APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5180	99.94%	0	Fig.1
802.11a	5180	99.91%	0	Fig.2
802.11n HT20	5180	99.90%	0	Fig.3
802.11n HT20	5180	99.89%	0	Fig.4
802.11ac VHT20	5180	99.90%	0	Fig.5
802.11ac VHT20	5180	99.89%	0	Fig.6
802.11n HT40	5190	99.80%	0	Fig.7
802.11n HT40	5190	99.81%	0	Fig.8
802.11ac VHT40	5190	99.78%	0	Fig.9
802.11ac VHT40	5190	99.84%	0	Fig.10
802.11ac VHT80	5210	99.66%	0	Fig.11
802.11ac VHT80	5210	99.68%	0	Fig.12

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

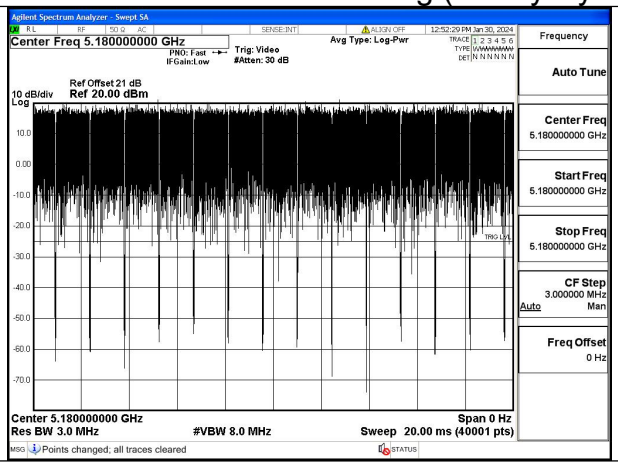


Fig.1

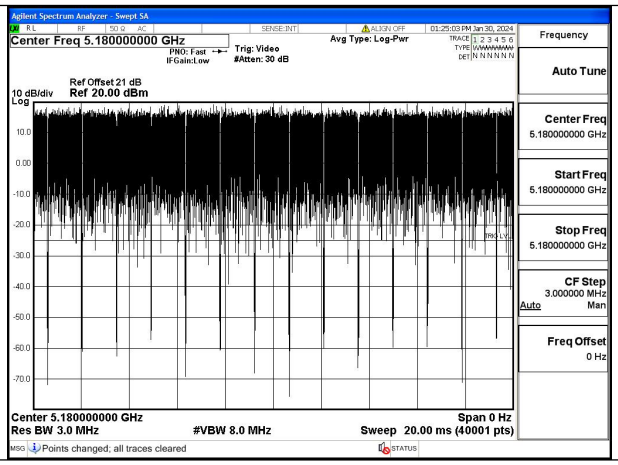


Fig.2

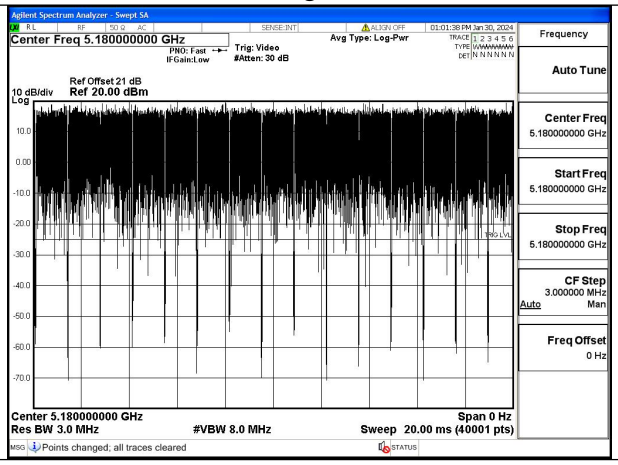


Fig.3

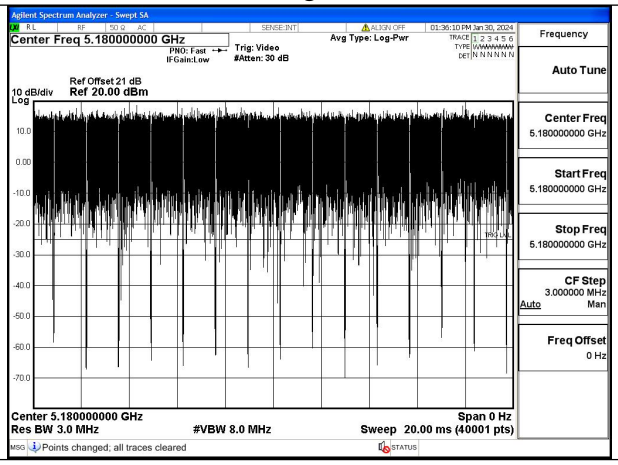


Fig.4

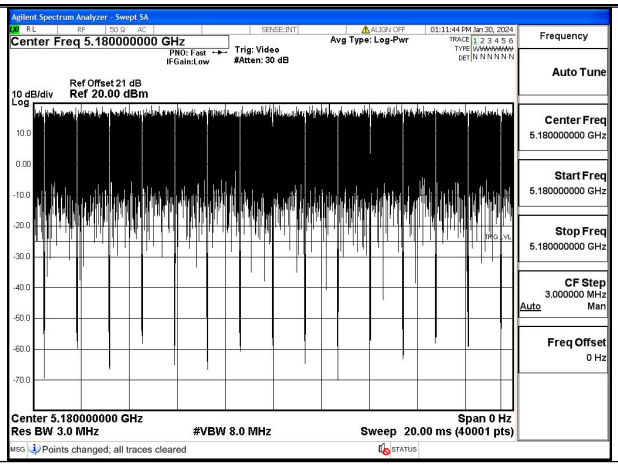


