APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5180	98.79%	0.05
802. 11n HT20	5180	99.52%	0.02
802. 11n HT40	5190	99.45%	0.02
802. 11ac VHT20	5180	99.46%	0.02
802. 11ac VHT40	5190	99.53%	0.02
802. 11ac VHT80	5210	99.54%	0.02
802. 11ac VHT160	5250	99.52%	0.02
802. 11ax HE20	5180	99.47%	0.02
802. 11ax HE40	5190	99.53%	0.02
802. 11ax HE80	5210	99.45%	0.02
802. 11ax HE160	5250	99.56%	0.02

Output Power

NII1

Mode	Tones/ RUIndex	Freq (MHz)	Ant	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Ant7	11.31	7.51
			Ant8	11.38	11.88
		5220	Ant7	11.09	7.29
			Ant8	11.26	11.76
		5240	Ant7	10.91	7.11
			Ant8	11.27	11.77
802.11n20M		5180	Ant7	11.00	7.20
			Ant8	11.19	11.69
			Ant7+Ant8	14.11	13.01
		5220	Ant7	11.05	7.25
			Ant8	11.23	11.73
			Ant7+Ant8	14.15	13.05
		5240	Ant7	10.96	7.16
			Ant8	11.07	11.57
			Ant7+Ant8	14.03	12.91
802.11n40M		5190	Ant7	11.09	7.29
			Ant8	11.28	11.78
			Ant7+Ant8	14.20	13.10
		5230	Ant7	10.99	7.19
			Ant8	11.22	11.72
			Ant7+Ant8	14.12	13.03
802.11ac20M		5180	Ant7	11.14	7.34
			Ant8	11.13	11.63
			Ant7+Ant8	14.15	13.00
		5220	Ant7	10.98	7.18
			Ant8	11.07	11.57
			Ant7+Ant8	14.04	12.92
		5240	Ant7	10.81	7.01
			Ant8	11.05	11.55
			Ant7+Ant8	13.94	12.86
802.11ac40M		5190	Ant7	11.01	7.21
			Ant8	11.35	11.85
			Ant7+Ant8	14.19	13.13
		5230	Ant7	10.94	7.14

			Ant8	11.34	11.84
			Ant7+Ant8	14.15	13.11
802.11ac80M		5210	Ant7	10.86	7.06
			Ant8	11.21	11.71
			Ant7+Ant8	14.05	12.99
802.11ac160M		5250	Ant7	11.45	7.65
			Ant8	11.38	11.88
			Ant7+Ant8	14.43	13.27

Mode	Tones/ RUIndex	Freq (MHz)	Ant	Conducted average power output(dBm)	EIRP (dBm)
802.11ax20M	26T/0	5180	Ant7	6.98	3.18
			Ant8	6.54	7.04
			Ant7+Ant8	9.78	8.54
		5220	Ant7	7.39	3.59
			Ant8	6.28	6.78
			Ant7+Ant8	9.88	8.48
		5240	Ant7	7.25	3.45
			Ant8	6.27	6.77
			Ant7+Ant8	9.80	8.43
	26T/4	5180	Ant7	6.65	2.85
			Ant8	6.70	7.20
			Ant7+Ant8	9.69	8.56
		5220	Ant7	6.97	3.17
			Ant8	6.85	7.35
			Ant7+Ant8	9.92	8.75
		5240	Ant7	6.79	2.99
			Ant8	6.81	7.31
			Ant7+Ant8	9.81	8.68
	26T/8	5180	Ant7	7.01	3.21
			Ant8	7.10	7.60
			Ant7+Ant8	10.07	8.95
		5220	Ant7	7.37	3.57
			Ant8	7.19	7.69
			Ant7+Ant8	10.29	9.11
		5240	Ant7	7.18	3.38
			Ant8	7.18	7.68
			Ant7+Ant8	10.19	9.05
	52T/37	5180	Ant7	6.92	3.12
			Ant8	7.05	7.55
			Ant7+Ant8	10.00	8.89
		5220	Ant7	7.14	3.34
			Ant8	7.08	7.58
			Ant7+Ant8	10.12	8.97
		5240	Ant7	7.11	3.31
			Ant8	7.11	7.61
			Ant7+Ant8	10.12	8.98

	52T/39	5180	Ant7	6.62	2.82
			Ant8	6.74	7.24
			Ant7+Ant8	9.69	8.58
		5220	Ant7	7.05	3.25
			Ant8	6.86	7.36
			Ant7+Ant8	9.97	8.78
		5240	Ant7	6.85	3.05
			Ant8	6.79	7.29
			Ant7+Ant8	9.83	8.68
	52T/40	5180	Ant7	6.93	3.13
			Ant8	6.89	7.39
			Ant7+Ant8	9.92	8.77
		5220	Ant7	7.18	3.38
			Ant8	6.13	6.63
			Ant7+Ant8	9.70	8.31
		5240	Ant7	7.08	3.28
			Ant8	6.93	7.43
			Ant7+Ant8	10.02	8.84
	106T/53	5180	Ant7	6.94	3.14
			Ant8	6.12	6.62
			Ant7+Ant8	9.56	8.23
		5220	Ant7	7.22	3.42
			Ant8	6.26	6.76
			Ant7+Ant8	9.78	8.41
		5240	Ant7	7.09	3.29
			Ant8	6.15	6.65
			Ant7+Ant8	9.66	8.30
	106T/54	5180	Ant7	7.04	3.24
			Ant8	6.09	6.59
			Ant7+Ant8	9.60	8.24
		5220	Ant7	7.19	3.39
			Ant8	6.22	6.72
			Ant7+Ant8	9.74	8.38
		5240	Ant7	7.05	3.25
			Ant8	6.16	6.66
			Ant7+Ant8	9.64	8.29
	242T/61	5180	Ant7	11.59	7.79
			Ant8	11.55	12.05
			Ant7+Ant8	14.58	13.43

		5220	Ant7	11.59	7.79
			Ant8	11.59	12.09
			Ant7+Ant8	14.60	13.46
		5240	Ant7	11.43	7.63
			Ant8	11.56	12.06
			Ant7+Ant8	14.51	13.40

Mode	Tones/ RUIndex	Freq (MHz)	Ant	Conducted average power output(dBm)	EIRP (dBm)
802.11ax40M	26T/0	5190	Ant7	7.34	3.54
			Ant8	6.46	6.96
			Ant7+Ant8	9.93	8.59
		5230	Ant7	7.59	3.79
			Ant8	6.76	7.26
			Ant7+Ant8	10.21	8.87
	26T/10	5190	Ant7	7.27	3.47
			Ant8	6.36	6.86
			Ant7+Ant8	9.85	8.50
		5230	Ant7	7.43	3.63
			Ant8	6.49	6.99
			Ant7+Ant8	10.00	8.64
	26T/17	5190	Ant7	7.4	3.60
			Ant8	6.50	7.00
			Ant7+Ant8	9.98	8.63
		5230	Ant7	7.53	3.73
			Ant8	6.61	7.11
			Ant7+Ant8	10.10	8.75
	52T/37	5190	Ant7	7.33	3.53
			Ant8	6.68	7.18
			Ant7+Ant8	10.03	8.74
		5230	Ant7	7.78	3.98
			Ant8	6.84	7.34
			Ant7+Ant8	10.35	8.99
	52T/41	5190	Ant7	7.33	3.53
			Ant8	6.29	6.79
			Ant7+Ant8	9.85	8.47
		5230	Ant7	7.54	3.74
			Ant8	6.61	7.11
			Ant7+Ant8	10.11	8.75

	52T/44	5190	Ant7	7.55	3.75
			Ant8	6.52	7.02
			Ant7+Ant8	10.08	8.70
		5230	Ant7	7.65	3.85
			Ant8	6.73	7.23
			Ant7+Ant8	10.22	8.87
	106T/53	5190	Ant7	7.5	3.70
			Ant8	6.73	7.23
			Ant7+Ant8	10.14	8.82
		5230	Ant7	7.69	3.89
			Ant8	6.74	7.24
			Ant7+Ant8	10.25	8.89
	106T/55	5190	Ant7	7.38	3.58
			Ant8	6.47	6.97
			Ant7+Ant8	9.96	8.61
		5230	Ant7	7.53	3.73
			Ant8	6.61	7.11
			Ant7+Ant8	10.10	8.75
	106T/56	5190	Ant7	7.58	3.78
			Ant8	6.62	7.12
			Ant7+Ant8	10.14	8.77
		5230	Ant7	7.63	3.83
			Ant8	6.71	7.21
			Ant7+Ant8	10.20	8.85
	242T/61	5190	Ant7	7.46	3.66
			Ant8	6.67	7.17
			Ant7+Ant8	10.09	8.77
		5230	Ant7	7.65	3.85
			Ant8	6.72	7.22
			Ant7+Ant8	10.22	8.86
	242T/62	5190	Ant7	7.35	3.55
			Ant8	6.63	7.13
			Ant7+Ant8	10.02	8.71
		5230	Ant7	7.59	3.79
			Ant8	6.66	7.16
			Ant7+Ant8	10.16	8.80
	484T/65	5190	Ant7	11.42	7.62
			Ant8	11.79	12.29
			Ant7+Ant8	14.62	13.56

		5230	Ant7	11.31	7.51
			Ant8	11.71	12.21
			Ant7+Ant8	14.52	13.48

Mode	Tones/ RUIndex	Freq (MHz)	Ant	Conducted average power output(dBm)	EIRP (dBm)
802.11ax80M	26T/0	5210	Ant7	7.74	3.94
			Ant8	6.90	7.40
			Ant7+Ant8	10.35	9.02
	26T/18		Ant7	7.69	3.89
			Ant8	6.51	7.01
			Ant7+Ant8	10.15	8.73
	26T/36		Ant7	7.67	3.87
			Ant8	6.53	7.03
			Ant7+Ant8	10.15	8.74
	52T/37		Ant7	7.14	3.34
			Ant8	6.80	7.30
			Ant7+Ant8	9.98	8.77
	52T/45		Ant7	7.73	3.93
			Ant8	6.66	7.16
			Ant7+Ant8	10.24	8.85
	52T/52		Ant7	7.75	3.95
			Ant8	6.62	7.12
			Ant7+Ant8	10.23	8.83
	106T/53		Ant7	7.58	3.78
			Ant8	6.84	7.34
			Ant7+Ant8	10.24	8.93
	106T/57		Ant7	7.57	3.77
			Ant8	6.63	7.13
			Ant7+Ant8	10.14	8.78
	106T/60		Ant7	7.59	3.79
			Ant8	6.66	7.16
			Ant7+Ant8	10.16	8.80
	242T/61		Ant7	7.71	3.91
			Ant8	6.76	7.26
			Ant7+Ant8	10.27	8.91
	242T/63		Ant7	7.63	3.83
			Ant8	6.60	7.10
			Ant7+Ant8	10.16	8.78

	242T/64		Ant7	7.65	3.85
			Ant8	6.65	7.15
			Ant7+Ant8	10.19	8.82
	484T/65		Ant7	7.59	3.79
			Ant8	6.65	7.15
			Ant7+Ant8	10.16	8.80
	484T/66		Ant7	7.54	3.74
			Ant8	6.70	7.20
			Ant7+Ant8	10.15	8.82
	996T/67		Ant7	11.43	7.63
			Ant8	11.93	12.43
			Ant7+Ant8	14.70	13.67

Mode	Tones/ RUIndex	Freq (MHz)	Ant	Conducted average power output(dBm)	EIRP (dBm)
802.11ax160M	26T/L	5250	Ant7	7.41	3.61
			Ant8	7.49	7.99
			Ant7+Ant8	10.46	9.34
	26T/H		Ant7	7.16	3.36
			Ant8	6.75	7.25
			Ant7+Ant8	9.97	8.74
	52T/L		Ant7	7.37	3.57
			Ant8	7.40	7.90
			Ant7+Ant8	10.40	9.26
	52T/H		Ant7	7.11	3.31
			Ant8	6.70	7.20
			Ant7+Ant8	9.92	8.69
	106T/L		Ant7	7.34	3.54
			Ant8	7.44	7.94
			Ant7+Ant8	10.40	9.29
	106T/H		Ant7	7.04	3.24
			Ant8	6.74	7.24
			Ant7+Ant8	9.90	8.70
	242T/L		Ant7	7.33	3.53
			Ant8	7.43	7.93
			Ant7+Ant8	10.39	9.28
	242T/H		Ant7	7.05	3.25
			Ant8	6.73	7.23

			Ant7+Ant8	9.90	8.69
	484T/L		Ant7	7.18	3.38
			Ant8	7.22	7.72
			Ant7+Ant8	10.21	9.08
	484T/H		Ant7	6.88	3.08
			Ant8	6.57	7.07
			Ant7+Ant8	9.74	8.53
	996T/L		Ant7	6.95	3.15
			Ant8	6.93	7.43
			Ant7+Ant8	9.95	8.81
	996T/H		Ant7	6.72	2.92
			Ant8	6.47	6.97
			Ant7+Ant8	9.61	8.41
	1992T/L&H		Ant7	11.04	7.24
			Ant8	10.90	11.40
			Ant7+Ant8	13.98	12.81

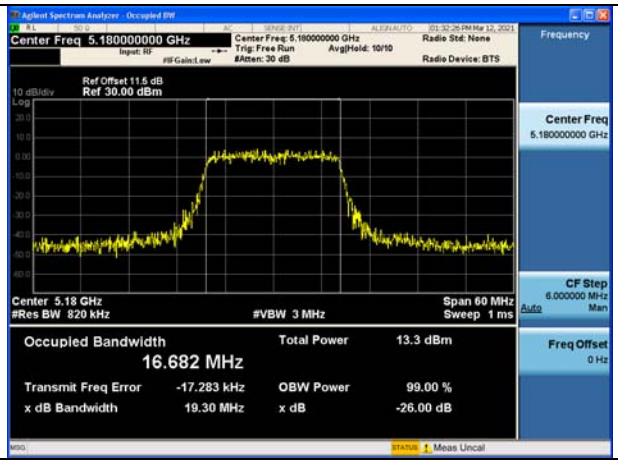
Emission Bandwidth

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

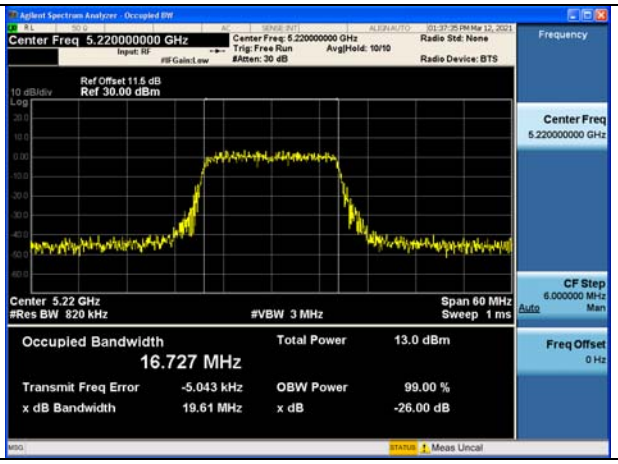
Test Mode:802.11a

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5180	Ant7	19.30
	Ant8	19.05
5220	Ant7	19.61
	Ant8	19.60
5240	Ant7	19.31
	Ant8	18.95

