



Appendix A for SHEM191101869601

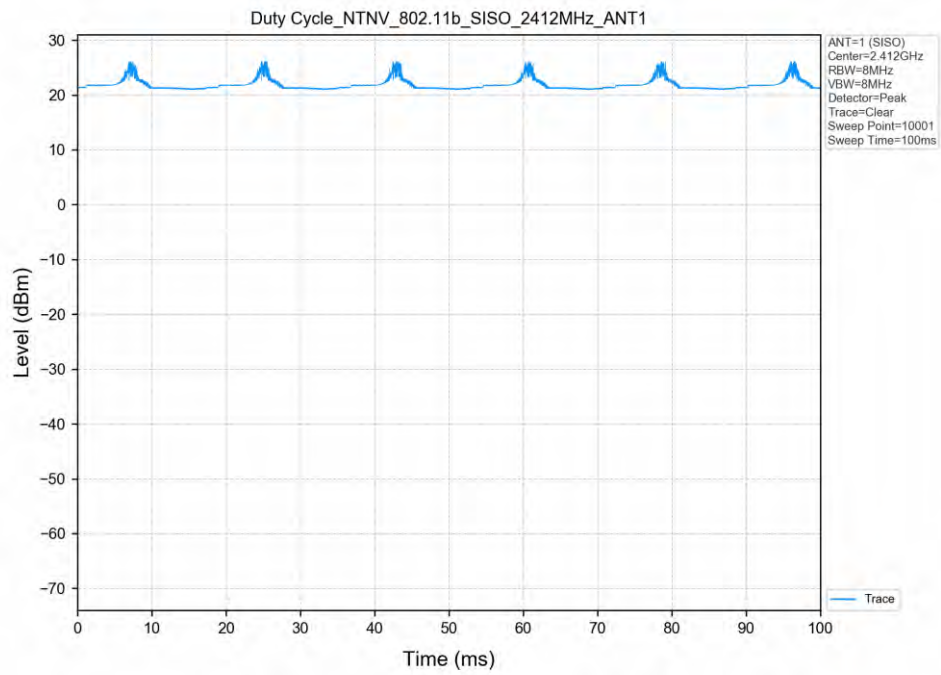
1. Duty Cycle

1.1 Test Result

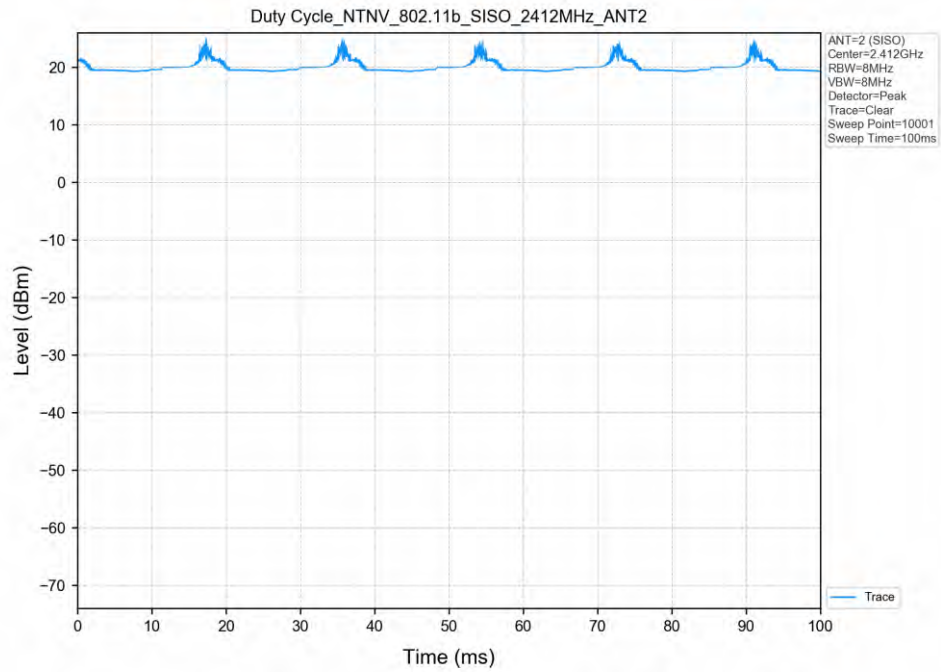
Test Mode	Channel Frequency(MHz)	TX Type	ANT No.	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
802.11b	2412	SISO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
	2437	SISO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
	2462	SISO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
802.11g	2412	SISO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
	2437	SISO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
	2462	SISO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
802.11n(HT20)	2412	SISO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
		MIMO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
	2437	SISO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
		MIMO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
	2462	SISO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
		MIMO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
802.11n(HT40)	2422	SISO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
		MIMO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
	2437	SISO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
		MIMO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
	2452	SISO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00
		MIMO	1	100.000	100.000	100.00	0.00
			2	100.000	100.000	100.00	0.00

