

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5180	98.76%	0	Fig.1
802.11n HT20	5180	99.57%	0	Fig.2
802.11ac VHT20	5180	99.86%	0	Fig.3
802.11ax HE20	5180	99.81%	0	Fig.4
802.11n HT40	5190	99.86%	0	Fig.5
802.11ac VHT40	5190	99.72%	0	Fig.6
802.11ax HE40	5190	99.81%	0	Fig.7

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

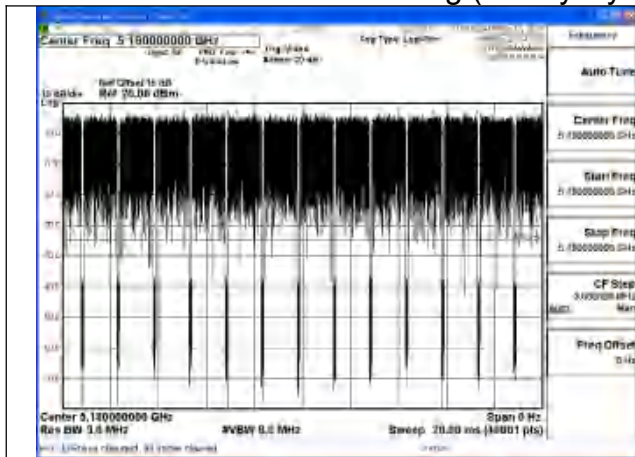


Fig.1

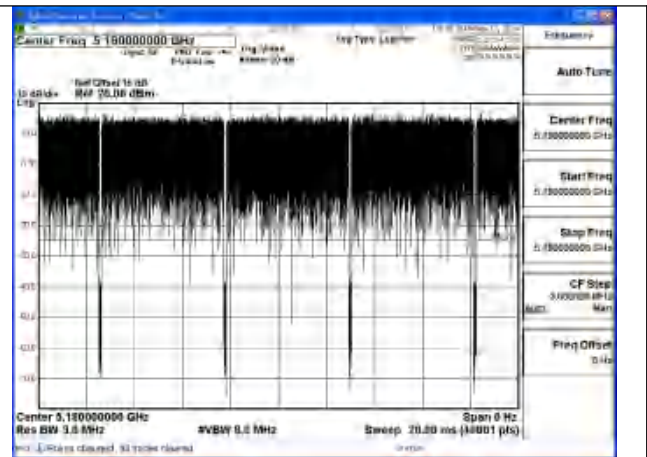


Fig.2

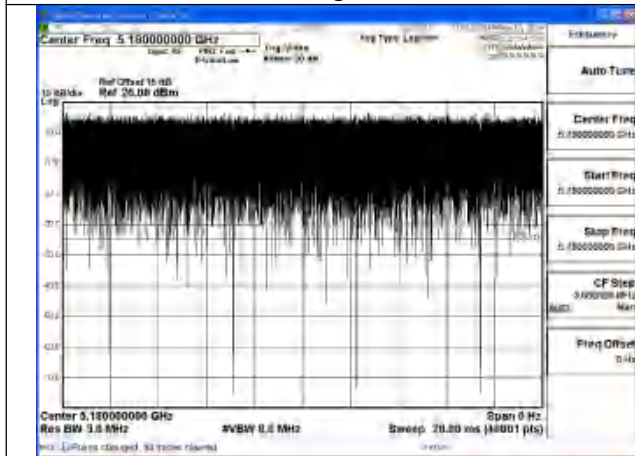


Fig.3

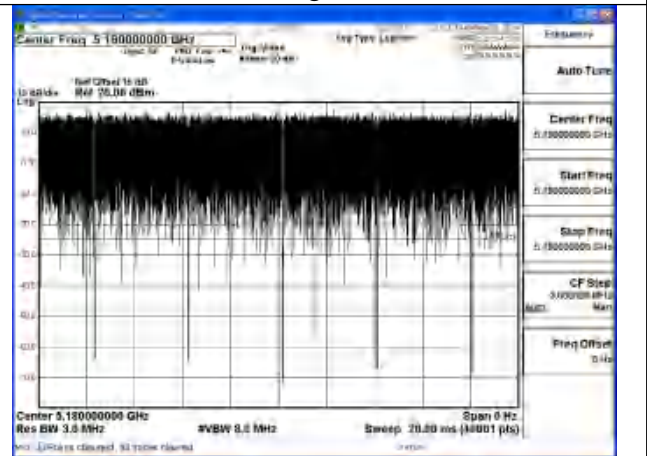


Fig.4

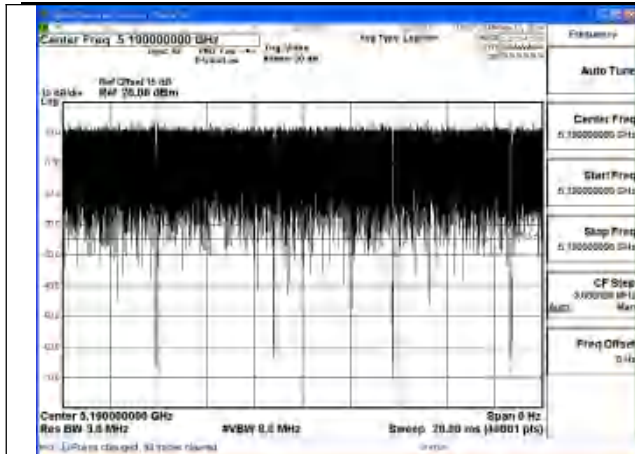


Fig.5

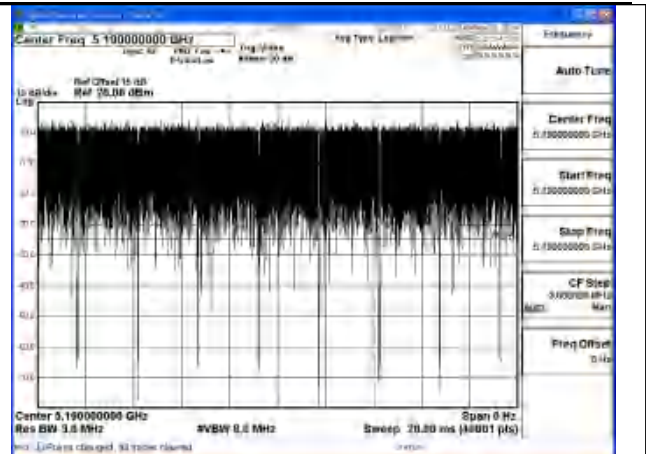


Fig.6

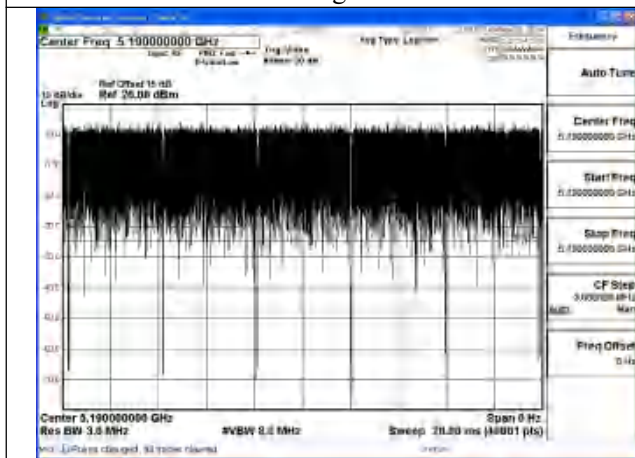


Fig.7



Output Power

Mode	Tones/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Chain0	14.57	16.38
802.11a	NA	5220	Chain0	14.70	16.51
802.11a	NA	5240	Chain0	14.46	16.27
802.11n HT20	NA	5180	Chain0	14.54	16.35
802.11n HT20	NA	5220	Chain0	14.66	16.47
802.11n HT20	NA	5240	Chain0	14.47	16.28
802.11ac VHT20	NA	5180	Chain0	14.12	15.93
802.11ac VHT20	NA	5220	Chain0	14.48	16.29
802.11ac VHT20	NA	5240	Chain0	14.48	16.29
802.11n HT40	NA	5190	Chain0	14.22	16.03
802.11n HT40	NA	5230	Chain0	14.36	16.17
802.11ac VHT40	NA	5190	Chain0	15.27	17.08
802.11ac VHT40	NA	5230	Chain0	15.01	16.82

Mode	Tones/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11ax HE20	242T 61	5180	Chain0	14.80	16.61
802.11ax HE20	242T 61	5220	Chain0	15.12	16.93
802.11ax HE20	242T 61	5240	Chain0	15.03	16.84
802.11ax HE40	484T 65	5190	Chain0	14.63	16.44
802.11ax HE40	484T 65	5230	Chain0	14.93	16.74

