APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Antenna	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	Chain0	5745	98.11%	0	Fig.1
802.11a	Chain1	5745	98.09%	0	Fig.2
802.11n HT20	Chain0	5745	97.90%	0.09	Fig.3
802.11n HT20	Chain1	5745	97.93%	0.09	Fig.4
802.11ac VHT20	Chain0	5745	97.90%	0.09	Fig.5
802.11ac VHT20	Chain1	5745	96.23%	0.17	Fig.6
802.11n HT40	Chain0	5755	96.14%	0.17	Fig.7
802.11n HT40	Chain1	5755	96.22%	0.17	Fig.8
802.11ac VHT40	Chain0	5755	94.16%	0.26	Fig.9
802.11ac VHT40	Chain1	5755	93.95%	0.27	Fig.10
802.11ac VHT80	Chain0	5775	91.72%	0.38	Fig.11
802.11ac VHT80	Chain1	5775	91.63%	0.38	Fig.12

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

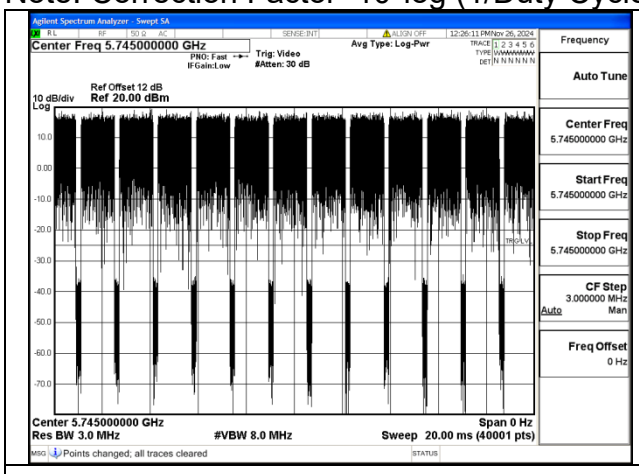


Fig.1

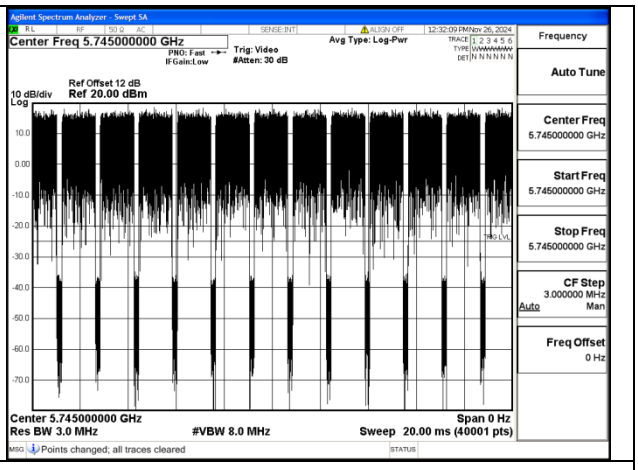


Fig.2

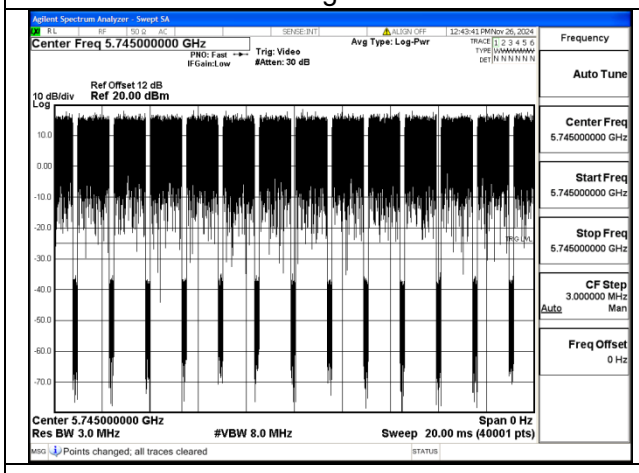


Fig.3

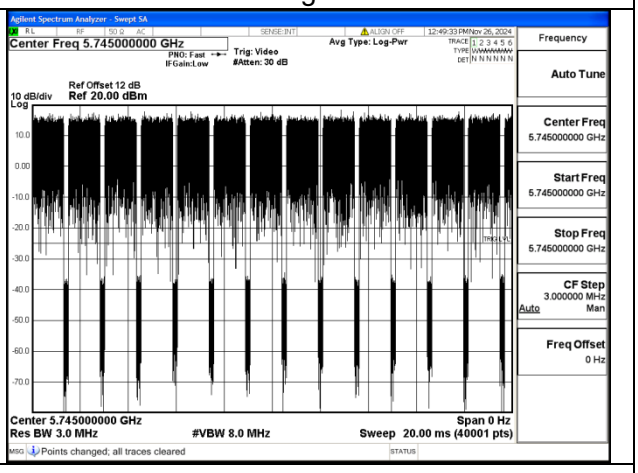


Fig.4

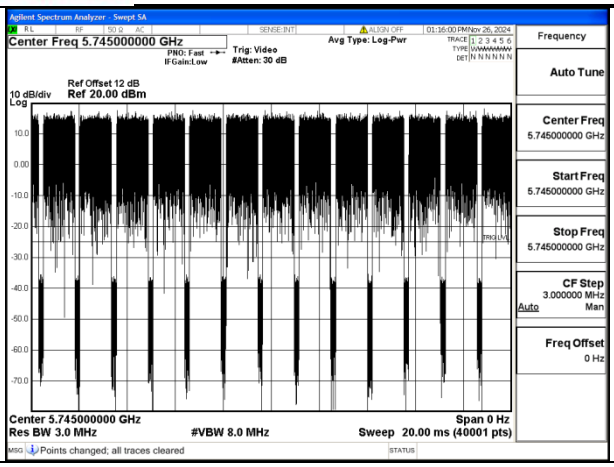


Fig.5

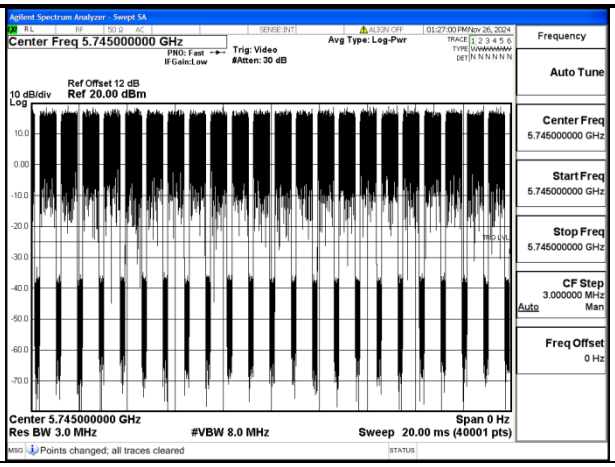


Fig.6

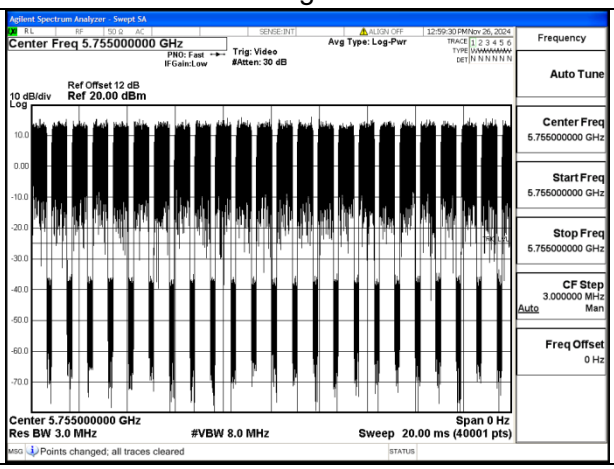


Fig.7

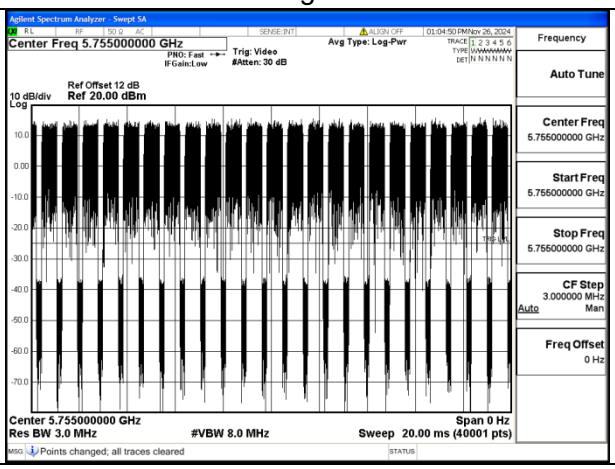


Fig.8

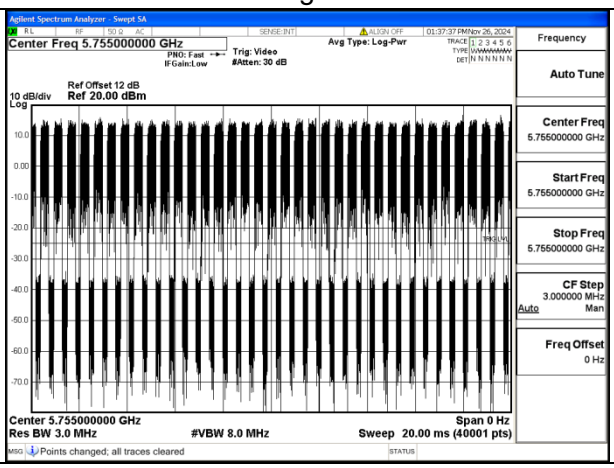


Fig.9

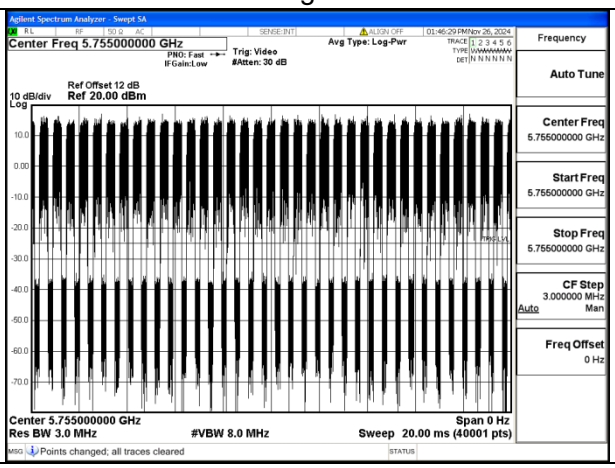


Fig.10

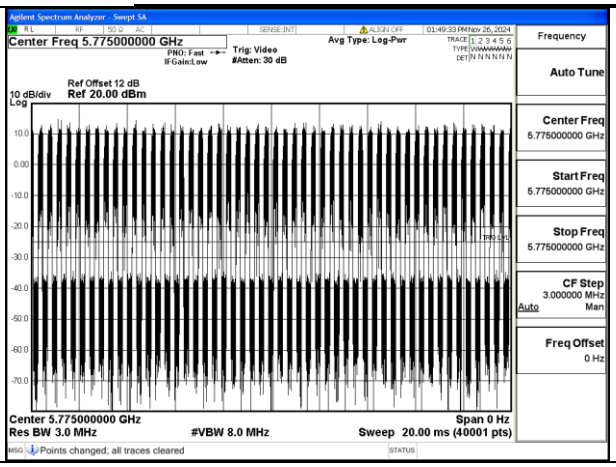

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Video
#Atten: 30 dB
Avg Type: Log-Pwr
Ref Offset 12 dB
10 dB/div
Ref 20.00 dBm
Log
Frequency
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.775000000 GHz
Stop Freq
5.775000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz
Center 5.775000000 GHz
Span 0 Hz
Res BW 3.0 MHz
#VBW 8.0 MHz
Sweep 20.00 ms (40001 pts)
Points changed; all traces cleared