1.2 Test Graph

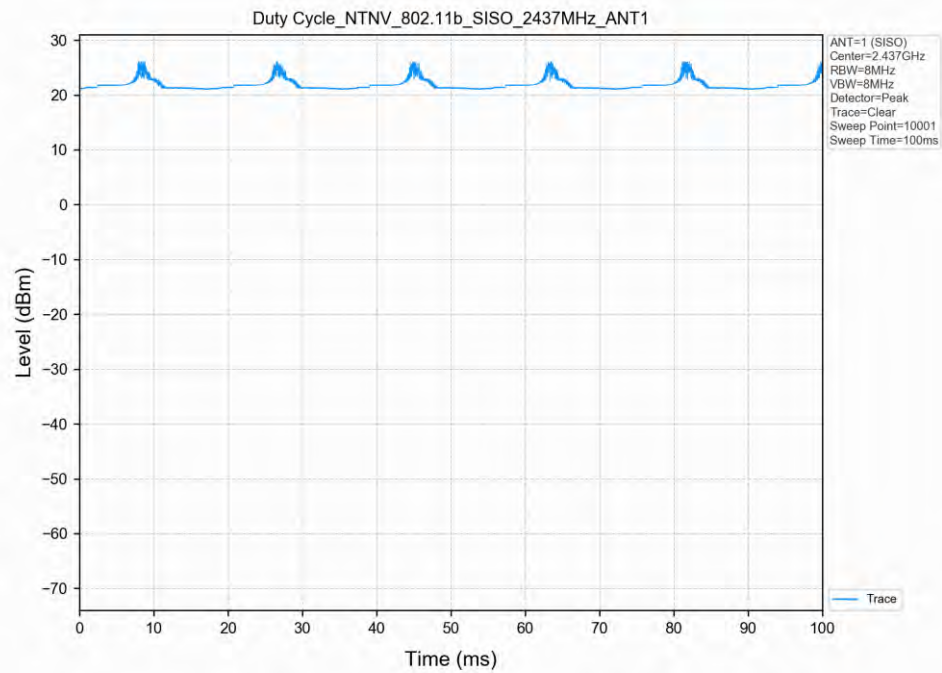
802.11b_2412MHz_SISO_ANT1



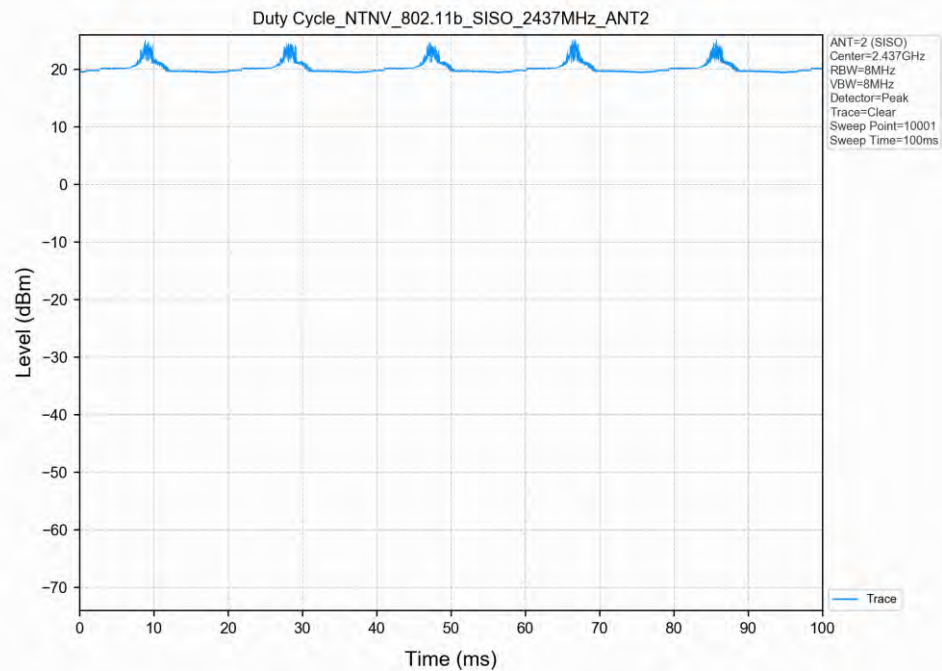
802.11b_2412MHz_SISO_ANT2



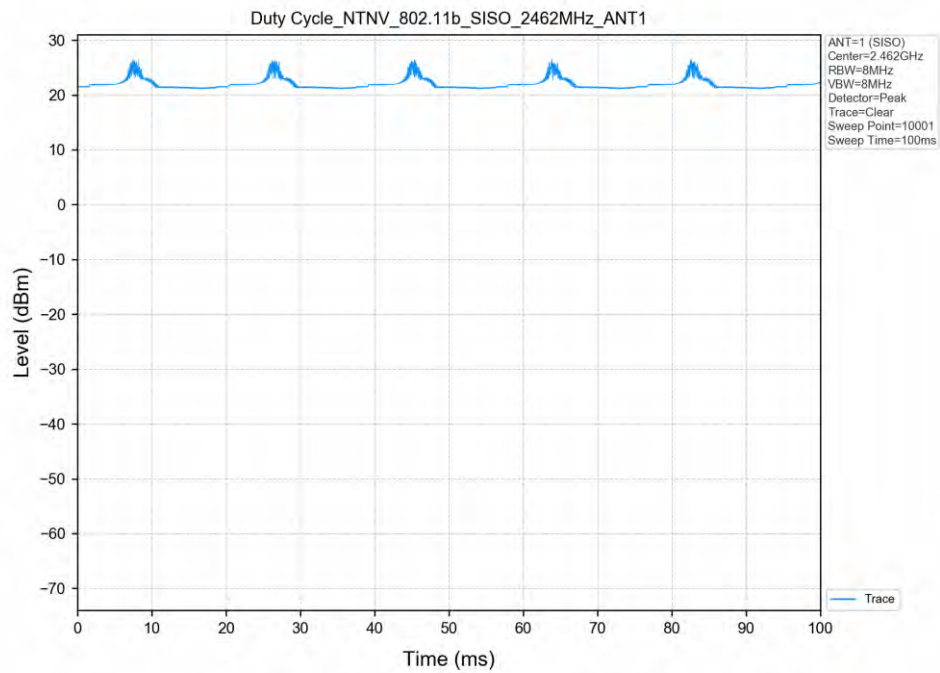
802.11b_2437MHz_SISO_ANT1



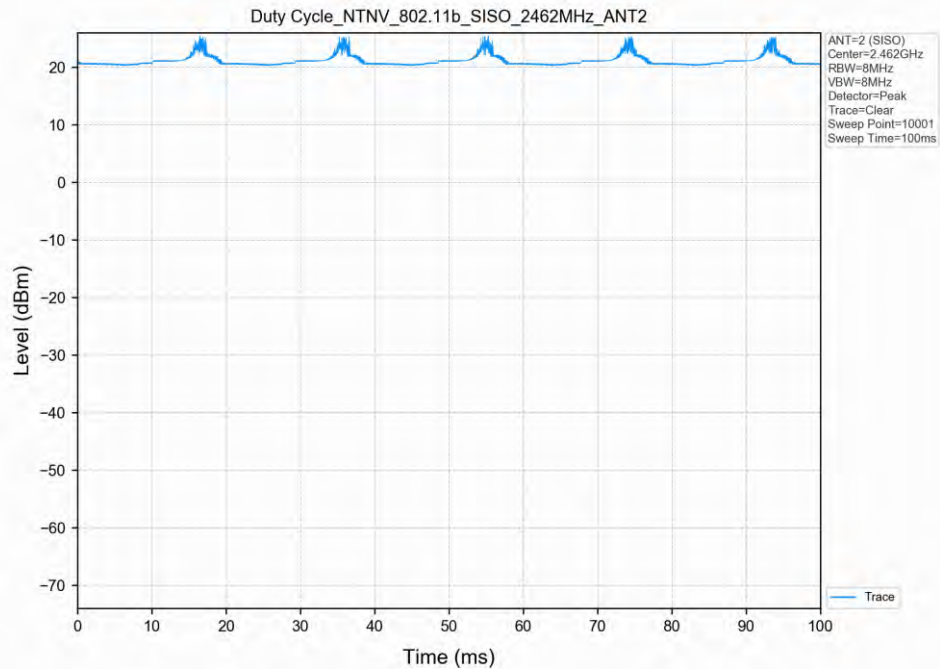
802.11b_2437MHz_SISO_ANT2



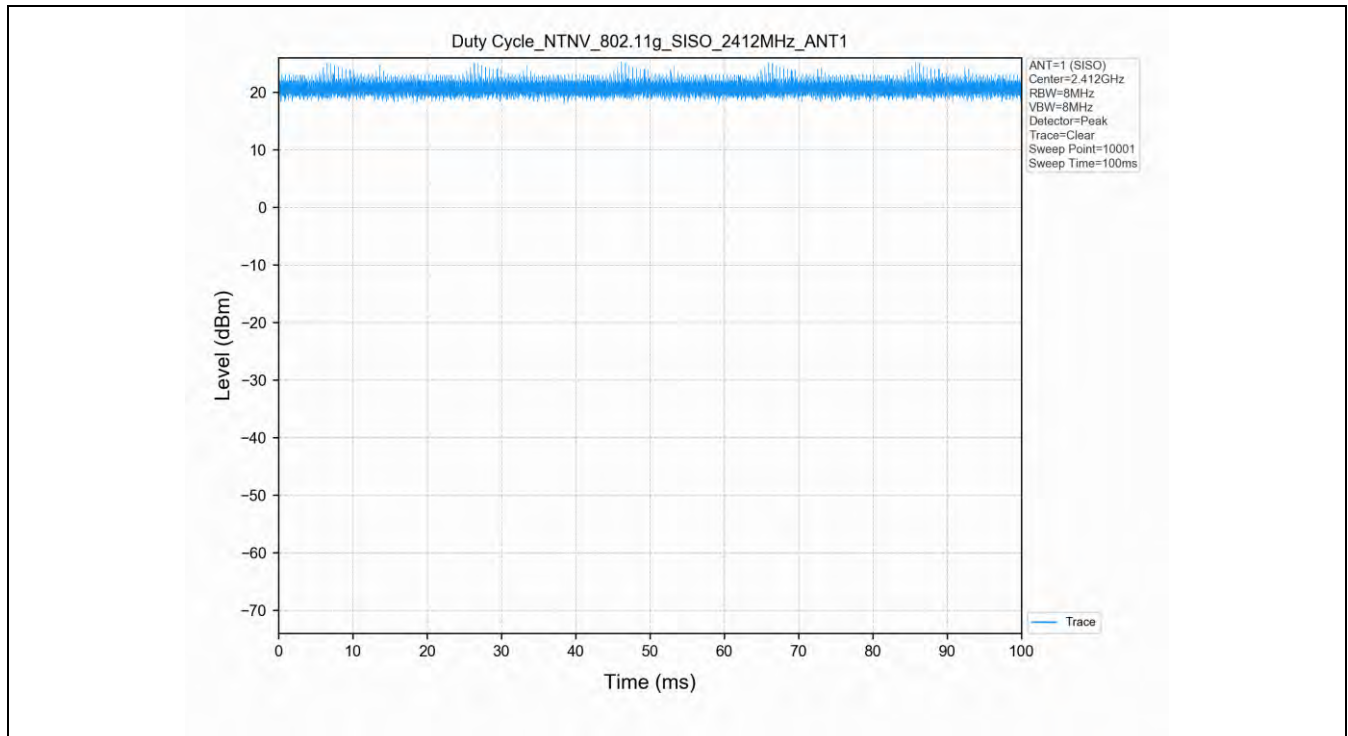
802.11b_2462MHz_SISO_ANT1



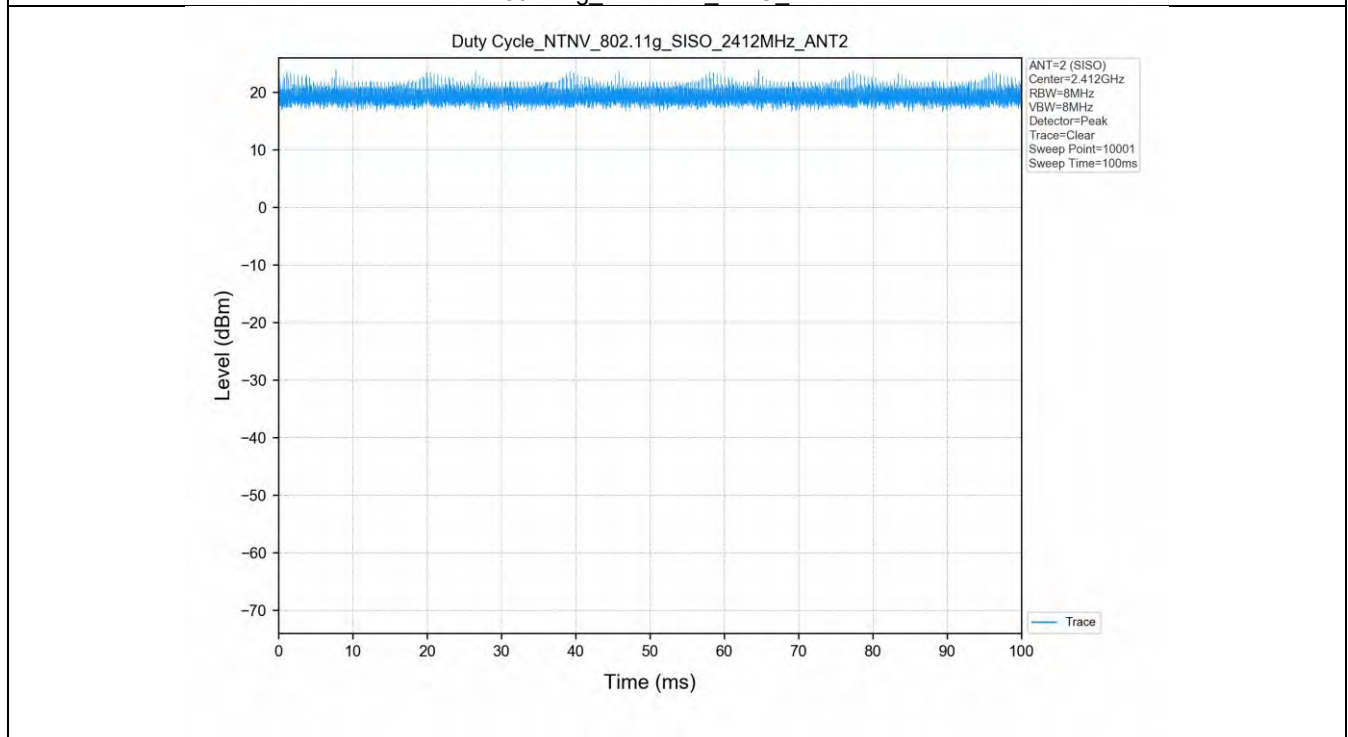
802.11b_2462MHz_SISO_ANT2



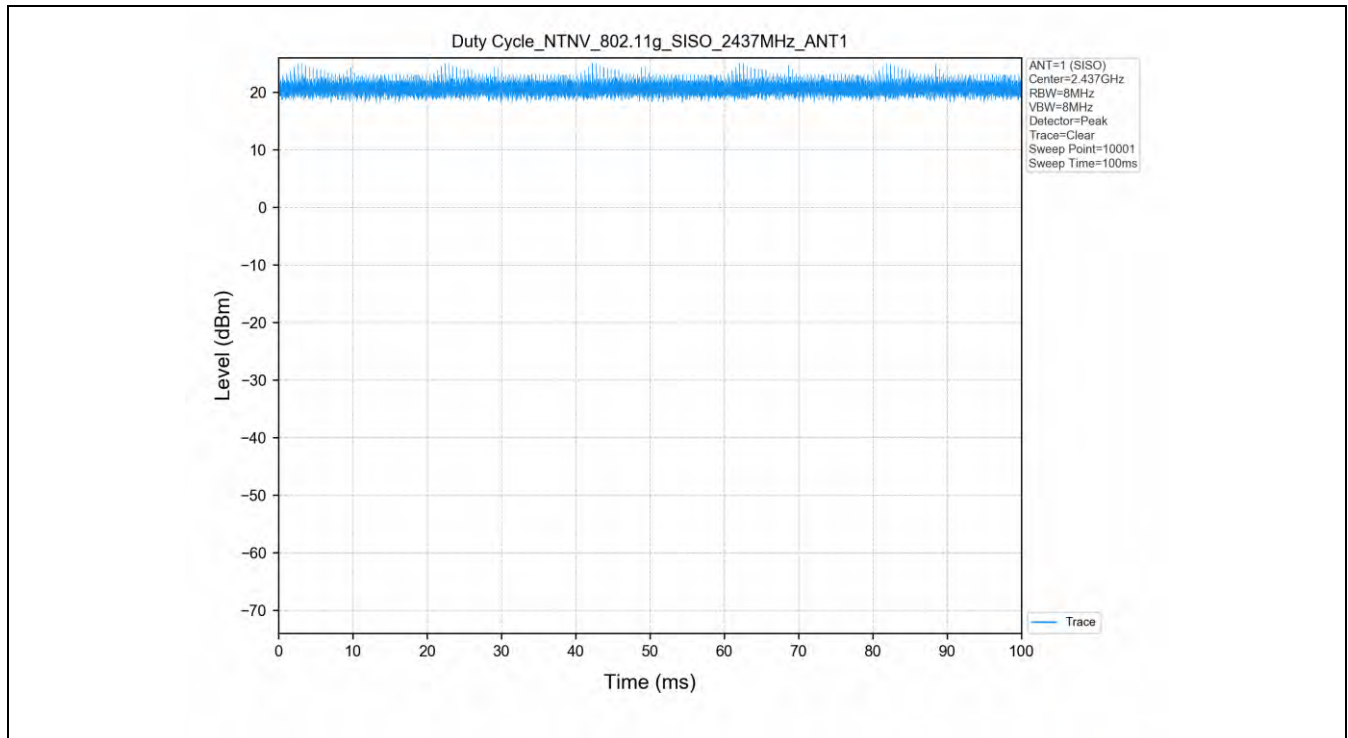
802.11g_2412MHz_SISO_ANT1



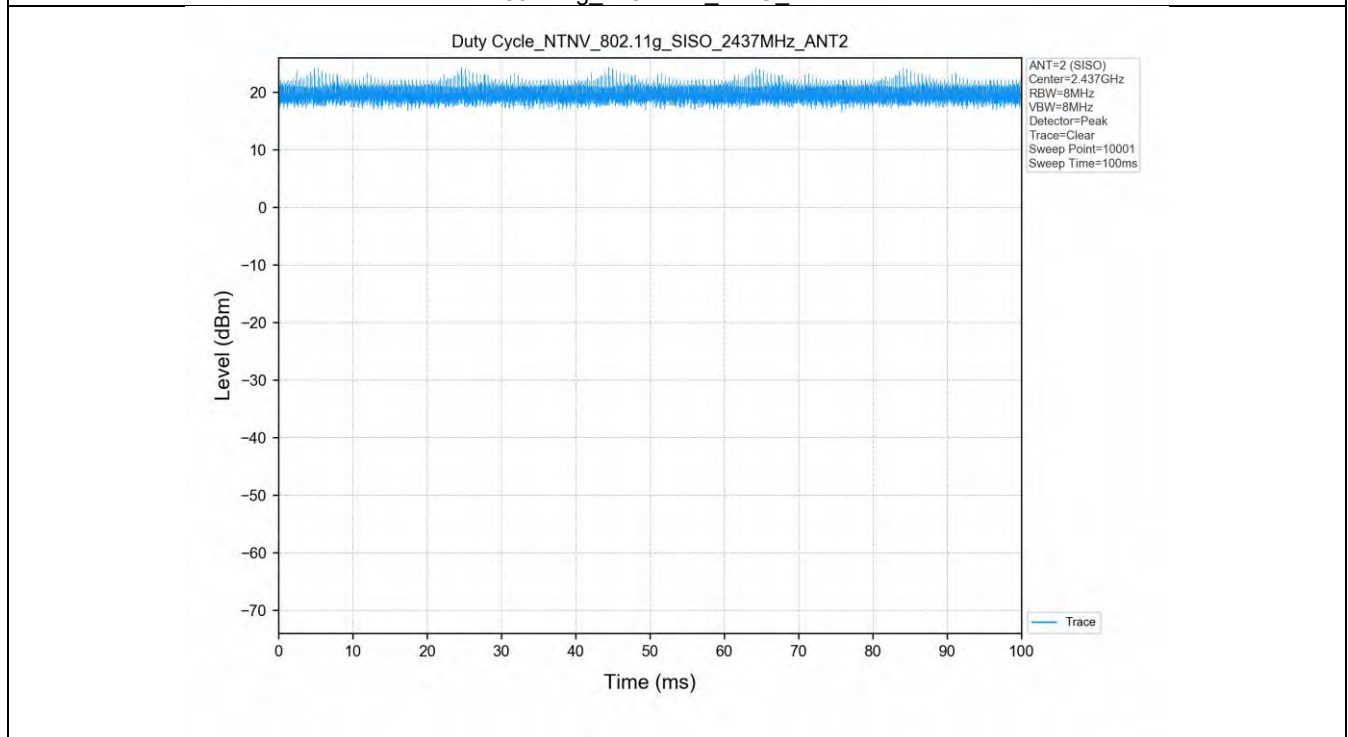
802.11g_2412MHz_SISO_ANT2



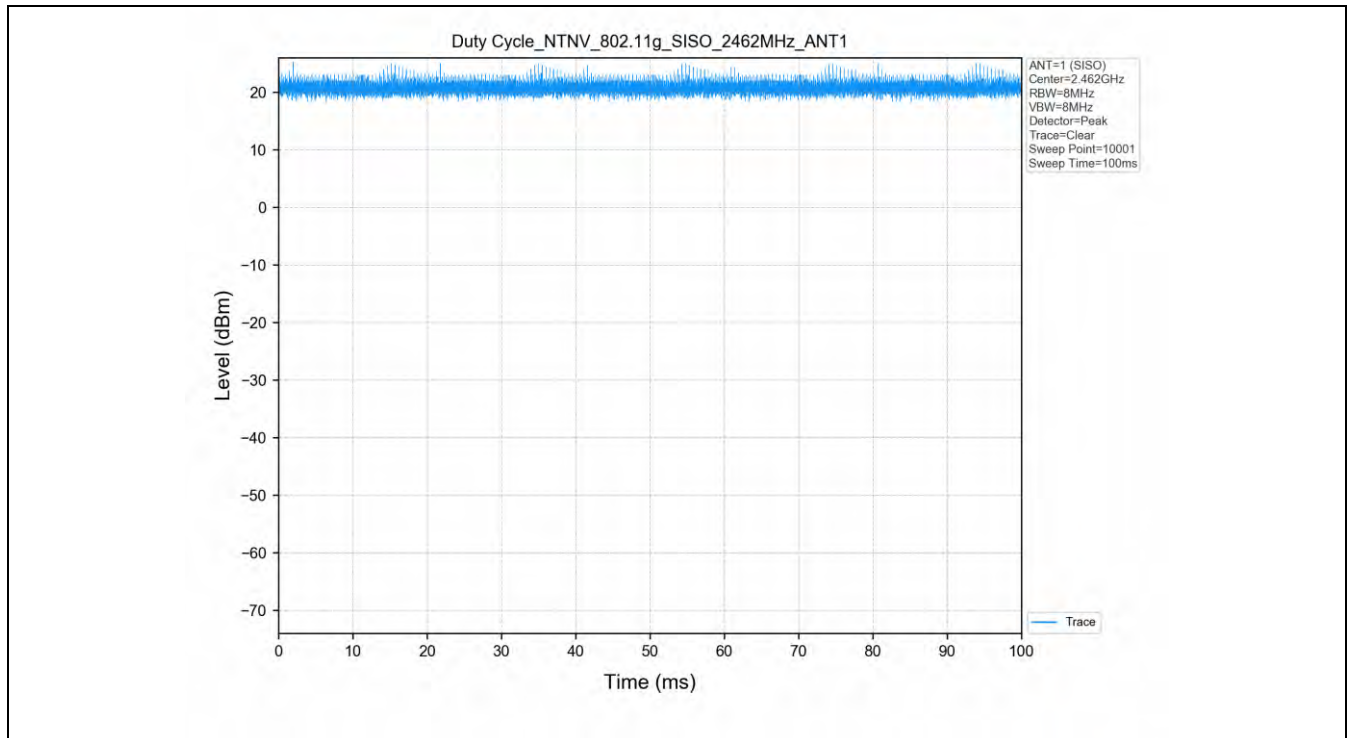
802.11g_2437MHz_SISO_ANT1



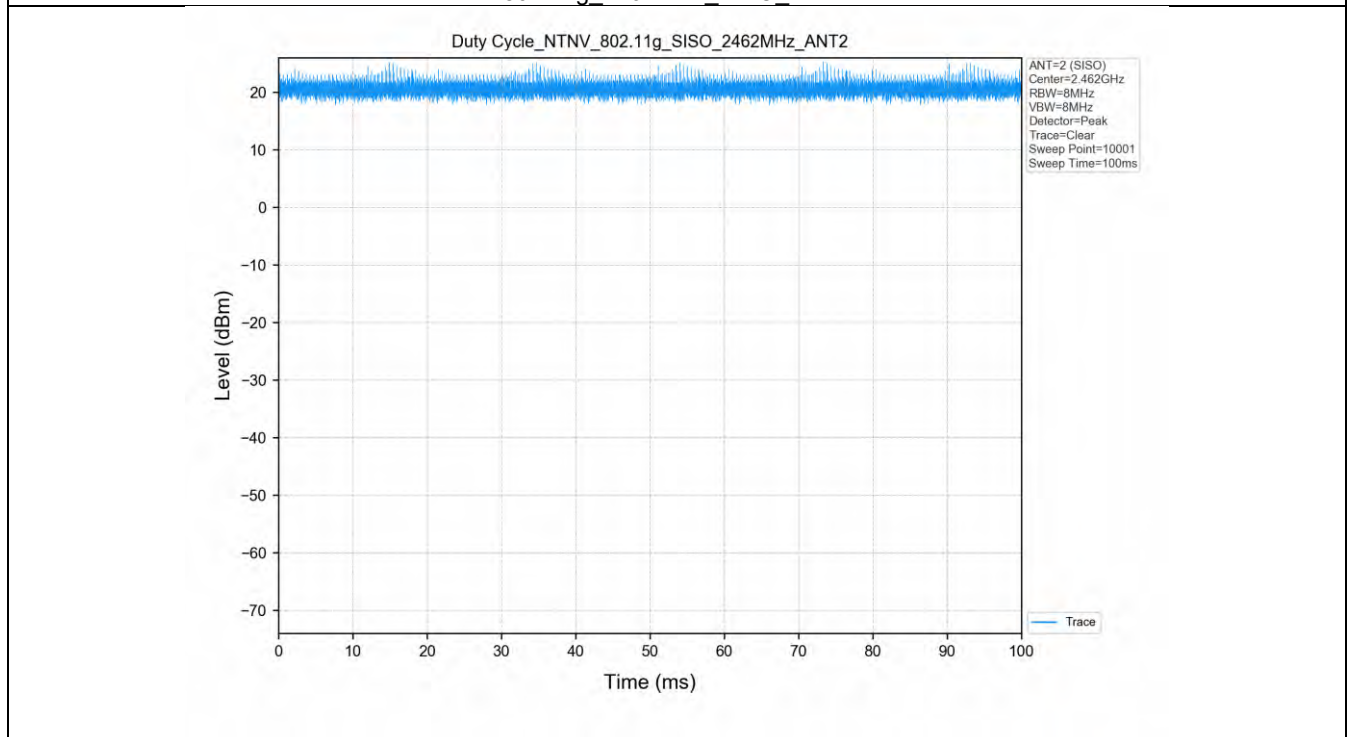
802.11g_2437MHz_SISO_ANT2



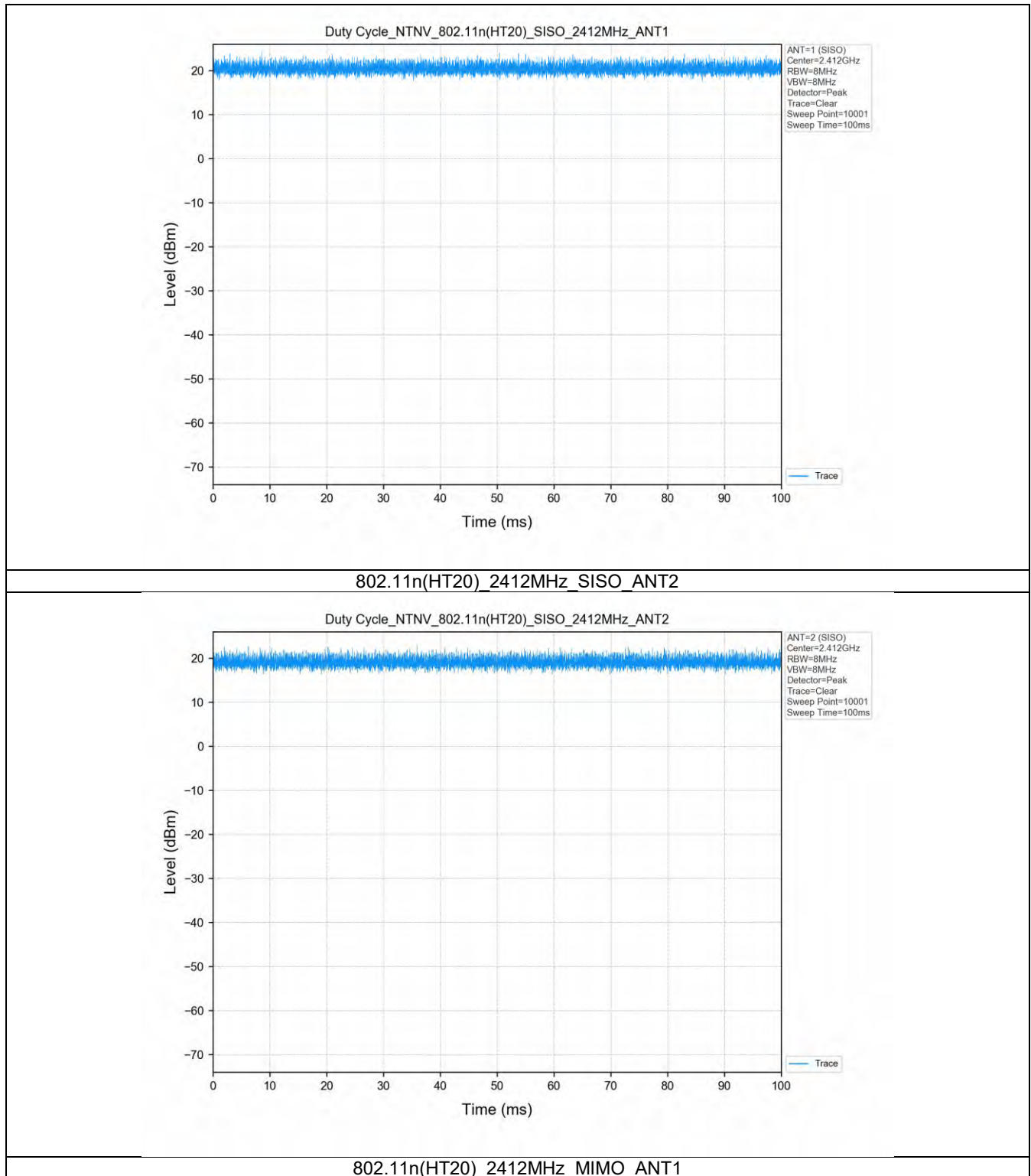
802.11g_2462MHz_SISO_ANT1

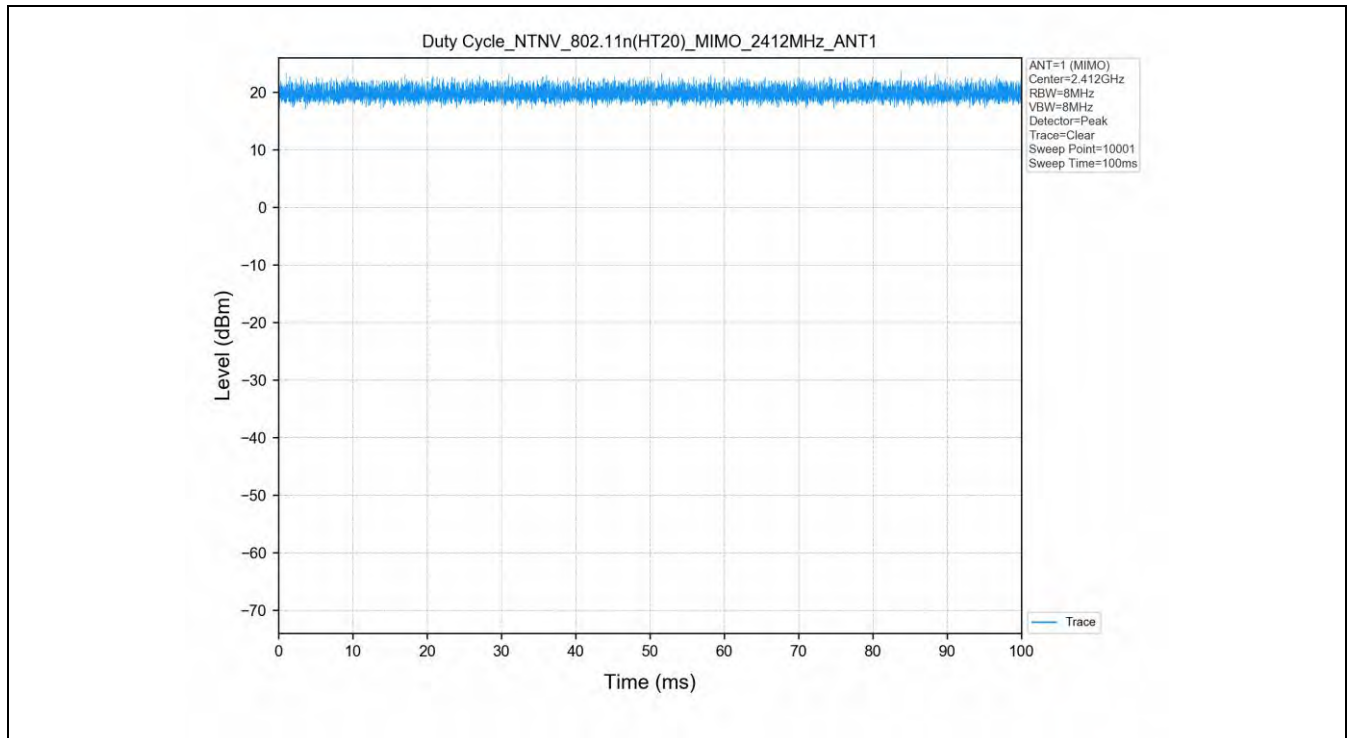


802.11g_2462MHz_SISO_ANT2

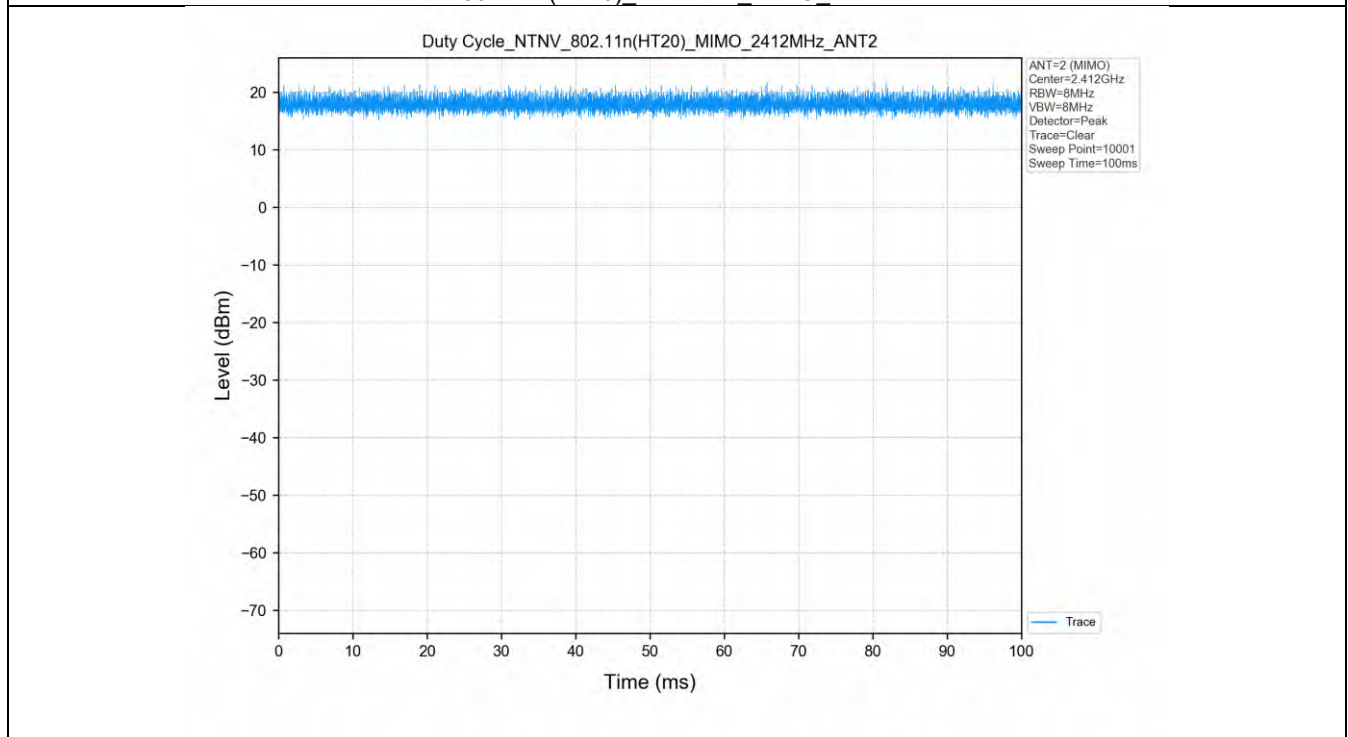


802.11n(HT20)_2412MHz_SISO_ANT1

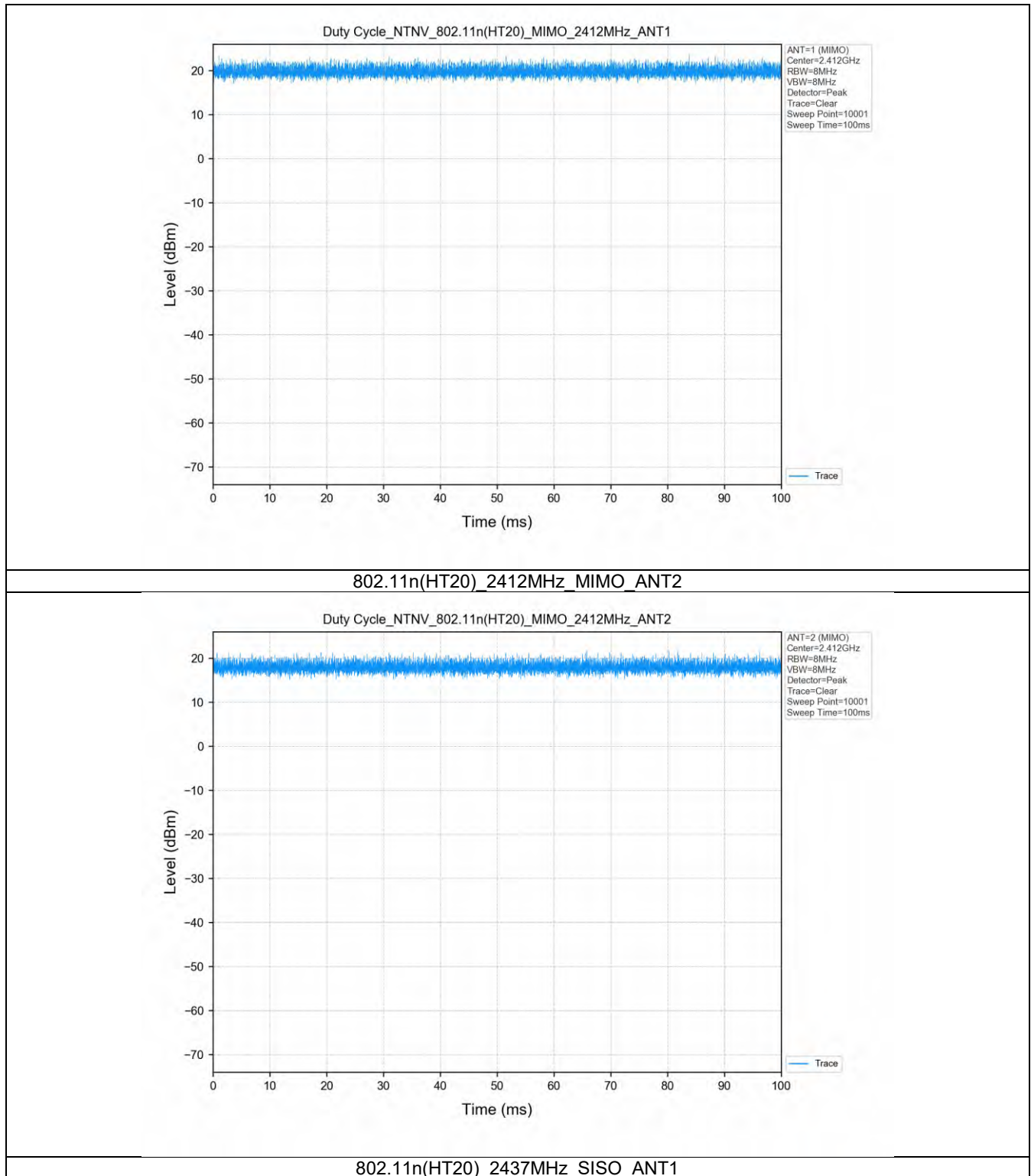


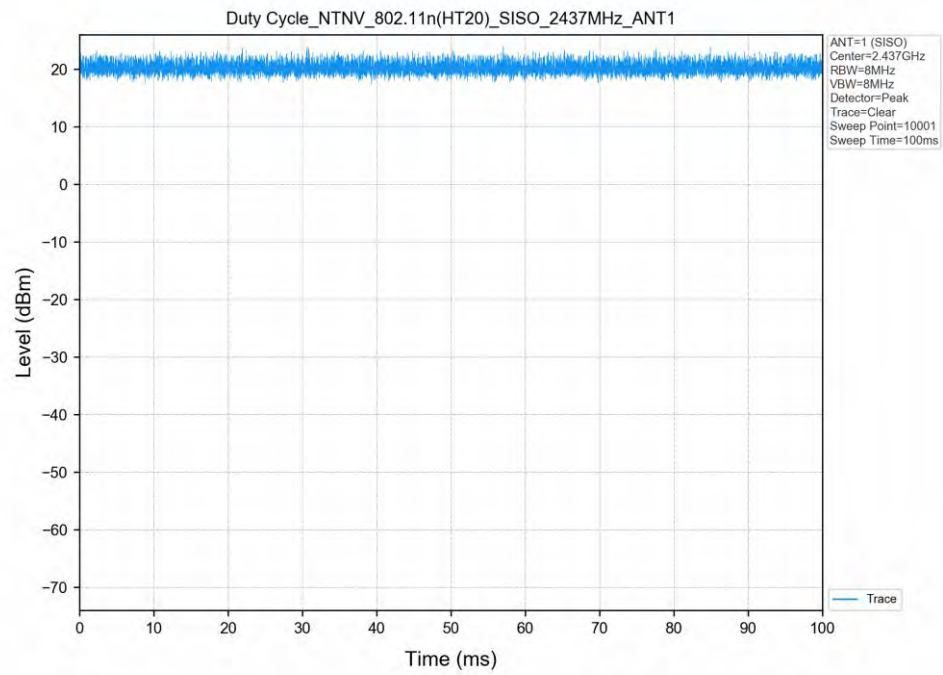


802.11n(HT20)_2412MHz_MIMO_ANT1

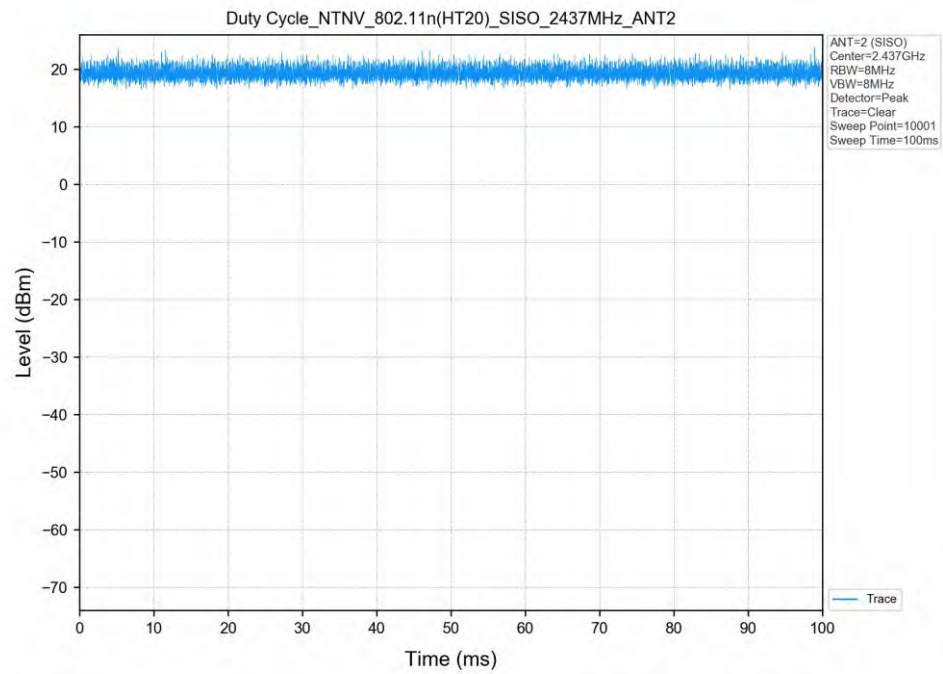


802.11n(HT20)_2412MHz_MIMO_ANT2

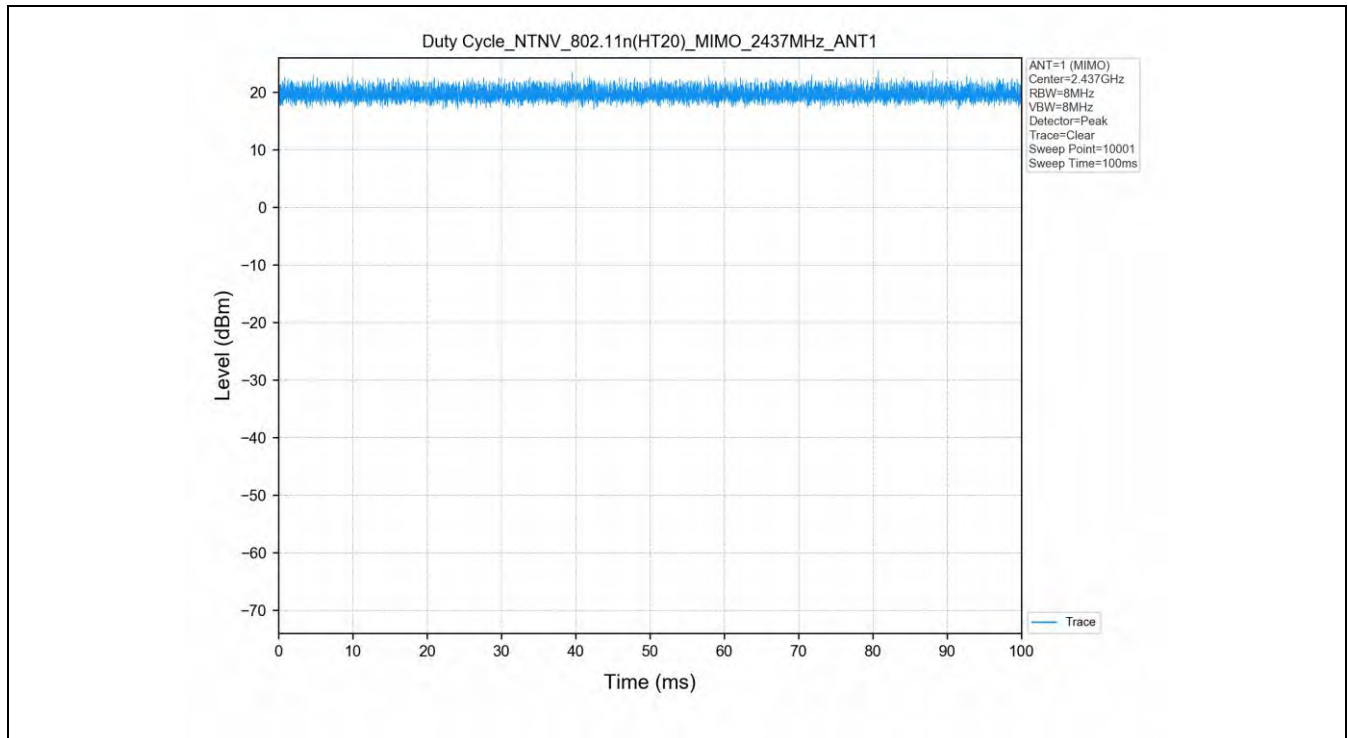




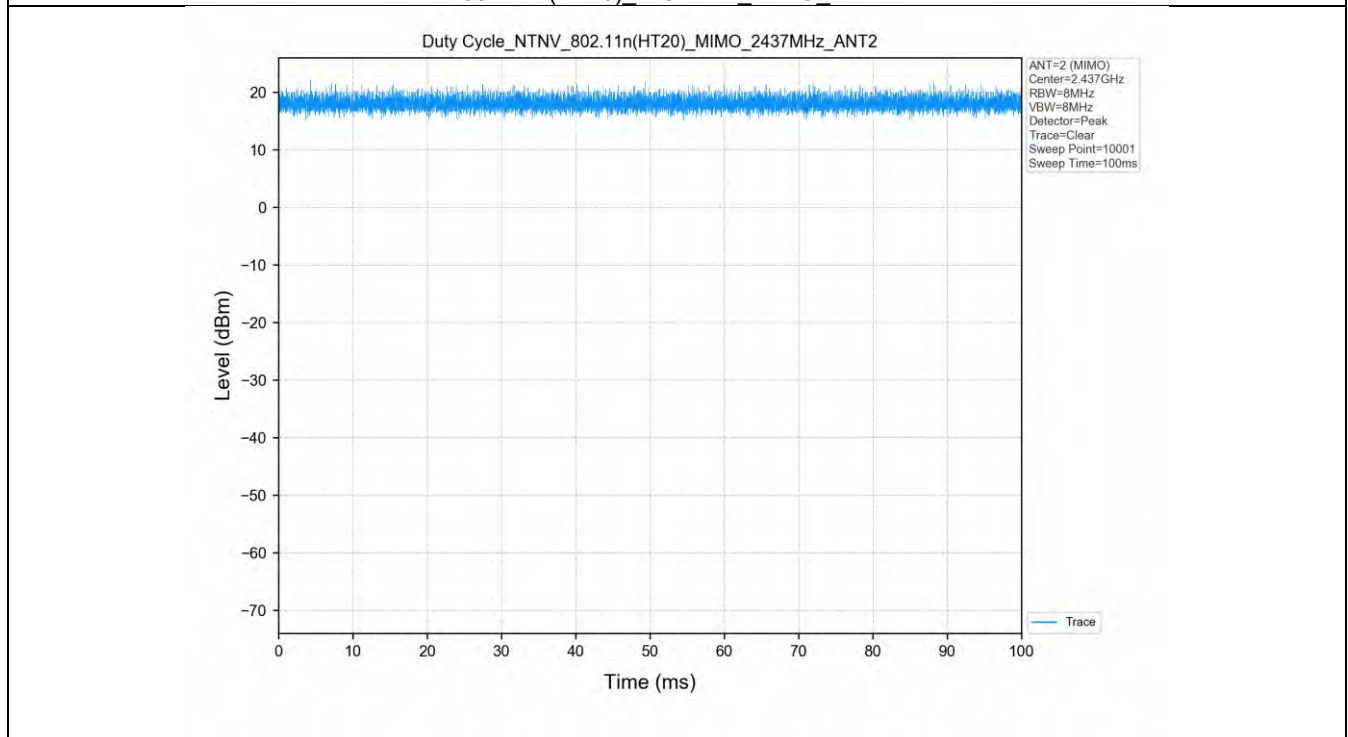
802.11n(HT20)_2437MHz_SISO_ANT2



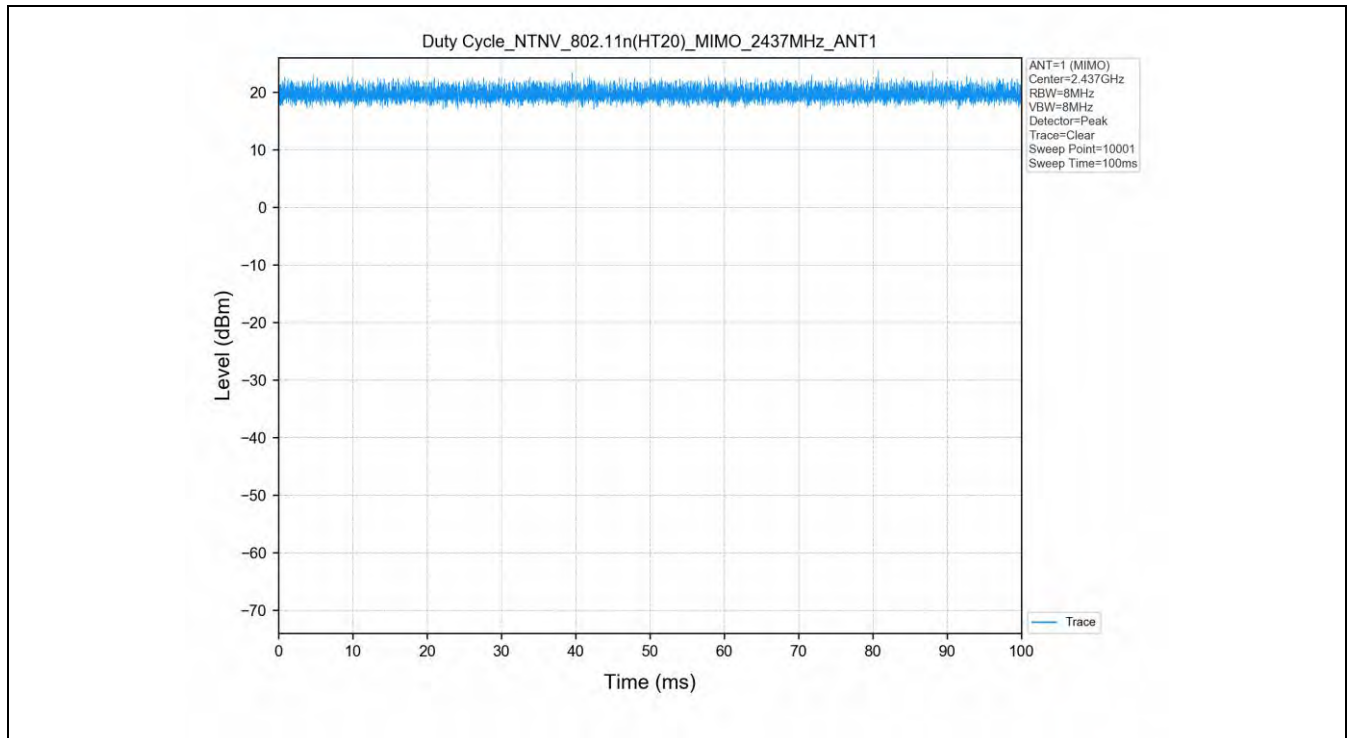
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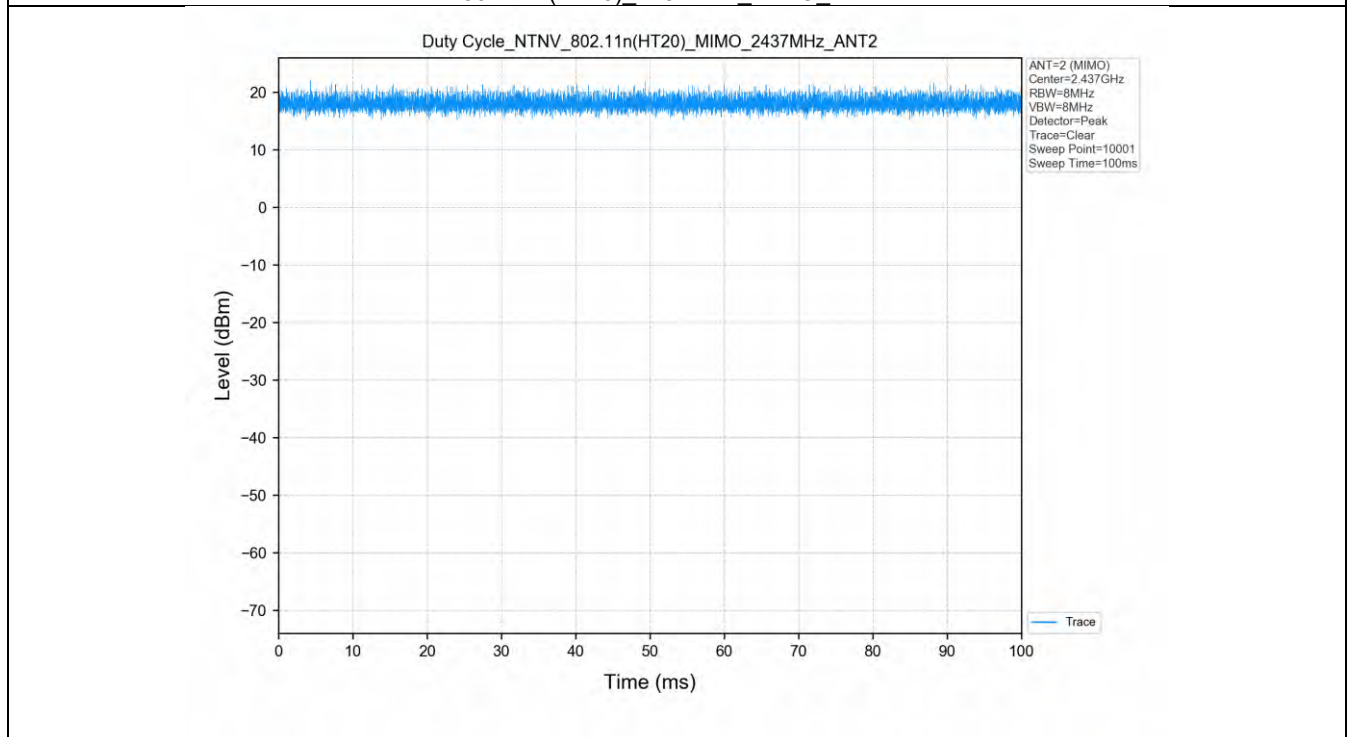
802.11n(HT20)_2437MHz_MIMO_ANT1



