APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Chain0	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	Chain1	5500	99.97%	0	Fig.1
802.11a	Chain0	5500	99.97%	0	Fig.2
802.11n HT20	Chain1	5500	99.96%	0	Fig.3
802.11n HT20	Chain0	5500	99.98%	0	Fig.4
802.11ac VHT20	Chain1	5500	99.97%	0	Fig.5
802.11ac VHT20	Chain0	5500	99.95%	0	Fig.6
802.11n HT40	Chain1	5510	99.97%	0	Fig.7
802.11n HT40	Chain0	5510	99.95%	0	Fig.8
802.11ac VHT40	Chain1	5510	99.95%	0	Fig.9
802.11ac VHT40	Chain0	5510	99.93%	0	Fig.10
802.11ac VHT80	Chain1	5530	99.91%	0	Fig.11
802.11ac VHT80	Chain0	5530	99.91%	0	Fig.12

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

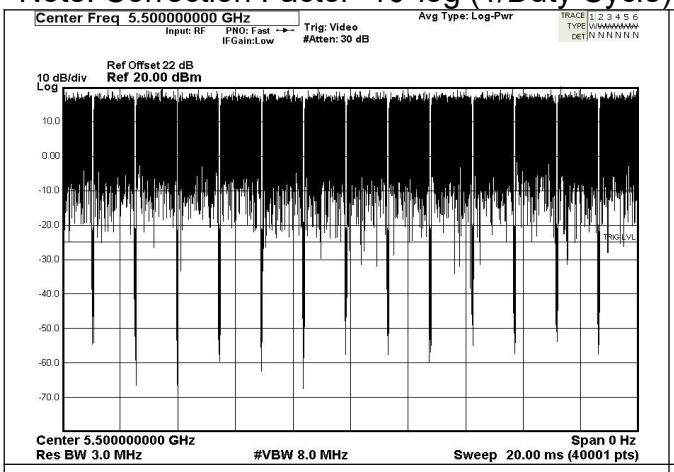


Fig.1

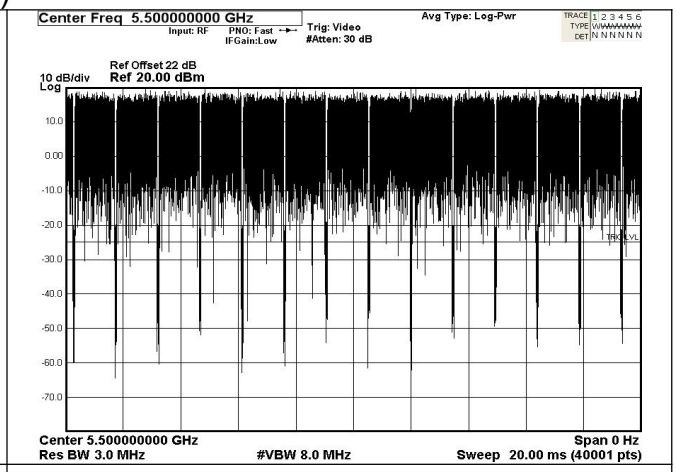


Fig.2

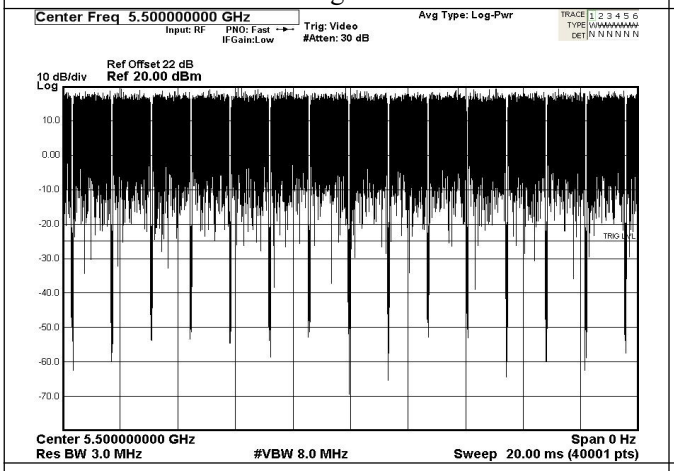


Fig.3

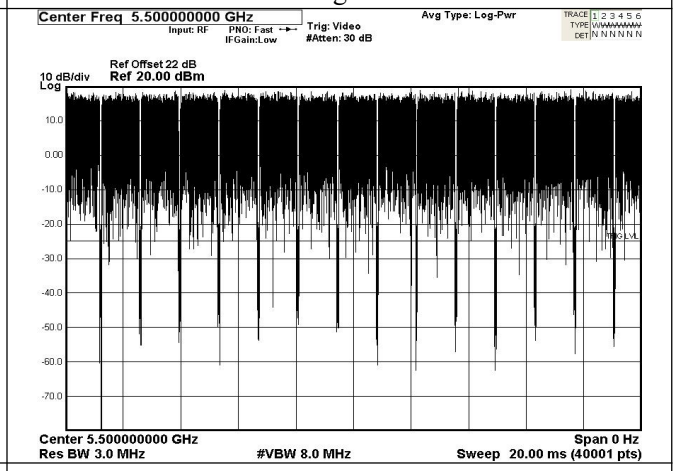


Fig.4

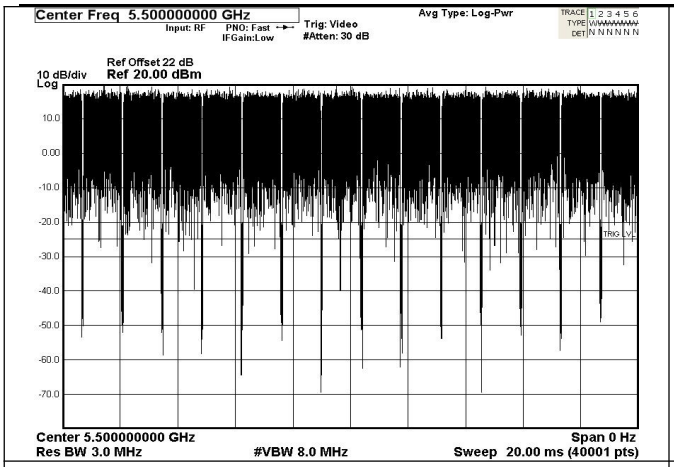


Fig.5

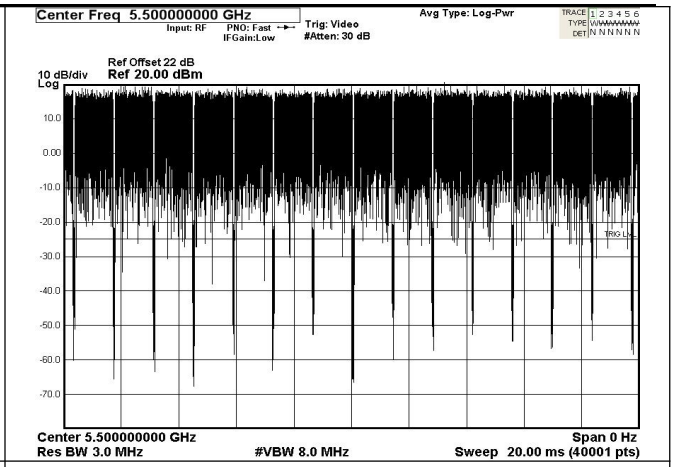


Fig.6

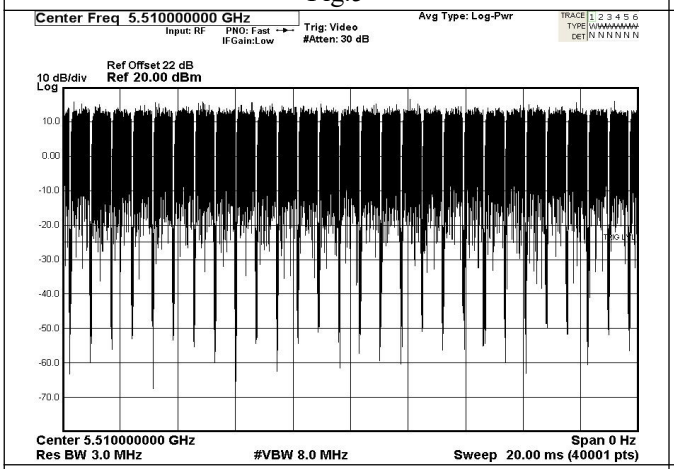


Fig.7

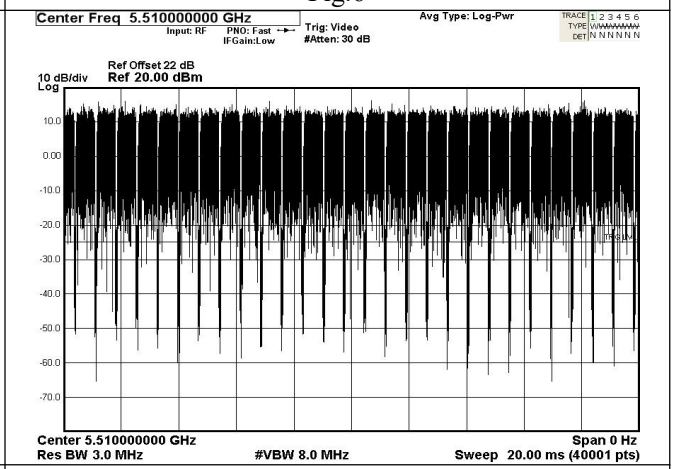


Fig.8

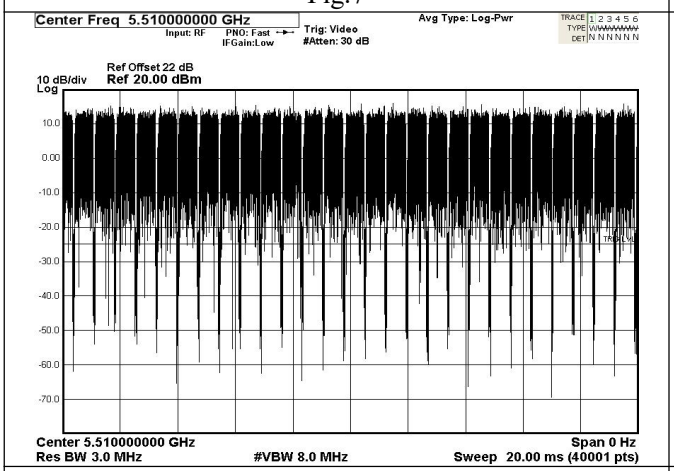


Fig.9

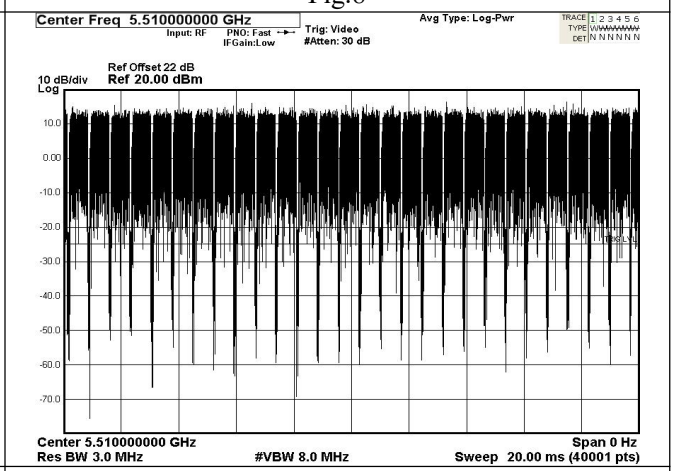


Fig.10

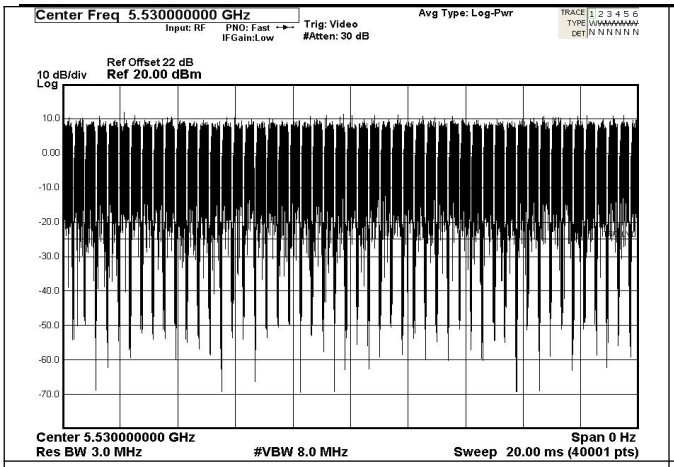

Center Freq 5.530000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Video
#Atten: 30 dB
Avg Type: Log-Pwr
Ref Offset 22 dB
10 dB/div
Ref 20.00 dBm
Log
Center 5.530000000 GHz
Span 0 Hz
Res BW 3.0 MHz
#VBW 8.0 MHz
Sweep 20.00 ms (40001 pts)

Fig.11

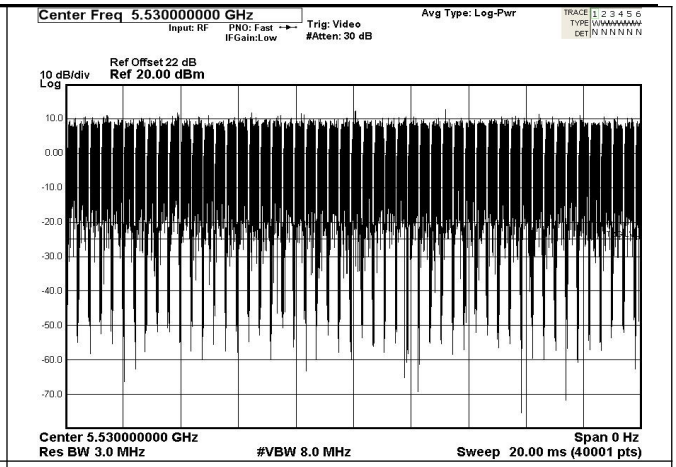

Center Freq 5.530000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Video
#Atten: 30 dB
Avg Type: Log-Pwr
Ref Offset 22 dB
10 dB/div
Ref 20.00 dBm
Log
Center 5.530000000 GHz
Span 0 Hz
Res BW 3.0 MHz
#VBW 8.0 MHz
Sweep 20.00 ms (40001 pts)

