

Appendix for 15.247

1. Bandwidth

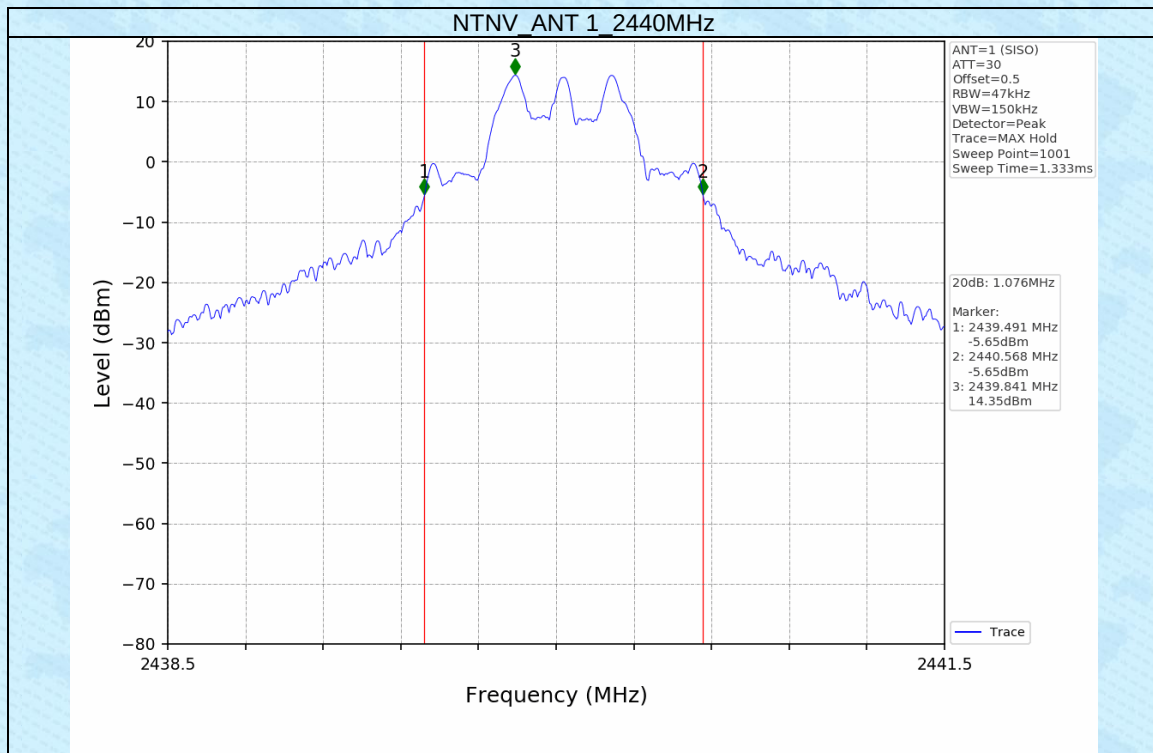
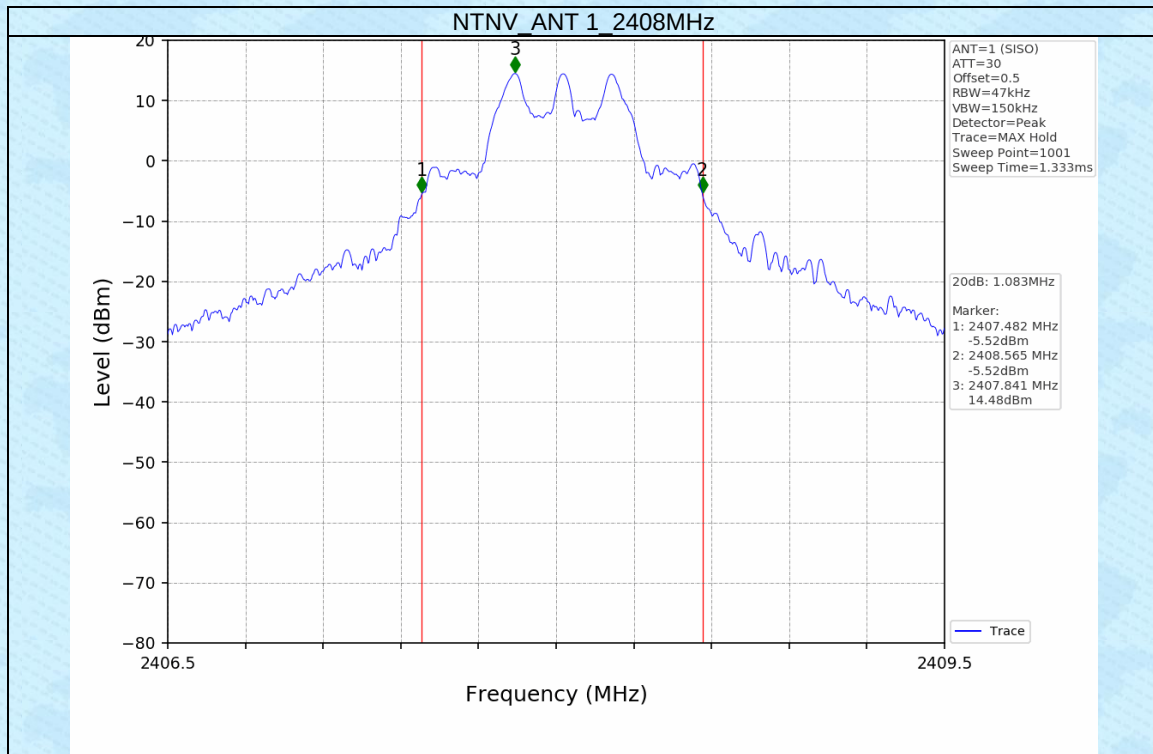
1.1 Test Result

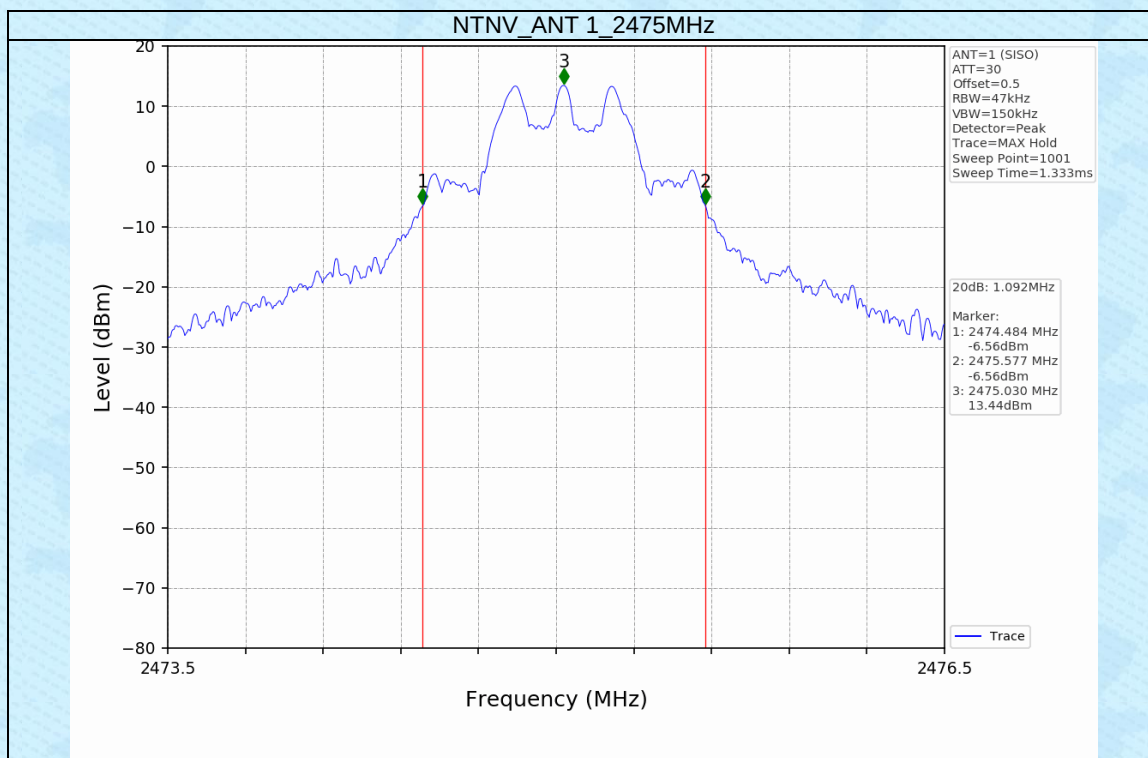
Test Mode	Frequency (MHz)	TX Type	ANT No.	20dB Bandwidth	Verdict
				Test Result (MHz)	
FHSS	2408	SISO	1	1.083	PASS
	2440	SISO	1	1.076	PASS
	2475	SISO	1	1.092	PASS
	2408	SISO	2	1.087	PASS
	2440	SISO	2	1.081	PASS
	2475	SISO	2	1.089	PASS

Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
FHSS	2408	SISO	1	1.035	Only for Report Use
	2440	SISO	1	1.036	Only for Report Use
	2475	SISO	1	1.028	Only for Report Use
	2408	SISO	2	1.028	Only for Report Use
	2440	SISO	2	1.029	Only for Report Use
	2475	SISO	2	1.036	Only for Report Use

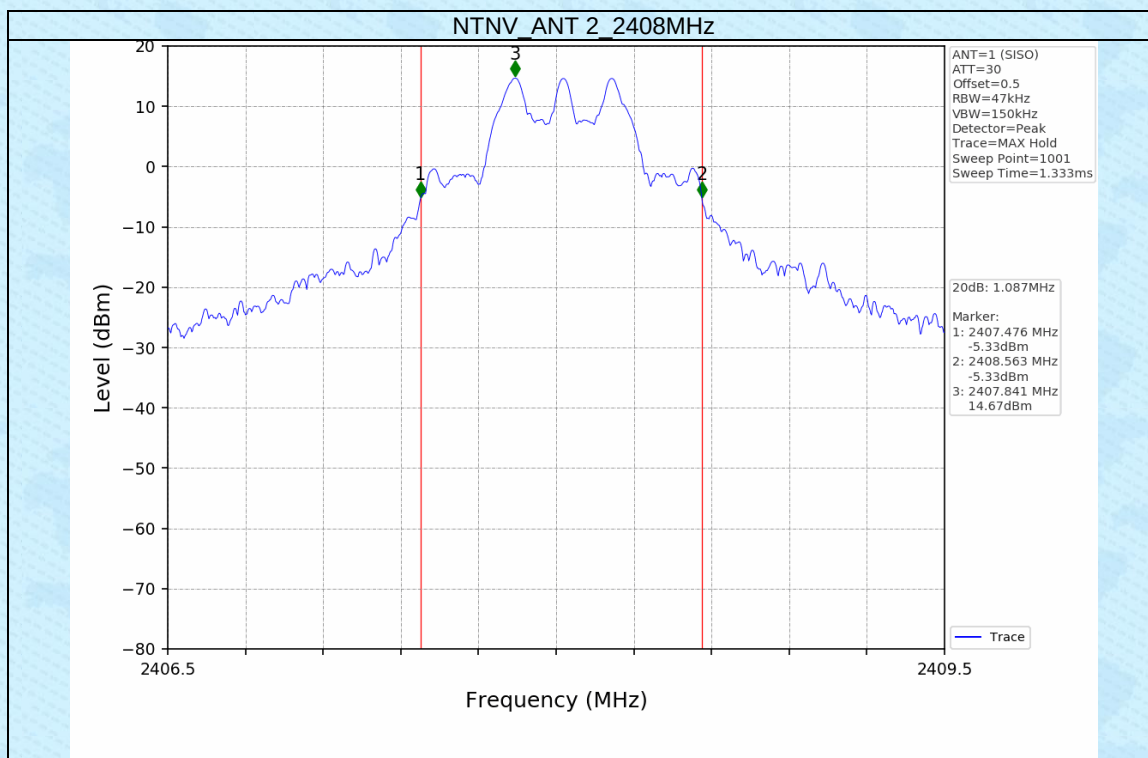
1.2 Test Graph - 20dB Bandwidth

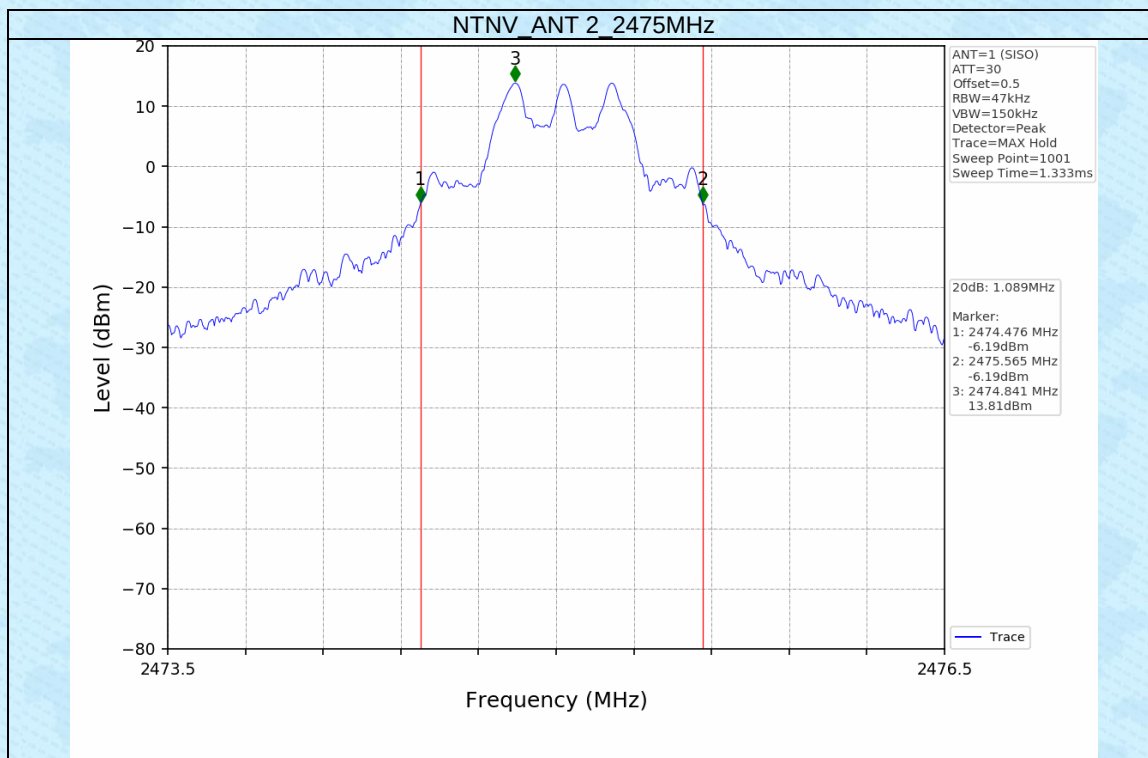
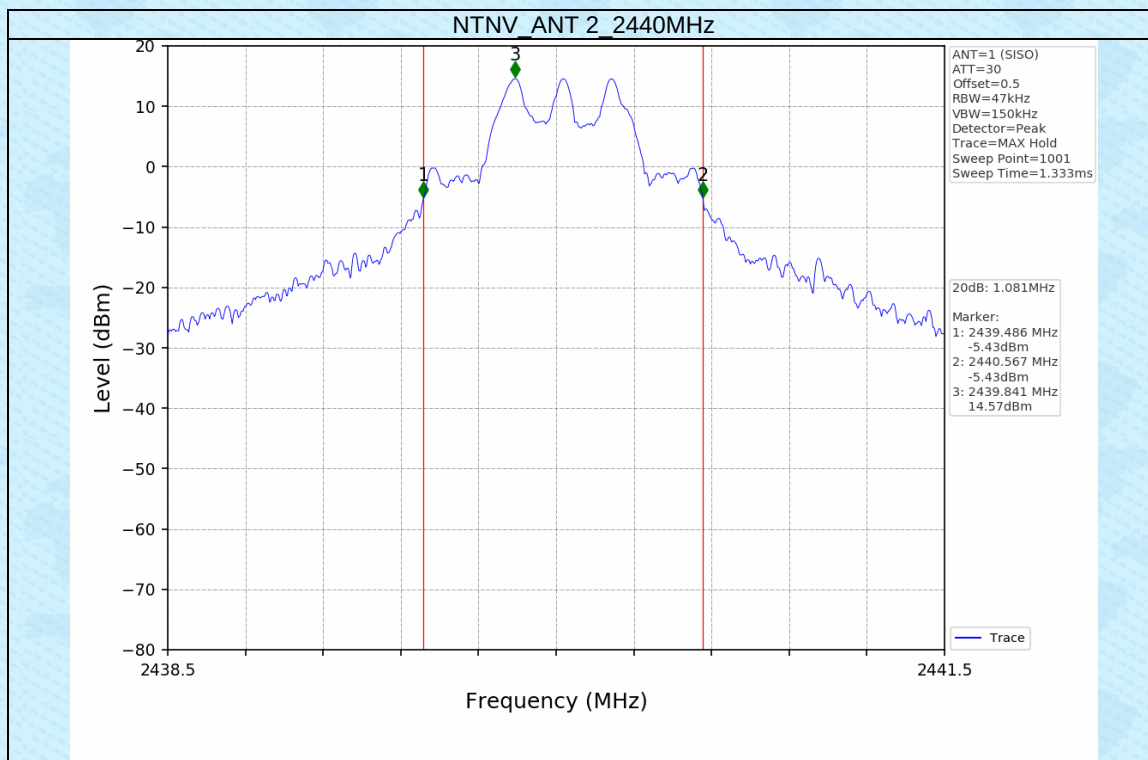
ANT1





