

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5500	98.66%	0
802.11a	5500	98.66%	0
802.11n HT20	5500	98.61%	0
802.11n HT20	5500	98.59%	0
802.11ac VHT20	5500	98.58%	0
802.11ac VHT20	5500	98.70%	0
802.11n HT40	5510	97.28%	0.12
802.11n HT40	5510	97.33%	0.12
802.11ac VHT40	5510	97.37%	0.12
802.11ac VHT40	5510	97.27%	0.12
802.11ac VHT80	5530	94.82%	0.23
802.11ac VHT80	5530	94.93%	0.23

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	5500	Chain0	16.19	18.19
802.11a	NA	5500	Chain1	16.48	17.98
802.11a	NA	5580	Chain0	15.58	17.58
802.11a	NA	5580	Chain1	15.99	17.49
802.11a	NA	5700	Chain0	14.36	16.36
802.11a	NA	5700	Chain1	15.27	16.77
802.11n HT20	NA	5500	Chain0	16.07	18.07
802.11n HT20	NA	5500	Chain1	16.30	17.80
802.11n HT20	NA	5500	MIMO	19.20	20.96
802.11n HT20	NA	5580	Chain0	15.48	17.48
802.11n HT20	NA	5580	Chain1	15.86	17.36
802.11n HT20	NA	5580	MIMO	18.68	20.44
802.11n HT20	NA	5700	Chain0	14.29	16.29
802.11n HT20	NA	5700	Chain1	15.03	16.53
802.11n HT20	NA	5700	MIMO	17.69	19.45
802.11ac VHT20	NA	5500	Chain0	16.05	18.05
802.11ac VHT20	NA	5500	Chain1	16.31	17.81
802.11ac VHT20	NA	5500	MIMO	19.19	20.95
802.11ac VHT20	NA	5580	Chain0	15.43	17.43
802.11ac VHT20	NA	5580	Chain1	15.72	17.22
802.11ac VHT20	NA	5580	MIMO	18.59	20.35
802.11ac VHT20	NA	5700	Chain0	14.28	16.28
802.11ac VHT20	NA	5700	Chain1	14.97	16.47

802.11ac VHT20	NA	5700	MIMO	17.65	19.41
802.11n HT40	NA	5510	Chain0	16.14	18.14
802.11n HT40	NA	5510	Chain1	16.25	17.75
802.11n HT40	NA	5510	MIMO	19.21	20.97
802.11n HT40	NA	5590	Chain0	15.34	17.34
802.11n HT40	NA	5590	Chain1	15.76	17.26
802.11n HT40	NA	5590	MIMO	18.57	20.33
802.11n HT40	NA	5670	Chain0	14.38	16.38
802.11n HT40	NA	5670	Chain1	15.26	16.76
802.11n HT40	NA	5670	MIMO	17.85	19.61
802.11ac VHT40	NA	5510	Chain0	16.08	18.08
802.11ac VHT40	NA	5510	Chain1	16.28	17.78
802.11ac VHT40	NA	5510	MIMO	19.19	20.95
802.11ac VHT40	NA	5590	Chain0	15.28	17.28
802.11ac VHT40	NA	5590	Chain1	15.59	17.09
802.11ac VHT40	NA	5590	MIMO	18.45	20.21
802.11ac VHT40	NA	5670	Chain0	14.42	16.42
802.11ac VHT40	NA	5670	Chain1	15.14	16.64
802.11ac VHT40	NA	5670	MIMO	17.81	19.57
802.11ac VHT80	NA	5530	Chain0	15.68	17.68
802.11ac VHT80	NA	5530	Chain1	15.89	17.39
802.11ac VHT80	NA	5530	MIMO	18.80	20.56
802.11ac VHT80	NA	5610	Chain0	14.62	16.62
802.11ac VHT80	NA	5610	Chain1	15.09	16.59
802.11ac VHT80	NA	5610	MIMO	17.87	19.63

Emission Bandwidth

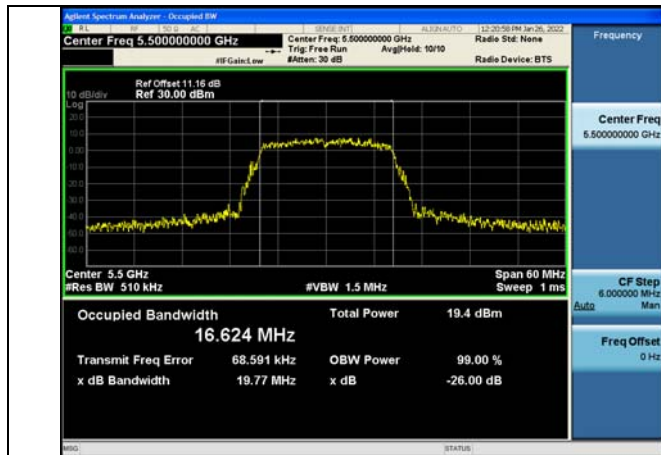
Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.618	Channel No.634	Channel No.658
		5500MHz	5580MHz	5700MHz
802.11a	Chain0	19.77	20.06	20.36
802.11a	Chain1	20.20	19.52	20.32
802.11n HT20	Chain0	20.19	20.40	20.38
802.11n HT20	Chain1	20.31	20.48	20.55
802.11ac VHT20	Chain0	19.76	20.34	20.47
802.11ac VHT20	Chain1	19.99	20.20	20.39

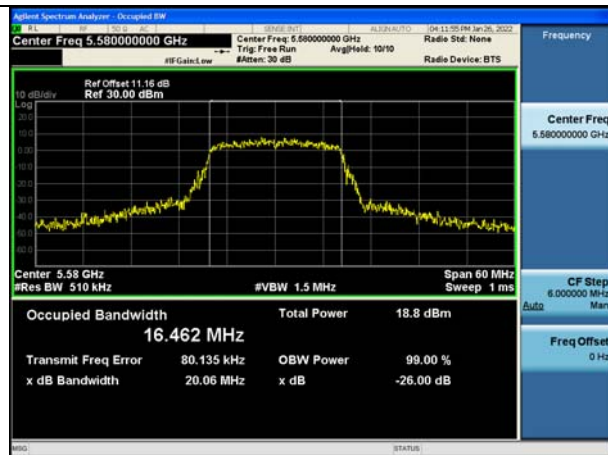
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.620	Channel No.636	Channel No.652
		5510MHz	5590MHz	5670MHz
802.11n HT40	Chain0	39.79	40.74	41.17
802.11n HT40	Chain1	40.09	40.57	40.05
802.11ac VHT40	Chain0	40.12	40.52	41.09
802.11ac VHT40	Chain1	40.42	40.16	39.85

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.624	---	Channel No.640
		5530MHz	---	5610MHz
802.11ac VHT80	Chain0	81.42	---	81.58
802.11ac VHT80	Chain1	81.18	---	81.05

