

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5180	99.52%	0	Fig.1
802.11n HT20	5180	99.49%	0	Fig.2
802.11ac VHT20	5180	99.52%	0	Fig.3
802.11n HT40	5190	99.06%	0	Fig.4
802.11ac VHT40	5190	99.06%	0	Fig.5
802.11ac VHT80	5210	98.06%	0	Fig.6

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

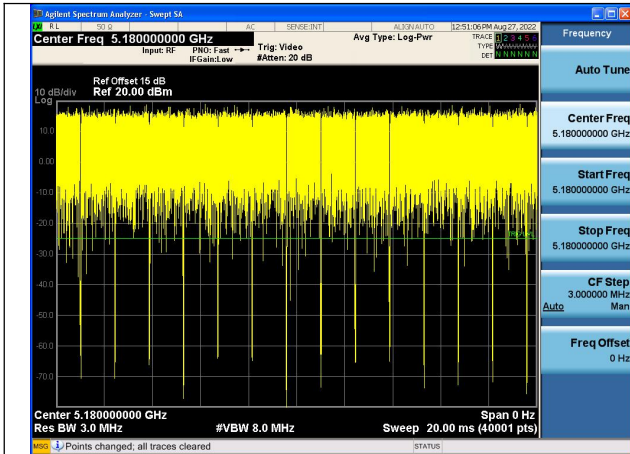


Fig.1

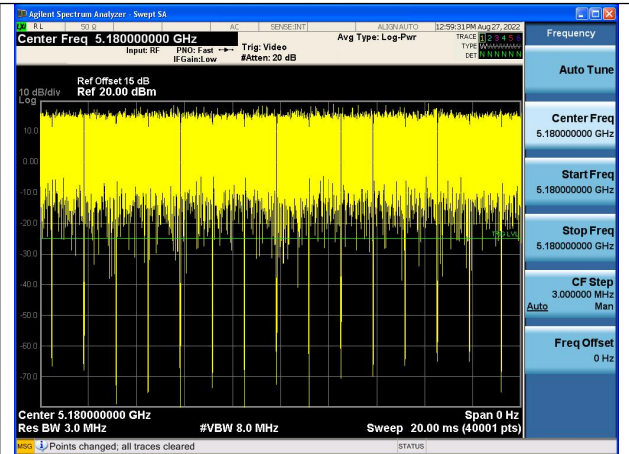


Fig.2

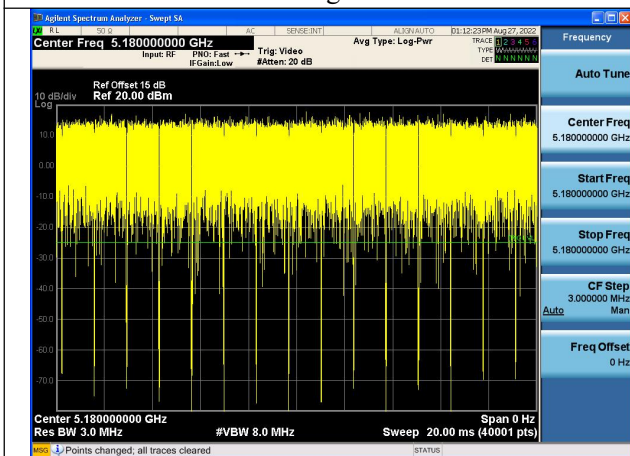


Fig.3

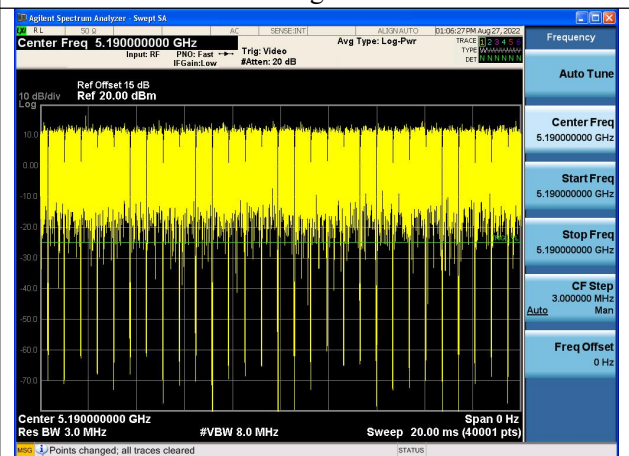


Fig.4



Fig.5



Fig.6

Output Power

Mode	Tones/ RUIndex	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Chain0	14.52	14.31
802.11a	NA	5220	Chain0	14.36	14.15
802.11a	NA	5240	Chain0	14.53	14.32
802.11n HT20	NA	5180	Chain0	14.38	14.17
802.11n HT20	NA	5220	Chain0	14.28	14.07
802.11n HT20	NA	5240	Chain0	14.44	14.23
802.11ac VHT20	NA	5180	Chain0	12.99	12.78
802.11ac VHT20	NA	5220	Chain0	12.74	12.53
802.11ac VHT20	NA	5240	Chain0	12.97	12.76
802.11n HT40	NA	5190	Chain0	14.33	14.12
802.11n HT40	NA	5230	Chain0	14.29	14.08
802.11ac VHT40	NA	5190	Chain0	12.80	12.59
802.11ac VHT40	NA	5230	Chain0	12.75	12.54
802.11ac VHT80	NA	5210	Chain0	12.38	12.17

