

## APPENDIX A – TEST DATA OF CONDUCTED EMISSION

### Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5260	99.94%	0	Fig.1
802.11n HT20	5260	99.95%	0	Fig.2
802.11ac VHT20	5260	99.93%	0	Fig.3
802.11n HT40	5270	99.90%	0	Fig.4
802.11ac VHT40	5270	99.89%	0	Fig.5
802.11ac VHT80	5290	99.81%	0	Fig.6

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

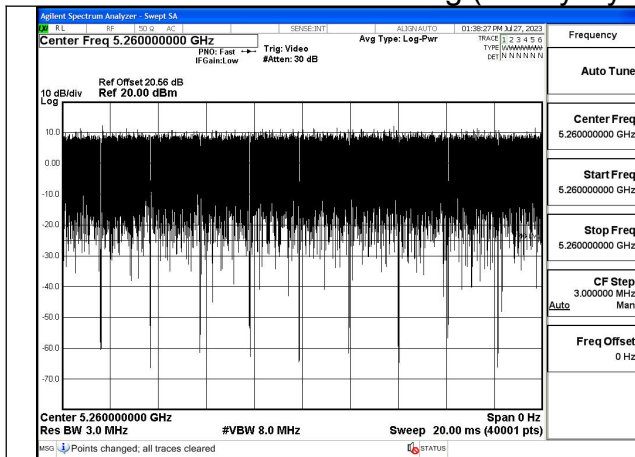


Fig.1

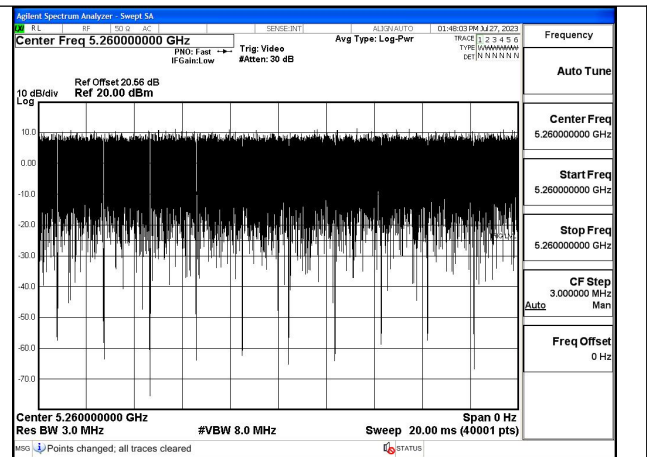


Fig.2

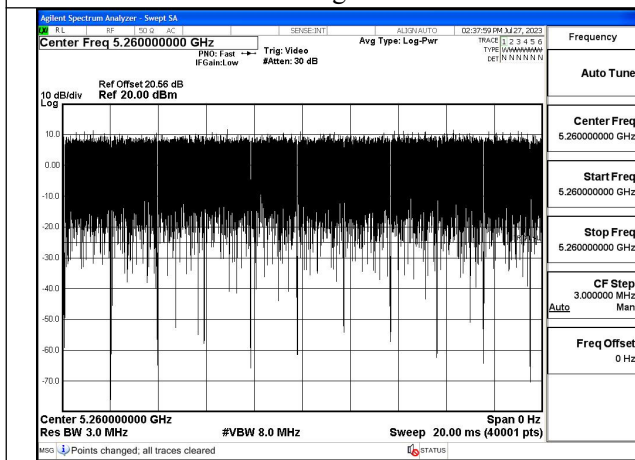


Fig.3

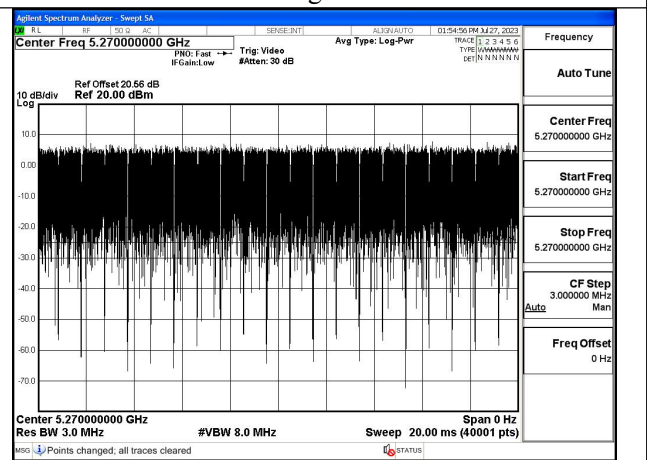


Fig.4

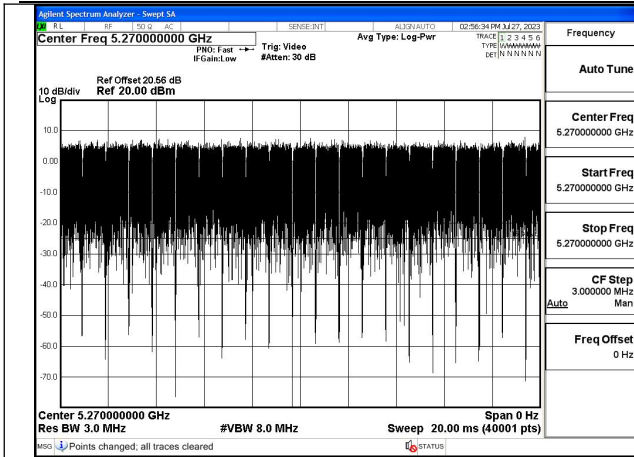


Fig.5

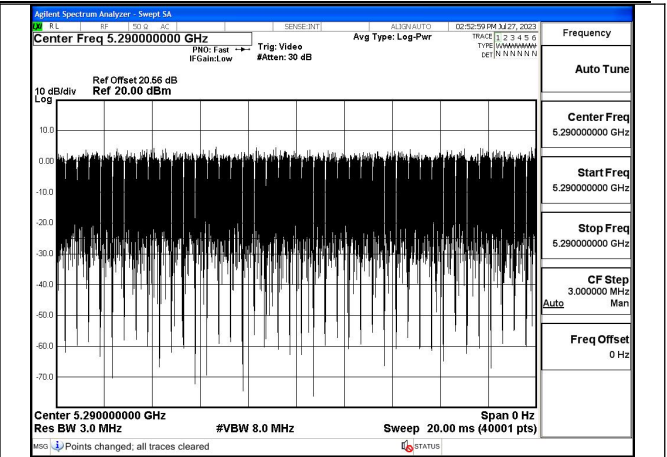


Fig.6

## Output Power

Mode	Tones/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5260	Chain0	11.08	8.68
802.11a	NA	5280	Chain0	11.17	8.77
802.11a	NA	5320	Chain0	11.07	8.67
802.11n HT20	NA	5260	Chain0	10.99	8.59
802.11n HT20	NA	5280	Chain0	11.01	8.61
802.11n HT20	NA	5320	Chain0	10.95	8.55
802.11ac VHT20	NA	5260	Chain0	11.02	8.62
802.11ac VHT20	NA	5280	Chain0	11.02	8.62
802.11ac VHT20	NA	5320	Chain0	10.96	8.56
802.11n HT40	NA	5270	Chain0	11.09	8.69
802.11n HT40	NA	5310	Chain0	11.02	8.62
802.11ac VHT40	NA	5270	Chain0	11.09	8.69
802.11ac VHT40	NA	5310	Chain0	11.03	8.63
802.11ac VHT80	NA	5290	Chain0	10.80	8.40

