

Test Data for 5G_Band 1

Product Name: WIFI module

Test Model: ALX850B

Appendix for 15.407

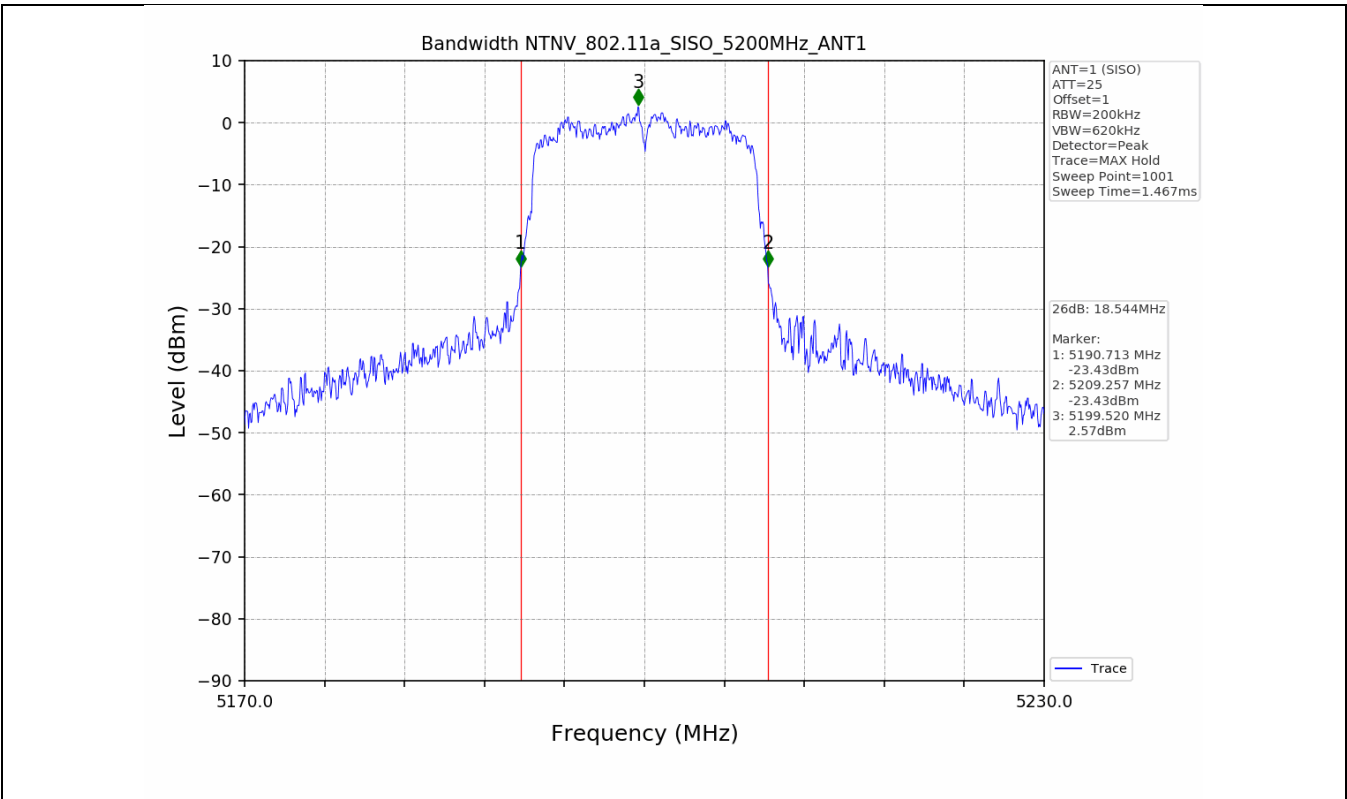
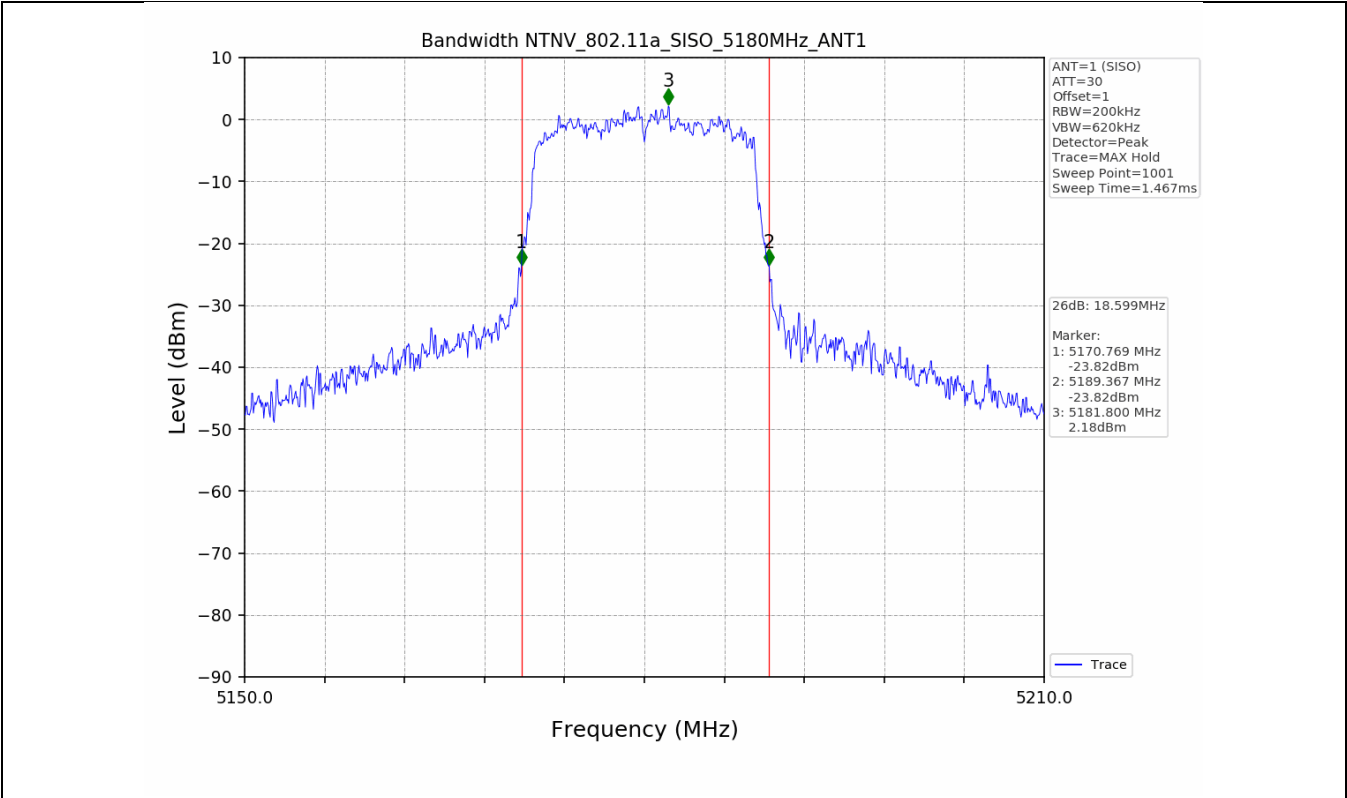
1. Bandwidth

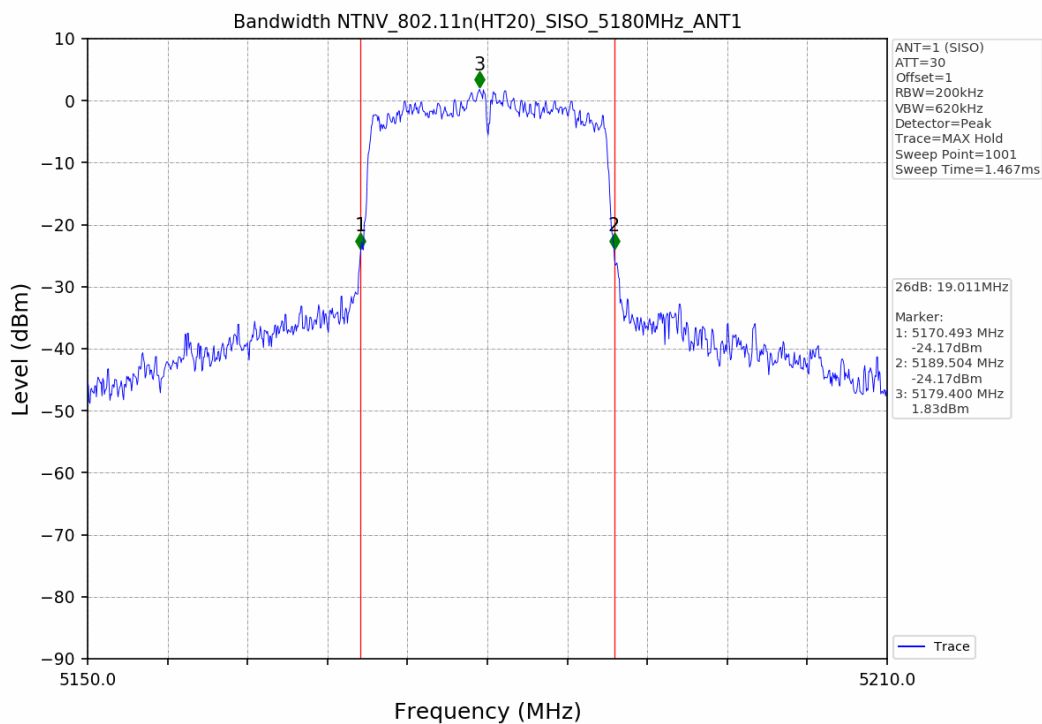
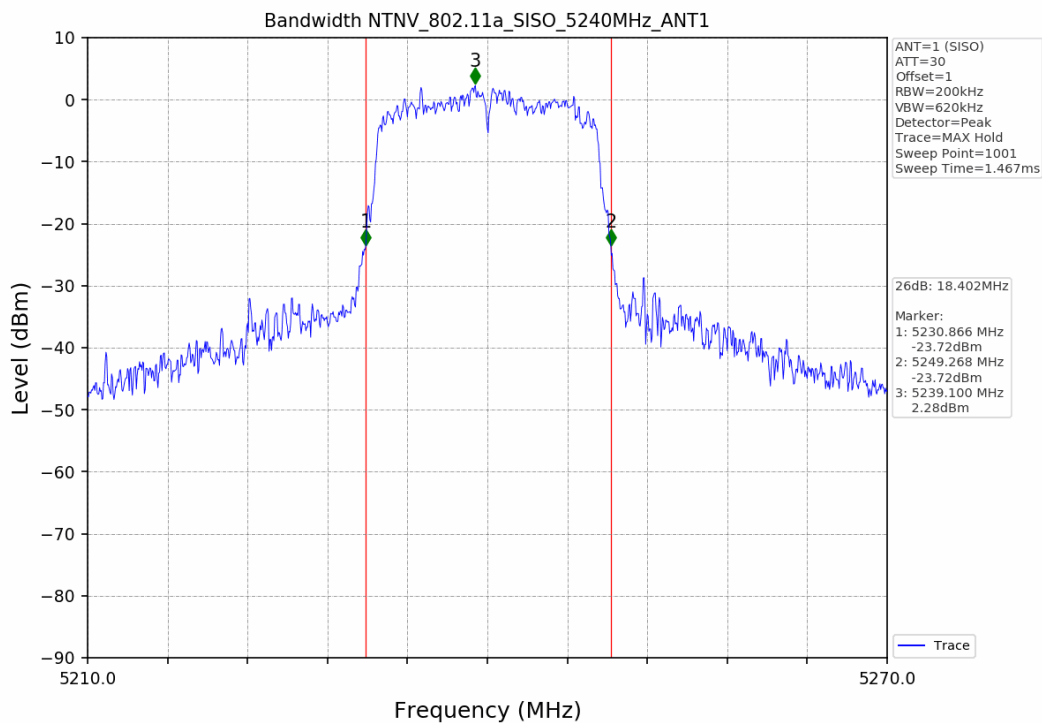
1.1 Test Result

