

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5745	98.70%	0
802.11n HT20	5745	98.42%	0
802.11ac VHT20	5745	98.39%	0
802.11n HT40	5755	96.94%	0.14
802.11ac VHT40	5755	97.06%	0.13
802.11ac VHT80	5775	94.53%	0.24

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	5745	Chain0	13.08	11.58
802.11a	NA	5785	Chain0	13.19	11.69
802.11a	NA	5825	Chain0	12.59	11.09
802.11n HT20	NA	5745	Chain0	13.98	12.48
802.11n HT20	NA	5785	Chain0	13.98	12.48
802.11n HT20	NA	5825	Chain0	13.59	12.09
802.11ac VHT20	NA	5745	Chain0	13.04	11.54
802.11ac VHT20	NA	5785	Chain0	12.97	11.47
802.11ac VHT20	NA	5825	Chain0	12.34	10.84
802.11n HT40	NA	5755	Chain0	13.90	12.40
802.11n HT40	NA	5795	Chain0	13.81	12.31
802.11ac VHT40	NA	5755	Chain0	13.97	12.47
802.11ac VHT40	NA	5795	Chain0	13.83	12.33
802.11ac VHT80	NA	5775	Chain0	12.52	11.02

Emission Bandwidth

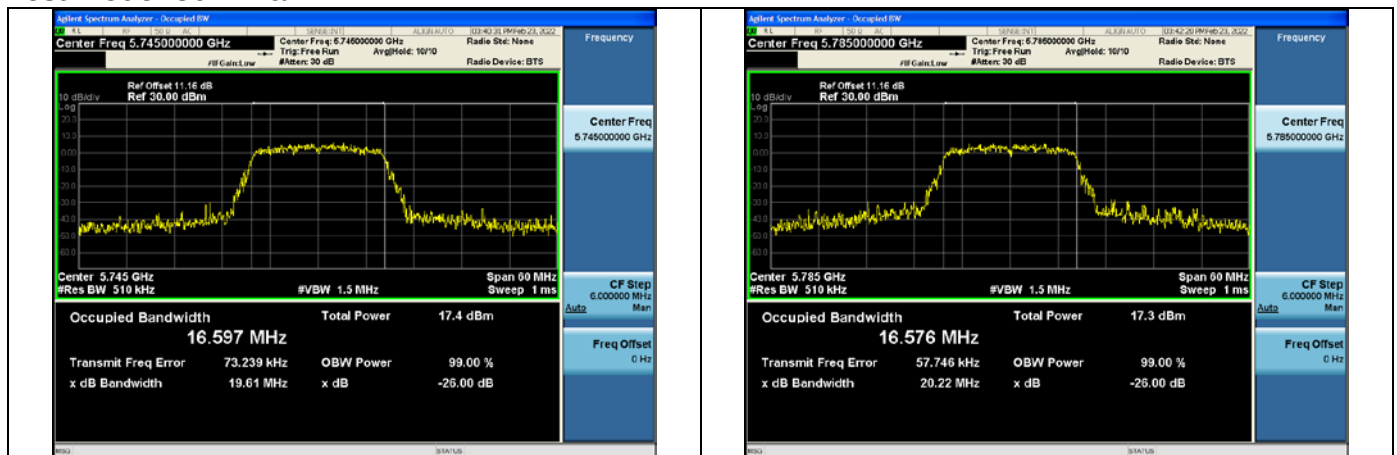
Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.667 5745MHz	Channel No.675 5785MHz	Channel No.683 5825MHz
802.11a	Chain0	19.61	20.22	19.61
802.11n HT20	Chain0	20.20	22.60	20.11
802.11ac VHT20	Chain0	20.16	20.42	20.17

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.669 5755MHz	---	Channel No.677 5795MHz
802.11n HT40	Chain0	39.91	---	40.44
802.11ac VHT40	Chain0	39.81	---	39.59

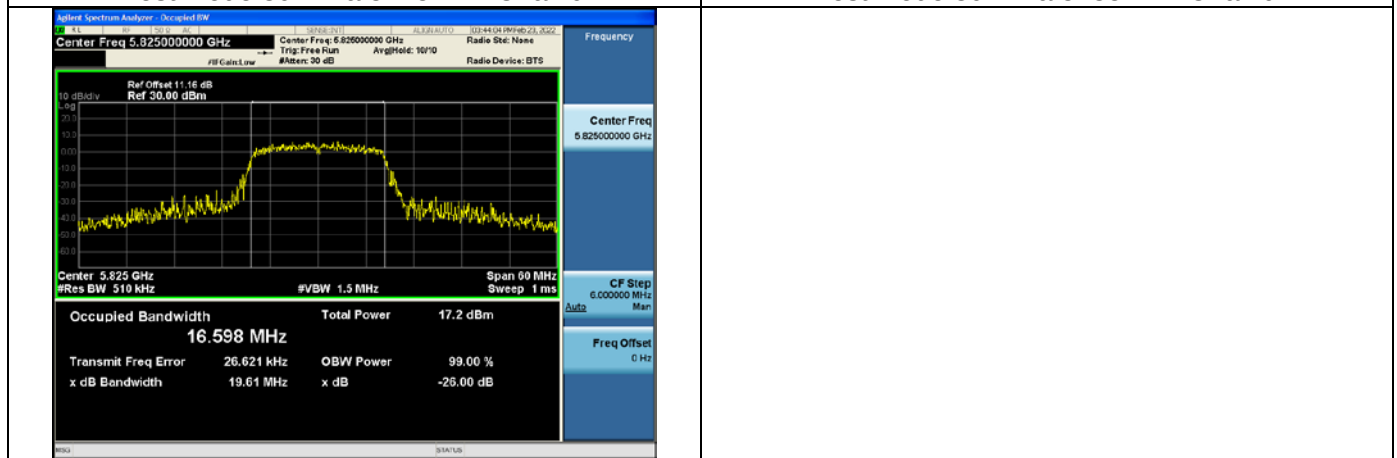
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.673 5775MHz	---	---
802.11ac VHT80	Chain0	179.28	---	---

