

Appendix for 15.247

TABLE OF CONTENTS

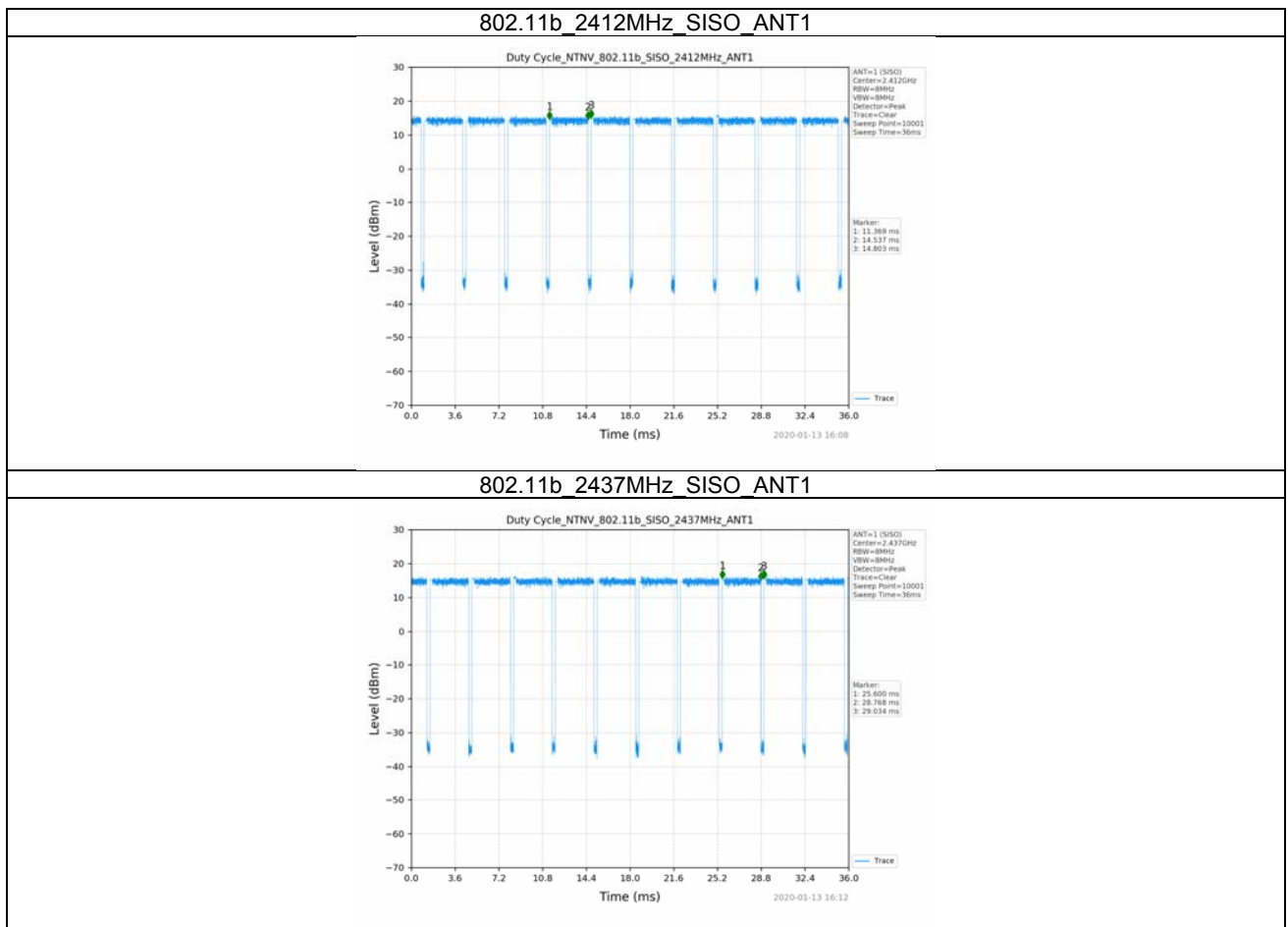
Appendix for 15.247	1
TABLE OF CONTENTS	1
1. Duty Cycle.....	2
1.1 Test Result	2
1.2 Test Graph.....	2
2. Bandwidth	5
2.1 Test Result	5
2.2 Test Graph - 6dB Bandwidth.....	5
2.3 Test Graph - 99% Occupied Bandwidth	8
3. Maximum Conducted Output Power	11
3.1 Test Result	11
3.2 Test Graph.....	12
4. Maximum Power Spectral Density (PSD)	15
4.1 Test Result	15
4.2 Test Graph.....	15
5. Unwanted Emissions in Non-restricted Frequency Bands	18
5.1 Test Result	18
5.2 Test Graph.....	18

1. Duty Cycle

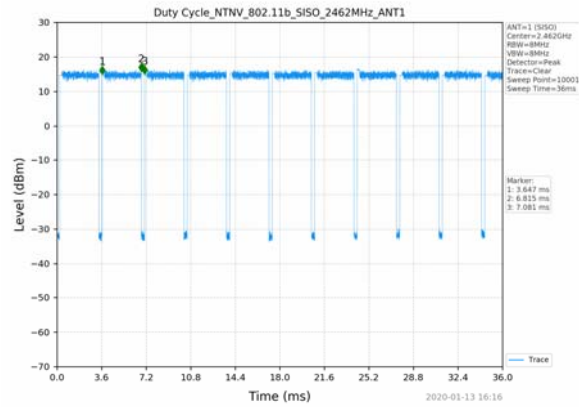
1.1 Test Result

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	3.168	3.434	92.25	0.35
	2437	SISO	1	3.168	3.434	92.25	0.35
	2462	SISO	1	3.168	3.434	92.25	0.35
802.11g	2412	SISO	1	0.605	0.867	69.78	1.56
	2437	SISO	1	0.605	0.868	69.70	1.57
	2462	SISO	1	0.605	0.868	69.70	1.57
802.11n(HT20)	2412	SISO	1	0.544	0.816	66.67	1.76
	2437	SISO	1	0.544	0.816	66.67	1.76
	2462	SISO	1	0.543	0.816	66.54	1.77

