

Appendix for 15.247

1. Bandwidth

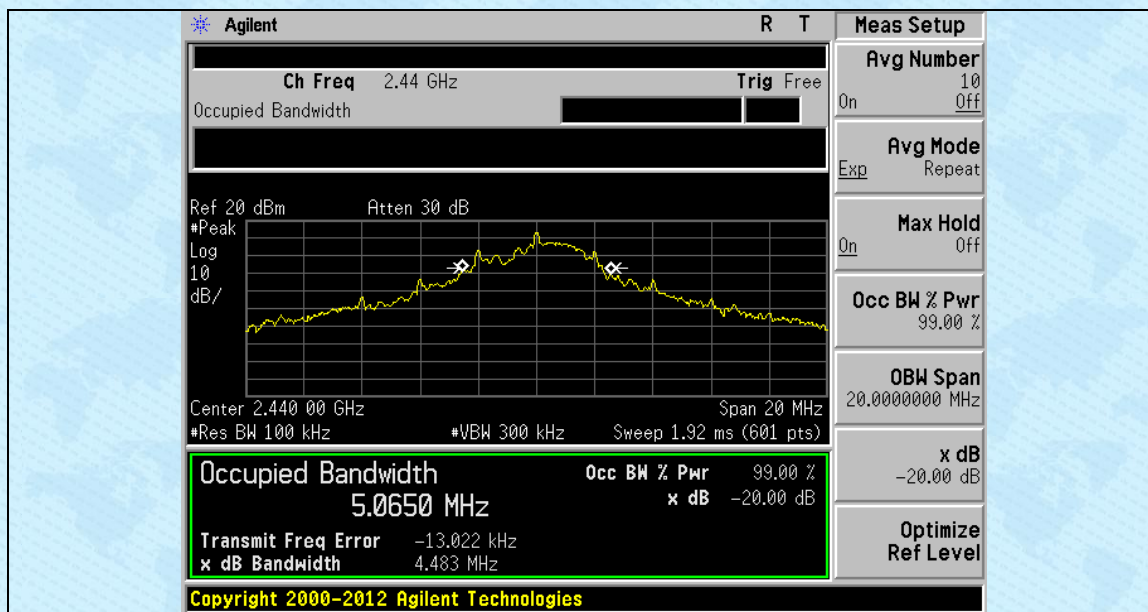
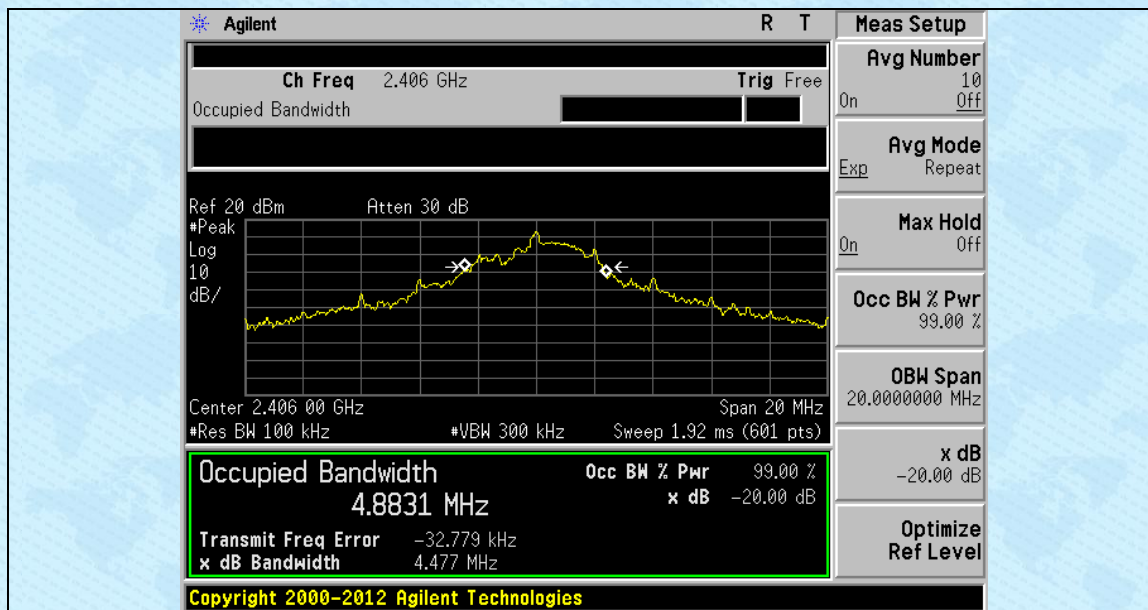
1.1 Test Result

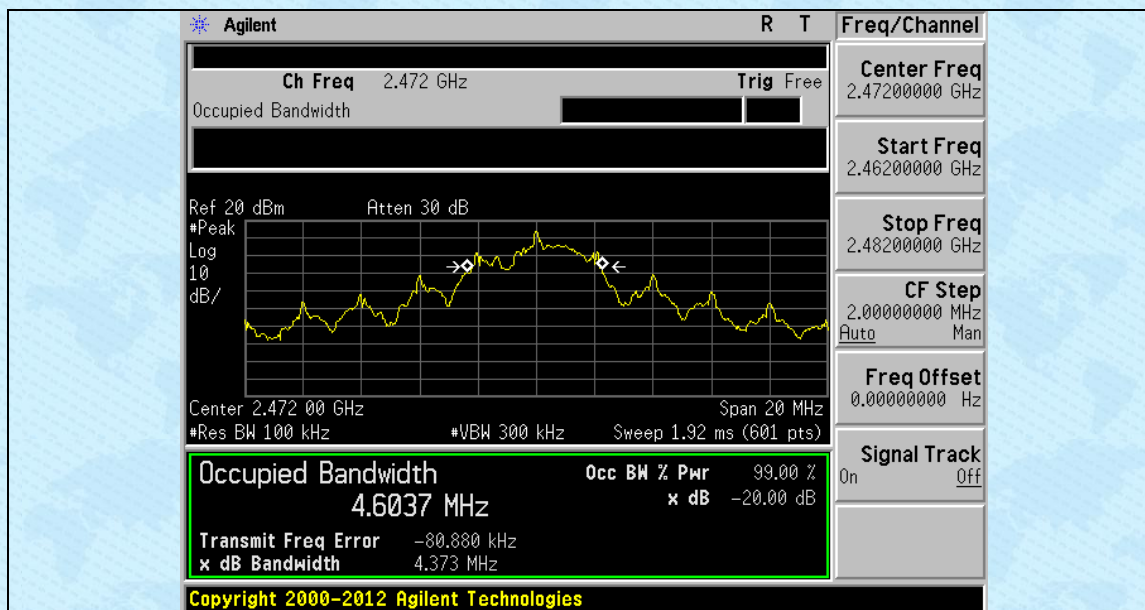
Test Mode	Frequency (MHz)	TX Type	ANT No.	20dB Bandwidth	Verdict
				Test Result (MHz)	
GMSK	2406	SISO	ANT1	4.477	PASS
	2440	SISO	ANT1	4.483	PASS
	2472	SISO	ANT1	4.373	PASS
	2406	SISO	ANT2	4.475	PASS
	2440	SISO	ANT2	4.404	PASS
	2472	SISO	ANT2	4.339	PASS

Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
GMSK	2406	SISO	ANT1	4.883	Only for Report Use
	2440	SISO	ANT1	5.065	Only for Report Use
	2472	SISO	ANT1	4.604	Only for Report Use
	2406	SISO	ANT2	4.855	Only for Report Use
	2440	SISO	ANT2	5.027	Only for Report Use
	2472	SISO	ANT2	4.559	Only for Report Use

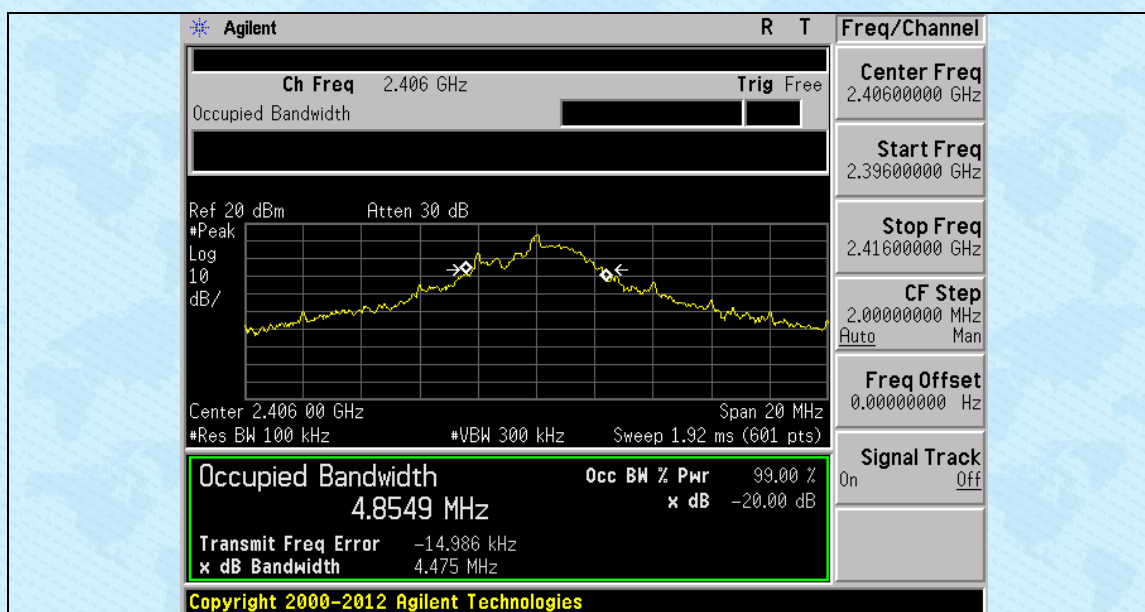
1.2 Test Graph - 20dB Bandwidth

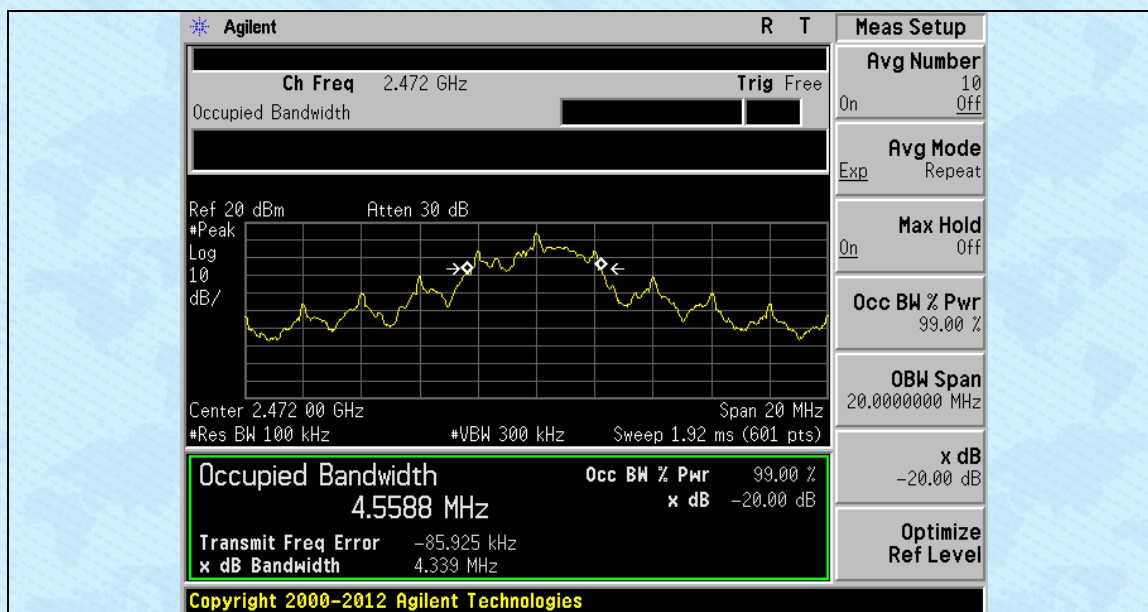
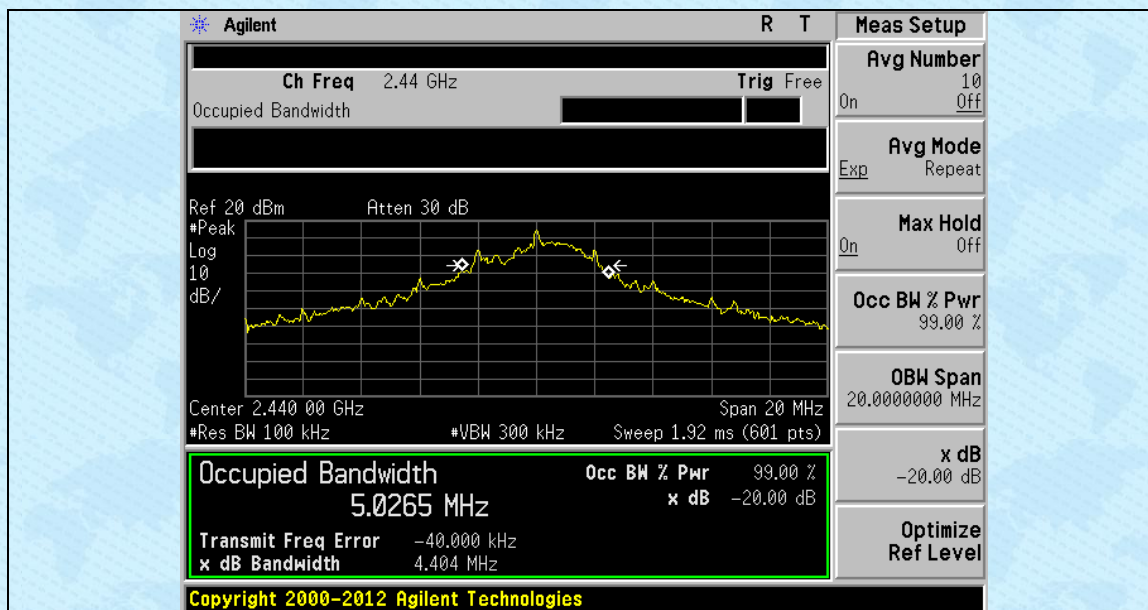
ANT1:





ANT2:





2. Maximum Conducted Output Power

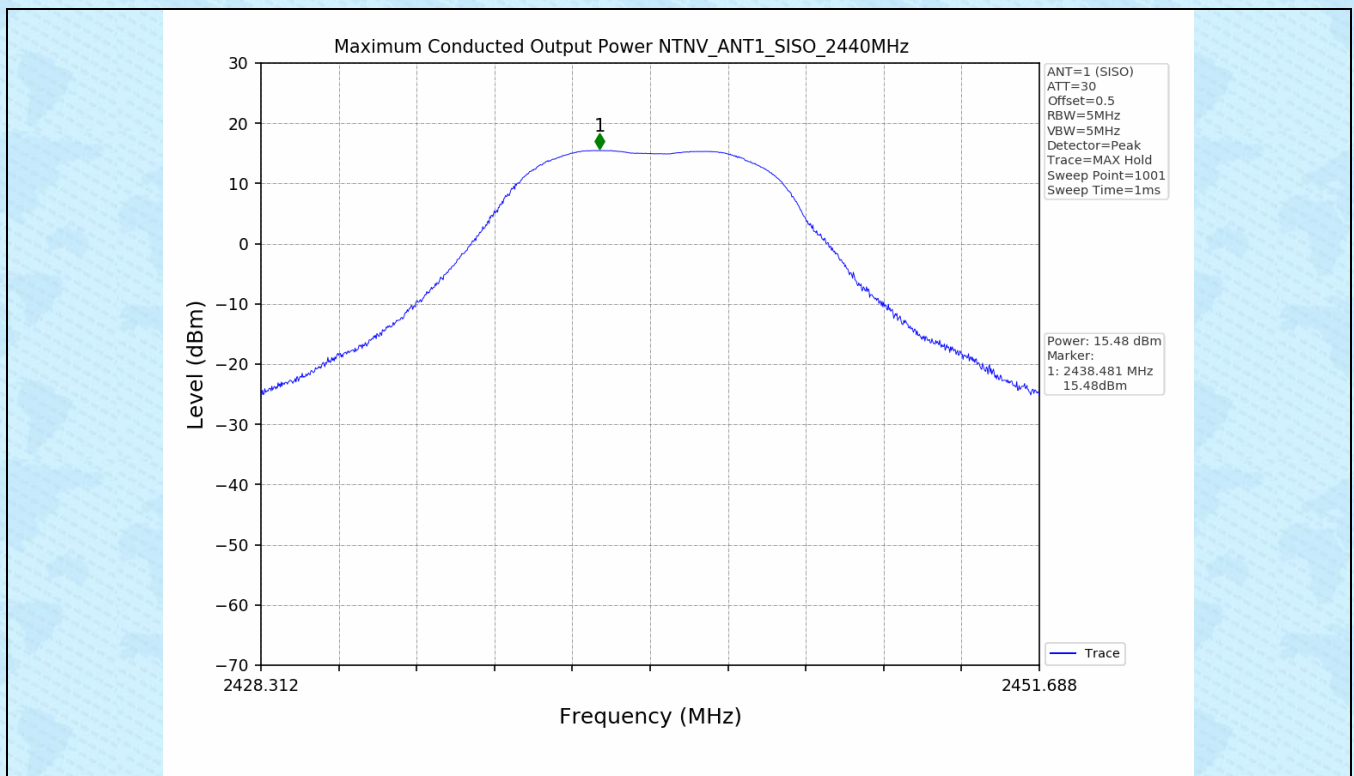
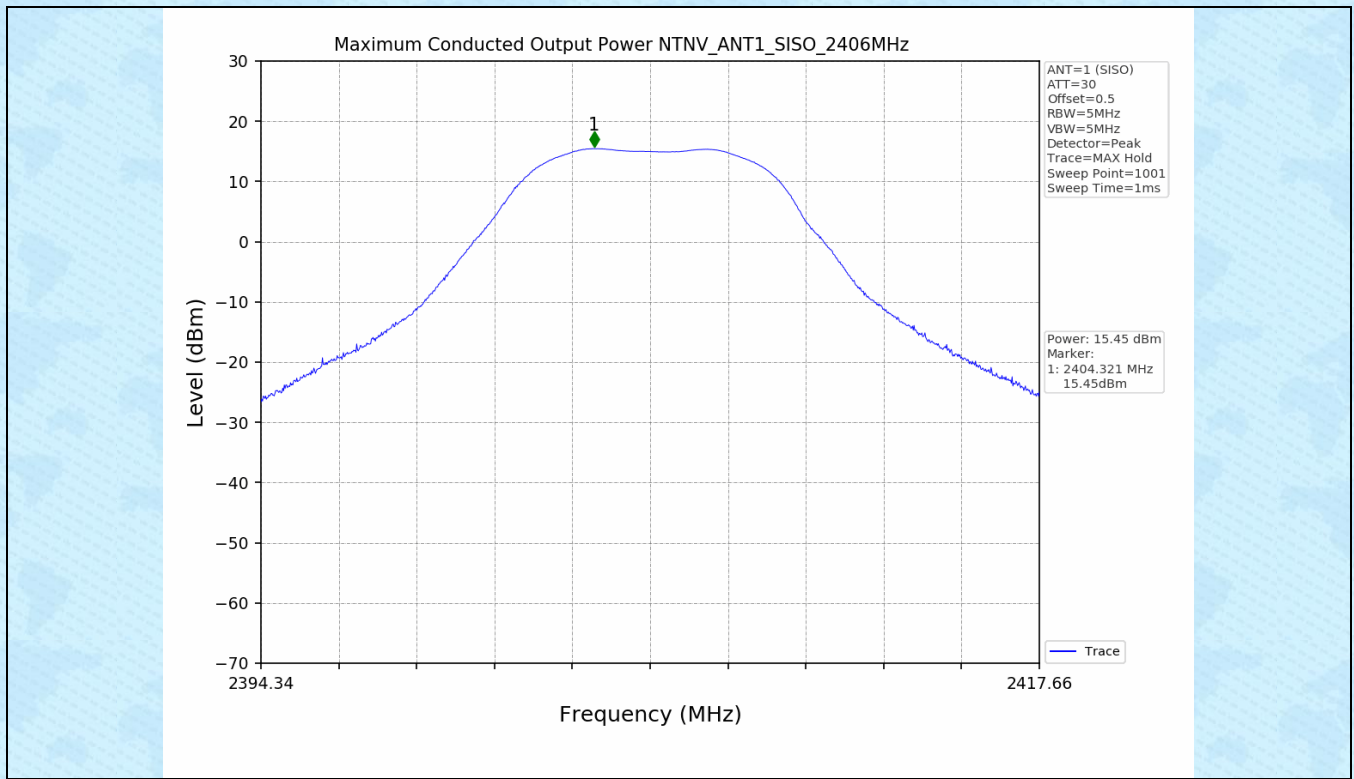
2.1 Test Result

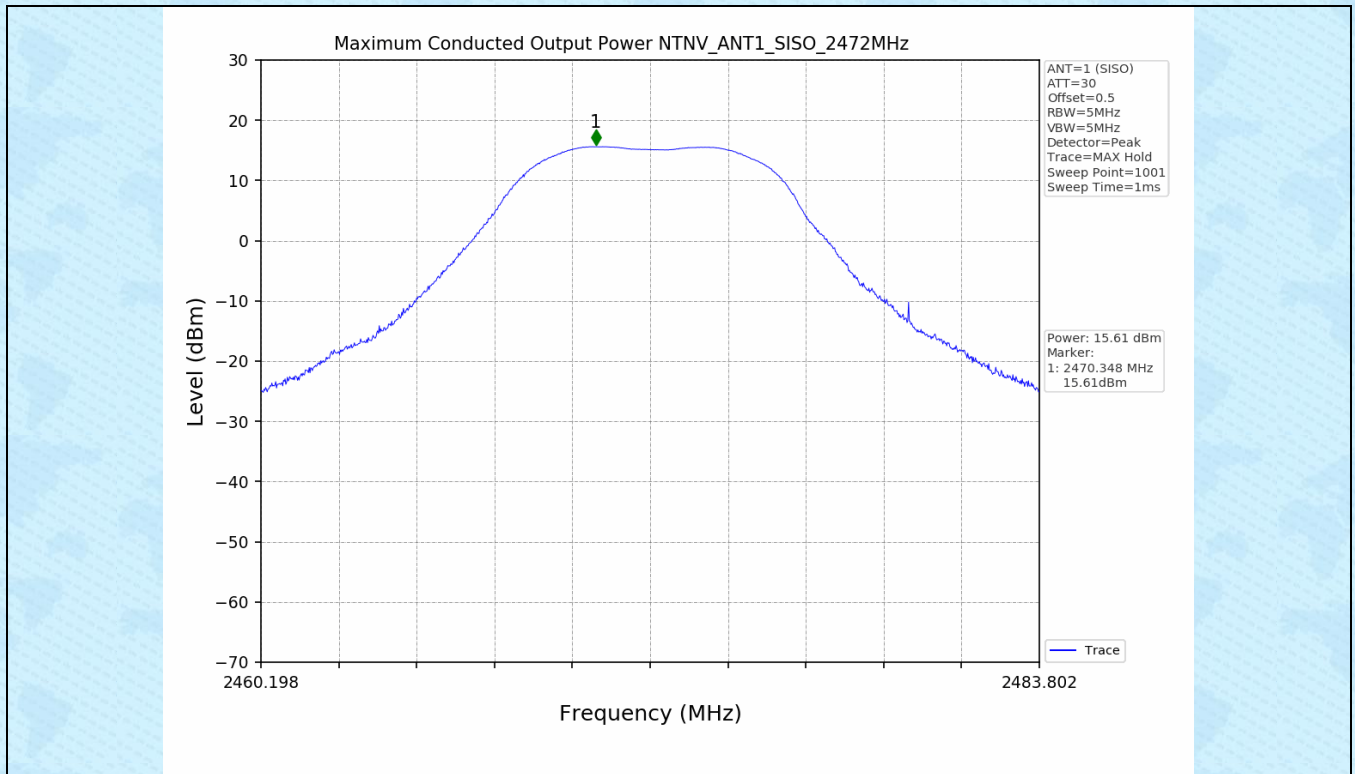
Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 1		
GMSK	2406	SISO	15.45	20.97	PASS
	2440	SISO	15.48	20.97	PASS
	2472	SISO	15.61	20.97	PASS

Test Mode	Frequency (MHz)	Tx Type	Measured Peak Output Power (dBm)	Limits (dBm)	Verdict
			Ant 2		
GMSK	2406	SISO	15.65	20.97	PASS
	2440	SISO	15.97	20.97	PASS
	2472	SISO	15.71	20.97	PASS

