

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5260	86.35%	0.64	Fig.1
802.11n HT20	5260	84.12%	0.75	Fig.2
802.11ac VHT20	5260	84.61%	0.73	Fig.3
802.11n HT40	5270	76.86%	1.14	Fig.4
802.11ac VHT40	5270	77.08%	1.13	Fig.5
802.11ac VHT80	5290	68.82%	1.62	Fig.6

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

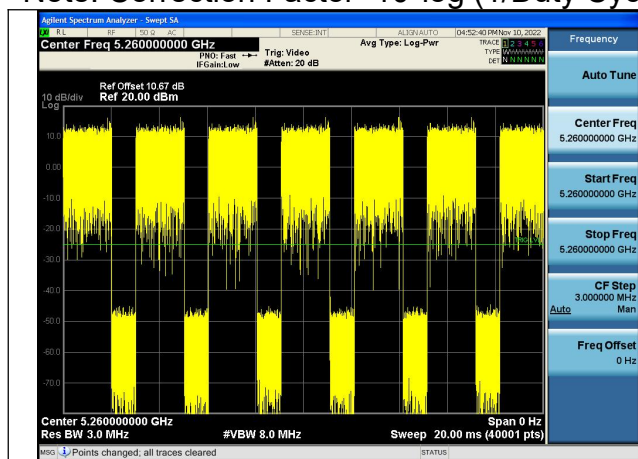


Fig.1

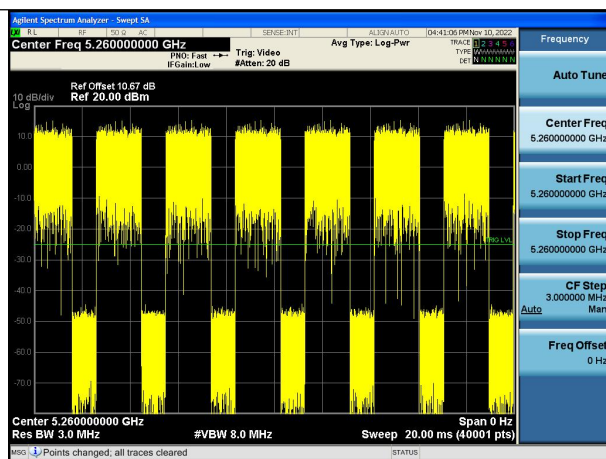


Fig.2

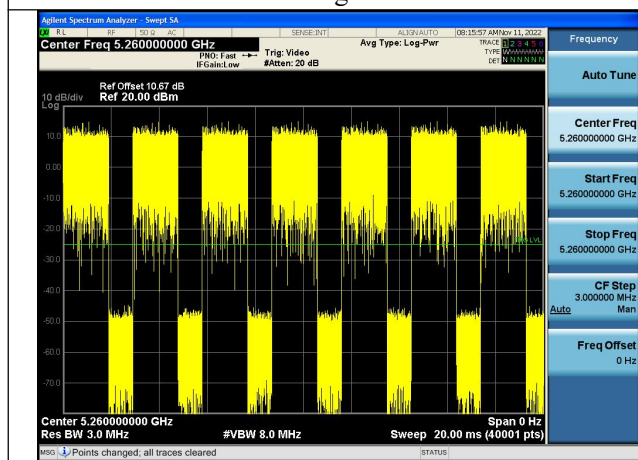


Fig.3

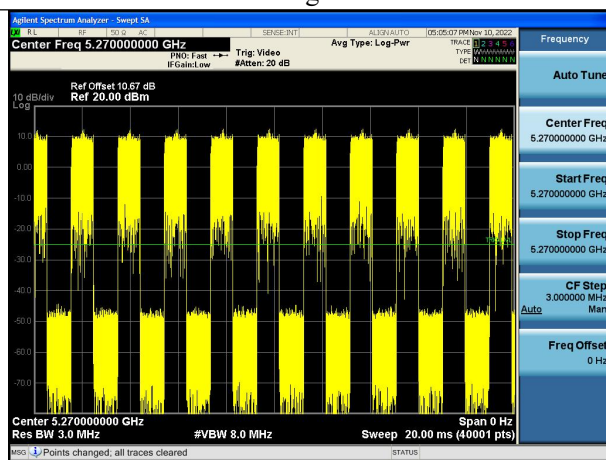


Fig.4

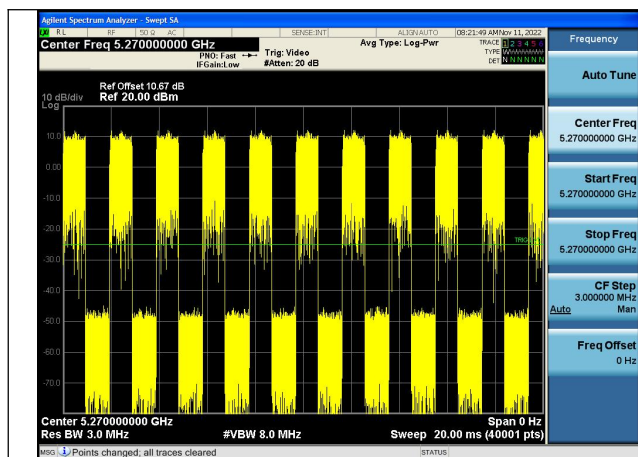


Fig.5

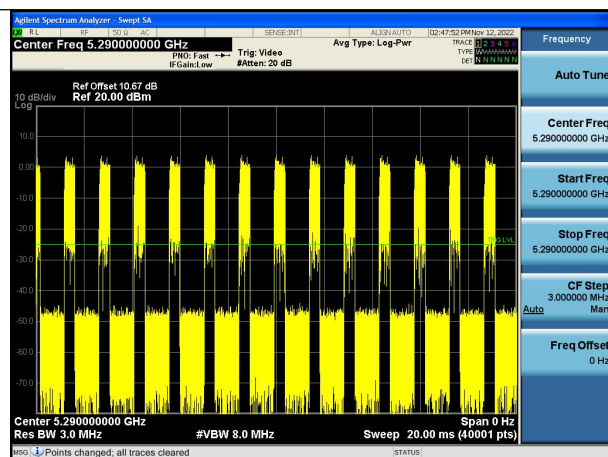


Fig.6

Output Power

Mode	Tones/ RUIndex	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5260	Chain0	14.37	17.37
802.11a	NA	5280	Chain0	14.72	17.72
802.11a	NA	5320	Chain0	15.06	18.06
802.11n HT20	NA	5260	Chain0	15.00	18.00
802.11n HT20	NA	5280	Chain0	15.23	18.23