Emission Bandwidth

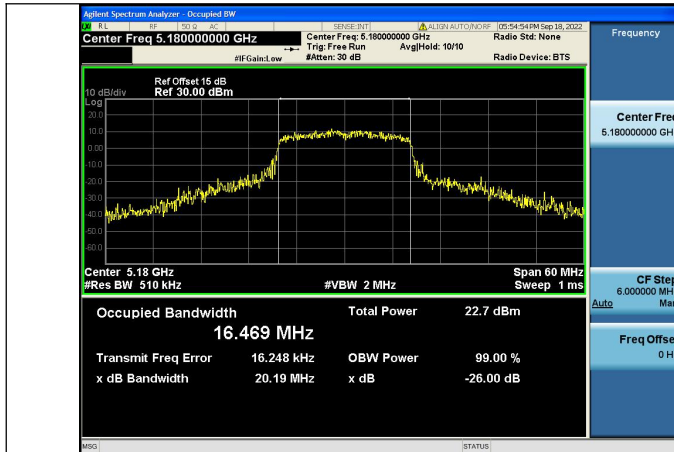
Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.554	Channel No.562	Channel No.566
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	20.19	21.61	19.96
802.11n HT20	Chain0	23.30	24.63	23.05
802.11ac VHT20	Chain0	20.63	20.11	22.19

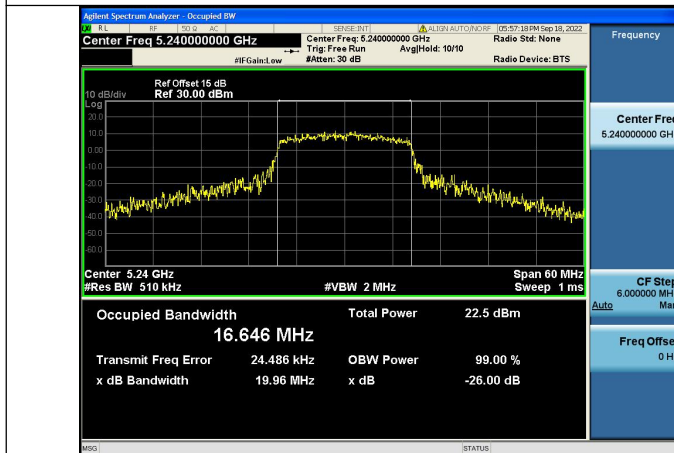
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.556	---	Channel No.564
		5190MHz	---	5230MHz
802.11n HT40	Chain0	45.78	---	40.09
802.11ac VHT40	Chain0	40.36	---	40.12

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.560	---	---
		5210MHz	---	---
802.11ac VHT80	Chain0	81.37	---	---

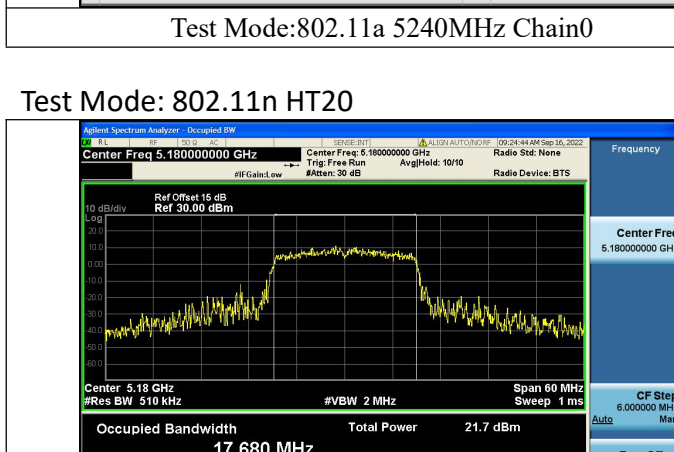
Test Mode: 802.11a



Test Mode:802.11a 5180MHz Chain0

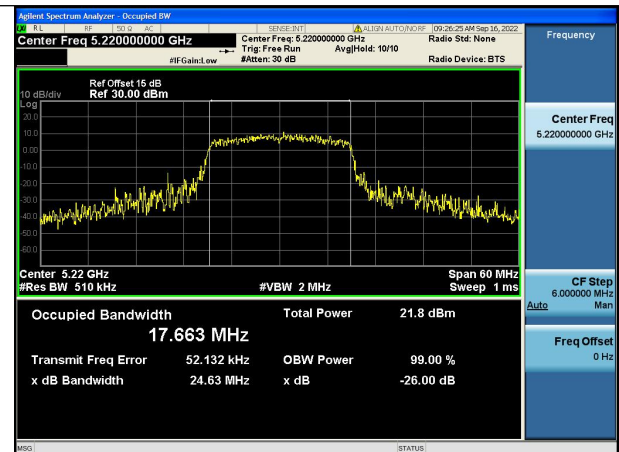
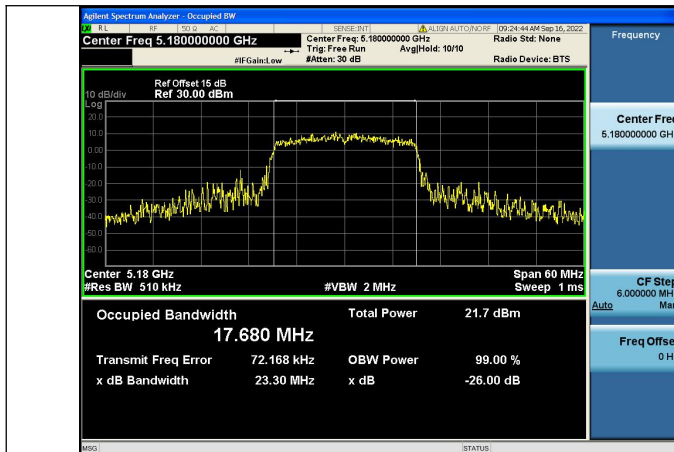