Test Mode: 802.11a



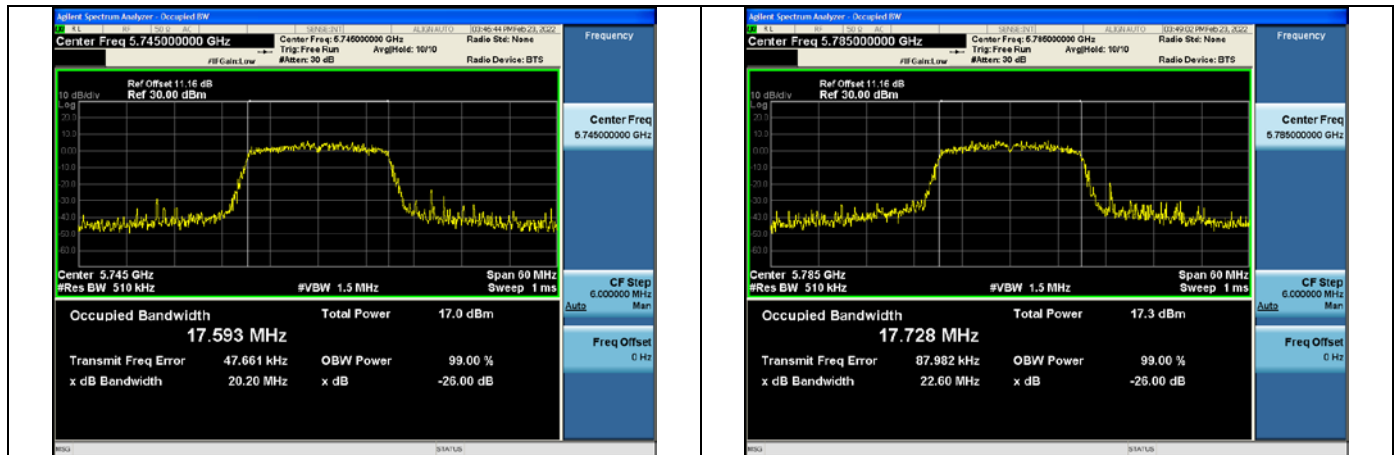
Test Mode:802.11a 5745MHz Chain0

Test Mode:802.11a 5785MHz Chain0



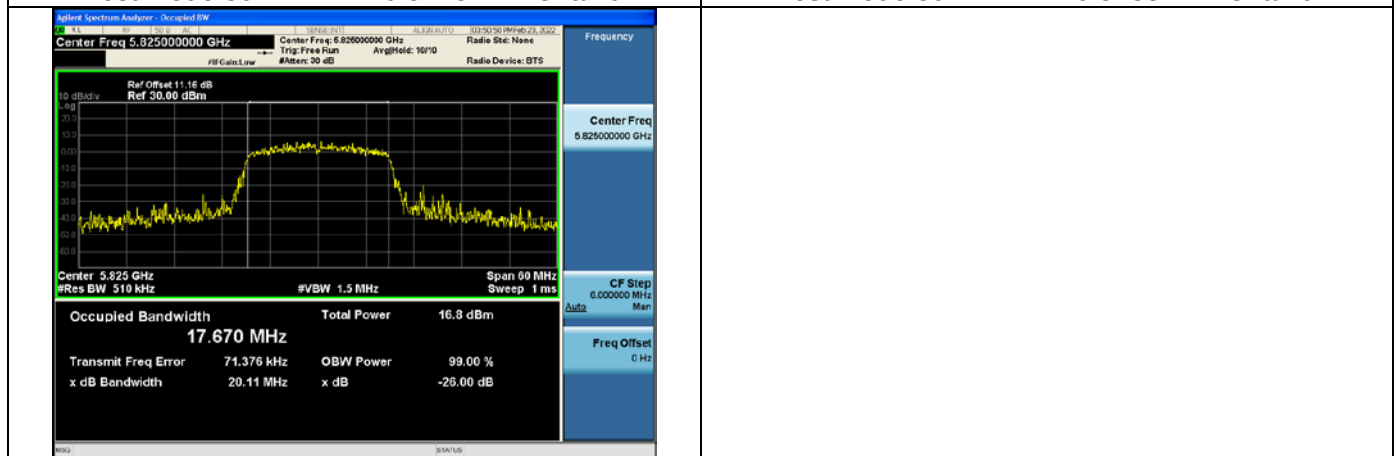
Test Mode:802.11a 5825MHz Chain0

Test Mode: 802.11n HT20



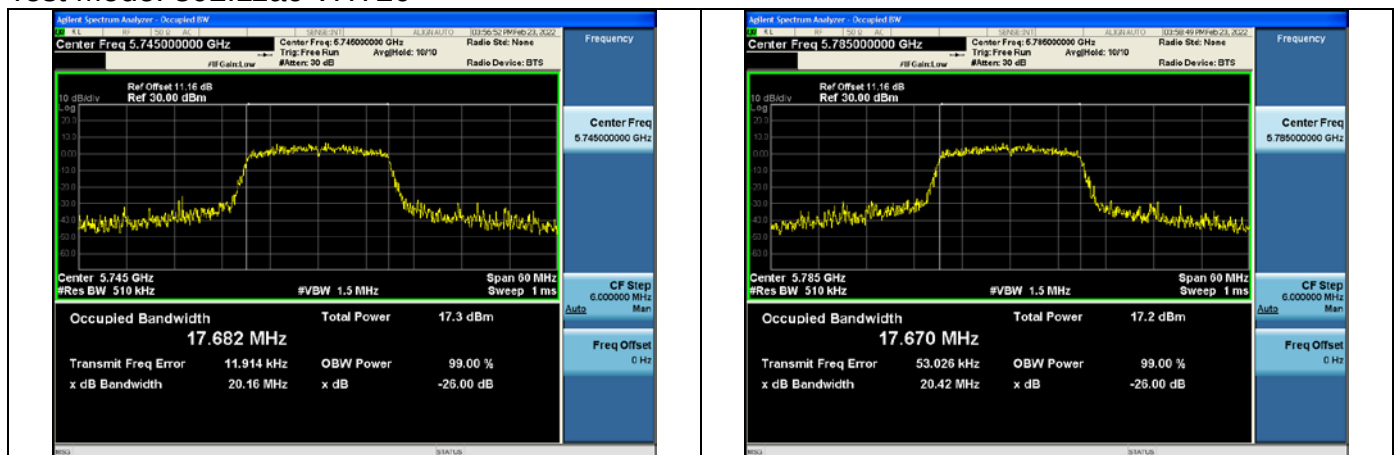
Test Mode:802.11n HT20 5745MHz Chain0

Test Mode:802.11n HT20 5785MHz Chain0



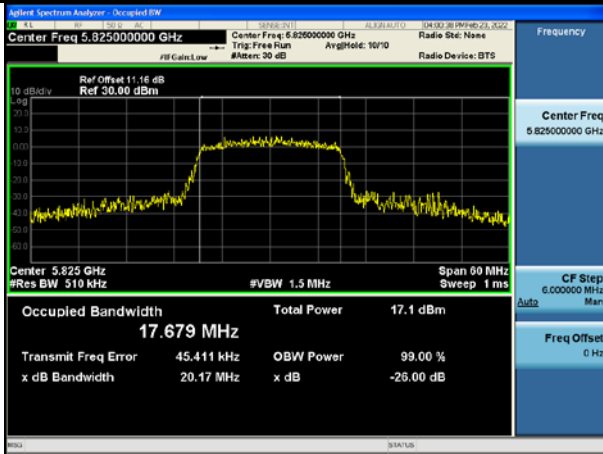
Test Mode:802.11n HT20 5825MHz Chain0

Test Mode: 802.11ac VHT20



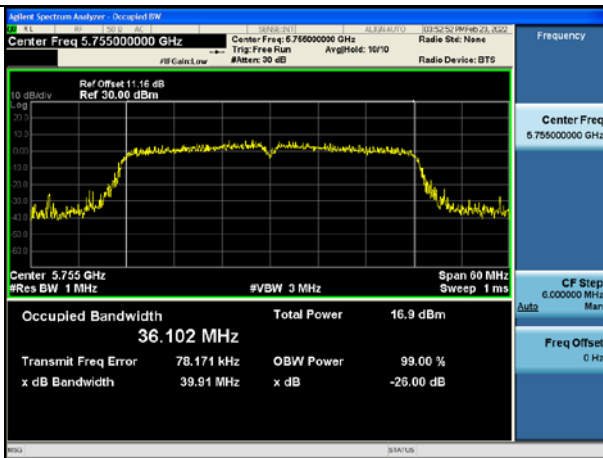
Test Mode:802.11ac VHT20 5745MHz Chain0

Test Mode:802.11ac VHT20 5785MHz Chain0

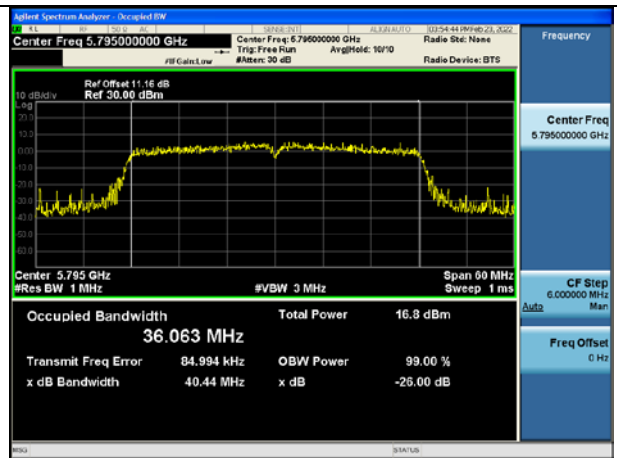


Test Mode:802.11ac VHT20 5825MHz Chain0

Test Mode: 802.11n HT40

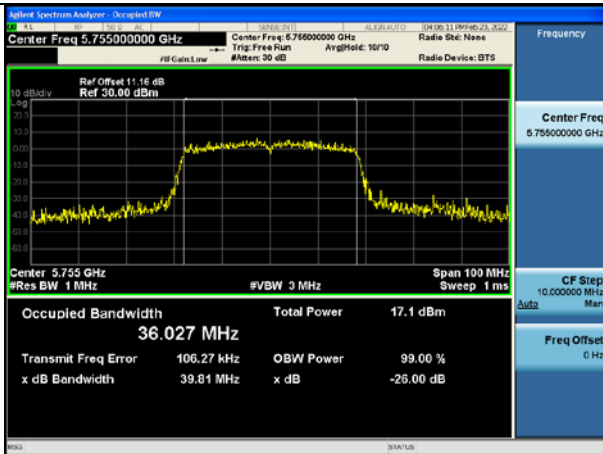


Test Mode:802.11n HT40 5755MHz Chain0

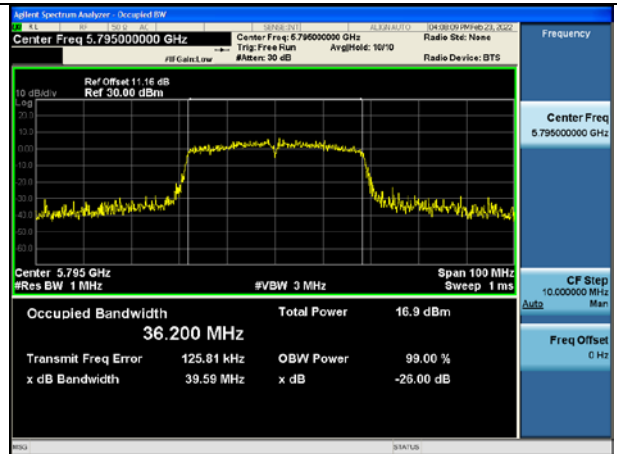


Test Mode:802.11n HT40 5795MHz Chain0

