

## **APPENDIX A – TEST DATA OF CONDUCTED EMISSION**

### **Duty Cycle**

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5260	99.56%	0	Fig.1
802.11n HT20	5260	99.48%	0	Fig.2
802.11ac VHT20	5260	99.48%	0	Fig.3
802.11n HT40	5270	99.05%	0	Fig.4
802.11ac VHT40	5270	98.28%	0	Fig.5
802.11ac VHT80	5290	96.80%	0.14	Fig.6

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

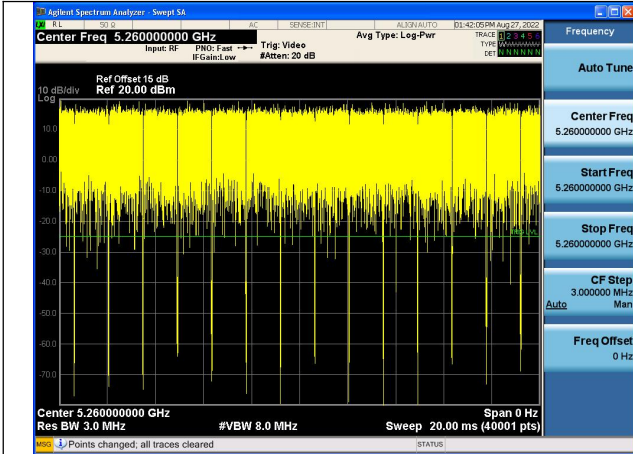


Fig.1

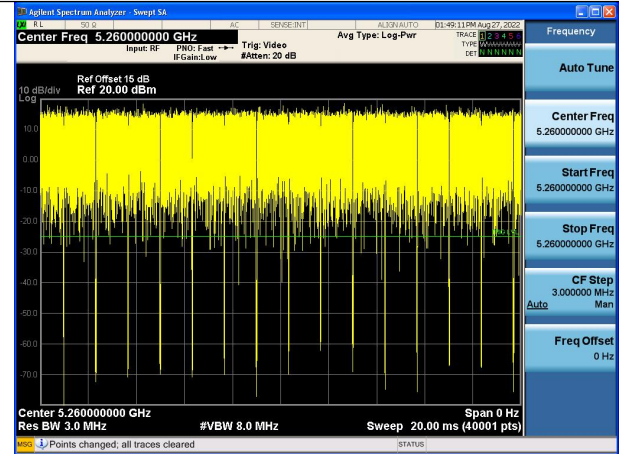


Fig.2

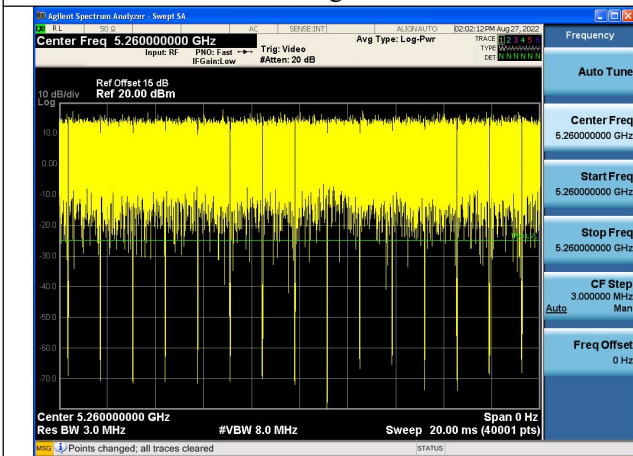


Fig.3

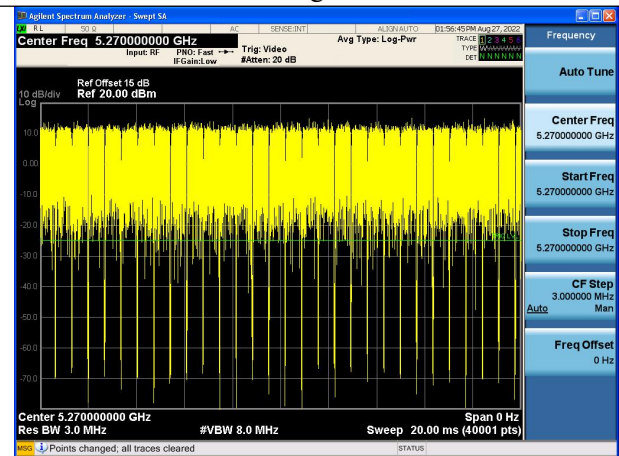


Fig.4

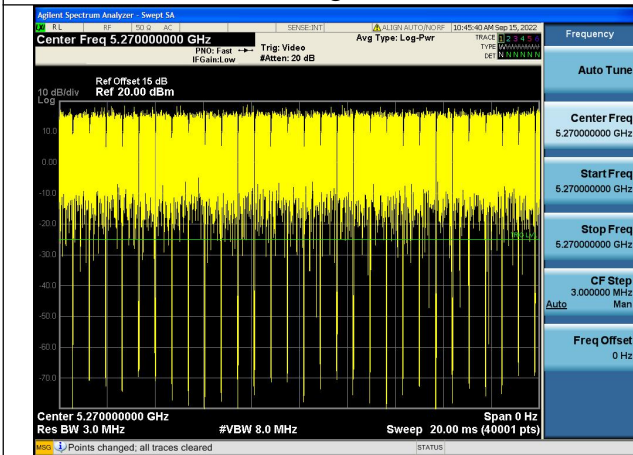


Fig.5



Fig.6

## Output Power

Mode	Tones/ RUIndex	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5260	Chain0	14.51	14.30
802.11a	NA	5280	Chain0	14.42	14.21
802.11a	NA	5320	Chain0	14.58	14.37
802.11n HT20	NA	5260	Chain0	14.37	14.16
802.11n HT20	NA	5280	Chain0	14.11	13.90
802.11n HT20	NA	5320	Chain0	14.40	14.19
