

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5180	99.70%	0	Fig.1
802.11n HT20	5180	99.67%	0	Fig.2
802.11ac VHT20	5180	99.64%	0	Fig.3
802.11n HT40	5190	99.43%	0	Fig.4
802.11ac VHT40	5190	99.42%	0	Fig.5
802.11ac VHT80	5210	96.09%	0.17	Fig.6

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

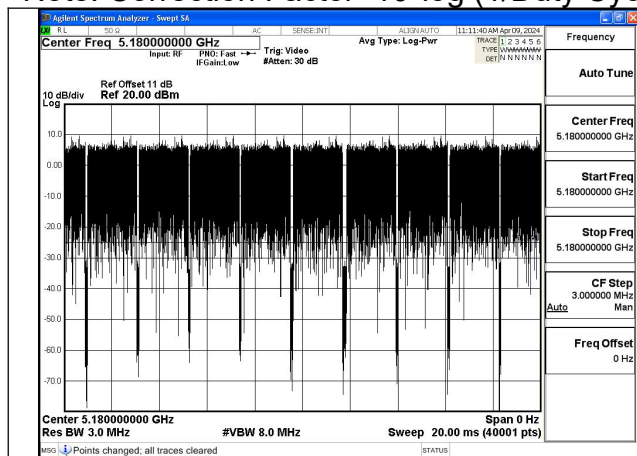


Fig.1

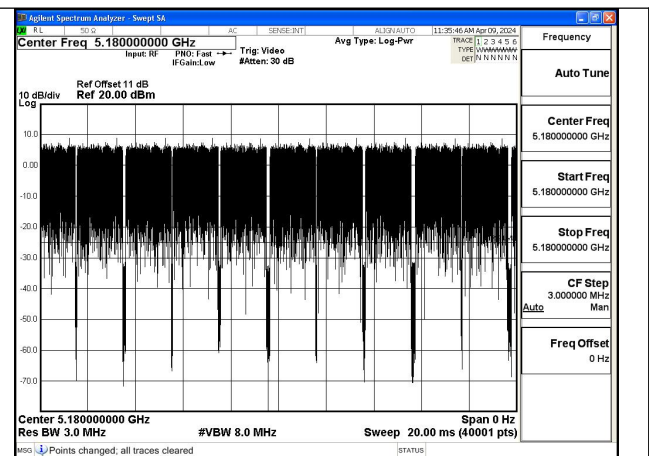


Fig.2

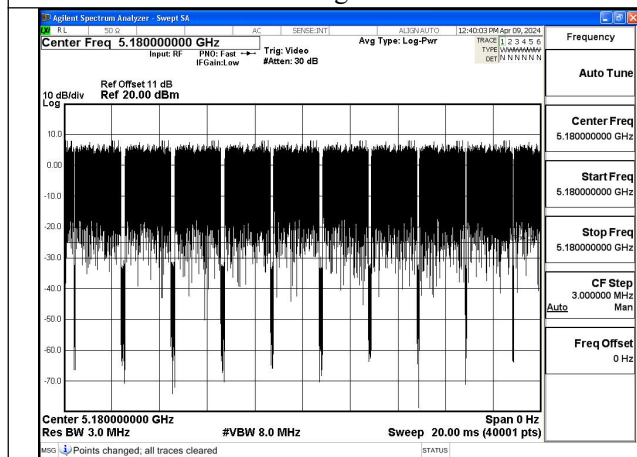


Fig.3

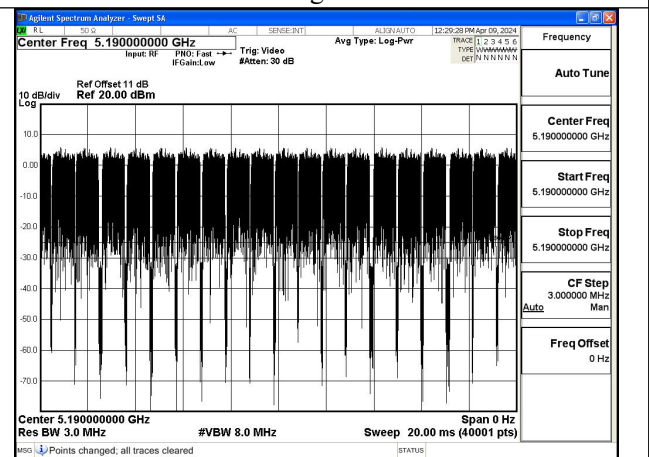


Fig.4

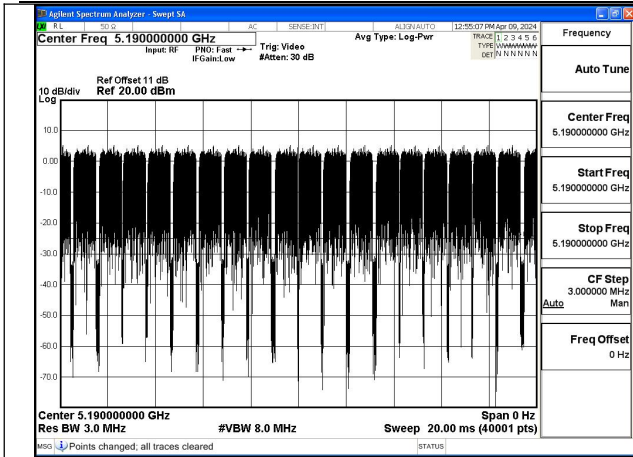


Fig.5

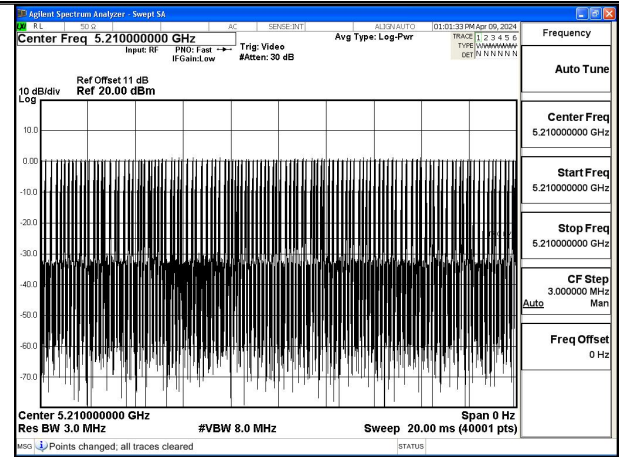


Fig.6

Output Power

Mode	Tones/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Chain0	16.15	16.17
802.11a	NA	5220	Chain0	15.97	15.99
802.11a	NA	5240	Chain0	15.73	15.75
802.11n HT20	NA	5180	Chain0	15.97	15.99
802.11n HT20	NA	5220	Chain0	15.60	15.62
802.11n HT20	NA	5240	Chain0	15.53	15.55