### Emission Bandwidth

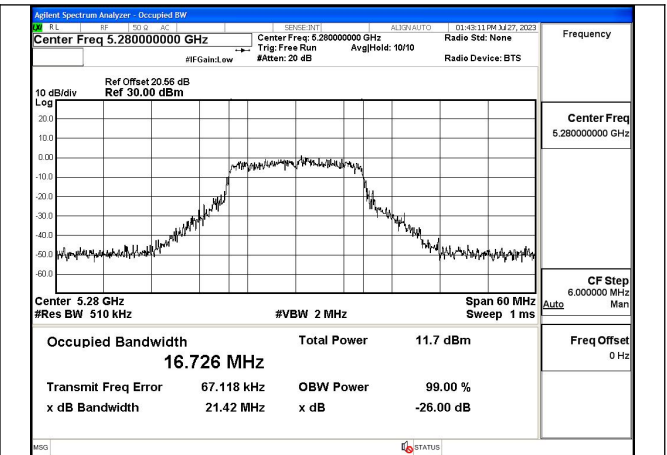
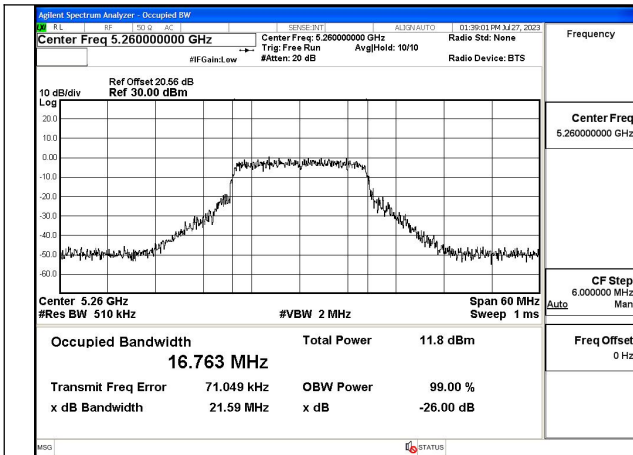
Offset 20.56dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5260MHz	5280MHz	5320MHz
802.11a	Chain0	21.59	21.42	22.35
802.11n HT20	Chain0	24.04	24.02	24.77
802.11ac VHT20	Chain0	23.48	21.64	23.08

Test Mode	Antenna	26dB Bandwidth (MHz)		
		5270MHz	---	5310MHz
802.11n HT40	Chain0	40.25	---	40.09
802.11ac VHT40	Chain0	41.51	---	40.68

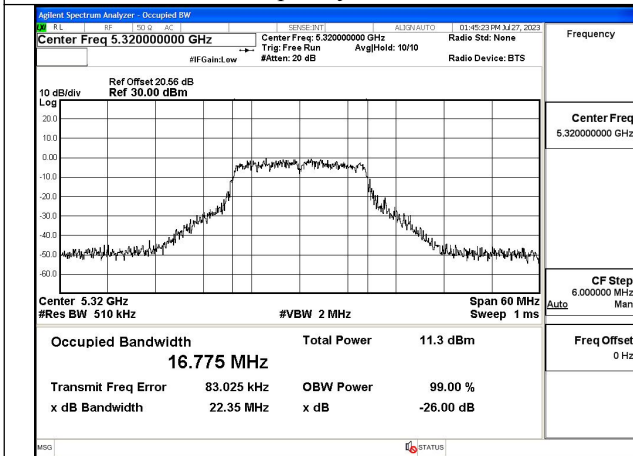
Test Mode	Antenna	26dB Bandwidth (MHz)		
		5290MHz	---	---
802.11ac VHT80	Chain0	82.71	---	---

Test Mode: 802.11a



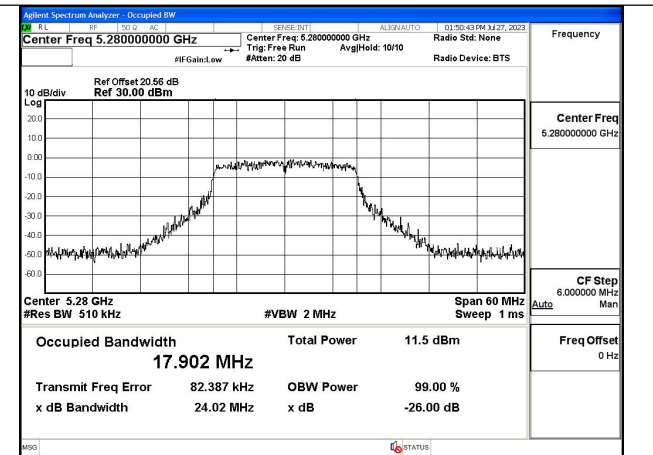
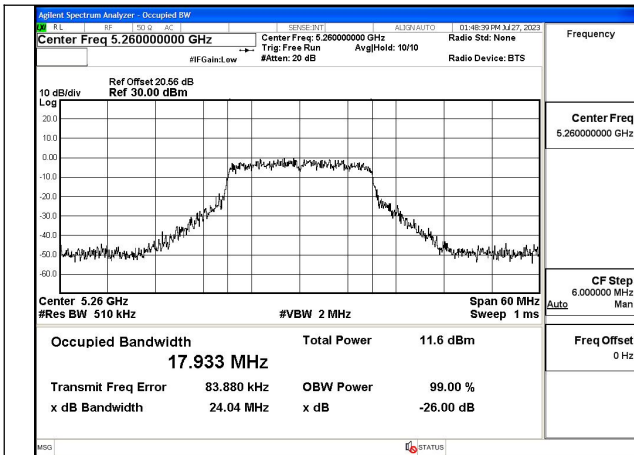
Mode:802.11a Frequency:5260MHz Ant:Chain0