Fig.11

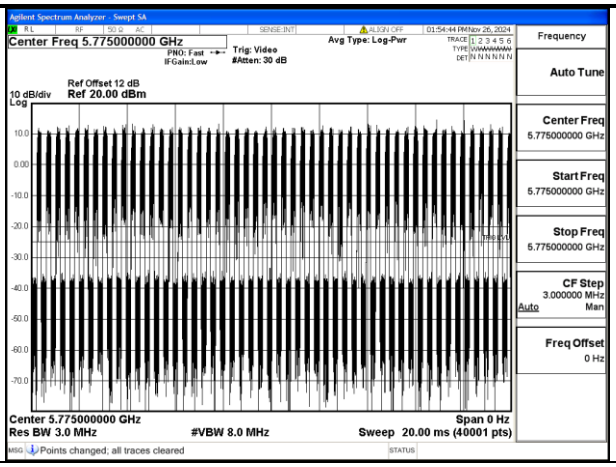

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Video
#Atten: 30 dB
Avg Type: Log-Pwr
Ref Offset 12 dB
10 dB/div
Ref 20.00 dBm
Log
Frequency
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.775000000 GHz
Stop Freq
5.775000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz
Center 5.775000000 GHz
Span 0 Hz
Res BW 3.0 MHz
#VBW 8.0 MHz
Sweep 20.00 ms (40001 pts)
Points changed; all traces cleared

Fig.12

Output Power

Mode	Tones/ RUIndex	Frequency (MHz)	Antenna	Conductedaverage power output(dBm)	EIRP (dBm)
802.11a	NA	5745	Chain0	15.66	14.80
802.11a	NA	5745	Chain1	15.06	14.20
802.11a	NA	5785	Chain0	15.82	14.96
802.11a	NA	5785	Chain1	15.00	14.14
802.11a	NA	5825	Chain0	15.67	14.81
802.11a	NA	5825	Chain1	15.18	14.32
802.11n HT20	NA	5745	Chain0	14.91	14.05
802.11n HT20	NA	5745	Chain1	14.25	13.39
802.11n HT20	NA	5745	MIMO	17.60	16.74
802.11n HT20	NA	5785	Chain0	14.95	14.09
802.11n HT20	NA	5785	Chain1	14.95	14.09
802.11n HT20	NA	5785	MIMO	17.96	17.10
802.11n HT20	NA	5825	Chain0	15.03	14.17
802.11n HT20	NA	5825	Chain1	14.93	14.07
802.11n HT20	NA	5825	MIMO	17.99	17.13
802.11ac VHT20	NA	5745	Chain0	14.48	13.62
802.11ac VHT20	NA	5745	Chain1	15.40	14.54
802.11ac VHT20	NA	5745	MIMO	17.97	17.11
802.11ac VHT20	NA	5785	Chain0	14.87	14.01
802.11ac VHT20	NA	5785	Chain1	15.37	14.51
802.11ac VHT20	NA	5785	MIMO	18.14	17.28
802.11ac VHT20	NA	5825	Chain0	15.16	14.30
802.11ac VHT20	NA	5825	Chain1	15.22	14.36
802.11ac VHT20	NA	5825	MIMO	18.20	17.34
802.11n HT40	NA	5755	Chain0	15.16	14.30
802.11n HT40	NA	5755	Chain1	15.20	14.34
802.11n HT40	NA	5755	MIMO	18.19	17.33
802.11n HT40	NA	5795	Chain0	15.22	14.36
802.11n HT40	NA	5795	Chain1	15.91	15.05
802.11n HT40	NA	5795	MIMO	18.59	17.73
802.11ac VHT40	NA	5755	Chain0	15.16	14.30
802.11ac VHT40	NA	5755	Chain1	15.23	14.37
802.11ac VHT40	NA	5755	MIMO	18.21	17.35
802.11ac VHT40	NA	5795	Chain0	14.86	14.00
802.11ac VHT40	NA	5795	Chain1	15.51	14.65
802.11ac VHT40	NA	5795	MIMO	18.21	17.35
802.11ac VHT80	NA	5775	Chain0	14.23	13.37
802.11ac VHT80	NA	5775	Chain1	15.03	14.17
802.11ac VHT80	NA	5775	MIMO	17.66	16.80

Emission Bandwidth

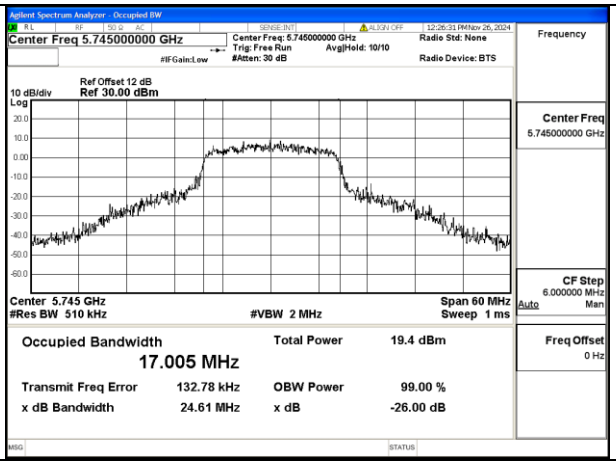
Offset 12dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5745MHz	5785MHz	5825MHz
802.11a	Chain0	24.61	20.77	26.37
802.11a	Chain1	25.18	24.06	27.63
802.11n HT20	Chain0	27.96	23.85	25.62
802.11n HT20	Chain1	21.20	24.71	28.81
802.11ac VHT20	Chain0	28.15	20.40	21.74
802.11ac VHT20	Chain1	23.90	24.68	20.58

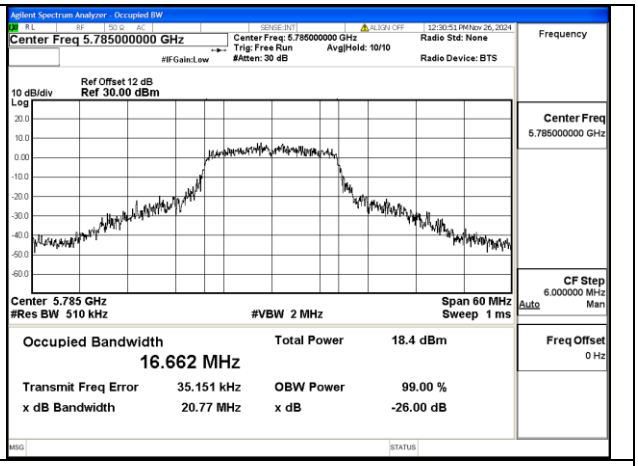
Test Mode	Antenna	26dB Bandwidth (MHz)		
		5755MHz	---	5795MHz
802.11n HT40	Chain0	43.89	---	47.96
802.11n HT40	Chain1	42.83	---	42.01
802.11ac VHT40	Chain0	40.09	---	40.54
802.11ac VHT40	Chain1	40.24	---	40.15

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5775MHz	---	---
802.11ac VHT80	Chain0	80.57	---	---
802.11ac VHT80	Chain1	84.58	---	---

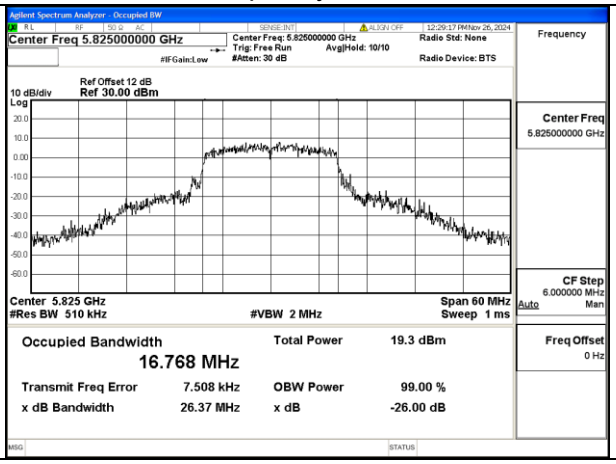
Test Mode: 802.11a



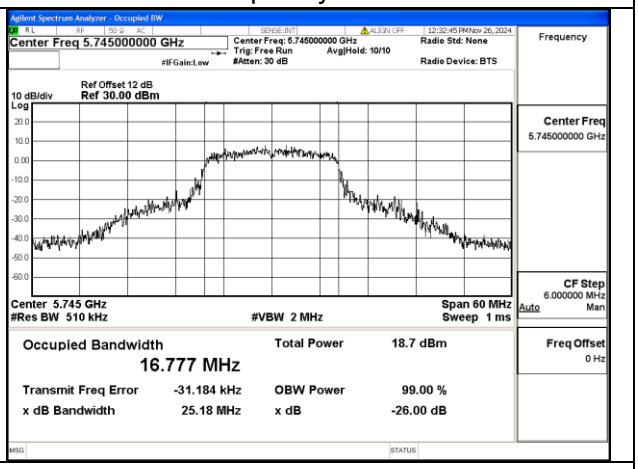
Mode:802.11a Frequency:5745MHz Ant:Chain0



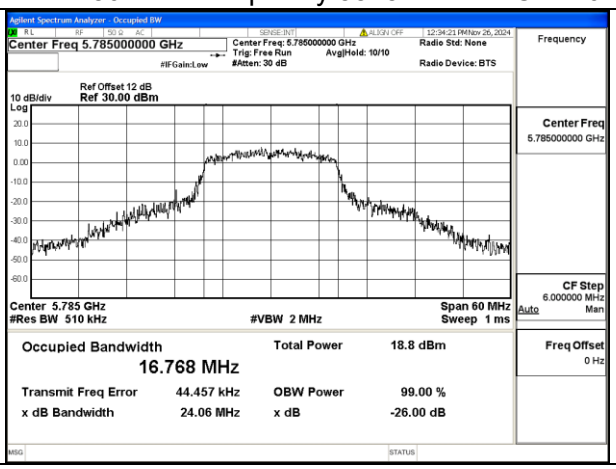
Mode:802.11a Frequency:5785MHz Ant:Chain0



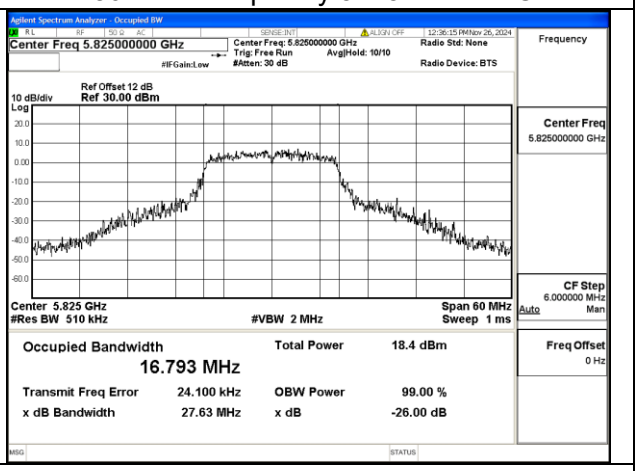
Mode:802.11a Frequency:5825MHz Ant:Chain0



