

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5745	98.87%	0	Fig.1
802.11n HT20	5745	99.93%	0	Fig.2
802.11ac VHT20	5745	99.91%	0	Fig.3
802.11ax HE20	5745	98.56%	0	Fig.4
802.11n HT40	5755	99.83%	0	Fig.5
802.11ac VHT40	5755	99.88%	0	Fig.6
802.11ax HE40	5755	99.52%	0	Fig.7

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

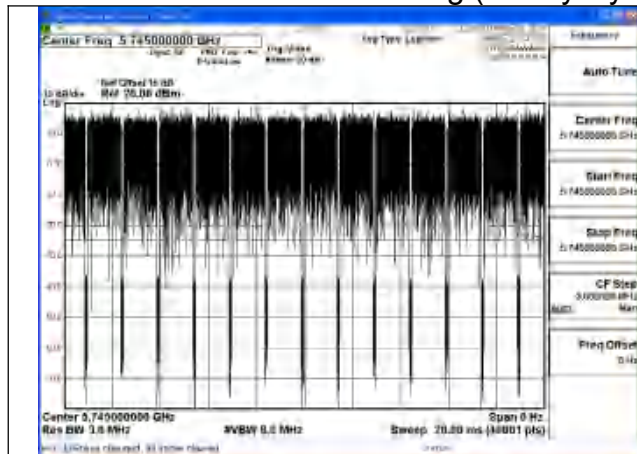


Fig.1

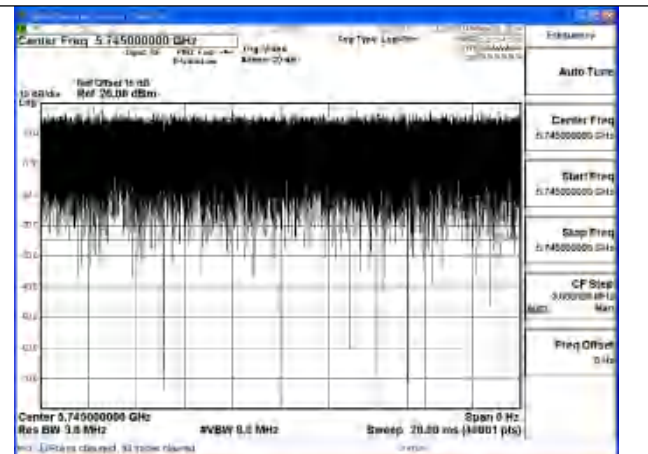


Fig.2

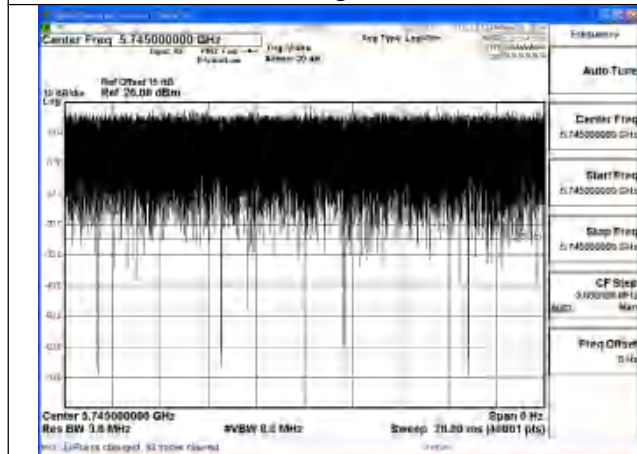


Fig.3

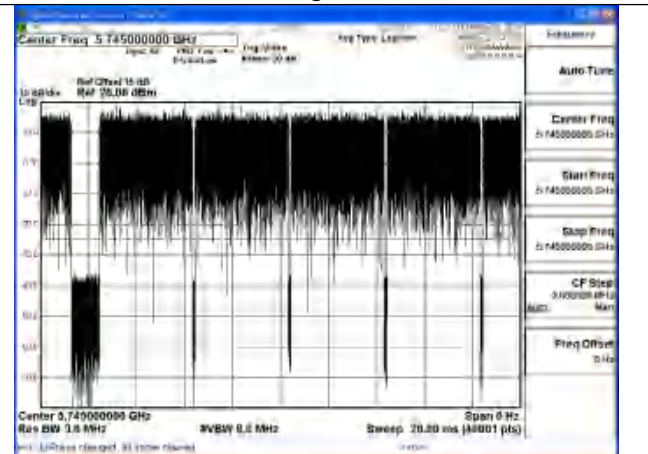


Fig.4

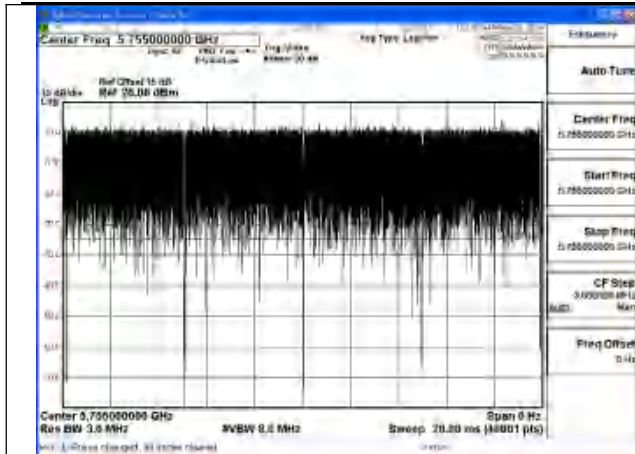


Fig.5

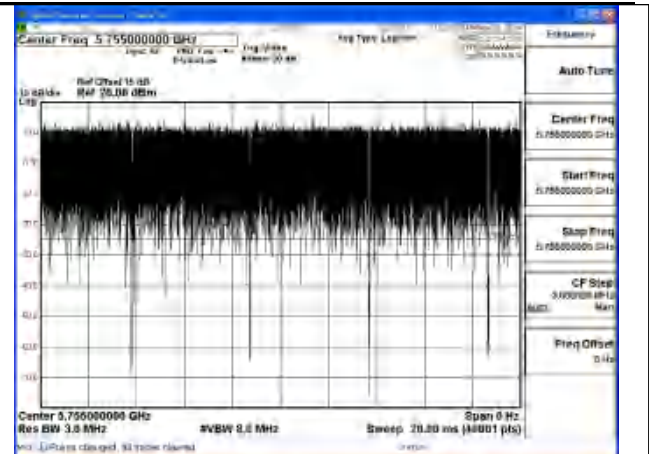


Fig.6

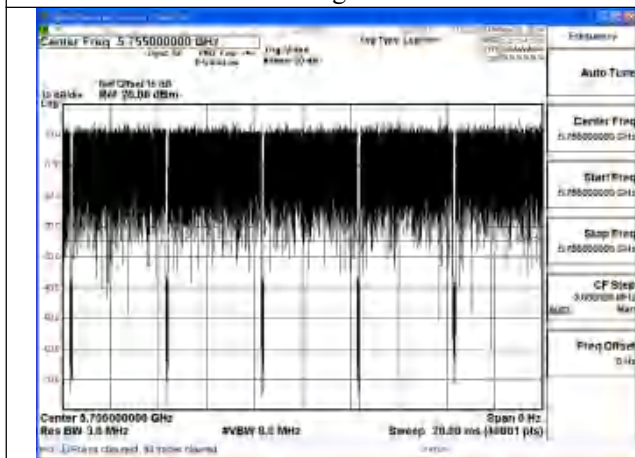


Fig.7



Output Power

Mode	Tones/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5745	Chain0	14.85	16.66
802.11a	NA	5785	Chain0	14.33	16.14
802.11a	NA	5825	Chain0	12.53	14.34
802.11n HT20	NA	5745	Chain0	15.46	17.27
802.11n HT20	NA	5785	Chain0	14.37	16.18
802.11n HT20	NA	5825	Chain0	13.00	14.81
802.11ac VHT20	NA	5745	Chain0	15.68	17.49
802.11ac VHT20	NA	5785	Chain0	14.93	16.74
802.11ac VHT20	NA	5825	Chain0	13.38	15.19
802.11n HT40	NA	5755	Chain0	14.43	16.24
802.11n HT40	NA	5795	Chain0	14.63	16.44
802.11ac VHT40	NA	5755	Chain0	15.51	17.32
802.11ac VHT40	NA	5795	Chain0	14.61	16.42

Mode	Tones/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11ax HE20	242T 61	5745	Chain0	15.58	17.39
802.11ax HE20	242T 61	5785	Chain0	14.89	16.70
802.11ax HE20	242T 61	5825	Chain0	12.81	14.62
802.11ax HE40	484T 65	5755	Chain0	15.00	16.81
802.11ax HE40	484T 65	5795	Chain0	14.07	15.88

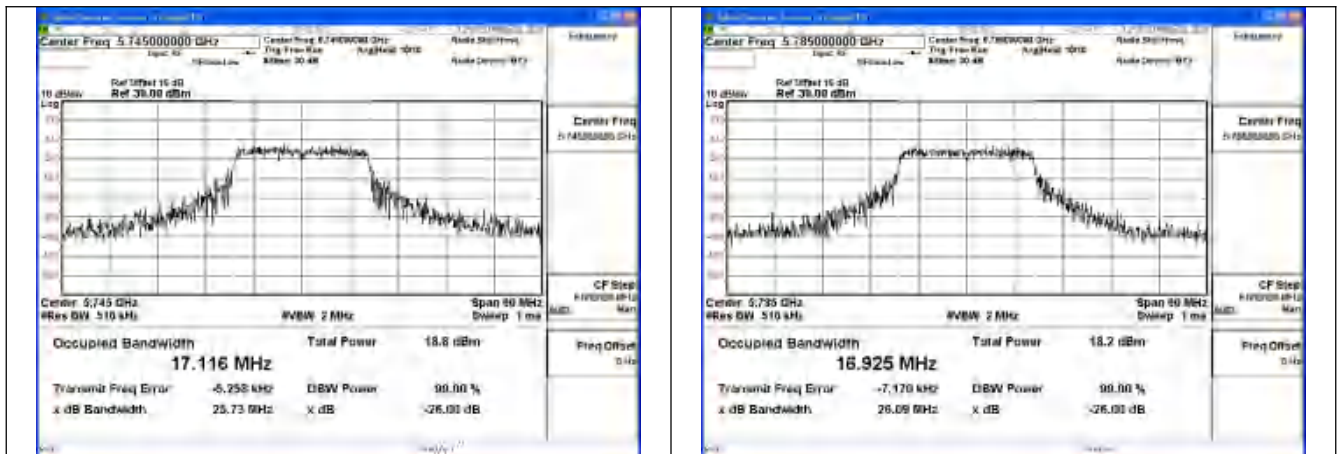
Emission Bandwidth

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

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5745MHz	5785MHz	5825MHz
802.11a	Chain0	25.73	26.09	26.97
802.11n HT20	Chain0	27.59	29.87	26.73
802.11ac VHT20	Chain0	26.49	26.19	27.62
802.11ax HE20	Chain0	24.53	25.77	25.80