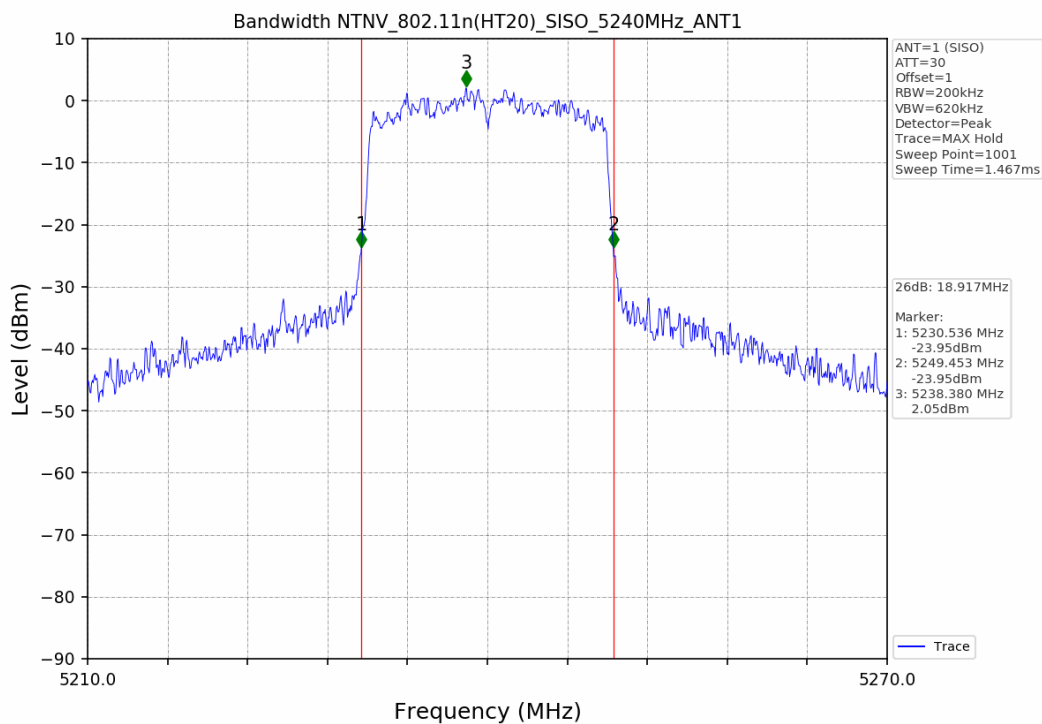
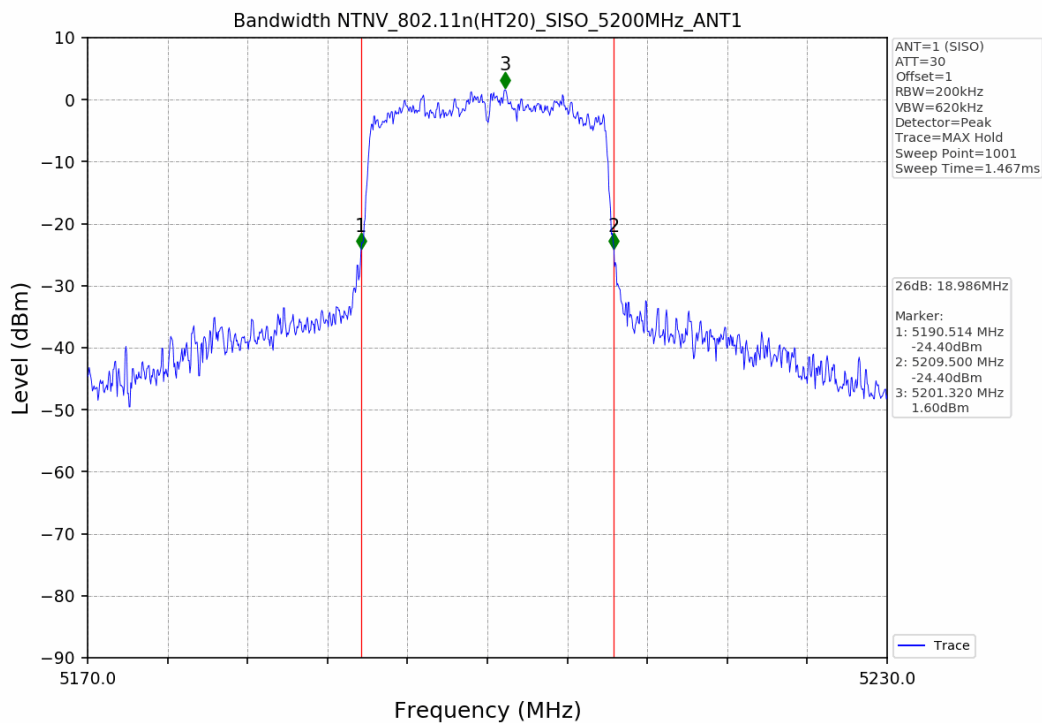
Test Mode	Frequency (MHz)	TX Type	ANT No.	Emission Bandwidth		Verdict
				Test Result (MHz)	Limits (MHz)	
802.11a	5180	SISO	1	18.599	Only for Report Use	PASS
	5200	SISO	1	18.544	Only for Report Use	PASS
	5240	SISO	1	18.402	Only for Report Use	PASS
802.11n(HT20)	5180	SISO	1	19.011	Only for Report Use	PASS
	5200	SISO	1	18.986	Only for Report Use	PASS
	5240	SISO	1	18.917	Only for Report Use	PASS
802.11n(HT40)	5190	SISO	1	38.737	Only for Report Use	PASS
	5230	SISO	1	39.204	Only for Report Use	PASS

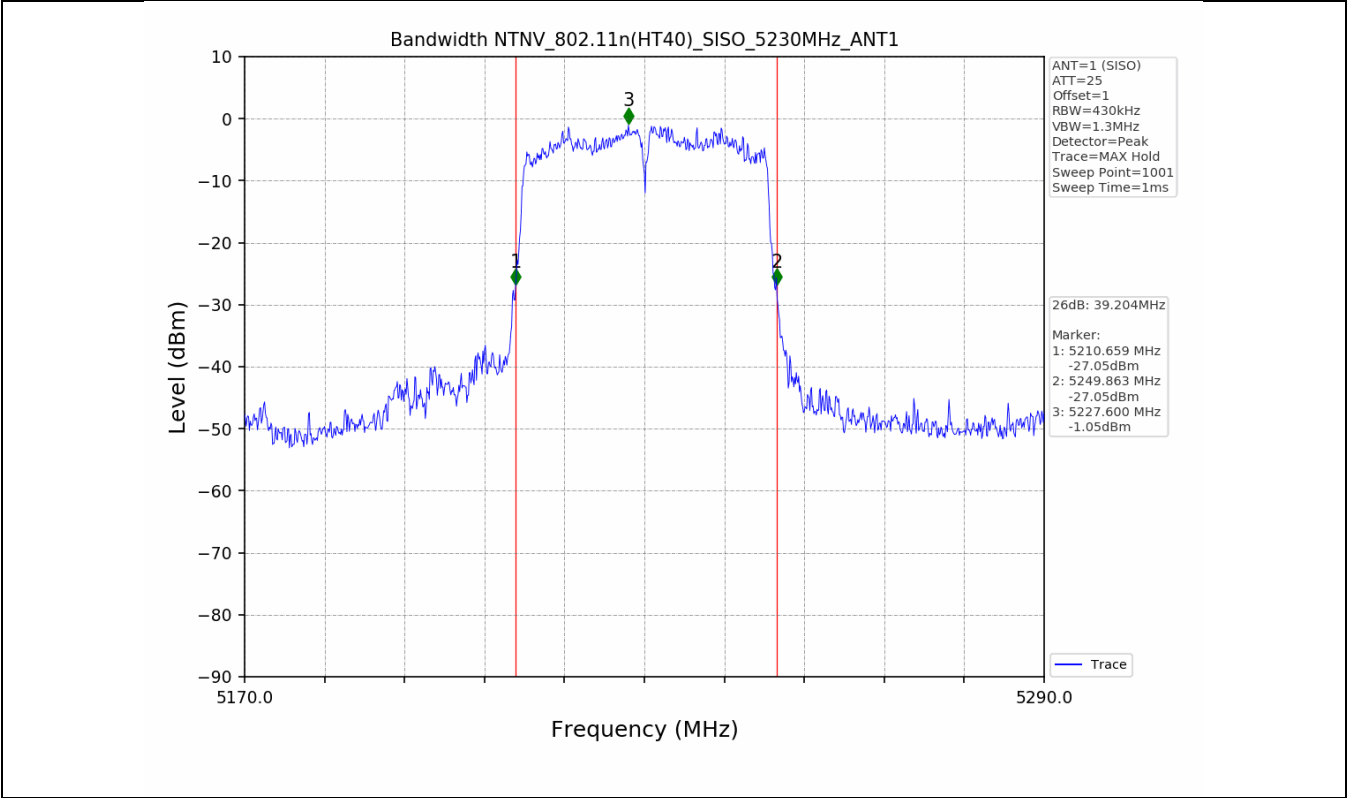
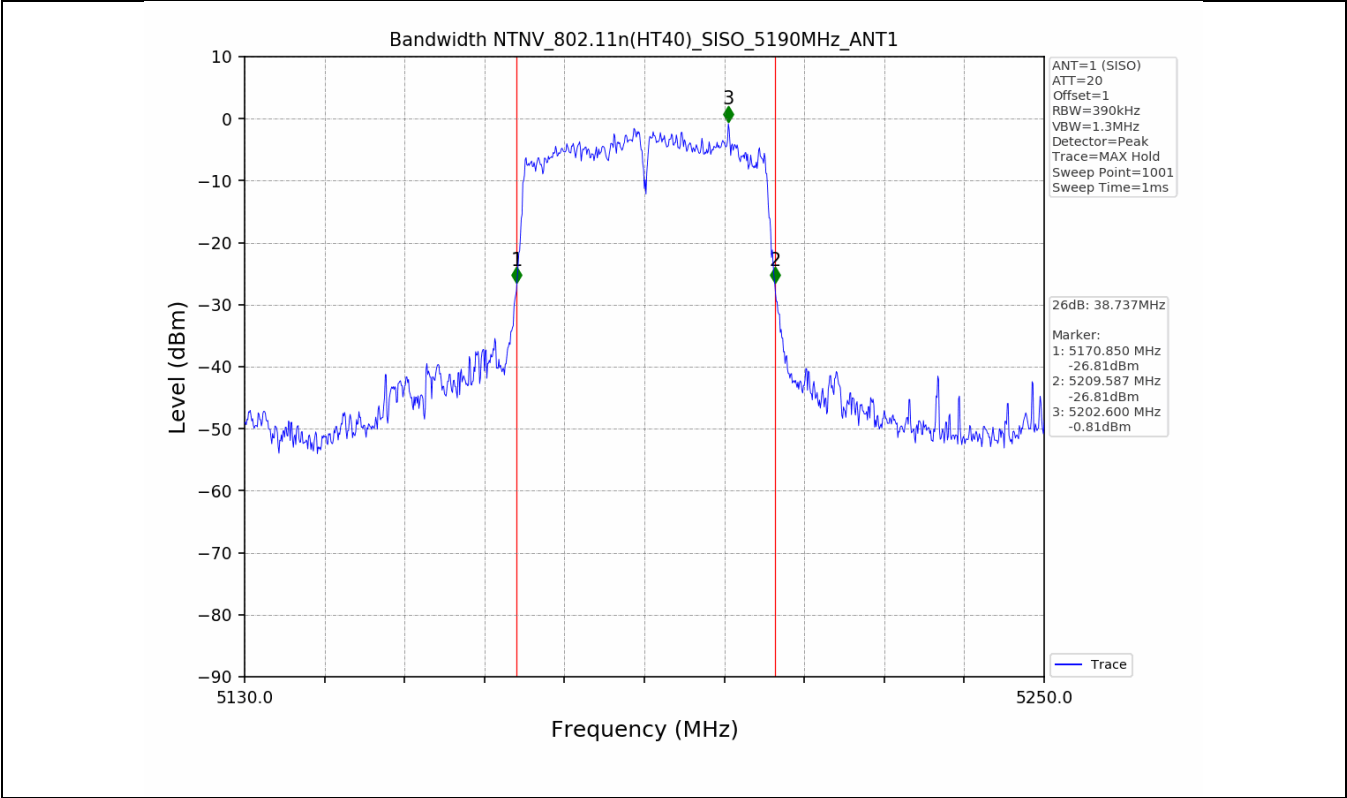
Test Mode	Frequency (MHz)	TX Type	ANT No.	99% Occupied Bandwidth	
				Test Result (MHz)	
802.11a	5180	SISO	1	16.500	Only for Report Use
	5200	SISO	1	16.505	Only for Report Use
	5240	SISO	1	16.487	Only for Report Use
802.11n(HT20)	5180	SISO	1	17.586	Only for Report Use
	5200	SISO	1	17.580	Only for Report Use
	5240	SISO	1	17.606	Only for Report Use
802.11n(HT40)	5190	SISO	1	36.354	Only for Report Use
	5230	SISO	1	36.171	Only for Report Use

