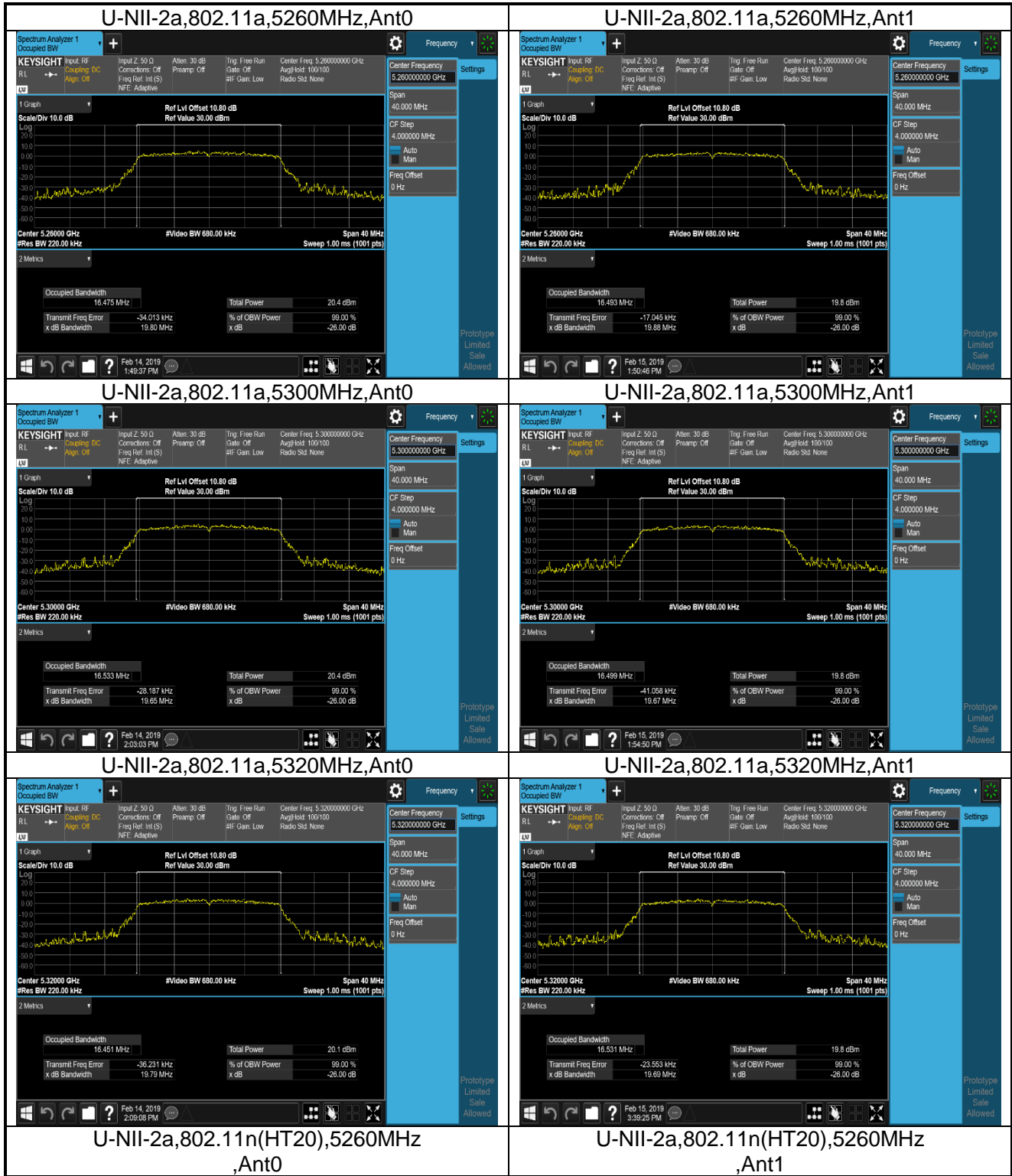# Appendix A2: Test results

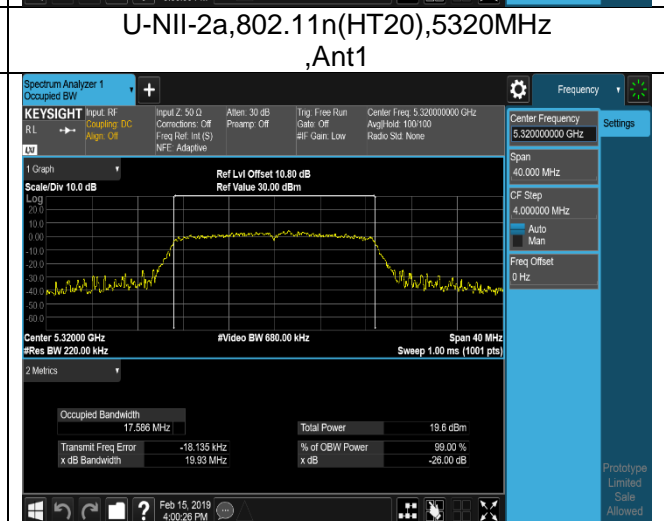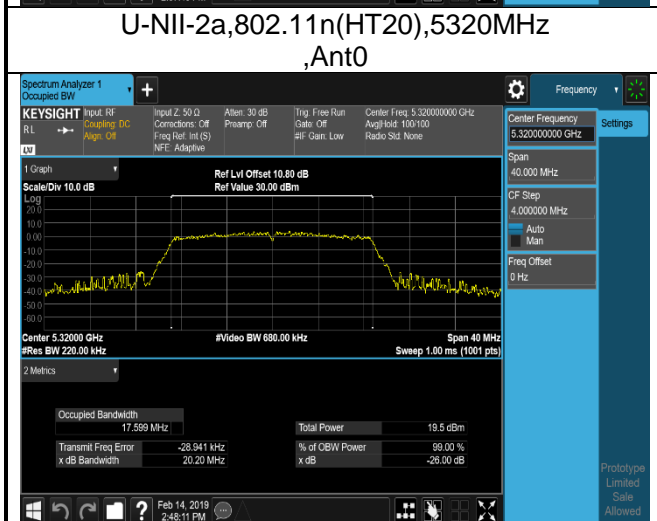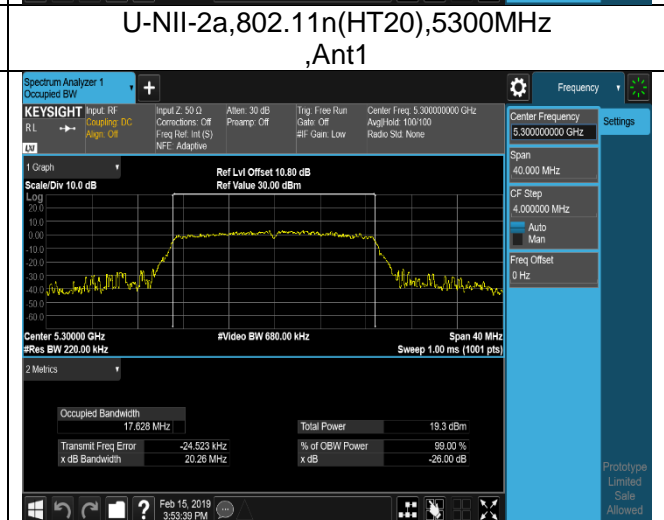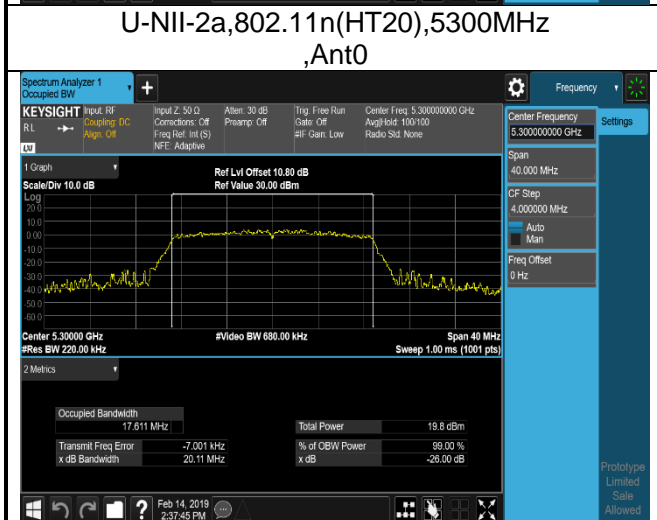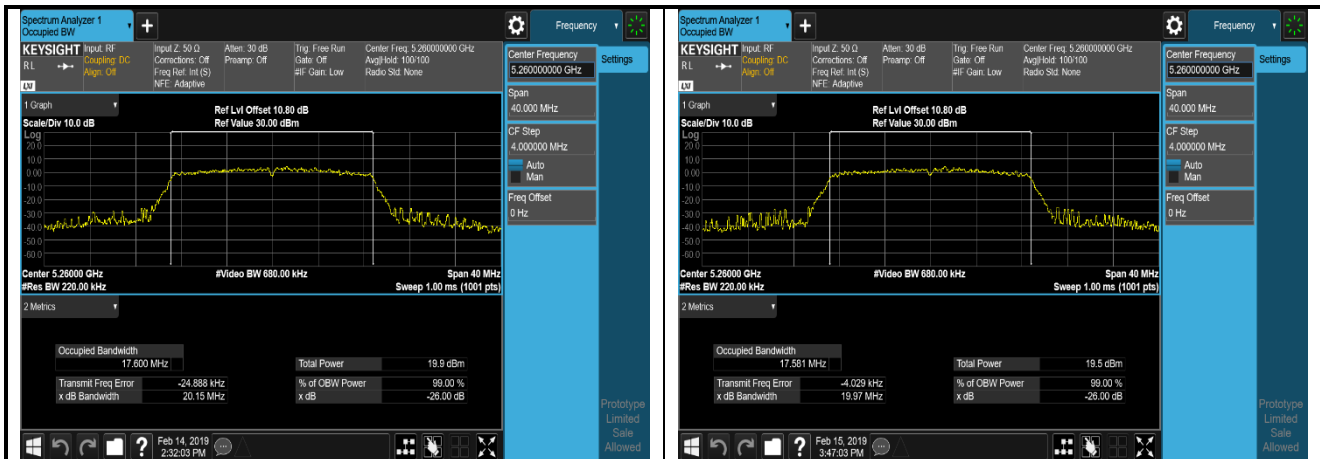1. Occupied N dB Bandwidth

1.1 Test Data

U-NII-2a Occupied N dB Bandwidth				
Mode	Test Frequency (MHz)	Ant	Occupied Bandwidth (MHz)	Result
802.11a	5260	Ant0	19.80	Pass
802.11a	5260	Ant1	19.88	Pass
802.11a	5300	Ant0	19.65	Pass
802.11a	5300	Ant1	19.67	Pass
802.11a	5320	Ant0	19.79	Pass
802.11a	5320	Ant1	19.69	Pass
802.11n (HT20)	5260	Ant0	20.15	Pass
802.11n (HT20)	5260	Ant1	19.97	Pass
802.11n (HT20)	5300	Ant0	20.11	Pass
802.11n (HT20)	5300	Ant1	20.26	Pass
802.11n (HT20)	5320	Ant0	20.20	Pass
802.11n (HT20)	5320	Ant1	19.93	Pass
802.11n (HT40)	5270	Ant0	40.45	Pass
802.11n (HT40)	5270	Ant1	40.15	Pass
802.11n (HT40)	5310	Ant0	40.26	Pass
802.11n (HT40)	5310	Ant1	40.19	Pass
802.11ac (VHT80)	5290	Ant0	80.60	Pass
802.11ac (VHT80)	5290	Ant1	80.39	Pass

1.2 Test Plots

U-NII-2a,802.11a,5260MHz,Ant0	U-NII-2a,802.11a,5260MHz,Ant1
U-NII-2a,802.11a,5300MHz,Ant0	U-NII-2a,802.11a,5300MHz,Ant1
U-NII-2a,802.11a,5320MHz,Ant0	U-NII-2a,802.11a,5320MHz,Ant1
U-NII-2a,802.11n(HT20),5260MHz ,Ant0	U-NII-2a,802.11n(HT20),5260MHz ,Ant1

