

Appendix D

RF Test Data for 5.5G WLAN (Conducted Measurement)

Product Name: Wireless Cast

Trade Mark: N/A

Test Model: ZL006

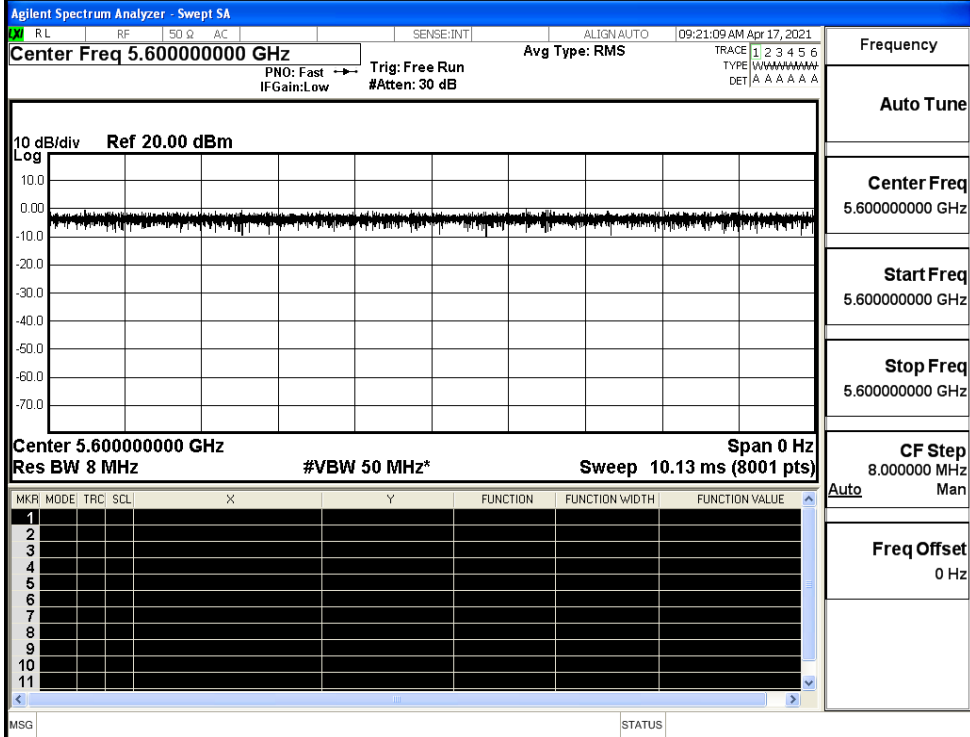
Environmental Conditions

Temperature:	24.9° C
Relative Humidity:	55.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan

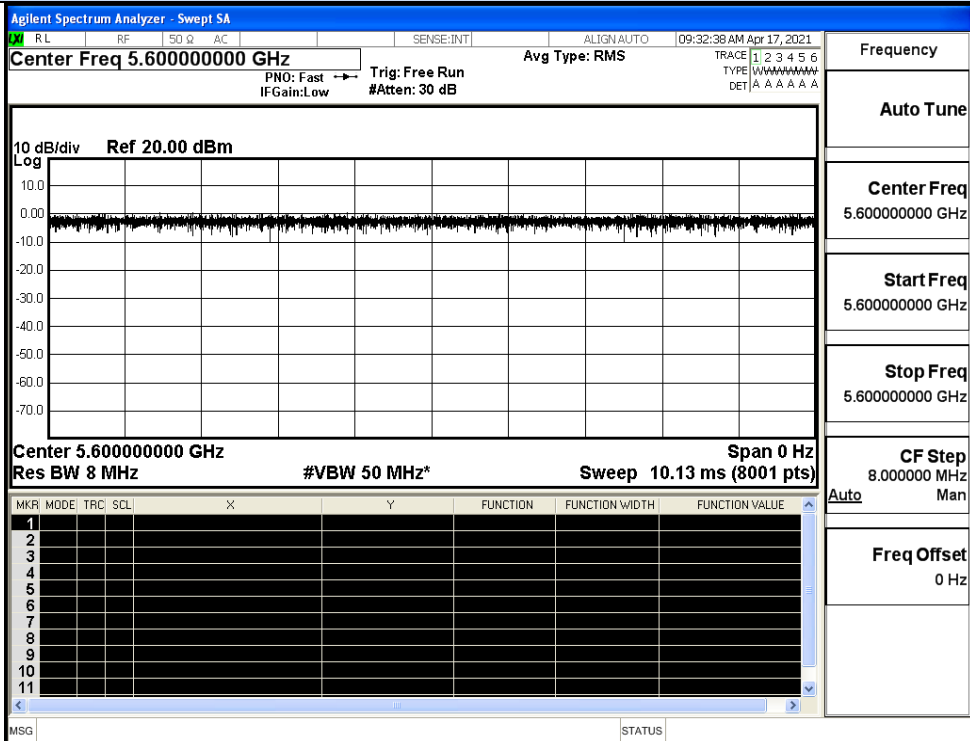
D.1 Duty Cycle

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5600	100	0.00	0.01
11N20 SISO	5600	100	0.00	0.01
11N40 SISO	5590	100	0.00	0.01