1.2 Test Graph - Emission Bandwidth

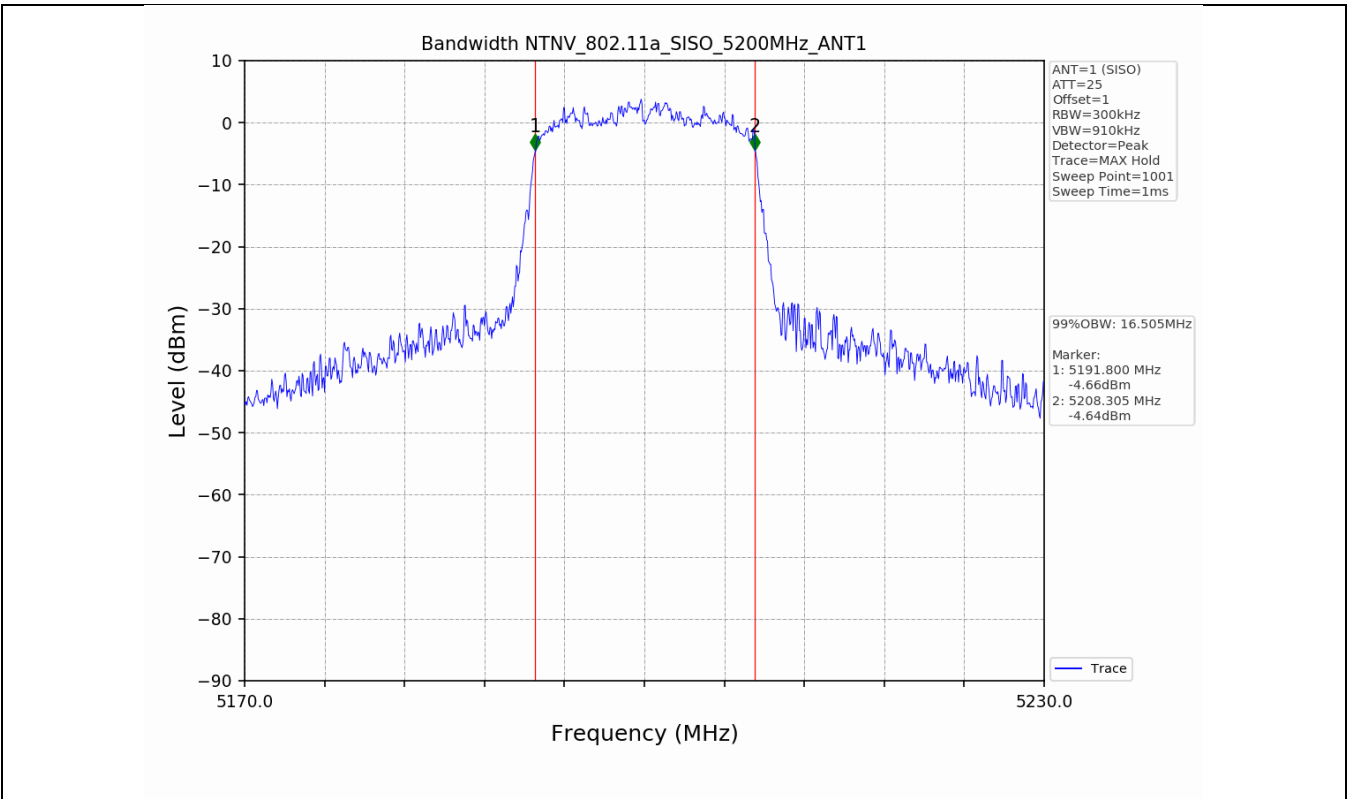
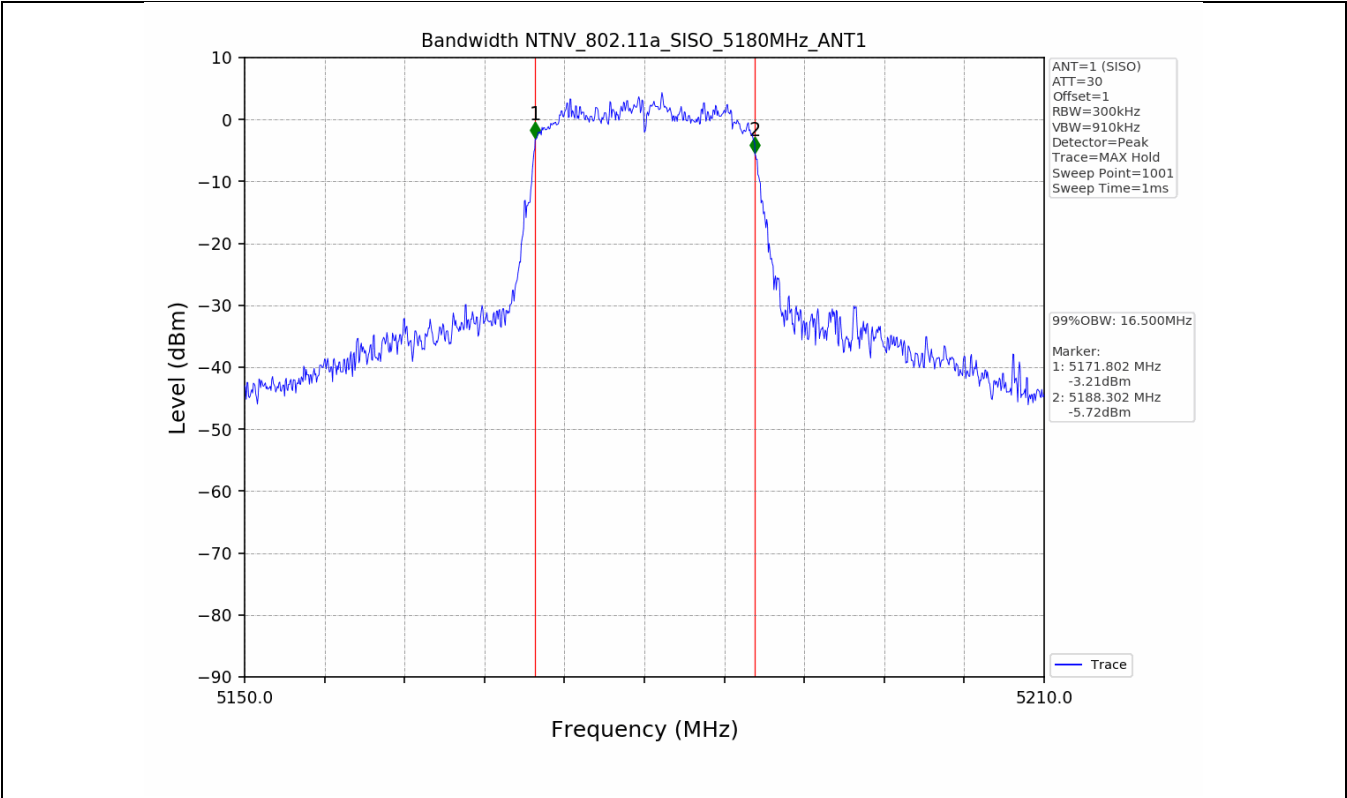