Test Mode:802.11a 5220MHz Chain0



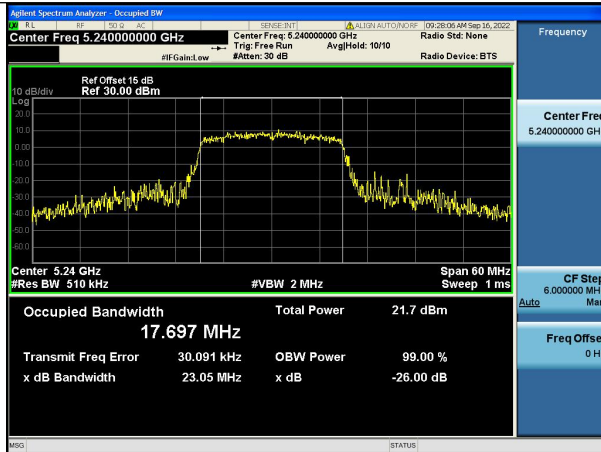
Test Mode:802.11a 5240MHz Chain0

Test Mode: 802.11n HT20



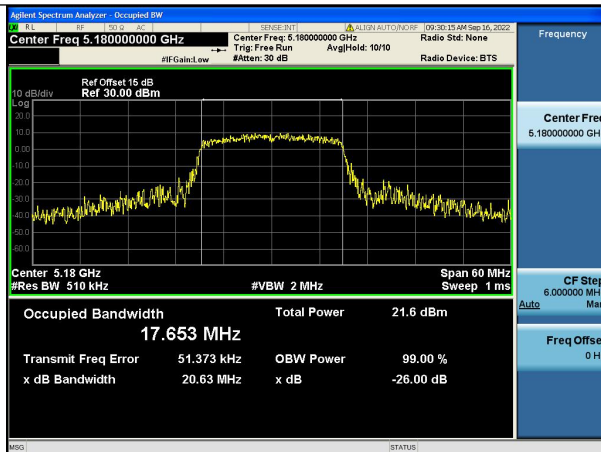
Test Mode:802.11n HT20 5180MHz Chain0

Test Mode:802.11n HT20 5220MHz Chain0

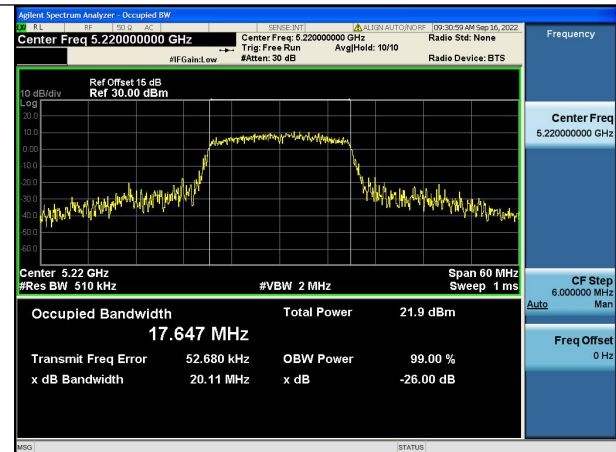


Test Mode:802.11n HT20 5240MHz Chain0

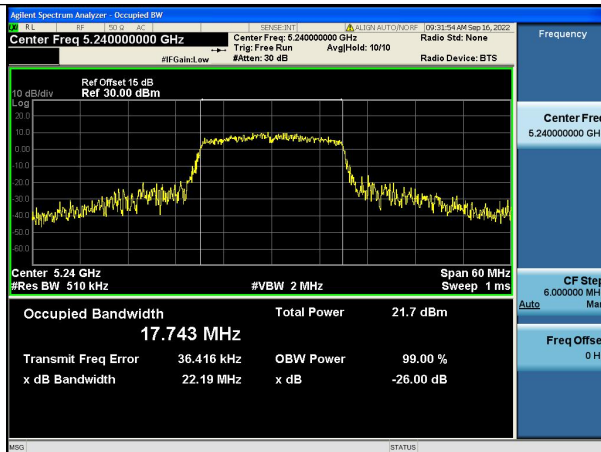
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5180MHz Chain0