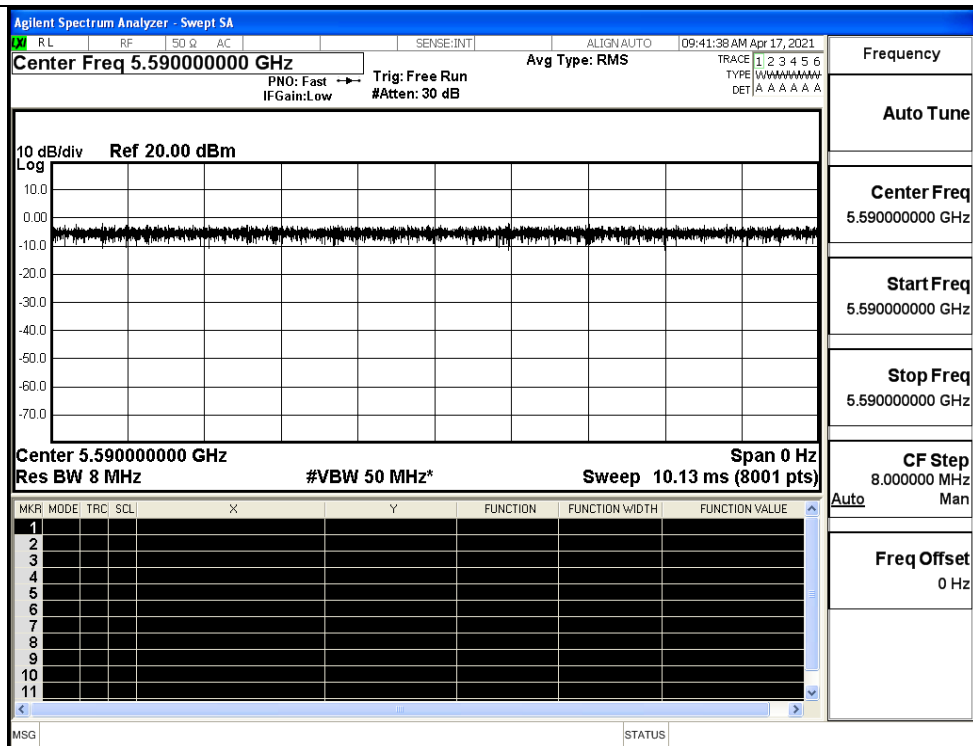
On Time and Duty Cycle



IEEE 802.11a



IEEE 802.11n HT20



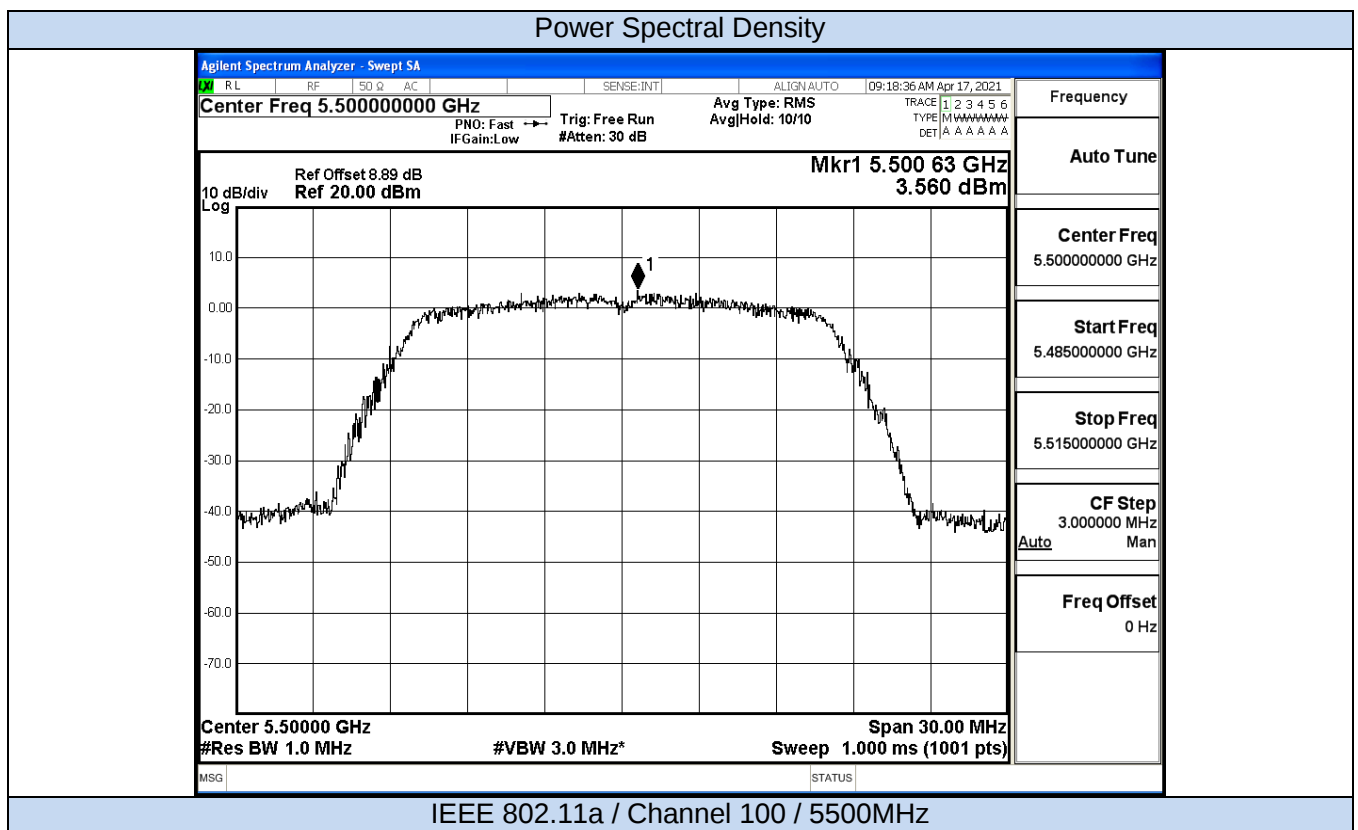
IEEE 802.11n HT40

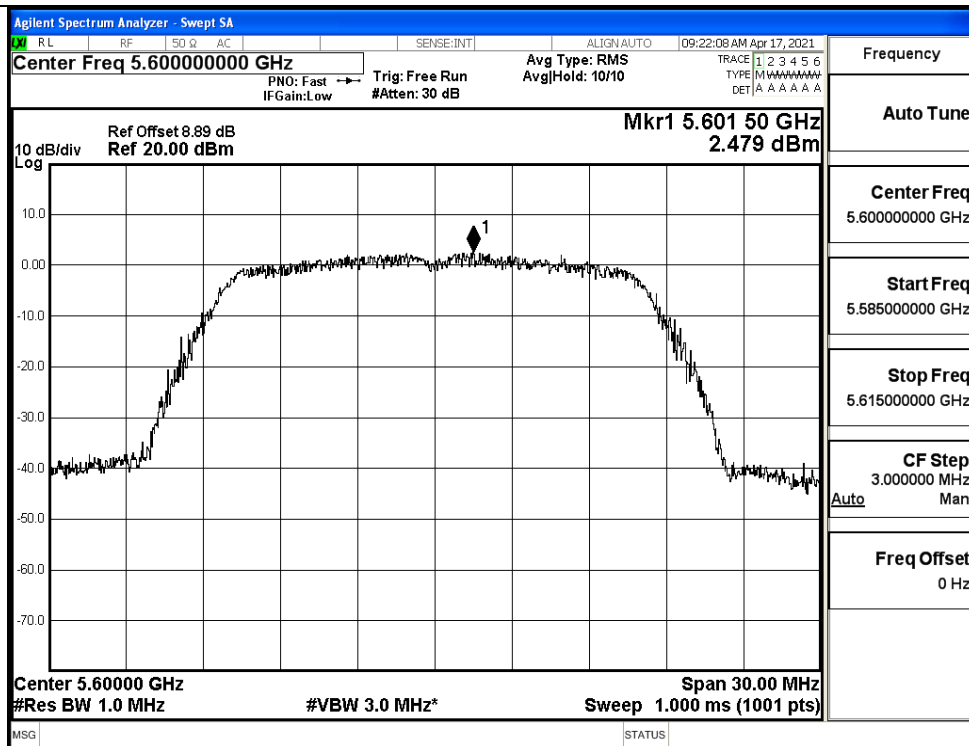
D.2 Maximum Conduct Output Power

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	100	5500	12.93	0	12.93	24	Pass
	120	5600	12.45	0	12.45		Pass
	140	5700	13.11	0	13.11		Pass
11N20 SISO	100	5500	14.11	0	14.11	24	Pass
	120	5600	13.66	0	13.66		Pass
	140	5700	13.35	0	13.35		Pass
11N40 SISO	149	5510	14.47	0	14.47	24	Pass
	157	5590	13.99	0	13.99		Pass
	165	5670	13.49	0	13.49		Pass

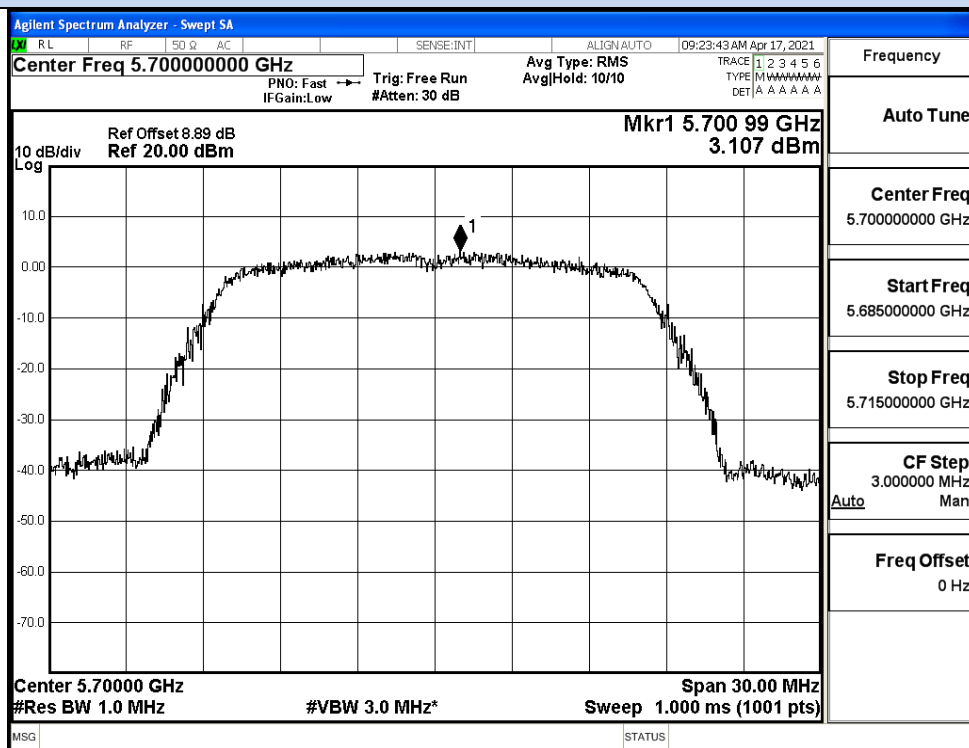
D.3 Power Spectral Density

Test Mode	Channel	Frequen cy (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(d B)	Report Power Density (dBm/MHz)	Limit (dBm/MH z)	Verdic t
11A	100	5500	3.56	0	3.56	11	Pass
	120	5600	2.48	0	2.48		Pass
	140	5700	3.11	0	3.11		Pass
11N20 SISO	100	5500	4.80	0	4.80	11	Pass
	120	5600	3.88	0	3.88		Pass
	140	5700	3.09	0	3.09		Pass
11N40 SISO	102	5510	1.49	0	1.49	11	Pass
	118	5590	1.37	0	1.37		Pass
	134	5670	0.89	0	0.89		Pass