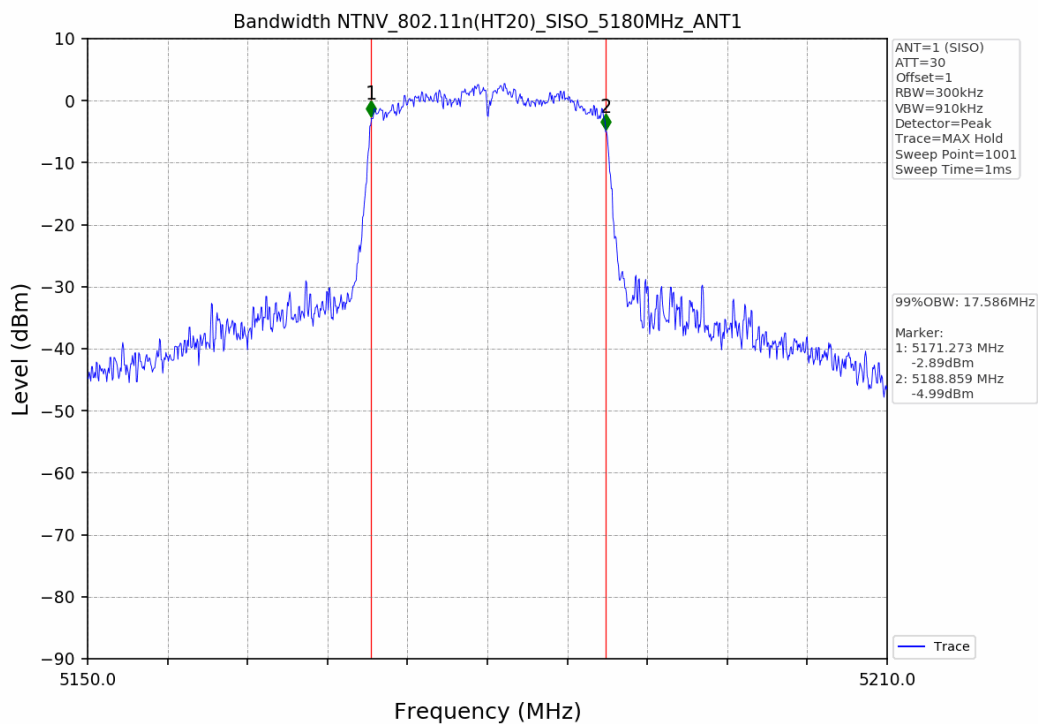
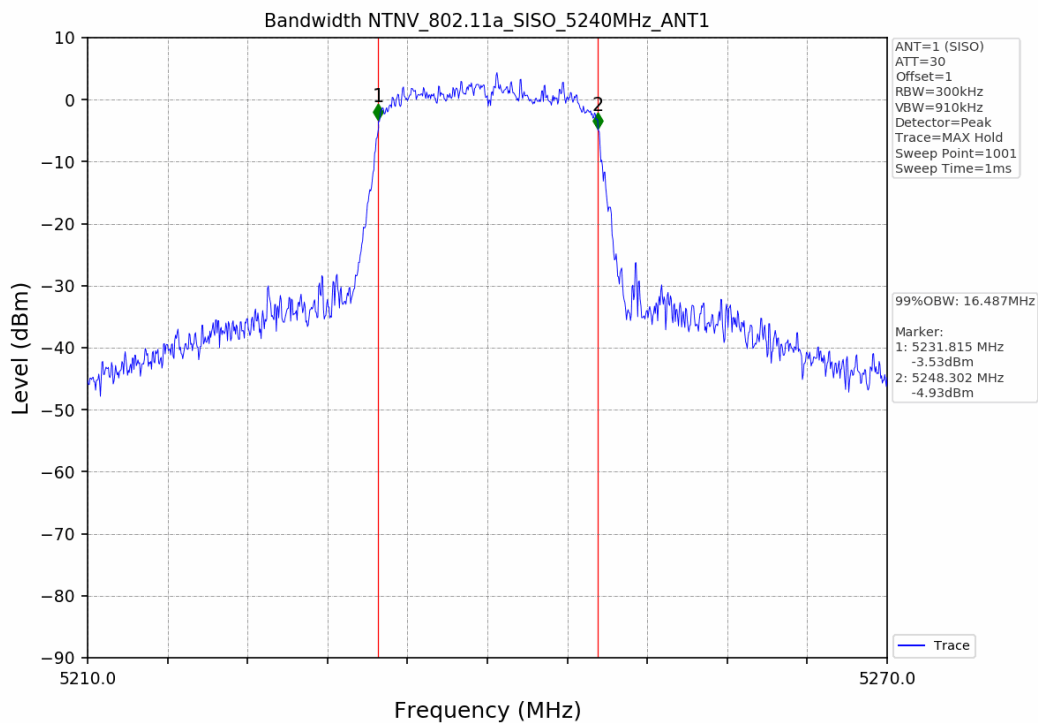


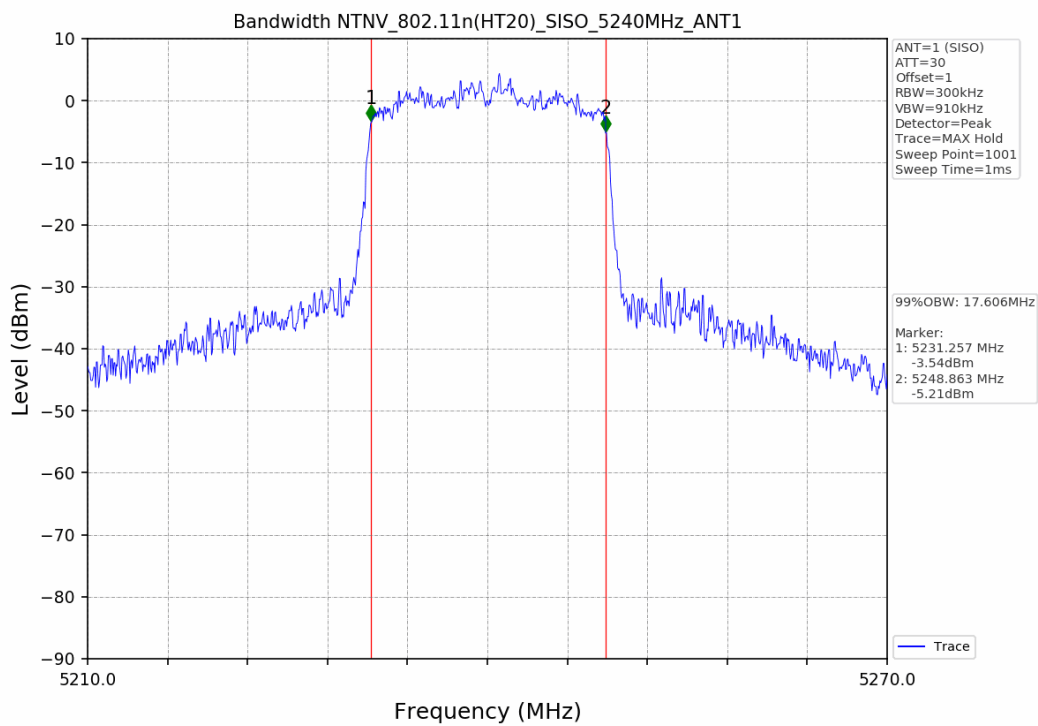
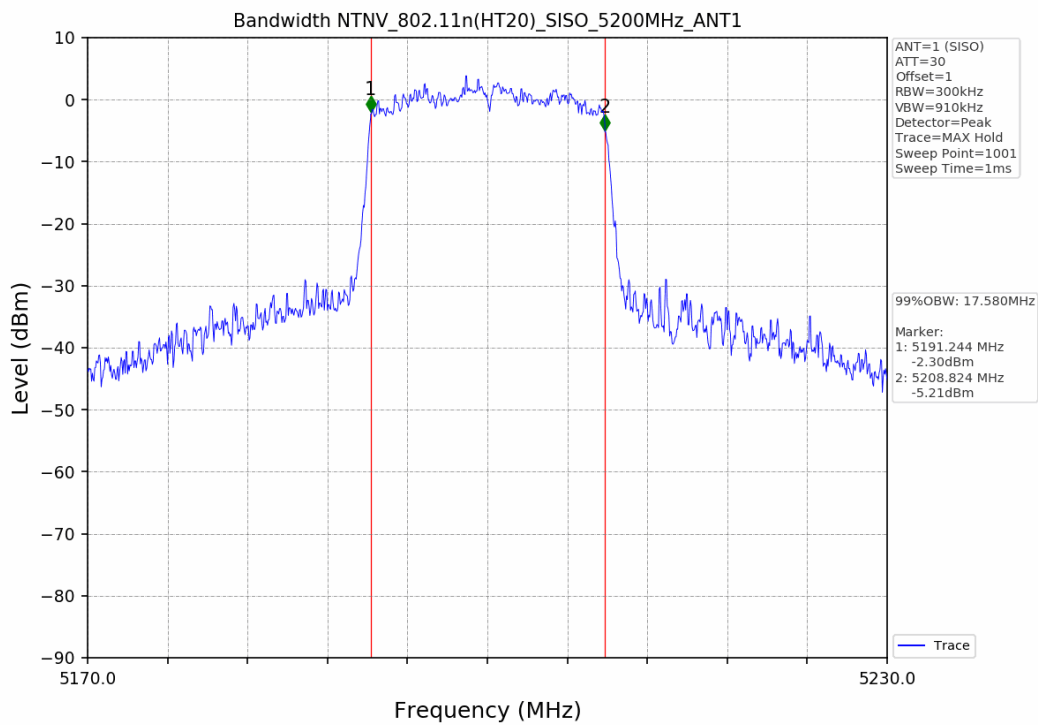


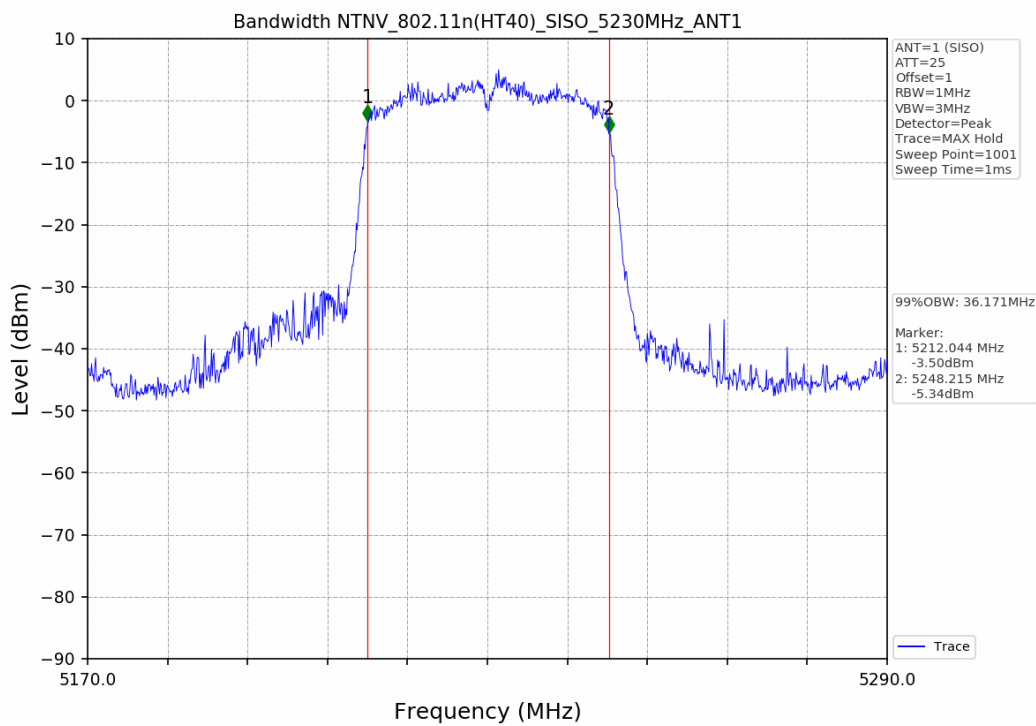
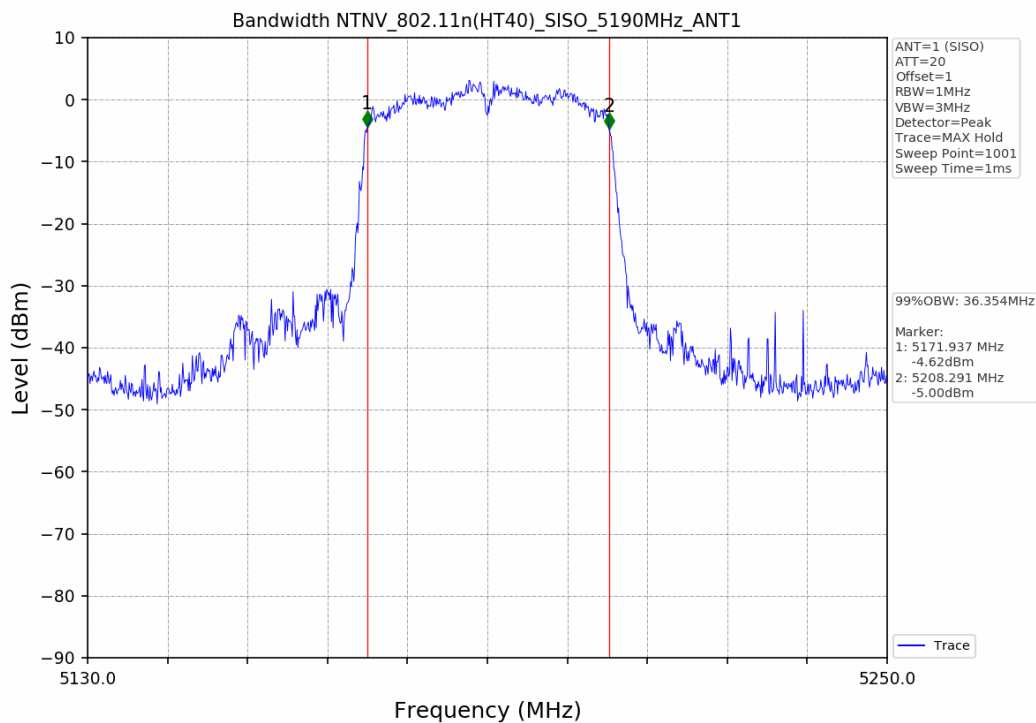