802.11ac VHT20	NA	5260	Chain0	12.76	12.55
802.11ac VHT20	NA	5280	Chain0	12.63	12.42
802.11ac VHT20	NA	5320	Chain0	12.86	12.65
802.11n HT40	NA	5270	Chain0	14.10	13.89
802.11n HT40	NA	5310	Chain0	14.30	14.09
802.11ac VHT40	NA	5270	Chain0	12.66	12.45
802.11ac VHT40	NA	5310	Chain0	12.87	12.66
802.11ac VHT80	NA	5290	Chain0	12.32	12.11

## Emission Bandwidth

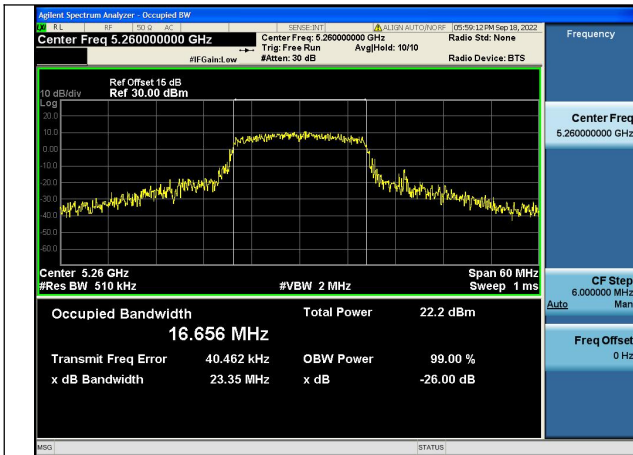
Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.554	Channel No.562	Channel No.566
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	23.35	21.51	27.62
802.11n HT20	Chain0	22.06	21.44	22.15
802.11ac VHT20	Chain0	20.21	20.20	20.20

Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.556	---	Channel No.564
		5190MHz	---	5230MHz
802.11n HT40	Chain0	40.59	---	40.53
802.11ac VHT40	Chain0	39.87	---	40.54

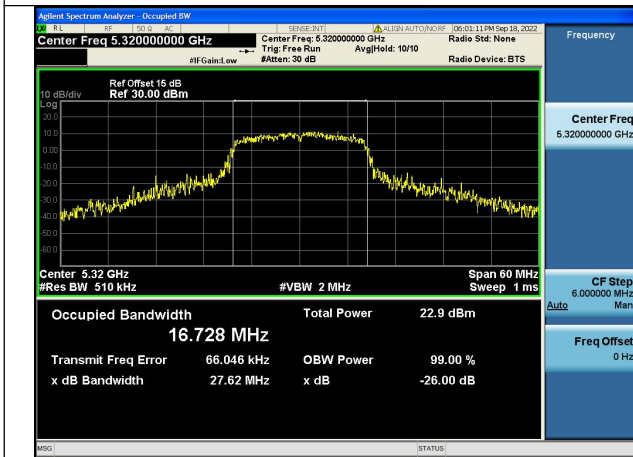
Test Mode	Antenna	26dB Bandwidth (MHz)		
		Channel No.560	---	---
		5210MHz	---	---
802.11ac VHT80	Chain0	80.52	---	---

