

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

### **Duty Cycle**

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5745	99.51%	0
802.11n HT20	5745	99.49%	0
802.11n HT40	5755	99.00%	0
802.11ac VHT20	5745	99.42%	0
802.11ac VHT40	5755	98.99%	0
802.11ac VHT80	5775	97.94%	0.09

### **Output Power**

#### **NII3**

Mode	Tones/ RUIndex	Freq (MHz)	Chain	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5745	Chain0	11.98	10.08
		5785	Chain0	11.80	9.90
		5825	Chain0	11.42	9.52
802.11n20M		5745	Chain0	11.80	9.90
		5785	Chain0	11.61	9.71
		5825	Chain0	11.24	9.34
802.11n40M		5755	Chain0	11.69	9.79
		5795	Chain0	11.59	9.69
802.11ac20M		5745	Chain0	11.81	9.91
		5785	Chain0	11.65	9.75
		5825	Chain0	11.25	9.35
802.11ac40M		5755	Chain0	11.76	9.86
	5795	Chain0	11.66	9.76	
802.11ac80M	5775	Chain0	11.85	9.95	

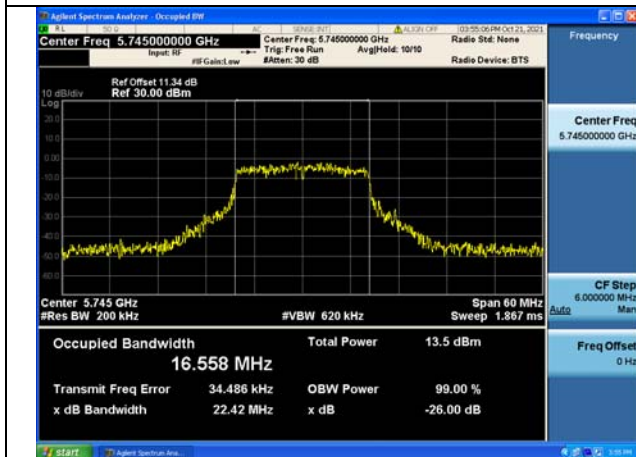
### Emission Bandwidth

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

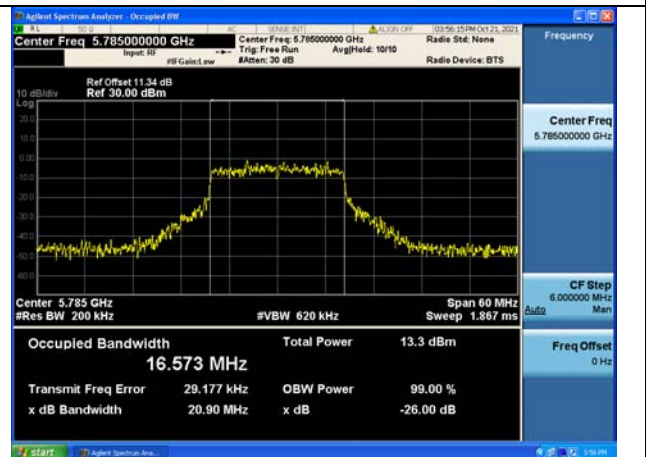
Test Mode:802.11a

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5745	Chain0	22.42
5785	Chain0	20.90
5825	Chain0	22.05

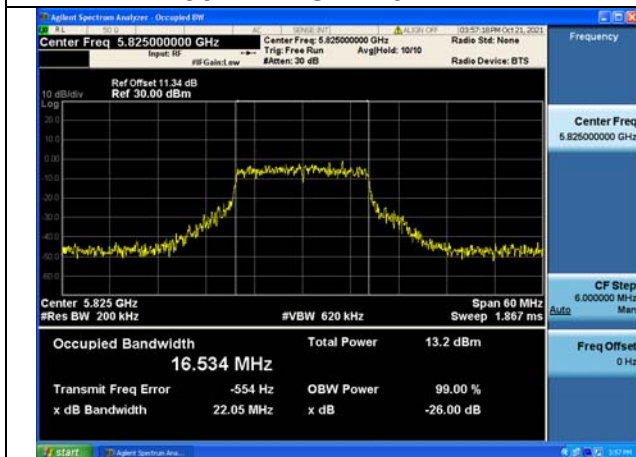
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



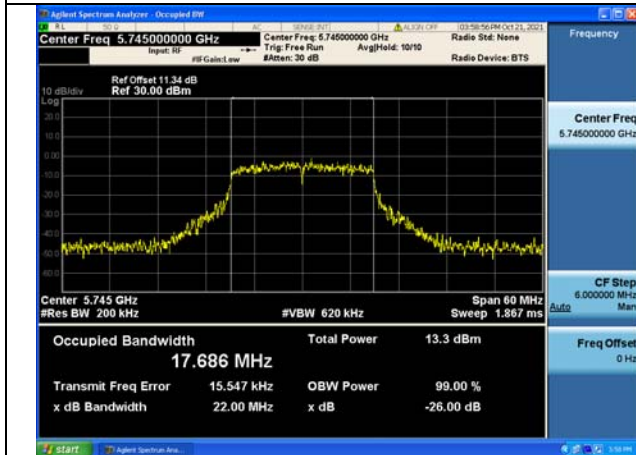
Test Mode:802.11a Chain0



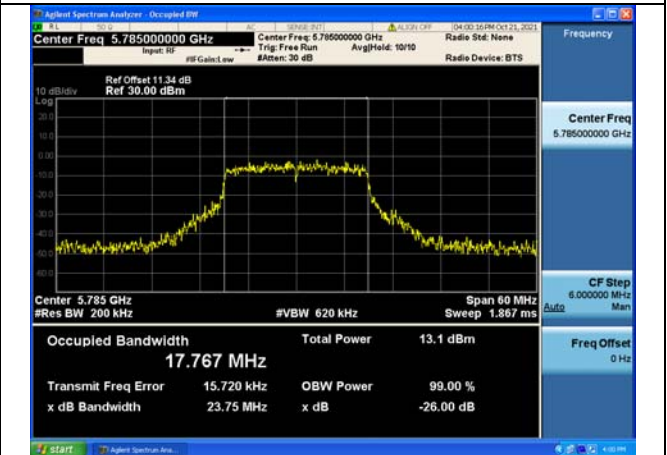
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5745	Chain0	22.00
5785	Chain0	23.75
5825	Chain0	23.75

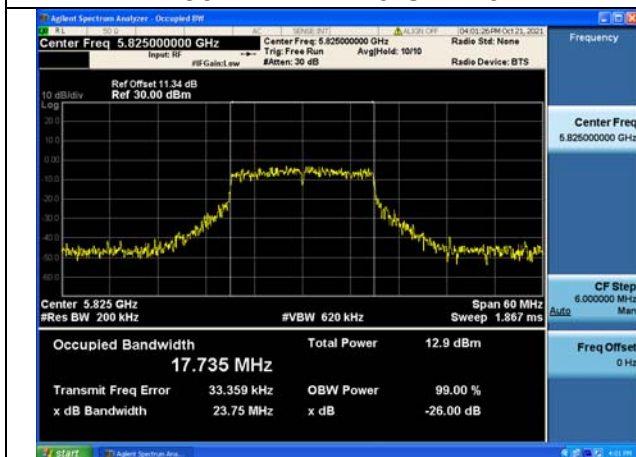
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



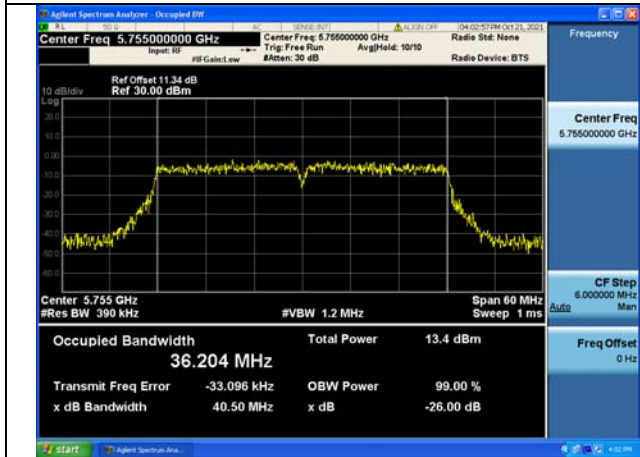
Test Mode:802. 11n HT20 Chain0



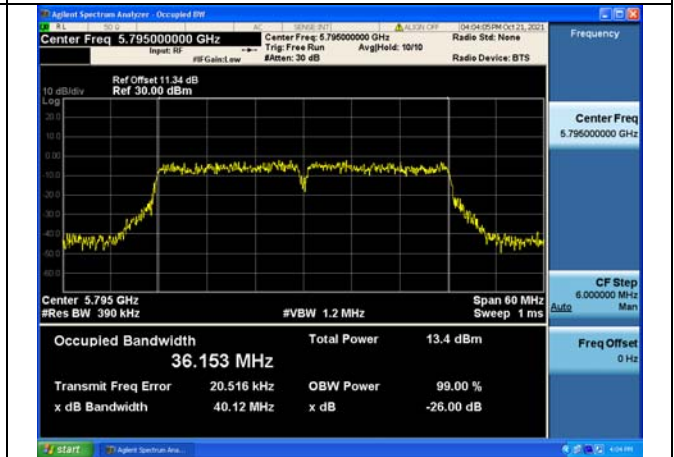
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5755	Chain0	40.50
5795	Chain0	40.12

Test Mode:802. 11n HT40 Chain0



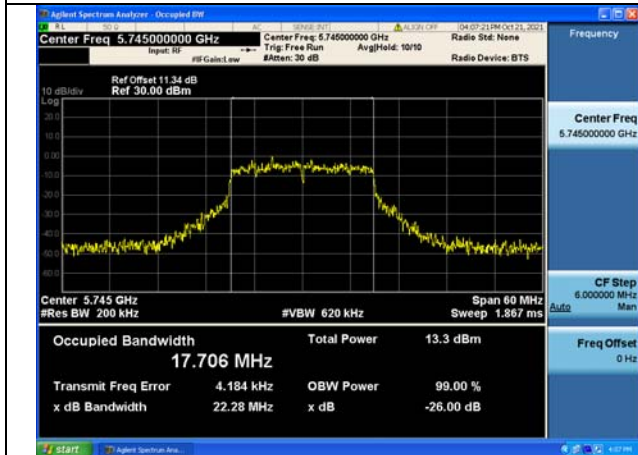
Test Mode:802. 11n HT40 Chain0



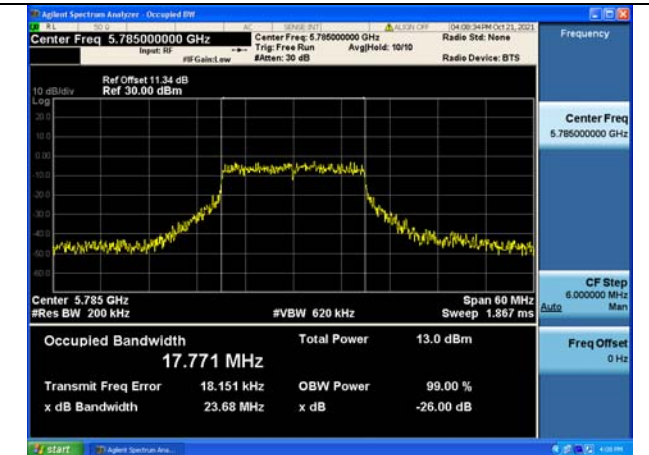
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5745	Chain0	22.28
5785	Chain0	23.68
5825	Chain0	22.58

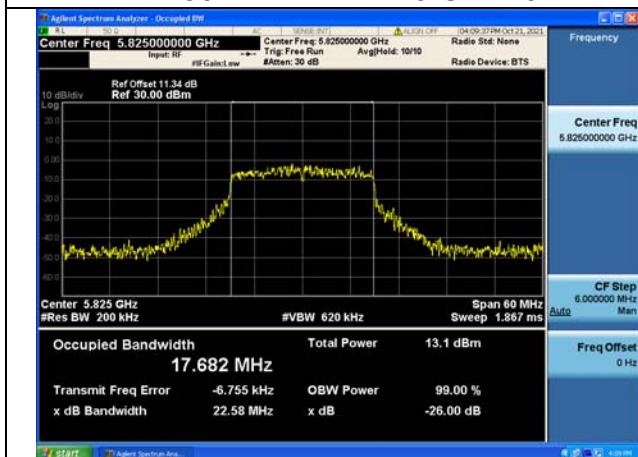
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0



