

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5180	99.94%	0	Fig.1
802.11n HT20	5180	99.96%	0	Fig.2
802.11ac VHT20	5180	99.95%	0	Fig.3
802.11n HT40	5190	99.89%	0	Fig.4
802.11ac VHT40	5190	99.91%	0	Fig.5
802.11ac VHT80	5210	99.75%	0	Fig.6

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

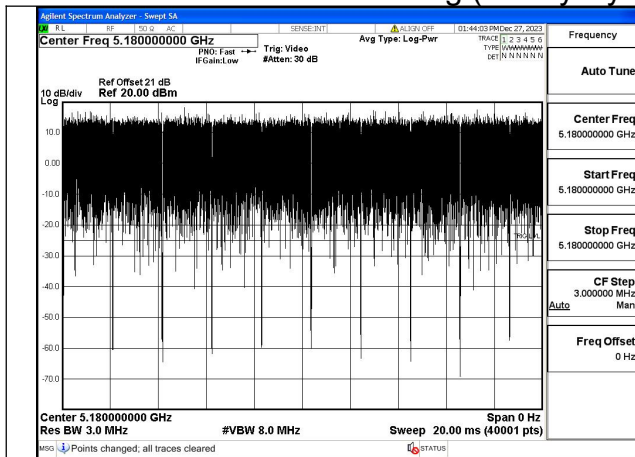


Fig.1

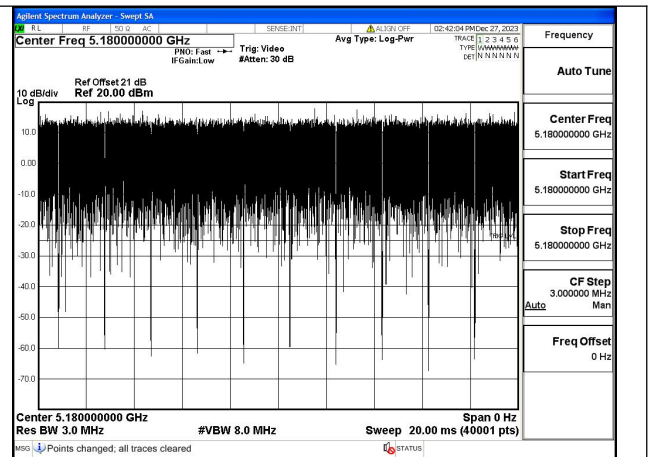


Fig.2

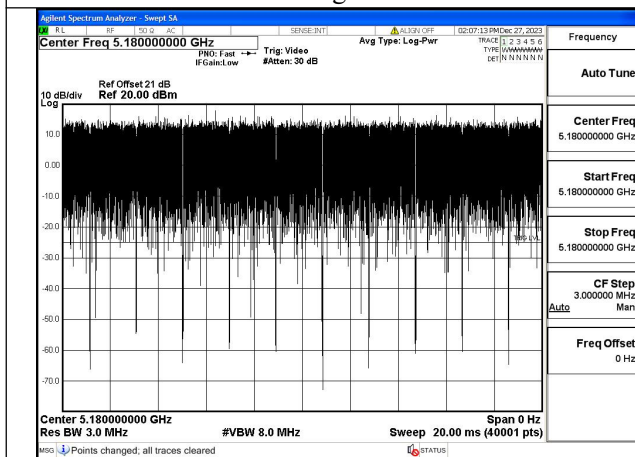


Fig.3

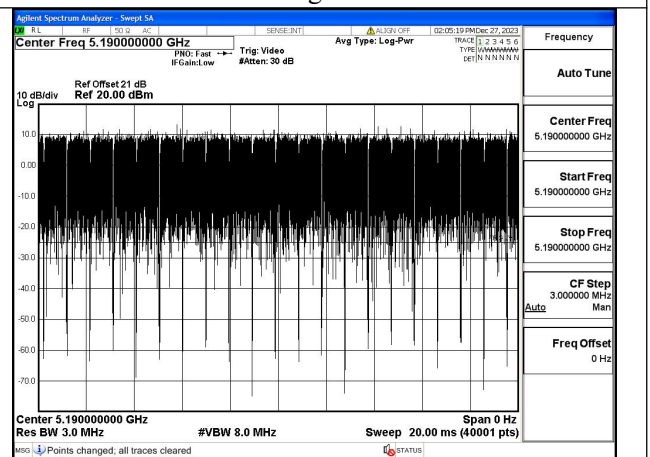


Fig.4

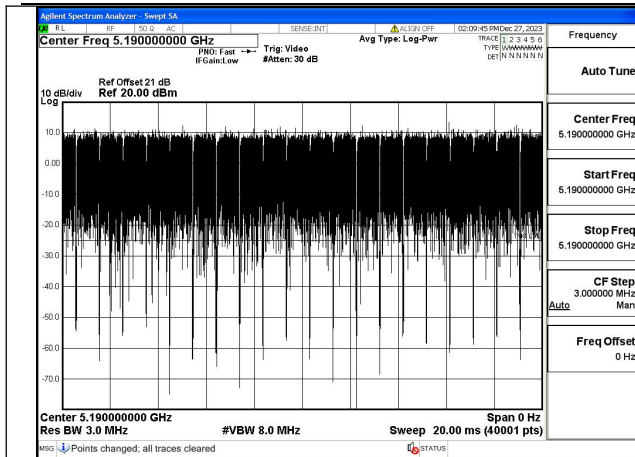


Fig.5

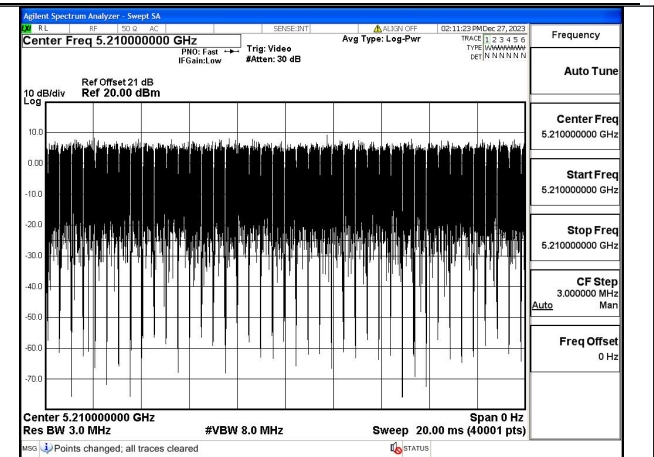


Fig.6

Output Power

Mode	Tones/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Chain0	11.97	9.17
802.11a	NA	5220	Chain0	11.86	9.06
802.11a	NA	5240	Chain0	11.89	9.09
802.11n HT20	NA	5180	Chain0	11.88	9.08
802.11n HT20	NA	5220	Chain0	12.00	9.20
802.11n HT20	NA	5240	Chain0	11.78	8.98
802.11ac VHT20	NA	5180	Chain0	11.86	9.06
802.11ac VHT20	NA	5220	Chain0	11.91	9.11
802.11ac VHT20	NA	5240	Chain0	11.92	9.12
802.11n HT40	NA	5190	Chain0	11.44	8.64
802.11n HT40	NA	5230	Chain0	11.57	8.77
802.11ac VHT40	NA	5190	Chain0	11.44	8.64
802.11ac VHT40	NA	5230	Chain0	11.61	8.81
802.11ac VHT80	NA	5210	Chain0	11.28	8.48

Emission Bandwidth

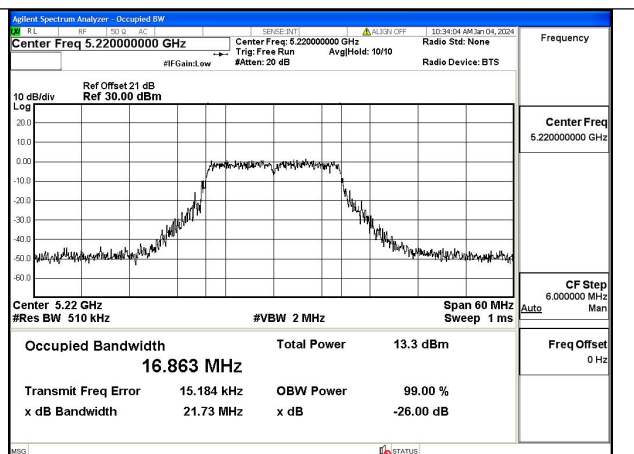
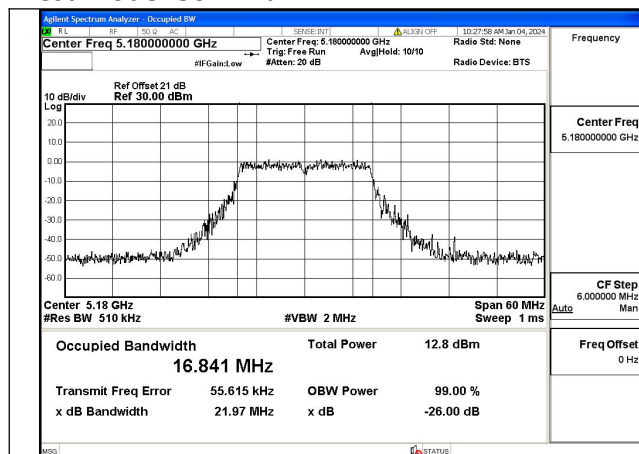
Offset 21dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	21.97	21.73	22.23
802.11n HT20	Chain0	23.37	22.67	22.45
802.11ac VHT20	Chain0	22.90	24.10	22.65

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5190MHz	---	5230MHz
802.11n HT40	Chain0	41.42	---	41.89
802.11ac VHT40	Chain0	42.45	---	41.69

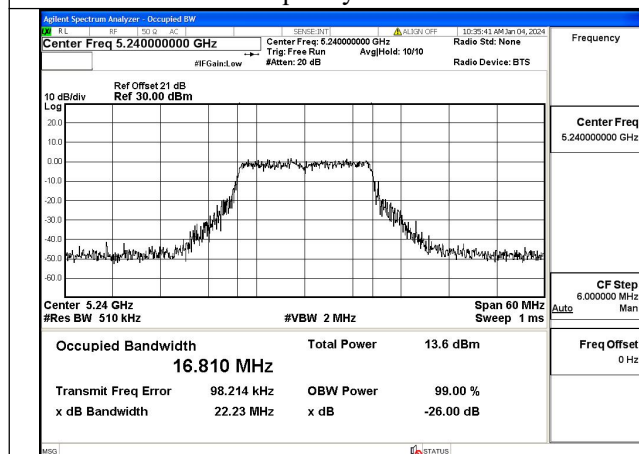
Test Mode	Antenna	26dB Bandwidth (MHz)		
		5210MHz	---	---
802.11ac VHT80	Chain0	84.00	---	---

Test Mode: 802.11a



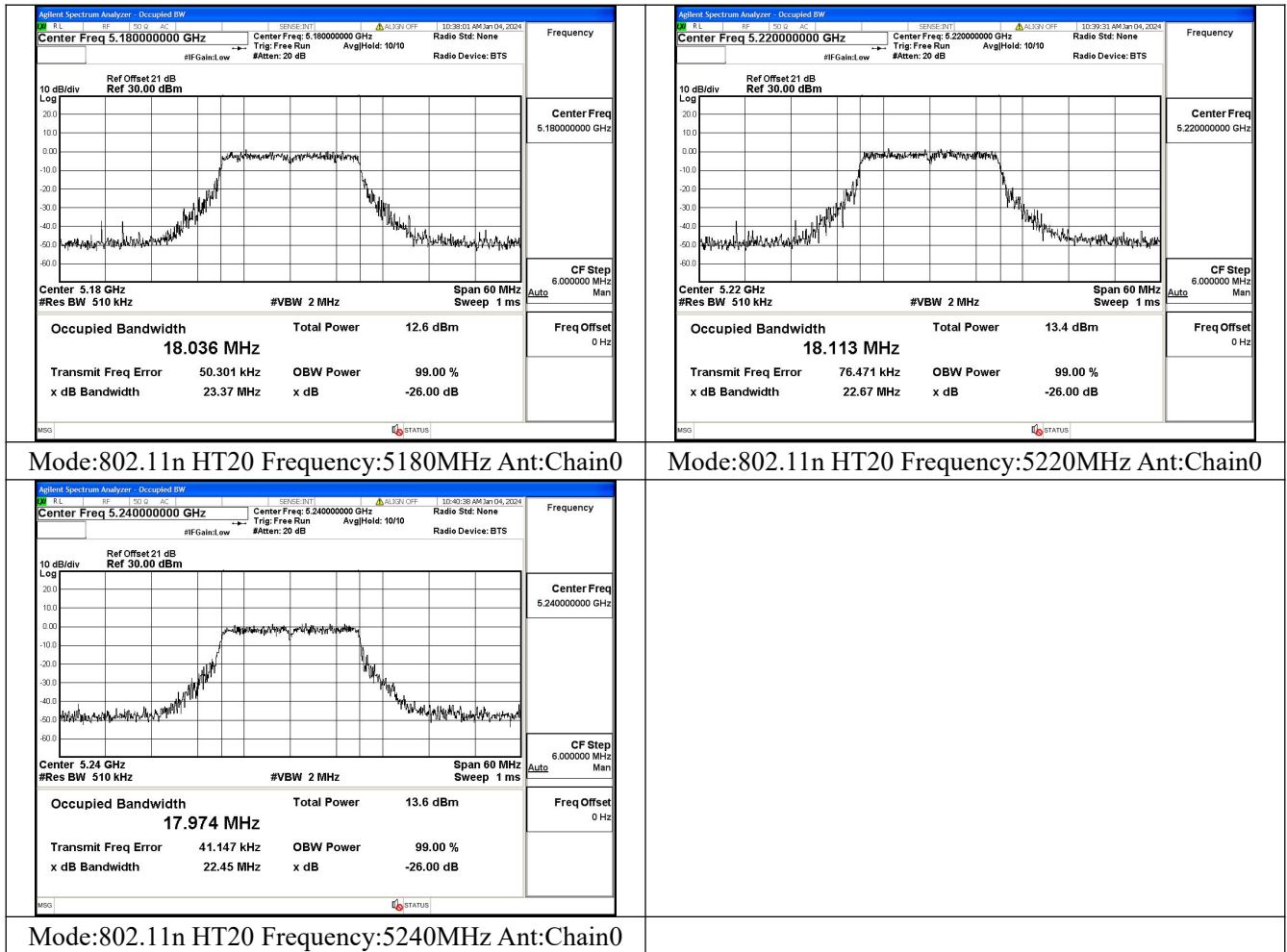
Mode:802.11a Frequency:5180MHz Ant:Chain0

