

Appendix D

RF Test Data for 5.2GWIFI (Conducted Measurement)

Product Name: Smart Phone

Test Model: ULTRA S25

Environmental Conditions

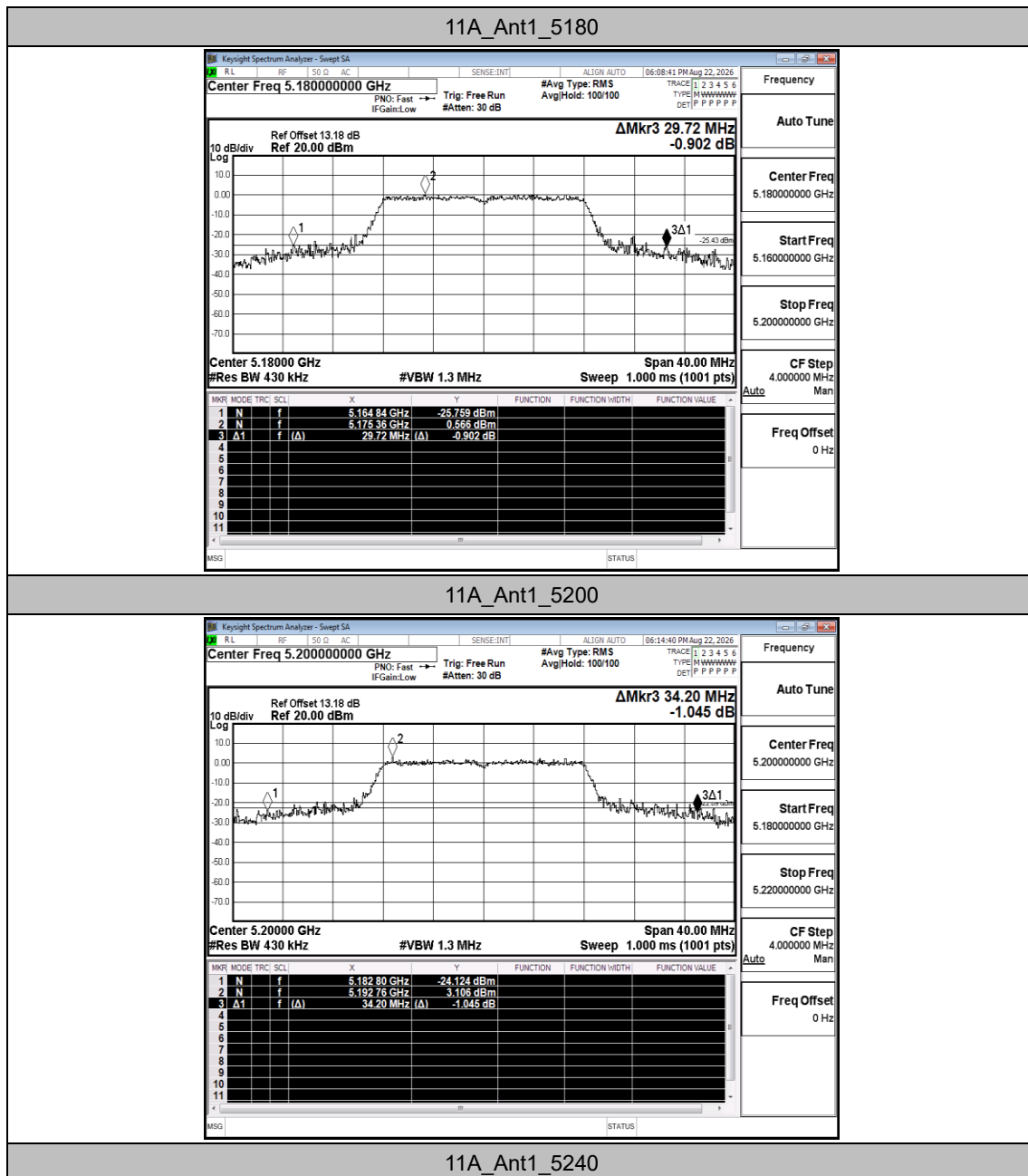
Temperature:	24.3°C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