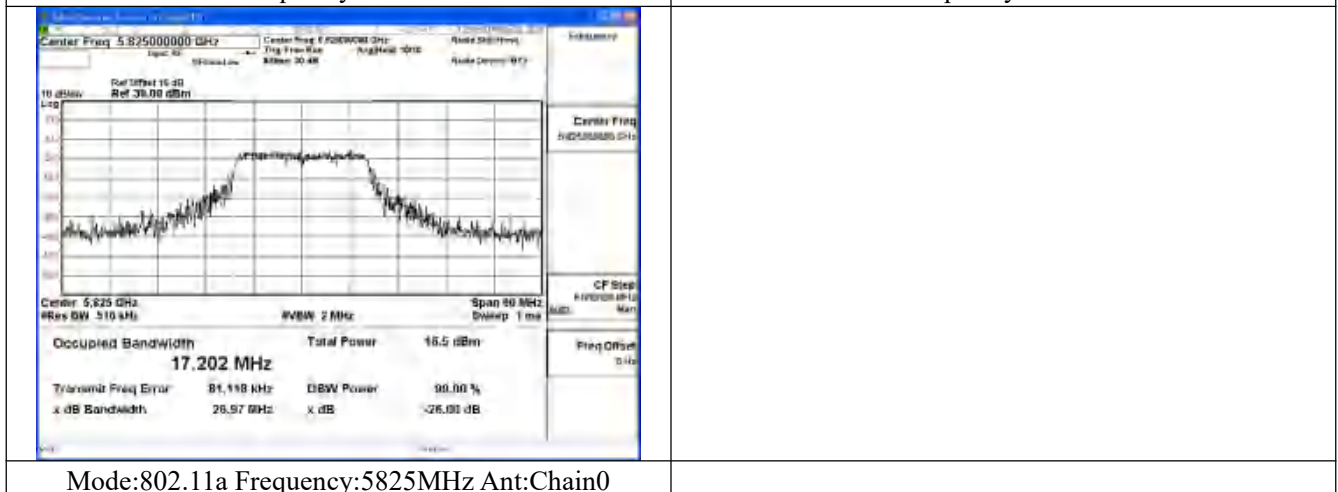
Test Mode	Antenna	26dB Bandwidth (MHz)		
		5755MHz	---	5795MHz
802.11n HT40	Chain0	46.05	---	46.63
802.11ac VHT40	Chain0	49.27	---	47.14
802.11ax HE40	Chain0	45.59	---	47.15

Test Mode: 802.11a



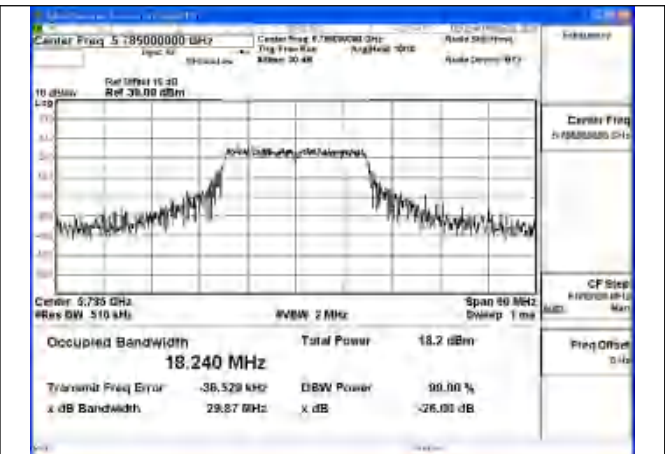
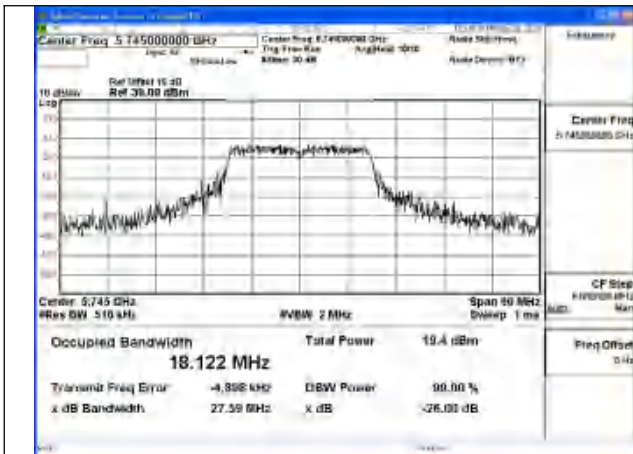
Mode:802.11a Frequency:5745MHz Ant:Chain0

Mode:802.11a Frequency:5785MHz Ant:Chain0



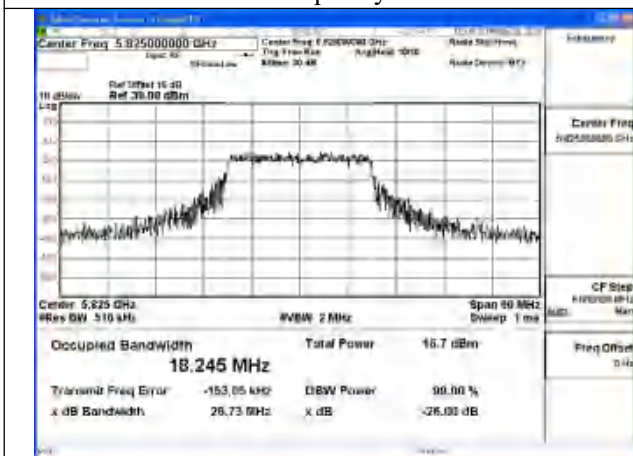
Mode:802.11a Frequency:5825MHz Ant:Chain0

Test Mode: 802.11n HT20



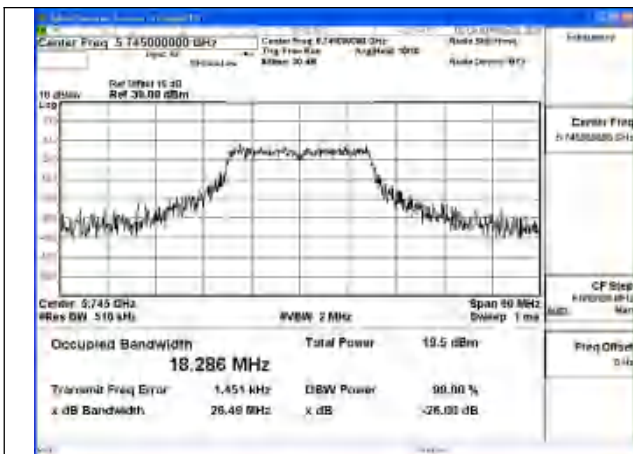
Mode:802.11n HT20 Frequency:5745MHz Ant:Chain0

