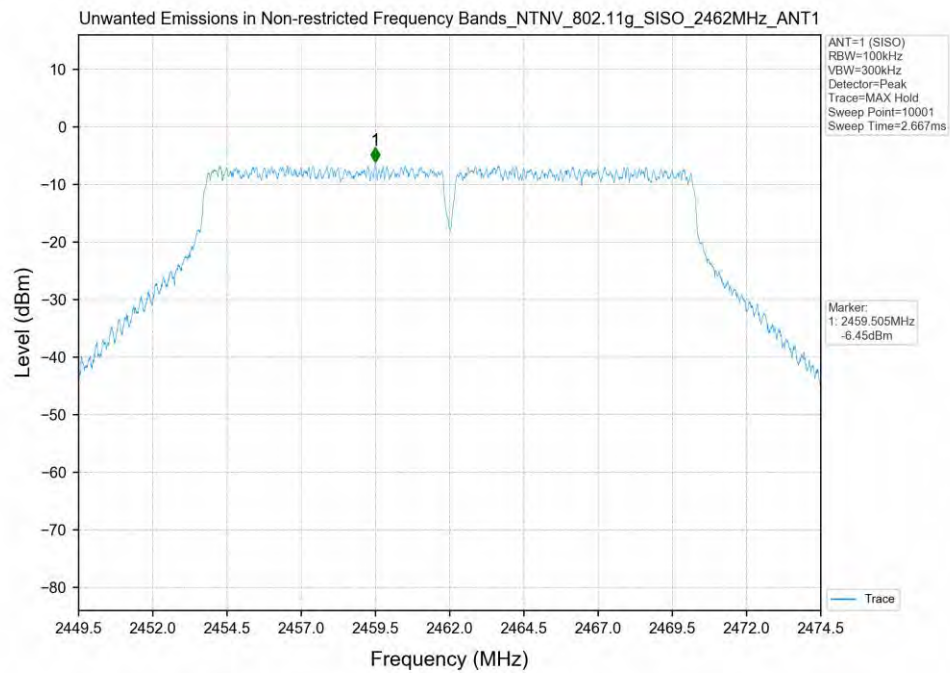
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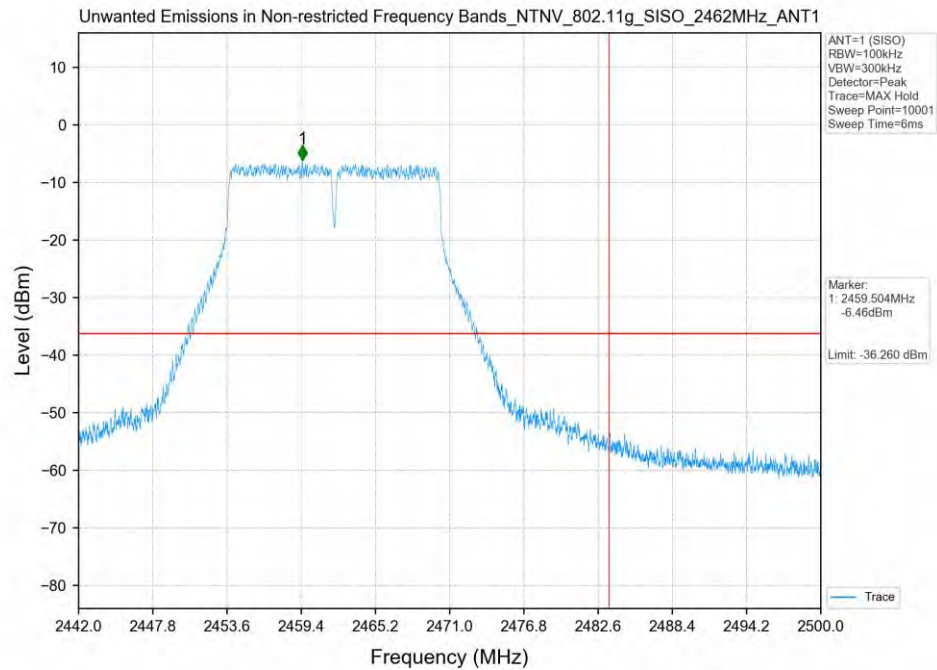
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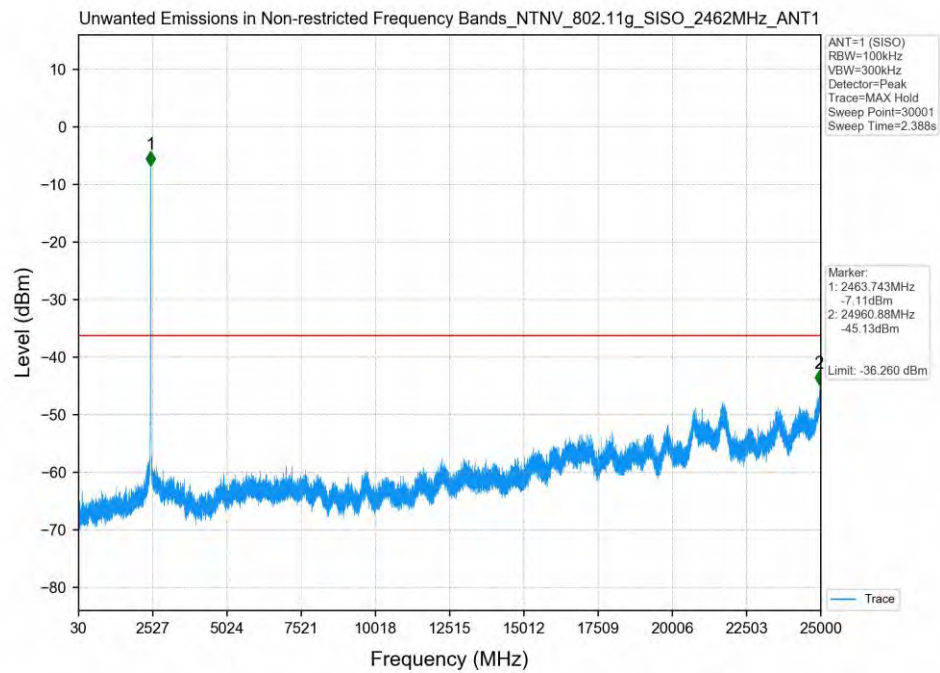
