

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5500	98.99%	0	Fig.1
802.11n HT20	5500	98.91%	0	Fig.2
802.11ac VHT20	5500	98.97%	0	Fig.3
802.11n HT40	5510	97.79%	0.10	Fig.4
802.11ac VHT40	5510	96.33%	0.16	Fig.5
802.11ac VHT80	5530	95.90%	0.18	Fig.6

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

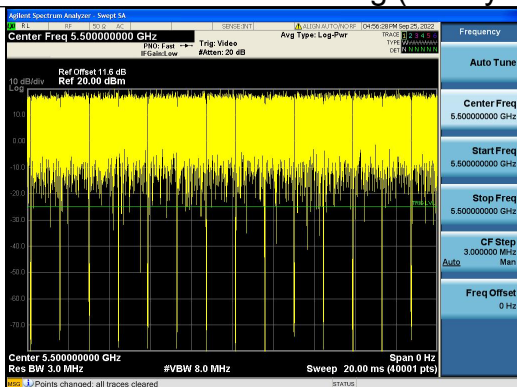


Fig.1

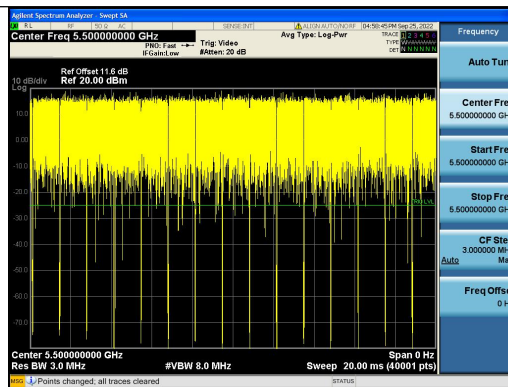


Fig.2

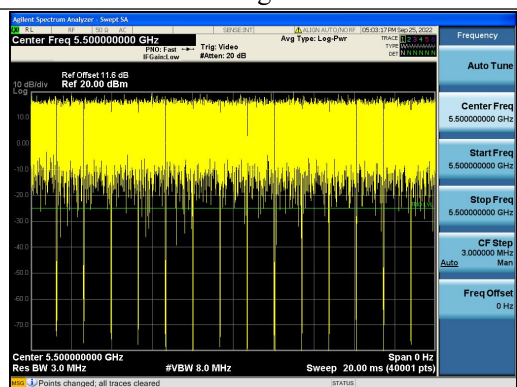


Fig.3

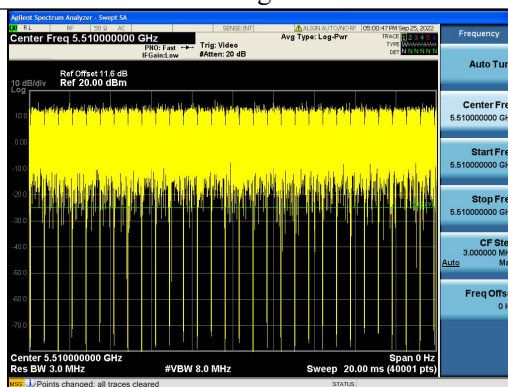


Fig.4

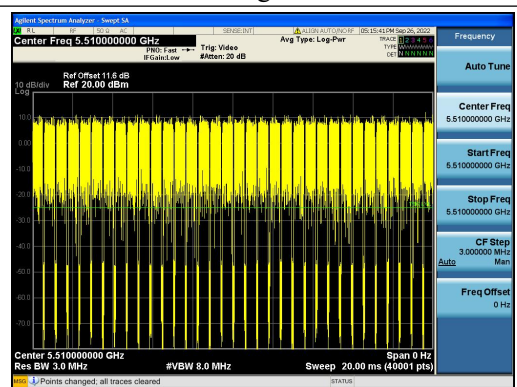


Fig.5

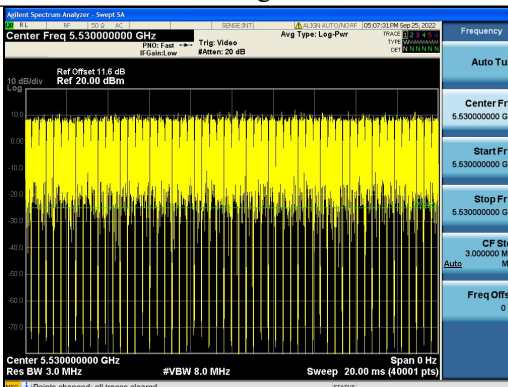


Fig.6

Output Power

Mode	Tones/ RUIndex	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5500	Chain0	9.73	8.53
802.11a	NA	5580	Chain0	10.42	9.22
802.11a	NA	5700	Chain0	9.69	8.49
802.11n HT20	NA	5500	Chain0	9.38	8.18
802.11n HT20	NA	5580	Chain0	10.50	9.30
802.11n HT20	NA	5700	Chain0	9.83	8.63
802.11ac VHT20	NA	5500	Chain0	6.96	5.76
802.11ac VHT20	NA	5580	Chain0	10.54	9.34
802.11ac VHT20	NA	5700	Chain0	9.55	8.35
802.11n HT40	NA	5510	Chain0	10.06	8.86
802.11n HT40	NA	5590	Chain0	10.33	9.13
802.11n HT40	NA	5670	Chain0	10.10	8.90
802.11ac VHT40	NA	5510	Chain0	9.89	8.69
802.11ac VHT40	NA	5590	Chain0	10.81	9.61
802.11ac VHT40	NA	5670	Chain0	10.59	9.39
802.11ac VHT80	NA	5530	Chain0	10.01	8.81
802.11ac VHT80	NA	5610	Chain0	9.97	8.77