Mode:802.11a Frequency:5280MHz Ant:Chain0



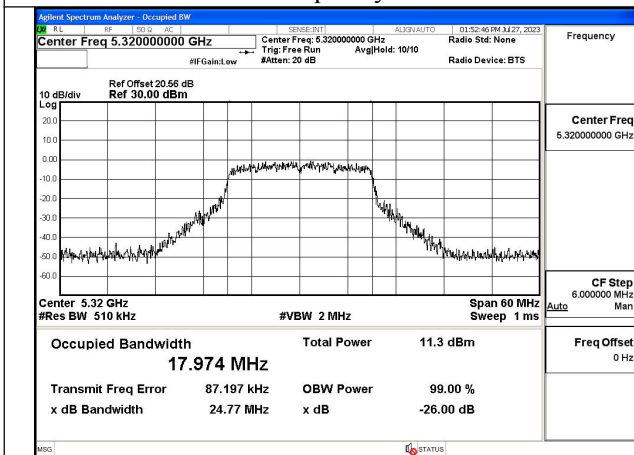
Mode:802.11a Frequency:5320MHz Ant:Chain0

Test Mode: 802.11n HT20



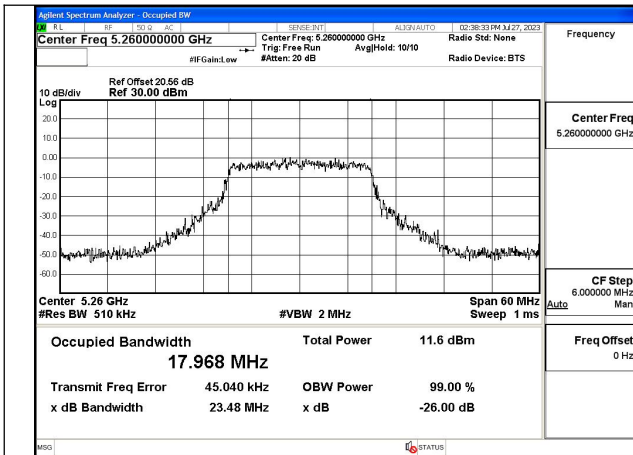
Mode:802.11n HT20 Frequency:5260MHz Ant:Chain0