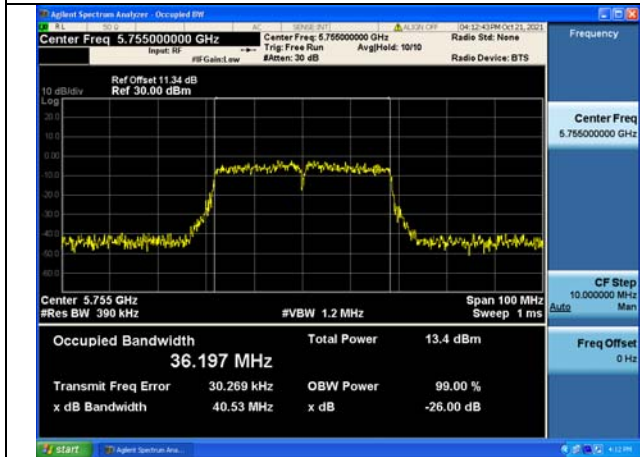
Test Mode:802. 11ac VHT20 Chain0



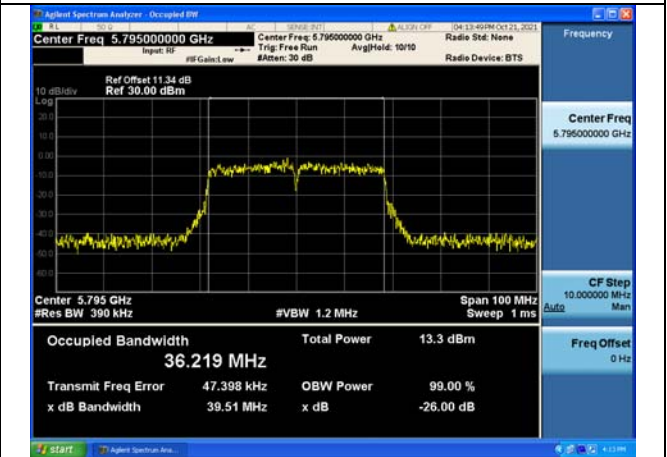
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5755	Chain0	40.53
5795	Chain0	39.51

Test Mode:802. 11ac VHT40 Chain0



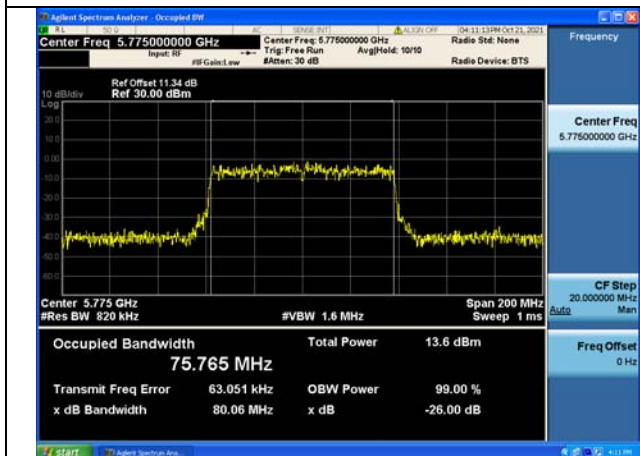
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5775	Chain0	80.06

Test Mode:802. 11ac VHT80 Chain0



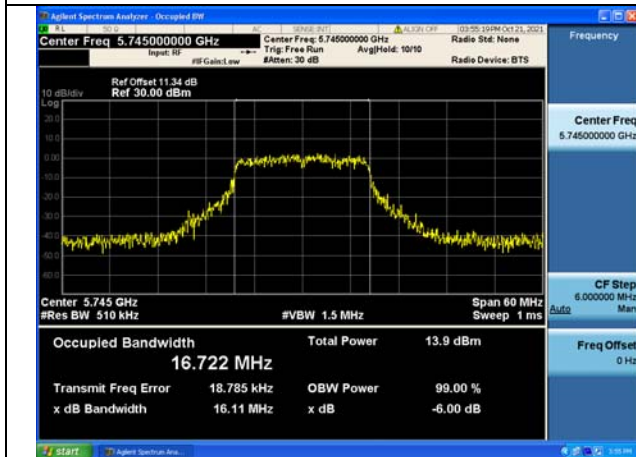
### Occupied Bandwidth

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

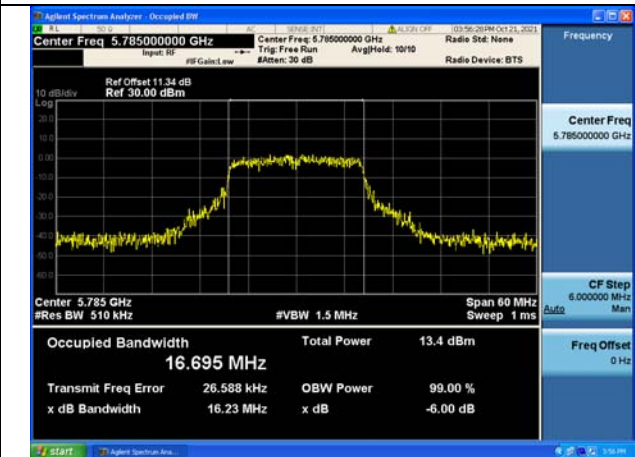
Test Mode:802.11a

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5745	Chain0	16.722
5785	Chain0	16.695
5825	Chain0	16.690

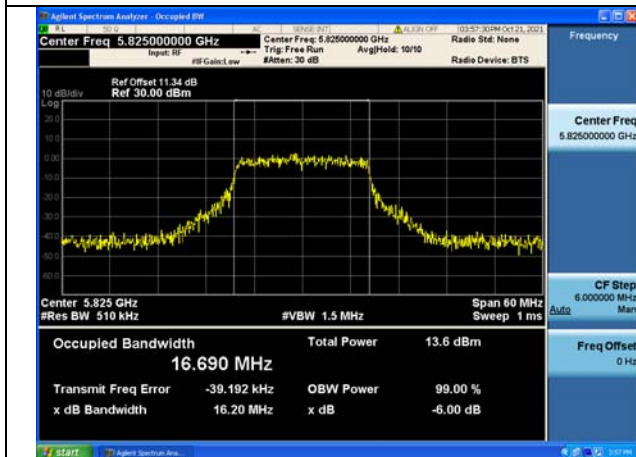
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



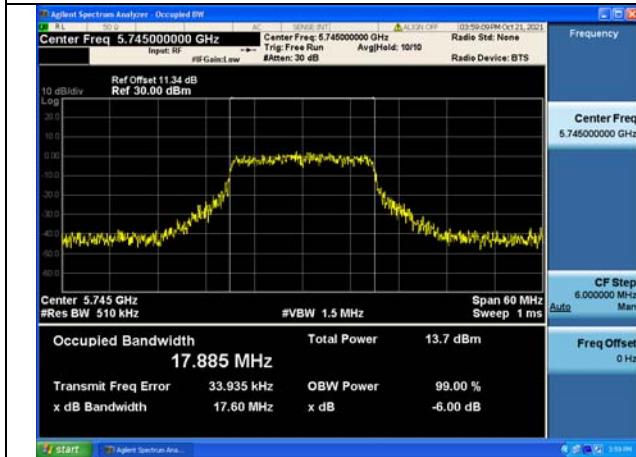
Test Mode:802.11a Chain0



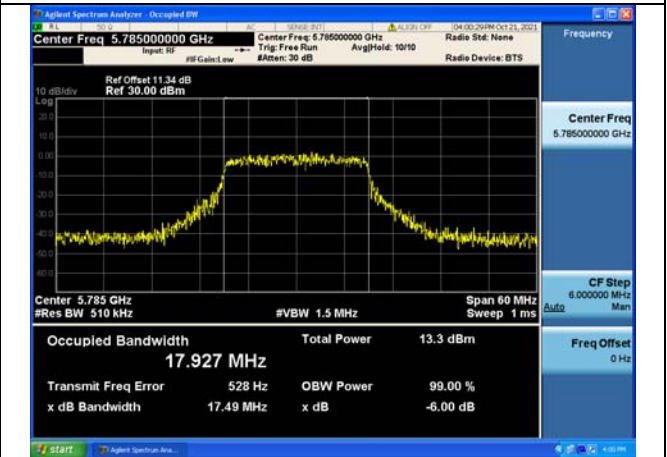
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5745	Chain0	17.885
5785	Chain0	17.927
5825	Chain0	17.941

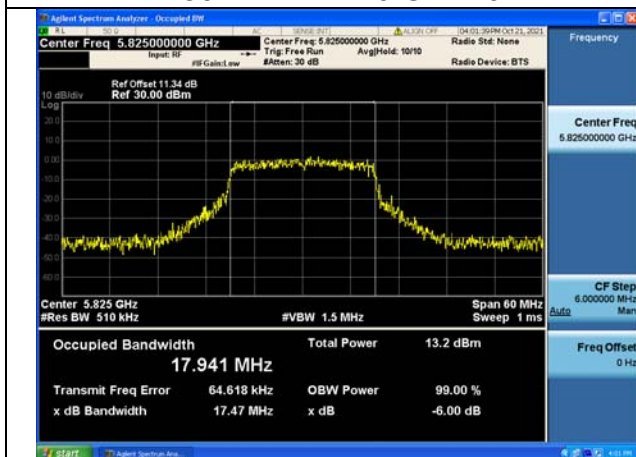
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0

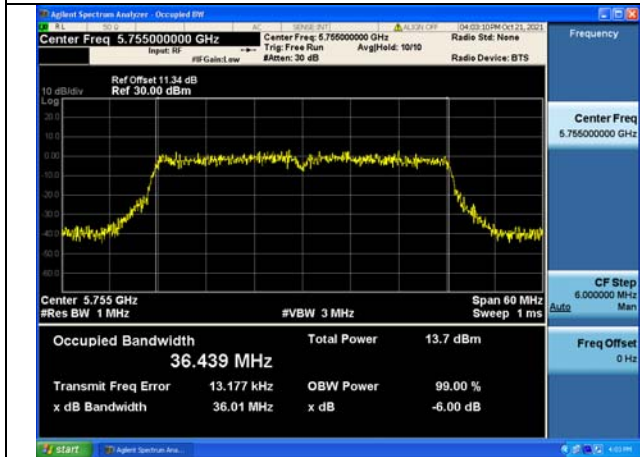




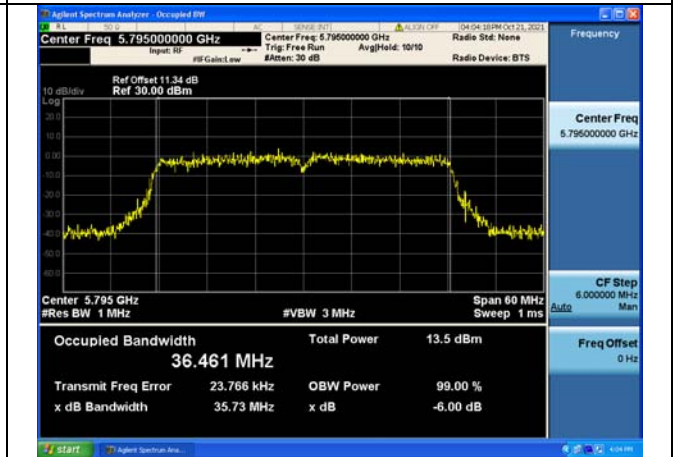
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5755	Chain0	36.439
5795	Chain0	36.461

Test Mode:802. 11n HT40 Chain0



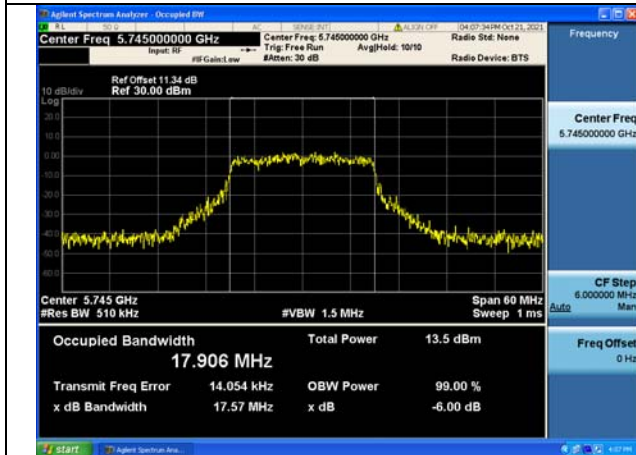
Test Mode:802. 11n HT40 Chain0



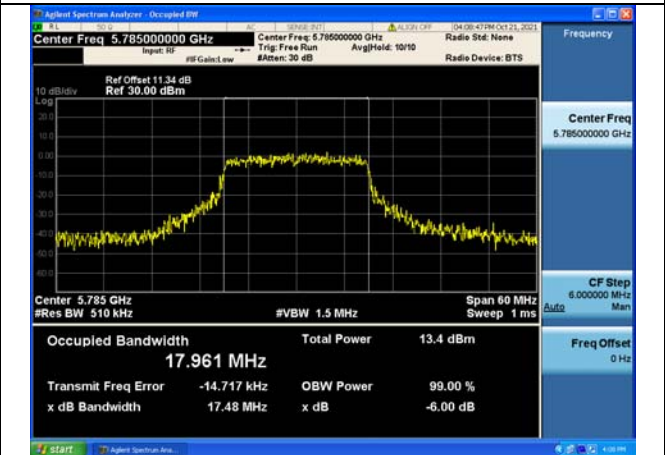
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5745	Chain0	17.906
5785	Chain0	17.961
5825	Chain0	17.817