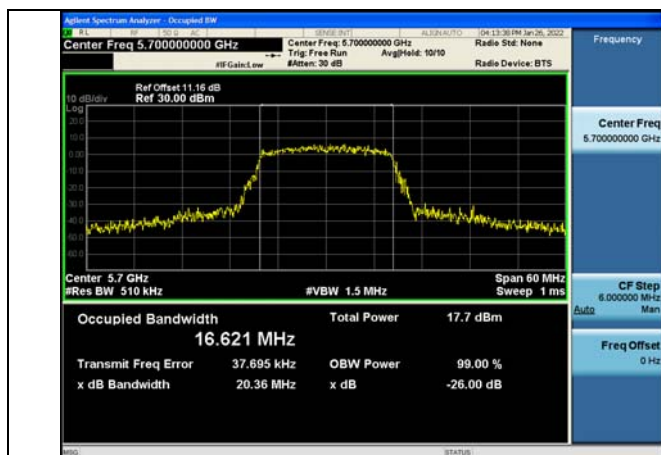
Test Mode: 802.11a



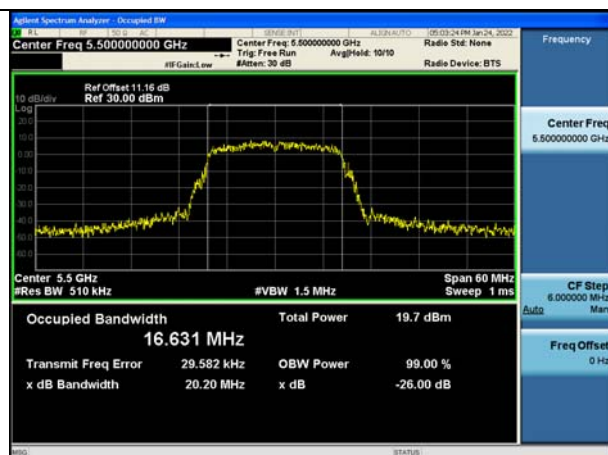
Test Mode:802.11a 5500MHz Chain0



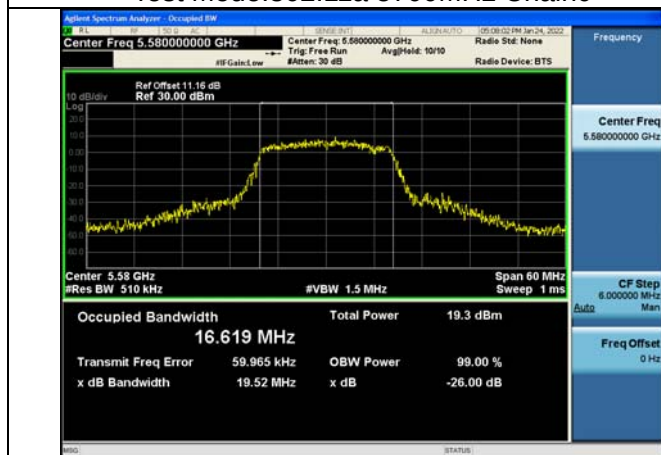
Test Mode:802.11a 5580MHz Chain0



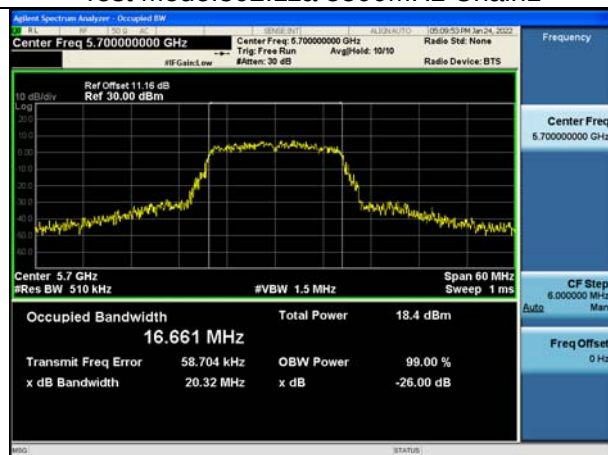
Test Mode:802.11a 5700MHz Chain0



Test Mode:802.11a 5500MHz Chain1

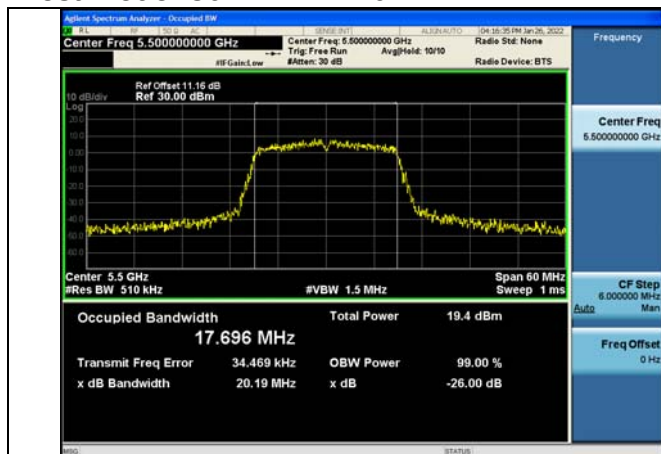


Test Mode:802.11a 5580MHz Chain1

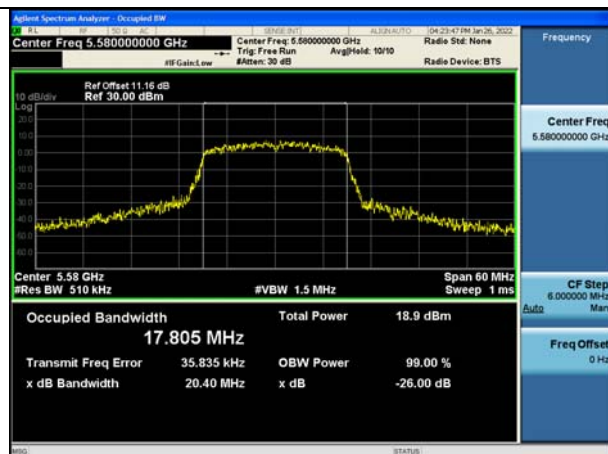


Test Mode:802.11a 5700MHz Chain1

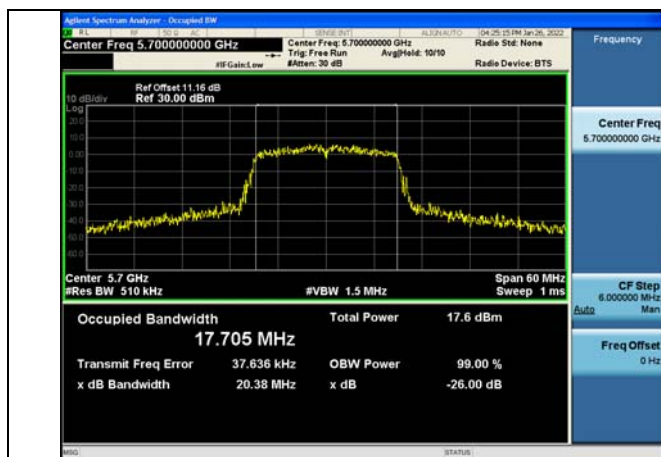
Test Mode: 802.11n HT20



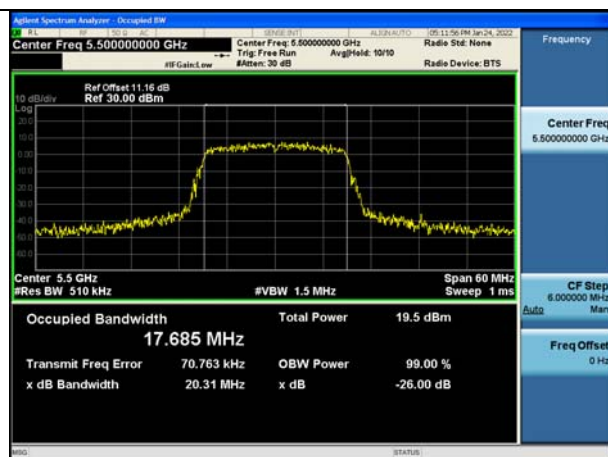
Test Mode:802.11n HT20 5500MHz Chain0



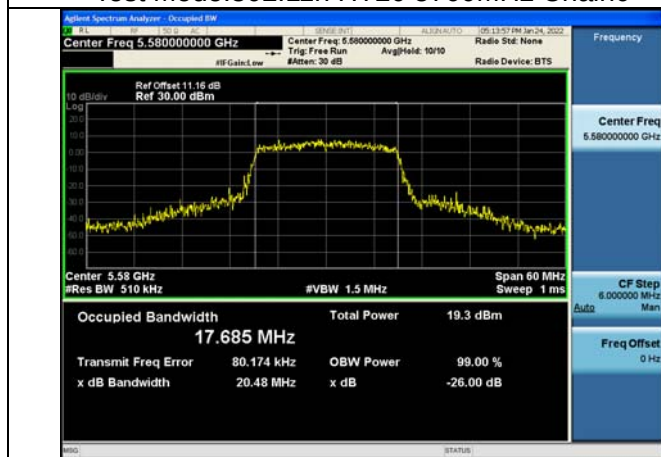
Test Mode:802.11n HT20 5580MHz Chain0



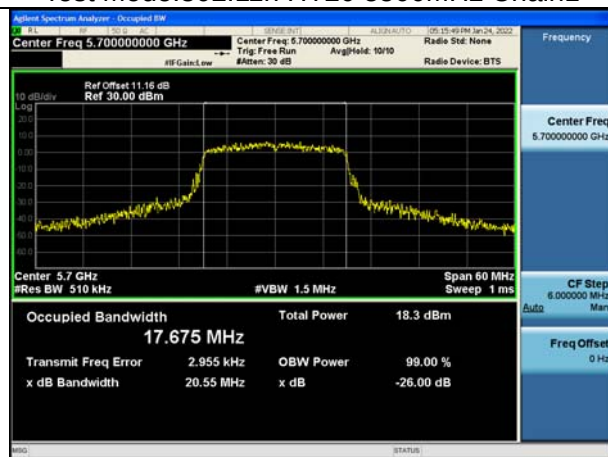
Test Mode:802.11n HT20 5700MHz Chain0



Test Mode:802.11n HT20 5500MHz Chain1

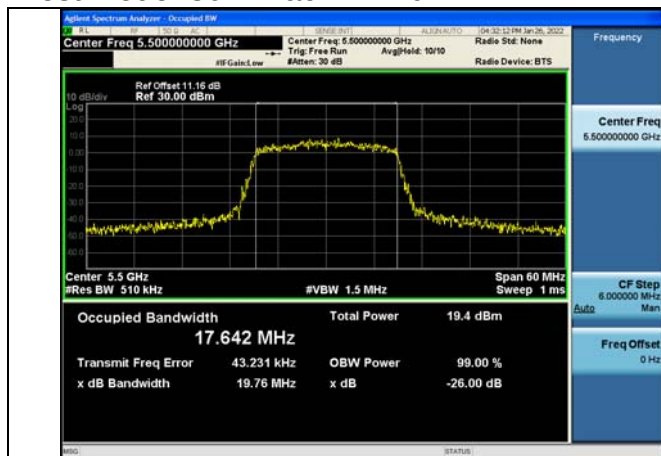


Test Mode:802.11n HT20 5580MHz Chain1

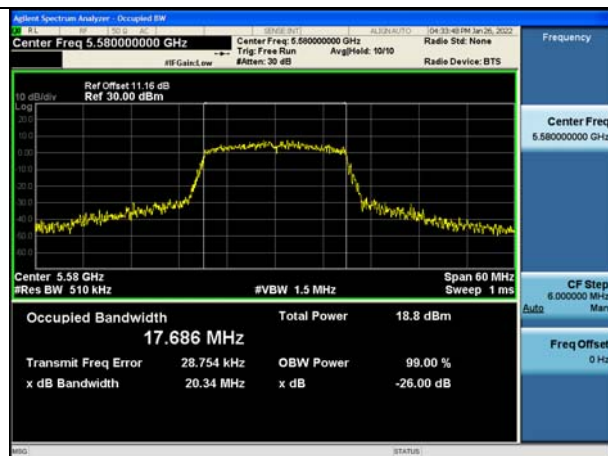


Test Mode:802.11n HT20 5700MHz Chain1

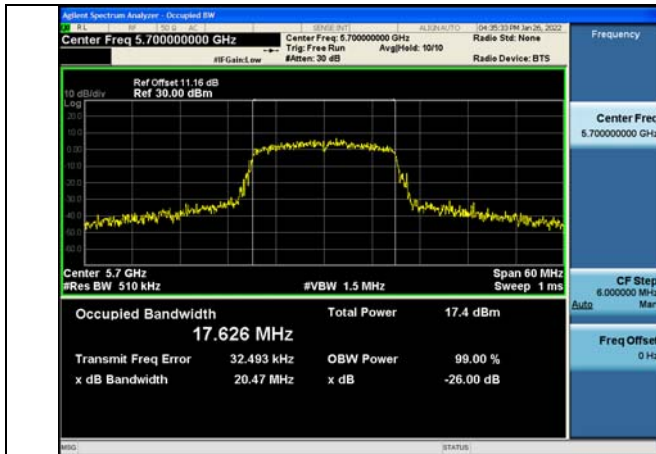
Test Mode: 802.11ac VHT20



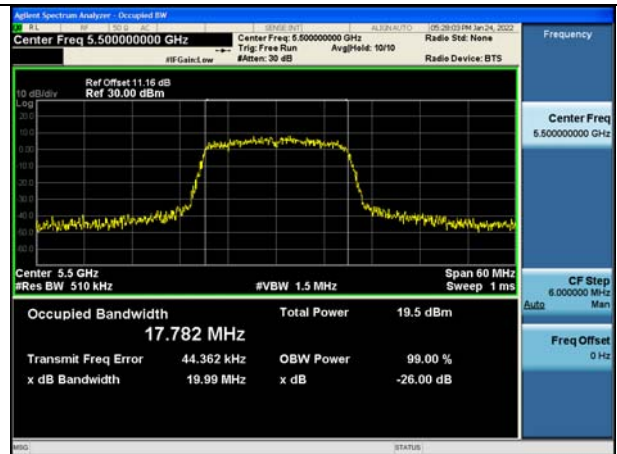
Test Mode:802.11ac VHT20 5500MHz Chain0



