

Appendix D

RF Test Data for 5.2GWIFI (Conducted Measurement)

Product Name: Tablet

Test Model: HELIOS12 16G

Environmental Conditions

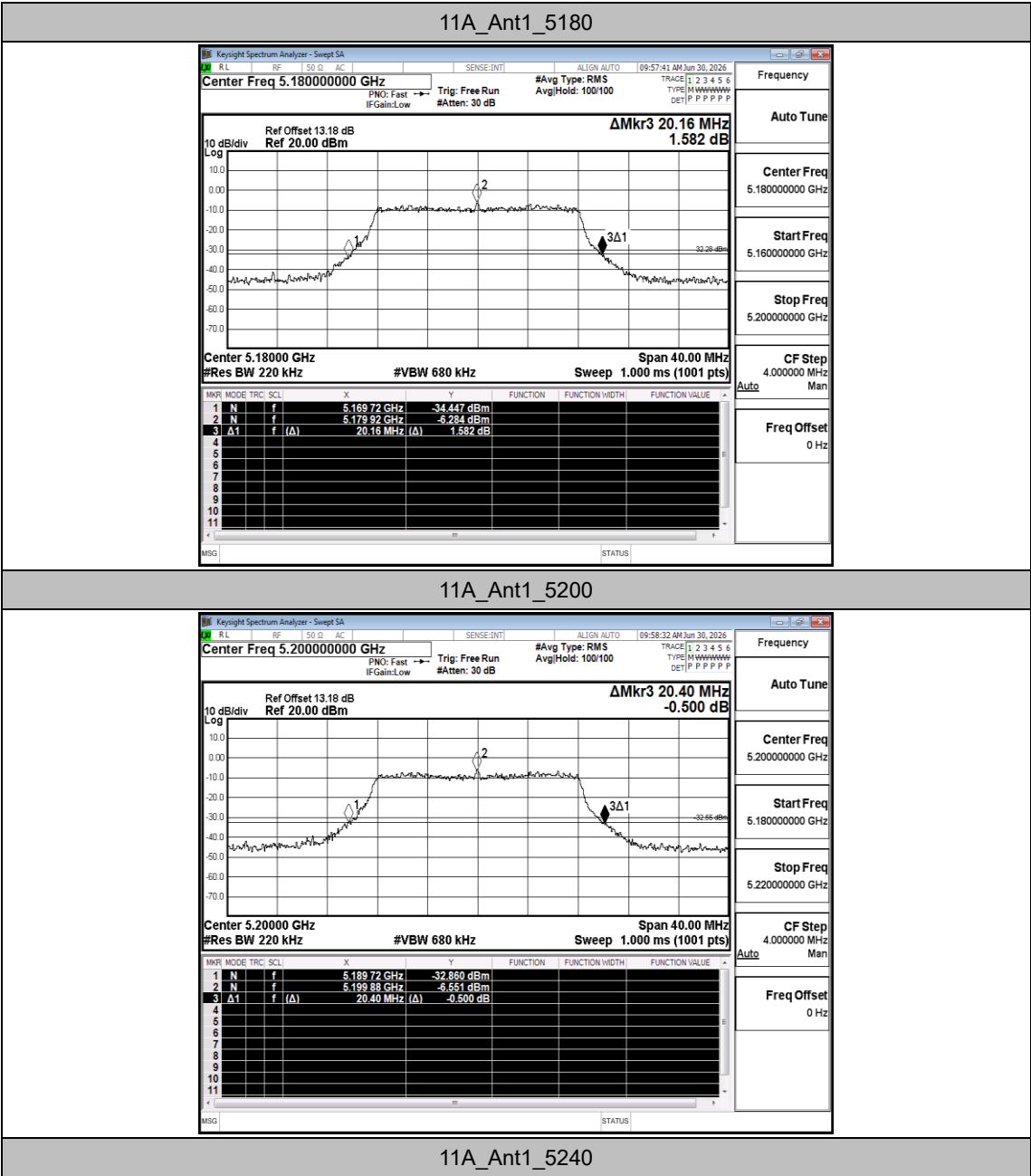
Temperature:	24.5°C
Relative Humidity:	53.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

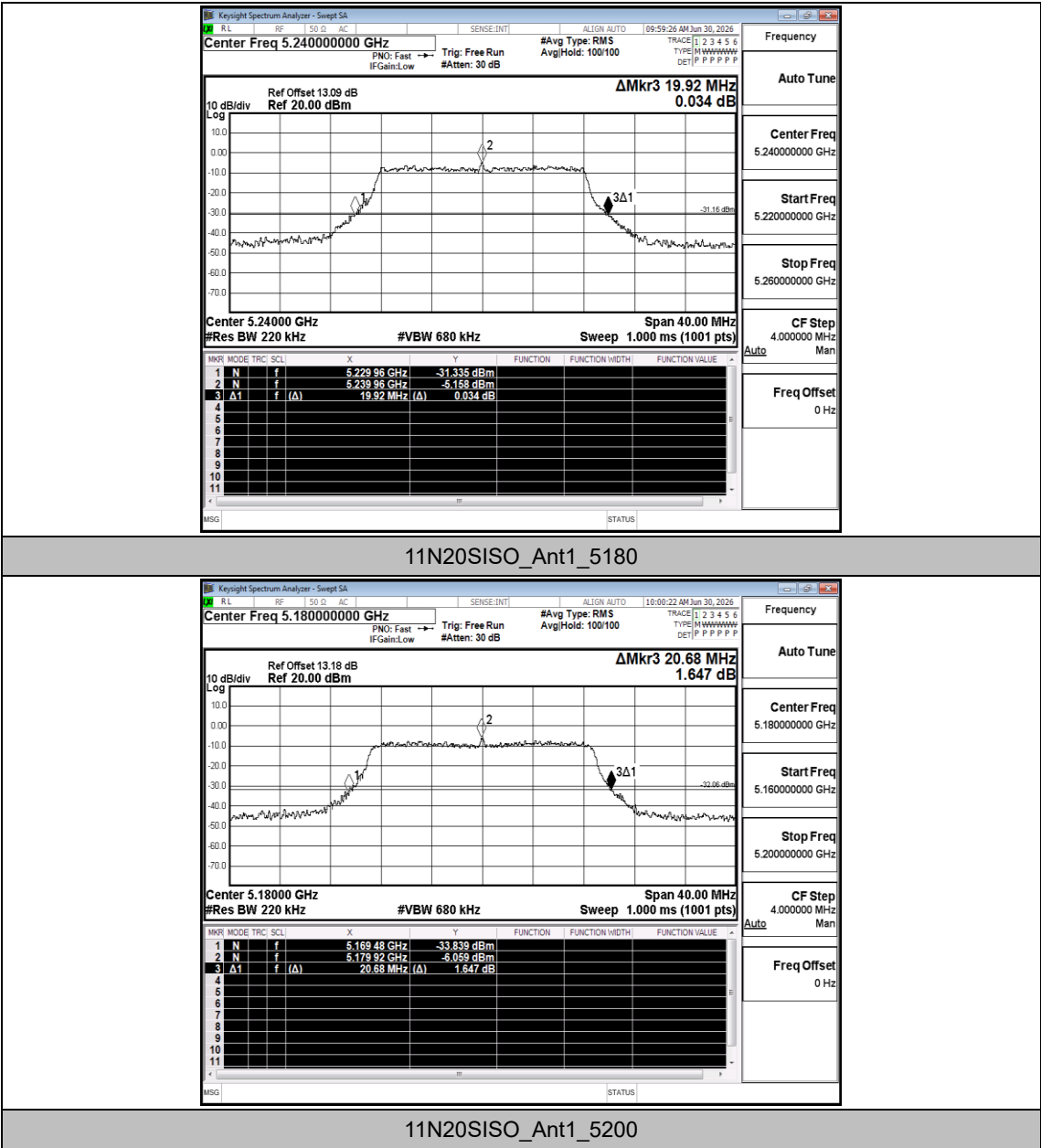
D.1 26dB Bandwidth

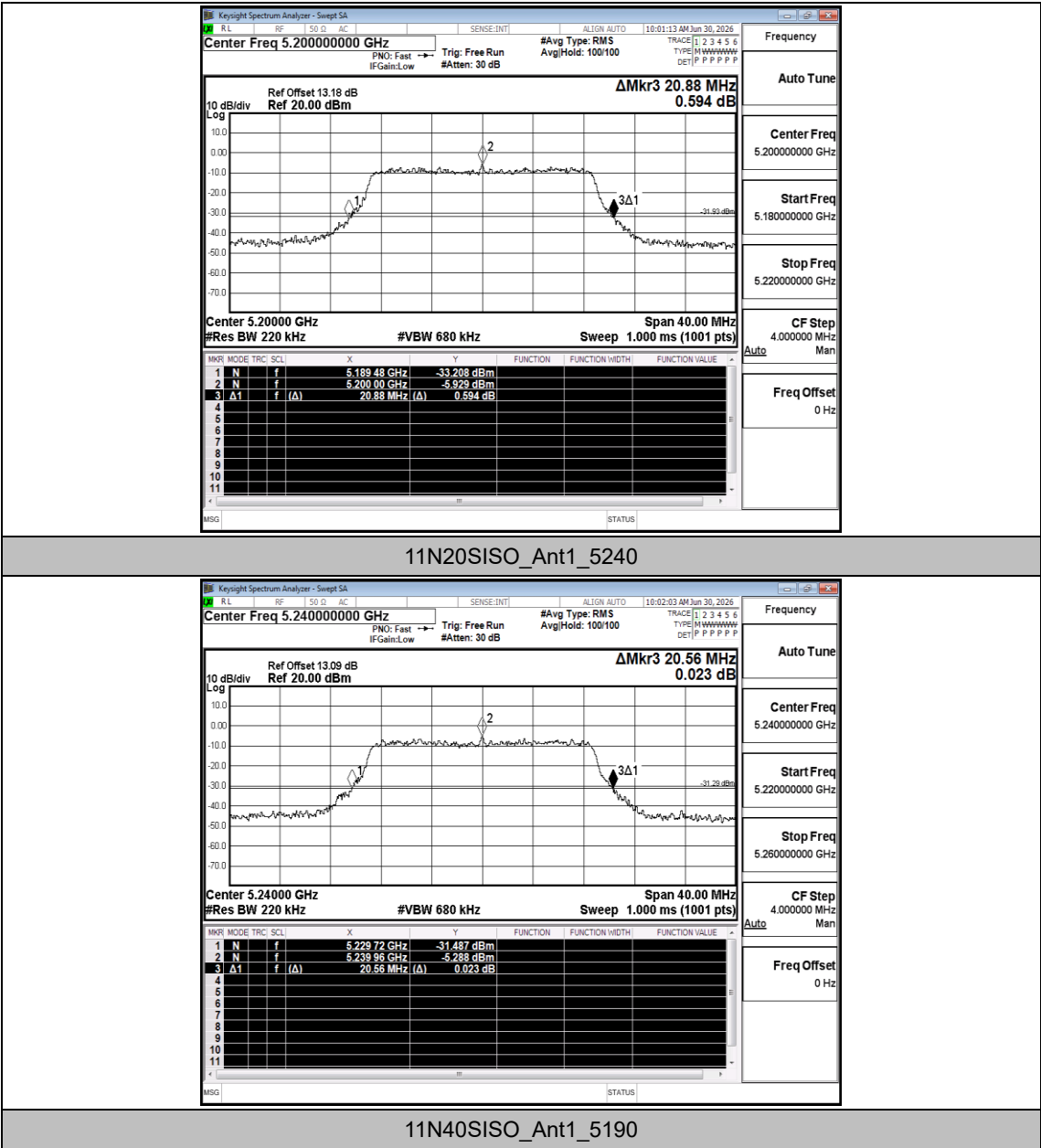
Test Result

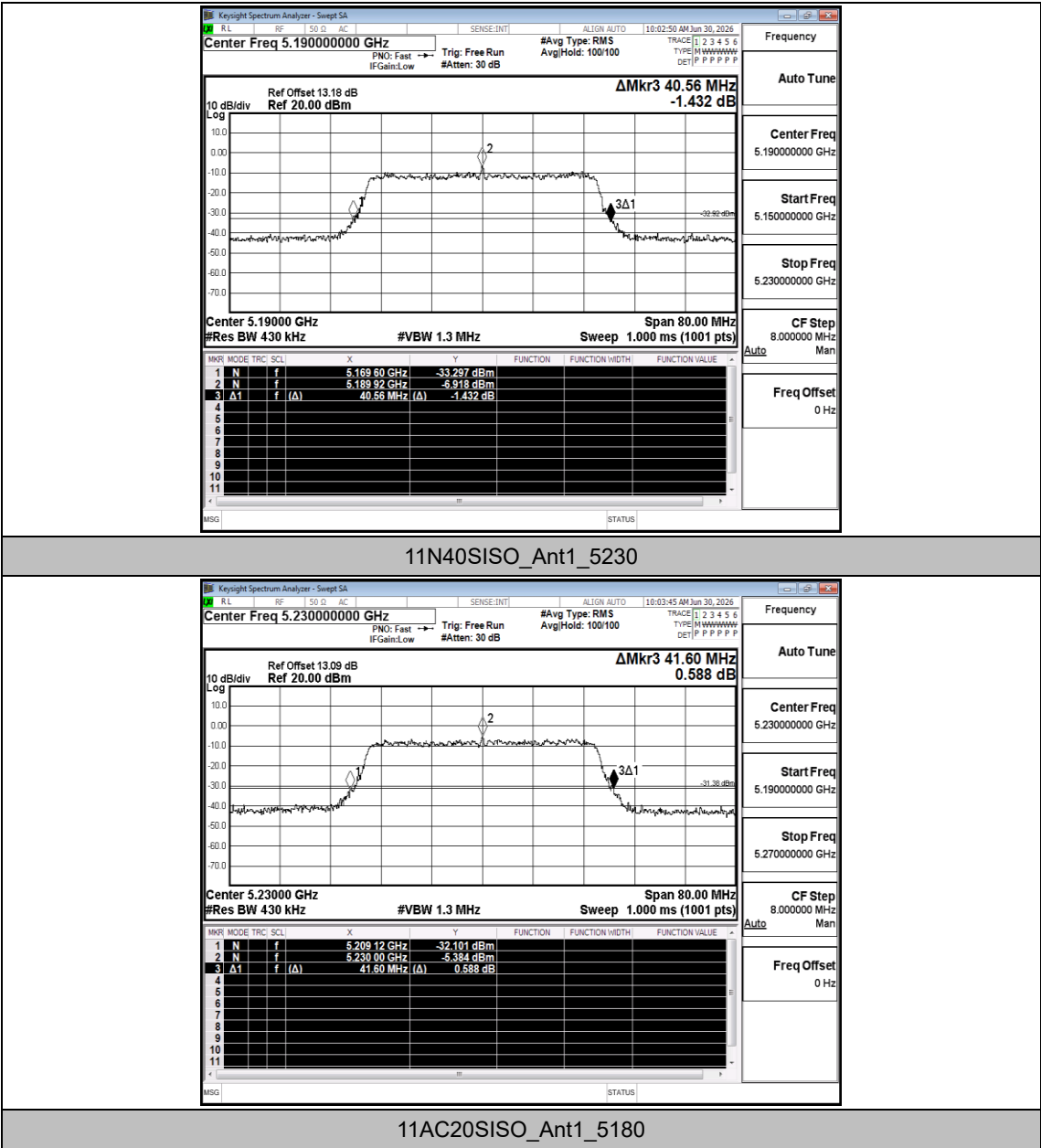
TestMode	Antenna	Freq (MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	20.160	5169.720	5189.880	---	---
		5200	20.400	5189.720	5210.120	---	---
		5240	19.920	5229.960	5249.880	---	---
11N20SISO	Ant1	5180	20.680	5169.480	5190.160	---	---
		5200	20.880	5189.480	5210.360	---	---
		5240	20.560	5229.720	5250.280	---	---
11N40SISO	Ant1	5190	40.560	5169.600	5210.160	---	---
		5230	41.600	5209.120	5250.720	---	---
11AC20SISO	Ant1	5180	21.000	5169.440	5190.440	---	---
		5200	20.760	5189.680	5210.440	---	---
		5240	20.840	5229.440	5250.280	---	---
11AC40SISO	Ant1	5190	40.400	5169.920	5210.320	---	---
		5230	41.440	5209.360	5250.800	---	---
11AC80SISO	Ant1	5210	80.480	5170.000	5250.480	---	---

