

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5500	87.12%	0.60	Fig.1
802.11a	5500	85.80%	0.67	Fig.2
802.11n HT20	5500	85.95%	0.66	Fig.3
802.11n HT20	5500	85.82%	0.66	Fig.4
802.11ac VHT20	5500	85.61%	0.67	Fig.5
802.11ac VHT20	5500	85.88%	0.66	Fig.6
802.11n HT40	5510	76.58%	1.16	Fig.7
802.11n HT40	5510	77.35%	1.12	Fig.8
802.11ac VHT40	5510	76.50%	1.16	Fig.9
802.11ac VHT40	5510	77.73%	1.09	Fig.10
802.11ac VHT80	5530	67.54%	1.70	Fig.11
802.11ac VHT80	5530	67.34%	1.72	Fig.12

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

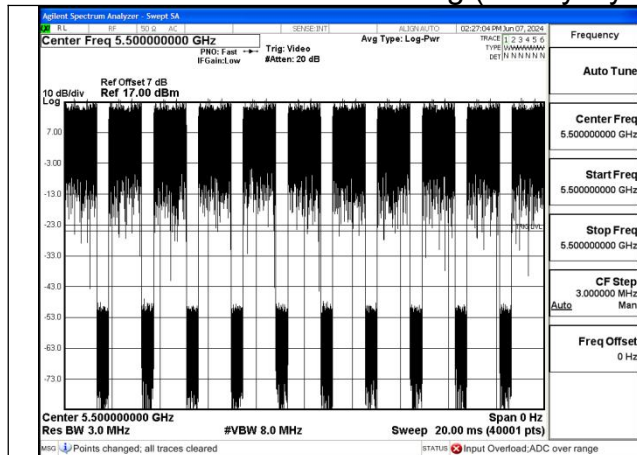


Fig.1

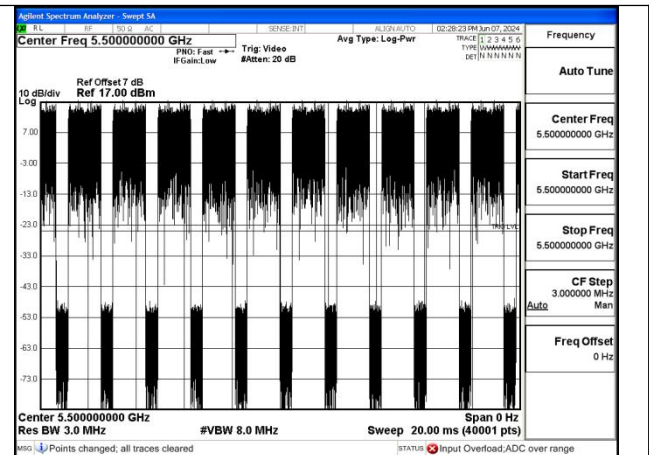


Fig.2

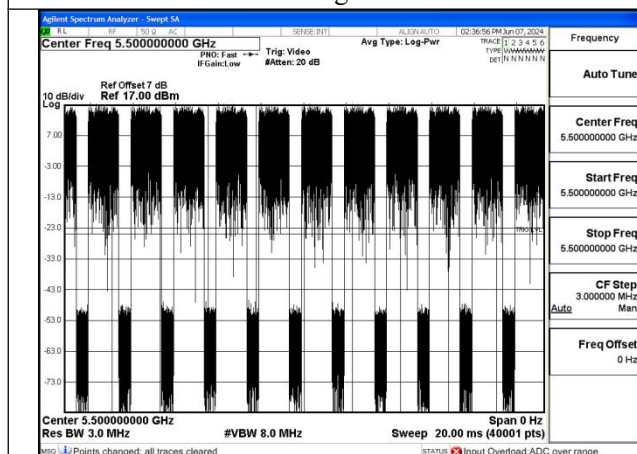


Fig.3

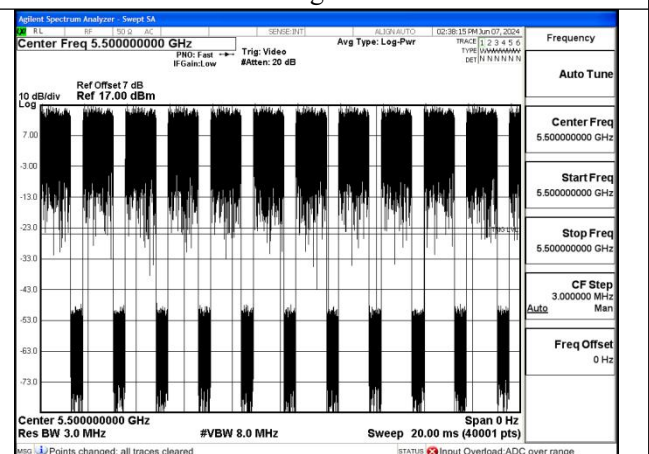


Fig.4

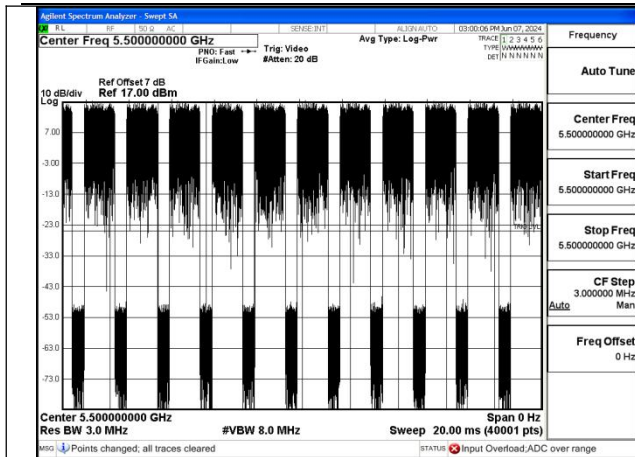


Fig.5

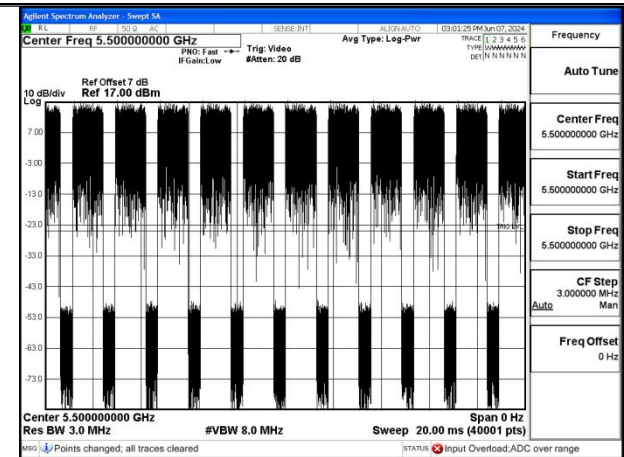


Fig.6

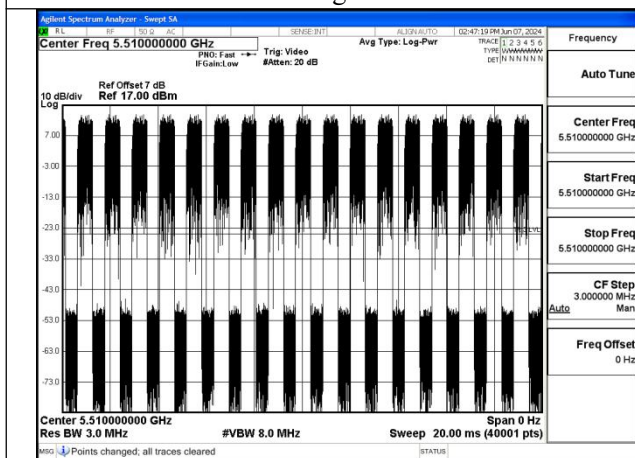


Fig.7

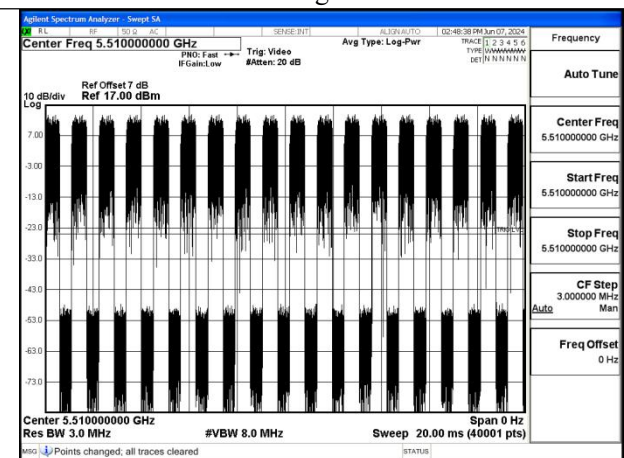


Fig.8

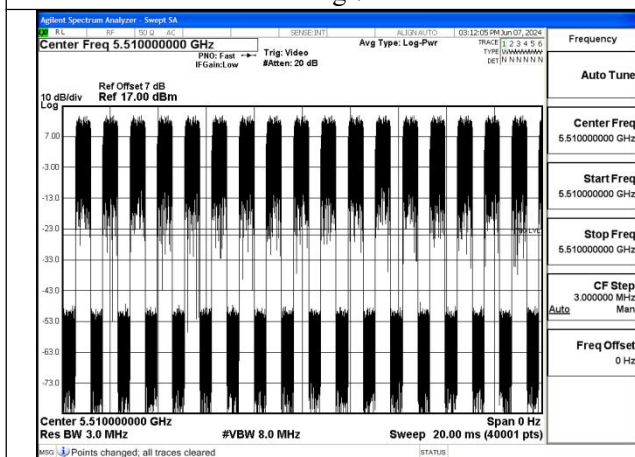


Fig.9

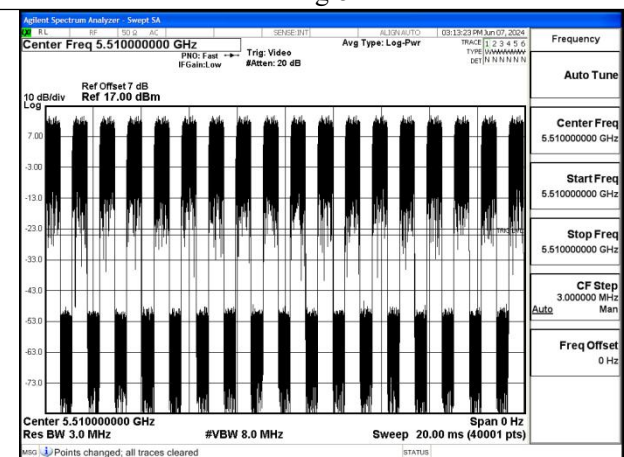


Fig.10

