

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5745	99.24%	0
802.11n HT20	5745	99.25%	0
802.11ac VHT20	5745	99.23%	0
802.11n HT40	5755	98.41%	0
802.11ac VHT40	5755	98.43%	0
802.11ac VHT80	5775	96.88%	0.14

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	11.52	9.02
802.11a	NA	5785	Chain0	11.98	9.48
802.11a	NA	5825	Chain0	12.18	9.68
802.11n HT20	NA	5745	Chain0	11.51	9.01
802.11n HT20	NA	5785	Chain0	11.97	9.47
802.11n HT20	NA	5825	Chain0	12.20	9.70
802.11ac VHT20	NA	5745	Chain0	11.51	9.01
802.11ac VHT20	NA	5785	Chain0	12.00	9.50
802.11ac VHT20	NA	5825	Chain0	12.23	9.73
802.11n HT40	NA	5755	Chain0	11.41	8.91
802.11n HT40	NA	5795	Chain0	11.80	9.30
802.11ac VHT40	NA	5755	Chain0	11.42	8.92
802.11ac VHT40	NA	5795	Chain0	11.79	9.29
802.11ac VHT80	NA	5775	Chain0	11.50	9.00

Emission Bandwidth

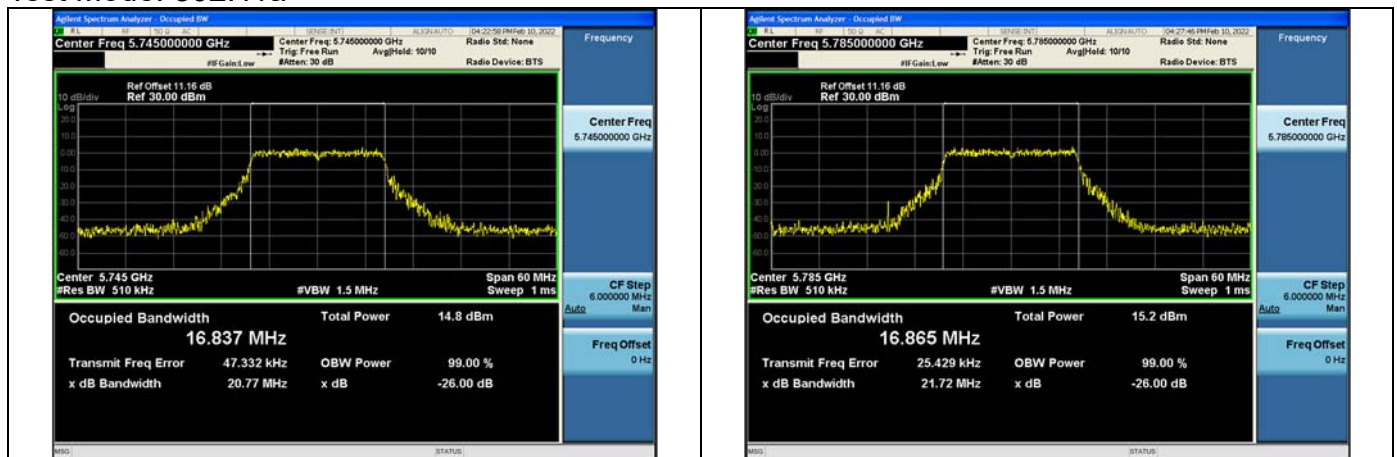
Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.667	Channel No.675	Channel No.683
		5745MHz	5785MHz	5825MHz
802.11a	Chain0	20.77	21.72	22.24
802.11n HT20	Chain0	22.83	22.75	23.10
802.11ac VHT20	Chain0	23.31	22.25	21.99

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.669	---	Channel No.677
		5755MHz	---	5795MHz
802.11n HT40	Chain0	42.25	---	41.68
802.11ac VHT40	Chain0	41.12	---	42.14

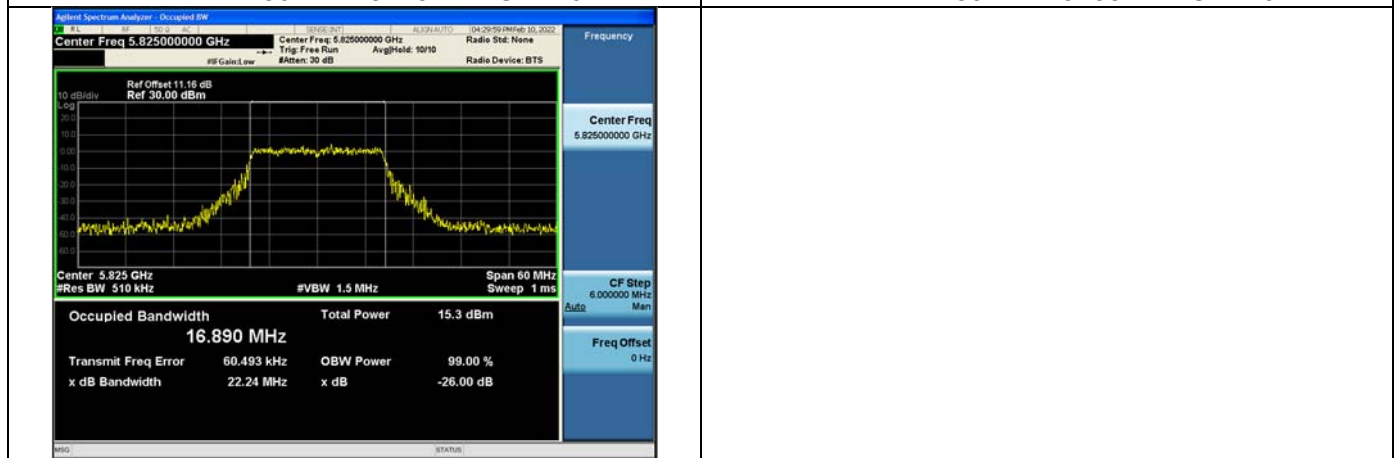
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.673	---	---
		5775MHz	---	---
802.11ac VHT80	Chain0	83.33	---	---