U-NII-2a,802.11n(HT20),5300MHz ,Ant0	U-NII-2a,802.11n(HT20),5300MHz ,Ant1
U-NII-2a,802.11n(HT20),5320MHz ,Ant0	U-NII-2a,802.11n(HT20),5320MHz ,Ant1
U-NII-2a,802.11n(HT40),5270MHz ,Ant0	U-NII-2a,802.11n(HT40),5270MHz ,Ant1

U-NII-2a,802.11n(HT40),5310MHz ,Ant0	U-NII-2a,802.11n(HT40),5310MHz ,Ant1

U-NII-2a,802.11ac(VHT80),5290MHz ,Ant0	U-NII-2a,802.11ac(VHT80),5290MHz ,Ant1

2. 99% Occupied Bandwidth

2.1 Test Data

U-NII-2a 99% Occupied Bandwidth				
Mode	Test Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz)	Result
802.11a	5260	Ant0	16.484	Pass
802.11a	5260	Ant1	16.522	Pass
802.11a	5300	Ant0	16.471	Pass
802.11a	5300	Ant1	16.499	Pass
802.11a	5320	Ant0	16.448	Pass
802.11a	5320	Ant1	16.513	Pass
802.11n (HT20)	5260	Ant0	17.582	Pass
802.11n (HT20)	5260	Ant1	17.612	Pass
802.11n (HT20)	5300	Ant0	17.580	Pass
802.11n (HT20)	5300	Ant1	17.598	Pass
802.11n (HT20)	5320	Ant0	17.573	Pass
802.11n (HT20)	5320	Ant1	17.616	Pass
802.11n (HT40)	5270	Ant0	36.244	Pass
802.11n (HT40)	5270	Ant1	36.141	Pass
802.11n (HT40)	5310	Ant0	36.120	Pass
802.11n (HT40)	5310	Ant1	36.173	Pass
802.11ac (VHT80)	5290	Ant0	75.872	Pass
802.11ac (VHT80)	5290	Ant1	75.628	Pass

2.2 Test Plots
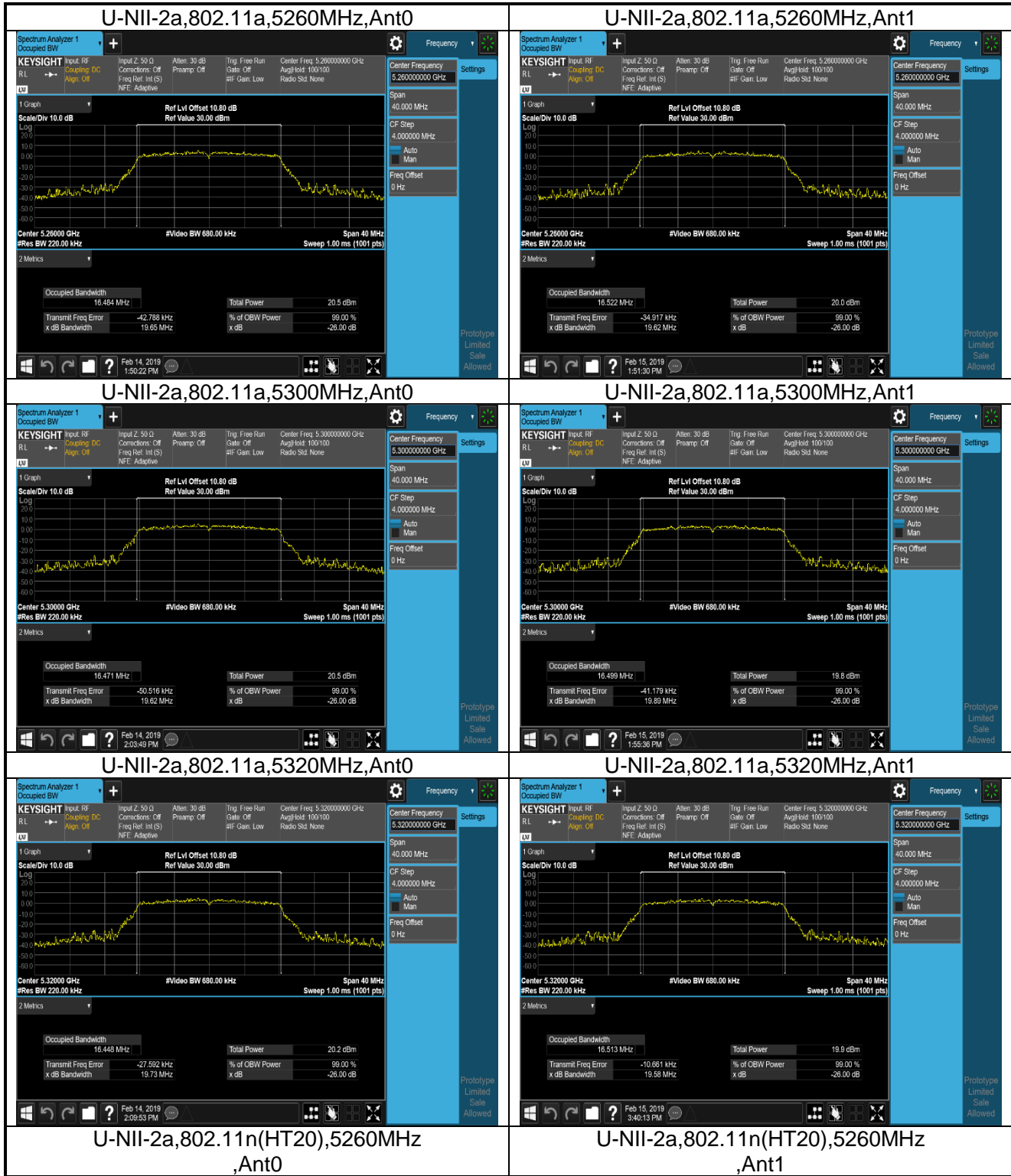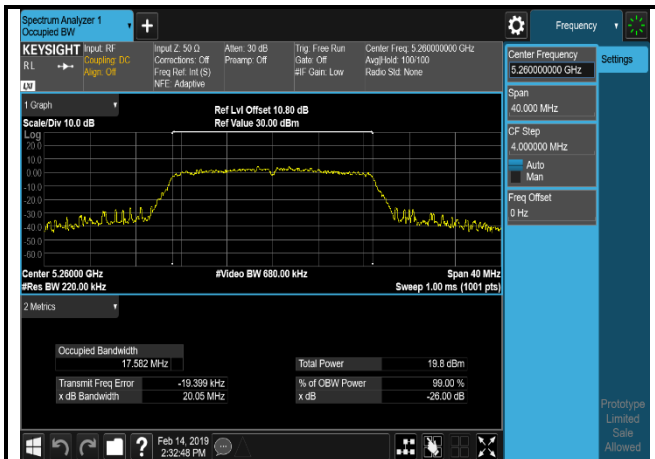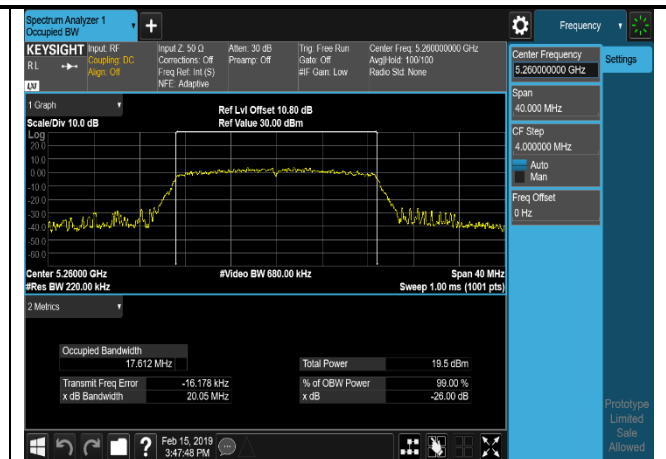
Total Quality. Assured.