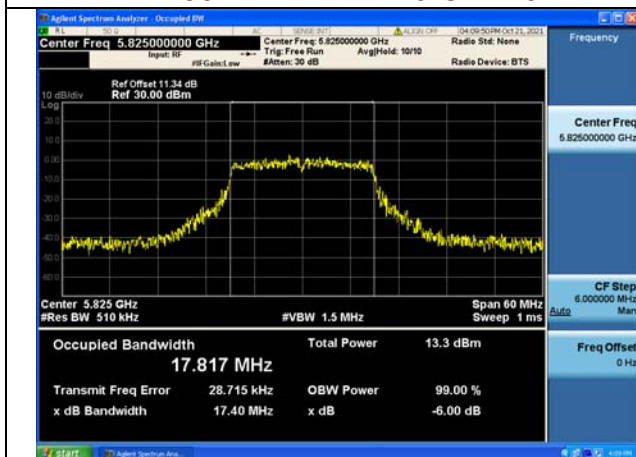
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0



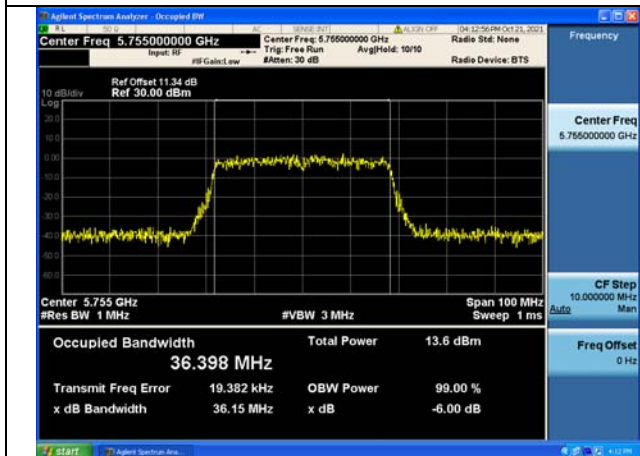
Test Mode:802. 11ac VHT20 Chain0



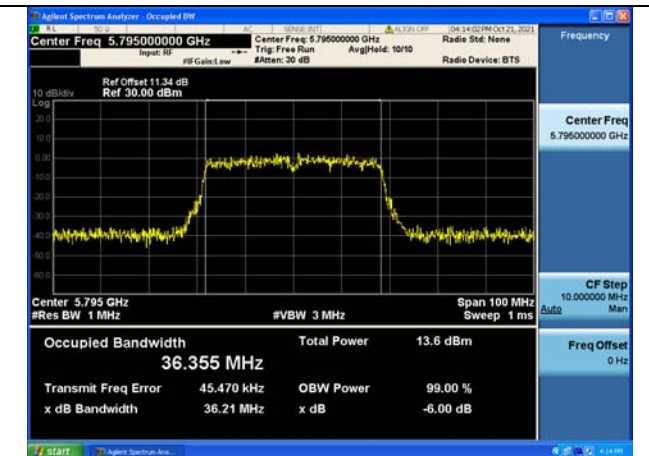
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5755	Chain0	36.398
5795	Chain0	36.355

Test Mode:802. 11ac VHT40 Chain0



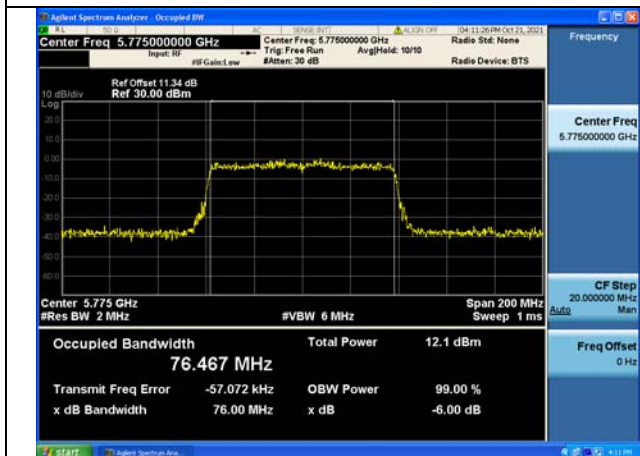
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5775	Chain0	76.467

Test Mode:802. 11ac VHT80 Chain0



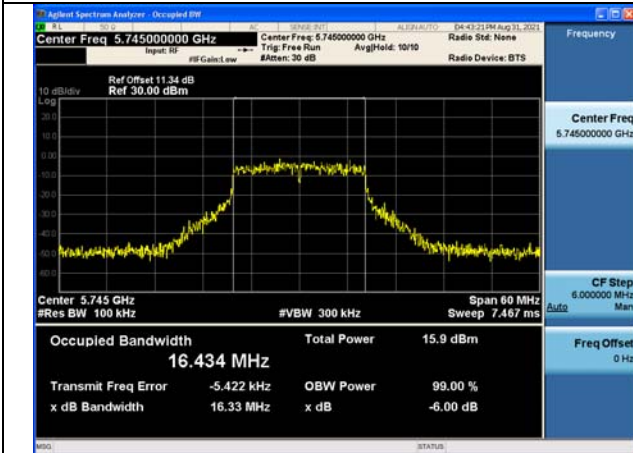
### 6dB Bandwidth

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

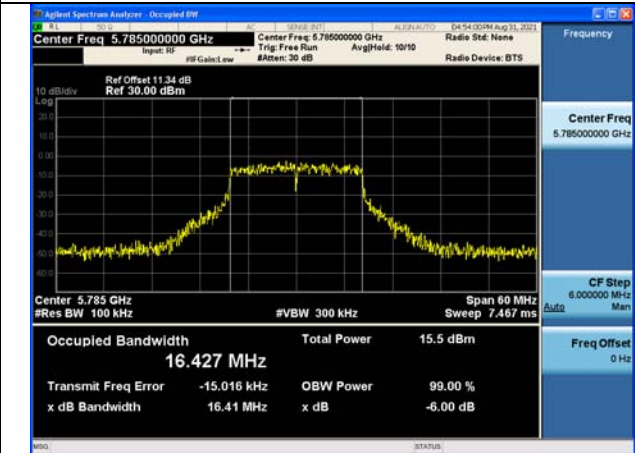
Test Mode:802.11a

Carrier frequency (MHz)	Chain	6dB Bandwidth (MHz)
5745	Chain0	16.33
5785	Chain0	16.41
5825	Chain0	16.03

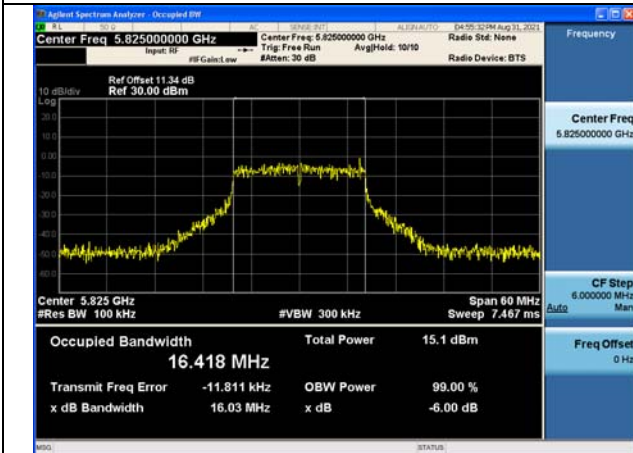
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



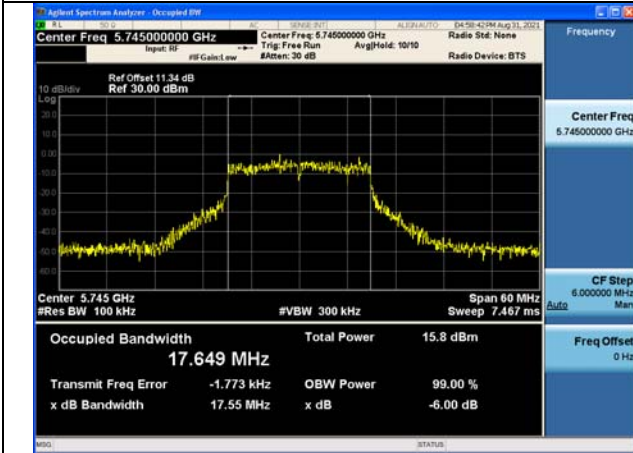
Test Mode:802.11a Chain0



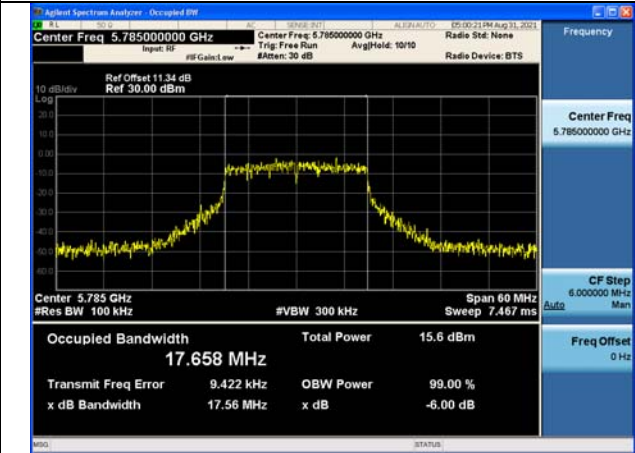
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	6dB Bandwidth (MHz)
5745	Chain0	17.55
5785	Chain0	17.56
5825	Chain0	17.21

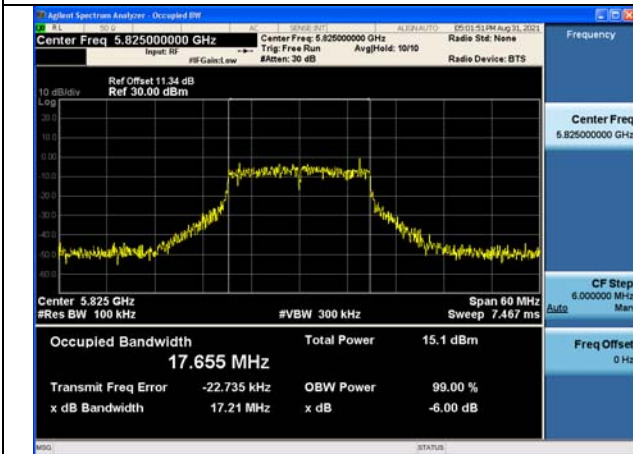
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



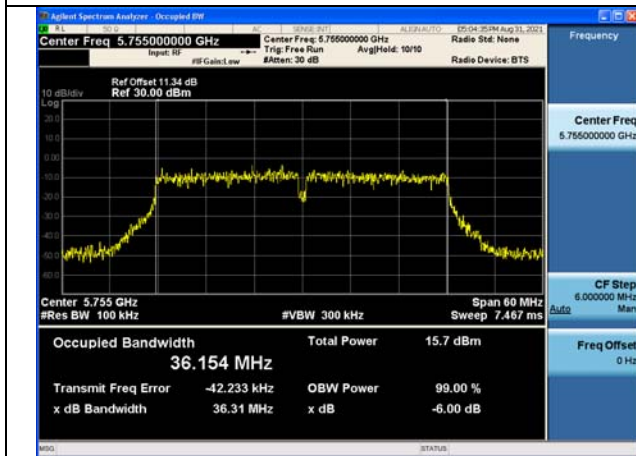
Test Mode:802. 11n HT20 Chain0



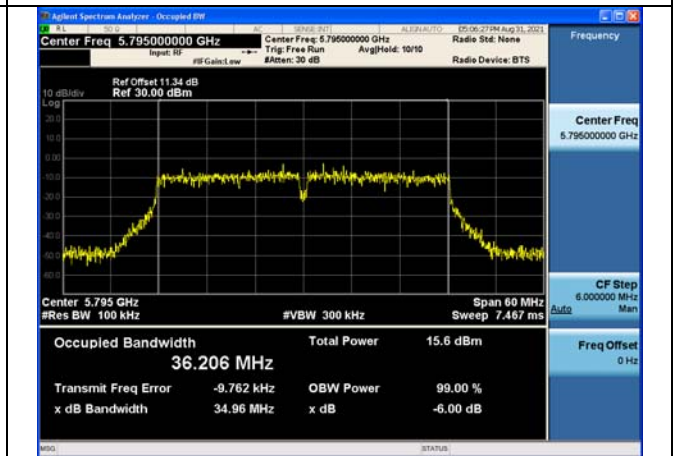
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	6dB Bandwidth (MHz)
5755	Chain0	36.31
5795	Chain0	34.96