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

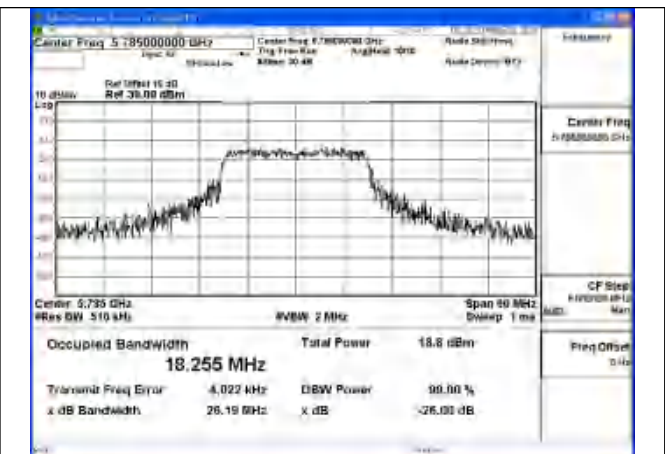


Mode:802.11n HT20 Frequency:5825MHz Ant:Chain0

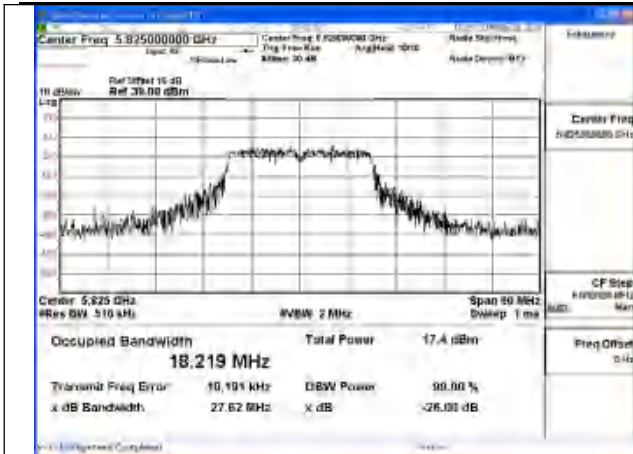
Test Mode: 802.11ac VHT20



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

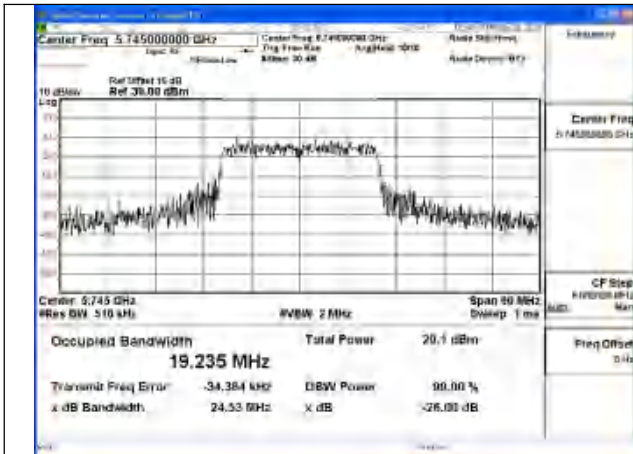


Mode:802.11ac VHT20 Frequency:5785MHz
Ant:Chain0

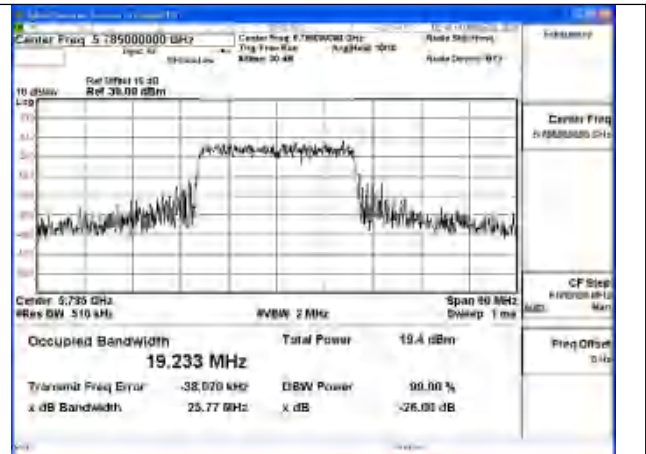


Mode:802.11ac VHT20 Frequency:5825MHz
Ant:Chain0

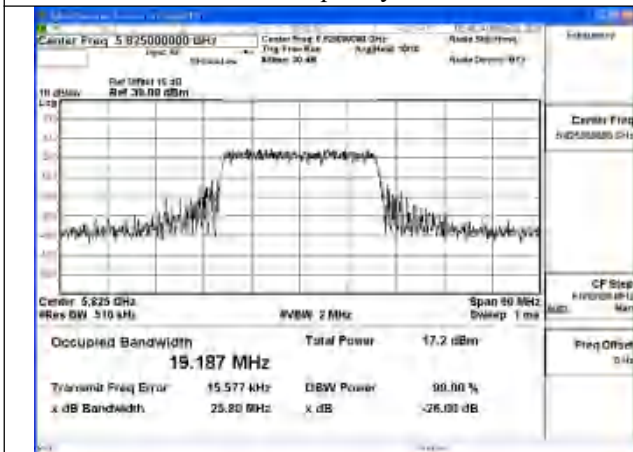
Test Mode: 802.11ax HE20



Mode:802.11ax HE20 Frequency:5745MHz Ant:Chain0

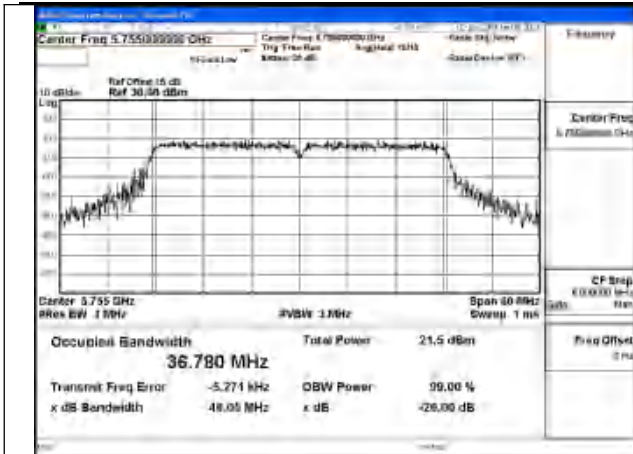


Mode:802.11ax HE20 Frequency:5785MHz Ant:Chain0

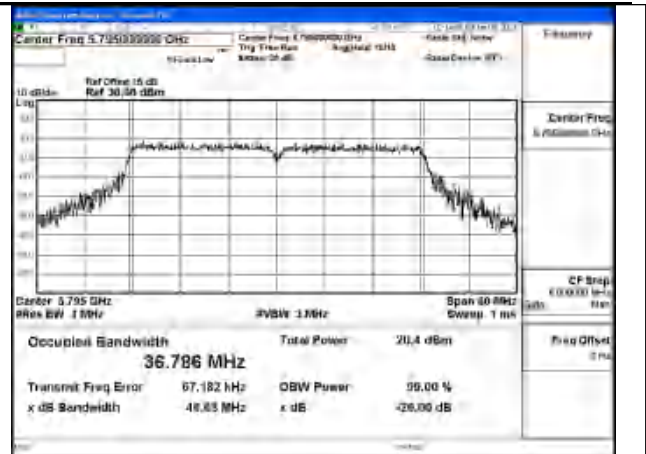


Mode:802.11ax HE20 Frequency:5825MHz Ant:Chain0

Test Mode: 802.11n HT40

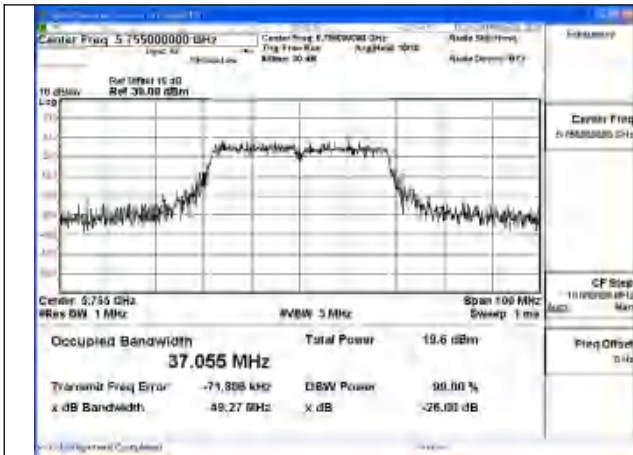


Mode:802.11n HT40 Frequency:5755MHz Ant:Chain0

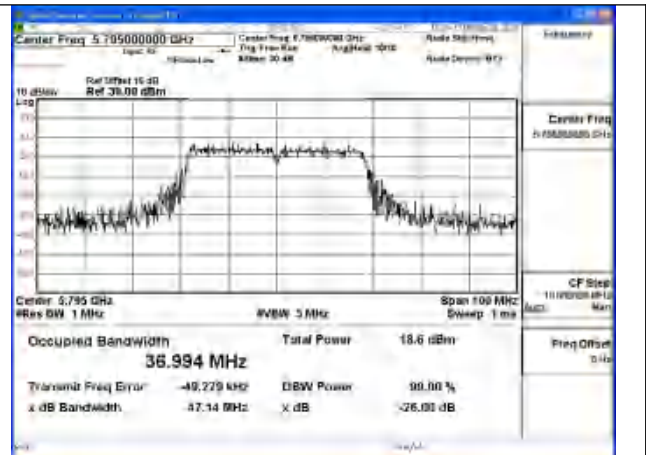


Mode:802.11n HT40 Frequency:5795MHz Ant:Chain0

Test Mode: 802.11ac VHT40

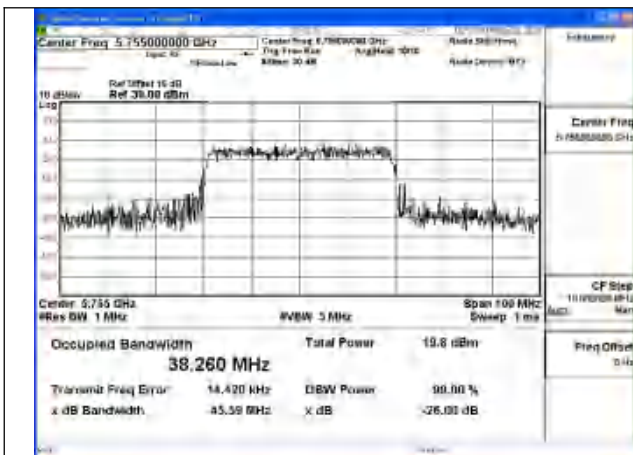


Mode:802.11ac VHT40 Frequency:5755MHz
Ant:Chain0

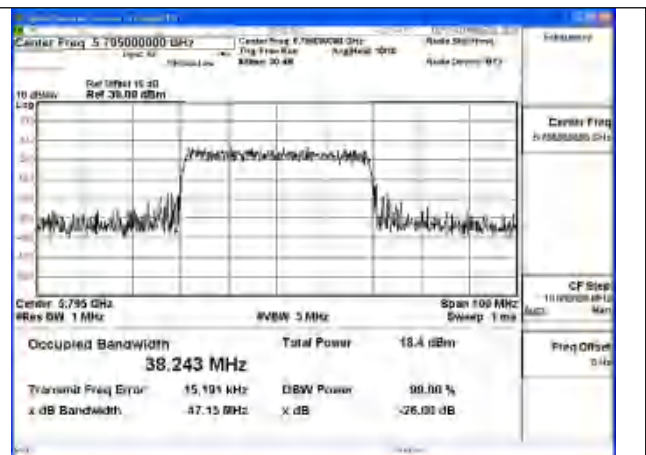


Mode:802.11ac VHT40 Frequency:5795MHz
Ant:Chain0

Test Mode: 802.11ax HE40



Mode:802.11ax HE40 Frequency:5755MHz Ant:Chain0



Mode:802.11ax HE40 Frequency:5795MHz Ant:Chain0



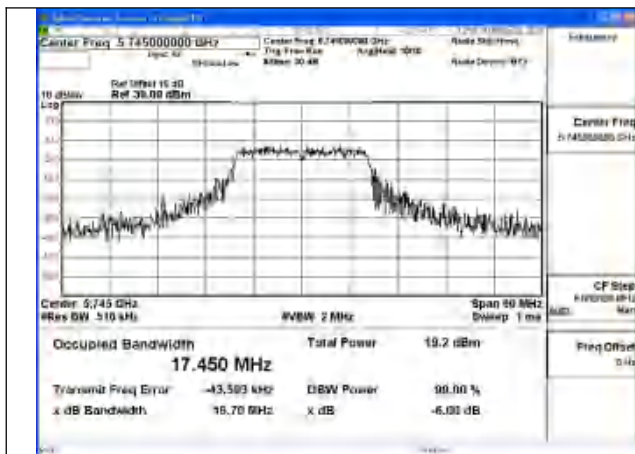
Occupied Bandwidth

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

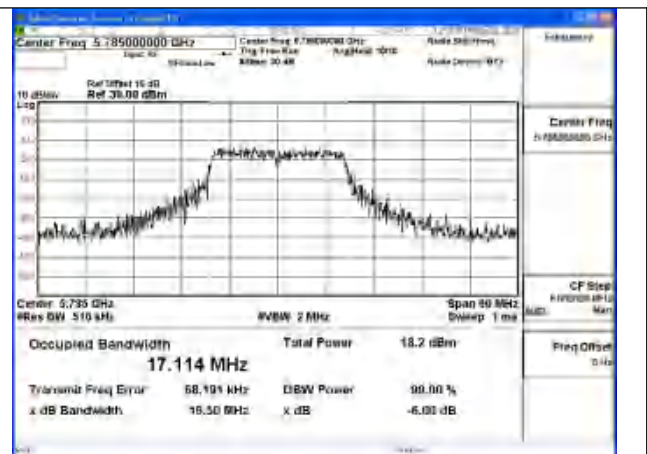
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5745MHz	5785MHz	5825MHz
802.11a	Chain0	17.450	17.114	17.021
802.11n HT20	Chain0	18.406	18.207	18.133
802.11ac VHT20	Chain0	18.280	18.230	18.198
802.11ax HE20	Chain0	19.191	19.219	19.196

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5755MHz	---	5795MHz
802.11n HT40	Chain0	36.809	---	36.784
802.11ac VHT40	Chain0	36.812	---	36.790
802.11ax HE40	Chain0	38.246	---	38.111