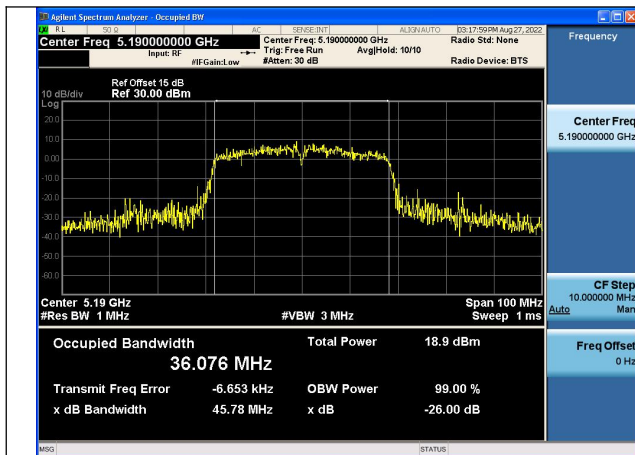


Test Mode:802.11ac VHT20 5220MHz Chain0



Test Mode:802.11ac VHT20 5240MHz Chain0

Test Mode: 802.11n HT40

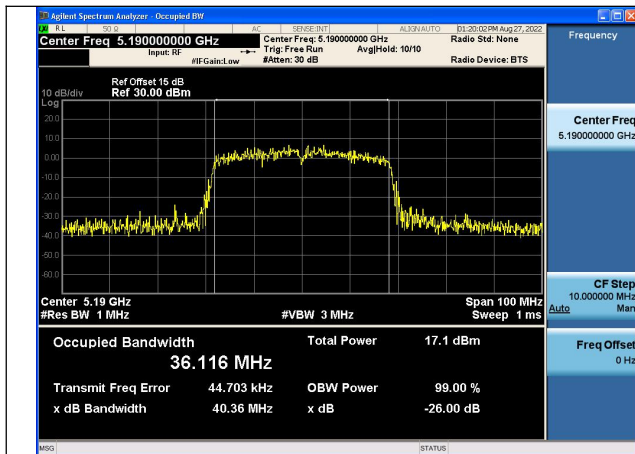


Test Mode:802.11n HT40 5190MHz Chain0

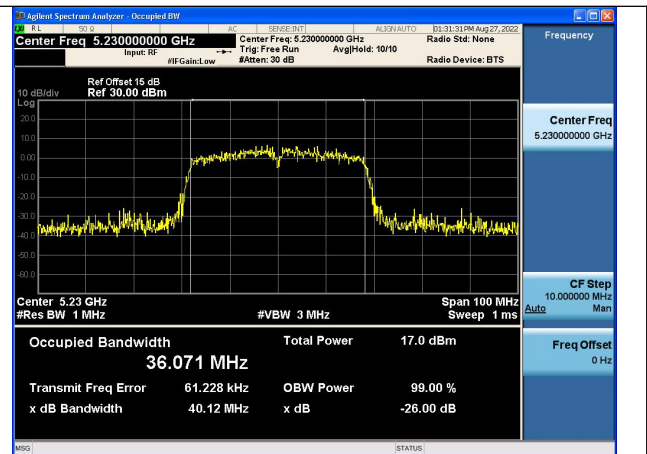


Test Mode:802.11n HT40 5230MHz Chain0

Test Mode: 802.11ac VHT40

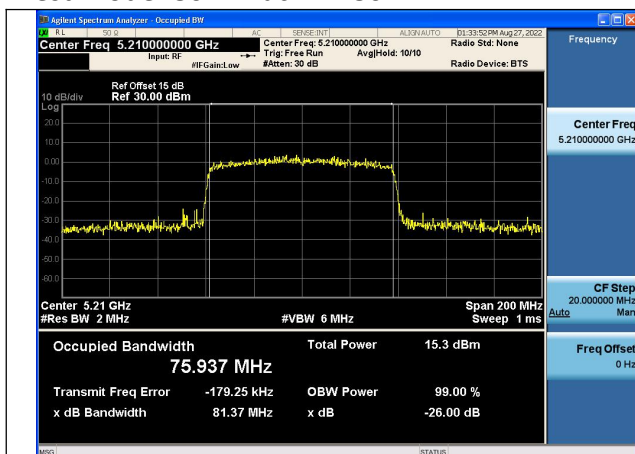


Test Mode:802.11ac VHT40 5190MHz Chain0



Test Mode:802.11ac VHT40 5230MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5210MHz Chain0

Occupied Bandwidth

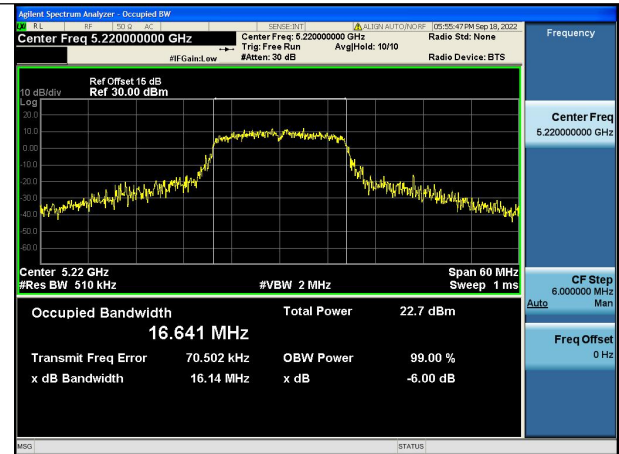
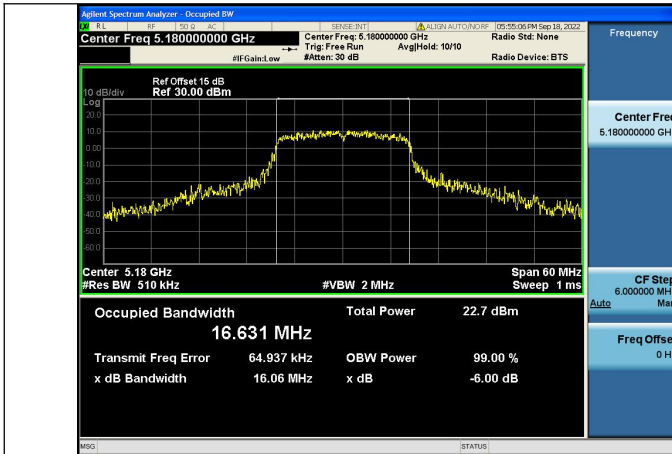
Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.554	Channel No.562	Channel No.566
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	16.631	16.641	16.703
802.11n HT20	Chain0	17.675	17.639	17.724
802.11ac VHT20	Chain0	17.714	17.713	17.571

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.556	---	Channel No.564
		5190MHz	---	5230MHz
802.11n HT40	Chain0	36.161	---	36.066
802.11ac VHT40	Chain0	36.231	---	36.026