Test Mode:802. 11n HT40 Chain0



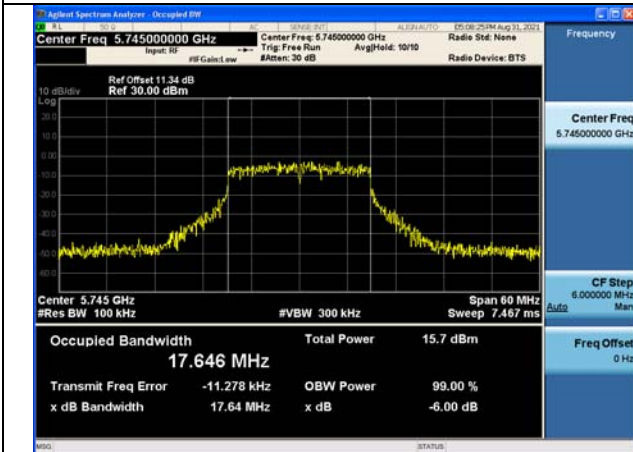
Test Mode:802. 11n HT40 Chain0



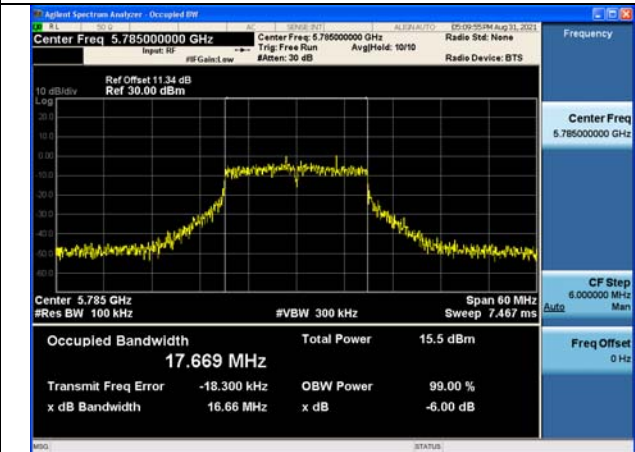
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	6dB Bandwidth (MHz)
5745	Chain0	17.64
5785	Chain0	16.66
5825	Chain0	16.40

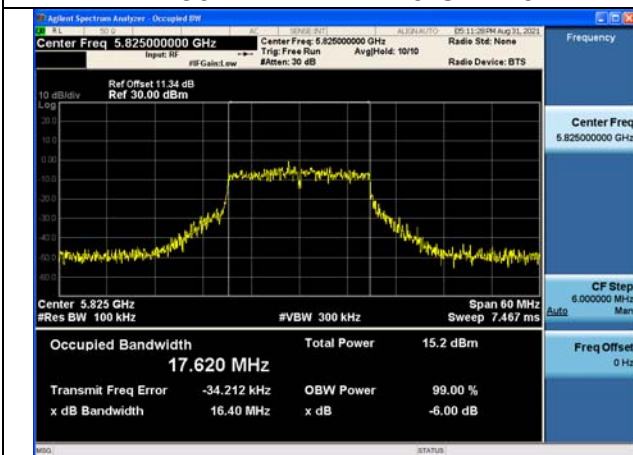
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0



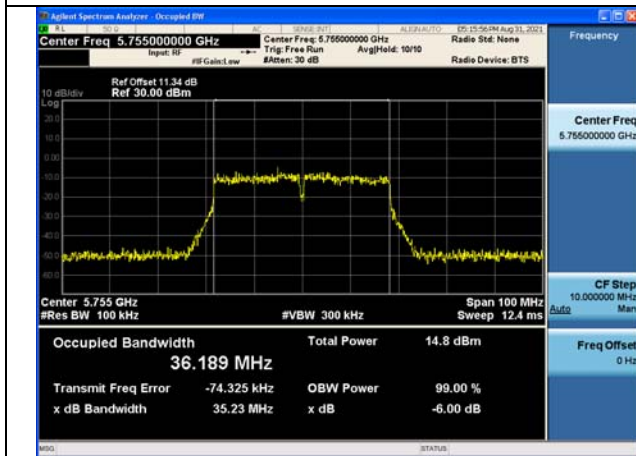
Test Mode:802. 11ac VHT20 Chain0



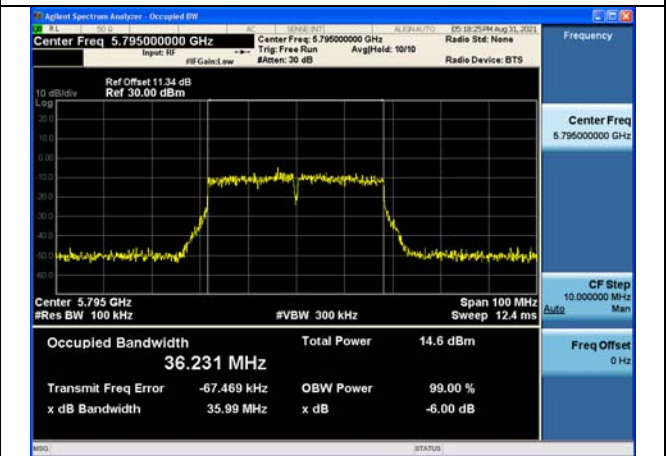
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	6dB Bandwidth (MHz)
5755	Chain0	35.23
5795	Chain0	35.99

Test Mode:802. 11ac VHT40 Chain0



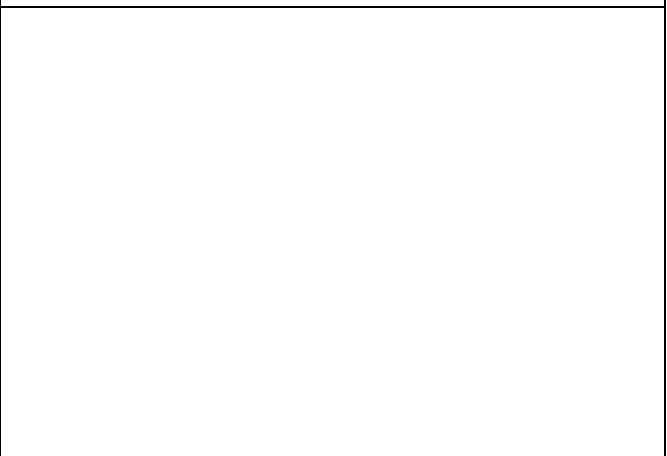
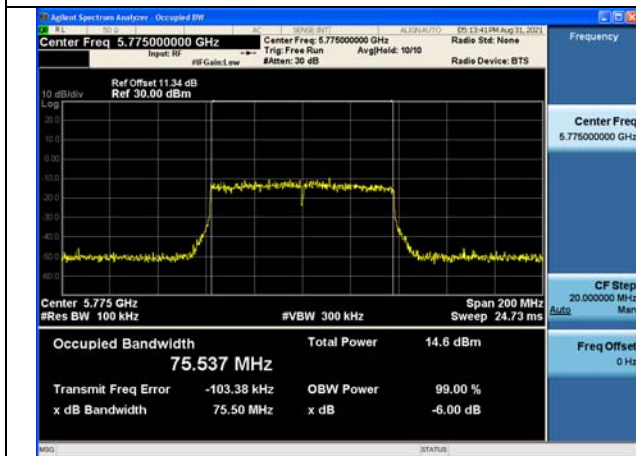
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	6dB Bandwidth (MHz)
5775	Chain0	75.50

Test Mode:802. 11ac VHT80 Chain0





### Transmitter Power Spectral Density

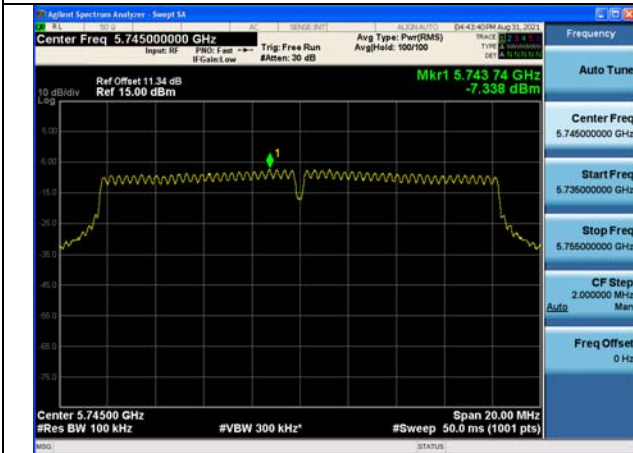
Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

Test Mode:802.11a

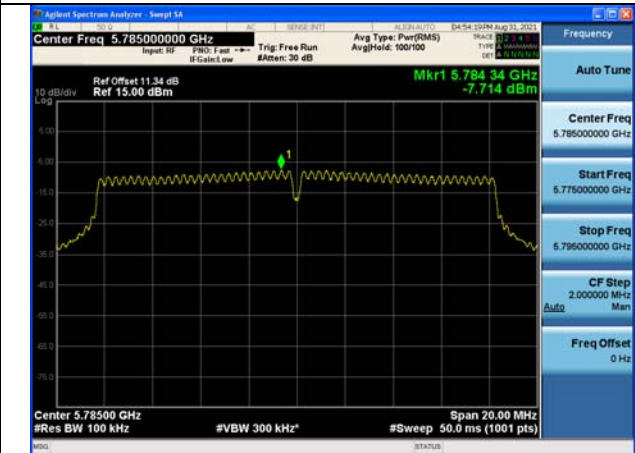
Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm/500kHz)
5745	0	Chain0	-7.338
5785		Chain0	-7.714
5825		Chain0	-8.224

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

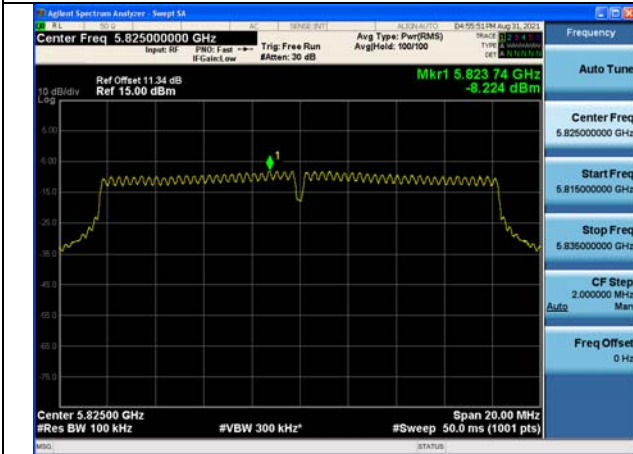
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



Test Mode:802.11a Chain0

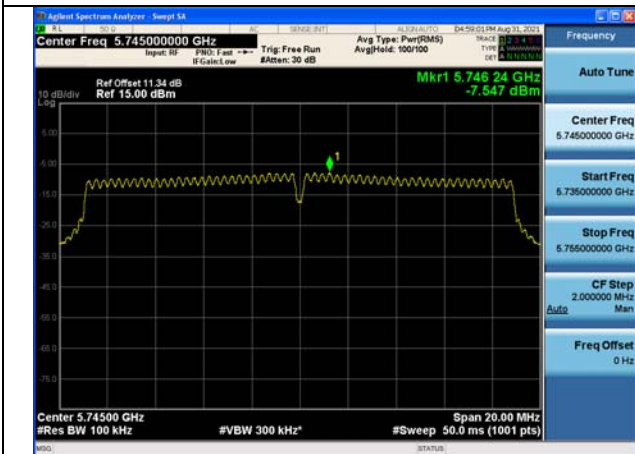


Test Mode:802. 11n HT20

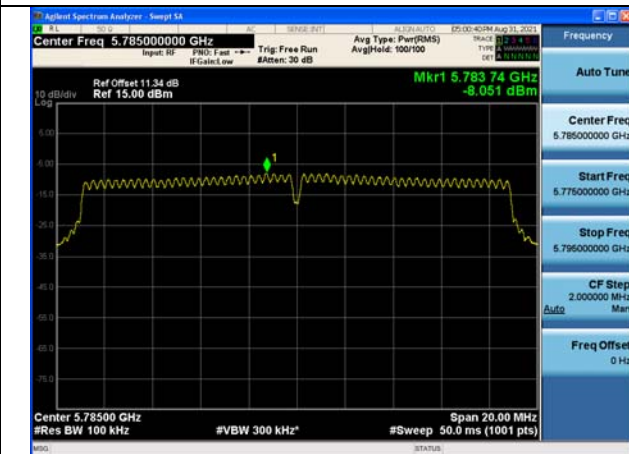
Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm/500kHz)
5745	0	Chain0	-7.547
5785		Chain0	-8.051
5825		Chain0	-8.448

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

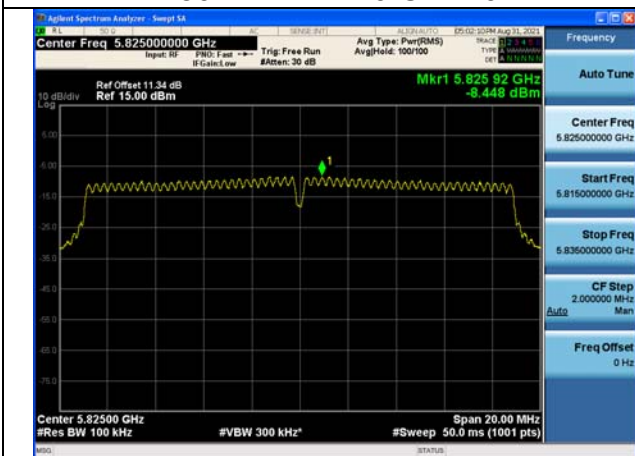
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT40