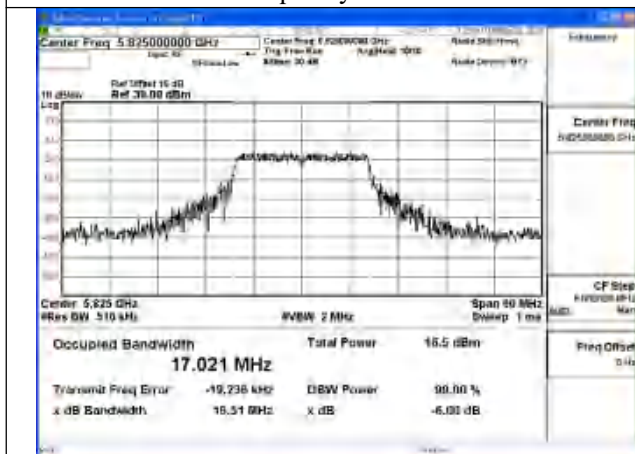
Test Mode: 802.11a



Mode:802.11a Frequency:5745MHz Ant:Chain0

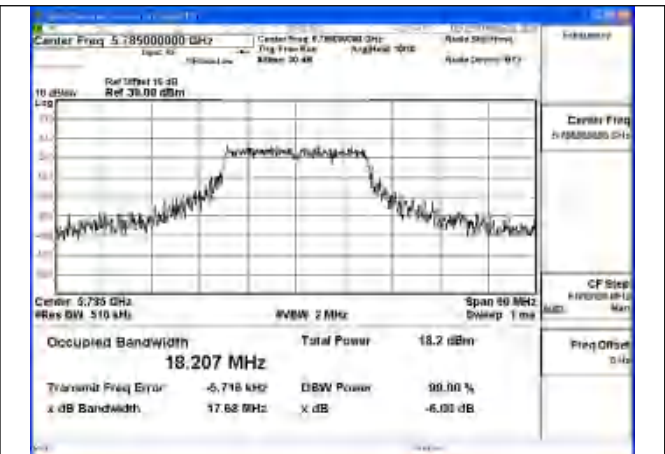
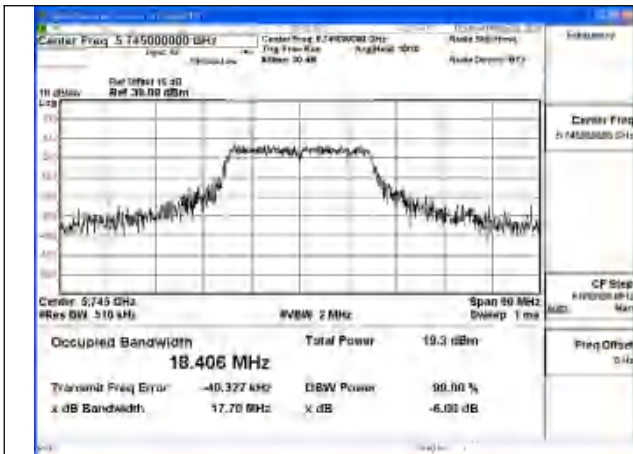


Mode:802.11a Frequency:5785MHz Ant:Chain0



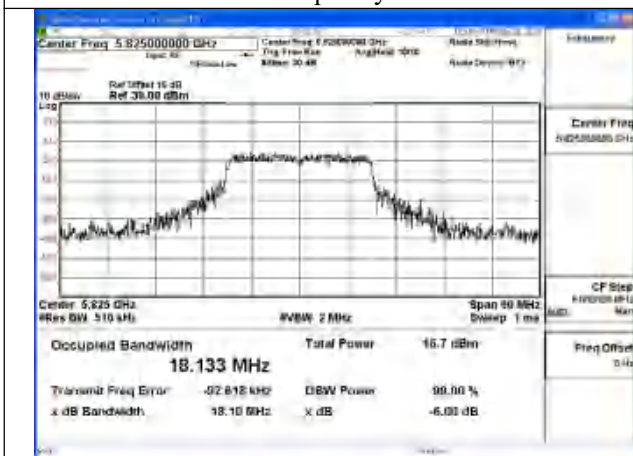
Mode:802.11a Frequency:5825MHz Ant:Chain0

Test Mode: 802.11n HT20



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

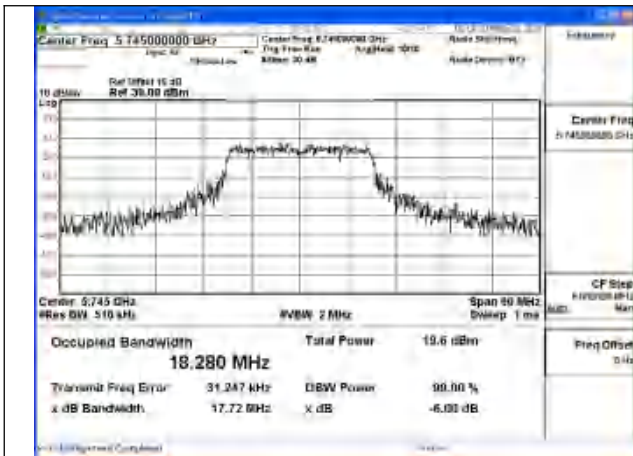
Mode:802.11n HT20 Frequency:5785MHz Ant:Chain0



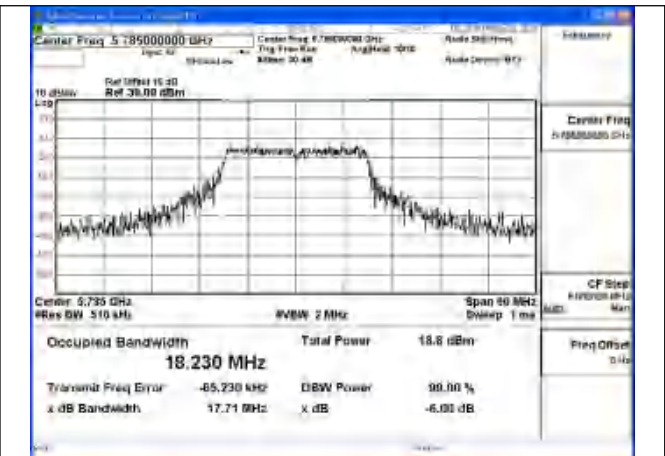
Mode:802.11n HT20 Frequency:5825MHz Ant:Chain0



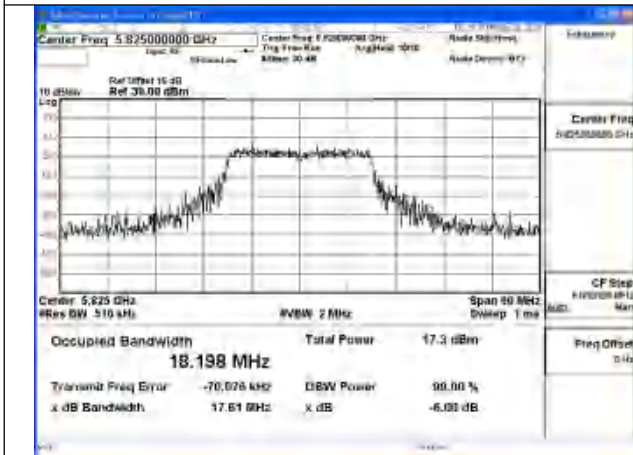
Test Mode: 802.11ac VHT20



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



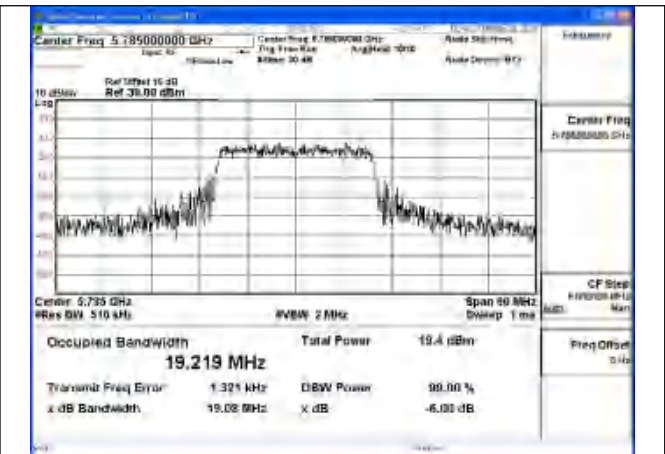
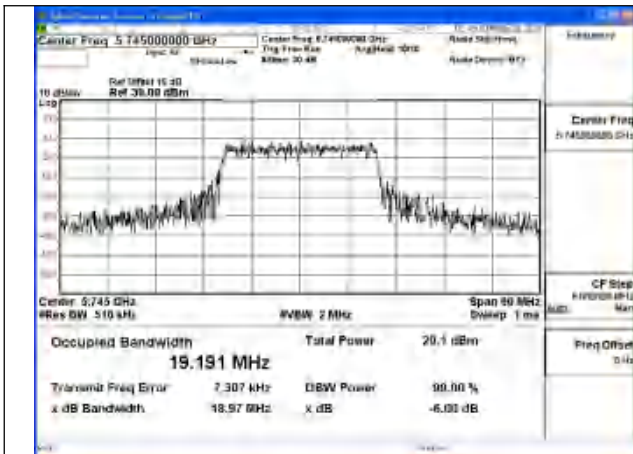
Mode:802.11ac VHT20 Frequency:5785MHz
Ant:Chain0



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

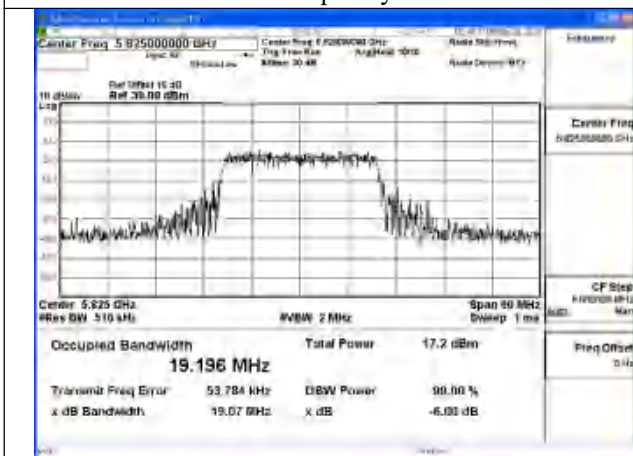


Test Mode: 802.11ax HE20



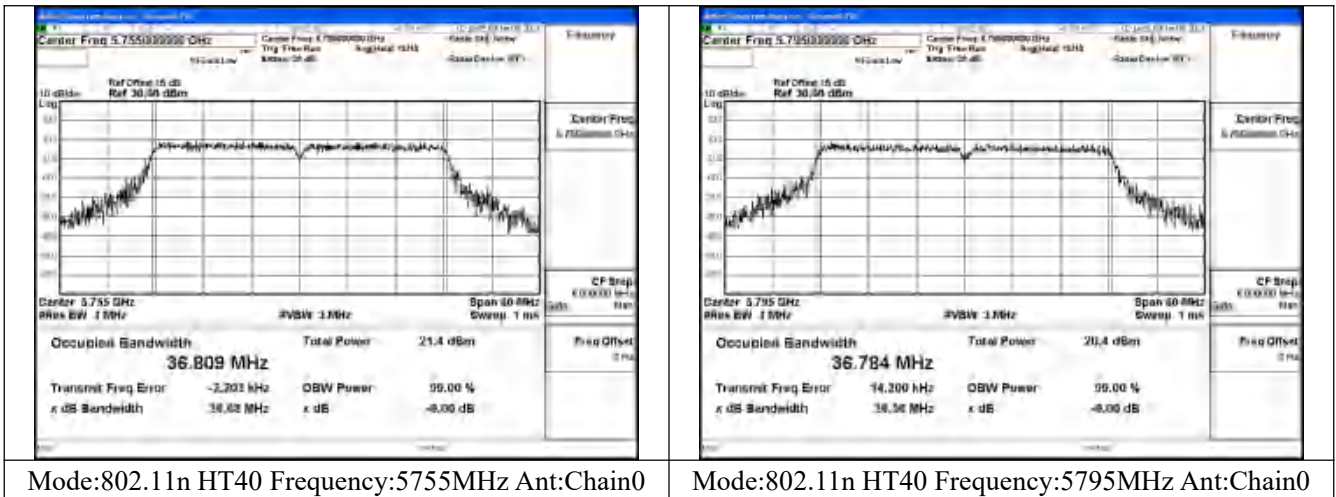
Mode:802.11ax HE20 Frequency:5745MHz Ant:Chain0