Test Mode: 802.11a



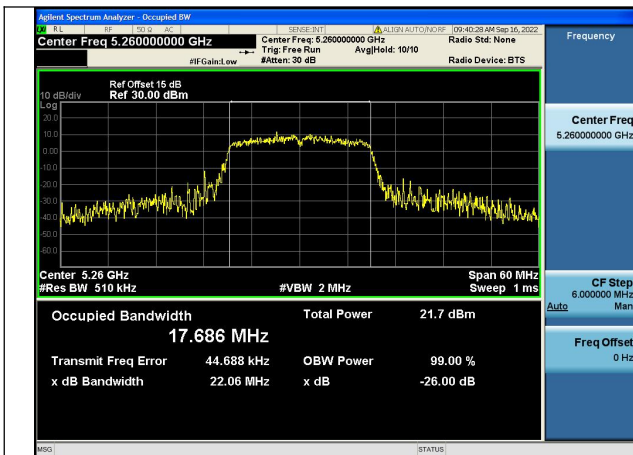
Test Mode:802.11a 5260MHz Chain0

Test Mode:802.11a 5280MHz Chain0

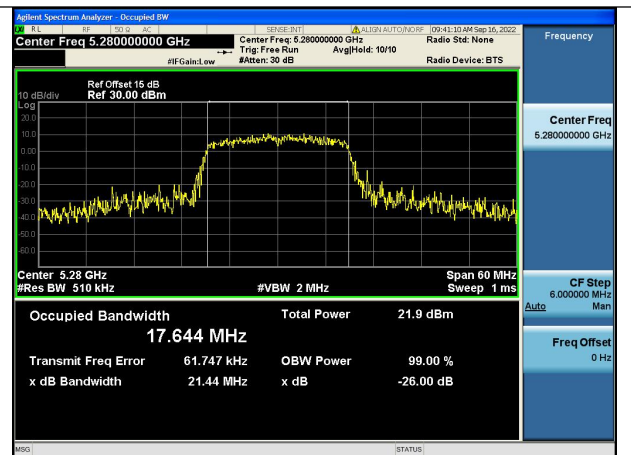


Test Mode:802.11a 5320MHz Chain0

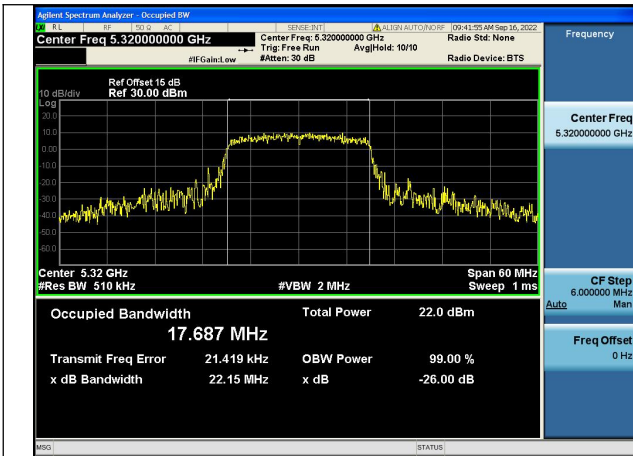
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5260MHz Chain0

