

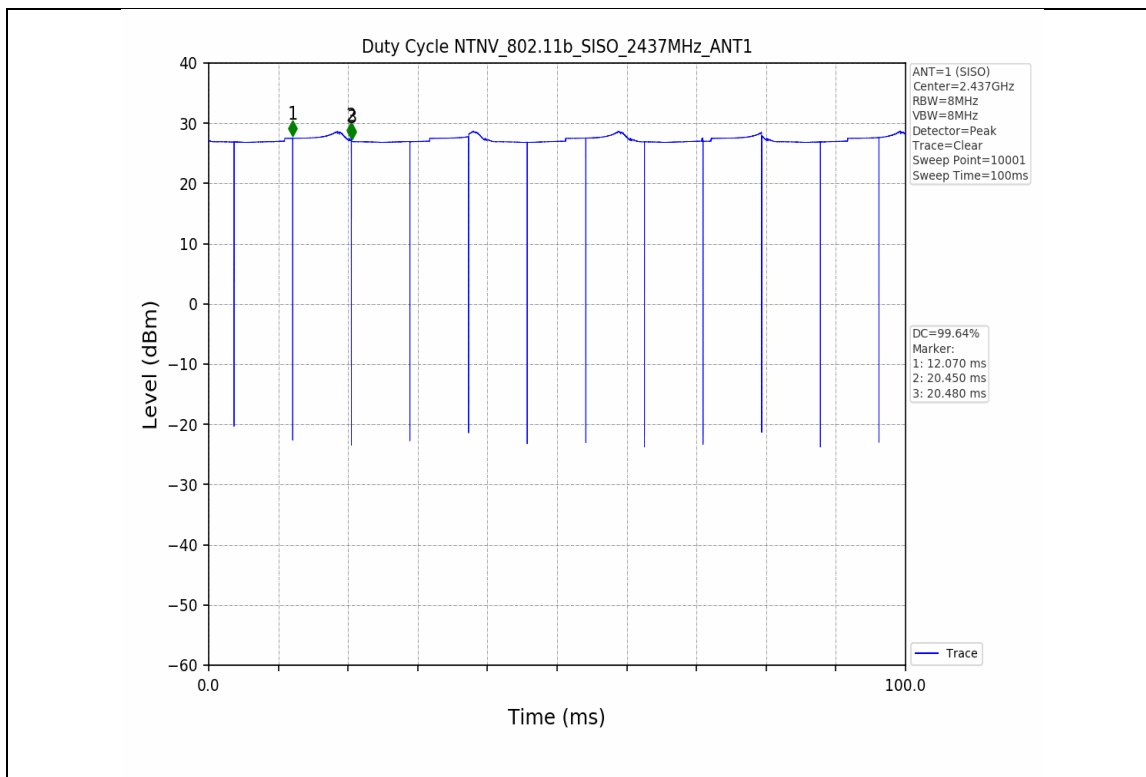
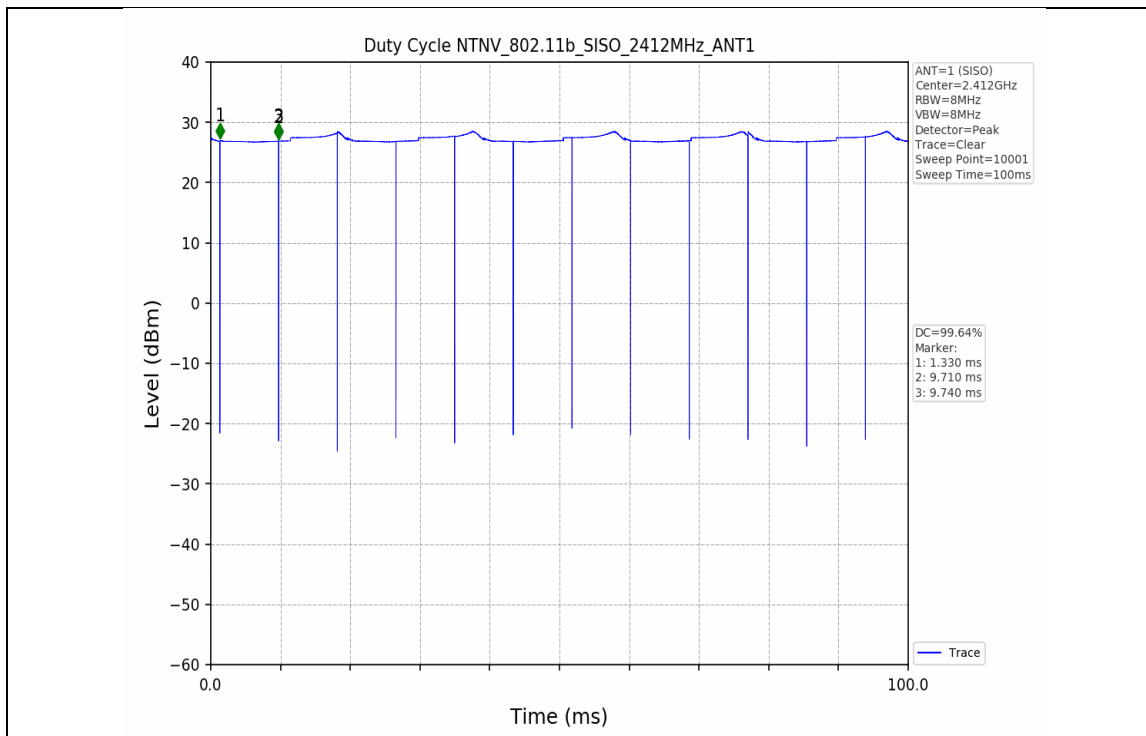
Appendix for 15.247

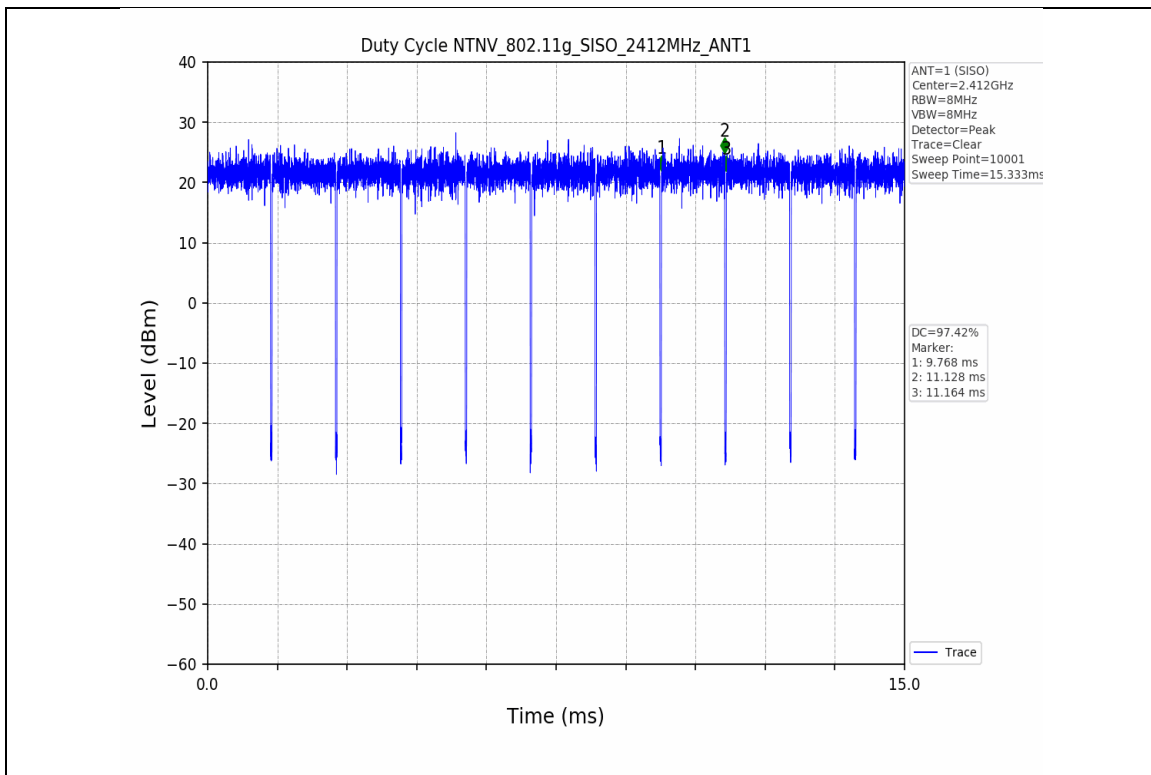
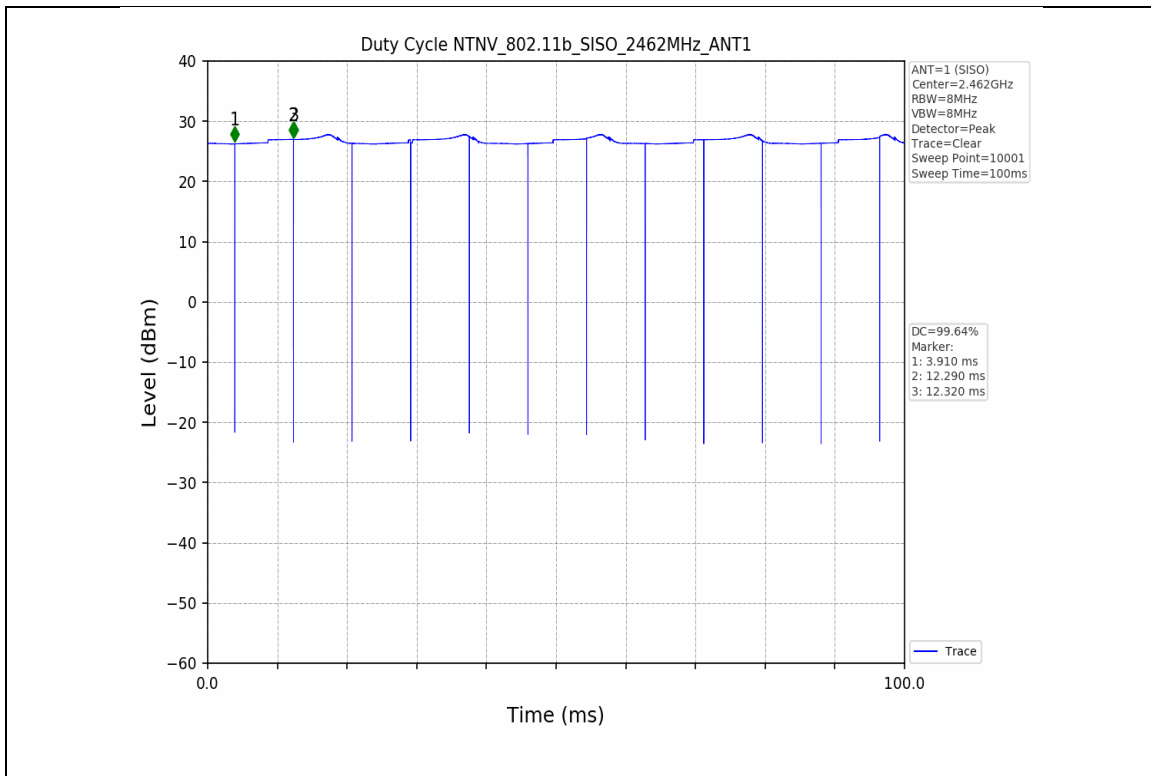
1. Duty Cycle

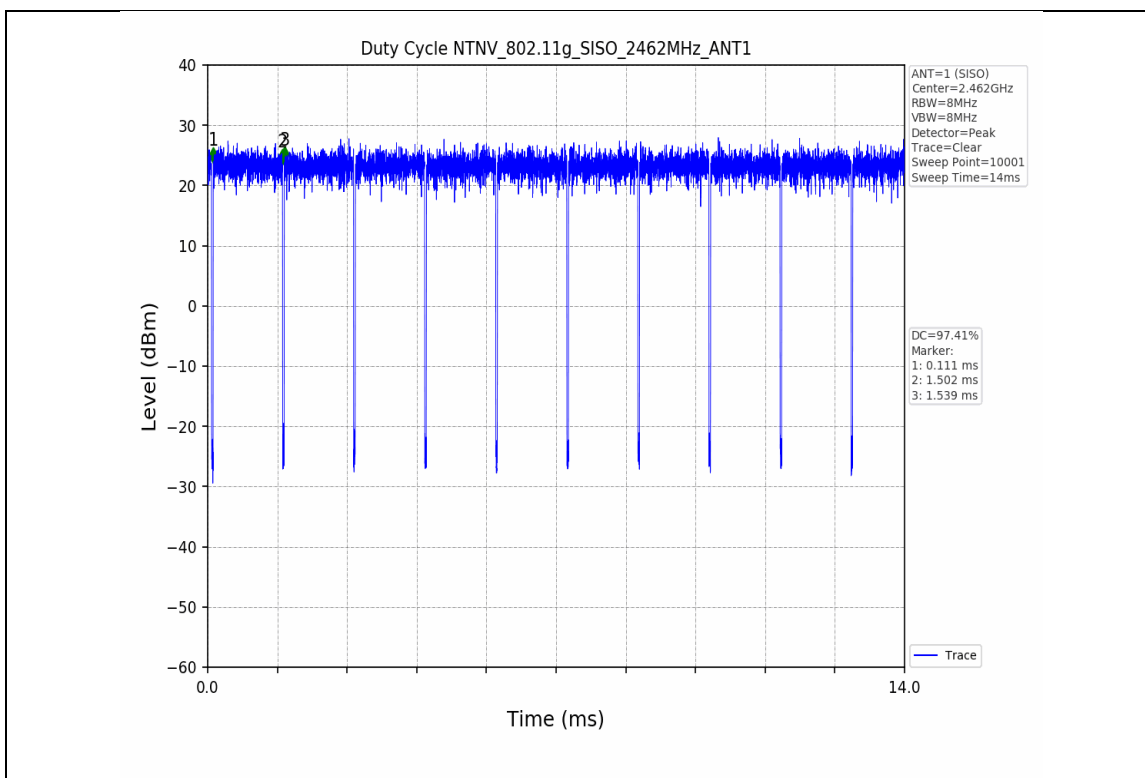
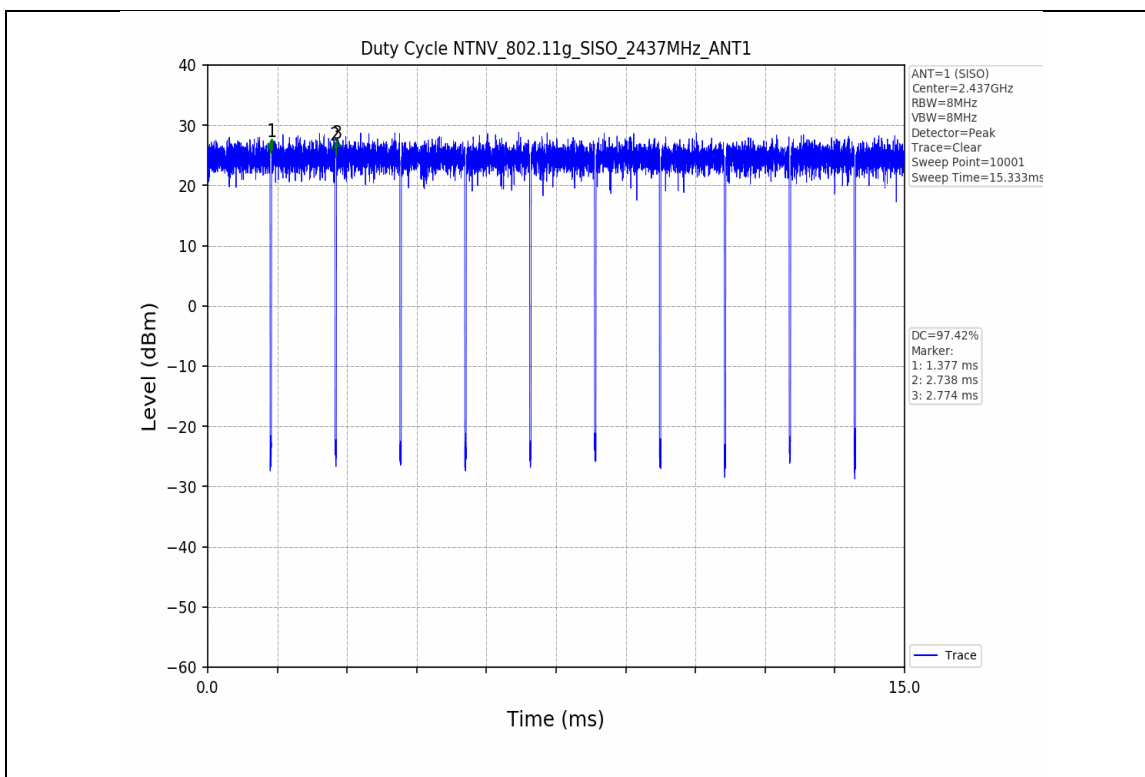
1.1 Test Result

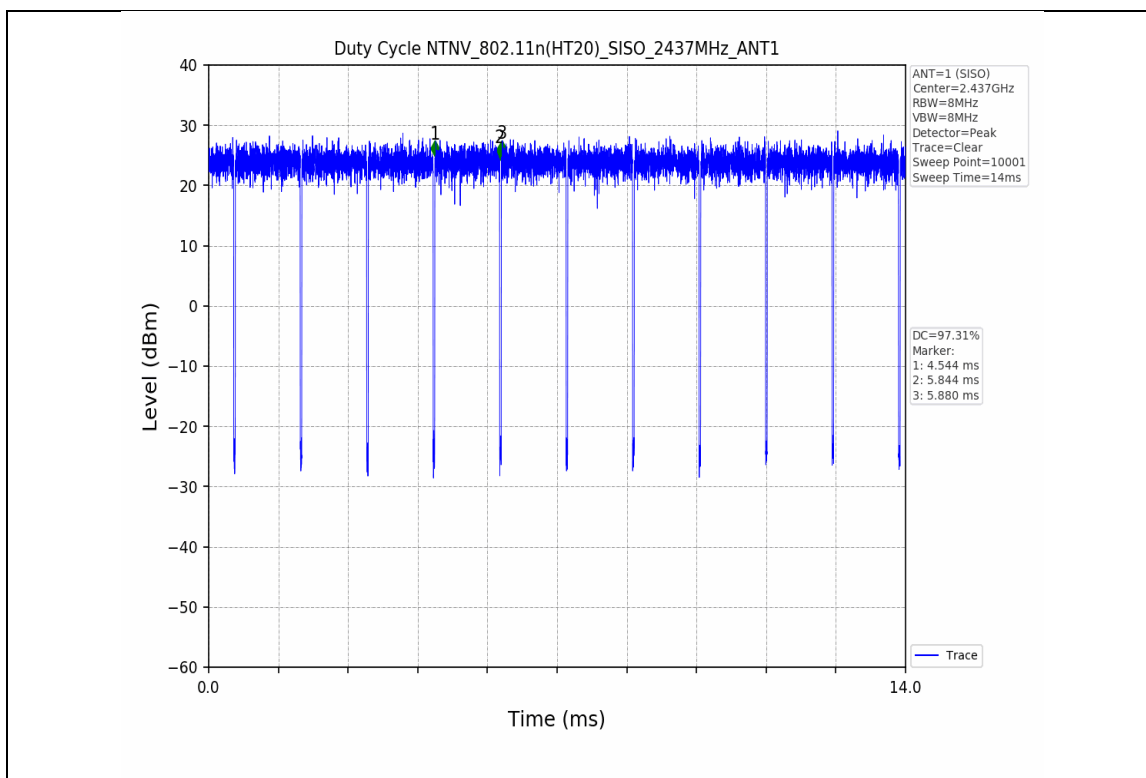
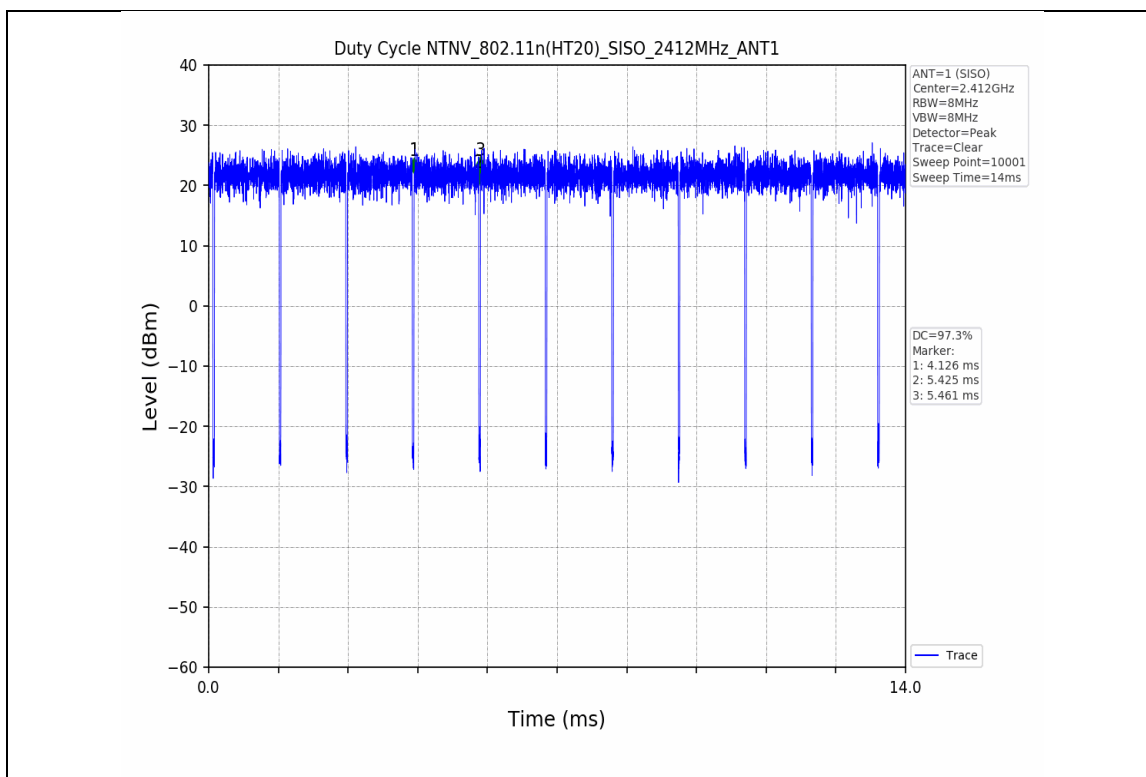
Test Mode	Channel Frequency(MHz)	TX Type	ANT No.	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
802.11b	2412	SISO	1	8.380	8.410	99.64	0.02
	2437	SISO	1	8.380	8.410	99.64	0.02
	2462	SISO	1	8.380	8.410	99.64	0.02
802.11g	2412	SISO	1	1.360	1.396	97.42	0.11
	2437	SISO	1	1.361	1.397	97.42	0.11
	2462	SISO	1	1.391	1.428	97.41	0.11
802.11n(HT20)	2412	SISO	1	1.299	1.335	97.30	0.12
	2437	SISO	1	1.300	1.336	97.31	0.12
	2462	SISO	1	1.299	1.335	97.30	0.12
802.11n(HT40)	2422	SISO	1	0.618	0.652	94.79	0.23
	2437	SISO	1	0.618	0.652	94.79	0.23
	2452	SISO	1	0.619	0.652	94.94	0.23

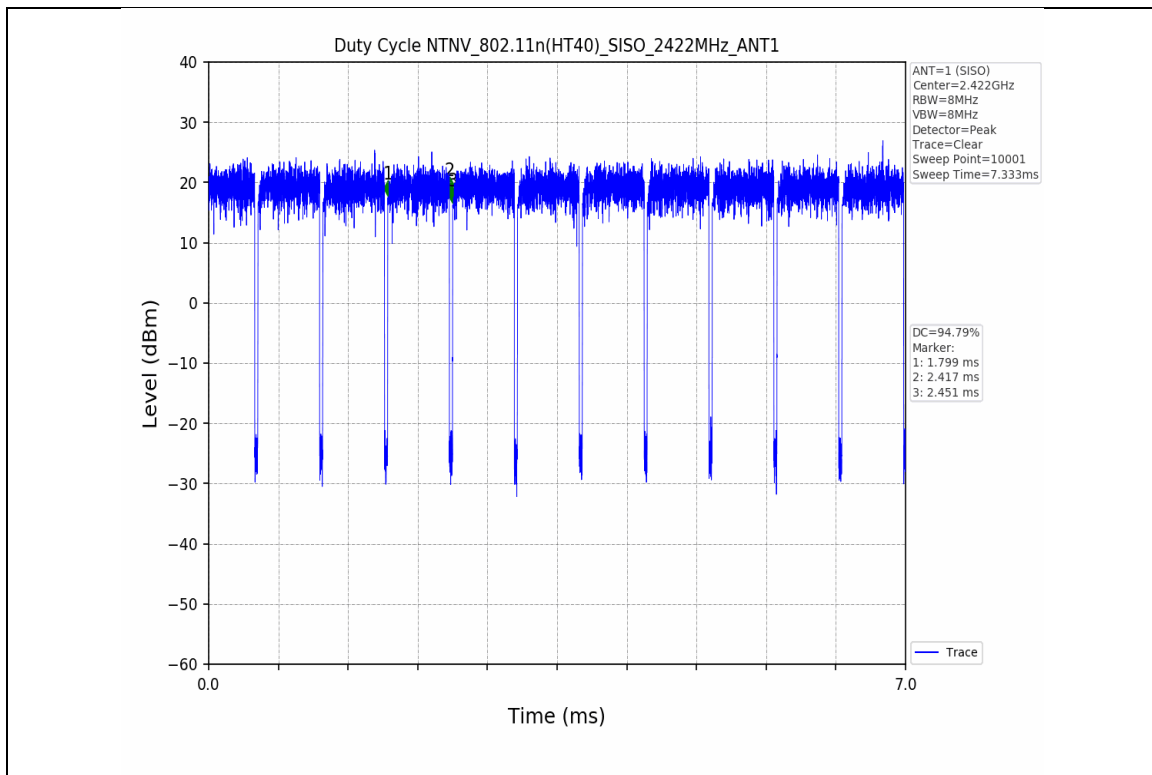
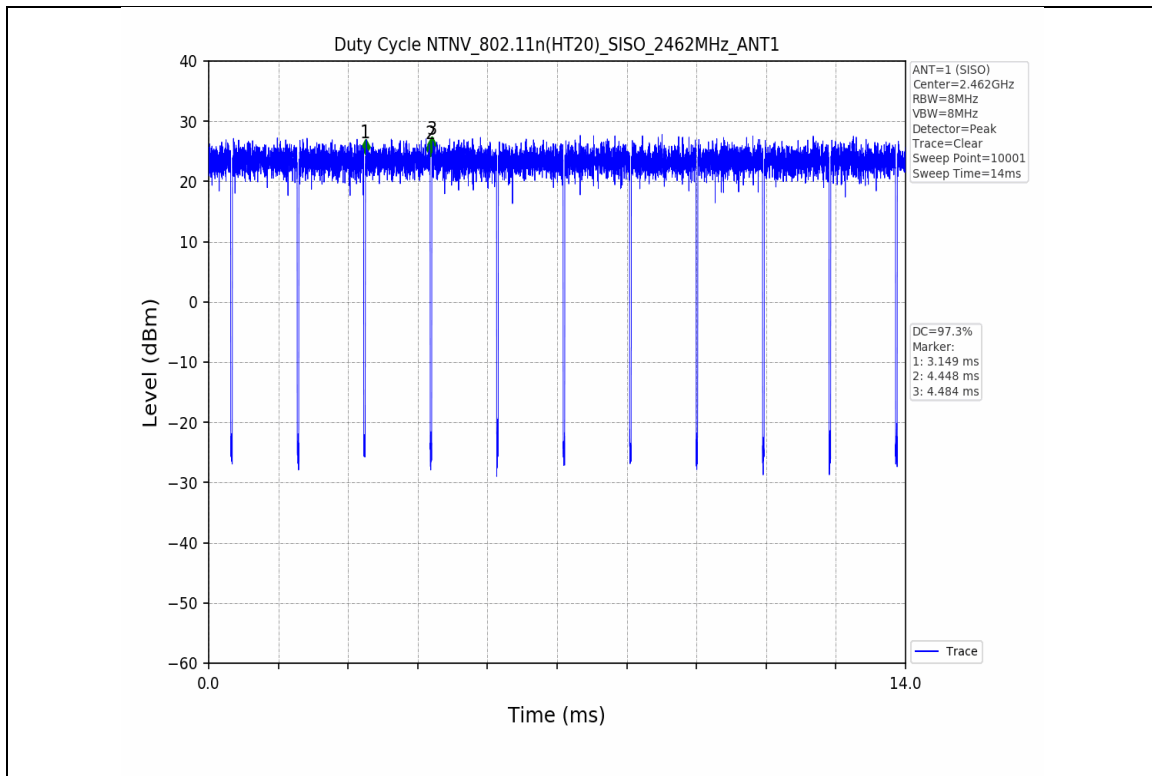
1.2 Test Graph