Fig.12

Output Power

Mode	Tones/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5500	Chain0	15.78	16.28
802.11a	NA	5500	Chain1	15.82	16.27
802.11a	NA	5580	Chain0	15.83	16.33
802.11a	NA	5580	Chain1	15.64	16.09
802.11a	NA	5700	Chain0	15.89	16.39
802.11a	NA	5700	Chain1	15.77	16.22
802.11n HT20	NA	5500	Chain0	15.91	16.41
802.11n HT20	NA	5500	Chain1	15.55	16.00
802.11n HT20	NA	5500	MIMO	18.74	19.22
802.11n HT20	NA	5580	Chain0	15.56	16.06
802.11n HT20	NA	5580	Chain1	15.47	15.92
802.11n HT20	NA	5580	MIMO	18.53	19.01
802.11n HT20	NA	5700	Chain0	15.95	16.45
802.11n HT20	NA	5700	Chain1	15.58	16.03
802.11n HT20	NA	5700	MIMO	18.78	19.26
802.11ac VHT20	NA	5500	Chain0	15.86	16.36
802.11ac VHT20	NA	5500	Chain1	16.02	16.47
802.11ac VHT20	NA	5500	MIMO	18.95	19.43
802.11ac VHT20	NA	5580	Chain0	15.53	16.03
802.11ac VHT20	NA	5580	Chain1	15.86	16.31
802.11ac VHT20	NA	5580	MIMO	18.71	19.19
802.11ac VHT20	NA	5700	Chain0	15.79	16.29
802.11ac VHT20	NA	5700	Chain1	15.84	16.29
802.11ac VHT20	NA	5700	MIMO	18.83	19.31
802.11n HT40	NA	5510	Chain0	15.08	15.58
802.11n HT40	NA	5510	Chain1	14.94	15.39
802.11n HT40	NA	5510	MIMO	18.02	18.50
802.11n HT40	NA	5590	Chain0	15.04	15.54
802.11n HT40	NA	5590	Chain1	14.81	15.26
802.11n HT40	NA	5590	MIMO	17.94	18.42
802.11n HT40	NA	5670	Chain0	14.73	15.23
802.11n HT40	NA	5670	Chain1	14.70	15.15
802.11n HT40	NA	5670	MIMO	17.73	18.21
802.11ac VHT40	NA	5510	Chain0	15.19	15.69
802.11ac VHT40	NA	5510	Chain1	15.26	15.71
802.11ac VHT40	NA	5510	MIMO	18.24	18.72
802.11ac VHT40	NA	5590	Chain0	14.83	15.33
802.11ac VHT40	NA	5590	Chain1	15.32	15.77
802.11ac VHT40	NA	5590	MIMO	18.09	18.57
802.11ac VHT40	NA	5670	Chain0	14.63	15.13
802.11ac VHT40	NA	5670	Chain1	15.12	15.57
802.11ac VHT40	NA	5670	MIMO	17.89	18.37