Mode:802.11a Frequency:5220MHz Ant:Chain0

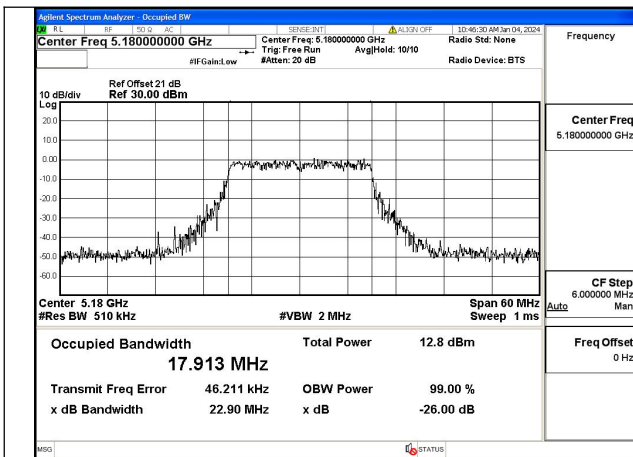


Mode:802.11a Frequency:5240MHz Ant:Chain0

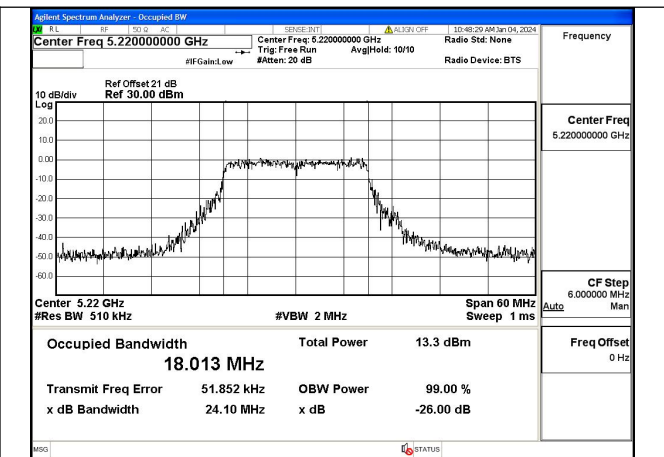
Test Mode: 802.11n HT20



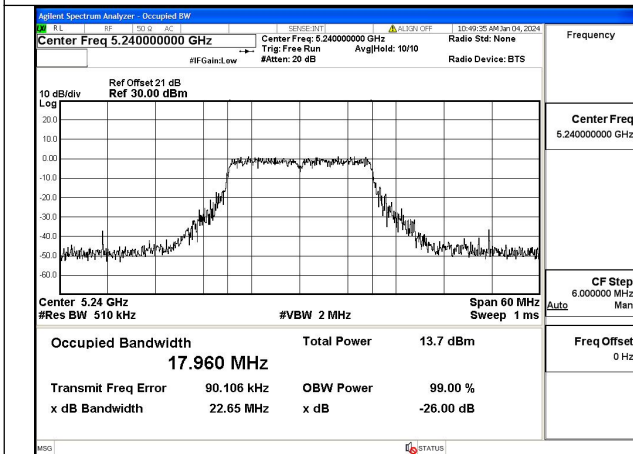
Test Mode: 802.11ac VHT20



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

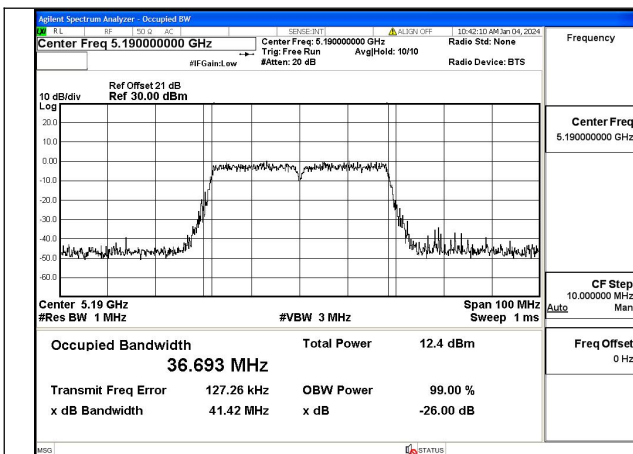


Mode:802.11ac VHT20 Frequency:5220MHz
Ant:Chain0

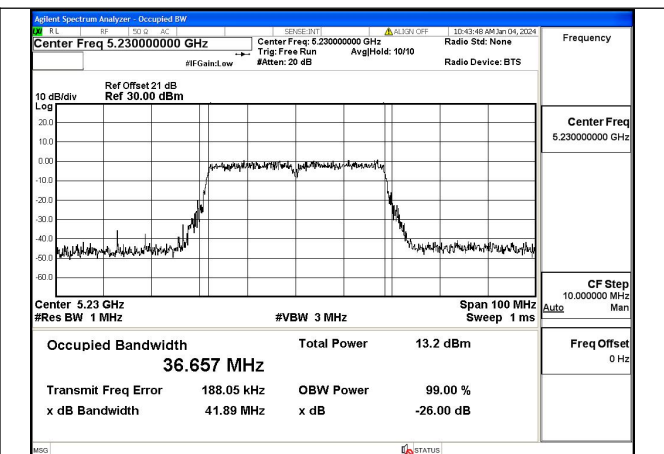


Mode:802.11ac VHT20 Frequency:5240MHz
