APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5745	99.96%	0	Fig.1
802.11n HT20	5745	99.95%	0	Fig.2
802.11ac VHT20	5745	99.96%	0	Fig.3
802.11n HT40	5755	99.93%	0	Fig.4
802.11ac VHT40	5755	99.91%	0	Fig.5
802.11ac VHT80	5775	99.84%	0	Fig.6

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

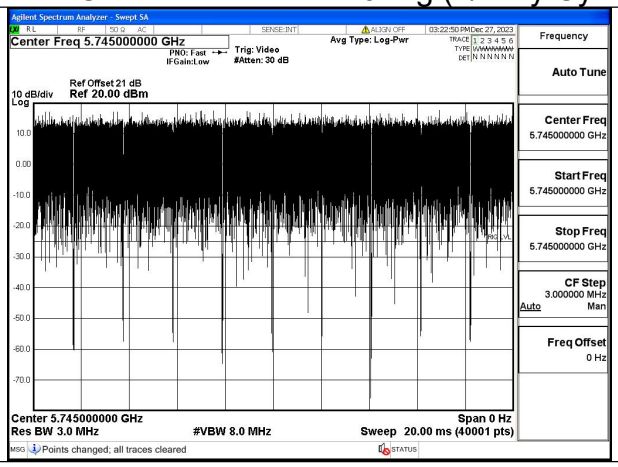


Fig.1

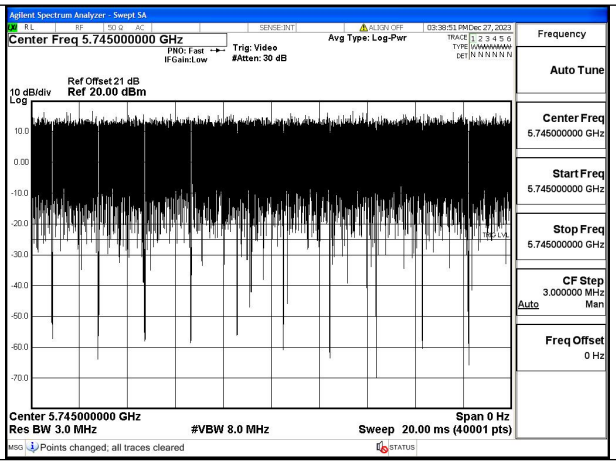


Fig.2

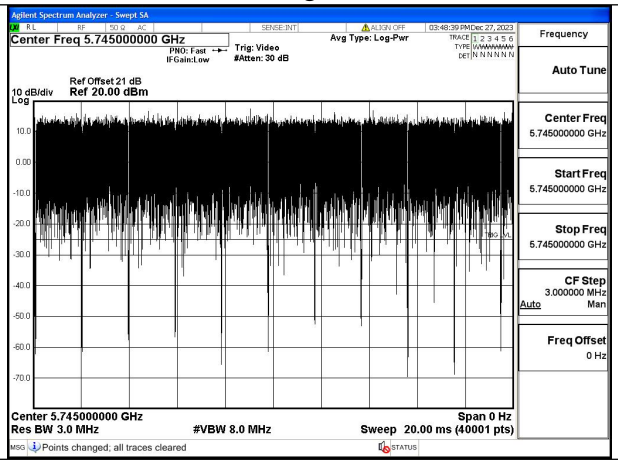


Fig.3

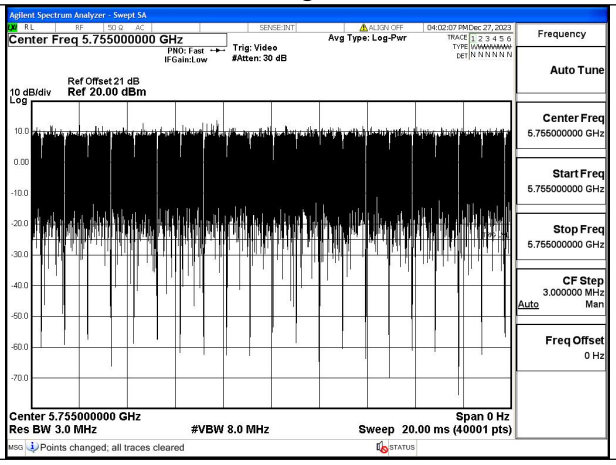


Fig.4

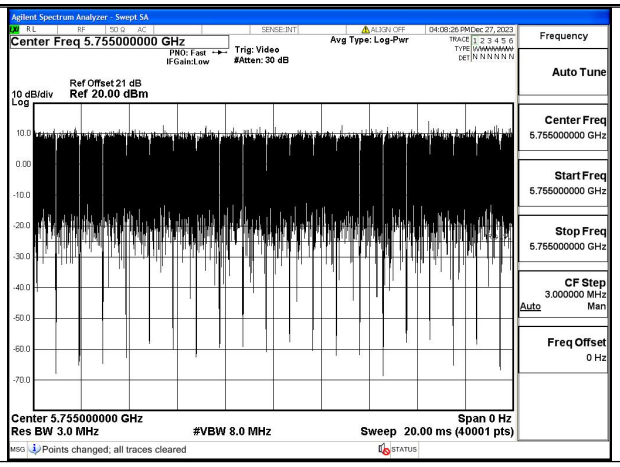

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.755000000 GHz
PNO: Fast
IFGain:Low
Trig: Video
#Atten: 30 dB
Avg Type: Log-Pwr
Ref Offset 21 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.755000000 GHz
Res BW 3.0 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 20.00 ms (40001 pts)
Points changed; all traces cleared
Frequency
Auto Tune
Center Freq
5.755000000 GHz
Start Freq
5.755000000 GHz
Stop Freq
5.755000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Fig.5