Emission Bandwidth

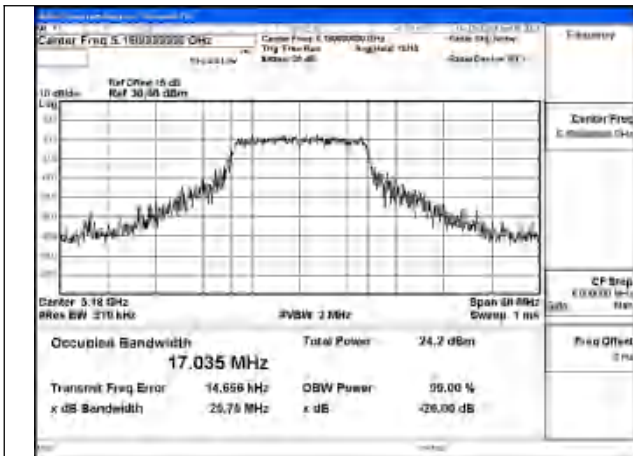
Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	25.75	25.47	23.58
802.11n HT20	Chain0	26.07	25.95	27.81
802.11ac VHT20	Chain0	26.95	25.75	28.35
802.11ax HE20	Chain0	23.19	23.95	23.95

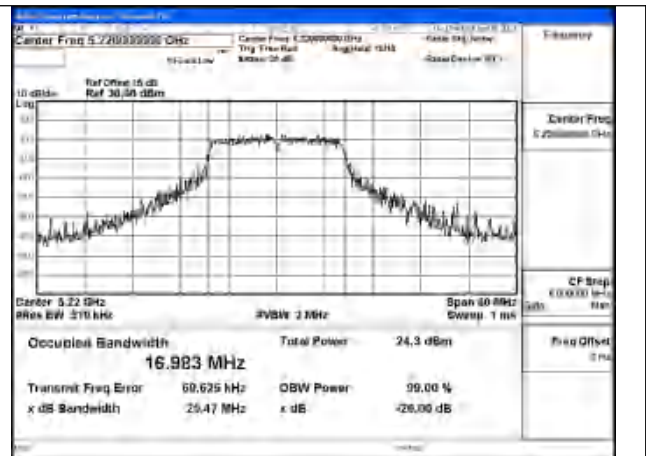
Test Mode	Antenna	26dB Bandwidth (MHz)		
		5190MHz	---	5230MHz
802.11n HT40	Chain0	49.29	---	44.64
802.11ac VHT40	Chain0	48.24	---	44.92
802.11ax HE40	Chain0	45.26	---	46.73