802.11n HT20	NA	5320	Chain0	15.66	18.66
802.11ac VHT20	NA	5260	Chain0	14.78	17.78
802.11ac VHT20	NA	5280	Chain0	15.39	18.39
802.11ac VHT20	NA	5320	Chain0	15.65	18.65
802.11n HT40	NA	5270	Chain0	14.47	17.47
802.11n HT40	NA	5310	Chain0	14.93	17.93
802.11ac VHT40	NA	5270	Chain0	14.73	17.73
802.11ac VHT40	NA	5310	Chain0	15.16	18.16
802.11ac VHT80	NA	5290	Chain0	13.38	16.38

Emission Bandwidth

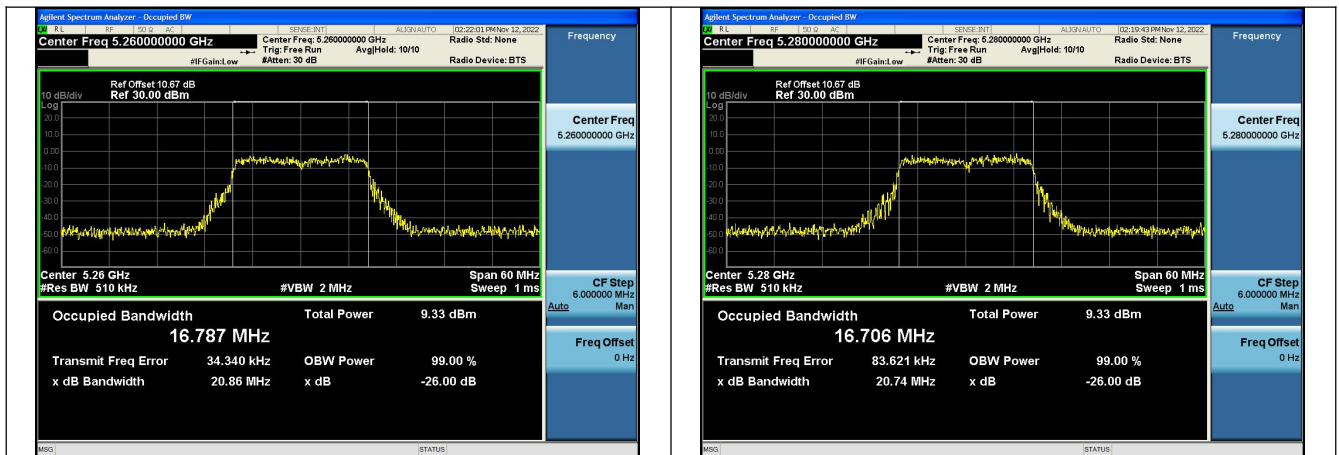
Offset 10.67dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.570	Channel No.574	Channel No.582
		5260MHz	5280MHz	5320MHz
802.11a	Chain0	20.86	20.74	20.89
802.11n HT20	Chain0	21.61	20.94	21.69
802.11ac VHT20	Chain0	21.14	20.88	21.25

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.572	---	Channel No.580
		5270MHz	---	5310MHz
802.11n HT40	Chain0	40.78	---	41.34
802.11ac VHT40	Chain0	40.96	---	41.40

