

Appendix B

RF Test Data for 5.2GWIFI (Conducted Measurement)

Product Name: VEXnet SERVER

Test Model: 210-8909-000

Environmental Conditions

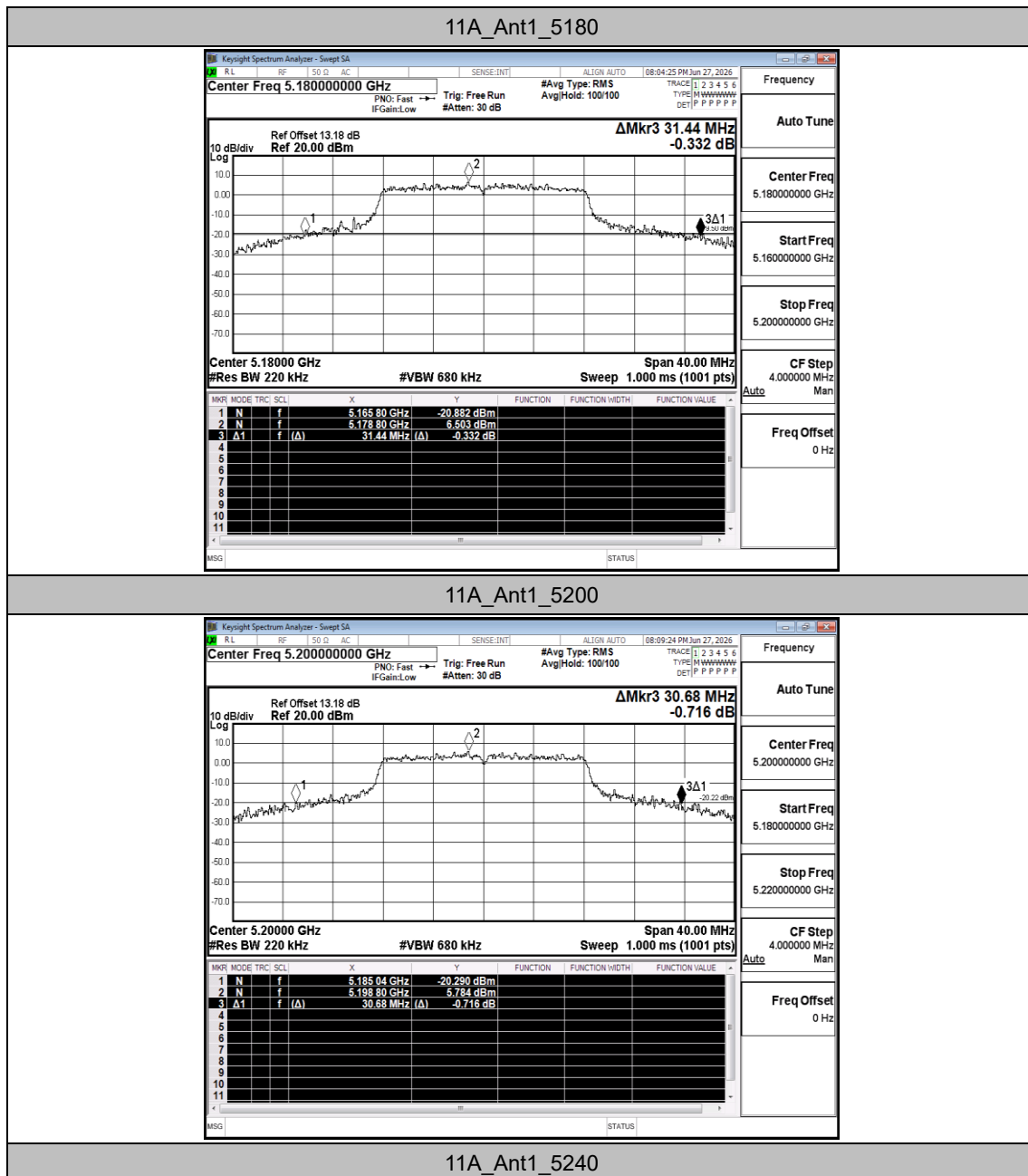
Temperature:	24.5°C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	FengLiu Tang