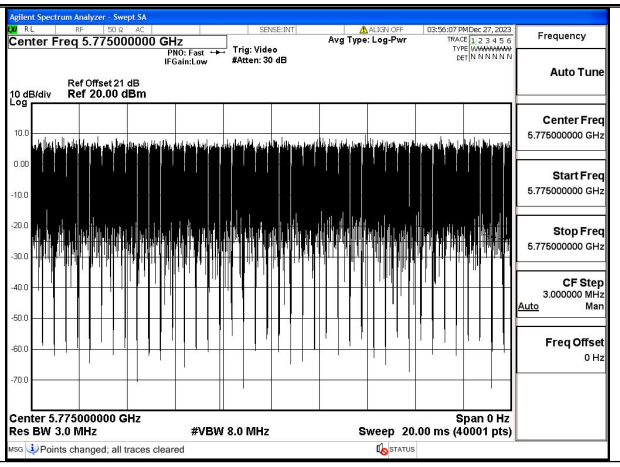

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Video
#Atten: 30 dB
Avg Type: Log-Pwr
Ref Offset 21 dB
10 dB/div
Log
Ref 20.00 dBm
Center 5.775000000 GHz
Res BW 3.0 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 20.00 ms (40001 pts)
Points changed; all traces cleared
Frequency
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

Fig.6

Output Power

Mode	Tones/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5745	Chain0	10.41	7.91
802.11a	NA	5785	Chain0	11.03	8.53
802.11a	NA	5825	Chain0	11.11	8.61
802.11n HT20	NA	5745	Chain0	10.46	7.96
802.11n HT20	NA	5785	Chain0	10.98	8.48
802.11n HT20	NA	5825	Chain0	11.07	8.57
802.11ac VHT20	NA	5745	Chain0	10.44	7.94
802.11ac VHT20	NA	5785	Chain0	11.01	8.51
802.11ac VHT20	NA	5825	Chain0	11.14	8.64
802.11n HT40	NA	5755	Chain0	10.33	7.83
802.11n HT40	NA	5795	Chain0	10.85	8.35
802.11ac VHT40	NA	5755	Chain0	10.32	7.82
802.11ac VHT40	NA	5795	Chain0	10.89	8.39
802.11ac VHT80	NA	5775	Chain0	10.58	8.08

Emission Bandwidth

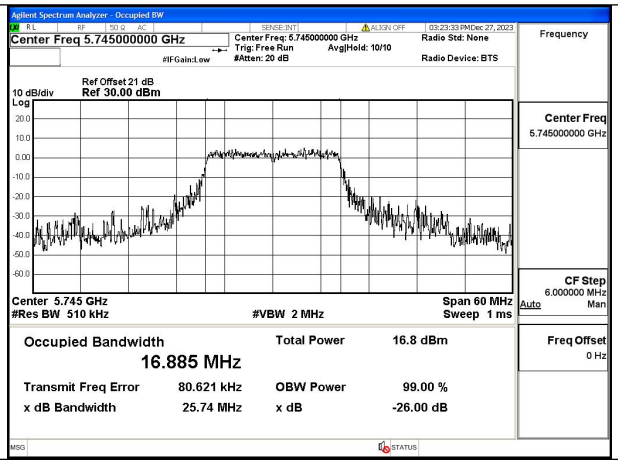
Offset 21dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5745MHz	5785MHz	5825MHz
802.11a	Chain0	25.74	26.62	22.37
802.11n HT20	Chain0	27.37	28.15	22.83
802.11ac VHT20	Chain0	23.31	28.61	22.45

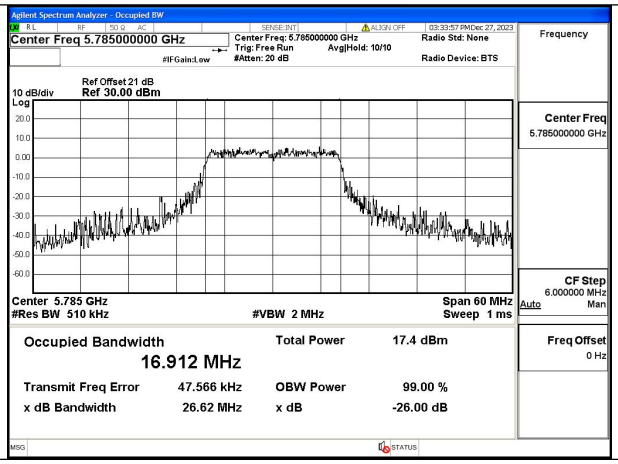
Test Mode	Antenna	26dB Bandwidth (MHz)		
		5755MHz	---	5795MHz
802.11n HT40	Chain0	41.86	---	49.24
802.11ac VHT40	Chain0	41.37	---	42.84

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5775MHz	---	---
802.11ac VHT80	Chain0	85.83	---	---