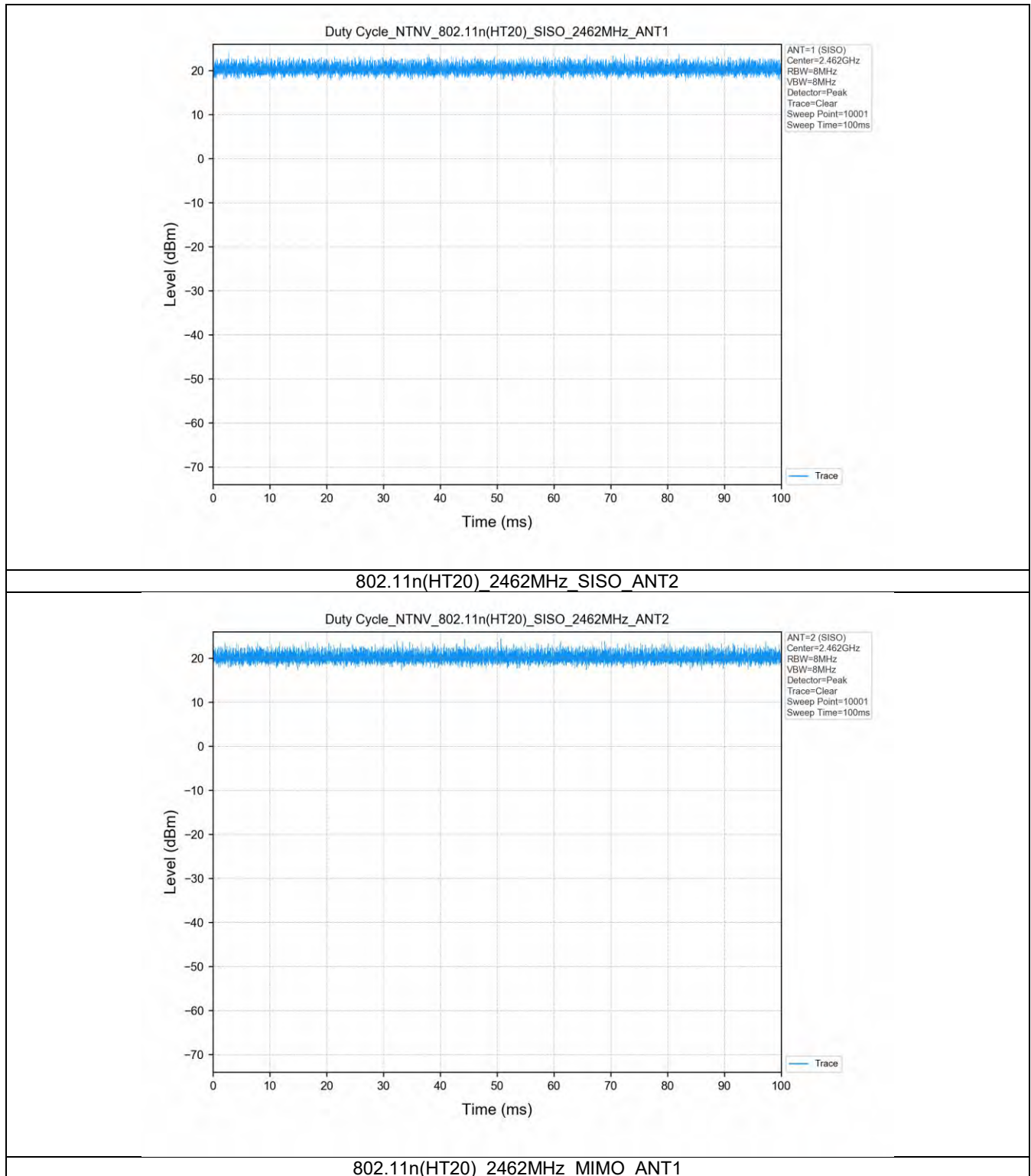
802.11n(HT20)_2437MHz_MIMO_ANT2

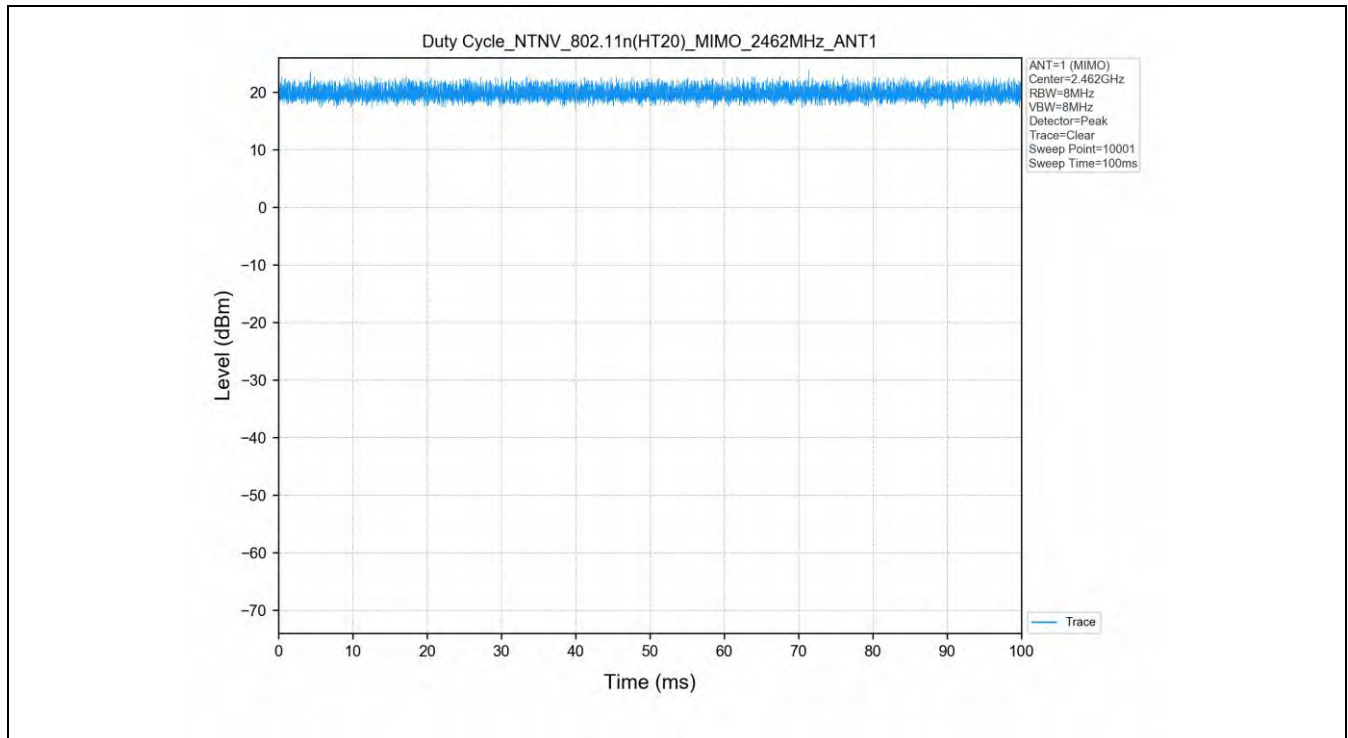


802.11n(HT20)_2437MHz_MIMO_ANT2

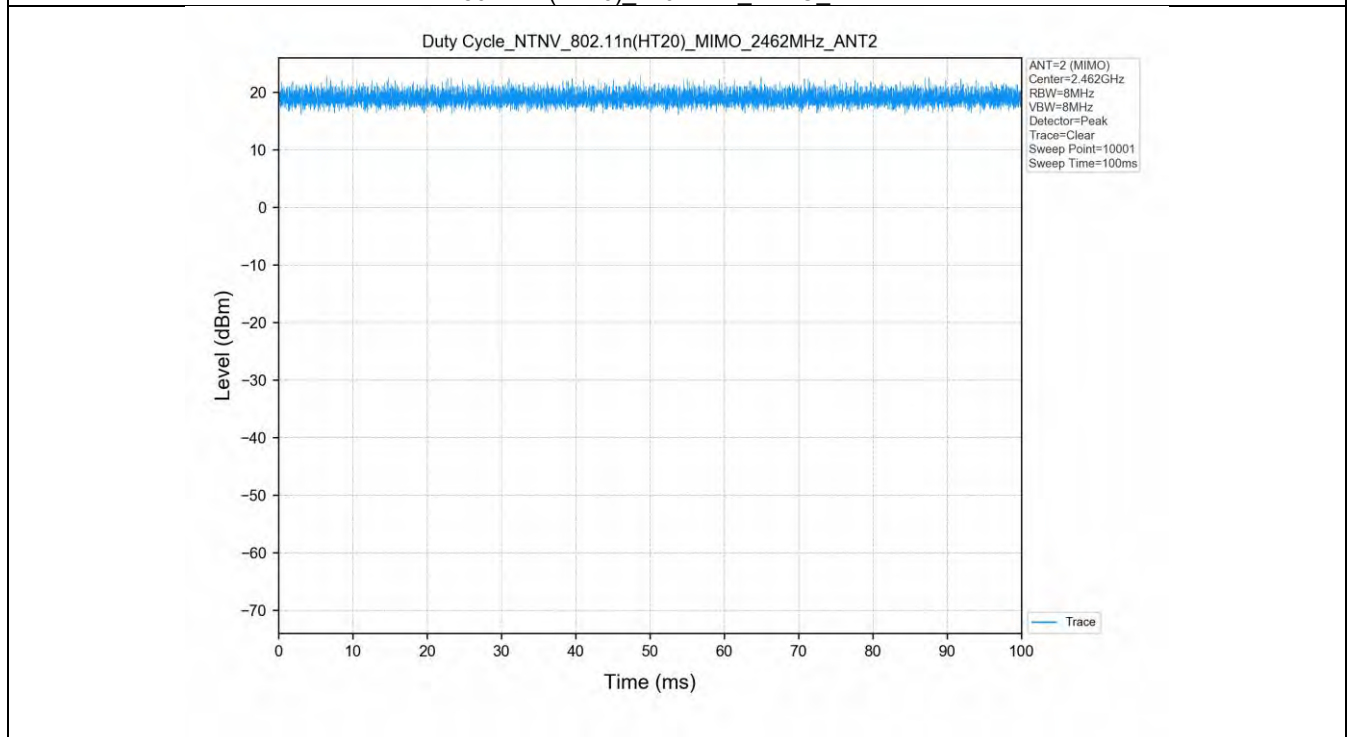


802.11n(HT20)_2462MHz_SISO_ANT1

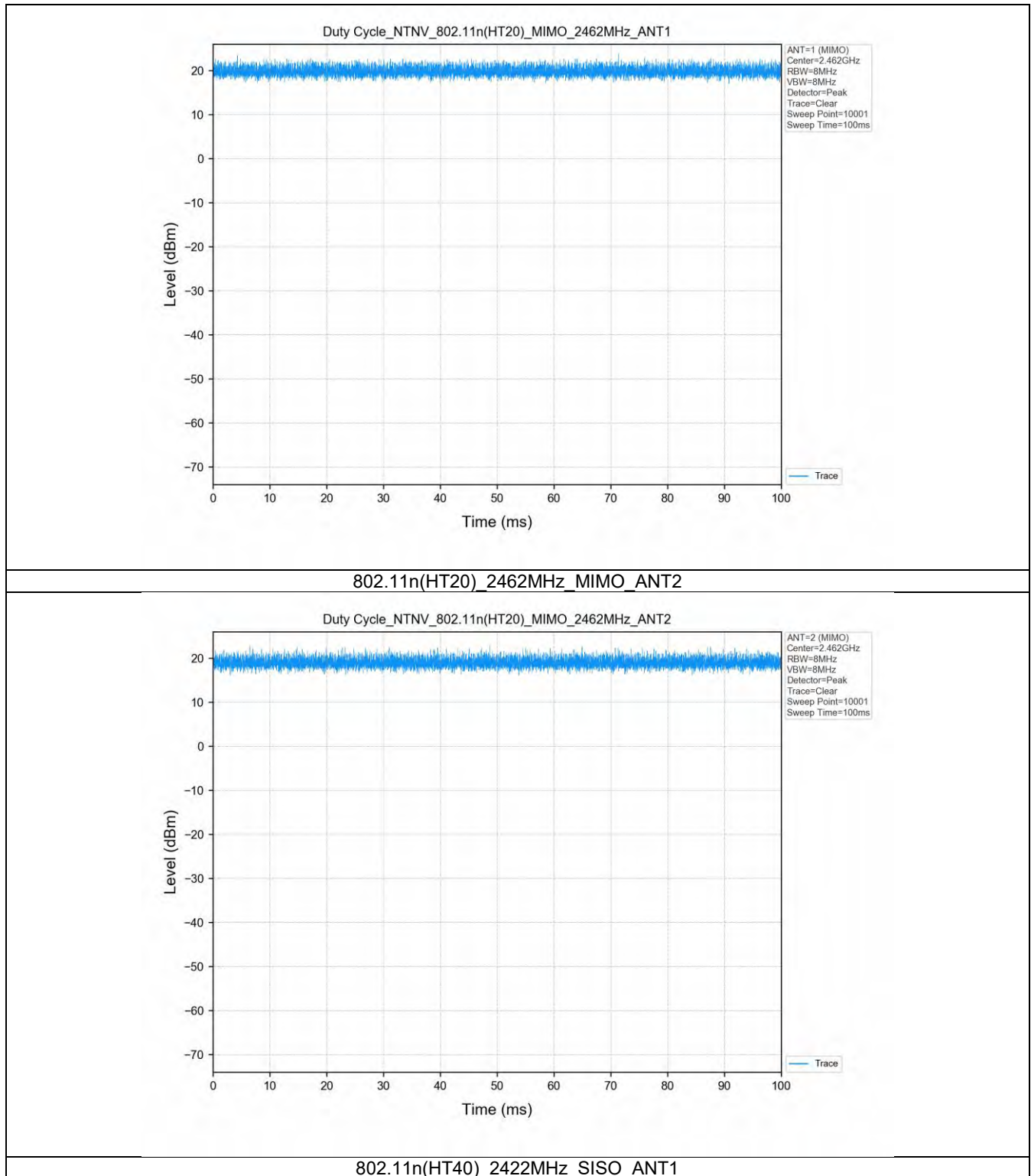


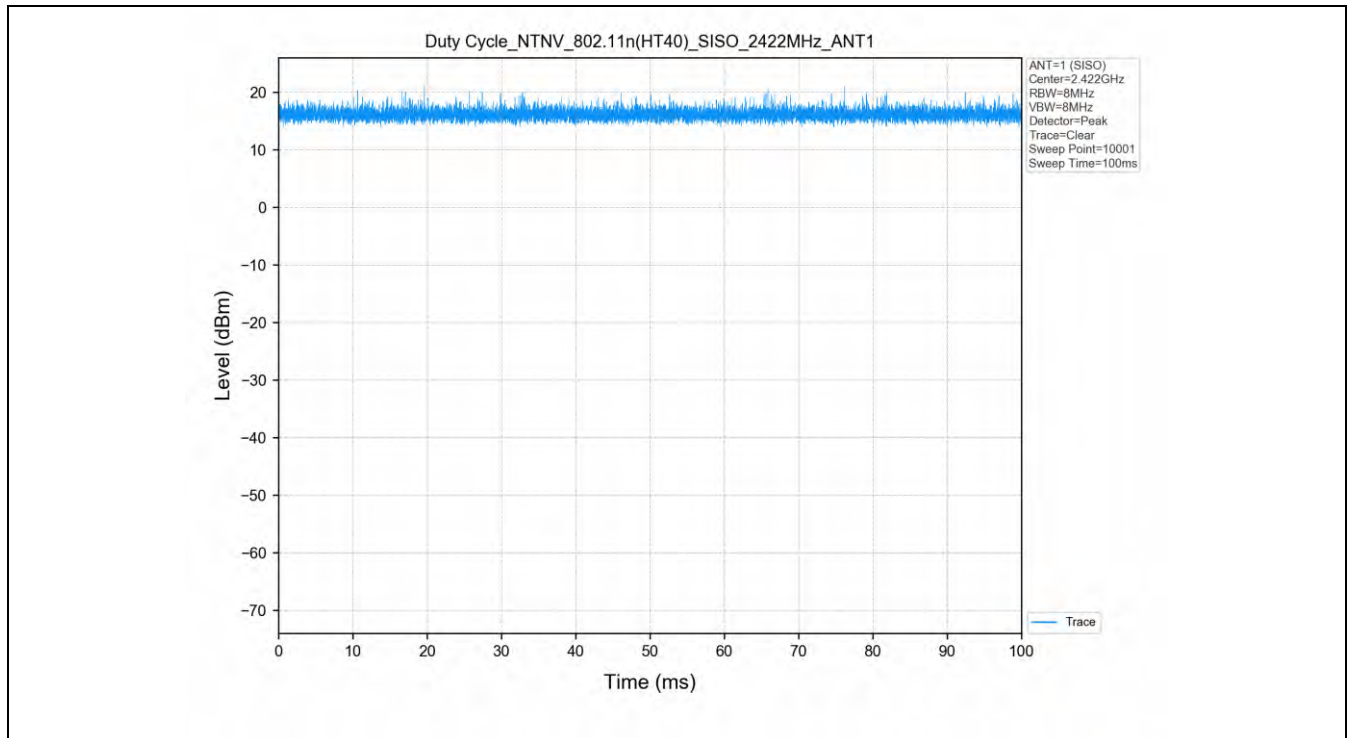


802.11n(HT20)_2462MHz_MIMO_ANT1

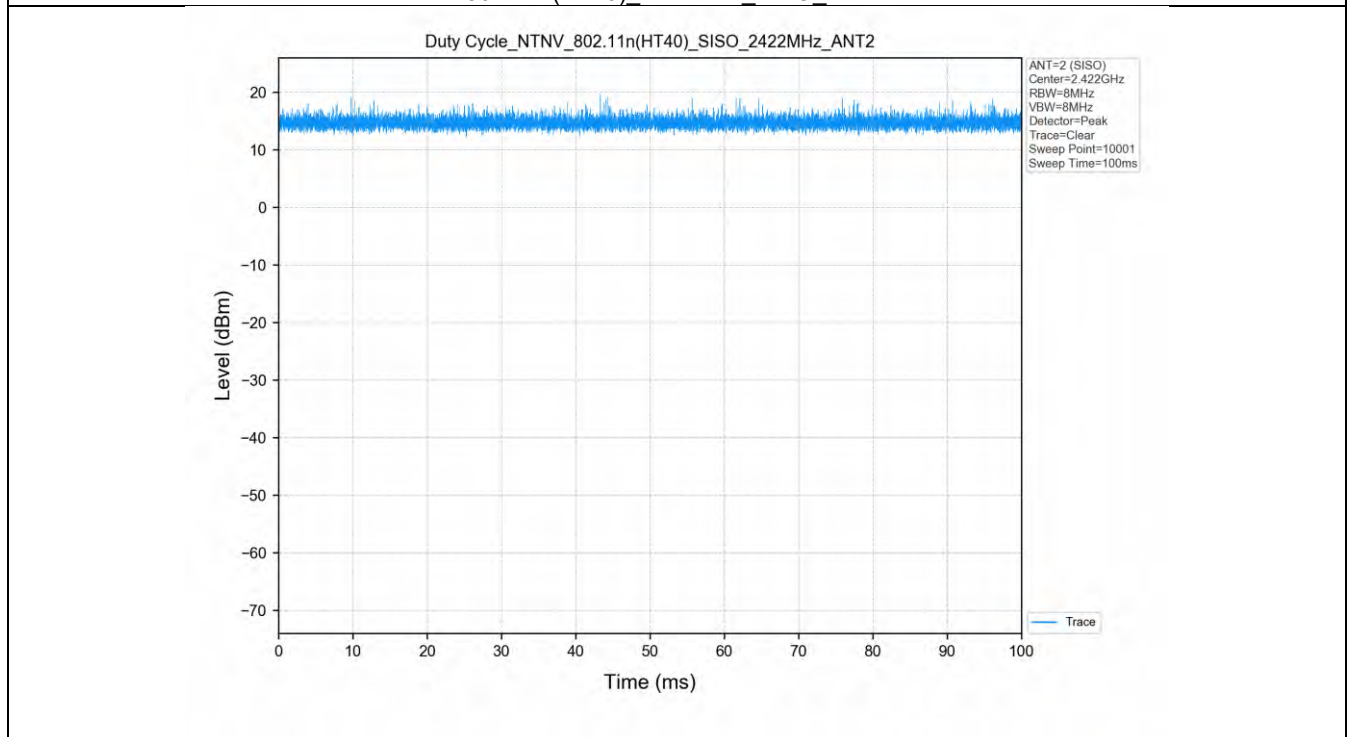


802.11n(HT20)_2462MHz_MIMO_ANT2

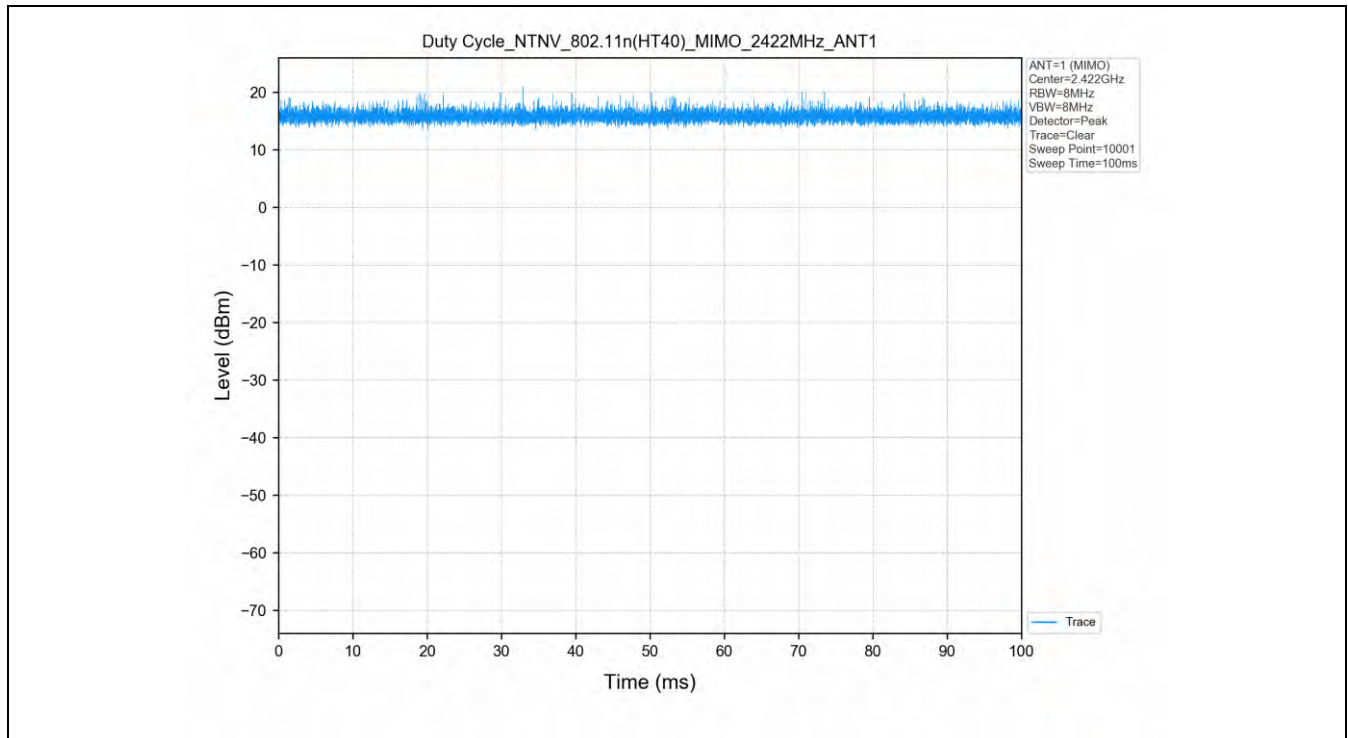




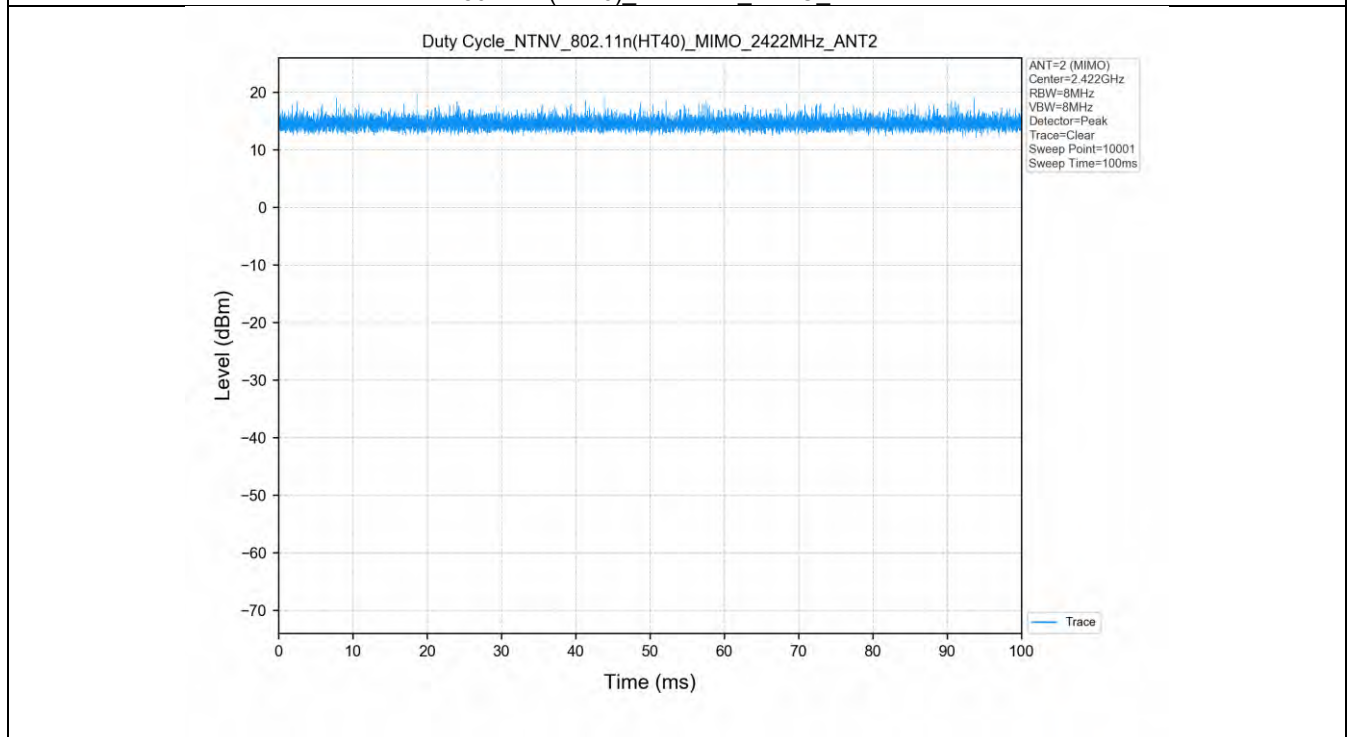
802.11n(HT40)_2422MHz_SISO_ANT2



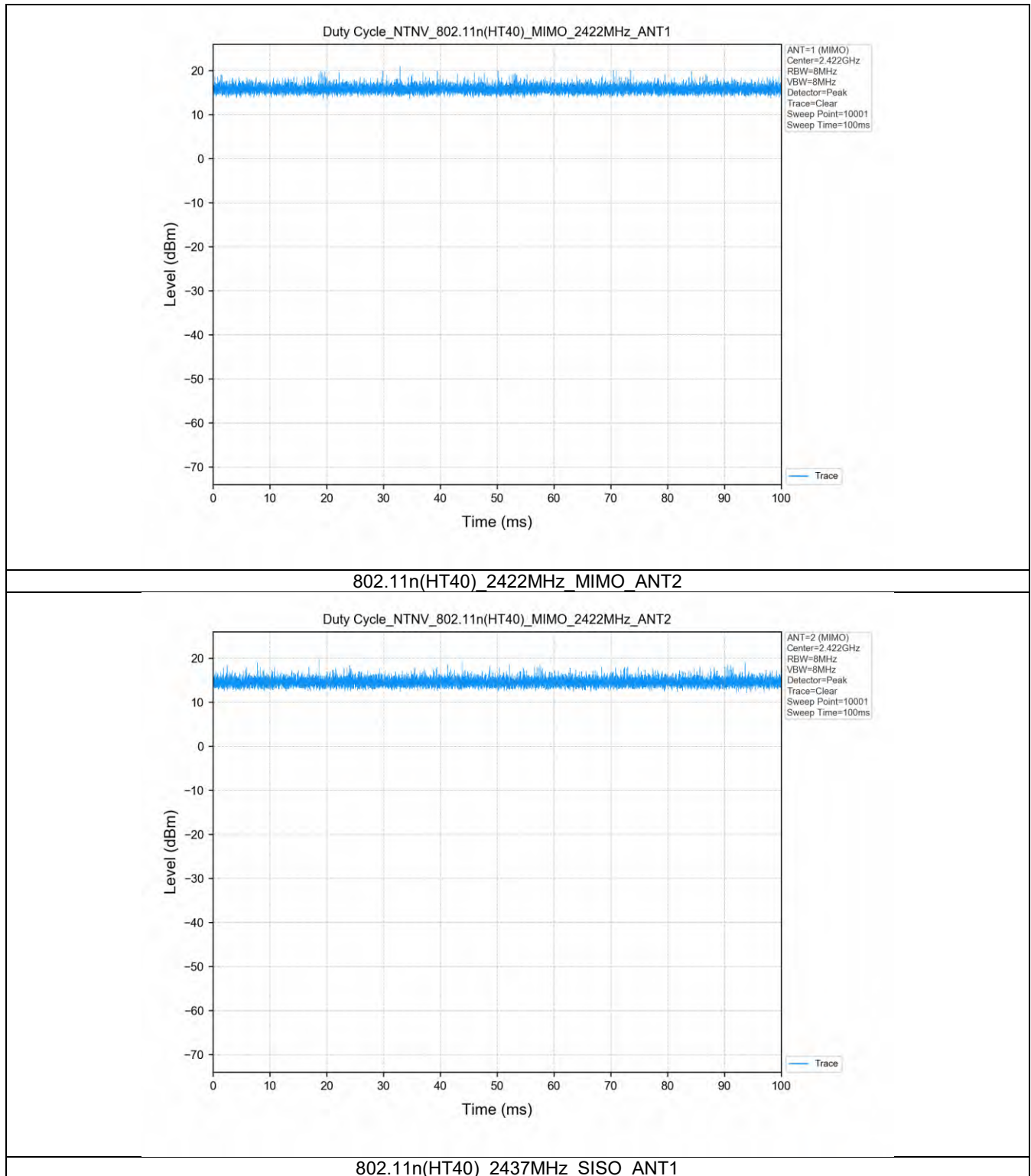
802.11n(HT40)_2422MHz_MIMO_ANT1

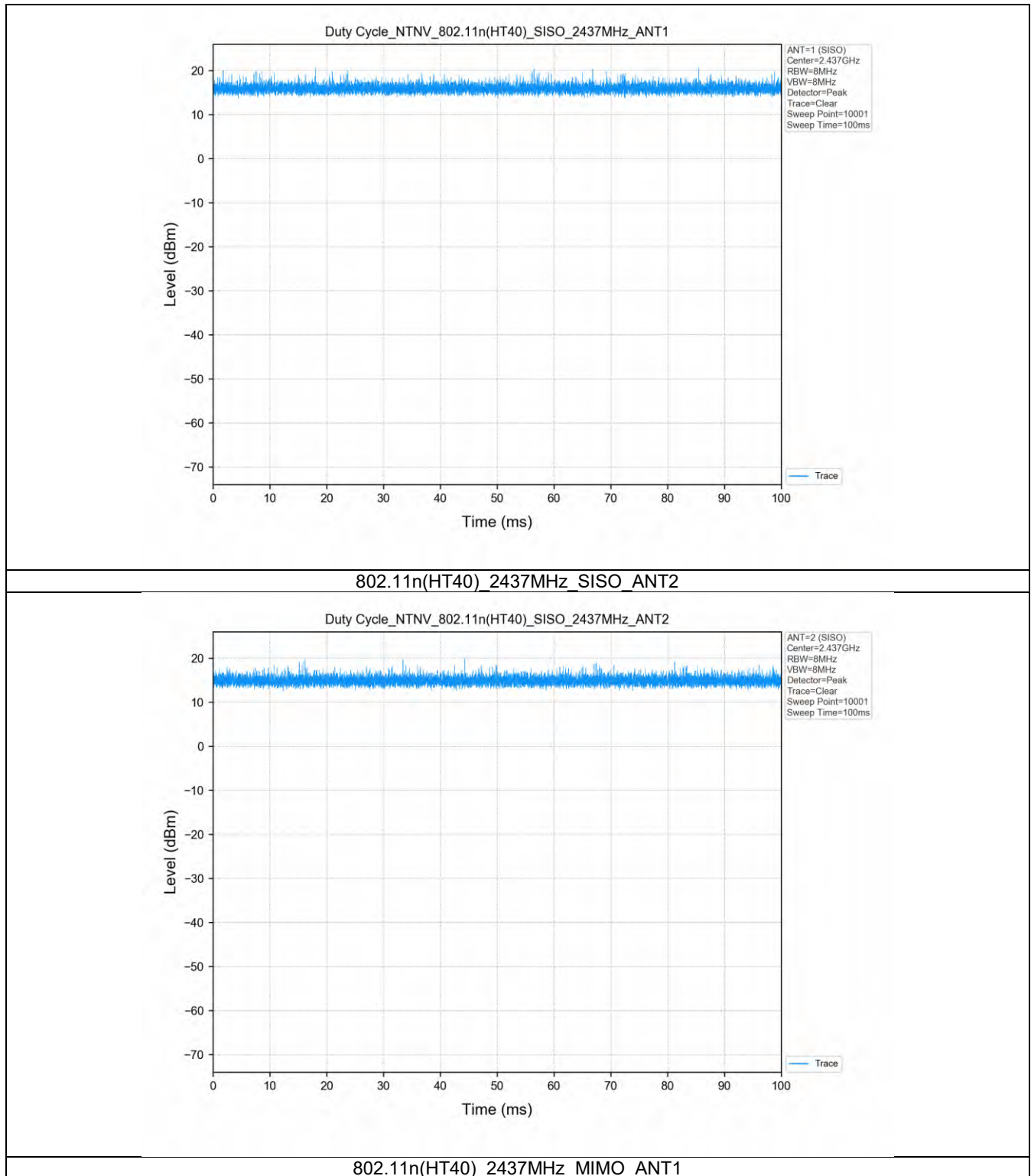


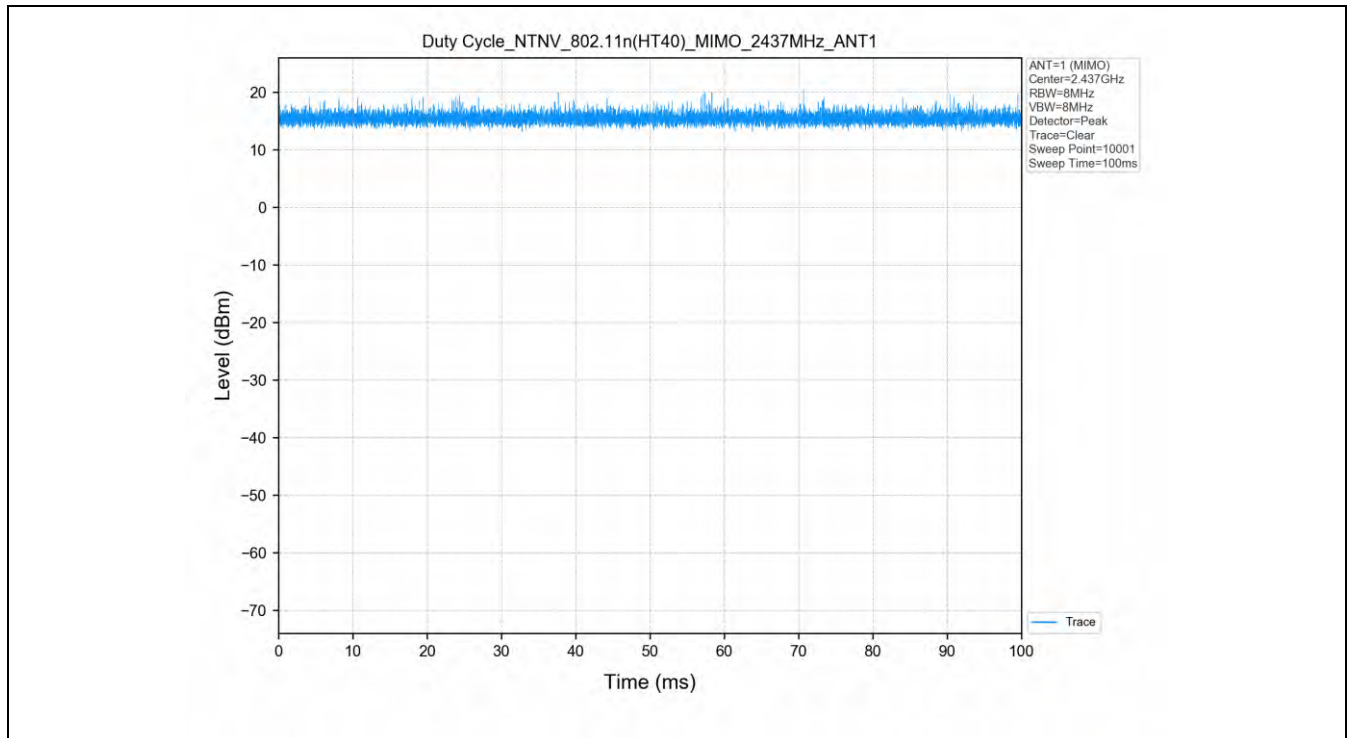
802.11n(HT40)_2422MHz_MIMO_ANT1



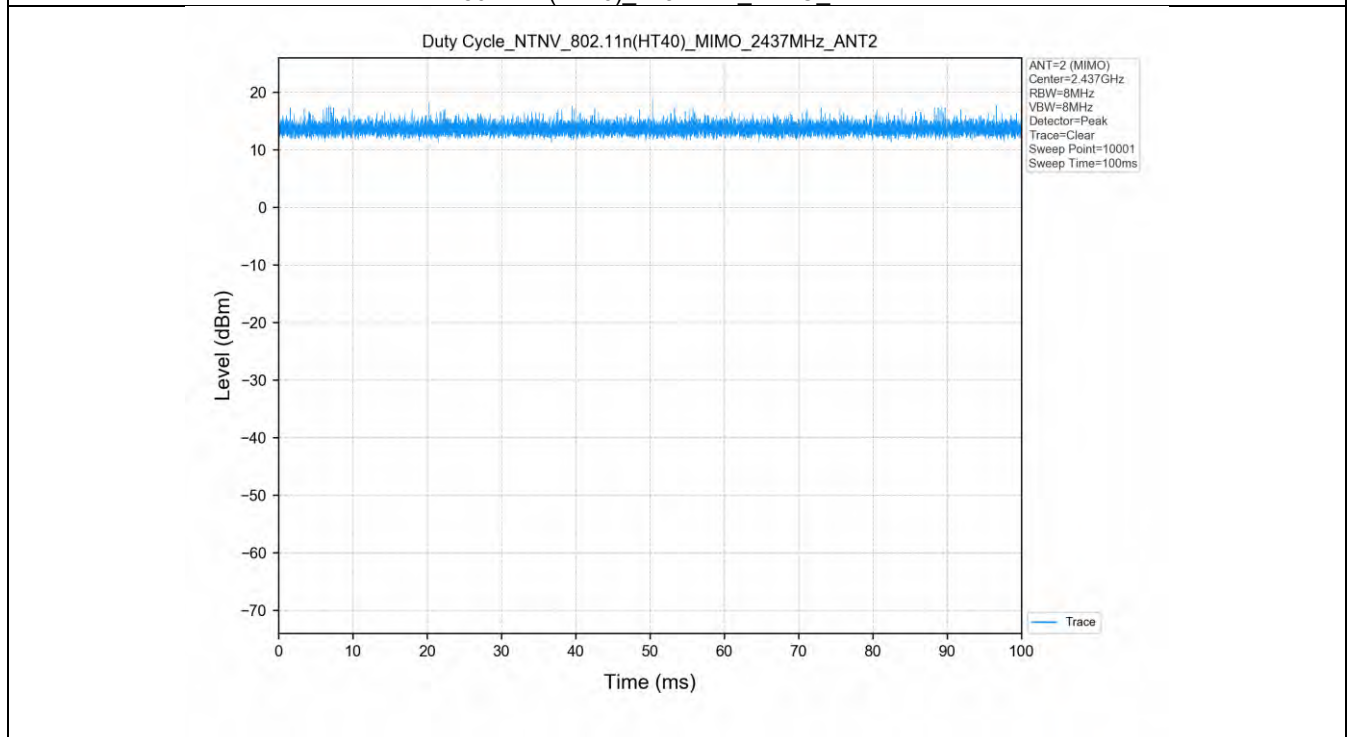
802.11n(HT40)_2422MHz_MIMO_ANT2



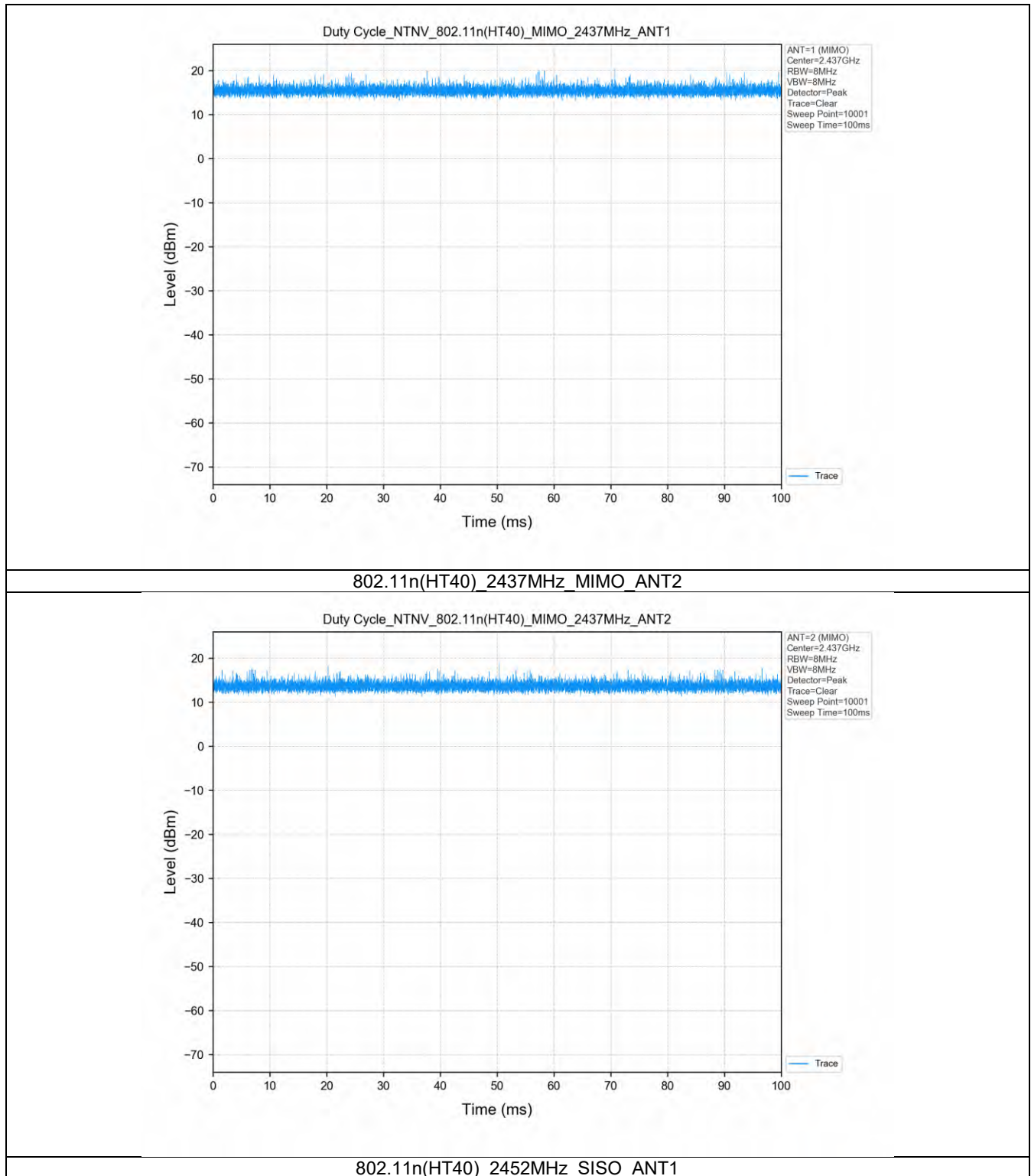


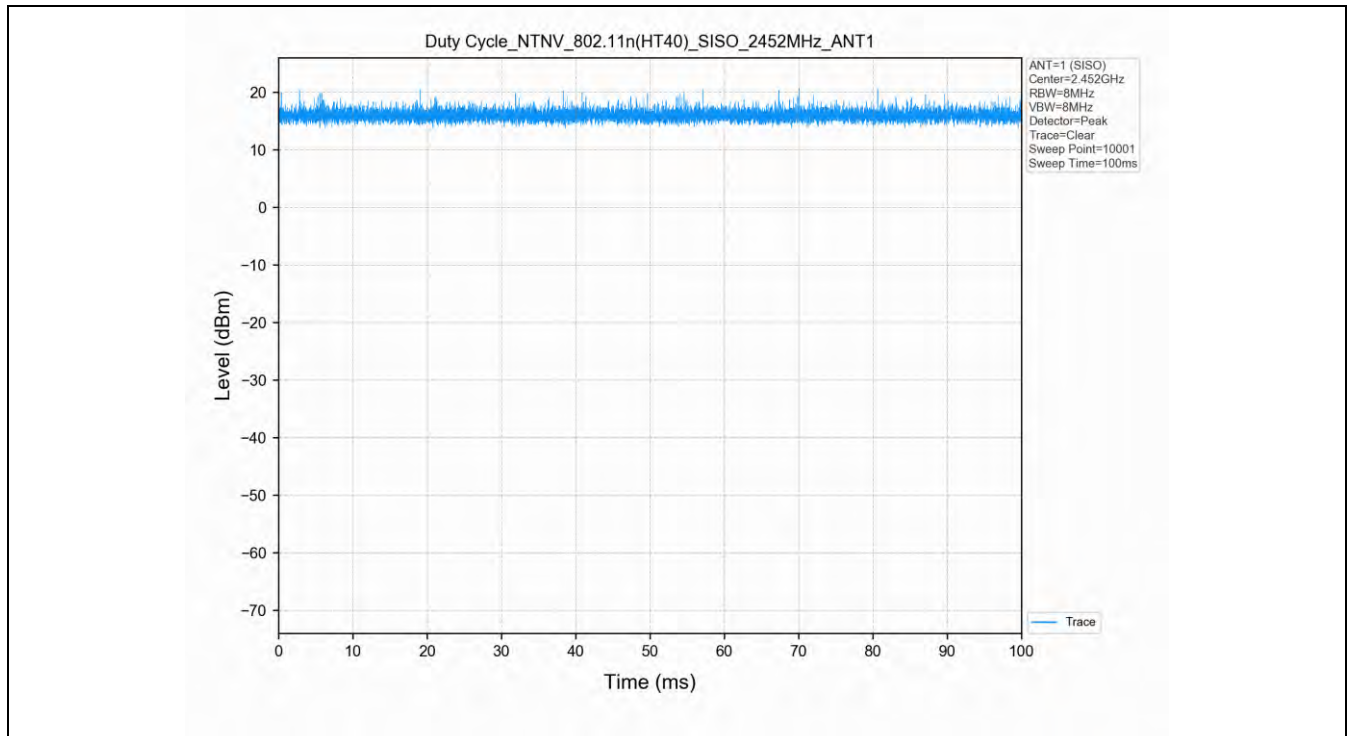


802.11n(HT40)_2437MHz_MIMO_ANT1

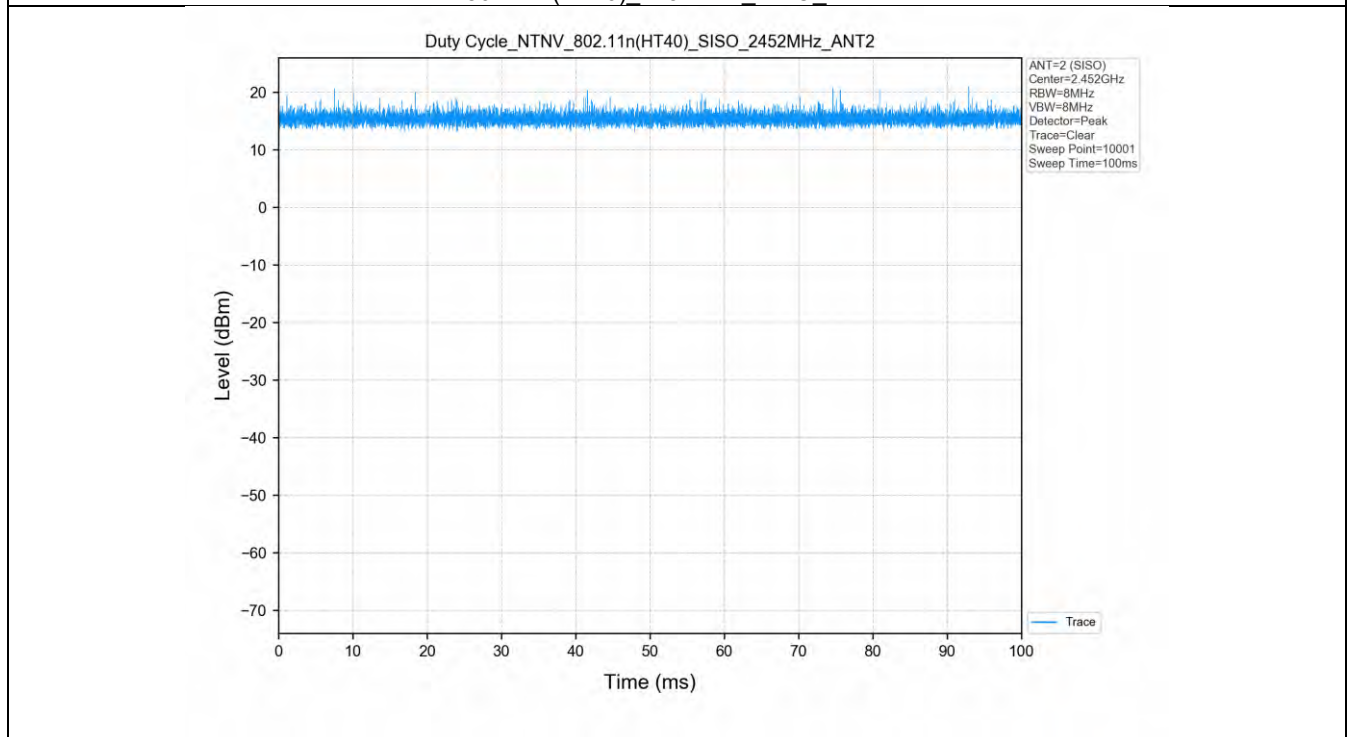


802.11n(HT40)_2437MHz_MIMO_ANT2

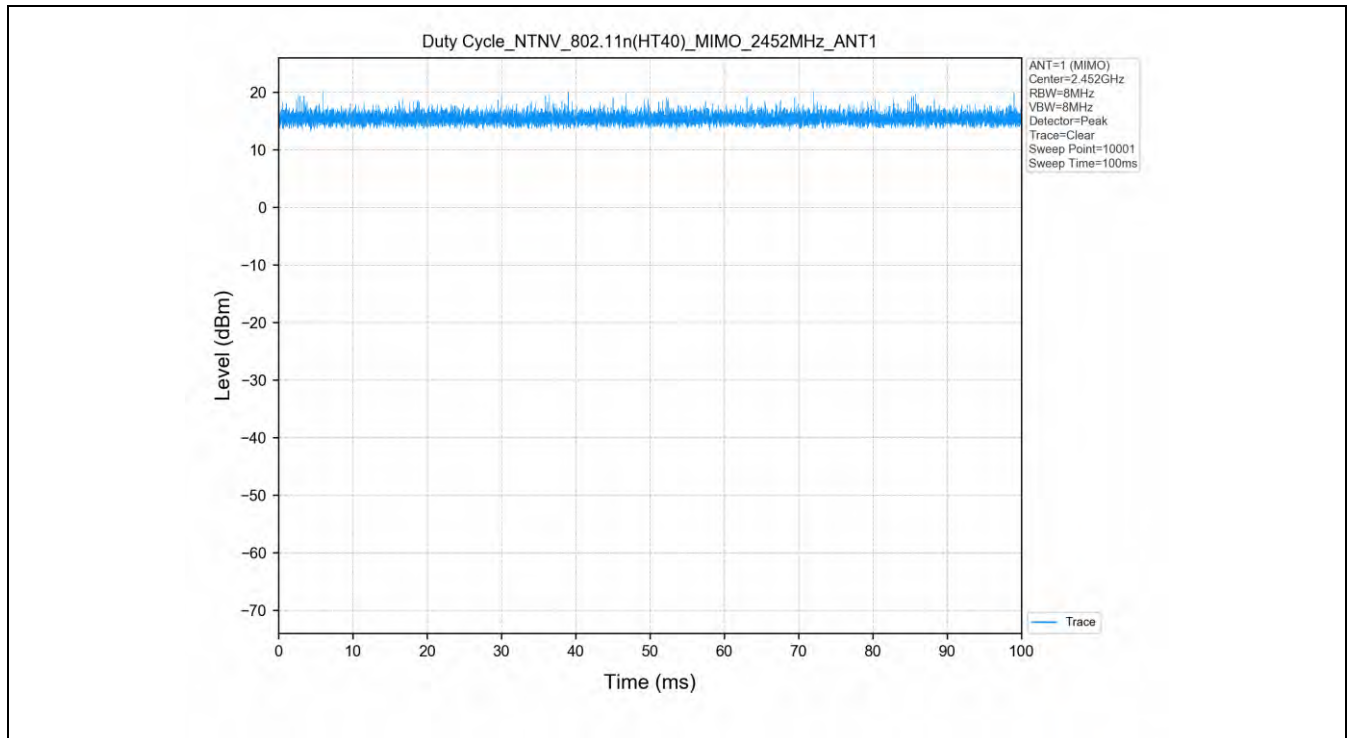




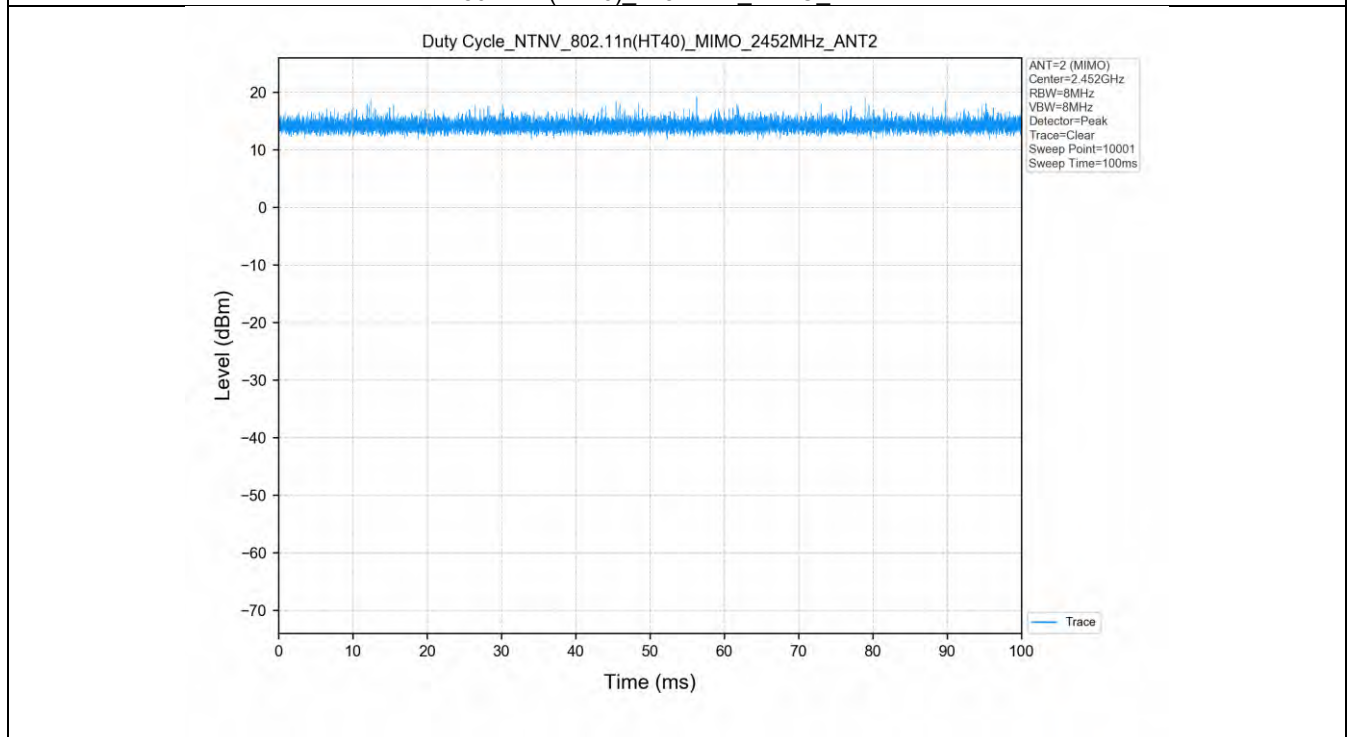
802.11n(HT40)_2452MHz_SISO_ANT2



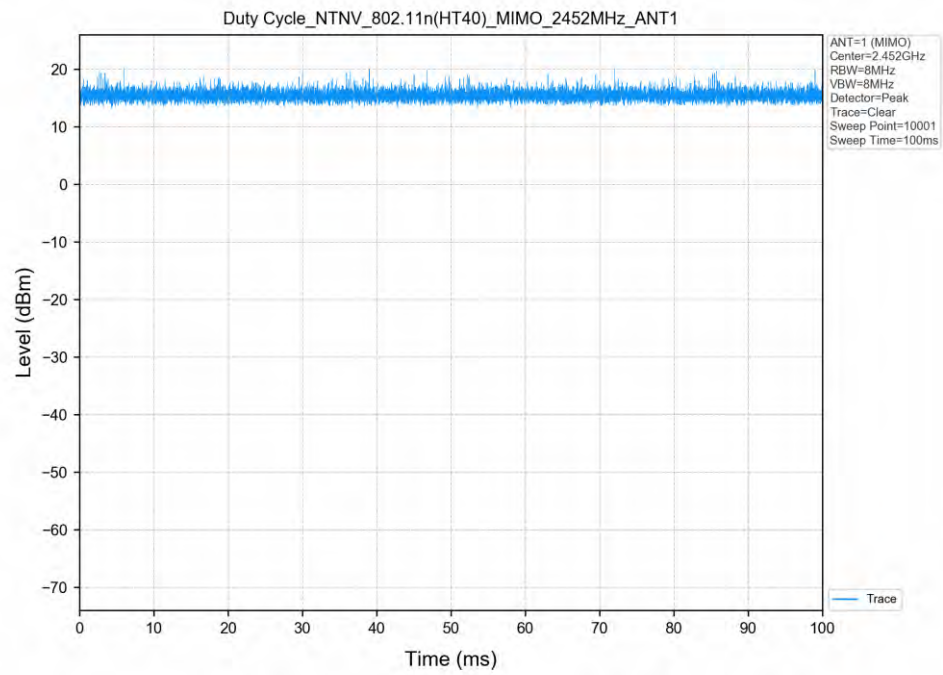
802.11n(HT40)_2452MHz_MIMO_ANT1



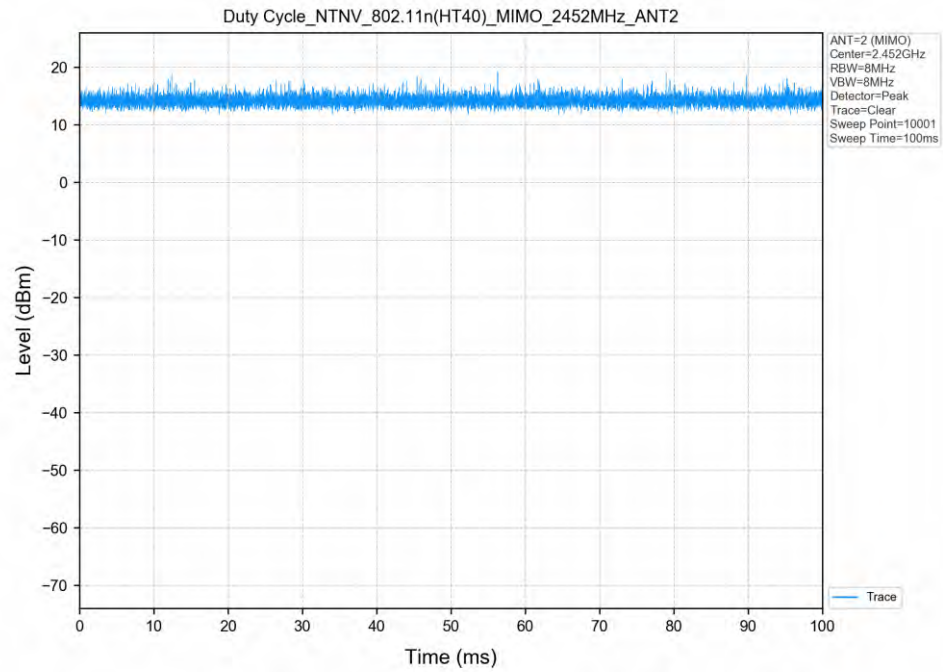
802.11n(HT40)_2452MHz_MIMO_ANT1



802.11n(HT40)_2452MHz_MIMO_ANT2



802.11n(HT40)_2452MHz_MIMO_ANT2





2. Bandwidth

2.1 Test Result

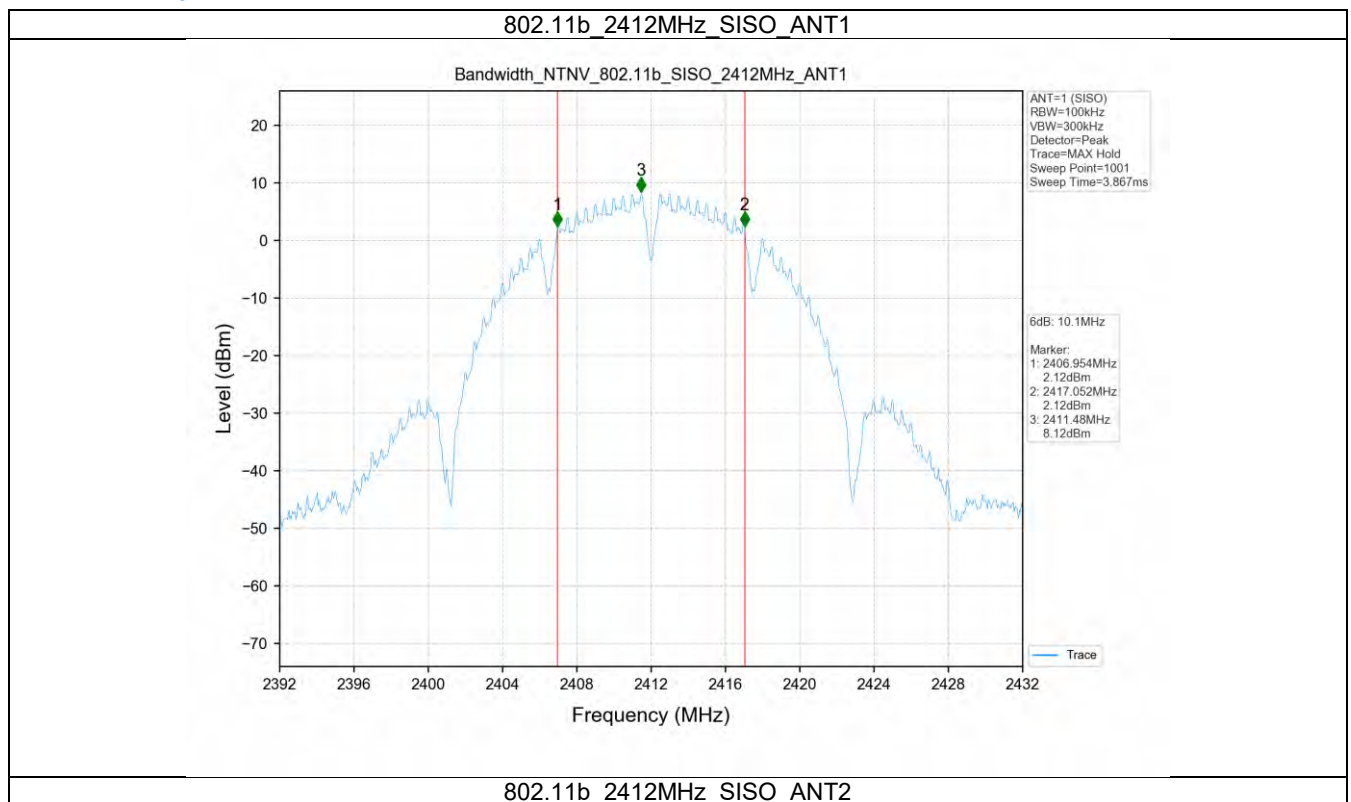
Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11b	2412	SISO	1	10.100	≥0.5	PASS
			2	10.100	≥0.5	PASS
	2437	SISO	1	10.100	≥0.5	PASS
			2	10.100	≥0.5	PASS
	2462	SISO	1	10.100	≥0.5	PASS
			2	10.100	≥0.5	PASS
802.11g	2412	SISO	1	16.620	≥0.5	PASS
			2	16.630	≥0.5	PASS
	2437	SISO	1	16.620	≥0.5	PASS
			2	16.620	≥0.5	PASS
	2462	SISO	1	16.620	≥0.5	PASS
			2	16.620	≥0.5	PASS