Mode:802.11a Frequency:5745MHz Ant:Chain1

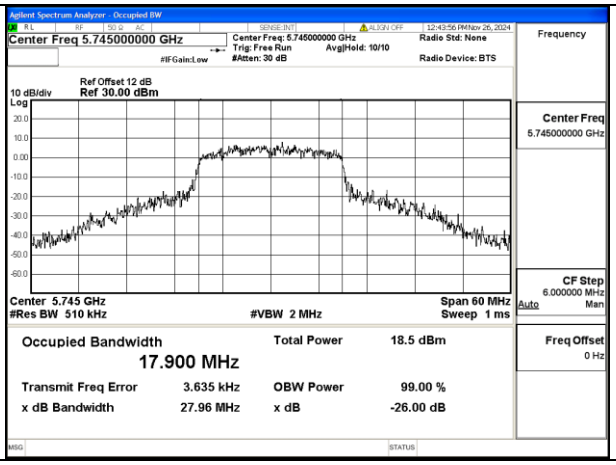


Mode:802.11a Frequency:5785MHz Ant:Chain1

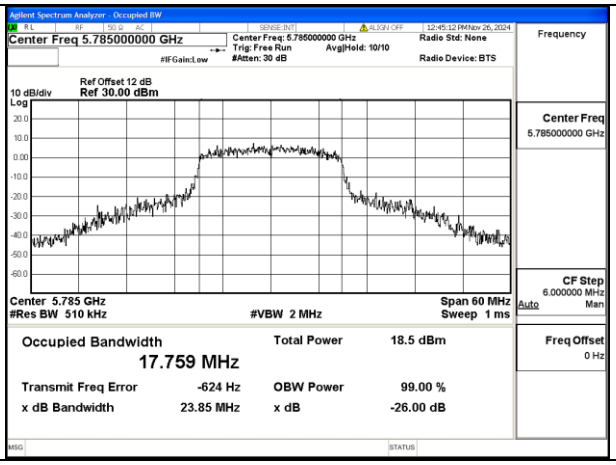


Mode:802.11a Frequency:5825MHz Ant:Chain1

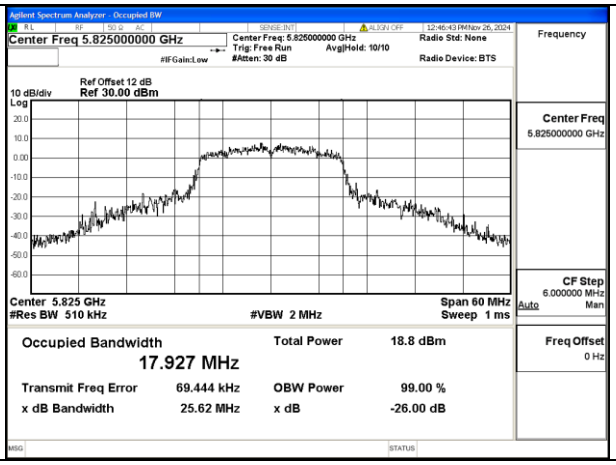
Test Mode: 802.11n HT20



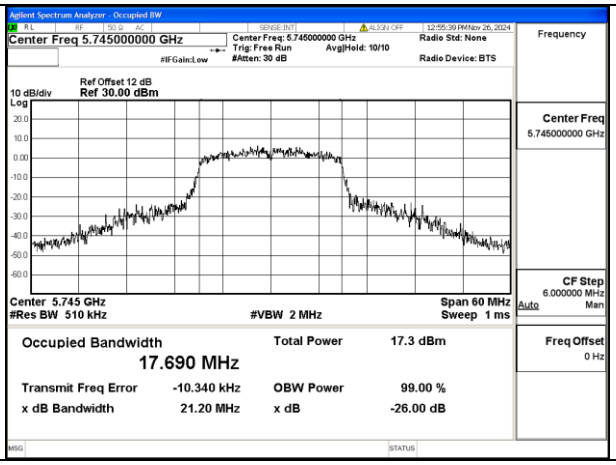
Mode:802.11n HT20 Frequency:5745MHz
Ant:Chain0



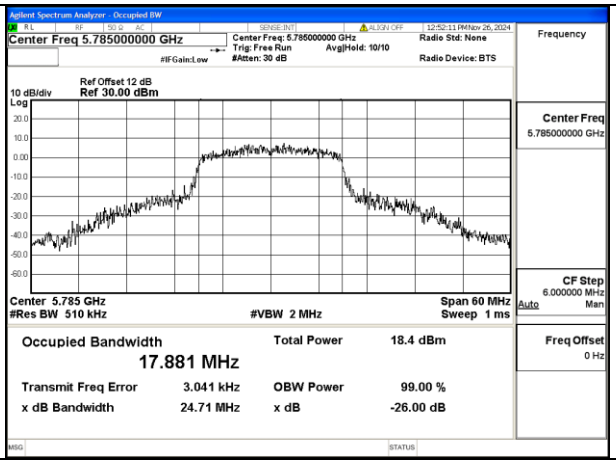
Mode:802.11n HT20 Frequency:5785MHz
Ant:Chain0



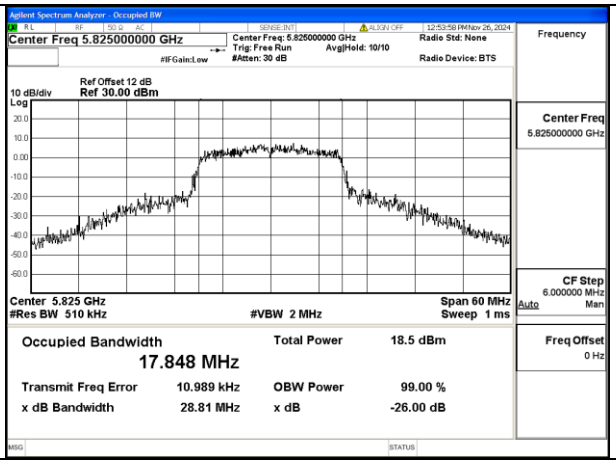
Mode:802.11n HT20 Frequency:5825MHz
Ant:Chain0



Mode:802.11n HT20 Frequency:5745MHz
Ant:Chain1

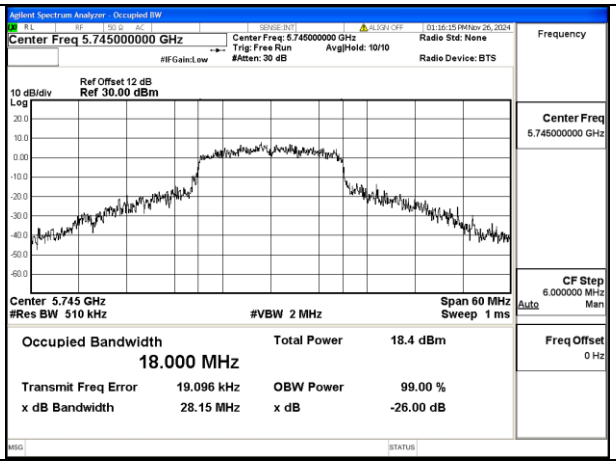


Mode:802.11n HT20 Frequency:5785MHz
Ant:Chain1

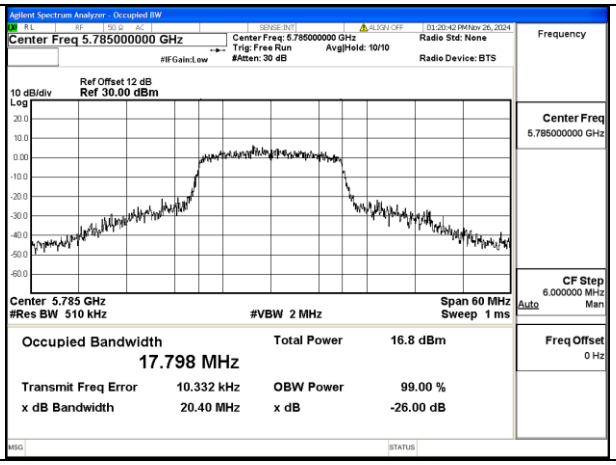


Mode:802.11n HT20 Frequency:5825MHz
Ant:Chain1

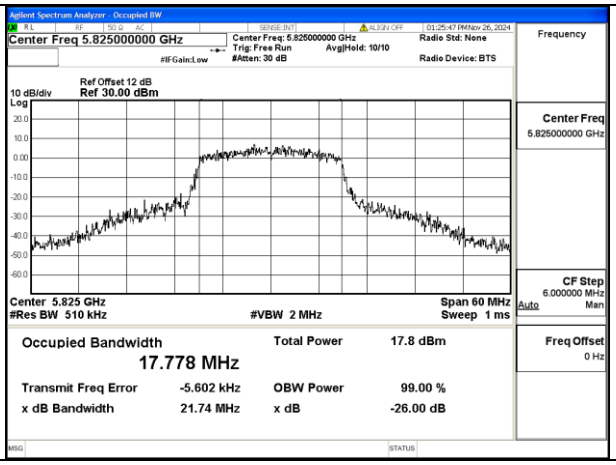
Test Mode: 802.11ac VHT20



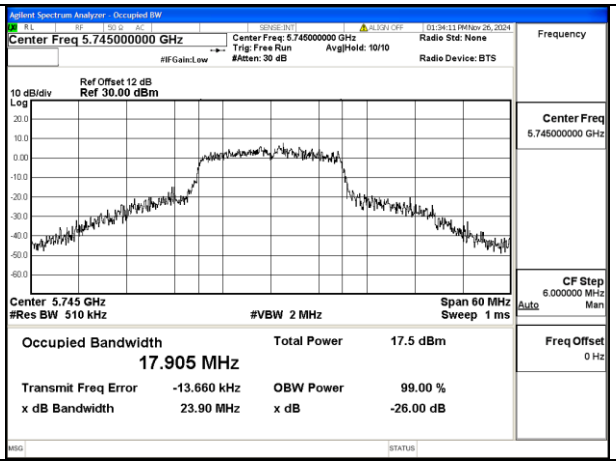
Mode:802.11ac VHT20 Frequency:5745MHz
Ant:Chain0



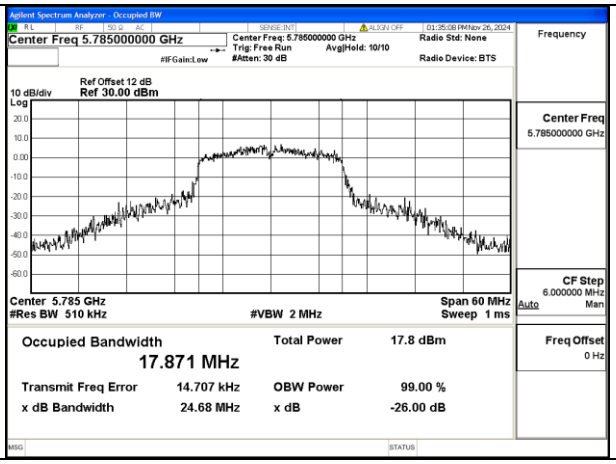
Mode:802.11ac VHT20 Frequency:5785MHz
Ant:Chain0



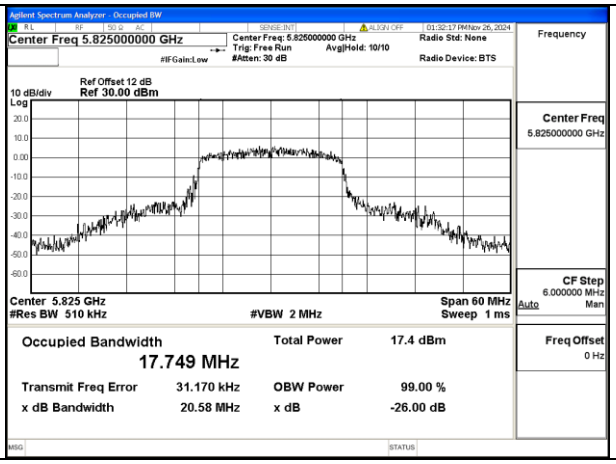
Mode:802.11ac VHT20 Frequency:5825MHz
Ant:Chain0



