

Appendix F

RF Test Data for 5.5GWIFI (Conducted Measurement)

Product Name: Smart Phone

Test Model: ULTRA S25

Environmental Conditions

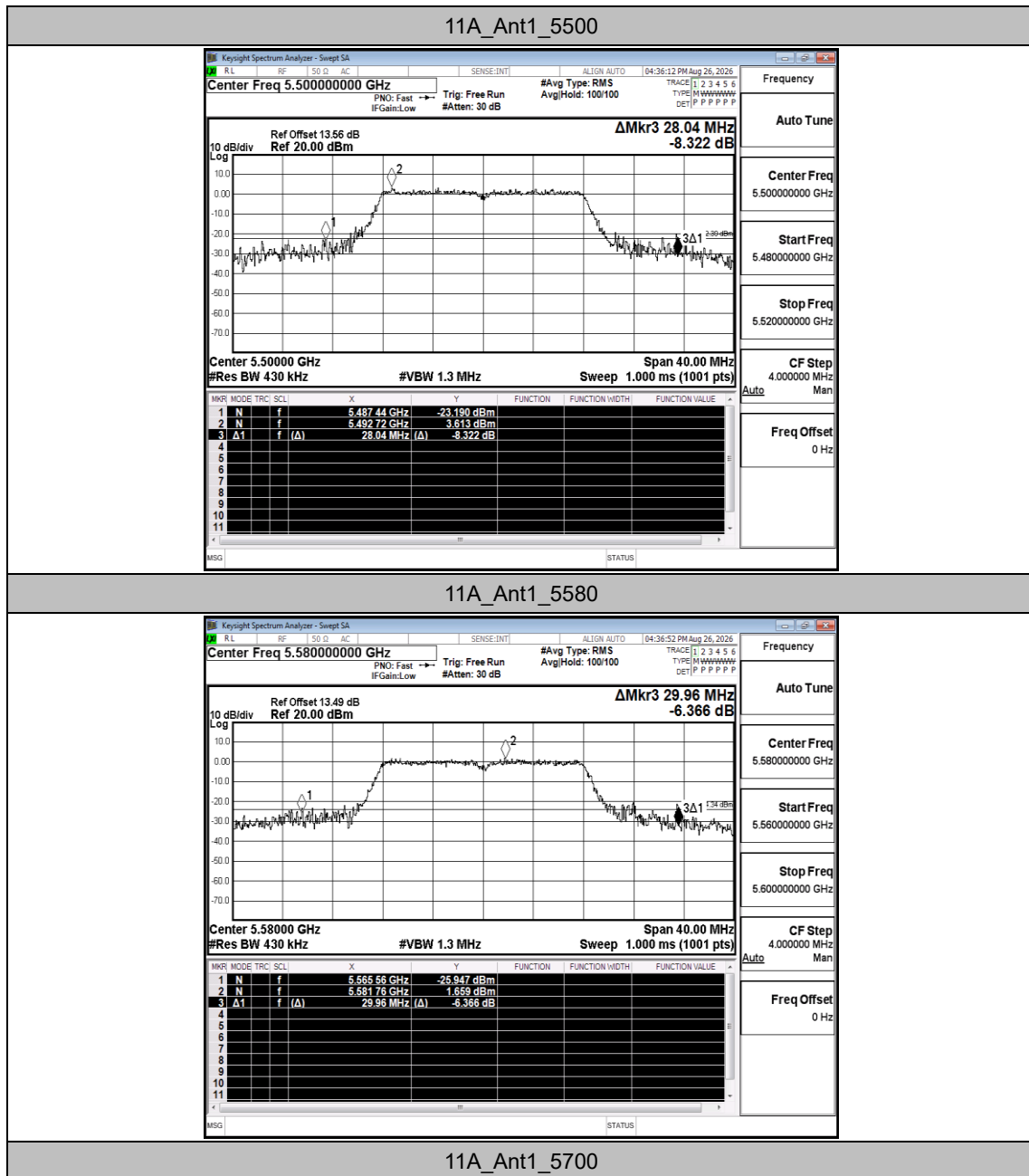
Temperature:	24.3°C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