Mode:802.11n HT20 Frequency:5280MHz Ant:Chain0

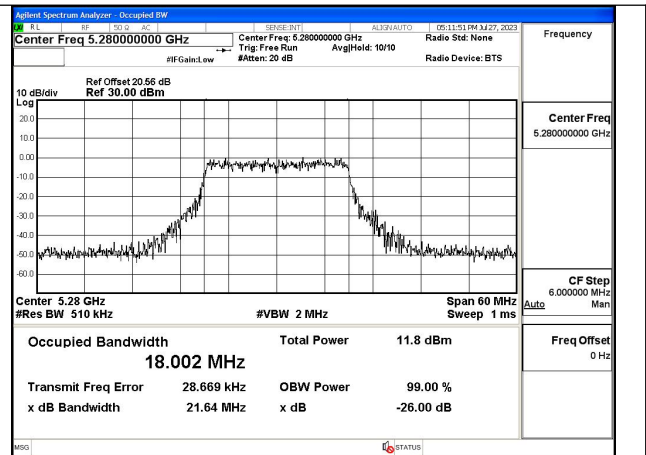


Mode:802.11n HT20 Frequency:5320MHz Ant:Chain0

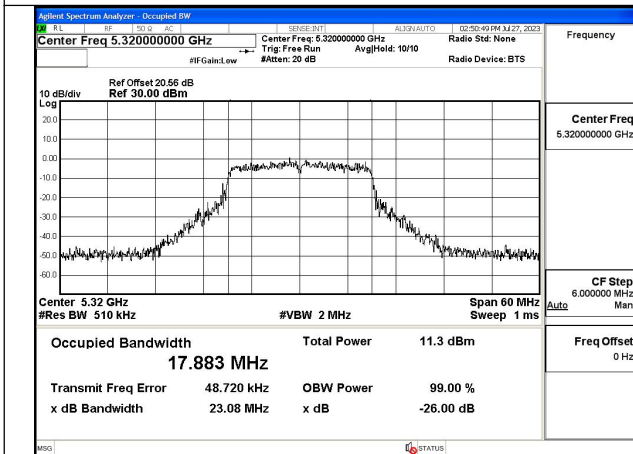
Test Mode: 802.11ac VHT20



Mode:802.11ac VHT20 Frequency:5260MHz  
Ant:Chain0

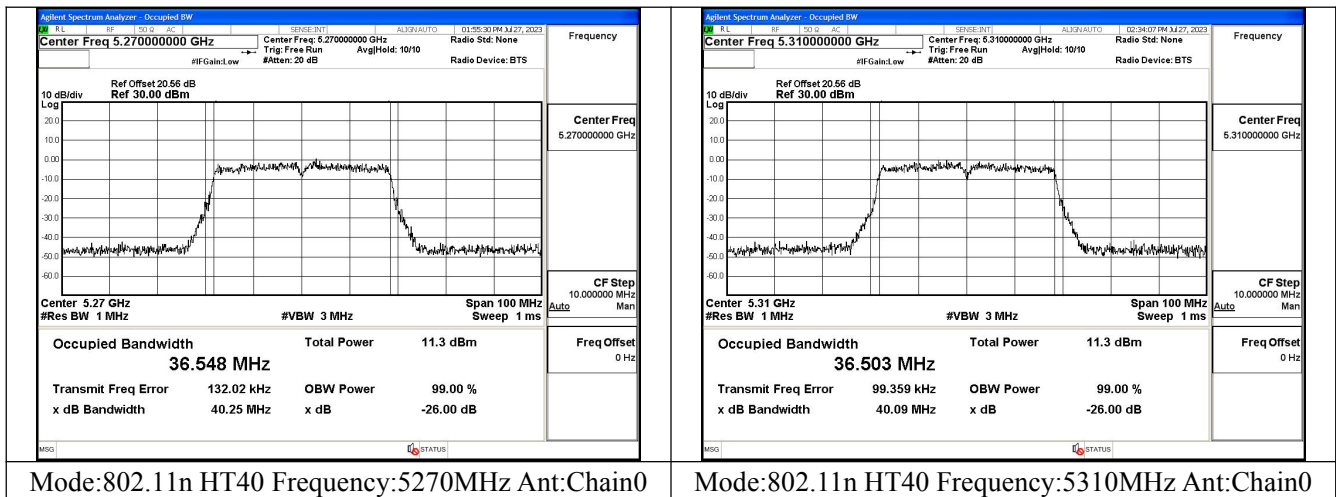


Mode:802.11ac VHT20 Frequency:5280MHz  
Ant:Chain0

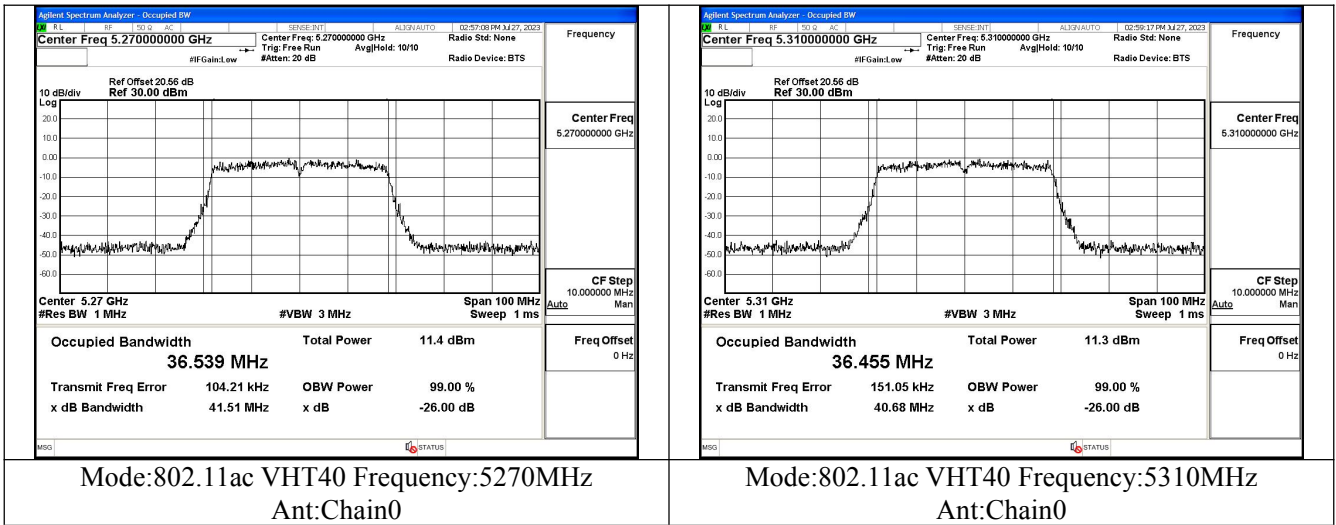


Mode:802.11ac VHT20 Frequency:5320MHz  
Ant:Chain0