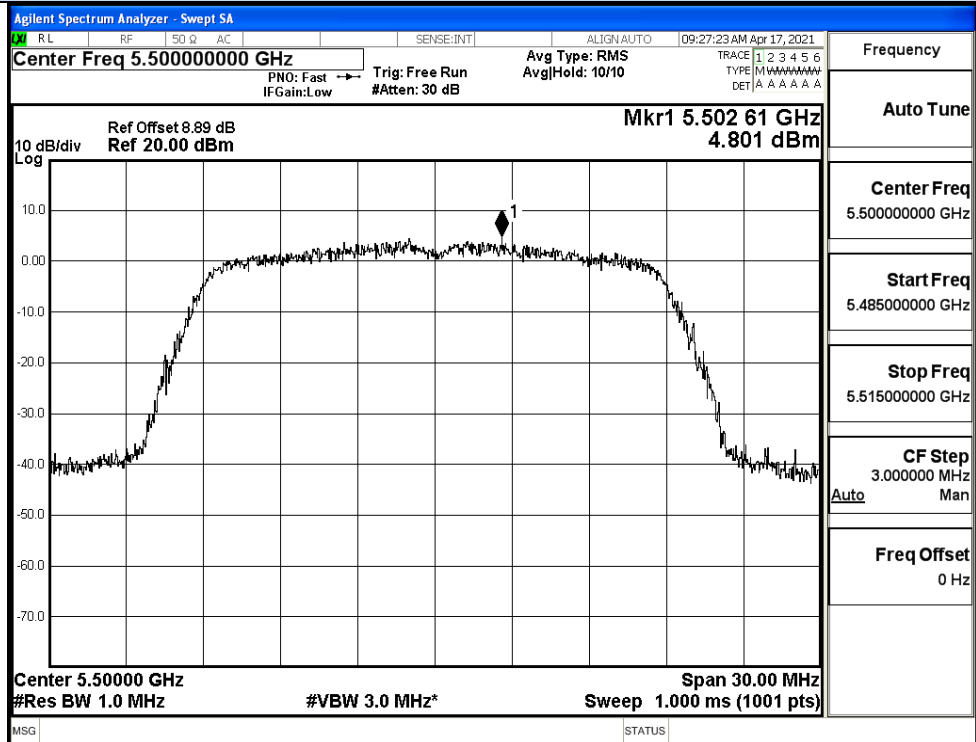


IEEE 802.11a / Channel 120 / 5600MHz

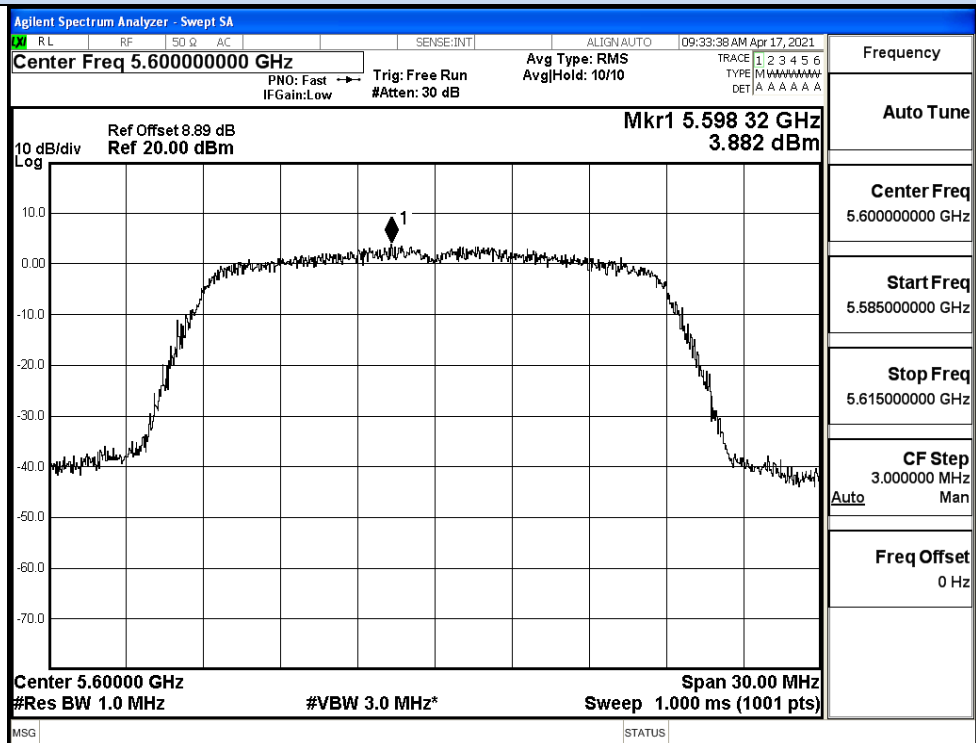


IEEE 802.11a / Channel 140 / 5700MHz

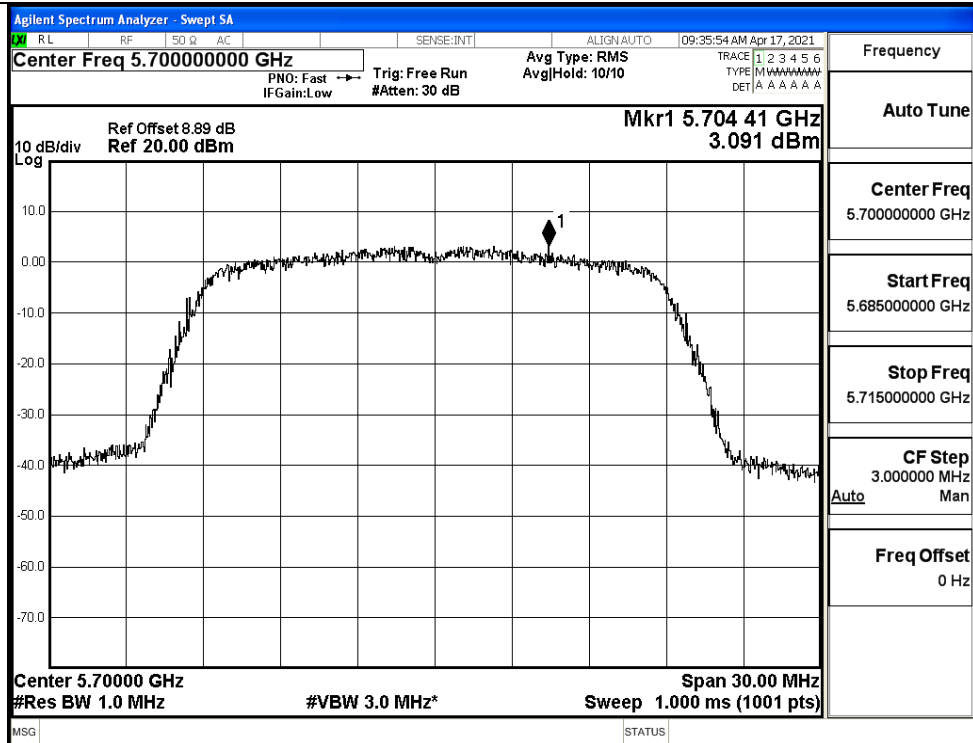
Power Spectral Density



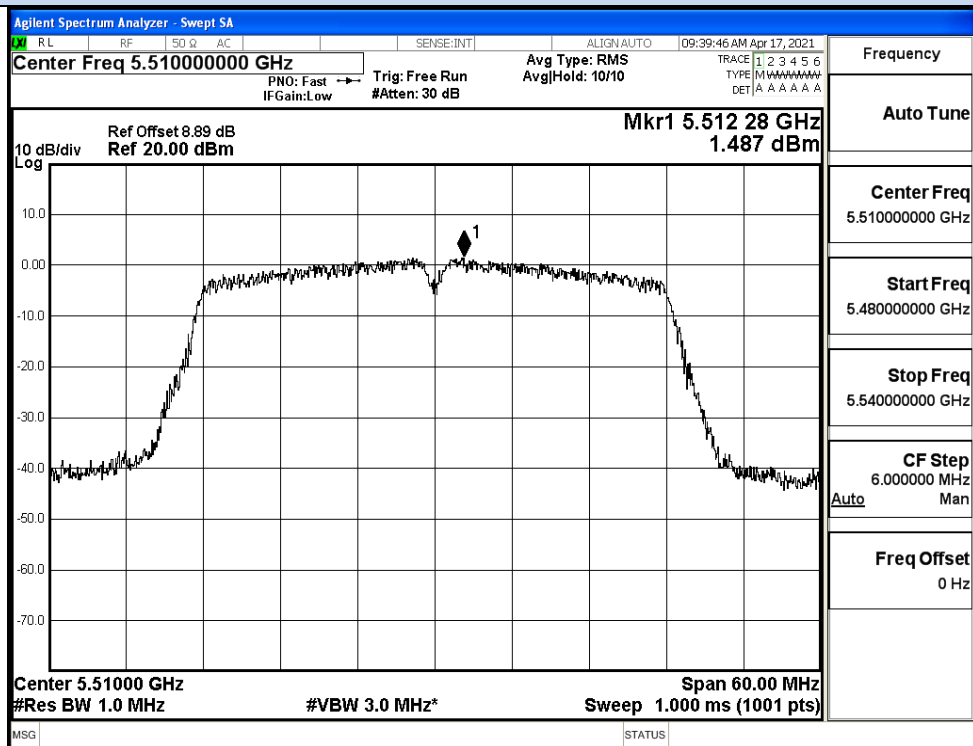
IEEE 802.11n20 / Channel 100 / 5500MHz



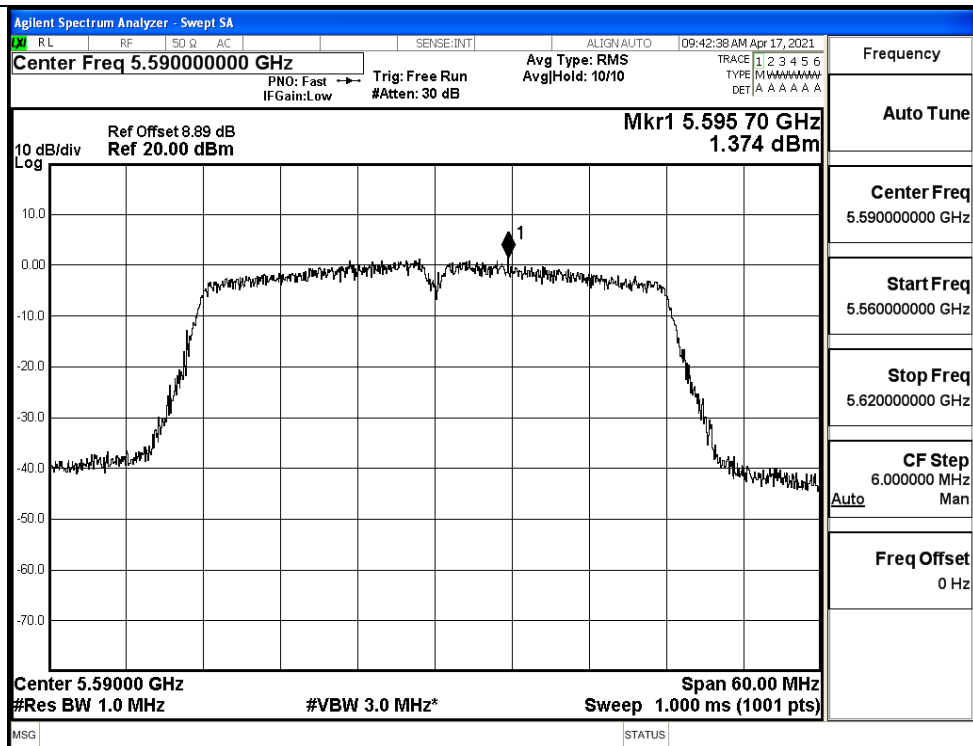
IEEE 802.11n20 / Channel 120 / 5600MHz



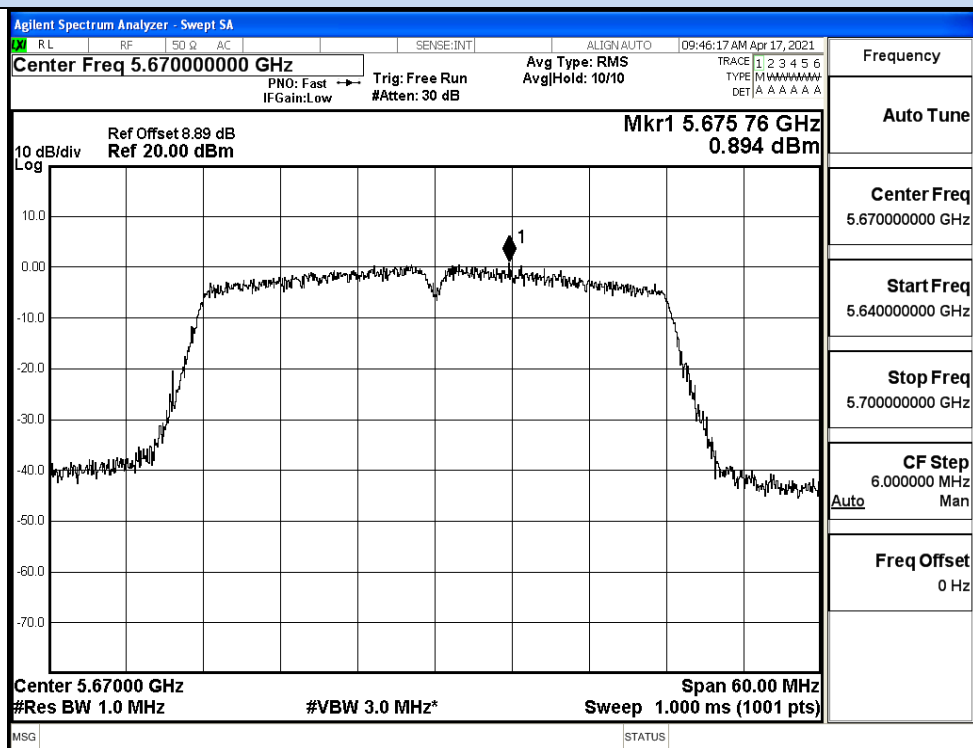
IEEE 802.11n20 / Channel 140 / 5700MHz



IEEE 802.11n40 / Channel 102 / 5510MHz