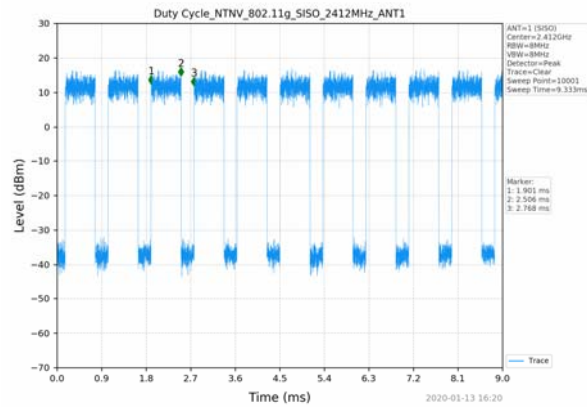
1.2 Test Graph



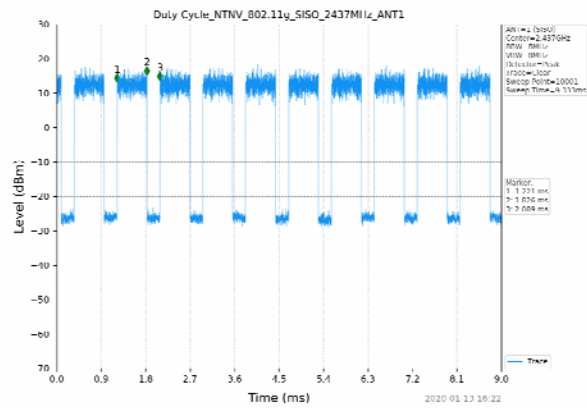
802.11b_2462MHz_SISO_ANT1



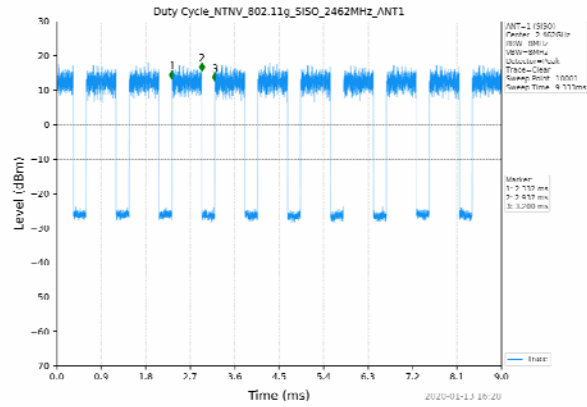
802.11g_2412MHz_SISO_ANT1



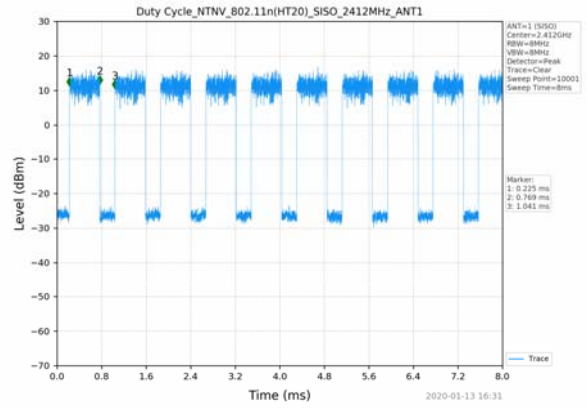
802.11g_2437MHz_SISO_ANT1



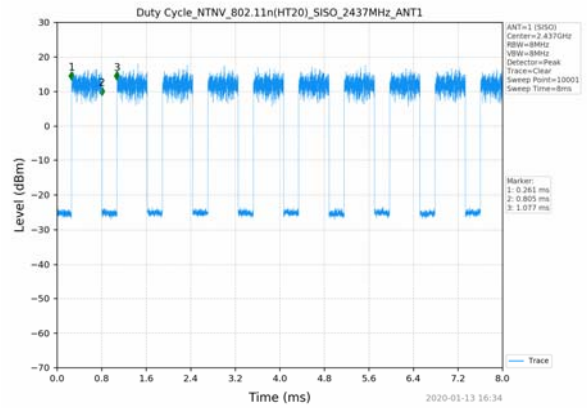
802.11g_2462MHz_SISO_ANT1

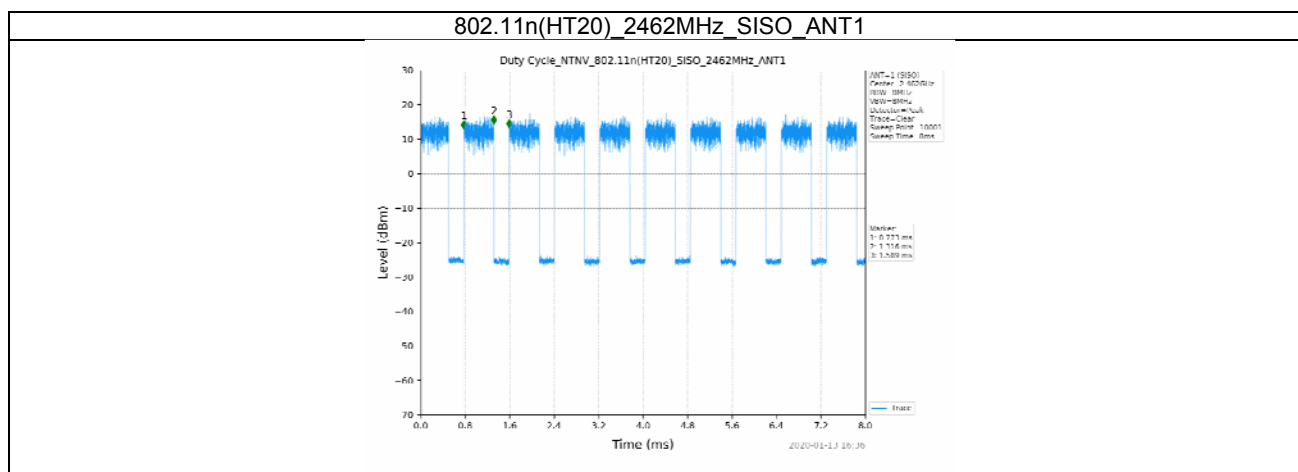


802.11n(HT20)_2412MHz_SISO_ANT1



802.11n(HT20)_2437MHz_SISO_ANT1





2. Bandwidth

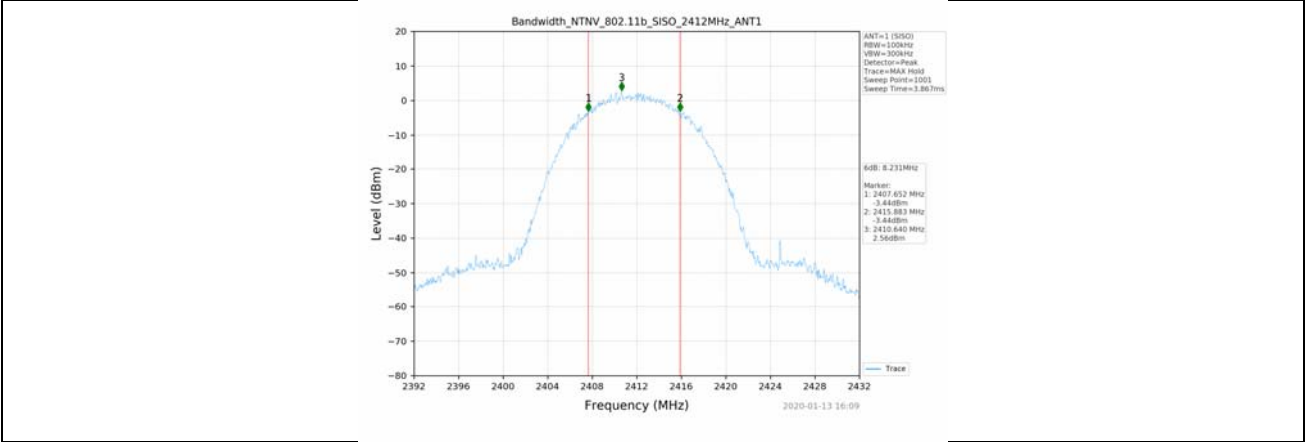
2.1 Test Result

Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11b	2412	SISO	1	8.231	≥ 0.5	PASS
	2437	SISO	1	8.933	≥ 0.5	PASS
	2462	SISO	1	8.590	≥ 0.5	PASS
802.11g	2412	SISO	1	16.445	≥ 0.5	PASS
	2437	SISO	1	16.473	≥ 0.5	PASS
	2462	SISO	1	16.488	≥ 0.5	PASS
802.11n(HT20)	2412	SISO	1	17.347	≥ 0.5	PASS
	2437	SISO	1	17.667	≥ 0.5	PASS
	2462	SISO	1	17.649	≥ 0.5	PASS

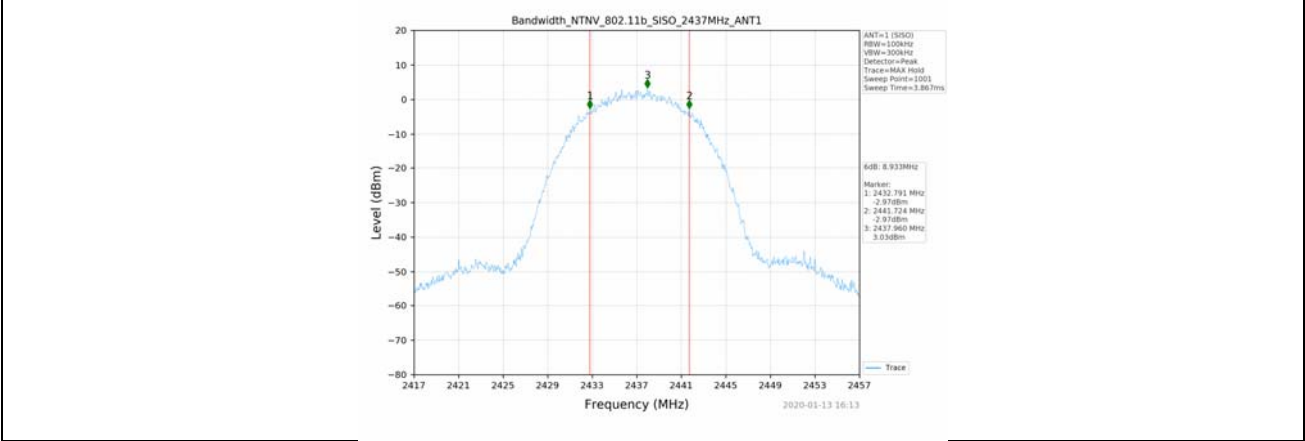
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11b	2412	SISO	1	12.805	Only for Report Use
	2437	SISO	1	12.848	Only for Report Use
	2462	SISO	1	12.930	Only for Report Use
802.11g	2412	SISO	1	16.739	Only for Report Use
	2437	SISO	1	16.735	Only for Report Use
	2462	SISO	1	16.788	Only for Report Use
802.11n(HT20)	2412	SISO	1	17.763	Only for Report Use
	2437	SISO	1	17.779	Only for Report Use
	2462	SISO	1	17.804	Only for Report Use