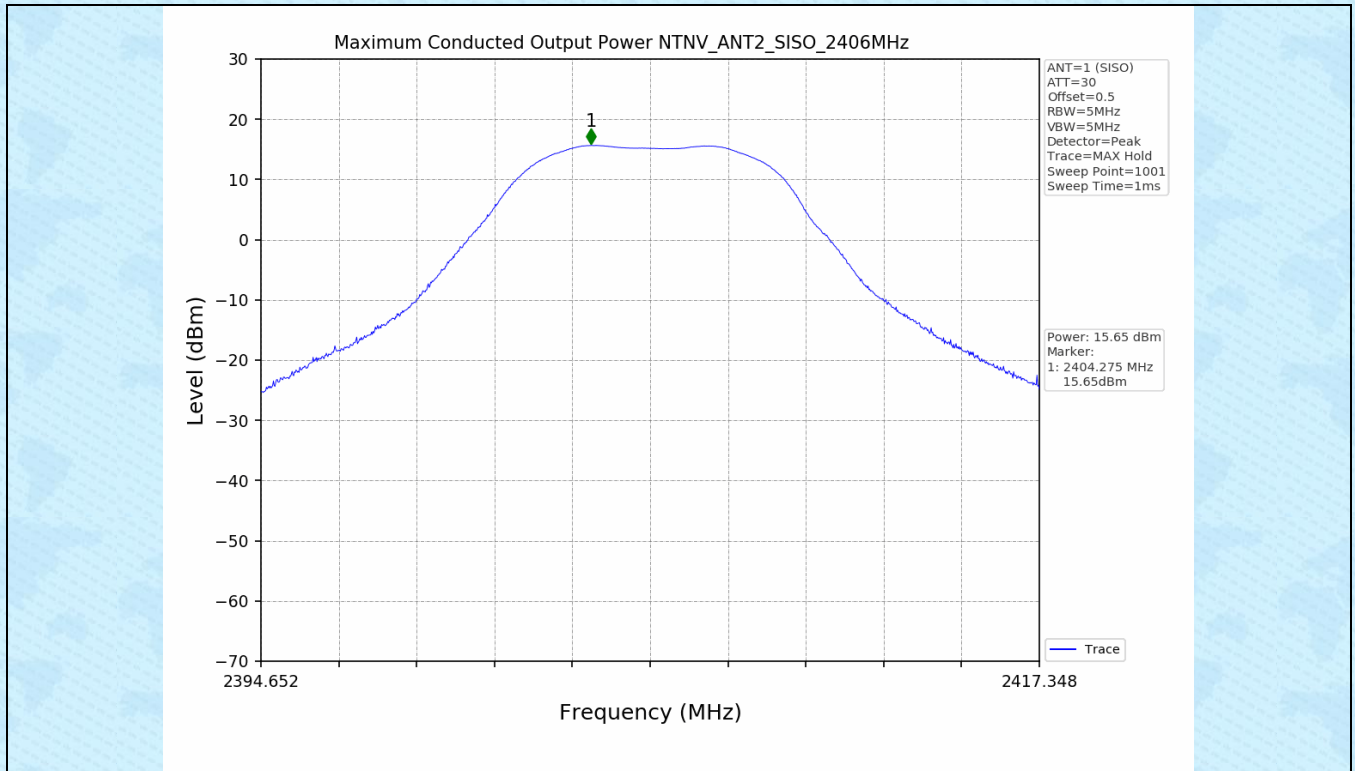
2.2 Test Graph

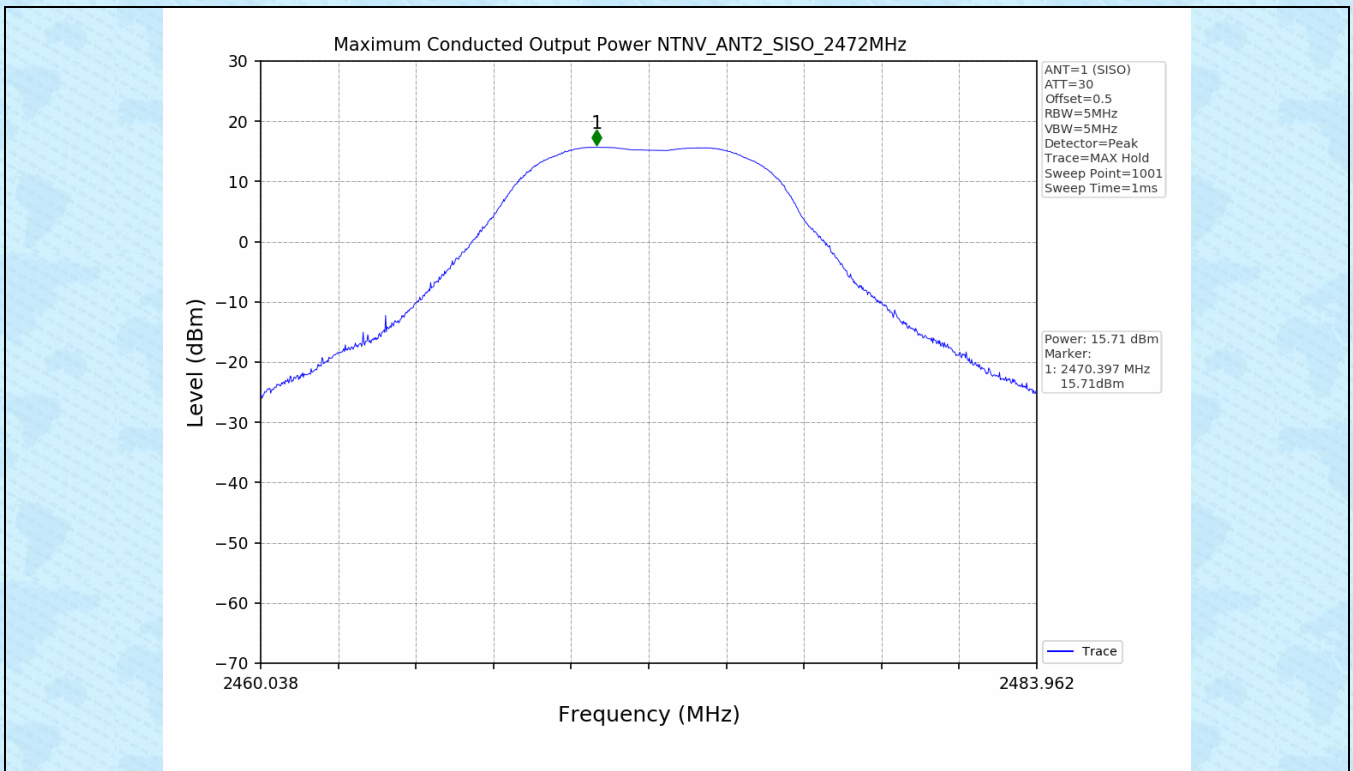
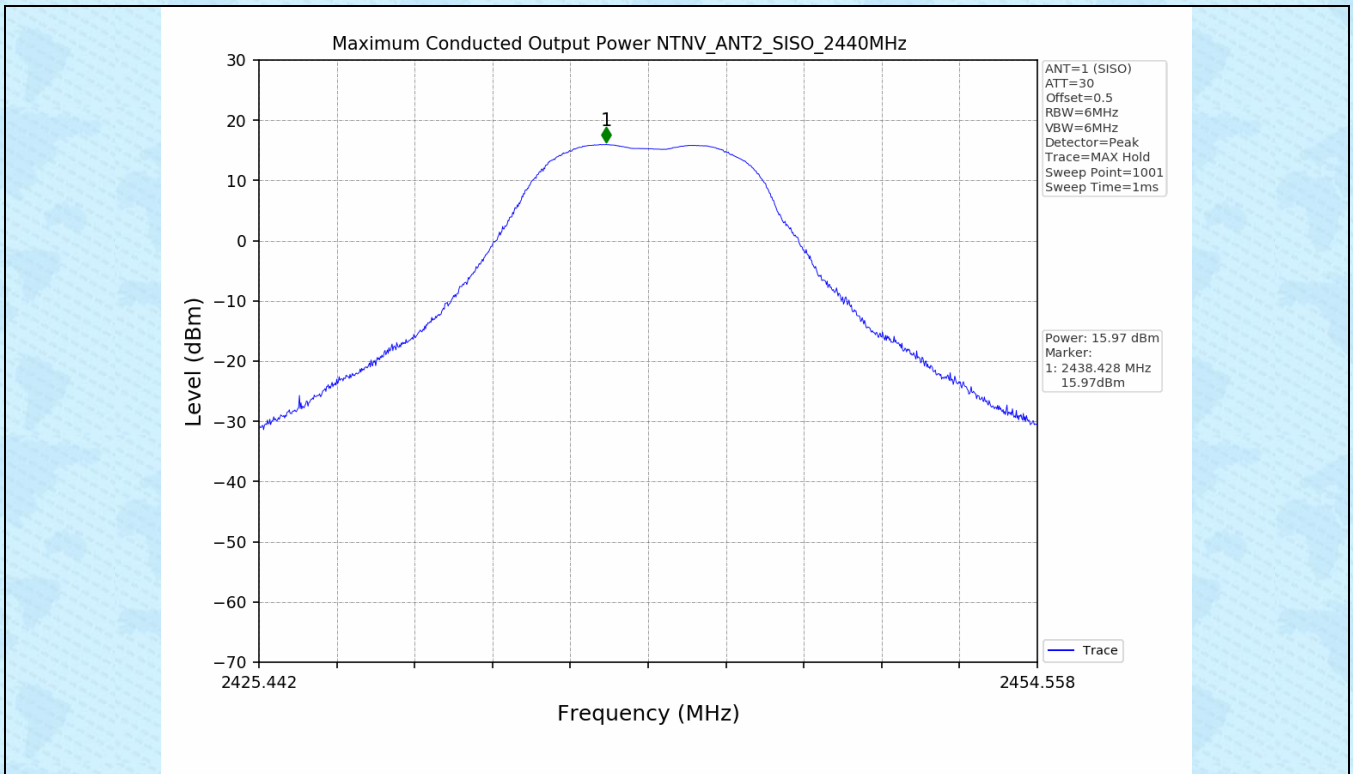
ANT1:





ANT2:





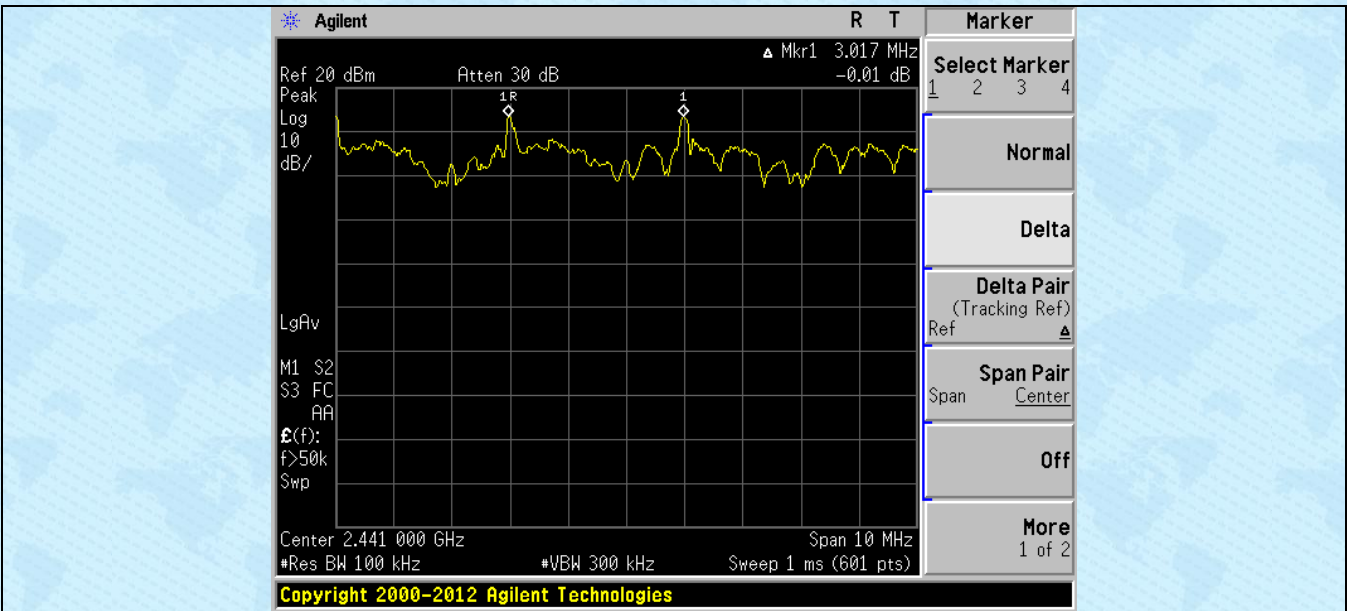
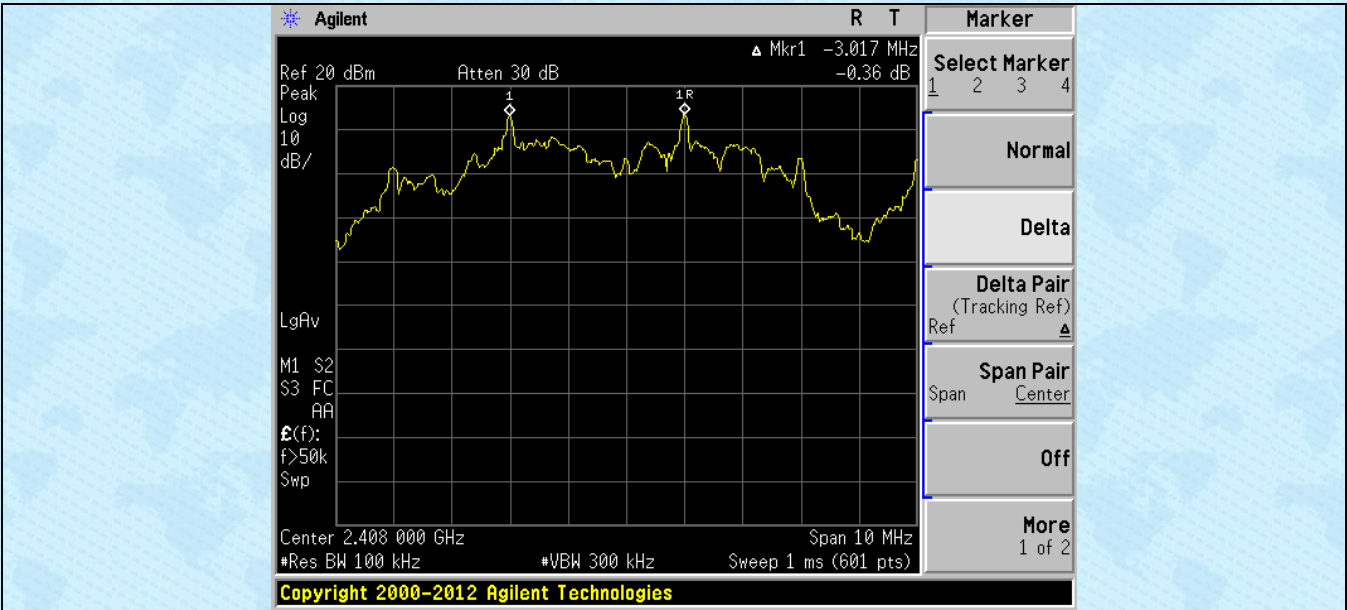
3. Carrier frequency separation

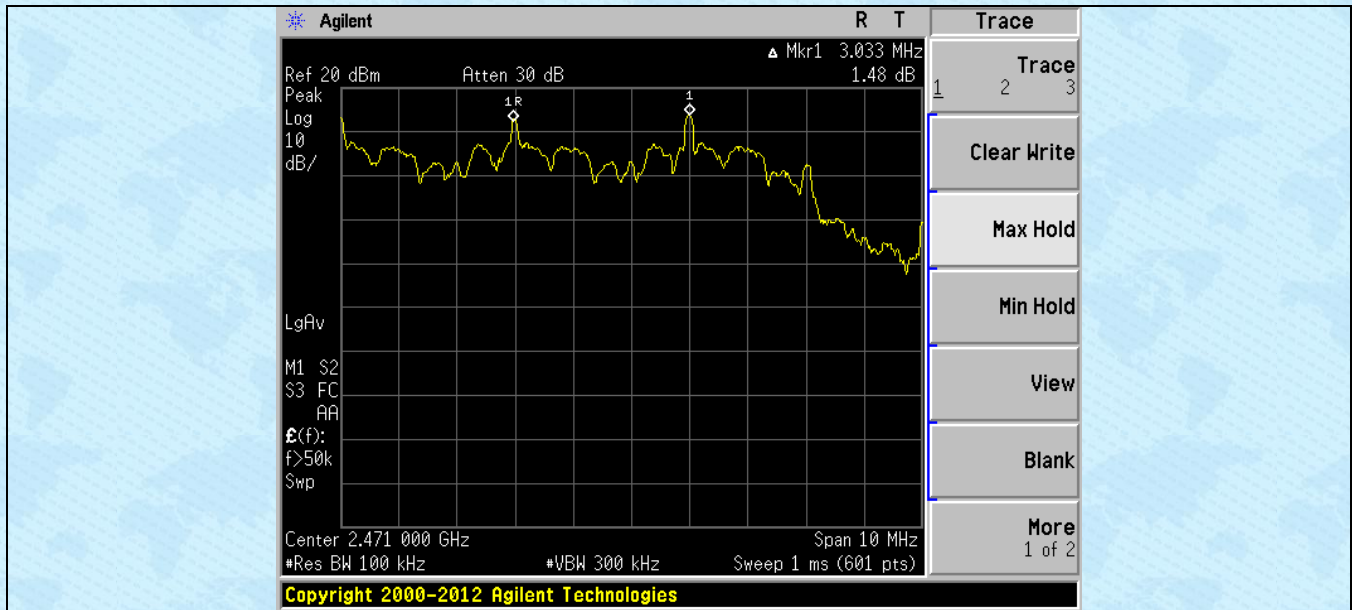
3.1 Test Result

ANT No.	Test channel	Carrier Frequencies Separation (kHz)	Limit (kHz)	Result
1	Lowest	3017	2985	Pass
	Middle	3017	2989	Pass
	Highest	3033	2915	Pass
2	Lowest	3000	2983	Pass
	Middle	3017	2936	Pass
	Highest	3033	2893	Pass