802.11ac VHT80	NA	5530	Chain0	13.93	14.43
802.11ac VHT80	NA	5530	Chain1	14.44	14.89
802.11ac VHT80	NA	5530	MIMO	17.20	17.68
802.11ac VHT80	NA	5610	Chain0	13.71	14.21
802.11ac VHT80	NA	5610	Chain1	14.22	14.67
802.11ac VHT80	NA	5610	MIMO	16.98	17.46

Emission Bandwidth

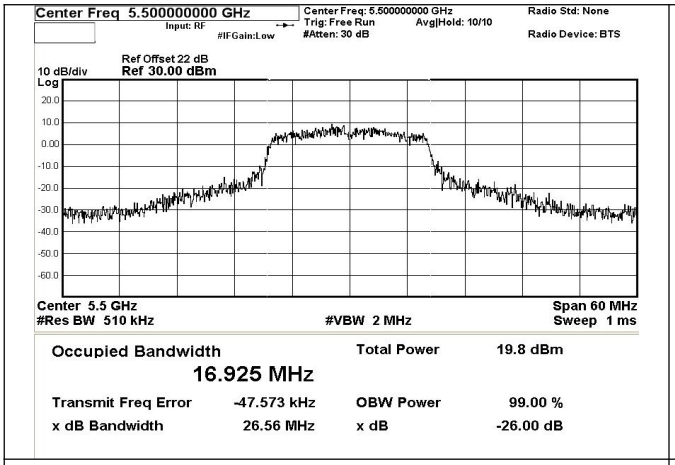
Offset 22dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5500MHz	5580MHz	5700MHz
802.11a	Chain0	26.56	26.55	27.02
802.11a	Chain1	22.50	21.11	21.51
802.11n HT20	Chain0	28.59	28.96	27.03
802.11n HT20	Chain1	20.73	23.26	20.82
802.11ac VHT20	Chain0	20.17	20.48	24.43
802.11ac VHT20	Chain1	21.18	20.41	20.39

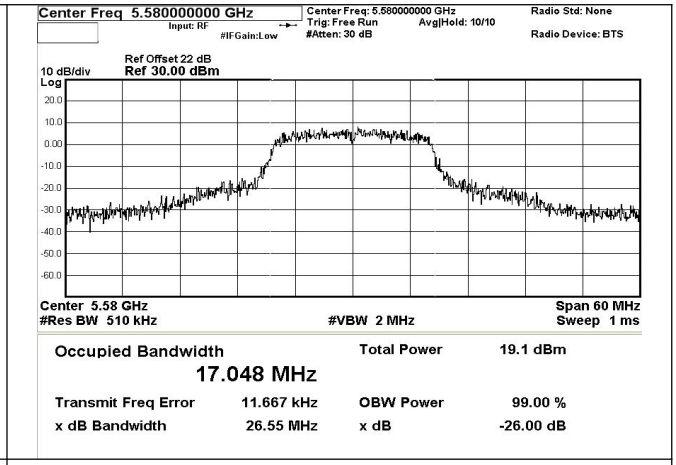
Test Mode	Antenna	26dB Bandwidth (MHz)		
		5510MHz	5590MHz	5670MHz
802.11n HT40	Chain0	46.89	46.42	44.91
802.11n HT40	Chain1	40.60	40.72	41.44
802.11ac VHT40	Chain0	42.52	40.44	40.79
802.11ac VHT40	Chain1	41.80	40.54	41.50

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5530MHz	---	5610MHz
802.11ac VHT80	Chain0	81.39	---	82.03
802.11ac VHT80	Chain1	82.01	---	80.63

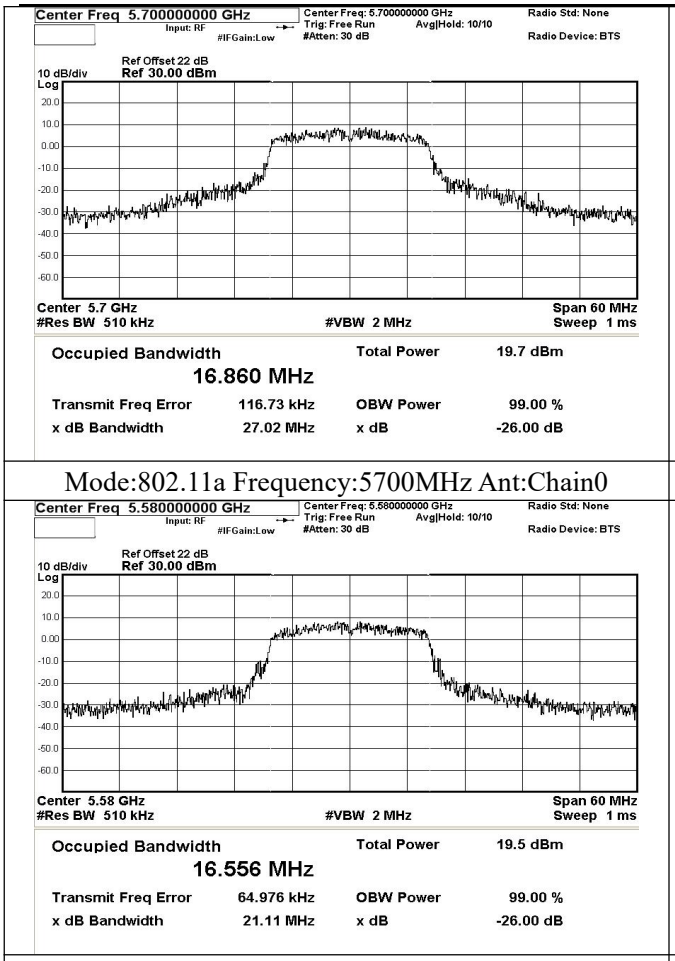
Test Mode: 802.11a



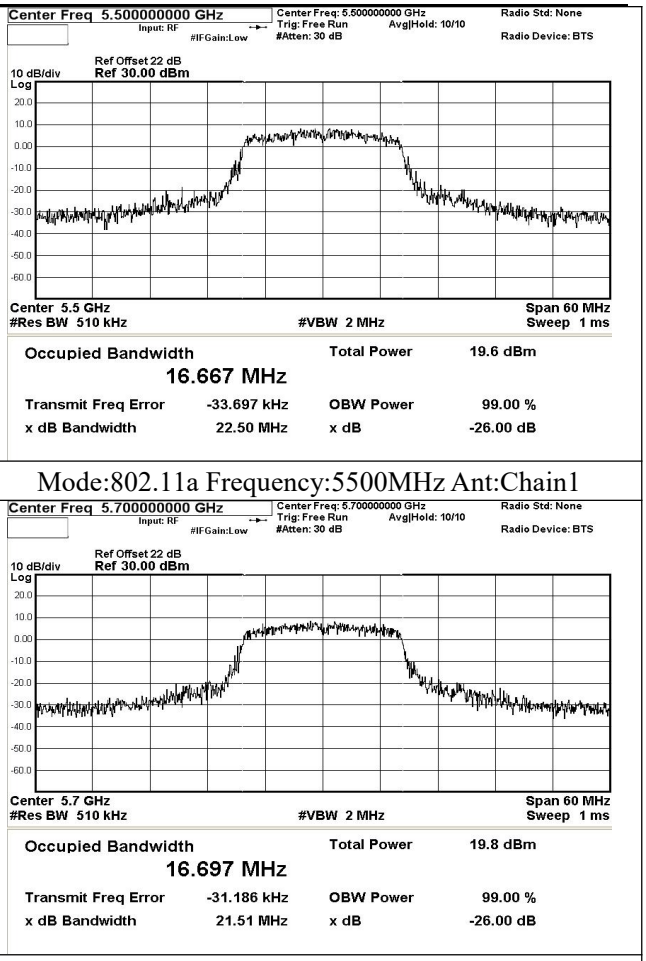
Mode:802.11a Frequency:5500MHz Ant:Chain0