802.11ac VHT20	NA	5180	Chain0	16.05	16.07
802.11ac VHT20	NA	5220	Chain0	15.65	15.67
802.11ac VHT20	NA	5240	Chain0	15.51	15.53
802.11n HT40	NA	5190	Chain0	15.69	15.71
802.11n HT40	NA	5230	Chain0	15.47	15.49
802.11ac VHT40	NA	5190	Chain0	15.93	15.95
802.11ac VHT40	NA	5230	Chain0	15.66	15.68
802.11ac VHT80	NA	5210	Chain0	15.57	15.59

Emission Bandwidth

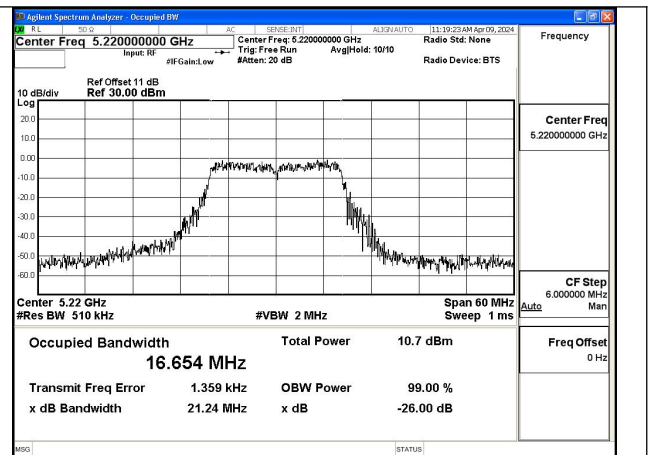
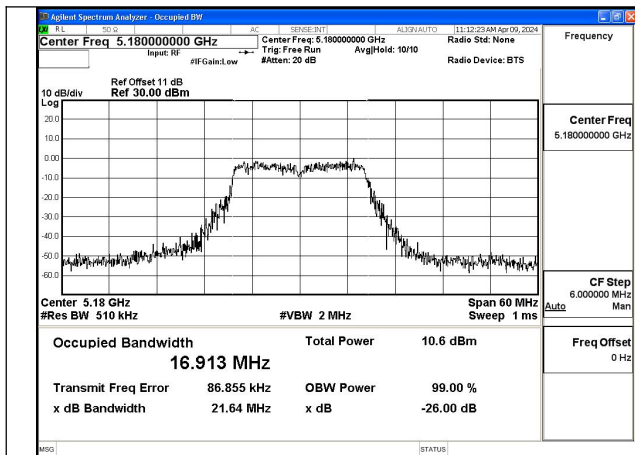
Offset 11dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	21.64	21.24	21.68
802.11n HT20	Chain0	21.45	21.91	21.32
802.11ac VHT20	Chain0	21.69	20.88	21.73

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5190MHz	---	5230MHz
802.11n HT40	Chain0	42.09	---	41.19
802.11ac VHT40	Chain0	42.61	---	42.84

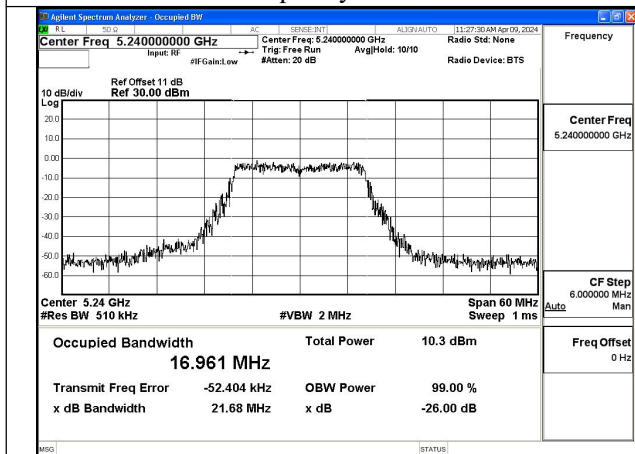
Test Mode	Antenna	26dB Bandwidth (MHz)		
		5210MHz	---	---
802.11ac VHT80	Chain0	82.77	---	---