2.2 Test Graph - 6dB Bandwidth

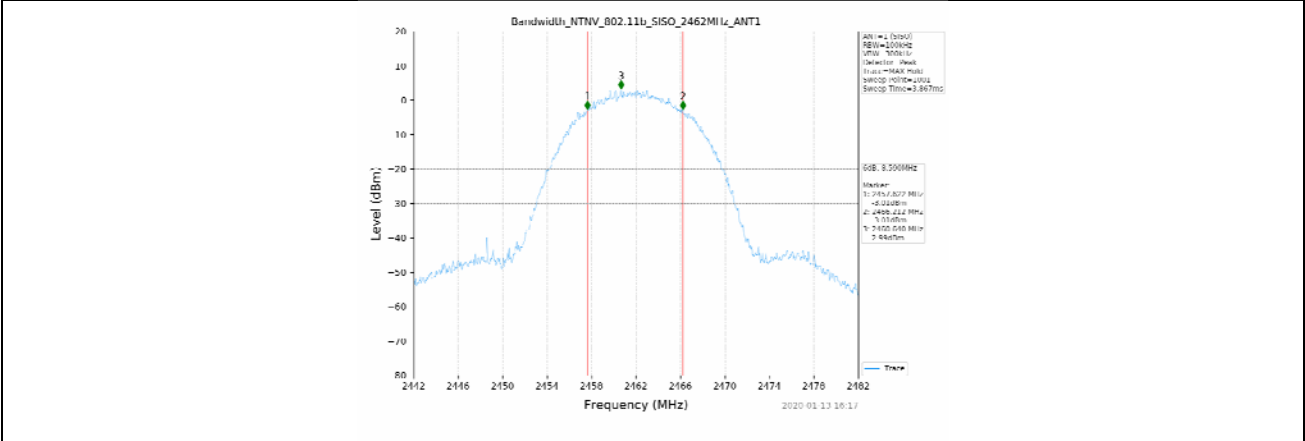
802.11b 2412MHz SISO ANT1



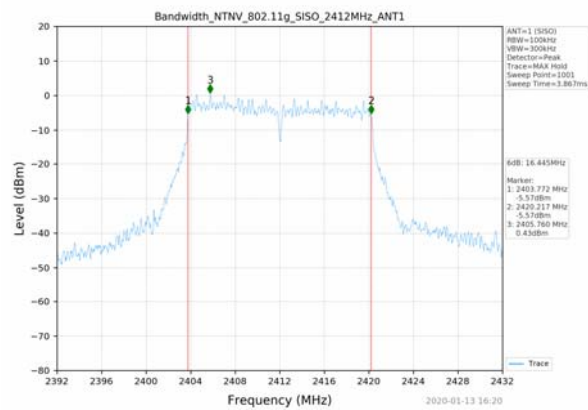
802.11b 2437MHz SISO ANT1



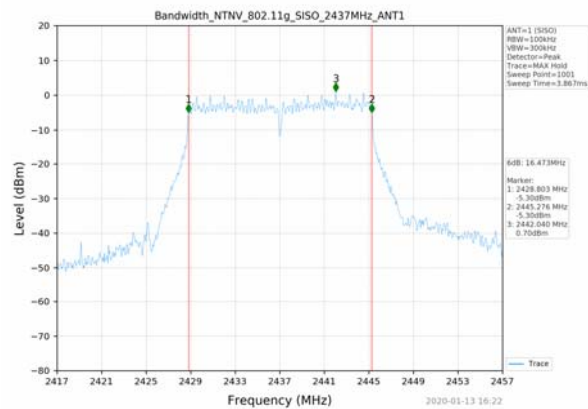
802.11b 2462MHz SISO ANT1



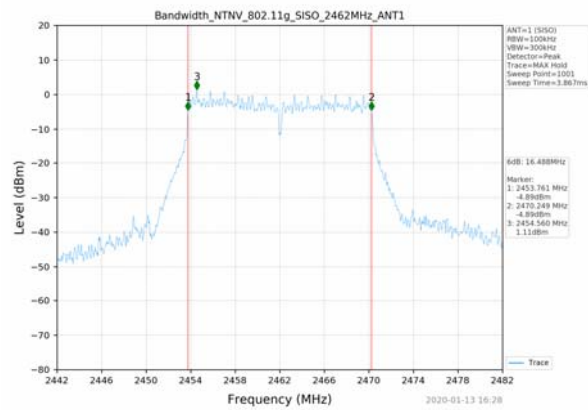
802.11g_2412MHz_SISO_ANT1



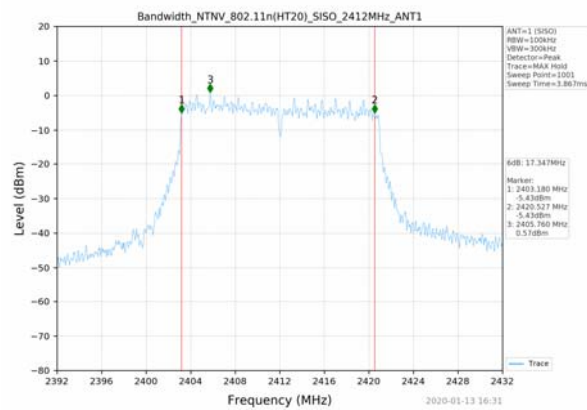
802.11g_2437MHz_SISO_ANT1



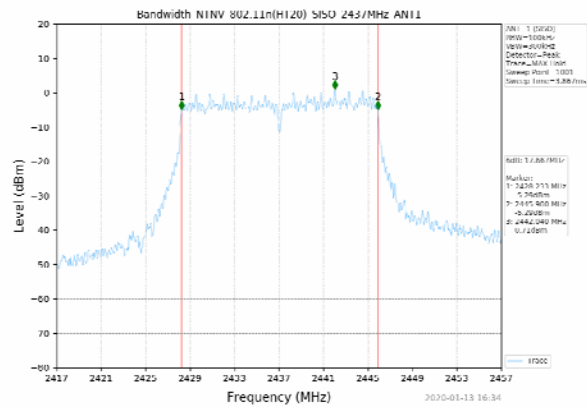
802.11g_2462MHz_SISO_ANT1



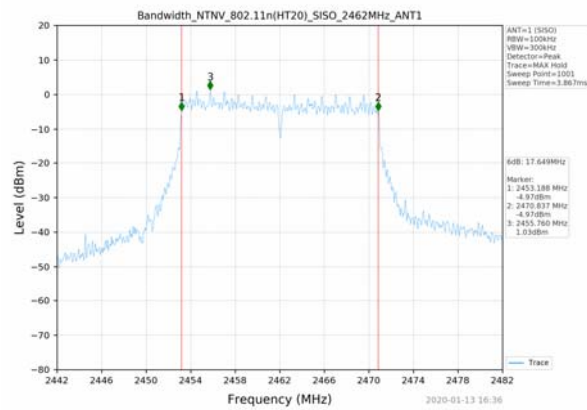
802.11n(HT20)_2412MHz_SISO_ANT1



802.11n(HT20)_2437MHz_SISO_ANT1

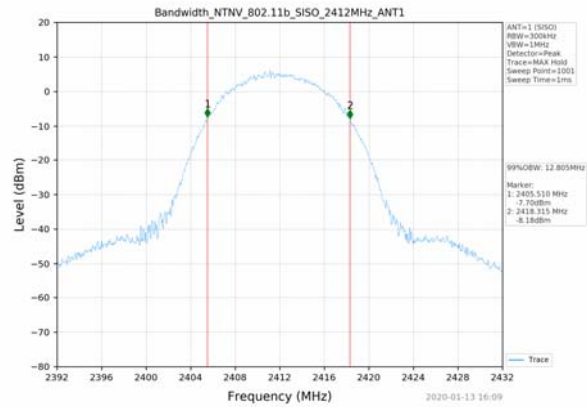


802.11n(HT20)_2462MHz_SISO_ANT1

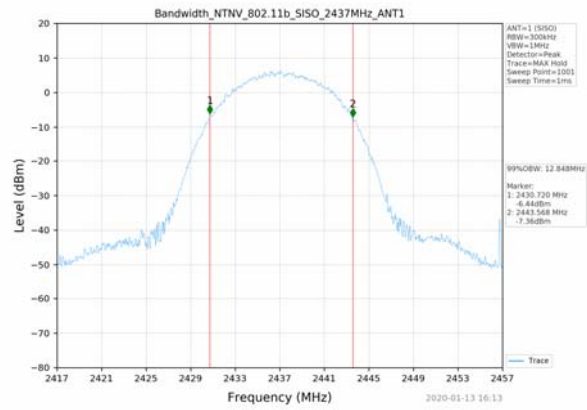


2.3 Test Graph - 99% Occupied Bandwidth

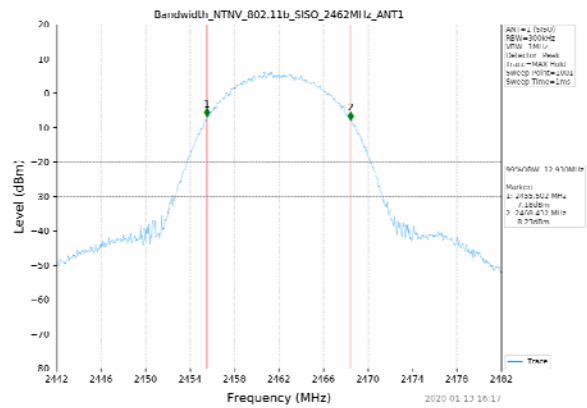
802.11b_2412MHz_SISO_ANT1



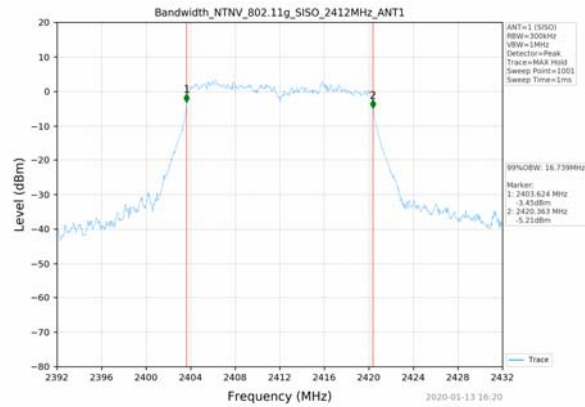
802.11b_2437MHz_SISO_ANT1



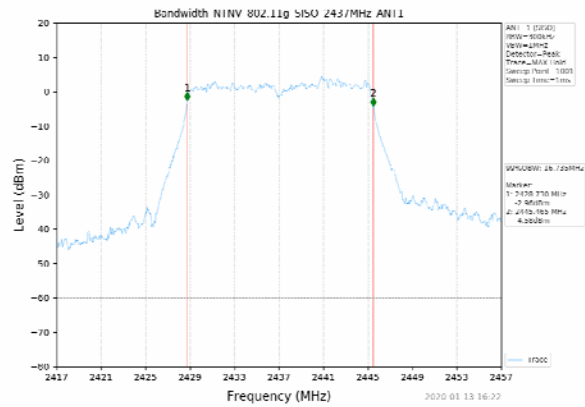
802.11b_2462MHz_SISO_ANT1