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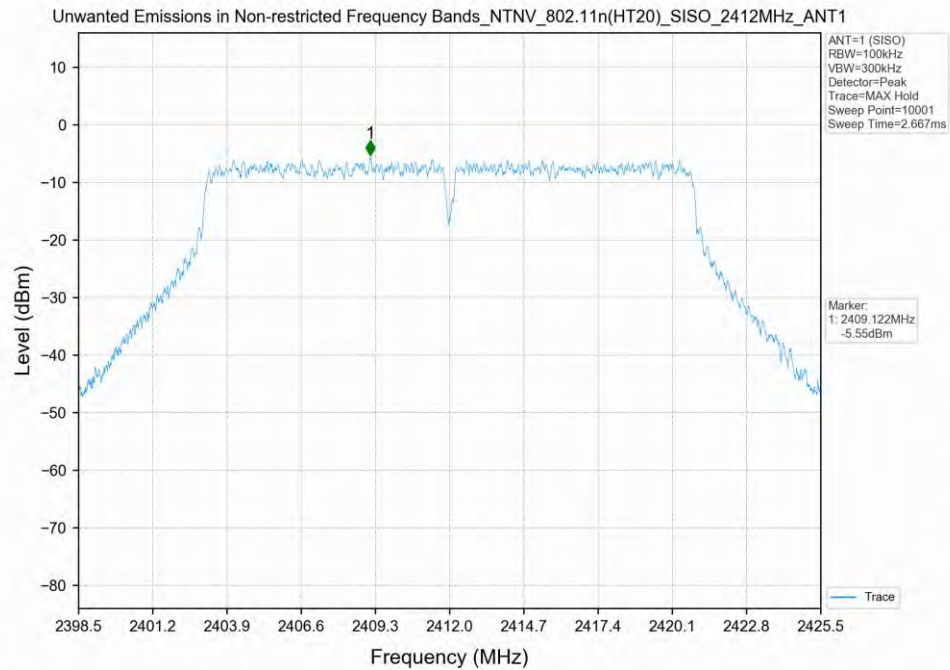
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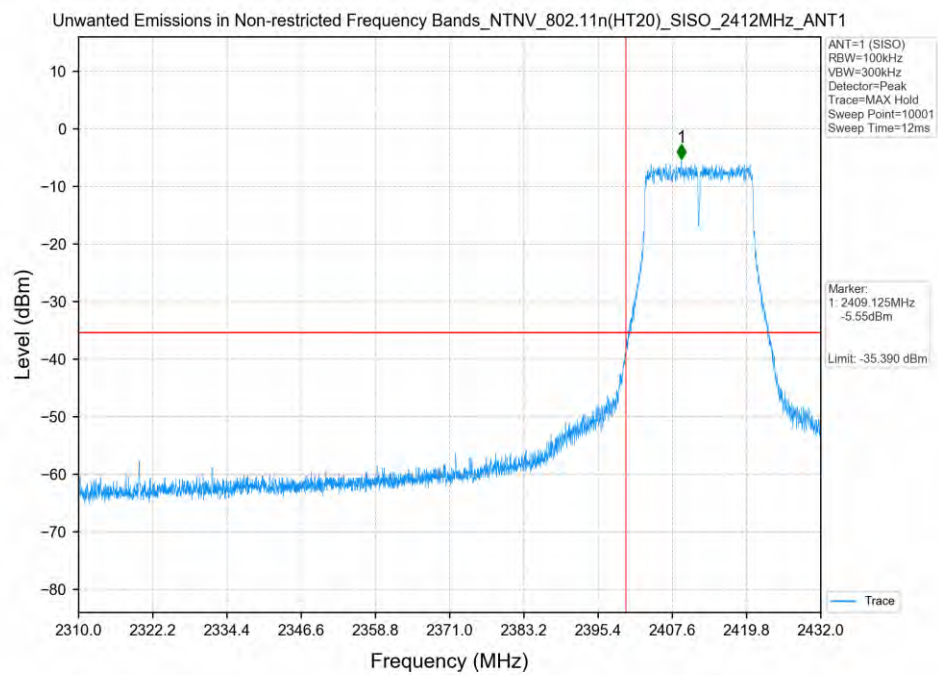