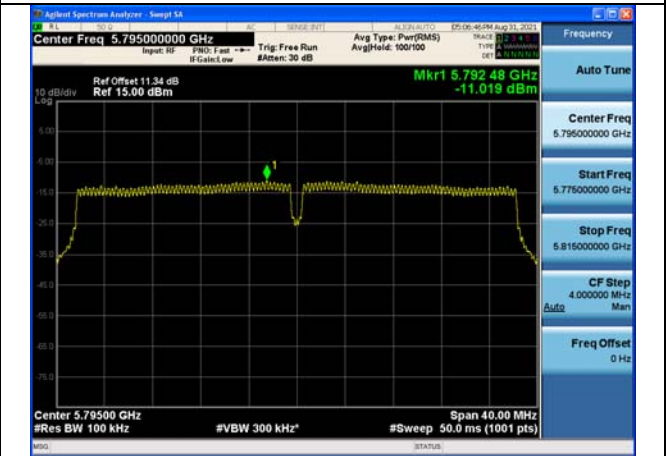
Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm/500kHz)
5755	0	Chain0	-10.864
5795		Chain0	-11.019

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

Test Mode:802. 11n HT40 Chain0



Test Mode:802. 11n HT40 Chain0

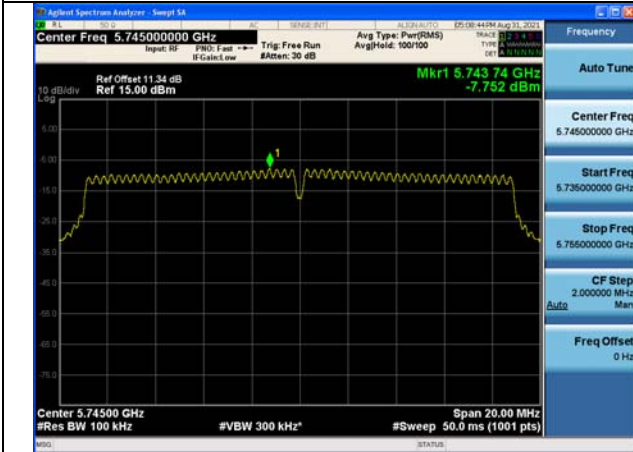


Test Mode:802. 11ac VHT20

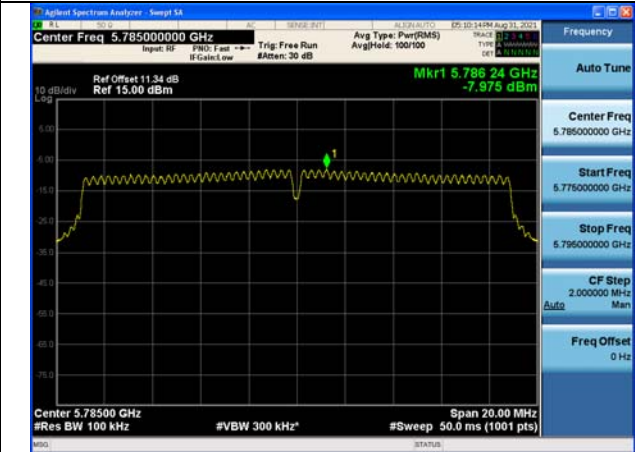
Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm/500kHz)
5745	0	Chain0	-7.752
5785		Chain0	-7.975
5825		Chain0	-8.426

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

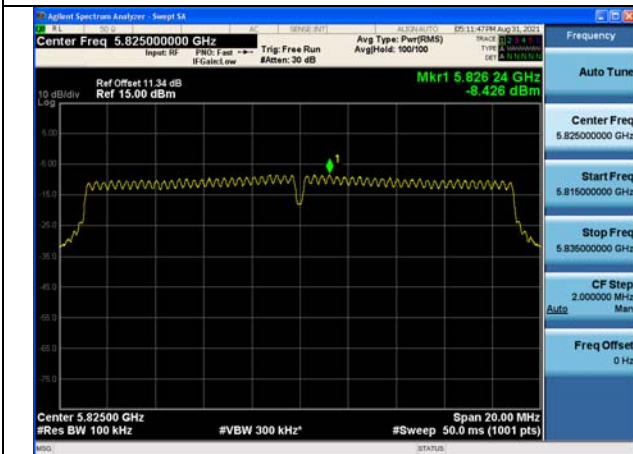
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT40

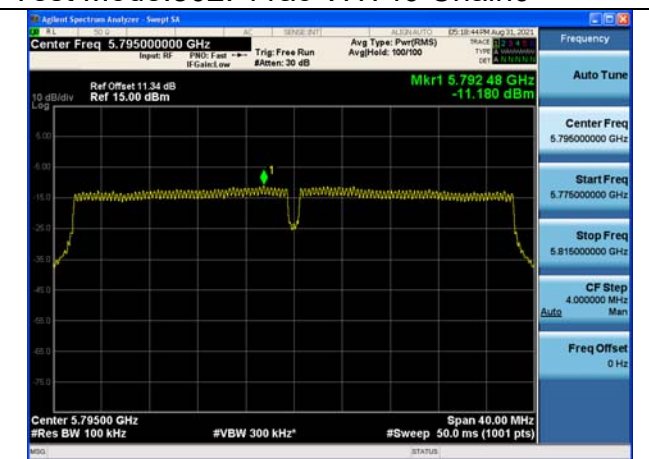
Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm/500kHz)
5755	0	Chain0	-10.982
5795		Chain0	-11.18

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

Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT40 Chain0

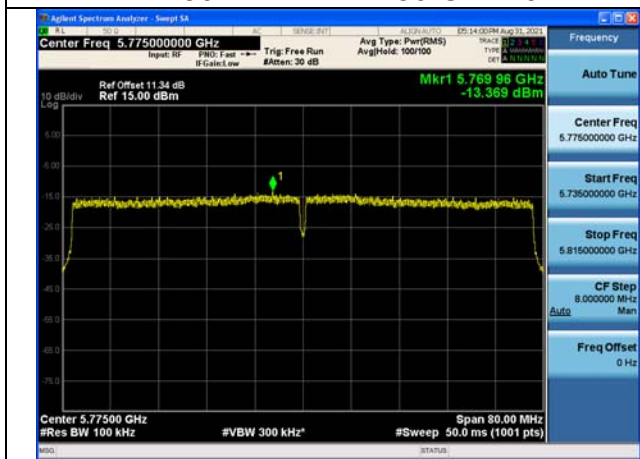


Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm/500kHz)
5775	0.09	Chain0	-13.279

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

Test Mode:802. 11ac VHT80 Chain0



### Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5720	99.51%	0
802.11n HT20	5720	99.46%	0
802.11n HT40	5710	98.98%	0
802.11ac VHT20	5720	99.51%	0
802.11ac VHT40	5710	99.02%	0
802.11ac VHT80	5690	98.02%	0

### Output Power NII3

Mode	Tones/ RUIndex	Freq (MHz)	Chain	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5720	Chain0	11.71	9.81
802.11n20M			Chain0	11.62	9.72
802.11n40M		5710	Chain0	11.55	9.65
802.11ac20M		5720	Chain0	11.57	9.67
802.11ac40M		5710	Chain0	11.62	9.72
802.11ac80M		5690	Chain0	11.43	9.53

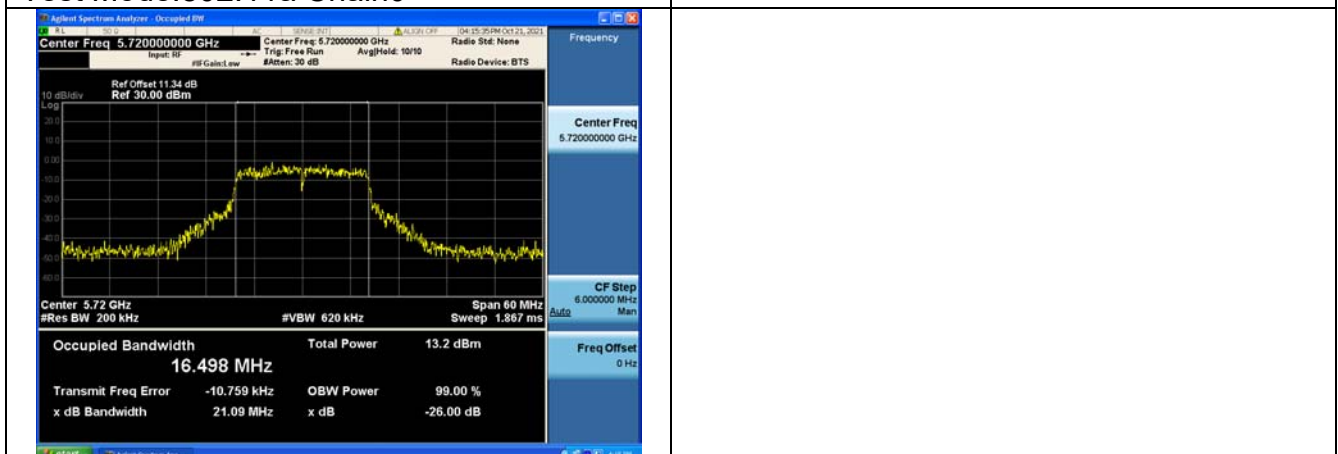
### Emission Bandwidth

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

Test Mode:802.11a

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5720	Chain0	21.09

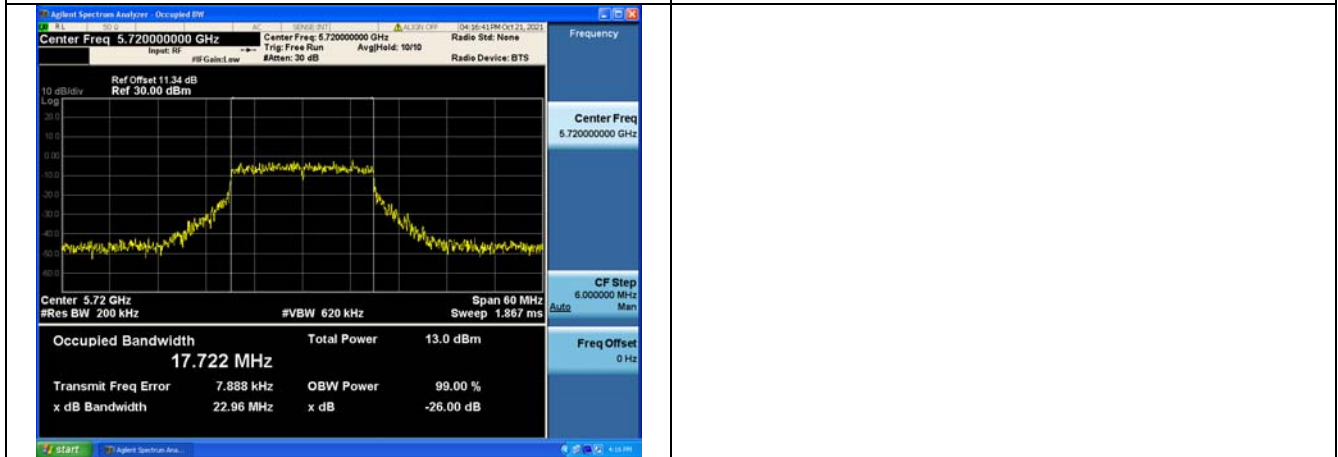
Test Mode:802.11a Chain0



Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5720	Chain0	22.96

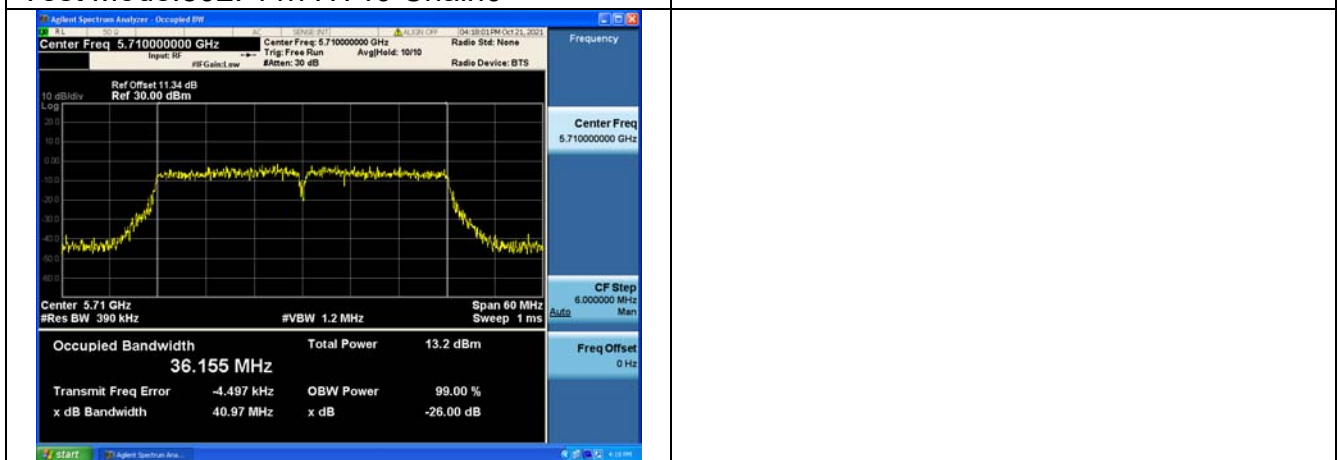
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5710	Chain0	40.97

