

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5180	98.94%	0
802.11n HT20	5180	98.92%	0
802.11ac VHT20	5180	98.89%	0
802.11n HT40	5190	97.78%	0.10
802.11ac VHT40	5190	97.82%	0.10
802.11ac VHT80	5210	95.57%	0.20

Note: Correction Factor=10*log (1/Duty Cycle)

Output Power

Mode	Tones/ RUIndex	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Chain0	11.54	10.24
802.11a	NA	5220	Chain0	11.83	10.53
802.11a	NA	5240	Chain0	11.53	10.23
802.11n HT20	NA	5180	Chain0	10.86	9.56
802.11n HT20	NA	5220	Chain0	11.19	9.89
802.11n HT20	NA	5240	Chain0	10.94	9.64
802.11ac VHT20	NA	5180	Chain0	10.84	9.54
802.11ac VHT20	NA	5220	Chain0	10.77	9.47
802.11ac VHT20	NA	5240	Chain0	10.90	9.60
802.11n HT40	NA	5190	Chain0	10.99	9.69
802.11n HT40	NA	5230	Chain0	10.96	9.66
802.11ac VHT40	NA	5190	Chain0	10.63	9.33
802.11ac VHT40	NA	5230	Chain0	10.96	9.66
802.11ac VHT80	NA	5210	Chain0	10.55	9.25

Emission Bandwidth

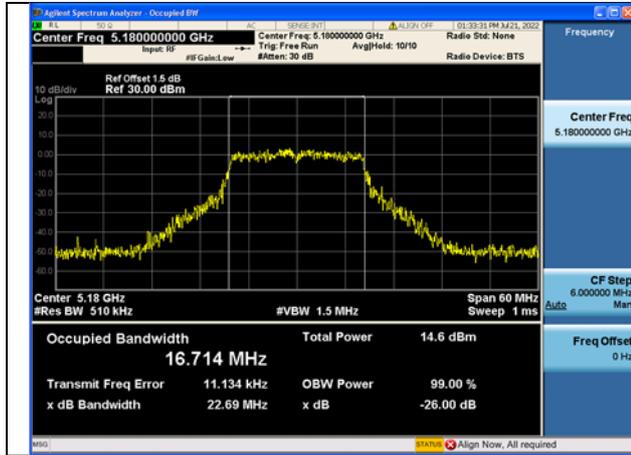
Offset 1.5dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.554	Channel No.562	Channel No.566
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	22.69	22.58	22.53
802.11n HT20	Chain0	22.89	22.99	23.57
802.11ac VHT20	Chain0	24.38	24.56	23.96

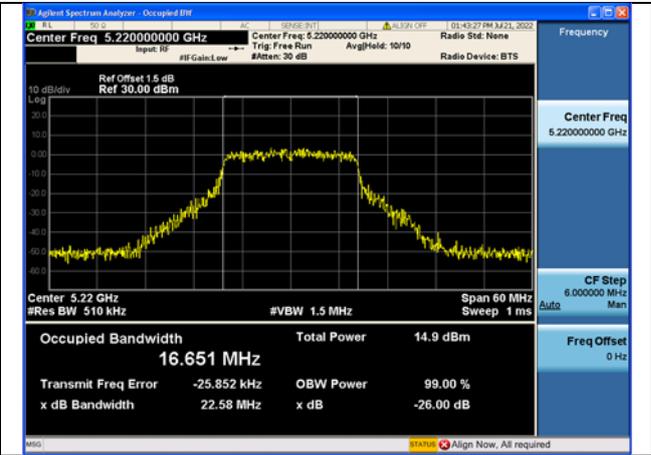
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.556	---	Channel No.564
		5190MHz	---	5230MHz
802.11n HT40	Chain0	40.85	---	40.12
802.11ac VHT40	Chain0	40.78	---	39.54

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.560	---	---
		5210MHz	---	---
802.11ac VHT80	Chain0	83.31	---	---

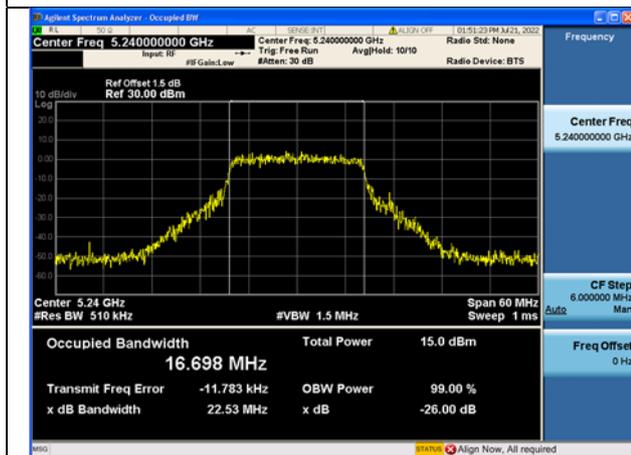
Test Mode: 802.11a



Test Mode:802.11a 5180MHz Chain0

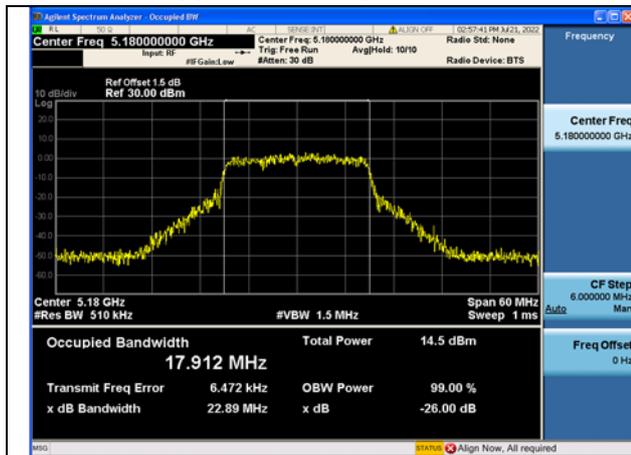


Test Mode:802.11a 5220MHz Chain0

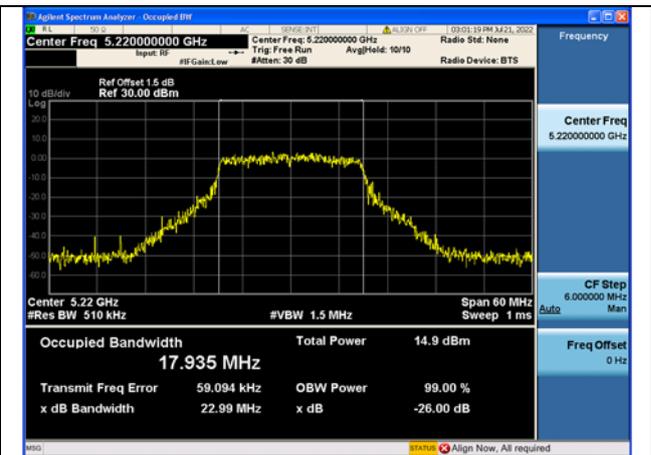


Test Mode:802.11a 5240MHz Chain0

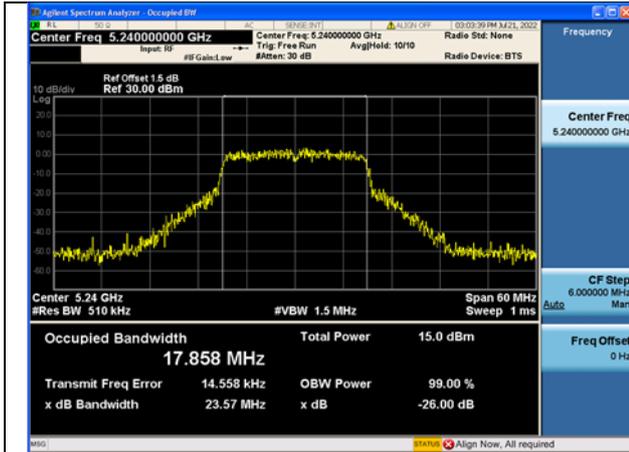
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5180MHz Chain0

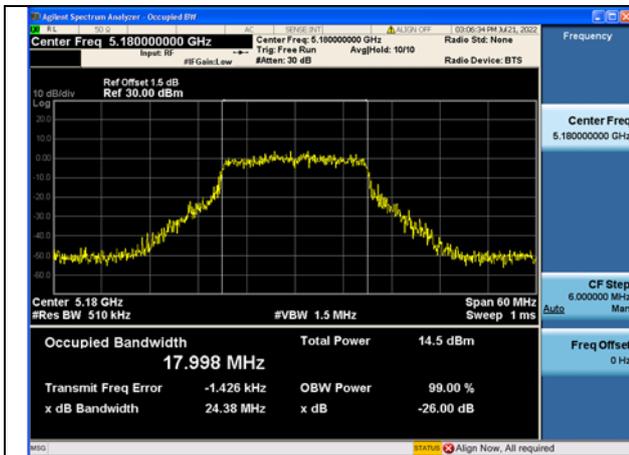


Test Mode:802.11n HT20 5220MHz Chain0

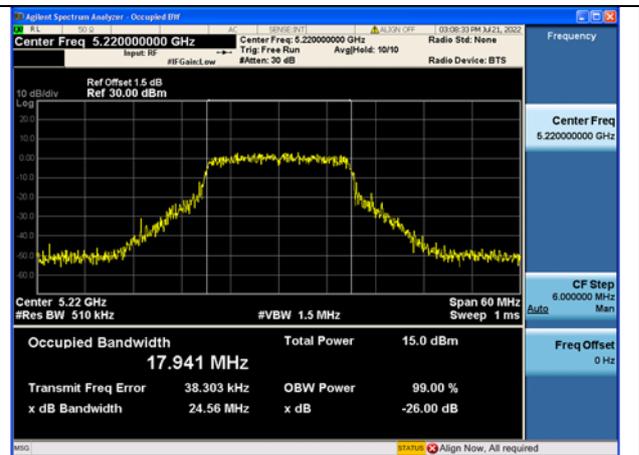


Test Mode:802.11n HT20 5240MHz Chain0

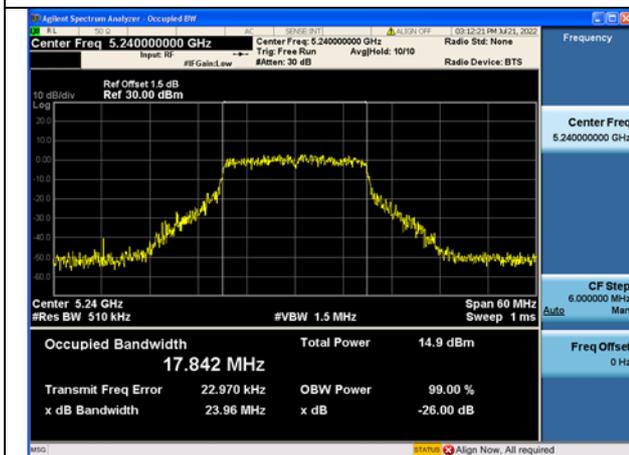
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5180MHz Chain0

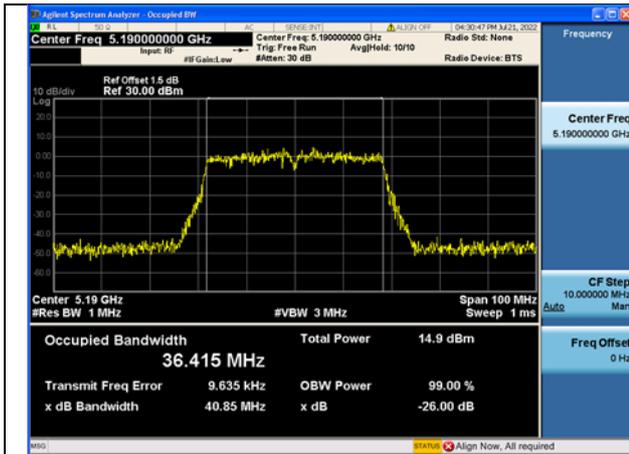


Test Mode:802.11ac VHT20 5220MHz Chain0

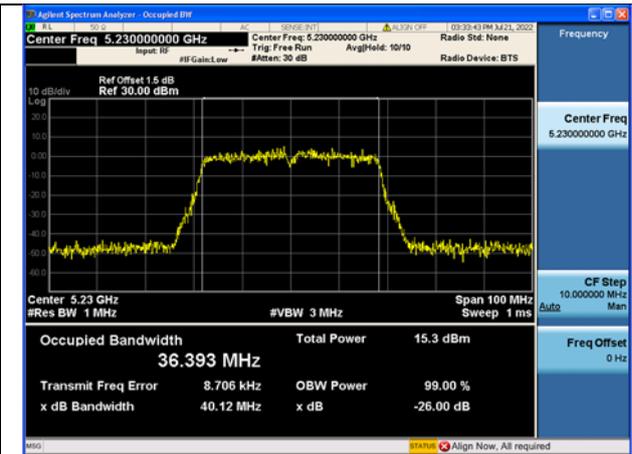


Test Mode:802.11ac VHT20 5240MHz Chain0

Test Mode: 802.11n HT40

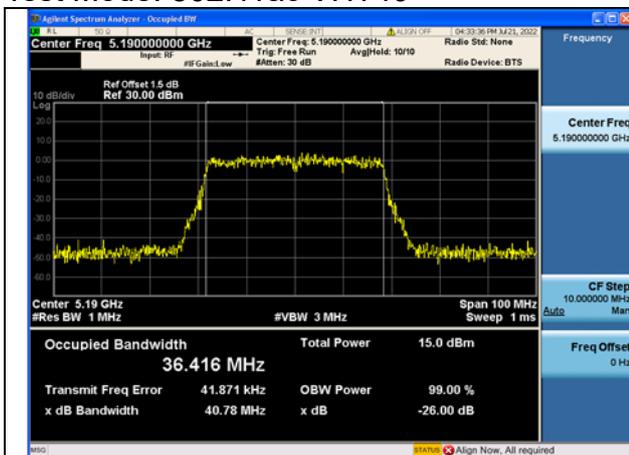


Test Mode:802.11n HT40 5190MHz Chain0

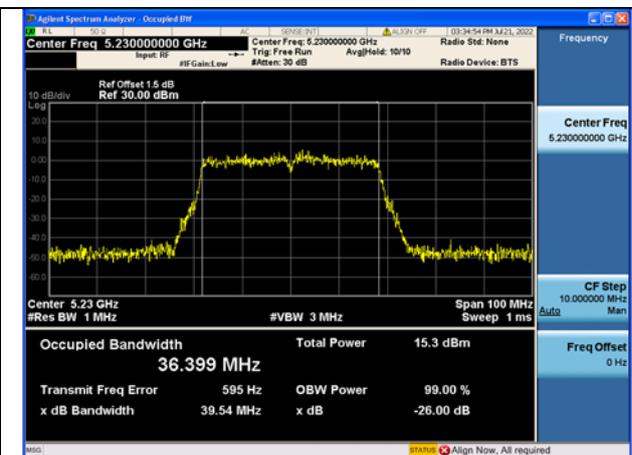


Test Mode:802.11n HT40 5230MHz Chain0

Test Mode: 802.11ac VHT40

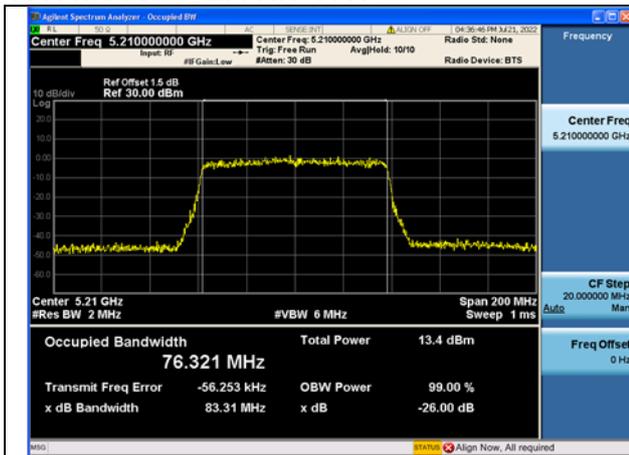


Test Mode:802.11ac VHT40 5190MHz Chain0



Test Mode:802.11ac VHT40 5230MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5210MHz Chain0

Occupied Bandwidth

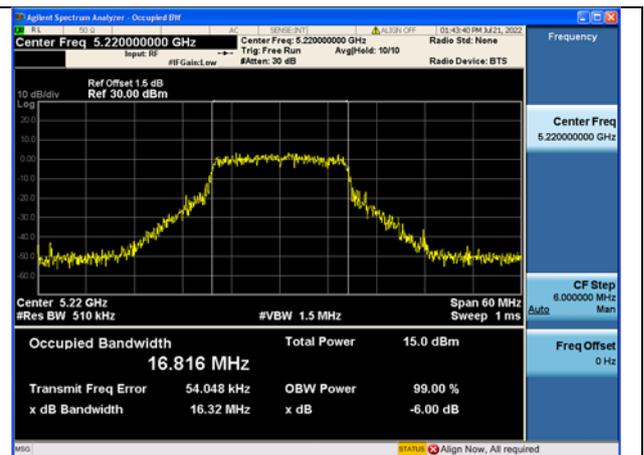
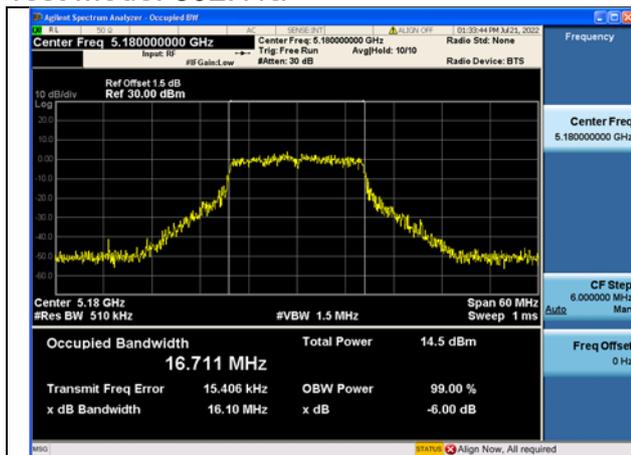
Offset 1.5dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.554	Channel No.562	Channel No.566
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	16.711	16.816	16.822
802.11n HT20	Chain0	17.998	17.844	17.990
802.11ac VHT20	Chain0	17.814	17.836	17.851

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.556	---	Channel No.564
		5190MHz	---	5230MHz
802.11n HT40	Chain0	36.476	---	36.452
802.11ac VHT40	Chain0	36.466	---	36.383

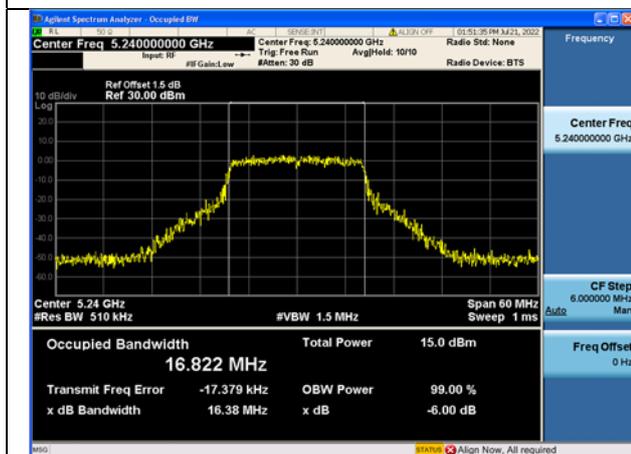
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.560	---	---
		5210MHz	---	---
802.11ac VHT80	Chain0	76.348	---	---

Test Mode: 802.11a



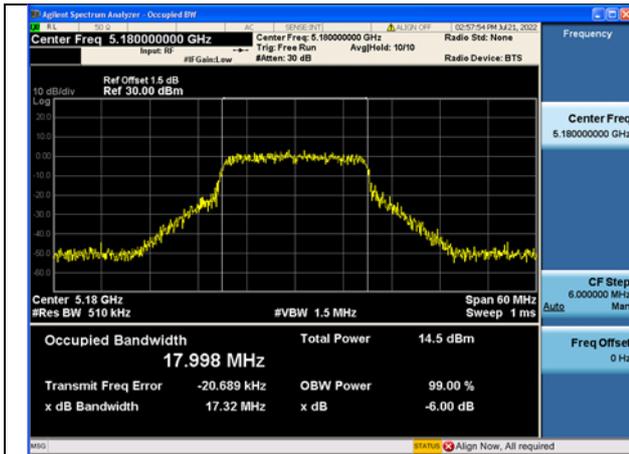
Test Mode:802.11a 5180MHz Chain0

Test Mode:802.11a 5220MHz Chain0

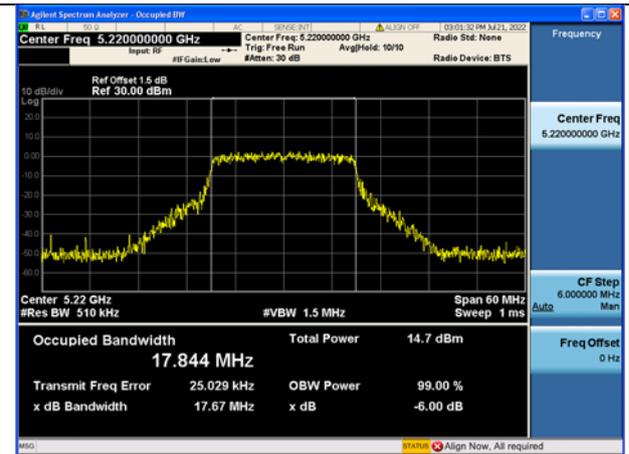


Test Mode:802.11a 5240MHz Chain0

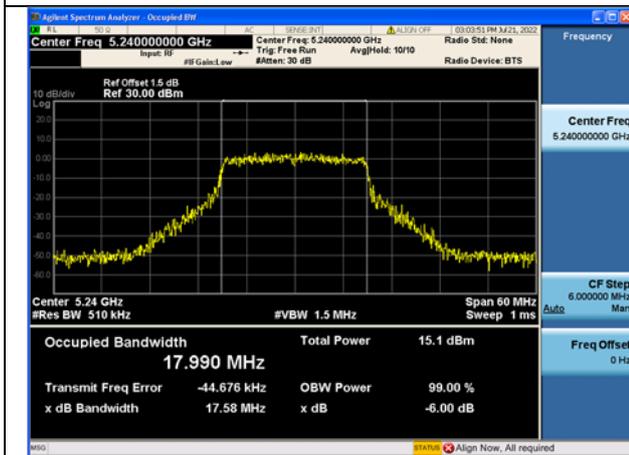
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5180MHz Chain0

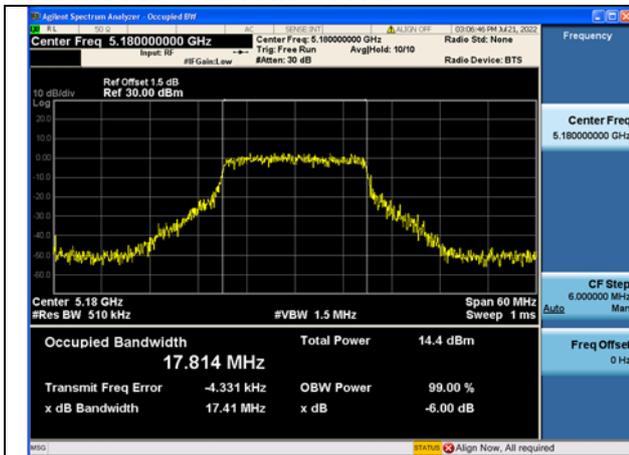


Test Mode:802.11n HT20 5220MHz Chain0

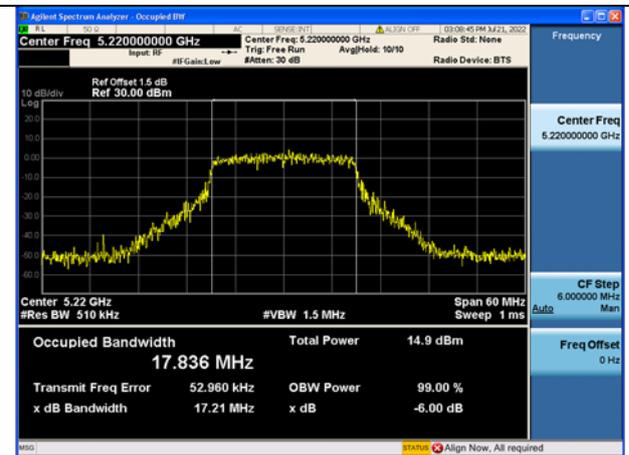


Test Mode:802.11n HT20 5240MHz Chain0

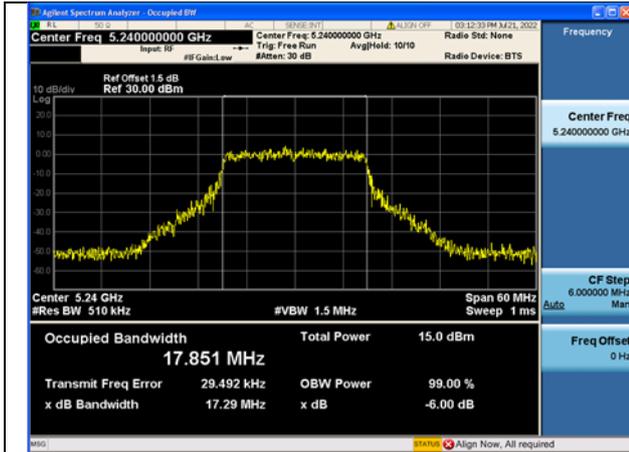
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5180MHz Chain0

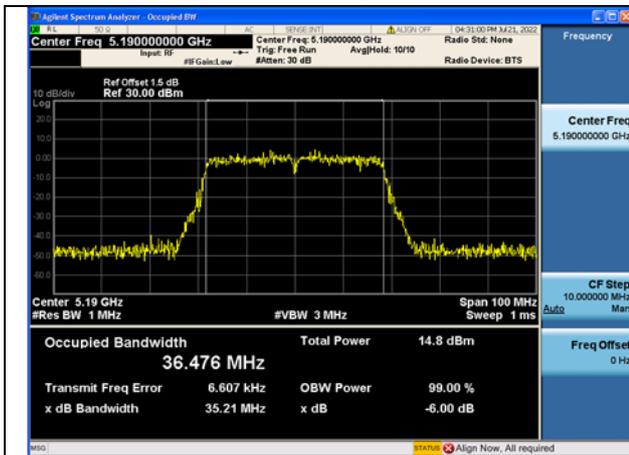


Test Mode:802.11ac VHT20 5220MHz Chain0

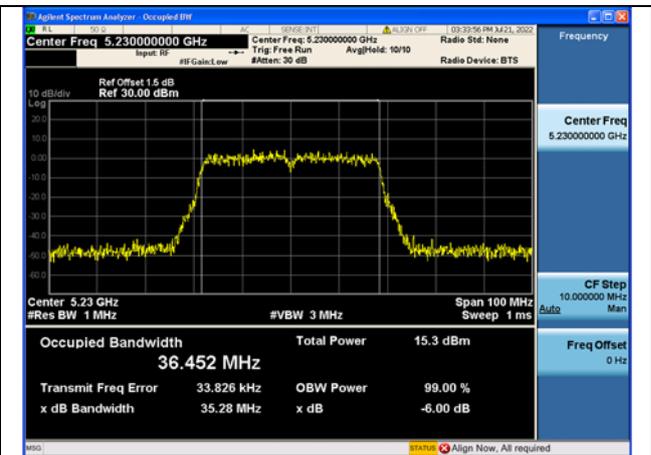


Test Mode:802.11ac VHT20 5240MHz Chain0

Test Mode: 802.11n HT40

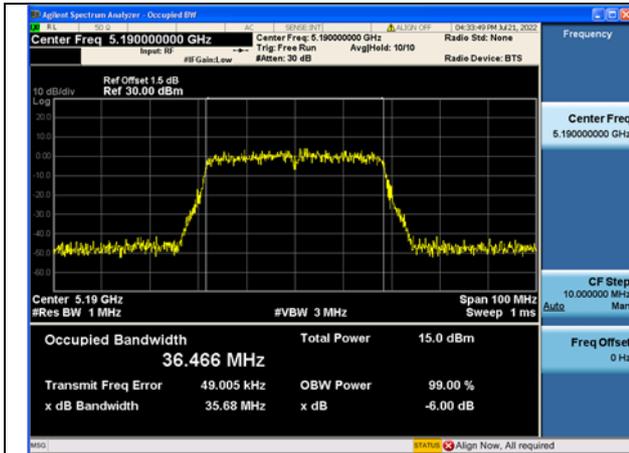


Test Mode:802.11n HT40 5190MHz Chain0

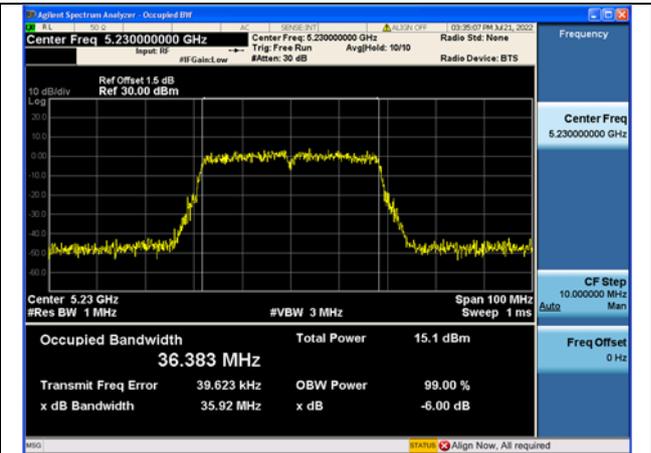


Test Mode:802.11n HT40 5230MHz Chain0

Test Mode: 802.11ac VHT40

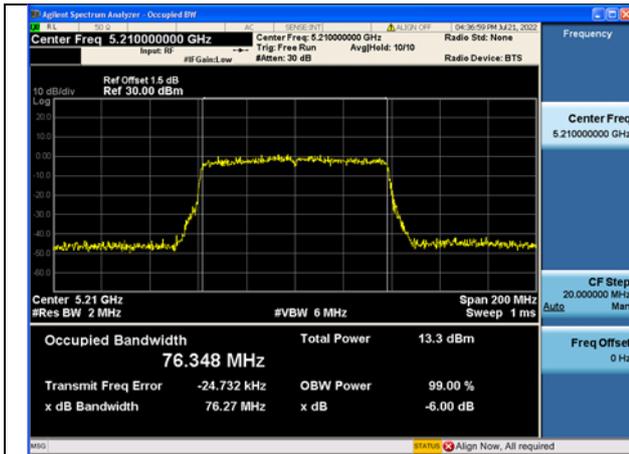


Test Mode:802.11ac VHT40 5190MHz Chain0



Test Mode:802.11ac VHT40 5230MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5210MHz Chain0

Transmitter Power Spectral Density

Offset 1.5dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	5180MHz		5220MHz		5240MHz	
		Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11a	Chain0	0	-0.144	0	0.198	0	0.276
802.11n HT20	Chain0	0	-0.522	0	-0.161	0	-0.048
802.11ac VHT20	Chain0	0	-0.554	0	-0.222	0	-0.097

Test Mode	Antenna	5190MHz		---		5230MHz	
		Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11n HT40	Chain0	0.10	-3.323	---	---	0.10	-2.955
802.11ac VHT40	Chain0	0.10	-3.230	---	---	0.10	-2.939

Test Mode	Antenna	5210MHz		---		---	
		Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11ac VHT80	Chain0	0.20	-6.558	---	---	---	---

Test Mode: 802.11a



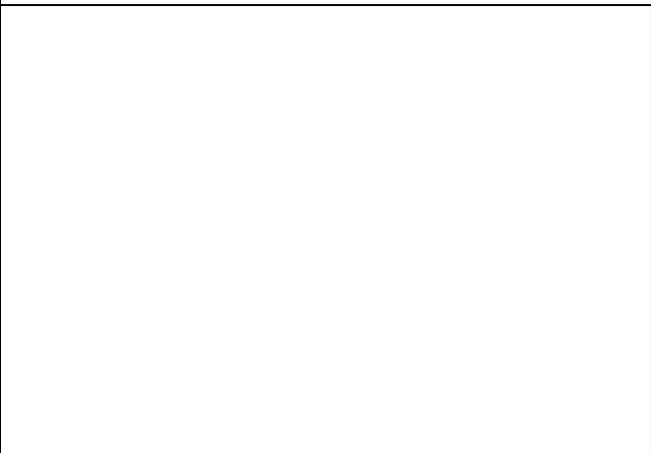
Test Mode:802.11a 5180MHz Chain0



Test Mode:802.11a 5220MHz Chain0



Test Mode:802.11a 5240MHz Chain0



Test Mode:802.11n HT20 5220MHz Chain0

Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5180MHz Chain0





Test Mode:802.11n HT20 5240MHz Chain0

Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5180MHz Chain0



Test Mode:802.11ac VHT20 5220MHz Chain0



Test Mode:802.11ac VHT20 5240MHz Chain0

Test Mode: 802.11n HT40



Test Mode:802.11n HT40 5190MHz Chain0

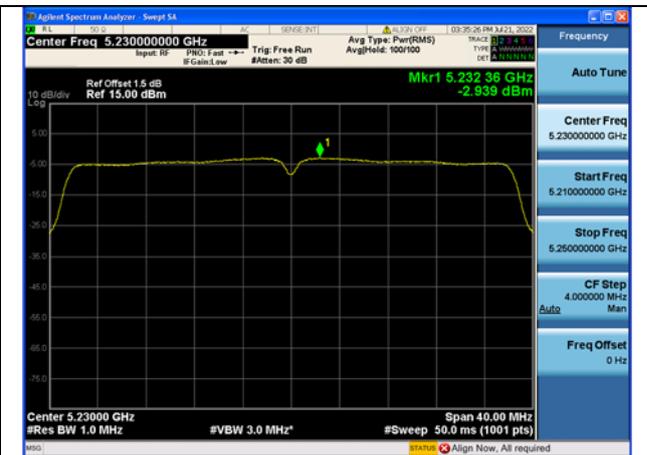


Test Mode:802.11n HT40 5230MHz Chain0

Test Mode: 802.11ac VHT40



Test Mode:802.11ac VHT40 5190MHz Chain0



Test Mode:802.11ac VHT40 5230MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5210MHz Chain0