Mode:802.11ac VHT20 Frequency:5745MHz
Ant:Chain1

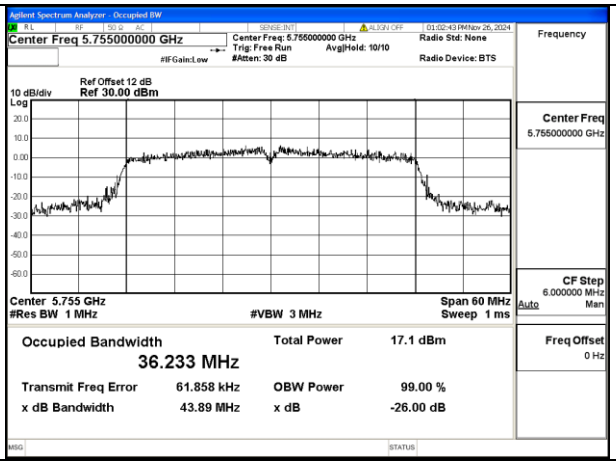


Mode:802.11ac VHT20 Frequency:5785MHz
Ant:Chain1

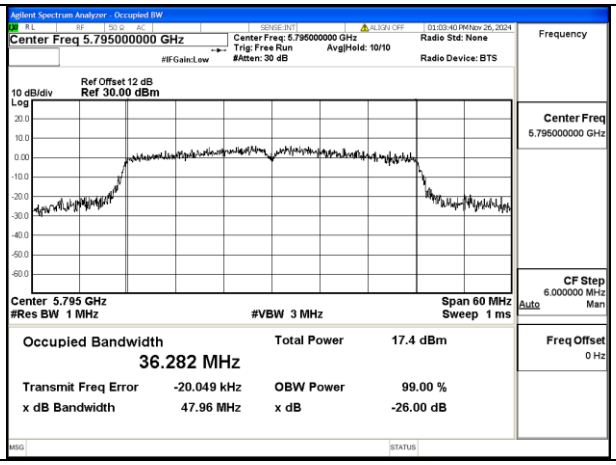


Mode:802.11ac VHT20 Frequency:5825MHz
Ant:Chain1

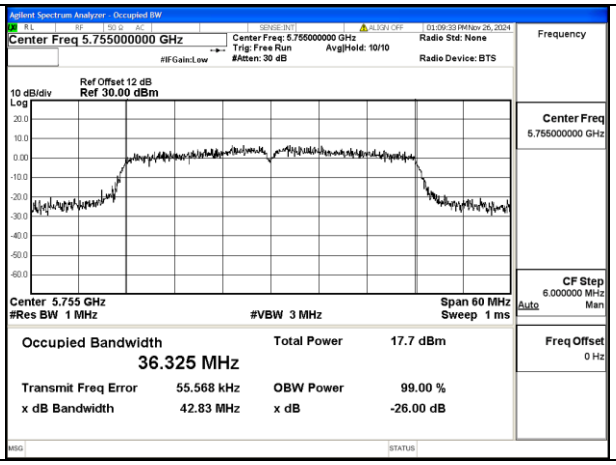
Test Mode: 802.11n HT40



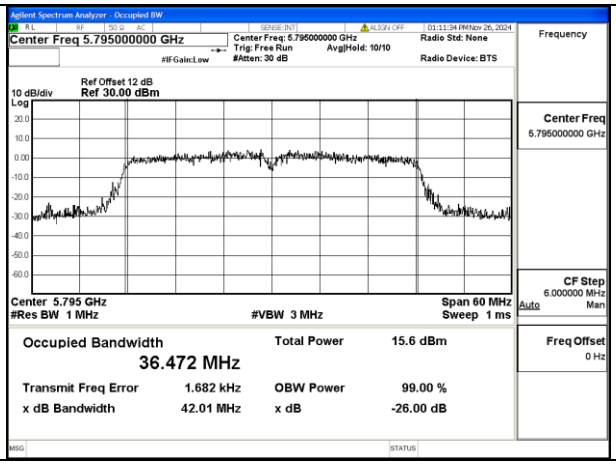
Mode:802.11n HT40 Frequency:5755MHz
Ant:Chain0



Mode:802.11n HT40 Frequency:5795MHz
Ant:Chain0

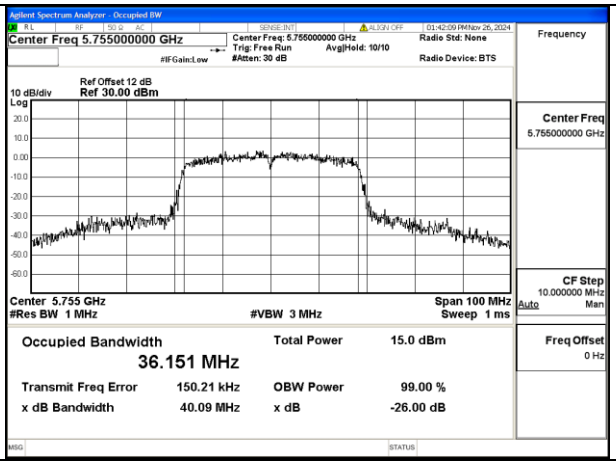


Mode:802.11n HT40 Frequency:5755MHz
Ant:Chain1

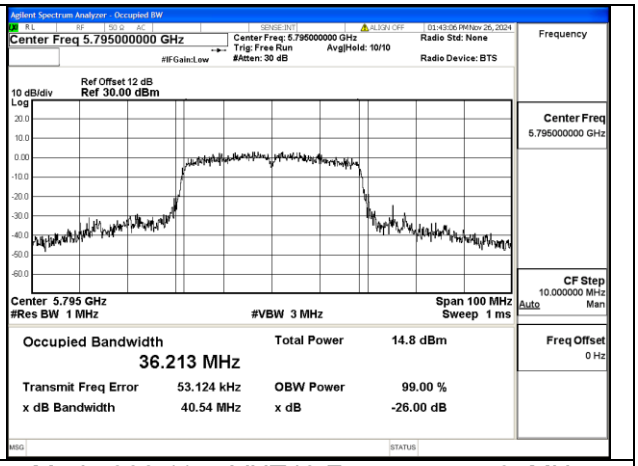


Mode:802.11n HT40 Frequency:5795MHz
Ant:Chain1

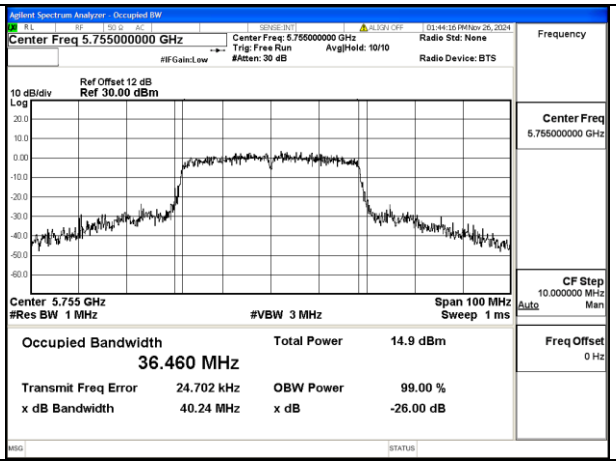
Test Mode: 802.11ac VHT40



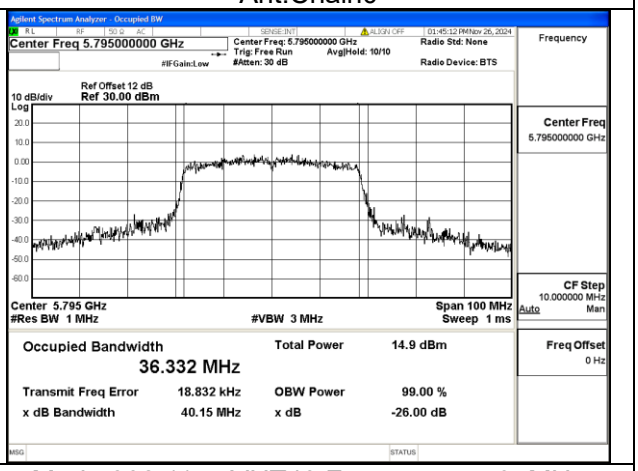
Mode:802.11ac VHT40 Frequency:5755MHz
Ant:Chain0



Mode:802.11ac VHT40 Frequency:5795MHz
Ant:Chain0

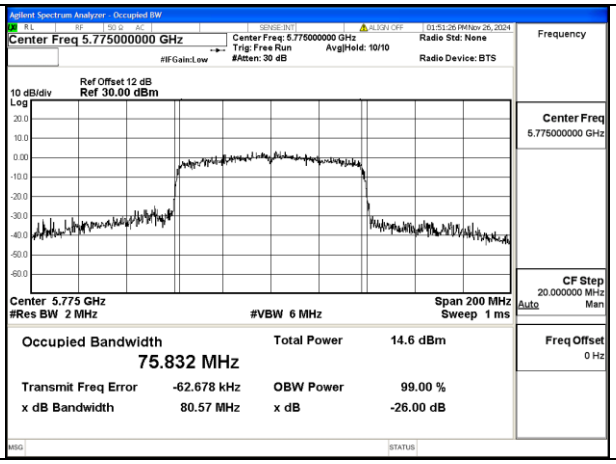


Mode:802.11ac VHT40 Frequency:5755MHz
Ant:Chain1

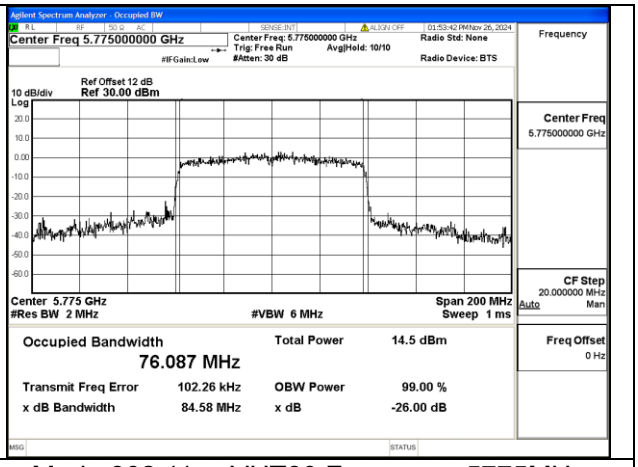


Mode:802.11ac VHT40 Frequency:5795MHz
Ant:Chain1

Test Mode: 802.11ac VHT80



Mode:802.11ac VHT80 Frequency:5775MHz
Ant:Chain0



Mode:802.11ac VHT80 Frequency:5775MHz
Ant:Chain1

Occupied Bandwidth

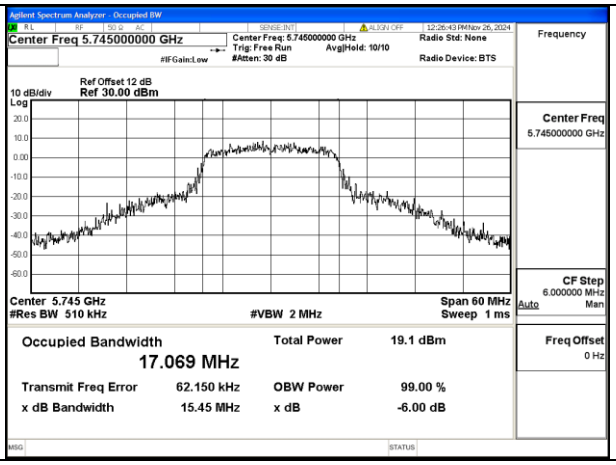
Offset 12dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5745MHz	5785MHz	5825MHz
802.11a	Chain0	17.069	16.677	16.837
802.11a	Chain1	16.827	16.744	16.778
802.11n HT20	Chain0	17.952	17.837	17.980
802.11n HT20	Chain1	17.806	17.806	17.918
802.11ac VHT20	Chain0	18.100	17.740	17.762
802.11ac VHT20	Chain1	17.911	17.802	17.814