Mode:802.11ax HE20 Frequency:5785MHz Ant:Chain0

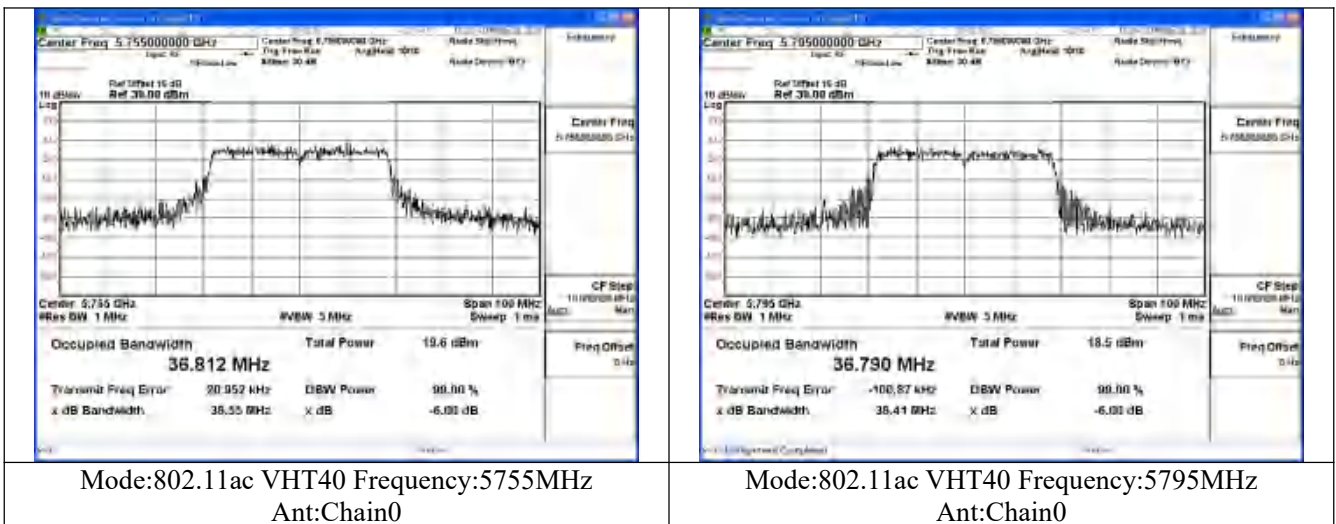


Mode:802.11ax HE20 Frequency:5825MHz Ant:Chain0

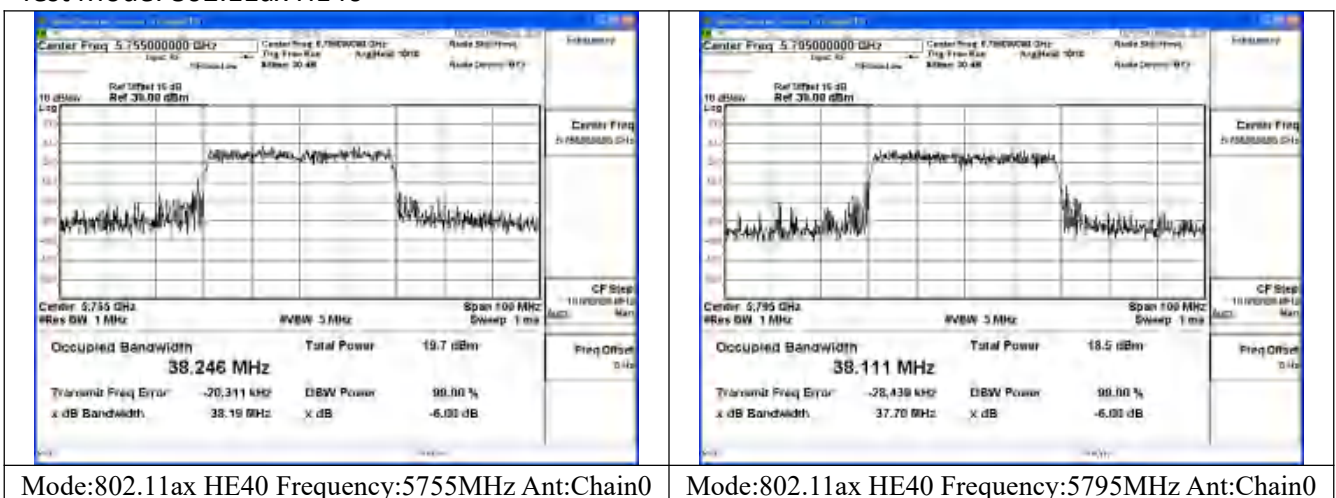
Test Mode: 802.11n HT40



Test Mode: 802.11ac VHT40



Test Mode: 802.11ax HE40





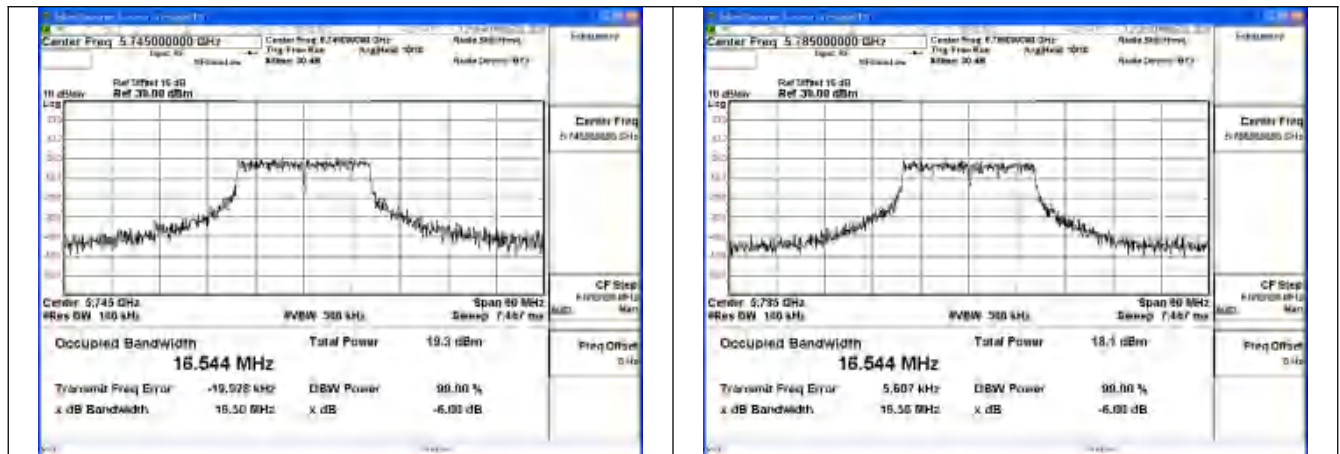
6dB Bandwidth

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

Test Mode	Antenna	6dB Bandwidth (MHz)		
		5745MHz	5785MHz	5825MHz
802.11a	Chain0	16.50	16.56	16.42
802.11n HT20	Chain0	17.77	17.69	17.69
802.11ac VHT20	Chain0	17.71	17.62	17.77
802.11ax HE20	Chain0	19.02	19.13	18.99

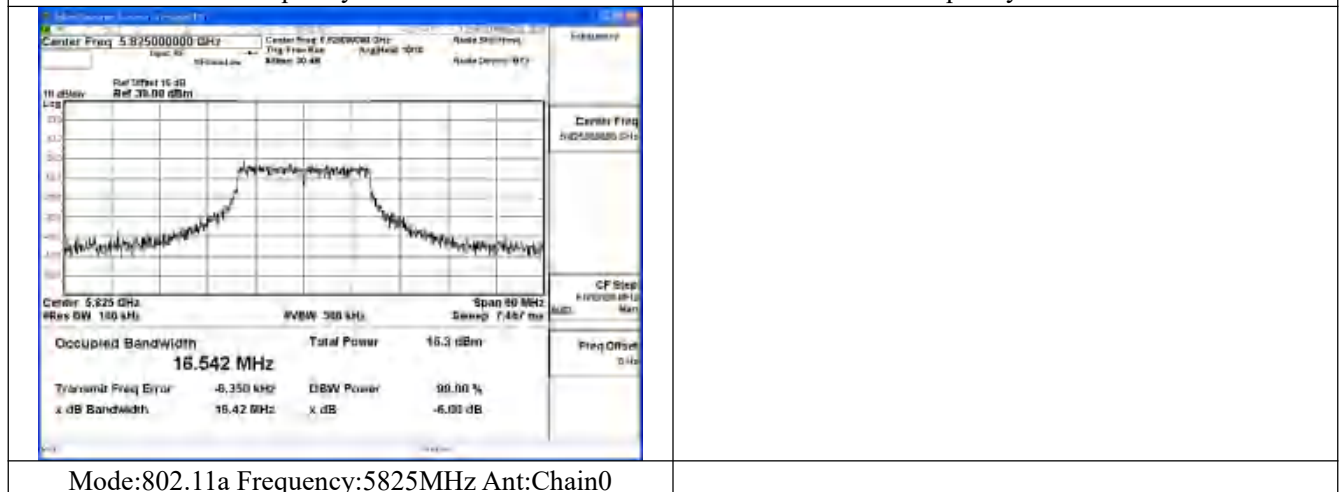
Test Mode	Antenna	6dB Bandwidth (MHz)		
		5755MHz	---	5795MHz
802.11n HT40	Chain0	36.53	---	36.48
802.11ac VHT40	Chain0	36.49	---	36.51
802.11ax HE40	Chain0	38.13	---	37.83

Test Mode: 802.11a



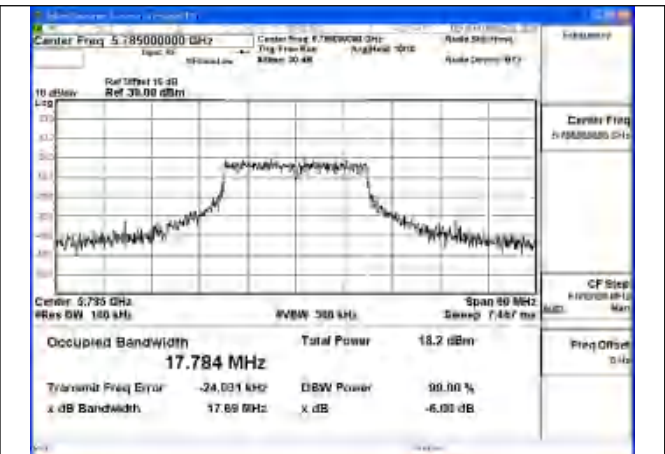
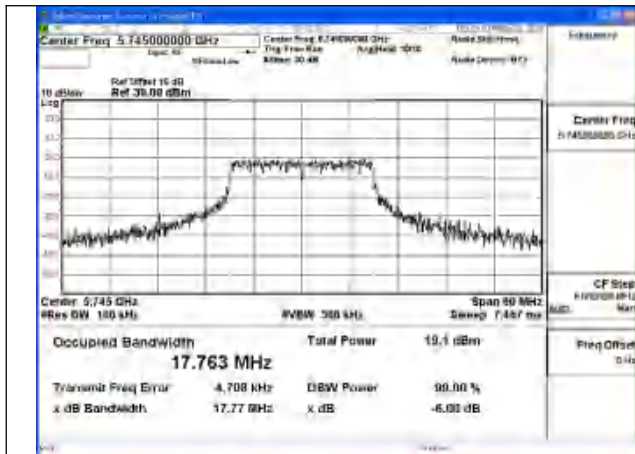
Mode:802.11a Frequency:5745MHz Ant:Chain0