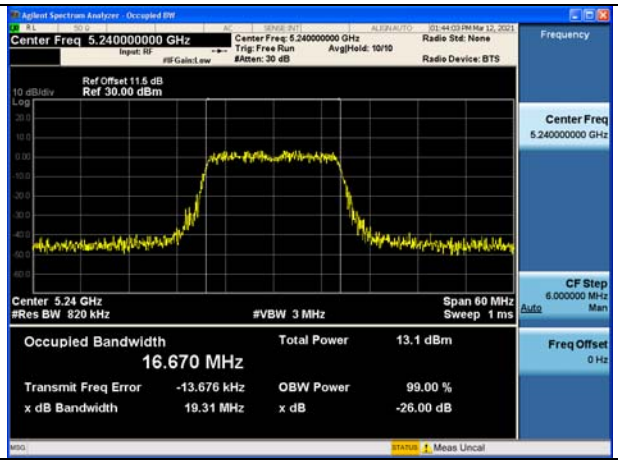
Test Mode:802.11a Ant7



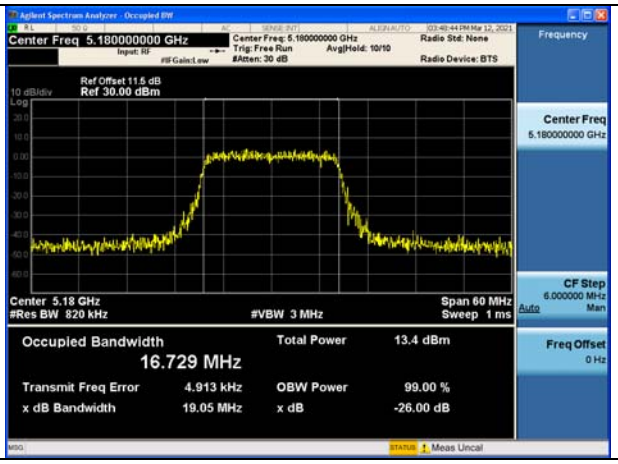
Test Mode:802.11a Ant7



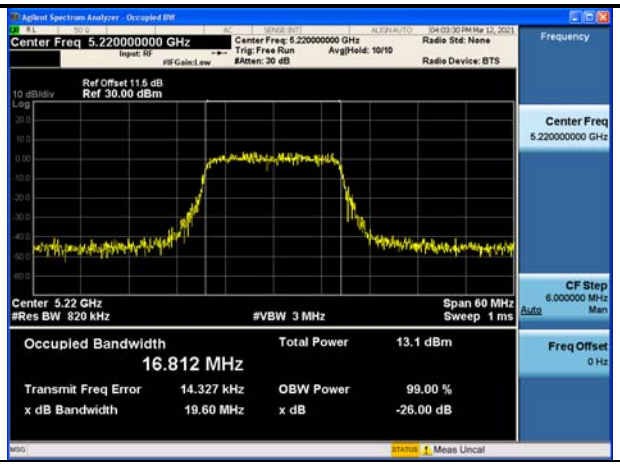
Test Mode:802.11a Ant7

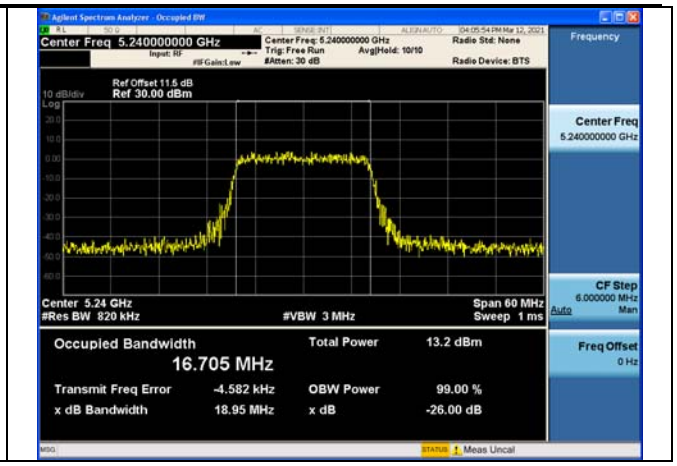


Test Mode:802.11a Ant8



Test Mode:802.11a Ant8

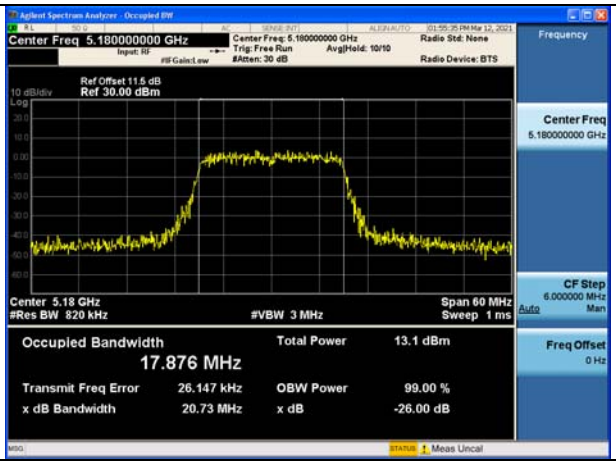

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.220000000 GHz
Center Freq: 5.220000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11.5 dB
10 dB/div
Ref 30.00 dBm
Log
Center Freq
5.220000000 GHz
Center 5.22 GHz
#Res BW 820 kHz
#VBW 3 MHz
Span 60 MHz
Sweep 1 ms
CF Step
6.000000 MHz
Auto
Man
Occupied Bandwidth
16.812 MHz
Total Power 13.1 dBm
Transmit Freq Error 14.327 kHz
OBW Power 99.00 %
x dB Bandwidth 19.60 MHz
x dB -26.00 dB
Freq Offset
0 Hz
Meas Uncal


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.240000000 GHz
Center Freq: 5.240000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11.5 dB
10 dB/div
Ref 30.00 dBm
Log
Center Freq
5.240000000 GHz
Center 5.24 GHz
#Res BW 820 kHz
#VBW 3 MHz
Span 60 MHz
Sweep 1 ms
CF Step
6.000000 MHz
Auto
Man
Occupied Bandwidth
16.705 MHz
Total Power 13.2 dBm
Transmit Freq Error -4.582 kHz
OBW Power 99.00 %
x dB Bandwidth 18.95 MHz
x dB -26.00 dB
Freq Offset
0 Hz
Meas Uncal

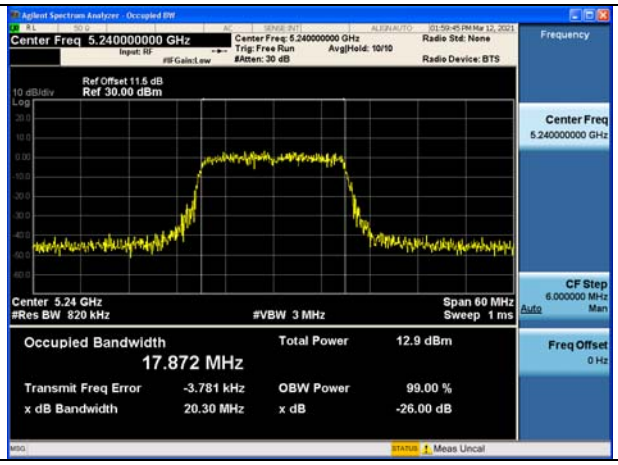
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5180	Ant7	20.73
	Ant8	20.92
5240	Ant7	20.30
	Ant8	20.18

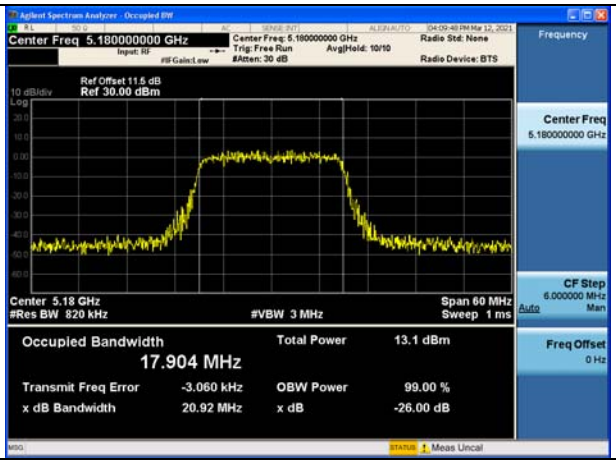
Test Mode:802. 11n HT20 Ant7



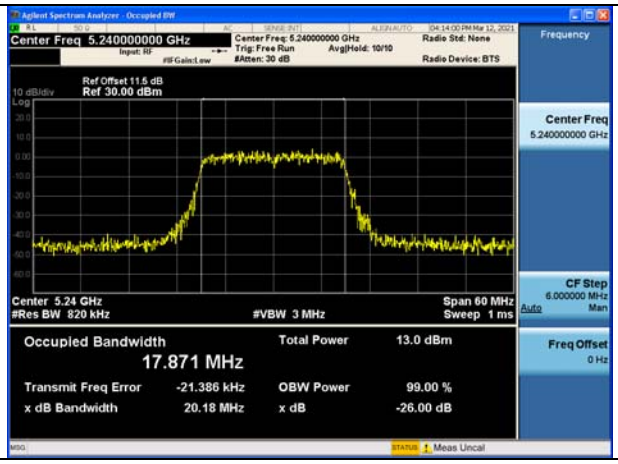
Test Mode:802. 11n HT20 Ant7



Test Mode:802. 11n HT20 Ant8



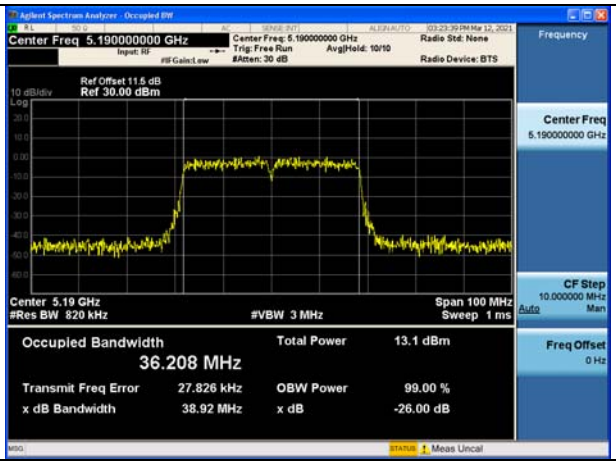
Test Mode:802. 11n HT20 Ant8



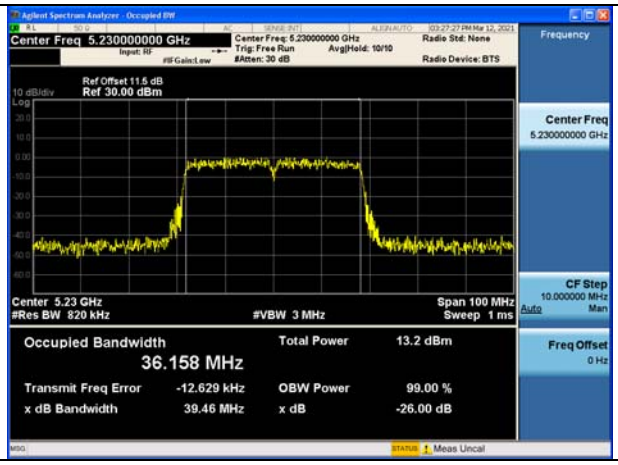
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5190	Ant7	38.92
	Ant8	39.06
5230	Ant7	39.46
	Ant8	39.21

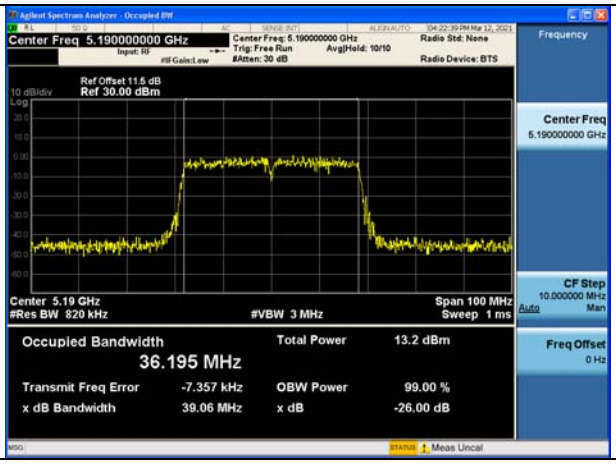
Test Mode:802. 11n HT40 Ant7



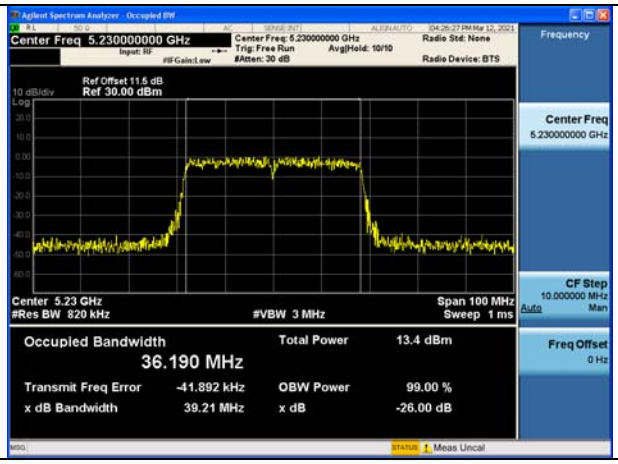
Test Mode:802. 11n HT40 Ant7



Test Mode:802. 11n HT40 Ant8



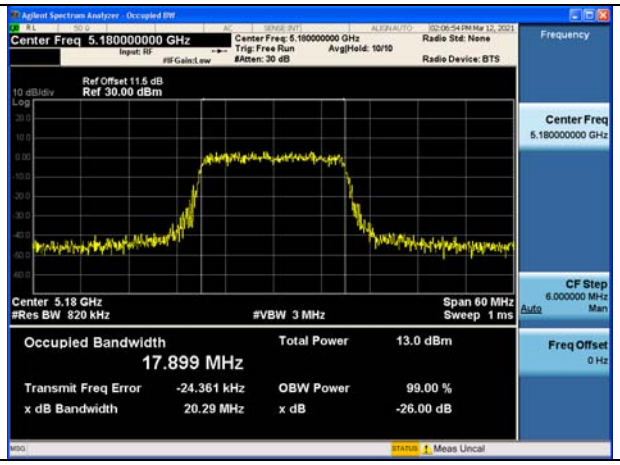
Test Mode:802. 11n HT40 Ant8



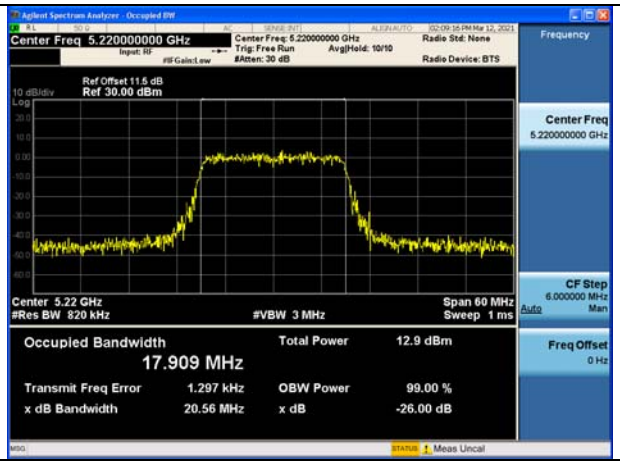
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5180	Ant7	20.29
	Ant8	20.50
5220	Ant7	20.56
	Ant8	20.86
5240	Ant7	20.50
	Ant8	20.87

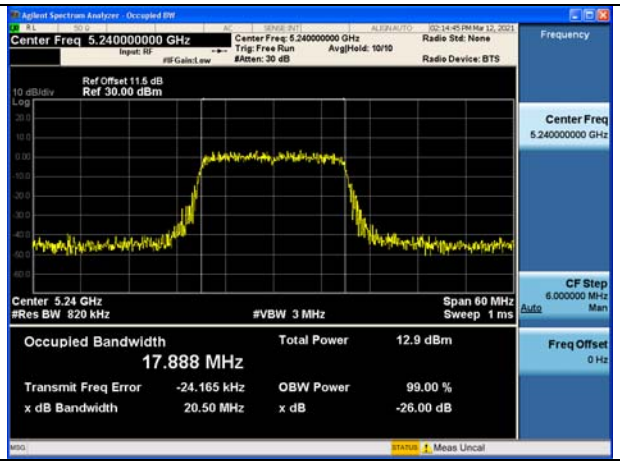
Test Mode:802. 11ac VHT20 Ant7



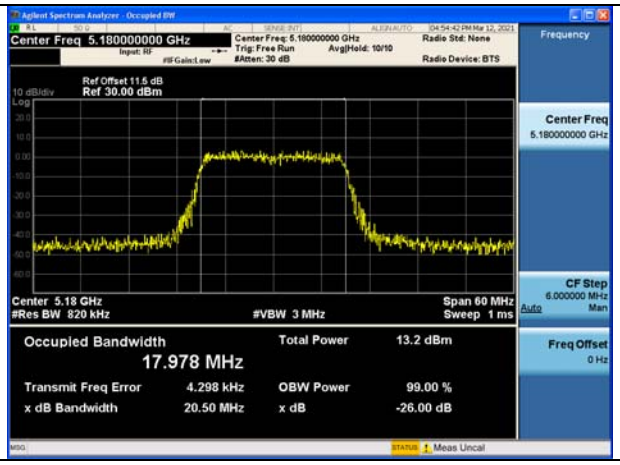
Test Mode:802. 11ac VHT20 Ant7



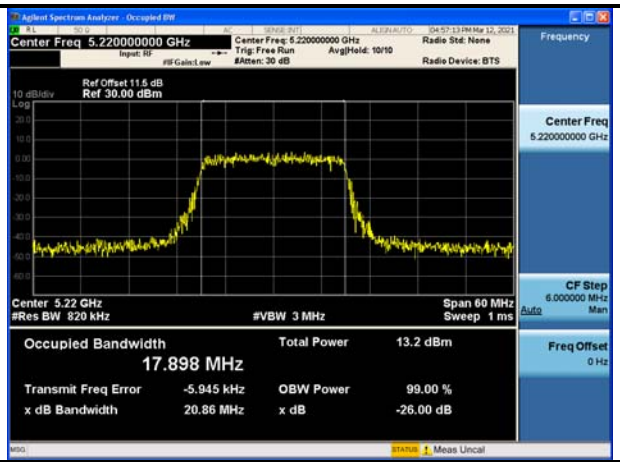
Test Mode:802. 11ac VHT20 Ant7

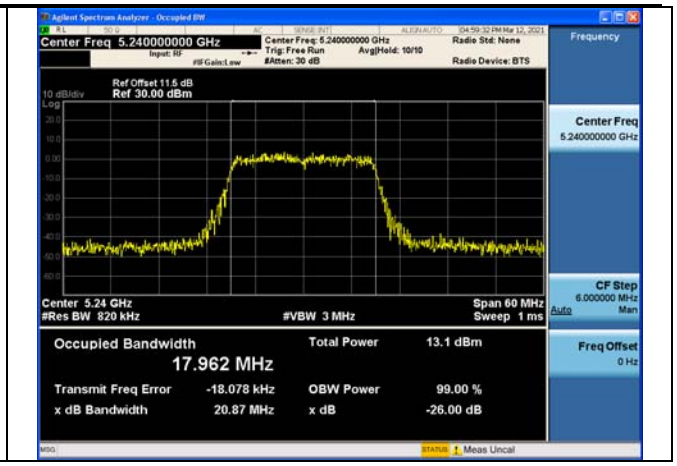


Test Mode:802. 11ac VHT20 Ant8



Test Mode:802. 11ac VHT20 Ant8

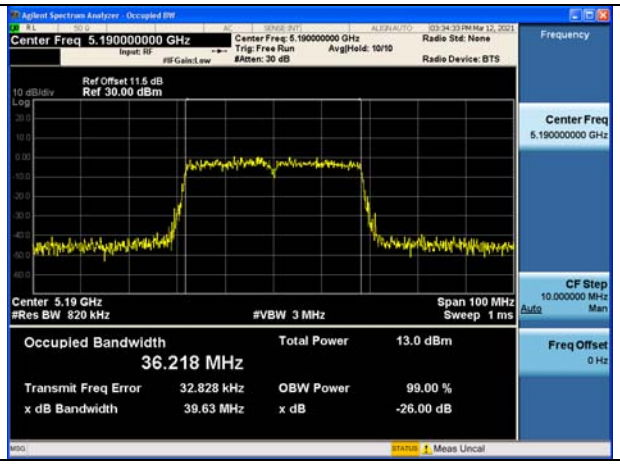

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.220000000 GHz
Center Freq: 5.220000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11.5 dB
10 dB/div
Ref 30.00 dBm
Log
Center Freq
5.220000000 GHz
Center 5.22 GHz
#Res BW 820 kHz
#VBW 3 MHz
Span 60 MHz
Sweep 1 ms
CF Step
6.000000 MHz
Auto
Man
Occupied Bandwidth
17.898 MHz
Total Power
13.2 dBm
Transmit Freq Error
-5.945 kHz
OBW Power
99.00 %
x dB Bandwidth
20.86 MHz
x dB
-26.00 dB
Freq Offset
0 Hz
Meas Uncal