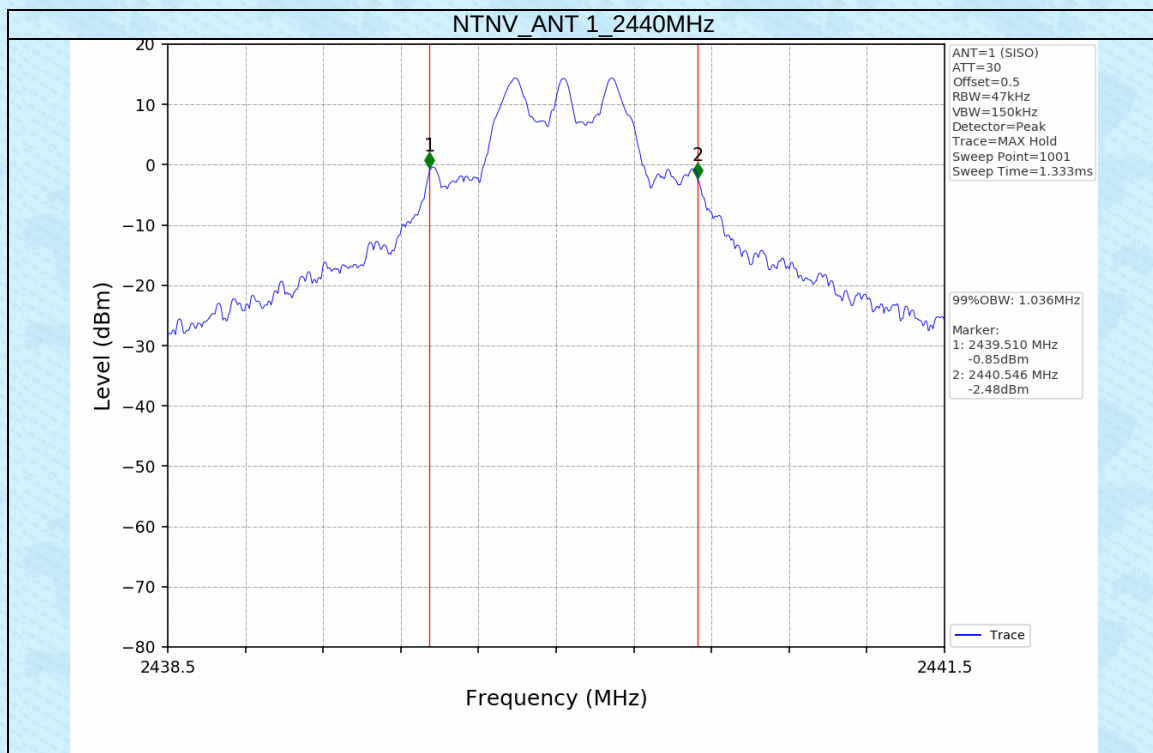
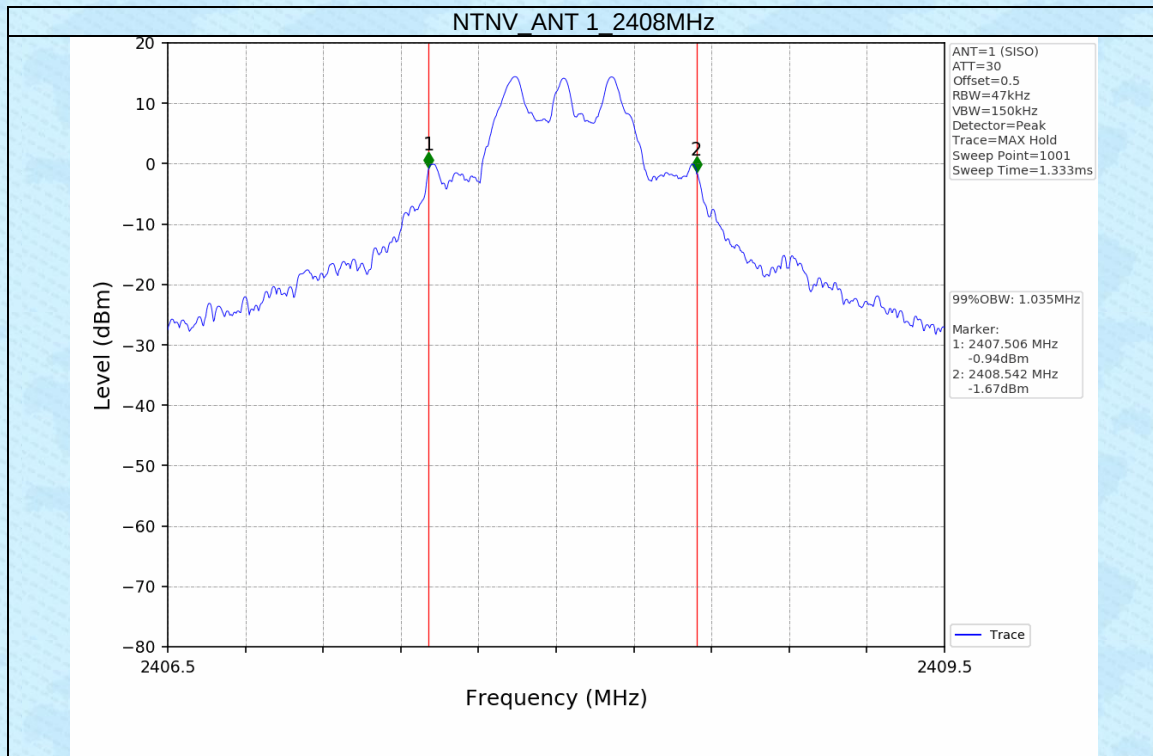
ANT2

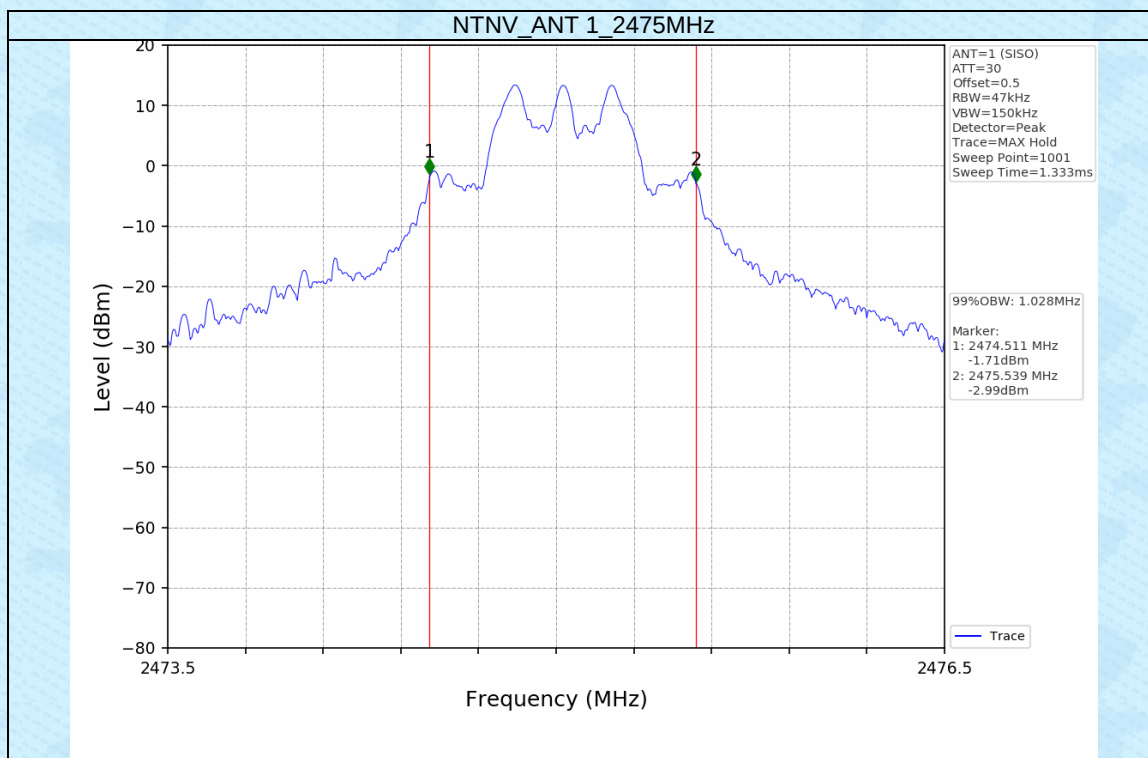




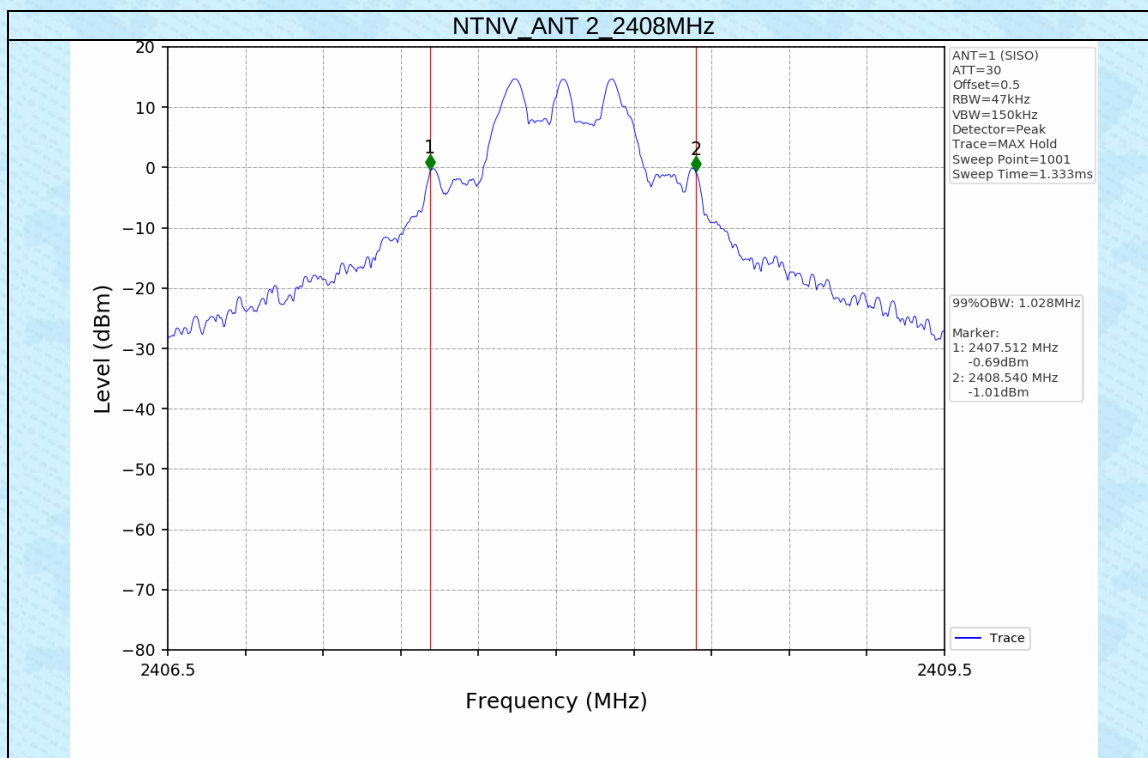
1.3 Test Graph - 99% Occupied Bandwidth

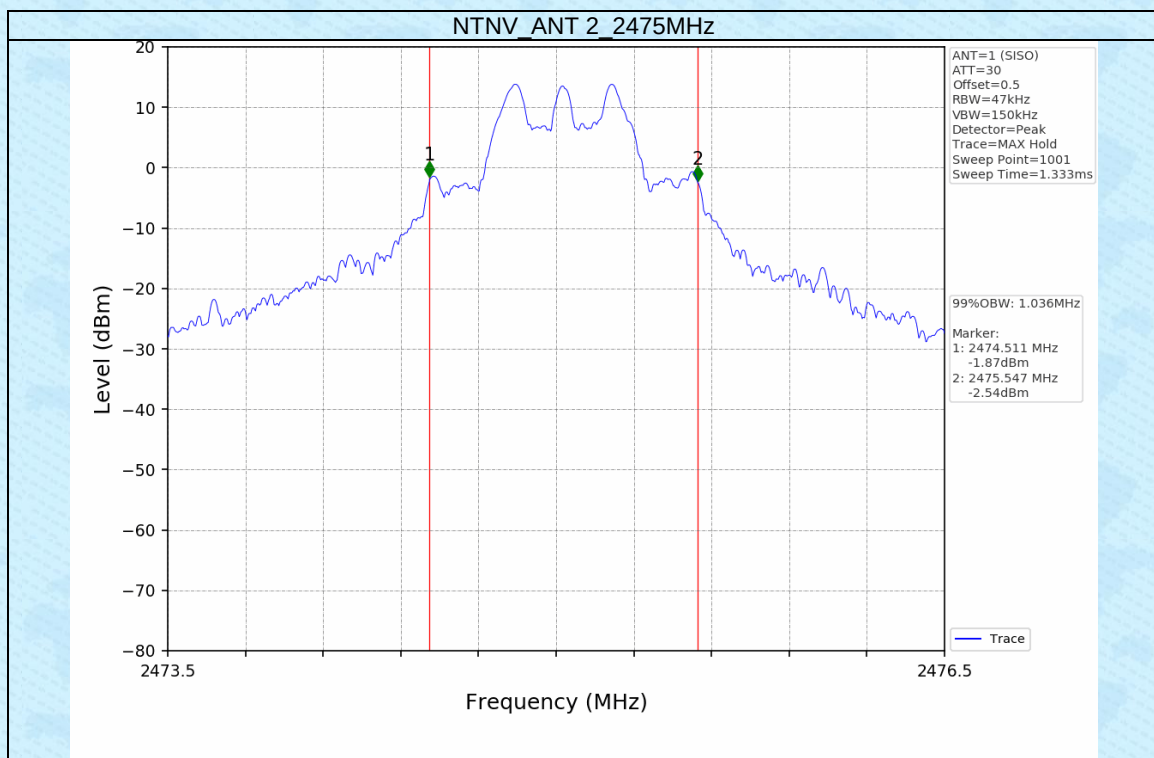
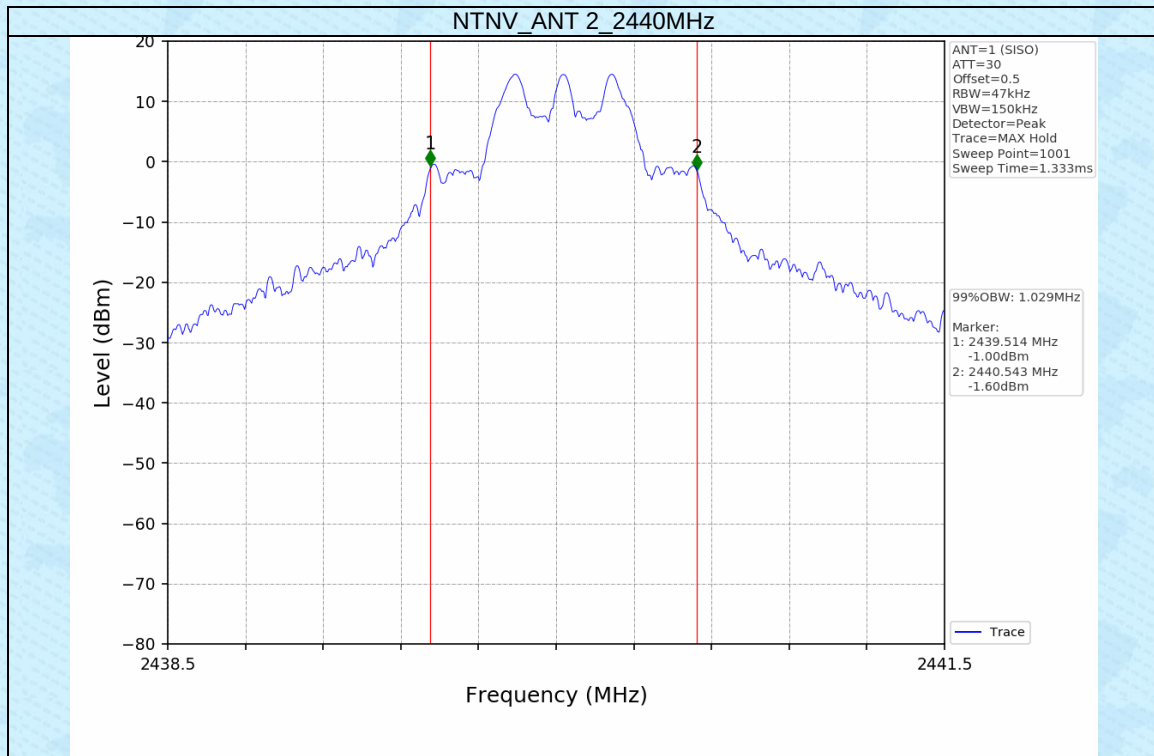
ANT1