Fig.5

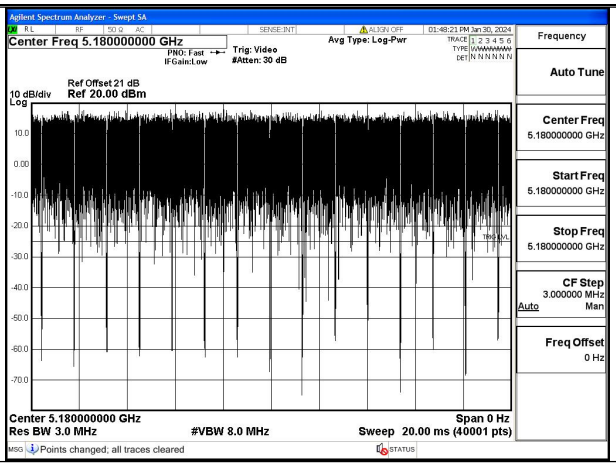


Fig.6

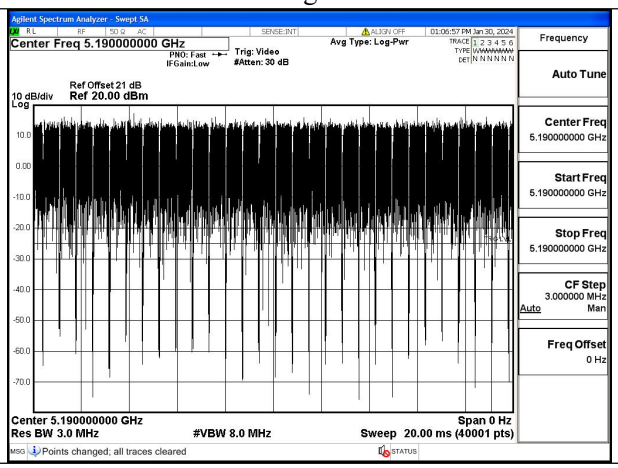


Fig.7

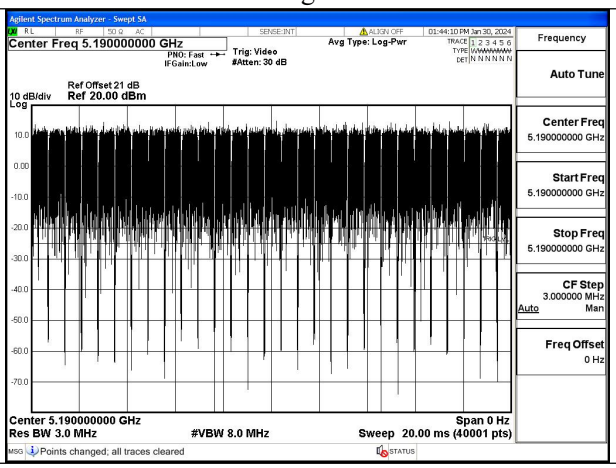


Fig.8

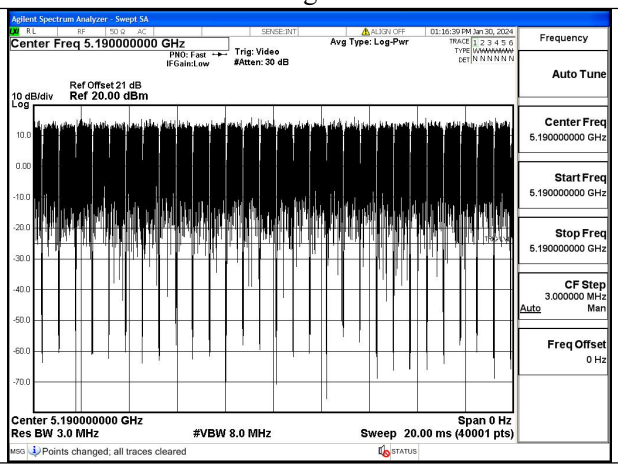


Fig.9

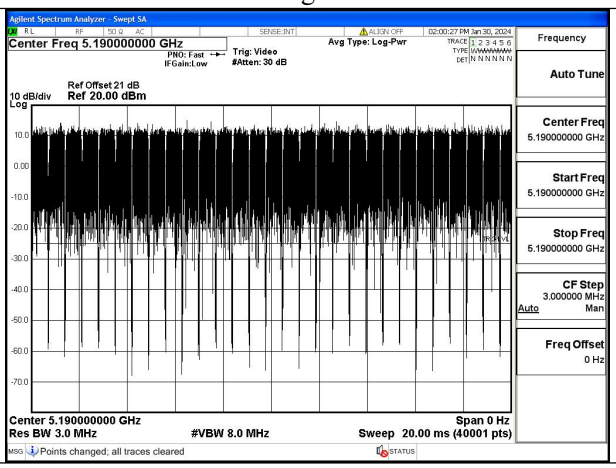


Fig.10

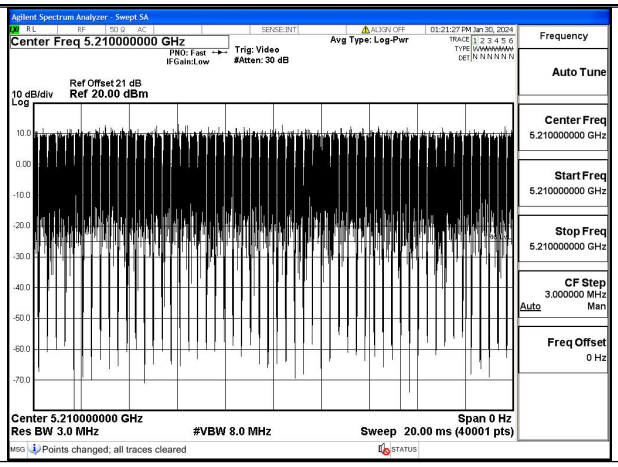

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.210000000 GHz
PNO: Fast
IFGain:Low
Trig: Video
#Atten: 30 dB
Avg Type: Log-Pwr
01:21:27 PM Jan 30, 2024
Ref Offset 21 dB
10 dB/div
Ref 20.00 dBm
Log
Frequency
Auto Tune
Center Freq
5.210000000 GHz
Start Freq
5.210000000 GHz
Stop Freq
5.210000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz
Center 5.210000000 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