Mode:802.11a Frequency:5580MHz Ant:Chain0



Mode:802.11a Frequency:5700MHz Ant:Chain0

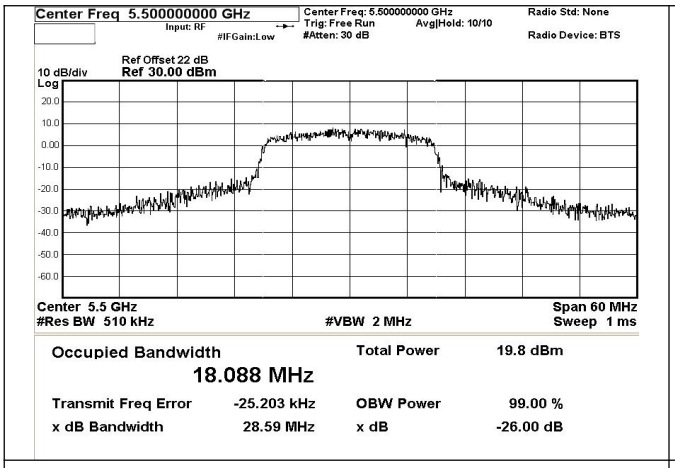


Mode:802.11a Frequency:5500MHz Ant:Chain1

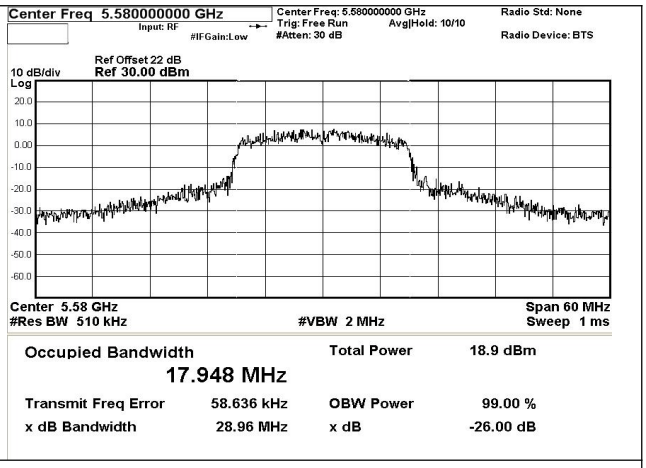
Mode:802.11a Frequency:5580MHz Ant:Chain1

Mode:802.11a Frequency:5700MHz Ant:Chain1

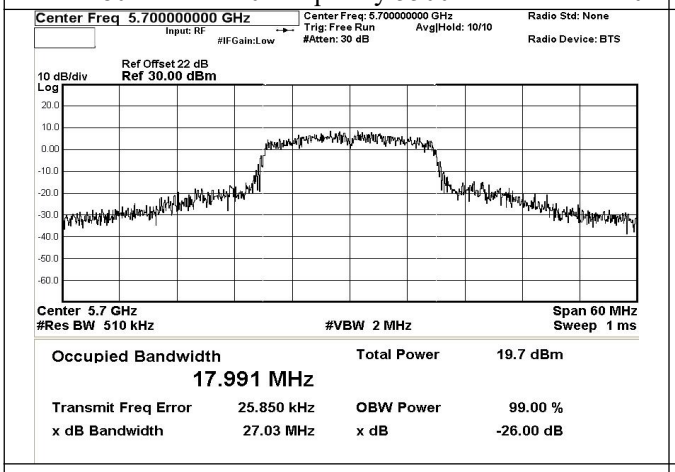
Test Mode: 802.11n HT20



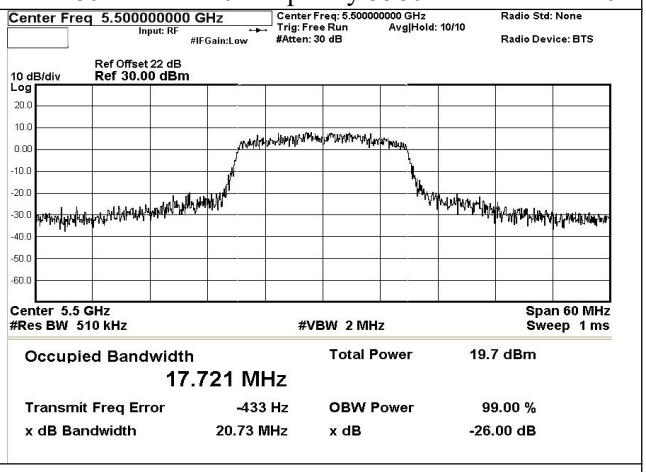
Mode:802.11n HT20 Frequency:5500MHz Ant:Chain0



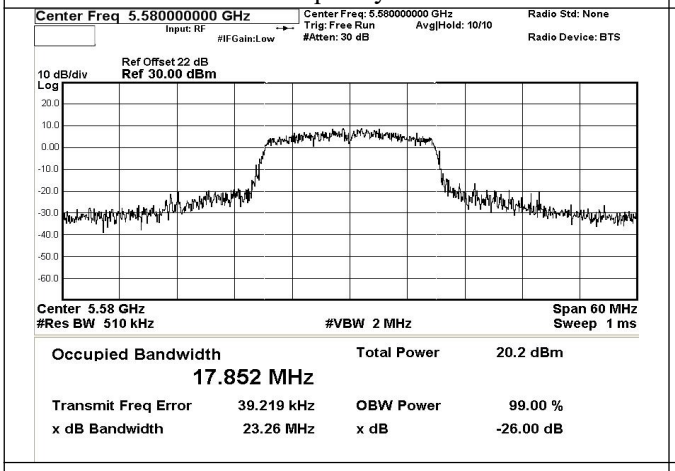
Mode:802.11n HT20 Frequency:5580MHz Ant:Chain0



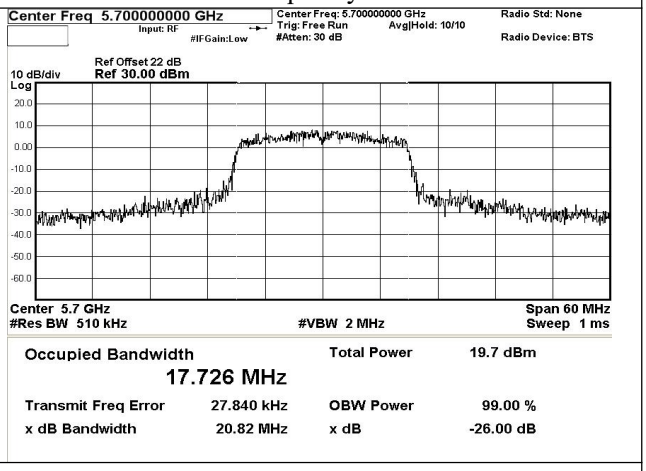
Mode:802.11n HT20 Frequency:5700MHz Ant:Chain0