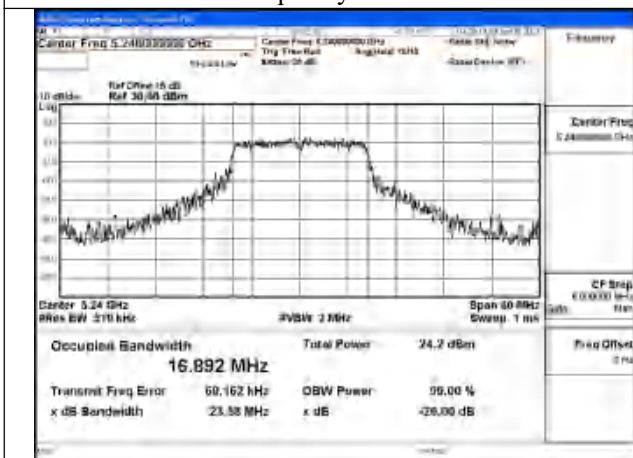
Test Mode: 802.11a



Mode:802.11a Frequency:5180MHz Ant:Chain0

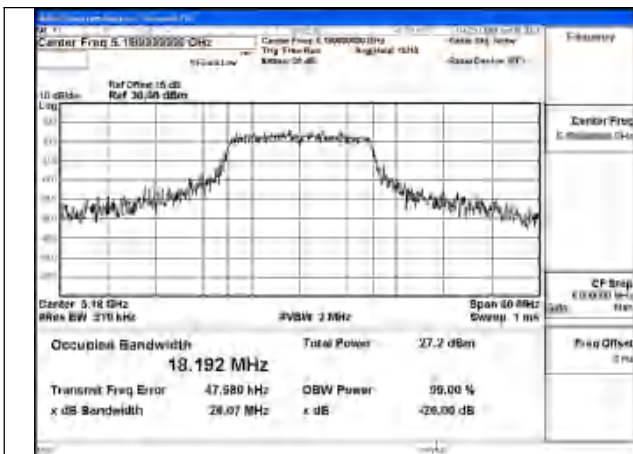


Mode:802.11a Frequency:5220MHz Ant:Chain0

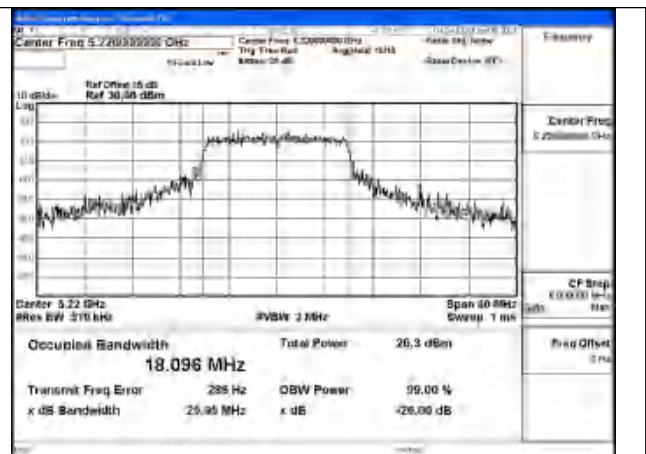


Mode:802.11a Frequency:5240MHz Ant:Chain0

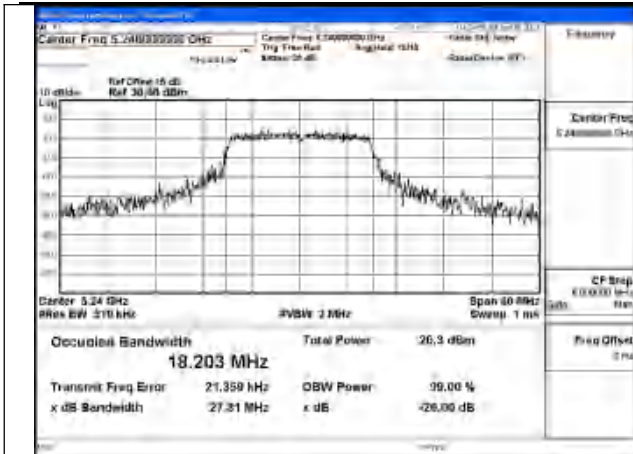
Test Mode: 802.11n HT20



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

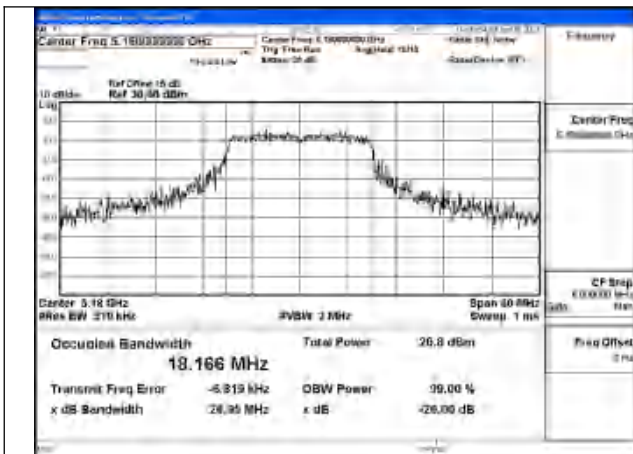


Mode:802.11n HT20 Frequency:5220MHz Ant:Chain0

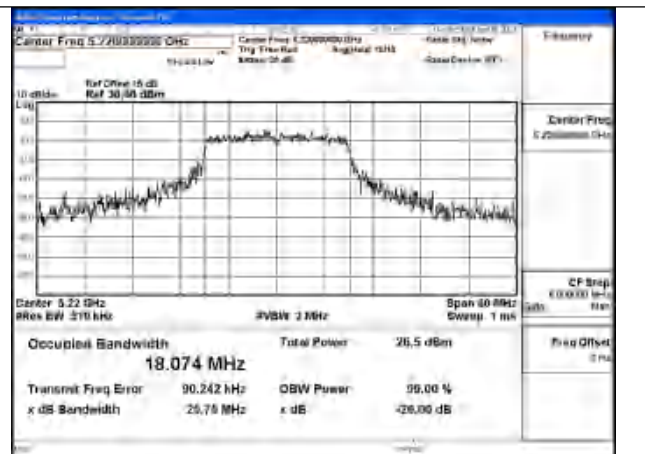


Mode:802.11n HT20 Frequency:5240MHz Ant:Chain0

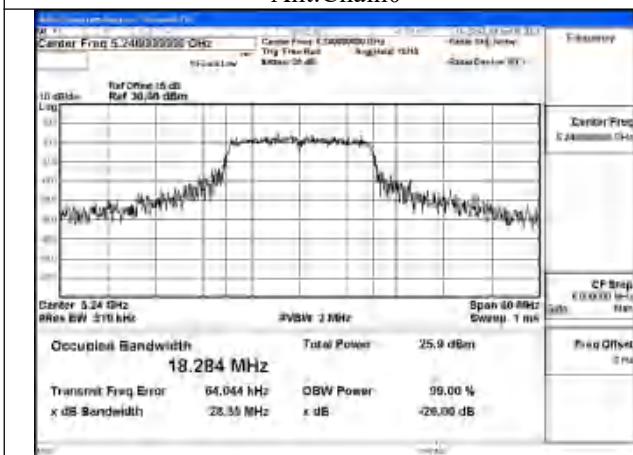
Test Mode: 802.11ac VHT20



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



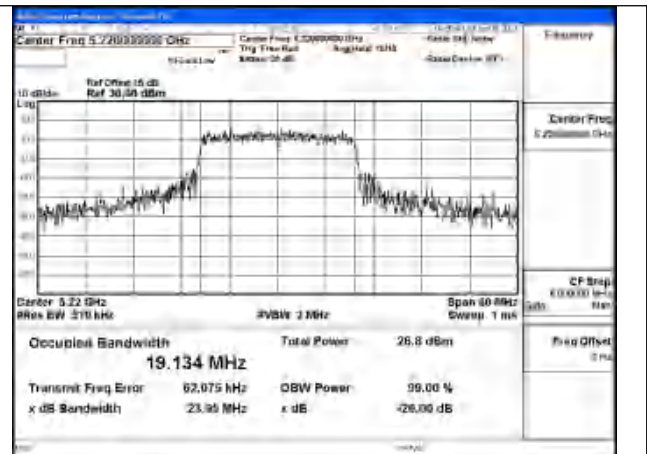
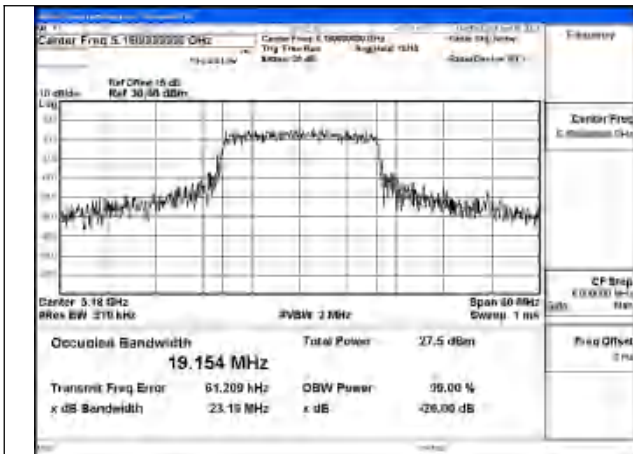
Mode:802.11ac VHT20 Frequency:5220MHz
Ant:Chain0



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

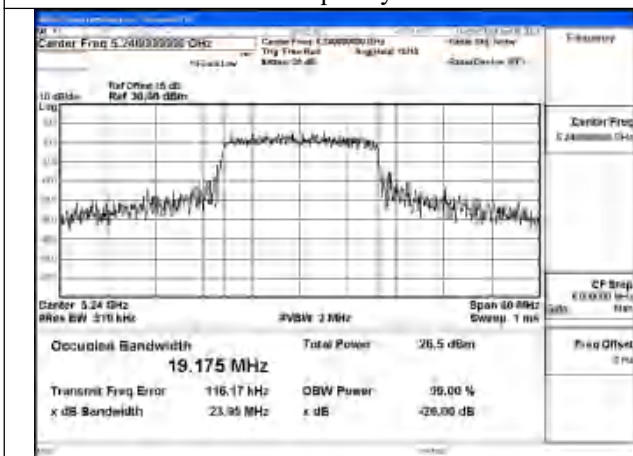


Test Mode: 802.11ax HE20



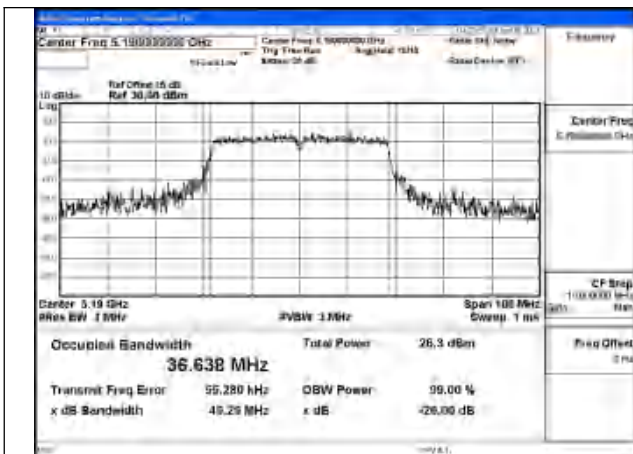
Mode:802.11ax HE20 Frequency:5180MHz Ant:Chain0

Mode:802.11ax HE20 Frequency:5220MHz Ant:Chain0

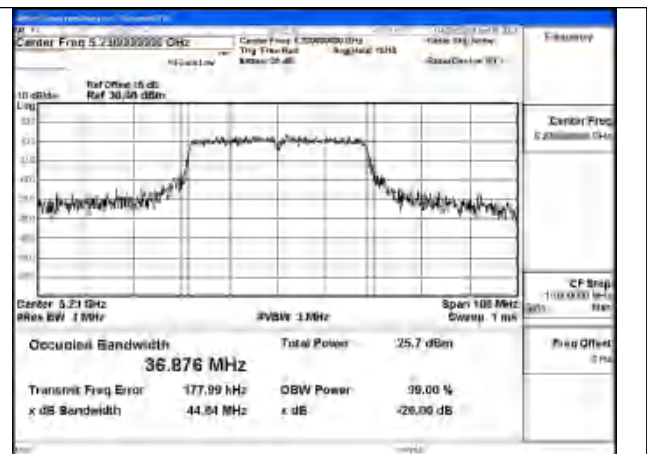


Mode:802.11ax HE20 Frequency:5240MHz Ant:Chain0

Test Mode: 802.11n HT40



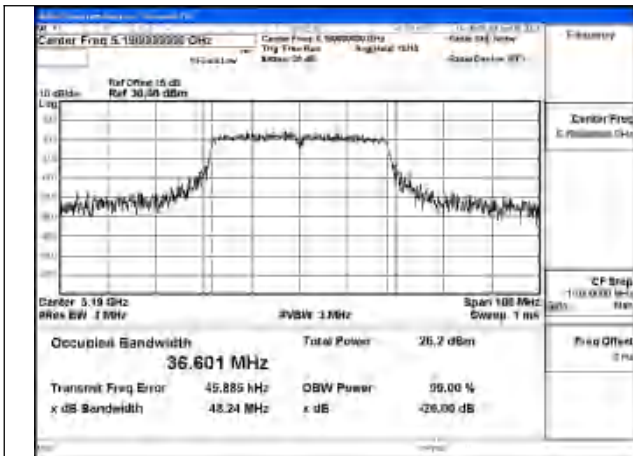
Mode:802.11n HT40 Frequency:5190MHz Ant:Chain0



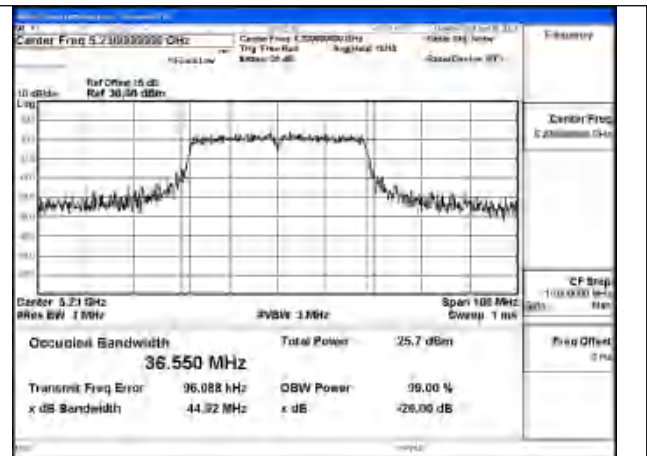
Mode:802.11n HT40 Frequency:5230MHz Ant:Chain0



