

Appendix A

RF Test Data for 5.2G WLAN (Conducted Measurement)

Product Name: Wireless Monitor

Trade Mark: N/A

Test Model: FT6/FR6

Environmental Conditions

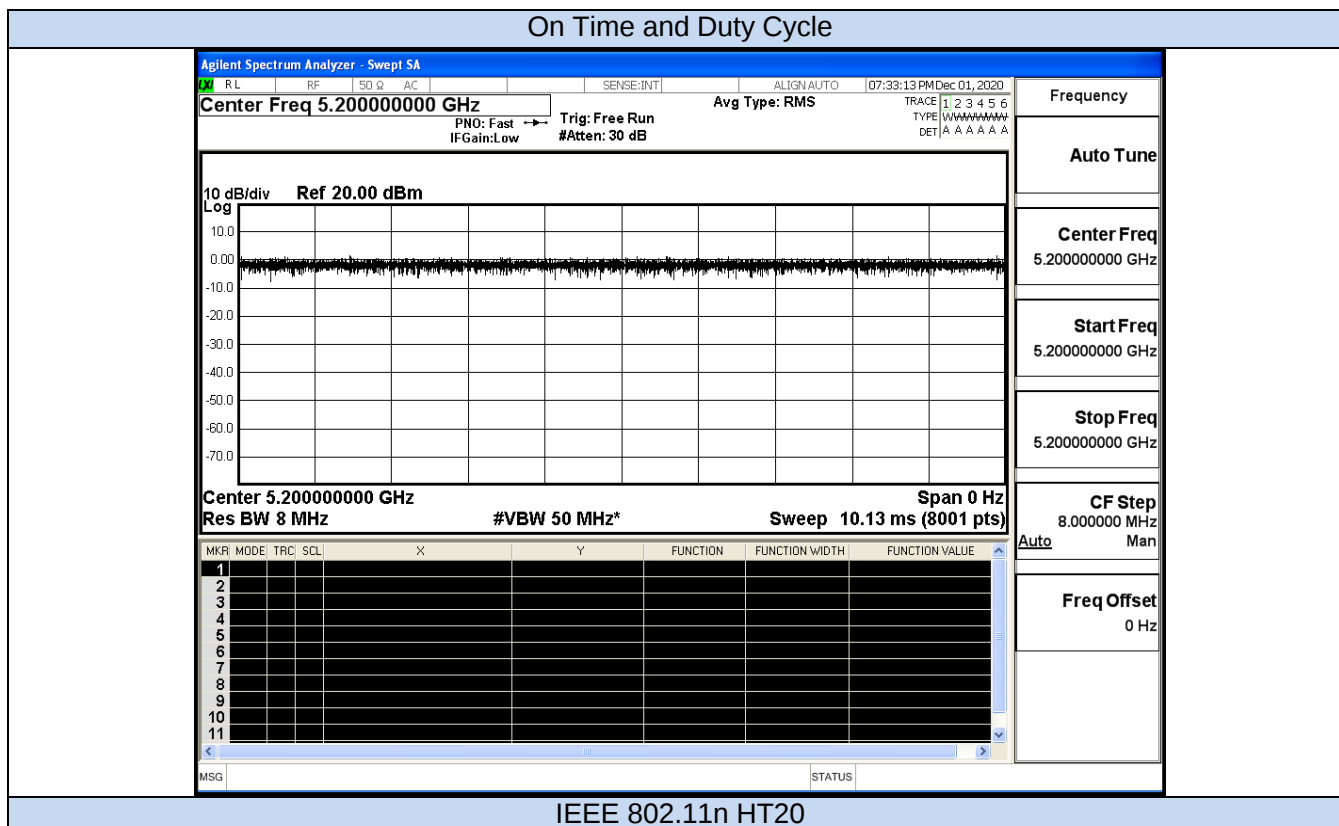
Temperature:	24.6° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Ben Jin
Supervised by:	Li Huan

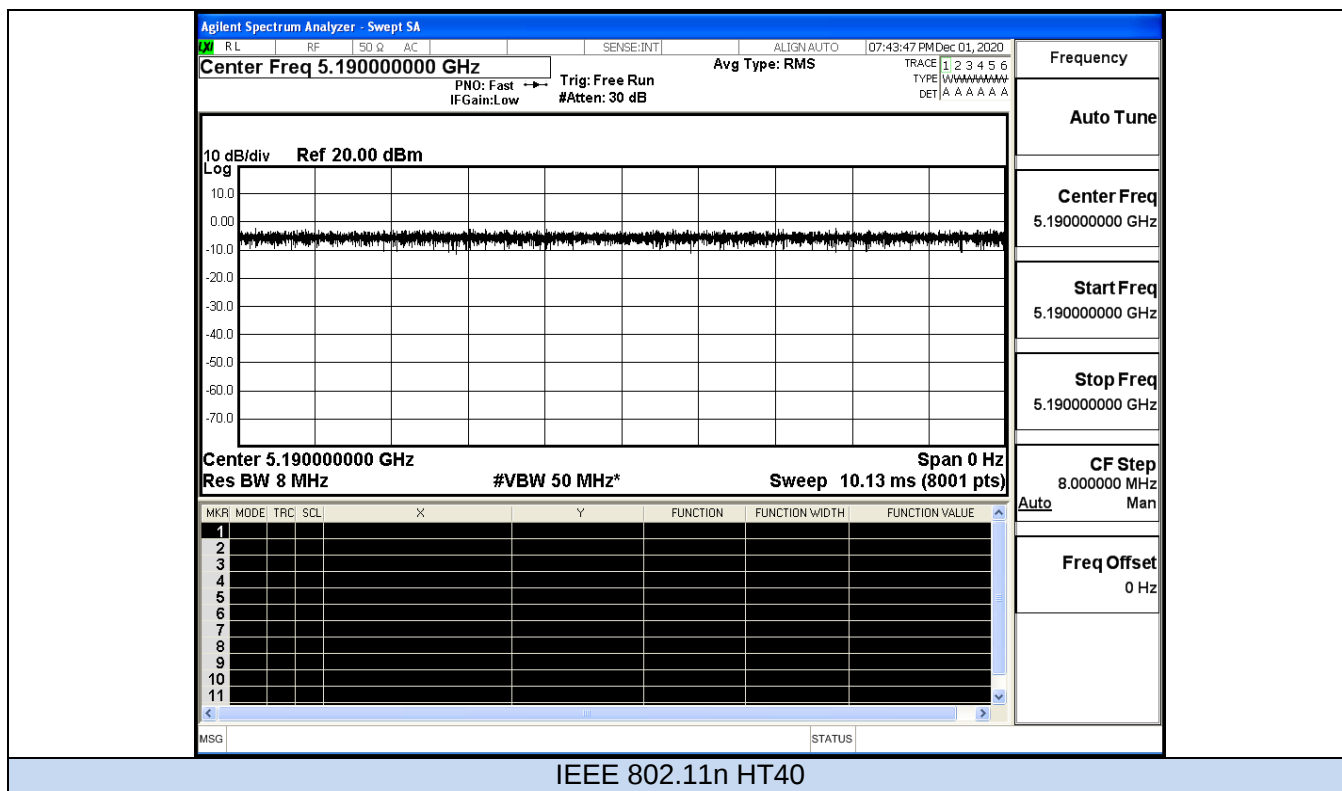
A.1 Duty Cycle

ANT0

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11N20 SISO	5200	100	0.00	0.01
11N40 SISO	5190	100	0.00	0.01

On Time and Duty Cycle

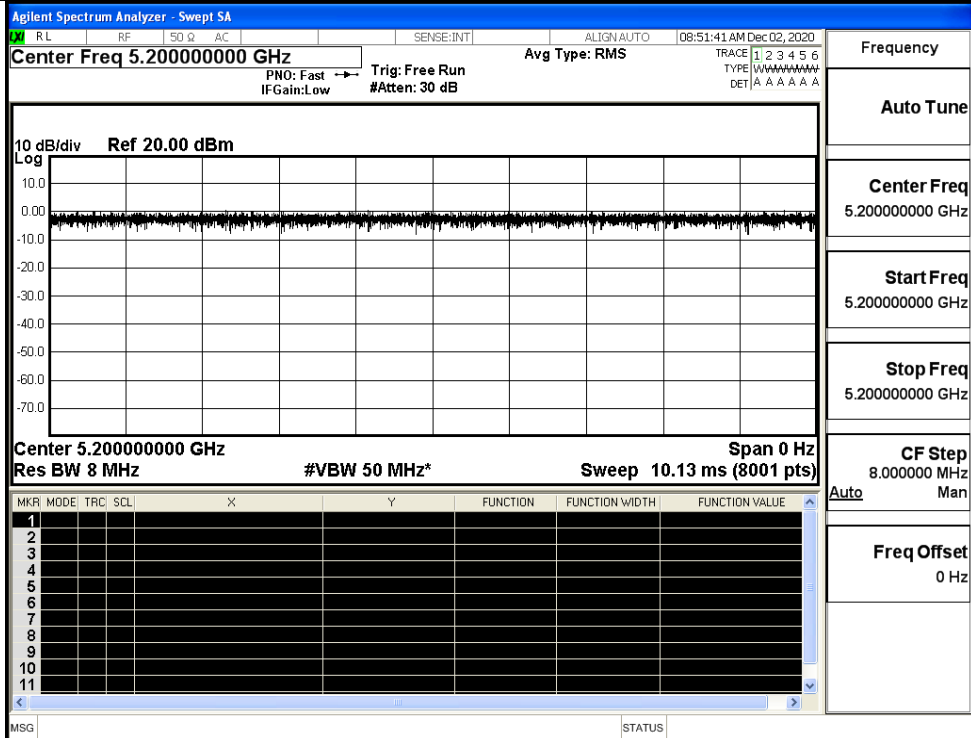




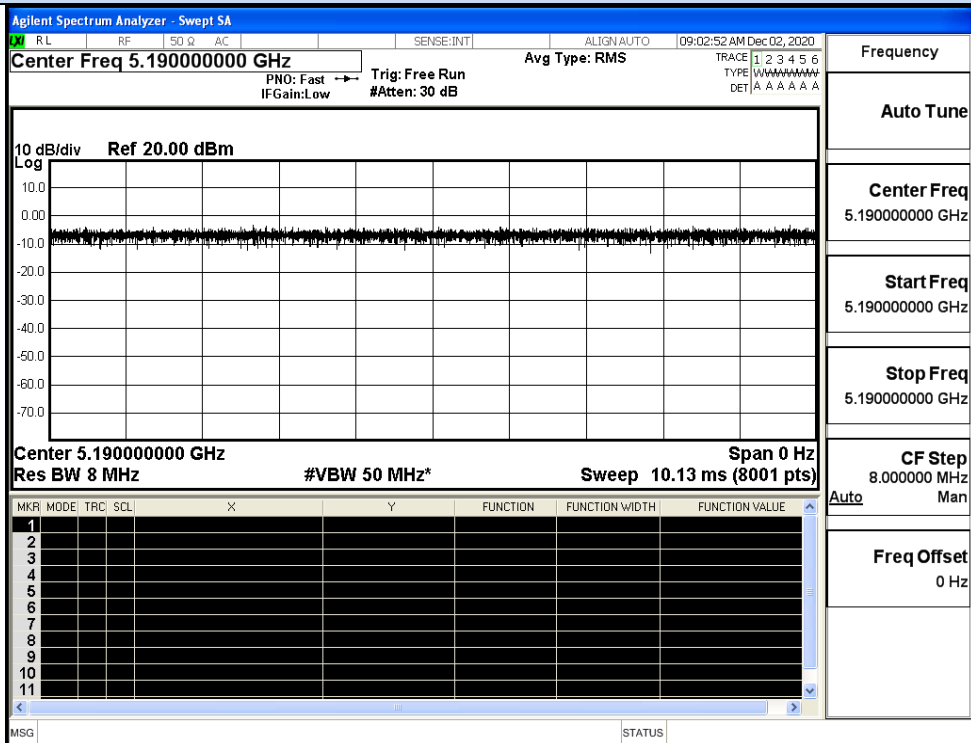
ANT1

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11N20 SISO	5200	100	0.00	0.01
11N40 SISO	5190	100	0.00	0.01

On Time and Duty Cycle



IEEE 802.11n HT20



IEEE 802.11n HT40

A.2 Maximum Conduct Output Power**ANT0**

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor (dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11N20 SISO	36	5180	15.16	0	15.16	24	Pass
	40	5200	14.81	0	14.81		Pass
	48	5240	14.25	0	14.25		Pass
11N40 SISO	38	5190	15.26	0	15.26	24	Pass
	46	5230	14.72	0	14.72		Pass

ANT1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor (dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11N20 SISO	36	5180	15.24	0	15.24	24	Pass
	40	5200	13.87	0	13.87		Pass
	48	5240	13.44	0	13.44		Pass
11N40 SISO	38	5190	13.84	0	13.84	24	Pass
	46	5230	13.85	0	13.85		Pass

Combined Ant0 and Ant1

Test Mode	Channel	Frequency (MHz)	Report Conducted Power (dBm)			Limit (dBm)
			Ant_0	Ant_1	Sum	
11N20	36	5180	15.16	15.24	18.21	24
	40	5200	14.81	13.87	17.38	
	48	5240	14.25	13.44	16.87	
11N40	38	5190	15.26	13.84	17.62	24
	46	5230	14.72	13.85	17.32	