Test Mode: 802.11ac VHT40



Test Mode:802.11ac VHT40 5755MHz Chain0



Test Mode:802.11ac VHT40 5795MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode: 802.11ac VHT80 5775MHz Chain0

Occupied Bandwidth

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

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.667	Channel No.675	Channel No.683
		5745MHz	5785MHz	5825MHz
802.11a	Chain0	16.607	16.498	16.543
802.11n HT20	Chain0	17.643	17.711	17.673
802.11ac VHT20	Chain0	17.667	17.615	17.764

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.669	---	Channel No.677
		5755MHz	---	5795MHz
802.11n HT40	Chain0	36.131	---	36.146
802.11ac VHT40	Chain0	36.177	---	36.147

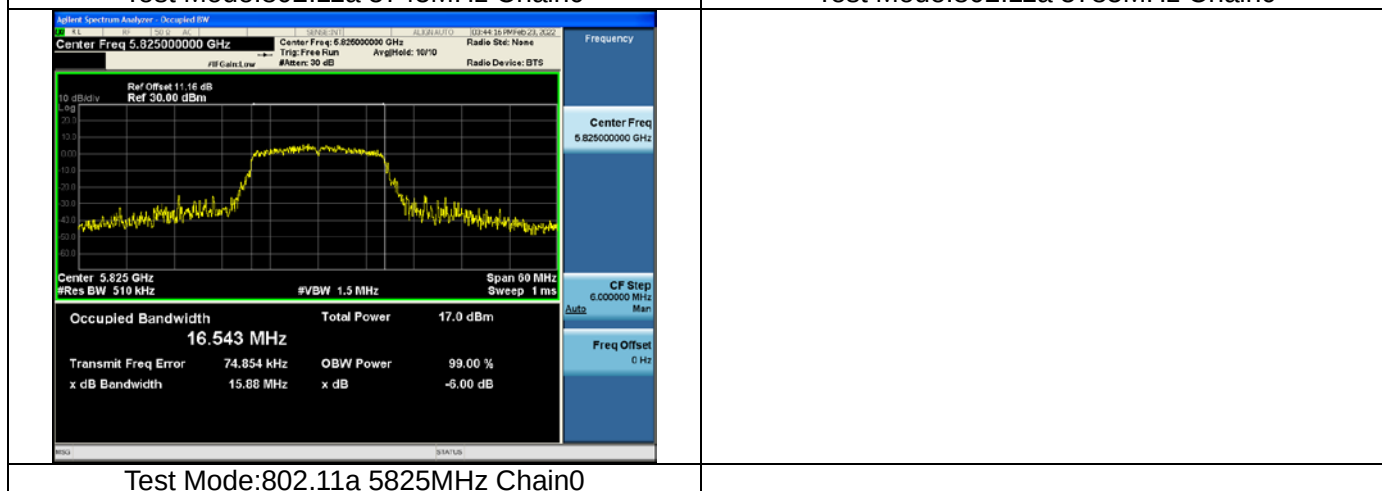
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.673	---	---
		5775MHz	---	---
802.11ac VHT80	Chain0	81.850	---	---