Ant:Chain0

Test Mode: 802.11n HT40

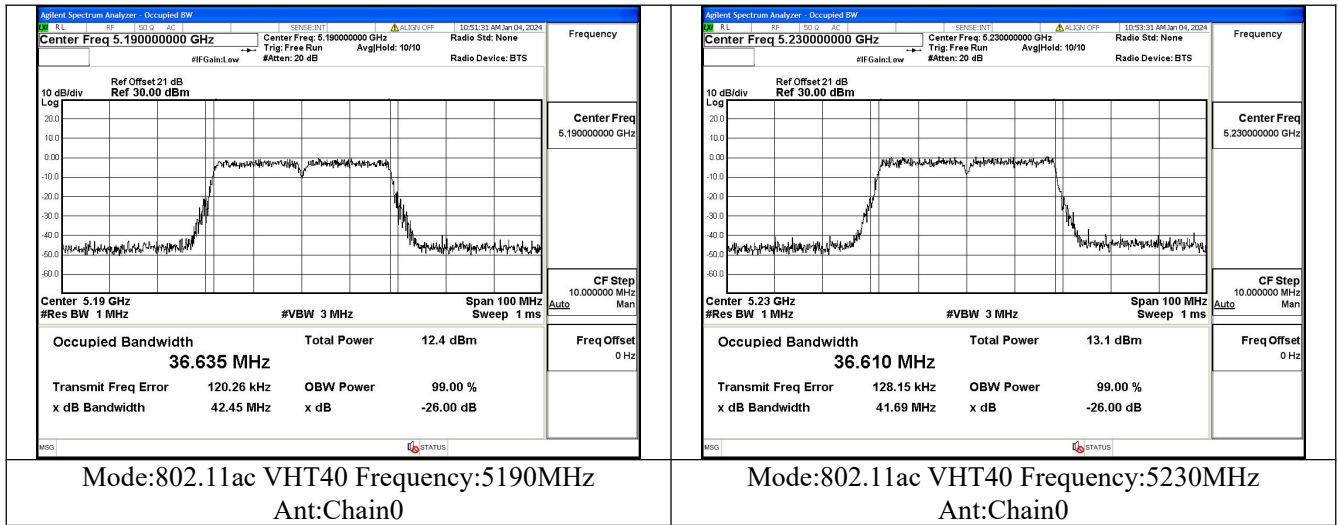


Mode:802.11n HT40 Frequency:5190MHz Ant:Chain0

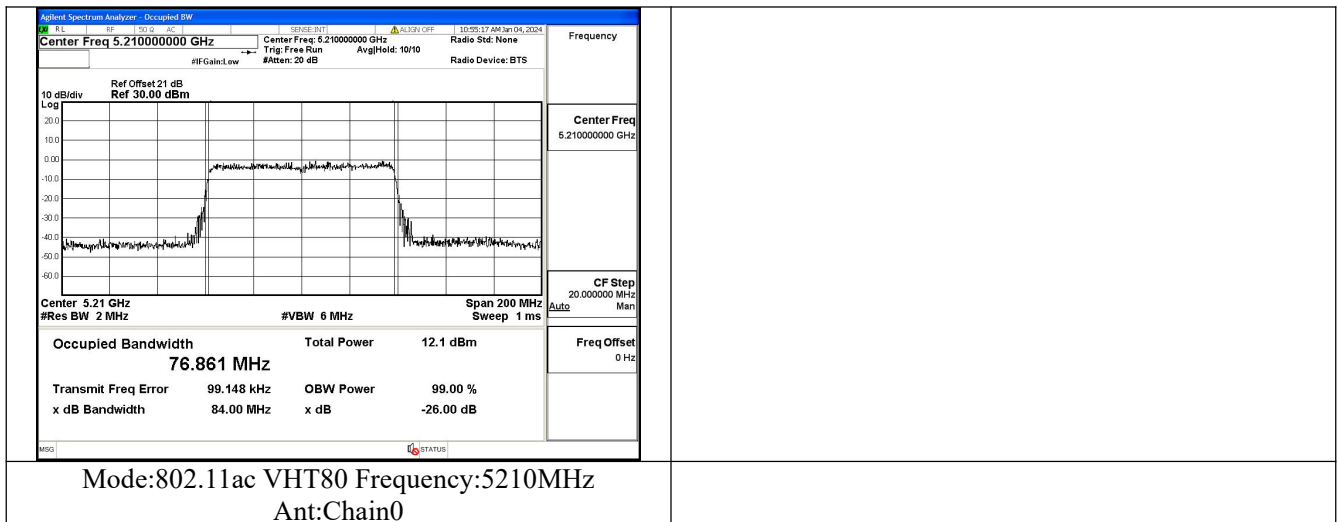


Mode:802.11n HT40 Frequency:5230MHz Ant:Chain0

Test Mode: 802.11ac VHT40



Test Mode: 802.11ac VHT80



Occupied Bandwidth

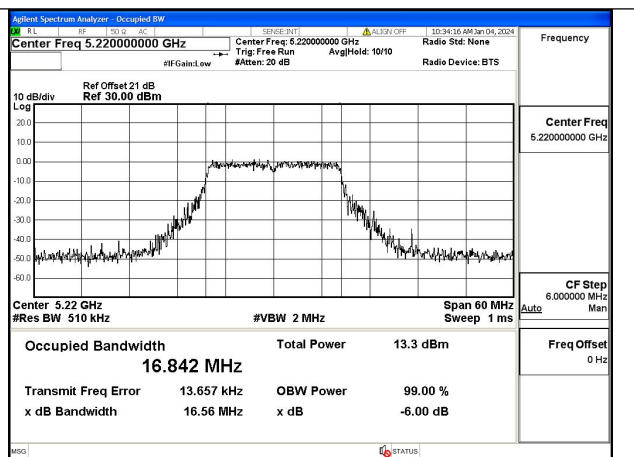
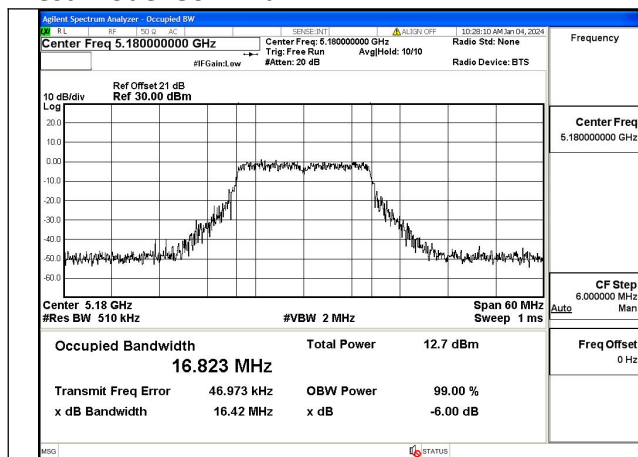
Offset 21dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	16.823	16.842	16.919