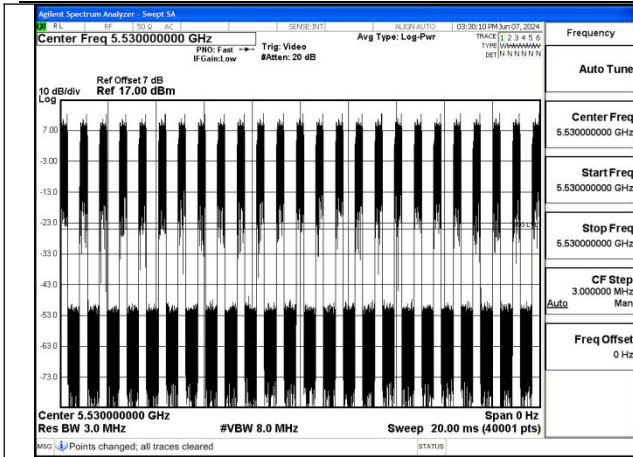


Fig.11

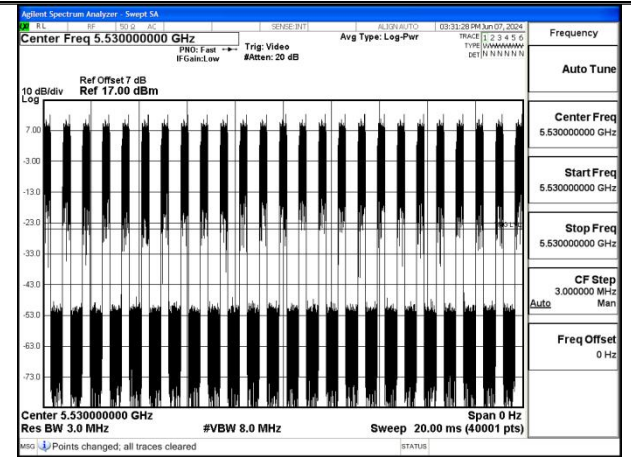


Fig.12

Output Power

Mode	Tones/ RUIndex	Frequency (MHz)	Antenna	Conductedaverage power output(dBm)	EIRP (dBm)
802.11a	NA	5500	Chain0	13.96	15.99
802.11a	NA	5500	Chain1	13.56	13.78
802.11a	NA	5580	Chain0	13.88	15.91
802.11a	NA	5580	Chain1	13.81	14.03
802.11a	NA	5700	Chain0	15.61	17.64
802.11a	NA	5700	Chain1	15.54	15.76
802.11n HT20	NA	5500	Chain0	13.86	15.89
802.11n HT20	NA	5500	Chain1	13.79	14.01
802.11n HT20	NA	5500	MIMO	16.84	18.06
802.11n HT20	NA	5580	Chain0	14.28	16.31
802.11n HT20	NA	5580	Chain1	14.18	14.40
802.11n HT20	NA	5580	MIMO	17.24	18.46
802.11n HT20	NA	5700	Chain0	15.99	18.02
802.11n HT20	NA	5700	Chain1	15.81	16.03
802.11n HT20	NA	5700	MIMO	18.91	20.13
802.11ac VHT20	NA	5500	Chain0	13.99	16.02
802.11ac VHT20	NA	5500	Chain1	13.79	14.01
802.11ac VHT20	NA	5500	MIMO	16.90	18.12
802.11ac VHT20	NA	5580	Chain0	14.17	16.20
802.11ac VHT20	NA	5580	Chain1	14.12	14.34
802.11ac VHT20	NA	5580	MIMO	17.16	18.38
802.11ac VHT20	NA	5700	Chain0	15.89	17.92