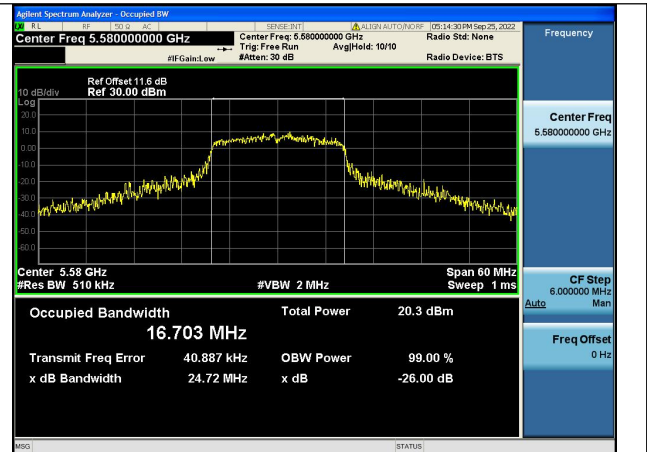
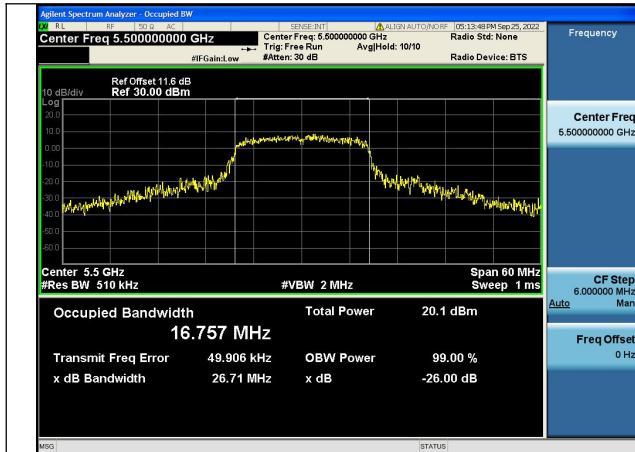
Emission Bandwidth

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.618	Channel No.634	Channel No.658
		5500MHz	5580MHz	5700MHz
802.11a	Chain0	26.71	24.72	25.27
802.11n HT20	Chain0	21.01	20.55	25.96
802.11ac VHT20	Chain0	21.06	25.52	25.17

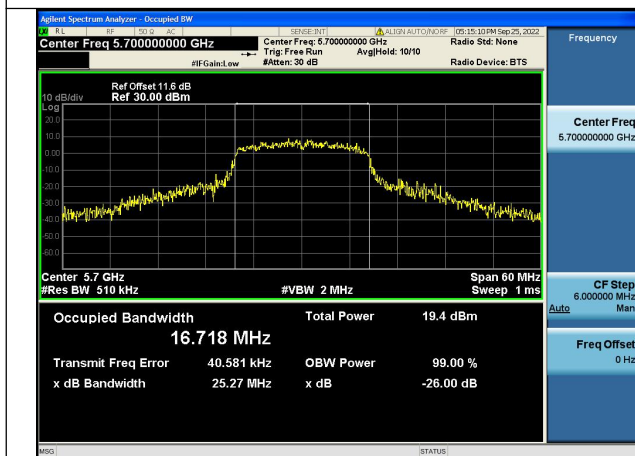
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.620	Channel No.636	Channel No.652
		5510MHz	5590MHz	5670MHz
802.11n HT40	Chain0	40.68	39.87	39.93
802.11ac VHT40	Chain0	39.82	40.20	40.01

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.624	---	Channel No.640
		5530MHz	---	5610MHz
802.11ac VHT80	Chain0	83.12	---	82.84