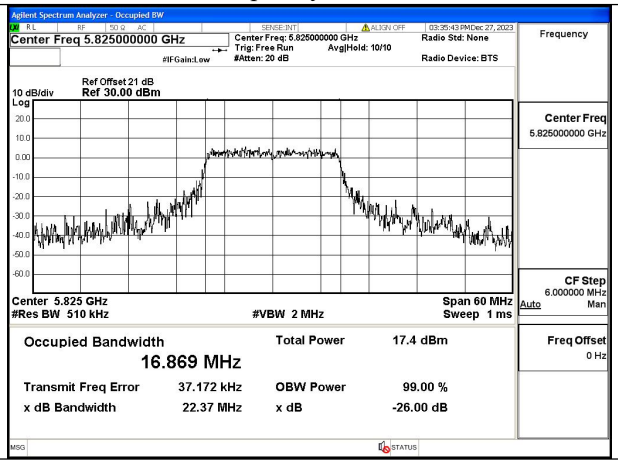
Test Mode: 802.11a



Mode:802.11a Frequency:5745MHz Ant:Chain0

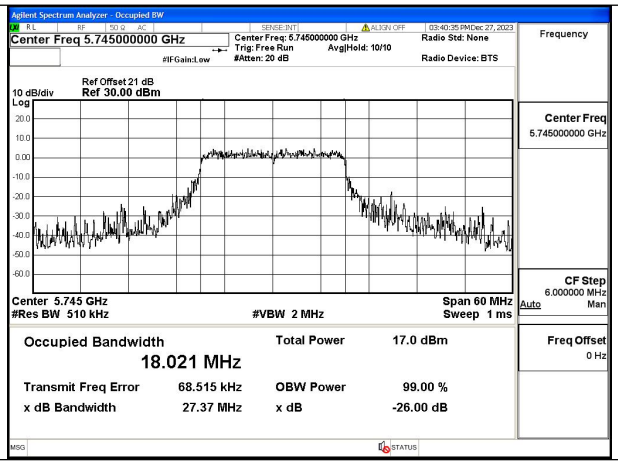


Mode:802.11a Frequency:5785MHz Ant:Chain0

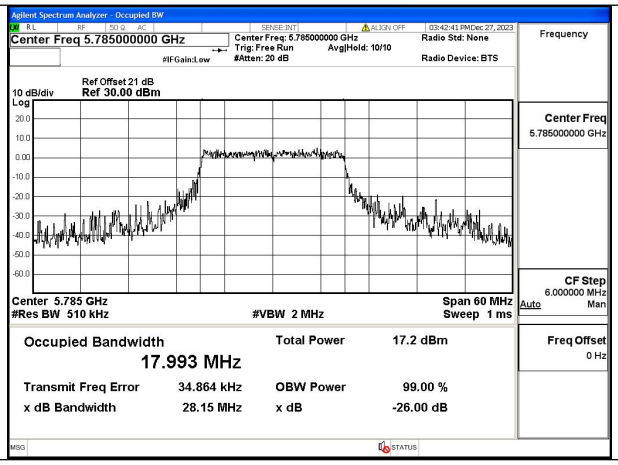


Mode:802.11a Frequency:5825MHz Ant:Chain0

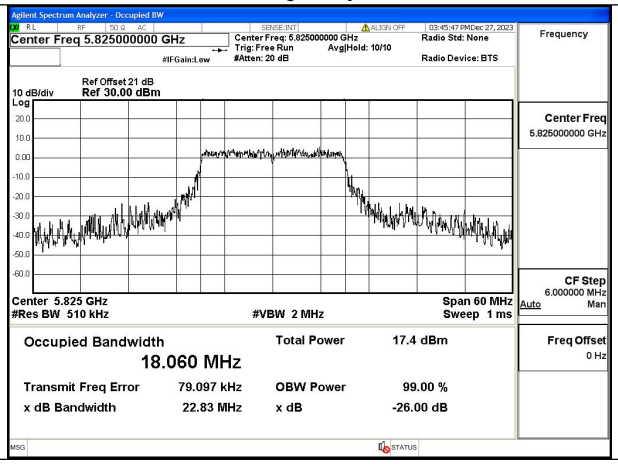
Test Mode: 802.11n HT20



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

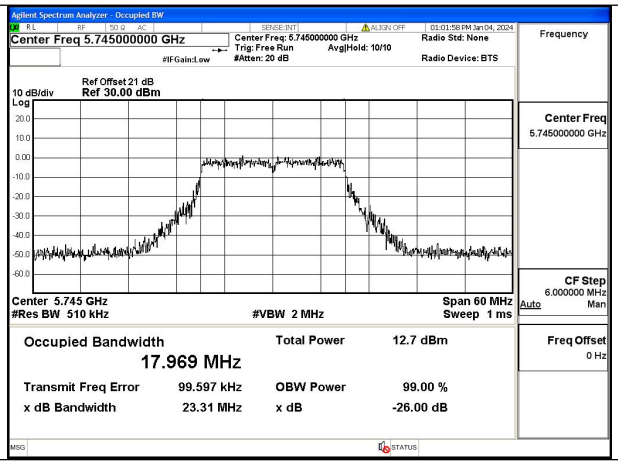


Mode:802.11n HT20 Frequency:5785MHz Ant:Chain0

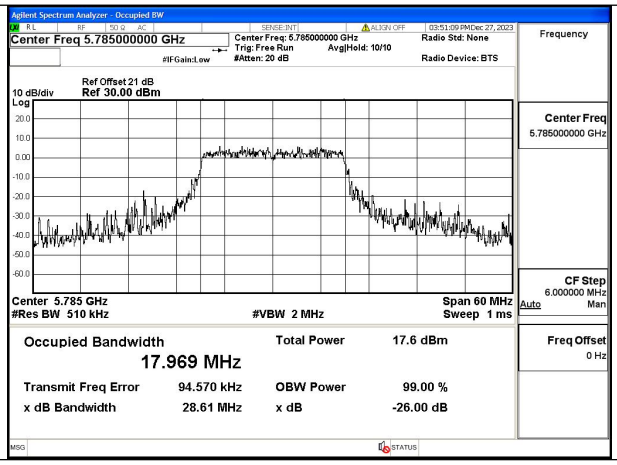


Mode:802.11n HT20 Frequency:5825MHz Ant:Chain0

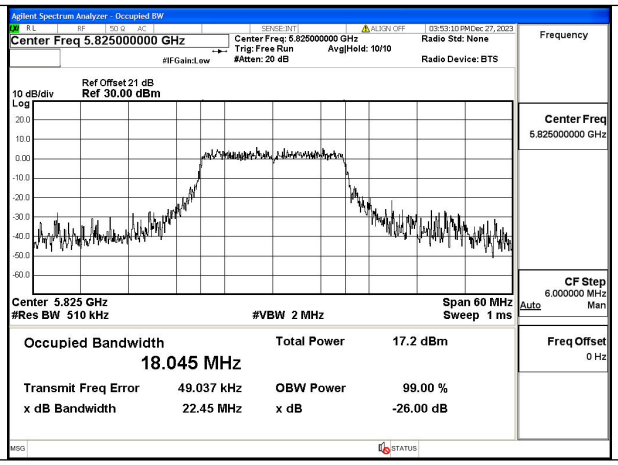
Test Mode: 802.11ac VHT20



