

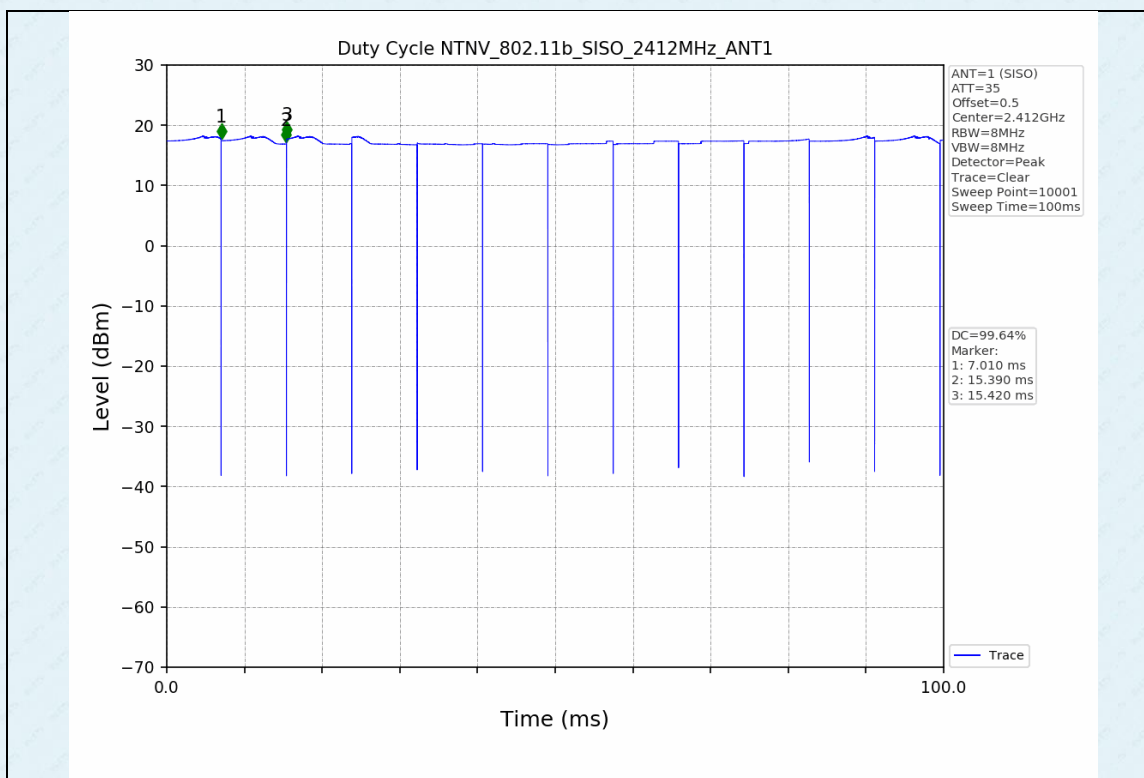
Appendix for 15.247

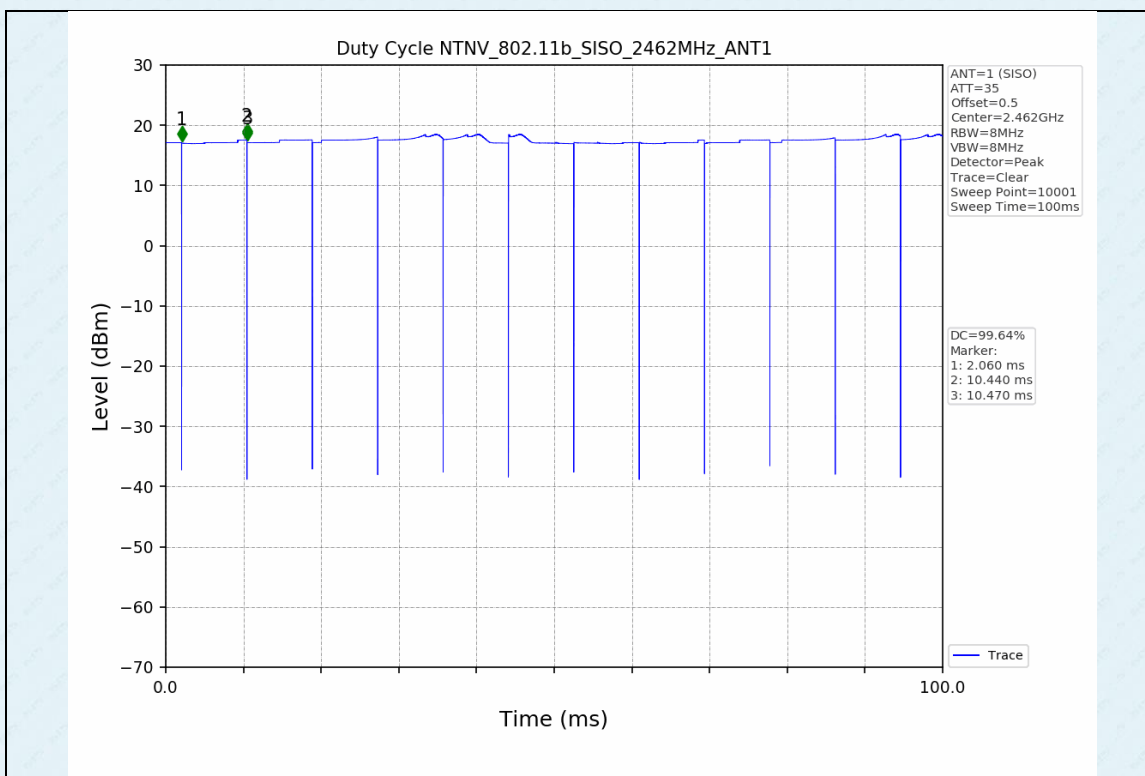
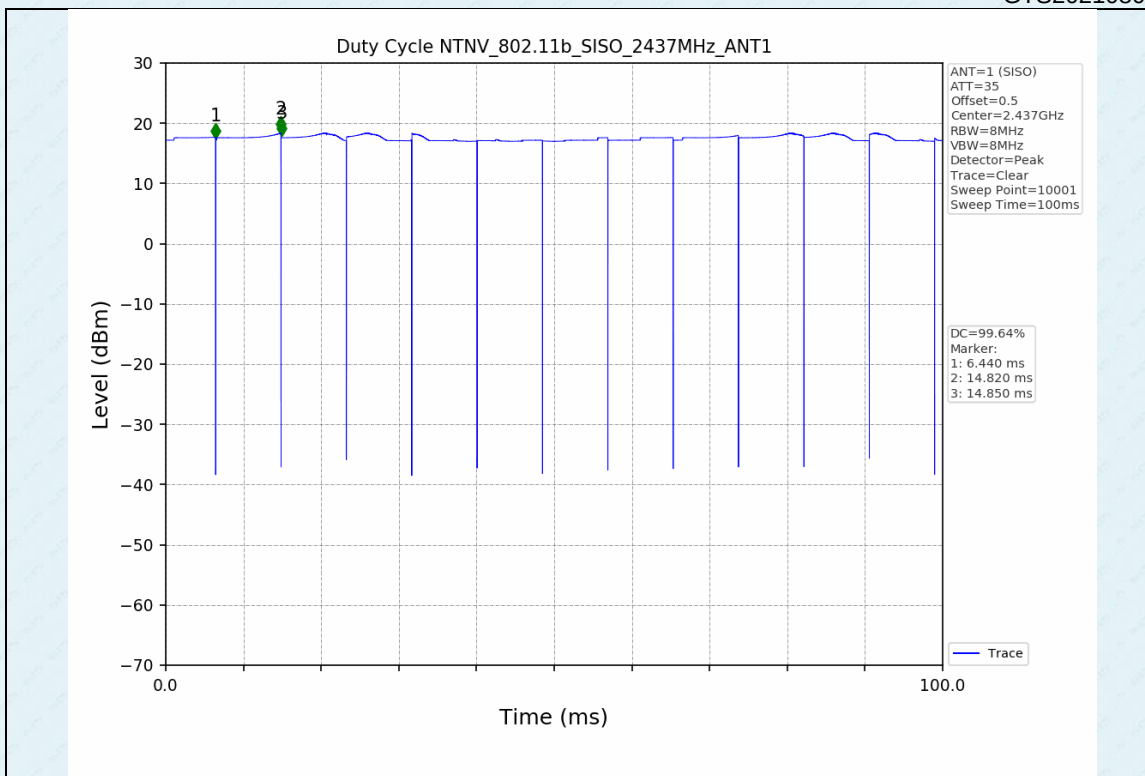
1. Duty Cycle

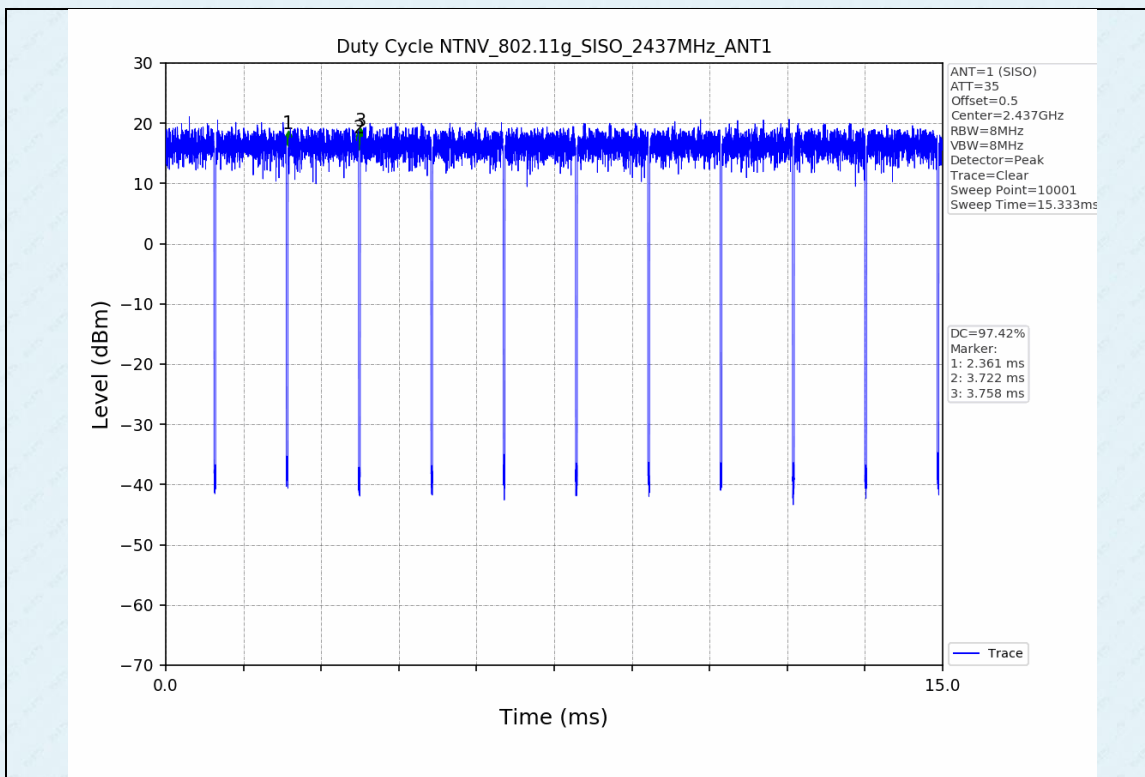
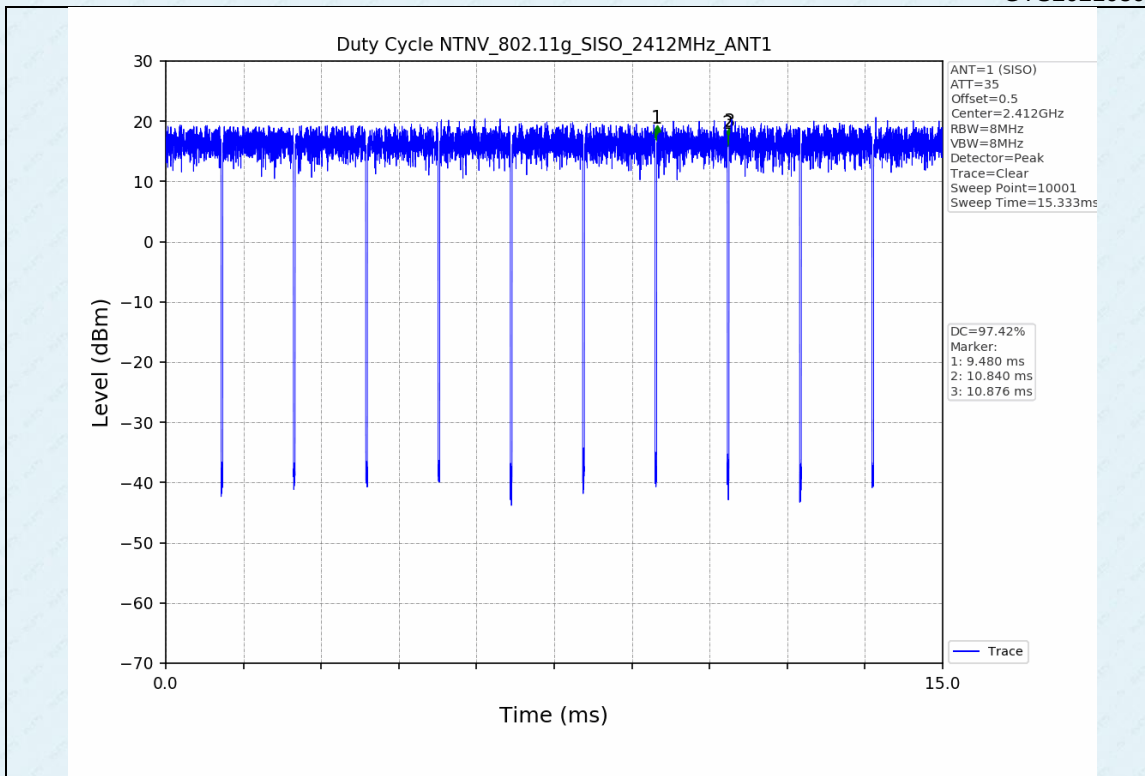
1.1 Test Result

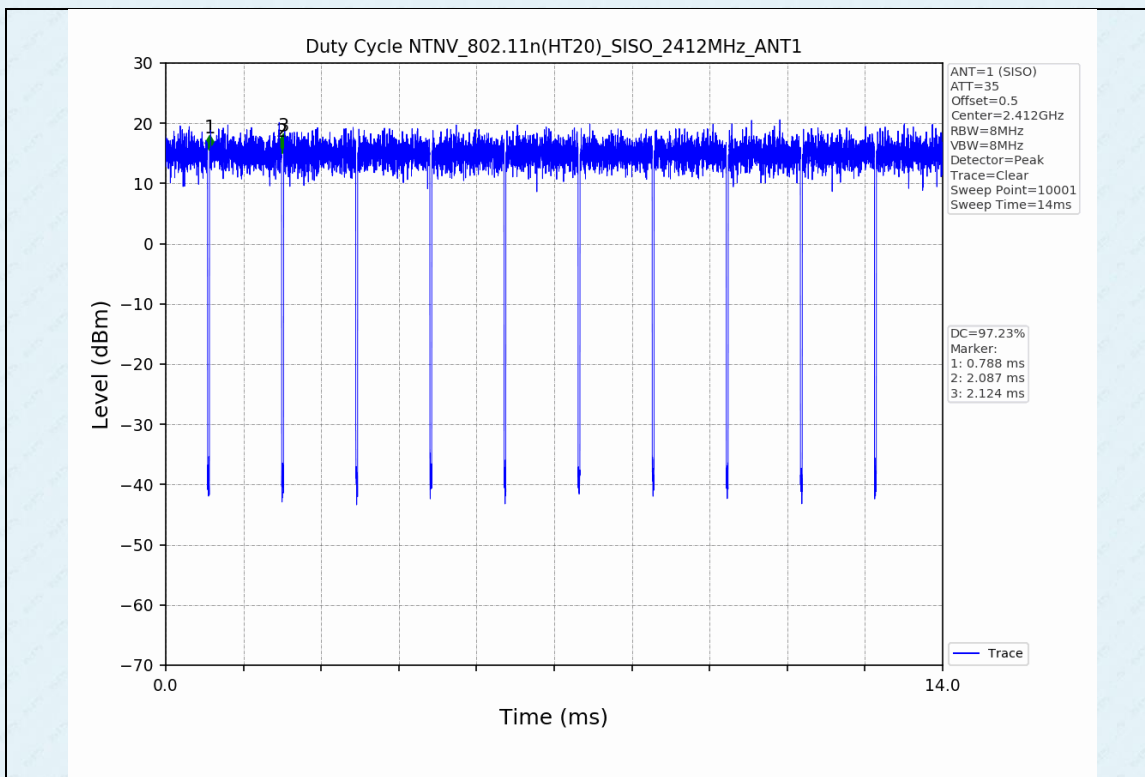
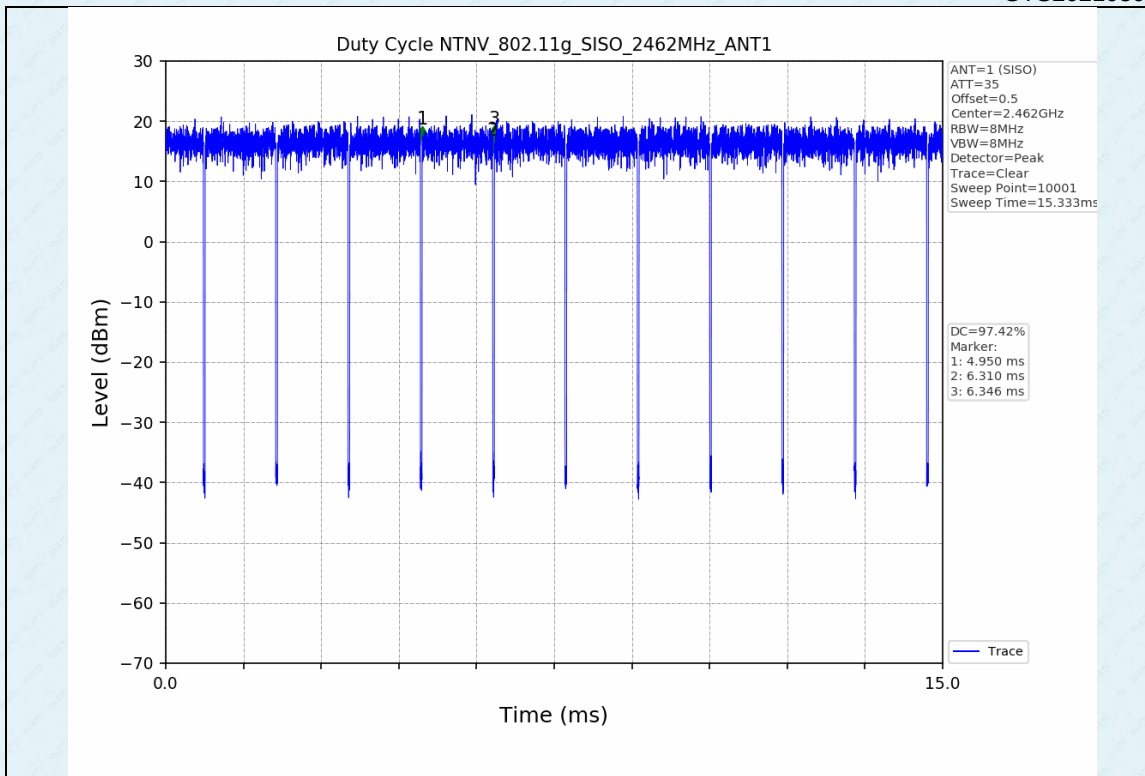
Test Mode	Channel Frequency(M Hz)	TX Type	ANT No.	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
802.11b	2412	SISO	1	8.380	8.410	99.64	0.02
	2437	SISO	1	8.380	8.410	99.64	0.02
	2462	SISO	1	8.380	8.410	99.64	0.02
802.11g	2412	SISO	1	1.360	1.396	97.42	0.11
	2437	SISO	1	1.361	1.397	97.42	0.11
	2462	SISO	1	1.360	1.396	97.42	0.11
802.11n(HT20)	2412	SISO	1	1.299	1.336	97.23	0.12
	2437	SISO	1	1.299	1.335	97.30	0.12
	2462	SISO	1	1.299	1.335	97.30	0.12
802.11n(HT40)	2422	SISO	1	0.618	0.651	94.93	0.23
	2437	SISO	1	0.618	0.651	94.93	0.23
	2452	SISO	1	0.619	0.652	94.94	0.23

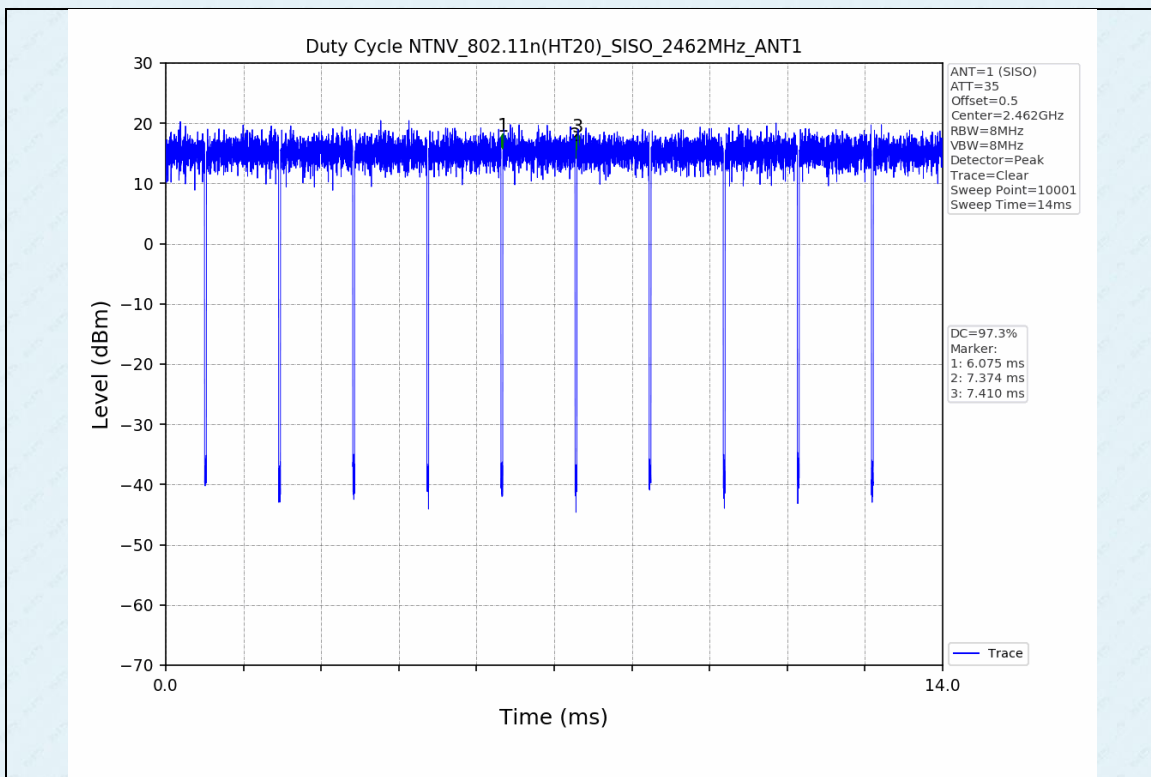
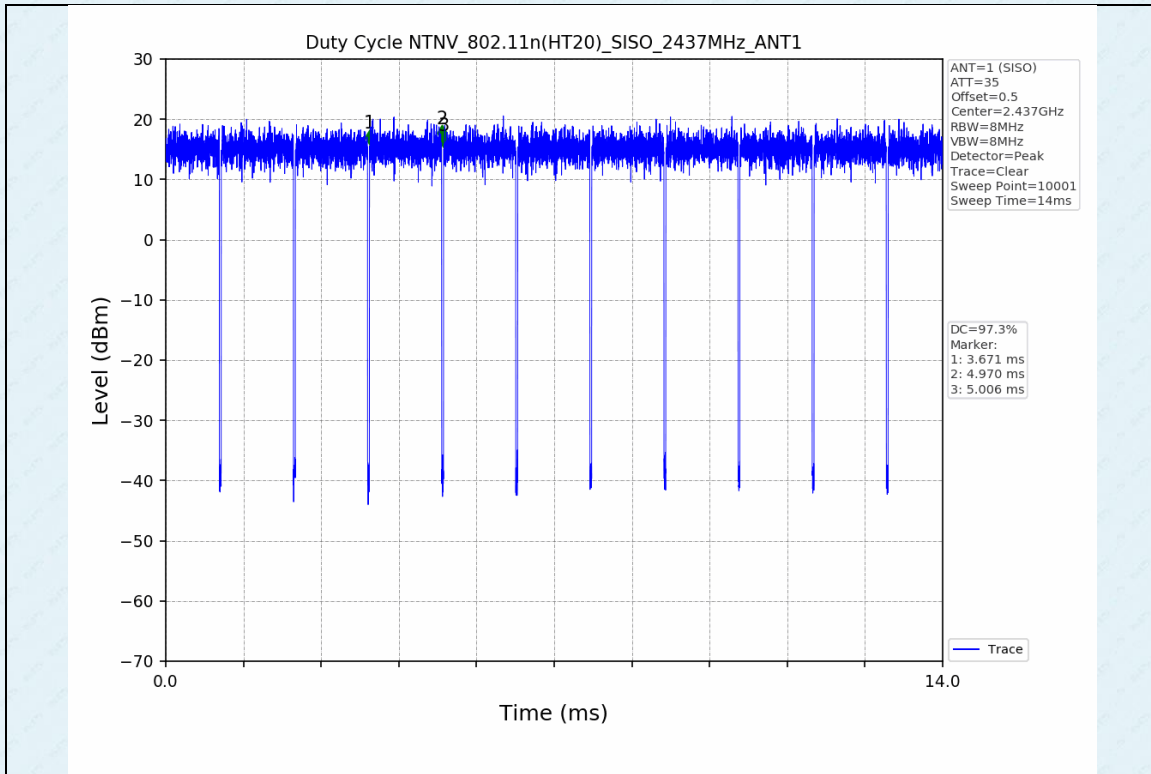
1.2 Test Graph