Test Mode: 802.11ac VHT40

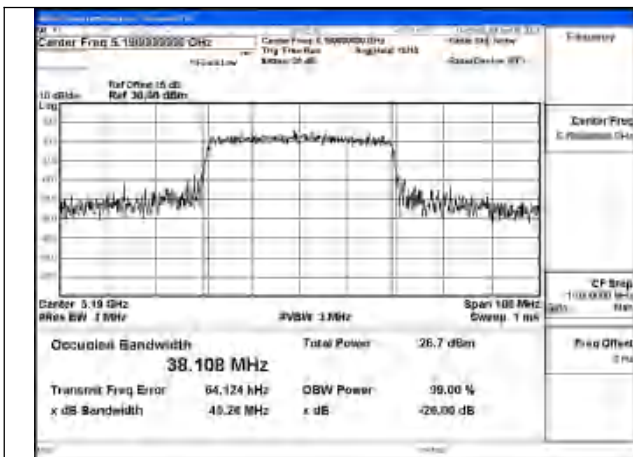


Mode:802.11ac VHT40 Frequency:5190MHz
Ant:Chain0

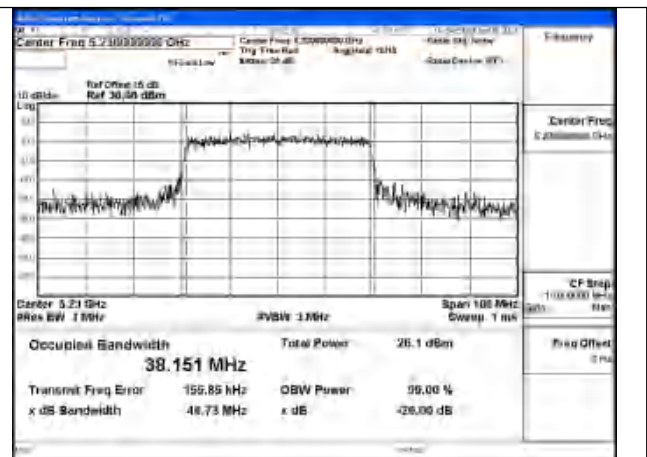


Mode:802.11ac VHT40 Frequency:5230MHz
Ant:Chain0

Test Mode: 802.11ax HE40



Mode:802.11ax HE40 Frequency:5190MHz Ant:Chain0



Mode:802.11ax HE40 Frequency:5230MHz Ant:Chain0



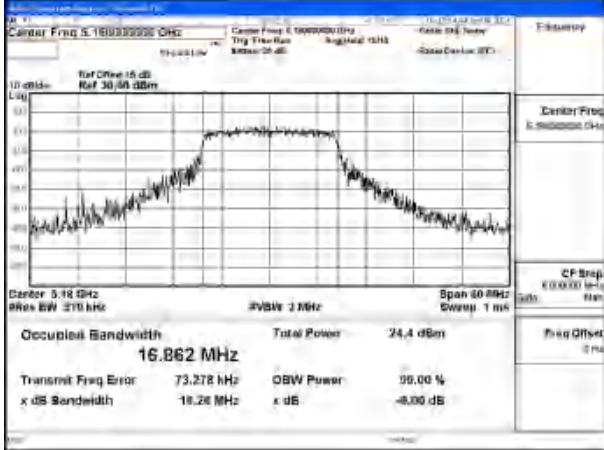
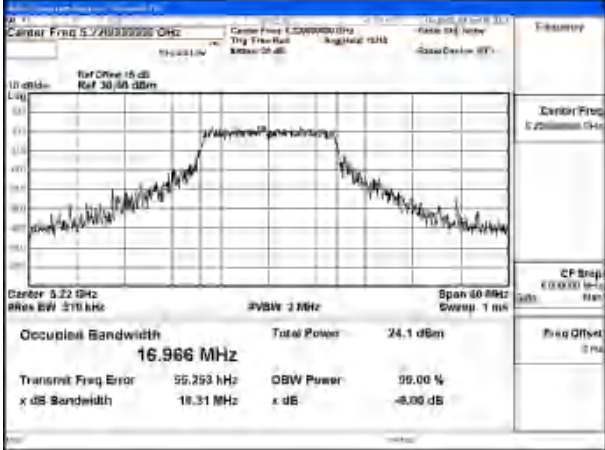
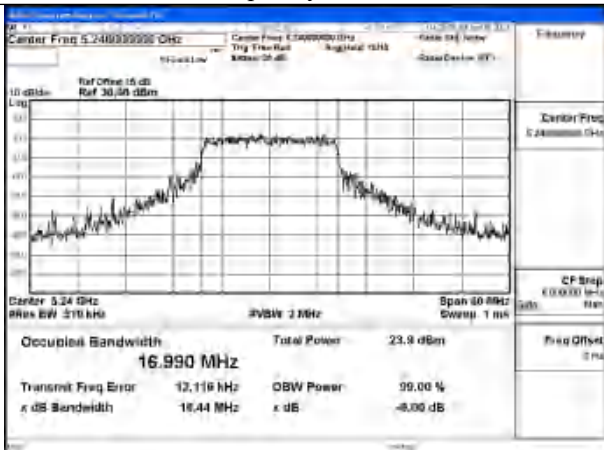
Occupied Bandwidth

Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5180MHz	5220MHz	5240MHz
802.11a	Chain0	16.862	16.966	16.990
802.11n HT20	Chain0	18.162	18.229	18.288
802.11ac VHT20	Chain0	17.980	18.215	18.211
802.11ax HE20	Chain0	19.137	19.198	19.175

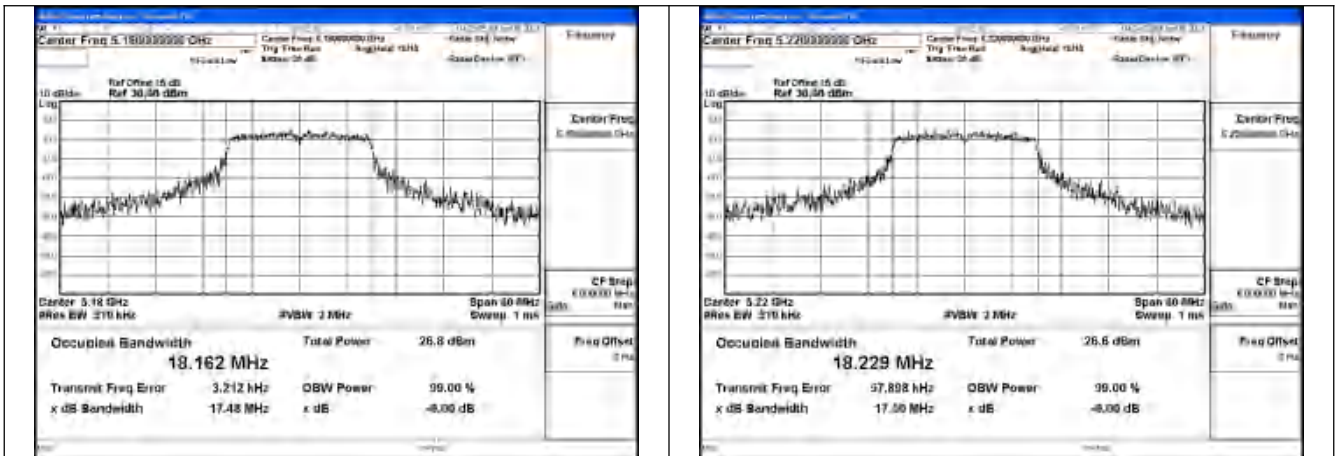
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5190MHz	---	5230MHz
802.11n HT40	Chain0	36.652	---	36.775
802.11ac VHT40	Chain0	36.634	---	36.722
802.11ax HE40	Chain0	38.199	---	38.189