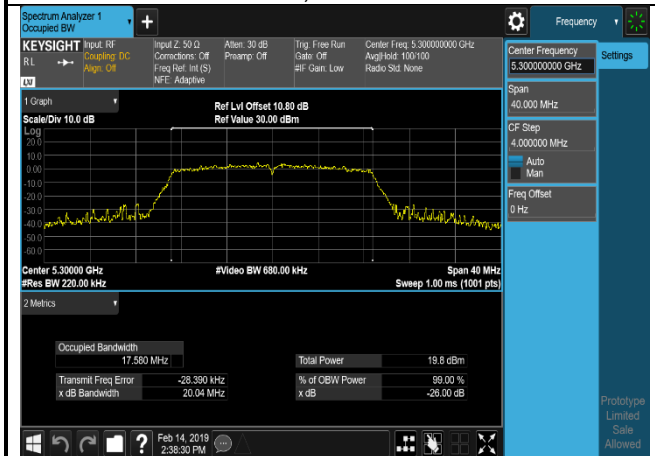| U-NII-2a,802.11a,5260MHz,Ant0	U-NII-2a,802.11a,5260MHz,Ant1
U-NII-2a,802.11a,5300MHz,Ant0	U-NII-2a,802.11a,5300MHz,Ant1
U-NII-2a,802.11a,5320MHz,Ant0	U-NII-2a,802.11a,5320MHz,Ant1
U-NII-2a,802.11n(HT20),5260MHz,Ant0	U-NII-2a,802.11n(HT20),5260MHz,Ant1

