

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5180	97.69%	0.10
802.11n HT20	5180	97.53%	0.11
802.11ac VHT20	5180	97.67%	0.10
802.11n HT40	5190	95.53%	0.20
802.11ac VHT40	5190	95.51%	0.20
802.11ac VHT80	5210	91.94%	0.37

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	14.34	16.24
802.11a	NA	5220	Chain0	14.38	16.28
802.11a	NA	5240	Chain0	14.02	15.92
802.11n HT20	NA	5180	Chain0	14.28	16.18
802.11n HT20	NA	5220	Chain0	14.28	16.18
802.11n HT20	NA	5240	Chain0	14.04	15.94
802.11ac VHT20	NA	5180	Chain0	13.74	15.64
802.11ac VHT20	NA	5220	Chain0	13.88	15.78
802.11ac VHT20	NA	5240	Chain0	14.12	16.02
802.11n HT40	NA	5190	Chain0	14.01	15.91
802.11n HT40	NA	5230	Chain0	13.86	15.76
802.11ac VHT40	NA	5190	Chain0	13.62	15.52
802.11ac VHT40	NA	5230	Chain0	13.75	15.65
802.11ac VHT80	NA	5210	Chain0	13.40	15.3

Emission Bandwidth

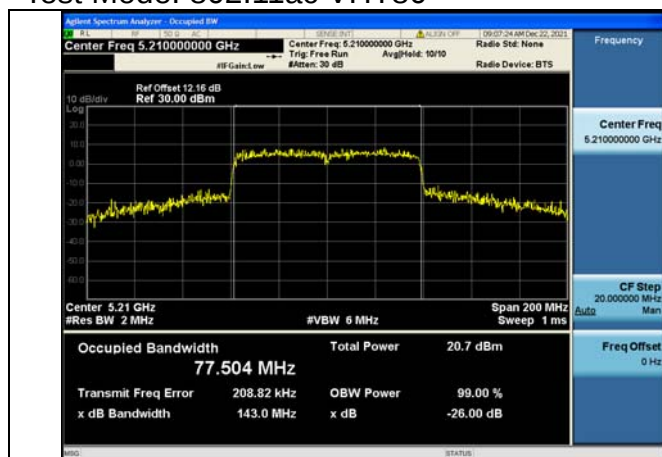
Offset 12.16dB = Attenuator 10dB + Temporary antenna connector loss 0.2dB + Cable loss 1.96dB

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.554	Channel No.562	Channel No.566
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	36.86	32.78	35.65

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.556	---	Channel No.564
		5190MHz	---	5230MHz
802.11n HT40	Chain0	73.54	---	75.56
802.11ac VHT40	Chain0	72.85	---	63.95

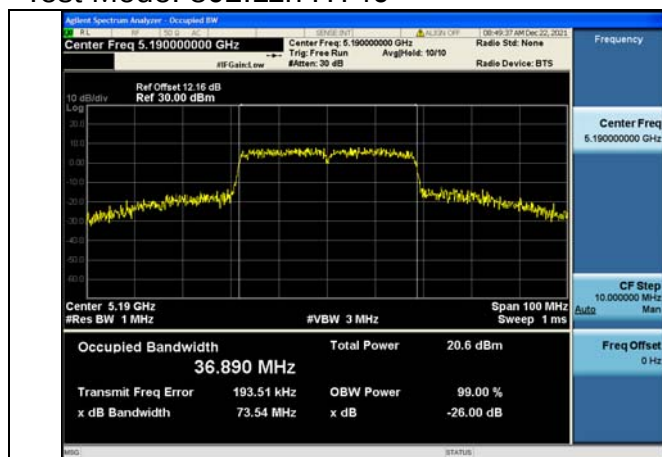
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.560	---	---
		5210MHz	---	---
802.11ac VHT80	Chain0	143.03	---	---

