Appendix B: Test results of U-NII-2a Band

1 Occupied N dB Bandwidth

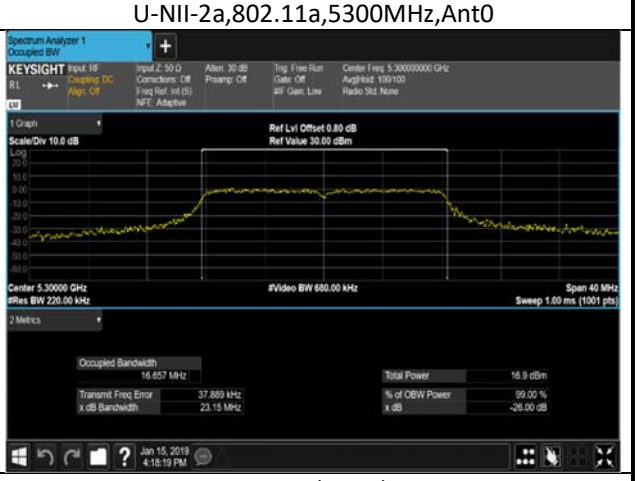
1.1 Test Data

U-NII-2a Occupied N dB Bandwidth				
Mode	Test Frequency (MHz)	Ant	Occupied Bandwidth (MHz)	Result
802.11a	5260	Ant0	21.04	Pass
802.11a	5300	Ant0	23.15	Pass
802.11a	5320	Ant0	22.75	Pass
802.11n (HT20)	5260	Ant0	27.31	Pass
802.11n (HT20)	5300	Ant0	21.24	Pass
802.11n (HT20)	5320	Ant0	21.59	Pass
802.11n (HT40)	5270	Ant0	49.33	Pass
802.11n (HT40)	5310	Ant0	56.21	Pass
802.11ac (VHT80)	5290	Ant0	91.54	Pass

1.2 Test Plots

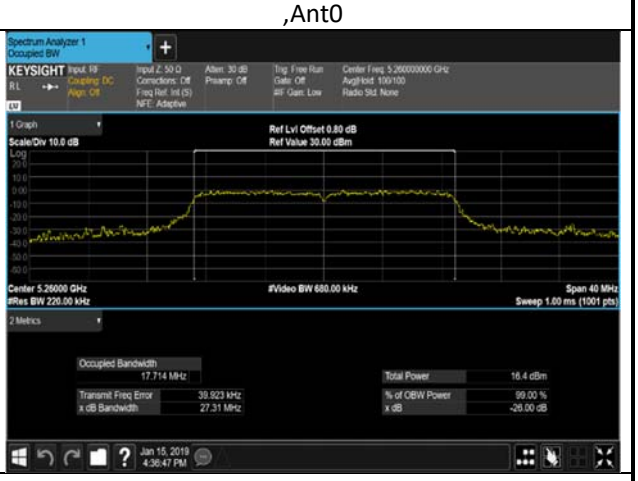
U-NII-2a,802.11a,5260MHz,Ant0

U-NII-2a,802.11a,5300MHz,Ant0



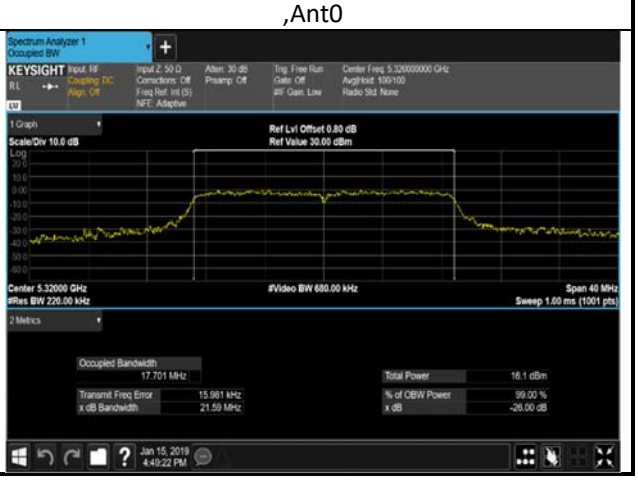
U-NII-2a,802.11a,5320MHz,Ant0

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



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

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



U-NII-2a,802.11n(HT40),5270MHz ,Ant0	U-NII-2a,802.11n(HT40),5310MHz ,Ant0
U-NII-2a,802.11ac(VHT80),5290MHz ,Ant0	