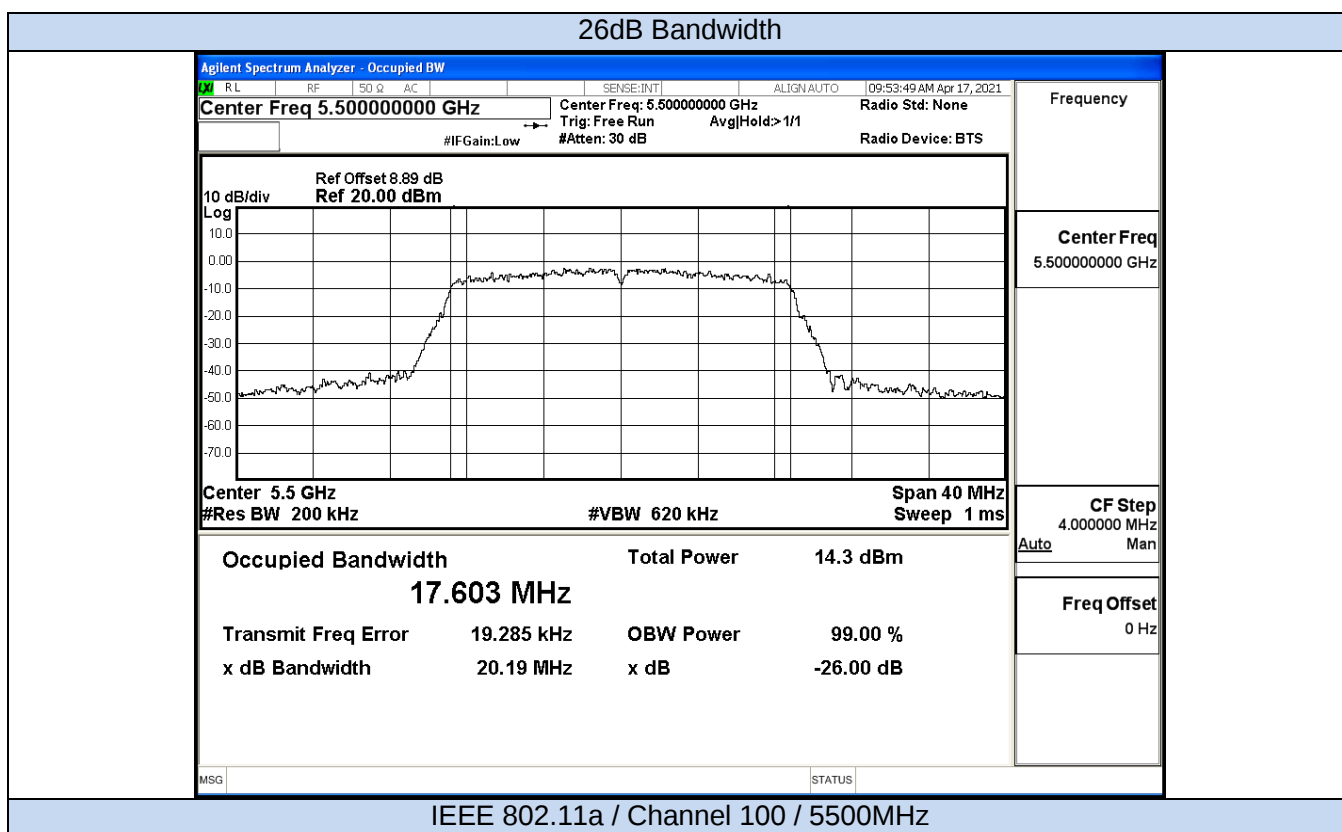
IEEE 802.11n40 / Channel 118 / 5590MHz

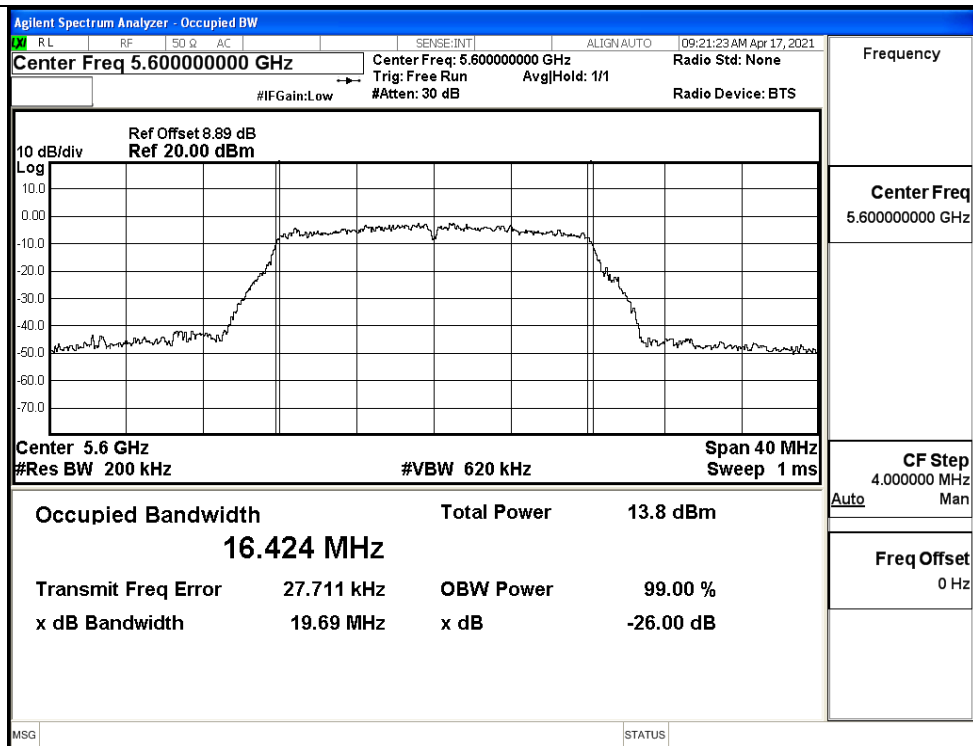


IEEE 802.11n40 / Channel 134 / 5670MHz

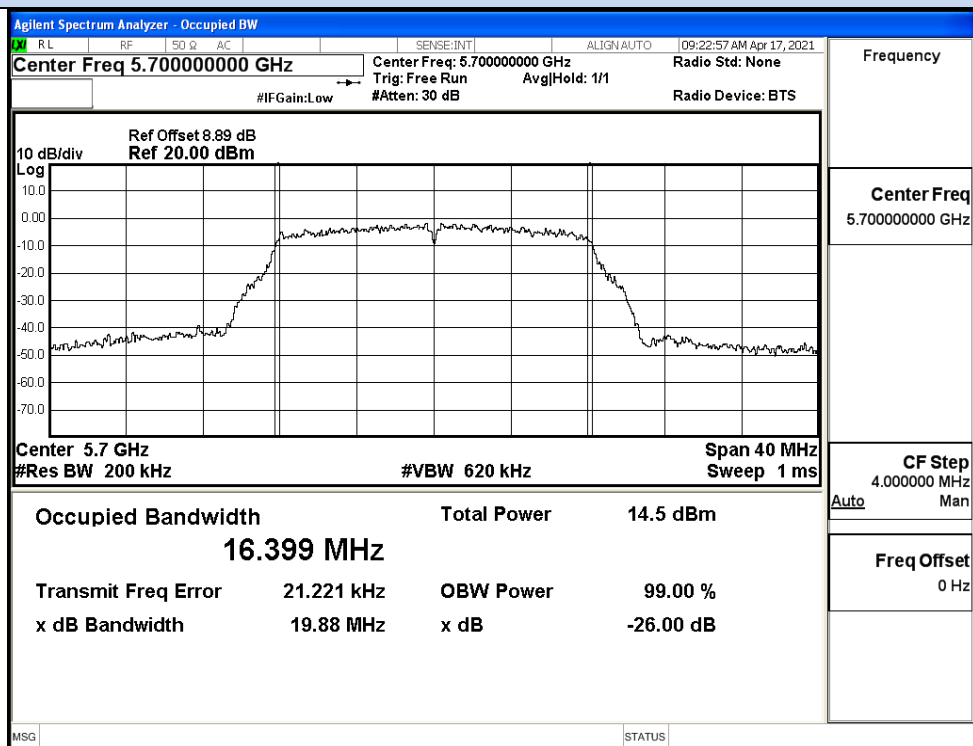
D.4 Emission Bandwidth

Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	100	5500	19.53	No Limit	Pass
	120	5600	19.69		Pass
	140	5700	19.88		Pass
11N20 SISO	100	5500	20.09	No Limit	Pass
	120	5600	20.06		Pass
	140	5700	20.22		Pass
11N40 SISO	102	5510	40.19	No Limit	Pass
	118	5590	40.18		Pass
	134	5670	39.70		Pass