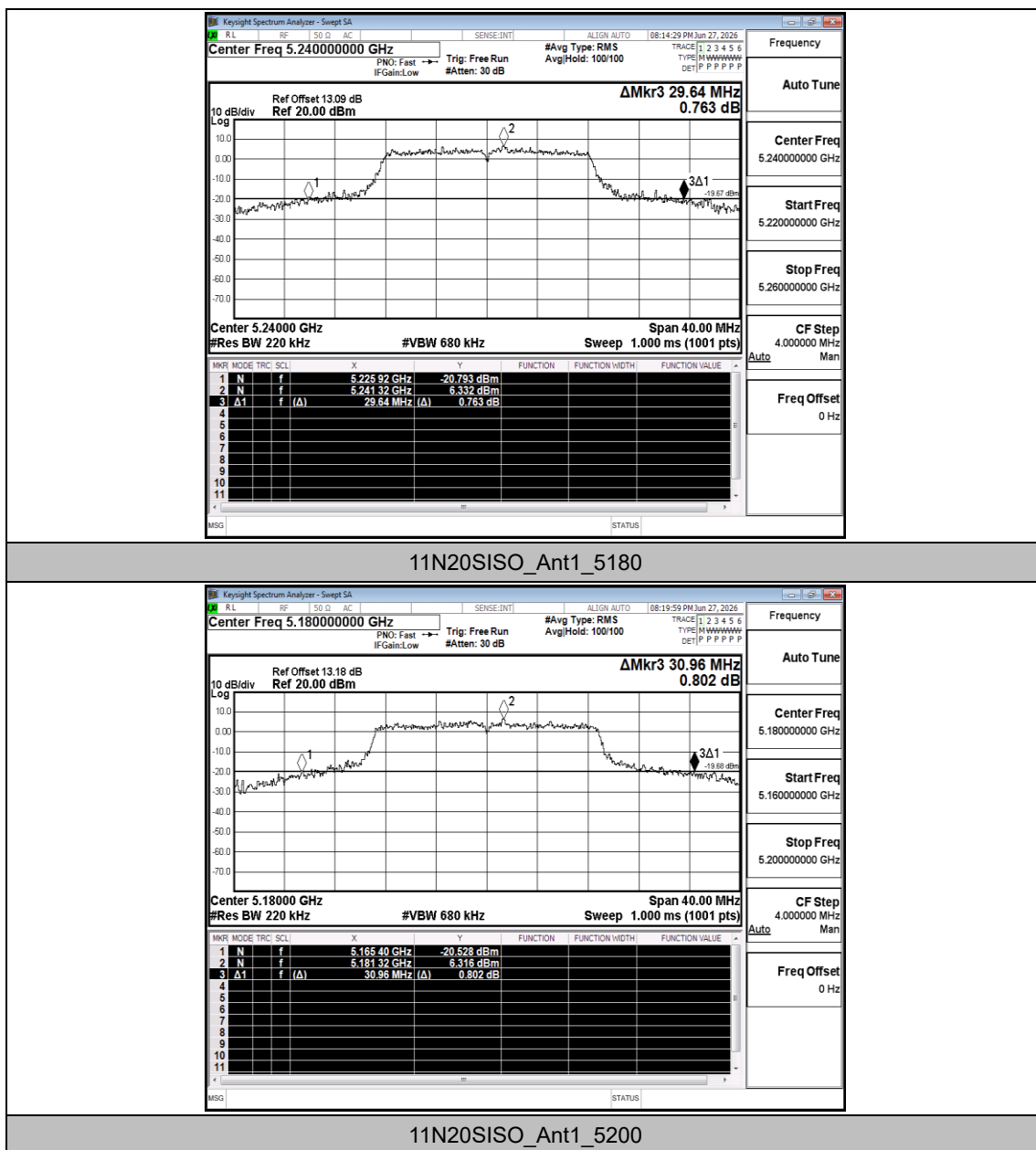
B.1 Emission Bandwidth

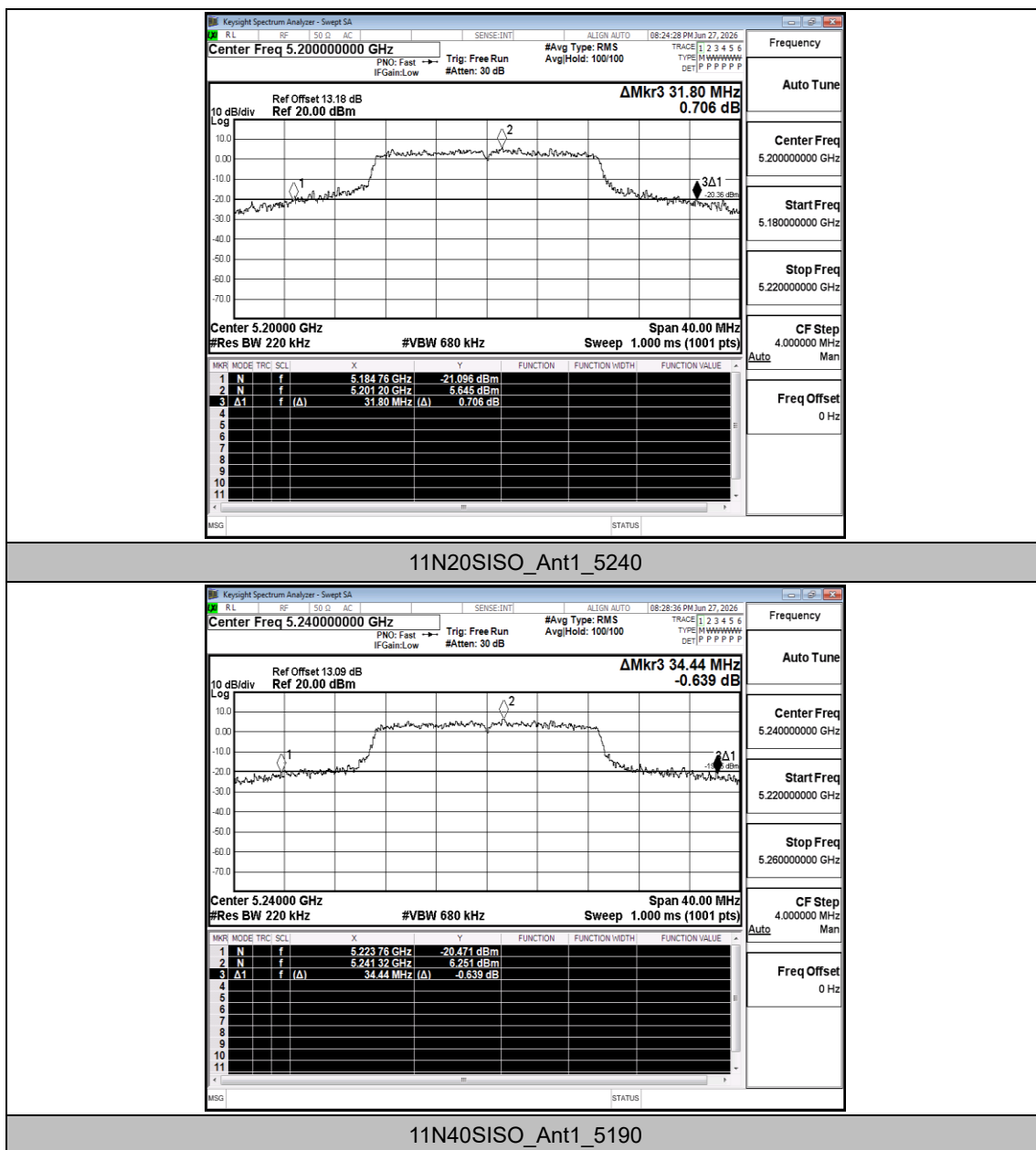
Test Result

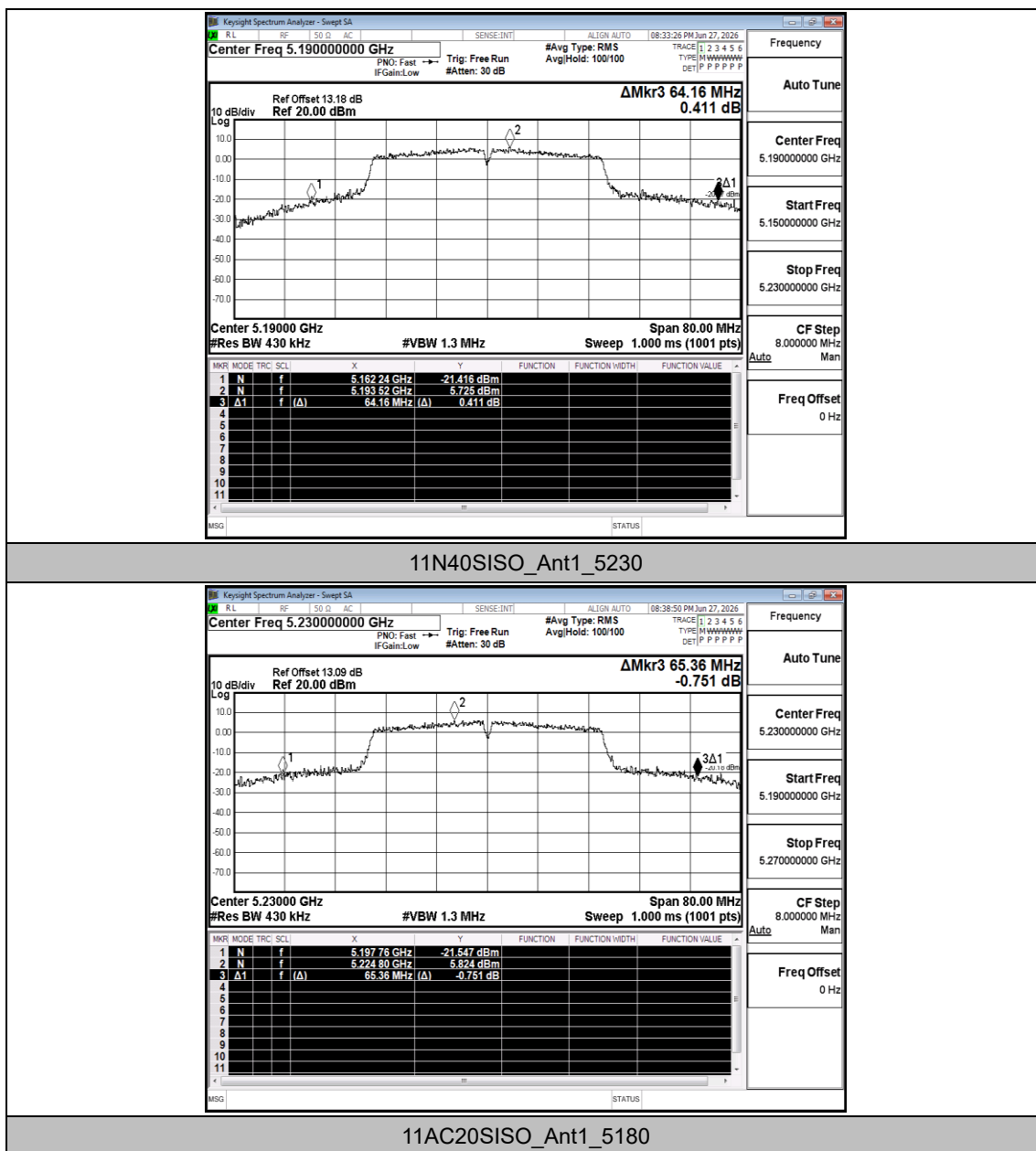
TestMode	Antenna	Freq (MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	31.440	5165.800	5197.240	---	---
		5200	30.680	5185.040	5215.720	---	---
		5240	29.640	5225.920	5255.560	---	---
11N20SISO	Ant1	5180	30.960	5165.400	5196.360	---	---
		5200	31.800	5184.760	5216.560	---	---
		5240	34.440	5223.760	5258.200	---	---
11N40SISO	Ant1	5190	64.160	5162.240	5226.400	---	---
		5230	65.360	5197.760	5263.120	---	---
11AC20SISO	Ant1	5180	29.880	5165.960	5195.840	---	---
		5200	33.720	5184.200	5217.920	---	---
		5240	31.960	5224.560	5256.520	---	---
11AC40SISO	Ant1	5190	70.800	5157.120	5227.920	---	---
		5230	75.520	5190.880	5266.400	---	---
11AC80SISO	Ant1	5210	129.920	5153.840	5283.760	---	---
11AX20SISO	Ant1	5180	33.640	5163.440	5197.080	---	---
		5200	36.520	5182.400	5218.920	---	---
		5240	34.360	5222.240	5256.600	---	---
11AX40SISO	Ant1	5190	65.520	5159.440	5224.960	---	---
		5230	71.920	5194.640	5266.560	---	---
11AX80SISO	Ant1	5210	122.240	5156.240	5278.480	---	---