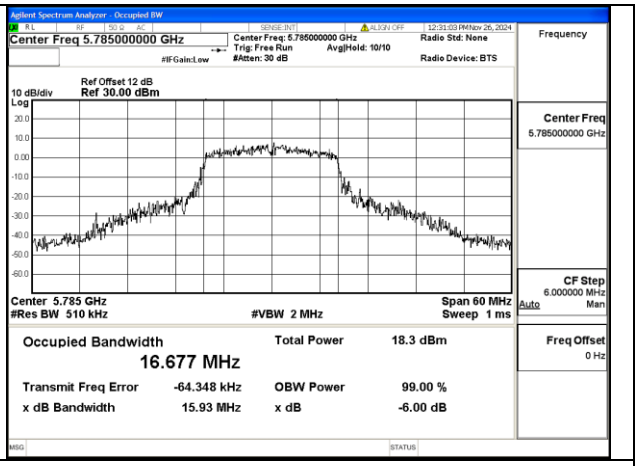
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5755MHz	---	5795MHz
802.11n HT40	Chain0	36.209	---	36.360
802.11n HT40	Chain1	36.175	---	36.247
802.11ac VHT40	Chain0	36.274	---	36.307
802.11ac VHT40	Chain1	36.353	---	36.183

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5775MHz	---	---
802.11ac VHT80	Chain0	76.139	---	---
802.11ac VHT80	Chain1	76.263	---	---

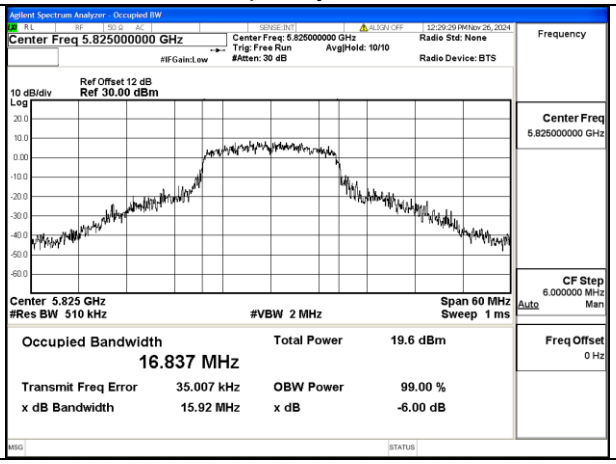
Test Mode: 802.11a



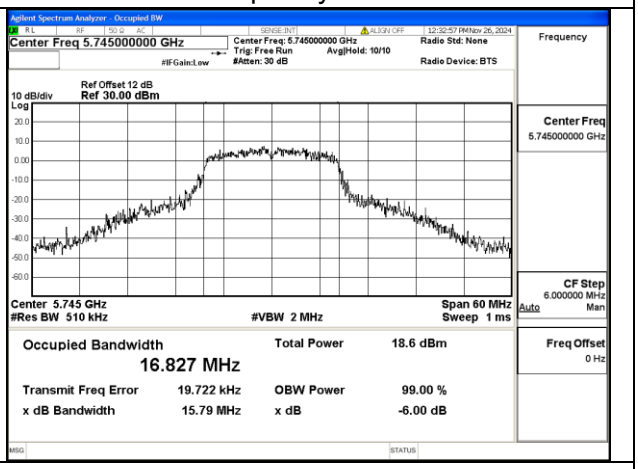
Mode:802.11a Frequency:5745MHz Ant:Chain0



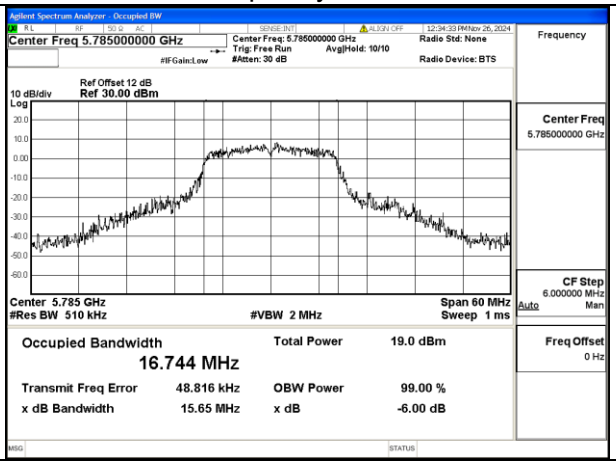
Mode:802.11a Frequency:5785MHz Ant:Chain0



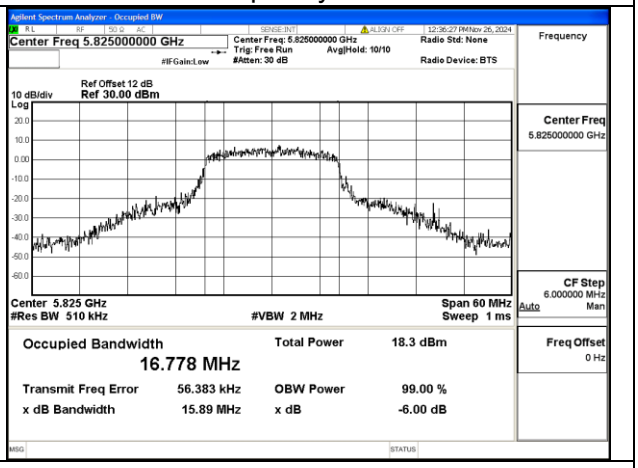
Mode:802.11a Frequency:5825MHz Ant:Chain0



Mode:802.11a Frequency:5745MHz Ant:Chain1

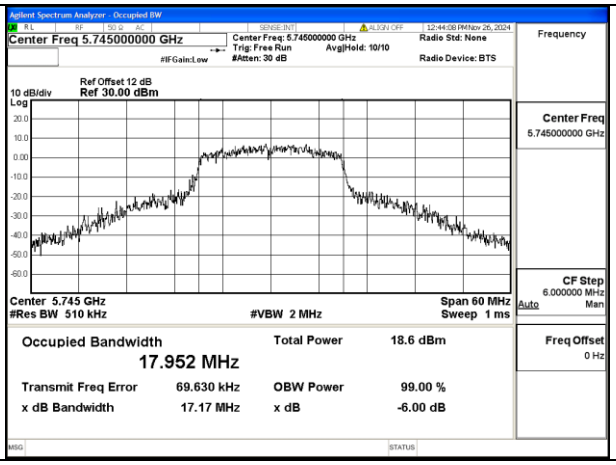


Mode:802.11a Frequency:5785MHz Ant:Chain1

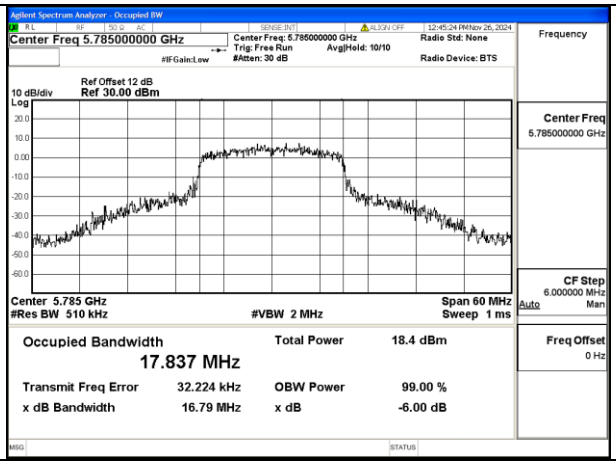


Mode:802.11a Frequency:5825MHz Ant:Chain1

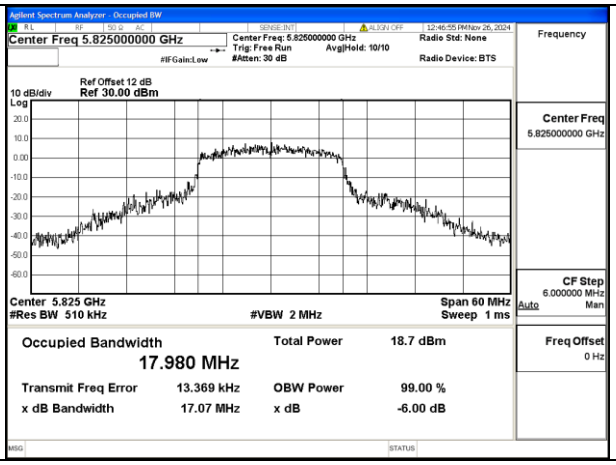
Test Mode: 802.11n HT20



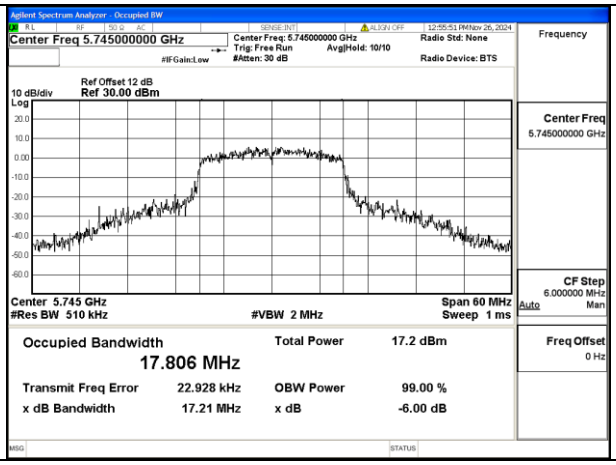
Mode:802.11n HT20 Frequency:5745MHz
Ant:Chain0



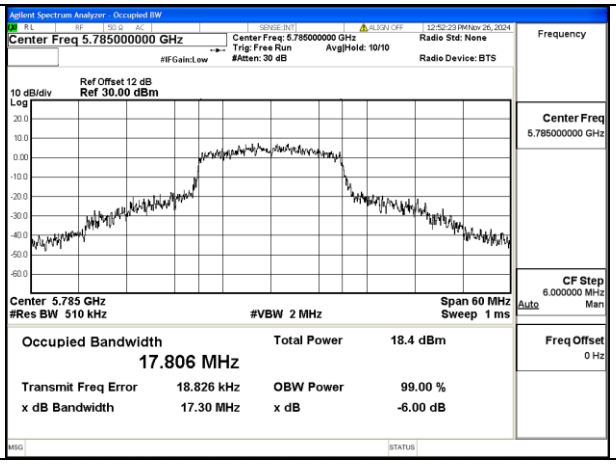
Mode:802.11n HT20 Frequency:5785MHz
Ant:Chain0



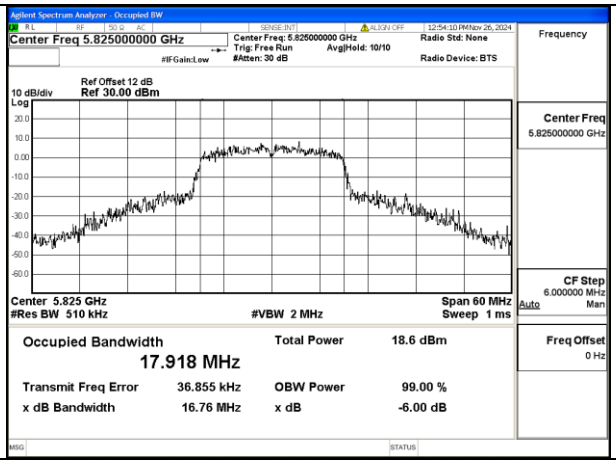
Mode:802.11n HT20 Frequency:5825MHz
Ant:Chain0