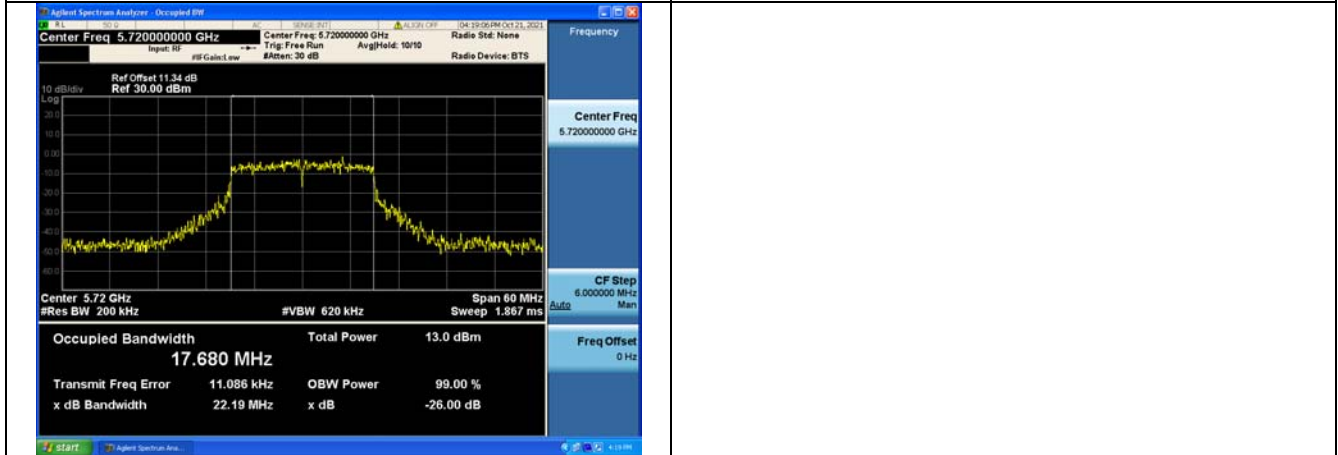
Test Mode:802. 11n HT40 Chain0



Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5720	Chain0	22.19

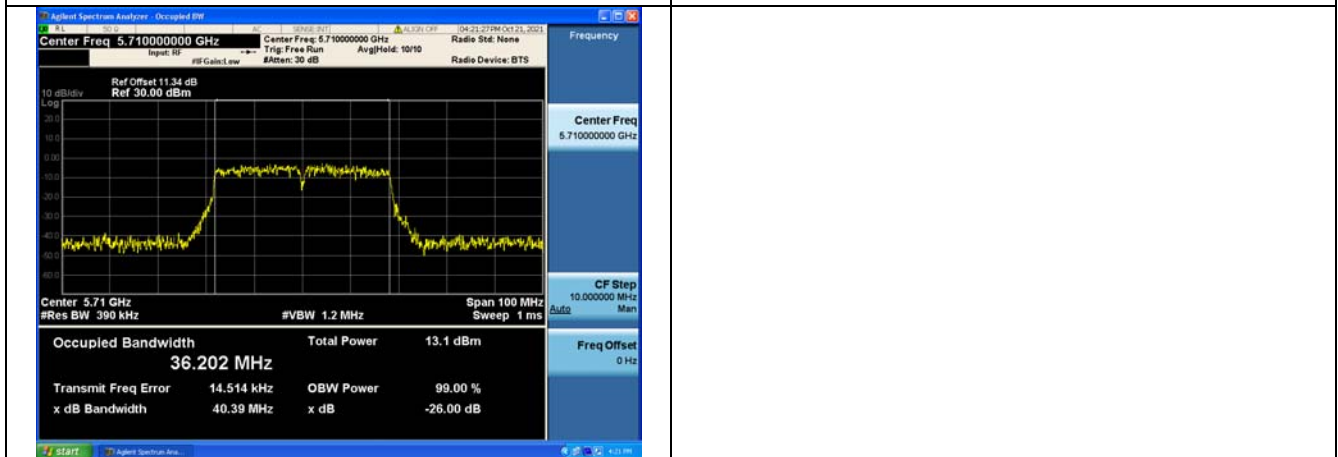
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5710	Chain0	40.39

Test Mode:802. 11ac VHT40 Chain0

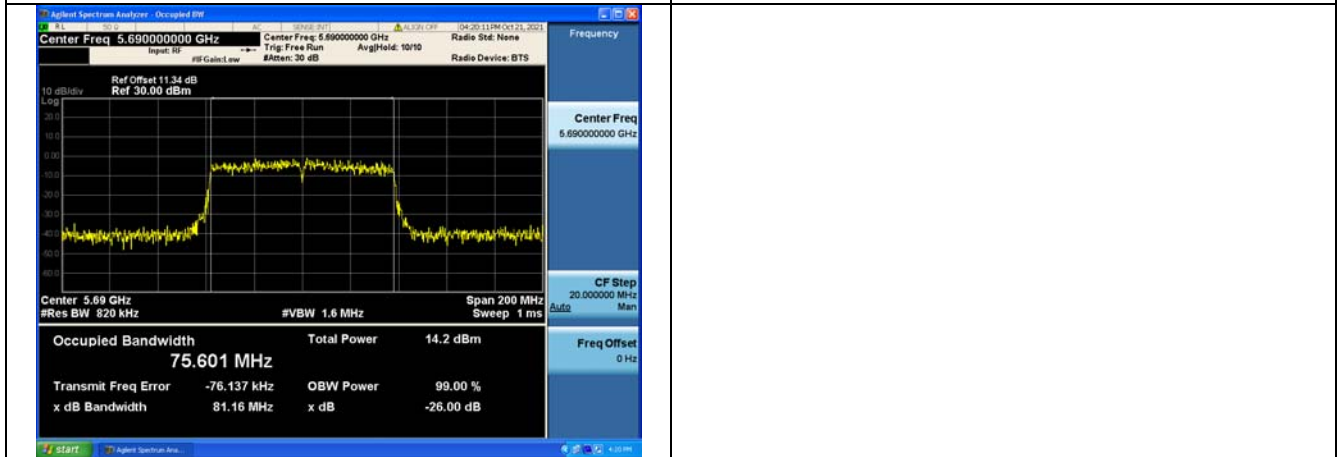




Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5690	Chain0	81.16

Test Mode:802. 11ac VHT80 Chain0



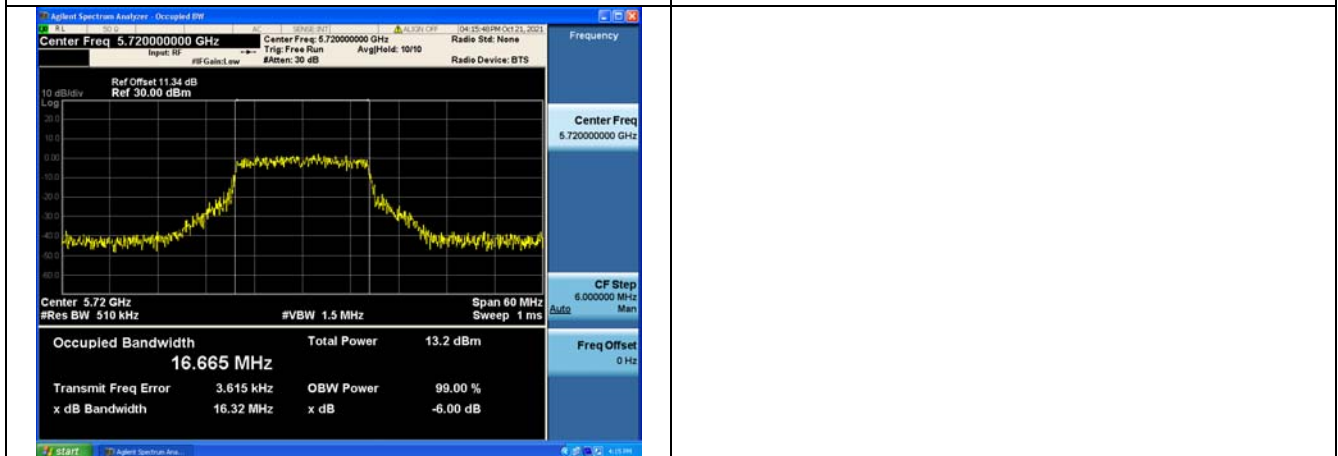
Occupied Bandwidth

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

Test Mode:802.11a

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5720	Chain0	16.665

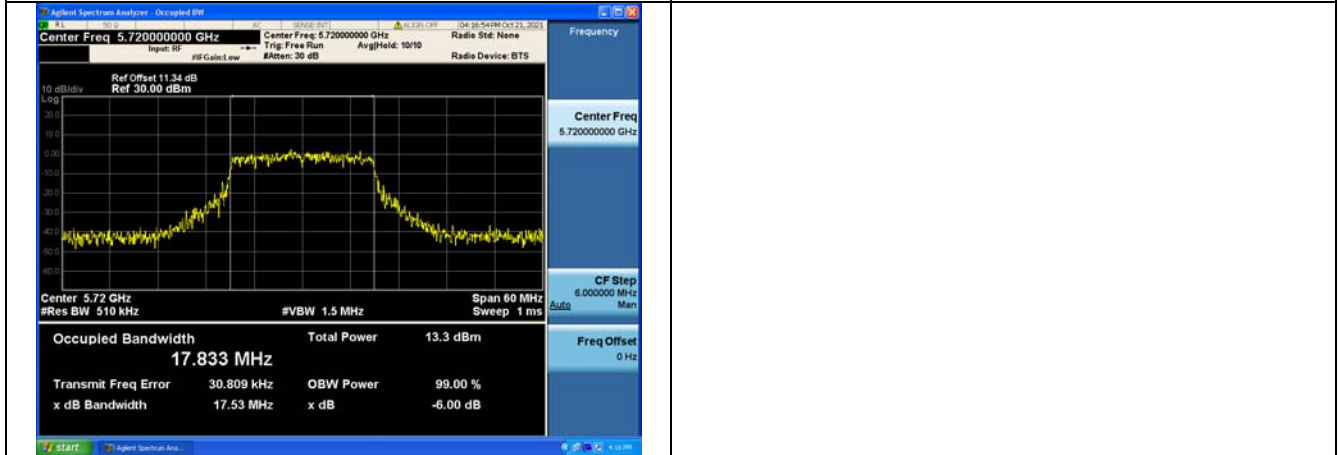
Test Mode:802.11a Chain0



Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5720	Chain0	17.833

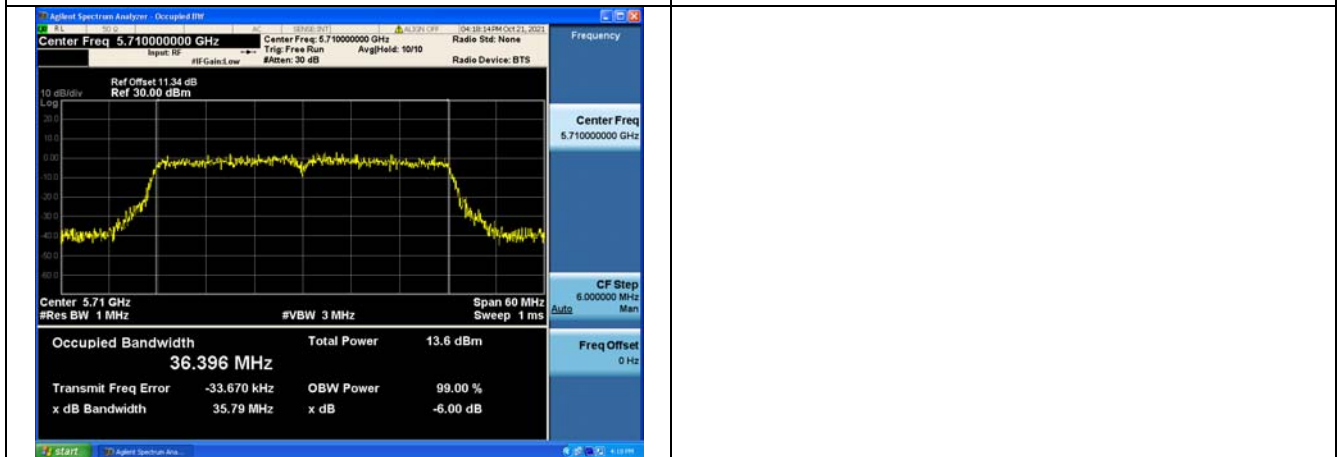
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5710	Chain0	36.396