Test Mode: 802.11a



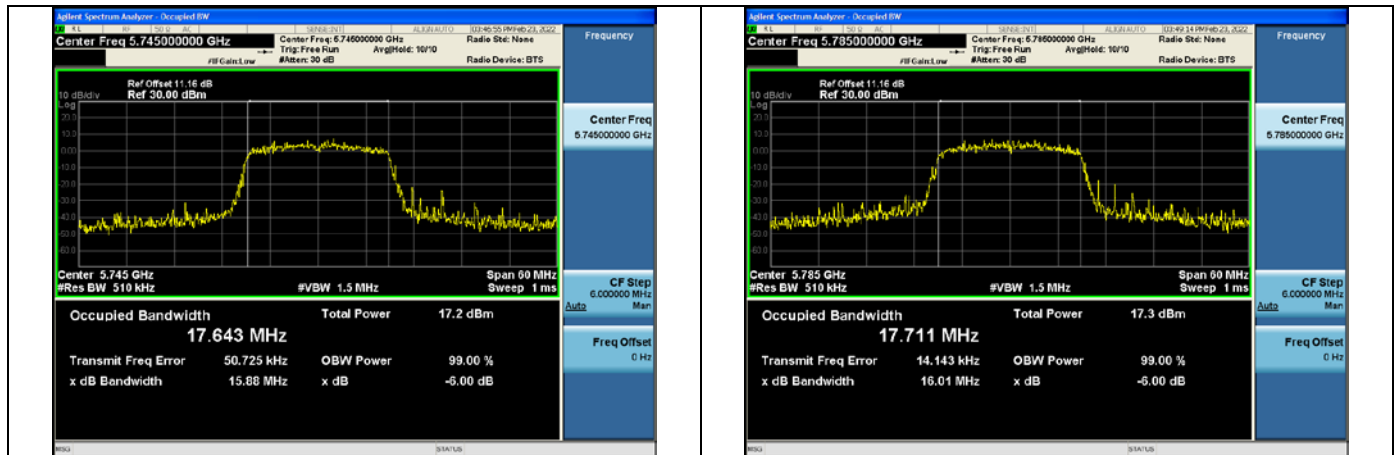
Test Mode:802.11a 5745MHz Chain0

Test Mode:802.11a 5785MHz Chain0



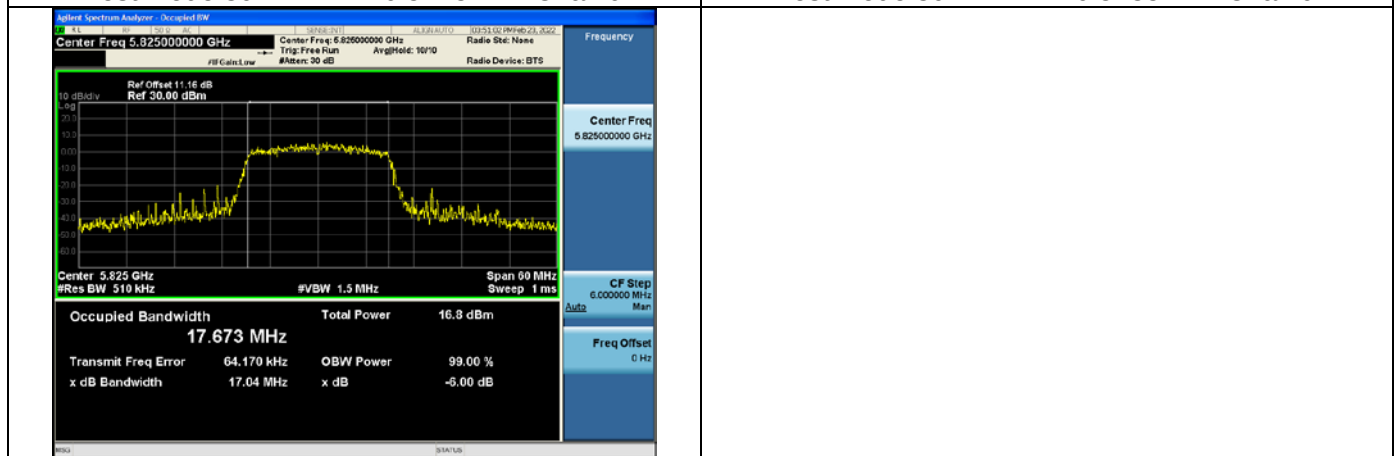
Test Mode:802.11a 5825MHz Chain0

Test Mode: 802.11n HT20



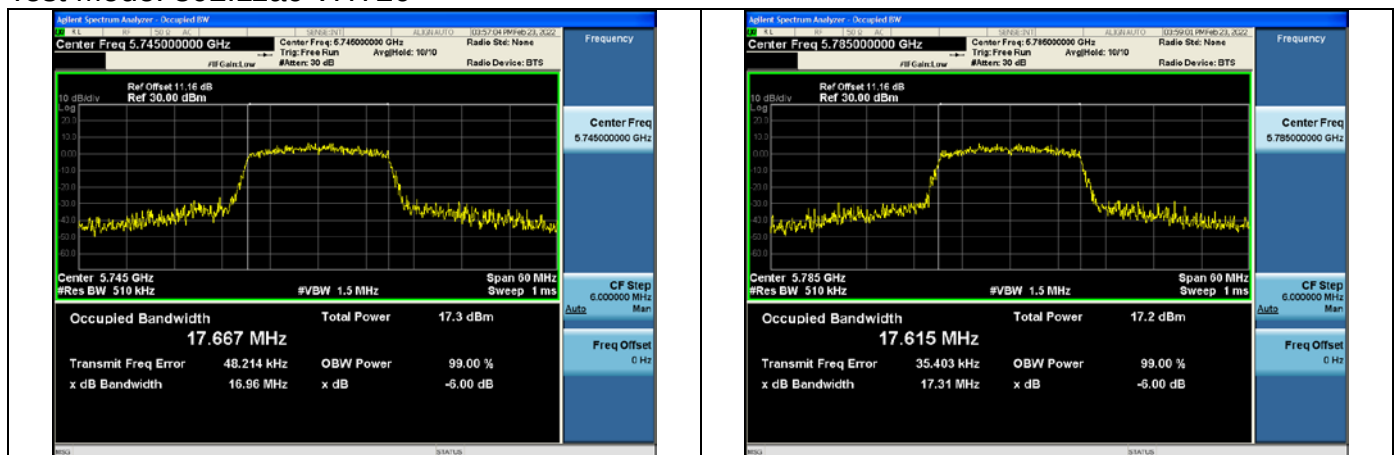
Test Mode:802.11n HT20 5745MHz Chain0

Test Mode:802.11n HT20 5785MHz Chain0



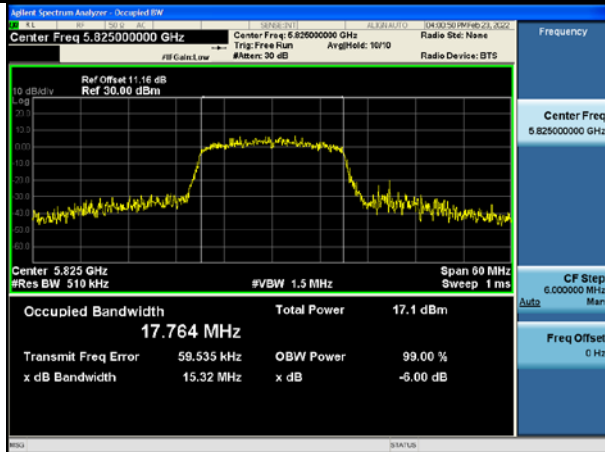
Test Mode:802.11n HT20 5825MHz Chain0

Test Mode: 802.11ac VHT20



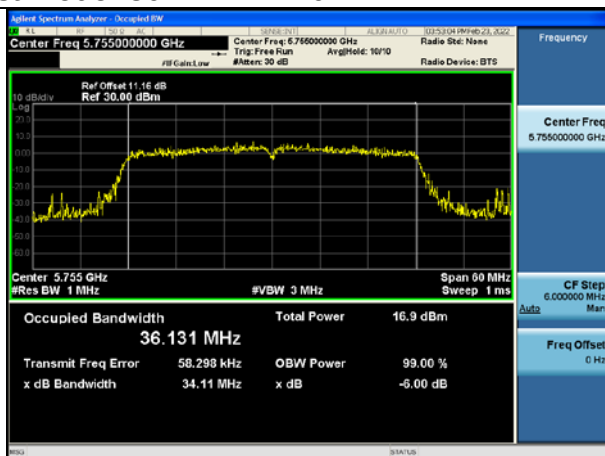
Test Mode:802.11ac VHT20 5745MHz Chain0

Test Mode:802.11ac VHT20 5785MHz Chain0

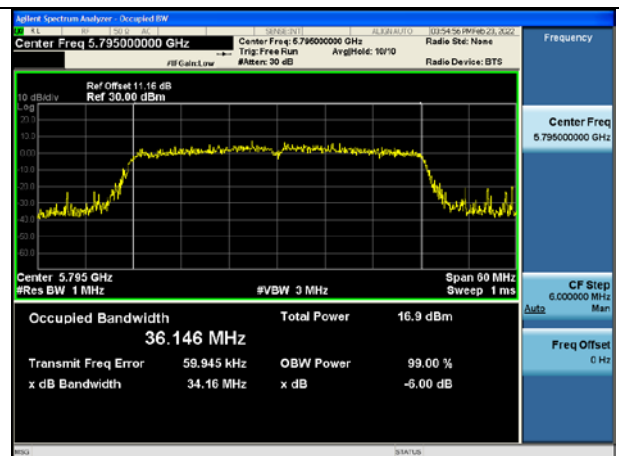


Test Mode:802.11ac VHT20 5825MHz Chain0

Test Mode: 802.11n HT40

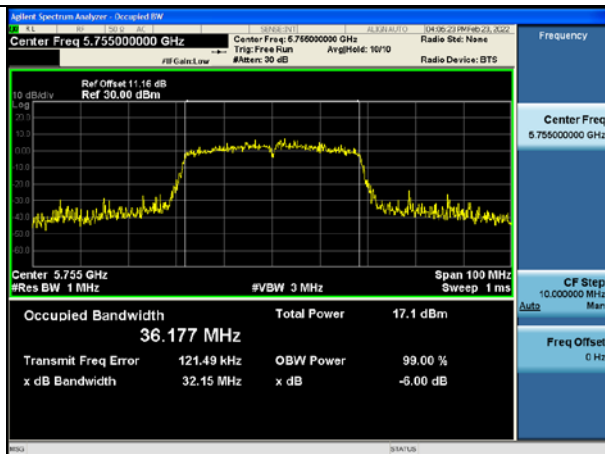


Test Mode:802.11n HT40 5755MHz Chain0

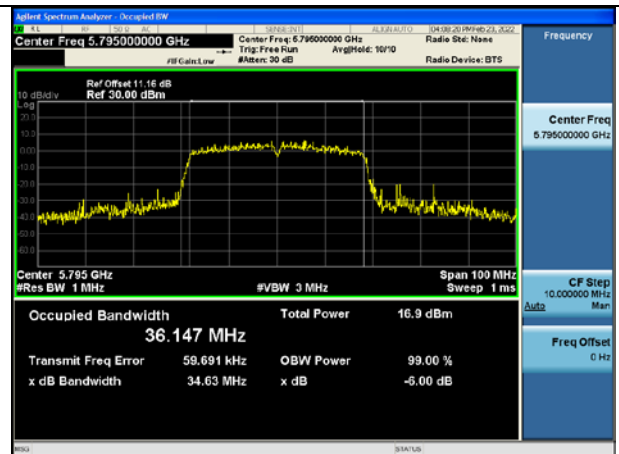


Test Mode:802.11n HT40 5795MHz Chain0

Test Mode: 802.11ac VHT40



Test Mode:802.11ac VHT40 5755MHz Chain0



Test Mode:802.11ac VHT40 5795MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5775MHz Chain0