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

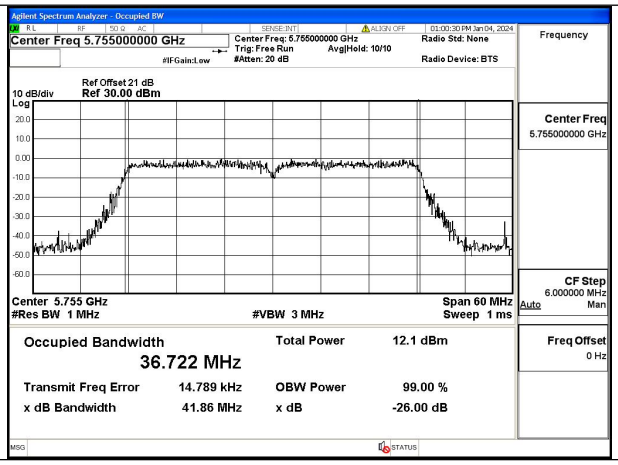


Mode:802.11ac VHT20 Frequency:5785MHz Ant:Chain0

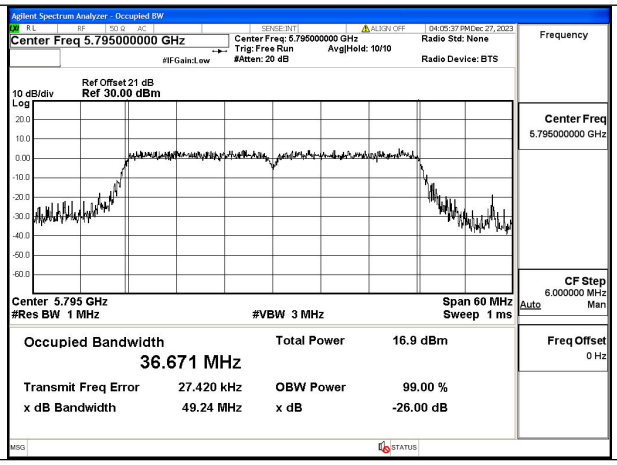


Mode:802.11ac VHT20 Frequency:5825MHz Ant:Chain0

Test Mode: 802.11n HT40

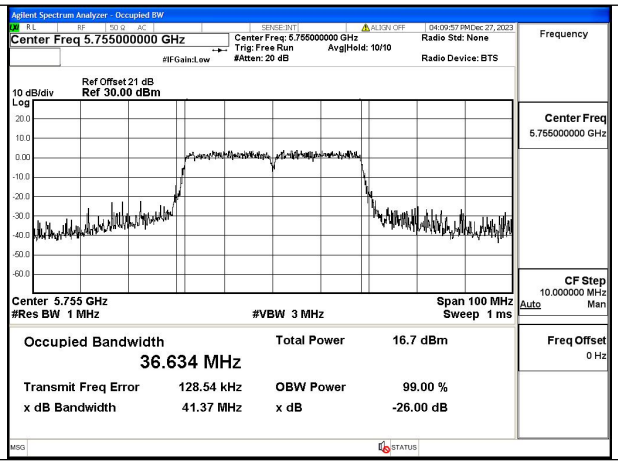


Mode:802.11n HT40 Frequency:5755MHz Ant:Chain0

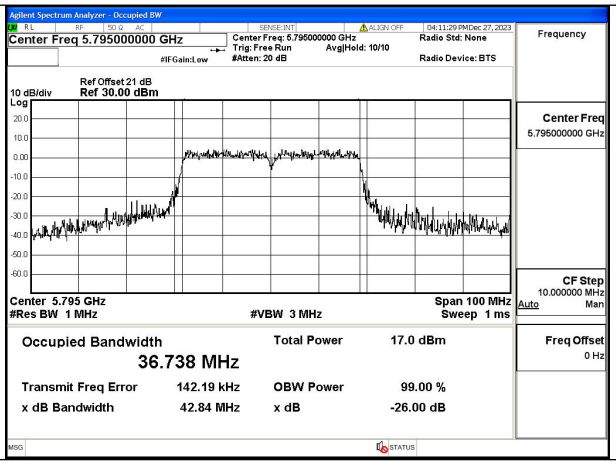


Mode:802.11n HT40 Frequency:5795MHz Ant:Chain0

Test Mode: 802.11ac VHT40

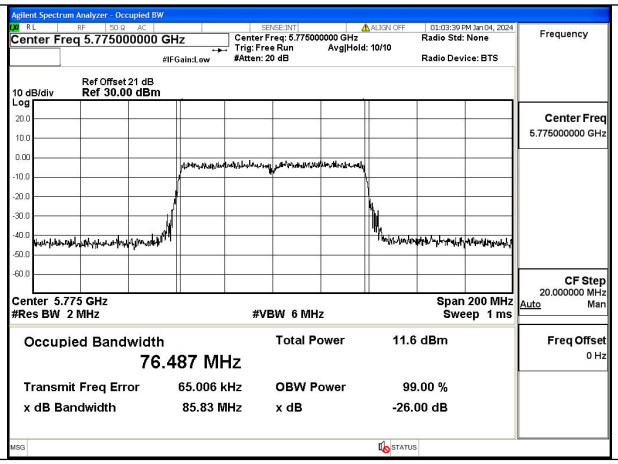


Mode:802.11ac VHT40 Frequency:5755MHz
Ant:Chain0



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

