

Appendix for 15.247

TABLE OF CONTENTS

Appendix for 15.247.....	1
TABLE OF CONTENTS.....	1
1. Bandwidth.....	2
1.1 Test Result	2
1.2 Test Graph - 6dB Bandwidth.....	2
1.3 Test Graph - 99% Occupied Bandwidth	10
2. Maximum Conducted Output Power	18
2.1 Test Result	18
2.2 Test Graph.....	19
3. Maximum Power Spectral Density (PSD).....	27
3.1 Test Result	27
3.2 Test Graph.....	27
4. Unwanted Emissions in Non-restricted Frequency Bands.....	35
4.1 Test Result	35
4.2 Test Graph.....	37

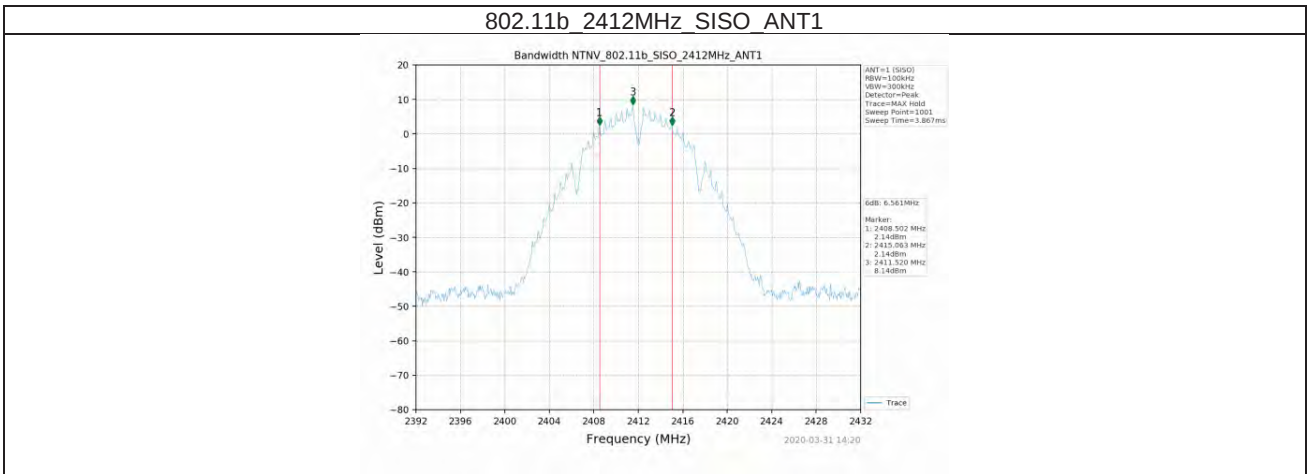
1. Bandwidth

1.1 Test Result

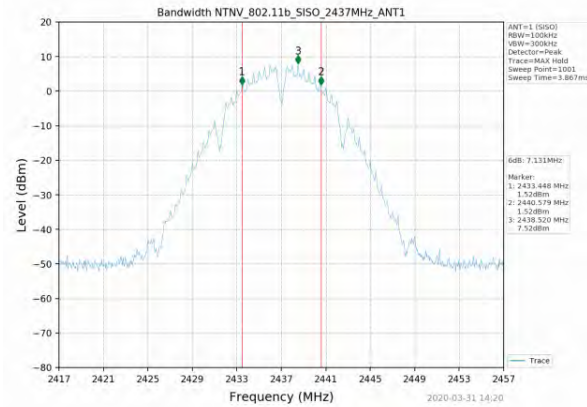
Test Mode	Frequency (MHz)	TX Type	6dB Bandwidth			Verdict
			Test Result (MHz)		Limits (MHz)	
			Ant1	Ant2		
802.11b	2412	SISO	6.561	7.082	≥0.5	PASS
	2437	SISO	7.131	7.075	≥0.5	PASS
	2462	SISO	7.080	7.084	≥0.5	PASS
802.11g	2412	SISO	15.770	15.677	≥0.5	PASS
	2437	SISO	15.857	15.567	≥0.5	PASS
	2462	SISO	16.062	16.088	≥0.5	PASS
802.11n(HT20)	2412	SISO	15.695	15.753	≥0.5	PASS
	2437	SISO	15.936	16.695	≥0.5	PASS
	2462	SISO	16.531	16.248	≥0.5	PASS
802.11n(HT40)	2422	SISO	35.238	35.511	≥0.5	PASS
	2437	SISO	35.194	35.204	≥0.5	PASS
	2452	SISO	35.534	35.536	≥0.5	PASS

Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth		
				Test Result (MHz)		
				Ant1	Ant2	
802.11b	2412	SISO	1	11.490	11.215	Only for Report Use
	2437	SISO	1	11.369	11.295	Only for Report Use
	2462	SISO	1	11.648	11.406	Only for Report Use
802.11g	2412	SISO	1	16.384	16.369	Only for Report Use
	2437	SISO	1	16.388	16.380	Only for Report Use
	2462	SISO	1	16.405	16.396	Only for Report Use
802.11n(HT20)	2412	SISO	1	17.495	17.484	Only for Report Use
	2437	SISO	1	17.492	17.508	Only for Report Use
	2462	SISO	1	17.512	17.516	Only for Report Use
802.11n(HT40)	2422	SISO	1	37.268	37.148	Only for Report Use
	2437	SISO	1	37.140	37.186	Only for Report Use
	2452	SISO	1	37.062	37.342	Only for Report Use