Test Mode: 802.11a



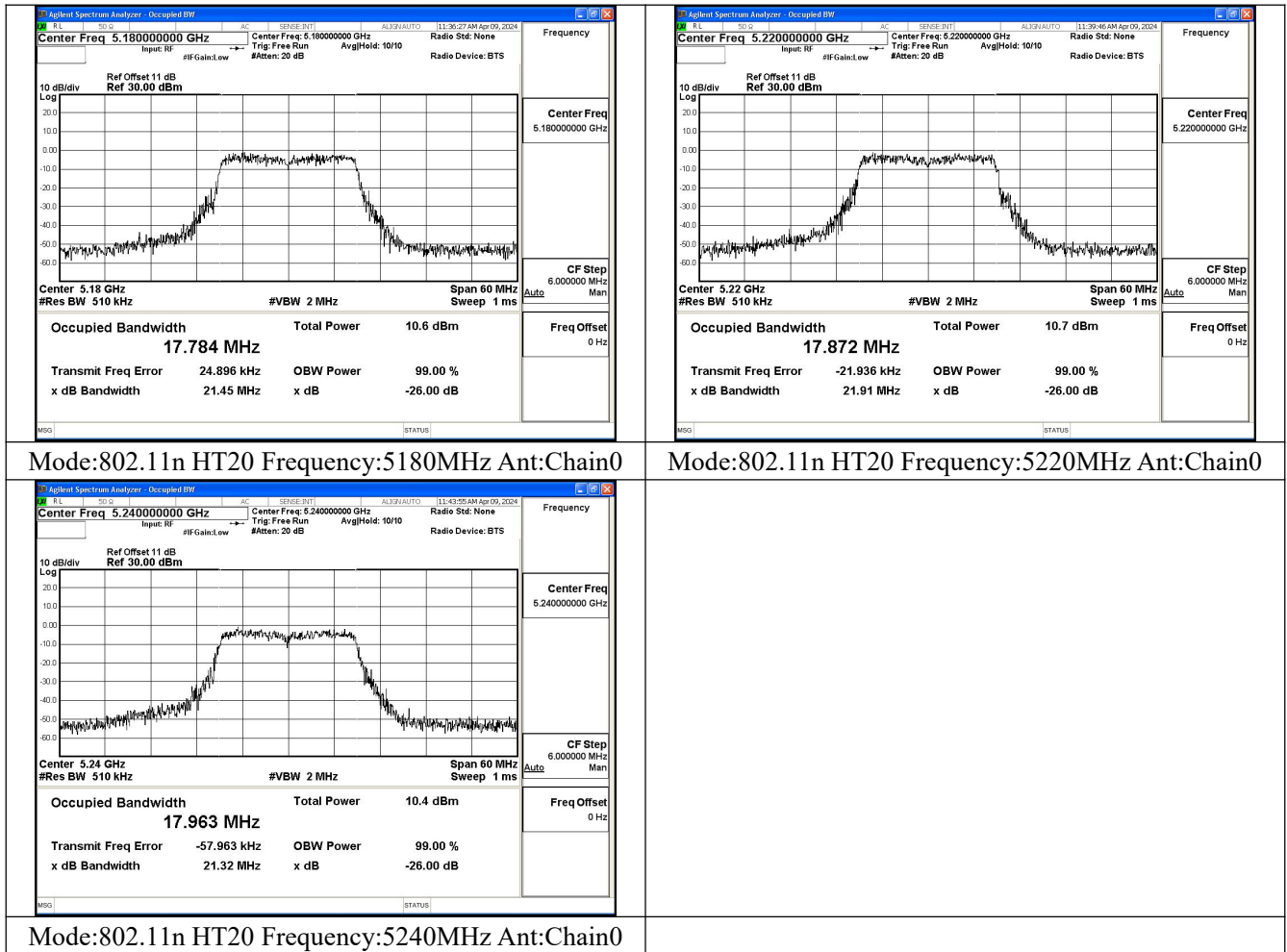
Mode:802.11a Frequency:5180MHz Ant:Chain0