6dB Bandwidth

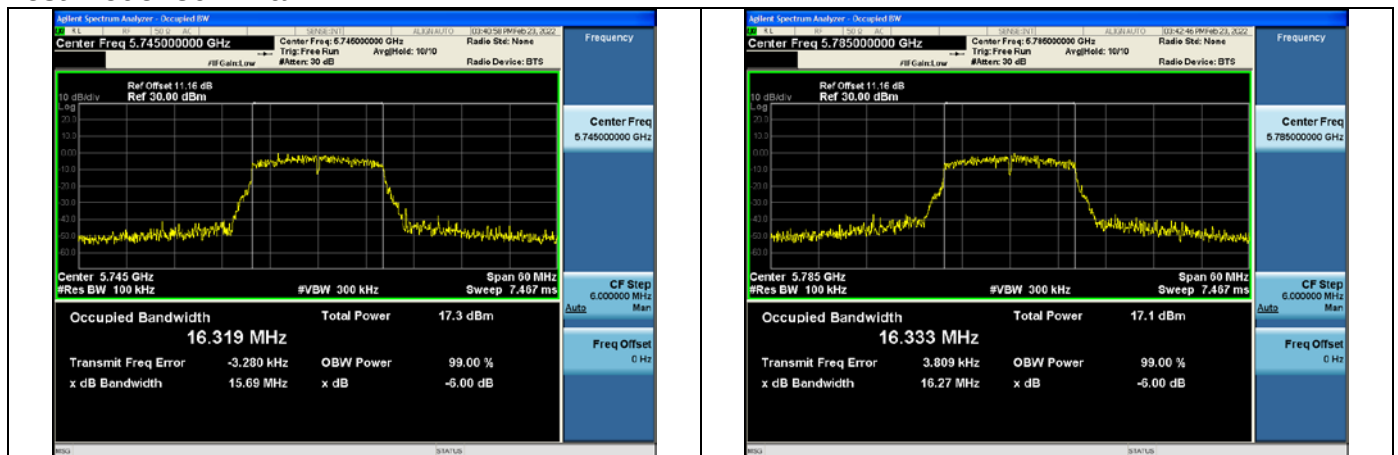
Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	6dB Bandwidth (MHz)		
		Channel No.667 5745MHz	Channel No.675 5785MHz	Channel No.683 5825MHz
802.11a	Chain0	15.69	16.27	16.19
802.11n HT20	Chain0	14.54	16.87	16.02
802.11ac VHT20	Chain0	15.43	15.68	17.50

Test Mode	Antenna	6dB Bandwidth (MHz)		
		Channel No.669 5755MHz	---	Channel No.677 5795MHz
802.11n HT40	Chain0	29.89	---	35.09
802.11ac VHT40	Chain0	35.09	---	34.45

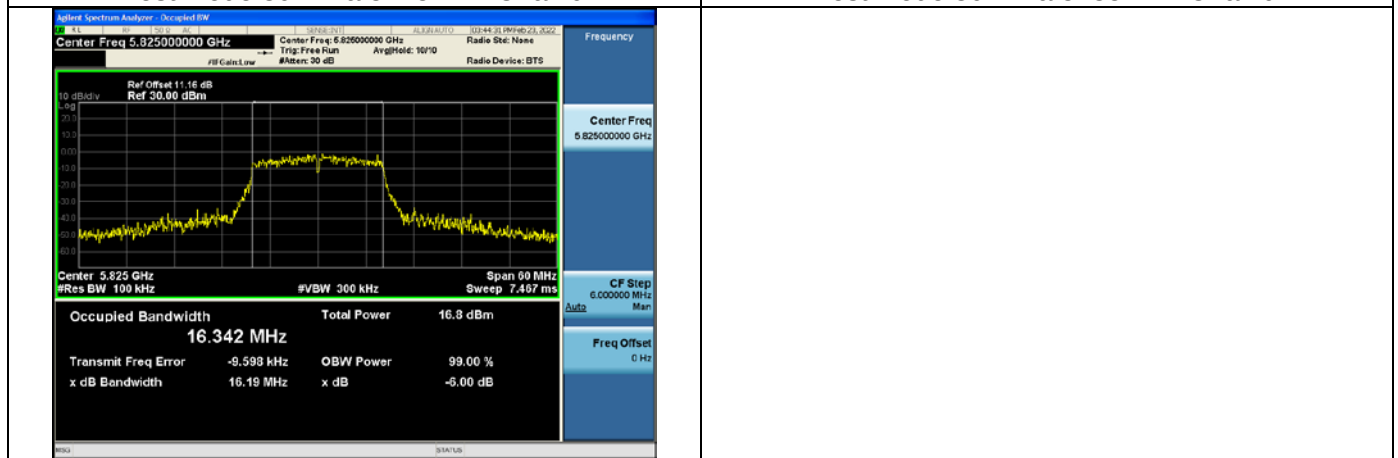
Test Mode	Antenna	6dB Bandwidth (MHz)		
		Channel No.673 5775MHz	---	---
802.11ac VHT80	Chain0	75.12	---	---

Test Mode: 802.11a



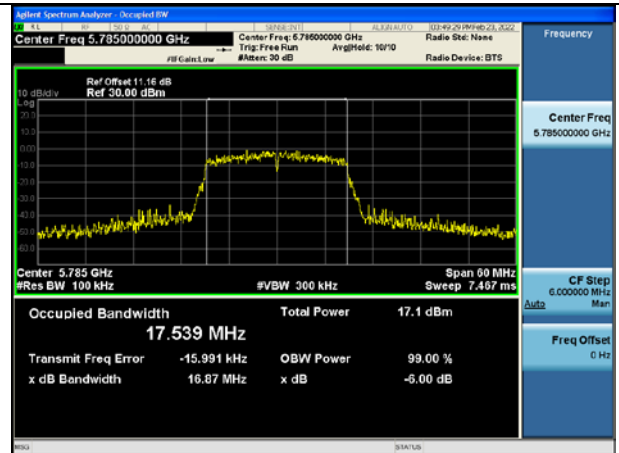
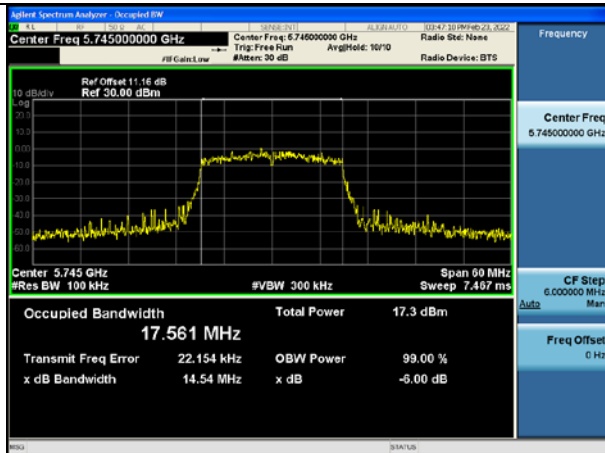
Test Mode:802.11a 5745MHz Chain0