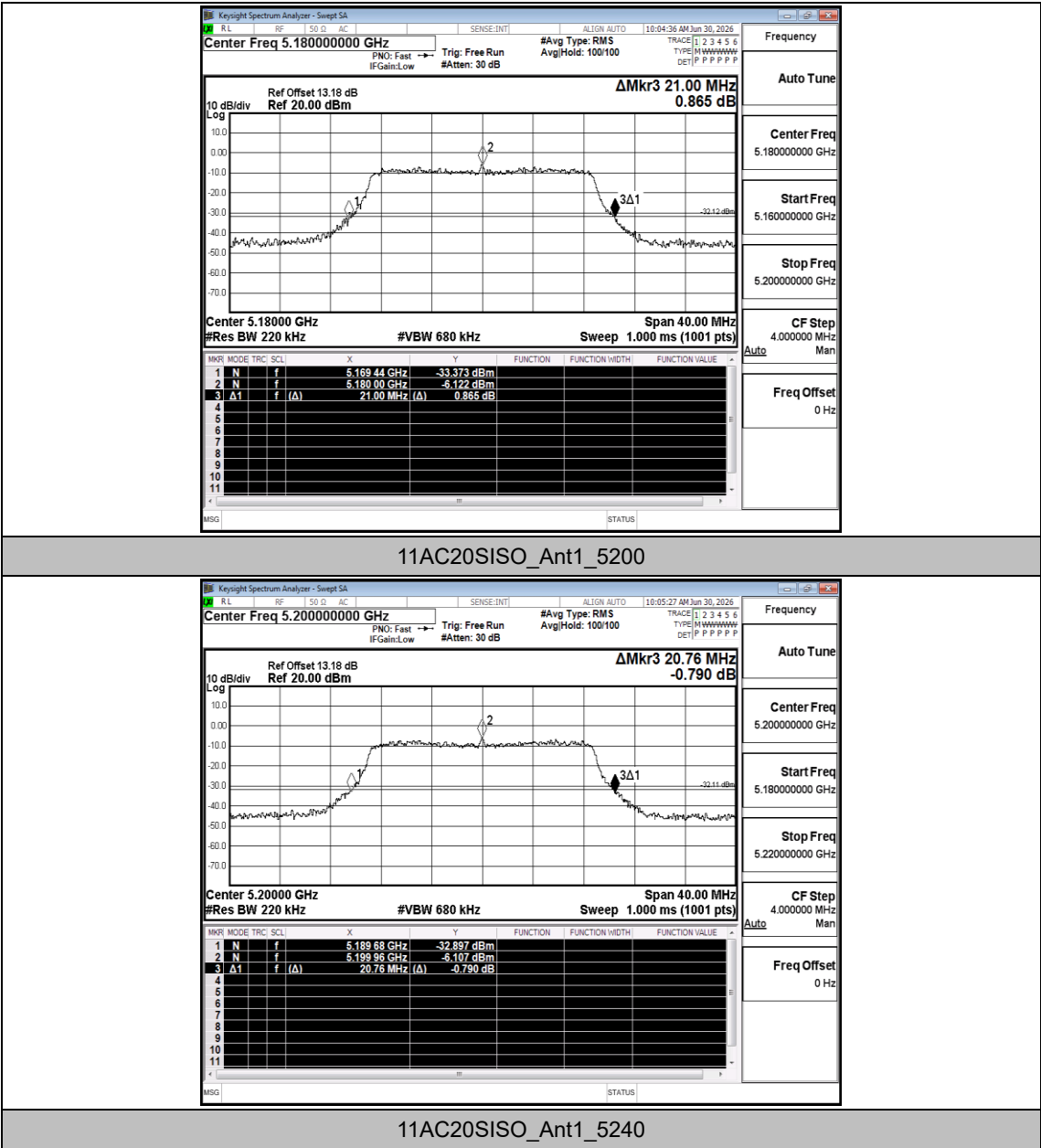
Test Graphs

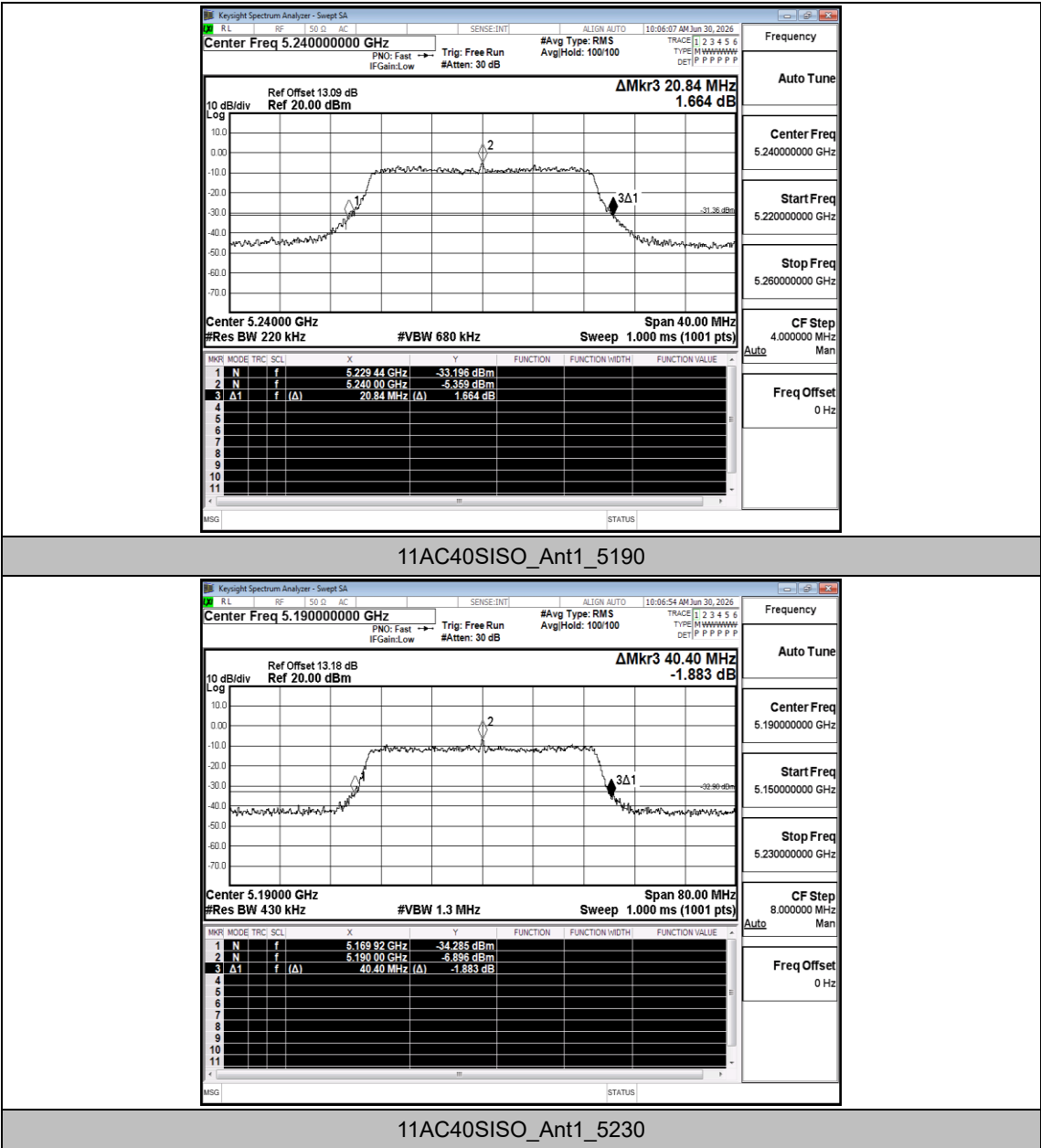


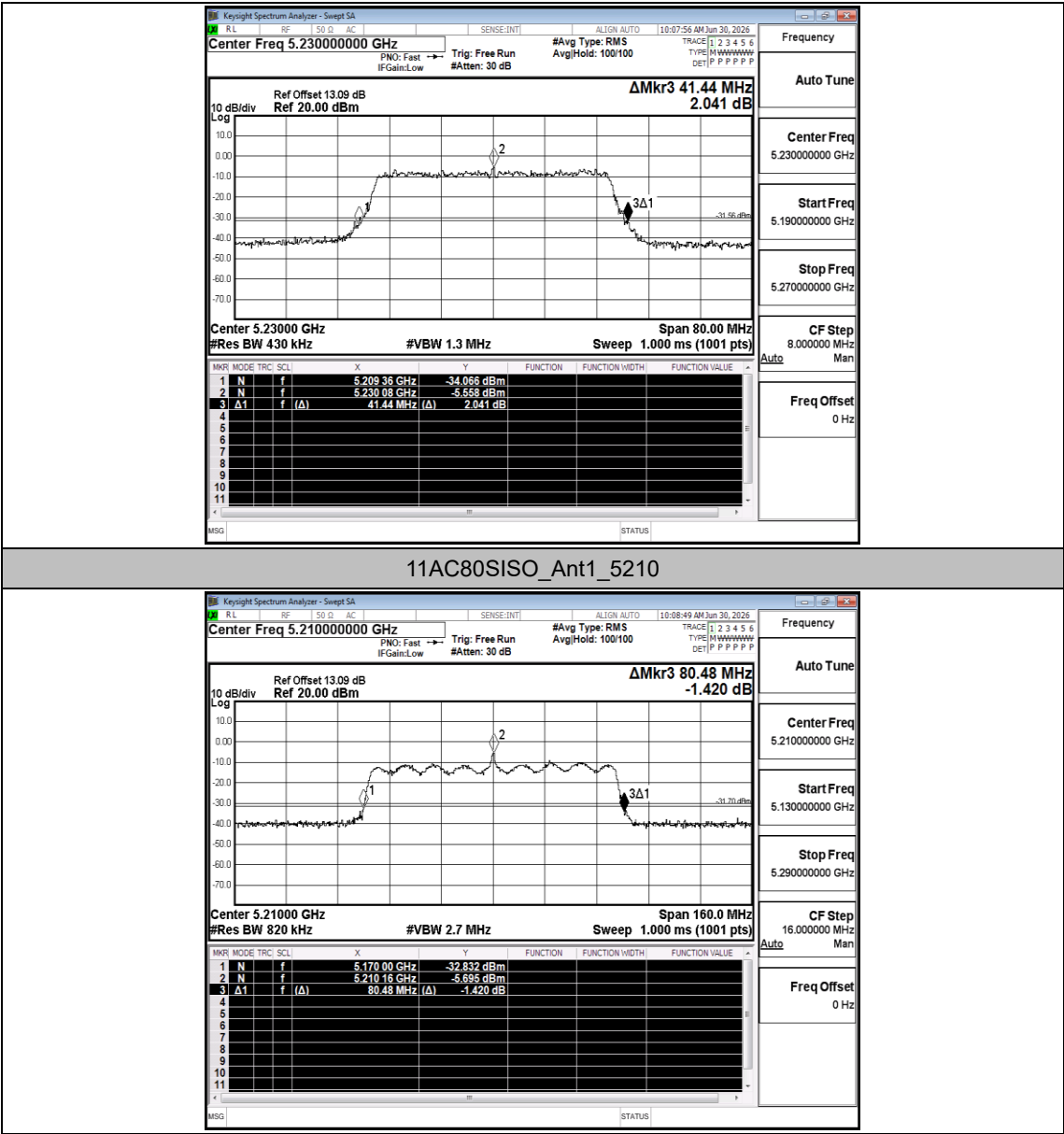








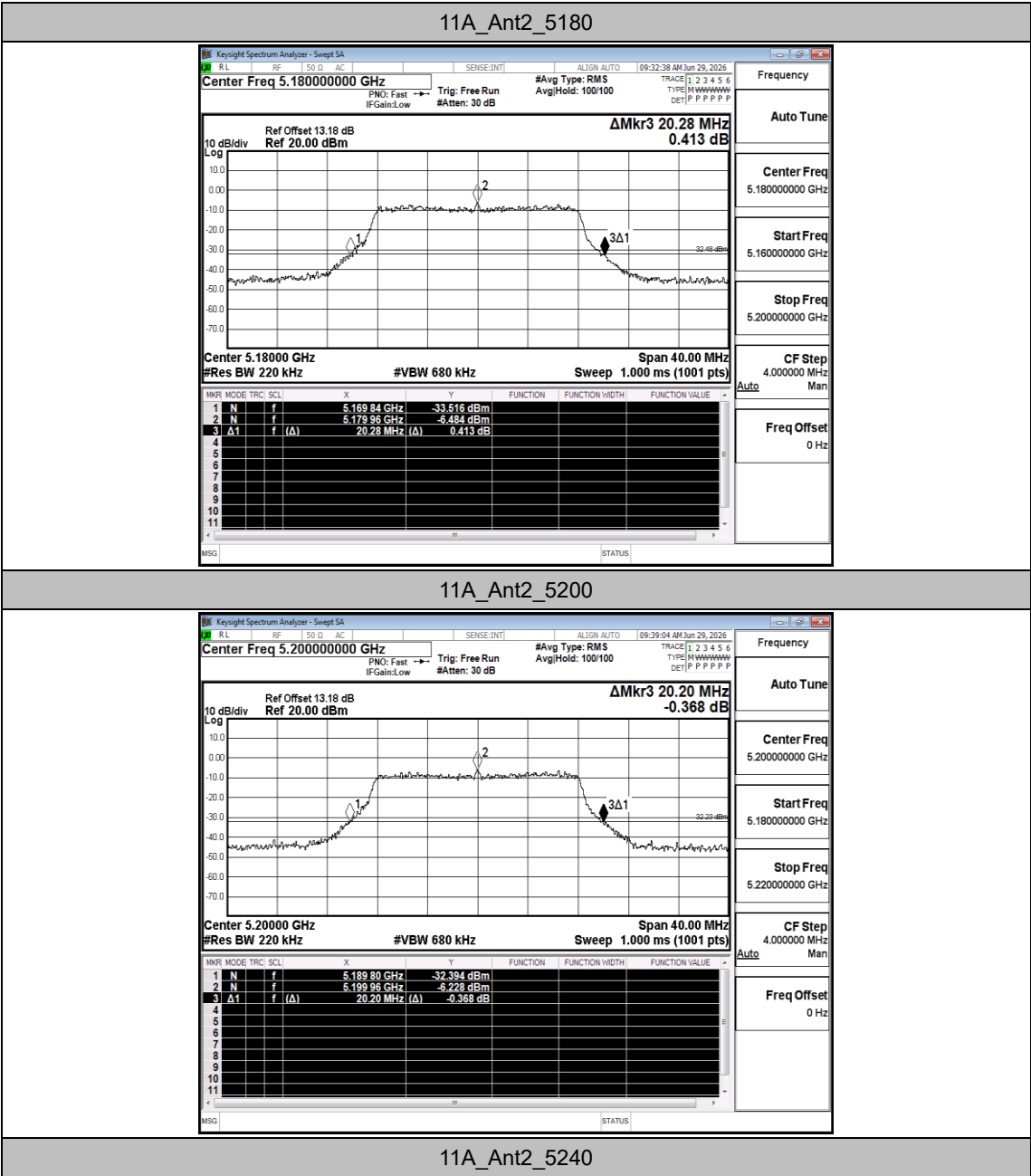


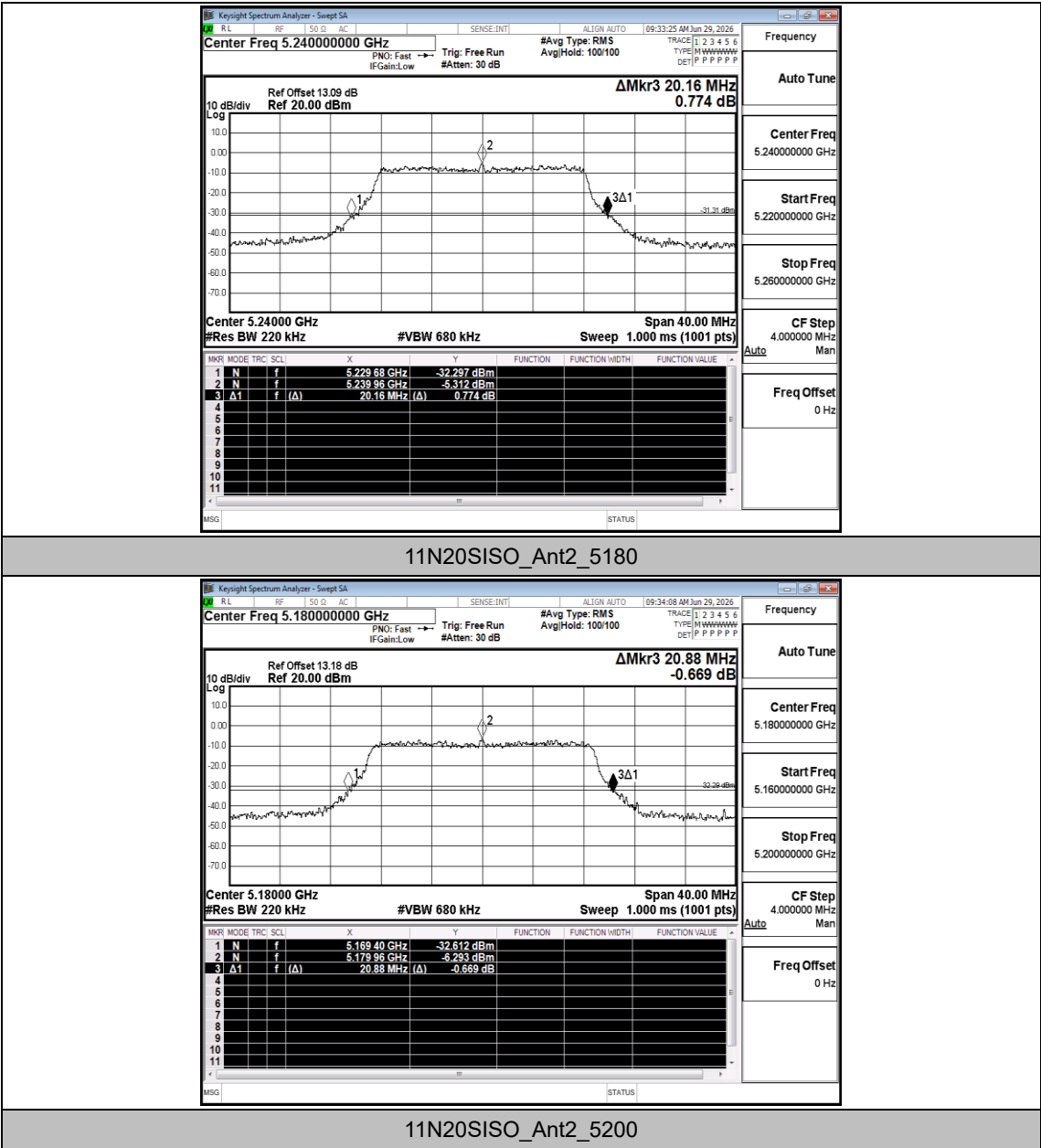


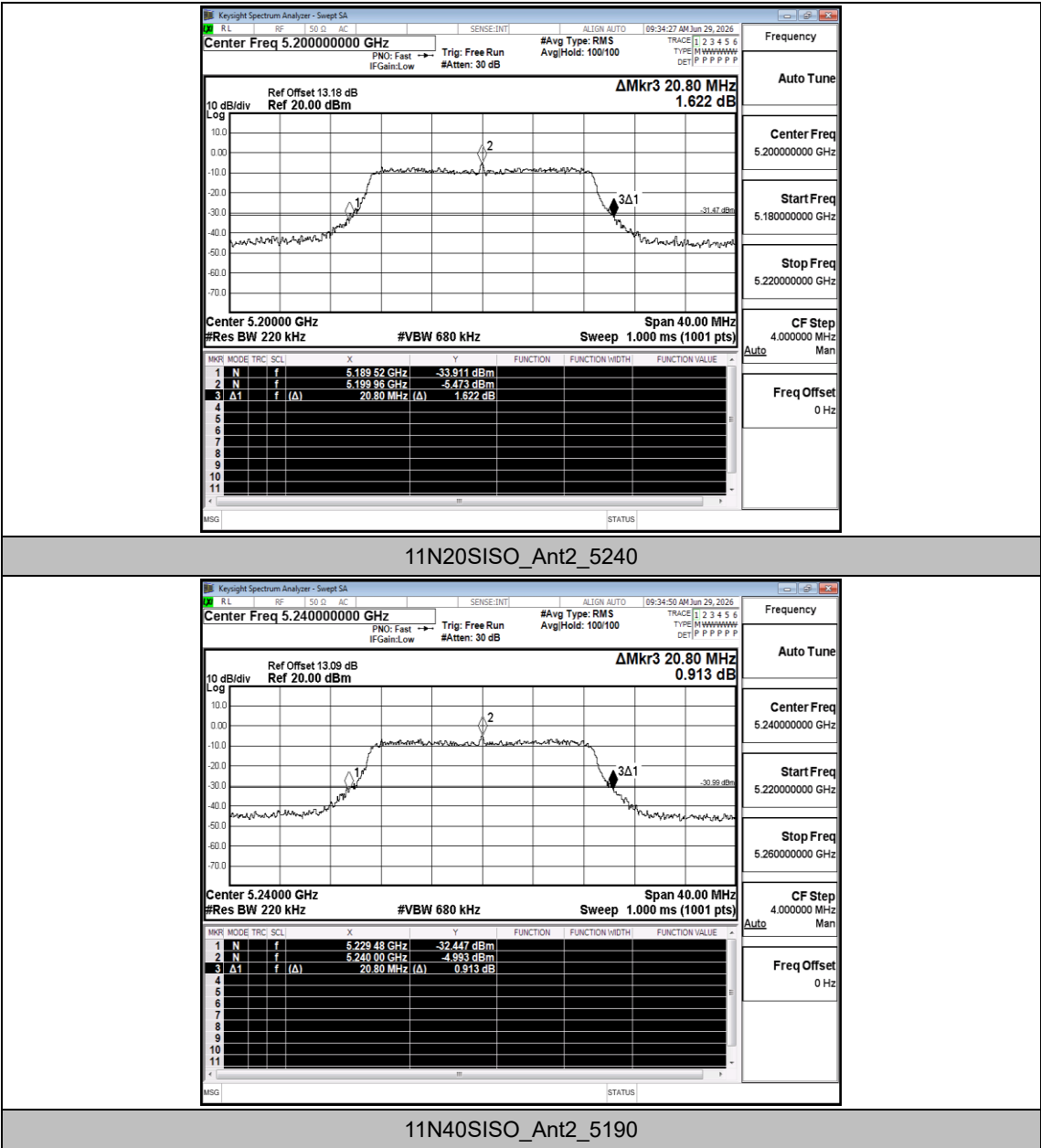
Test Result

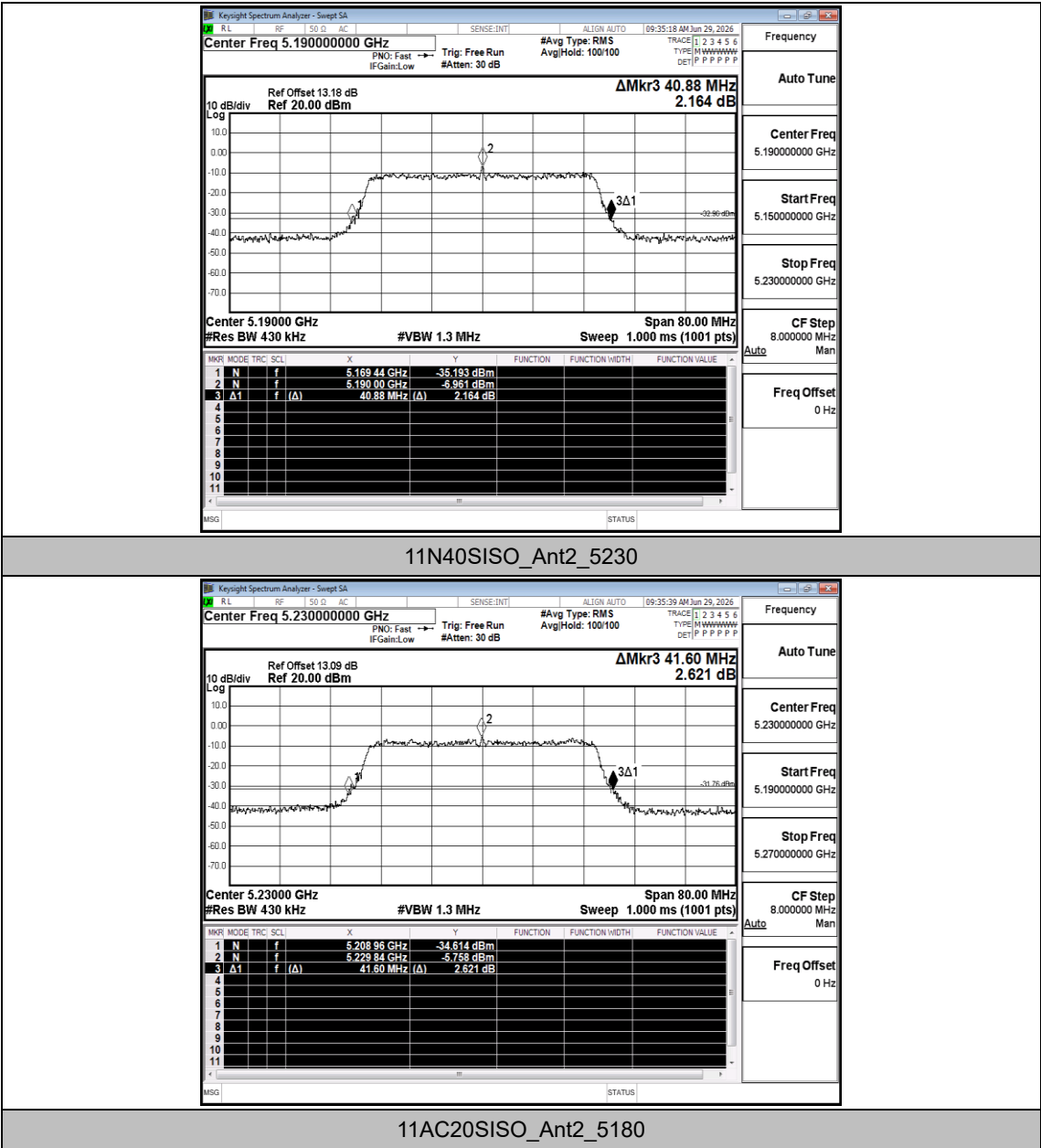
TestMode	Antenna	Freq (MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant2	5180	20.280	5169.840	5190.120	---	---
		5200	20.200	5189.800	5210.000	---	---
		5240	20.160	5229.680	5249.840	---	---
11N20SISO	Ant2	5180	20.880	5169.400	5190.280	---	---
		5200	20.800	5189.520	5210.320	---	---
		5240	20.800	5229.480	5250.280	---	---
11N40SISO	Ant2	5190	40.880	5169.440	5210.320	---	---
		5230	41.600	5208.960	5250.560	---	---
11AC20SISO	Ant2	5180	21.040	5169.320	5190.360	---	---
		5200	21.120	5189.320	5210.440	---	---
		5240	21.040	5229.320	5250.360	---	---
11AC40SISO	Ant2	5190	40.320	5169.680	5210.000	---	---
		5230	41.040	5209.600	5250.640	---	---
11AC80SISO	Ant2	5210	79.840	5170.320	5250.160	---	---

