

Appendix E

RF Test Data for 5.5G WLAN (Conducted Measurement)

Product Name: Smart Lock

Trade Mark: REVOLO

Test Model: WFP01

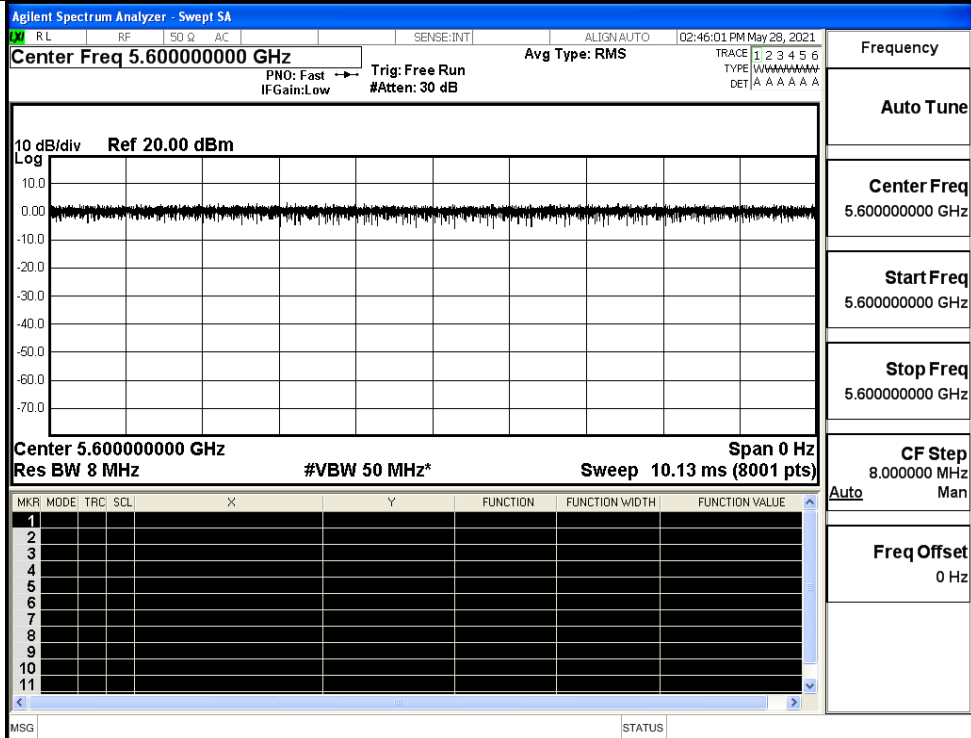
Environmental Conditions

Temperature:	23.7° C
Relative Humidity:	51.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

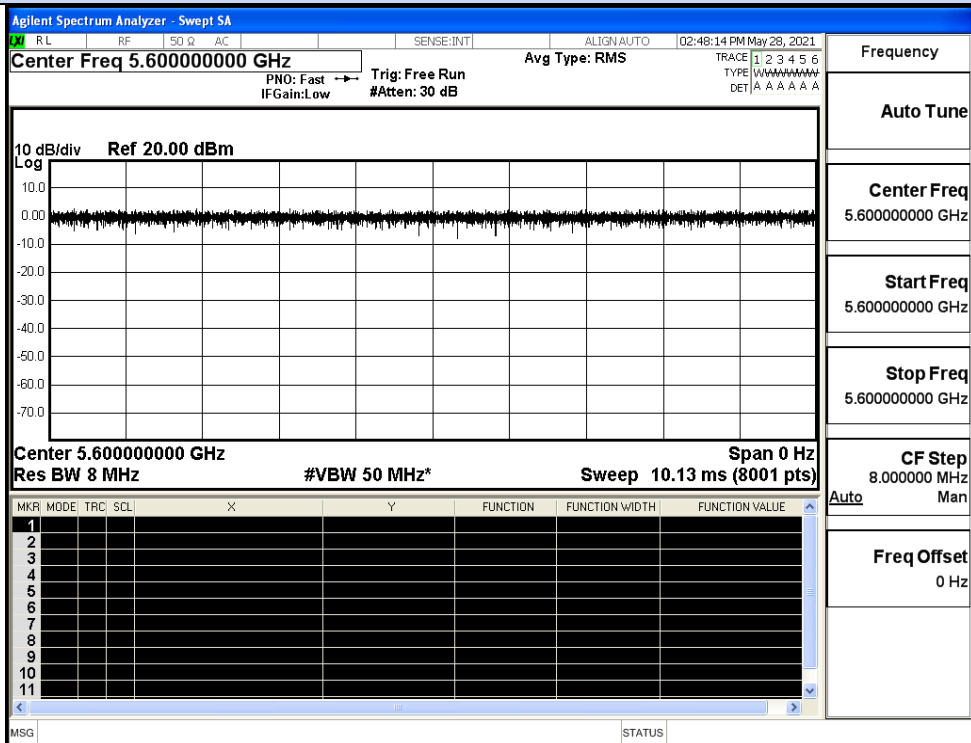
E.1 Duty Cycle

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
11AC20 SISO	5600	100	0.00	0.01