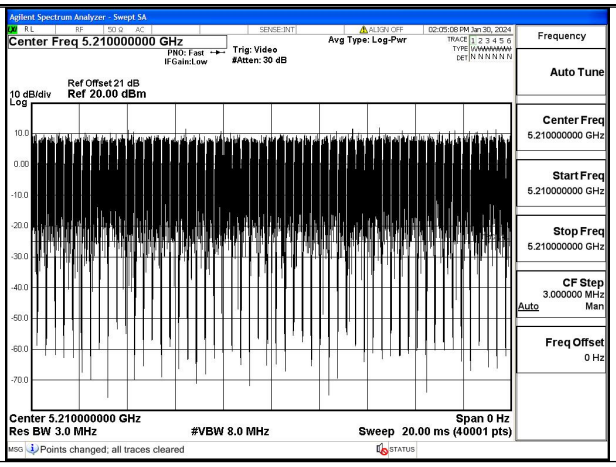

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.210000000 GHz
PNO: Fast
IFGain:Low
Trig: Video
#Atten: 30 dB
Avg Type: Log-Pwr
02:05:08 PM Jan 30, 2024
Ref Offset 21 dB
10 dB/div
Ref 20.00 dBm
Log
Frequency
Auto Tune
Center Freq
5.210000000 GHz
Start Freq
5.210000000 GHz
Stop Freq
5.210000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz
Center 5.210000000 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/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Chain0	16.60	21.86
802.11a	NA	5180	Chain1	15.28	16.07
802.11a	NA	5220	Chain0	16.79	22.05
802.11a	NA	5220	Chain1	15.20	15.99
802.11a	NA	5240	Chain0	16.84	22.10
802.11a	NA	5240	Chain1	15.44	16.23
802.11n HT20	NA	5180	Chain0	15.74	21.00
802.11n HT20	NA	5180	Chain1	14.25	15.04
802.11n HT20	NA	5180	MIMO	18.07	21.65
802.11n HT20	NA	5220	Chain0	15.66	20.92
802.11n HT20	NA	5220	Chain1	14.17	14.96
802.11n HT20	NA	5220	MIMO	17.99	21.57
802.11n HT20	NA	5240	Chain0	15.67	20.93
802.11n HT20	NA	5240	Chain1	14.39	15.18
802.11n HT20	NA	5240	MIMO	18.09	21.67
802.11ac VHT20	NA	5180	Chain0	15.76	21.02
802.11ac VHT20	NA	5180	Chain1	14.27	15.06
802.11ac VHT20	NA	5180	MIMO	18.09	21.67
802.11ac VHT20	NA	5220	Chain0	15.56	20.82
802.11ac VHT20	NA	5220	Chain1	14.17	14.96
802.11ac VHT20	NA	5220	MIMO	17.93	21.51
802.11ac VHT20	NA	5240	Chain0	15.72	20.98
802.11ac VHT20	NA	5240	Chain1	14.39	15.18
802.11ac VHT20	NA	5240	MIMO	18.12	21.70
802.11n HT40	NA	5190	Chain0	15.78	21.04
802.11n HT40	NA	5190	Chain1	14.14	14.93
802.11n HT40	NA	5190	MIMO	18.05	21.63
802.11n HT40	NA	5230	Chain0	15.77	21.03
802.11n HT40	NA	5230	Chain1	14.28	15.07
802.11n HT40	NA	5230	MIMO	18.10	21.68
802.11ac VHT40	NA	5190	Chain0	15.80	21.06
802.11ac VHT40	NA	5190	Chain1	14.05	14.84
802.11ac VHT40	NA	5190	MIMO	18.02	21.60
802.11ac VHT40	NA	5230	Chain0	15.74	21.00
802.11ac VHT40	NA	5230	Chain1	14.29	15.08
802.11ac VHT40	NA	5230	MIMO	18.09	21.67
802.11ac VHT80	NA	5210	Chain0	15.18	20.44
802.11ac VHT80	NA	5210	Chain1	13.76	14.55
802.11ac VHT80	NA	5210	MIMO	17.54	21.12

Emission Bandwidth

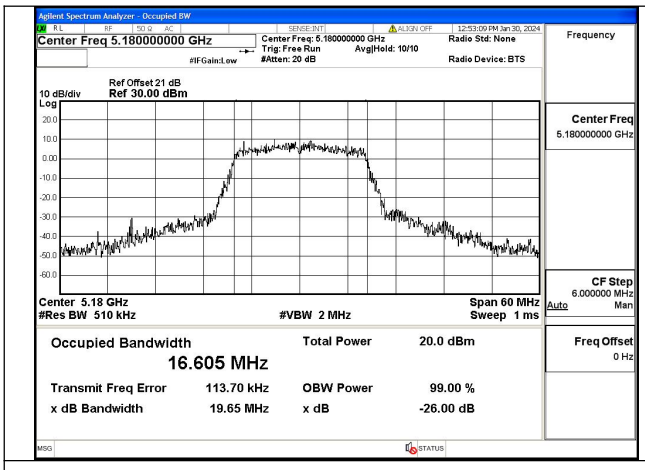
Offset 21dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	19.65	22.05	21.27
802.11a	Chain1	19.87	20.61	20.53
802.11n HT20	Chain0	19.76	20.45	20.41
802.11n HT20	Chain1	20.02	20.35	20.12
802.11ac VHT20	Chain0	20.15	20.75	20.30
802.11ac VHT20	Chain1	20.26	20.07	20.35