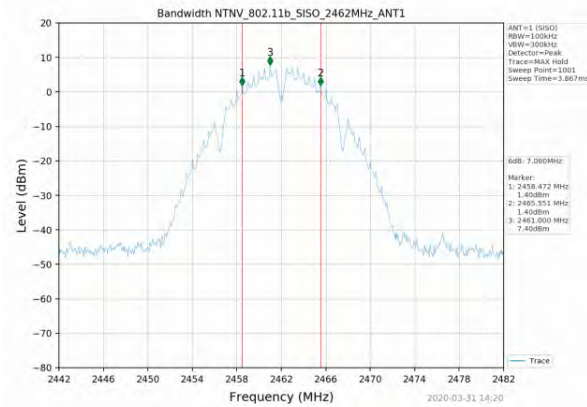
1.2 Test Graph - 6dB Bandwidth



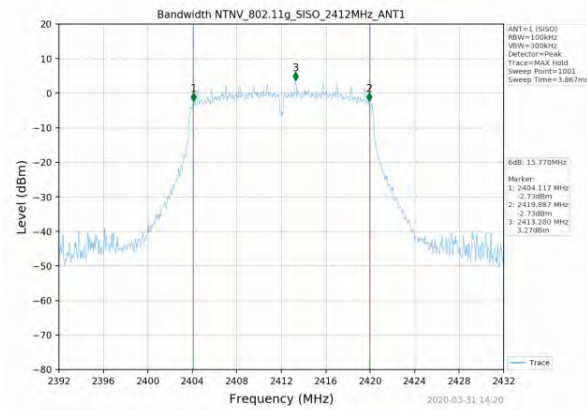
802.11b_2437MHz_SISO_ANT1



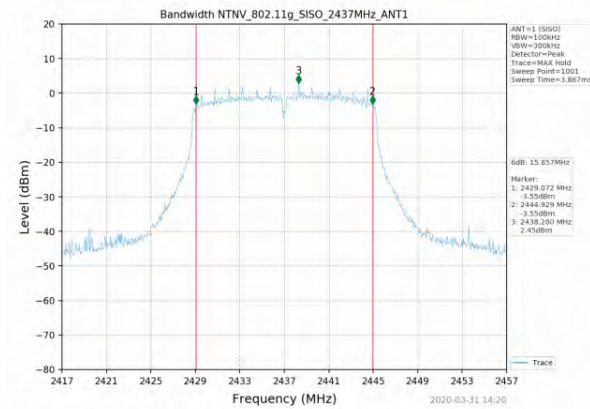
802.11b_2462MHz_SISO_ANT1



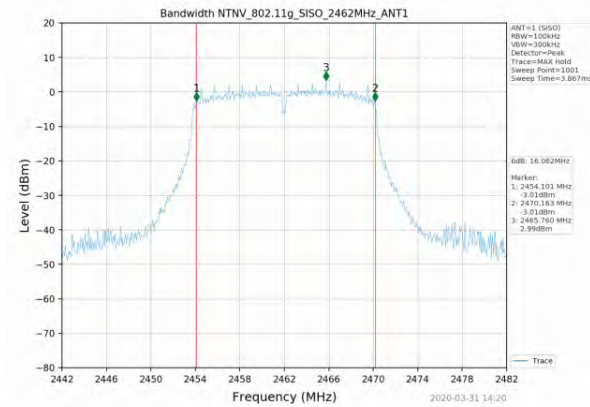
802.11g_2412MHz_SISO_ANT1



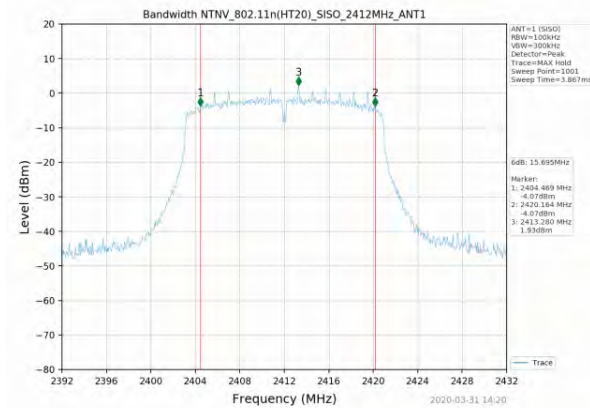
802.11g 2437MHz SISO ANT1



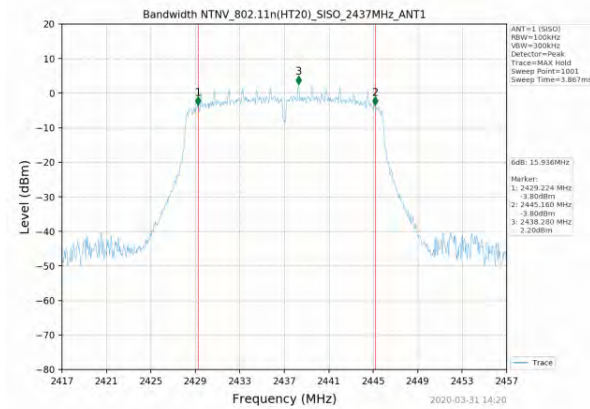
802.11g 2462MHz SISO ANT1



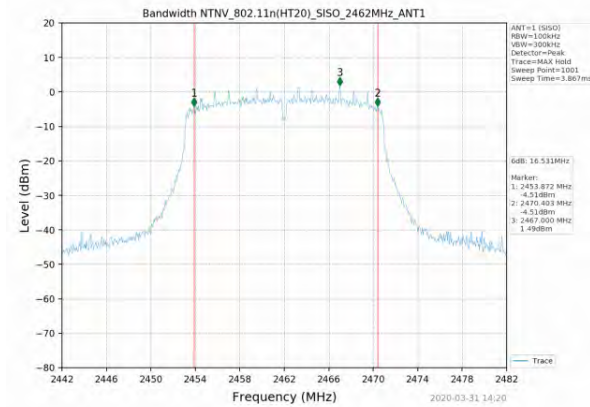
802.11n(HT20) 2412MHz SISO ANT1



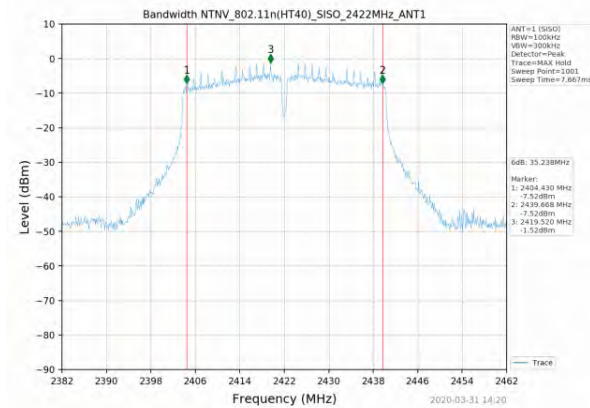
802.11n(HT20) 2437MHz SISO ANT1



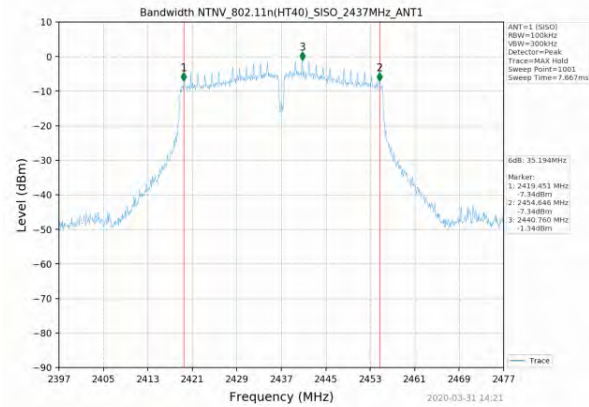
802.11n(HT20) 2462MHz SISO ANT1



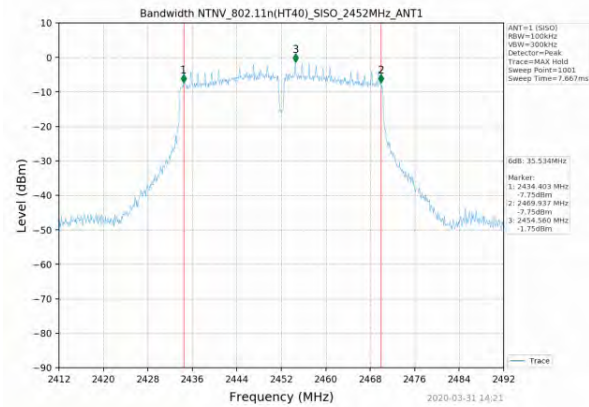
802.11n(HT40) 2422MHz SISO ANT1



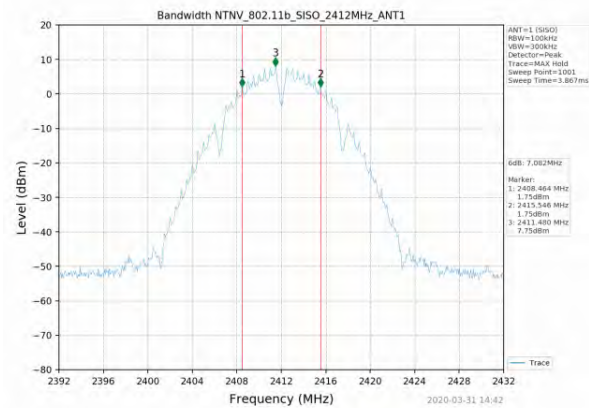
802.11n(HT40) 2437MHz_SISO_ANT1



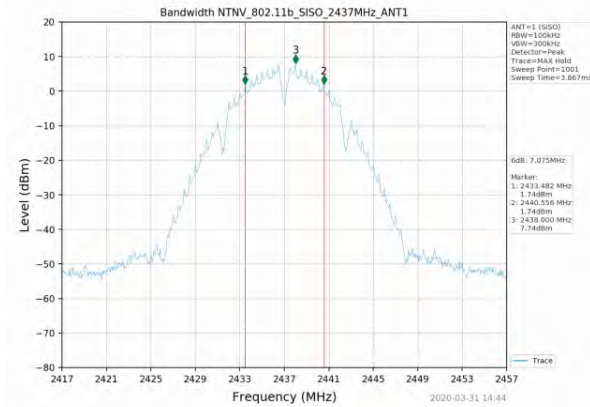
802.11n(HT40) 2452MHz_SISO_ANT1



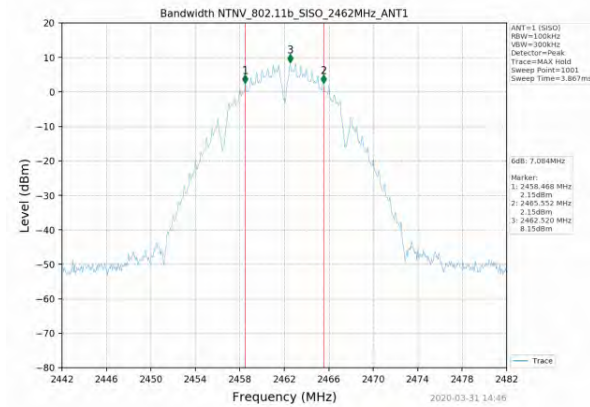
802.11b 2412MHz_SISO_ANT2



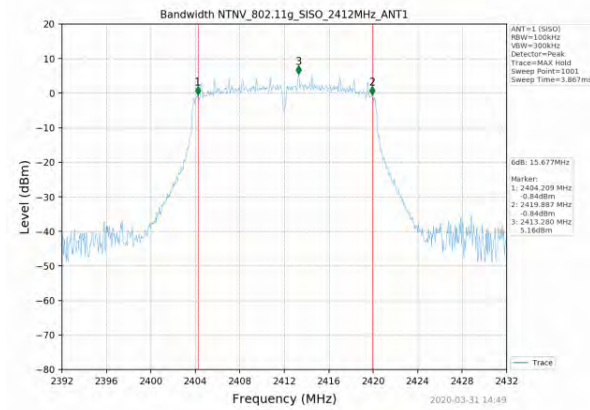
802.11b 2437MHz SISO ANT2



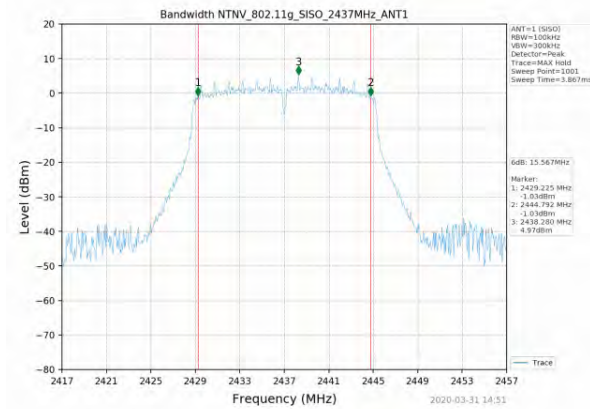
802.11b 2462MHz SISO ANT2



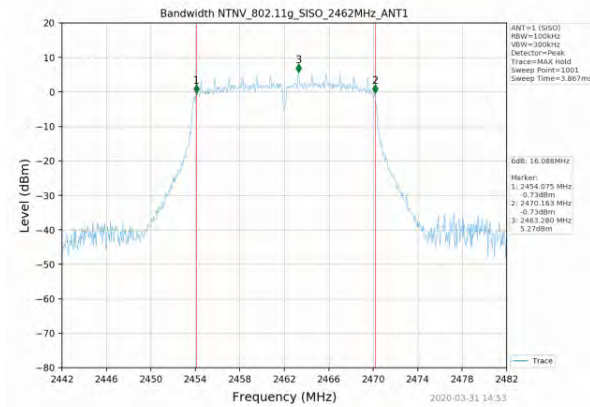
802.11g 2412MHz SISO ANT2



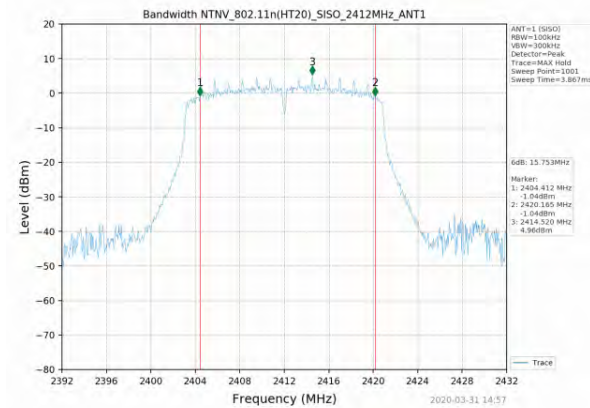
802.11g 2437MHz SISO ANT2



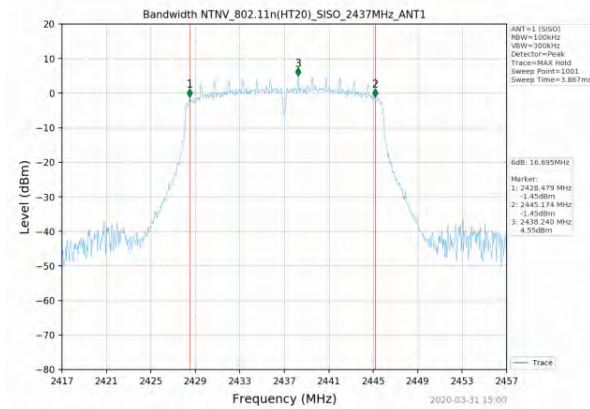
802.11g 2462MHz SISO ANT2



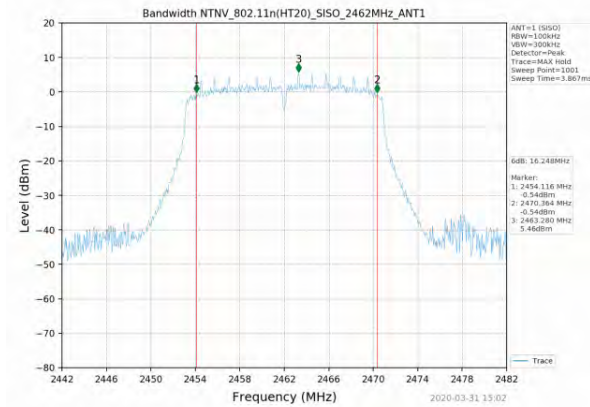
802.11n(HT20) 2412MHz SISO ANT2



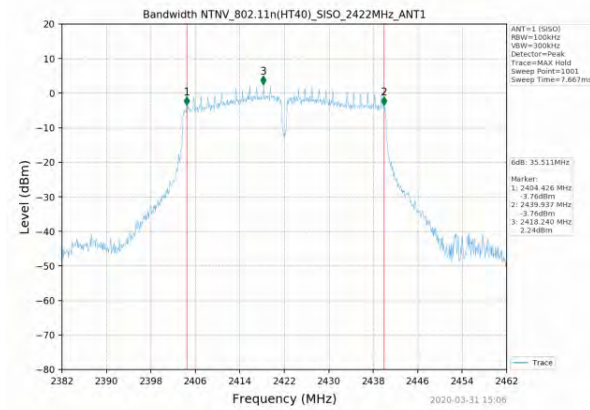