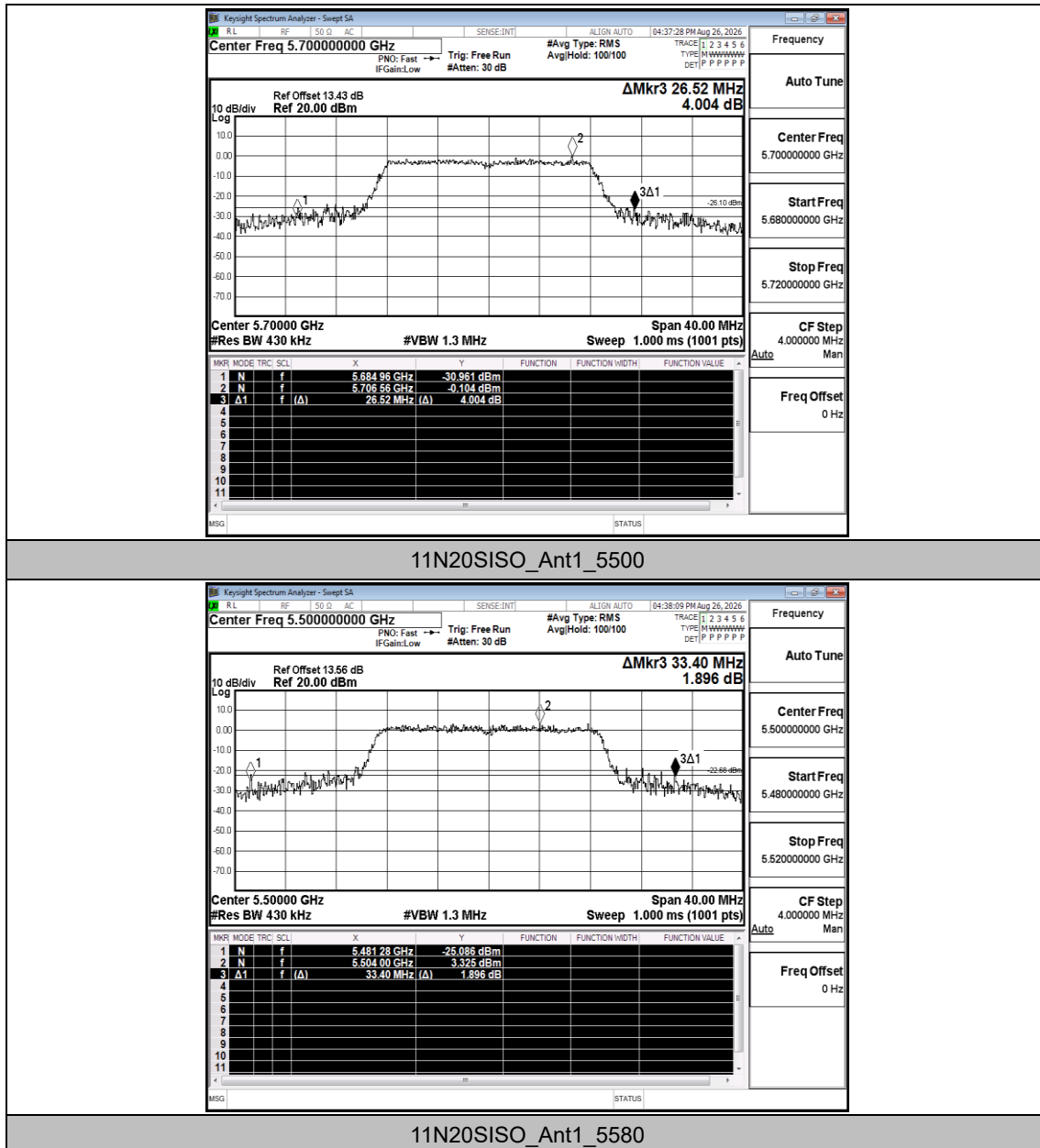
F.1 Emission Bandwidth

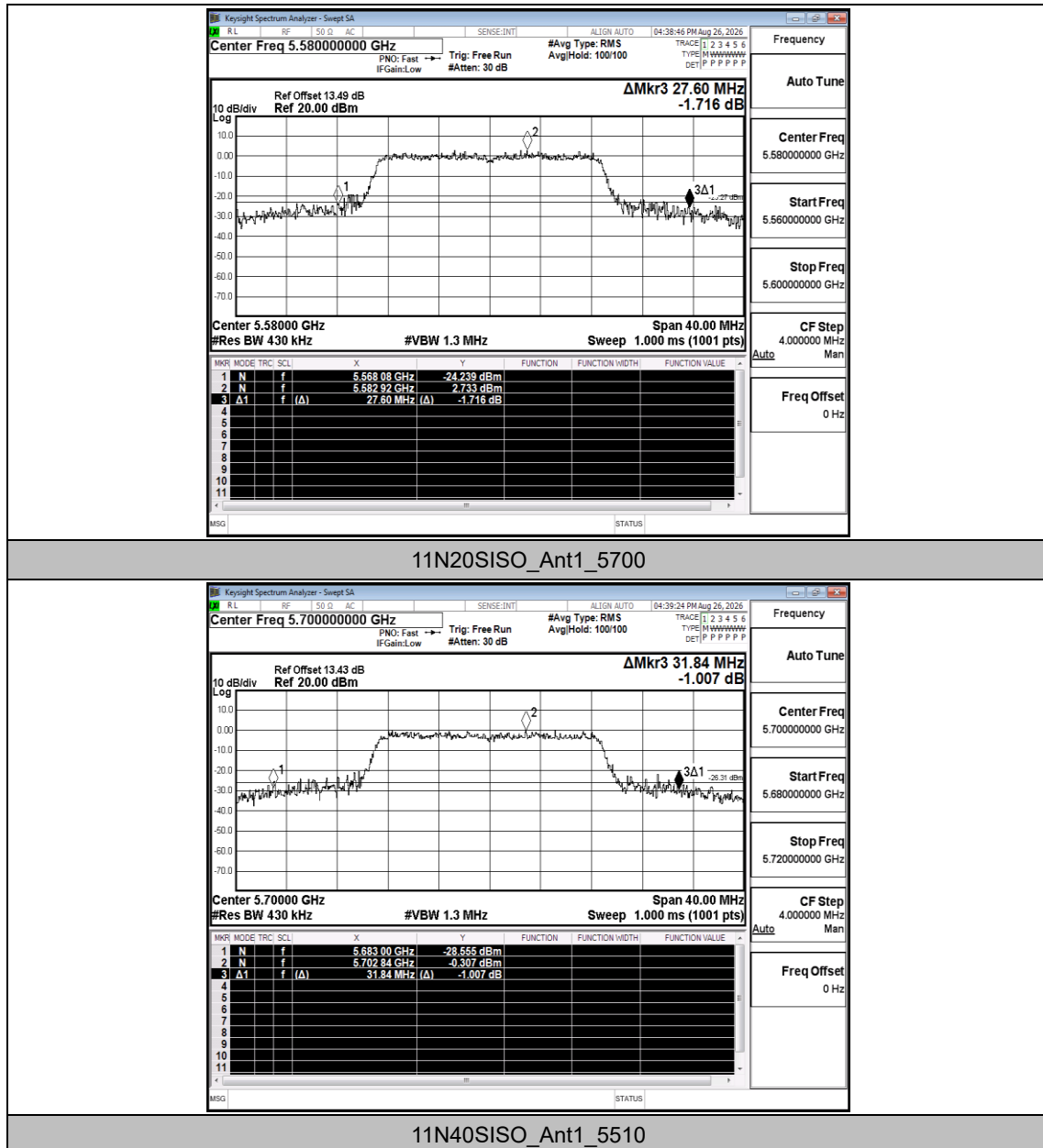
Test Result

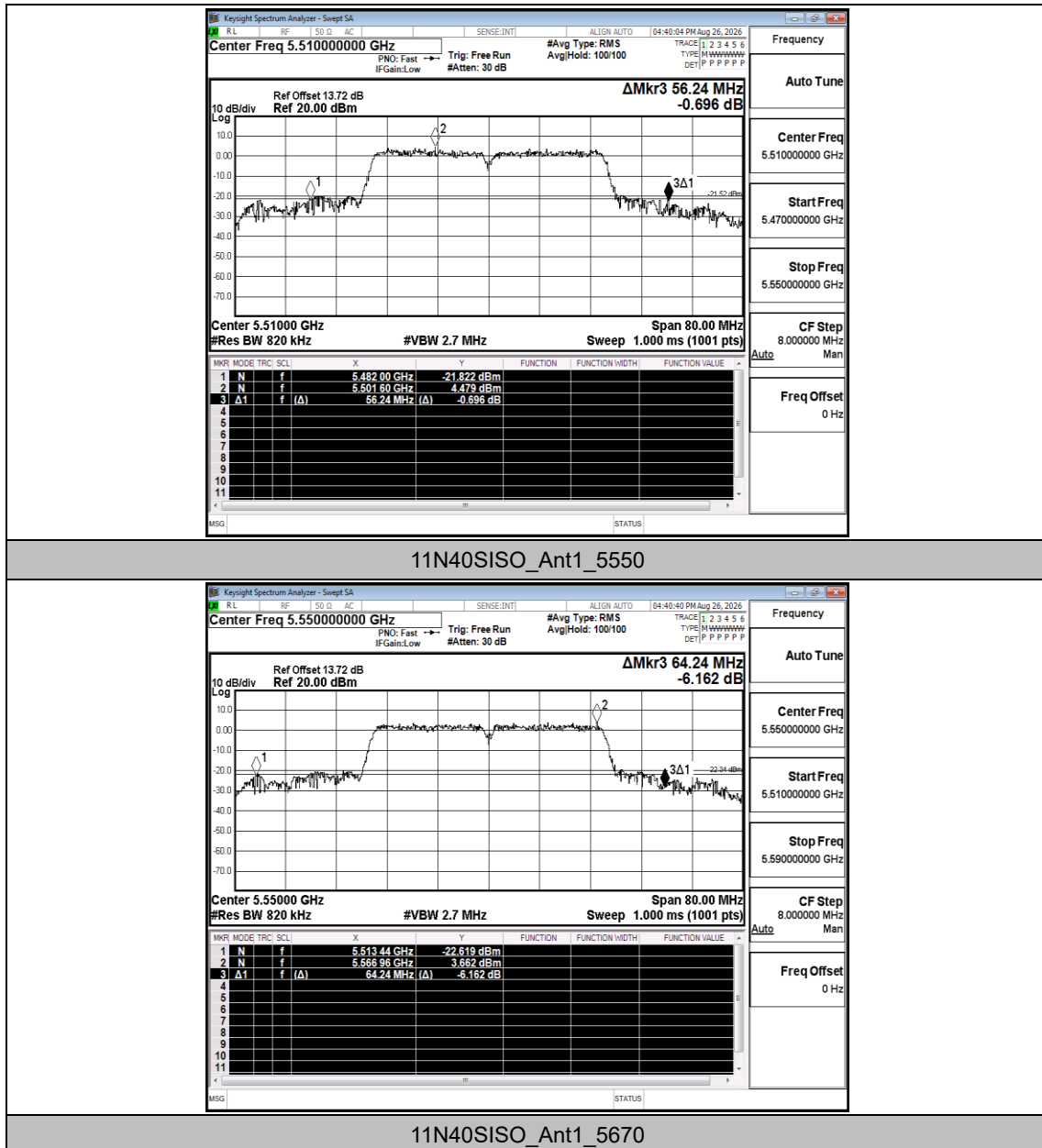
TestMode	Antenna	Freq (MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant1	5500	28.040	5487.440	5515.480	---	---
		5580	29.960	5565.560	5595.520	---	---
		5700	26.520	5684.960	5711.480	---	---
11N20SISO	Ant1	5500	33.400	5481.280	5514.680	---	---
		5580	27.600	5568.080	5595.680	---	---
		5700	31.840	5683.000	5714.840	---	---
11N40SISO	Ant1	5510	56.240	5482.000	5538.240	---	---
		5550	64.240	5513.440	5577.680	---	---
		5670	62.000	5632.640	5694.640	---	---
11AC20SISO	Ant1	5500	32.360	5483.400	5515.760	---	---
		5580	32.800	5562.000	5594.800	---	---
		5700	32.480	5683.000	5715.480	---	---
11AC40SISO	Ant1	5510	57.680	5480.080	5537.760	---	---
		5550	53.040	5522.240	5575.280	---	---
		5670	56.640	5638.480	5695.120	---	---
11AC80SISO	Ant1	5530	88.960	5484.880	5573.840	---	---
		5610	89.920	5564.240	5654.160	---	---