802.11ac VHT20	NA	5700	Chain1	15.80	16.02
802.11ac VHT20	NA	5700	MIMO	18.86	20.08
802.11n HT40	NA	5510	Chain0	13.23	15.26
802.11n HT40	NA	5510	Chain1	13.23	13.45
802.11n HT40	NA	5510	MIMO	16.24	17.46
802.11n HT40	NA	5590	Chain0	13.42	15.45
802.11n HT40	NA	5590	Chain1	13.40	13.62
802.11n HT40	NA	5590	MIMO	16.42	17.64
802.11n HT40	NA	5670	Chain0	14.07	16.10
802.11n HT40	NA	5670	Chain1	14.05	14.27
802.11n HT40	NA	5670	MIMO	17.07	18.29
802.11ac VHT40	NA	5510	Chain0	13.25	15.28
802.11ac VHT40	NA	5510	Chain1	13.25	13.47
802.11ac VHT40	NA	5510	MIMO	16.26	17.48
802.11ac VHT40	NA	5590	Chain0	13.43	15.46
802.11ac VHT40	NA	5590	Chain1	13.44	13.66
802.11ac VHT40	NA	5590	MIMO	16.45	17.67
802.11ac VHT40	NA	5670	Chain0	14.05	16.08
802.11ac VHT40	NA	5670	Chain1	14.04	14.26
802.11ac VHT40	NA	5670	MIMO	17.06	18.28

802.11ac VHT80	NA	5530	Chain0	14.28	16.31
802.11ac VHT80	NA	5530	Chain1	14.21	14.43
802.11ac VHT80	NA	5530	MIMO	17.26	18.48
802.11ac VHT80	NA	5610	Chain0	14.43	16.46
802.11ac VHT80	NA	5610	Chain1	14.42	14.64
802.11ac VHT80	NA	5610	MIMO	17.44	18.66