Test Mode: 802.11a



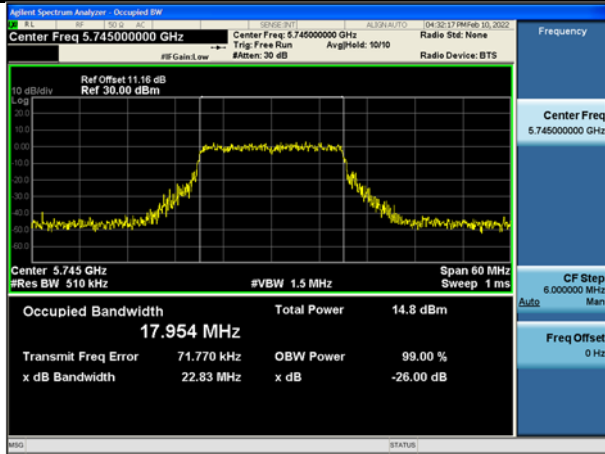
Test Mode:802.11a 5745MHz Chain0

Test Mode:802.11a 5785MHz Chain0

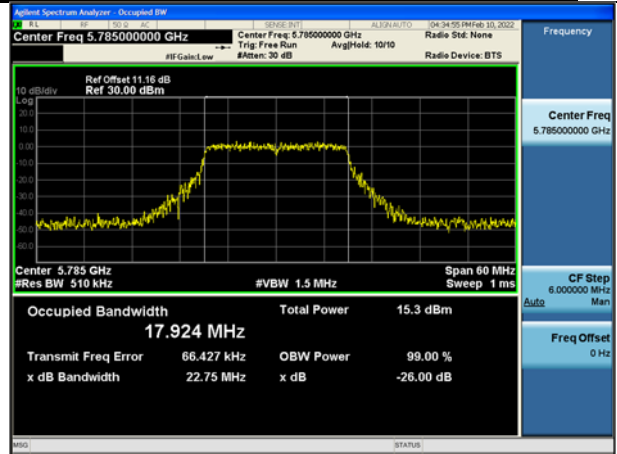


Test Mode:802.11a 5825MHz Chain0

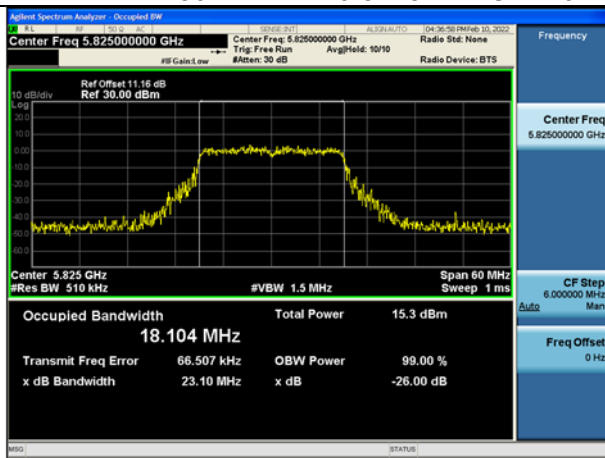
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5745MHz Chain0

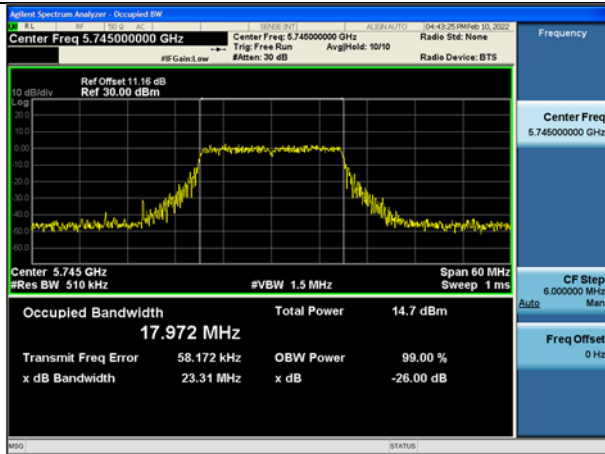


Test Mode:802.11n HT20 5785MHz Chain0

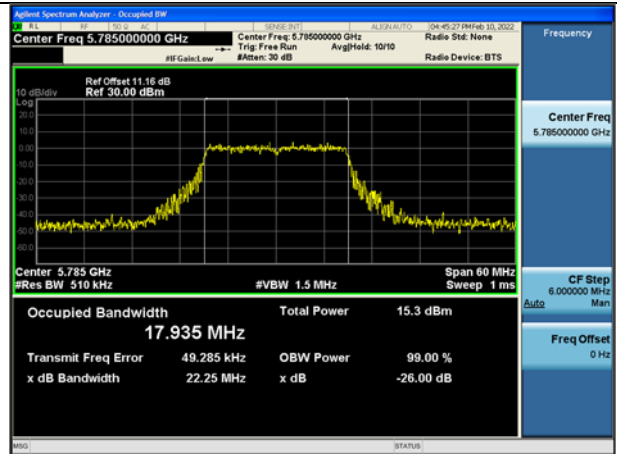


Test Mode:802.11n HT20 5825MHz Chain0

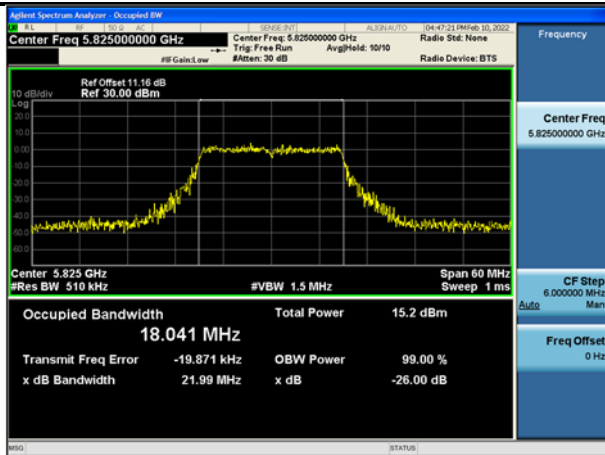
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5745MHz Chain0