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.240000000 GHz
Center Freq: 5.240000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11.5 dB
10 dB/div
Ref 30.00 dBm
Log
Center Freq
5.240000000 GHz
Center 5.24 GHz
#Res BW 820 kHz
#VBW 3 MHz
Span 60 MHz
Sweep 1 ms
CF Step
6.000000 MHz
Auto
Man
Occupied Bandwidth
17.962 MHz
Total Power
13.1 dBm
Transmit Freq Error
-18.078 kHz
OBW Power
99.00 %
x dB Bandwidth
20.87 MHz
x dB
-26.00 dB
Freq Offset
0 Hz
Meas Uncal

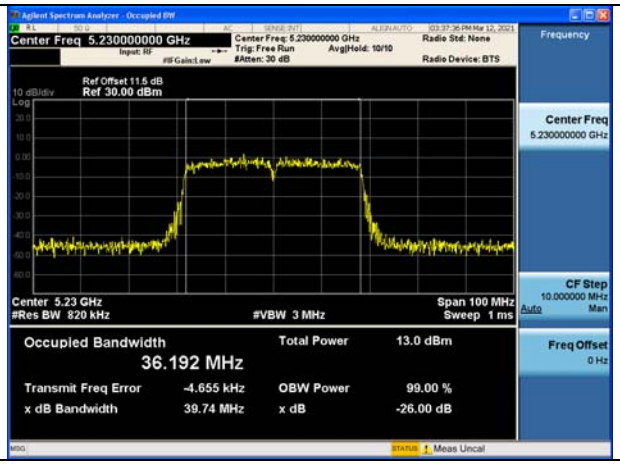
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5190	Ant7	39.63
	Ant8	38.67
5230	Ant7	39.74
	Ant8	39.20

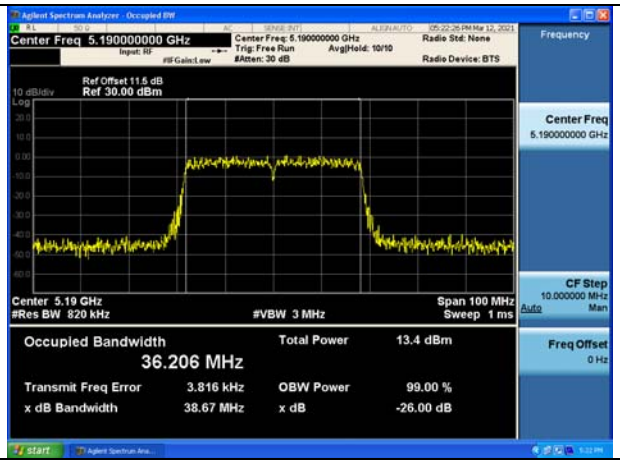
Test Mode:802. 11ac VHT40 Ant7



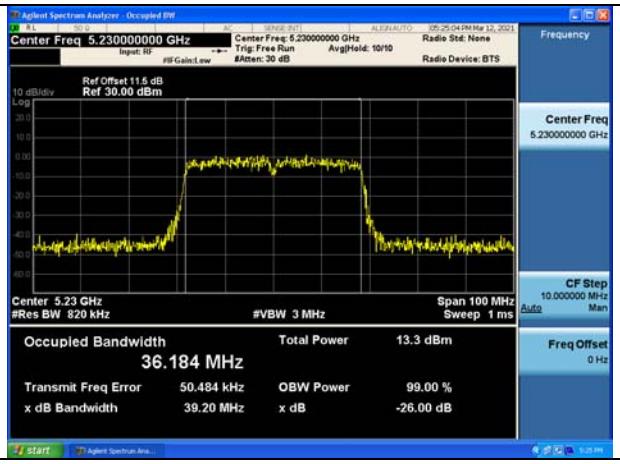
Test Mode:802. 11ac VHT40 Ant7



Test Mode:802. 11ac VHT40 Ant8

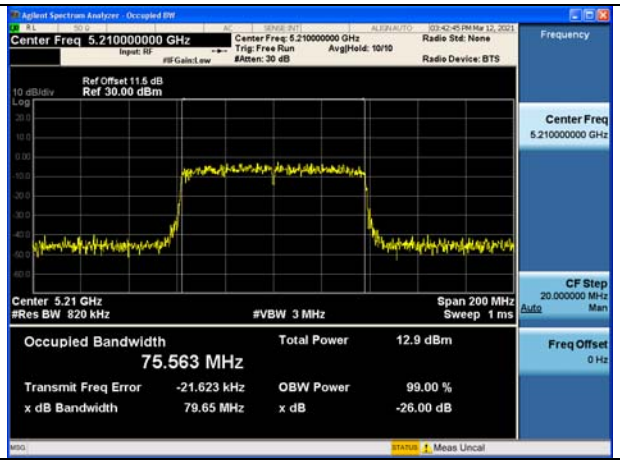
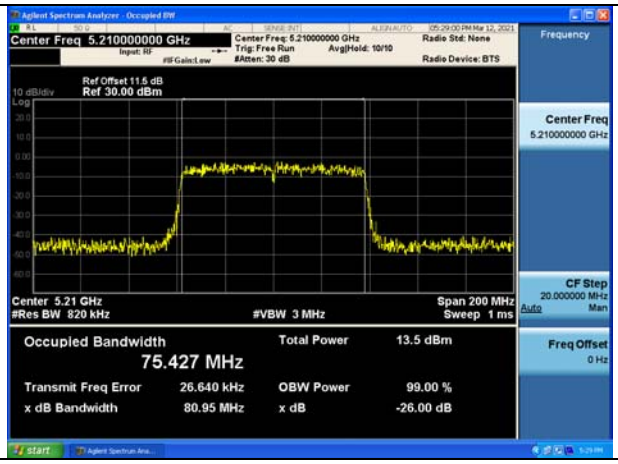


Test Mode:802. 11ac VHT40 Ant8



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5210	Ant7	79.65
	Ant8	80.95

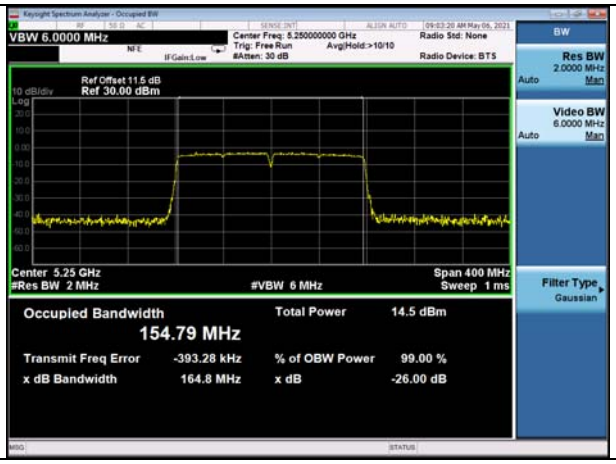
Test Mode:802. 11ac VHT80 Ant7	Test Mode:802. 11ac VHT80 Ant8
	

Test Mode:802. 11ac VHT160

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5250	Ant7	164.2
	Ant8	164.8

Test Mode:802. 11ac VHT160 Ant7

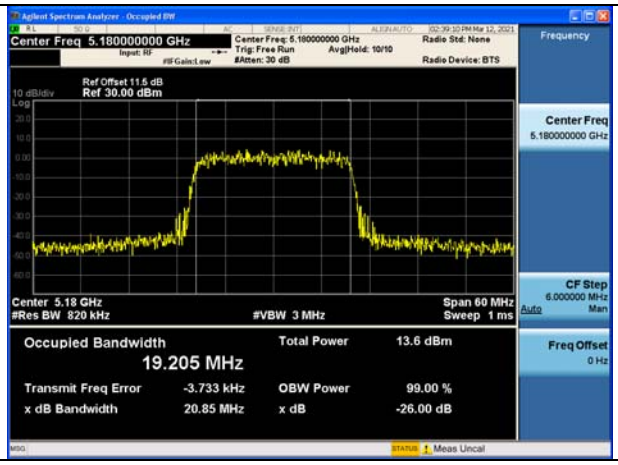
Test Mode:802. 11ac VHT160 Ant8



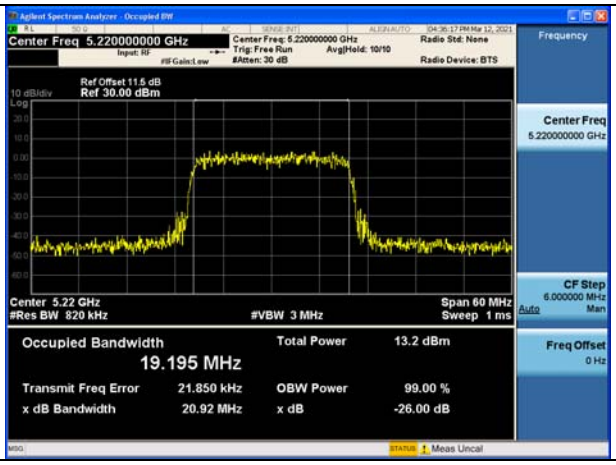
Test Mode:802.11ax HE20(242)

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5180	Ant7	20.85
	Ant8	20.96
5220	Ant7	20.92
	Ant8	20.99
5240	Ant7	20.75
	Ant8	20.93

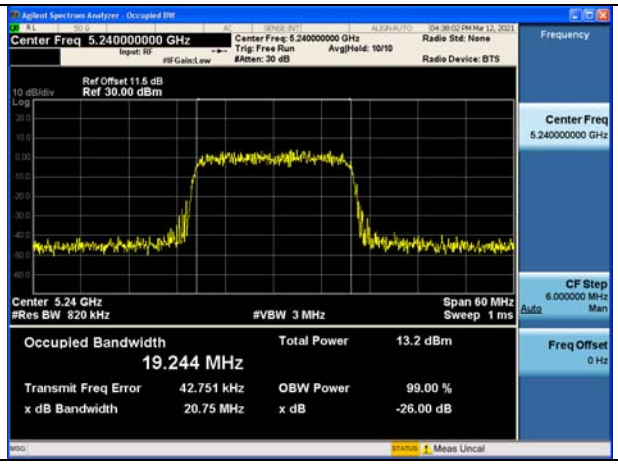
Test Mode:802. 11ax HE20 Ant7



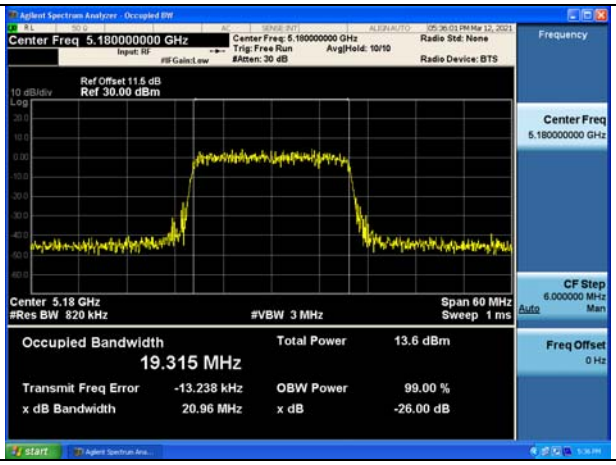
Test Mode:802. 11ax HE20 Ant7



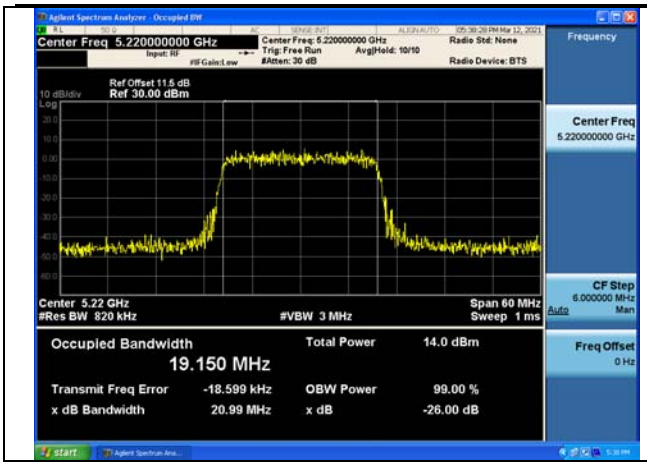
Test Mode:802. 11ax HE20 Ant7

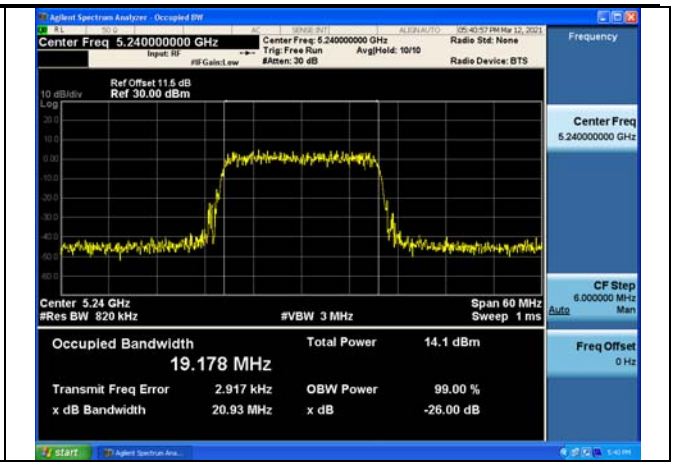


Test Mode:802. 11ax HE20 Ant8



Test Mode:802. 11ax HE20 Ant8

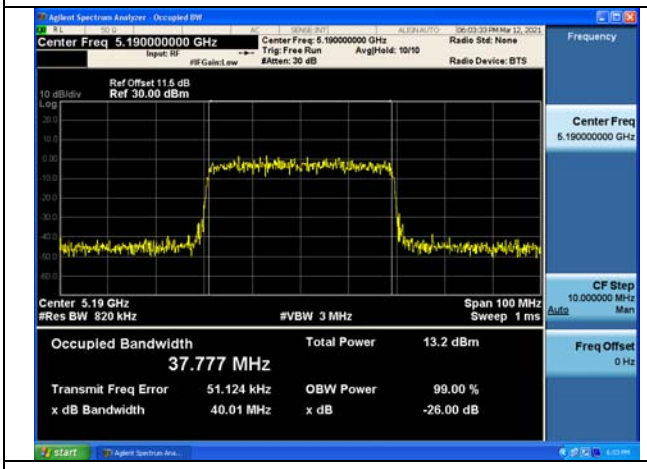




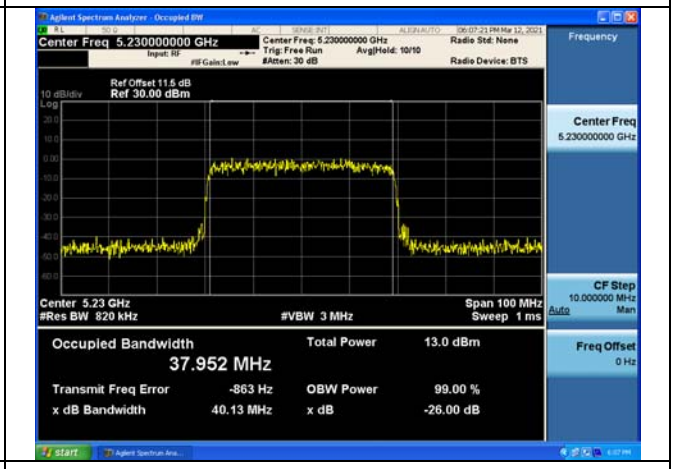
Test Mode:802.11ax HE40(484)

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5190	Ant7	40.01
	Ant8	39.93
5230	Ant7	40.13
	Ant8	40.47