802.11n(HT20)	2412	SISO	1	17.860	≥0.5	PASS
			2	17.850	≥0.5	PASS
	2437	MIMO	0	17.860	≥0.5	PASS
			1	17.850	≥0.5	PASS
		SISO	2	17.850	≥0.5	PASS
			0	17.850	≥0.5	PASS
	2462	MIMO	1	17.850	≥0.5	PASS
			2	17.850	≥0.5	PASS
		SISO	0	17.850	≥0.5	PASS
			1	17.850	≥0.5	PASS
802.11n(HT40)	2422	SISO	1	36.520	≥0.5	PASS
			2	36.550	≥0.5	PASS
		MIMO	0	36.540	≥0.5	PASS
	2437	SISO	1	36.540	≥0.5	PASS
			2	36.540	≥0.5	PASS
		MIMO	0	36.540	≥0.5	PASS
	2452	SISO	1	36.510	≥0.5	PASS
			2	36.530	≥0.5	PASS
		MIMO	1	36.510	≥0.5	PASS
			0	36.550	≥0.5	PASS

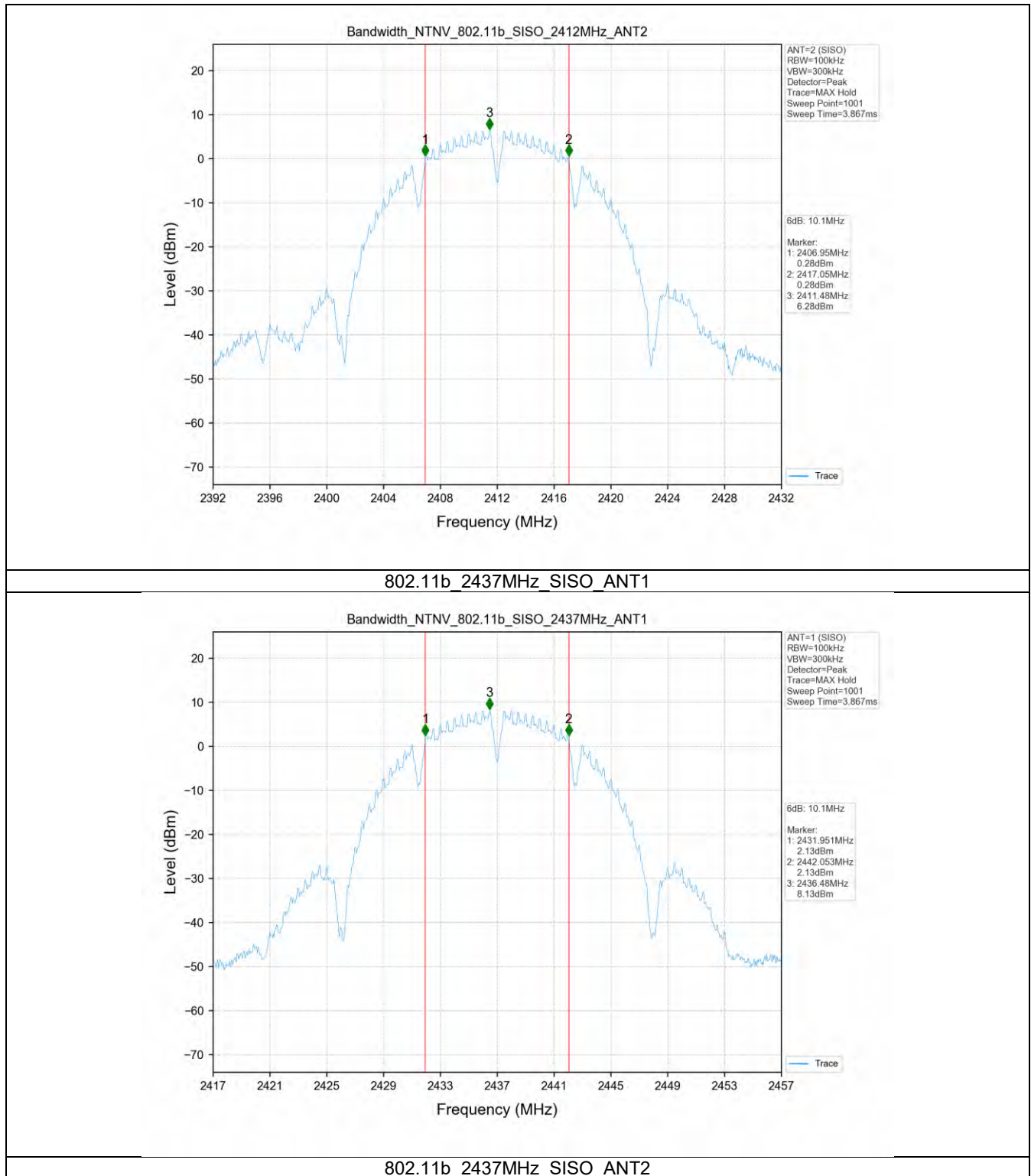
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11b	2412	SISO	1	15.100	Only for Report Use
			2	15.070	Only for Report Use
	2437	SISO	1	15.110	Only for Report Use
			2	15.030	Only for Report Use
	2462	SISO	1	15.120	Only for Report Use
			2	15.040	Only for Report Use
802.11g	2412	SISO	1	17.030	Only for Report Use
			2	17.080	Only for Report Use
	2437	SISO	1	17.030	Only for Report Use
			2	17.080	Only for Report Use
	2462	SISO	1	17.020	Only for Report Use
			2	17.030	Only for Report Use
802.11n(HT20)	2412	SISO	1	18.070	Only for Report Use
			2	18.100	Only for Report Use
		MIMO	0	18.090	Only for Report Use

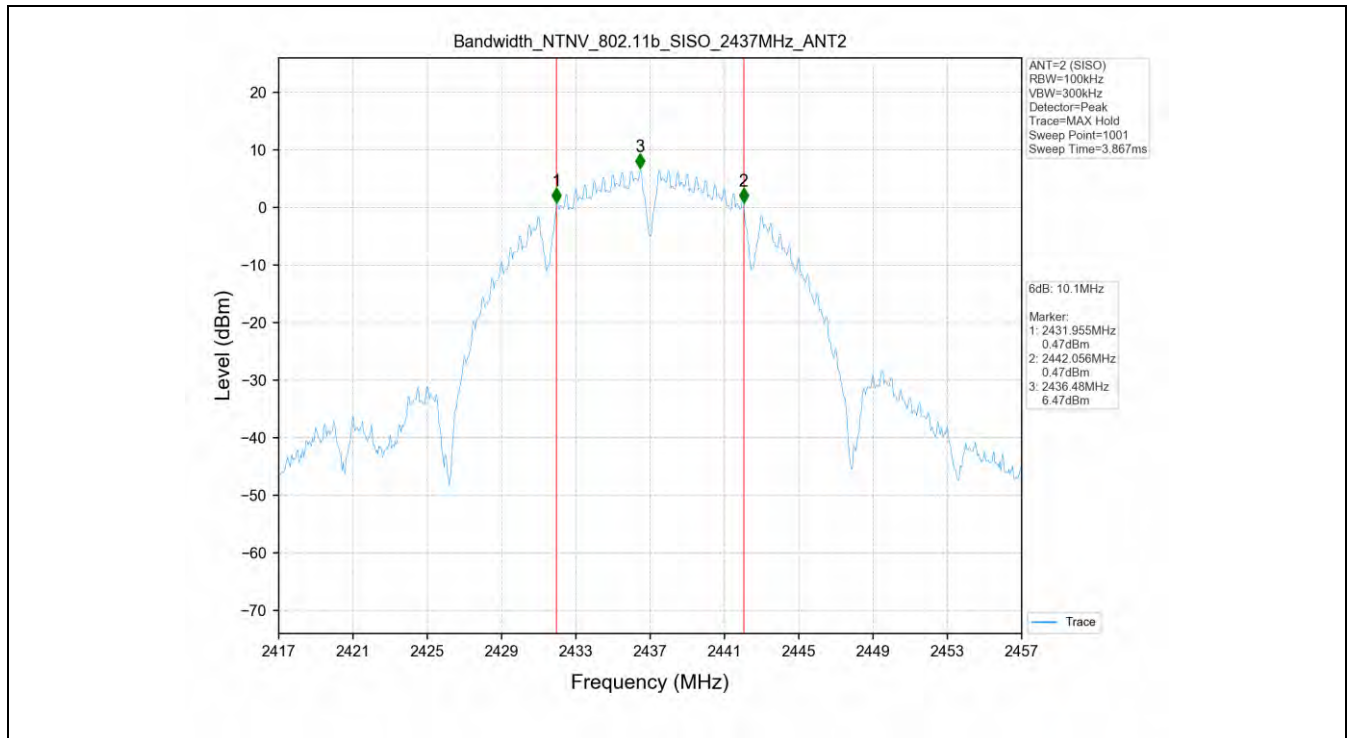


	2437	SISO	1	18.060	Only for Report Use
			2	18.110	Only for Report Use
		MIMO	0	18.100	Only for Report Use
	2462	SISO	1	18.050	Only for Report Use
			2	18.060	Only for Report Use
		MIMO	0	18.060	Only for Report Use
802.11n(HT40)	2422	SISO	1	36.780	Only for Report Use
			2	36.870	Only for Report Use
		MIMO	0	36.880	Only for Report Use
	2437	SISO	1	36.780	Only for Report Use
			2	36.860	Only for Report Use
		MIMO	0	36.880	Only for Report Use
	2452	SISO	1	36.790	Only for Report Use
			2	36.820	Only for Report Use
		MIMO	0	36.830	Only for Report Use