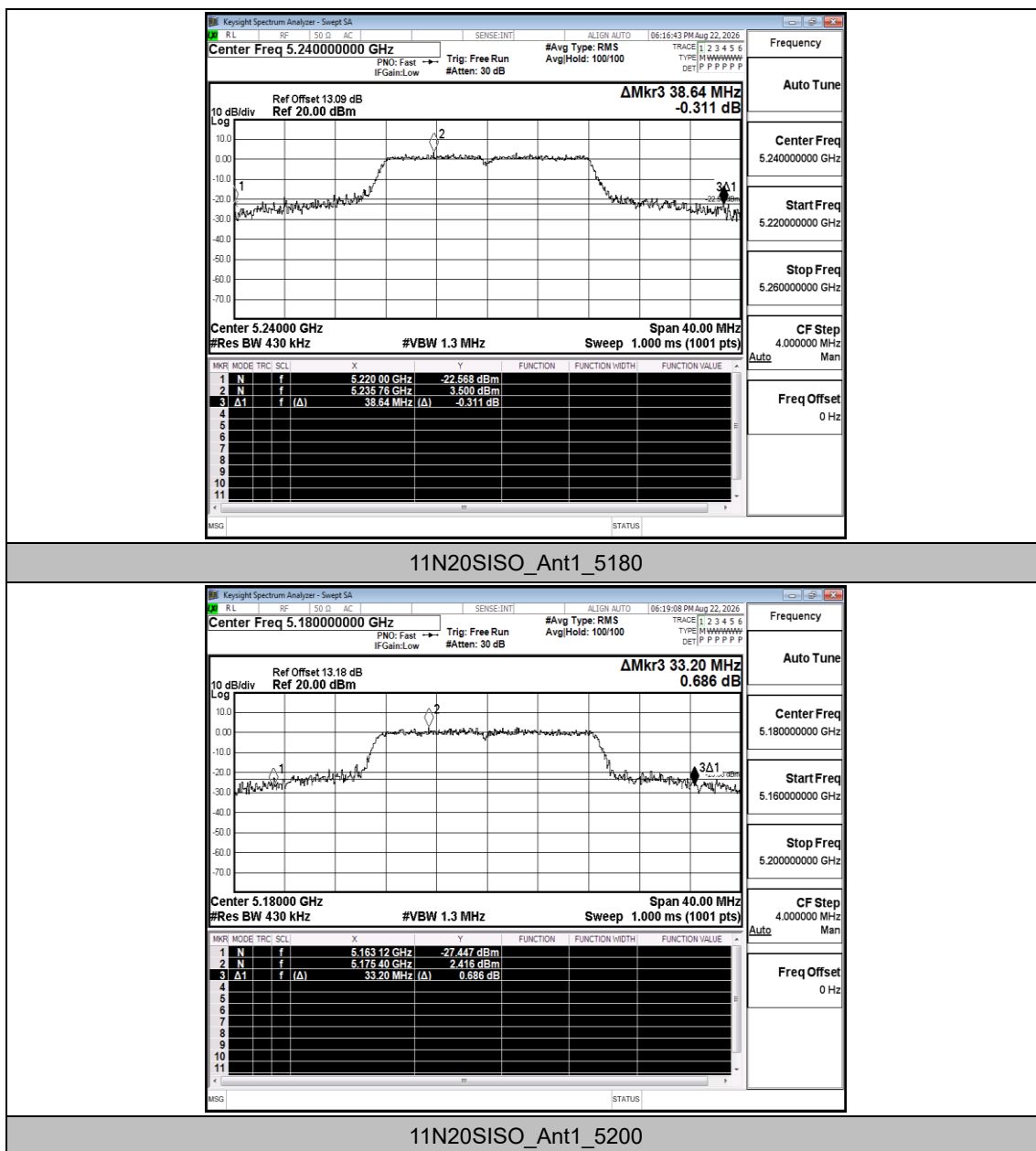
D.1 Emission Bandwidth

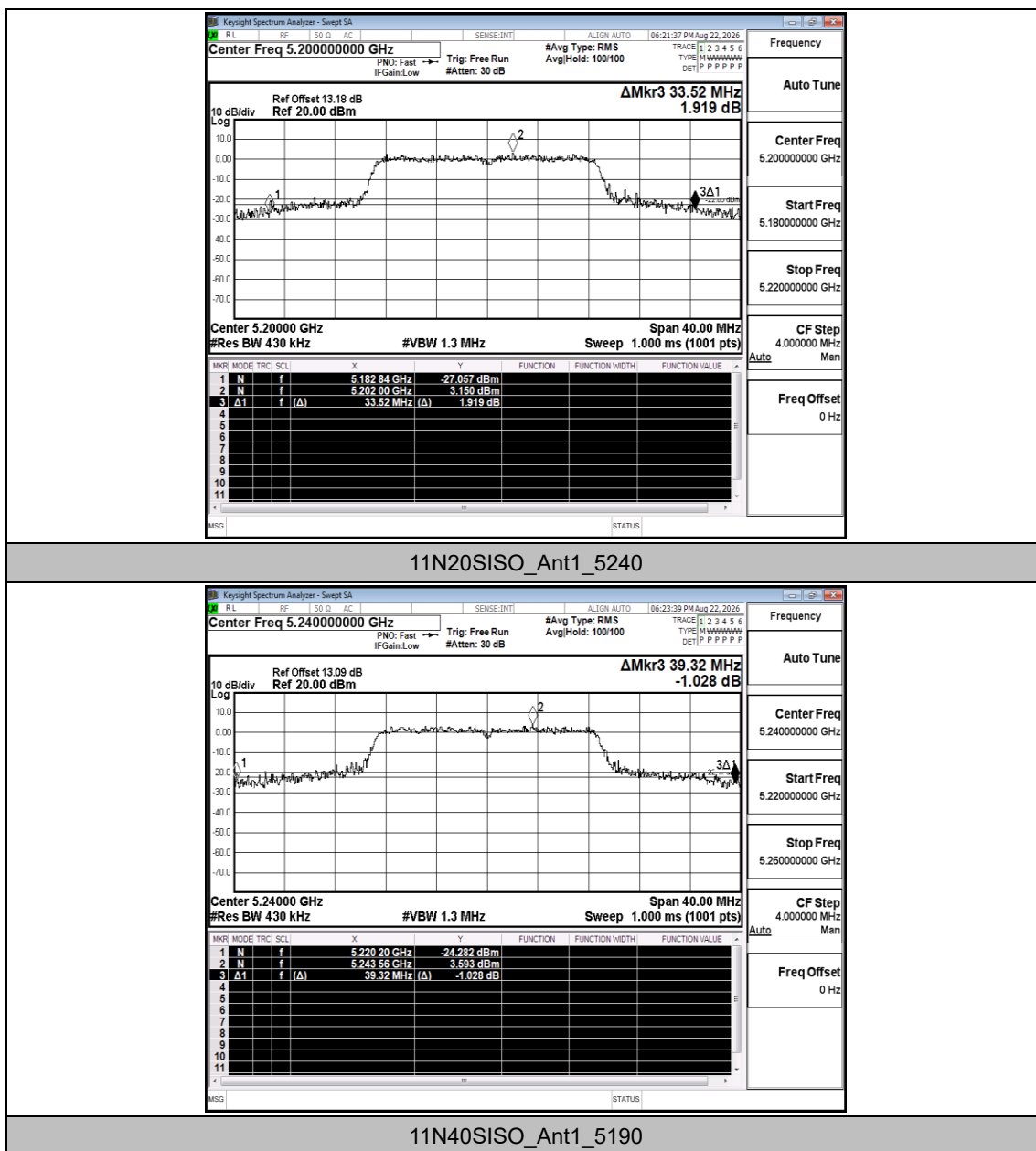
Test Result

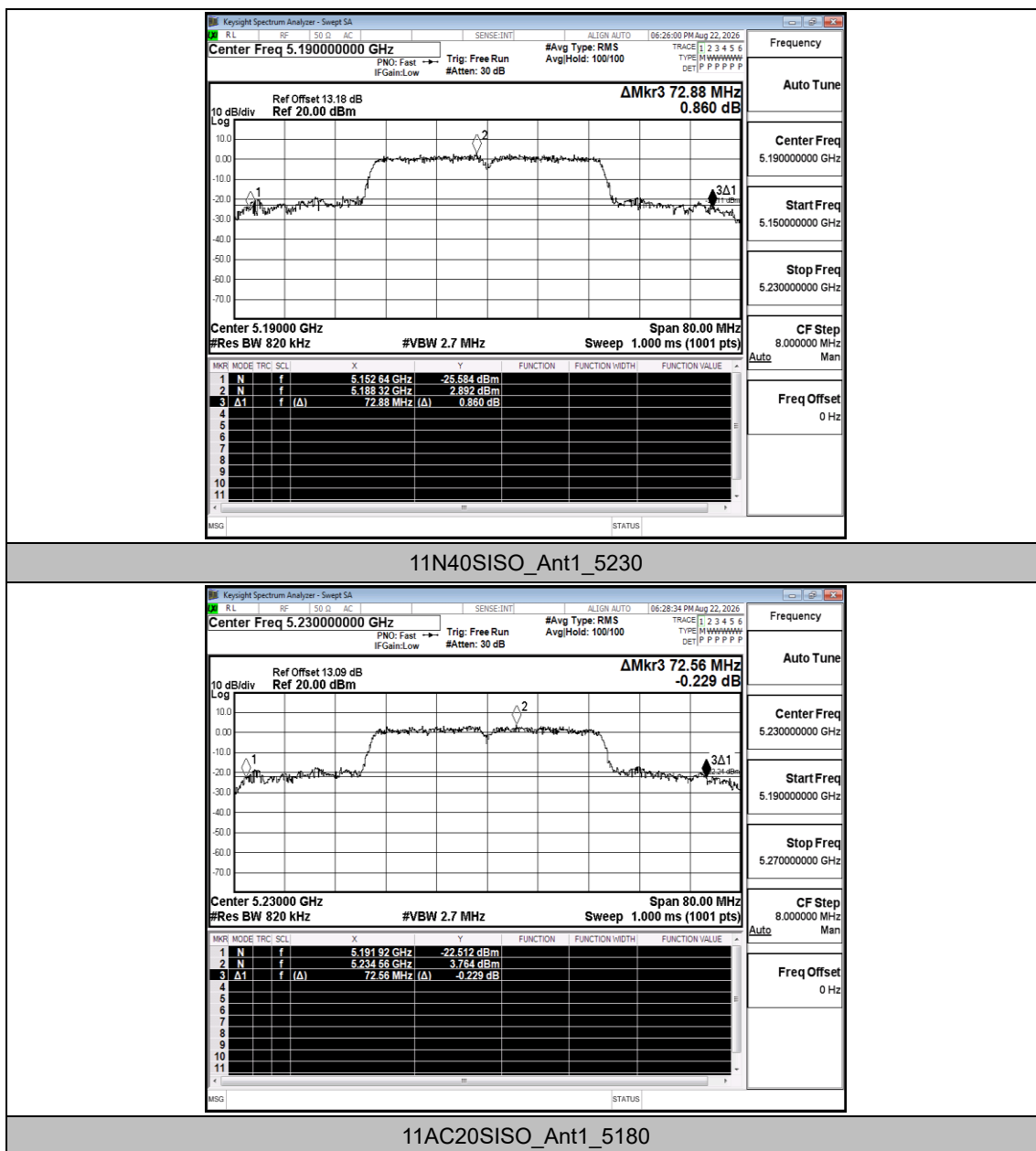
TestMode	Antenna	Freq (MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	29.720	5164.840	5194.560	---	---
		5200	34.200	5182.800	5217.000	---	---
		5240	38.640	5220.000	5258.640	---	---
11N20SISO	Ant1	5180	33.200	5163.120	5196.320	---	---
		5200	33.520	5182.840	5216.360	---	---
		5240	39.320	5220.200	5259.520	---	---
11N40SISO	Ant1	5190	72.880	5152.640	5225.520	---	---
		5230	72.560	5191.920	5264.480	---	---
11AC20SISO	Ant1	5180	37.080	5161.160	5198.240	---	---
		5200	37.200	5180.840	5218.040	---	---
		5240	37.880	5220.960	5258.840	---	---
11AC40SISO	Ant1	5190	71.200	5156.320	5227.520	---	---
		5230	74.880	5192.480	5267.360	---	---
11AC80SISO	Ant1	5210	130.720	5145.040	5275.760	---	---