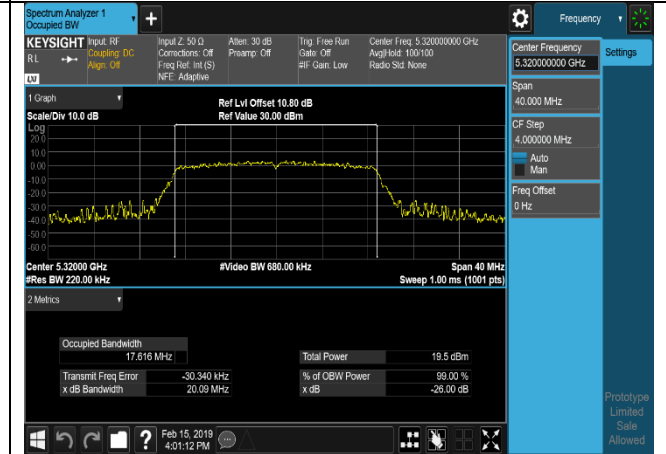U-NII-2a,802.11n(HT20),5300MHz
,Ant0

U-NII-2a,802.11n(HT20),5300MHz
,Ant1

U-NII-2a,802.11n(HT20),5320MHz
,Ant0

U-NII-2a,802.11n(HT20),5320MHz
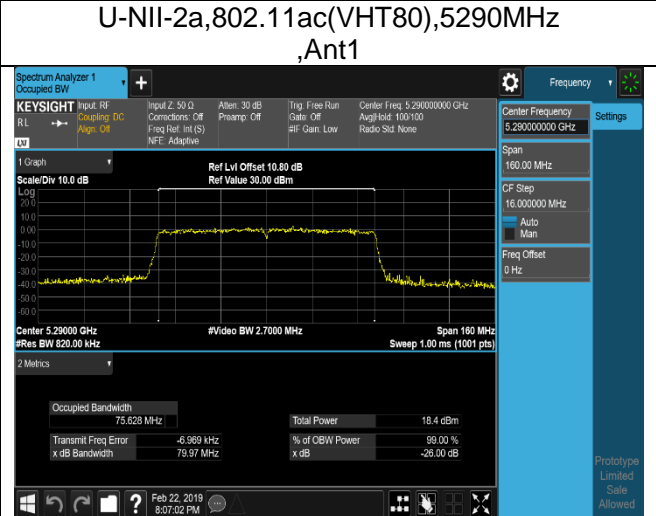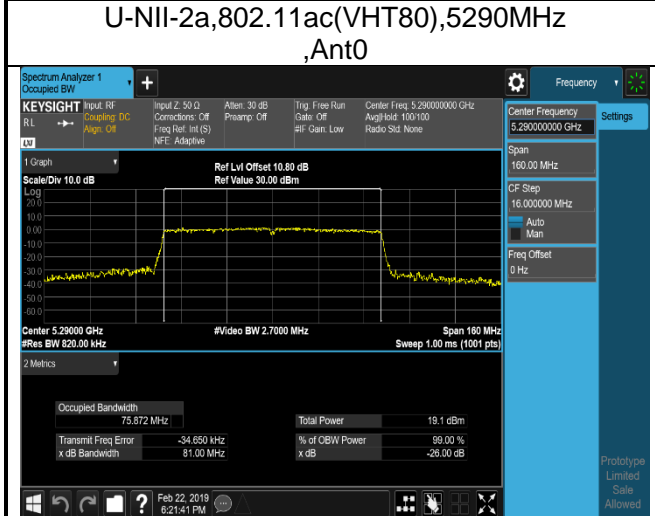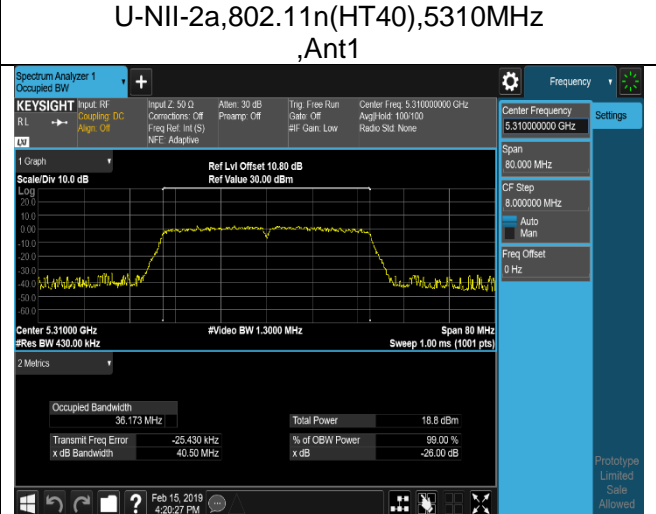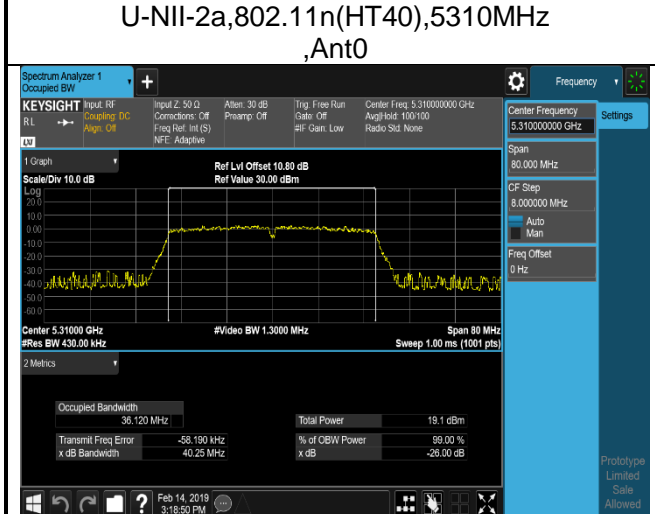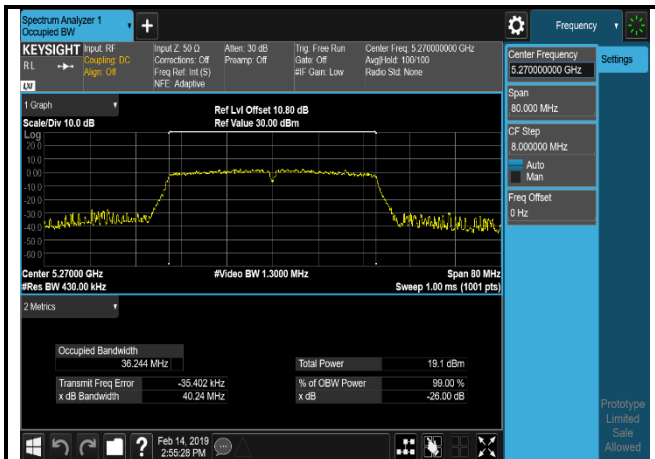,Ant1