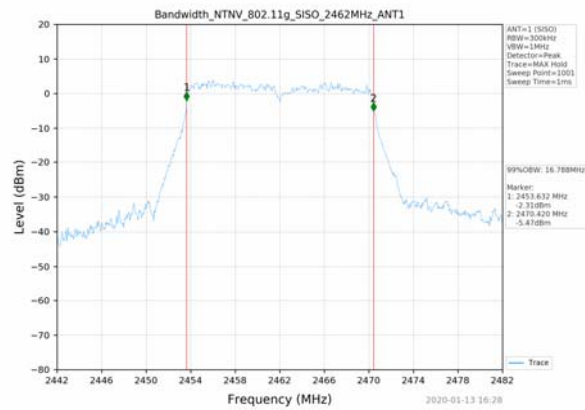
802.11g_2412MHz_SISO_ANT1



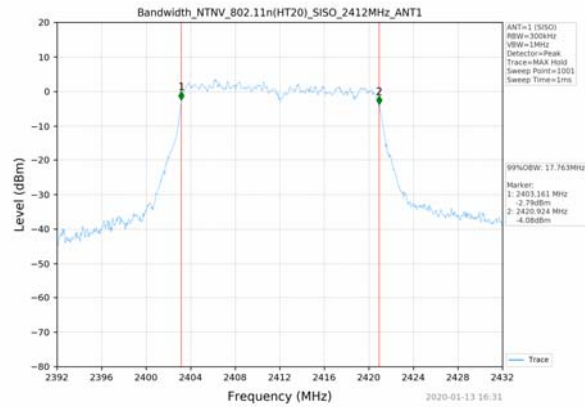
802.11g_2437MHz_SISO_ANT1



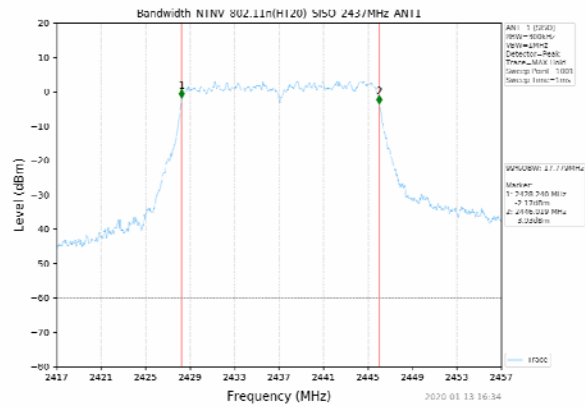
802.11g_2462MHz_SISO_ANT1



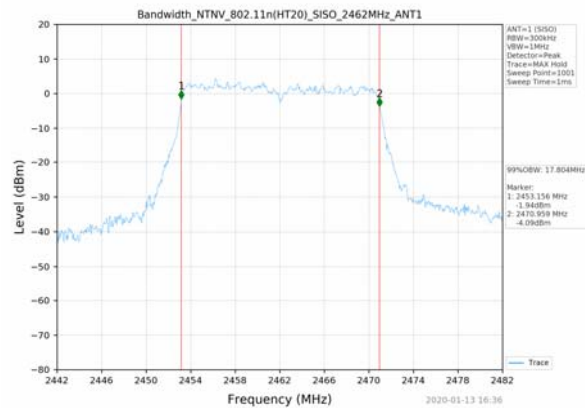
802.11n(HT20)_2412MHz_SISO_ANT1



802.11n(HT20)_2437MHz_SISO_ANT1



802.11n(HT20)_2462MHz_SISO_ANT1



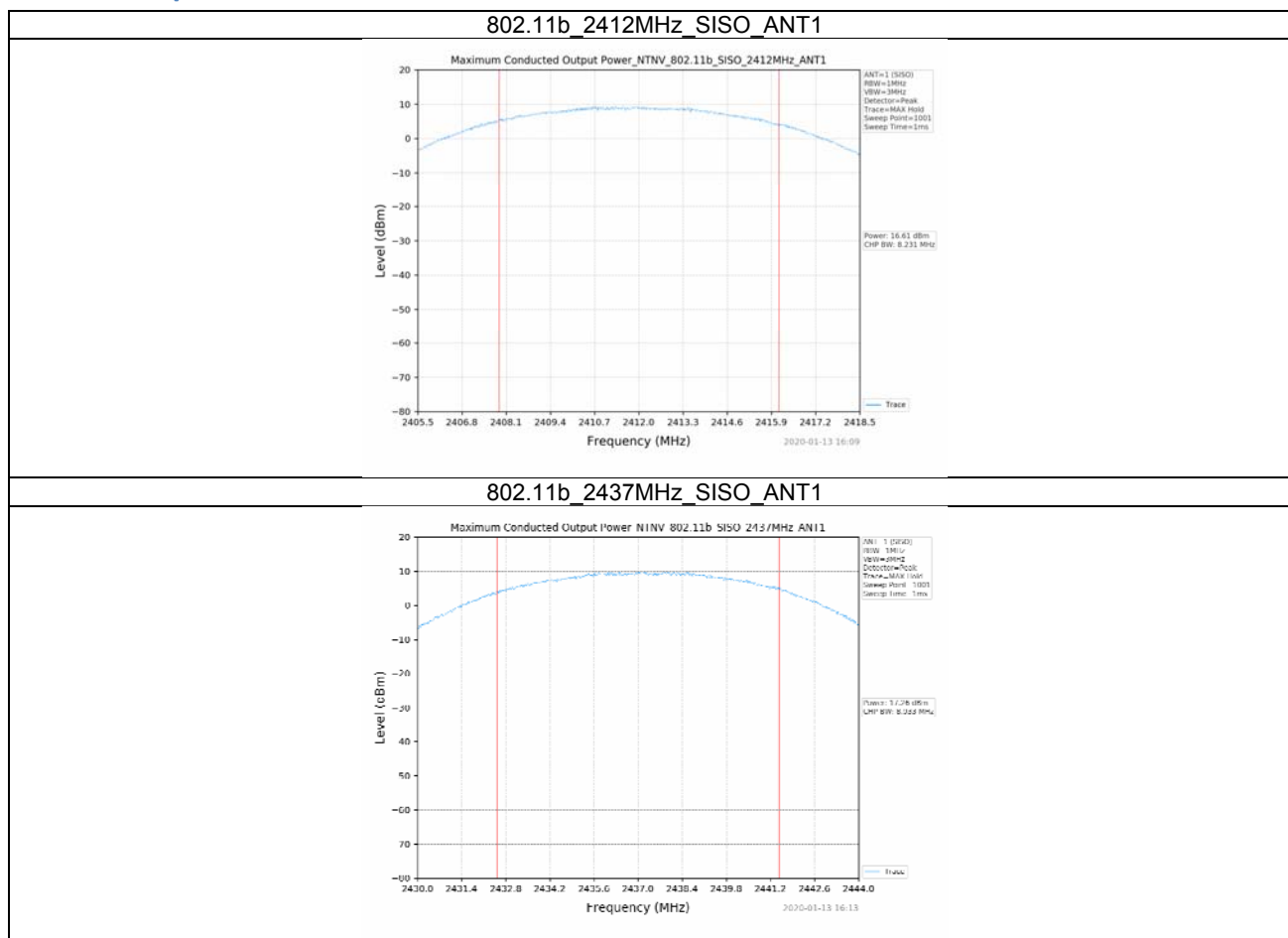
3. Maximum Conducted Output Power

3.1 Test Result

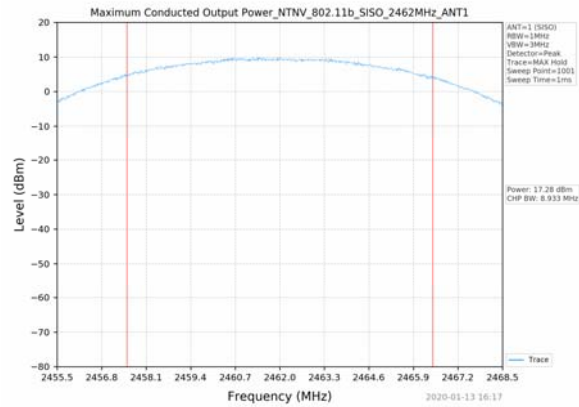
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
-----------	-----------------	---------	----------------------------------	--------------	---------

			Ant 1		
802.11b	2412	SISO	16.61	30	PASS
	2437	SISO	17.26	30	PASS
	2462	SISO	17.28	30	PASS
802.11g	2412	SISO	18.79	30	PASS
	2437	SISO	19.49	30	PASS
	2462	SISO	19.65	30	PASS
802.11n(HT20)	2412	SISO	18.91	30	PASS
	2437	SISO	19.45	30	PASS
	2462	SISO	19.63	30	PASS