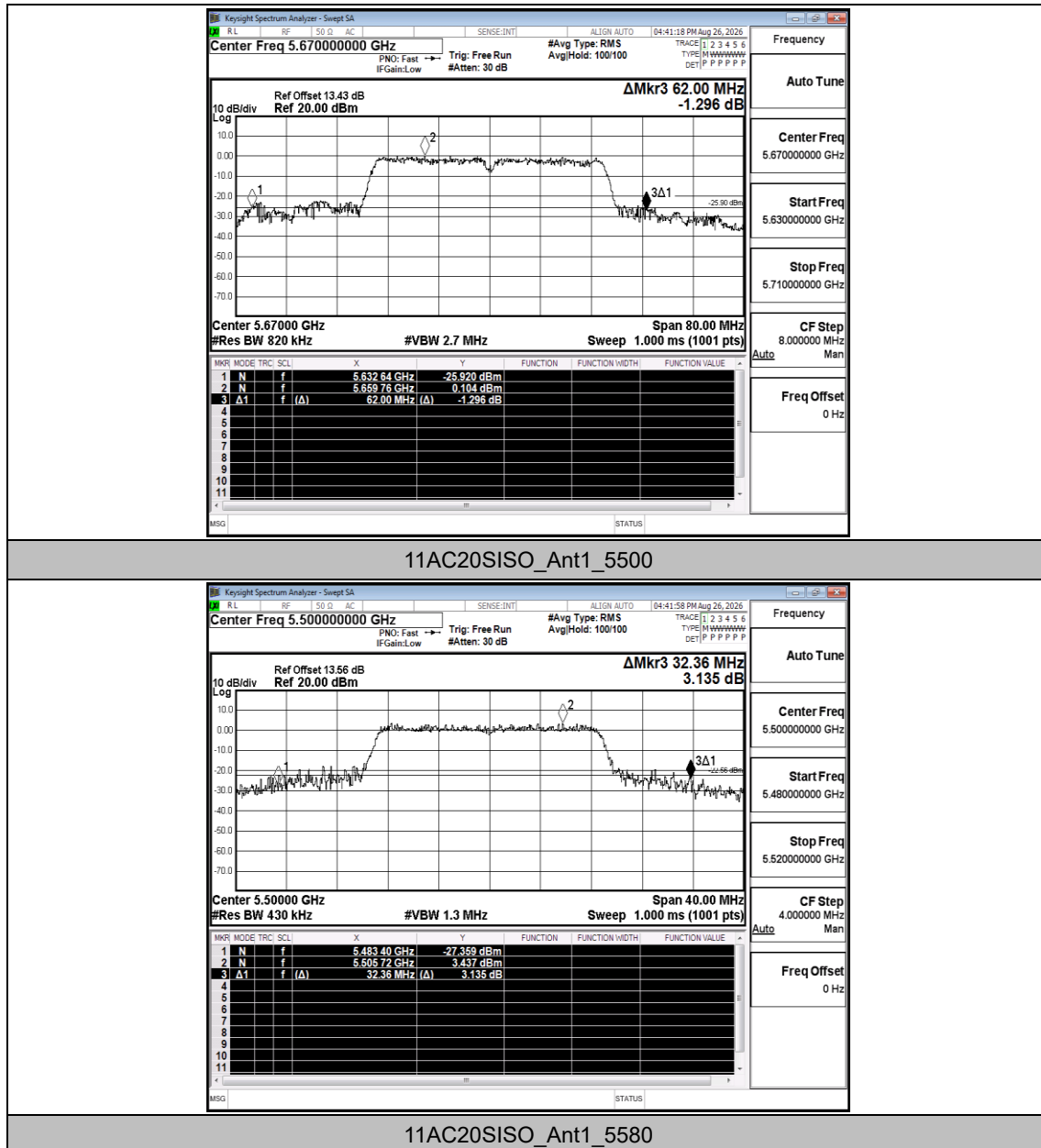
Test Graphs

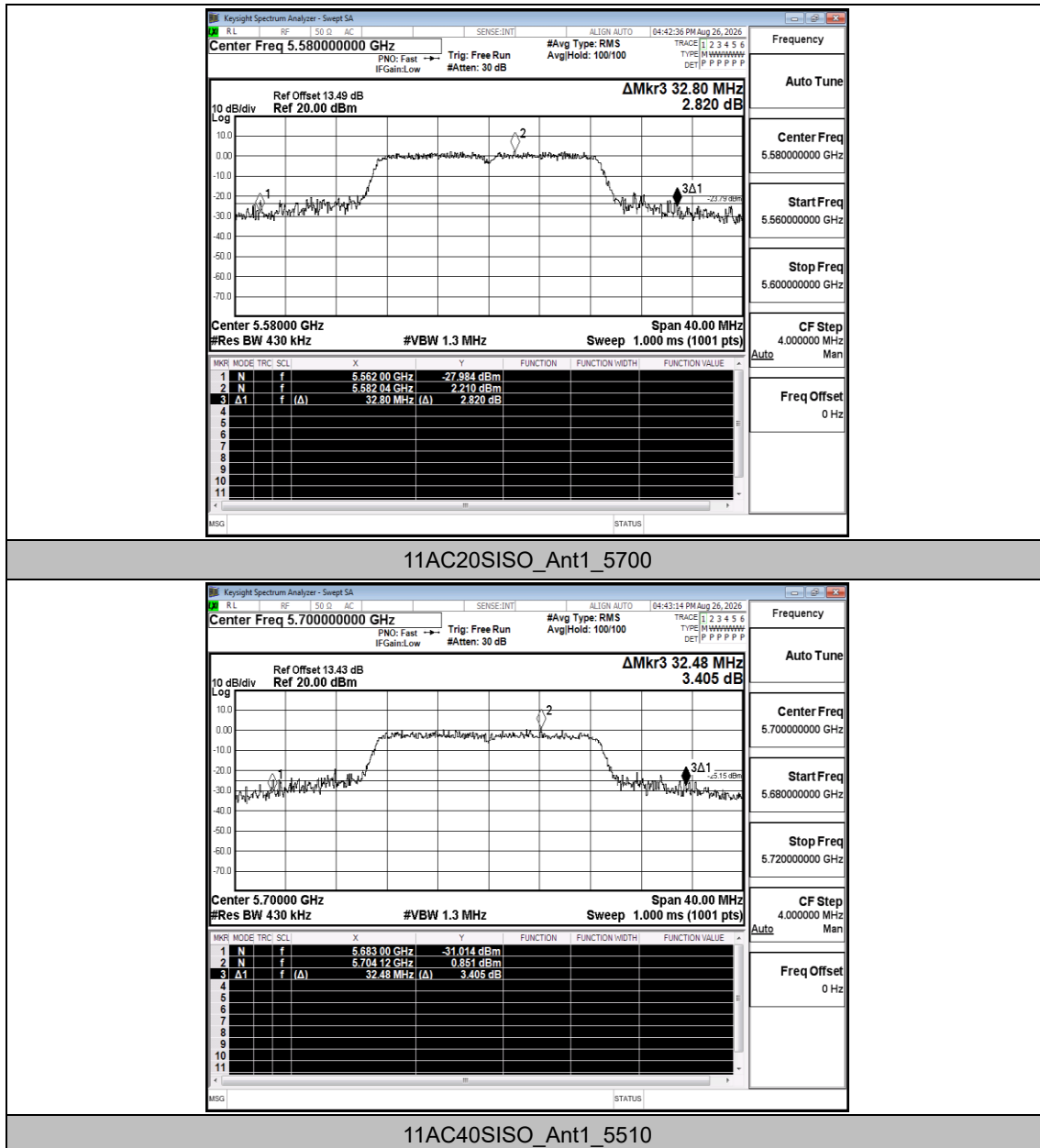


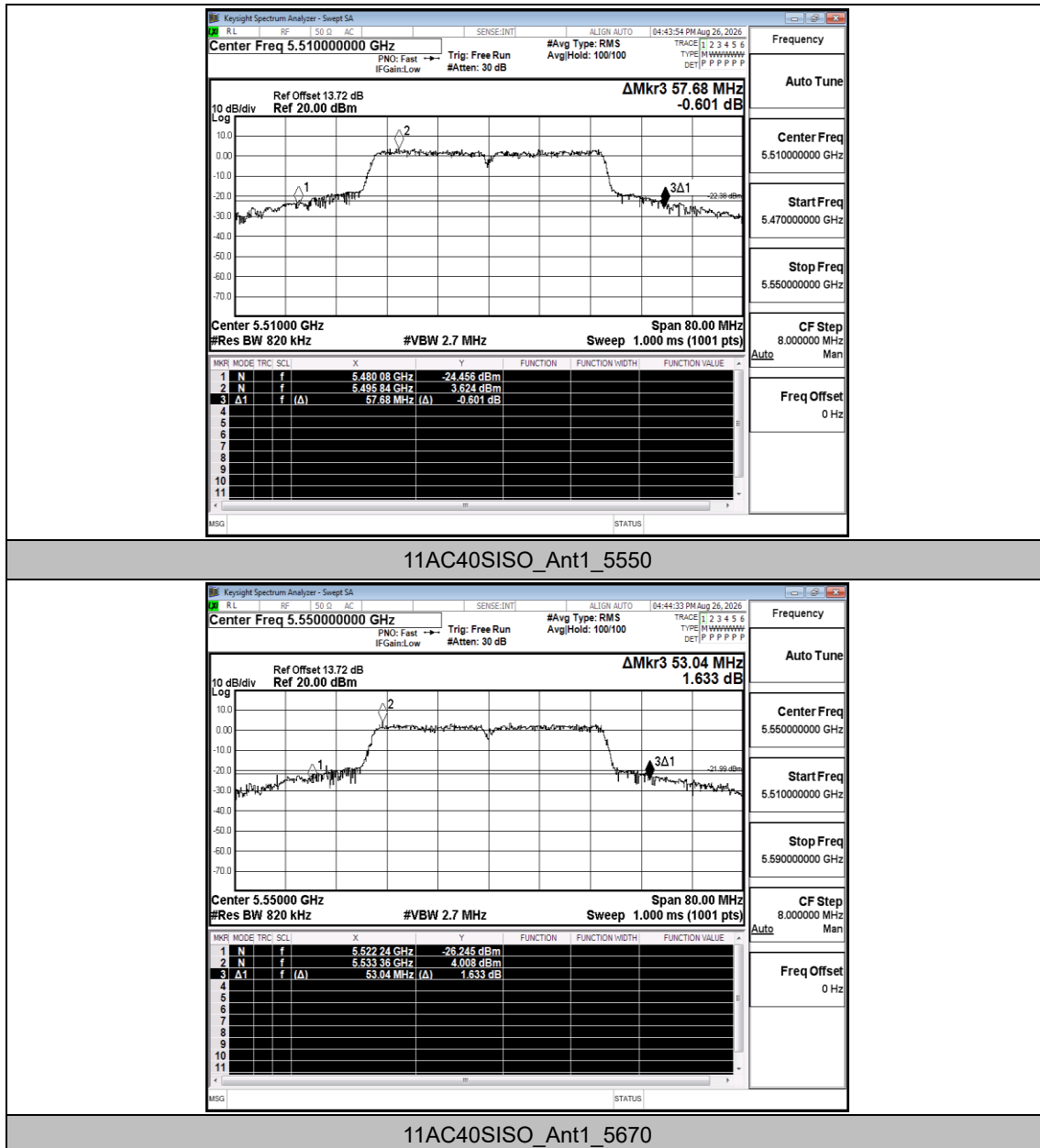


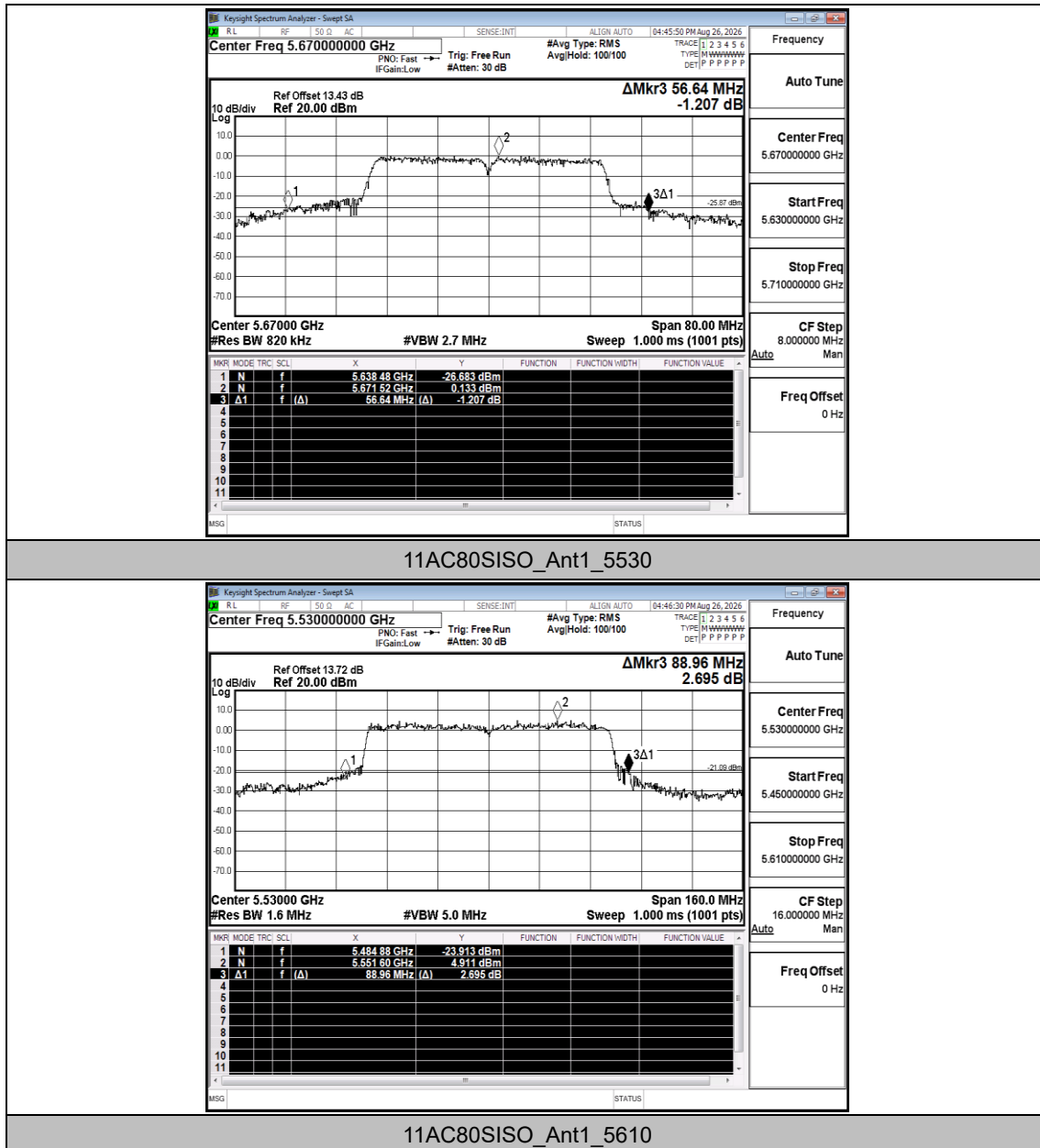


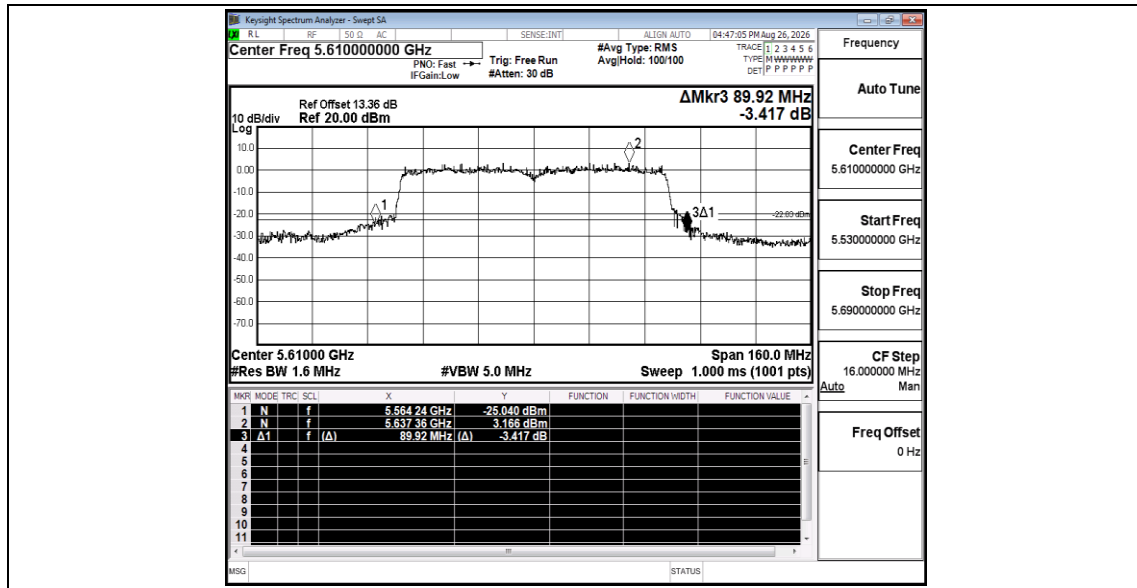












F.2 Maximum conducted output power

Test Result

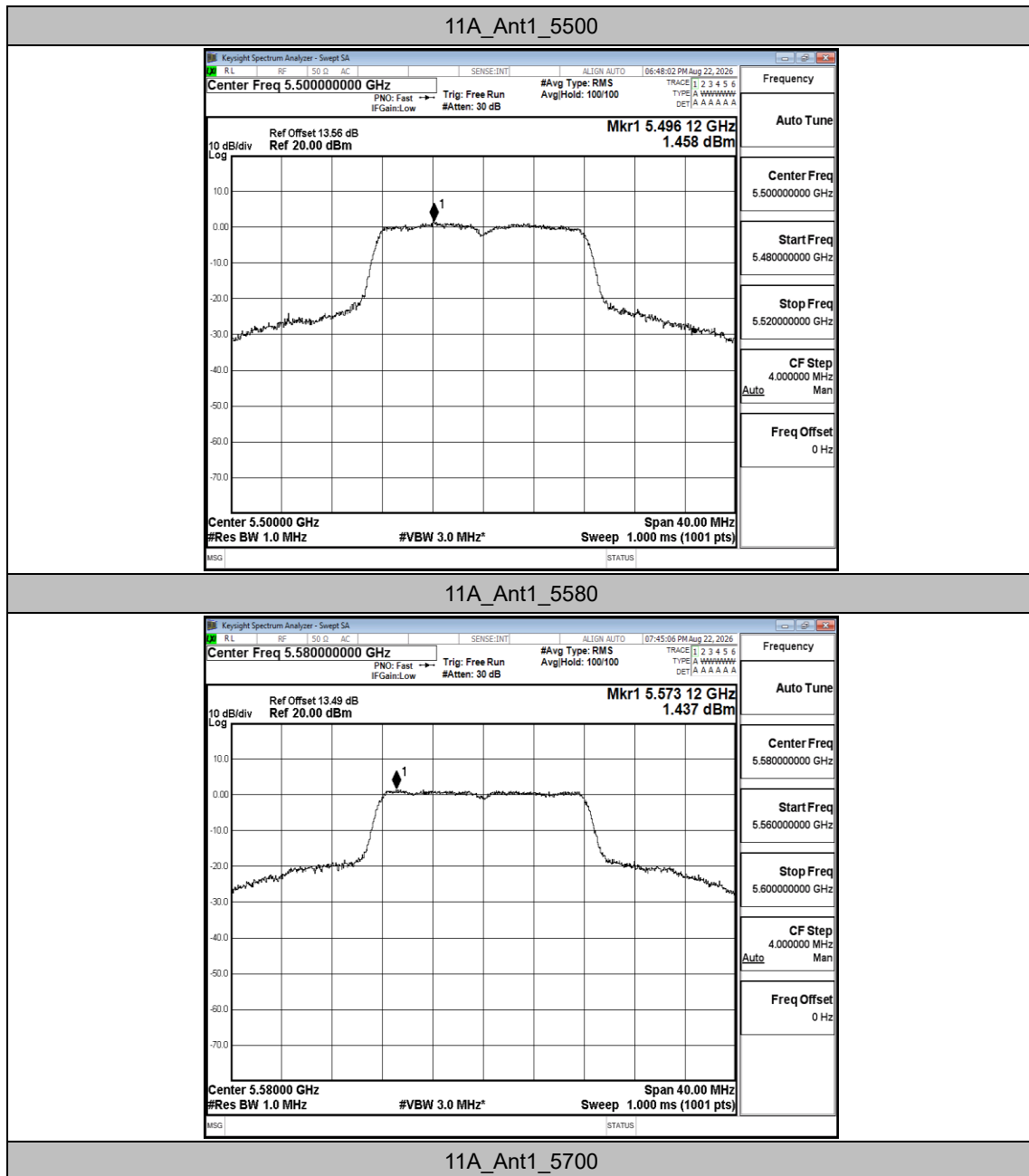
TestMode	Antenna	Freq (MHz)	TPC Mode	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5500	NA	13.07	1.76	14.83	≤23.98	PASS
		5580	NA	13.69	2.14	15.83	≤23.98	PASS
		5700	NA	12.58	1.76	14.34	≤23.98	PASS
11N20SISO	Ant1	5500	NA	14.34	1.89	16.23	≤23.98	PASS
		5580	NA	13.27	1.89	15.16	≤23.98	PASS
		5700	NA	12.17	2.14	14.31	≤23.98	PASS
11N40SISO	Ant1	5510	NA	12.95	3.01	15.96	≤23.98	PASS
		5550	NA	12.31	2.69	15.00	≤23.98	PASS
		5670	NA	11.46	2.43	13.89	≤23.98	PASS
11AC20SISO	Ant1	5500	NA	13.92	1.76	15.68	≤23.98	PASS
		5580	NA	13.32	1.65	14.97	≤23.98	PASS
		5700	NA	12.25	1.76	14.01	≤23.98	PASS
11AC40SISO	Ant1	5510	NA	13.07	2.73	15.80	≤23.98	PASS
		5550	NA	12.46	2.43	14.89	≤23.98	PASS