U-NII-2a,802.11n(HT40),5270MHz
,Ant0

U-NII-2a,802.11n(HT40),5270MHz
,Ant1

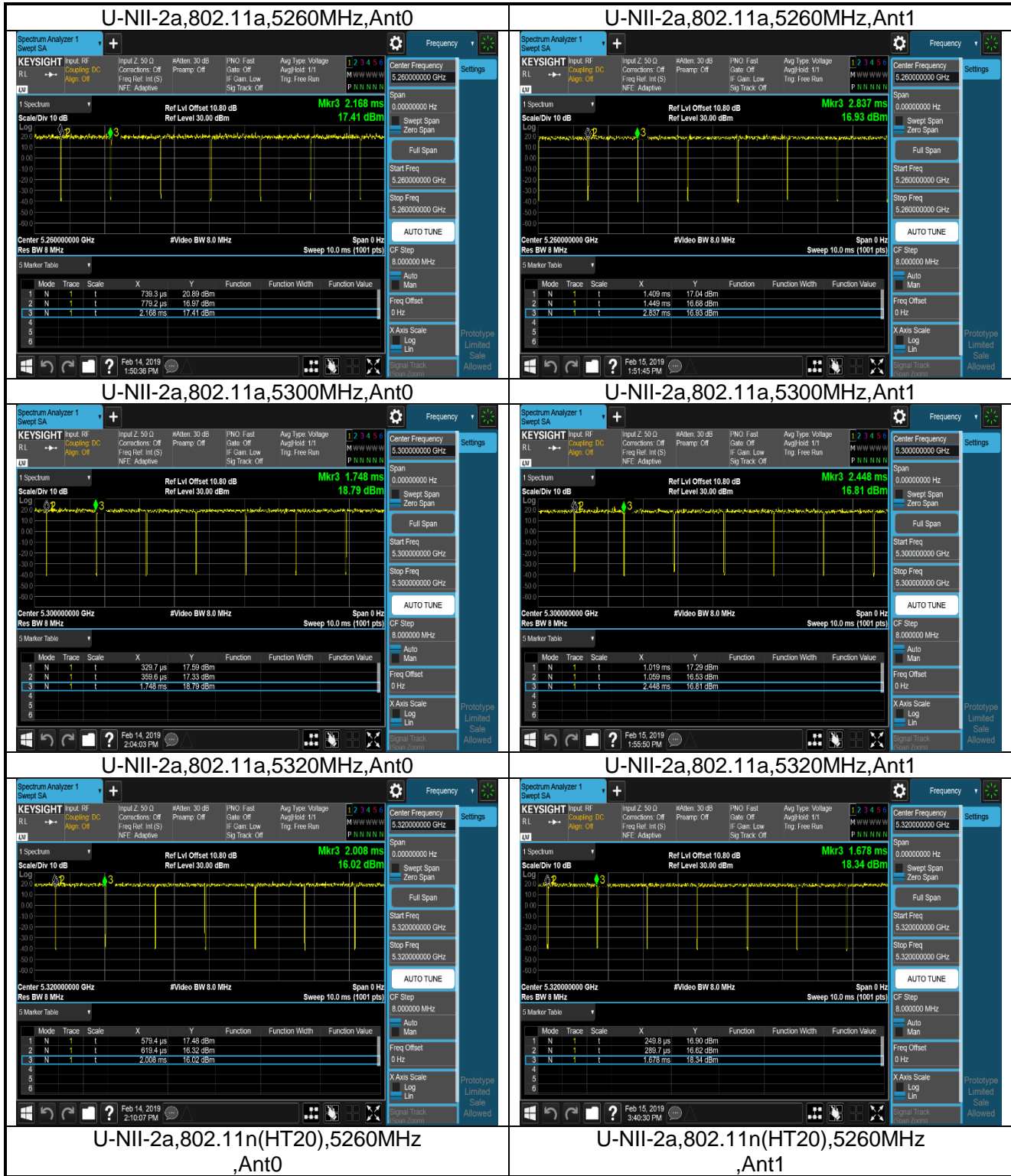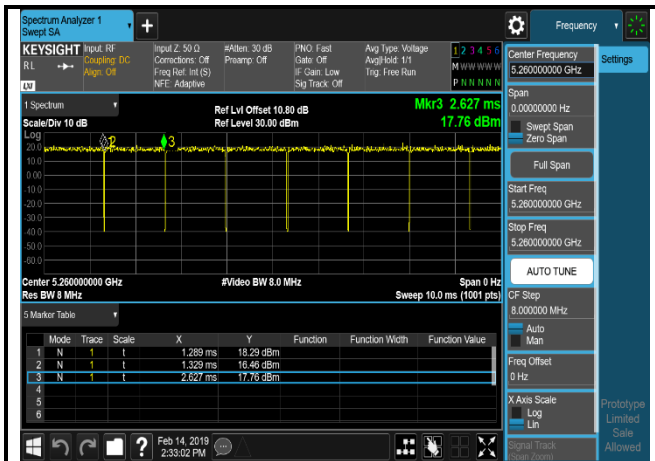| U-NII-2a,802.11n(HT40),5310MHz ,Ant0	U-NII-2a,802.11n(HT40),5310MHz ,Ant1
U-NII-2a,802.11ac(VHT80),5290MHz ,Ant0	U-NII-2a,802.11ac(VHT80),5290MHz ,Ant1

3. Duty Cycle

3.1 Test Data

U-NII-2a Duty Cycle				
Mode	Test Frequency (MHz)	Ant	Duty Cycle (%)	Duty Cycle Factor (dB)
802.11a	5260	Ant0	97.20	0.12
802.11a	5260	Ant1	97.20	0.12
802.11a	5300	Ant0	97.89	0.09
802.11a	5300	Ant1	97.20	0.12
802.11a	5320	Ant0	97.20	0.12
802.11a	5320	Ant1	97.20	0.12
802.11n (HT20)	5260	Ant0	97.01	0.13
802.11n (HT20)	5260	Ant1	97.74	0.10
802.11n (HT20)	5300	Ant0	97.01	0.13
802.11n (HT20)	5300	Ant1	97.74	0.10
802.11n (HT20)	5320	Ant0	97.74	0.10
802.11n (HT20)	5320	Ant1	97.01	0.13
802.11n (HT40)	5270	Ant0	95.59	0.20
802.11n (HT40)	5270	Ant1	95.59	0.20
802.11n (HT40)	5310	Ant0	94.20	0.26
802.11n (HT40)	5310	Ant1	94.12	0.26
802.11ac (VHT80)	5290	Ant0	84.12	0.75
802.11ac (VHT80)	5290	Ant1	84.12	0.75