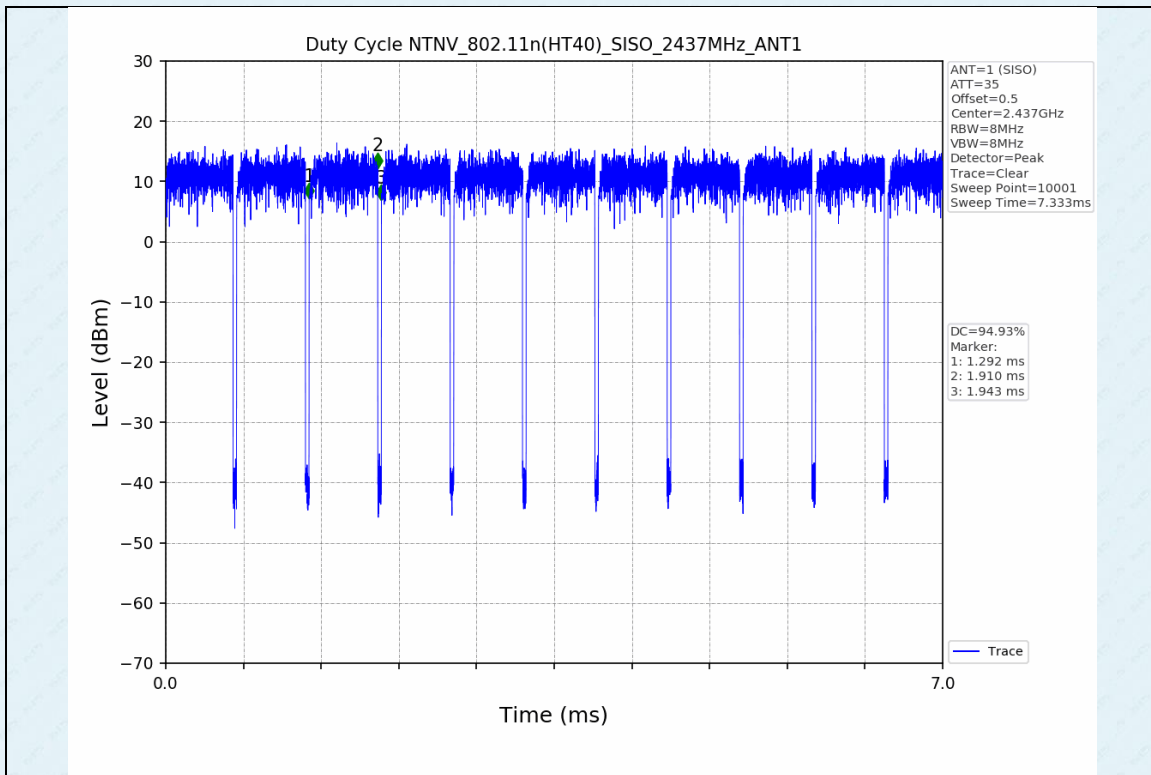
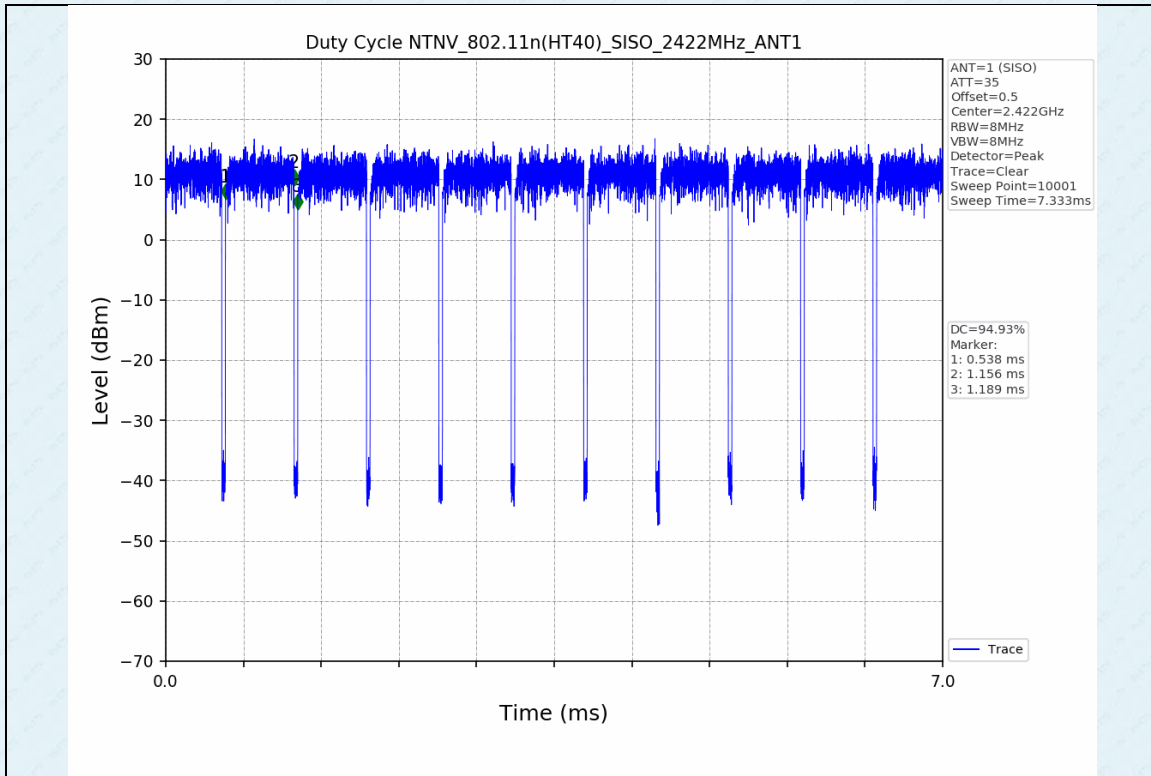


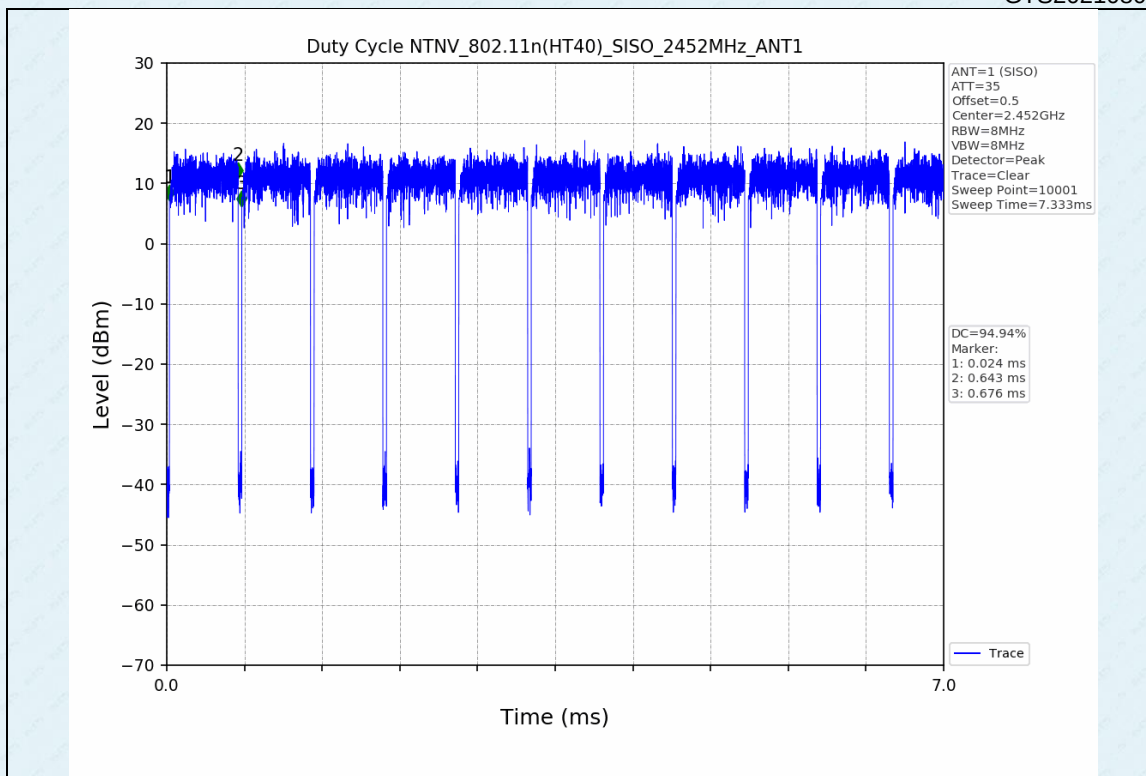












2. Bandwidth

2.1 Test Result

ANT 1:

Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11b	2412	SISO	1	8.116	≥0.5	PASS
	2437	SISO	1	9.096	≥0.5	PASS
	2462	SISO	1	9.092	≥0.5	PASS
802.11g	2412	SISO	1	15.154	≥0.5	PASS
	2437	SISO	1	15.103	≥0.5	PASS
	2462	SISO	1	15.138	≥0.5	PASS
802.11n(HT20)	2412	SISO	1	15.741	≥0.5	PASS
	2437	SISO	1	15.161	≥0.5	PASS
	2462	SISO	1	16.323	≥0.5	PASS
802.11n(HT40)	2422	SISO	1	35.178	≥0.5	PASS
	2437	SISO	1	35.173	≥0.5	PASS
	2452	SISO	1	35.166	≥0.5	PASS

Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11b	2412	SISO	1	13.379	Only for Report Use
	2437	SISO	1	13.393	Only for Report Use
	2462	SISO	1	13.463	Only for Report Use
802.11g	2412	SISO	1	16.480	Only for Report Use
	2437	SISO	1	16.487	Only for Report Use
	2462	SISO	1	16.515	Only for Report Use
802.11n(HT20)	2412	SISO	1	17.546	Only for Report Use
	2437	SISO	1	17.548	Only for Report Use
	2462	SISO	1	17.551	Only for Report Use
802.11n(HT40)	2422	SISO	1	36.717	Only for Report Use
	2437	SISO	1	36.707	Only for Report Use
	2452	SISO	1	36.683	Only for Report Use

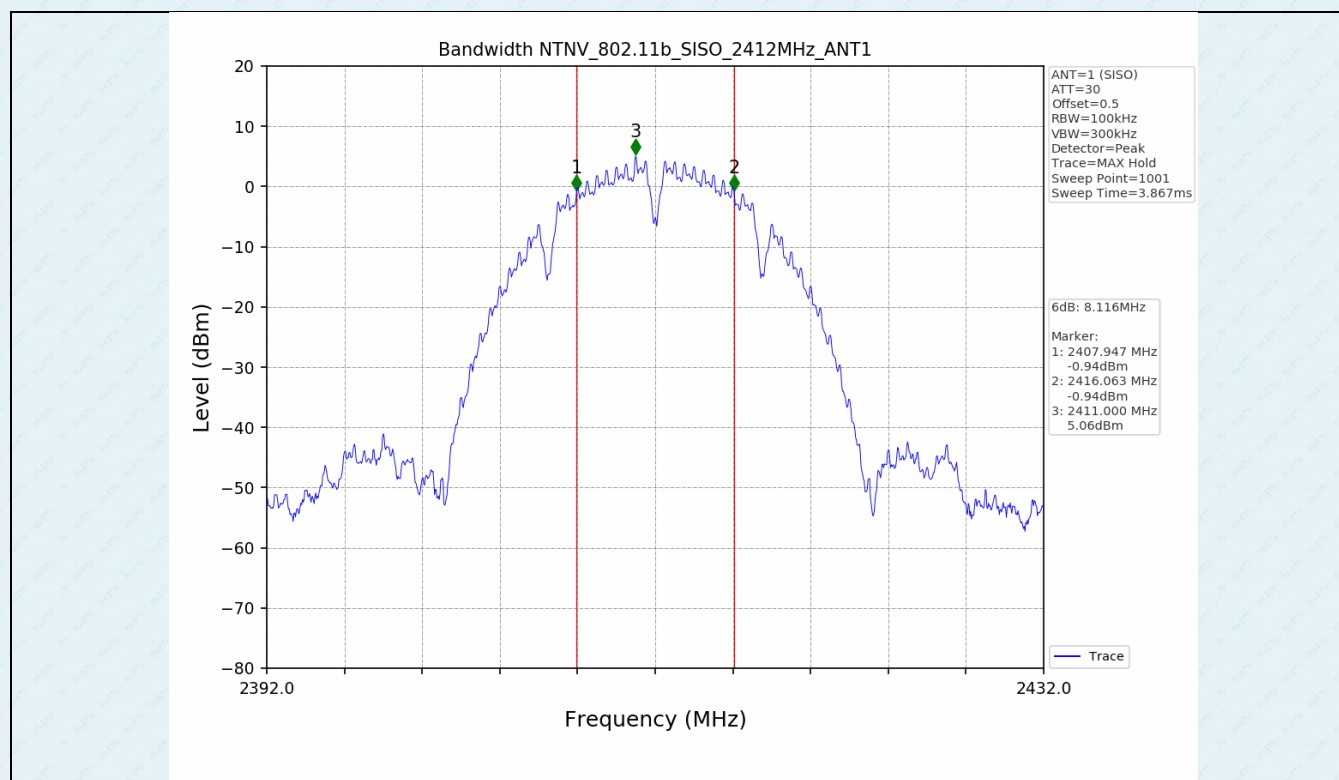
ANT 2:

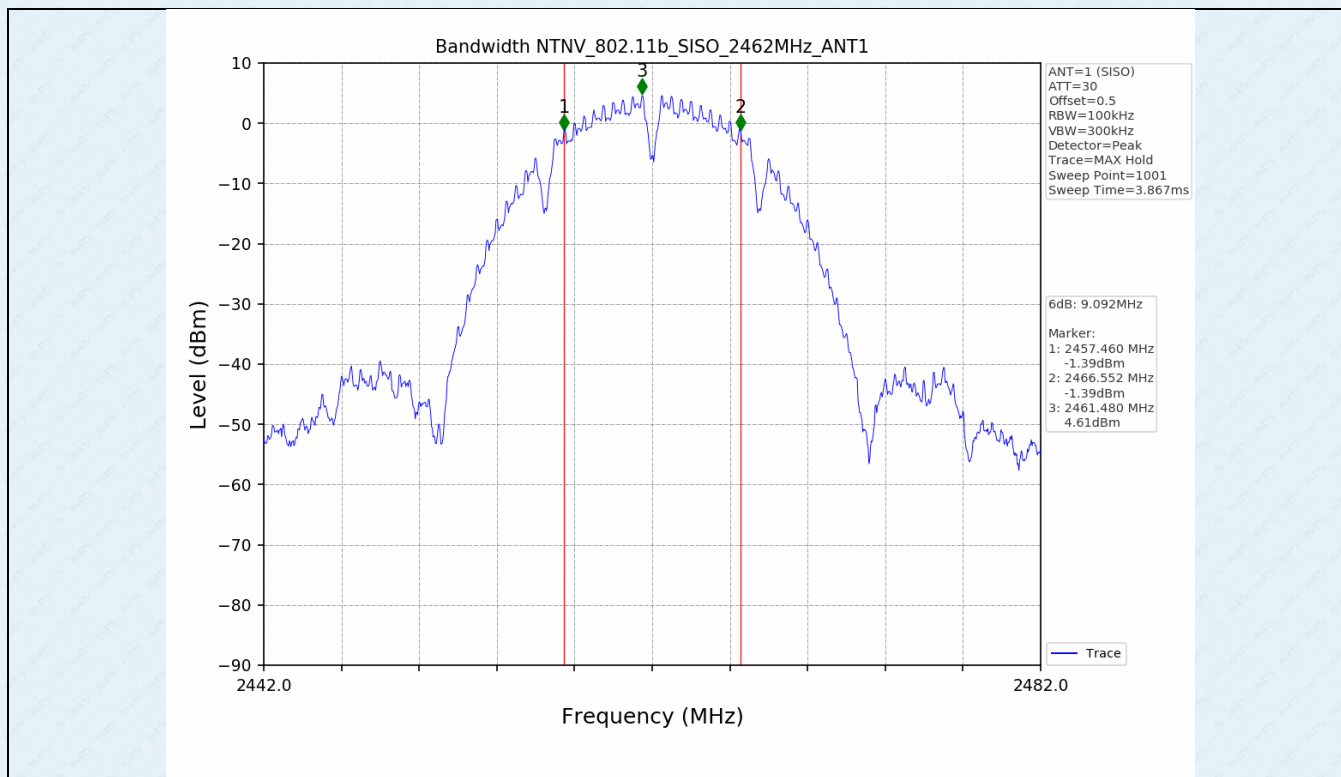
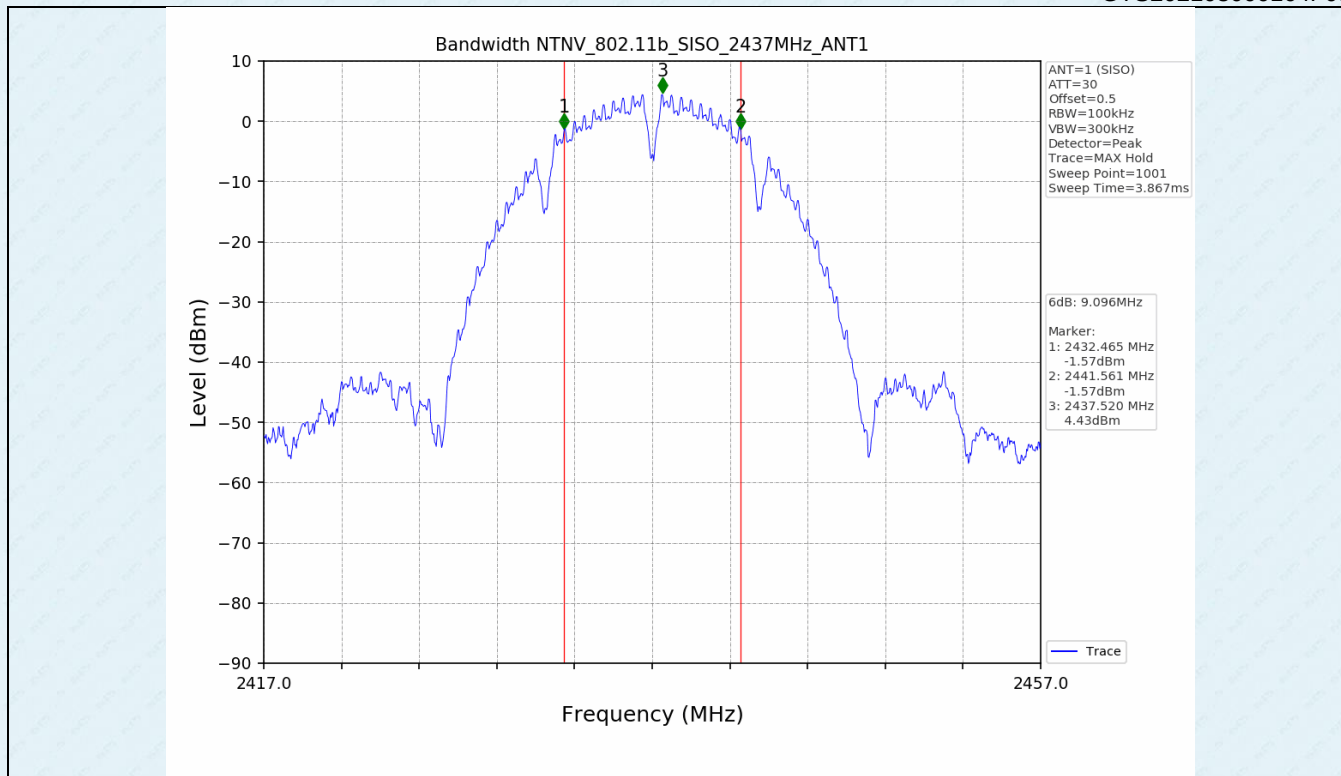
Test Mode	Frequency (MHz)	TX Type	ANT No.	6dB Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11b	2412	SISO	1	9.095	≥0.5	PASS
	2437	SISO	1	9.085	≥0.5	PASS
	2462	SISO	1	9.088	≥0.5	PASS
802.11g	2412	SISO	1	15.125	≥0.5	PASS
	2437	SISO	1	15.129	≥0.5	PASS
	2462	SISO	1	15.133	≥0.5	PASS
802.11n(HT20)	2412	SISO	1	15.103	≥0.5	PASS
	2437	SISO	1	15.172	≥0.5	PASS
	2462	SISO	1	15.148	≥0.5	PASS
802.11n(HT40)	2422	SISO	1	35.201	≥0.5	PASS
	2437	SISO	1	35.220	≥0.5	PASS
	2452	SISO	1	35.180	≥0.5	PASS

