

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

ANT 0

Offset 28.6dB = Attenuator + Temporary antenna connector loss + Cable loss

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5180	99.63%	0
802. 11n HT20	5180	99.53%	0
802. 11n HT40	5190	99.42%	0
802. 11ac VHT20	5180	99.62%	0
802. 11ac VHT40	5190	99.36%	0
802. 11ac VHT80	5210	99.22%	0

Output Power NII1

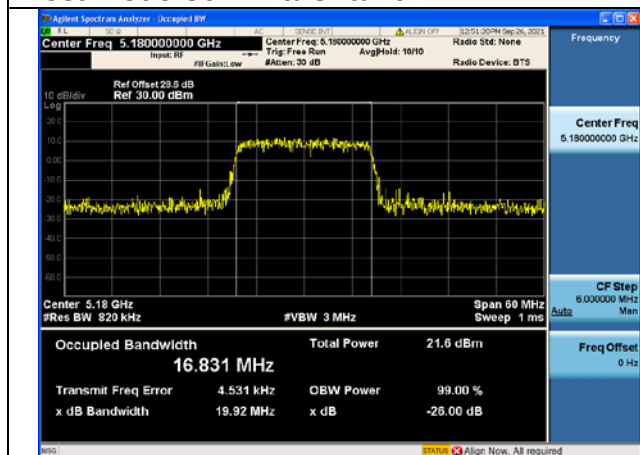
Mode	Tones/ RUIndex	Freq (MHz)	Chain	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Chain0	16.78	17.08
		5220	Chain0	17.19	17.49
		5240	Chain0	17.31	17.61
802.11n20M		5180	Chain0	16.66	16.96
		5220	Chain0	17.04	17.34
		5240	Chain0	17.14	17.44
802.11n40M		5190	Chain0	15.83	16.13
		5230	Chain0	16.08	16.38
802.11ac20M		5180	Chain0	16.55	16.85
		5220	Chain0	17.10	17.40
		5240	Chain0	17.32	17.62
802.11ac40M		5190	Chain0	15.80	16.10
		5230	Chain0	16.17	16.47
802.11ac80M		5210	Chain0	14.63	14.93

Emission Bandwidth

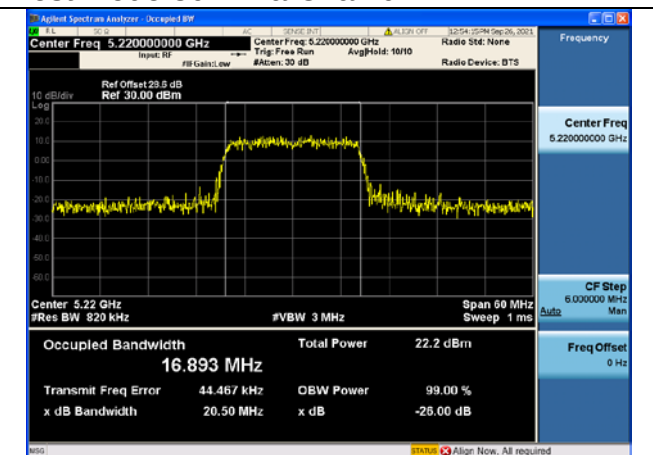
Test Mode:802.11a

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5180	Chain0	19.92
5220	Chain0	20.50
5240	Chain0	24.63

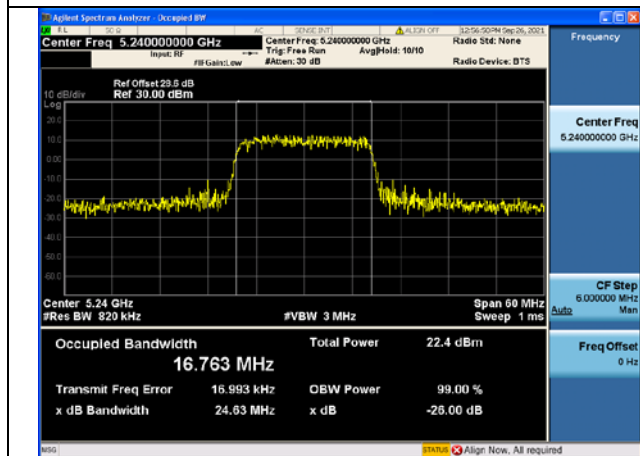
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



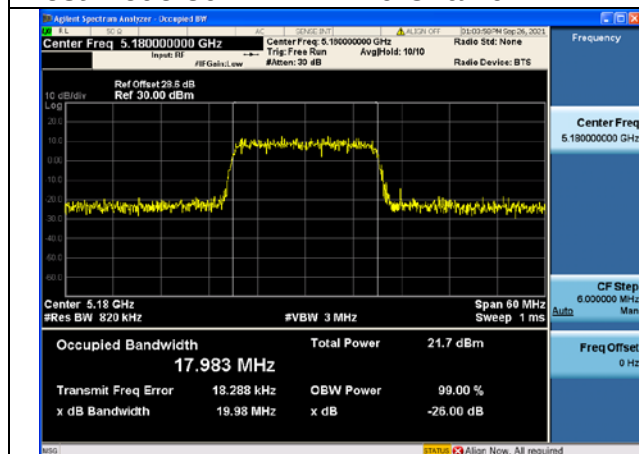
Test Mode:802.11a Chain0



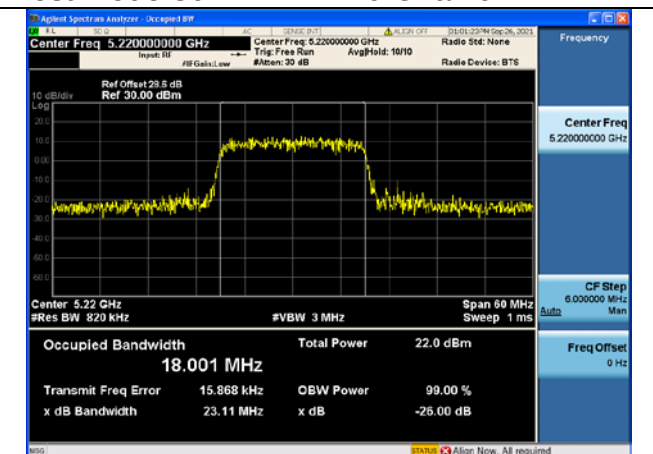
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5180	Chain0	19.98
5220	Chain0	23.11
5240	Chain0	21.77

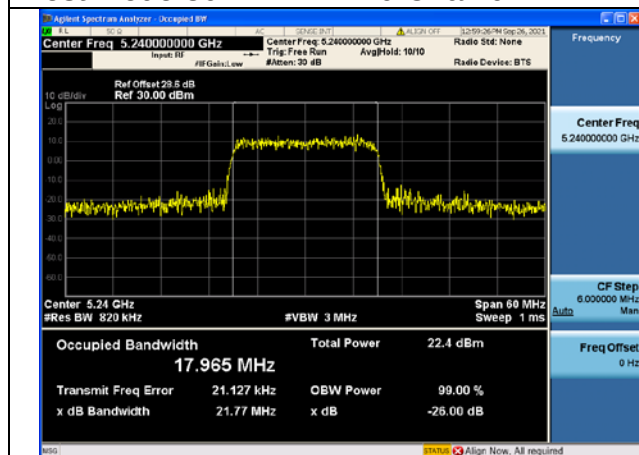
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



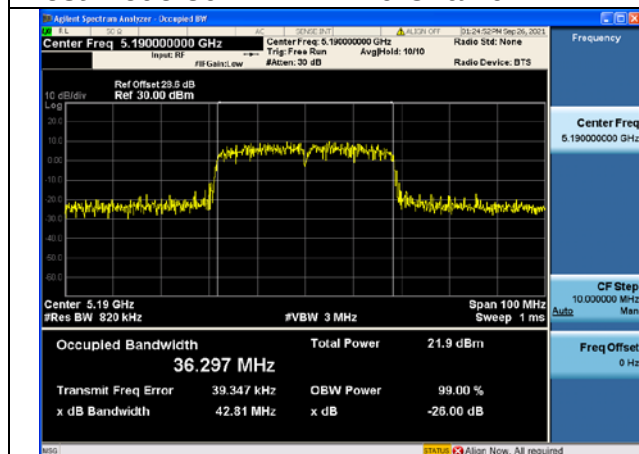
Test Mode:802. 11n HT20 Chain0



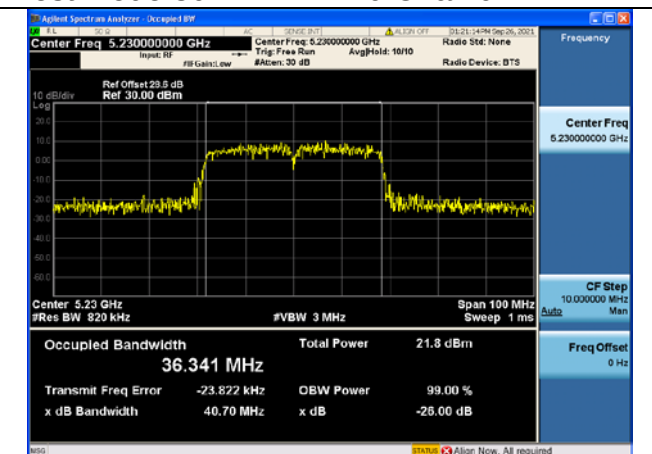
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5190	Chain0	42.81
5230	Chain0	40.70