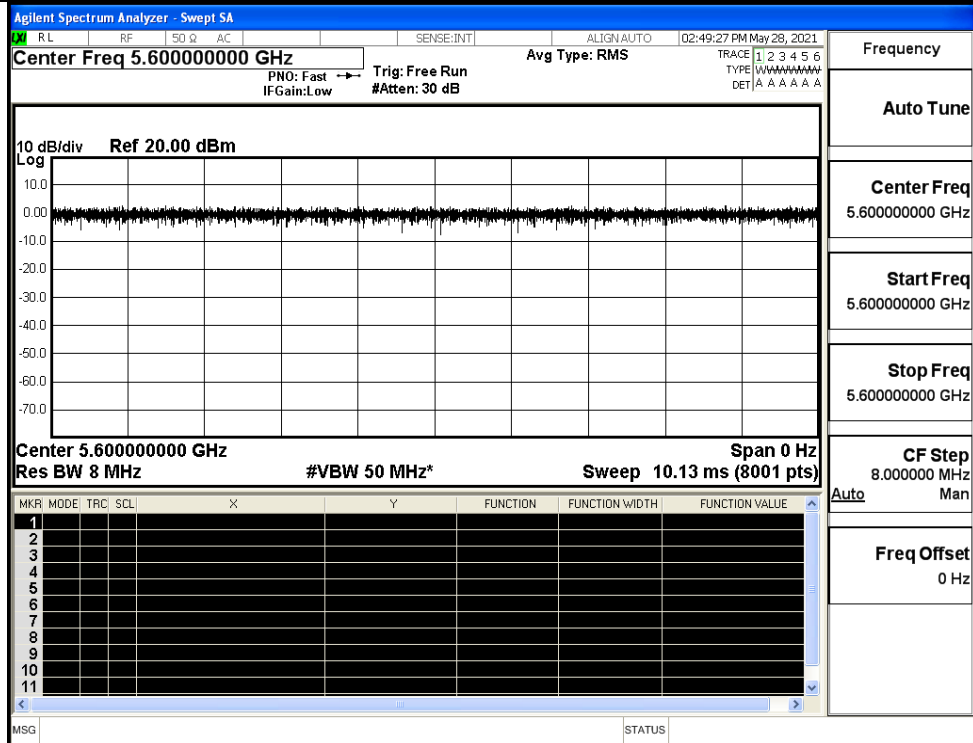
On Time and Duty Cycle



IEEE 802.11a



IEEE 802.11n HT20



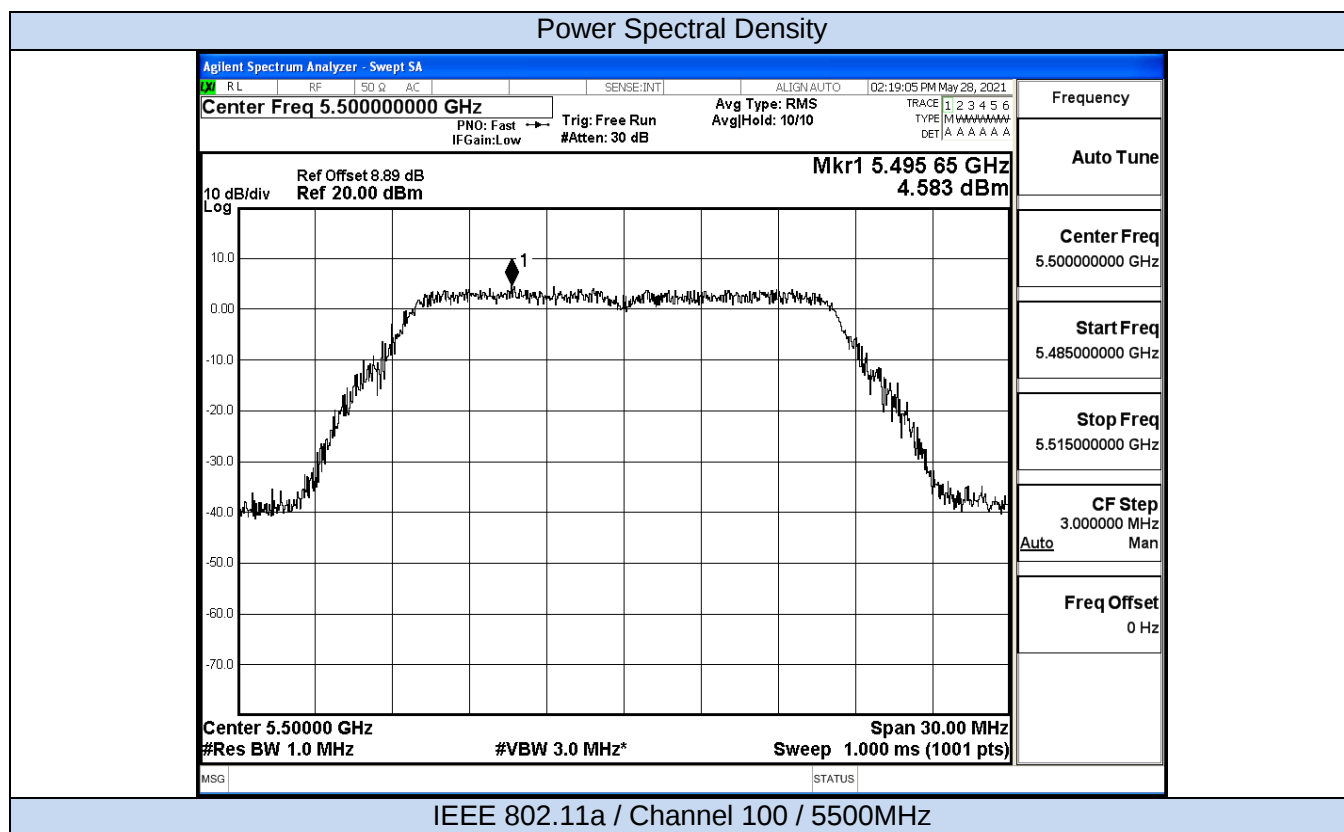
IEEE 802.11AC20

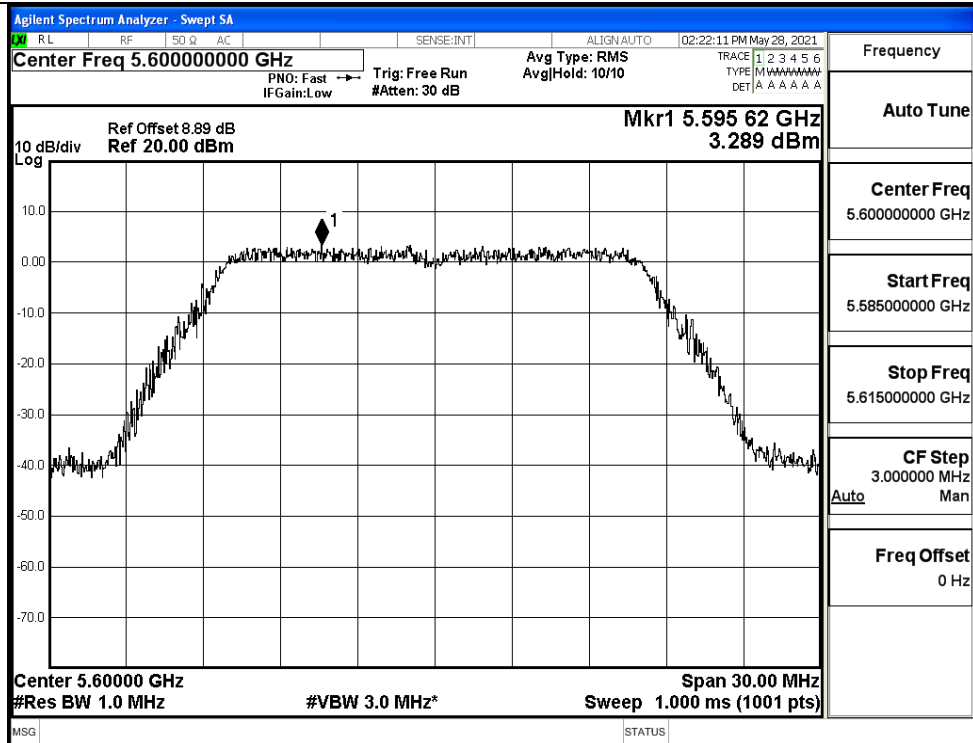
E.2 Maximum Conduct Output Power

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	100	5500	14.97	0	14.97	24	Pass
	120	5600	13.9	0	13.9		Pass
	140	5700	11.99	0	11.99		Pass
11N20 SISO	100	5500	14.88	0	14.88	24	Pass
	120	5600	13.95	0	13.95		Pass
	140	5700	11.78	0	11.78		Pass
11ac20 SISO	100	5500	12.86	0	12.86	24	Pass
	120	5600	12.32	0	12.32		Pass
	140	5700	10.05	0	10.05		Pass

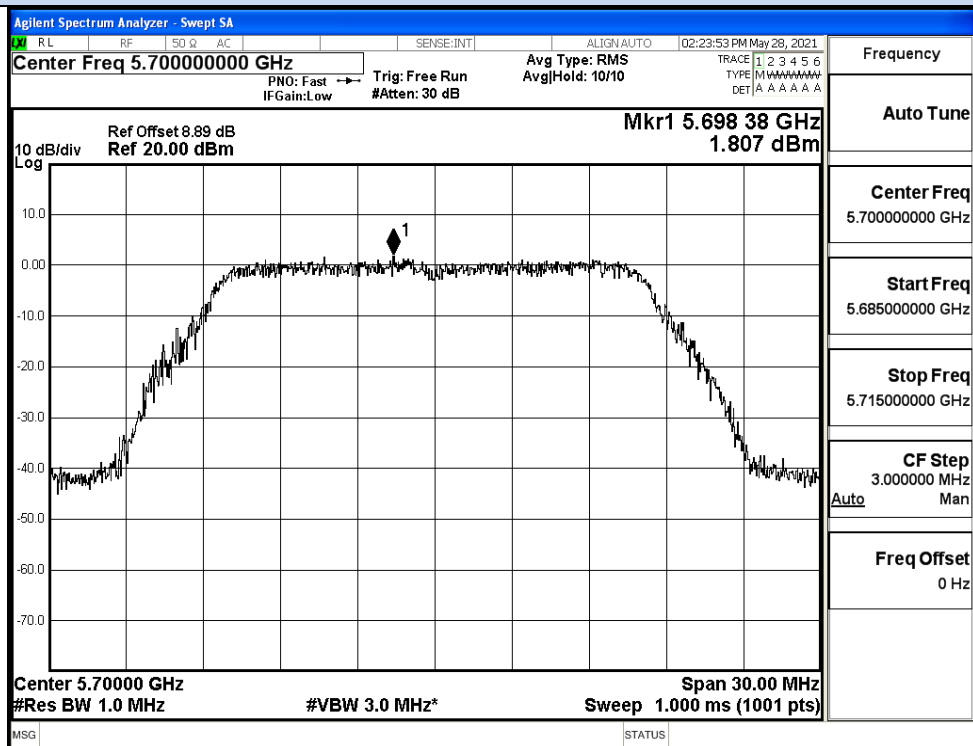
E.3 Power Spectral Density

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11A	100	5500	4.58	0	4.58	11	Pass
	120	5600	3.29	0	3.29		Pass
	140	5700	1.81	0	1.81		Pass
11N20 SISO	100	5500	4.55	0	4.55	11	Pass
	120	5600	3.64	0	3.64		Pass
	140	5700	1.39	0	1.39		Pass
11AC20 SISO	100	5500	3.13	0	3.13	11	Pass
	120	5600	2.71	0	2.71		Pass
	140	5700	0.47	0	0.47		Pass