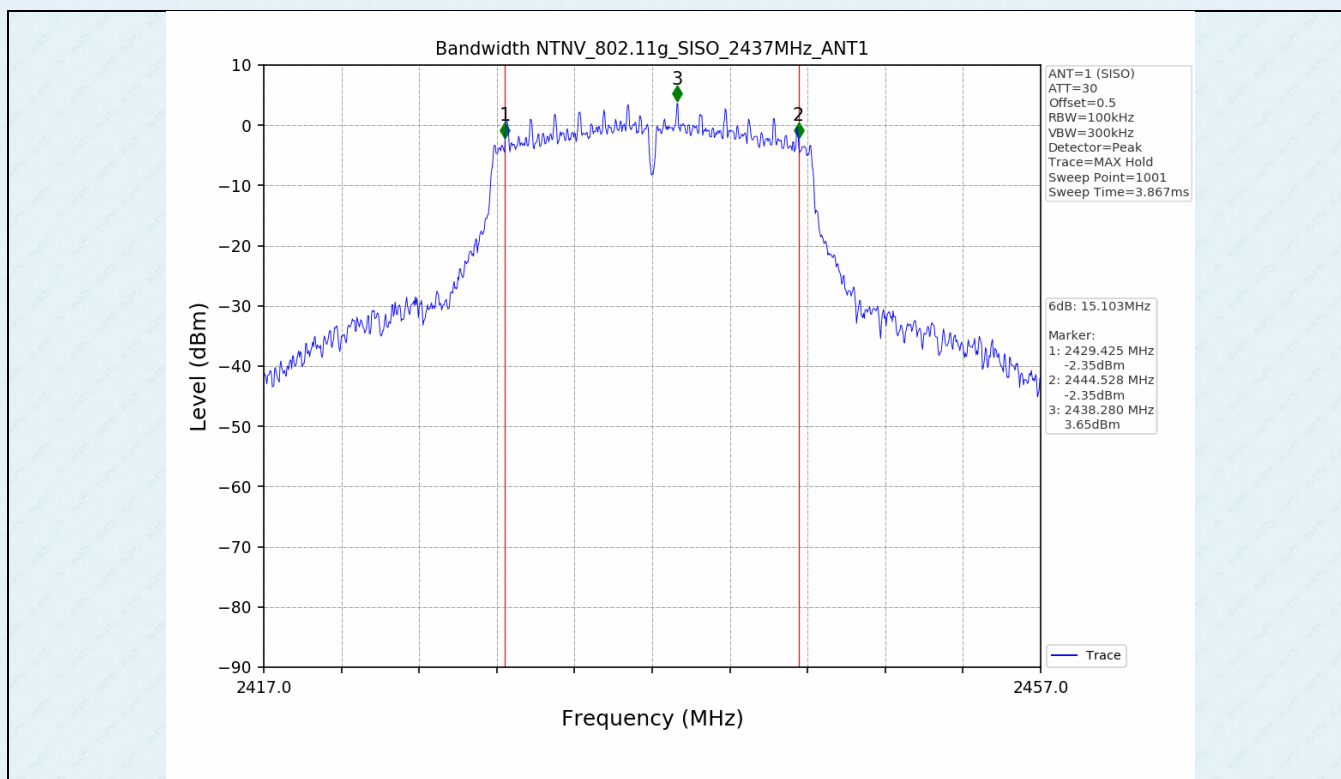
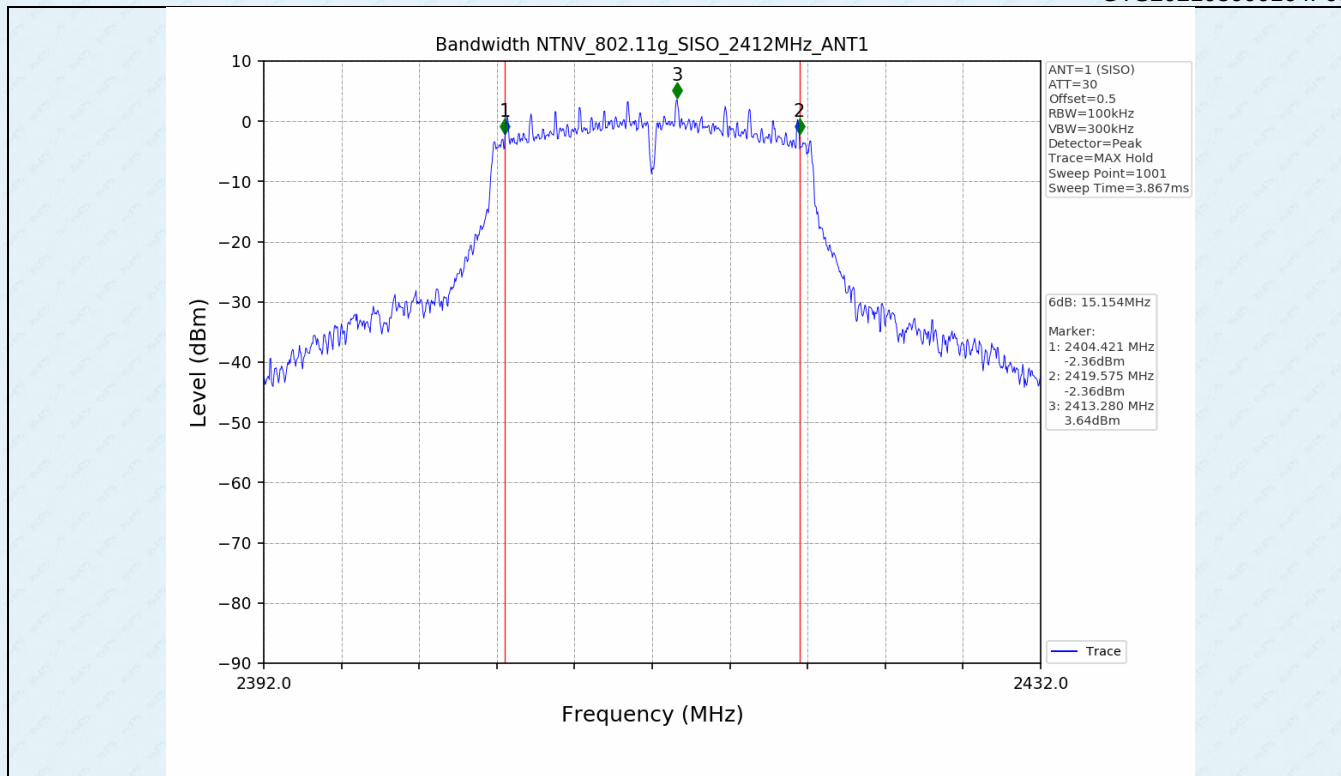
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11b	2412	SISO	1	13.330	Only for Report Use
	2437	SISO	1	13.370	Only for Report Use
	2462	SISO	1	13.366	Only for Report Use
802.11g	2412	SISO	1	16.785	Only for Report Use
	2437	SISO	1	16.803	Only for Report Use
	2462	SISO	1	16.797	Only for Report Use
802.11n(HT20)	2412	SISO	1	17.675	Only for Report Use
	2437	SISO	1	17.697	Only for Report Use
	2462	SISO	1	17.704	Only for Report Use
802.11n(HT40)	2422	SISO	1	36.547	Only for Report Use
	2437	SISO	1	36.540	Only for Report Use
	2452	SISO	1	36.537	Only for Report Use

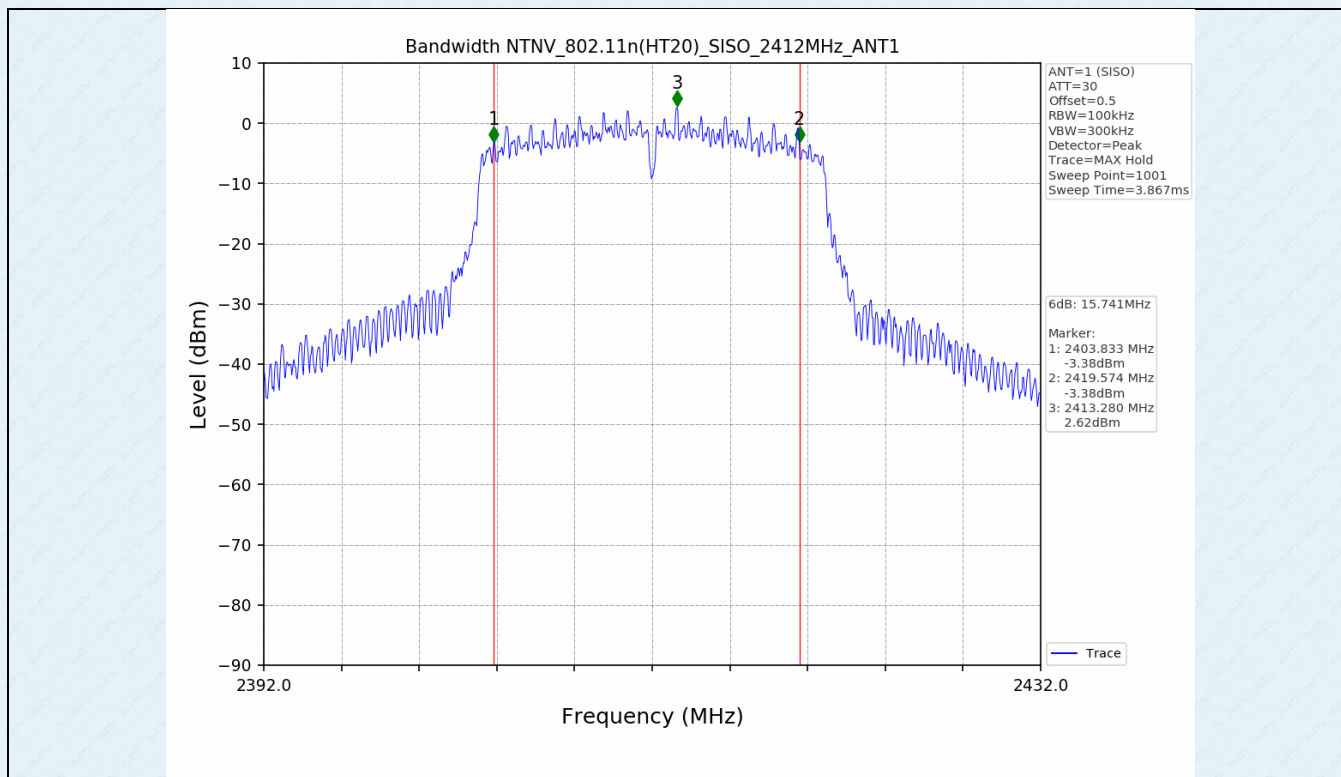
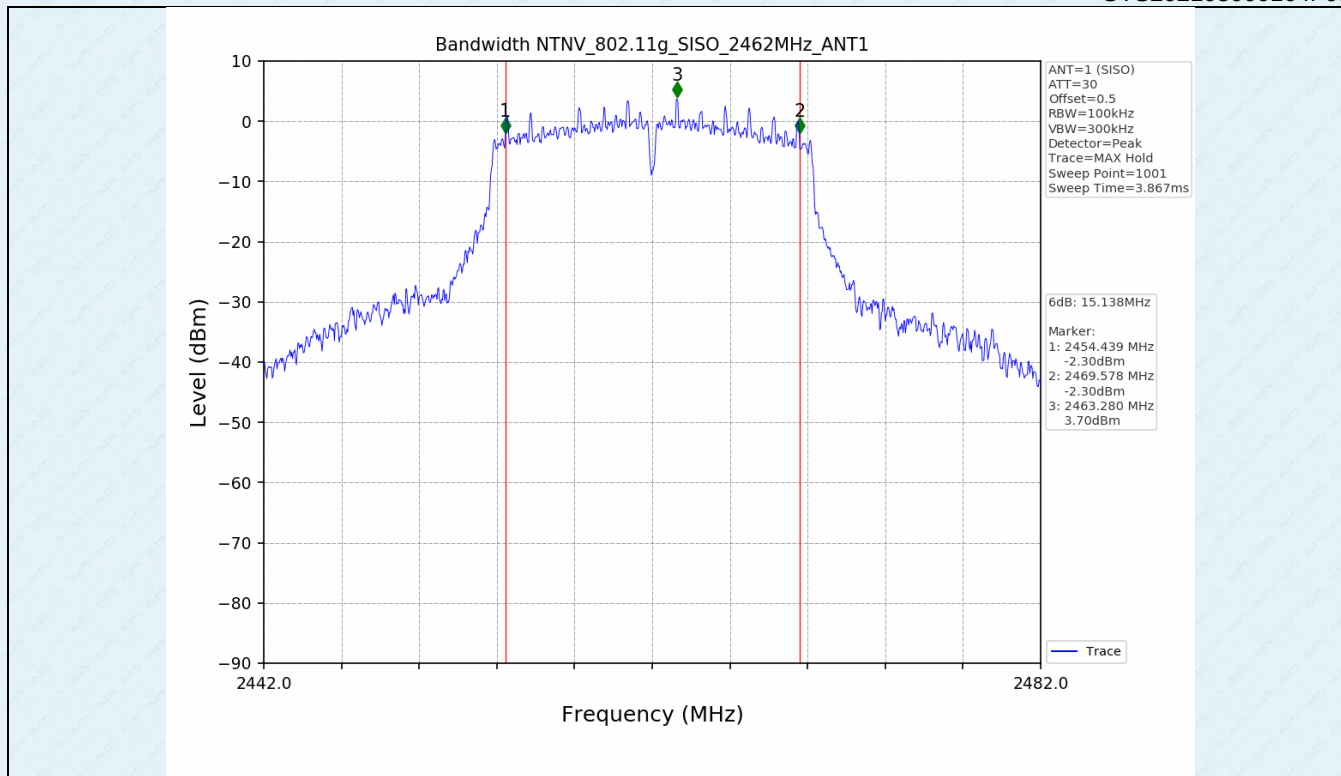
2.2 Test Graph - 6dB Bandwidth

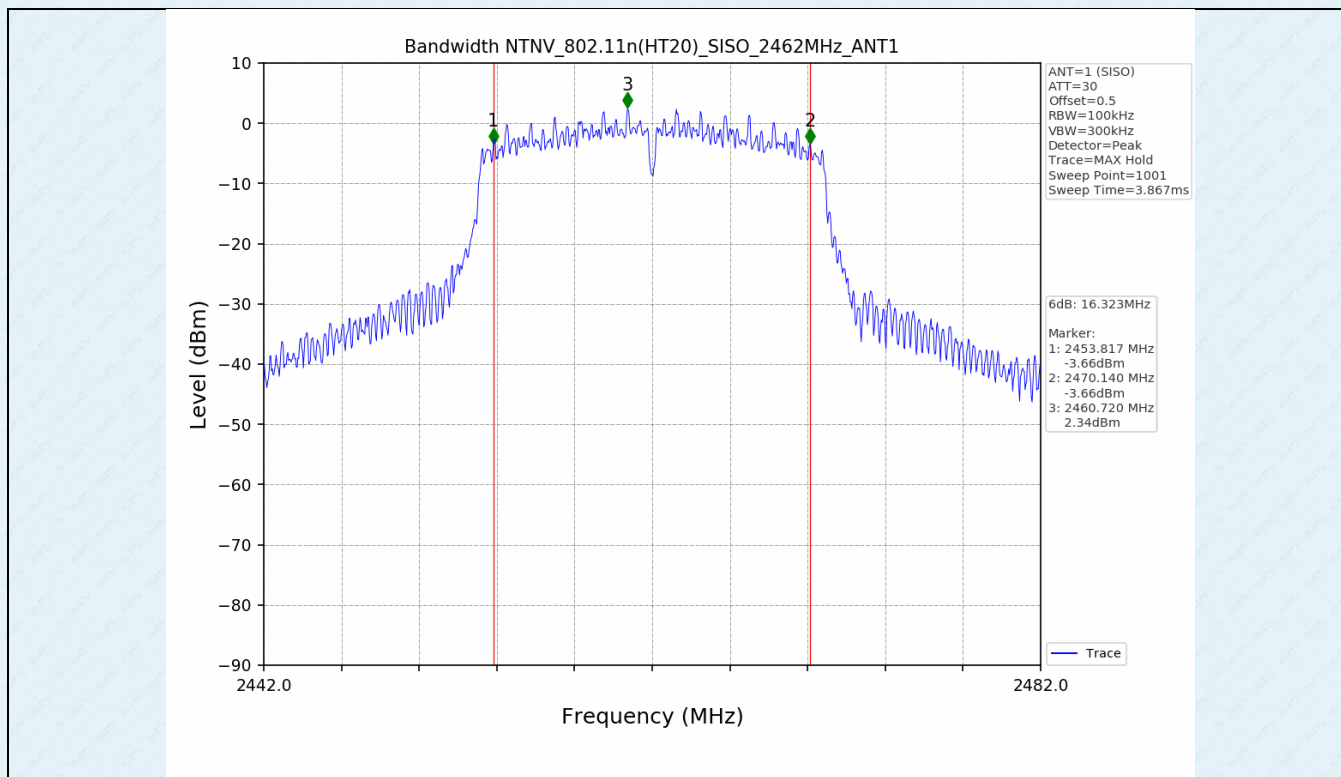
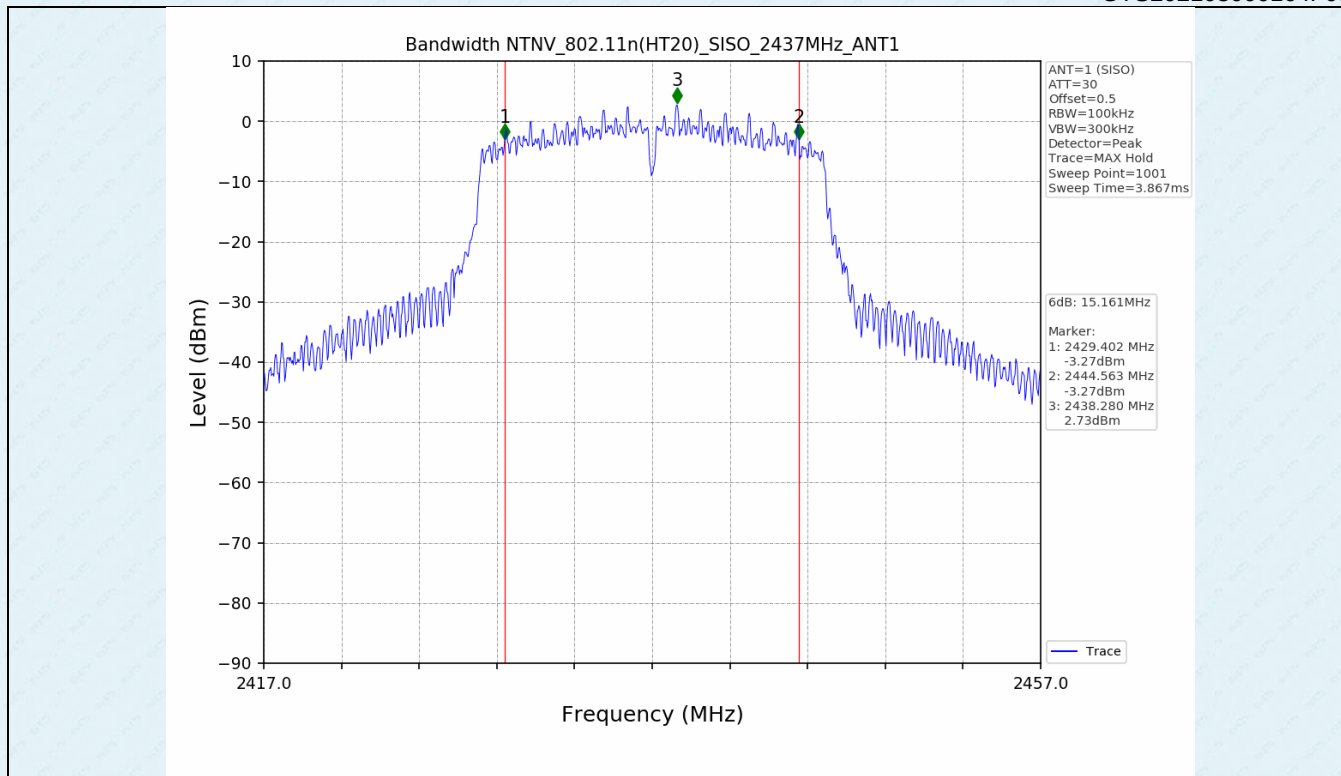
ANT 1:

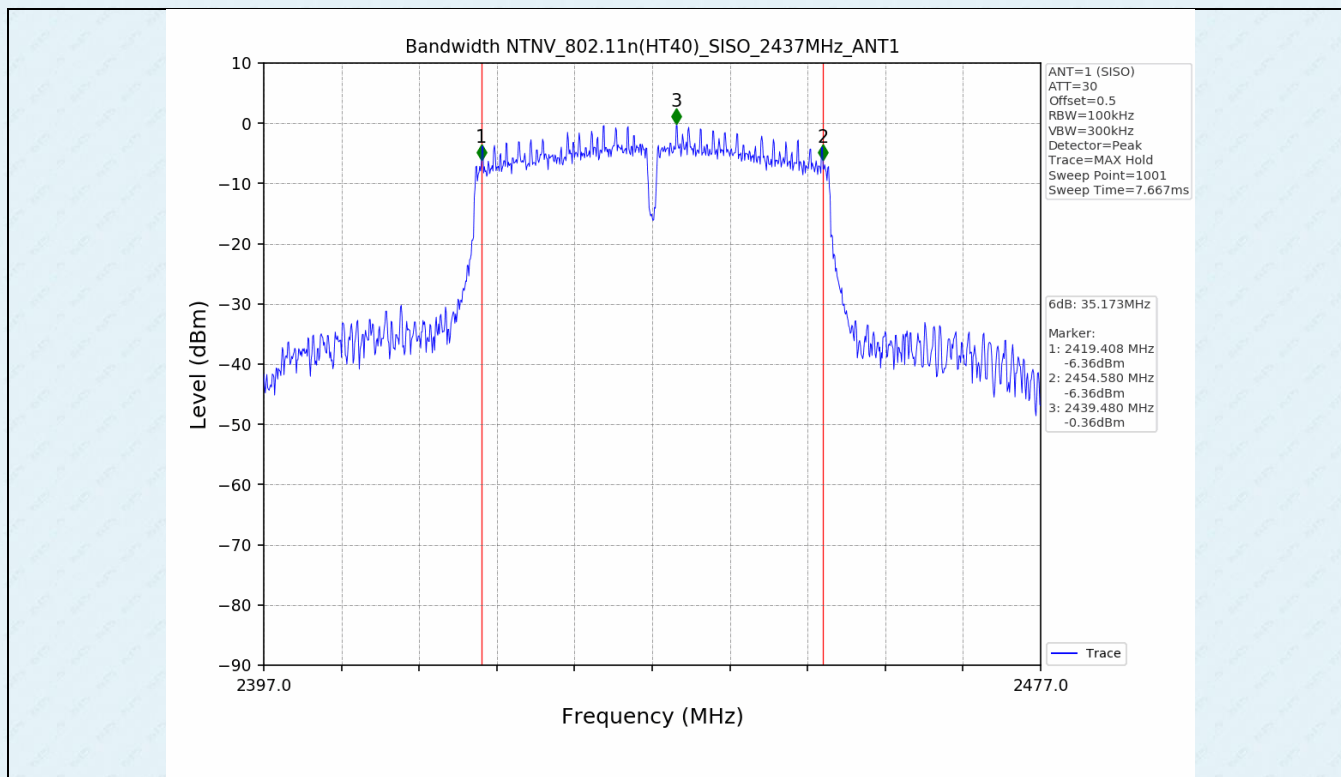
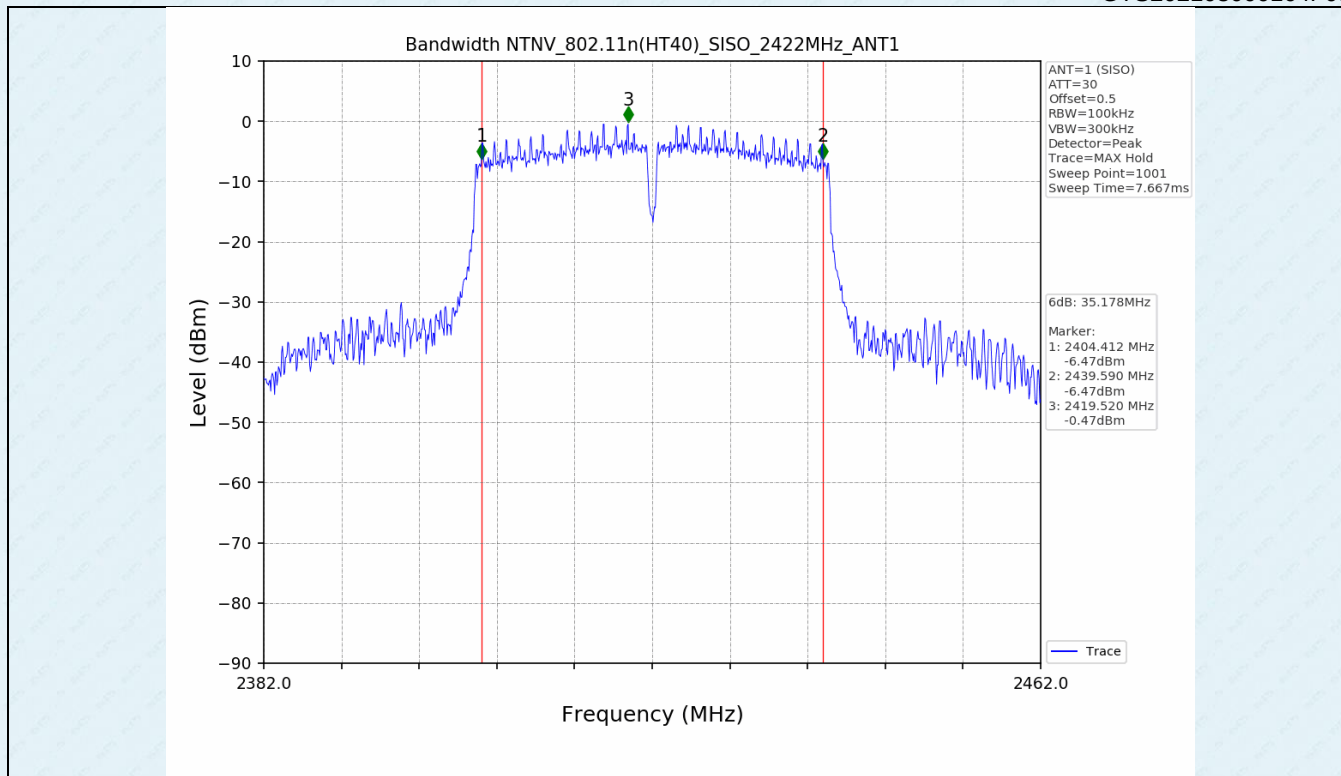