Test Mode:802. 11n HT40 Chain0



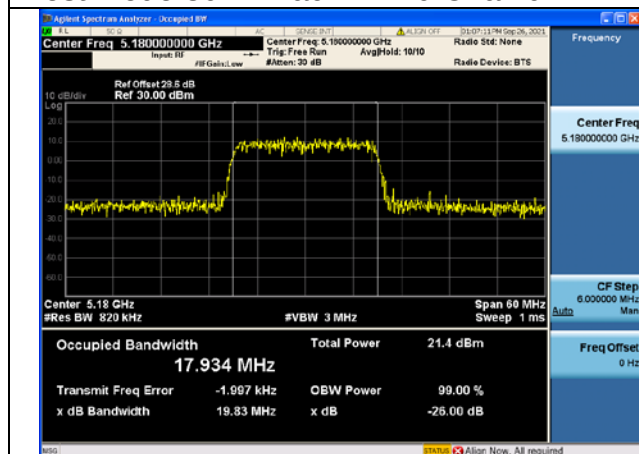
Test Mode:802. 11n HT40 Chain0



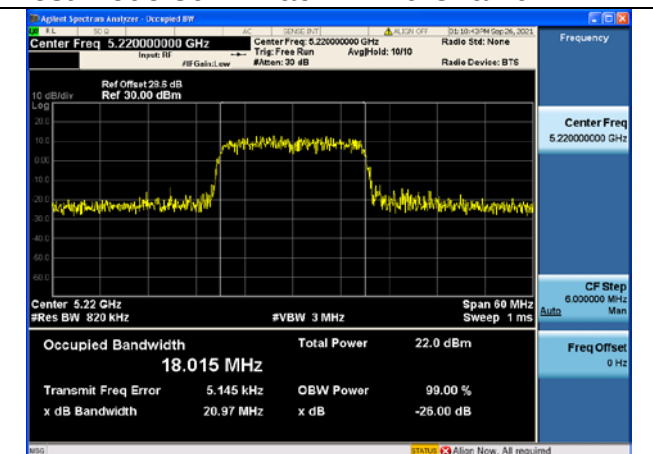
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5180	Chain0	19.83
5220	Chain0	20.97
5240	Chain0	24.50

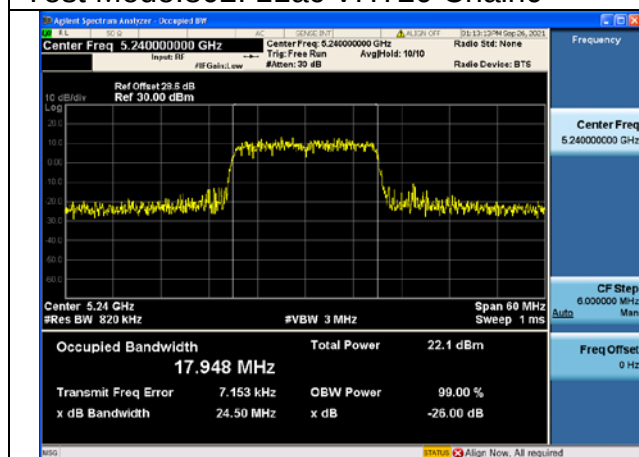
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0



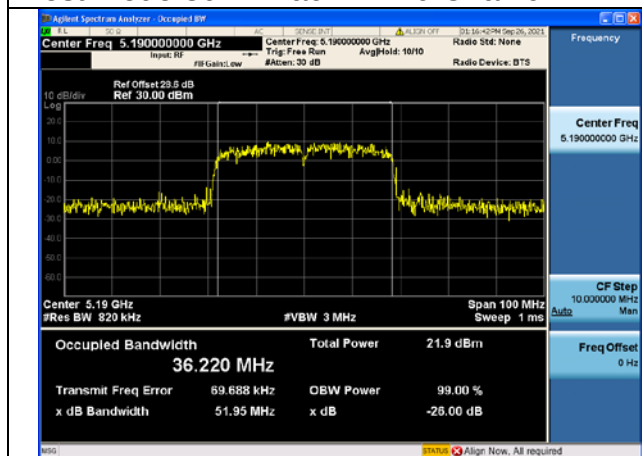
Test Mode:802. 11ac VHT20 Chain0



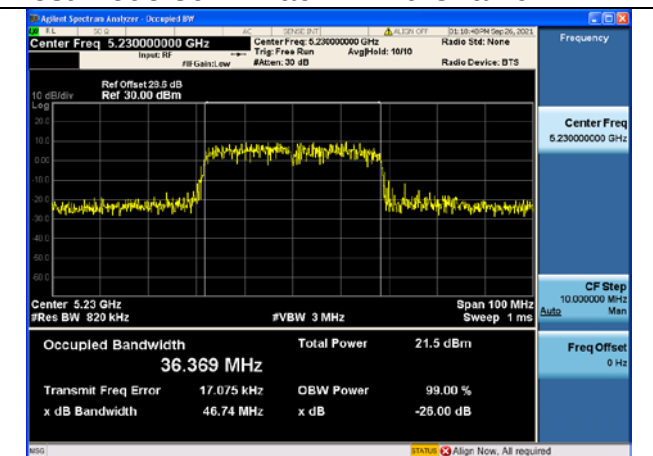
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5190	Chain0	51.95
5230	Chain0	46.74

Test Mode:802. 11ac VHT40 Chain0



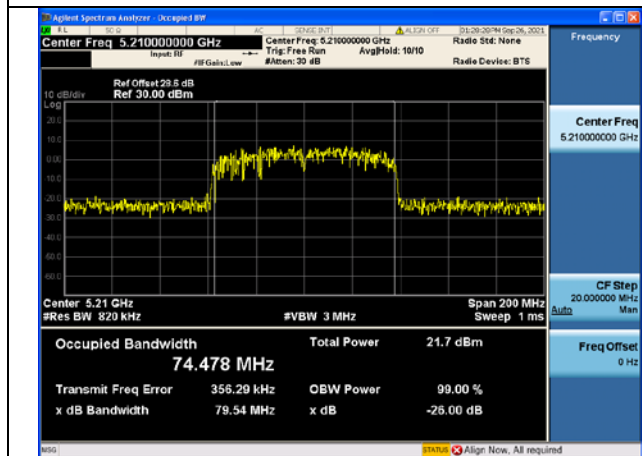
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5210	Chain0	79.54

Test Mode:802. 11ac VHT80 Chain0

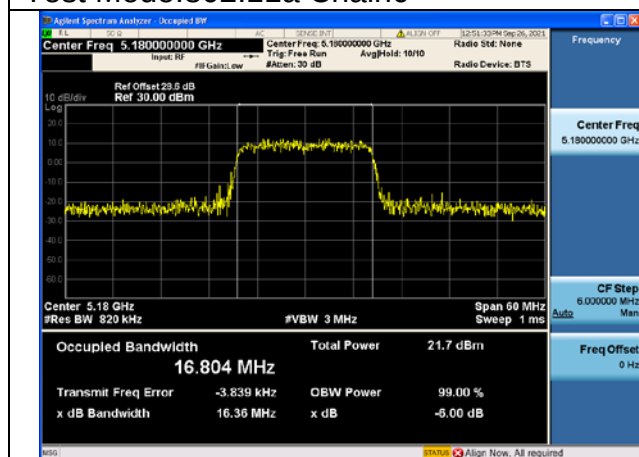


Occupied Bandwidth

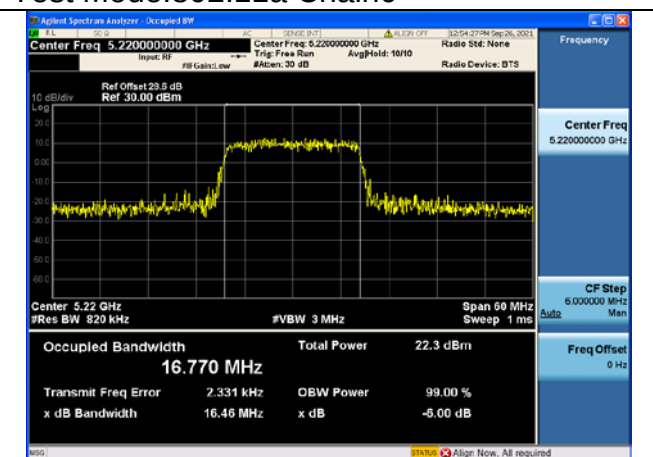
Test Mode:802.11a

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5180	Chain0	16.804
5220	Chain0	16.770
5240	Chain0	16.849