Test Mode:802. 11n HT40 Chain0



Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5720	Chain0	17.951

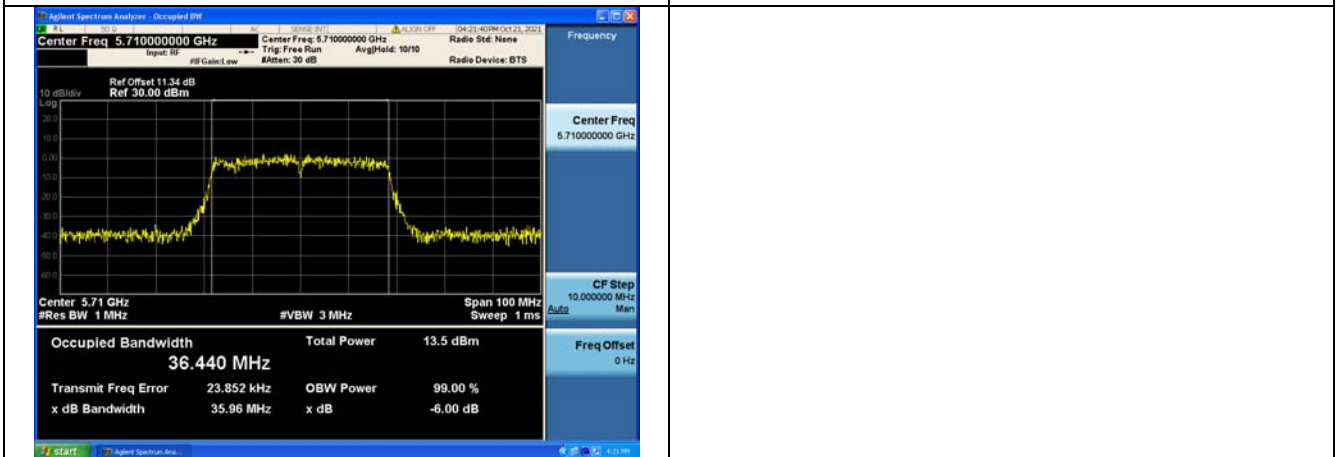
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5710	Chain0	36.440

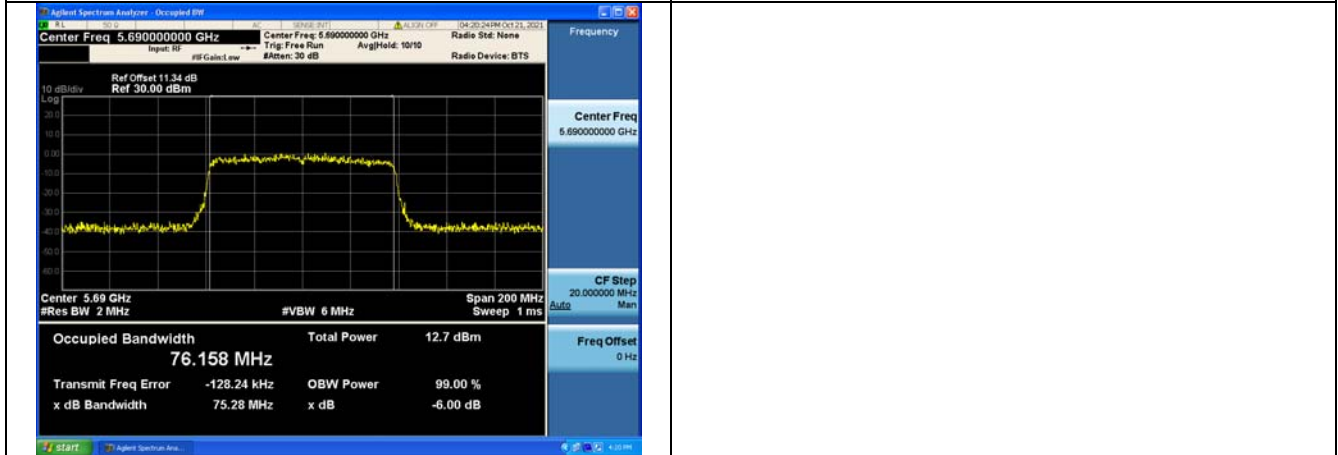
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5690	Chain0	76.158

Test Mode:802. 11ac VHT80 Chain0



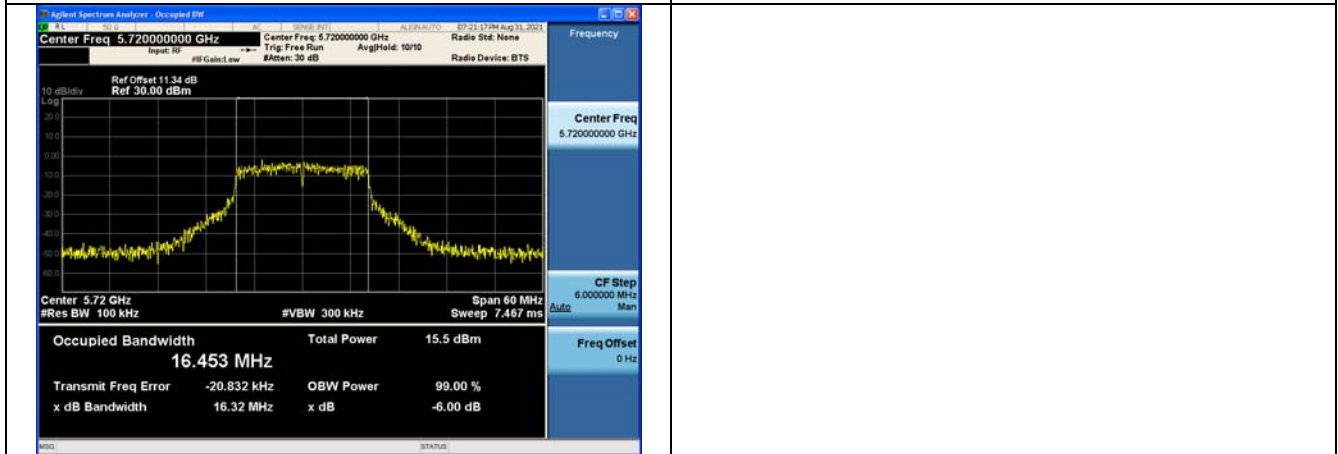
6dB Bandwidth

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

Test Mode:802.11a

Carrier frequency (MHz)	Chain	6dB Bandwidth (MHz)
5720	Chain0	16.32

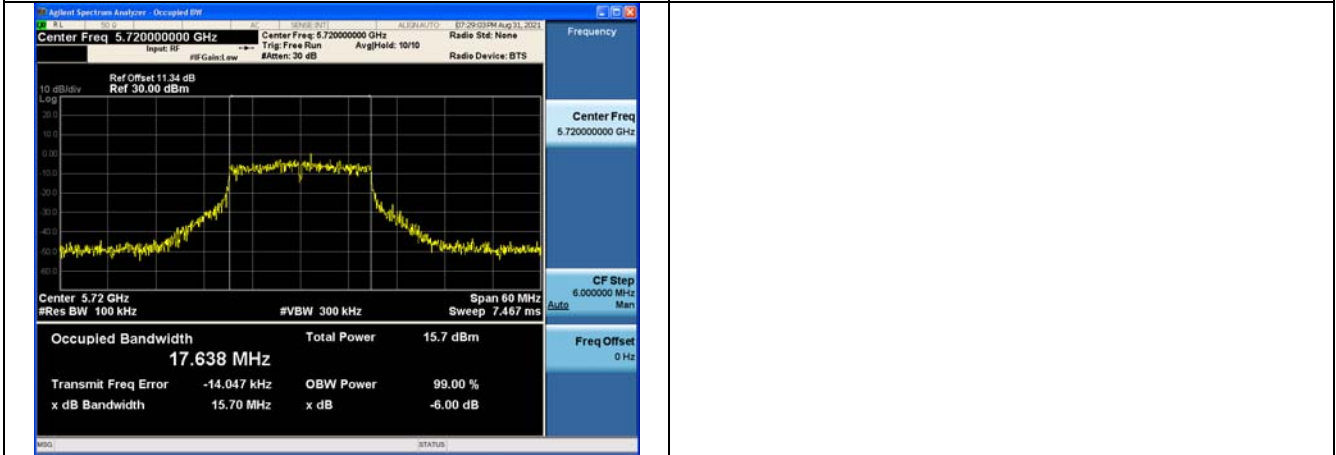
Test Mode:802.11a Chain0



Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	6dB Bandwidth (MHz)
5720	Chain0	15.70

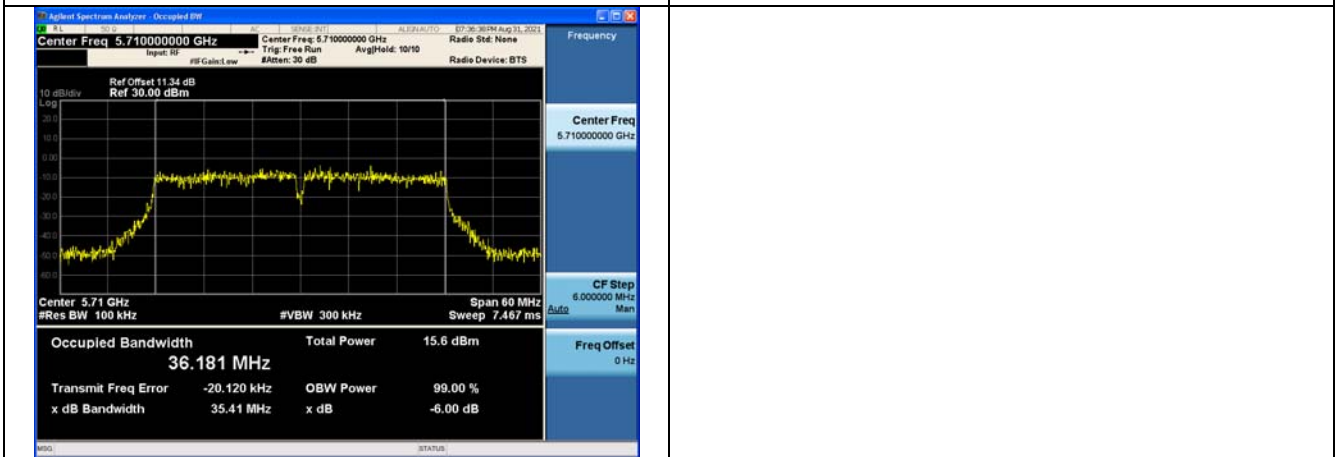
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	6dB Bandwidth (MHz)
5710	Chain0	35.41

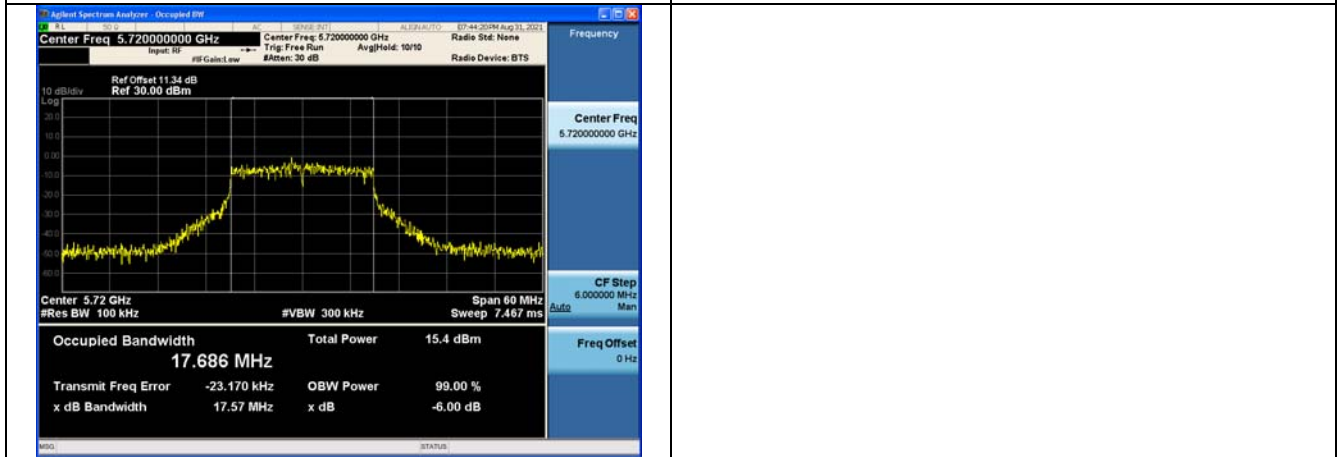
Test Mode:802. 11n HT40 Chain0



Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	6dB Bandwidth (MHz)
5720	Chain0	17.57