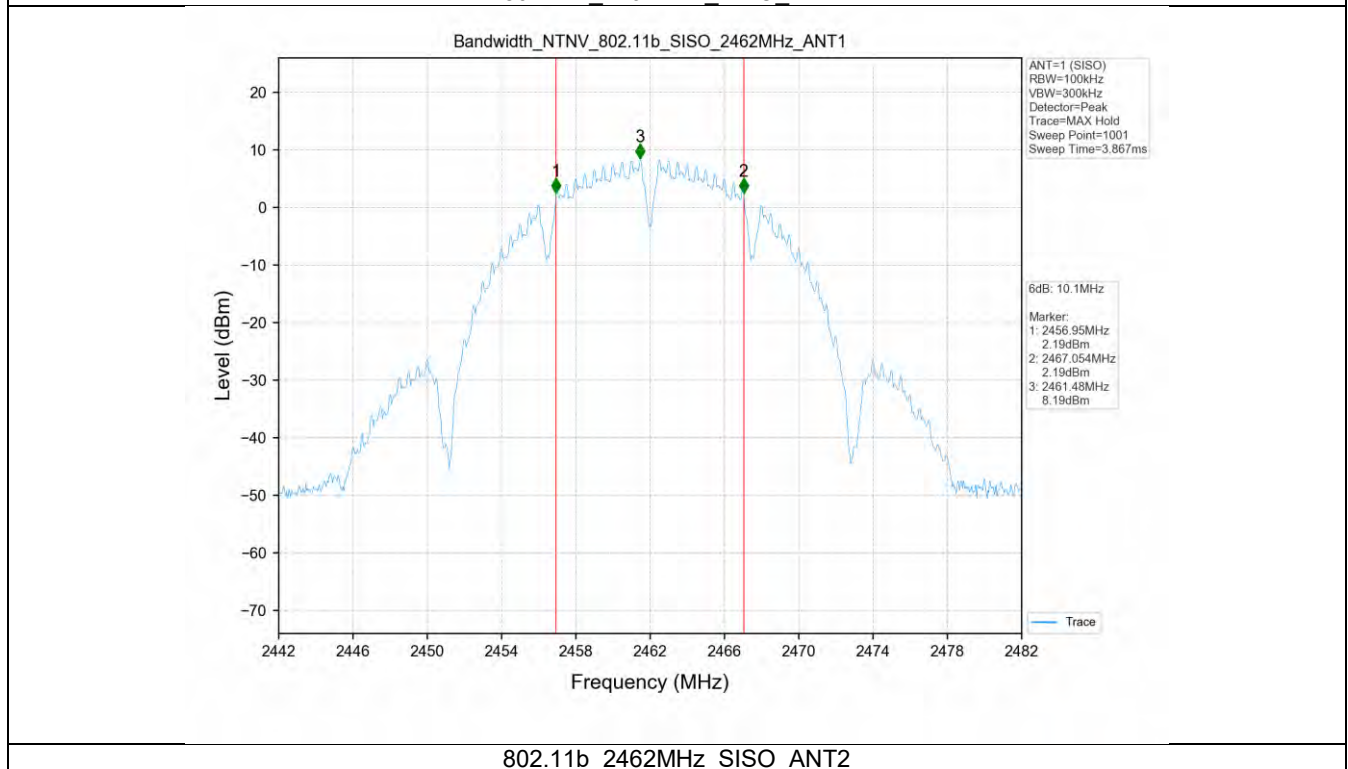
2.2 Test Graph - 6dB Bandwidth



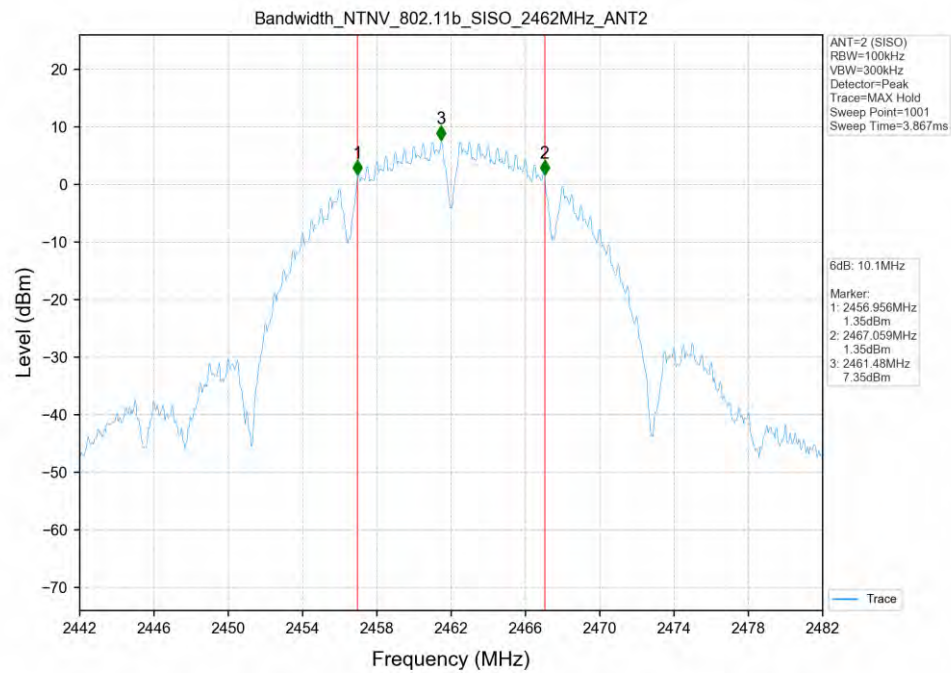




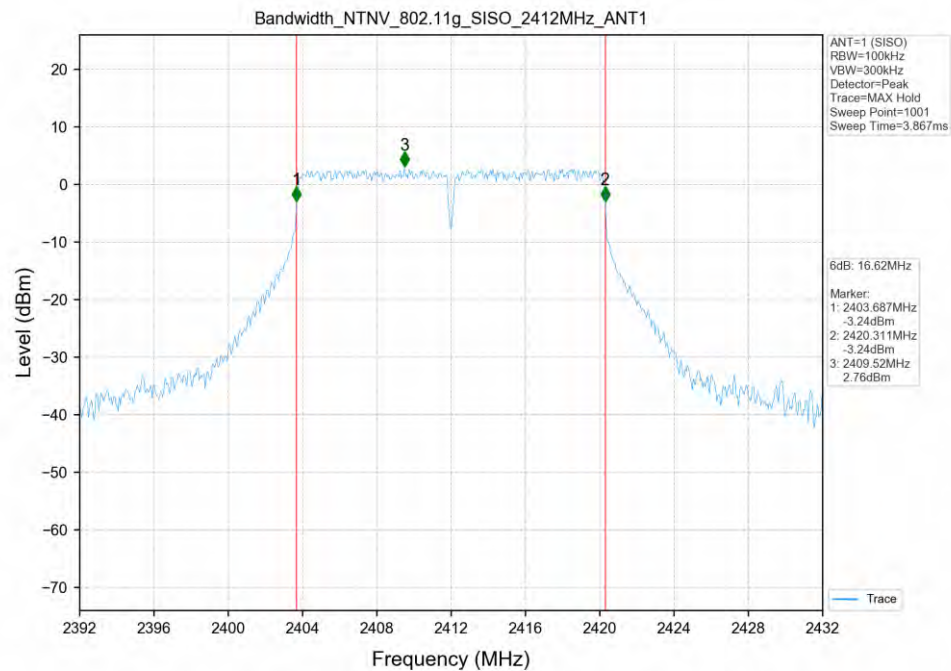
802.11b_2462MHz_SISO_ANT1



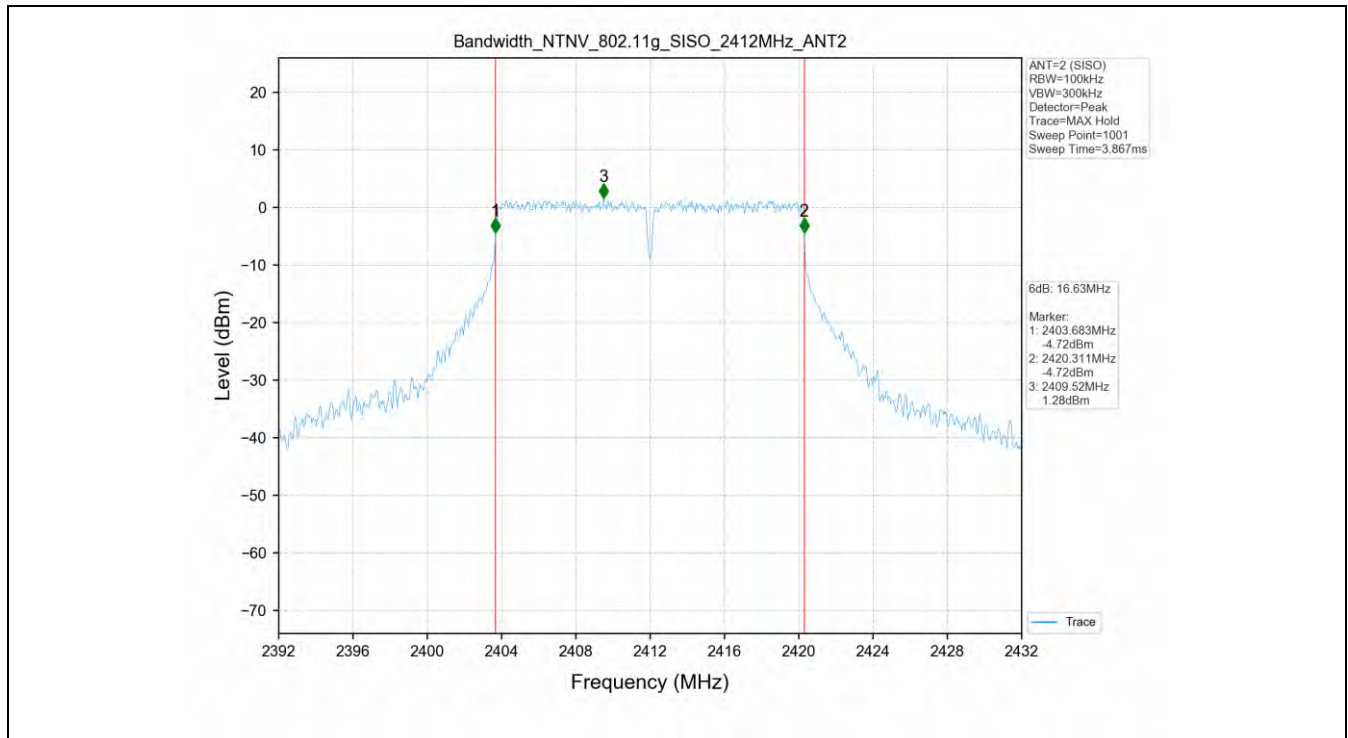
802.11b_2462MHz_SISO_ANT2



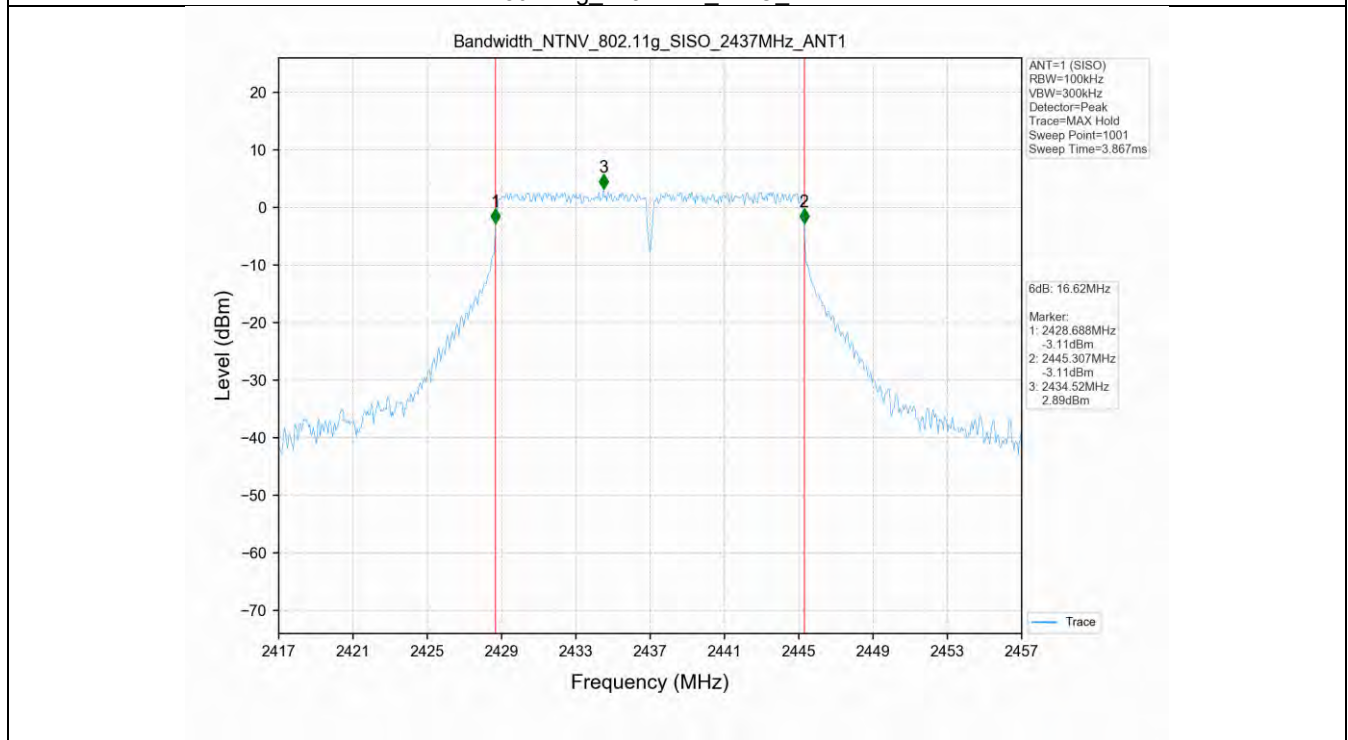
802.11g_2412MHz_SISO_ANT1



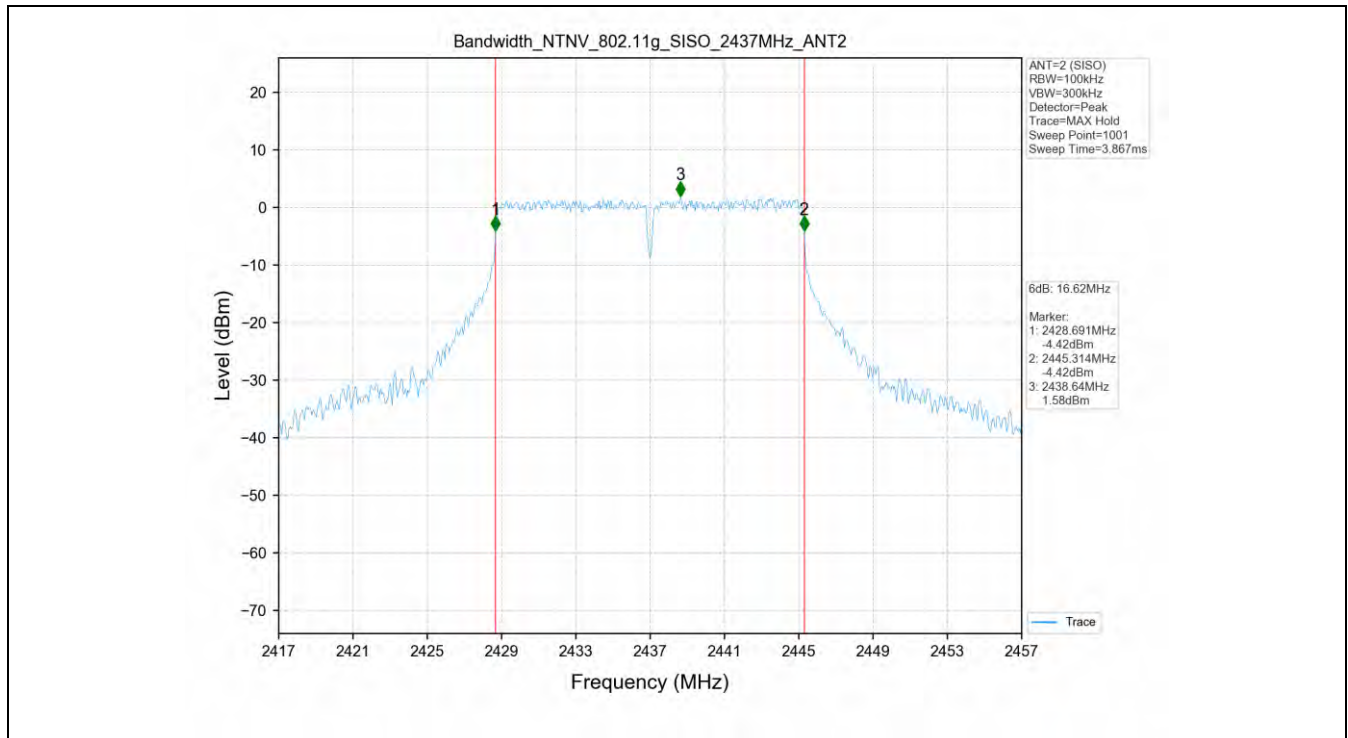
802.11g_2412MHz_SISO_ANT2



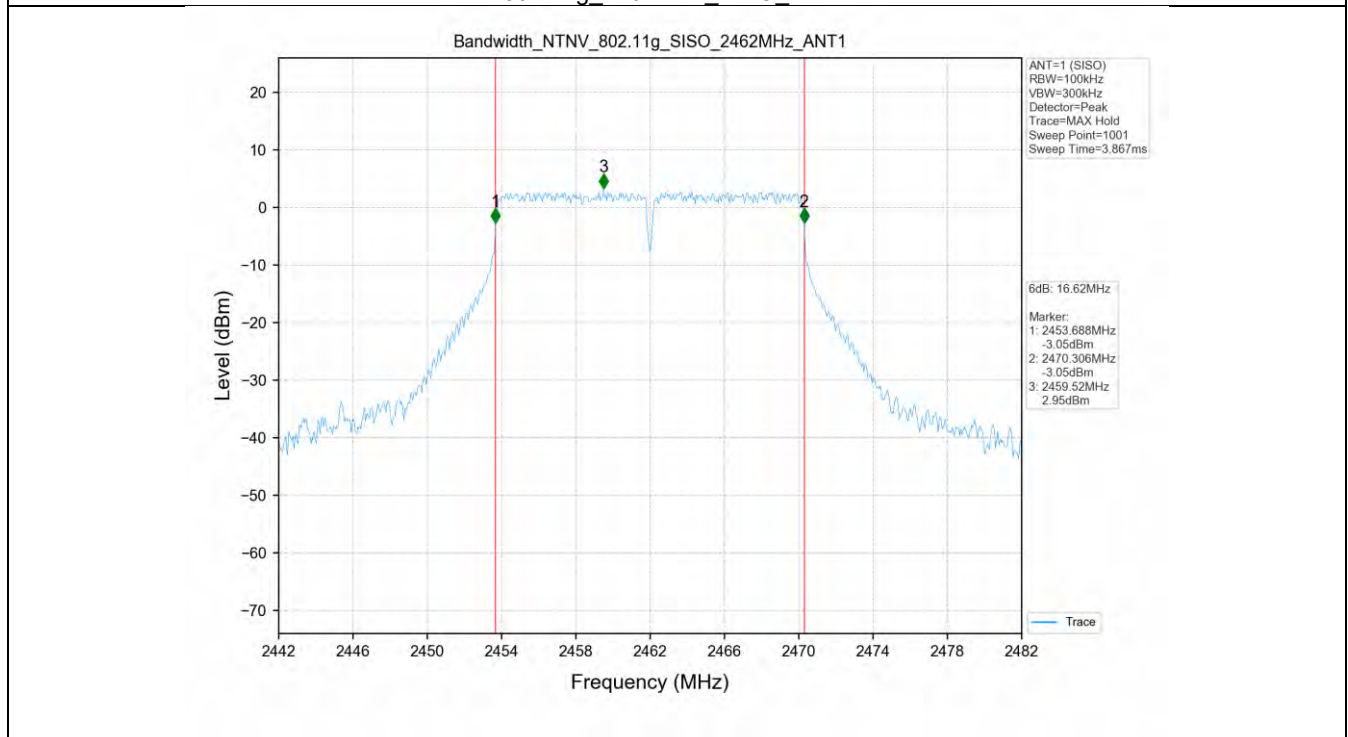
802.11g_2437MHz_SISO_ANT1



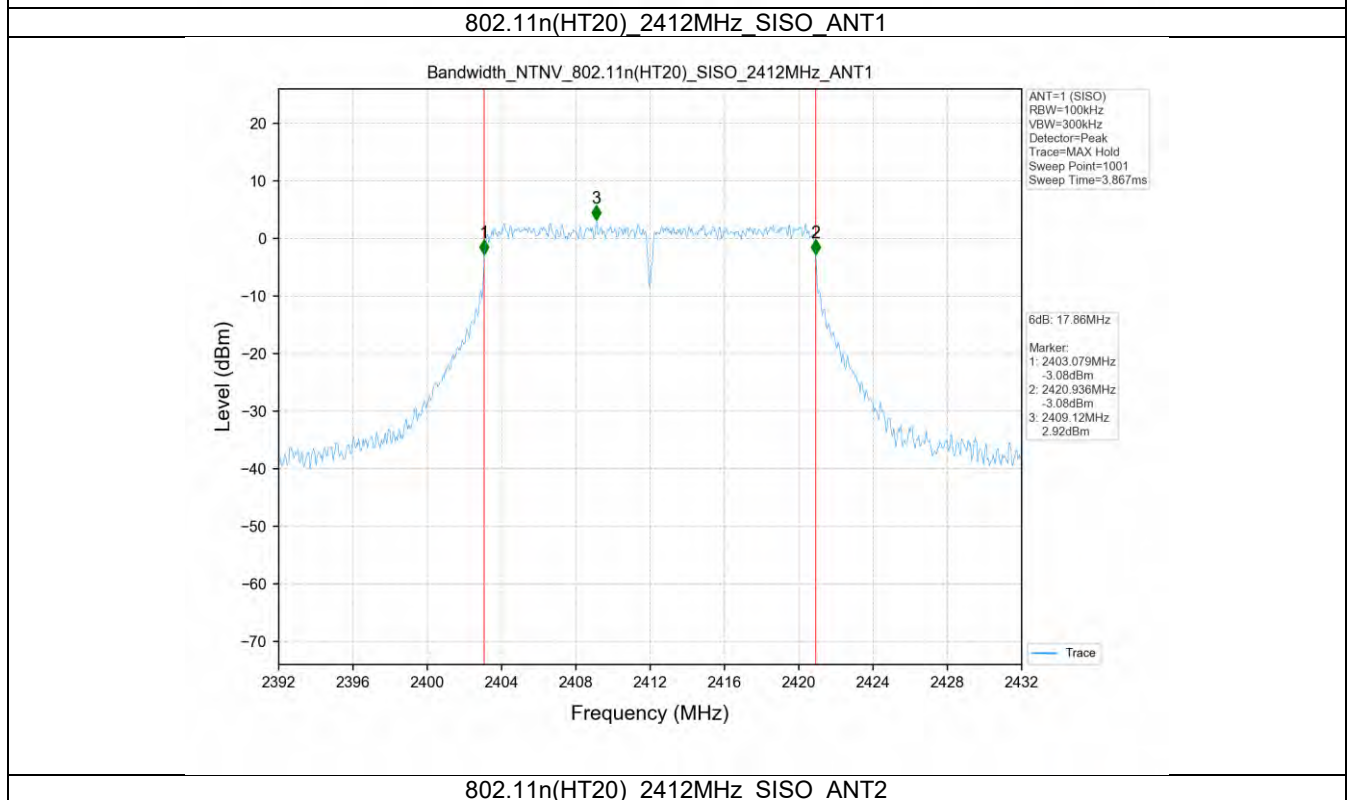
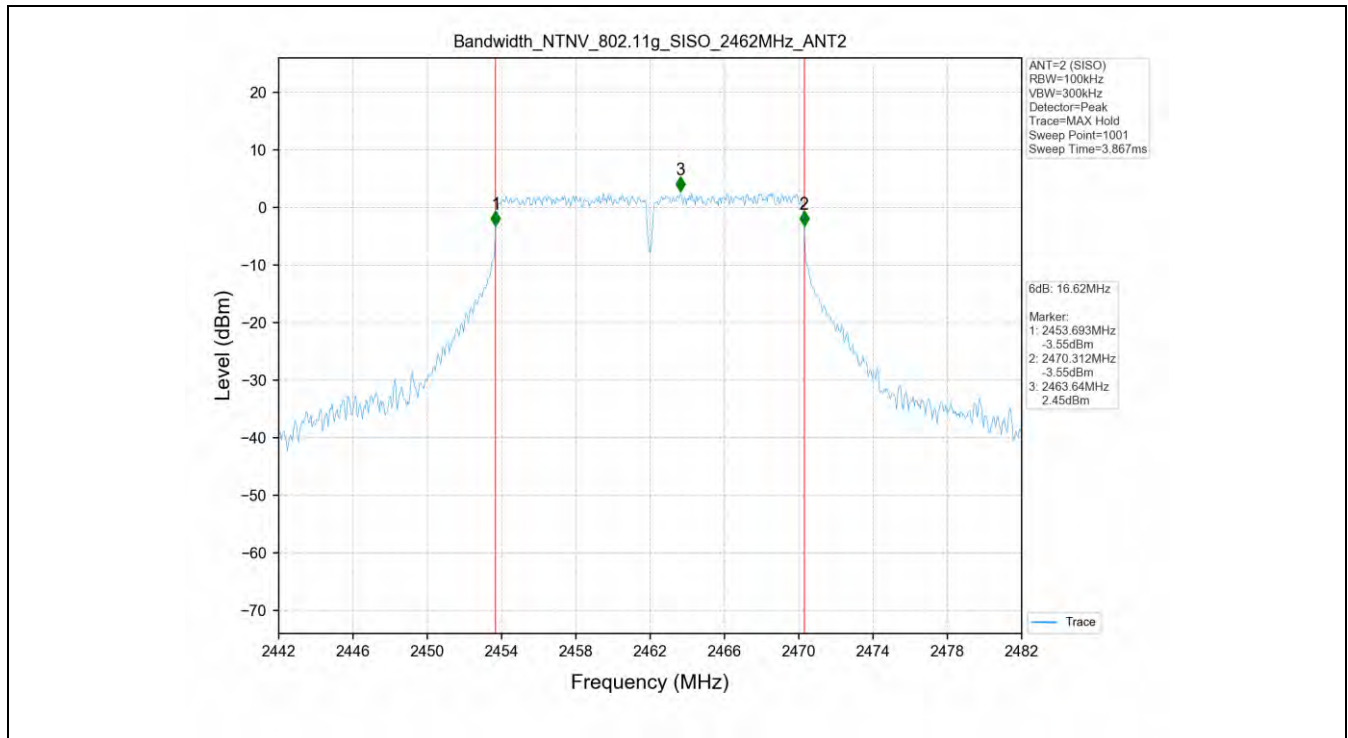
802.11g_2437MHz_SISO_ANT2