A.3 Power Spectral Density**ANT0**

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11N20 SISO	36	5180	4.41	0	4.41	11	Pass
	40	5200	4.53	0	4.53		Pass
	48	5240	3.45	0	3.45		Pass
11N40 SISO	38	5190	2.02	0	2.02	11	Pass
	46	5230	1.88	0	1.88		Pass

ANT1

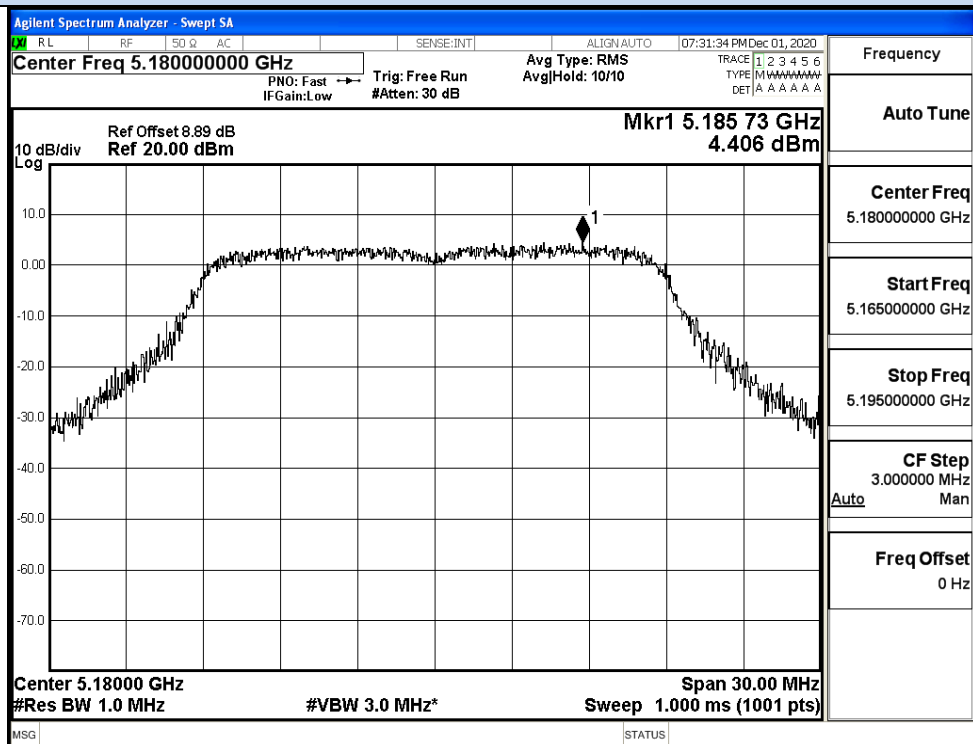
Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11N20 SISO	36	5180	4.33	0	4.33	11	Pass
	40	5200	2.92	0	2.92		Pass
	48	5240	3.49	0	3.49		Pass
11N40 SISO	38	5190	-0.22	0	-0.22	11	Pass
	46	5230	0.00	0	0.00		Pass

Combined Ant0 and Ant1

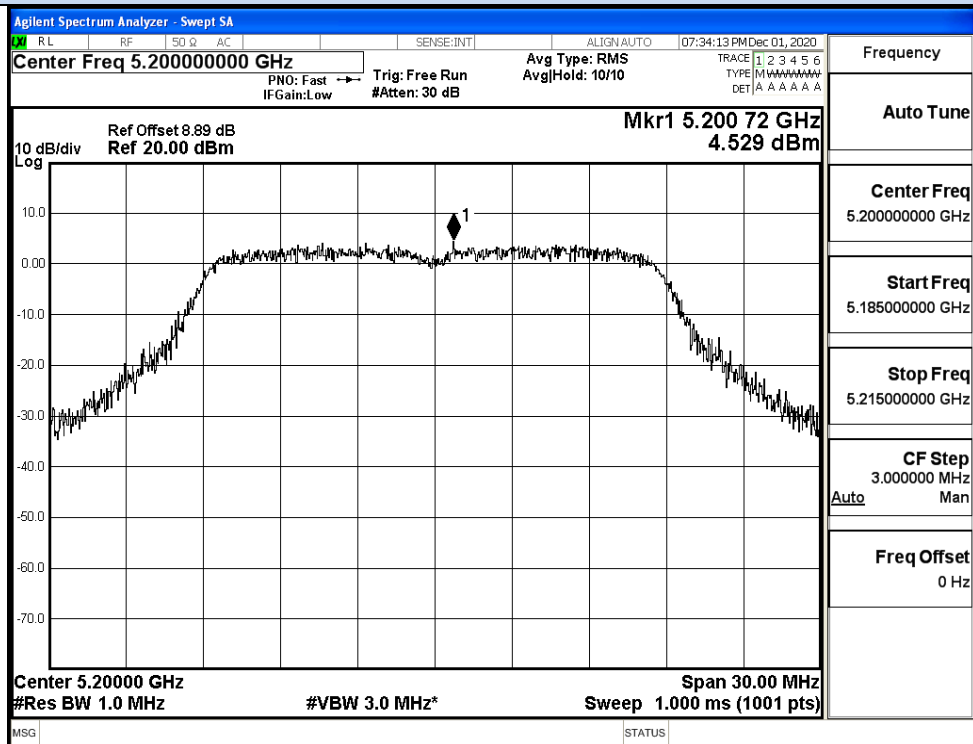
Test Mode	Channel	Frequency (MHz)	Report Power Density (dBm/MHz)			Limit (dBm/MHz)
			Ant_0	Ant_1	Sum	
11N20	36	5180	4.41	4.33	7.38	11
	40	5200	4.53	2.92	6.81	
	48	5240	3.45	3.49	6.48	
11N40	38	5190	2.02	-0.22	4.05	11
	46	5230	1.88	0.00	4.05	