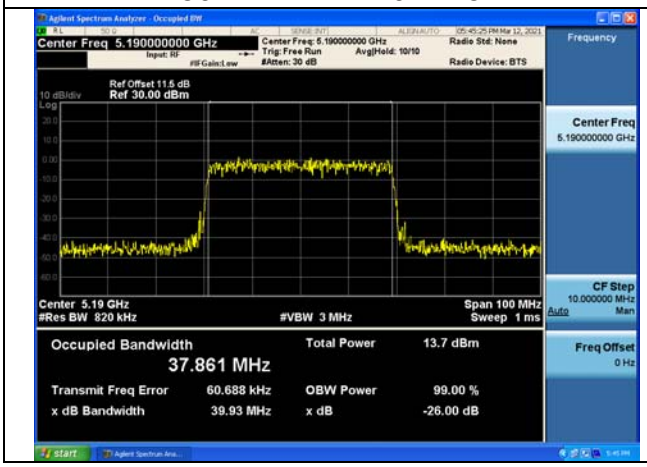
Test Mode:802. 11ax HE40 Ant7



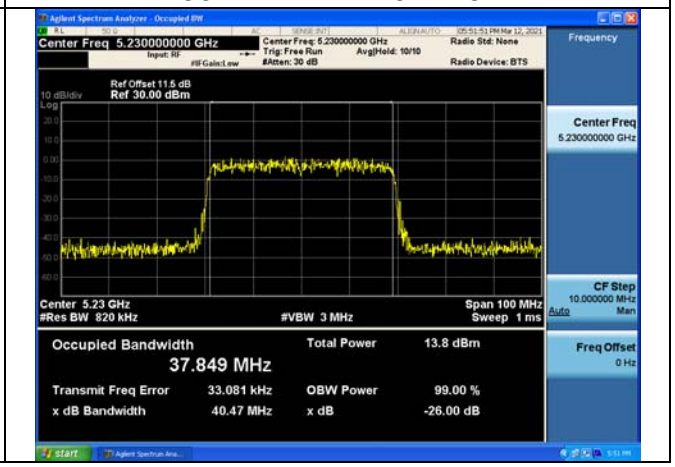
Test Mode:802. 11ax HE40 Ant7



Test Mode:802. 11ax HE40 Ant8

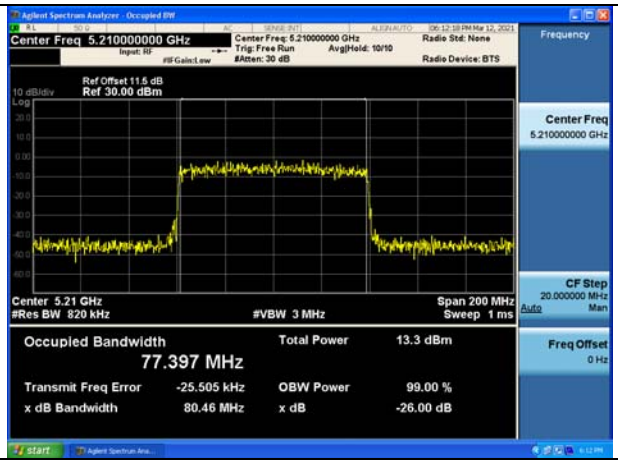
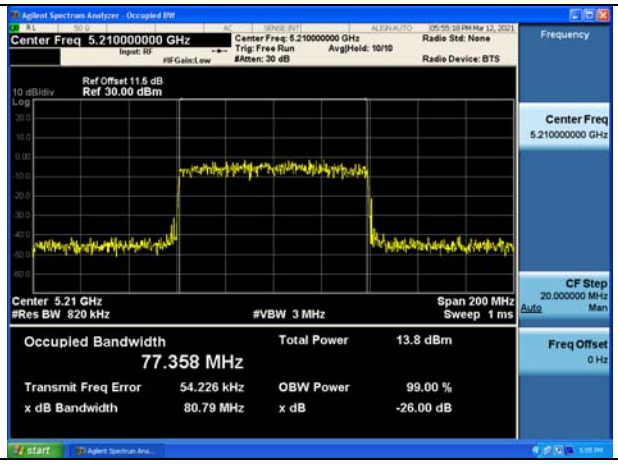


Test Mode:802. 11ax HE40 Ant8



Test Mode:802.11ax HE80(996)

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5210	Ant7	80.46
	Ant8	80.79

Test Mode:802. 11ax HE80 Ant7	Test Mode:802. 11ax HE80 Ant8
	

Test Mode:802.11ax HE160(1992)

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5250	Ant7	163.8
	Ant8	163.6

Test Mode:802. 11ax HE160 Ant7	Test Mode:802. 11ax HE160 Ant8

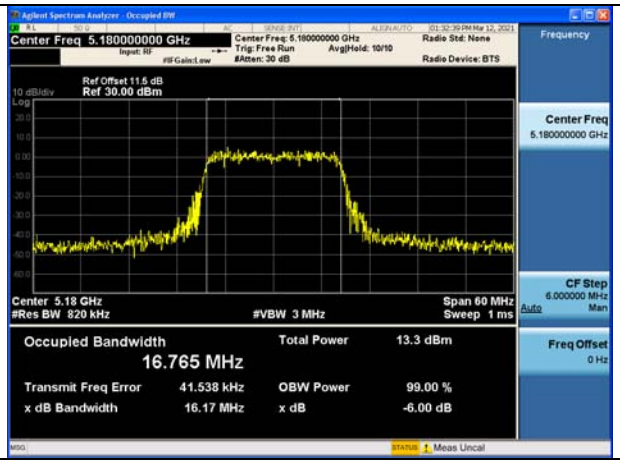
Occupied Bandwidth

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

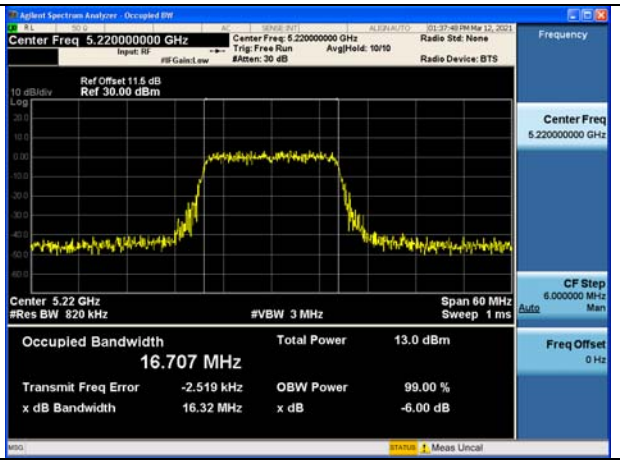
Test Mode:802.11a

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5180	Ant7	16.765
	Ant8	16.794
5220	Ant7	16.707
	Ant8	16.785
5240	Ant7	16.771
	Ant8	16.661

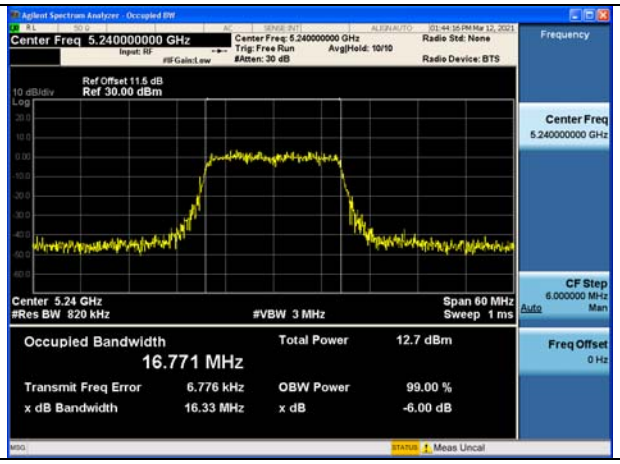
Test Mode:802.11a Ant7



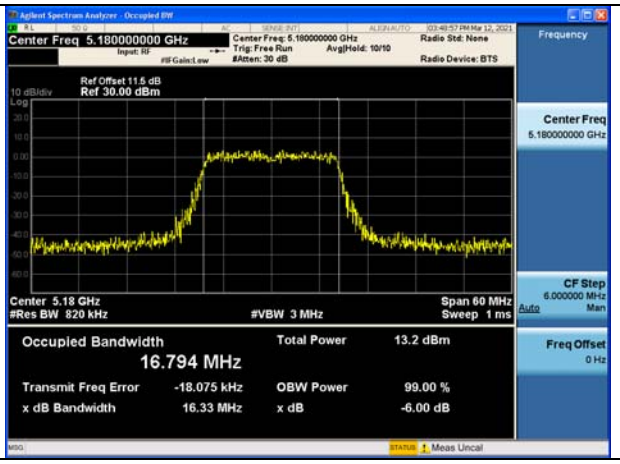
Test Mode:802.11a Ant7



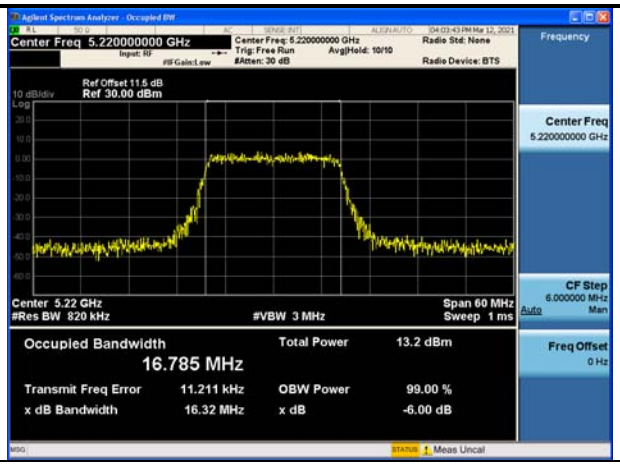
Test Mode:802.11a Ant7

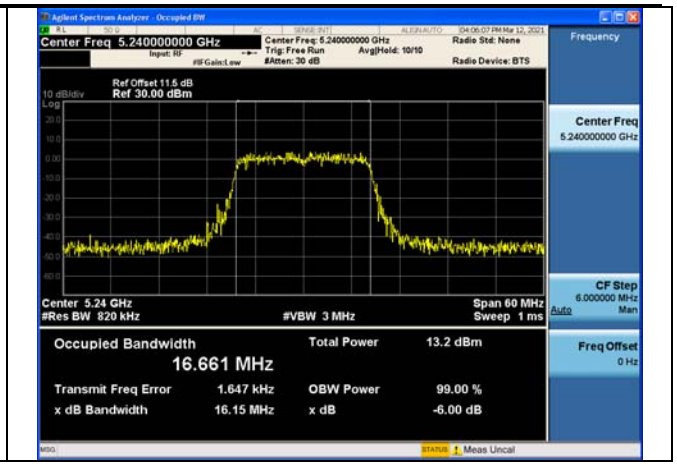


Test Mode:802.11a Ant8



Test Mode:802.11a Ant8

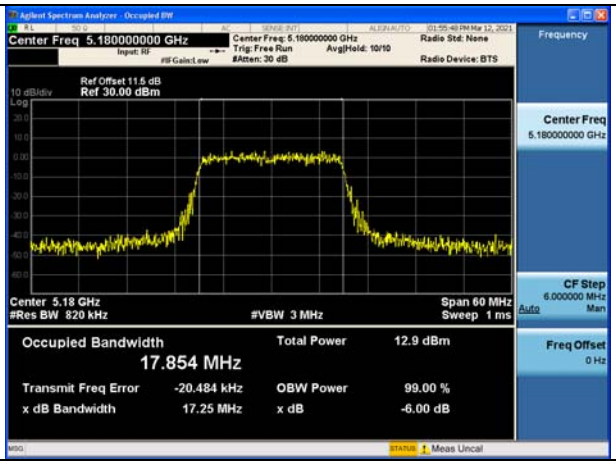

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.220000000 GHz
Center Freq: 5.220000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11.5 dB
10 dB/div
Ref 30.00 dBm
Log
Center Freq
5.220000000 GHz
CF Step
6.000000 MHz
Auto
Man
Center 5.22 GHz
#Res BW 820 kHz
#VBW 3 MHz
Span 60 MHz
Sweep 1 ms
Occupied Bandwidth
16.785 MHz
Total Power 13.2 dBm
Transmit Freq Error 11.211 kHz
OBW Power 99.00 %
x dB Bandwidth 16.32 MHz
x dB -6.00 dB
Freq Offset
0 Hz
Meas Uncal


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.240000000 GHz
Center Freq: 5.240000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11.5 dB
10 dB/div
Ref 30.00 dBm
Log
Center Freq
5.240000000 GHz
CF Step
6.000000 MHz
Auto
Man
Center 5.24 GHz
#Res BW 820 kHz
#VBW 3 MHz
Span 60 MHz
Sweep 1 ms
Occupied Bandwidth
16.661 MHz
Total Power 13.2 dBm
Transmit Freq Error 1.647 kHz
OBW Power 99.00 %
x dB Bandwidth 16.15 MHz
x dB -6.00 dB
Freq Offset
0 Hz
Meas Uncal

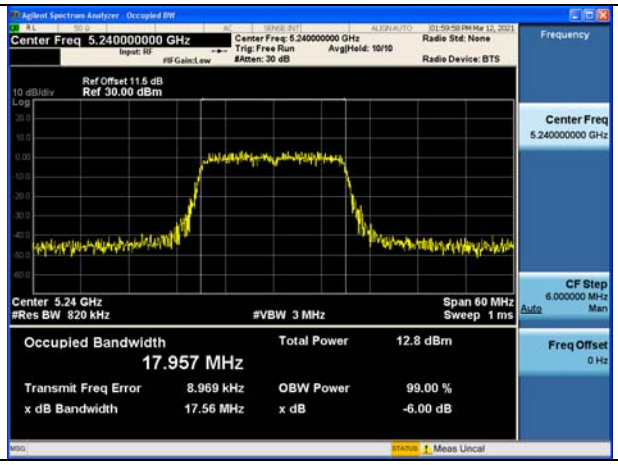
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5180	Ant7	17.854
	Ant8	17.894
5240	Ant7	17.957
	Ant8	18.013

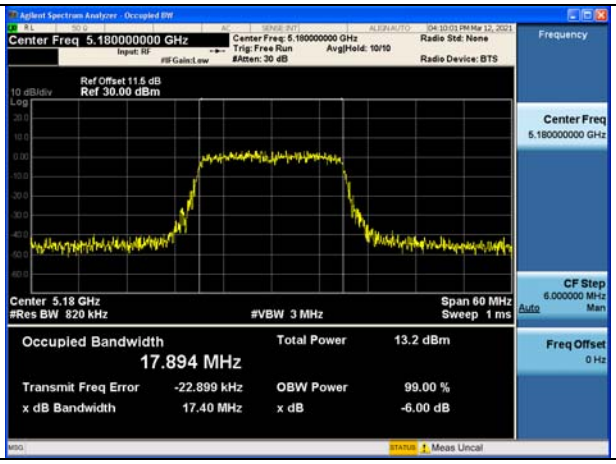
Test Mode:802. 11n HT20 Ant7



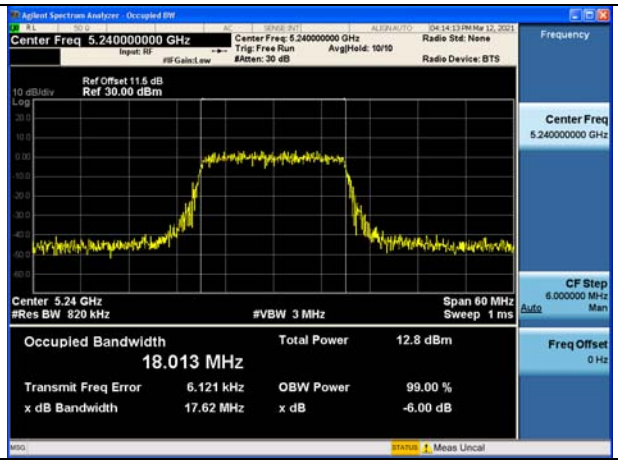
Test Mode:802. 11n HT20 Ant7



Test Mode:802. 11n HT20 Ant8



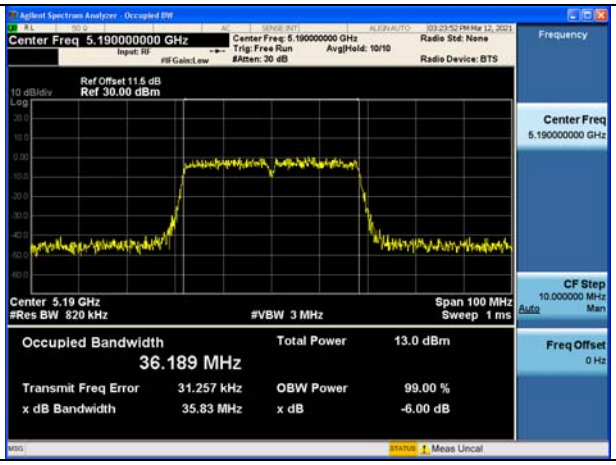
Test Mode:802. 11n HT20 Ant8



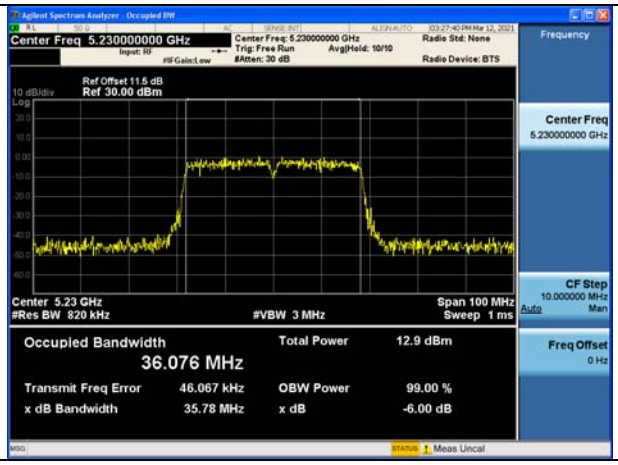
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5190	Ant7	36.189
	Ant8	36.136
5230	Ant7	36.076
	Ant8	36.213