ANT2





2. Maximum Conducted Output Power

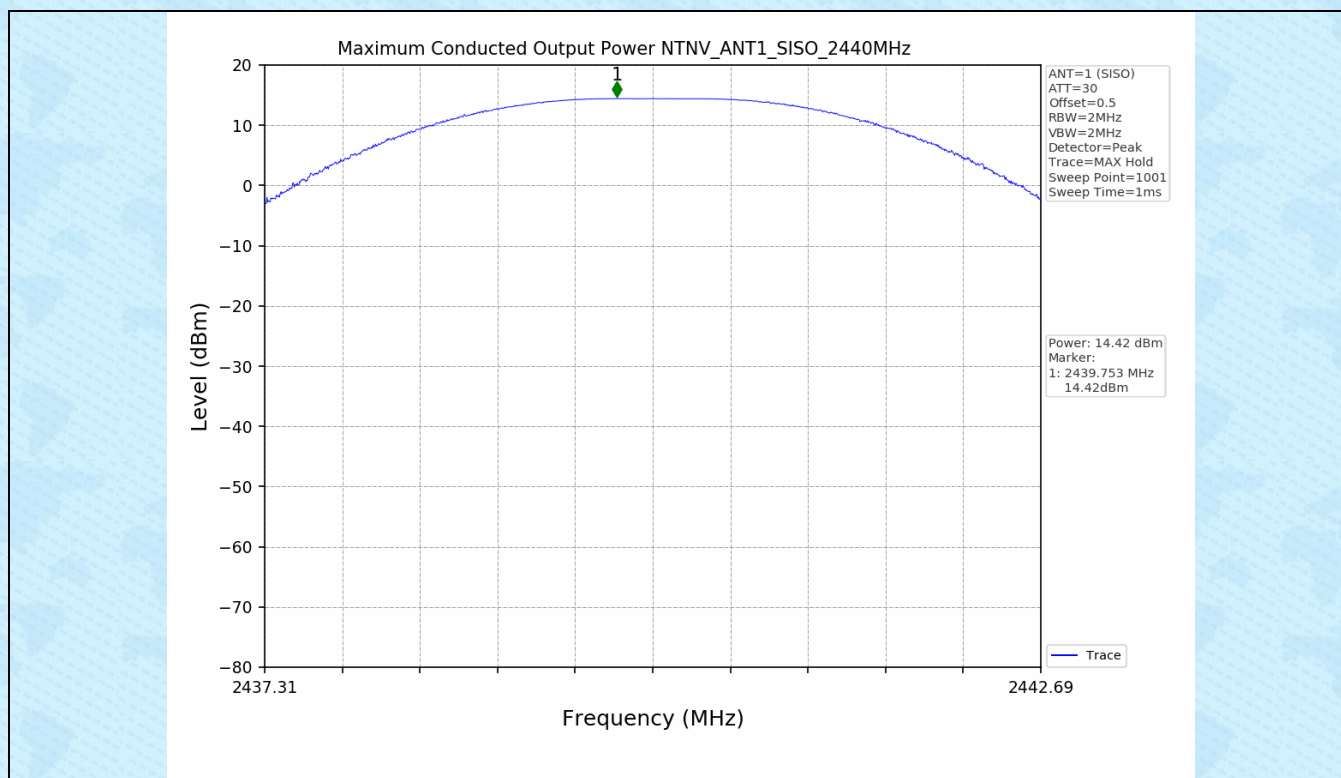
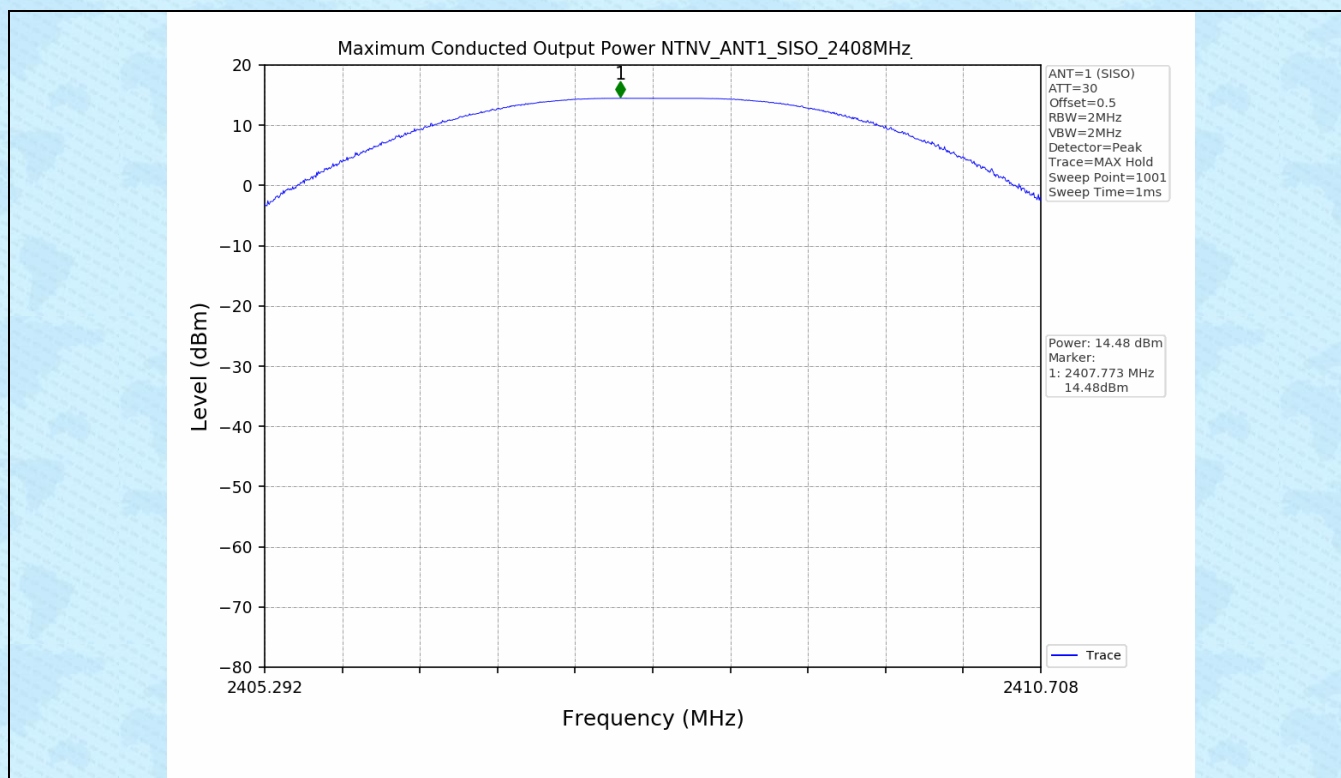
2.1 Test Result

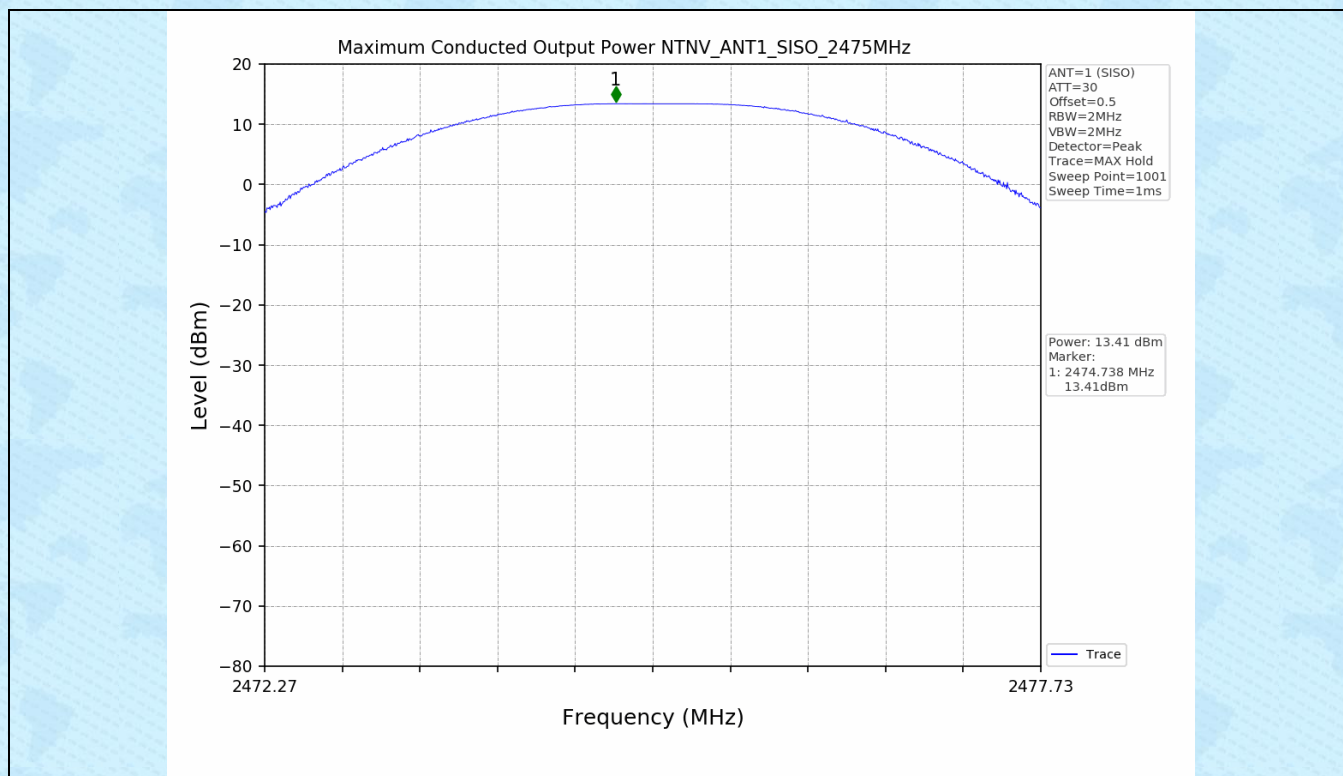
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
GFSK	2408	SISO	14.48	20.97	PASS
	2440	SISO	14.42	20.97	PASS
	2475	SISO	13.41	20.97	PASS

Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 2		
GFSK	2408	SISO	14.69	20.97	PASS
	2440	SISO	14.62	20.97	PASS
	2475	SISO	13.85	20.97	PASS

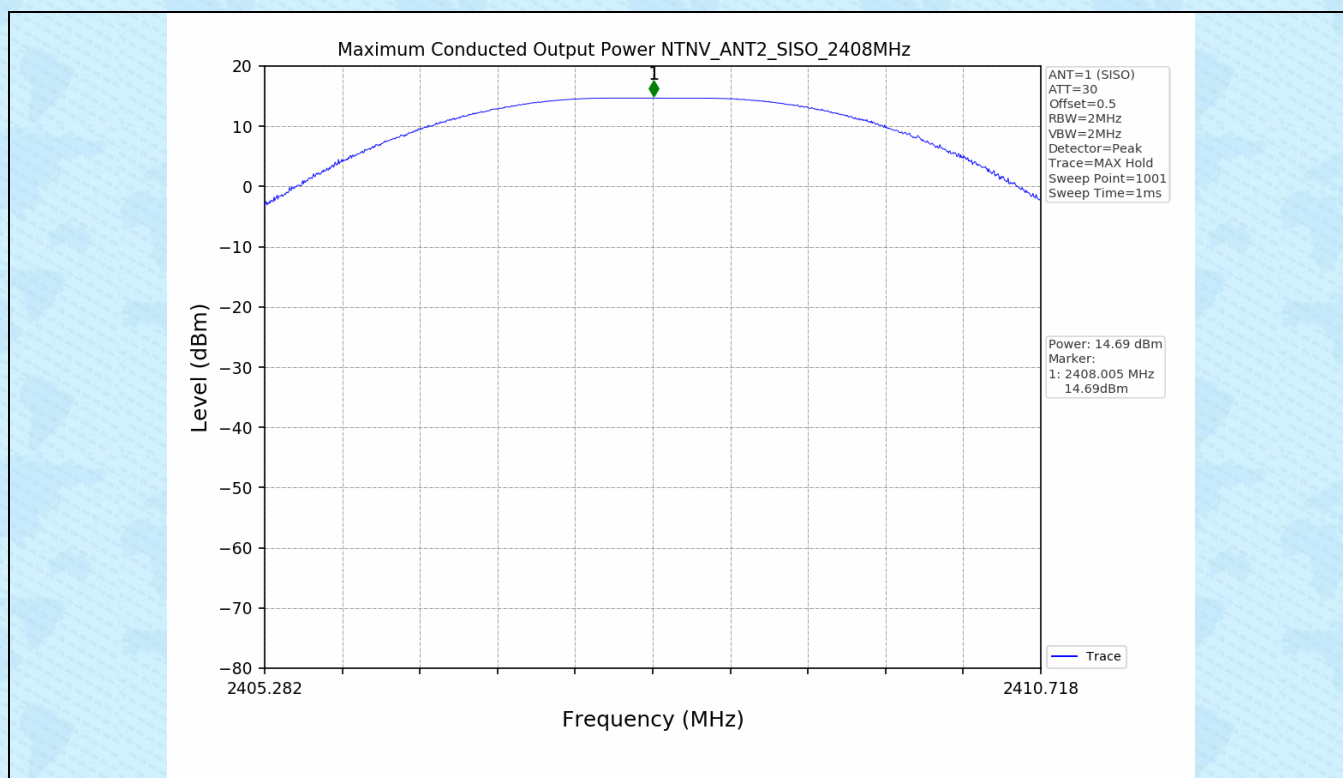
2.2 Test Graph

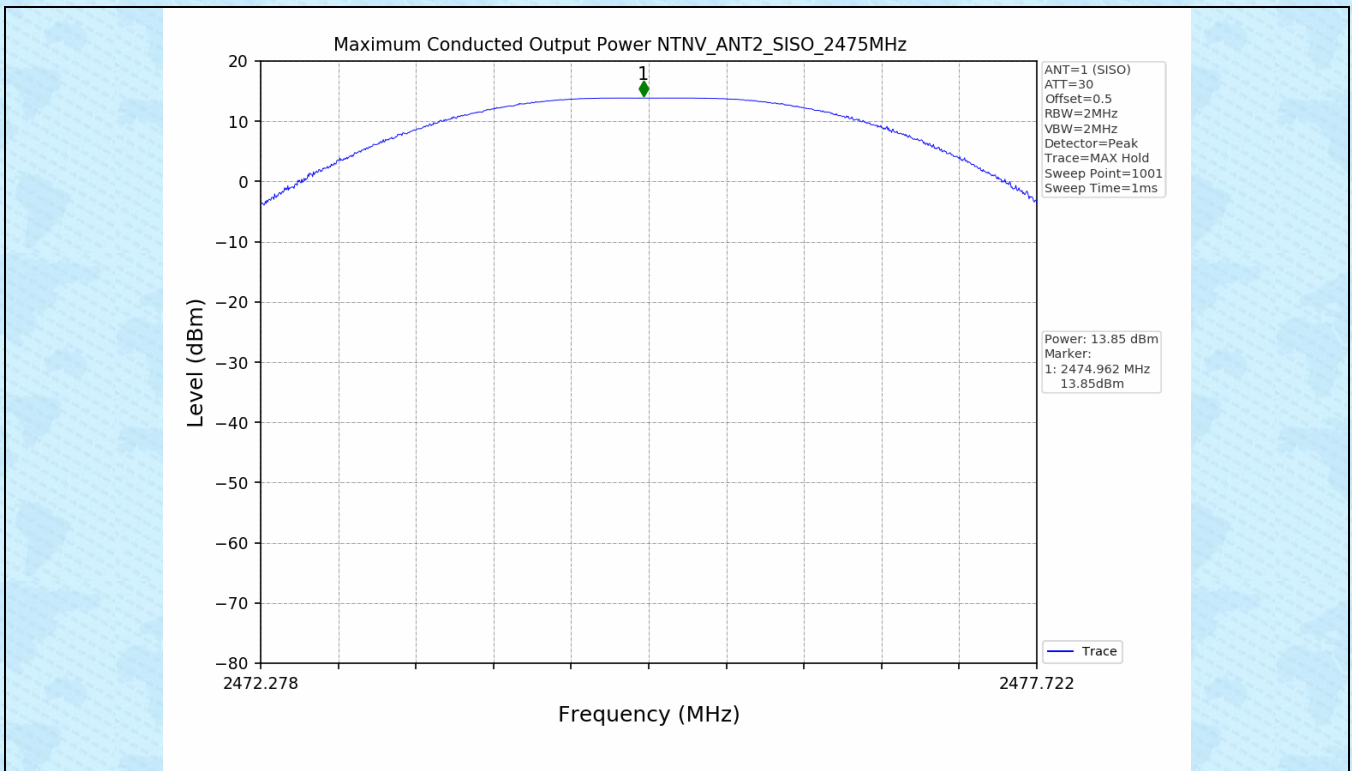
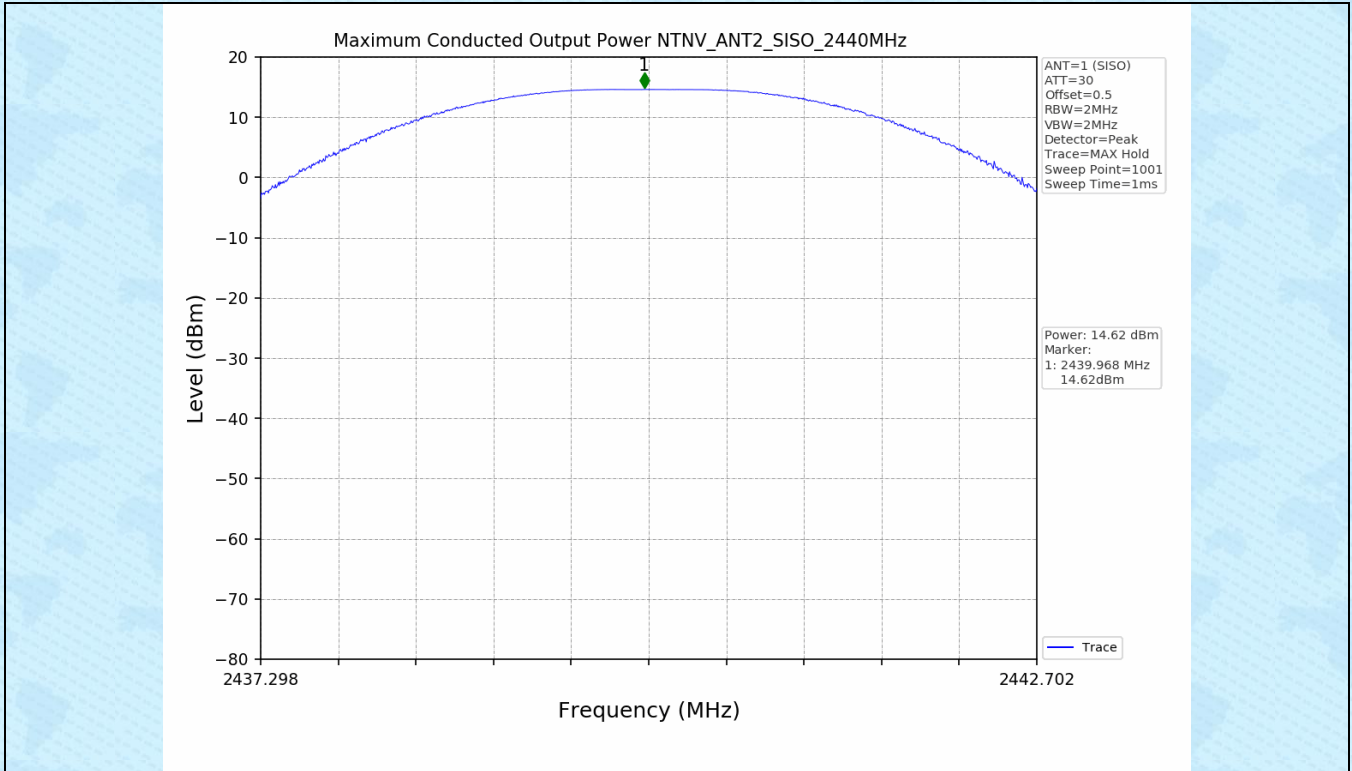
ANT1