2 99% Occupied Bandwidth

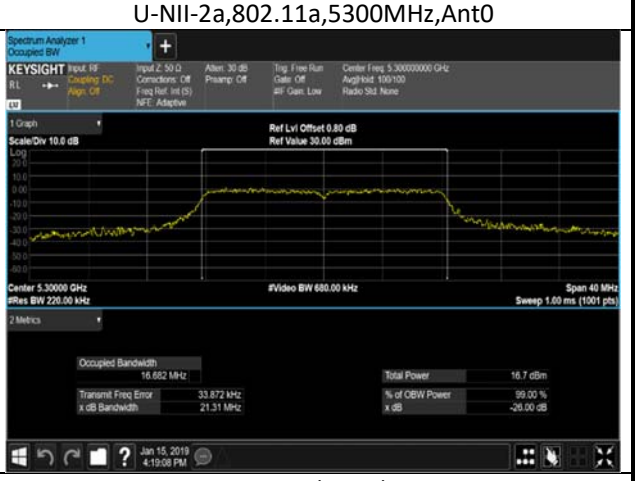
2.1 Test Data

U-NII-2a 99% Occupied Bandwidth				
Mode	Test Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz)	Result
802.11a	5260	Ant0	16.650	Pass
802.11a	5300	Ant0	16.682	Pass
802.11a	5320	Ant0	16.720	Pass
802.11n (HT20)	5260	Ant0	17.671	Pass
802.11n (HT20)	5300	Ant0	17.690	Pass
802.11n (HT20)	5320	Ant0	17.724	Pass
802.11n (HT40)	5270	Ant0	36.505	Pass
802.11n (HT40)	5310	Ant0	36.579	Pass
802.11ac (VHT80)	5290	Ant0	75.793	Pass

2.2 Test Plots

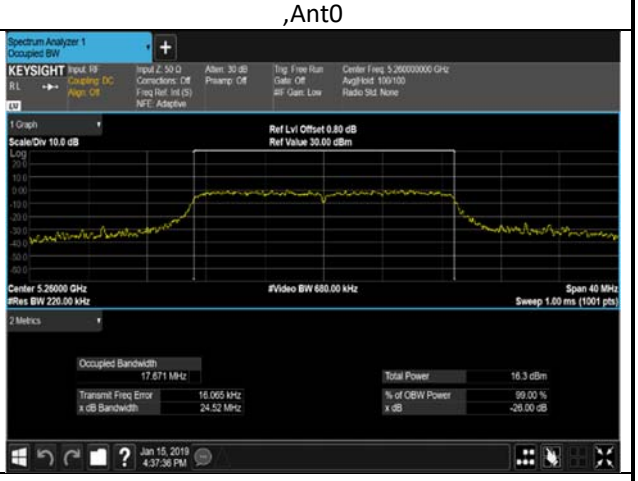
U-NII-2a,802.11a,5260MHz,Ant0

U-NII-2a,802.11a,5300MHz,Ant0



U-NII-2a,802.11a,5320MHz,Ant0

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



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

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

U-NII-2a,802.11n(HT40),5270MHz ,Ant0	U-NII-2a,802.11n(HT40),5310MHz ,Ant0
U-NII-2a,802.11ac(VHT80),5290MHz ,Ant0	