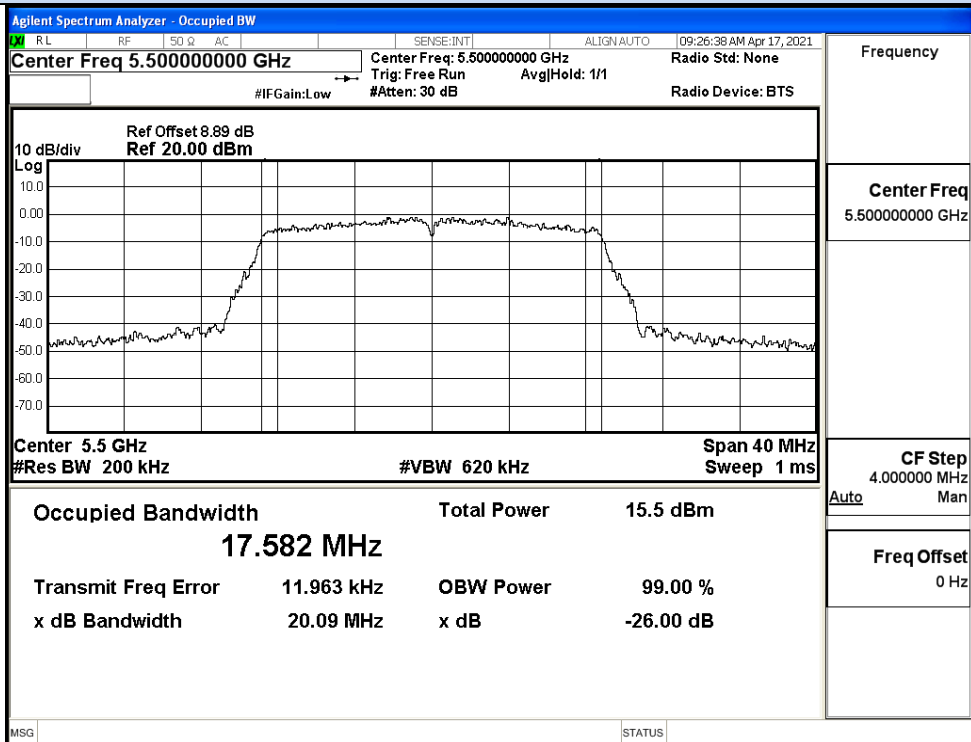


IEEE 802.11a / Channel 120 / 5600MHz

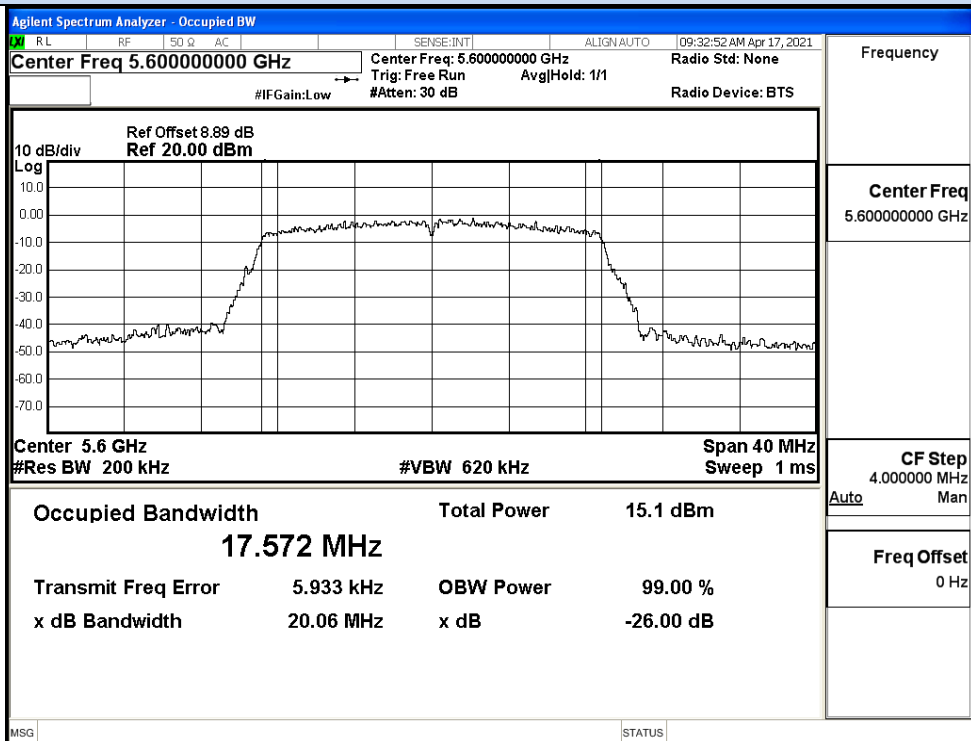


IEEE 802.11a / Channel 140 / 5700MHz

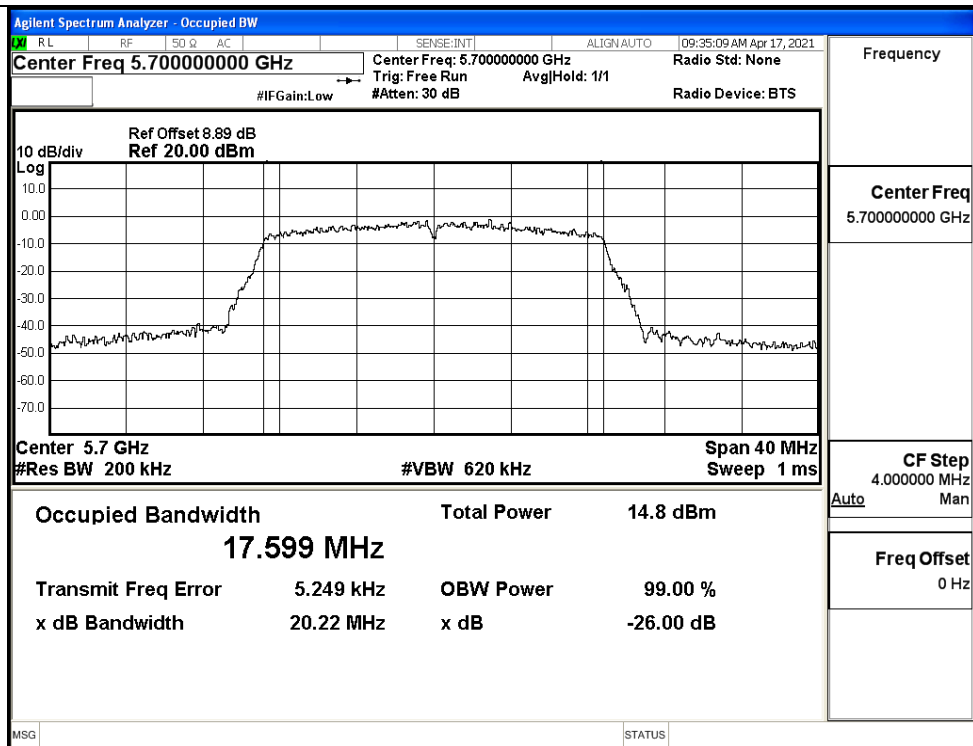
26dB Bandwidth



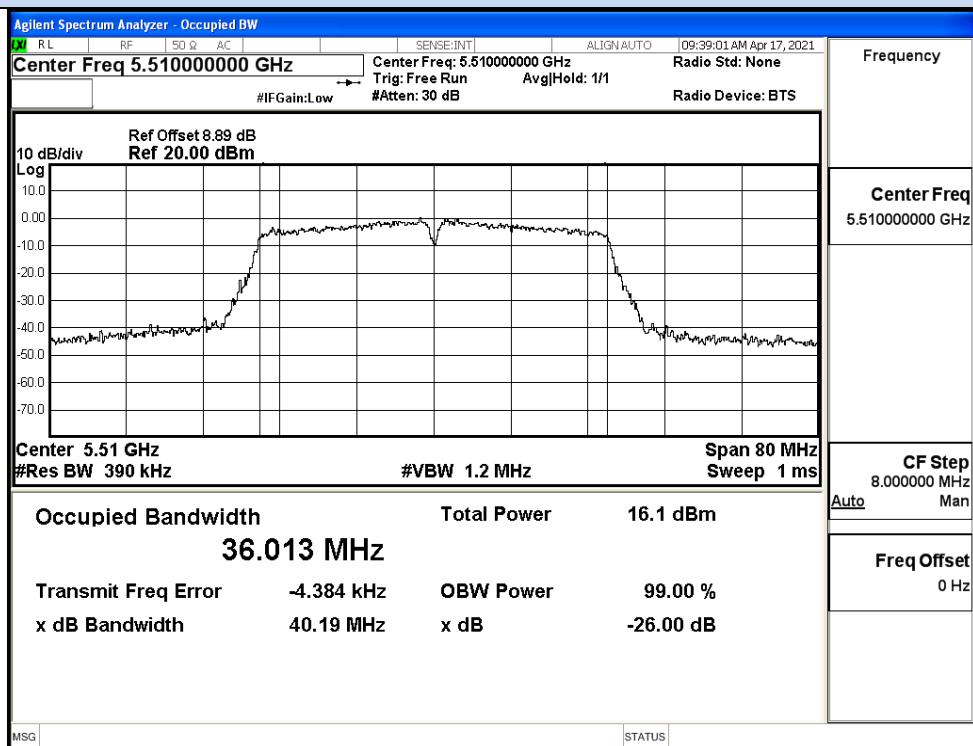
IEEE 802.11n20 / Channel 100 / 5500MHz



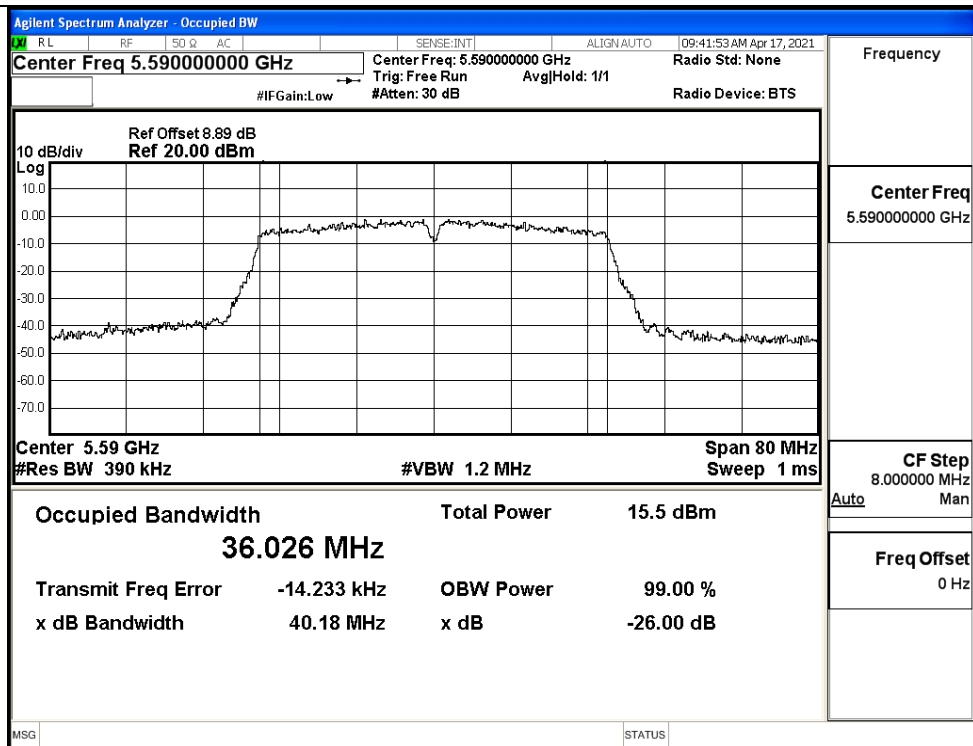
IEEE 802.11n20 / Channel 120 / 5600MHz



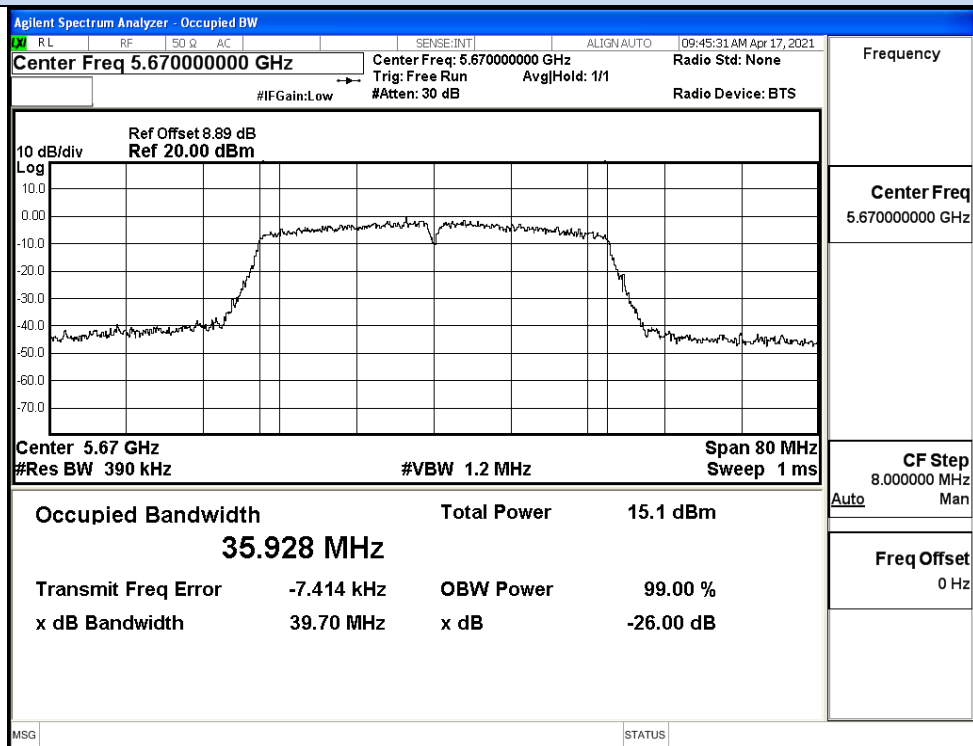
IEEE 802.11n20 / Channel 140 / 5700MHz



IEEE 802.11n40 / Channel 102 / 5510MHz



IEEE 802.11n40 / Channel 118 / 5590MHz

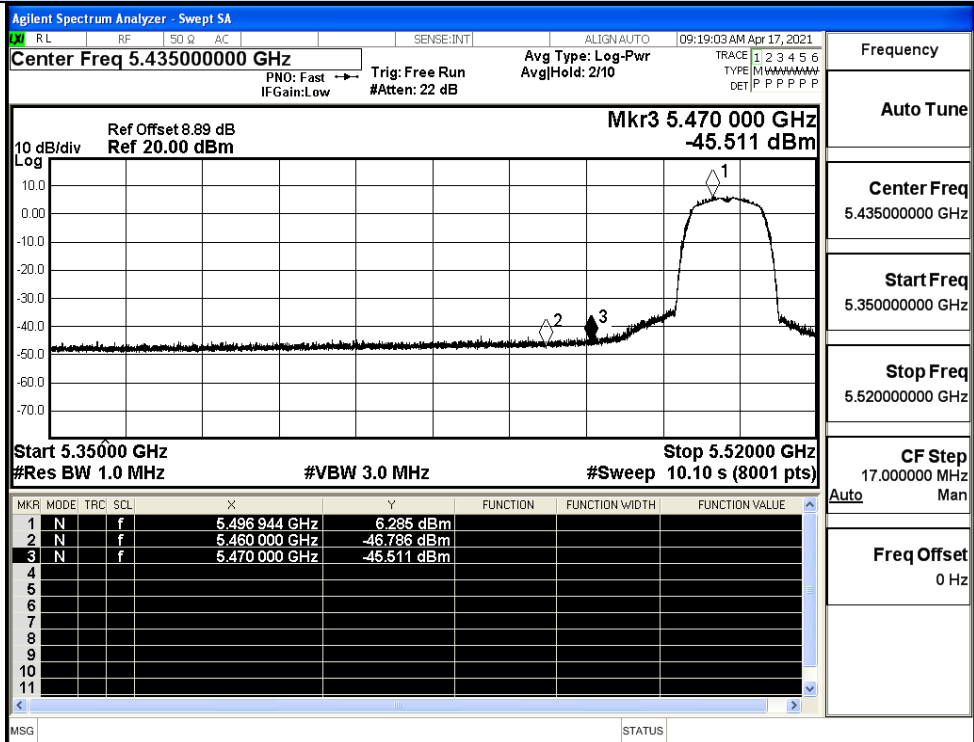


IEEE 802.11n40 / Channel 134 / 5670MHz

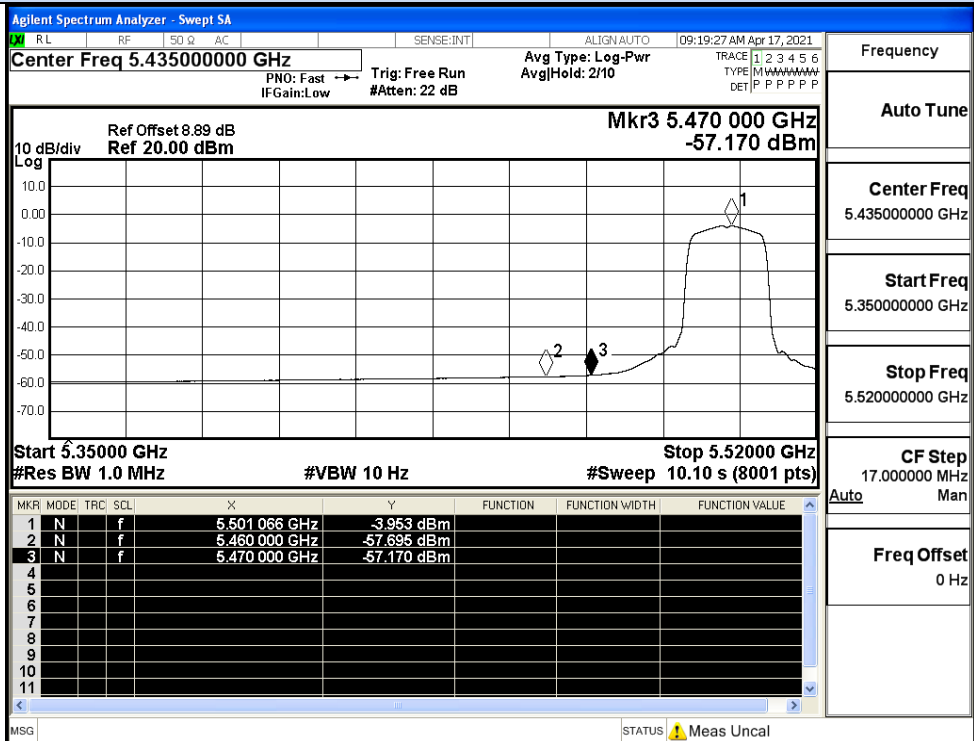
D.5 Undesirable Emissions Measurement

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
11A	100	5460.0	-46.79	2.00	0	48.44	Peak	68.20	Pass
		5460.0	-57.70	2.00	0	37.53	Average	54.00	Pass
		5470.0	-45.51	2.00	0	49.72	Peak	68.20	Pass
		5470.0	-57.17	2.00	0	38.06	Average	54.00	Pass