ANT2





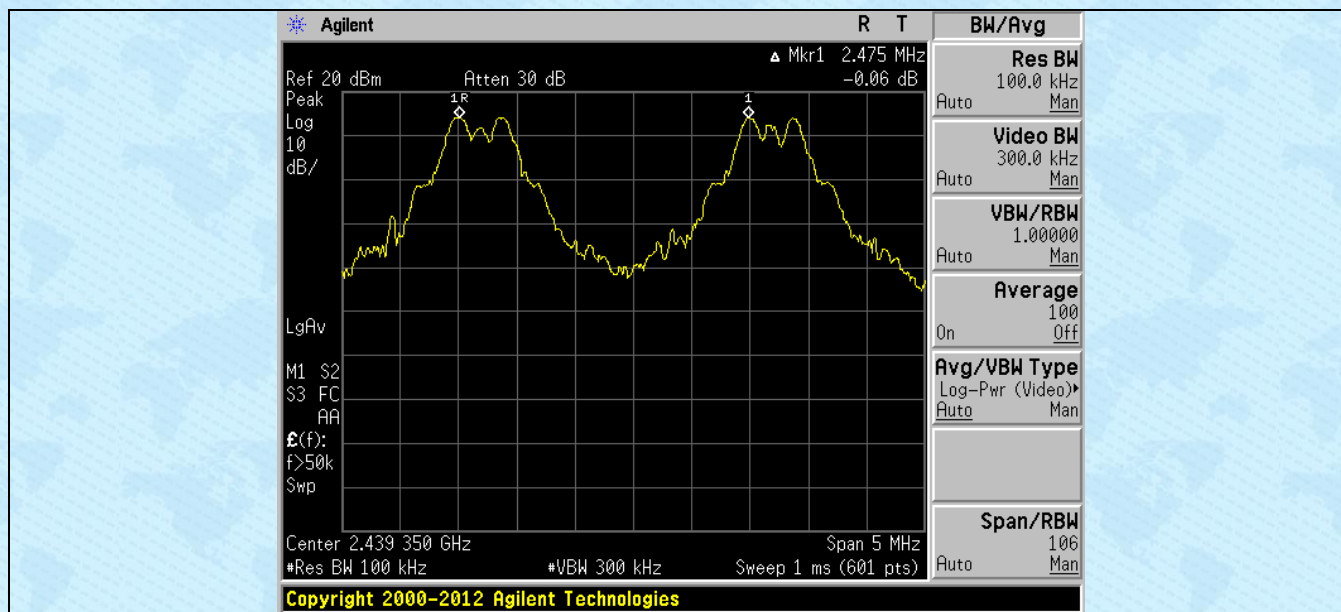
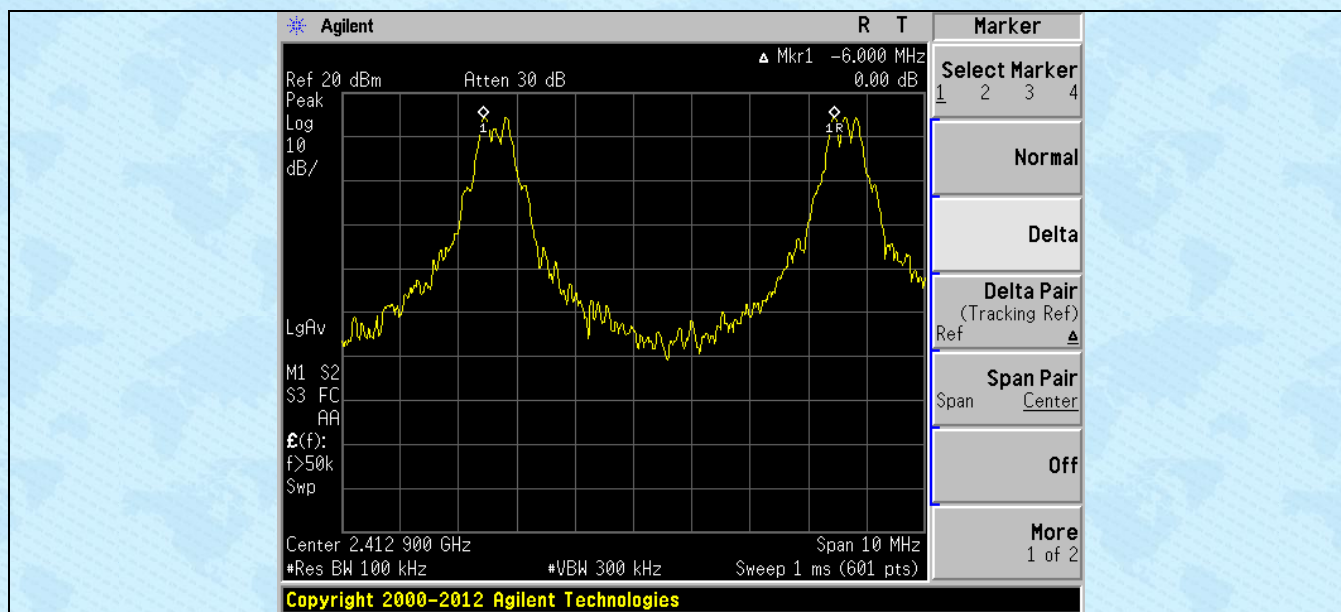
3. Carrier frequency separation

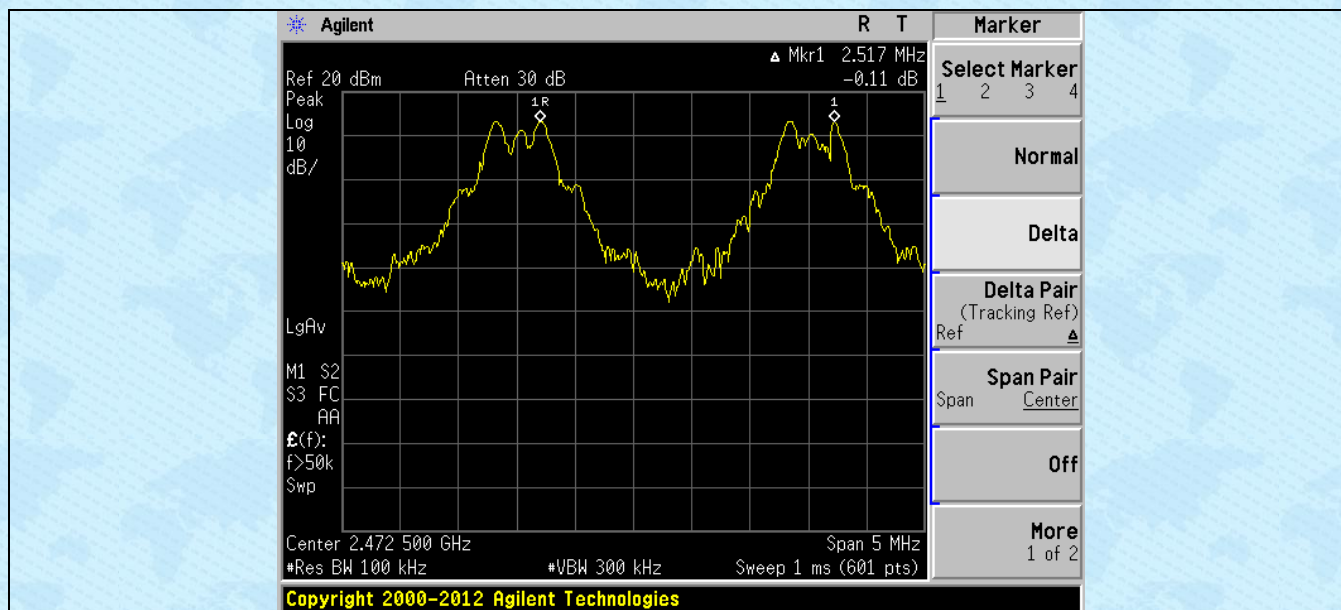
3.1 Test Result

ANT No.	Test channel	Carrier Frequencies Separation (kHz)	Limit (kHz)	Result
1	Lowest	6000	967.33	Pass
	Middle	2475	965.33	Pass
	Highest	2517	970.00	Pass
2	Lowest	5983	967.33	Pass
	Middle	2308	966.67	Pass
	Highest	2508	969.33	Pass

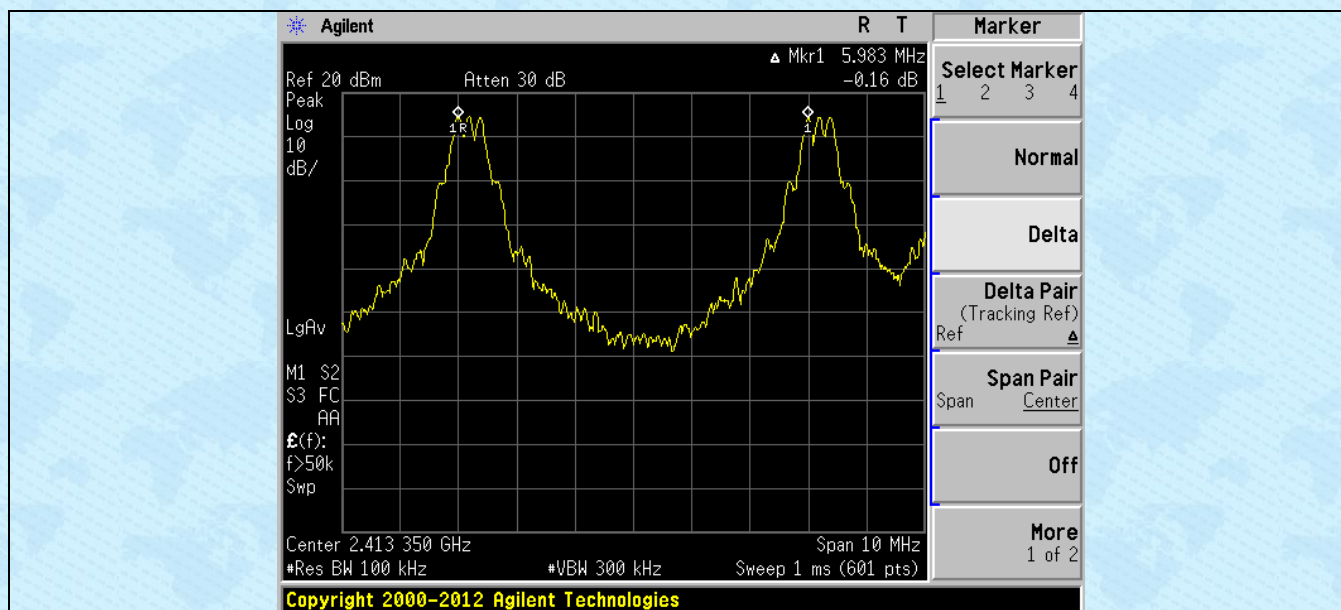
3.2 Test Graph

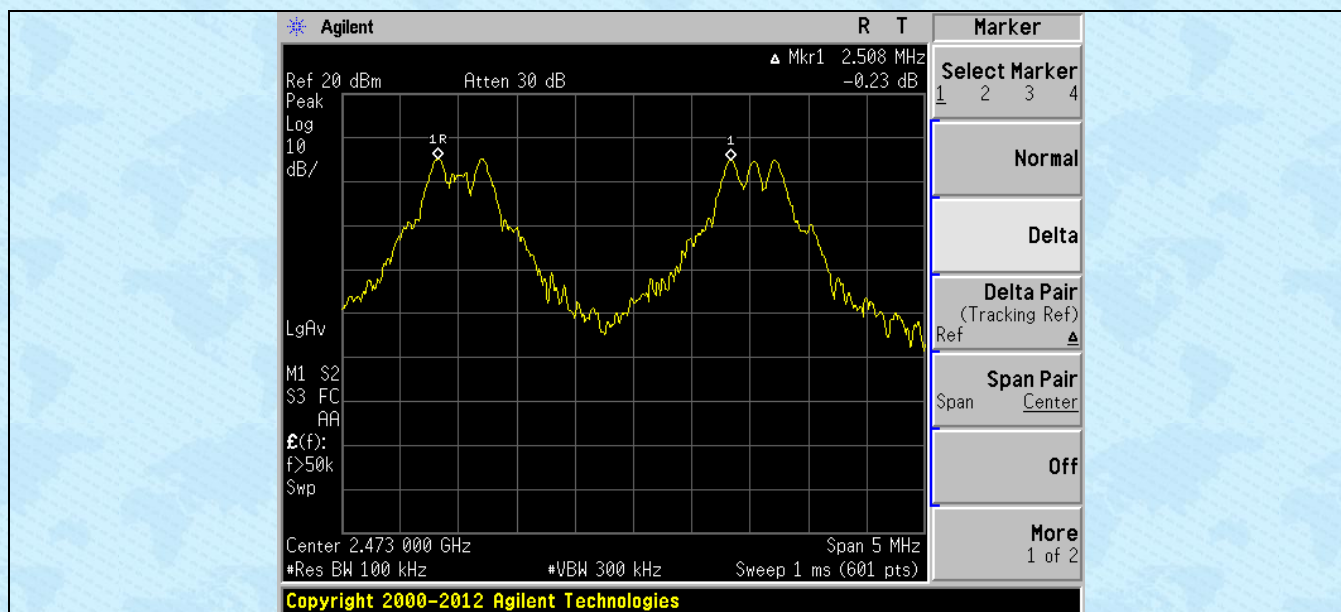
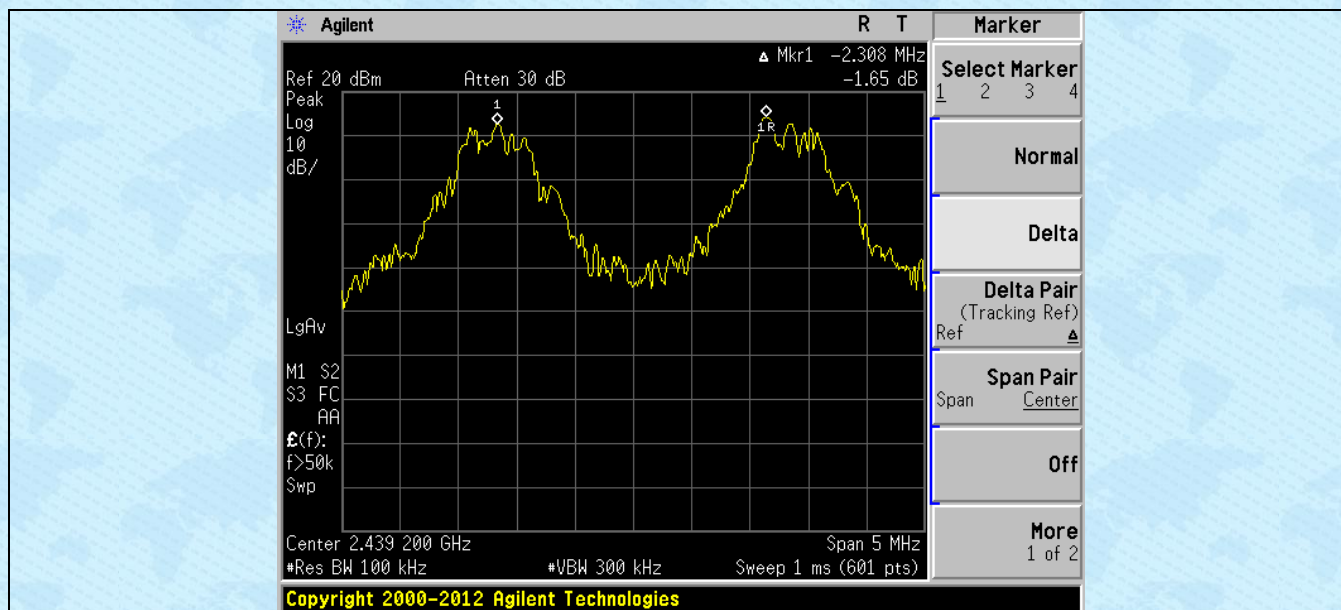
ANT1