Emission Bandwidth

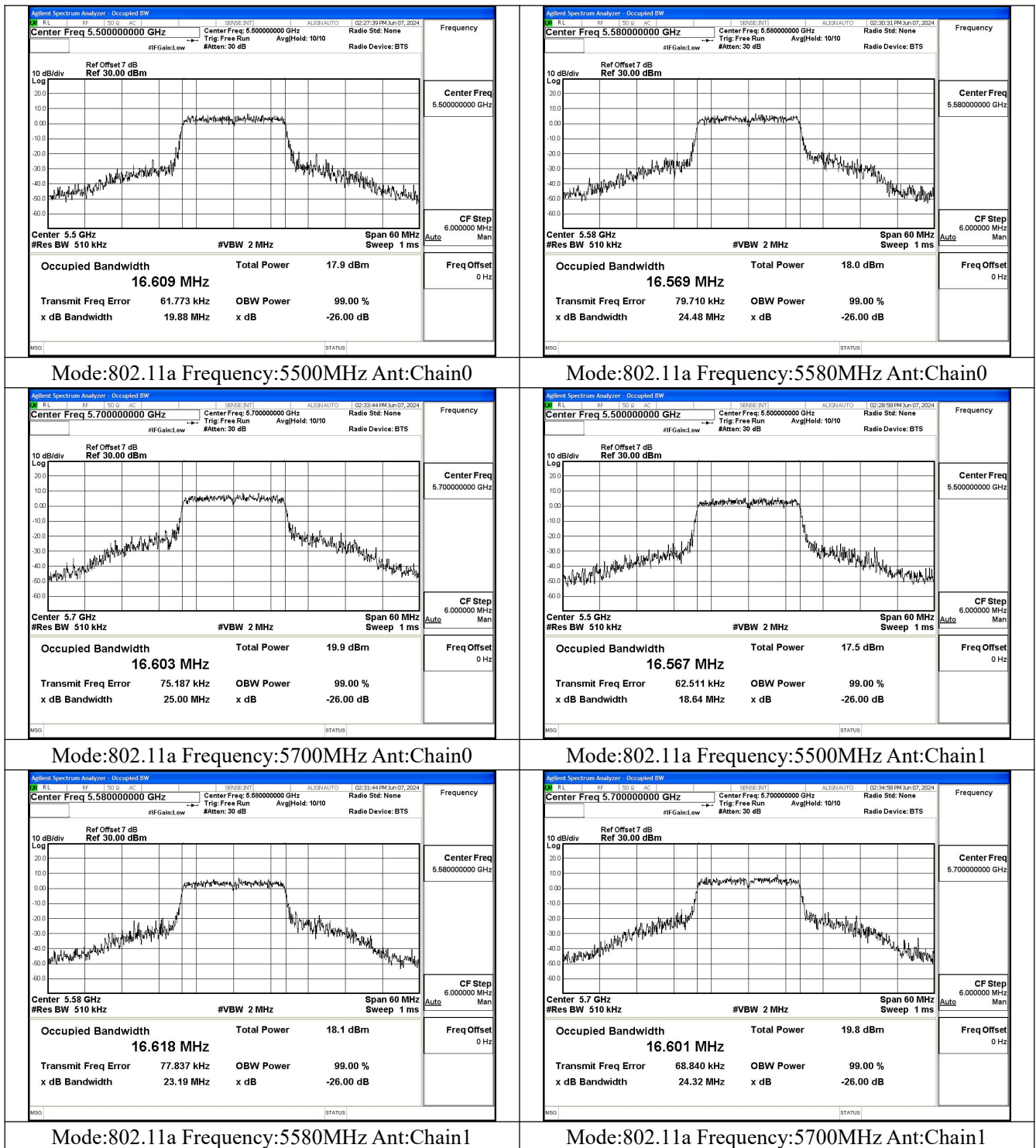
Offset 7dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5500MHz	5580MHz	5700MHz
802.11a	Chain0	19.88	24.48	25.00
802.11a	Chain1	18.64	23.19	24.32
802.11n HT20	Chain0	19.30	27.20	28.18
802.11n HT20	Chain1	19.65	24.95	28.54
802.11ac VHT20	Chain0	19.47	24.94	22.87
802.11ac VHT20	Chain1	22.78	29.79	27.69

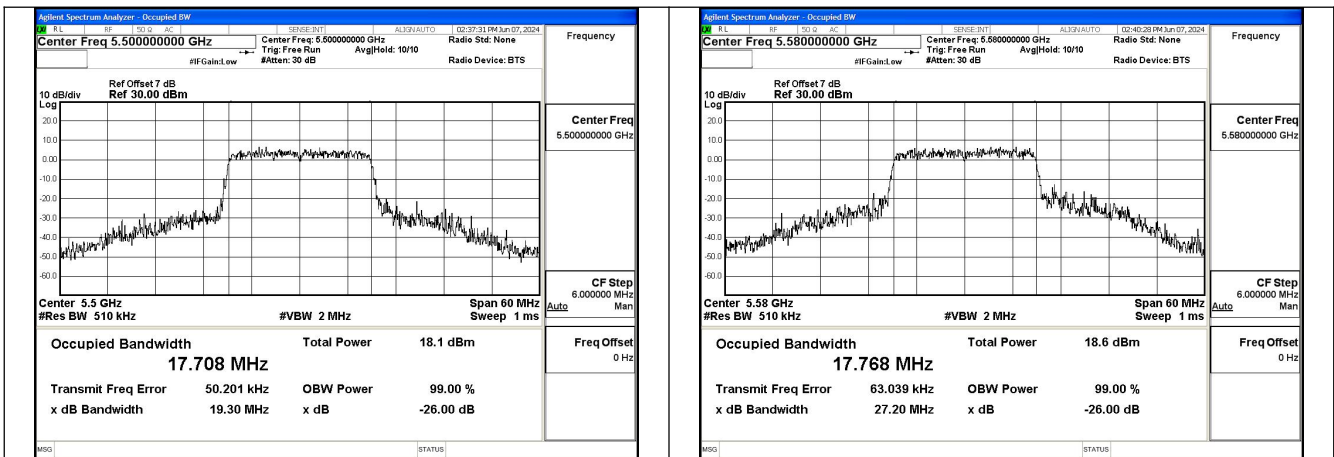
Test Mode	Antenna	26dB Bandwidth (MHz)		
		5510MHz	5590MHz	5670MHz
802.11n HT40	Chain0	40.51	40.04	46.75
802.11n HT40	Chain1	41.62	43.09	47.78
802.11ac VHT40	Chain0	40.71	46.07	43.37
802.11ac VHT40	Chain1	43.36	41.29	46.57

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5530MHz	---	5610MHz
802.11ac VHT80	Chain0	83.33	---	81.27
802.11ac VHT80	Chain1	89.03	---	81.17