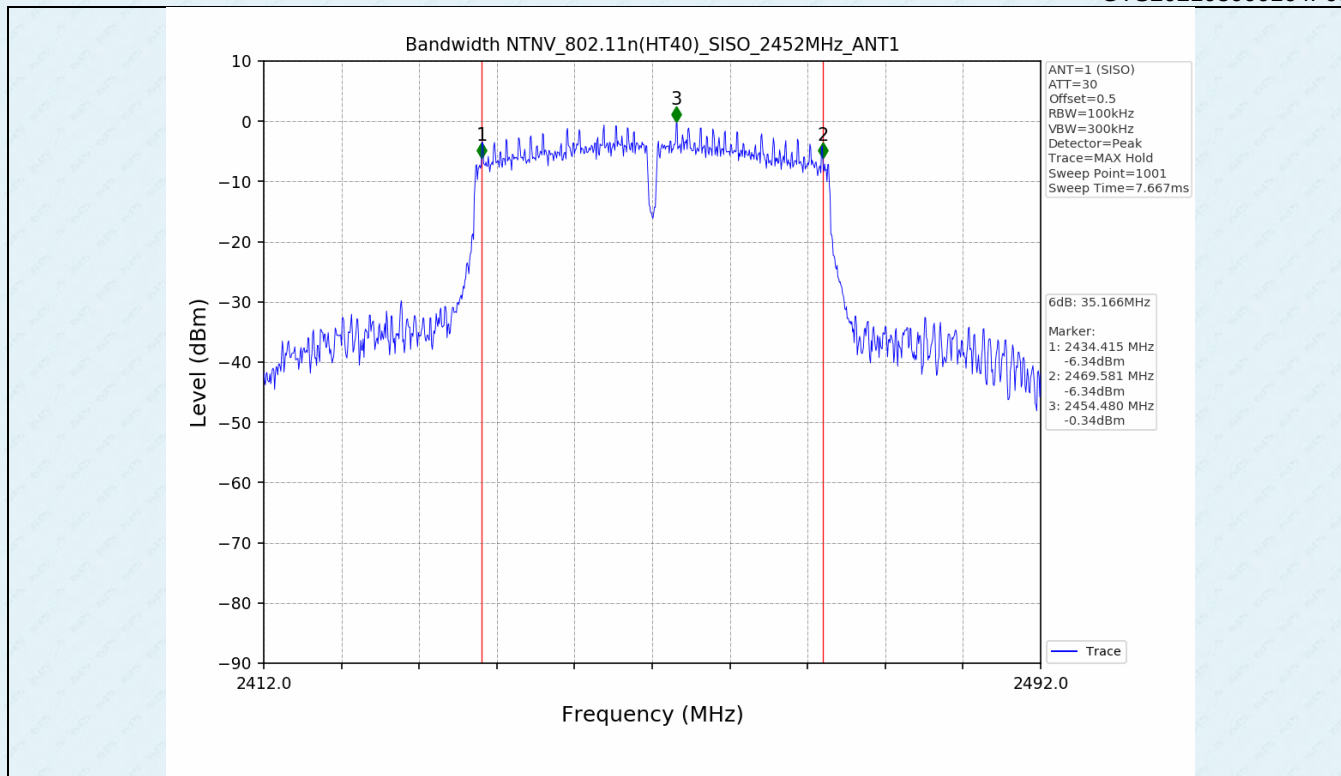




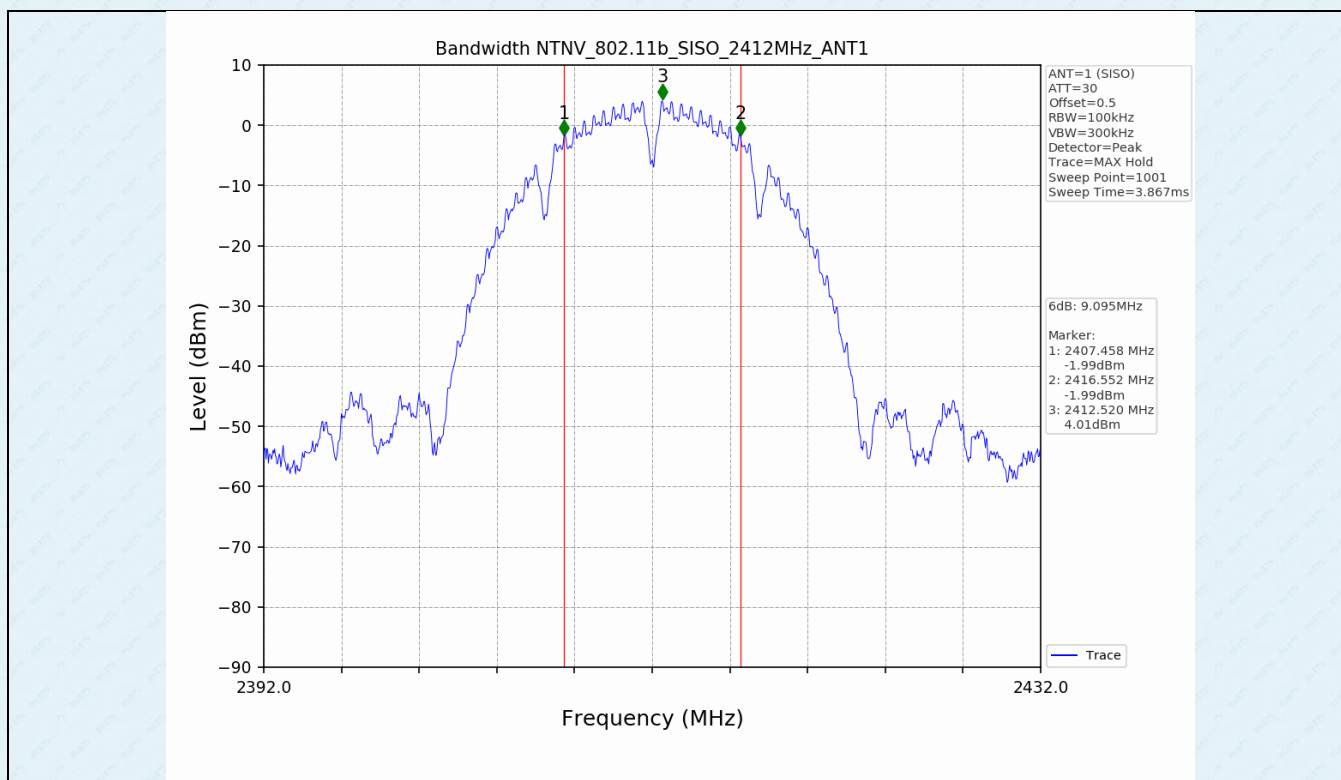


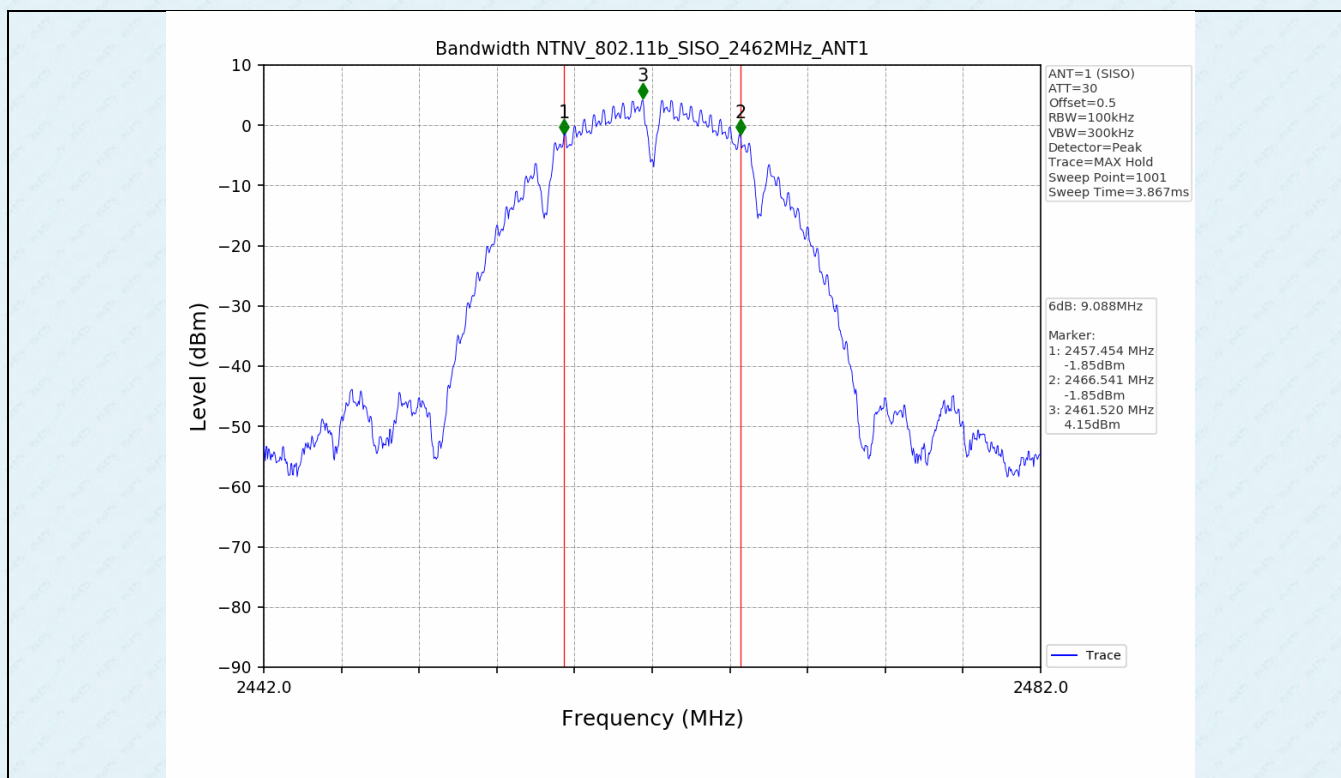
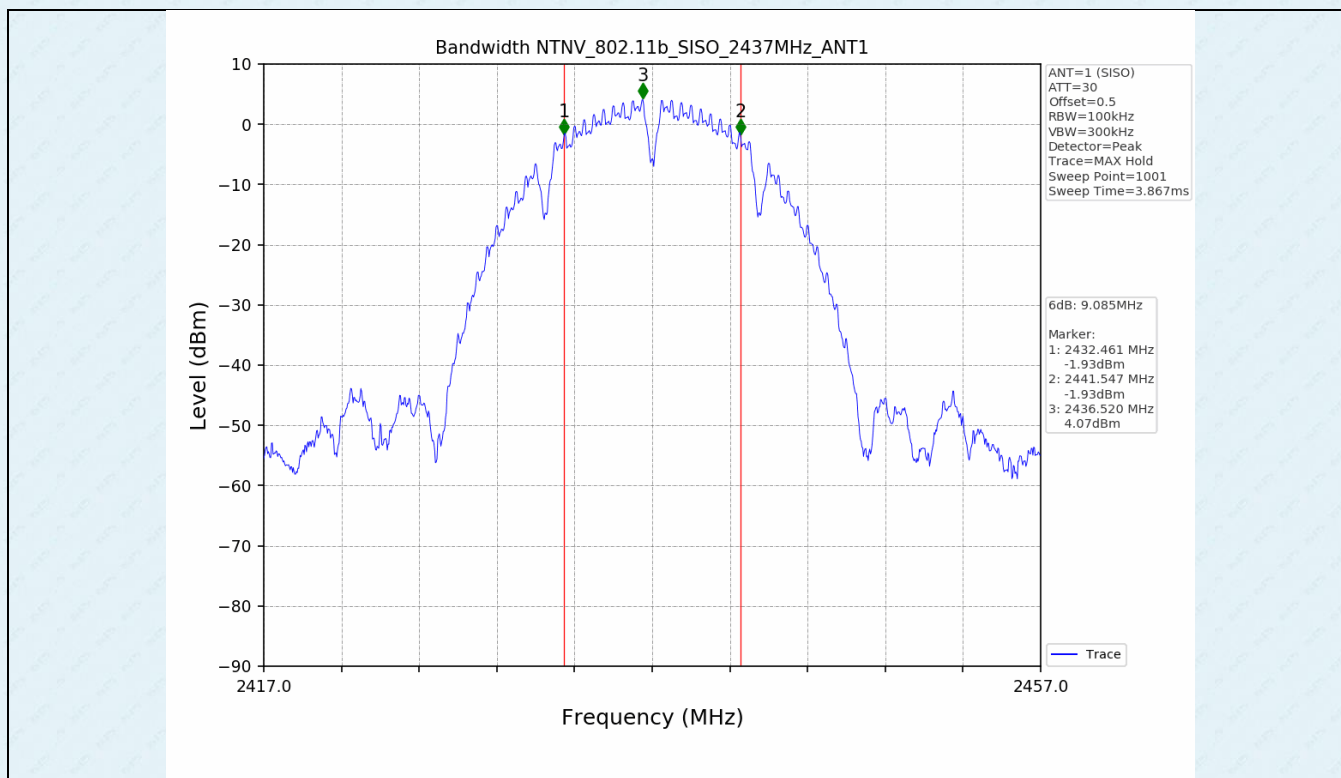


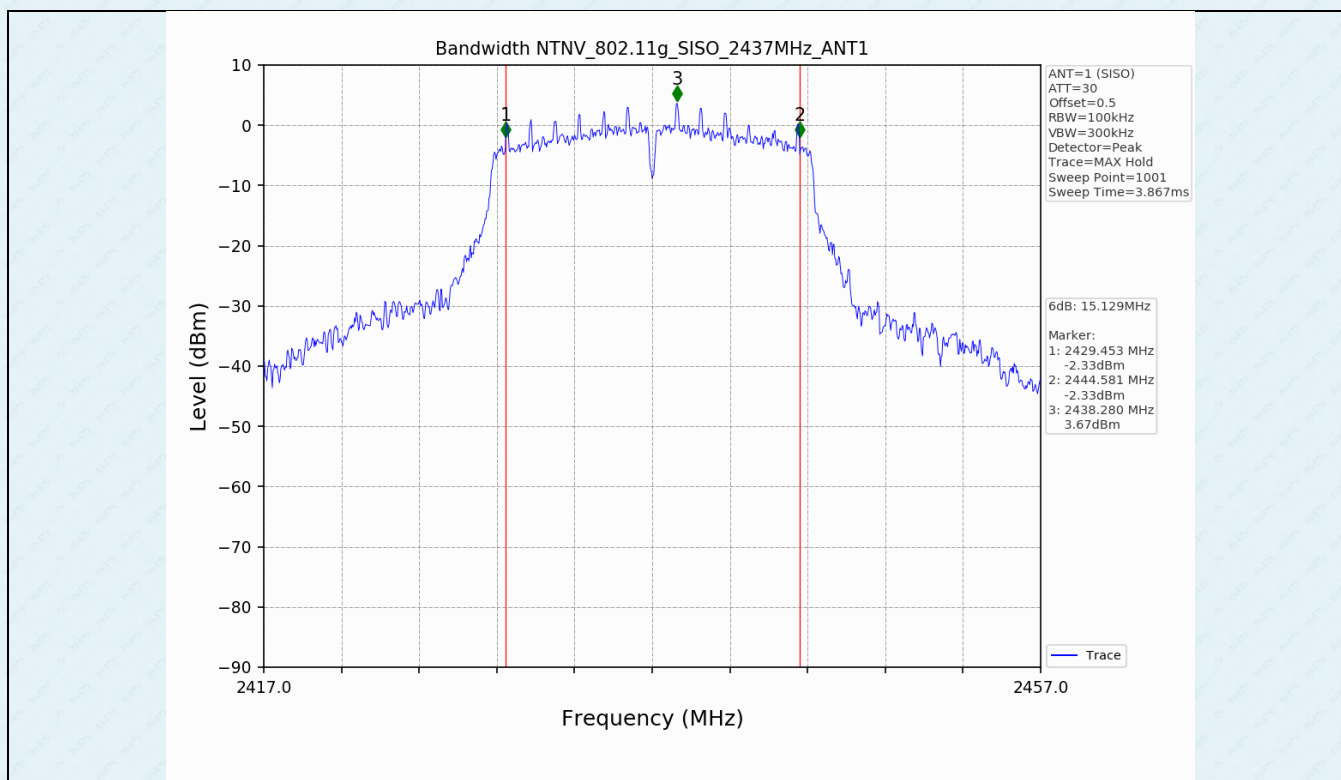
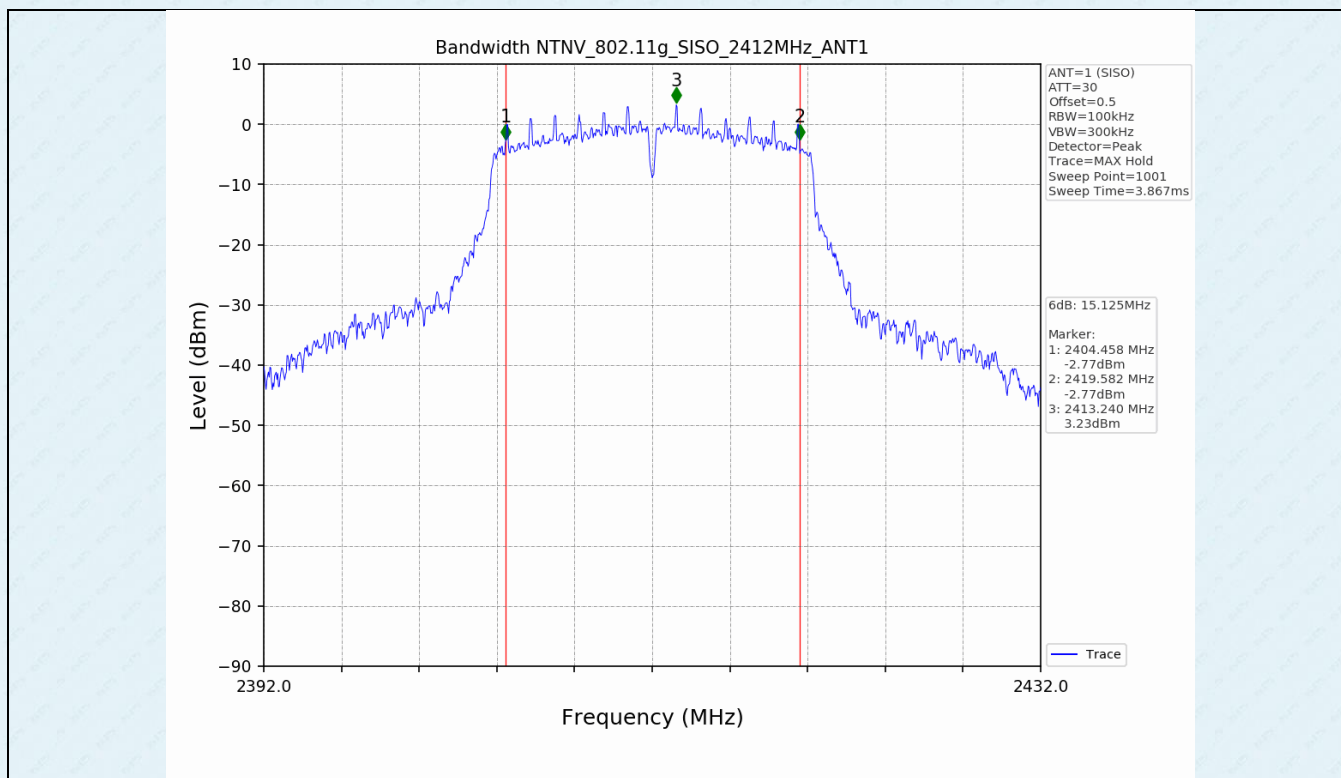


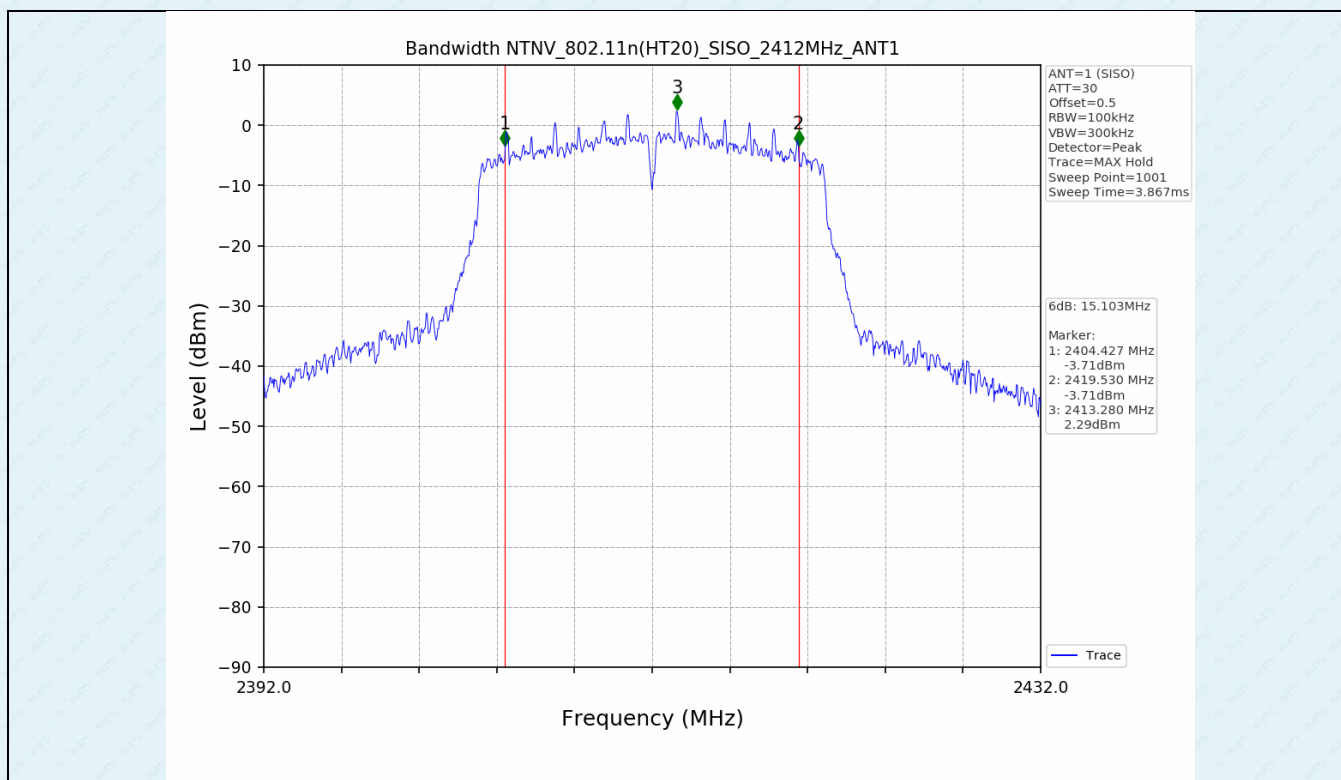
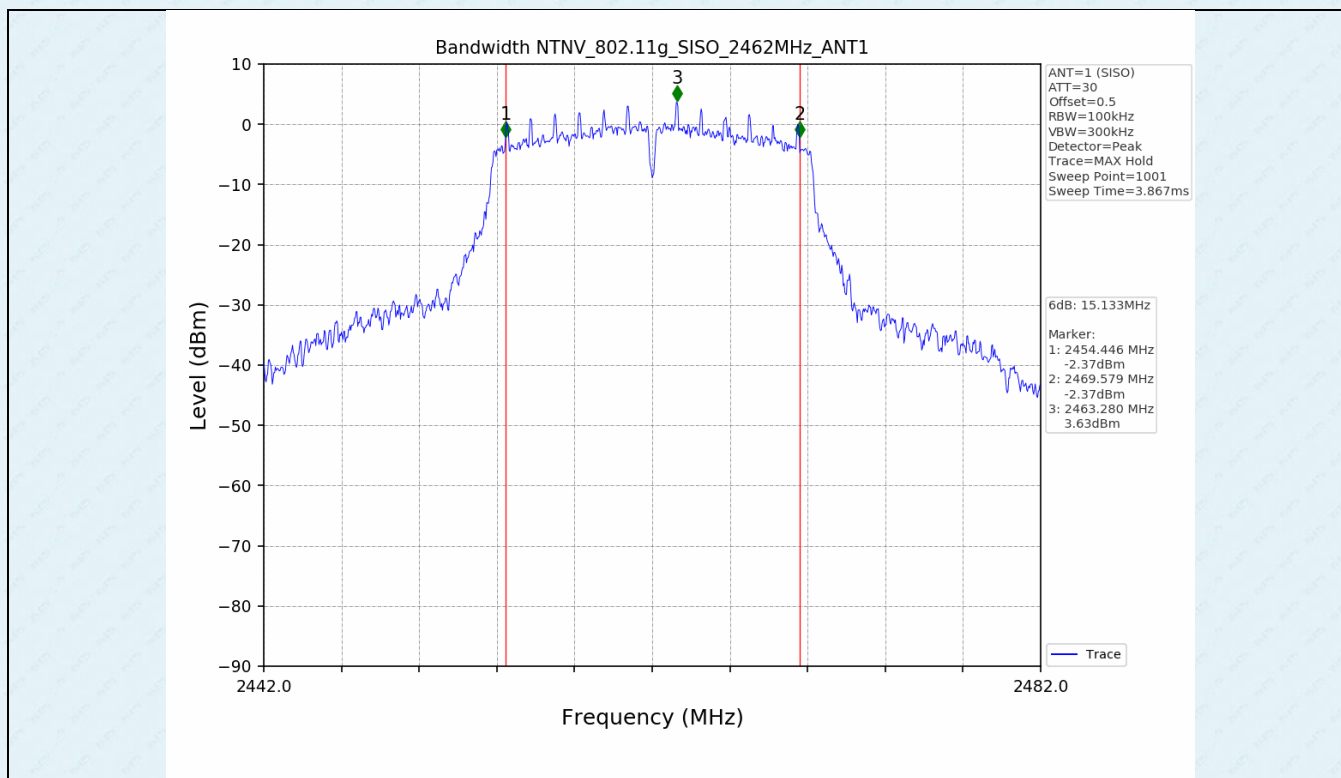