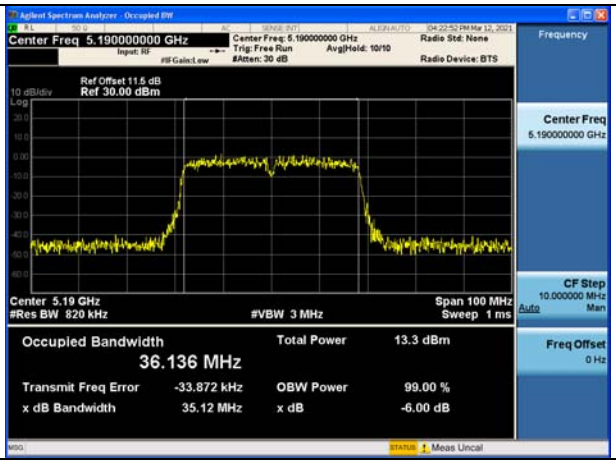
Test Mode:802. 11n HT40 Ant7



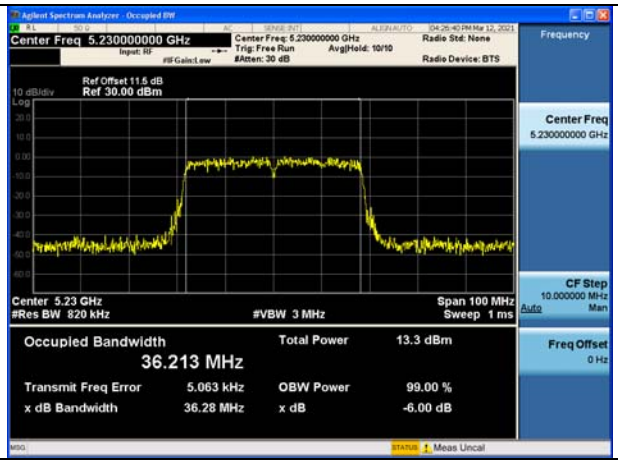
Test Mode:802. 11n HT40 Ant7



Test Mode:802. 11n HT40 Ant8



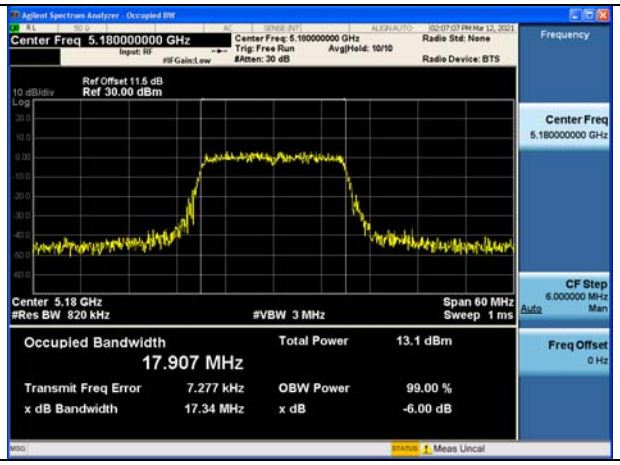
Test Mode:802. 11n HT40 Ant8



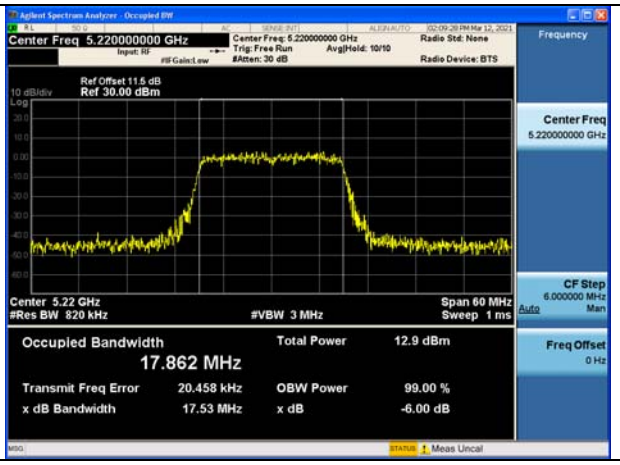
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5180	Ant7	17.907
	Ant8	17.870
5220	Ant7	17.862
	Ant8	17.912
5240	Ant7	17.909
	Ant8	17.893

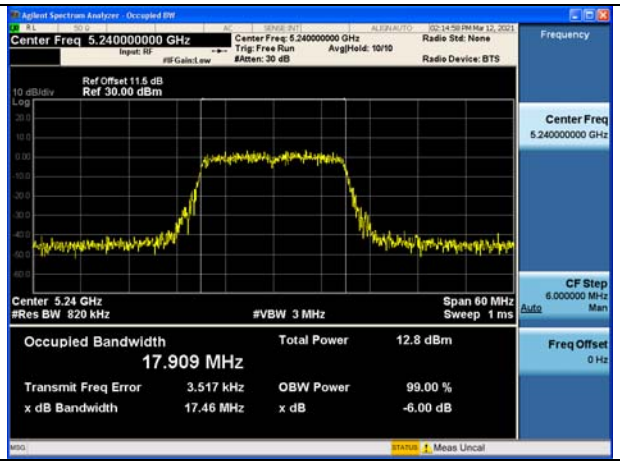
Test Mode:802. 11ac VHT20 Ant7



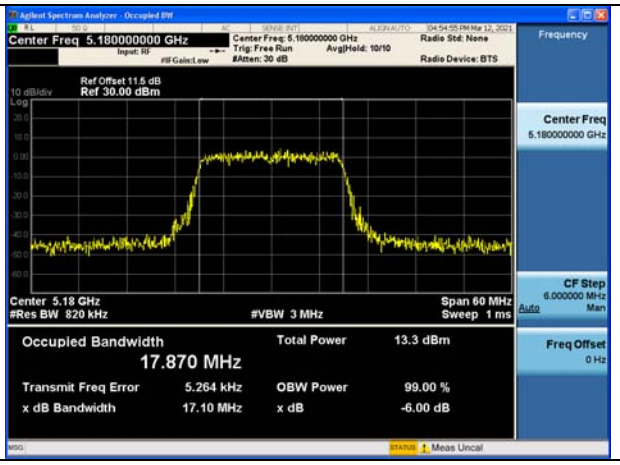
Test Mode:802. 11ac VHT20 Ant7



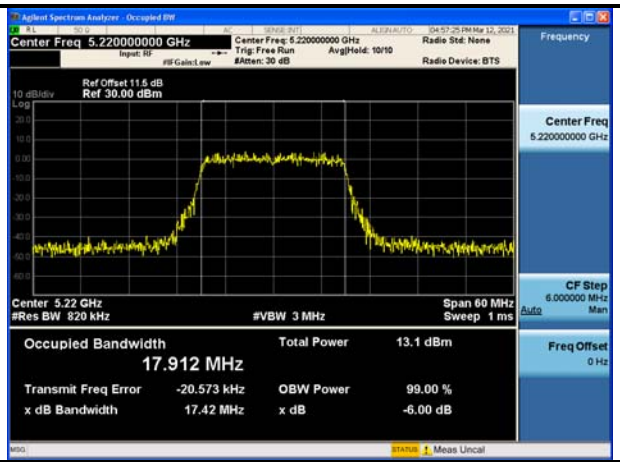
Test Mode:802. 11ac VHT20 Ant7

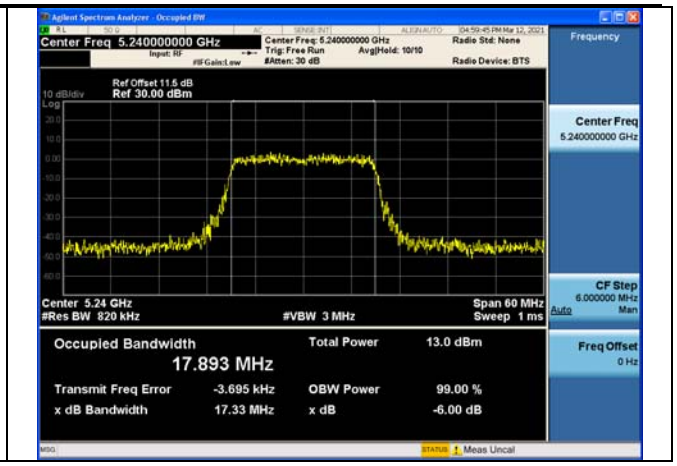


Test Mode:802. 11ac VHT20 Ant8



Test Mode:802. 11ac VHT20 Ant8

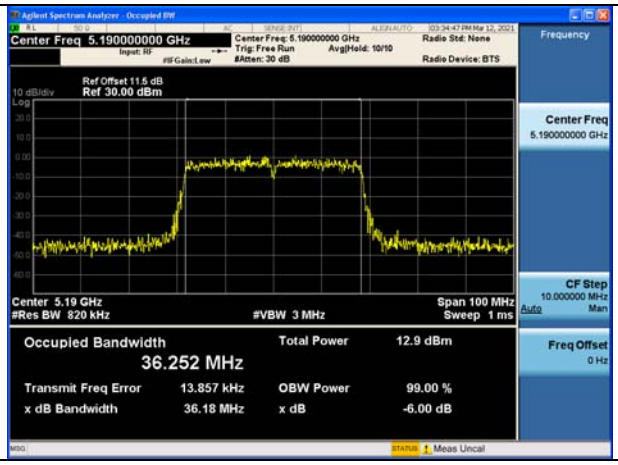

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.220000000 GHz
Center Freq: 5.220000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11.5 dB
10 dB/div
Ref 30.00 dBm
Log
Center Freq
5.220000000 GHz
Center 5.22 GHz
#Res BW 820 kHz
#VBW 3 MHz
Span 60 MHz
Sweep 1 ms
CF Step
6.000000 MHz
Auto
Man
Occupied Bandwidth
17.912 MHz
Total Power
13.1 dBm
Transmit Freq Error
-20.573 kHz
OBW Power
99.00 %
x dB Bandwidth
17.42 MHz
x dB
-6.00 dB
Freq Offset
0 Hz
Meas Uncal


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.240000000 GHz
Center Freq: 5.240000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11.5 dB
10 dB/div
Ref 30.00 dBm
Log
Center Freq
5.240000000 GHz
Center 5.24 GHz
#Res BW 820 kHz
#VBW 3 MHz
Span 60 MHz
Sweep 1 ms
CF Step
6.000000 MHz
Auto
Man
Occupied Bandwidth
17.893 MHz
Total Power
13.0 dBm
Transmit Freq Error
-3.695 kHz
OBW Power
99.00 %
x dB Bandwidth
17.33 MHz
x dB
-6.00 dB
Freq Offset
0 Hz
Meas Uncal

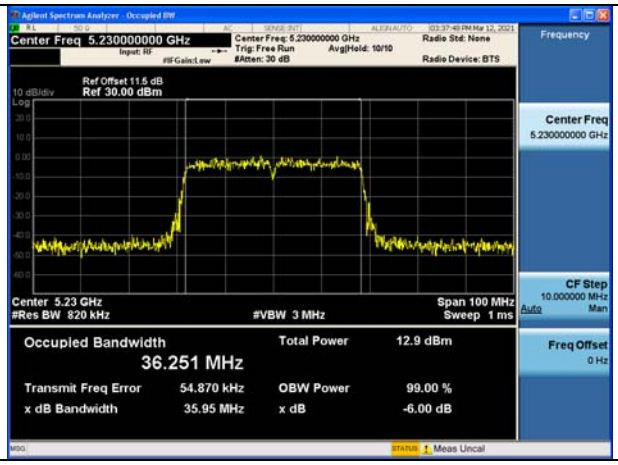
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5190	Ant7	36.252
	Ant8	36.158
5230	Ant7	36.251
	Ant8	36.174

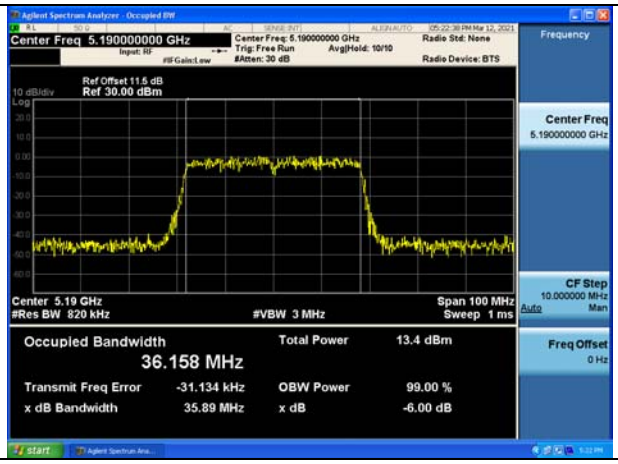
Test Mode:802. 11ac VHT40 Ant7



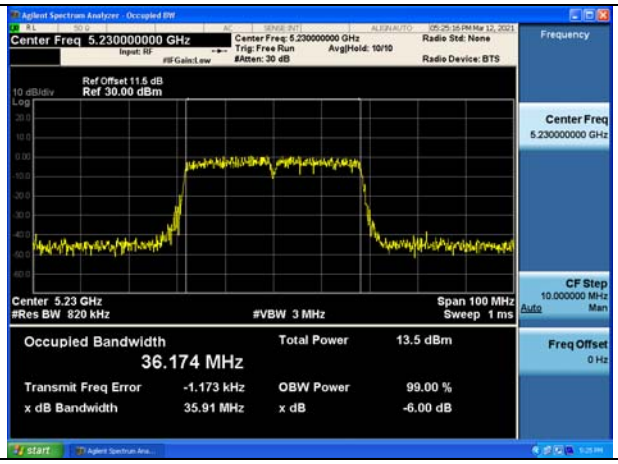
Test Mode:802. 11ac VHT40 Ant7



Test Mode:802. 11ac VHT40 Ant8

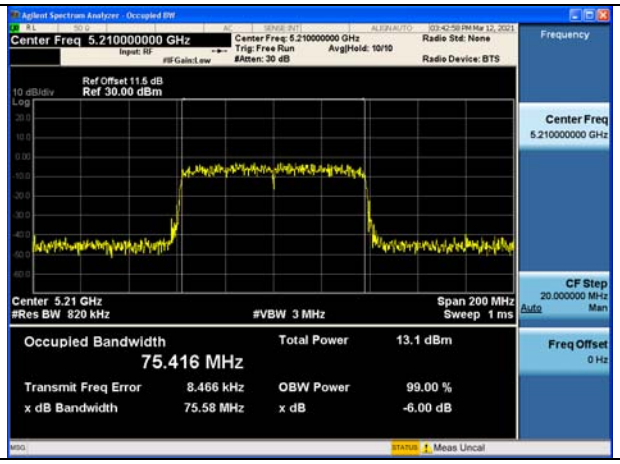
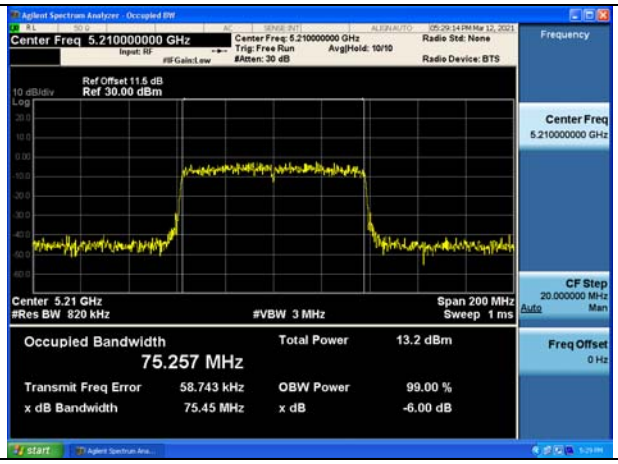


Test Mode:802. 11ac VHT40 Ant8



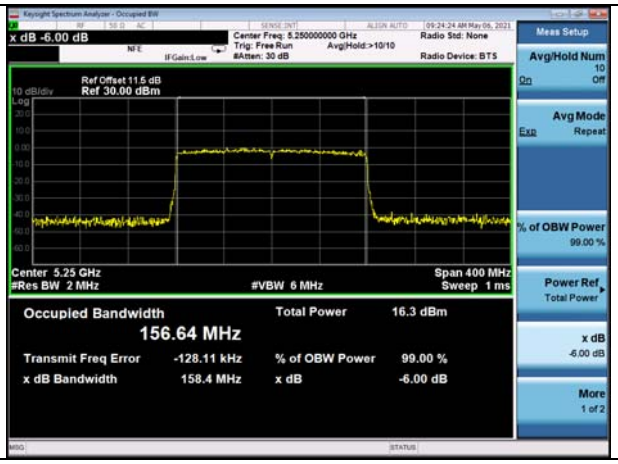
Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5210	Ant7	75.416
	Ant8	75.257

Test Mode:802. 11ac VHT80 Ant7	Test Mode:802. 11ac VHT80 Ant8
	

Test Mode:802. 11ac VHT160

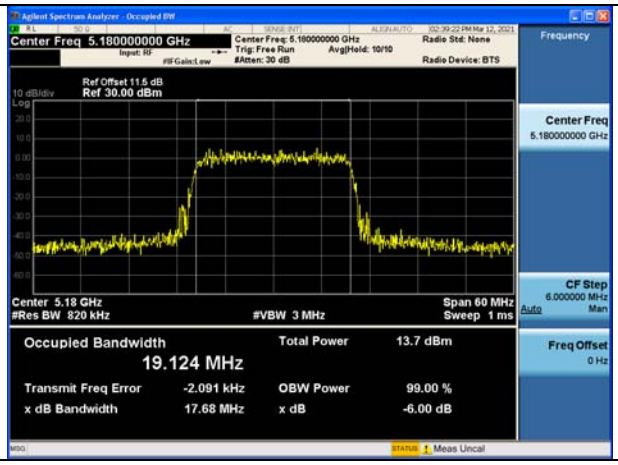
Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5250	Ant7	156.64
	Ant8	154.97