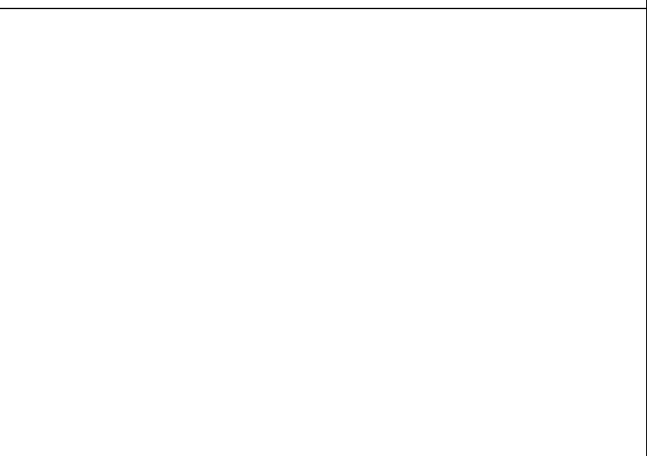
Test Mode: 802.11a



Test Mode:802.11a 5500MHz Chain0

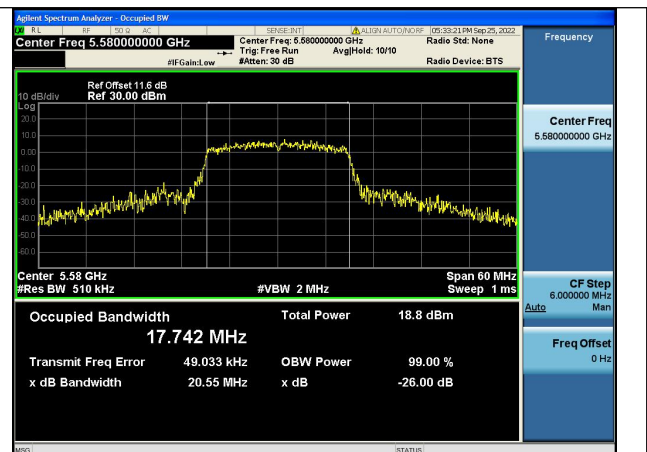


Test Mode:802.11a 5580MHz Chain0



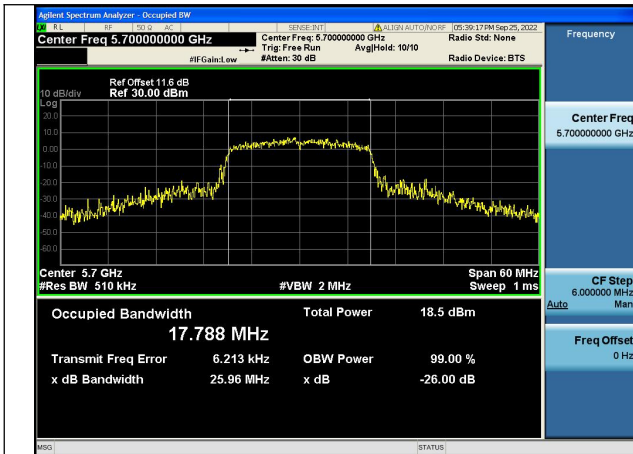
Test Mode:802.11a 5700MHz Chain0

Test Mode: 802.11n HT20



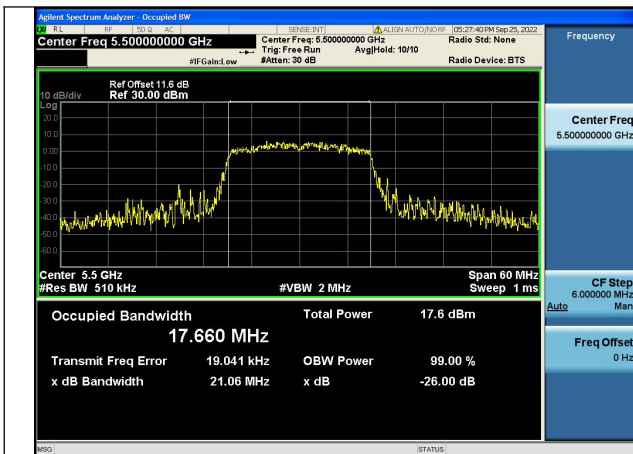
Test Mode:802.11n HT20 5500MHz Chain0

Test Mode:802.11n HT20 5580MHz Chain0

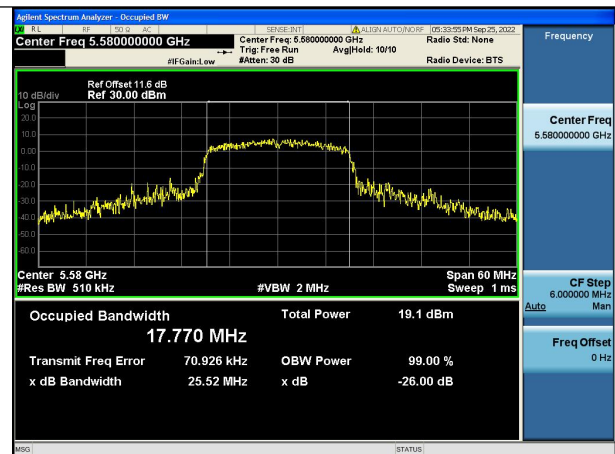


Test Mode:802.11n HT20 5700MHz Chain0

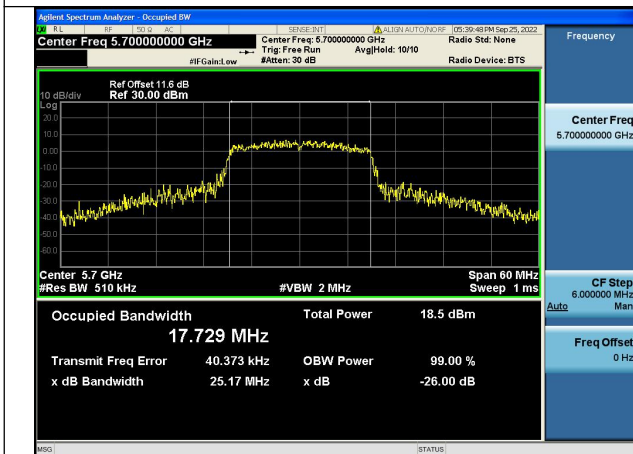
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5500MHz Chain0