ANT2





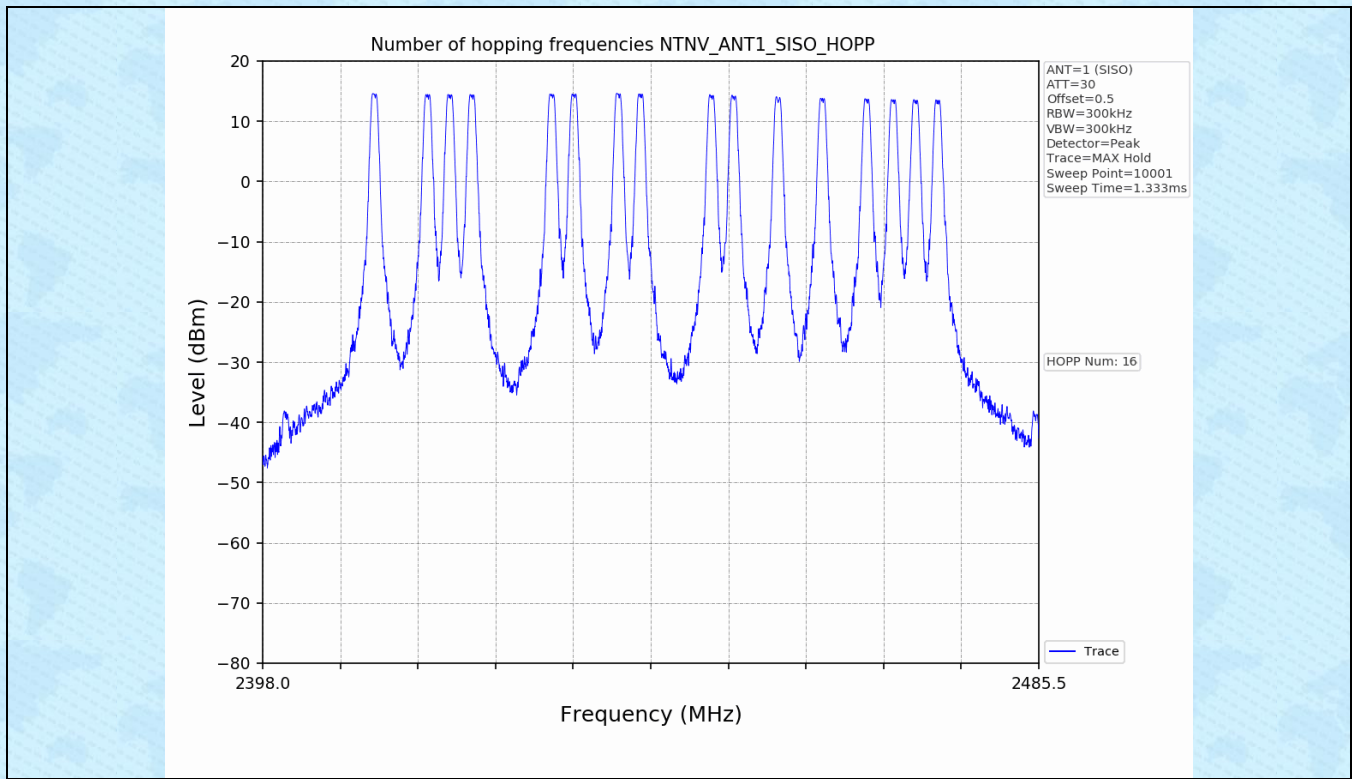
4. Number of hopping frequencies

4.1 Test Result

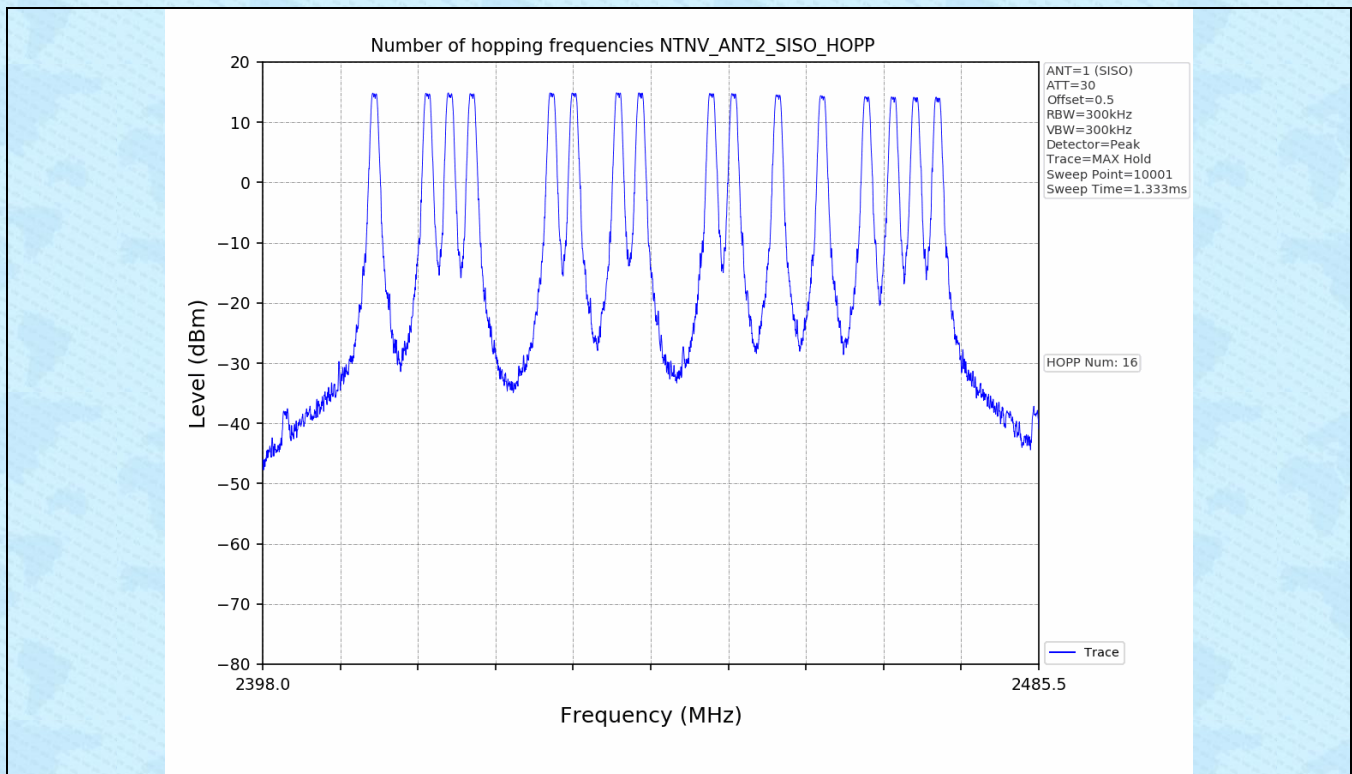
Test Mode	TX Type	ANT No.	Num of Hopping Frequencies	Limits	Verdict
FHSS	SISO	1	16	≥15	PASS
	SISO	2	16	≥15	PASS

4.2 Test Graph

ANT1



ANT2



5. Time of occupancy (dwell time)

5.1 Test Result

ANT No.	Test channel	Ton (ms)	Dwell time(ms)	Limit(ms)	Result
1	Lowest	1.3000	74.8800	400	Pass
	Middle	1.3330	76.7808	400	Pass
	Highest	1.3000	74.8800	400	Pass
2	Lowest	1.3000	74.8800	400	Pass
	Middle	1.2670	72.9792	400	Pass
	Highest	1.3330	76.7808	400	Pass

The formula as below:

Lowest: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=1.3000ms*9*0.4*16=74.8800ms

Middle: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=1.3330ms*9*0.4*16=76.7808ms

Highest: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=1.3000ms*9*0.4*16=74.8800ms

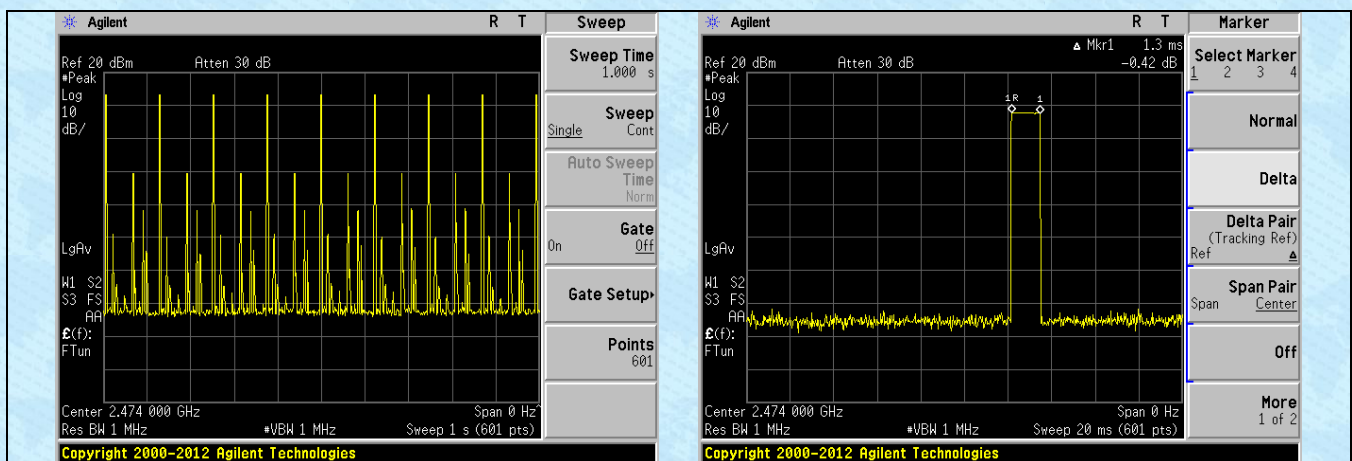
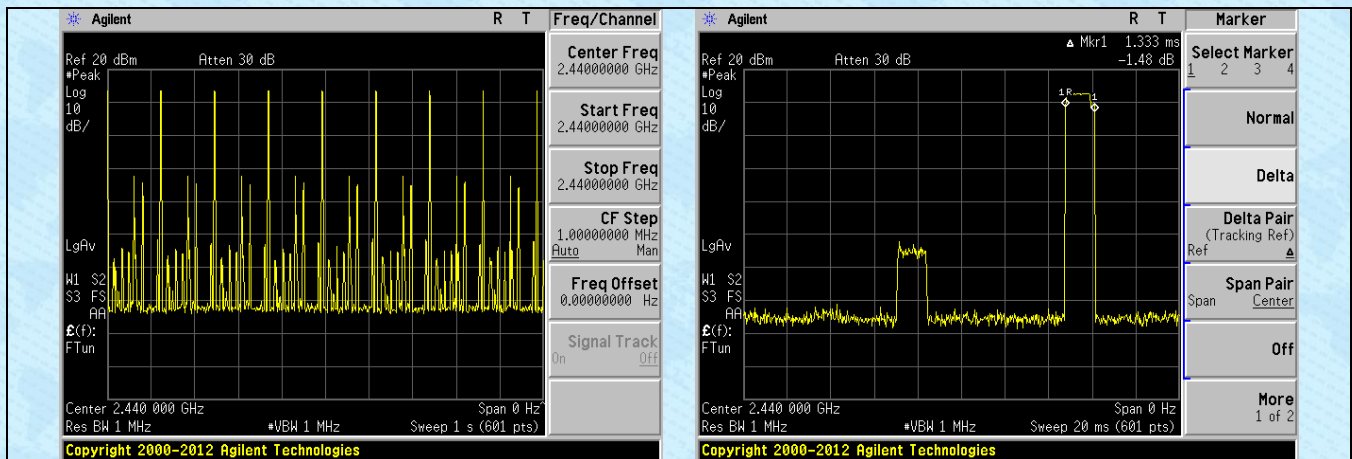
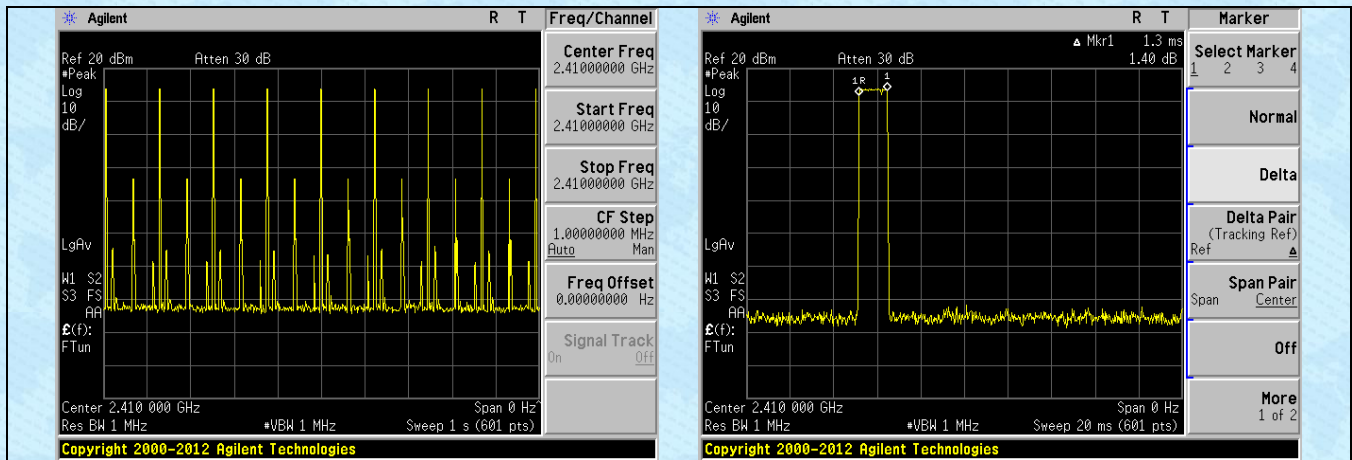
Lowest: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=1.3000ms*9*0.4*16=74.8800ms

Middle: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=1.2670ms*9*0.4*16=72.9792ms

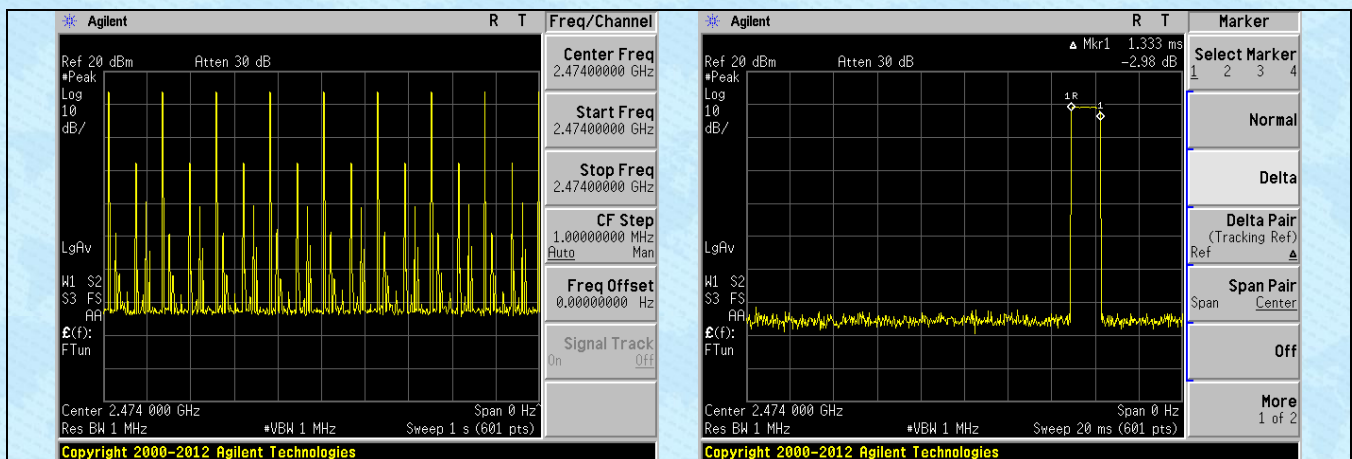
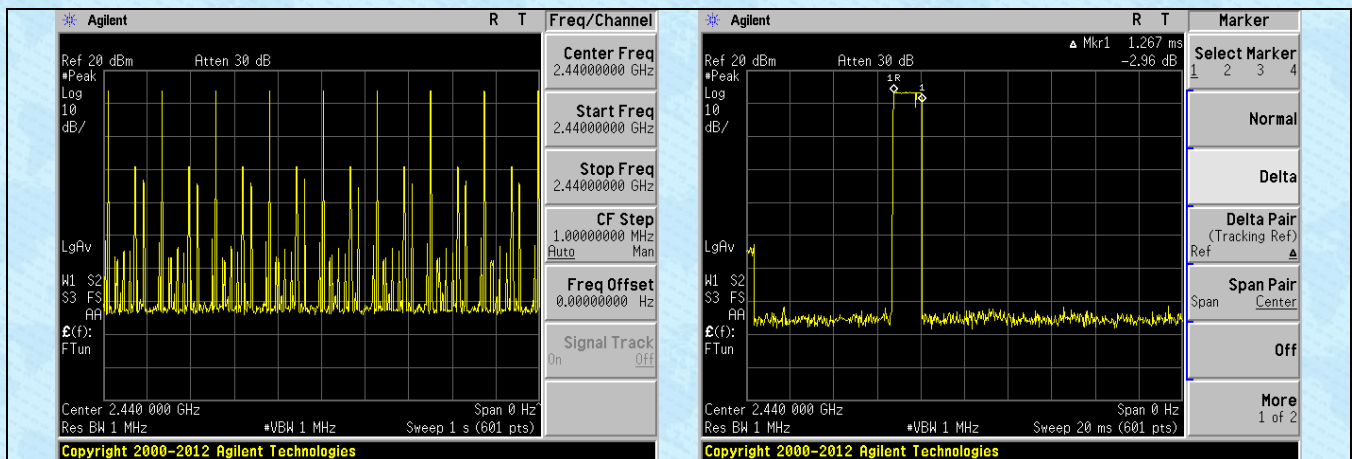
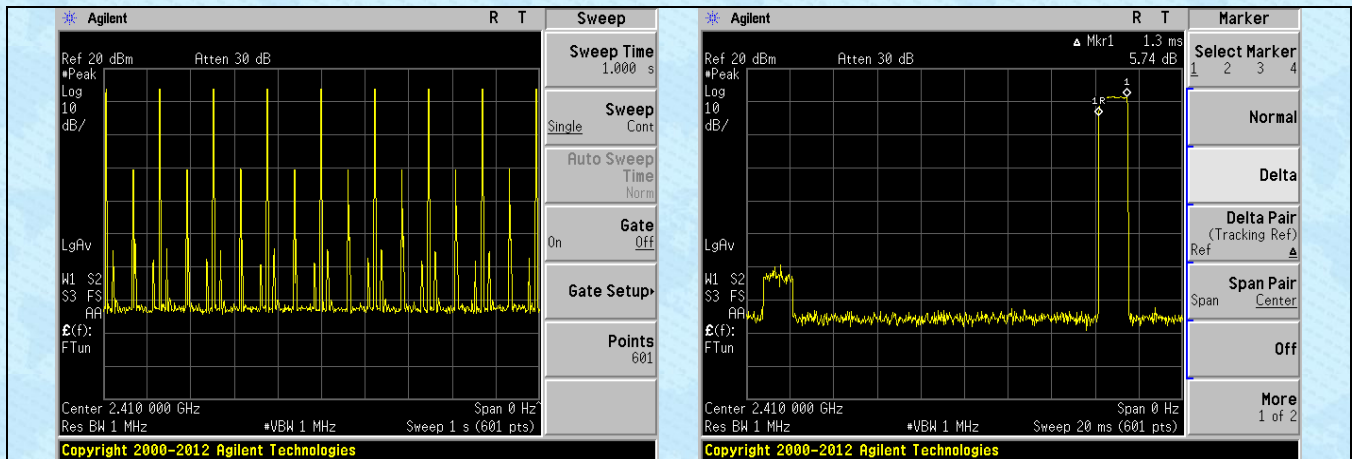
Highest: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=1.3330ms*9*0.4*16=76.7808ms