Test Mode: 802.11n HT40

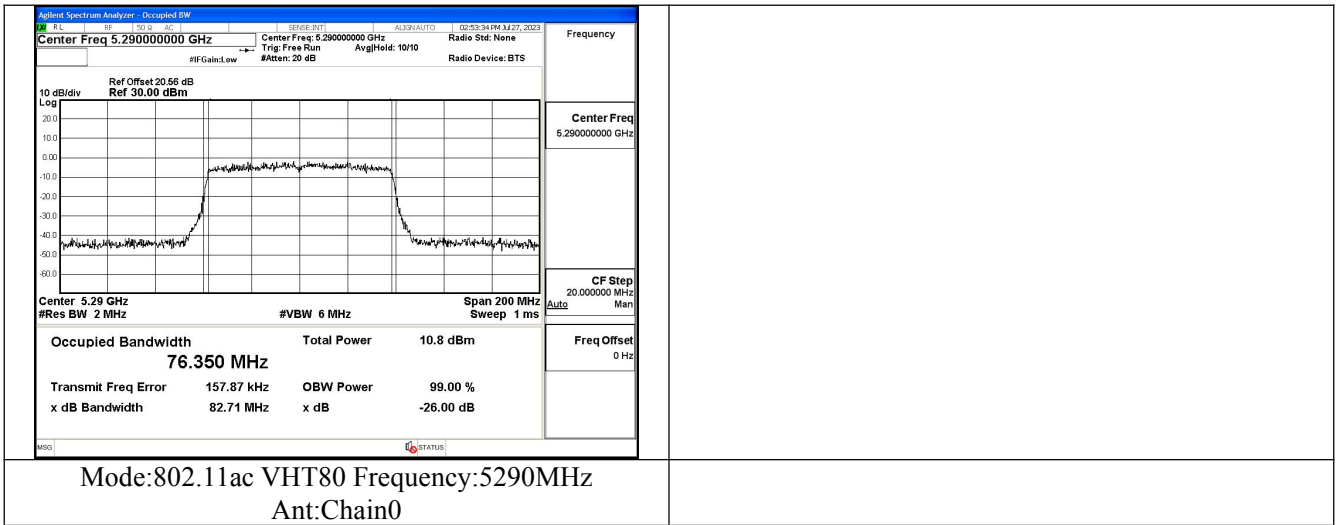


Test Mode: 802.11ac VHT40





Test Mode: 802.11ac VHT80



### Occupied Bandwidth

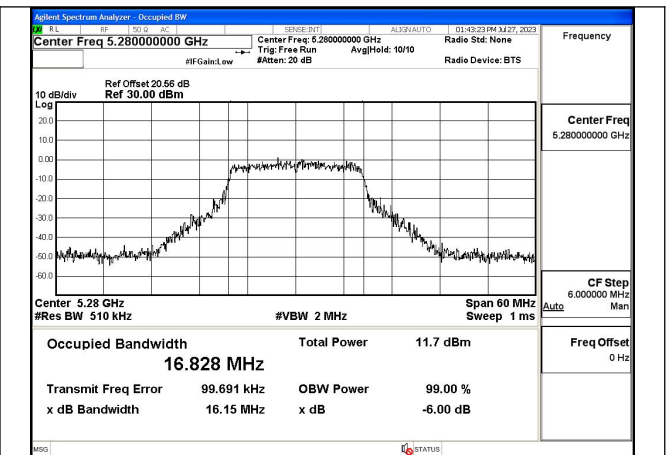
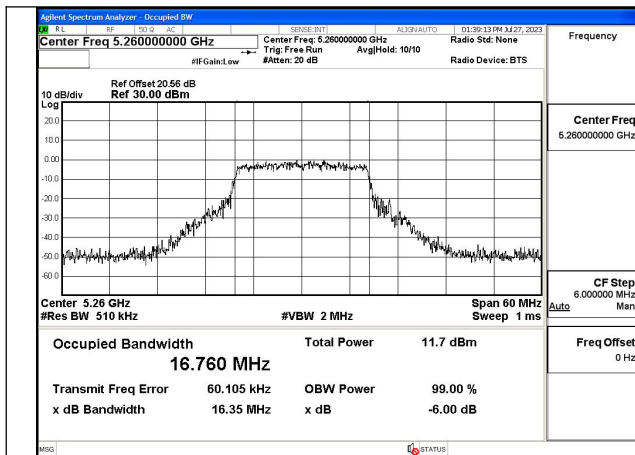
Offset 20.56dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5260MHz	5280MHz	5320MHz
802.11a	Chain0	16.760	16.828	16.807
802.11n HT20	Chain0	18.011	17.939	17.904
802.11ac VHT20	Chain0	17.930	17.967	17.913