802.11n(HT20) 2437MHz SISO ANT2



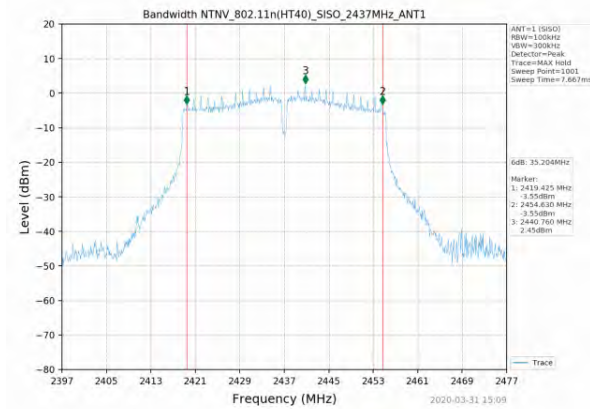
802.11n(HT20) 2462MHz SISO ANT2



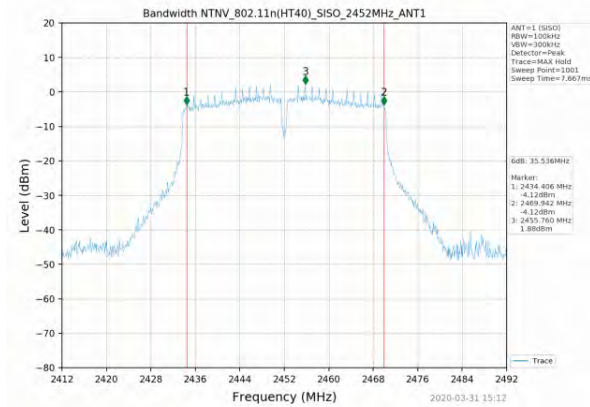
802.11n(HT40) 2422MHz SISO ANT2



802.11n(HT40) 2437MHz SISO ANT2

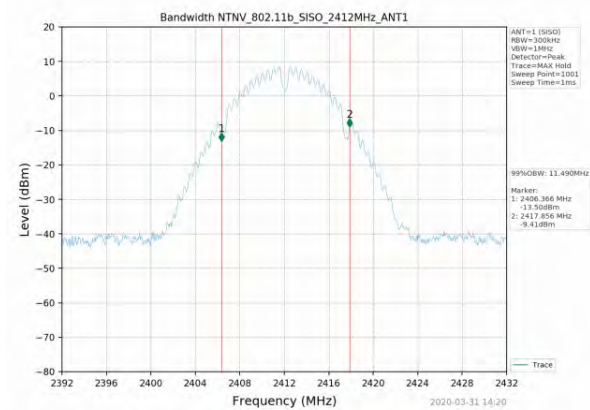


802.11n(HT40) 2452MHz SISO ANT2

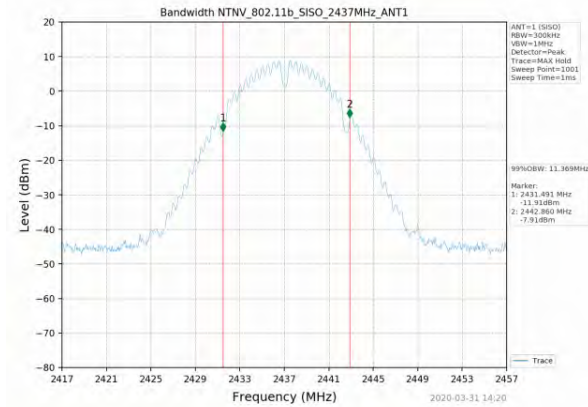


1.3 Test Graph - 99% Occupied Bandwidth

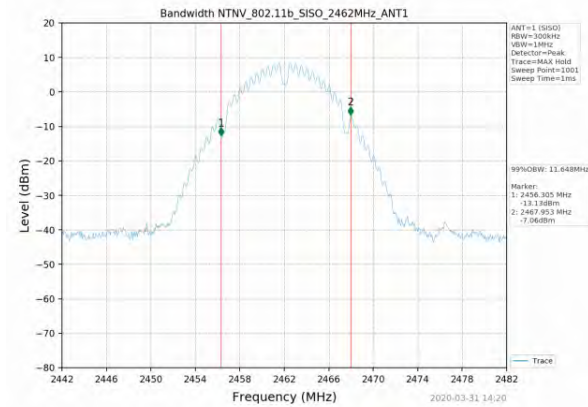
802.11b 2412MHz SISO ANT1



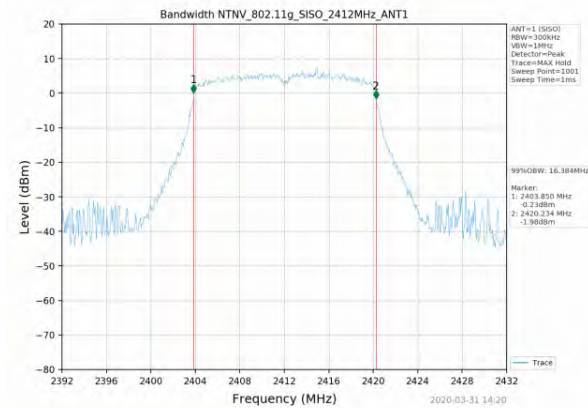
802.11b_2437MHz_SISO_ANT1



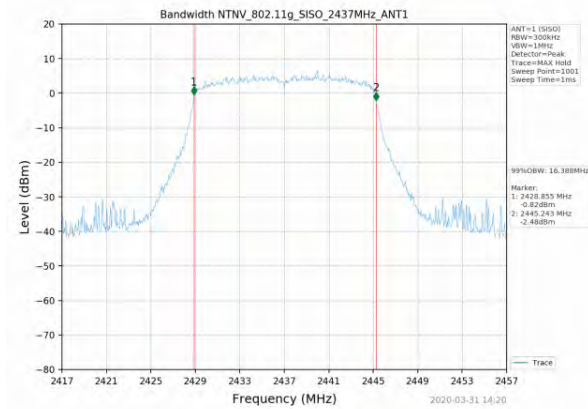
802.11b_2462MHz_SISO_ANT1



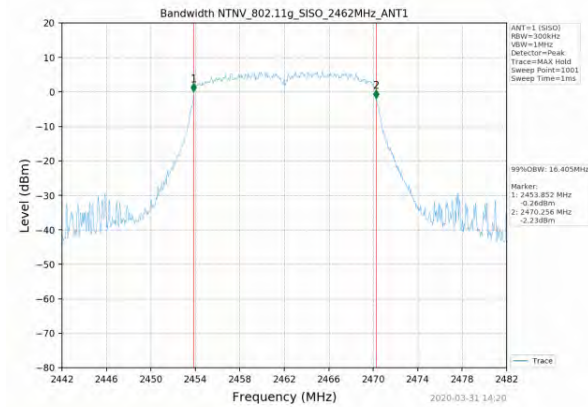
802.11g_2412MHz_SISO_ANT1



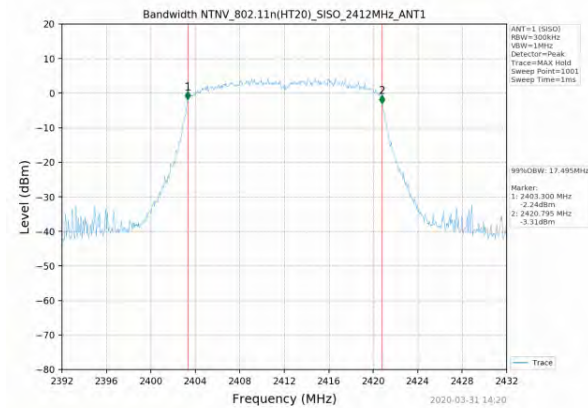
802.11g 2437MHz_SISO_ANT1



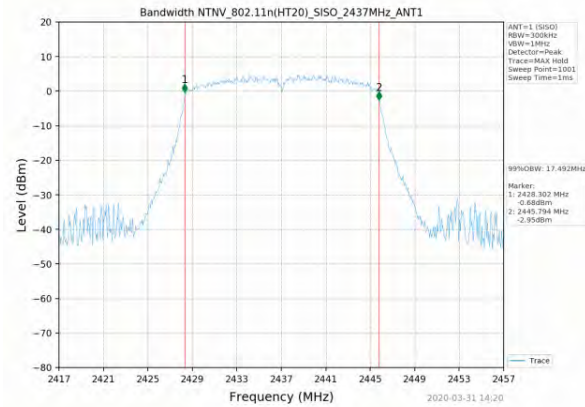
802.11g 2462MHz_SISO_ANT1



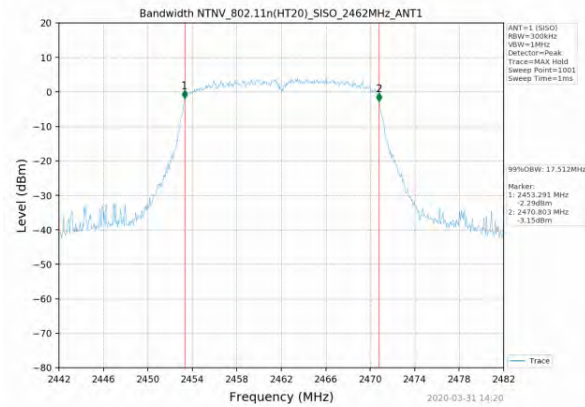
802.11n(HT20) 2412MHz_SISO_ANT1



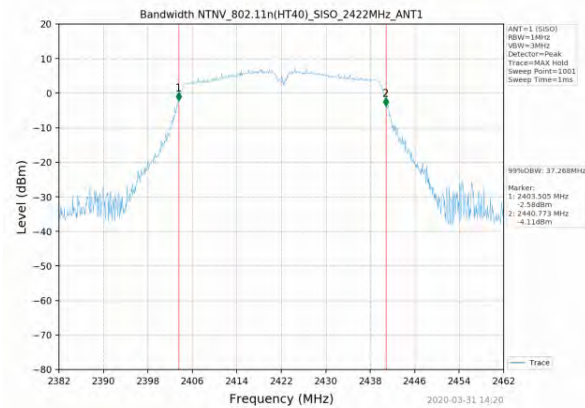
802.11n(HT20) 2437MHz SISO ANT1



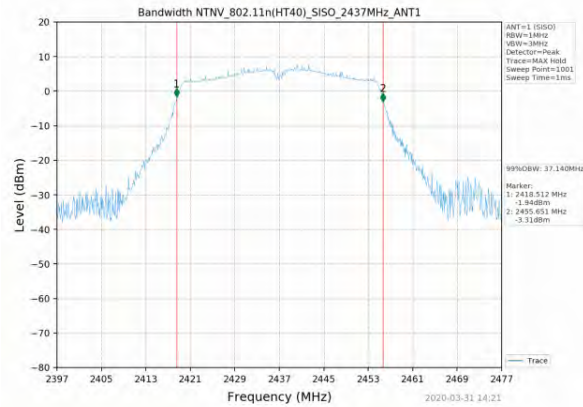
802.11n(HT20) 2462MHz SISO ANT1



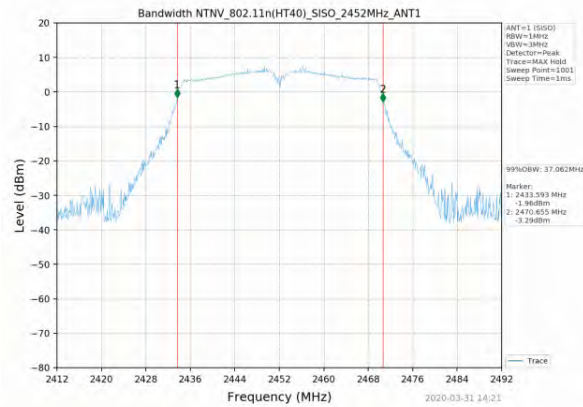
802.11n(HT40) 2422MHz SISO ANT1



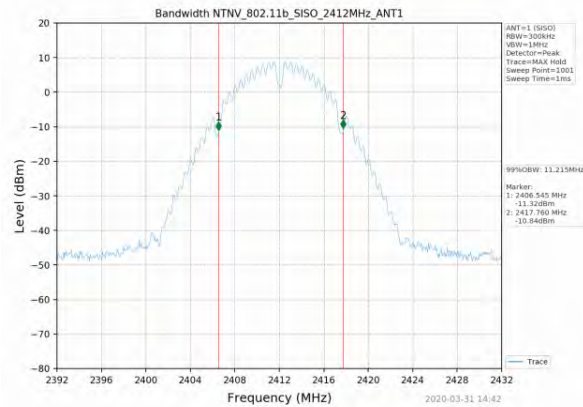
802.11n(HT40) 2437MHz SISO ANT1



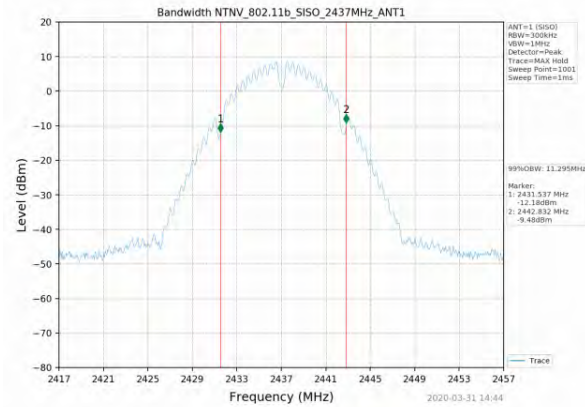
802.11n(HT40) 2452MHz SISO ANT1



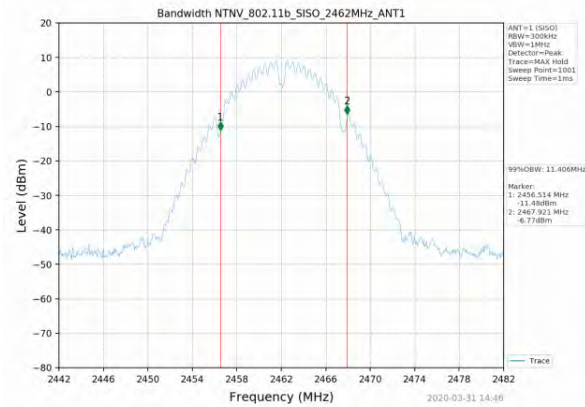
802.11b 2412MHz SISO ANT2



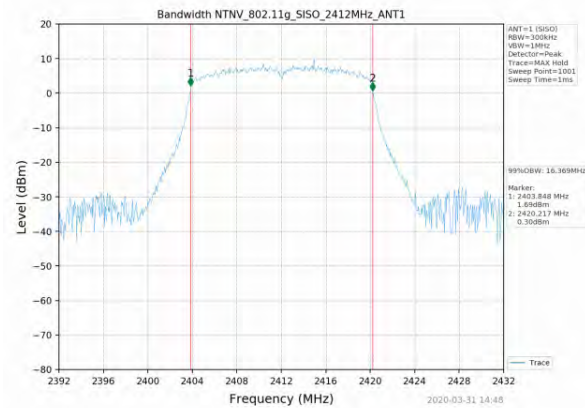