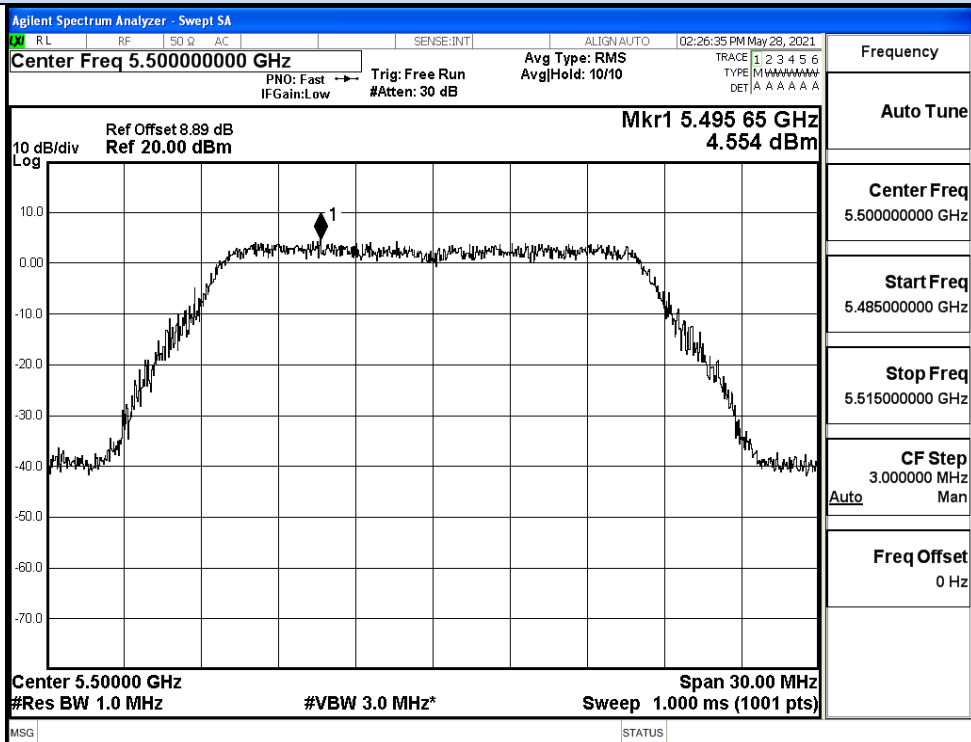


IEEE 802.11a / Channel 120 / 5600MHz

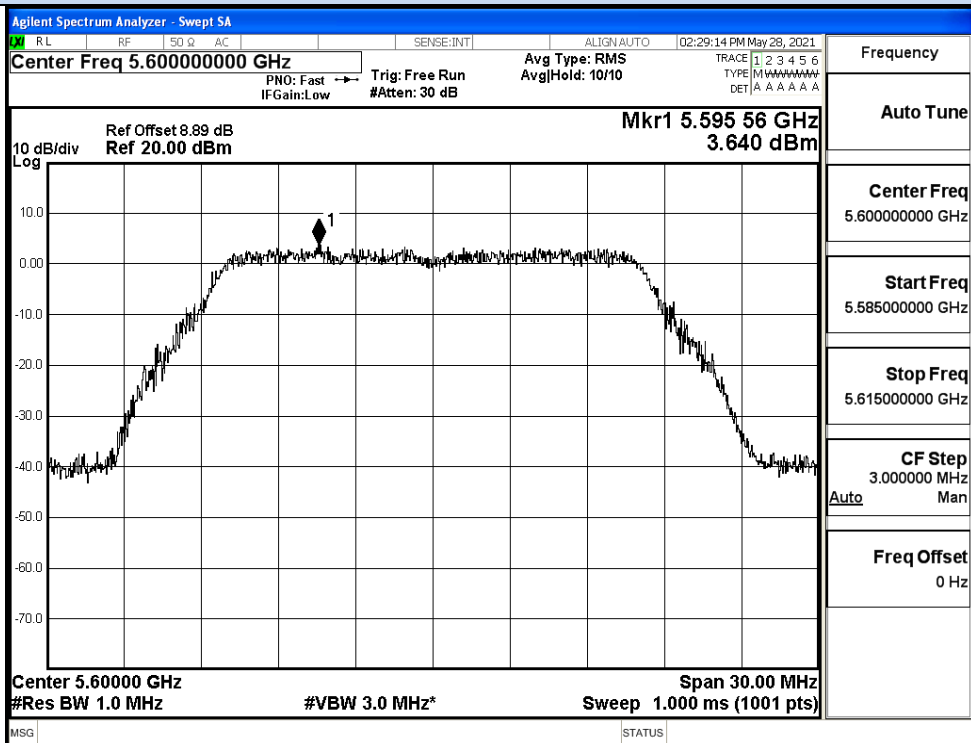


IEEE 802.11a / Channel 140 / 5700MHz

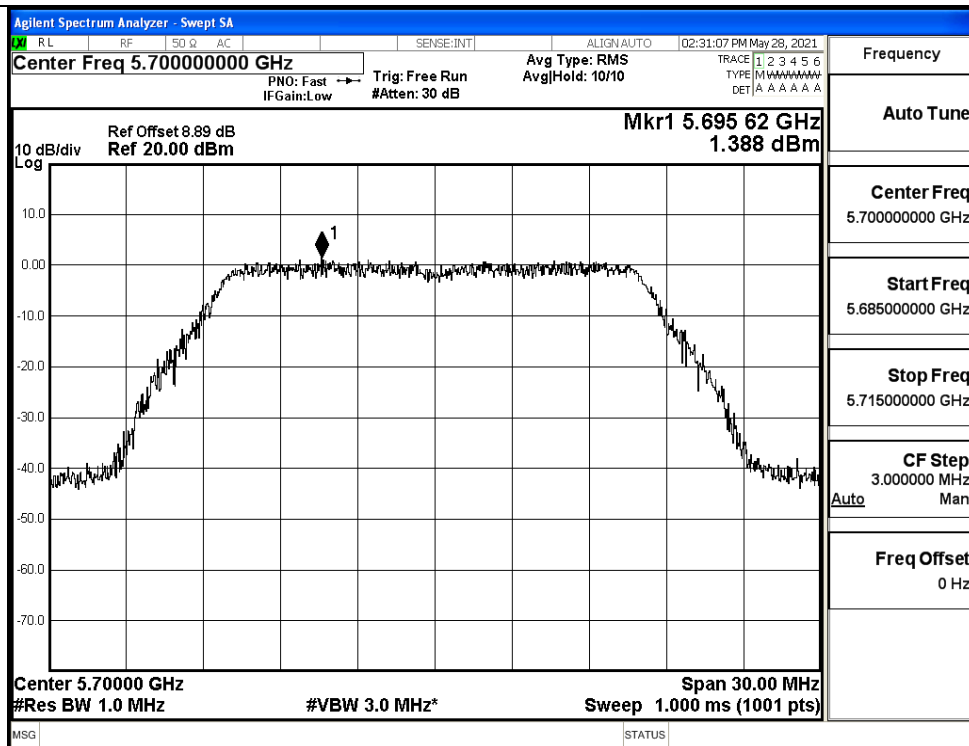
Power Spectral Density



IEEE 802.11n20 / Channel 100 / 5500MHz

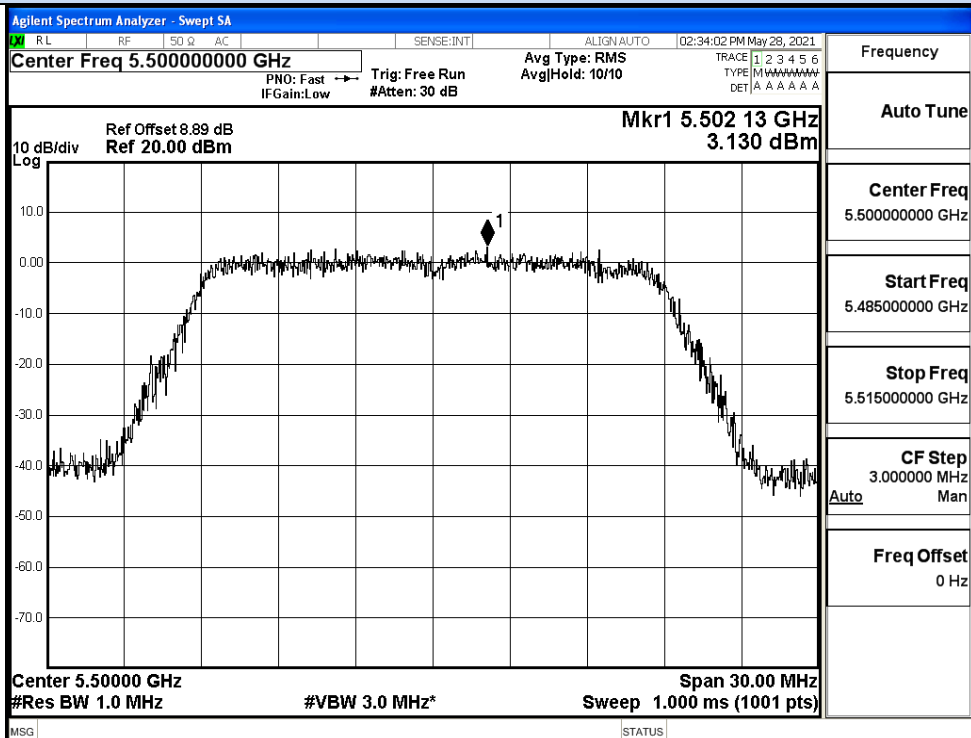


IEEE 802.11n20 / Channel 120 / 5600MHz

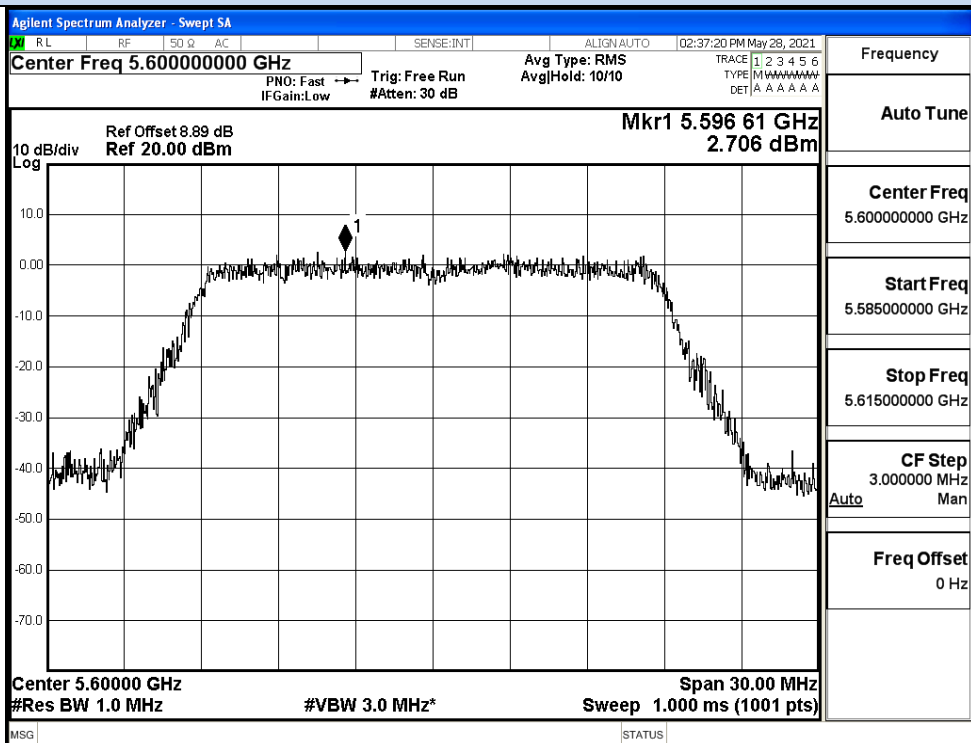


IEEE 802.11n20 / Channel 140 / 5700MHz

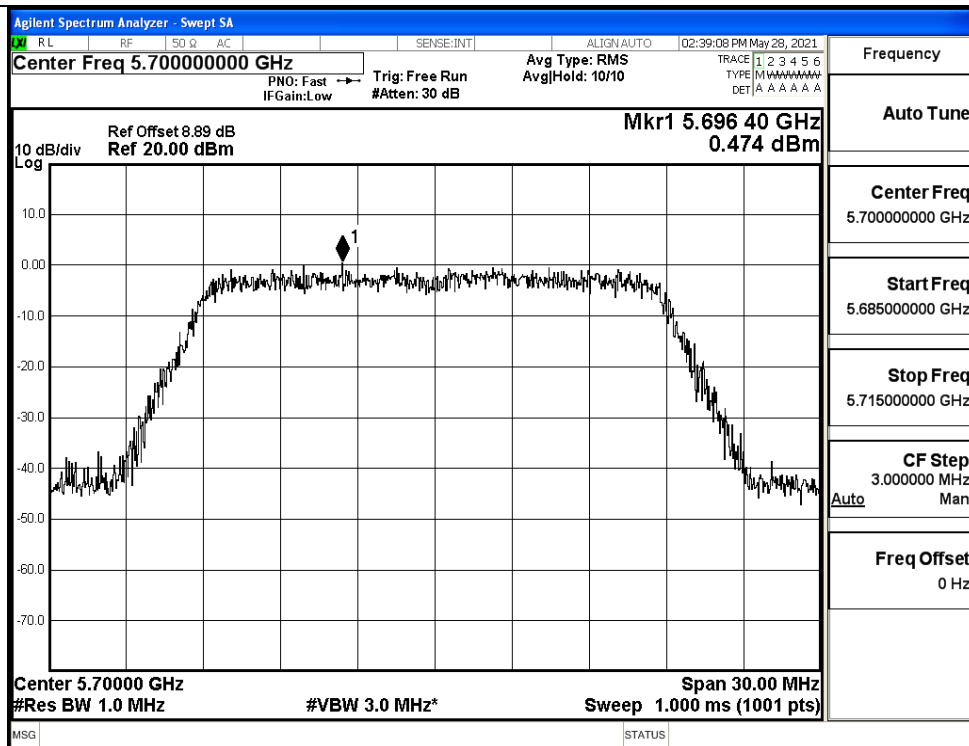
Power Spectral Density



IEEE 802.11ac20 / Channel 100 / 5500MHz