Test Mode:802.11ac VHT20 5580MHz Chain0



Test Mode:802.11ac VHT20 5700MHz Chain0



Test Mode:802.11ac VHT20 5500MHz Chain1

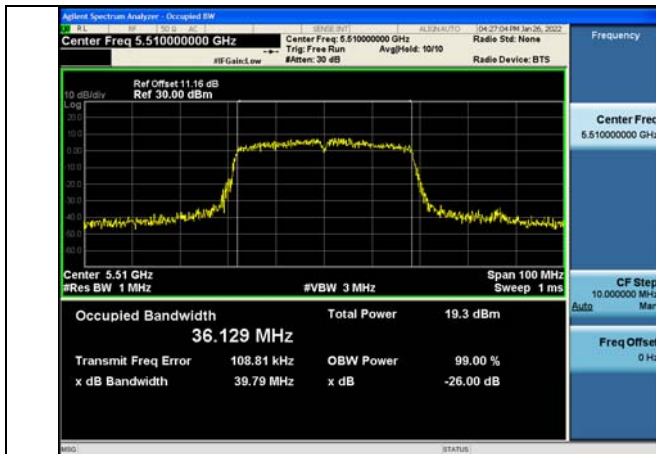


Test Mode:802.11ac VHT20 5580MHz Chain1



Test Mode:802.11ac VHT20 5700MHz Chain1

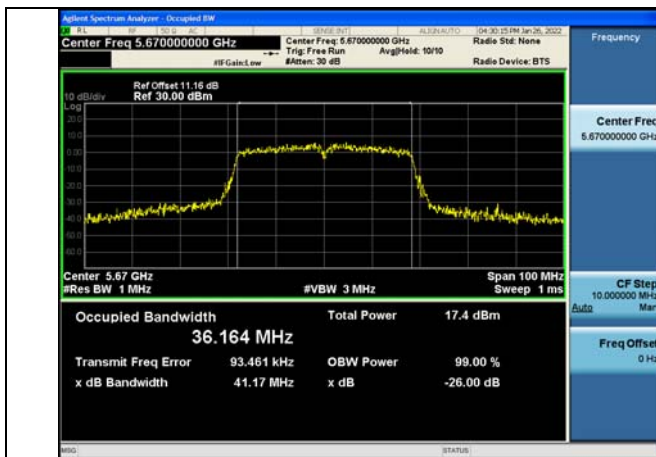
Test Mode: 802.11n HT40



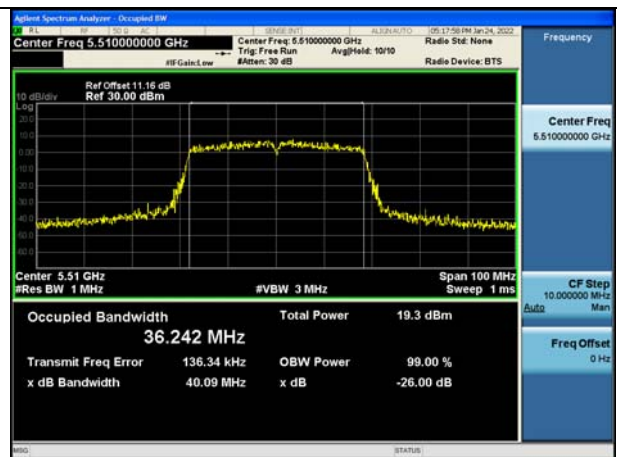
Test Mode:802.11n HT40 5510MHz Chain0



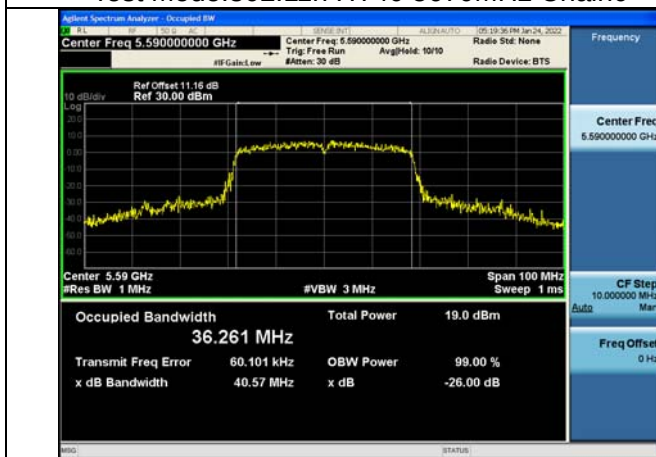
Test Mode:802.11n HT40 5590MHz Chain0



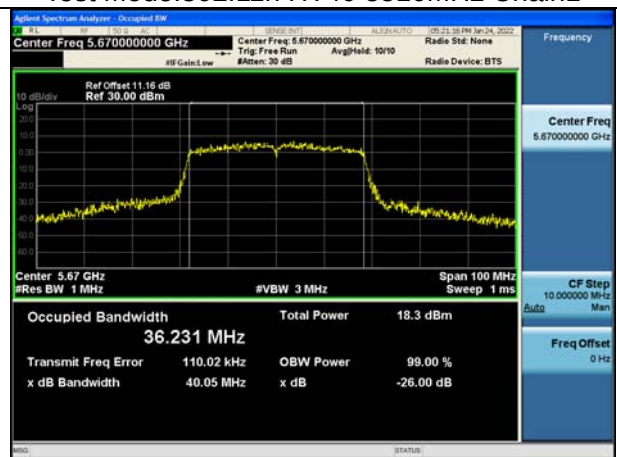
Test Mode:802.11n HT40 5670MHz Chain0



Test Mode:802.11n HT40 5510MHz Chain1

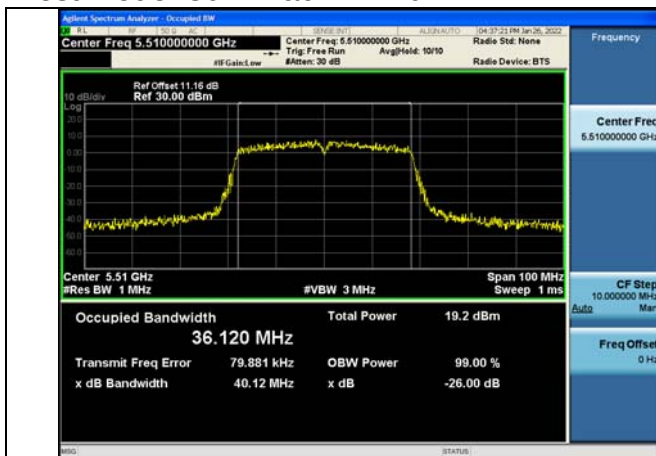


Test Mode:802.11n HT40 5590MHz Chain1

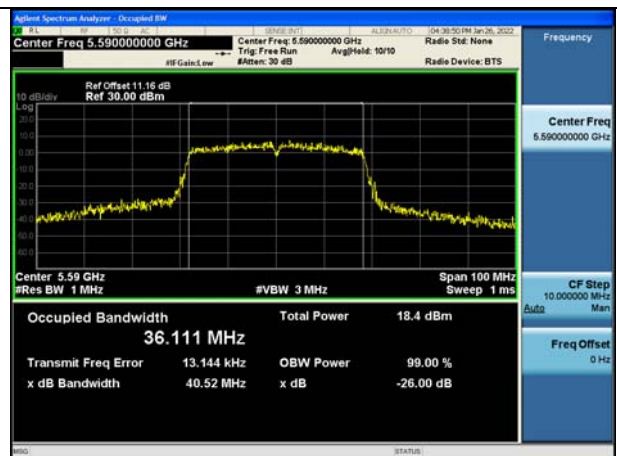


Test Mode:802.11n HT40 5670MHz Chain1

Test Mode: 802.11ac VHT40



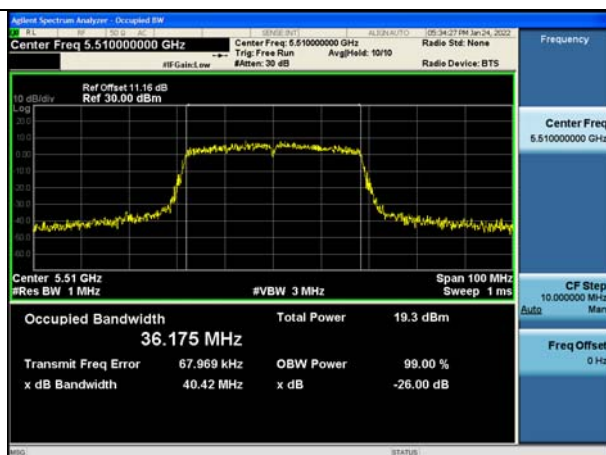
Test Mode:802.11ac VHT40 5510MHz Chain0



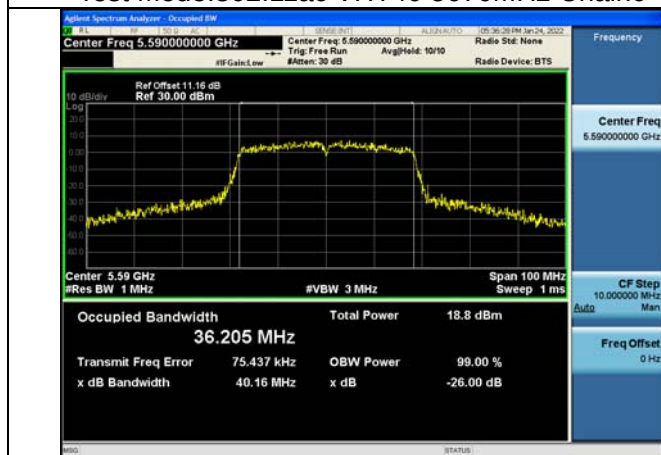
Test Mode:802.11ac VHT40 5590MHz Chain0



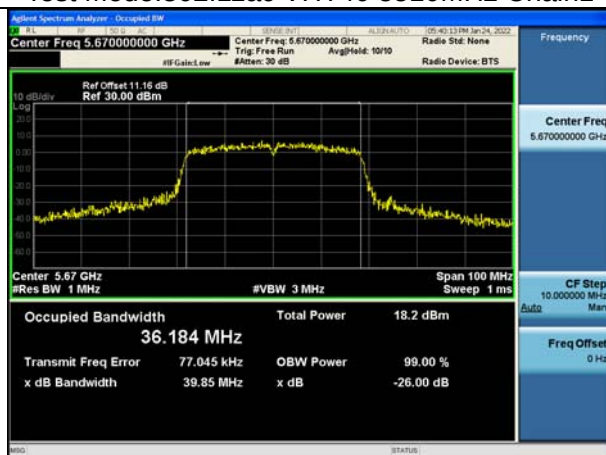
Test Mode:802.11ac VHT40 5670MHz Chain0



Test Mode:802.11ac VHT40 5510MHz Chain1

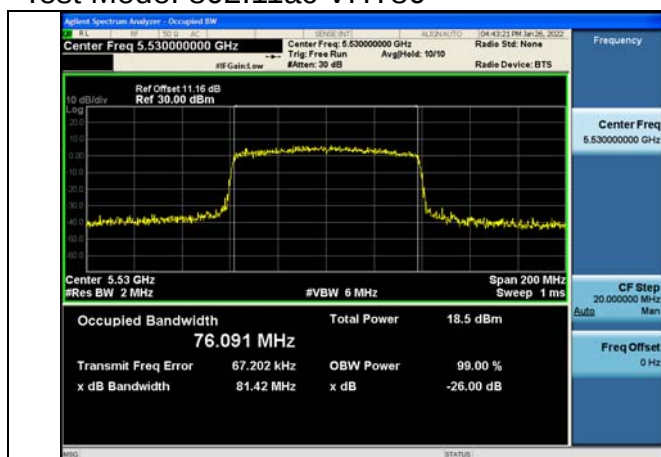


Test Mode:802.11ac VHT40 5590MHz Chain1