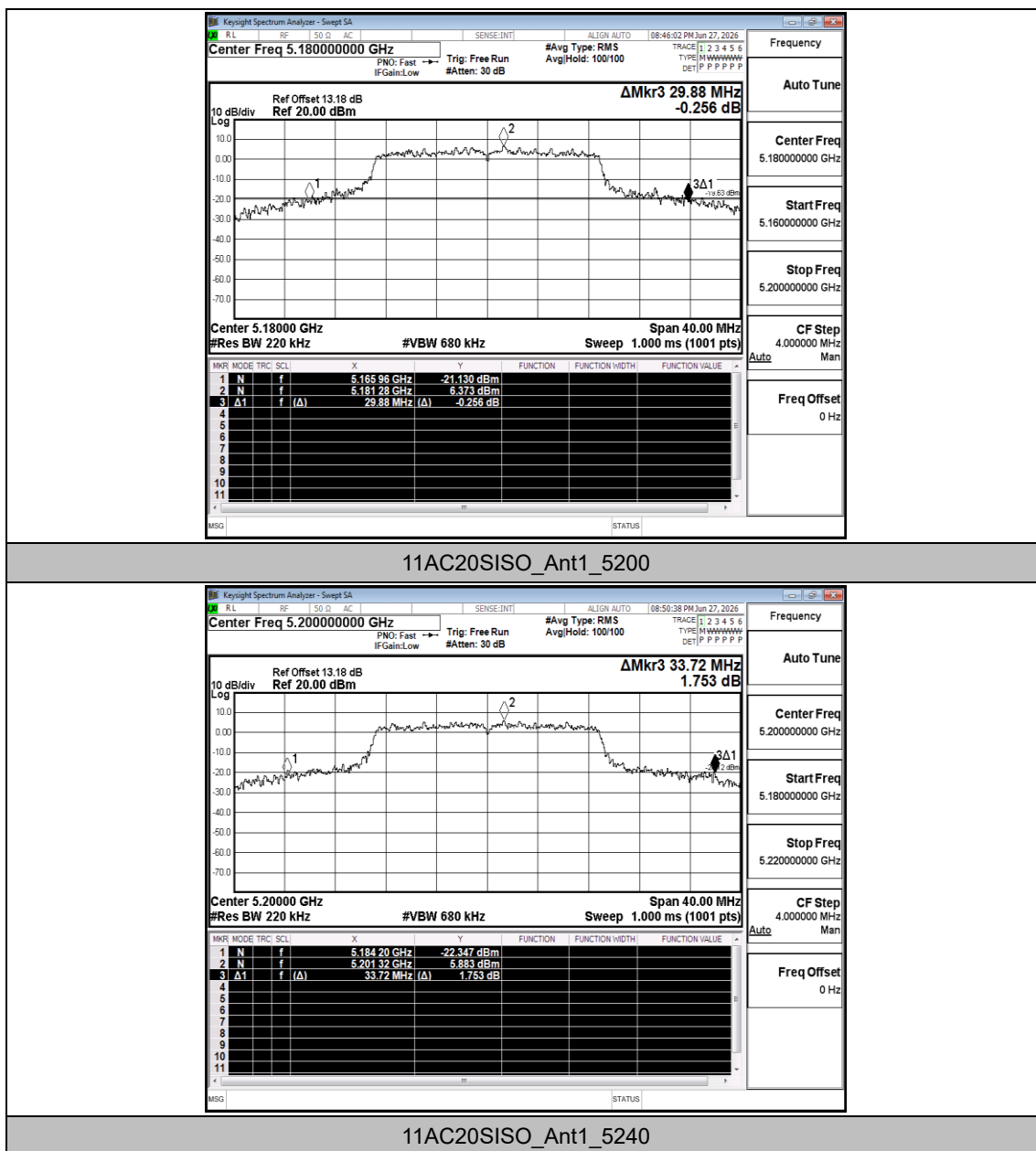
Test Graphs

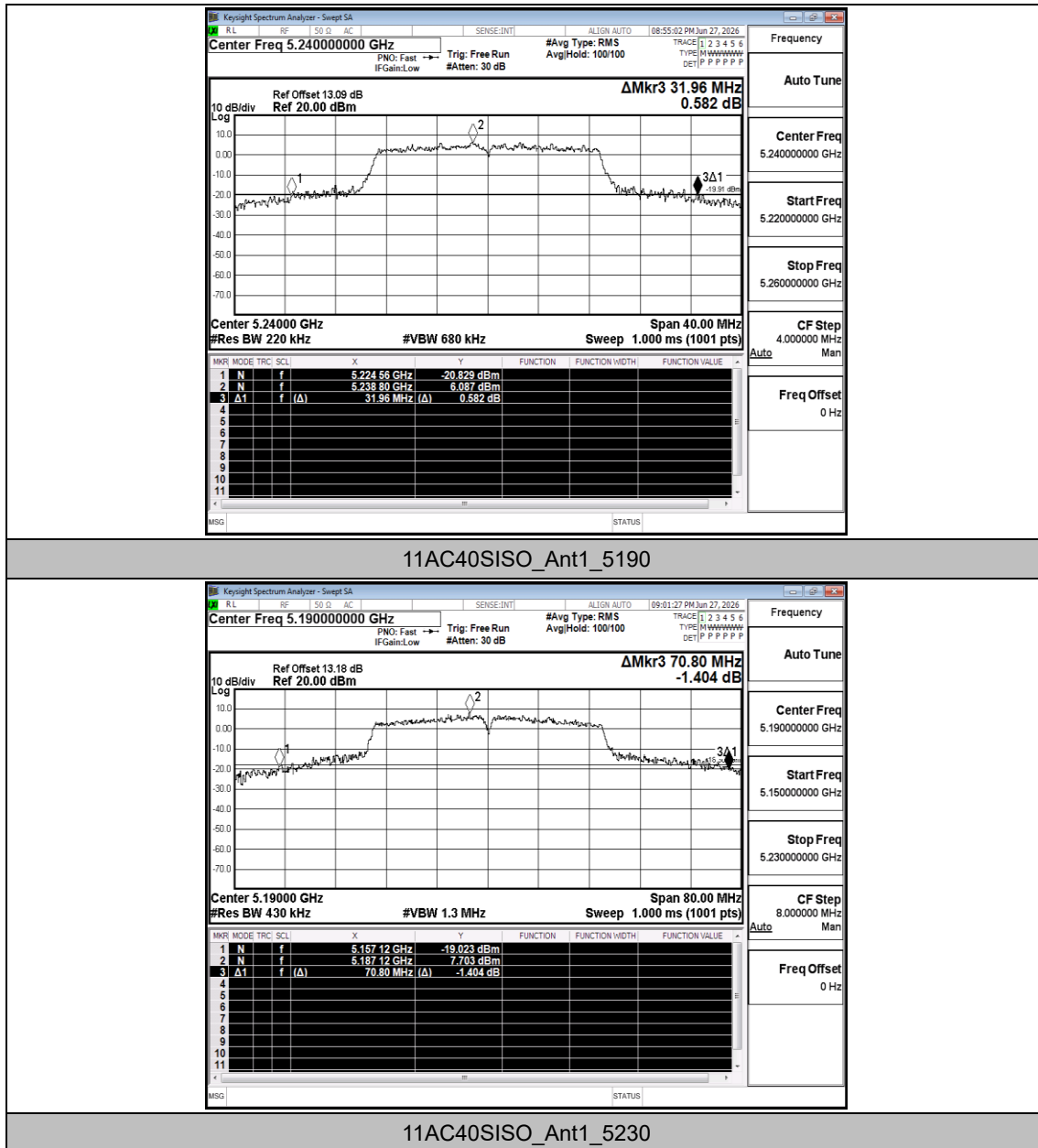


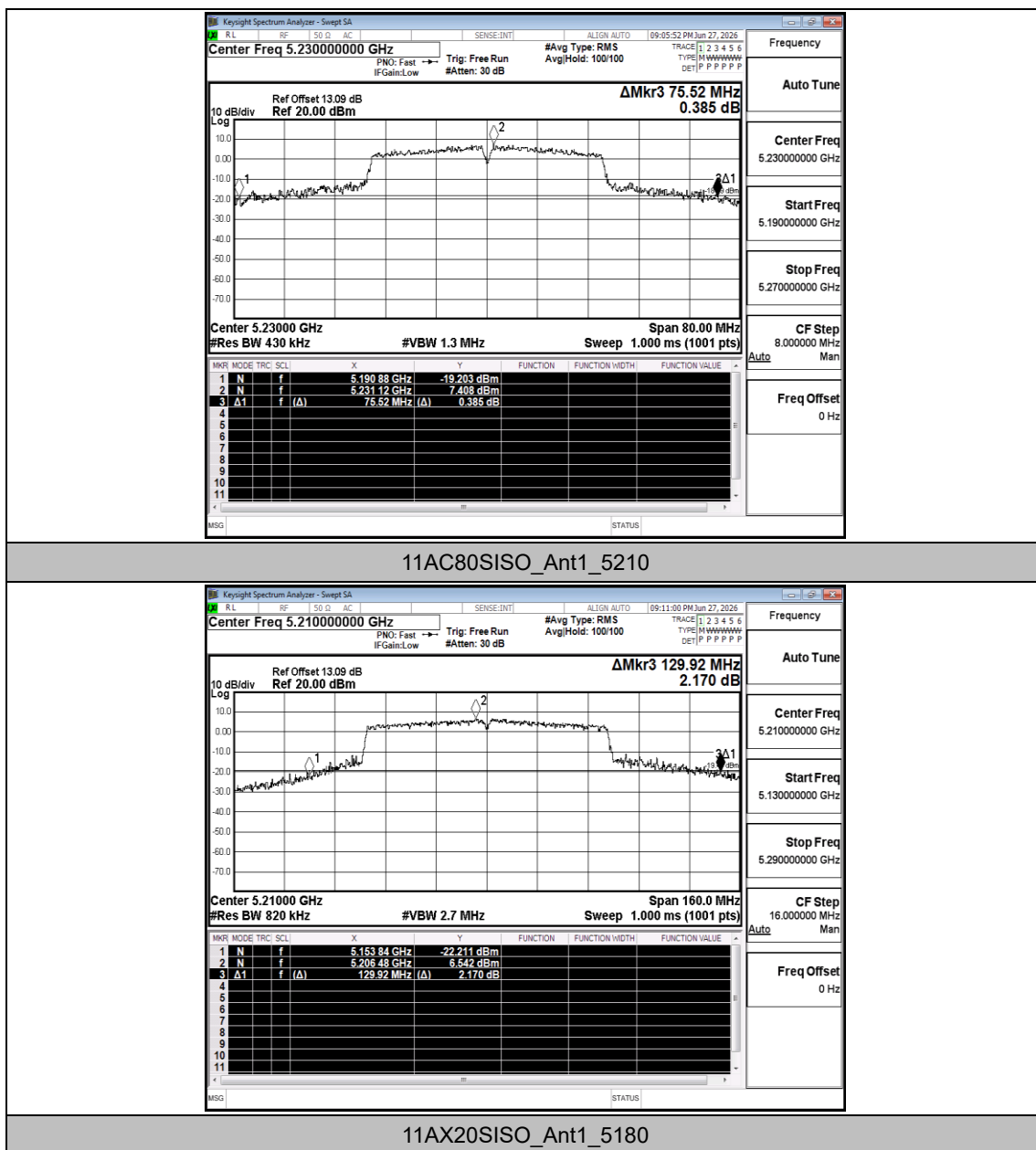


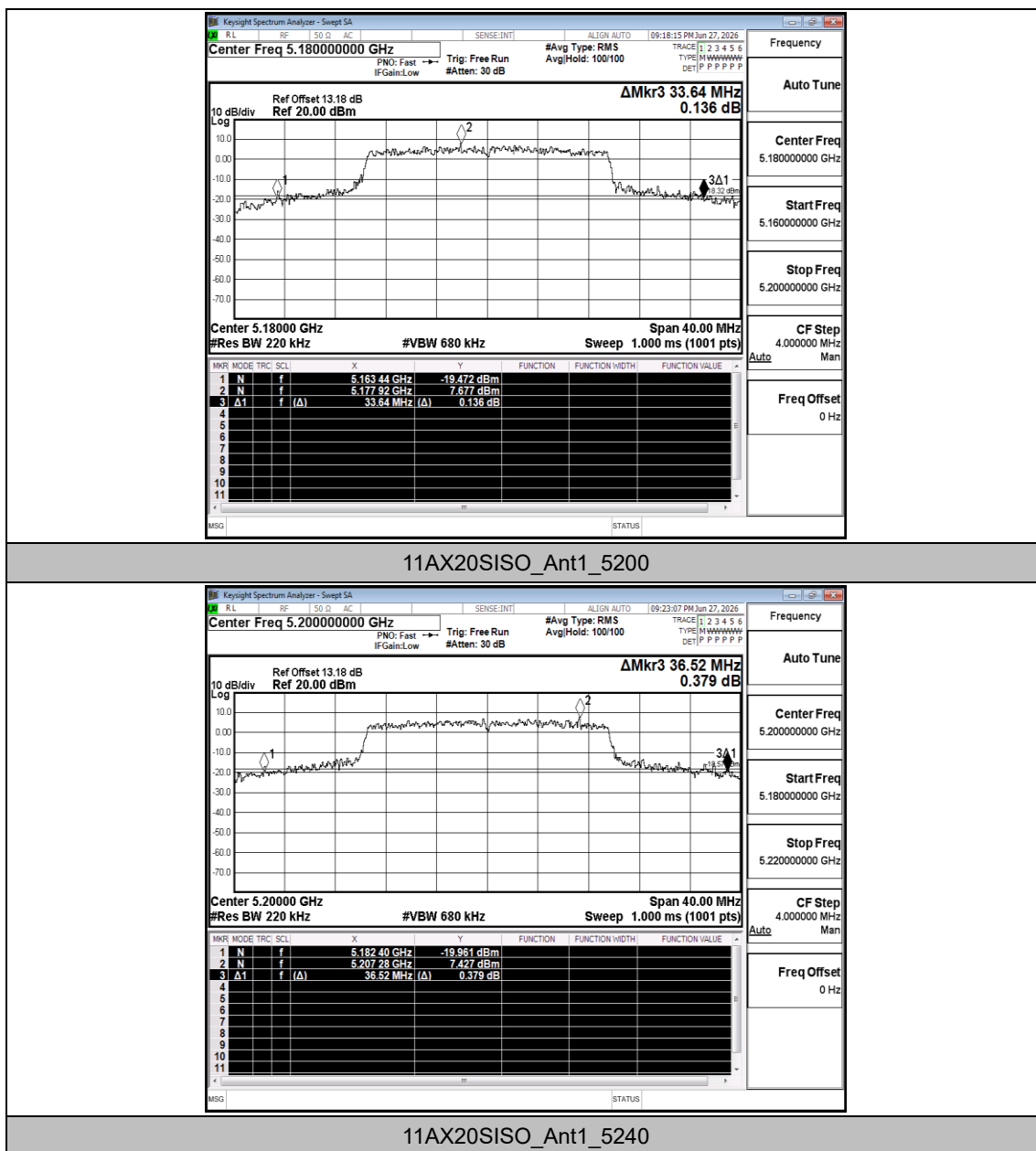


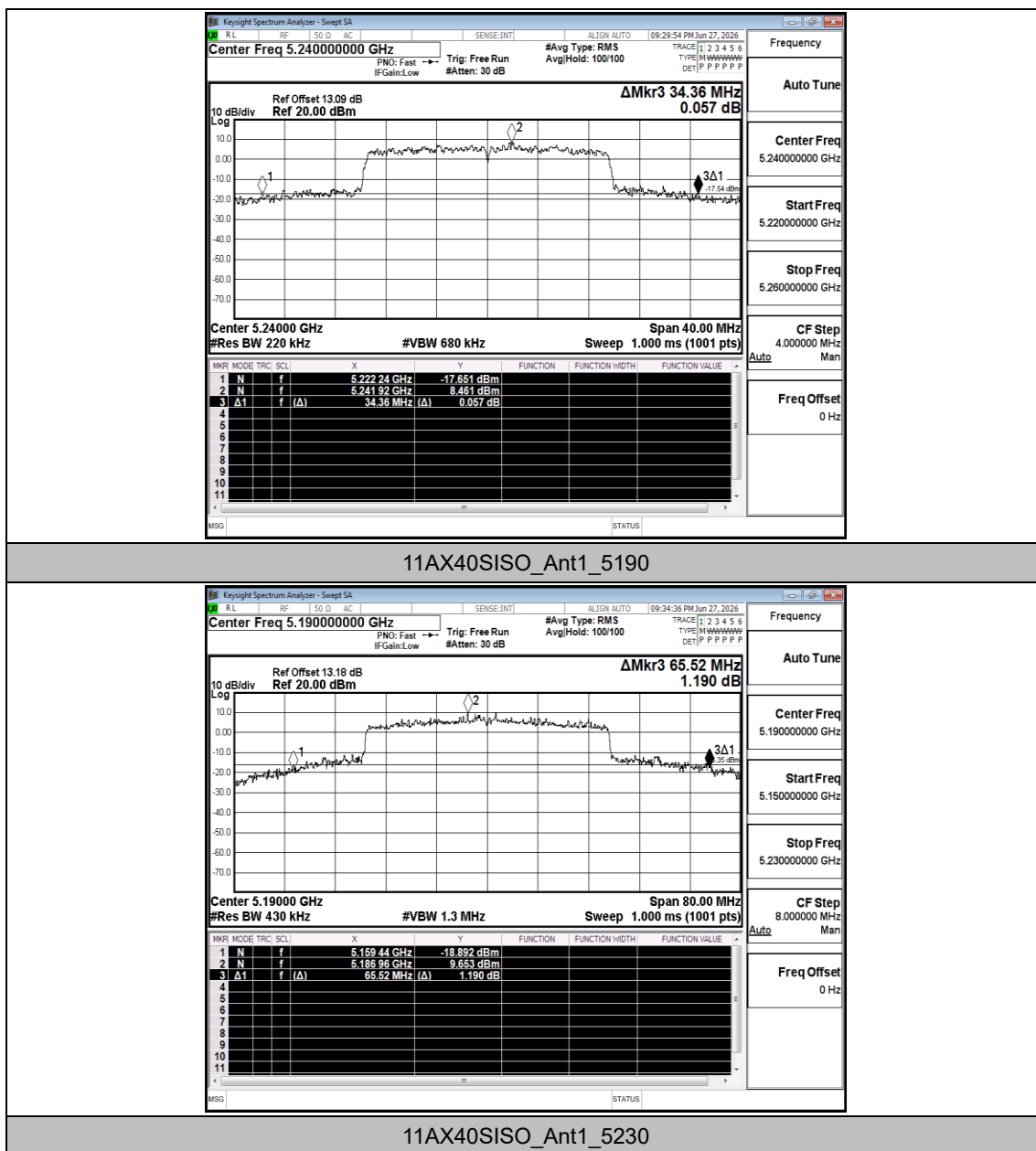


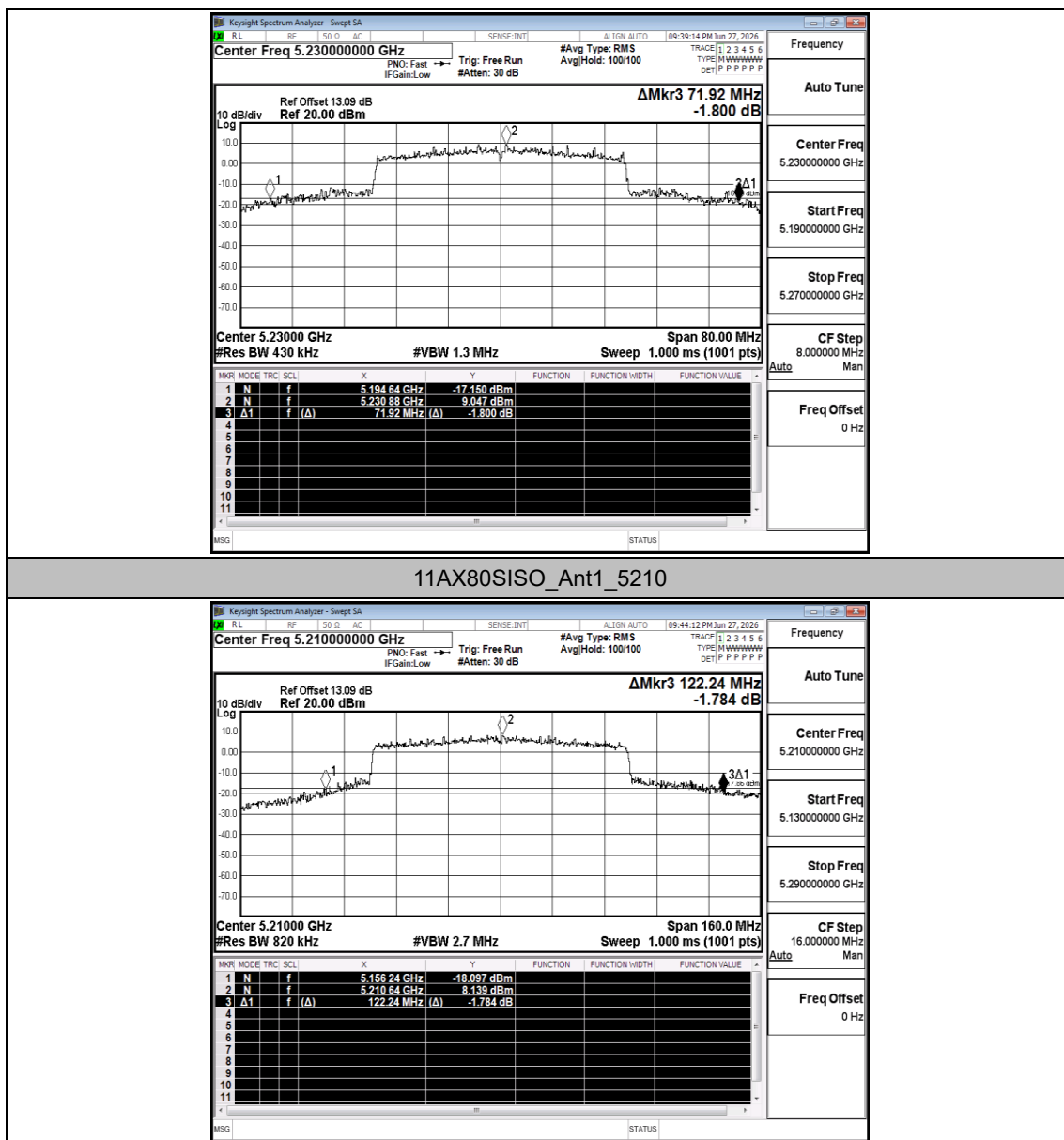








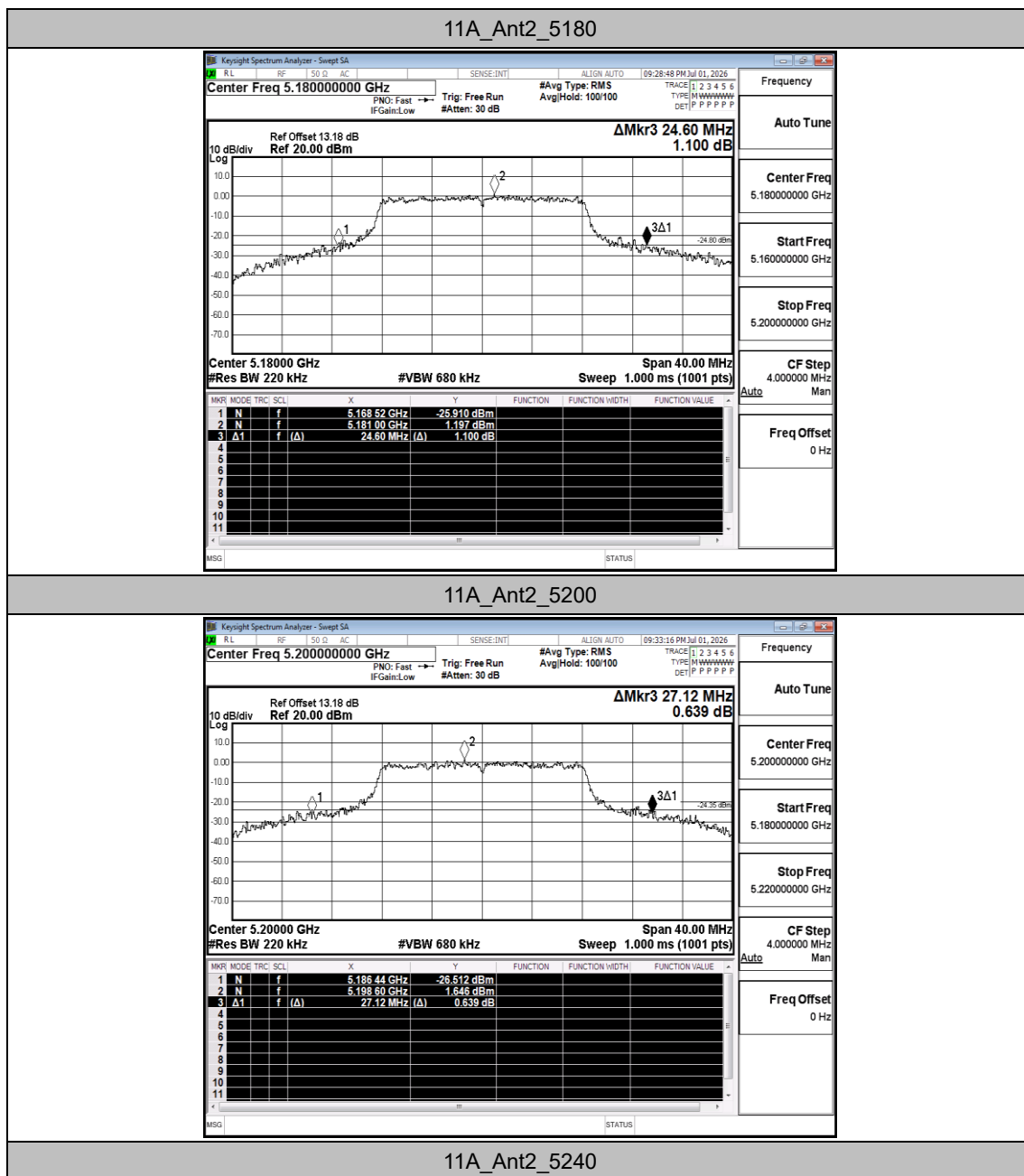


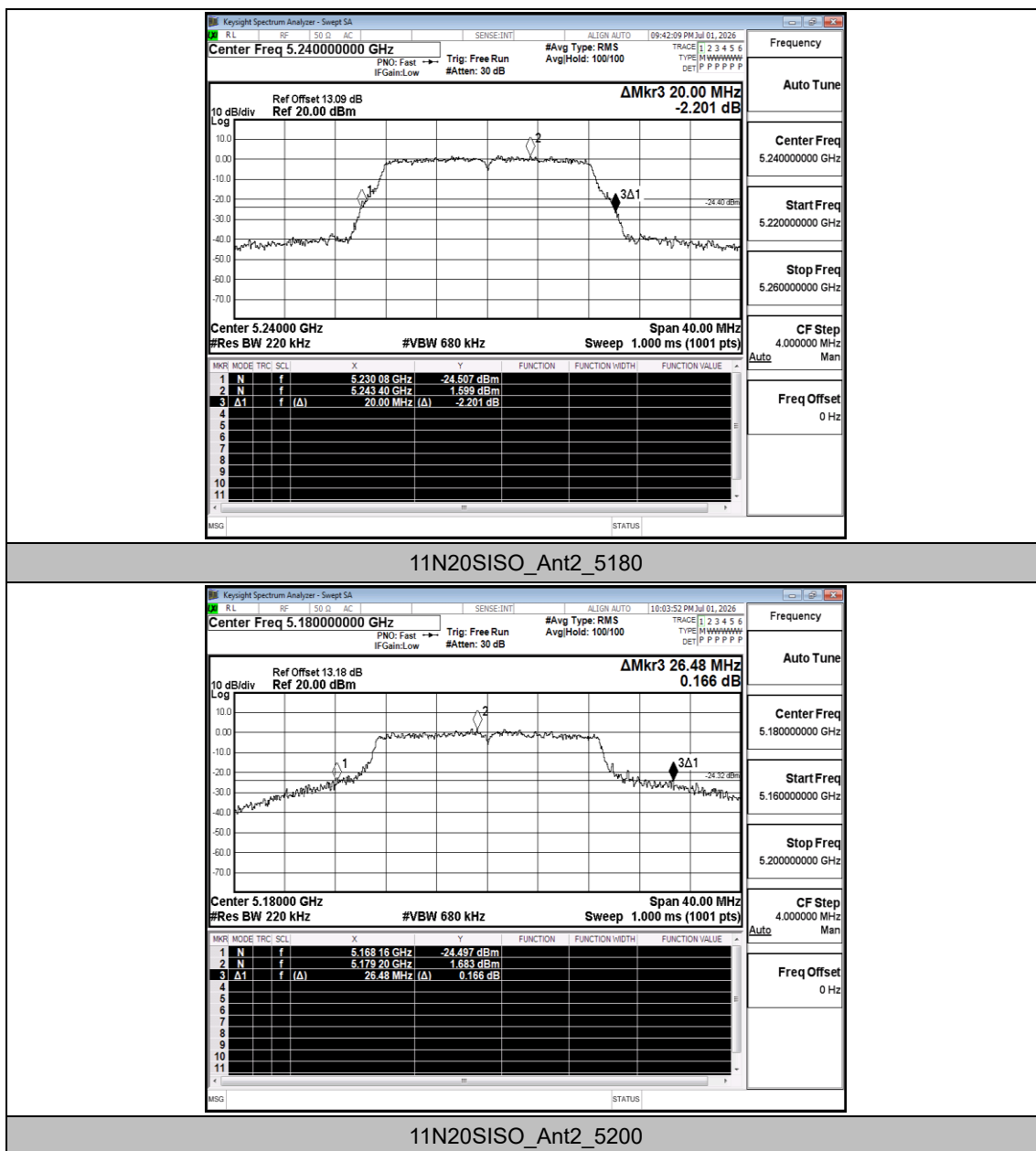


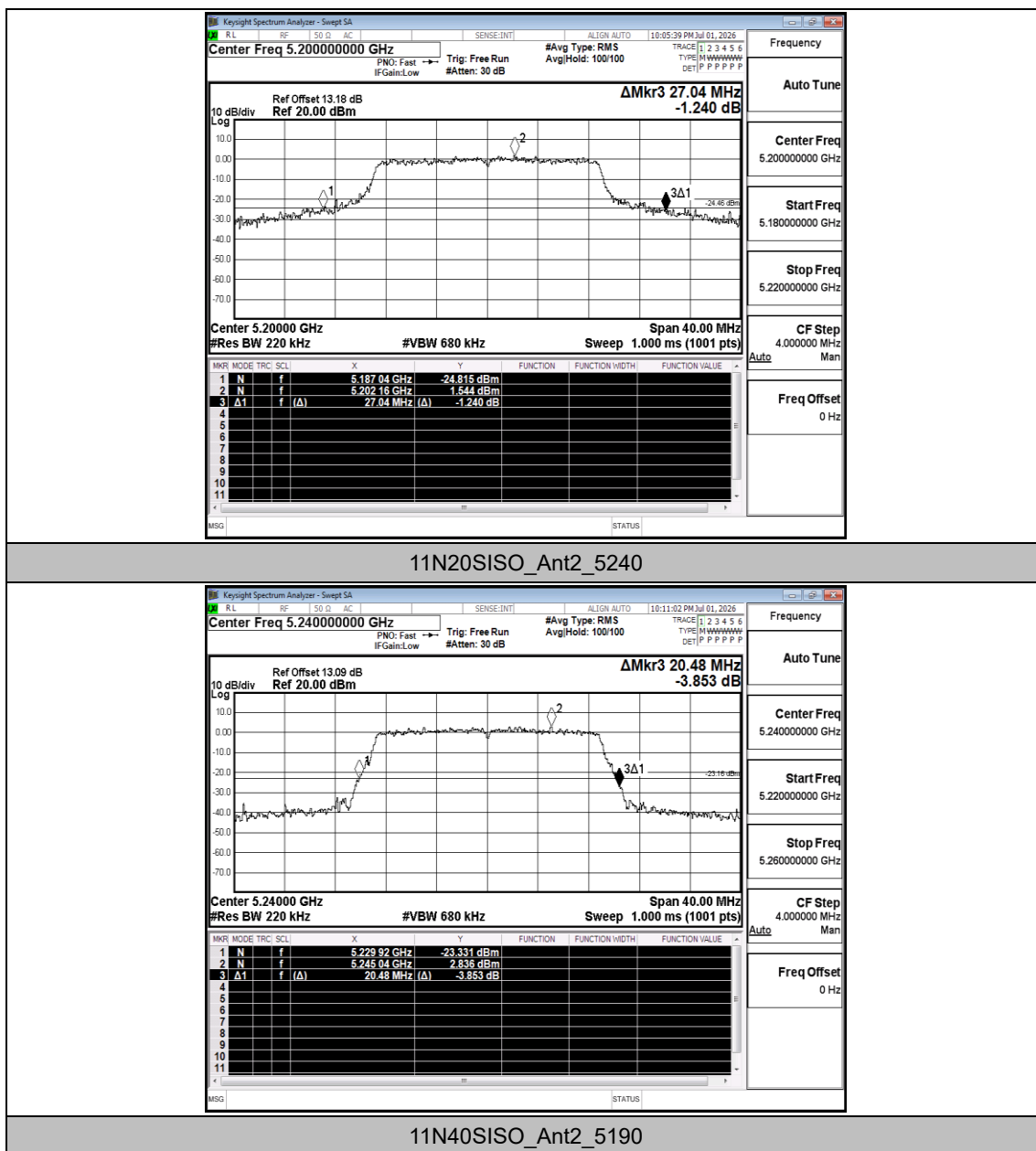
Test Result

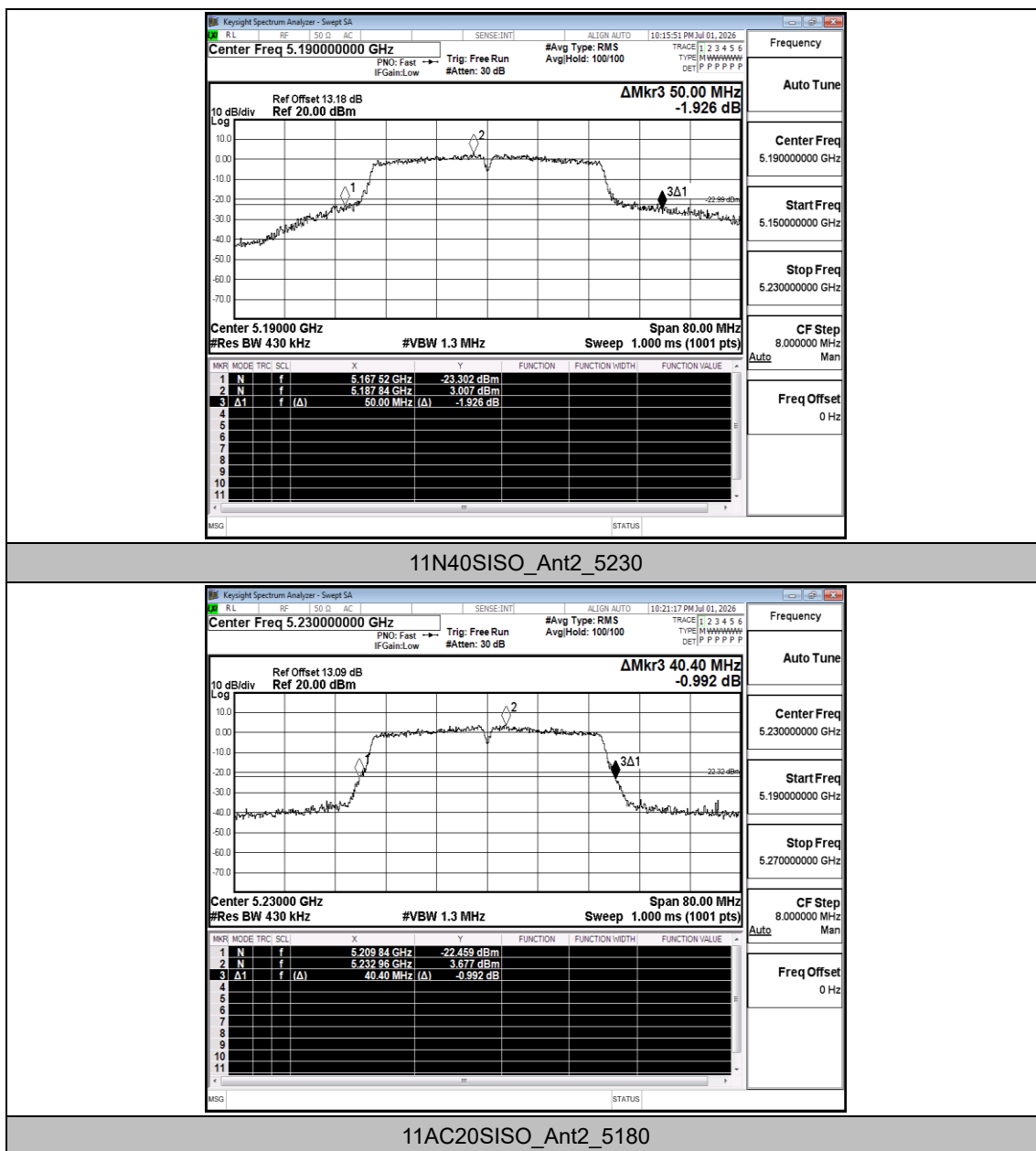