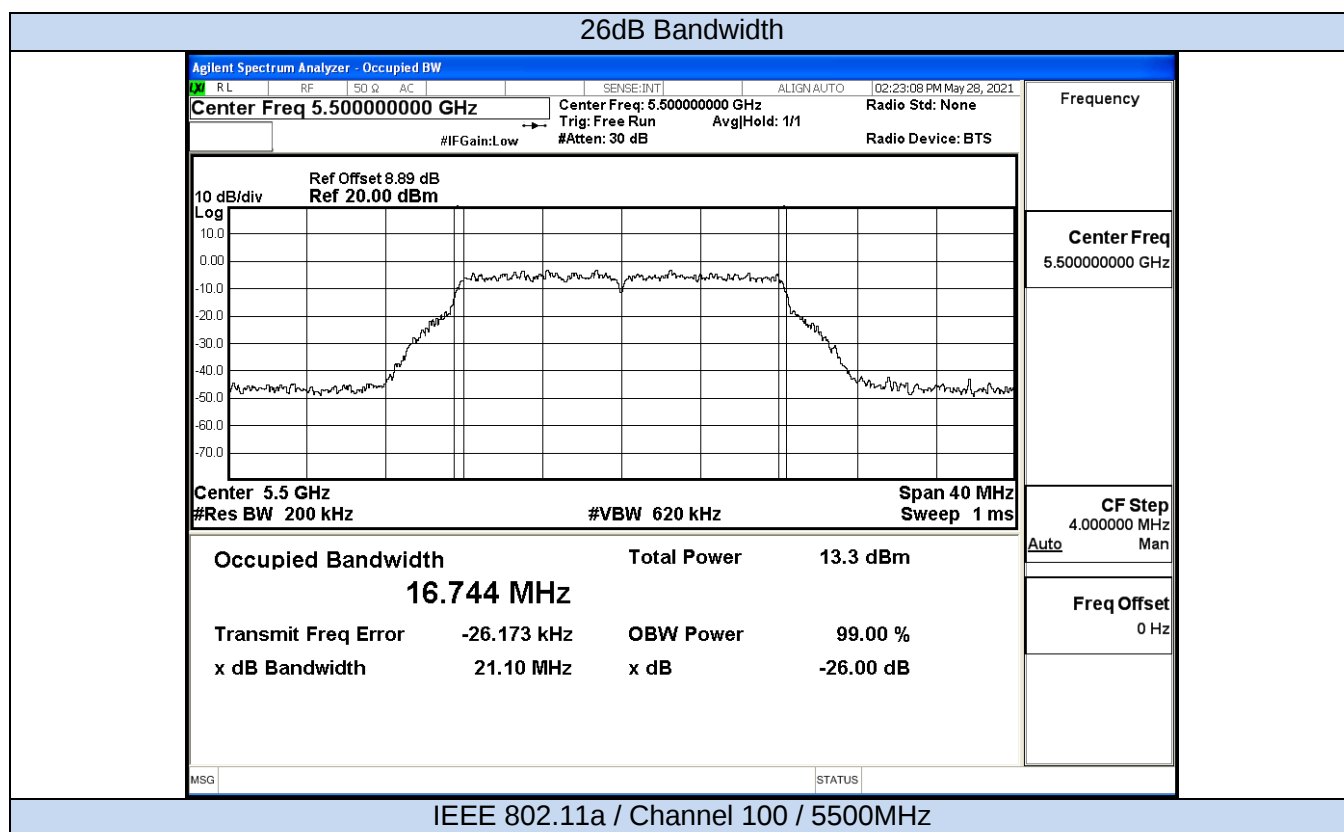
IEEE 802.11ac20 / Channel 120 / 5600MHz

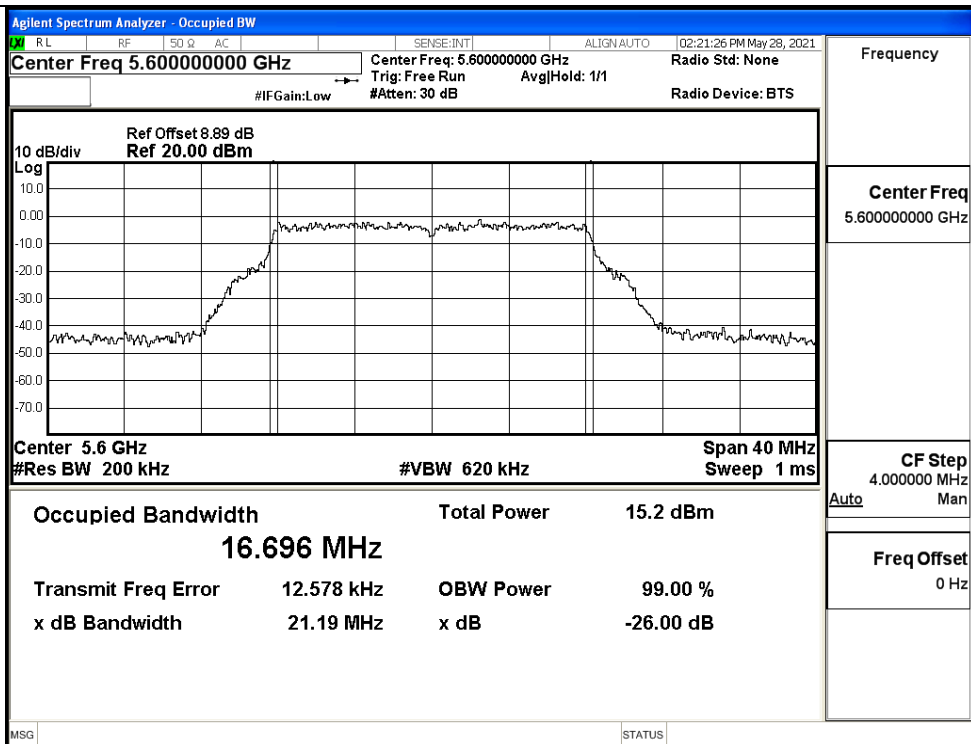


IEEE 802.11ac20 / Channel 140 / 5700MHz

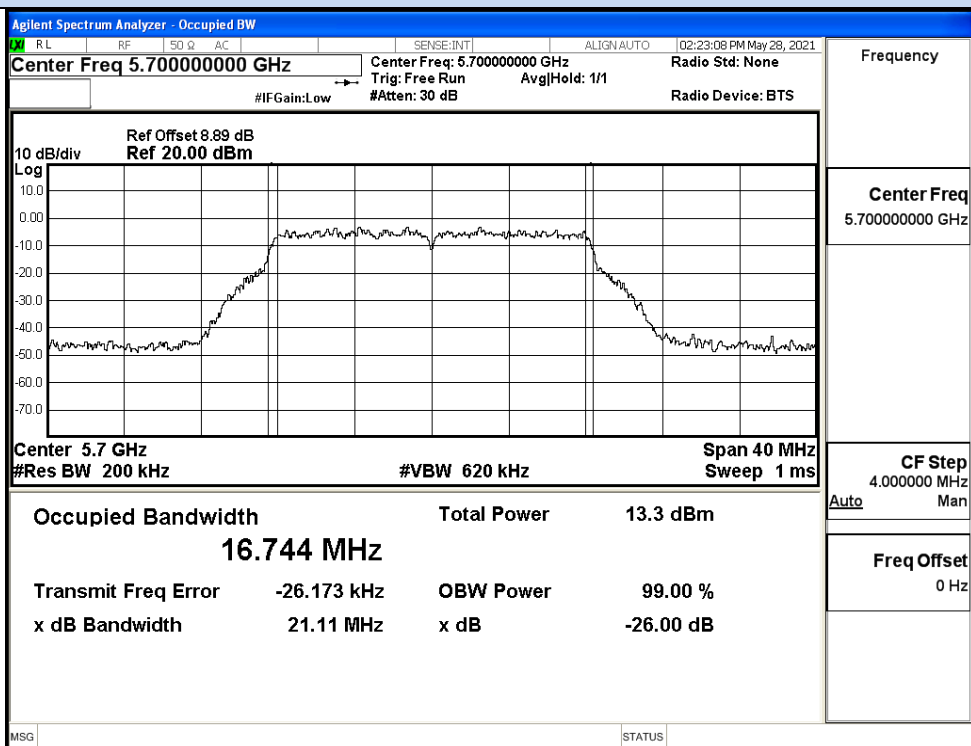
E.4 Emission Bandwidth

Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	100	5500	21.10	No Limit	Pass
	120	5600	21.19		Pass
	140	5700	21.11		Pass
11N20 SISO	100	5500	21.00	No Limit	Pass
	120	5600	21.25		Pass
	140	5700	21.37		Pass
11AC20 SISO	100	5500	20.35	No Limit	Pass
	120	5600	21.04		Pass
	140	5700	21.10		Pass