802.11b_2437MHz_SISO_ANT2



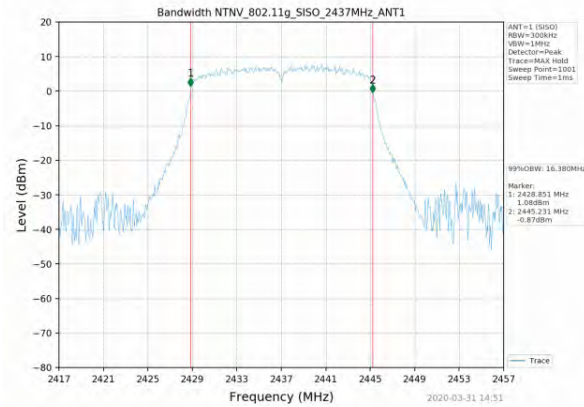
802.11b_2462MHz_SISO_ANT2



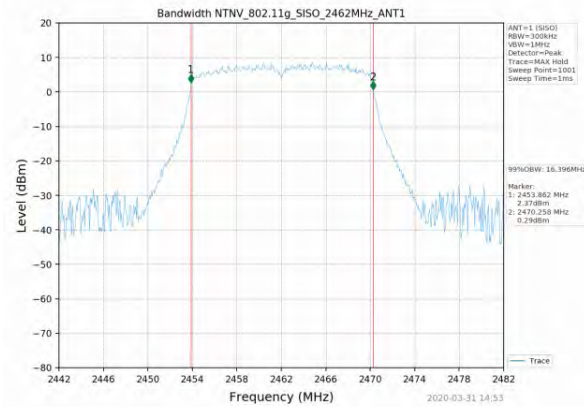
802.11g_2412MHz_SISO_ANT2



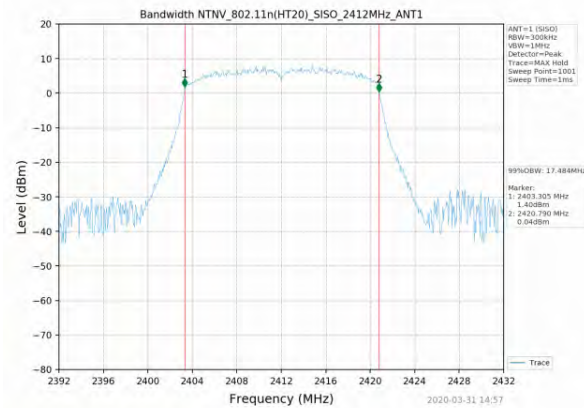
802.11g 2437MHz_SISO_ANT2



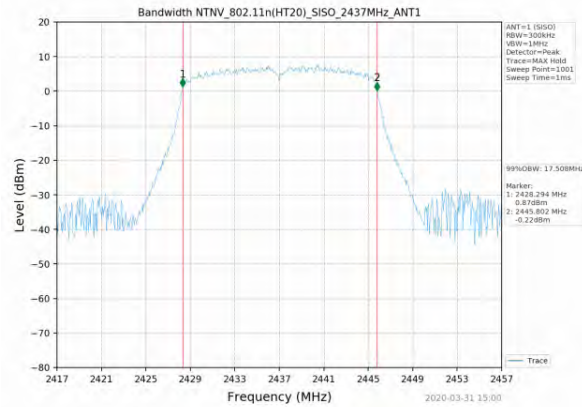
802.11g 2462MHz_SISO_ANT2



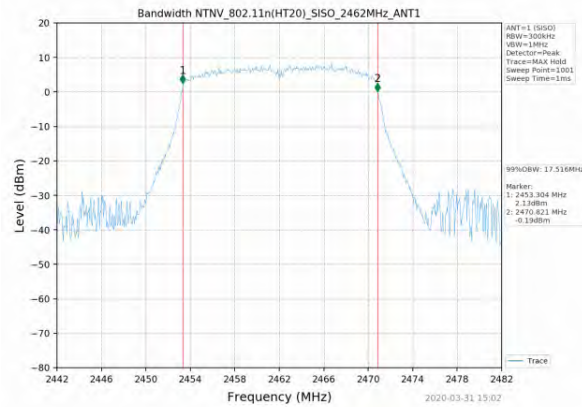
802.11n(HT20) 2412MHz_SISO_ANT2



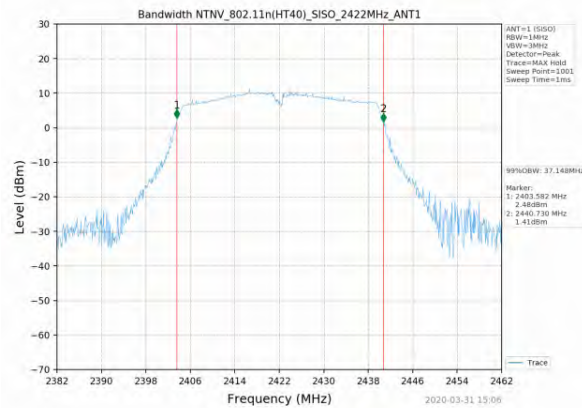
802.11n(HT20) 2437MHz SISO ANT2



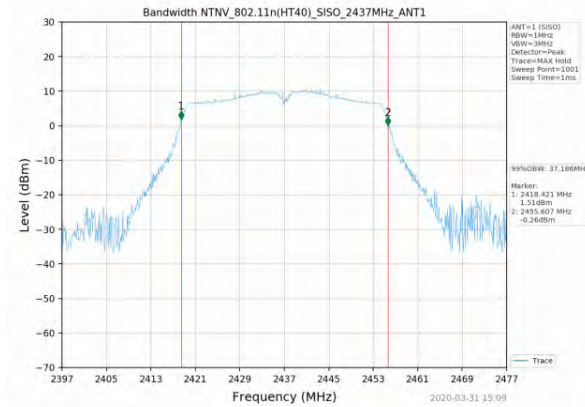
802.11n(HT20) 2462MHz SISO ANT2



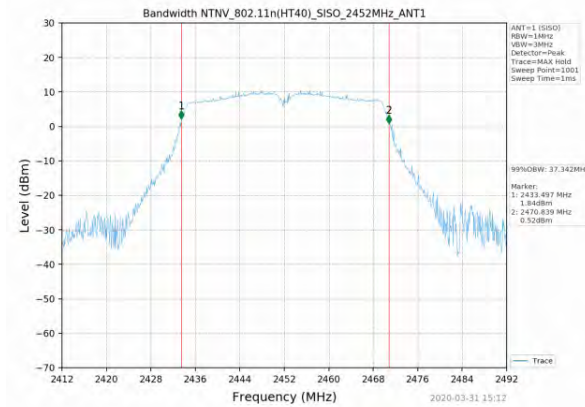
802.11n(HT40) 2422MHz SISO ANT2



802.11n(HT40) 2437MHz SISO ANT2



802.11n(HT40) 2452MHz SISO ANT2

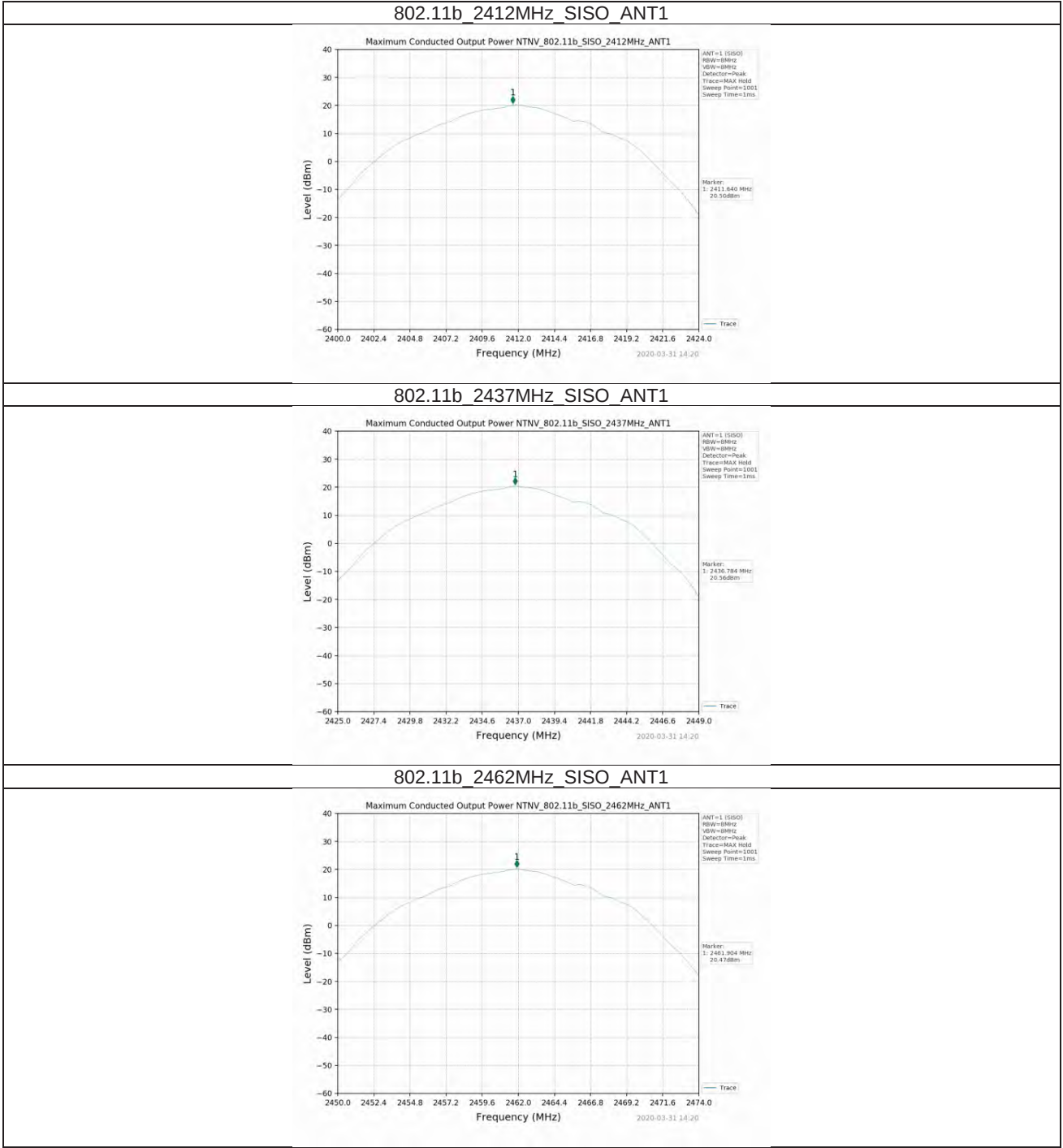


2. Maximum Conducted Output Power

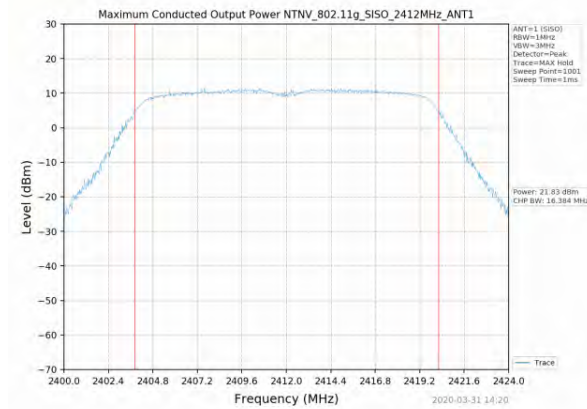
2.1 Test Result

Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)			Limits (dBm)	Verdict
			Ant 1	Ant 2	Output power Total		
802.11b	2412	SISO	20.50	20.75	/	30	PASS
	2437	SISO	20.56	20.22	/	30	PASS
	2462	SISO	20.47	20.71	/	30	PASS
802.11g	2412	SISO	21.83	23.70	/	30	PASS
	2437	SISO	21.26	23.43	/	30	PASS
	2462	SISO	21.90	23.99	/	30	PASS
802.11n(HT20)	2412	SISO	20.17	23.45	25.12	29.99	PASS
	2437	SISO	20.50	23.30	25.13	29.99	PASS
	2462	SISO	20.21	23.82	25.39	29.99	PASS
802.11n(HT40)	2422	SISO	19.87	23.61	25.14	29.99	PASS
	2437	SISO	19.59	23.23	24.79	29.99	PASS
	2452	SISO	19.89	23.43	25.02	29.99	PASS

