

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5180	98.16%	0	Fig.1
802.11n HT20	5180	97.99%	0.09	Fig.2
802.11ac VHT20	5180	98.06%	0	Fig.3
802.11n HT40	5190	96.09%	0.17	Fig.4
802.11ac VHT40	5190	96.10%	0.17	Fig.5
802.11ac VHT80	5210	93.65%	0.28	Fig.6

Note: Correction Factor= $10 \cdot \log(1/\text{Duty Cycle})$

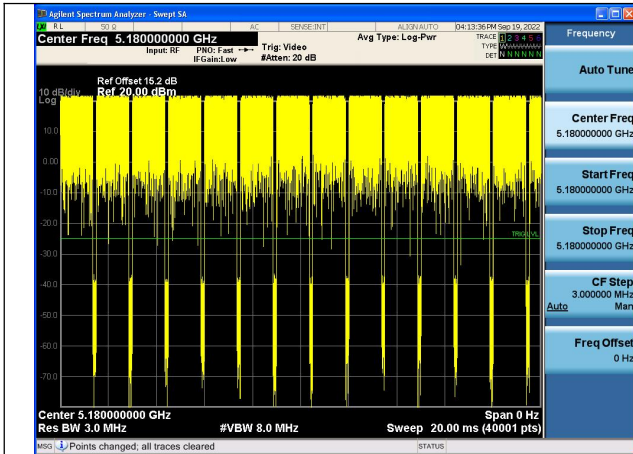


Fig.1

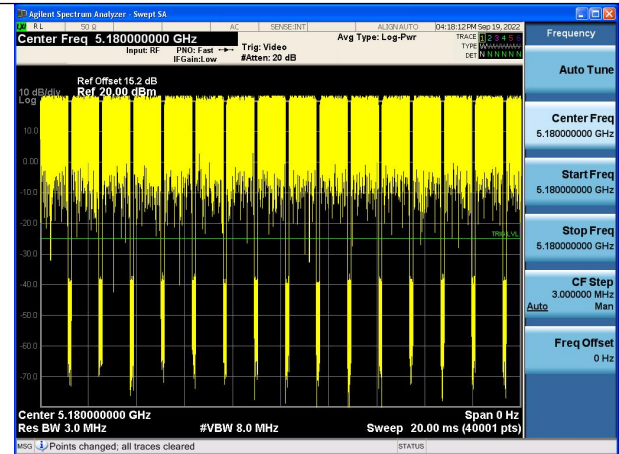


Fig.2

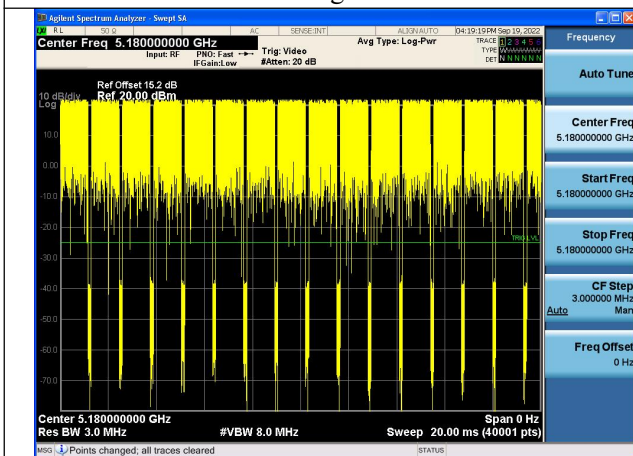


Fig.3

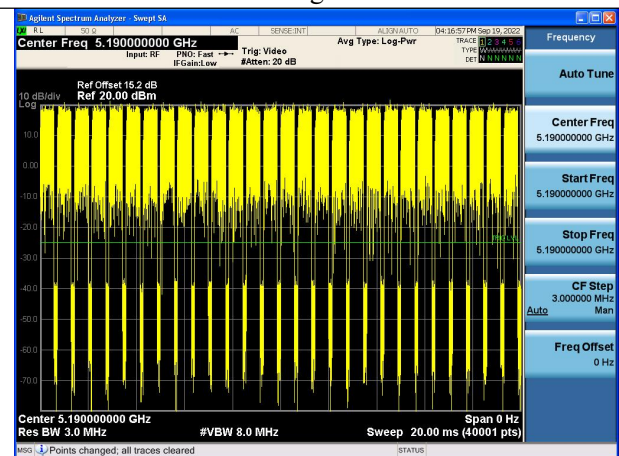


Fig.4

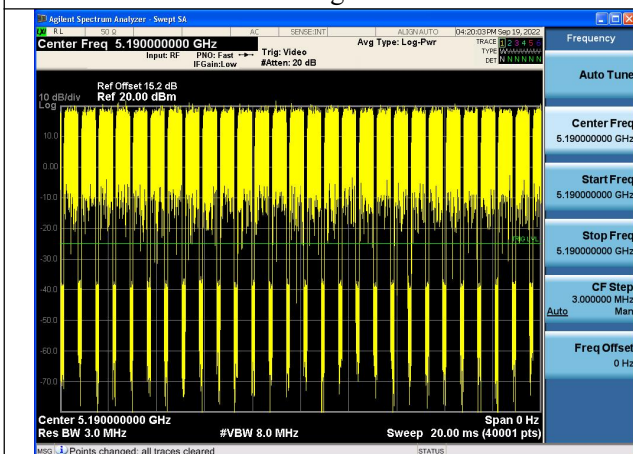


Fig.5

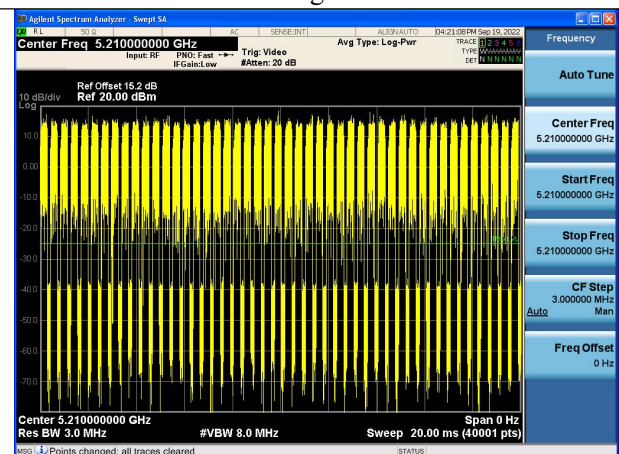


Fig.6

Output Power

Mode	Tones/ RUIndex	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Chain0	16.49	14.69
802.11a	NA	5220	Chain0	15.98	14.18
802.11a	NA	5240	Chain0	15.89	14.09
802.11n HT20	NA	5180	Chain0	16.51	14.71
802.11n HT20	NA	5220	Chain0	15.98	14.18
802.11n HT20	NA	5240	Chain0	15.78	13.98
802.11ac VHT20	NA	5180	Chain0	16.58	14.78
