

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5500	99.58%	0	Fig.1
802.11n HT20	5500	99.56%	0	Fig.2
802.11ac VHT20	5500	99.52%	0	Fig.3
802.11n HT40	5510	99.13%	0	Fig.4
802.11ac VHT40	5510	99.11%	0	Fig.5
802.11ac VHT80	5530	98.26%	0	Fig.6

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

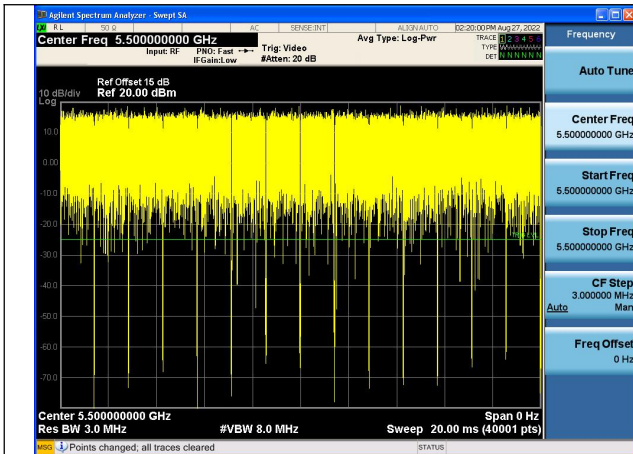


Fig.1

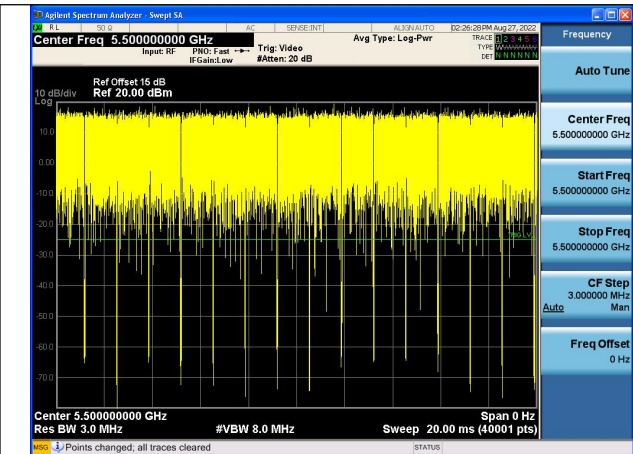


Fig.2

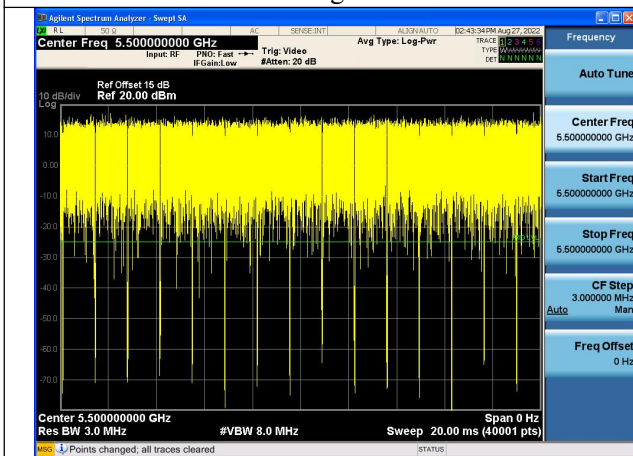


Fig.3

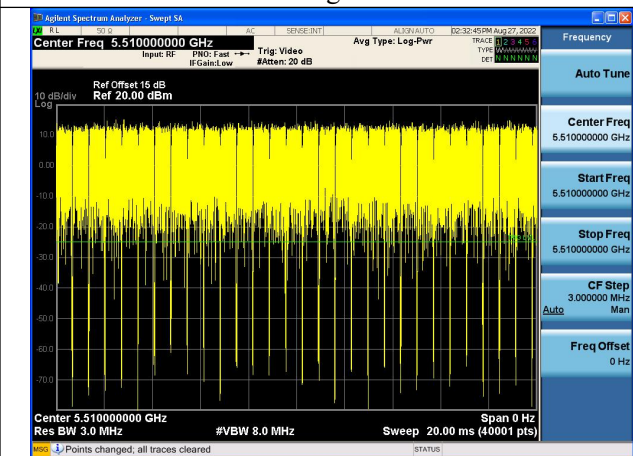


Fig.4

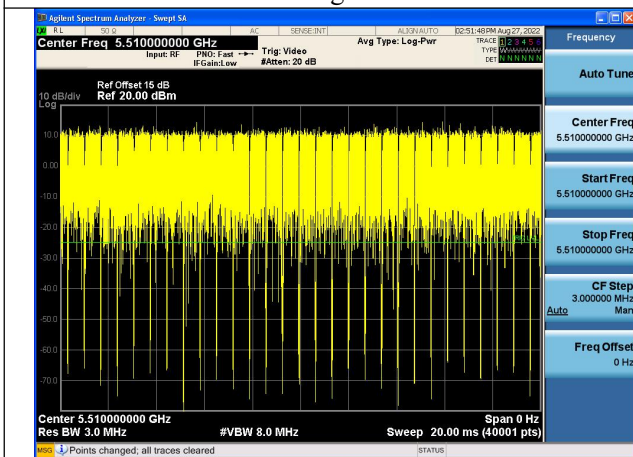


Fig.5

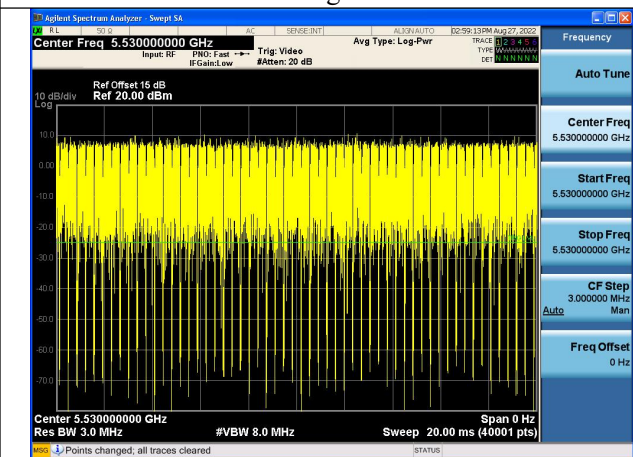


Fig.6

Output Power

Mode	Tones/ RUIndex	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5500	Chain0	14.34	14.13
802.11a	NA	5580	Chain0	14.34	14.13
802.11a	NA	5700	Chain0	14.61	14.40
802.11n HT20	NA	5500	Chain0	14.13	13.92
802.11n HT20	NA	5580	Chain0	14.19	13.98
802.11n HT20	NA	5700	Chain0	14.48	14.27
802.11ac VHT20	NA	5500	Chain0	12.81	12.60
802.11ac VHT20	NA	5580	Chain0	12.78	12.57
802.11ac VHT20	NA	5700	Chain0	13.01	12.80
802.11n HT40	NA	5510	Chain0	14.02	13.81