802.11n HT20	Chain0	18.033	17.963	17.933
802.11ac VHT20	Chain0	17.930	18.025	17.904

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5190MHz	---	5230MHz
802.11n HT40	Chain0	36.670	---	36.672
802.11ac VHT40	Chain0	36.664	---	36.674

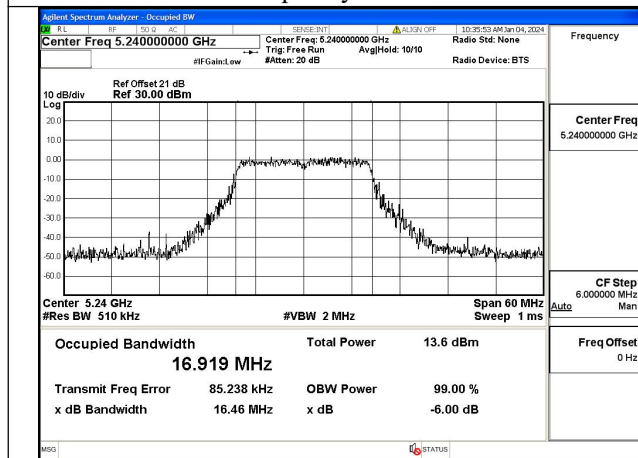
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5210MHz	---	---
802.11ac VHT80	Chain0	76.736	---	---

Test Mode: 802.11a



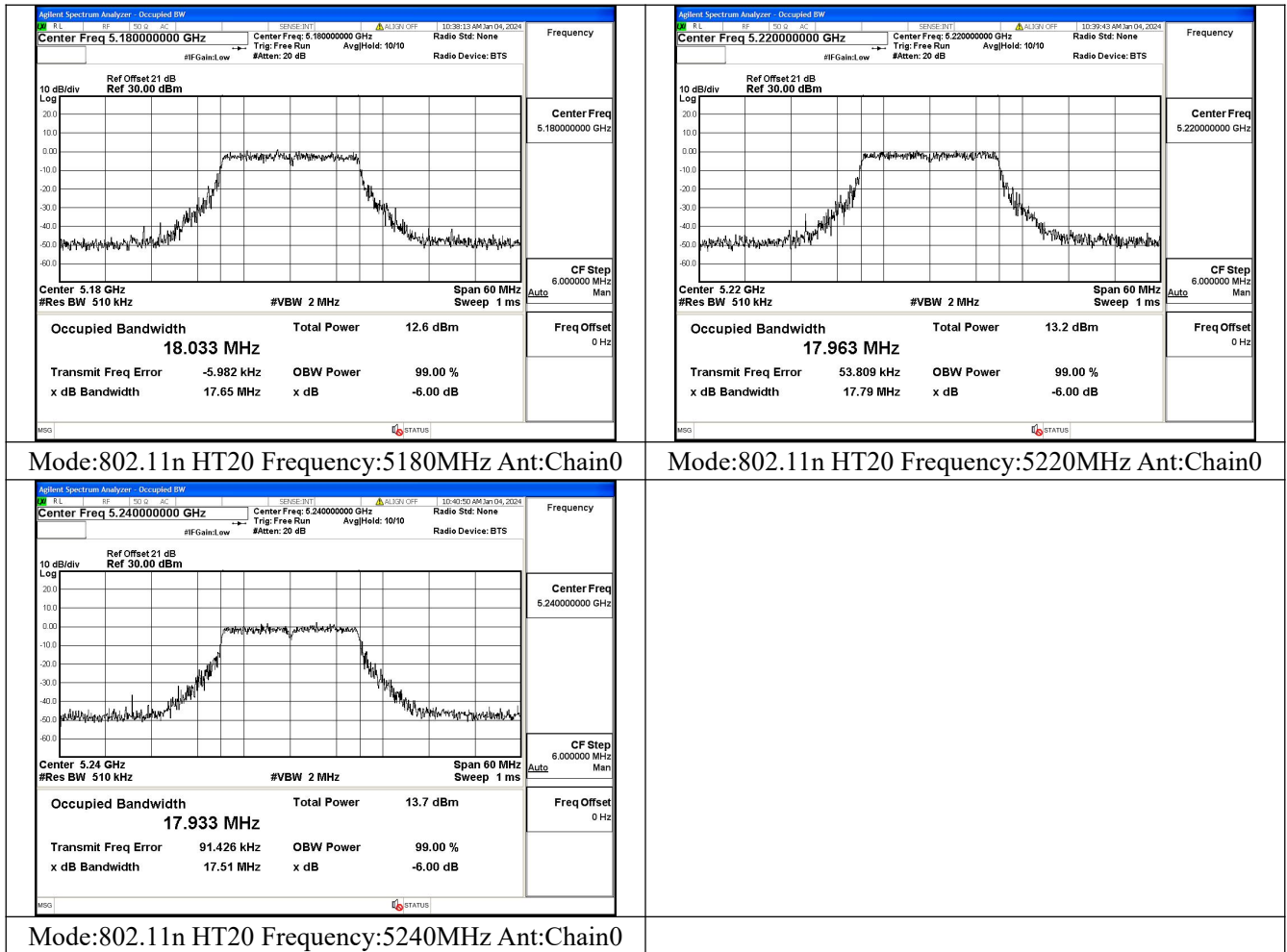
Mode:802.11a Frequency:5180MHz Ant:Chain0