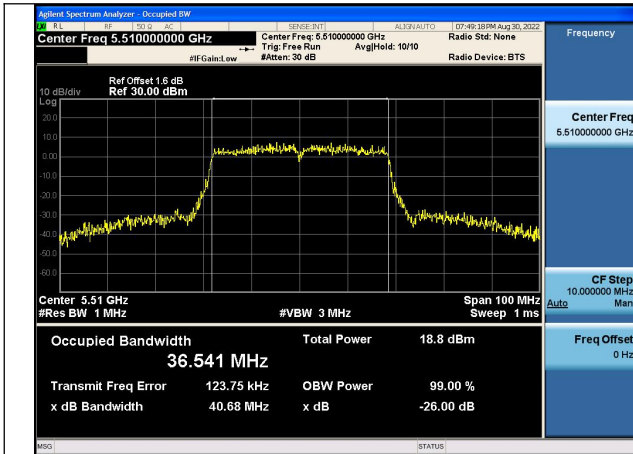


Test Mode:802.11ac VHT20 5580MHz Chain0

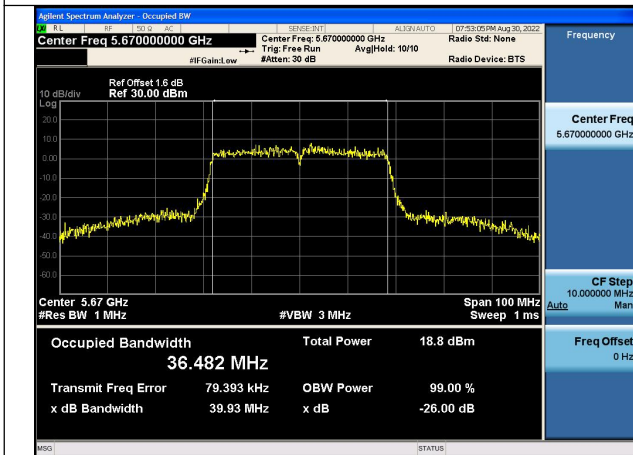


Test Mode:802.11ac VHT20 5700MHz Chain0

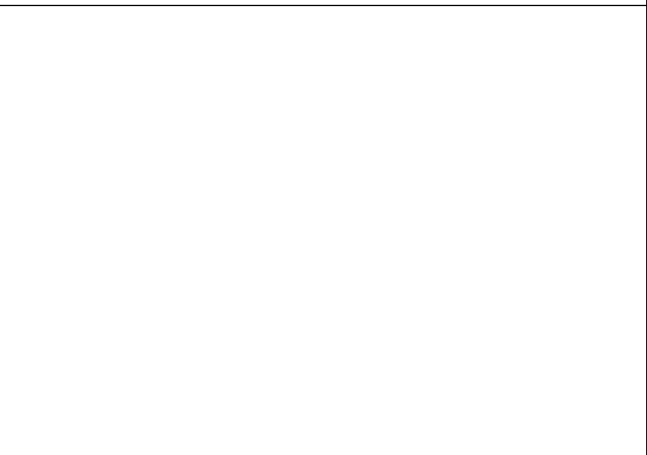
Test Mode: 802.11n HT40



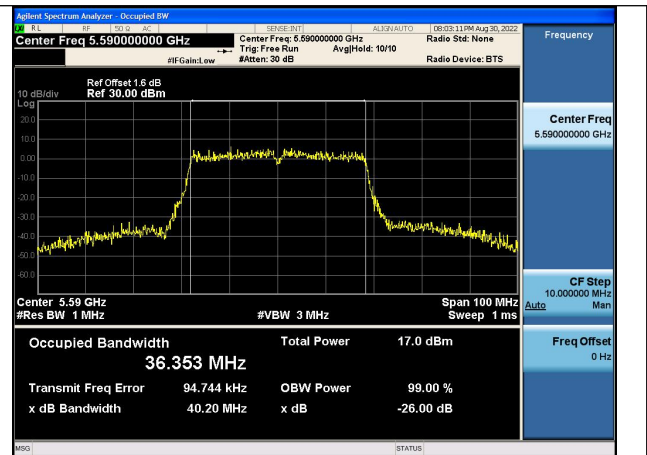
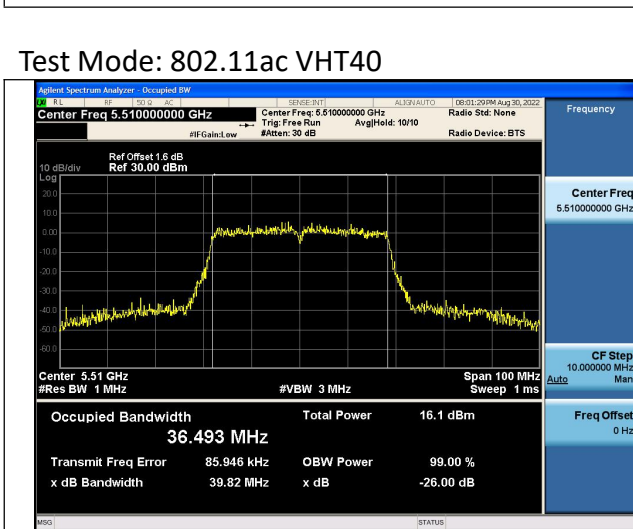
Test Mode: 802.11n HT40 5510MHz Chain0