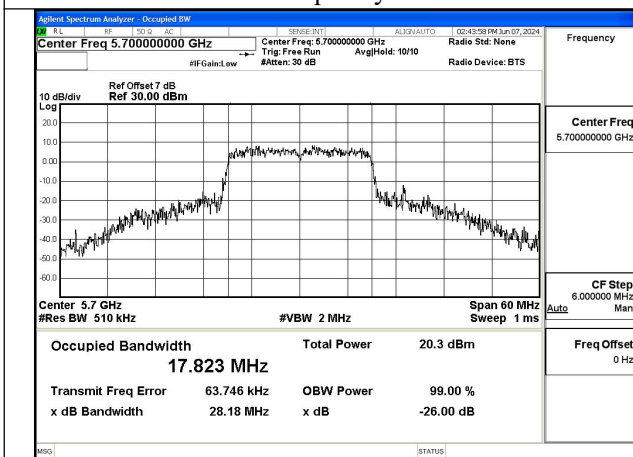
Test Mode: 802.11a



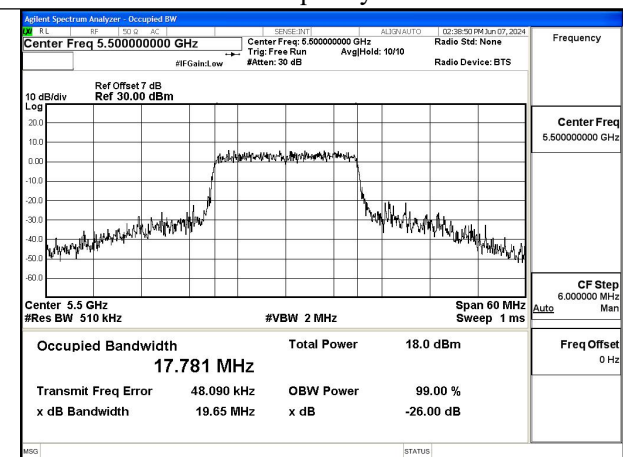
Test Mode: 802.11n HT20



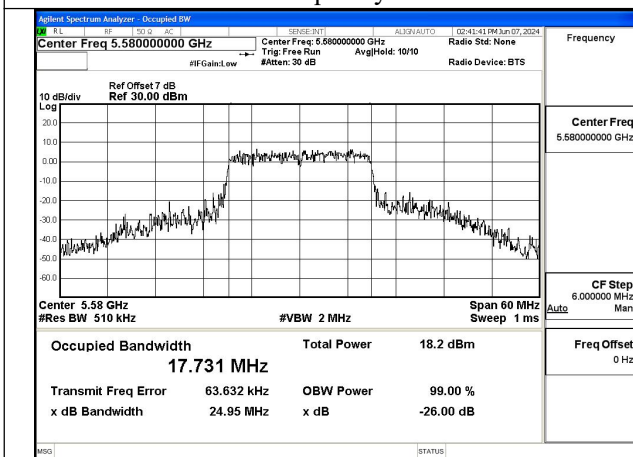
Mode:802.11n HT20 Frequency:5500MHz Ant:Chain0



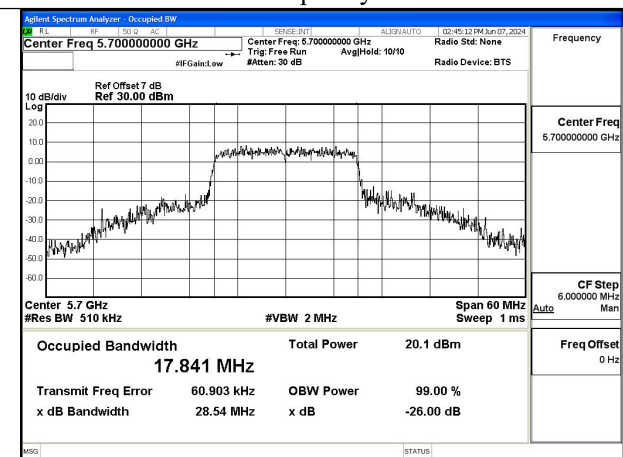
Mode:802.11n HT20 Frequency:5580MHz Ant:Chain0



Mode:802.11n HT20 Frequency:5700MHz Ant:Chain0



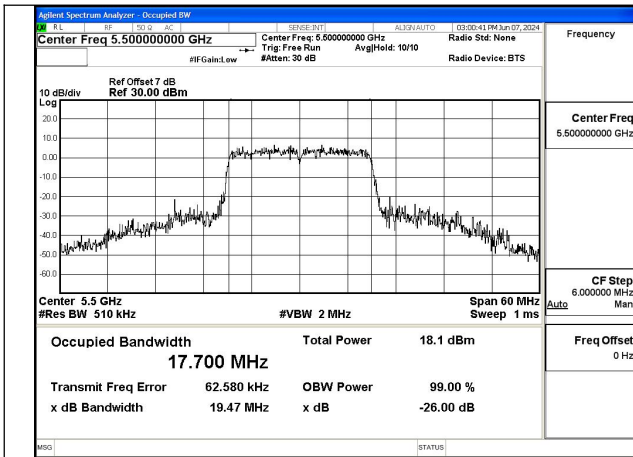
Mode:802.11n HT20 Frequency:5500MHz Ant:Chain1



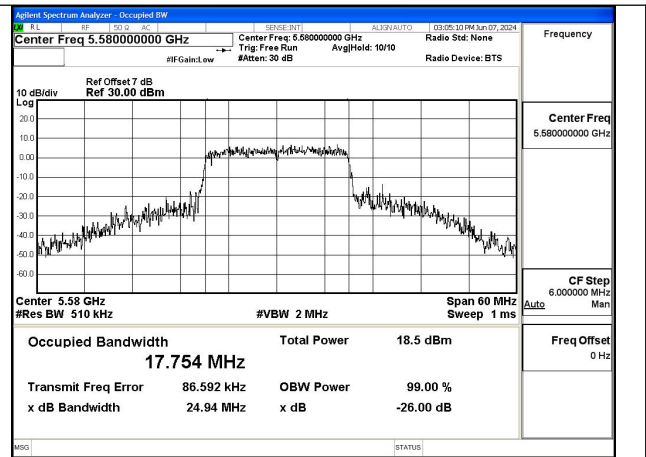
Mode:802.11n HT20 Frequency:5580MHz Ant:Chain1