		5670	NA	11.59	2.73	14.32	≤23.98	PASS
11AC80SISO	Ant1	5530	NA	12.58	2.69	15.27	≤23.98	PASS
		5610	NA	11.71	2.69	14.40	≤23.98	PASS

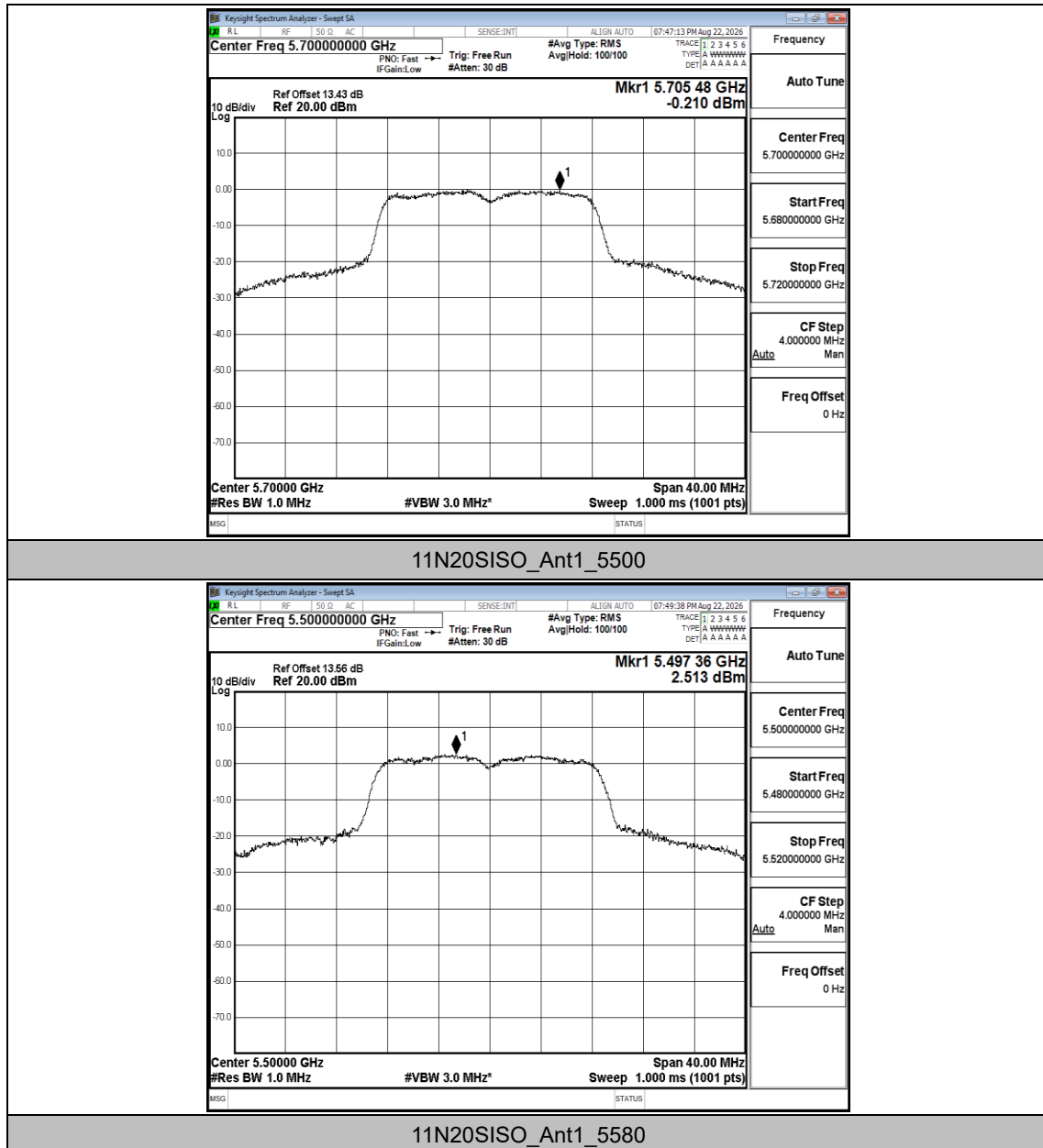
F.3 Maximum power spectral density

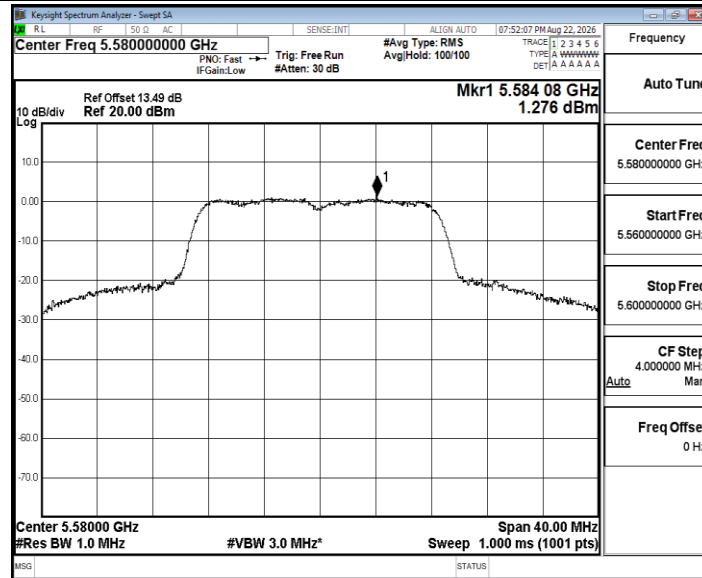
Test Result

TestMode	Antenna	Freq (MHz)	Raw Data [dBm/MHz]	DC Factor	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5500	1.46	1.76	3.22	≤11.00	PASS
		5580	1.44	2.14	3.58	≤11.00	PASS
		5700	-0.21	1.76	1.55	≤11.00	PASS
11N20SISO	Ant1	5500	2.51	1.89	4.40	≤11.00	PASS
		5580	1.28	1.89	3.17	≤11.00	PASS
		5700	-0.96	2.14	1.18	≤11.00	PASS
11N40SISO	Ant1	5510	-1.11	3.01	1.90	≤11.00	PASS
		5550	-1.61	2.69	1.08	≤11.00	PASS
		5670	-3.27	2.43	-0.84	≤11.00	PASS
11AC20SISO	Ant1	5500	1.66	1.76	3.42	≤11.00	PASS
		5580	1.21	1.65	2.86	≤11.00	PASS
		5700	-0.86	1.76	0.90	≤11.00	PASS
11AC40SISO	Ant1	5510	-1.65	2.73	1.08	≤11.00	PASS
		5550	-1.41	2.43	1.02	≤11.00	PASS
		5670	-3.72	2.73	-0.99	≤11.00	PASS
11AC80SISO	Ant1	5530	-4.79	2.69	-2.10	≤11.00	PASS
		5610	-5.27	2.69	-2.58	≤11.00	PASS