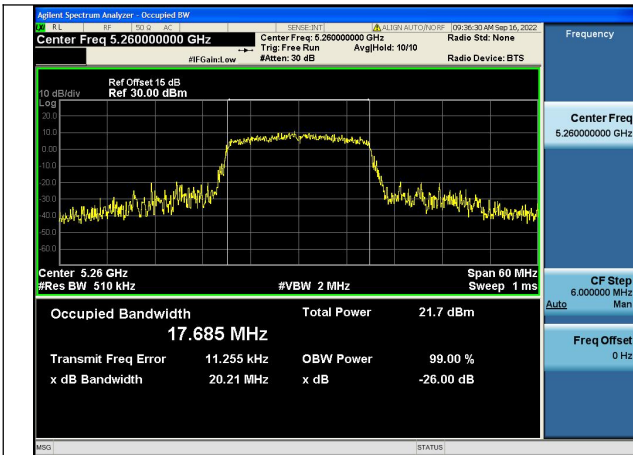


Test Mode:802.11n HT20 5280MHz Chain0

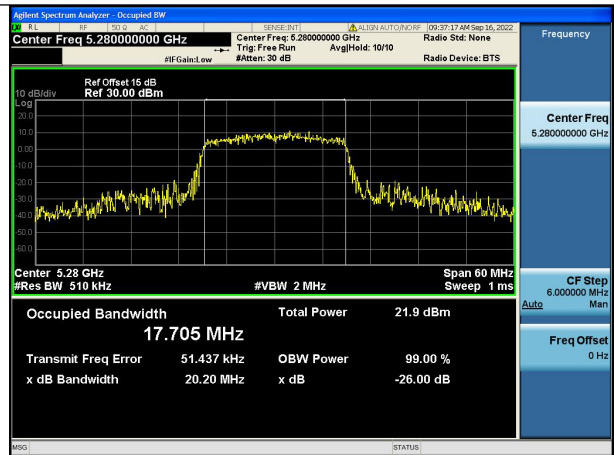


Test Mode:802.11n HT20 5320MHz Chain0

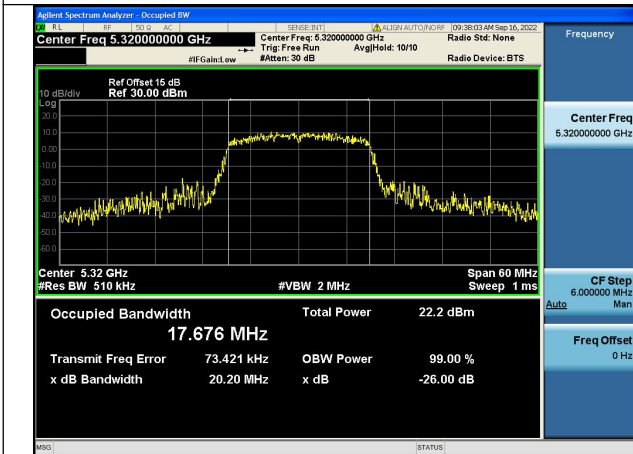
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5260MHz Chain0