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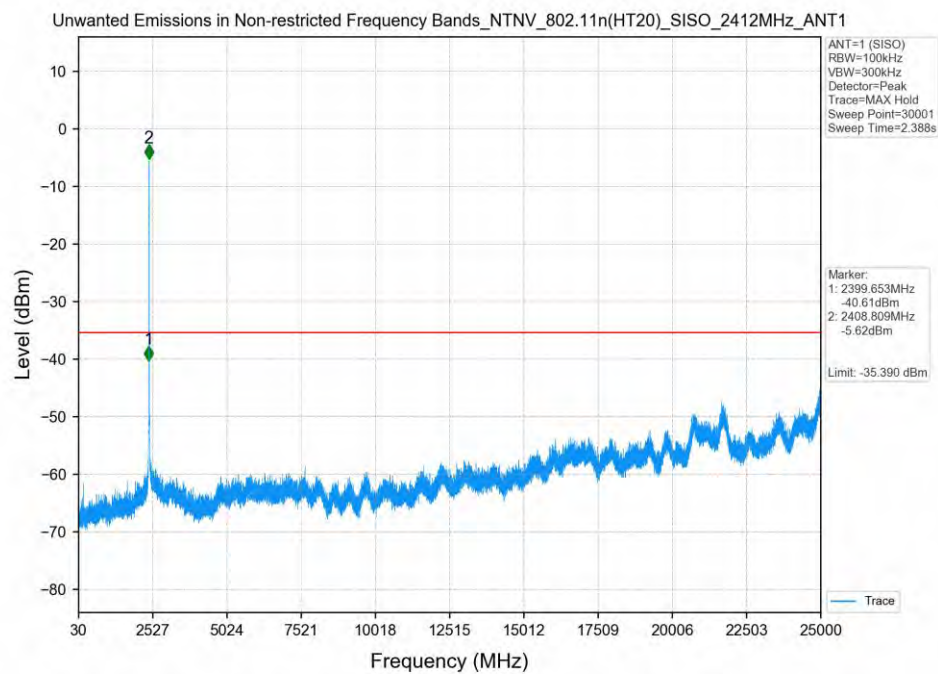
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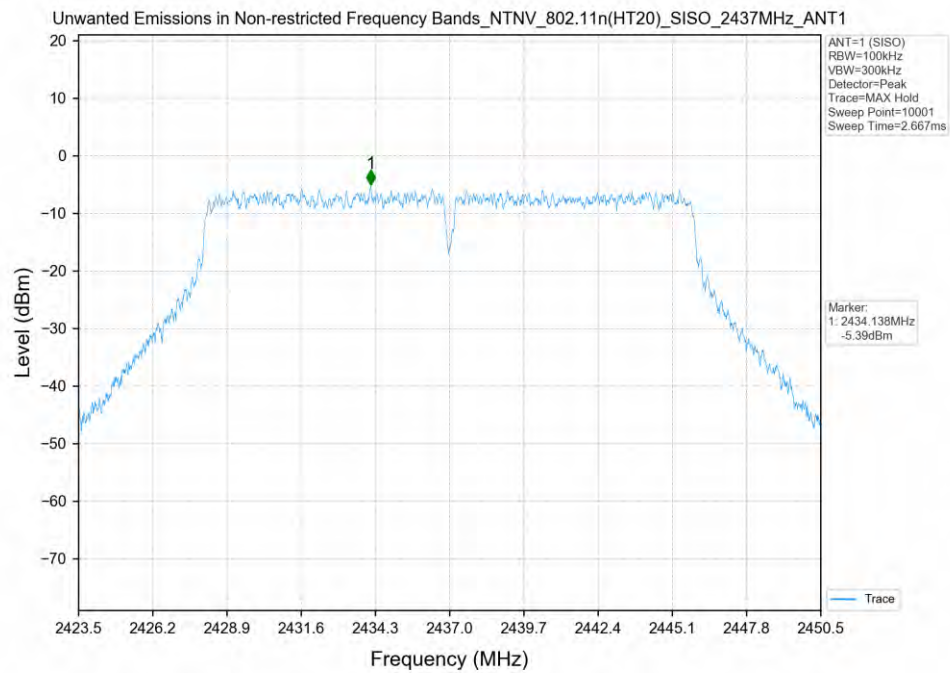
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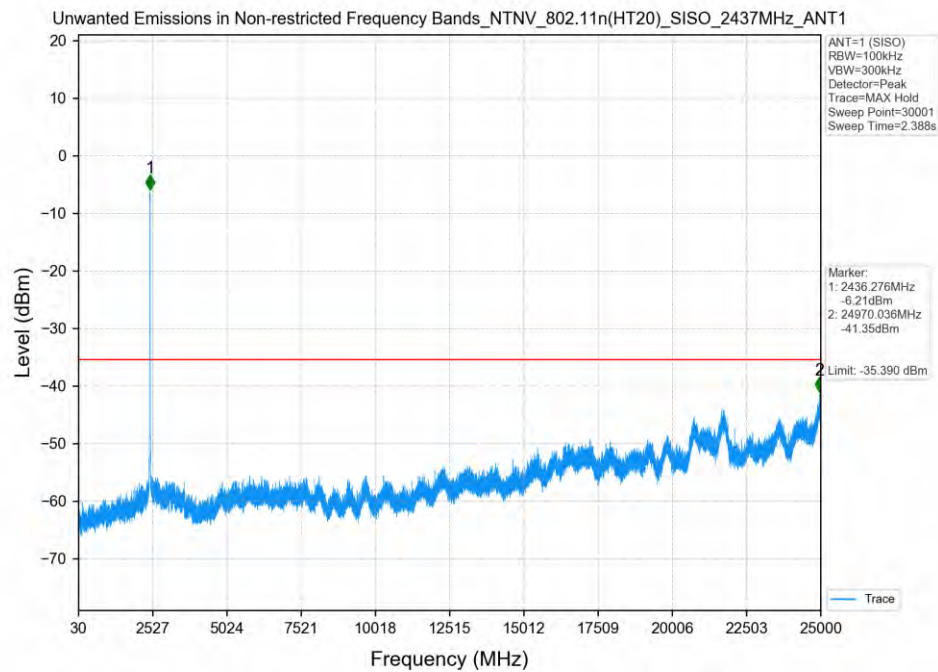