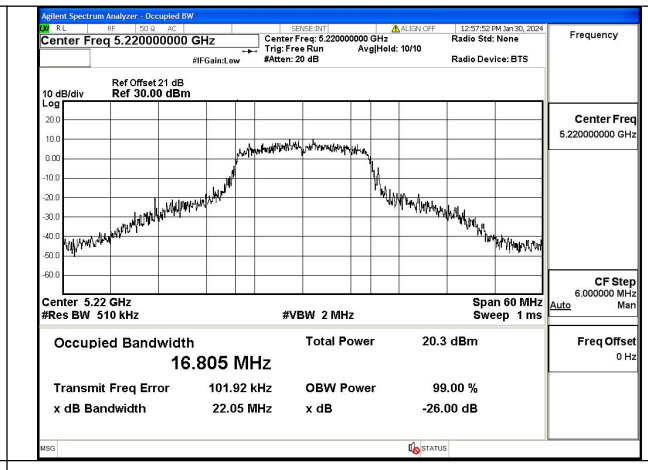
Test Mode	Antenna	26dB Bandwidth (MHz)		
		5190MHz	---	5230MHz
802.11n HT40	Chain0	40.49	---	41.17
802.11n HT40	Chain1	40.66	---	41.16
802.11ac VHT40	Chain0	39.38	---	40.96
802.11ac VHT40	Chain1	39.88	---	40.17

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5210MHz	---	---
802.11ac VHT80	Chain0	80.84	---	---
802.11ac VHT80	Chain1	81.24	---	---

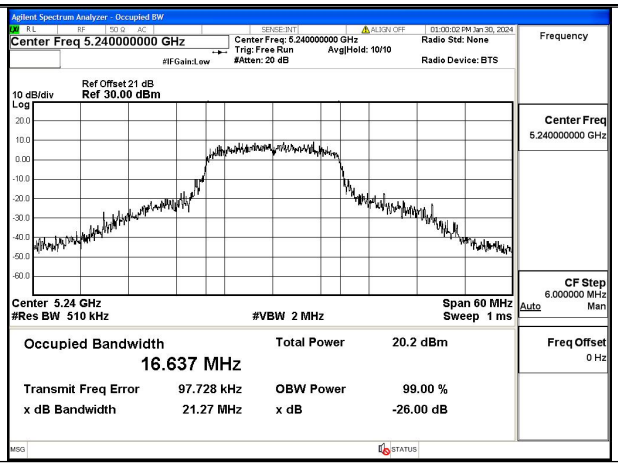
Test Mode: 802.11a



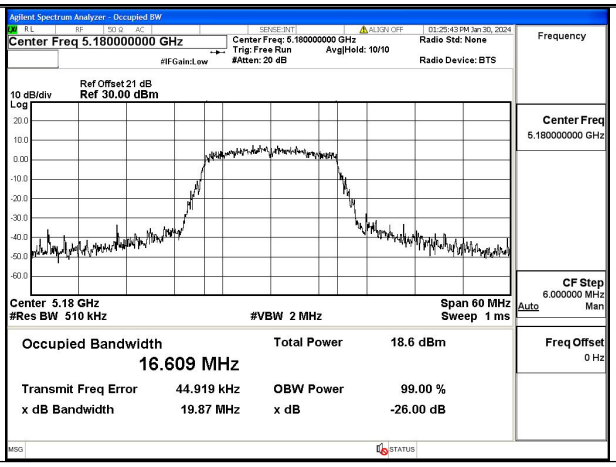
Mode:802.11a Frequency:5180MHz Ant:Chain0



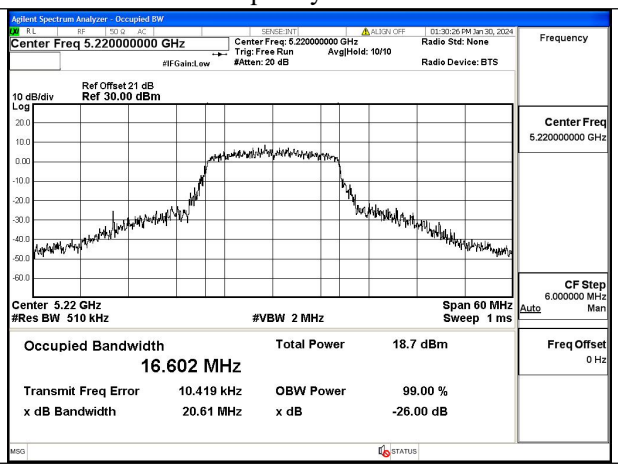
Mode:802.11a Frequency:5220MHz Ant:Chain0



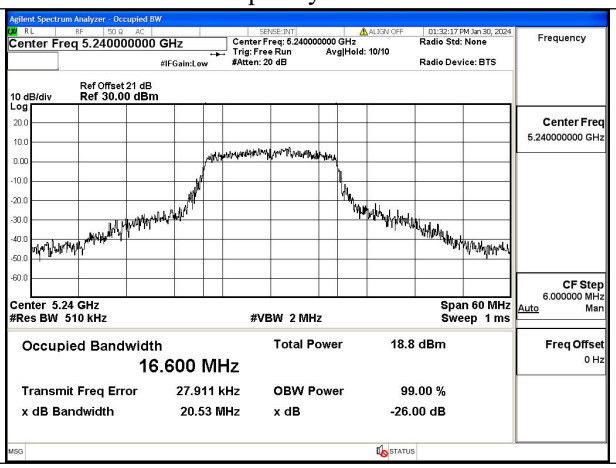
Mode:802.11a Frequency:5240MHz Ant:Chain0