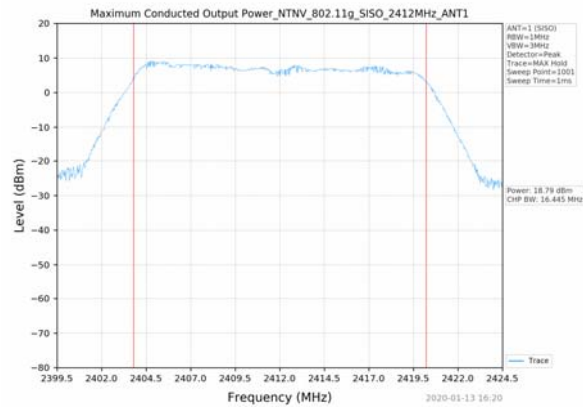
3.2 Test Graph



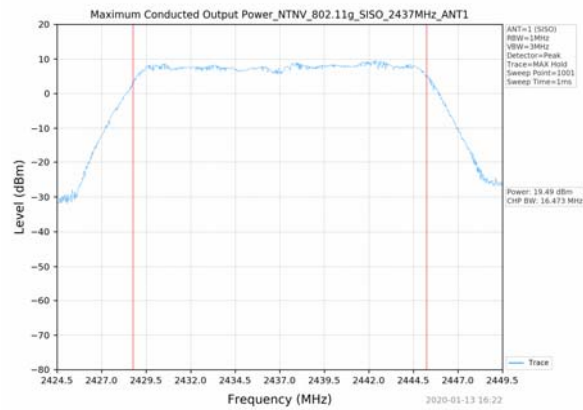
802.11b_2462MHz_SISO_ANT1



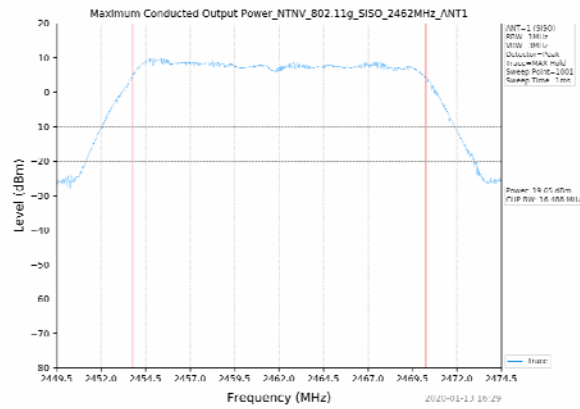
802.11g_2412MHz_SISO_ANT1



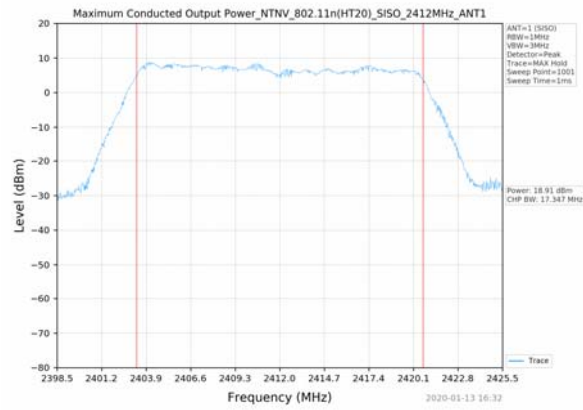
802.11g_2437MHz_SISO_ANT1



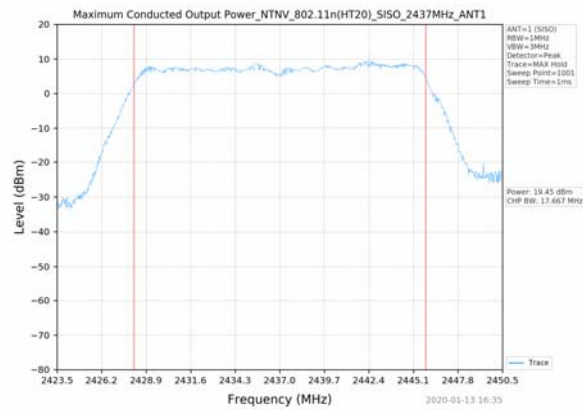
802.11g_2462MHz_SISO_ANT1

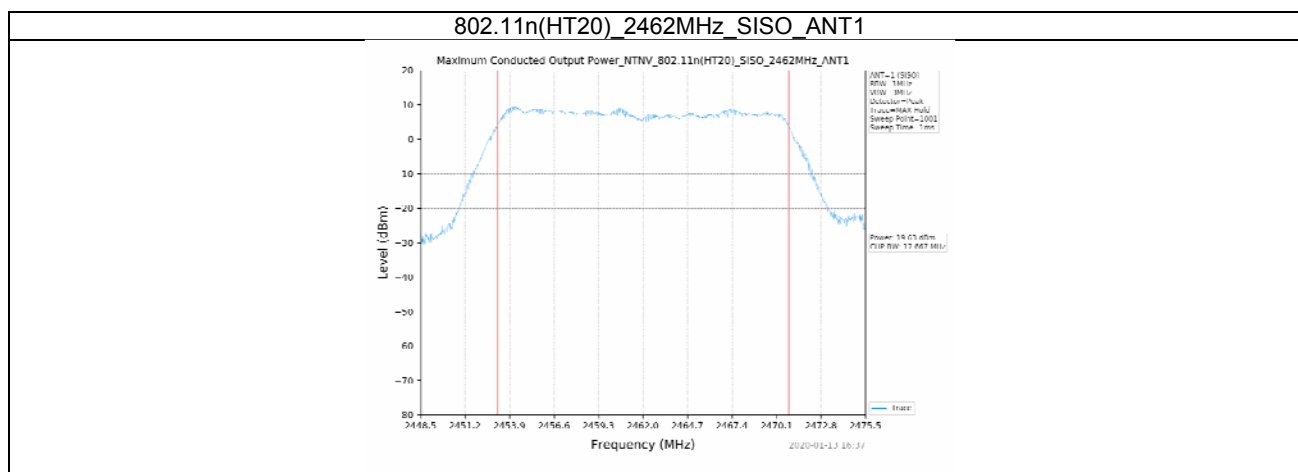


802.11n(HT20)_2412MHz_SISO_ANT1



802.11n(HT20)_2437MHz_SISO_ANT1



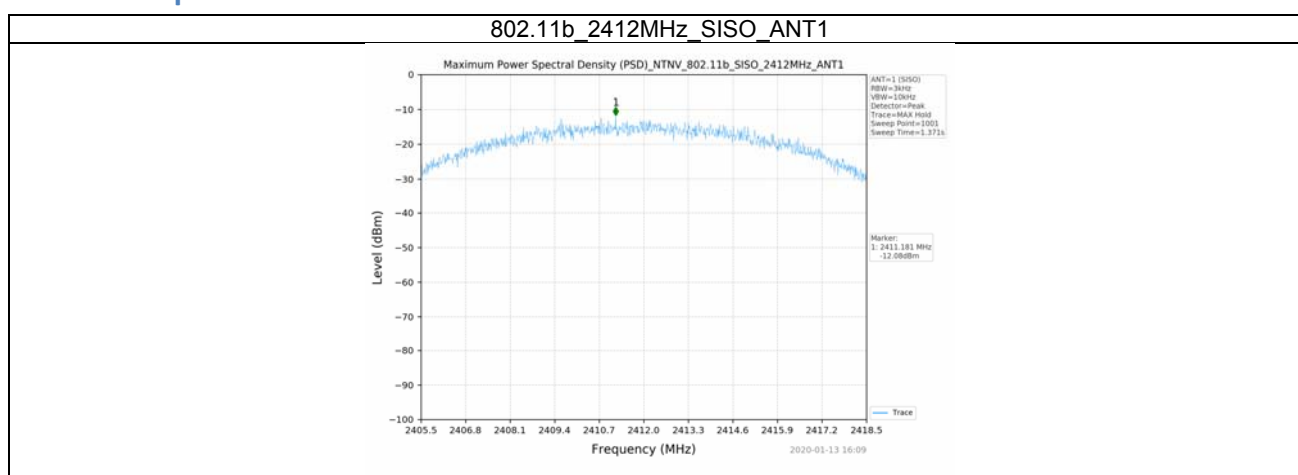


4. Maximum Power Spectral Density (PSD)

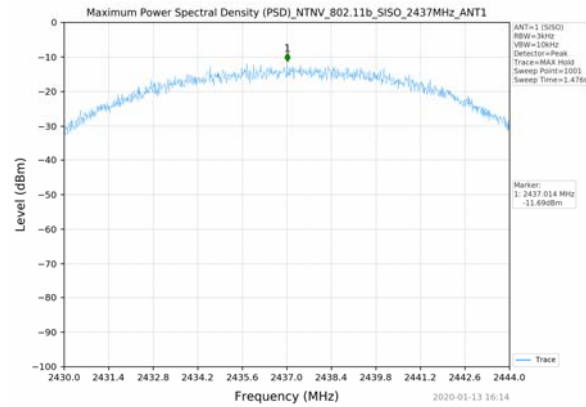
4.1 Test Result

Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)	Limits (dBm/3kHz)	Verdict
			Ant 1		
802.11b	2412	SISO	-12.08	≤8	PASS
	2437	SISO	-11.69	≤8	PASS
	2462	SISO	-11.45	≤8	PASS
802.11g	2412	SISO	-14.92	≤8	PASS
	2437	SISO	-14.15	≤8	PASS
	2462	SISO	-14.07	≤8	PASS
802.11n(HT20)	2412	SISO	-14.03	≤8	PASS
	2437	SISO	-14.08	≤8	PASS
	2462	SISO	-13.82	≤8	PASS