802.11n HT40	NA	5590	Chain0	14.12	13.91
802.11n HT40	NA	5670	Chain0	14.20	13.99
802.11ac VHT40	NA	5510	Chain0	12.61	12.40
802.11ac VHT40	NA	5590	Chain0	12.65	12.44
802.11ac VHT40	NA	5670	Chain0	12.79	12.58
802.11ac VHT80	NA	5530	Chain0	12.19	11.98
802.11ac VHT80	NA	5610	Chain0	12.20	11.99

Emission Bandwidth

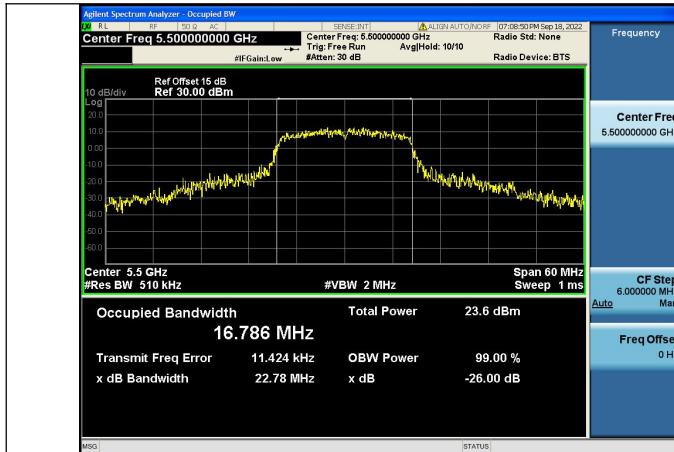
Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.618	Channel No.634	Channel No.658
		5500MHz	5580MHz	5700MHz
802.11a	Chain0	22.78	26.79	27.59
802.11n HT20	Chain0	23.10	22.52	24.96
802.11ac VHT20	Chain0	21.44	20.52	22.84

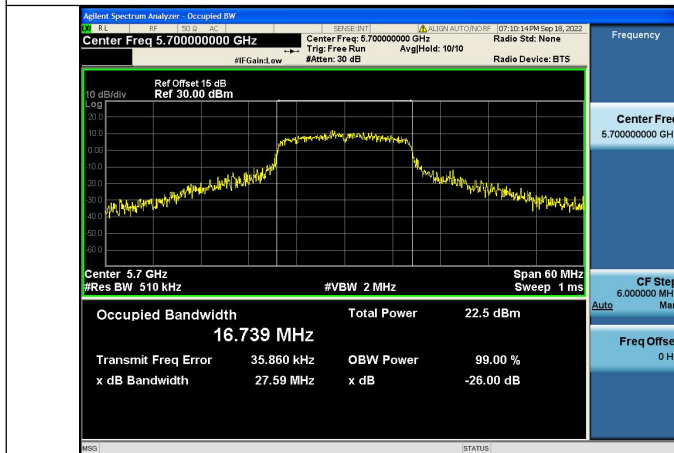
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.620	Channel No.636	Channel No.652
		5510MHz	5590MHz	5670MHz
802.11n HT40	Chain0	49.87	42.77	44.61
802.11ac VHT40	Chain0	41.18	39.88	40.77

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.624	---	Channel No.640
		5530MHz	---	5610MHz
802.11ac VHT80	Chain0	80.51	---	81.27

Test Mode: 802.11a



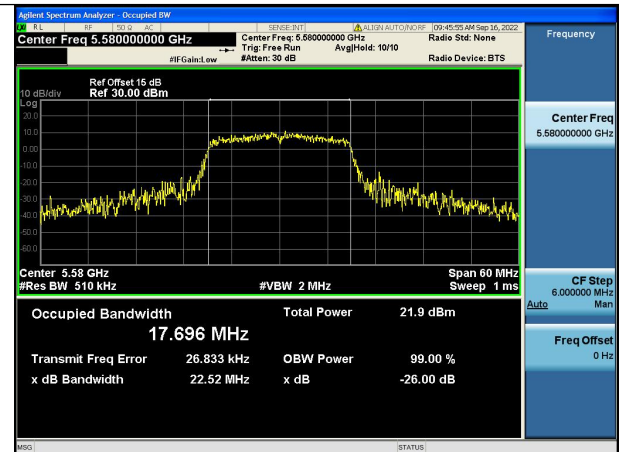
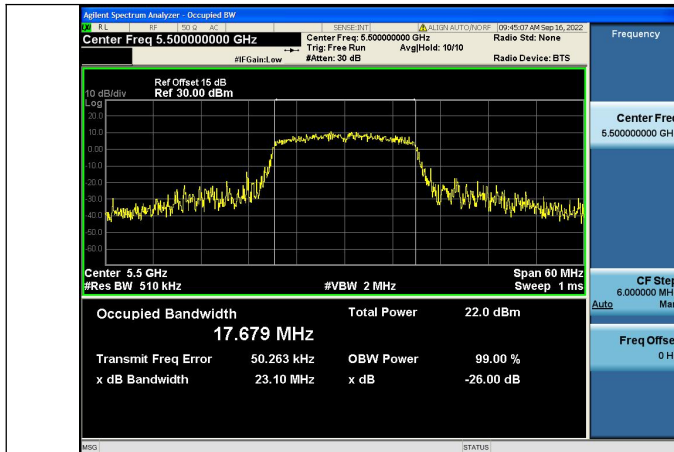
Test Mode:802.11a 5500MHz Chain0