Test Mode: 802.11ac VHT80



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

Occupied Bandwidth

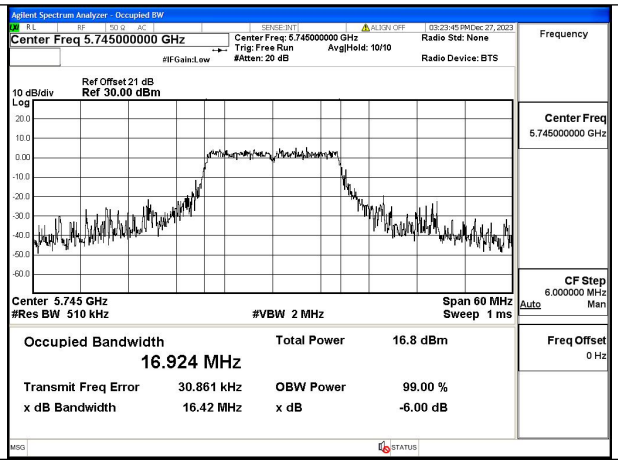
Offset 21dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5745MHz	5785MHz	5825MHz
802.11a	Chain0	16.924	16.823	16.945
802.11n HT20	Chain0	18.108	17.943	17.928
802.11ac VHT20	Chain0	18.038	18.075	18.114

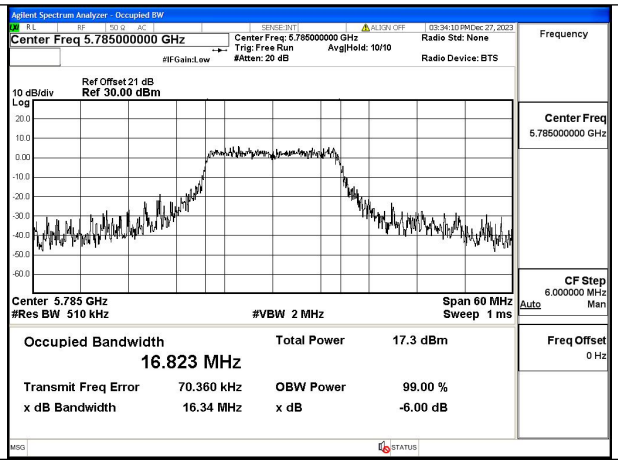
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5755MHz	---	5795MHz
802.11n HT40	Chain0	36.604	---	36.585
802.11ac VHT40	Chain0	36.671	---	36.717

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5775MHz	---	---
802.11ac VHT80	Chain0	76.620	---	---