Test Mode: 802.11ac VHT80



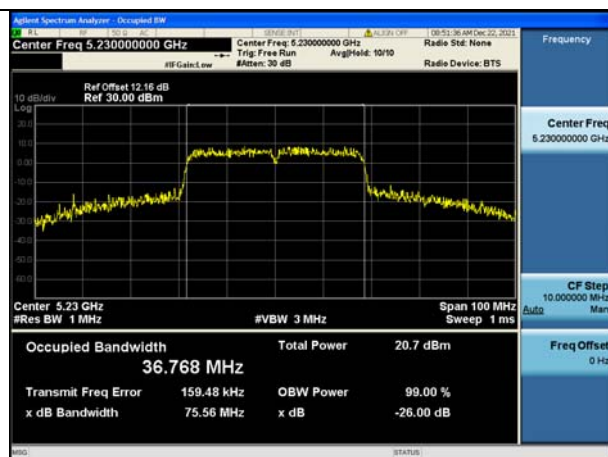
Test Mode:802.11ac VHT80 5210MHz Chain0

Test Mode: 802.11n HT40

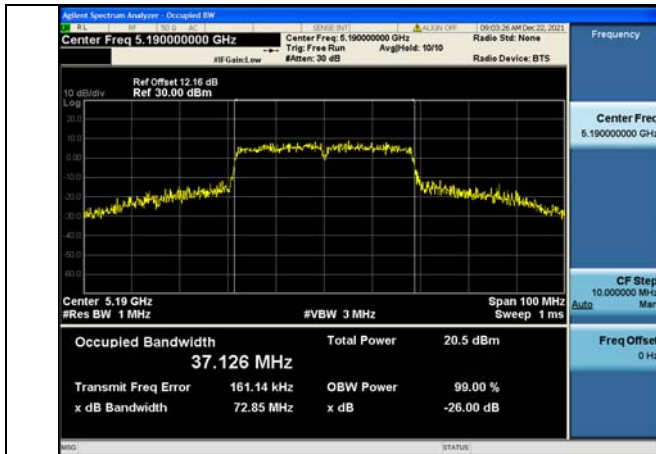


Test Mode:802.11n HT40 5190MHz Chain0

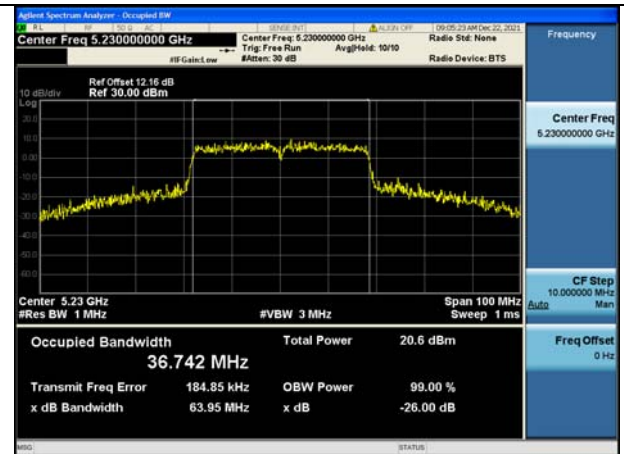
Test Mode: 802.11ac VHT40



Test Mode:802.11n HT40 5230MHz Chain0

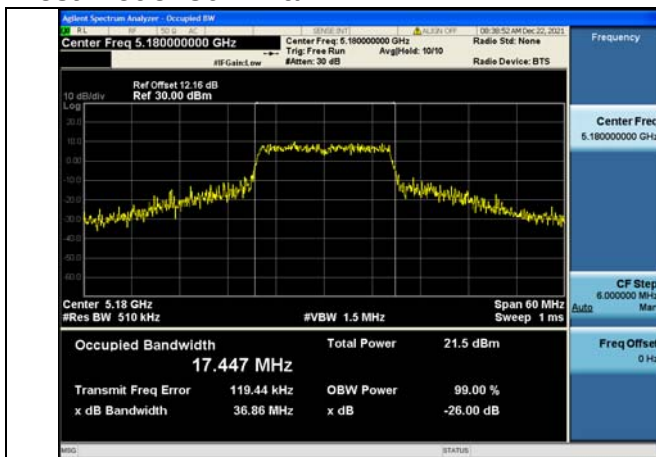


Test Mode:802.11ac VHT40 5190MHz Chain0