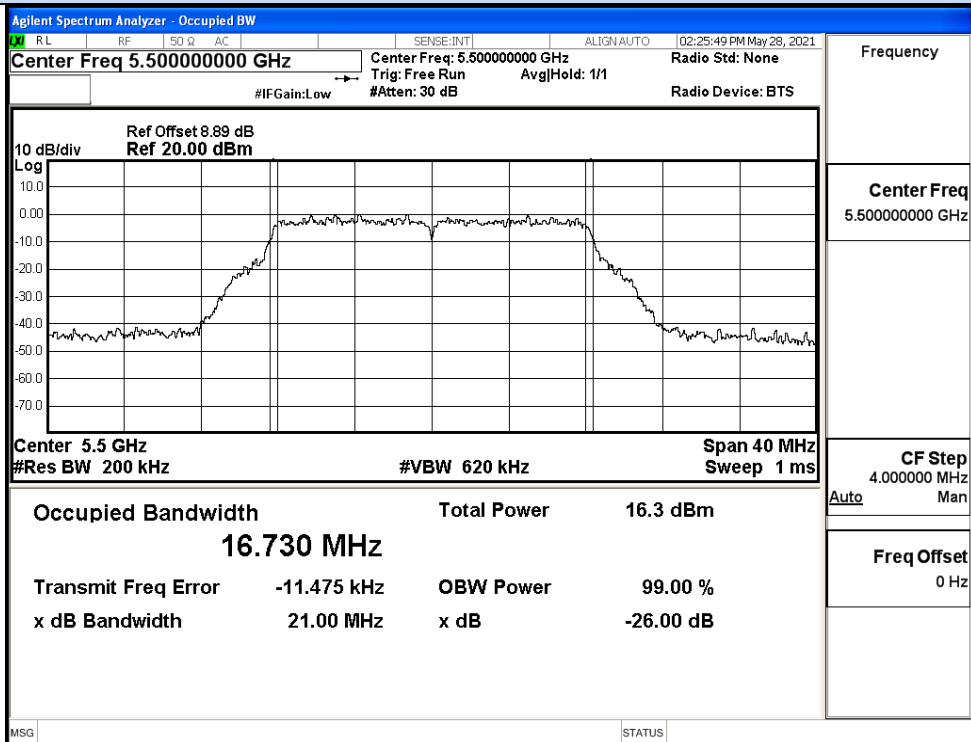


IEEE 802.11a / Channel 120 / 5600MHz

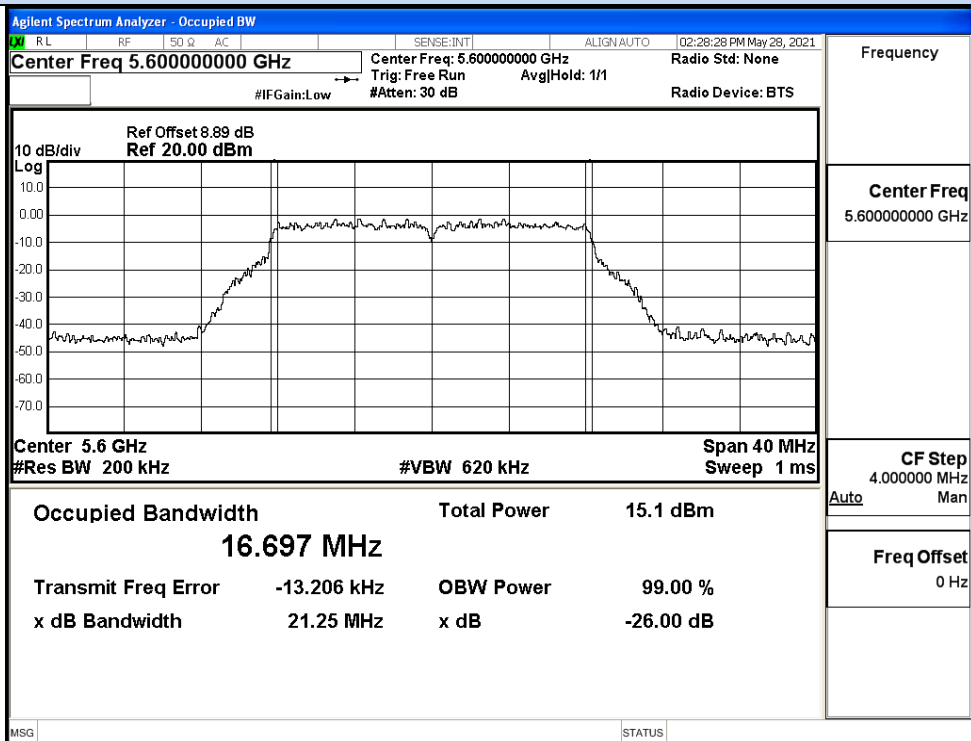


IEEE 802.11a / Channel 140 / 5700MHz

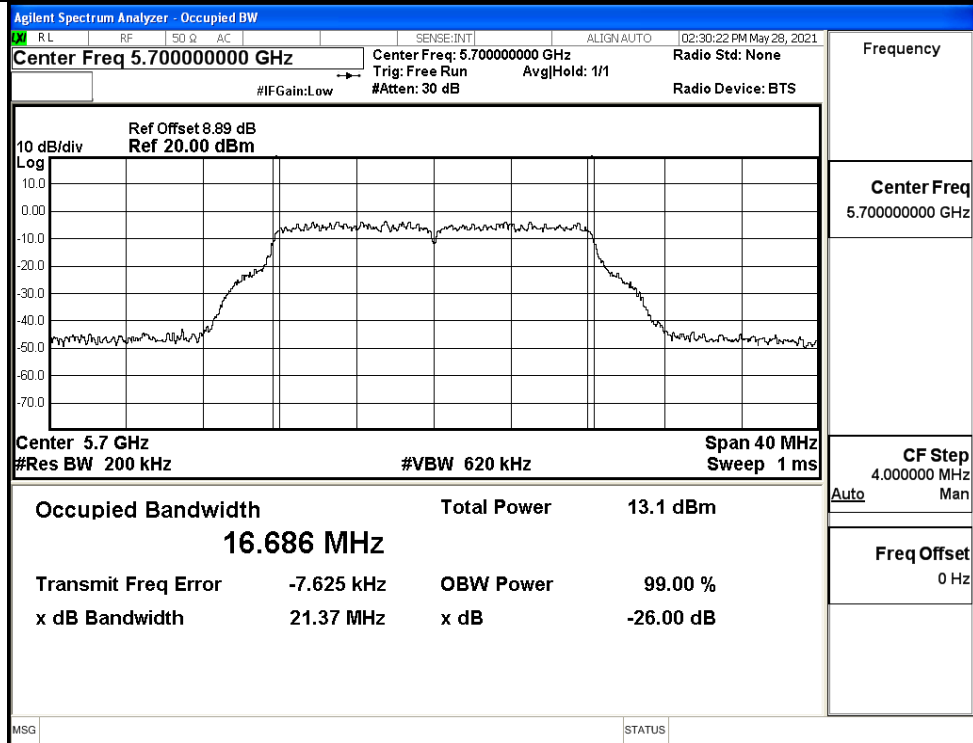
26dB Bandwidth



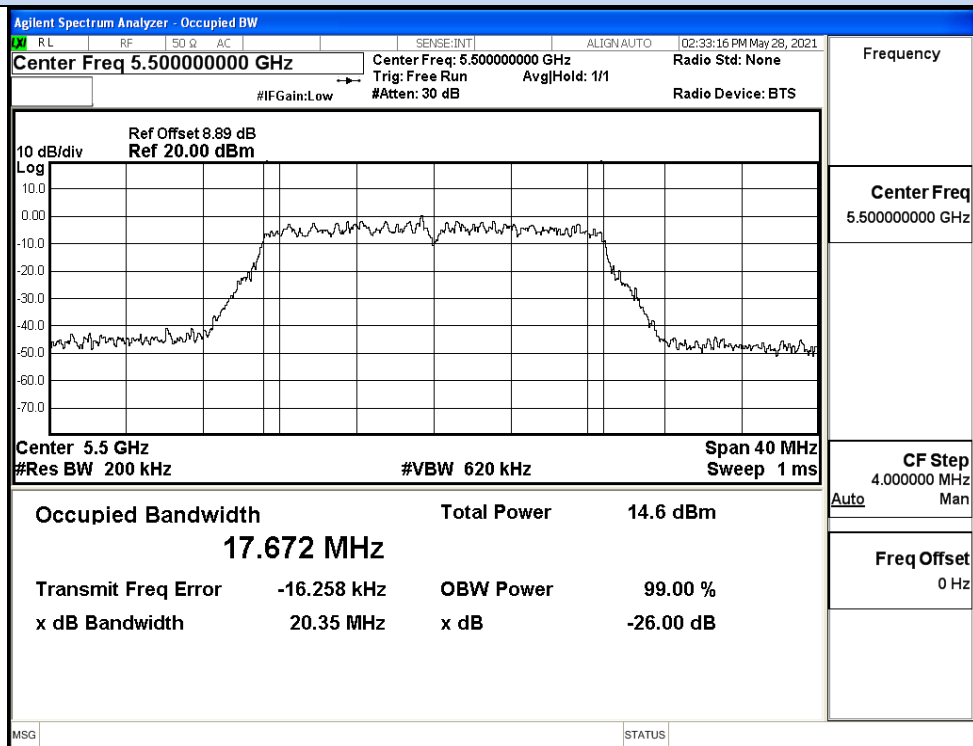
IEEE 802.11n20 / Channel 100 / 5500MHz



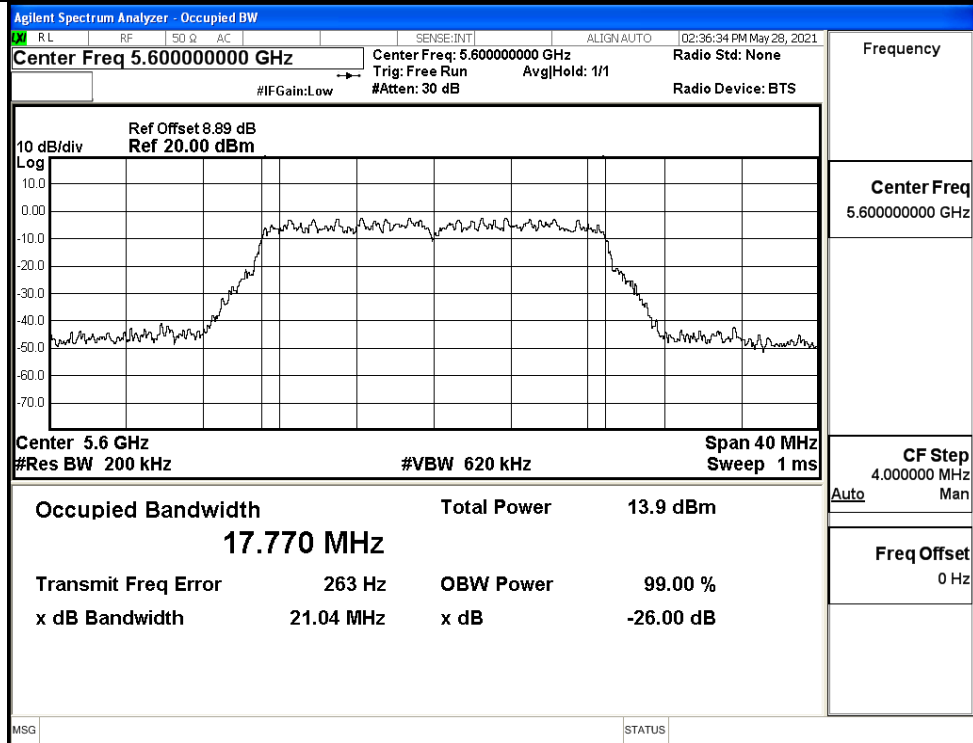
IEEE 802.11n20 / Channel 120 / 5600MHz



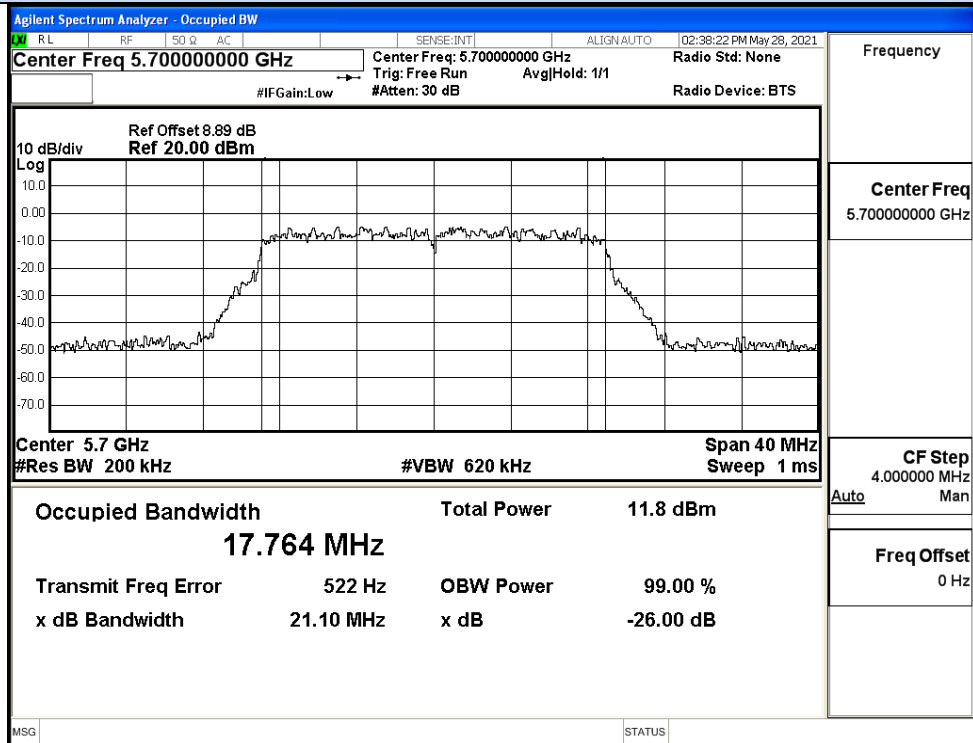
IEEE 802.11n20 / Channel 140 / 5700MHz



IEEE 802.11ac20 / Channel 100 / 5500MHz



IEEE 802.11ac20 / Channel 120 / 5600MHz

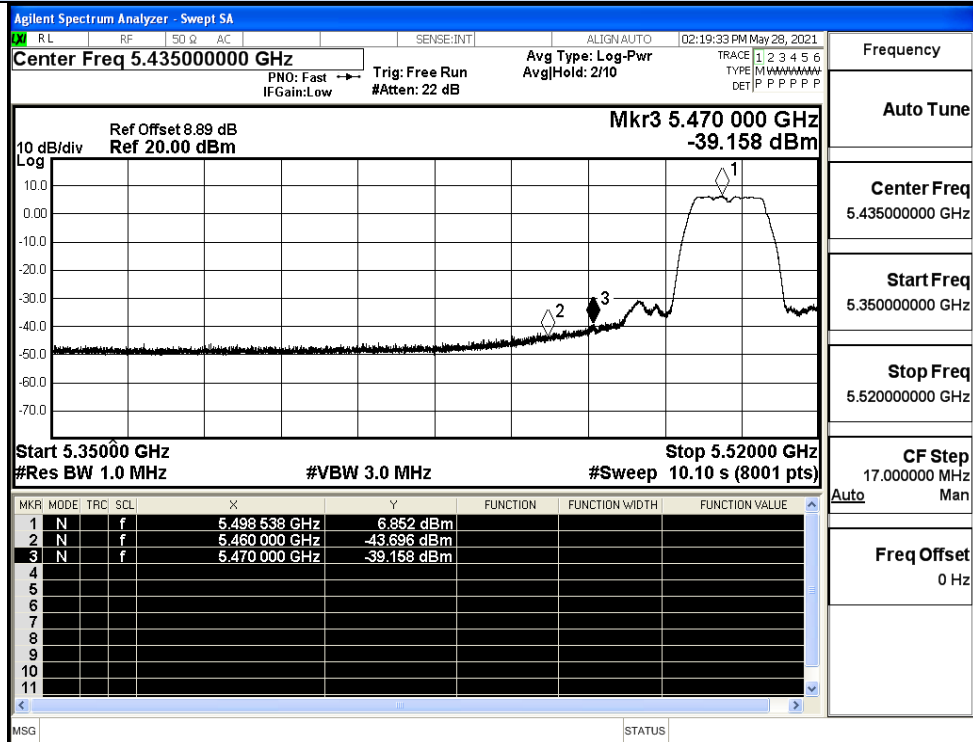


IEEE 802.11ac20 / Channel 140 / 5700MHz

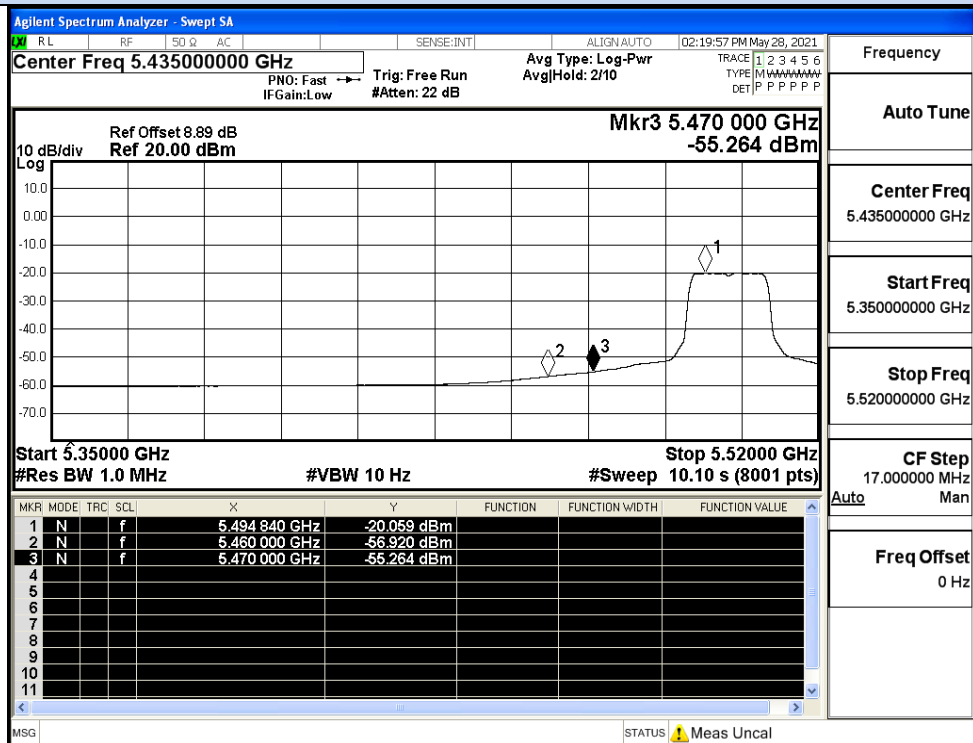
E.5 Undesirable Emissions Measurement

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	-43.70	2.00	0	53.53	Peak	68.20	Pass
		5460.0	-56.92	2.00	0	40.31	Average	54.00	Pass
		5470.0	-39.16	2.00	0	58.07	Peak	68.20	Pass
		5470.0	-55.26	2.00	0	41.97	Average	54.00	Pass