Mode:802.11a Frequency:5220MHz Ant:Chain0

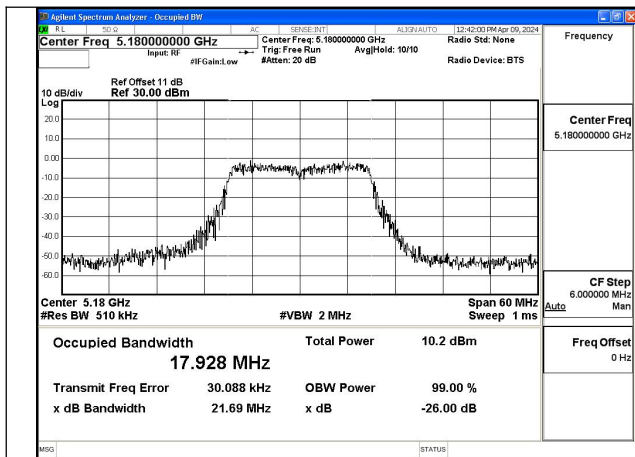


Mode:802.11a Frequency:5240MHz Ant:Chain0

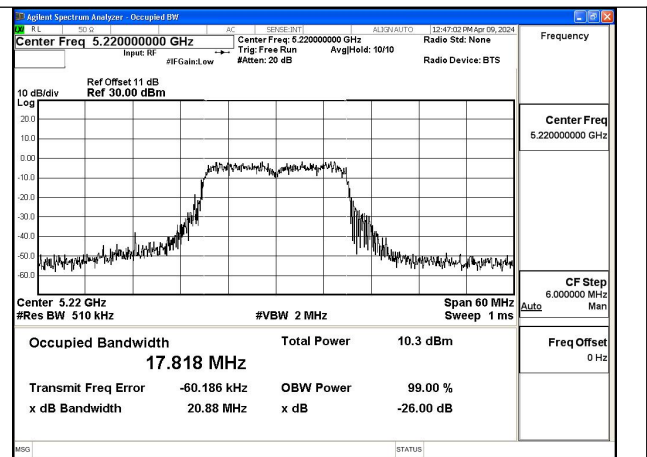
Test Mode: 802.11n HT20



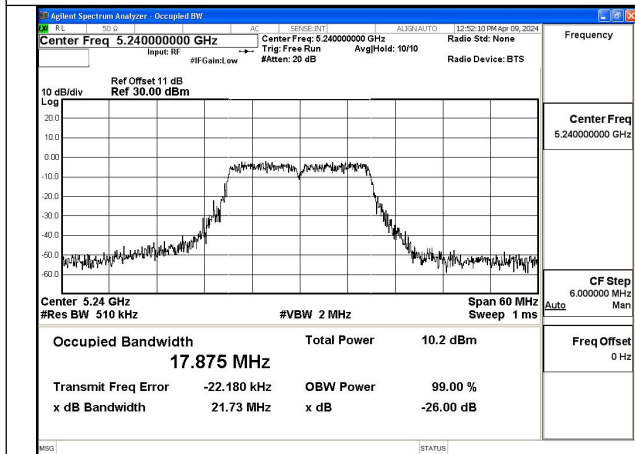
Test Mode: 802.11ac VHT20



Mode:802.11ac VHT20 Frequency:5180MHz
Ant:Chain0

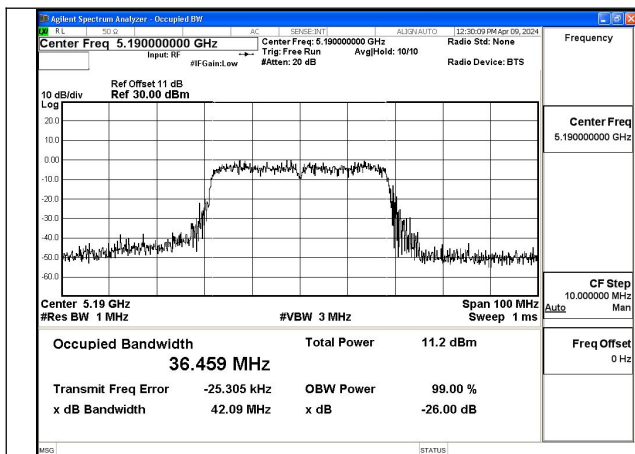


Mode:802.11ac VHT20 Frequency:5220MHz
Ant:Chain0

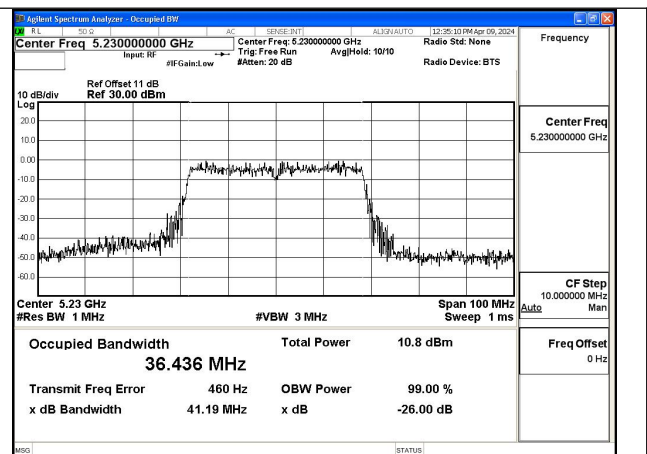


Mode:802.11ac VHT20 Frequency:5240MHz
Ant:Chain0

Test Mode: 802.11n HT40

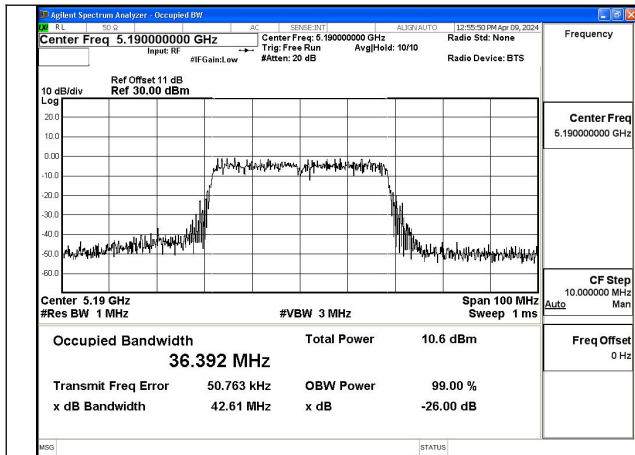


Mode:802.11n HT40 Frequency:5190MHz Ant:Chain0

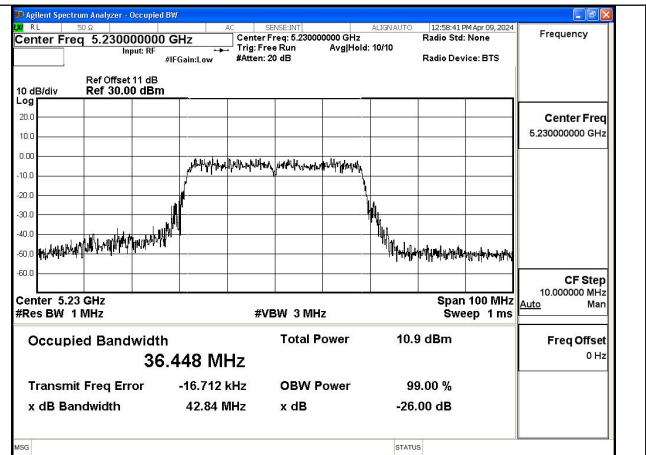


Mode:802.11n HT40 Frequency:5230MHz Ant:Chain0