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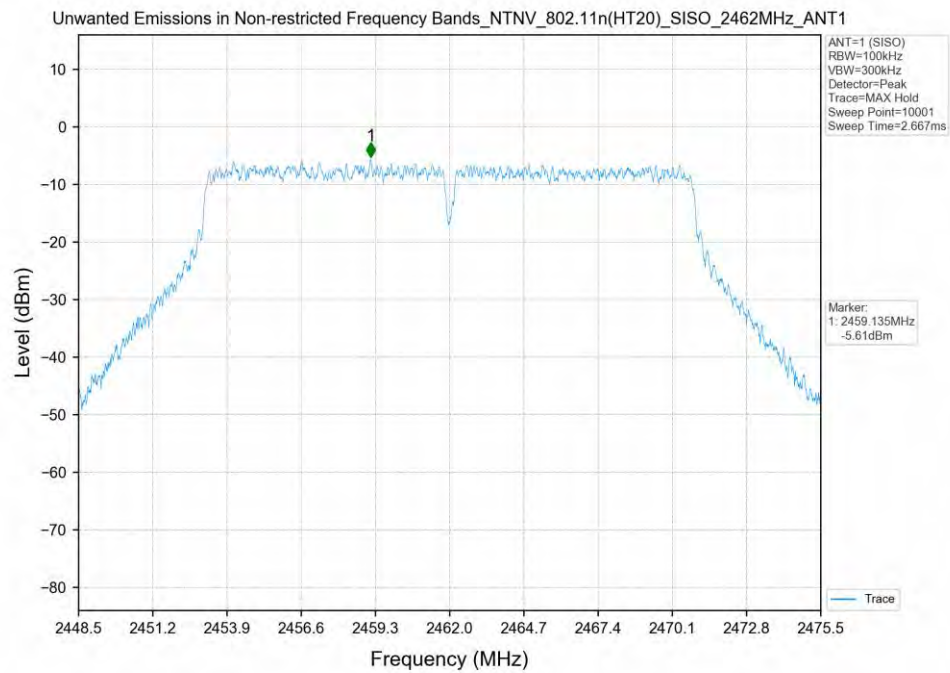
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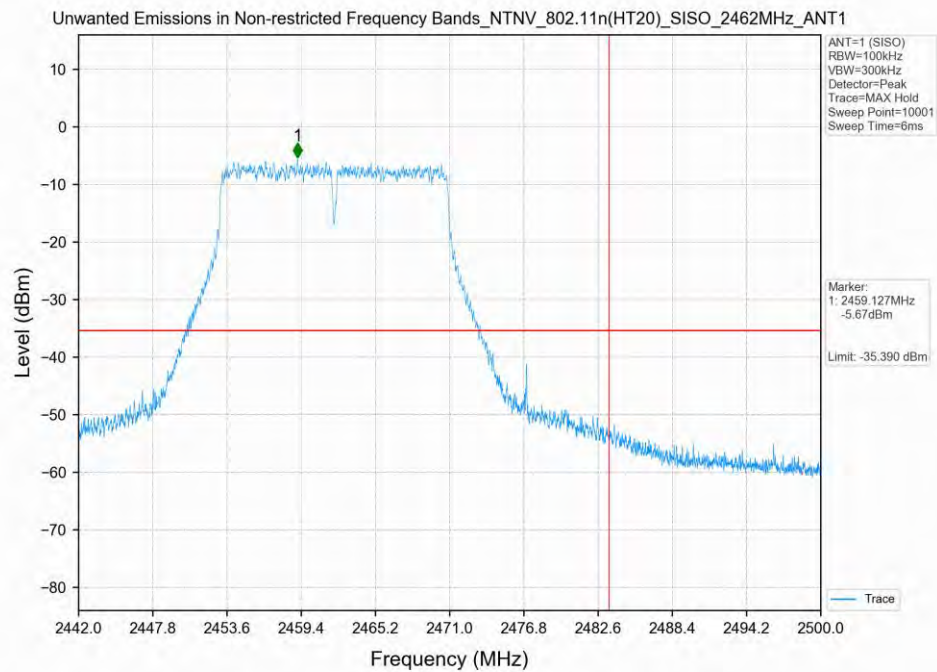