Test Mode:802.11a 5580MHz Chain0

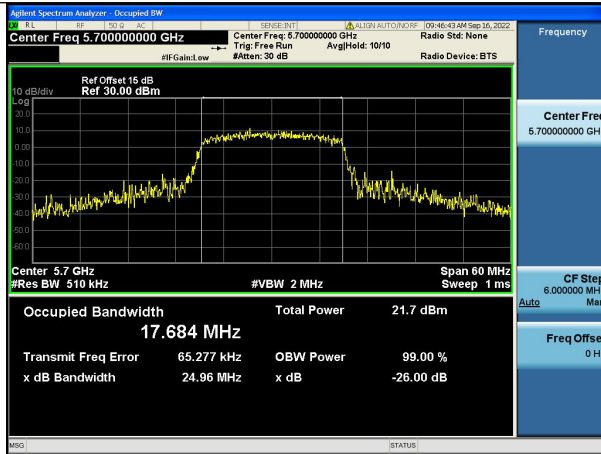
Test Mode:802.11a 5700MHz Chain0

Test Mode: 802.11n HT20



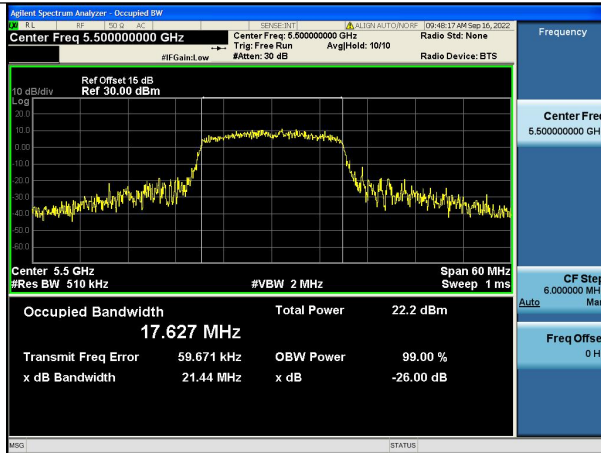
Test Mode:802.11n HT20 5500MHz Chain0

Test Mode:802.11n HT20 5580MHz Chain0

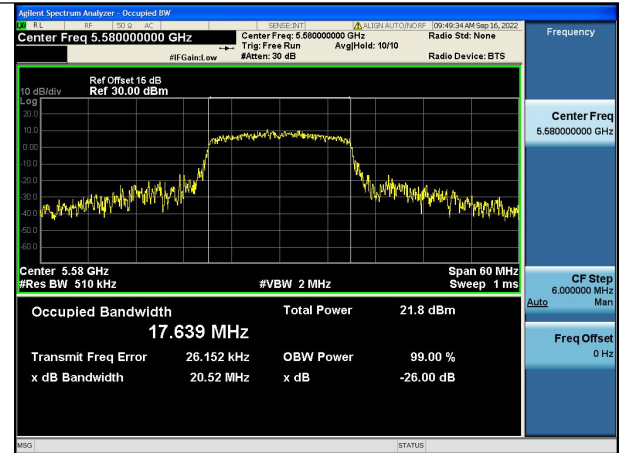


Test Mode:802.11n HT20 5700MHz Chain0

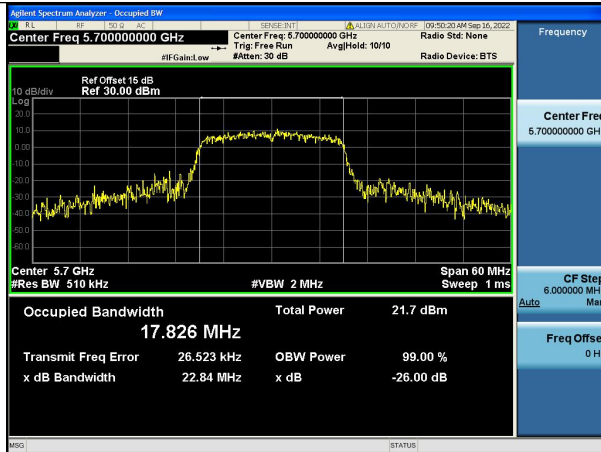
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5500MHz Chain0