3.2 Test Plots

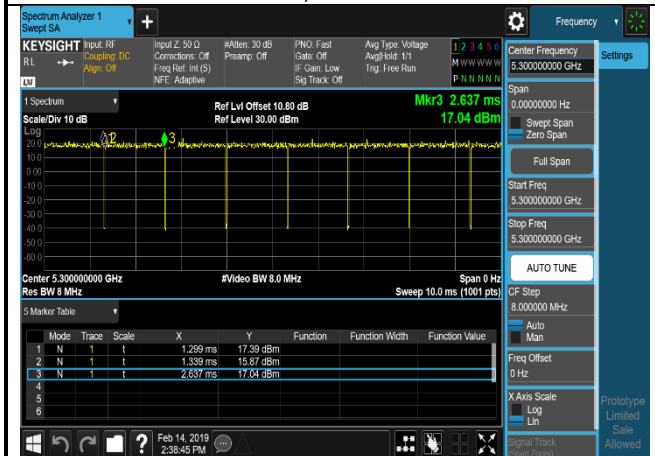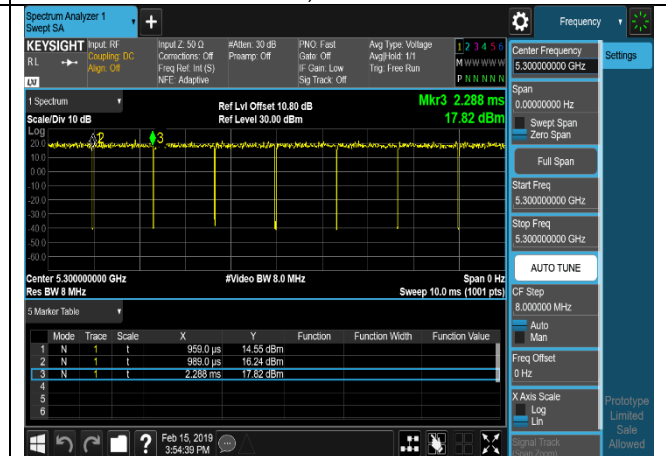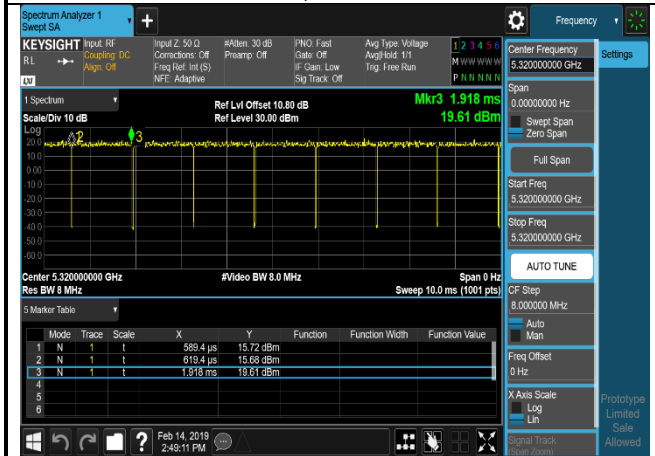| U-NII-2a,802.11a,5260MHz,Ant0	U-NII-2a,802.11a,5260MHz,Ant1
U-NII-2a,802.11a,5300MHz,Ant0	U-NII-2a,802.11a,5300MHz,Ant1
U-NII-2a,802.11a,5320MHz,Ant0	U-NII-2a,802.11a,5320MHz,Ant1
U-NII-2a,802.11n(HT20),5260MHz ,Ant0	U-NII-2a,802.11n(HT20),5260MHz ,Ant1
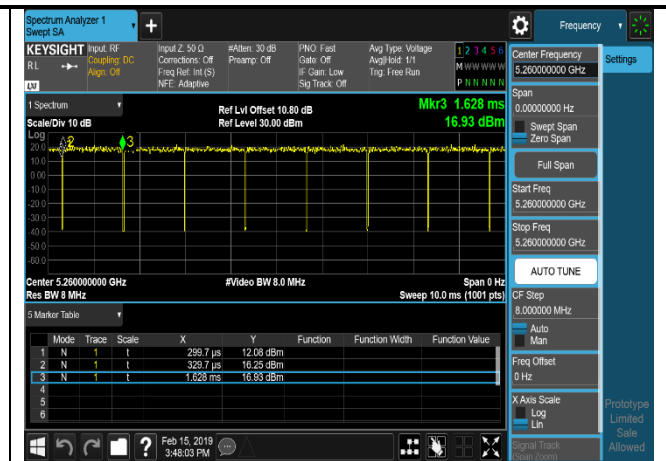
U-NII-2a,802.11n(HT20),5300MHz ,Ant0

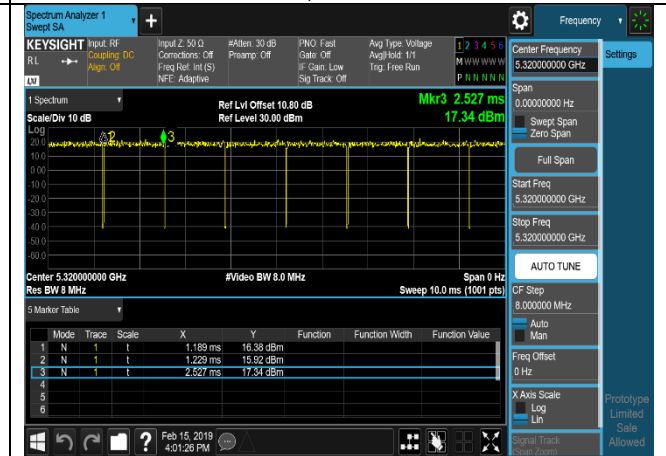U-NII-2a,802.11n(HT20),5300MHz ,Ant1

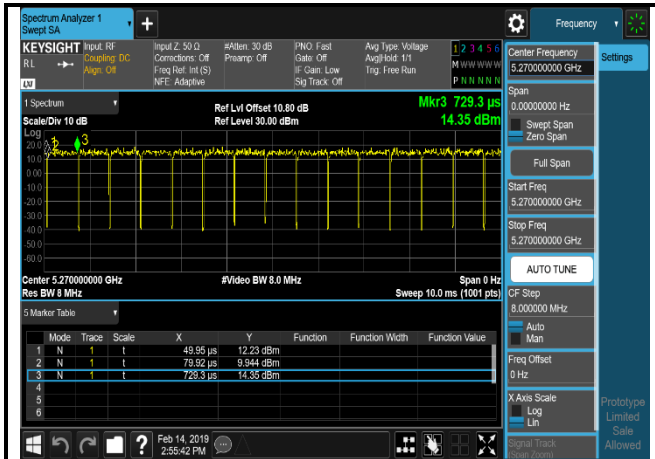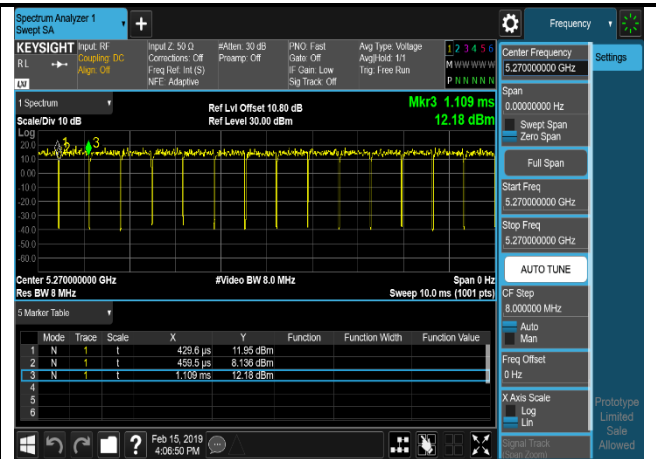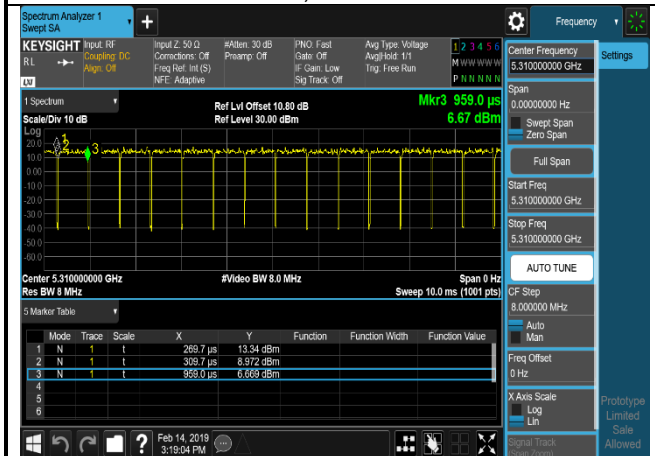U-NII-2a,802.11n(HT20),5320MHz ,Ant0