1.3 Test Graph - 99% Occupied Bandwidth







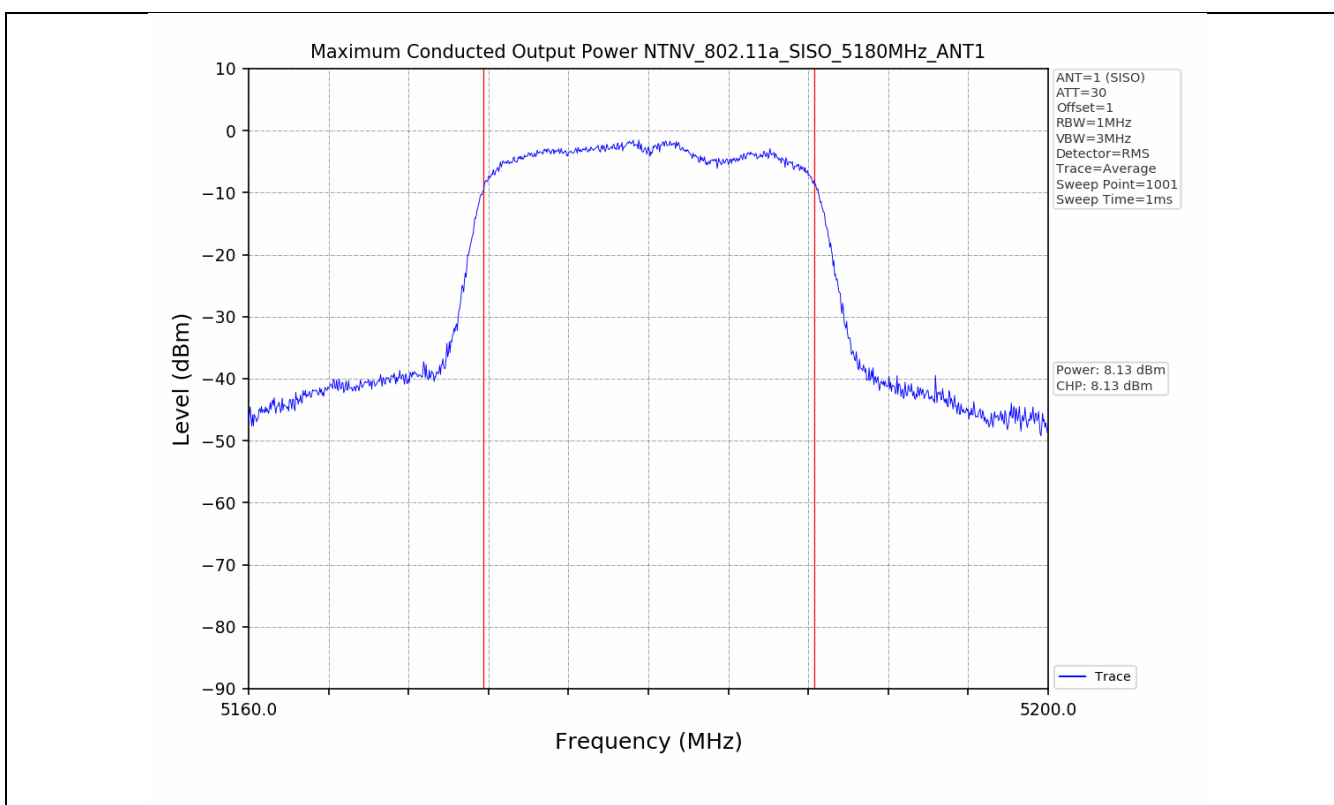


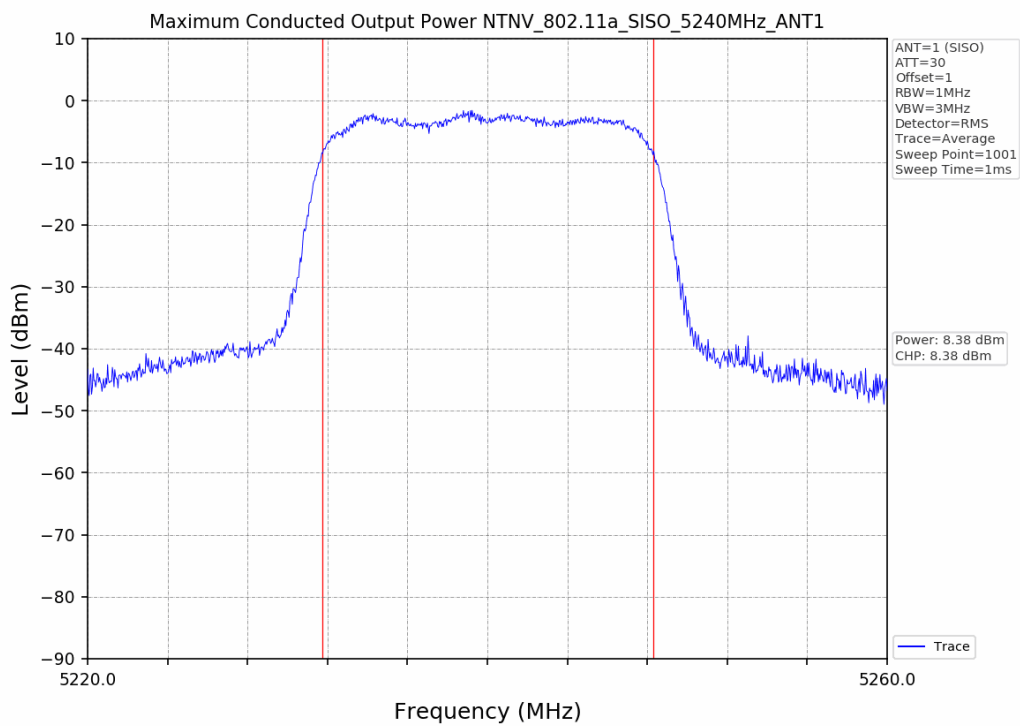
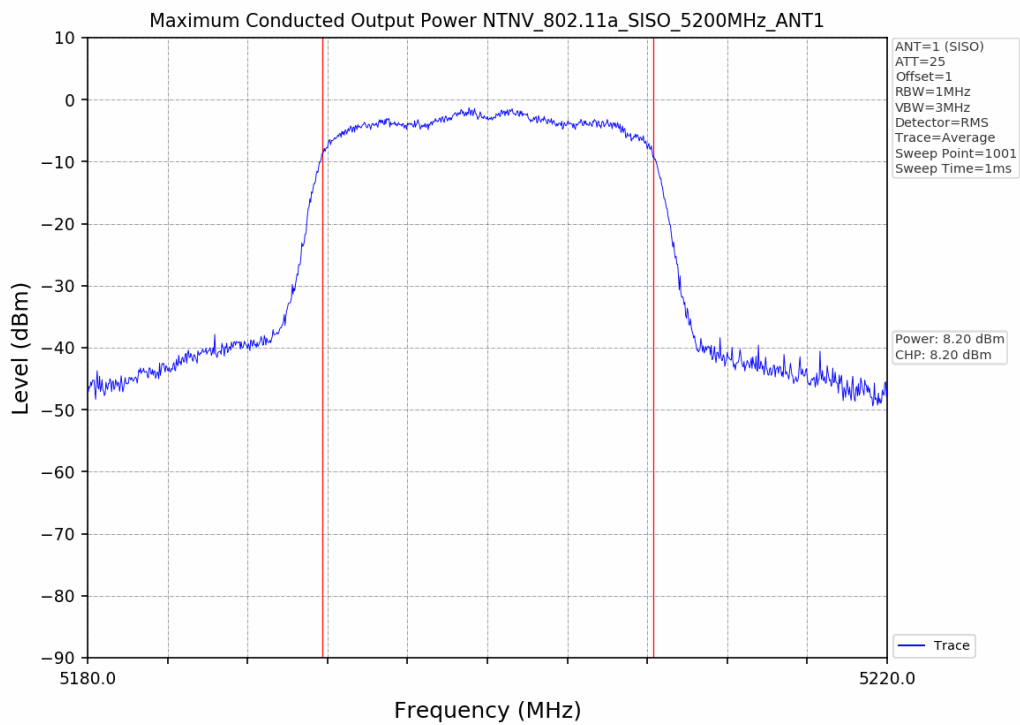
2. Maximum Conducted Output Power