	140	5725.0	-43.75	2.00	0	53.48	Peak	68.20	Pass
		5725.0	-56.23	2.00	0	41.00	Average	54.00	Pass
		5735.0	-46.64	2.00	0	50.59	Peak	68.20	Pass
		5735.0	-57.09	2.00	0	40.14	Average	54.00	Pass
11N20 SISO	100	5460.0	-44.99	2.00	0	52.24	Peak	68.20	Pass
		5460.0	-57.09	2.00	0	40.14	Average	54.00	Pass
		5470.0	-42.10	2.00	0	55.13	Peak	68.20	Pass
		5470.0	-55.68	2.00	0	41.55	Average	54.00	Pass
	140	5725.0	-43.68	2.00	0	53.55	Peak	68.20	Pass
		5725.0	-56.54	2.00	0	40.69	Average	54.00	Pass
		5735.0	-44.70	2.00	0	52.53	Peak	68.20	Pass
		5735.0	-57.35	2.00	0	39.88	Average	54.00	Pass
11AC20 SISO	100	5460.0	-44.41	2.00	0	52.82	Peak	68.20	Pass
		5460.0	-59.44	2.00	0	37.79	Average	54.00	Pass
		5470.0	-43.32	2.00	0	53.91	Peak	68.20	Pass
		5470.0	-58.82	2.00	0	38.41	Average	54.00	Pass
	140	5725.0	-45.99	2.00	0	51.24	Peak	68.20	Pass
		5725.0	-58.21	2.00	0	39.02	Average	54.00	Pass
		5735.0	-47.03	2.00	0	50.20	Peak	68.20	Pass
		5735.0	-58.47	2.00	0	38.76	Average	54.00	Pass