5.2 Test Graph

ANT1



ANT2



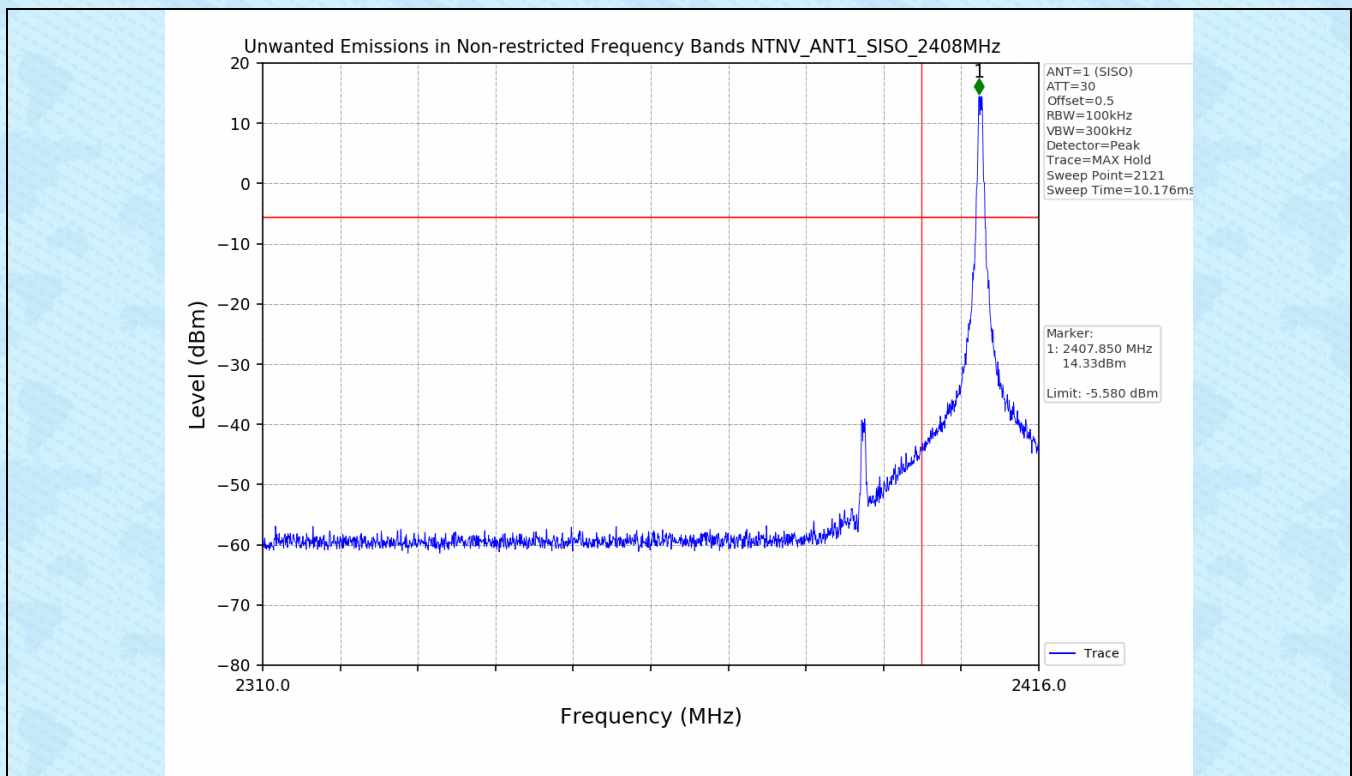
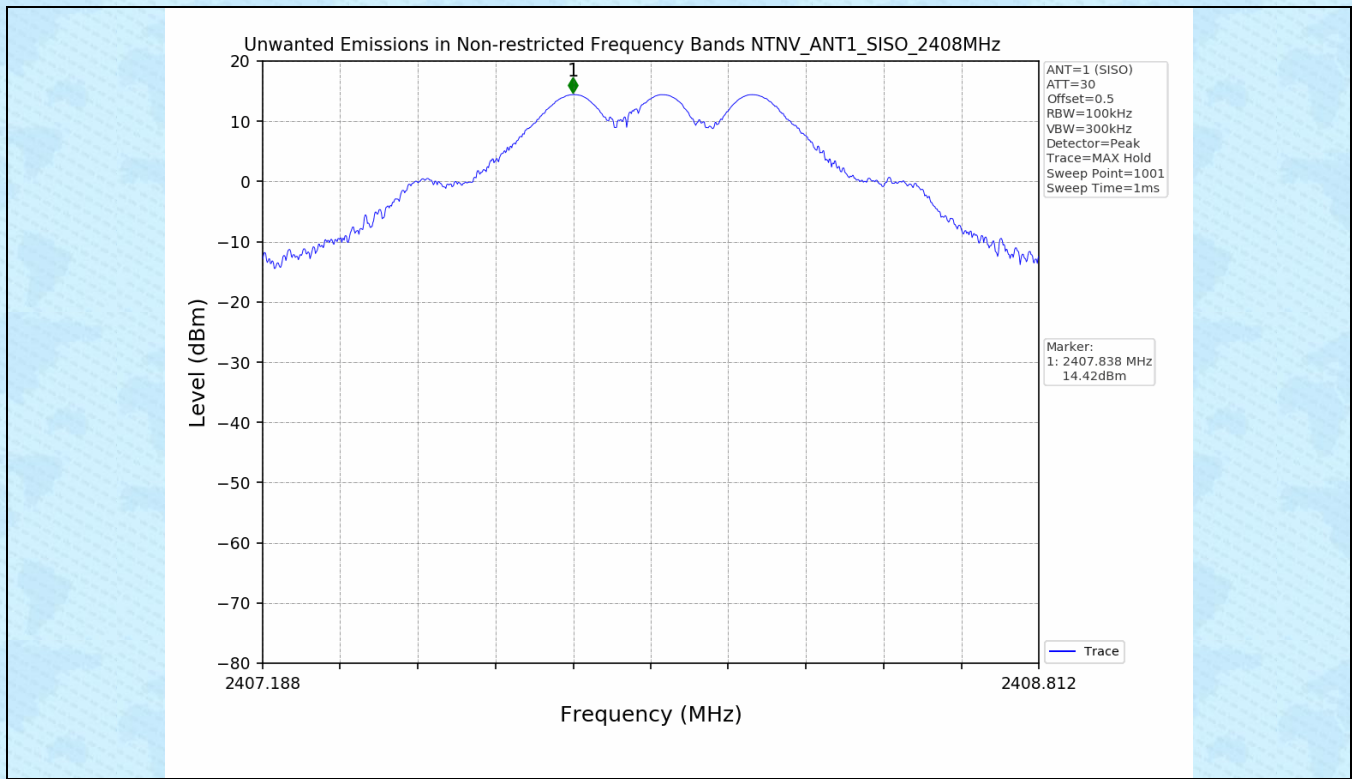
6. Unwanted Emissions in Non-restricted Frequency Bands

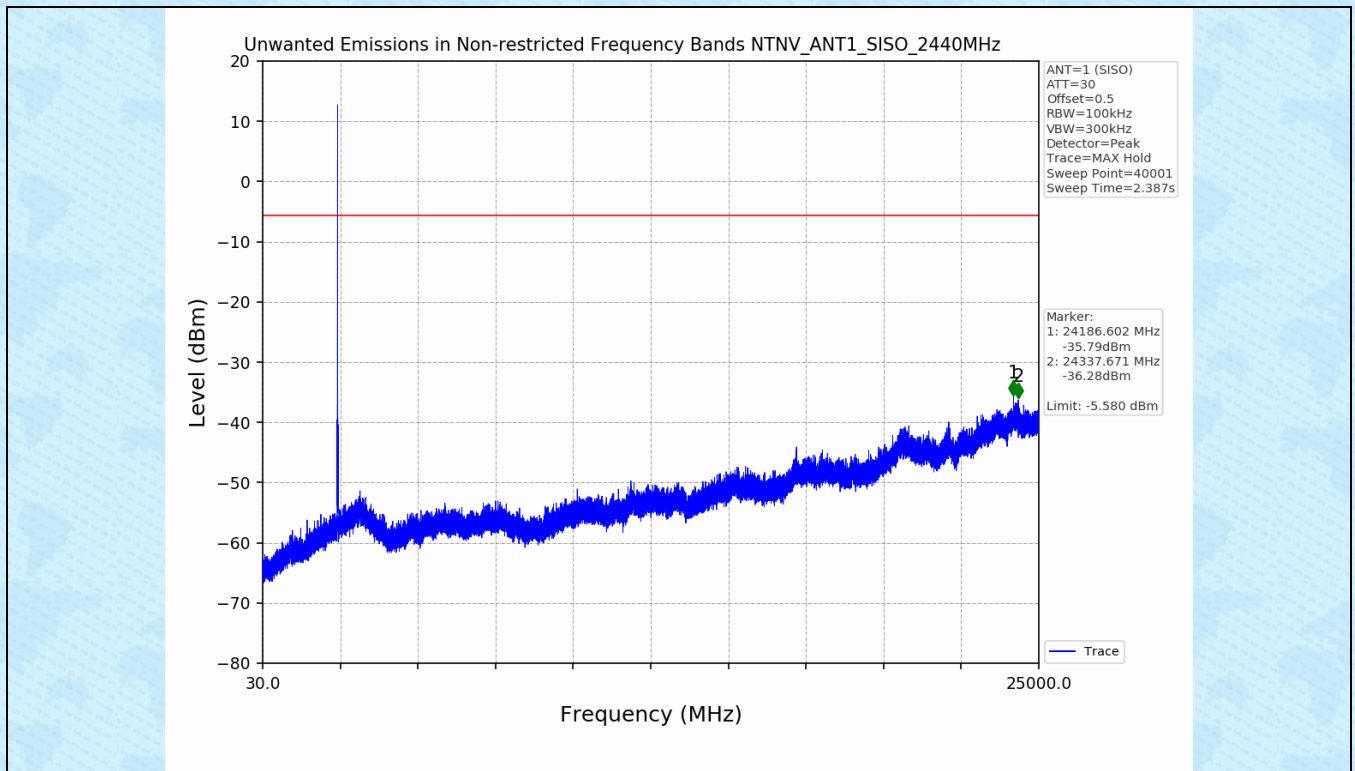
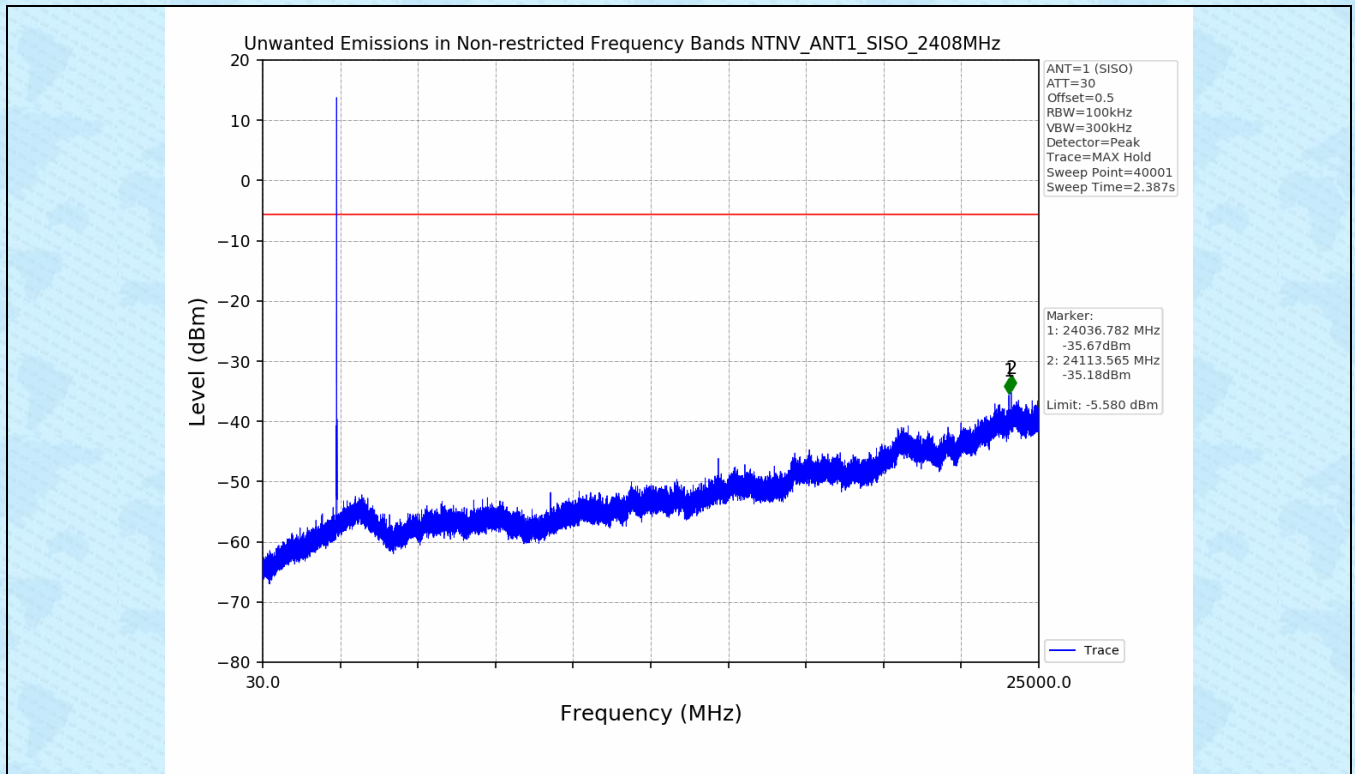
6.1 Test Result

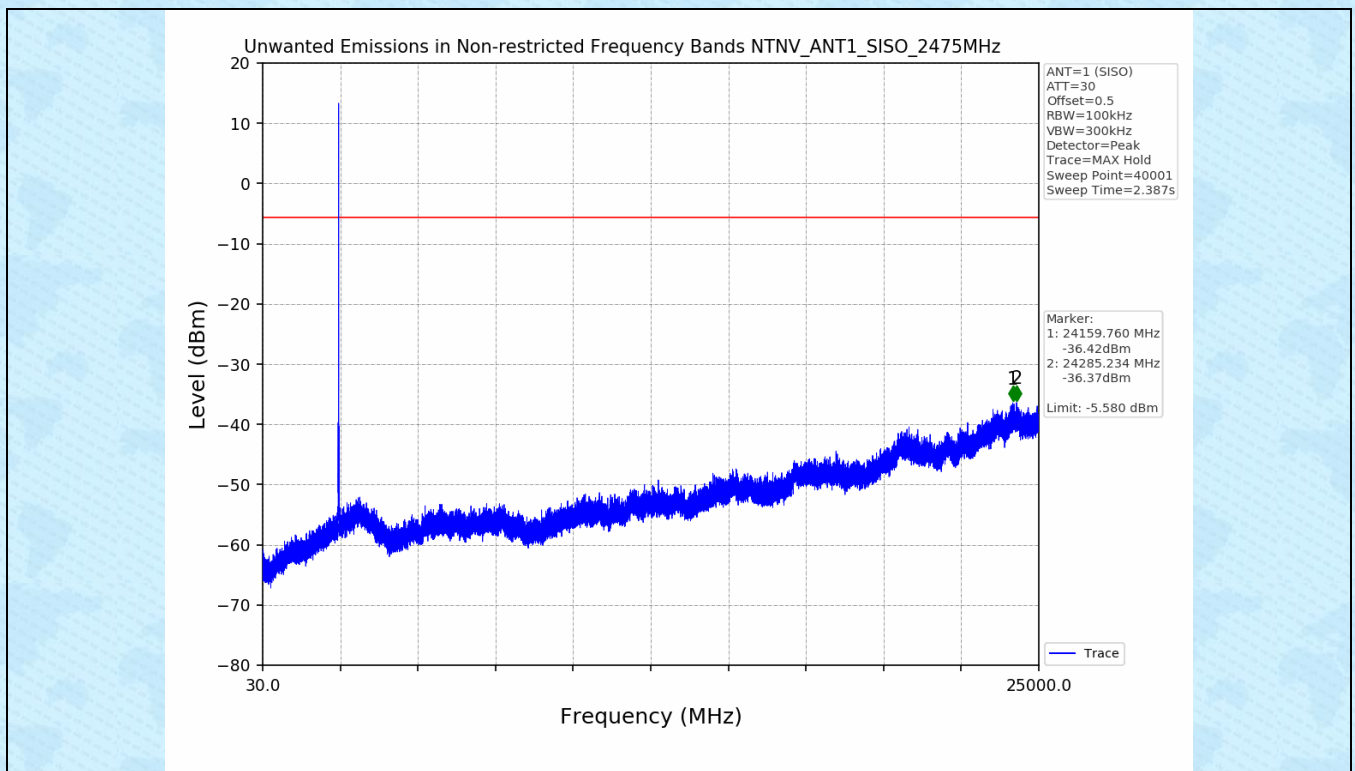
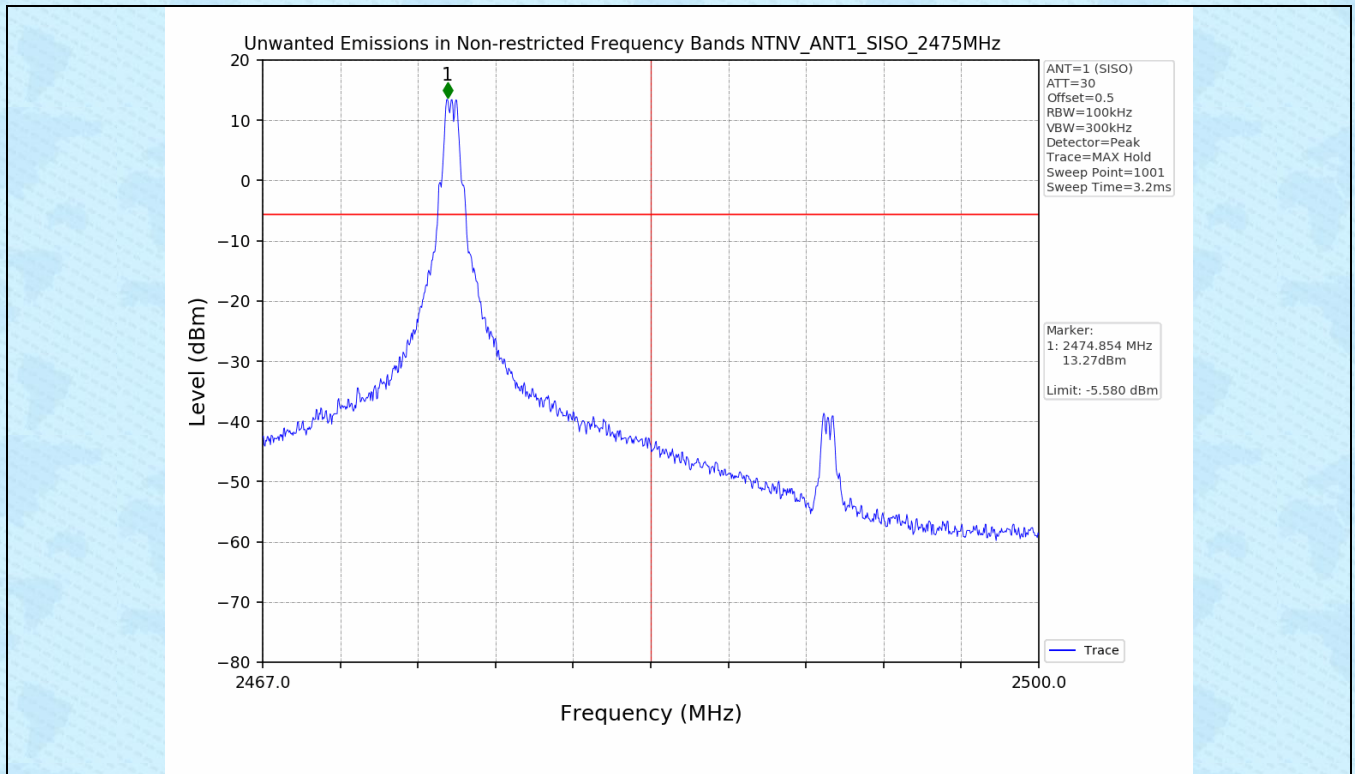
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
FHSS	2408	SISO	1	Refer to test graph	-5.58	PASS
	2440	SISO	1	Refer to test graph	-5.58	PASS
	2475	SISO	1	Refer to test graph	-5.58	PASS
	Hopping	SISO	1	Refer to test graph	-5.58	PASS
	2408	SISO	2	Refer to test graph	-5.37	PASS
	2440	SISO	2	Refer to test graph	-5.37	PASS
	2475	SISO	2	Refer to test graph	-5.37	PASS
	Hopping	SISO	2	Refer to test graph	-5.37	PASS