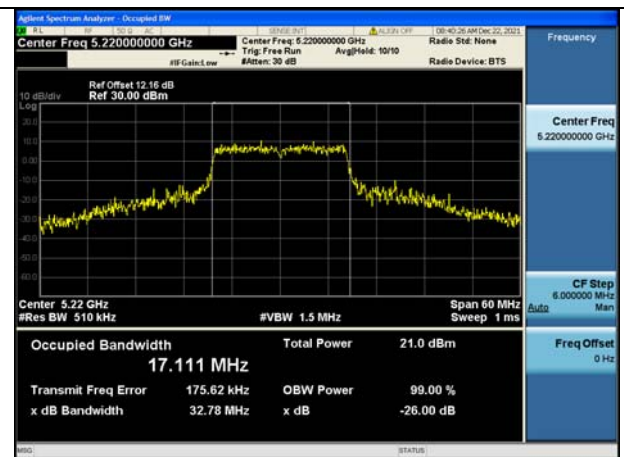


Test Mode:802.11ac VHT40 5230MHz Chain0

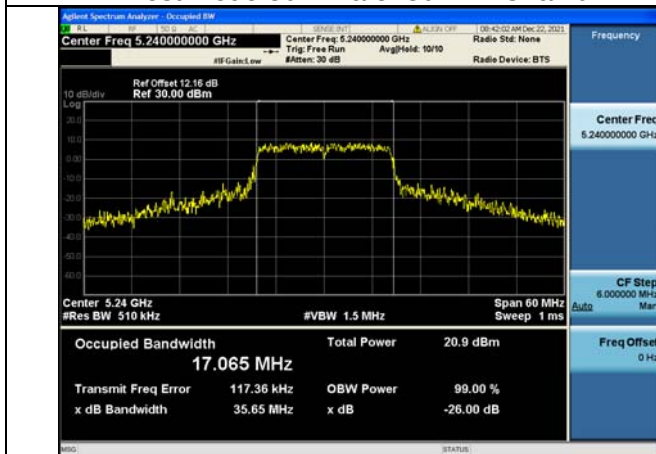
Test Mode: 802.11a



Test Mode:802.11a 5180MHz Chain0

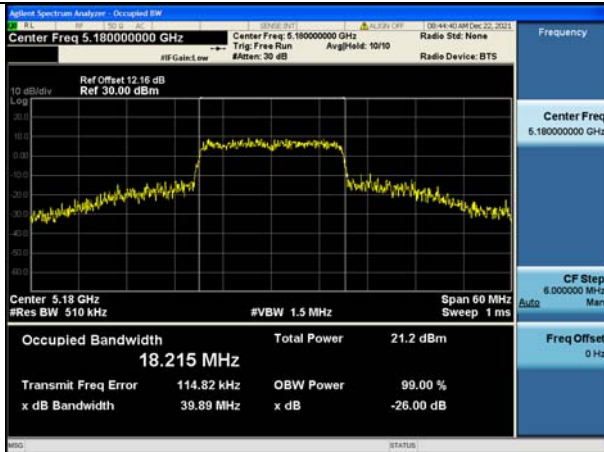


Test Mode:802.11a 5220MHz Chain0

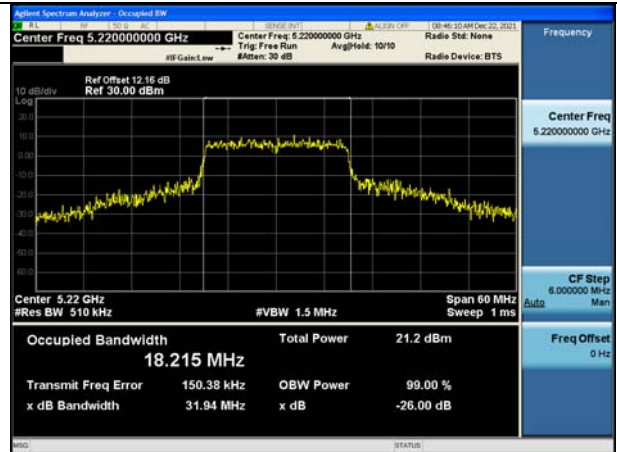


Test Mode:802.11a 5240MHz Chain0

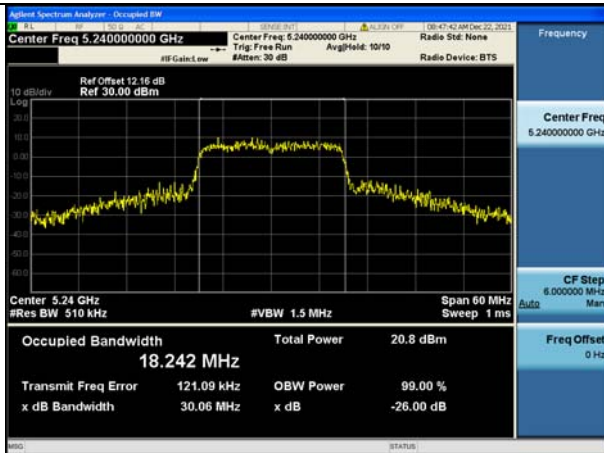
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5180MHz Chain0