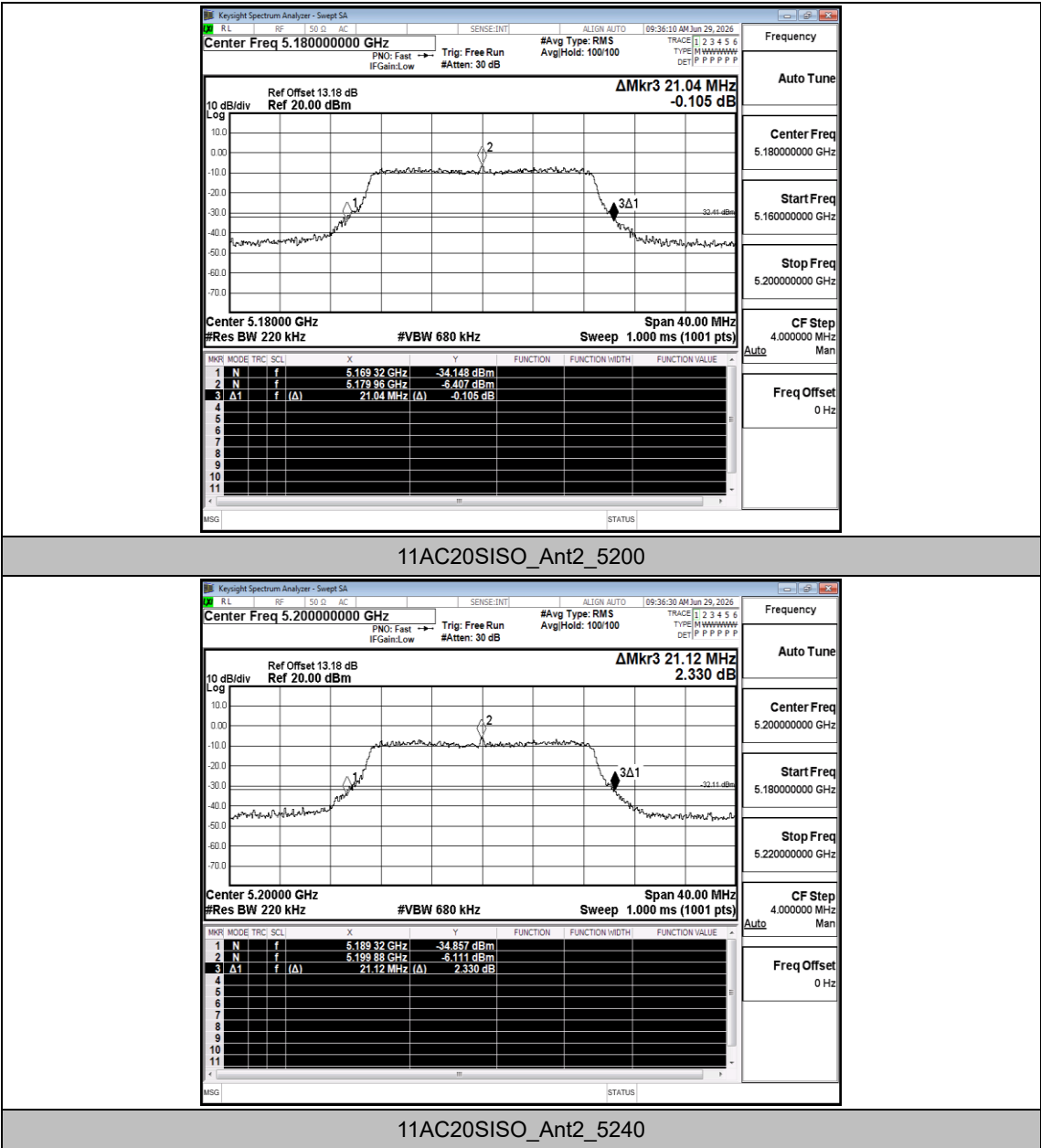
Test Graphs

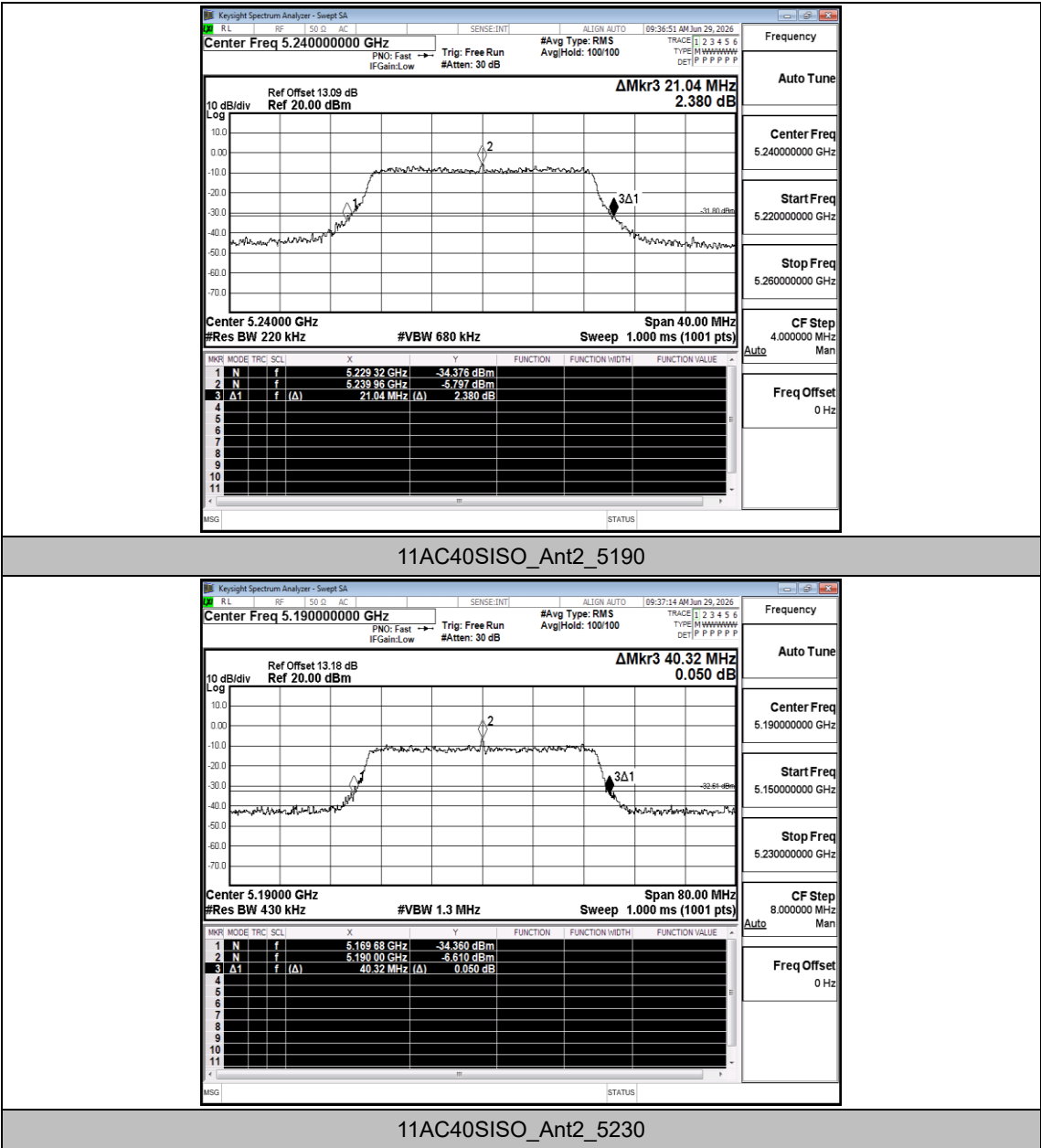


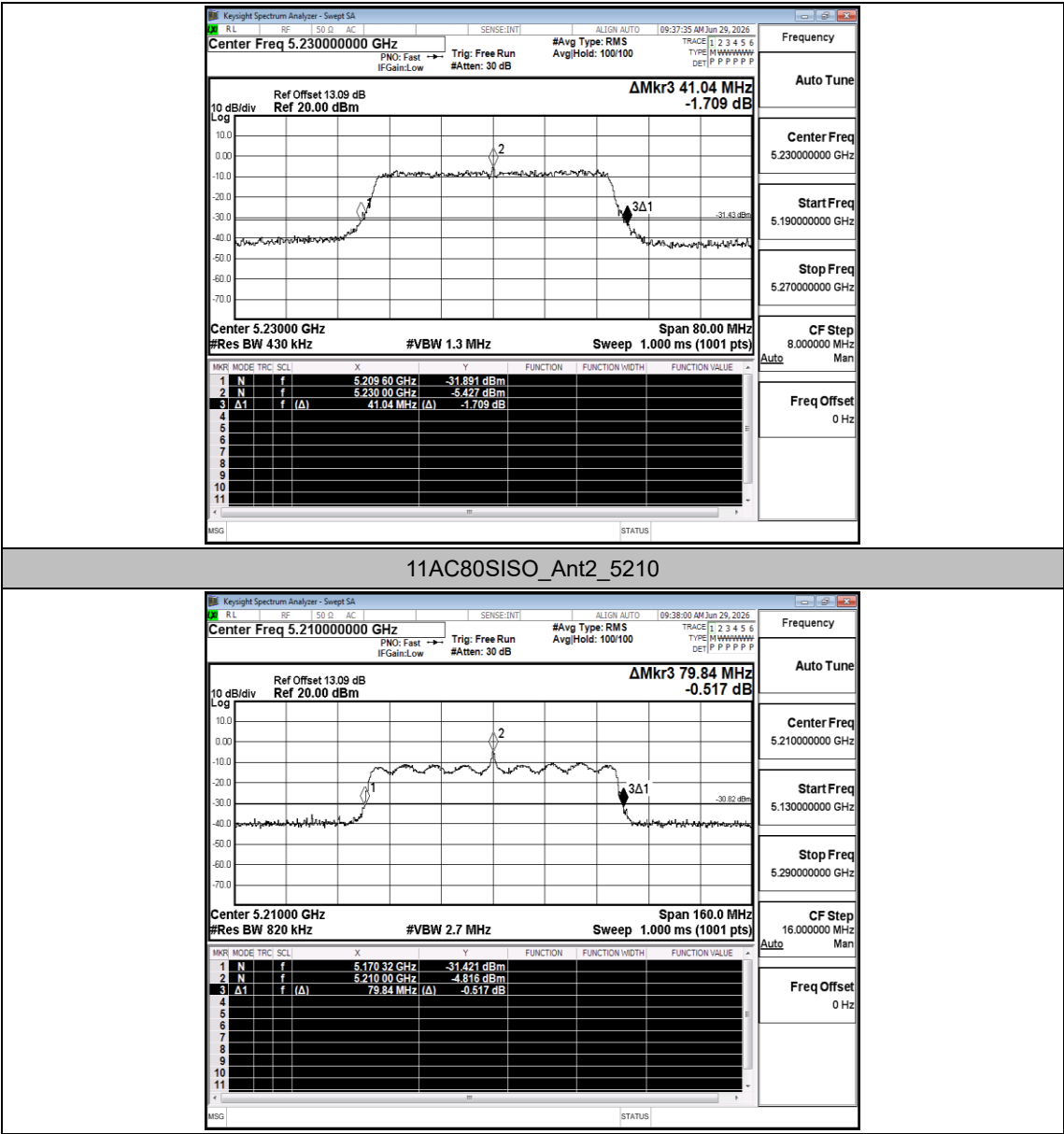












D.2 Maximum conducted output power

Test Result

Test Mode	Antenna	Freq (MHz)	TPC Mode	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	NA	14.44	0.00	14.44	≤24	PASS
		5200	NA	14.76	0.00	14.76	≤24	PASS
		5240	NA	15.66	0.00	15.66	≤24	PASS
11N20SISO	Ant1	5180	NA	14.39	0.00	14.39	≤24	PASS
		5200	NA	14.72	0.00	14.72	≤24	PASS
		5240	NA	15.60	0.00	15.60	≤24	PASS
11N40SISO	Ant1	5190	NA	14.59	0.00	14.59	≤24	PASS
		5230	NA	15.41	0.00	15.41	≤24	PASS
11AC20SISO	Ant1	5180	NA	14.39	0.00	14.39	≤24	PASS
		5200	NA	14.80	0.00	14.80	≤24	PASS
		5240	NA	15.68	0.00	15.68	≤24	PASS
11AC40SISO	Ant1	5190	NA	14.65	0.00	14.65	≤24	PASS
		5230	NA	15.46	0.00	15.46	≤24	PASS
11AC80SISO	Ant1	5210	NA	14.91	0.00	14.91	≤24	PASS

Test Result

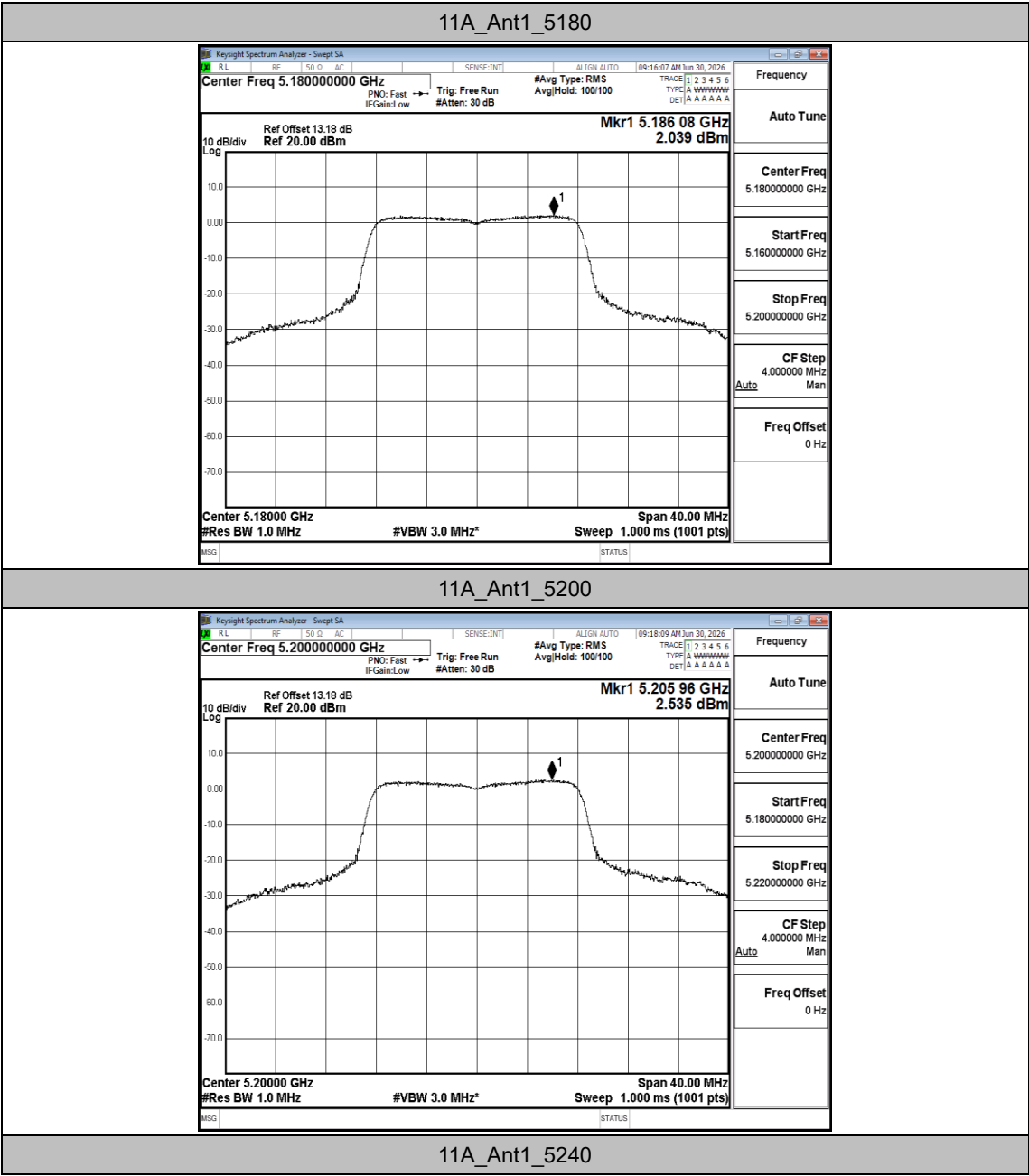
Test Mode	Antenna	Freq (MHz)	TPC Mode	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant2	5180	NA	14.75	0.00	14.75	≤24	PASS
		5200	NA	14.80	0.00	14.80	≤24	PASS
		5240	NA	15.44	0.00	15.44	≤24	PASS
11N20SISO	Ant2	5180	NA	14.54	0.00	14.54	≤24	PASS
		5200	NA	14.73	0.00	14.73	≤24	PASS
		5240	NA	15.32	0.00	15.32	≤24	PASS
11N40SISO	Ant2	5190	NA	14.49	0.00	14.49	≤24	PASS
		5230	NA	15.05	0.00	15.05	≤24	PASS
11AC20SISO	Ant2	5180	NA	14.43	0.00	14.43	≤24	PASS
		5200	NA	14.55	0.00	14.55	≤24	PASS
		5240	NA	15.22	0.00	15.22	≤24	PASS
11AC40SISO	Ant2	5190	NA	14.43	0.00	14.43	≤24	PASS
		5230	NA	14.99	0.00	14.99	≤24	PASS
11AC80SISO	Ant2	5210	NA	14.50	0.00	14.50	≤24	PASS