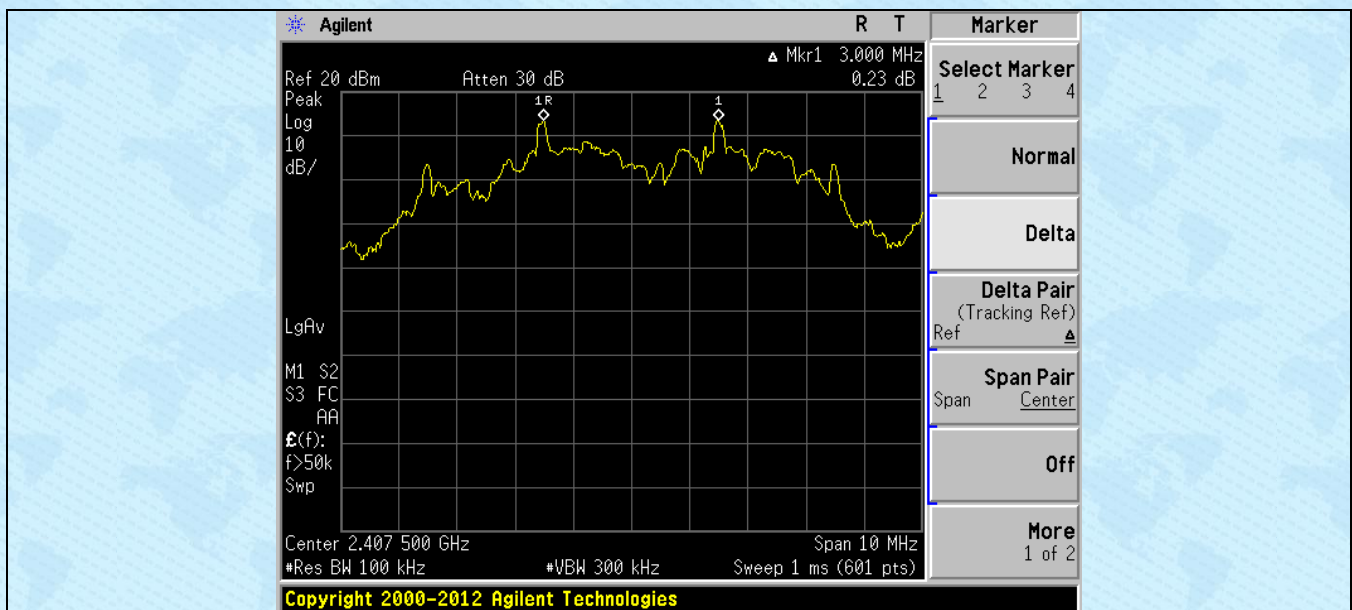
3.2 Test Graph

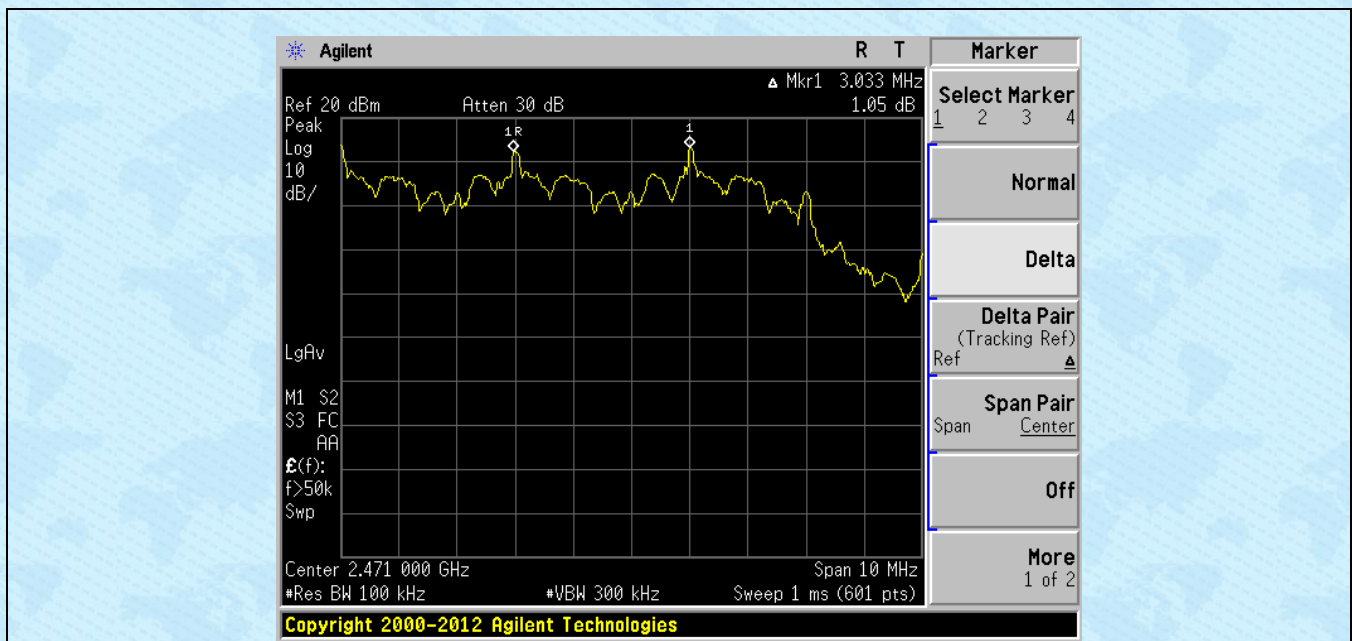
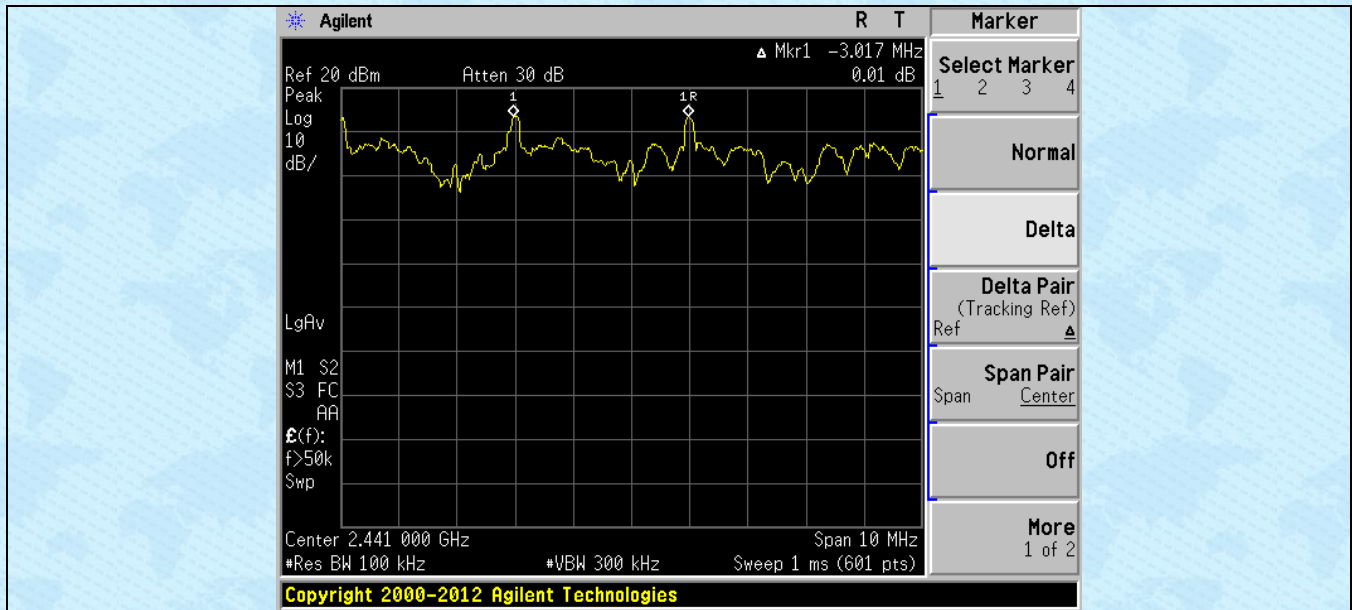
ANT1:





ANT2:





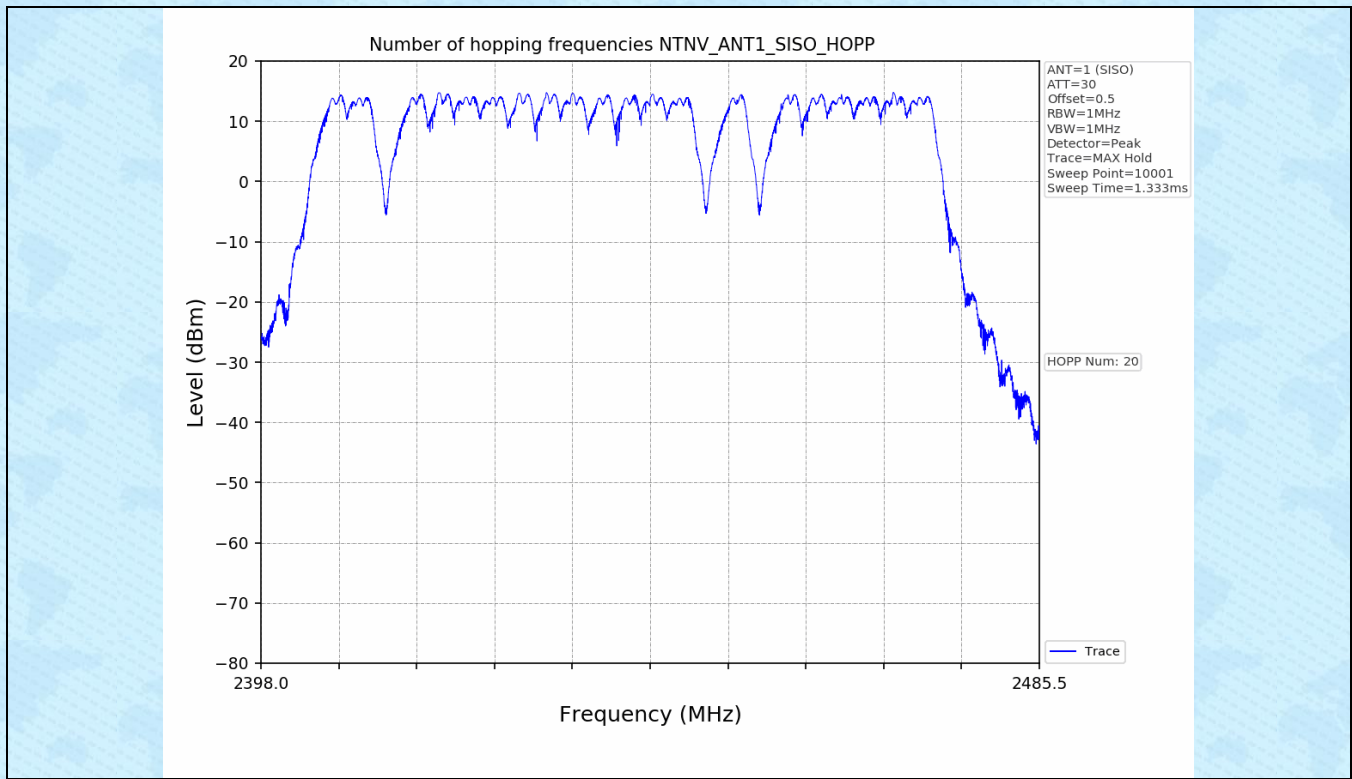
4. Number of hopping frequencies

4.1 Test Result

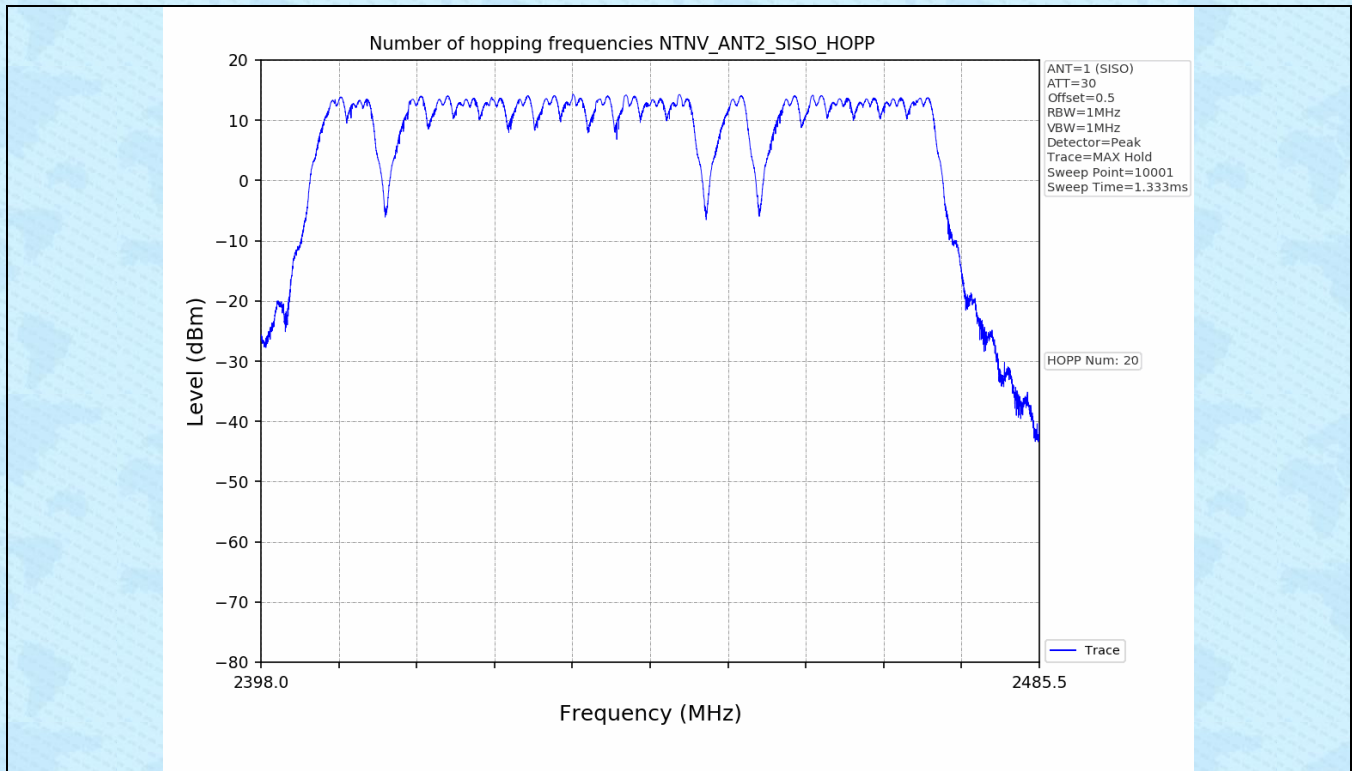
Test Mode	TX Type	ANT No.	Num of Hopping Frequencies	Limits	Verdict
FHSS	SISO	ANT1	20	≥15	PASS
	SISO	ANT2	20	≥15	PASS

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	4.15	66.40	400	Pass
	Middle	4.05	64.80	400	Pass
	Highest	4.10	65.60	400	Pass
2	Lowest	4.10	65.60	400	Pass
	Middle	4.05	64.80	400	Pass
	Highest	4.15	66.40	400	Pass

The formula as below:

ANT1:

Lowest: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=4.15ms*2*0.4*20=66.40ms

Middle: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=4.05ms*2*0.4*20=64.80ms

Highest: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=4.10ms*2*0.4*20=65.60ms

ANT2

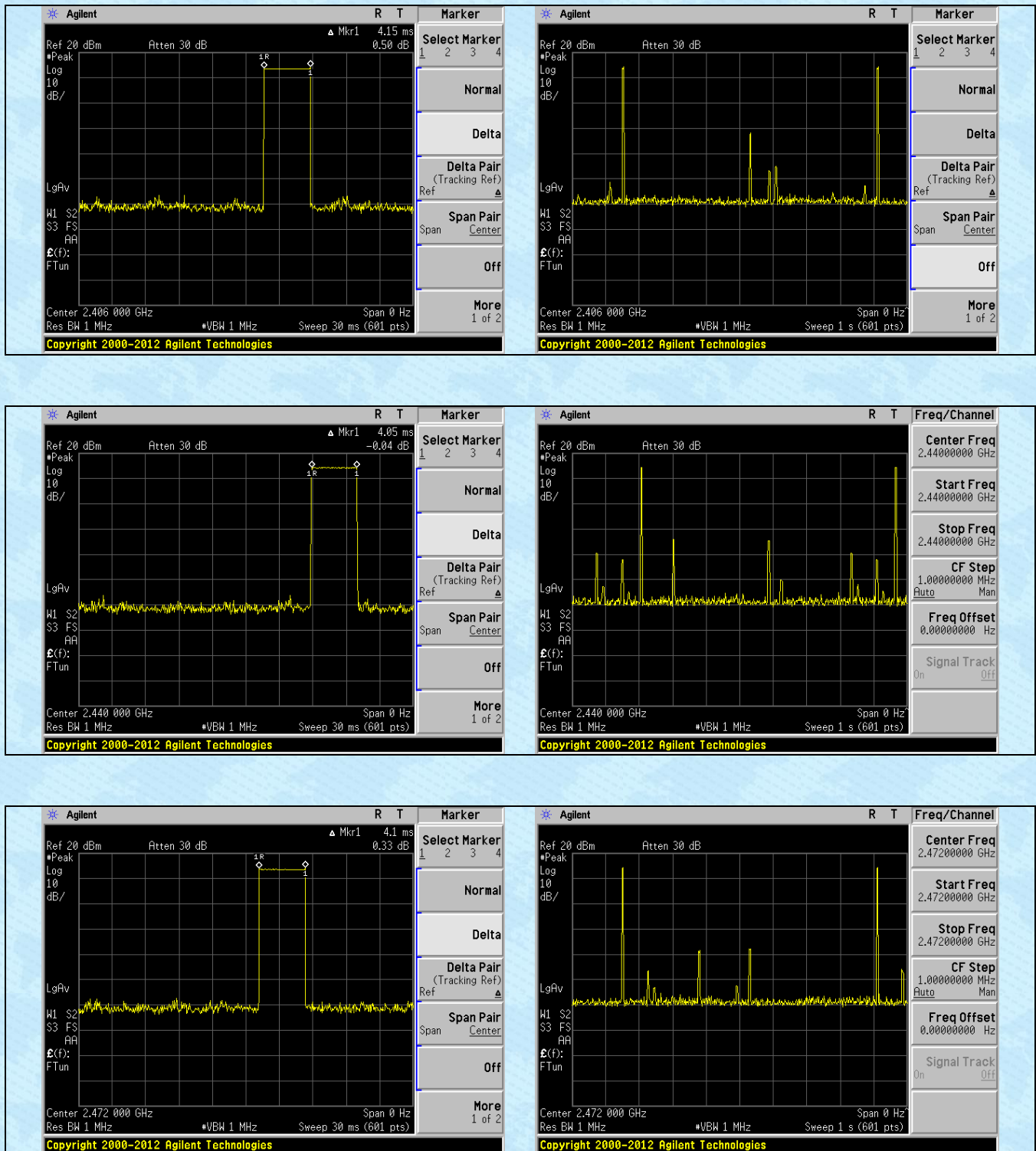
Lowest: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=4.10ms*2*0.4*20=65.60ms