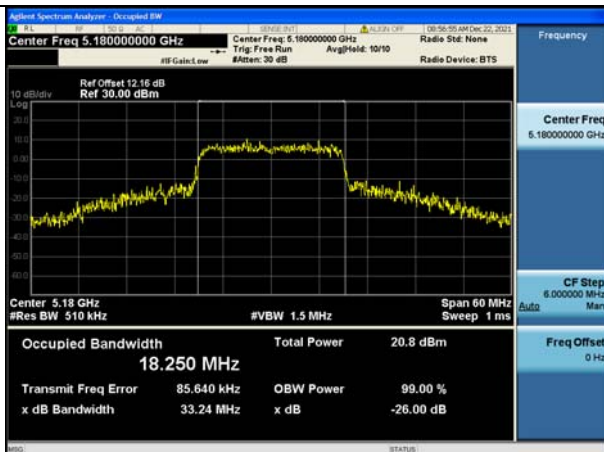


Test Mode:802.11n HT20 5220MHz Chain0

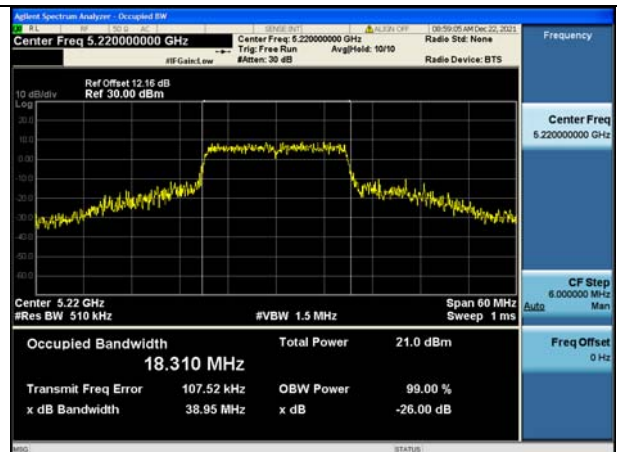


Test Mode:802.11n HT20 5240MHz Chain0

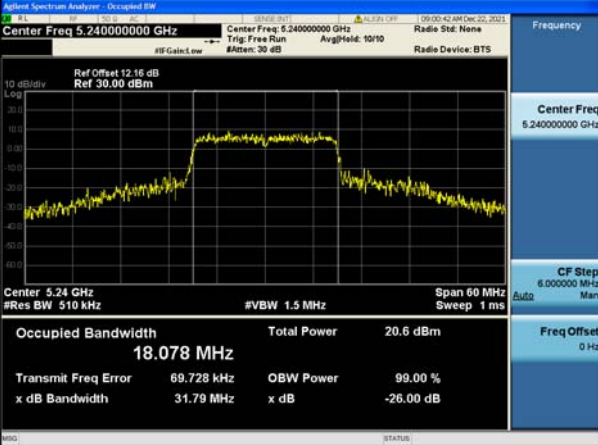
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5180MHz Chain0



Test Mode:802.11ac VHT20 5220MHz Chain0

	
Test Mode:802.11ac VHT20 5240MHz Chain0	

Occupied Bandwidth

Offset 12.16dB = Attenuator 10dB + Temporary antenna connector loss 0.2dB + Cable loss 1.96dB

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.554	Channel No.562	Channel No.566
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	17.304	17.216	17.036

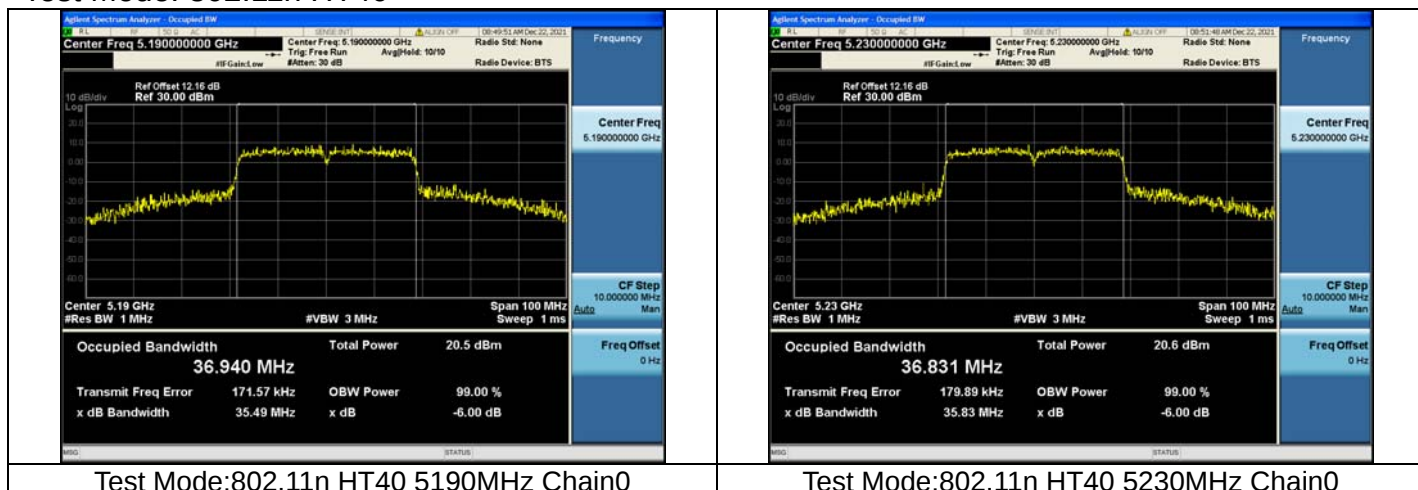
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.556	---	Channel No.564
		5190MHz	---	5230MHz
802.11n HT40	Chain0	36.940	---	36.831
802.11ac VHT40	Chain0	37.000	---	36.778