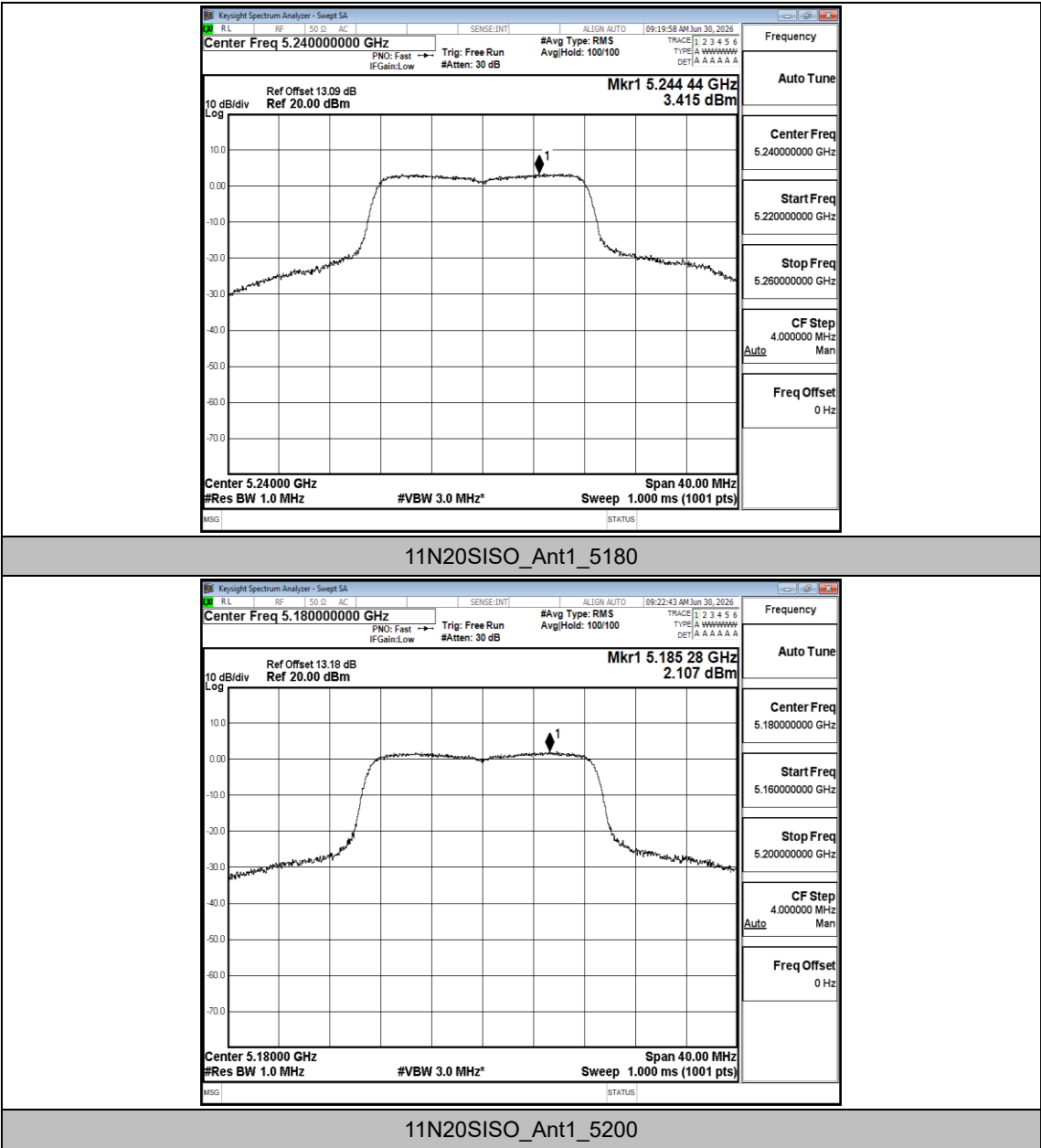
D.3 Maximum power spectral density

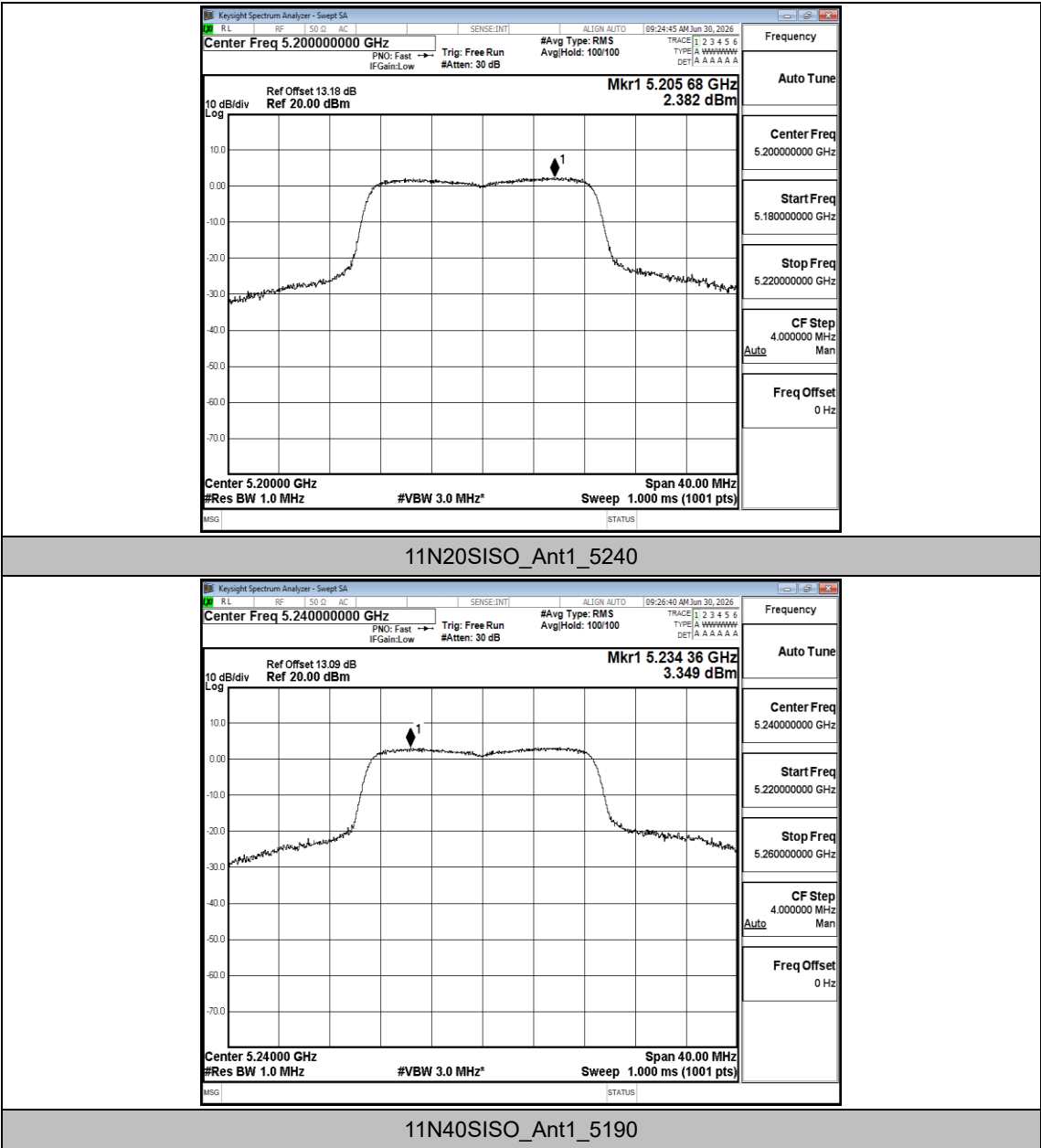
Test Result

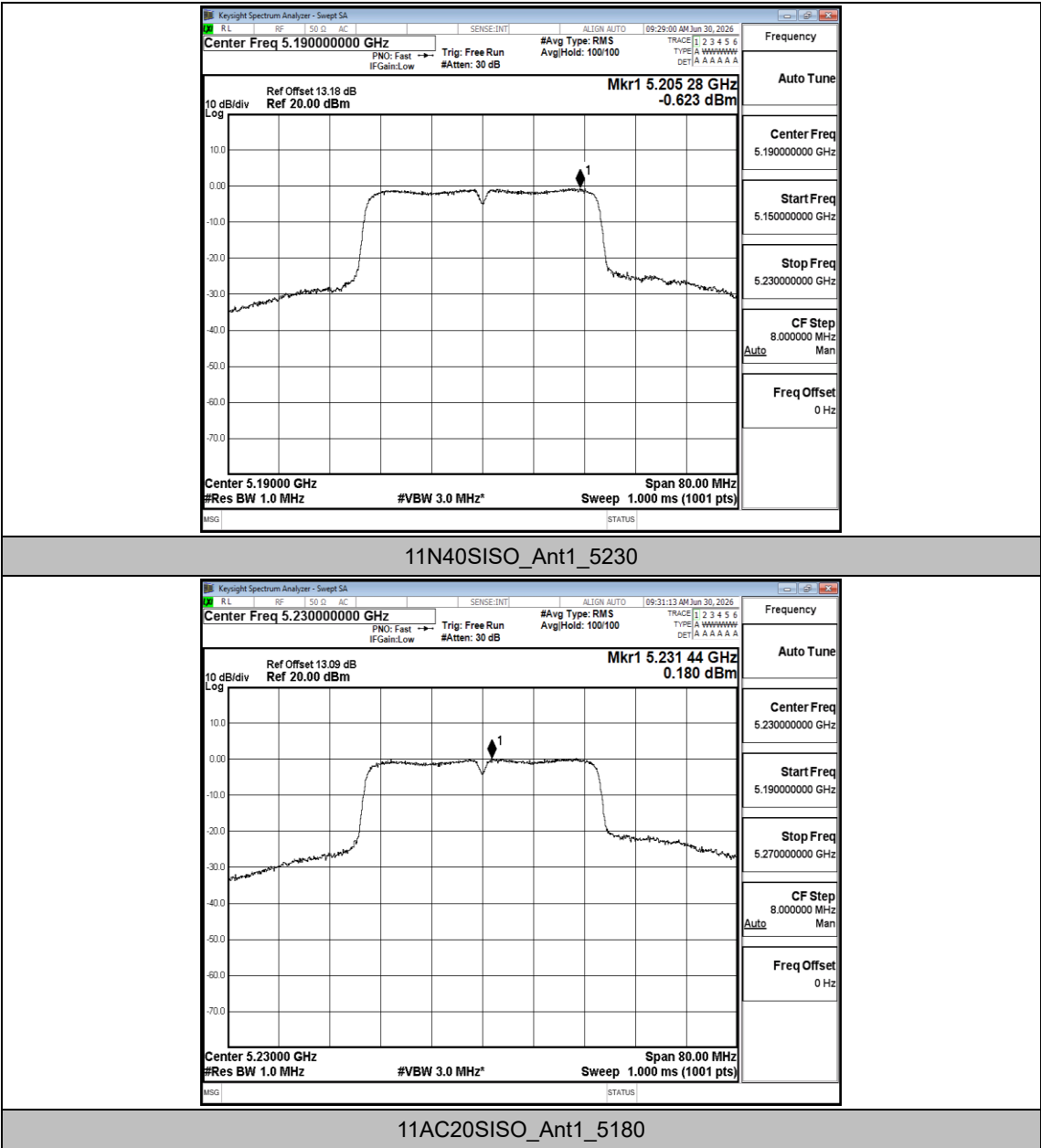
TestMode	Antenna	Freq (MHz)	Raw Data [dBm/MHz]	DC Factor	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	2.04	0.00	2.04	≤11.00	PASS
		5200	2.54	0.00	2.54	≤11.00	PASS
		5240	3.42	0.00	3.42	≤11.00	PASS
11N20SISO	Ant1	5180	2.11	0.00	2.11	≤11.00	PASS
		5200	2.38	0.00	2.38	≤11.00	PASS
		5240	3.35	0.00	3.35	≤11.00	PASS
11N40SISO	Ant1	5190	-0.62	0.00	-0.62	≤11.00	PASS
		5230	0.18	0.00	0.18	≤11.00	PASS
11AC20SISO	Ant1	5180	2.09	0.00	2.09	≤11.00	PASS
		5200	2.65	0.00	2.65	≤11.00	PASS
		5240	3.6	0.00	3.60	≤11.00	PASS
11AC40SISO	Ant1	5190	-0.41	0.00	-0.41	≤11.00	PASS
		5230	0.35	0.00	0.35	≤11.00	PASS
11AC80SISO	Ant1	5210	-1.68	0.00	-1.68	≤11.00	PASS