Test Mode:802.11a 5785MHz Chain0

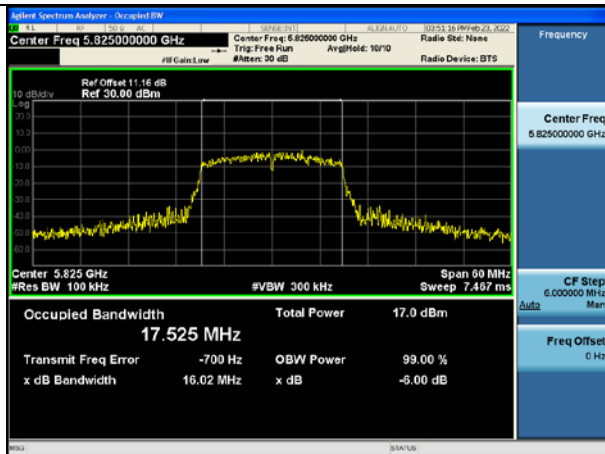


Test Mode:802.11a 5825MHz Chain0

Test Mode: 802.11n HT20



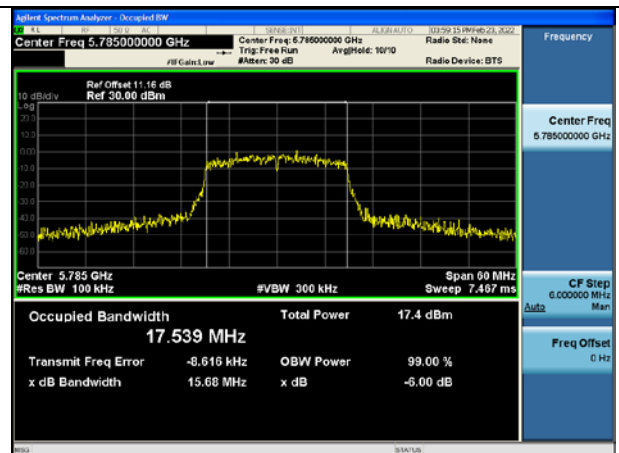
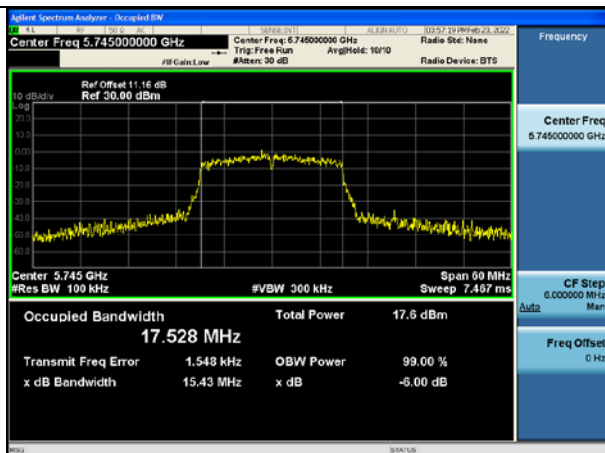
Test Mode:802.11n HT20 5745MHz Chain0