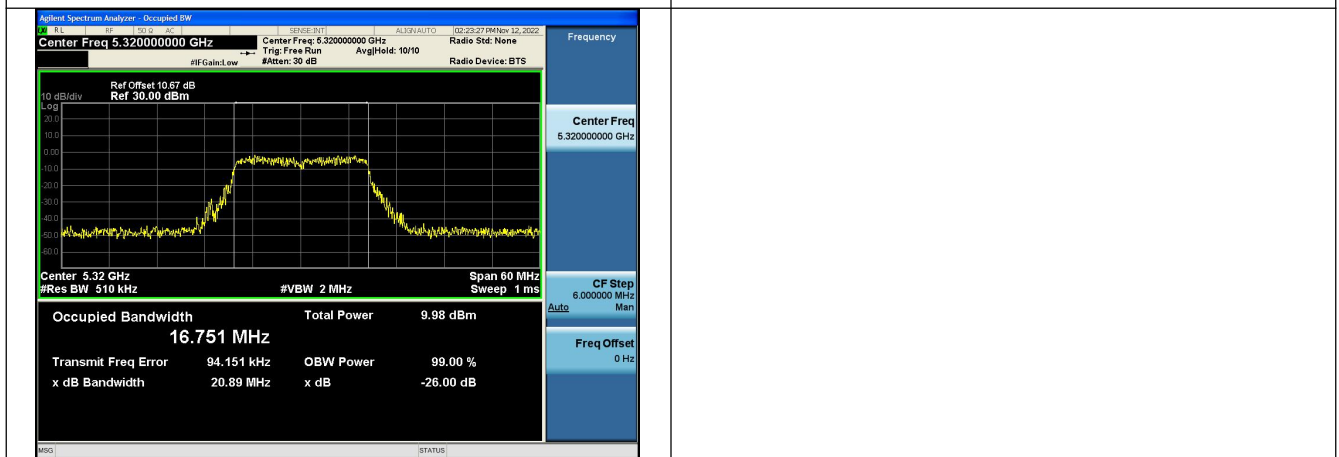
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.576	---	---
		5290MHz	---	---
802.11ac VHT80	Chain0	81.80	---	---

Test Mode: 802.11a



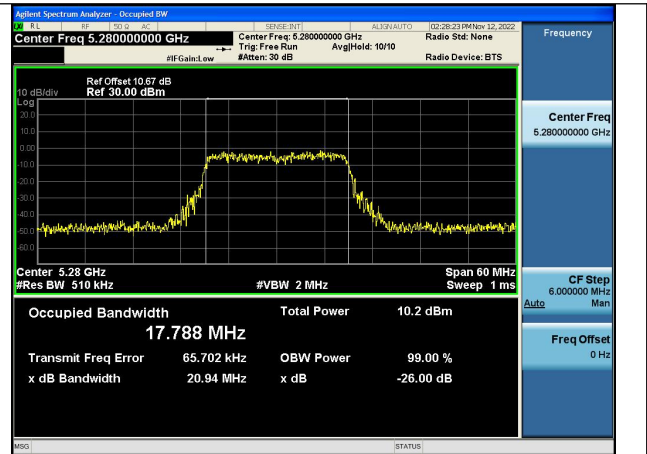
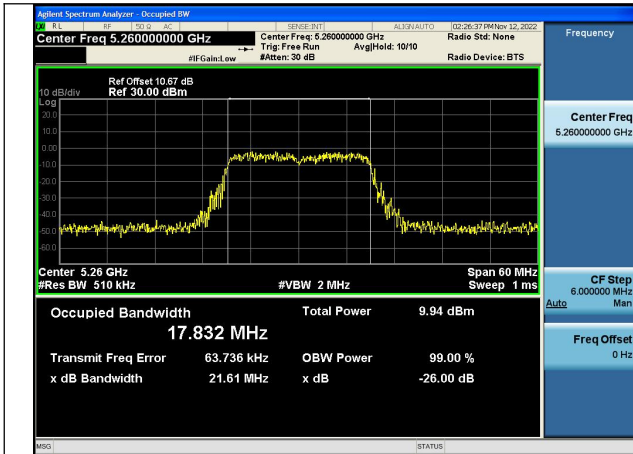
Test Mode:802.11a 5260MHz Chain0

Test Mode:802.11a 5280MHz Chain0

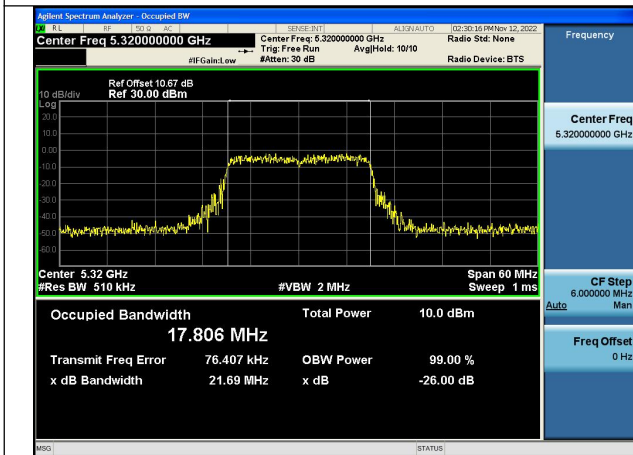


Test Mode:802.11a 5320MHz Chain0

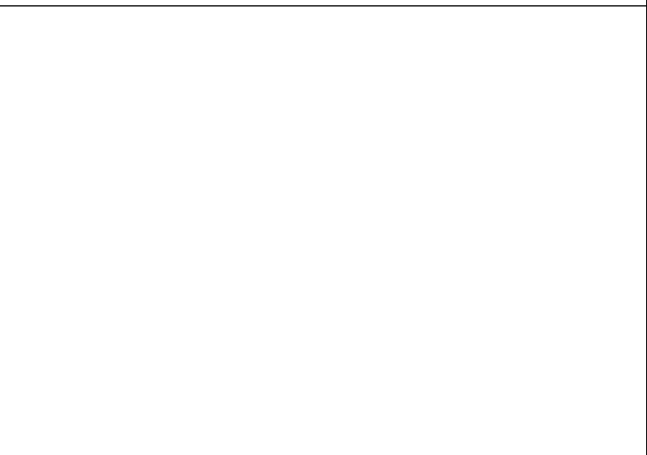
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5260MHz Chain0