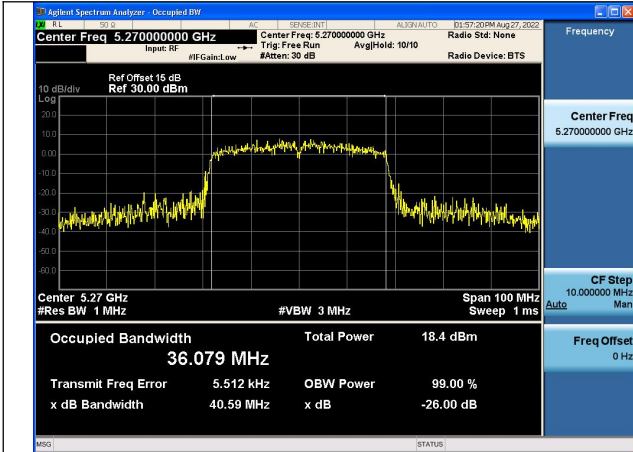


Test Mode:802.11ac VHT20 5280MHz Chain0

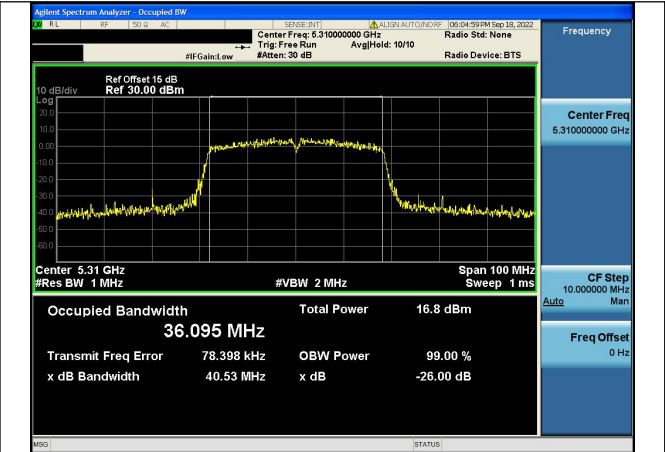


Test Mode:802.11ac VHT20 5320MHz Chain0

Test Mode: 802.11n HT40

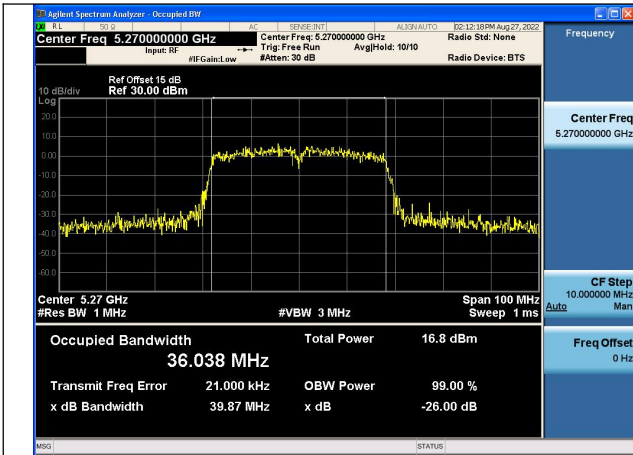


Test Mode:802.11n HT40 5270MHz Chain0

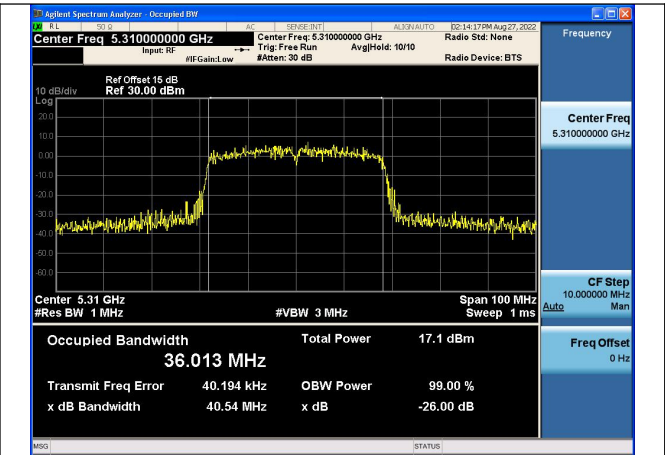


Test Mode:802.11n HT40 5310MHz Chain0

Test Mode: 802.11ac VHT40

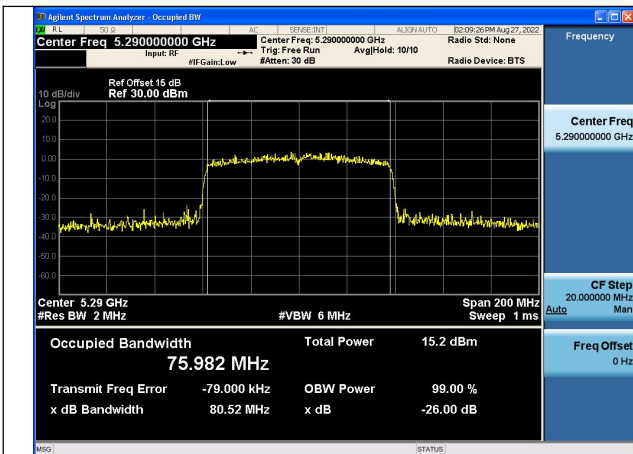


Test Mode:802.11ac VHT40 5270MHz Chain0



Test Mode:802.11ac VHT40 5310MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5290MHz Chain0

## Occupied Bandwidth

Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

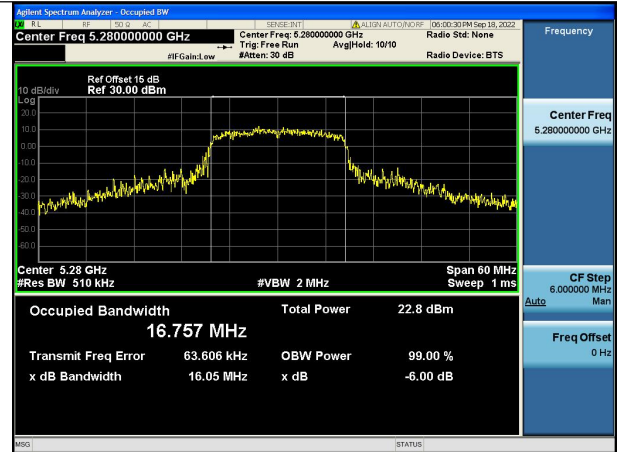
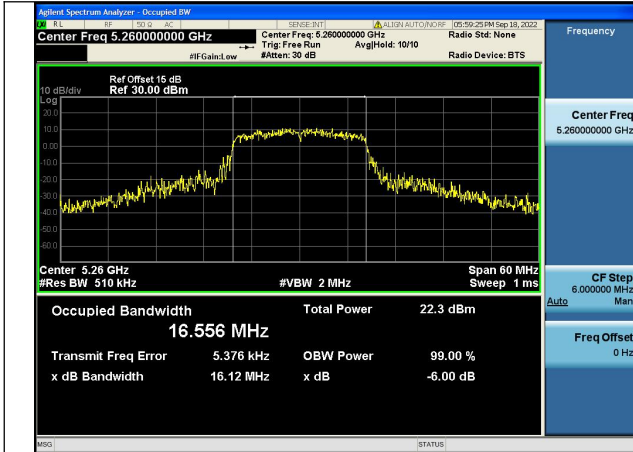
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.554	Channel No.562	Channel No.566
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	16.556	16.757	16.691
802.11n HT20	Chain0	17.742	17.591	17.738
802.11ac VHT20	Chain0	17.737	17.686	17.662