Test Mode: 802.11ac VHT40

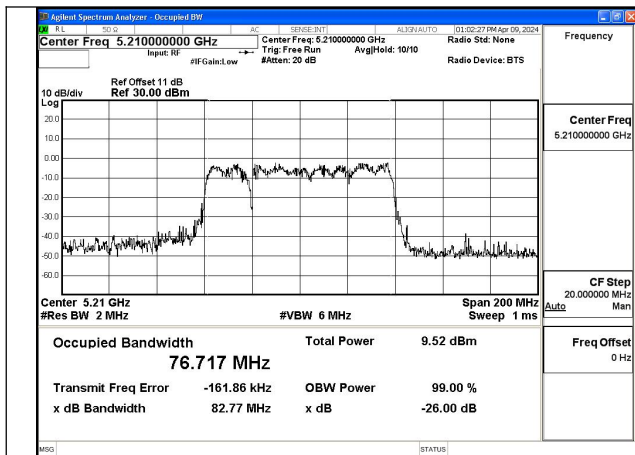


Mode:802.11ac VHT40 Frequency:5190MHz
Ant:Chain0



Mode:802.11ac VHT40 Frequency:5230MHz
Ant:Chain0

Test Mode: 802.11ac VHT80



Mode:802.11ac VHT80 Frequency:5210MHz
Ant:Chain0

Occupied Bandwidth

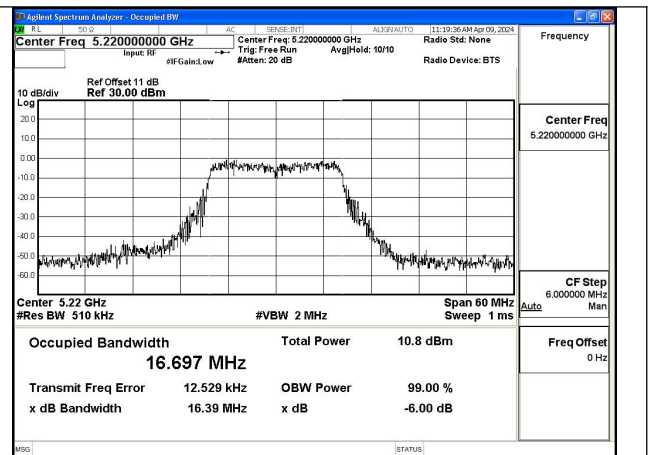
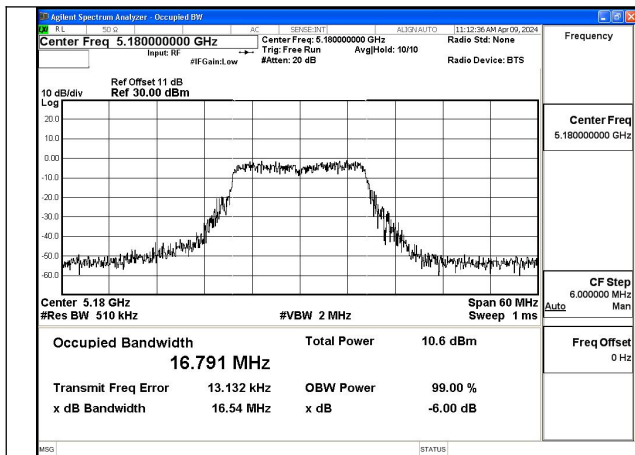
Offset 11dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	16.791	16.697	16.806
802.11n HT20	Chain0	17.897	17.770	17.894
802.11ac VHT20	Chain0	17.871	17.905	17.799

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5190MHz	---	5230MHz
802.11n HT40	Chain0	36.485	---	36.538
802.11ac VHT40	Chain0	36.791	---	36.343