	140	5725.0	-44.97	2.00	0	50.26	Peak	68.20	Pass
		5725.0	-56.13	2.00	0	39.09	Average	54.00	Pass
		5735.0	-46.76	2.00	0	48.47	Peak	68.20	Pass
		5735.0	-57.19	2.00	0	38.04	Average	54.00	Pass
11N20 SISO	100	5460.0	-45.96	2.00	0	49.27	Peak	68.20	Pass
		5460.0	-56.72	2.00	0	38.51	Average	54.00	Pass
		5470.0	-43.94	2.00	0	51.28	Peak	68.20	Pass
		5470.0	-55.91	2.00	0	39.32	Average	54.00	Pass
	140	5725.0	-45.09	2.00	0	50.14	Peak	68.20	Pass
		5725.0	-55.03	2.00	0	40.20	Average	54.00	Pass
		5735.0	-45.91	2.00	0	49.32	Peak	68.20	Pass
		5735.0	-56.48	2.00	0	38.75	Average	54.00	Pass
11N40 SISO	102	5460.0	-44.15	2.00	0	51.08	Peak	68.20	Pass
		5460.0	-55.77	2.00	0	39.46	Average	54.00	Pass
		5470.0	-40.28	2.00	0	54.94	Peak	68.20	Pass
		5470.0	-52.58	2.00	0	42.65	Average	54.00	Pass
	134	5725.0	-47.18	2.00	0	48.05	Peak	68.20	Pass
		5725.0	-56.46	2.00	0	38.77	Average	54.00	Pass
		5735.0	-46.86	2.00	0	48.37	Peak	68.20	Pass
		5735.0	-56.82	2.00	0	38.41	Average	54.00	Pass