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	

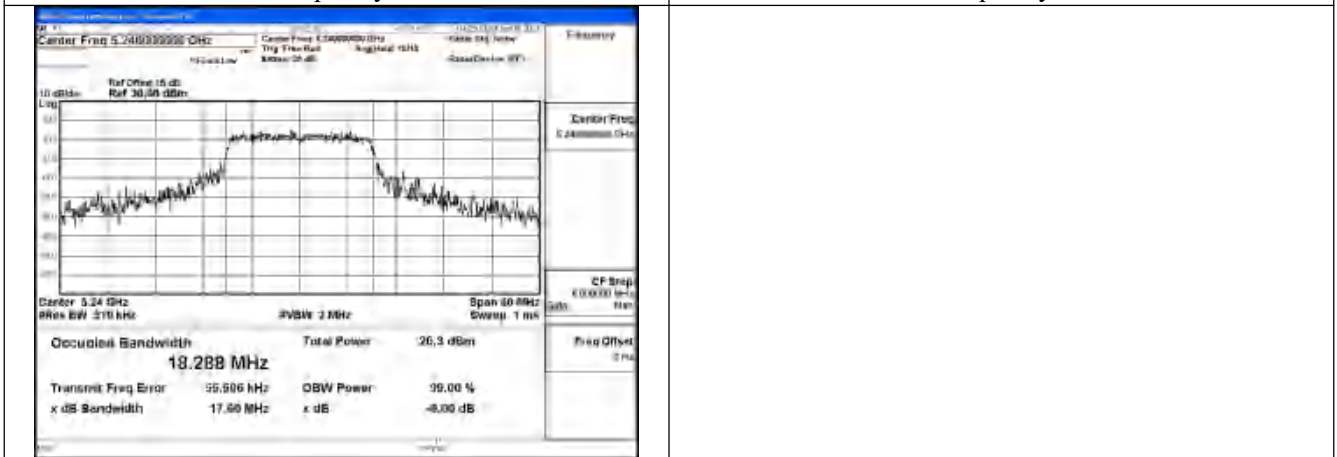


Test Mode: 802.11n HT20



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

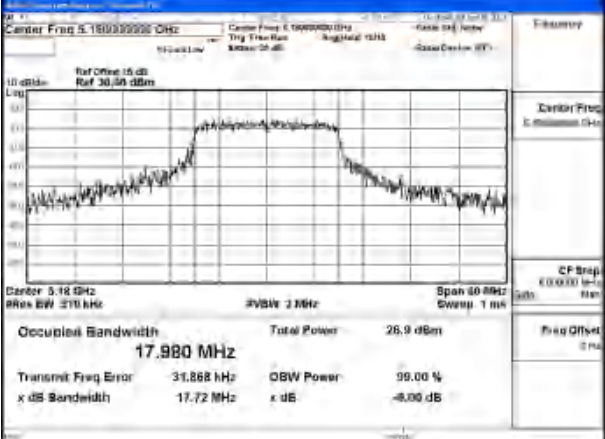
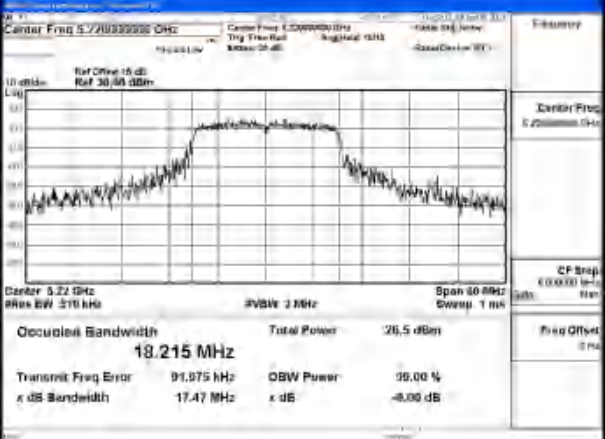
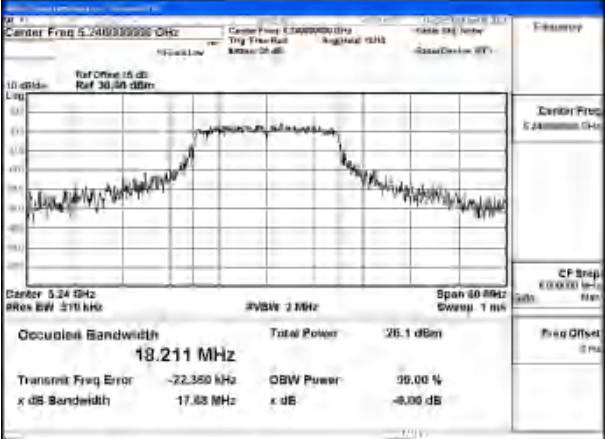
Mode:802.11n HT20 Frequency:5220MHz Ant:Chain0



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

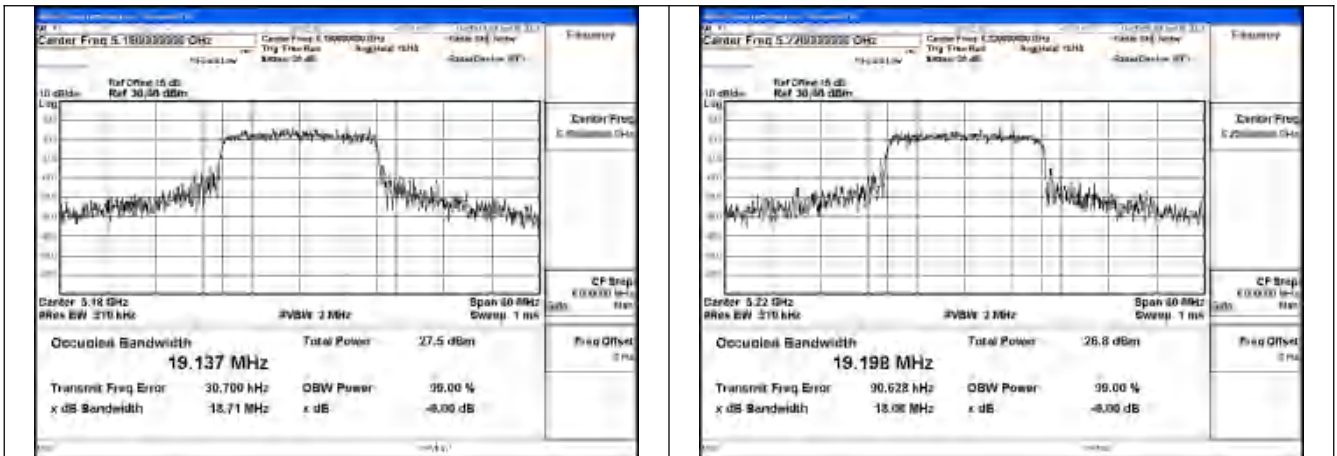


Test Mode: 802.11ac VHT20

 Mode:802.11ac VHT20 Frequency:5180MHz Ant:Chain0	 Mode:802.11ac VHT20 Frequency:5220MHz Ant:Chain0
 Mode:802.11ac VHT20 Frequency:5240MHz Ant:Chain0	