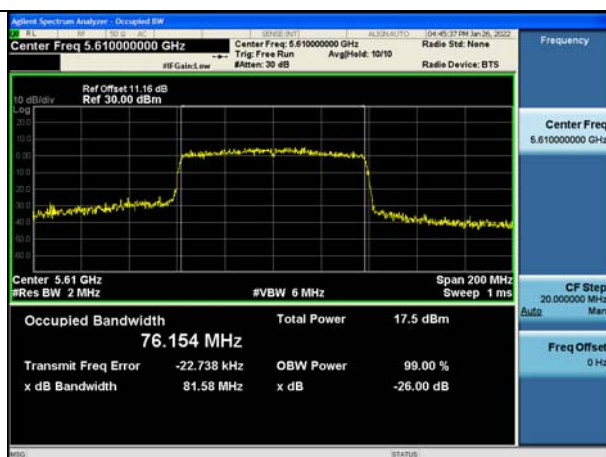


Test Mode:802.11ac VHT40 5670MHz Chain1

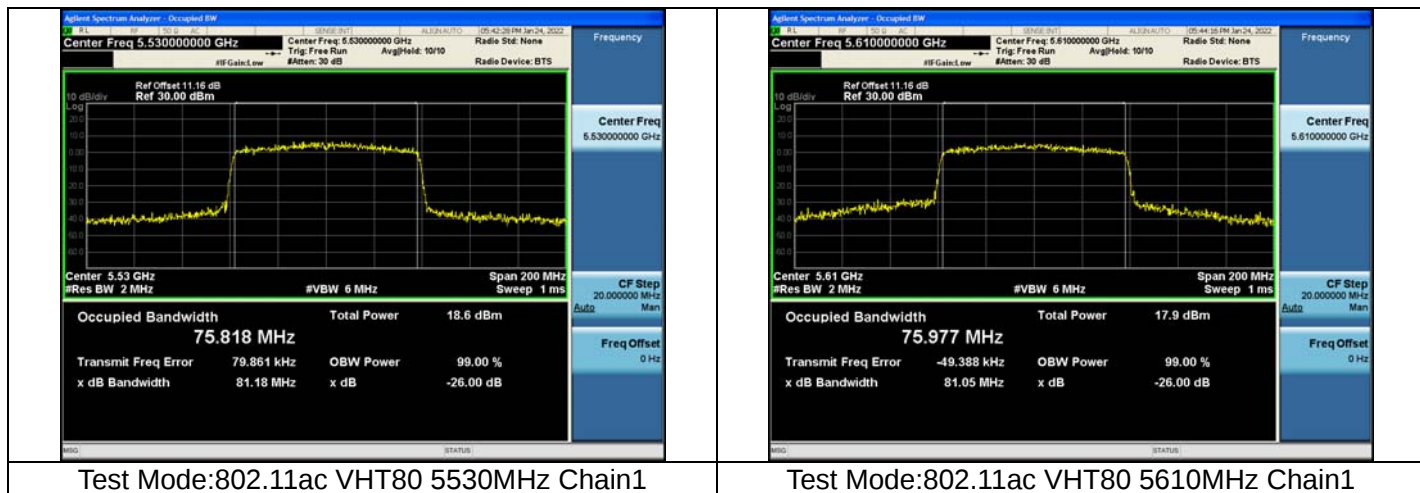
Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5530MHz Chain0



Test Mode:802.11ac VHT80 5610MHz Chain0



Occupied Bandwidth

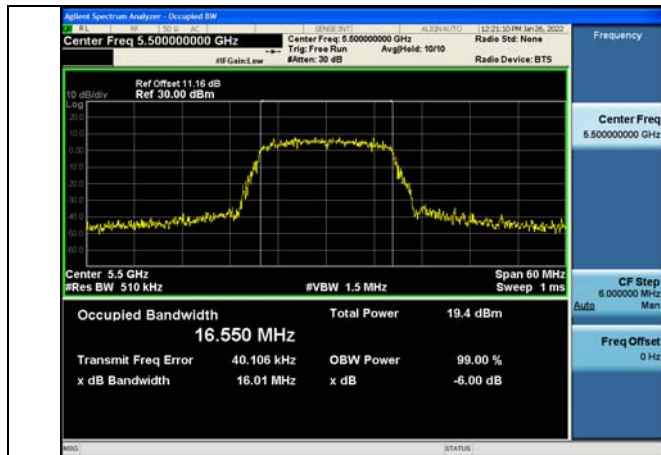
Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.618	Channel No.634	Channel No.658
		5500MHz	5580MHz	5700MHz
802.11a	Chain0	16.550	16.564	16.608
802.11a	Chain1	16.539	16.606	16.652
802.11n HT20	Chain0	17.624	17.697	17.743
802.11n HT20	Chain1	17.634	17.718	17.785
802.11ac VHT20	Chain0	17.740	17.648	17.653
802.11ac VHT20	Chain1	17.735	17.715	17.683

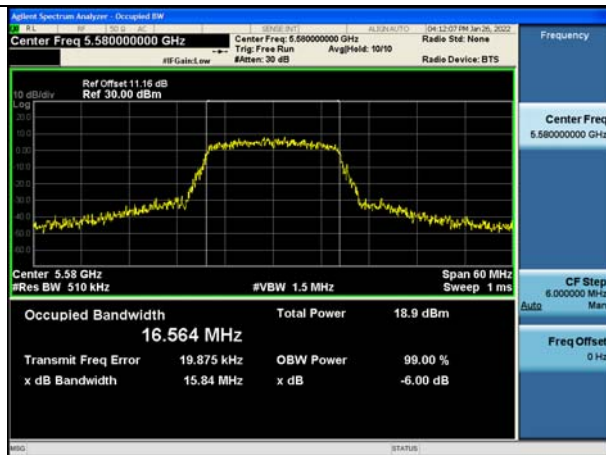
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.620	Channel No.636	Channel No.652
		5510MHz	5590MHz	5670MHz
802.11n HT40	Chain0	36.145	36.215	36.147
802.11n HT40	Chain1	36.188	36.257	36.151
802.11ac VHT40	Chain0	36.218	36.180	36.168
802.11ac VHT40	Chain1	36.176	36.230	36.236

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.624	---	Channel No.640
		5530MHz	---	5610MHz
802.11ac VHT80	Chain0	75.818	---	76.244
802.11ac VHT80	Chain1	75.676	---	75.996