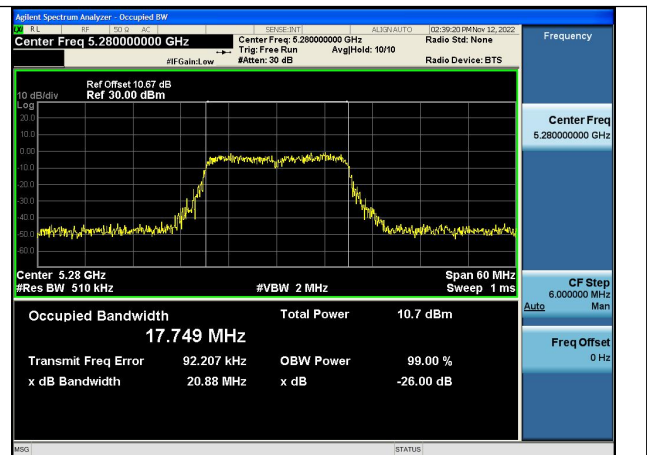
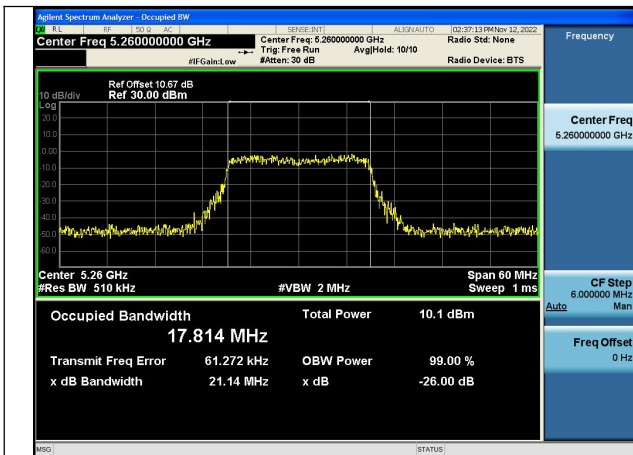