TestMode	Antenna	Freq (MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant2	5180	24.600	5168.520	5193.120	---	---
		5200	27.120	5186.440	5213.560	---	---
		5240	20.000	5230.080	5250.080	---	---
11N20SISO	Ant2	5180	26.480	5168.160	5194.640	---	---
		5200	27.040	5187.040	5214.080	---	---
		5240	20.480	5229.920	5250.400	---	---
11N40SISO	Ant2	5190	50.000	5167.520	5217.520	---	---
		5230	40.400	5209.840	5250.240	---	---
11AC20SISO	Ant2	5180	24.960	5168.720	5193.680	---	---
		5200	27.640	5186.880	5214.520	---	---
		5240	20.400	5230.000	5250.400	---	---
11AC40SISO	Ant2	5190	42.880	5170.240	5213.120	---	---
		5230	40.400	5209.840	5250.240	---	---
11AC80SISO	Ant2	5210	105.120	5170.320	5275.440	---	---
11AX20SISO	Ant2	5180	28.280	5166.680	5194.960	---	---
		5200	29.720	5185.800	5215.520	---	---
		5240	20.080	5230.040	5250.120	---	---
11AX40SISO	Ant2	5190	46.240	5170.320	5216.560	---	---
		5230	39.440	5210.400	5249.840	---	---
11AX80SISO	Ant2	5210	89.760	5169.040	5258.800	---	---