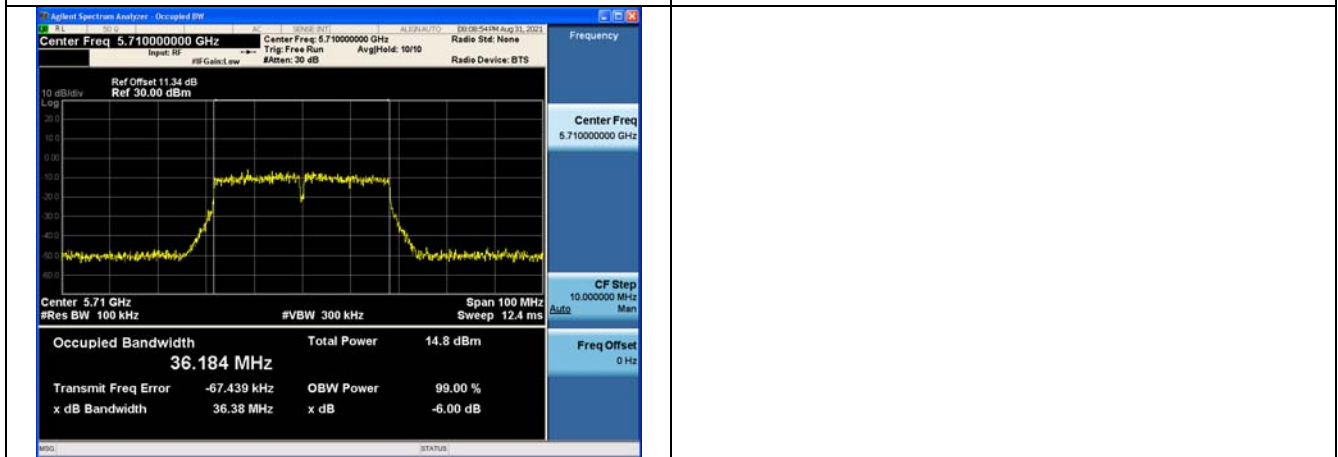
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	6dB Bandwidth (MHz)
5710	Chain0	36.38

Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	6dB Bandwidth (MHz)
5690	Chain0	75.82

Test Mode:802. 11ac VHT80 Chain0



Transmitter Power Spectral Density

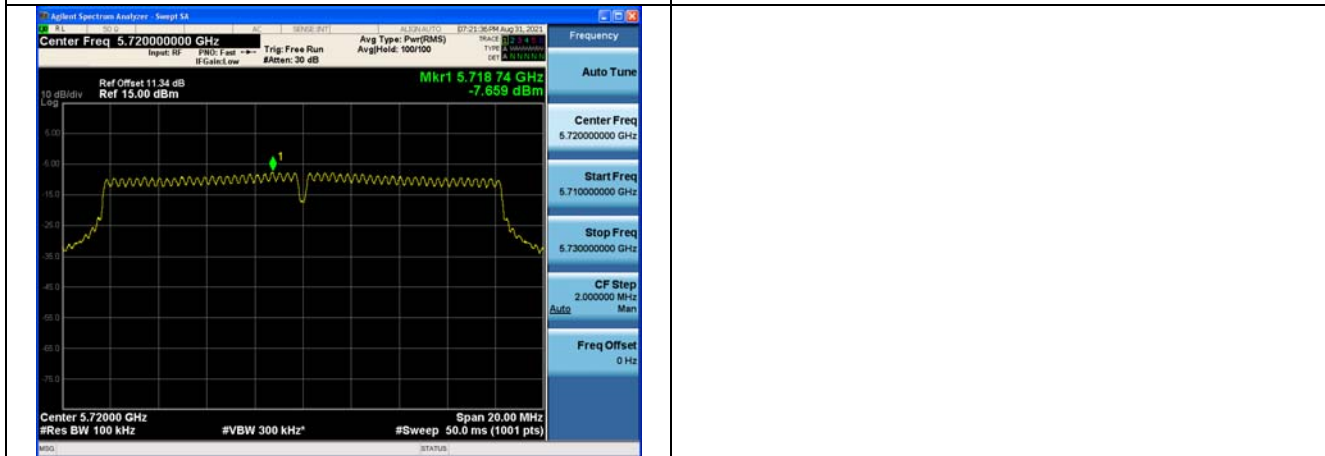
Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

Test Mode:802.11a

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm/500kHz)
5720	0	Chain0	-7.659

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

Test Mode:802.11a Chain0

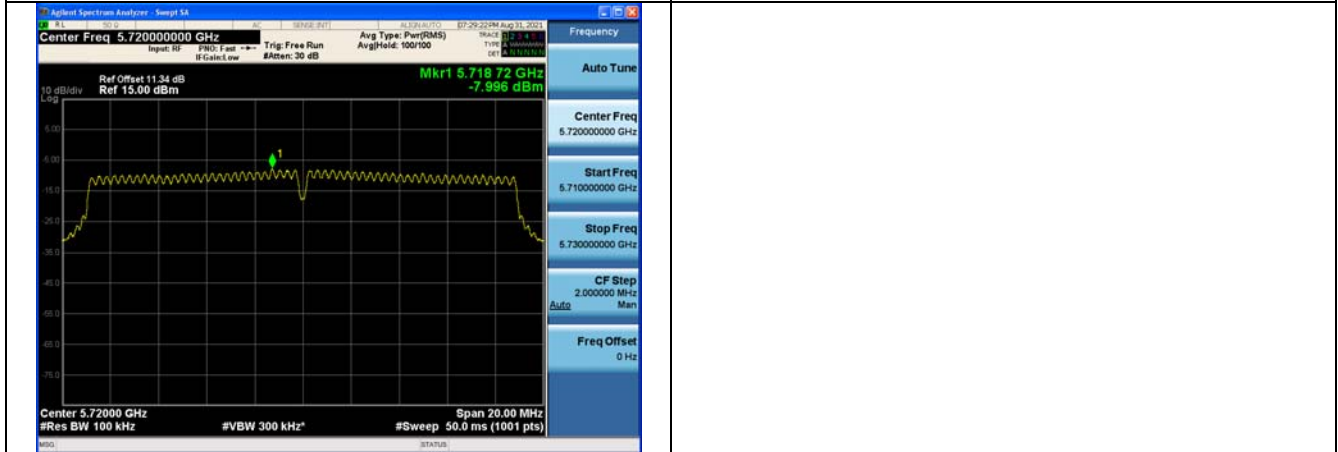


Test Mode:802. 11n HT20

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm/500kHz)
5720	0	Chain0	-7.996

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

Test Mode:802. 11n HT20 Chain0

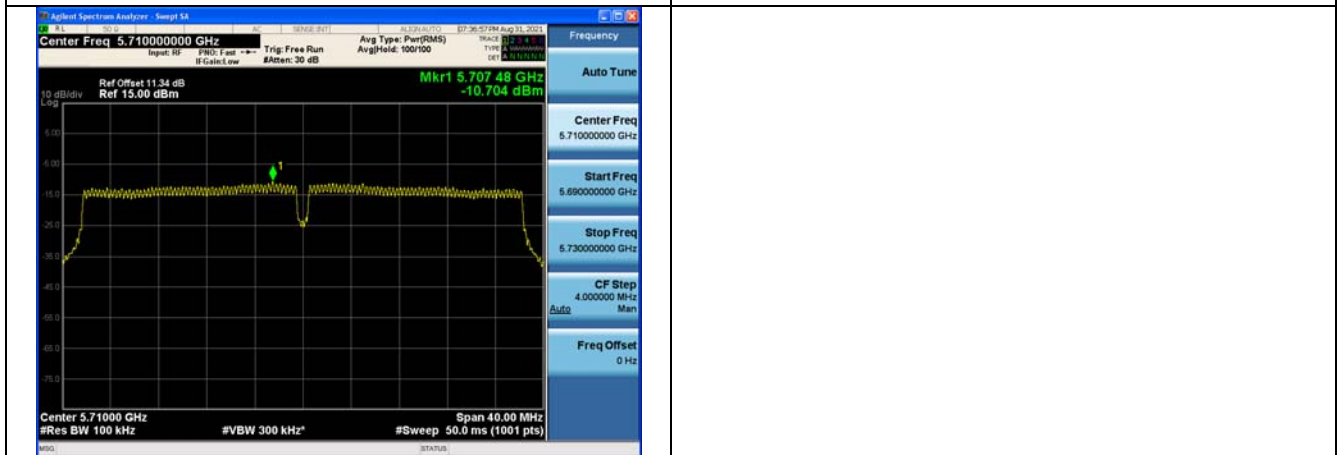


Test Mode:802. 11n HT40

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm/500kHz)
5710	0	Chain0	-10.704

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

Test Mode:802. 11n HT40 Chain0



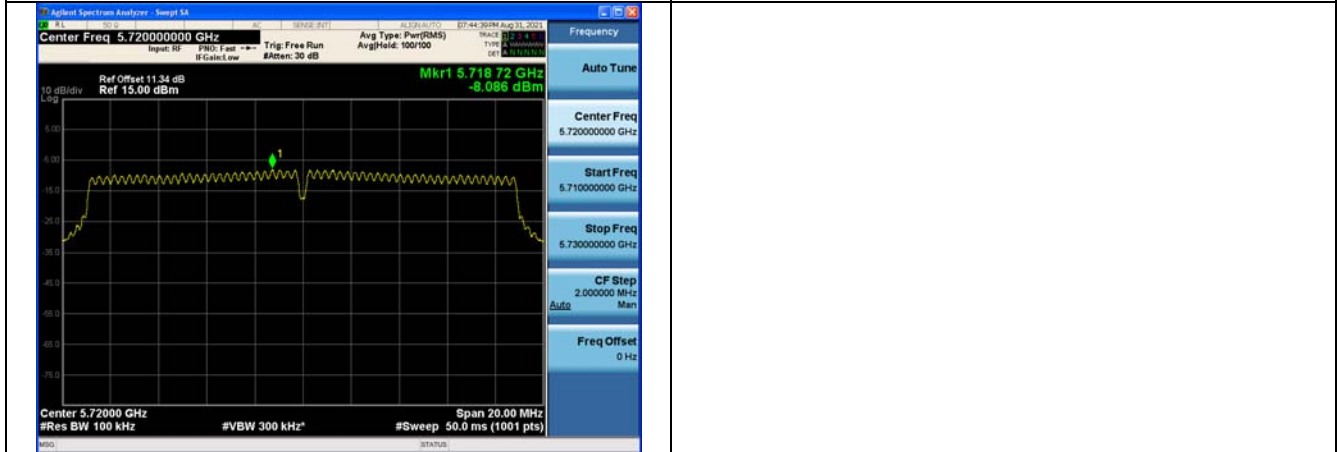


Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm/500kHz)
5720	0	Chain0	-8.086

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

Test Mode:802. 11ac VHT20 Chain0

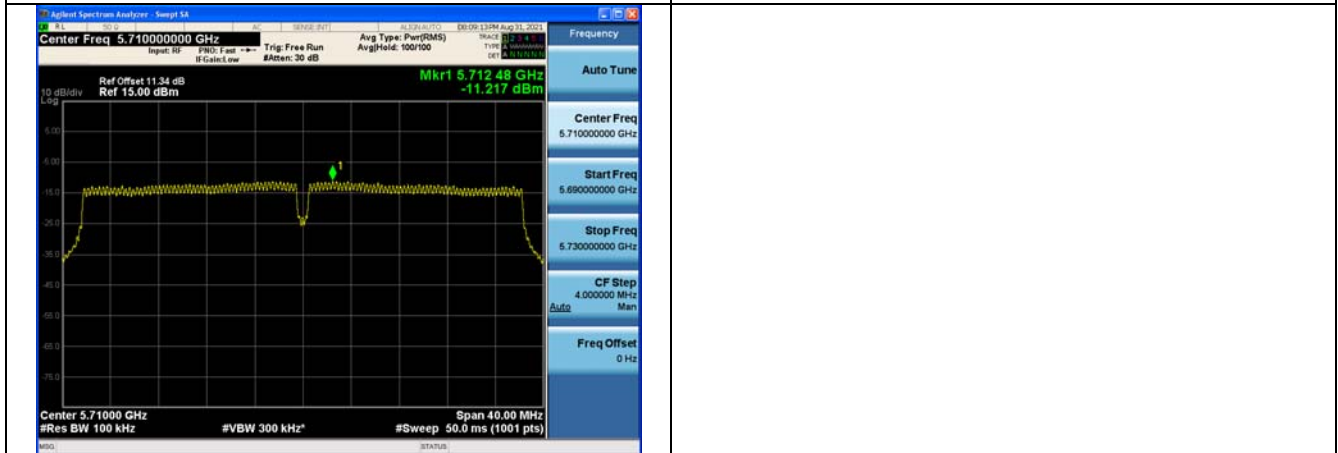


Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm/500kHz)
5710	0	Chain0	-11.217

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

Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm/500kHz)
5690	0	Chain0	-13.767

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

Test Mode:802. 11ac VHT80 Chain0