802.11ac VHT20	NA	5220	Chain0	14.22	12.42
802.11ac VHT20	NA	5240	Chain0	14.54	12.74
802.11n HT40	NA	5190	Chain0	15.35	13.55
802.11n HT40	NA	5230	Chain0	15.63	13.83
802.11ac VHT40	NA	5190	Chain0	14.51	12.71
802.11ac VHT40	NA	5230	Chain0	14.00	12.20
802.11ac VHT80	NA	5210	Chain0	13.72	11.92

Emission Bandwidth

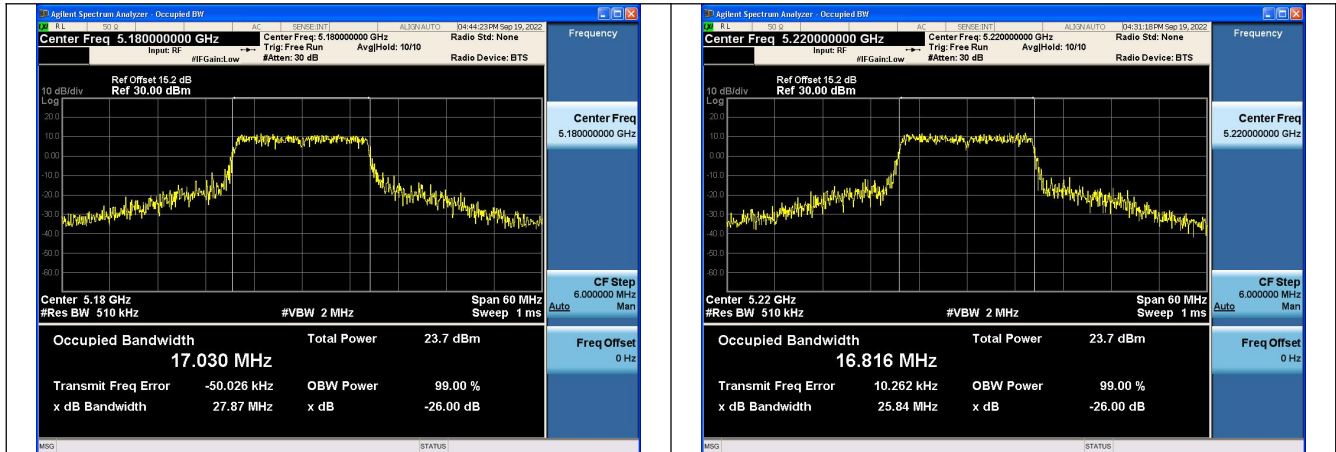
Offset 15.2dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.554	Channel No.562	Channel No.566
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	27.87	25.84	25.72
802.11n HT20	Chain0	28.45	26.46	23.24
802.11ac VHT20	Chain0	25.39	21.57	25.49

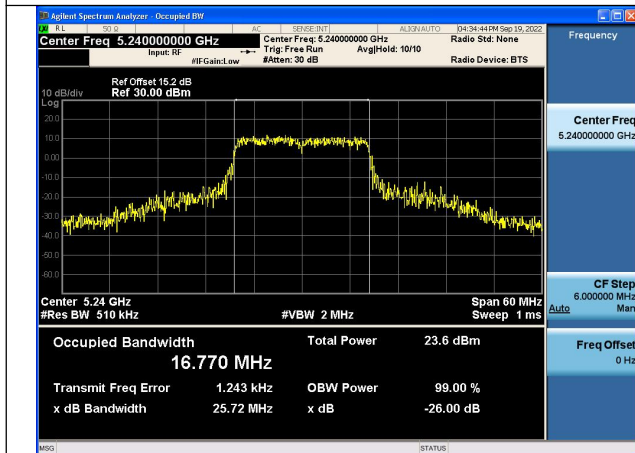
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.556	---	Channel No.564
		5190MHz	---	5230MHz
802.11n HT40	Chain0	42.45	---	42.61
802.11ac VHT40	Chain0	39.53	---	44.85

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.560	---	---
		5210MHz	---	---
802.11ac VHT80	Chain0	80.72	---	---