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.556	---	Channel No.564
		5190MHz	---	5230MHz
802.11n HT40	Chain0	36.194	---	36.207
802.11ac VHT40	Chain0	36.119	---	36.167

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		Channel No.560	---	---
		5210MHz	---	---
802.11ac VHT80	Chain0	76.116	---	---



Test Mode: 802.11a



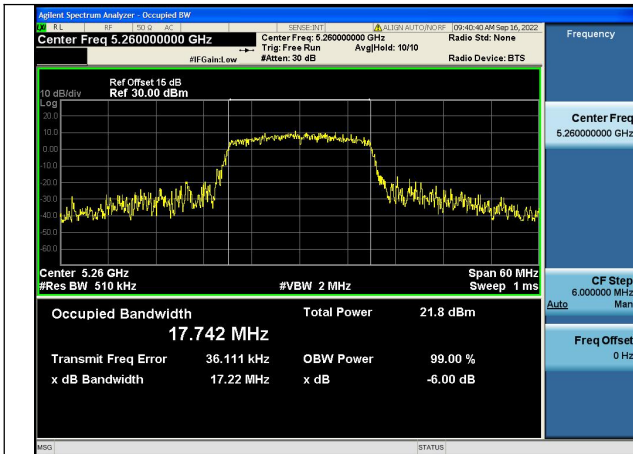
Test Mode:802.11a 5260MHz Chain0

Test Mode:802.11a 5280MHz Chain0

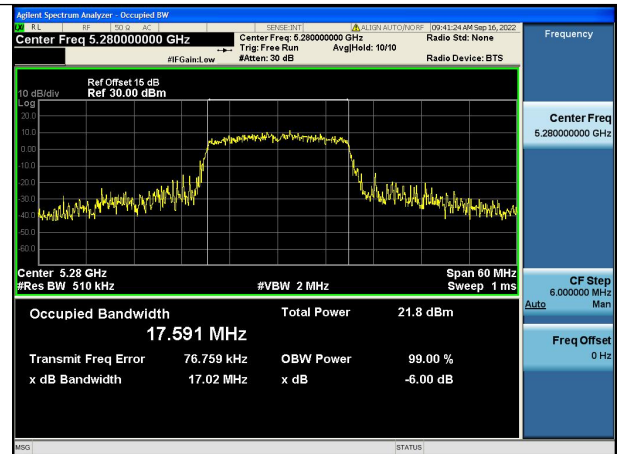


Test Mode:802.11a 5320MHz Chain0

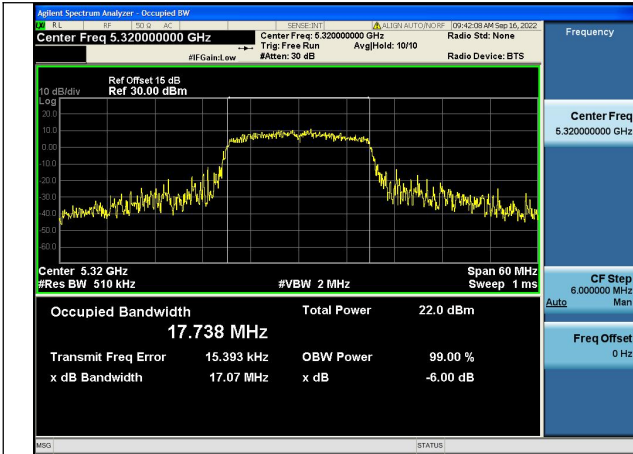
Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5260MHz Chain0