Undesirable Emissions Measurement

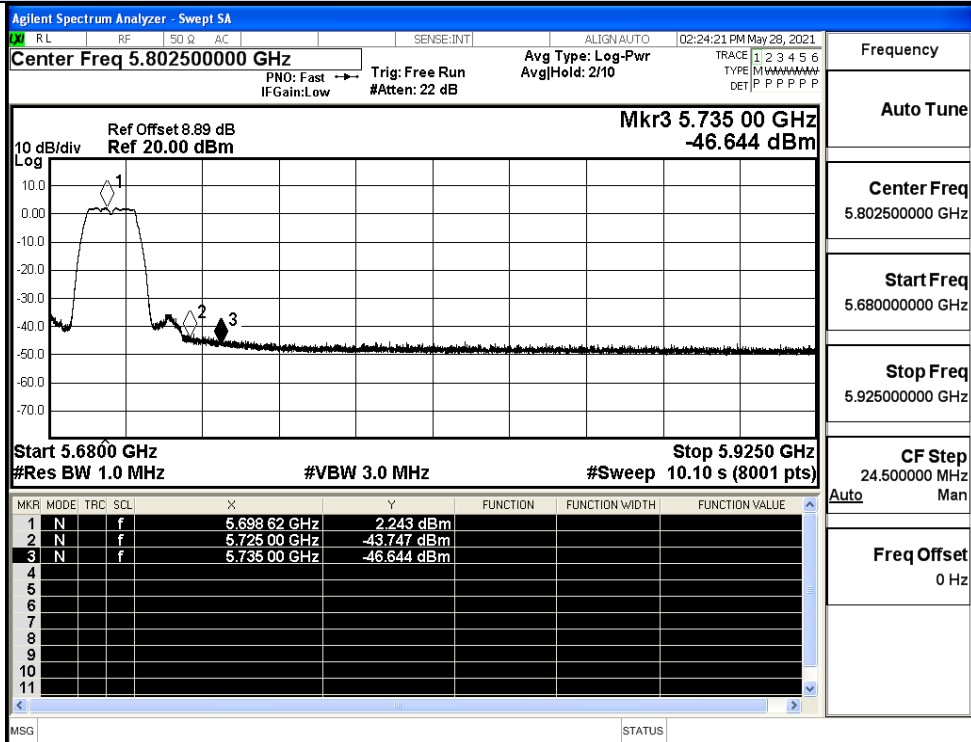


IEEE 802.11a / Channel 100 / 5500MHz / Peak

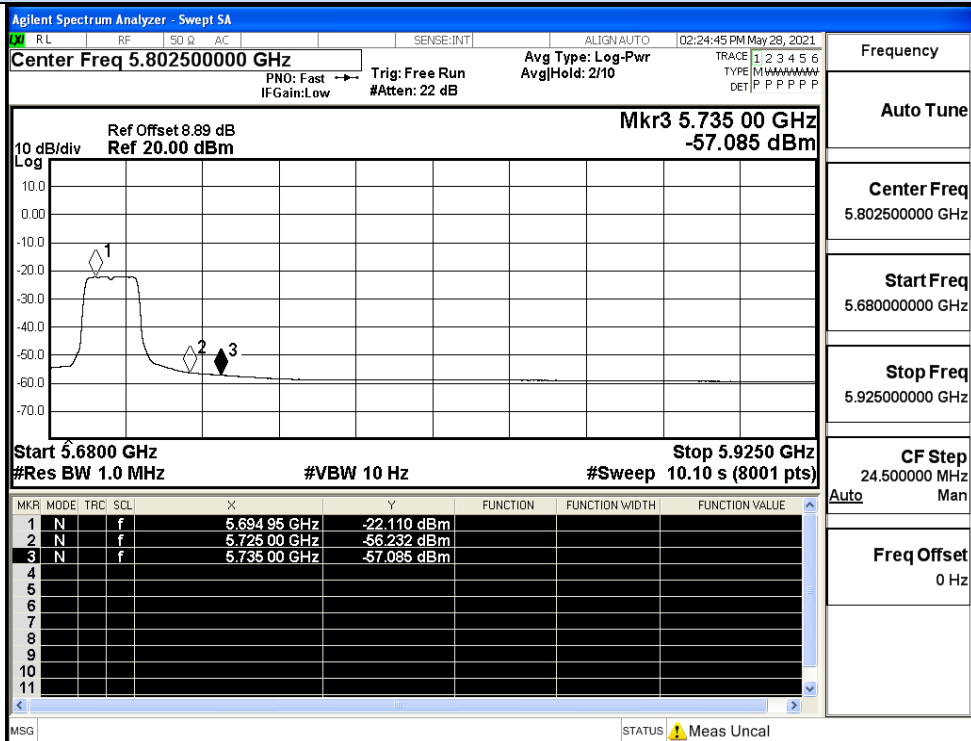


IEEE 802.11a / Channel 100 / 5500MHz / Average

Undesirable Emissions Measurement

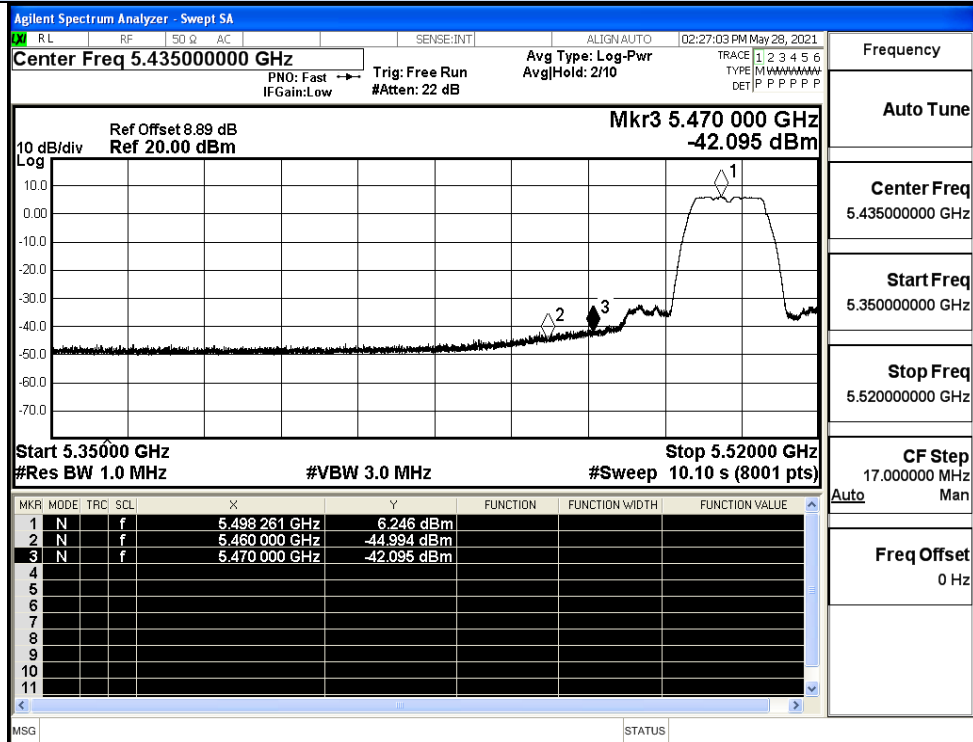


IEEE 802.11a / Channel 140 / 5700MHz / Peak

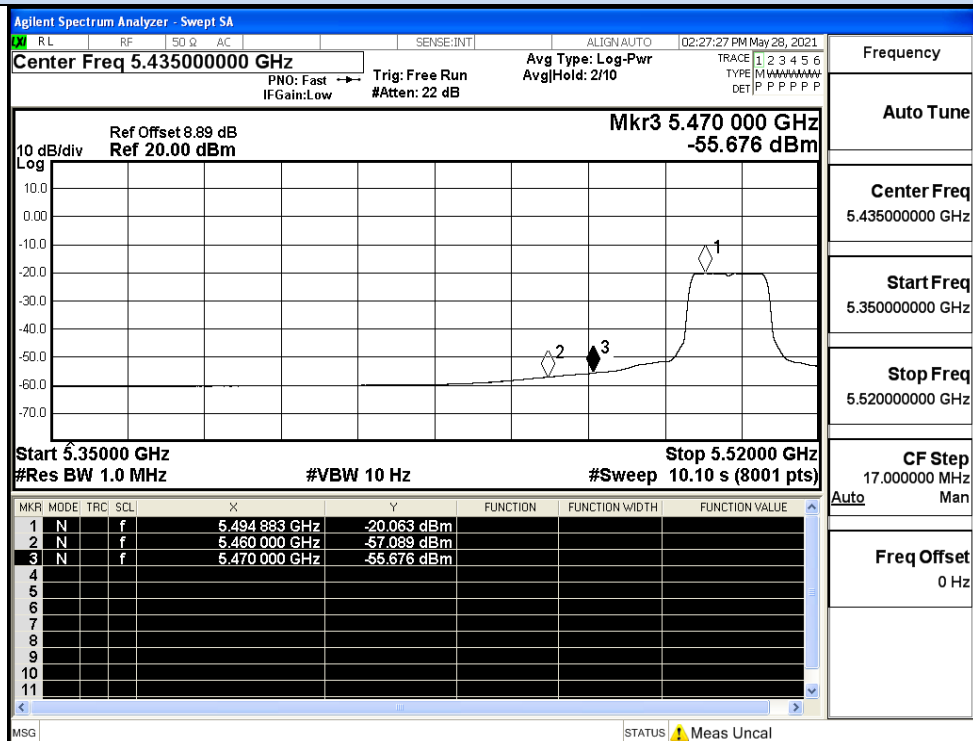


IEEE 802.11a / Channel 140 / 5700MHz / Average

Undesirable Emissions Measurement

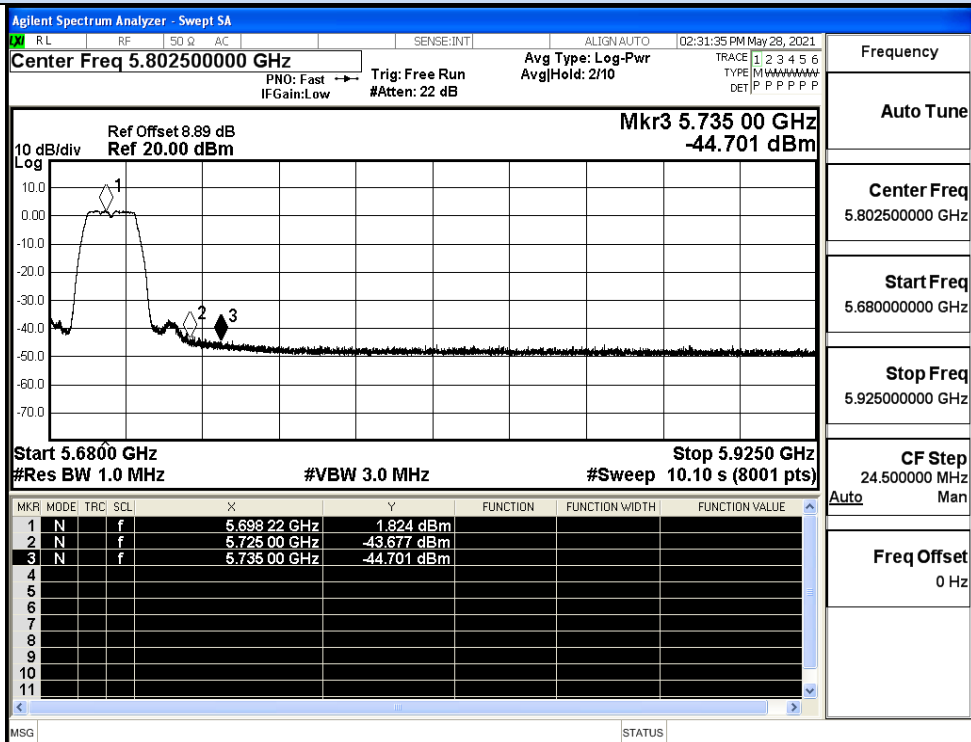


IEEE 802.11n20 / Channel 100 / 5500MHz / Peak

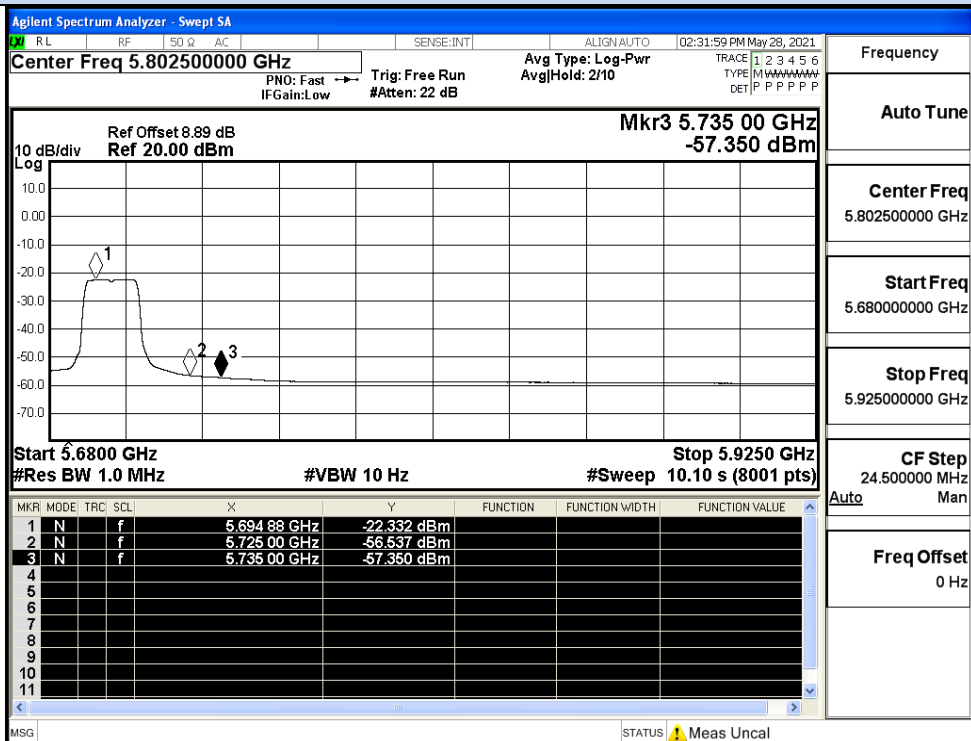