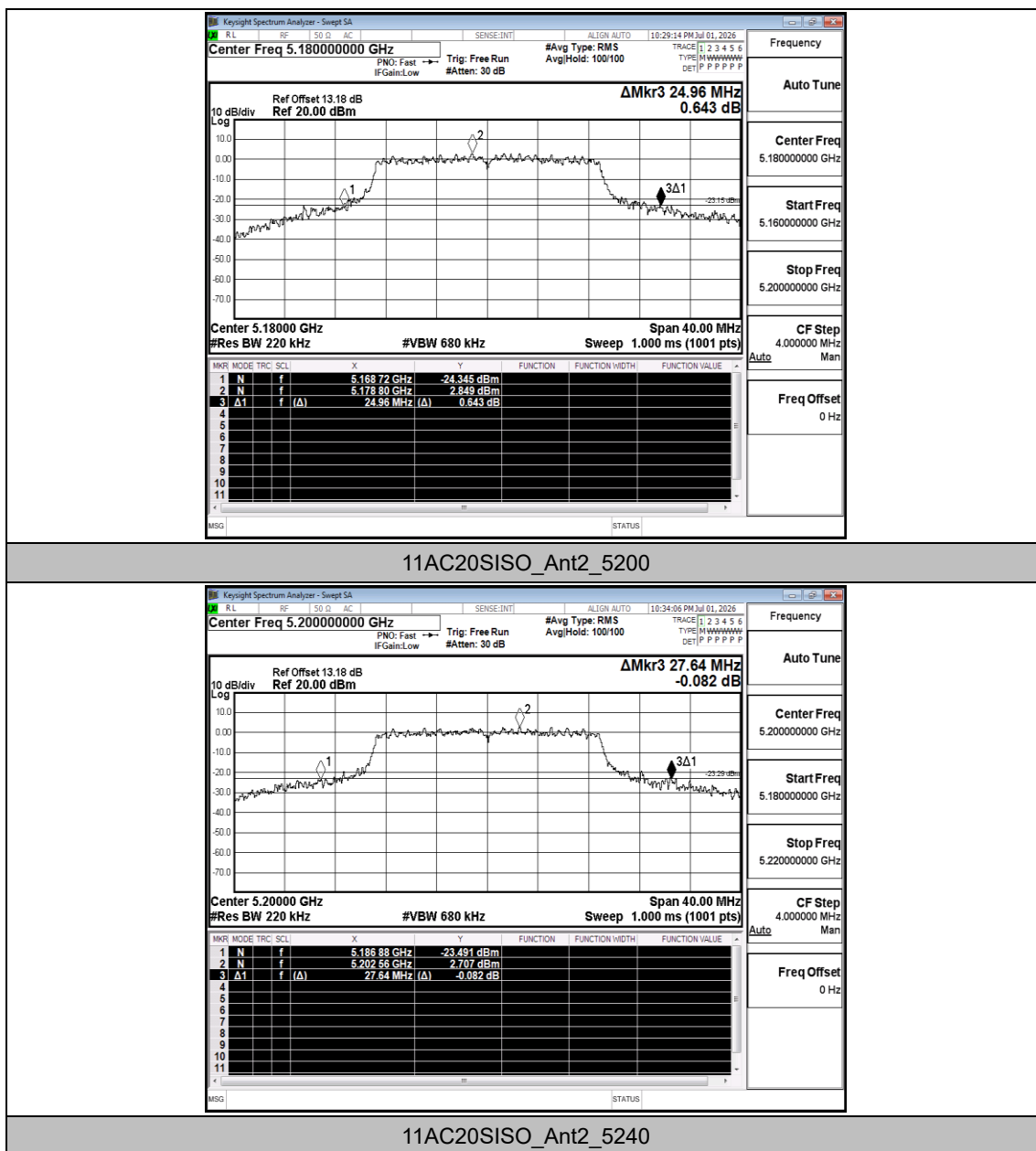
Test Graphs

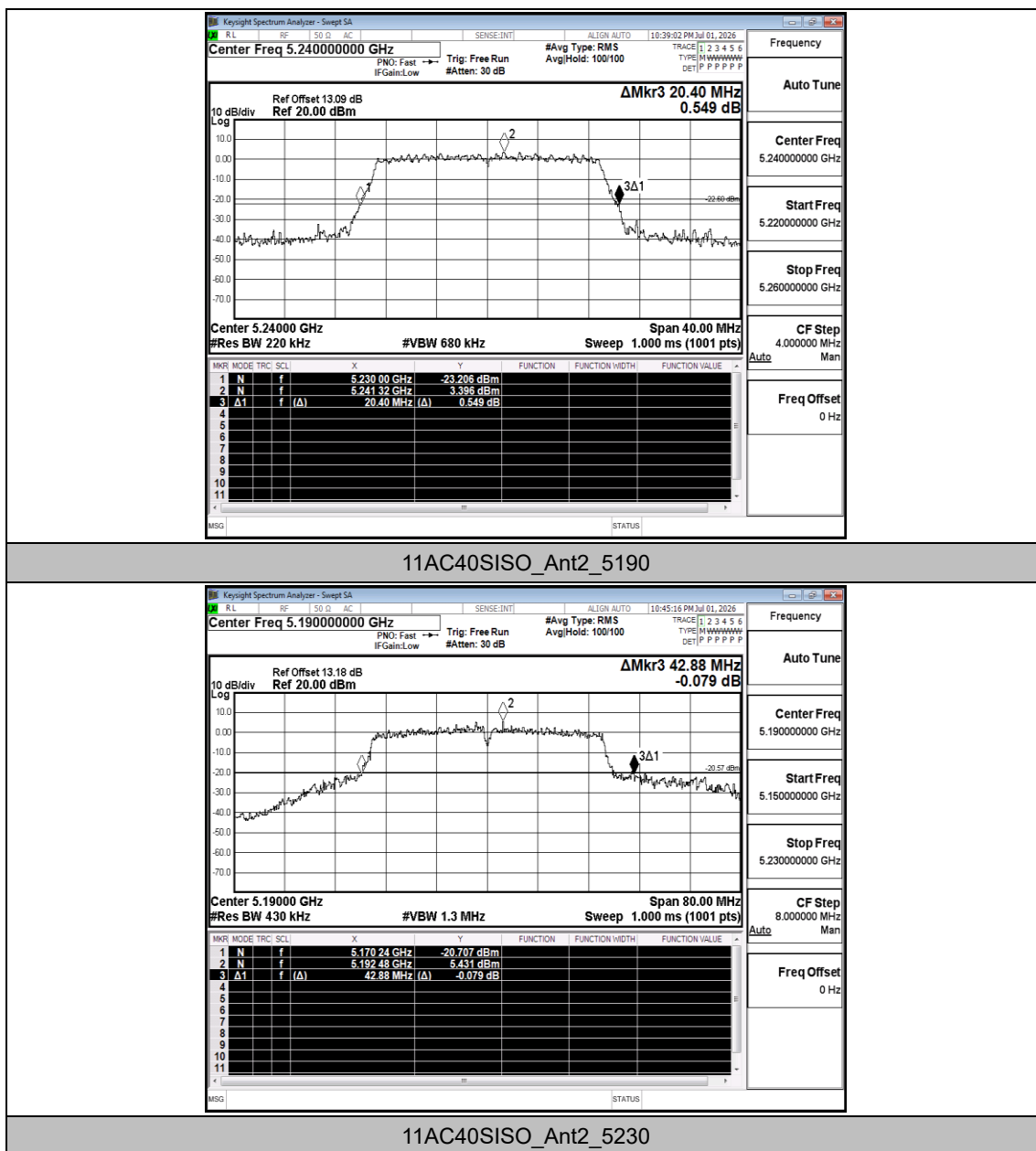


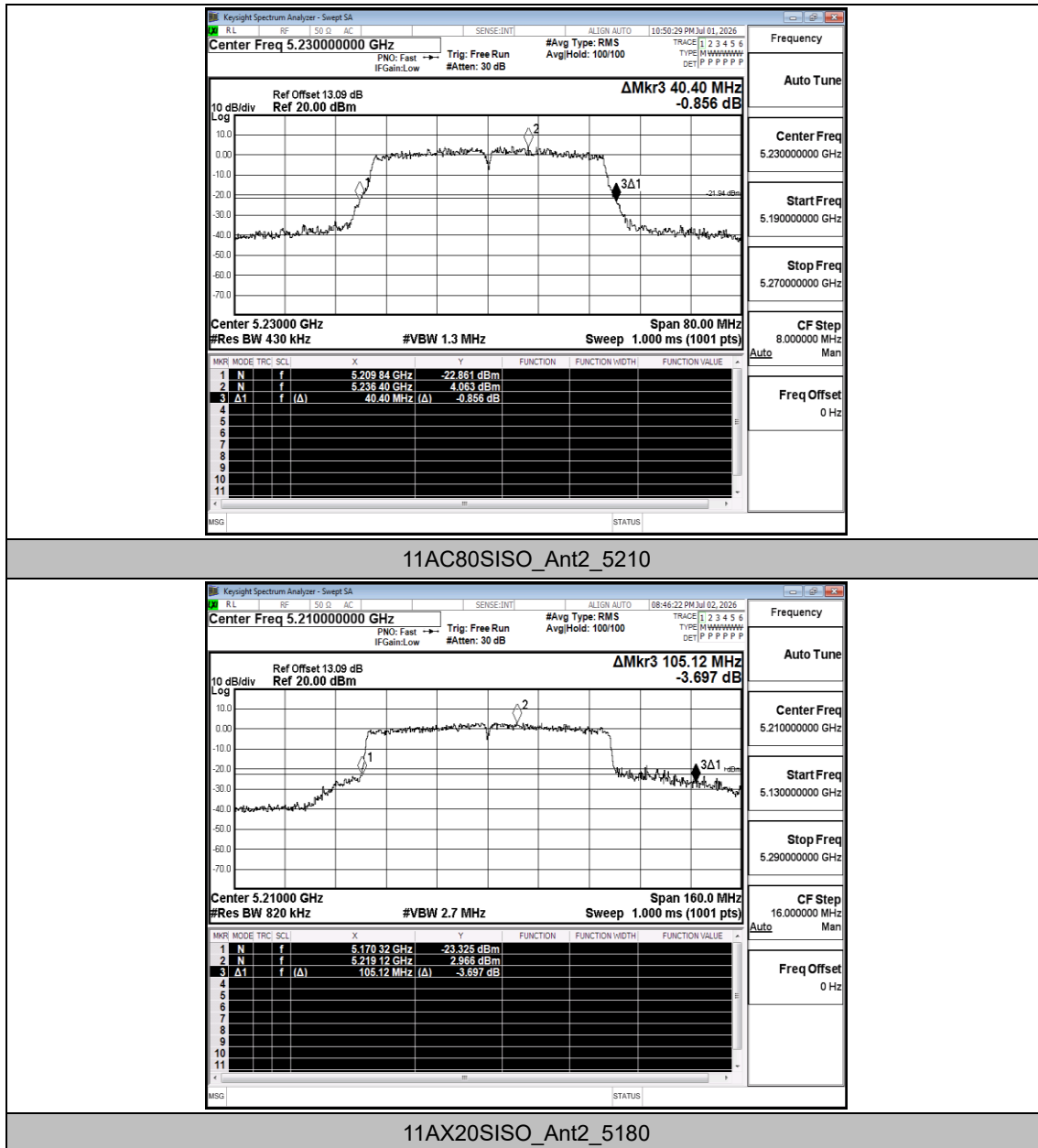


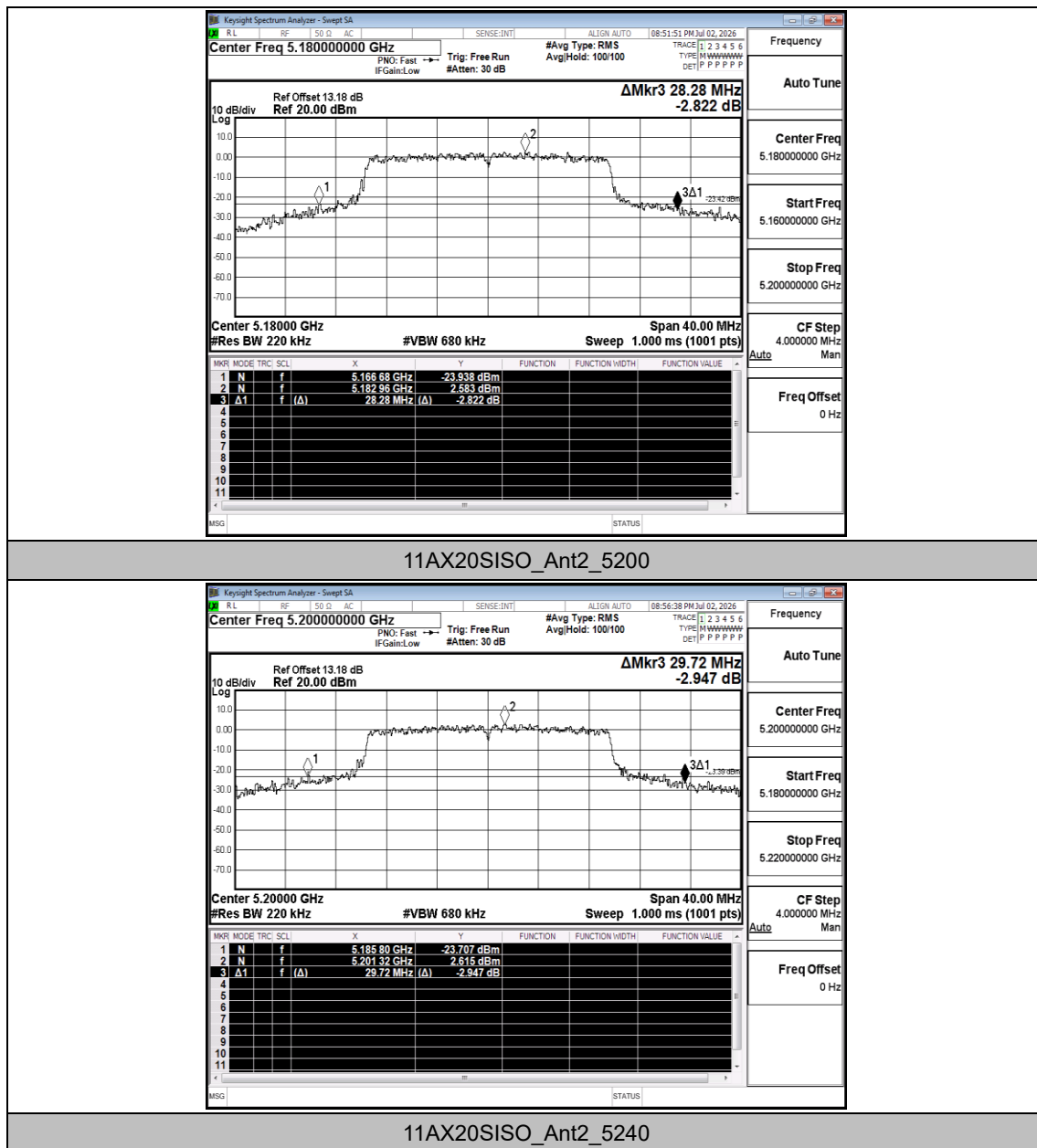


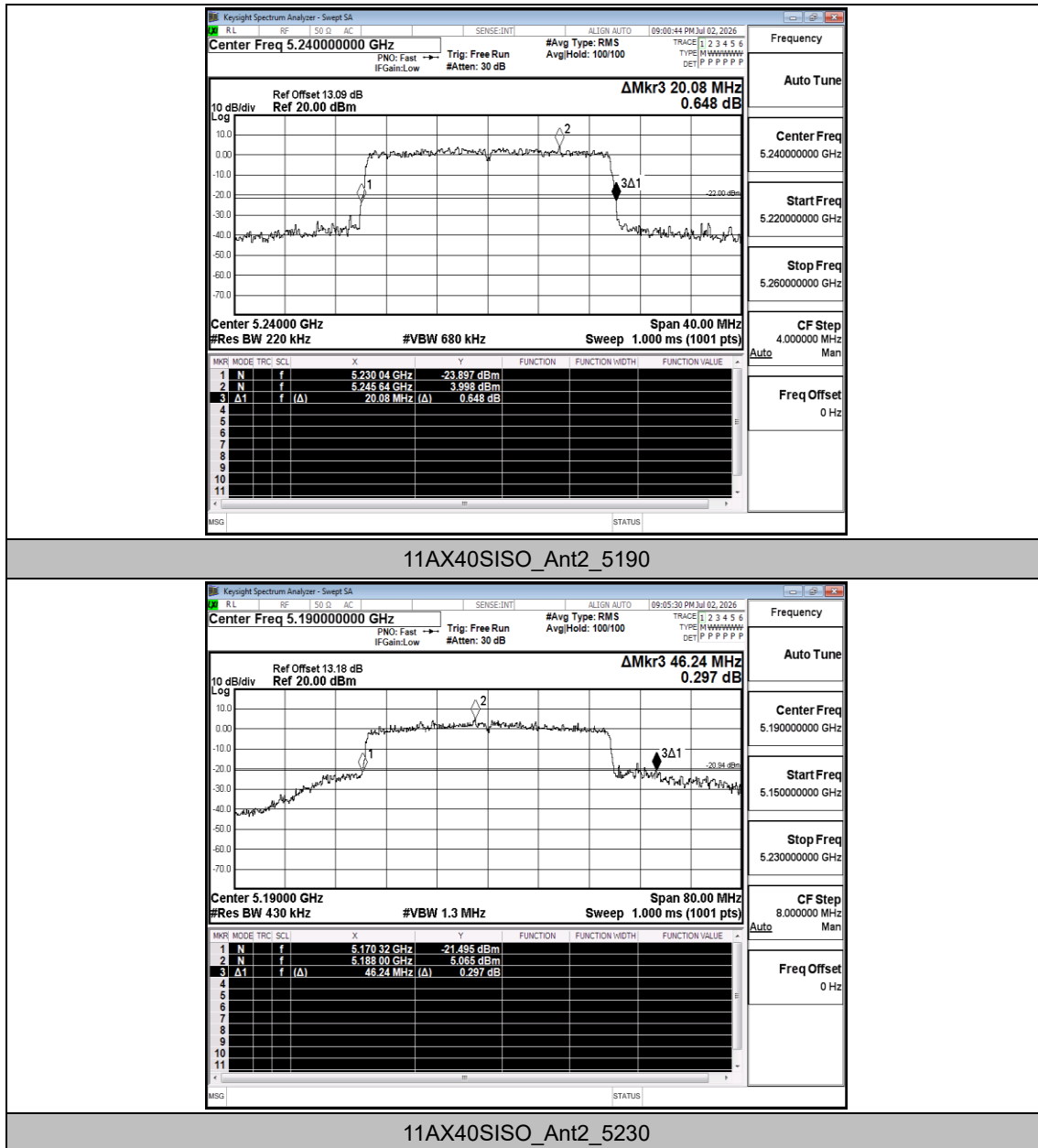


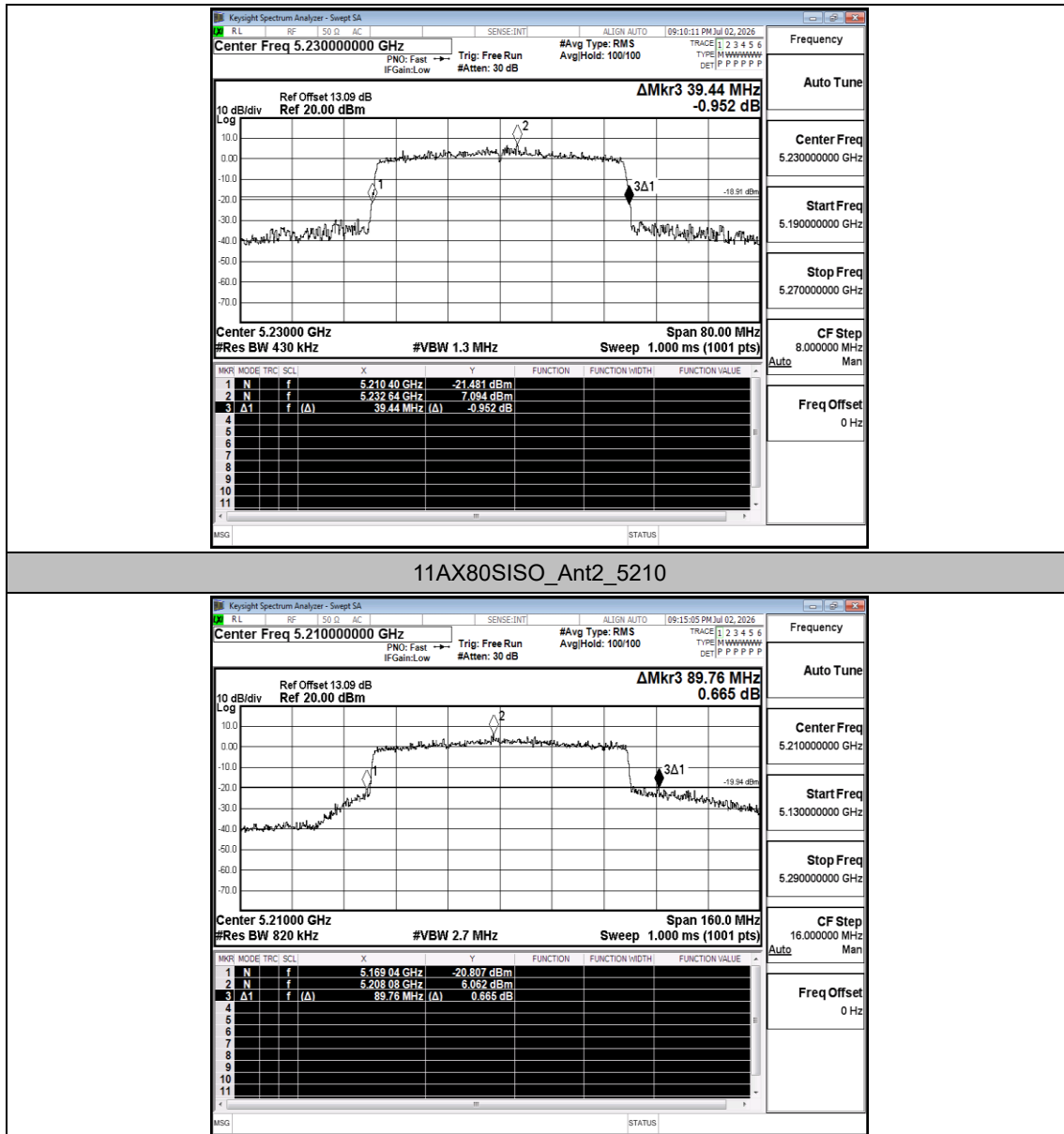








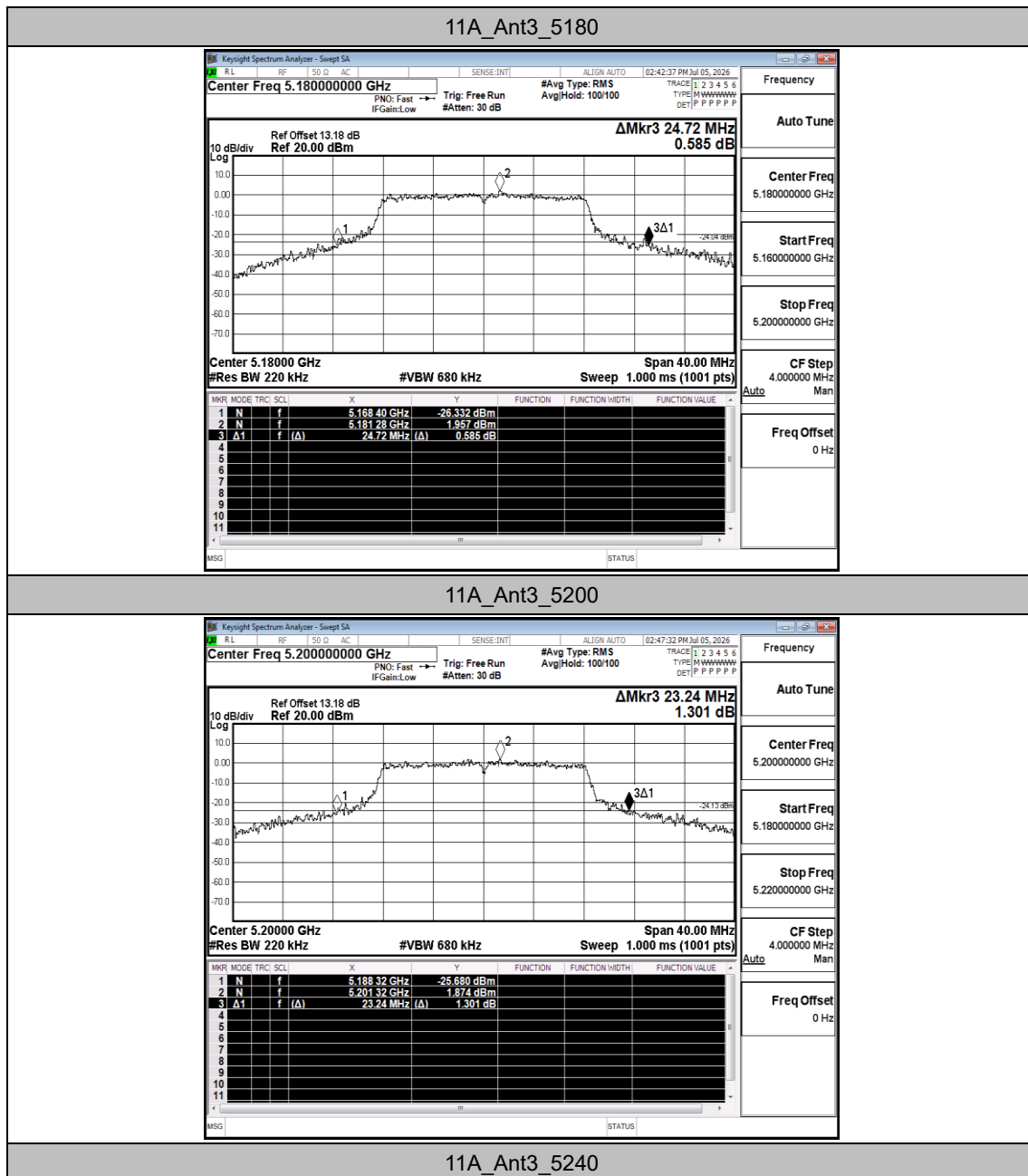


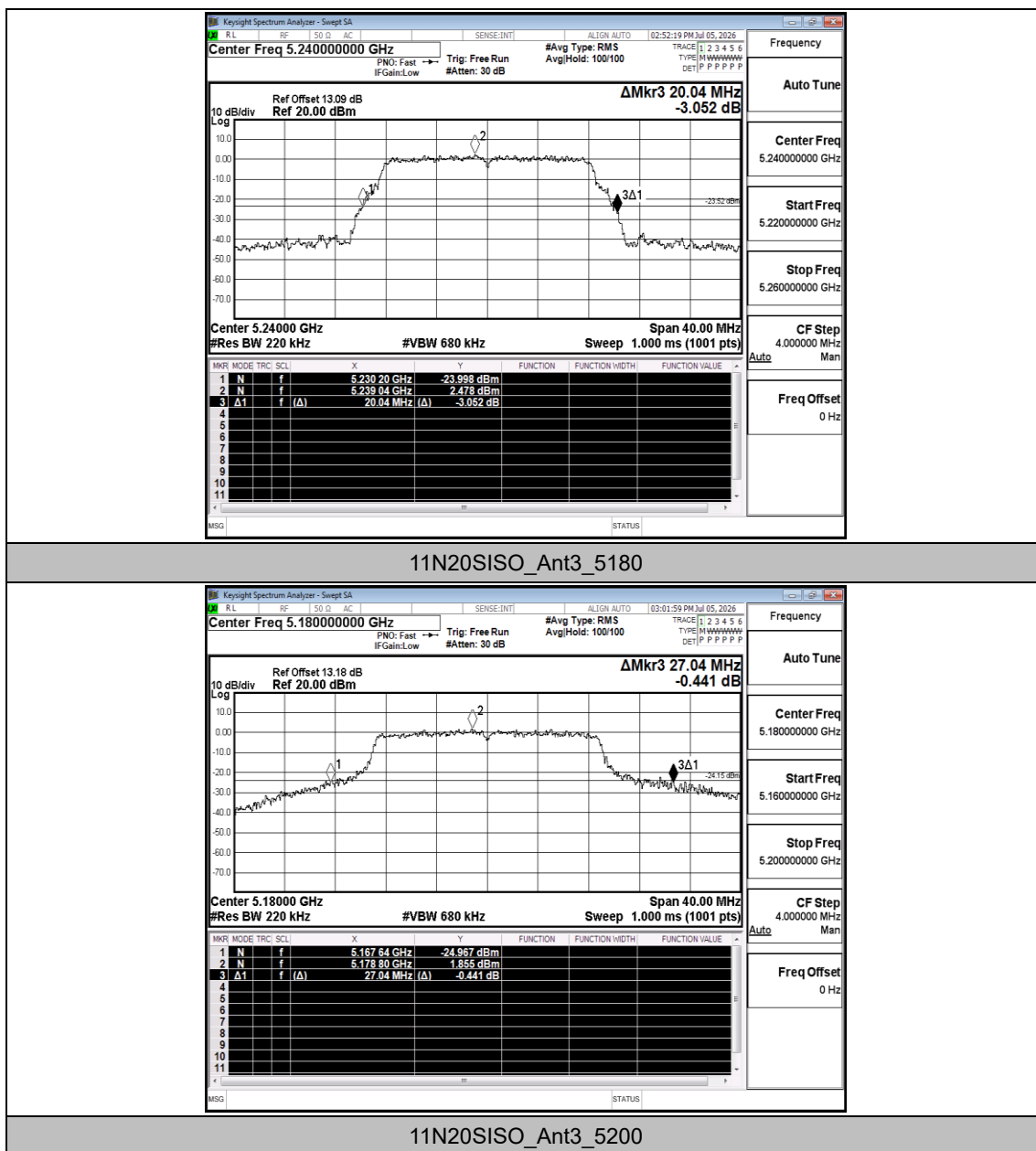


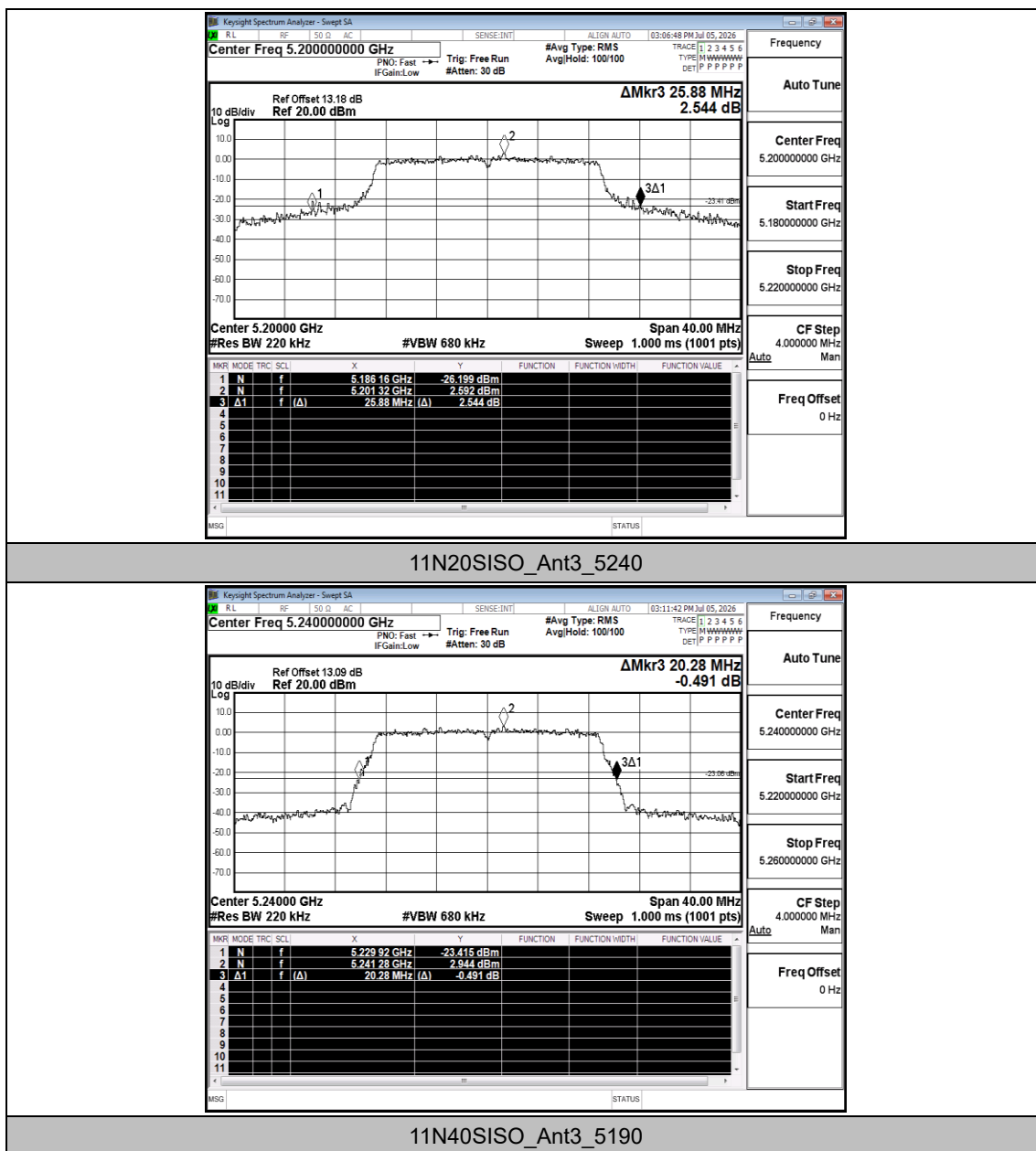
Test Result

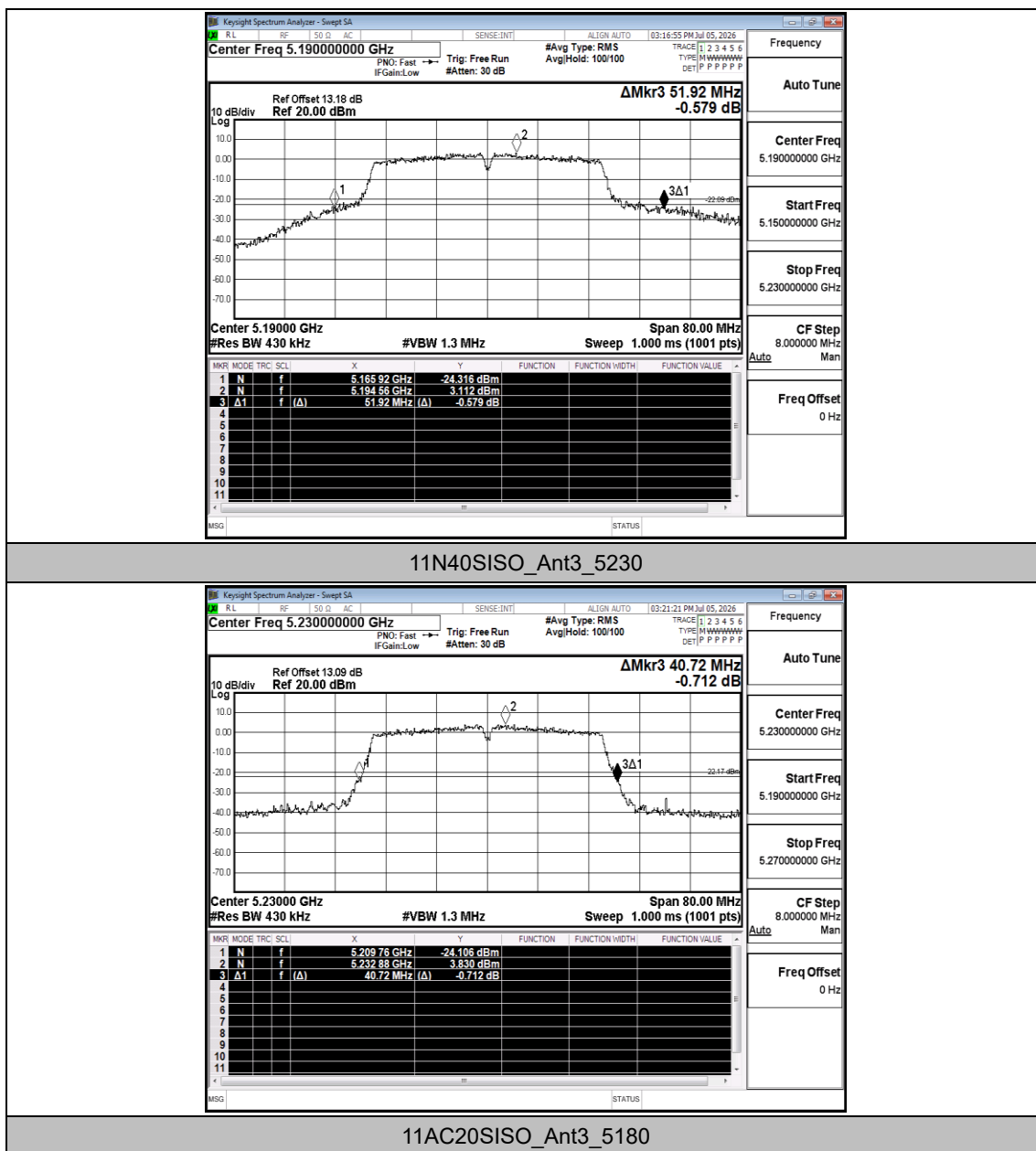