Test Mode: 802.11n HT40 5590MHz Chain0

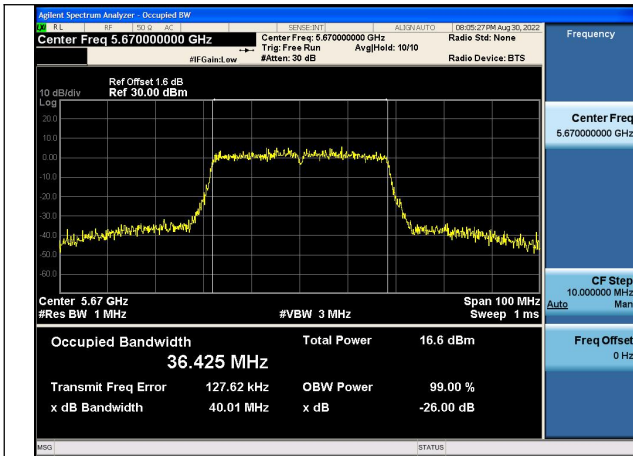


Test Mode: 802.11n HT40 5670MHz Chain0



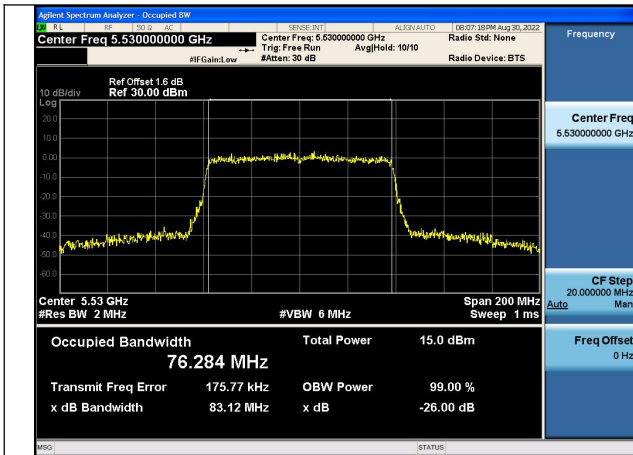
Test Mode: 802.11ac VHT40 5510MHz Chain0

Test Mode: 802.11ac VHT40 5590MHz Chain0

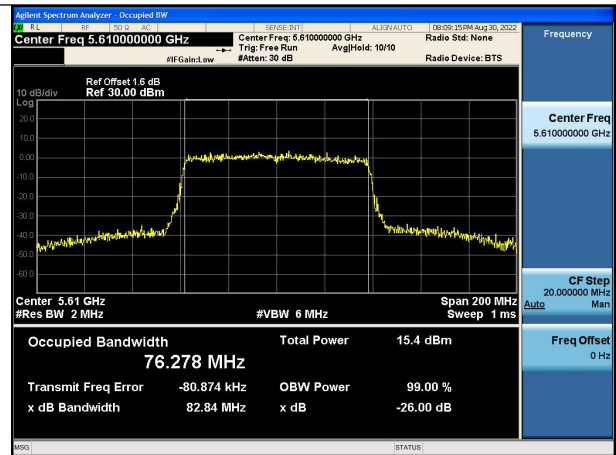


Test Mode:802.11ac VHT40 5670MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5530MHz Chain0



Test Mode:802.11ac VHT80 5610MHz Chain0

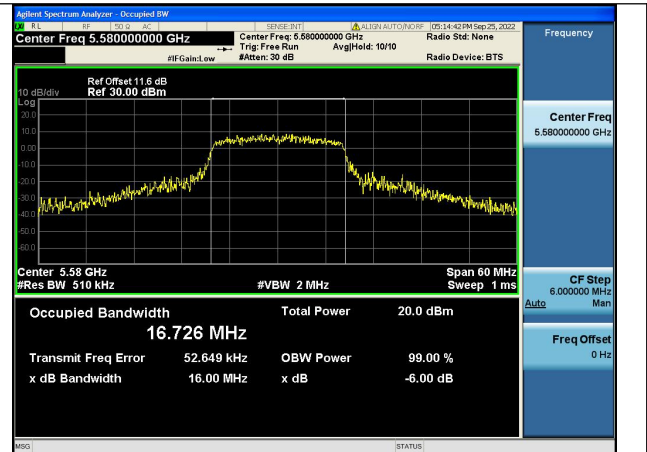
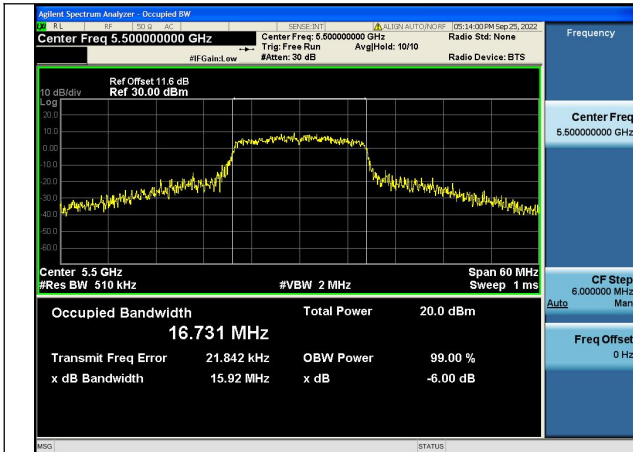
Occupied Bandwidth

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.618	Channel No.634	Channel No.658
		5500MHz	5580MHz	5700MHz
802.11a	Chain0	16.731	16.726	16.850
802.11n HT20	Chain0	17.683	17.769	17.747
802.11ac VHT20	Chain0	17.681	17.881	17.692

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.620	Channel No.636	Channel No.652
		5510MHz	5590MHz	5670MHz
802.11n HT40	Chain0	36.573	36.524	36.589
802.11ac VHT40	Chain0	36.515	36.483	36.528