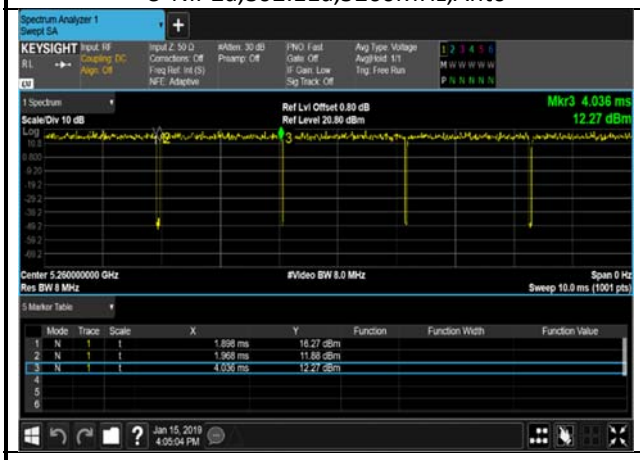
3 Duty Cycle

3.1 Test Data

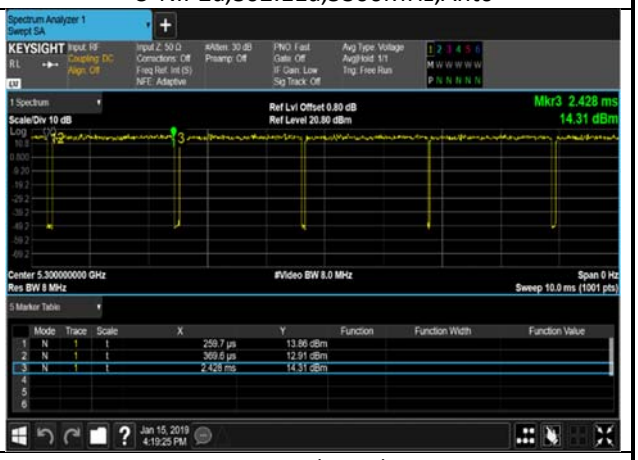
U-NII-2a Duty Cycle				
Mode	Test Frequency (MHz)	Ant	Duty Cycle (%)	Duty Cycle Factor (dB)
802.11a	5260	Ant0	96.73	0.14
802.11a	5300	Ant0	94.93	0.23
802.11a	5320	Ant0	96.73	0.14
802.11n (HT20)	5260	Ant0	95.52	0.20
802.11n (HT20)	5300	Ant0	96.97	0.13
802.11n (HT20)	5320	Ant0	96.00	0.18
802.11n (HT40)	5270	Ant0	92.16	0.35
802.11n (HT40)	5310	Ant0	93.07	0.31
802.11ac (VHT80)	5290	Ant0	89.32	0.49