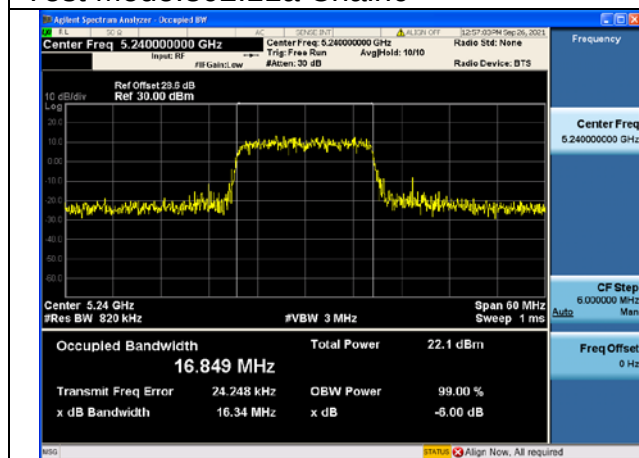
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



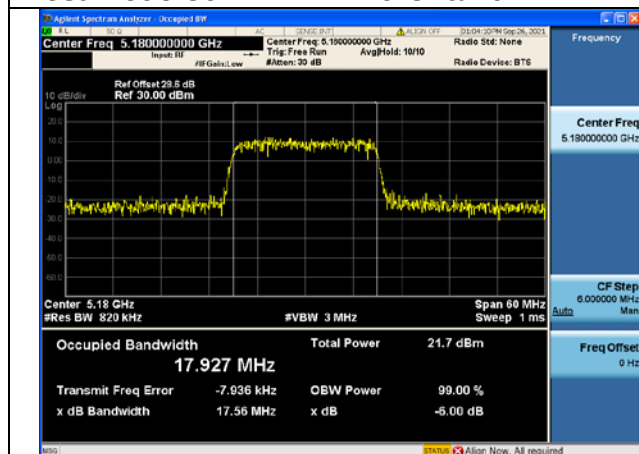
Test Mode:802.11a Chain0



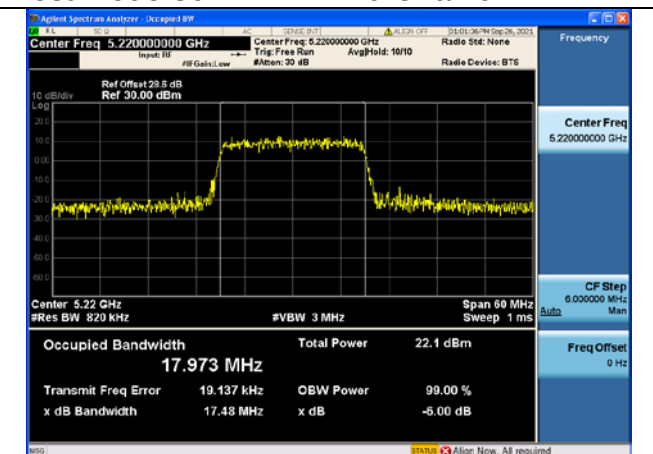
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5180	Chain0	17.927
5220	Chain0	17.973
5240	Chain0	17.949

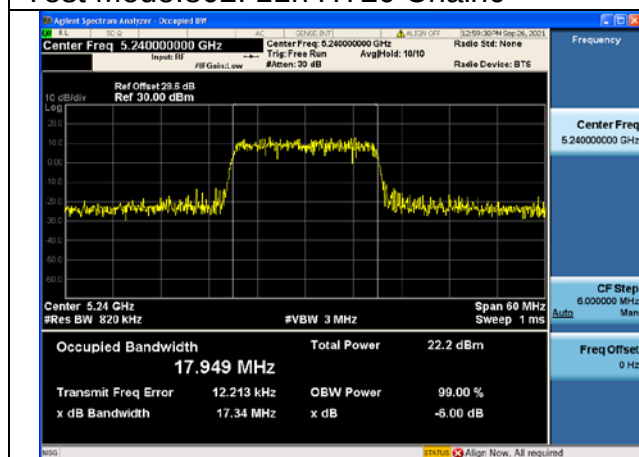
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



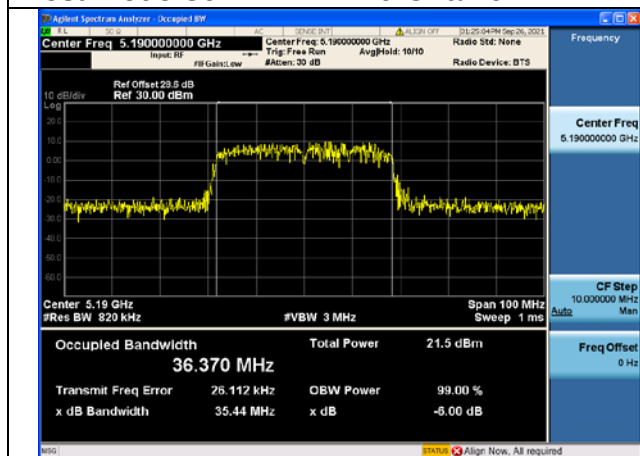
Test Mode:802. 11n HT20 Chain0



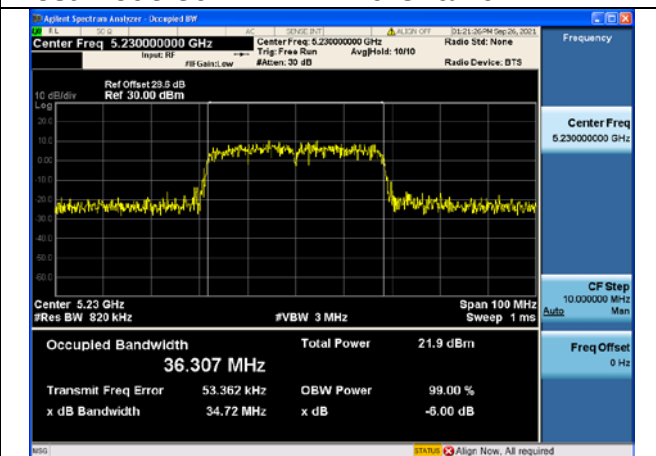
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5190	Chain0	36.370
5230	Chain0	36.307

Test Mode:802. 11n HT40 Chain0



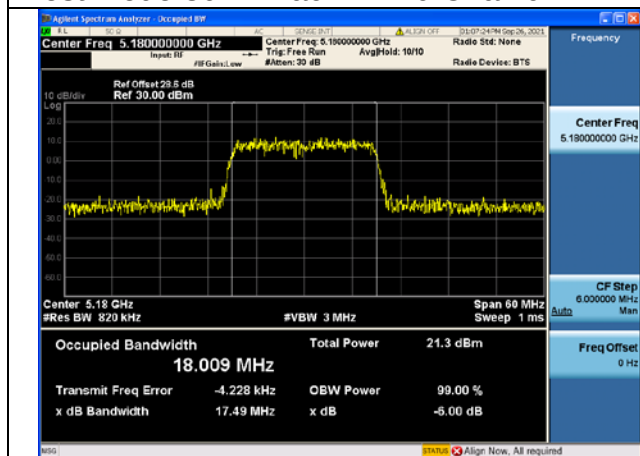
Test Mode:802. 11n HT40 Chain0



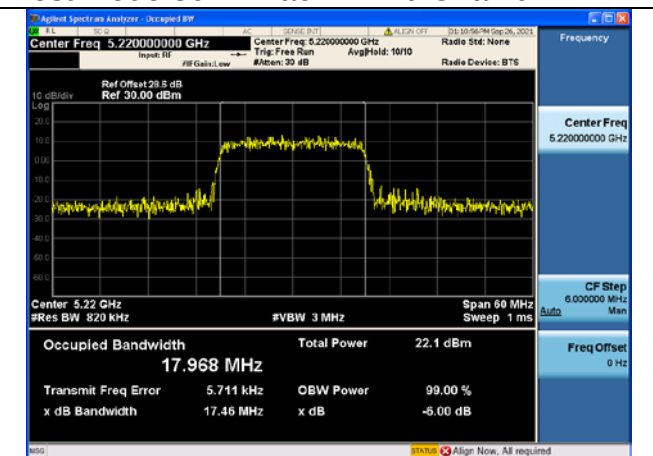
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5180	Chain0	18.009
5220	Chain0	17.968
5240	Chain0	17.955