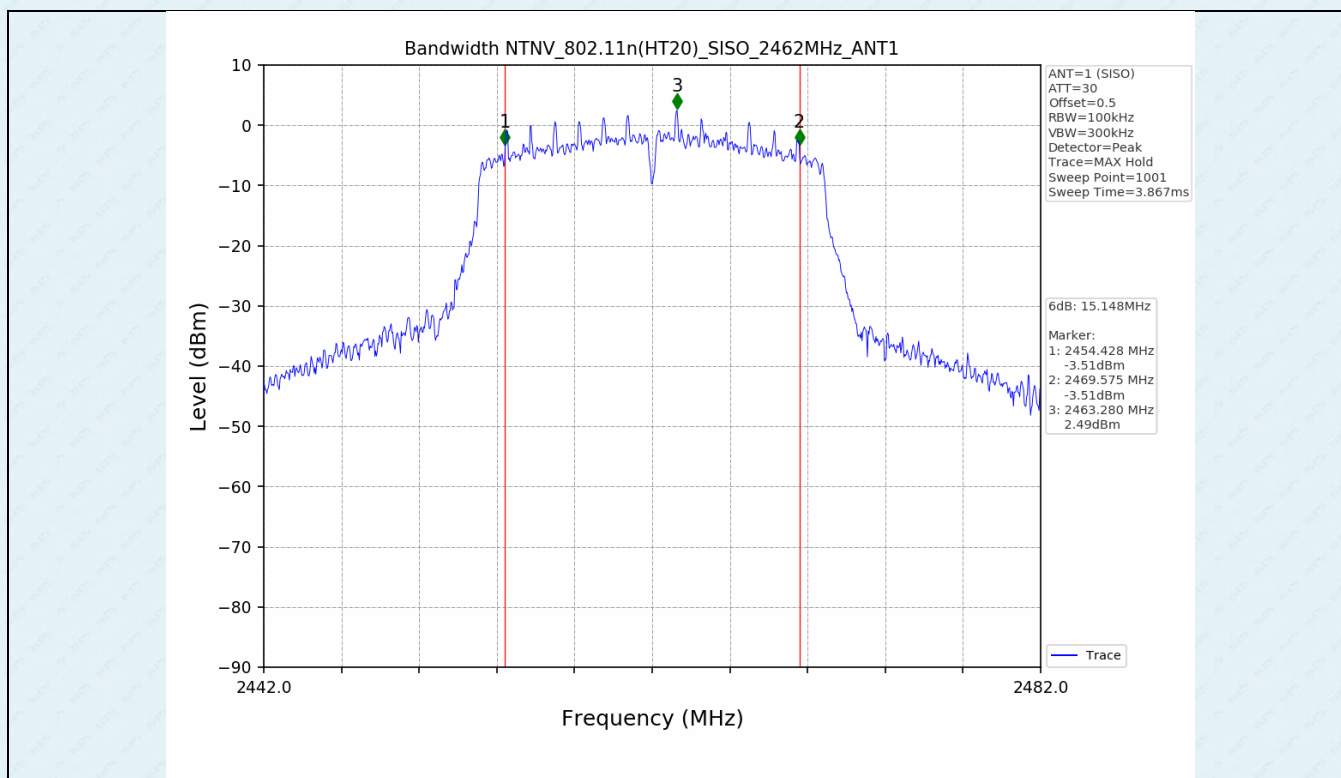
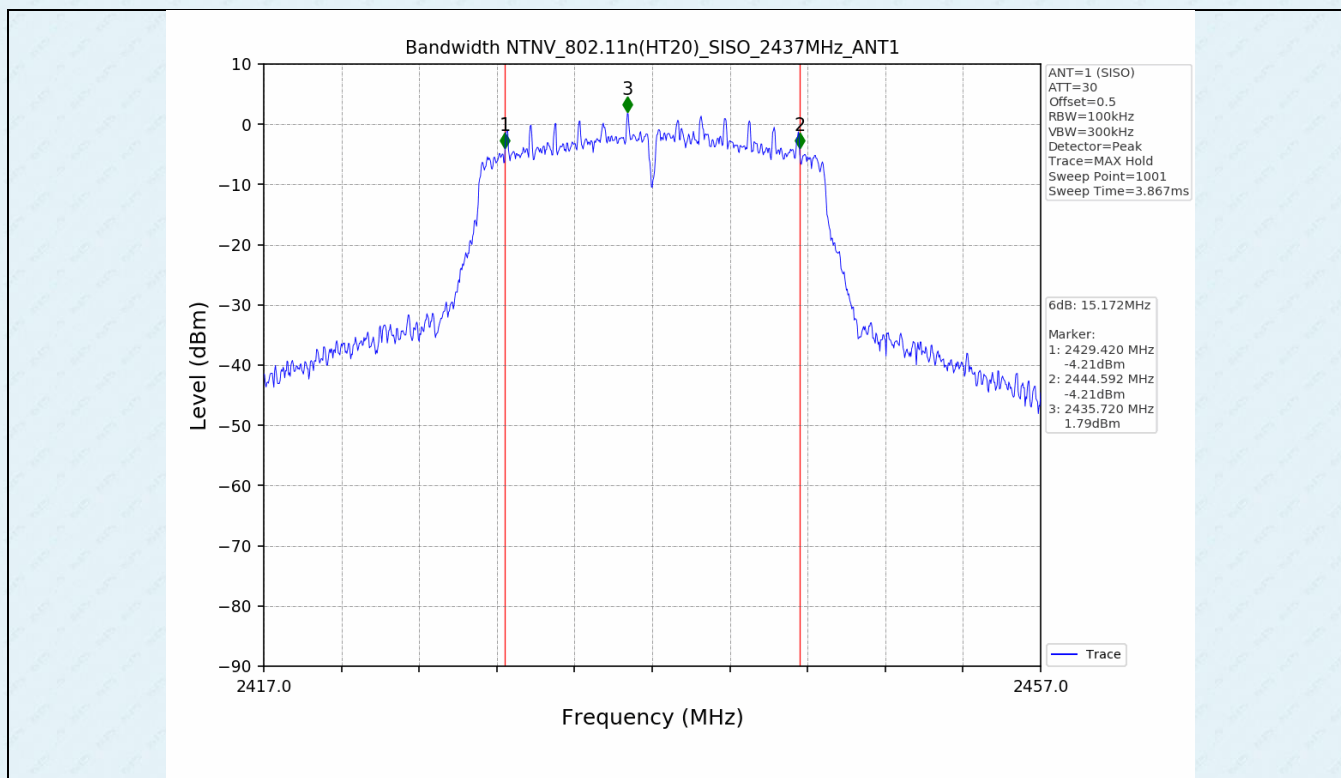
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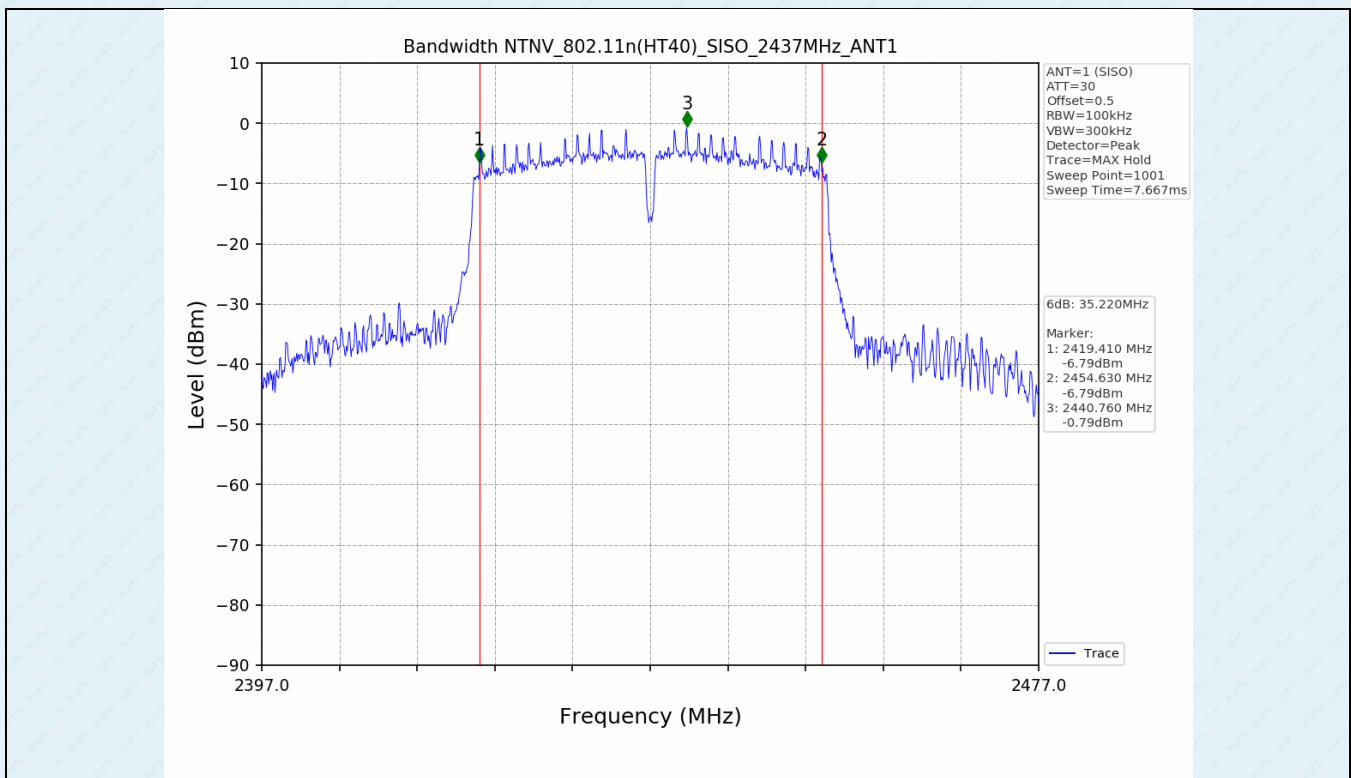
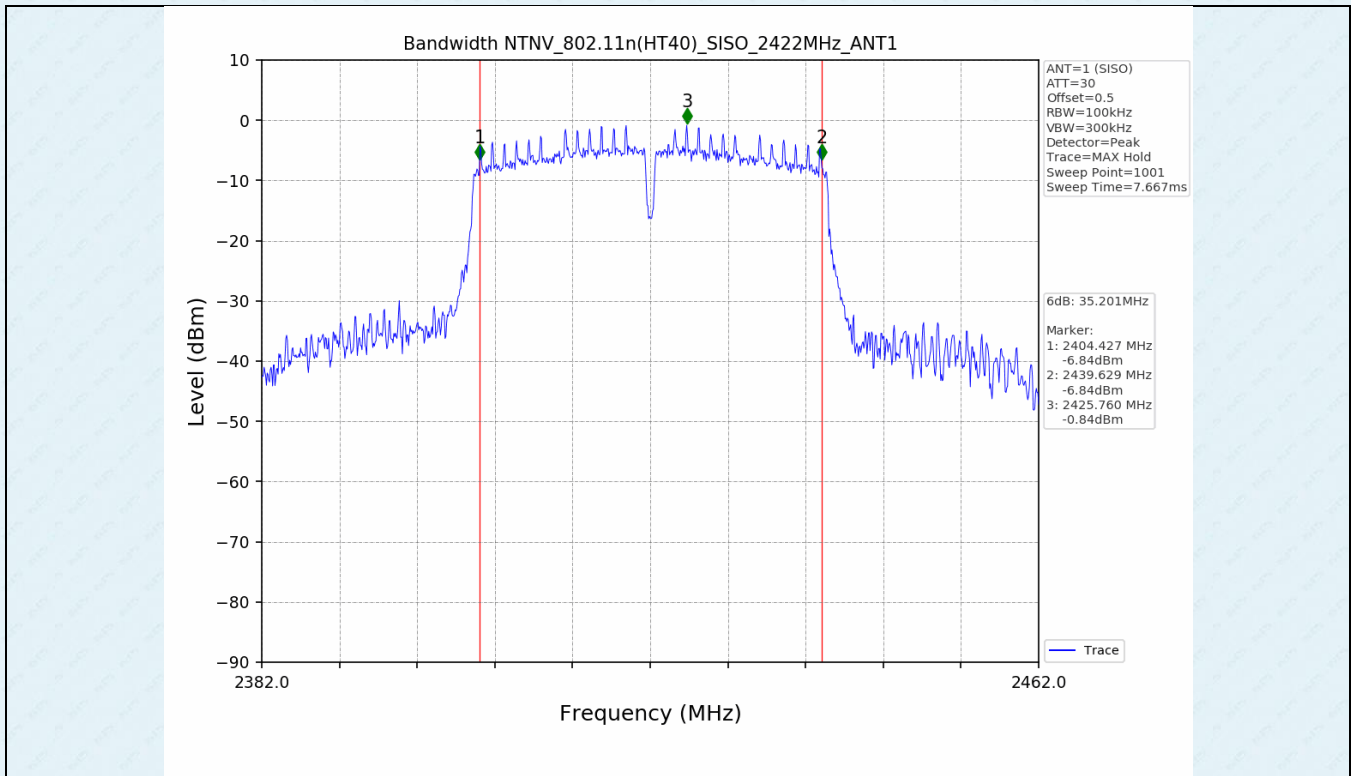


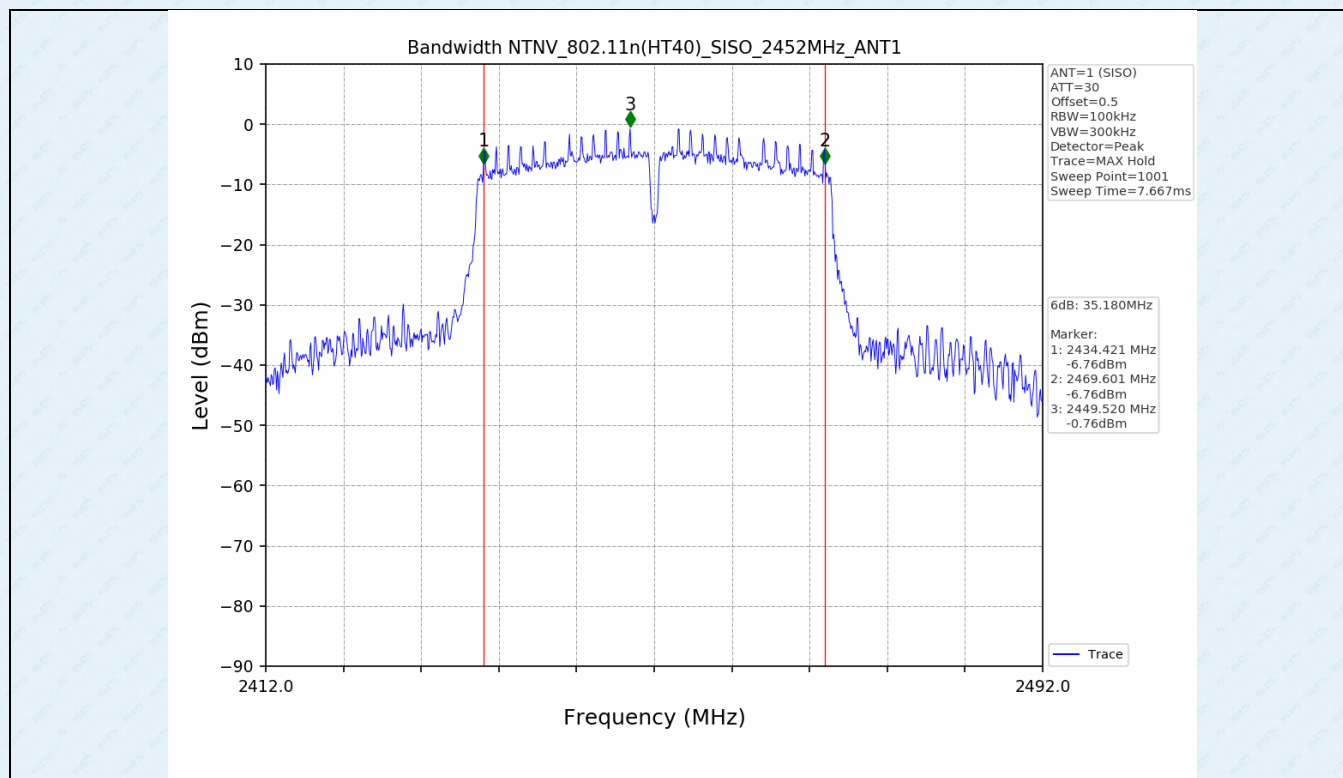






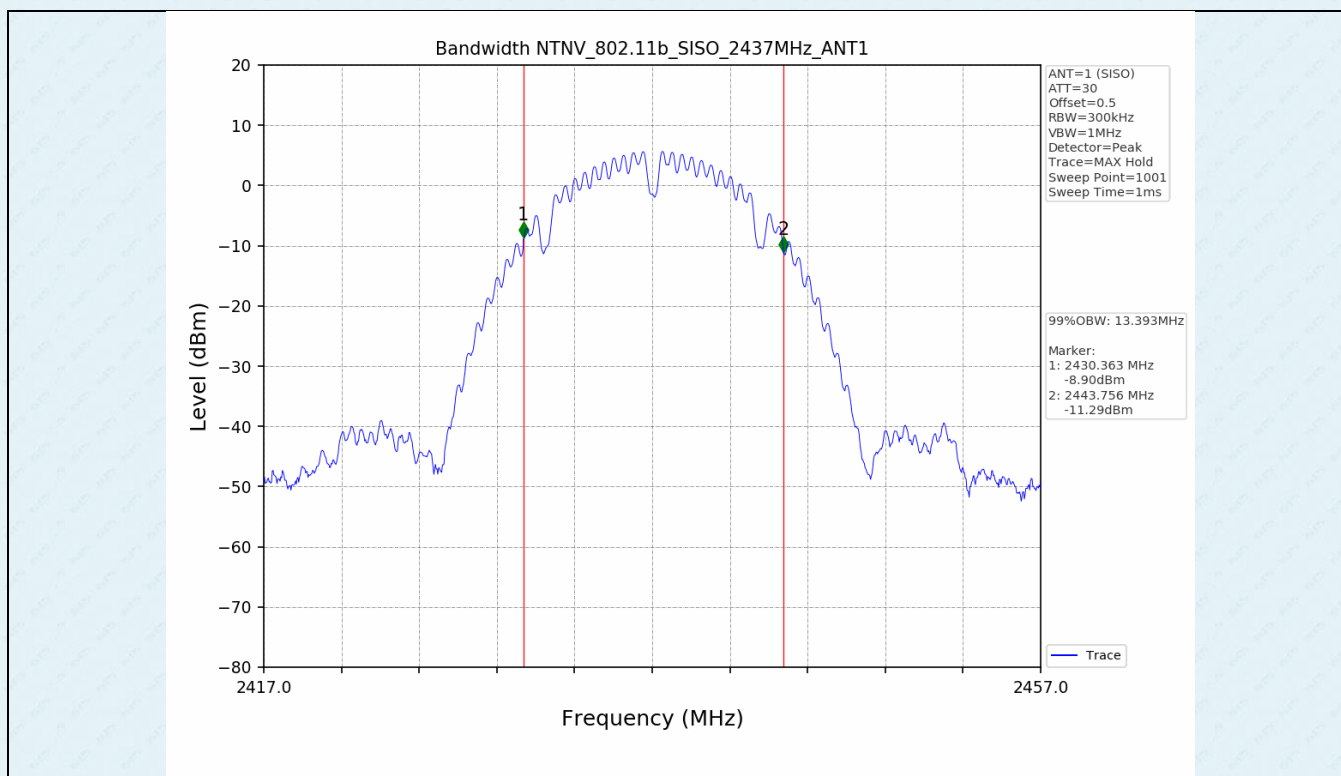
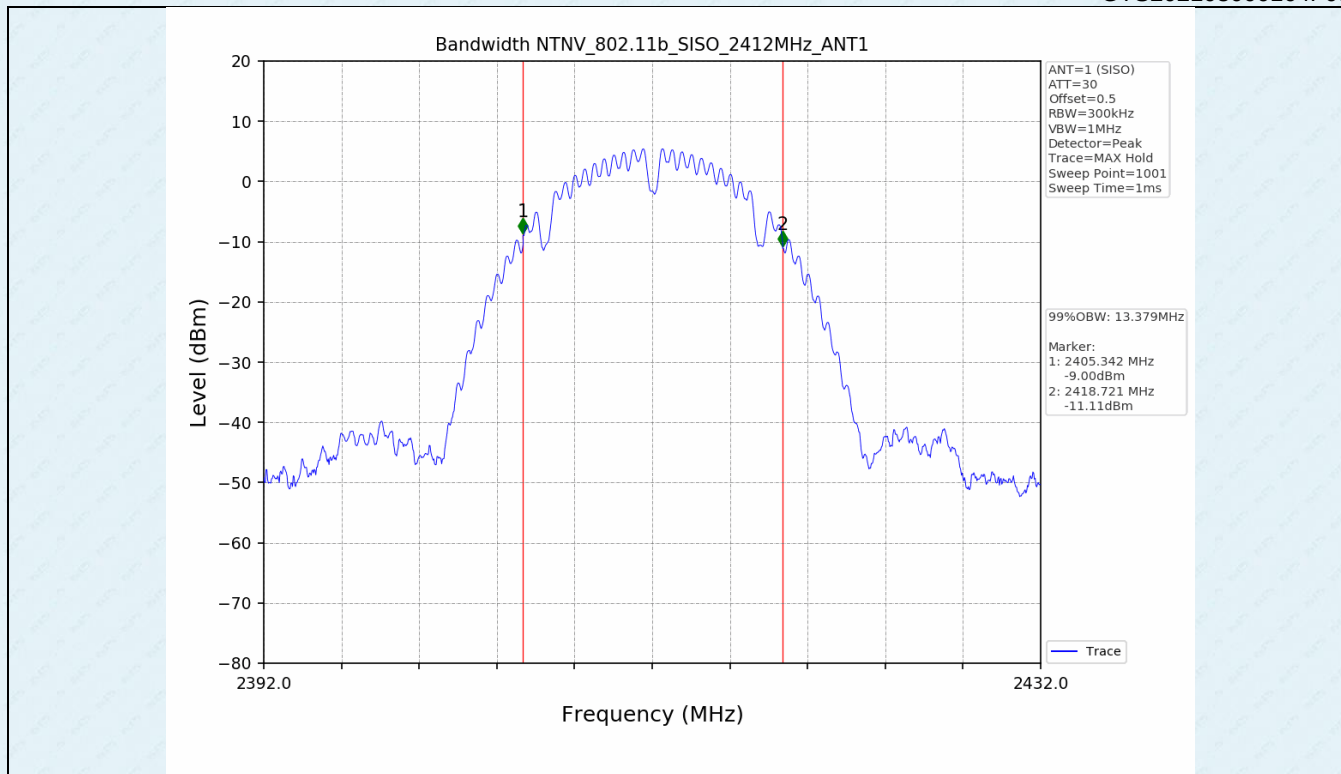