U-NII-2a,802.11n(HT20),5320MHz ,Ant1

U-NII-2a,802.11n(HT40),5270MHz ,Ant0

U-NII-2a,802.11n(HT40),5270MHz ,Ant1

![intertek Total Quality. Assured.]

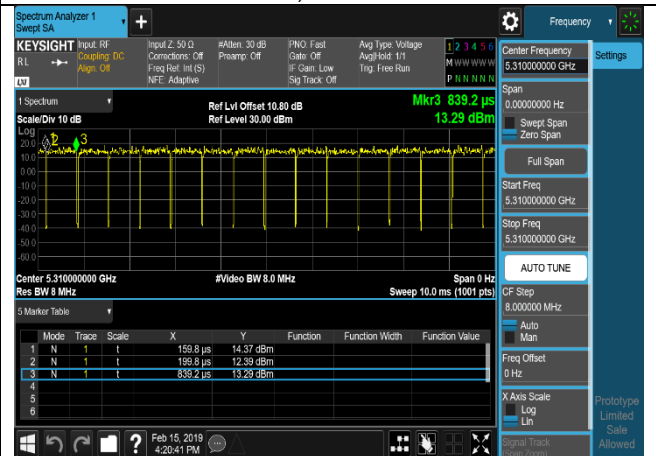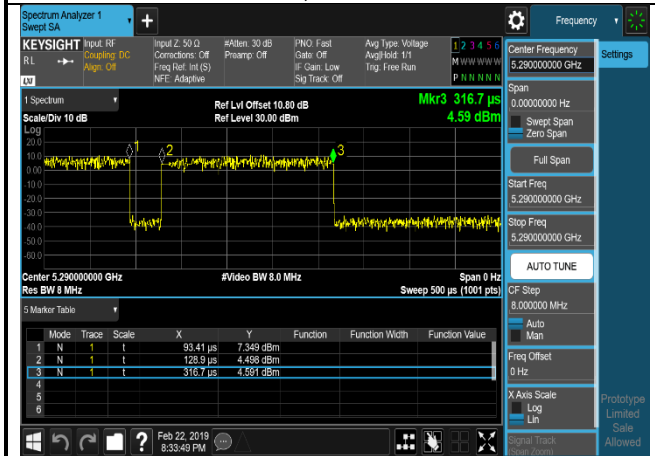| U-NII-2a,802.11n(HT40),5310MHz ,Ant0	U-NII-2a,802.11n(HT40),5310MHz ,Ant1
U-NII-2a,802.11ac(VHT80),5290MHz ,Ant0	U-NII-2a,802.11ac(VHT80),5290MHz ,Ant1

4. AVGSA Output Power

4.1 Test Data

Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	Max Power (dBm)	Total Power (dBm)	FCC Limit (dBm)	IC Limit (dBm)	EIRP (dBm)	Result
			U-NII-2a AVGSA Output Power						
802.11a	5260	Ant0	0.12	14.62	14.62	24	23	18.06	Pass
802.11a	5260	Ant1	0.12	14.12	14.12	24	23	17.49	Pass
802.11a	5300	Ant0	0.09	14.67	14.67	24	23	18.11	Pass
802.11a	5300	Ant1	0.12	13.95	13.95	24	23	17.32	Pass
802.11a	5320	Ant0	0.12	14.45	14.45	24	23	17.89	Pass
802.11a	5320	Ant1	0.12	14.06	14.06	24	23	17.43	Pass
802.11n (HT20)	5260	Ant0	0.13	13.84	16.71	24	23	20.12	Pass
802.11n (HT20)	5260	Ant1	0.10	13.55					
802.11n (HT20)	5300	Ant0	0.13	13.87	16.70	24	23	20.11	Pass
802.11n (HT20)	5300	Ant1	0.10	13.50					
802.11n (HT20)	5320	Ant0	0.10	13.59	16.59	24	23	20.00	Pass
802.11n (HT20)	5320	Ant1	0.13	13.57					
802.11n (HT40)	5270	Ant0	0.20	13.11	15.92	24	24	19.33	Pass
802.11n (HT40)	5270	Ant1	0.20	12.70					
802.11n (HT40)	5310	Ant0	0.26	13.22	16.03	24	24	19.44	Pass
802.11n (HT40)	5310	Ant1	0.26	12.81					
802.11ac (VHT80)	5290	Ant0	0.75	10.86	13.55	24	24	16.96	Pass
802.11ac (VHT80)	5290	Ant1	0.75	10.19					

4.2 Test Plots

U-NII-2a,802.11a,5260MHz,Ant0	U-NII-2a,802.11a,5260MHz,Ant1
U-NII-2a,802.11a,5300MHz,Ant0	U-NII-2a,802.11a,5300MHz,Ant1
U-NII-2a,802.11a,5320MHz,Ant0	U-NII-2a,802.11a,5320MHz,Ant1
U-NII-2a,802.11n(HT20),5260MHz ,Ant0	U-NII-2a,802.11n(HT20),5260MHz ,Ant1