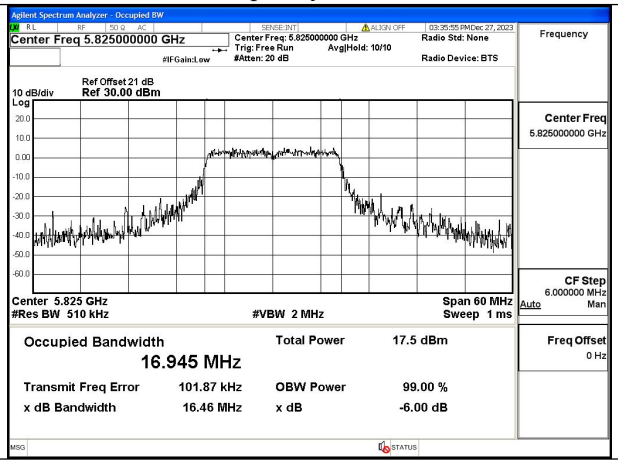
Test Mode: 802.11a



Mode:802.11a Frequency:5745MHz Ant:Chain0

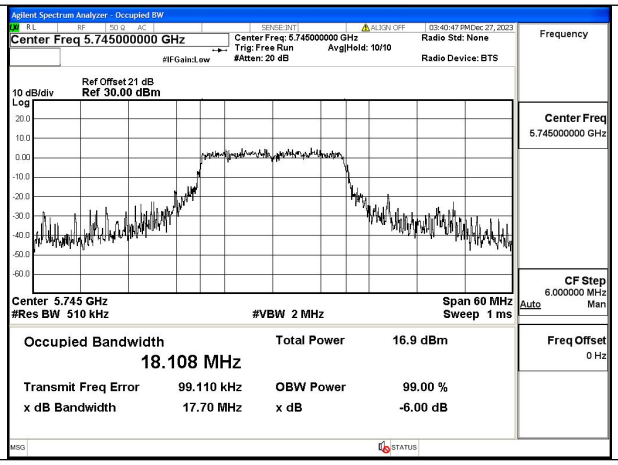


Mode:802.11a Frequency:5785MHz Ant:Chain0

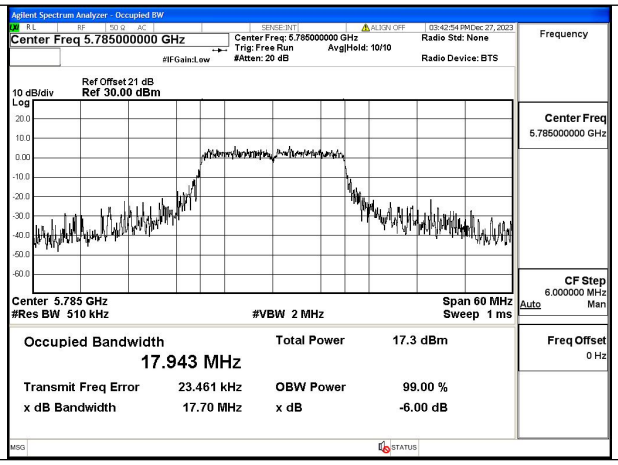


Mode:802.11a Frequency:5825MHz Ant:Chain0

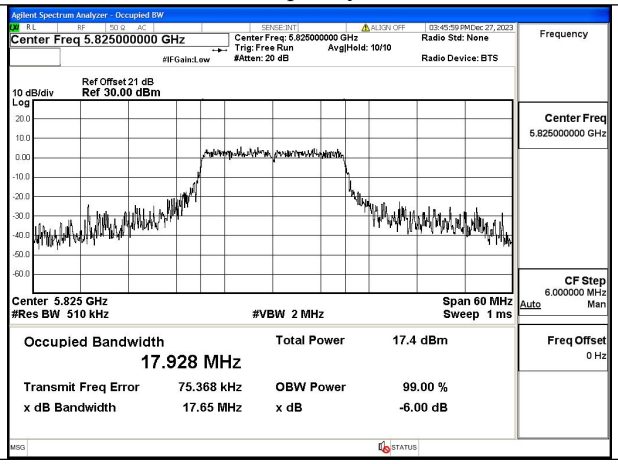
Test Mode: 802.11n HT20



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

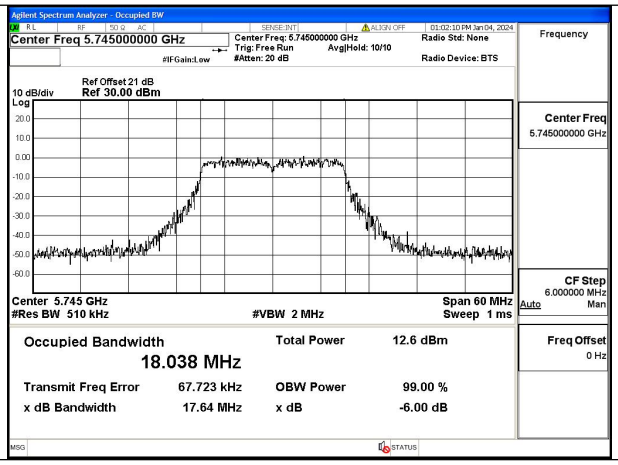


Mode:802.11n HT20 Frequency:5785MHz Ant:Chain0

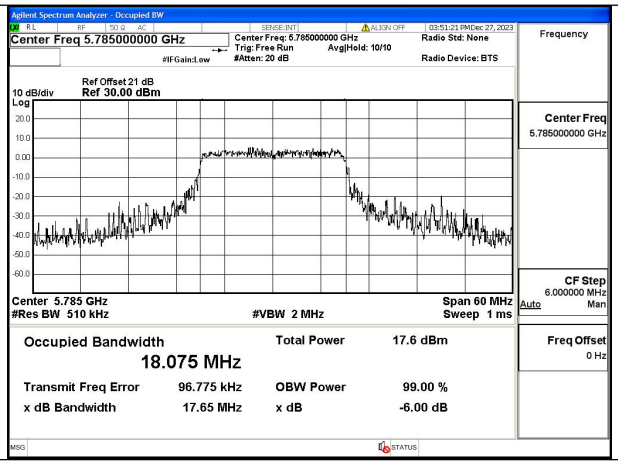


Mode:802.11n HT20 Frequency:5825MHz Ant:Chain0

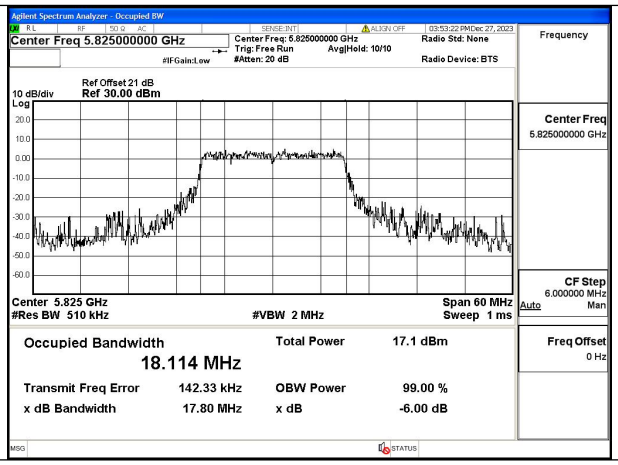
Test Mode: 802.11ac VHT20



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

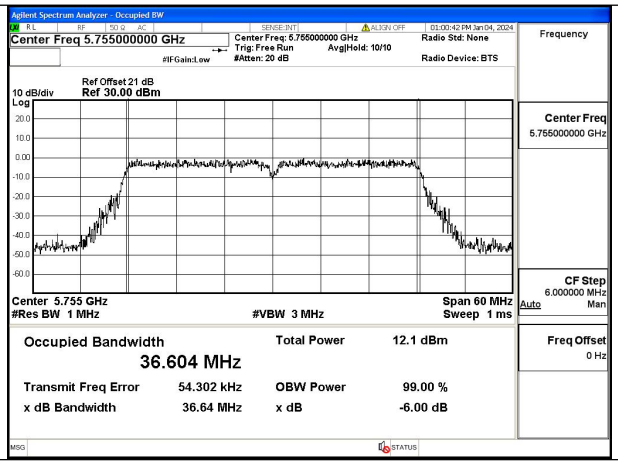


Mode:802.11ac VHT20 Frequency:5785MHz
Ant:Chain0