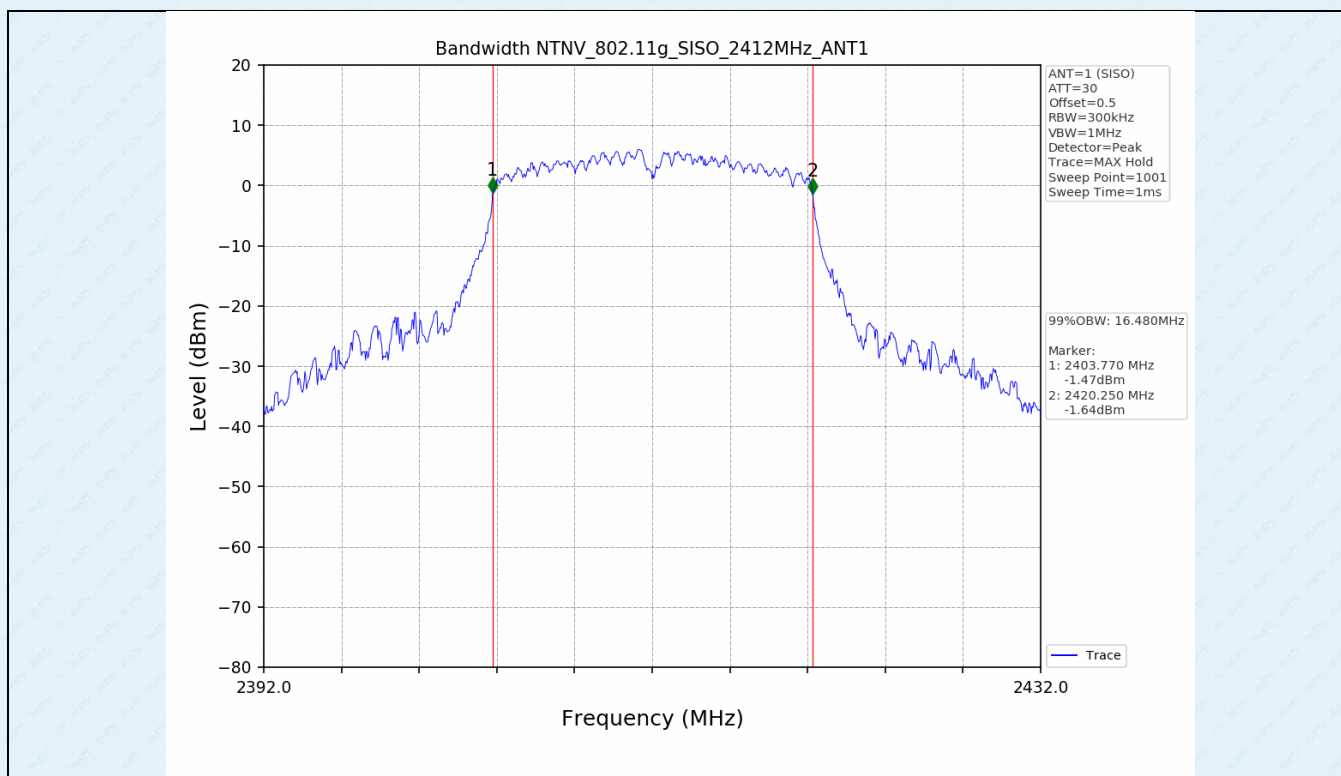
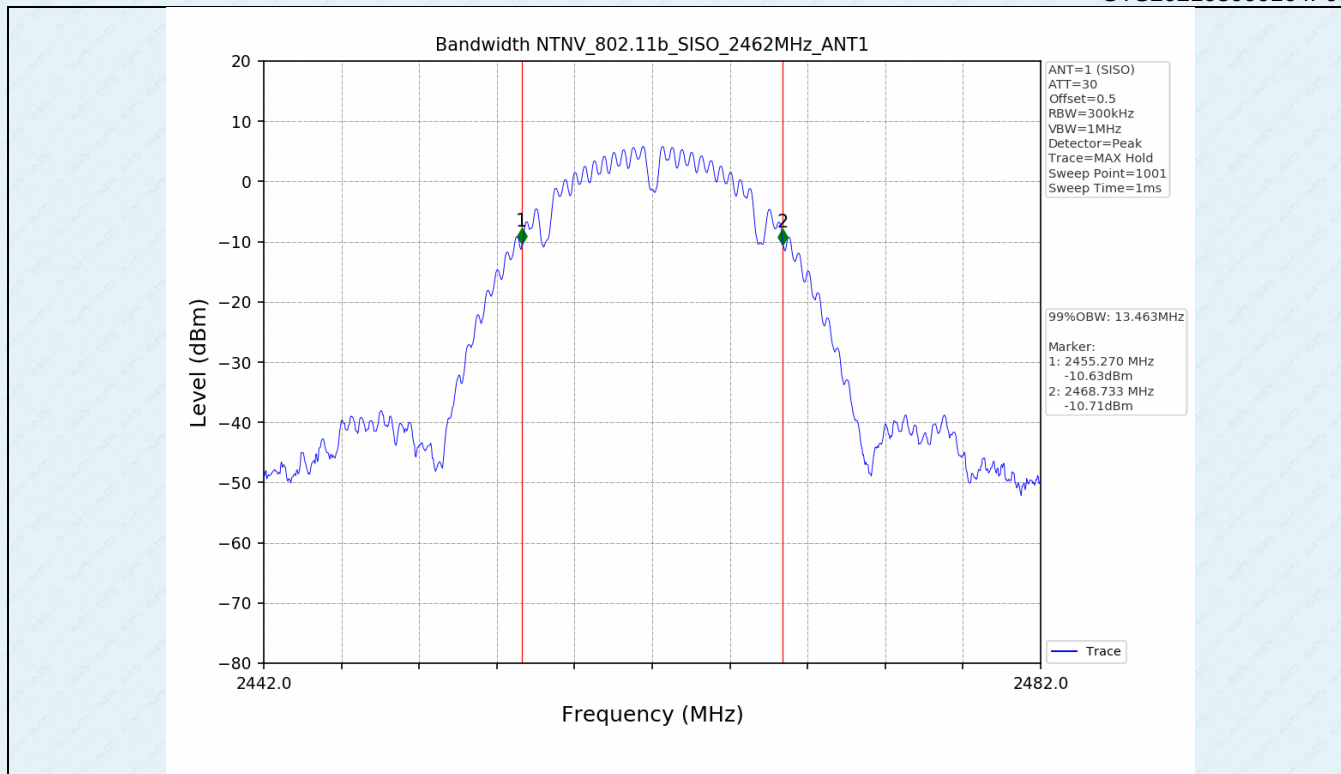


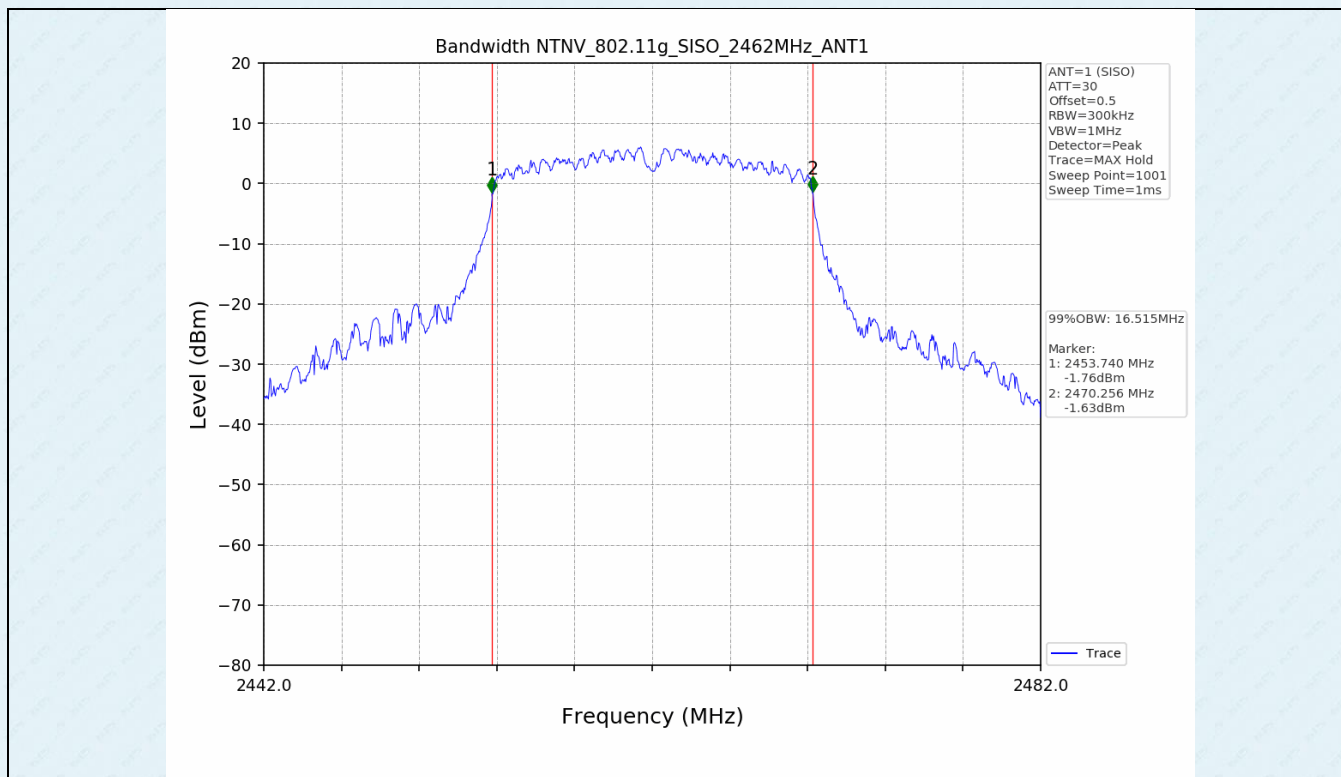
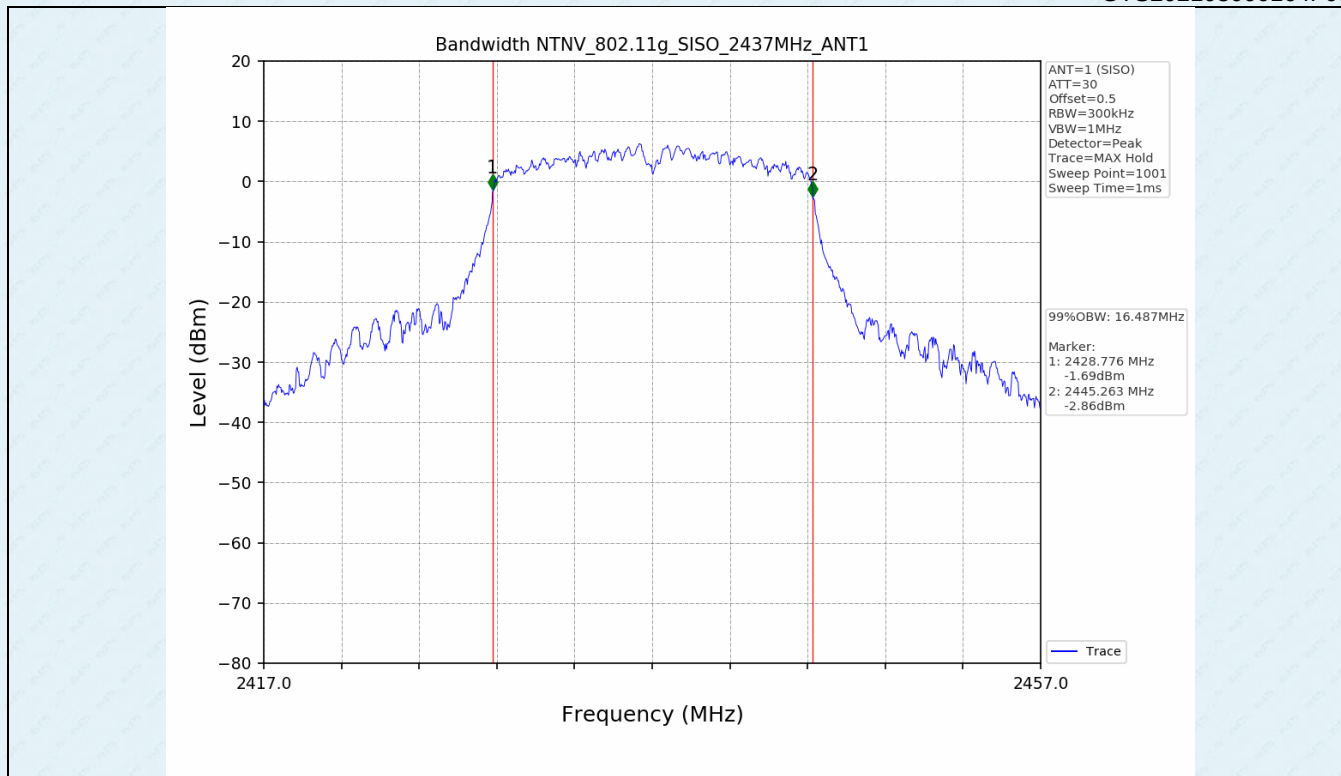


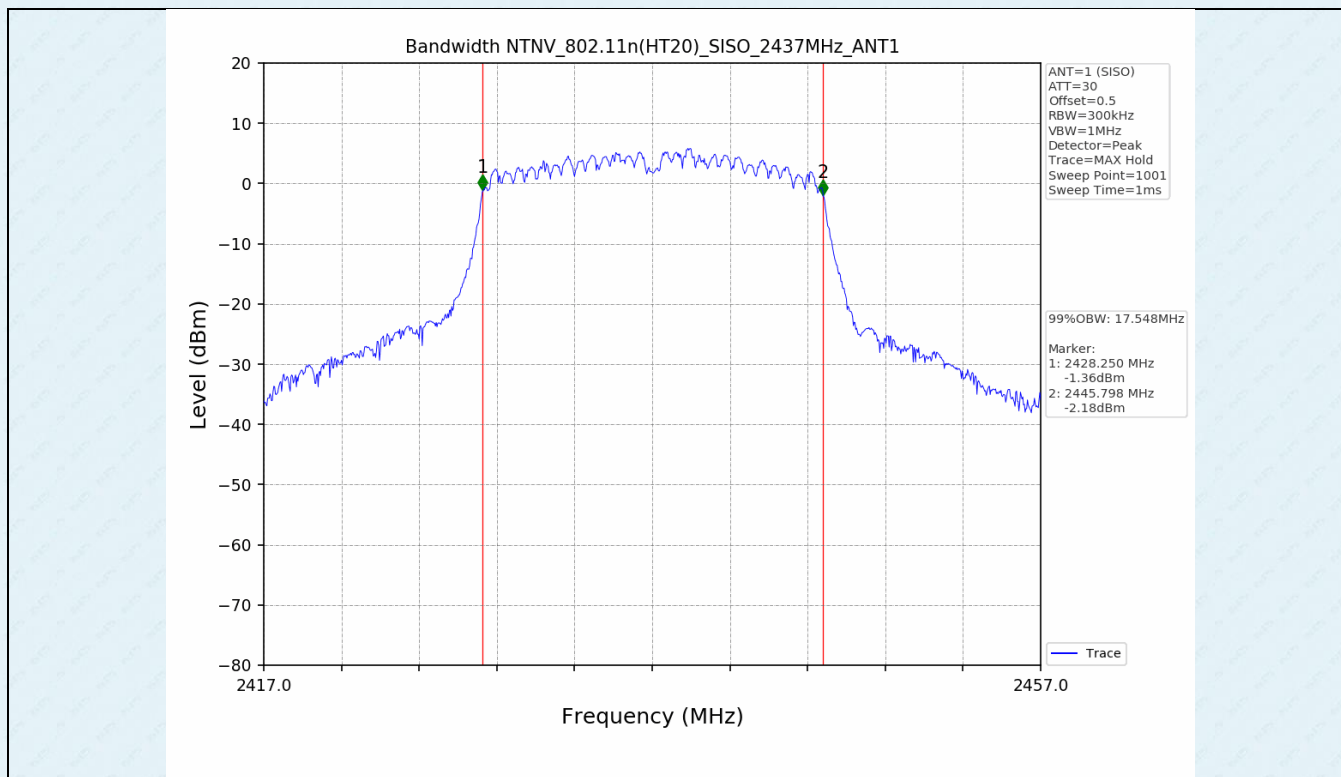
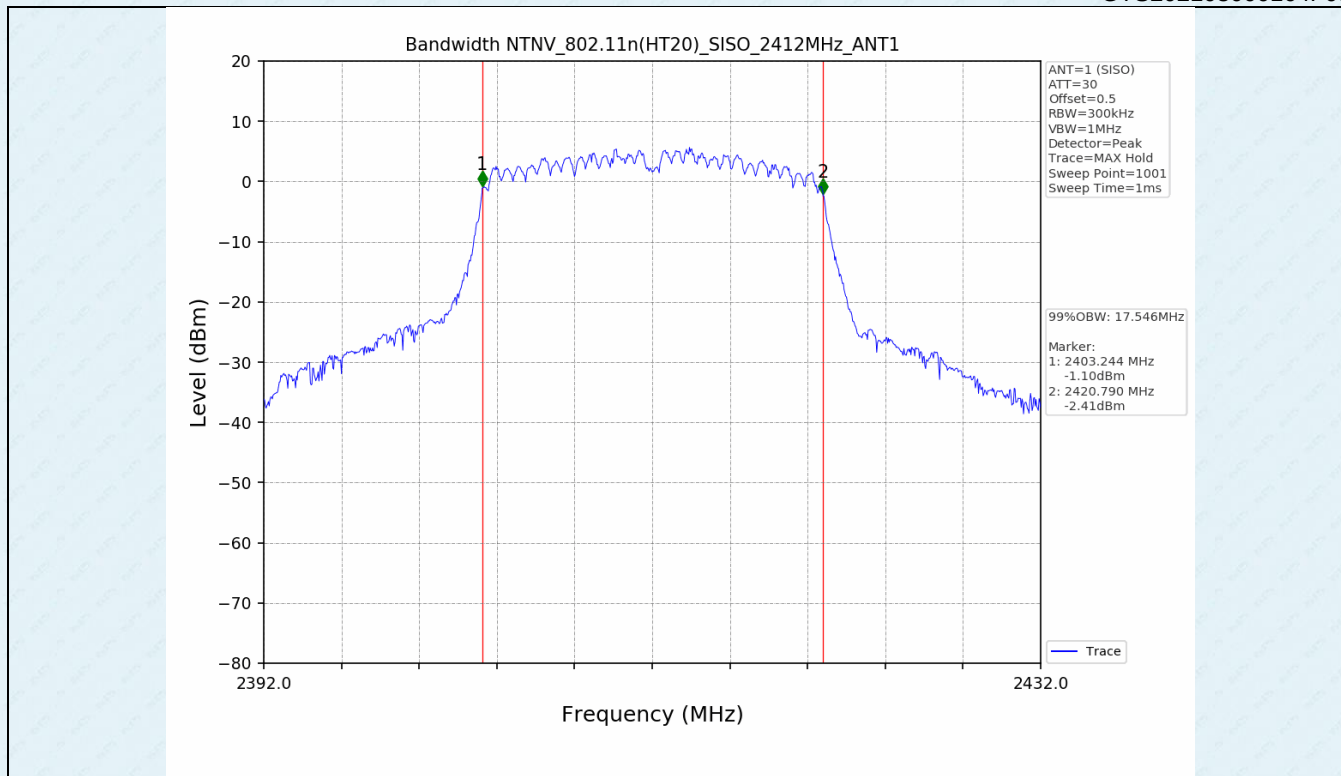
2.3 Test Graph - 99% Occupied Bandwidth