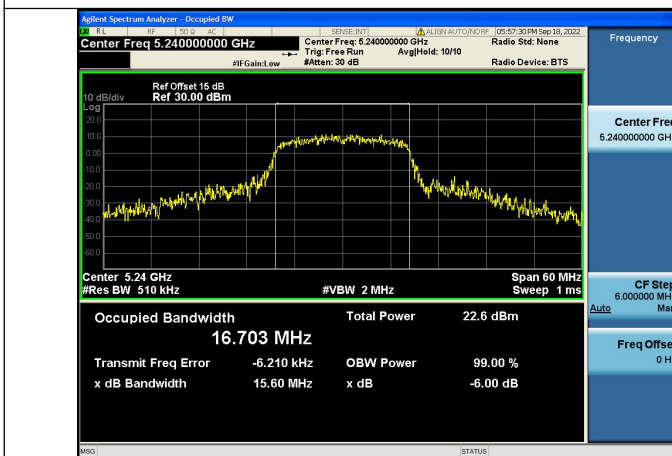
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.560	---	---
		5210MHz	---	---
802.11ac VHT80	Chain0	75.745	---	---

Test Mode: 802.11a



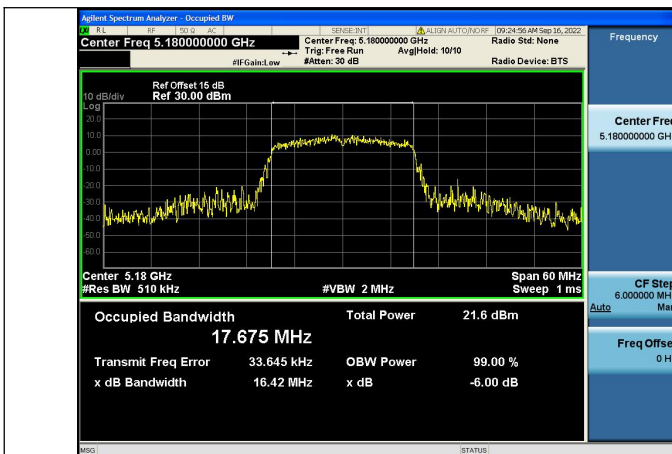
Test Mode:802.11a 5180MHz Chain0

Test Mode:802.11a 5220MHz Chain0

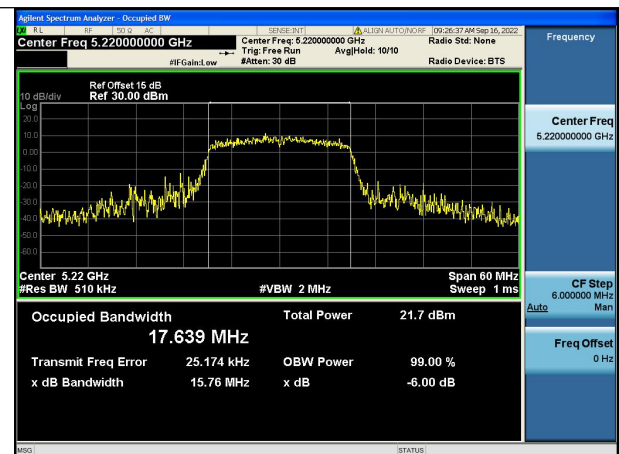


Test Mode:802.11a 5240MHz Chain0

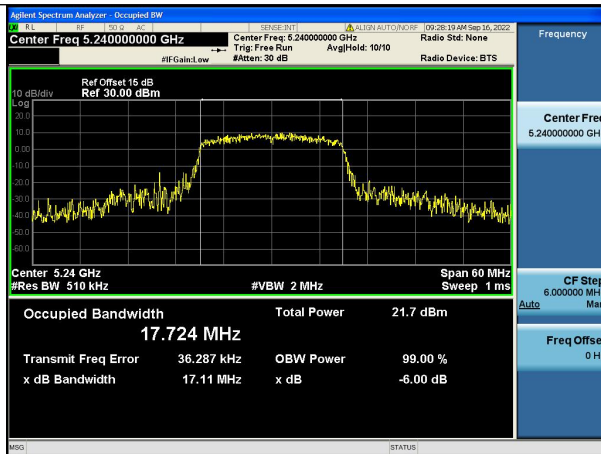
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5180MHz Chain0