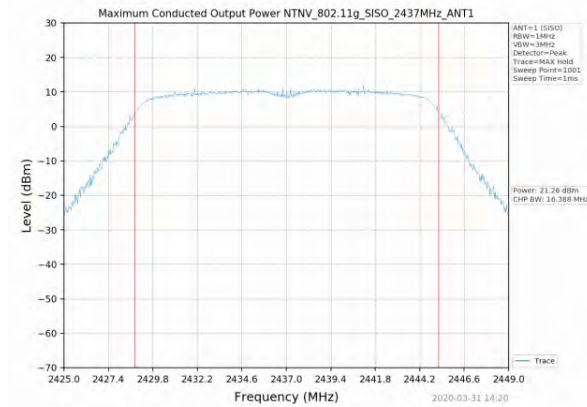
2.2 Test Graph



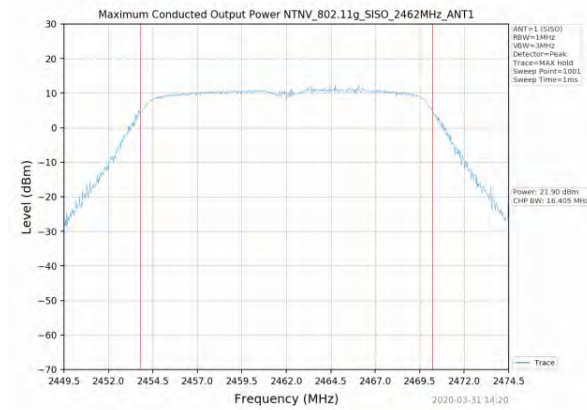
802.11g 2412MHz SISO ANT1



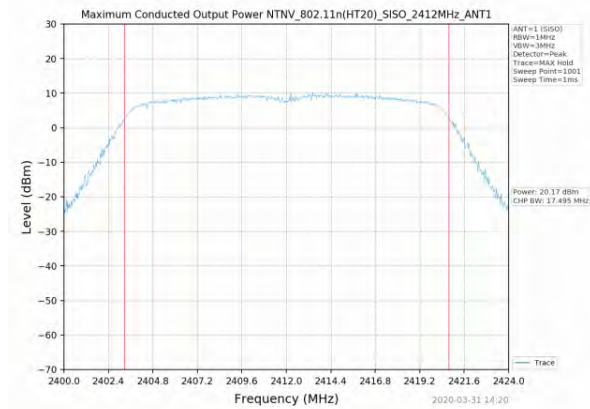
802.11g 2437MHz SISO ANT1



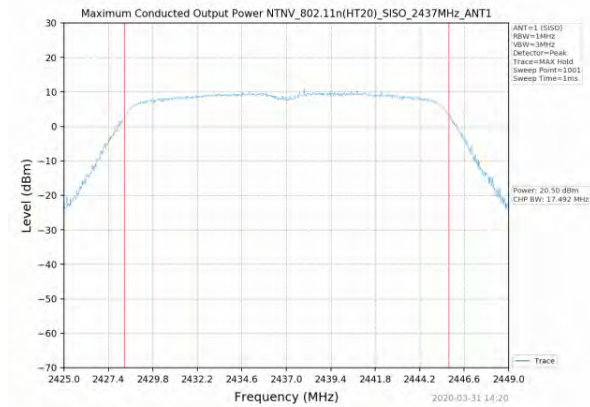
802.11g 2462MHz SISO ANT1



802.11n(HT20) 2412MHz SISO ANT1



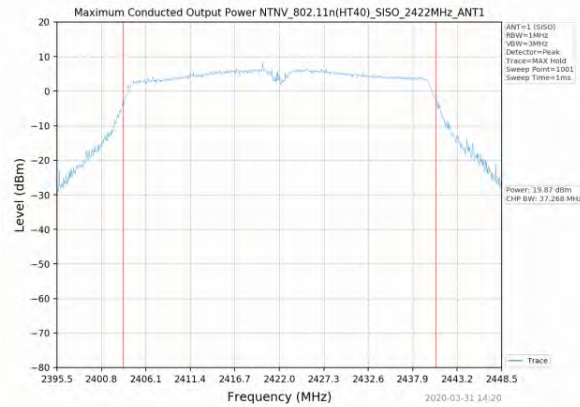
802.11n(HT20) 2437MHz SISO ANT1



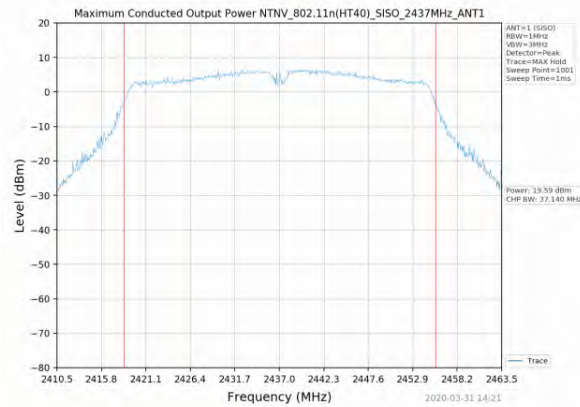
802.11n(HT20) 2462MHz SISO ANT1



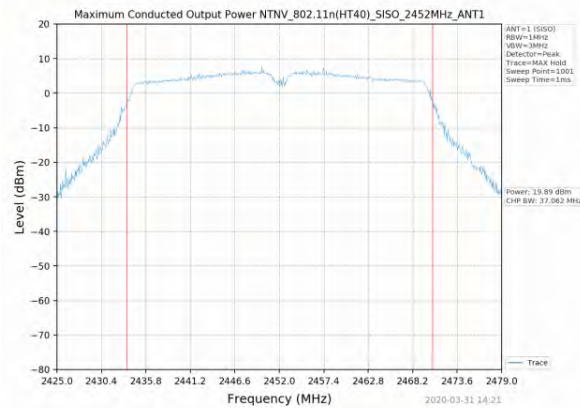
802.11n(HT40) 2422MHz SISO ANT1



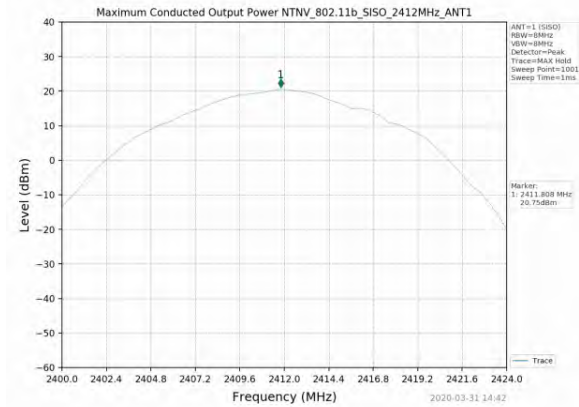
802.11n(HT40) 2437MHz SISO ANT1



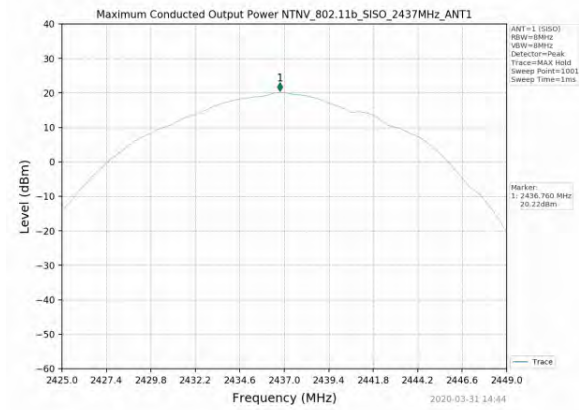
802.11n(HT40) 2452MHz SISO ANT1



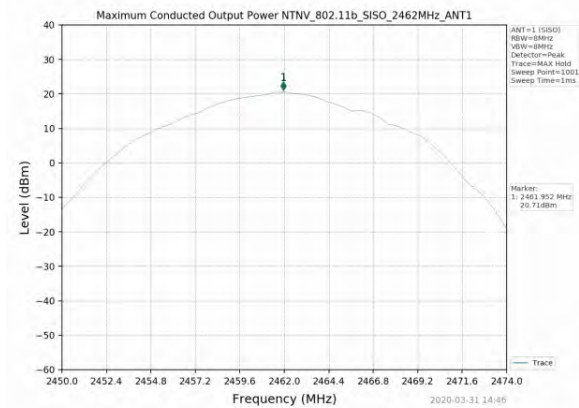
802.11b 2412MHz SISO_ANT2



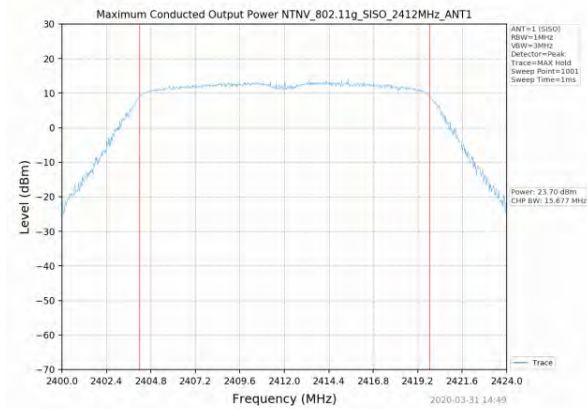
802.11b 2437MHz SISO_ANT2



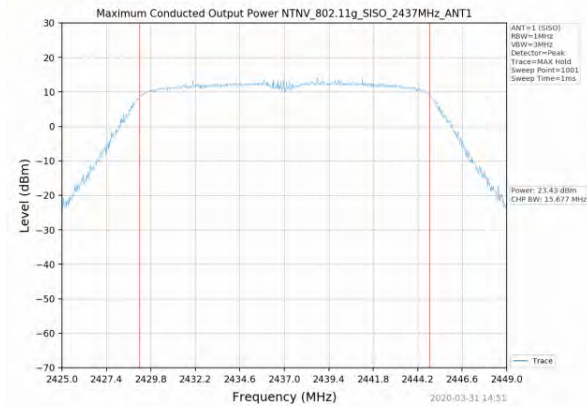
802.11b 2462MHz SISO_ANT2



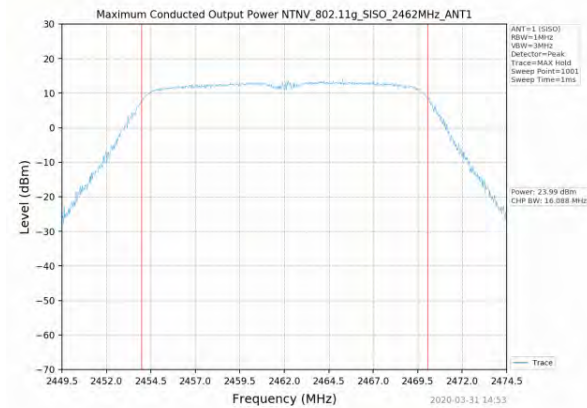
802.11g 2412MHz SISO ANT2



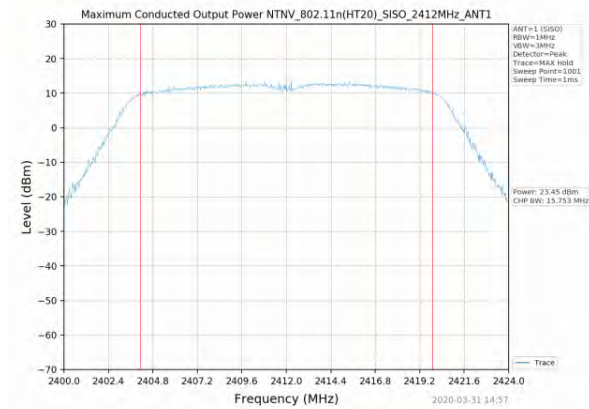
802.11g 2437MHz SISO ANT2



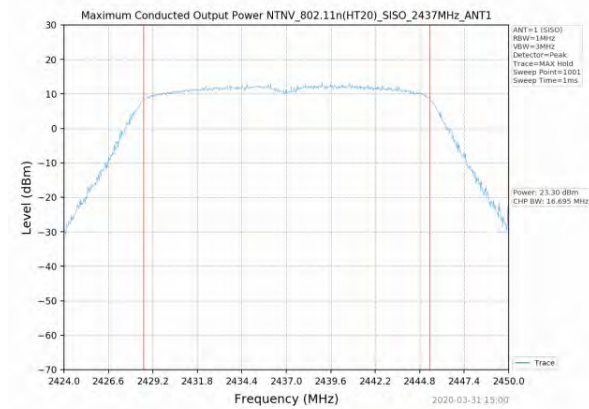
802.11g 2462MHz SISO ANT2



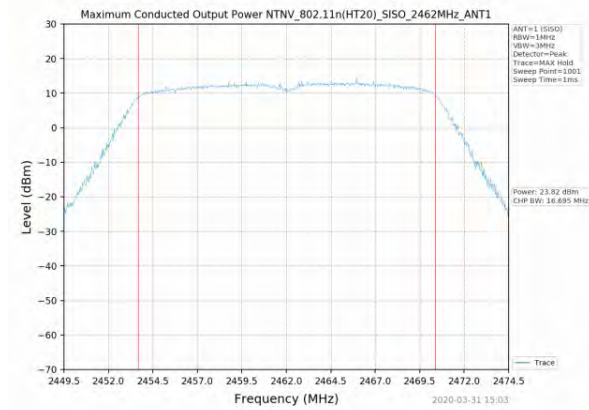
802.11n(HT20) 2412MHz SISO ANT2



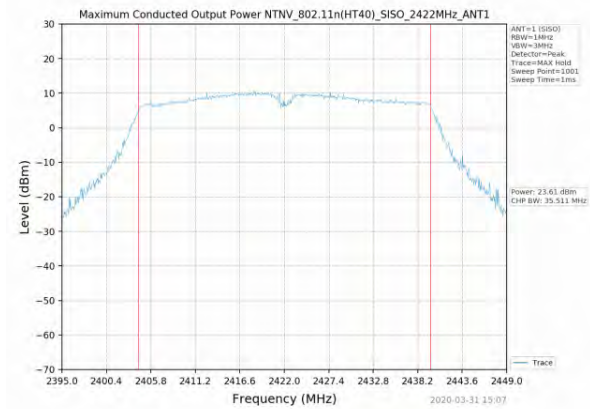
802.11n(HT20) 2437MHz SISO ANT2



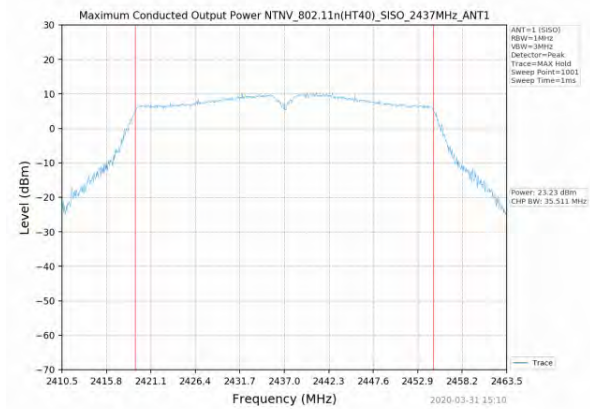
802.11n(HT20) 2462MHz SISO ANT2



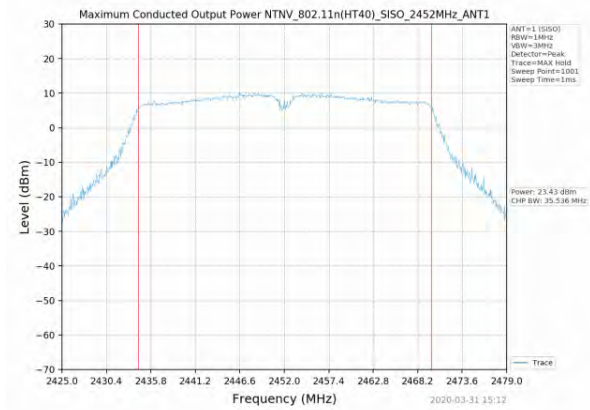
802.11n(HT40) 2422MHz SISO ANT2



802.11n(HT40) 2437MHz SISO ANT2



802.11n(HT40) 2452MHz SISO ANT2

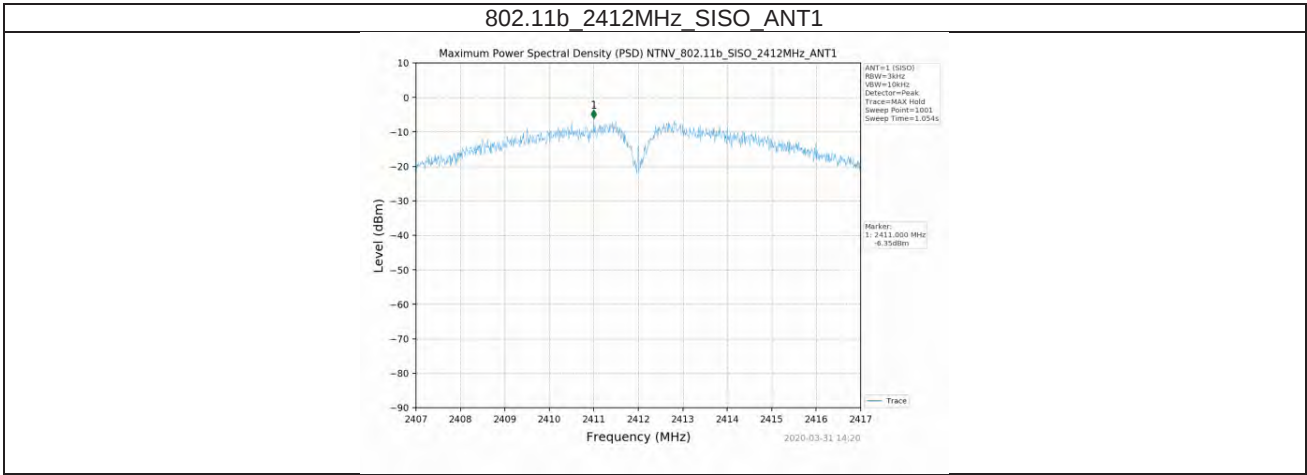


3. Maximum Power Spectral Density (PSD)

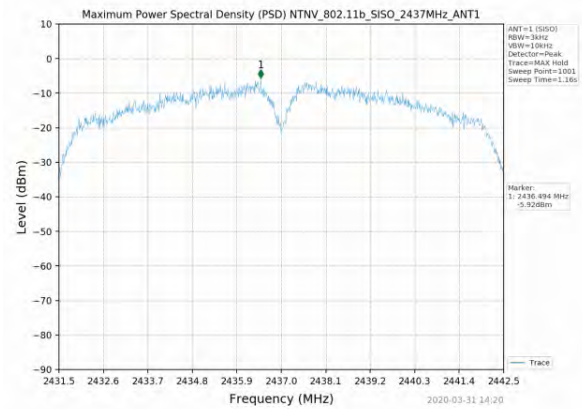
3.1 Test Result

Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)			Limits (dBm/3kHz)	Verdict
			Ant 1	Ant 2	Output power Total		
802.11b	2412	SISO	-6.35	-6.14	/	≤8	PASS
	2437	SISO	-5.92	-6.33	/	≤8	PASS
	2462	SISO	-6.33	-5.71	/	≤8	PASS
802.11g	2412	SISO	-10.66	-8.64	/	≤8	PASS
	2437	SISO	-11.64	-8.97	/	≤8	PASS
	2462	SISO	-10.80	-8.96	/	≤8	PASS
802.11n(HT20)	2412	SISO	-12.48	-8.72	-7.19	≤7.99	PASS
	2437	SISO	-12.27	-9.93	-7.93	≤7.99	PASS
	2462	SISO	-13.13	-8.76	-7.41	≤7.99	PASS
802.11n(HT40)	2422	SISO	-15.93	-9.88	-8.92	≤7.99	PASS
	2437	SISO	-15.84	-11.45	-10.10	≤7.99	PASS
	2452	SISO	-15.60	-11.98	-10.41	≤7.99	PASS