Test Mode:802.11n HT20 5785MHz Chain0

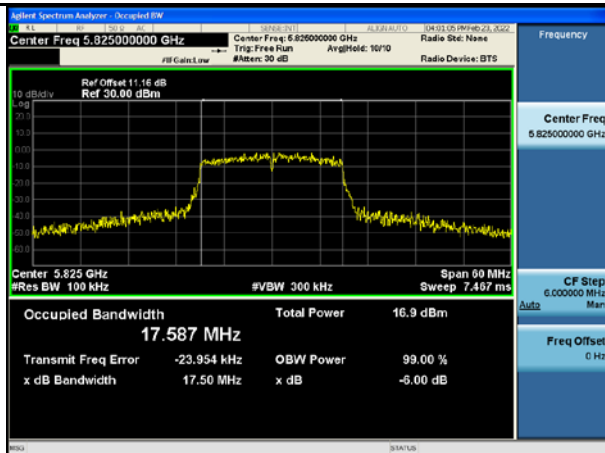
Test Mode:802.11n HT20 5825MHz Chain0

Test Mode: 802.11ac VHT20



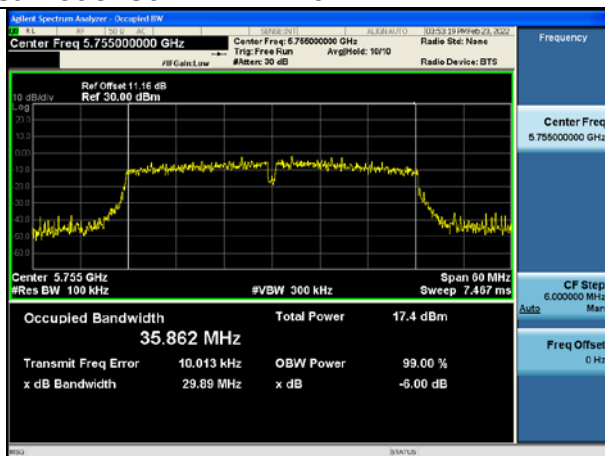
Test Mode:802.11ac VHT20 5745MHz Chain0

Test Mode:802.11ac VHT20 5785MHz Chain0

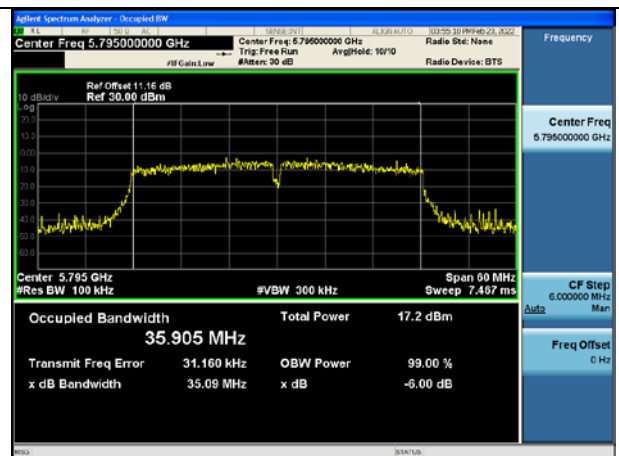


Test Mode:802.11ac VHT20 5825MHz Chain0

Test Mode: 802.11n HT40

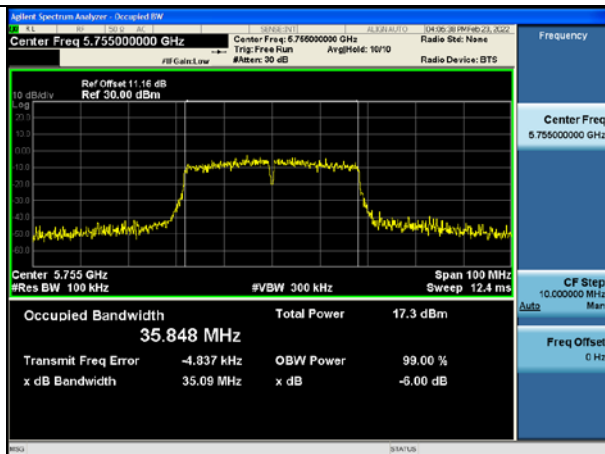


Test Mode:802.11n HT40 5755MHz Chain0

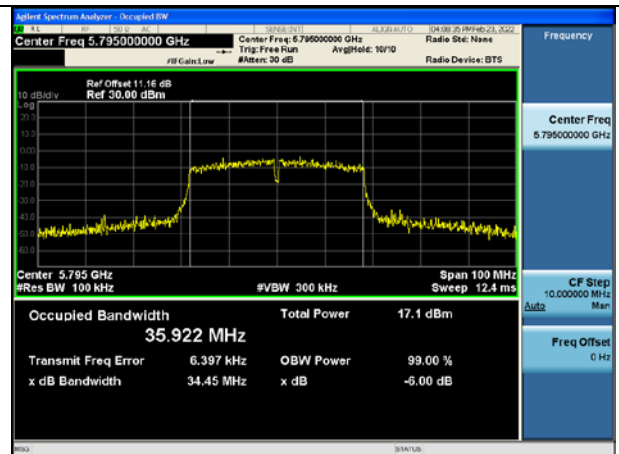


Test Mode:802.11n HT40 5795MHz Chain0

Test Mode: 802.11ac VHT40

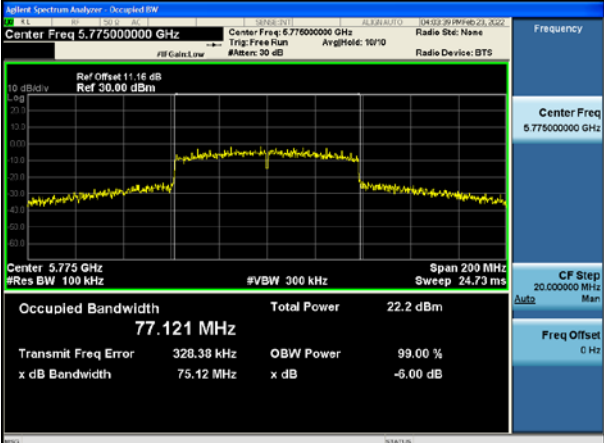


Test Mode:802.11ac VHT40 5755MHz Chain0



Test Mode:802.11ac VHT40 5795MHz Chain0

Test Mode: 802.11ac VHT80

 Agilent Spectrum Analyzer - Occupied BW Center Freq 5.775000000 GHz Ref Offset 11.16 dB Ref 50.00 dBm Center 5.775 GHz Res BW 100 kHz Occupied Bandwidth 77.121 MHz Transmit Freq Error 328.38 kHz x dB Bandwidth 75.12 MHz Total Power 22.2 dBm OBW Power 99.00 % x dB -6.00 dB	
Test Mode:802.11ac VHT80 5775MHz Chain0	

Transmitter Power Spectral Density

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

Test Mode	Antenna	5745MHz		5785MHz		5825MHz	
		Correction Factor(dB)	Power Density (dBm/500KHz)	Correction Factor(dB)	Power Density (dBm/500KHz)	Correction Factor(dB)	Power Density (dBm/500KHz)
802.11a	Chain0	0	2.062	0	2.042	0	1.523
802.11n HT20	Chain0	0	1.571	0	1.354	0	0.762
802.11ac VHT20	Chain0	0	1.472	0	1.380	0	0.938

Note: As measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result.

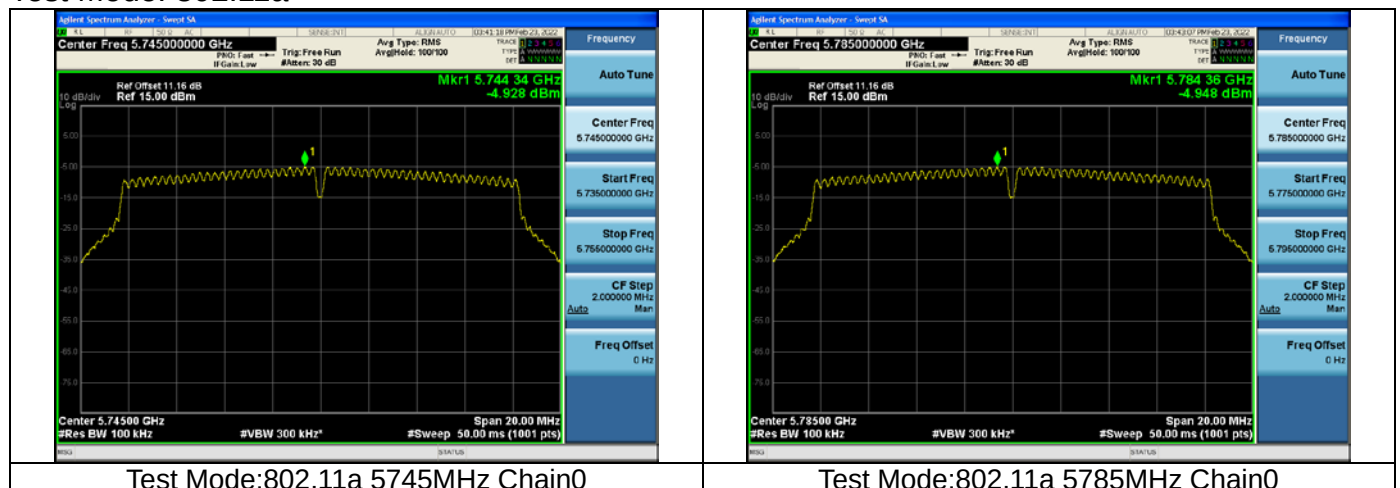
Test Mode	Antenna	5755MHz		---		5795MHz	
		Correction Factor(dB)	Power Density (dBm/500KHz)	Correction Factor(dB)	Power Density (dBm/500KHz)	Correction Factor(dB)	Power Density (dBm/500KHz)
802.11n HT40	Chain0	0.14	-1.738	---	---	0.14	-1.746
802.11ac VHT40	Chain0	0.13	-1.594	---	---	0.13	-1.692

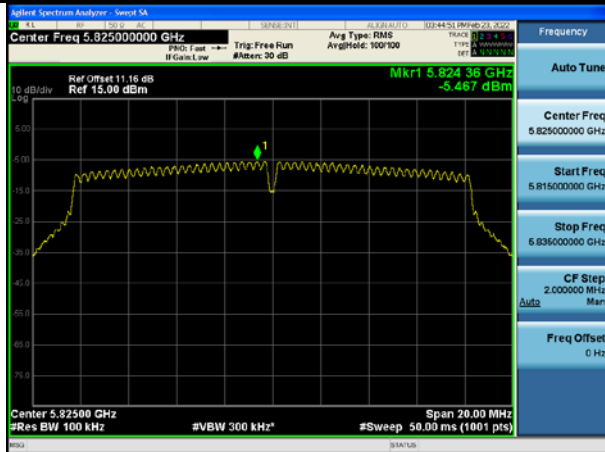
Note: As measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result.

Test Mode	Antenna	5775MHz		---		---	
		Correction Factor(dB)	Power Density (dBm/500KHz)	Correction Factor(dB)	Power Density (dBm/500KHz)	Correction Factor(dB)	Power Density (dBm/500KHz)
802.11ac VHT80	Chain0	0.24	1.165	---	---	---	---

Note: As measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result.

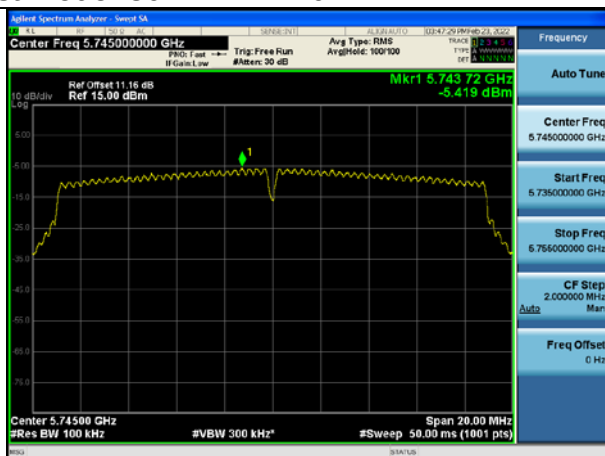
Test Mode: 802.11a



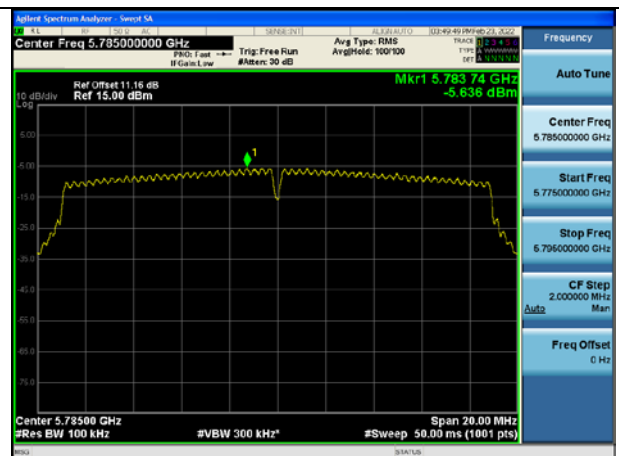


Test Mode:802.11a 5825MHz Chain0

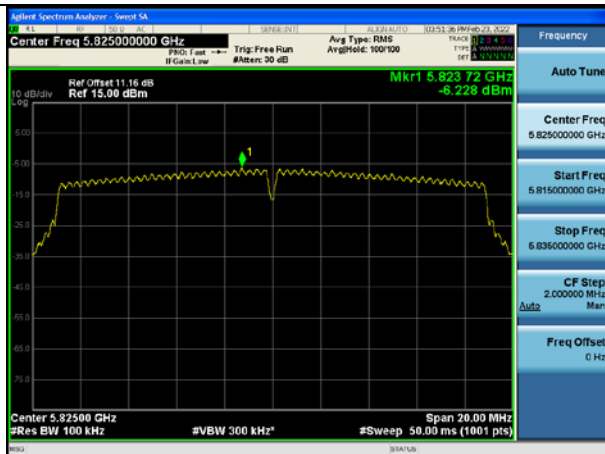
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5745MHz Chain0