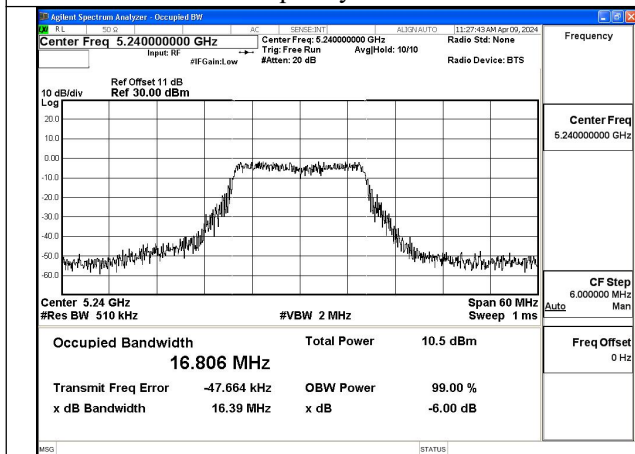
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5210MHz	---	---
802.11ac VHT80	Chain0	76.369	---	---

Test Mode: 802.11a



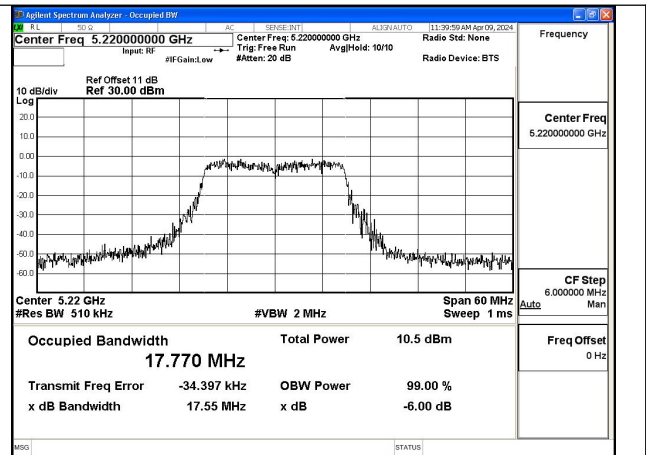
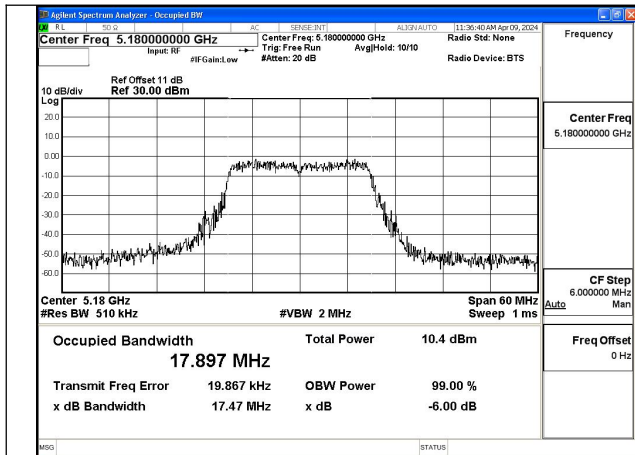
Mode:802.11a Frequency:5180MHz Ant:Chain0

Mode:802.11a Frequency:5220MHz Ant:Chain0



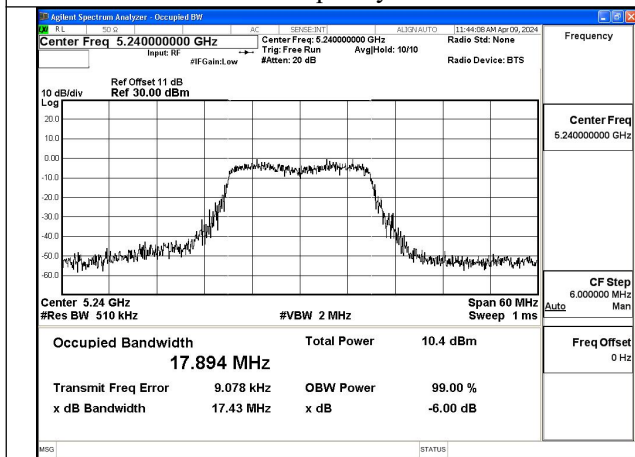
Mode:802.11a Frequency:5240MHz Ant:Chain0