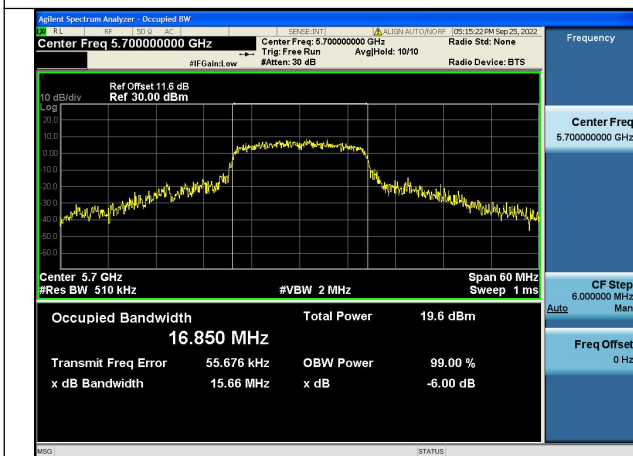
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.624	---	Channel No.640
		5530MHz	---	5610MHz
802.11ac VHT80	Chain0	76.244	---	76.383

Test Mode: 802.11a



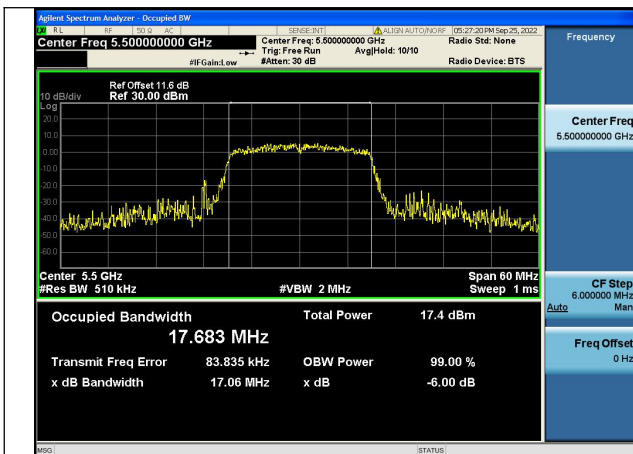
Test Mode:802.11a 5500MHz Chain0

Test Mode:802.11a 5580MHz Chain0



Test Mode:802.11a 5700MHz Chain0

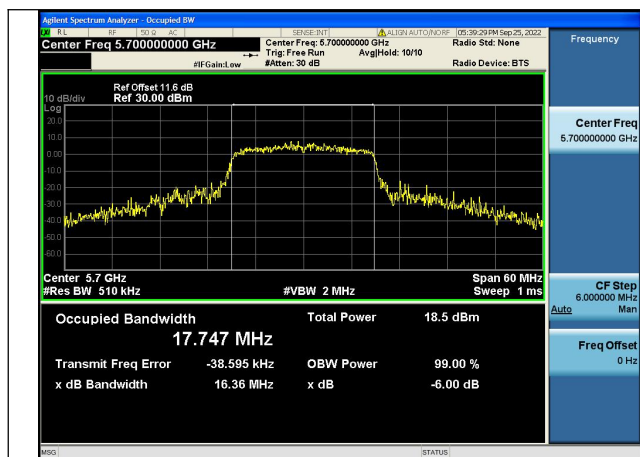
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5500MHz Chain0

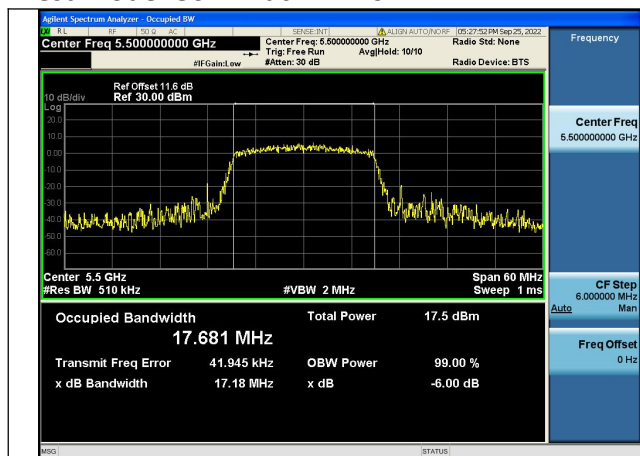


Test Mode:802.11n HT20 5580MHz Chain0

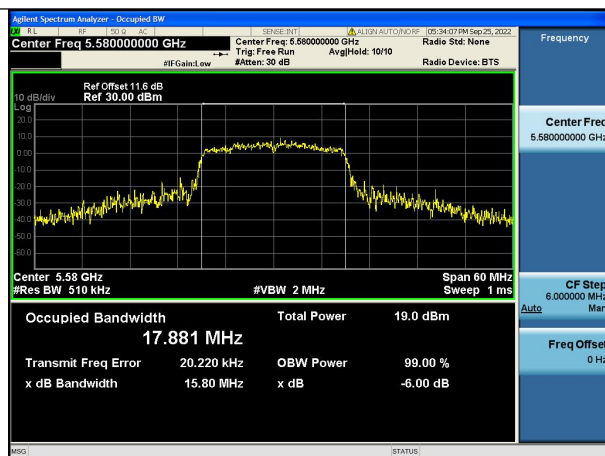


Test Mode:802.11n HT20 5700MHz Chain0

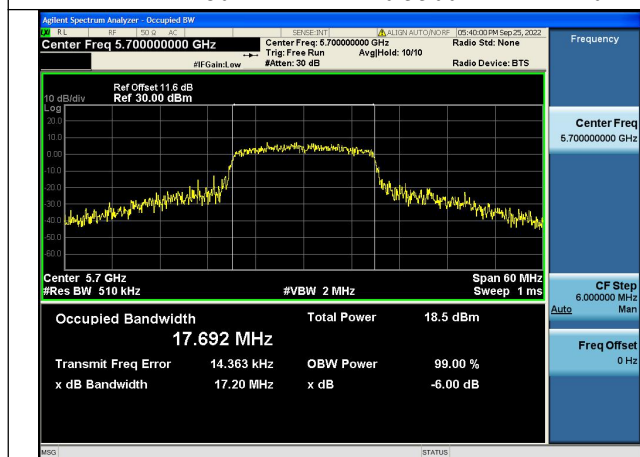
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5500MHz Chain0