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5270MHz	---	5310MHz
802.11n HT40	Chain0	36.469	---	36.473
802.11ac VHT40	Chain0	36.577	---	36.519

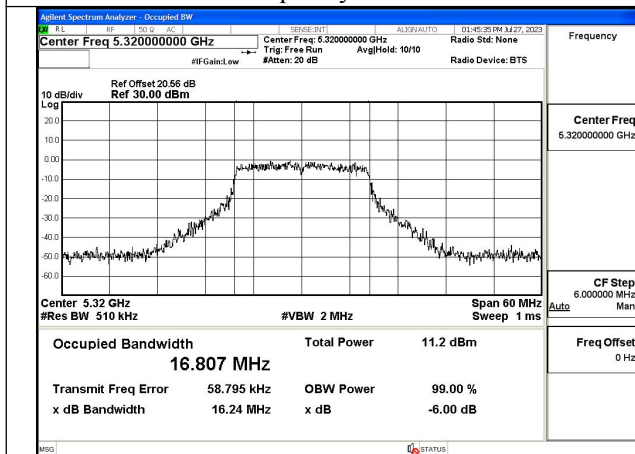
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		5290MHz	---	---
802.11ac VHT80	Chain0	76.360	---	---

### Test Mode: 802.11a



Mode:802.11a Frequency:5260MHz Ant:Chain0

Mode:802.11a Frequency:5280MHz Ant:Chain0

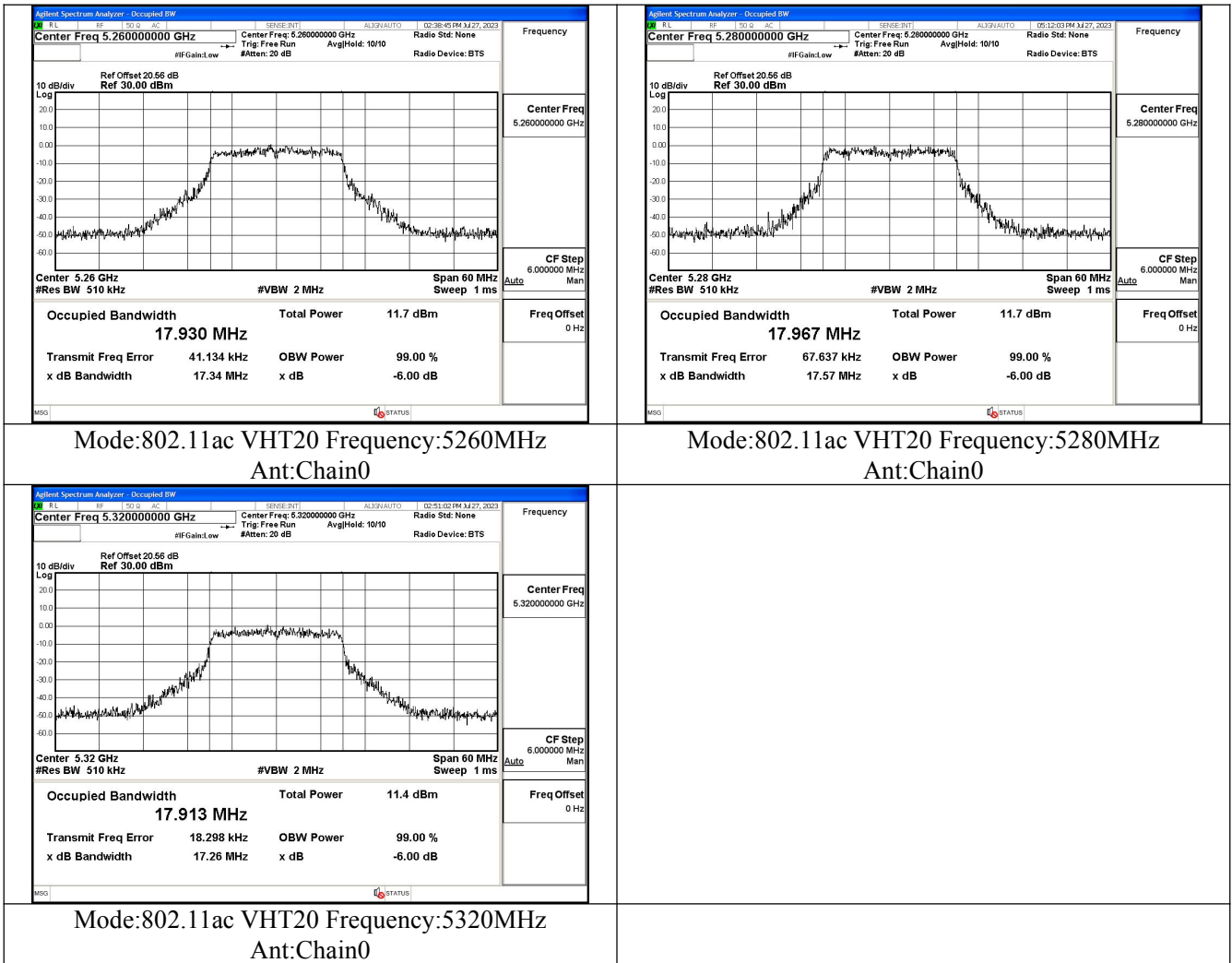


Mode:802.11a Frequency:5320MHz Ant:Chain0

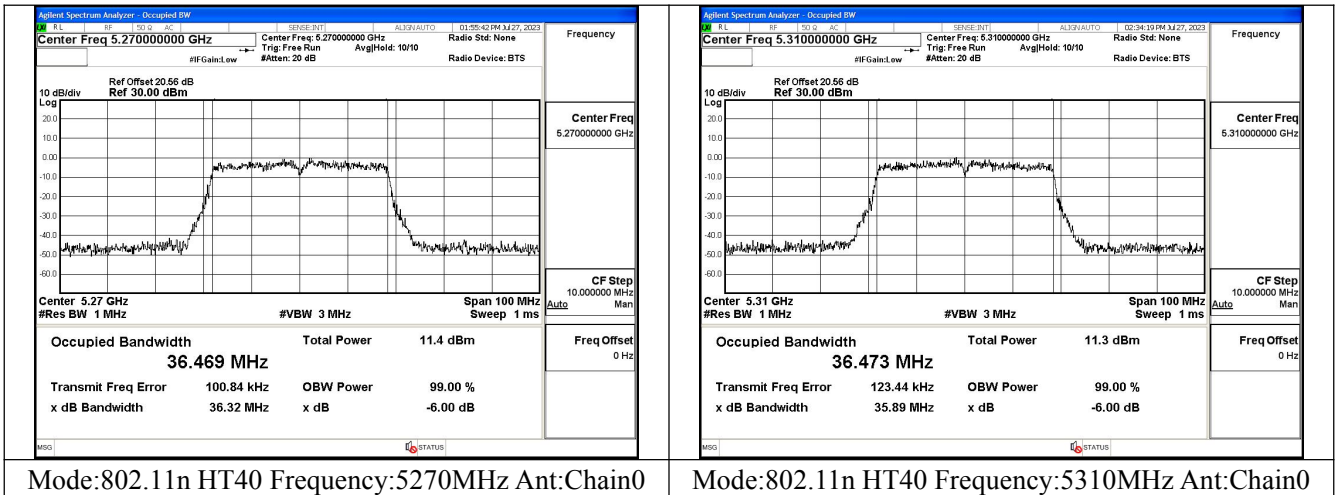
Test Mode: 802.11n HT20

<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.260000000 GHz</p> <p>Ref Offset 20.56 dB Ref 30.00 dBm</p> <p>Center 5.26 GHz #Res BW 510 kHz #VBW 2 MHz Span 60 MHz Sweep 1 ms</p> <p>Occupied Bandwidth <b>18.011 MHz</b></p> <p>Total Power 11.5 dBm</p> <p>Transmit Freq Error 60.956 kHz</p> <p>x dB Bandwidth 17.51 MHz</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.280000000 GHz</p> <p>Ref Offset 20.56 dB Ref 30.00 dBm</p> <p>Center 5.28 GHz #Res BW 510 kHz #VBW 2 MHz Span 60 MHz Sweep 1 ms</p> <p>Occupied Bandwidth <b>17.939 MHz</b></p> <p>Total Power 11.5 dBm</p> <p>Transmit Freq Error 79.301 kHz</p> <p>x dB Bandwidth 17.55 MHz</p>
<p>Mode:802.11n HT20 Frequency:5260MHz Ant:Chain0</p> <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.320000000 GHz</p> <p>Ref Offset 20.56 dB Ref 30.00 dBm</p> <p>Center 5.32 GHz #Res BW 510 kHz #VBW 2 MHz Span 60 MHz Sweep 1 ms</p> <p>Occupied Bandwidth <b>17.904 MHz</b></p> <p>Total Power 11.2 dBm</p> <p>Transmit Freq Error 47.786 kHz</p> <p>x dB Bandwidth 17.43 MHz</p>	<p>Mode:802.11n HT20 Frequency:5280MHz Ant:Chain0</p>
<p>Mode:802.11n HT20 Frequency:5320MHz Ant:Chain0</p>	