Mode:802.11a Frequency:5220MHz Ant:Chain0

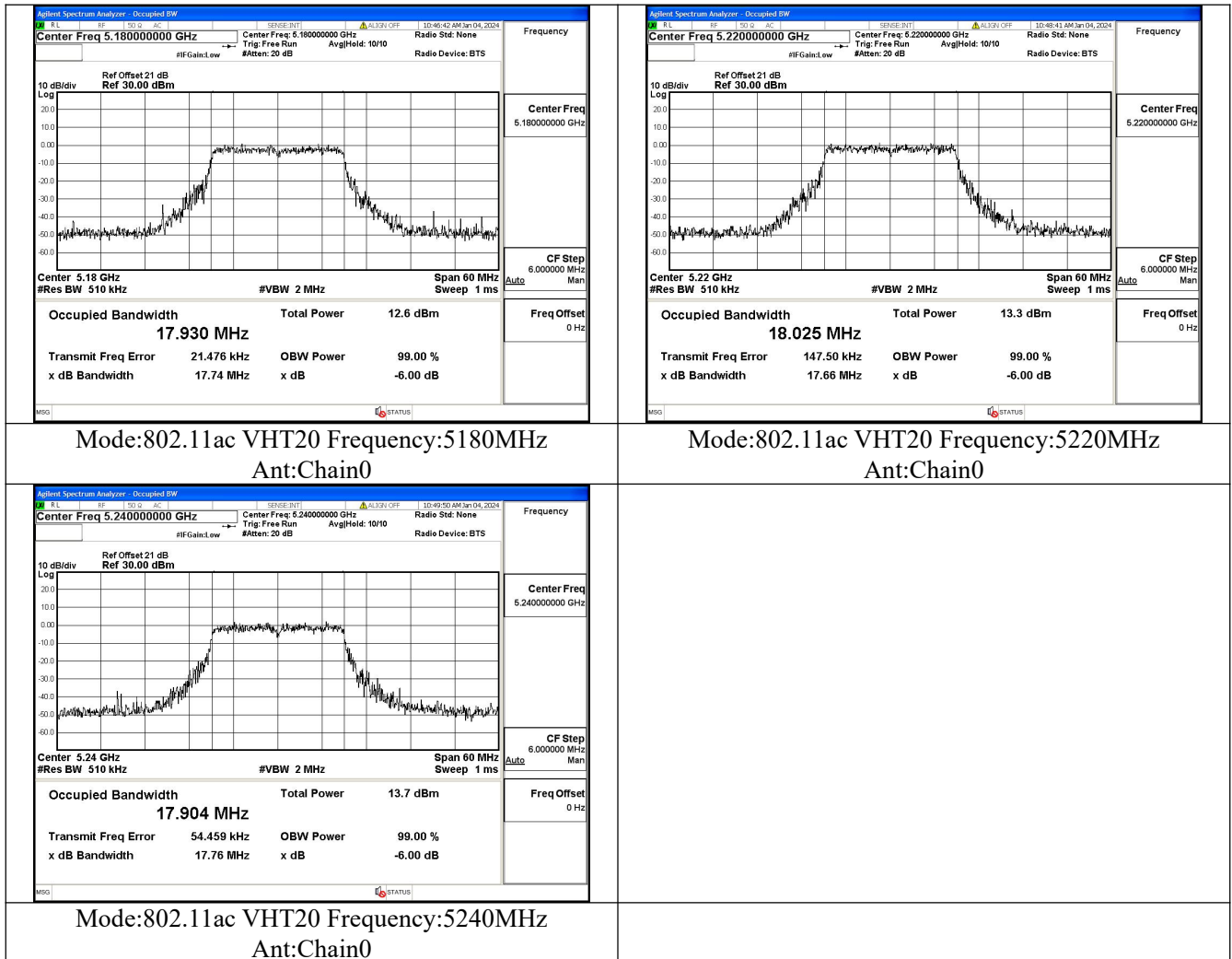


Mode:802.11a Frequency:5240MHz Ant:Chain0

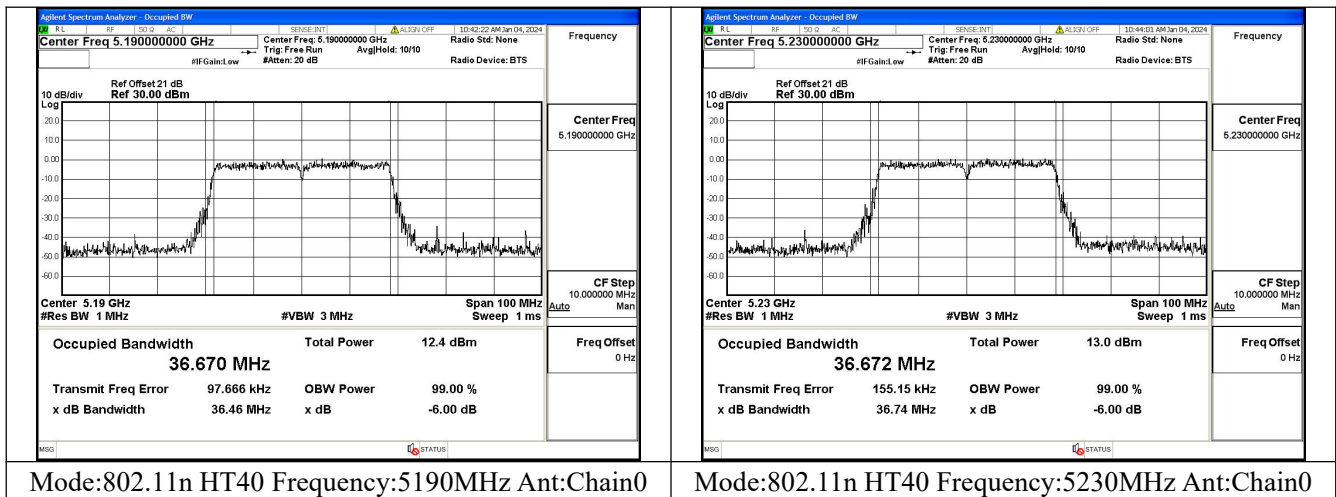
Test Mode: 802.11n HT20



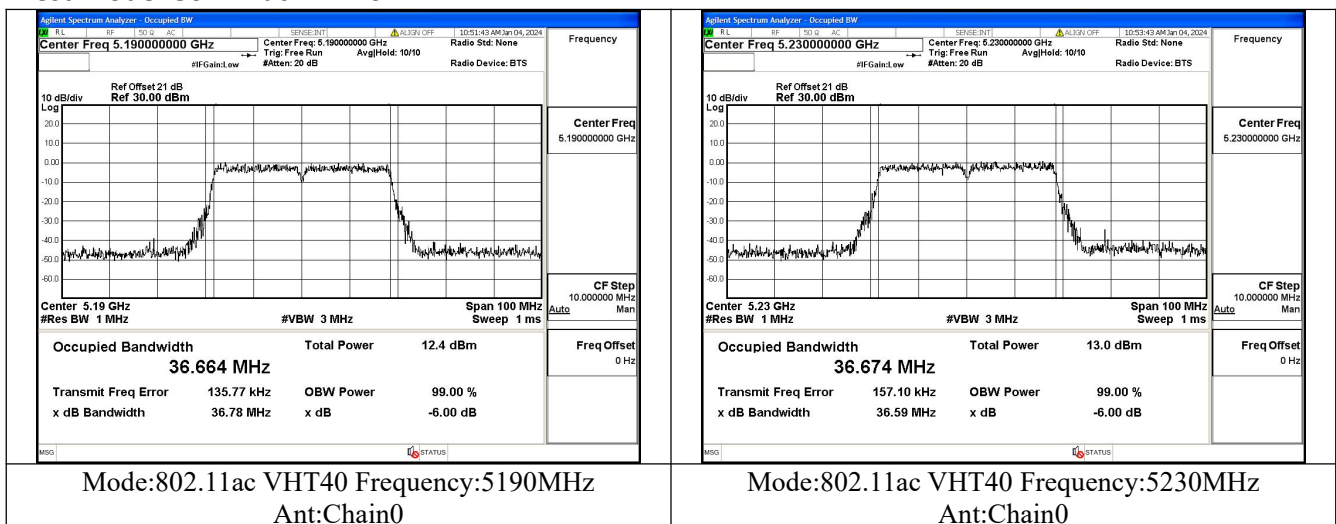
Test Mode: 802.11ac VHT20



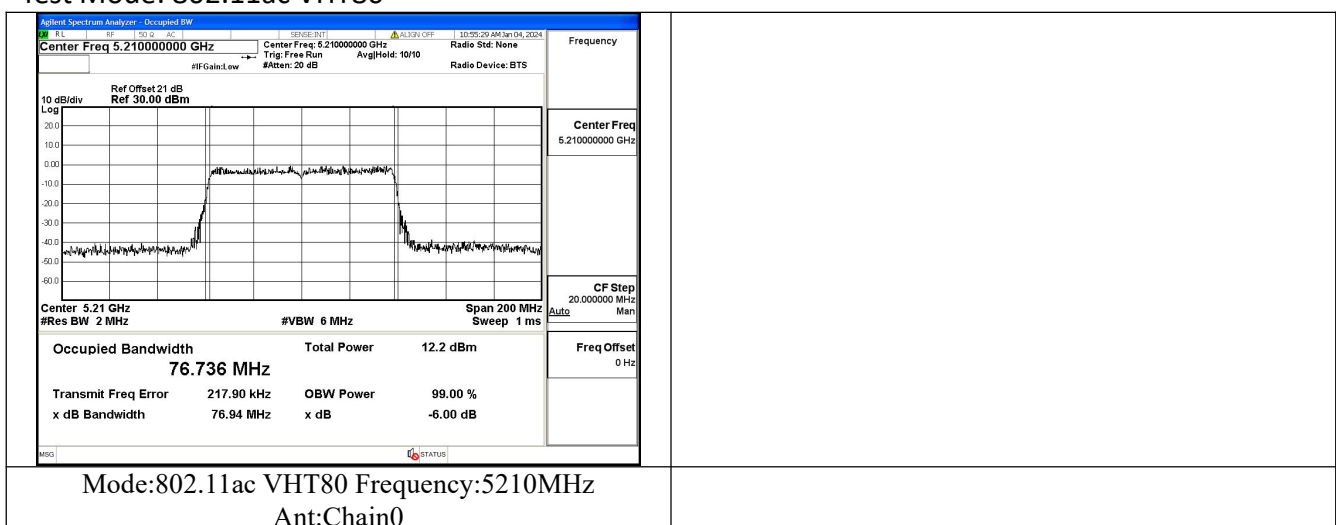
Test Mode: 802.11n HT40



Test Mode: 802.11ac VHT40



Test Mode: 802.11ac VHT80



Transmitter Power Spectral Density

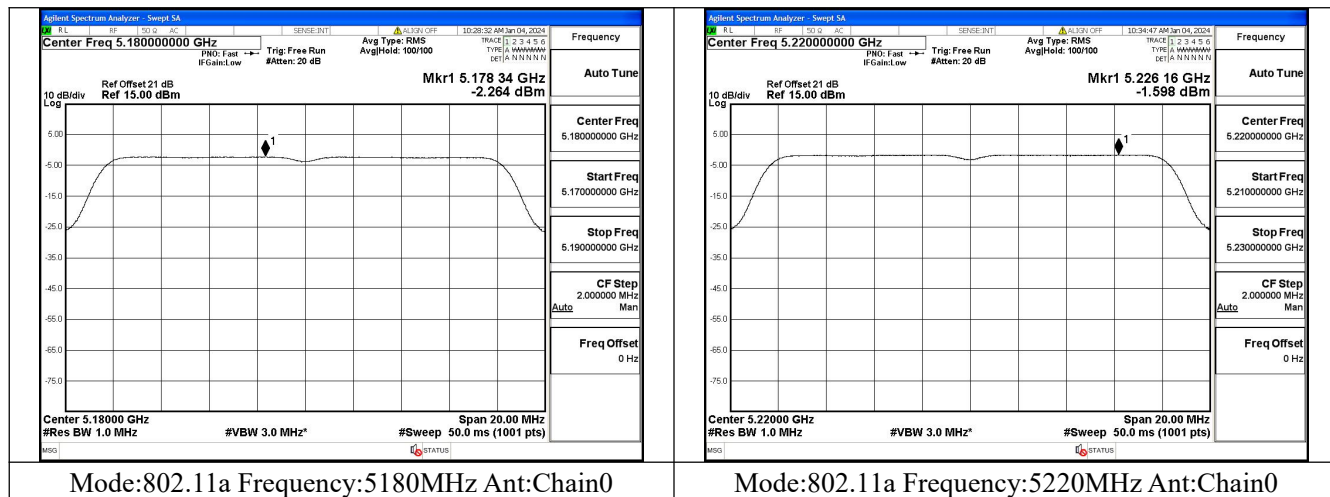