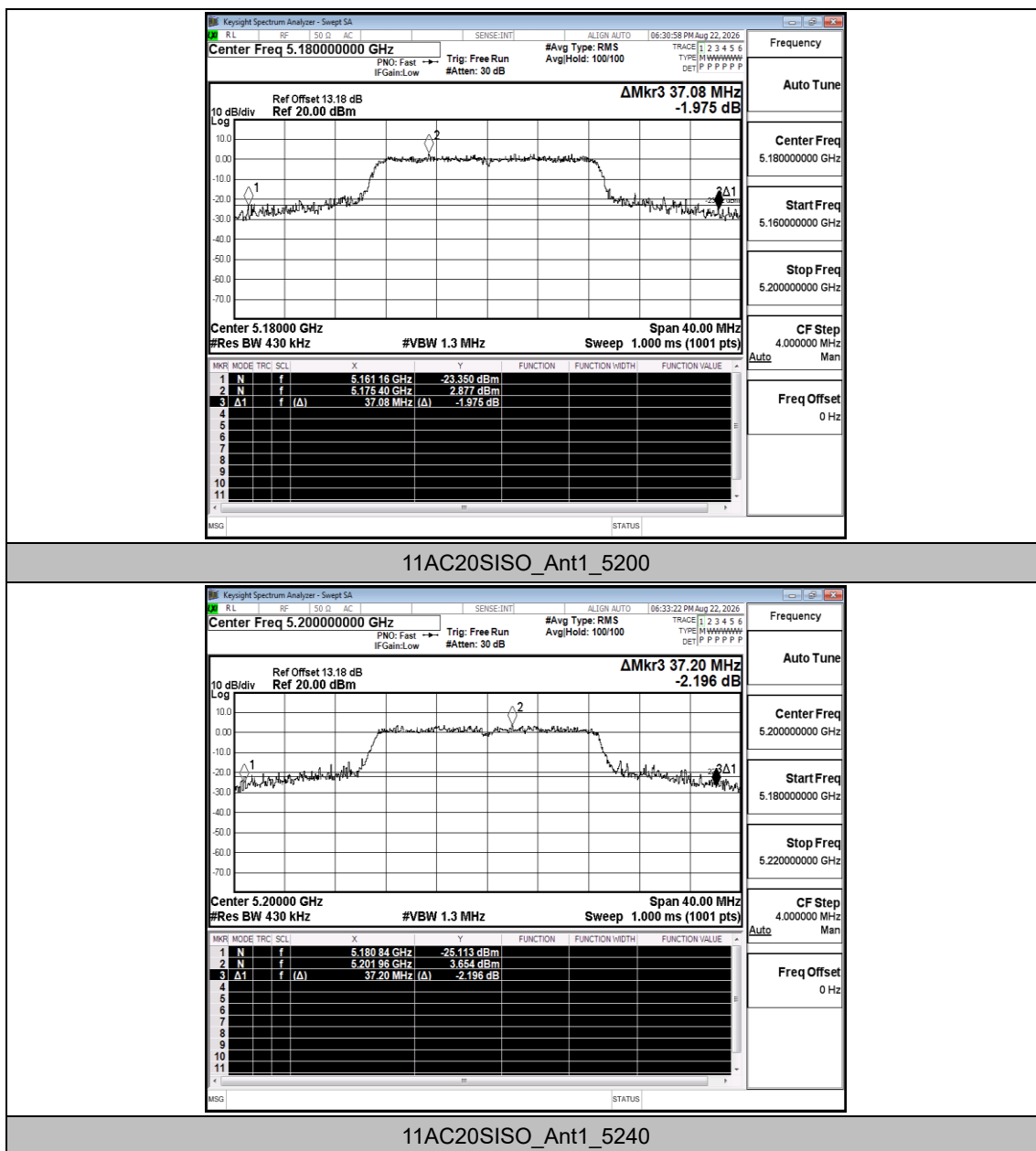
Test Graphs

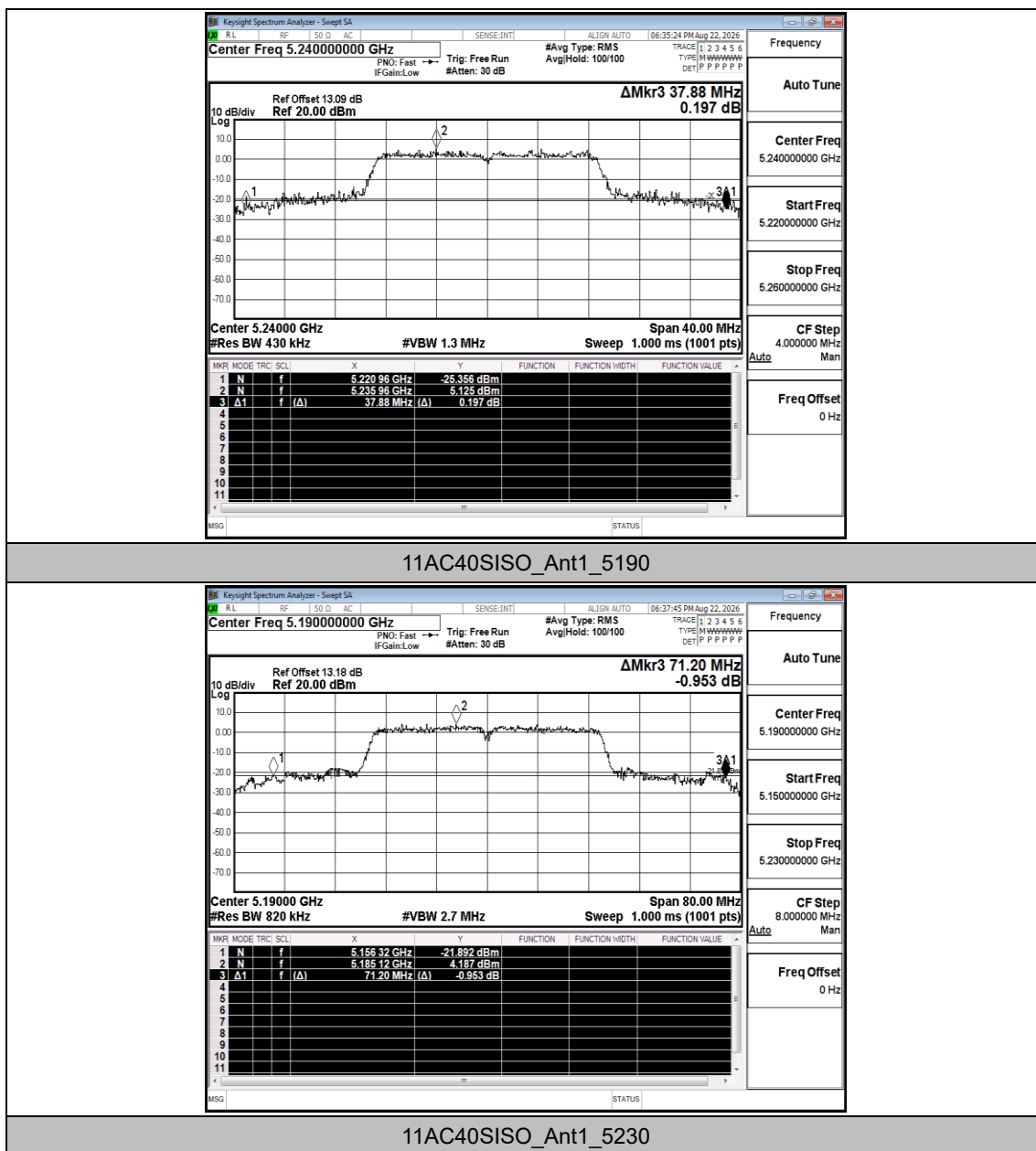


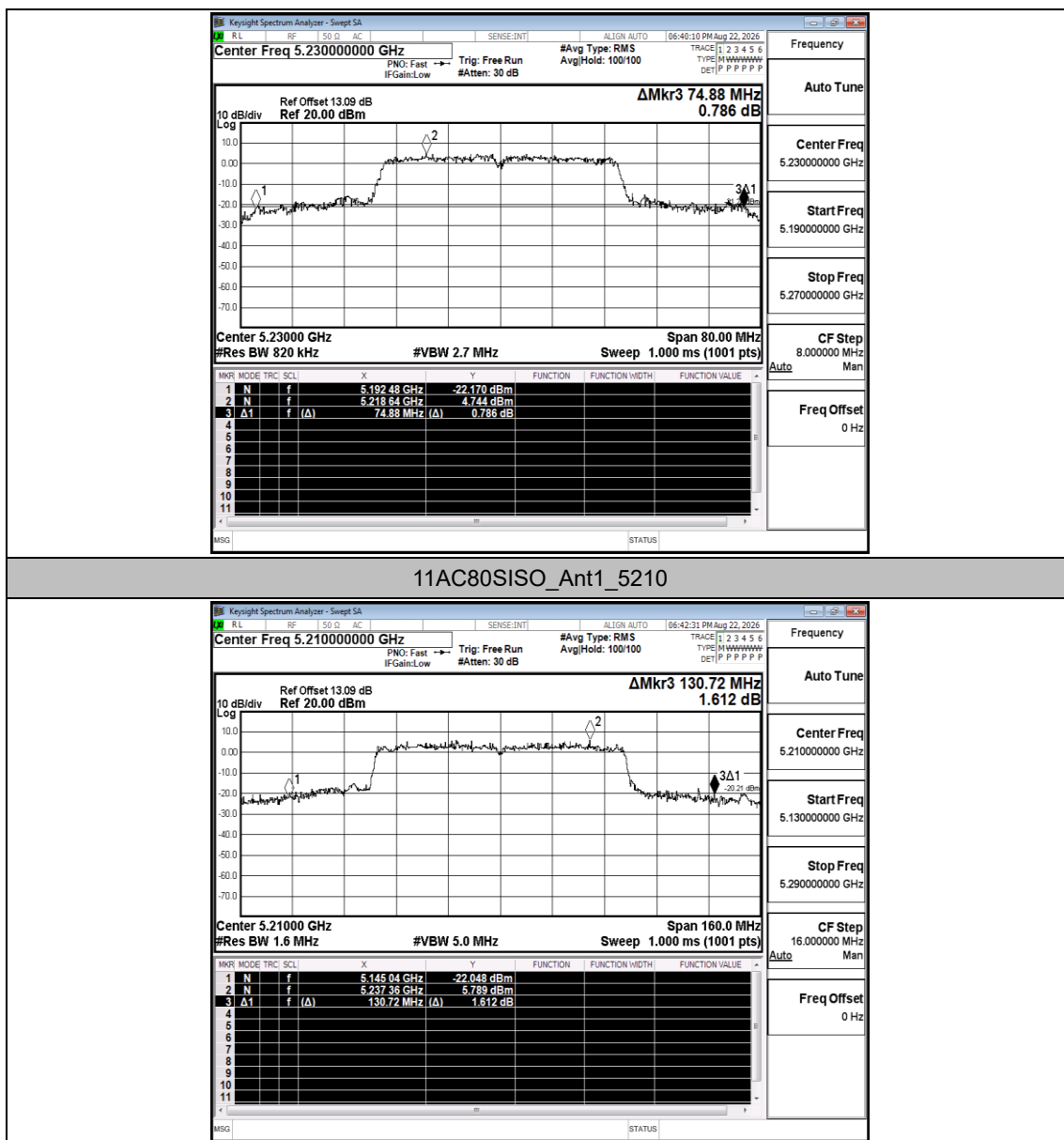












D.2 Maximum conducted output power

Test Result

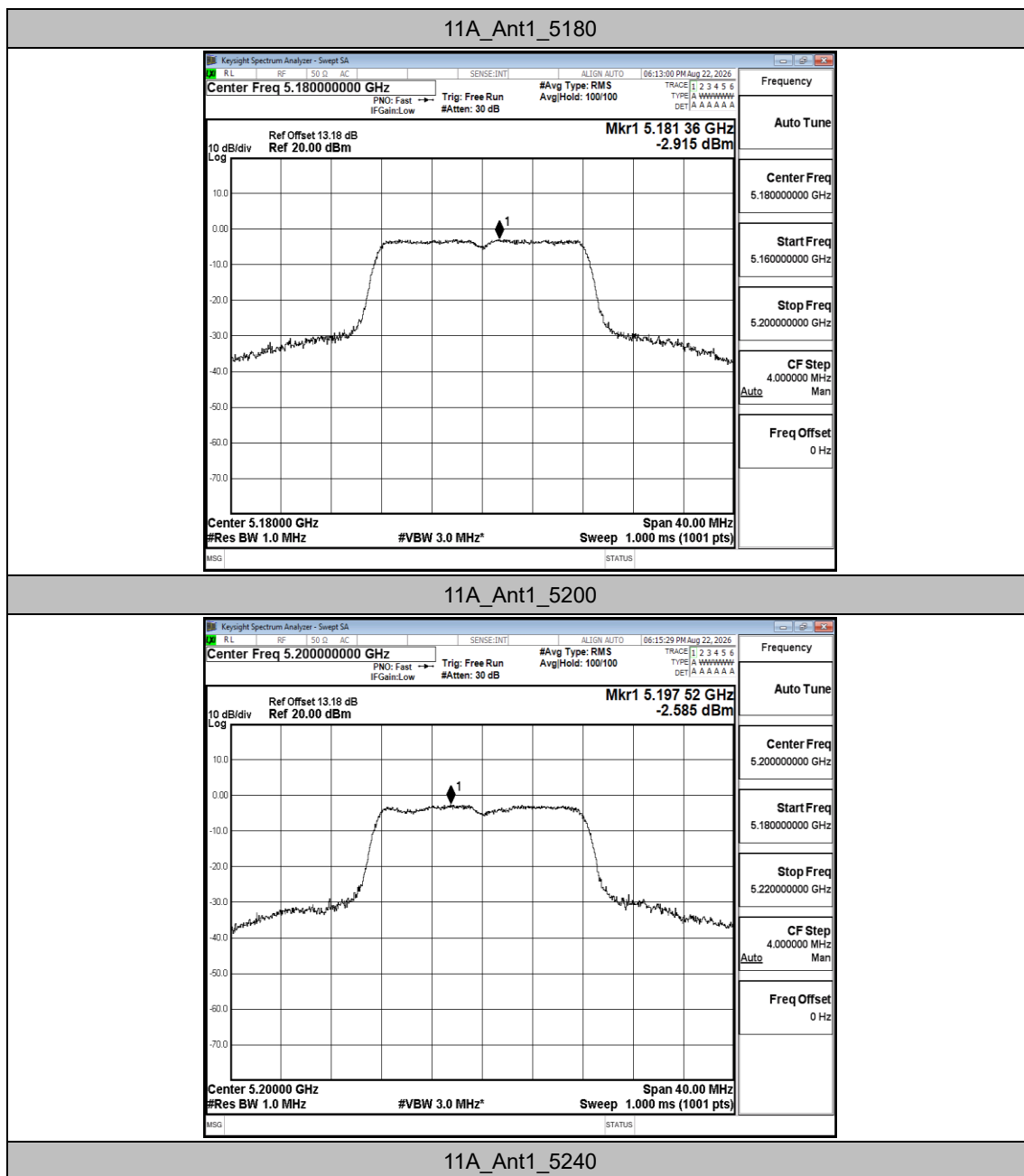
TestMode	Antenna	Freq (MHz)	TPC Mode	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	NA	9.14	1.76	10.90	≤23.98	PASS
		5200	NA	9.24	1.76	11.00	≤23.98	PASS
		5240	NA	10.26	2.14	12.40	≤23.98	PASS
11N20SISO	Ant1	5180	NA	9.28	2.14	11.42	≤23.98	PASS
		5200	NA	9.36	1.76	11.12	≤23.98	PASS
		5240	NA	10.38	2.14	12.52	≤23.98	PASS
11N40SISO	Ant1	5190	NA	7.92	2.43	10.35	≤23.98	PASS
		5230	NA	9.29	3.01	12.30	≤23.98	PASS
11AC20SISO	Ant1	5180	NA	9.38	2.00	11.38	≤23.98	PASS
		5200	NA	10.64	2.00	12.64	≤23.98	PASS
		5240	NA	11.67	1.65	13.32	≤23.98	PASS
11AC40SISO	Ant1	5190	NA	9.68	2.73	12.41	≤23.98	PASS
		5230	NA	10.58	2.73	13.31	≤23.98	PASS
11AC80SISO	Ant1	5210	NA	9.49	3.01	12.50	≤23.98	PASS