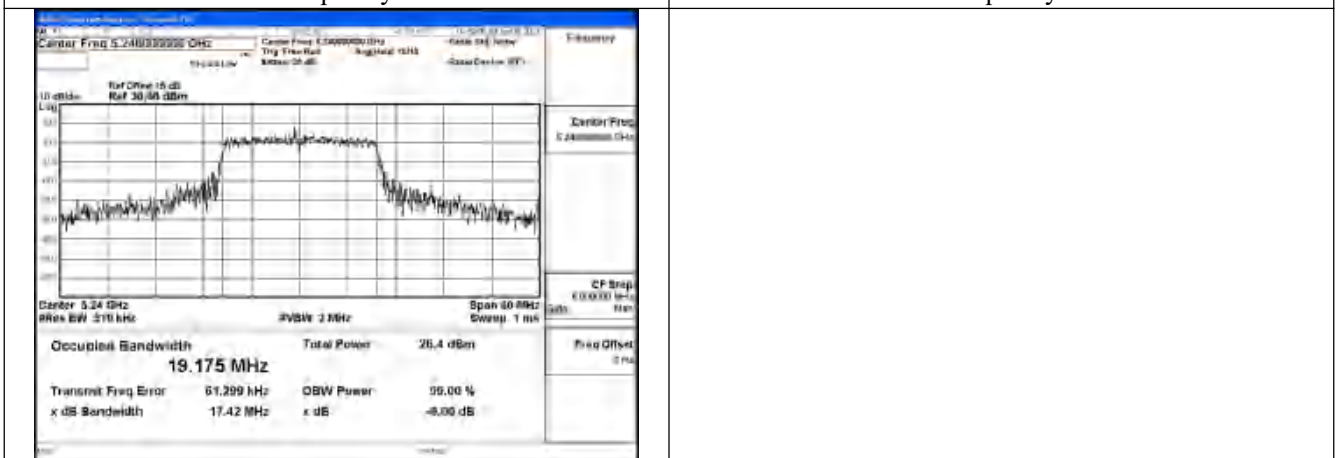


Test Mode: 802.11ax HE20



Mode:802.11ax HE20 Frequency:5180MHz Ant:Chain0

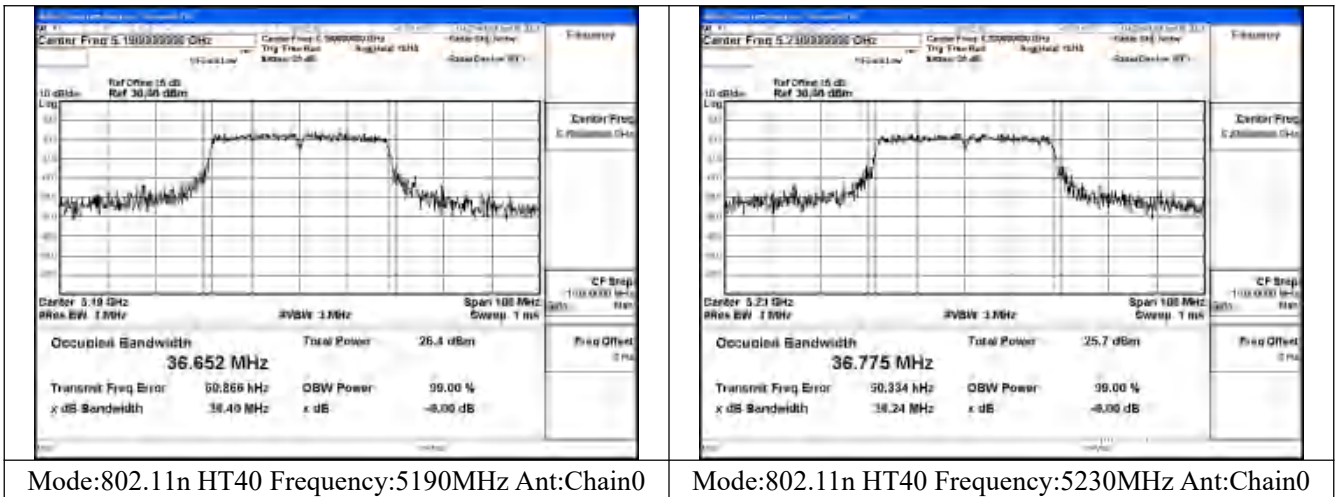
Mode:802.11ax HE20 Frequency:5220MHz Ant:Chain0



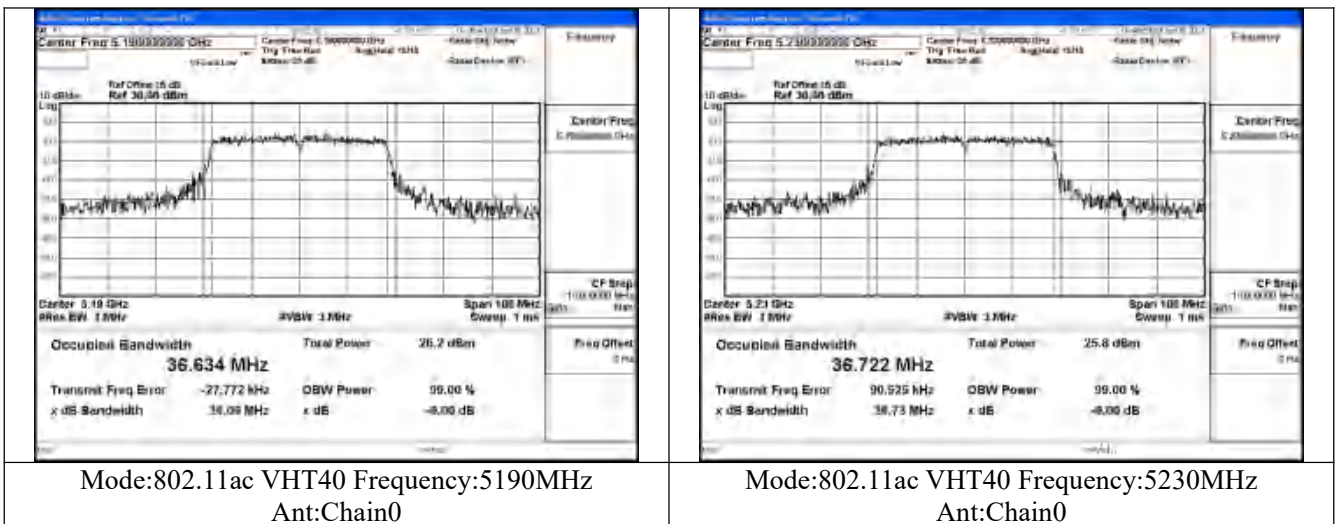
Mode:802.11ax HE20 Frequency:5240MHz Ant:Chain0



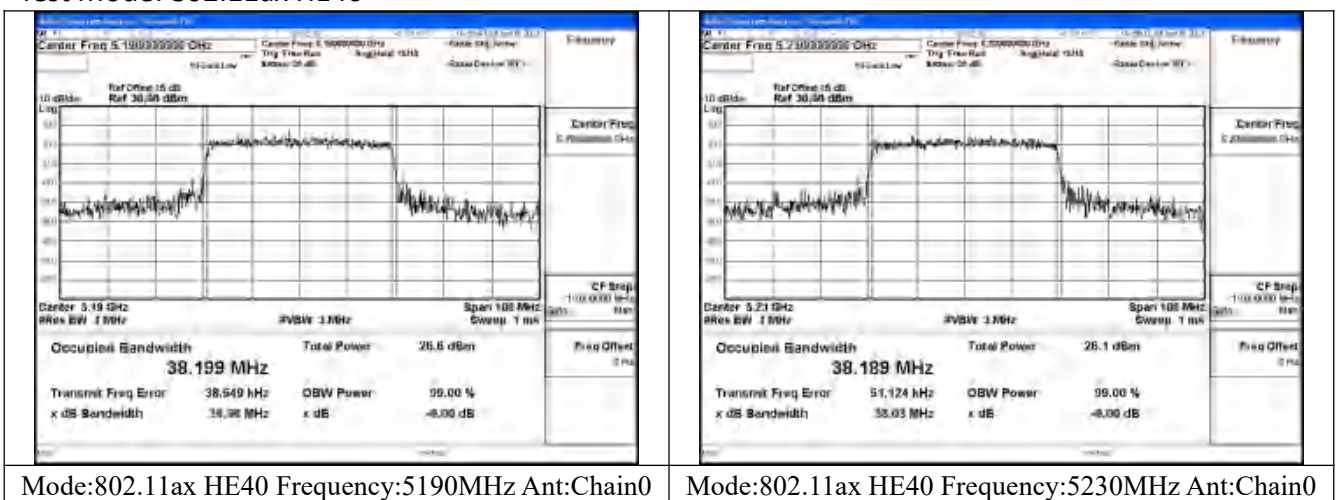
Test Mode: 802.11n HT40



Test Mode: 802.11ac VHT40



Test Mode: 802.11ax HE40





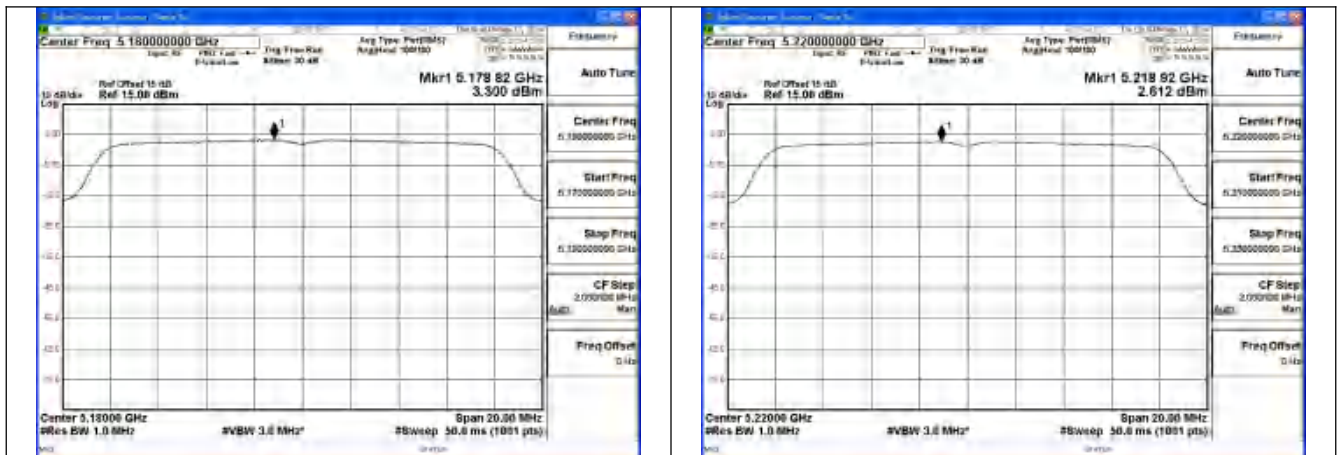
Transmitter Power Spectral Density

Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Tones	5180MHz		5220MHz		5240MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11a	Chain0	NA	0.00	3.300	0.00	2.612	0.00	3.277
802.11n HT20	Chain0	NA	0.00	2.826	0.00	2.713	0.00	2.681
802.11ac VHT20	Chain0	NA	0.00	2.466	0.00	2.911	0.00	2.620
802.11ax HE20	Chain0	242T	0.00	2.930	0.00	3.245	0.00	3.230