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

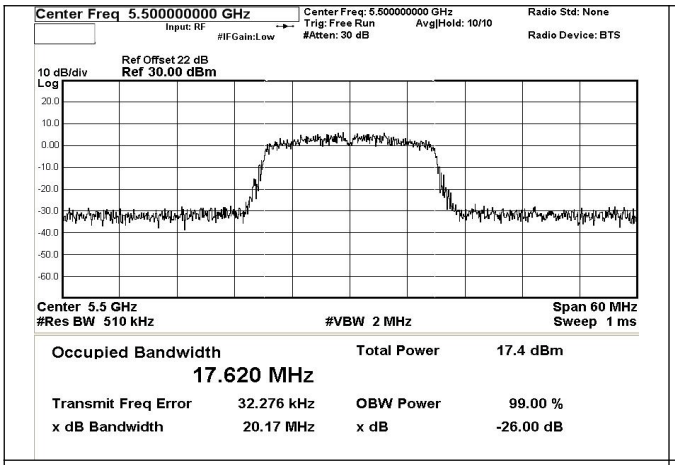


Mode:802.11n HT20 Frequency:5580MHz Ant:Chain1

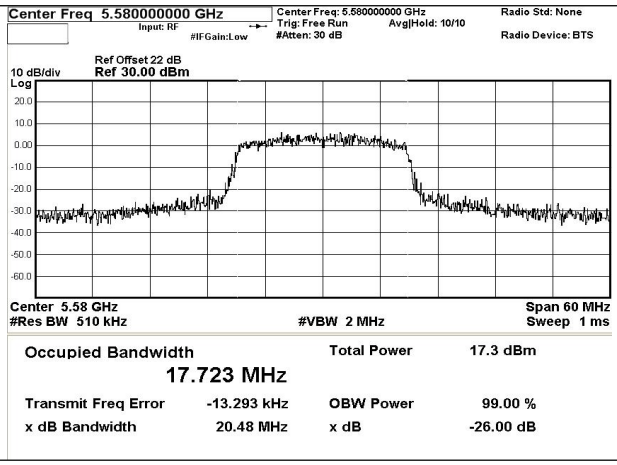


Mode:802.11n HT20 Frequency:5700MHz Ant:Chain1

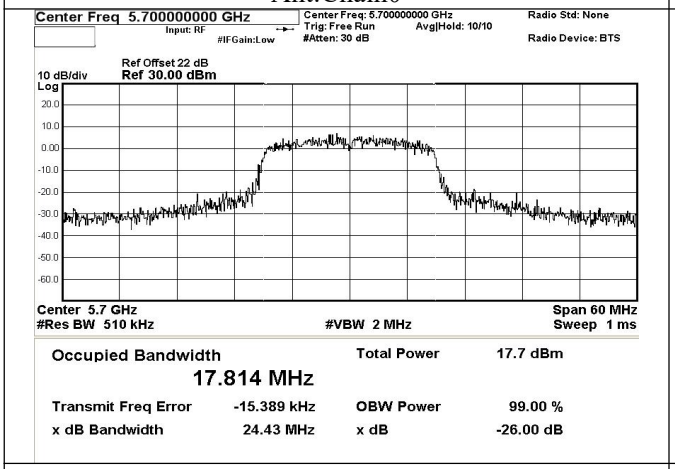
Test Mode: 802.11ac VHT20



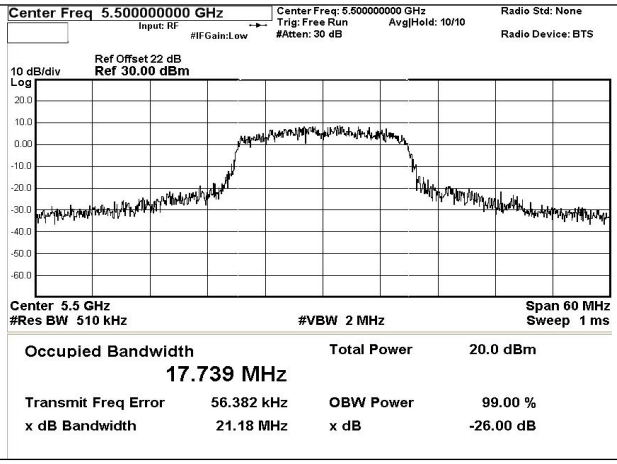
Mode:802.11ac VHT20 Frequency:5500MHz
Ant:Chain0



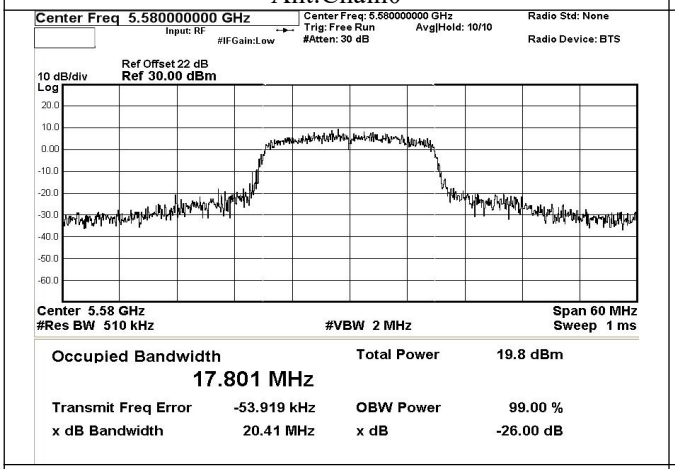
Mode:802.11ac VHT20 Frequency:5580MHz
Ant:Chain0



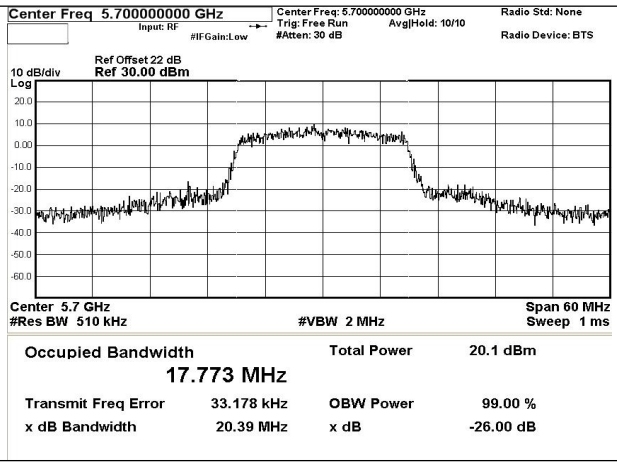
Mode:802.11ac VHT20 Frequency:5700MHz
Ant:Chain0