3.2 Test Plots

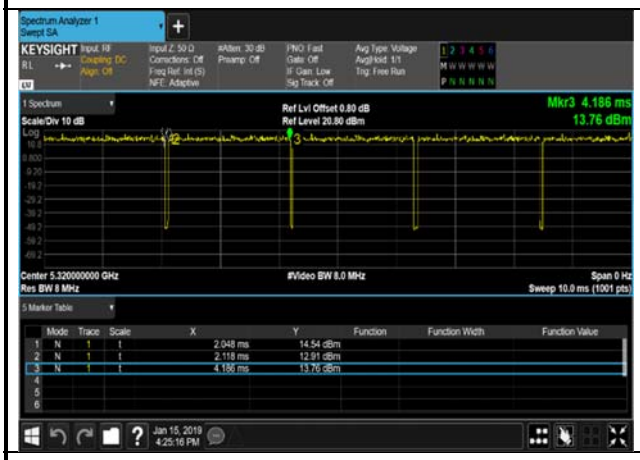
U-NII-2a,802.11a,5260MHz,Ant0



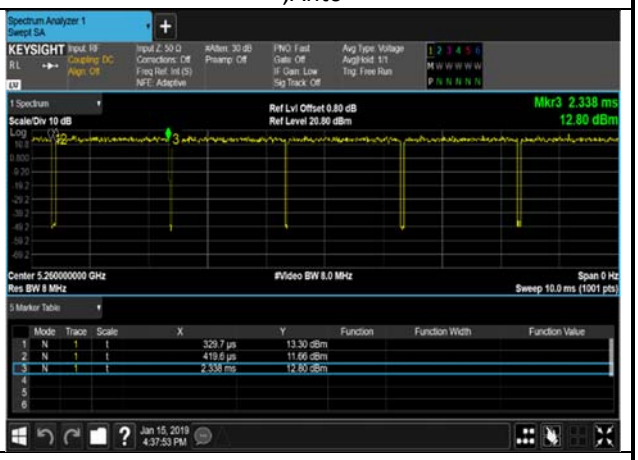
U-NII-2a,802.11a,5300MHz,Ant0



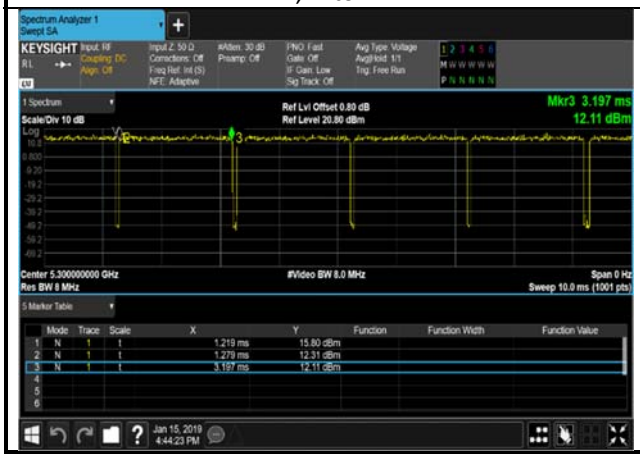
U-NII-2a,802.11a,5320MHz,Ant0



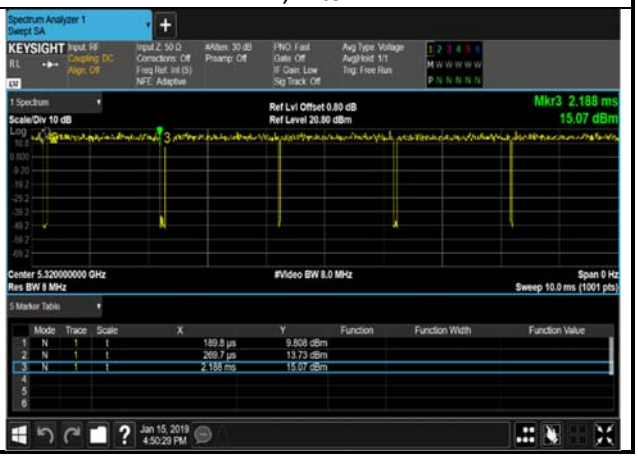
U-NII-2a,802.11n(HT20),5260MHz ,Ant0

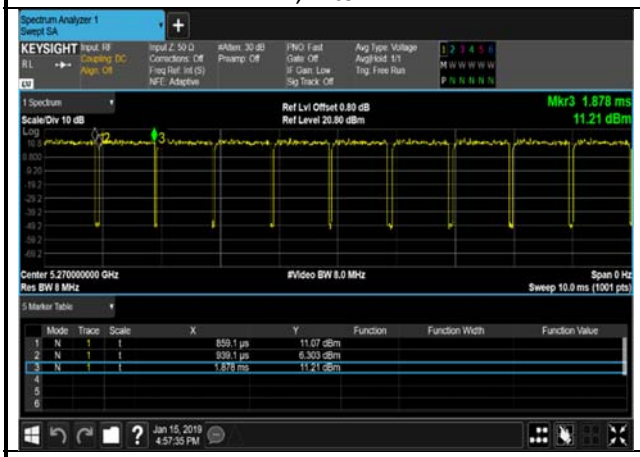
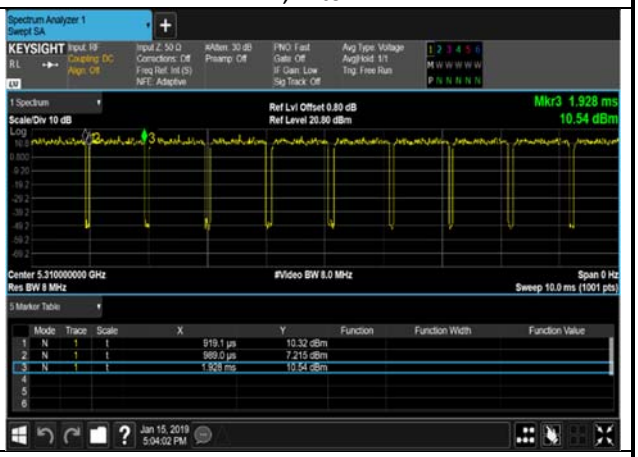
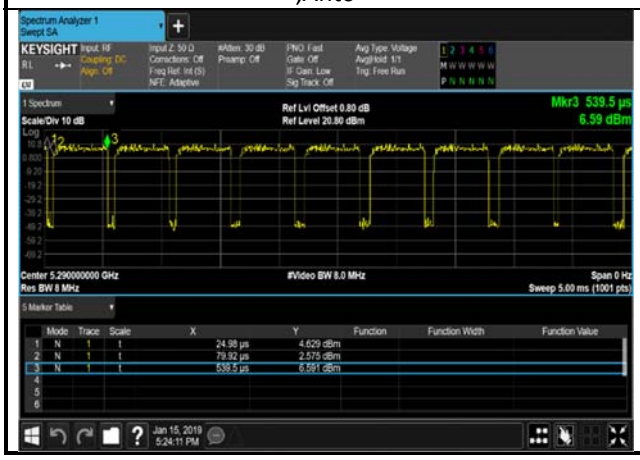