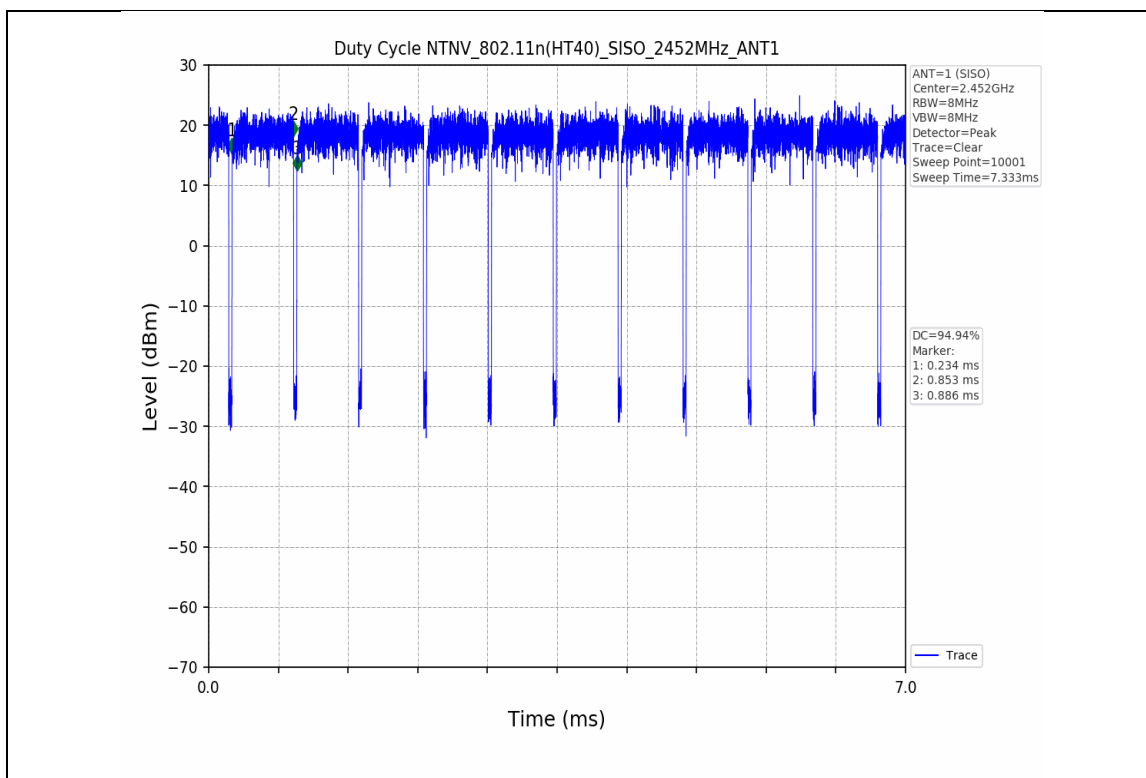
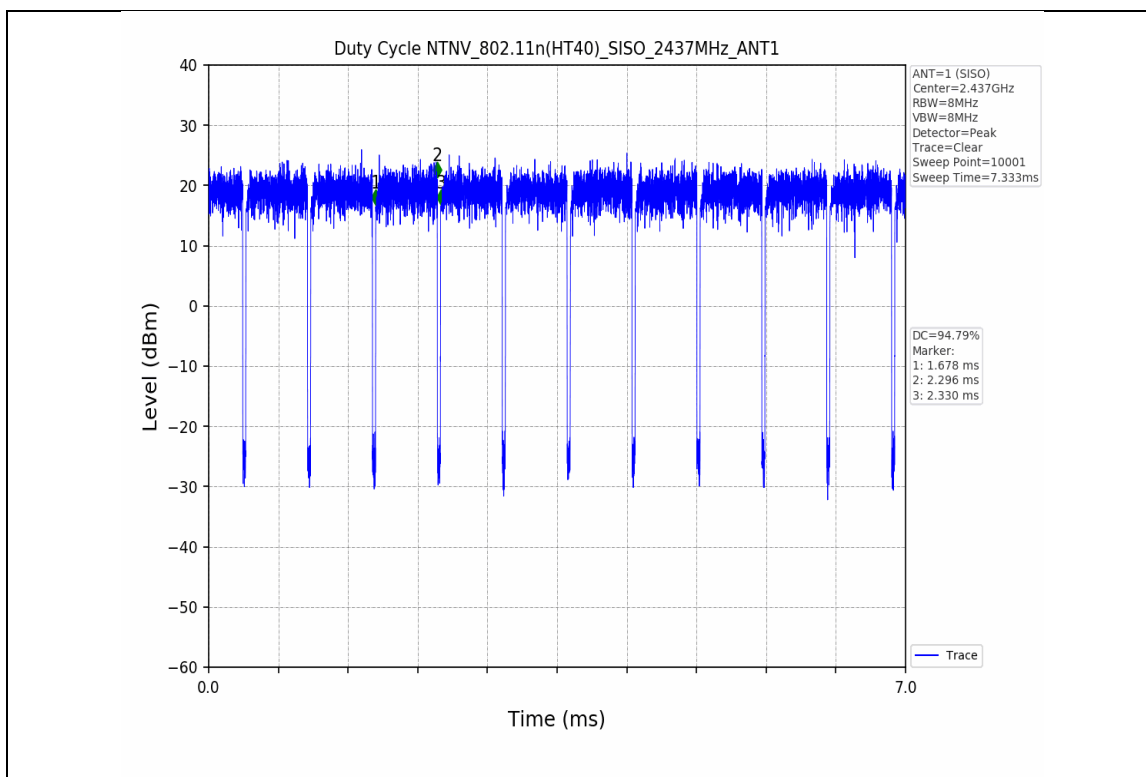












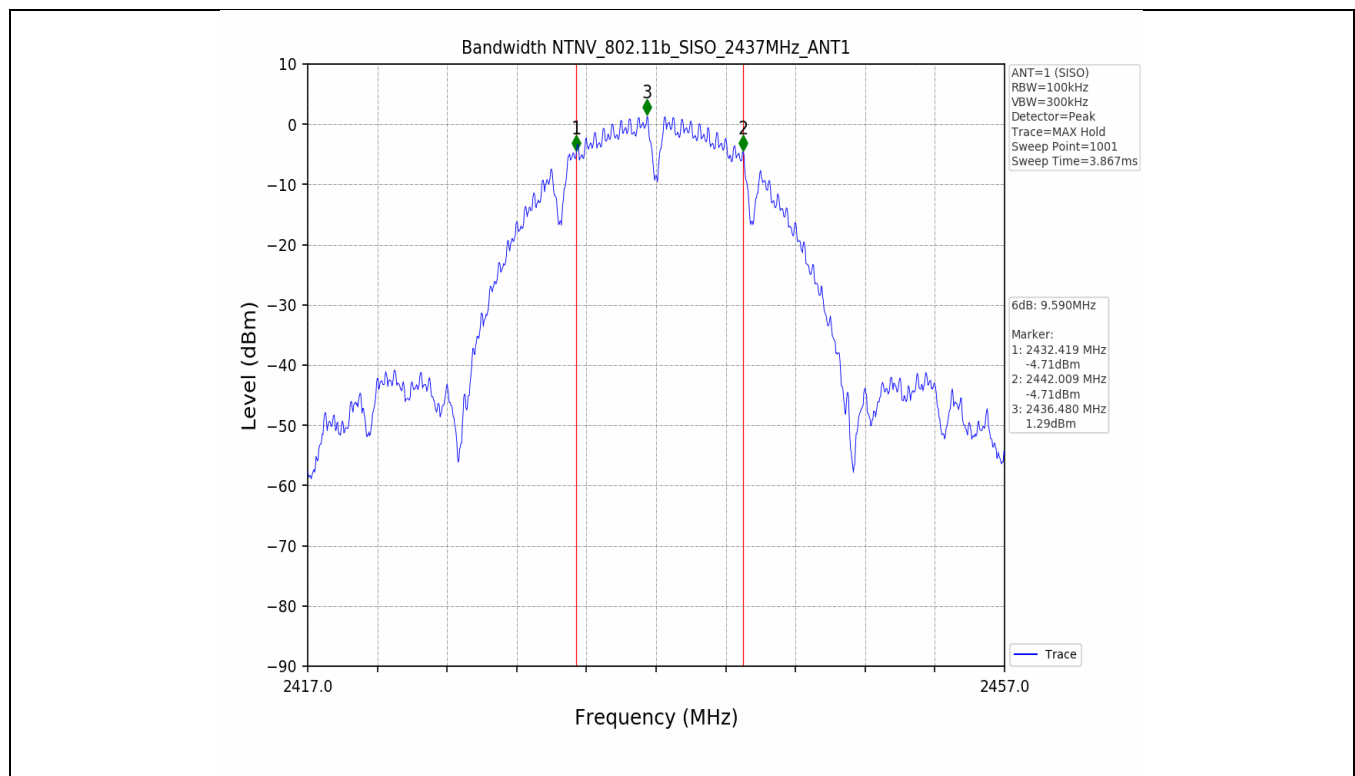
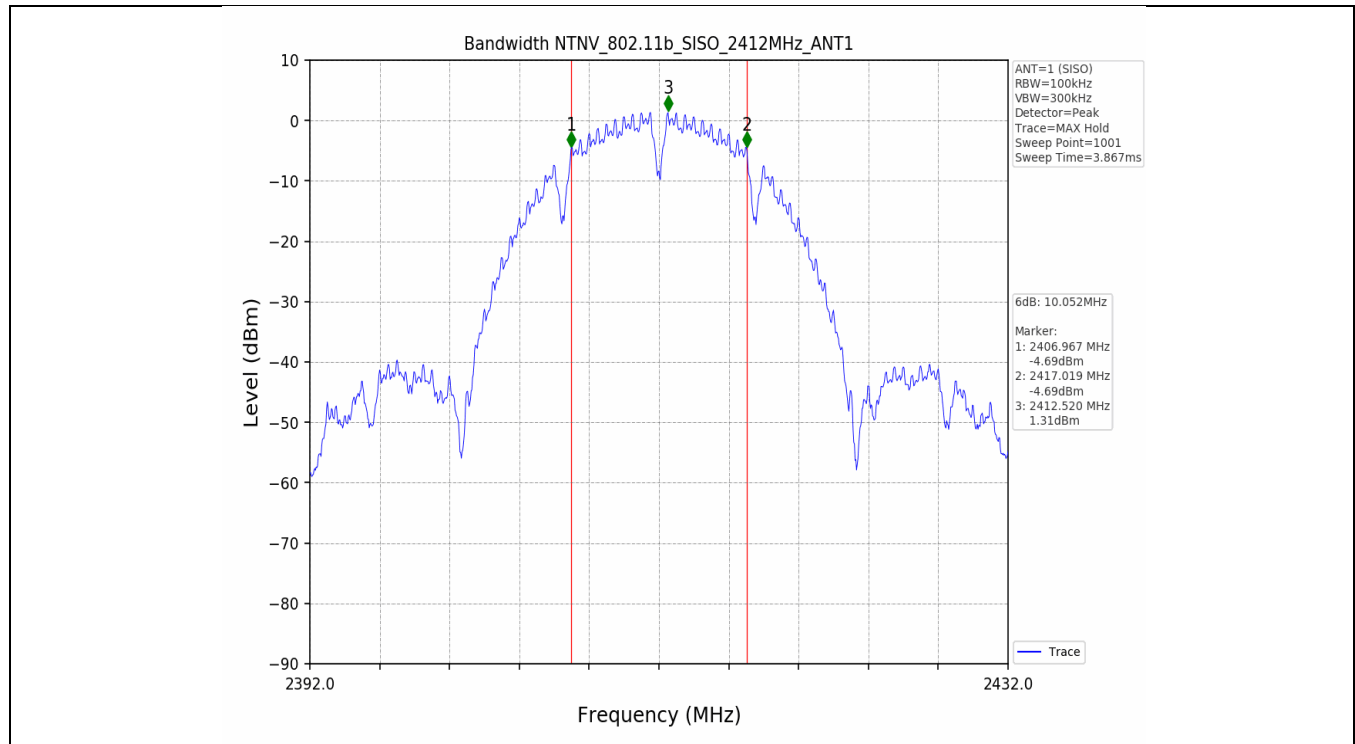
2. Bandwidth

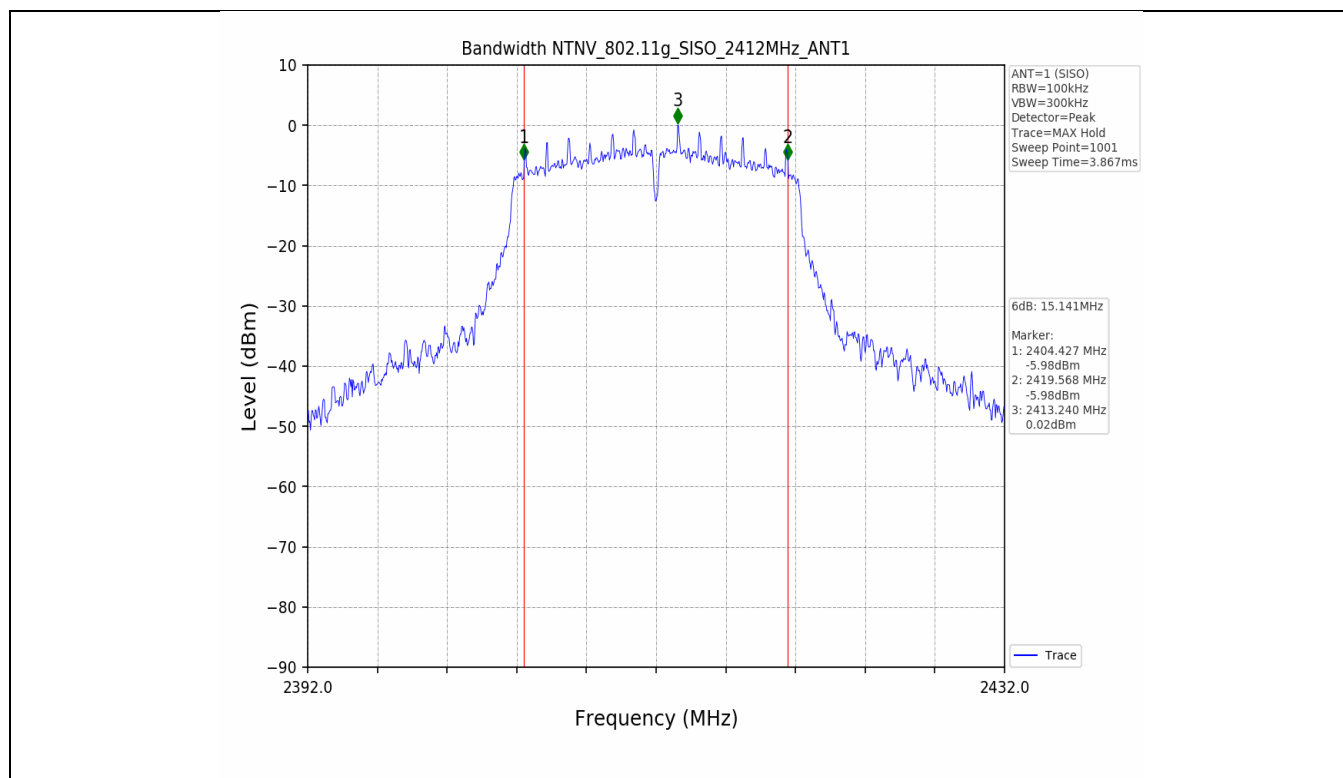
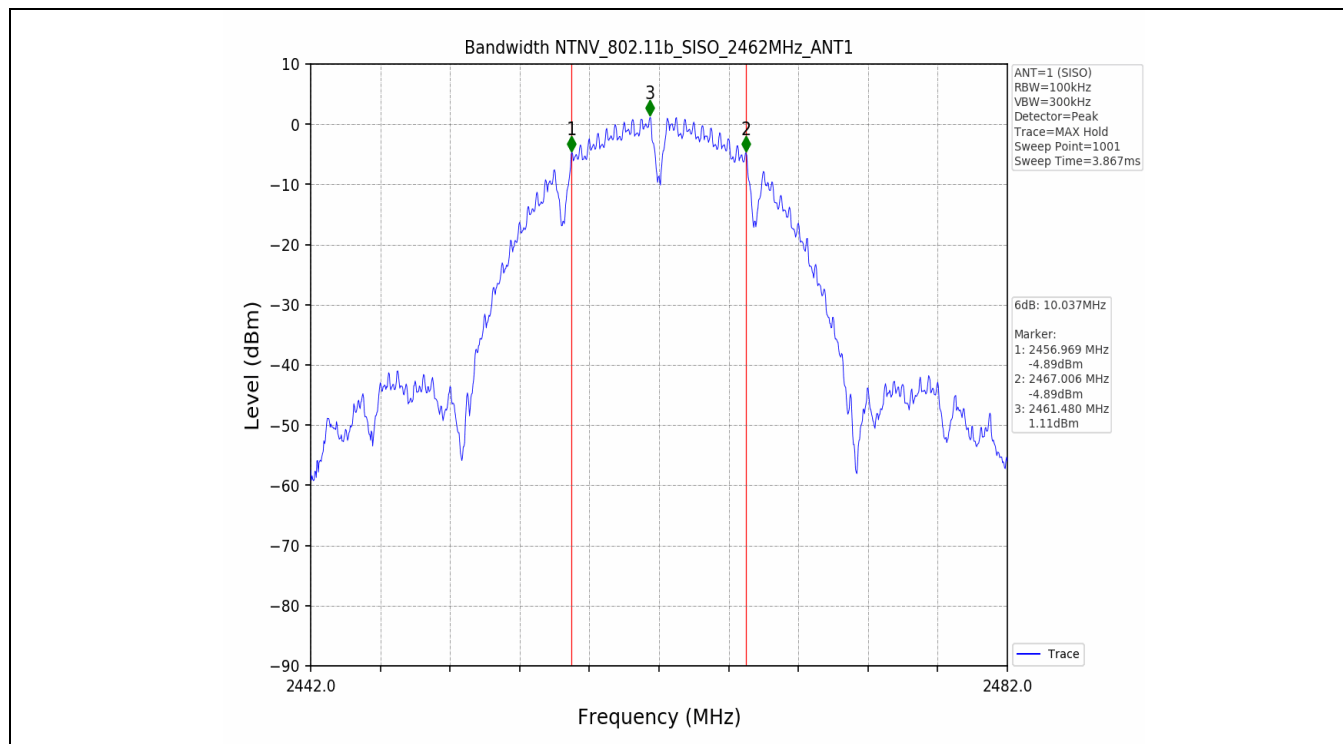
2.1 Test Result

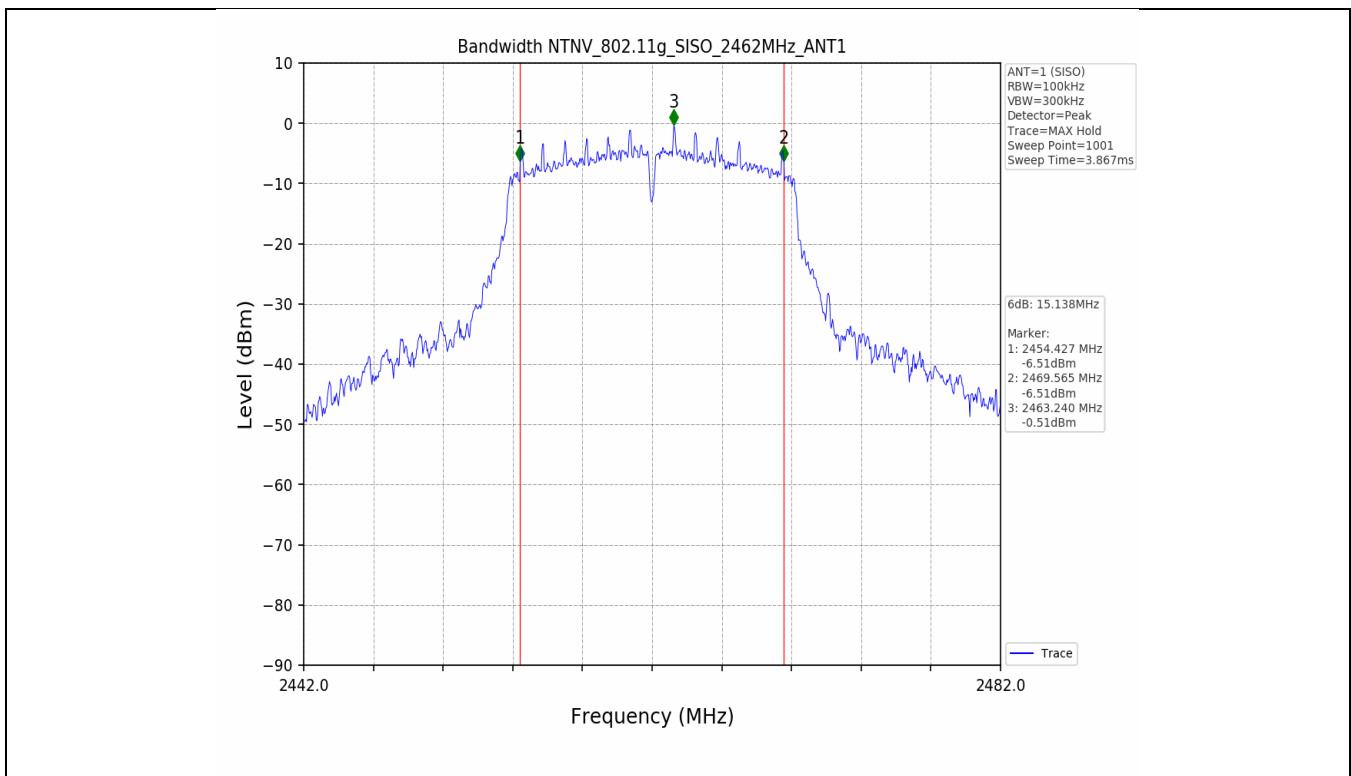
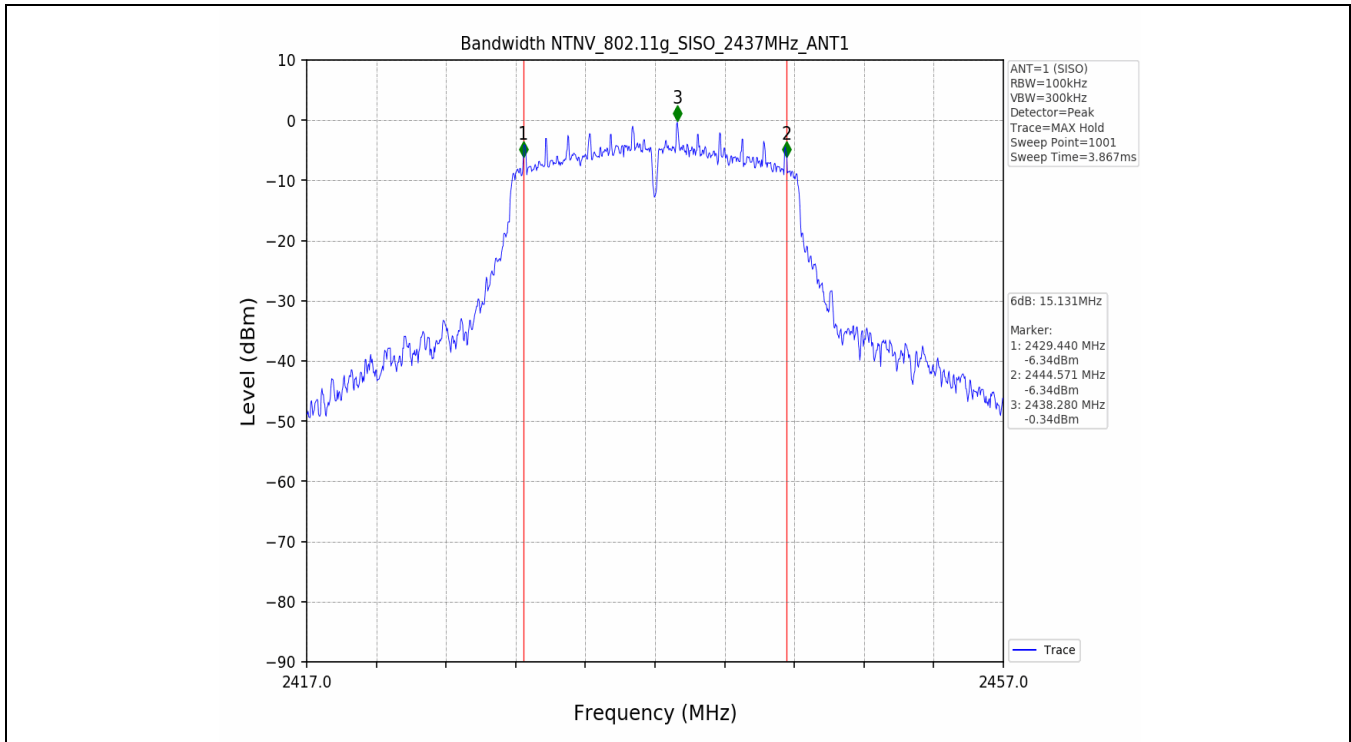
Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11b	2412	SISO	1	10.052	≥0.5	PASS
	2437	SISO	1	9.590	≥0.5	PASS
	2462	SISO	1	10.037	≥0.5	PASS
802.11g	2412	SISO	1	15.141	≥0.5	PASS
	2437	SISO	1	15.131	≥0.5	PASS
	2462	SISO	1	15.138	≥0.5	PASS
802.11n(HT20)	2412	SISO	1	15.119	≥0.5	PASS
	2437	SISO	1	15.123	≥0.5	PASS
	2462	SISO	1	15.096	≥0.5	PASS
802.11n(HT40)	2422	SISO	1	35.129	≥0.5	PASS
	2437	SISO	1	35.132	≥0.5	PASS
	2452	SISO	1	35.155	≥0.5	PASS