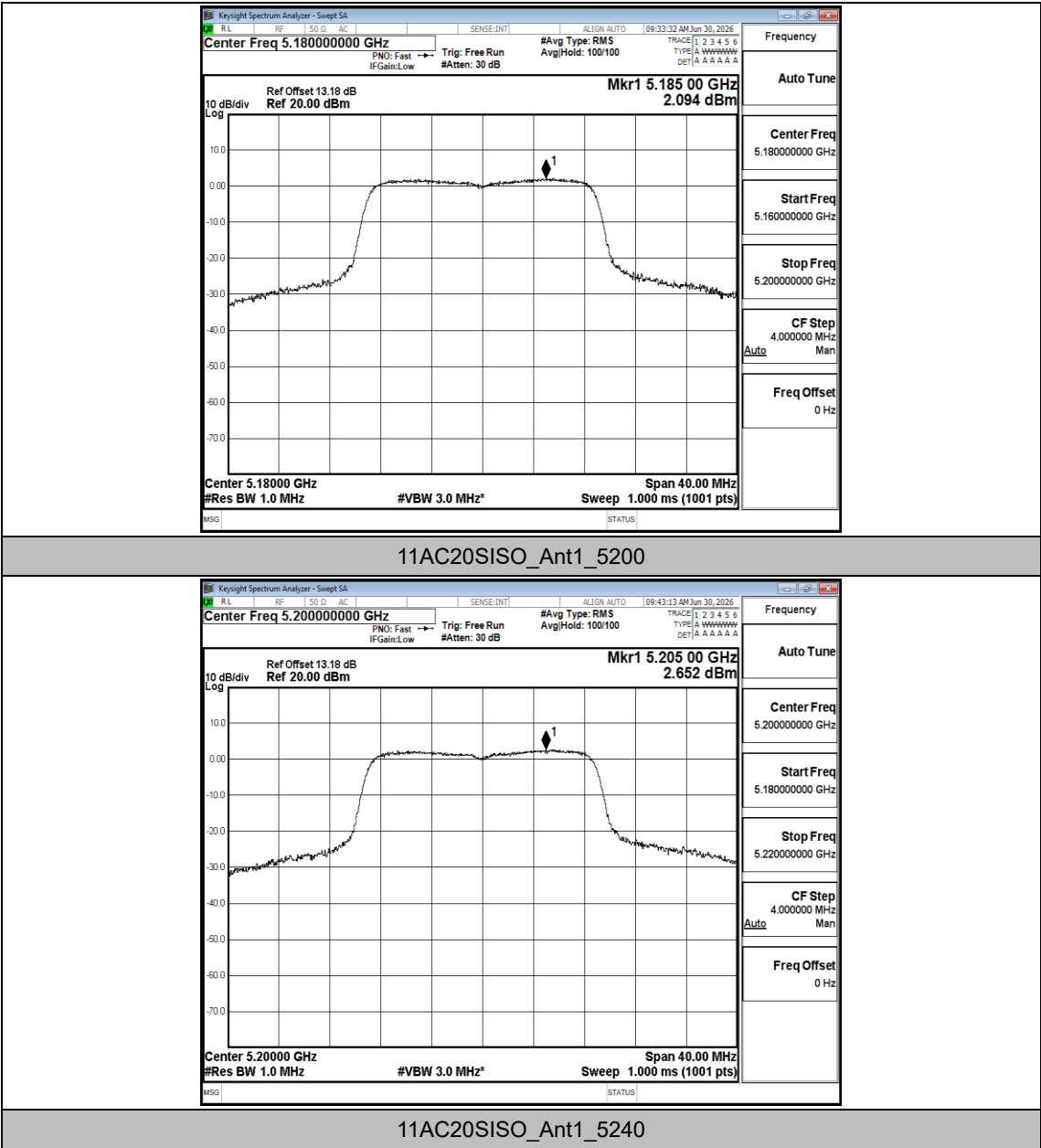
Test Graphs

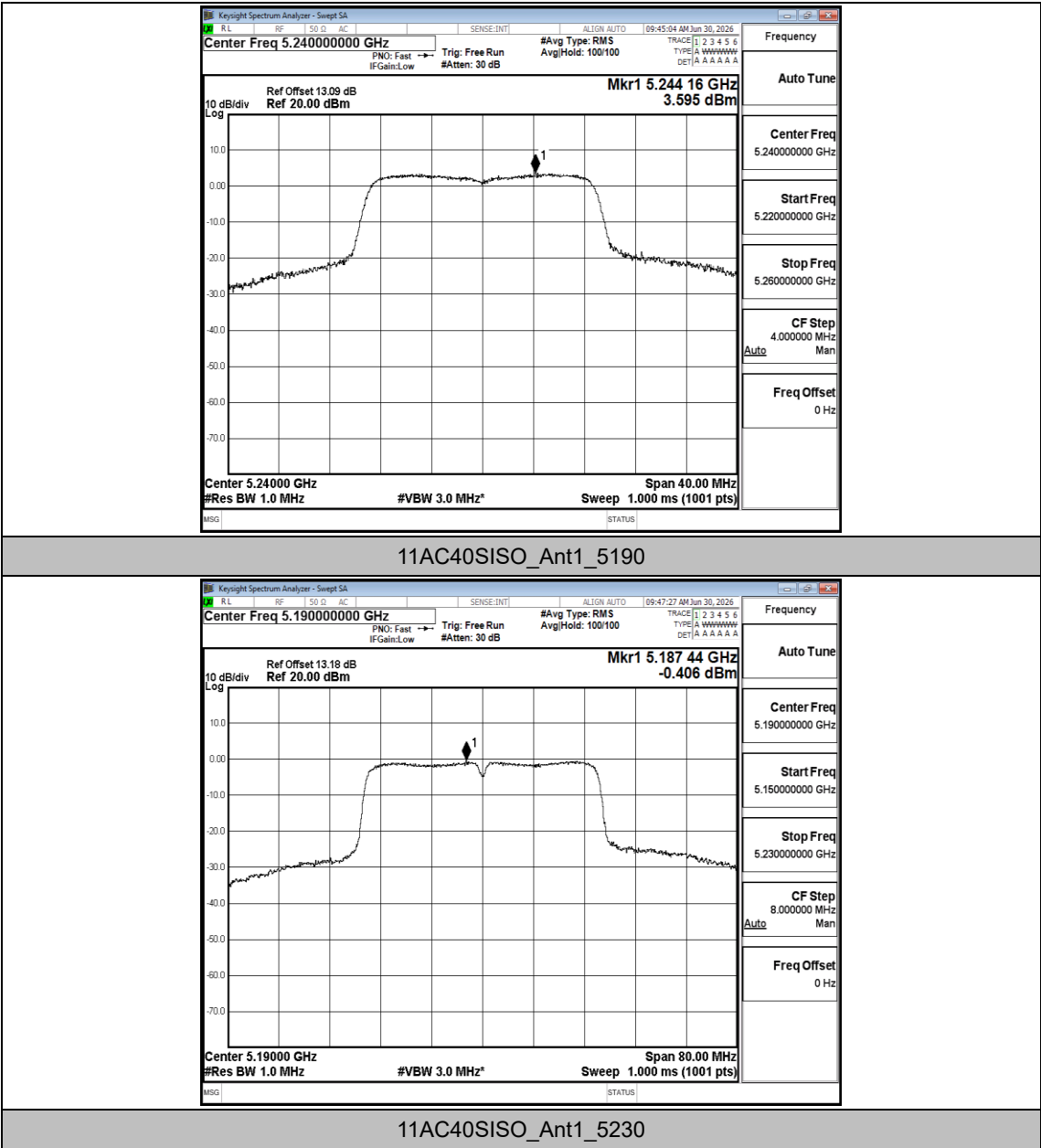


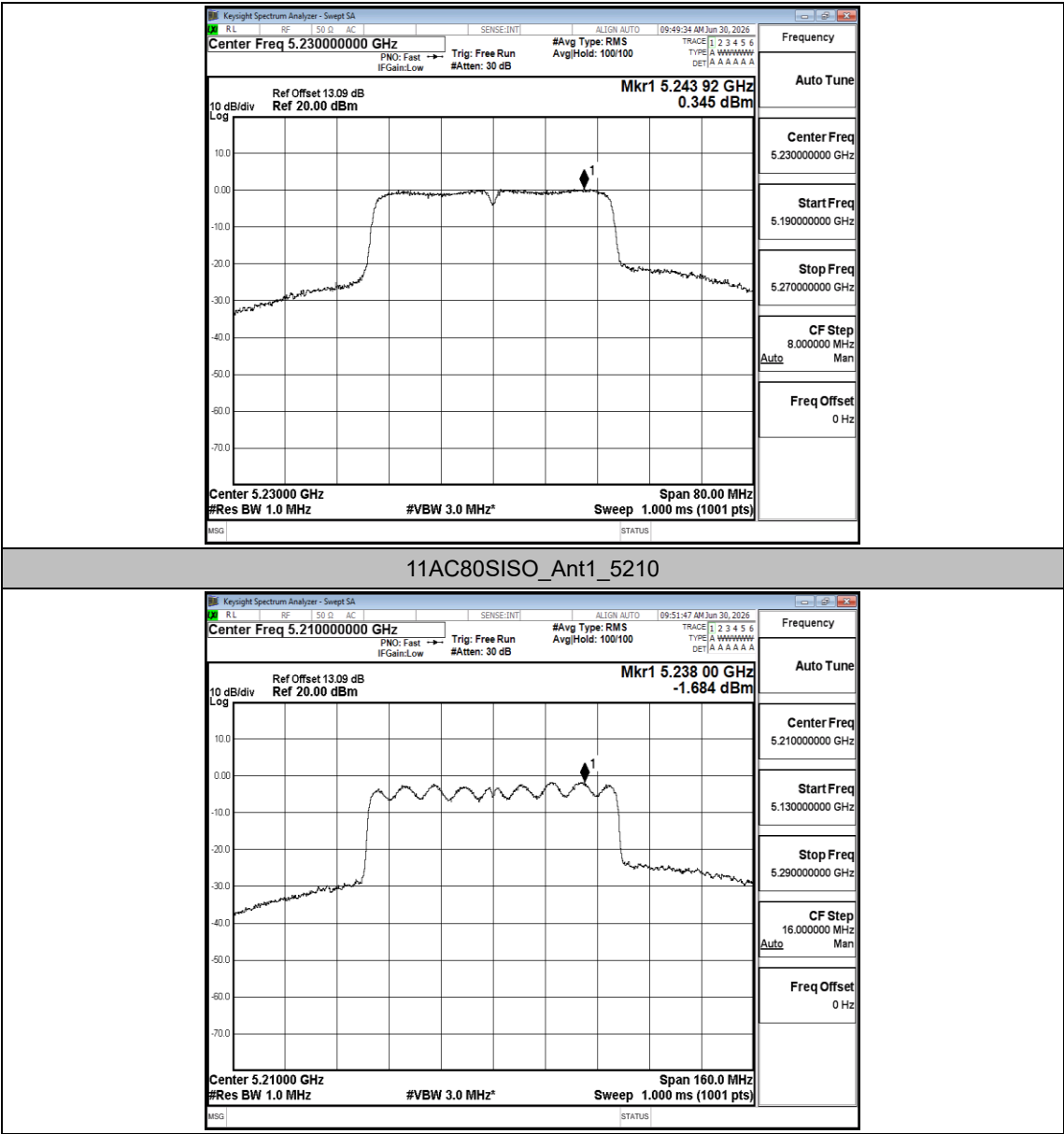








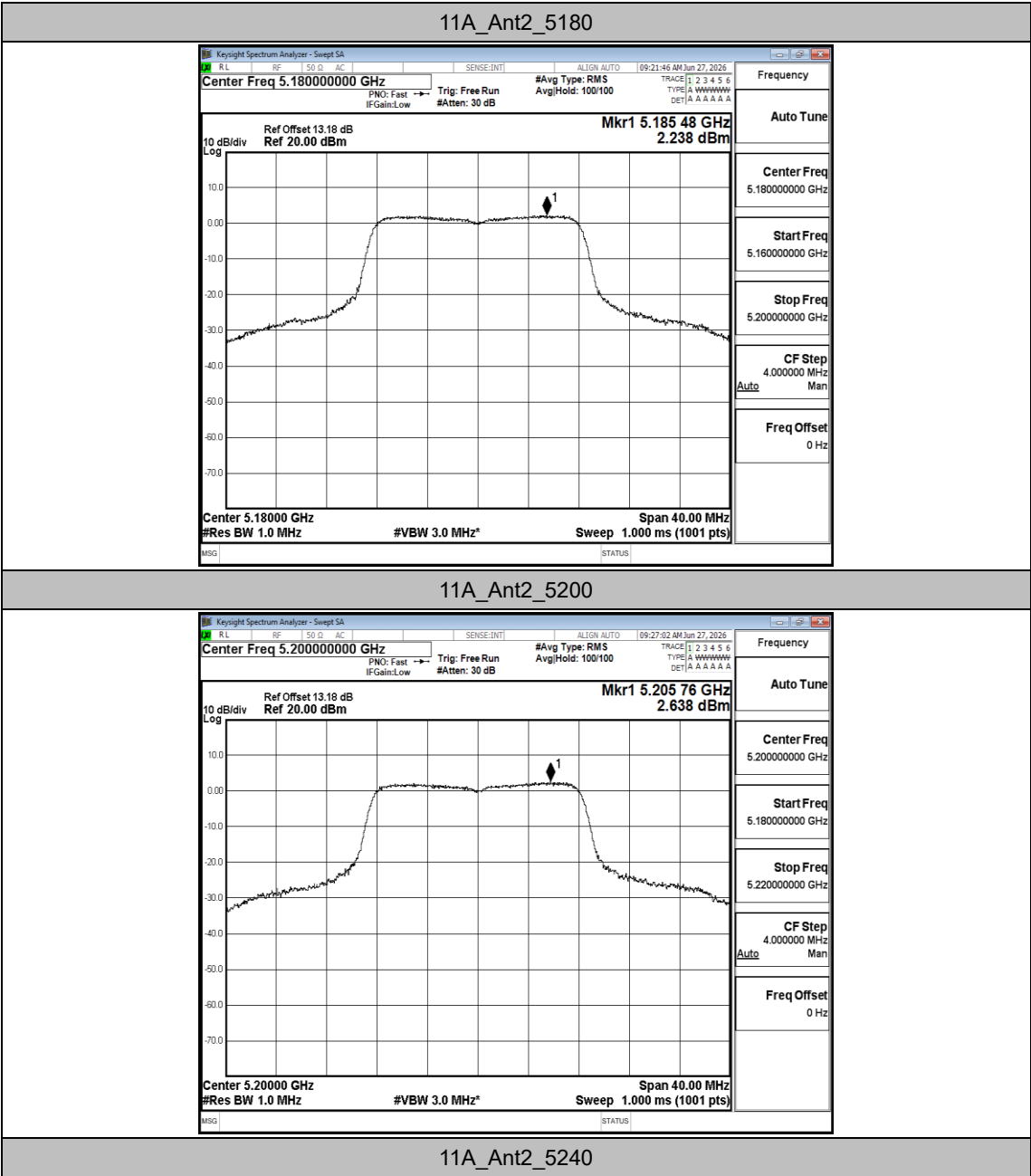


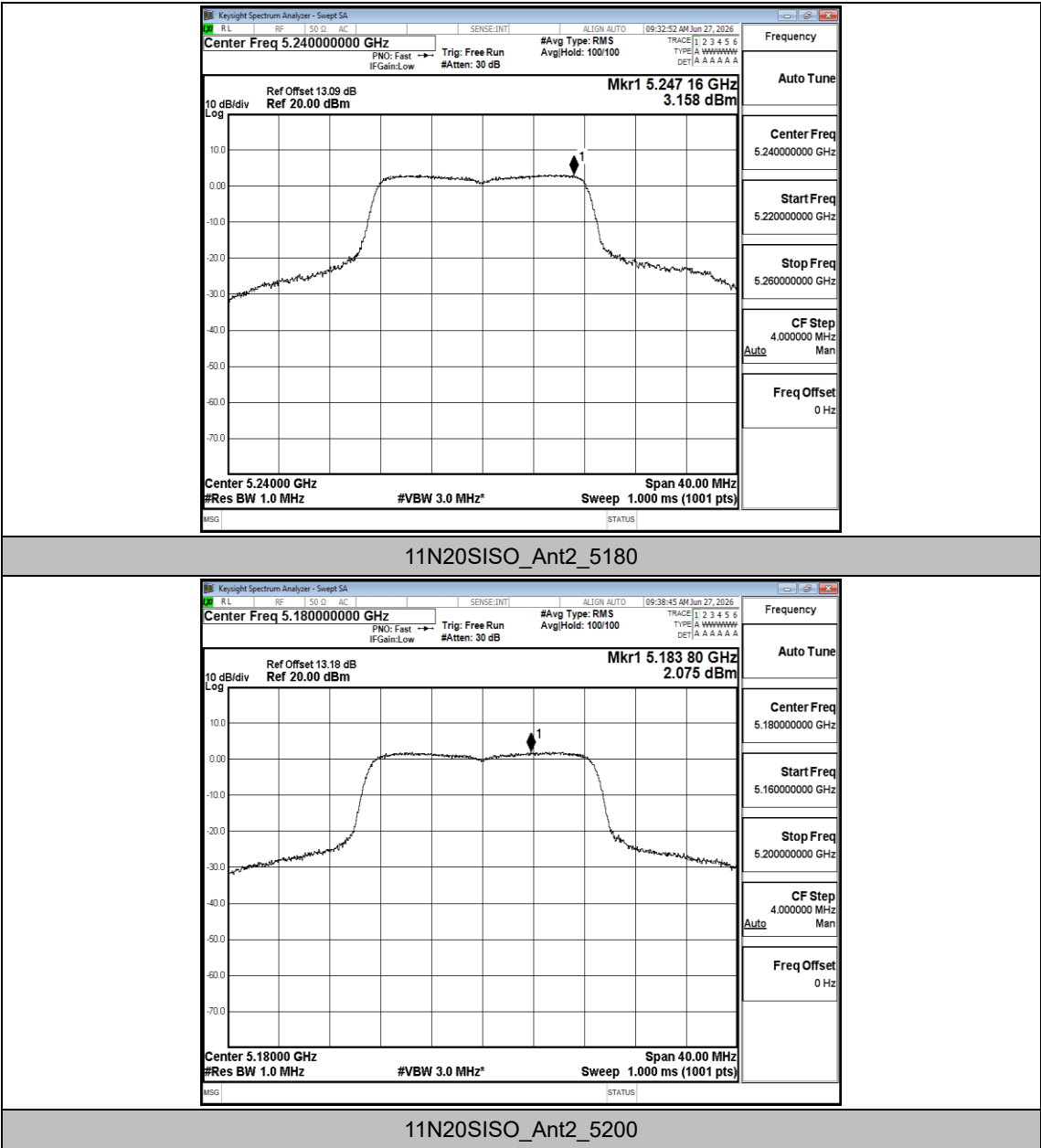


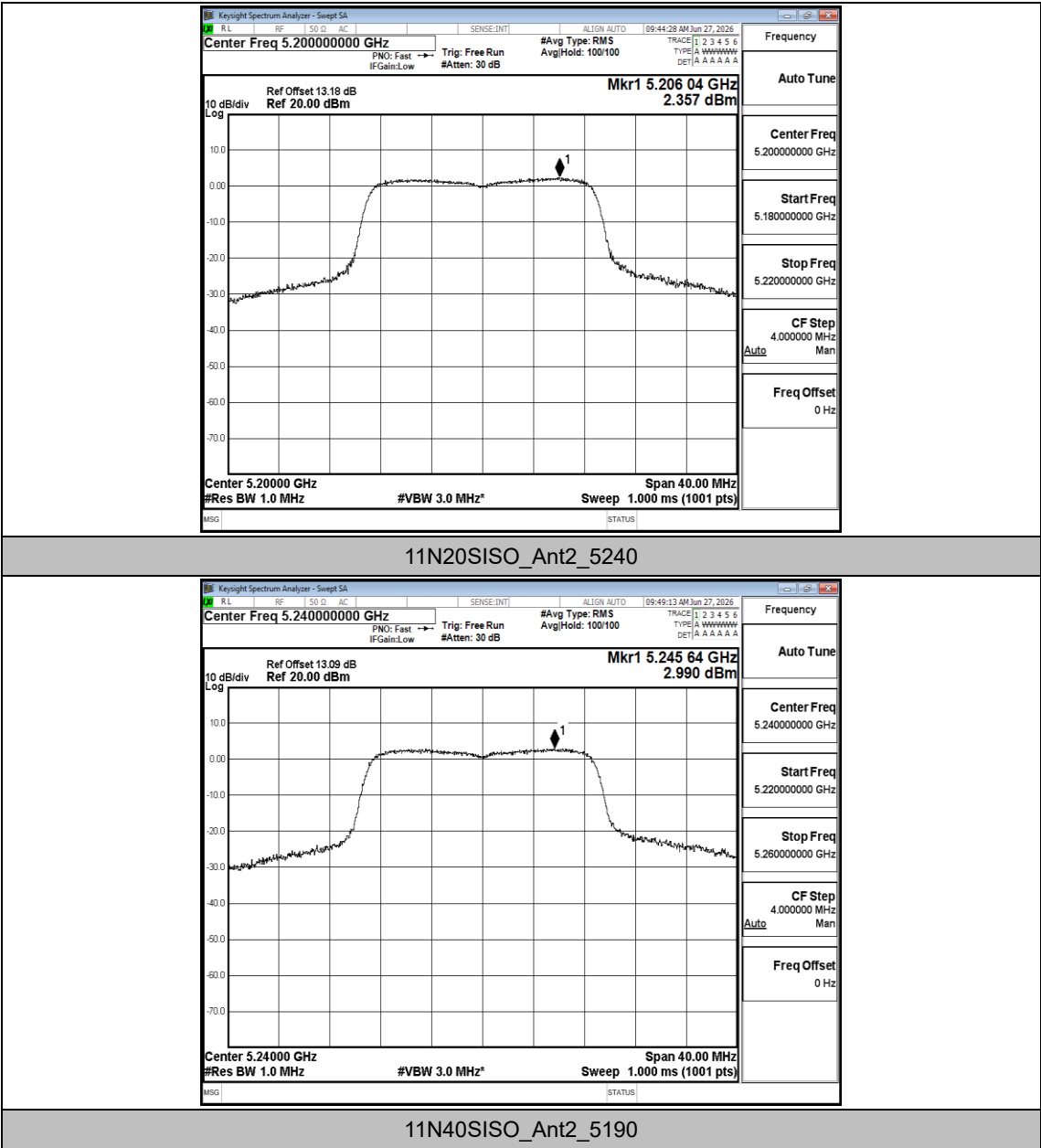
Test Result

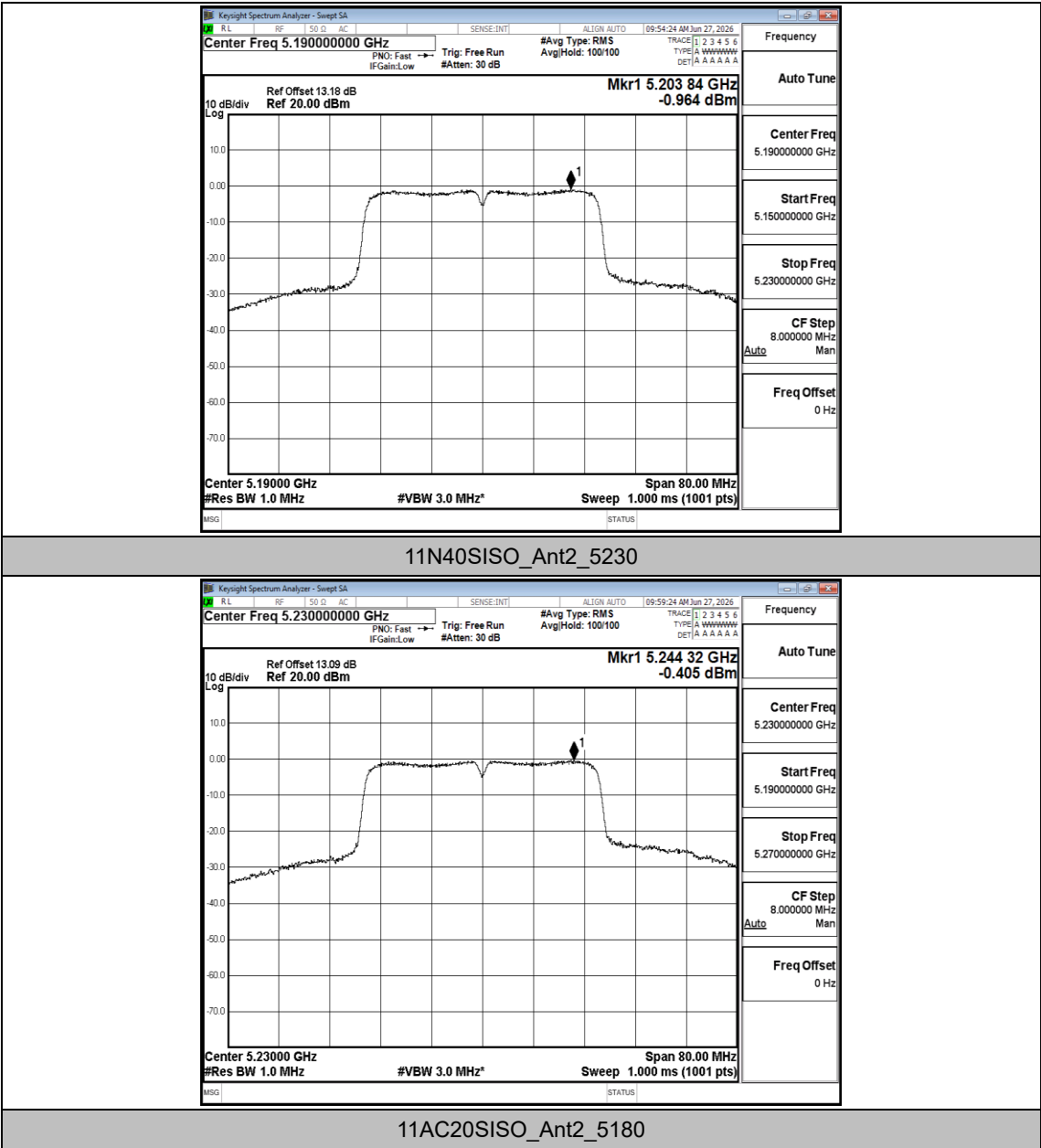
TestMode	Antenna	Freq (MHz)	Raw Data [dBm/MHz]	DC Factor	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant2	5180	2.24	0.00	2.24	≤11.00	PASS
		5200	2.64	0.00	2.64	≤11.00	PASS
		5240	3.16	0.00	3.16	≤11.00	PASS
11N20SISO	Ant2	5180	2.08	0.00	2.08	≤11.00	PASS
		5200	2.36	0.00	2.36	≤11.00	PASS
		5240	2.99	0.00	2.99	≤11.00	PASS
11N40SISO	Ant2	5190	-0.96	0.00	-0.96	≤11.00	PASS
		5230	-0.41	0.00	-0.41	≤11.00	PASS
11AC20SISO	Ant2	5180	2.2	0.00	2.20	≤11.00	PASS
		5200	2.28	0.00	2.28	≤11.00	PASS
		5240	2.91	0.00	2.91	≤11.00	PASS
11AC40SISO	Ant2	5190	-0.92	0.00	-0.92	≤11.00	PASS
		5230	-0.5	0.00	-0.50	≤11.00	PASS
11AC80SISO	Ant2	5210	-2.04	0.00	-2.04	≤11.00	PASS