Undesirable Emissions Measurement

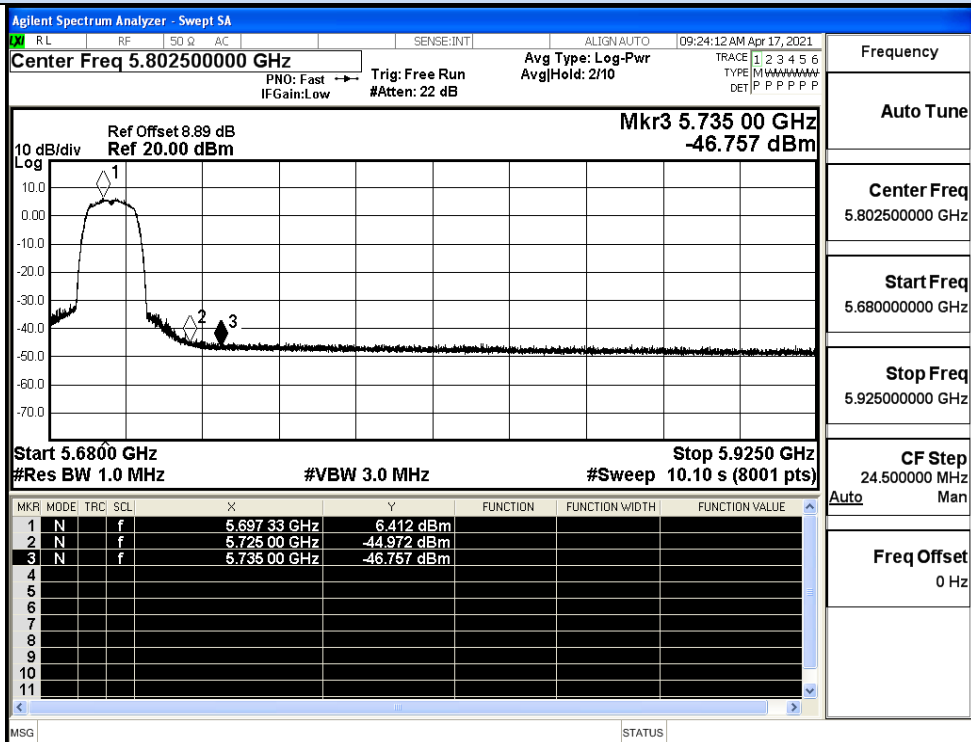


IEEE 802.11a / Channel 100 / 5500MHz / Peak

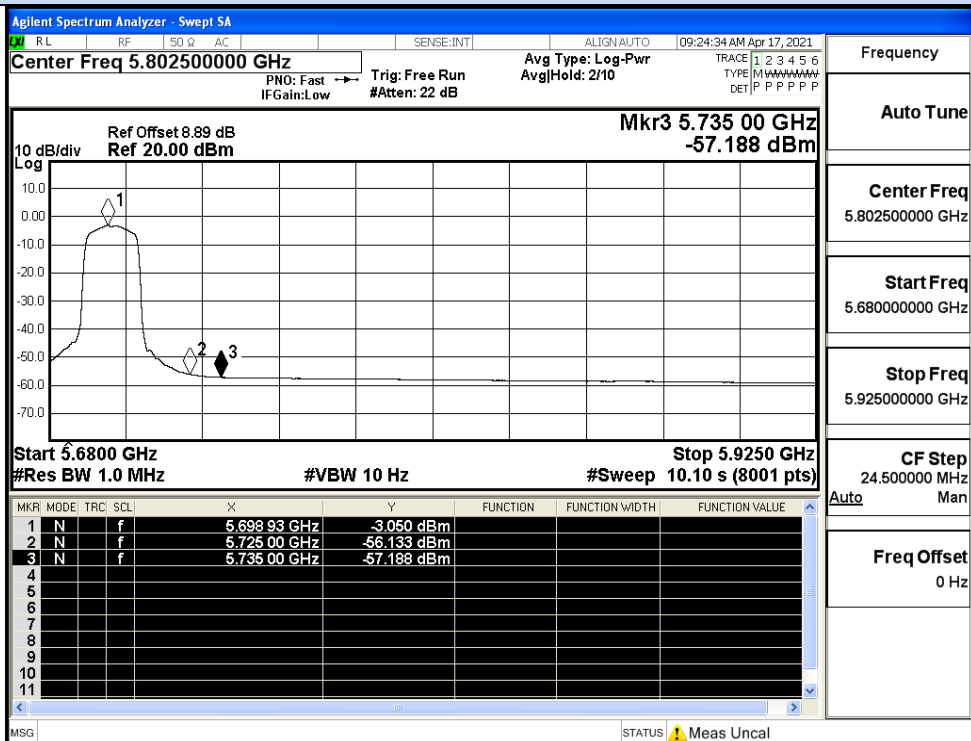


IEEE 802.11a / Channel 100 / 5500MHz / Average

Undesirable Emissions Measurement

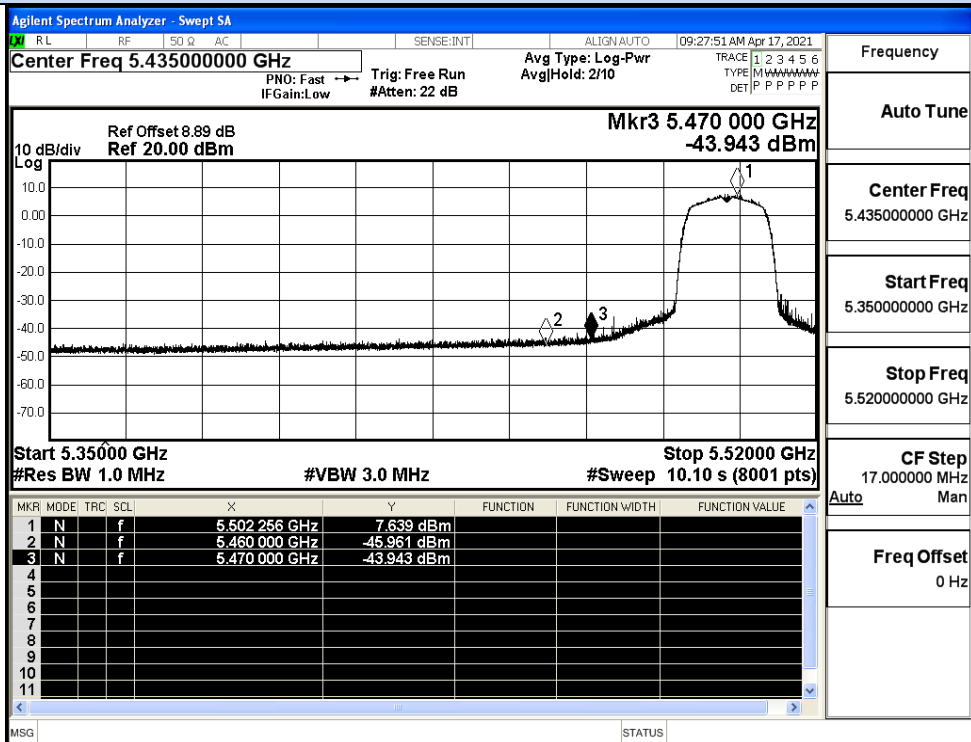


IEEE 802.11a / Channel 140 / 5700MHz / Peak

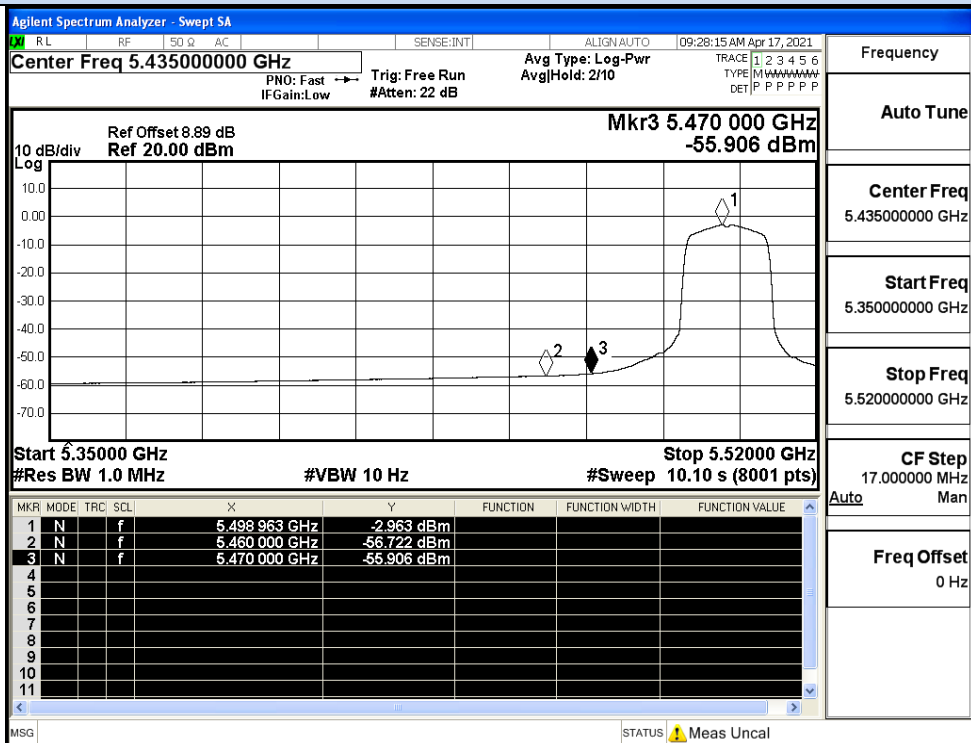


IEEE 802.11a / Channel 140 / 5700MHz / Average

Undesirable Emissions Measurement

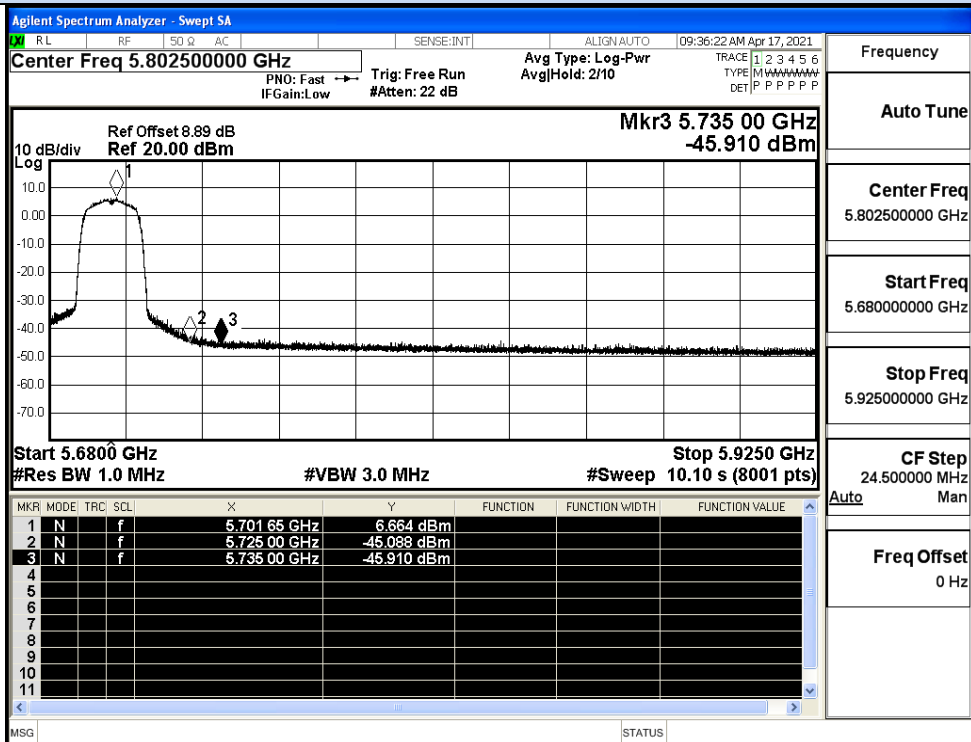


IEEE 802.11n20 / Channel 100 / 5500MHz / Peak

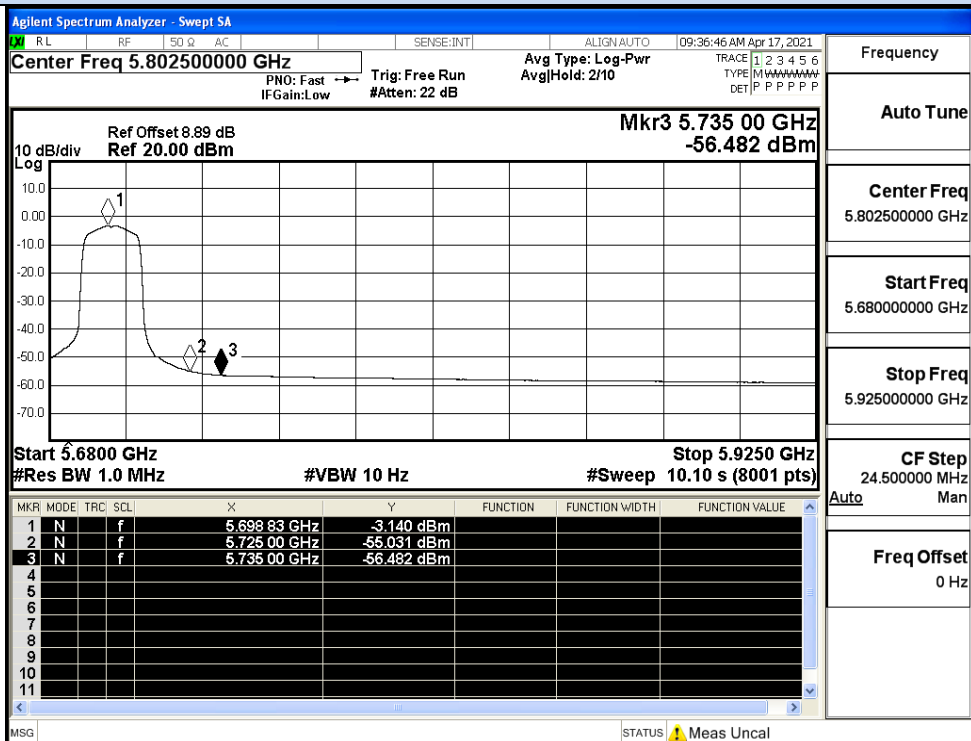