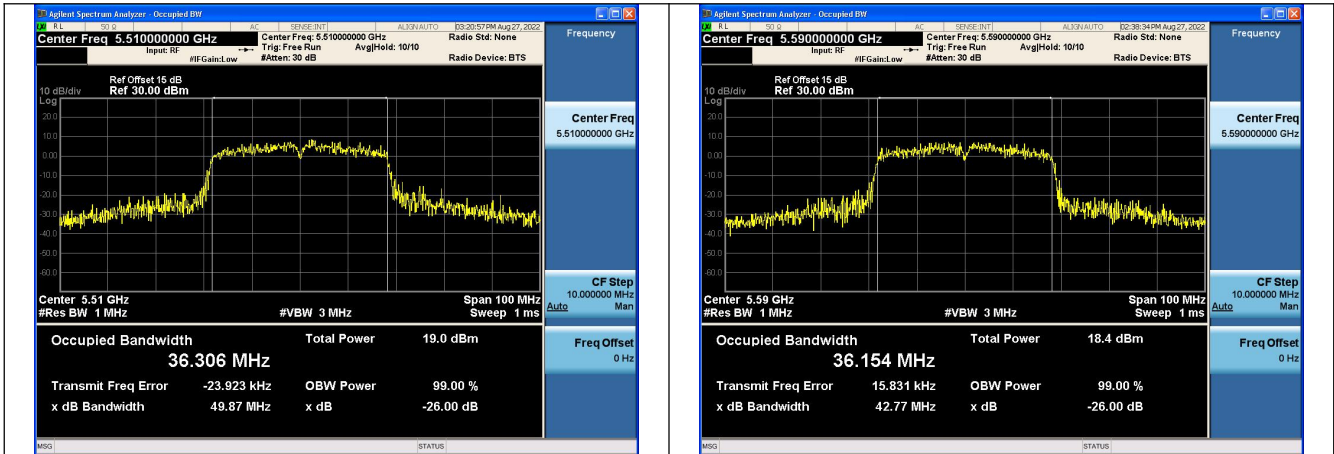


Test Mode:802.11ac VHT20 5580MHz Chain0

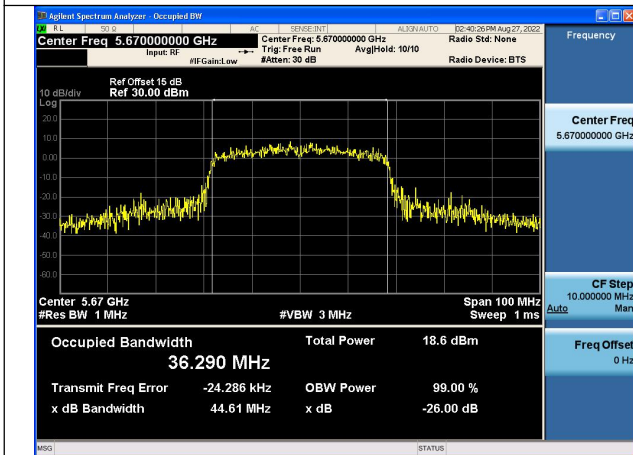


Test Mode:802.11ac VHT20 5700MHz Chain0

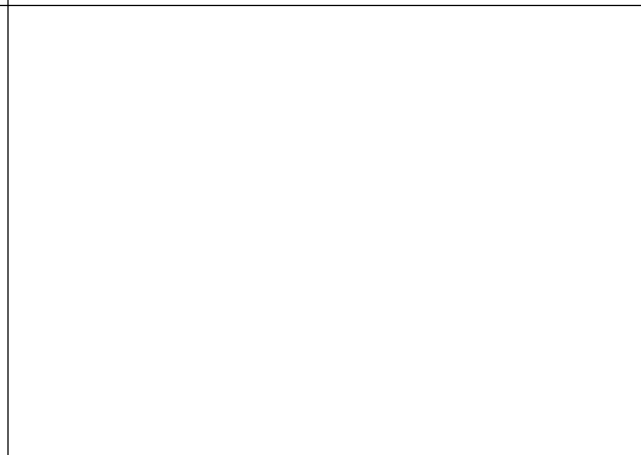
Test Mode: 802.11n HT40



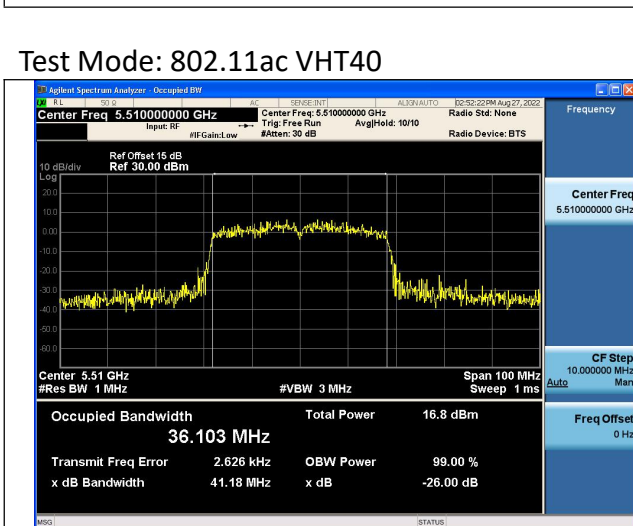
Test Mode: 802.11n HT40 5510MHz Chain0



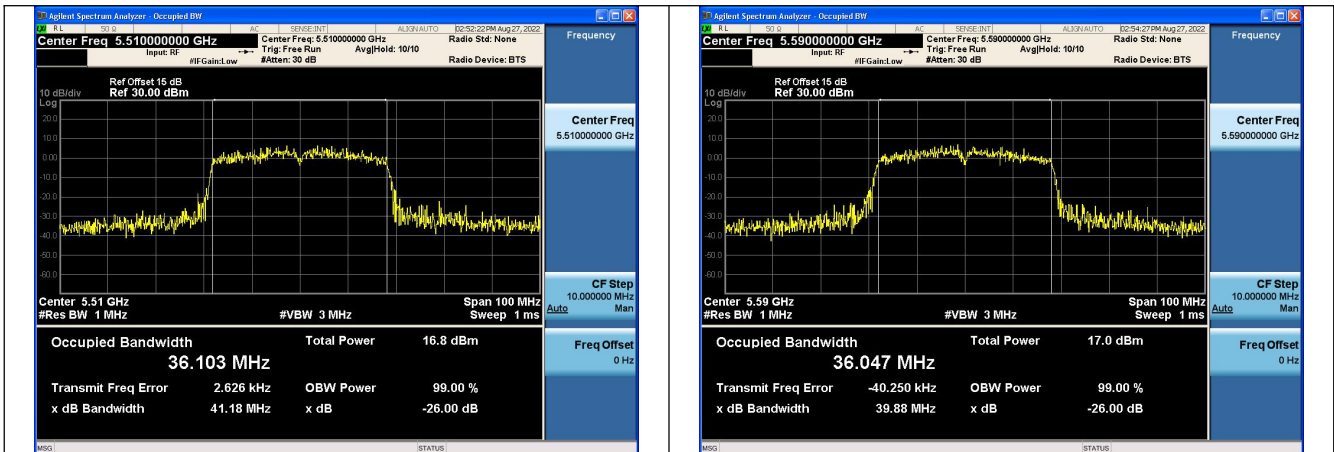
Test Mode: 802.11n HT40 5590MHz Chain0



Test Mode: 802.11n HT40 5670MHz Chain0

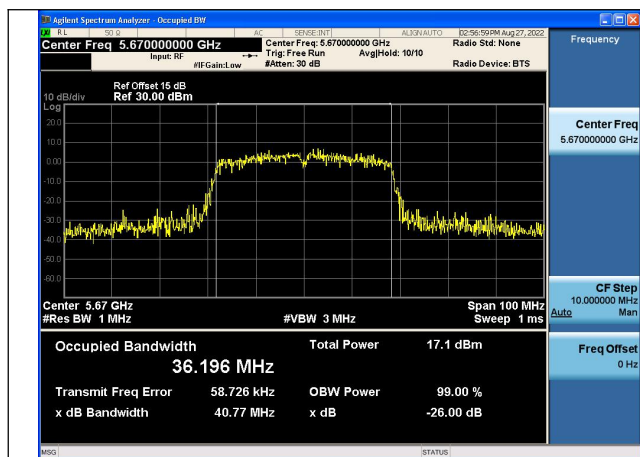


Test Mode: 802.11ac VHT40



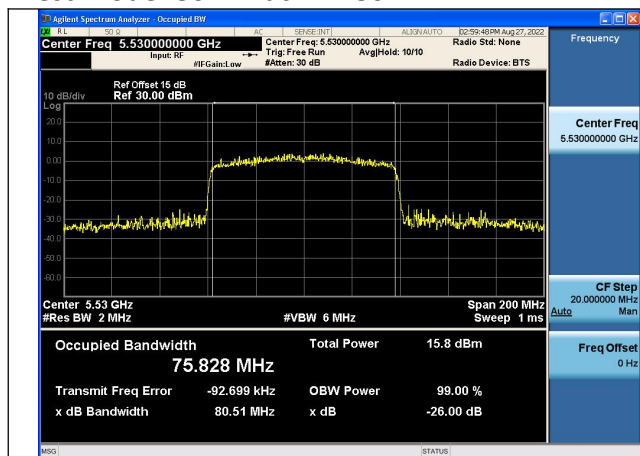
Test Mode: 802.11ac VHT40 5510MHz Chain0