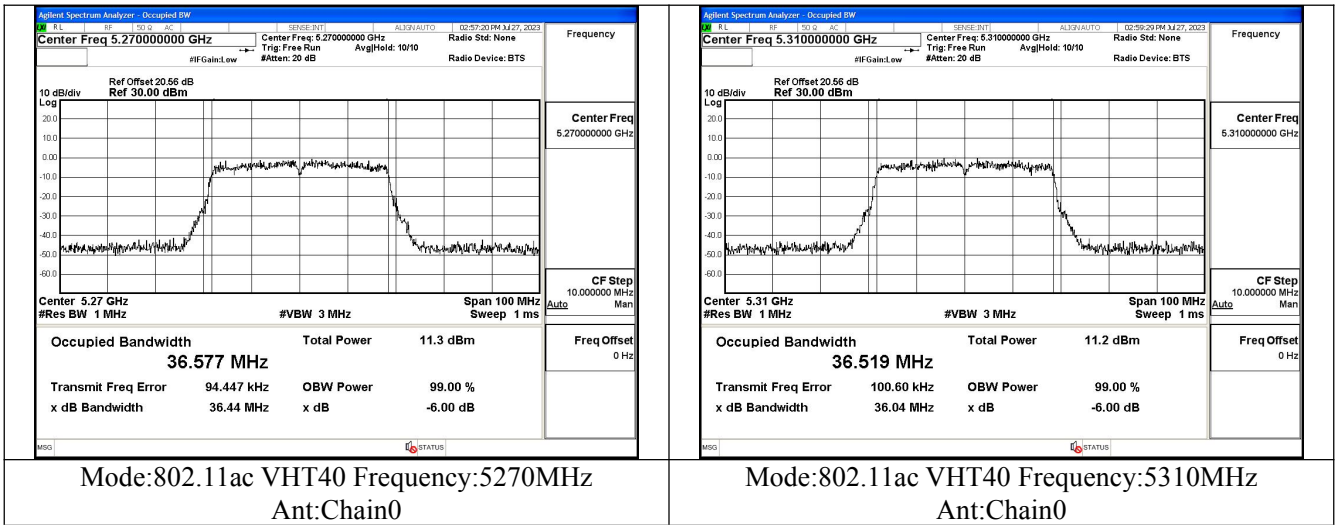
Test Mode: 802.11ac VHT20



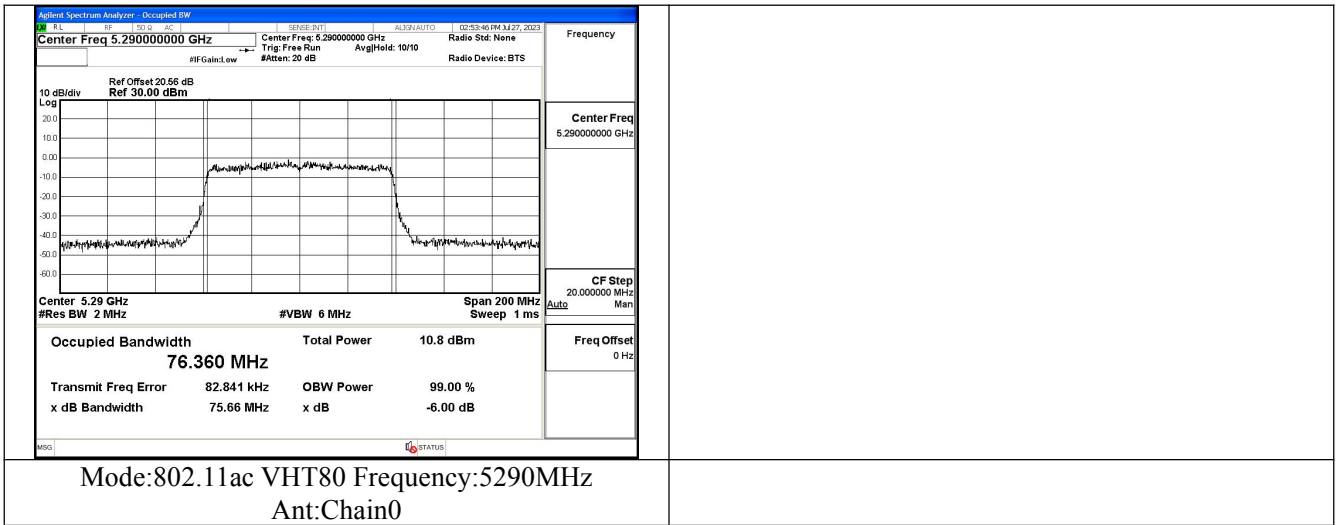
Test Mode: 802.11n HT40



Test Mode: 802.11ac VHT40



Test Mode: 802.11ac VHT80



## Transmitter Power Spectral Density

Offset 20.56dB = Attenuator + Temporary antenna connector loss + Cable loss

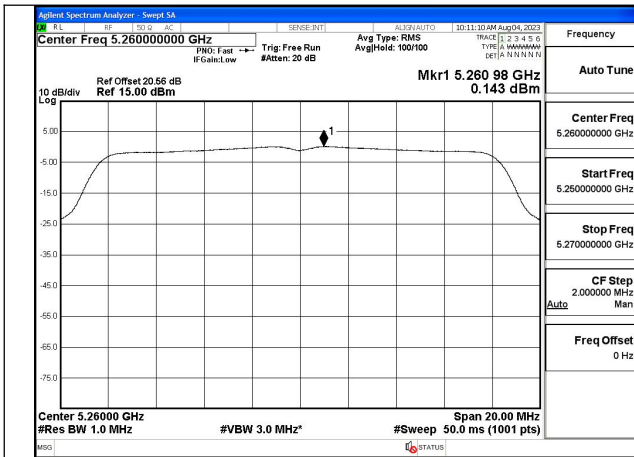
Test Mode	Antenna	Tones	5260MHz		5280MHz		5320MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11a	Chain0	NA	0.00	0.143	0.00	0.107	0.00	0.065
802.11n HT20	Chain0	NA	0.00	-0.165	0.00	-0.181	0.00	-0.191
802.11ac VHT20	Chain0	NA	0.00	-0.177	0.00	-0.156	0.00	-0.187

Test Mode	Antenna	Tones	5270MHz		---		5310MHz	
			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	-3.026	---	---	0.00	-3.081
802.11ac VHT40	Chain0	NA	0.00	-3.064	---	---	0.00	-3.082

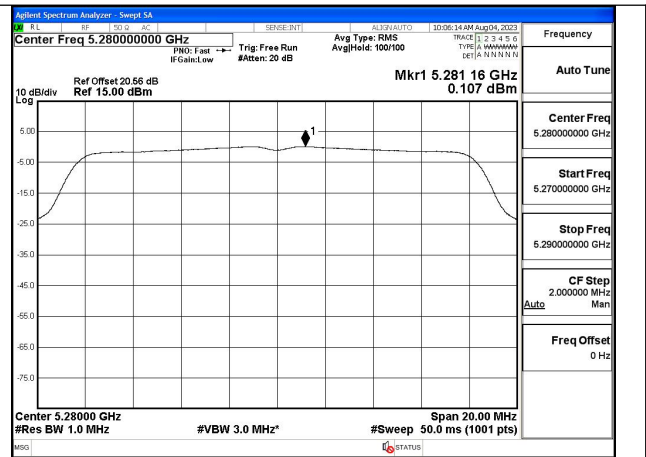
Test Mode	Antenna	Tones	5290MHz		---		---	
			Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11ac VHT80	Chain0	NA	0.00	-6.412	---	---	---	---