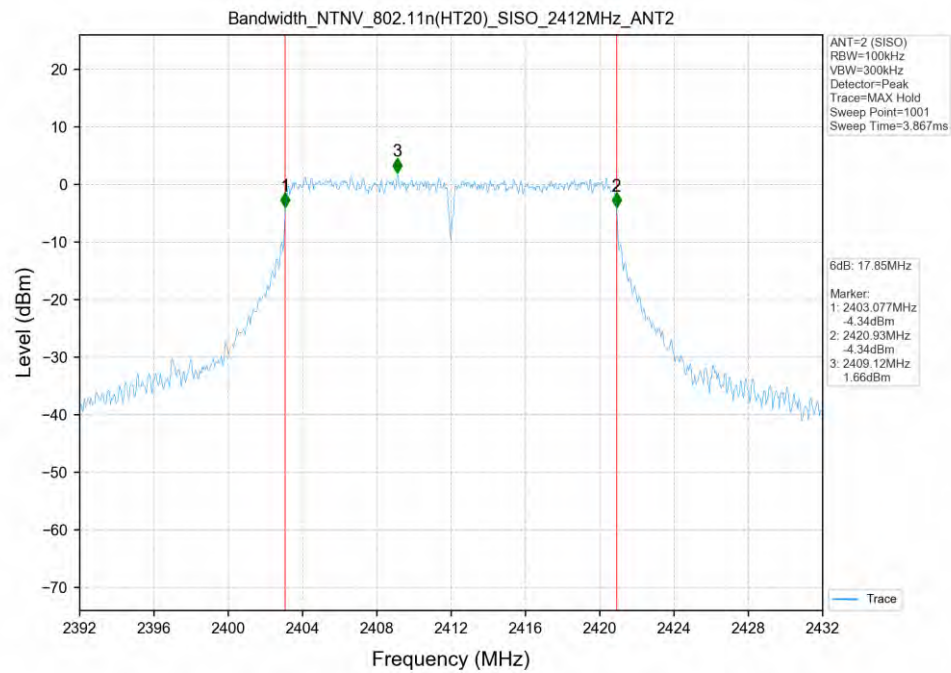


802.11g_2462MHz_SISO_ANT1

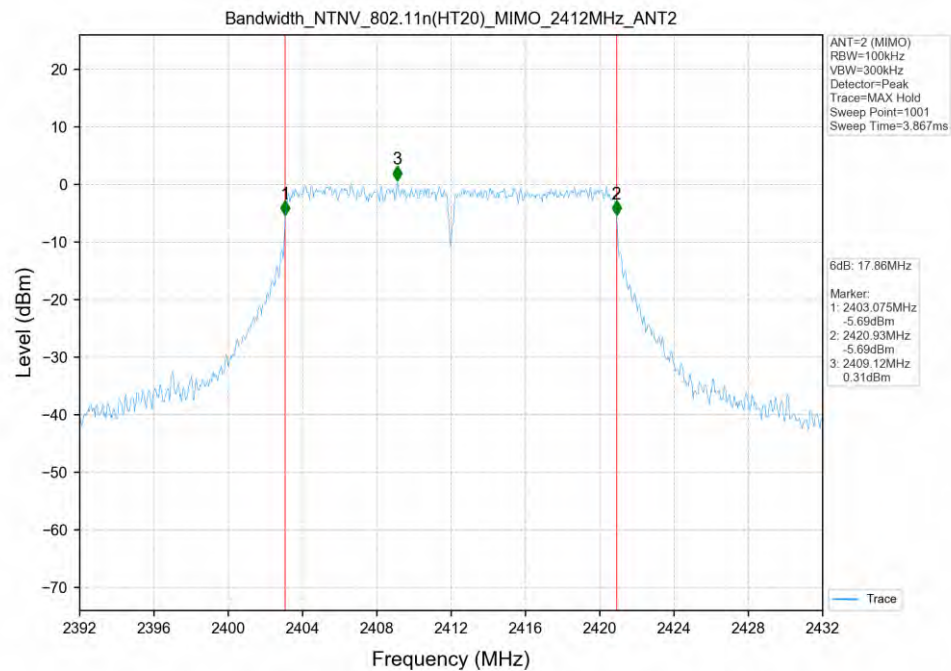


802.11g_2462MHz_SISO_ANT2

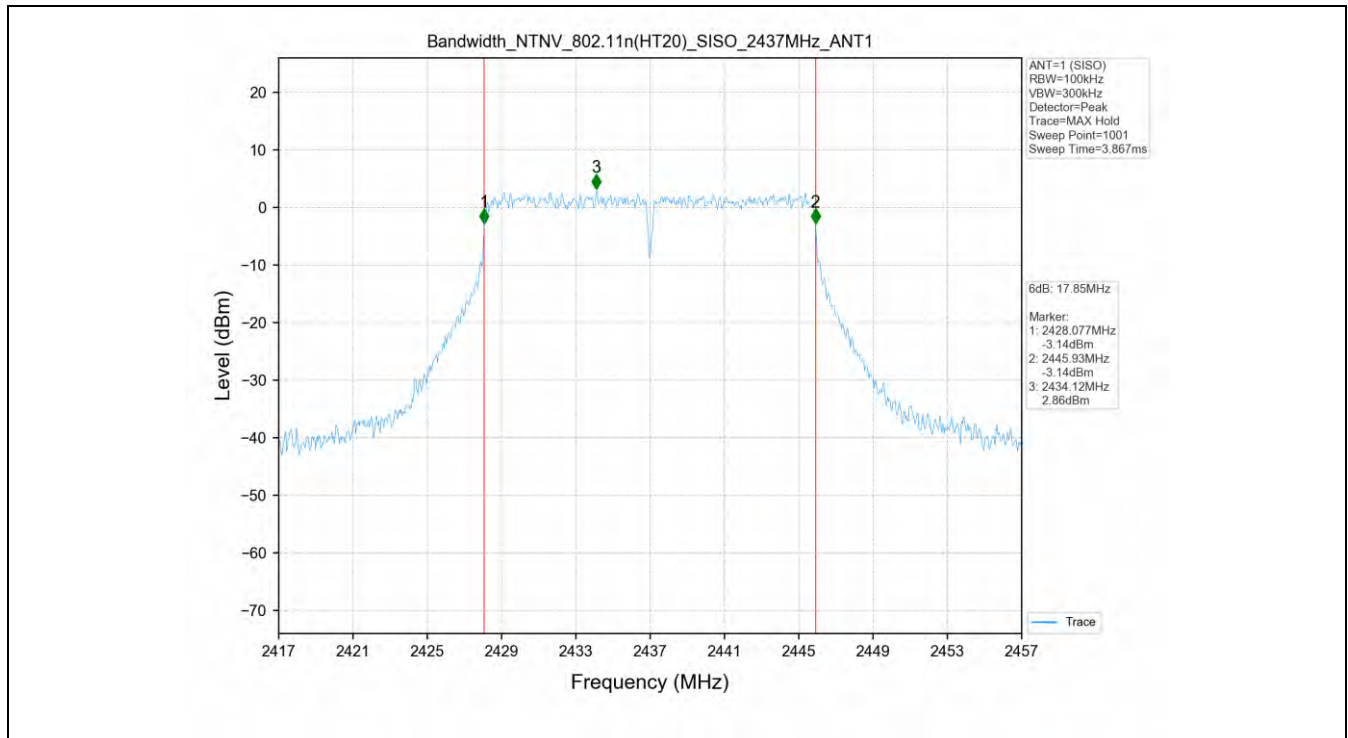




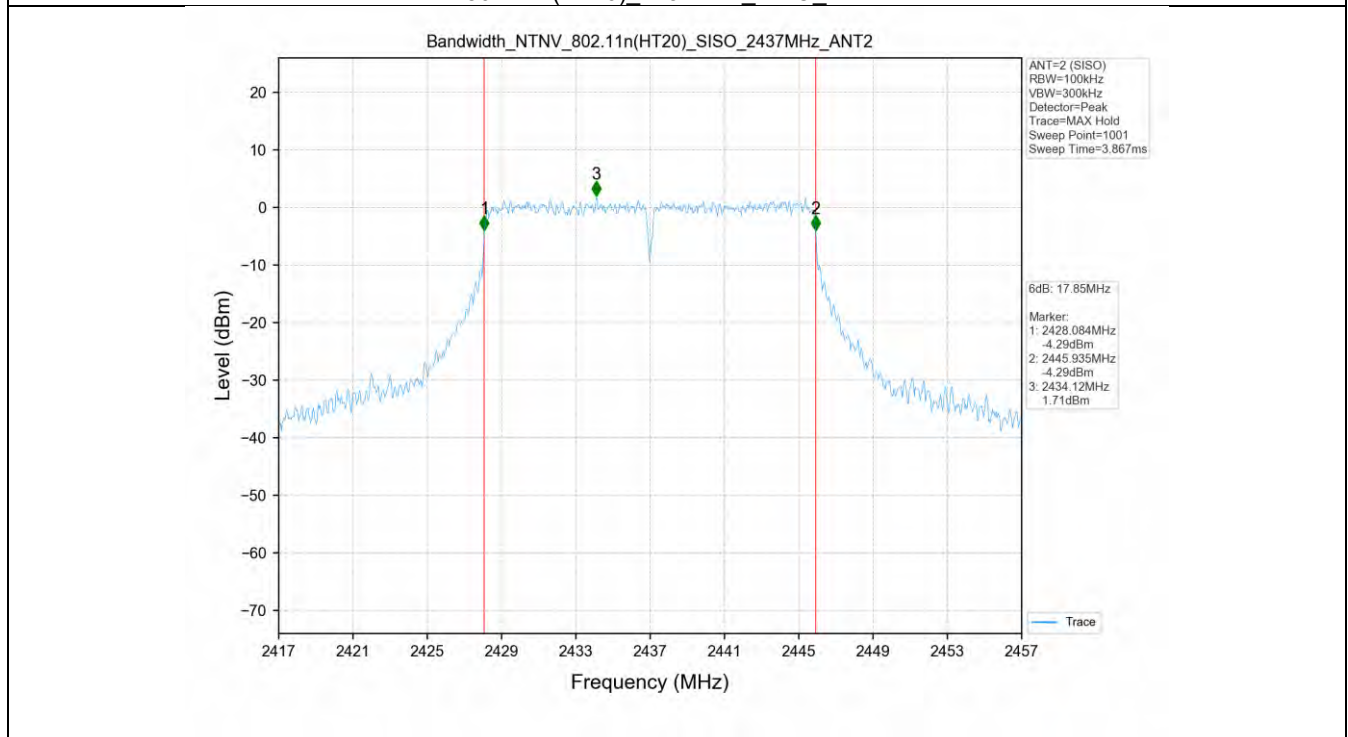
802.11n(HT20)_2412MHz_MIMO_Total



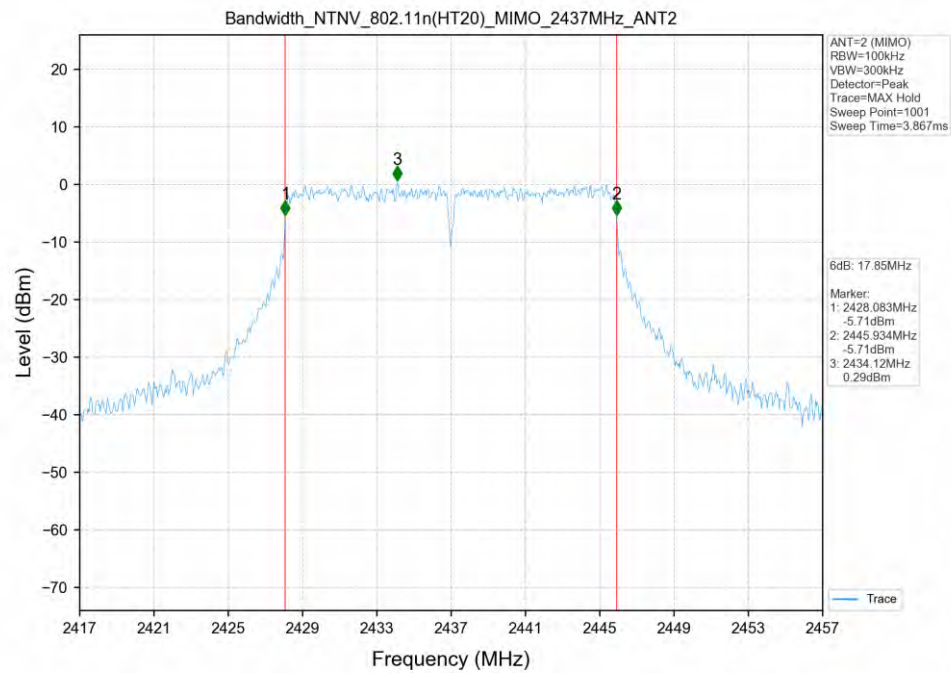
802.11n(HT20)_2437MHz_SISO_ANT1



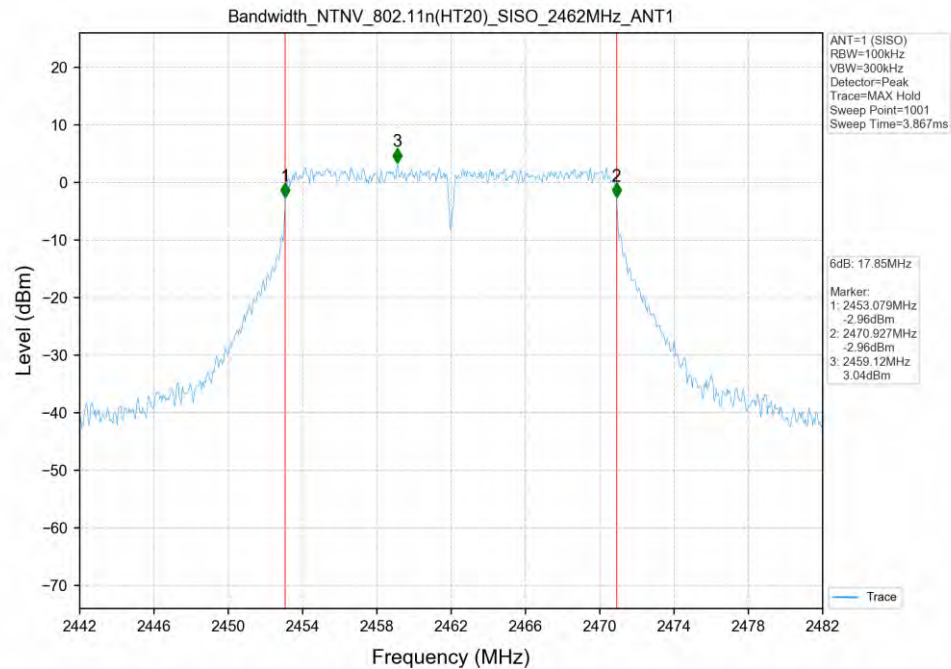
802.11n(HT20)_2437MHz_SISO_ANT2



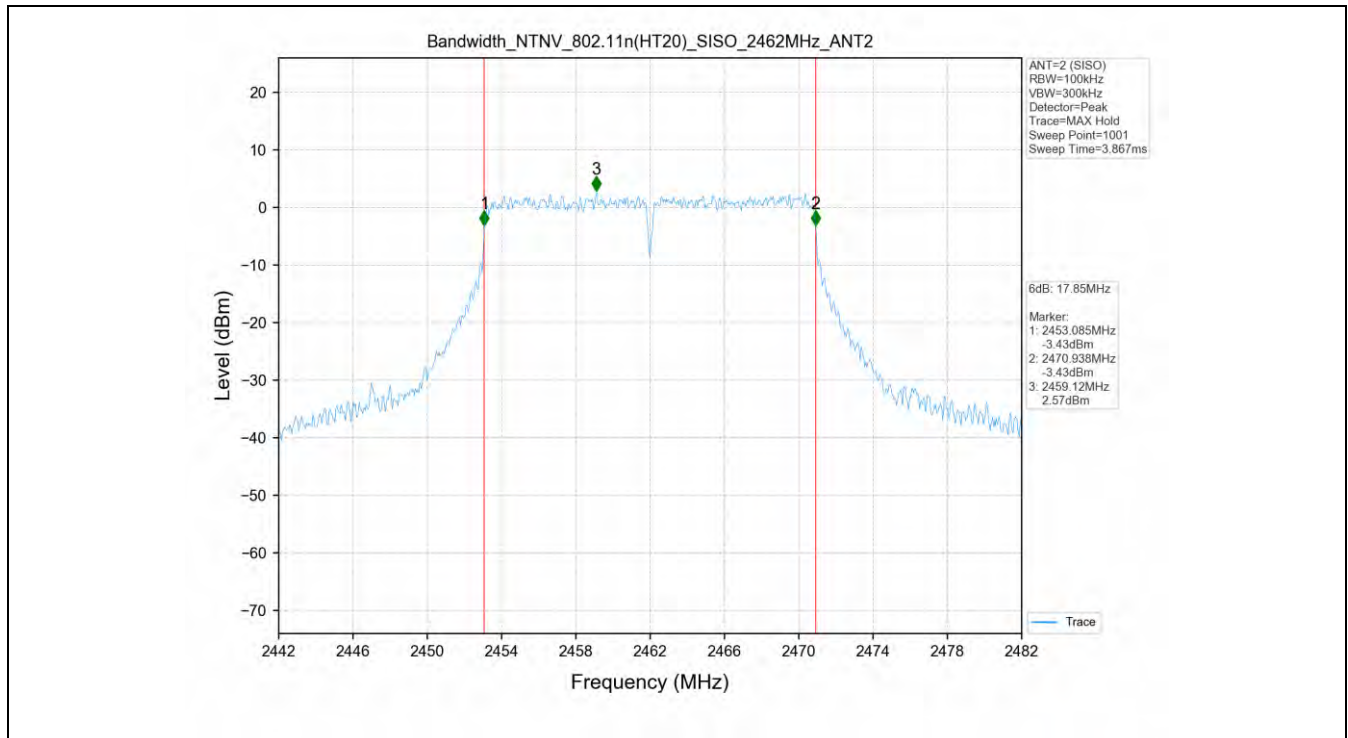
802.11n(HT20)_2437MHz_MIMO_Total



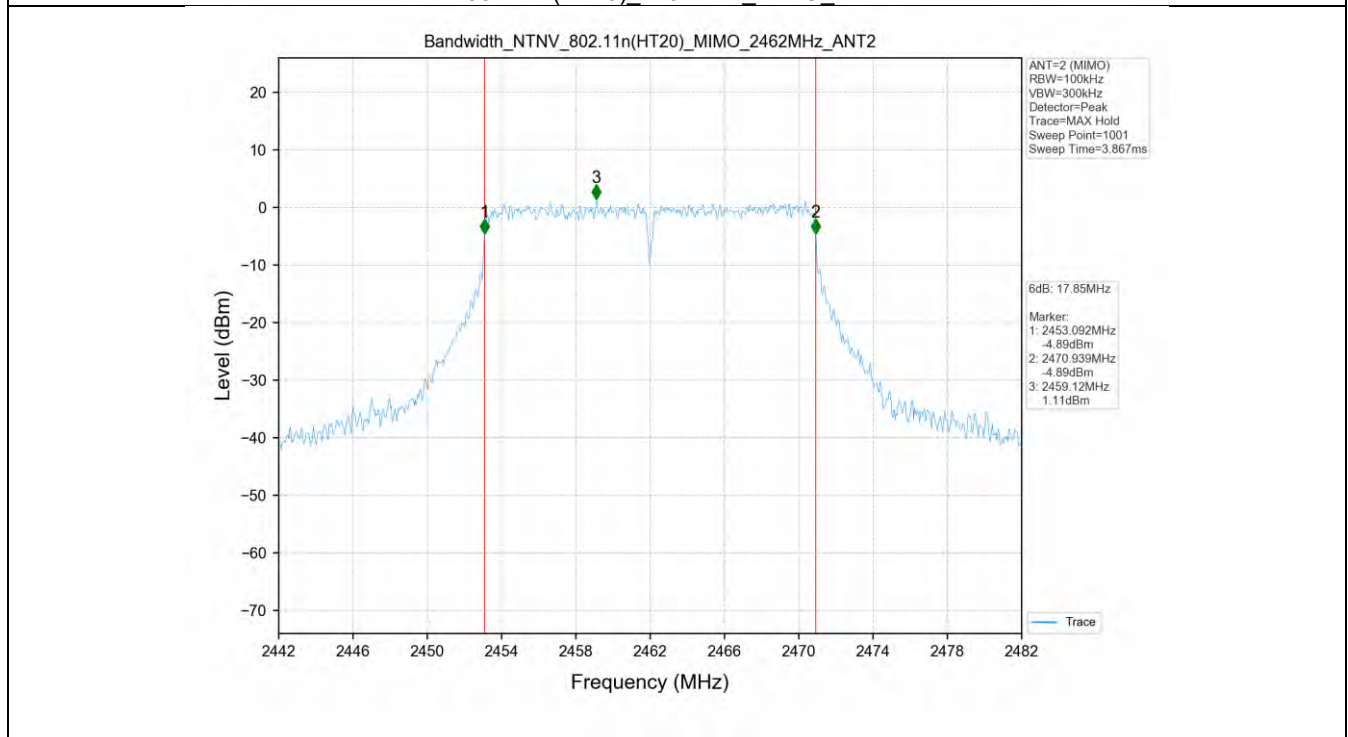
802.11n(HT20)_2462MHz_SISO_ANT1



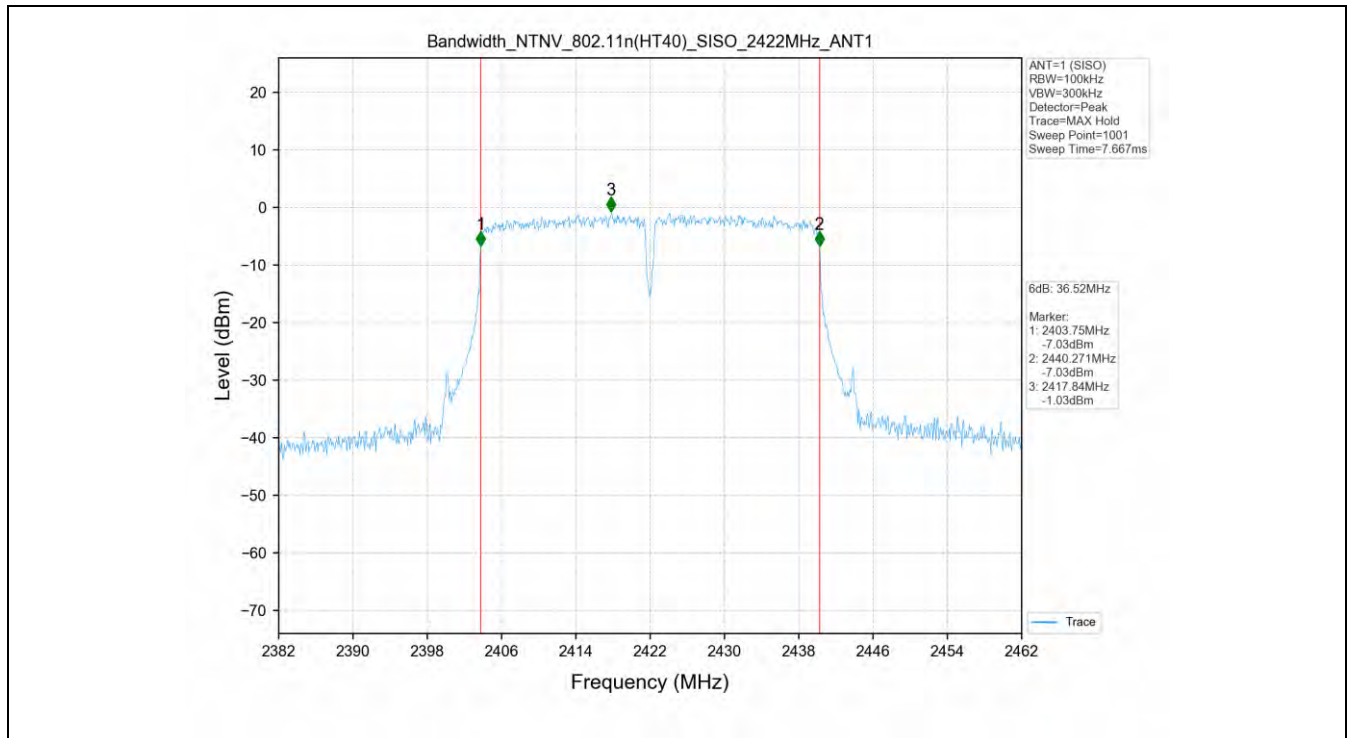
802.11n(HT20)_2462MHz_SISO_ANT2



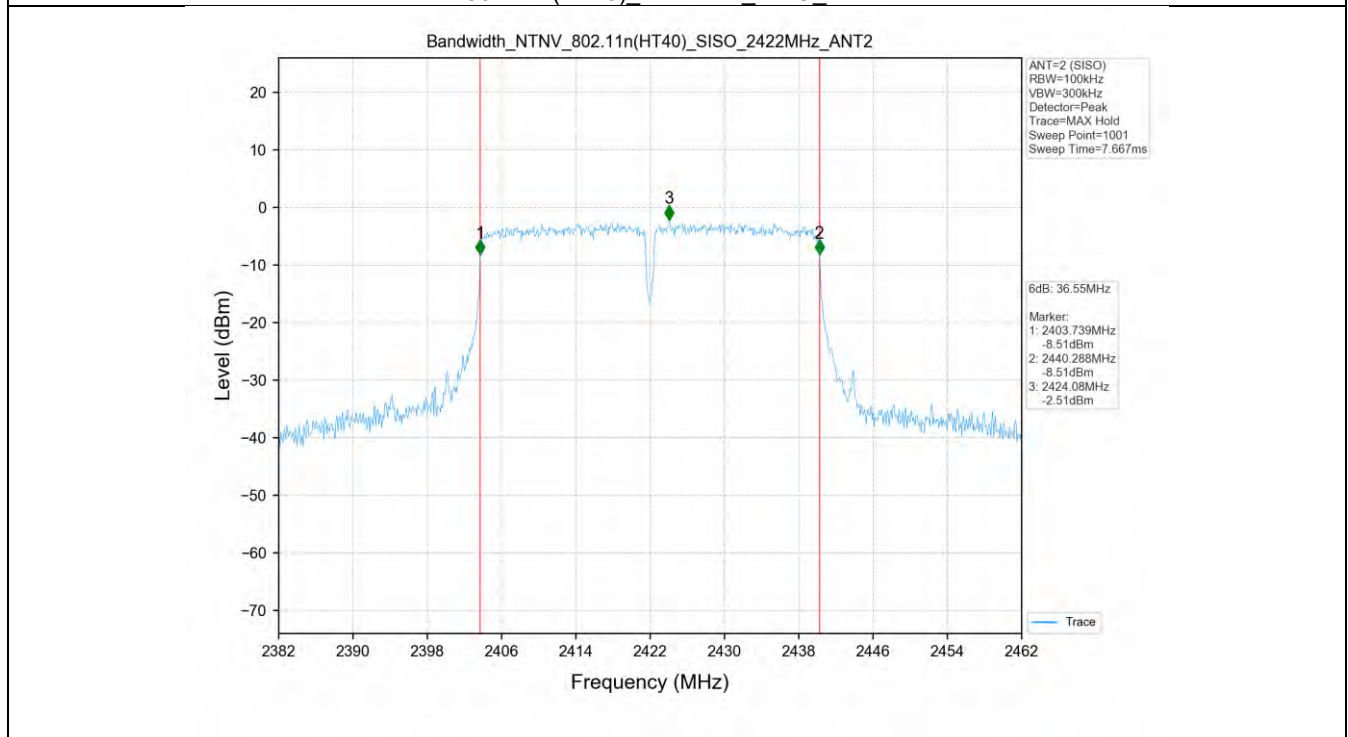
802.11n(HT20)_2462MHz_MIMO_Total



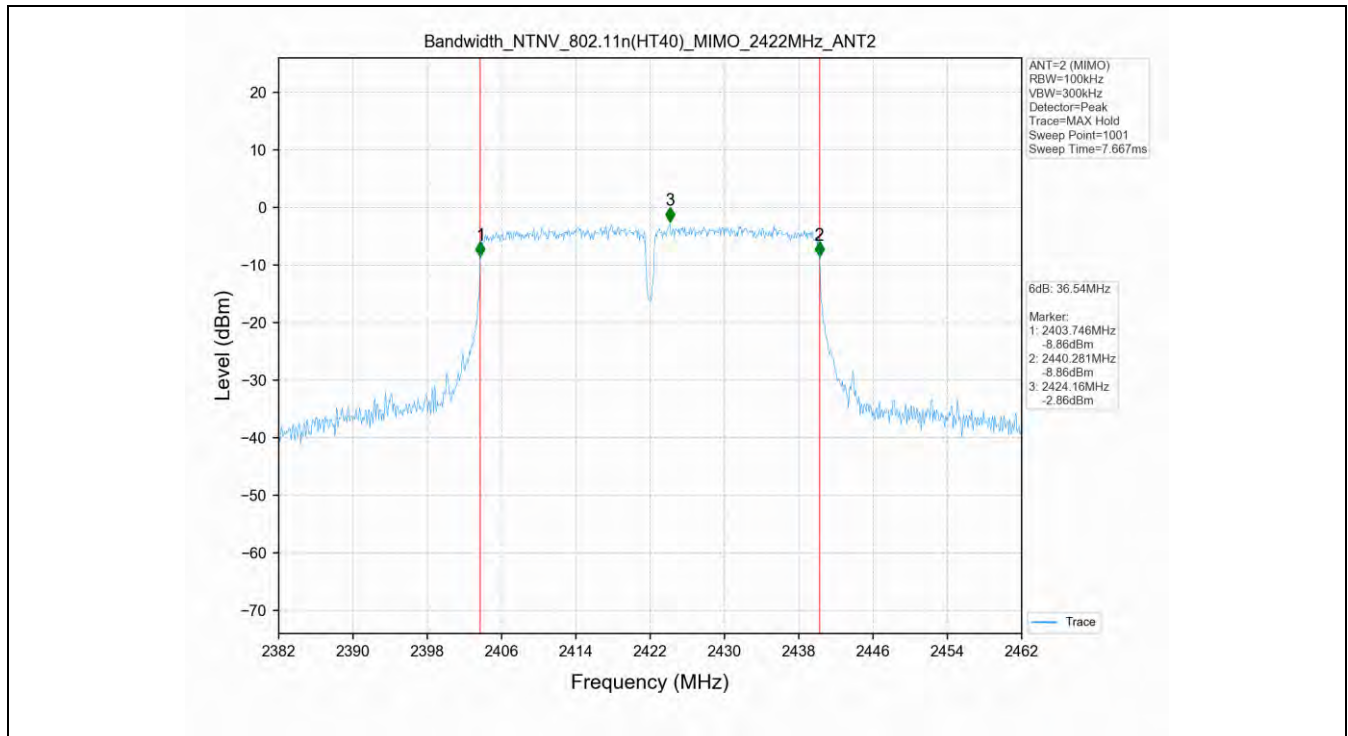
802.11n(HT40)_2422MHz_SISO_ANT1



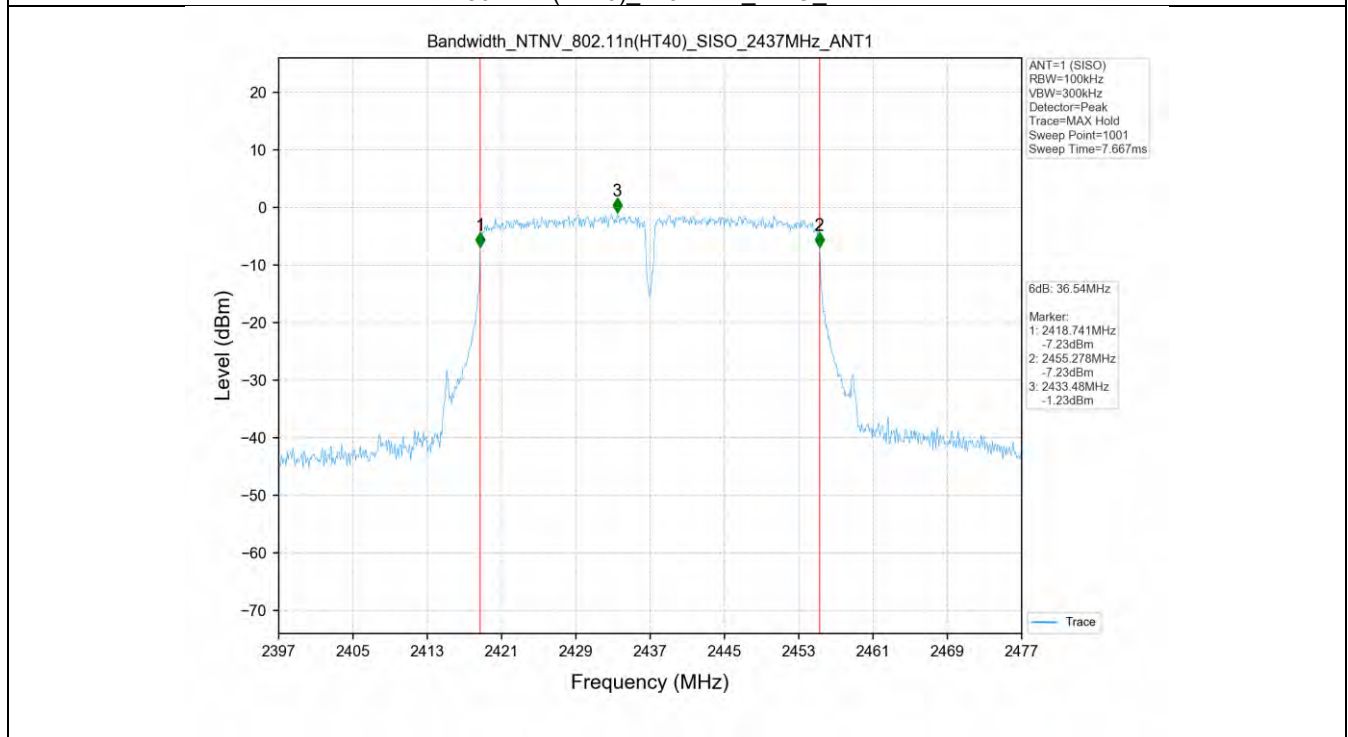
802.11n(HT40)_2422MHz_SISO_ANT2



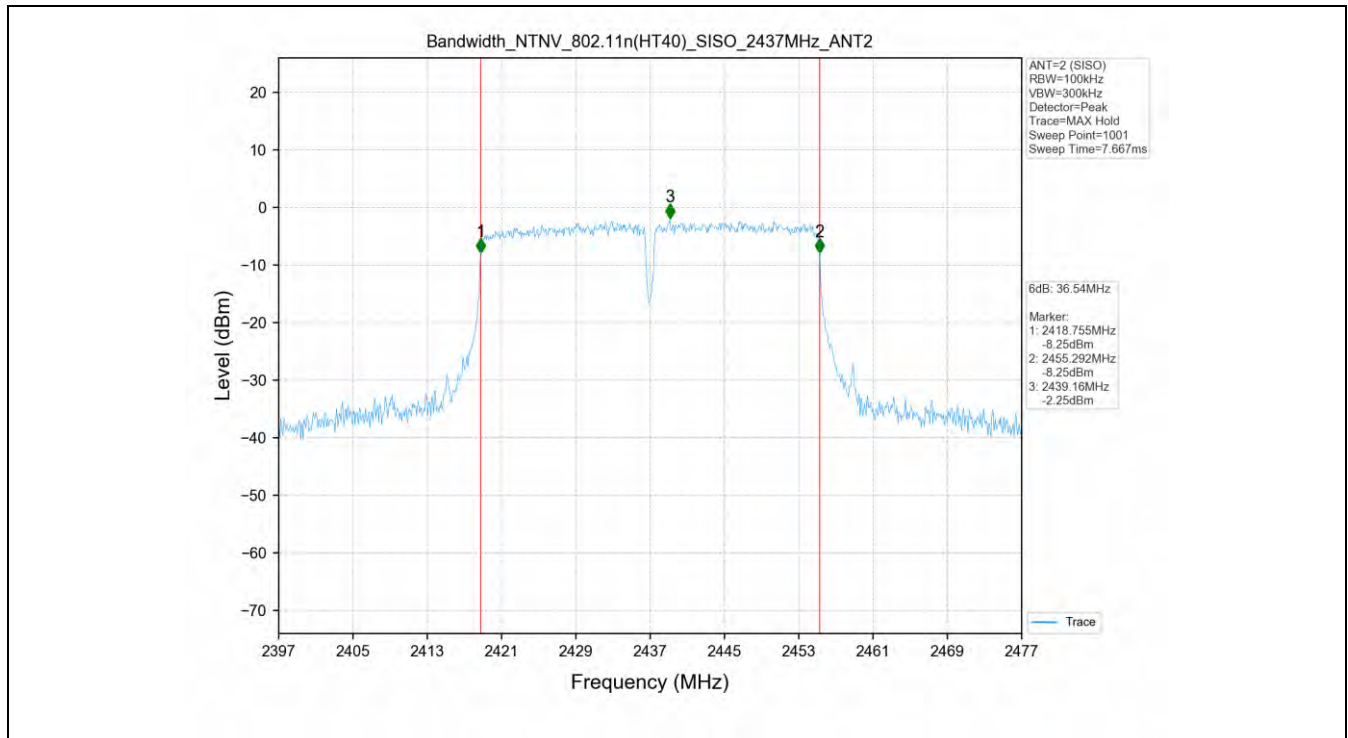
802.11n(HT40)_2422MHz_MIMO_Total