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.560	---	---
		5210MHz	---	---
802.11ac VHT80	Chain0	77.300	---	---

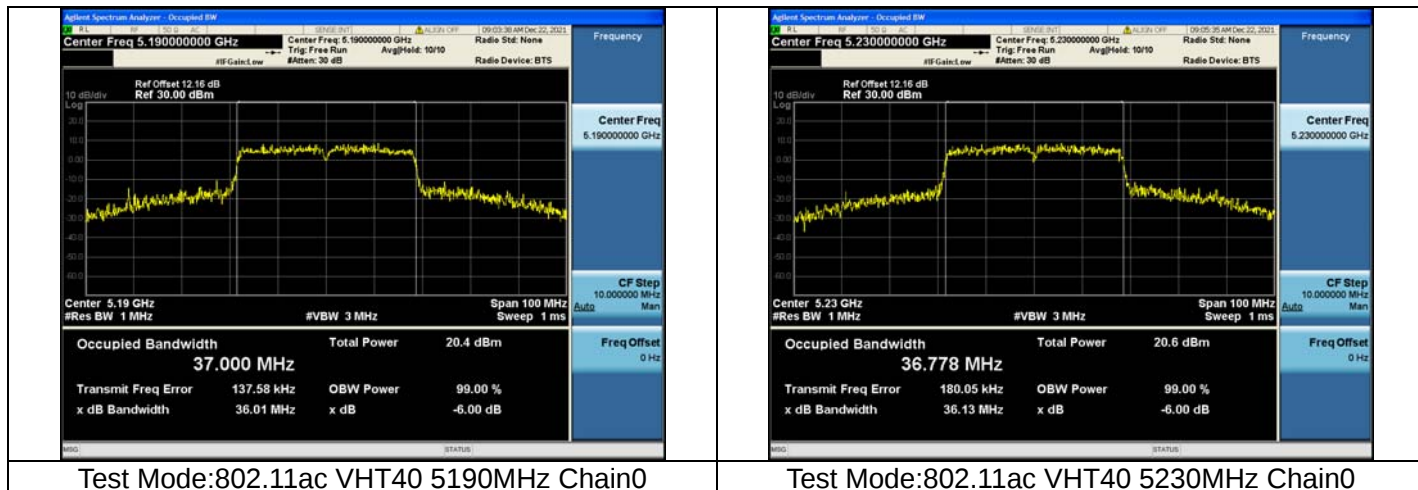
Test Mode: 802.11ac VHT80

	
Test Mode:802.11ac VHT80 5210MHz Chain0	

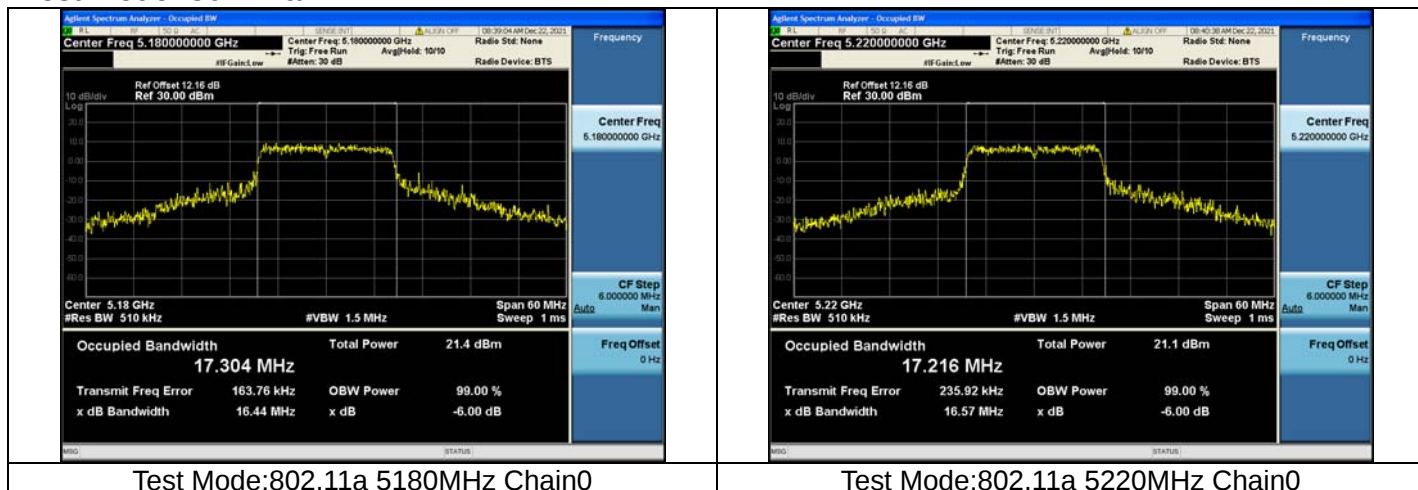
Test Mode: 802.11n HT40

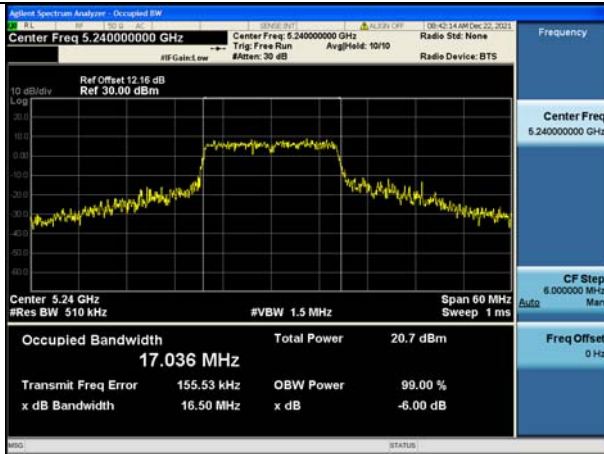


Test Mode: 802.11ac VHT40



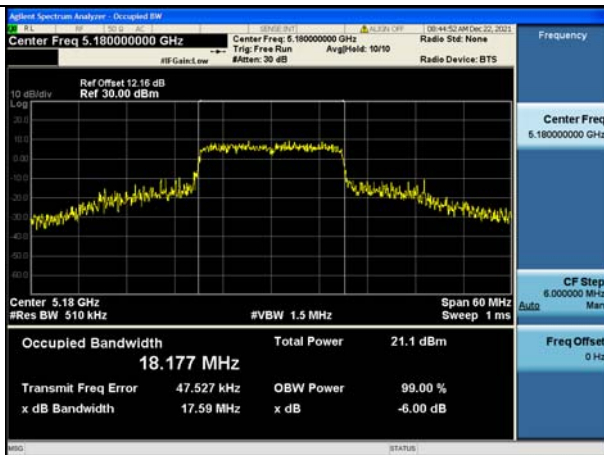
Test Mode: 802.11a



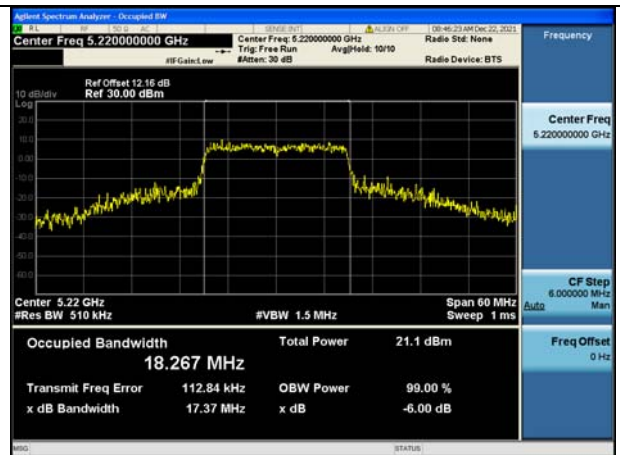


Test Mode:802.11a 5240MHz Chain0

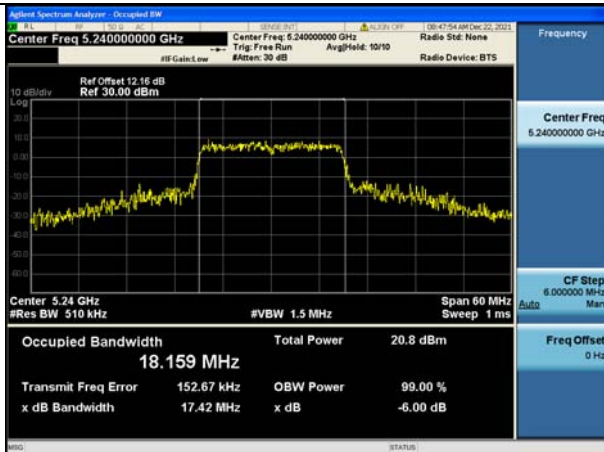
Test Mode: 802.11n HT20



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