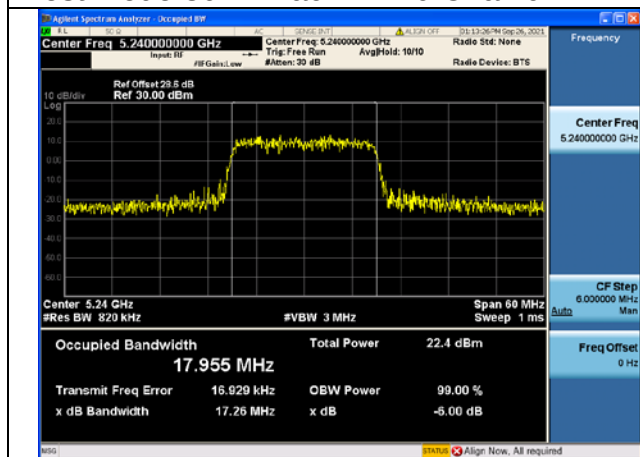
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0



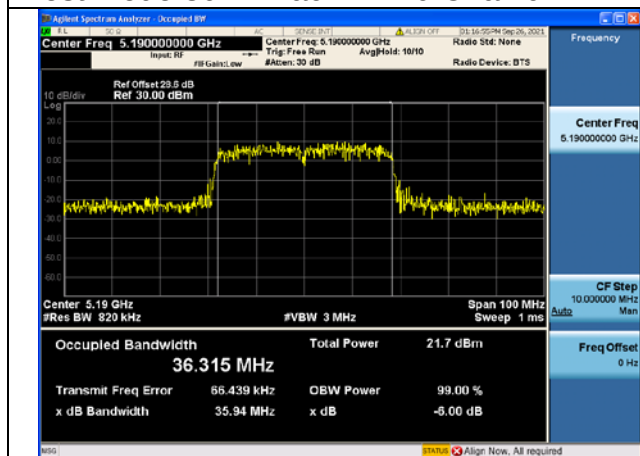
Test Mode:802. 11ac VHT20 Chain0



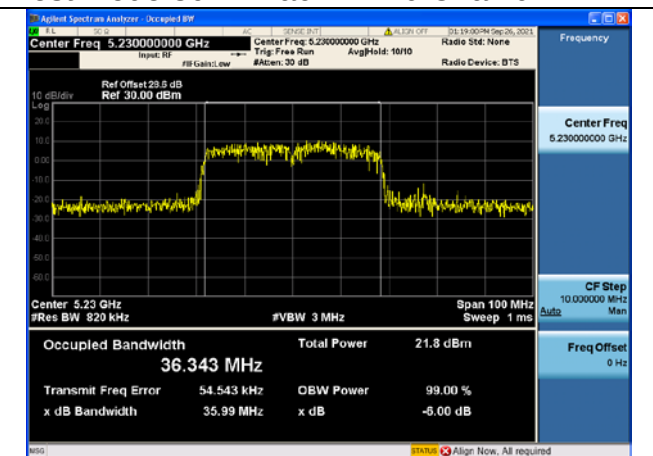
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5190	Chain0	36.315
5230	Chain0	36.343

Test Mode:802. 11ac VHT40 Chain0



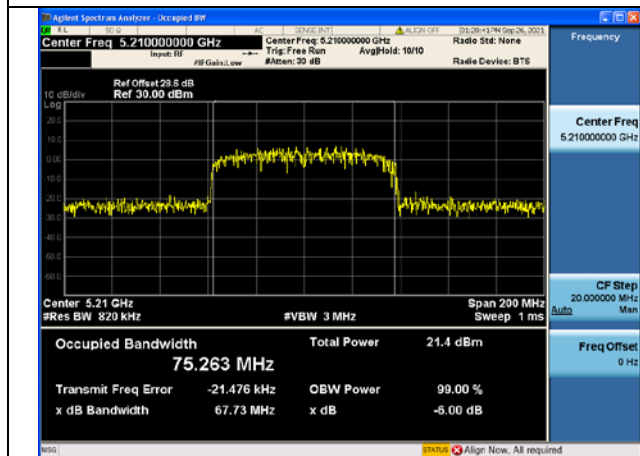
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5210	Chain0	75.263

Test Mode:802. 11ac VHT80 Chain0

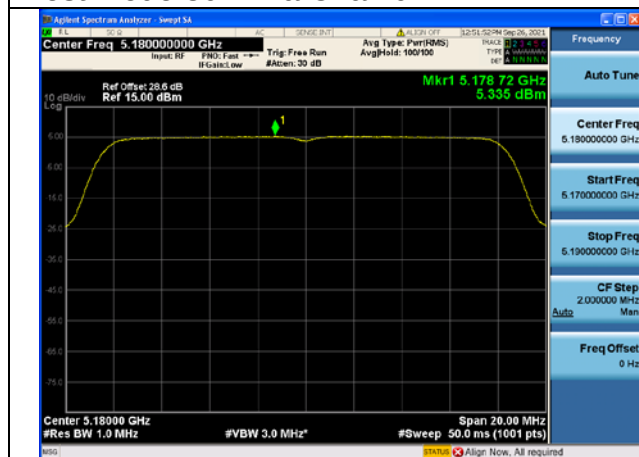


Transmitter Power Spectral Density

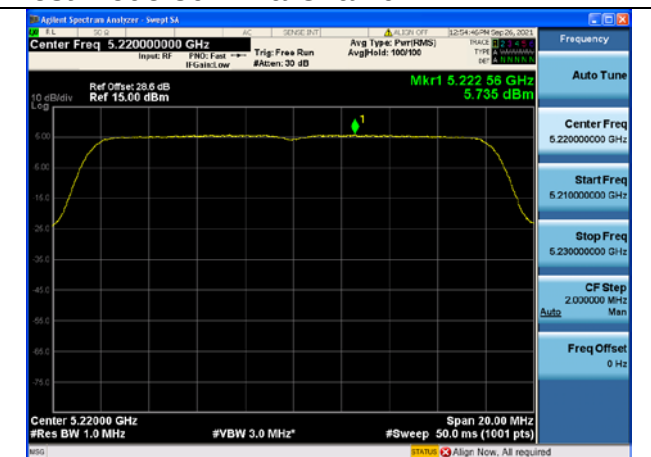
Test Mode:802.11a

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5180	0	Chain0	5.335
5220		Chain0	5.735
5240		Chain0	5.974

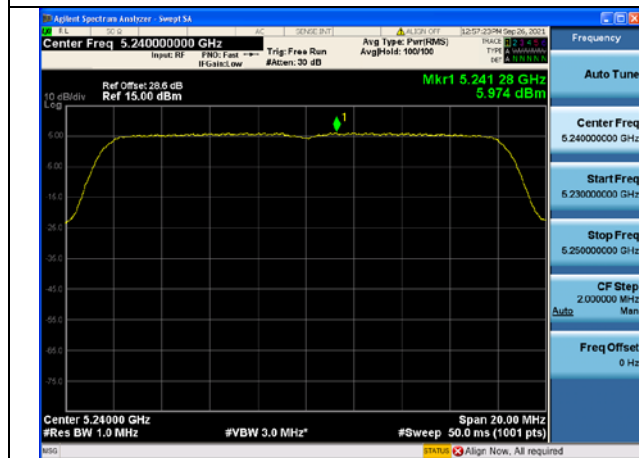
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