ANT0

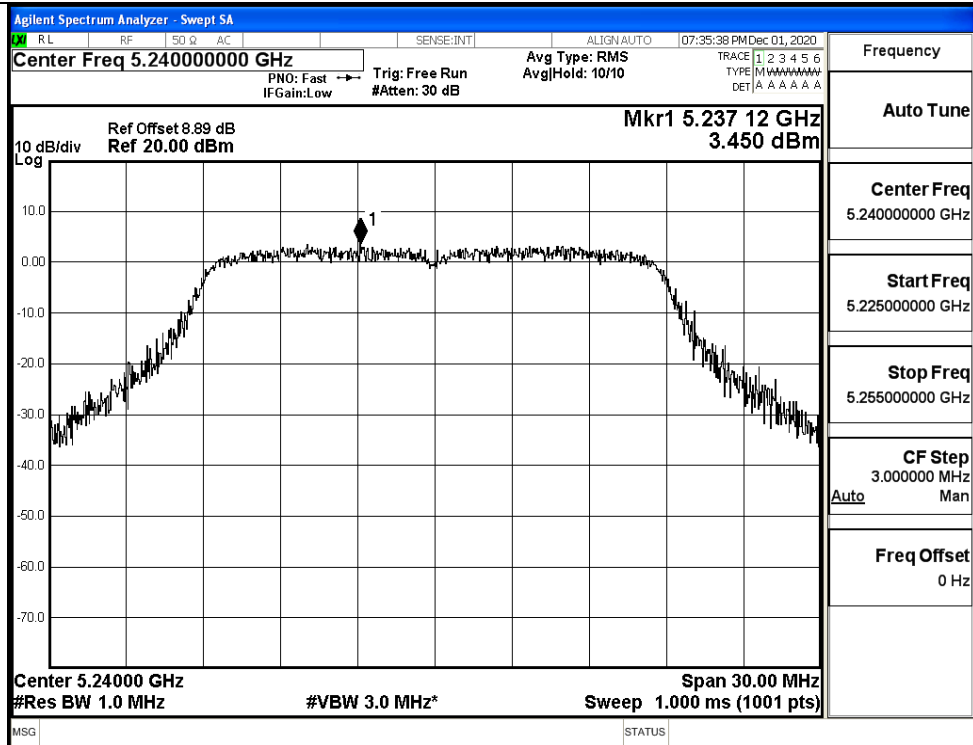
Power Spectral Density



IEEE 802.11n20 / Channel 36 / 5180MHz

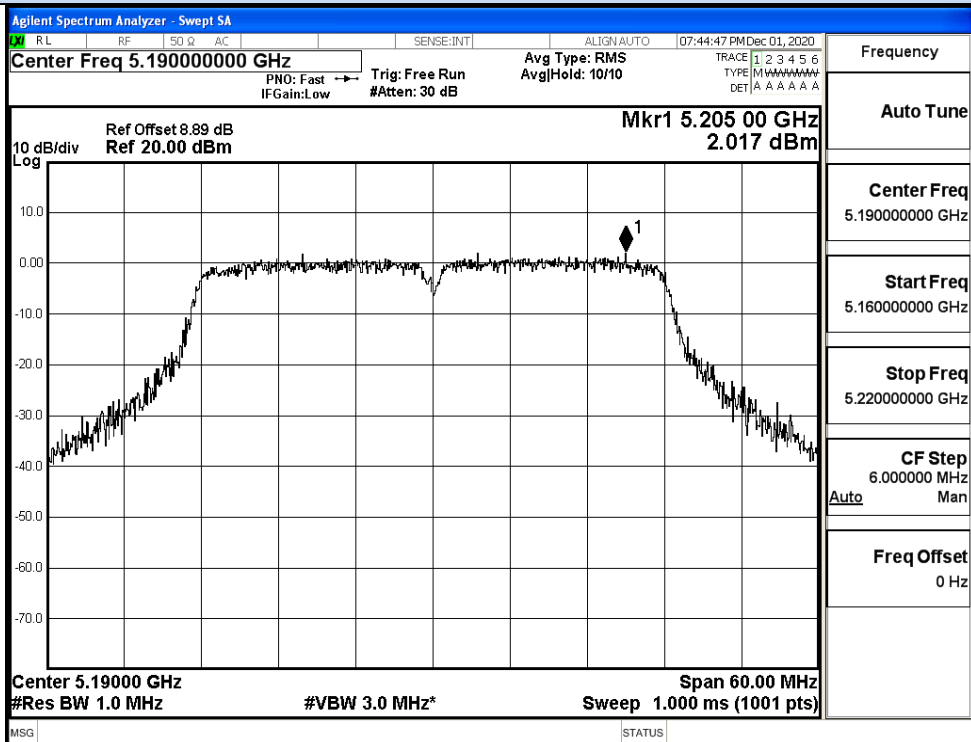


IEEE 802.11n20 / Channel 40 / 5200MHz

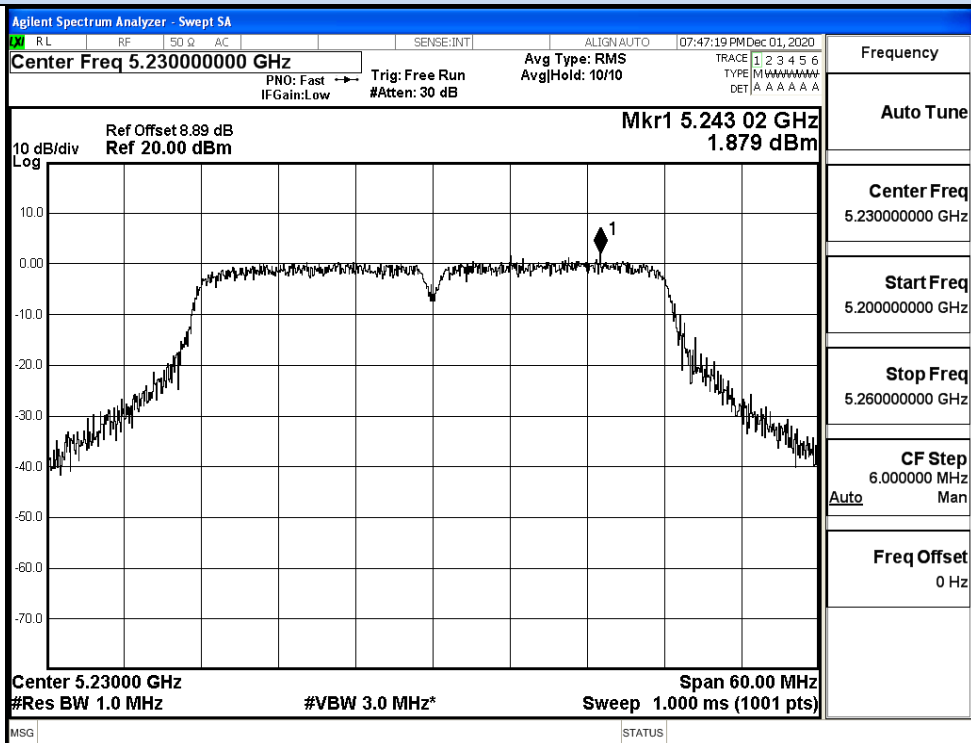


IEEE 802.11n20 / Channel 48 / 5240MHz

Power Spectral Density



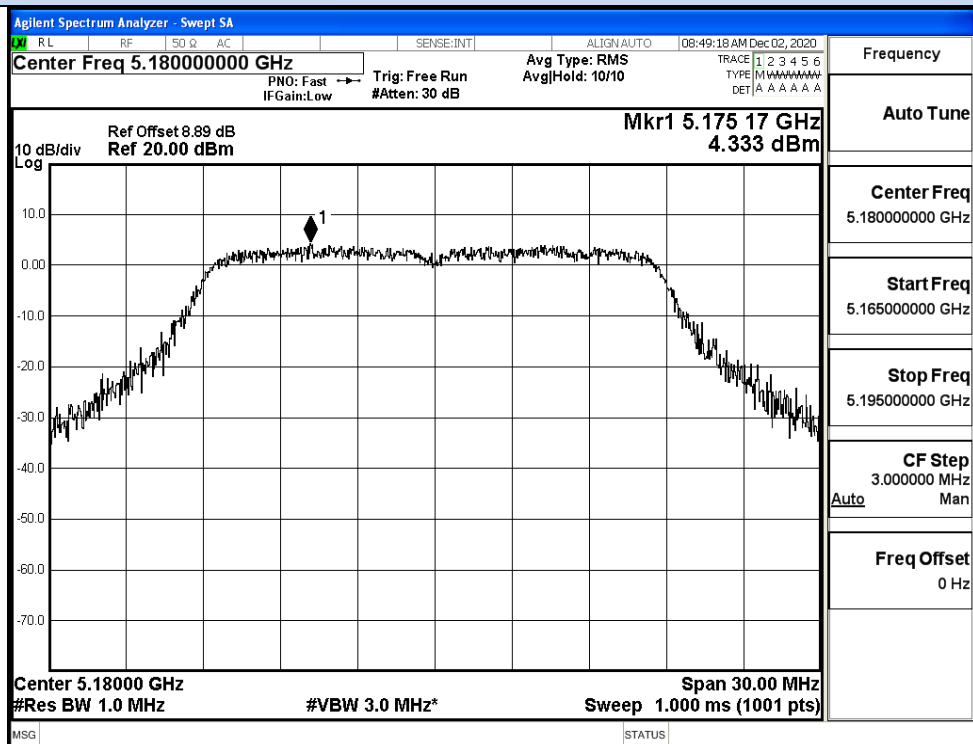
IEEE 802.11n40 / Channel 38 / 5190MHz



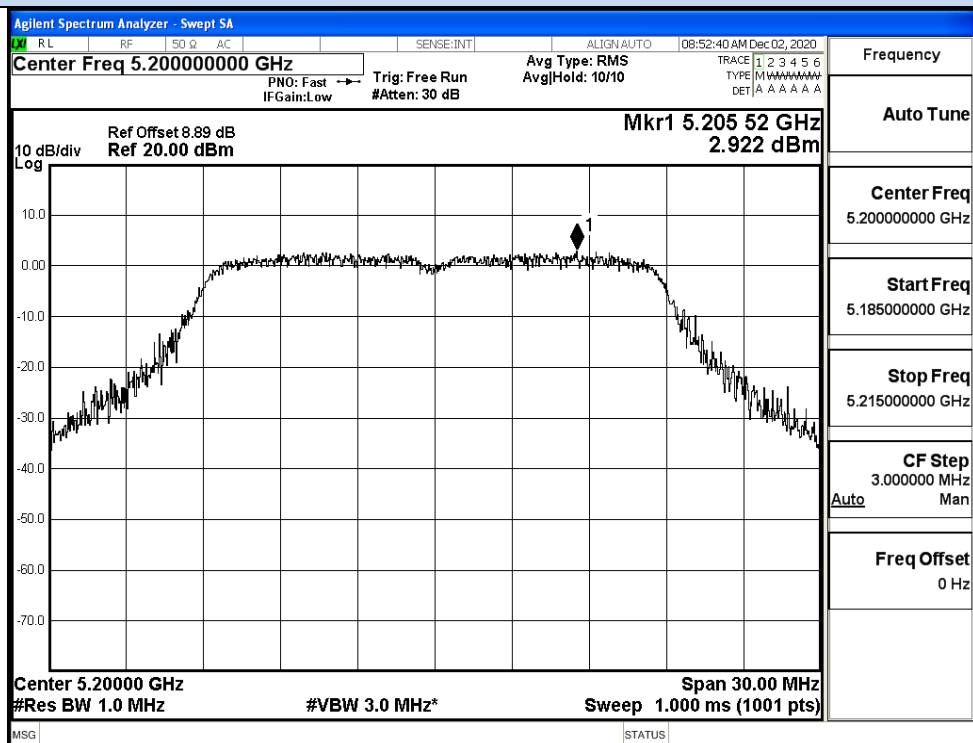
IEEE 802.11n40 / Channel 46 / 5230MHz

ANT1

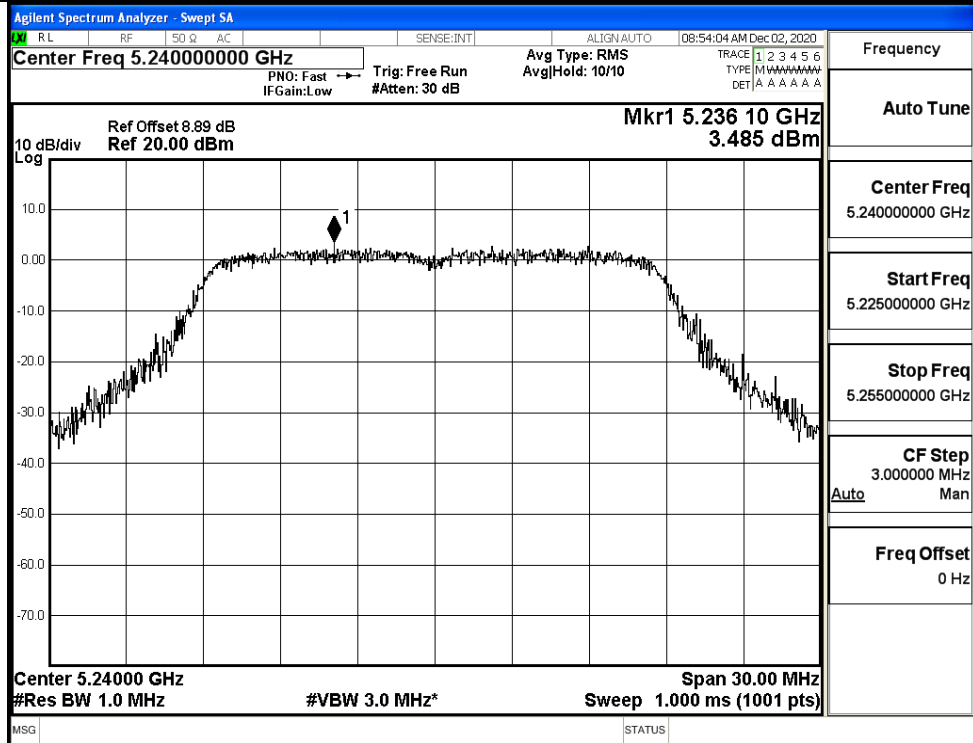
Power Spectral Density



IEEE 802.11n20 / Channel 36 / 5180MHz

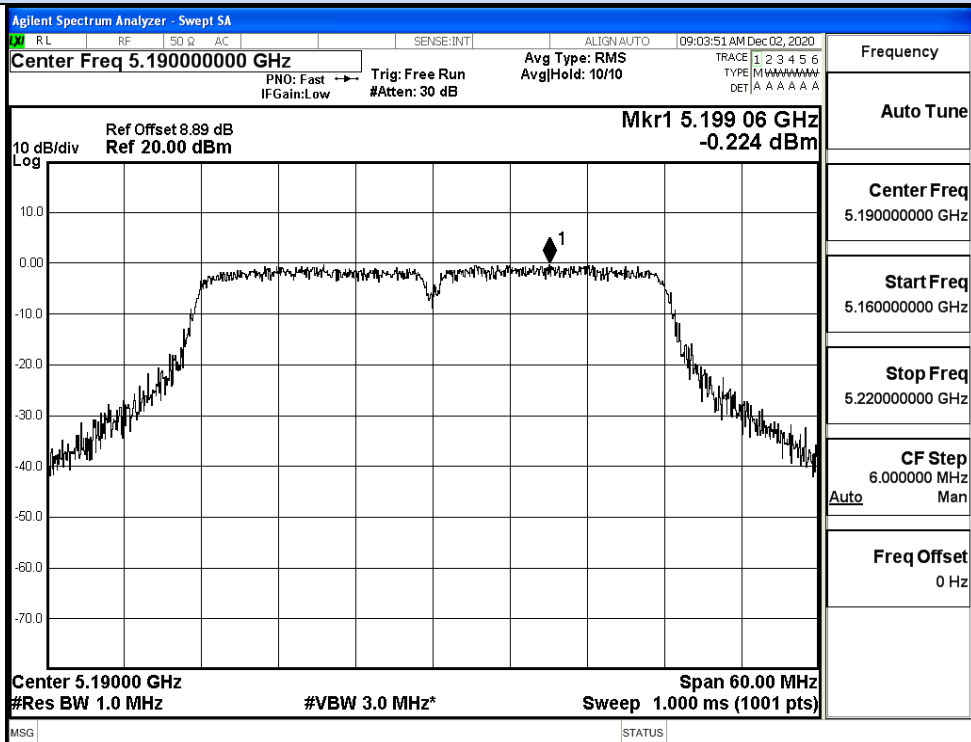


IEEE 802.11n20 / Channel 40 / 5200MHz

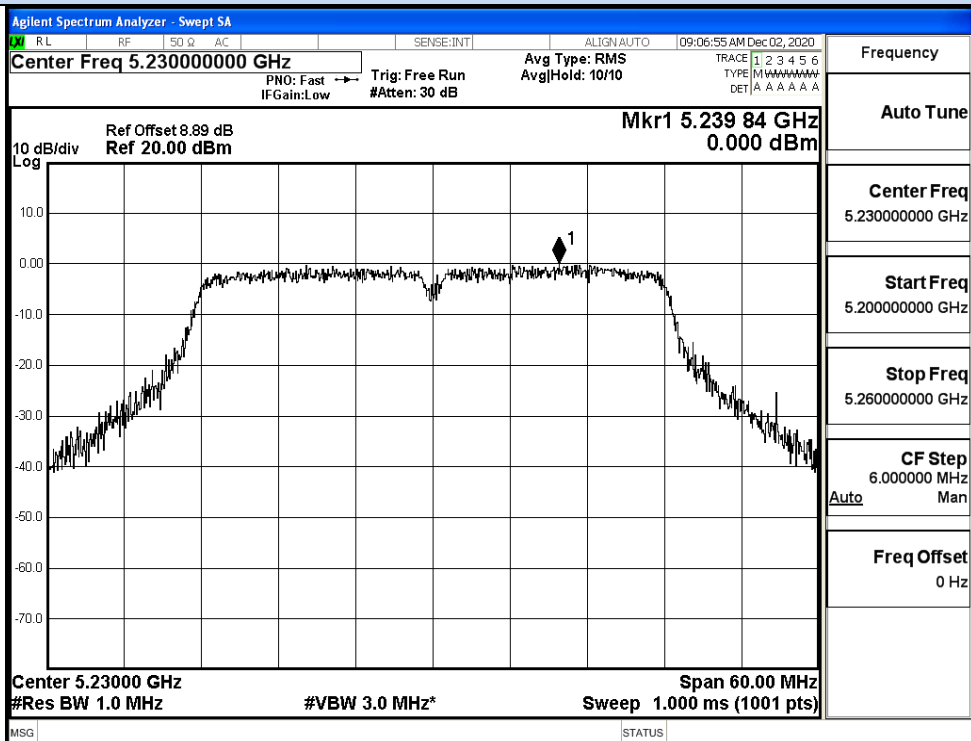


IEEE 802.11n20 / Channel 48 / 5240MHz

Power Spectral Density



IEEE 802.11n40 / Channel 38 / 5190MHz



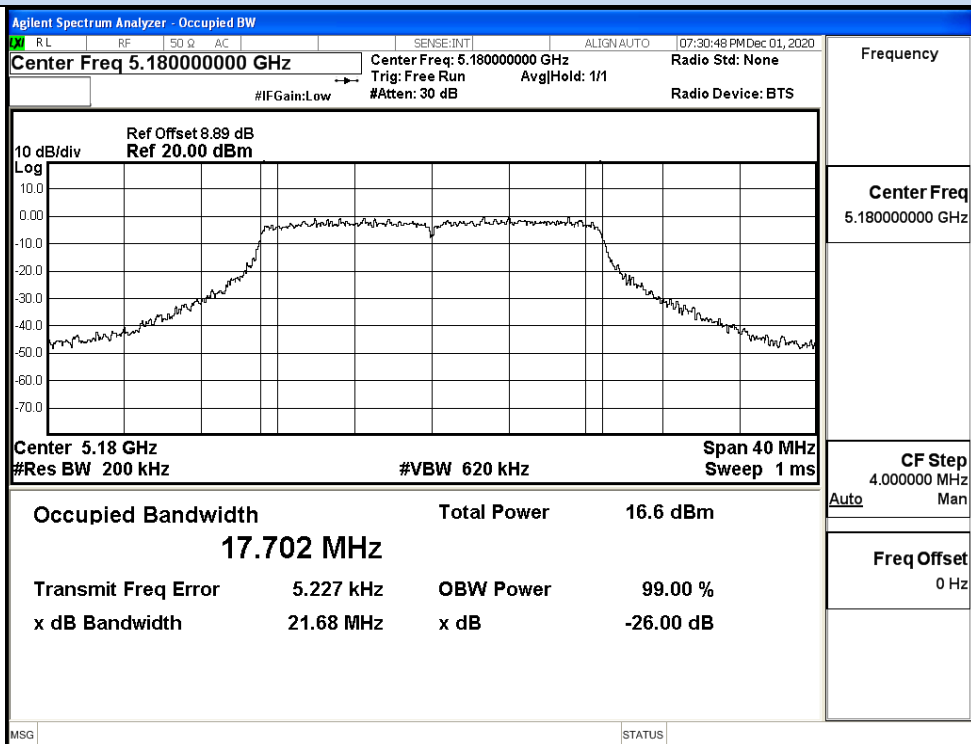
IEEE 802.11n40 / Channel 46 / 5230MHz

A.4 Emission Bandwidth

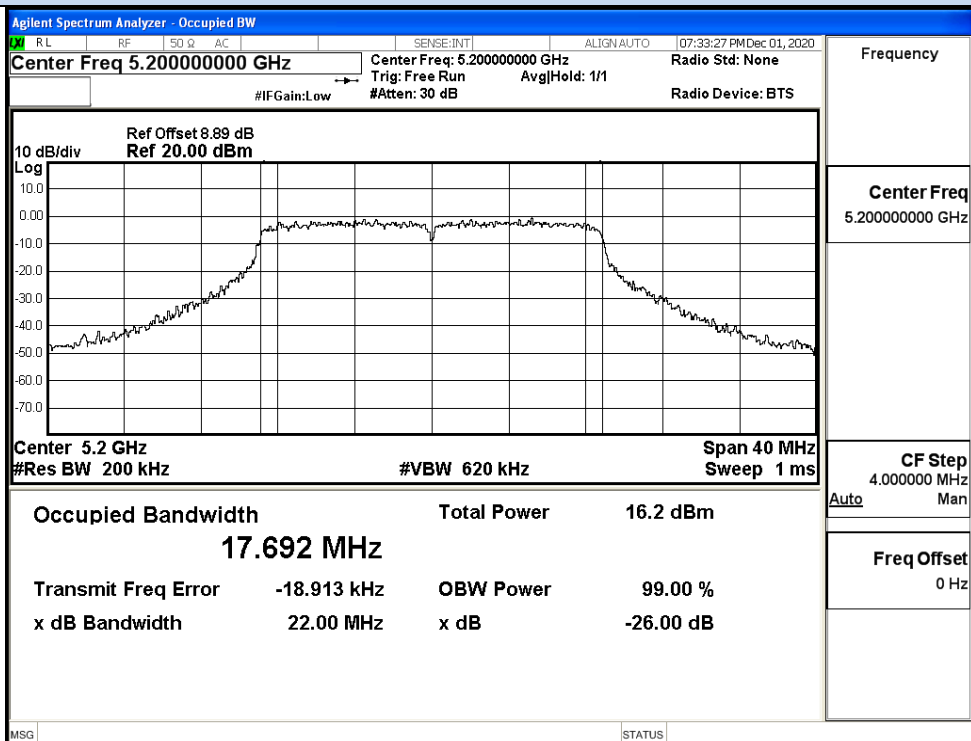
ANT0

Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
11N20 SISO	36	5180	21.68	No Limit	Pass
	40	5200	22.00		Pass
	48	5240	22.02		Pass
11N40 SISO	38	5190	43.96	No Limit	Pass
	46	5230	43.61		Pass