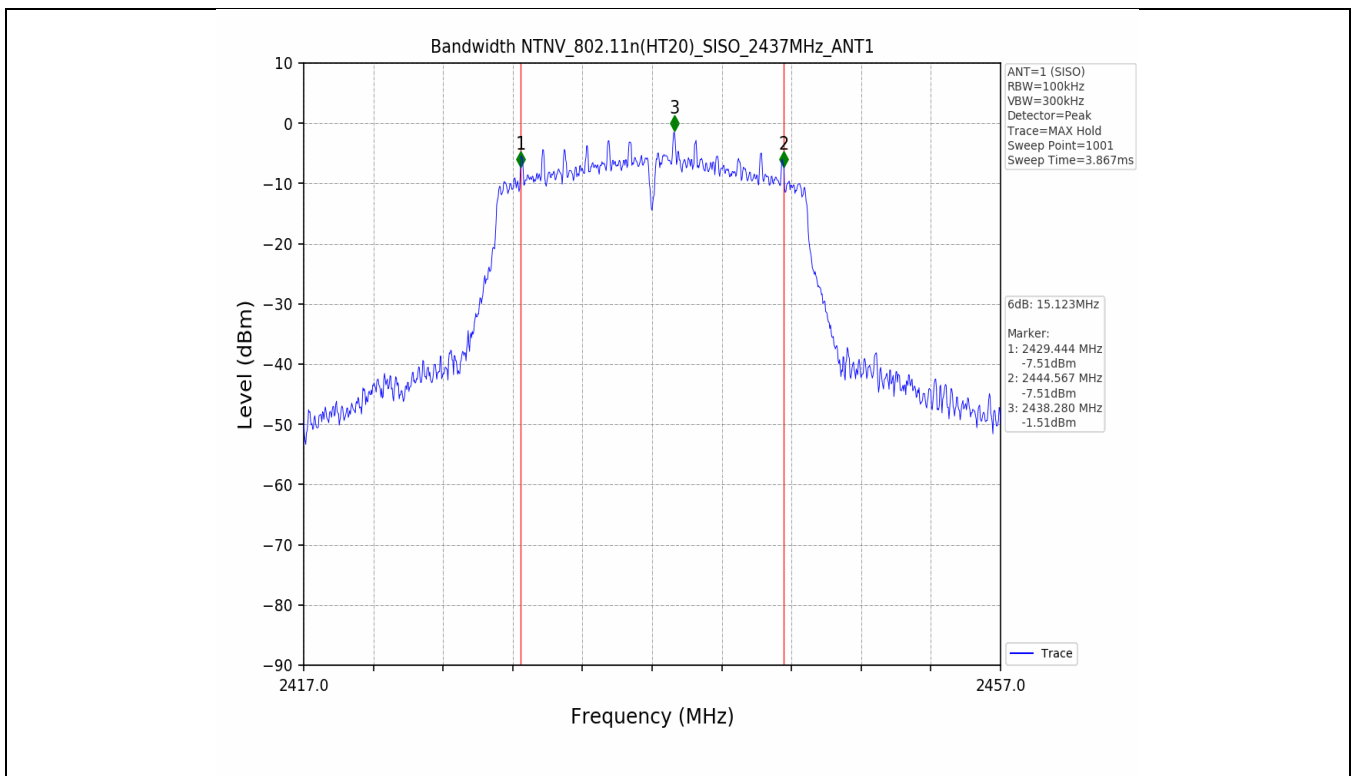
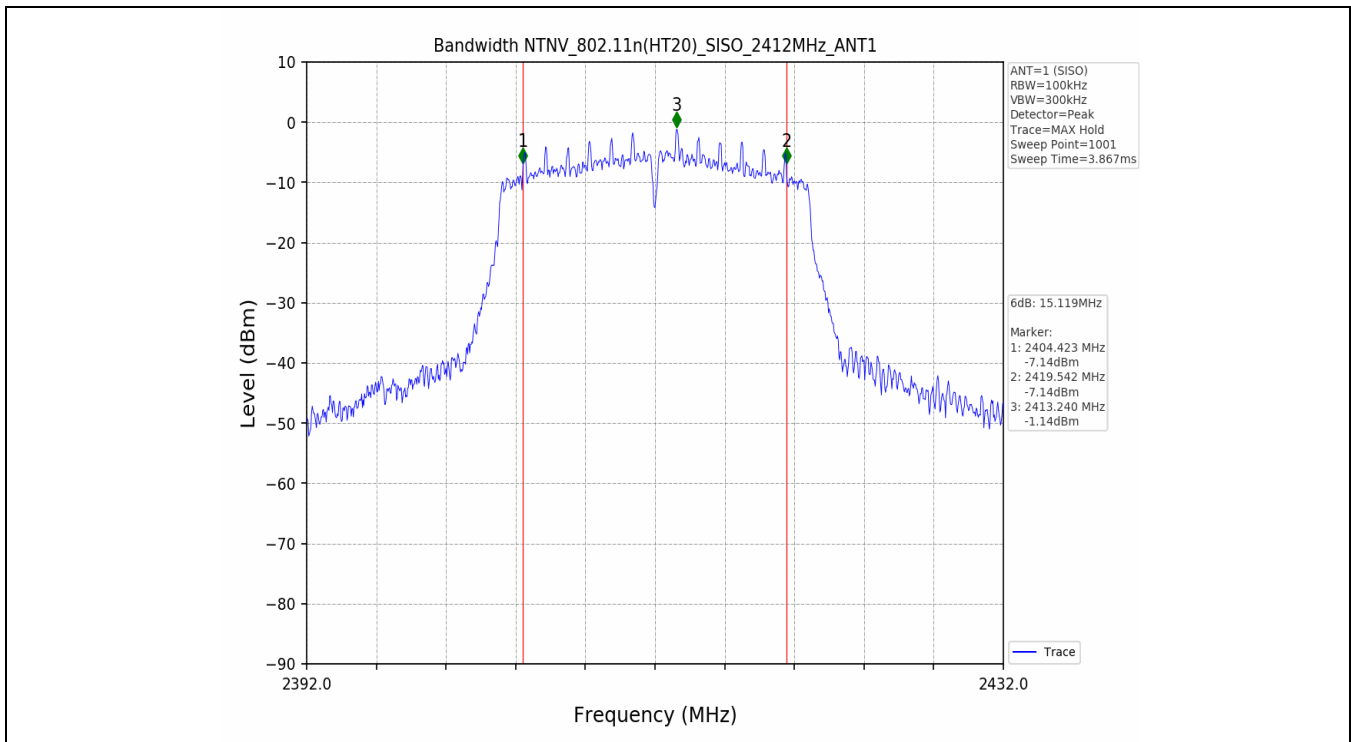
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11b	2412	SISO	1	14.343	Only for Report Use
	2437	SISO	1	14.316	Only for Report Use
	2462	SISO	1	14.322	Only for Report Use
802.11g	2412	SISO	1	16.759	Only for Report Use
	2437	SISO	1	16.766	Only for Report Use
	2462	SISO	1	16.744	Only for Report Use
802.11n(HT20)	2412	SISO	1	17.625	Only for Report Use
	2437	SISO	1	17.667	Only for Report Use
	2462	SISO	1	17.634	Only for Report Use
802.11n(HT40)	2422	SISO	1	36.095	Only for Report Use
	2437	SISO	1	36.253	Only for Report Use
	2452	SISO	1	36.180	Only for Report Use

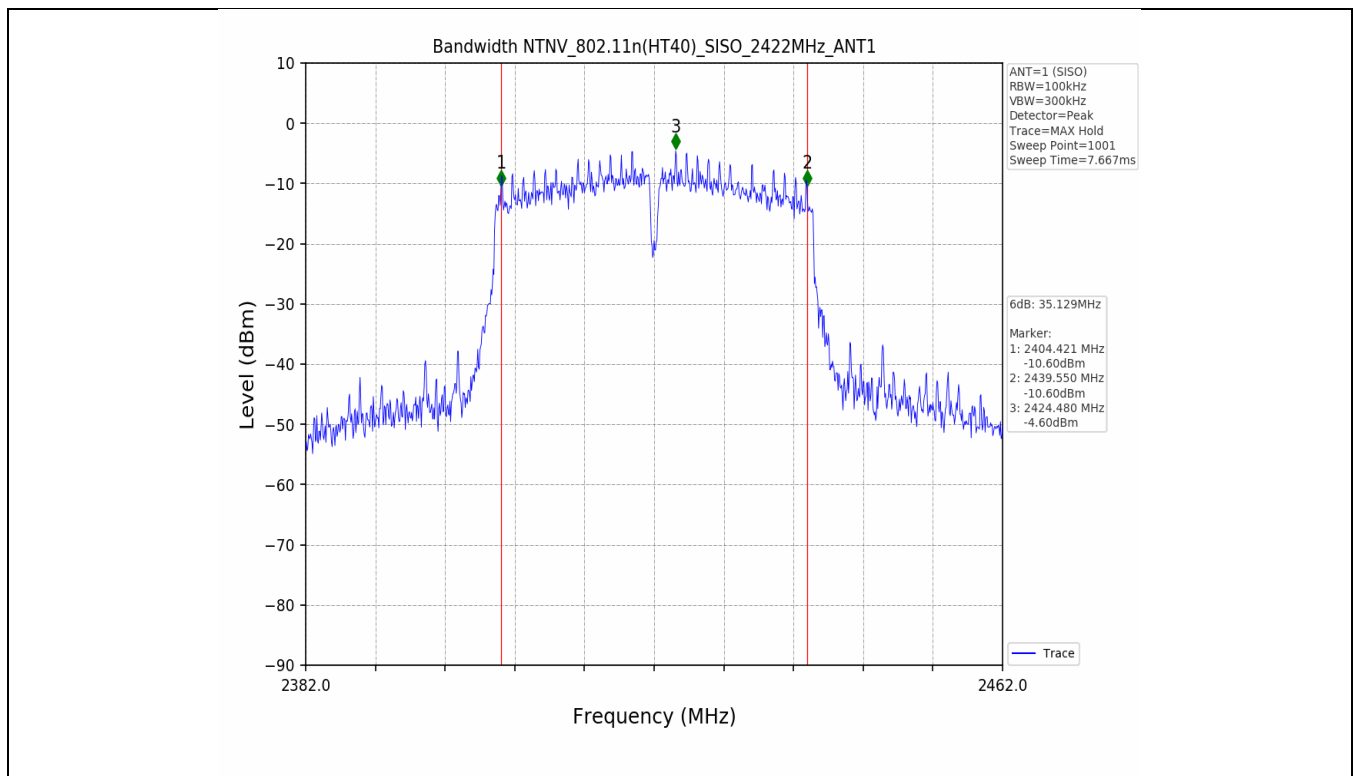
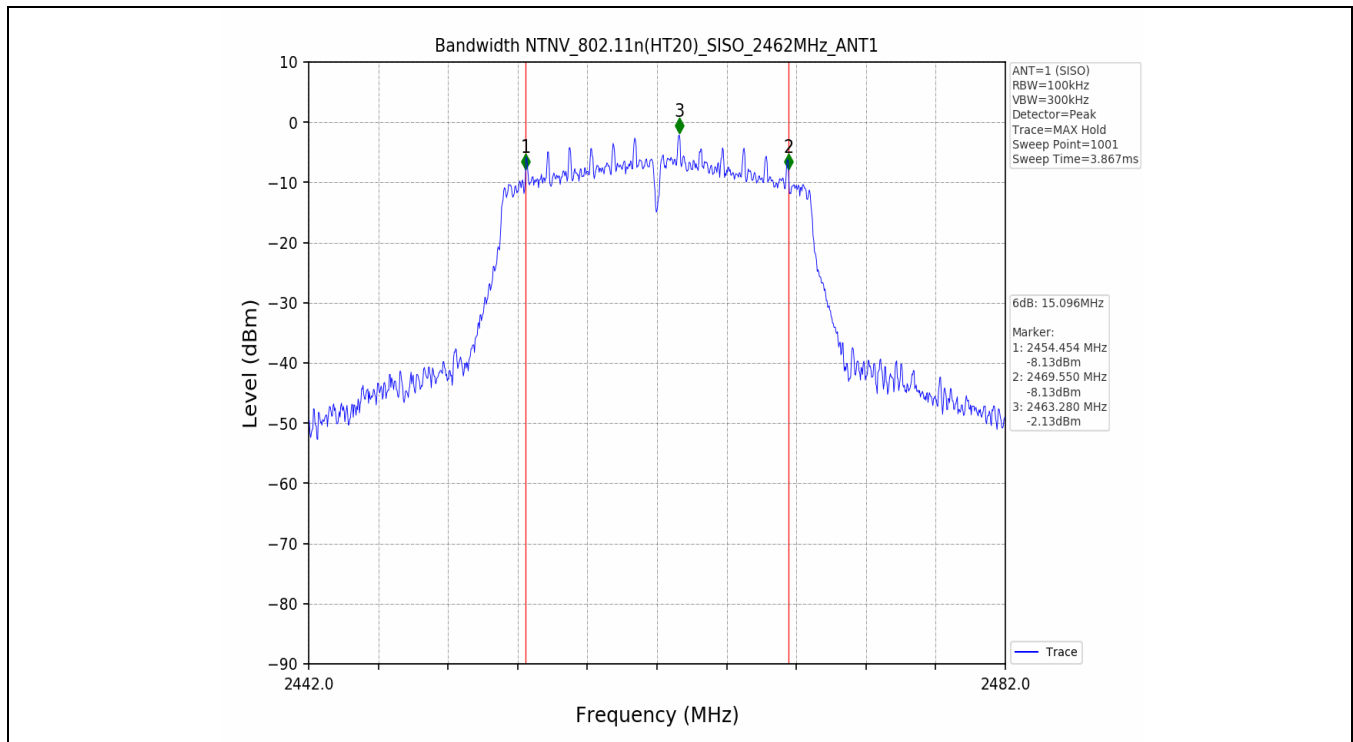
2.2 Test Graph - 6dB Bandwidth

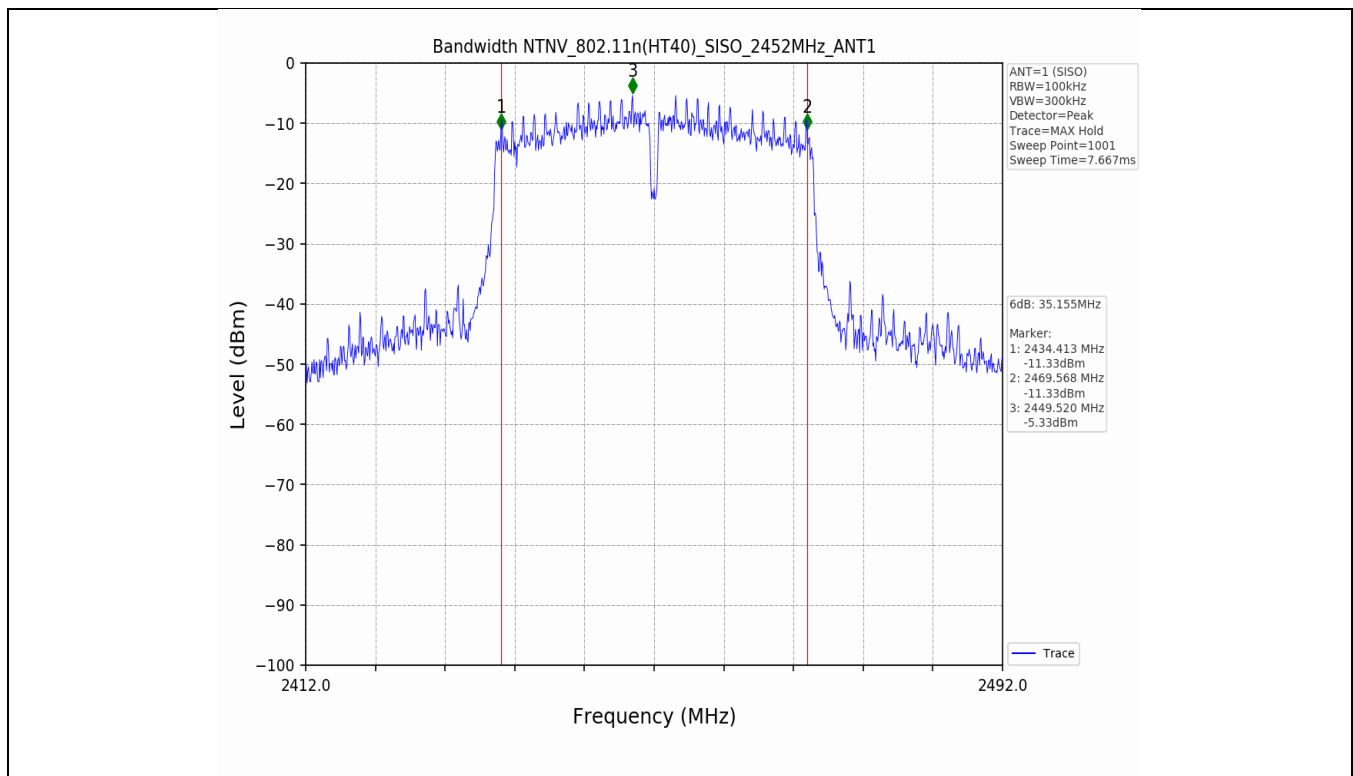
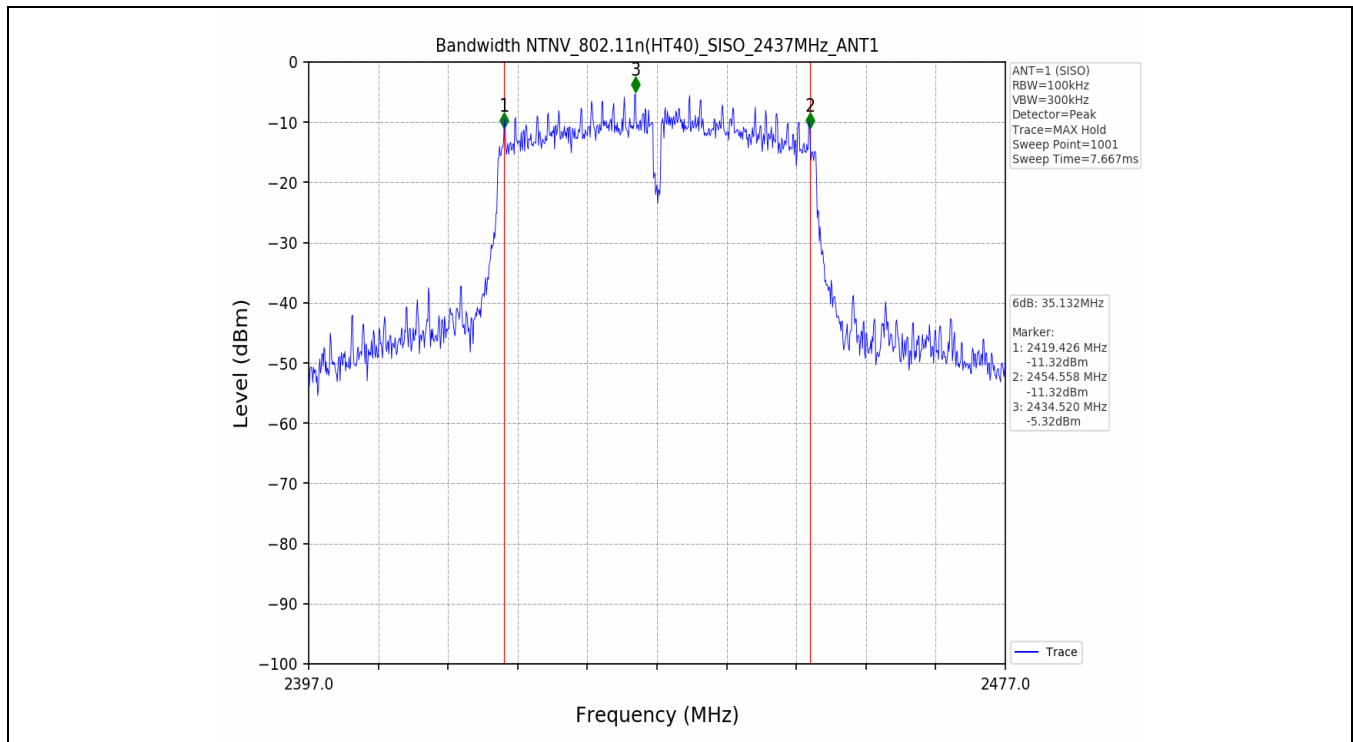




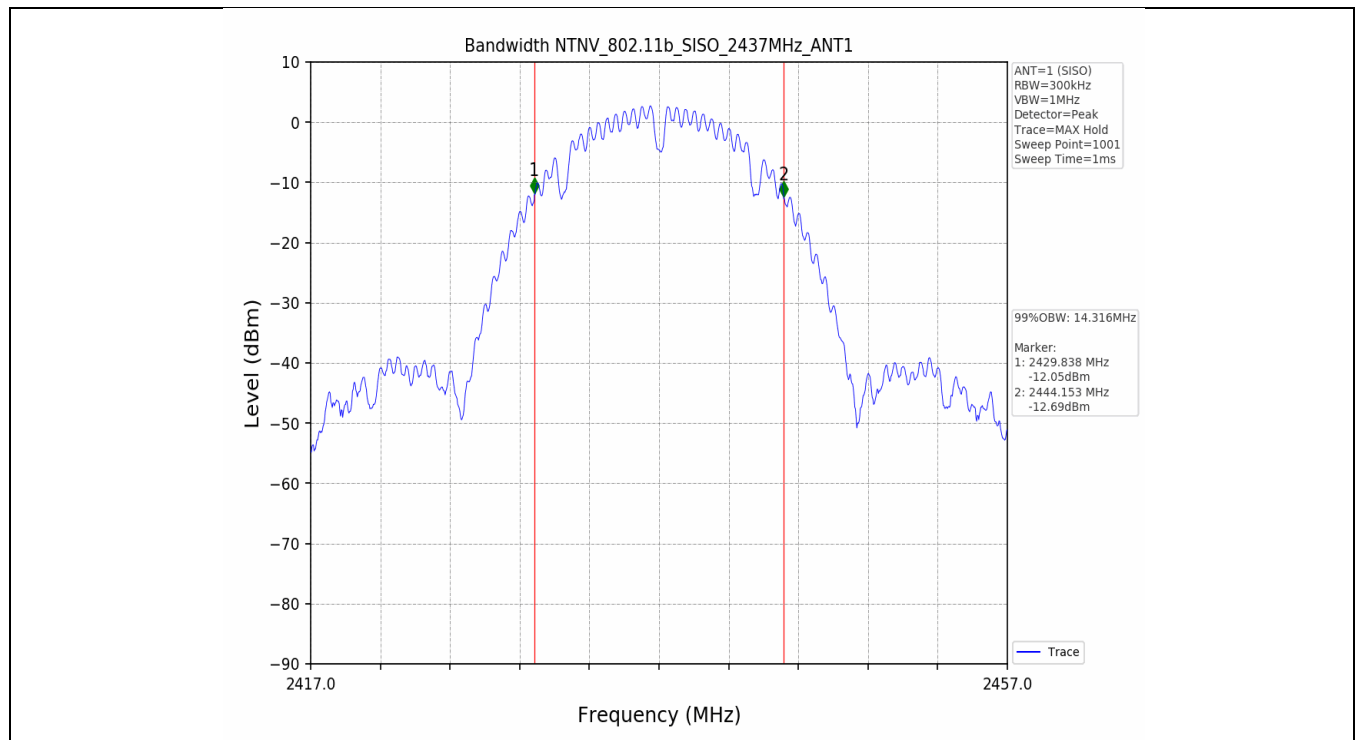
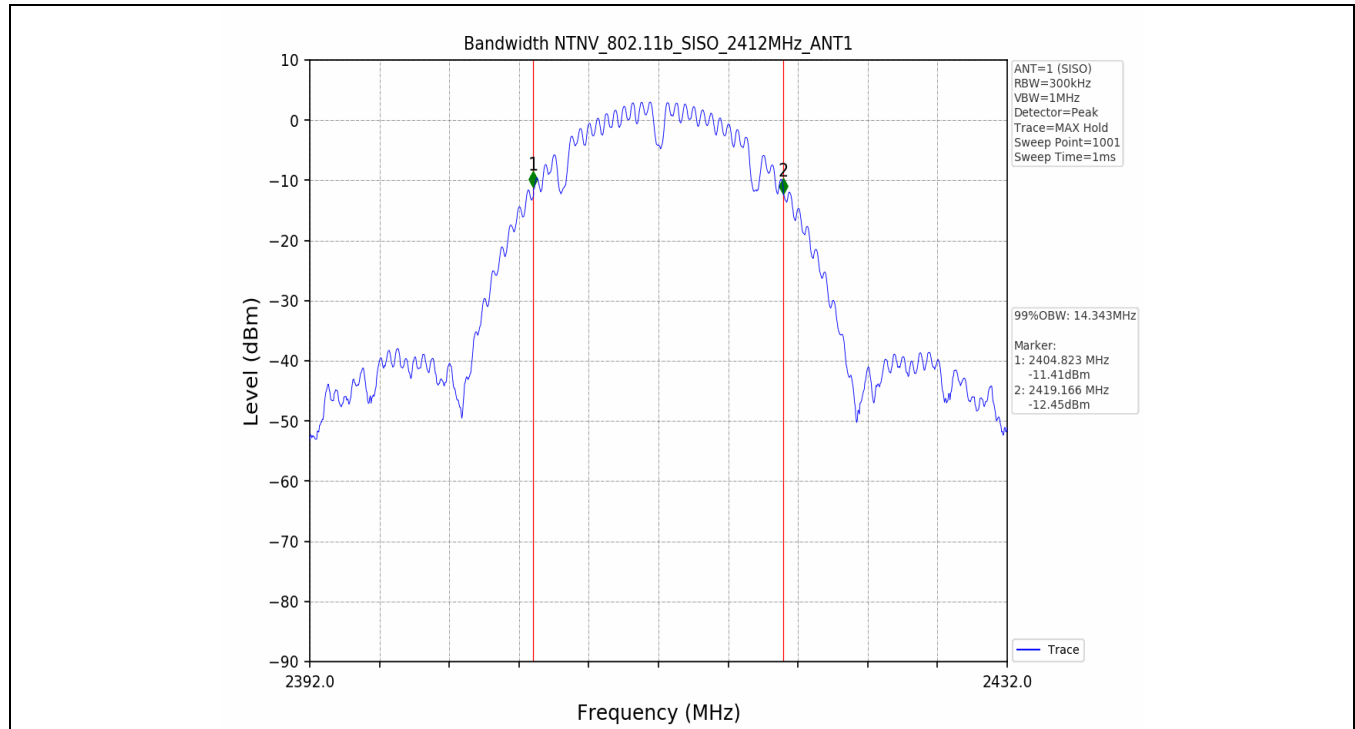


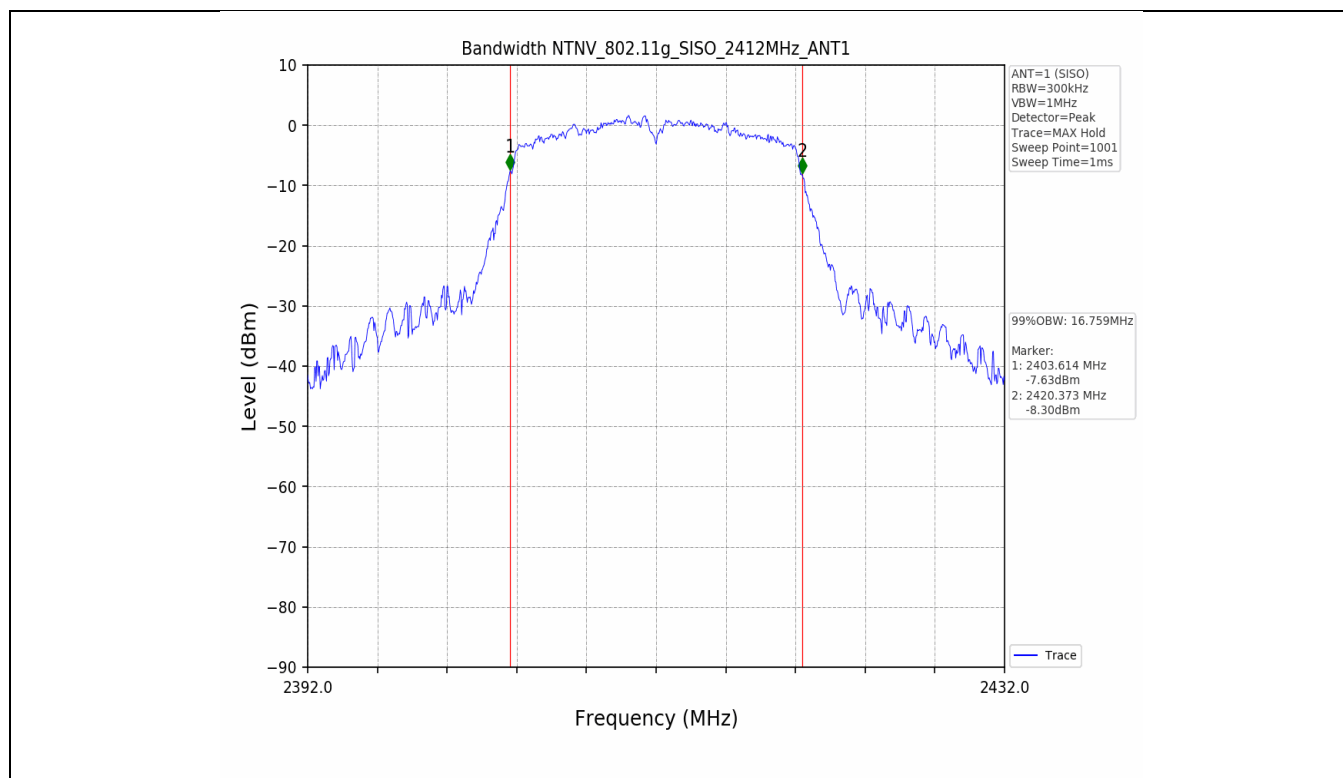
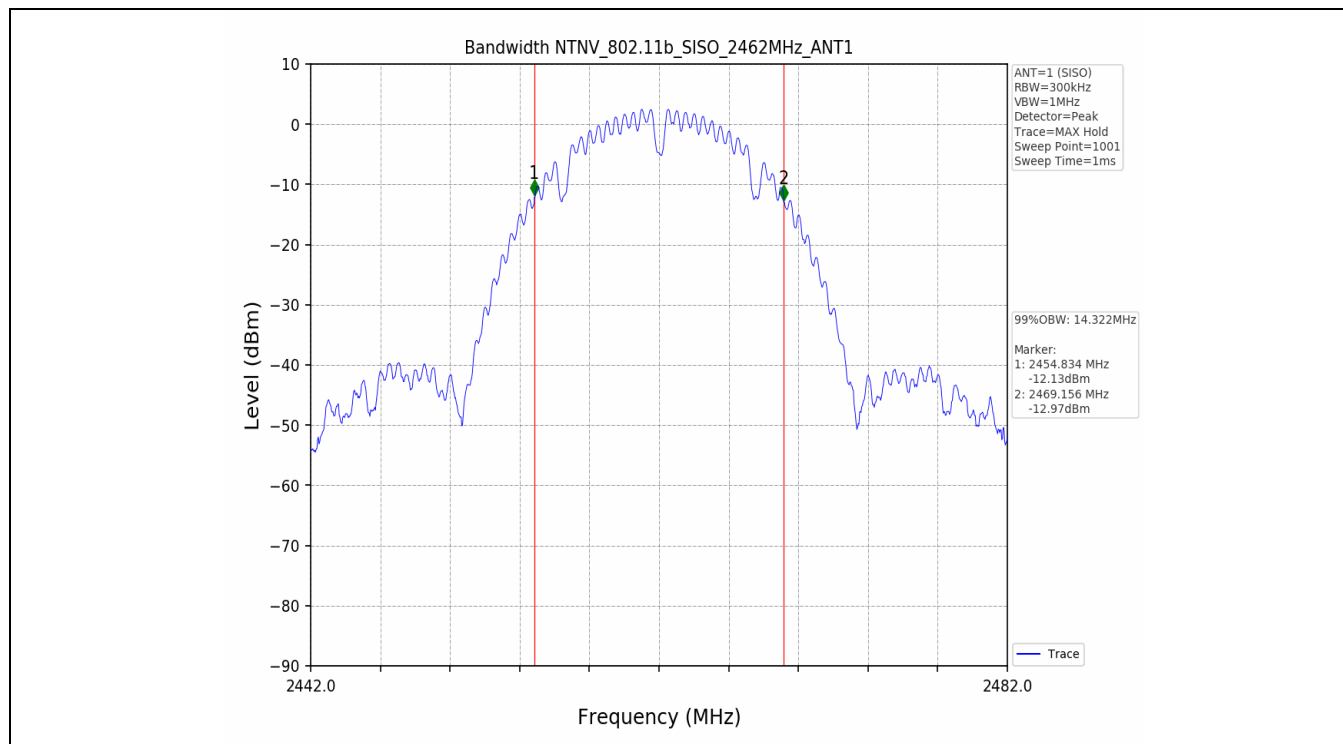


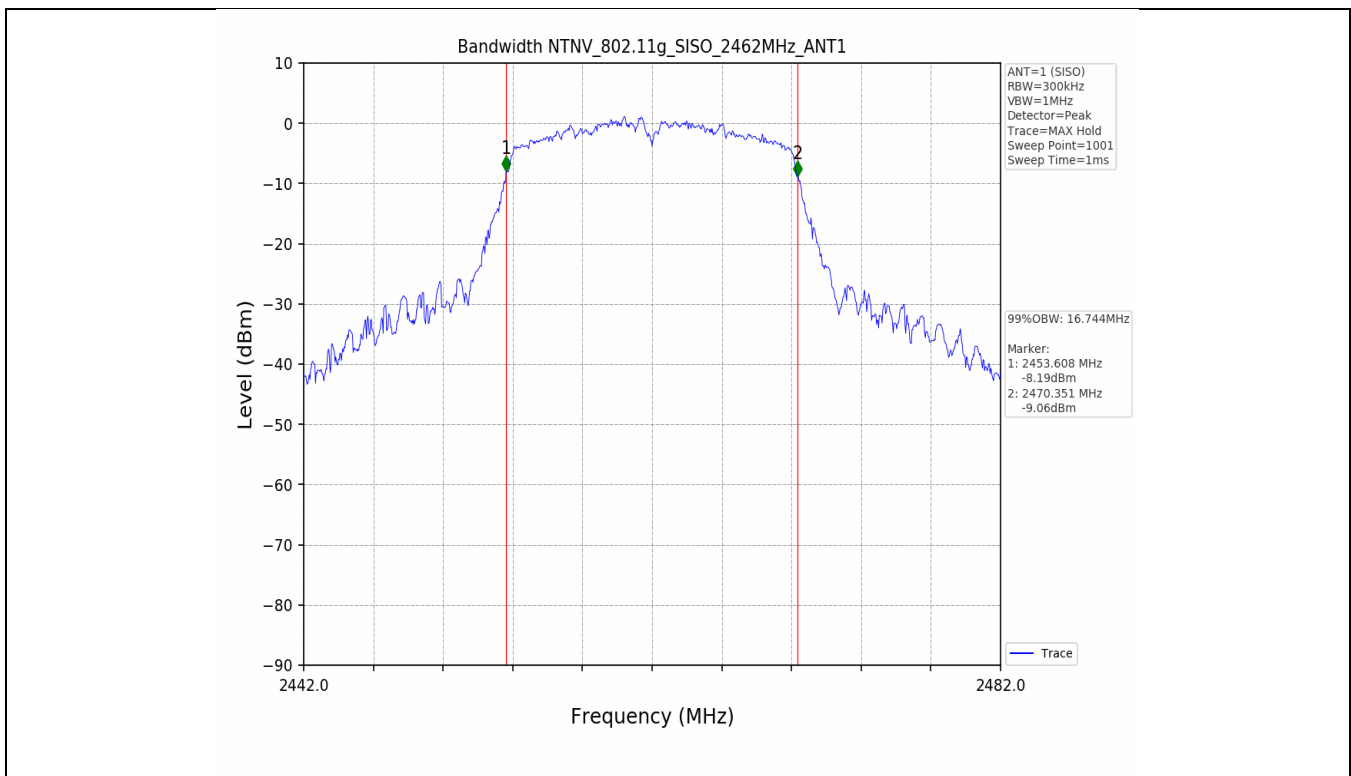
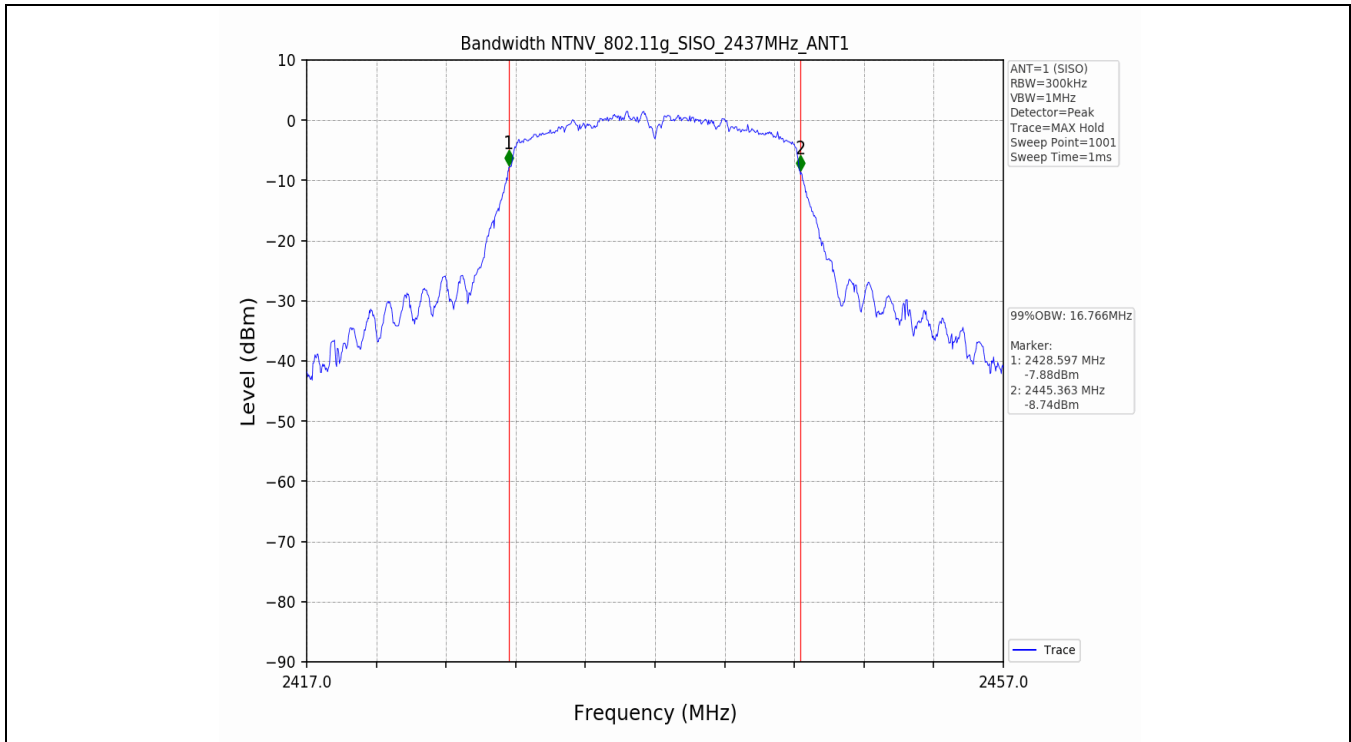


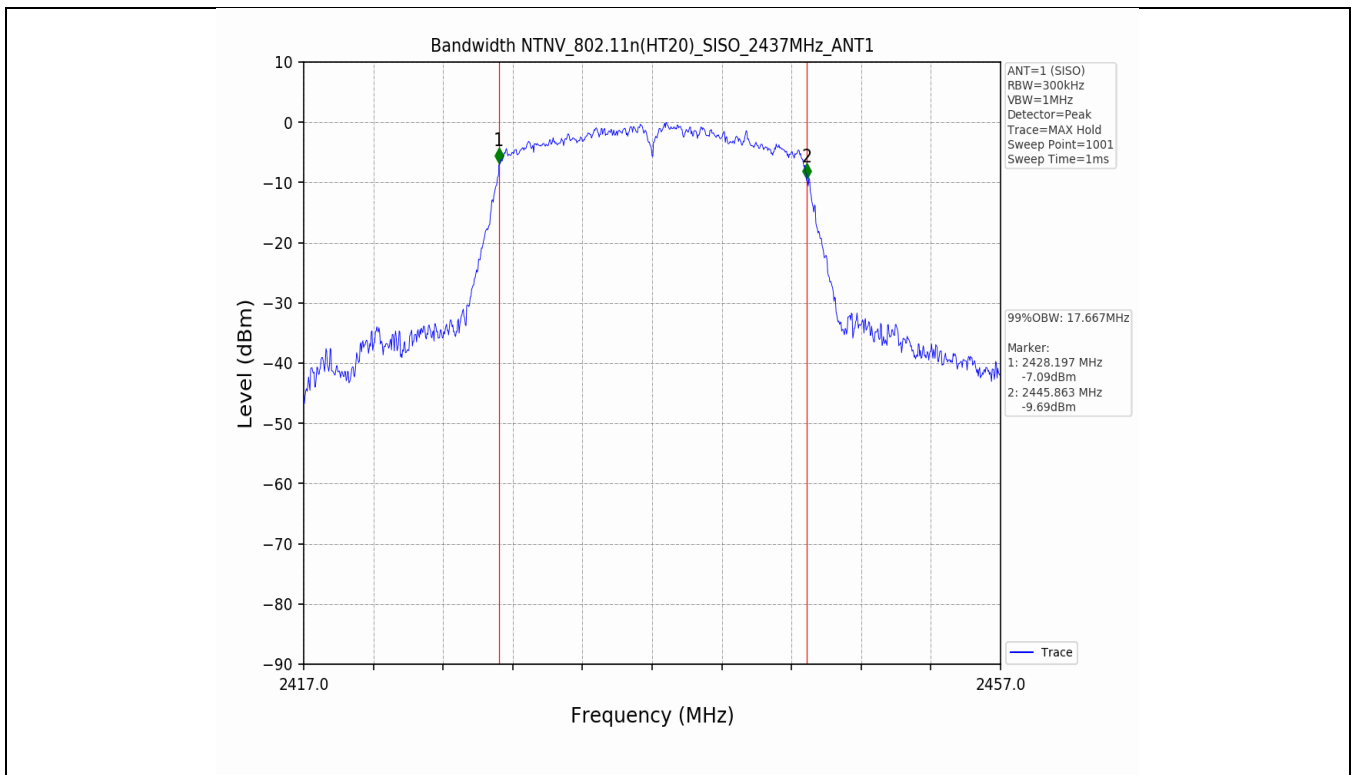
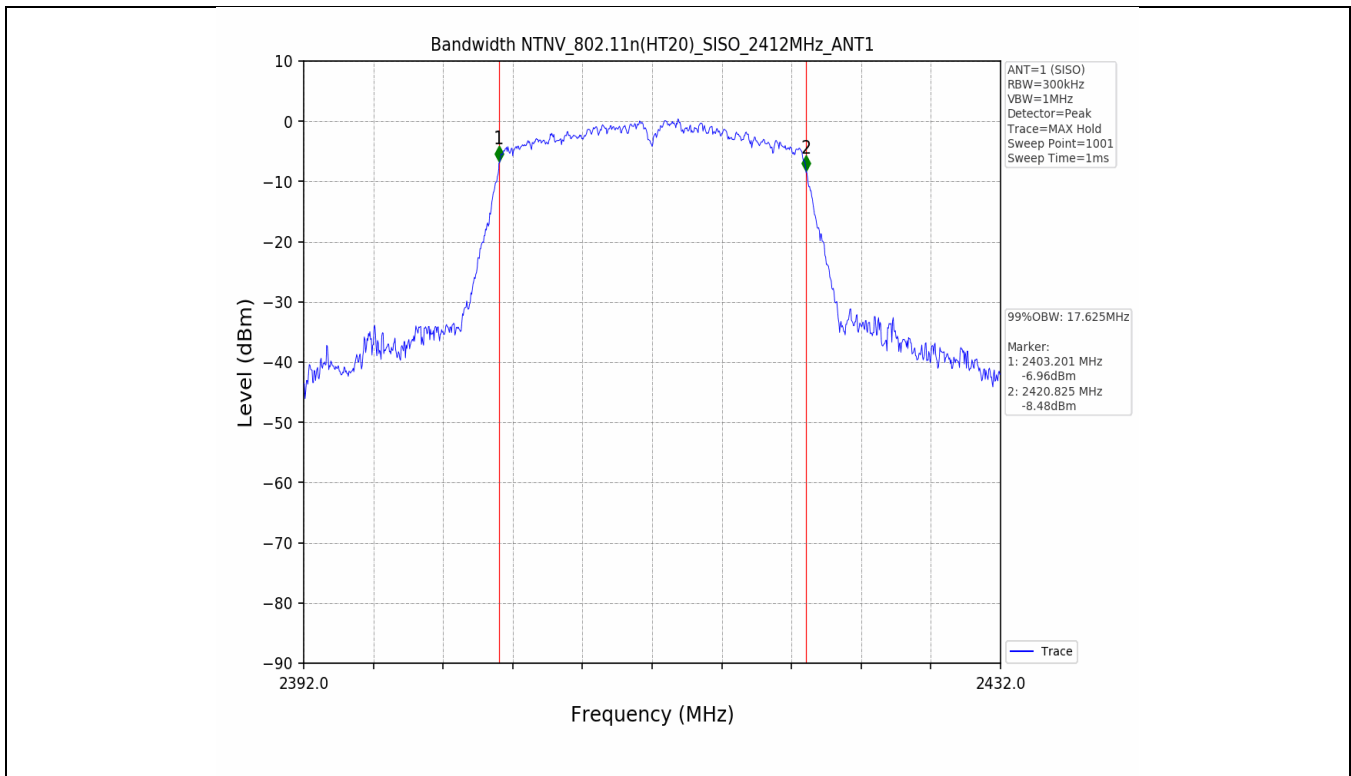


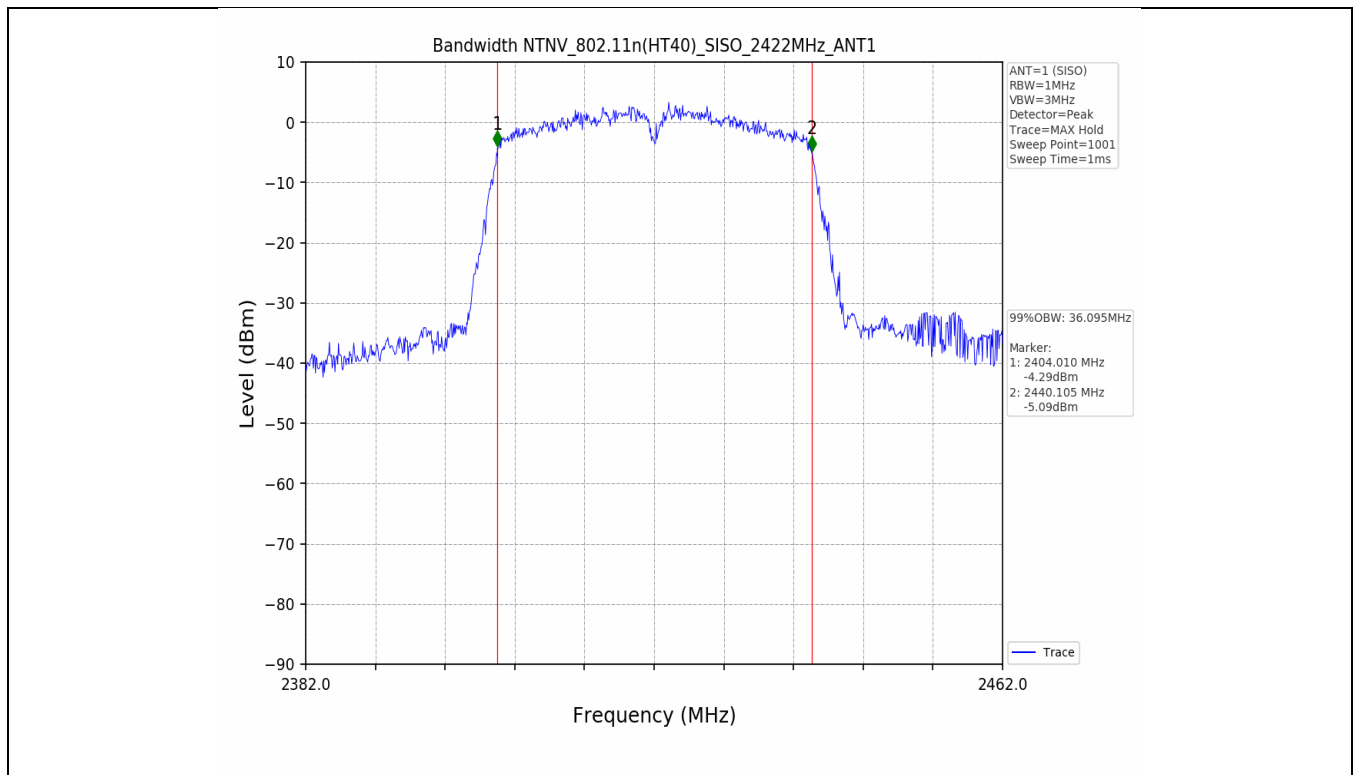
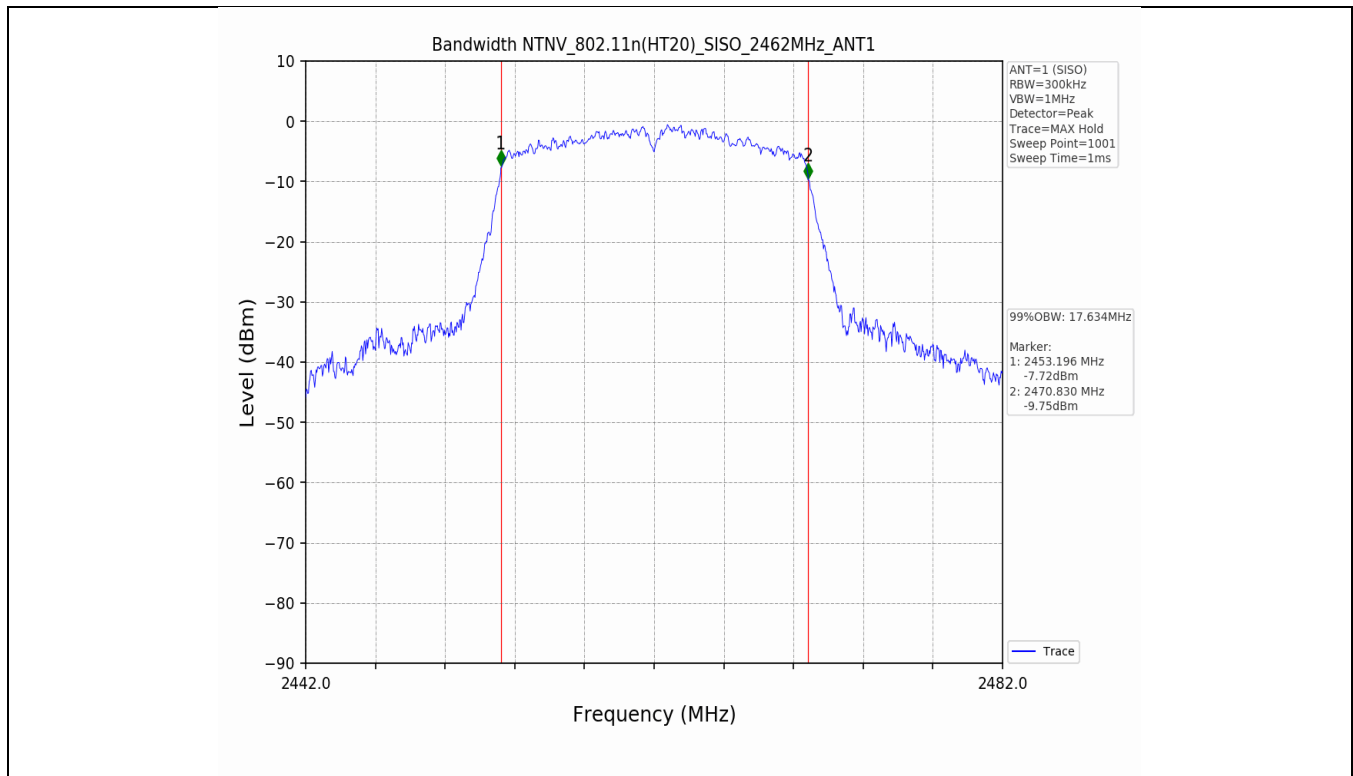
2.3 Test Graph - 99% Occupied Bandwidth

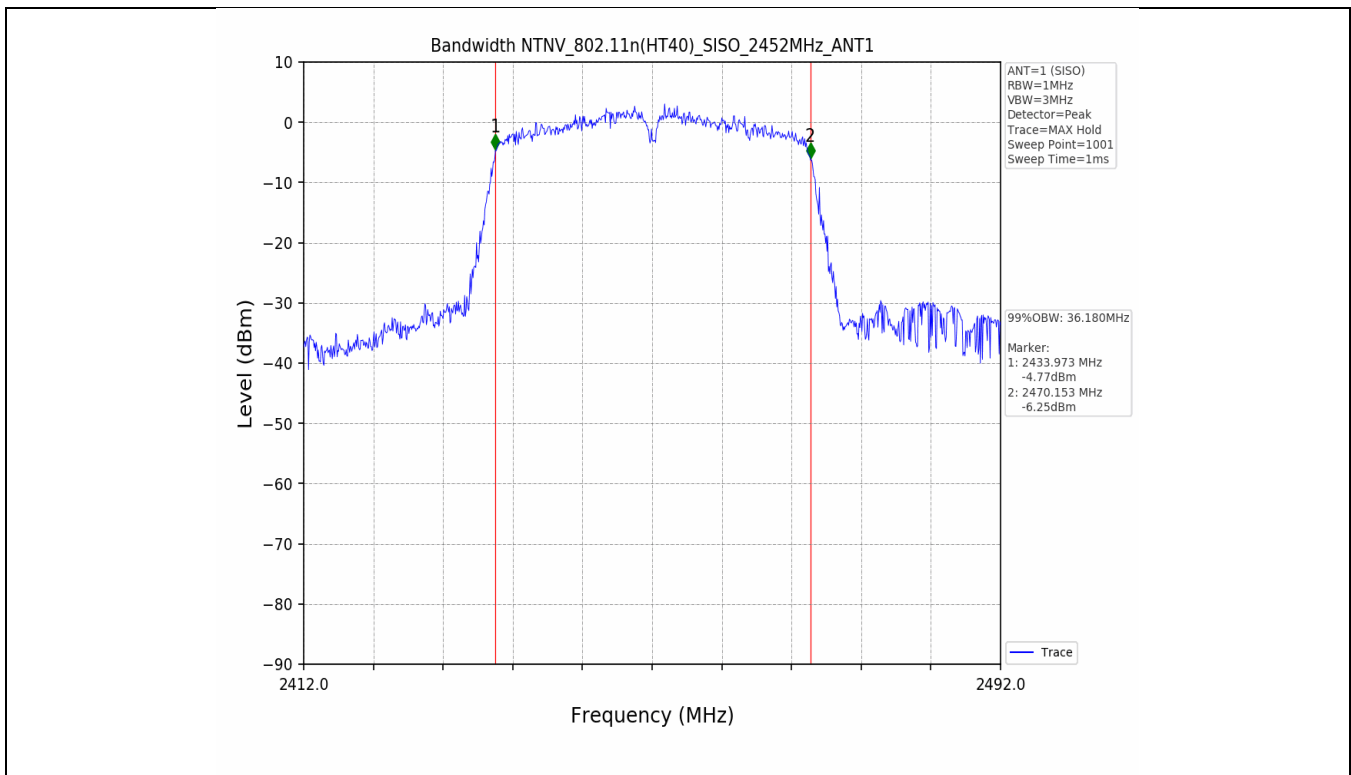
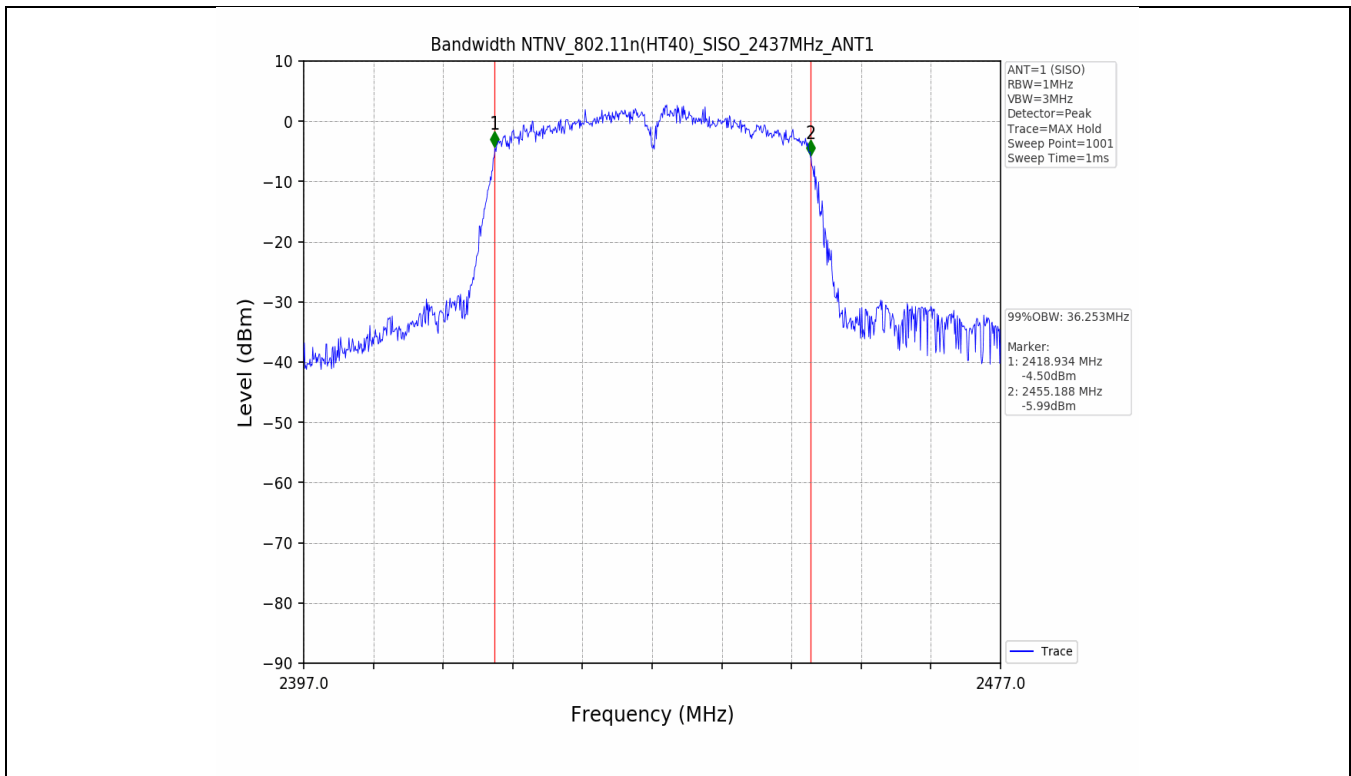