Middle: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=4.05ms*2*0.4*20=64.80ms

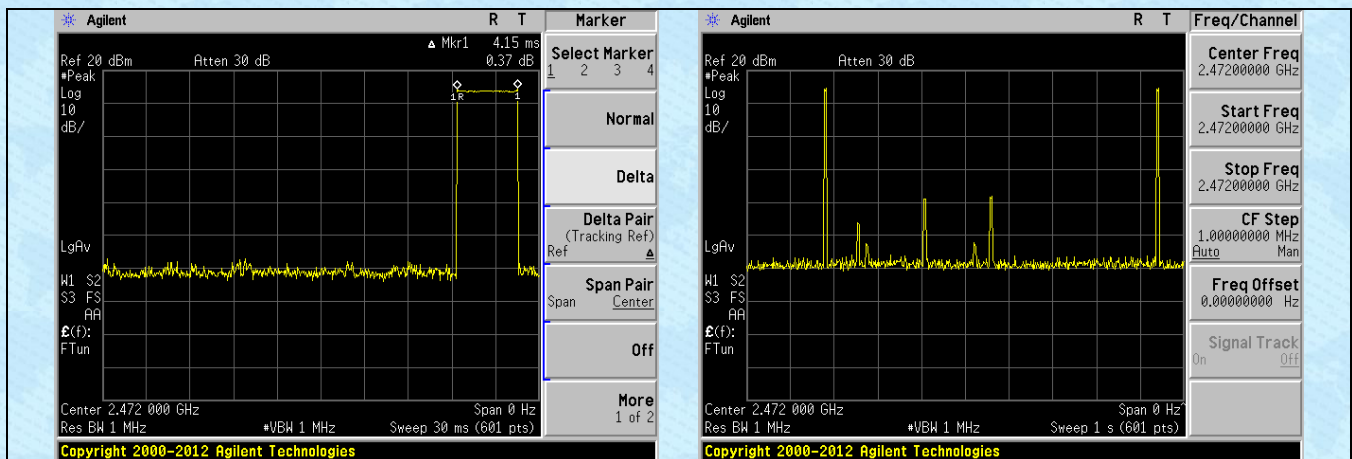
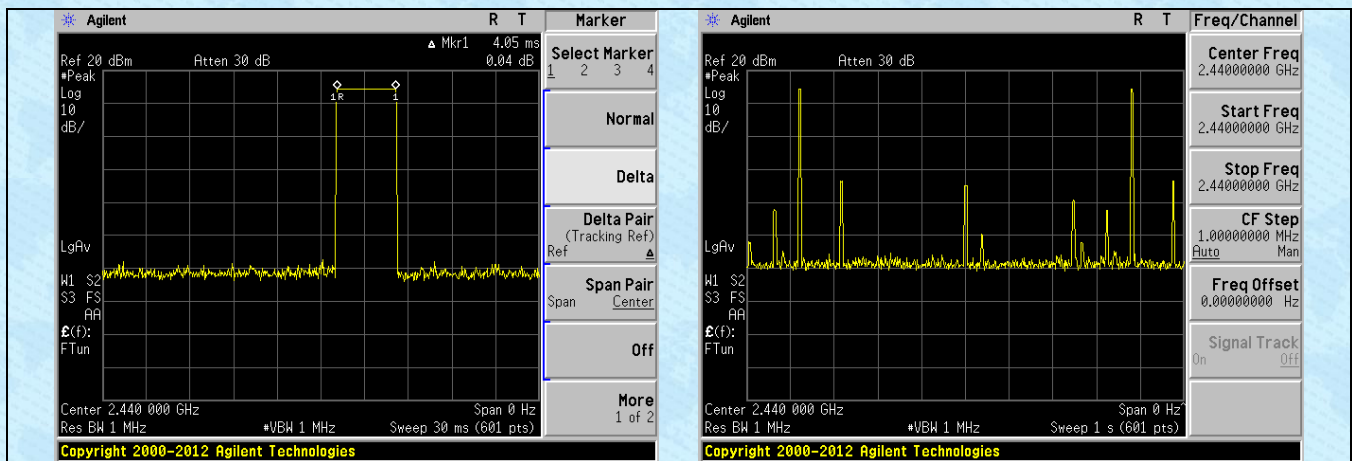
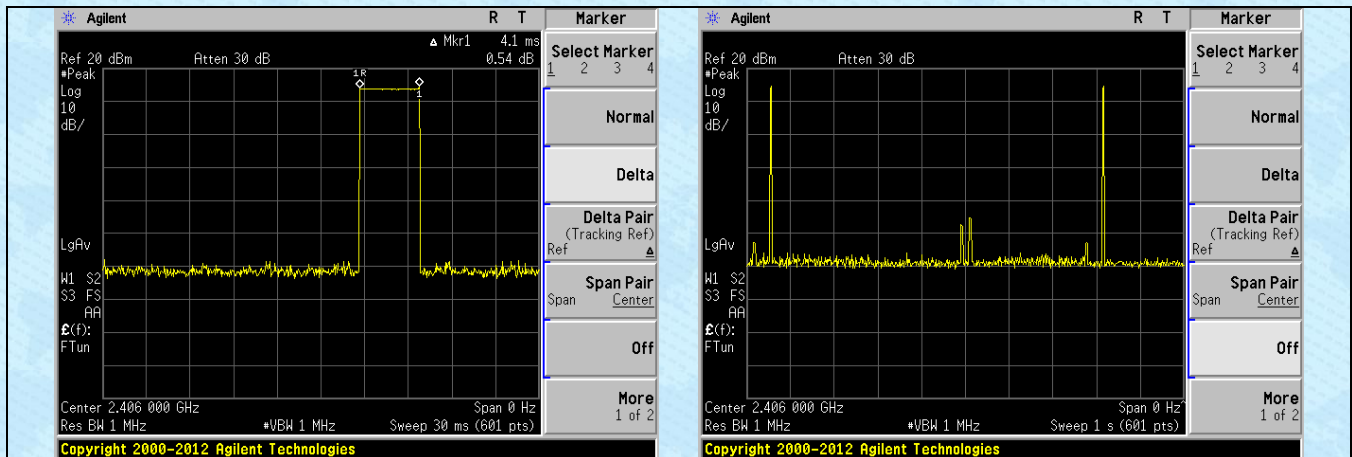
Highest: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=4.15ms*2*0.4*20=66.40ms

5.2 Test Graph

ANT1:



ANT2:



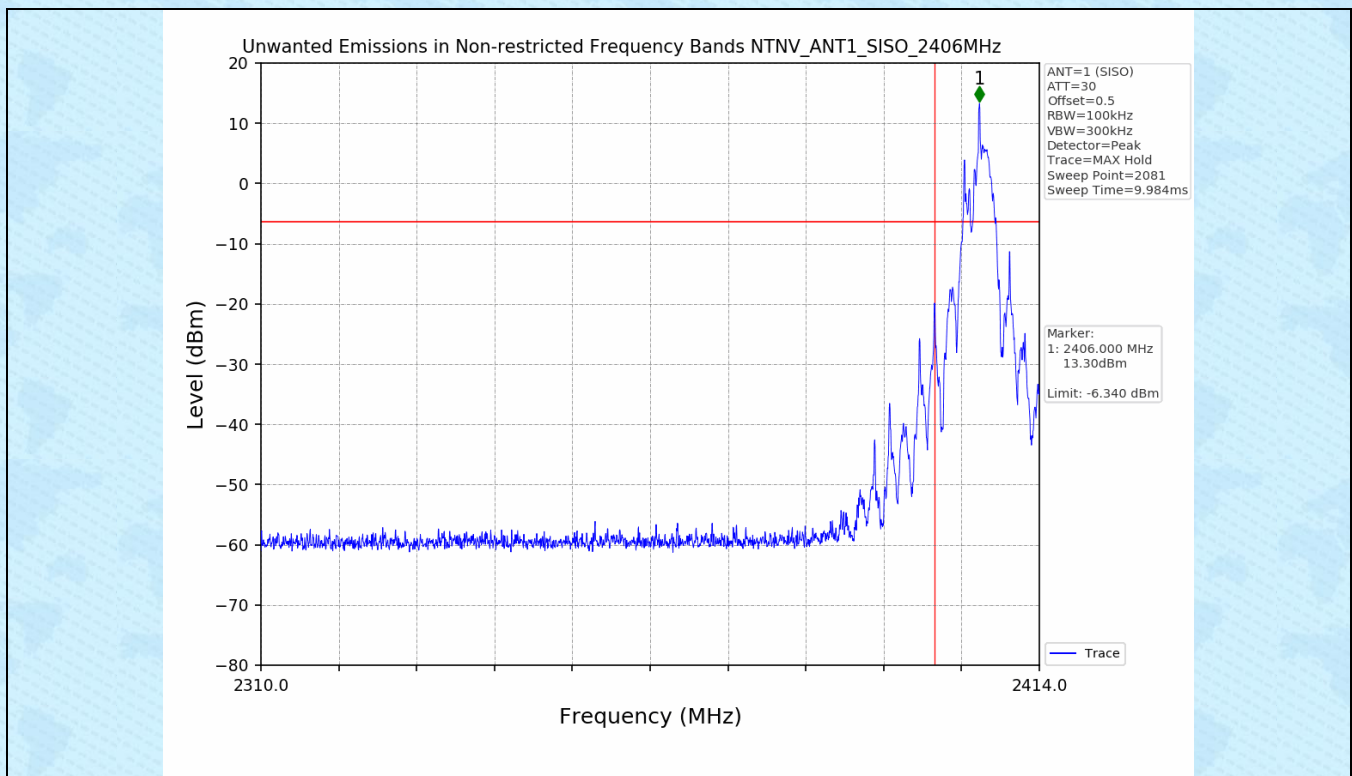
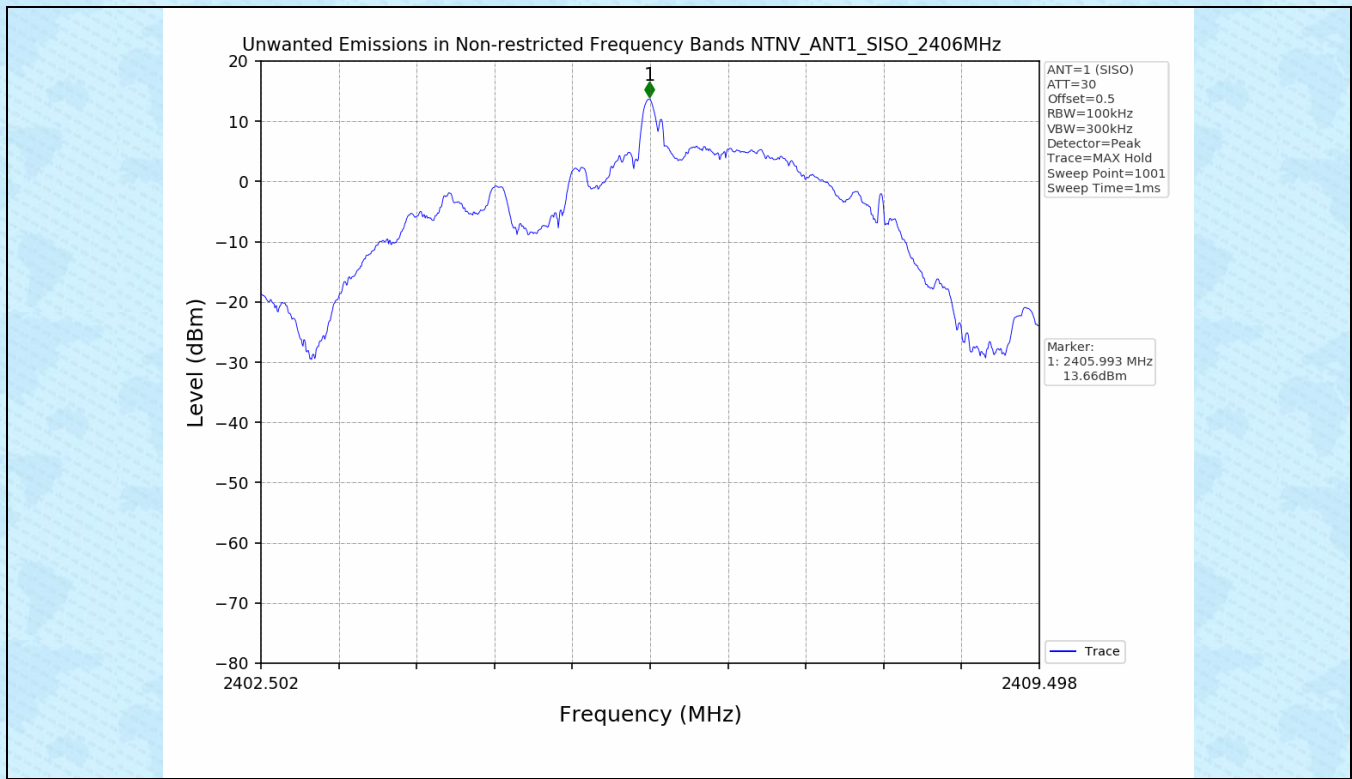
6. Unwanted Emissions in Non-restricted Frequency Bands

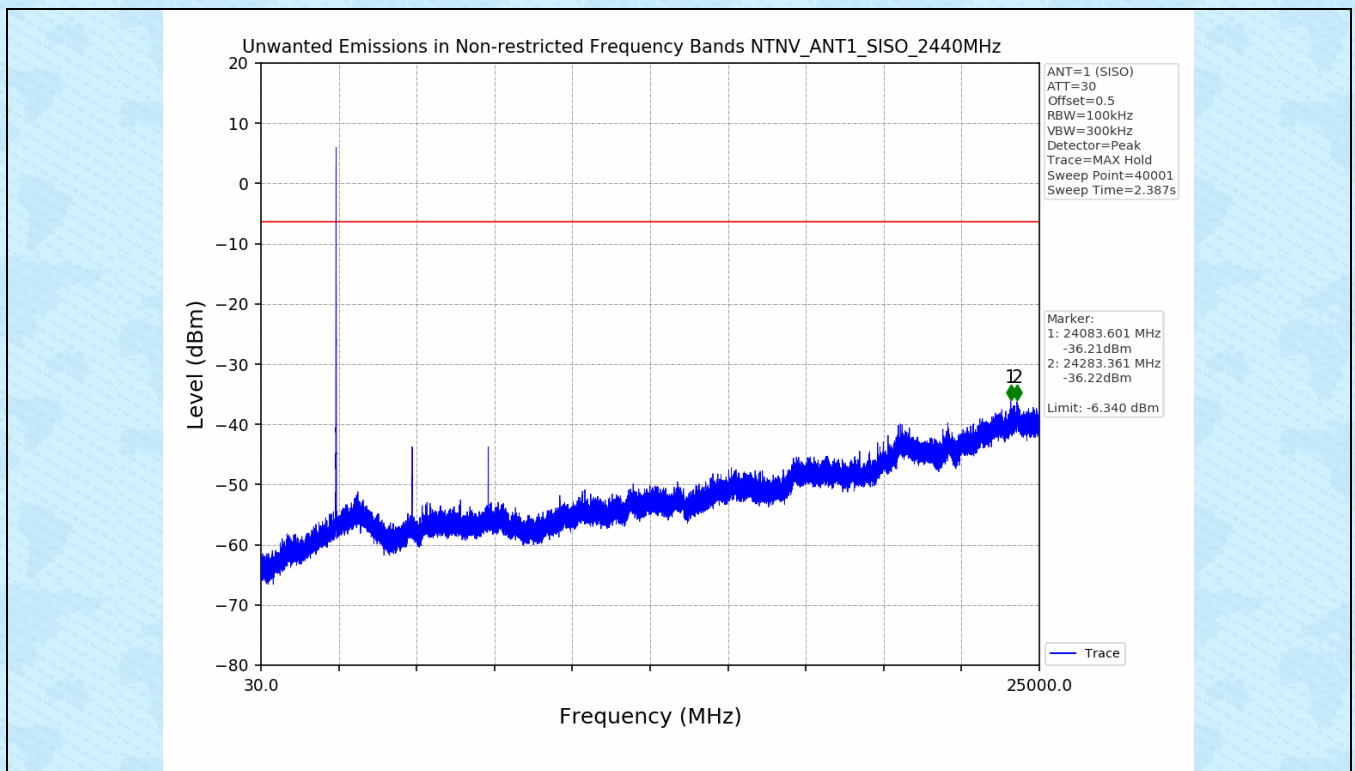
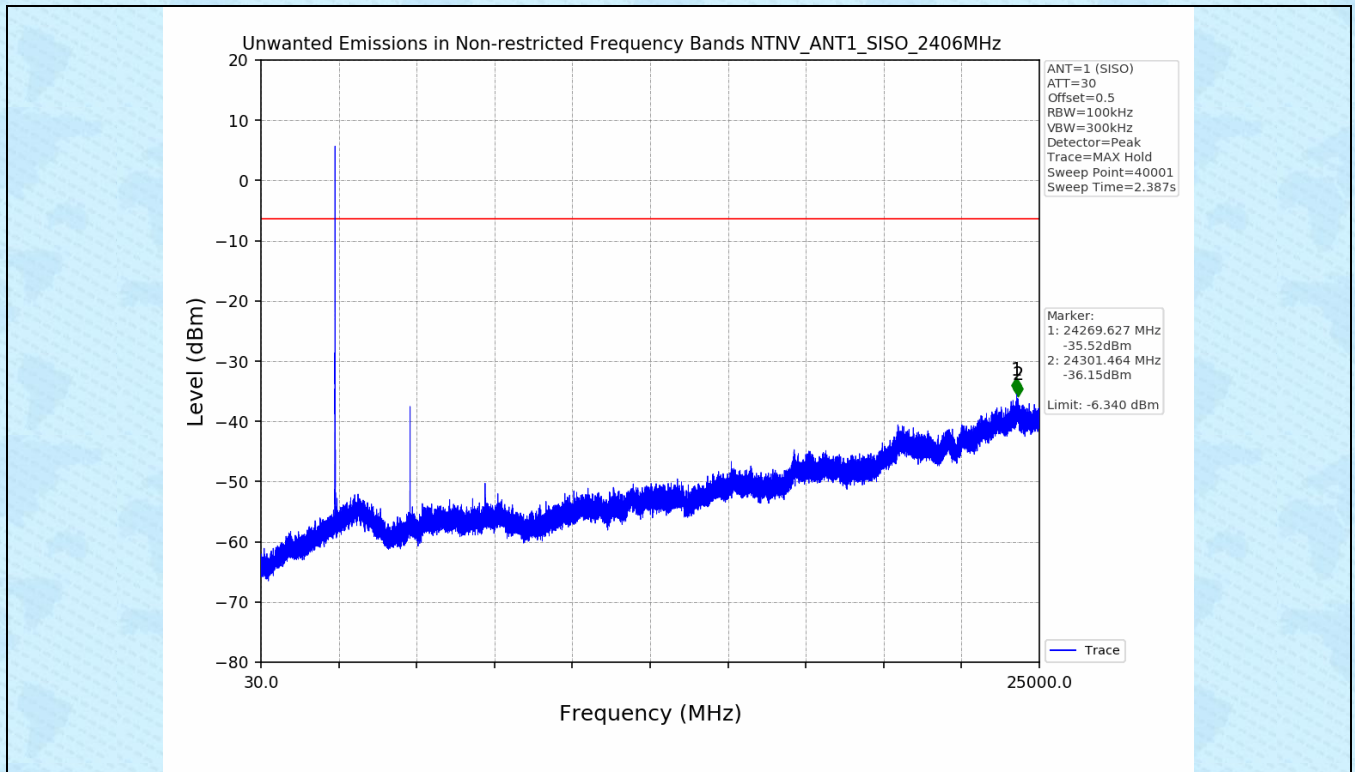
6.1 Test Result

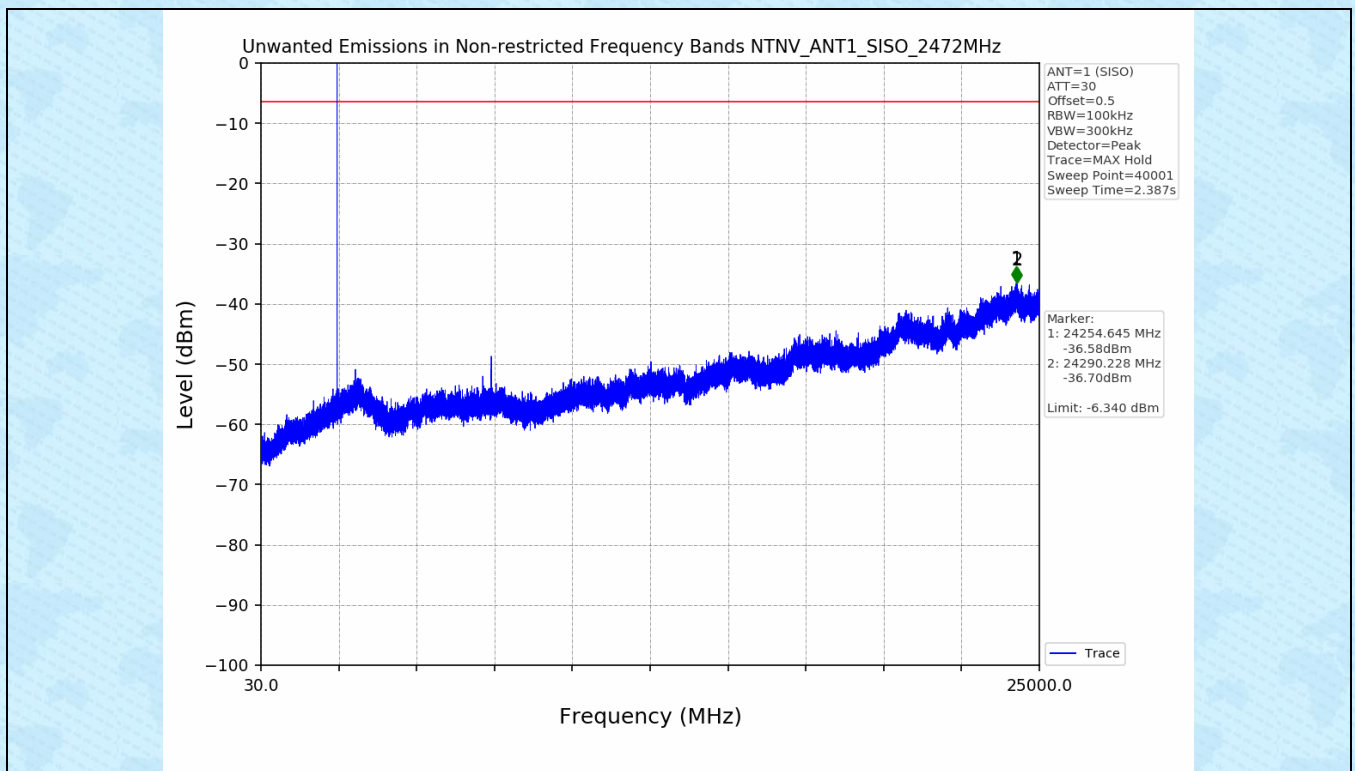
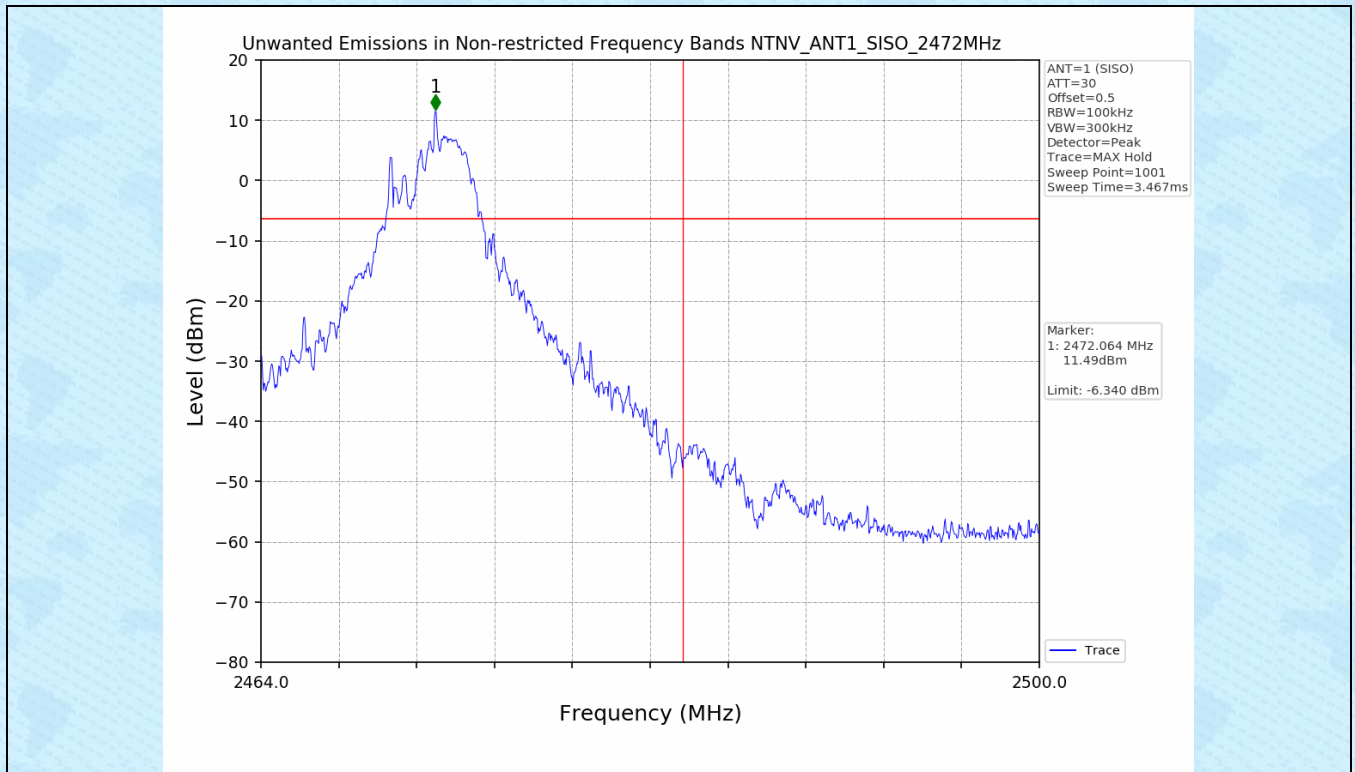
Test Mode	Frequency (MHz)	TX Type	ANT No.	Spurious Conducted Emission (dBm)	Limits (dBm)	Verdict
GMSK	2406	SISO	ANT1	Refer to test graph	-6.34	PASS
	2440	SISO	ANT1	Refer to test graph	-6.34	PASS
	2472	SISO	ANT1	Refer to test graph	-6.34	PASS
	Hopping	SISO	ANT1	Refer to test graph	-6.34	PASS
	2406	SISO	ANT2	Refer to test graph	-6.02	PASS
	2440	SISO	ANT2	Refer to test graph	-6.02	PASS
	2472	SISO	ANT2	Refer to test graph	-6.02	PASS
	Hopping	SISO	ANT2	Refer to test graph	-6.02	PASS