Mode:802.11a Frequency:5180MHz Ant:Chain1

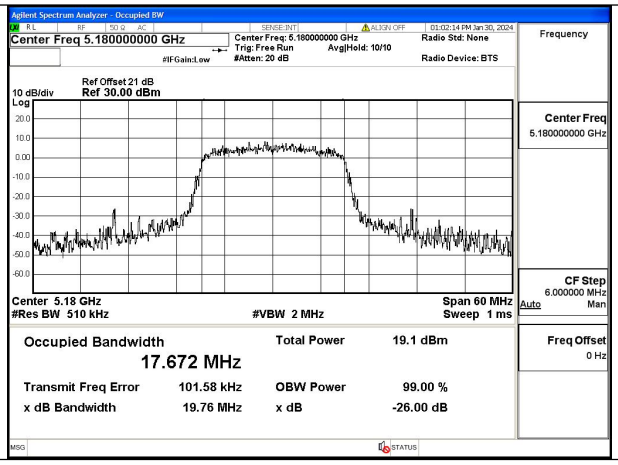


Mode:802.11a Frequency:5220MHz Ant:Chain1

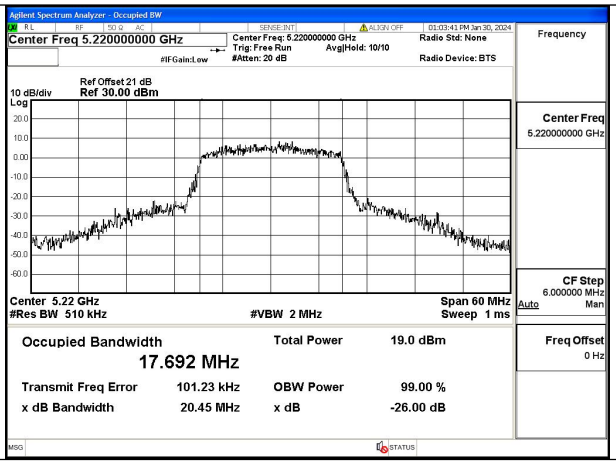


Mode:802.11a Frequency:5240MHz Ant:Chain1

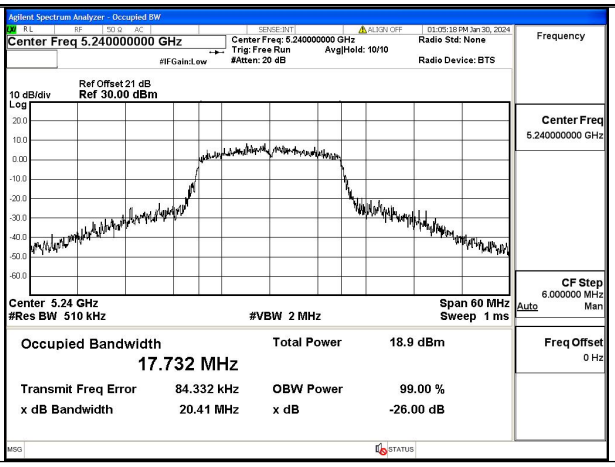
Test Mode: 802.11n HT20



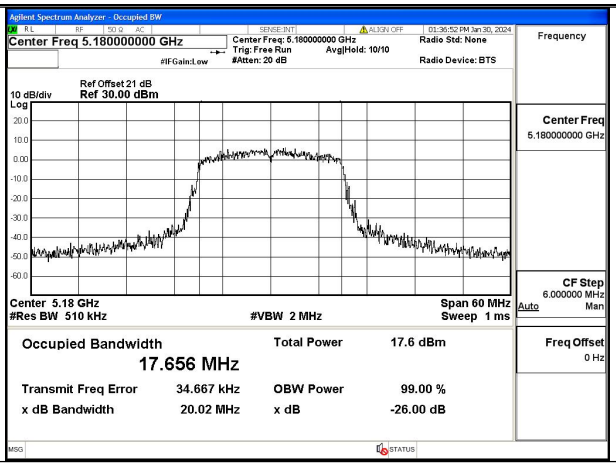
Mode:802.11n HT20 Frequency:5180MHz Ant:Chain0



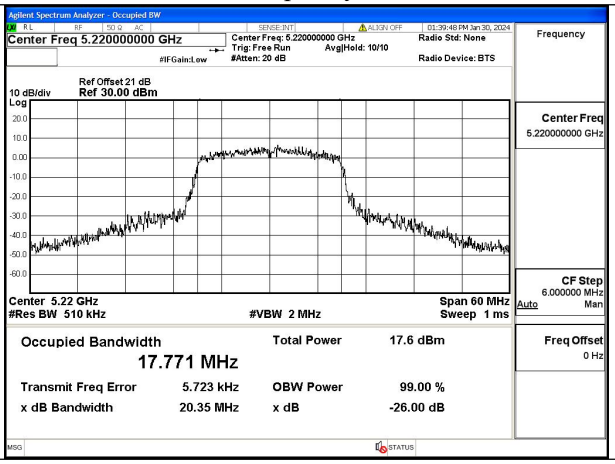
Mode:802.11n HT20 Frequency:5220MHz Ant:Chain0



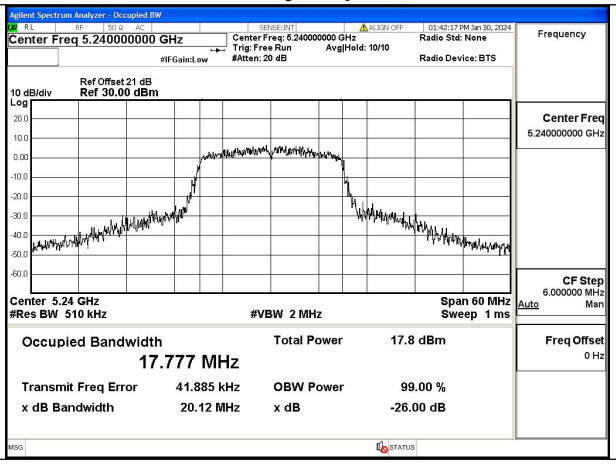
Mode:802.11n HT20 Frequency:5240MHz Ant:Chain0