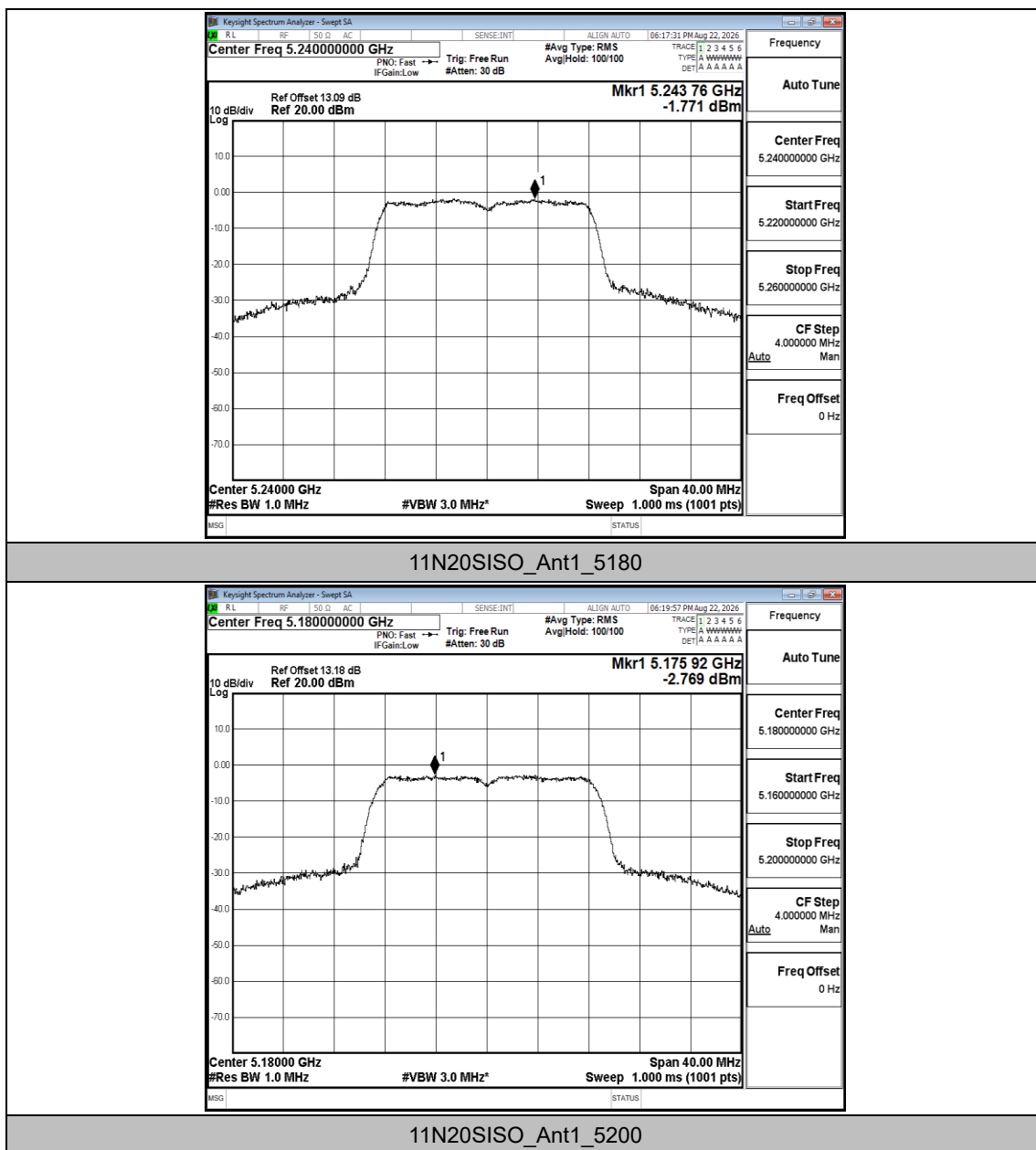
D.3 Maximum power spectral density

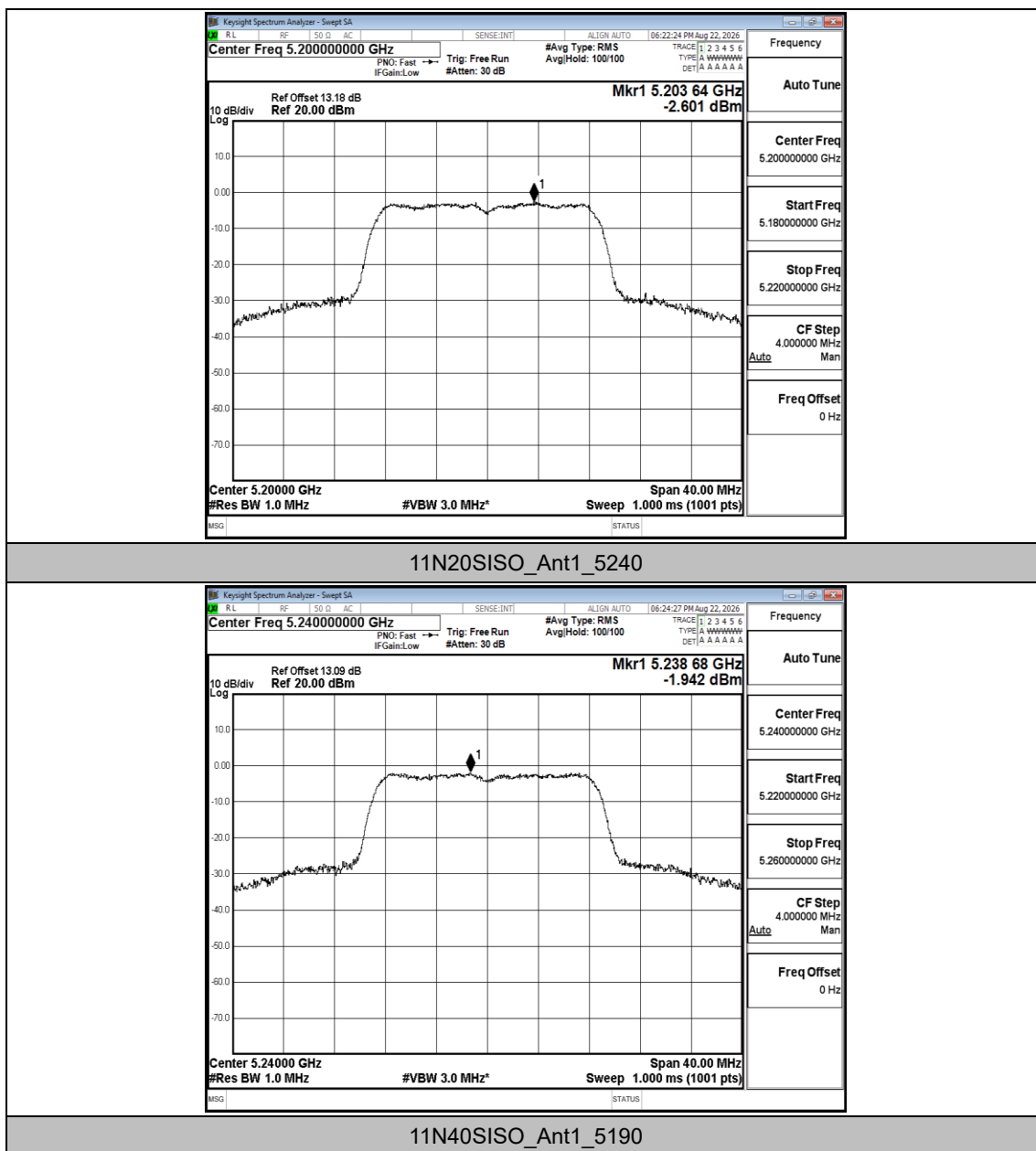
Test Result

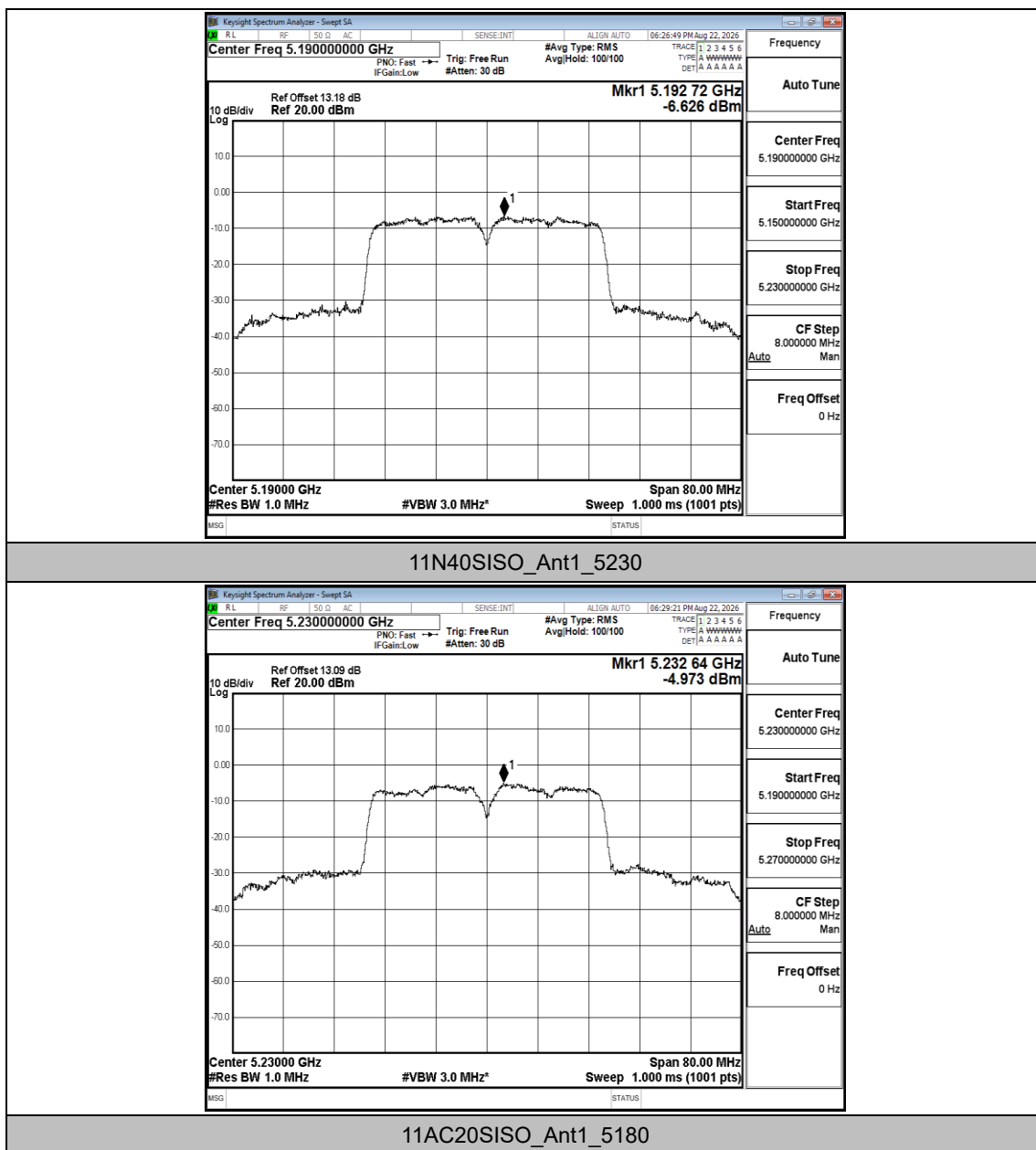
TestMode	Antenna	Freq (MHz)	Raw Data [dBm/MHz]	DC Factor	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	-2.92	1.76	-1.16	≤11.00	PASS
		5200	-2.59	1.76	-0.83	≤11.00	PASS
		5240	-1.77	2.14	0.37	≤11.00	PASS
11N20SISO	Ant1	5180	-2.77	2.14	-0.63	≤11.00	PASS
		5200	-2.6	1.76	-0.84	≤11.00	PASS
		5240	-1.94	2.14	0.20	≤11.00	PASS
11N40SISO	Ant1	5190	-6.63	2.43	-4.20	≤11.00	PASS
		5230	-4.97	3.01	-1.96	≤11.00	PASS
11AC20SISO	Ant1	5180	-2.38	2.00	-0.38	≤11.00	PASS
		5200	-1.2	2.00	0.80	≤11.00	PASS
		5240	-0.63	1.65	1.02	≤11.00	PASS
11AC40SISO	Ant1	5190	-5	2.73	-2.27	≤11.00	PASS
		5230	-4.07	2.73	-1.34	≤11.00	PASS
11AC80SISO	Ant1	5210	-7.32	3.01	-4.31	≤11.00	PASS