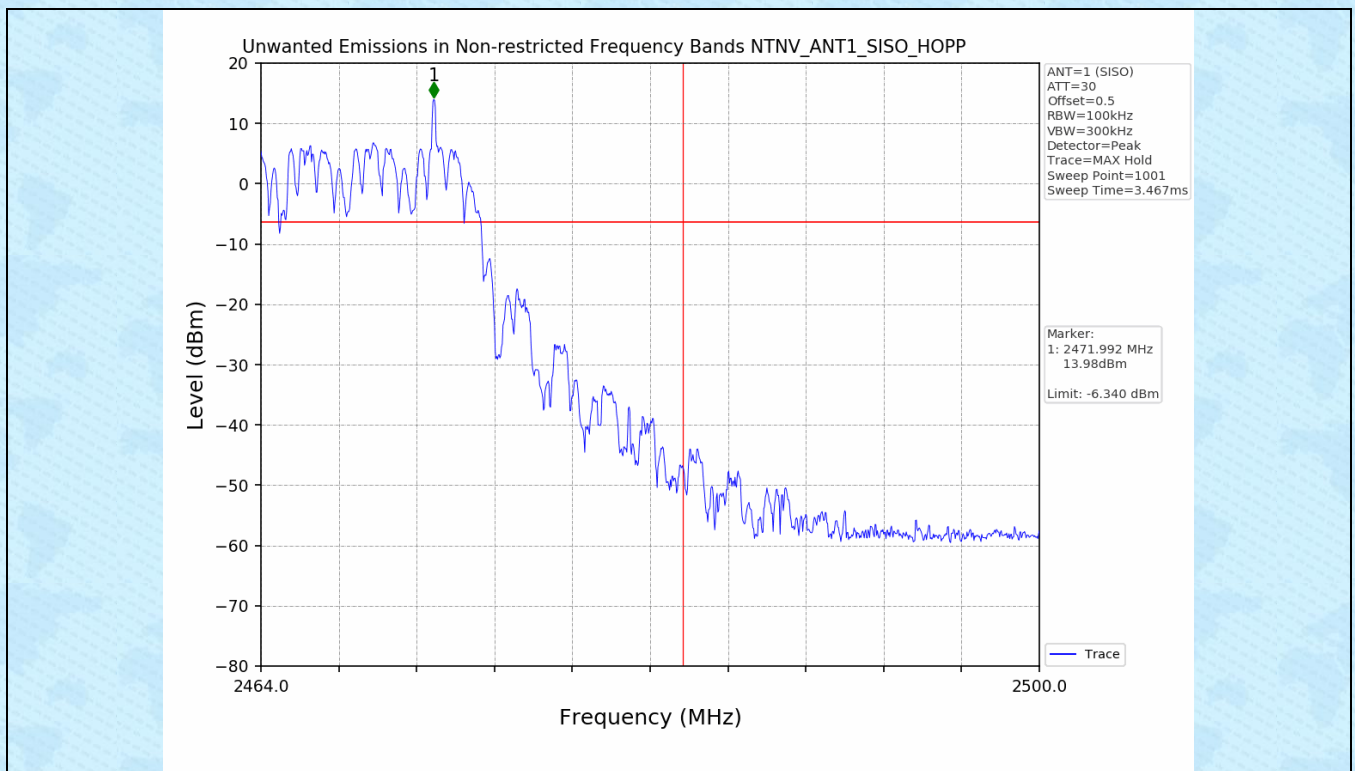
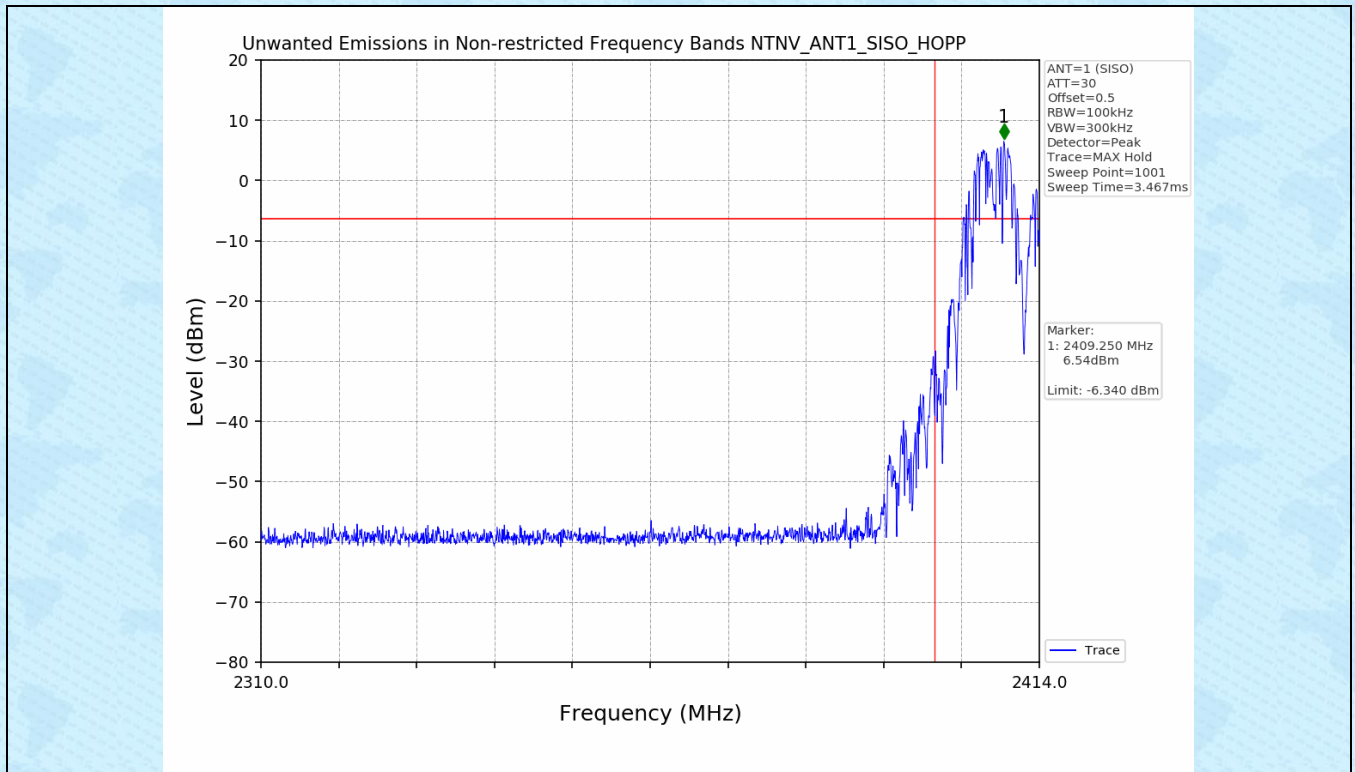
6.2 Test Graph

ANT1:

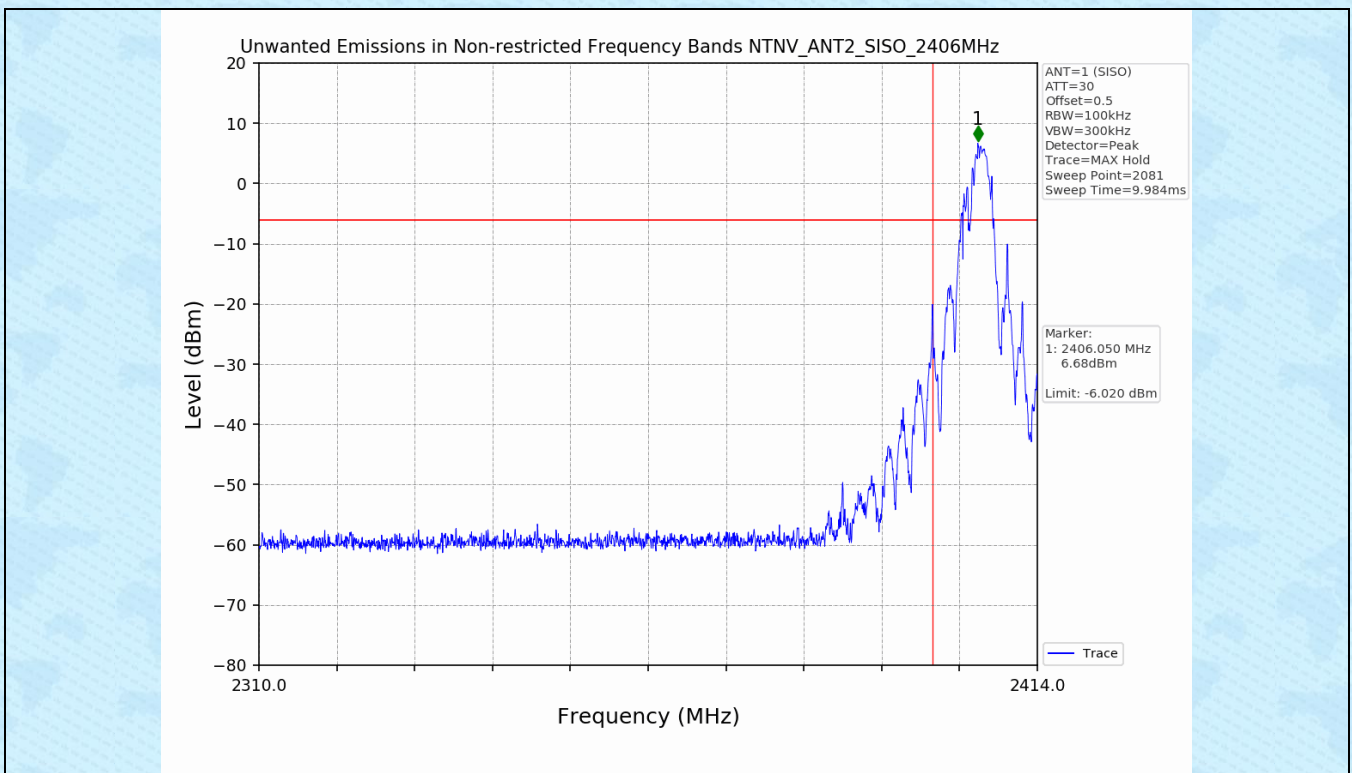
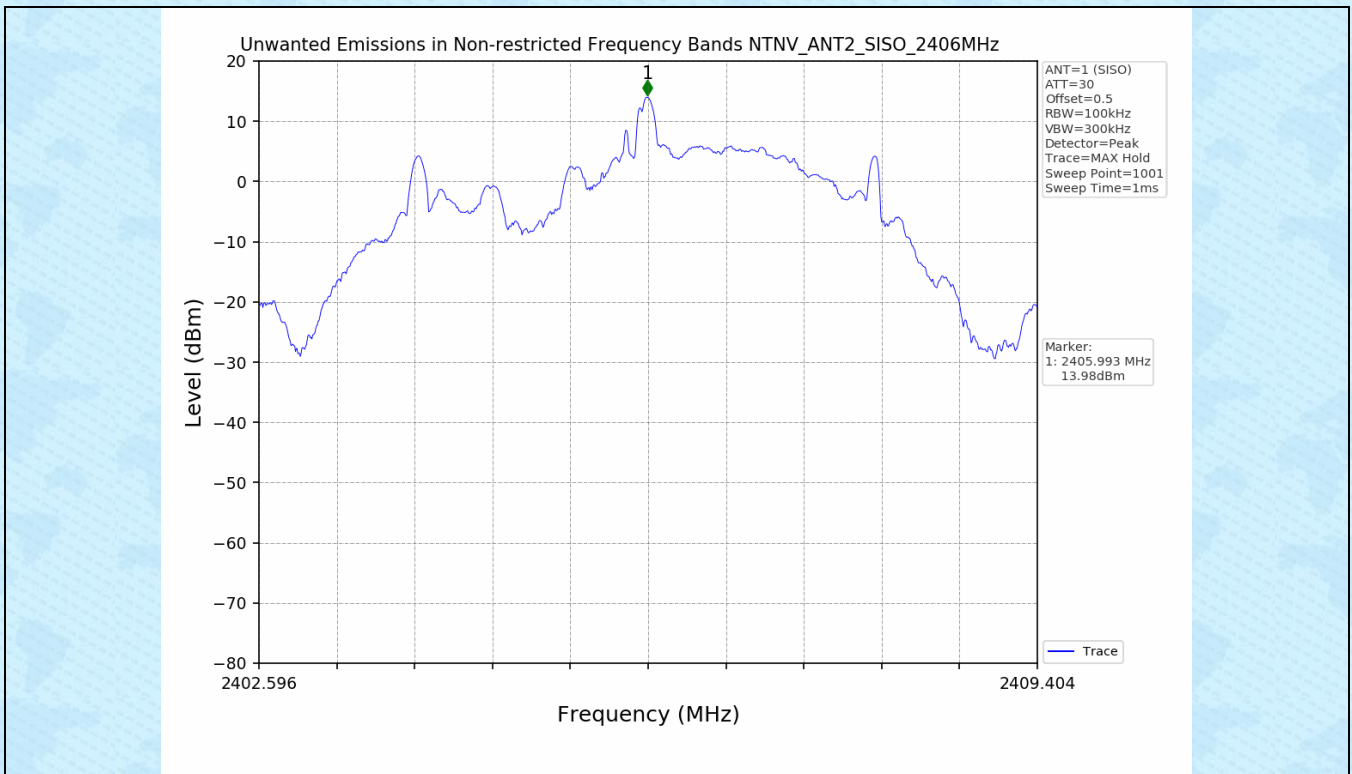


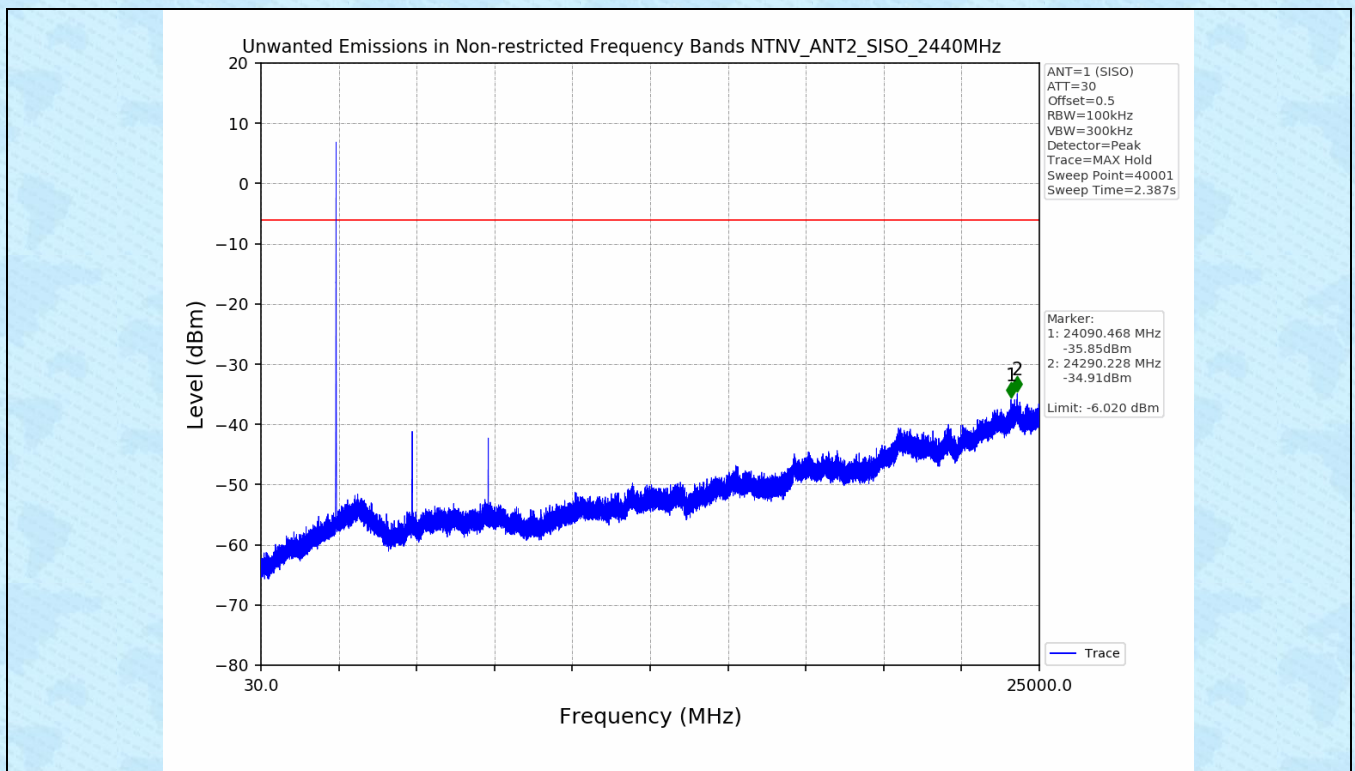
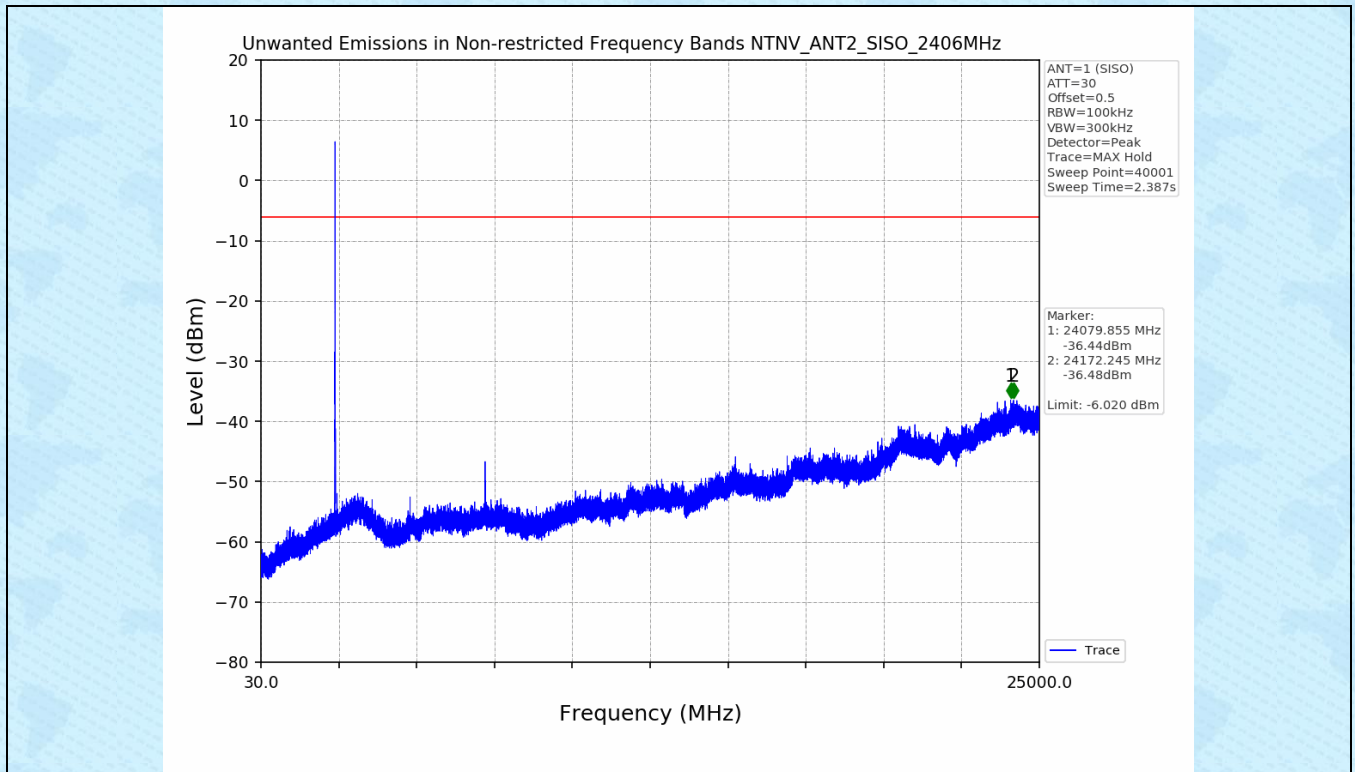