3. Maximum Conducted Output Power

3.1 Test Result

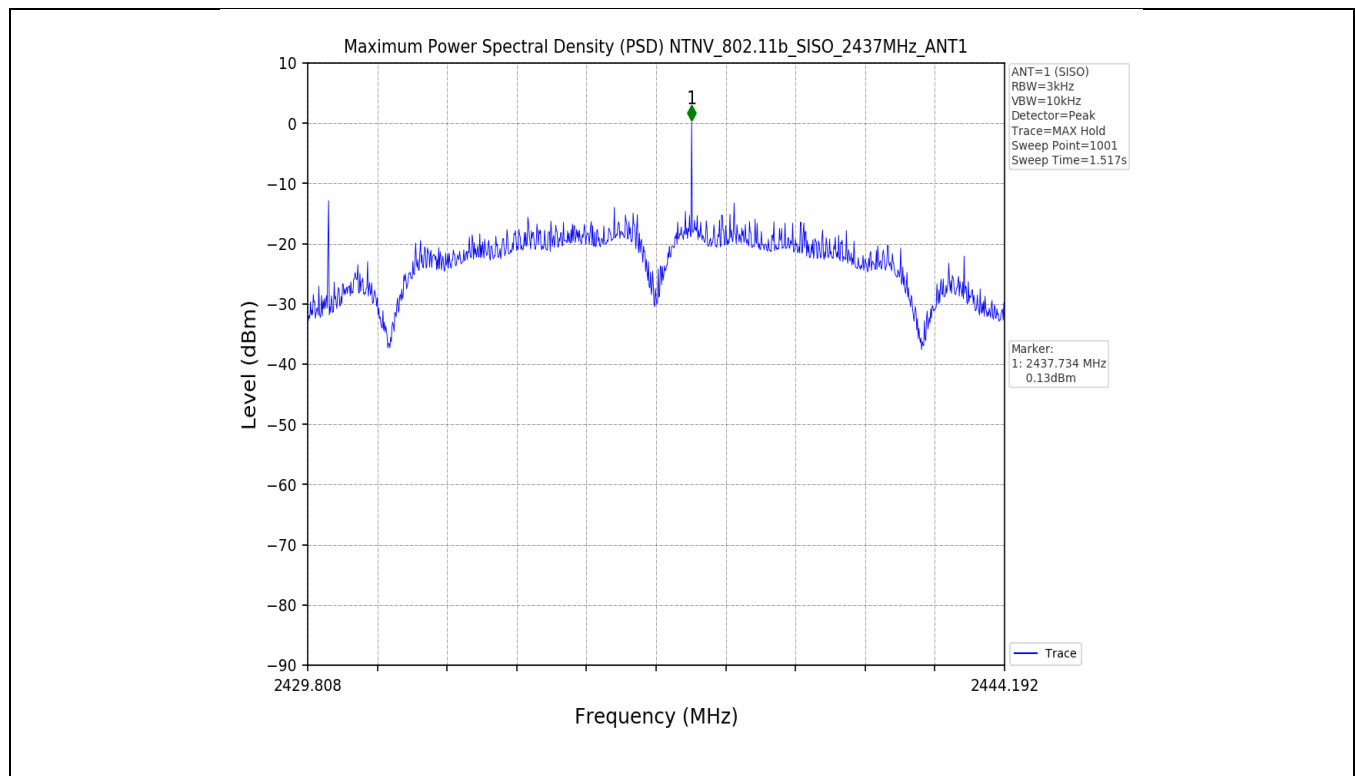
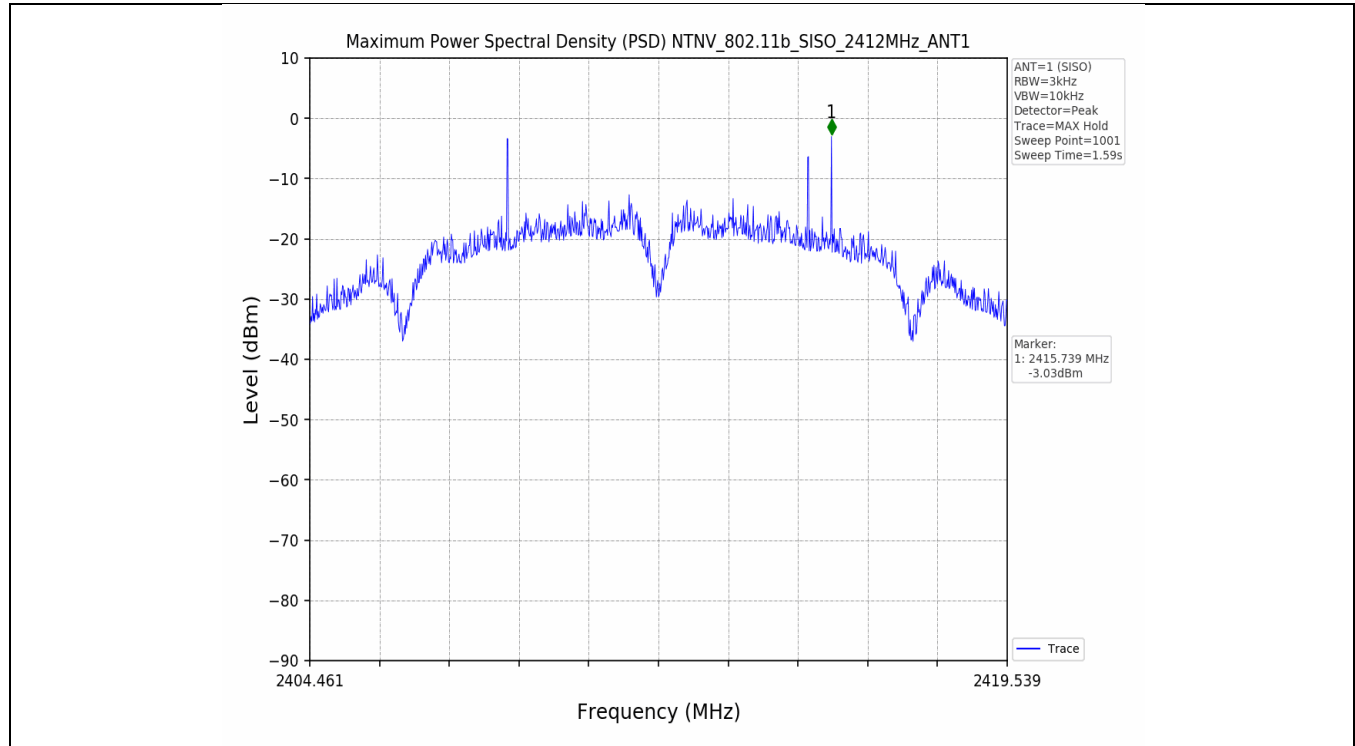
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
802.11b	2412	SISO	13.83	30	PASS
	2437	SISO	13.60	30	PASS
	2462	SISO	13.54	30	PASS
802.11g	2412	SISO	17.13	30	PASS
	2437	SISO	17.02	30	PASS
	2462	SISO	16.57	30	PASS
802.11n(HT20)	2412	SISO	15.76	30	PASS
	2437	SISO	15.40	30	PASS
	2462	SISO	14.84	30	PASS
802.11n(HT40)	2422	SISO	14.63	30	PASS
	2437	SISO	14.00	30	PASS
	2452	SISO	14.11	30	PASS

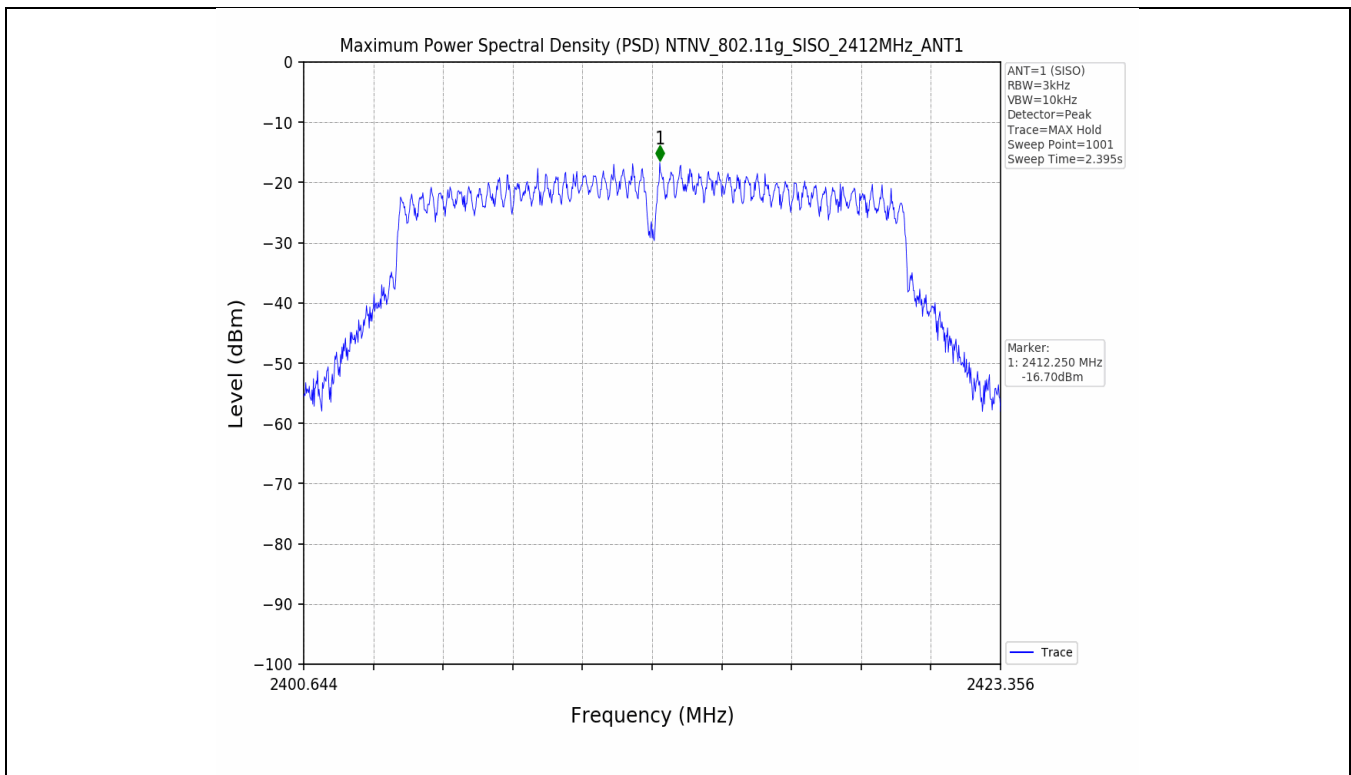
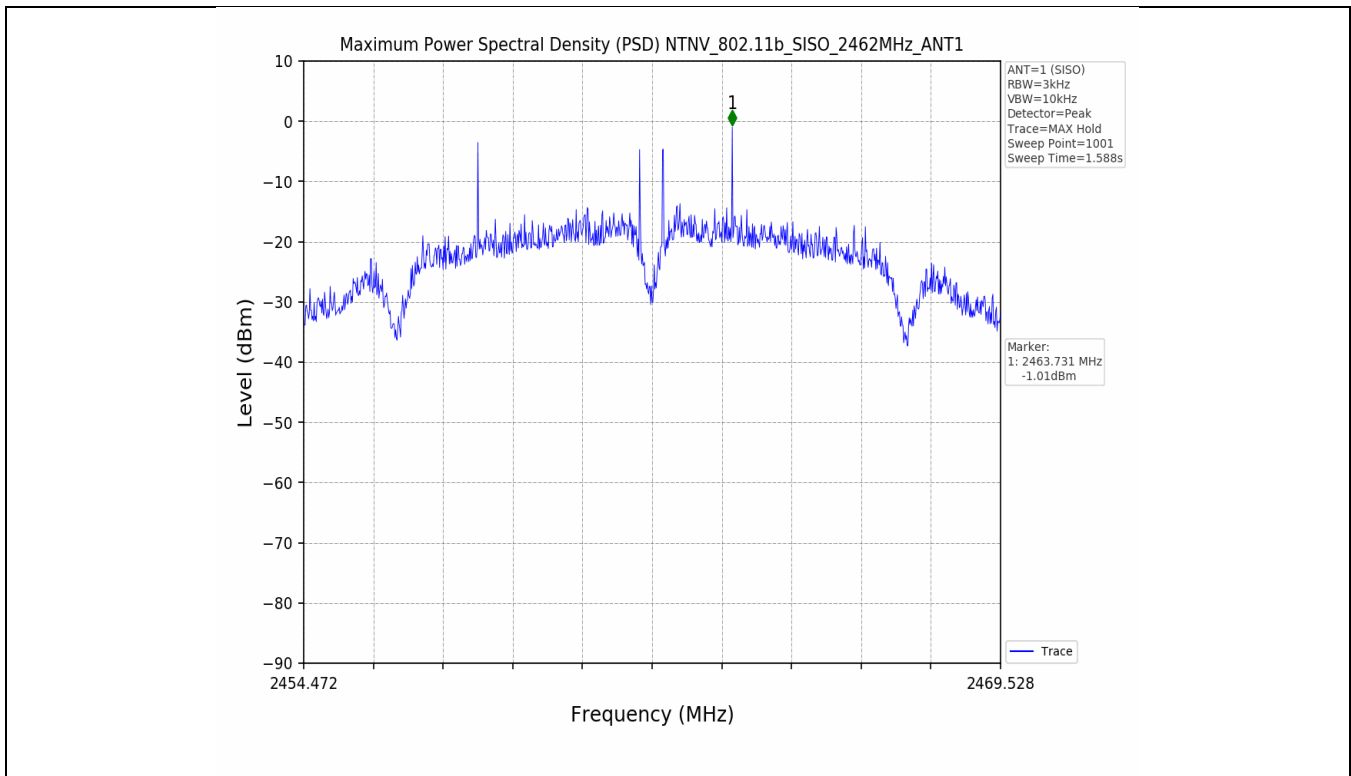
4. Maximum Power Spectral Density (PSD)

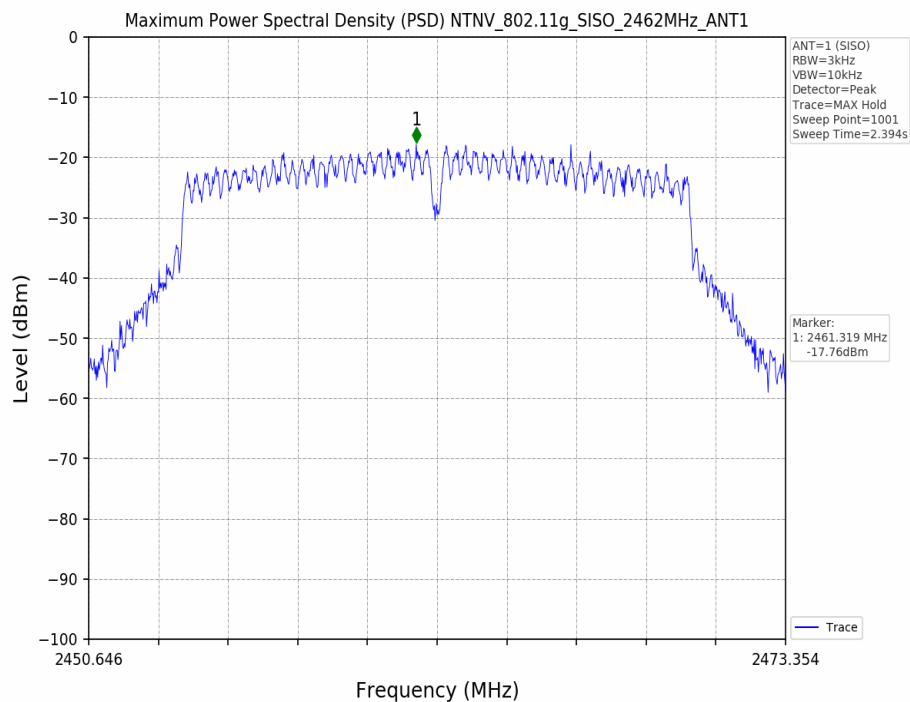
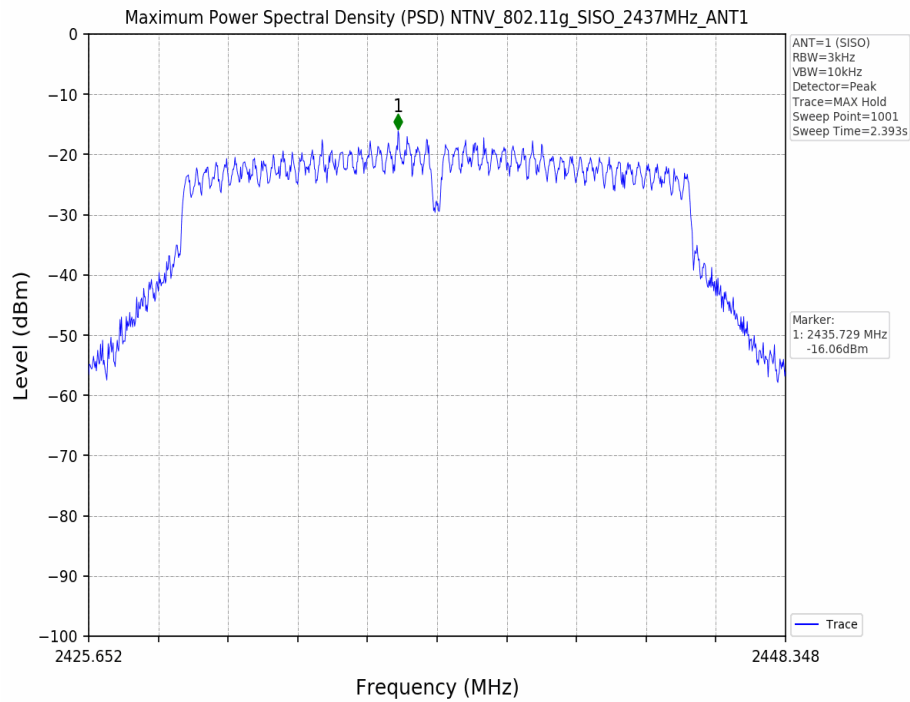
4.1 Test Result

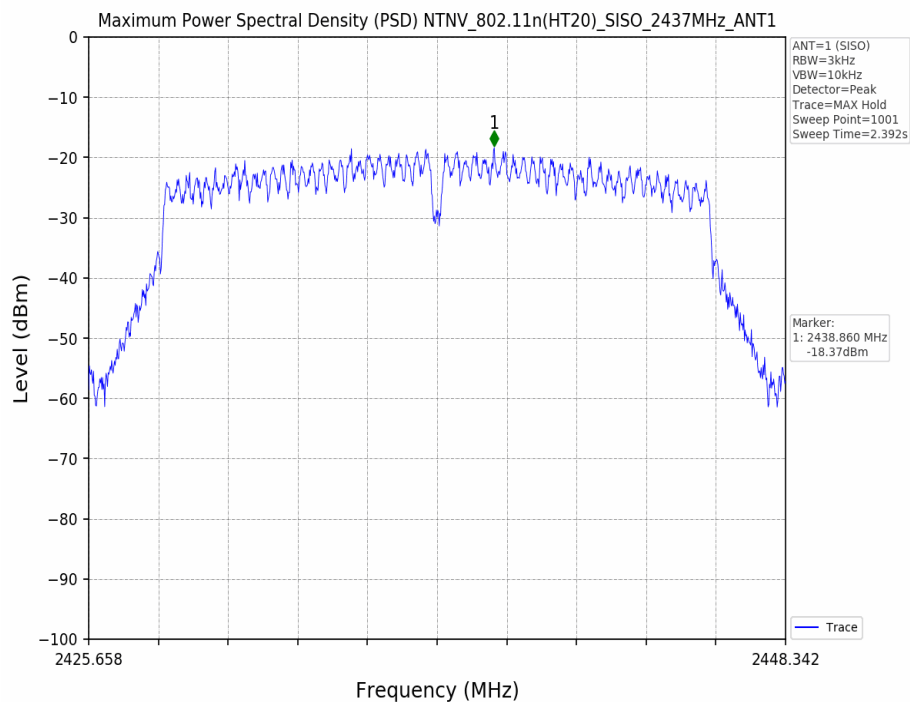
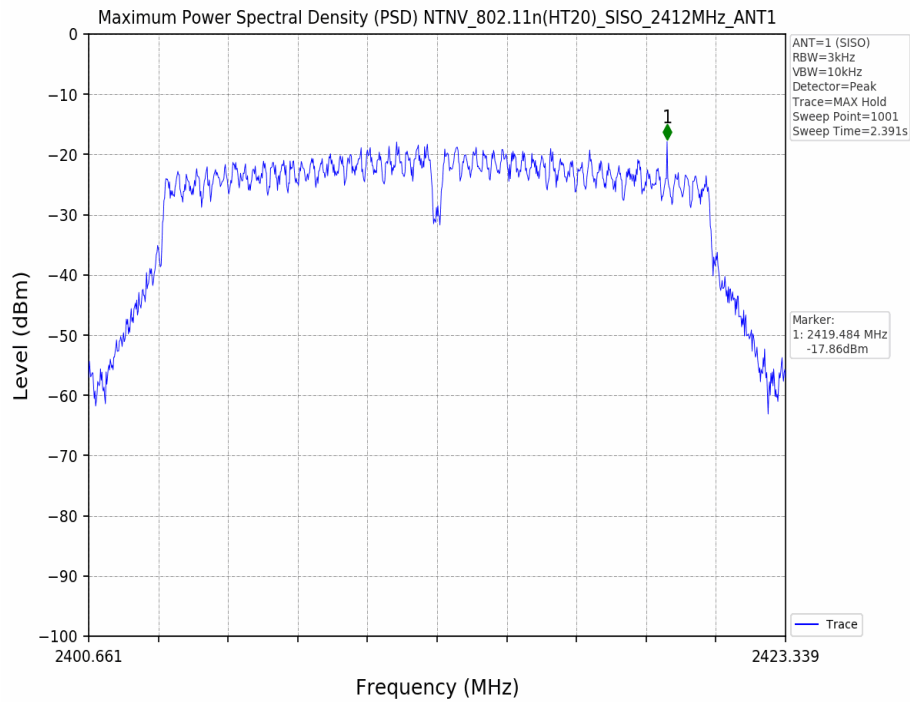
Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/3KHz)	Limits (dBm/3kHz)	Verdict
			Ant 1		
802.11b	2412	SISO	-3.03	≤8	PASS
	2437	SISO	0.13	≤8	PASS
	2462	SISO	-1.01	≤8	PASS
802.11g	2412	SISO	-16.70	≤8	PASS
	2437	SISO	-16.06	≤8	PASS
	2462	SISO	-17.76	≤8	PASS
802.11n(HT20)	2412	SISO	-17.86	≤8	PASS
	2437	SISO	-18.37	≤8	PASS
	2462	SISO	-18.13	≤8	PASS
802.11n(HT40)	2422	SISO	-21.18	≤8	PASS
	2437	SISO	-21.33	≤8	PASS
	2452	SISO	-22.95	≤8	PASS

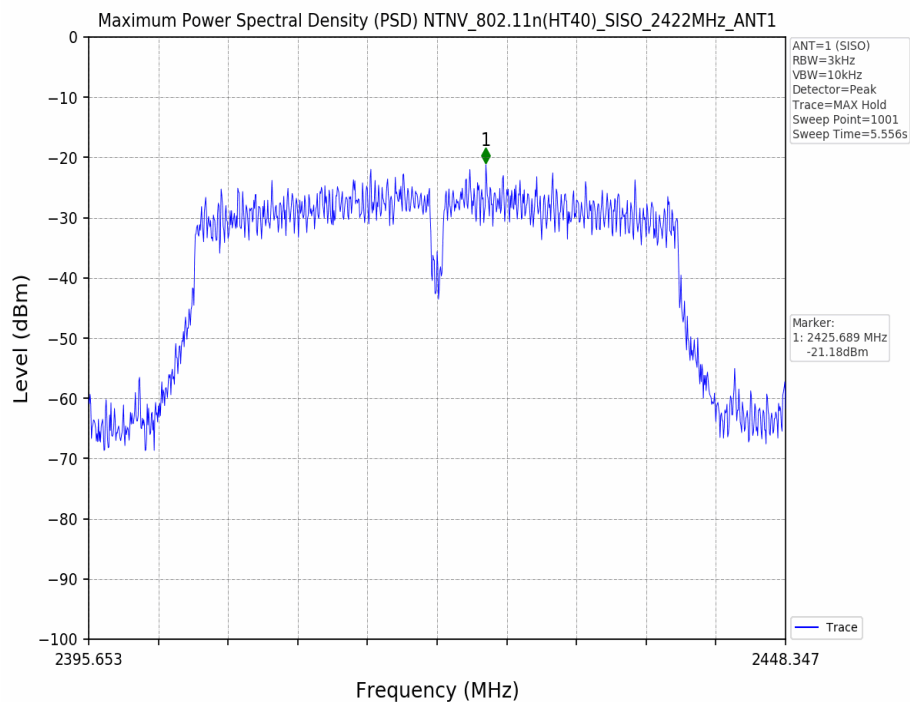
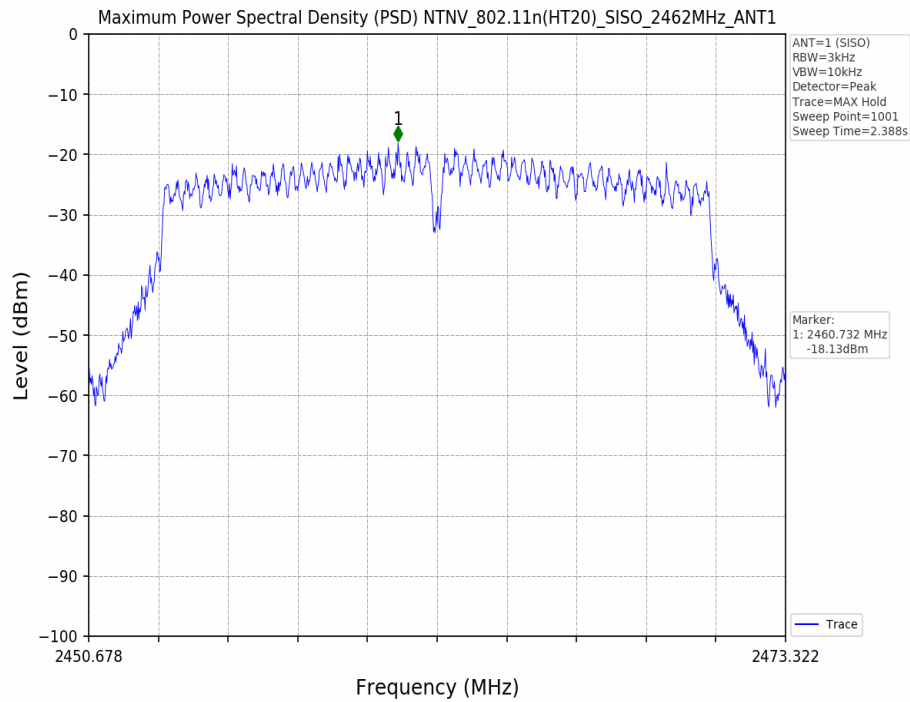
4.2 Test Graph

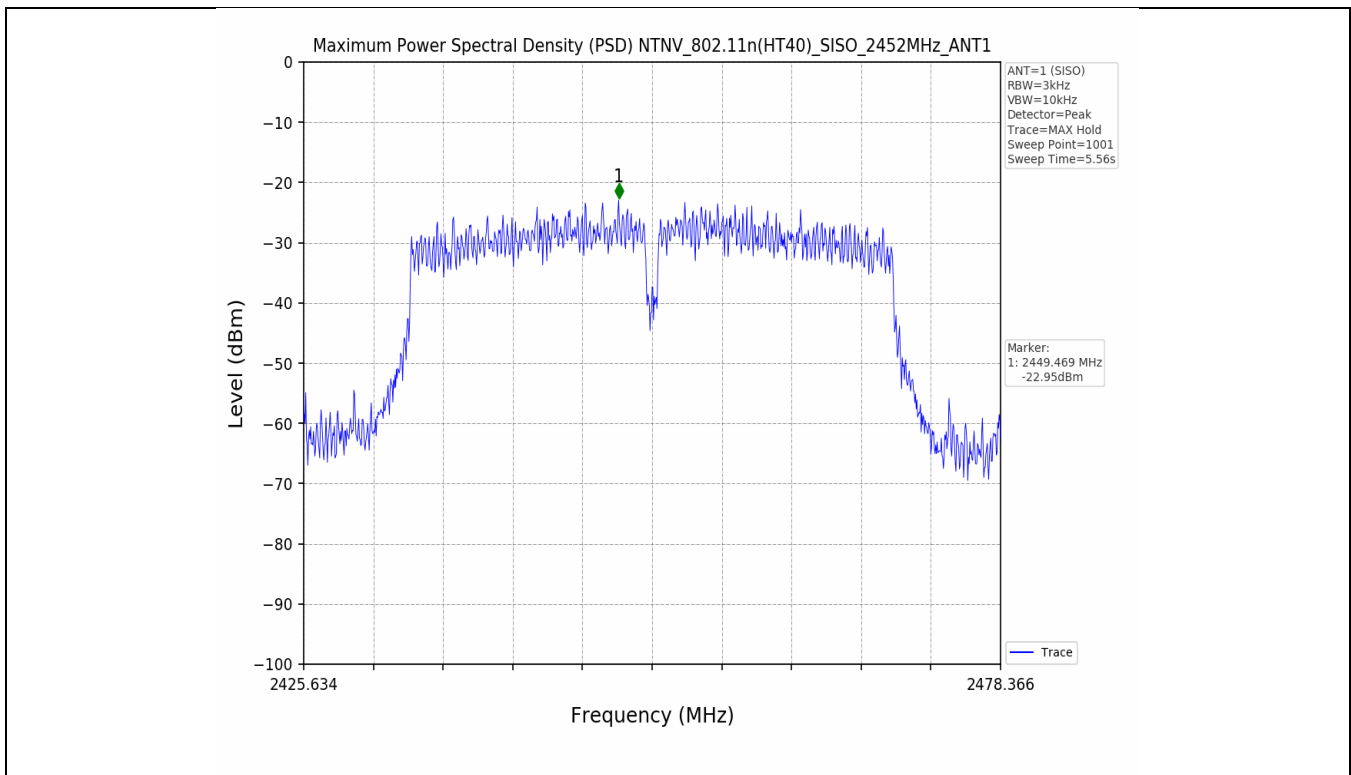
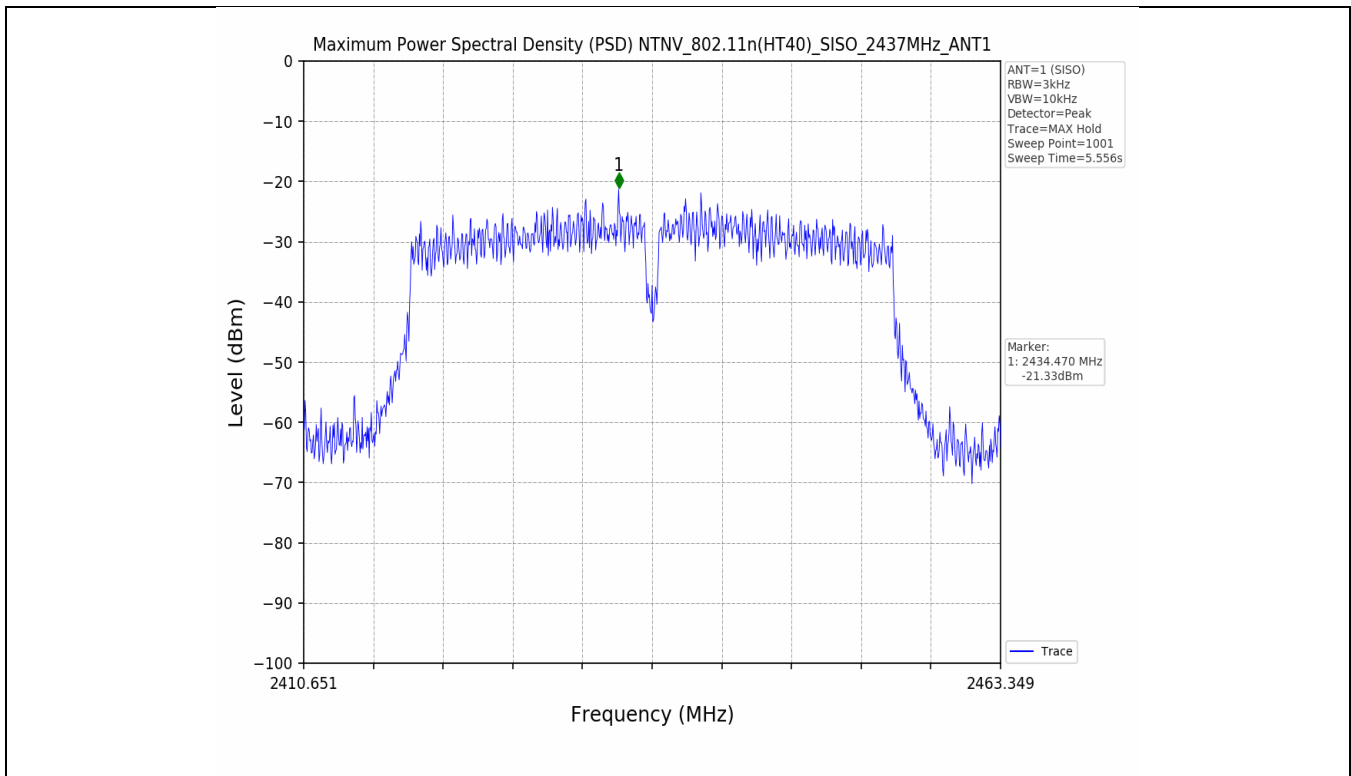