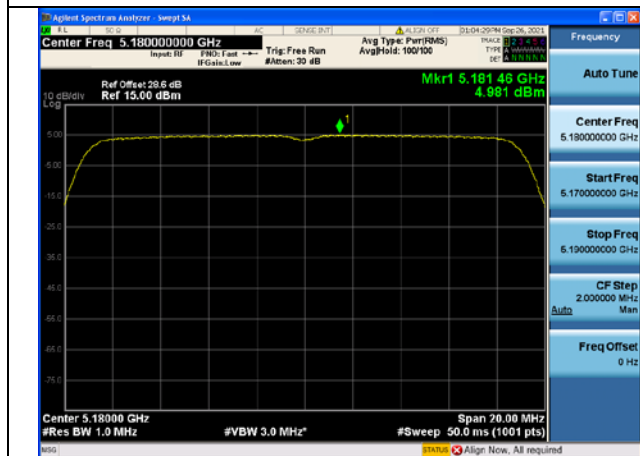
Test Mode:802.11a Chain0



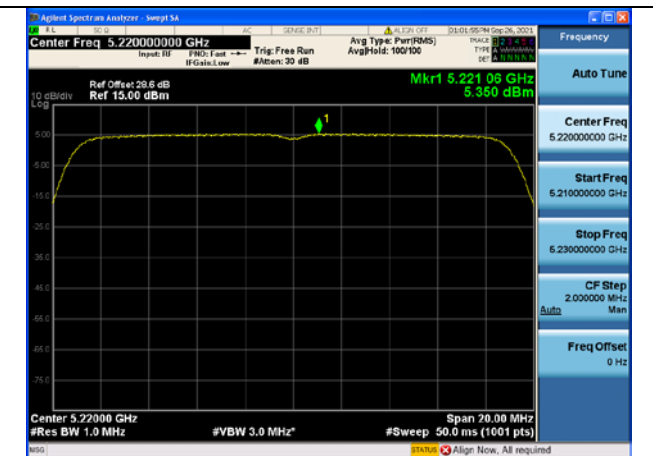
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5180	0	Chain0	4.981
5220		Chain0	5.35
5240		Chain0	5.538

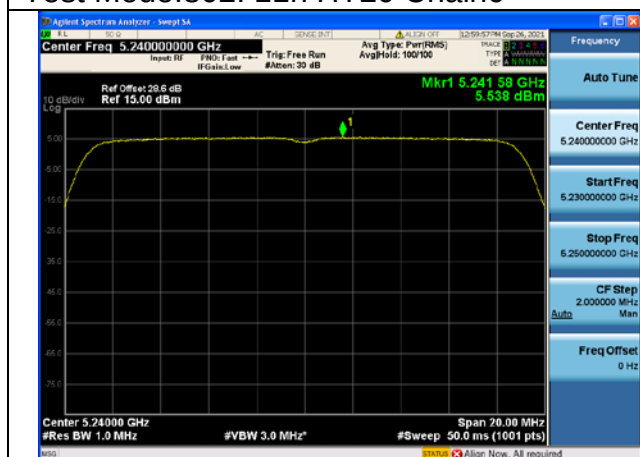
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



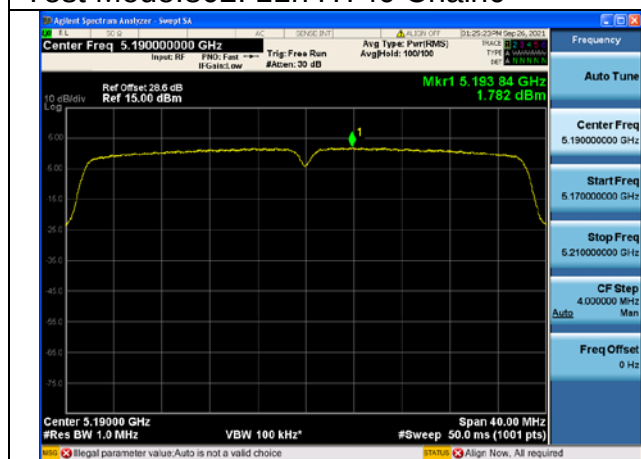
Test Mode:802. 11n HT20 Chain0



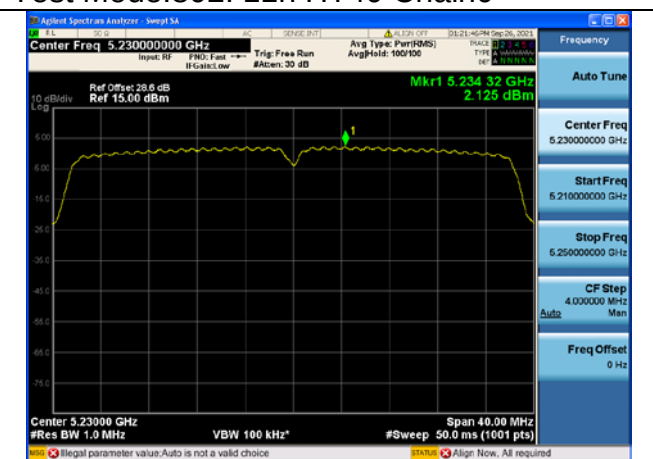
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5190	0	Chain0	1.782
5230		Chain0	2.125

Test Mode:802. 11n HT40 Chain0



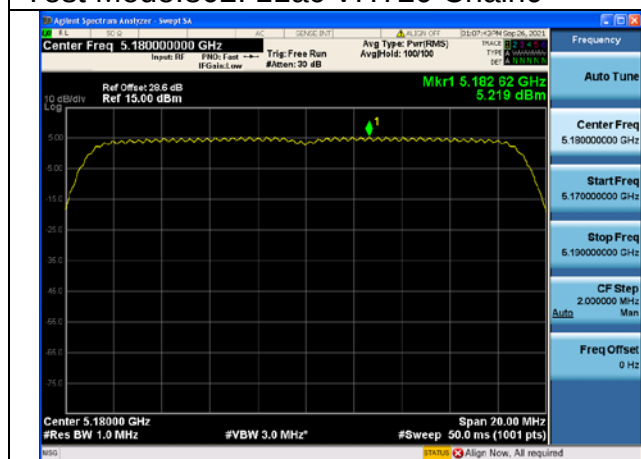
Test Mode:802. 11n HT40 Chain0



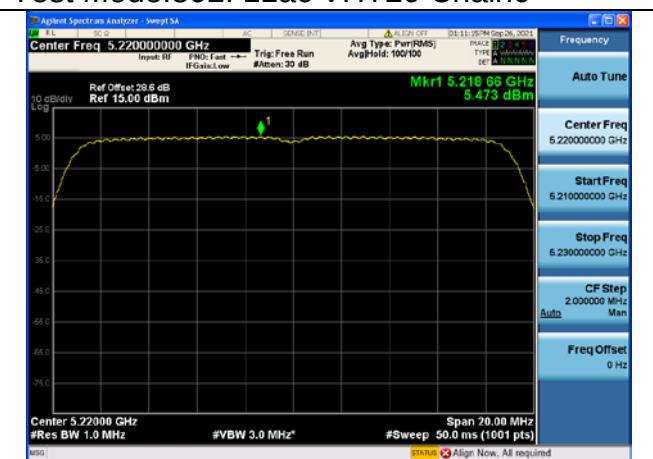
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5180	0	Chain0	5.219
5220		Chain0	5.473
5240		Chain0	5.599

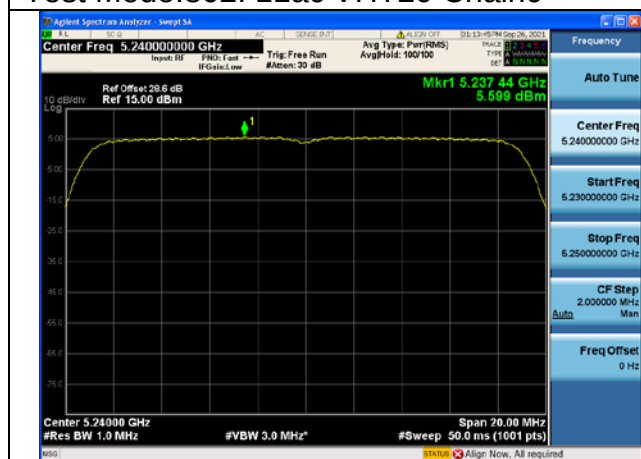
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0