Offset 21dB = Attenuator + Temporary antenna connector loss + Cable loss

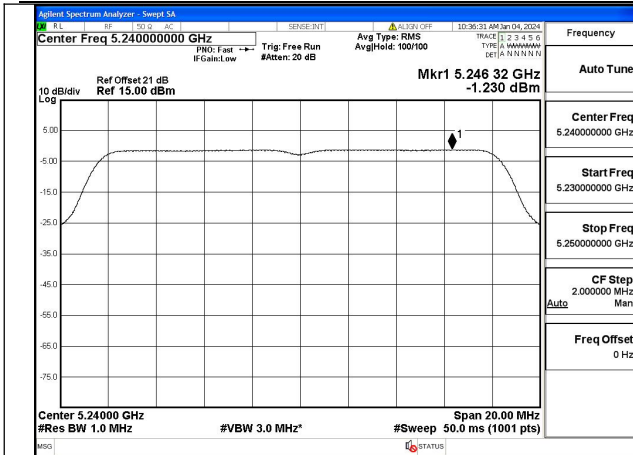
Test Mode	Antenna	Tones	5180MHz		5220MHz		5240MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11a	Chain0	NA	0	-2.264	0	-1.598	0	-1.230
802.11n HT20	Chain0	NA	0	-2.574	0	-1.965	0	-1.543
802.11ac VHT20	Chain0	NA	0	-2.580	0	-1.973	0	-1.530

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	-5.519	---	---	0	-4.546
802.11ac VHT40	Chain0	NA	0	-5.495	---	---	0	-4.575