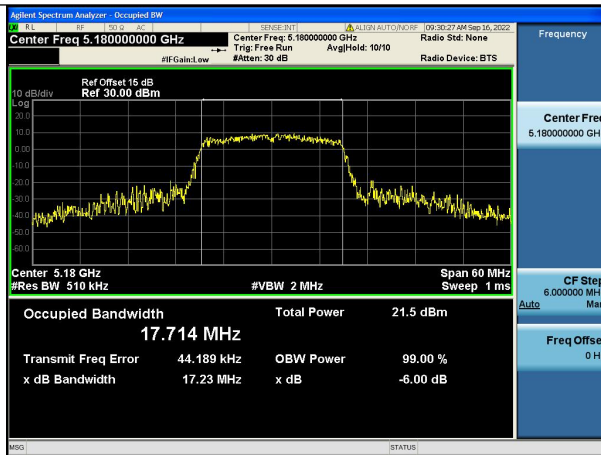


Test Mode:802.11n HT20 5220MHz Chain0

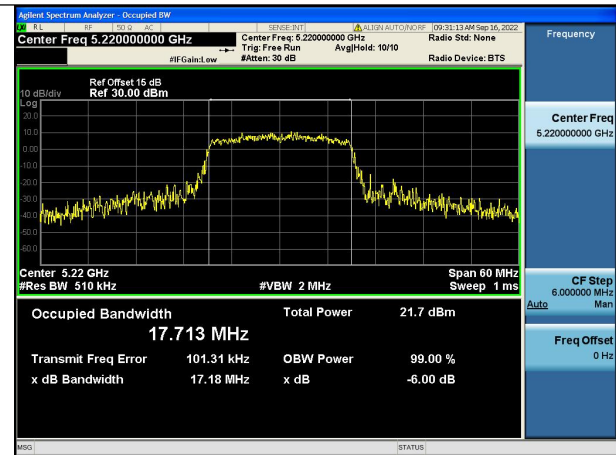


Test Mode:802.11n HT20 5240MHz Chain0

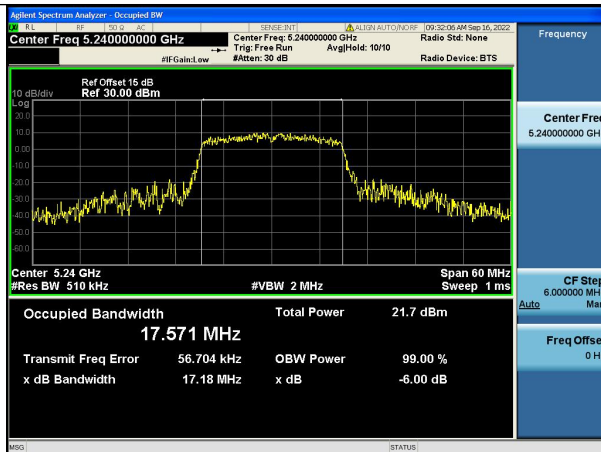
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5180MHz Chain0