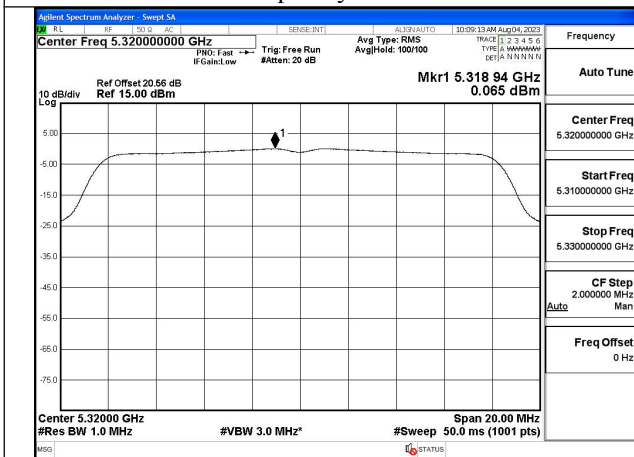
Test Mode: 802.11a



Mode:802.11a Frequency:5260MHz Ant:Chain0

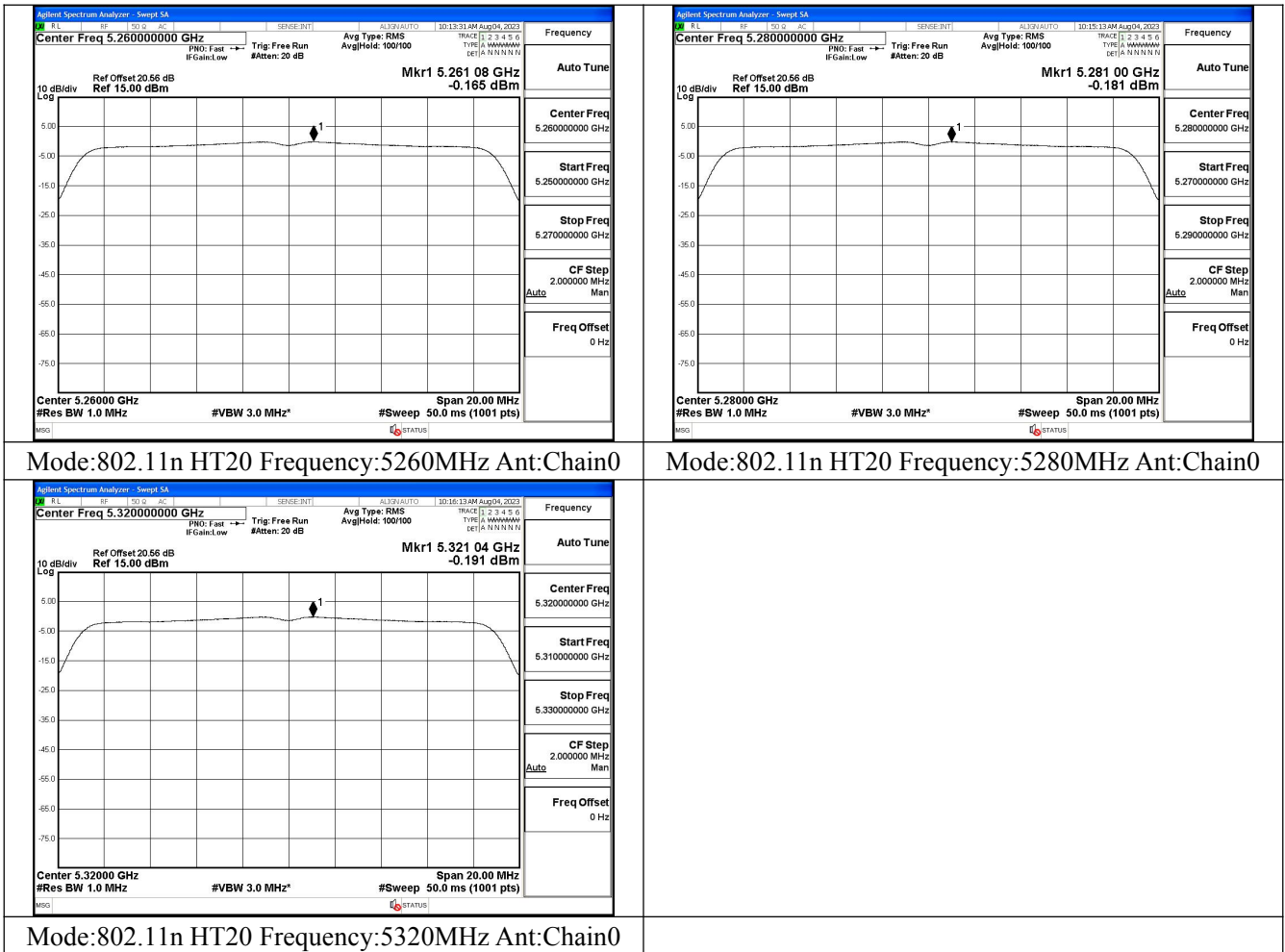


Mode:802.11a Frequency:5280MHz Ant:Chain0

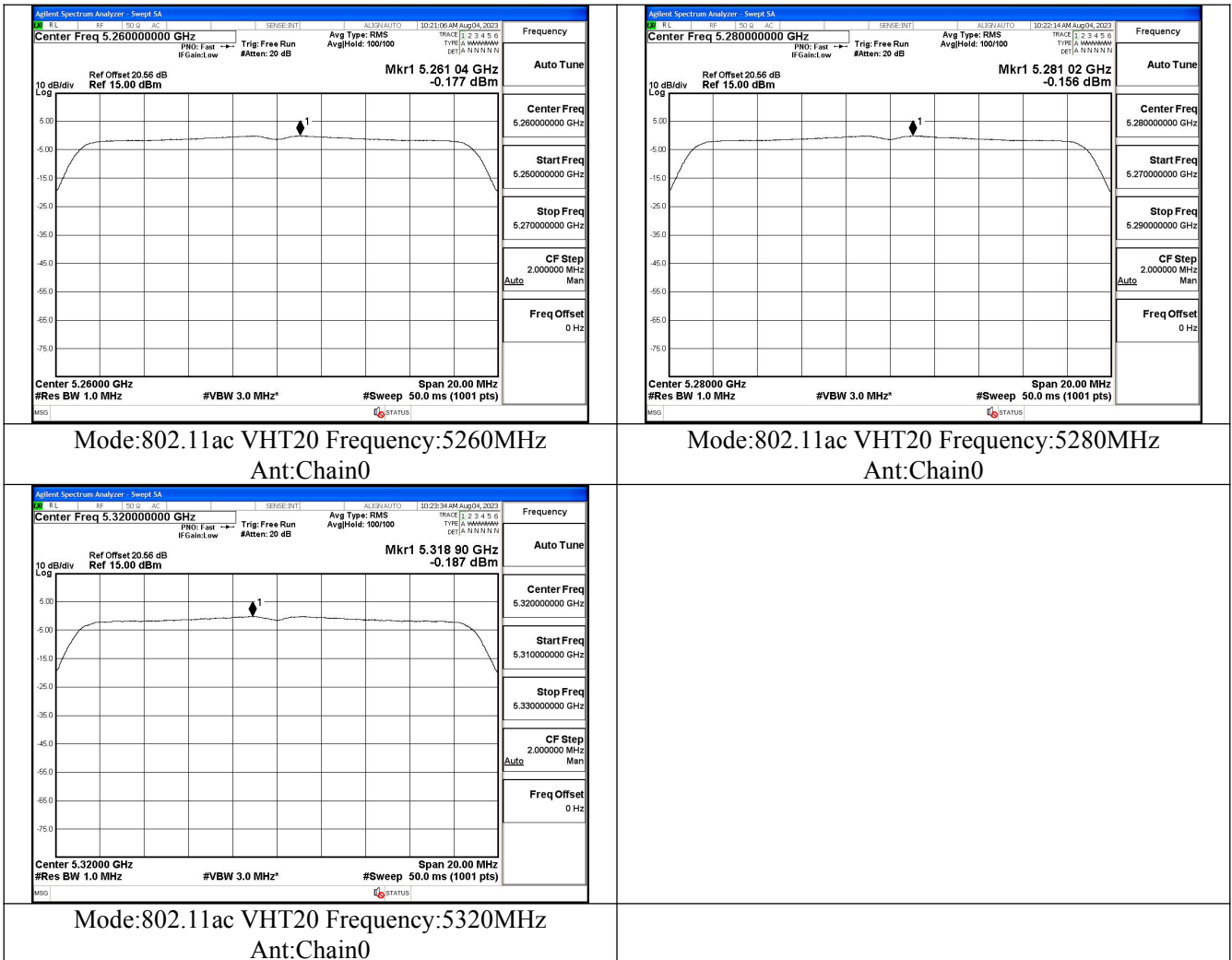


Mode:802.11a Frequency:5320MHz Ant:Chain0

Test Mode: 802.11n HT20



Test Mode: 802.11ac VHT20



Mode:802.11ac VHT20 Frequency:5260MHz  
Ant:Chain0

Mode:802.11ac VHT20 Frequency:5280MHz  
Ant:Chain0

Mode:802.11ac VHT20 Frequency:5320MHz  
Ant:Chain0