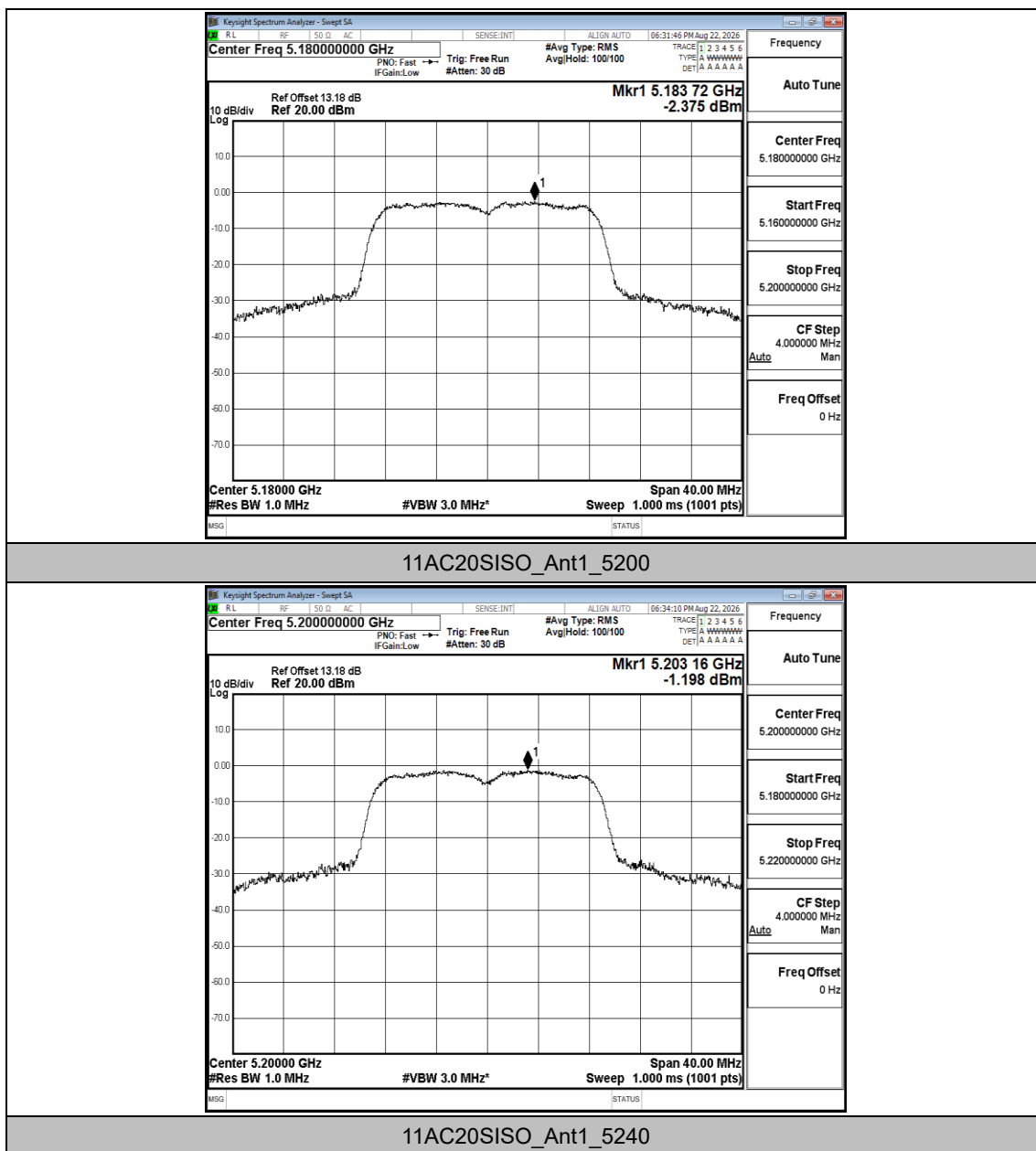
Test Graphs

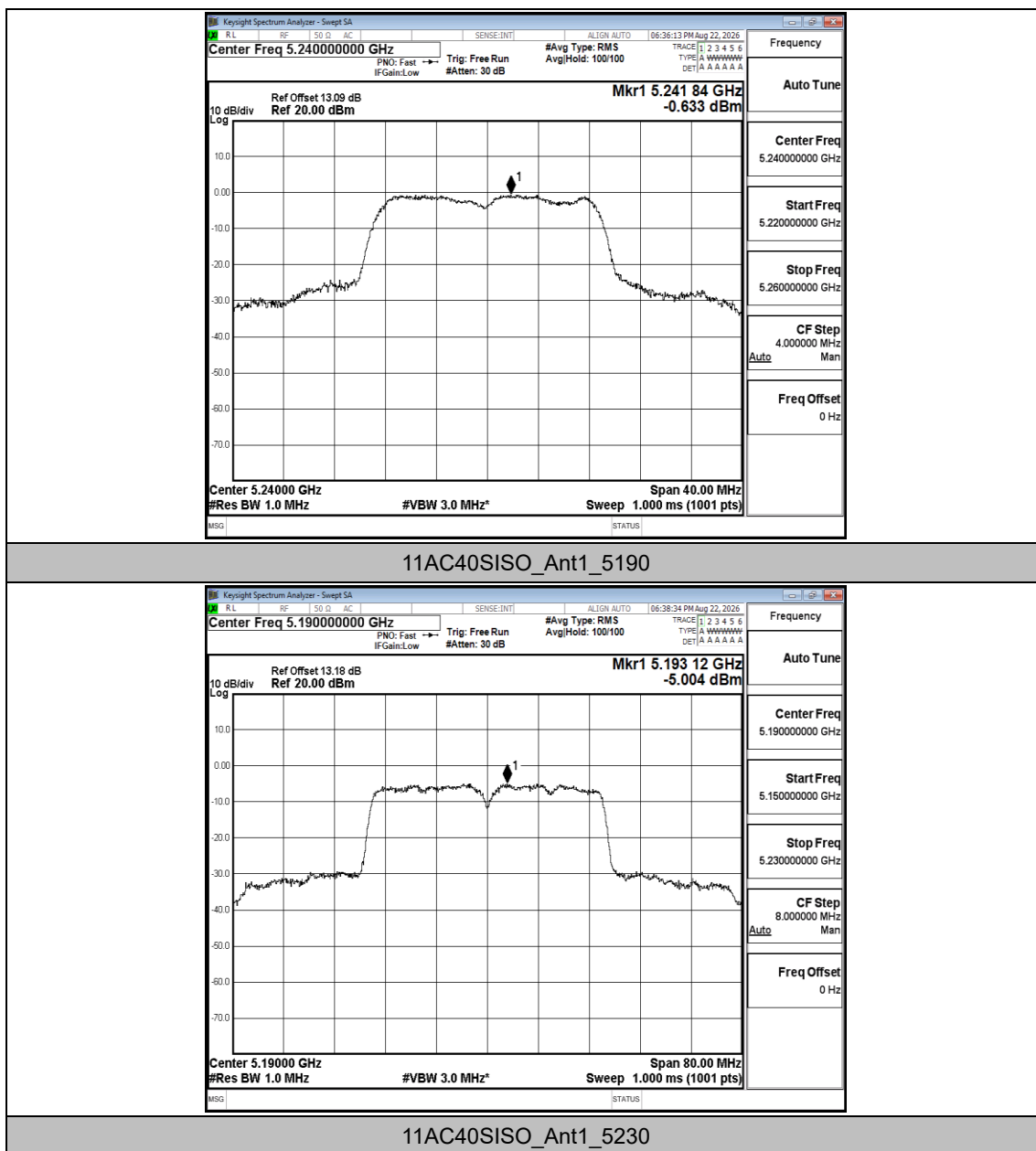


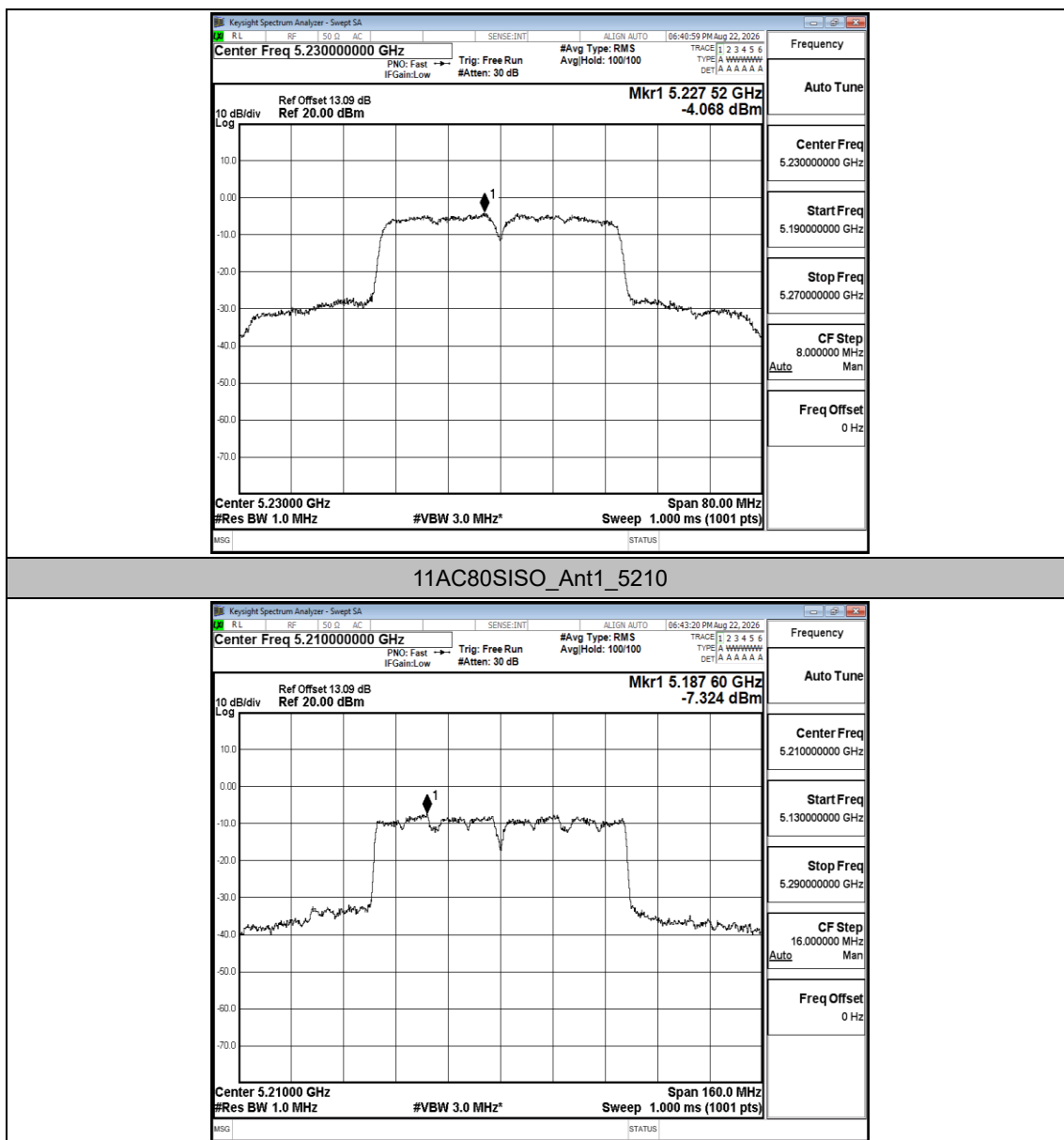












D.4 Emissions in Restricted Bands

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	-61.82	≤-44.96	2.00	1.76	37.14	≤54	PASS
				AV	5149.600	-51.16	≤-44.96	2.00	1.76	47.80	≤54	PASS
				AV	5150.000	-51.53	≤-44.96	2.00	1.76	47.43	≤54	PASS
				Peak	4500.000	-53.69	≤-29.00	2.00	0.00	43.51	≤68.2	PASS
				Peak	5148.900	-40.62	≤-29.00	2.00	0.00	56.58	≤68.2	PASS
				Peak	5150.000	-41.34	≤-29.00	2.00	0.00	55.86	≤68.2	PASS
		High	5240	AV	5350.000	-61.13	≤-45.34	2.00	2.14	38.21	≤54	PASS
				AV	5364.720	-60.61	≤-45.34	2.00	2.14	38.73	≤54	PASS
				AV	5460.000	-61.66	≤-45.34	2.00	2.14	37.68	≤54	PASS
				Peak	5350.000	-53.84	≤-29.00	2.00	0.00	43.36	≤68.2	PASS
				Peak	5380.560	-50.14	≤-29.00	2.00	0.00	47.06	≤68.2	PASS
				Peak	5460.000	-52.92	≤-29.00	2.00	0.00	44.28	≤68.2	PASS
11N20SISO	Ant1	Low	5180	AV	4500.000	-62.01	≤-45.34	2.00	2.14	37.33	≤54	PASS
				AV	5149.600	-51.48	≤-45.34	2.00	2.14	47.86	≤54	PASS
				AV	5150.000	-50.77	≤-45.34	2.00	2.14	48.57	≤54	PASS
				Peak	4500.000	-53.63	≤-29.00	2.00	0.00	43.57	≤68.2	PASS
				Peak	5148.900	-40.6	≤-29.00	2.00	0.00	56.60	≤68.2	PASS
				Peak	5150.000	-40.32	≤-29.00	2.00	0.00	56.88	≤68.2	PASS
		High	5240	AV	5350.000	-60.66	≤-45.34	2.00	2.14	38.68	≤54	PASS
				AV	5352.240	-60.48	≤-45.34	2.00	2.14	38.86	≤54	PASS
				AV	5460.000	-61.4	≤-45.34	2.00	2.14	37.94	≤54	PASS
				Peak	5350.000	-51.78	≤-29.00	2.00	0.00	45.42	≤68.2	PASS
				Peak	5455.200	-50.77	≤-29.00	2.00	0.00	46.43	≤68.2	PASS
				Peak	5460.000	-53.99	≤-29.00	2.00	0.00	43.21	≤68.2	PASS
11N40SISO	Ant1	Low	5190	AV	4500.000	-67.97	≤-45.63	2.00	2.43	31.66	≤54	PASS
				AV	4726.100	-52.66	≤-45.63	2.00	2.43	46.97	≤54	PASS
				AV	5150.000	-56.01	≤-45.63	2.00	2.43	43.62	≤54	PASS
				Peak	4500.000	-60	≤-29.00	2.00	0.00	37.20	≤68.2	PASS
				Peak	5148.900	-40.27	≤-29.00	2.00	0.00	56.93	≤68.2	PASS
				Peak	5150.000	-42.62	≤-29.00	2.00	0.00	54.58	≤68.2	PASS
		High	5230	AV	5350.000	-59.56	≤-46.21	2.00	3.01	40.65	≤54	PASS
				AV	5350.540	-58.97	≤-46.21	2.00	3.01	41.24	≤54	PASS
				AV	5460.000	-61.69	≤-46.21	2.00	3.01	38.52	≤54	PASS
				Peak	5350.000	-51.28	≤-29.00	2.00	0.00	45.92	≤68.2	PASS

				Peak	5350.540	-48.08	≤-29.00	2.00	0.00	49.12	≤68.2	PASS