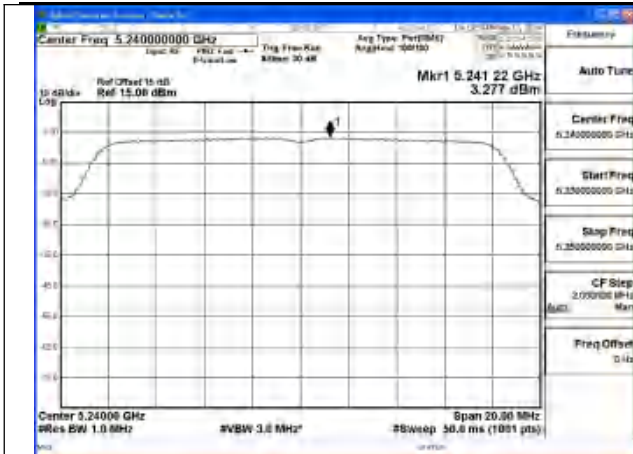
Test Mode	Antenna	Tones	5190MHz		---		5230MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11n HT40	Chain0	NA	0.00	-0.470	---	---	0.00	-0.495
802.11ac VHT40	Chain0	NA	0.00	0.495	---	---	0.00	0.496
802.11ax HE40	Chain0	484T	0.00	-2.982	---	---	0.00	-3.026

Test Mode: 802.11a



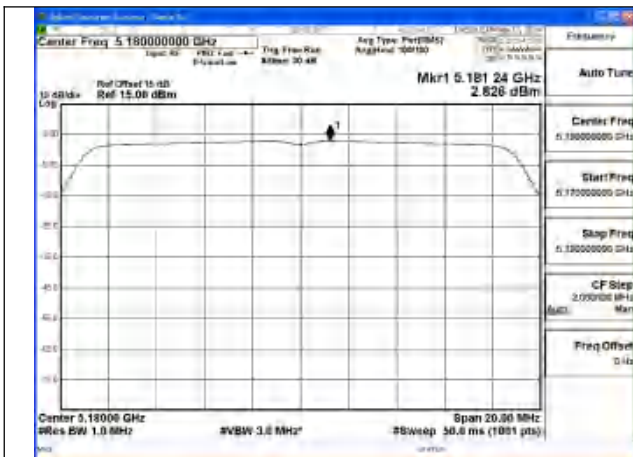
Mode:802.11a Frequency:5180MHz Ant:Chain0

Mode:802.11a Frequency:5220MHz Ant:Chain0

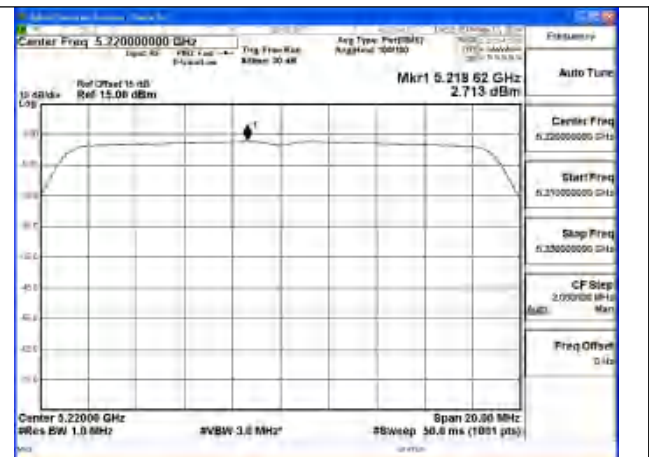


Mode:802.11a Frequency:5240MHz Ant:Chain0

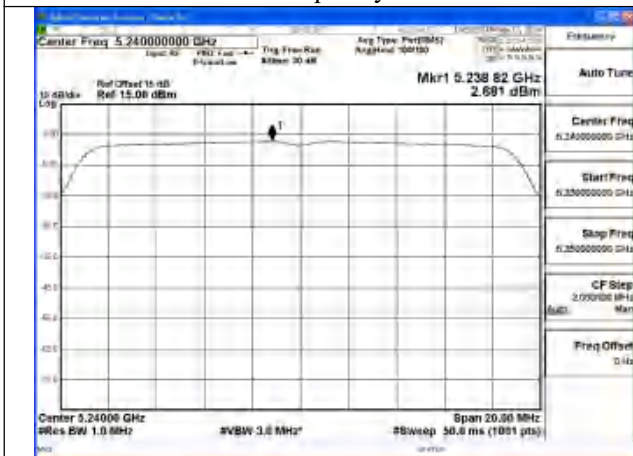
Test Mode: 802.11n HT20



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

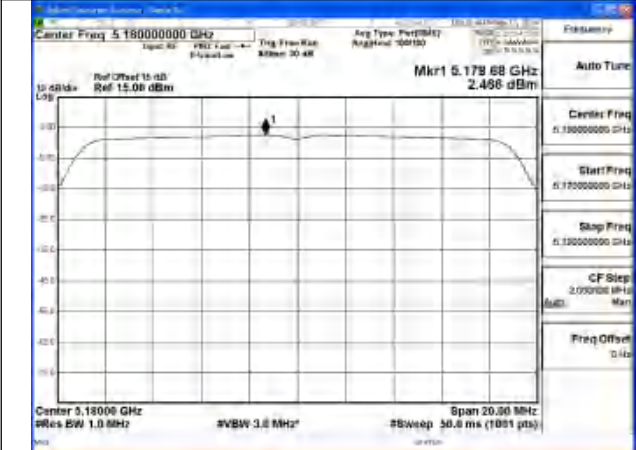
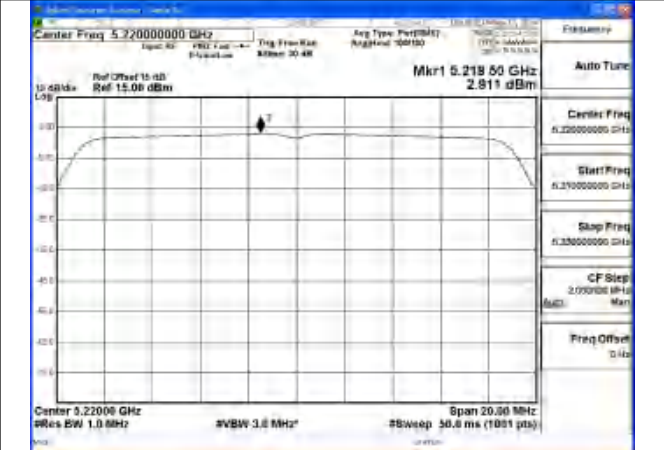
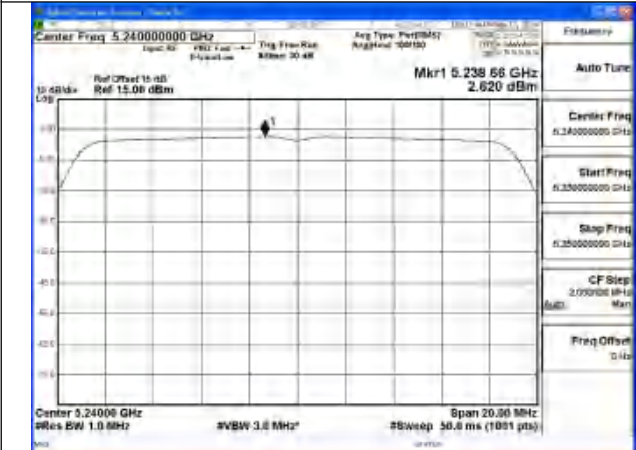


Mode:802.11n HT20 Frequency:5220MHz Ant:Chain0

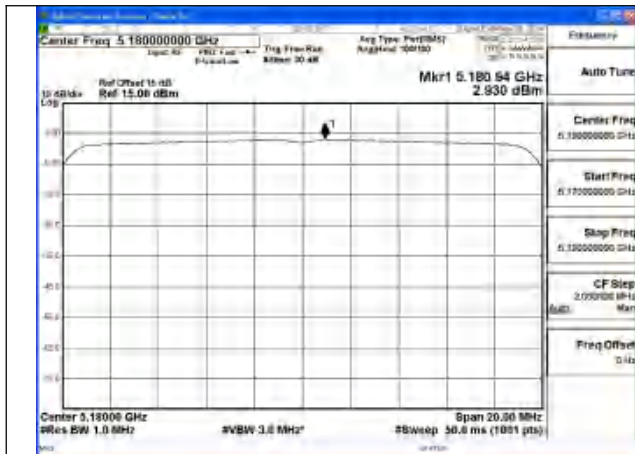


Mode:802.11n HT20 Frequency:5240MHz Ant:Chain0

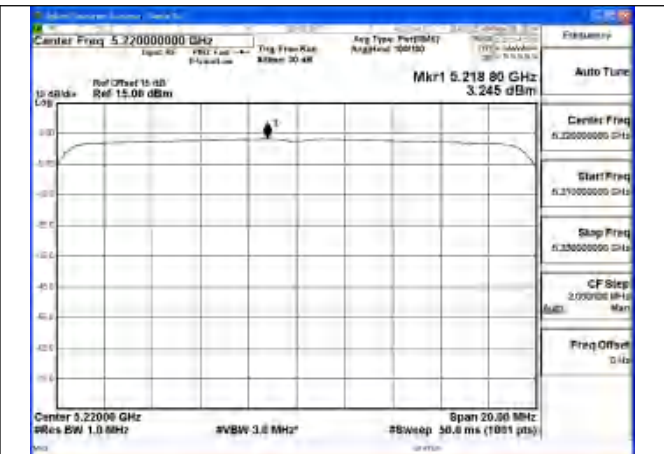
Test Mode: 802.11ac VHT20

	
Mode:802.11ac VHT20 Frequency:5180MHz Ant:Chain0	Mode:802.11ac VHT20 Frequency:5220MHz Ant:Chain0
	