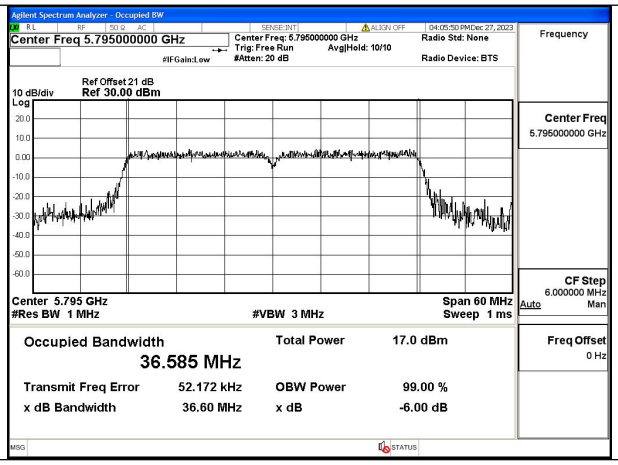


Mode:802.11ac VHT20 Frequency:5825MHz
Ant:Chain0

Test Mode: 802.11n HT40

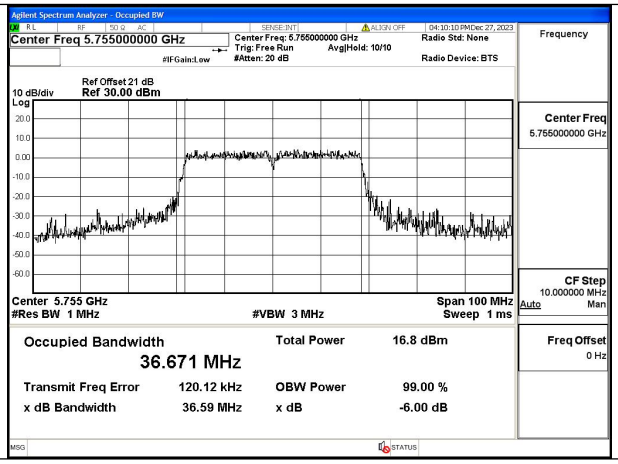


Mode:802.11n HT40 Frequency:5755MHz Ant:Chain0

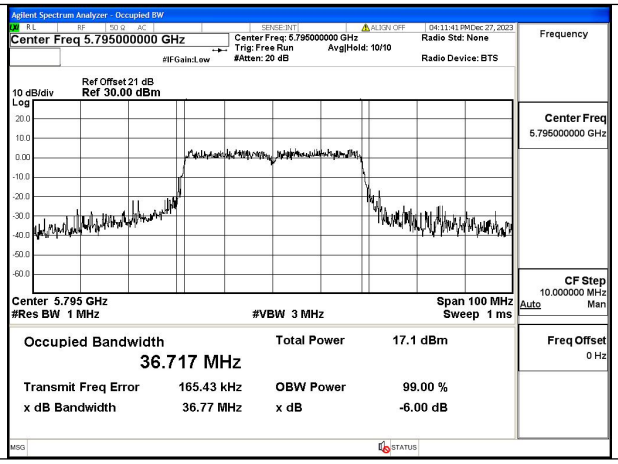


Mode:802.11n HT40 Frequency:5795MHz Ant:Chain0

Test Mode: 802.11ac VHT40

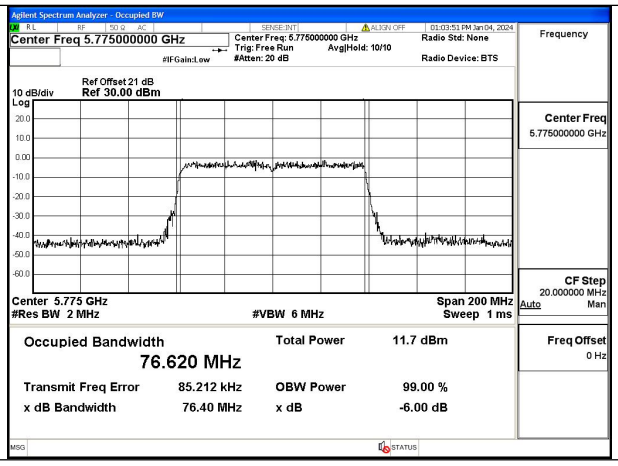


Mode:802.11ac VHT40 Frequency:5755MHz Ant:Chain0



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

Test Mode: 802.11ac VHT80



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

6dB Bandwidth

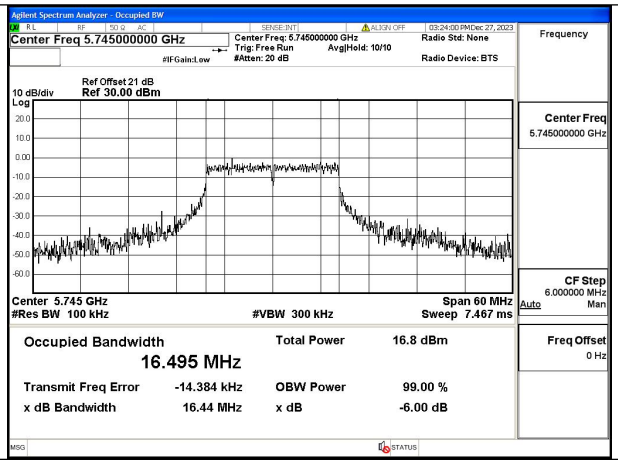
Offset 21dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	6dB Bandwidth (MHz)		
		5745MHz	5785MHz	5825MHz
802.11a	Chain0	16.44	16.42	16.35
802.11n HT20	Chain0	17.62	17.76	17.36
802.11ac VHT20	Chain0	17.79	17.70	17.80