U-NII-2a,802.11n(HT20),5300MHz ,Ant0



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



U-NII-2a,802.11n(HT40),5270MHz ,Ant0	U-NII-2a,802.11n(HT40),5310MHz ,Ant0
	
U-NII-2a,802.11ac(VHT80),5290MHz ,Ant0	
	

4 AVGSA Output Power

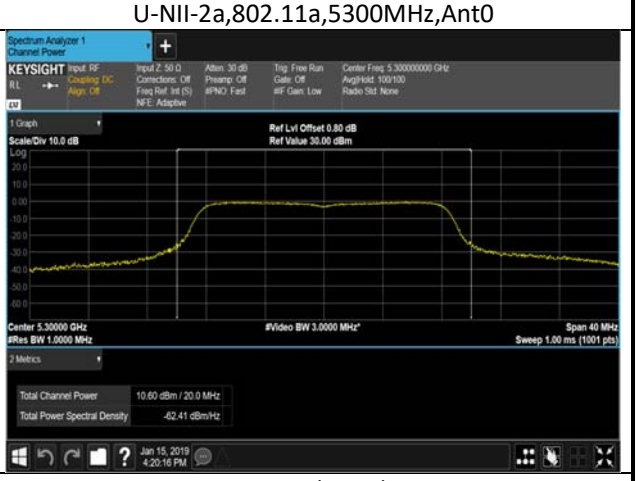
4.1 Test Data

U-NII-2a AVGSA Output Power								
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	Max Power (dBm)	Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Result
802.11a	5260	Ant0	0.14	10.76	24	13.46	30	Pass
802.11a	5300	Ant0	0.23	10.83	24	13.53	30	Pass
802.11a	5320	Ant0	0.14	10.47	24	13.17	30	Pass
802.11n (HT20)	5260	Ant0	0.20	10.34	24	13.04	30	Pass
802.11n (HT20)	5300	Ant0	0.13	10.27	24	12.97	30	Pass
802.11n (HT20)	5320	Ant0	0.18	10.18	24	12.88	30	Pass
802.11n (HT40)	5270	Ant0	0.35	10.61	24	13.31	30	Pass
802.11n (HT40)	5310	Ant0	0.31	10.73	24	13.43	30	Pass
802.11ac (VHT80)	5290	Ant0	0.49	10.13	24	12.83	30	Pass