Mode:802.11n HT20 Frequency:5745MHz
Ant:Chain1

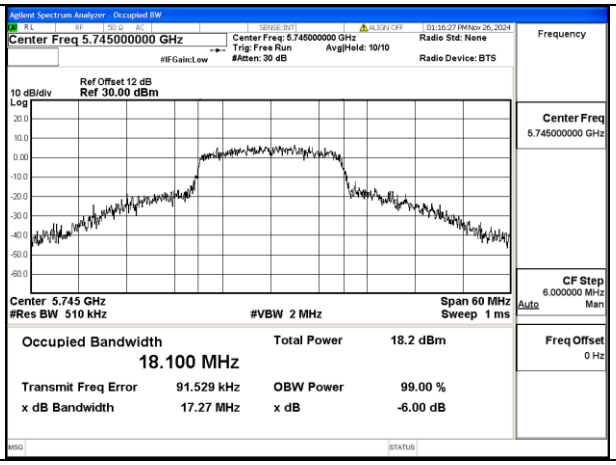


Mode:802.11n HT20 Frequency:5785MHz
Ant:Chain1

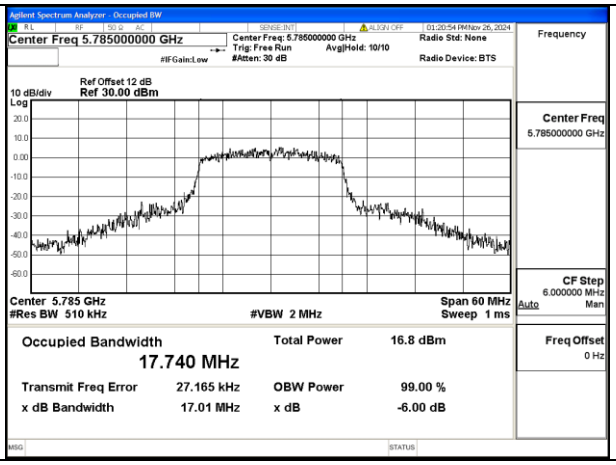


Mode:802.11n HT20 Frequency:5825MHz
Ant:Chain1

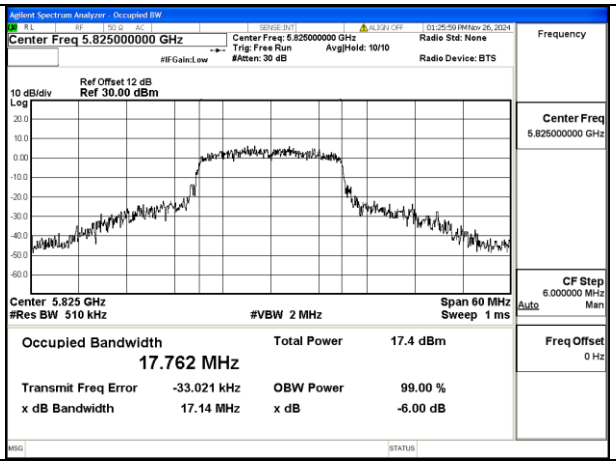
Test Mode: 802.11ac VHT20



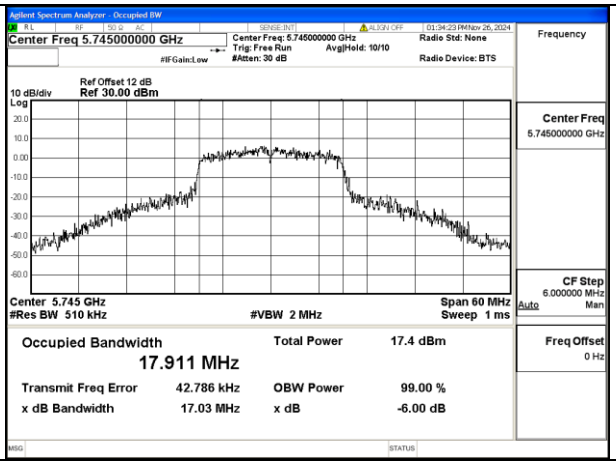
Mode:802.11ac VHT20 Frequency:5745MHz
Ant:Chain0



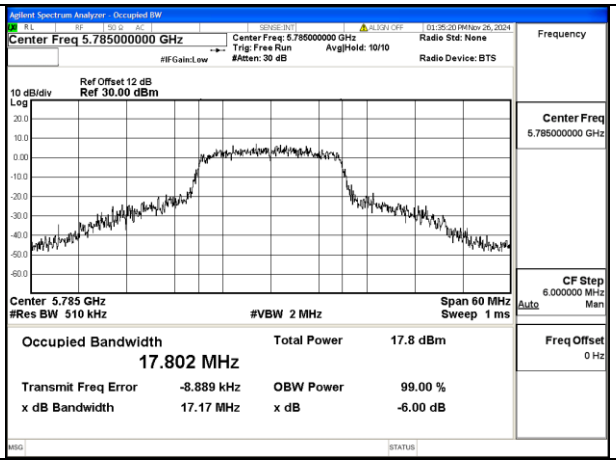
Mode:802.11ac VHT20 Frequency:5785MHz
Ant:Chain0



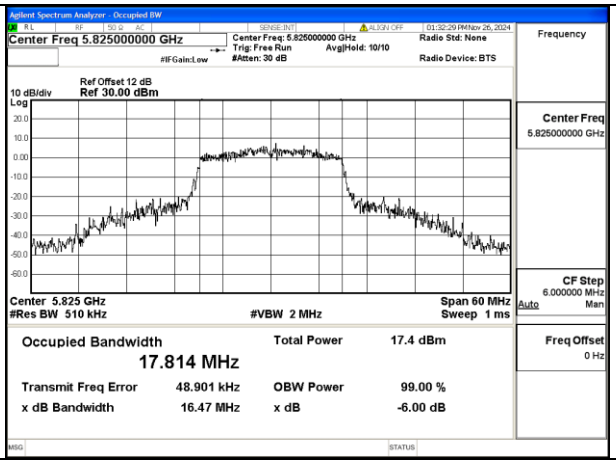
Mode:802.11ac VHT20 Frequency:5825MHz
Ant:Chain0



Mode:802.11ac VHT20 Frequency:5745MHz
Ant:Chain1

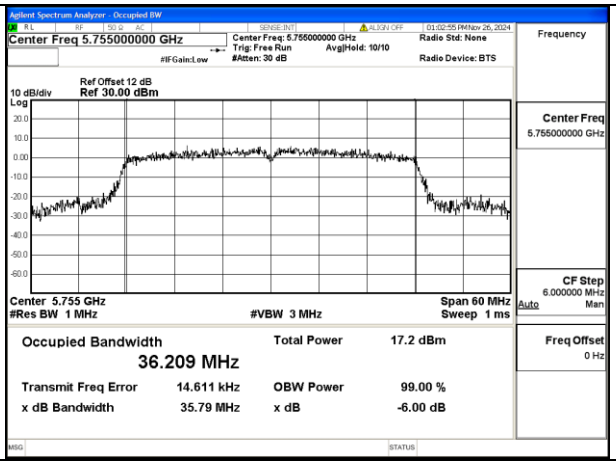


Mode:802.11ac VHT20 Frequency:5785MHz
Ant:Chain1

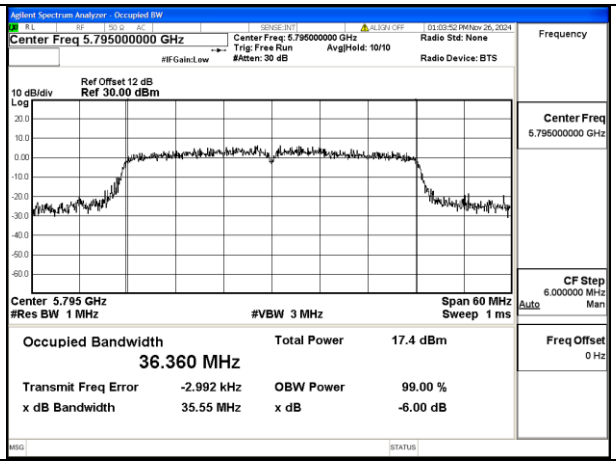


Mode:802.11ac VHT20 Frequency:5825MHz
Ant:Chain1

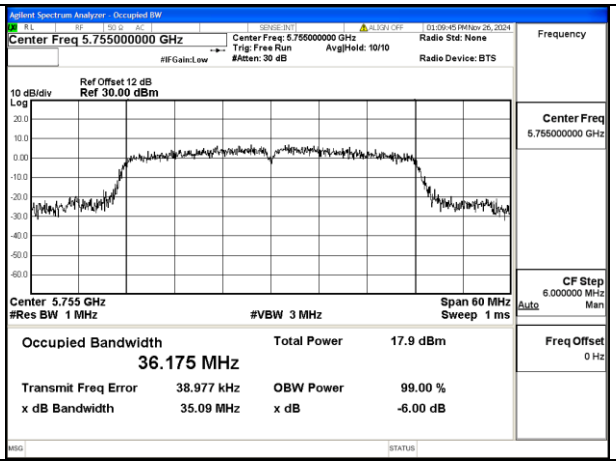
Test Mode: 802.11n HT40



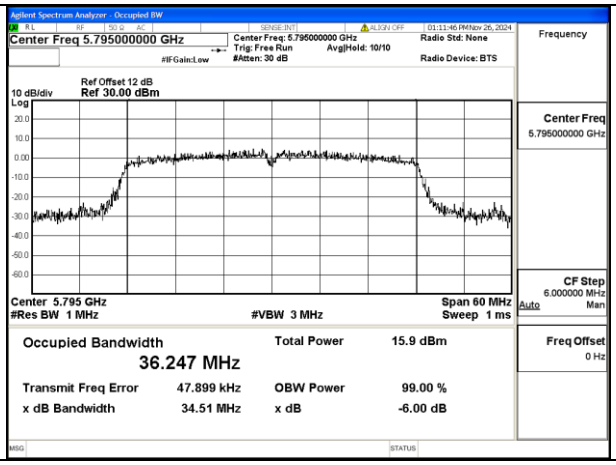
Mode:802.11n HT40 Frequency:5755MHz
Ant:Chain0