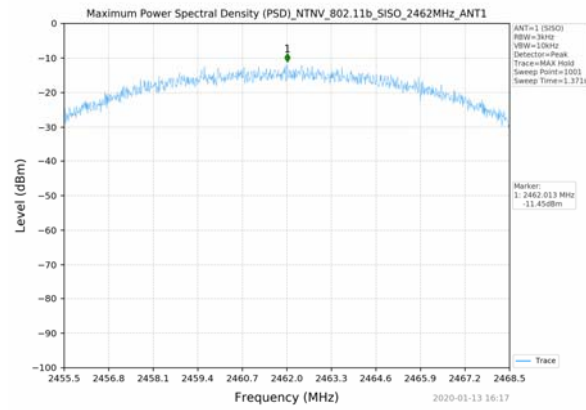
4.2 Test Graph



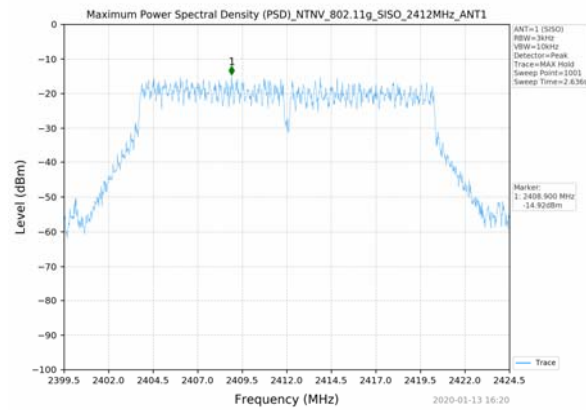
802.11b_2437MHz_SISO_ANT1



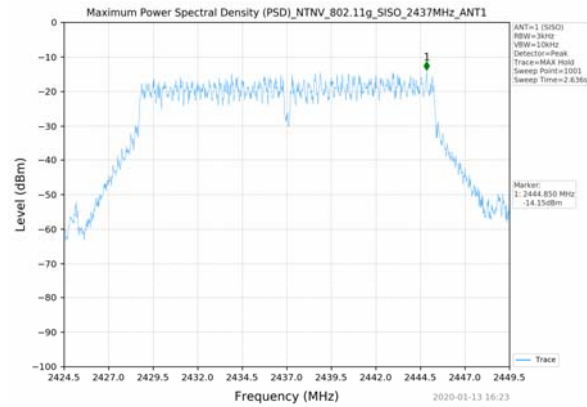
802.11b_2462MHz_SISO_ANT1



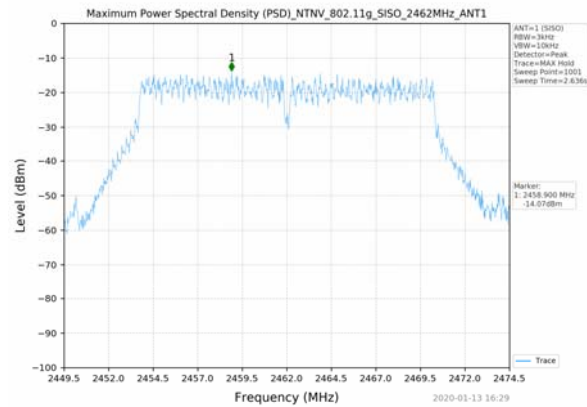
802.11g_2412MHz_SISO_ANT1



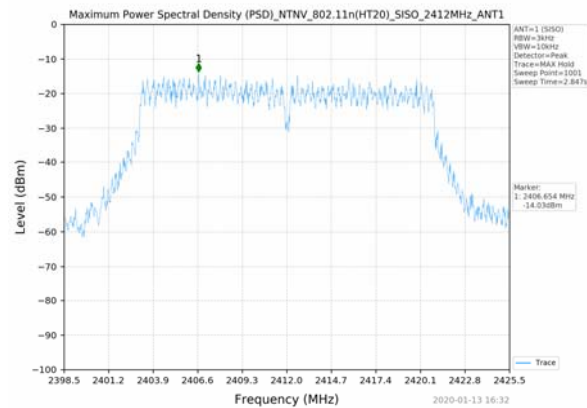
802.11g_2437MHz_SISO_ANT1

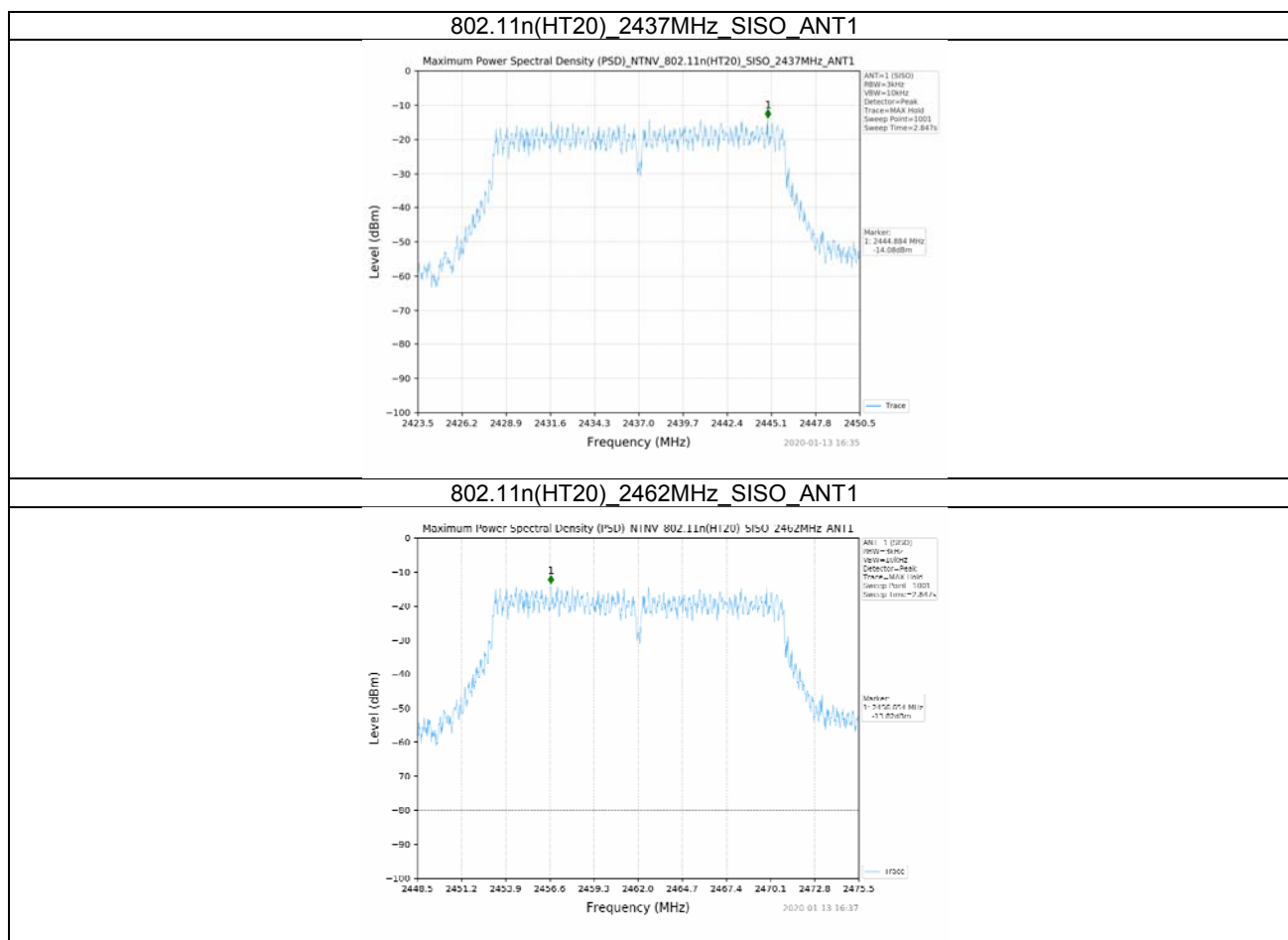


802.11g_2462MHz_SISO_ANT1



802.11n(HT20)_2412MHz_SISO_ANT1





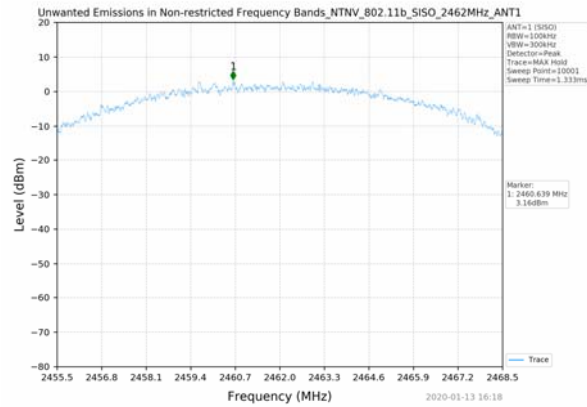
5. Unwanted Emissions in Non-restricted Frequency Bands

5.1 Test Result

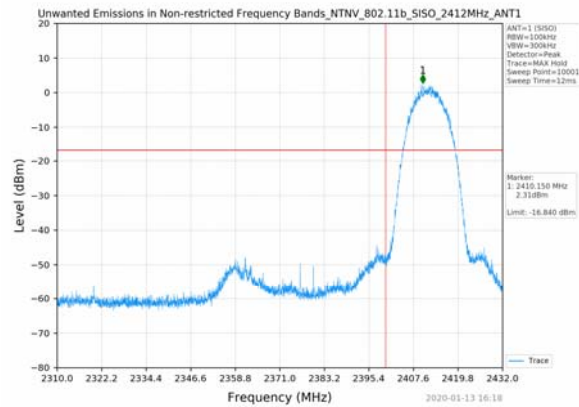
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
802.11b	2412	SISO	1	Refer to test graph	-16.84	PASS
	2437	SISO	1	Refer to test graph	-16.84	PASS
	2462	SISO	1	Refer to test graph	-16.84	PASS
802.11g	2412	SISO	1	Refer to test graph	-18.98	PASS
	2437	SISO	1	Refer to test graph	-18.98	PASS
	2462	SISO	1	Refer to test graph	-18.98	PASS
802.11n(HT20)	2412	SISO	1	Refer to test graph	-18.93	PASS
	2437	SISO	1	Refer to test graph	-18.93	PASS
	2462	SISO	1	Refer to test graph	-18.93	PASS

5.2 Test Graph

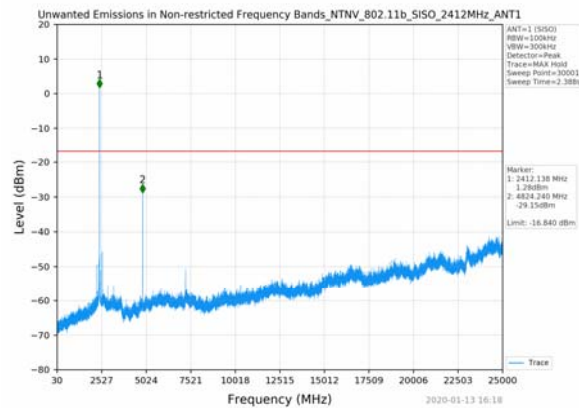
802.11b_SISO_ANT1_REF



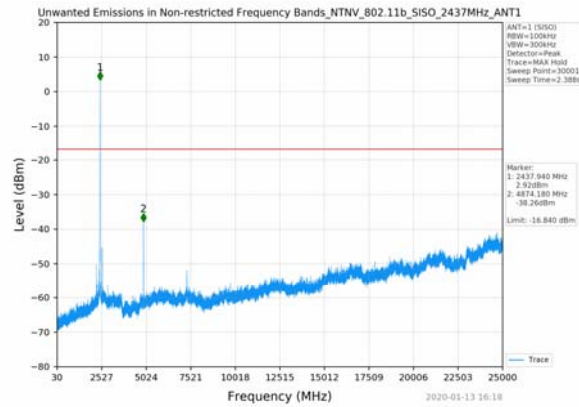
802.11b_2412MHz_SISO_ANT1



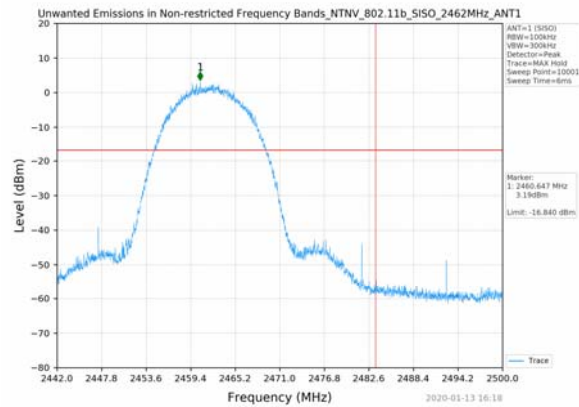
802.11b_2412MHz_SISO_ANT1



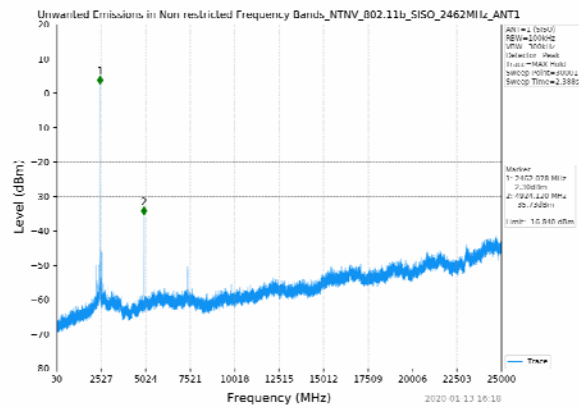
802.11b_2437MHz_SISO_ANT1



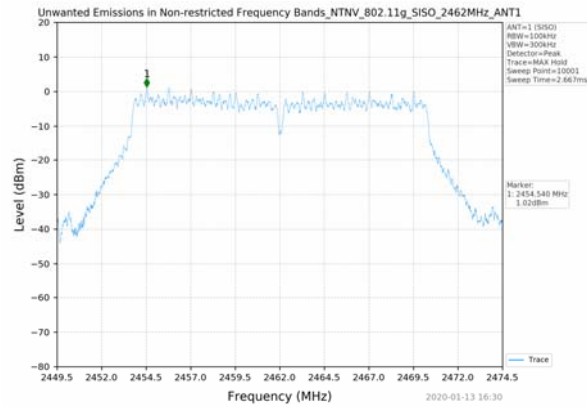
802.11b_2462MHz_SISO_ANT1



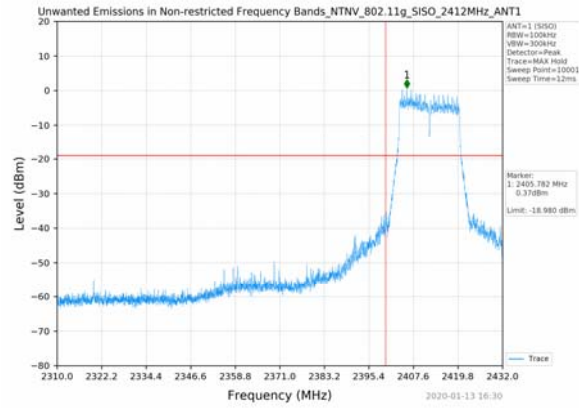
802.11b_2462MHz_SISO_ANT1



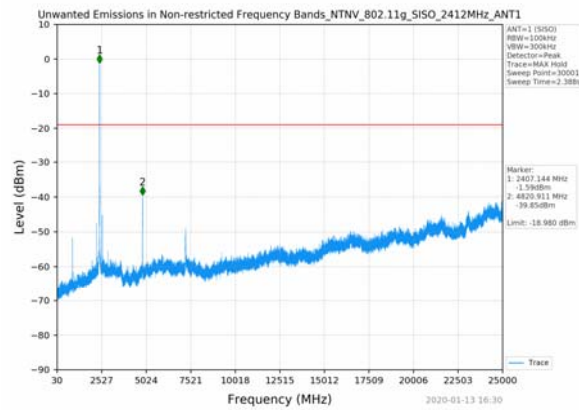
802.11g_SISO_ANT1_REF



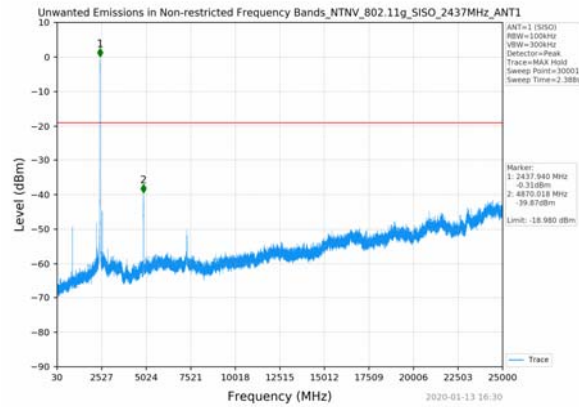
802.11g_2412MHz_SISO_ANT1



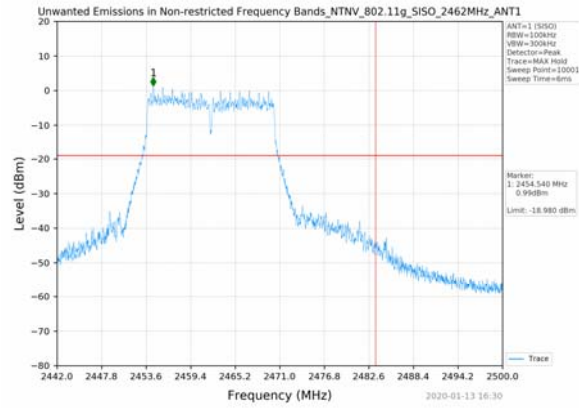
802.11g_2412MHz_SISO_ANT1



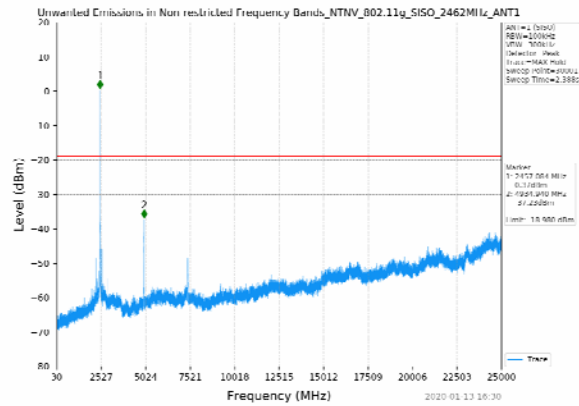
802.11g_2437MHz_SISO_ANT1



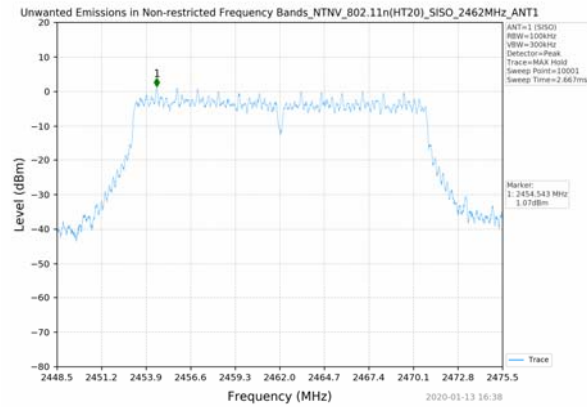
802.11g_2462MHz_SISO_ANT1



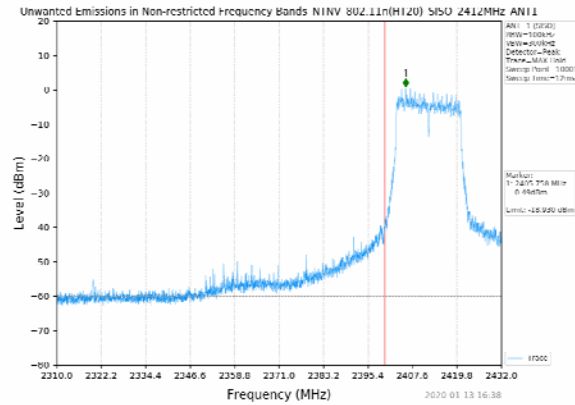
802.11g_2462MHz_SISO_ANT1



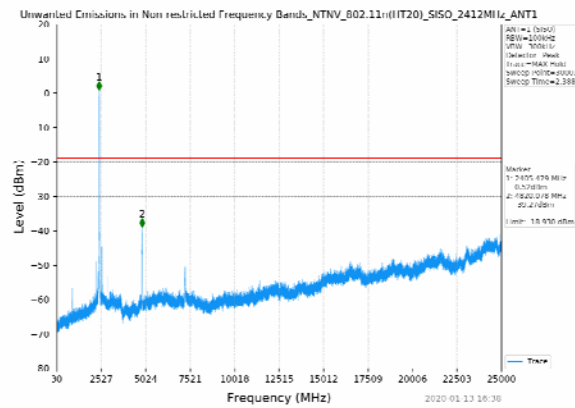
802.11n(HT20)_SISO_ANT1_REF



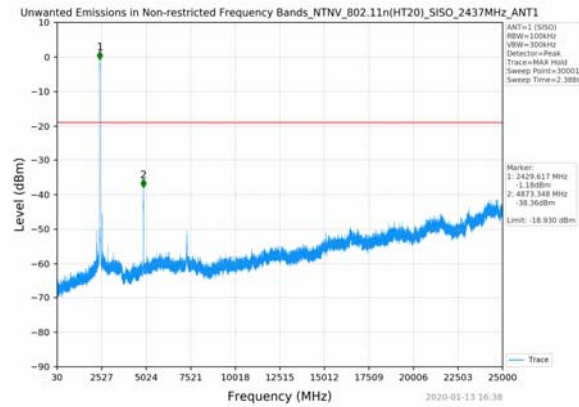
802.11n(HT20)_2412MHz_SISO_ANT1



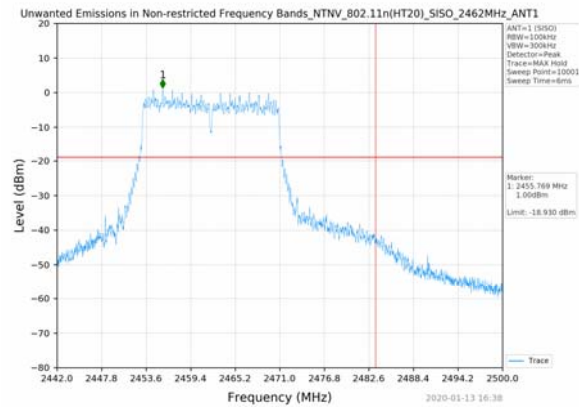
802.11n(HT20)_2412MHz_SISO_ANT1



802.11n(HT20)_2437MHz_SISO_ANT1



802.11n(HT20)_2462MHz_SISO_ANT1



802.11n(HT20)_2462MHz_SISO_ANT1