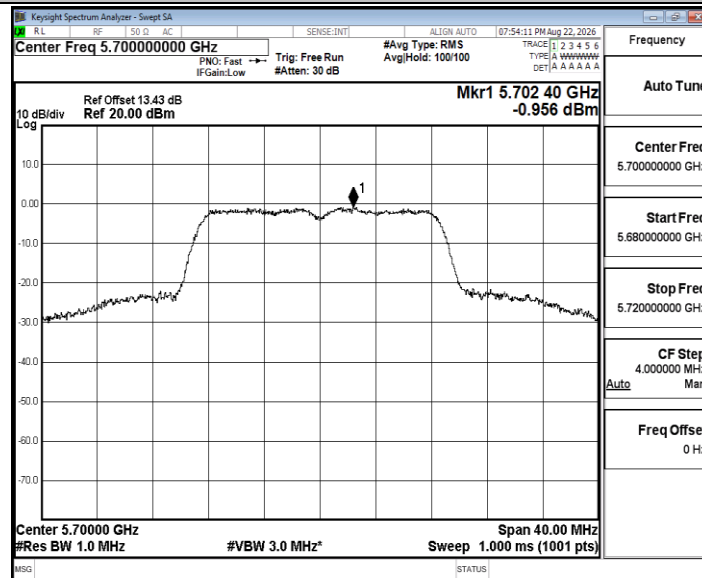
Test Graphs



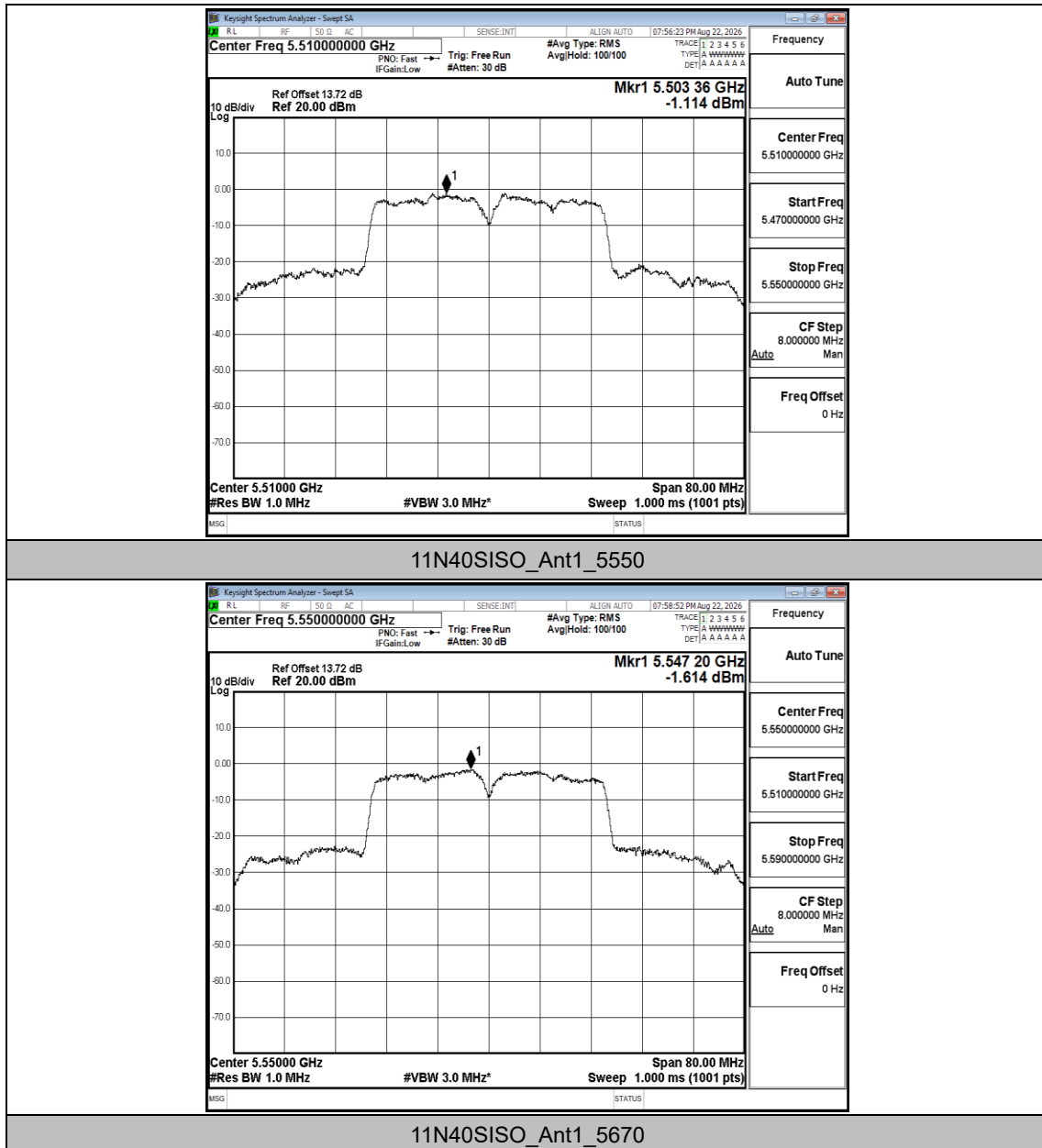


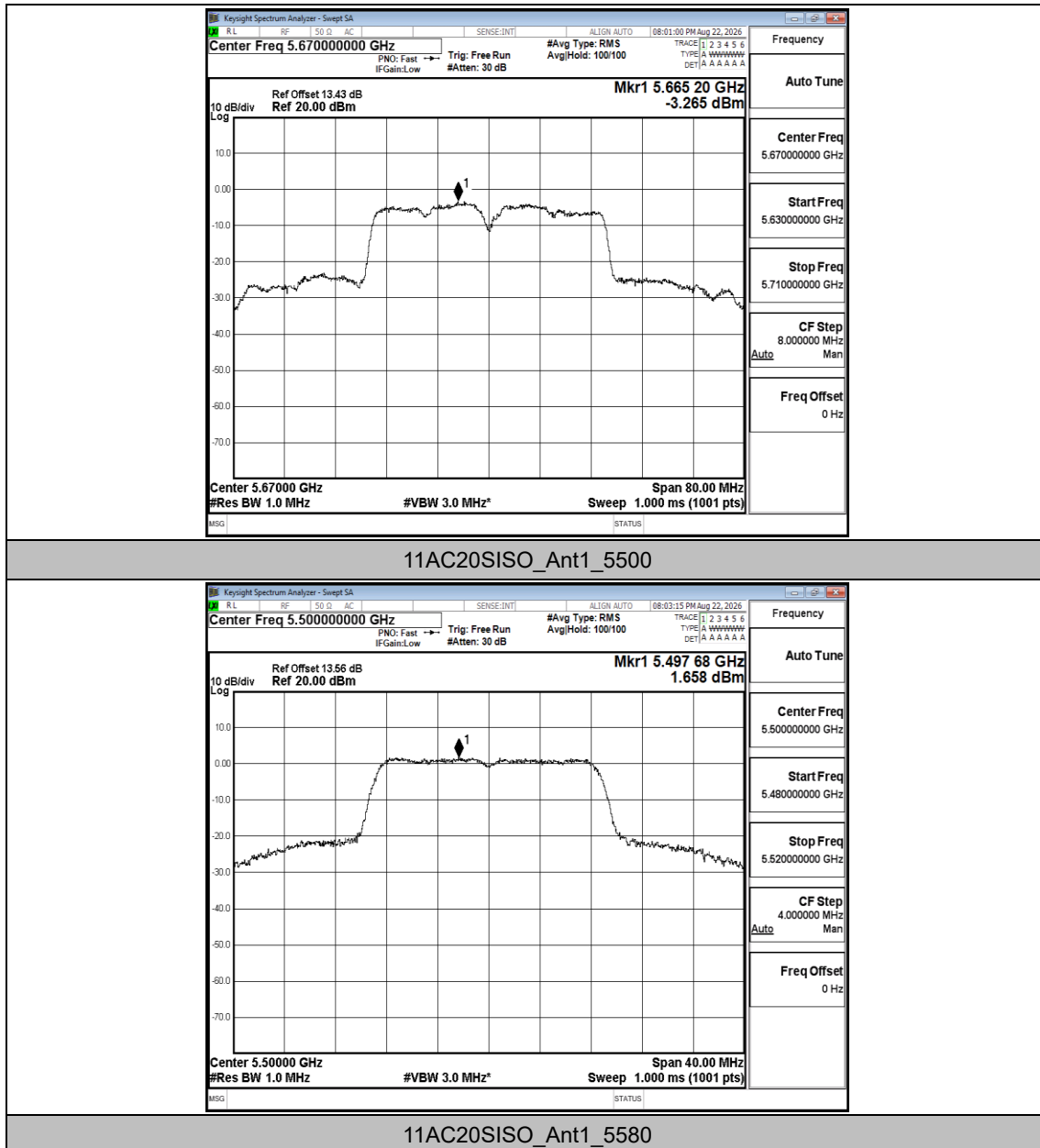


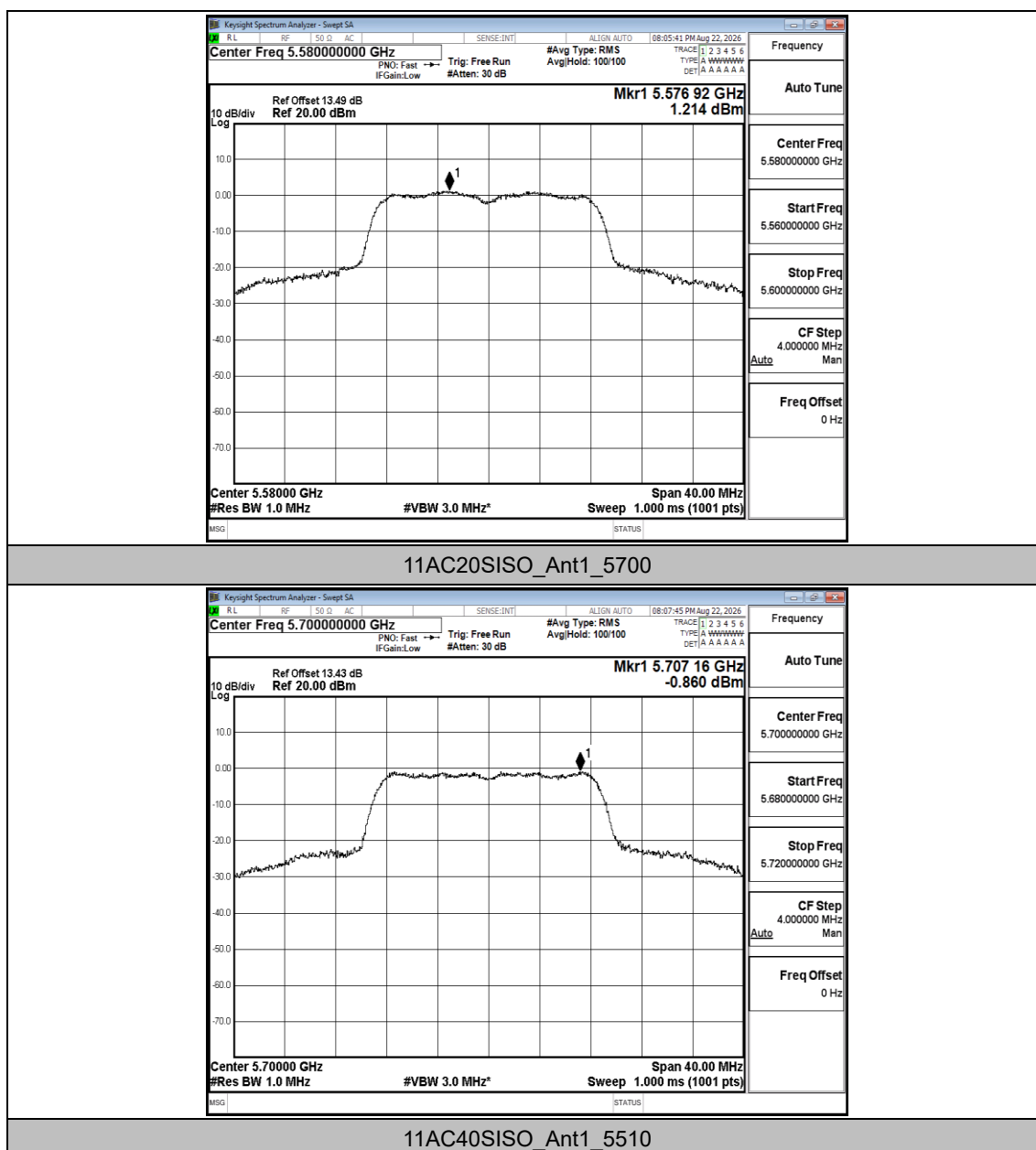
11N20SISO_Ant1_5700

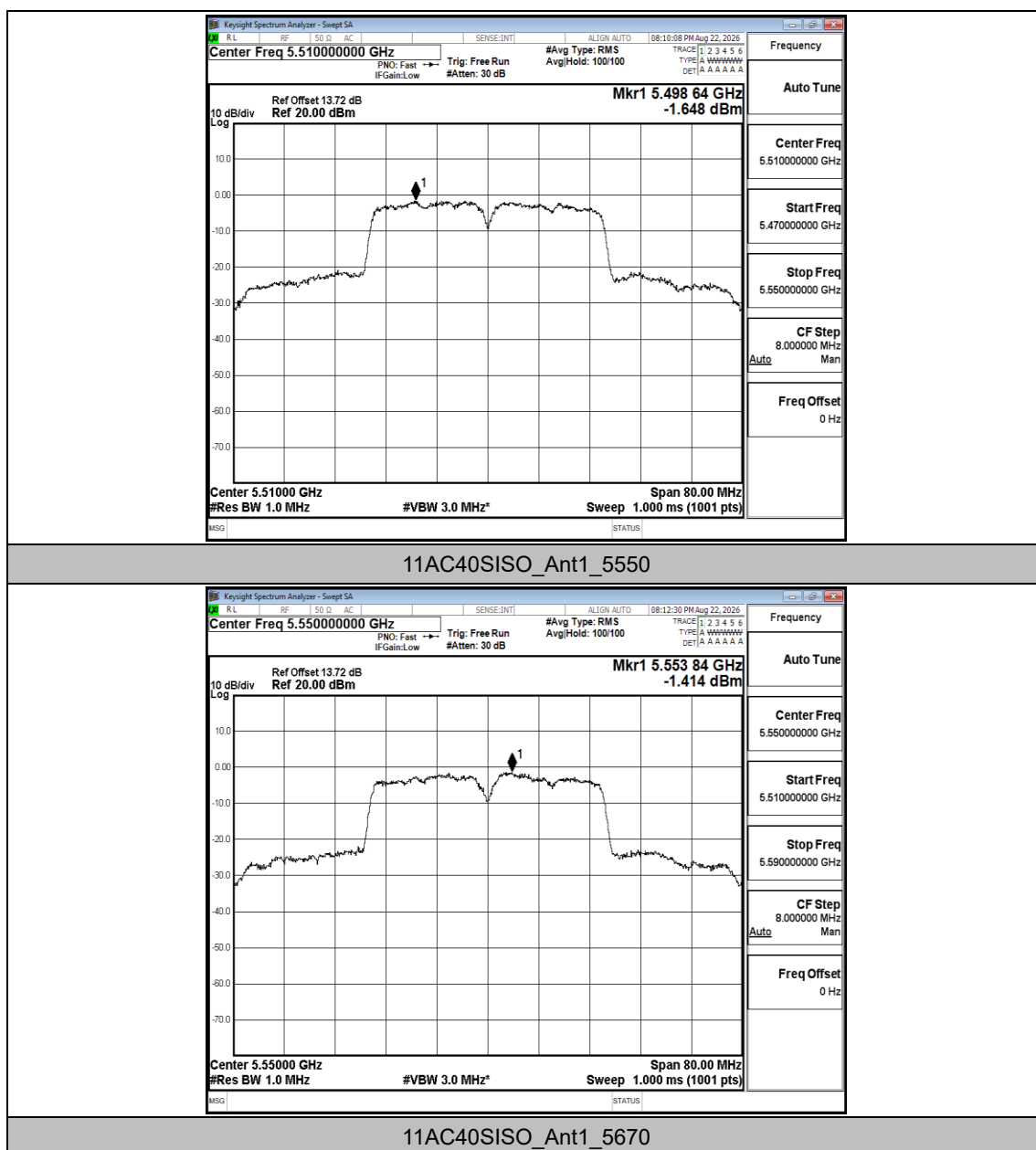


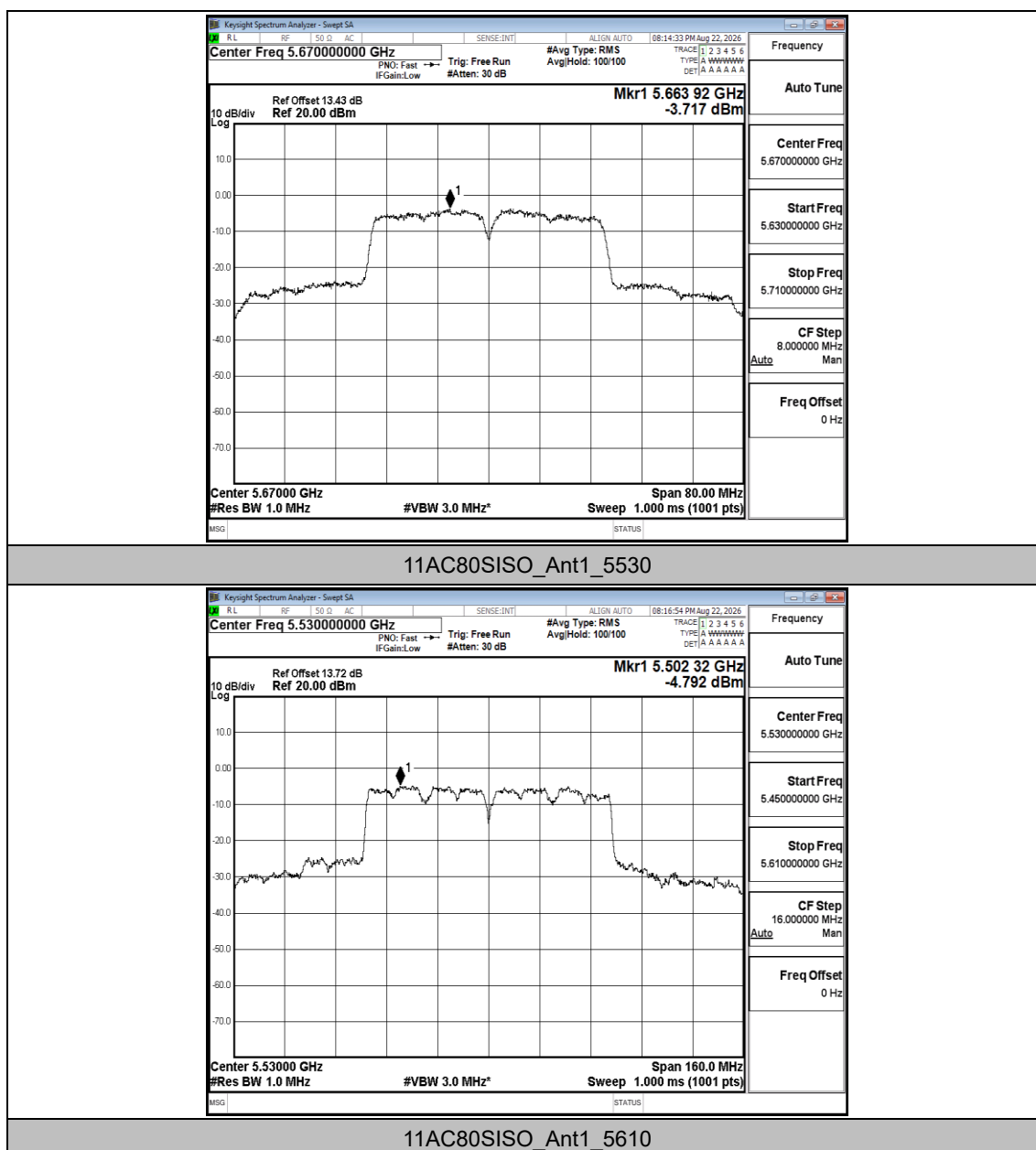
11N40SISO_Ant1_5510

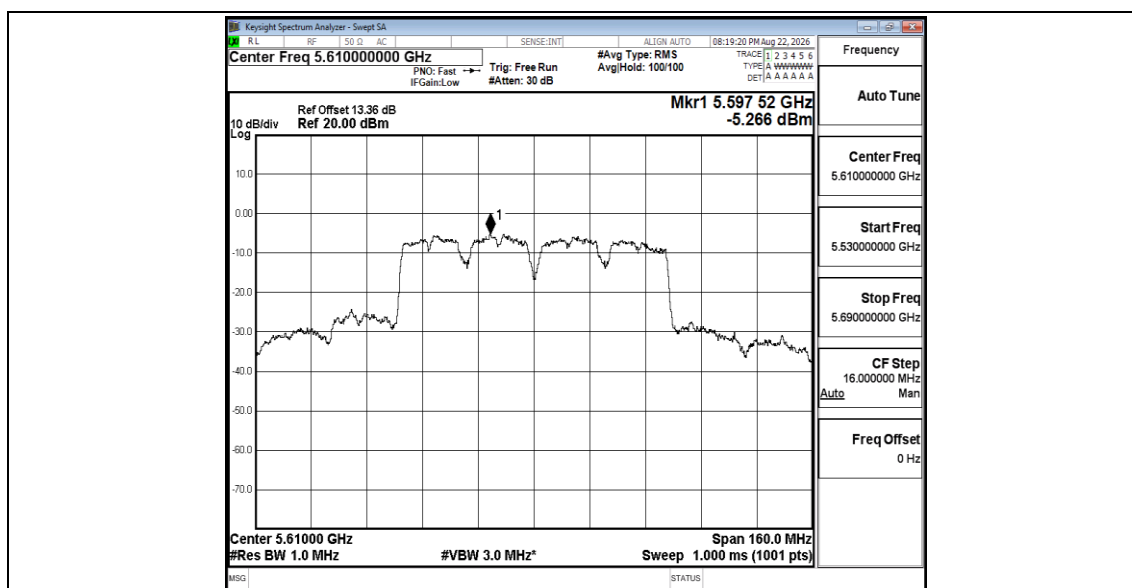












F.4 Emissions in Restricted Bands

Test Result

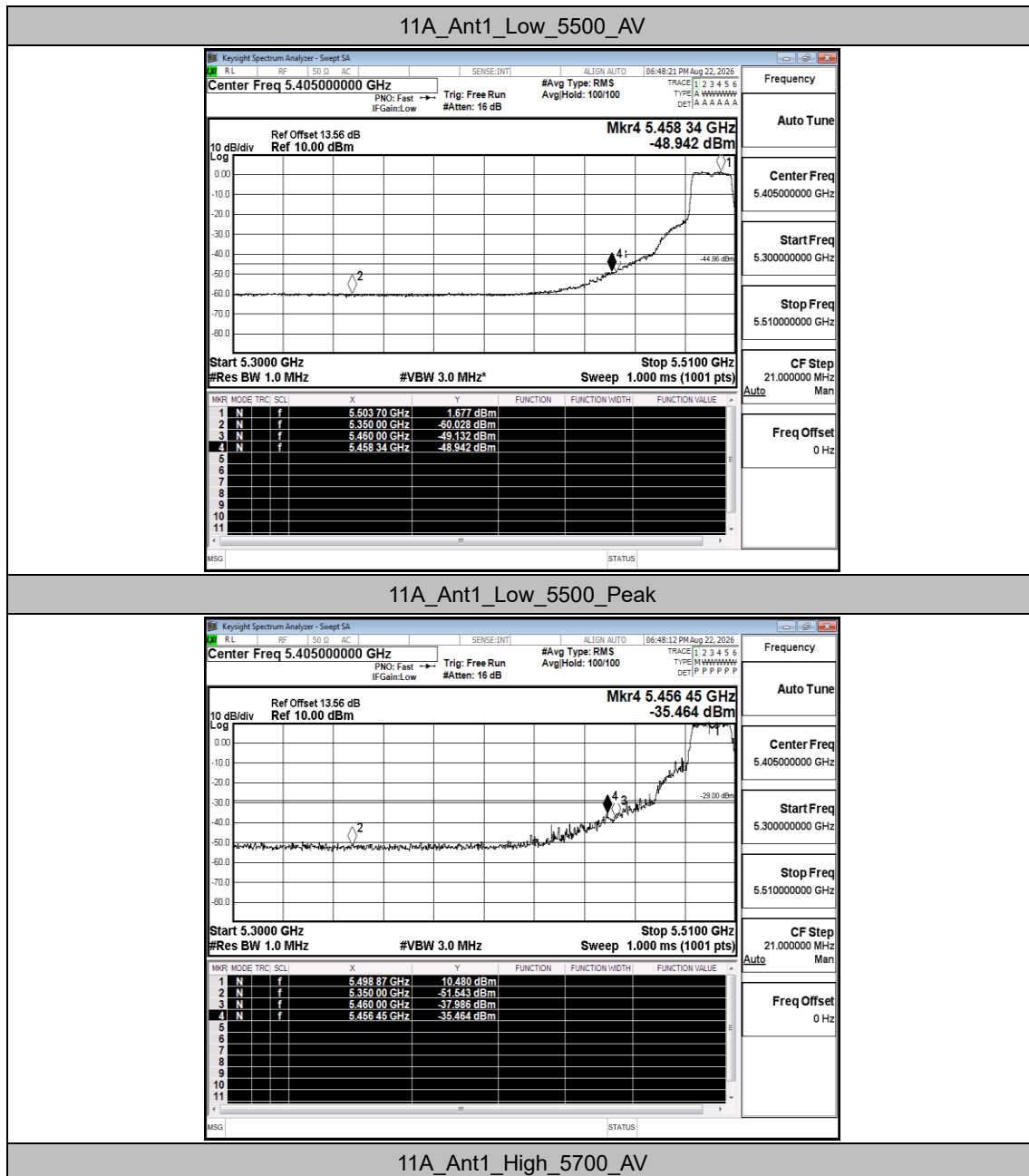
TestMode	Antenna	ChName	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant1	Low	5500	AV	5350.000	-60.03	≤-44.96	2.00	1.76	38.93	≤54	PASS
				AV	5458.340	-48.94	≤-44.96	2.00	1.76	50.02	≤54	PASS
				AV	5460.000	-49.13	≤-44.96	2.00	1.76	49.83	≤54	PASS
				Peak	5350.000	-51.54	≤-29.00	2.00	0.00	45.66	≤68.2	PASS
				Peak	5456.450	-35.46	≤-29.00	2.00	0.00	61.74	≤68.2	PASS