Mode:802.11n HT20 Frequency:5180MHz Ant:Chain1

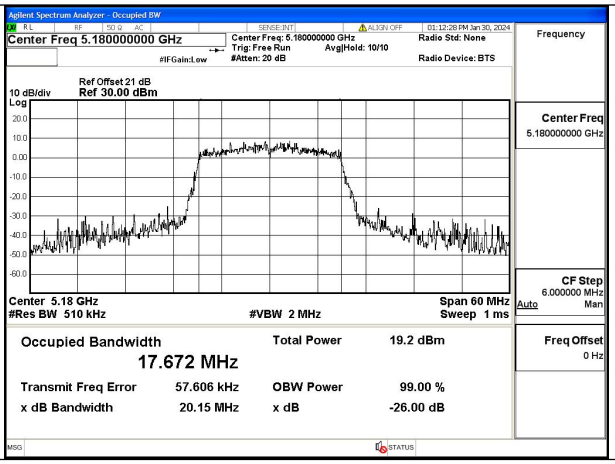


Mode:802.11n HT20 Frequency:5220MHz Ant:Chain1

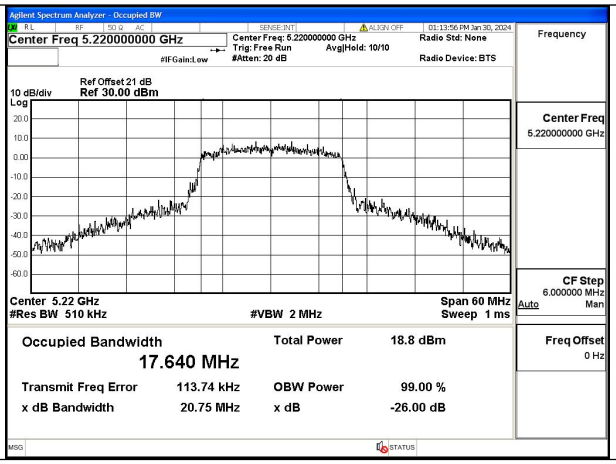


Mode:802.11n HT20 Frequency:5240MHz Ant:Chain1

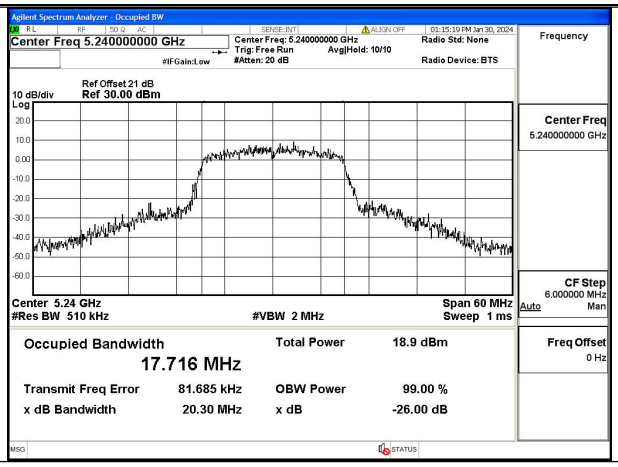
Test Mode: 802.11ac VHT20



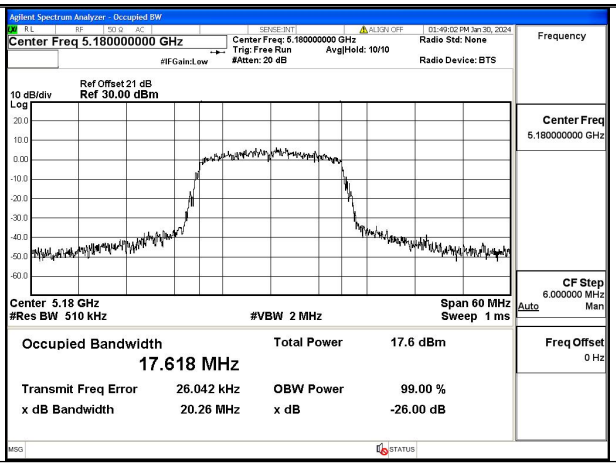
Mode:802.11ac VHT20 Frequency:5180MHz Ant:Chain0



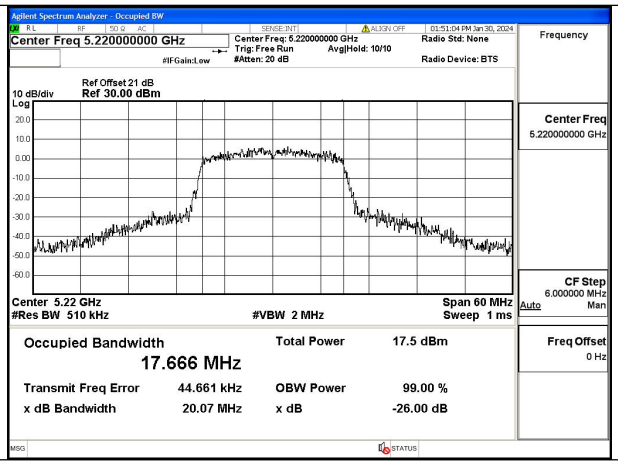
Mode:802.11ac VHT20 Frequency:5220MHz Ant:Chain0