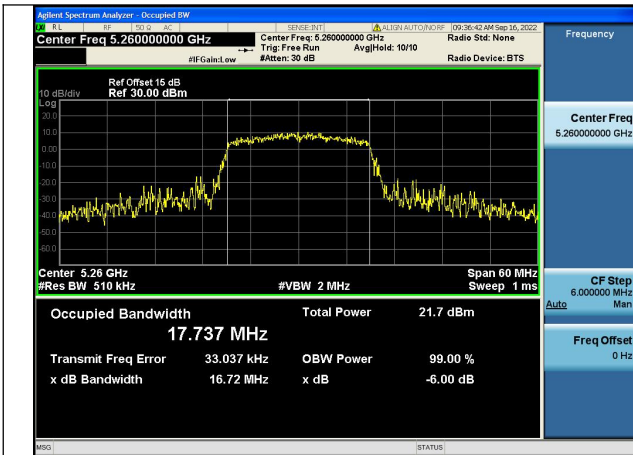


Test Mode:802.11n HT20 5280MHz Chain0

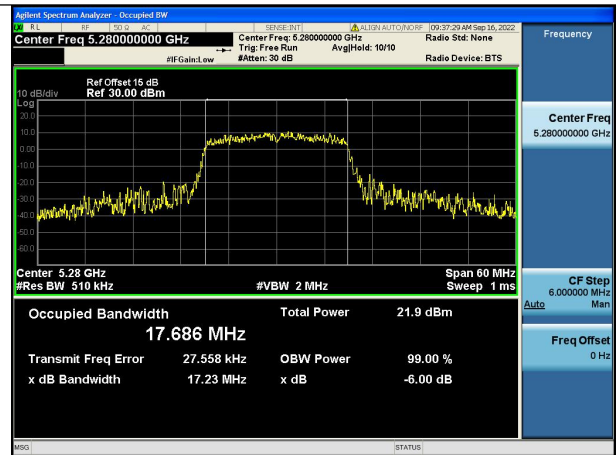


Test Mode:802.11n HT20 5320MHz Chain0

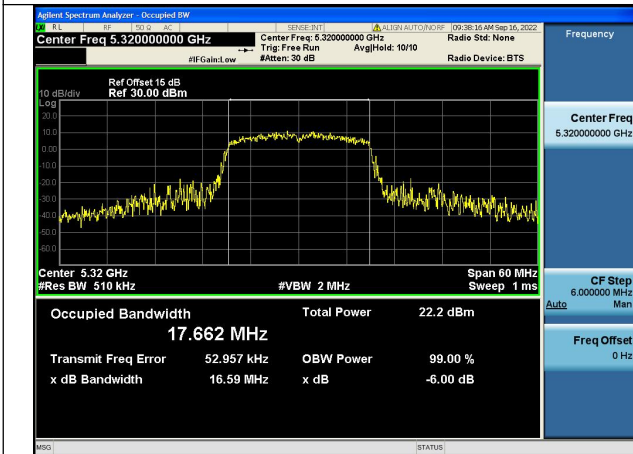
Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5260MHz Chain0