Test Mode: 802.11ac VHT40 5590MHz Chain0

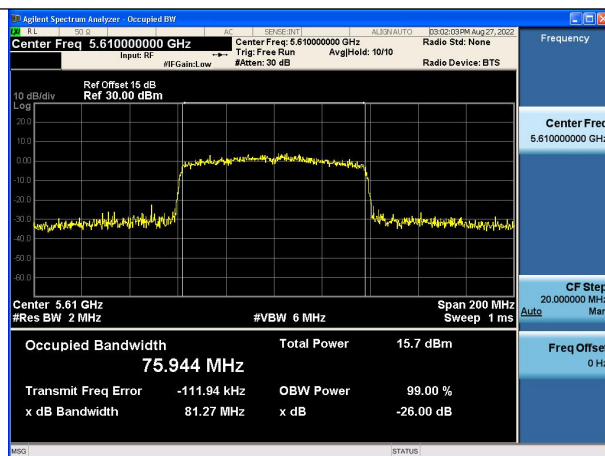


Test Mode:802.11ac VHT40 5670MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5530MHz Chain0



Test Mode:802.11ac VHT80 5610MHz Chain0

Occupied Bandwidth

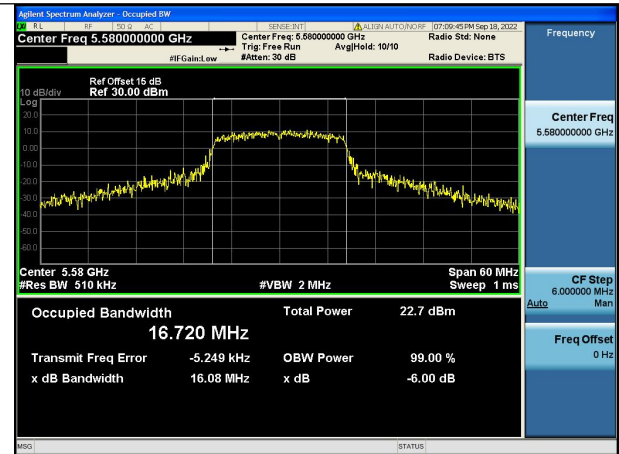
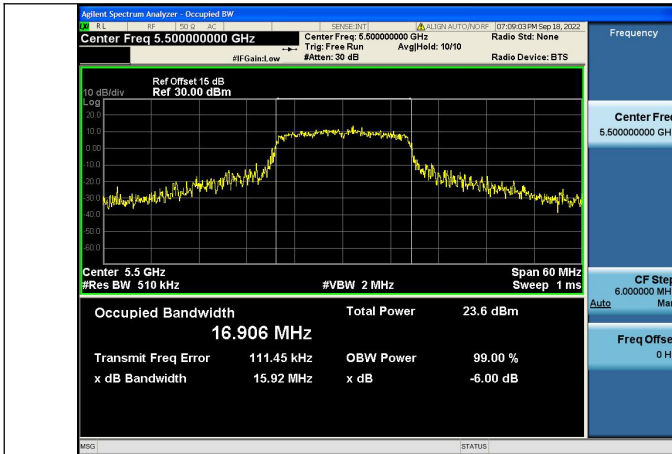
Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.618	Channel No.634	Channel No.658
		5500MHz	5580MHz	5700MHz
802.11a	Chain0	16.906	16.720	16.624
802.11n HT20	Chain0	17.726	17.673	17.707
802.11ac VHT20	Chain0	17.676	17.641	17.684