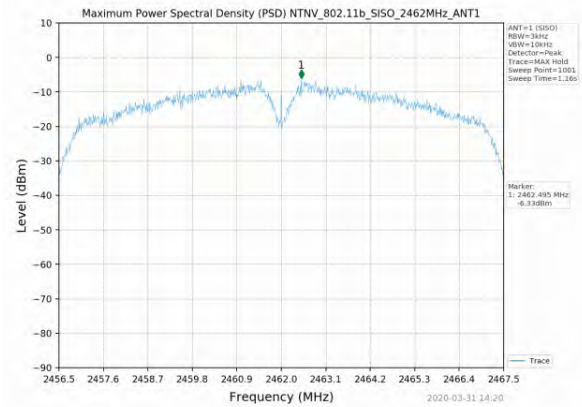
3.2 Test Graph



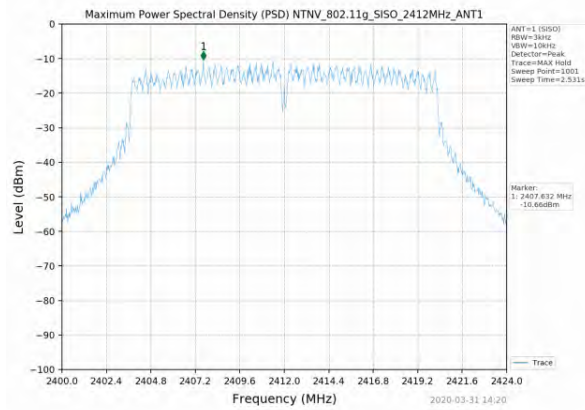
802.11b_2437MHz_SISO_ANT1



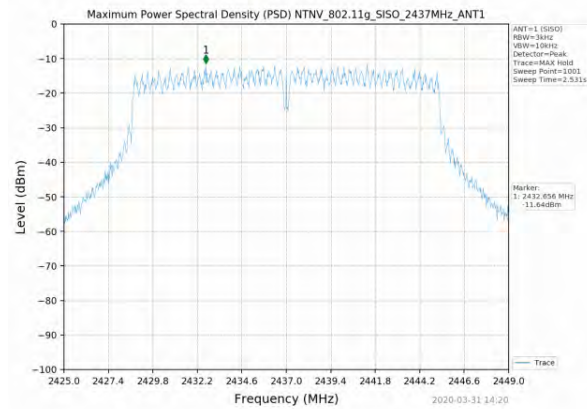
802.11b_2462MHz_SISO_ANT1



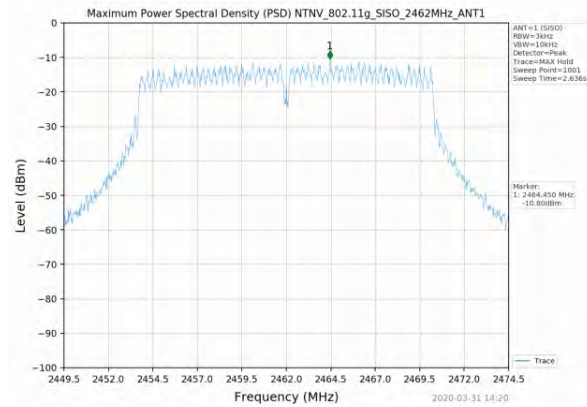
802.11g_2412MHz_SISO_ANT1



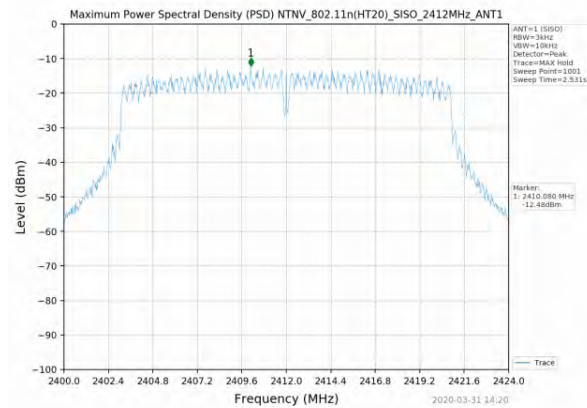
802.11g_2437MHz_SISO_ANT1



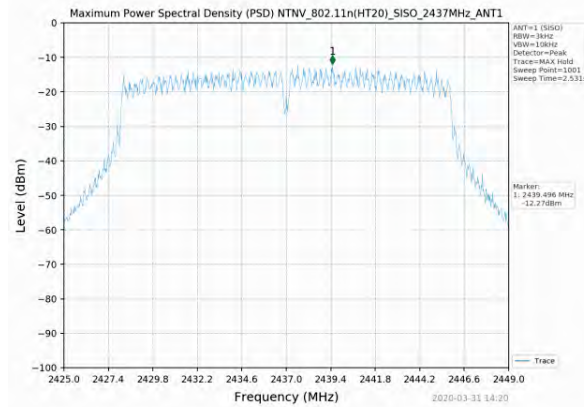
802.11g_2462MHz_SISO_ANT1



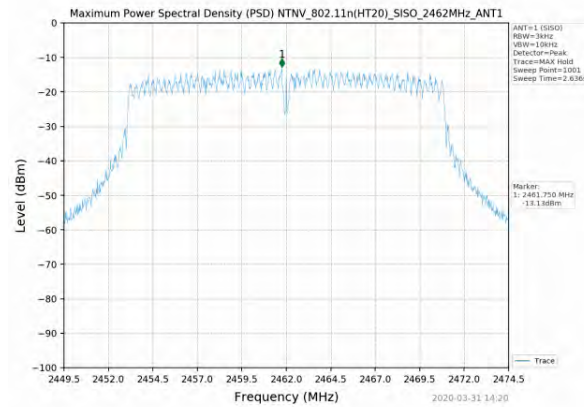
802.11n(HT20)_2412MHz_SISO_ANT1



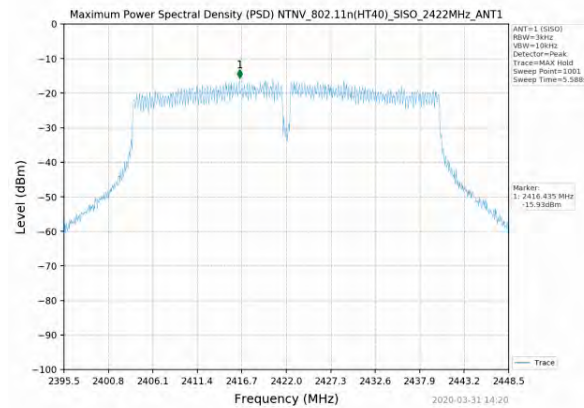
802.11n(HT20) 2437MHz SISO ANT1



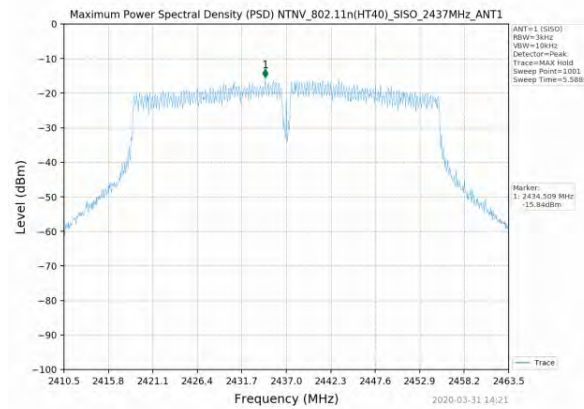
802.11n(HT20) 2462MHz SISO ANT1



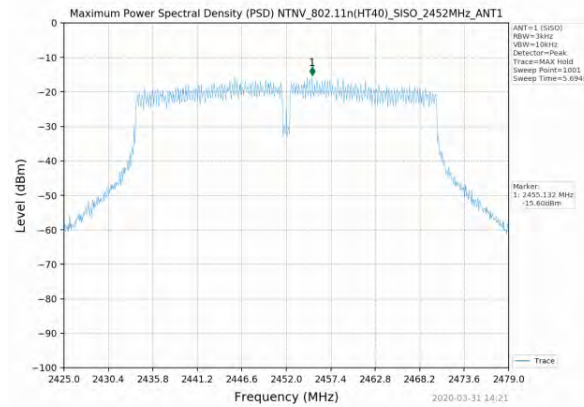
802.11n(HT40) 2422MHz SISO ANT1



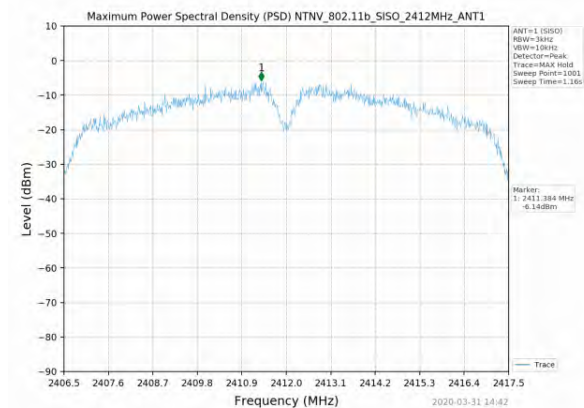
802.11n(HT40) 2437MHz SISO ANT1



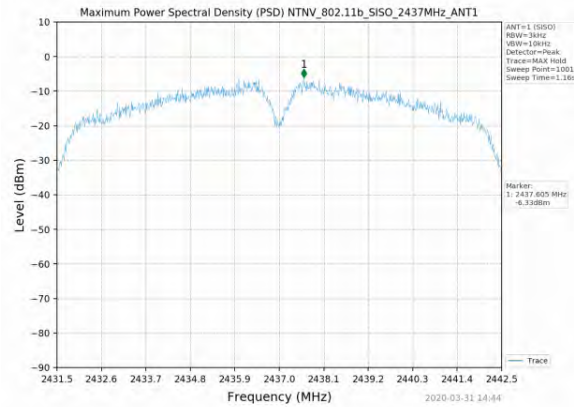
802.11n(HT40) 2452MHz SISO ANT1



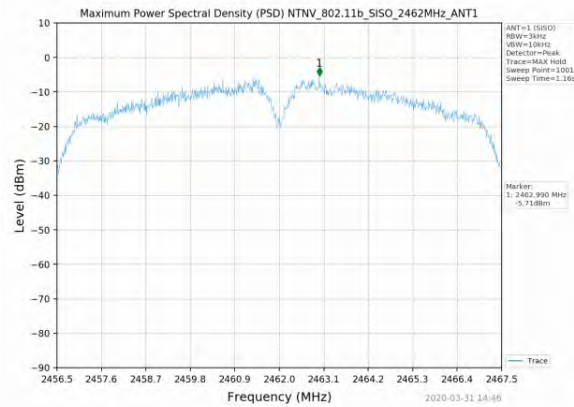
802.11b 2412MHz SISO ANT2



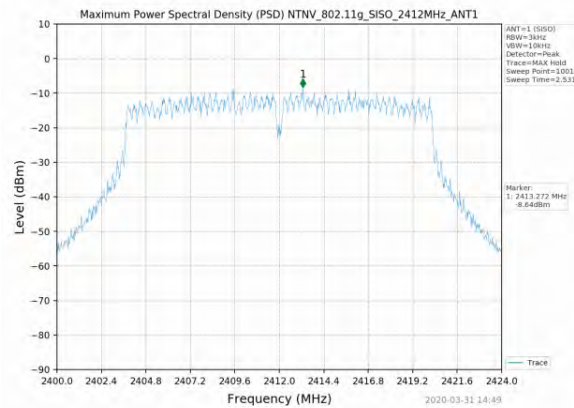
802.11b_2437MHz_SISO_ANT2



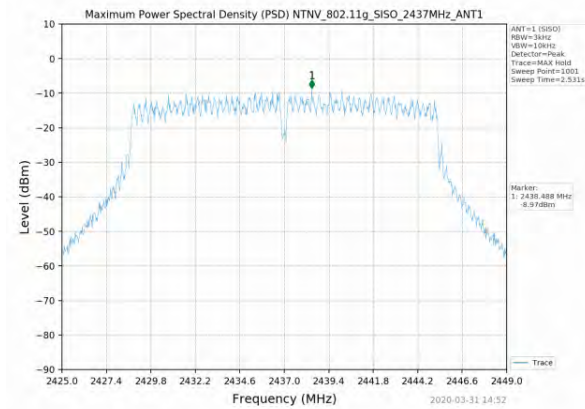
802.11b_2462MHz_SISO_ANT2



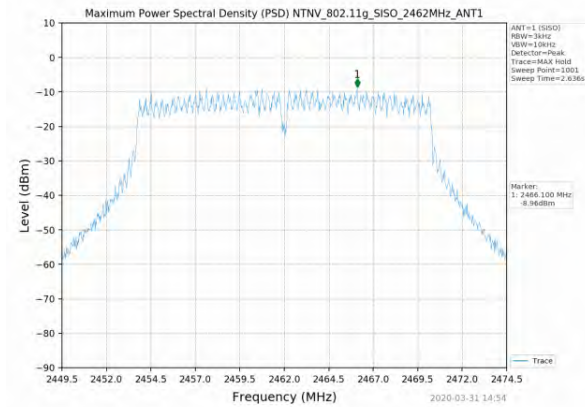
802.11g_2412MHz_SISO_ANT2



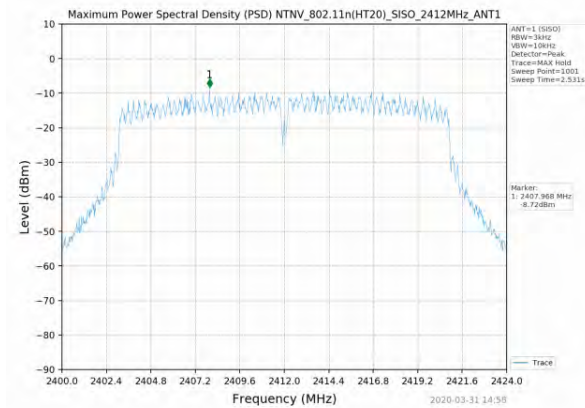
802.11g_2437MHz_SISO_ANT2



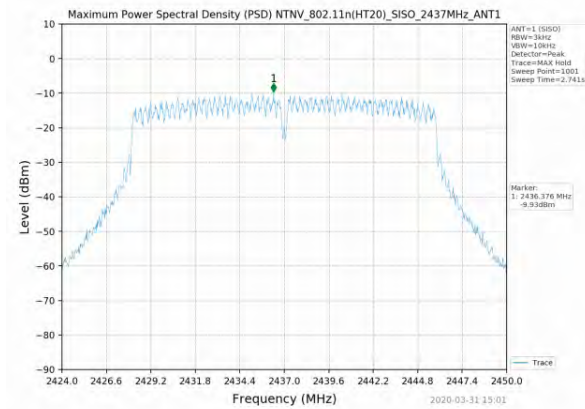
802.11g_2462MHz_SISO_ANT2



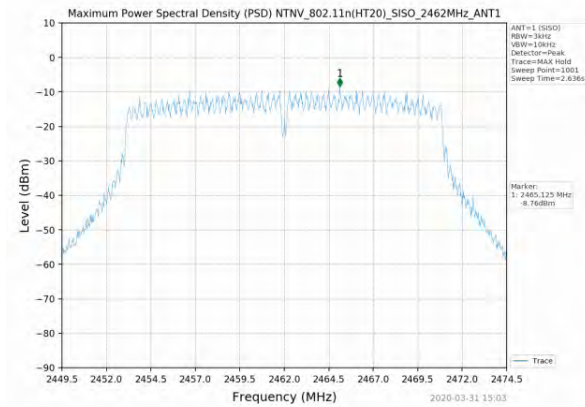
802.11n(HT20)_2412MHz_SISO_ANT2



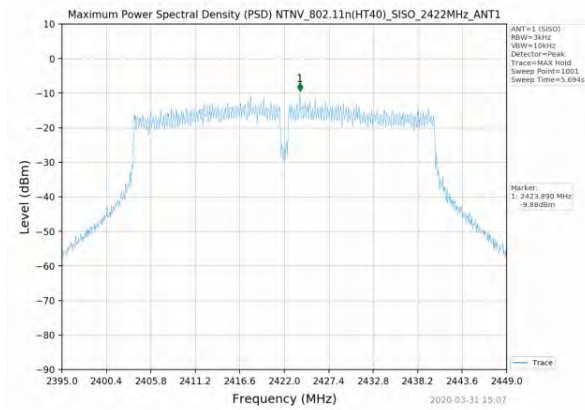
802.11n(HT20) 2437MHz SISO ANT2

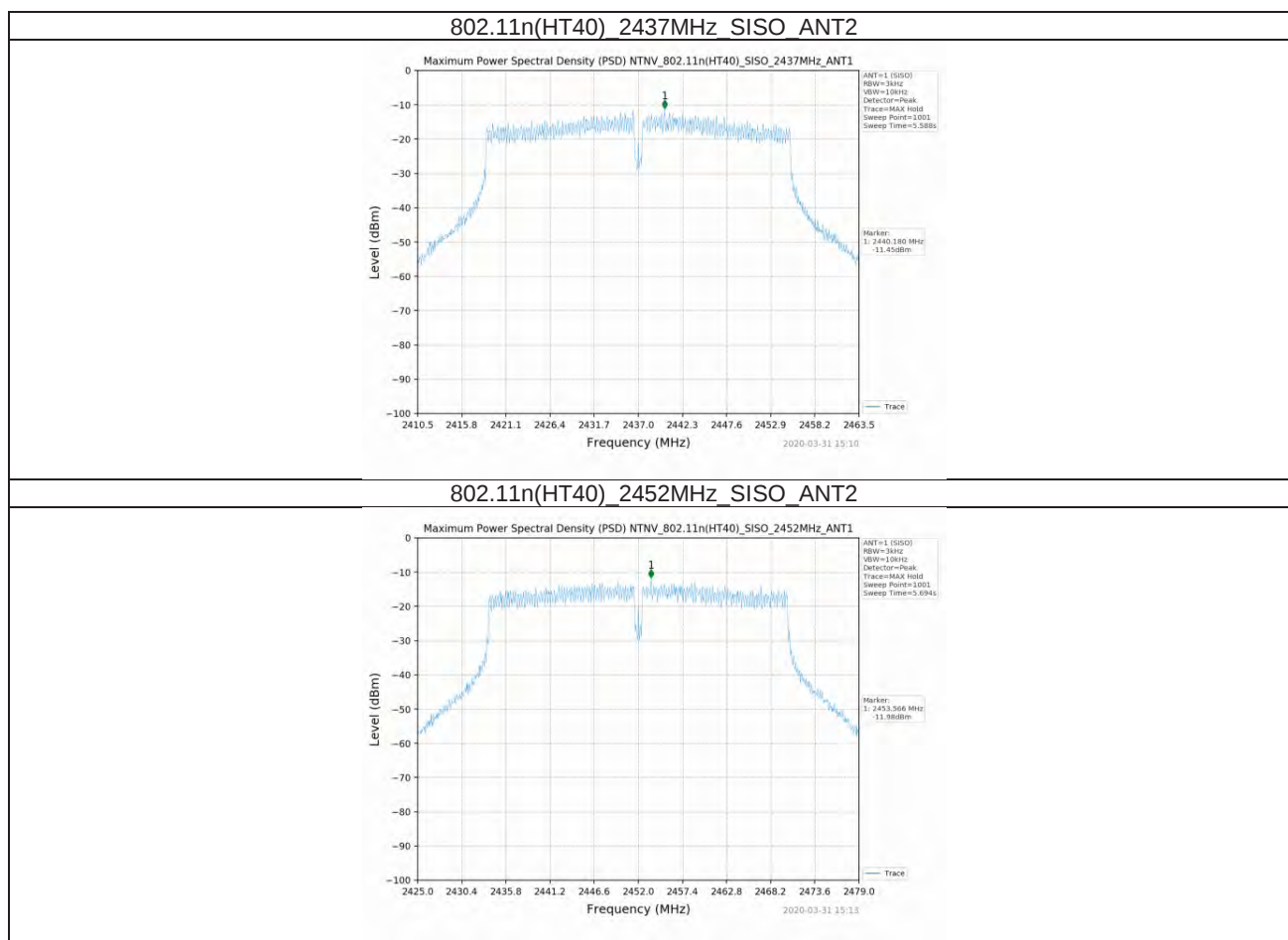


802.11n(HT20) 2462MHz SISO ANT2



802.11n(HT40) 2422MHz SISO ANT2





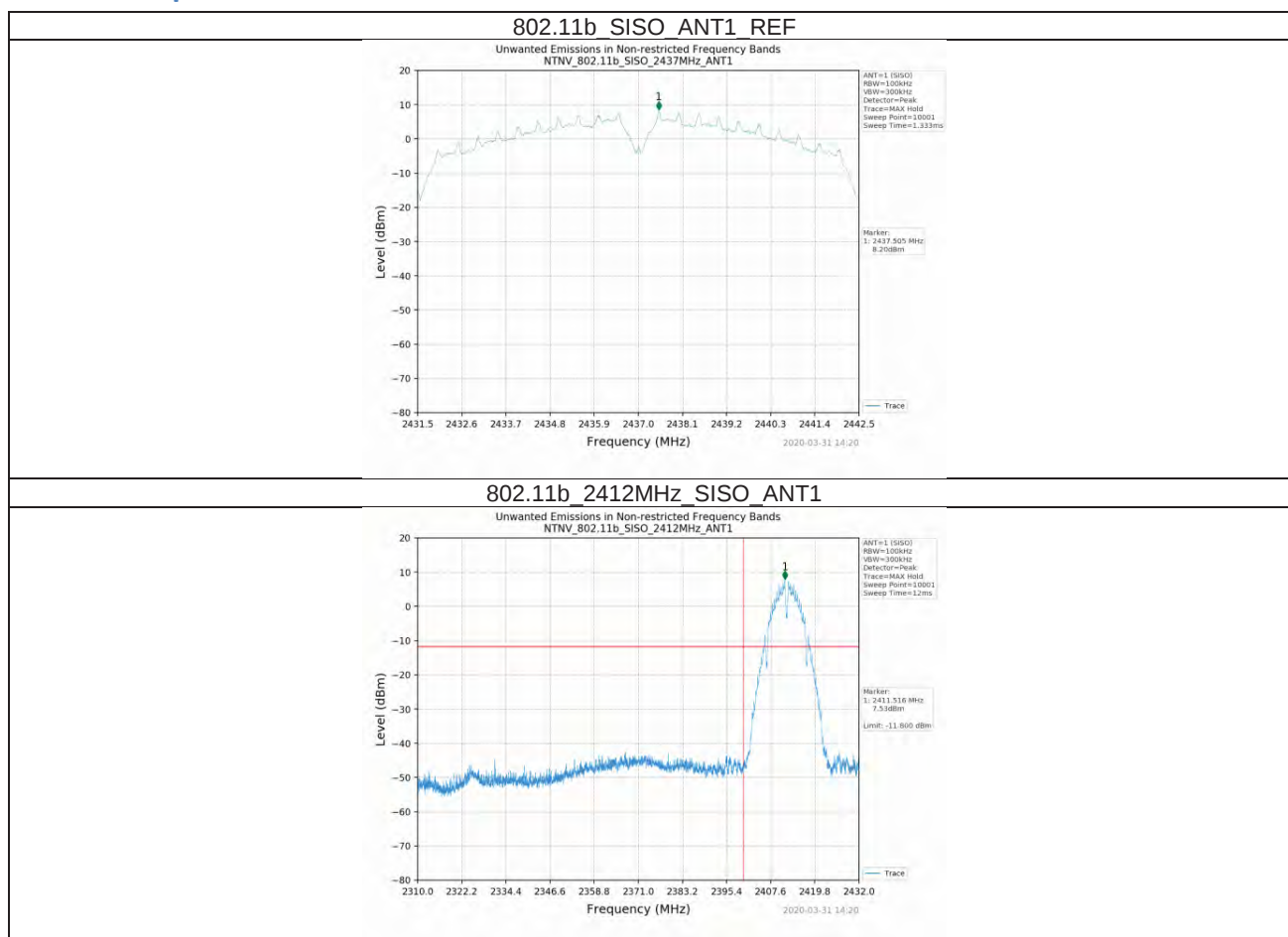
4. Unwanted Emissions in Non-restricted Frequency Bands

4.1 Test Result

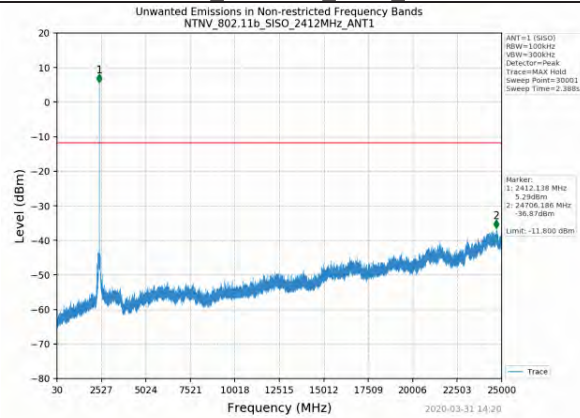
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
802.11b	2412	SISO	1	Refer to test graph	-11.80	PASS
	2437	SISO	1	Refer to test graph	-11.80	PASS
	2462	SISO	1	Refer to test graph	-11.80	PASS
802.11g	2412	SISO	1	Refer to test graph	-16.82	PASS
	2437	SISO	1	Refer to test graph	-16.82	PASS
	2462	SISO	1	Refer to test graph	-16.82	PASS
802.11n(HT20)	2412	SISO	1	Refer to test graph	-17.91	PASS
	2437	SISO	1	Refer to test graph	-17.91	PASS
	2462	SISO	1	Refer to test graph	-17.91	PASS
802.11n(HT40)	2422	SISO	1	Refer to test graph	-20.85	PASS
	2437	SISO	1	Refer to test graph	-20.85	PASS
	2452	SISO	1	Refer to test graph	-20.85	PASS

Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
802.11b	2412	SISO	2	Refer to test graph	-11.51	PASS
	2437	SISO	2	Refer to test graph	-11.51	PASS
	2462	SISO	2	Refer to test graph	-11.51	PASS
802.11g	2412	SISO	2	Refer to test graph	-14.70	PASS
	2437	SISO	2	Refer to test graph	-14.70	PASS
	2462	SISO	2	Refer to test graph	-14.70	PASS
802.11n(HT20)	2412	SISO	2	Refer to test graph	-14.79	PASS
	2437	SISO	2	Refer to test graph	-14.79	PASS
	2462	SISO	2	Refer to test graph	-14.79	PASS
802.11n(HT40)	2422	SISO	2	Refer to test graph	-17.48	PASS
	2437	SISO	2	Refer to test graph	-17.48	PASS
	2452	SISO	2	Refer to test graph	-17.48	PASS