Mode:802.11n HT20 Frequency:5700MHz Ant:Chain1

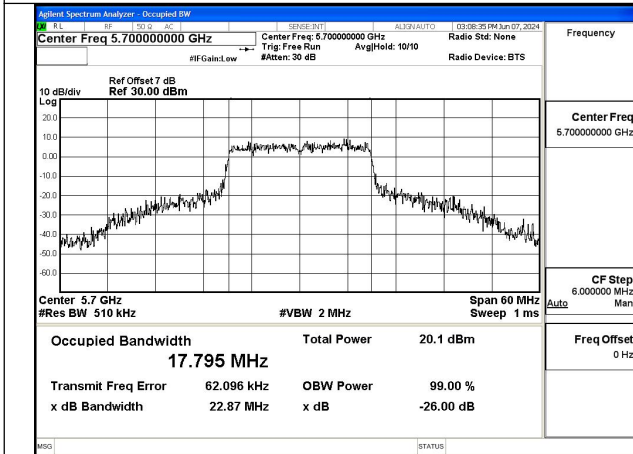
Test Mode: 802.11ac VHT20



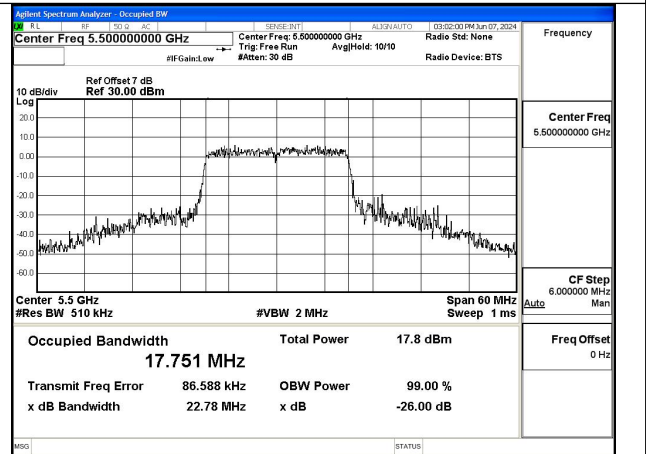
Mode:802.11ac VHT20 Frequency:5500MHz
Ant:Chain0



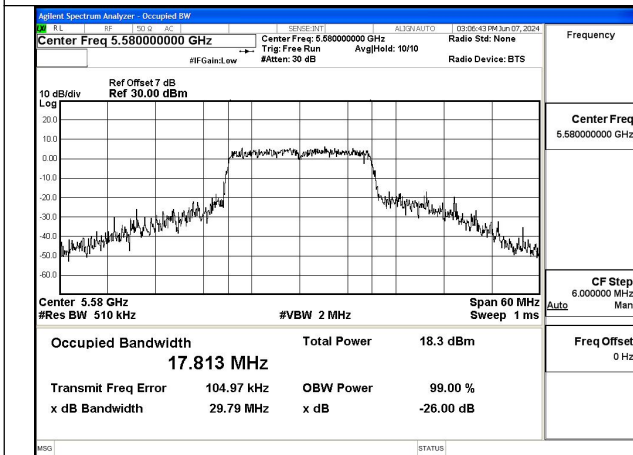
Mode:802.11ac VHT20 Frequency:5580MHz
Ant:Chain0



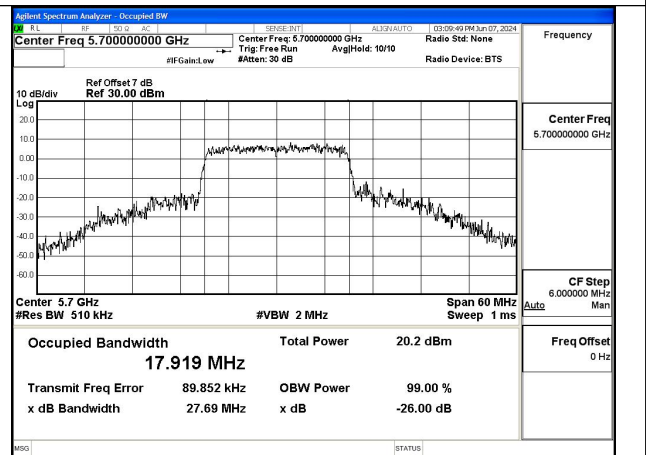
Mode:802.11ac VHT20 Frequency:5700MHz
Ant:Chain0