Mode:802.11a Frequency:5785MHz Ant:Chain0



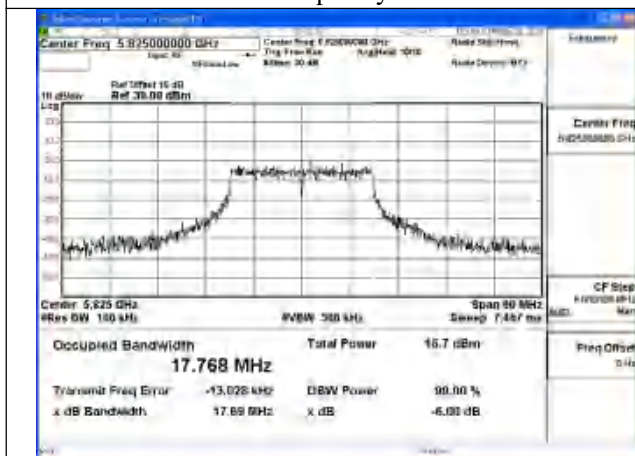
Mode:802.11a Frequency:5825MHz Ant:Chain0

Test Mode: 802.11n HT20



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

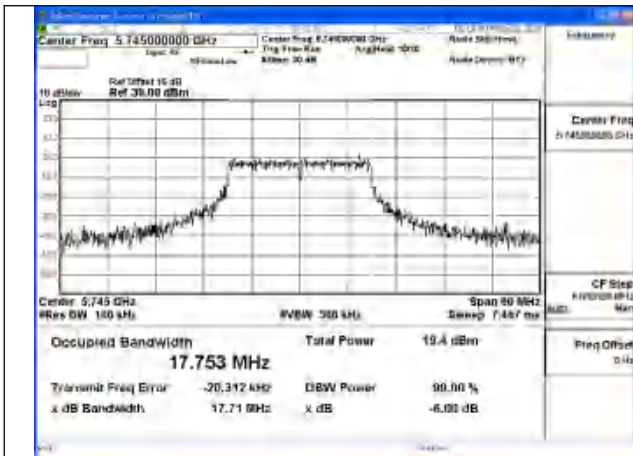
Mode:802.11n HT20 Frequency:5785MHz Ant:Chain0



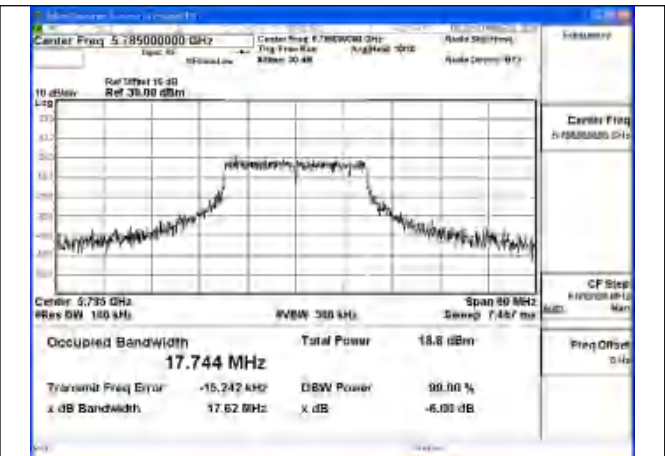
Mode:802.11n HT20 Frequency:5825MHz Ant:Chain0



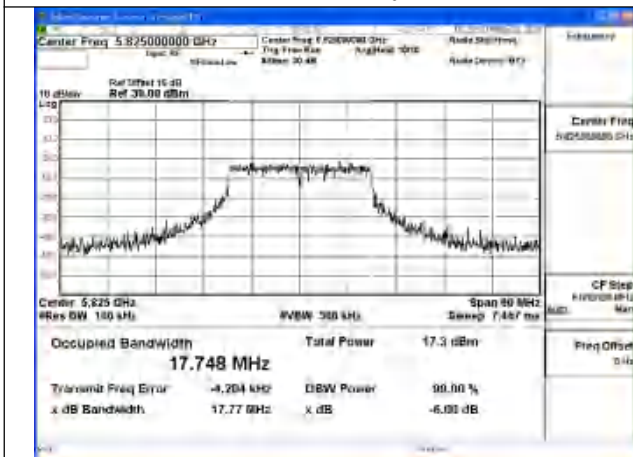
Test Mode: 802.11ac VHT20



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

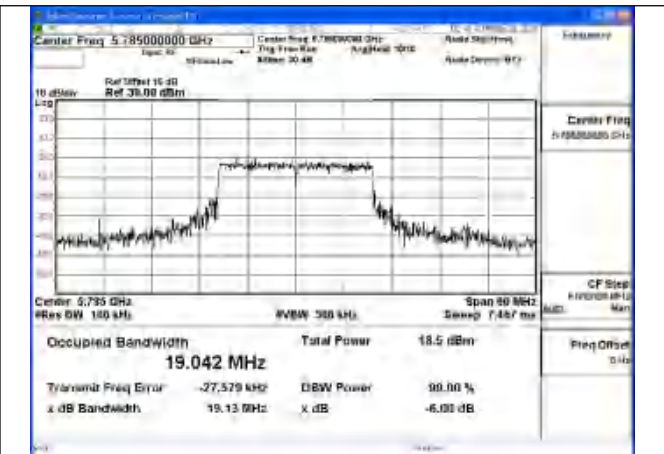
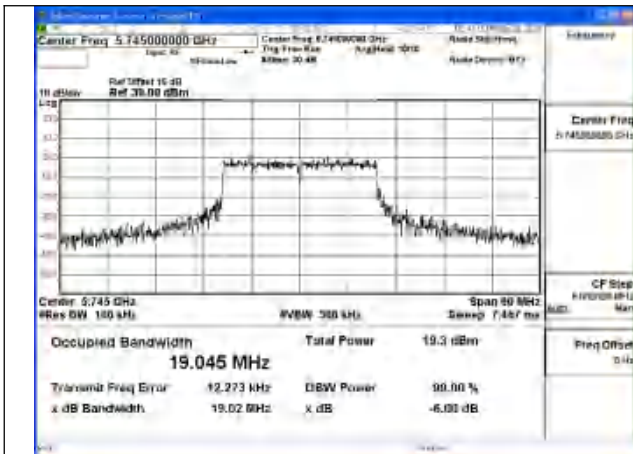


Mode:802.11ac VHT20 Frequency:5785MHz
Ant:Chain0



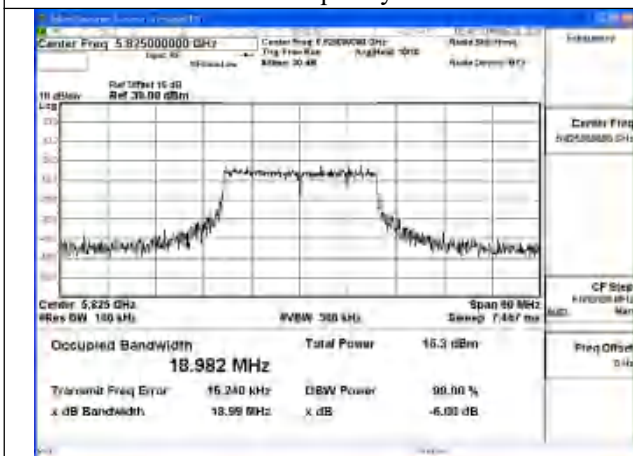
Mode:802.11ac VHT20 Frequency:5825MHz
Ant:Chain0