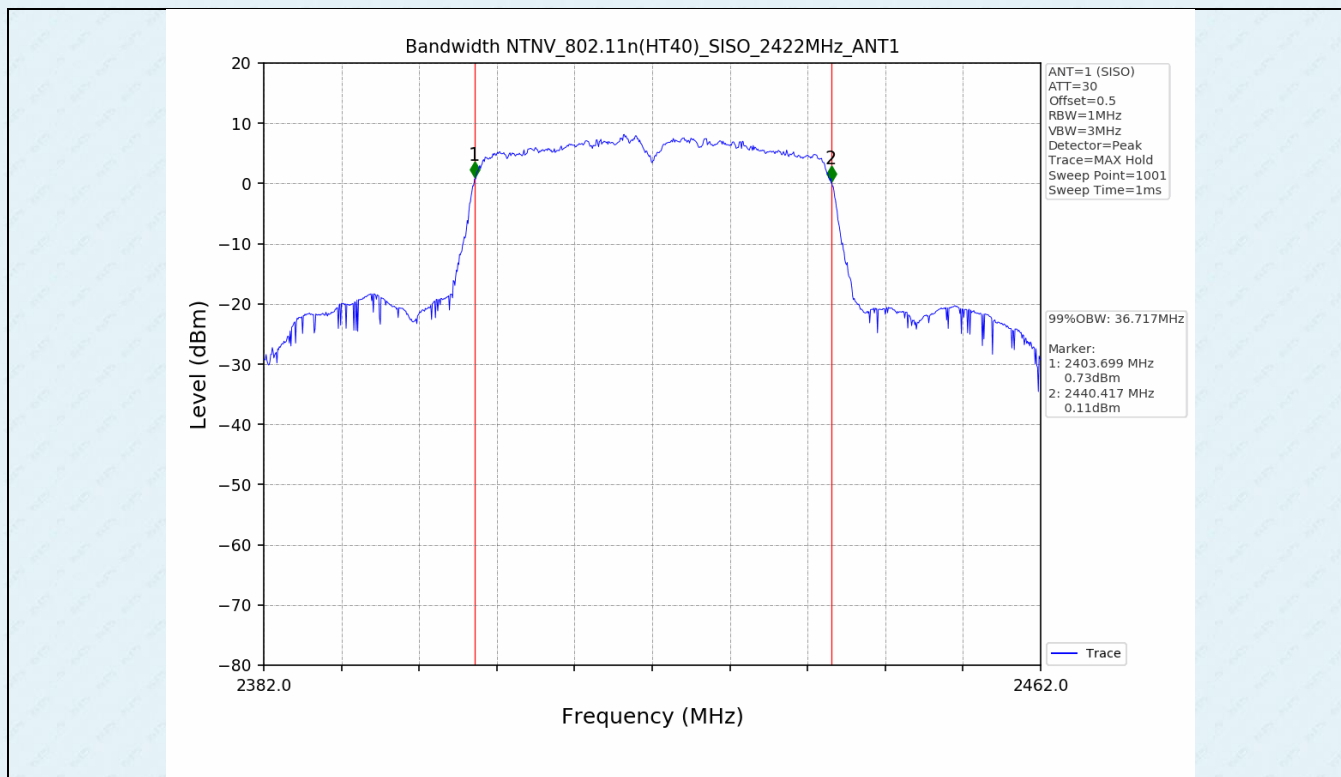
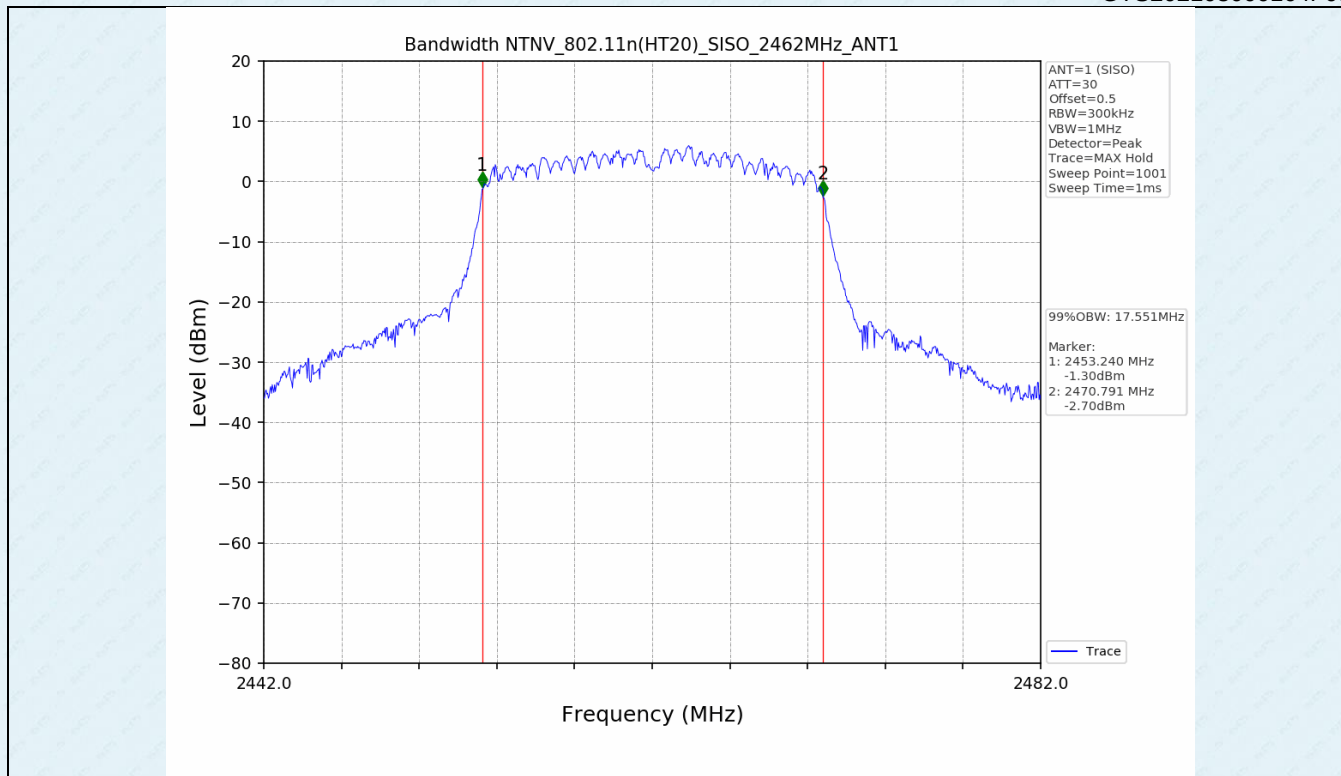
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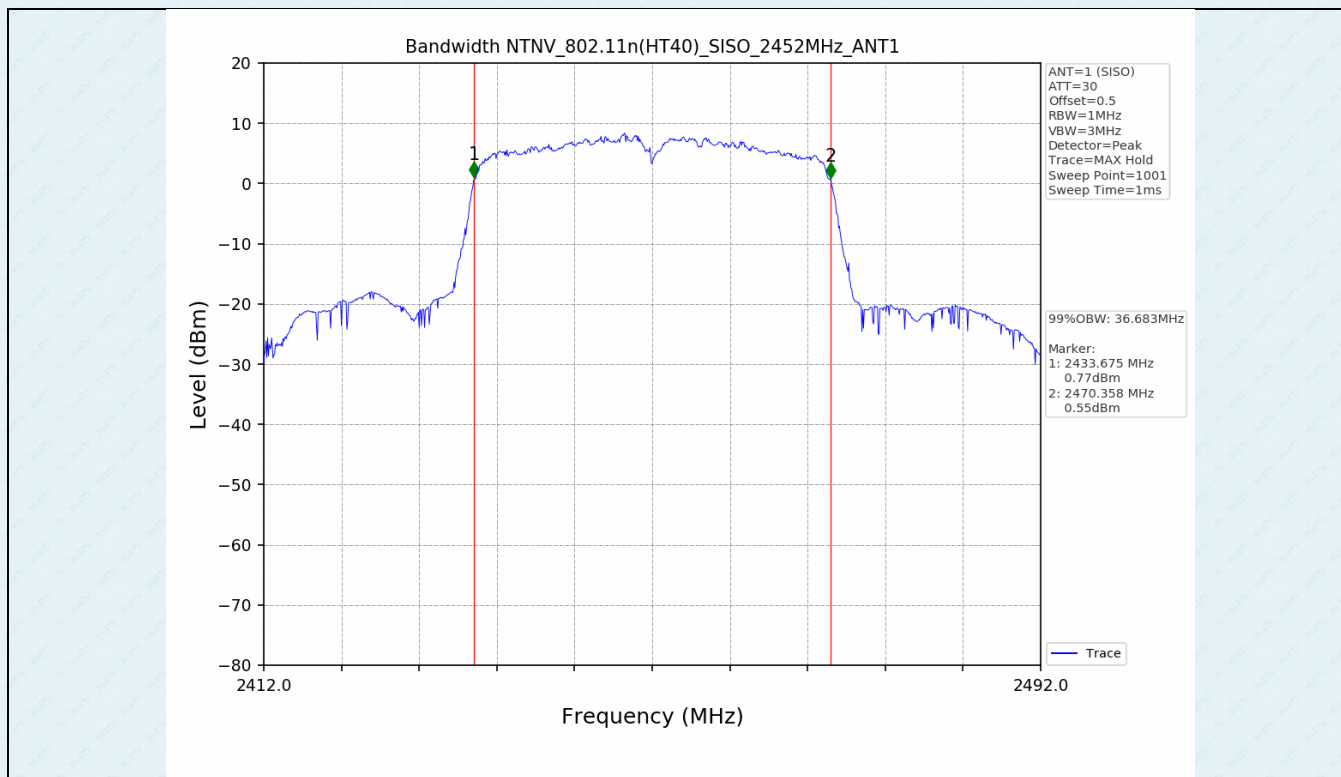
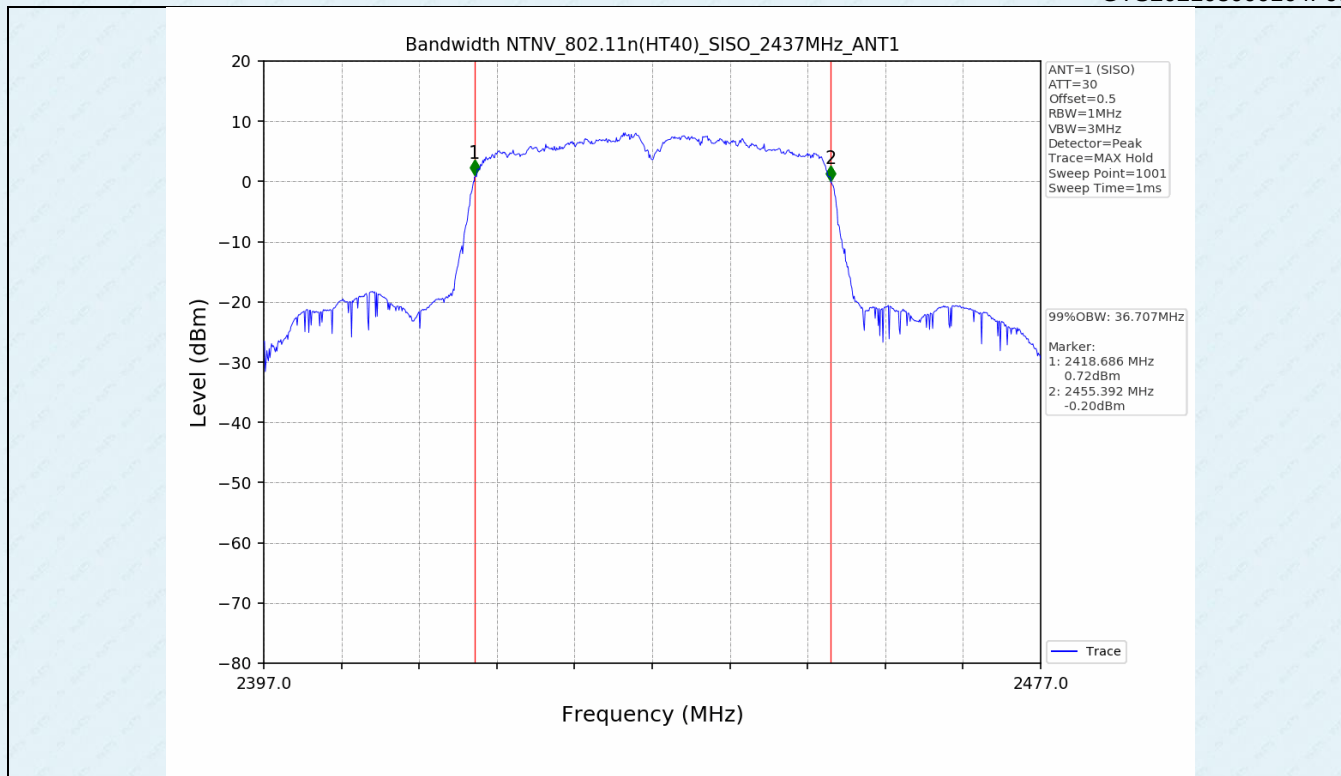




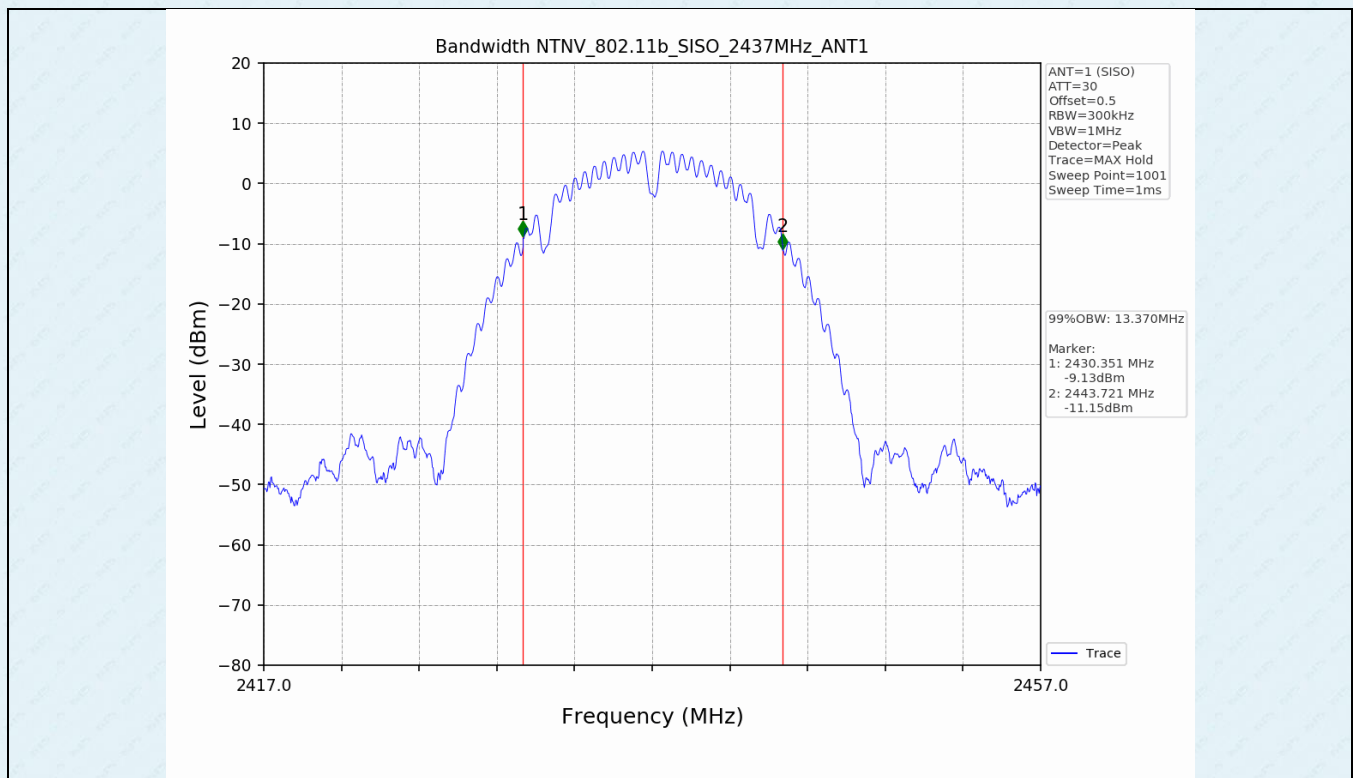
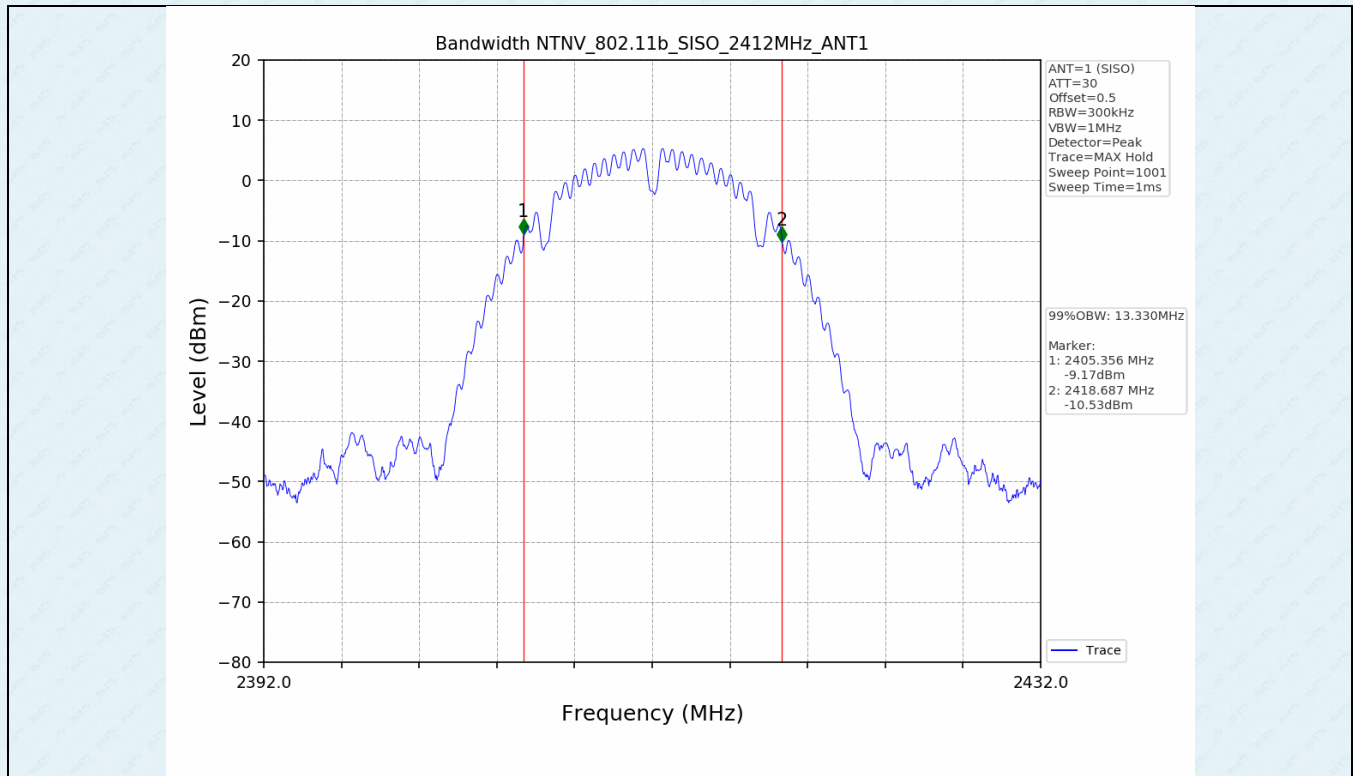


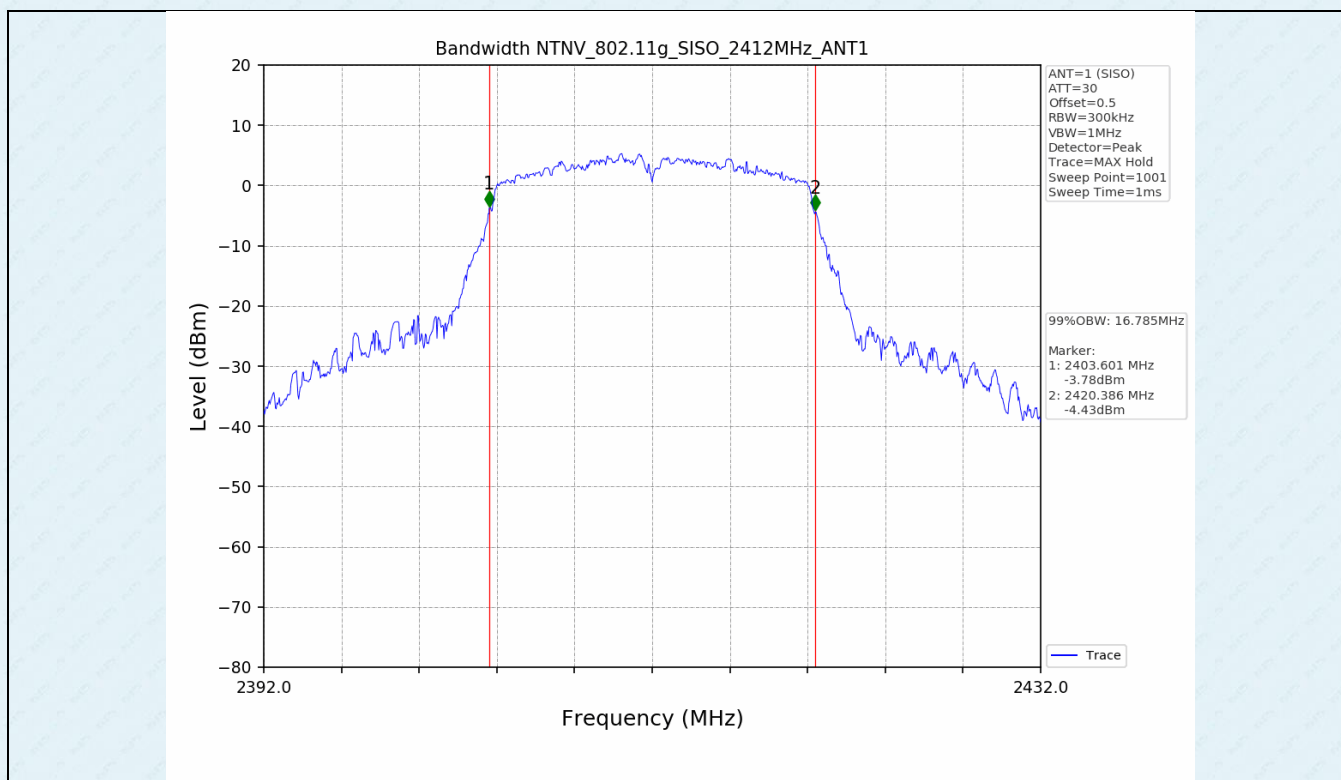
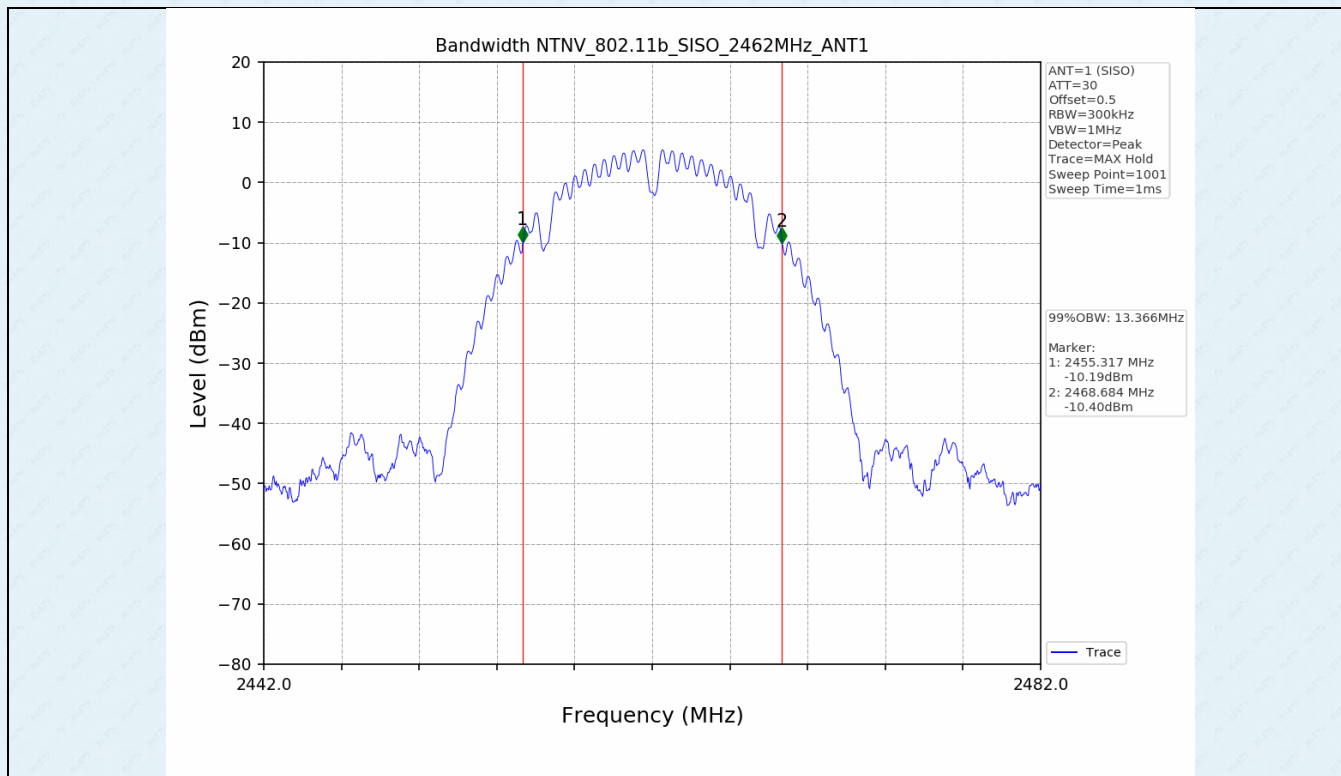


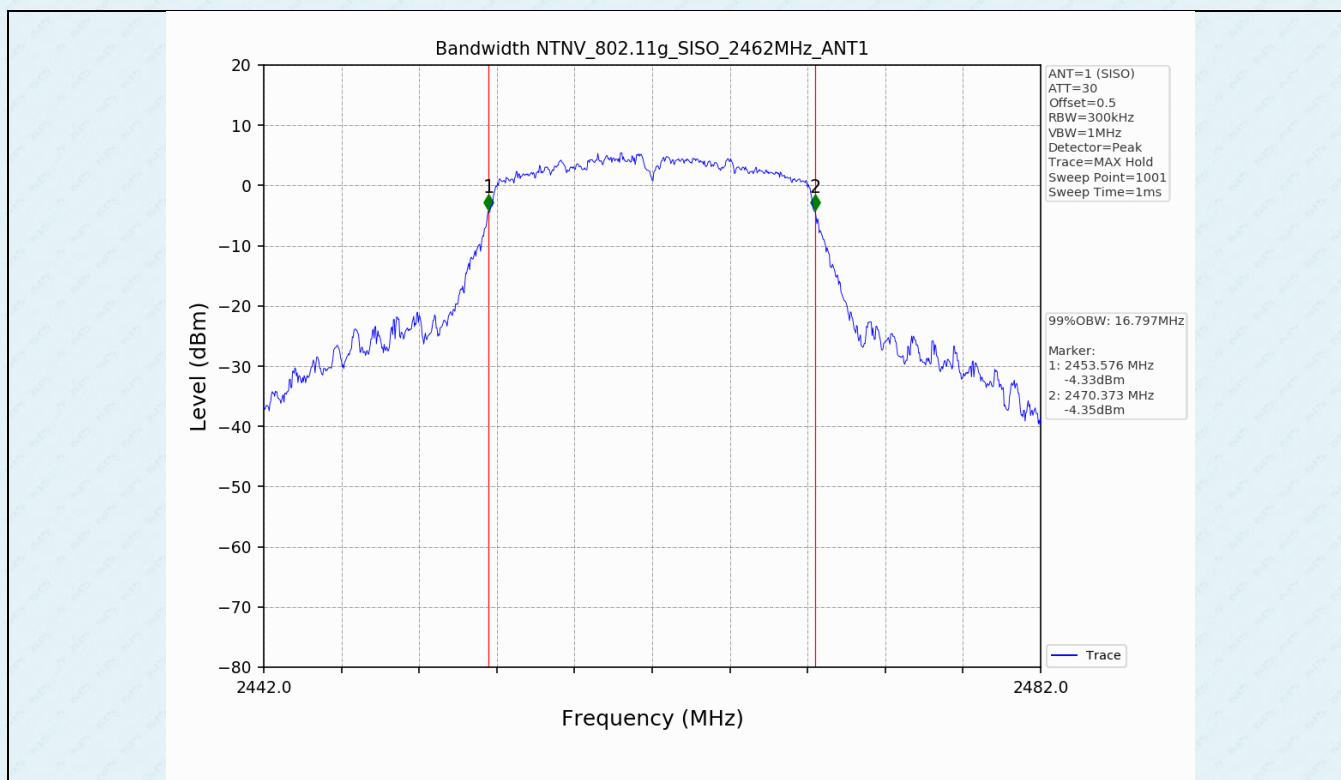
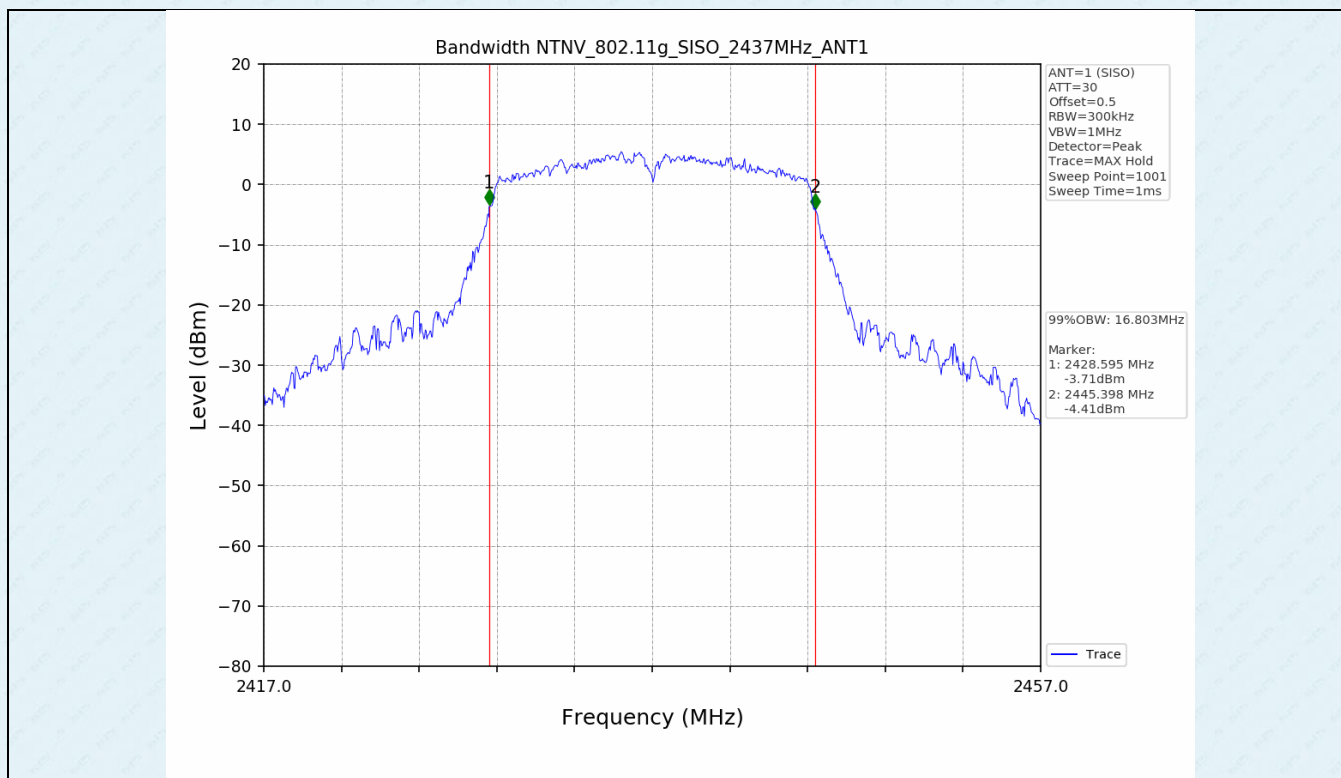