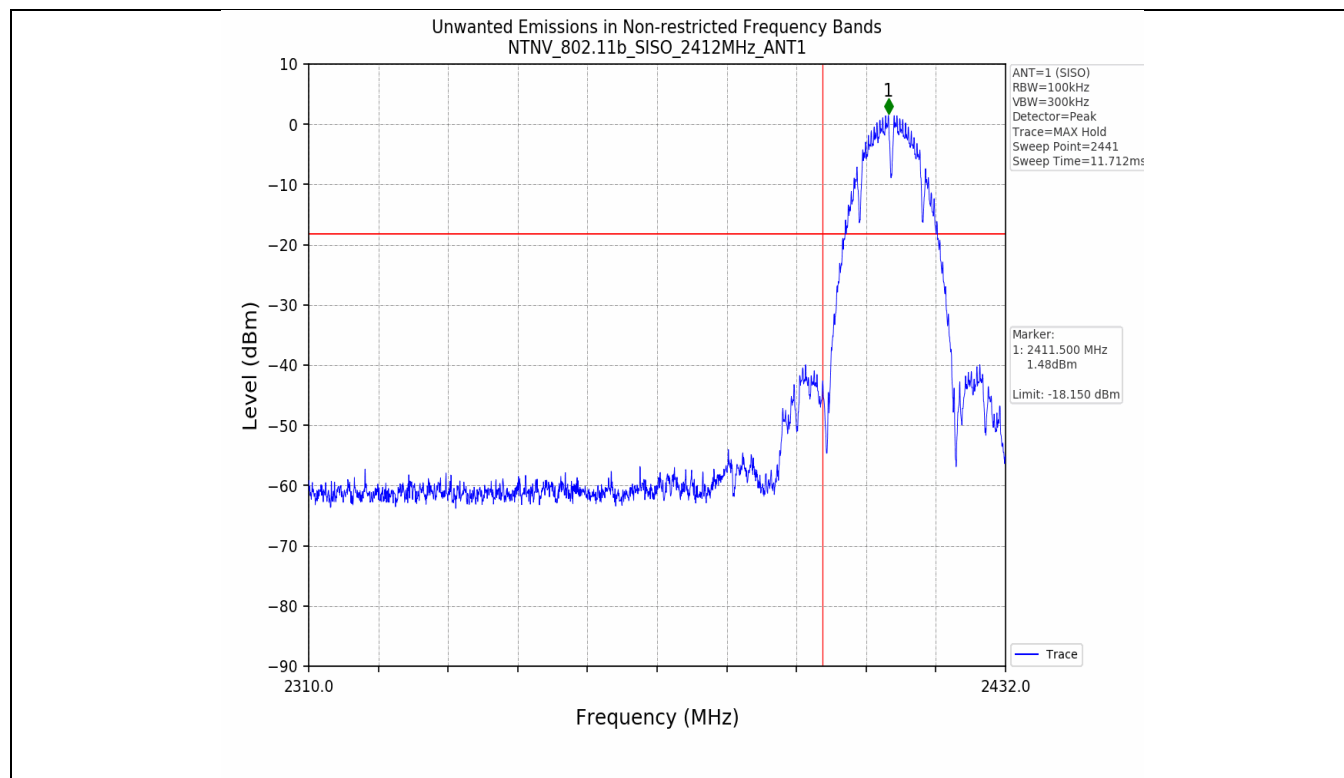
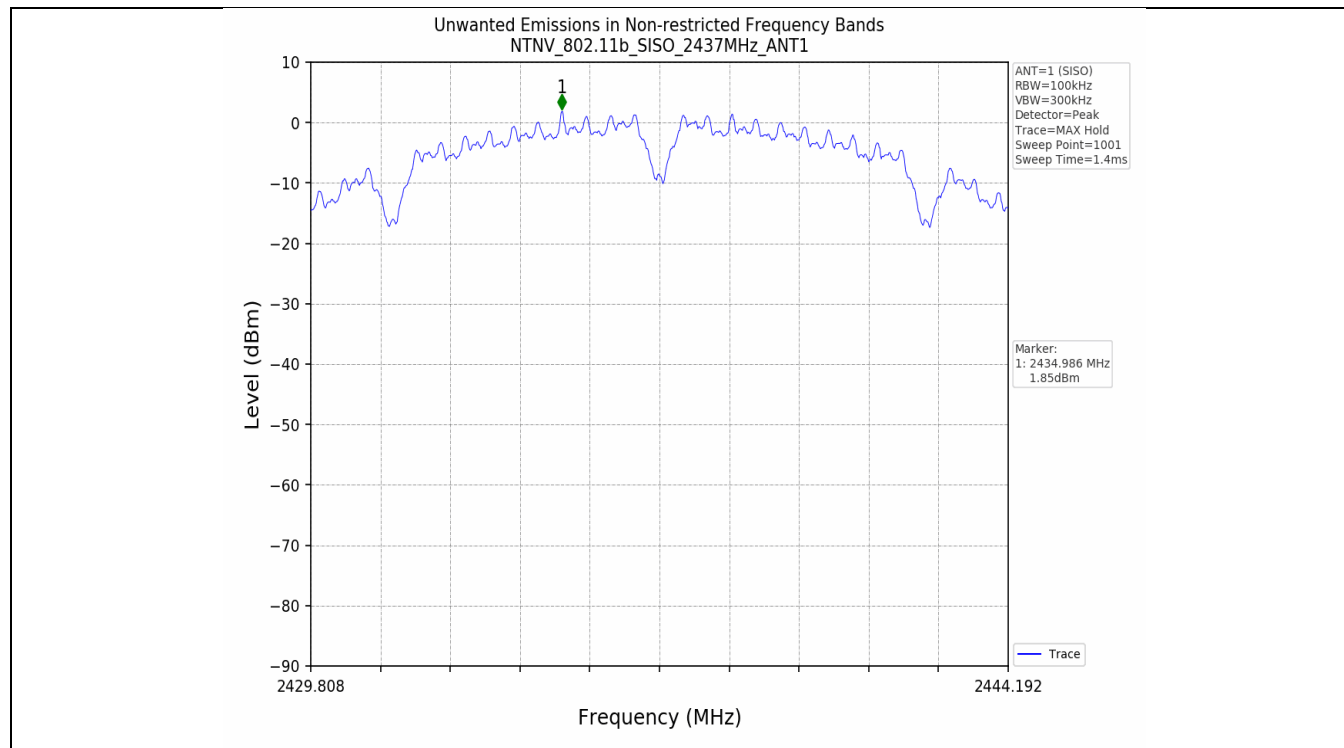


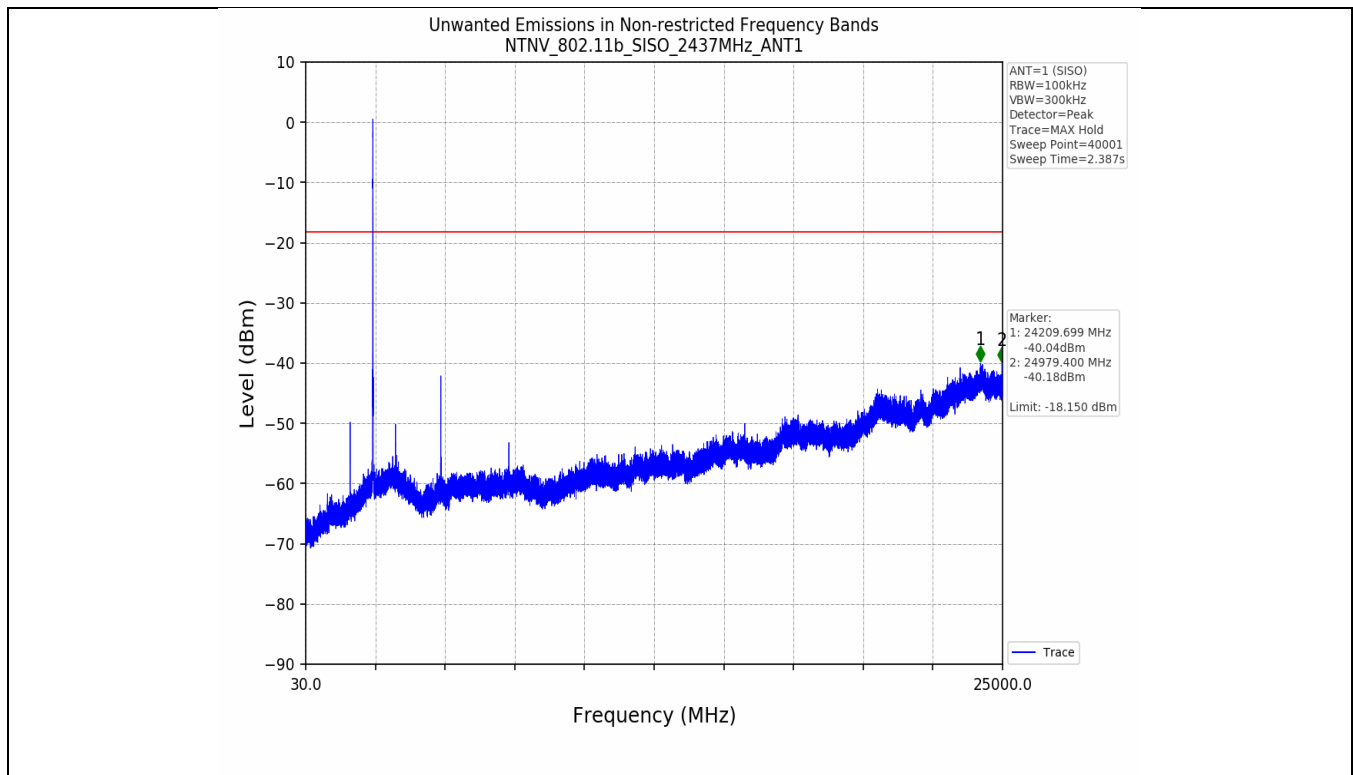
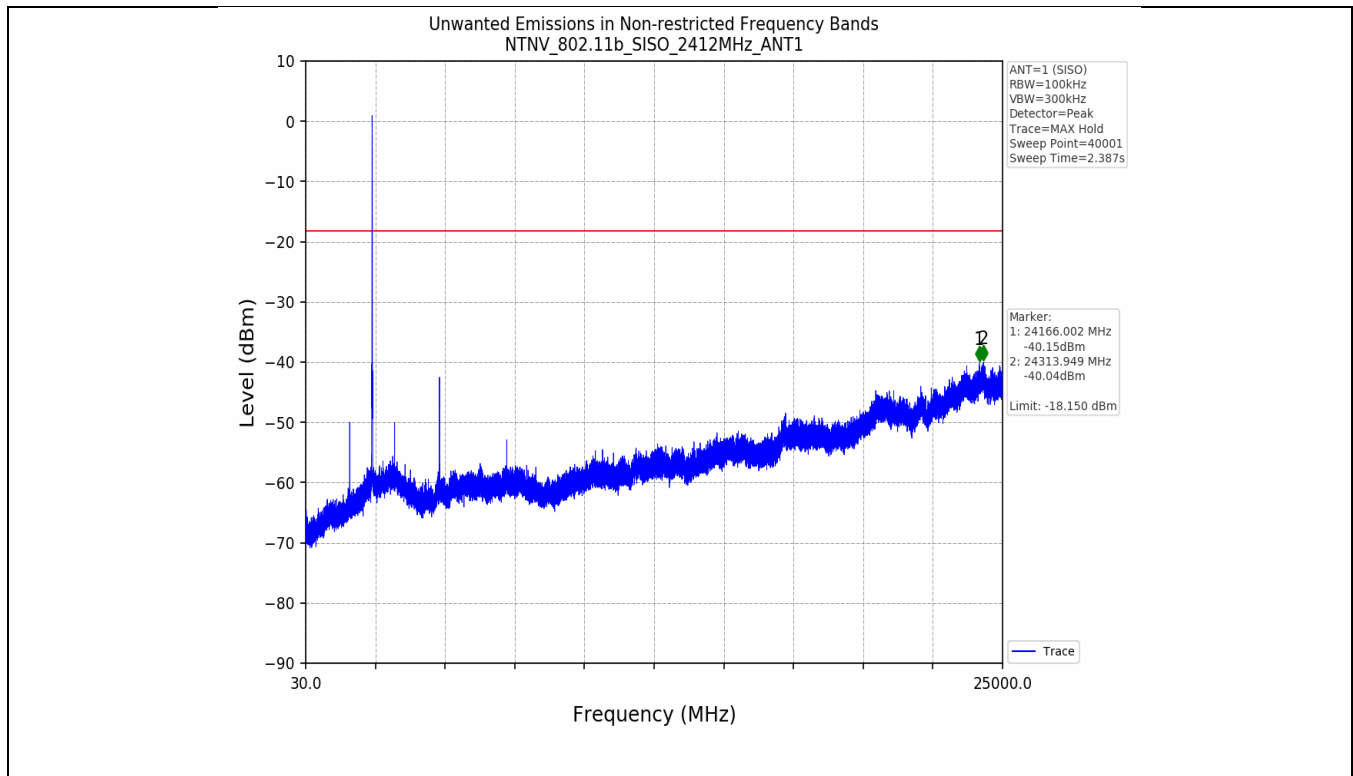
5. Unwanted Emissions in Non-restricted Frequency Bands

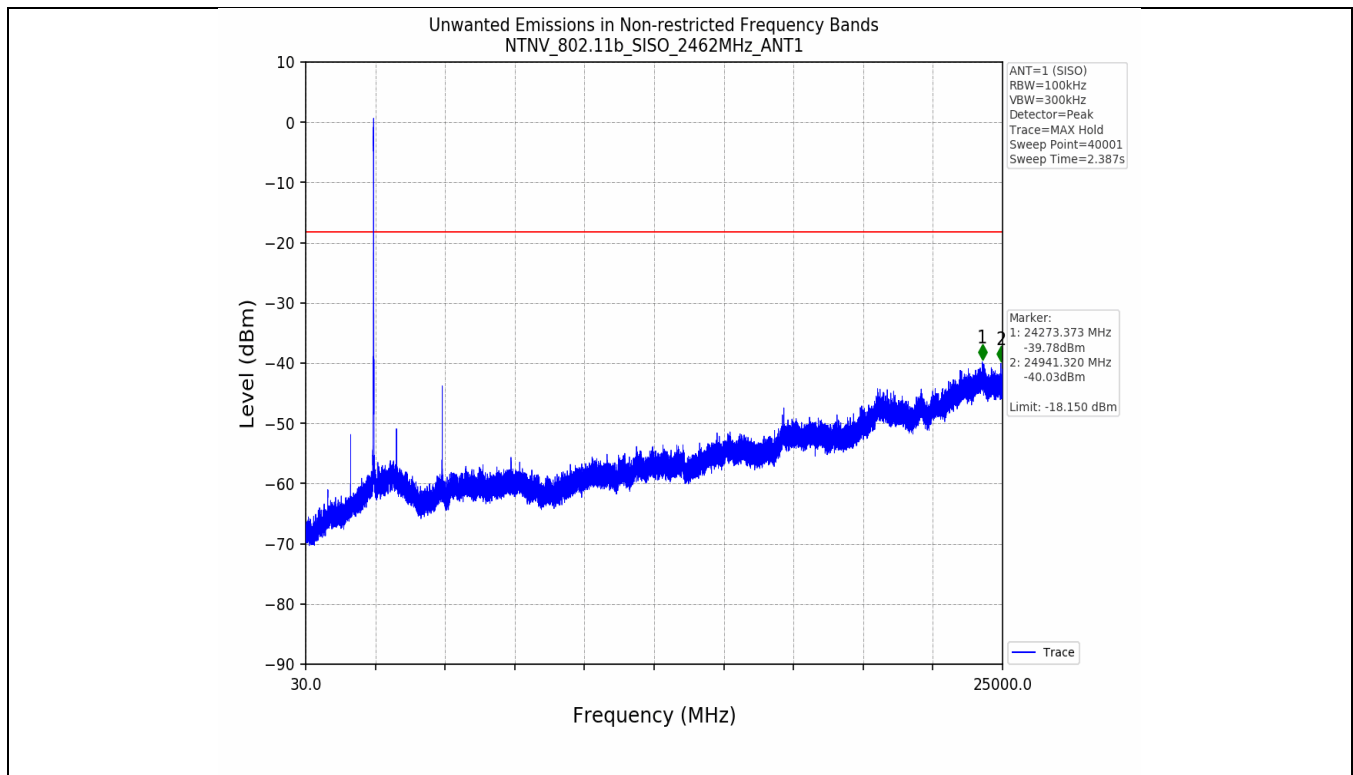
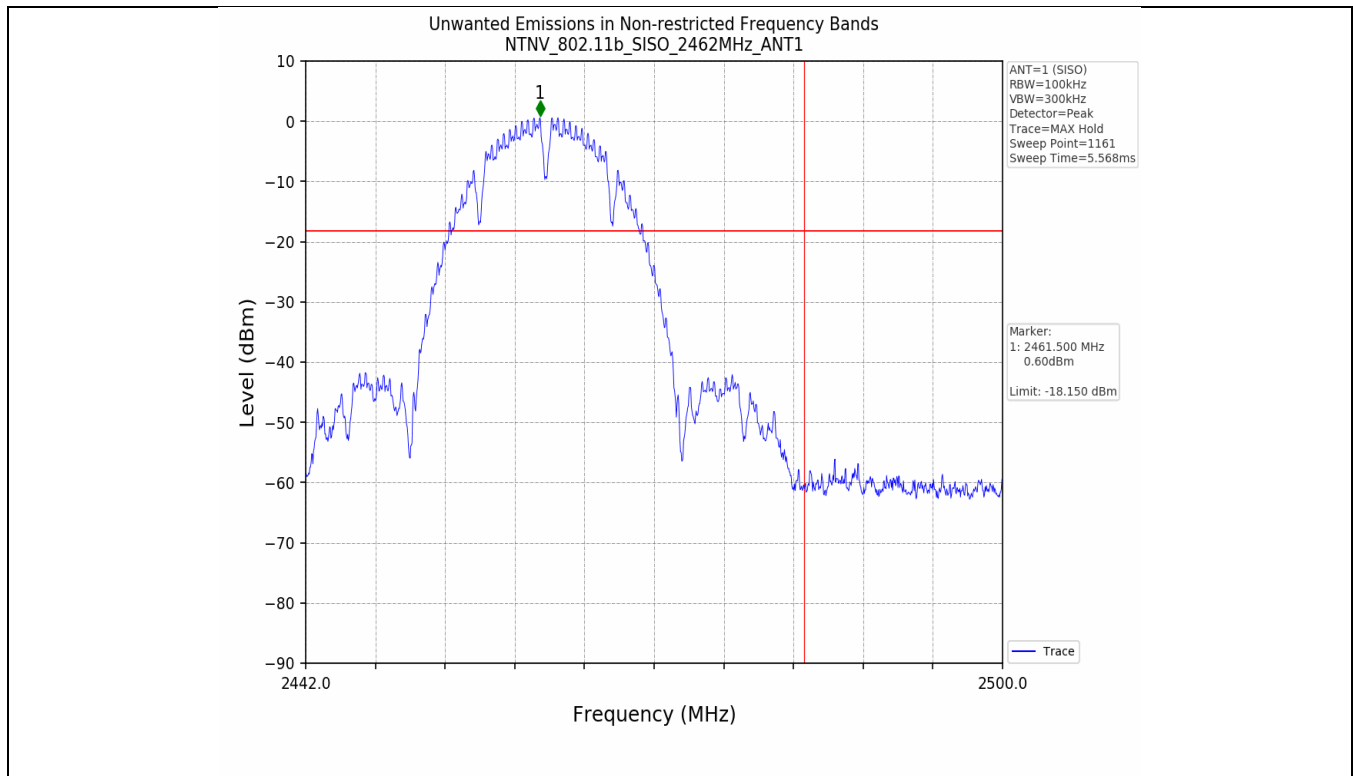
5.1 Test Result

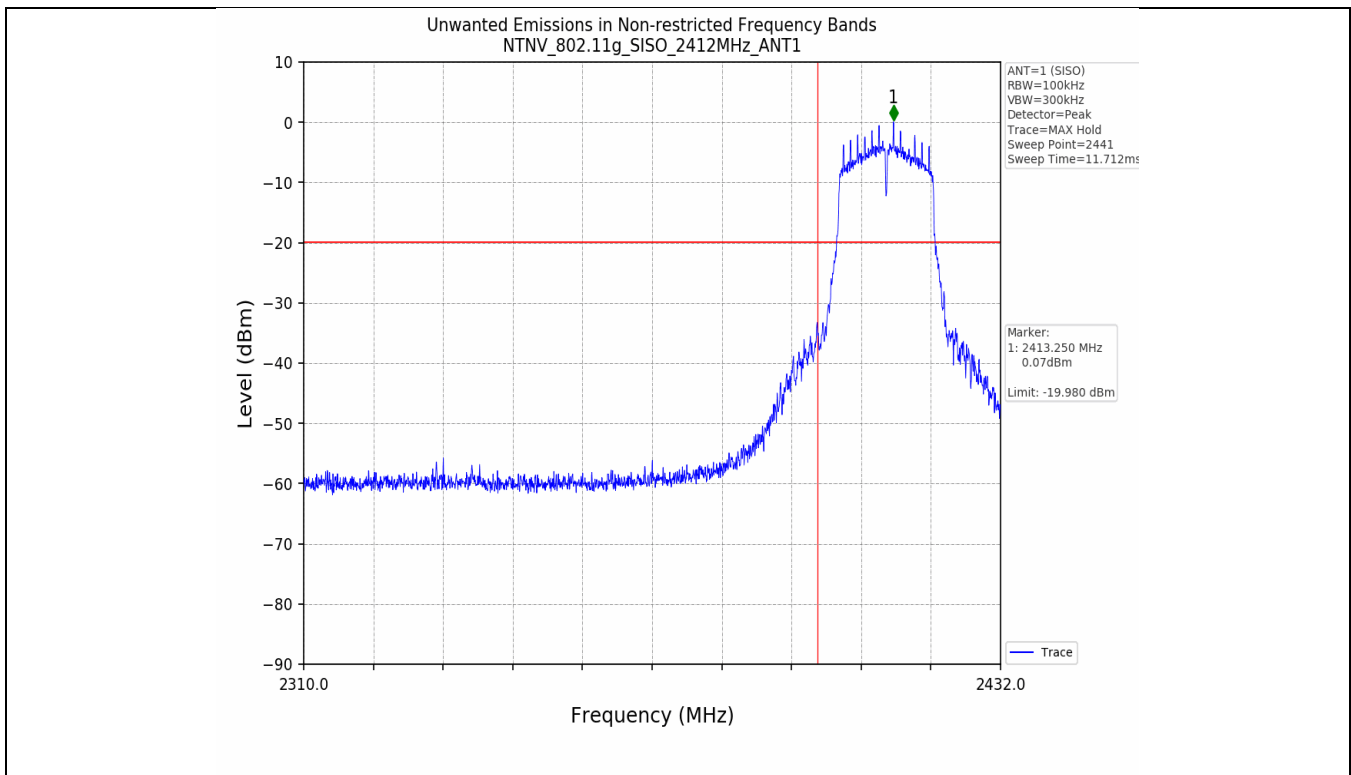
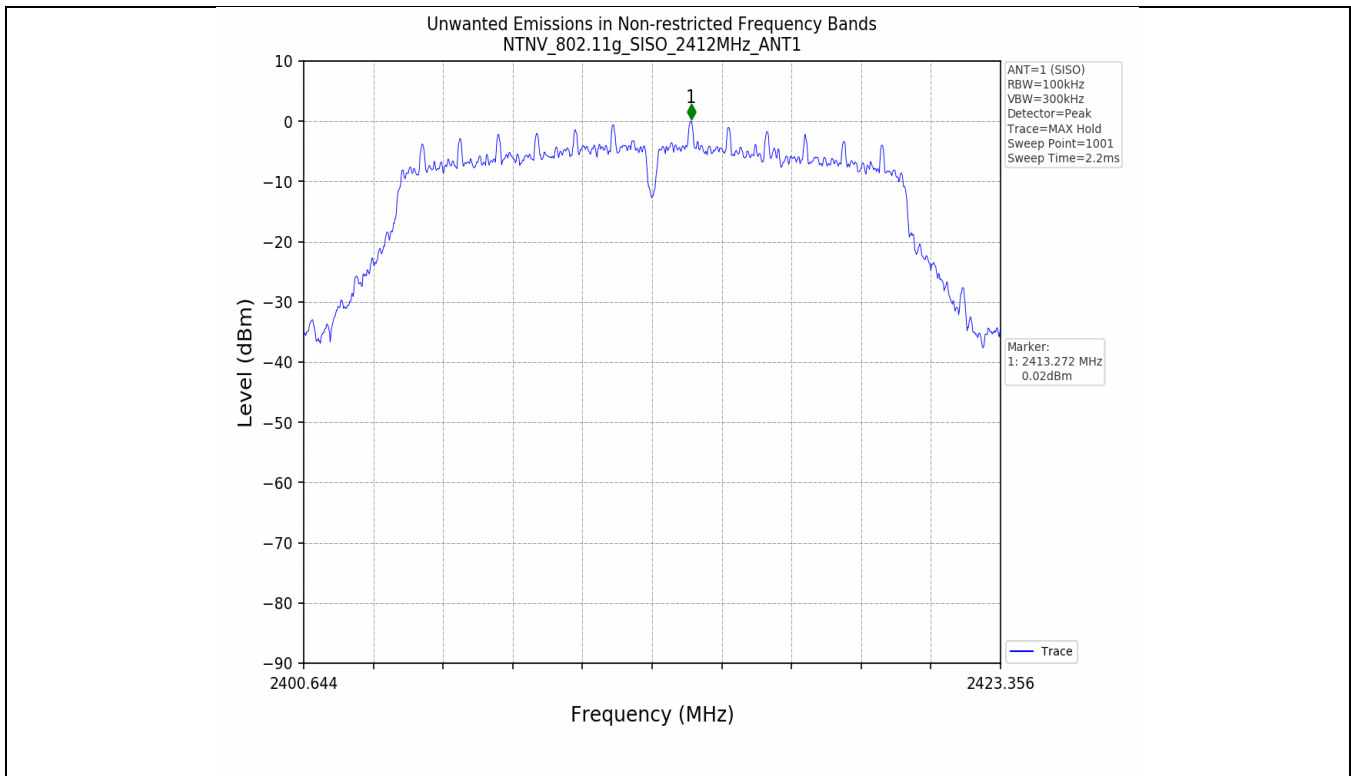
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
802.11b	2412	SISO	1	Refer to test graph	-18.15	PASS
	2437	SISO	1	Refer to test graph	-18.15	PASS
	2462	SISO	1	Refer to test graph	-18.15	PASS
802.11g	2412	SISO	1	Refer to test graph	-19.98	PASS
	2437	SISO	1	Refer to test graph	-19.98	PASS
	2462	SISO	1	Refer to test graph	-19.98	PASS
802.11n(HT20)	2412	SISO	1	Refer to test graph	-21.52	PASS
	2437	SISO	1	Refer to test graph	-21.52	PASS
	2462	SISO	1	Refer to test graph	-21.52	PASS
802.11n(HT40)	2422	SISO	1	Refer to test graph	-25.20	PASS
	2437	SISO	1	Refer to test graph	-25.20	PASS
	2452	SISO	1	Refer to test graph	-25.20	PASS