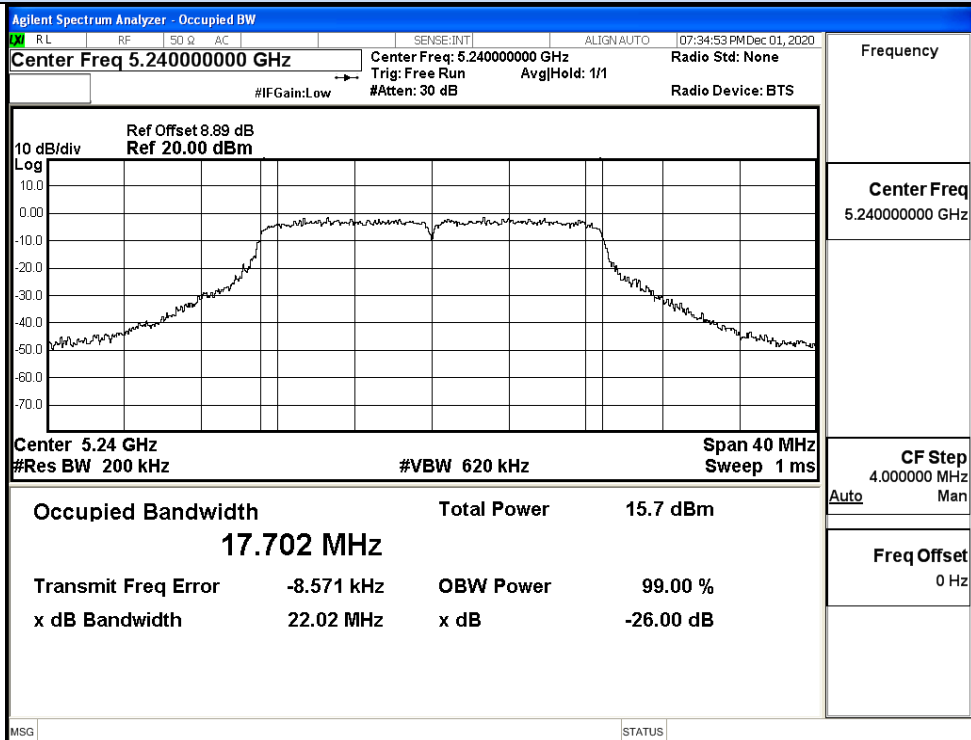
26dB Bandwidth



IEEE 802.11n20 / Channel 36 / 5180MHz

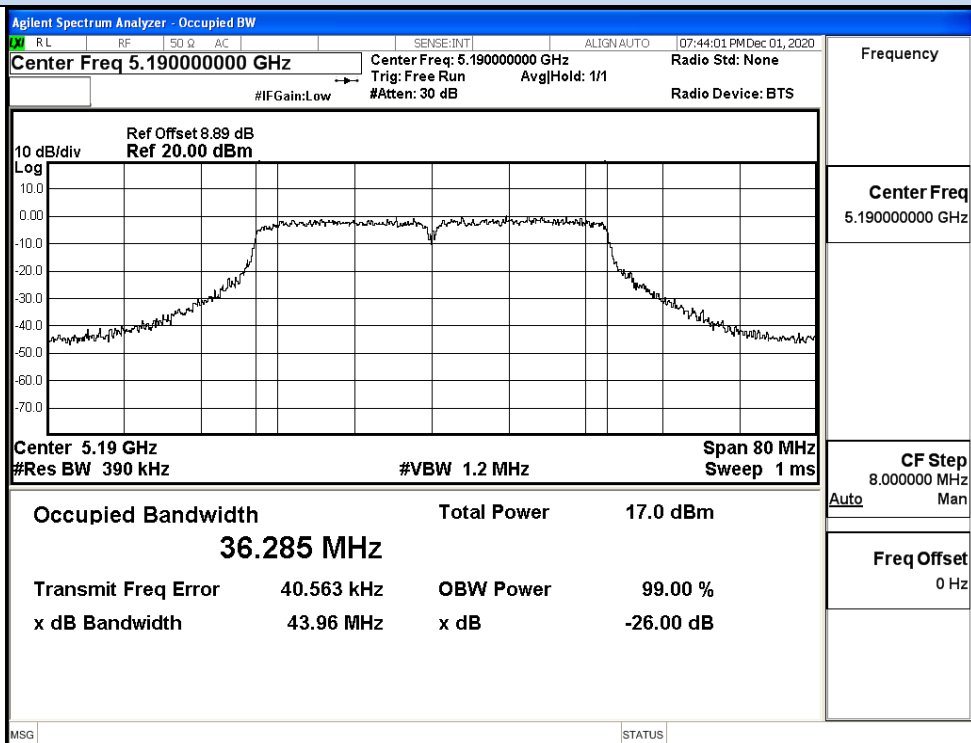


IEEE 802.11n20 / Channel 40 / 5200MHz

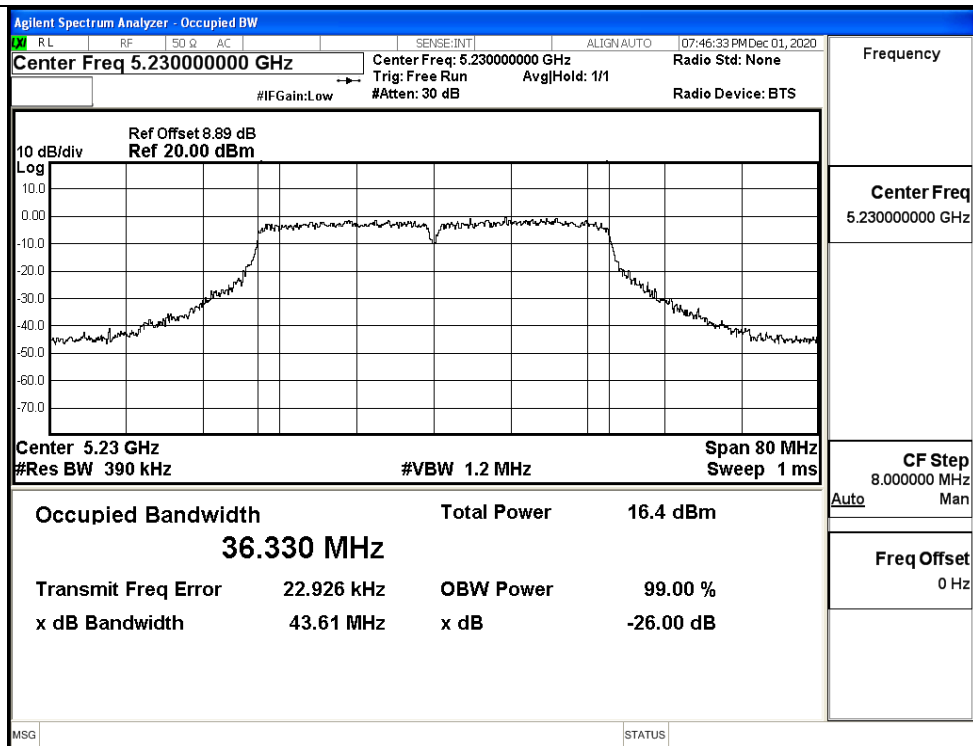


IEEE 802.11n20 / Channel 48 / 5240MHz

26dB Bandwidth



IEEE 802.11n40 / Channel 38 / 5190MHz

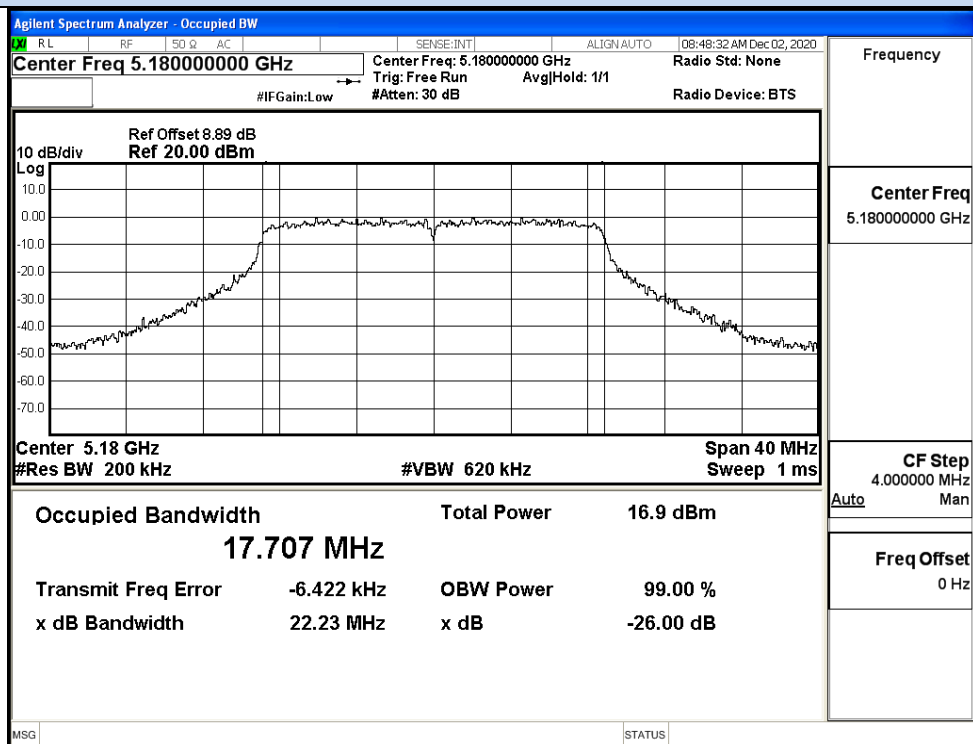


IEEE 802.11n40 / Channel 46 / 5230MHz

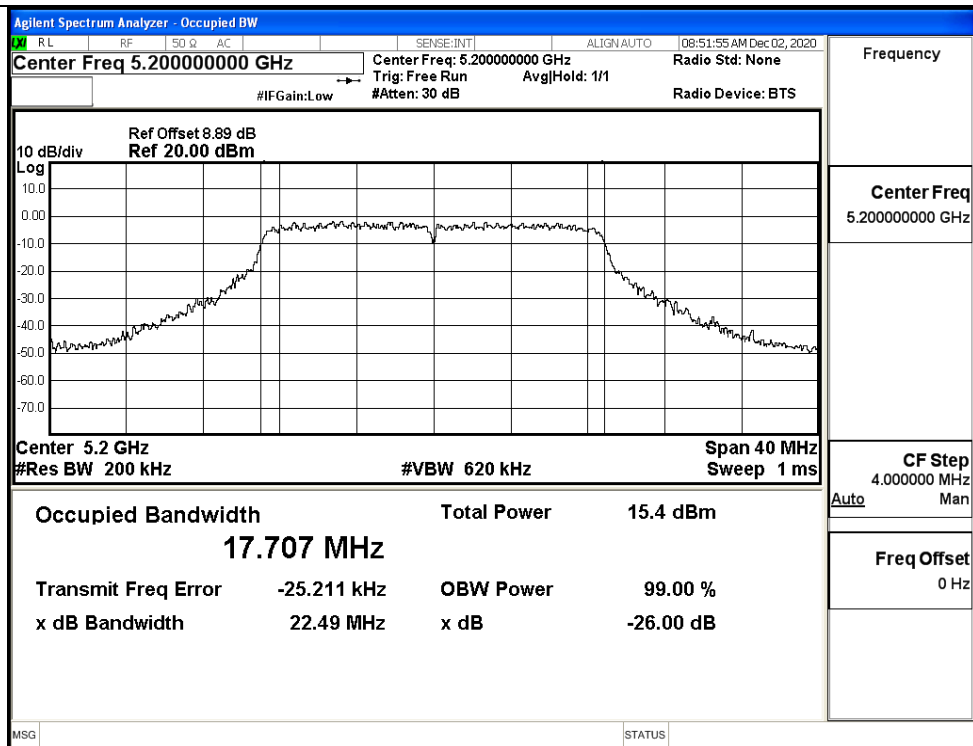
ANT1

Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
11N20 SISO	36	5180	22.23	No Limit	Pass
	40	5200	22.49		Pass
	48	5240	21.88		Pass
11N40 SISO	38	5190	44.55	No Limit	Pass
	46	5230	44.54		Pass

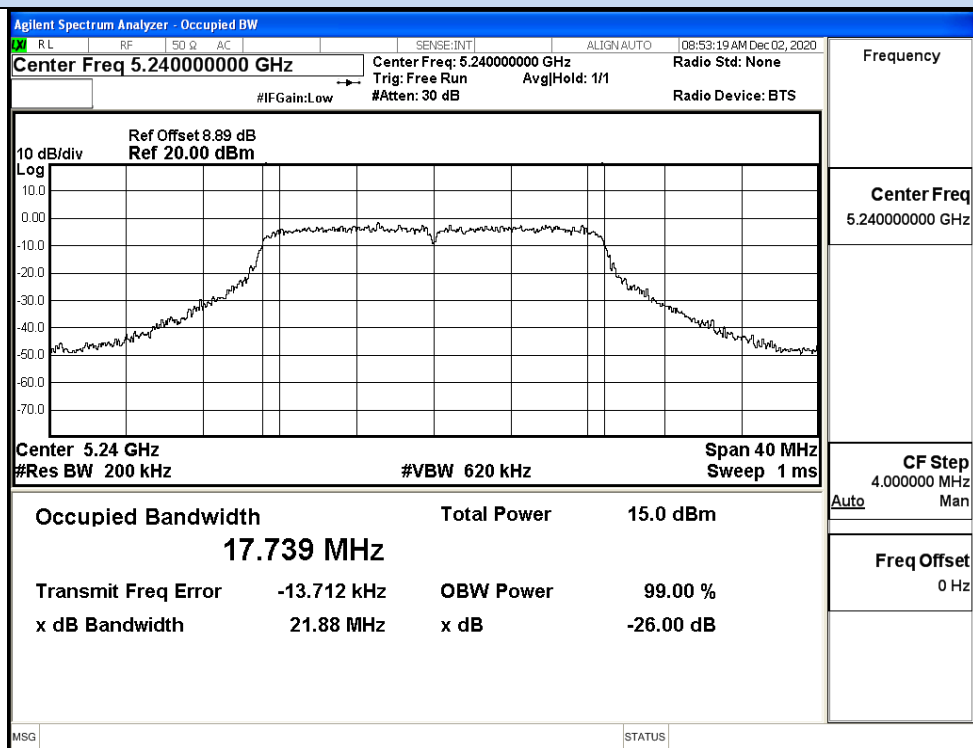
26dB Bandwidth



IEEE 802.11n20 / Channel 36 / 5180MHz

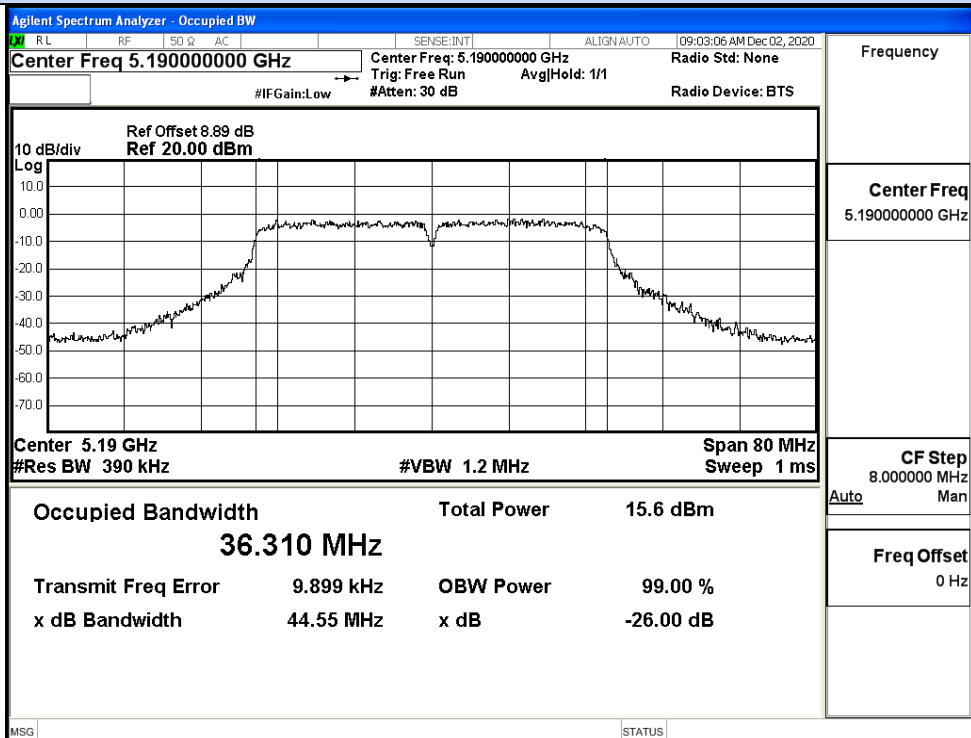


IEEE 802.11n20 / Channel 40 / 5200MHz

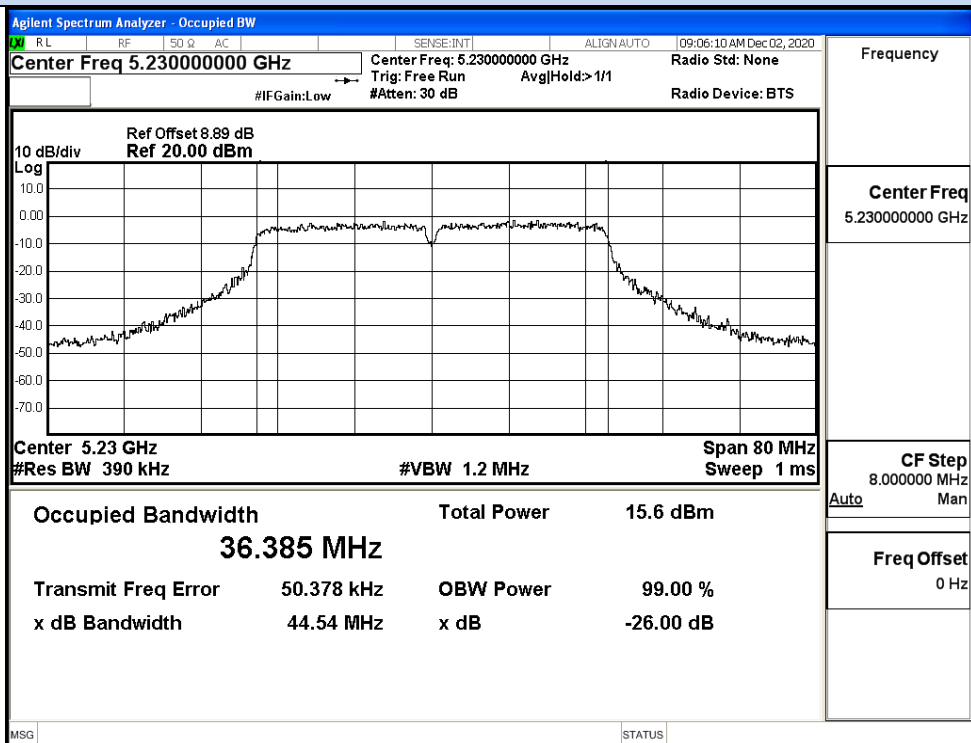


IEEE 802.11n20 / Channel 48 / 5240MHz

26dB Bandwidth



IEEE 802.11n40 / Channel 38 / 5190MHz



IEEE 802.11n40 / Channel 46 / 5230MHz

A.5 Undesirable Emissions Measurement

ANT0

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
11N20 SISO	36	4500.0	-50.64	2.00	0	44.59	Peak	74.00	Pass
		4500.0	-60.33	2.00	0	34.90	Average	54.00	Pass
		5150.0	-44.19	2.00	0	51.03	Peak	74.00	Pass
		5150.0	-53.52	2.00	0	41.70	Average	54.00	Pass
	48	5350.0	-43.54	2.00	0	51.69	Peak	74.00	Pass
		5350.0	-53.07	2.00	0	42.16	Average	54.00	Pass