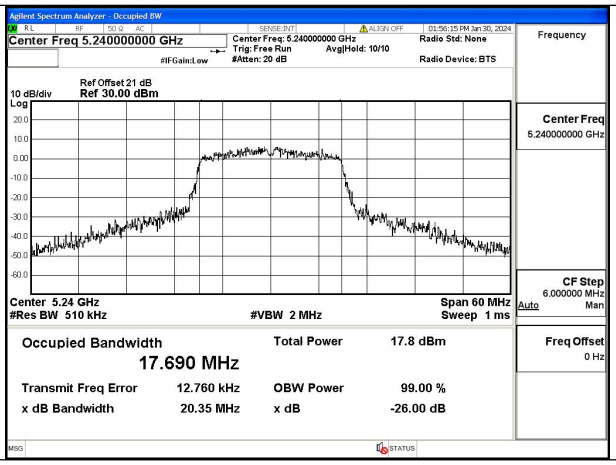
Mode:802.11ac VHT20 Frequency:5240MHz
Ant:Chain0



Mode:802.11ac VHT20 Frequency:5180MHz
Ant:Chain1

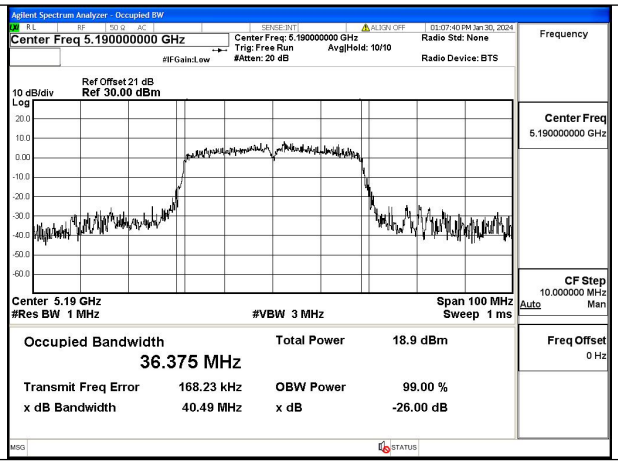


Mode:802.11ac VHT20 Frequency:5220MHz
Ant:Chain1

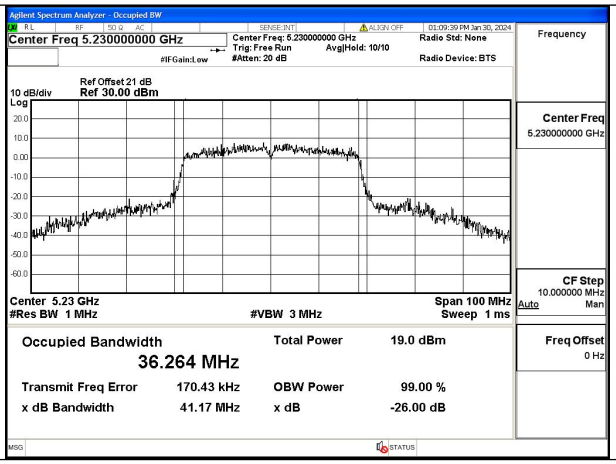


Mode:802.11ac VHT20 Frequency:5240MHz
Ant:Chain1

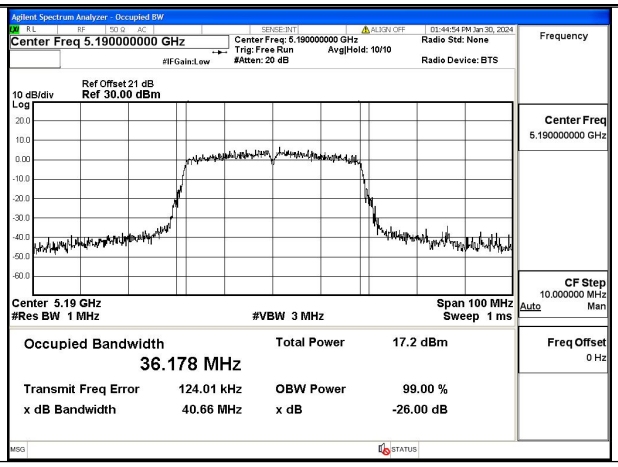
Test Mode: 802.11n HT40



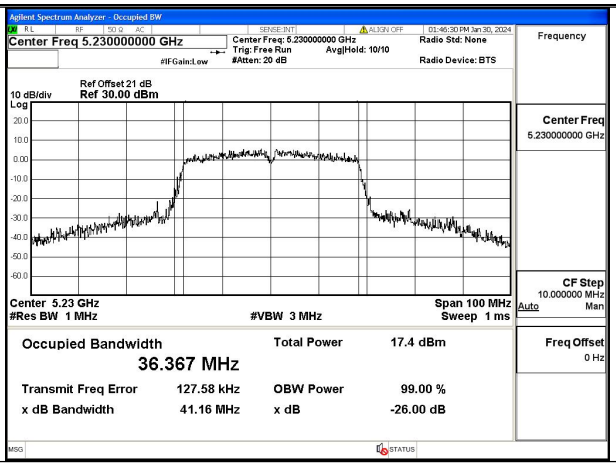
Mode:802.11n HT40 Frequency:5190MHz Ant:Chain0