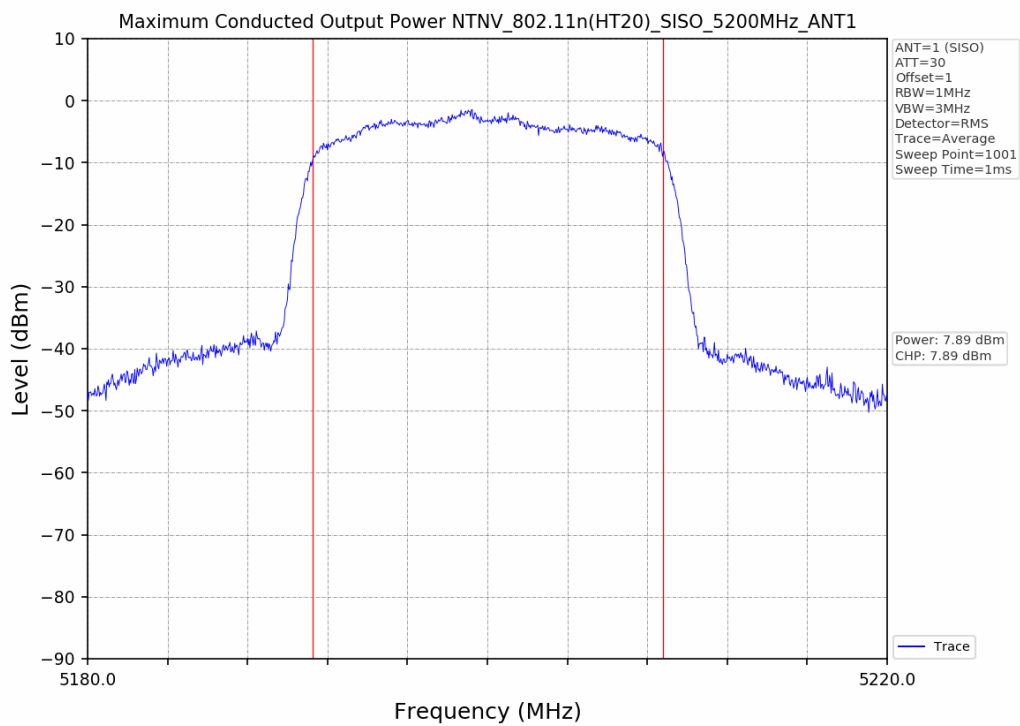
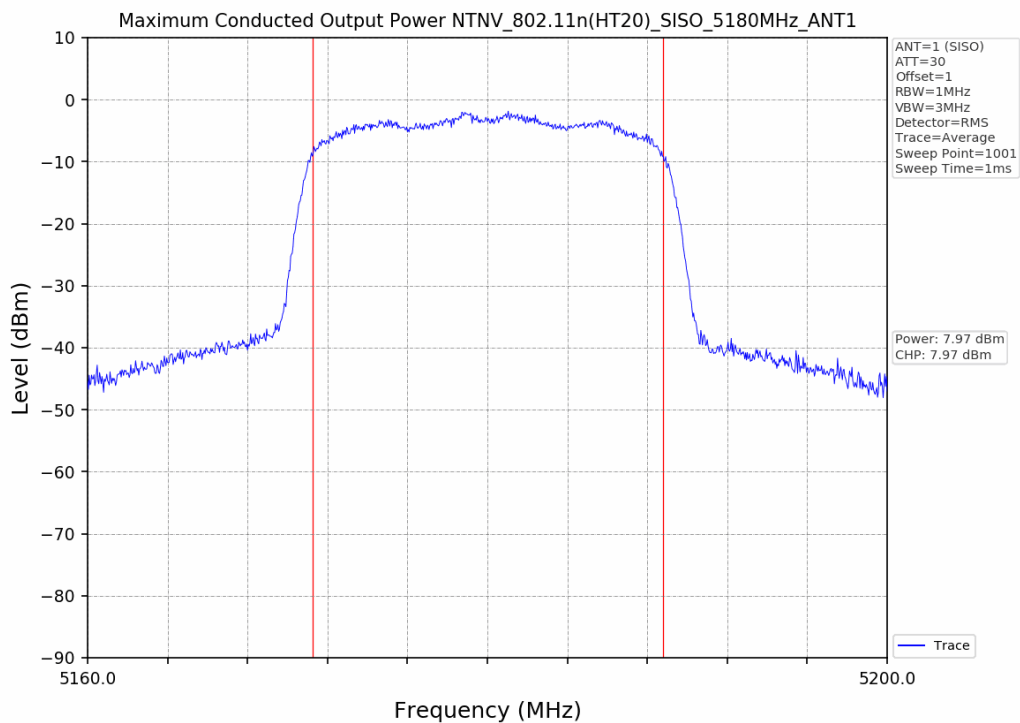
2.1 Test Result

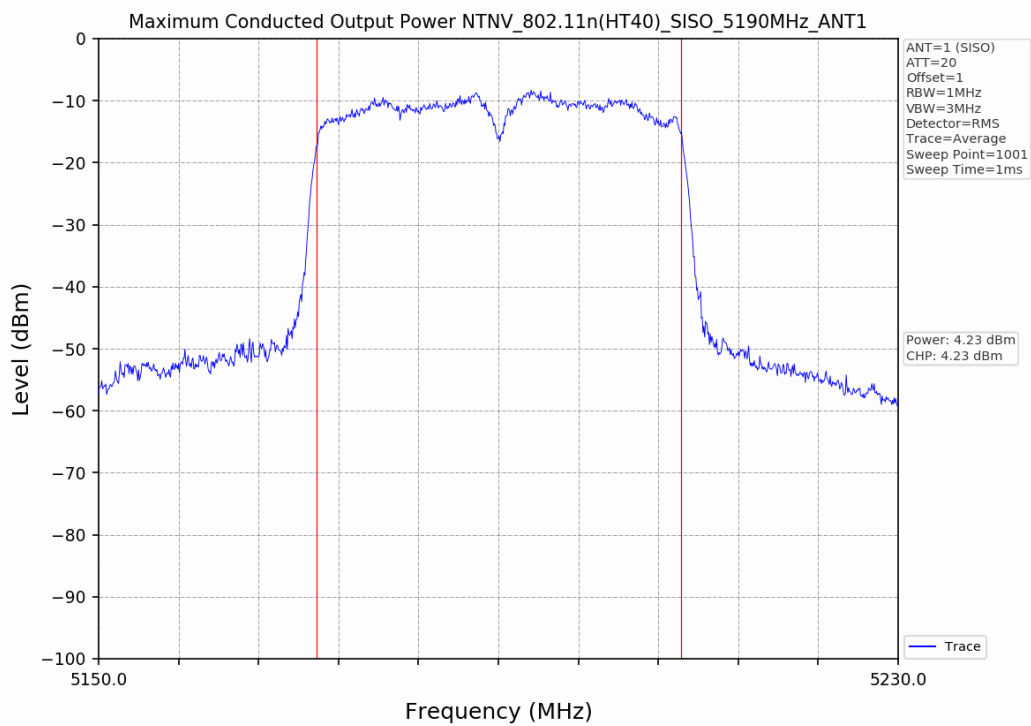
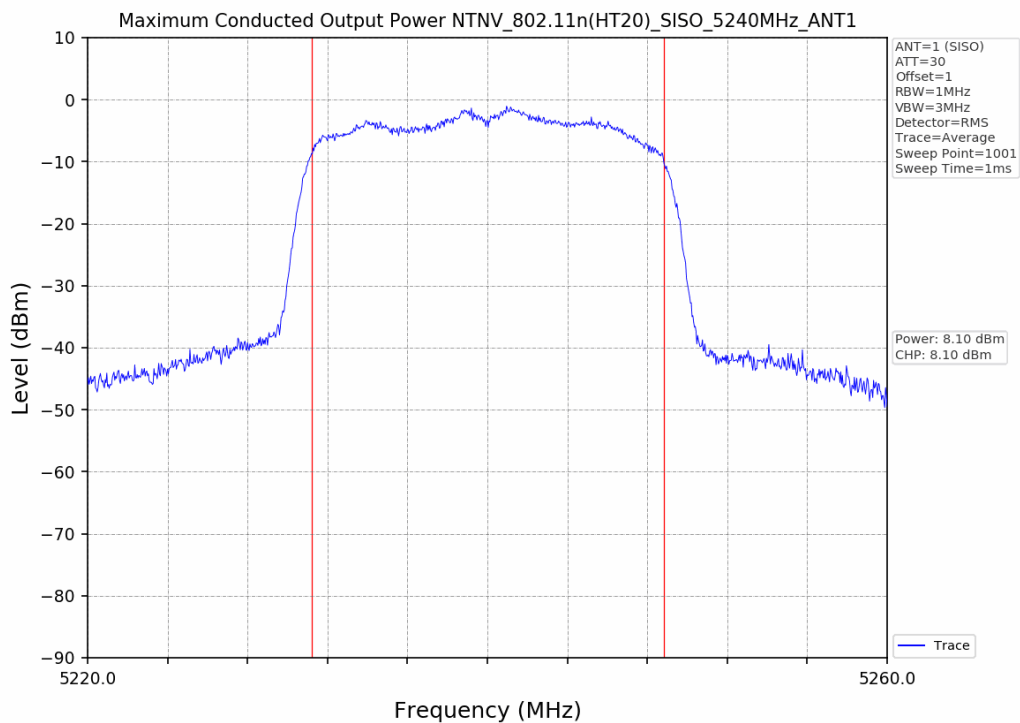
Test Mode	Frequency (MHz)	Tx Type	Measured Output Power (dBm)	Limit (dBm)	Verdict
			Ant 1		
802.11a	5180	SISO	8.13	≤ 23.98	PASS
	5200	SISO	8.20	≤ 23.98	PASS
	5240	SISO	8.38	≤ 23.98	PASS
802.11n(HT20)	5180	SISO	7.97	≤ 23.98	PASS
	5200	SISO	7.89	≤ 23.98	PASS
	5240	SISO	8.10	≤ 23.98	PASS
802.11n(HT40)	5190	SISO	4.23	≤ 23.98	PASS
	5230	SISO	4.58	≤ 23.98	PASS