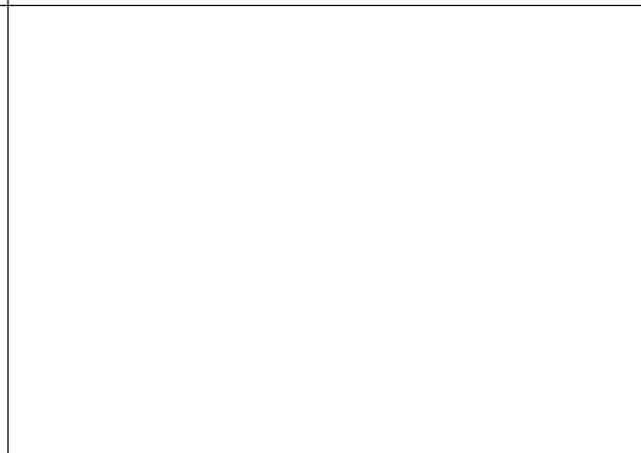
Test Mode: 802.11a



Test Mode:802.11a 5180MHz Chain0

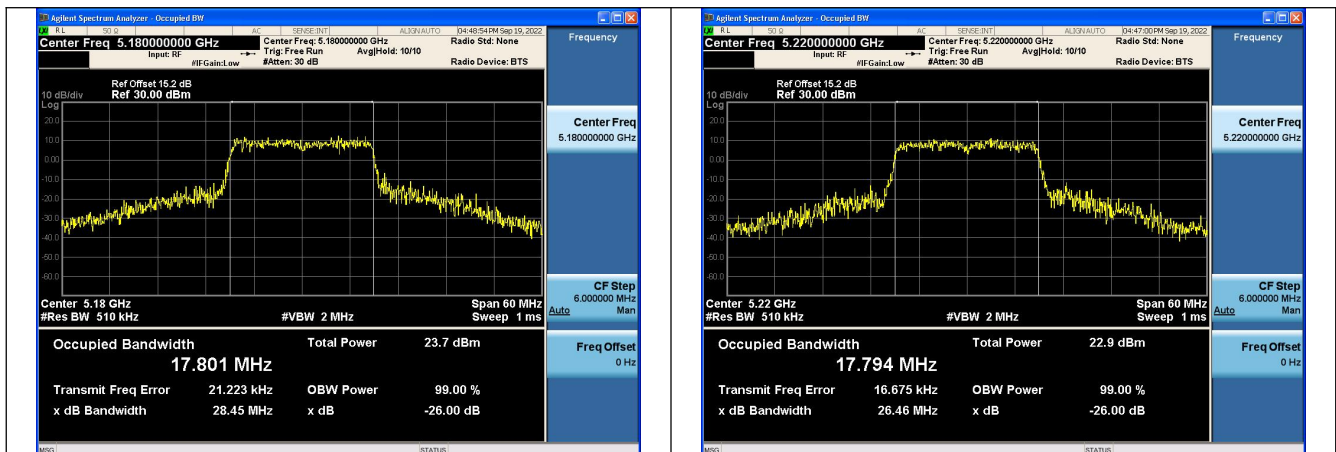


Test Mode:802.11a 5220MHz Chain0



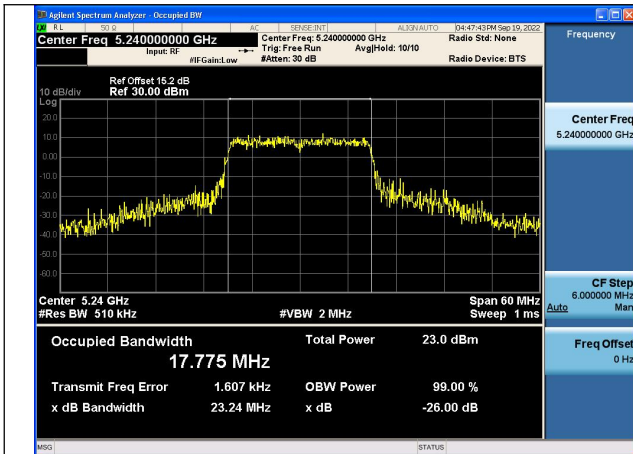
Test Mode:802.11a 5240MHz Chain0

Test Mode: 802.11n HT20



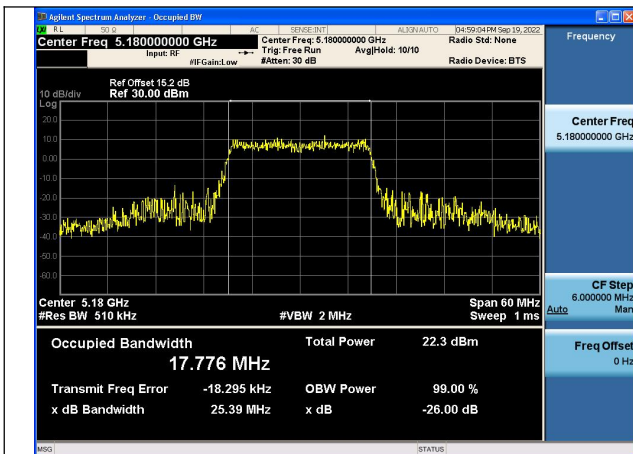
Test Mode:802.11n HT20 5180MHz Chain0

Test Mode:802.11n HT20 5220MHz Chain0

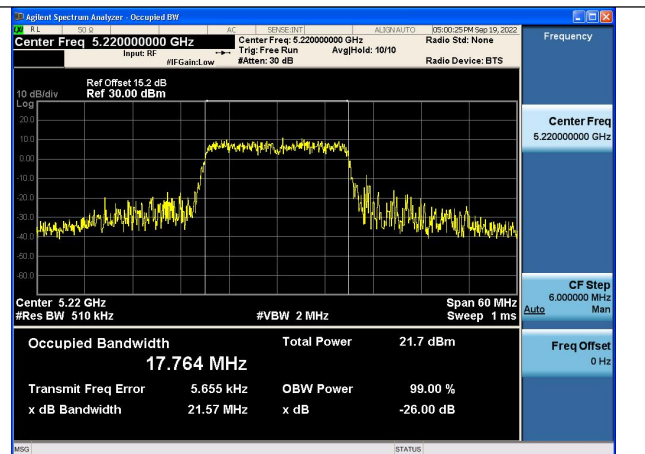


Test Mode:802.11n HT20 5240MHz Chain0

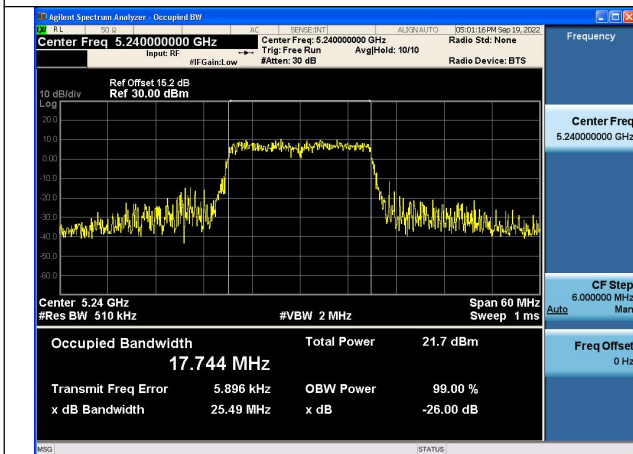
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5180MHz Chain0