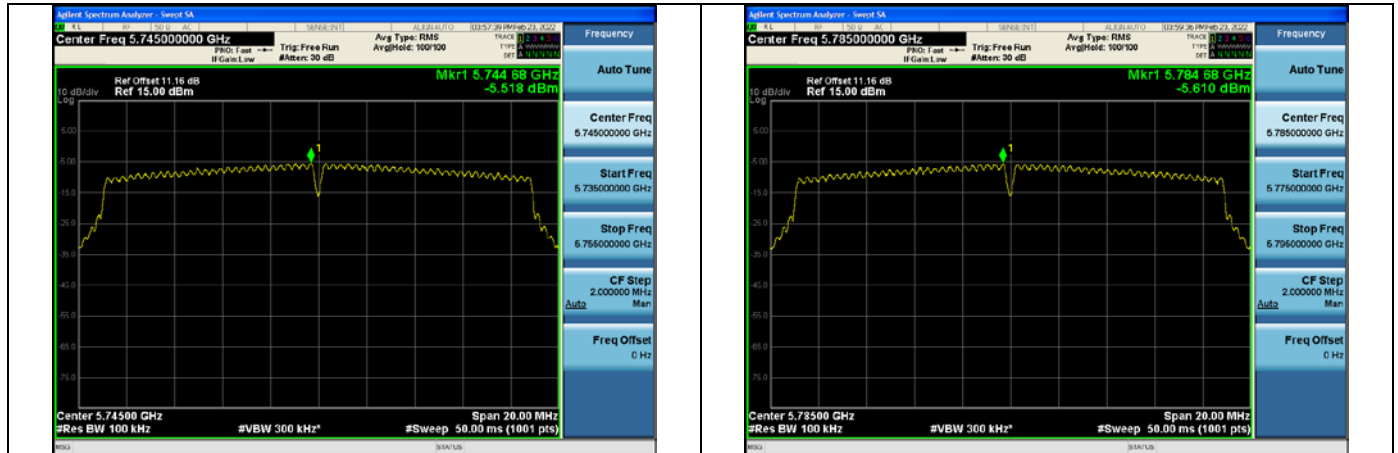


Test Mode:802.11n HT20 5785MHz Chain0



Test Mode:802.11n HT20 5825MHz Chain0

Test Mode: 802.11ac VHT20



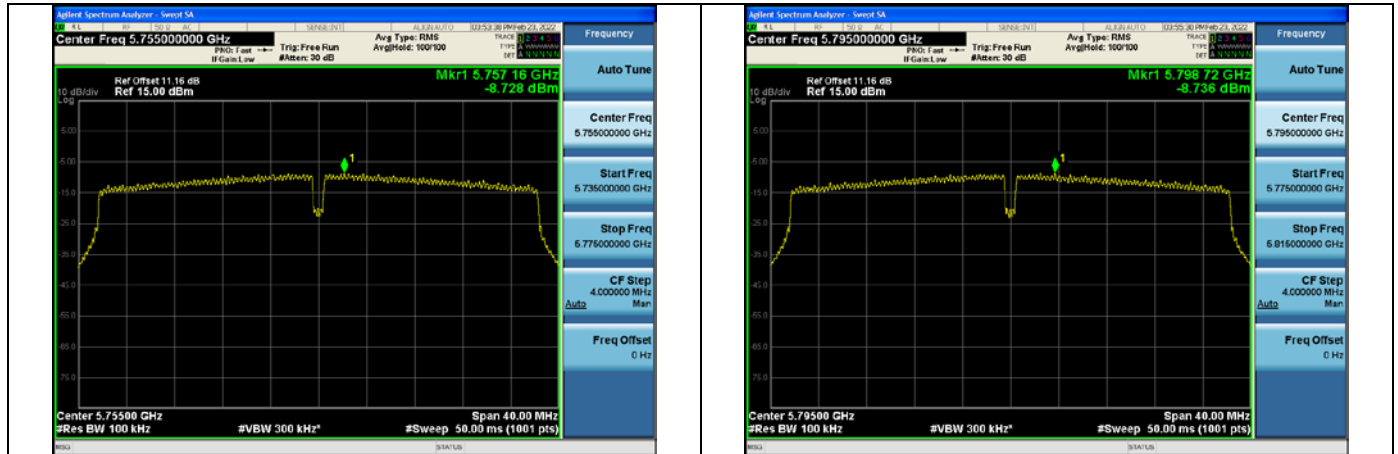
Test Mode:802.11ac VHT20 5745MHz Chain0

Test Mode:802.11ac VHT20 5785MHz Chain0



Test Mode:802.11ac VHT20 5825MHz Chain0

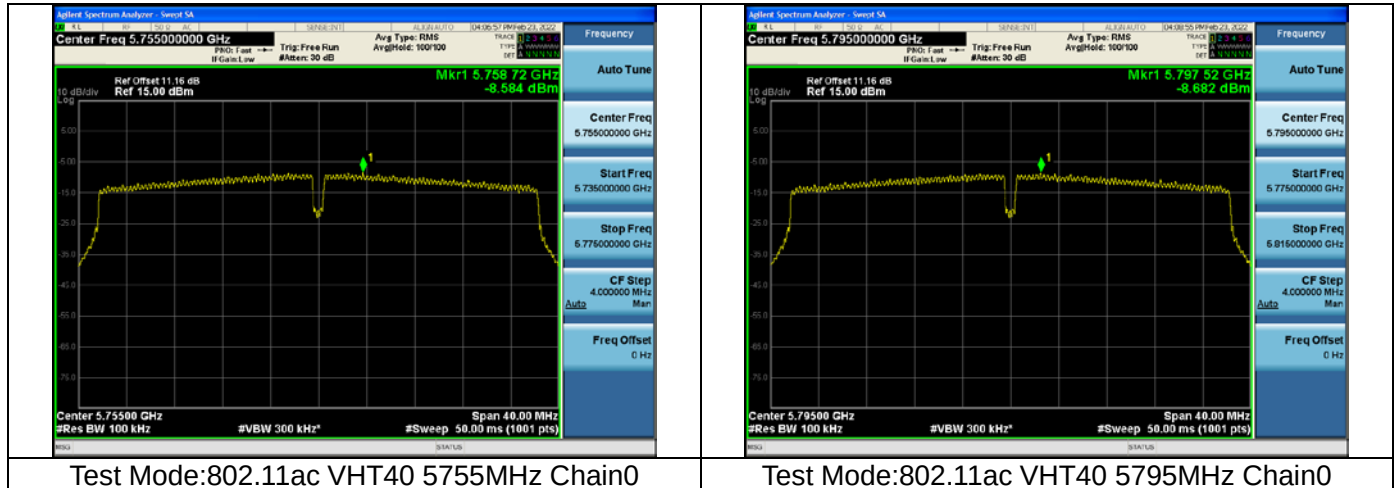
Test Mode: 802.11n HT40



Test Mode:802.11n HT40 5755MHz Chain0

Test Mode:802.11n HT40 5795MHz Chain0

Test Mode: 802.11ac VHT40



Test Mode: 802.11ac VHT80