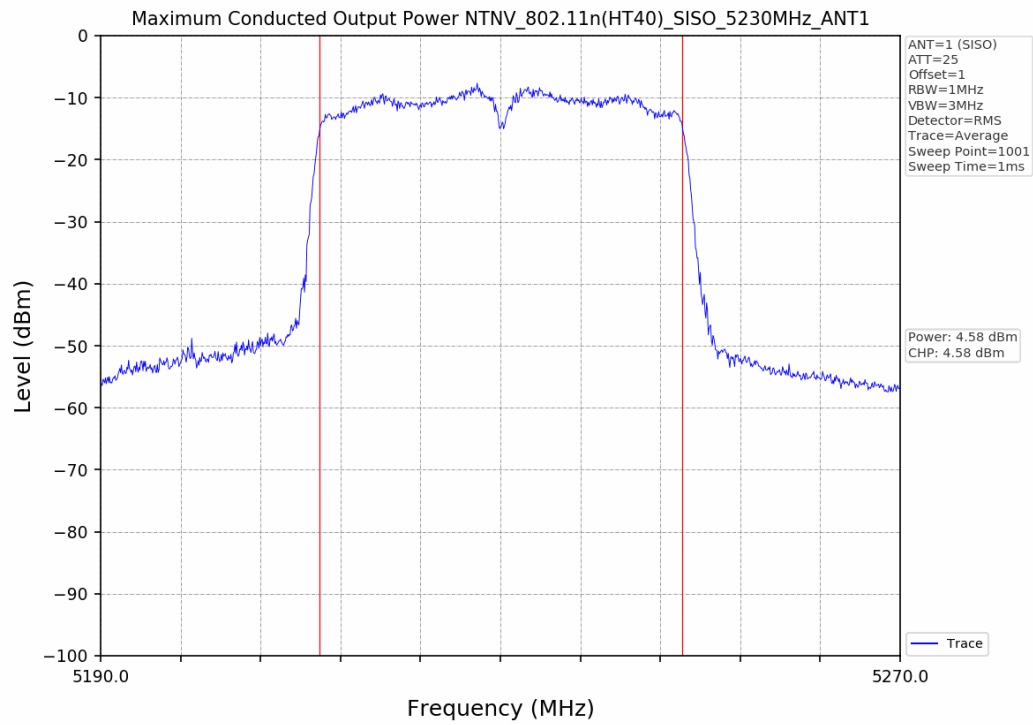
2.2 Test Graph









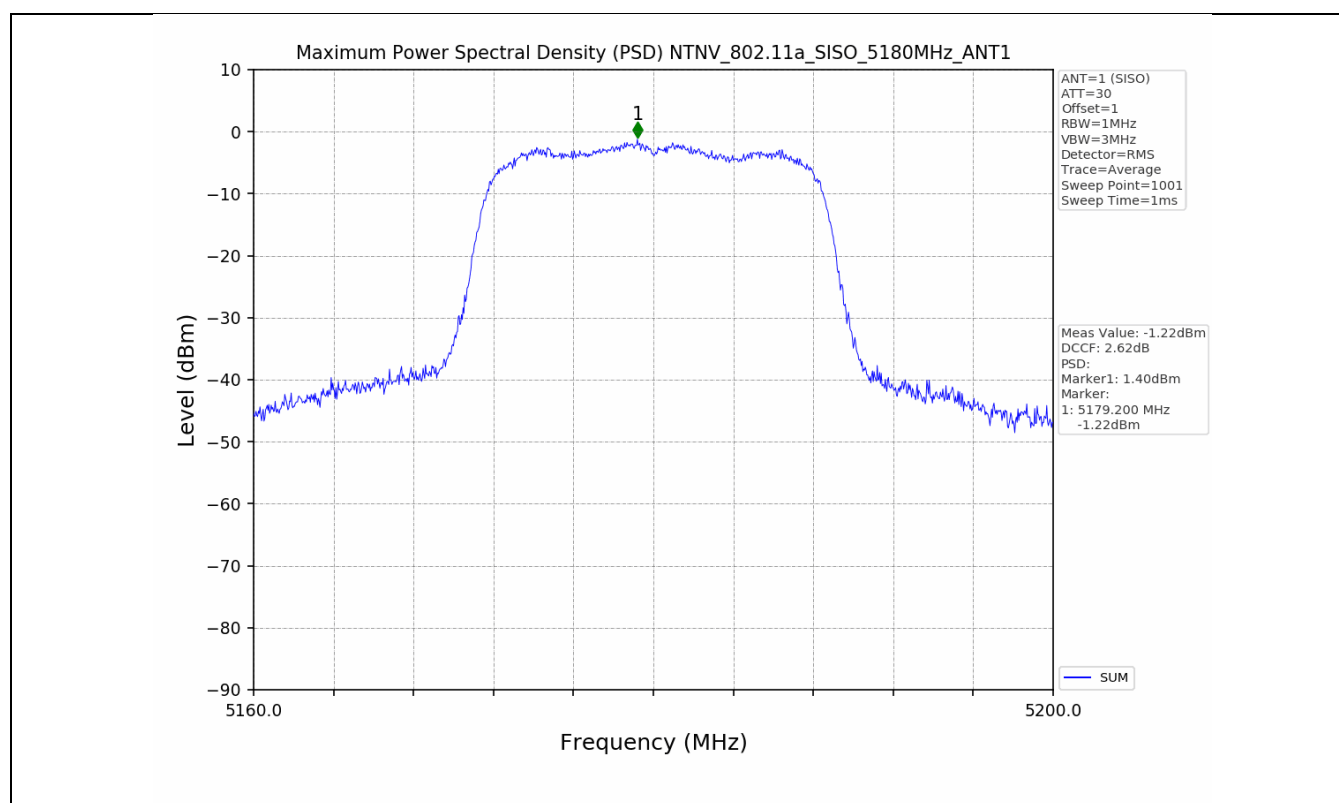


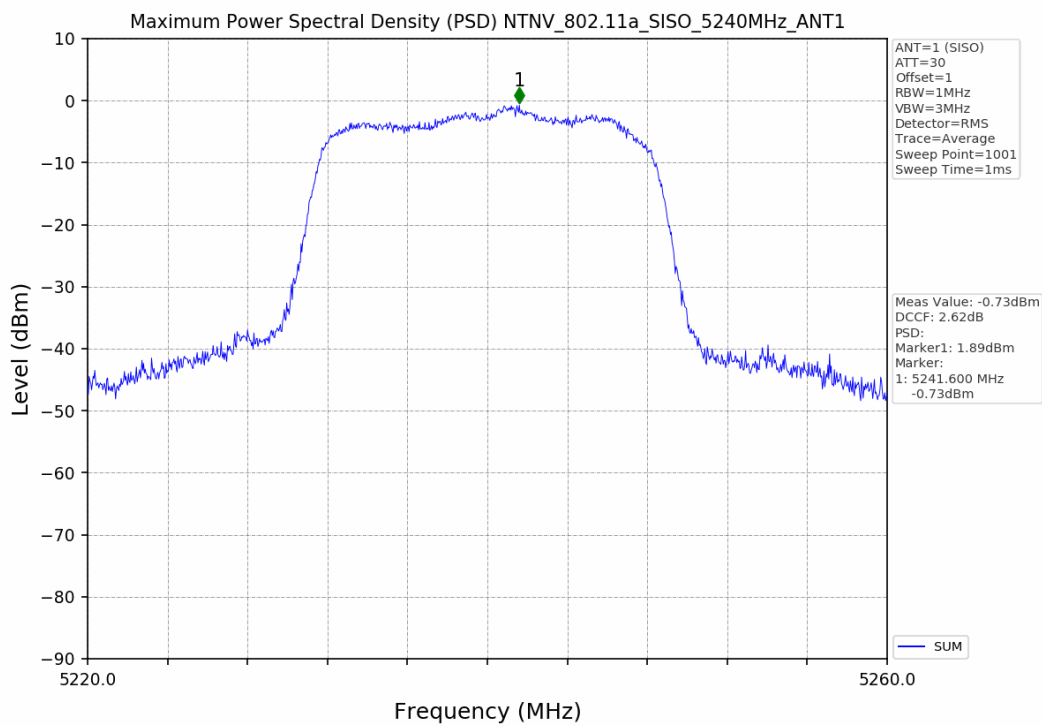
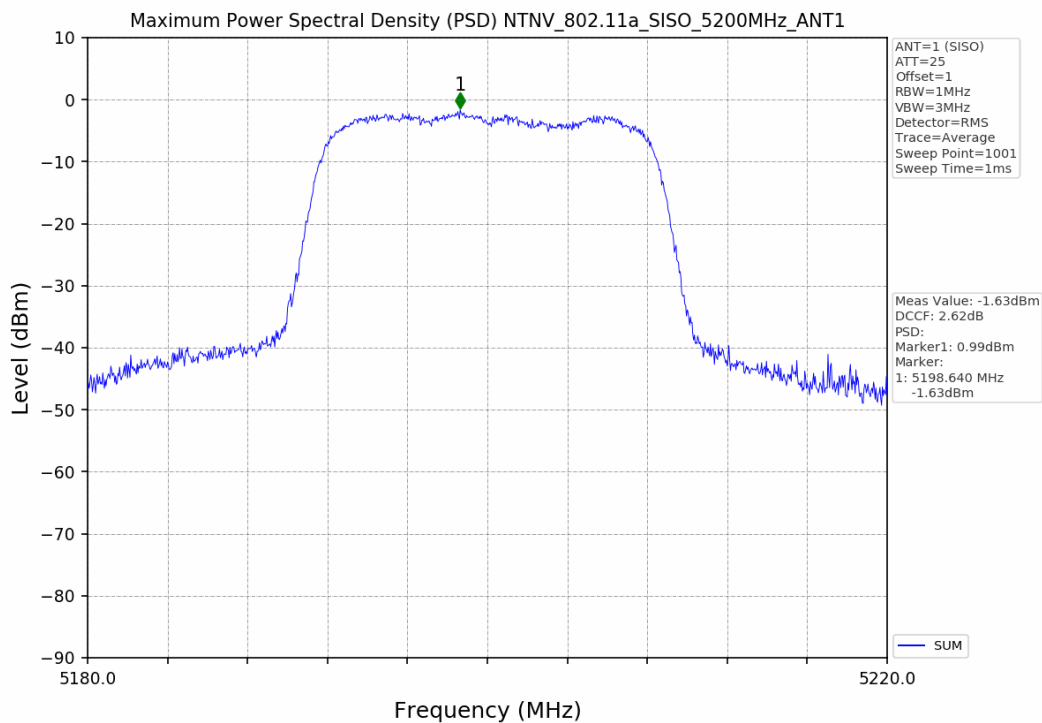
3. Maximum Power Spectral Density (PSD)