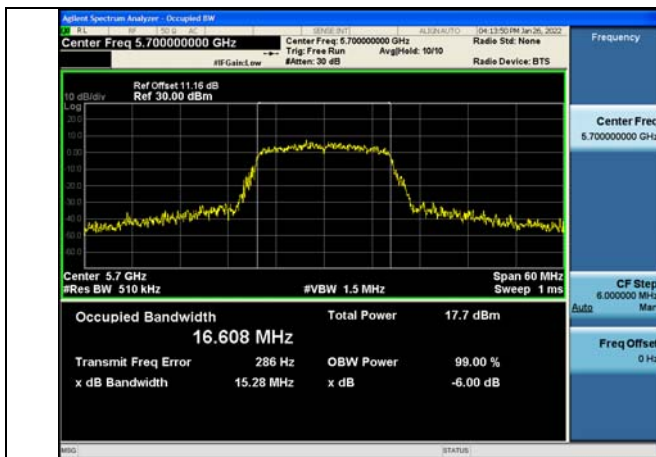
Test Mode: 802.11a



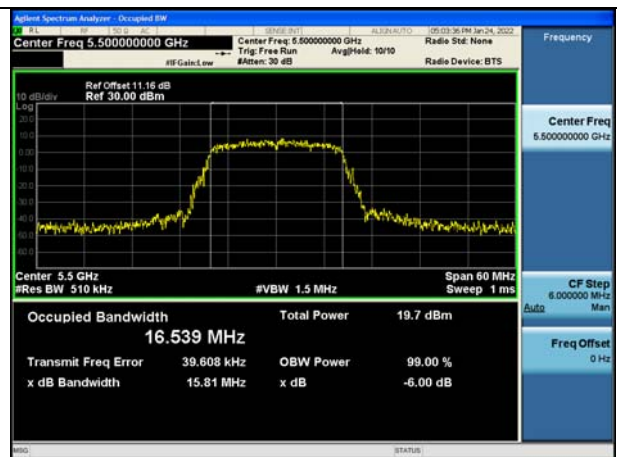
Test Mode:802.11a 5500MHz Chain0



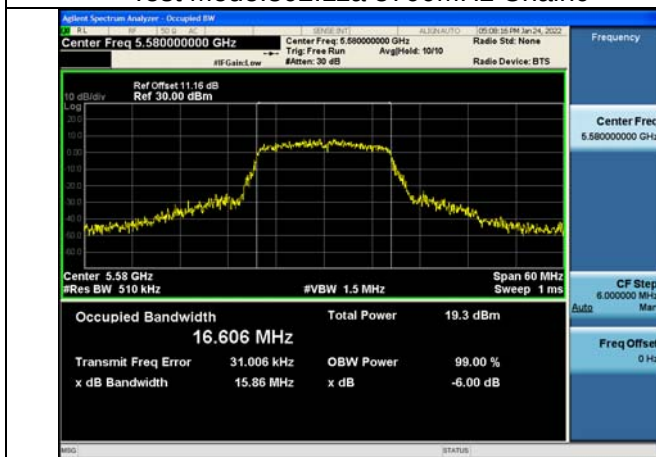
Test Mode:802.11a 5580MHz Chain0



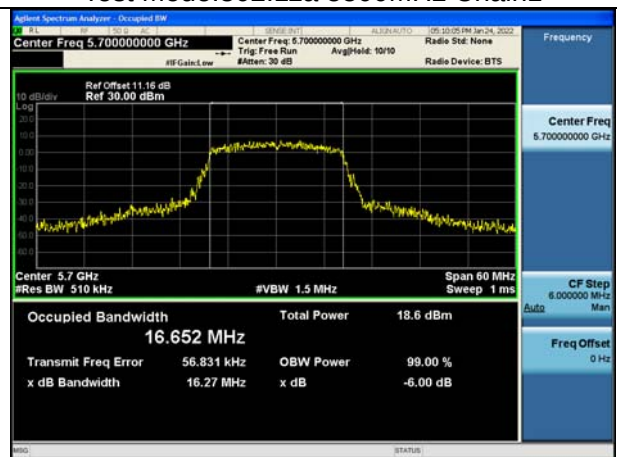
Test Mode:802.11a 5700MHz Chain0



Test Mode:802.11a 5500MHz Chain1

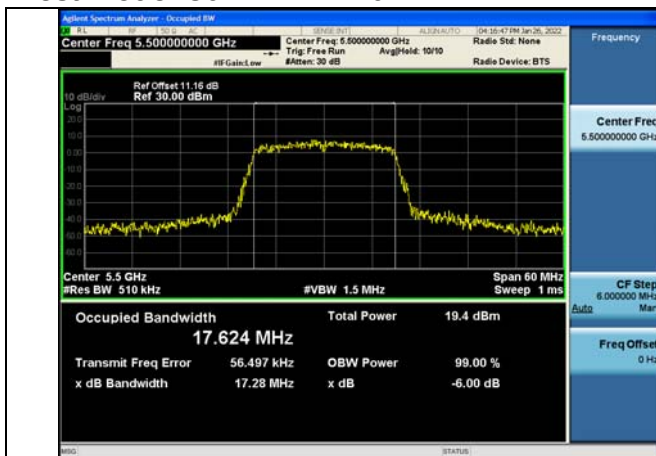


Test Mode:802.11a 5580MHz Chain1

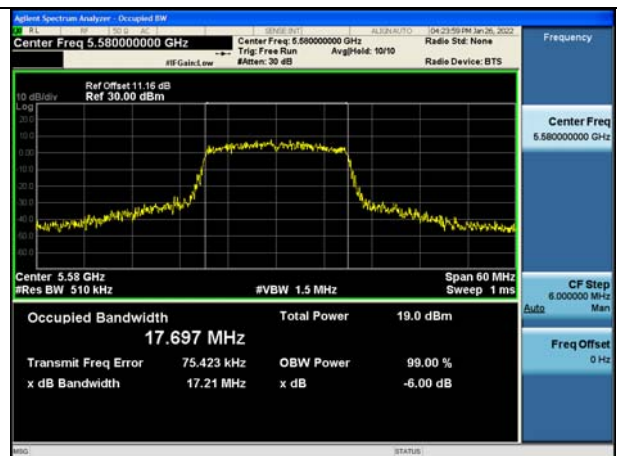


Test Mode:802.11a 5700MHz Chain1

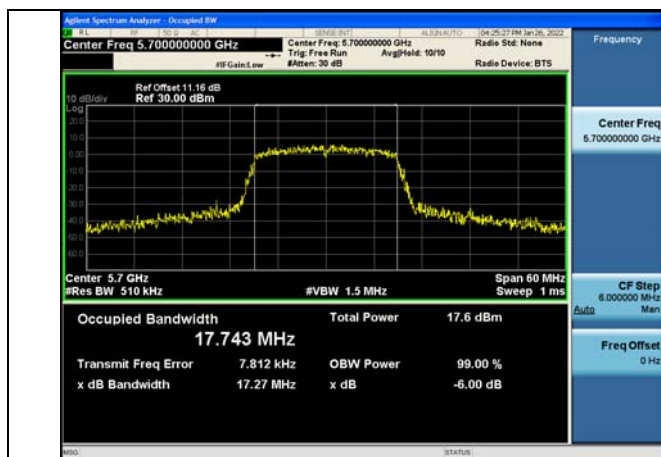
Test Mode: 802.11n HT20



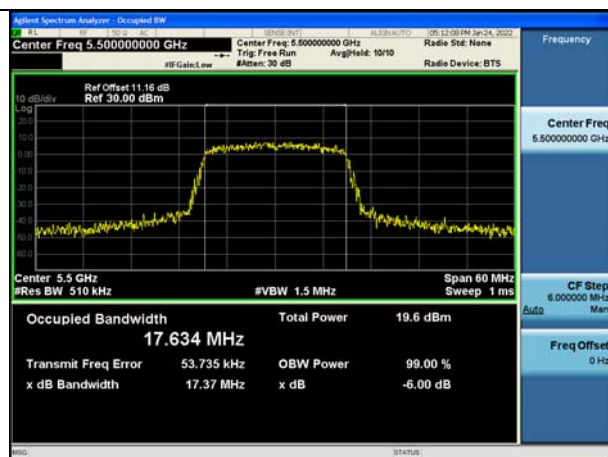
Test Mode:802.11n HT20 5500MHz Chain0



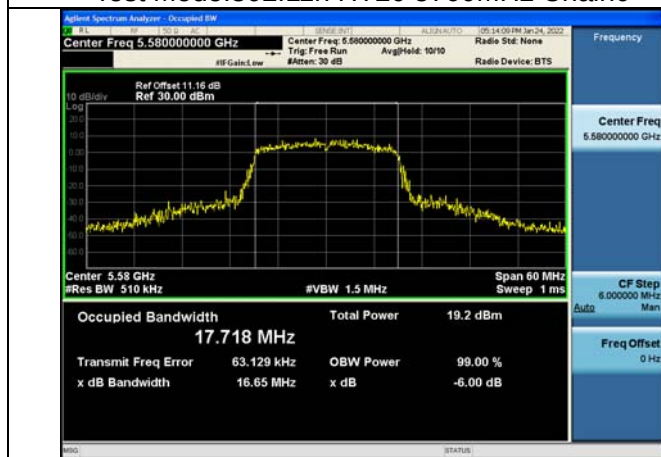
Test Mode:802.11n HT20 5580MHz Chain0



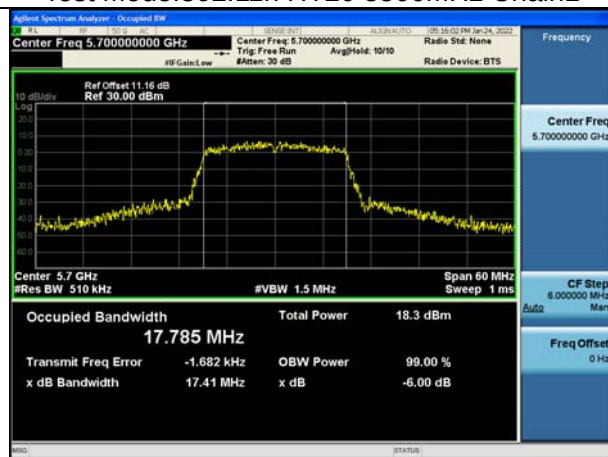
Test Mode:802.11n HT20 5700MHz Chain0



Test Mode:802.11n HT20 5500MHz Chain1

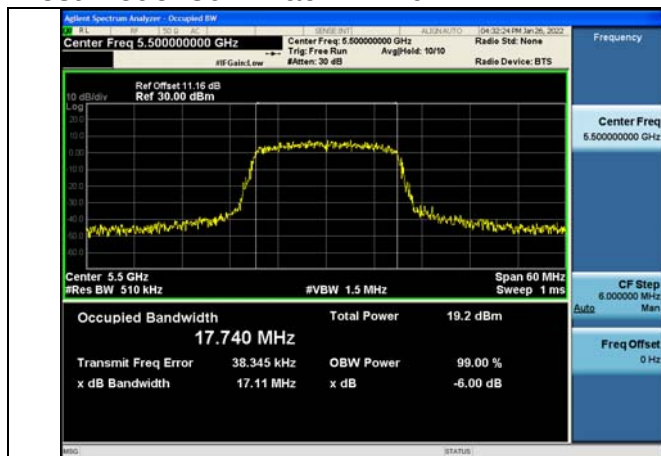


Test Mode:802.11n HT20 5580MHz Chain1

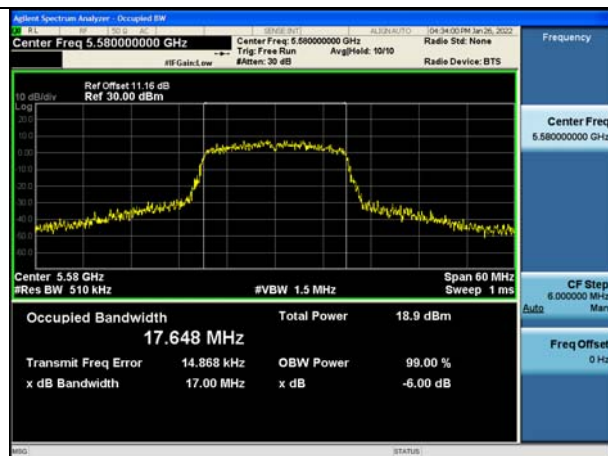


Test Mode:802.11n HT20 5700MHz Chain1

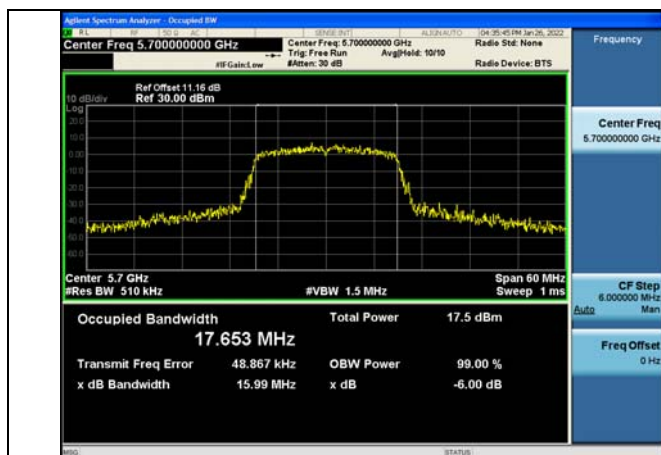