Test Mode:802.11n HT20 5280MHz Chain0



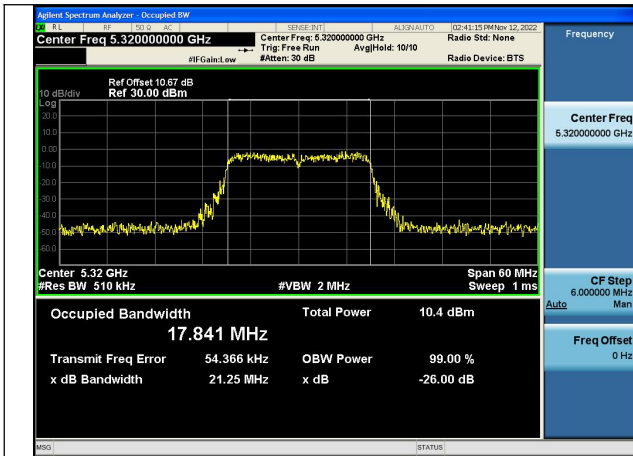
Test Mode:802.11n HT20 5320MHz Chain0

Test Mode: 802.11ac VHT20



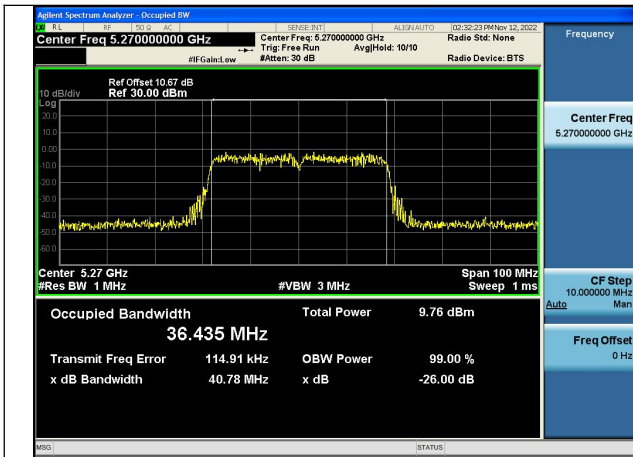
Test Mode:802.11ac VHT20 5260MHz Chain0

Test Mode:802.11ac VHT20 5280MHz Chain0

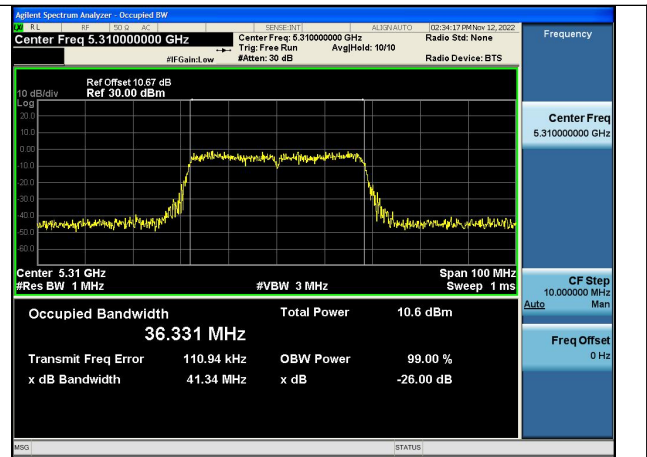


Test Mode:802.11ac VHT20 5320MHz Chain0

Test Mode: 802.11n HT40

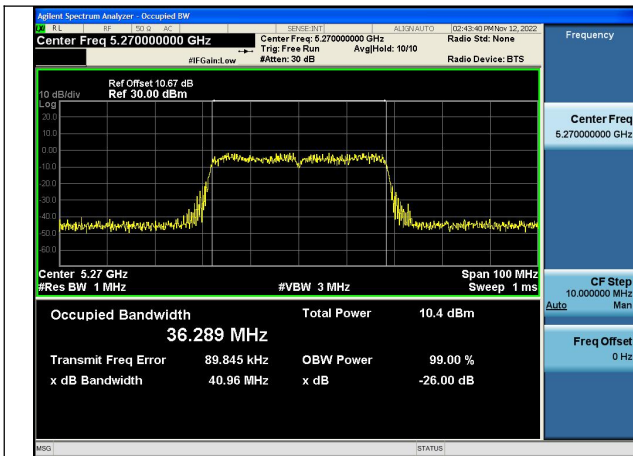


Test Mode:802.11n HT40 5270MHz Chain0



Test Mode:802.11n HT40 5310MHz Chain0

Test Mode: 802.11ac VHT40

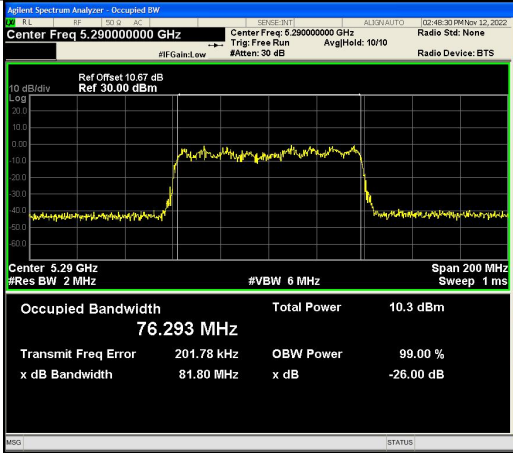


Test Mode:802.11ac VHT40 5270MHz Chain0



Test Mode:802.11ac VHT40 5310MHz Chain0

Test Mode: 802.11ac VHT80

 Agilent Spectrum Analyzer - Occupied BW Center Freq 5.290000000 GHz Ref Offset 10.67 dB Ref 30.00 dBm Center 5.29 GHz #Res BW 2 MHz #VBW 6 MHz Span 200 MHz Sweep 1 ms Occupied Bandwidth 76.293 MHz Total Power 10.3 dBm Transmit Freq Error 201.78 kHz OBW Power 99.00 % x dB Bandwidth 81.80 MHz x dB -26.00 dB	
Test Mode:802.11ac VHT80 5290MHz Chain0	

Occupied Bandwidth

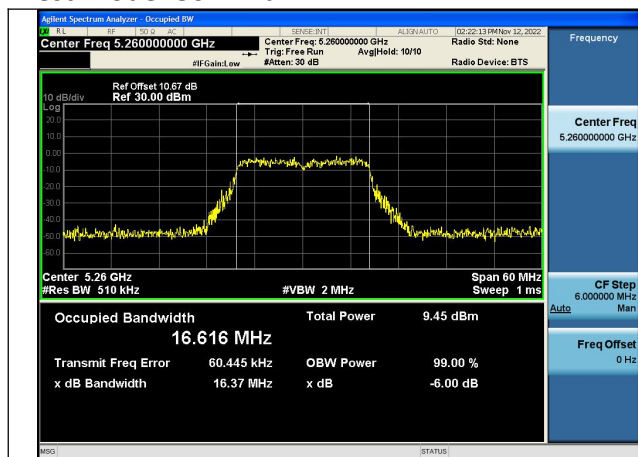
Offset 10.67dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.570	Channel No.574	Channel No.582
		5260MHz	5280MHz	5320MHz
802.11a	Chain0	16.616	16.709	16.656
802.11n HT20	Chain0	17.787	17.726	17.796
802.11ac VHT20	Chain0	17.821	17.848	17.834

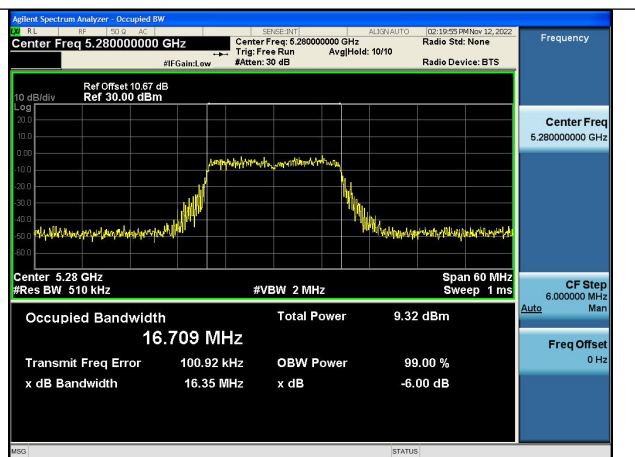
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.572	---	Channel No.580
		5270MHz	---	5310MHz
802.11n HT40	Chain0	36.363	---	36.414
802.11ac VHT40	Chain0	36.325	---	36.386