				Peak	5460.000	-37.99	≤-29.00	2.00	0.00	59.21	≤68.2	PASS
		High	5700	AV	5725.000	-45.45	≤-44.96	2.00	1.76	53.51	≤54	PASS
				AV	5725.340	-46.4	≤-44.96	2.00	1.76	52.56	≤54	PASS
				AV	5735.000	-54	≤-44.96	2.00	1.76	44.96	≤54	PASS
				Peak	5725.000	-33.31	≤-29.00	2.00	0.00	63.89	≤68.2	PASS
				Peak	5725.340	-32.5	≤-29.00	2.00	0.00	64.70	≤68.2	PASS
				Peak	5735.000	-41.02	≤-29.00	2.00	0.00	56.18	≤68.2	PASS
11N20SISO	Ant1	Low	5500	AV	5350.000	-60.53	≤-45.09	2.00	1.89	38.56	≤54	PASS
				AV	5458.130	-45.3	≤-45.09	2.00	1.89	53.79	≤54	PASS
				AV	5460.000	-45.72	≤-45.09	2.00	1.89	53.37	≤54	PASS
				Peak	5350.000	-54.06	≤-29.00	2.00	0.00	43.14	≤68.2	PASS
				Peak	5444.480	-30.62	≤-29.00	2.00	0.00	66.58	≤68.2	PASS
				Peak	5460.000	-33.39	≤-29.00	2.00	0.00	63.81	≤68.2	PASS
		High	5700	AV	5725.000	-48.41	≤-45.34	2.00	2.14	50.93	≤54	PASS
				AV	5725.530	-47.11	≤-45.34	2.00	2.14	52.23	≤54	PASS