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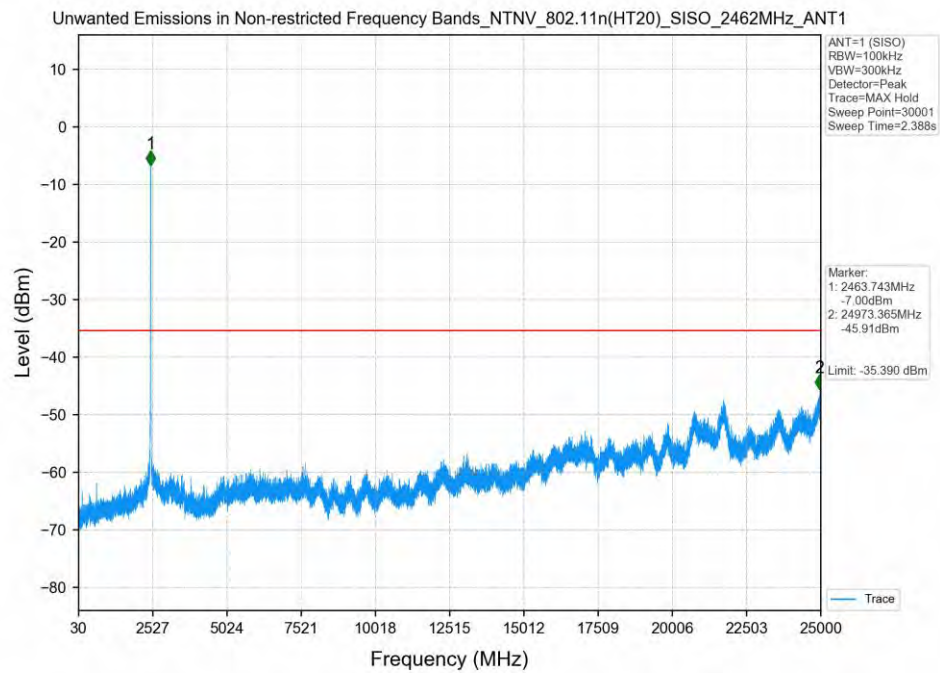
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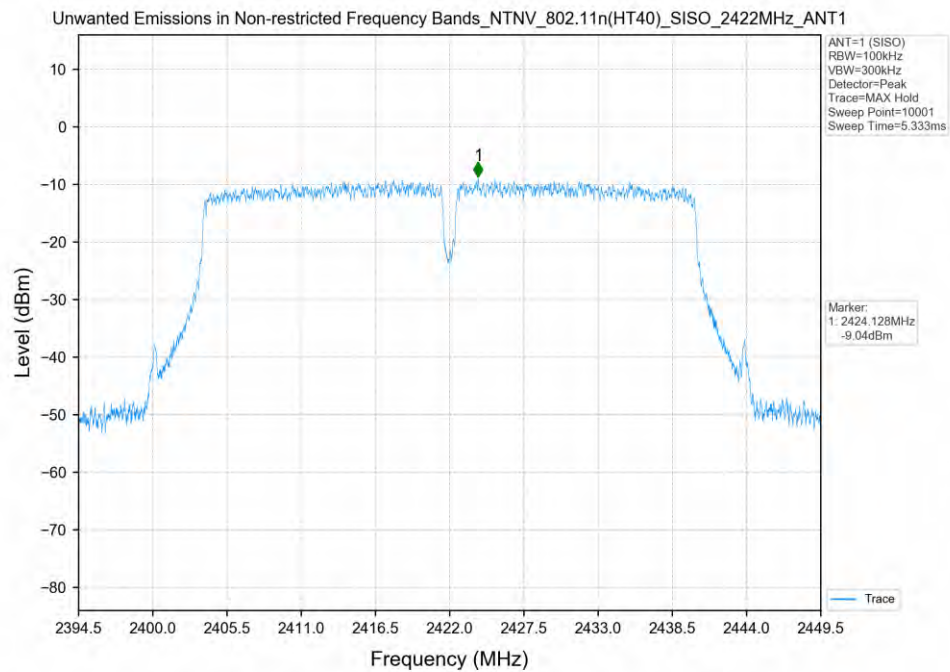
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