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.576	---	---
		5290MHz	---	---
802.11ac VHT80	Chain0	75.919	---	---

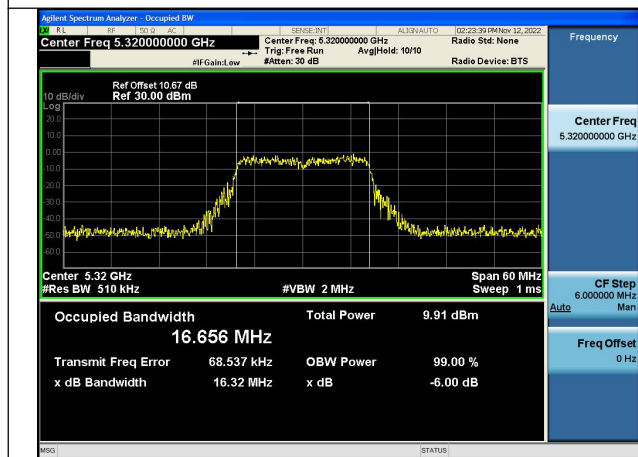
Test Mode: 802.11a



Test Mode: 802.11a 5260MHz Chain0

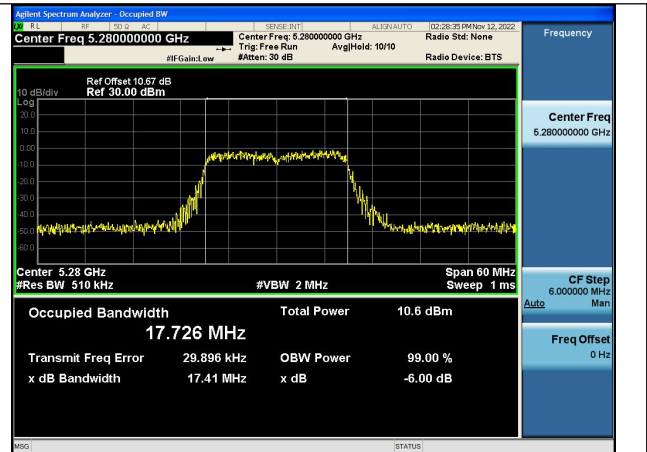
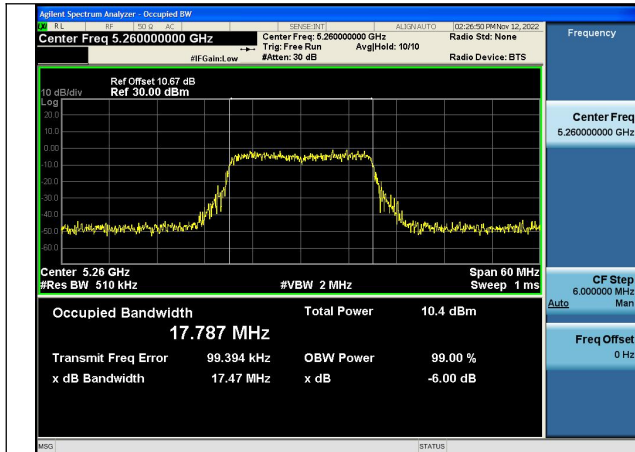