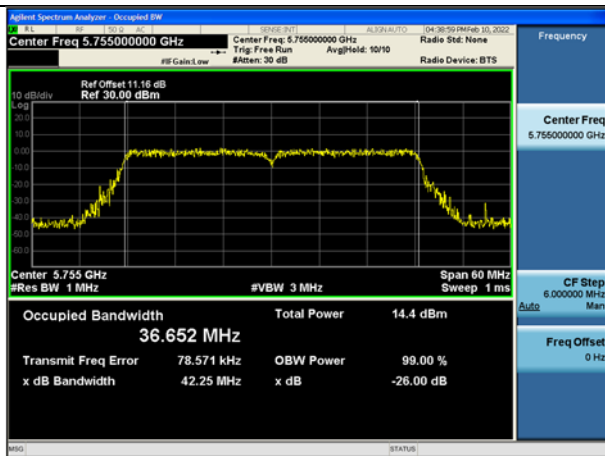


Test Mode:802.11ac VHT20 5785MHz Chain0

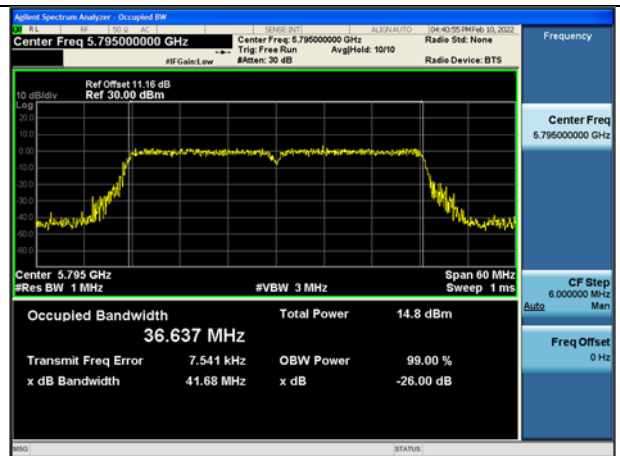


Test Mode:802.11ac VHT20 5825MHz Chain0

Test Mode: 802.11n HT40



Test Mode:802.11n HT40 5755MHz Chain0

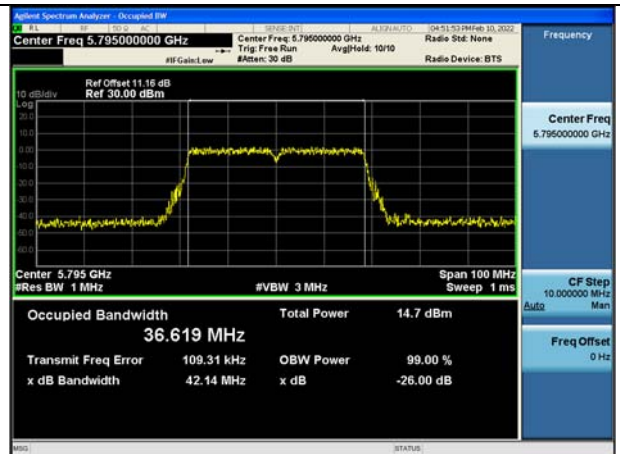


Test Mode:802.11n HT40 5795MHz Chain0

Test Mode: 802.11ac VHT40

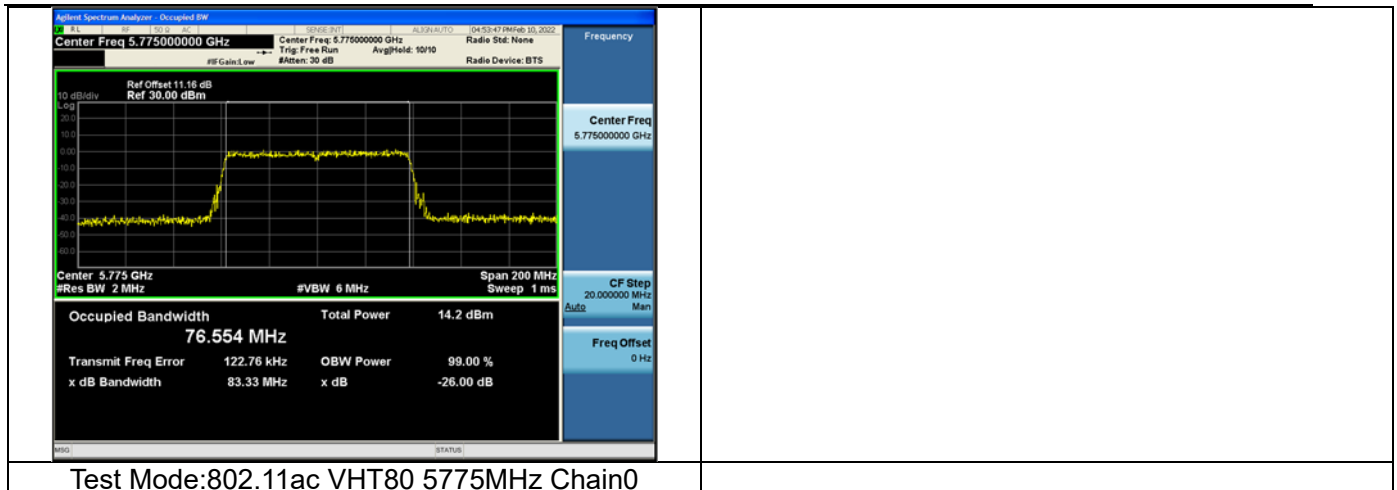


Test Mode:802.11ac VHT40 5755MHz Chain0



Test Mode:802.11ac VHT40 5795MHz Chain0

Test Mode: 802.11ac VHT80



Occupied Bandwidth

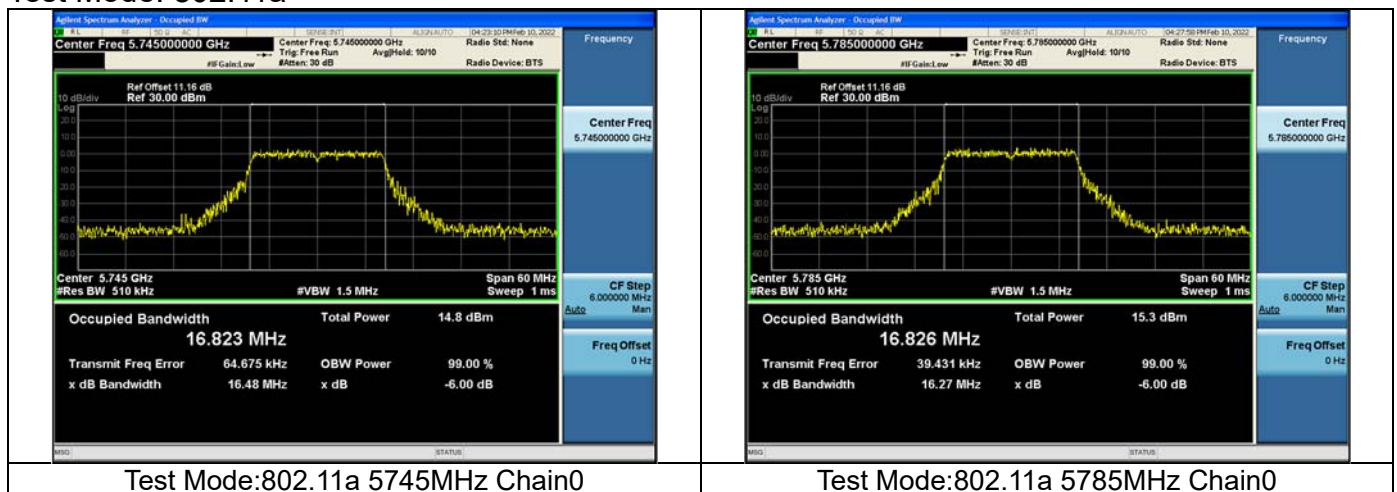
Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

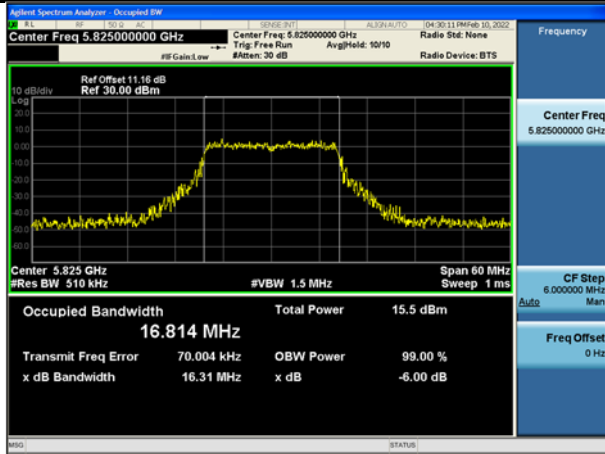
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.667 5745MHz	Channel No.675 5785MHz	Channel No.683 5825MHz
802.11a	Chain0	16.823	16.826	16.814
802.11n HT20	Chain0	17.909	17.942	17.913
802.11ac VHT20	Chain0	17.997	18.013	18.059

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.669 5755MHz	---	Channel No.677 5795MHz
802.11n HT40	Chain0	36.702	---	36.669
802.11ac VHT40	Chain0	36.626	---	36.624

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.673 5775MHz	---	---
802.11ac VHT80	Chain0	76.664	---	---