Mode:802.11ac VHT20 Frequency:5500MHz
Ant:Chain1

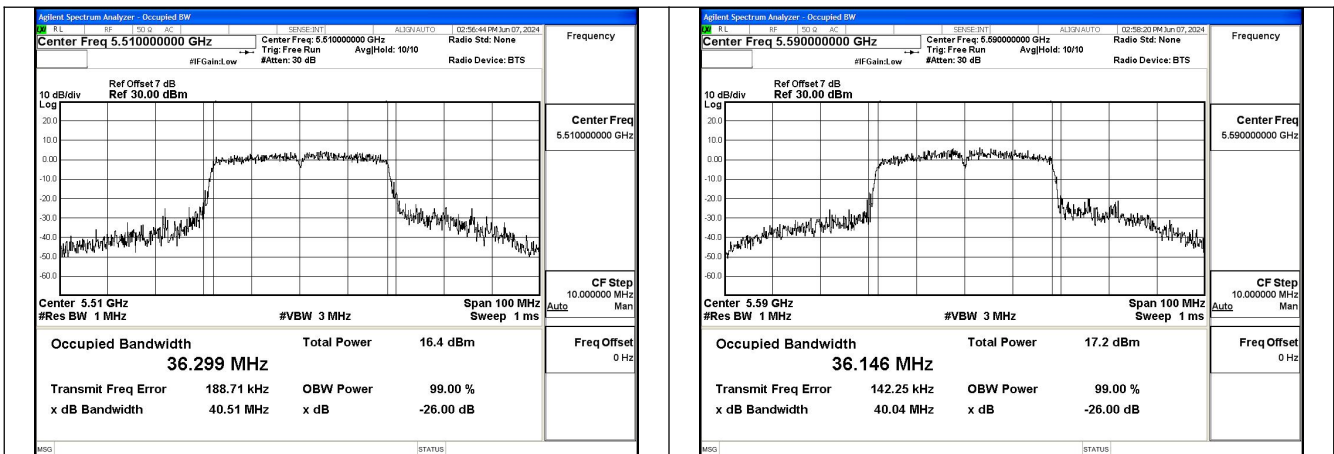


Mode:802.11ac VHT20 Frequency:5580MHz
Ant:Chain1



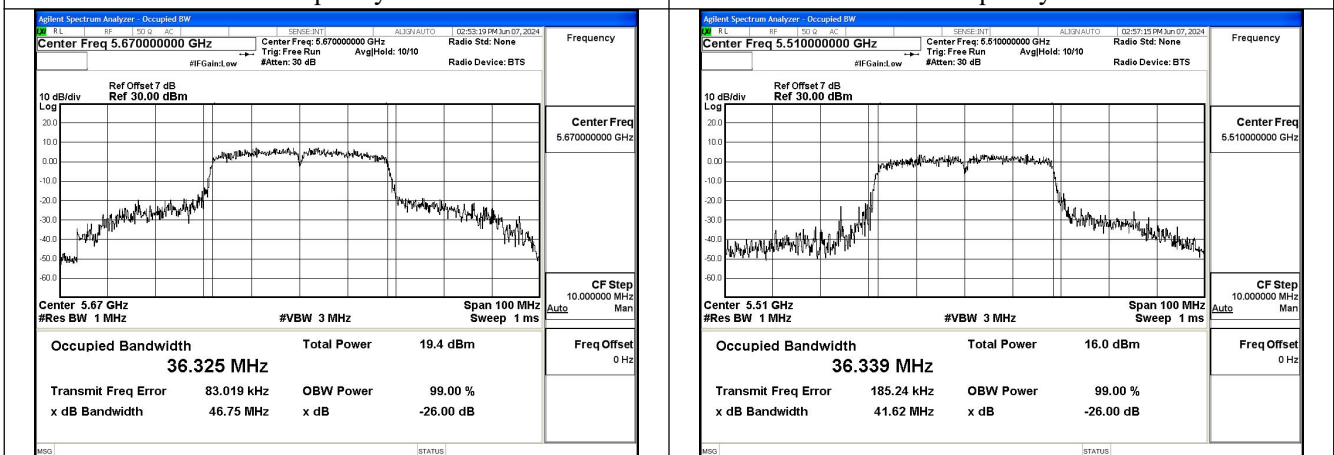
Mode:802.11ac VHT20 Frequency:5700MHz
Ant:Chain1

Test Mode: 802.11n HT40



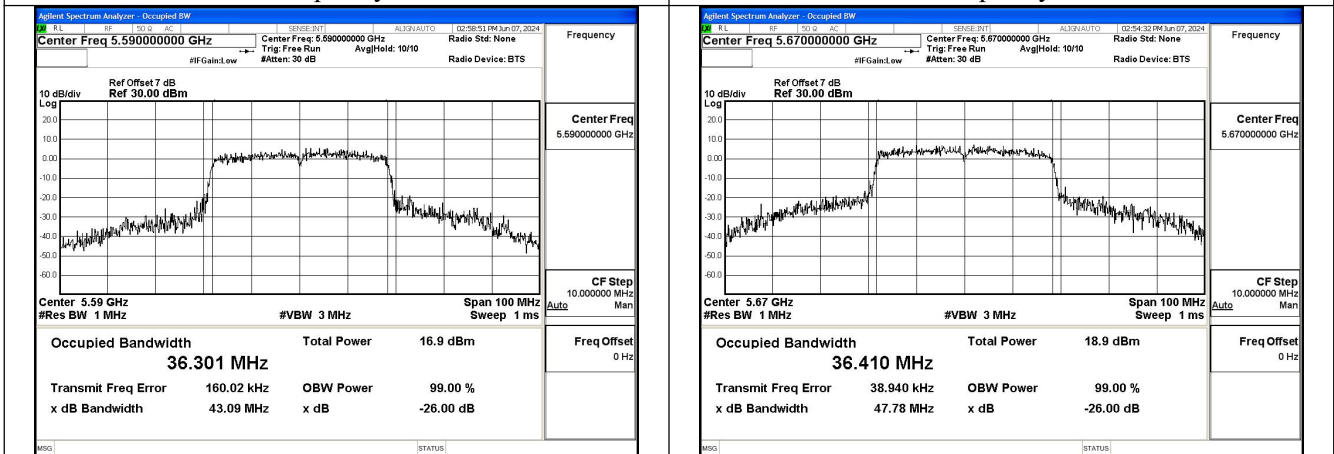
Mode:802.11n HT40 Frequency:5510MHz Ant:Chain0

Mode:802.11n HT40 Frequency:5590MHz Ant:Chain0



Mode:802.11n HT40 Frequency:5670MHz Ant:Chain0

Mode:802.11n HT40 Frequency:5510MHz Ant:Chain1



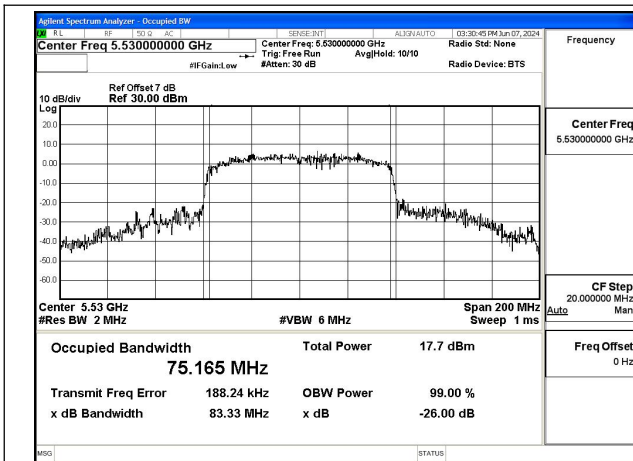
Mode:802.11n HT40 Frequency:5590MHz Ant:Chain1