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

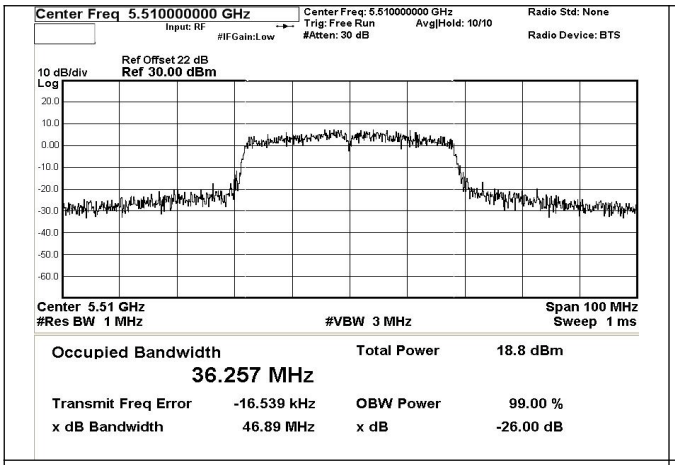


Mode:802.11ac VHT20 Frequency:5580MHz
Ant:Chain1

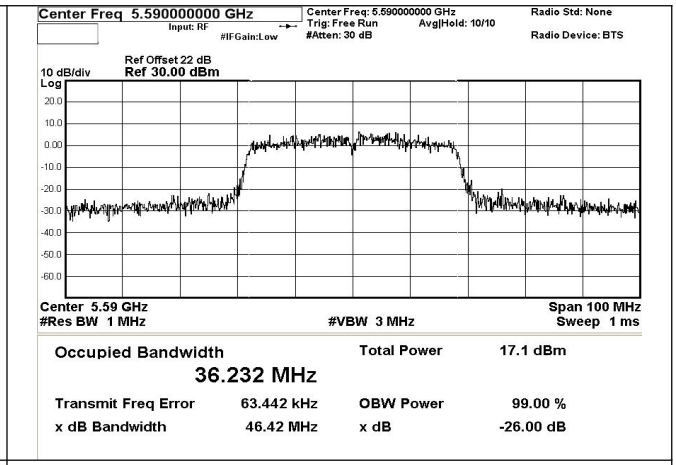


Mode:802.11ac VHT20 Frequency:5700MHz
Ant:Chain1

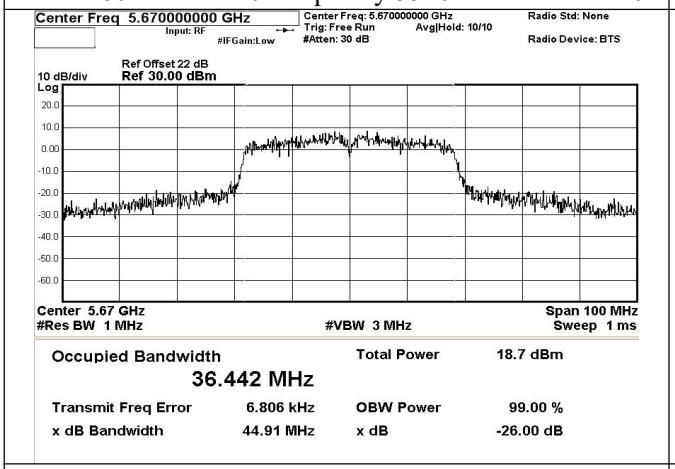
Test Mode: 802.11n HT40



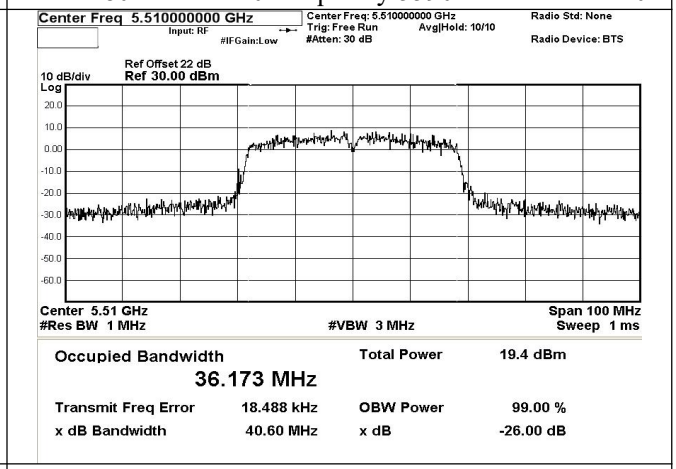
Mode:802.11n HT40 Frequency:5510MHz Ant:Chain0



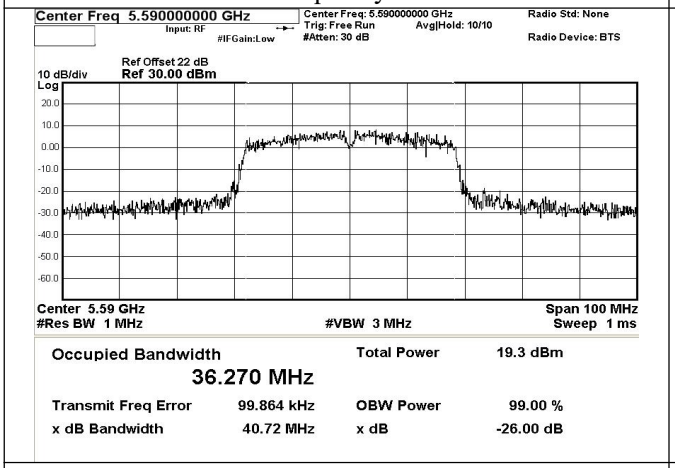
Mode:802.11n HT40 Frequency:5590MHz Ant:Chain0



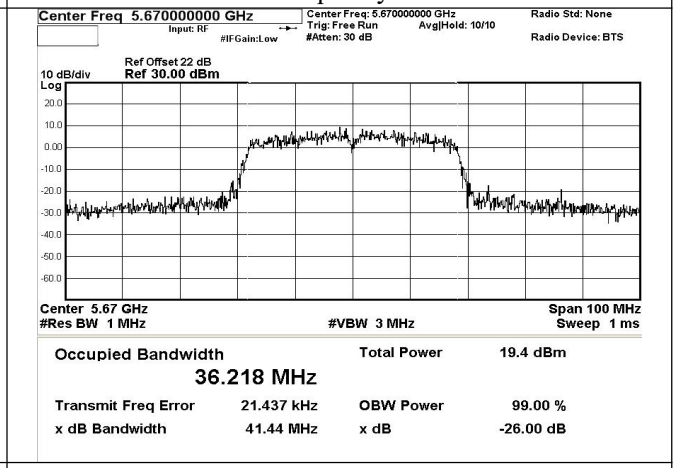
Mode:802.11n HT40 Frequency:5670MHz Ant:Chain0