Agilent Spectrum Analyzer - Occupied BW Center Freq 5.180000000 GHz Ref Offset 12.16 dB Ref 30.00 dBm Center 5.18 GHz #Res BW 510 kHz Occupied Bandwidth 18.151 MHz Total Power 20.9 dBm Transmit Freq Error 71.353 kHz x dB Bandwidth 17.41 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq 5.220000000 GHz Ref Offset 12.16 dB Ref 30.00 dBm Center 5.22 GHz #Res BW 510 kHz Occupied Bandwidth 18.325 MHz Total Power 21.0 dBm Transmit Freq Error 174.69 kHz x dB Bandwidth 17.20 MHz
Test Mode:802.11ac VHT20 5180MHz Chain0 Agilent Spectrum Analyzer - Occupied BW Center Freq 5.240000000 GHz Ref Offset 12.16 dB Ref 30.00 dBm Center 5.24 GHz #Res BW 510 kHz Occupied Bandwidth 18.105 MHz Total Power 20.6 dBm Transmit Freq Error 99.774 kHz x dB Bandwidth 17.43 MHz	Test Mode:802.11ac VHT20 5220MHz Chain0
Test Mode:802.11ac VHT20 5240MHz Chain0	

Transmitter Power Spectral Density

Offset 12.16dB = Attenuator 10dB + Temporary antenna connector loss 0.2dB + Cable loss 1.96dB

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	0.10	6.107	0.10	6.208	0.10	5.936

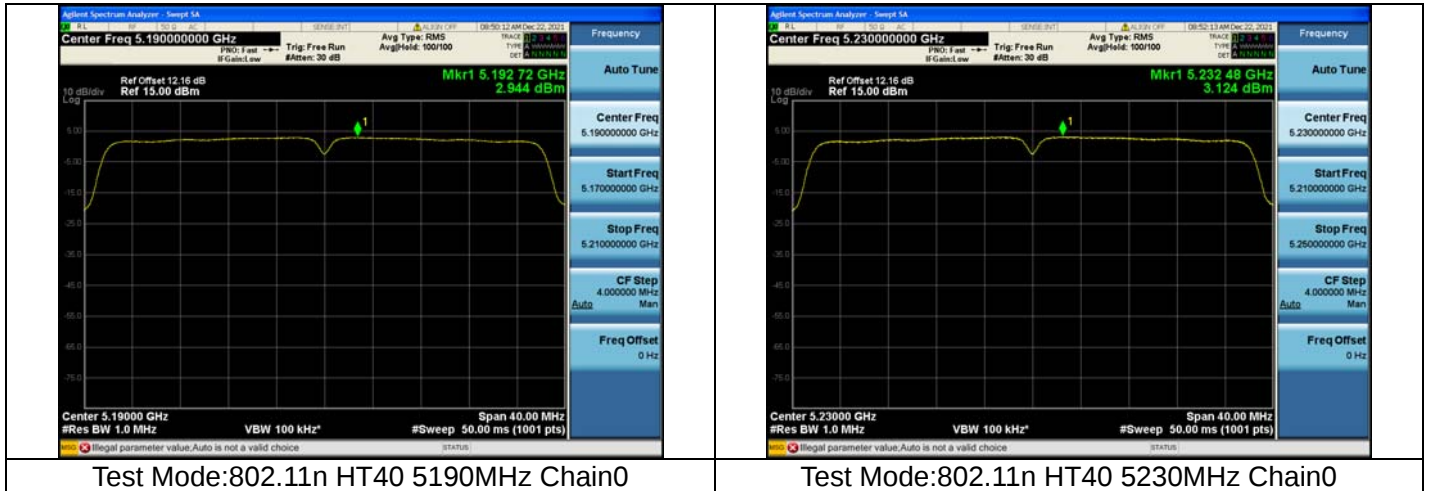
Test Mode	Antenna	5190MHz		---		5230MHz	
		Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11n HT40	Chain0	0.20	2.944	---	---	0.20	3.124
802.11a c VHT40	Chain0	0.20	2.948	---	---	0.20	3.030

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)
802.11a c VHT80	Chain0	0.37	-0.578	---	---	---	---