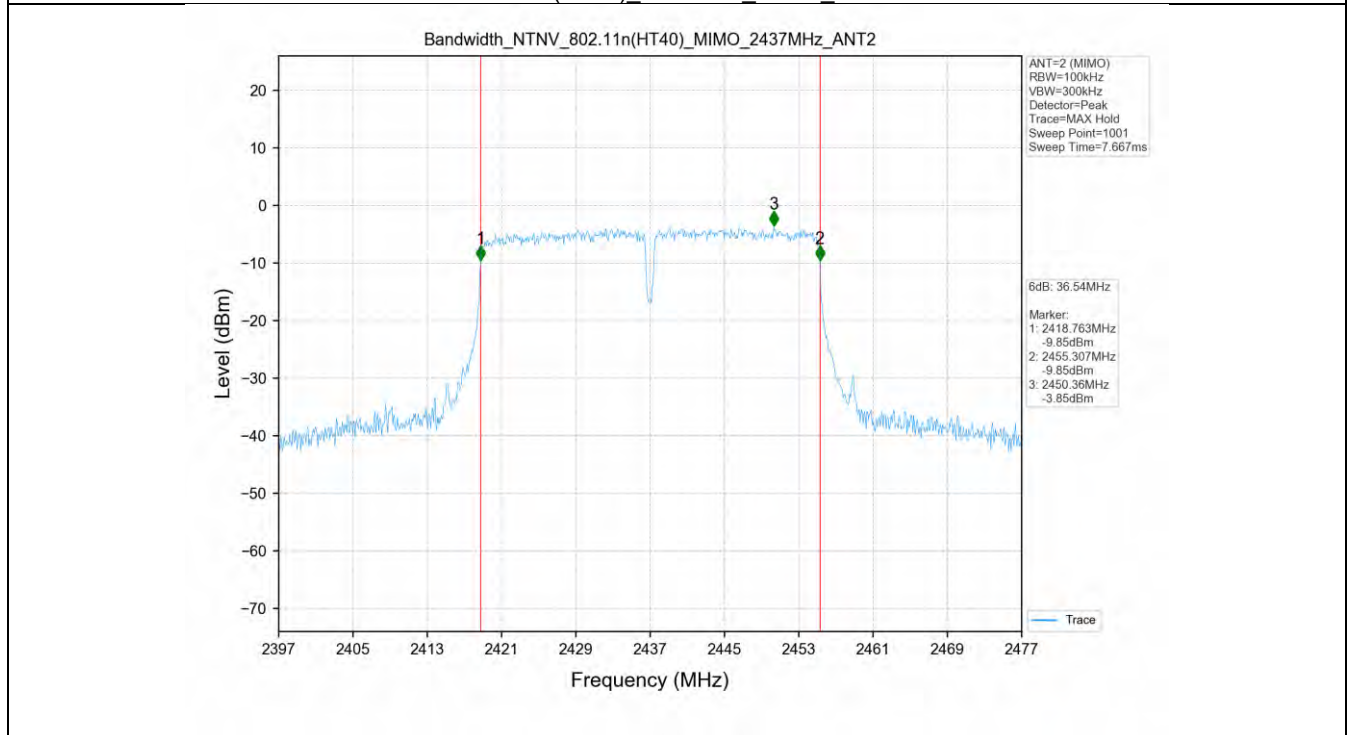
802.11n(HT40)_2437MHz_SISO_ANT1



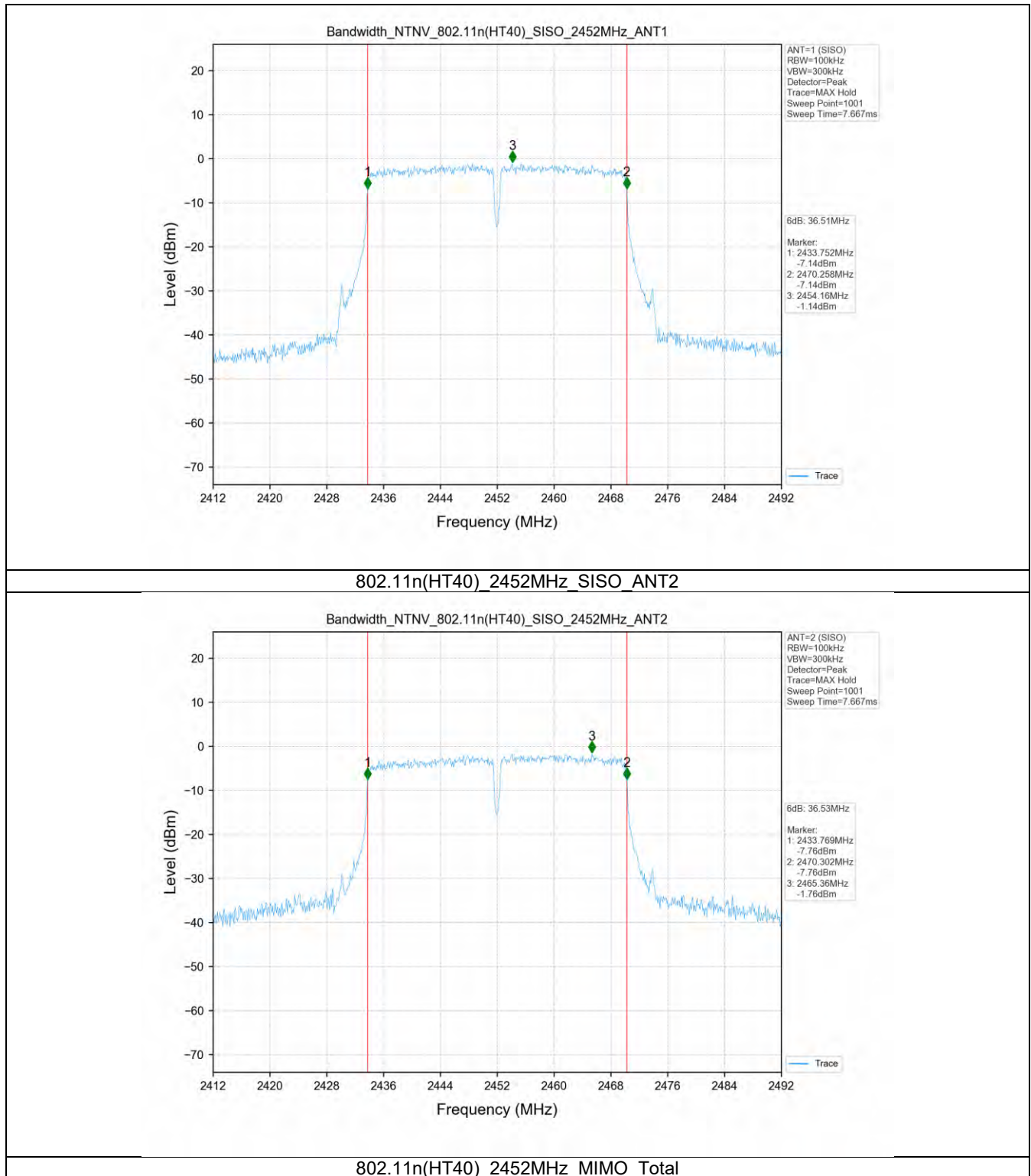
802.11n(HT40)_2437MHz_SISO_ANT2

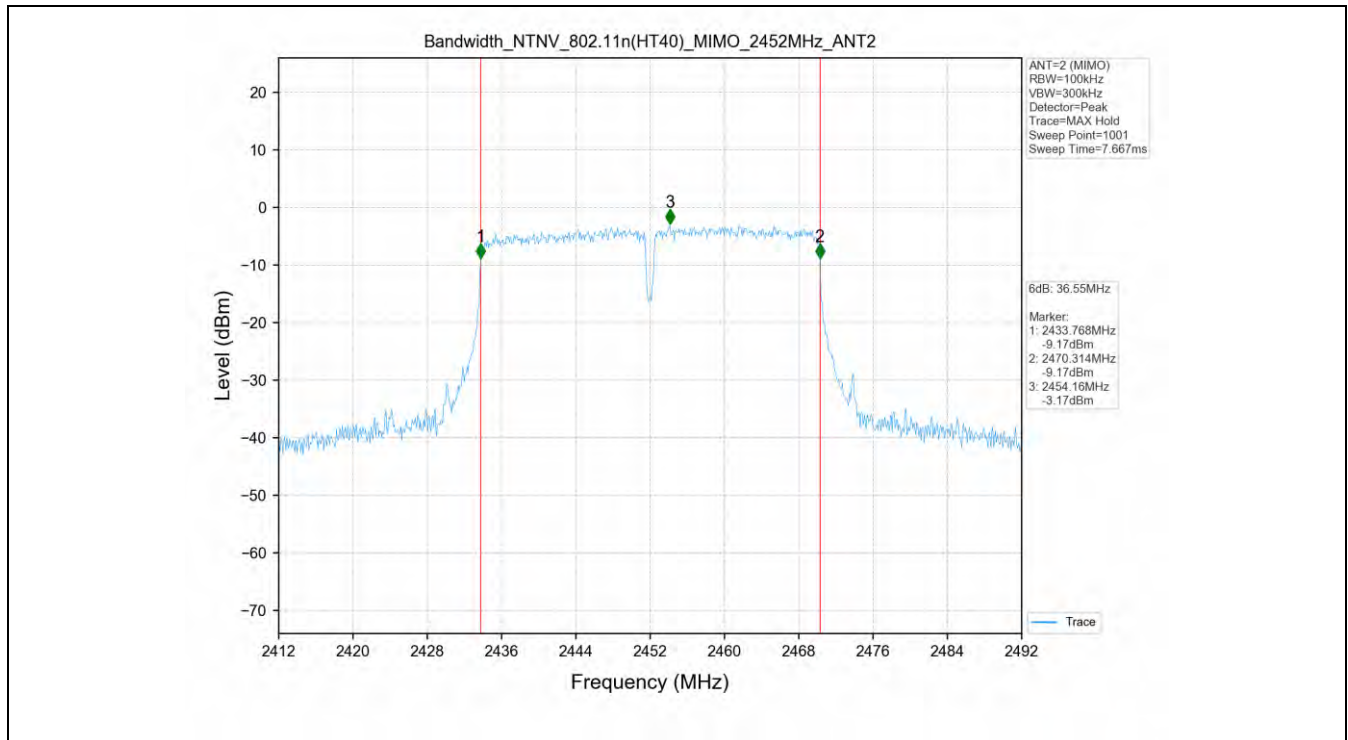


802.11n(HT40)_2437MHz_MIMO_Total

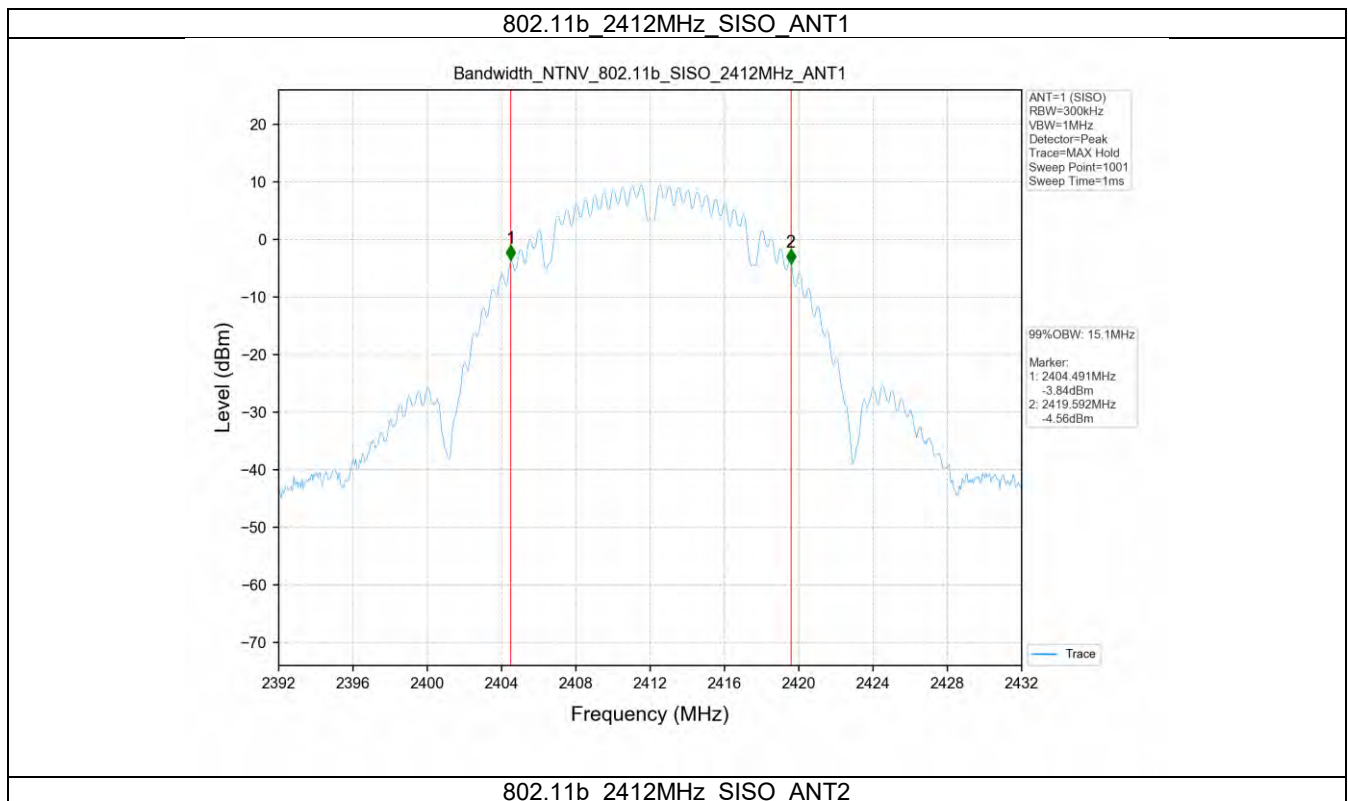


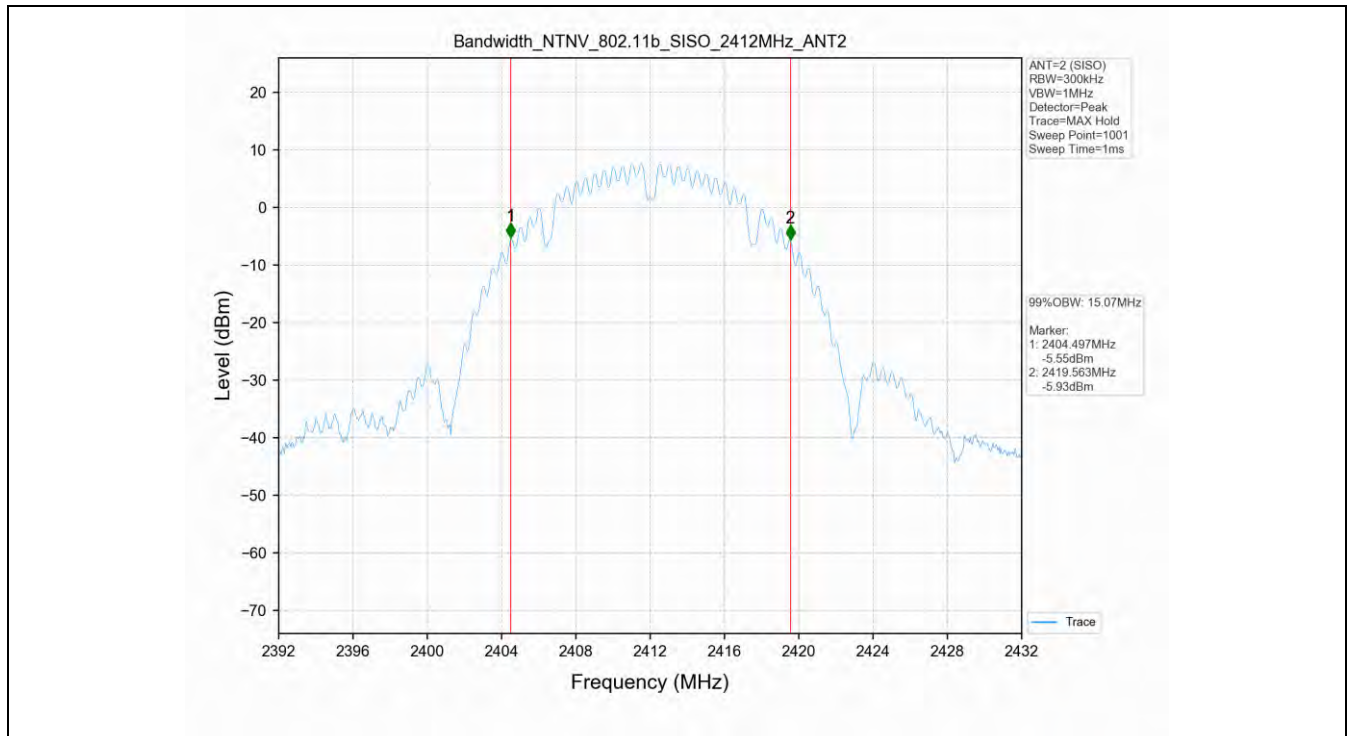
802.11n(HT40)_2452MHz_SISO_ANT1



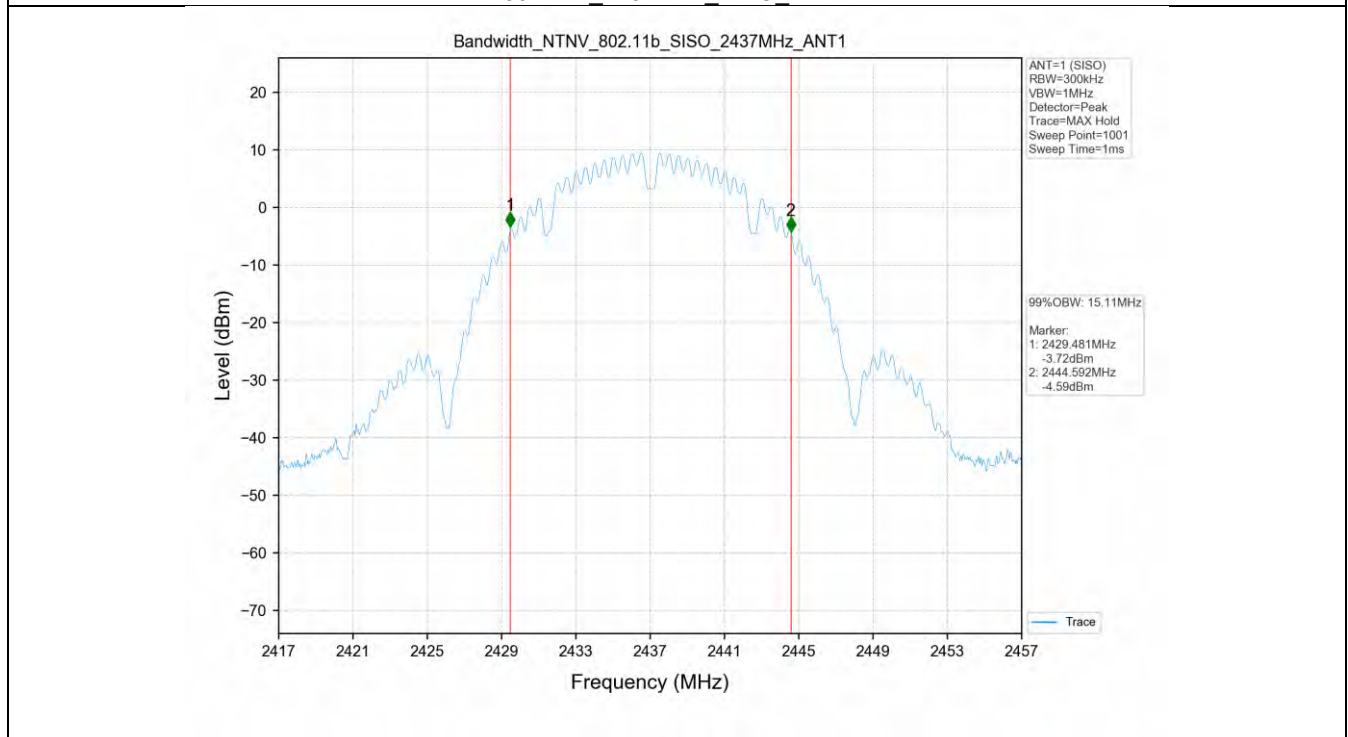


2.3 Test Graph - 99% Occupied Bandwidth

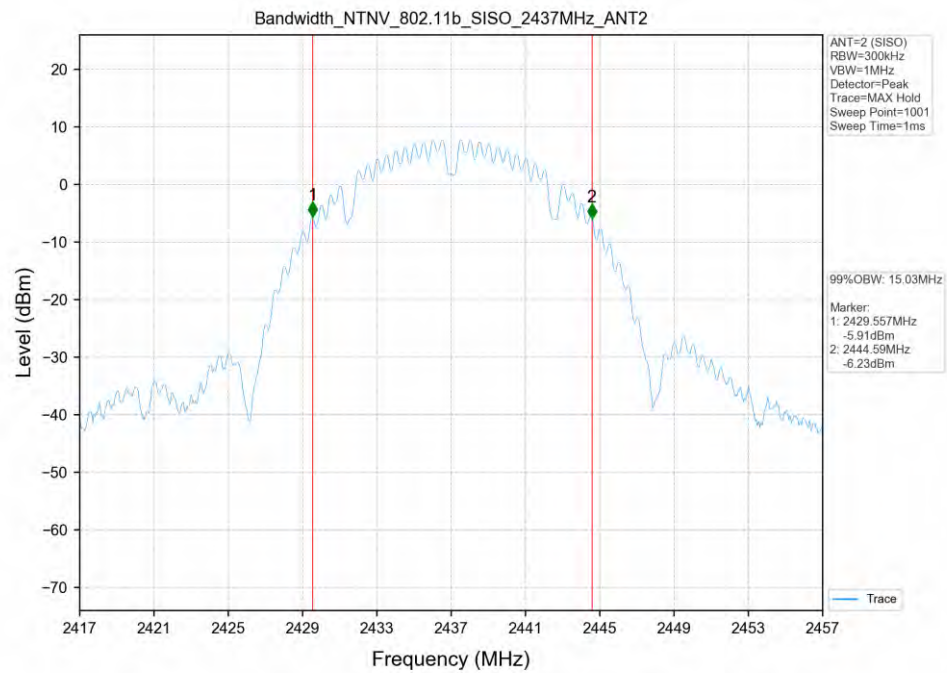




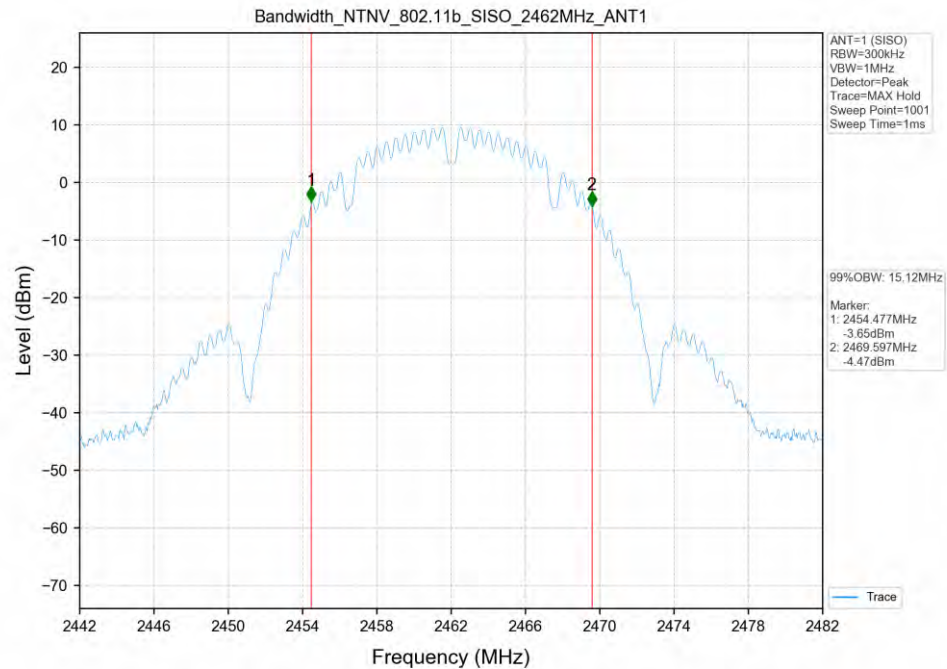
802.11b_2437MHz_SISO_ANT1



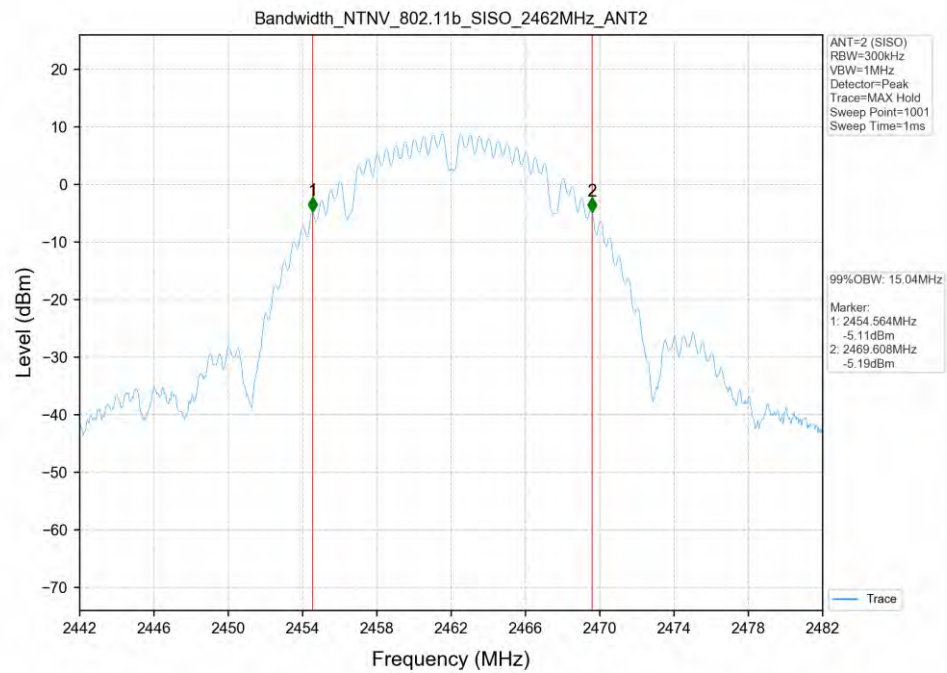
802.11b_2437MHz_SISO_ANT2



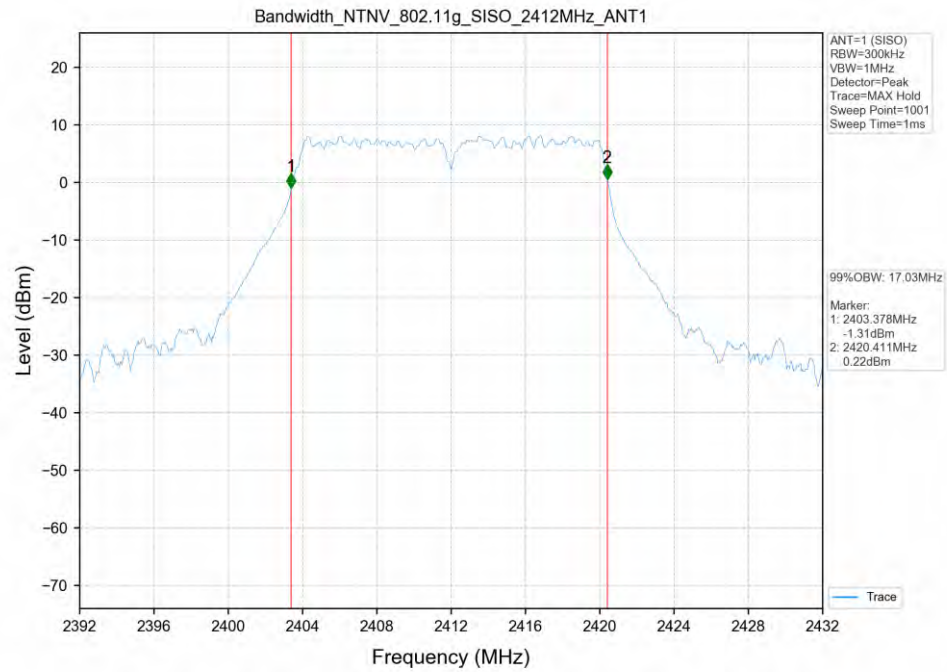
802.11b_2462MHz_SISO_ANT1



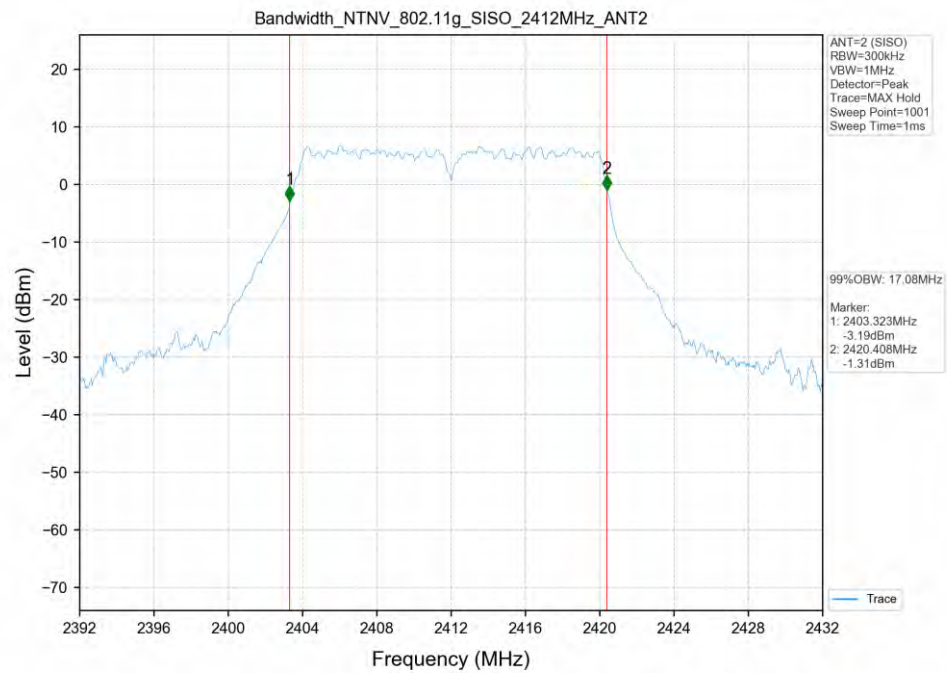
802.11b_2462MHz_SISO_ANT2



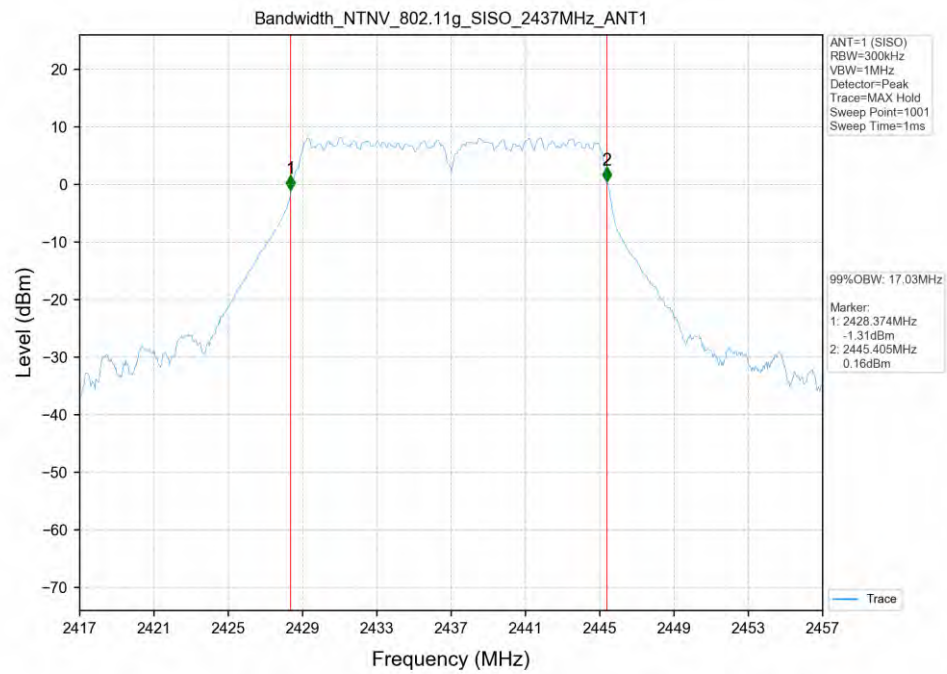
802.11g_2412MHz_SISO_ANT1



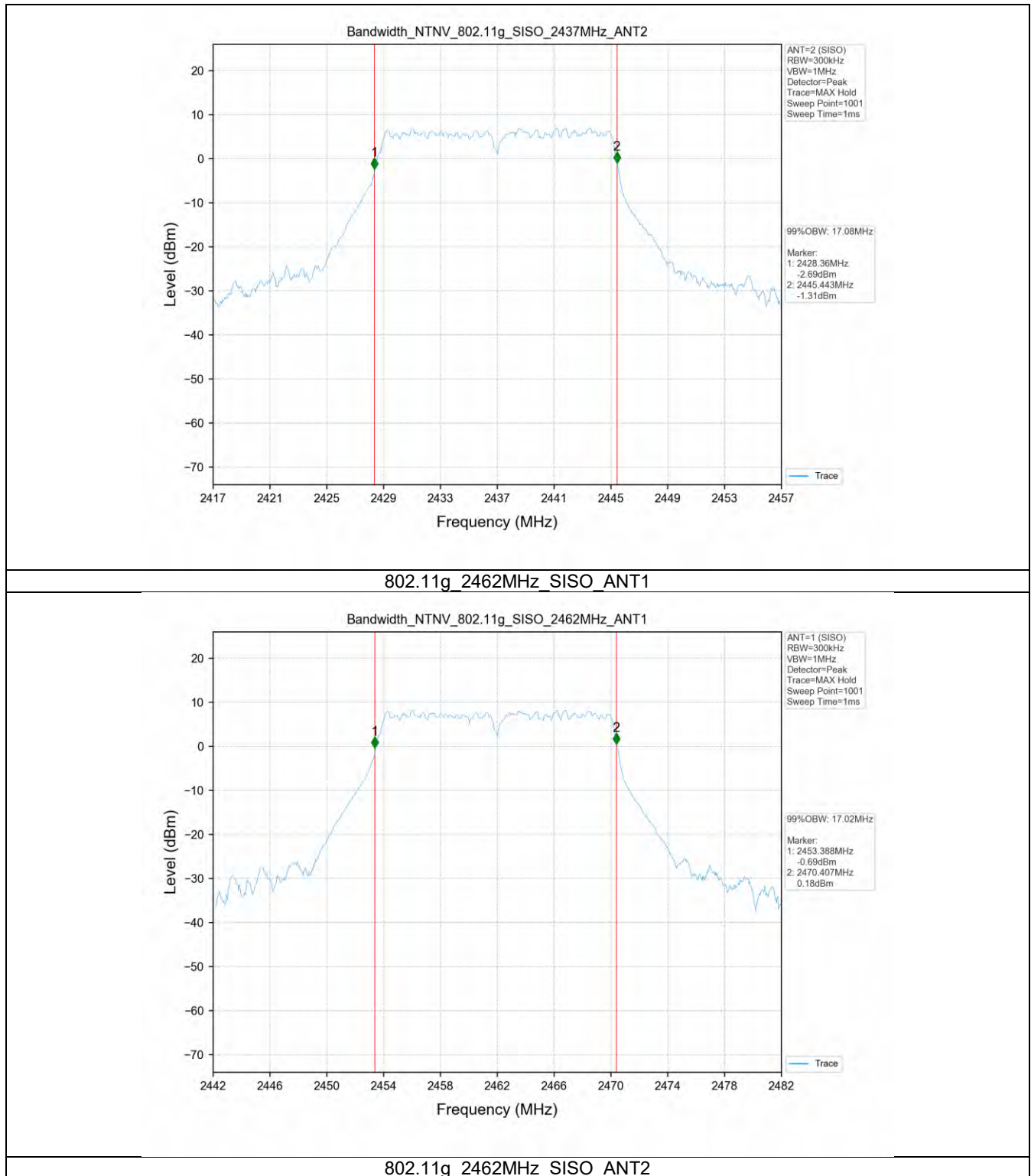
802.11g_2412MHz_SISO_ANT2

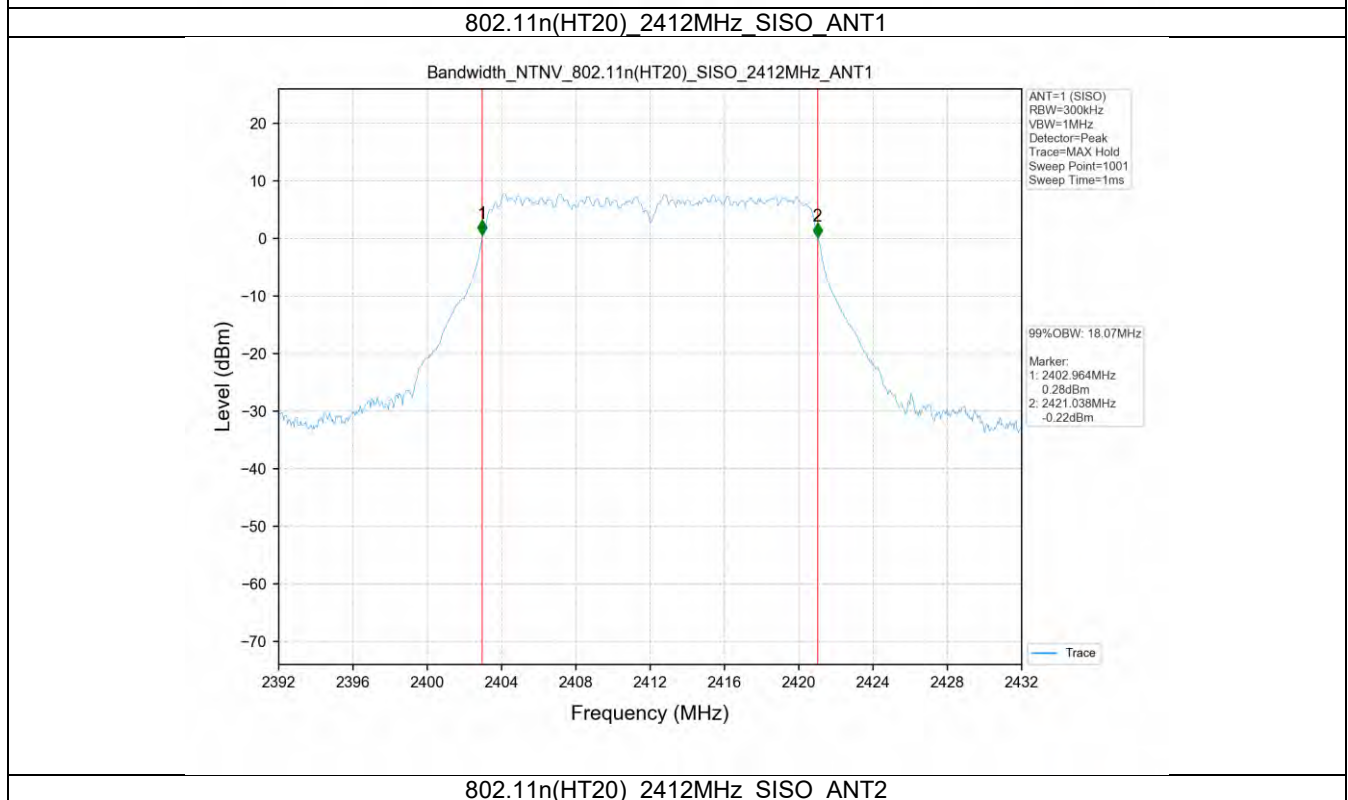
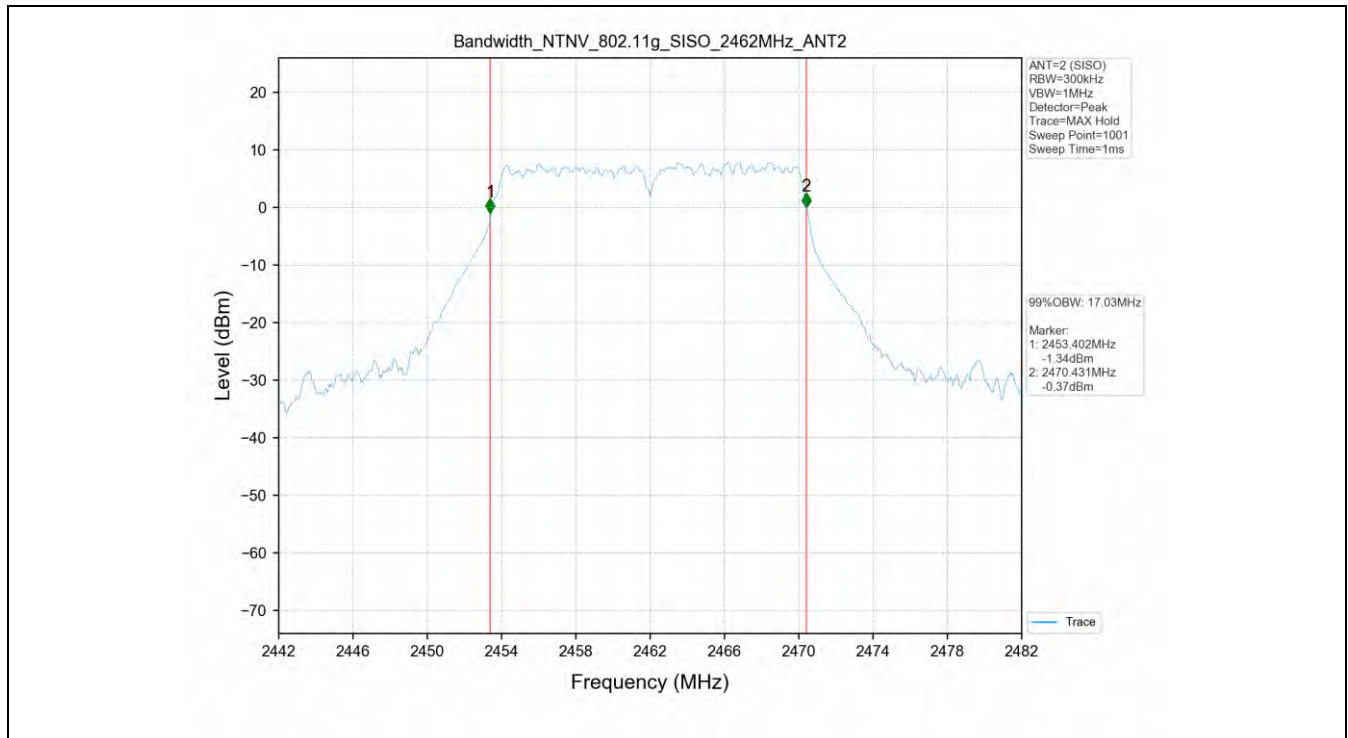