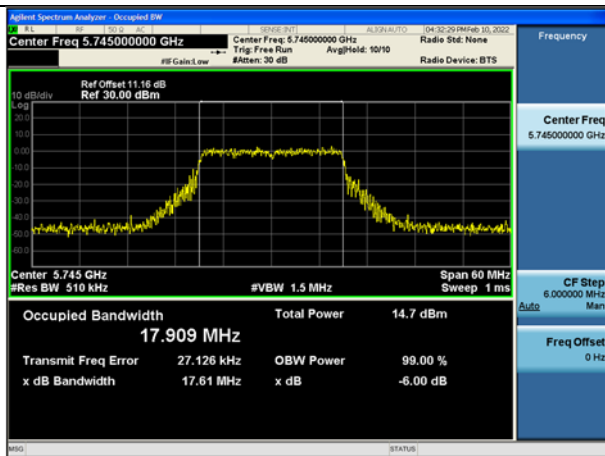
Test Mode: 802.11a



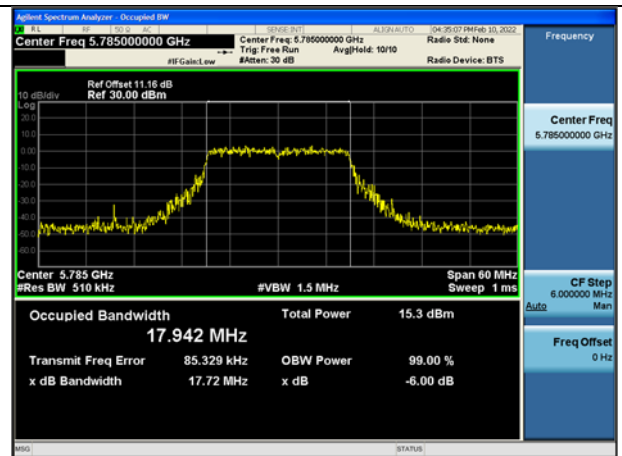


Test Mode:802.11a 5825MHz Chain0

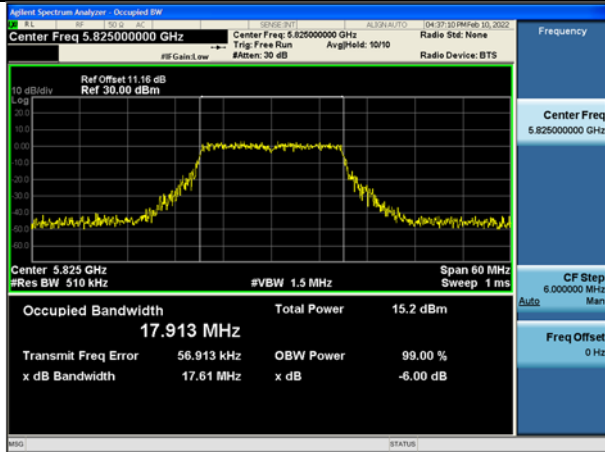
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5745MHz Chain0

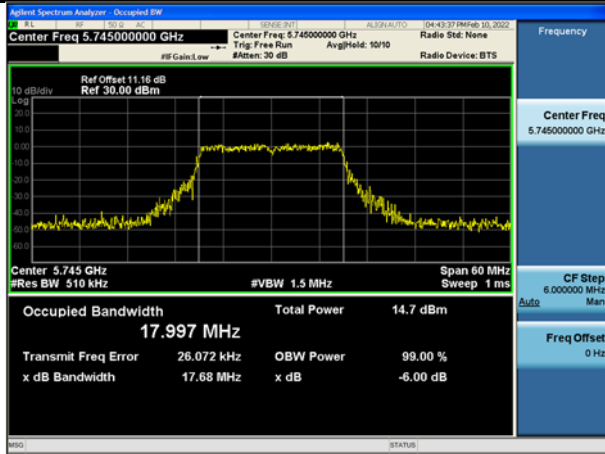


Test Mode:802.11n HT20 5785MHz Chain0

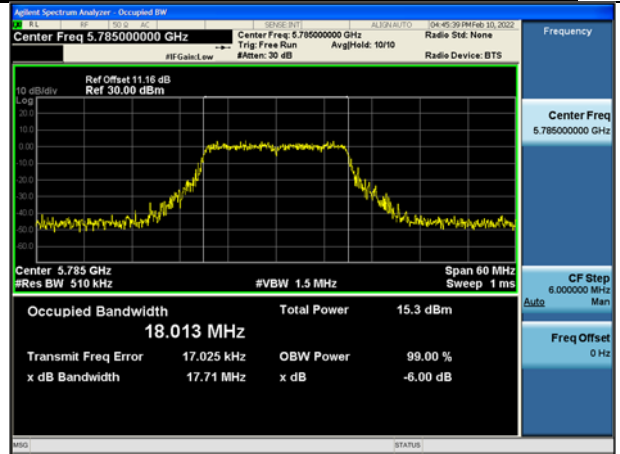


Test Mode:802.11n HT20 5825MHz Chain0

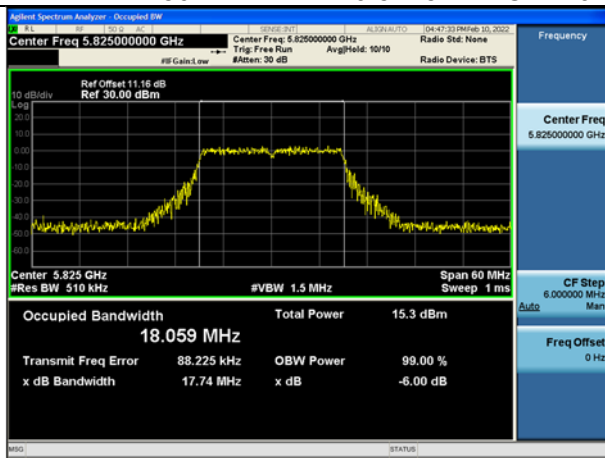
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5745MHz Chain0



Test Mode:802.11ac VHT20 5785MHz Chain0

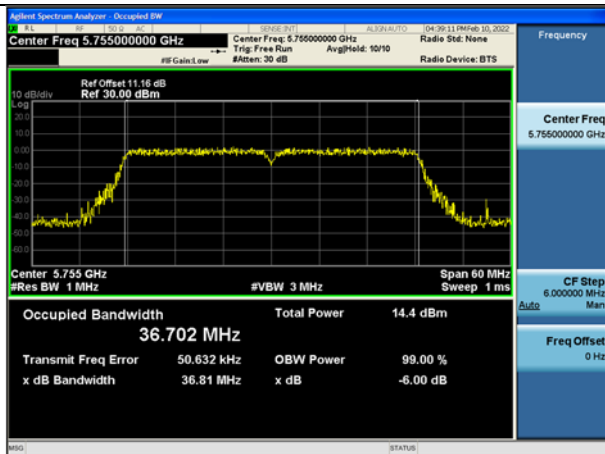


Test Mode:802.11ac VHT20 5825MHz Chain0

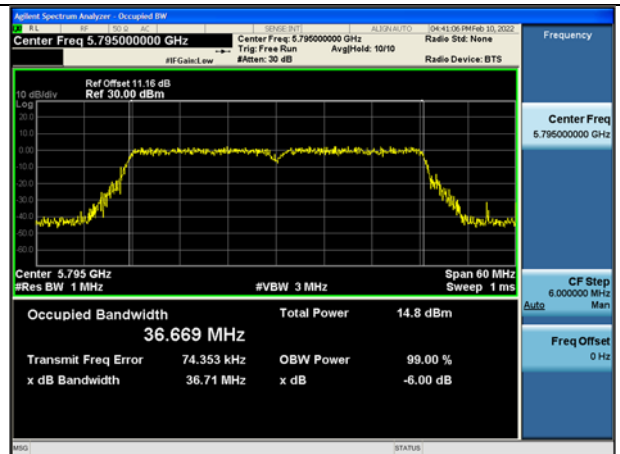


Test Mode:802.11ac VHT20 5785MHz Chain0

Test Mode: 802.11n HT40

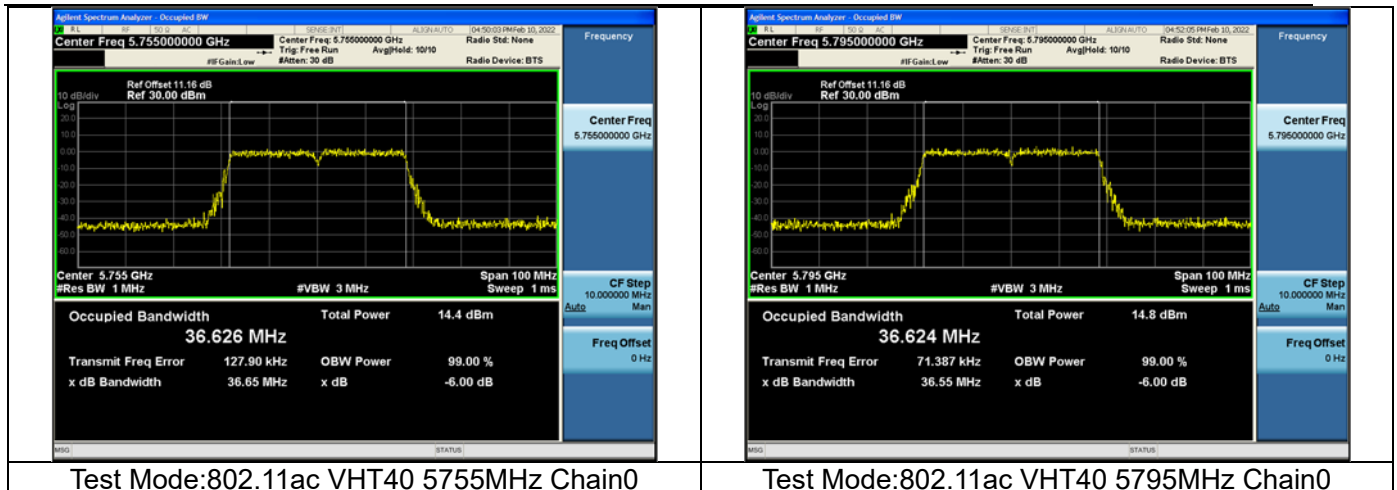


Test Mode:802.11n HT40 5755MHz Chain0

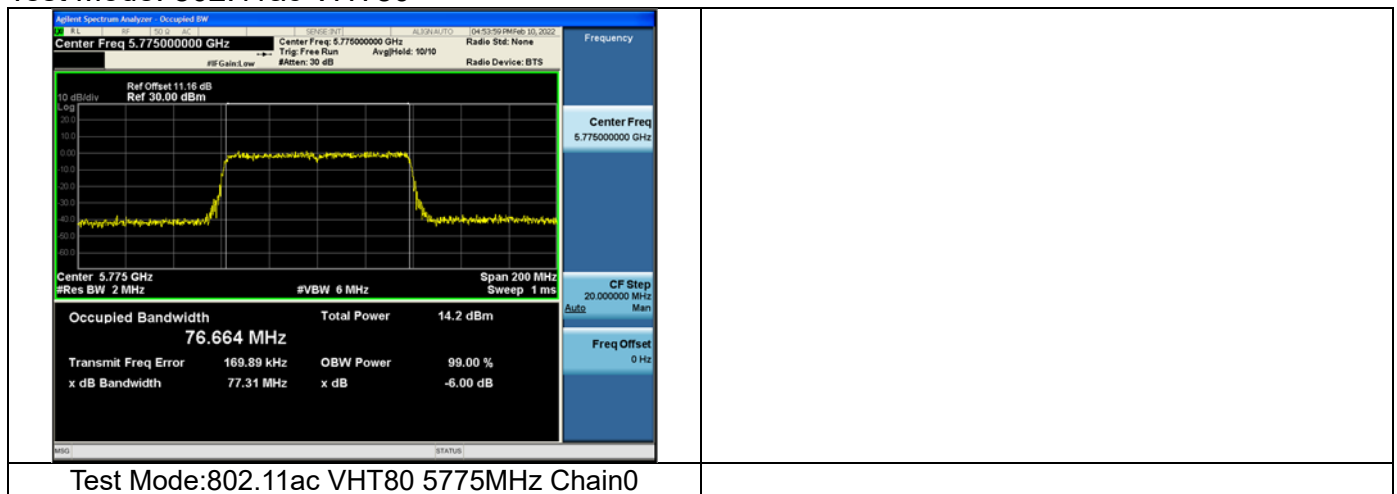


Test Mode:802.11n HT40 5795MHz Chain0

Test Mode: 802.11ac VHT40



Test Mode: 802.11ac VHT80



6dB Bandwidth

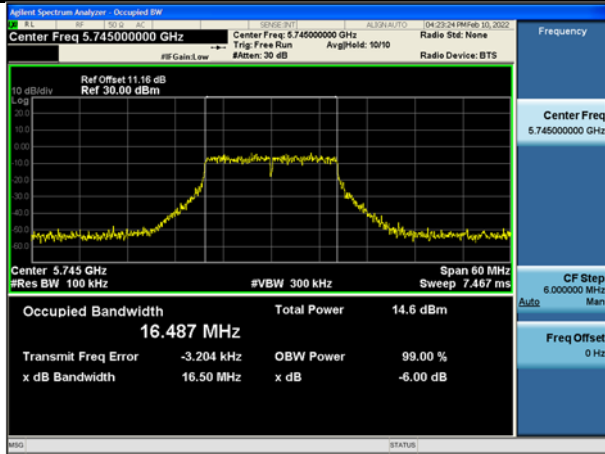
Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	6dB Bandwidth (MHz)		
		Channel No.667 5745MHz	Channel No.675 5785MHz	Channel No.683 5825MHz
802.11a	Chain0	16.50	16.46	16.41
802.11n HT20	Chain0	17.71	17.60	17.80
802.11ac VHT20	Chain0	17.78	17.79	17.67

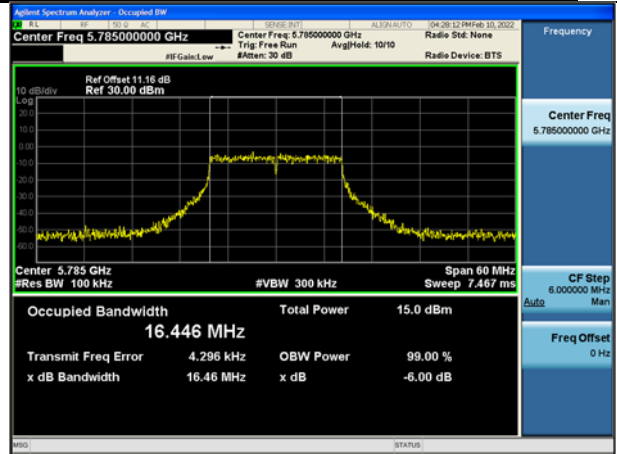
Test Mode	Antenna	6dB Bandwidth (MHz)		
		Channel No.669 5755MHz	Channel No.677 5795MHz	Channel No.683 5825MHz
802.11n HT40	Chain0	36.47	36.38	36.38
802.11ac VHT40	Chain0	36.46	36.53	36.53

Test Mode	Antenna	6dB Bandwidth (MHz)		
		Channel No.673 5775MHz	Channel No.681 5805MHz	Channel No.689 5845MHz
802.11ac VHT80	Chain0	76.39	76.39	76.39

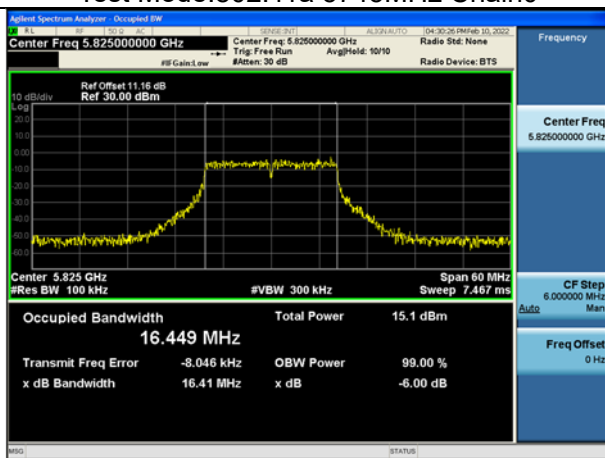
Test Mode: 802.11a



Test Mode:802.11a 5745MHz Chain0

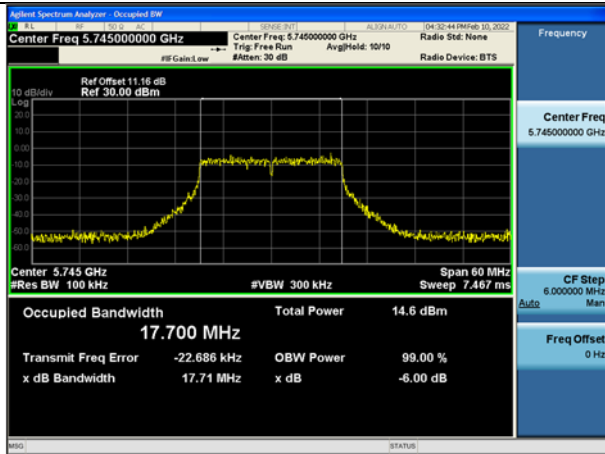


Test Mode:802.11a 5785MHz Chain0

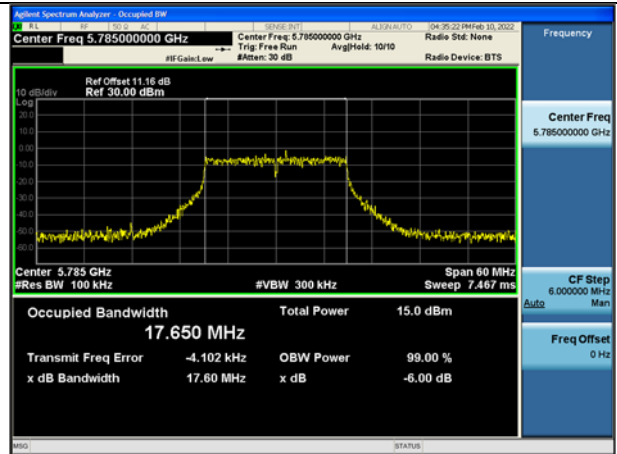


Test Mode:802.11a 5825MHz Chain0

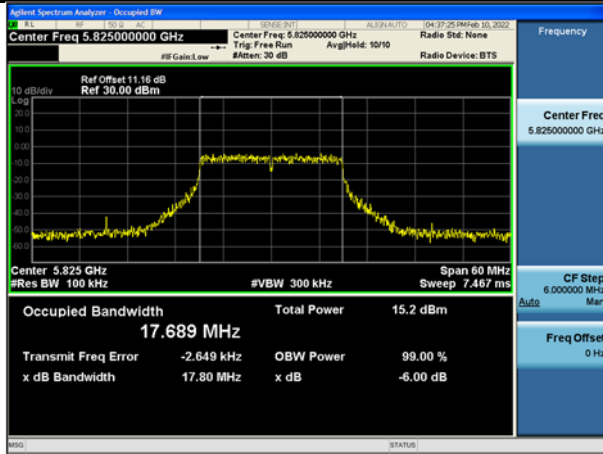
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5745MHz Chain0

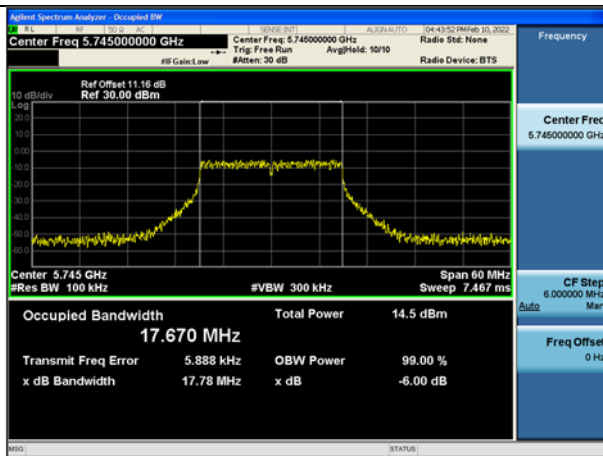


Test Mode:802.11n HT20 5785MHz Chain0

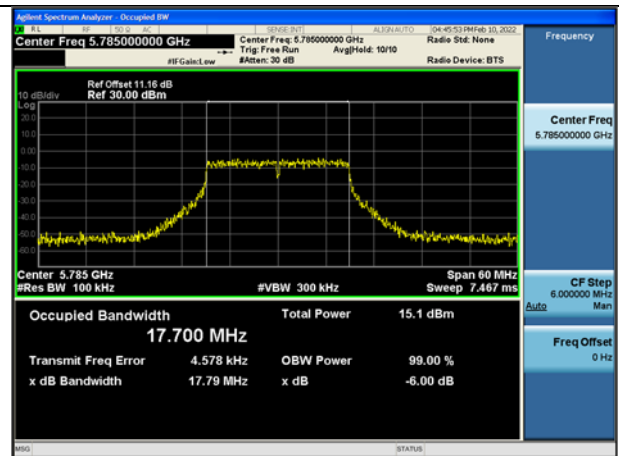


Test Mode:802.11n HT20 5825MHz Chain0

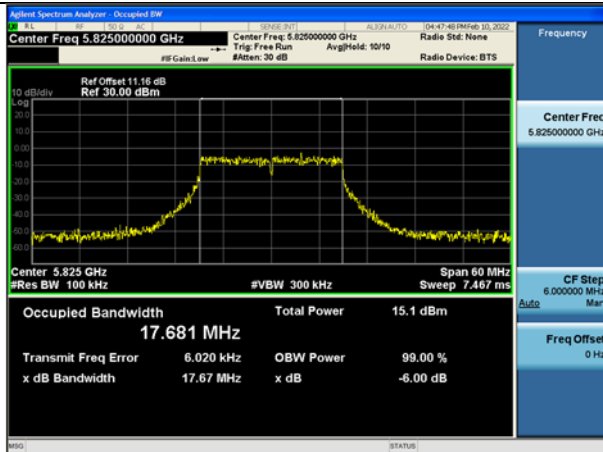
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5745MHz Chain0

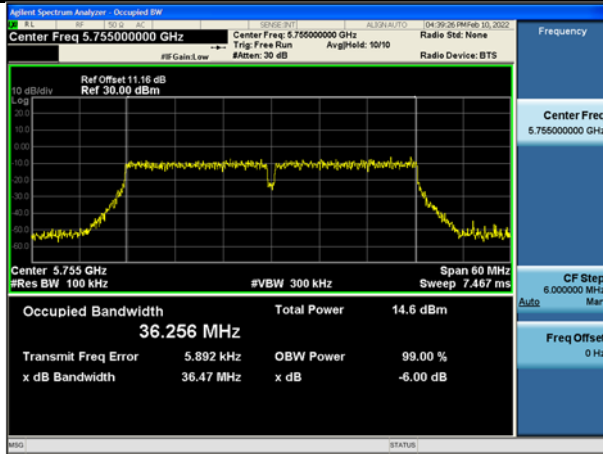


Test Mode:802.11ac VHT20 5785MHz Chain0

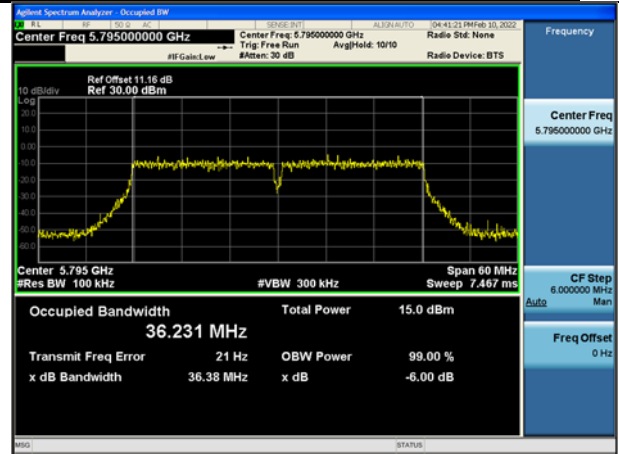


Test Mode:802.11ac VHT20 5825MHz Chain0

Test Mode: 802.11n HT40

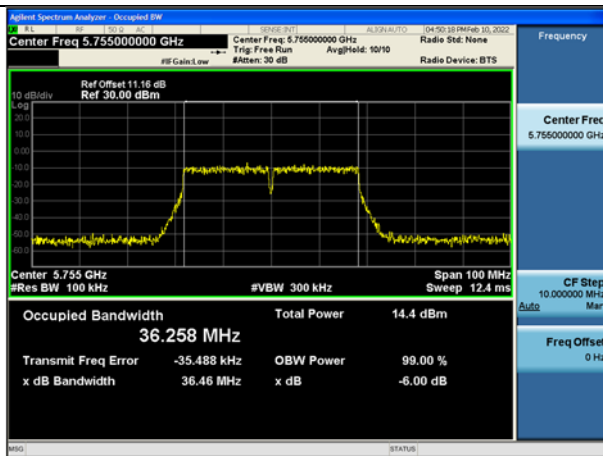


Test Mode:802.11n HT40 5755MHz Chain0

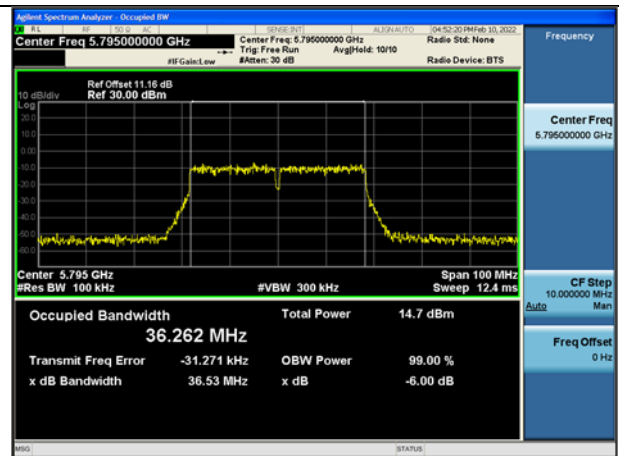


Test Mode:802.11n HT40 5795MHz Chain0

Test Mode: 802.11ac VHT40

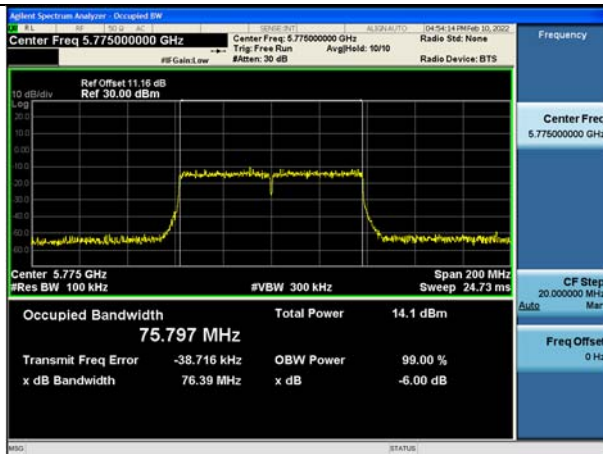


Test Mode:802.11ac VHT40 5755MHz Chain0



Test Mode:802.11ac VHT40 5795MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5775MHz Chain0

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	-8.120	0	-7.602	0	-7.407
802.11n HT20	Chain0	0	-8.292	0	-7.952	0	-7.817
802.11ac VHT20	Chain0	0	-8.294	0	-8.006	0	-7.953

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	-11.125	---	---	0	-10.809
802.11ac VHT40	Chain0	0	-11.168	---	---	0	-11.027

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

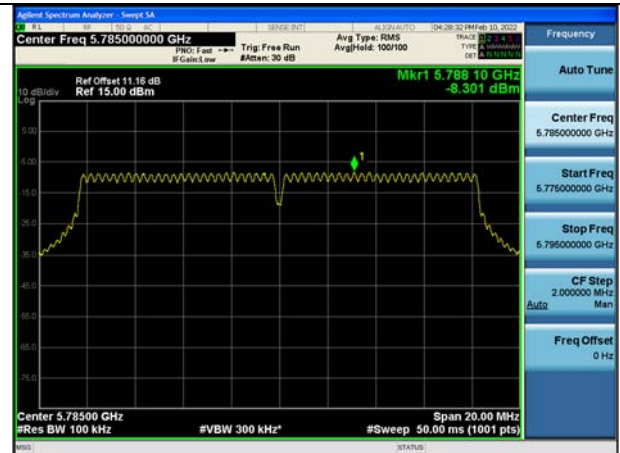
Test Mode	Antenna	5775MHz		---		---	
		Correction Factor(dB)	Power Density (dBm/500KHz)	Correction Factor(dB)	Power Density (dBm/500KHz)	Correction Factor(dB)	Power Density (dBm/500KHz)
802.11ac VHT80	Chain0	0.14	-14.023	---	---	---	---

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 5745MHz Chain0



Test Mode:802.11a 5785MHz Chain0



Test Mode:802.11a 5825MHz Chain0

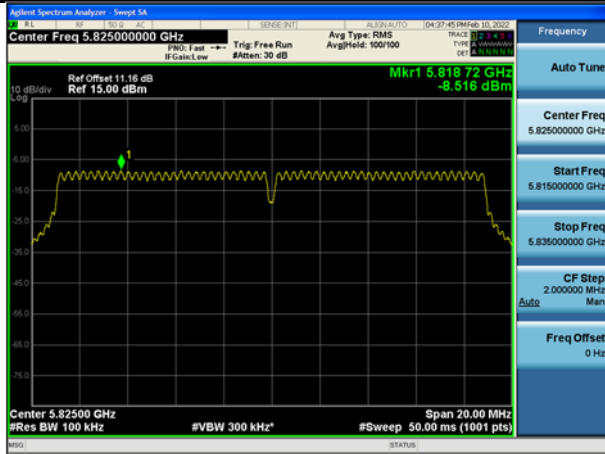
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5745MHz Chain0

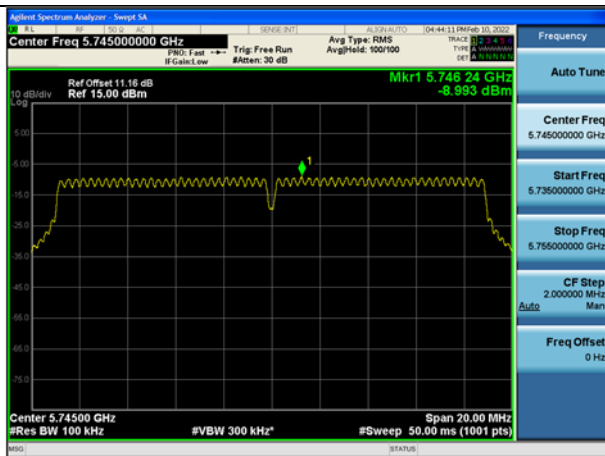


Test Mode:802.11n HT20 5785MHz Chain0

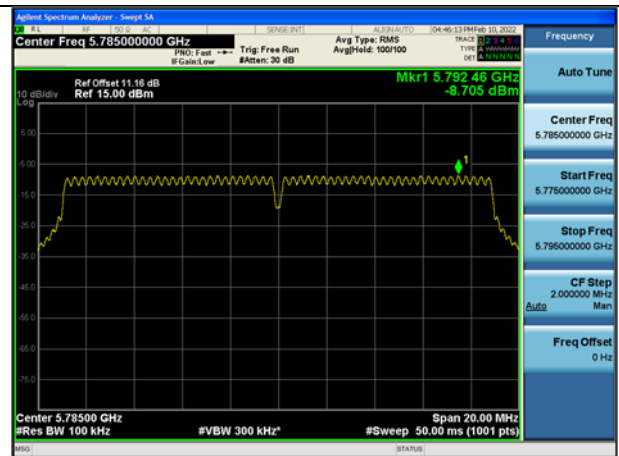


Test Mode:802.11n HT20 5825MHz Chain0

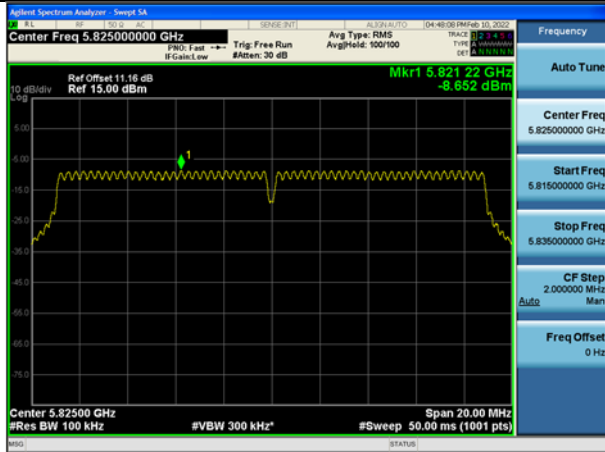
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5745MHz Chain0

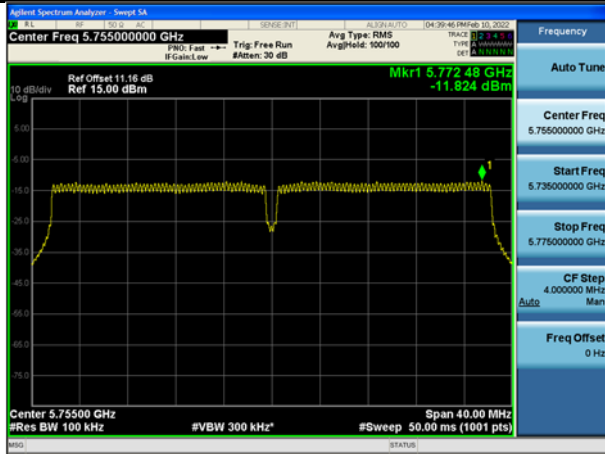


Test Mode:802.11ac VHT20 5785MHz Chain0

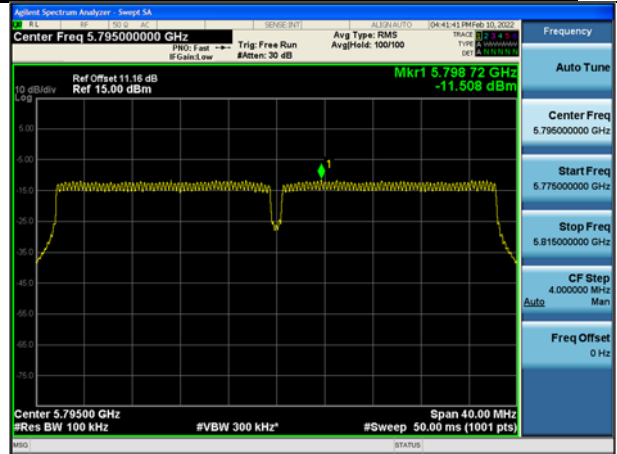


Test Mode:802.11ac VHT20 5825MHz Chain0

Test Mode: 802.11n HT40

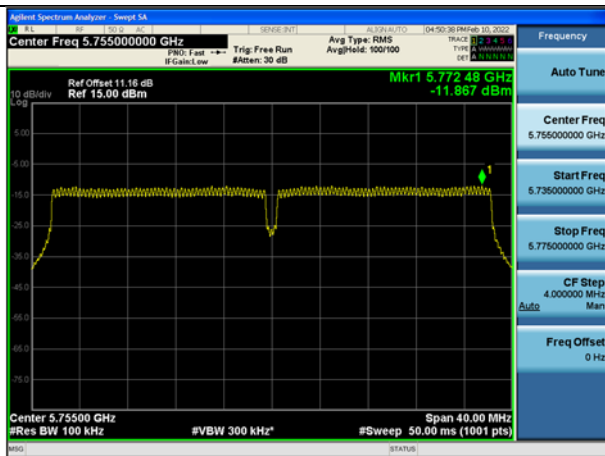


Test Mode:802.11n HT40 5755MHz Chain0

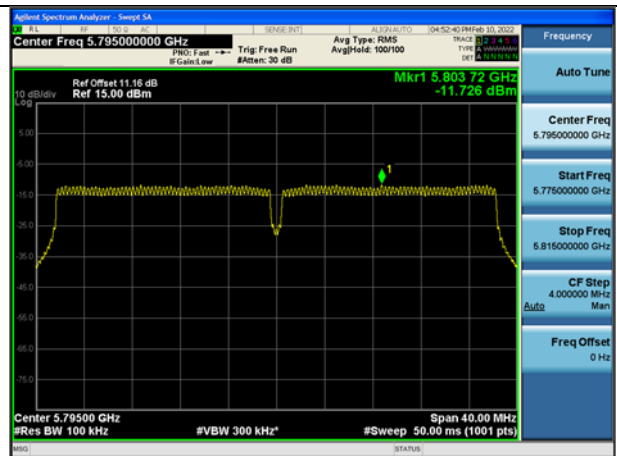


Test Mode:802.11n HT40 5795MHz Chain0

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