		5460.0	-42.76	2.00	0	52.47	Peak	74.00	Pass
		5460.0	-52.95	2.00	0	42.28	Average	54.00	Pass
11N40 SISO	38	4500.0	-50.40	2.00	0	44.83	Peak	74.00	Pass
		4500.0	-60.33	2.00	0	34.90	Average	54.00	Pass
		5150.0	-41.37	2.00	0	53.86	Peak	74.00	Pass
		5150.0	-51.59	2.00	0	43.64	Average	54.00	Pass
	46	5350.0	-42.16	2.00	0	53.07	Peak	74.00	Pass
		5350.0	-52.71	2.00	0	42.52	Average	54.00	Pass
		5460.0	-42.76	2.00	0	52.47	Peak	74.00	Pass
		5460.0	-52.65	2.00	0	42.57	Average	54.00	Pass

ANT1

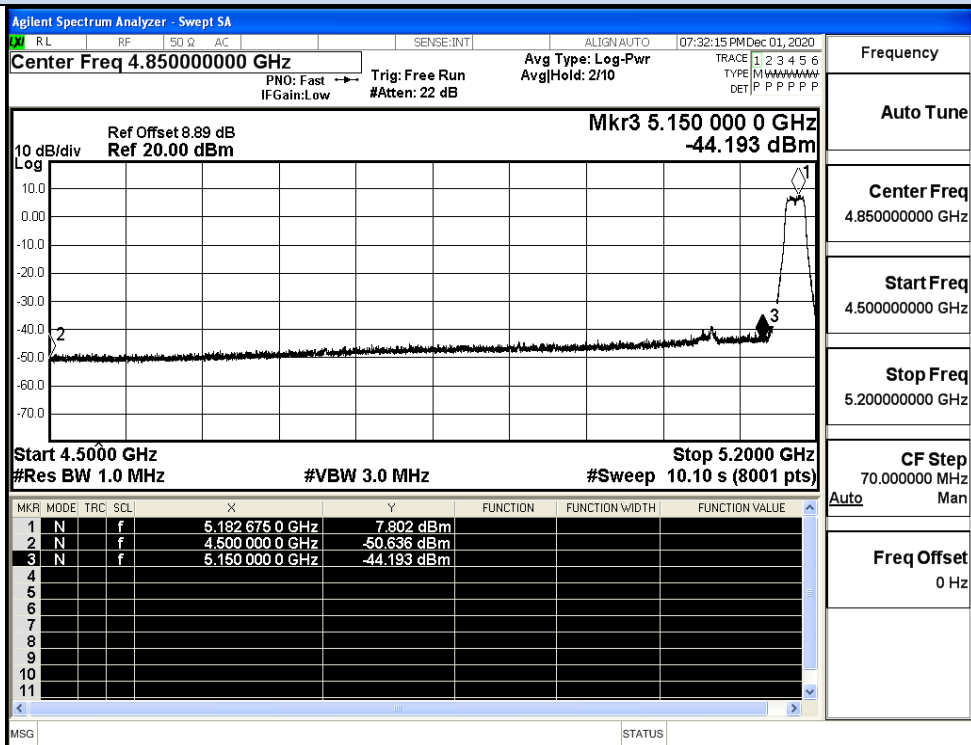
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
11N20 SISO	36	4500.0	-50.76	2.00	0	44.47	Peak	74.00	Pass
		4500.0	-59.67	2.00	0	35.56	Average	54.00	Pass
		5150.0	-42.66	2.00	0	52.57	Peak	74.00	Pass
		5150.0	-53.31	2.00	0	41.91	Average	54.00	Pass
	48	5350.0	-43.56	2.00	0	51.67	Peak	74.00	Pass
		5350.0	-53.59	2.00	0	41.64	Average	54.00	Pass
		5460.0	-43.07	2.00	0	52.15	Peak	74.00	Pass
		5460.0	-53.60	2.00	0	41.63	Average	54.00	Pass
11N40 SISO	38	4500.0	-50.19	2.00	0	45.04	Peak	74.00	Pass
		4500.0	-59.55	2.00	0	35.67	Average	54.00	Pass
		5150.0	-43.08	2.00	0	52.15	Peak	74.00	Pass
		5150.0	-52.93	2.00	0	42.30	Average	54.00	Pass
	46	5350.0	-41.48	2.00	0	53.75	Peak	74.00	Pass
		5350.0	-53.28	2.00	0	41.95	Average	54.00	Pass
		5460.0	-43.17	2.00	0	52.06	Peak	74.00	Pass
		5460.0	-53.19	2.00	0	42.04	Average	54.00	Pass