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

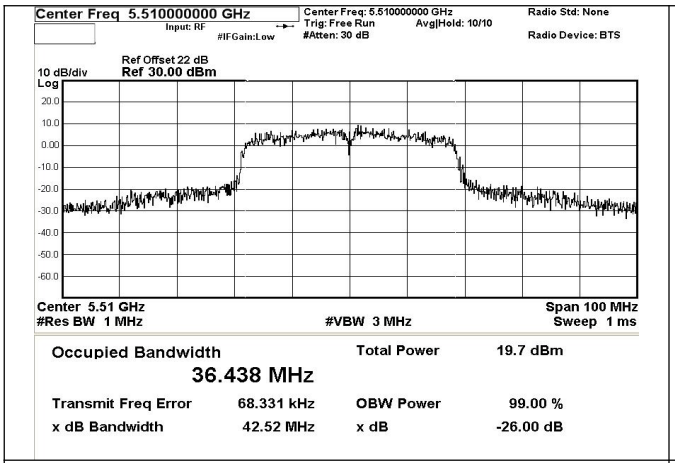


Mode:802.11n HT40 Frequency:5590MHz Ant:Chain1

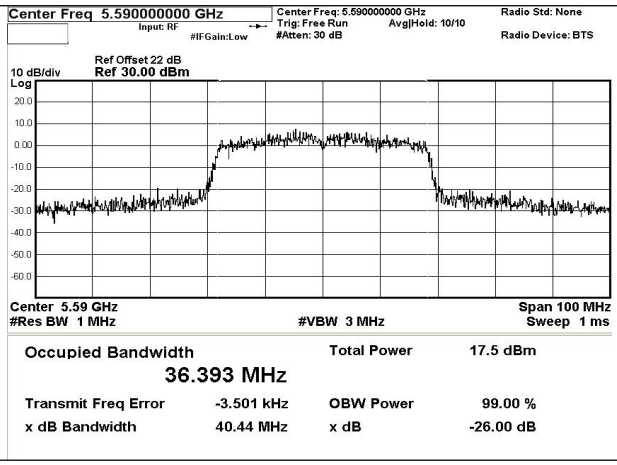


Mode:802.11n HT40 Frequency:5670MHz Ant:Chain1

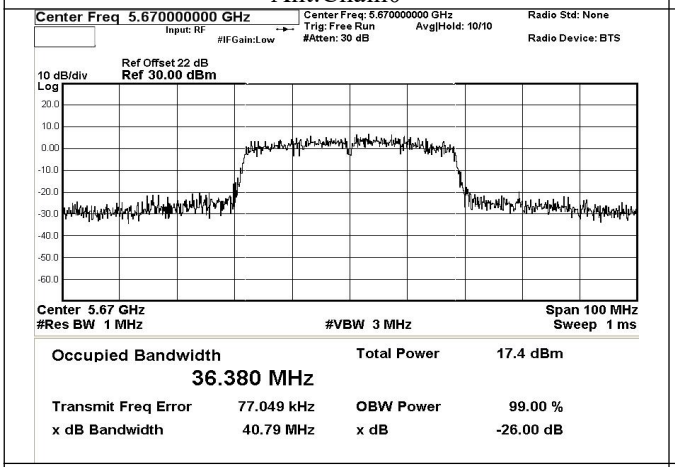
Test Mode: 802.11ac VHT40



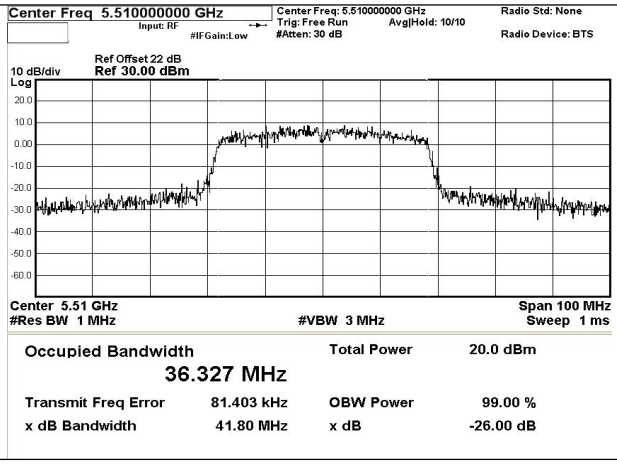
Mode:802.11ac VHT40 Frequency:5510MHz
Ant:Chain0



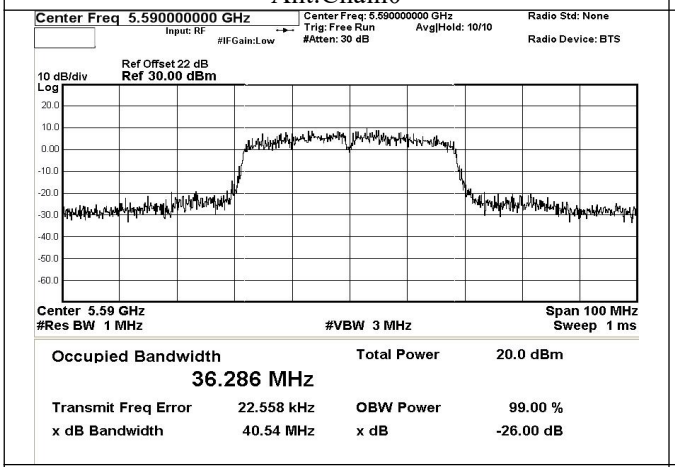
Mode:802.11ac VHT40 Frequency:5590MHz
Ant:Chain0



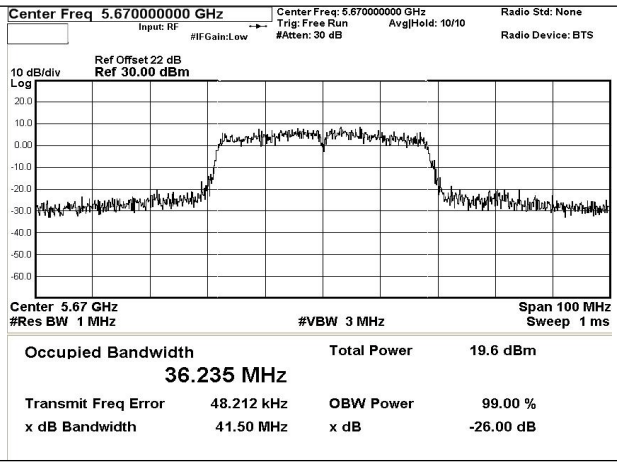
Mode:802.11ac VHT40 Frequency:5670MHz
Ant:Chain0



Mode:802.11ac VHT40 Frequency:5510MHz
Ant:Chain1

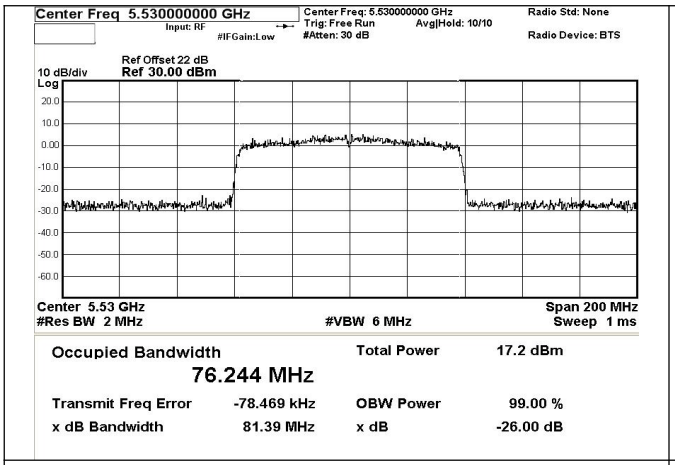


Mode:802.11ac VHT40 Frequency:5590MHz
Ant:Chain1

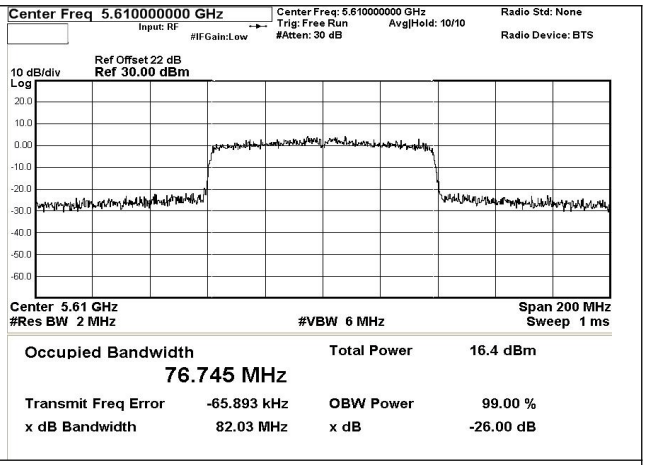


Mode:802.11ac VHT40 Frequency:5670MHz
Ant:Chain1

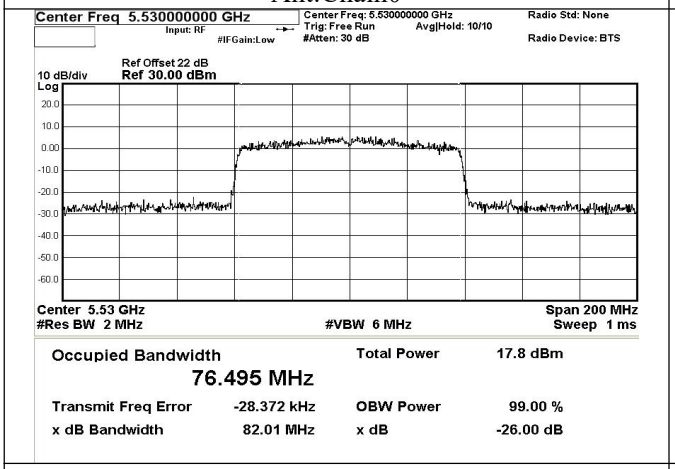
Test Mode: 802.11ac VHT80



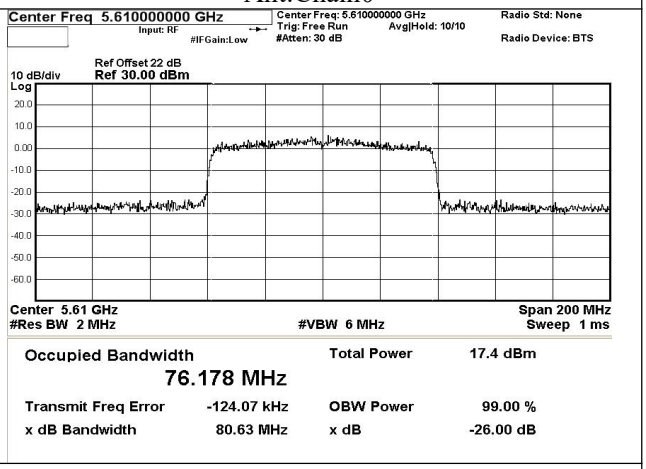
Mode:802.11ac VHT80 Frequency:5530MHz
Ant:Chain0