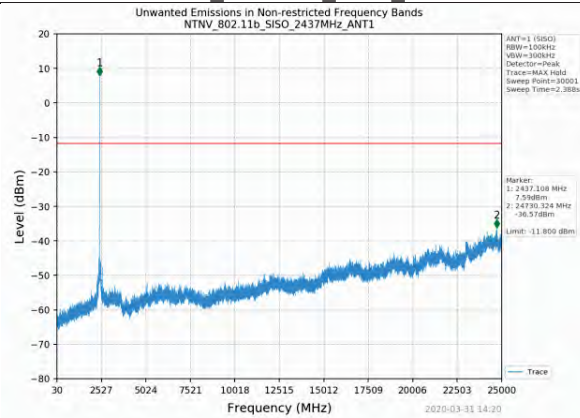
4.2 Test Graph



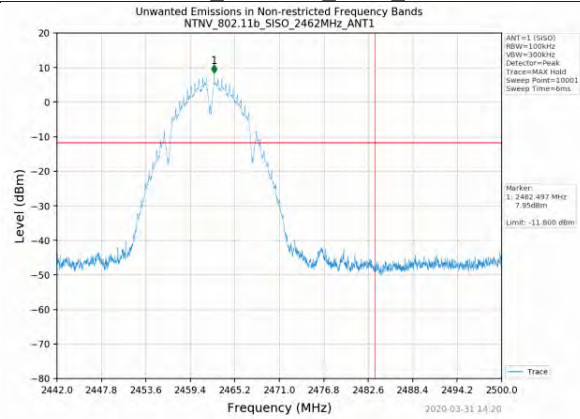
802.11b 2412MHz SISO_ANT1



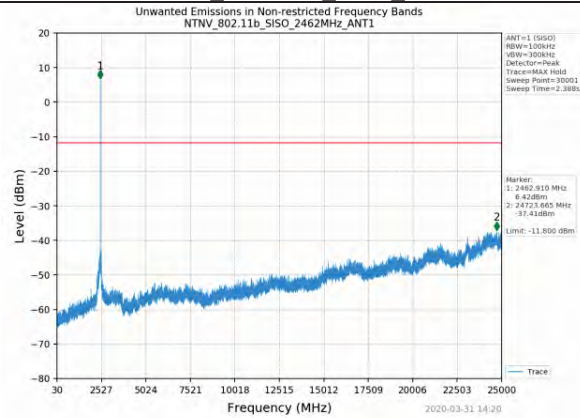
802.11b 2437MHz SISO_ANT1



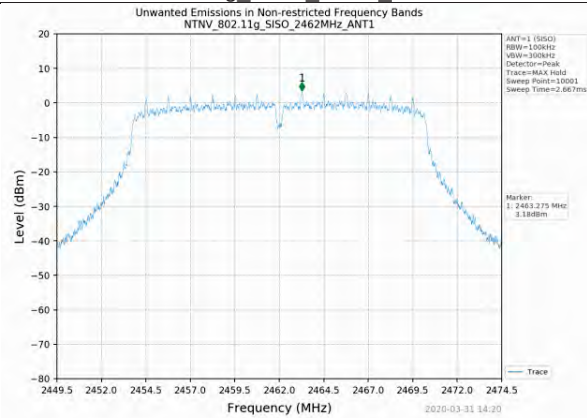
802.11b 2462MHz SISO_ANT1



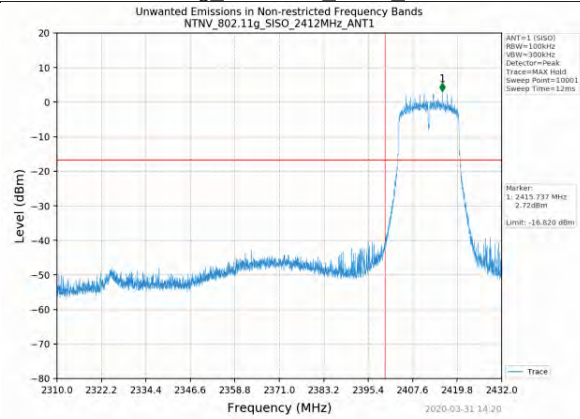
802.11b 2462MHz SISO_ANT1



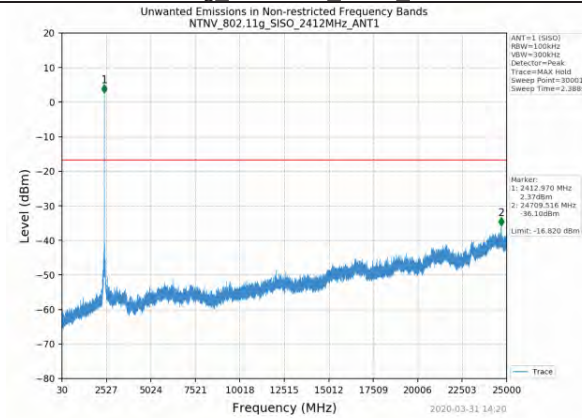
802.11g SISO_ANT1_REF



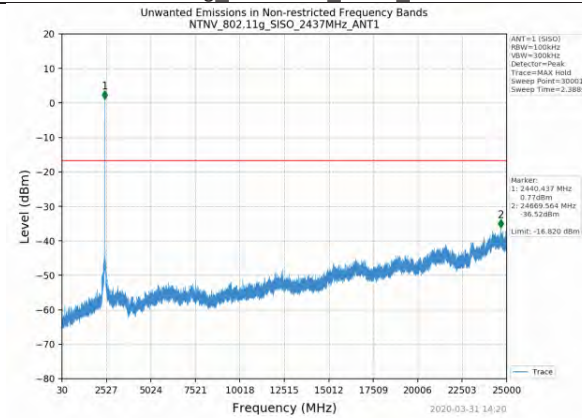
802.11g 2412MHz SISO_ANT1



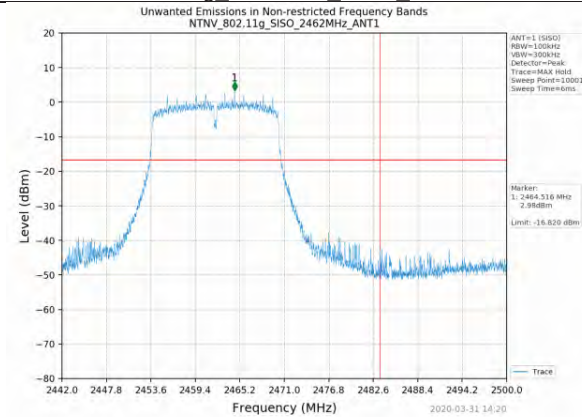
802.11g 2412MHz SISO_ANT1



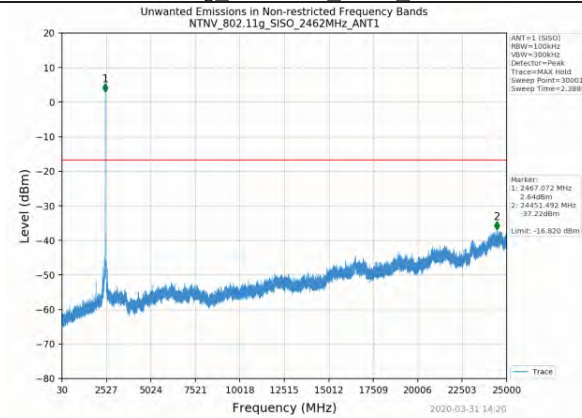
802.11g 2437MHz SISO_ANT1



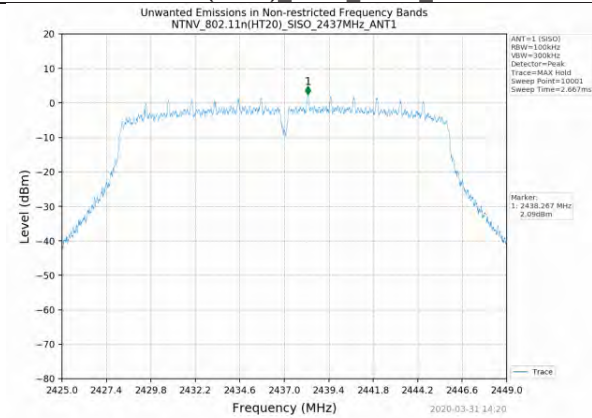
802.11g 2462MHz SISO_ANT1



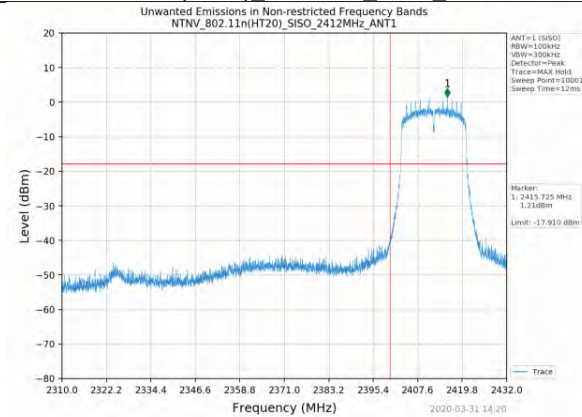
802.11g 2462MHz SISO_ANT1



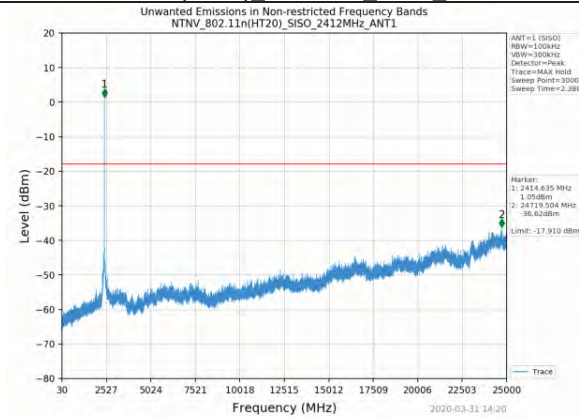
802.11n(HT20) SISO_ANT1_REF



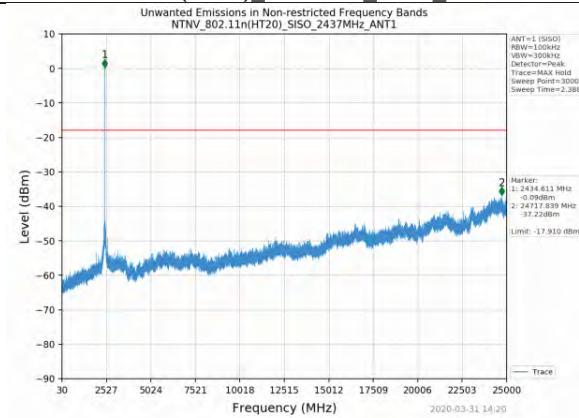
802.11n(HT20) 2412MHz SISO_ANT1



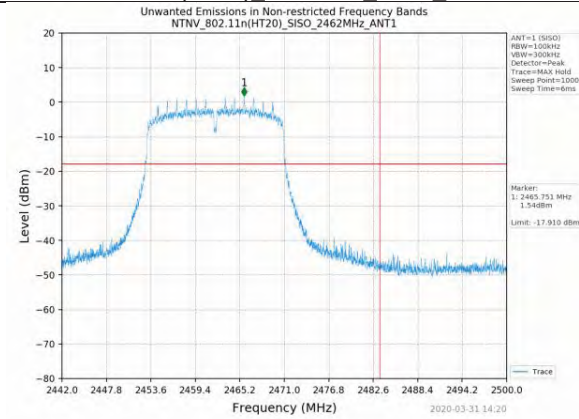
802.11n(HT20) 2412MHz SISO ANT1



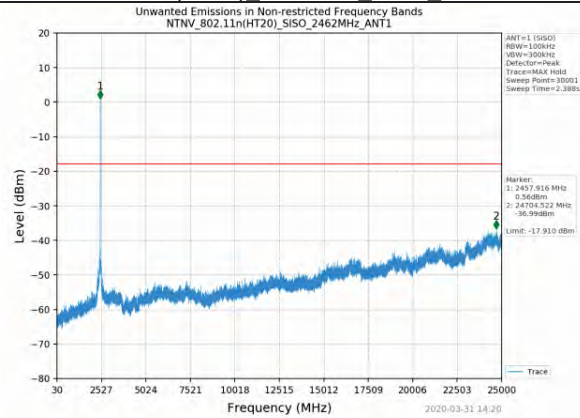
802.11n(HT20) 2437MHz SISO ANT1



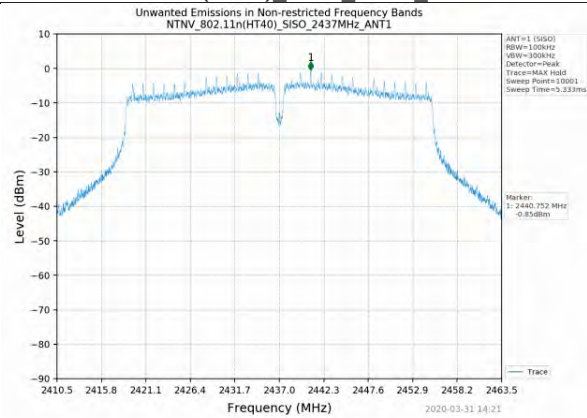
802.11n(HT20) 2462MHz SISO ANT1



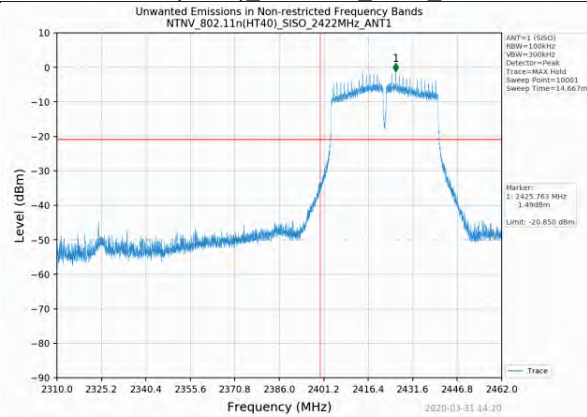
802.11n(HT20) 2462MHz SISO ANT1



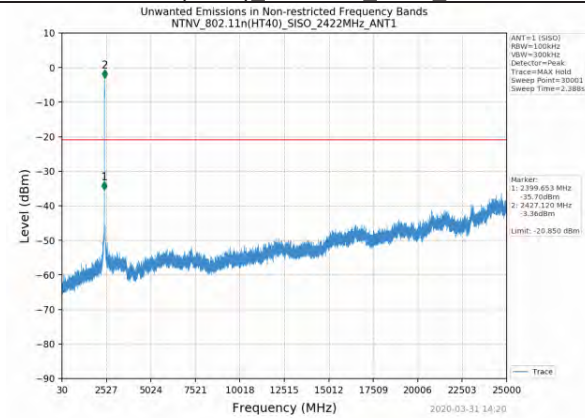
802.11n(HT40) SISO ANT1_REF



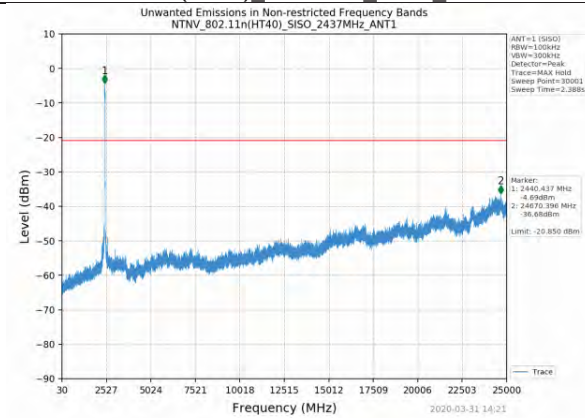
802.11n(HT40) 2422MHz SISO ANT1



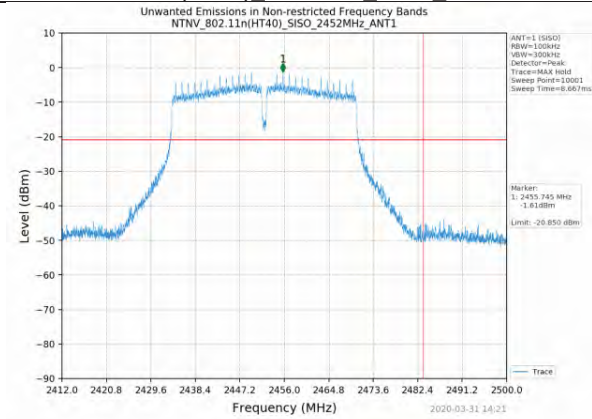
802.11n(HT40) 2422MHz SISO ANT1



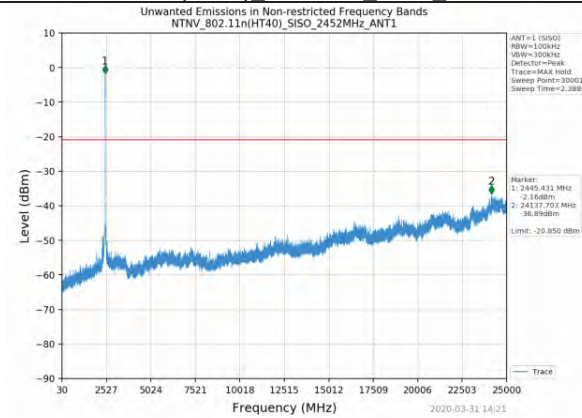
802.11n(HT40) 2437MHz SISO ANT1



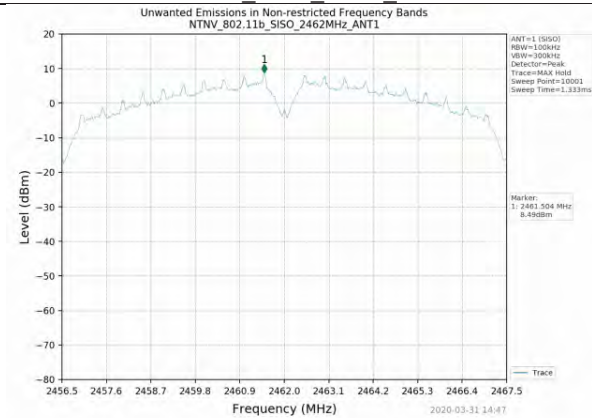
802.11n(HT40) 2452MHz SISO ANT1



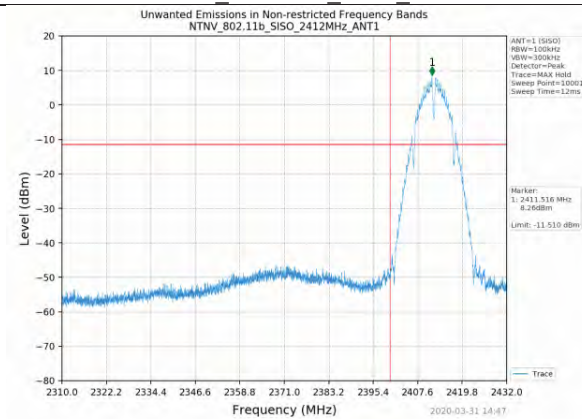