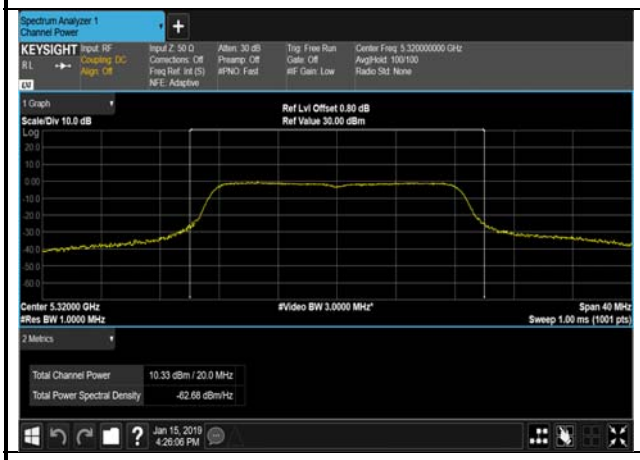
4.2 Test Plots

U-NII-2a,802.11a,5260MHz,Ant0

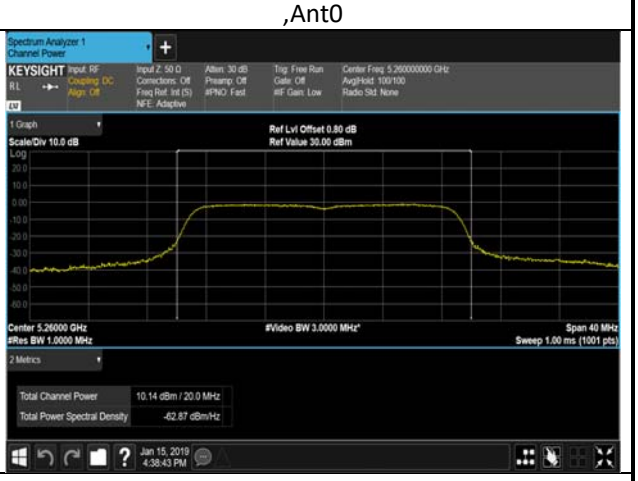
U-NII-2a,802.11a,5300MHz,Ant0



U-NII-2a,802.11a,5320MHz,Ant0

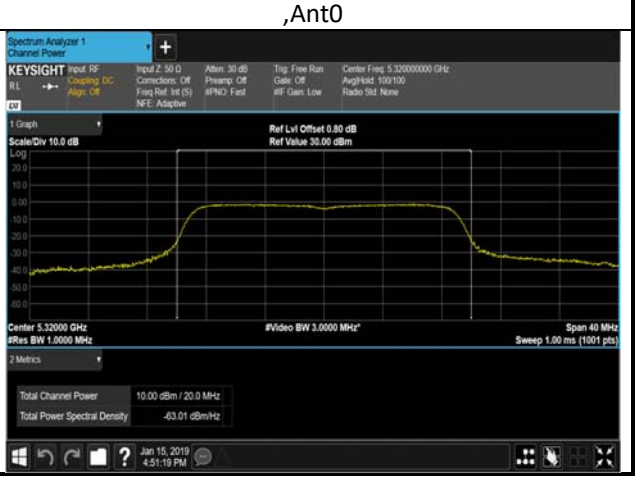


U-NII-2a,802.11n(HT20),5260MHz ,Ant0



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

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



U-NII-2a,802.11n(HT40),5270MHz ,Ant0	U-NII-2a,802.11n(HT40),5310MHz ,Ant0
U-NII-2a,802.11ac(VHT80),5290MHz ,Ant0	

5 AVGSA Power Spectral Density

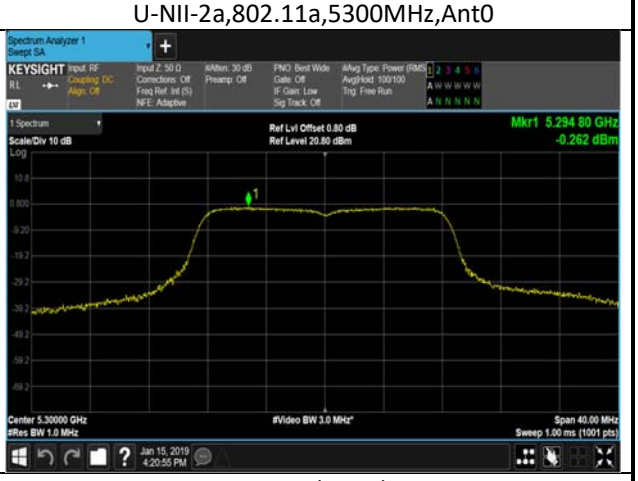
5.1 Test Data

U-NII-2a AVGSA Power Spectral Density							
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	PSD (dBm/MHz)	RBW (kHz)	Limit (dBm/MHz)	Result
802.11a	5260	Ant0	0.14	-0.040	1000	11	Pass
802.11a	5300	Ant0	0.23	-0.032	1000	11	Pass
802.11a	5320	Ant0	0.14	-0.539	1000	11	Pass
802.11n (HT20)	5260	Ant0	0.20	-0.992	1000	11	Pass
802.11n (HT20)	5300	Ant0	0.13	-1.014	1000	11	Pass
802.11n (HT20)	5320	Ant0	0.18	-0.881	1000	11	Pass
802.11n (HT40)	5270	Ant0	0.35	-3.586	1000	11	Pass
802.11n (HT40)	5310	Ant0	0.31	-3.563	1000	11	Pass
802.11ac (VHT80)	5290	Ant0	0.49	-5.899	1000	11	Pass