Test Mode: 802.11ax HE20



Mode:802.11ax HE20 Frequency:5745MHz Ant:Chain0

Mode:802.11ax HE20 Frequency:5785MHz Ant:Chain0



Mode:802.11ax HE20 Frequency:5825MHz Ant:Chain0

Test Mode: 802.11n HT40

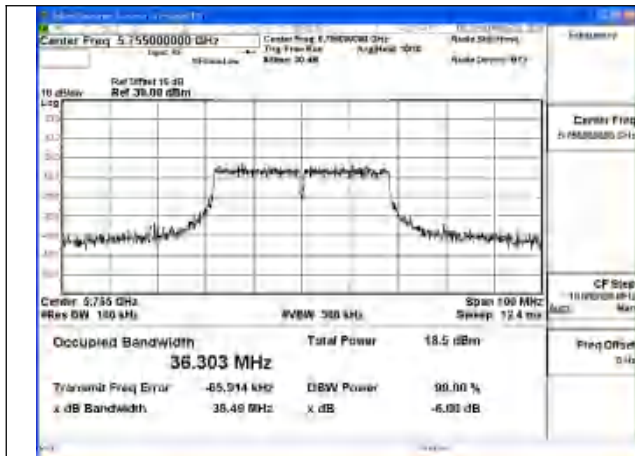


Mode:802.11n HT40 Frequency:5755MHz Ant:Chain0

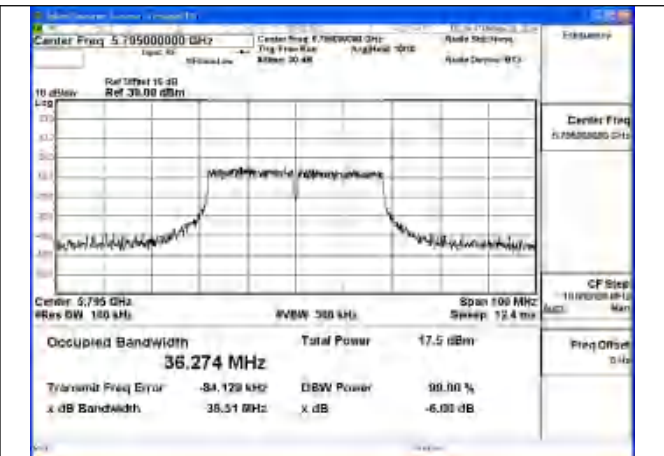


Mode:802.11n HT40 Frequency:5795MHz Ant:Chain0

Test Mode: 802.11ac VHT40

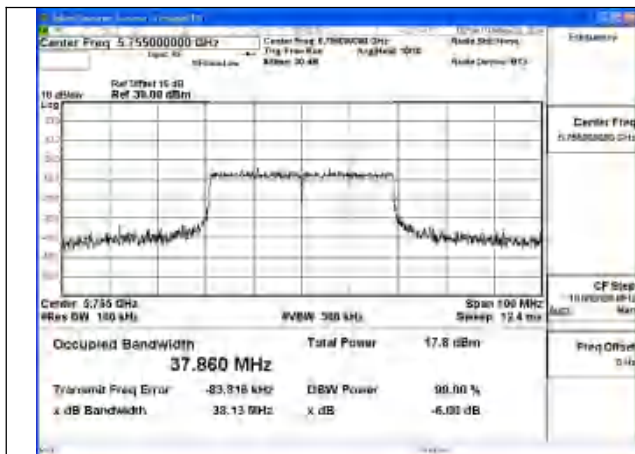


Mode:802.11ac VHT40 Frequency:5755MHz
Ant:Chain0

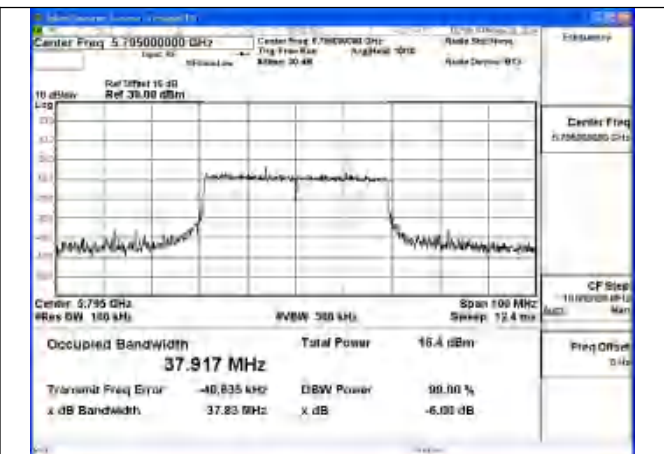


Mode:802.11ac VHT40 Frequency:5795MHz
Ant:Chain0

Test Mode: 802.11ax HE40



Mode:802.11ax HE40 Frequency:5755MHz Ant:Chain0



Mode:802.11ax HE40 Frequency:5795MHz Ant:Chain0

Transmitter Power Spectral Density

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

Test Mode	Antenna	Tones	5745MHz		5785MHz		5825MHz	
			Correction Factor (dB)	Power Density (dBm/500KHz)	Correction Factor (dB)	Power Density (dBm/500KHz)	Correction Factor (dB)	Power Density (dBm/500KHz)
802.11a	Chain0	NA	0.00	1.995	0.00	1.465	0.00	-0.788
802.11n HT20	Chain0	NA	0.00	1.611	0.00	1.087	0.00	-0.714
802.11ac VHT20	Chain0	NA	0.00	1.838	0.00	1.251	0.00	-0.166
802.11ax HE20	Chain0	242T	0.00	0.380	0.00	-0.047	0.00	-2.161

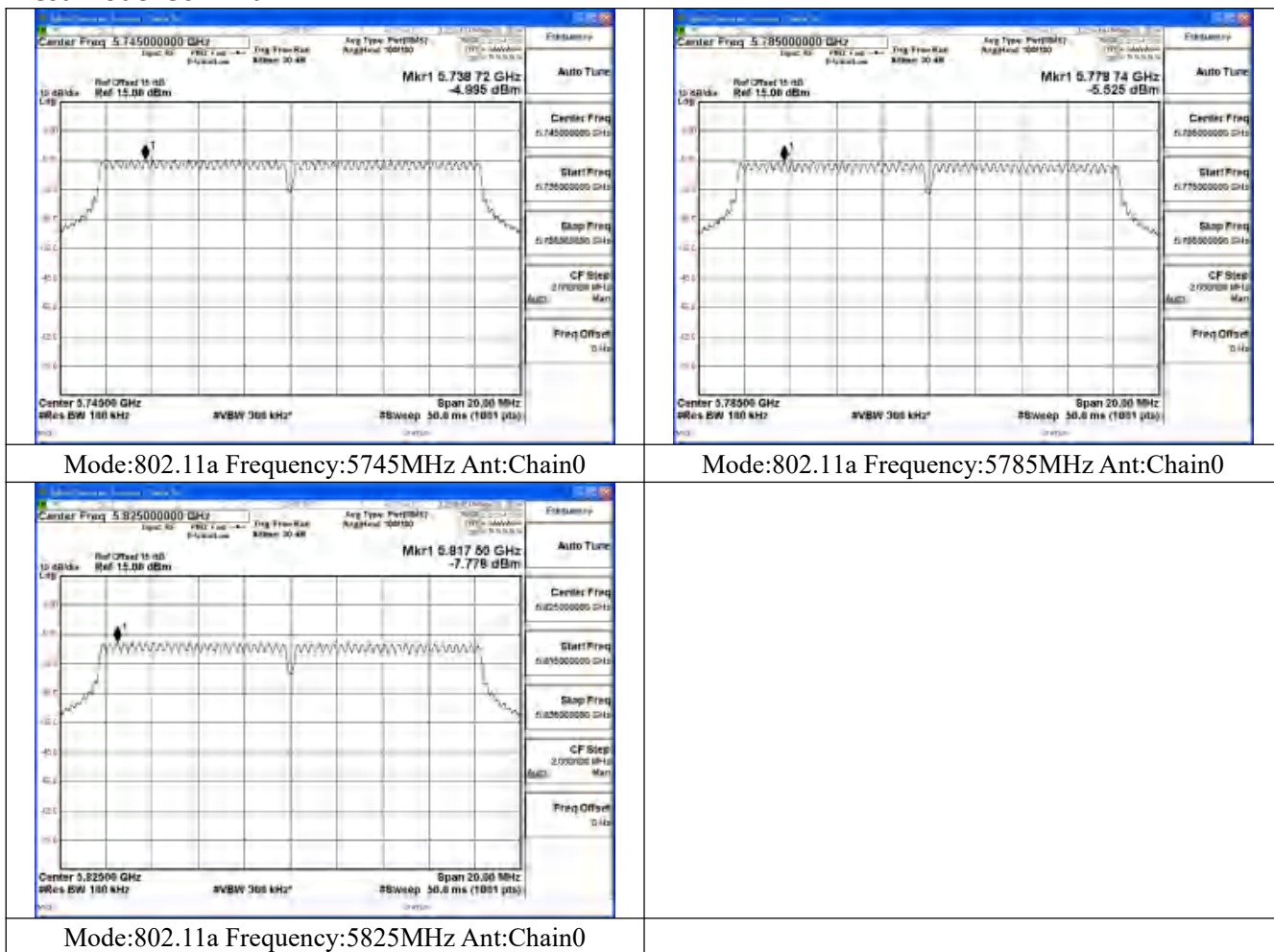
Note: As measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/\text{RBW})$ to the measured result.

Test Mode	Antenna	Tones	5755MHz		---		5795MHz	
			Correction Factor (dB)	Power Density (dBm/500KHz)	Correction Factor (dB)	Power Density (dBm/500KHz)	Correction Factor (dB)	Power Density (dBm/500KHz)
802.11n HT40	Chain0	NA	0.00	-2.198	---	---	0.00	-1.507
802.11ac VHT40	Chain0	NA	0.00	-1.136	---	---	0.00	-1.650
802.11ax HE40	Chain0	484T	0.00	-2.551	---	---	0.00	-3.533

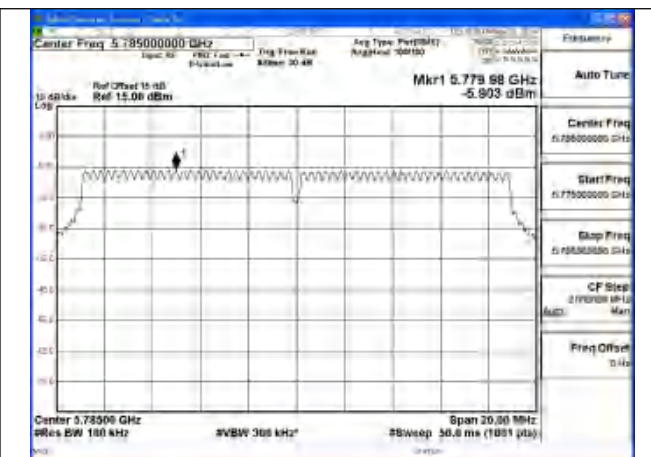
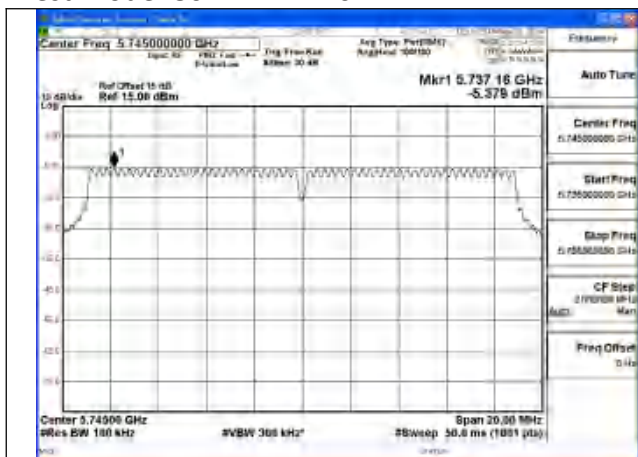
Note: As measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/\text{RBW})$ to the measured result.