				AV	5735.000	-56.8	≤-45.34	2.00	2.14	42.54	≤54	PASS
				Peak	5725.000	-28.3	≤-29.00	2.00	0.00	68.90	≤68.2	FAIL
				Peak	5729.520	-32.14	≤-29.00	2.00	0.00	65.06	≤68.2	PASS
				Peak	5735.000	-40.43	≤-29.00	2.00	0.00	56.77	≤68.2	PASS
11N40SISO	Ant1	Low	5510	AV	5350.000	-66.66	≤-46.21	2.00	3.01	33.55	≤54	PASS
				AV	5456.640	-53.18	≤-46.21	2.00	3.01	47.03	≤54	PASS
				AV	5460.000	-53.89	≤-46.21	2.00	3.01	46.32	≤54	PASS
				Peak	5350.000	-58.14	≤-29.00	2.00	0.00	39.06	≤68.2	PASS
				Peak	5453.780	-40.01	≤-29.00	2.00	0.00	57.19	≤68.2	PASS
				Peak	5460.000	-43.08	≤-29.00	2.00	0.00	54.12	≤68.2	PASS
		High	5670	AV	5725.000	-54.83	≤-45.63	2.00	2.43	44.80	≤54	PASS
				AV	5725.210	-54.43	≤-45.63	2.00	2.43	45.20	≤54	PASS
				AV	5735.000	-59.13	≤-45.63	2.00	2.43	40.50	≤54	PASS
				Peak	5725.000	-43.96	≤-29.00	2.00	0.00	53.24	≤68.2	PASS