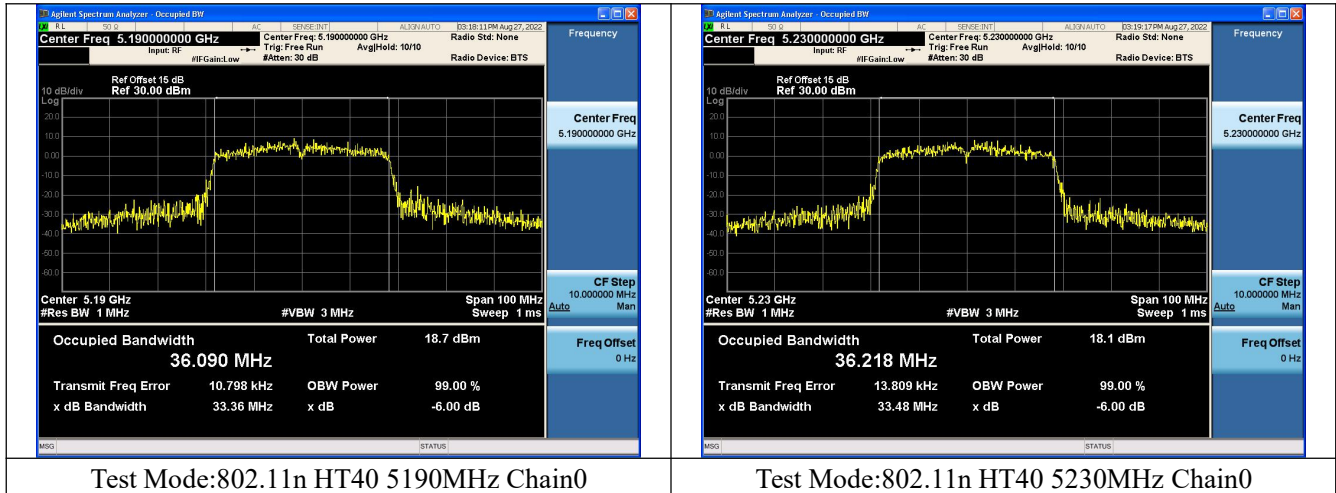


Test Mode:802.11ac VHT20 5220MHz Chain0

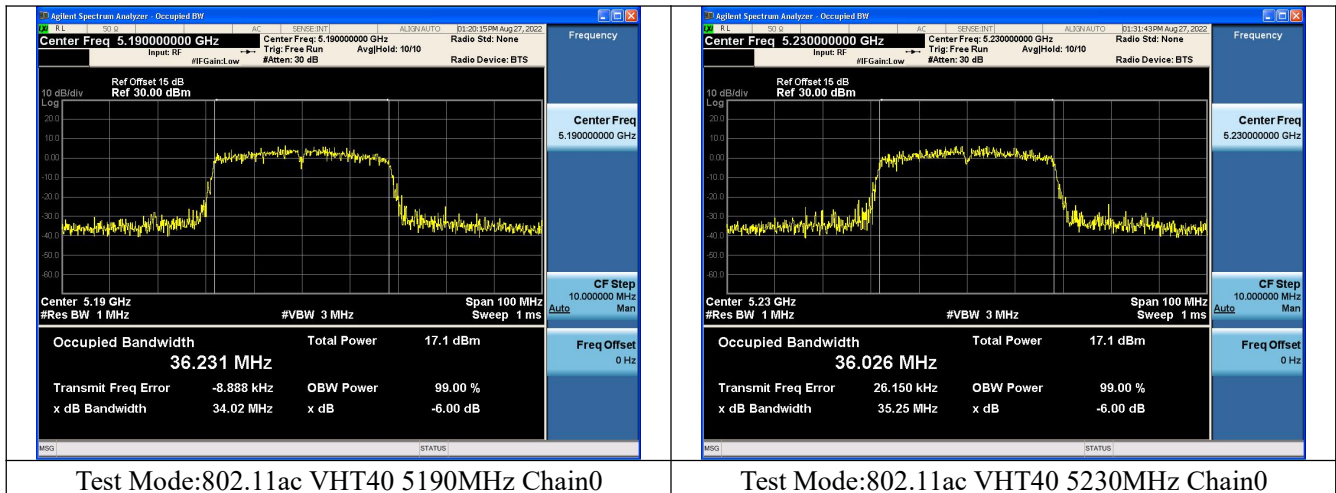


Test Mode:802.11ac VHT20 5240MHz Chain0

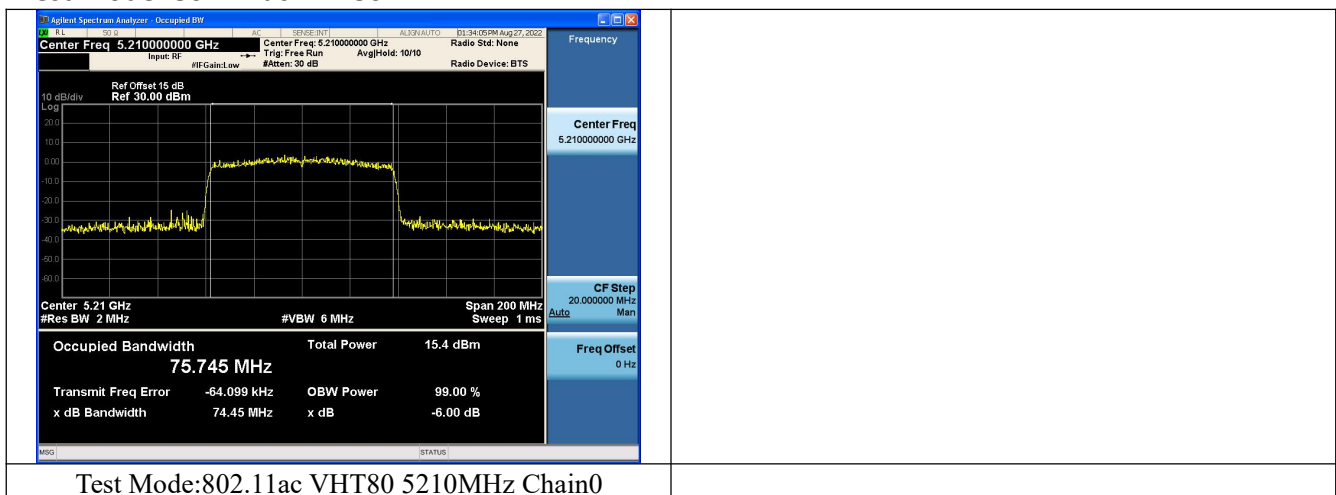
Test Mode: 802.11n HT40



Test Mode: 802.11ac VHT40



Test Mode: 802.11ac VHT80



Transmitter Power Spectral Density

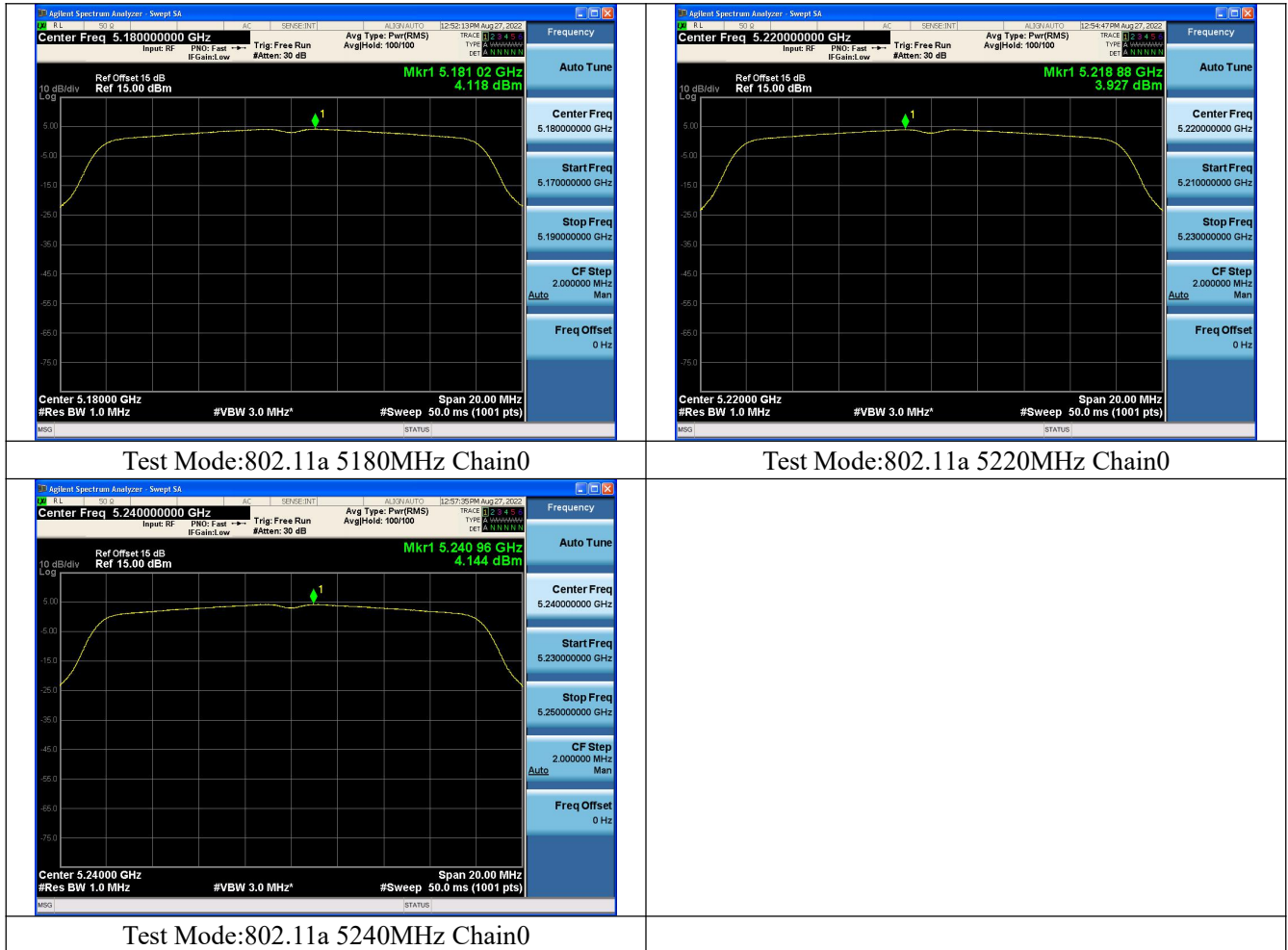
Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