Test Mode: 802.11a

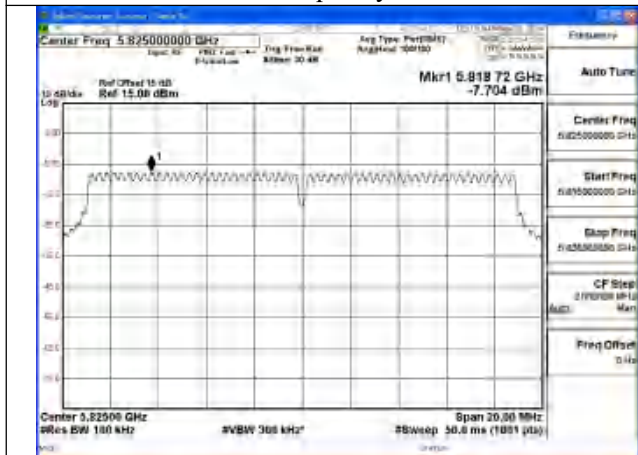


Test Mode: 802.11n HT20



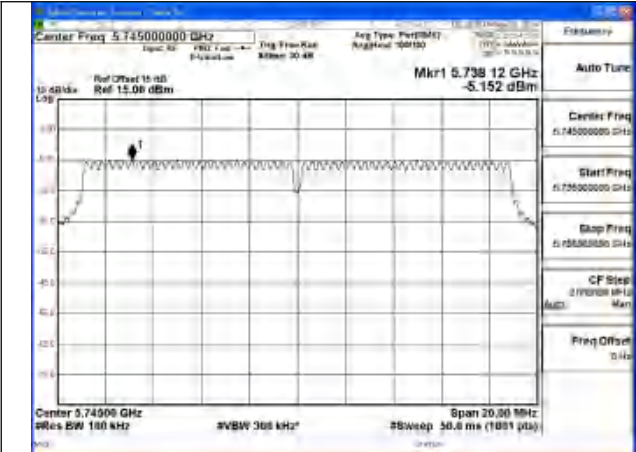
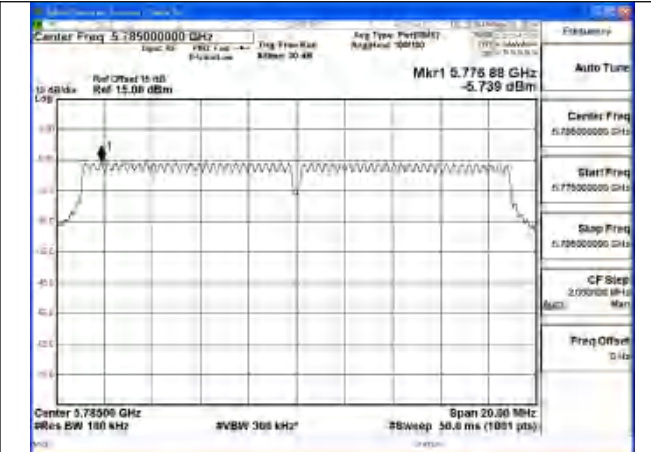
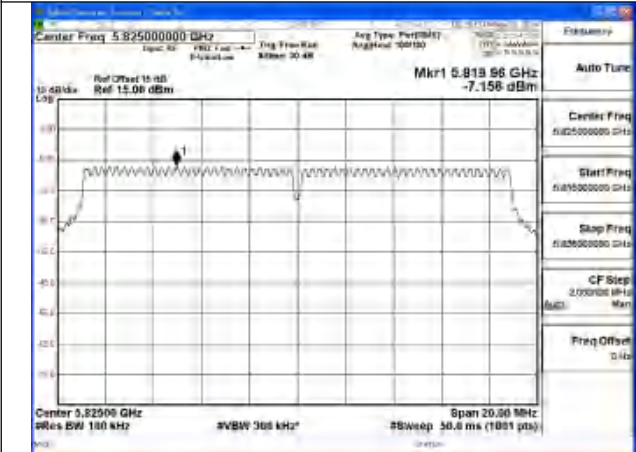
Mode:802.11n HT20 Frequency:5745MHz Ant:Chain0

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

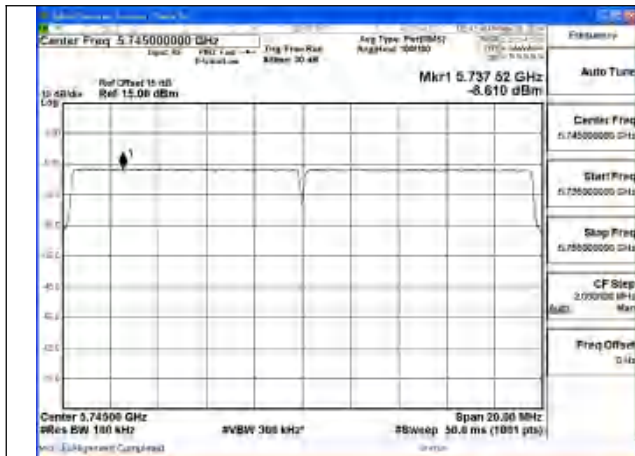


Mode:802.11n HT20 Frequency:5825MHz Ant:Chain0

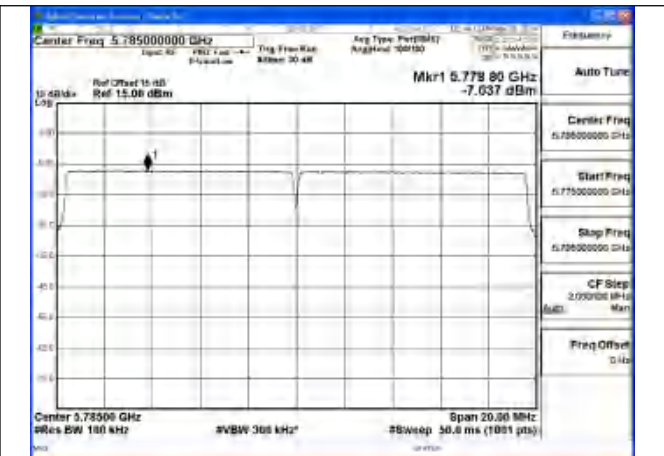
Test Mode: 802.11ac VHT20

	
Mode:802.11ac VHT20 Frequency:5745MHz Ant:Chain0	Mode:802.11ac VHT20 Frequency:5785MHz Ant:Chain0
	
Mode:802.11ac VHT20 Frequency:5825MHz Ant:Chain0	

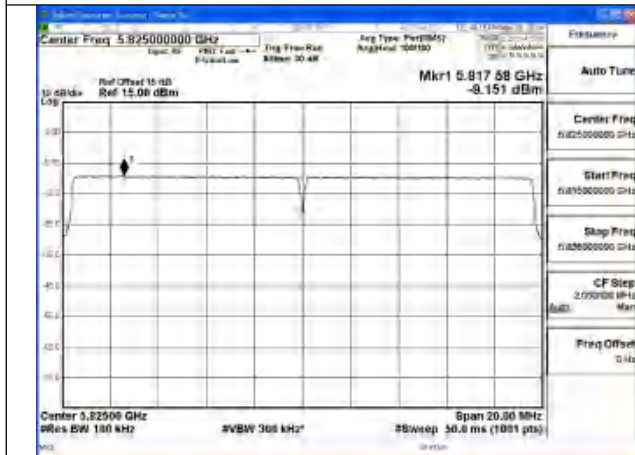
Test Mode: 802.11ax HE20



Mode:802.11ax HE20 Tone:242T Frequency:5745MHz
Ant:Chain0

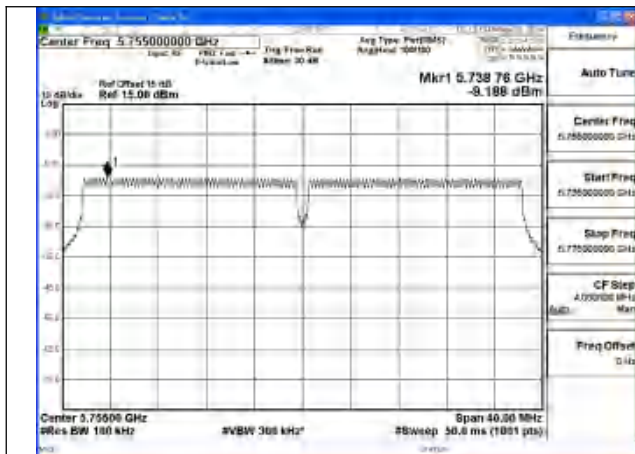


Mode:802.11ax HE20 Tone:242T Frequency:5785MHz
Ant:Chain0

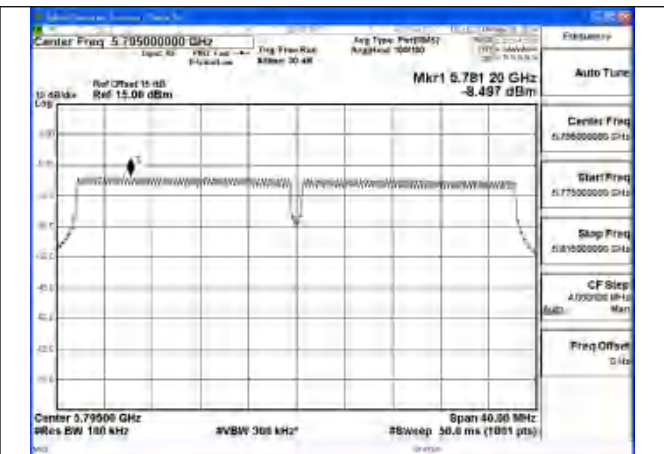


Mode:802.11ax HE20 Tone:242T Frequency:5825MHz
Ant:Chain0

Test Mode: 802.11n HT40



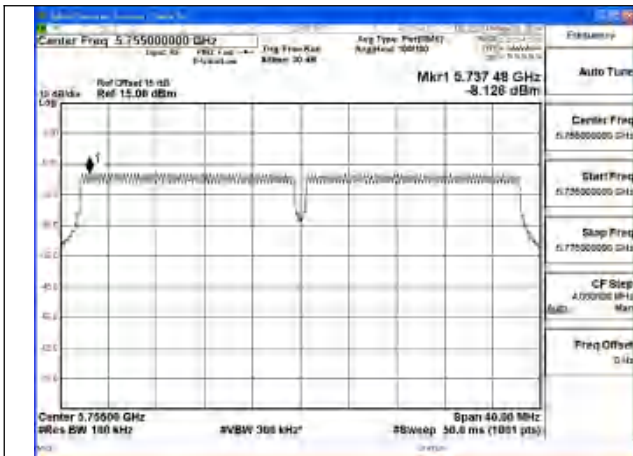
Mode:802.11n HT40 Frequency:5755MHz Ant:Chain0



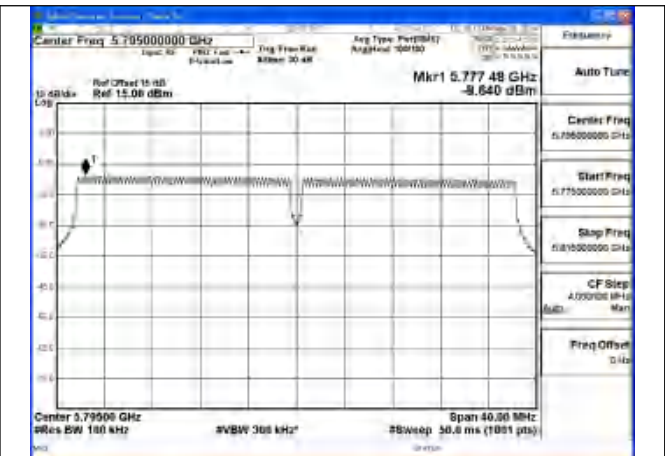
Mode:802.11n HT40 Frequency:5795MHz Ant:Chain0



Test Mode: 802.11ac VHT40

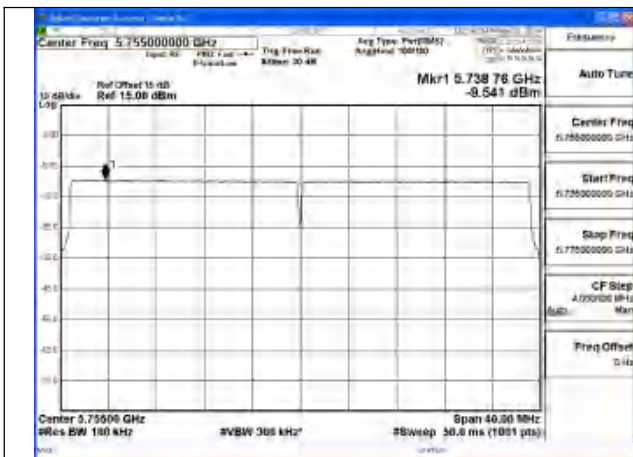


Mode:802.11ac VHT40 Frequency:5755MHz
Ant:Chain0



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

Test Mode: 802.11ax HE40



Mode:802.11ax HE40 Tone:484T Frequency:5755MHz
Ant:Chain0



Mode:802.11ax HE40 Tone:484T Frequency:5795MHz
Ant:Chain0