Test Mode: 802.11ac VHT20



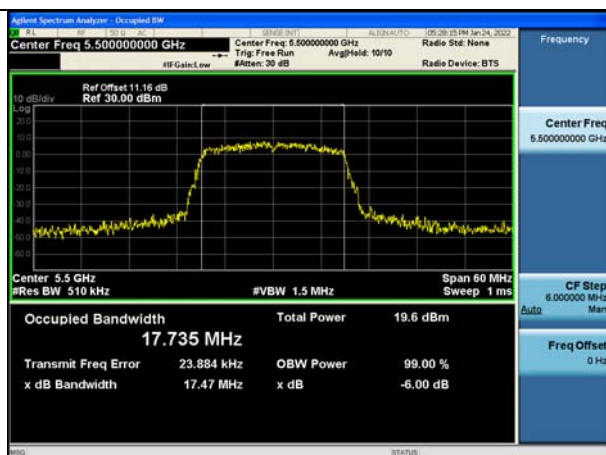
Test Mode:802.11ac VHT20 5500MHz Chain0



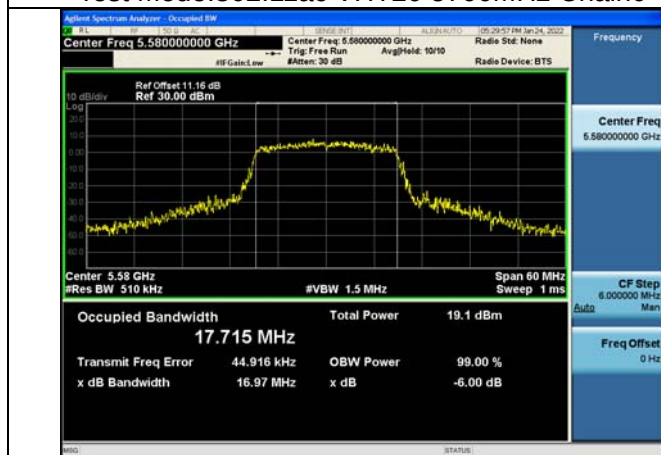
Test Mode:802.11ac VHT20 5580MHz Chain0



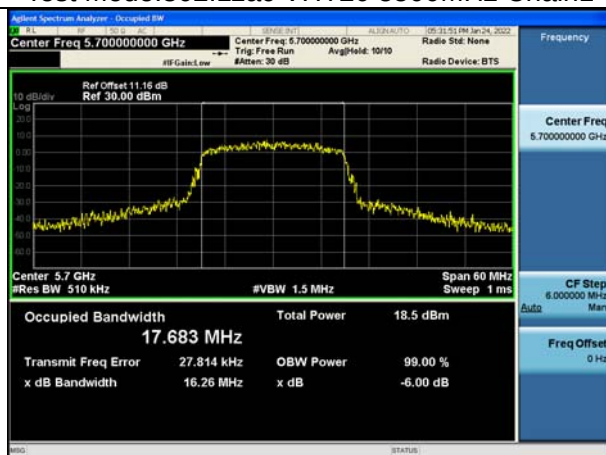
Test Mode:802.11ac VHT20 5700MHz Chain0



Test Mode:802.11ac VHT20 5500MHz Chain1

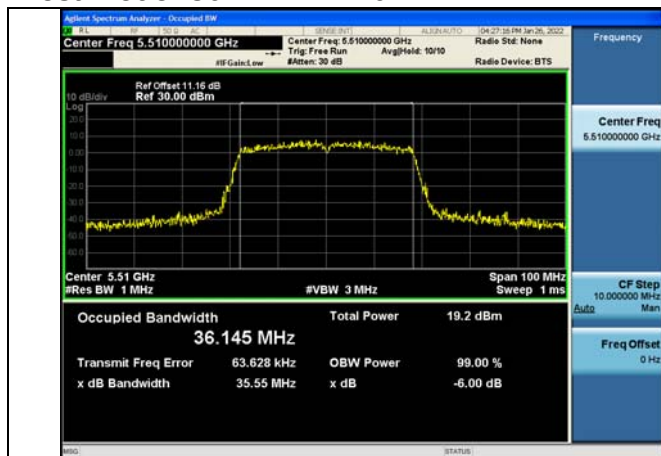


Test Mode:802.11ac VHT20 5580MHz Chain1

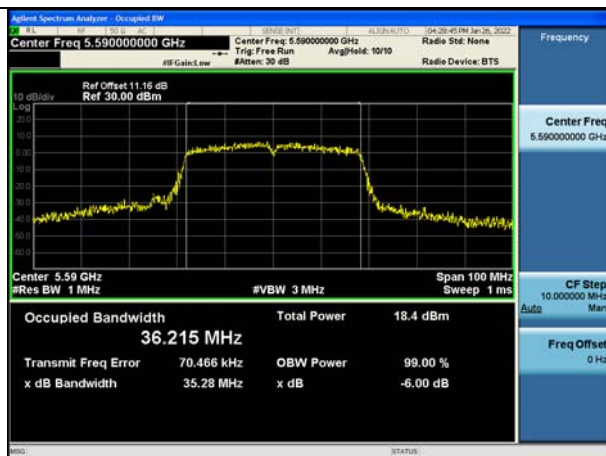


Test Mode:802.11ac VHT20 5700MHz Chain1

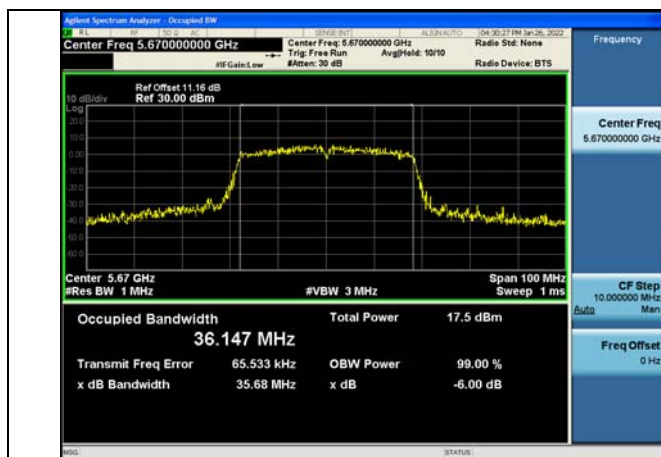
Test Mode: 802.11n HT40



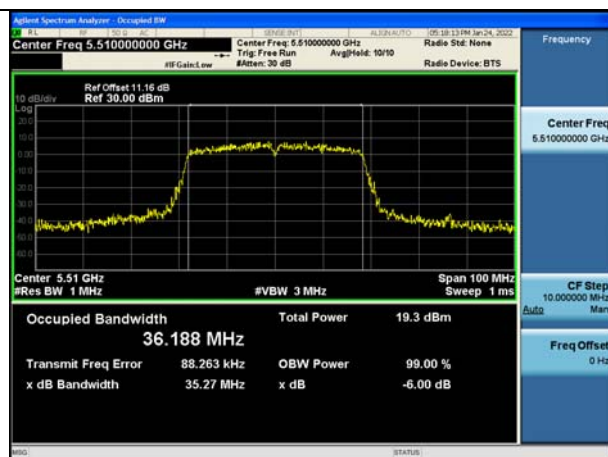
Test Mode:802.11n HT40 5510MHz Chain0



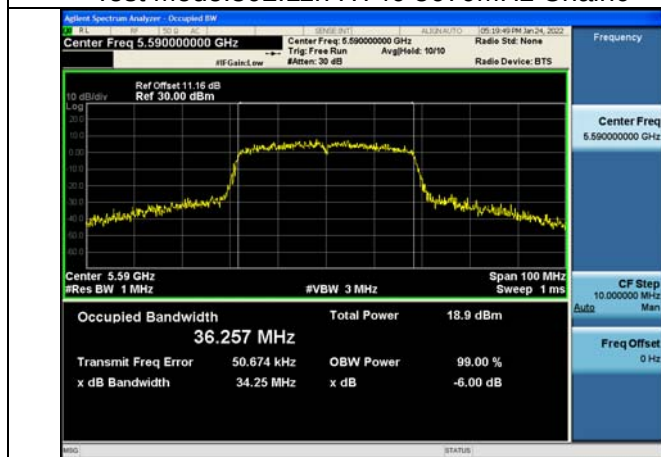
Test Mode:802.11n HT40 5590MHz Chain0



Test Mode:802.11n HT40 5670MHz Chain0



Test Mode:802.11n HT40 5510MHz Chain1

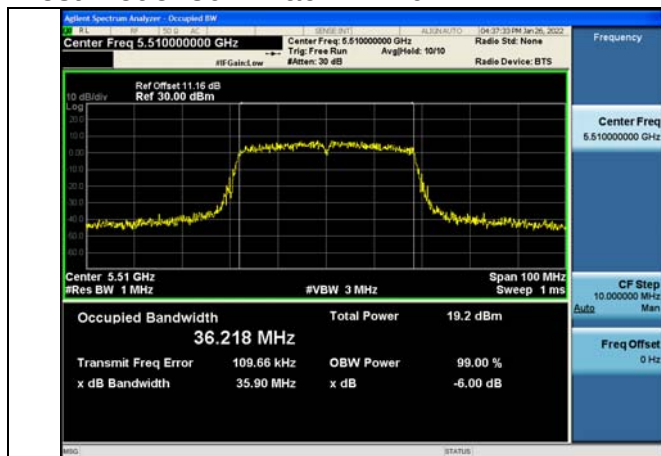


Test Mode:802.11n HT40 5590MHz Chain1

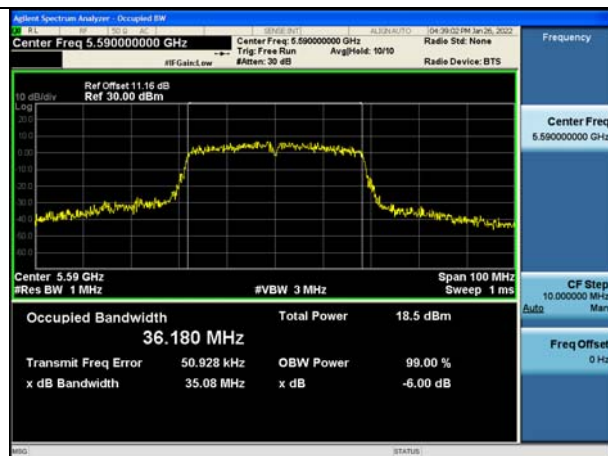


Test Mode:802.11n HT40 5670MHz Chain1

Test Mode: 802.11ac VHT40



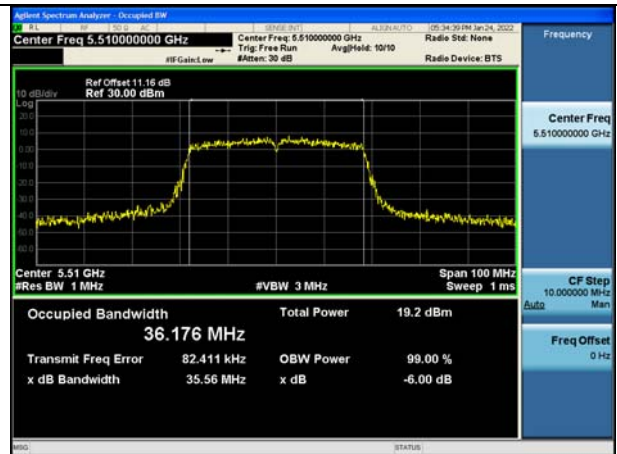