Test Mode:802. 11ac VHT160 Ant7	Test Mode:802. 11ac VHT160 Ant8
	

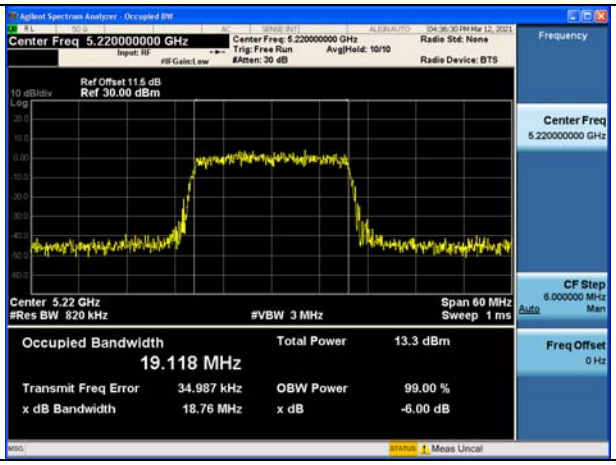
Test Mode:802.11ax HE20(242)

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5180	Ant7	19.124
	Ant8	19.356
5220	Ant7	19.118
	Ant8	19.190
5240	Ant7	19.152
	Ant8	19.177

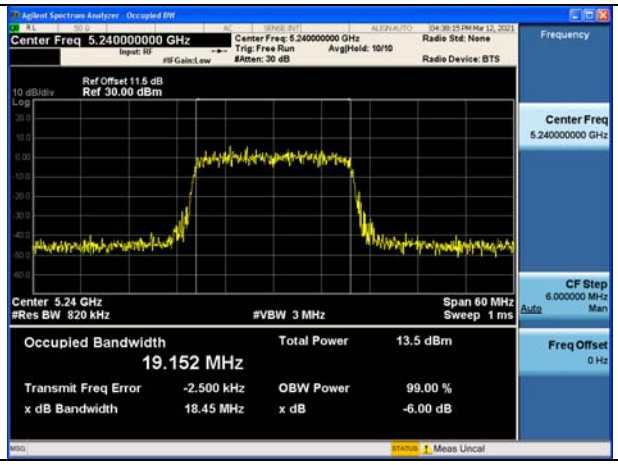
Test Mode:802. 11ax HE20 Ant7



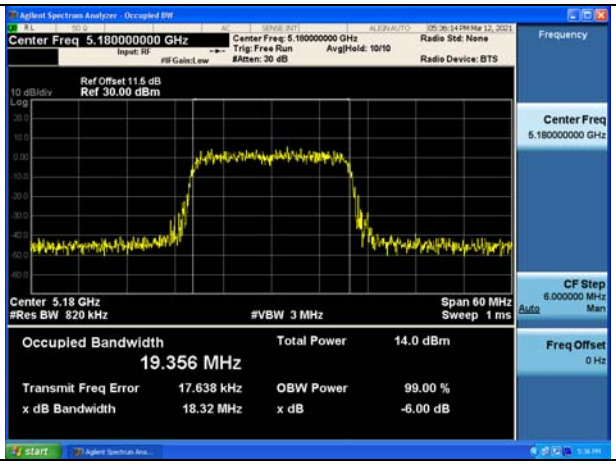
Test Mode:802. 11ax HE20 Ant7



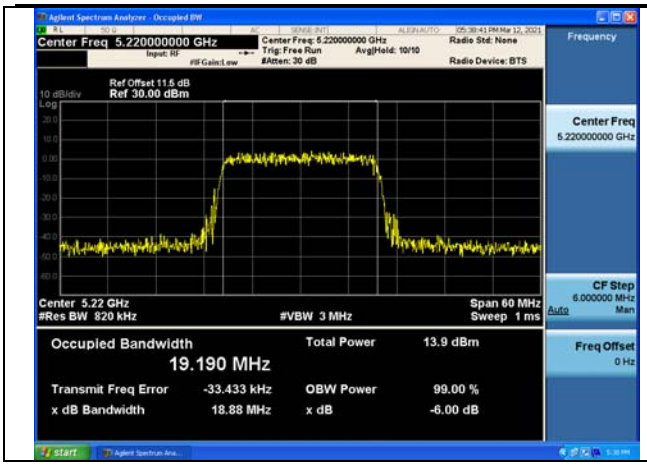
Test Mode:802. 11ax HE20 Ant7

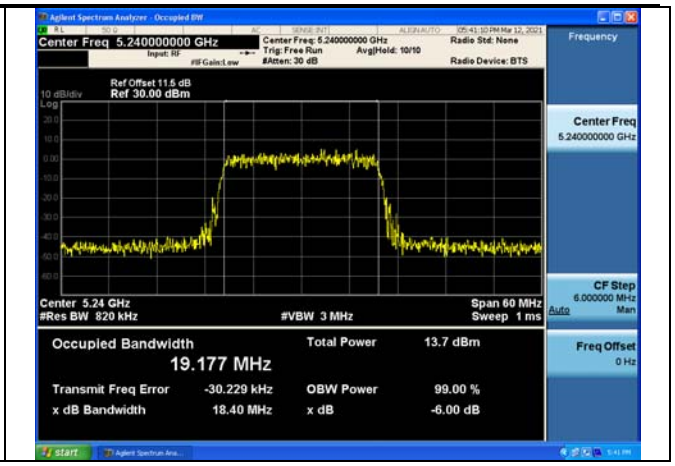


Test Mode:802. 11ax HE20 Ant8



Test Mode:802. 11ax HE20 Ant8

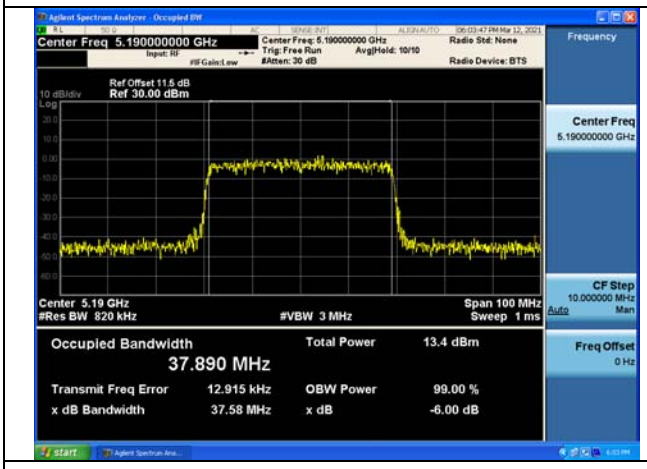




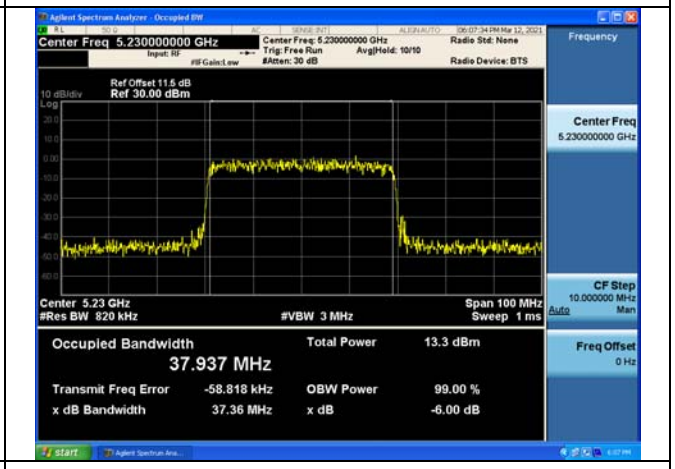
Test Mode:802.11ax HE40(484)

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5190	Ant7	37.890
	Ant8	37.911
5230	Ant7	37.937
	Ant8	37.750

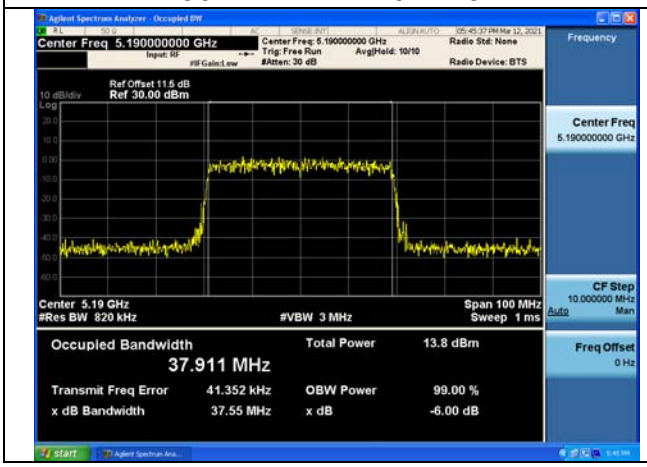
Test Mode:802. 11ax HE40 Ant7



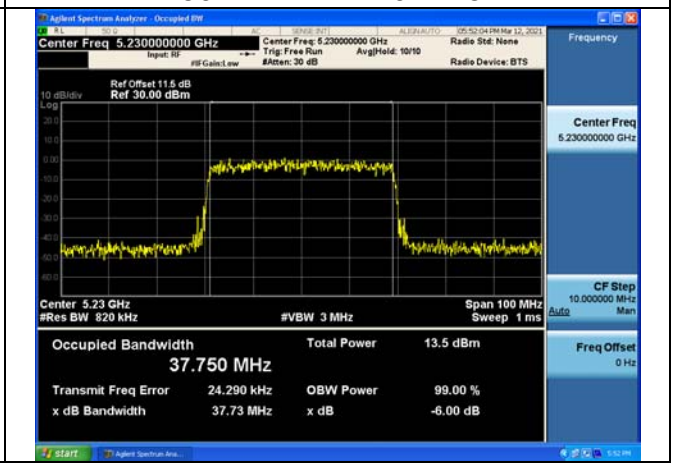
Test Mode:802. 11ax HE40 Ant7



Test Mode:802. 11ax HE40 Ant8

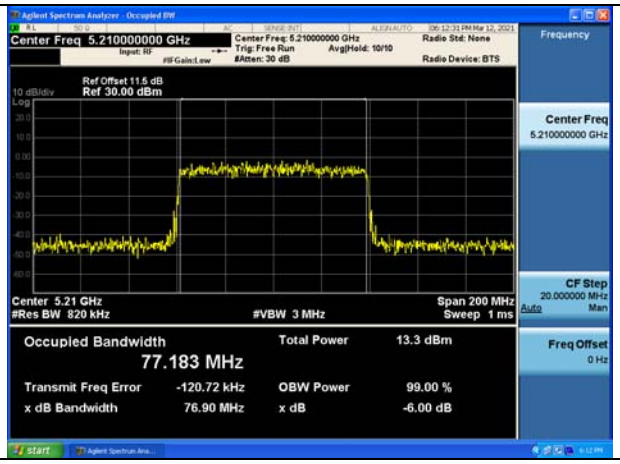
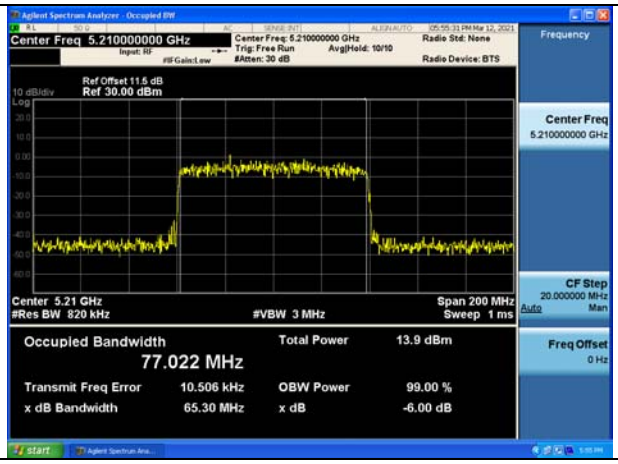


Test Mode:802. 11ax HE40 Ant8



Test Mode:802.11ax HE80(996)

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5210	Ant7	77.183
	Ant8	77.022

Test Mode:802. 11ax HE80 Ant7	Test Mode:802. 11ax HE80 Ant8
	

Test Mode:802.11ax HE160(1992)

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5250	Ant7	156.86
	Ant8	156.66

Test Mode:802. 11ax HE160 Ant7	Test Mode:802. 11ax HE160 Ant8

Transmitter Power Spectral Density

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

Test Mode:802.11a

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5180	0.05	Ant7	-1.355
		Ant8	-1.247
		Ant7+Ant8	1.710
5220		Ant7	-1.603
		Ant8	-1.170
		Ant7+Ant8	1.629
5240		Ant7	-1.810
		Ant8	-1.322
		Ant7+Ant8	1.451

Test Mode:802.11a Ant7

Test Mode:802.11a Ant7

Test Mode:802.11a Ant7

Test Mode:802.11a Ant8

Test Mode:802.11a Ant8

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.220000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: Pwr(RMS)
Avg|Hold: 100/100
Ref Offset 11.5 dB
10 dB/div Ref 15.00 dBm
Mkr1 5.221 68 GHz
-1.220 dBm
Frequency
Auto Tune
Center Freq
5.220000000 GHz
Start Freq
5.210000000 GHz
Stop Freq
5.230000000 GHz
CF Step
2.000000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.22000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 20.00 MHz
#Sweep 50.0 ms (1001 pts)

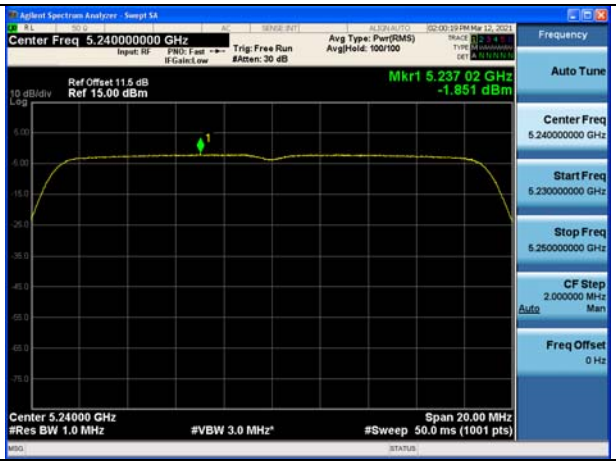
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.240000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: Pwr(RMS)
Avg|Hold: 100/100
Ref Offset 11.5 dB
10 dB/div Ref 15.00 dBm
Mkr1 5.242 22 GHz
-1.372 dBm
Frequency
Auto Tune
Center Freq
5.240000000 GHz
Start Freq
5.230000000 GHz
Stop Freq
5.250000000 GHz
CF Step
2.000000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.24000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 20.00 MHz
#Sweep 50.0 ms (1001 pts)

Test Mode:802. 11n HT20

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5180	0.02	Ant7	-1.652
		Ant8	-1.618
		Ant7+Ant8	1.375
5240		Ant7	-1.831
		Ant8	-1.730
		Ant7+Ant8	1.230

Test Mode:802. 11n HT20 Ant7

Test Mode:802. 11n HT20 Ant7



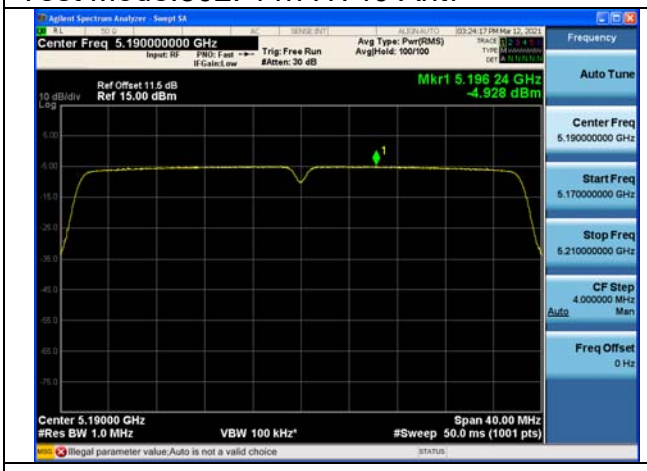
Test Mode:802. 11n HT20 Ant8

Test Mode:802. 11n HT20 Ant8

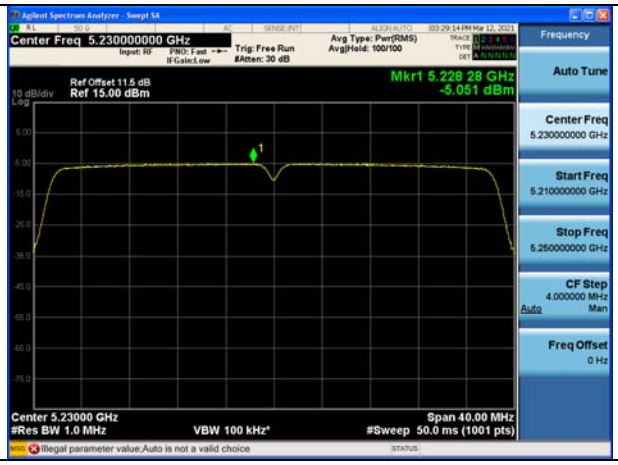
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5190	0.02	Ant7	-4.908
		Ant8	-4.476
		Ant7+Ant8	-1.676
5230		Ant7	-5.031
		Ant8	-4.755
		Ant7+Ant8	-1.881