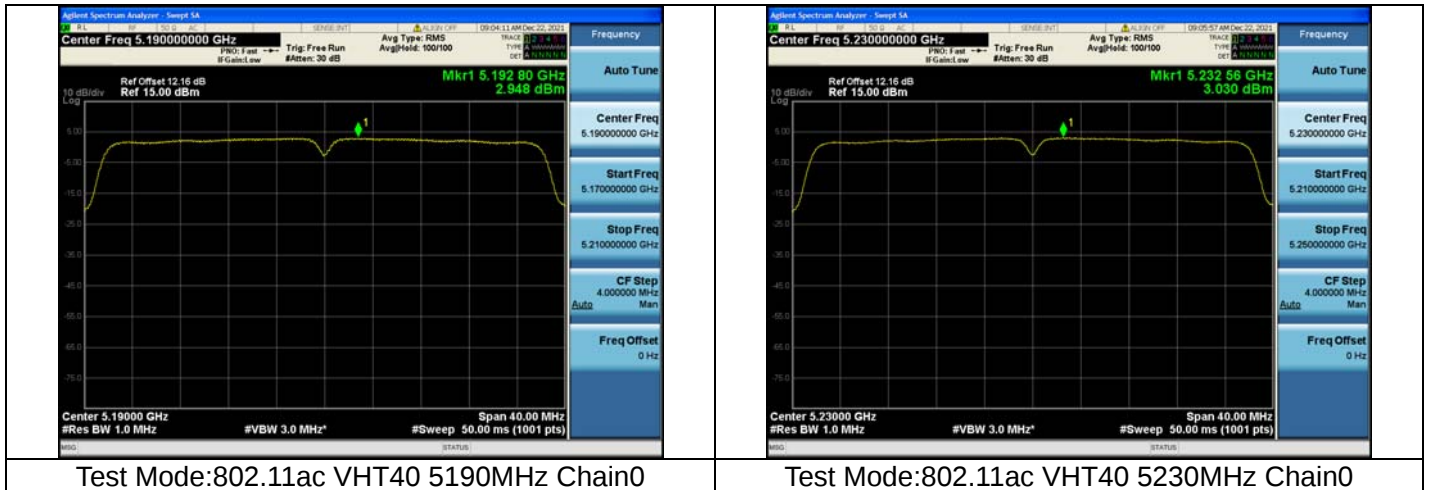
Test Mode: 802.11ac VHT80

	
Test Mode:802.11ac VHT80 5210MHz Chain0	

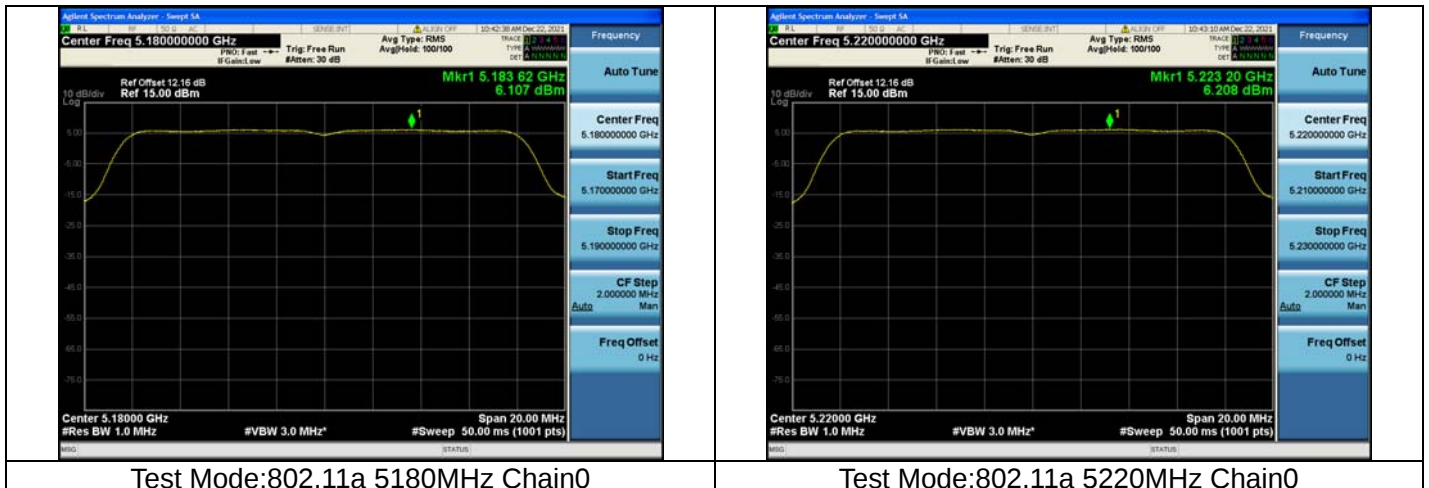
Test Mode: 802.11n HT40



Test Mode: 802.11ac VHT40



Test Mode: 802.11a





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