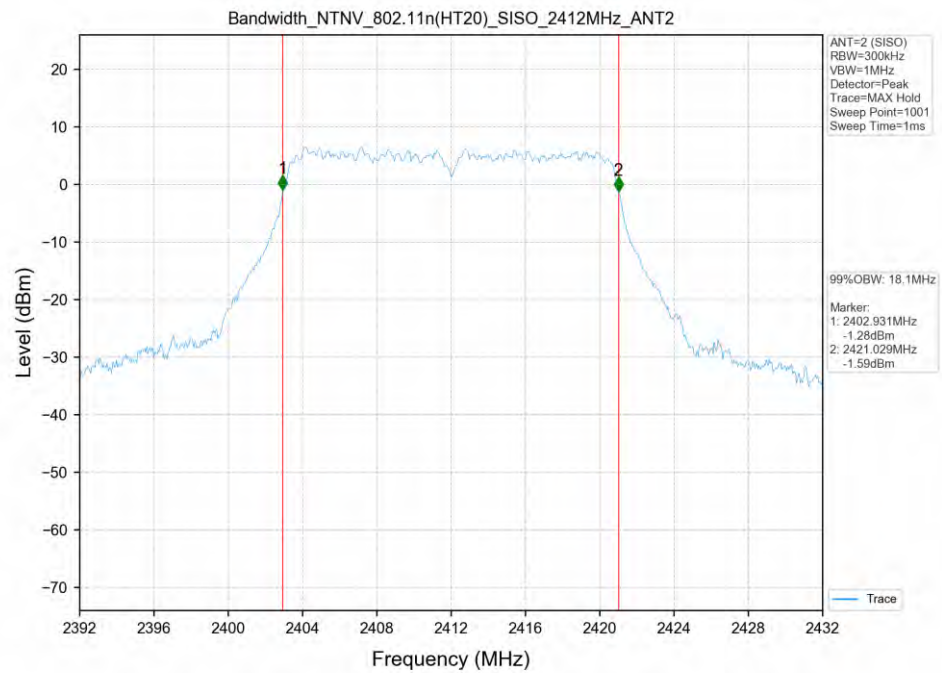
802.11g_2437MHz_SISO_ANT1



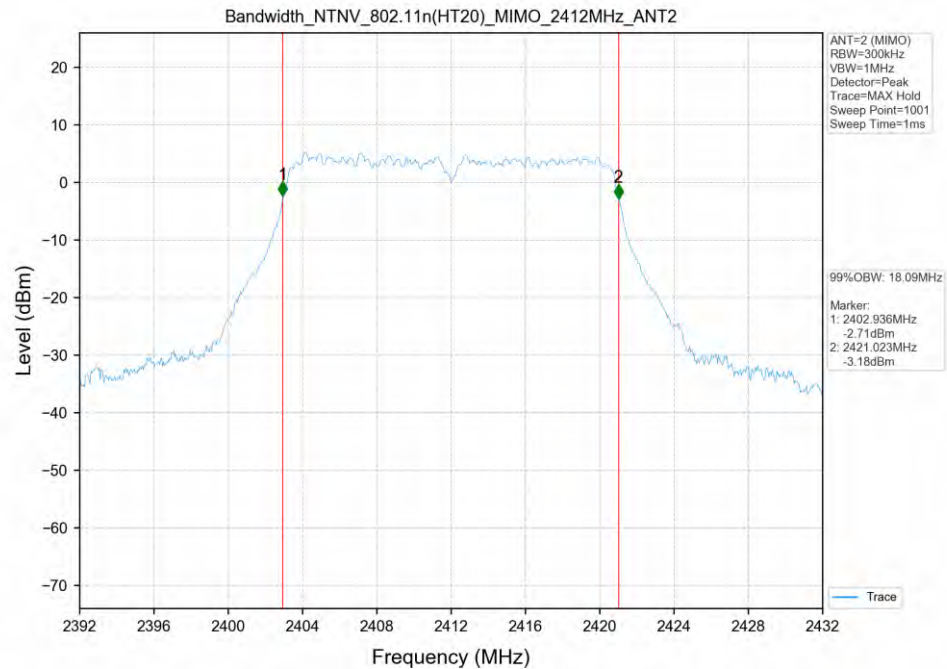
802.11g_2437MHz_SISO_ANT2



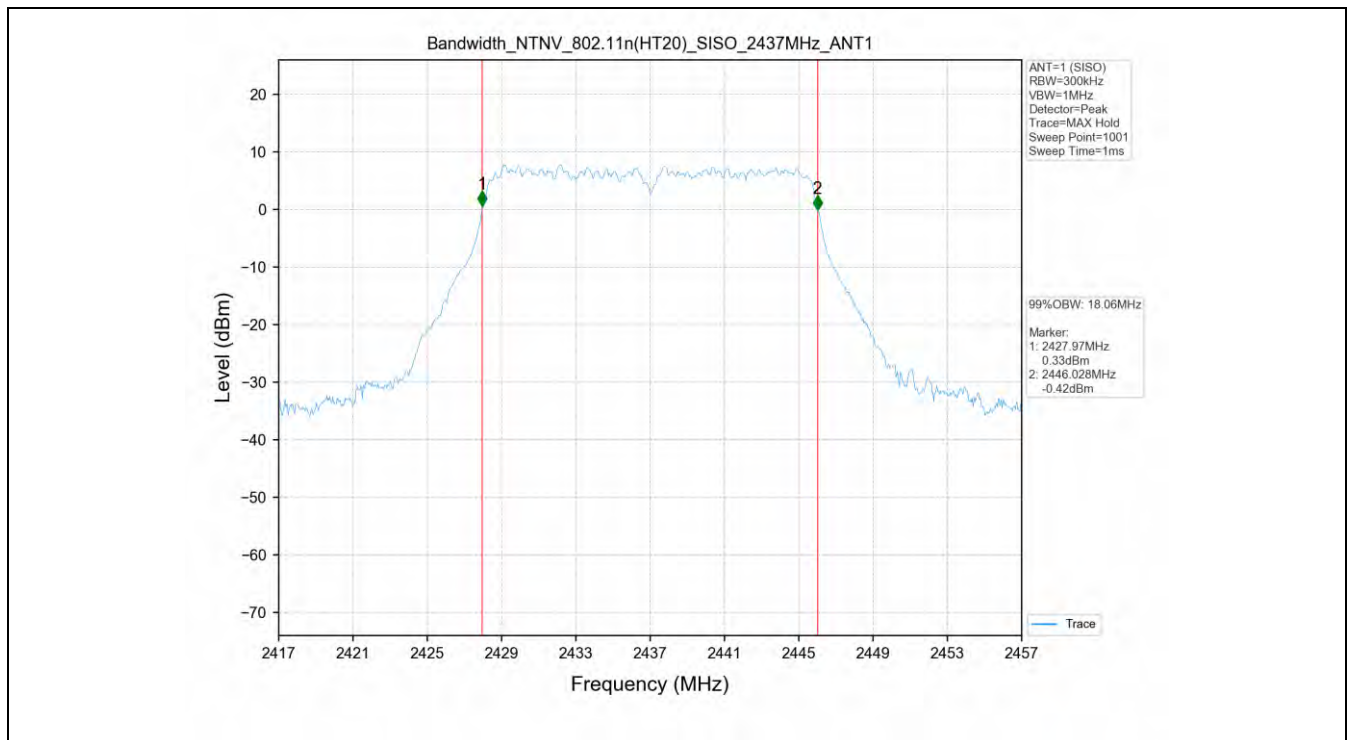




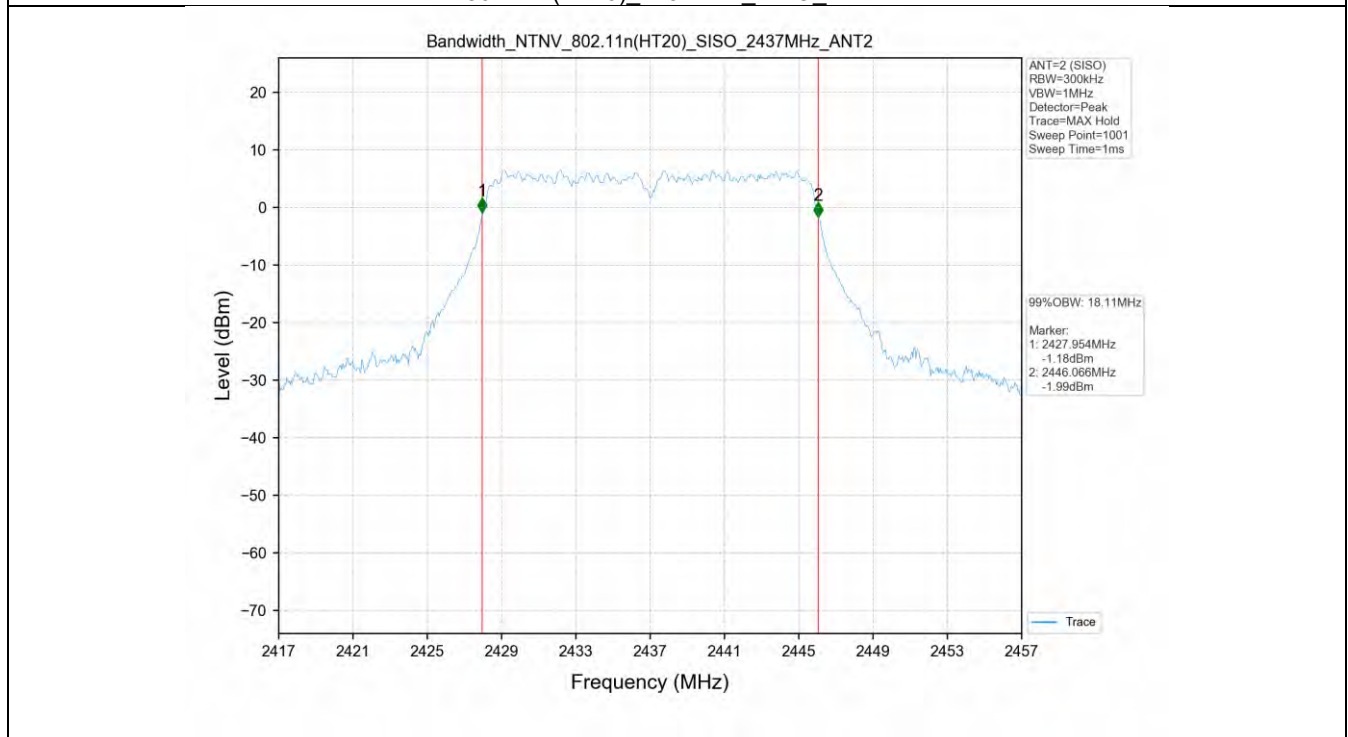
802.11n(HT20)_2412MHz_MIMO_Total



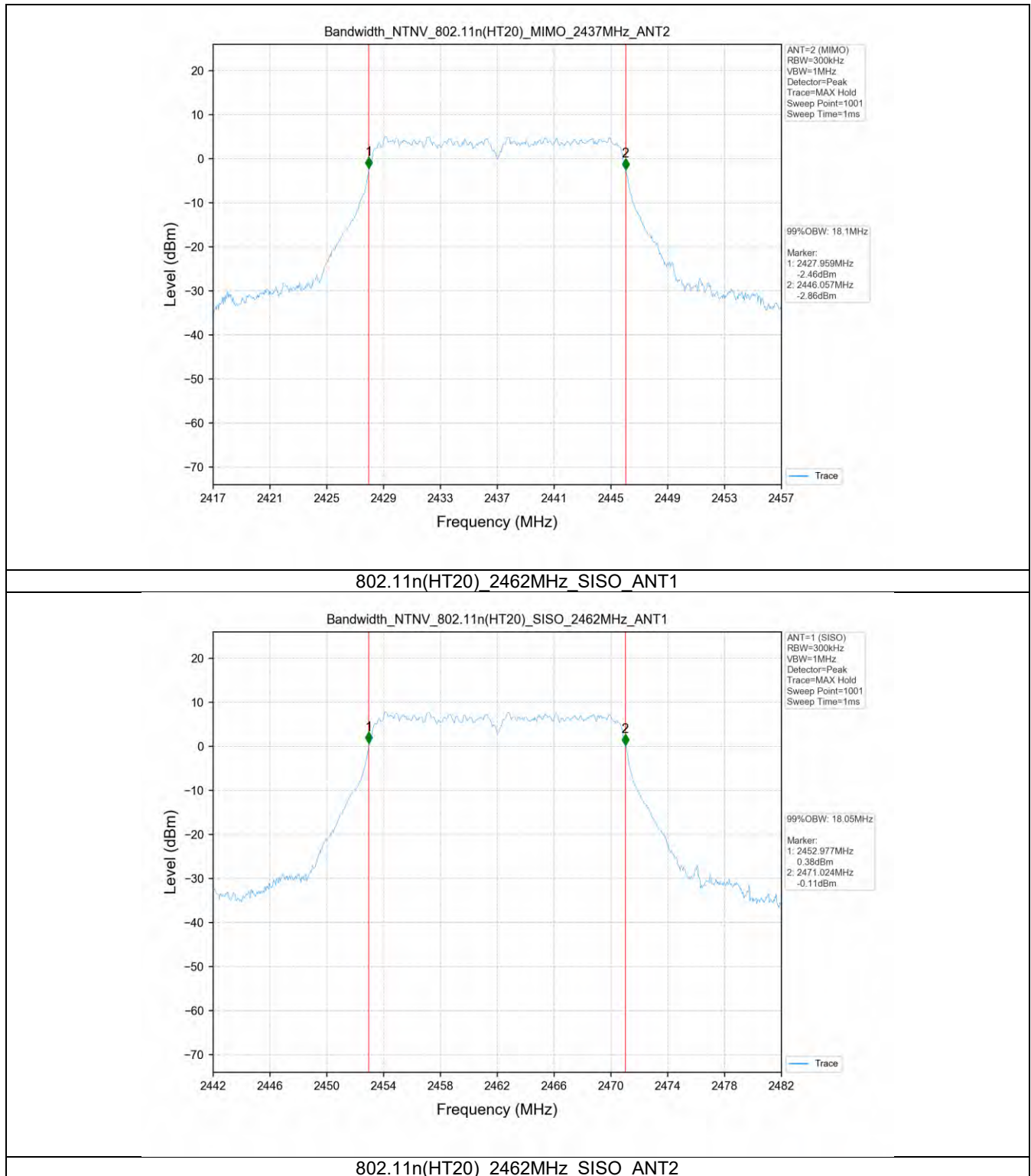
802.11n(HT20)_2437MHz_SISO_ANT1

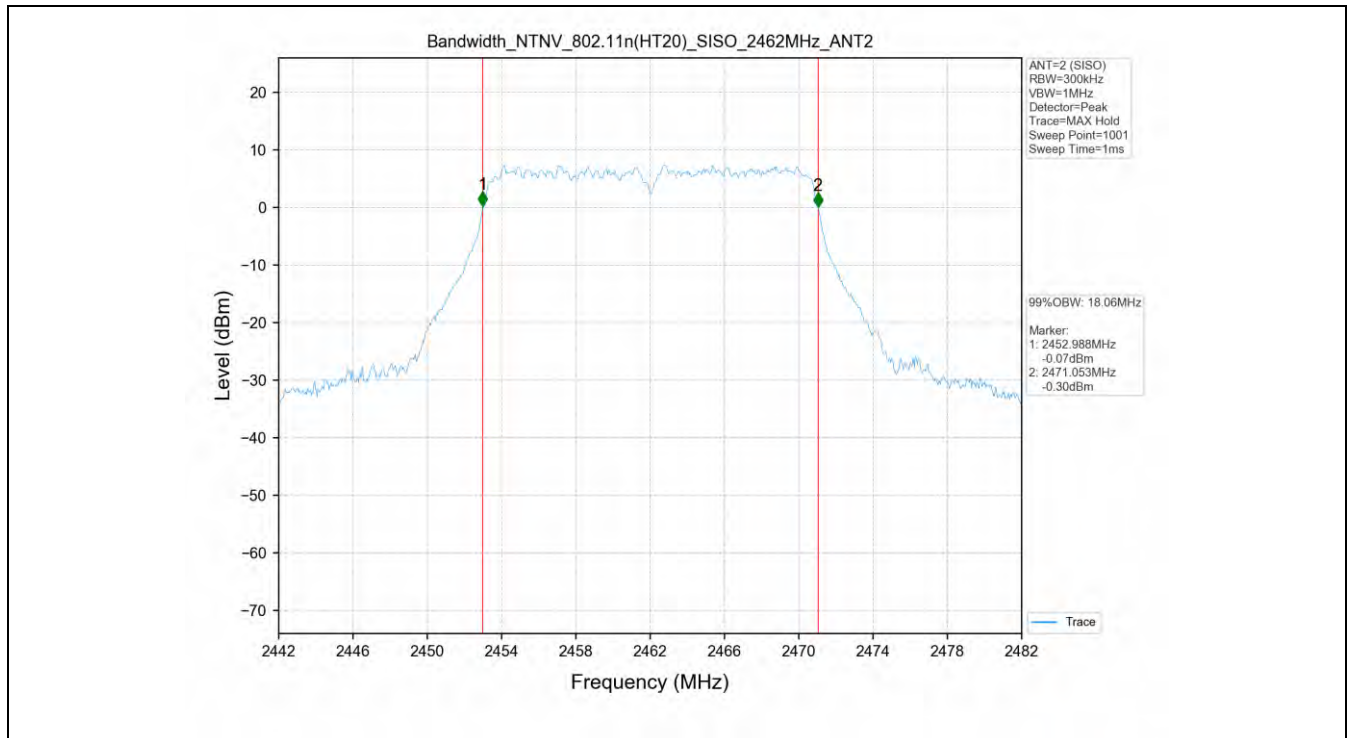


802.11n(HT20)_2437MHz_SISO_ANT2

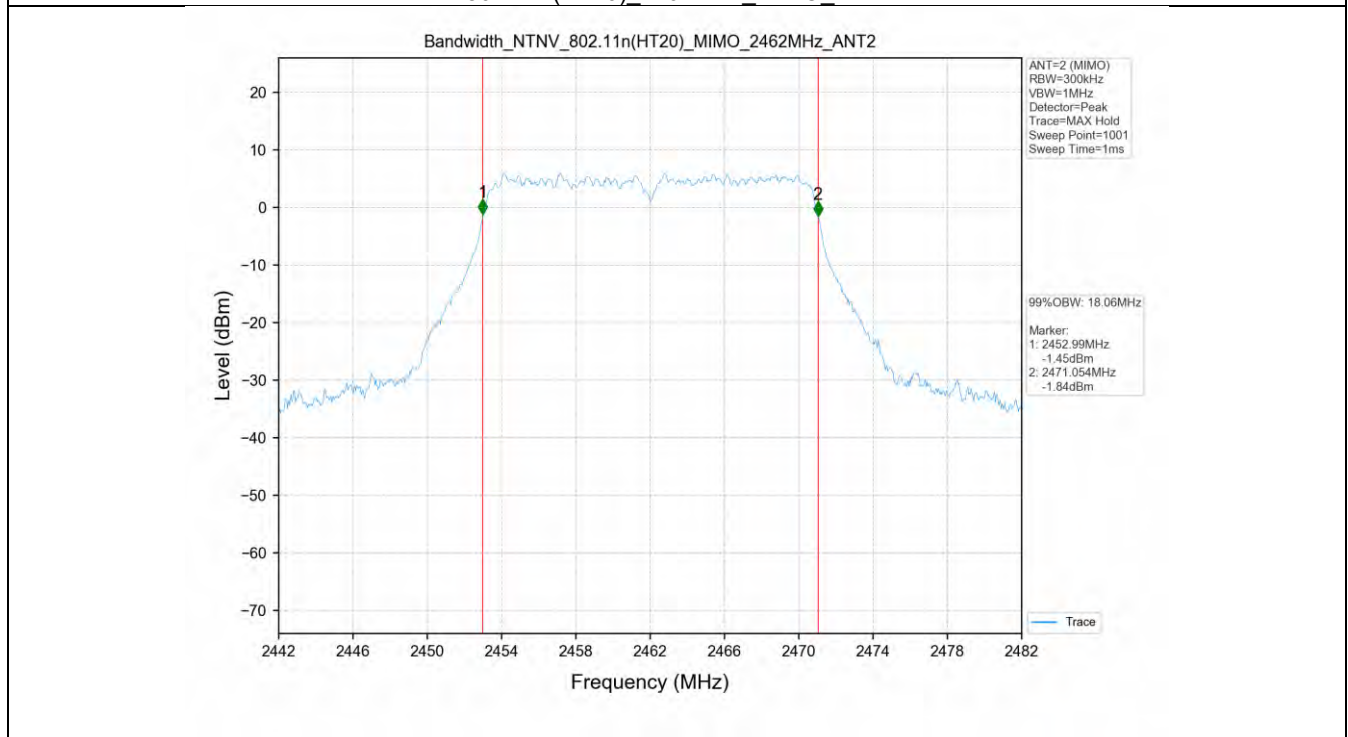


802.11n(HT20)_2437MHz_MIMO_Total

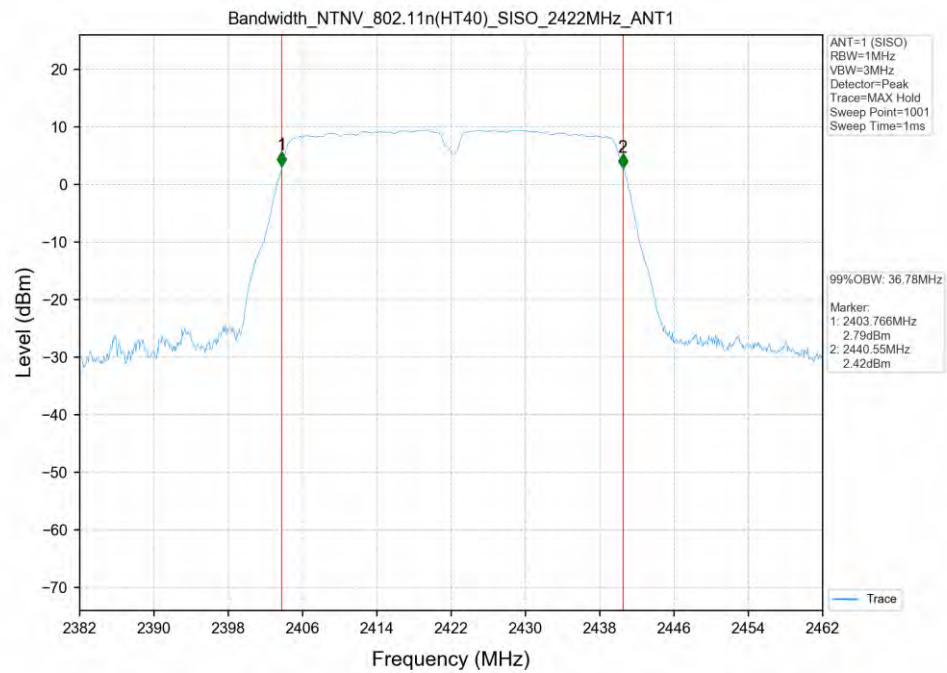




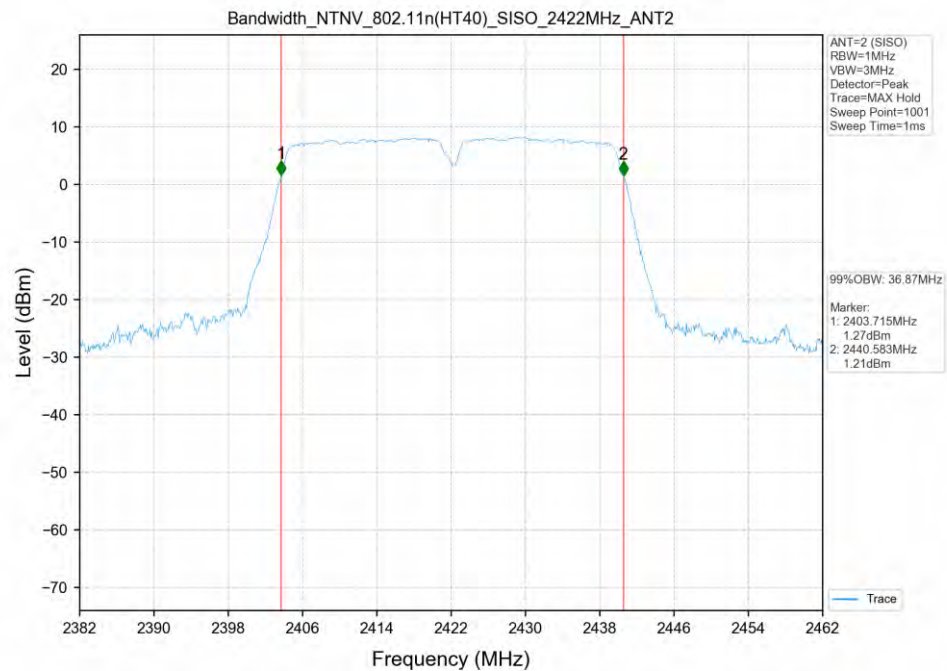
802.11n(HT20)_2462MHz_MIMO_Total



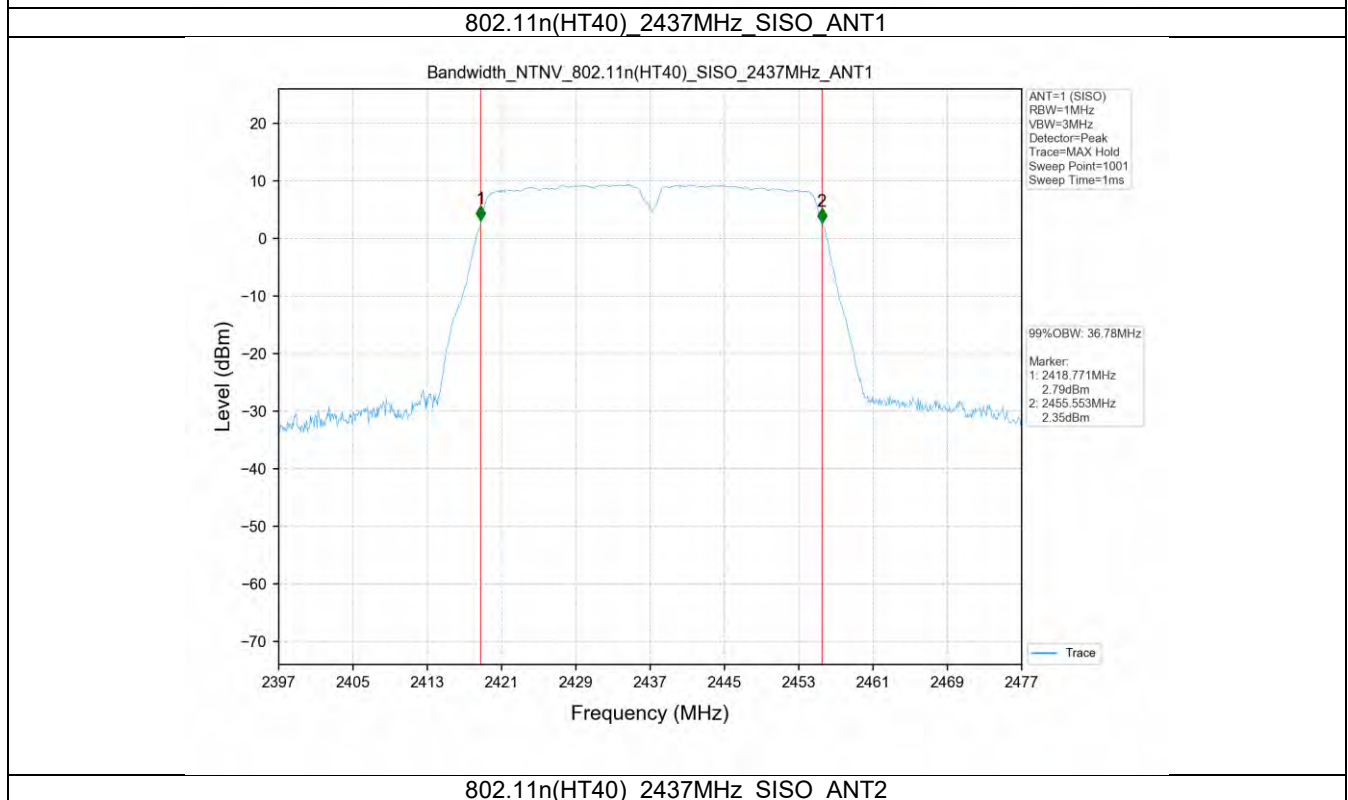
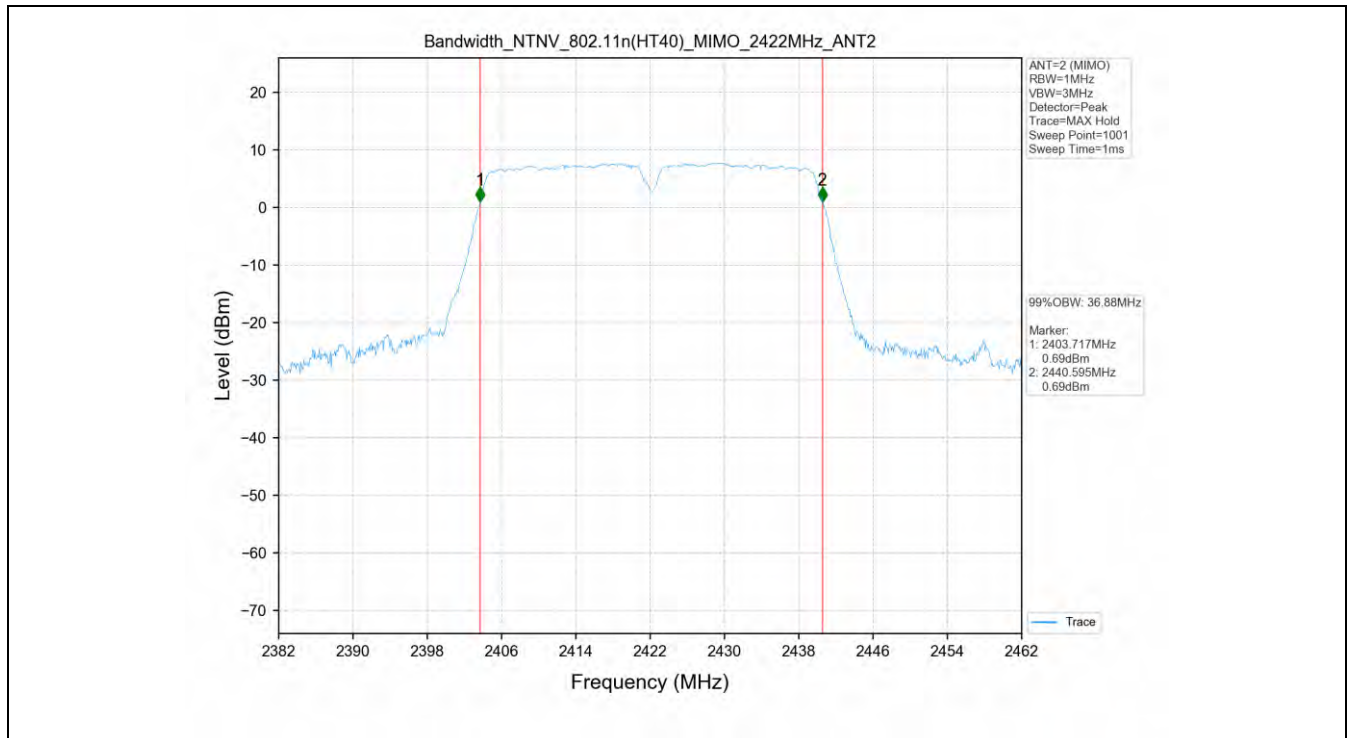
802.11n(HT40)_2422MHz_SISO_ANT1

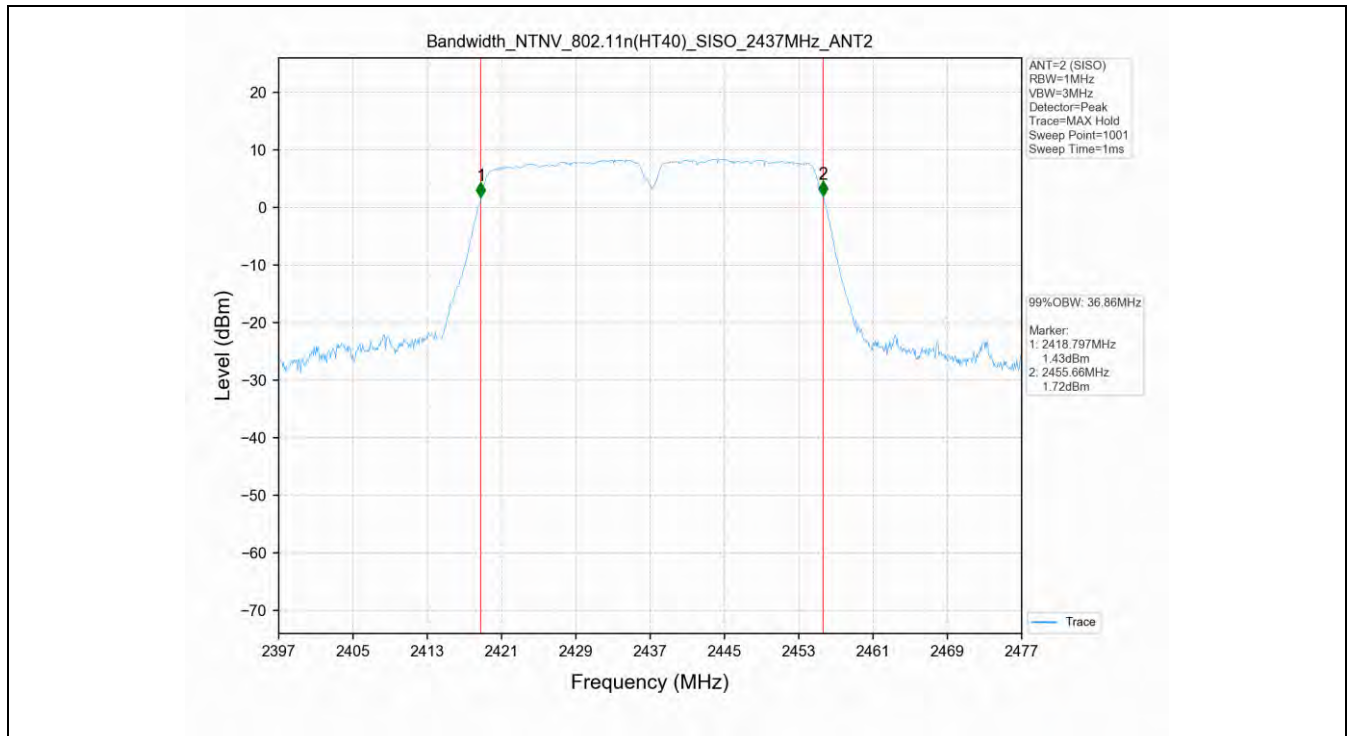


802.11n(HT40)_2422MHz_SISO_ANT2

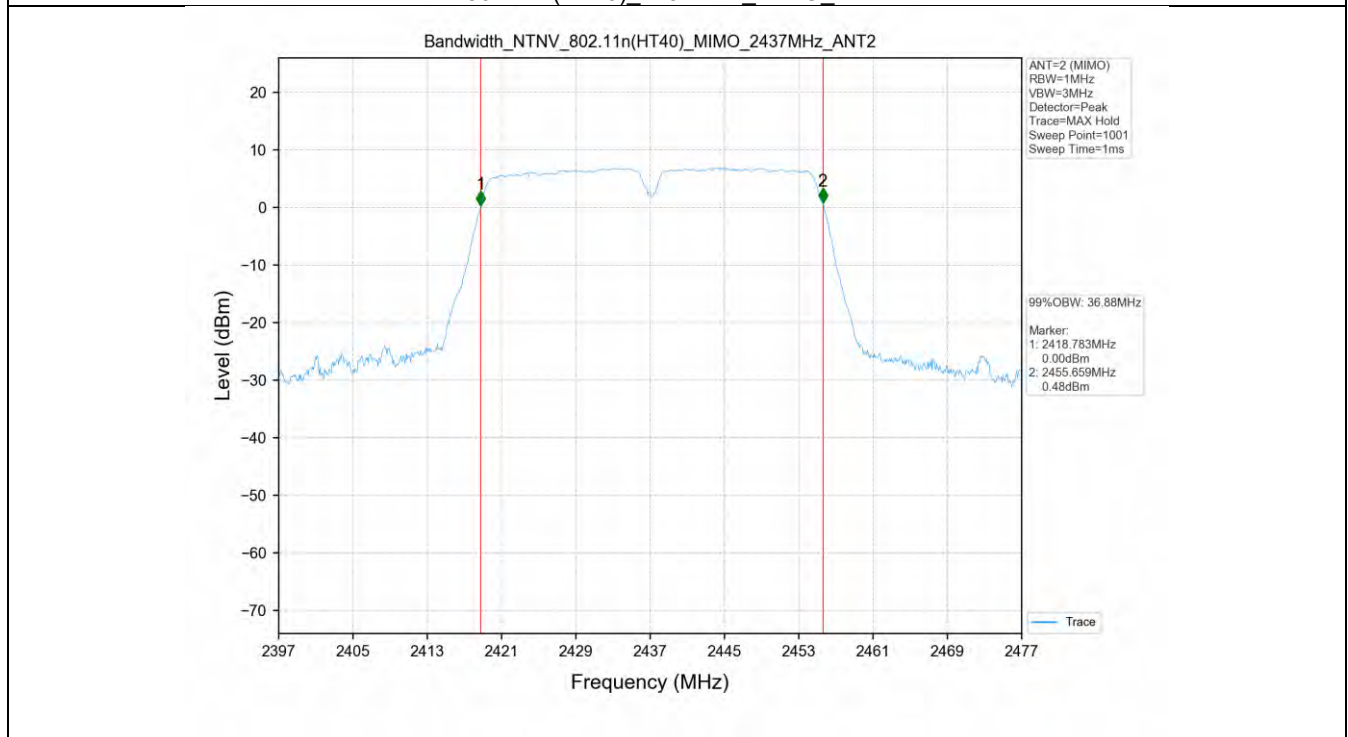


802.11n(HT40)_2422MHz_MIMO_Total

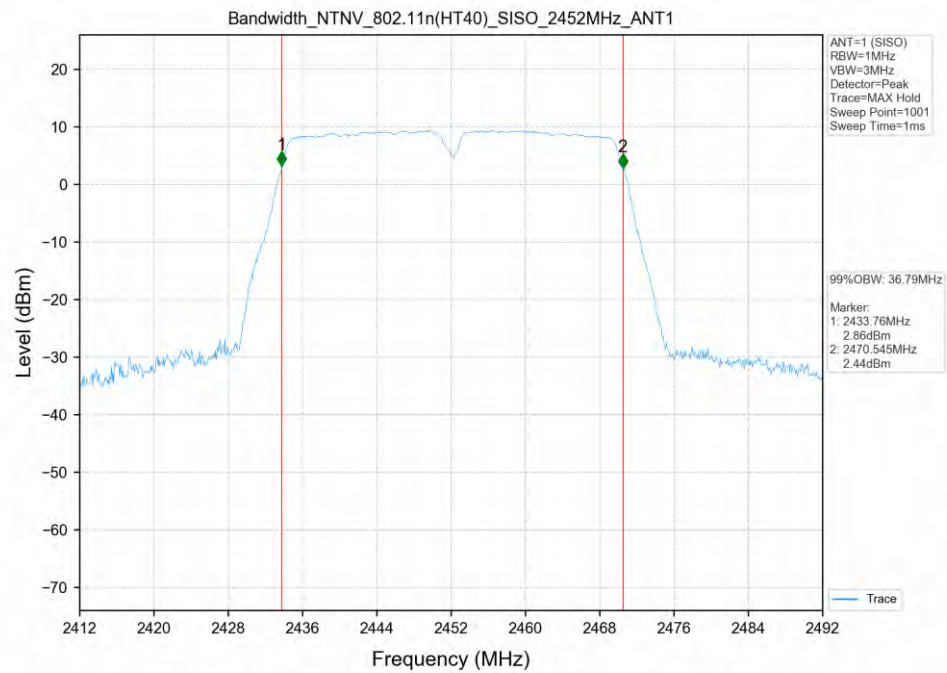




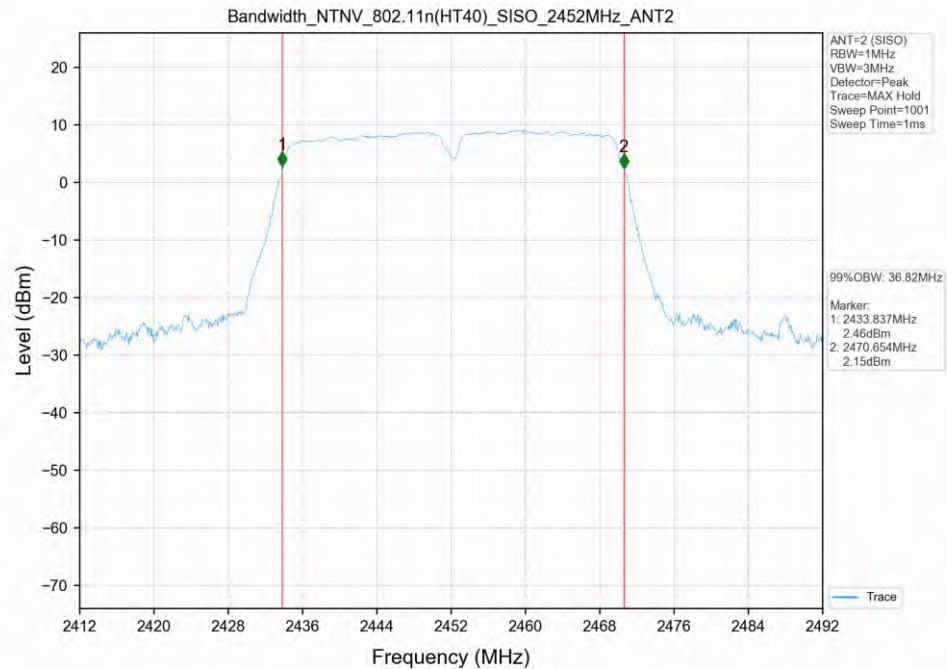
802.11n(HT40)_2437MHz_MIMO_Total



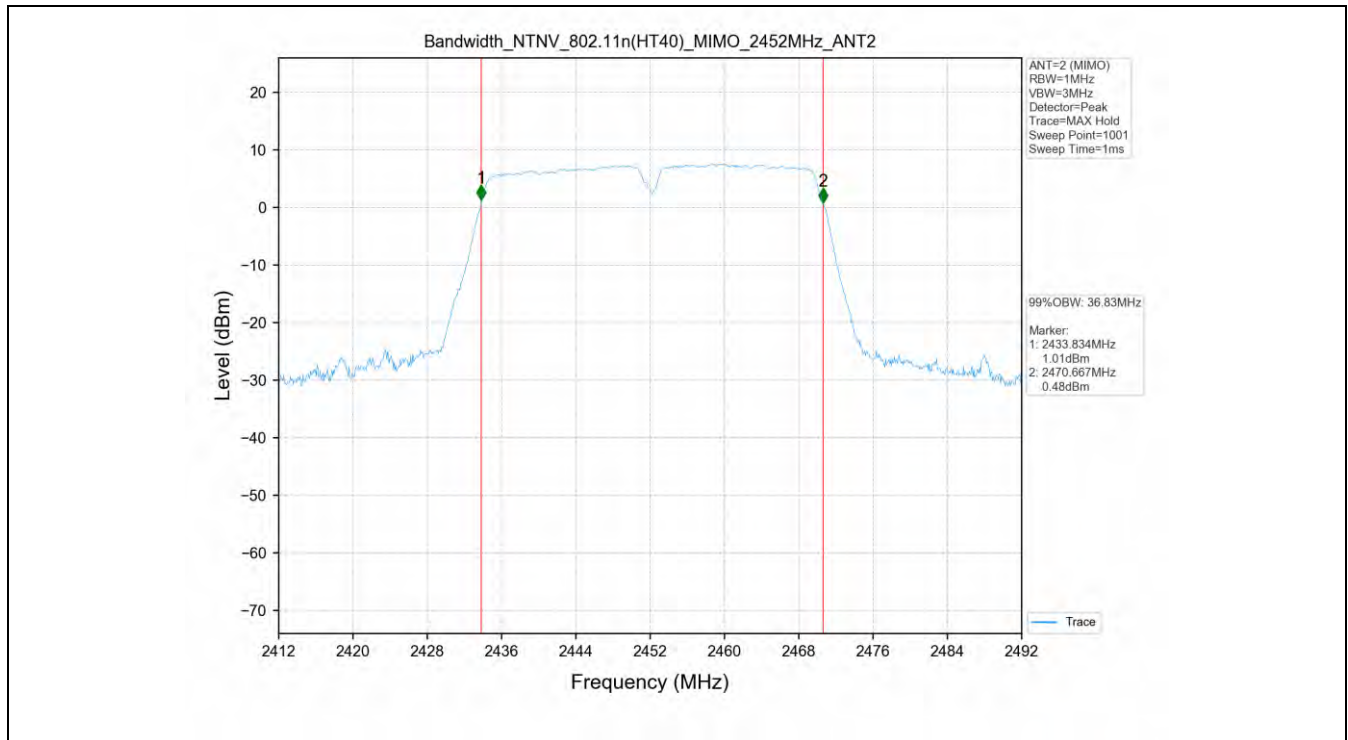
802.11n(HT40)_2452MHz_SISO_ANT1



802.11n(HT40)_2452MHz_SISO_ANT2



802.11n(HT40)_2452MHz_MIMO_Total



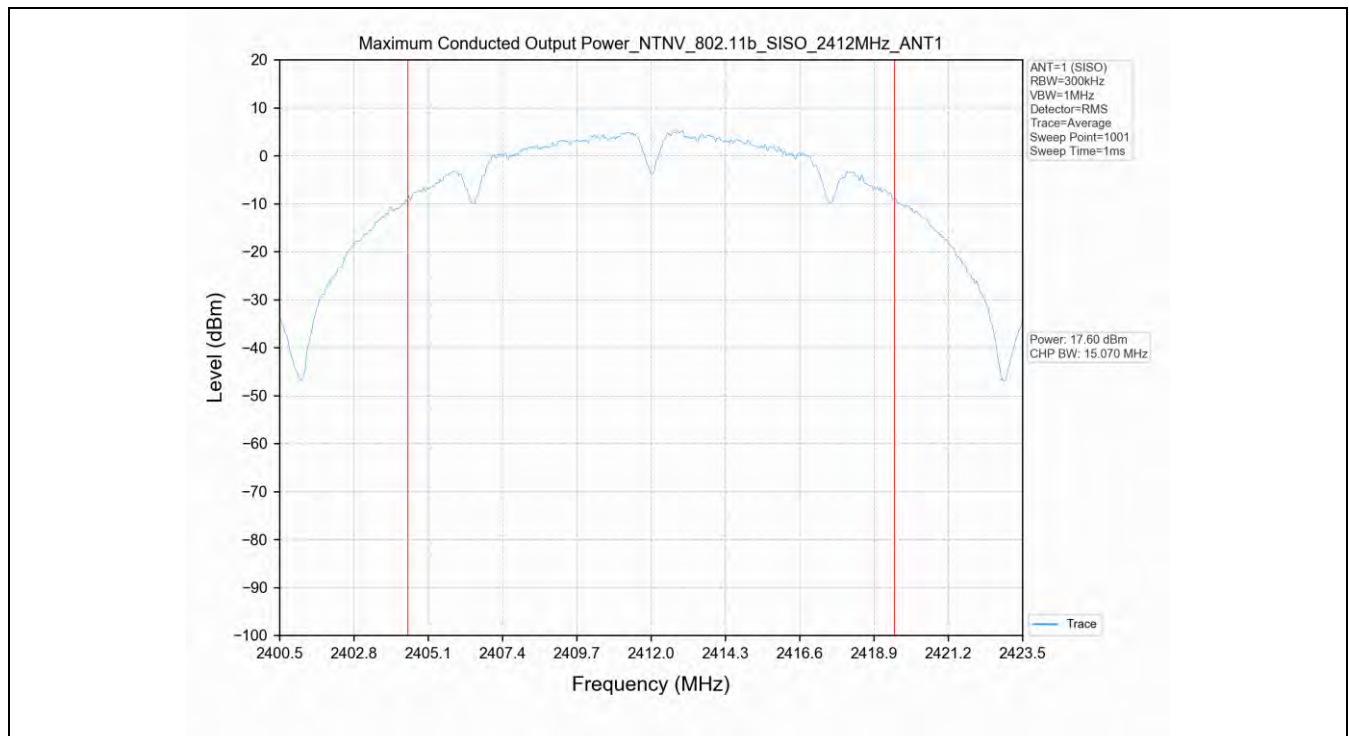
3. Maximum Conducted Output Power

3.1 Test Result

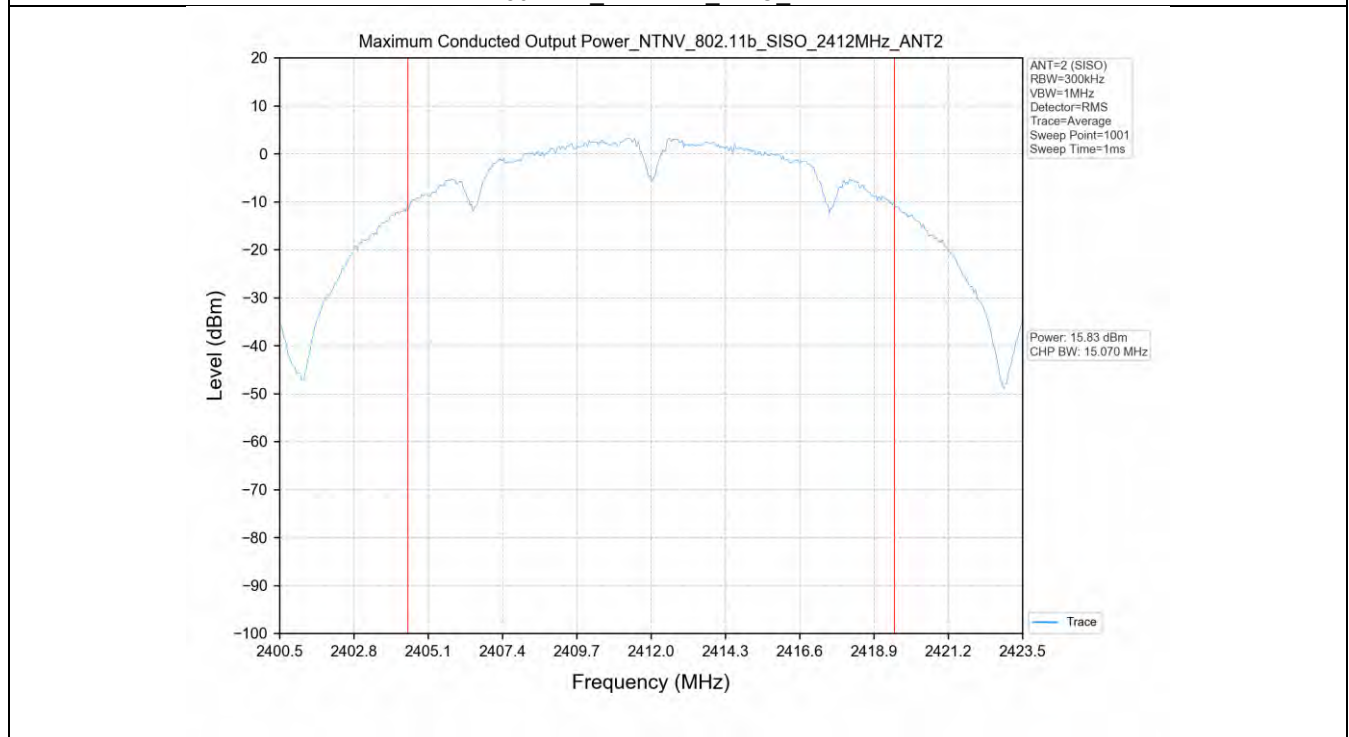
Test Mode	Frequency (MHz)	Tx Type	Measured Average Output Power (dBm)			Limits (dBm)	Verdict
			Ant 1	Ant 2	Total		
802.11b	2412	SISO	17.60	15.83	/	≤30	PASS
	2437	SISO	17.64	15.96	/	≤30	PASS
	2462	SISO	17.74	16.89	/	≤30	PASS
802.11g	2412	SISO	17.23	15.79	/	≤30	PASS
	2437	SISO	17.29	16.00	/	≤30	PASS
	2462	SISO	17.36	16.87	/	≤30	PASS
802.11n(HT20)	2412	SISO	17.03	15.65	/	≤30	PASS
		MIMO	16.16	14.30	18.34	≤30	PASS
	2437	SISO	17.00	15.83	/	≤30	PASS
		MIMO	16.08	14.34	18.31	≤30	PASS
	2462	SISO	17.09	16.71	/	≤30	PASS
		MIMO	16.19	15.26	18.76	≤30	PASS
802.11n(HT40)	2422	SISO	16.18	14.77	/	≤30	PASS
		MIMO	15.52	14.28	17.95	≤30	PASS
	2437	SISO	16.13	14.95	/	≤30	PASS
		MIMO	15.26	13.49	17.47	≤30	PASS
	2452	SISO	16.16	15.40	/	≤30	PASS
		MIMO	15.33	13.97	17.71	≤30	PASS

3.2 Test Graph

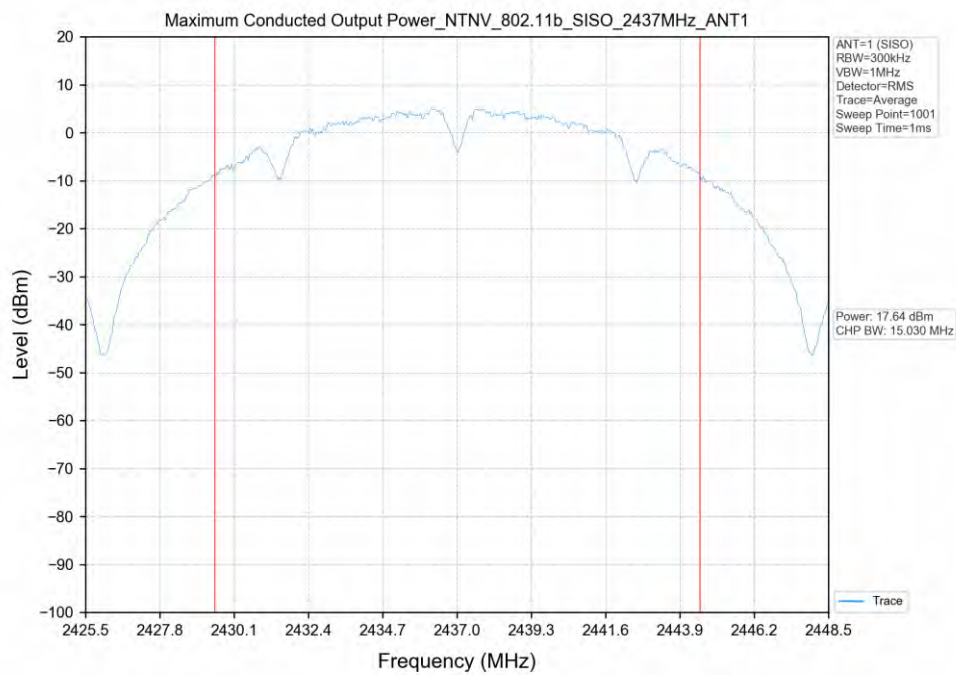
802.11b_2412MHz_SISO_ANT1



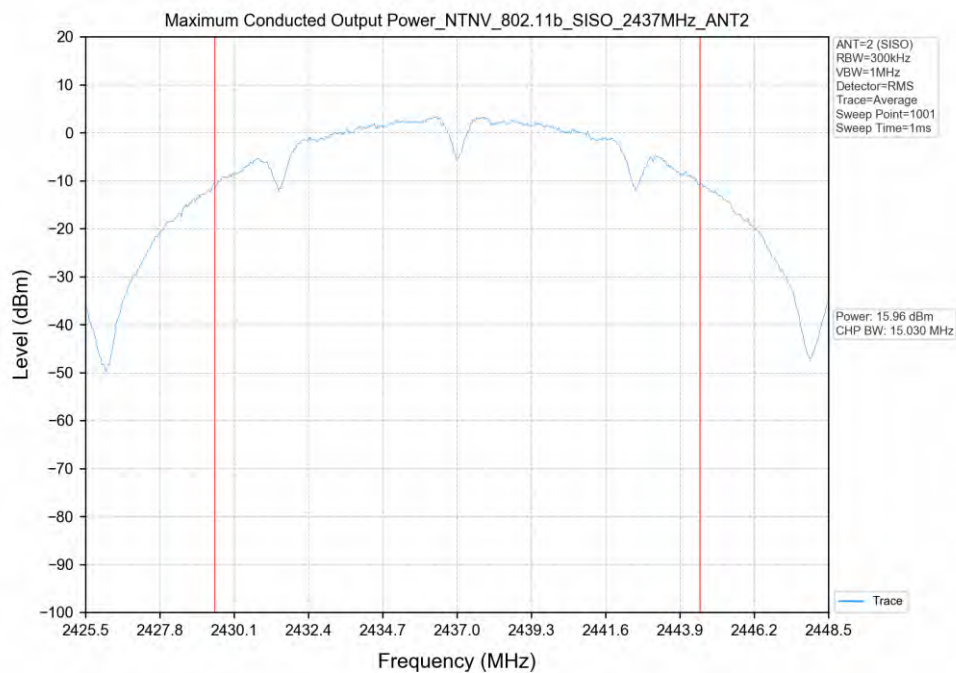
802.11b_2412MHz_SISO_ANT2



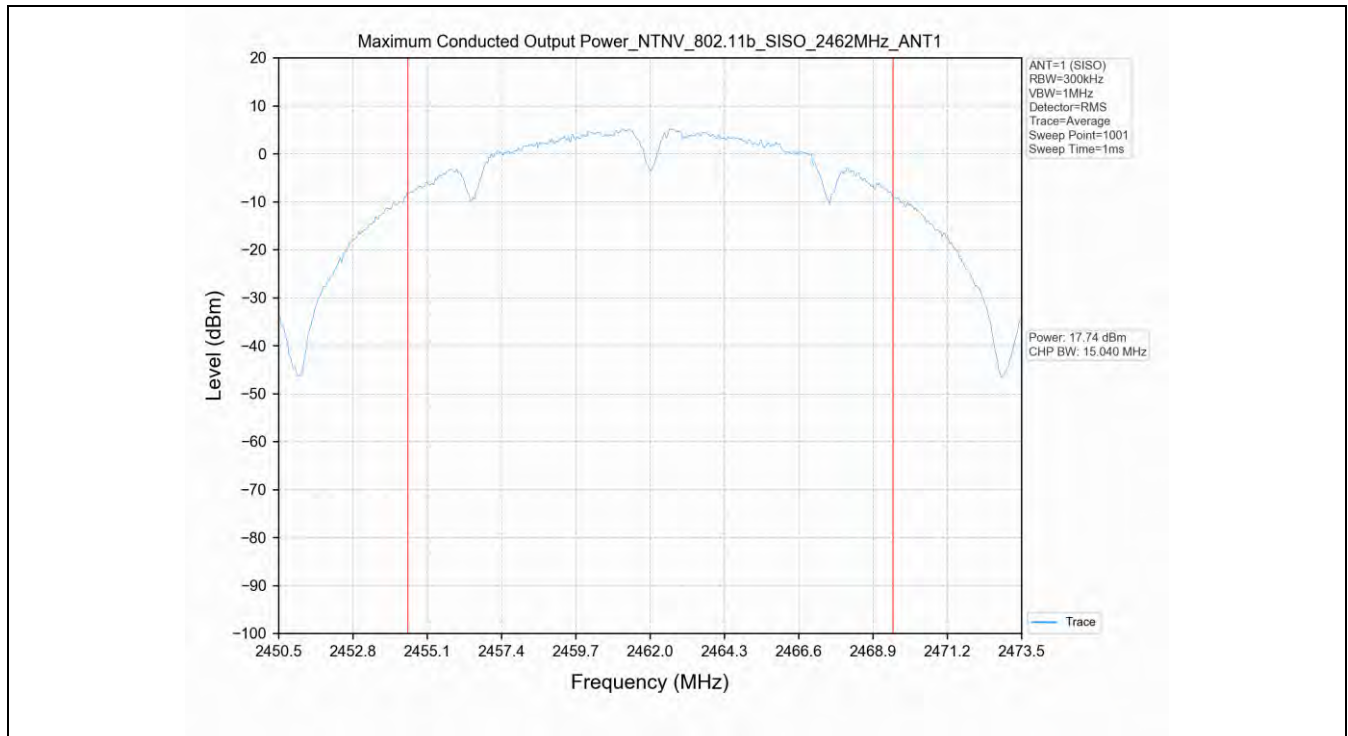
802.11b_2437MHz_SISO_ANT1



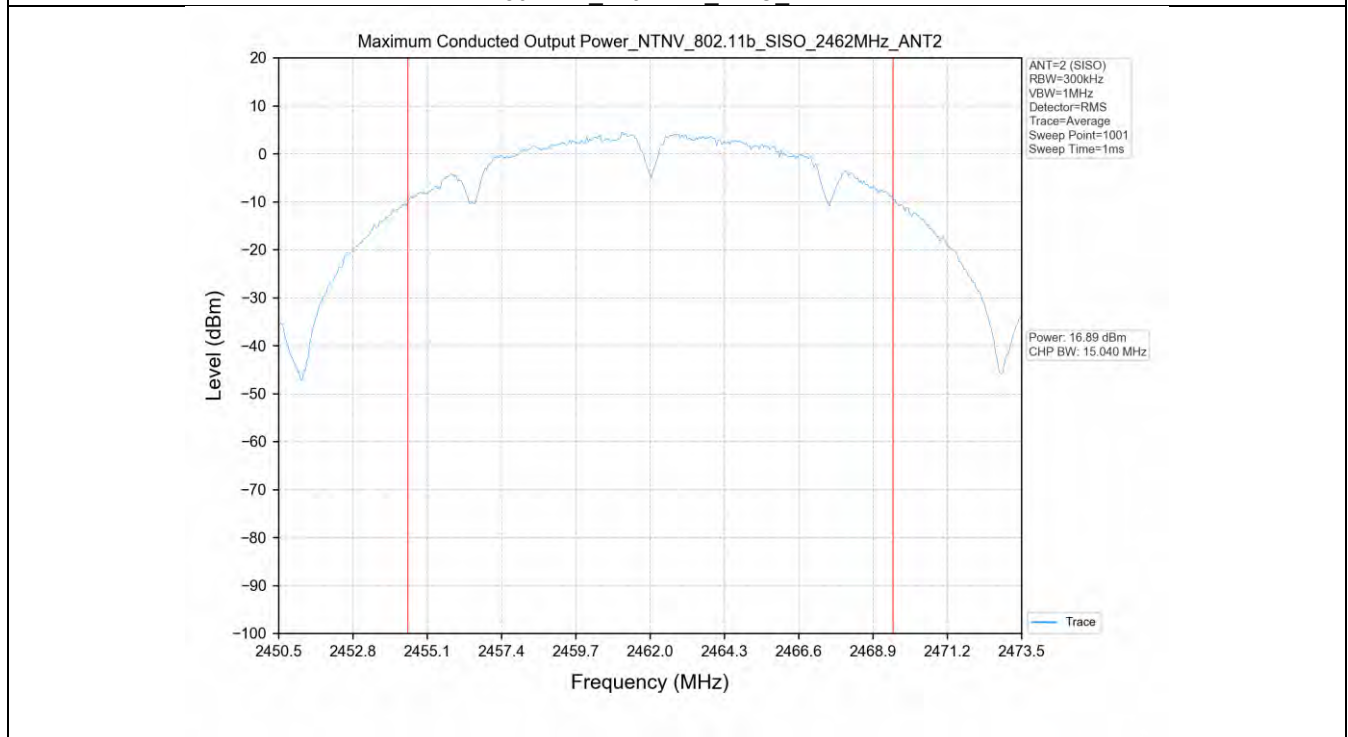
802.11b_2437MHz_SISO_ANT2



802.11b_2462MHz_SISO_ANT1



802.11b_2462MHz_SISO_ANT2



802.11g_2412MHz_SISO_ANT1