Test Mode:802. 11n HT40 Ant7

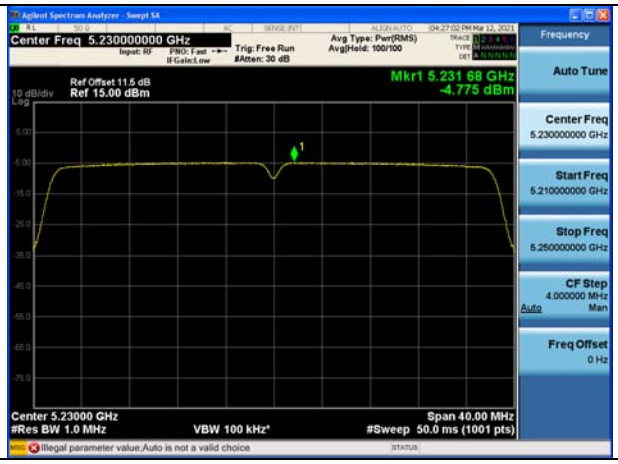


Test Mode:802. 11n HT40 Ant7



Test Mode:802. 11n HT40 Ant8

Test Mode:802. 11n HT40 Ant8



Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5180	0.02	Ant7	-1.687
		Ant8	-1.479
		Ant7+Ant8	1.429
5220		Ant7	-1.978
		Ant8	-1.731
		Ant7+Ant8	1.158
5240		Ant7	-2.133
		Ant8	-1.820
		Ant7+Ant8	1.037

Test Mode:802. 11ac VHT20 Ant7

Test Mode:802. 11ac VHT20 Ant7

Test Mode:802. 11ac VHT20 Ant7

Test Mode:802. 11ac VHT20 Ant8

Test Mode:802. 11ac VHT20 Ant8

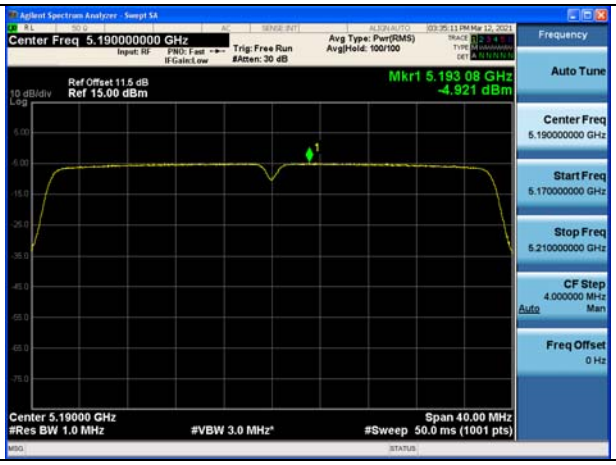
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.220000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: Pwr(RMS)
Avg|Hold: 100/100
Mkr1 5.221 18 GHz
-1.751 dBm
Ref Offset 11.5 dB
10 dB/div Ref 15.00 dBm
Frequency
Auto Tune
Center Freq
5.220000000 GHz
Start Freq
5.210000000 GHz
Stop Freq
5.230000000 GHz
CF Step
2.000000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.22000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 20.00 MHz
#Sweep 50.0 ms (1001 pts)

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.240000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: Pwr(RMS)
Avg|Hold: 100/100
Mkr1 5.242 92 GHz
-1.840 dBm
Ref Offset 11.5 dB
10 dB/div Ref 15.00 dBm
Frequency
Auto Tune
Center Freq
5.240000000 GHz
Start Freq
5.230000000 GHz
Stop Freq
5.250000000 GHz
CF Step
2.000000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.24000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 20.00 MHz
#Sweep 50.0 ms (1001 pts)

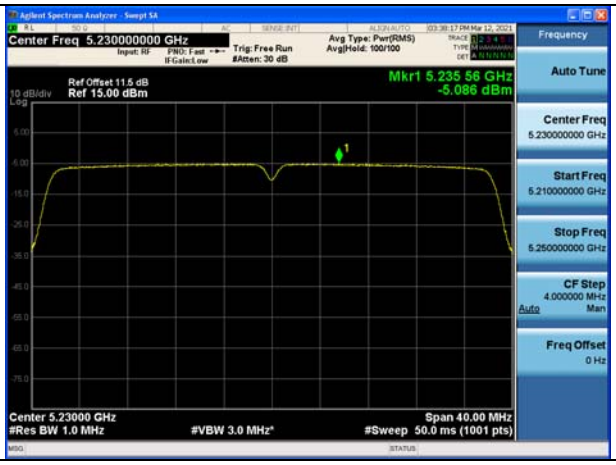
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5190	0.02	Ant7	-4.901
		Ant8	-4.377
		Ant7+Ant8	-1.621
5230		Ant7	-5.066
		Ant8	-4.588
		Ant7+Ant8	-1.810

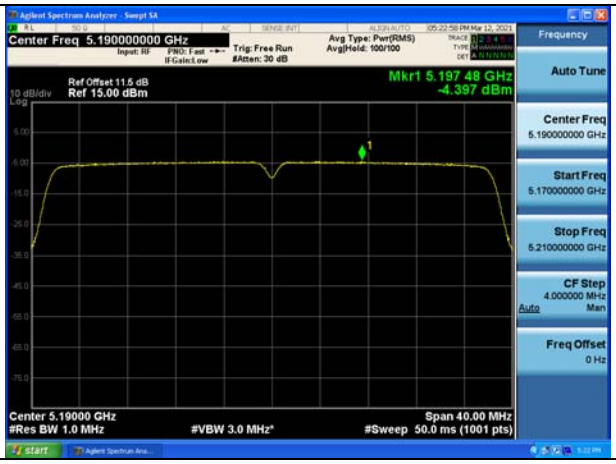
Test Mode:802. 11ac VHT40 Ant7



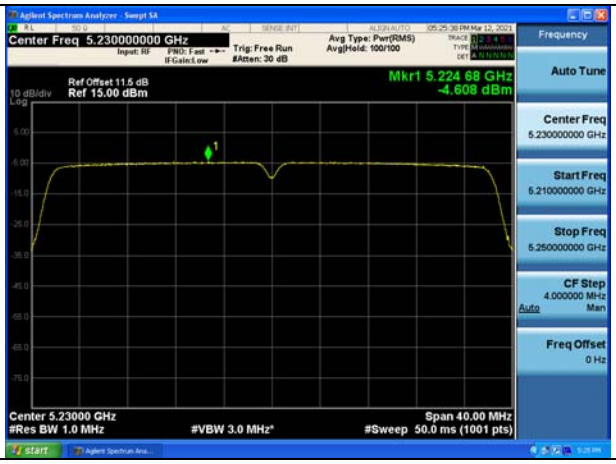
Test Mode:802. 11ac VHT40 Ant7



Test Mode:802. 11ac VHT40 Ant8

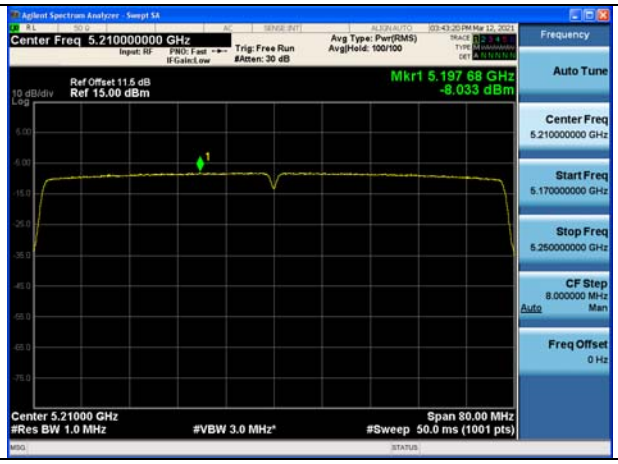


Test Mode:802. 11ac VHT40 Ant8



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5210	0.02	Ant7	-8.013
		Ant8	-7.622
		Ant7+Ant8	-4.803

Test Mode:802. 11ac VHT80 Ant7	Test Mode:802. 11ac VHT80 Ant8
	

Test Mode:802. 11ac VHT160

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5250	0.02	Ant7	-11.510
		Ant8	-11.474
		Ant7+Ant8	-8.482

Test Mode:802. 11ac VHT160 Ant7	Test Mode:802. 11ac VHT160 Ant8

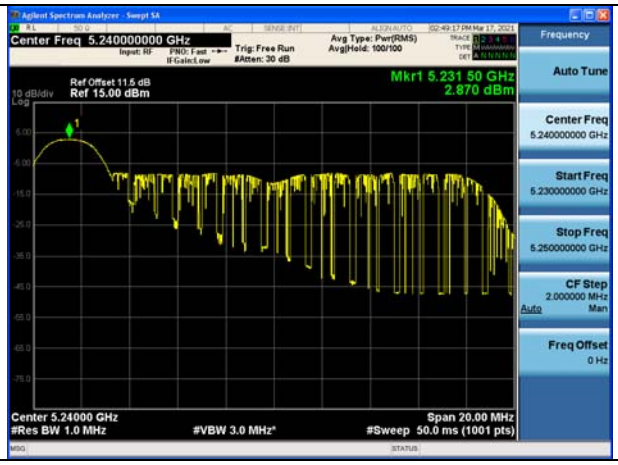
Test Mode:802.11ax HE20(26T)

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5180	0.02	Ant7	2.855
		Ant8	1.904
		Ant7+Ant8	5.416
5220		Ant7	3.220
		Ant8	1.977
		Ant7+Ant8	5.653
5240		Ant7	2.890
		Ant8	2.096
		Ant7+Ant8	5.521

Test Mode:802. 11ax HE20 Ant7

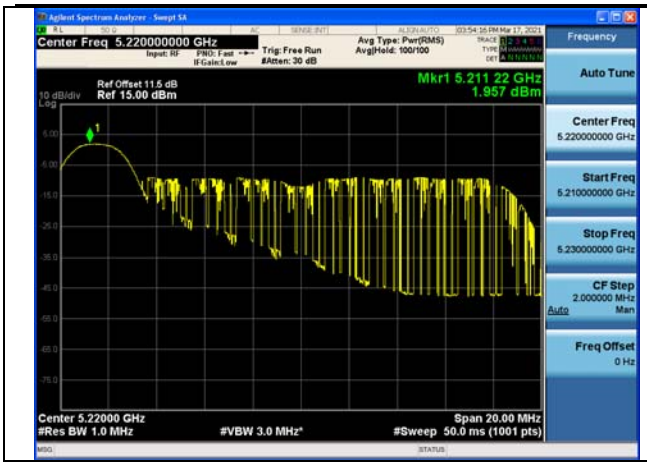
Test Mode:802. 11ax HE20 Ant7

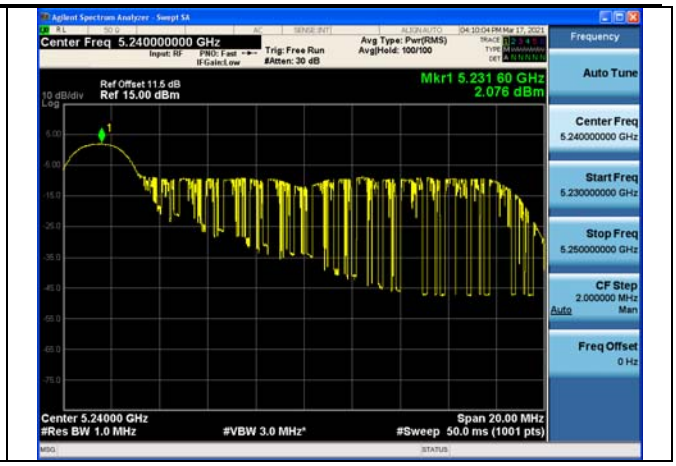
Test Mode:802. 11ax HE20 Ant7



Test Mode:802. 11ax HE20 Ant8

Test Mode:802. 11ax HE20 Ant8


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.220000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: Pwr(RMS)
Avg|Hold: 100/100
Mkr1 5.211 22 GHz
1.957 dBm
Ref Offset 11.5 dB
10 dB/div Ref 15.00 dBm
Frequency
Auto Tune
Center Freq
5.220000000 GHz
Start Freq
5.210000000 GHz
Stop Freq
5.230000000 GHz
CF Step
2.000000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.22000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 20.00 MHz
#Sweep 50.0 ms (1001 pts)


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.240000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: Pwr(RMS)
Avg|Hold: 100/100
Mkr1 5.231 60 GHz
2.076 dBm
Ref Offset 11.5 dB
10 dB/div Ref 15.00 dBm
Frequency
Auto Tune
Center Freq
5.240000000 GHz
Start Freq
5.230000000 GHz
Stop Freq
5.250000000 GHz
CF Step
2.000000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.24000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 20.00 MHz
#Sweep 50.0 ms (1001 pts)

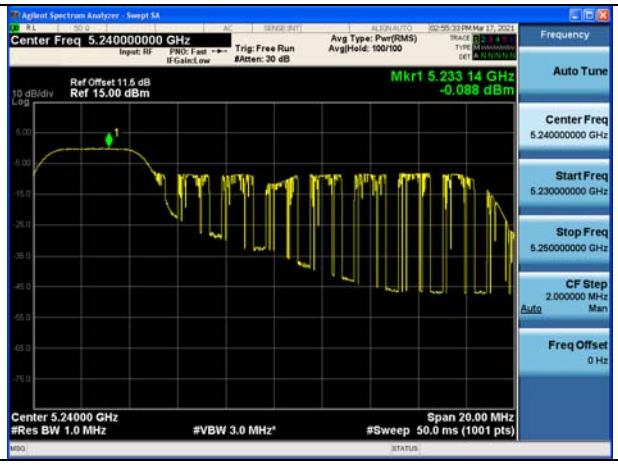
Test Mode:802.11ax HE20(52T)

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5180	0.02	Ant7	-0.067
		Ant8	-0.790
		Ant7+Ant8	2.597
5220		Ant7	0.330
		Ant8	-0.752
		Ant7+Ant8	2.833
5240		Ant7	-0.068
		Ant8	-0.902
		Ant7+Ant8	2.545

Test Mode:802. 11ax HE20 Ant7

Test Mode:802. 11ax HE20 Ant7

Test Mode:802. 11ax HE20 Ant7



Test Mode:802. 11ax HE20 Ant8

Test Mode:802. 11ax HE20 Ant8

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.220000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: Pwr(RMS)
Avg|Hold: 100/100
Ref Offset 11.5 dB
10 dB/div Ref 15.00 dBm
Mkr1 5.213 04 GHz
-0.772 dBm
Frequency
Auto Tune
Center Freq
5.220000000 GHz
Start Freq
5.210000000 GHz
Stop Freq
5.230000000 GHz
CF Step
2.000000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.22000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 20.00 MHz
#Sweep 50.0 ms (1001 pts)

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.240000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: Pwr(RMS)
Avg|Hold: 100/100
Ref Offset 11.5 dB
10 dB/div Ref 15.00 dBm
Mkr1 5.233 32 GHz
-0.922 dBm
Frequency
Auto Tune
Center Freq
5.240000000 GHz
Start Freq
5.230000000 GHz
Stop Freq
5.250000000 GHz
CF Step
2.000000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.24000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 20.00 MHz
#Sweep 50.0 ms (1001 pts)

Test Mode:802.11ax HE20(106T)

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5180	0.02	Ant7	-2.898
		Ant8	-3.661
		Ant7+Ant8	-0.252
5220		Ant7	-2.703
		Ant8	-3.582
		Ant7+Ant8	-0.110
5240		Ant7	-2.807
		Ant8	-3.708
		Ant7+Ant8	-0.224

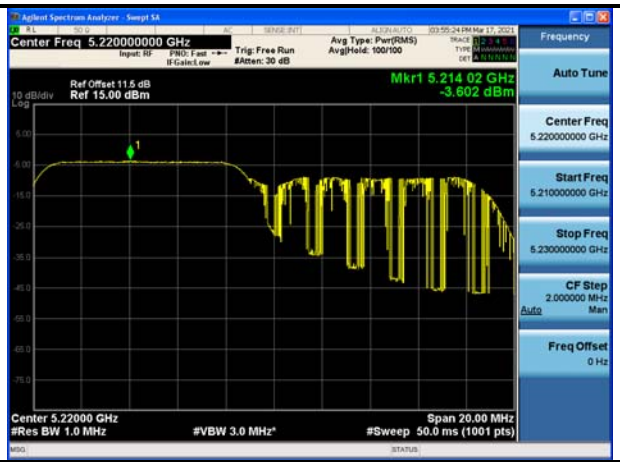
Test Mode:802. 11ax HE20 Ant7

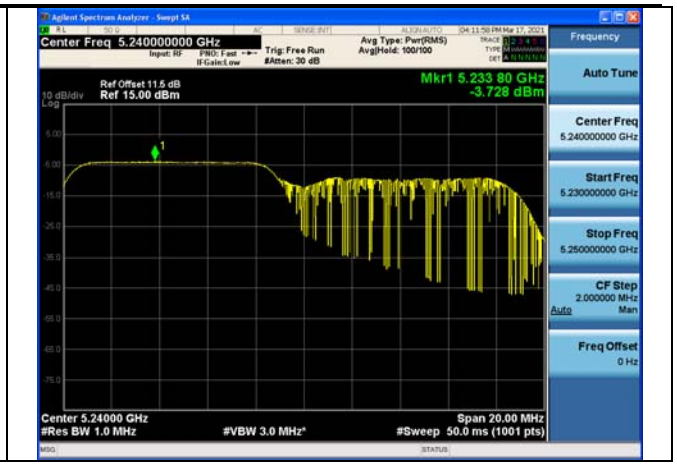
Test Mode:802. 11ax HE20 Ant7

Test Mode:802. 11ax HE20 Ant7

Test Mode:802. 11ax HE20 Ant8

Test Mode:802. 11ax HE20 Ant8


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.220000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: Pwr(RMS)
Avg|Hold: 100/100
Ref Offset 11.5 dB
10 dB/div Ref 15.00 dBm
Mkr1 5.214 02 GHz
-3.602 dBm
Frequency
Auto Tune
Center Freq
5.220000000 GHz
Start Freq
5.210000000 GHz
Stop Freq
5.230000000 GHz
CF Step
2.000000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.22000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 20.00 MHz
#Sweep 50.0 ms (1001 pts)