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



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



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

Occupied Bandwidth

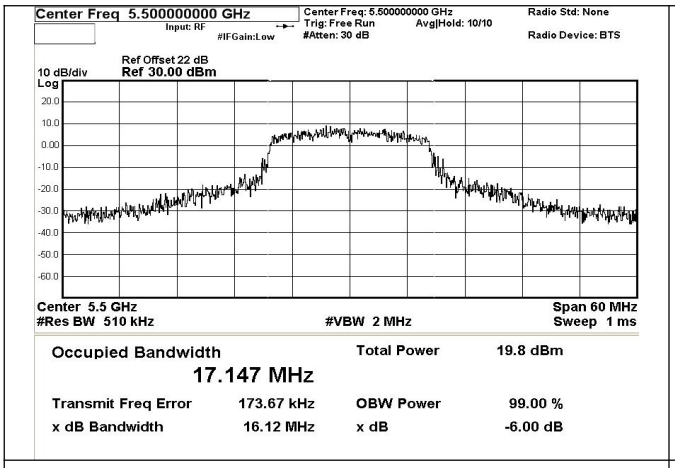
Offset 22dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5500MHz	5580MHz	5700MHz
802.11a	Chain0	17.147	16.805	16.839
802.11a	Chain1	16.586	16.669	16.922
802.11n HT20	Chain0	17.924	17.921	18.028
802.11n HT20	Chain1	17.808	17.850	17.726
802.11ac VHT20	Chain0	17.695	17.828	17.890
802.11ac VHT20	Chain1	17.809	17.791	17.756

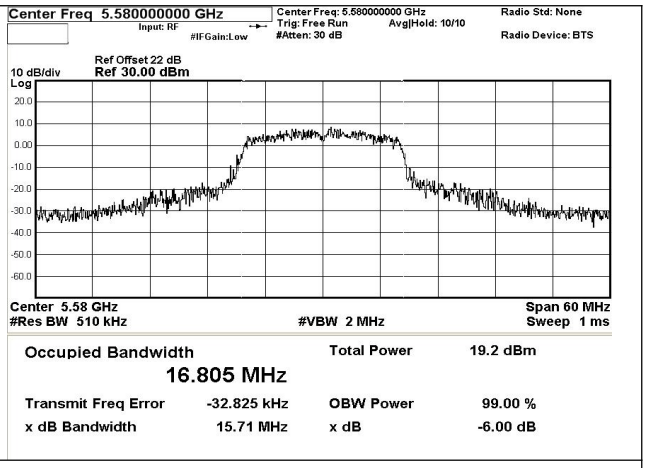
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5510MHz	5590MHz	5670MHz
802.11n HT40	Chain0	36.541	36.383	36.508
802.11n HT40	Chain1	36.249	36.307	36.205
802.11ac VHT40	Chain0	36.470	36.372	36.371
802.11ac VHT40	Chain1	36.188	36.189	36.412

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5530MHz	---	5610MHz
802.11ac VHT80	Chain0	76.329	---	76.619
802.11ac VHT80	Chain1	76.258	---	76.176

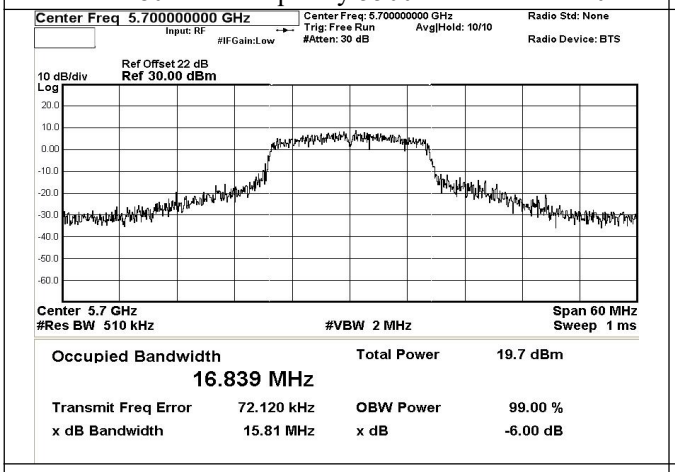
Test Mode: 802.11a



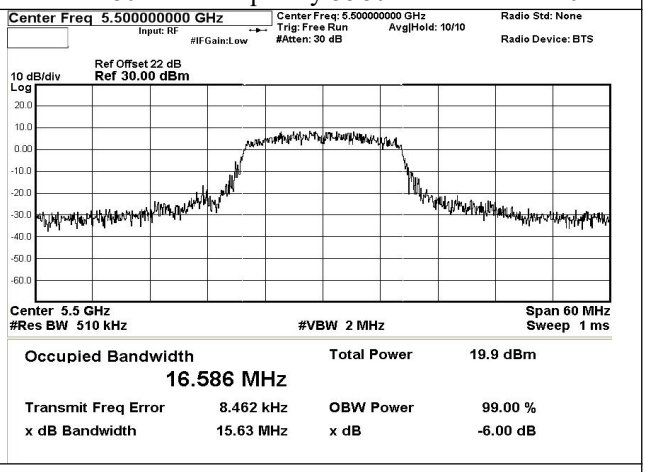
Mode:802.11a Frequency:5500MHz Ant:Chain0



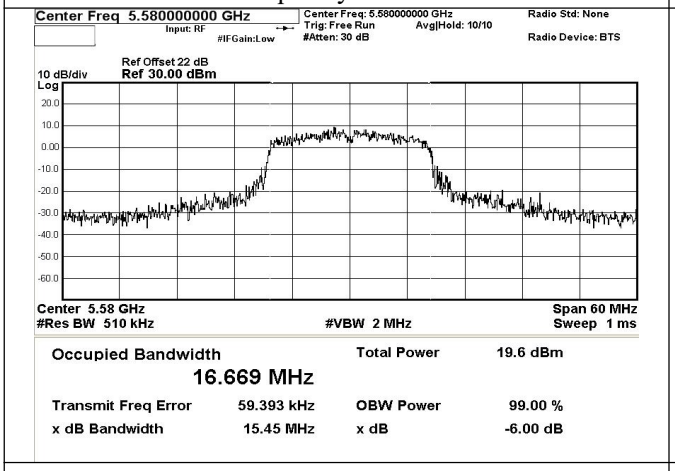
Mode:802.11a Frequency:5580MHz Ant:Chain0



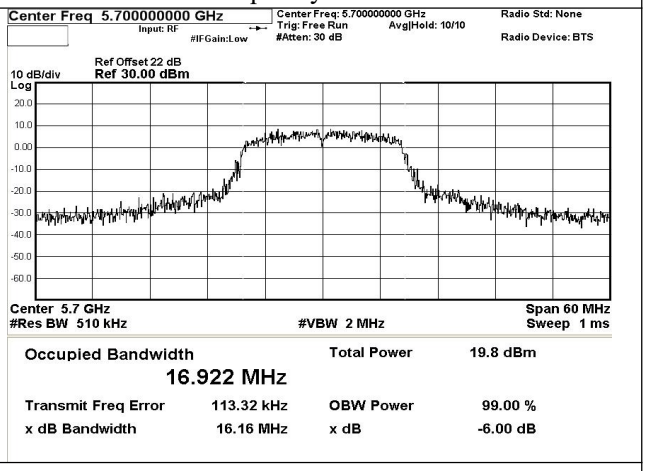
Mode:802.11a Frequency:5700MHz Ant:Chain0



Mode:802.11a Frequency:5500MHz Ant:Chain1



Mode:802.11a Frequency:5580MHz Ant:Chain1



Mode:802.11a Frequency:5700MHz Ant:Chain1