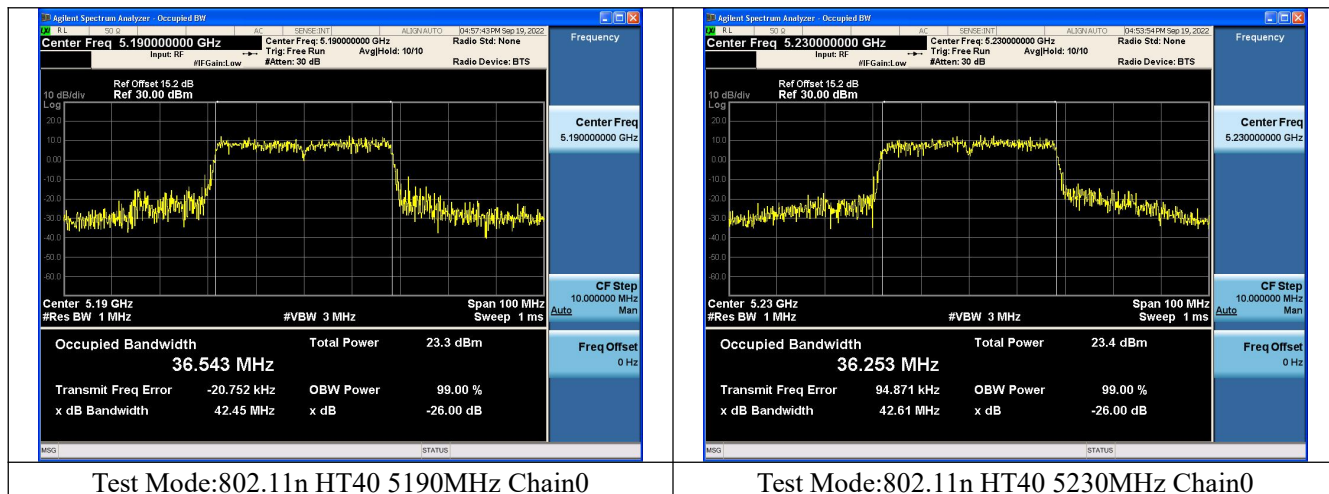


Test Mode:802.11ac VHT20 5220MHz Chain0

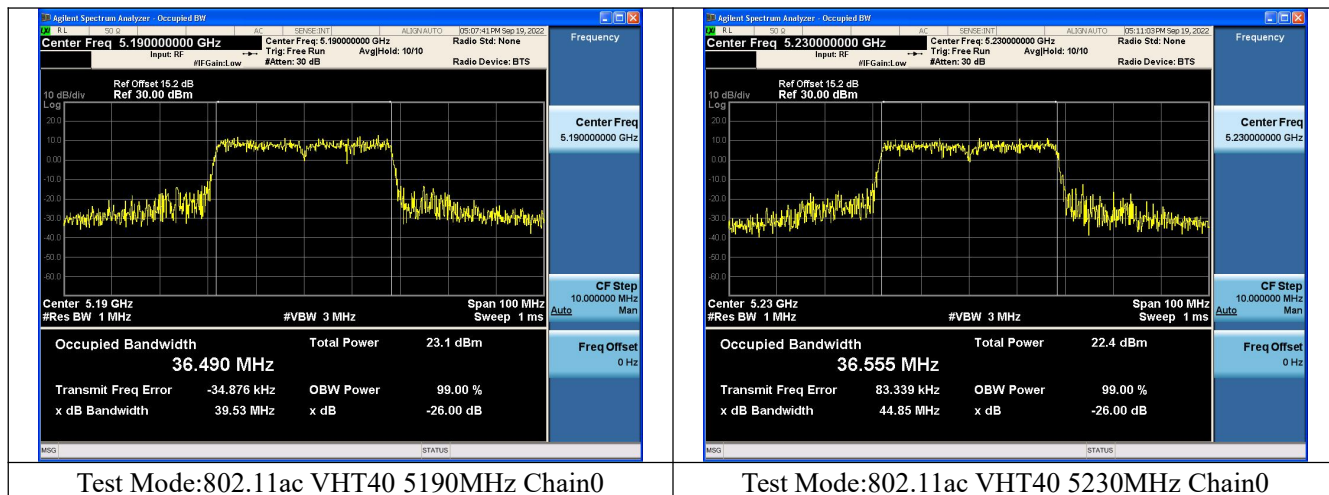


Test Mode:802.11ac VHT20 5240MHz Chain0

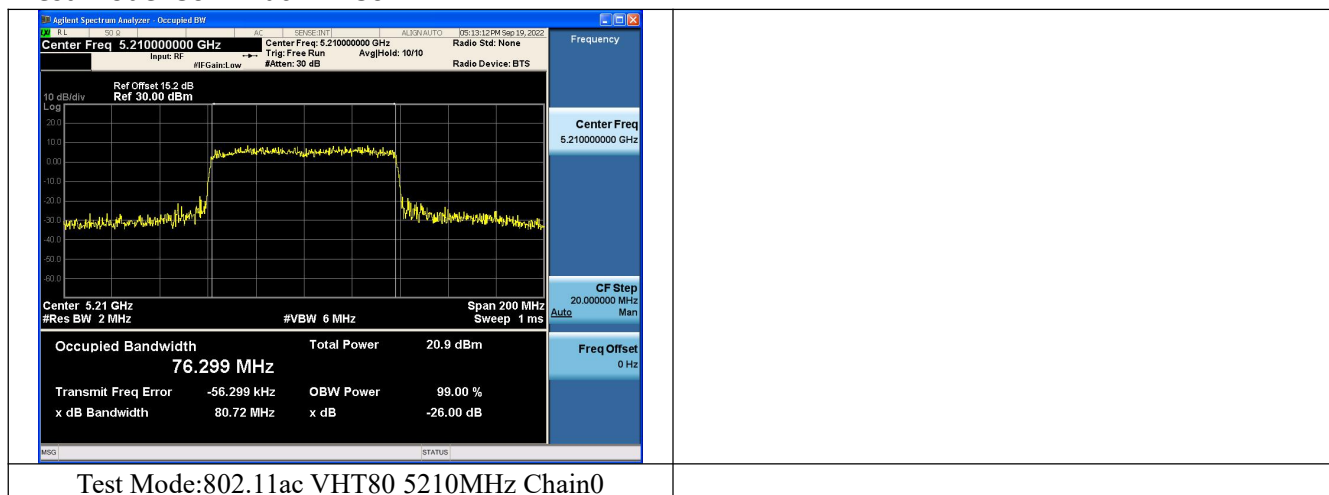
Test Mode: 802.11n HT40



Test Mode: 802.11ac VHT40



Test Mode: 802.11ac VHT80



Occupied Bandwidth

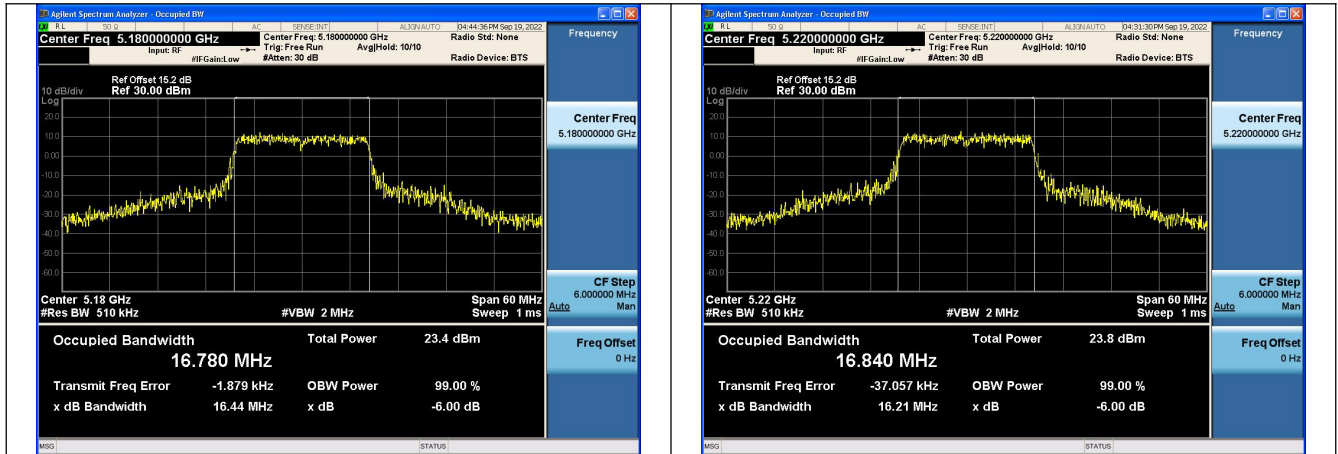
Offset 15.2dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.554	Channel No.562	Channel No.566
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	16.780	16.840	16.737
802.11n HT20	Chain0	17.807	17.711	17.766
802.11ac VHT20	Chain0	17.782	17.743	17.792

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.556	---	Channel No.564
		5190MHz	---	5230MHz
802.11n HT40	Chain0	36.563	---	36.357
802.11ac VHT40	Chain0	36.527	---	36.505

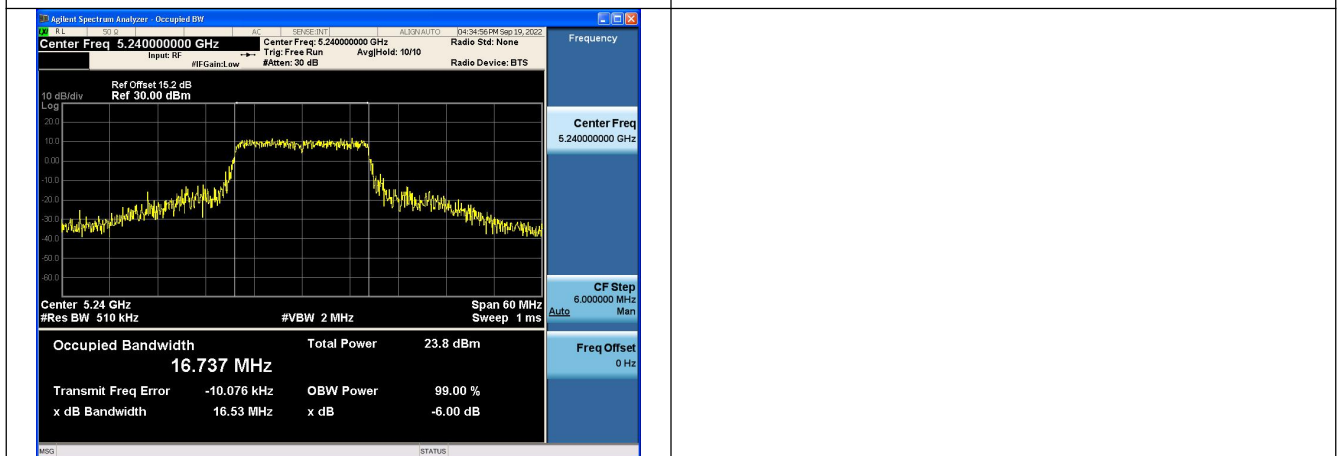
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.560	---	---
		5210MHz	---	---
802.11ac VHT80	Chain0	76.278	---	---