Mode:802.11ac VHT20 Frequency:5240MHz Ant:Chain0	

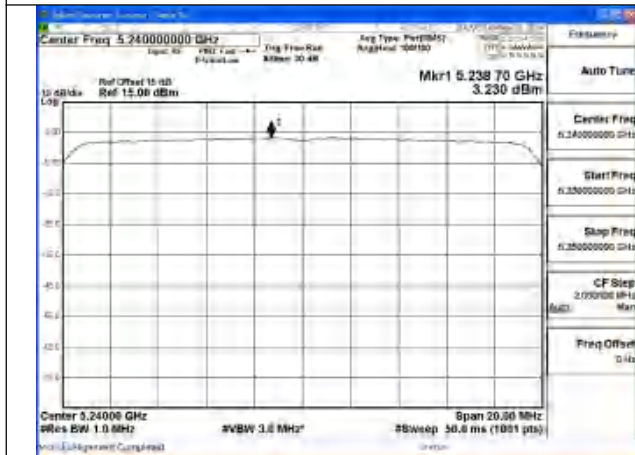
Test Mode: 802.11ax HE20



Mode:802.11ax HE20 Tone:242T Frequency:5180MHz
Ant:Chain0

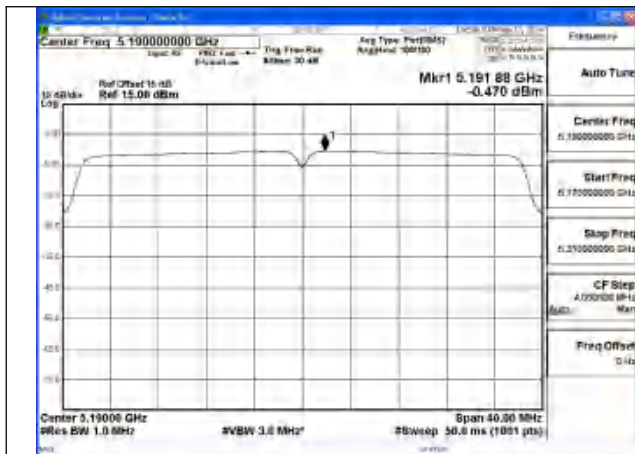


Mode:802.11ax HE20 Tone:242T Frequency:5220MHz
Ant:Chain0

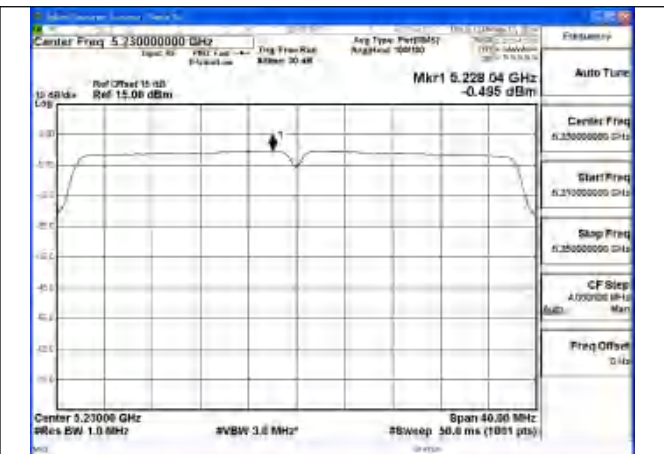


Mode:802.11ax HE20 Tone:242T Frequency:5240MHz
Ant:Chain0

Test Mode: 802.11n HT40

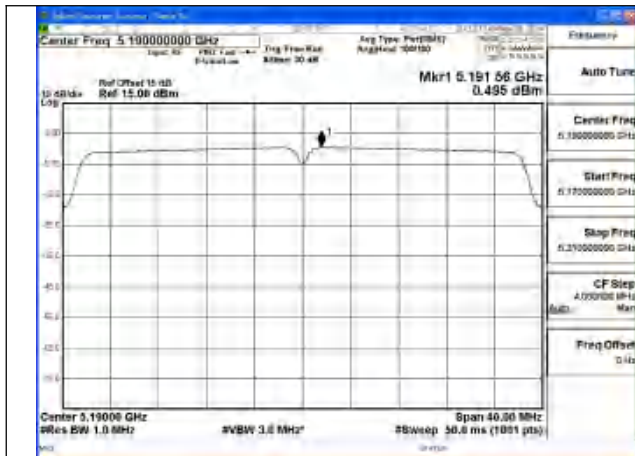


Mode:802.11n HT40 Frequency:5190MHz Ant:Chain0

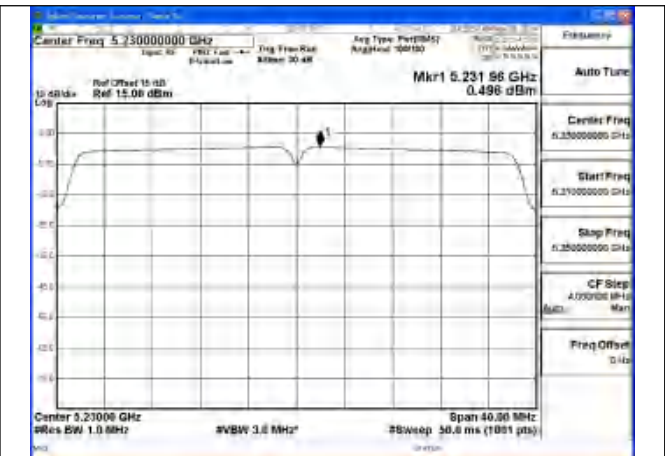


Mode:802.11n HT40 Frequency:5230MHz Ant:Chain0

Test Mode: 802.11ac VHT40

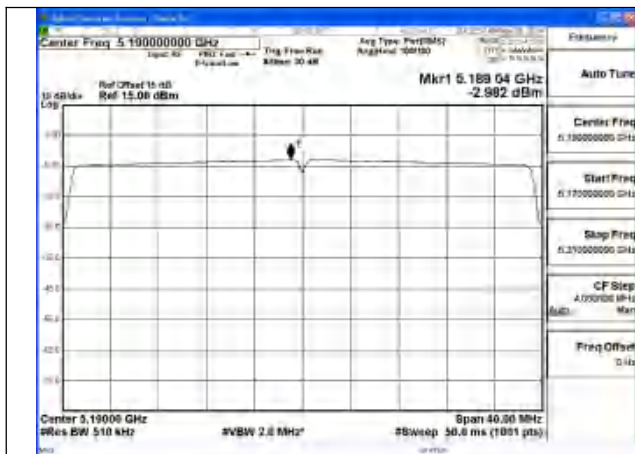


Mode:802.11ac VHT40 Frequency:5190MHz
Ant:Chain0

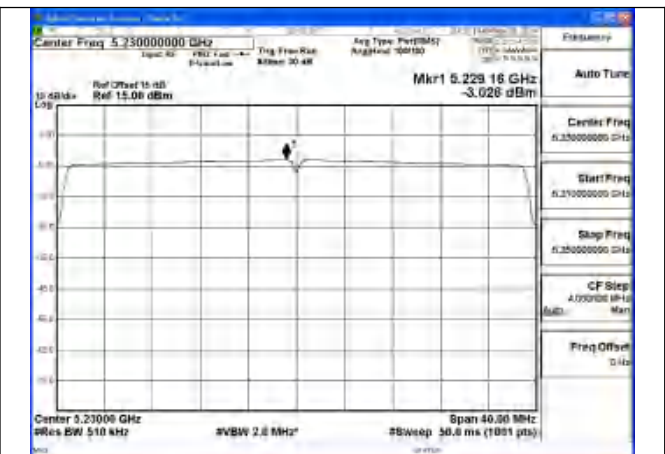


Mode:802.11ac VHT40 Frequency:5230MHz
Ant:Chain0

Test Mode: 802.11ax HE40



Mode:802.11ax HE40 Tone:484T Frequency:5190MHz
Ant:Chain0



Mode:802.11ax HE40 Tone:484T Frequency:5230MHz
Ant:Chain0