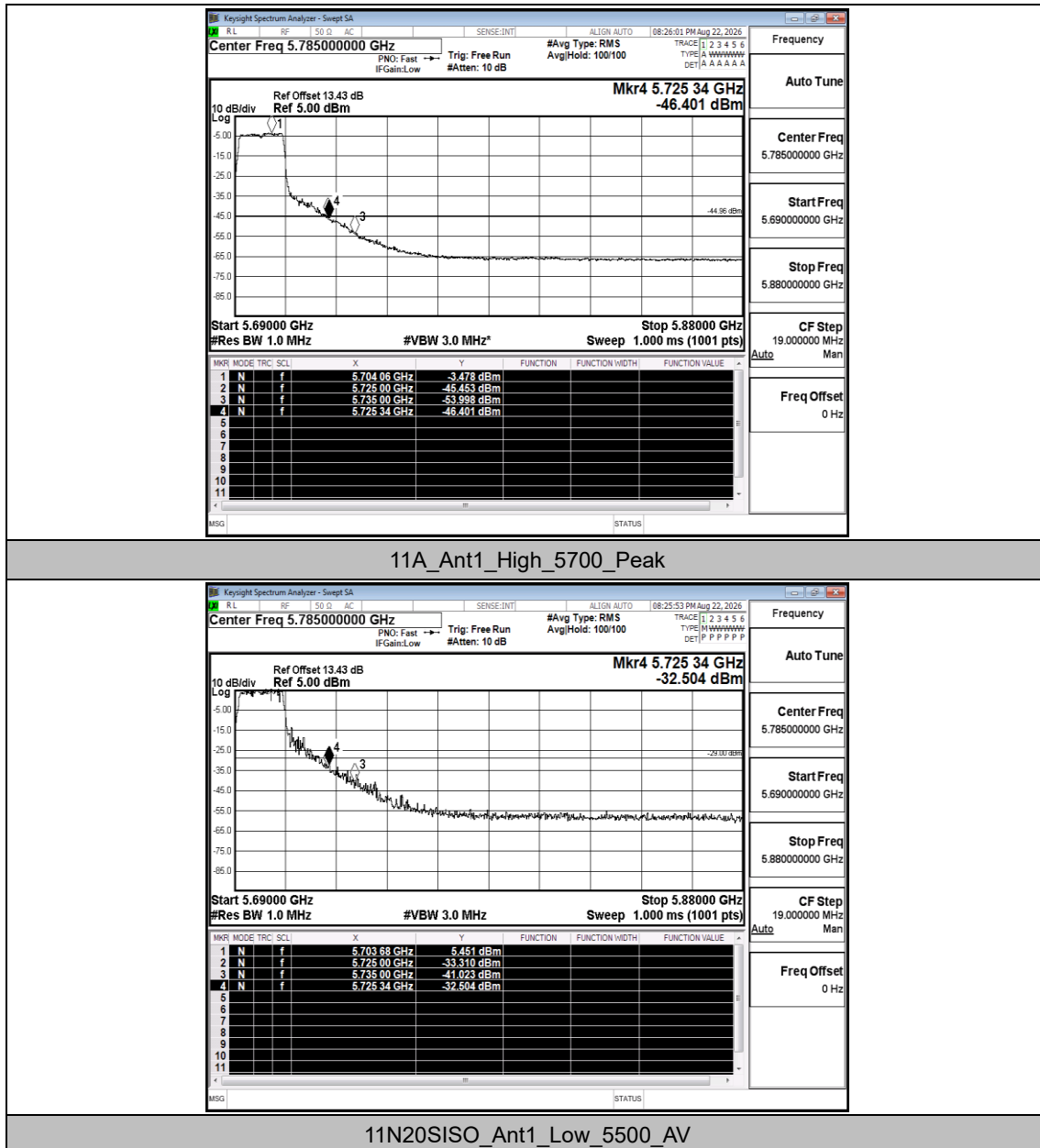
				Peak	5725.440	-41.14	≤-29.00	2.00	0.00	56.06	≤68.2	PASS
				Peak	5735.000	-43.79	≤-29.00	2.00	0.00	53.41	≤68.2	PASS
11AC20SISO	Ant1	Low	5500	AV	5350.000	-60.57	≤-44.96	2.00	1.76	38.39	≤54	PASS
				AV	5459.180	-45.91	≤-44.96	2.00	1.76	53.05	≤54	PASS
				AV	5460.000	-45.66	≤-44.96	2.00	1.76	53.30	≤54	PASS
				Peak	5350.000	-51.28	≤-29.00	2.00	0.00	45.92	≤68.2	PASS
				Peak	5458.760	-33.5	≤-29.00	2.00	0.00	63.70	≤68.2	PASS
				Peak	5460.000	-34.5	≤-29.00	2.00	0.00	62.70	≤68.2	PASS
		High	5700	AV	5725.000	-47.92	≤-44.96	2.00	1.76	51.04	≤54	PASS
				AV	5725.720	-49.72	≤-44.96	2.00	1.76	49.24	≤54	PASS
				AV	5735.000	-57.88	≤-44.96	2.00	1.76	41.08	≤54	PASS
				Peak	5725.000	-33.8	≤-29.00	2.00	0.00	63.40	≤68.2	PASS
				Peak	5725.340	-31.68	≤-29.00	2.00	0.00	65.52	≤68.2	PASS
				Peak	5735.000	-45.64	≤-29.00	2.00	0.00	51.56	≤68.2	PASS
11AC40SISO	Ant1	Low	5510	AV	5350.000	-66.17	≤-45.93	2.00	2.73	33.76	≤54	PASS
				AV	5458.840	-52.14	≤-45.93	2.00	2.73	47.79	≤54	PASS
				AV	5460.000	-53.48	≤-45.93	2.00	2.73	46.45	≤54	PASS
				Peak	5350.000	-57.91	≤-29.00	2.00	0.00	39.29	≤68.2	PASS
				Peak	5459.060	-40.43	≤-29.00	2.00	0.00	56.77	≤68.2	PASS
				Peak	5460.000	-43.77	≤-29.00	2.00	0.00	53.43	≤68.2	PASS
		High	5670	AV	5725.000	-54.3	≤-45.93	2.00	2.73	45.63	≤54	PASS
				AV	5725.440	-53.6	≤-45.93	2.00	2.73	46.33	≤54	PASS
				AV	5735.000	-59.19	≤-45.93	2.00	2.73	40.74	≤54	PASS
				Peak	5725.000	-41.88	≤-29.00	2.00	0.00	55.32	≤68.2	PASS
				Peak	5725.210	-39.93	≤-29.00	2.00	0.00	57.27	≤68.2	PASS
				Peak	5735.000	-46.65	≤-29.00	2.00	0.00	50.55	≤68.2	PASS
11AC80SISO	Ant1	Low	5530	AV	5350.000	-63.88	≤-45.89	2.00	2.69	36.01	≤54	PASS
				AV	5442.520	-47.43	≤-45.89	2.00	2.69	52.46	≤54	PASS
				AV	5460.000	-51.79	≤-45.89	2.00	2.69	48.10	≤54	PASS
				Peak	5350.000	-52.92	≤-29.00	2.00	0.00	44.28	≤68.2	PASS
				Peak	5450.920	-37.35	≤-29.00	2.00	0.00	59.85	≤68.2	PASS
				Peak	5460.000	-41.02	≤-29.00	2.00	0.00	56.18	≤68.2	PASS
		High	5610	AV	5725.000	-61.67	≤-45.89	2.00	2.69	38.22	≤54	PASS
				AV	5727.870	-59.98	≤-45.89	2.00	2.69	39.91	≤54	PASS
				AV	5735.000	-61.43	≤-45.89	2.00	2.69	38.46	≤54	PASS
				Peak	5725.000	-52.22	≤-29.00	2.00	0.00	44.98	≤68.2	PASS
				Peak	5727.210	-48.41	≤-29.00	2.00	0.00	48.79	≤68.2	PASS
				Peak	5735.000	-51.92	≤-29.00	2.00	0.00	45.28	≤68.2	PASS

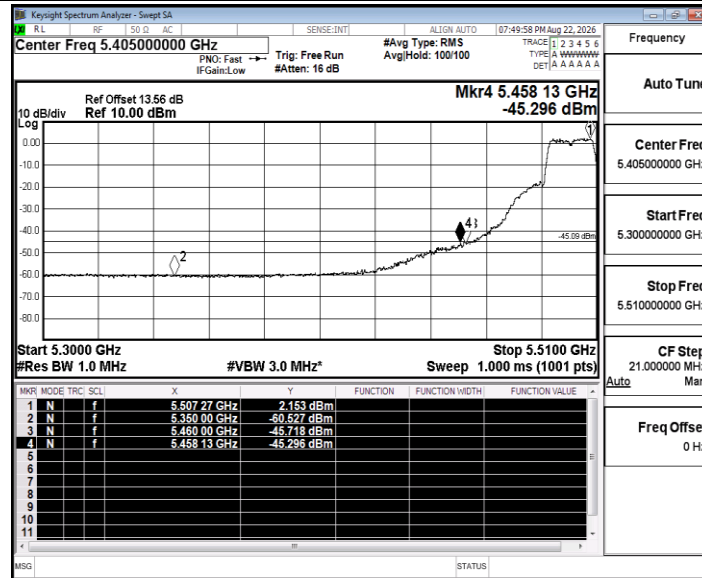
Note:

1. The Antenna Gain is compensated in the graph.

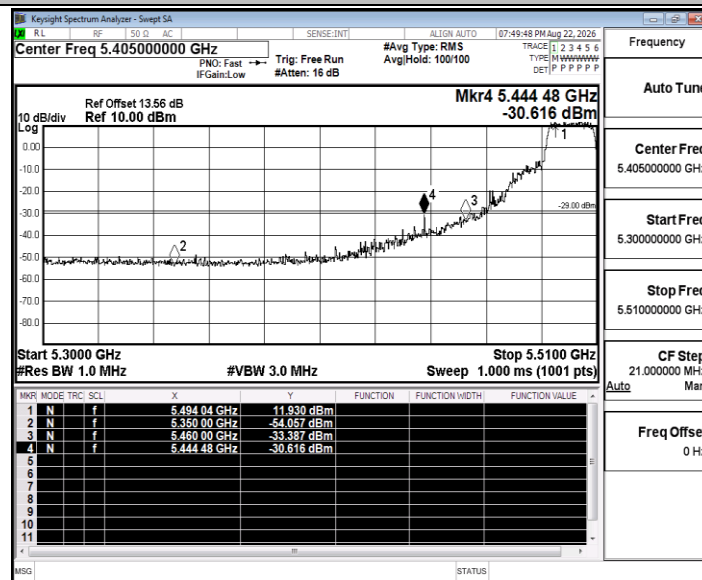
Test Graphs



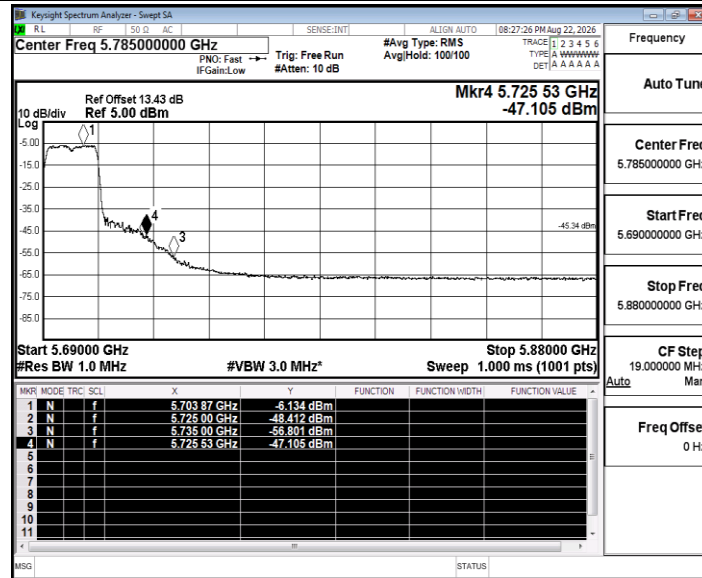




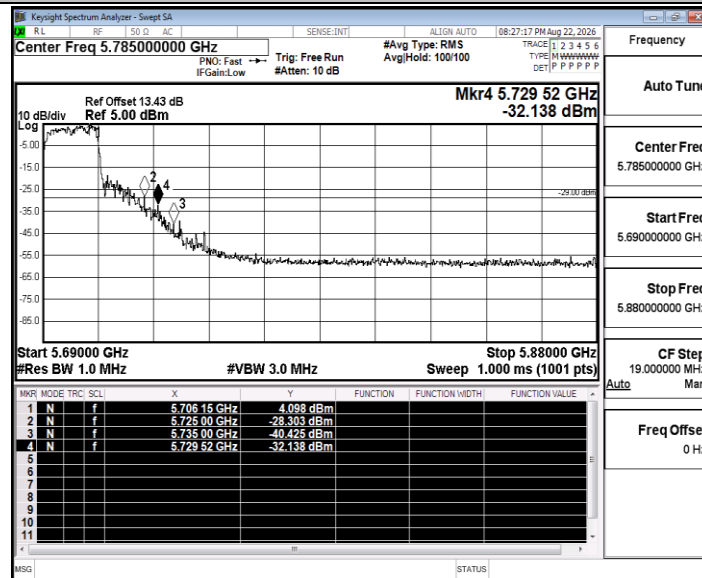
11N20SISO_Ant1_Low_5500_Peak



11N20SISO_Ant1_High_5700_AV



11N20SISO_Ant1_High_5700_Peak



11N40SISO_Ant1_Low_5510_AV