Test Mode: 802.11n HT20



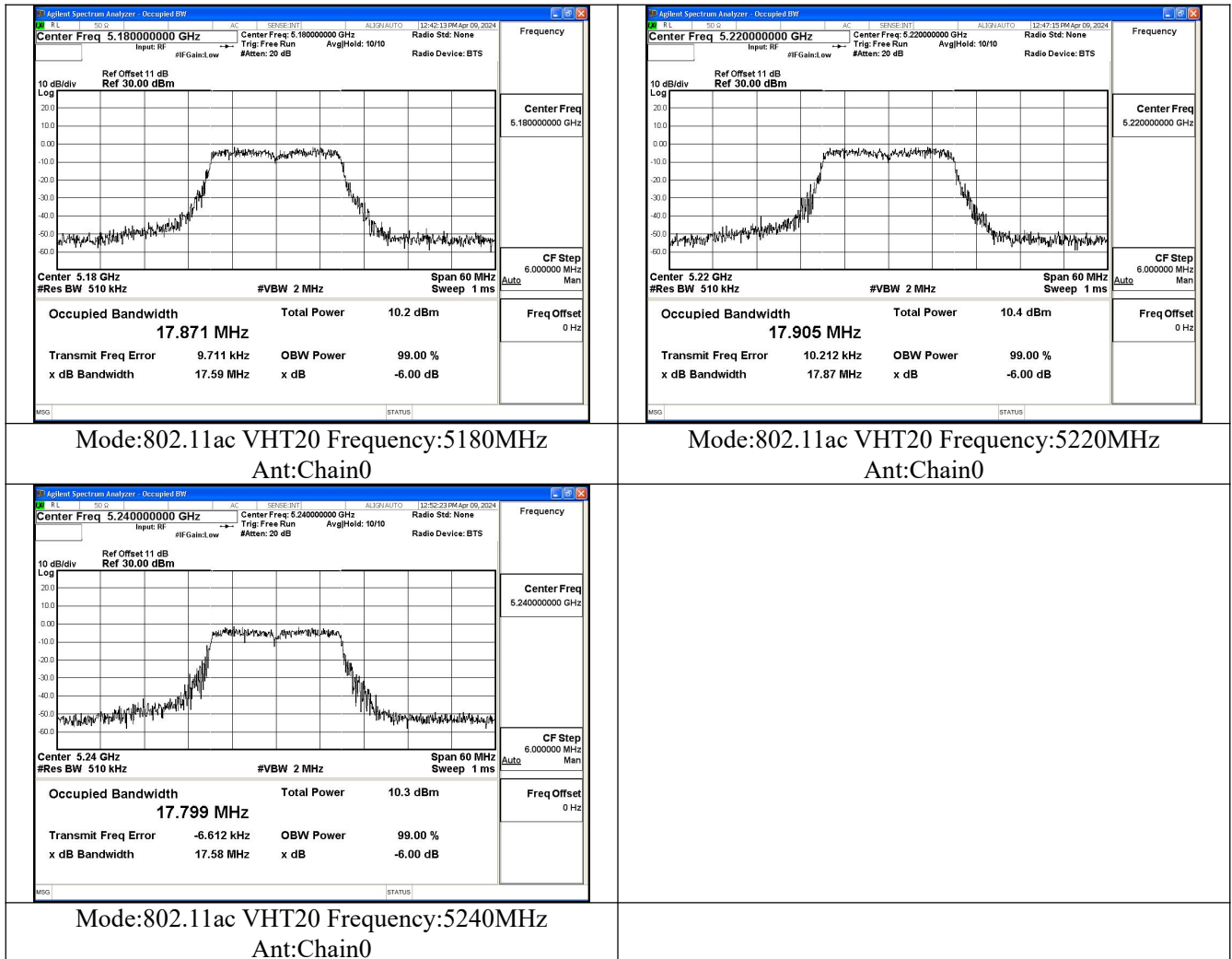
Mode:802.11n HT20 Frequency:5180MHz Ant:Chain0