Combined Ant0 and Ant1

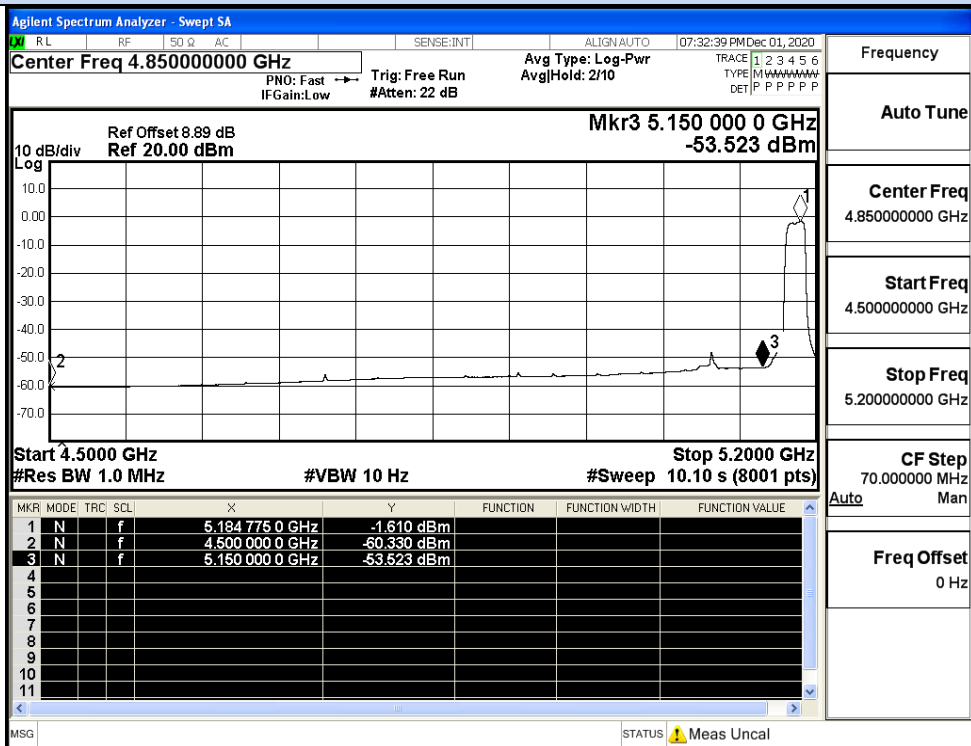
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)			Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
			Ant0	Ant1	Sum						
11N20 SISO	36	4500.0	-50.64	-50.76	-47.69	3.01	0	50.55	Peak	74.00	Pass
		4500.0	-60.33	-59.67	-56.98	3.01	0	41.26	Average	54.00	Pass
		5150.0	-44.19	-42.66	-40.35	3.01	0	57.89	Peak	74.00	Pass
		5150.0	-53.52	-53.31	-50.40	3.01	0	47.84	Average	54.00	Pass
	48	5350.0	-43.54	-43.56	-40.54	3.01	0	57.70	Peak	74.00	Pass
		5350.0	-53.07	-53.59	-50.31	3.01	0	47.93	Average	54.00	Pass
		5460.0	-42.76	-43.07	-39.90	3.01	0	58.34	Peak	74.00	Pass
		5460.0	-52.95	-53.60	-50.25	3.01	0	47.99	Average	54.00	Pass
11N40 SISO	38	4500.0	-50.40	-50.19	-47.28	3.01	0	50.96	Peak	74.00	Pass
		4500.0	-60.33	-59.55	-56.91	3.01	0	41.33	Average	54.00	Pass
		5150.0	-41.37	-43.08	-39.13	3.01	0	59.11	Peak	74.00	Pass
		5150.0	-51.59	-52.93	-49.20	3.01	0	49.04	Average	54.00	Pass
	46	5350.0	-42.16	-41.48	-38.80	3.01	0	59.44	Peak	74.00	Pass
		5350.0	-52.71	-53.28	-49.98	3.01	0	48.26	Average	54.00	Pass
		5460.0	-42.76	-43.17	-39.95	3.01	0	58.29	Peak	74.00	Pass
		5460.0	-52.65	-53.19	-49.90	3.01	0	48.34	Average	54.00	Pass