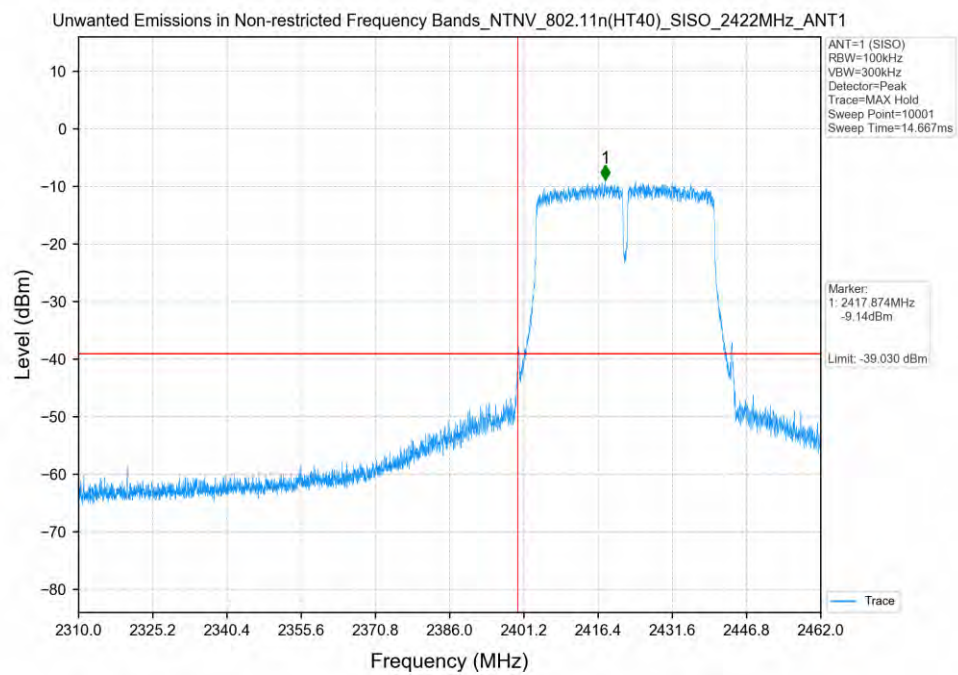
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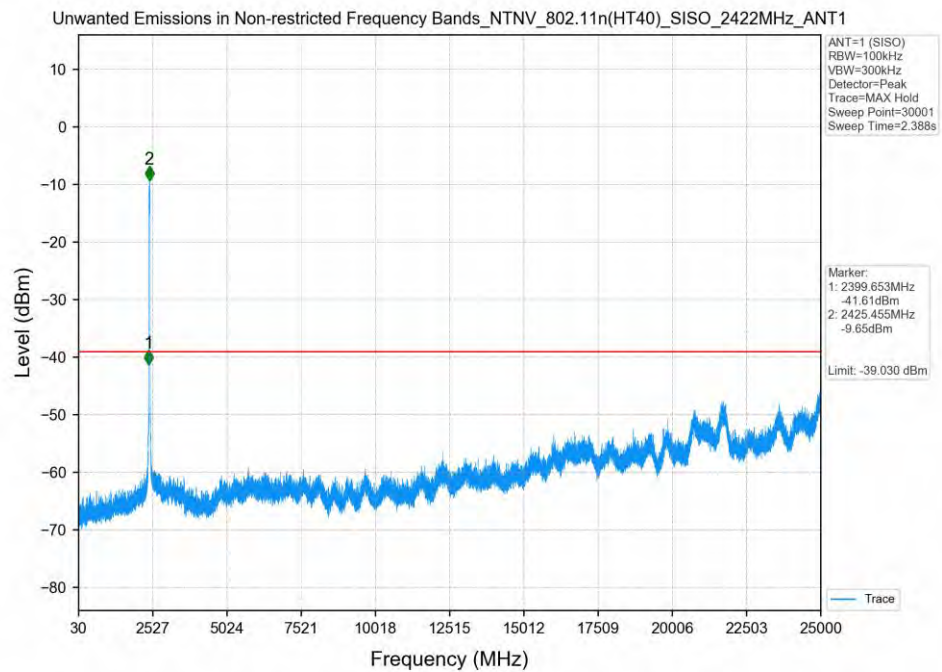
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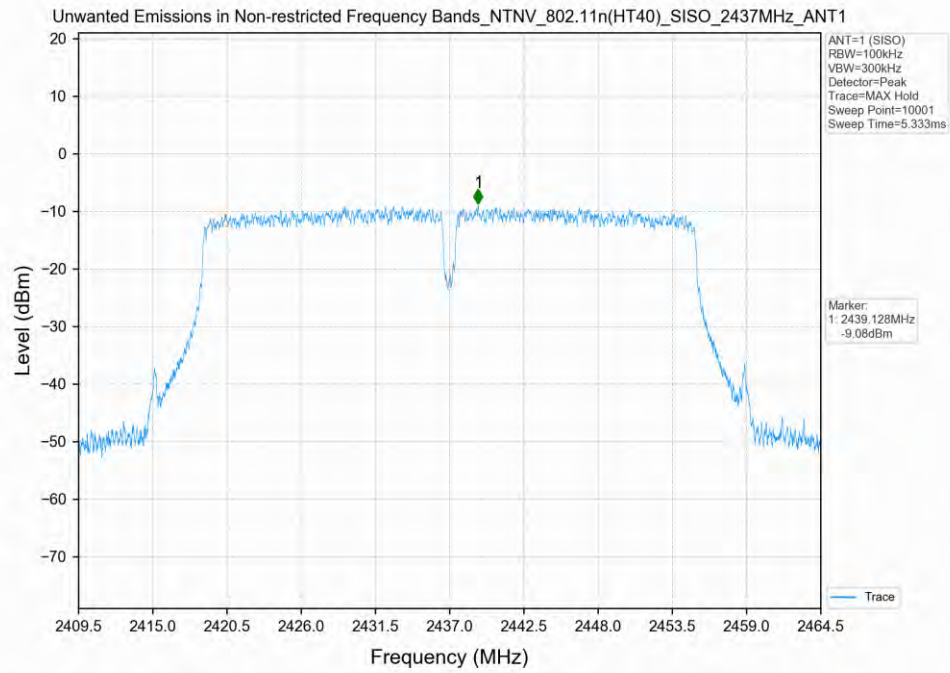