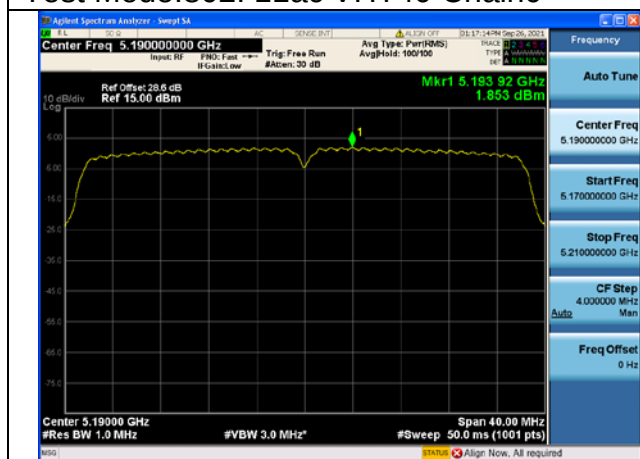
Test Mode:802. 11ac VHT20 Chain0



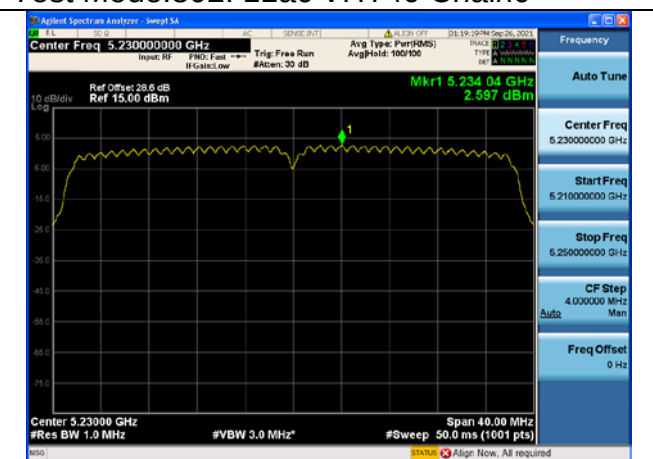
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5190	0	Chain0	1.853
5230		Chain0	2.597

Test Mode:802. 11ac VHT40 Chain0



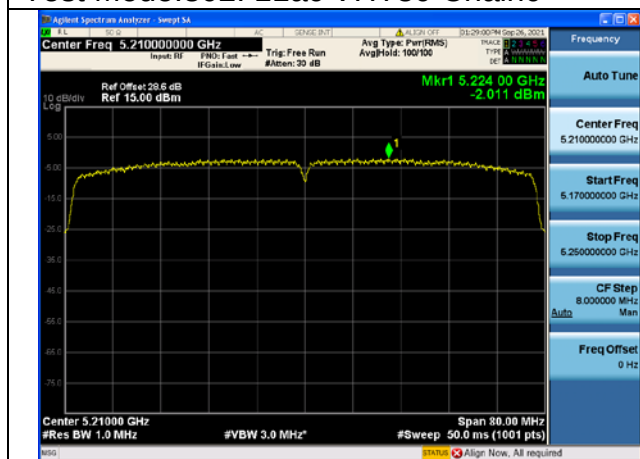
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5210	0	Chain0	-2.011

Test Mode:802. 11ac VHT80 Chain0



ANT 1

Offset 6dB = Attenuator + Temporary antenna connector loss + Cable loss

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5180	79.82%	0.98
802. 11n HT20	5180	93.71%	0.28
802. 11n HT40	5190	90.39%	0.44
802. 11ac VHT20	5180	93.81%	0.28
802. 11ac VHT40	5190	90.45%	0.44
802. 11ac VHT80	5210	86.53%	0.63

Output Power NII1

Mode	Tones/ RUIndex	Freq (MHz)	Chain	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Chain1	9.62	10.62
		5220	Chain1	9.95	10.95
		5240	Chain1	10.10	11.10
802.11n20M		5180	Chain1	15.87	16.17
		5220	Chain1	16.15	16.45
		5240	Chain1	16.26	16.56
802.11n40M		5190	Chain1	14.98	15.28
		5230	Chain1	15.36	15.66
802.11ac20M		5180	Chain1	15.72	16.02
		5220	Chain1	16.17	16.47
		5240	Chain1	16.42	16.72
802.11ac40M		5190	Chain1	14.95	15.25
		5230	Chain1	15.34	15.64
802.11ac80M		5210	Chain1	13.76	14.06

Emission Bandwidth

Test Mode:802.11a

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5180	Chain1	18.90
5220	Chain1	20.40
5240	Chain1	19.00

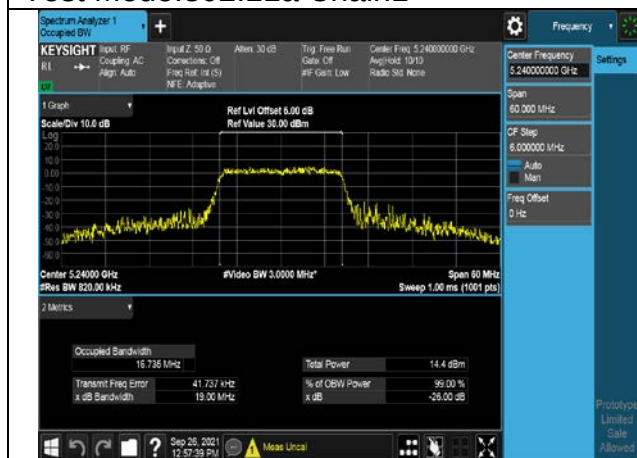
Test Mode:802.11a Chain1



Test Mode:802.11a Chain1



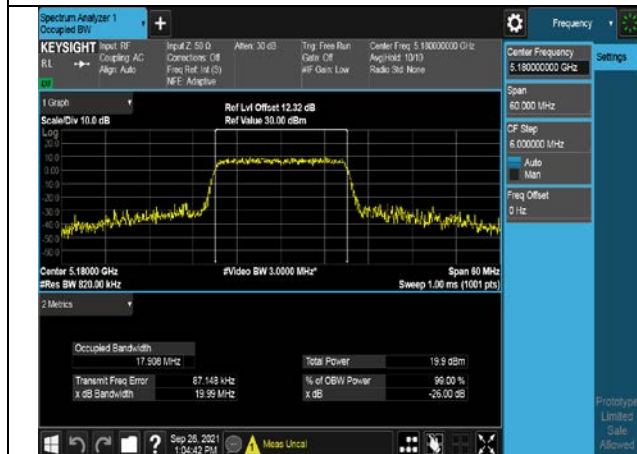
Test Mode:802.11a Chain1



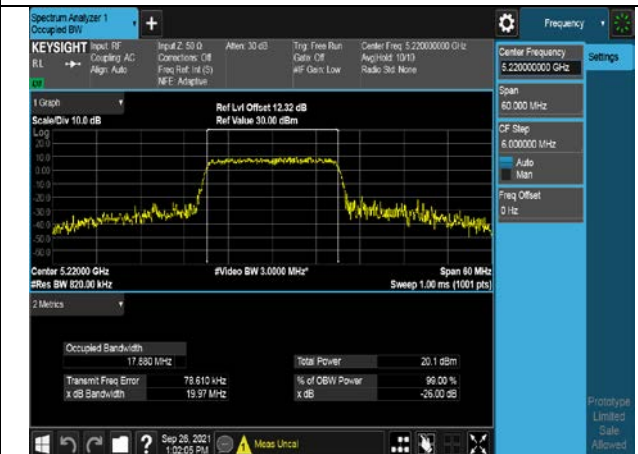
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5180	Chain1	19.99
5220	Chain1	19.97
5240	Chain1	19.98