IEEE 802.11n20 / Channel 100 / 5500MHz / Average

Undesirable Emissions Measurement

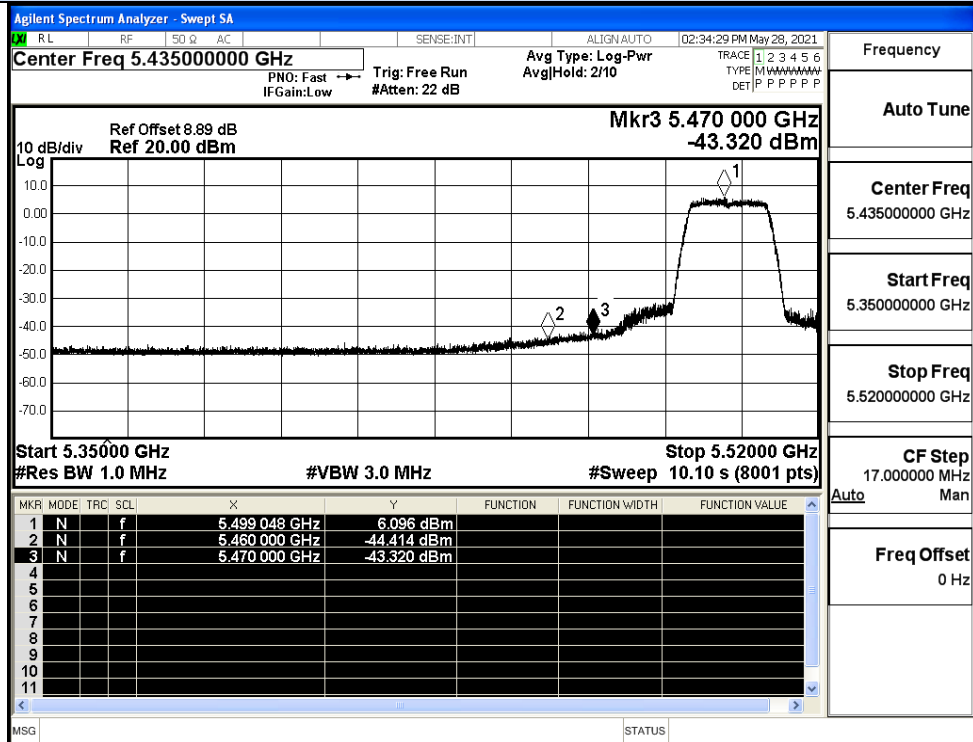


IEEE 802.11n20 / Channel 140 / 5700MHz / Peak

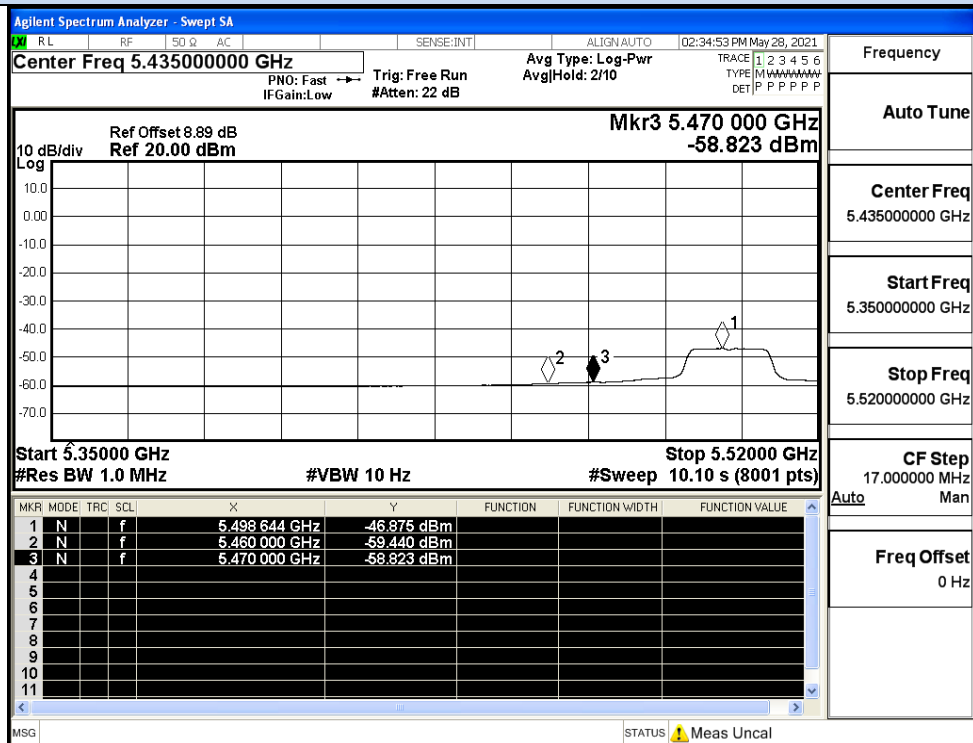


IEEE 802.11n20 / Channel 140 / 5700MHz / Average

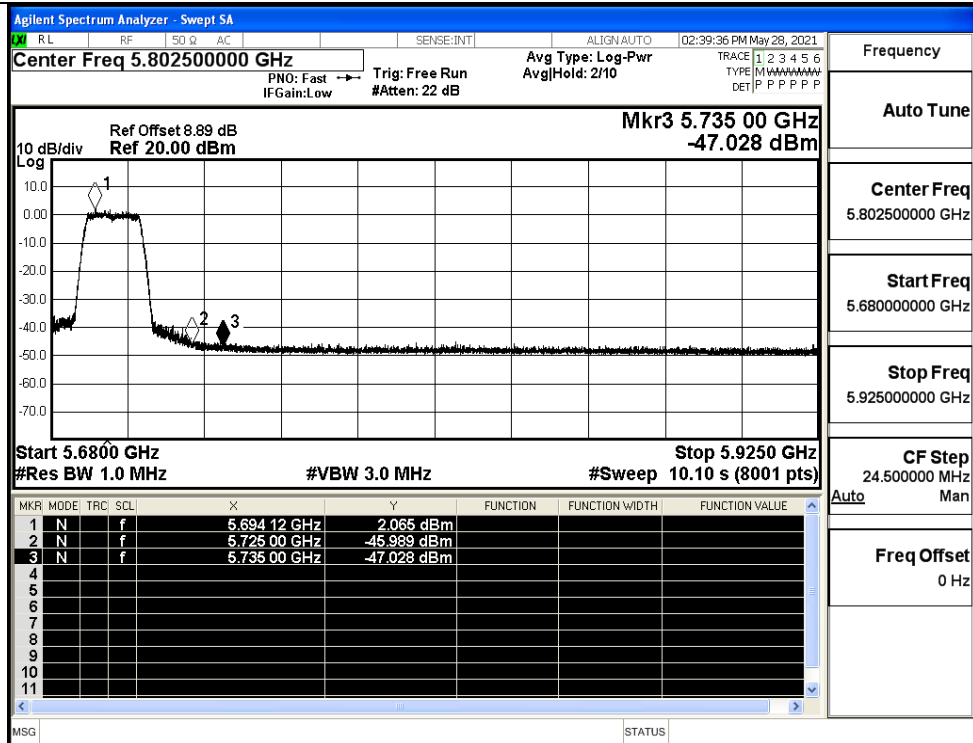
Undesirable Emissions Measurement



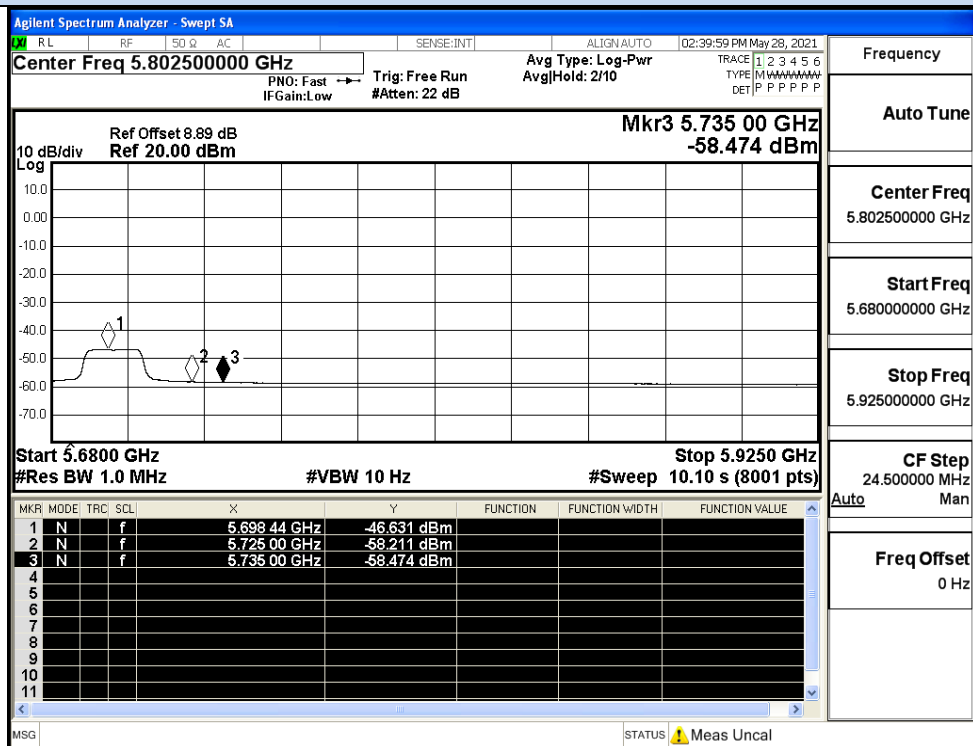
IEEE 802.11ac20 / Channel 100 / 5500MHz / Peak



IEEE 802.11ac20 / Channel 100 / 5500MHz / Average



IEEE 802.11ac20 / Channel 140 / 5700MHz / Peak



IEEE 802.11ac20 / Channel 140 / 5700MHz / Average