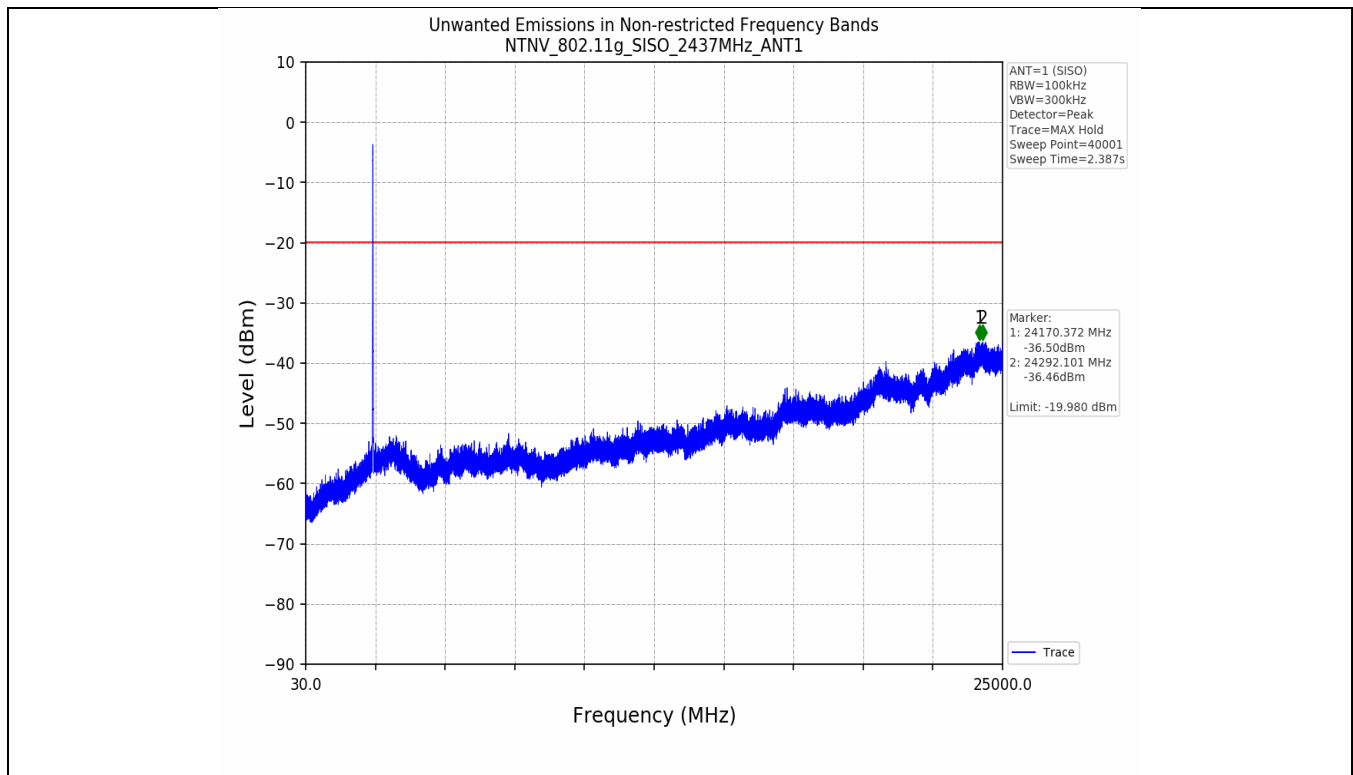
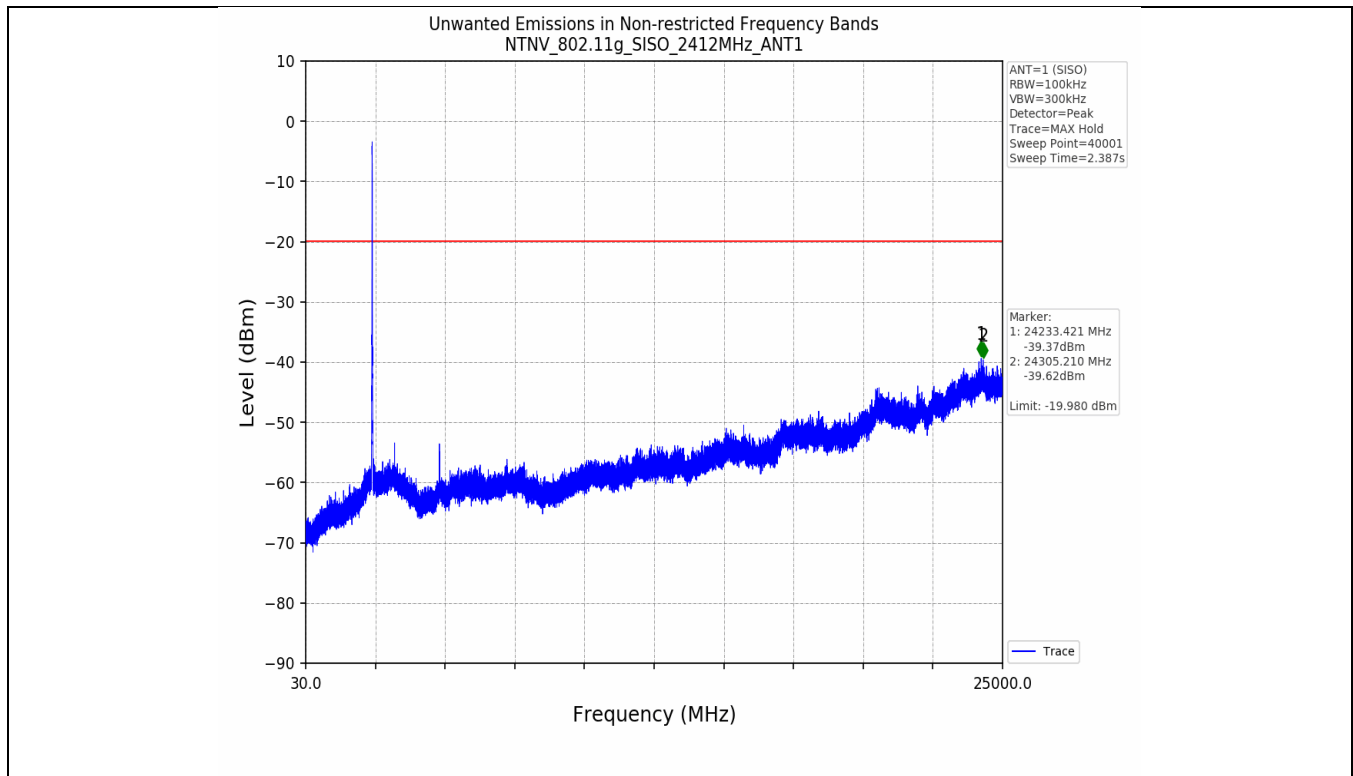
5.2 Test Graph

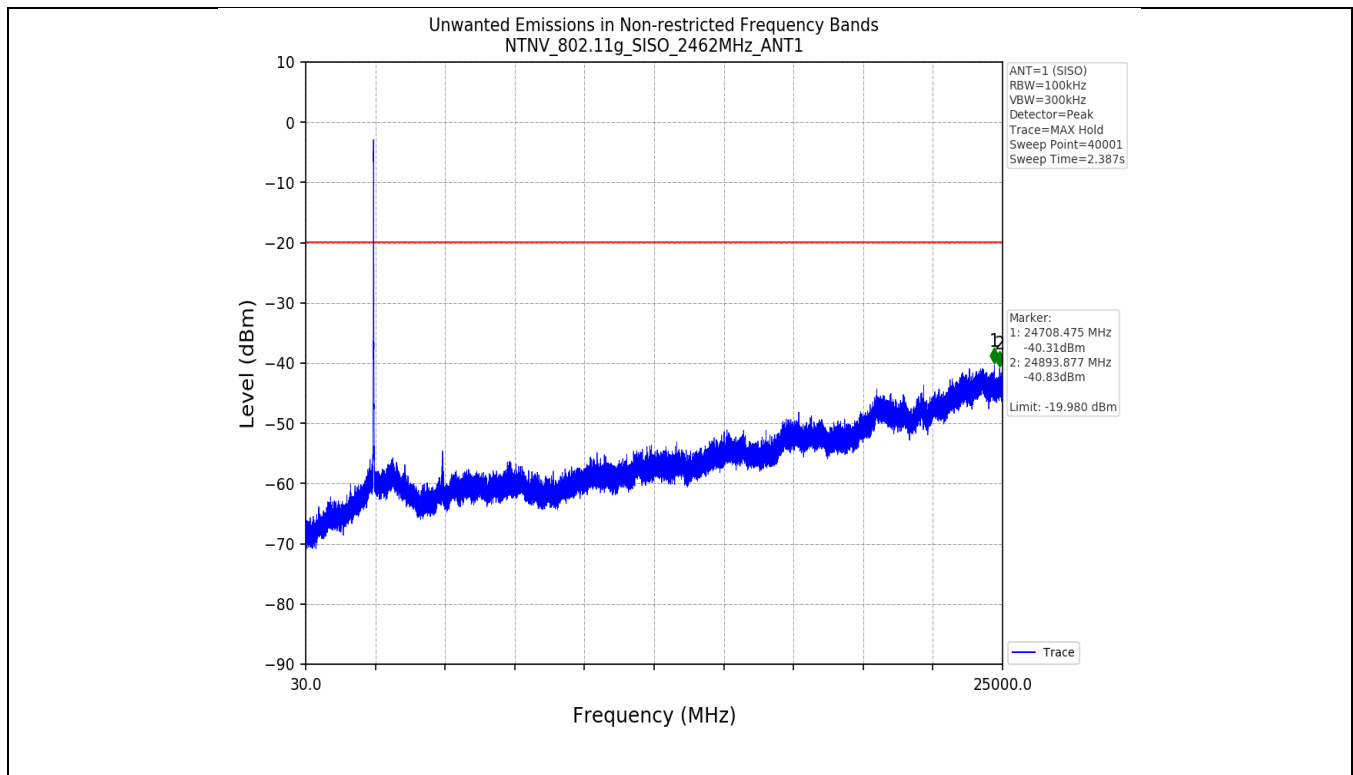
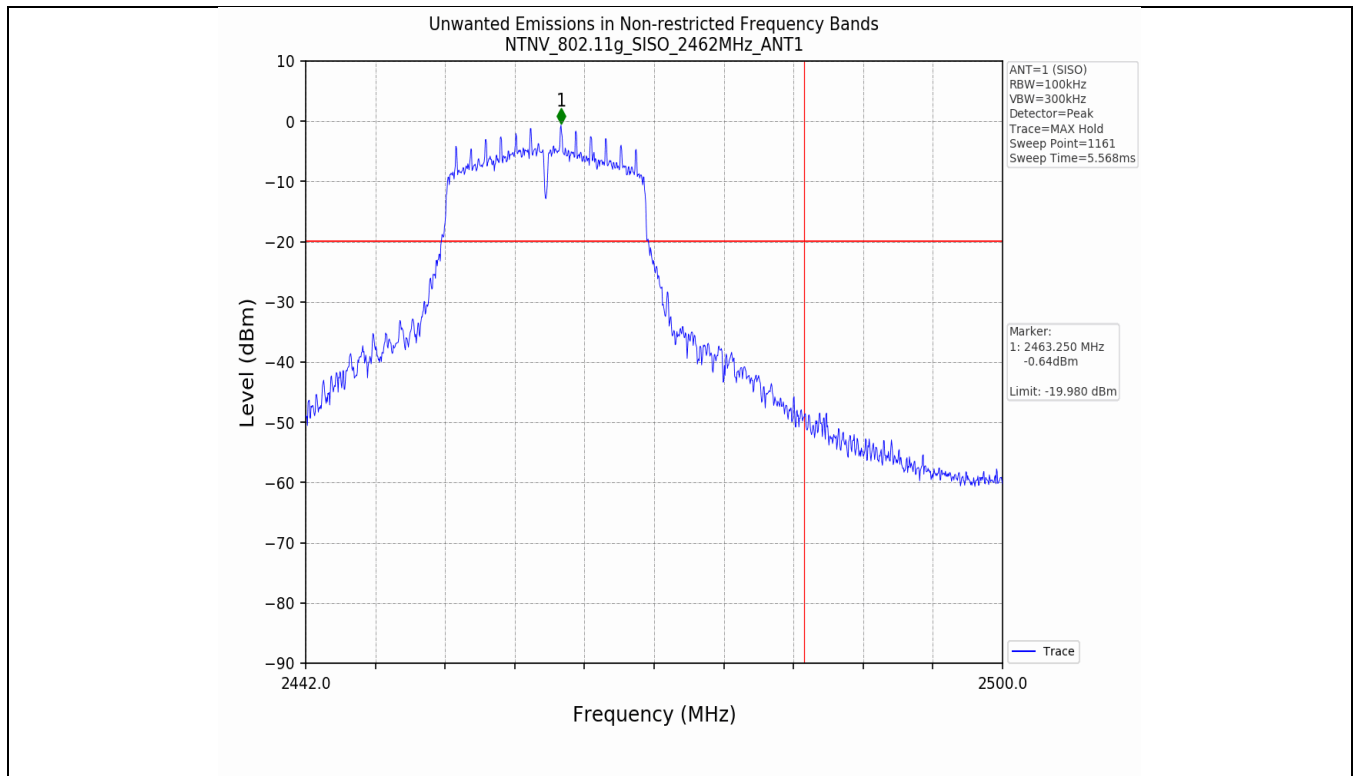


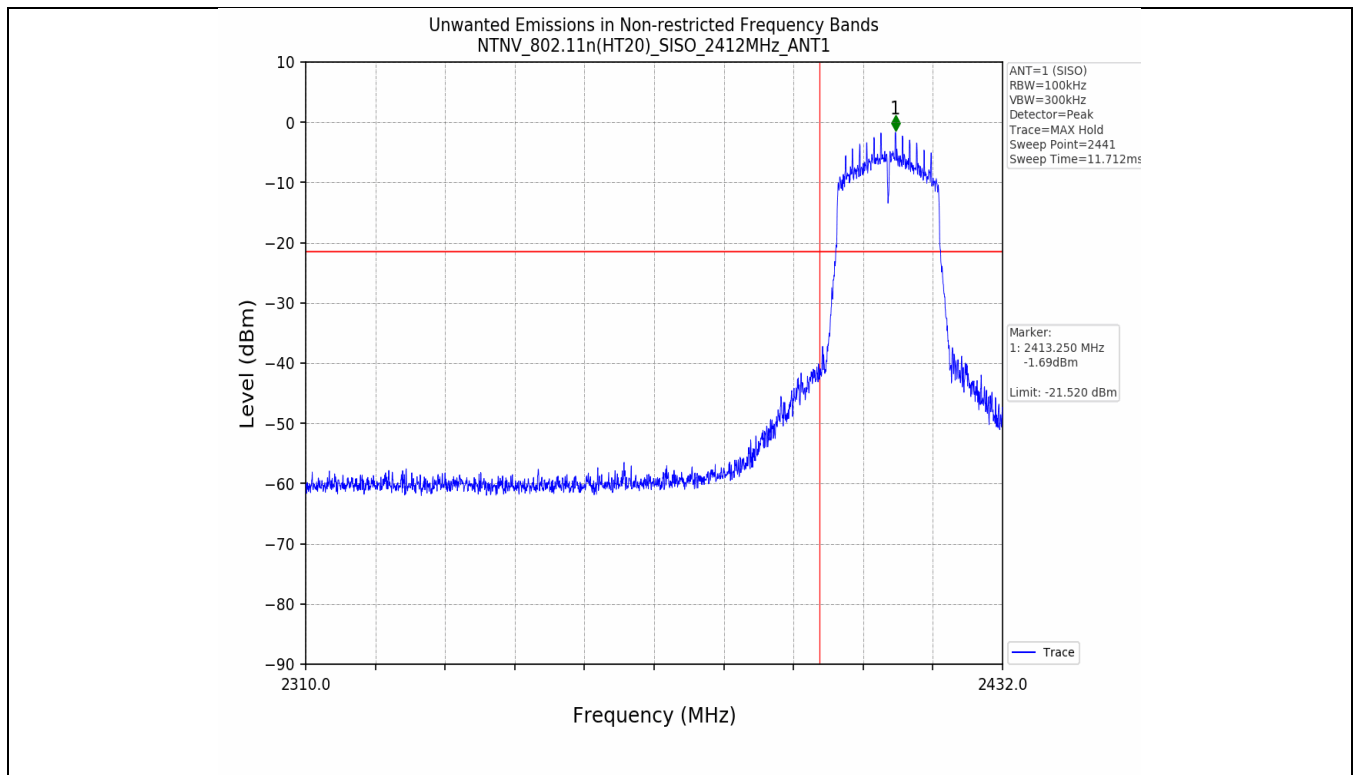
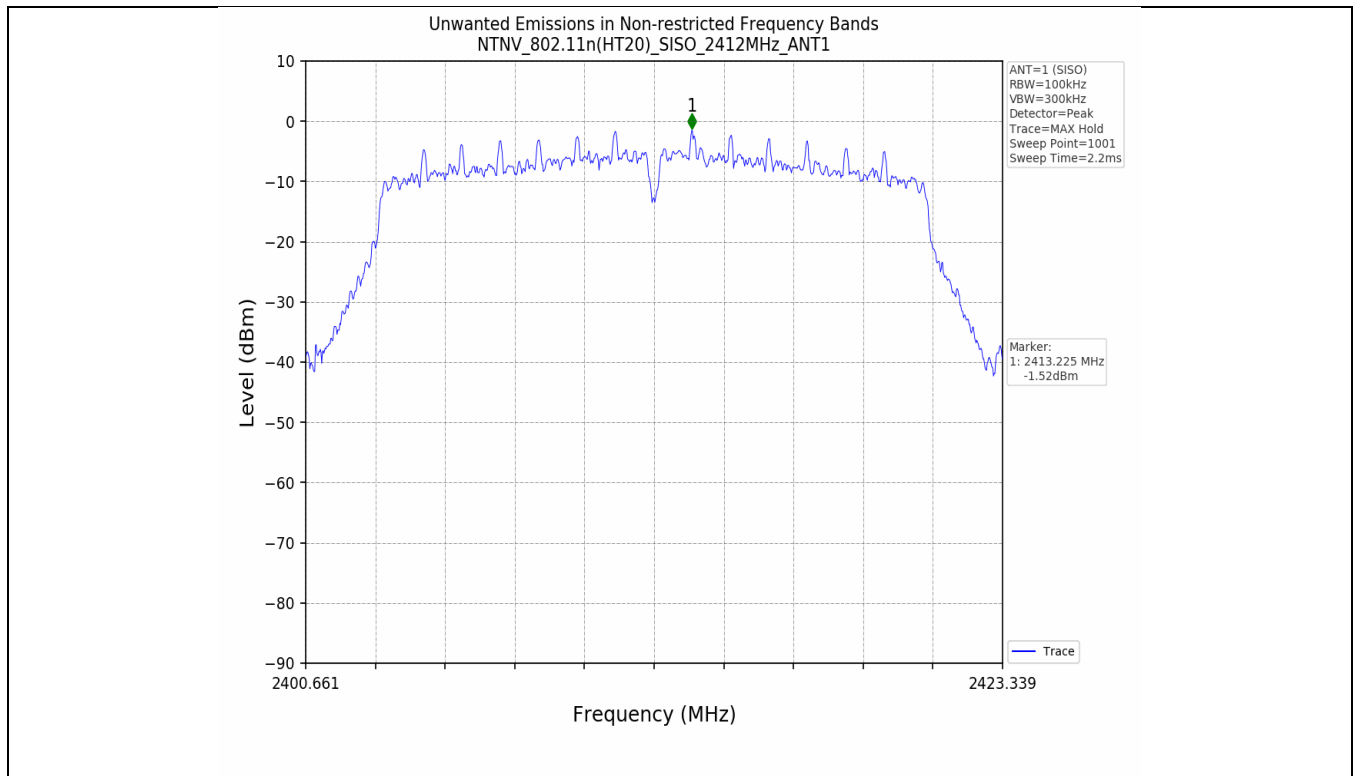


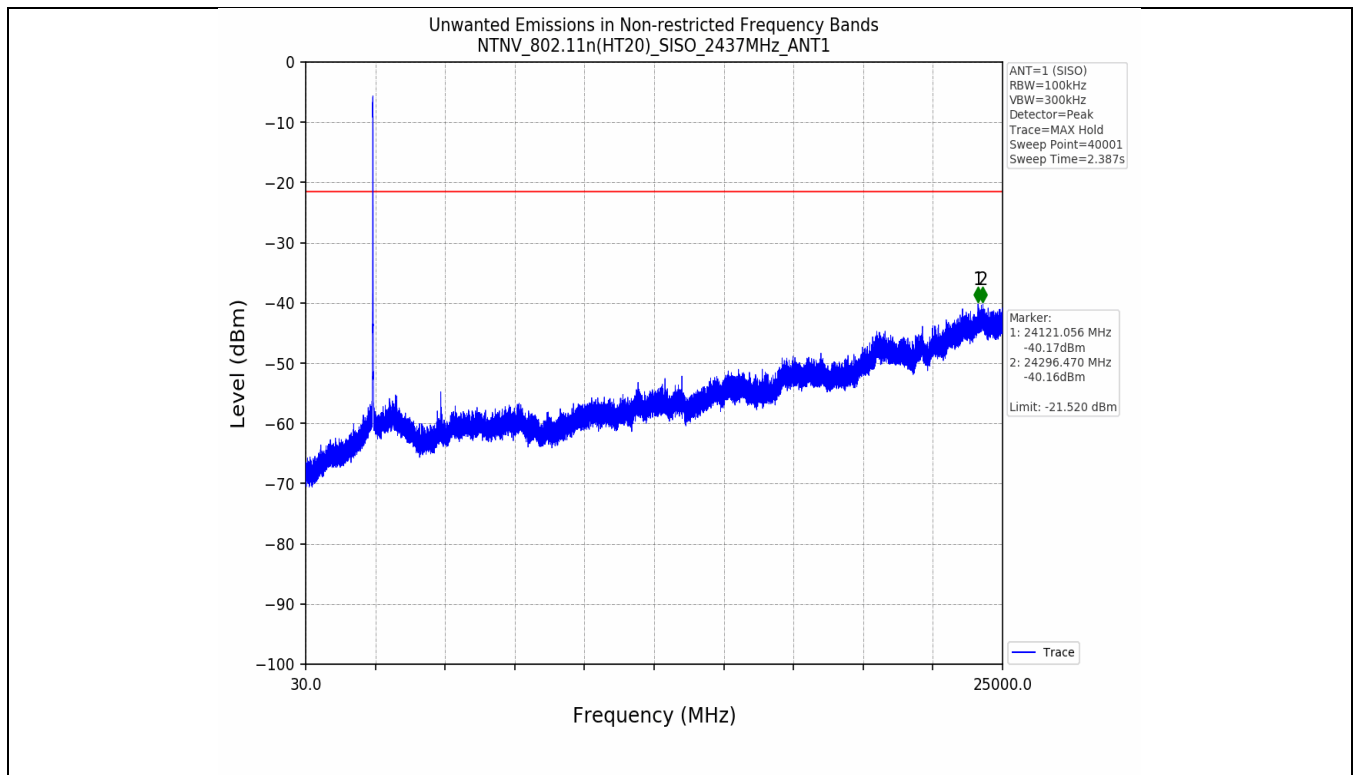
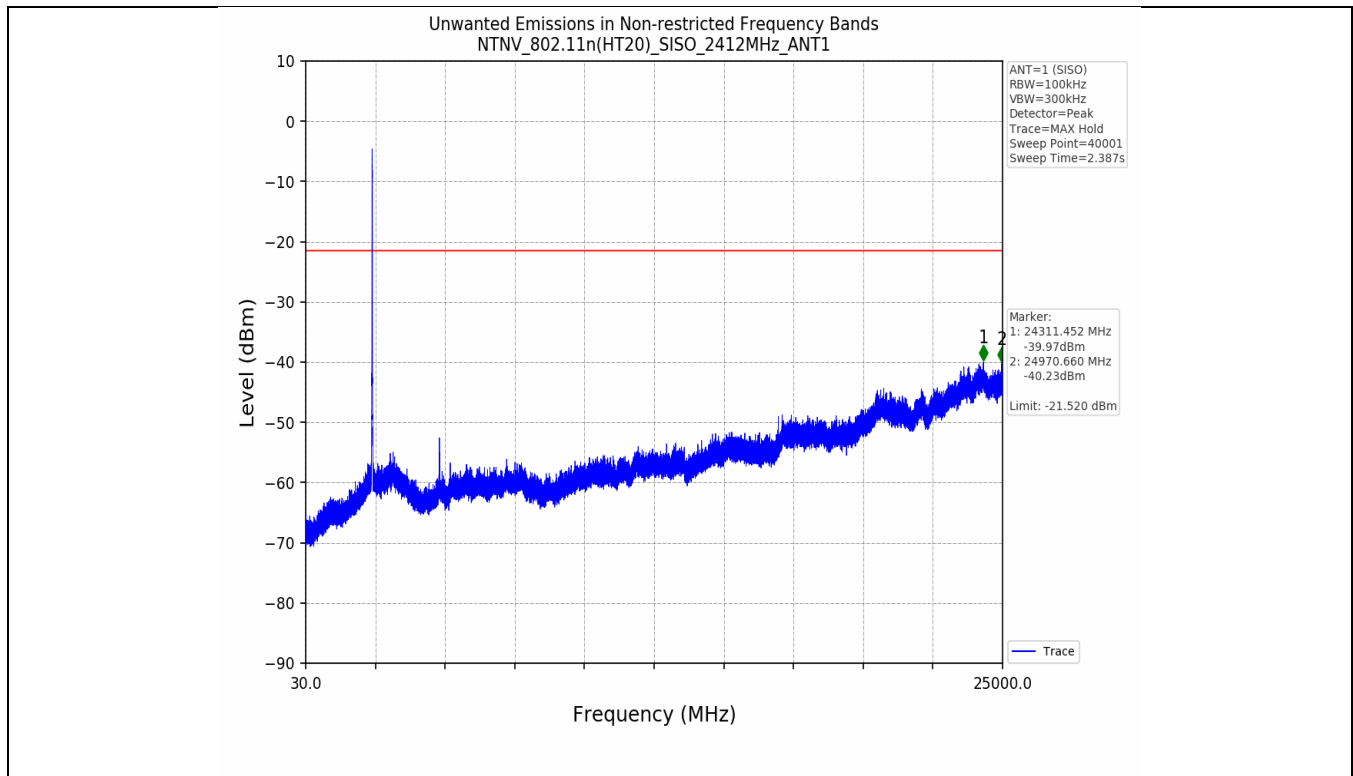