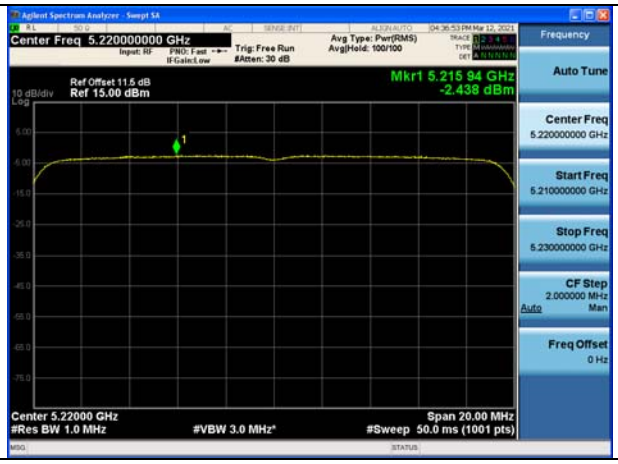

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.240000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: Pwr(RMS)
Avg|Hold: 100/100
Ref Offset 11.5 dB
10 dB/div Ref 15.00 dBm
Mkr1 5.233 80 GHz
-3.728 dBm
Frequency
Auto Tune
Center Freq
5.240000000 GHz
Start Freq
5.230000000 GHz
Stop Freq
5.250000000 GHz
CF Step
2.000000 MHz
Auto Man
Freq Offset
0 Hz
Center 5.24000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 20.00 MHz
#Sweep 50.0 ms (1001 pts)

Test Mode:802.11ax HE20(242T)

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5180	0.02	Ant7	-2.138
		Ant8	-1.565
		Ant7+Ant8	1.168
5220		Ant7	-2.418
		Ant8	-1.501
		Ant7+Ant8	1.075
5240		Ant7	-2.360
		Ant8	-1.784
		Ant7+Ant8	0.948

Test Mode:802. 11ax HE20 Ant7

Test Mode:802. 11ax HE20 Ant7



Test Mode:802. 11ax HE20 Ant7

Test Mode:802. 11ax HE20 Ant8

Test Mode:802. 11ax HE20 Ant8

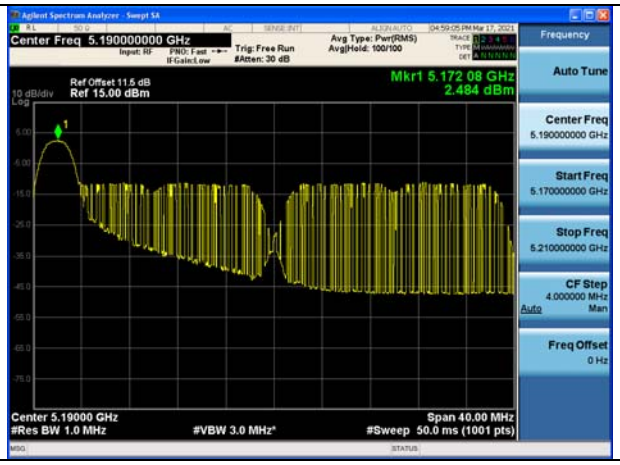
Agilent Spectrum Analyzer - Swept SA
Center Freq 5.220000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: Pwr(RMS)
Avg|Hold: 100/100
Ref Offset 11.5 dB
10 dB/div Ref 15.00 dBm
Mkr1 5.221 24 GHz
-1.521 dBm
Center 5.22000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 20.00 MHz
#Sweep 50.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.220000000 GHz
Start Freq
5.210000000 GHz
Stop Freq
5.230000000 GHz
CF Step
2.000000 MHz
Auto Man
Freq Offset
0 Hz

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.240000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg Type: Pwr(RMS)
Avg|Hold: 100/100
Ref Offset 11.5 dB
10 dB/div Ref 15.00 dBm
Mkr1 5.236 26 GHz
-1.804 dBm
Center 5.24000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 20.00 MHz
#Sweep 50.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.240000000 GHz
Start Freq
5.230000000 GHz
Stop Freq
5.250000000 GHz
CF Step
2.000000 MHz
Auto Man
Freq Offset
0 Hz

Test Mode:802.11ax HE40(26T)

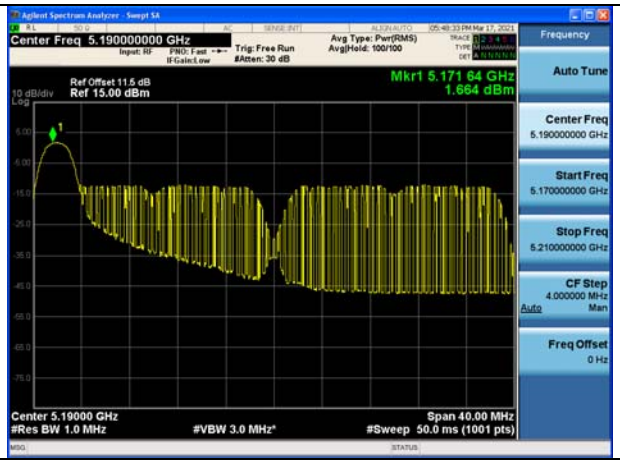
Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5190	0.02	Ant7	2.504
		Ant8	1.684
		Ant7+Ant8	5.124
5230		Ant7	3.178
		Ant8	2.163
		Ant7+Ant8	5.710

Test Mode:802. 11ax HE40 Ant7



Test Mode:802. 11ax HE40 Ant7

Test Mode:802. 11ax HE40 Ant8

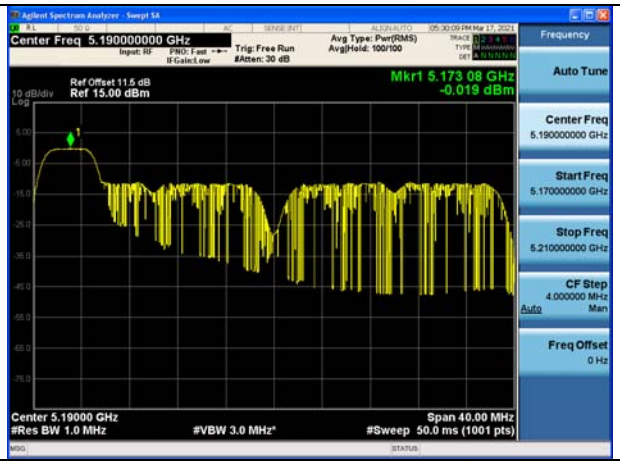


Test Mode:802. 11ax HE40 Ant8

Test Mode:802.11ax HE40(52T)

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5190	0.02	Ant7	0.001
		Ant8	-0.909
		Ant7+Ant8	2.580
5230		Ant7	0.223
		Ant8	-0.816
		Ant7+Ant8	2.745

Test Mode:802. 11ax HE40 Ant7



Test Mode:802. 11ax HE40 Ant7

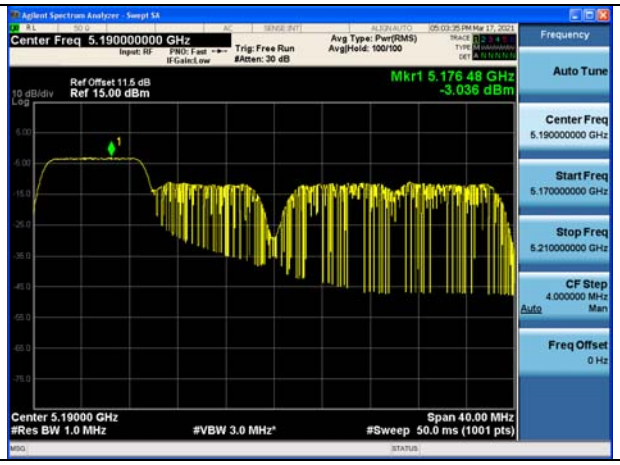
Test Mode:802. 11ax HE40 Ant8

Test Mode:802. 11ax HE40 Ant8

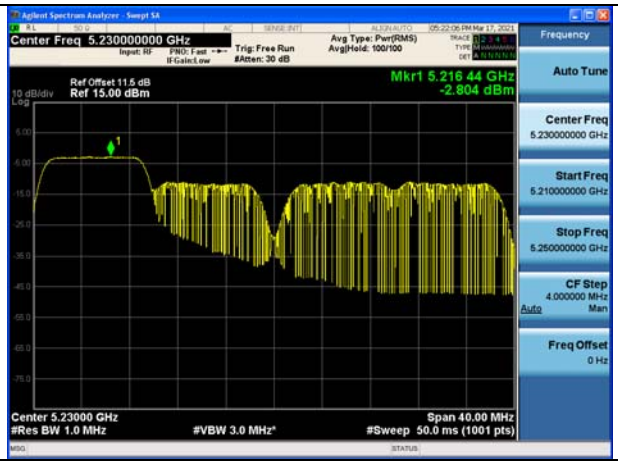
Test Mode:802.11ax HE40(106T)

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5190	0.02	Ant7	-3.016
		Ant8	-3.680
		Ant7+Ant8	-0.325
5230		Ant7	-2.784
		Ant8	-3.667
		Ant7+Ant8	-0.193

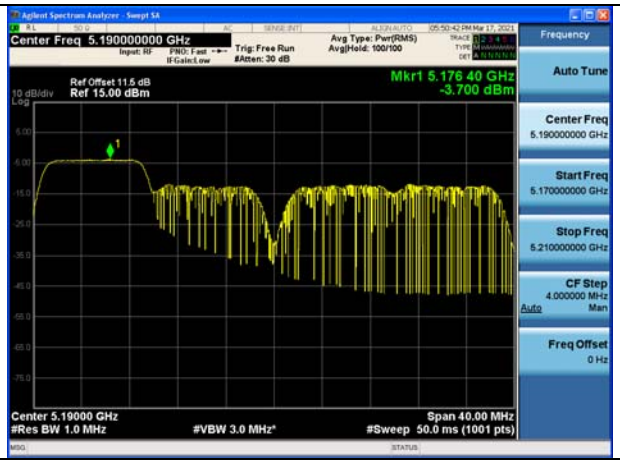
Test Mode:802. 11ax HE40 Ant7



Test Mode:802. 11ax HE40 Ant7



Test Mode:802. 11ax HE40 Ant8

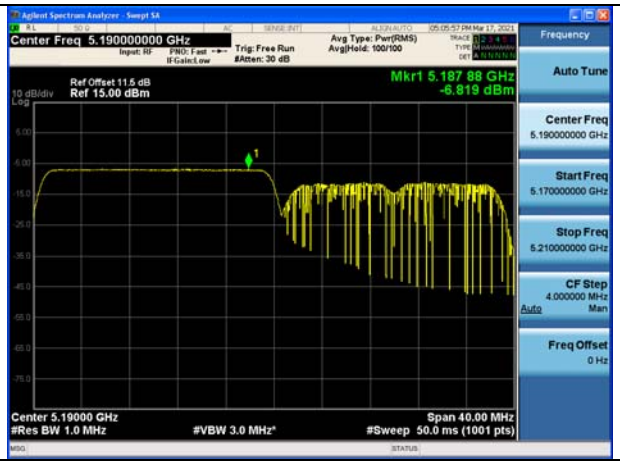


Test Mode:802. 11ax HE40 Ant8

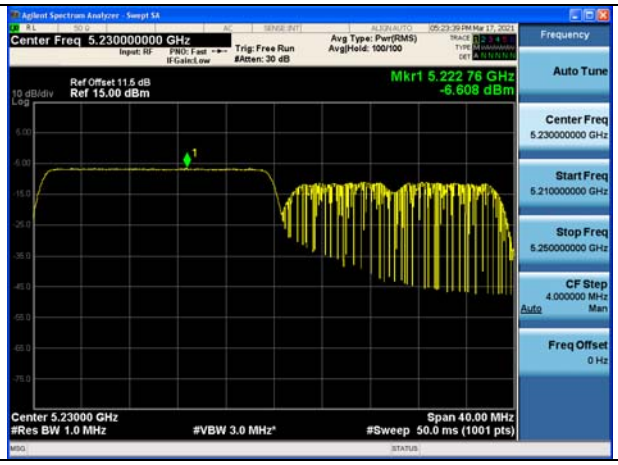
Test Mode:802.11ax HE40(242T)

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5190		Ant7	-6.799
		Ant8	-7.534
		Ant7+Ant8	-4.141
5230		Ant7	-6.588
		Ant8	-7.460
		Ant7+Ant8	-3.992

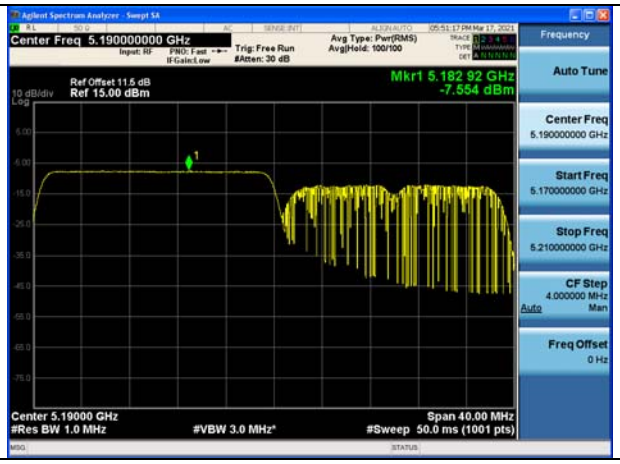
Test Mode:802. 11ax HE40 Ant7



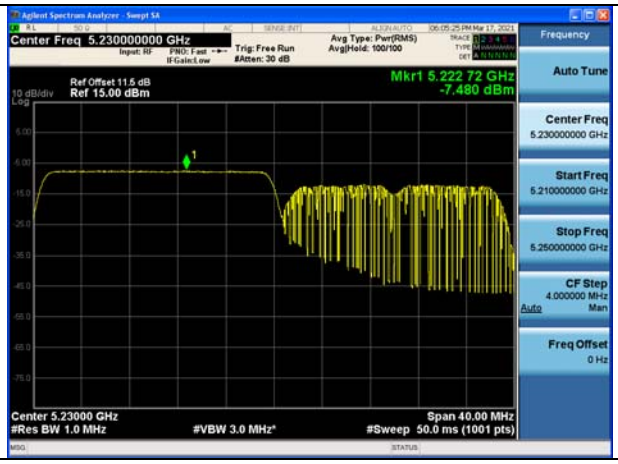
Test Mode:802. 11ax HE40 Ant7



Test Mode:802. 11ax HE40 Ant8



Test Mode:802. 11ax HE40 Ant8



Test Mode:802.11ax HE40(484T)

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5190	0.02	Ant7	-7.203
		Ant8	-6.617
		Ant7+Ant8	-3.890
5230		Ant7	-7.607
		Ant8	-6.909
		Ant7+Ant8	-4.234

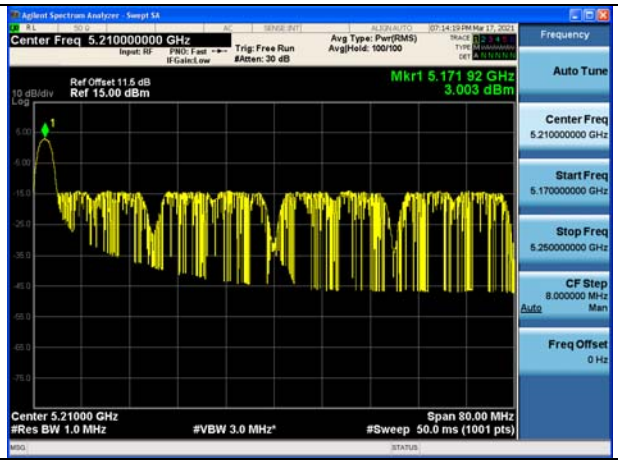
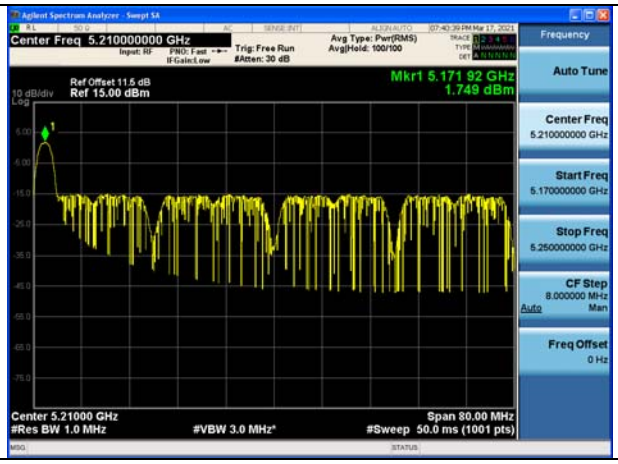
Test Mode:802. 11ax HE40 Ant7

Test Mode:802. 11ax HE40 Ant7

Test Mode:802. 11ax HE40 Ant8

Test Mode:802. 11ax HE40 Ant8

Test Mode:802.11ax HE80(26T)

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5210	0.02	Ant7	3.023
		Ant8	1.769
		Ant7+Ant8	5.451

Test Mode:802. 11ax HE80 Ant7	Test Mode:802. 11ax HE80 Ant8