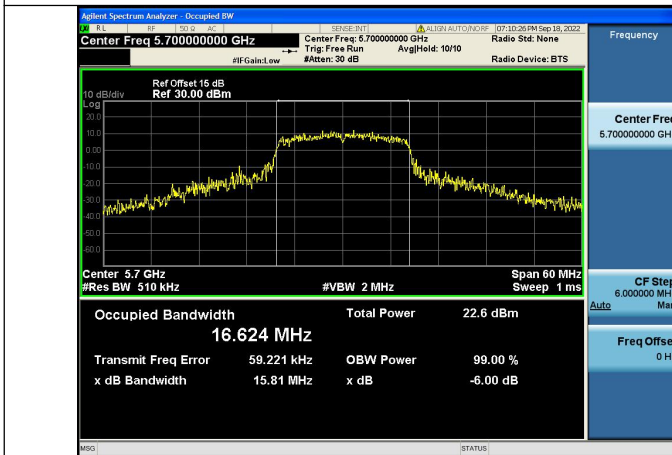
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.620	Channel No.636	Channel No.652
		5510MHz	5590MHz	5670MHz
802.11n HT40	Chain0	36.247	36.205	36.217
802.11ac VHT40	Chain0	36.105	36.130	36.112

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.624	---	Channel No.640
		5530MHz	---	5610MHz
802.11ac VHT80	Chain0	75.850	---	76.021

Test Mode: 802.11a



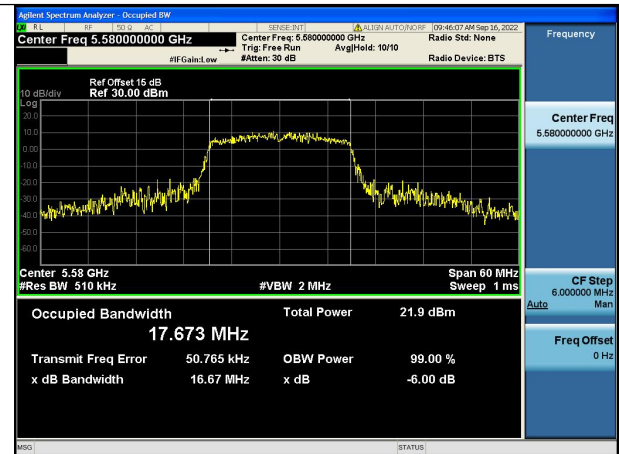
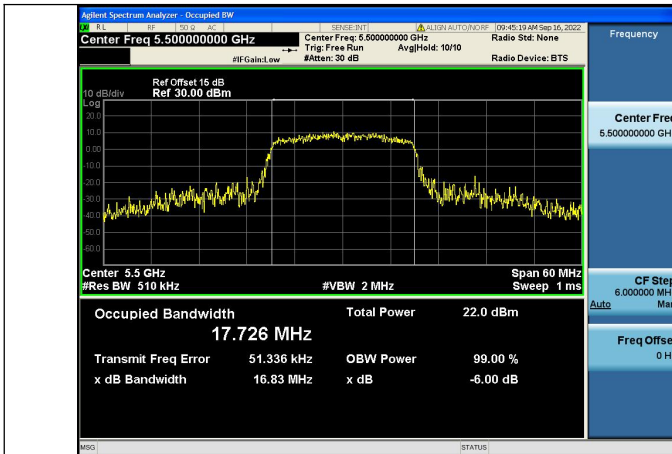
Test Mode:802.11a 5500MHz Chain0