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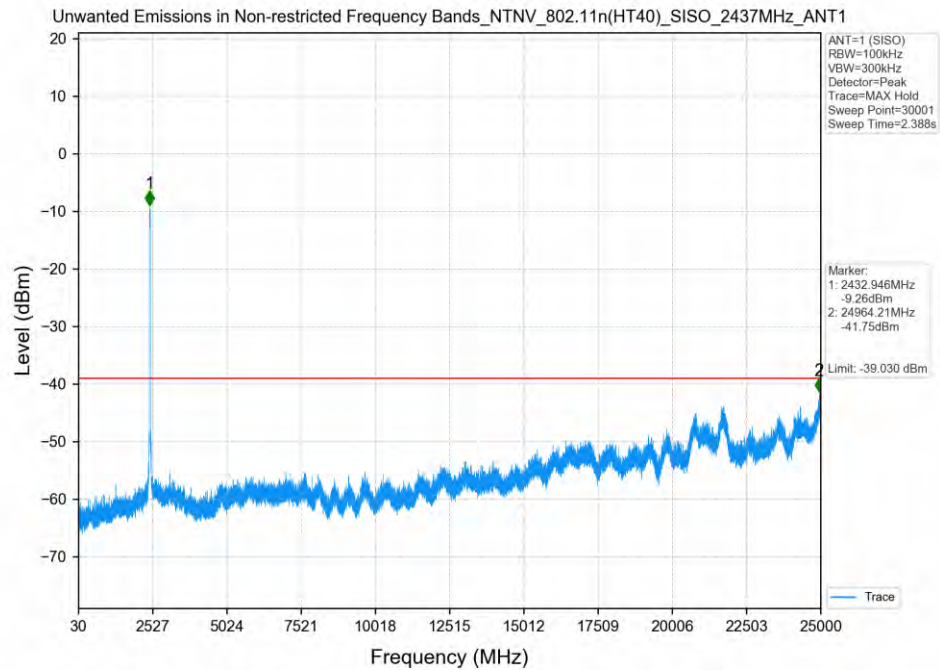
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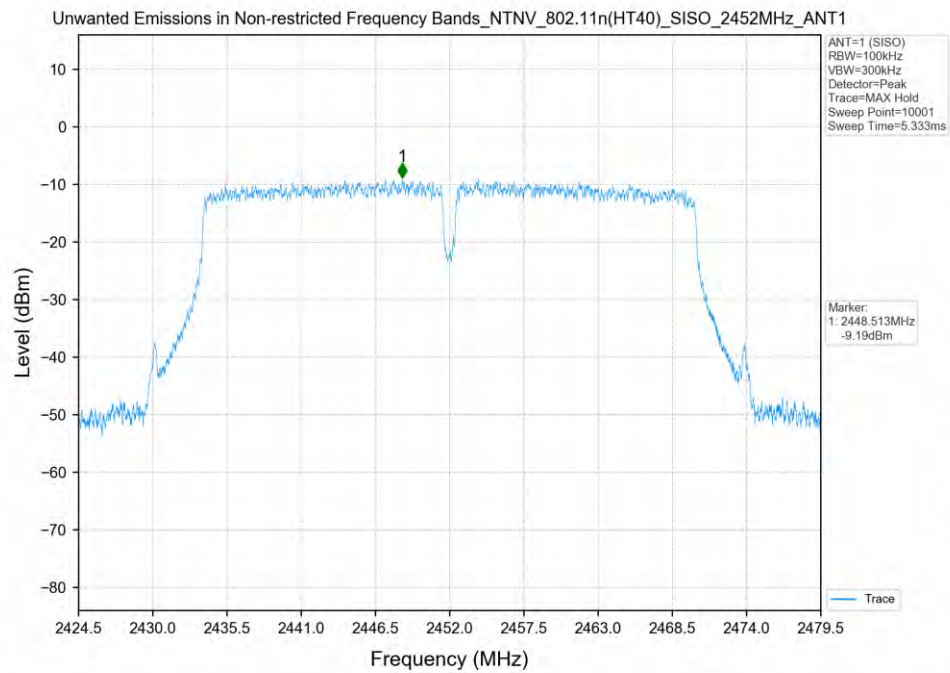