Mode:802.11n HT40 Frequency:5795MHz
Ant:Chain0

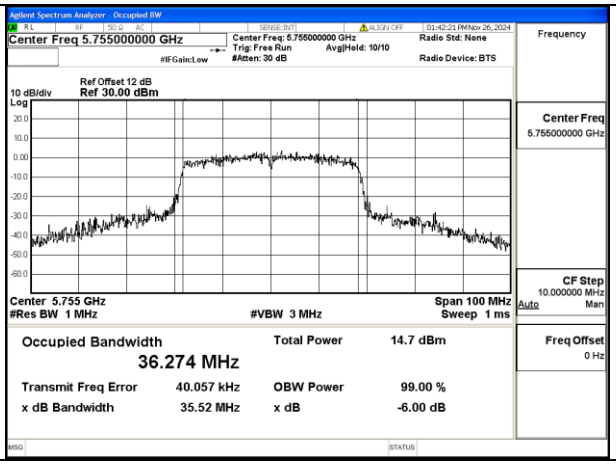


Mode:802.11n HT40 Frequency:5755MHz
Ant:Chain1

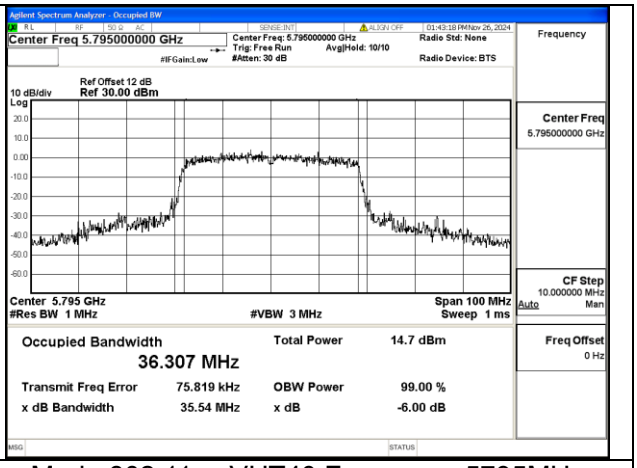


Mode:802.11n HT40 Frequency:5795MHz
Ant:Chain1

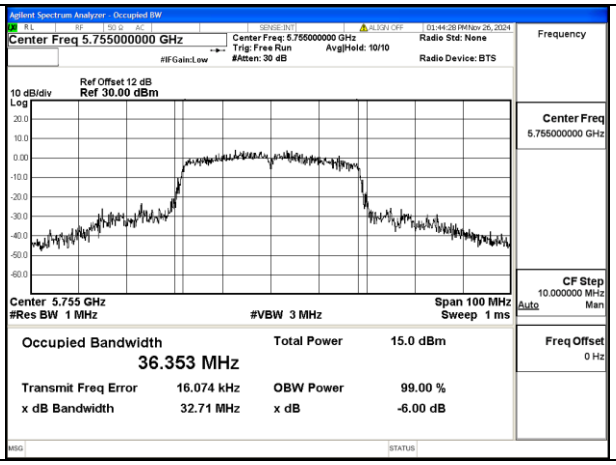
Test Mode: 802.11ac VHT40



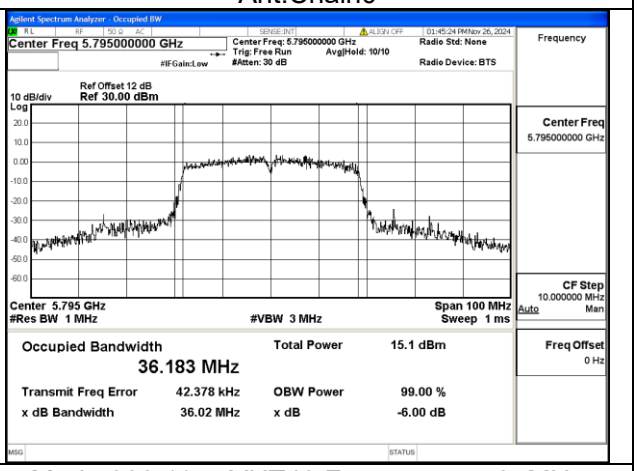
Mode:802.11ac VHT40 Frequency:5755MHz
Ant:Chain0



Mode:802.11ac VHT40 Frequency:5795MHz
Ant:Chain0

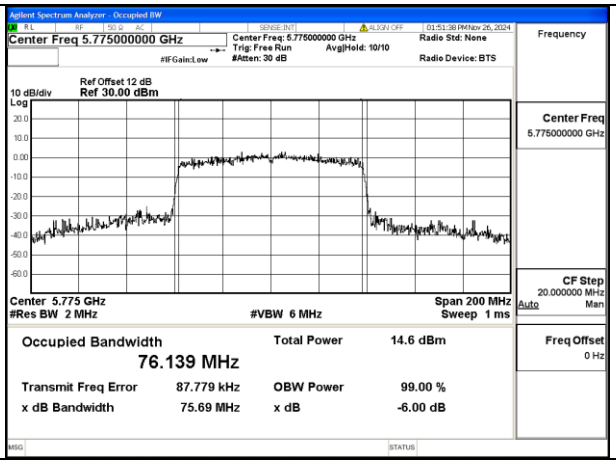


Mode:802.11ac VHT40 Frequency:5755MHz
Ant:Chain1

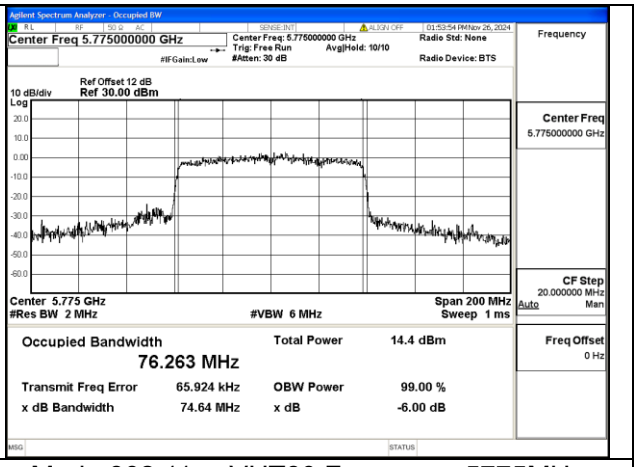


Mode:802.11ac VHT40 Frequency:5795MHz
Ant:Chain1

Test Mode: 802.11ac VHT80



Mode:802.11ac VHT80 Frequency:5775MHz
Ant:Chain0



Mode:802.11ac VHT80 Frequency:5775MHz
Ant:Chain1

6dB Bandwidth

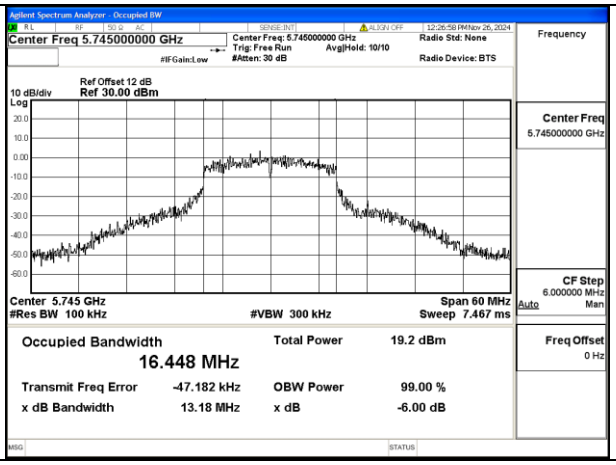
Offset 12dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	6dB Bandwidth (MHz)		
		5745MHz	5785MHz	5825MHz
802.11a	Chain0	13.18	16.35	15.01
802.11a	Chain1	14.13	15.63	16.33
802.11n HT20	Chain0	14.76	17.41	14.43
802.11n HT20	Chain1	16.90	16.81	17.20
802.11ac VHT20	Chain0	17.23	13.25	12.57
802.11ac VHT20	Chain1	17.32	11.50	13.21

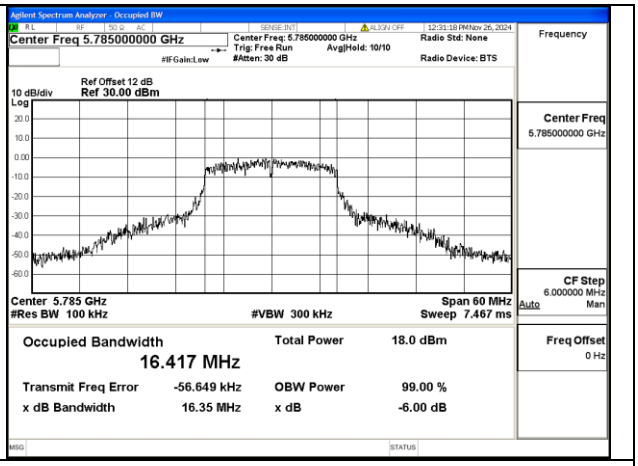
Test Mode	Antenna	6dB Bandwidth (MHz)		
		5755MHz	---	5795MHz
802.11n HT40	Chain0	34.23	---	28.27
802.11n HT40	Chain1	28.78	---	32.99
802.11ac VHT40	Chain0	28.84	---	32.56
802.11ac VHT40	Chain1	32.65	---	31.36

Test Mode	Antenna	6dB Bandwidth (MHz)		
		5775MHz	---	---
802.11ac VHT80	Chain0	72.55	---	---
802.11ac VHT80	Chain1	70.22	---	---

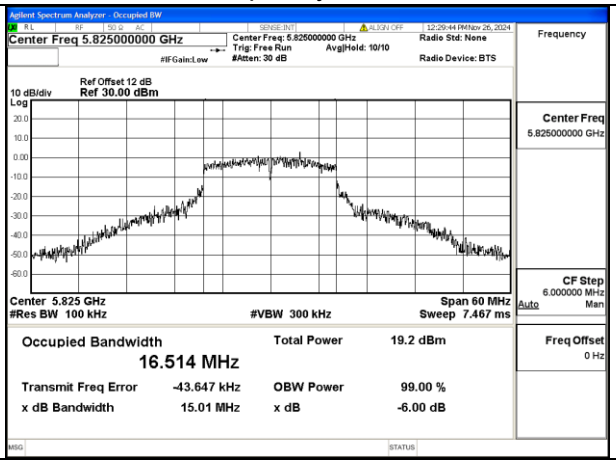
Test Mode: 802.11a



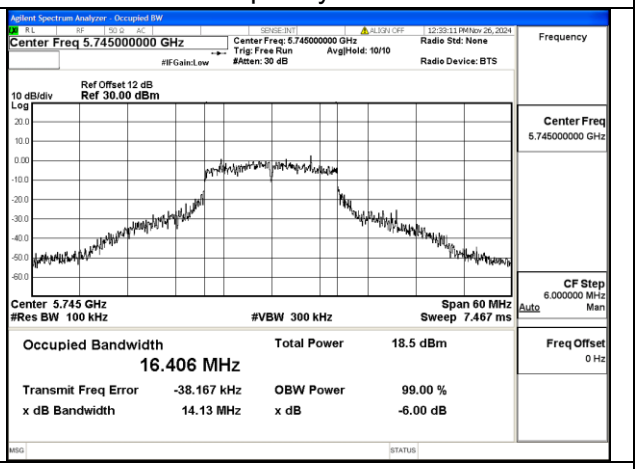
Mode:802.11a Frequency:5745MHz Ant:Chain0



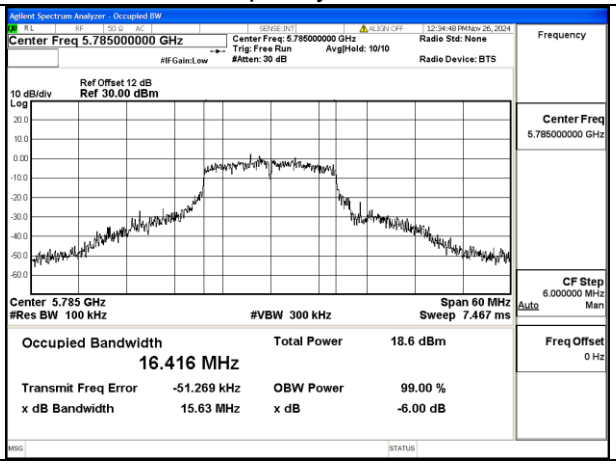
Mode:802.11a Frequency:5785MHz Ant:Chain0



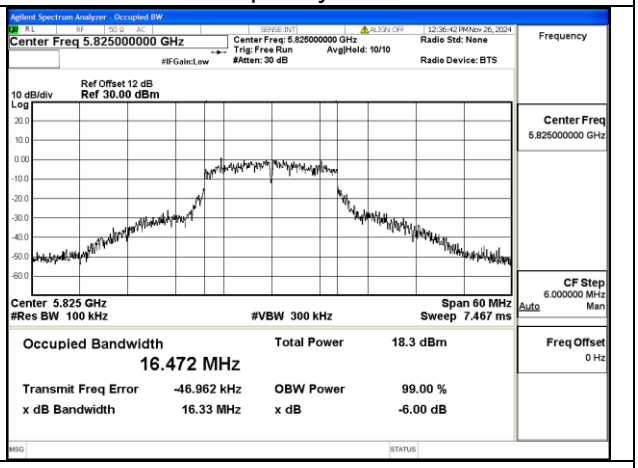
Mode:802.11a Frequency:5825MHz Ant:Chain0