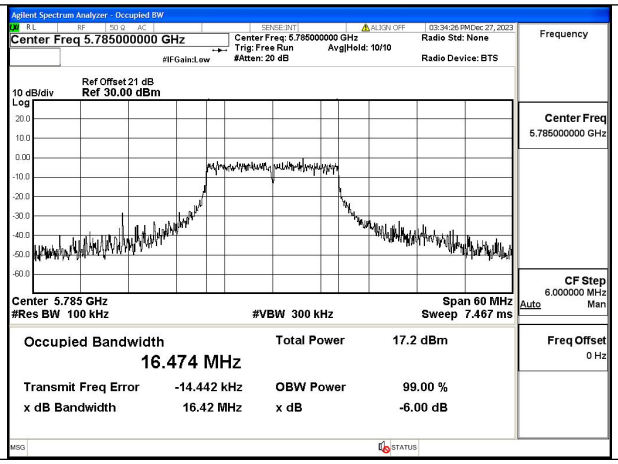
Test Mode	Antenna	6dB Bandwidth (MHz)		
		5755MHz	---	5795MHz
802.11n HT40	Chain0	36.44	---	36.42
802.11ac VHT40	Chain0	36.44	---	36.36

Test Mode	Antenna	6dB Bandwidth (MHz)		
		5775MHz	---	---
802.11ac VHT80	Chain0	76.45	---	---

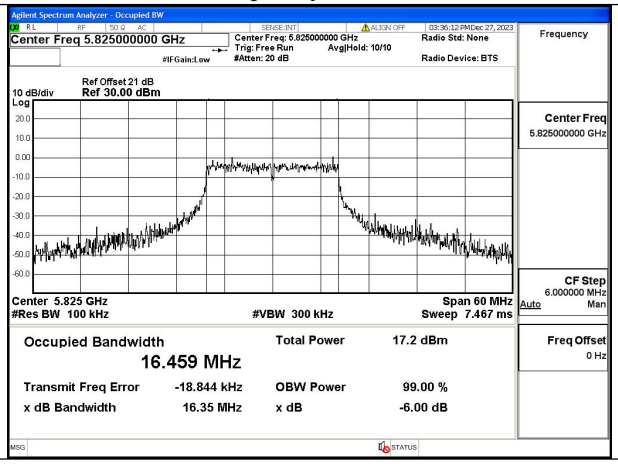
Test Mode: 802.11a



Mode:802.11a Frequency:5745MHz Ant:Chain0

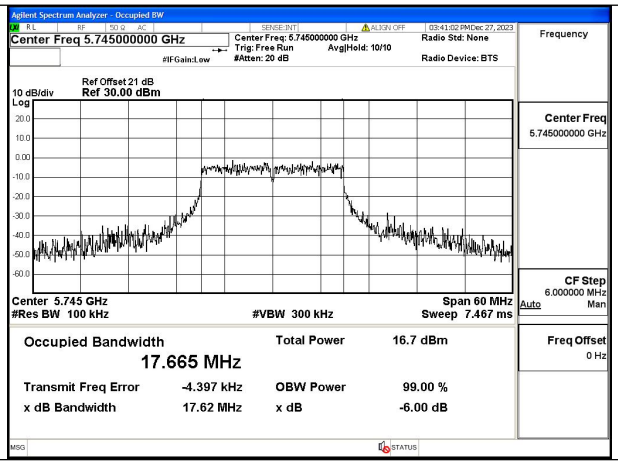


Mode:802.11a Frequency:5785MHz Ant:Chain0

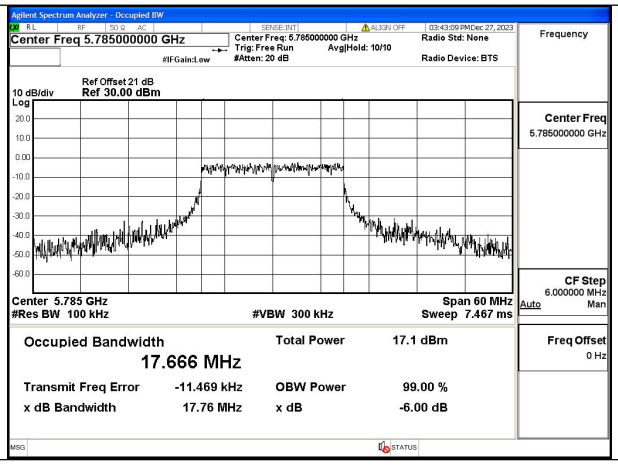


Mode:802.11a Frequency:5825MHz Ant:Chain0

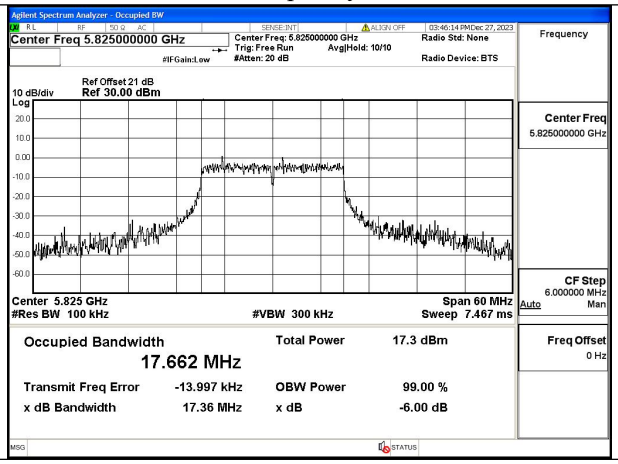
Test Mode: 802.11n HT20



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



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



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