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	4.118	0	3.927	0	4.144
802.11n HT20	Chain0	NA	0	3.798	0	3.557	0	3.790
802.11ac VHT20	Chain0	NA	0	2.322	0	2.184	0	2.324

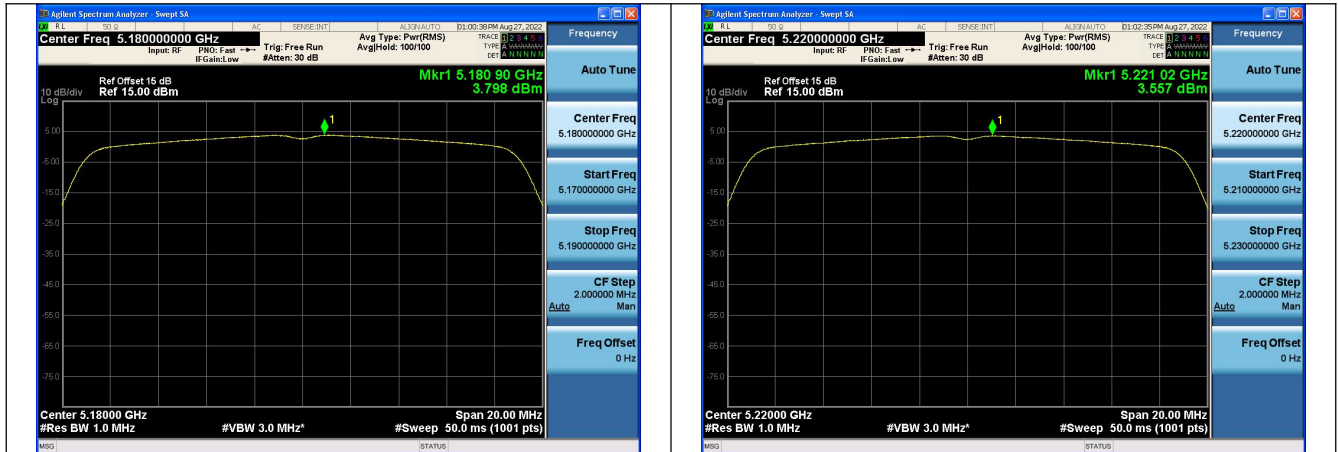
Test Mode	Antenna	Tones	5190MHz		5230MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11n HT40	Chain0	NA	0	0.997	0	0.821
802.11ac VHT40	Chain0	NA	0	-0.532	0	-0.706

Test Mode	Antenna	Tones	5210MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)
802.11ac VHT80	Chain0	NA	0	-4.315

Test Mode: 802.11a

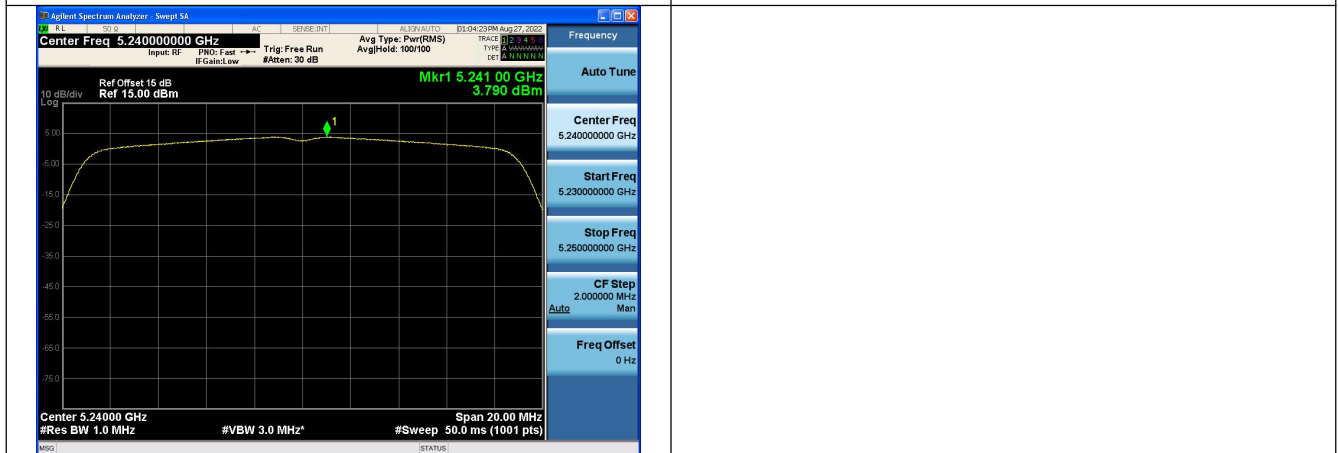


Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5180MHz Chain0

Test Mode:802.11n HT20 5220MHz Chain0



Test Mode:802.11n HT20 5240MHz Chain0