Test Mode: 802.11a 5280MHz Chain0

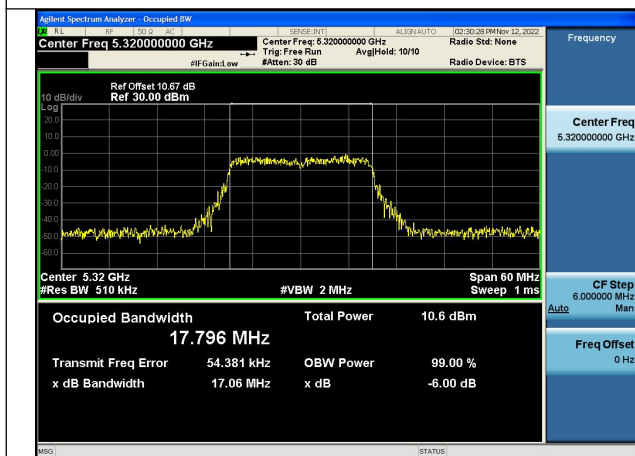


Test Mode: 802.11a 5320MHz Chain0

Test Mode: 802.11n HT20



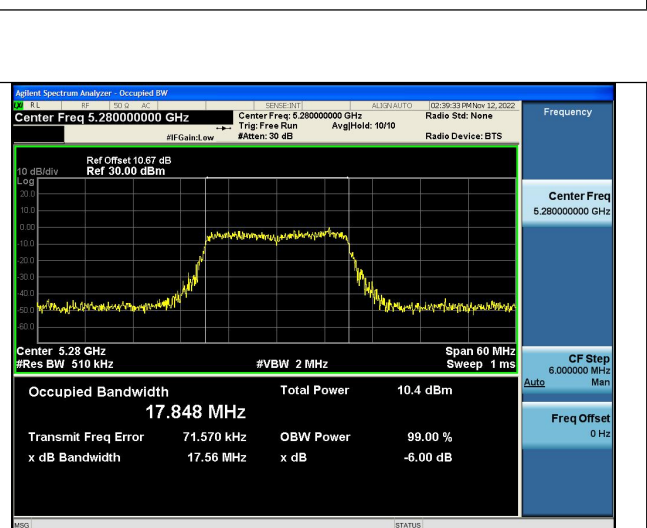
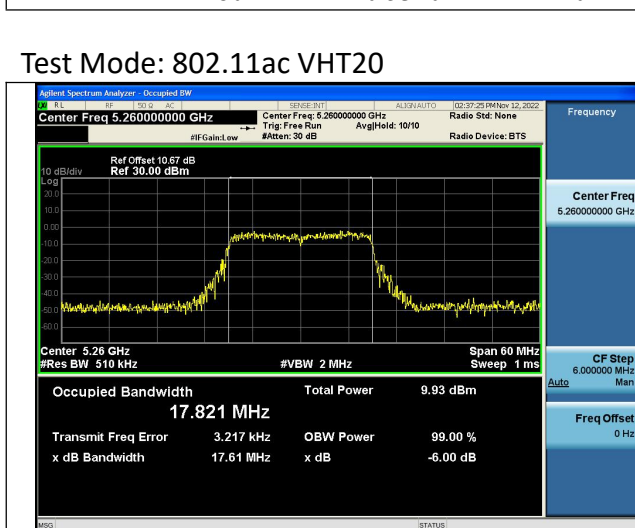
Test Mode:802.11n HT20 5260MHz Chain0