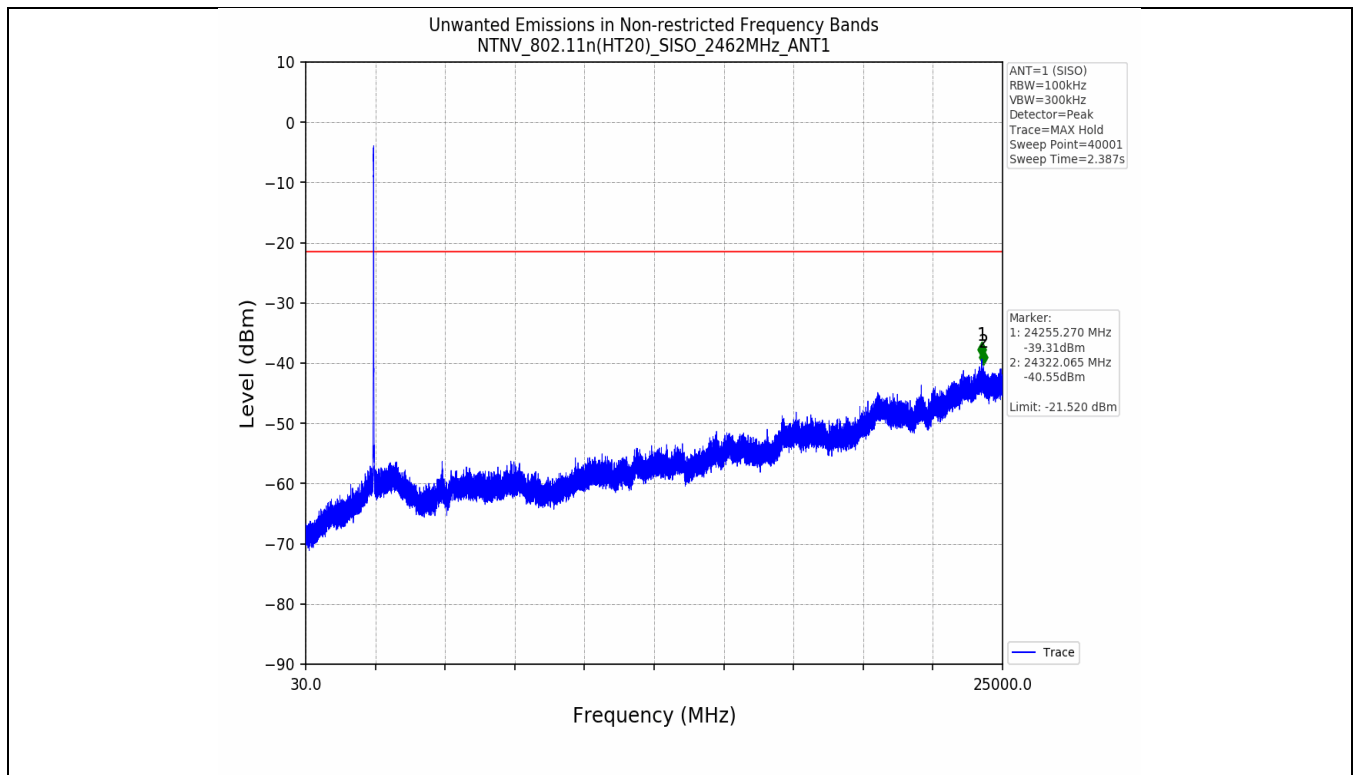
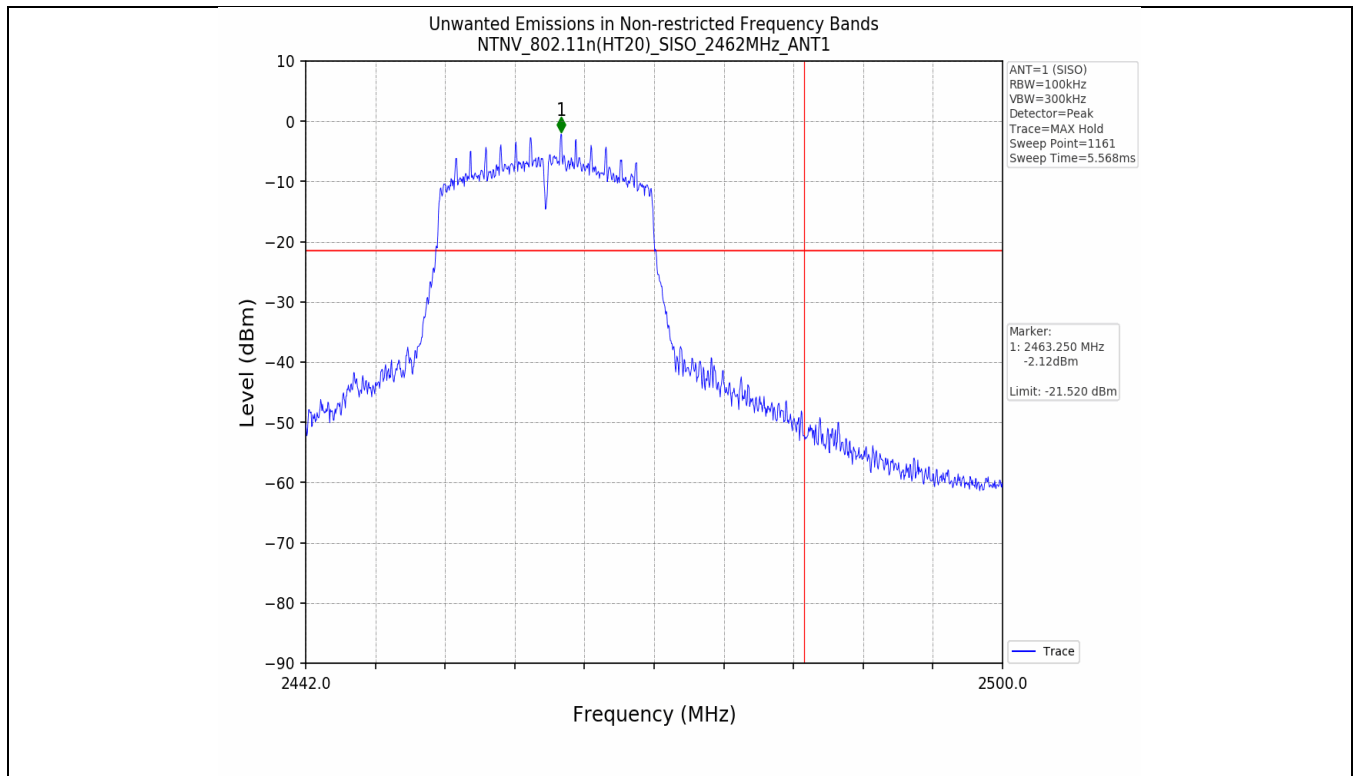


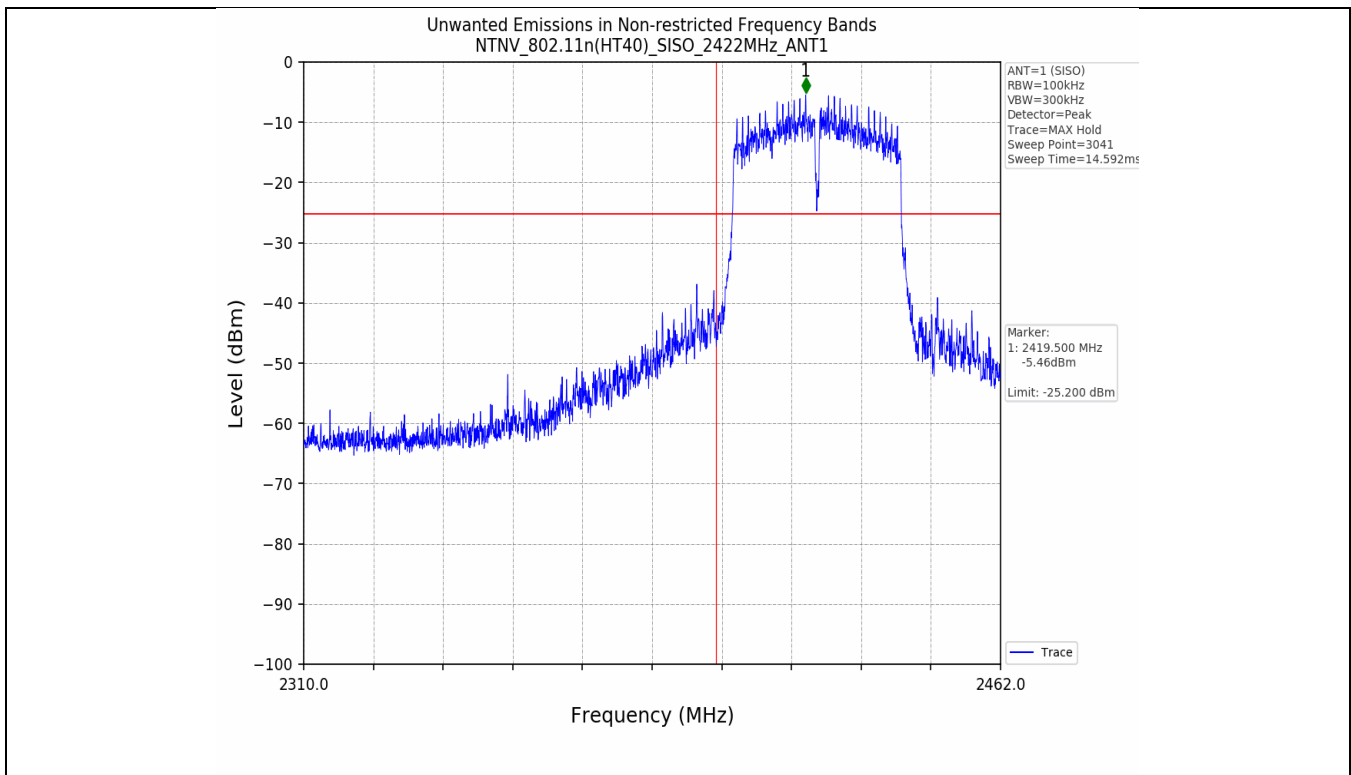
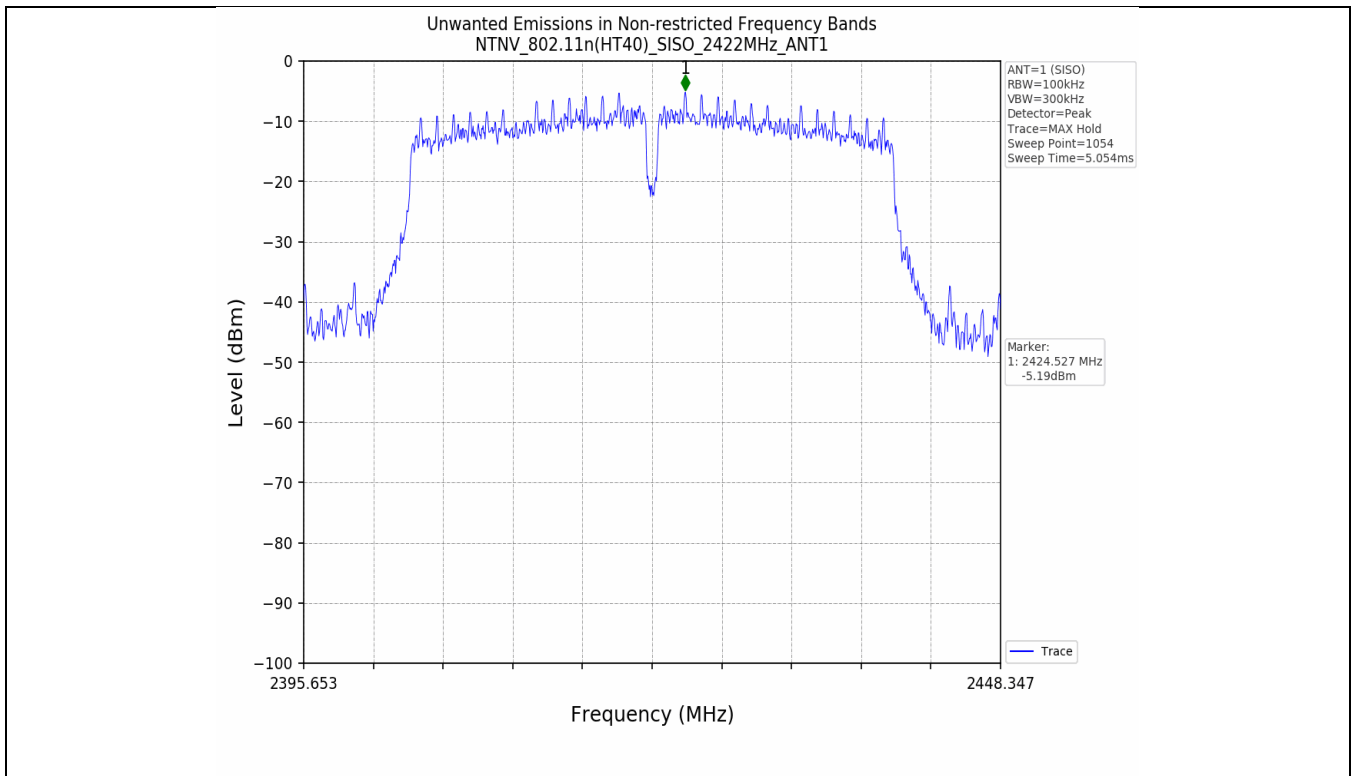


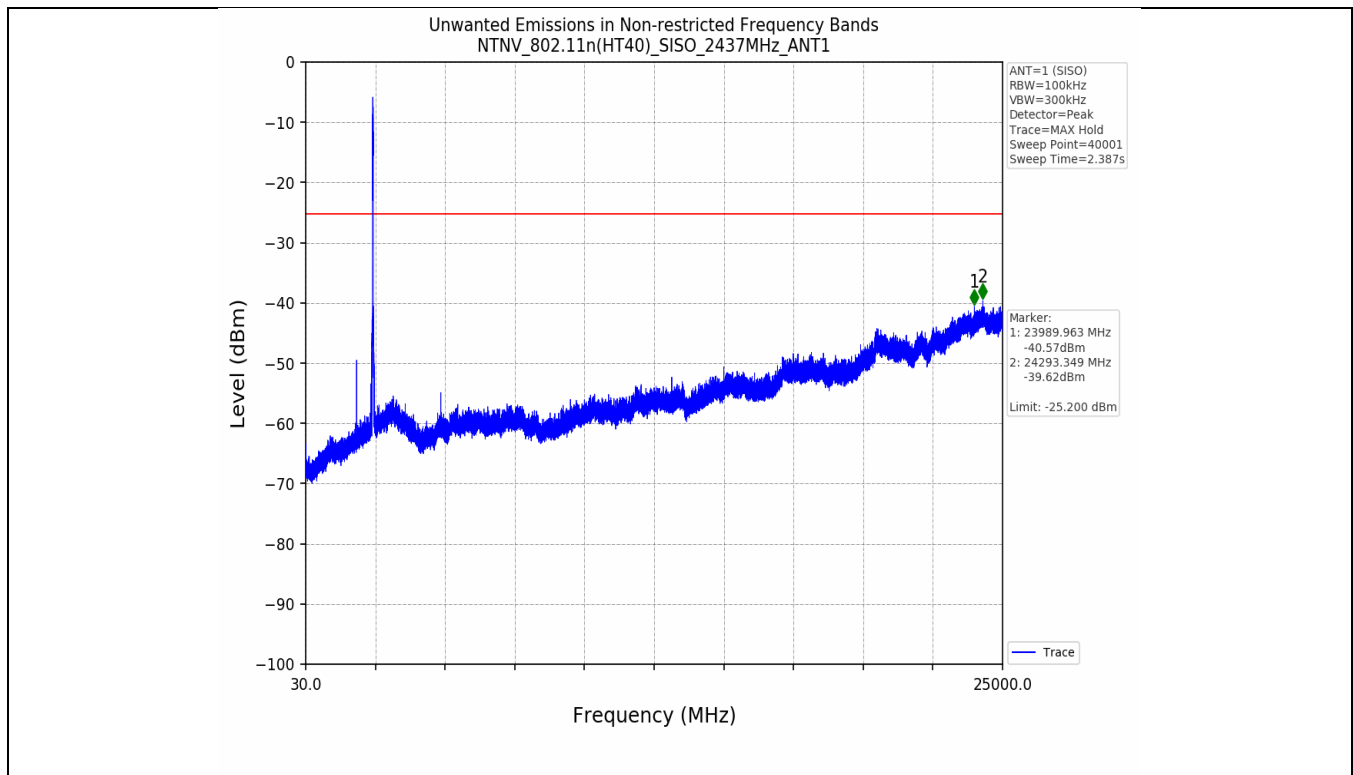
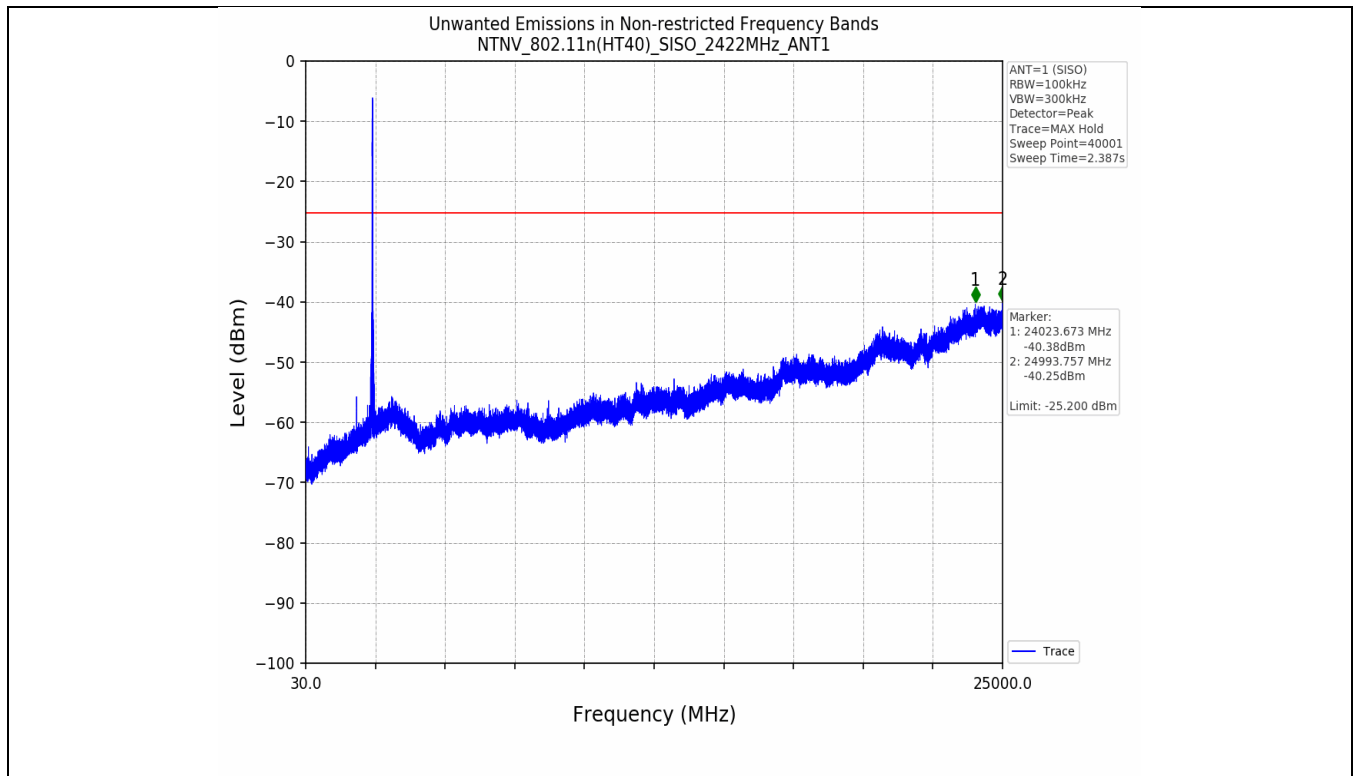


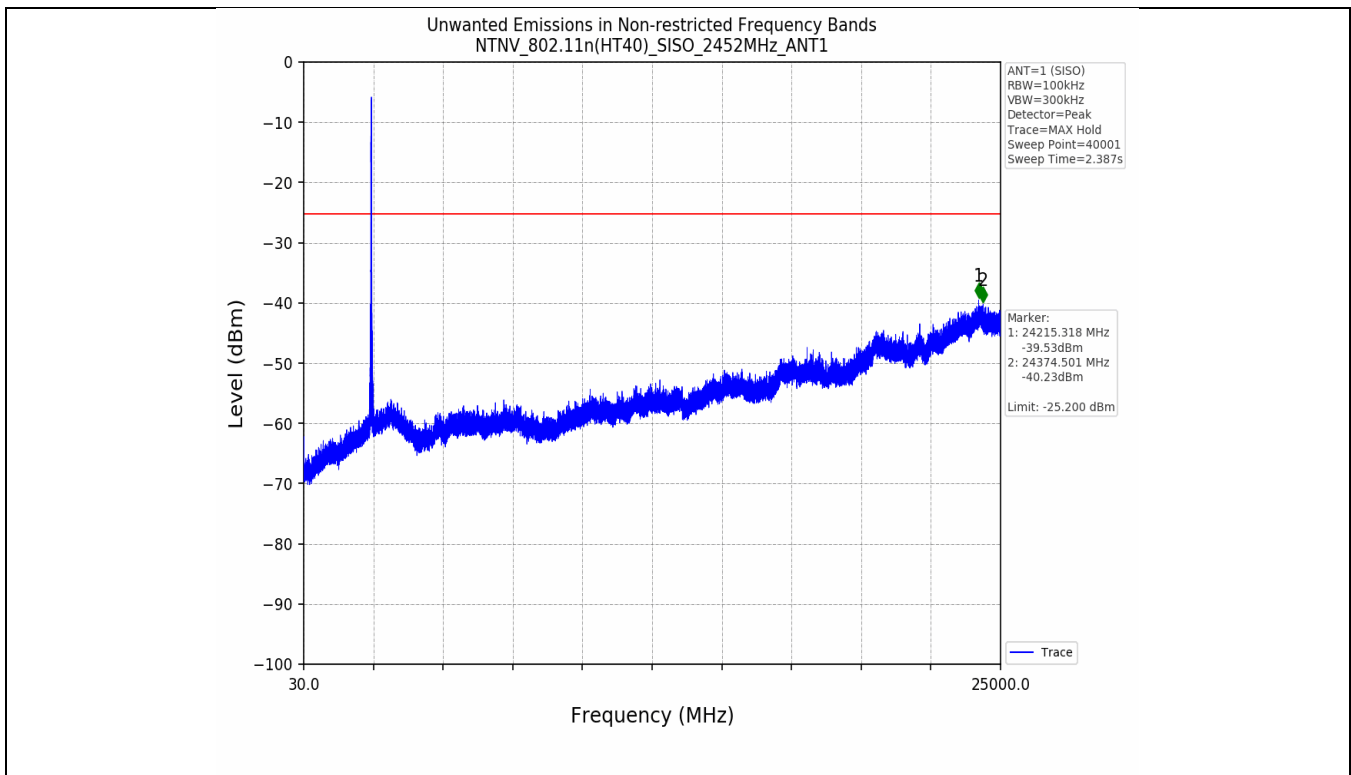
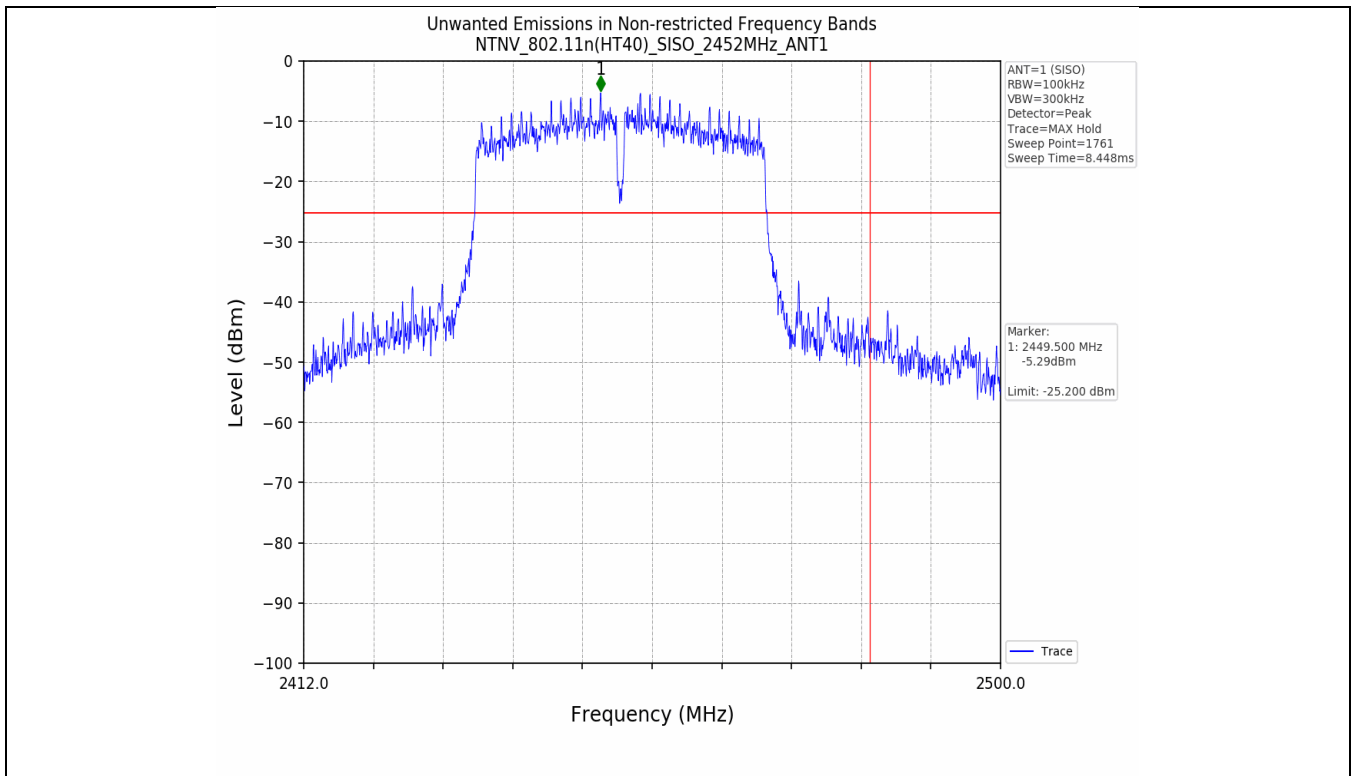












6. FrequencyError

6.1 Test Result

Frequency stability versus Temp.						
Power Supply: DC 3.3V						
Temp. (°C)	Operating Frequency (MHz)	0 minute Measured Frequency	2 minute Measured Frequency	5 minute Measured Frequency	10 minute Measured Frequency	Pass /Fail
-30	2412	2412.27	2412.71	2412.15	2412.27	Pass
	2422	2422.48	2422.59	2422.80	2422.00	Pass
	2437	2437.26	2437.07	2437.55	2437.24	Pass
	2452	2452.87	2452.24	2452.02	2452.46	Pass
	2462	2462.23	2462.31	2462.43	2462.96	Pass
-20	2412	2413.00	2412.31	2412.56	2412.10	Pass
	2422	2422.19	2422.77	2422.43	2422.39	Pass
	2437	2437.93	2437.07	2437.45	2437.28	Pass
	2452	2452.01	2452.92	2452.31	2452.93	Pass
	2462	2462.14	2462.67	2462.32	2462.87	Pass
-10	2412	2412.19	2412.42	2412.85	2412.90	Pass
	2422	2422.51	2422.63	2422.99	2422.45	Pass
	2437	2437.61	2437.34	2437.60	2437.22	Pass
	2452	2452.85	2452.99	2452.53	2452.73	Pass
	2462	2462.32	2462.70	2462.47	2462.91	Pass
0	2412	2412.11	2412.14	2412.63	2412.00	Pass
	2422	2422.48	2422.93	2422.23	2423.00	Pass
	2437	2437.78	2437.97	2437.51	2437.17	Pass
	2452	2452.55	2452.12	2452.25	2452.02	Pass
	2462	2462.83	2462.64	2462.57	2462.21	Pass
10	2412	2412.15	2412.02	2412.19	2412.94	Pass
	2422	2422.44	2422.44	2422.49	2422.09	Pass
	2437	2437.95	2437.43	2437.58	2437.57	Pass
	2452	2452.61	2452.77	2452.08	2452.74	Pass
	2462	2462.94	2462.59	2462.96	2462.76	Pass
20	2412	2412.40	2412.81	2412.96	2412.71	Pass
	2422	2422.71	2422.58	2422.32	2422.95	Pass
	2437	2437.78	2437.64	2437.50	2437.72	Pass
	2452	2452.01	2452.14	2452.75	2452.52	Pass
	2462	2462.86	2462.99	2462.64	2462.95	Pass
30	2412	2412.86	2412.98	2412.07	2412.23	Pass
	2422	2422.23	2422.48	2422.29	2422.80	Pass
	2437	2437.26	2437.80	2437.68	2437.35	Pass
	2452	2452.80	2452.97	2452.32	2452.10	Pass
	2462	2462.26	2462.78	2462.16	2462.07	Pass
40	2412	2412.35	2412.42	2412.83	2412.13	Pass
	2422	2422.76	2422.60	2422.38	2422.29	Pass
	2437	2437.86	2437.99	2437.85	2437.63	Pass
	2452	2452.67	2452.79	2452.67	2452.03	Pass
	2462	2462.14	2462.98	2462.21	2462.94	Pass
50	2412	2412.40	2412.81	2412.96	2412.71	Pass
	2422	2422.71	2422.58	2422.32	2422.95	Pass
	2437	2437.78	2437.64	2437.50	2437.72	Pass
	2452	2452.01	2452.14	2452.75	2452.52	Pass
	2462	2462.86	2462.99	2462.64	2462.95	Pass

Frequency stability versus Voltage						
Temperature: 25°C						
Power Supply (VDC)	Operating Frequency (MHz)	0 minute	2 minute	5 minute	10 minute	Pass /Fail
		Measured Frequency	Measured Frequency	Measured Frequency	Measured Frequency	
2.7	2412	2412.55	2412.64	2412.90	2412.15	Pass
	2422	2422.64	2422.66	2422.13	2422.36	Pass
	2437	2437.80	2437.11	2437.12	2437.99	Pass
	2452	2452.82	2452.43	2452.48	2452.82	Pass
	2462	2462.42	2462.14	2462.80	2462.50	Pass

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