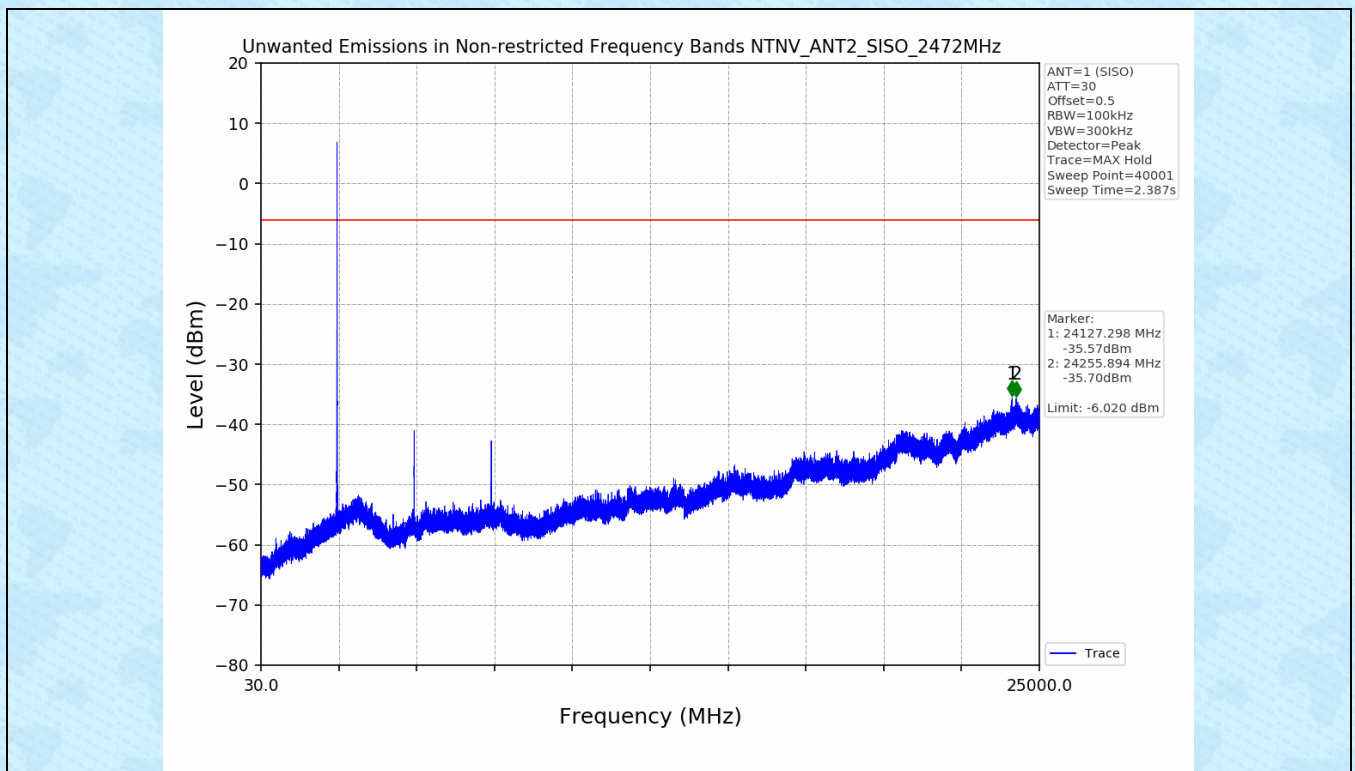
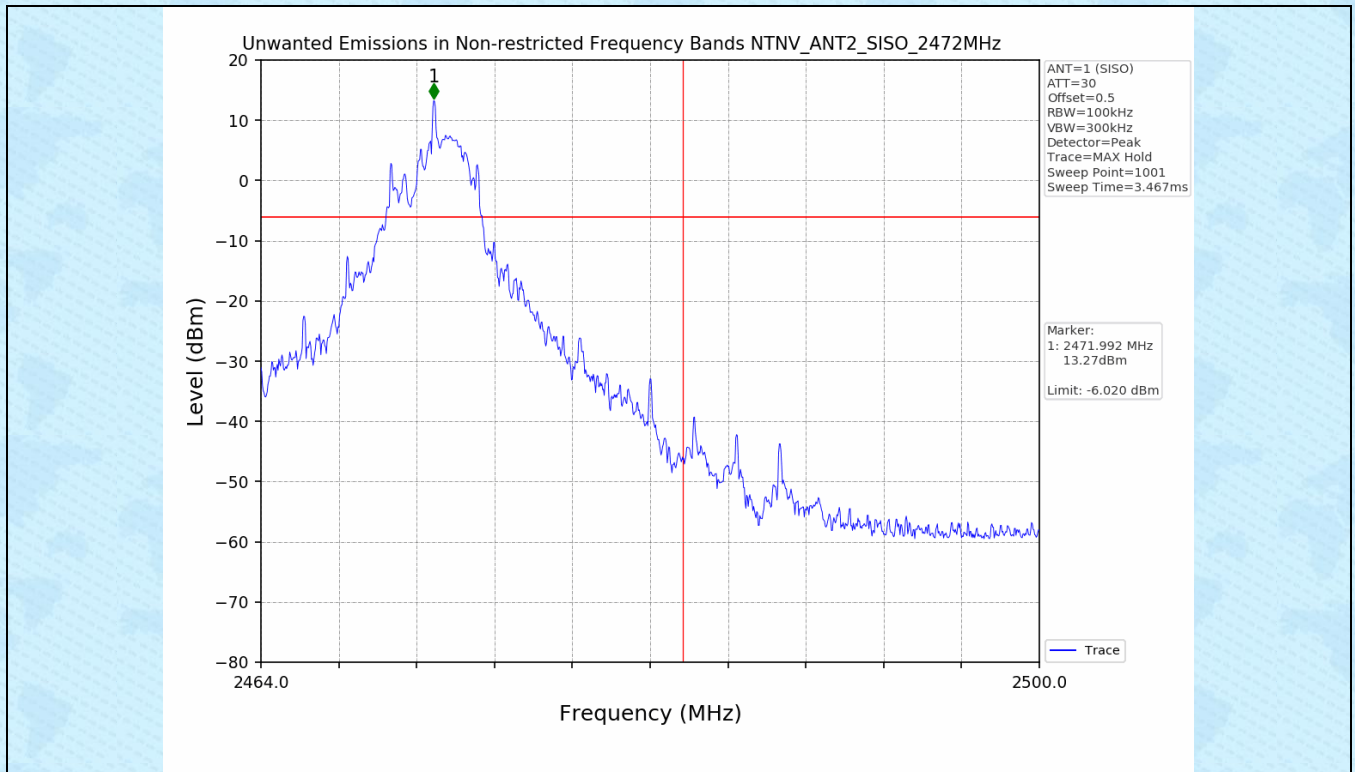


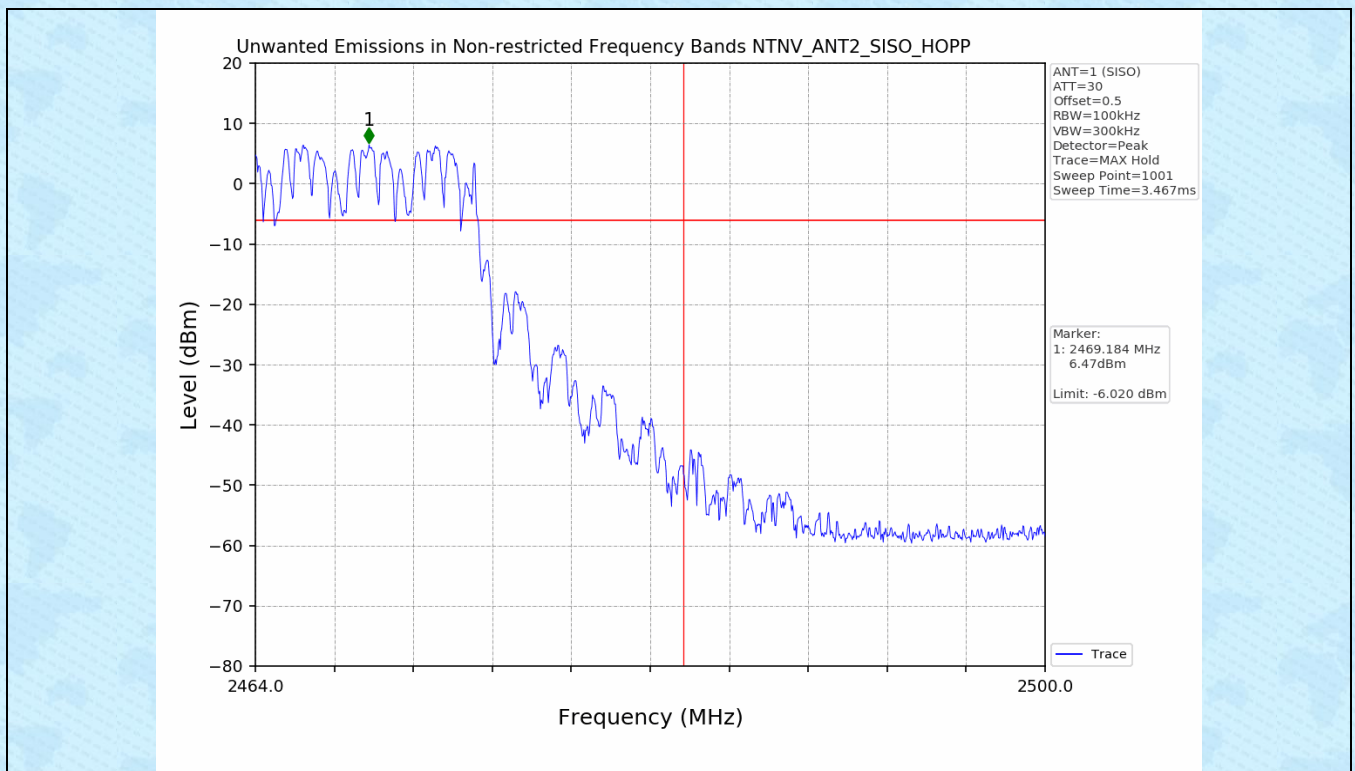
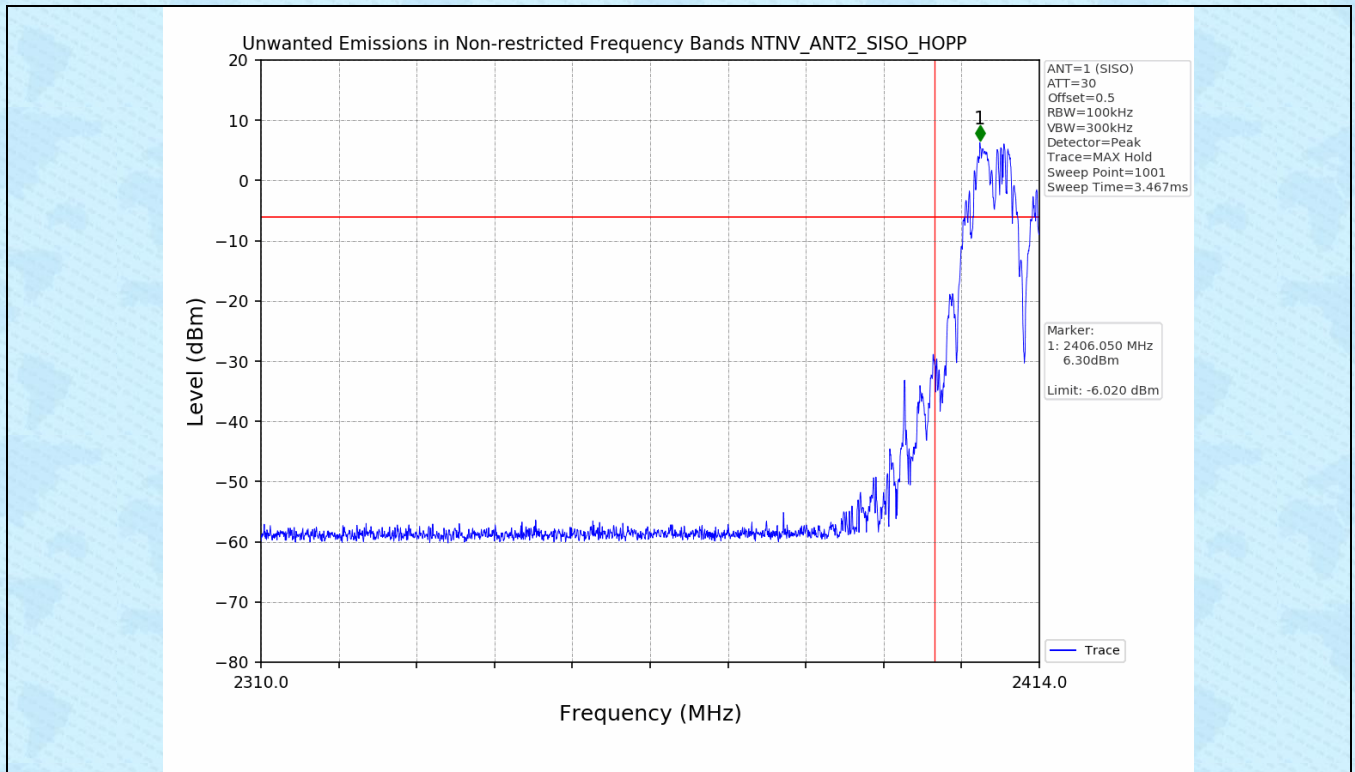


ANT2:









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