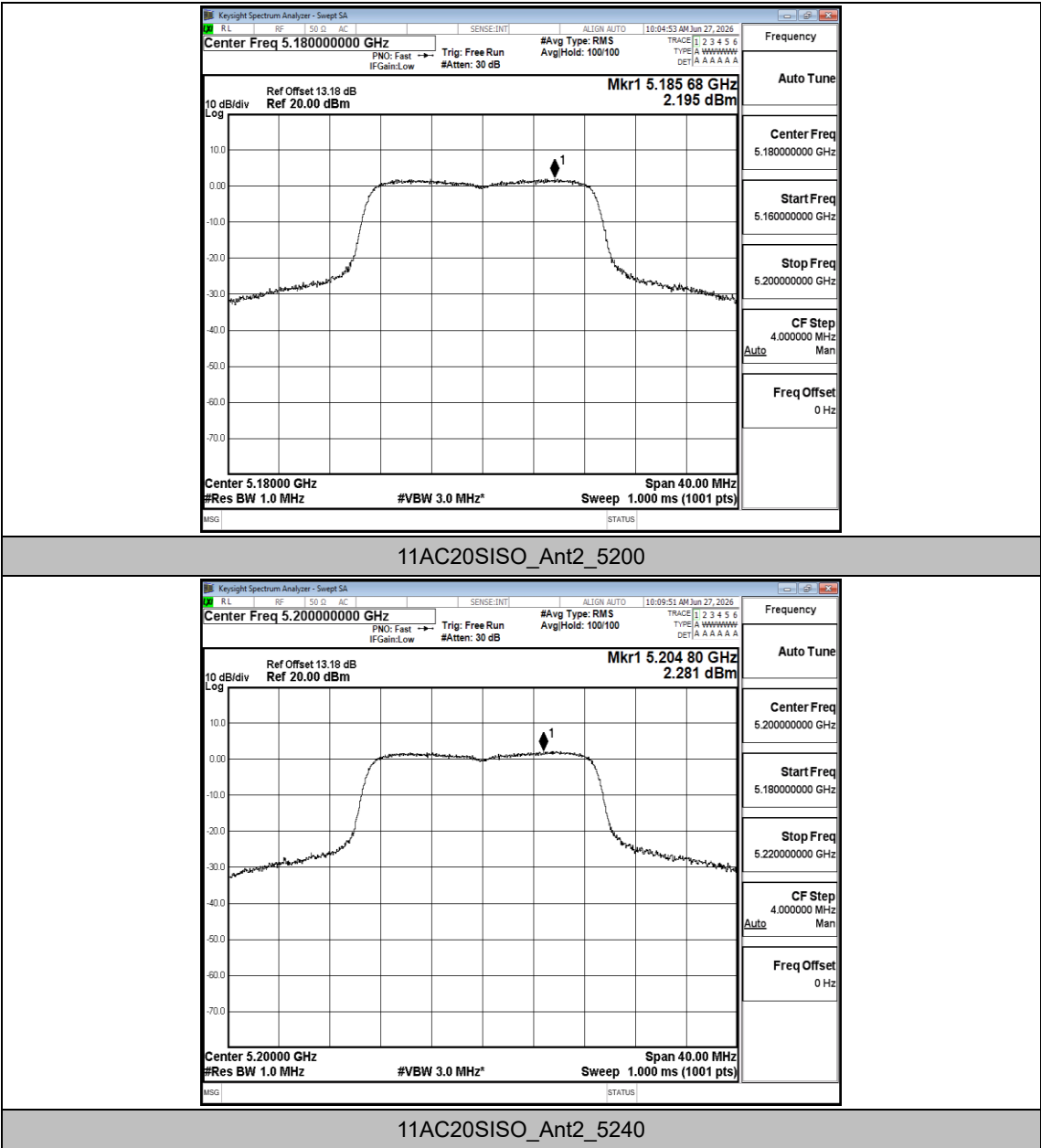
Test Graphs

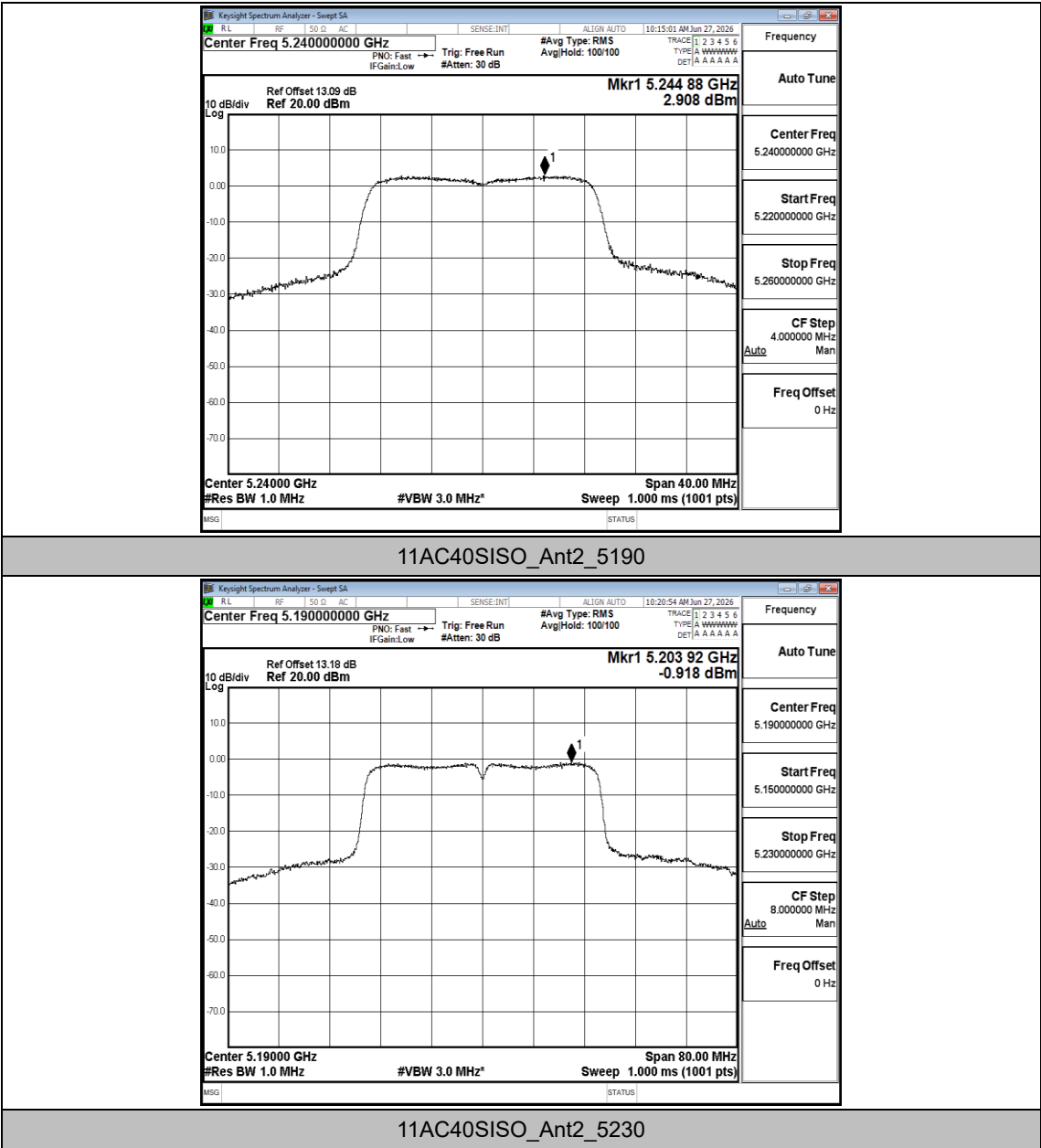


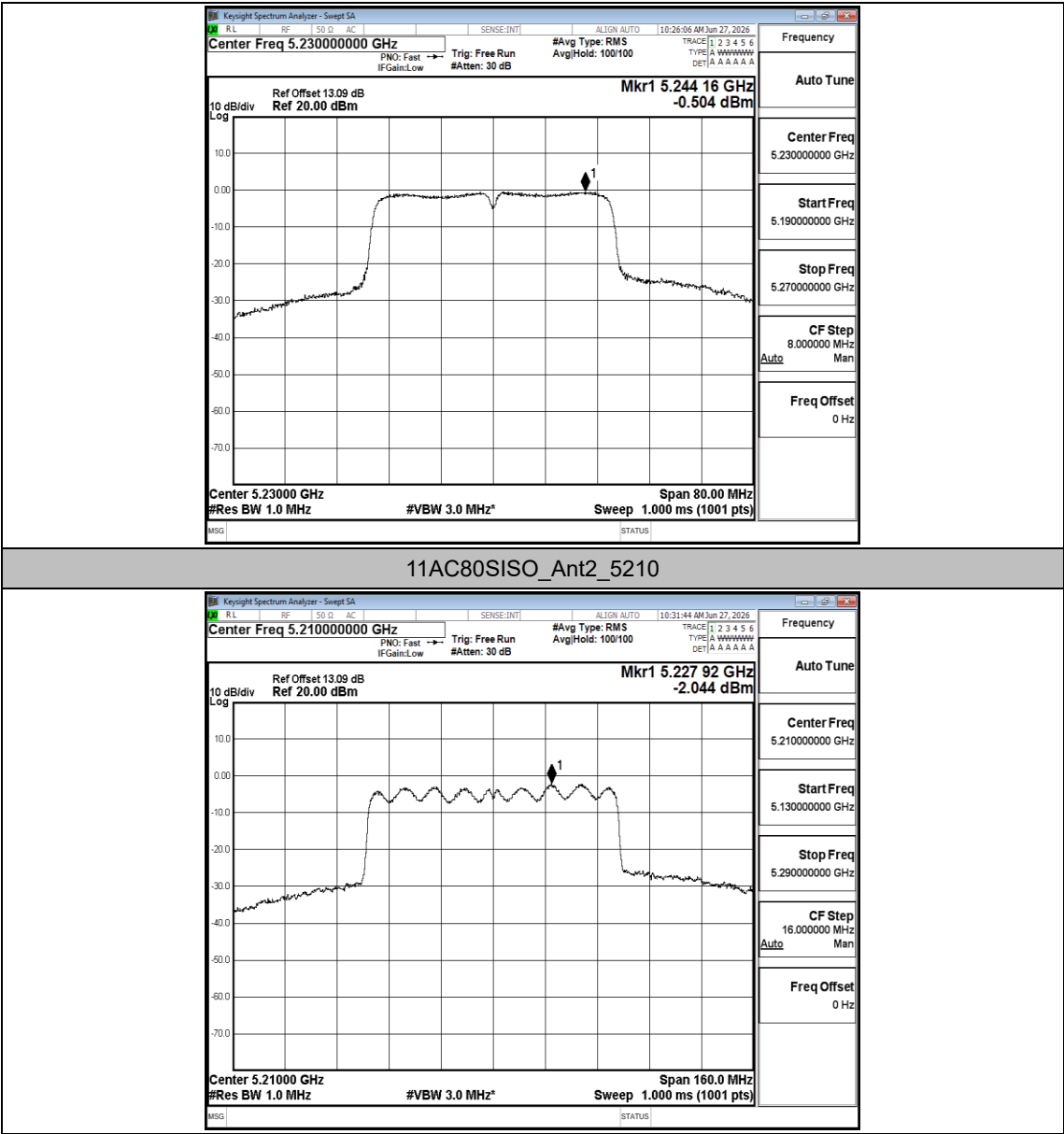












D.4 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant1	Low	5180	AV	4500.000	-62.89	≤-43.20	2.67	0.00	35.01	≤54	PASS
				AV	5146.800	-44.05	≤-43.20	2.67	0.00	53.85	≤54	PASS
				AV	5150.000	-48.26	≤-43.20	2.67	0.00	49.64	≤54	PASS
				Peak	4500.000	-55.3	≤-29.00	2.67	0.00	42.60	≤68.2	PASS
				Peak	5146.800	-38.32	≤-29.00	2.67	0.00	59.58	≤68.2	PASS
				Peak	5150.000	-37.68	≤-29.00	2.67	0.00	60.22	≤68.2	PASS
		High	5240	AV	5350.000	-60.89	≤-43.20	2.67	0.00	37.01	≤54	PASS
				AV	5403.360	-56.56	≤-43.20	2.67	0.00	41.34	≤54	PASS
				AV	5460.000	-59.23	≤-43.20	2.67	0.00	38.67	≤54	PASS
				Peak	5350.000	-54.19	≤-29.00	2.67	0.00	43.71	≤68.2	PASS
				Peak	5405.040	-49.67	≤-29.00	2.67	0.00	48.23	≤68.2	PASS
				Peak	5460.000	-55.52	≤-29.00	2.67	0.00	42.38	≤68.2	PASS
11N20SISO	Ant1	Low	5180	AV	4500.000	-61.99	≤-43.20	2.67	0.00	35.91	≤54	PASS
				AV	5148.900	-45.64	≤-43.20	2.67	0.00	52.26	≤54	PASS
				AV	5150.000	-45.98	≤-43.20	2.67	0.00	51.92	≤54	PASS
				Peak	4500.000	-56.15	≤-29.00	2.67	0.00	41.75	≤68.2	PASS
				Peak	5148.200	-37.08	≤-29.00	2.67	0.00	60.82	≤68.2	PASS
				Peak	5150.000	-40.24	≤-29.00	2.67	0.00	57.66	≤68.2	PASS
		High	5240	AV	5350.000	-58.67	≤-43.20	2.67	0.00	39.23	≤54	PASS
				AV	5397.360	-56.77	≤-43.20	2.67	0.00	41.13	≤54	PASS
				AV	5460.000	-59.44	≤-43.20	2.67	0.00	38.46	≤54	PASS
				Peak	5350.000	-54.04	≤-29.00	2.67	0.00	43.86	≤68.2	PASS
				Peak	5397.600	-48.93	≤-29.00	2.67	0.00	48.97	≤68.2	PASS
				Peak	5460.000	-51.94	≤-29.00	2.67	0.00	45.96	≤68.2	PASS
11N40SISO	Ant1	Low	5190	AV	4500.000	-61.8	≤-43.20	2.67	0.00	36.10	≤54	PASS
				AV	5108.300	-57.65	≤-43.20	2.67	0.00	40.25	≤54	PASS
				AV	5150.000	-61.41	≤-43.20	2.67	0.00	36.49	≤54	PASS
				Peak	4500.000	-55.7	≤-29.00	2.67	0.00	42.20	≤68.2	PASS
				Peak	5050.900	-49.43	≤-29.00	2.67	0.00	48.47	≤68.2	PASS
				Peak	5150.000	-50.91	≤-29.00	2.67	0.00	46.99	≤68.2	PASS
		High	5230	AV	5350.000	-57.86	≤-43.20	2.67	0.00	40.04	≤54	PASS
				AV	5379.660	-56.72	≤-43.20	2.67	0.00	41.18	≤54	PASS
				AV	5460.000	-60.44	≤-43.20	2.67	0.00	37.46	≤54	PASS
				Peak	5350.000	-50.78	≤-29.00	2.67	0.00	47.12	≤68.2	PASS

				Peak	5362.760	-46.35	≤-29.00	2.67	0.00	51.55	≤68.2	PASS
				Peak	5460.000	-55.93	≤-29.00	2.67	0.00	41.97	≤68.2	PASS
11AC20SISO	Ant1	Low	5180	AV	4500.000	-61.81	≤-43.20	2.67	0.00	36.09	≤54	PASS
				AV	5148.200	-45.61	≤-43.20	2.67	0.00	52.29	≤54	PASS
				AV	5150.000	-45.38	≤-43.20	2.67	0.00	52.52	≤54	PASS
				Peak	4500.000	-54.93	≤-29.00	2.67	0.00	42.97	≤68.2	PASS
				Peak	5145.400	-37.55	≤-29.00	2.67	0.00	60.35	≤68.2	PASS
				Peak	5150.000	-37.55	≤-29.00	2.67	0.00	60.35	≤68.2	PASS
		High	5240	AV	5350.000	-59.98	≤-43.20	2.67	0.00	37.92	≤54	PASS
				AV	5404.320	-56.19	≤-43.20	2.67	0.00	41.71	≤54	PASS
				AV	5460.000	-60.41	≤-43.20	2.67	0.00	37.49	≤54	PASS
				Peak	5350.000	-54.89	≤-29.00	2.67	0.00	43.01	≤68.2	PASS
				Peak	5394.960	-49.38	≤-29.00	2.67	0.00	48.52	≤68.2	PASS
				Peak	5460.000	-54.22	≤-29.00	2.67	0.00	43.68	≤68.2	PASS
11AC40SISO	Ant1	Low	5190	AV	4500.000	-61.89	≤-43.20	2.67	0.00	36.01	≤54	PASS
				AV	5143.300	-56.72	≤-43.20	2.67	0.00	41.18	≤54	PASS
				AV	5150.000	-59.14	≤-43.20	2.67	0.00	38.76	≤54	PASS
				Peak	4500.000	-57.1	≤-29.00	2.67	0.00	40.80	≤68.2	PASS
				Peak	4791.900	-49.62	≤-29.00	2.67	0.00	48.28	≤68.2	PASS
				Peak	5150.000	-55.16	≤-29.00	2.67	0.00	42.74	≤68.2	PASS
		High	5230	AV	5350.000	-58.59	≤-43.20	2.67	0.00	39.31	≤54	PASS
				AV	5353.660	-54.52	≤-43.20	2.67	0.00	43.38	≤54	PASS
				AV	5460.000	-58.99	≤-43.20	2.67	0.00	38.91	≤54	PASS
				Peak	5350.000	-52.34	≤-29.00	2.67	0.00	45.56	≤68.2	PASS
				Peak	5353.660	-48.3	≤-29.00	2.67	0.00	49.60	≤68.2	PASS
				Peak	5460.000	-55.81	≤-29.00	2.67	0.00	42.09	≤68.2	PASS
11AC80SISO	Ant1	Low	5210	AV	4500.000	-63.01	≤-43.20	2.67	0.00	34.89	≤54	PASS
				AV	5149.500	-57.31	≤-43.20	2.67	0.00	40.59	≤54	PASS
				AV	5150.000	-62.15	≤-43.20	2.67	0.00	35.75	≤54	PASS
				Peak	4500.000	-56.9	≤-29.00	2.67	0.00	41.00	≤68.2	PASS
				Peak	5053.500	-49.66	≤-29.00	2.67	0.00	48.24	≤68.2	PASS
				Peak	5150.000	-50.03	≤-29.00	2.67	0.00	47.87	≤68.2	PASS
		High	5210	AV	5350.000	-46.55	≤-43.20	2.67	0.00	51.35	≤54	PASS
				AV	5354.720	-44.46	≤-43.20	2.67	0.00	53.44	≤54	PASS
				AV	5460.000	-60.3	≤-43.20	2.67	0.00	37.60	≤54	PASS
				Peak	5350.000	-41.42	≤-29.00	2.67	0.00	56.48	≤68.2	PASS
				Peak	5366.760	-33.91	≤-29.00	2.67	0.00	63.99	≤68.2	PASS
				Peak	5460.000	-52.69	≤-29.00	2.67	0.00	45.21	≤68.2	PASS

Note:

1. The Antenna Gain is compensated in the graph.

Test Graphs