Test Mode:802.11n HT20 5280MHz Chain0

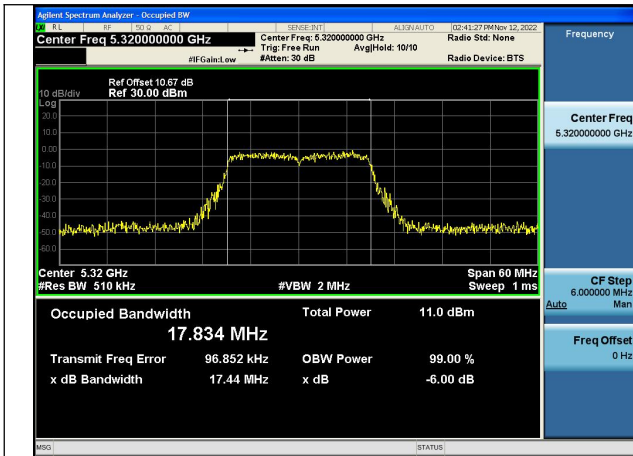


Test Mode:802.11n HT20 5320MHz Chain0



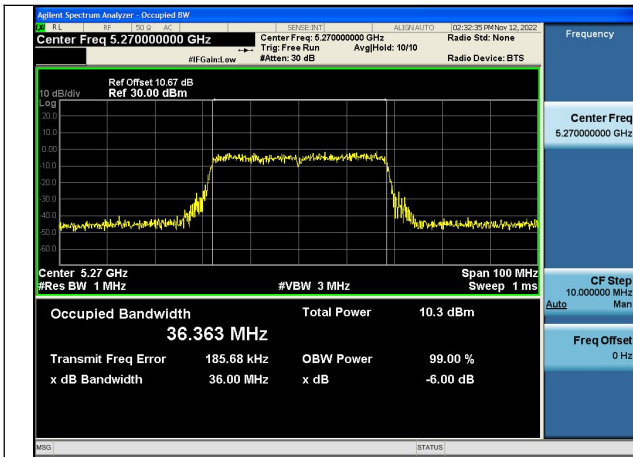
Test Mode:802.11ac VHT20 5260MHz Chain0

Test Mode:802.11ac VHT20 5280MHz Chain0

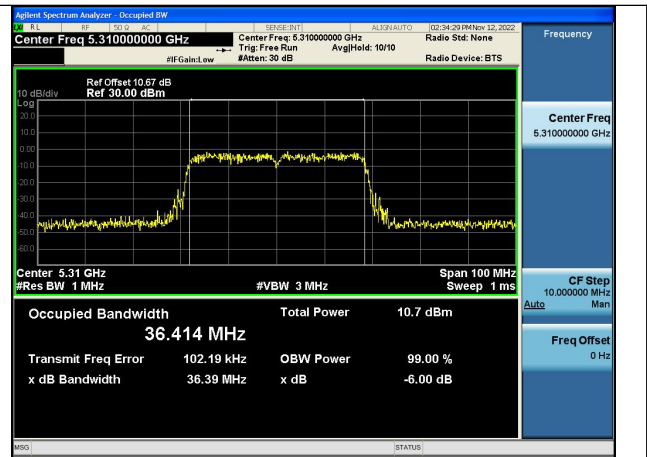


Test Mode:802.11ac VHT20 5320MHz Chain0

Test Mode: 802.11n HT40

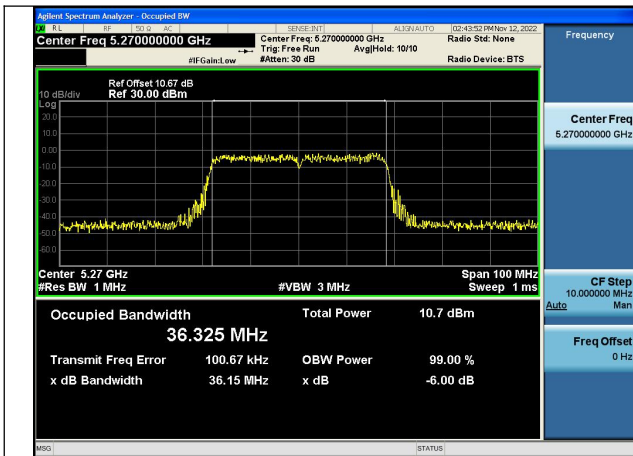


Test Mode:802.11n HT40 5270MHz Chain0



Test Mode:802.11n HT40 5310MHz Chain0

Test Mode: 802.11ac VHT40

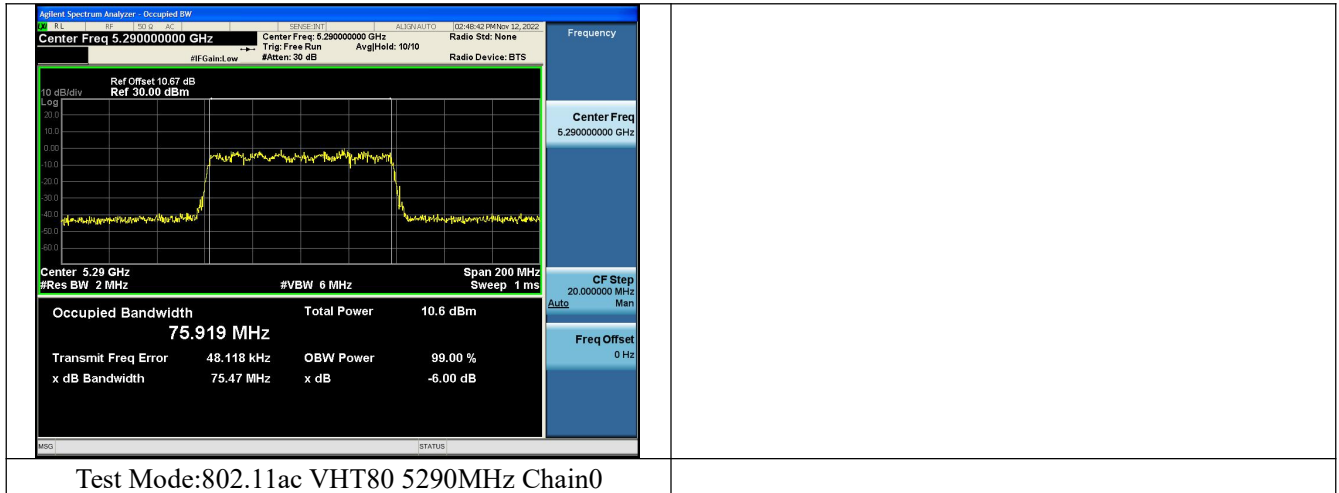


Test Mode:802.11ac VHT40 5270MHz Chain0



Test Mode:802.11ac VHT40 5310MHz Chain0

Test Mode: 802.11ac VHT80



Transmitter Power Spectral Density

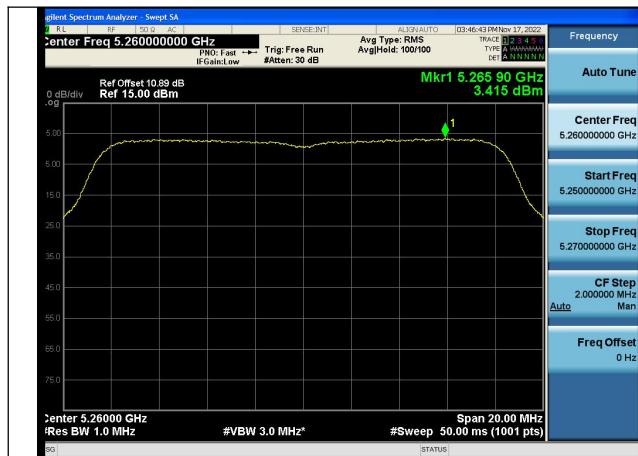
Offset 10.89dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Tones	5260MHz		5280MHz		5320MHz	
			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	0.74	4.155	0.74	4.301	0.74	4.617
802.11n HT20	Chain0	NA	0.71	4.284	0.71	4.740	0.71	5.233
802.11ac VHT20	Chain0	NA	0.70	4.381	0.70	4.922	0.70	4.840

Test Mode	Antenna	Tones	5270MHz		---		5310MHz	
			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	1.10	2.295	---	---	1.10	1.855
802.11ac VHT40	Chain0	NA	1.10	1.905	---	---	1.10	2.521

Test Mode	Antenna	Tones	5290MHz		---		---	
			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	1.57	-0.700	---	---	---	---

Test Mode: 802.11a



Test Mode:802.11a 5260MHz Chain0



Test Mode:802.11a 5280MHz Chain0



Test Mode:802.11a 5320MHz Chain0

Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5260MHz Chain0



Test Mode:802.11n HT20 5280MHz Chain0



Test Mode:802.11n HT20 5320MHz Chain0