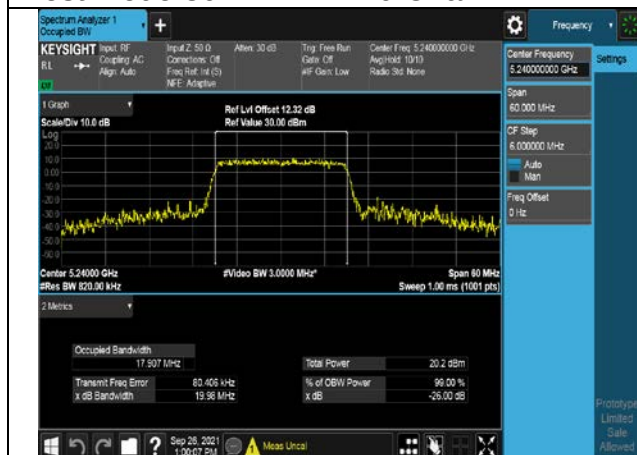
Test Mode:802. 11n HT20 Chain1



Test Mode:802. 11n HT20 Chain1



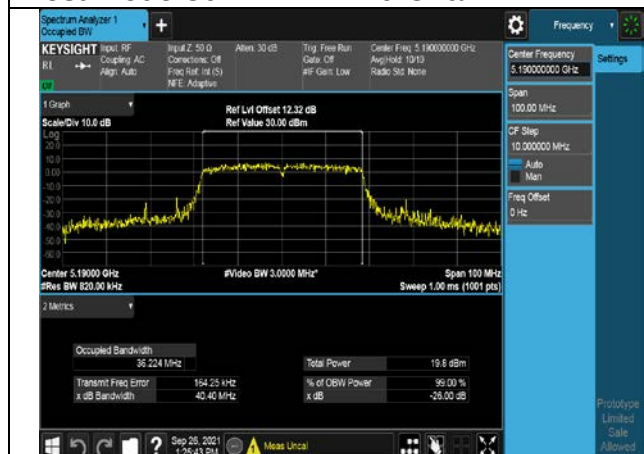
Test Mode:802. 11n HT20 Chain1



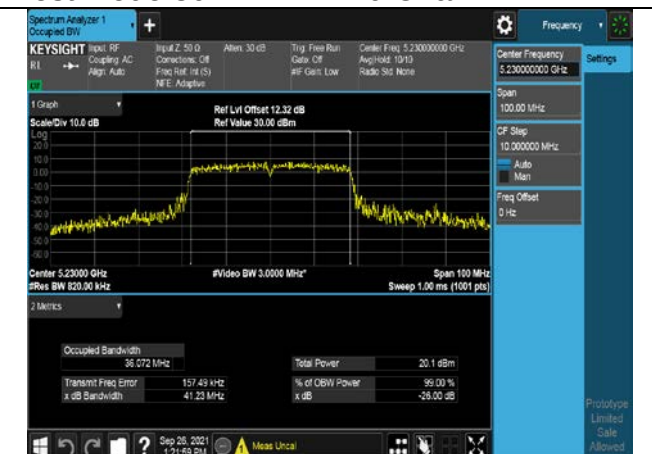
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5190	Chain1	40.40
5230	Chain1	41.23

Test Mode:802. 11n HT40 Chain1



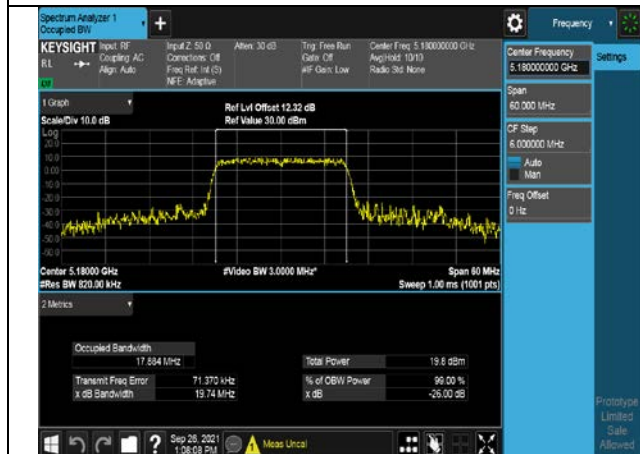
Test Mode:802. 11n HT40 Chain1



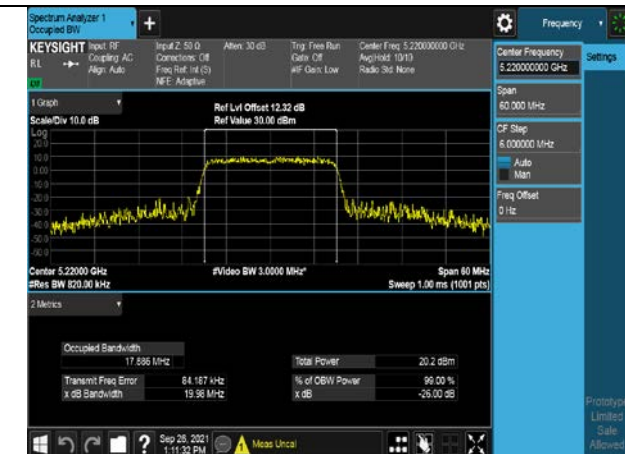
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5180	Chain1	19.74
5220	Chain1	19.98
5240	Chain1	19.70

Test Mode:802. 11ac VHT20 Chain1



Test Mode:802. 11ac VHT20 Chain1



Test Mode:802. 11ac VHT20 Chain1



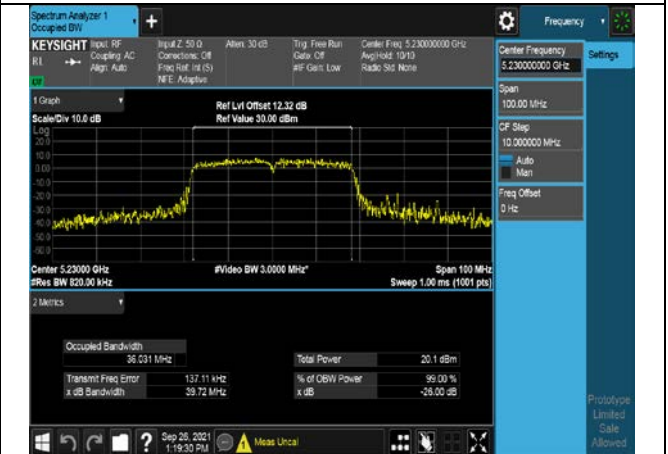
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5190	Chain1	39.98
5230	Chain1	39.72

Test Mode:802. 11ac VHT40 Chain1



Test Mode:802. 11ac VHT40 Chain1



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5210	Chain1	79.08

Test Mode:802. 11ac VHT80 Chain1



Occupied Bandwidth

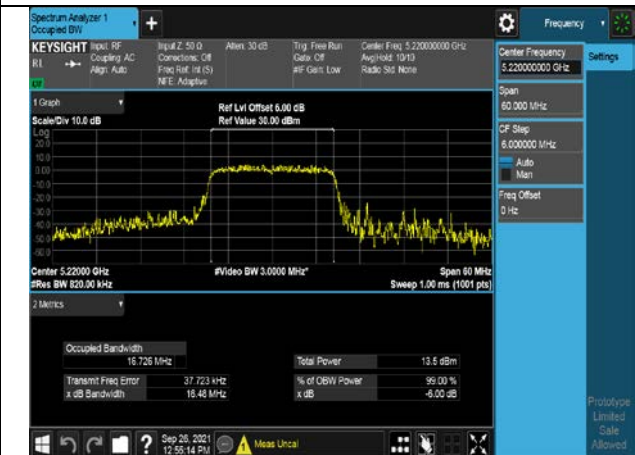
Test Mode:802.11a

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5180	Chain1	16.817
5220	Chain1	16.726
5240	Chain1	16.725

Test Mode:802.11a Chain1



Test Mode:802.11a Chain1



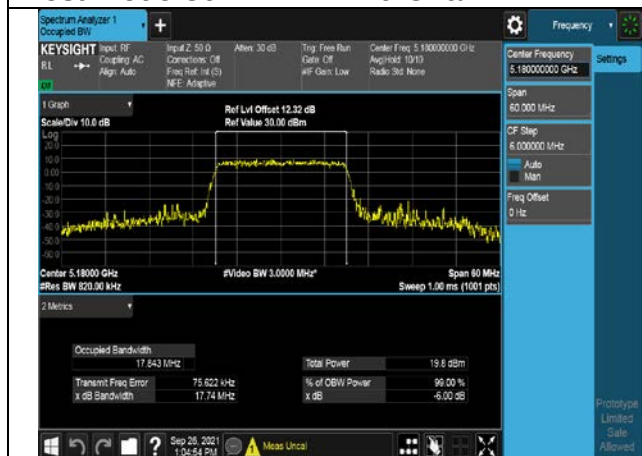
Test Mode:802.11a Chain1



Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5180	Chain1	17.843
5220	Chain1	17.944
5240	Chain1	17.935

Test Mode:802. 11n HT20 Chain1



Test Mode:802. 11n HT20 Chain1



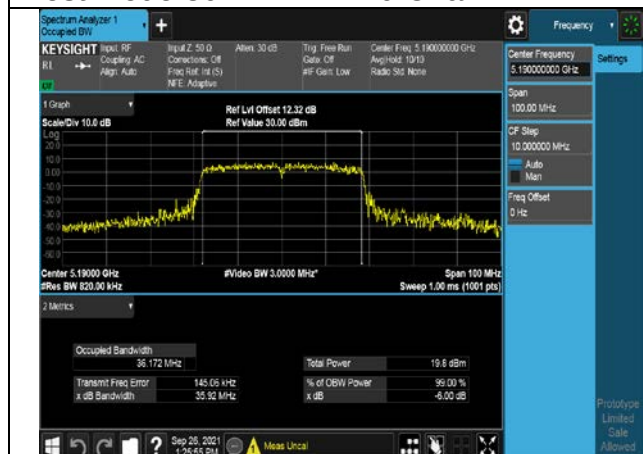
Test Mode:802. 11n HT20 Chain1



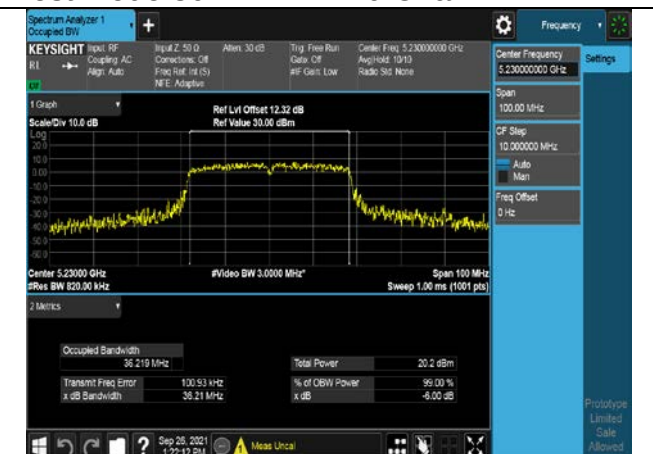
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5190	Chain1	36.172
5230	Chain1	36.219