Mode:802.11n HT40 Frequency:5230MHz Ant:Chain0

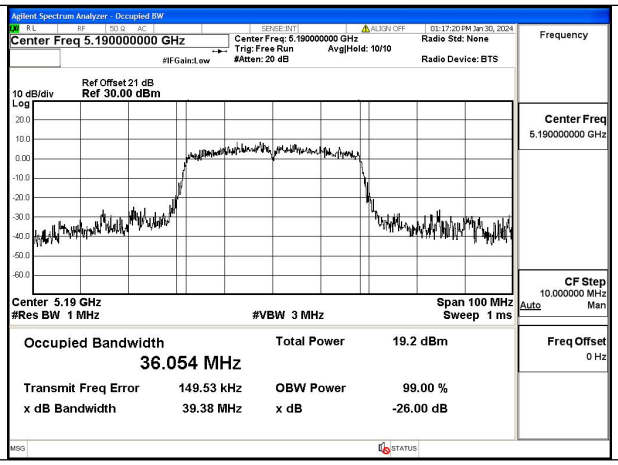


Mode:802.11n HT40 Frequency:5190MHz Ant:Chain1

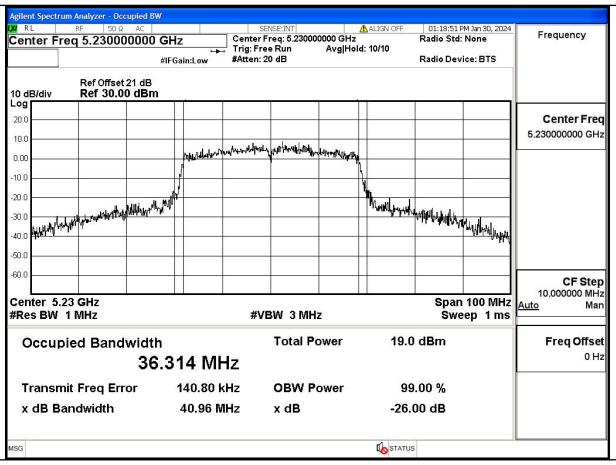


Mode:802.11n HT40 Frequency:5230MHz Ant:Chain1

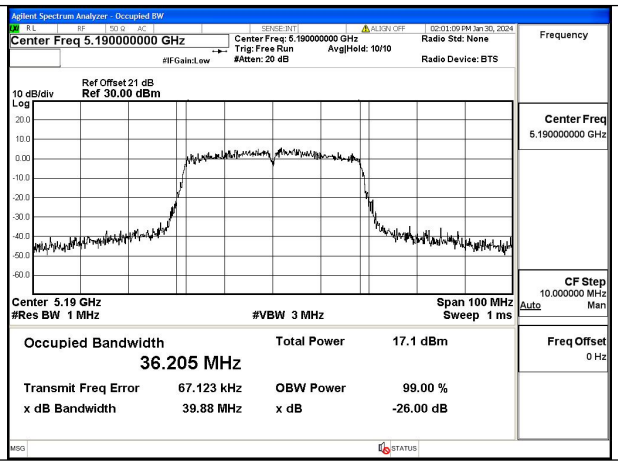
Test Mode: 802.11ac VHT40



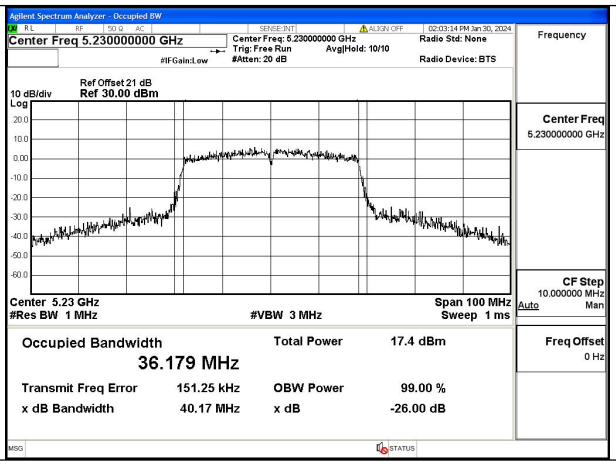
Mode:802.11ac VHT40 Frequency:5190MHz Ant:Chain0



Mode:802.11ac VHT40 Frequency:5230MHz Ant:Chain0

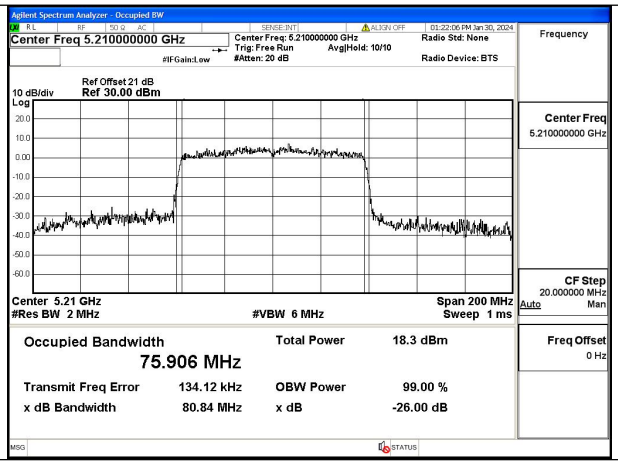


Mode:802.11ac VHT40 Frequency:5190MHz Ant:Chain1

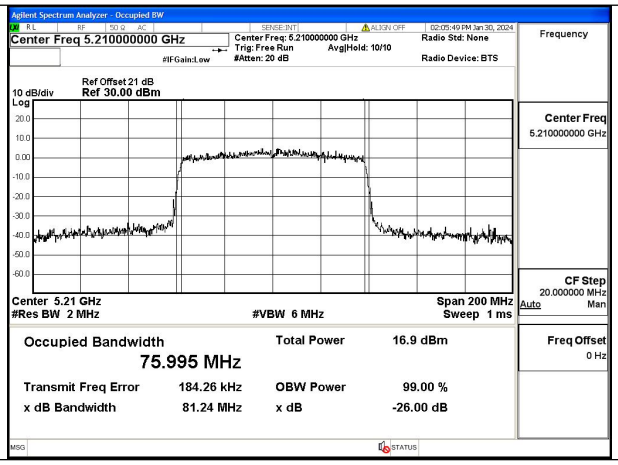


Mode:802.11ac VHT40 Frequency:5230MHz Ant:Chain1

Test Mode: 802.11ac VHT80



Mode:802.11ac VHT80 Frequency:5210MHz
Ant:Chain0



Mode:802.11ac VHT80 Frequency:5210MHz
Ant:Chain1