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	-7.976	---	---	---	---

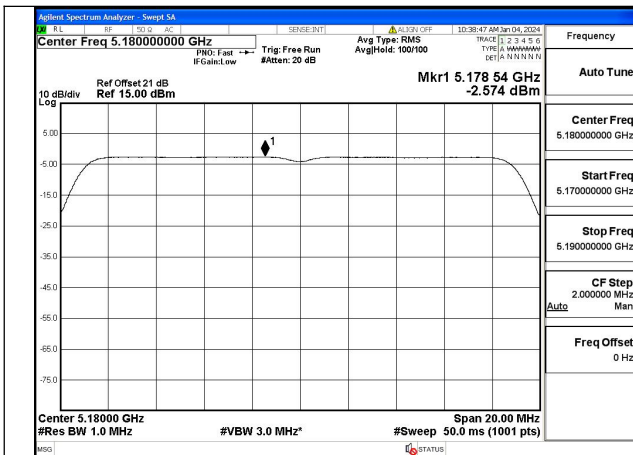
Test Mode: 802.11a



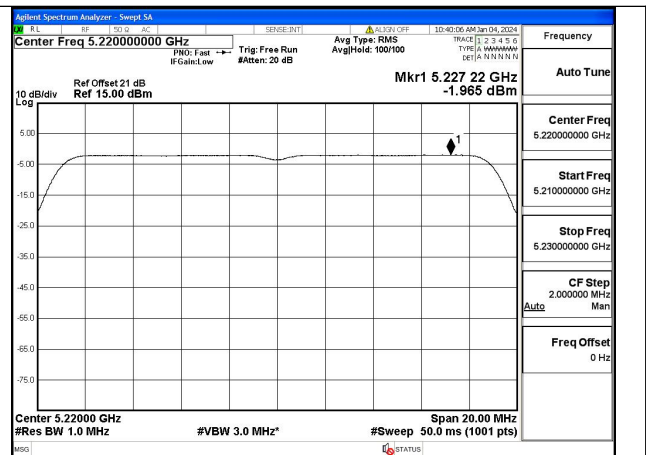


Mode:802.11a Frequency:5240MHz Ant:Chain0

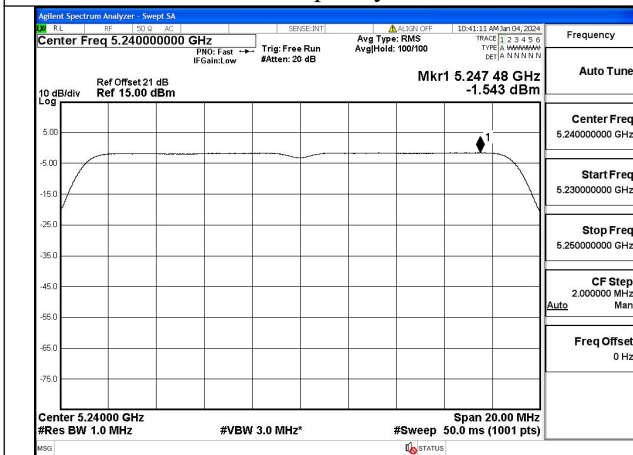
Test Mode: 802.11n HT20



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



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



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