Test Mode: 802.11a



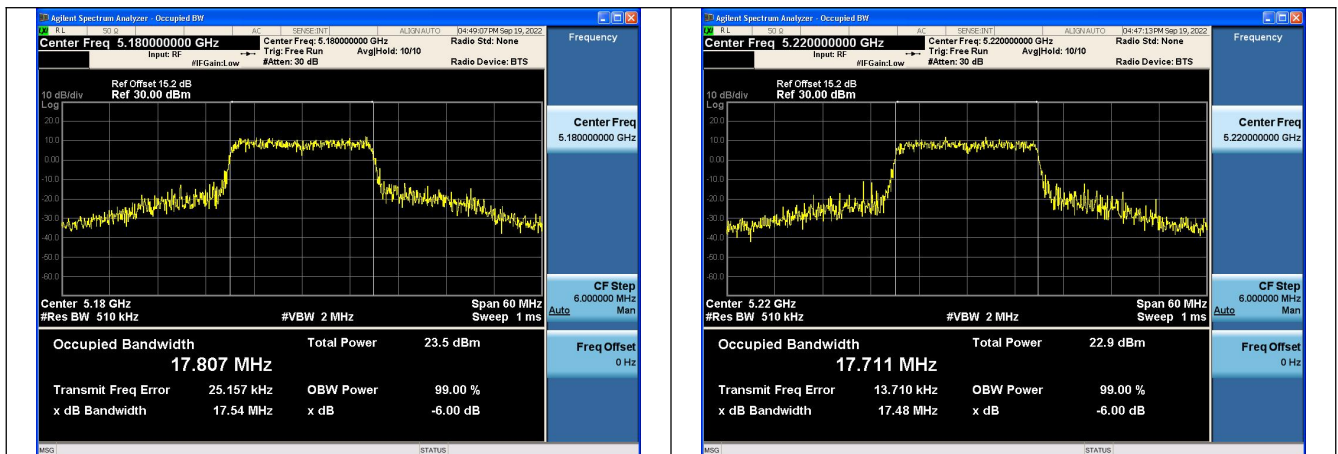
Test Mode:802.11a 5180MHz Chain0

Test Mode:802.11a 5220MHz Chain0



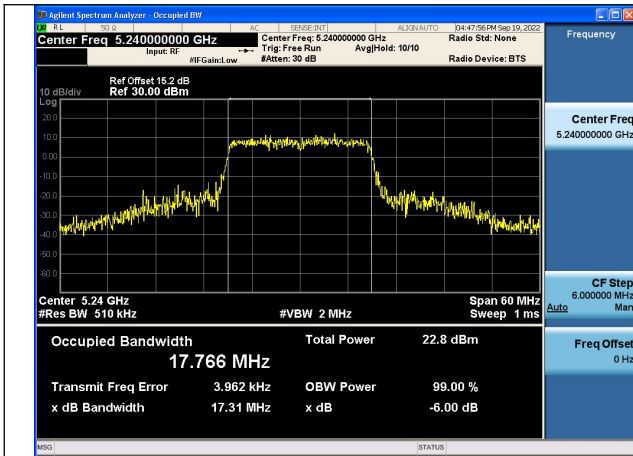
Test Mode:802.11a 5240MHz Chain0

Test Mode: 802.11n HT20



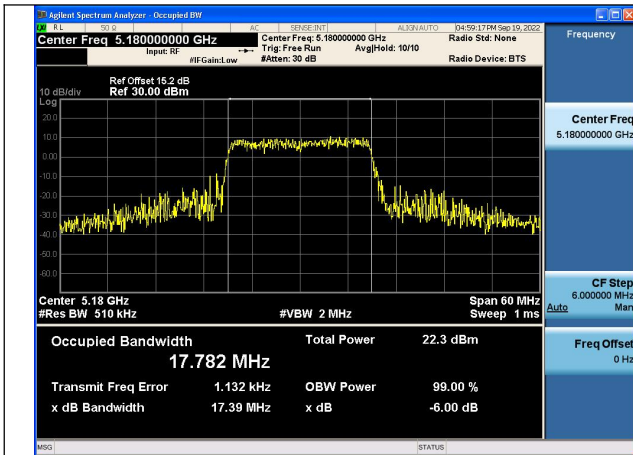
Test Mode:802.11n HT20 5180MHz Chain0

Test Mode:802.11n HT20 5220MHz Chain0

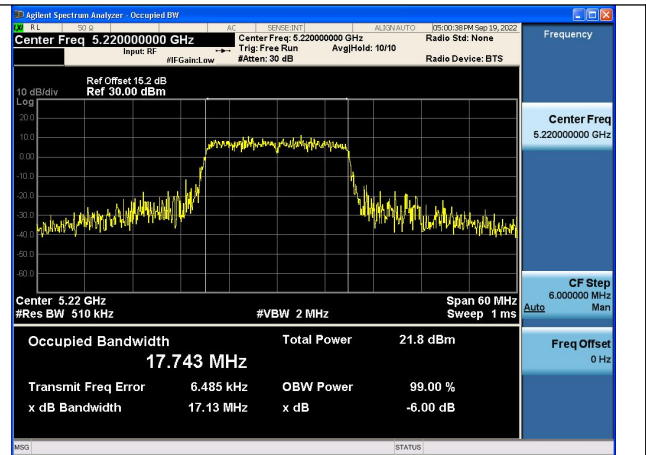


Test Mode:802.11n HT20 5240MHz Chain0

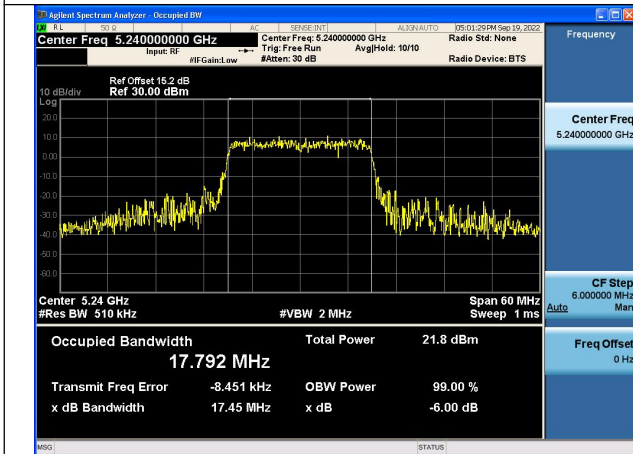
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5180MHz Chain0