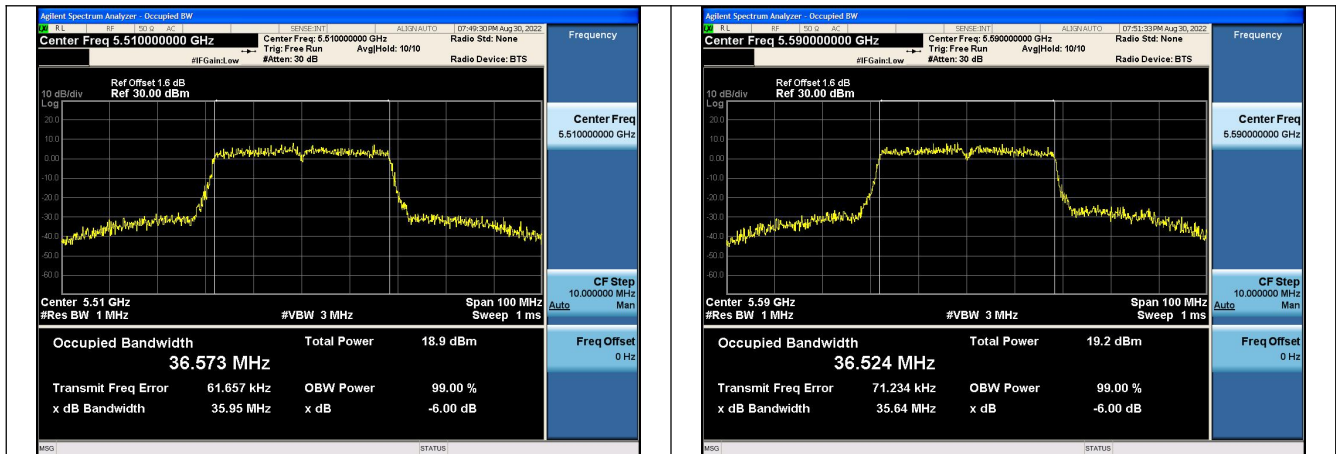


Test Mode:802.11ac VHT20 5580MHz Chain0

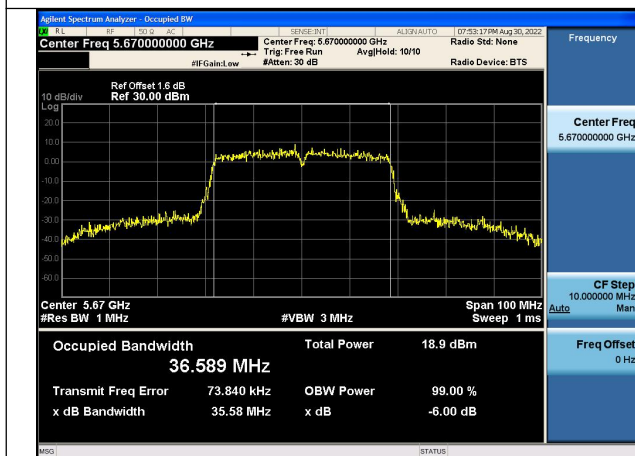


Test Mode:802.11ac VHT20 5700MHz Chain0

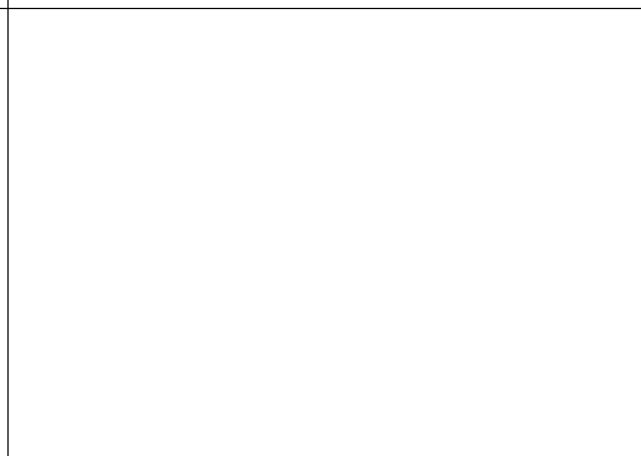
Test Mode: 802.11n HT40



Test Mode: 802.11n HT40 5510MHz Chain0

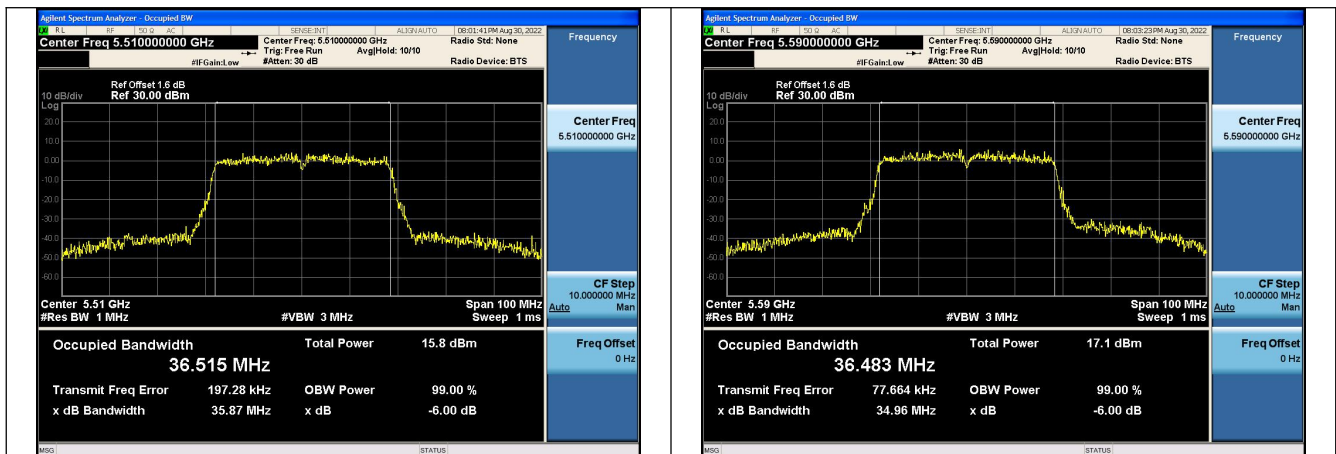


Test Mode: 802.11n HT40 5590MHz Chain0



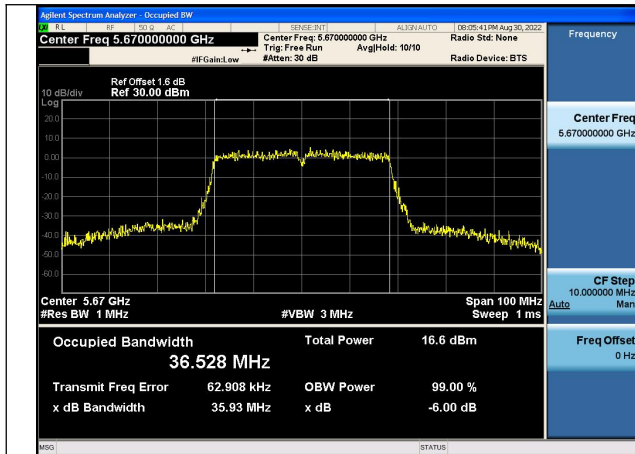
Test Mode: 802.11n HT40 5670MHz Chain0

Test Mode: 802.11ac VHT40



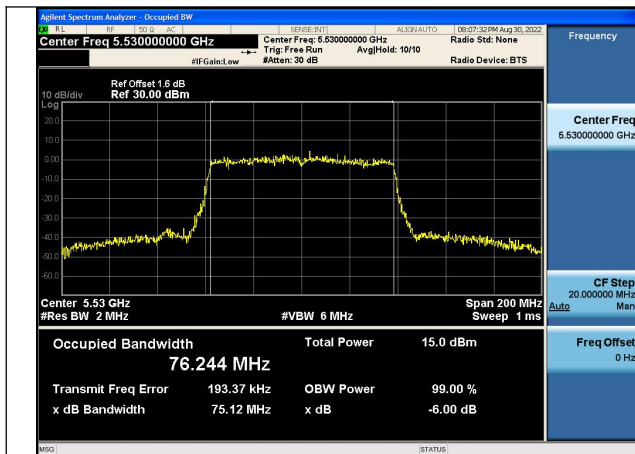
Test Mode: 802.11ac VHT40 5510MHz Chain0

Test Mode: 802.11ac VHT40 5590MHz Chain0

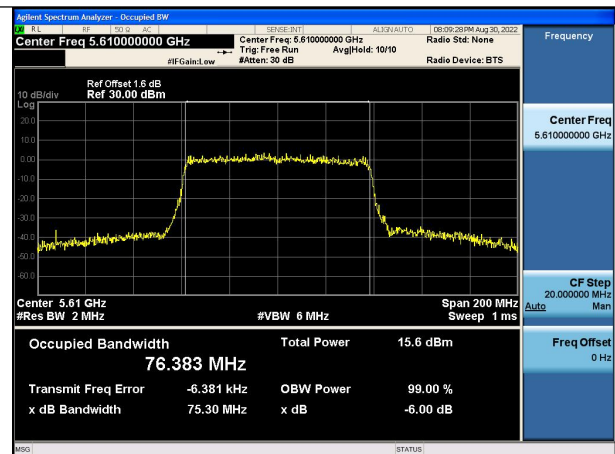


Test Mode:802.11ac VHT40 5670MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5530MHz Chain0



Test Mode:802.11ac VHT80 5610MHz Chain0

Transmitter Power Spectral Density

Offset 1.6dB = 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	-1.208	0	-0.218	0	-0.964
802.11n HT20	Chain0	NA	0	-1.682	0	-0.616	0	-1.272
802.11ac VHT20	Chain0	NA	0	-0.965	0	-0.635	0	-1.343

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	0.10	-2.665	0.10	-3.712	0.10	-3.936
802.11ac VHT40	Chain0	NA	0.16	-4.194	0.16	-3.121	0.16	-3.396

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	0.18	-6.758	---	---	0.18	-6.779