Mode:802.11a Frequency:5745MHz Ant:Chain1

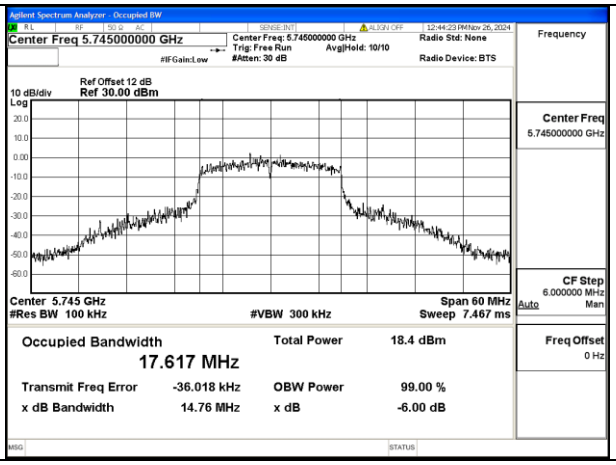


Mode:802.11a Frequency:5785MHz Ant:Chain1

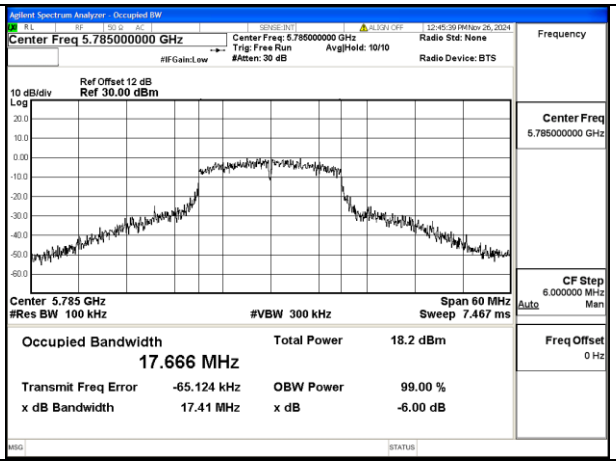


Mode:802.11a Frequency:5825MHz Ant:Chain1

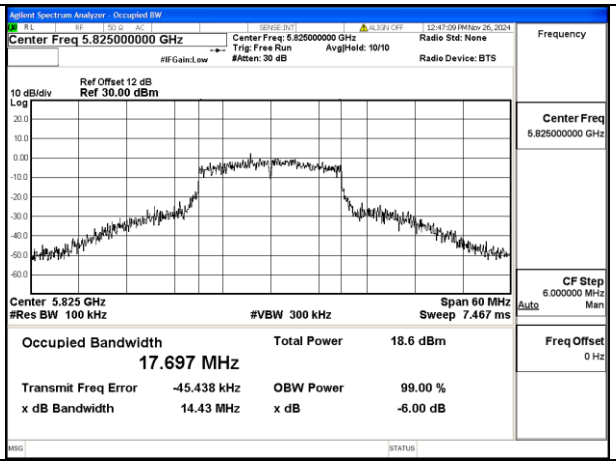
Test Mode: 802.11n HT20



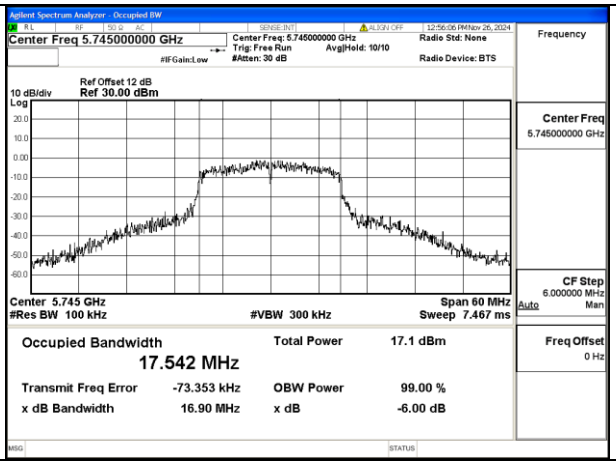
Mode:802.11n HT20 Frequency:5745MHz
Ant:Chain0



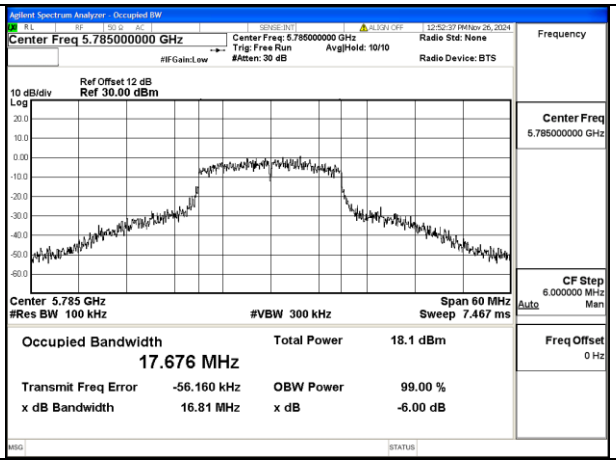
Mode:802.11n HT20 Frequency:5785MHz
Ant:Chain0



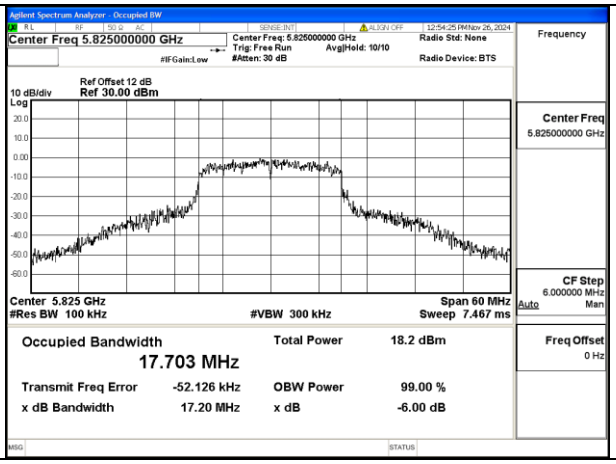
Mode:802.11n HT20 Frequency:5825MHz
Ant:Chain0



Mode:802.11n HT20 Frequency:5745MHz
Ant:Chain1

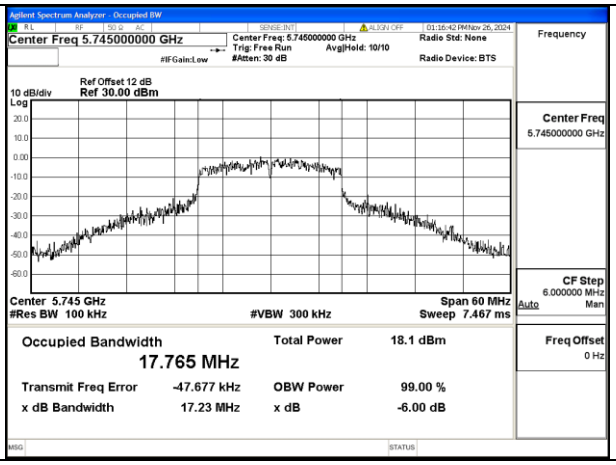


Mode:802.11n HT20 Frequency:5785MHz
Ant:Chain1

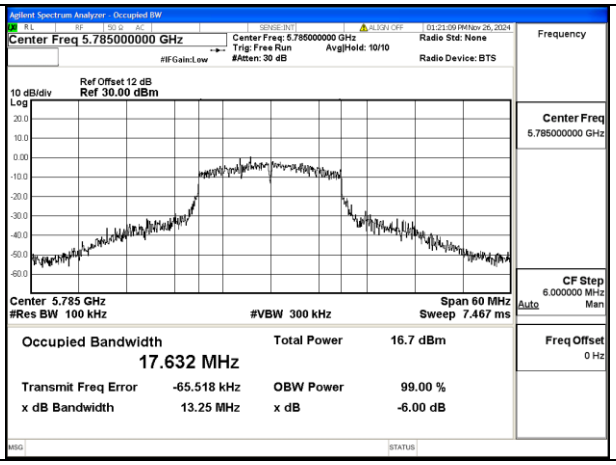


Mode:802.11n HT20 Frequency:5825MHz
Ant:Chain1

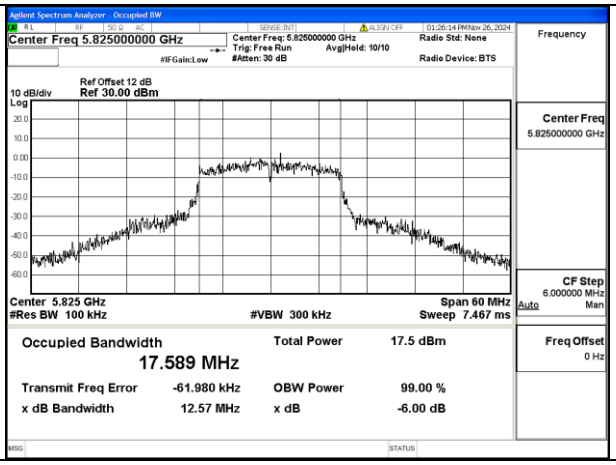
Test Mode: 802.11ac VHT20



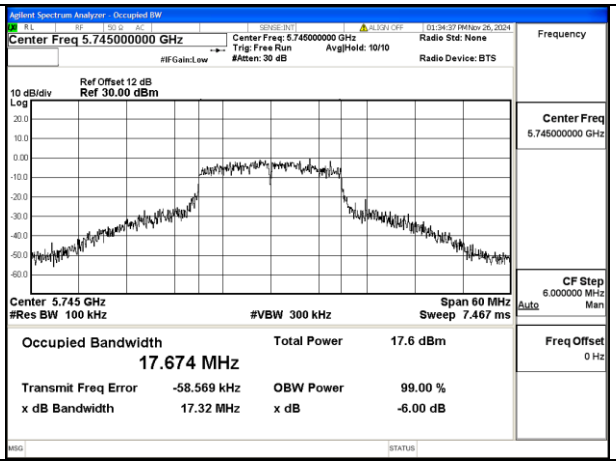
Mode:802.11ac VHT20 Frequency:5745MHz
Ant:Chain0



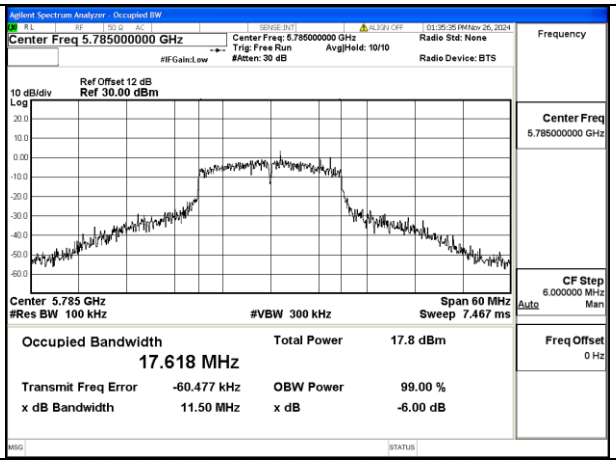
Mode:802.11ac VHT20 Frequency:5785MHz
Ant:Chain0



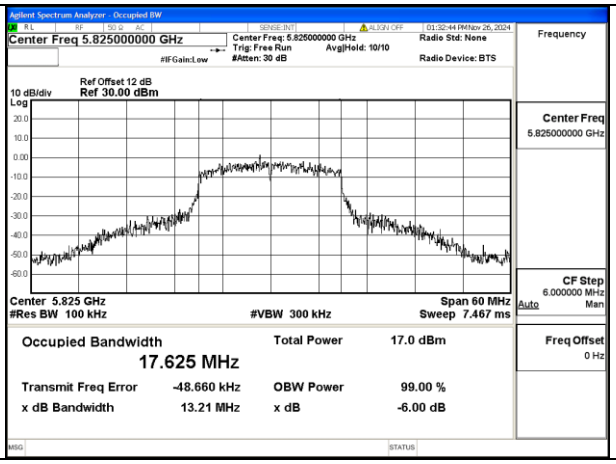
Mode:802.11ac VHT20 Frequency:5825MHz
Ant:Chain0



Mode:802.11ac VHT20 Frequency:5745MHz
Ant:Chain1



Mode:802.11ac VHT20 Frequency:5785MHz
Ant:Chain1



Mode:802.11ac VHT20 Frequency:5825MHz
Ant:Chain1