5.2 Test Plots

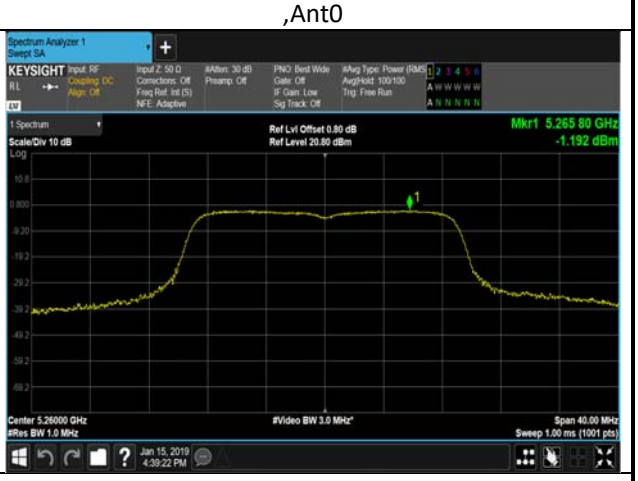
U-NII-2a,802.11a,5260MHz,Ant0

U-NII-2a,802.11a,5300MHz,Ant0



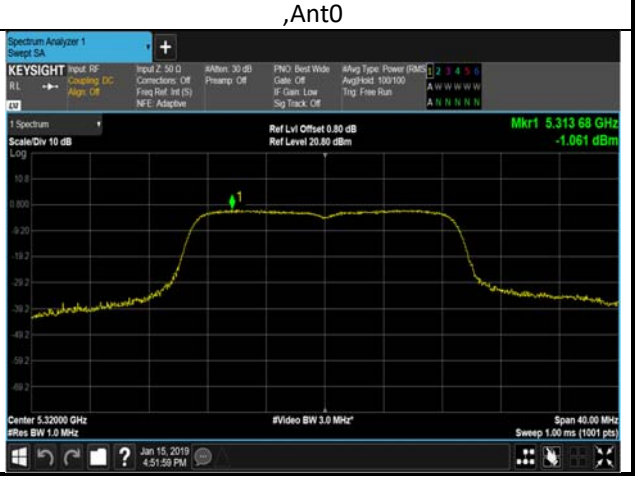
U-NII-2a,802.11a,5320MHz,Ant0

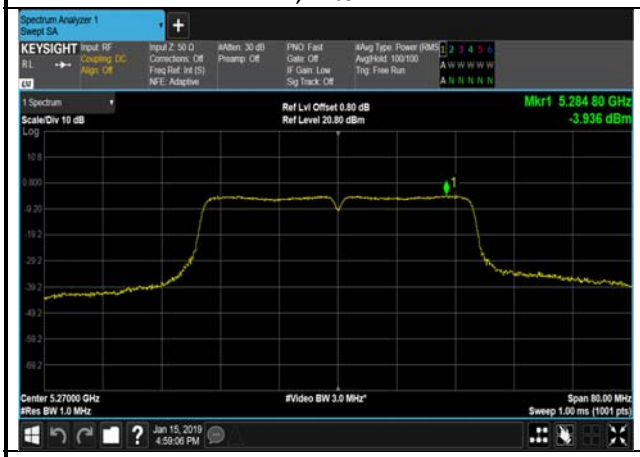
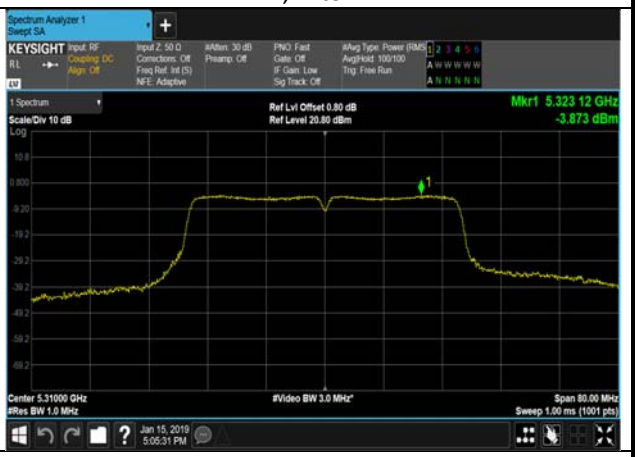
U-NII-2a,802.11n(HT20),5260MHz ,Ant0



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

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



U-NII-2a,802.11n(HT40),5270MHz ,Ant0	U-NII-2a,802.11n(HT40),5310MHz ,Ant0
	
U-NII-2a,802.11ac(VHT80),5290MHz ,Ant0	

********** END **********