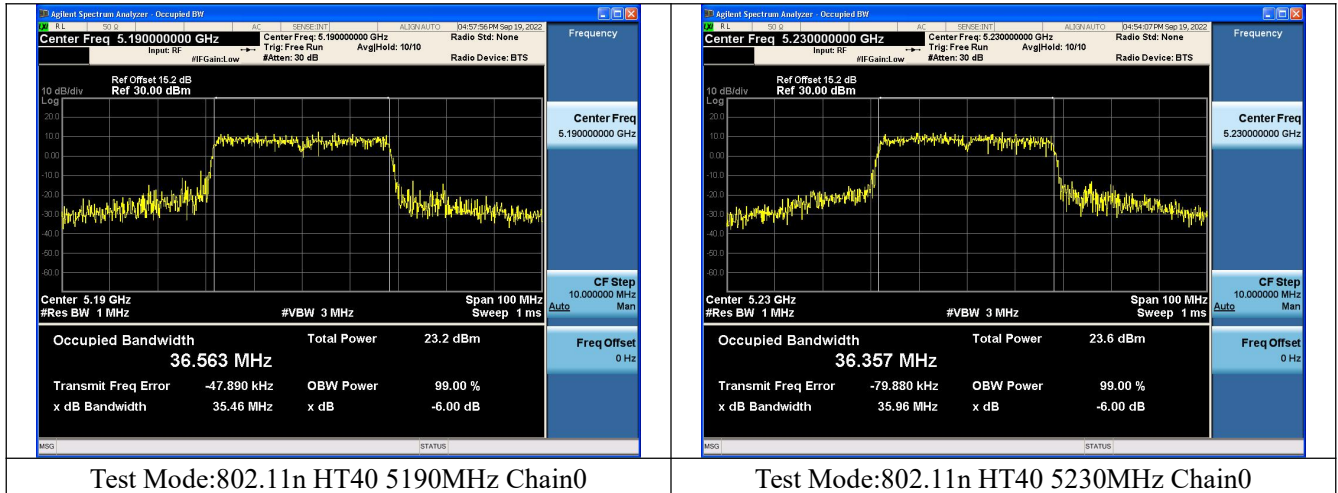


Test Mode:802.11ac VHT20 5220MHz Chain0

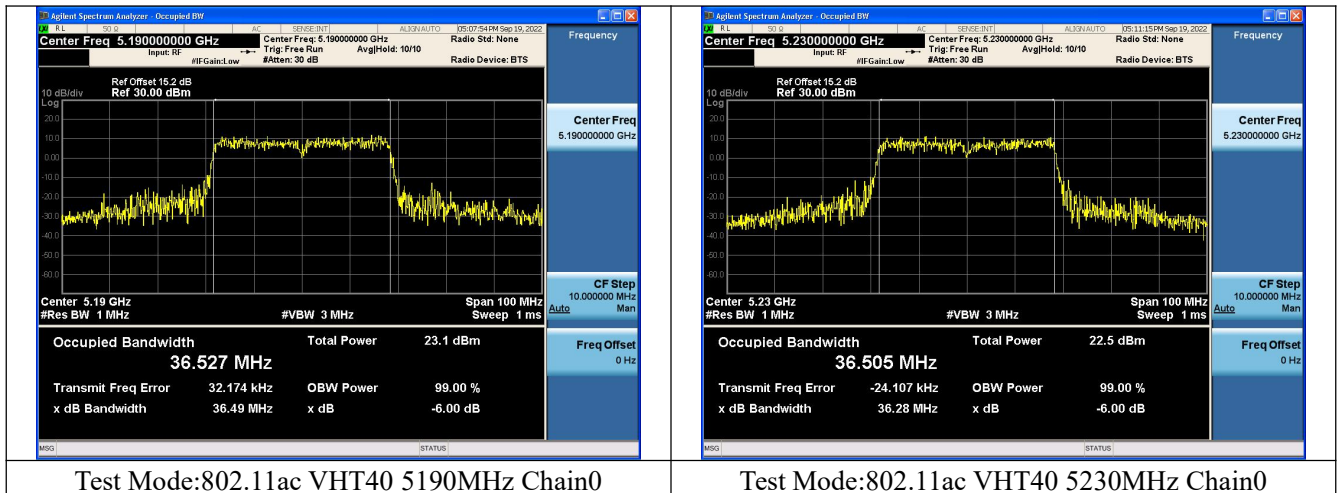


Test Mode:802.11ac VHT20 5240MHz Chain0

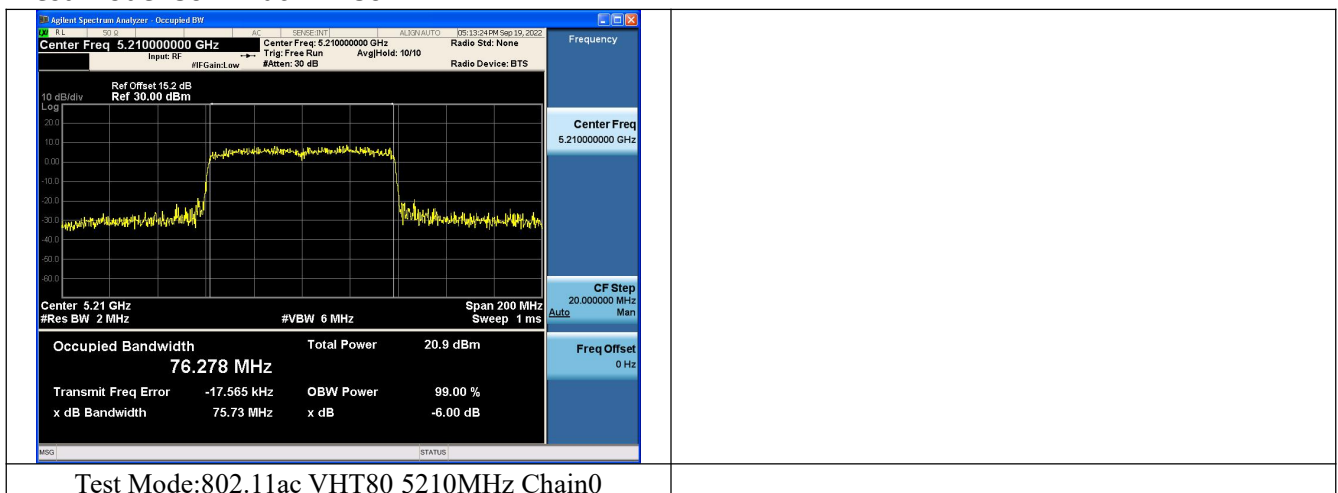
Test Mode: 802.11n HT40



Test Mode: 802.11ac VHT40



Test Mode: 802.11ac VHT80



Transmitter Power Spectral Density

Offset 1dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Tones	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	NA	0	4.991	0	4.604	0	4.716
802.11n HT20	Chain0	NA	0.09	4.738	0.09	4.433	0.09	4.443
802.11ac VHT20	Chain0	NA	0	4.928	0	2.606	0	2.743

Test Mode	Antenna	Tones	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	NA	0.17	1.169	---	---	0.17	1.281
802.11ac VHT40	Chain0	NA	0.17	0.459	---	---	0.17	-0.132

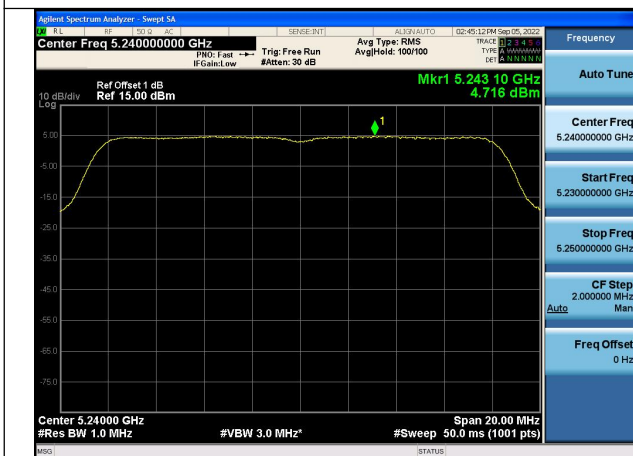
Test Mode	Antenna	Tones	5210MHz		---		---	
			Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11ac VHT80	Chain0	NA	0.28	-3.527	---	---	---	---

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