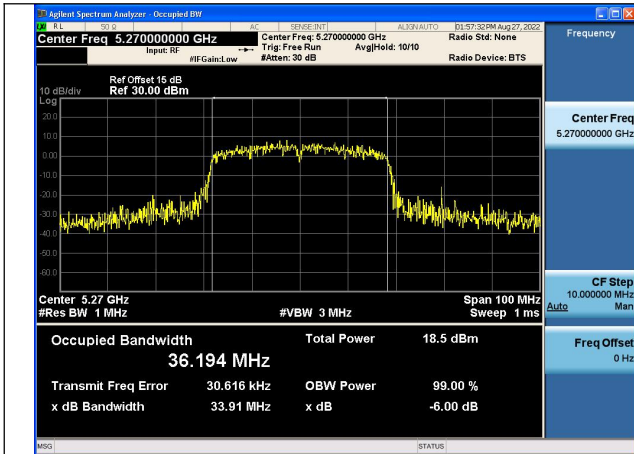


Test Mode:802.11ac VHT20 5280MHz Chain0

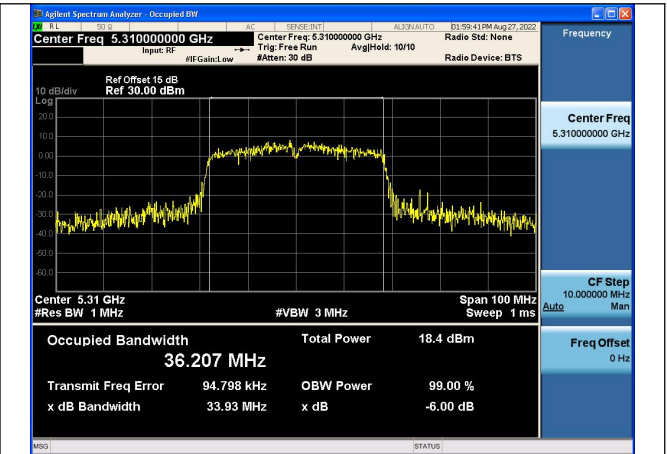


Test Mode:802.11ac VHT20 5320MHz Chain0

Test Mode: 802.11n HT40

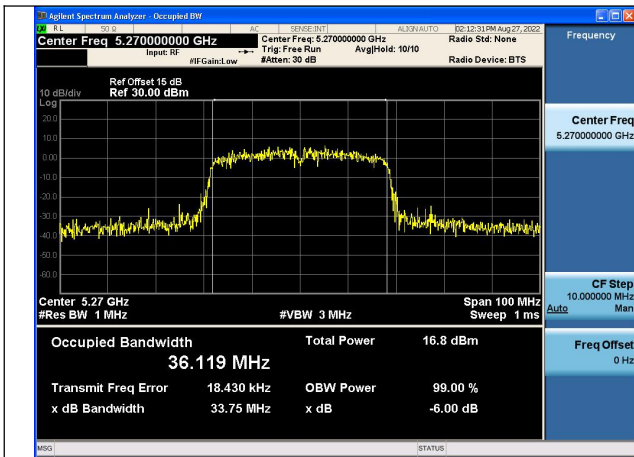


Test Mode:802.11n HT40 5270MHz Chain0

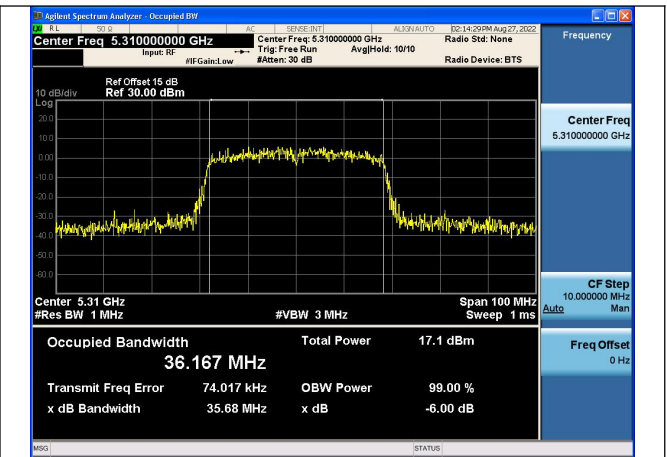


Test Mode:802.11n HT40 5310MHz Chain0

Test Mode: 802.11ac VHT40

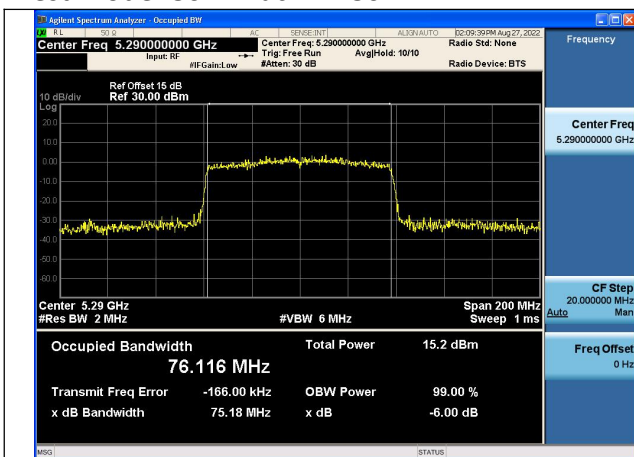


Test Mode:802.11ac VHT40 5270MHz Chain0



Test Mode:802.11ac VHT40 5310MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5290MHz Chain0

## Transmitter Power Spectral Density

Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Tones	5260MHz		5280MHz		5320MHz	
			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	3.990	0	3.892	0	4.159
802.11n HT20	Chain0	NA	0	3.688	0	3.560	0	3.631
802.11ac VHT20	Chain0	NA	0	2.050	0	1.952	0	2.176

Test Mode	Antenna	Tones	5270MHz		---		5310MHz	
			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	0.619	---	---	0	0.780
802.11ac VHT40	Chain0	NA	0	-0.923	---	---	0	-0.626

Test Mode	Antenna	Tones	5290MHz		---		---	
			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	-4.355	---	---	---	---

Test Mode: 802.11a



Test Mode:802.11a 5260MHz Chain0



Test Mode:802.11a 5280MHz Chain0



Test Mode:802.11a 5320MHz Chain0

Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5260MHz Chain0

Test Mode:802.11n HT20 5280MHz Chain0



Test Mode:802.11n HT20 5320MHz Chain0