Test Mode:802.11a 5580MHz Chain0

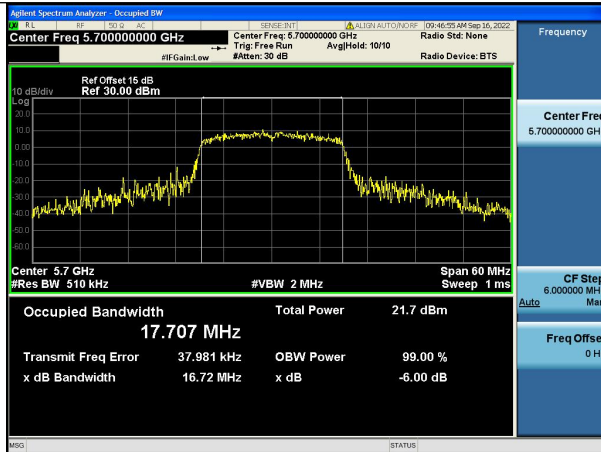
Test Mode:802.11a 5700MHz Chain0

Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5500MHz Chain0

Test Mode:802.11n HT20 5580MHz Chain0

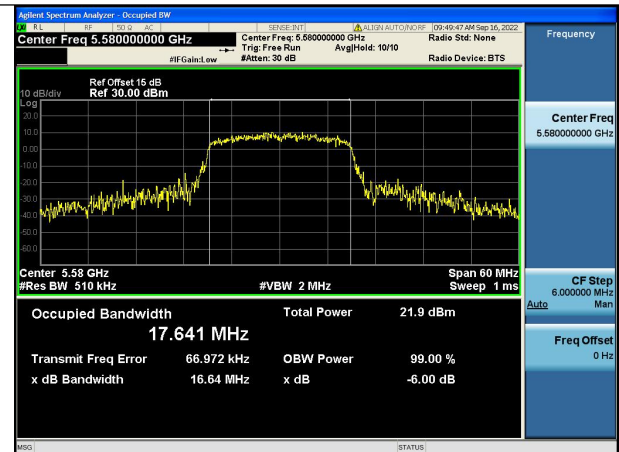


Test Mode:802.11n HT20 5700MHz Chain0

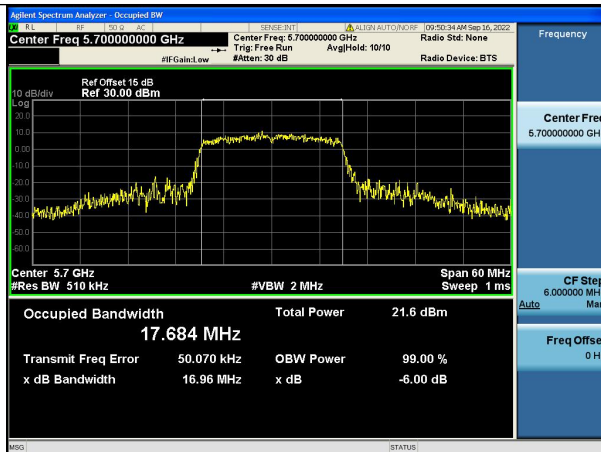
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5500MHz Chain0