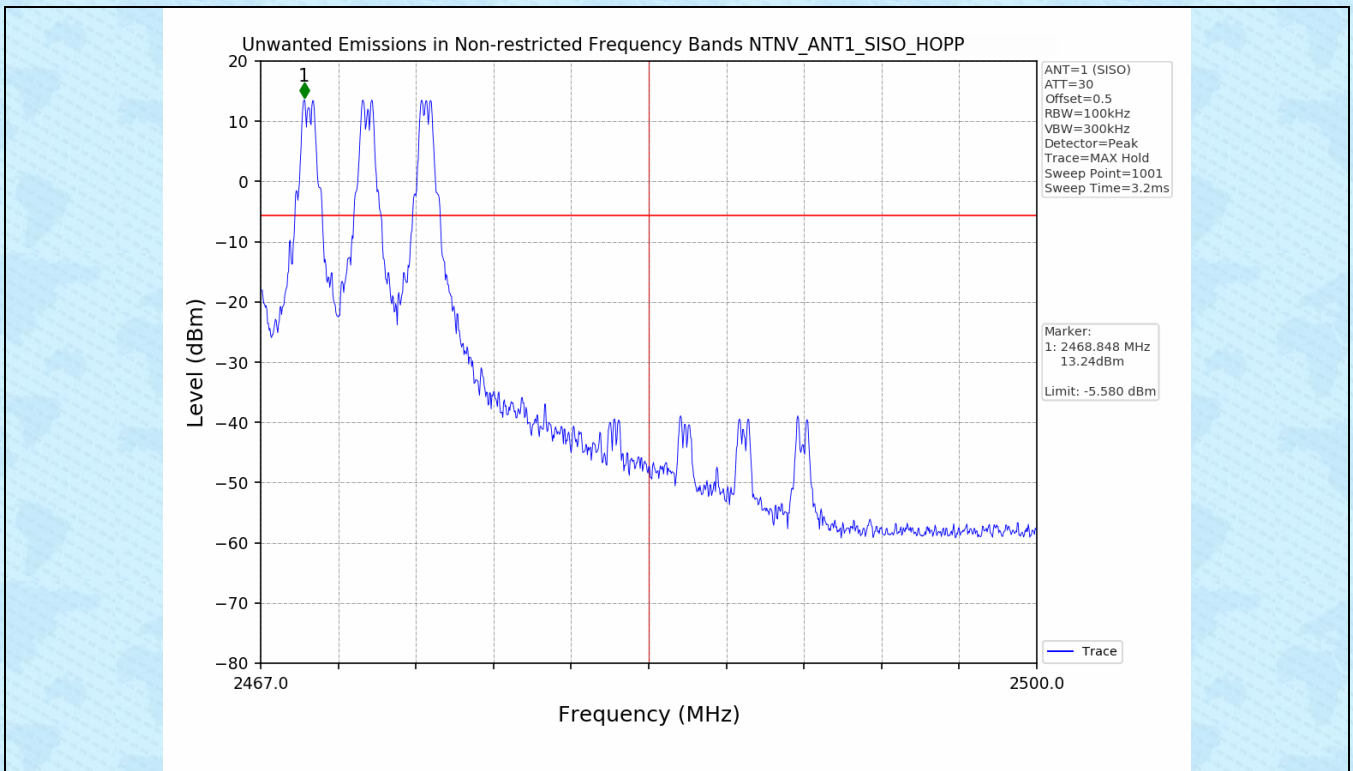
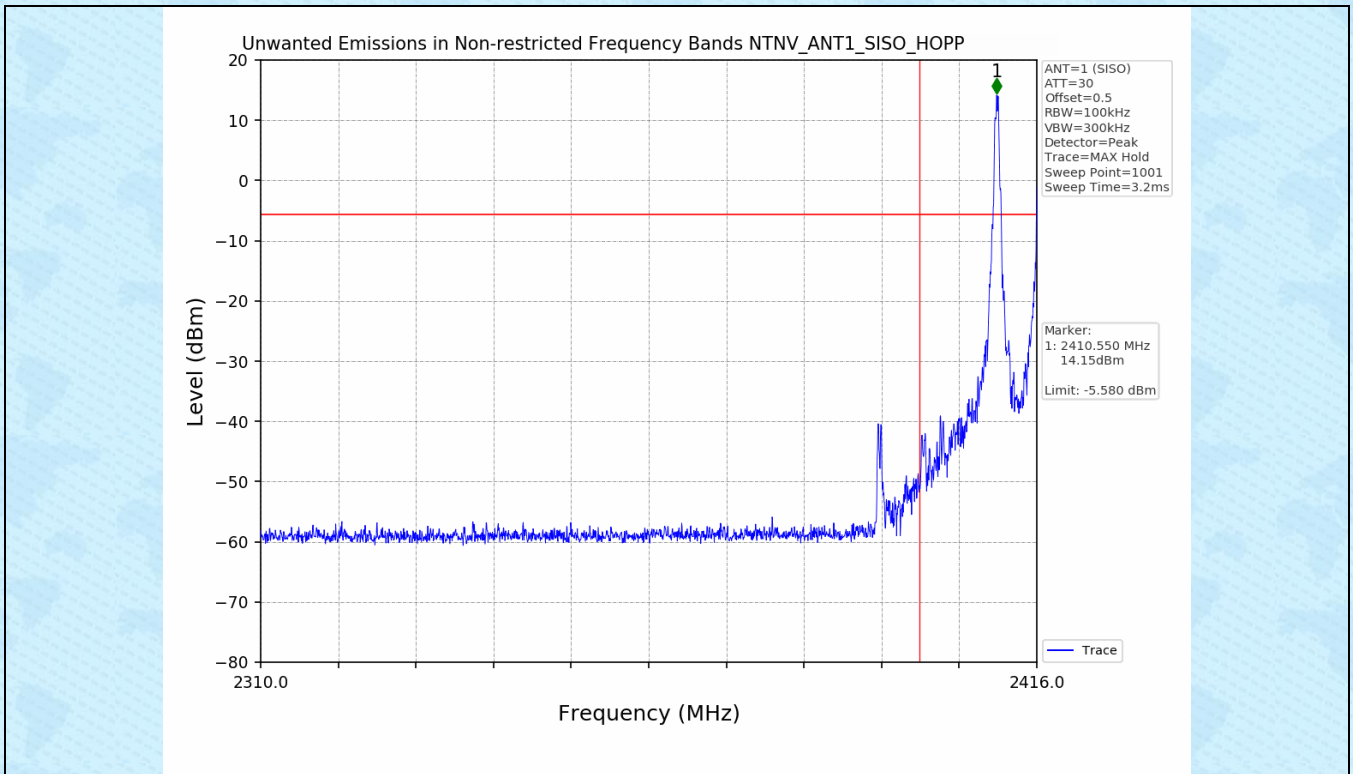
6.2 Test Graph

ANT1

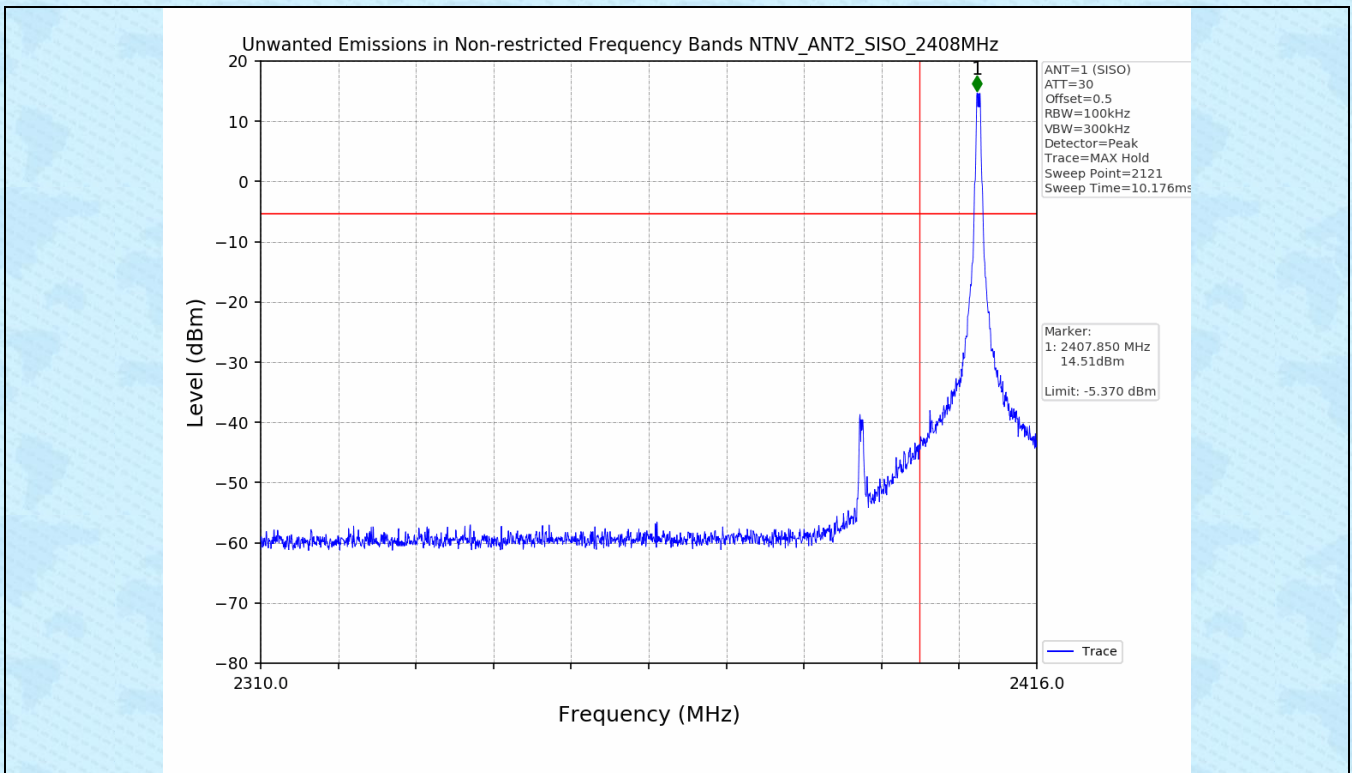
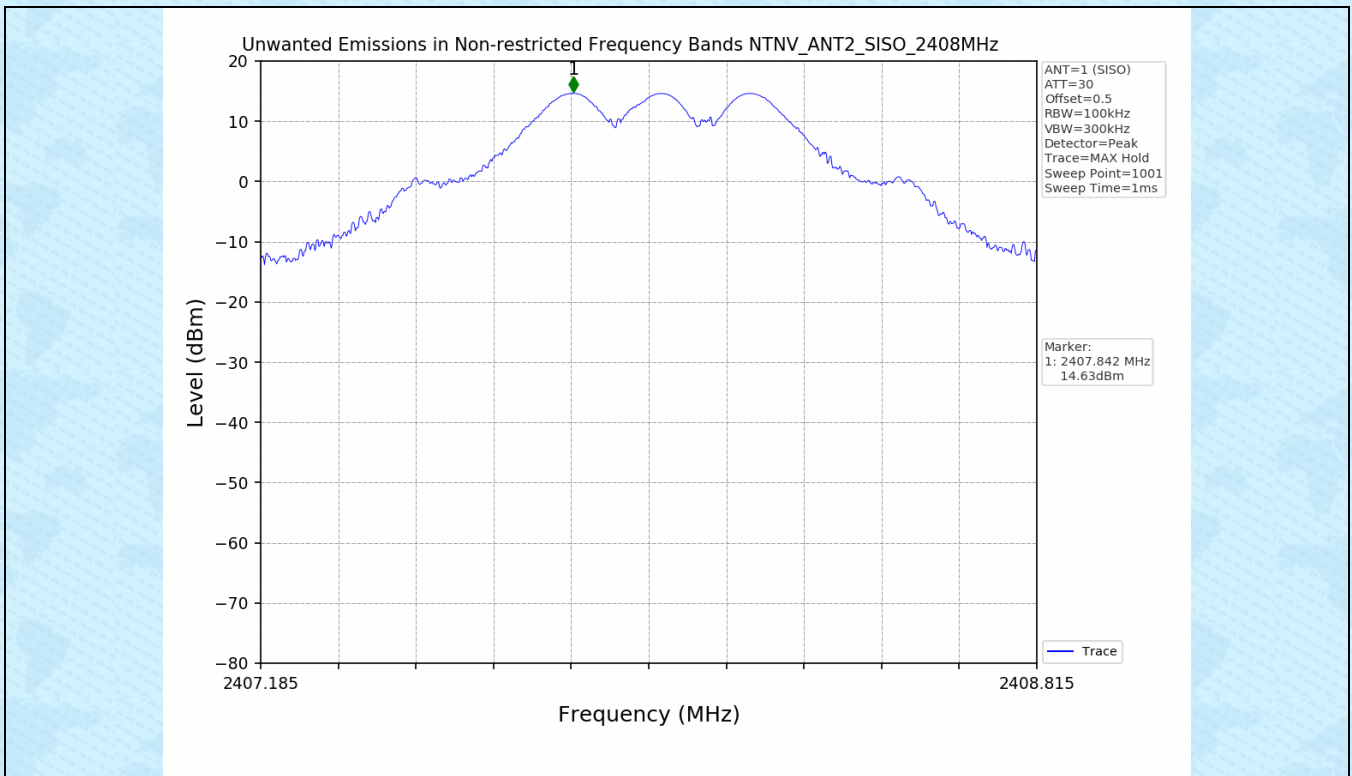