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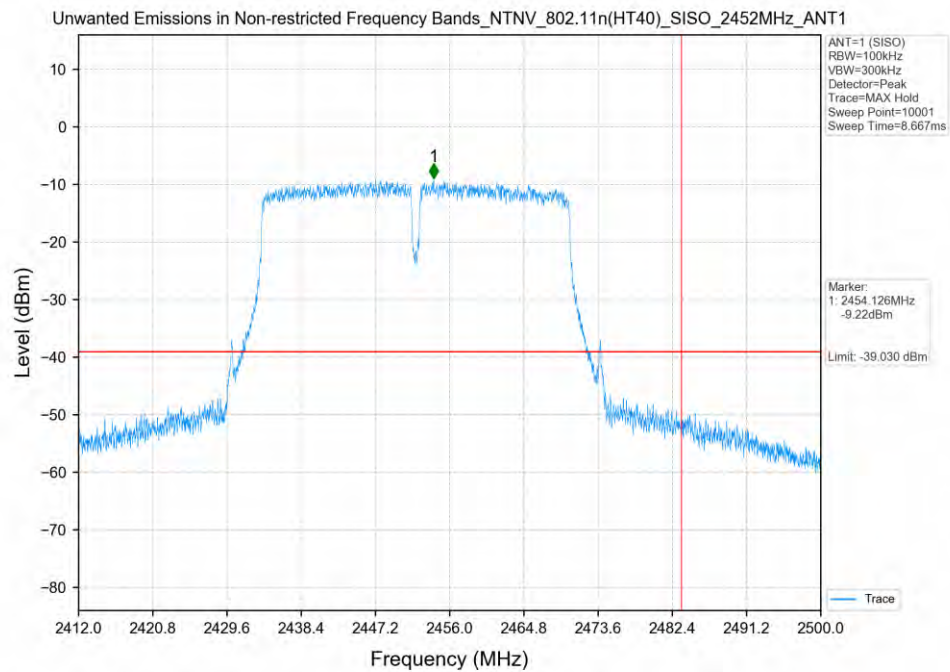
802.11n(HT40)_2437MHz_SISO_ANT1



802.11n(HT40)_2452MHz_SISO_REF



802.11n(HT40)_2452MHz_SISO_ANT1



802.11n(HT40)_2452MHz_SISO_ANT1