802.11n(HT40) 2452MHz SISO ANT1



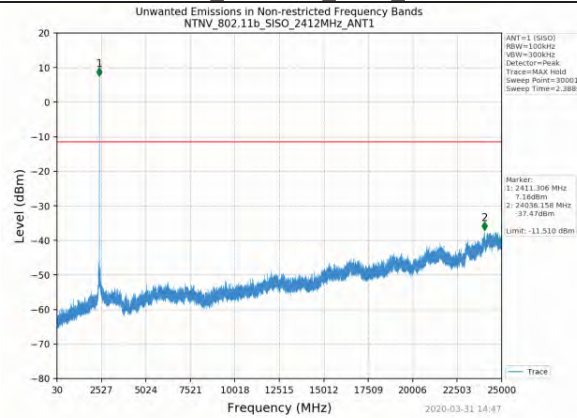
802.11b SISO ANT2 REF



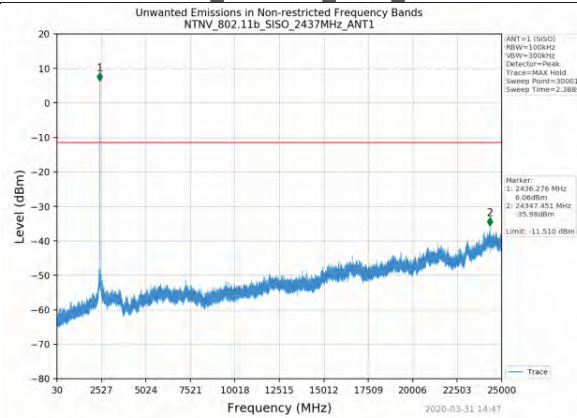
802.11b_2412MHz SISO ANT2



802.11b 2412MHz SISO_ANT2



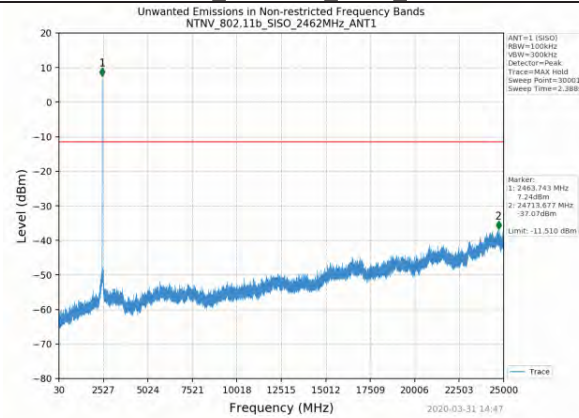
802.11b 2437MHz SISO_ANT2



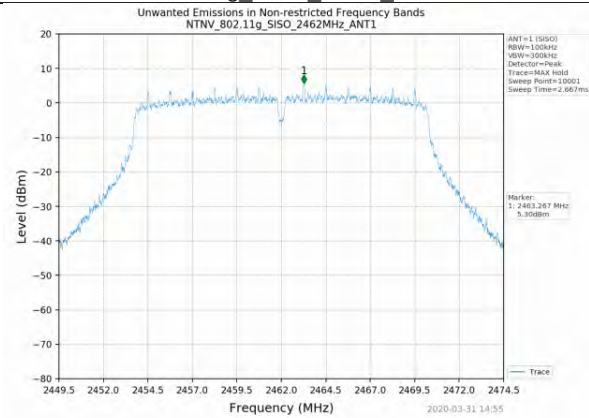
802.11b 2462MHz SISO_ANT2



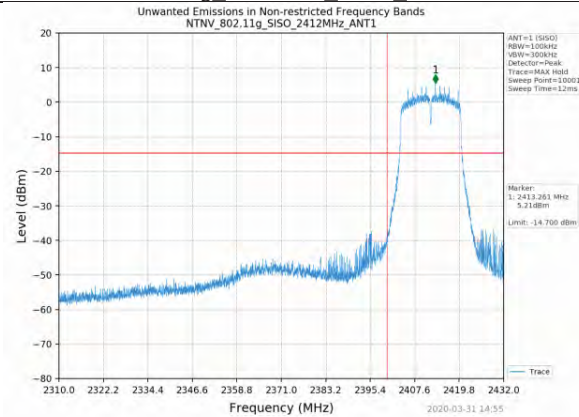
802.11b 2462MHz SISO_ANT2



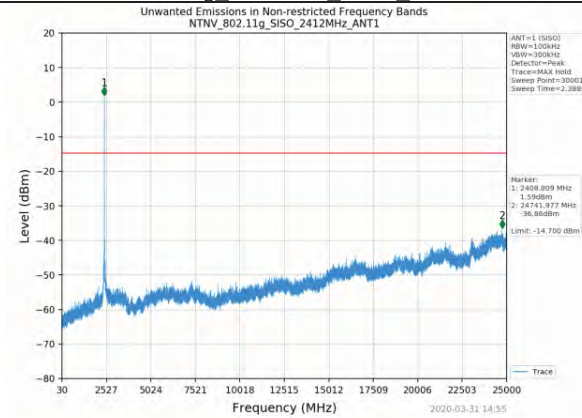
802.11g SISO_ANT2_REF



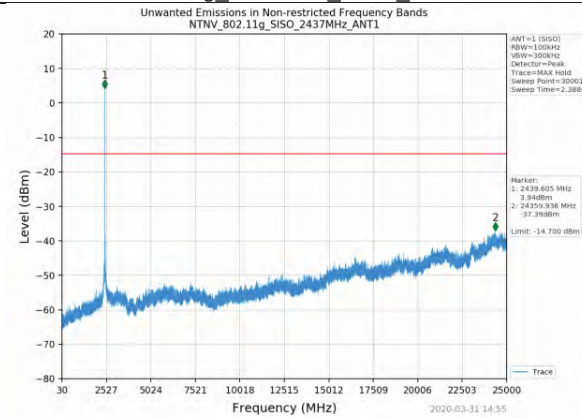
802.11g 2412MHz SISO_ANT2



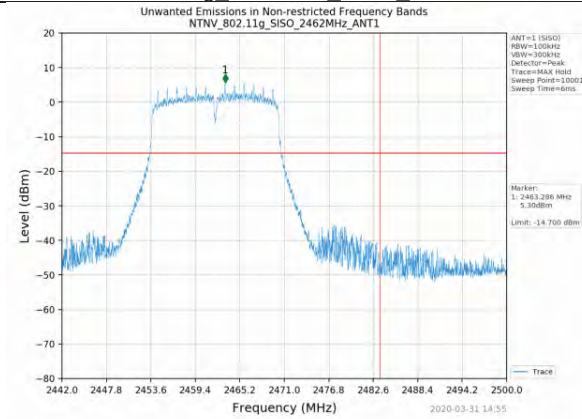
802.11g 2412MHz SISO_ANT2



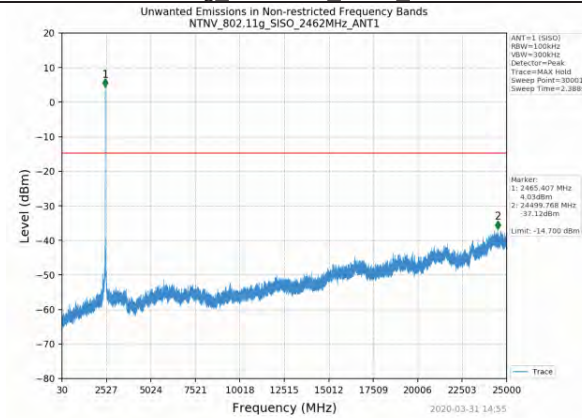
802.11g 2437MHz SISO_ANT2



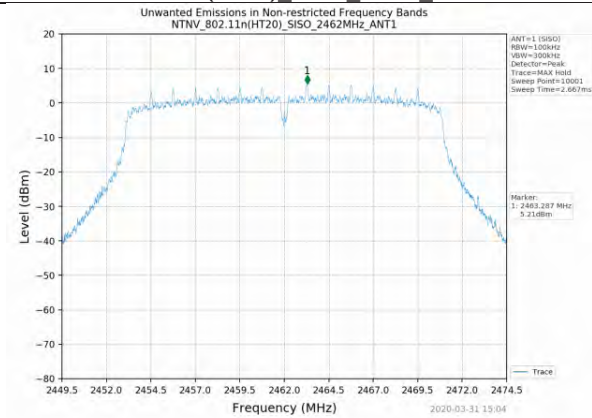
802.11g 2462MHz SISO_ANT2



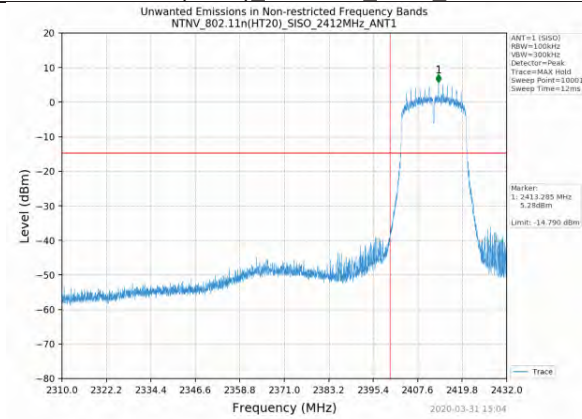
802.11g 2462MHz SISO_ANT2



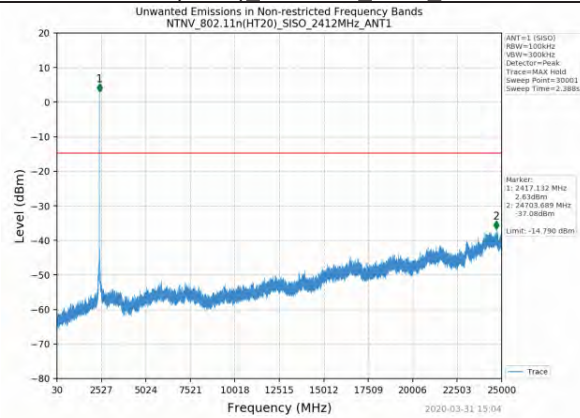
802.11n(HT20) SISO_ANT2_REF



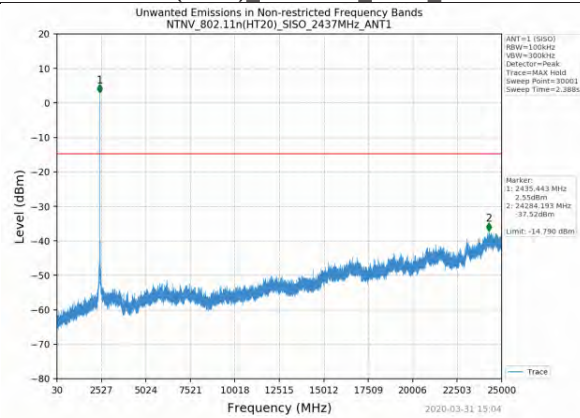
802.11n(HT20) 2412MHz SISO_ANT2



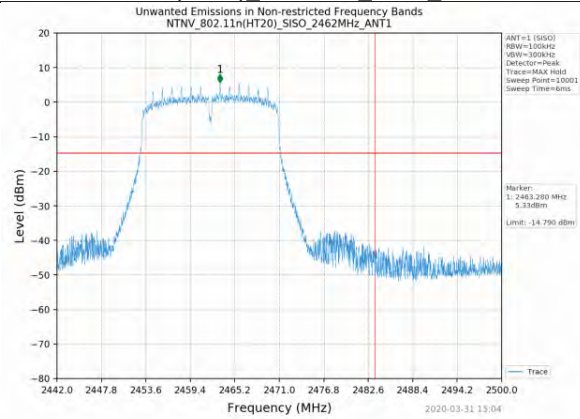
802.11n(HT20) 2412MHz SISO ANT2



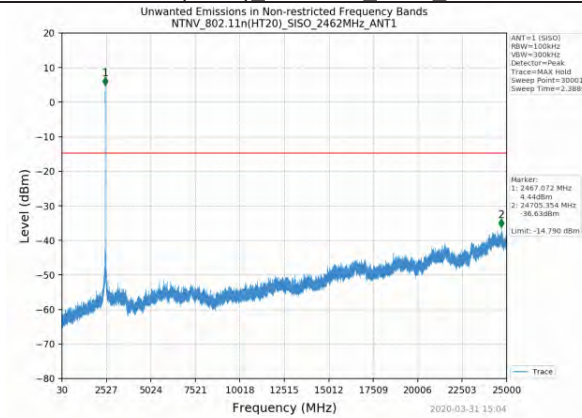
802.11n(HT20) 2437MHz SISO ANT2



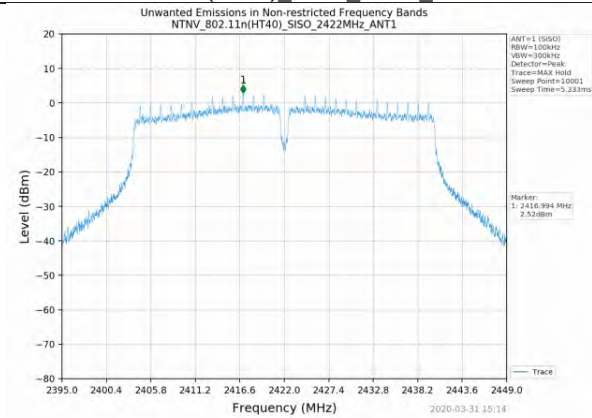
802.11n(HT20) 2462MHz SISO ANT2



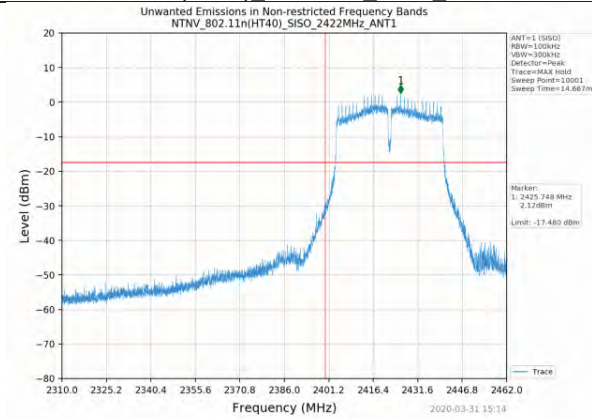
802.11n(HT20) 2462MHz SISO ANT2



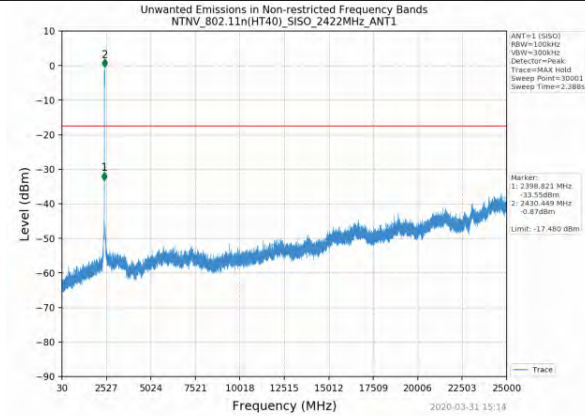
802.11n(HT40) SISO ANT2_REF



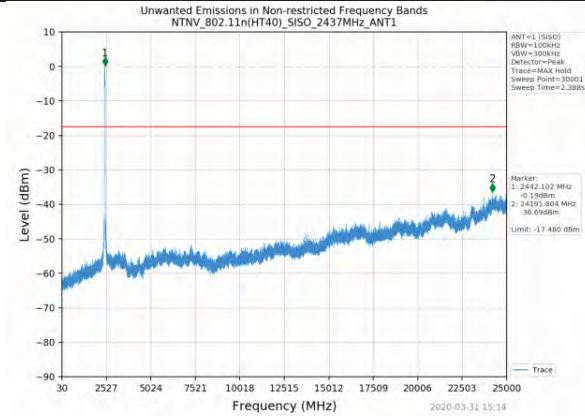
802.11n(HT40) 2422MHz SISO ANT2



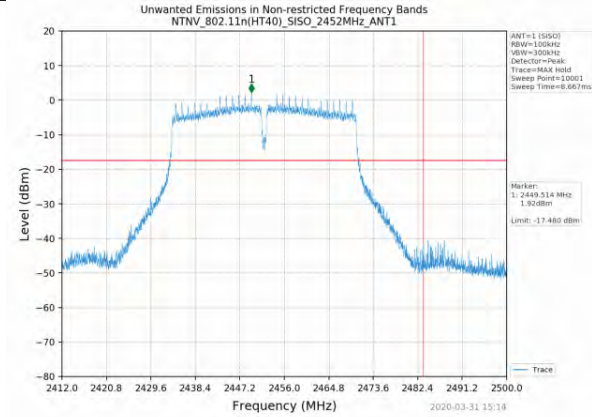
802.11n(HT40) 2422MHz SISO ANT2



802.11n(HT40) 2437MHz SISO ANT2



802.11n(HT40) 2452MHz SISO ANT2



802.11n(HT40) 2452MHz SISO ANT2