Test Mode:802.11ac VHT40 5510MHz Chain0



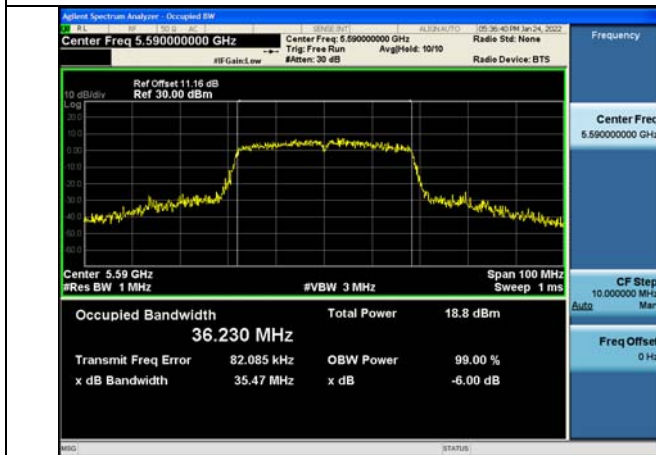
Test Mode:802.11ac VHT40 5590MHz Chain0



Test Mode:802.11ac VHT40 5670MHz Chain0



Test Mode:802.11ac VHT40 5510MHz Chain1

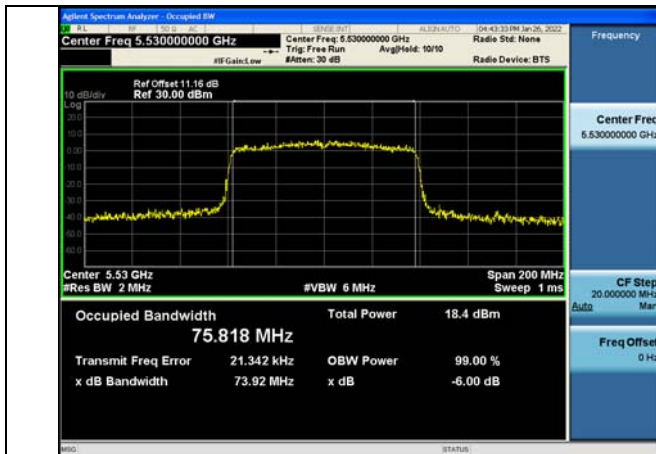


Test Mode:802.11ac VHT40 5590MHz Chain1



Test Mode:802.11ac VHT40 5670MHz Chain1

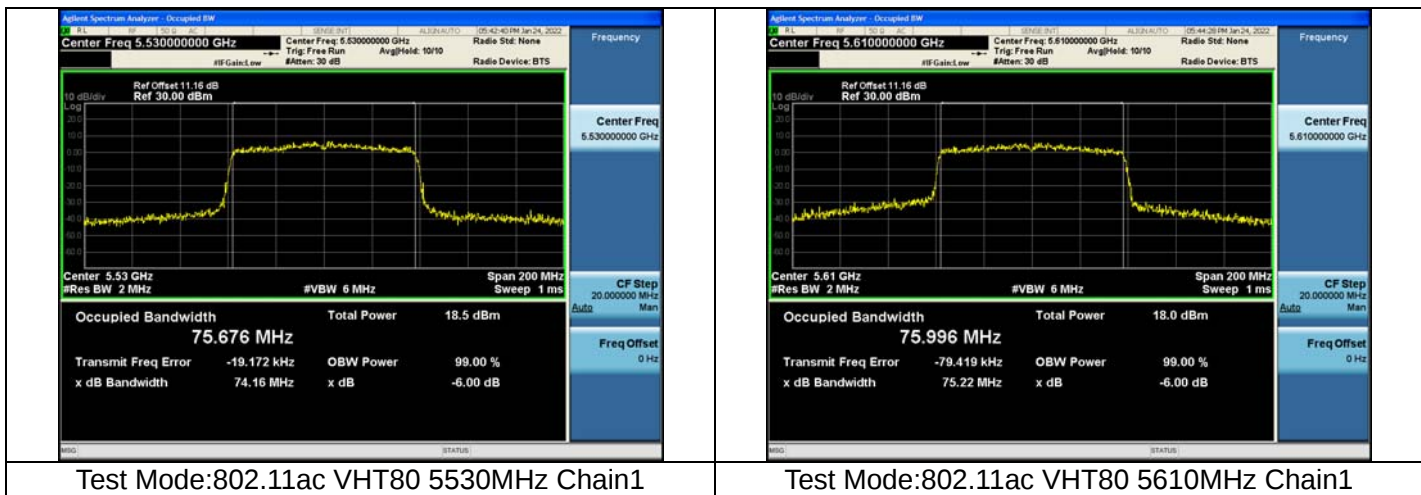
Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5530MHz Chain0



Test Mode:802.11ac VHT80 5610MHz Chain0



Transmitter Power Spectral Density

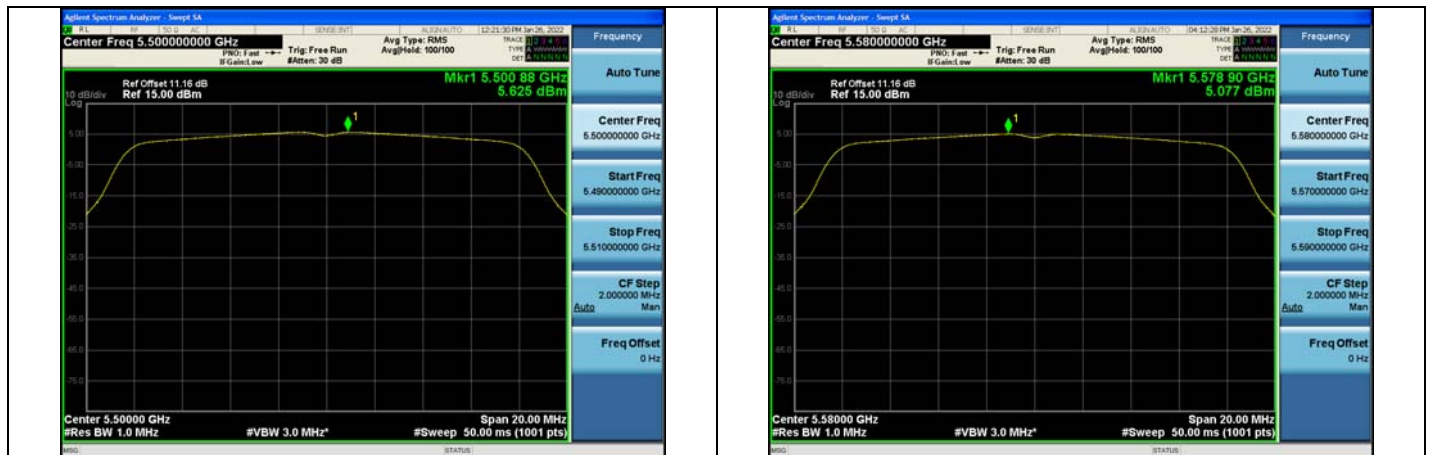
Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	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	0	5.625	0	5.077	0	3.893
802.11a	Chain1	0	6.001	0	5.531	0	4.637
802.11n HT20	Chain0	0	5.353	0	4.779	0	3.649
802.11n HT20	Chain1	0	5.632	0	5.187	0	4.402
802.11n HT20	MIMO	0	8.505	0	7.998	0	7.052
802.11a c VHT20	Chain0	0	5.331	0	4.854	0	3.719
802.11a c VHT20	Chain1	0	5.606	0	5.091	0	4.385
802.11a c VHT20	MIMO	0	8.481	0	7.984	0	7.075