ANT0

Undesirable Emissions Measurement

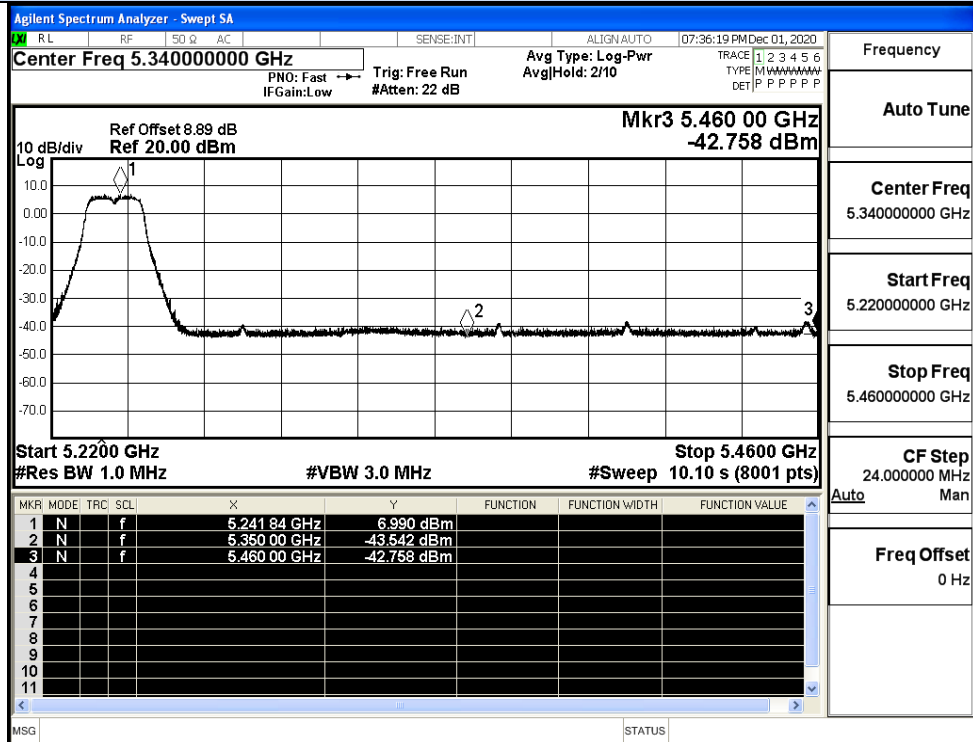


IEEE 802.11n20 / Channel 36 / 5180MHz / Peak

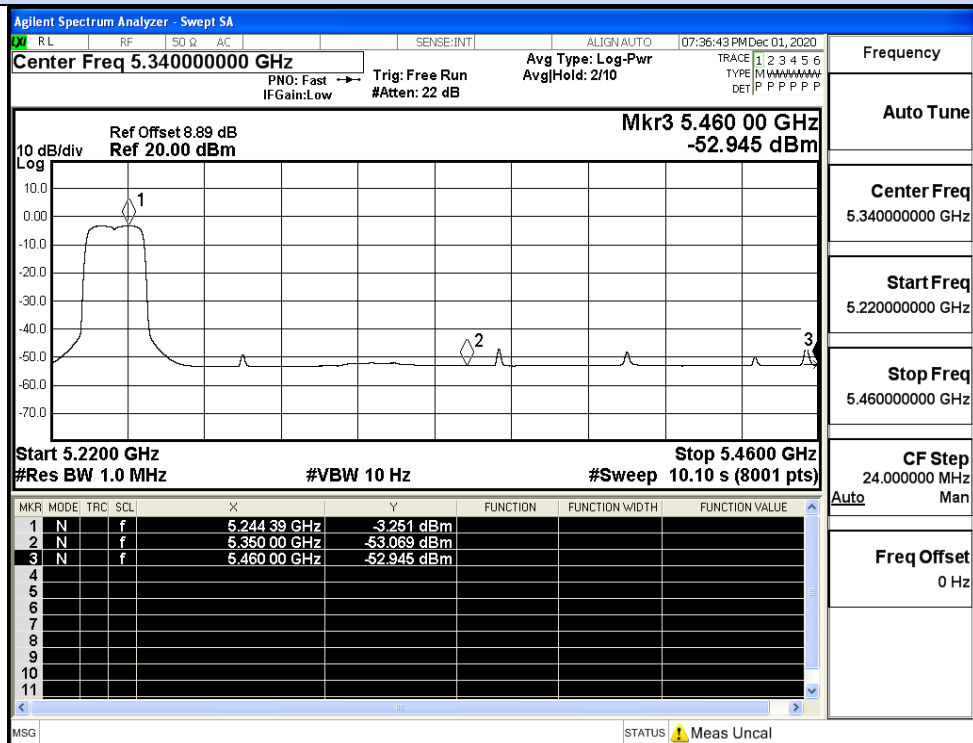


IEEE 802.11n20 / Channel 36 / 5180MHz / Average

Undesirable Emissions Measurement

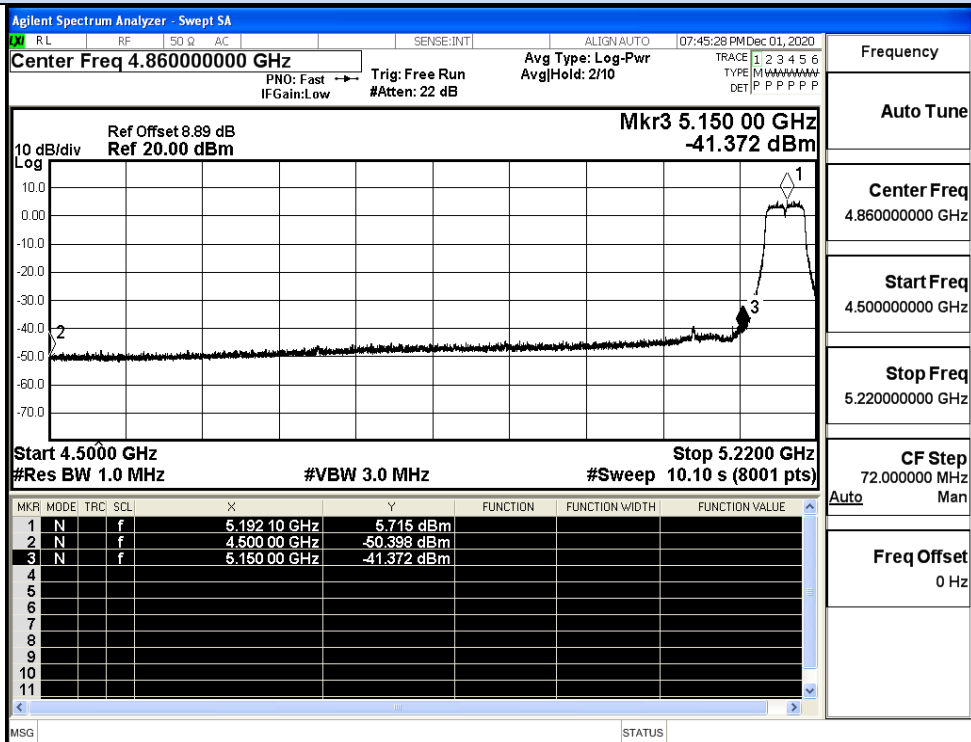


IEEE 802.11n20 / Channel 48 / 5240MHz / Peak

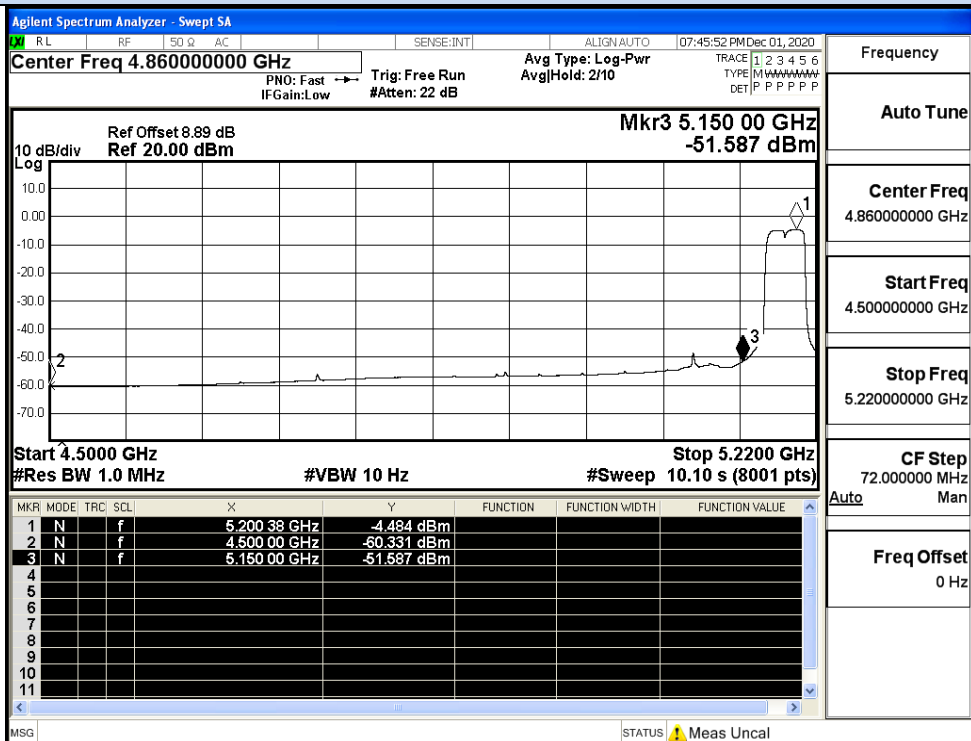


IEEE 802.11n20 / Channel 48 / 5240MHz / Average

Undesirable Emissions Measurement

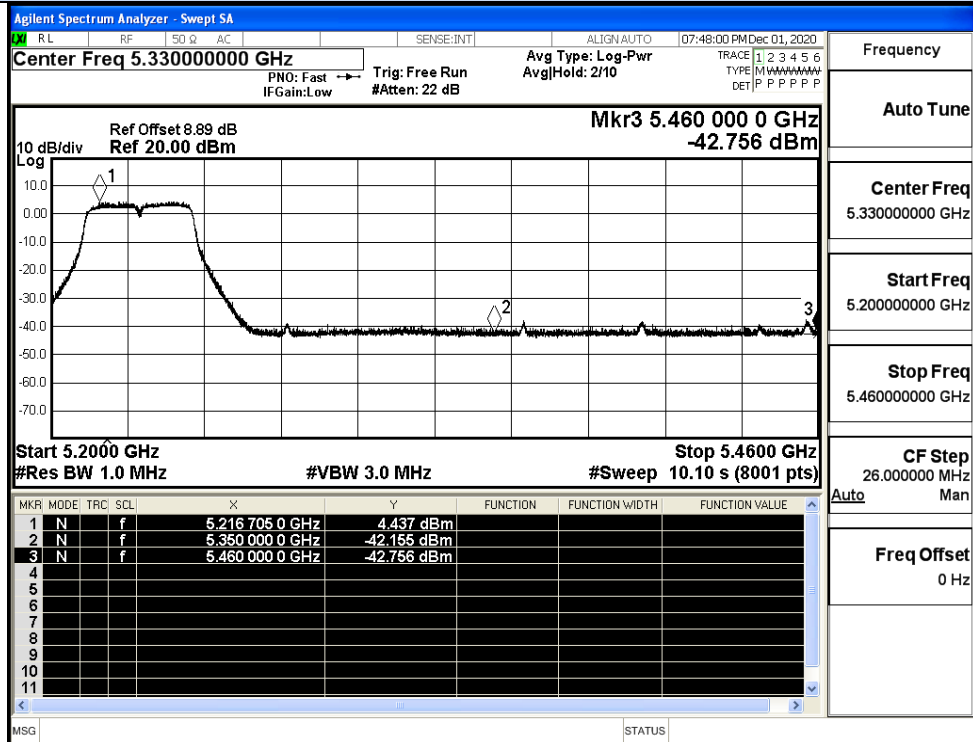


IEEE 802.11n40 / Channel 38 / 5190MHz / Peak

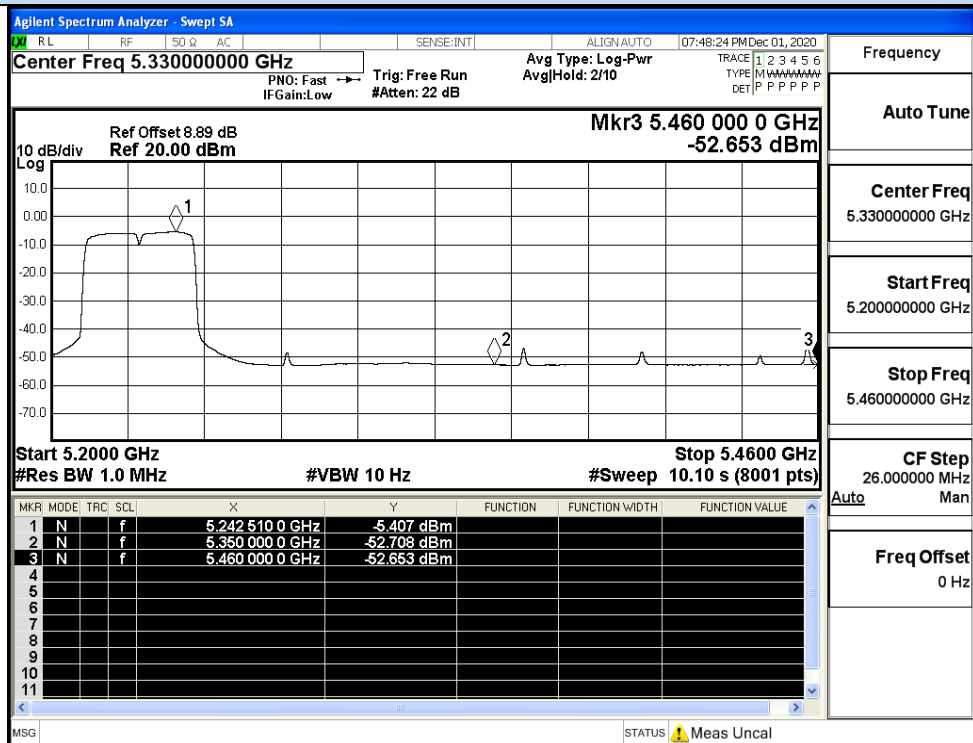


IEEE 802.11n40 / Channel 38 / 5190MHz / Average

Undesirable Emissions Measurement



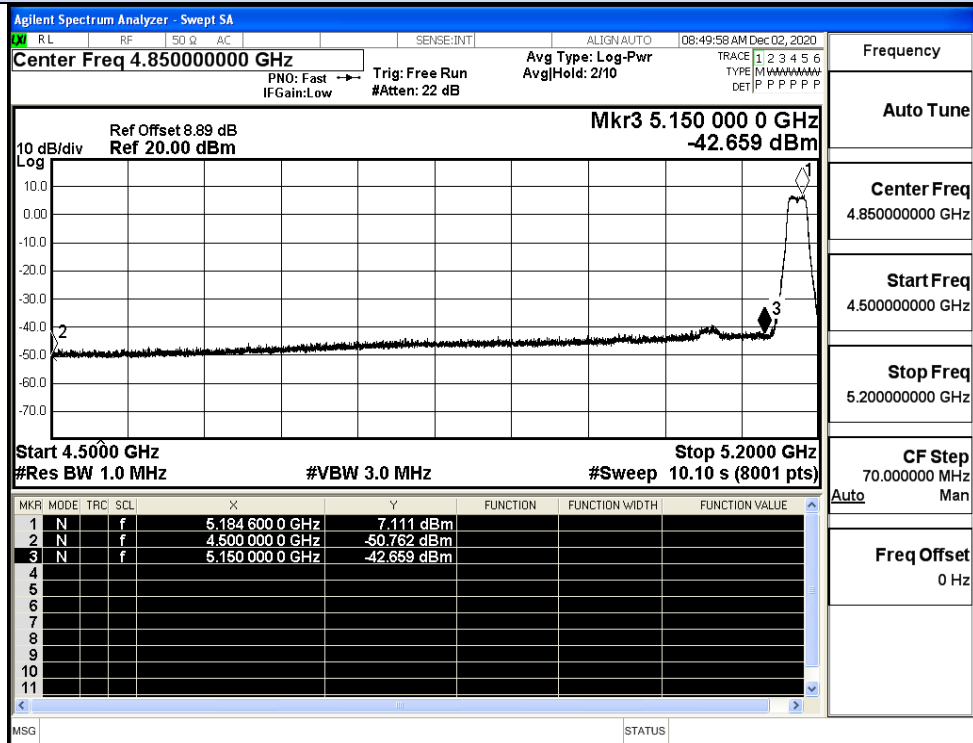
IEEE 802.11n40 / Channel 46 / 5230MHz / Peak



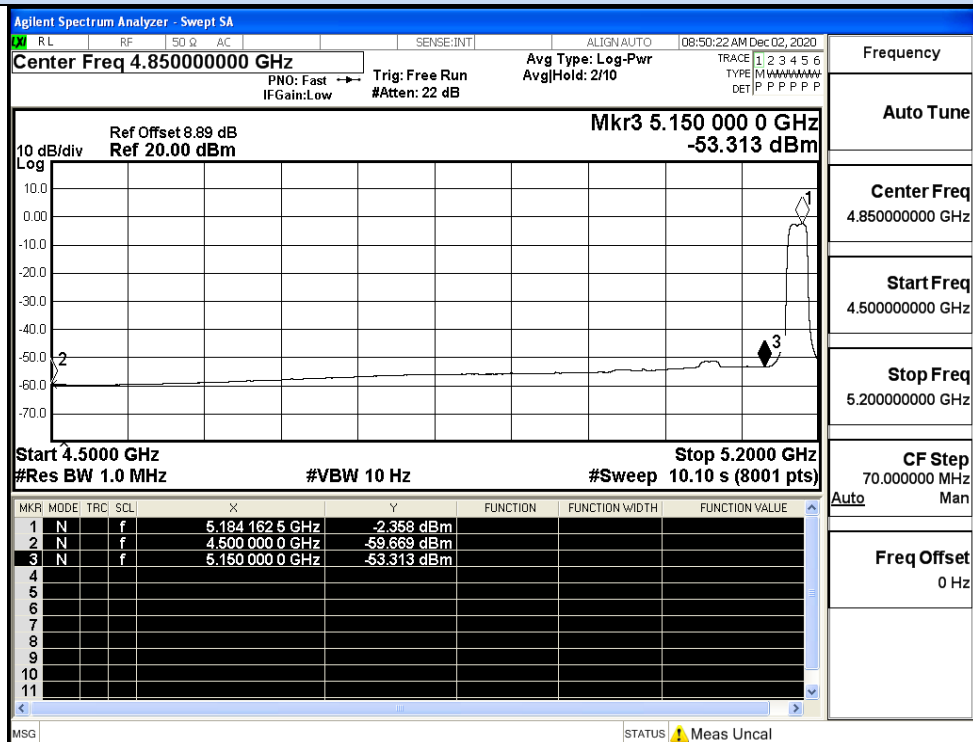
IEEE 802.11n40 / Channel 46 / 5230MHz / Average