				Peak	5460.000	-54.38	≤-29.00	2.00	0.00	42.82	≤68.2	PASS
11AC20SISO	Ant1	Low	5180	AV	4500.000	-61.85	≤-45.20	2.00	2.00	37.35	≤54	PASS
				AV	5149.600	-51.41	≤-45.20	2.00	2.00	47.79	≤54	PASS
				AV	5150.000	-51.04	≤-45.20	2.00	2.00	48.16	≤54	PASS
				Peak	4500.000	-53.98	≤-29.00	2.00	0.00	43.22	≤68.2	PASS
				Peak	5148.900	-39.4	≤-29.00	2.00	0.00	57.80	≤68.2	PASS
				Peak	5150.000	-42.85	≤-29.00	2.00	0.00	54.35	≤68.2	PASS
		High	5240	AV	5350.000	-60.56	≤-44.85	2.00	1.65	38.29	≤54	PASS
				AV	5352.720	-60.45	≤-44.85	2.00	1.65	38.40	≤54	PASS
				AV	5460.000	-61.48	≤-44.85	2.00	1.65	37.37	≤54	PASS
				Peak	5350.000	-51.98	≤-29.00	2.00	0.00	45.22	≤68.2	PASS
				Peak	5369.040	-50.77	≤-29.00	2.00	0.00	46.43	≤68.2	PASS
				Peak	5460.000	-53.5	≤-29.00	2.00	0.00	43.70	≤68.2	PASS
11AC40SISO	Ant1	Low	5190	AV	4500.000	-68.02	≤-45.93	2.00	2.73	31.91	≤54	PASS
				AV	4726.800	-53.02	≤-45.93	2.00	2.73	46.91	≤54	PASS
				AV	5150.000	-55.89	≤-45.93	2.00	2.73	44.04	≤54	PASS
				Peak	4500.000	-60.35	≤-29.00	2.00	0.00	36.85	≤68.2	PASS
				Peak	5147.500	-41.25	≤-29.00	2.00	0.00	55.95	≤68.2	PASS
				Peak	5150.000	-39.09	≤-29.00	2.00	0.00	58.11	≤68.2	PASS
		High	5230	AV	5350.000	-60.26	≤-45.93	2.00	2.73	39.67	≤54	PASS
				AV	5352.620	-59.4	≤-45.93	2.00	2.73	40.53	≤54	PASS
				AV	5460.000	-61.81	≤-45.93	2.00	2.73	38.12	≤54	PASS
				Peak	5350.000	-51.87	≤-29.00	2.00	0.00	45.33	≤68.2	PASS
				Peak	5350.540	-47.1	≤-29.00	2.00	0.00	50.10	≤68.2	PASS
				Peak	5460.000	-53.17	≤-29.00	2.00	0.00	44.03	≤68.2	PASS
11AC80SISO	Ant1	Low	5210	AV	4500.000	-68.57	≤-46.21	2.00	3.01	31.64	≤54	PASS
				AV	5146.500	-54.75	≤-46.21	2.00	3.01	45.46	≤54	PASS
				AV	5150.000	-57	≤-46.21	2.00	3.01	43.21	≤54	PASS
				Peak	4500.000	-60.32	≤-29.00	2.00	0.00	36.88	≤68.2	PASS
				Peak	5147.250	-40.29	≤-29.00	2.00	0.00	56.91	≤68.2	PASS
				Peak	5150.000	-46.63	≤-29.00	2.00	0.00	50.57	≤68.2	PASS
		High	5210	AV	5350.000	-54.46	≤-46.21	2.00	3.01	45.75	≤54	PASS
				AV	5357.520	-54.04	≤-46.21	2.00	3.01	46.17	≤54	PASS
				AV	5460.000	-60.73	≤-46.21	2.00	3.01	39.48	≤54	PASS
				Peak	5350.000	-42.37	≤-29.00	2.00	0.00	54.83	≤68.2	PASS
				Peak	5350.520	-41.5	≤-29.00	2.00	0.00	55.70	≤68.2	PASS
				Peak	5460.000	-53.05	≤-29.00	2.00	0.00	44.15	≤68.2	PASS

Note:

1. The Antenna Gain is compensated in the graph.

Test Graphs