Mode:802.11n HT20 Frequency:5220MHz Ant:Chain0

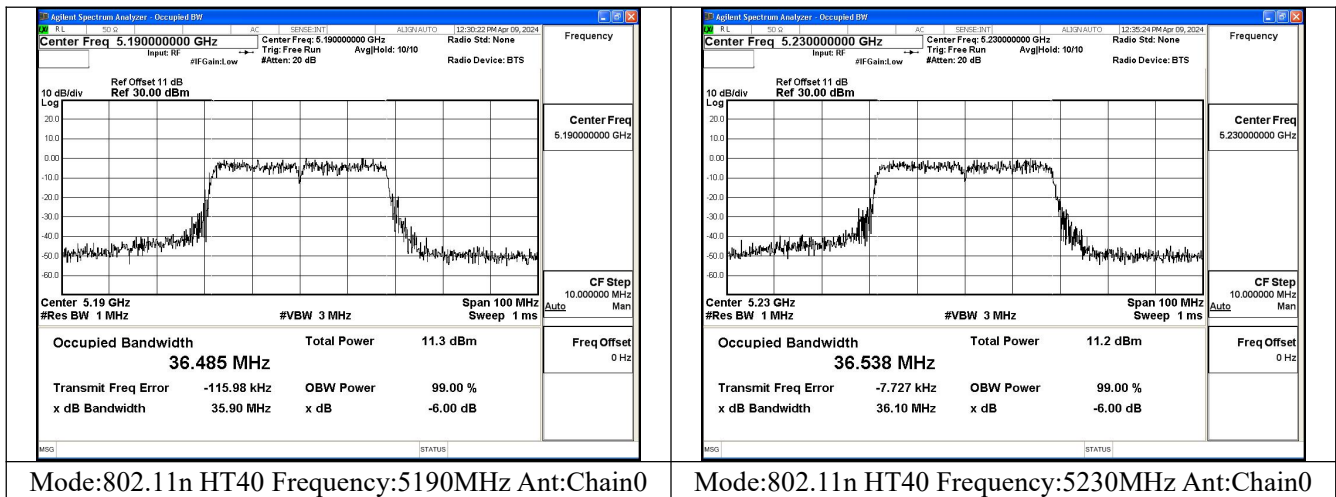


Mode:802.11n HT20 Frequency:5240MHz Ant:Chain0

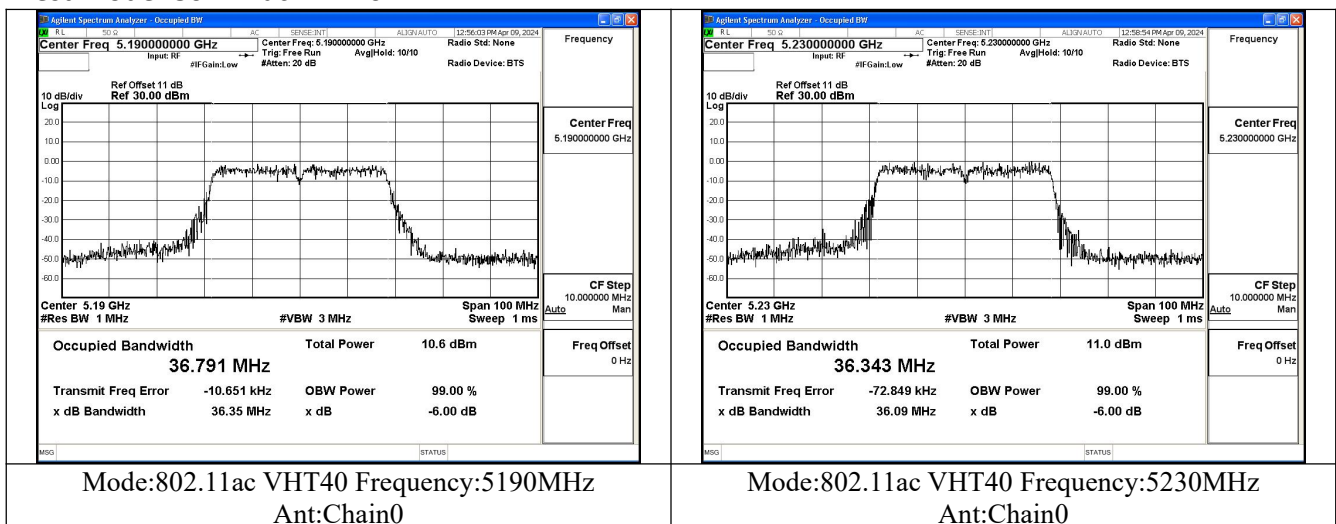
Test Mode: 802.11ac VHT20



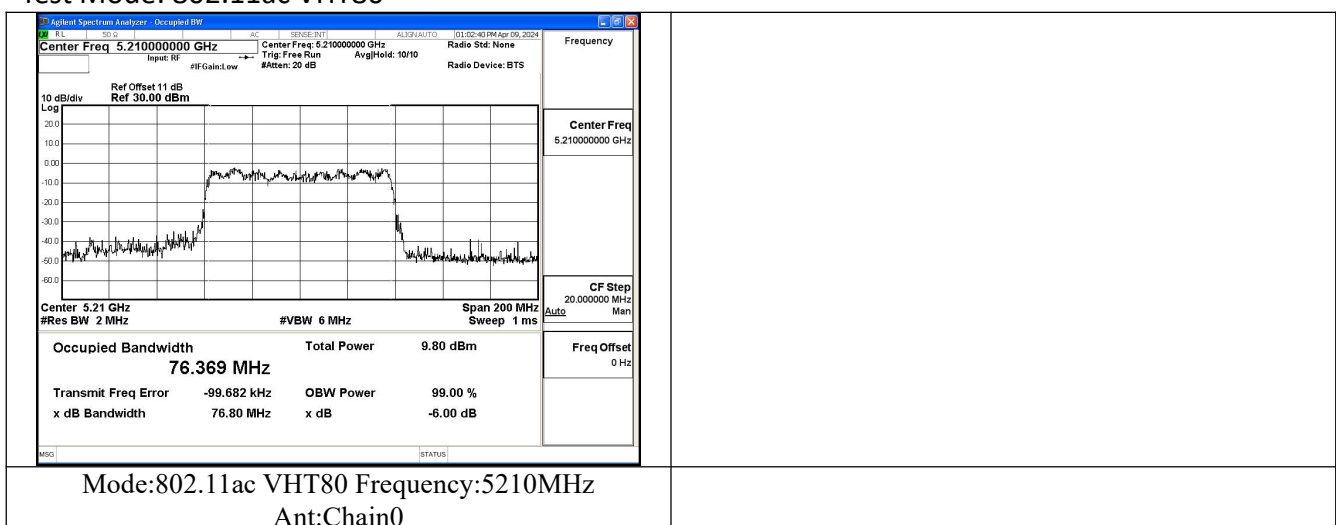
Test Mode: 802.11n HT40



Test Mode: 802.11ac VHT40



Test Mode: 802.11ac VHT80



Transmitter Power Spectral Density

Offset 11dB = 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	4.893	0	4.745	0	4.579
802.11n HT20	Chain0	NA	0	4.422	0	4.235	0	3.987
802.11ac VHT20	Chain0	NA	0	4.399	0	4.133	0	4.025

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	1.369	---	---	0	1.144
802.11ac VHT40	Chain0	NA	0	1.452	---	---	0	1.173

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	0.17	-0.648	---	---	---	---