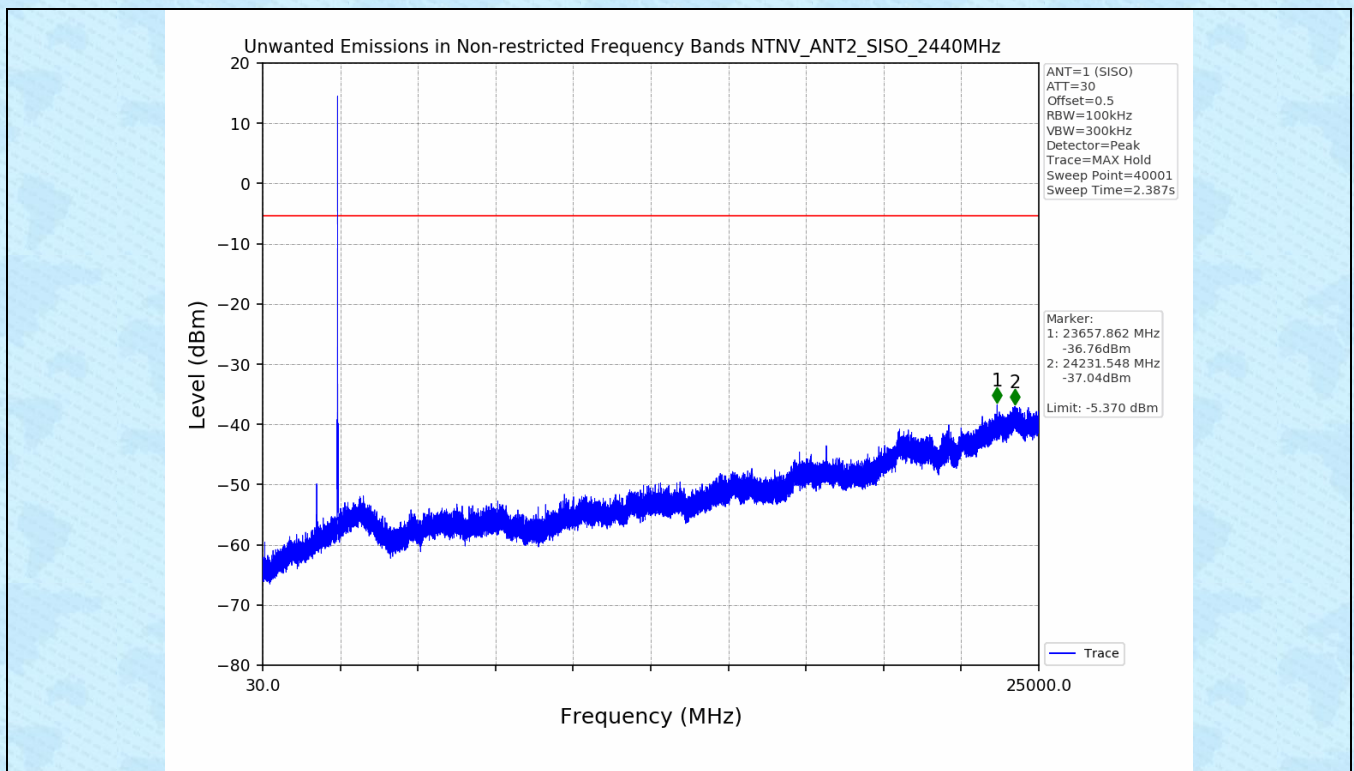
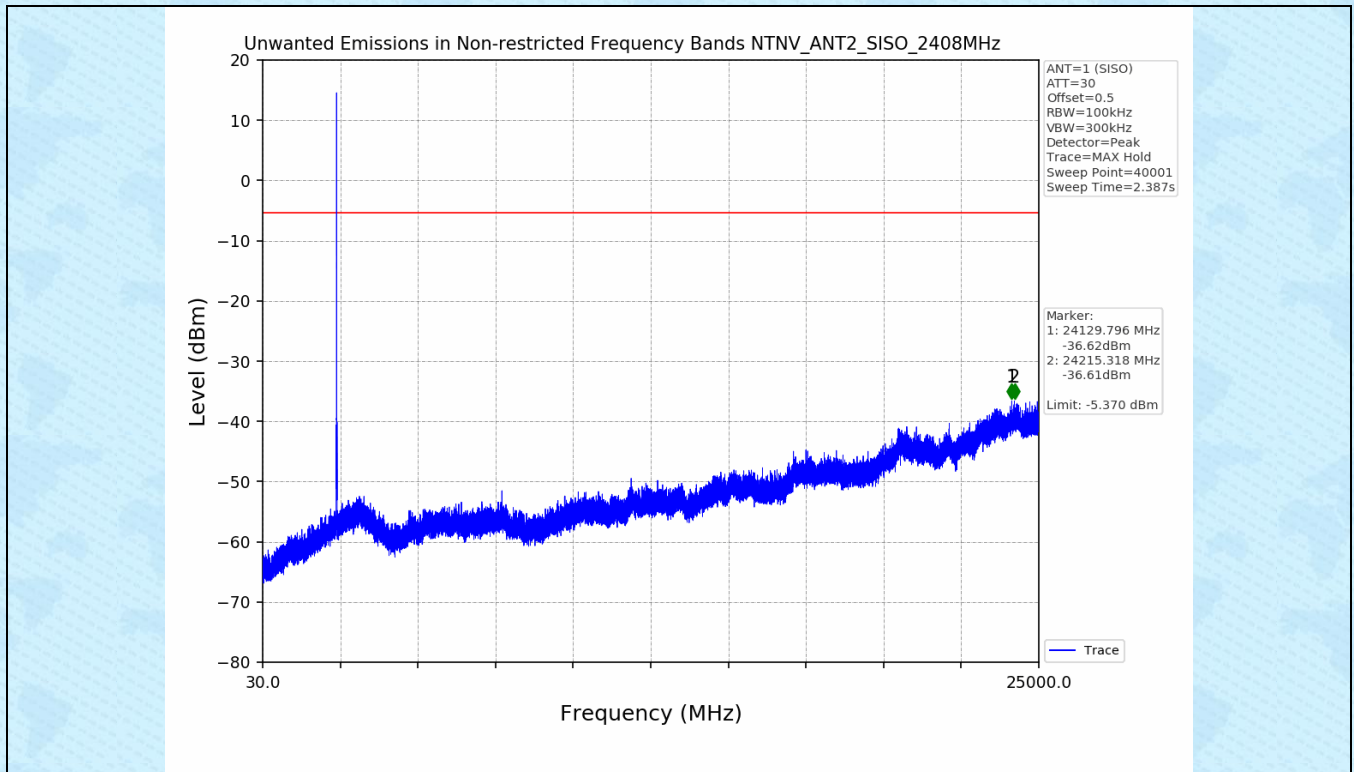


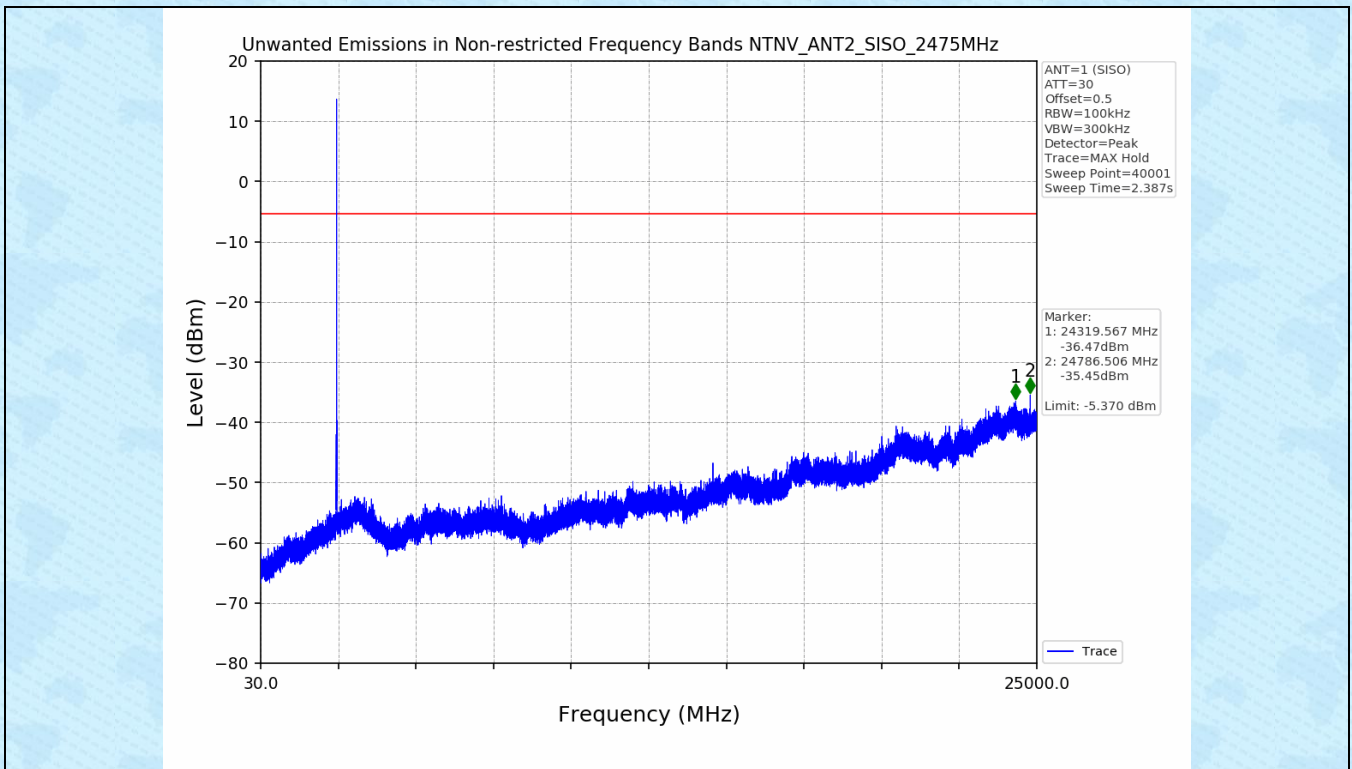
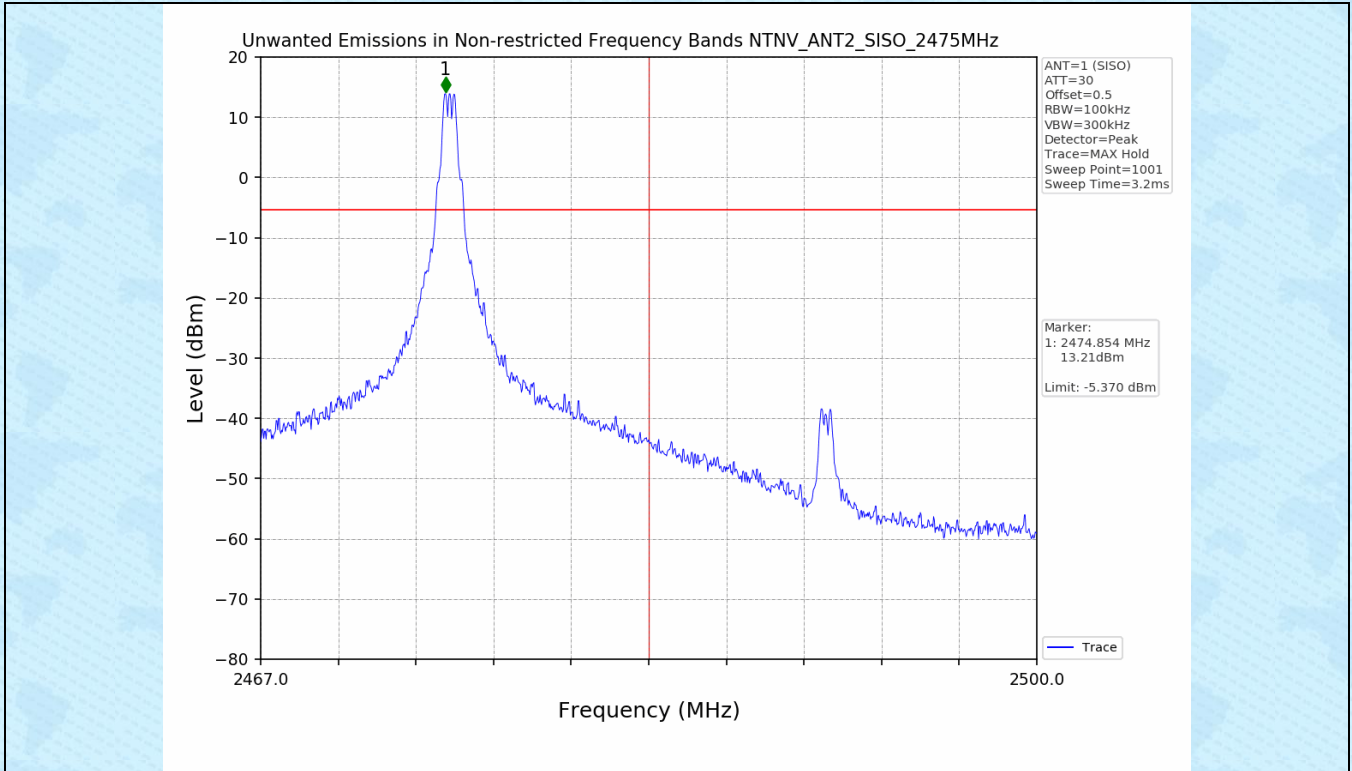


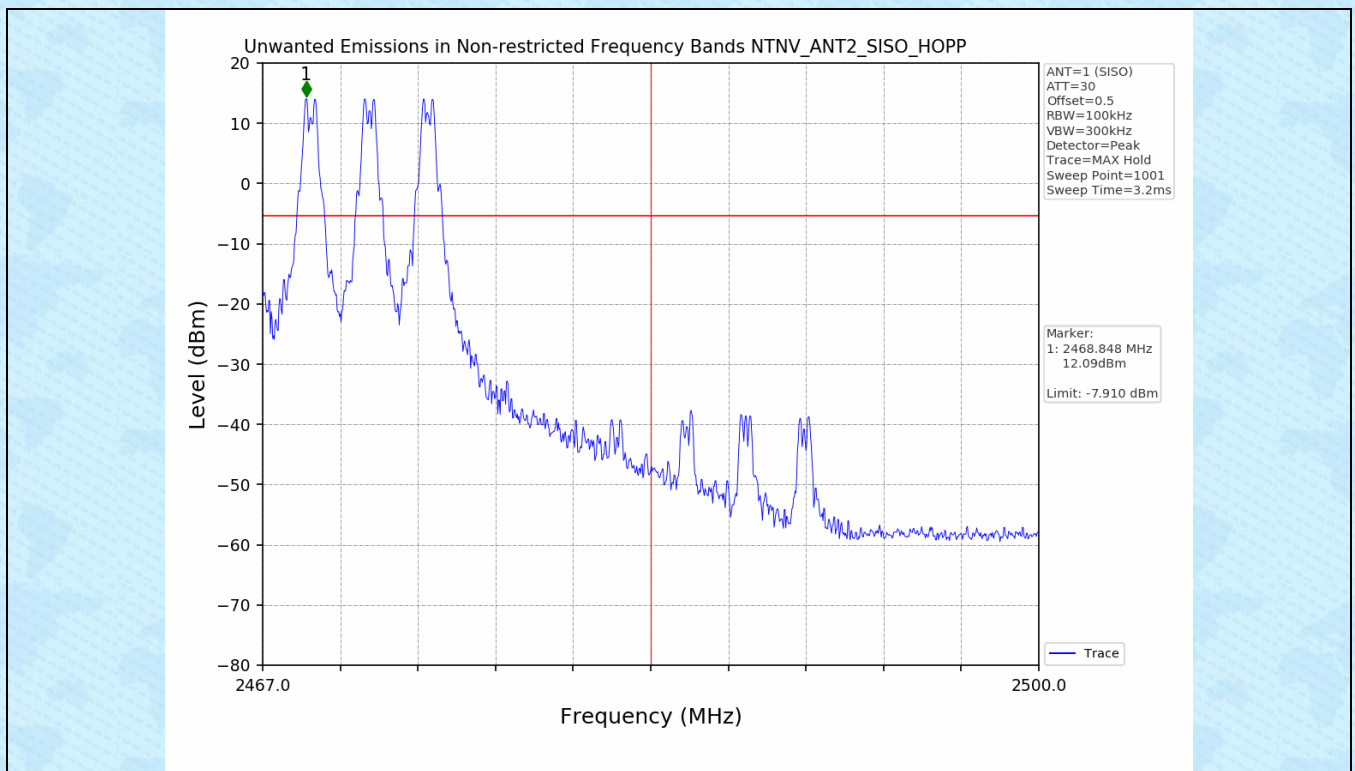
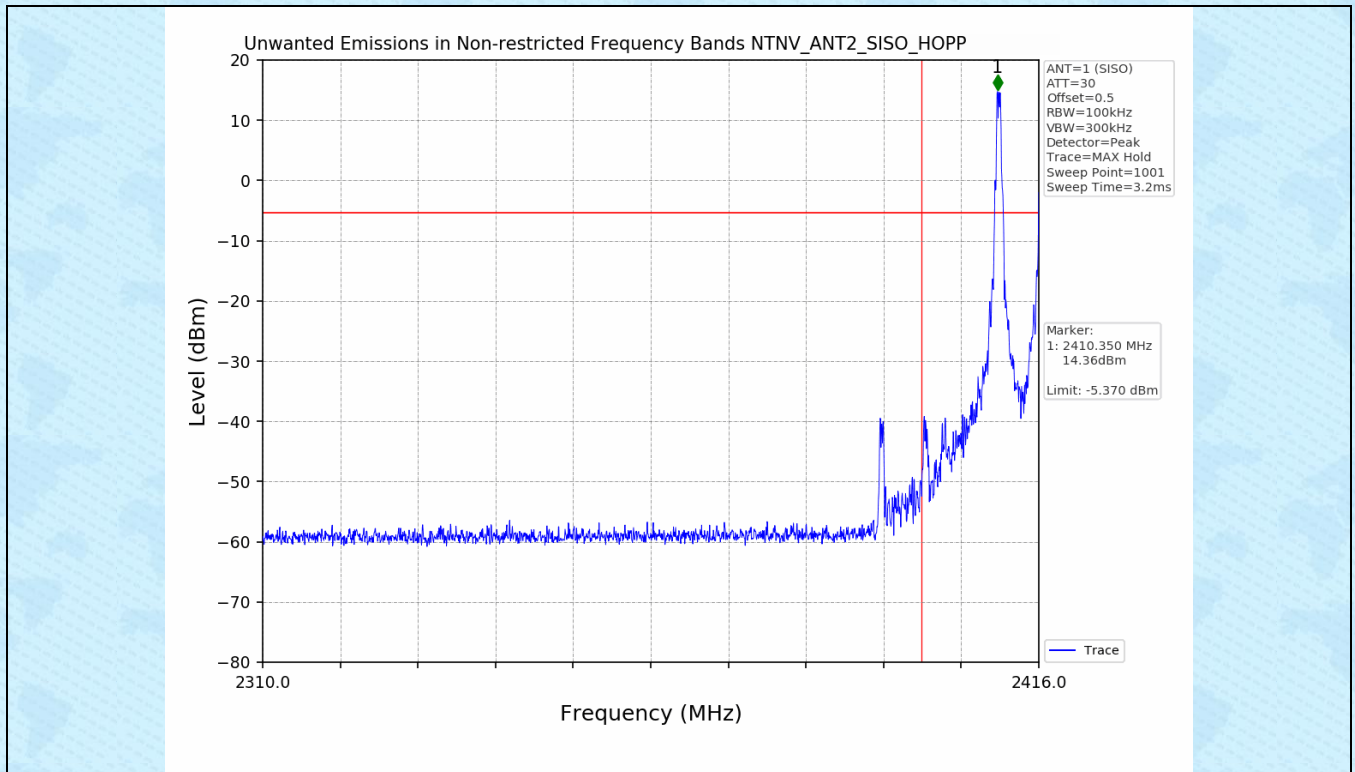


ANT2









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