IEEE 802.11n20 / Channel 100 / 5500MHz / Average

Undesirable Emissions Measurement

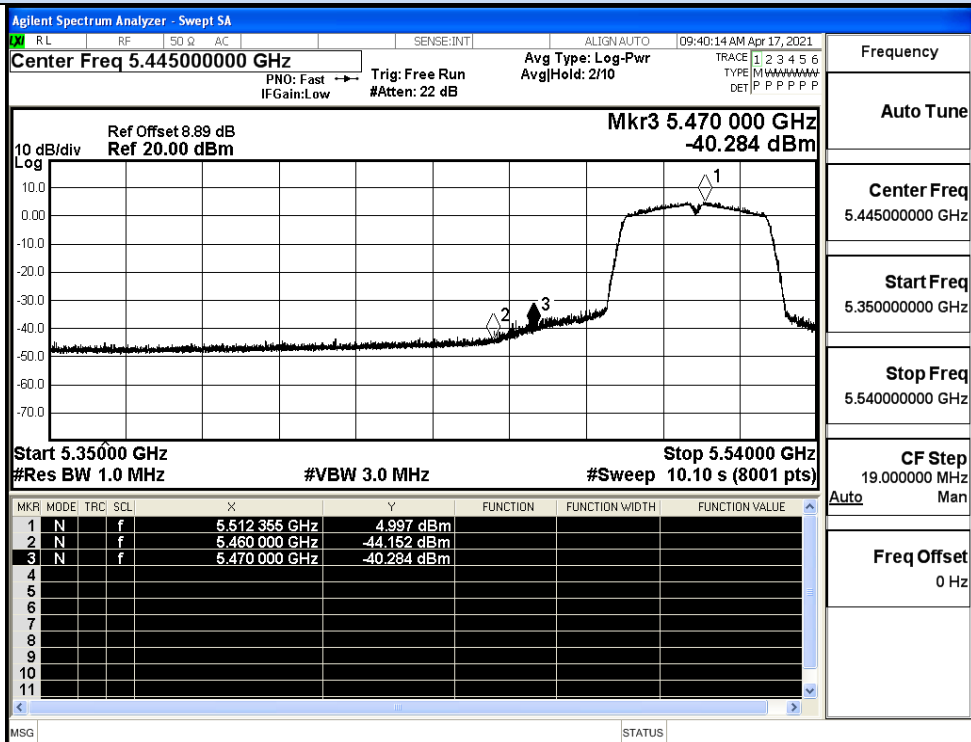


IEEE 802.11n20 / Channel 140 / 5700MHz / Peak

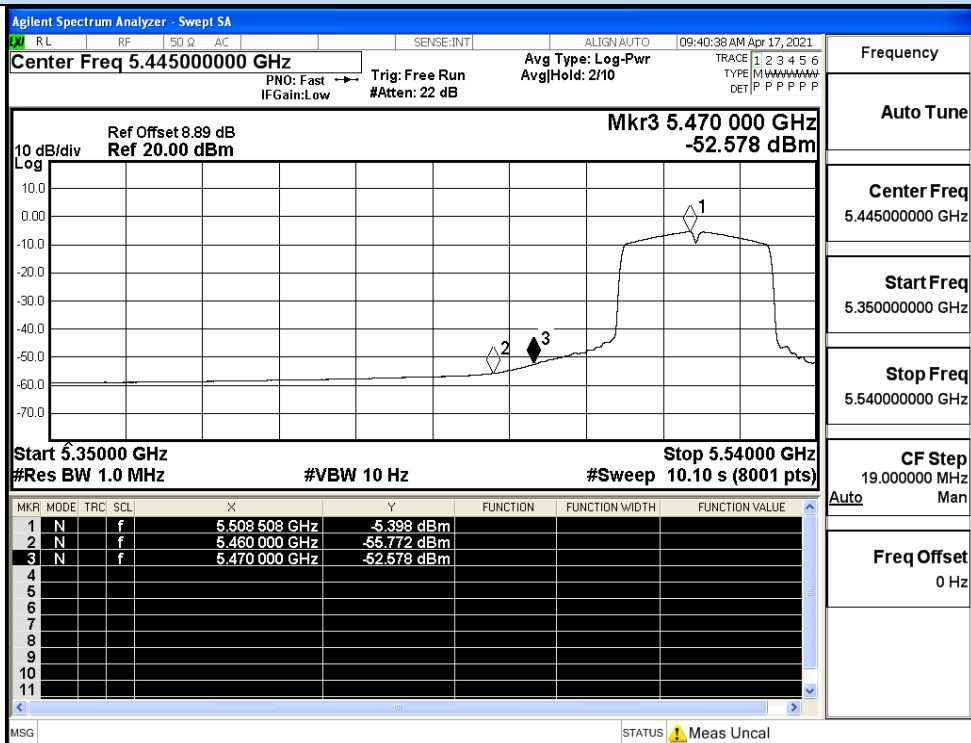


IEEE 802.11n20 / Channel 140 / 5700MHz / Average

Undesirable Emissions Measurement

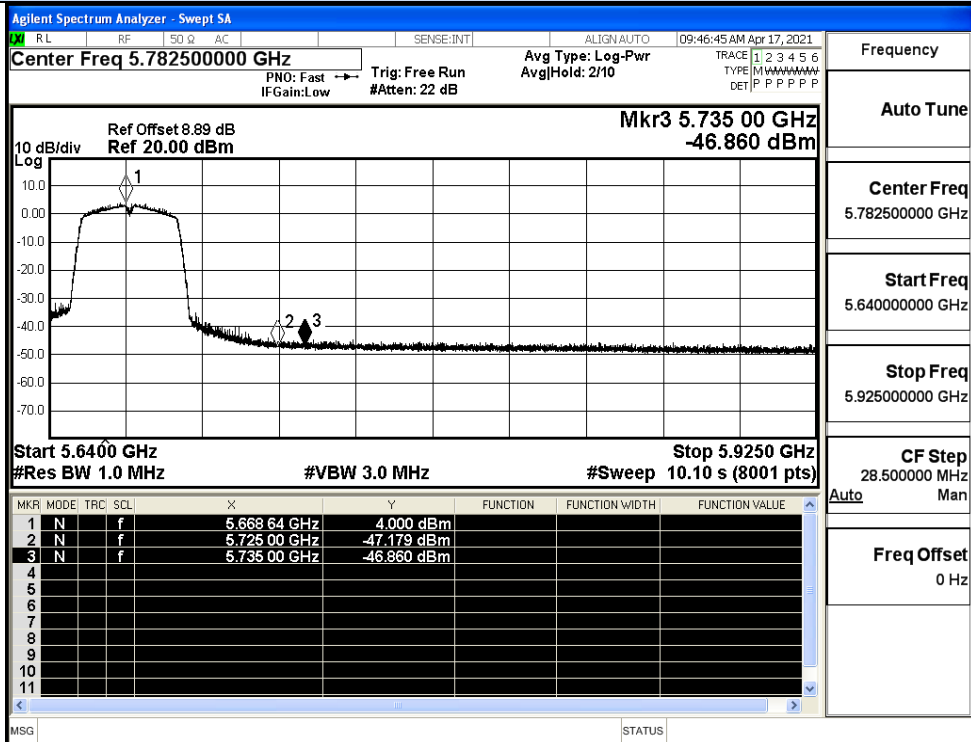


IEEE 802.11n40 / Channel 102 / 5510MHz / Peak

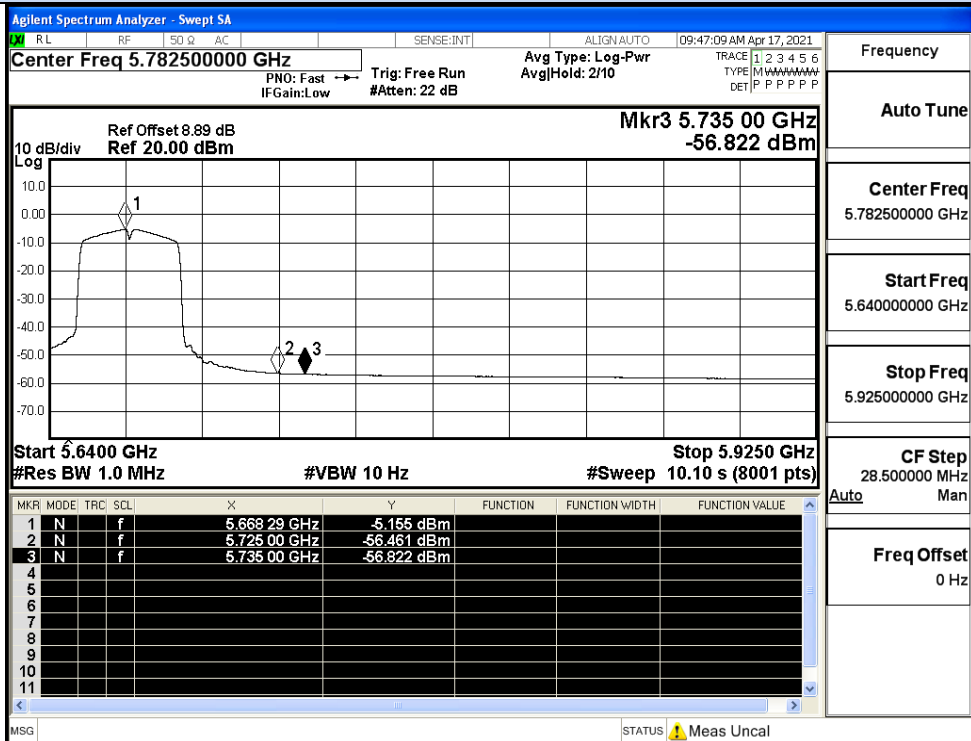


IEEE 802.11n40 / Channel 102 / 5510MHz / Average

Undesirable Emissions Measurement



IEEE 802.11n40 / Channel 134 / 5670MHz / Peak



IEEE 802.11n40 / Channel 134 / 5670MHz / Average