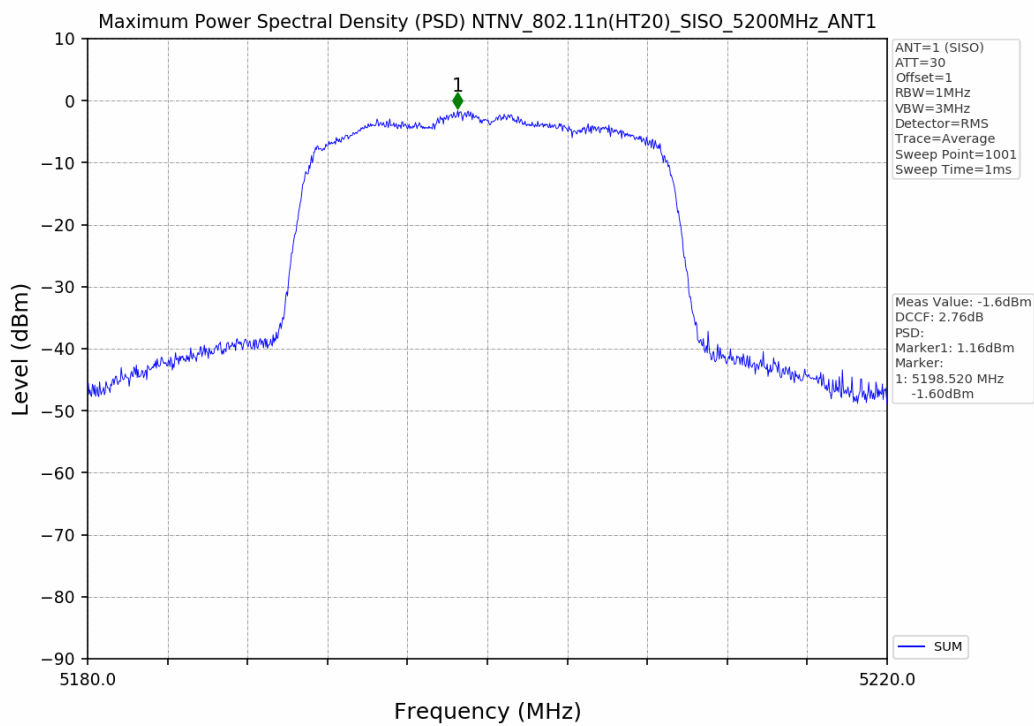
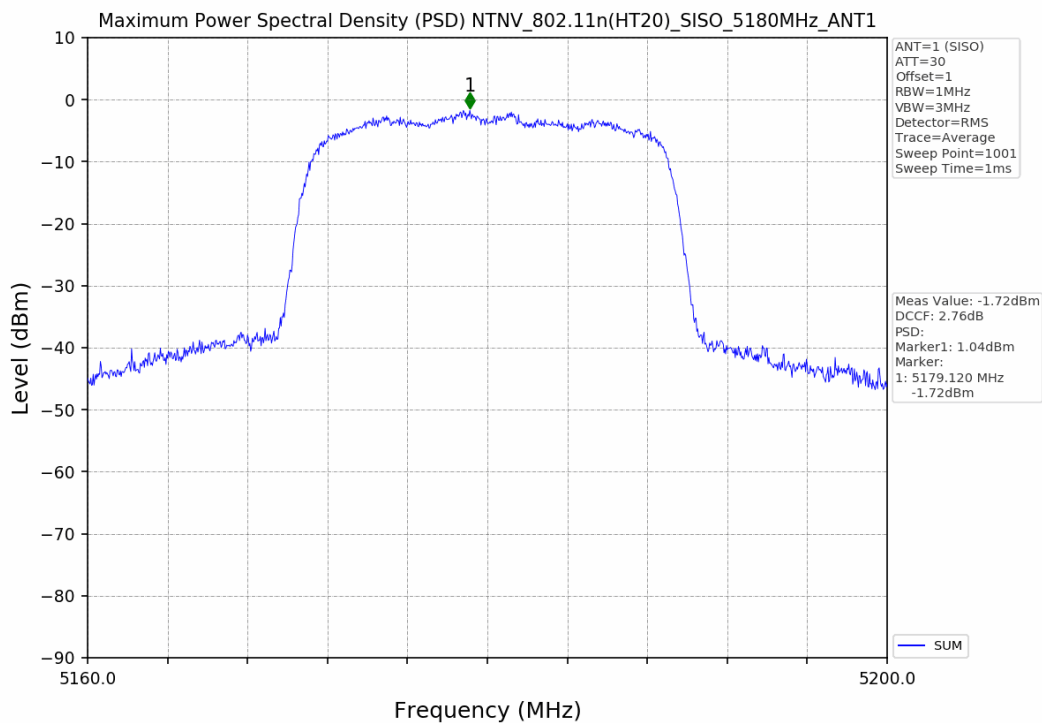
3.1 Test Result

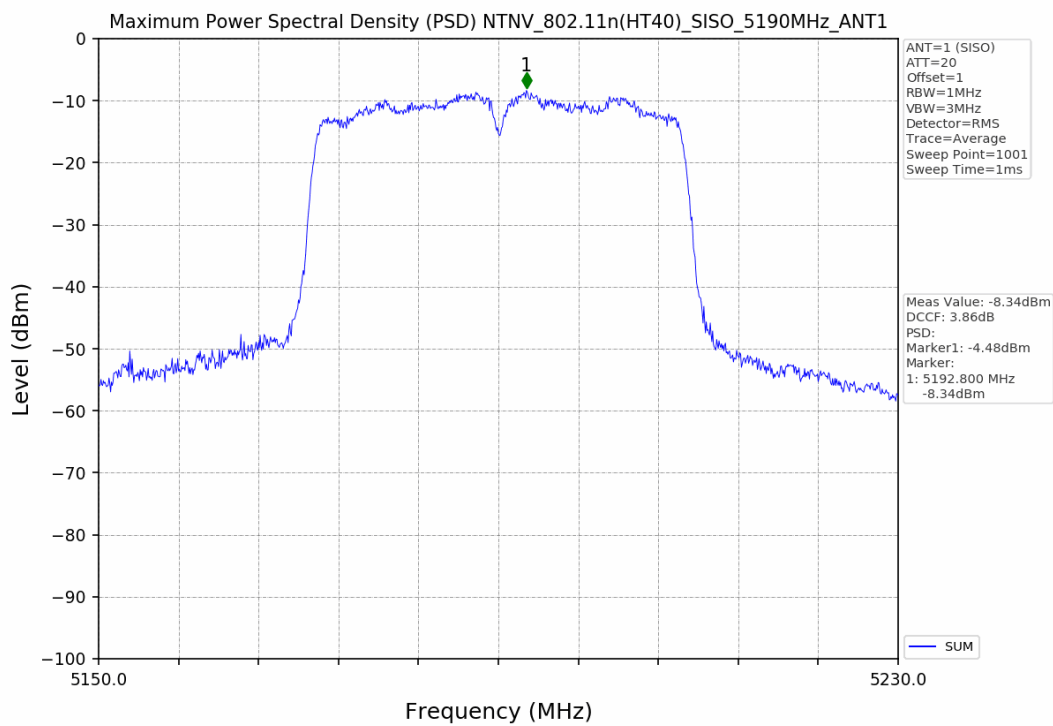
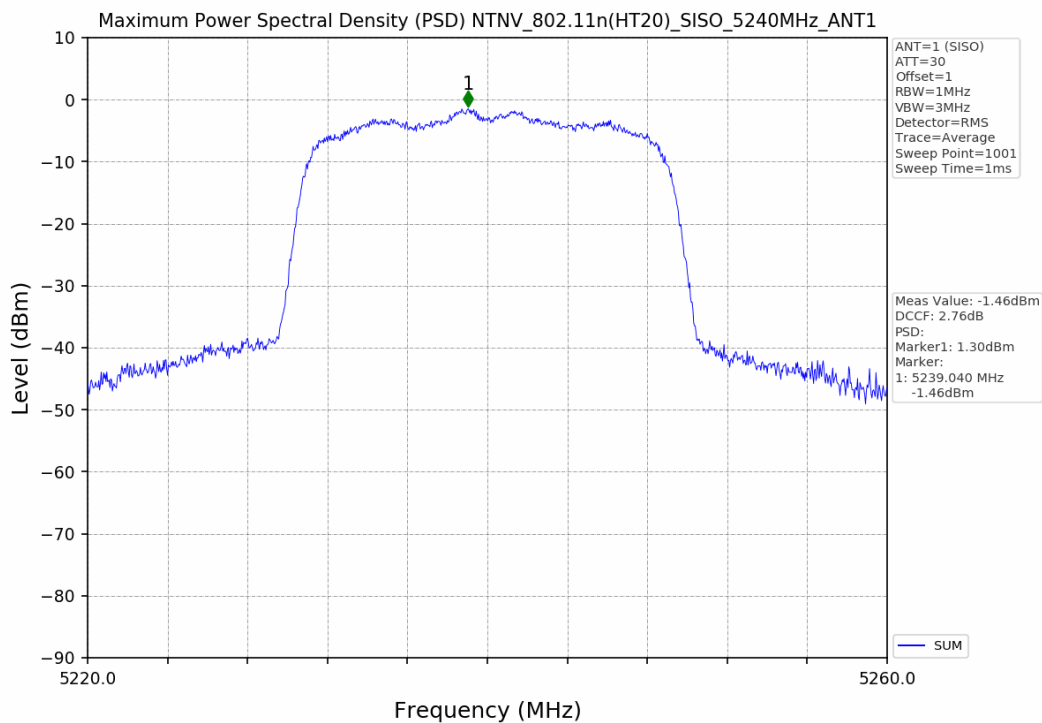
Test Mode	Frequency (MHz)	Tx Type	Maximum Power Spectral Density (dBm/MHz)	Limits (dBm/MHz)	Verdict
			Ant 1		
802.11a	5180	SISO	1.40	≤11	PASS
	5200	SISO	0.99	≤11	PASS
	5240	SISO	1.89	≤11	PASS
802.11n(HT20)	5180	SISO	1.04	≤11	PASS
	5200	SISO	1.16	≤11	PASS
	5240	SISO	1.30	≤11	PASS
802.11n(HT40)	5190	SISO	-4.48	≤11	PASS
	5230	SISO	-3.72	≤11	PASS

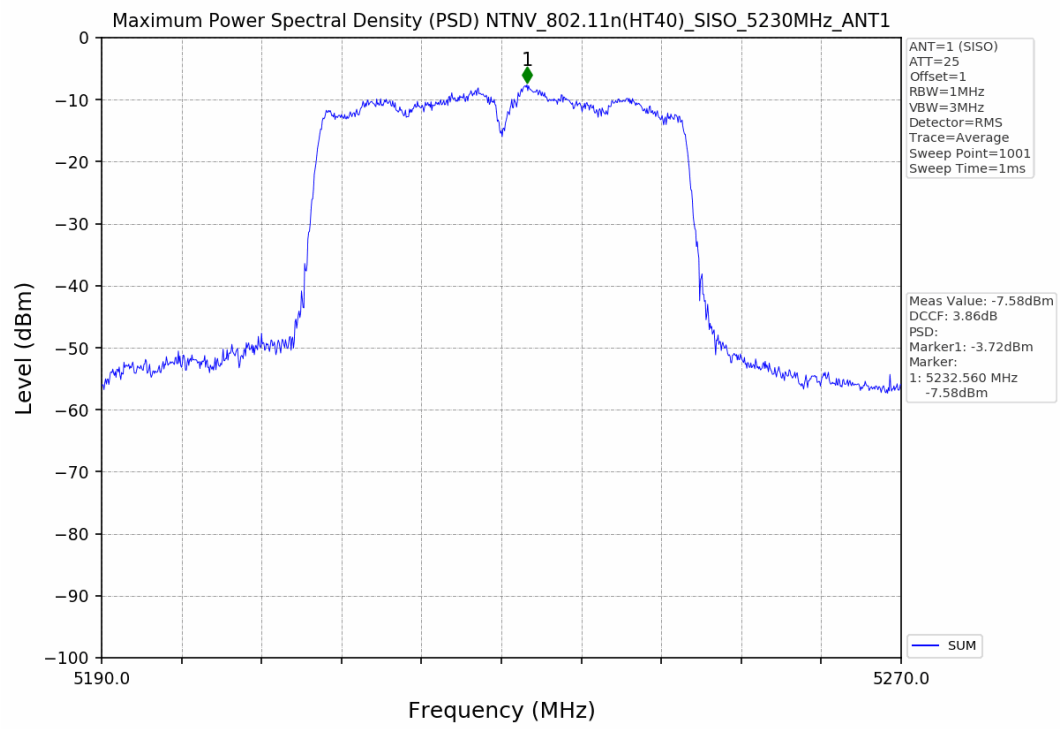
3.2 Test Graph











4. Frequency Stability

4.1 Test Result

Reference Frequency: 802.11a channel=36 frequency=5180MHz					
Voltage (V)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
5.0	-30	45.6	8.60	Within the band of operation	Pass
	-20	66.7	12.57		
	-10	79.4	15.21		
	0	83.2	16.04		
	10	83.7	16.08		
	20	65.7	12.52		
	30	52.8	10.32		
	40	56.8	10.86		
	50	50.1	9.63		
5.5	25	90.6	17.41	Within the band of operation	Pass
4.5	25	45.6	8.88		