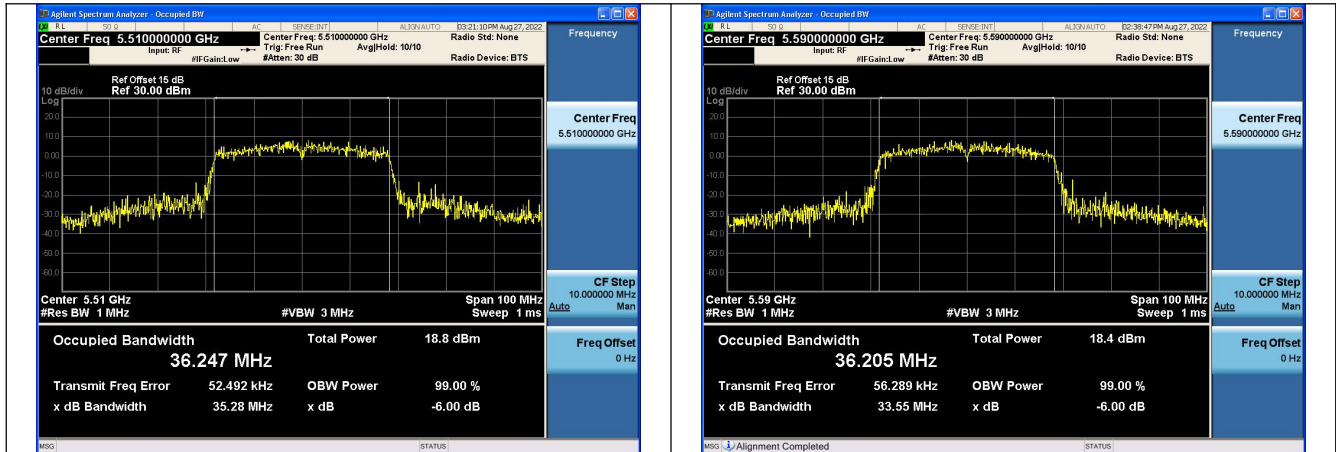


Test Mode:802.11ac VHT20 5580MHz Chain0

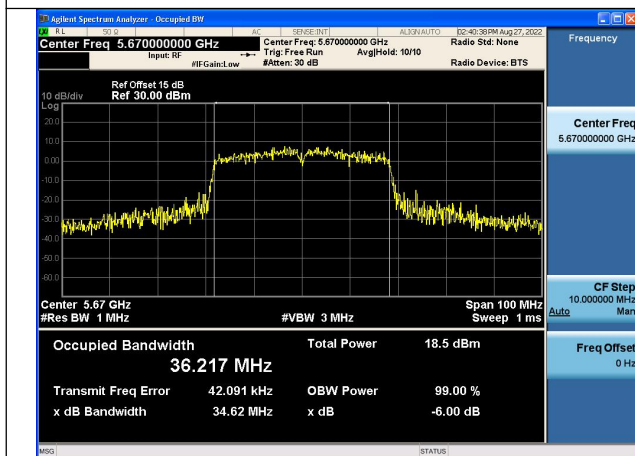


Test Mode:802.11ac VHT20 5700MHz Chain0

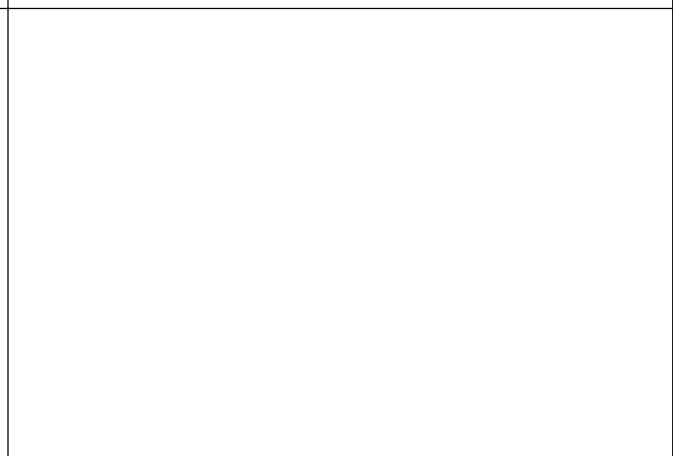
Test Mode: 802.11n HT40



Test Mode: 802.11n HT40 5510MHz Chain0

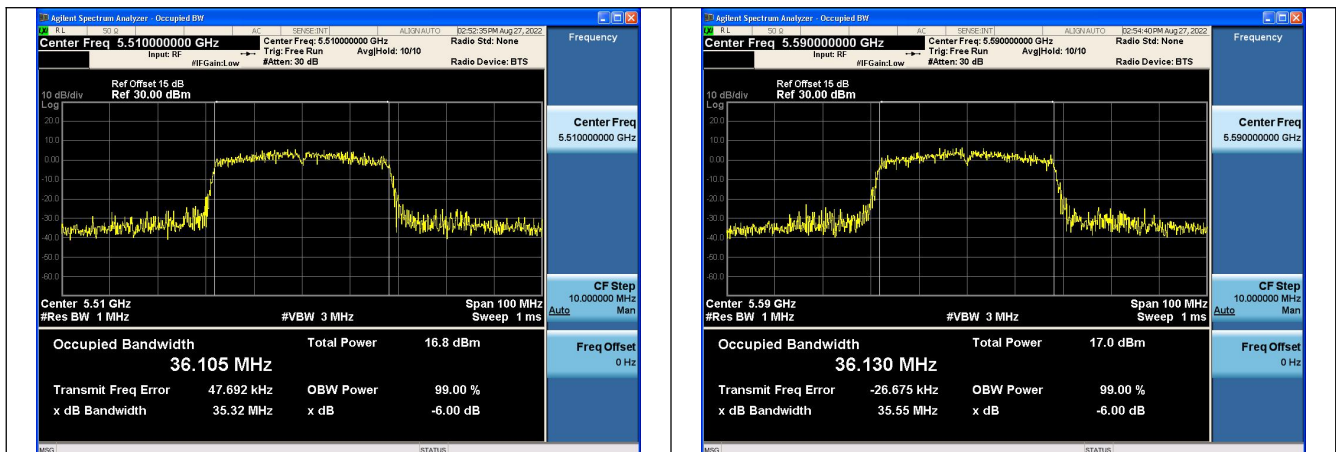


Test Mode: 802.11n HT40 5590MHz Chain0



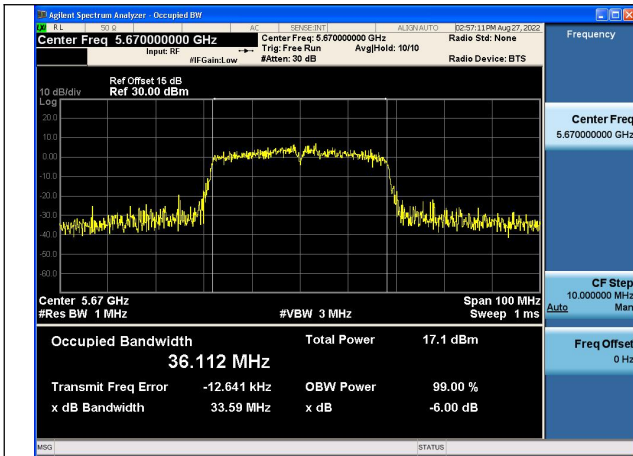
Test Mode: 802.11n HT40 5670MHz Chain0

Test Mode: 802.11ac VHT40



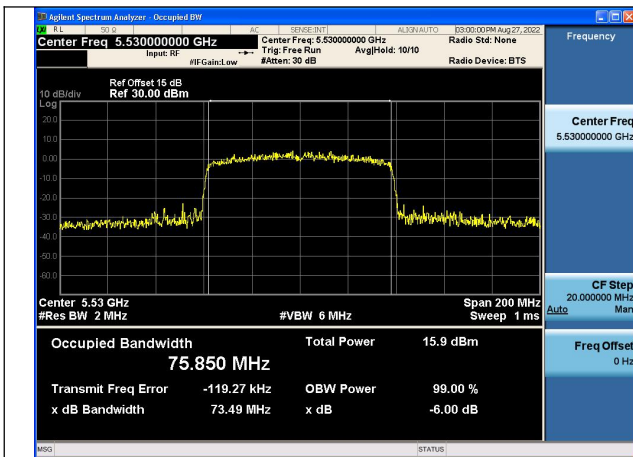
Test Mode: 802.11ac VHT40 5510MHz Chain0

Test Mode: 802.11ac VHT40 5590MHz Chain0

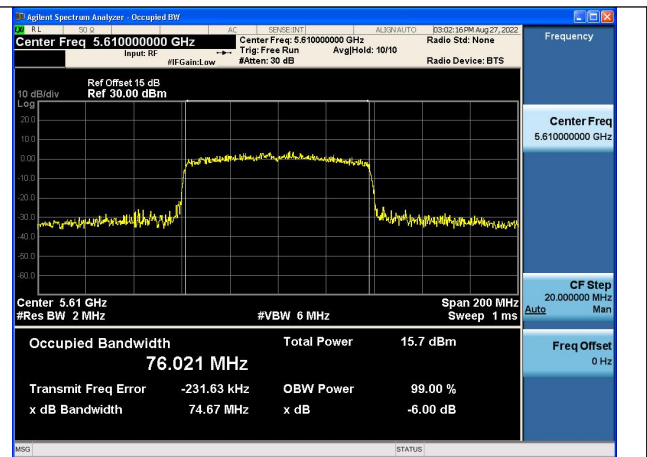


Test Mode:802.11ac VHT40 5670MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5530MHz Chain0



Test Mode:802.11ac VHT80 5610MHz Chain0

Transmitter Power Spectral Density

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

Test Mode	Antenna	Tones	5500MHz		5580MHz		5700MHz	
			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	3.814	0	3.909	0	4.224
802.11n HT20	Chain0	NA	0	3.411	0	3.497	0	3.958
802.11ac VHT20	Chain0	NA	0	2.141	0	2.114	0	2.462

Test Mode	Antenna	Tones	5510MHz		5590MHz		5670MHz	
			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	0.494	0	0.558	0	0.641
802.11ac VHT40	Chain0	NA	0	-0.881	0	-0.842	0	-0.730

Test Mode	Antenna	Tones	5530MHz		---		5610MHz	
			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	-4.402	---	---	0	-4.511