Mode:802.11n HT40 Frequency:5670MHz Ant:Chain1

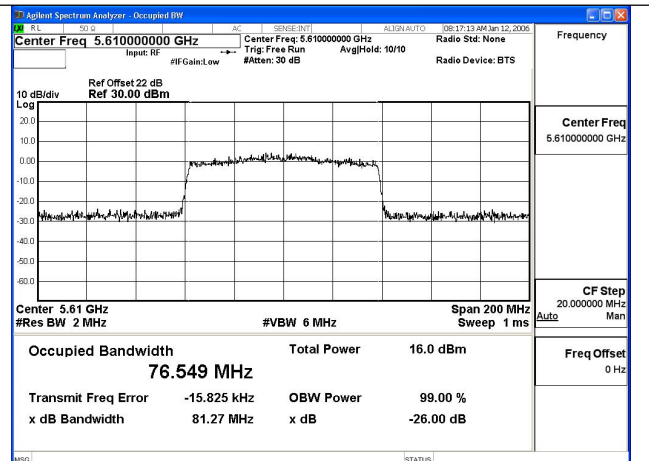
Test Mode: 802.11ac VHT40

Agilent Spectrum Analyzer - Occupied BW Center Freq 5.510000000 GHz Ref Offset 7 dB Ref 30.00 dBm Center 5.51 GHz #Res BW 1 MHz Occupied Bandwidth 36.282 MHz Total Power 16.3 dBm Transmit Freq Error 140.17 kHz x dB Bandwidth 40.71 MHz OBW Power 99.00 % x dB -26.00 dB	Agilent Spectrum Analyzer - Occupied BW Center Freq 5.590000000 GHz Ref Offset 7 dB Ref 30.00 dBm Center 5.59 GHz #Res BW 1 MHz Occupied Bandwidth 36.257 MHz Total Power 16.7 dBm Transmit Freq Error 79.734 kHz x dB Bandwidth 46.07 MHz OBW Power 99.00 % x dB -26.00 dB
Mode:802.11ac VHT40 Frequency:5510MHz Ant:Chain0	Mode:802.11ac VHT40 Frequency:5590MHz Ant:Chain0
Agilent Spectrum Analyzer - Occupied BW Center Freq 5.670000000 GHz Ref Offset 7 dB Ref 30.00 dBm Center 5.67 GHz #Res BW 1 MHz Occupied Bandwidth 36.183 MHz Total Power 17.5 dBm Transmit Freq Error 98.237 kHz x dB Bandwidth 43.37 MHz OBW Power 99.00 % x dB -26.00 dB	Agilent Spectrum Analyzer - Occupied BW Center Freq 5.510000000 GHz Ref Offset 7 dB Ref 30.00 dBm Center 5.51 GHz #Res BW 1 MHz Occupied Bandwidth 36.372 MHz Total Power 15.8 dBm Transmit Freq Error 155.32 kHz x dB Bandwidth 43.36 MHz OBW Power 99.00 % x dB -26.00 dB
Mode:802.11ac VHT40 Frequency:5670MHz Ant:Chain0	Mode:802.11ac VHT40 Frequency:5510MHz Ant:Chain1
Agilent Spectrum Analyzer - Occupied BW Center Freq 5.590000000 GHz Ref Offset 7 dB Ref 30.00 dBm Center 5.59 GHz #Res BW 1 MHz Occupied Bandwidth 36.214 MHz Total Power 17.1 dBm Transmit Freq Error 58.519 kHz x dB Bandwidth 41.29 MHz OBW Power 99.00 % x dB -26.00 dB	Agilent Spectrum Analyzer - Occupied BW Center Freq 5.670000000 GHz Ref Offset 7 dB Ref 30.00 dBm Center 5.67 GHz #Res BW 1 MHz Occupied Bandwidth 36.158 MHz Total Power 17.1 dBm Transmit Freq Error 106.56 kHz x dB Bandwidth 46.57 MHz OBW Power 99.00 % x dB -26.00 dB
Mode:802.11ac VHT40 Frequency:5590MHz Ant:Chain1	Mode:802.11ac VHT40 Frequency:5670MHz Ant:Chain1

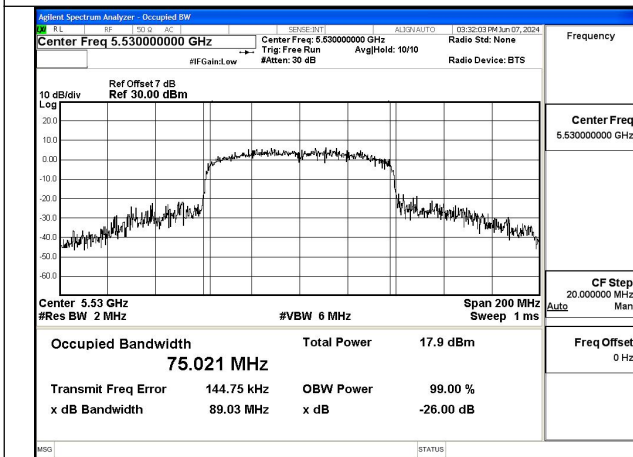
Test Mode: 802.11ac VHT80



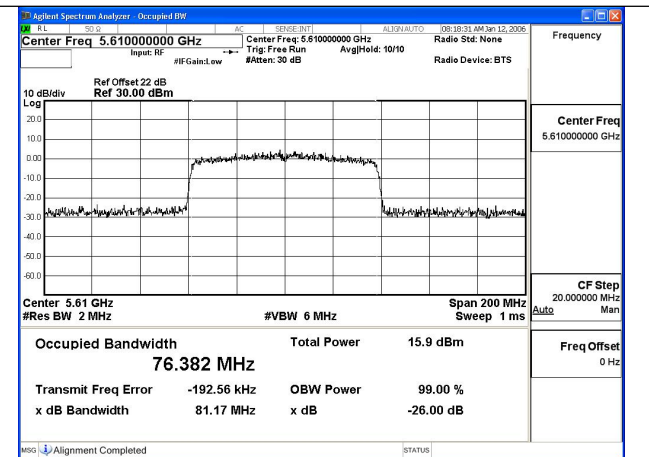
Mode:802.11ac VHT80 Frequency:5530MHz
Ant:Chain0



Mode:802.11ac VHT80 Frequency:5610MHz
Ant:Chain0



Mode:802.11ac VHT80 Frequency:5530MHz
Ant:Chain1



Mode:802.11ac VHT80 Frequency:5610MHz
Ant:Chain1