Test Mode:802. 11n HT40 Chain1



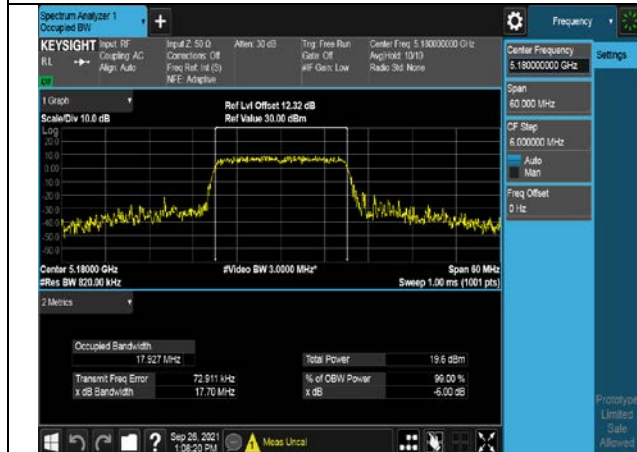
Test Mode:802. 11n HT40 Chain1



Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5180	Chain1	17.927
5220	Chain1	17.921
5240	Chain1	17.902

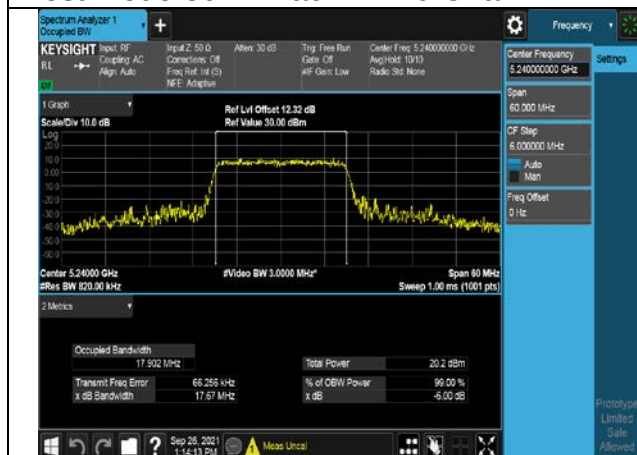
Test Mode:802. 11ac VHT20 Chain1



Test Mode:802. 11ac VHT20 Chain1



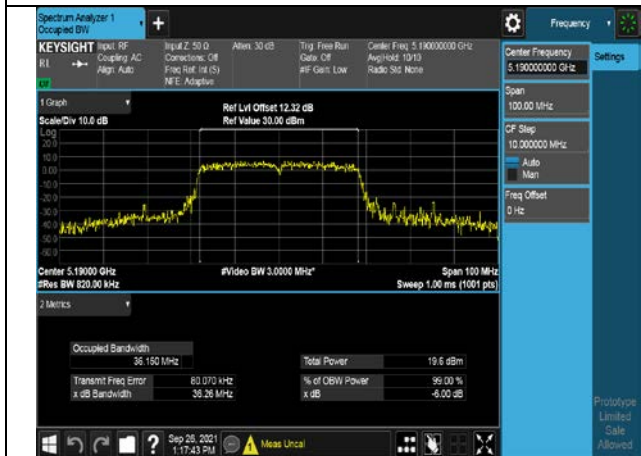
Test Mode:802. 11ac VHT20 Chain1



Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5190	Chain1	36.150
5230	Chain1	36.191

Test Mode:802. 11ac VHT40 Chain1



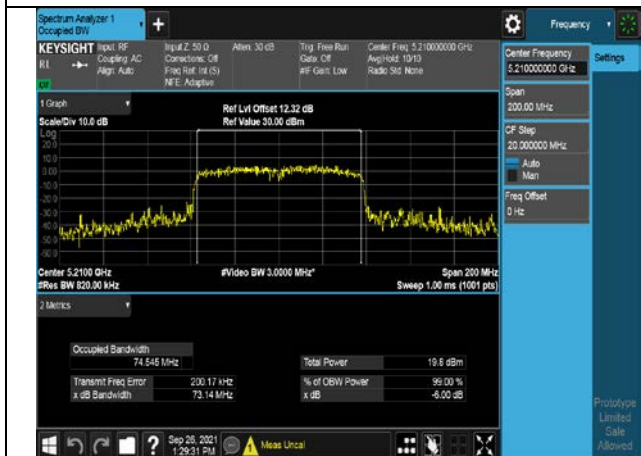
Test Mode:802. 11ac VHT40 Chain1



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5210	Chain1	74.545

Test Mode:802. 11ac VHT80 Chain1



Transmitter Power Spectral Density

Test Mode:802.11a

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5180	0.98	Chain1	-0.868
5220		Chain1	-0.532
5240		Chain1	-0.283

Test Mode:802.11a Chain1



Test Mode:802.11a Chain1



Test Mode:802.11a Chain1



Test Mode:802. 11n HT20

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5180	0.28	Chain1	4.443
5220		Chain1	4.832
5240		Chain1	5.035

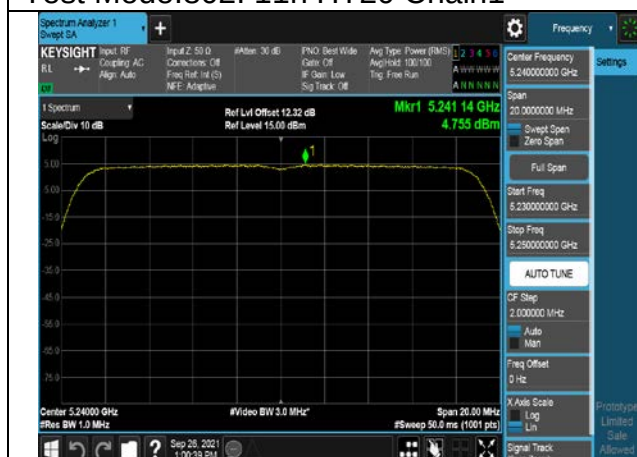
Test Mode:802. 11n HT20 Chain1



Test Mode:802. 11n HT20 Chain1



Test Mode:802. 11n HT20 Chain1



Test Mode:802. 11n HT40

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5190	0.44	Chain1	1.202
5230		Chain1	1.999

Test Mode:802. 11n HT40 Chain1



Test Mode:802. 11n HT40 Chain1



Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5180	0.28	Chain1	4.492
5220		Chain1	4.814
5240		Chain1	4.898

Test Mode:802. 11ac VHT20 Chain1



Test Mode:802. 11ac VHT20 Chain1



Test Mode:802. 11ac VHT20 Chain1



Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5190	0.44	Chain1	1.394
5230		Chain1	1.517

Test Mode:802. 11ac VHT40 Chain1



Test Mode:802. 11ac VHT40 Chain1



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5210	0.63	Chain1	-2.494

Test Mode:802.11ac VHT80 Chain1



MIMO

Mode	Tones/ RUIndex	Freq (MHz)	Chain	Conducted average power output(dBm)	EIRP (dBm)	Power Density (dBm)
802.11n20M	NA	5180	MIMO	19.29	19.59	7.73
		5220	MIMO	19.63	19.93	8.11
		5240	MIMO	19.73	20.03	8.30
802.11n40M		5190	MIMO	18.44	18.74	4.51
		5230	MIMO	18.75	19.05	5.07
802.11ac20M		5180	MIMO	19.17	19.47	7.88
		5220	MIMO	19.67	19.97	8.17
		5240	MIMO	19.90	20.20	8.27
802.11ac40M		5190	MIMO	18.41	18.71	4.64
		5230	MIMO	18.79	19.09	5.10
802.11ac80M		5210	MIMO	17.23	17.53	0.76