ANT1

Undesirable Emissions Measurement

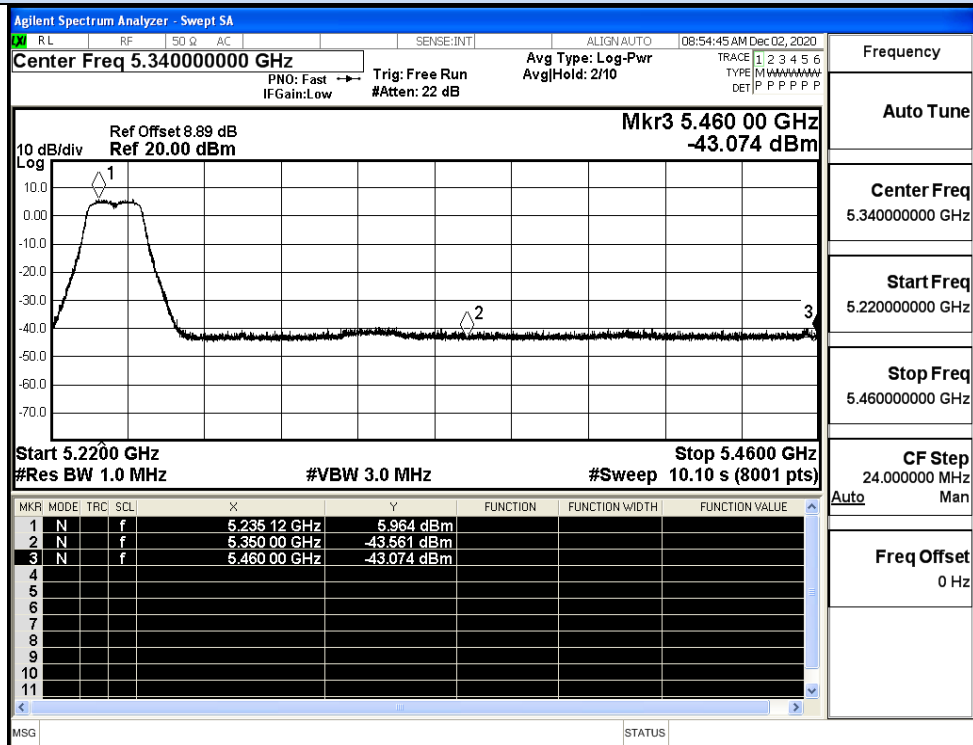


IEEE 802.11n20 / Channel 36 / 5180MHz / Peak

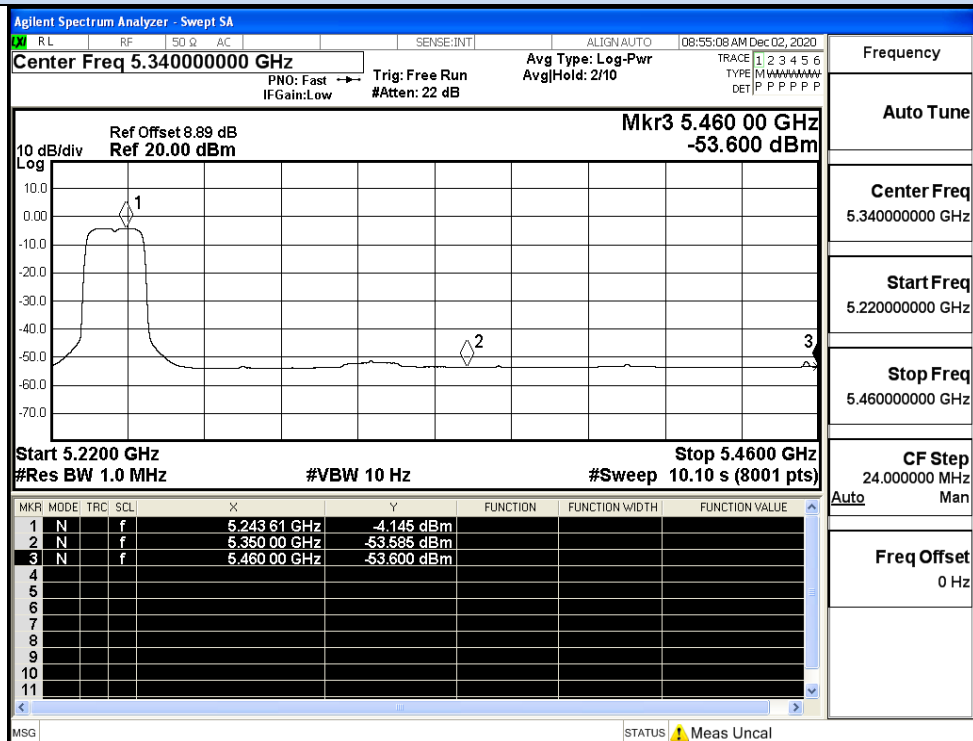


IEEE 802.11n20 / Channel 36 / 5180MHz / Average

Undesirable Emissions Measurement

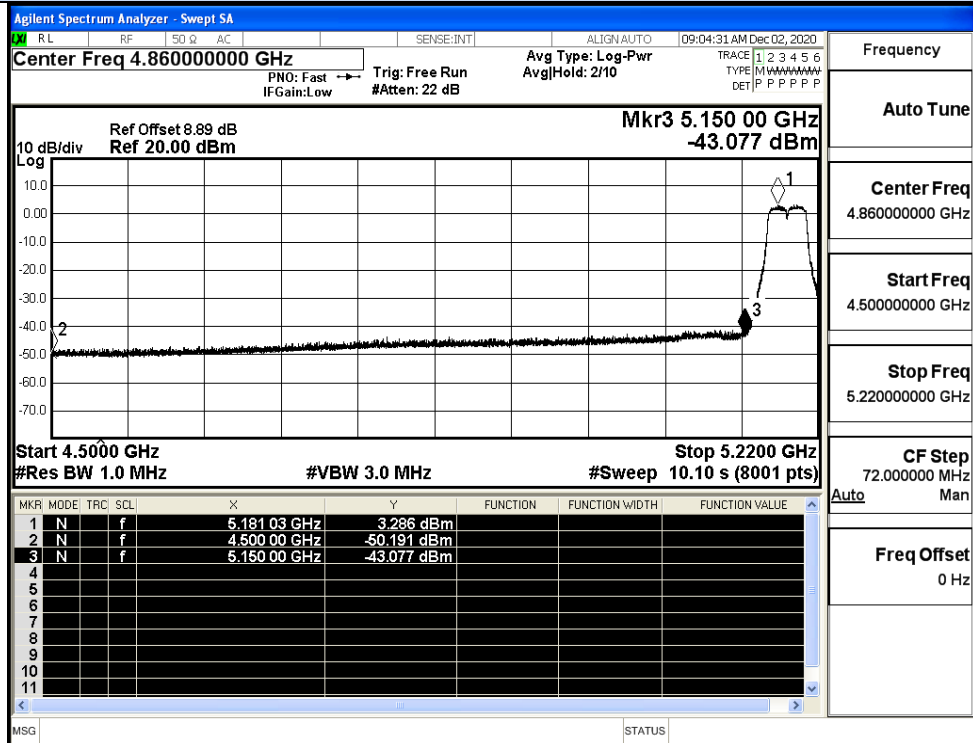


IEEE 802.11n20 / Channel 48 / 5240MHz / Peak

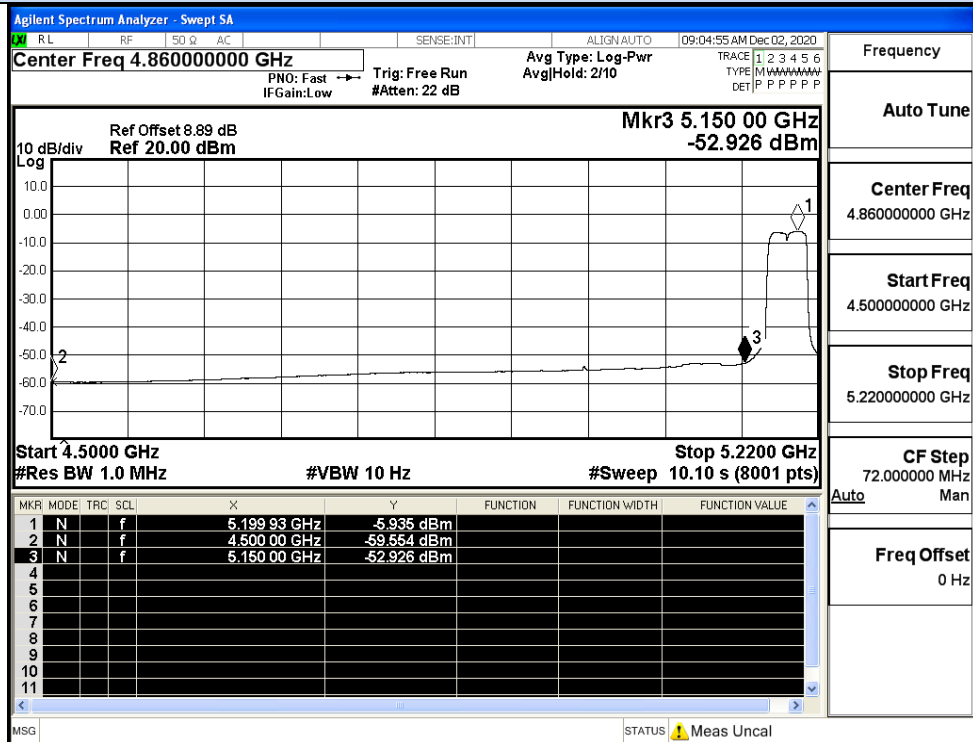


IEEE 802.11n20 / Channel 48 / 5240MHz / Average

Undesirable Emissions Measurement

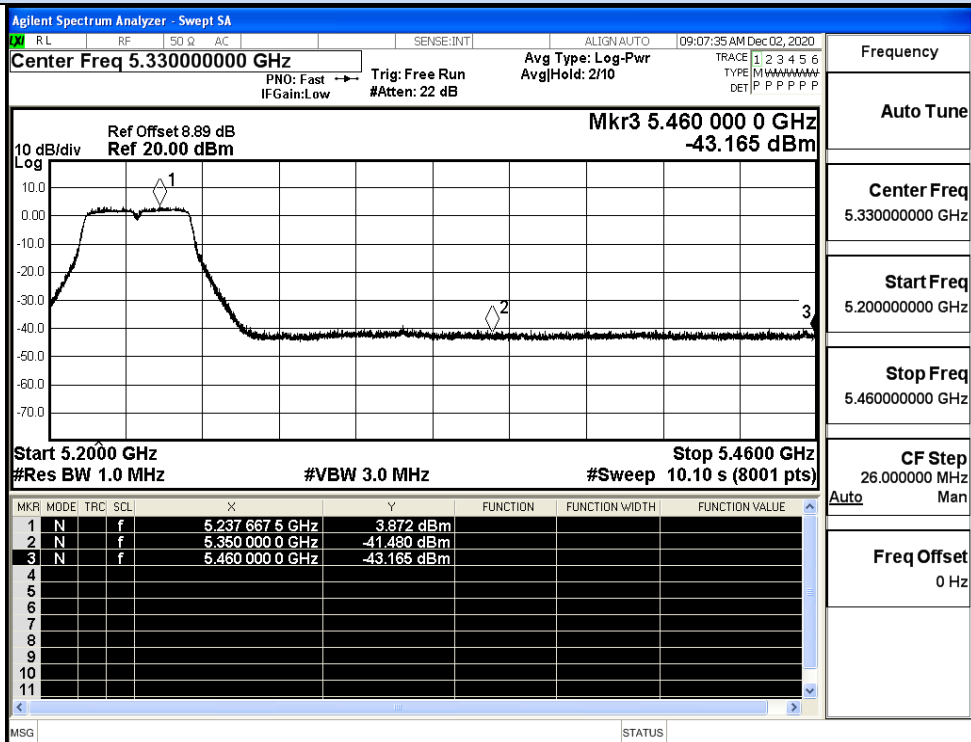


IEEE 802.11n40 / Channel 38 / 5190MHz / Peak

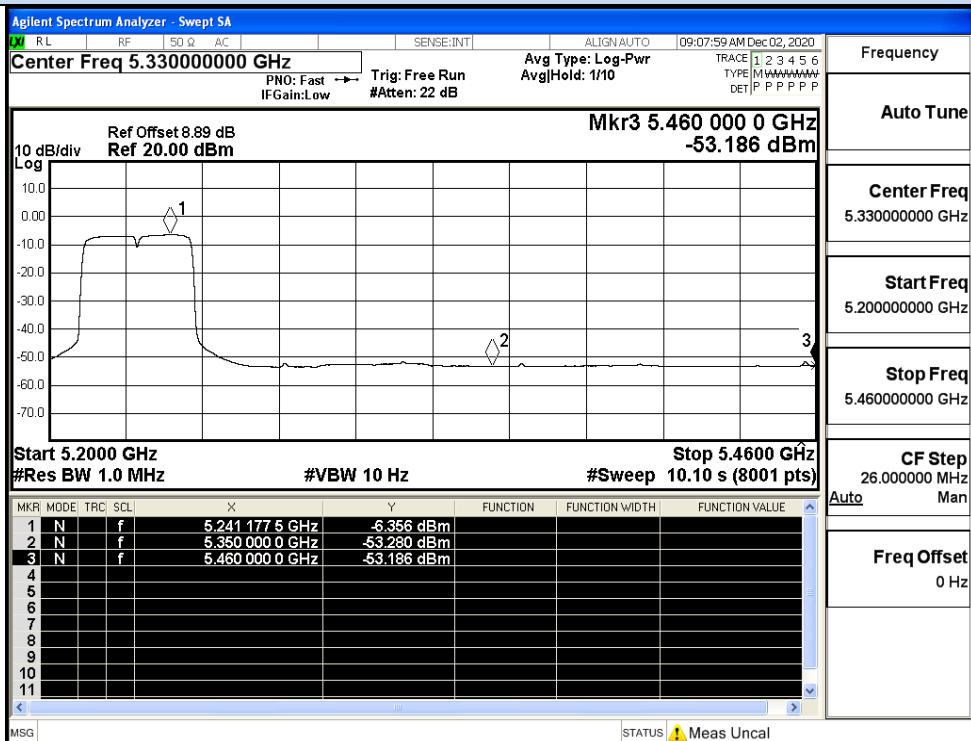


IEEE 802.11n40 / Channel 38 / 5190MHz / Average

Undesirable Emissions Measurement



IEEE 802.11n40 / Channel 46 / 5230MHz / Peak



IEEE 802.11n40 / Channel 46 / 5230MHz / Average