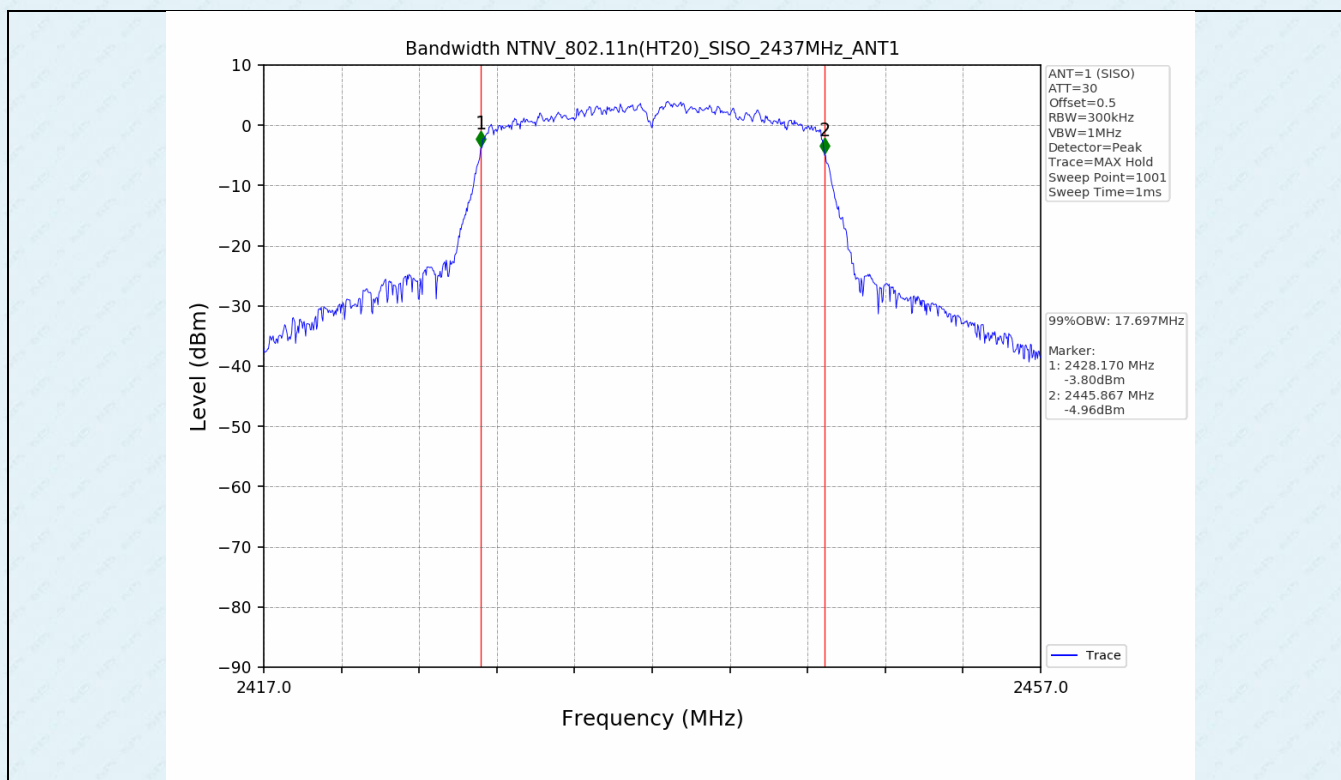
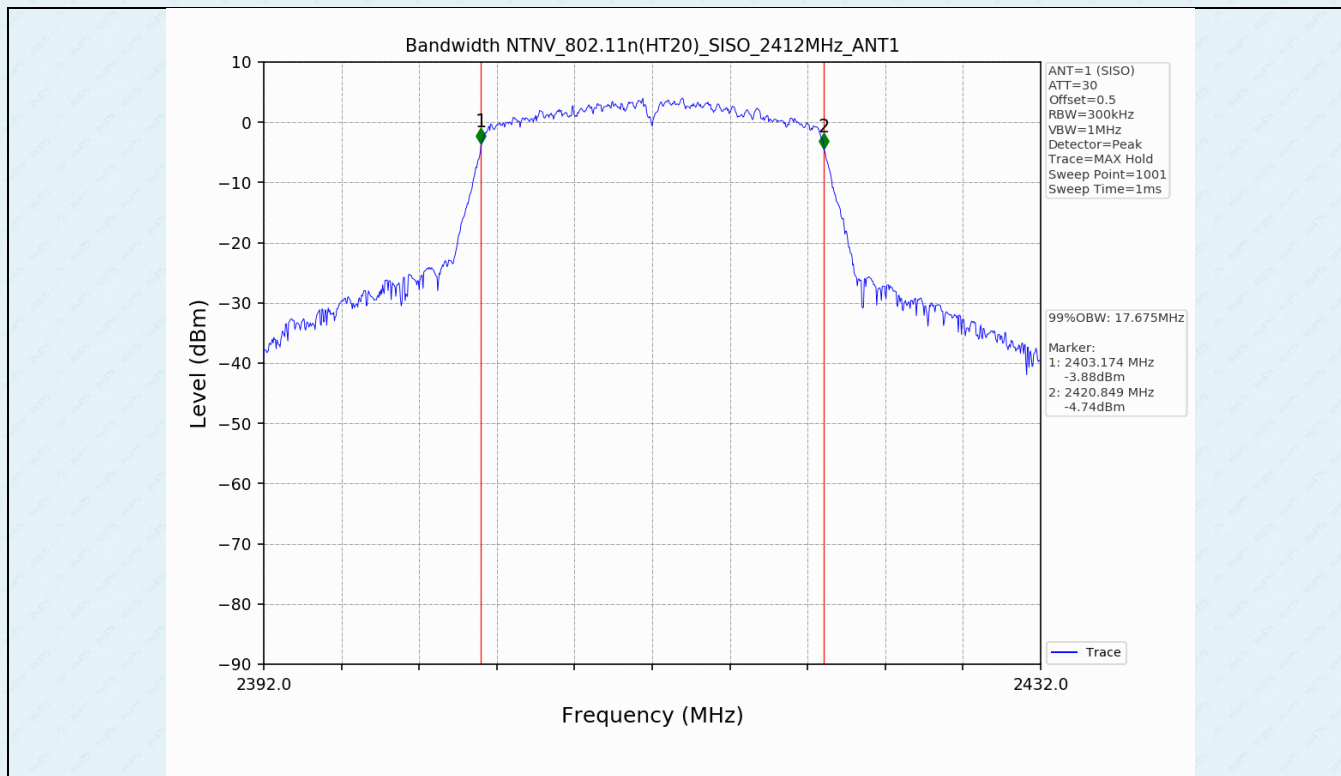


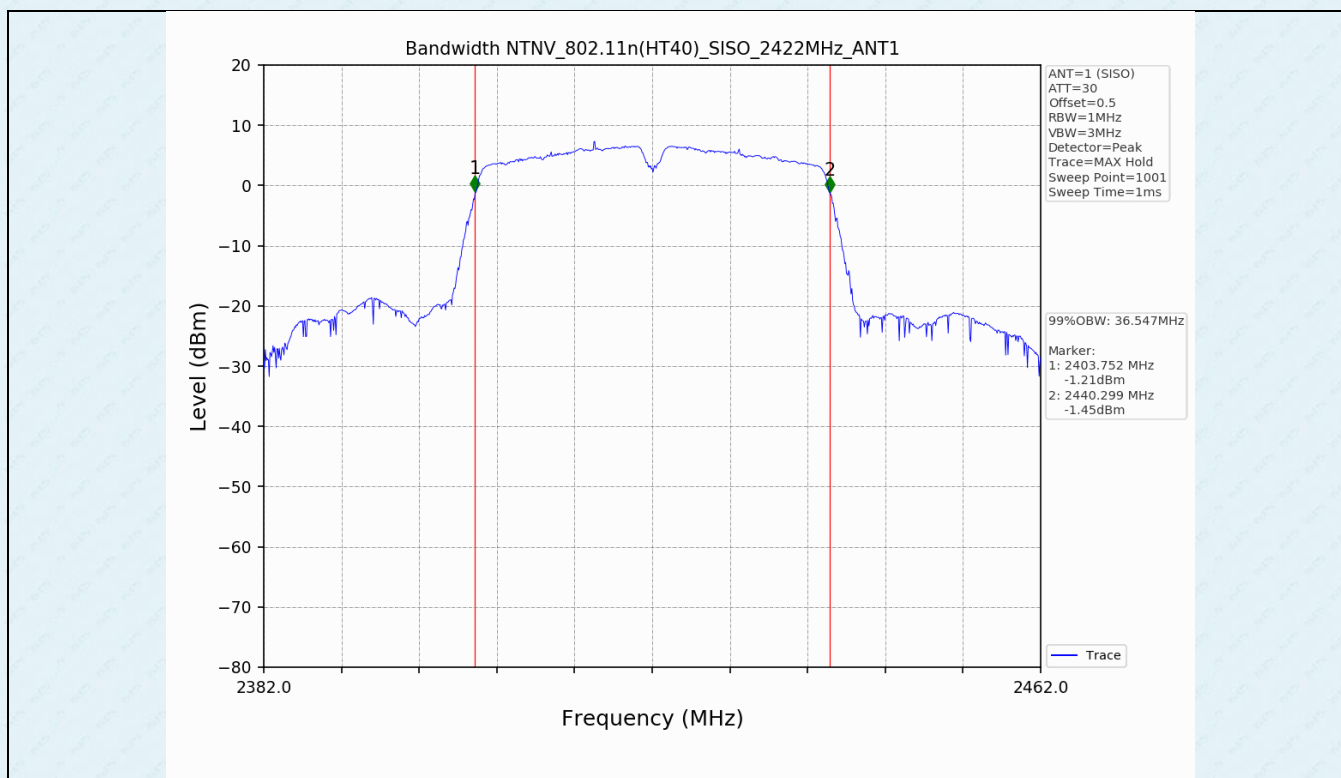
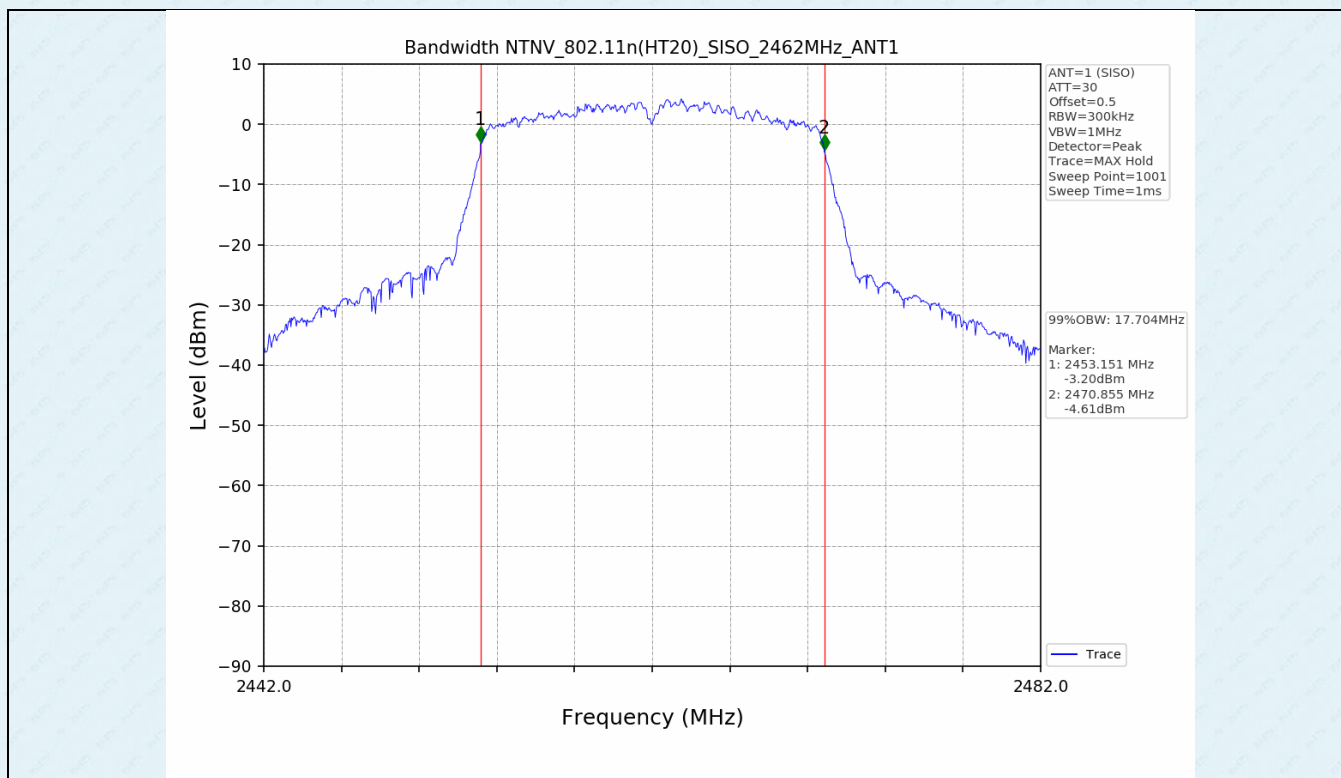
ANT 2:

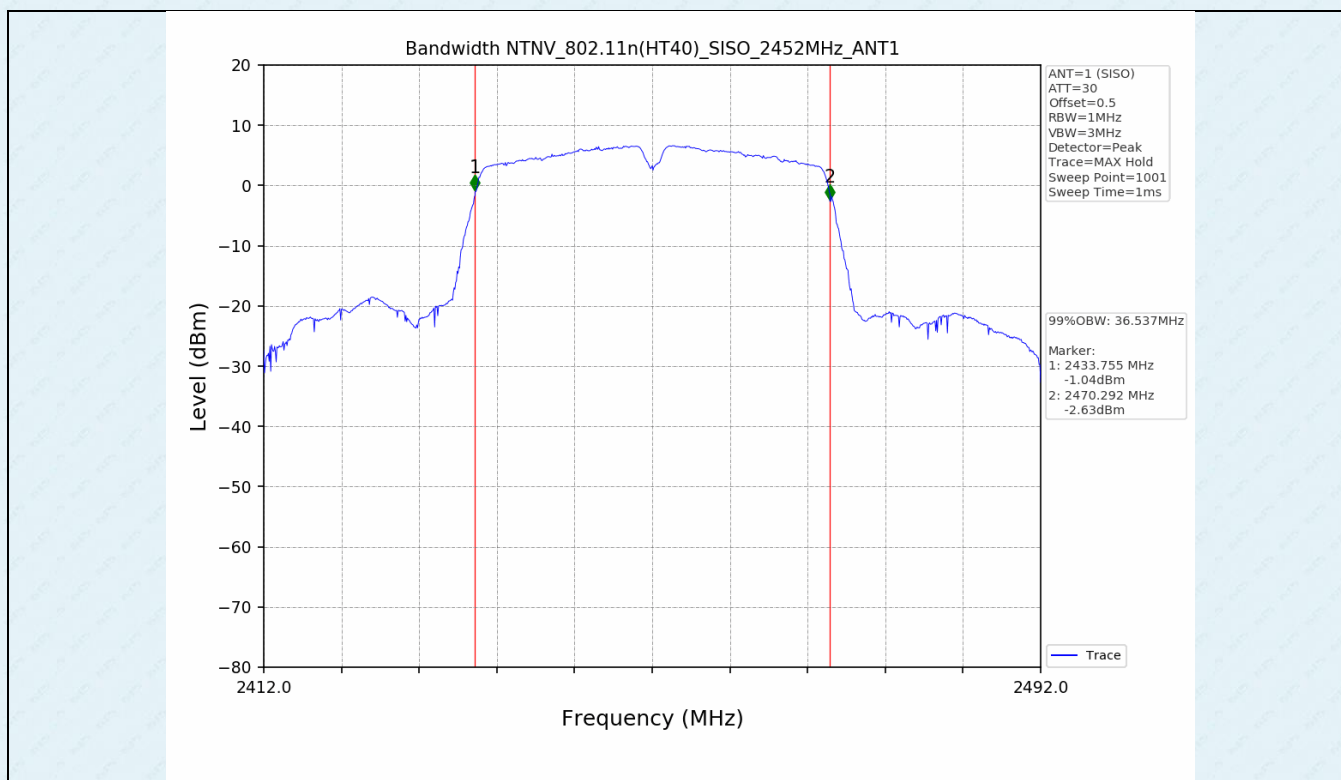
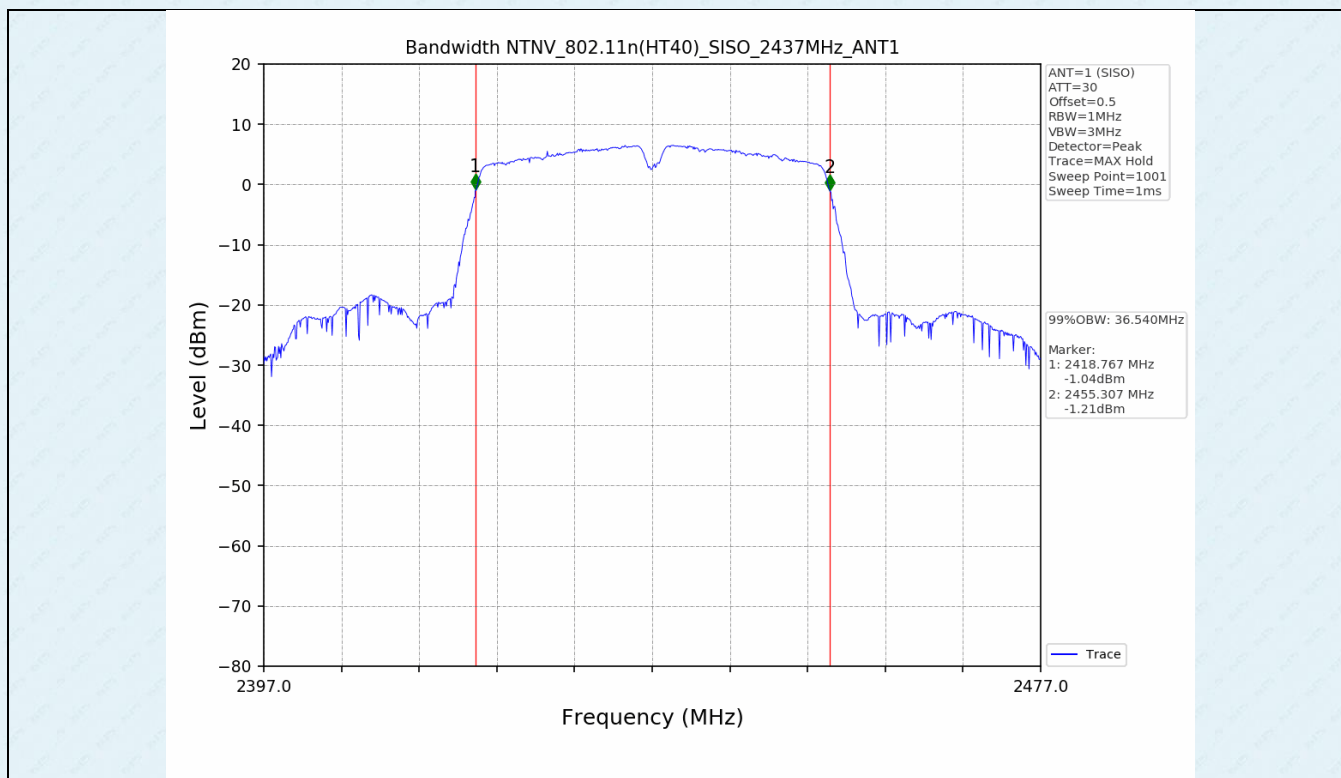












3. Maximum Conducted Output Power

3.1 Test Result

Test Mode	Frequency (MHz)	Ant.	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
802.11b	2412	1	15.76	30	PASS
	2412	2	15.78	30	PASS
	2437	1	16.22	30	PASS
	2437	2	15.83	30	PASS
	2462	1	16.39	30	PASS
	2462	2	16.11	30	PASS
802.11g	2412	1	21.41	30	PASS
	2412	2	20.97	30	PASS
	2437	1	21.47	30	PASS
	2437	2	21.08	30	PASS
	2462	1	21.46	30	PASS
	2462	2	21.05	30	PASS
802.11n(HT20)	2412	1	20.70	30	PASS
	2412	2	19.56	30	PASS
	2412	Total	23.18	30	PASS
	2437	1	20.71	30	PASS
	2437	2	19.65	30	PASS
	2437	Total	23.22	30	PASS
	2462	1	20.99	30	PASS
	2462	2	19.66	30	PASS
	2462	Total	23.39	30	PASS
802.11n(HT40)	2422	1	20.93	30	PASS
	2422	2	20.12	30	PASS
	2422	Total	23.55	30	PASS
	2437	1	20.94	30	PASS
	2437	2	20.22	30	PASS
	2437	Total	23.61	30	PASS
	2452	1	21.05	30	PASS
	2452	2	20.13	30	PASS
	2452	Total	23.62	30	PASS

Note: transmit signals are completely *correlated*,

Directional gain= $10 \times \log[(10^{3.5/20} + 10^{2.4/20})^2/2]$ =5.98dBi

4. Maximum Power Spectral Density (PSD)

4.1 Test Result

Test Mode	Frequency (MHz)	Ant.	Maximum Power Spectral Density (dBm/3KHz)	Limits (dBm/3kHz)	Verdict
802.11b	2412	1	1.55	≤8	PASS
	2412	2	2.98	≤8	PASS
	2437	1	1.10	≤8	PASS
	2437	2	-4.51	≤8	PASS
	2462	1	-1.01	≤8	PASS
	2462	2	2.04	≤8	PASS
802.11g	2412	1	-10.97	≤8	PASS
	2412	2	-12.17	≤8	PASS
	2437	1	-11.62	≤8	PASS
	2437	2	-12.00	≤8	PASS
	2462	1	-13.17	≤8	PASS
	2462	2	-12.21	≤8	PASS
802.11n(HT20)	2412	1	-10.91	≤8	PASS
	2412	2	-14.02	≤8	PASS
	2412	Total	-9.18	≤8	PASS
	2437	1	-12.05	≤8	PASS
	2437	2	-12.78	≤8	PASS
	2437	Total	-9.39	≤8	PASS
	2462	1	-11.84	≤8	PASS
	2462	2	-12.83	≤8	PASS
802.11n(HT40)	2422	1	-15.43	≤8	PASS
	2422	2	-16.41	≤8	PASS
	2422	Total	-12.88	≤8	PASS
	2437	1	-15.05	≤8	PASS
	2437	2	-15.73	≤8	PASS
	2437	Total	-12.37	≤8	PASS
	2452	1	-15.21	≤8	PASS
	2452	2	-15.59	≤8	PASS
	2452	Total	-12.39	≤8	PASS

4.2 Test Graph

ANT 1:

