

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5180	98.92%	0	Fig.1
802.11n HT20	5180	98.90%	0	Fig.2
802.11ac VHT20	5180	98.90%	0	Fig.3
802.11n HT40	5190	97.70%	0.10	Fig.4
802.11ac VHT40	5190	97.79%	0.10	Fig.5
802.11ac VHT80	5210	95.56%	0.20	Fig.6

Note: Correction Factor=10*log (1/Duty Cycle)

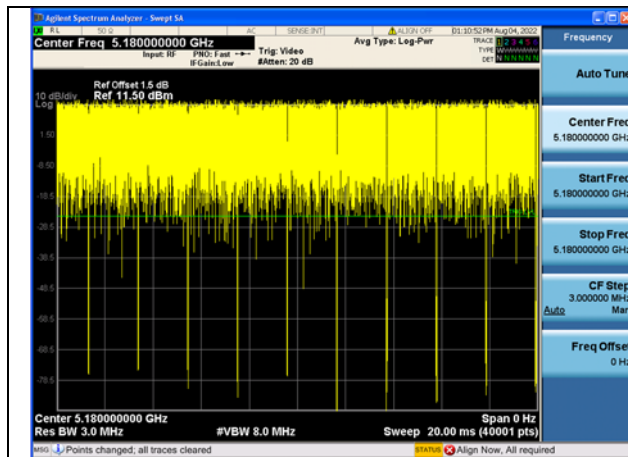


Fig.1

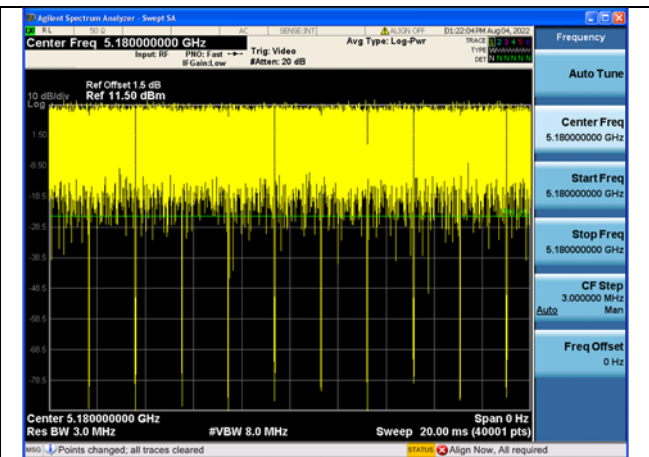


Fig.2

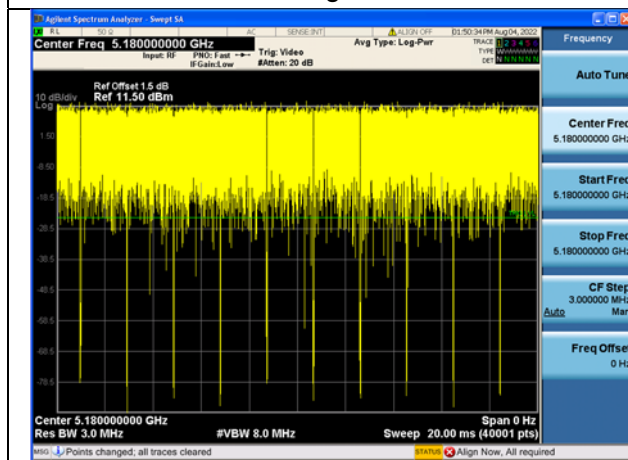


Fig.3

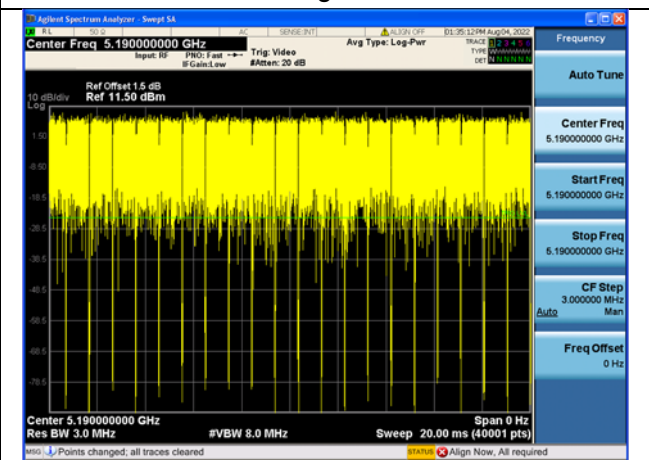


Fig.4

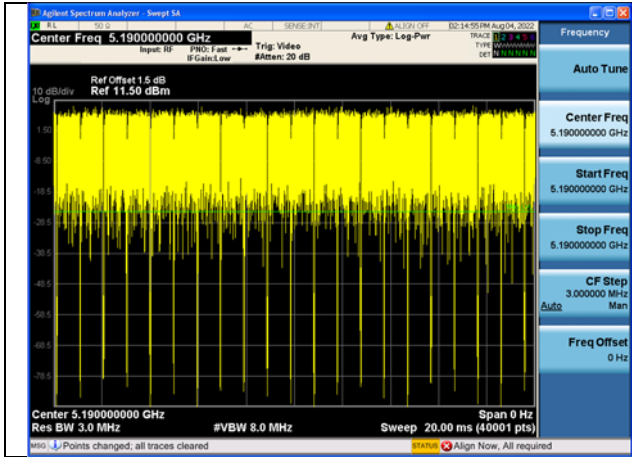


Fig.5

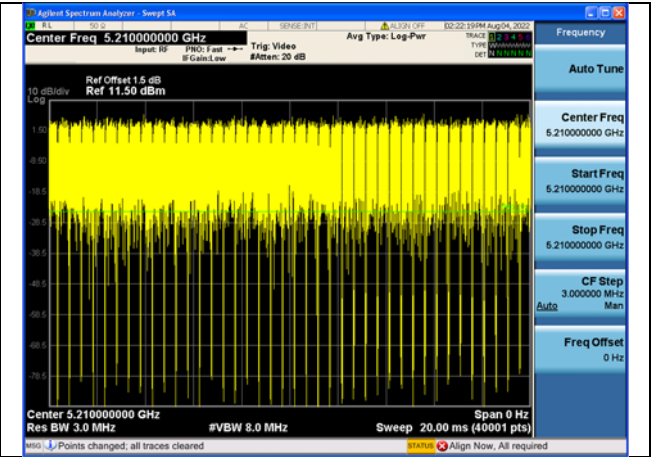


Fig.6

Output Power

Mode	Tones/ RUIndex	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Chain0	11.49	9.19
802.11a	NA	5220	Chain0	11.61	9.31
802.11a	NA	5240	Chain0	11.59	9.29
802.11n HT20	NA	5180	Chain0	11.33	9.03
802.11n HT20	NA	5220	Chain0	11.47	9.17
802.11n HT20	NA	5240	Chain0	11.42	9.12
802.11ac VHT20	NA	5180	Chain0	10.82	8.52
802.11ac VHT20	NA	5220	Chain0	10.88	8.58
802.11ac VHT20	NA	5240	Chain0	11.02	8.72
802.11n HT40	NA	5190	Chain0	11.30	9.00
802.11n HT40	NA	5230	Chain0	11.00	8.70
802.11ac VHT40	NA	5190	Chain0	10.86	8.56
802.11ac VHT40	NA	5230	Chain0	11.01	8.71
802.11ac VHT80	NA	5210	Chain0	10.73	8.43

Emission Bandwidth

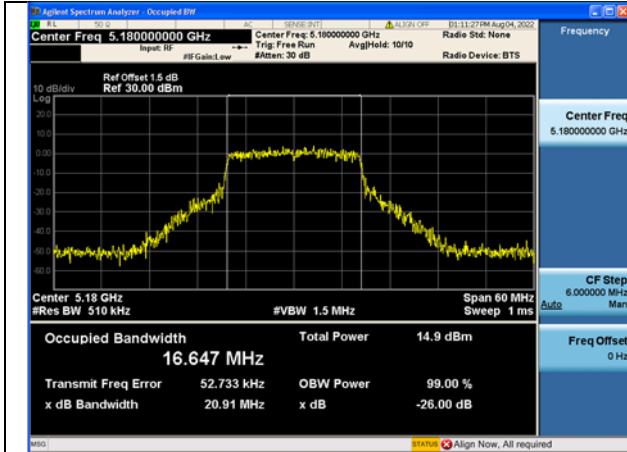
Offset 1.5dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.554	Channel No.562	Channel No.566
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	20.91	22.75	21.90
802.11n HT20	Chain0	22.15	22.87	23.79
802.11ac VHT20	Chain0	23.54	23.24	23.03

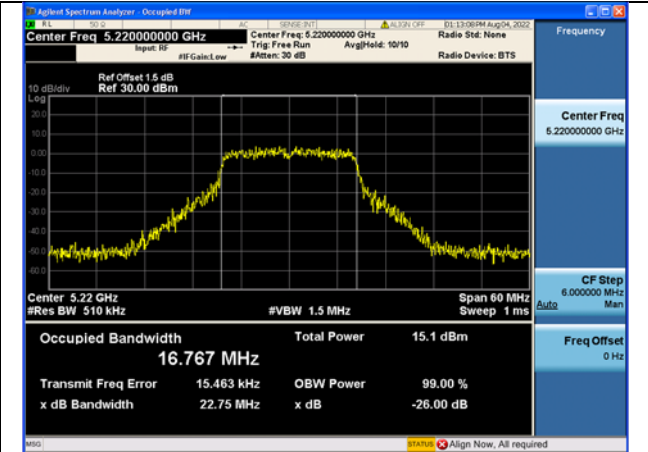
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.556	---	Channel No.564
		5190MHz	---	5230MHz
802.11n HT40	Chain0	40.90	---	40.25
802.11ac VHT40	Chain0	41.26	---	40.54

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.560	---	---
		5210MHz	---	---
802.11ac VHT80	Chain0	84.38	---	---

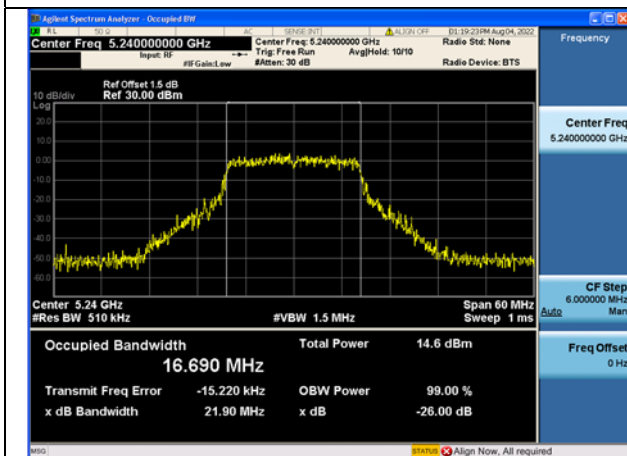
Test Mode: 802.11a



Test Mode:802.11a 5180MHz Chain0

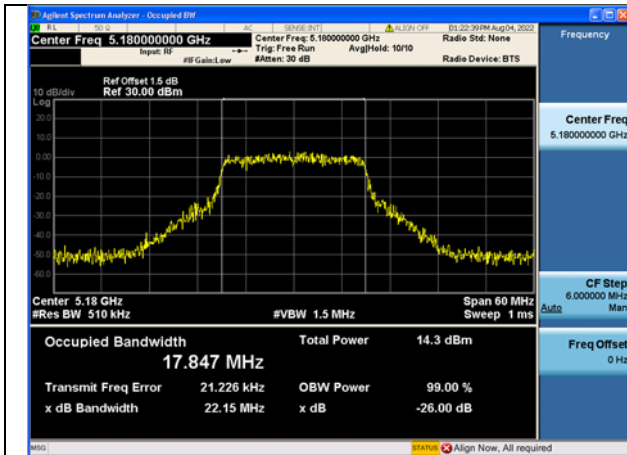


Test Mode:802.11a 5220MHz Chain0

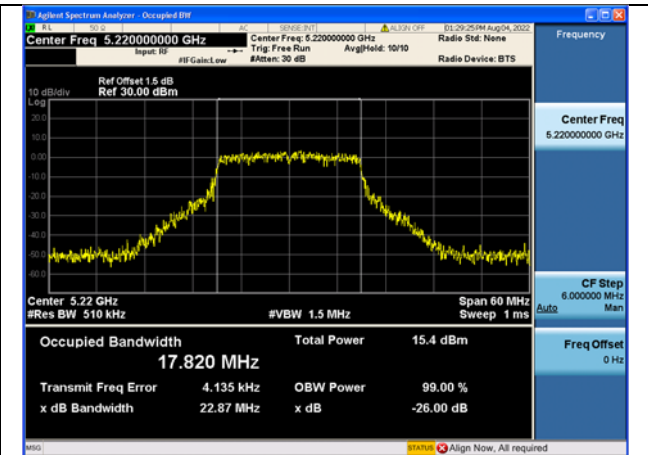


Test Mode:802.11a 5240MHz Chain0

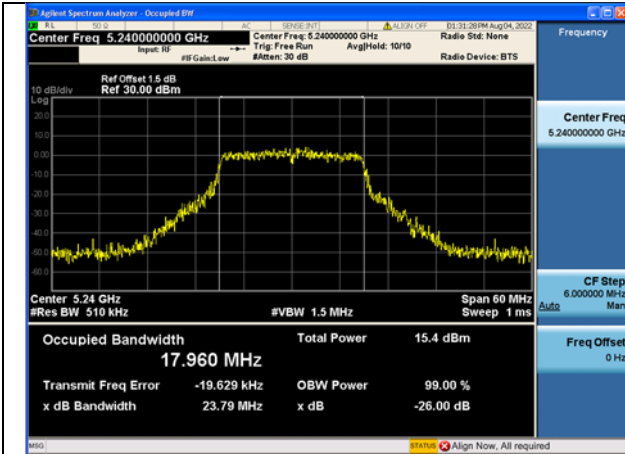
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5180MHz Chain0

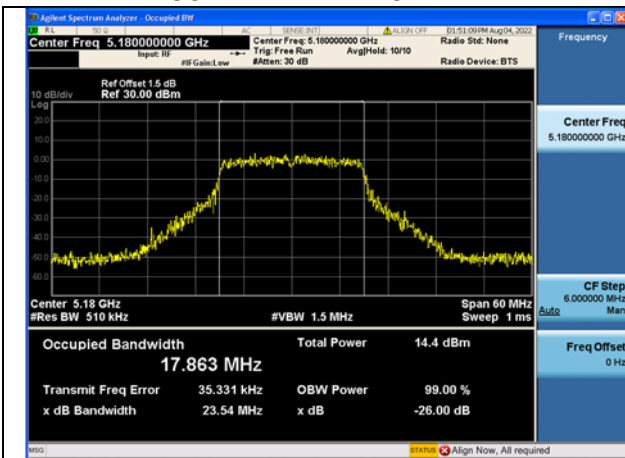


Test Mode:802.11n HT20 5220MHz Chain0

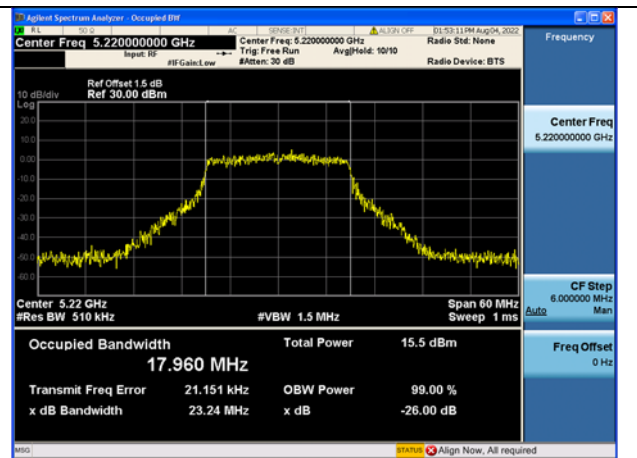


Test Mode:802.11n HT20 5240MHz Chain0

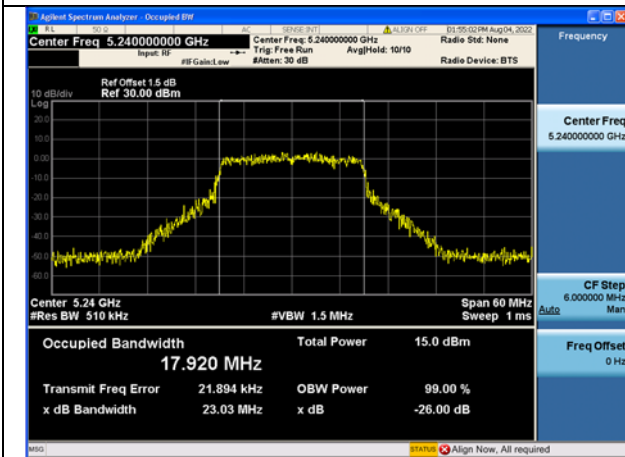
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5180MHz Chain0

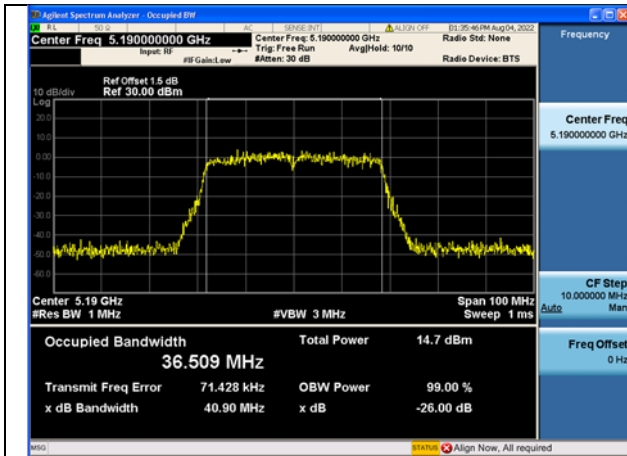


Test Mode:802.11ac VHT20 5220MHz Chain0

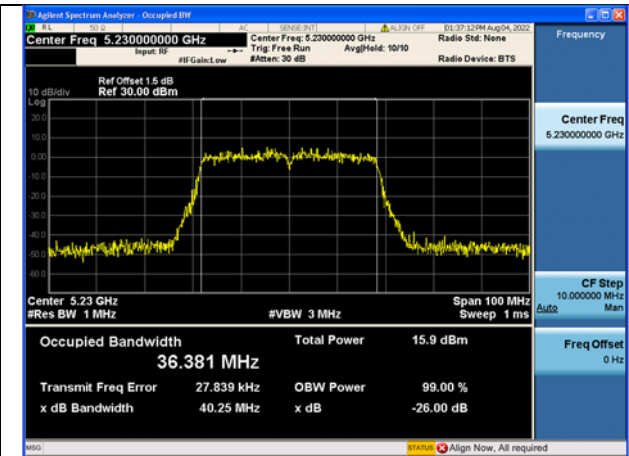


Test Mode:802.11ac VHT20 5240MHz Chain0

Test Mode: 802.11n HT40

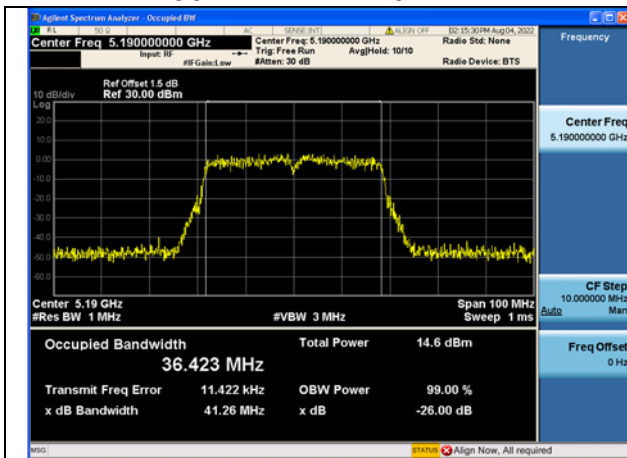


Test Mode:802.11n HT40 5190MHz Chain0

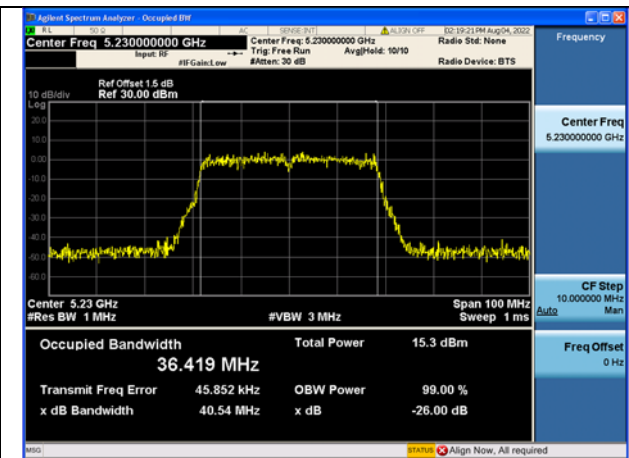


Test Mode:802.11n HT40 5230MHz Chain0

Test Mode: 802.11ac VHT40

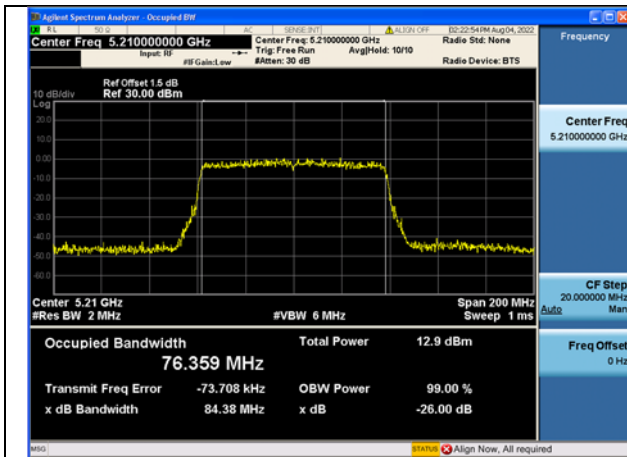


Test Mode:802.11ac VHT40 5190MHz Chain0



Test Mode:802.11ac VHT40 5230MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5210MHz Chain0

Occupied Bandwidth

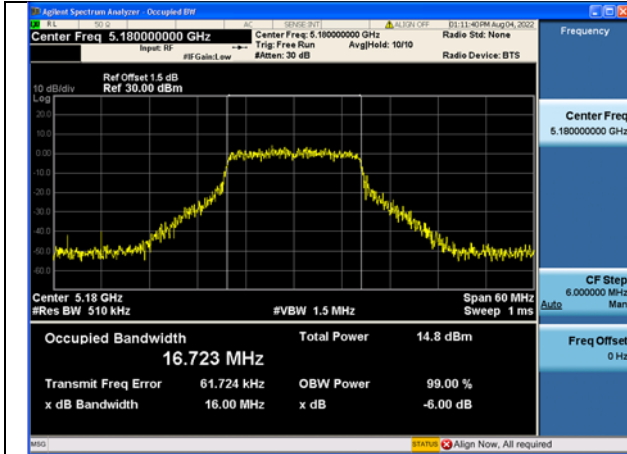
Offset 1.5dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.554	Channel No.562	Channel No.566
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	16.723	16.733	16.797
802.11n HT20	Chain0	17.811	17.896	17.900
802.11ac VHT20	Chain0	17.867	17.935	17.834

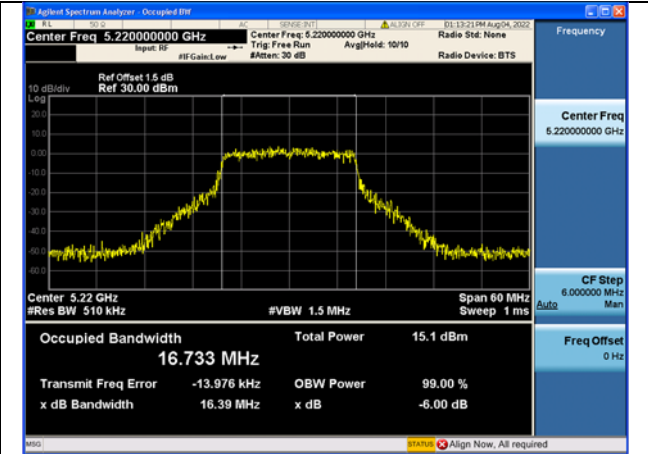
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.556	---	Channel No.564
		5190MHz	---	5230MHz
802.11n HT40	Chain0	36.398	---	36.433
802.11ac VHT40	Chain0	36.432	---	36.390

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.560	---	---
		5210MHz	---	---
802.11ac VHT80	Chain0	76.296	---	---

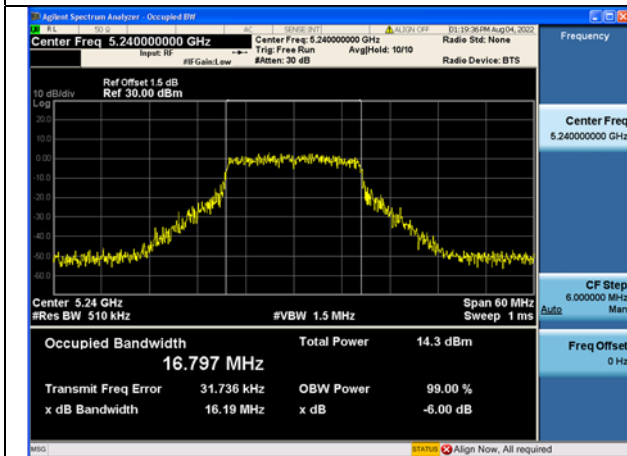
Test Mode: 802.11a



Test Mode:802.11a 5180MHz Chain0

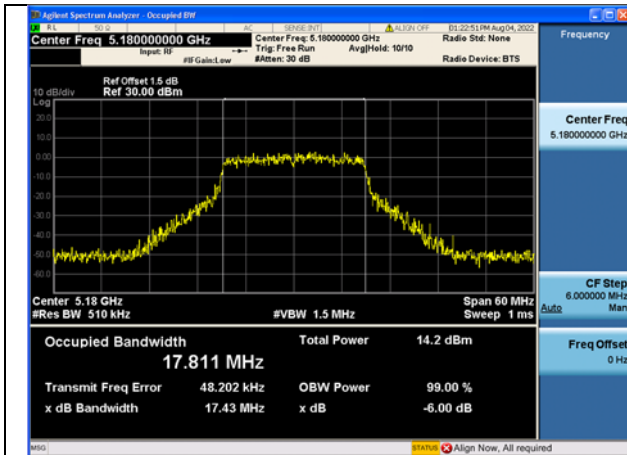


Test Mode:802.11a 5220MHz Chain0

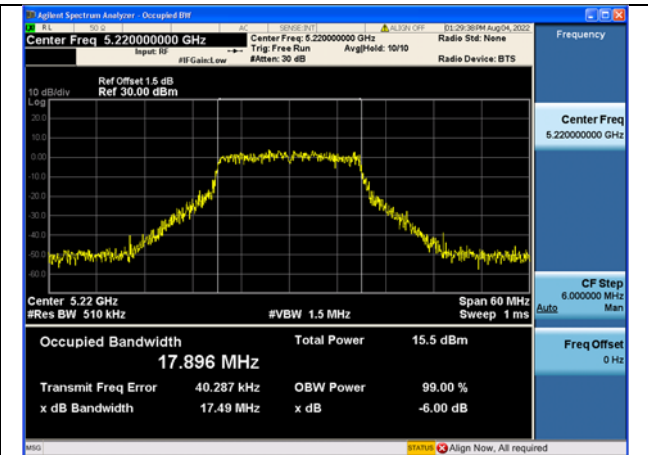


Test Mode:802.11a 5240MHz Chain0

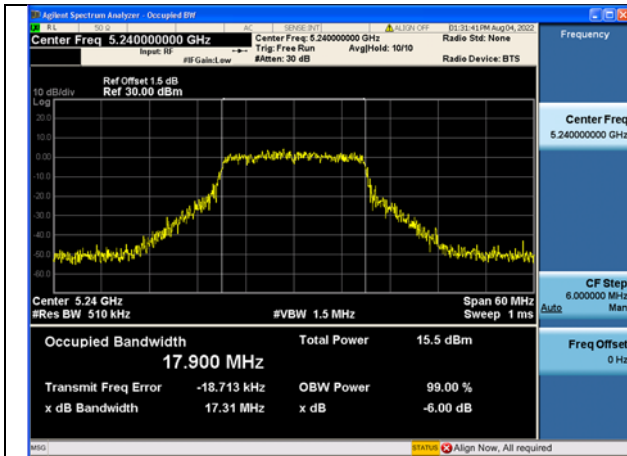
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5180MHz Chain0

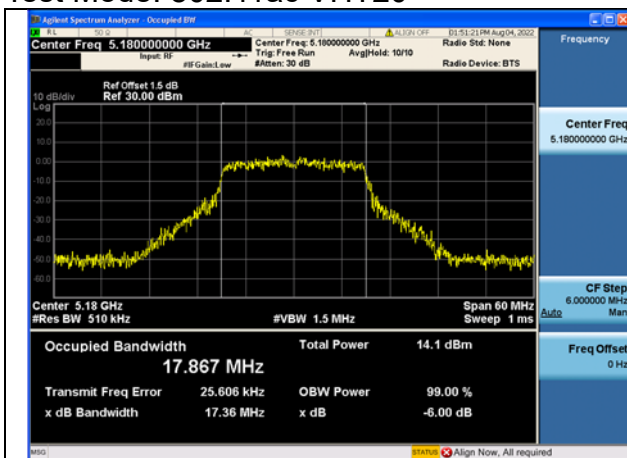


Test Mode:802.11n HT20 5220MHz Chain0

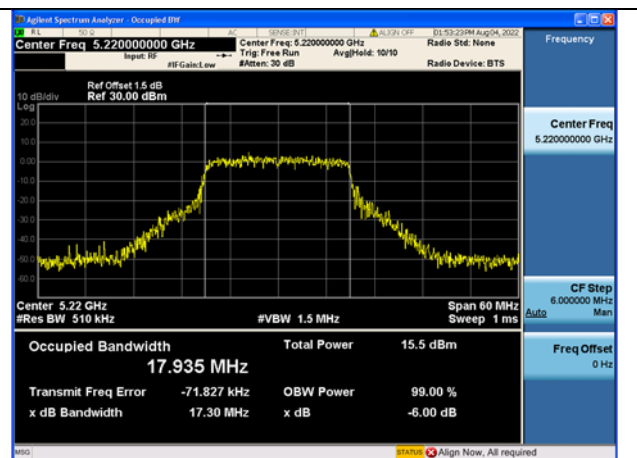


Test Mode:802.11n HT20 5240MHz Chain0

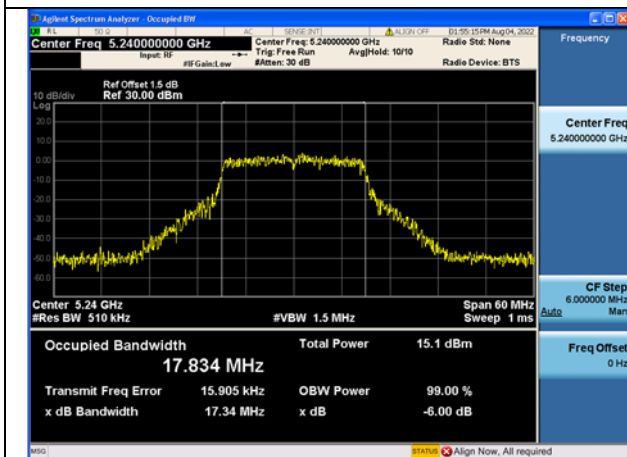
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5180MHz Chain0

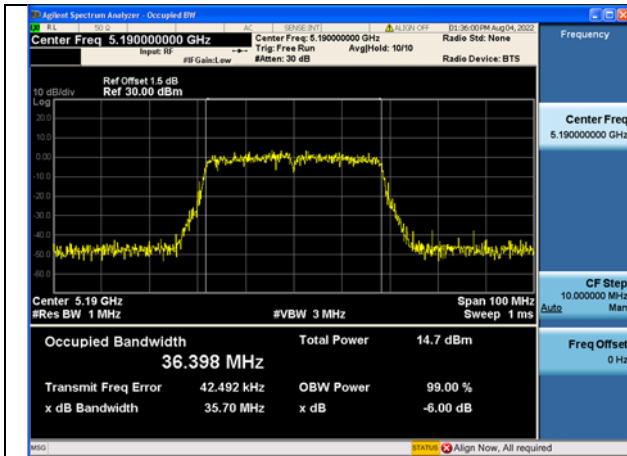


Test Mode:802.11ac VHT20 5220MHz Chain0

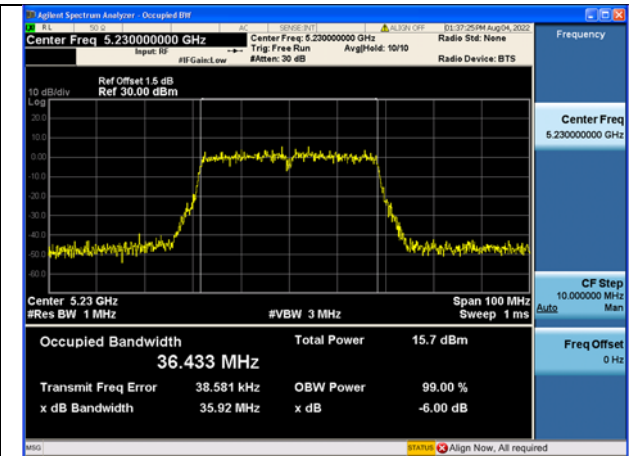


Test Mode:802.11ac VHT20 5240MHz Chain0

Test Mode: 802.11n HT40

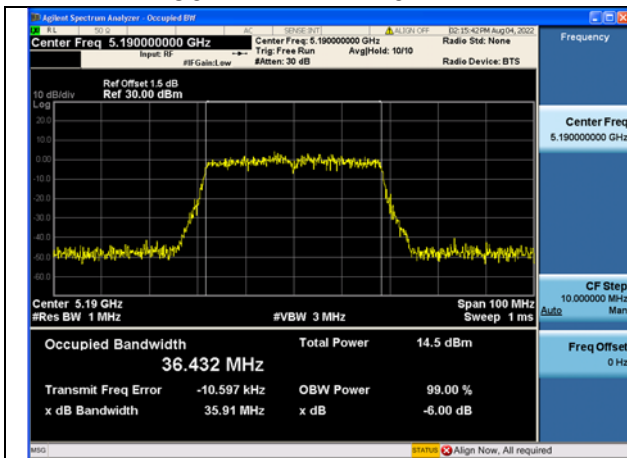


Test Mode:802.11n HT40 5190MHz Chain0

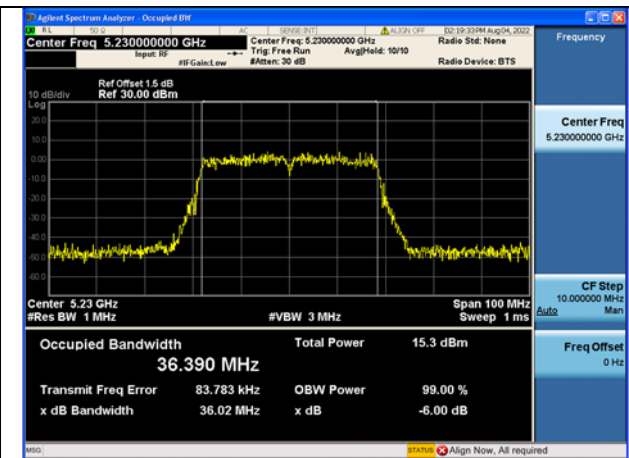


Test Mode:802.11n HT40 5230MHz Chain0

Test Mode: 802.11ac VHT40

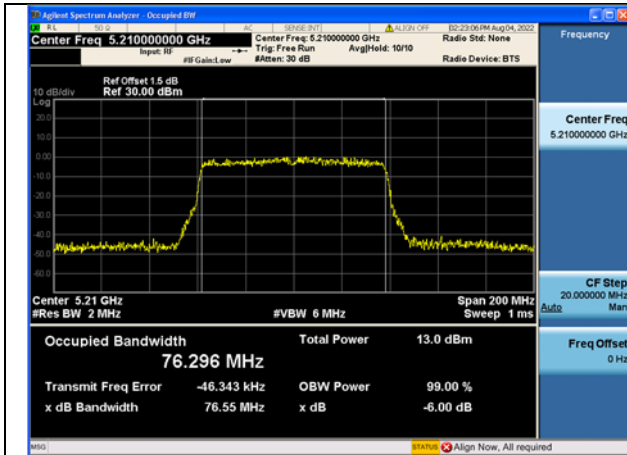


Test Mode:802.11ac VHT40 5190MHz Chain0



Test Mode:802.11ac VHT40 5230MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5210MHz Chain0

Transmitter Power Spectral Density

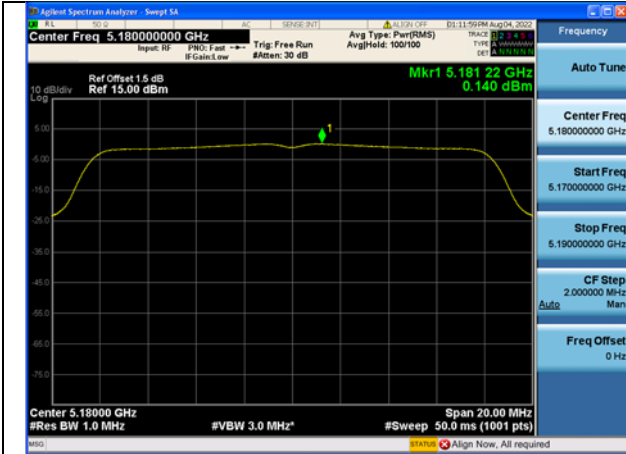
Offset 1.5dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	5180MHz		5220MHz		5240MHz	
		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	0.140	0	0.266	0	-0.283
802.11n HT20	Chain0	0	-0.822	0	0.361	0	0.297
802.11ac VHT20	Chain0	0	-0.830	0	0.350	0	-0.070

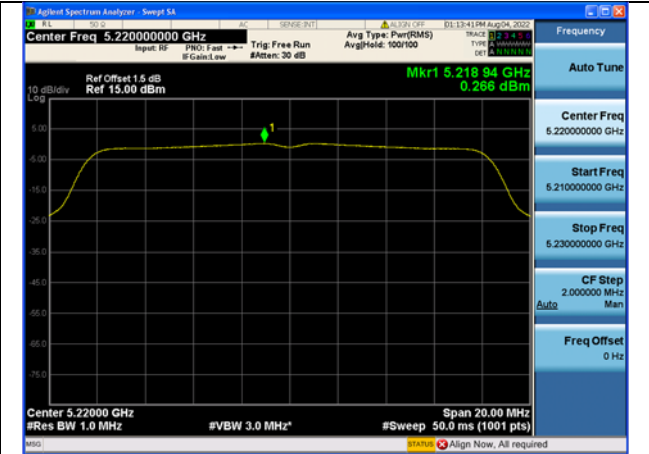
Test Mode	Antenna	5190MHz		---		5230MHz	
		Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11n HT40	Chain0	0.10	-3.686	---	---	0.10	-2.495
802.11ac VHT40	Chain0	0.10	-3.663	---	---	0.10	-2.999

Test Mode	Antenna	5210MHz		---		---	
		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	0.20	-7.059	---	---	---	---

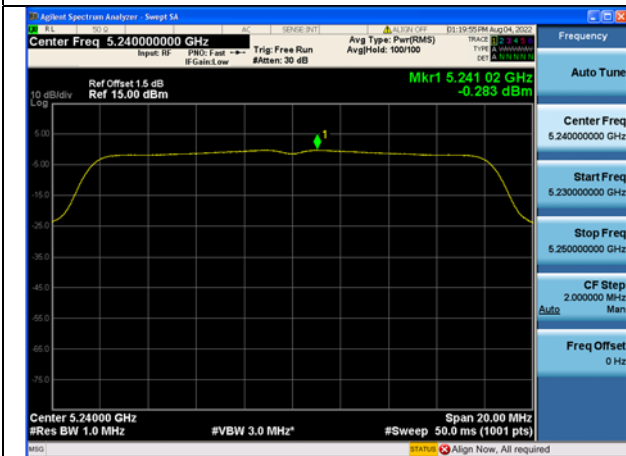
Test Mode: 802.11a



Test Mode:802.11a 5180MHz Chain0



Test Mode:802.11a 5220MHz Chain0

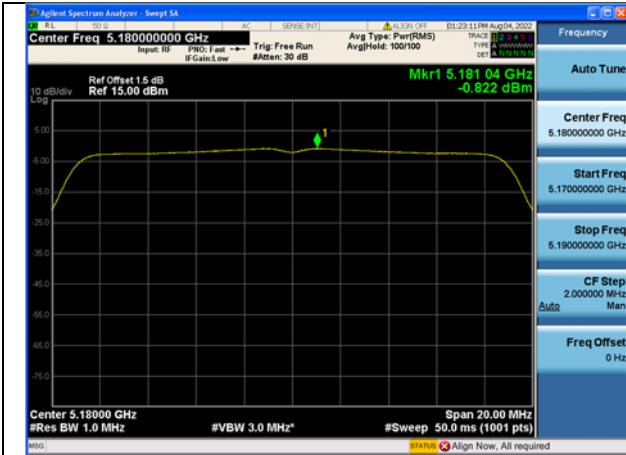


Test Mode:802.11a 5240MHz Chain0

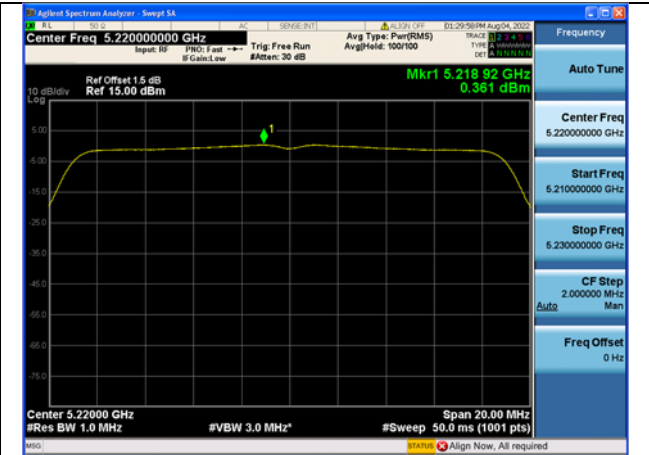


Test Mode:802.11a 5220MHz Chain0

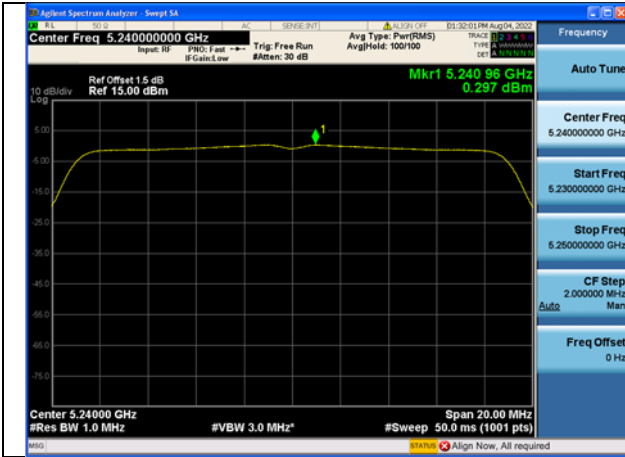
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5180MHz Chain0

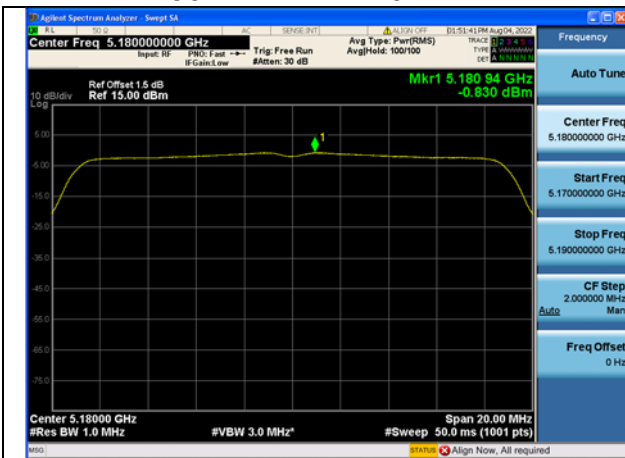


Test Mode:802.11n HT20 5220MHz Chain0

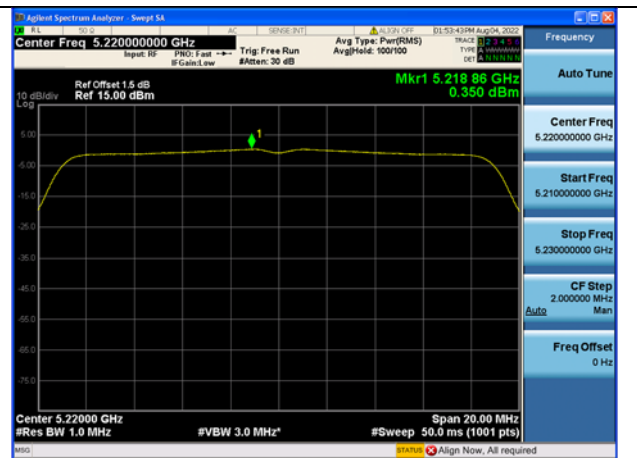


Test Mode:802.11n HT20 5240MHz Chain0

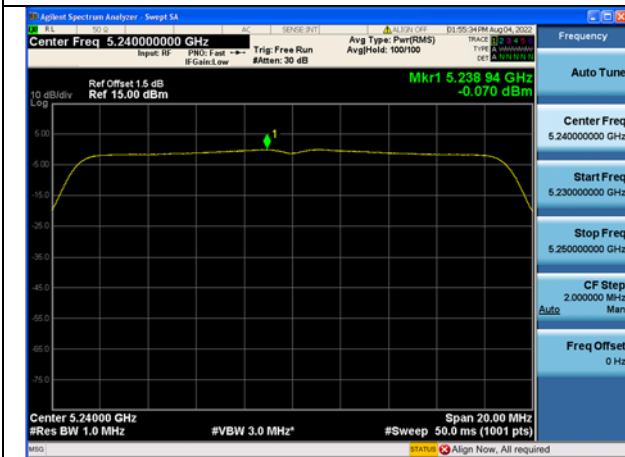
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5180MHz Chain0

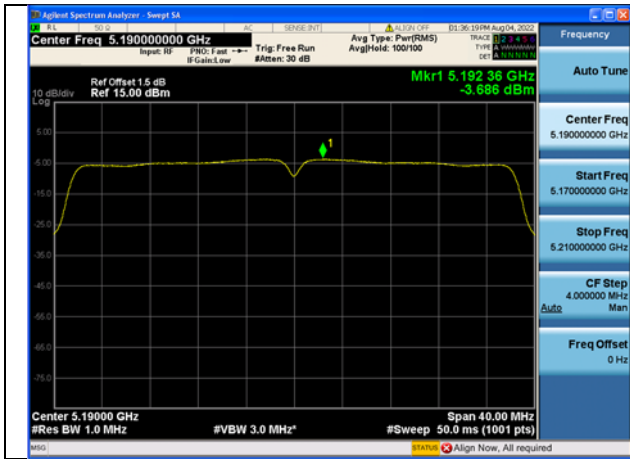


Test Mode:802.11ac VHT20 5220MHz Chain0

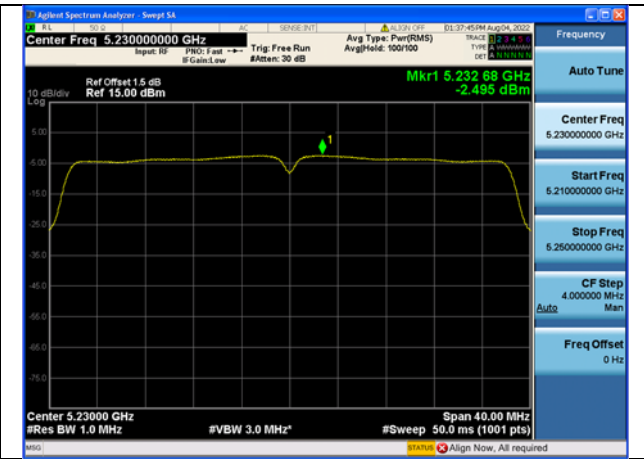


Test Mode:802.11ac VHT20 5240MHz Chain0

Test Mode: 802.11n HT40

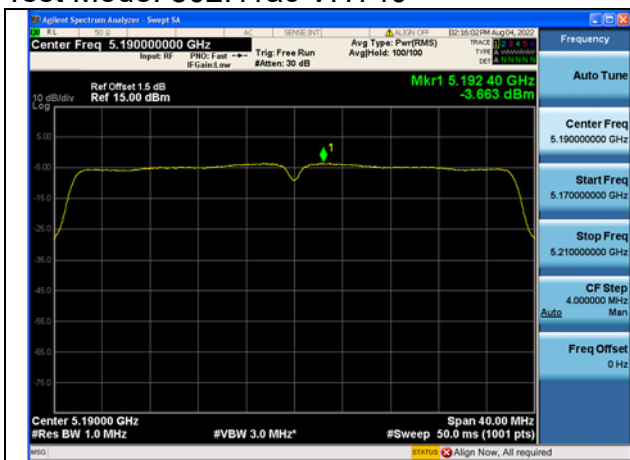


Test Mode:802.11n HT40 5190MHz Chain0

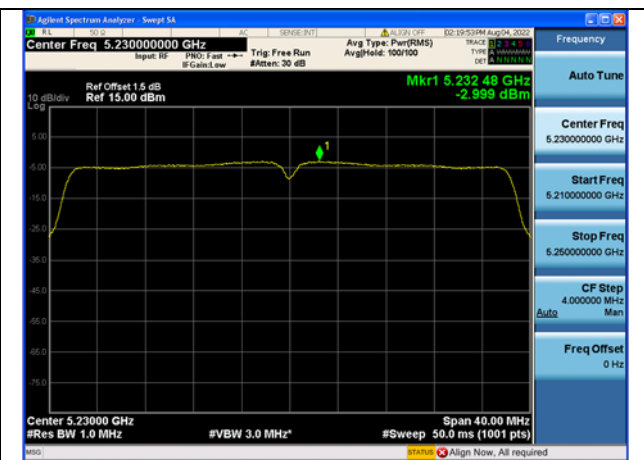


Test Mode:802.11n HT40 5230MHz Chain0

Test Mode: 802.11ac VHT40

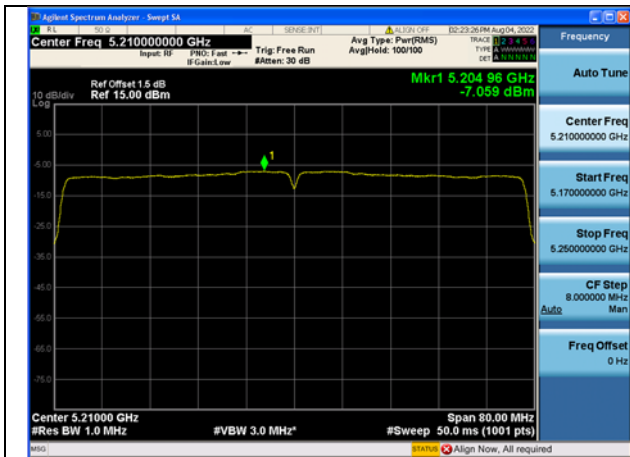


Test Mode:802.11ac VHT40 5190MHz Chain0



Test Mode:802.11ac VHT40 5230MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5210MHz Chain0