Test Mode	Antenna	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	0.12	2.535	0.12	1.619	0.12	0.706
802.11n HT40	Chain1	0.12	2.625	0.12	2.157	0.12	1.713
802.11n HT40	MIMO	0.12	5.591	0.12	4.907	0.12	4.249
802.11a c VHT40	Chain0	0.12	2.415	0.12	1.774	0.12	0.771
802.11a c VHT40	Chain1	0.12	2.601	0.12	2.068	0.12	1.467
802.11a c VHT40	MIMO	0.12	5.519	0.12	4.934	0.12	4.143

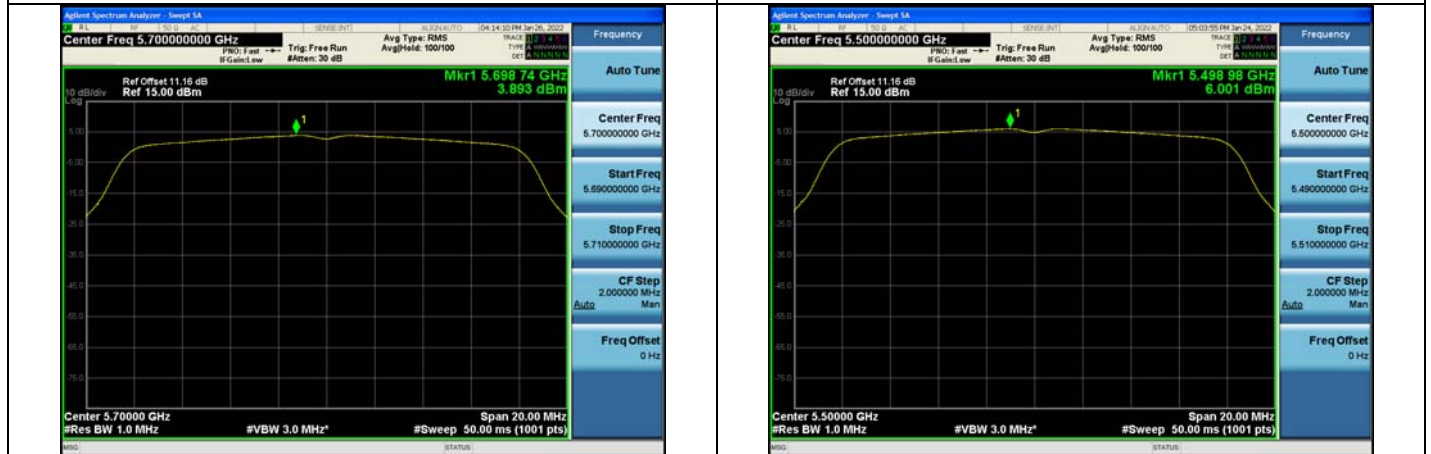
Test Mode	Antenna	5530MHz		---		5610MHz	
		Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11a c VHT80	Chain0	0.23	-0.774	---	---	0.23	-1.935
802.11a c VHT80	Chain1	0.23	-0.656	---	---	0.23	-1.492
802.11a c VHT80	MIMO	0.23	2.296		---	0.23	1.302

Test Mode: 802.11a



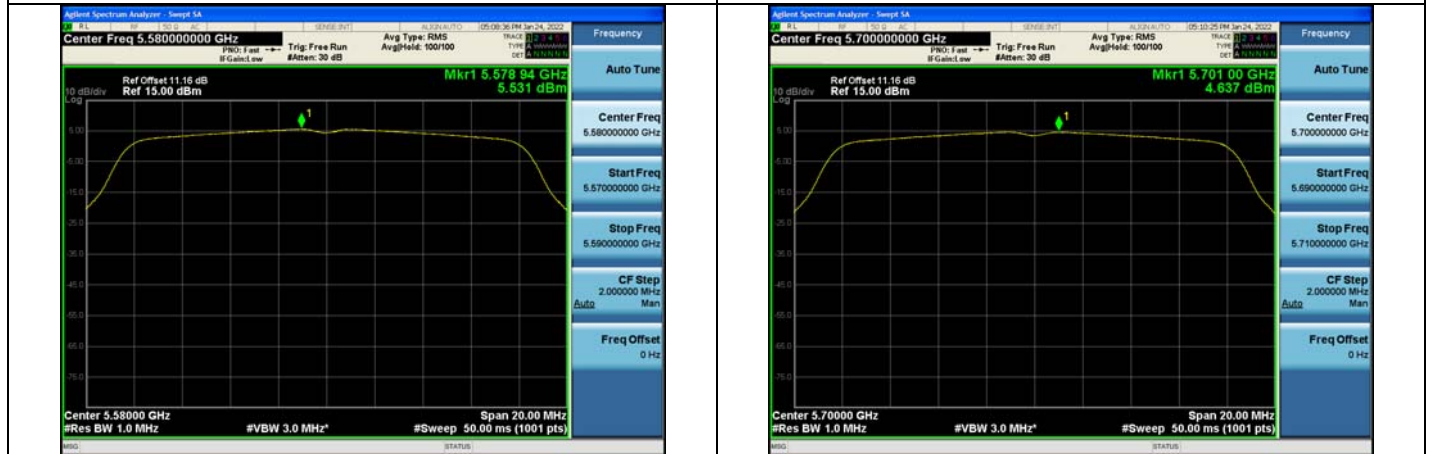
Test Mode:802.11a 5500MHz Chain0

Test Mode:802.11a 5580MHz Chain0



Test Mode:802.11a 5700MHz Chain0

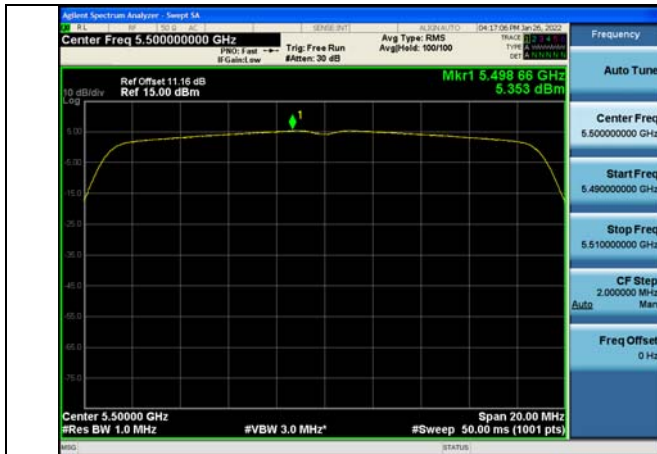
Test Mode:802.11a 5500MHz Chain1



Test Mode:802.11a 5580MHz Chain1

Test Mode:802.11a 5700MHz Chain1

Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5500MHz Chain0



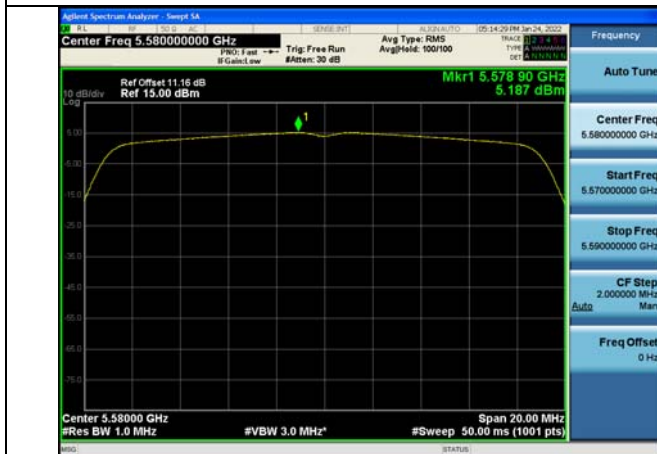
Test Mode:802.11n HT20 5580MHz Chain0



Test Mode:802.11n HT20 5700MHz Chain0



Test Mode:802.11n HT20 5500MHz Chain1

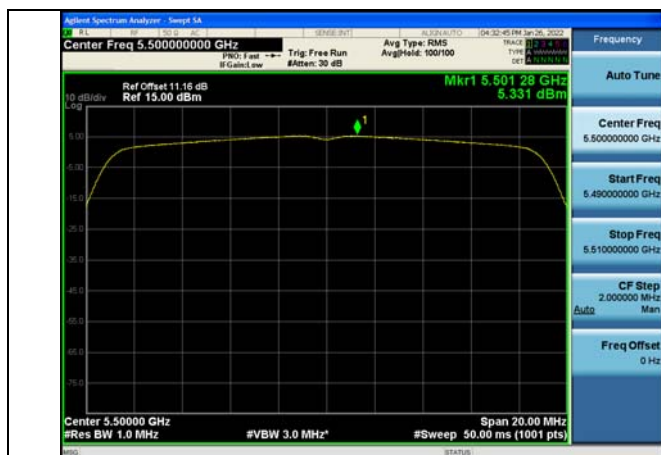


Test Mode:802.11n HT20 5580MHz Chain1



Test Mode:802.11n HT20 5700MHz Chain1

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:802.11ac VHT20 5500MHz Chain1



Test Mode:802.11ac VHT20 5580MHz Chain1



Test Mode:802.11ac VHT20 5700MHz Chain1

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:802.11n HT40 5510MHz Chain1



Test Mode:802.11n HT40 5590MHz Chain1



Test Mode:802.11n HT40 5670MHz Chain1

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 VHT40 5510MHz Chain1



Test Mode:802.11ac VHT40 5590MHz Chain1



Test Mode:802.11ac VHT40 5670MHz Chain1

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5530MHz Chain0



Test Mode:802.11ac VHT80 5610MHz Chain0



Test Mode:802.11ac VHT80 5530MHz Chain1



Test Mode:802.11ac VHT80 5610MHz Chain1