TestMode	Antenna	Freq (MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant3	5180	24.720	5168.400	5193.120	---	---
		5200	23.240	5188.320	5211.560	---	---
		5240	20.040	5230.200	5250.240	---	---
11N20SISO	Ant3	5180	27.040	5167.640	5194.680	---	---
		5200	25.880	5186.160	5212.040	---	---
		5240	20.280	5229.920	5250.200	---	---
11N40SISO	Ant3	5190	51.920	5165.920	5217.840	---	---
		5230	40.720	5209.760	5250.480	---	---
11AC20SISO	Ant3	5180	28.640	5167.720	5196.360	---	---
		5200	25.480	5188.120	5213.600	---	---
		5240	20.320	5229.960	5250.280	---	---
11AC40SISO	Ant3	5190	44.400	5168.240	5212.640	---	---
		5230	40.160	5210.080	5250.240	---	---
11AC80SISO	Ant3	5210	102.080	5162.960	5265.040	---	---
11AX20SISO	Ant3	5180	25.120	5168.680	5193.800	---	---
		5200	22.000	5189.440	5211.440	---	---
		5240	20.000	5230.040	5250.040	---	---
11AX40SISO	Ant3	5190	42.640	5167.280	5209.920	---	---
		5230	39.520	5210.320	5249.840	---	---
11AX80SISO	Ant3	5210	93.600	5169.200	5262.800	---	---

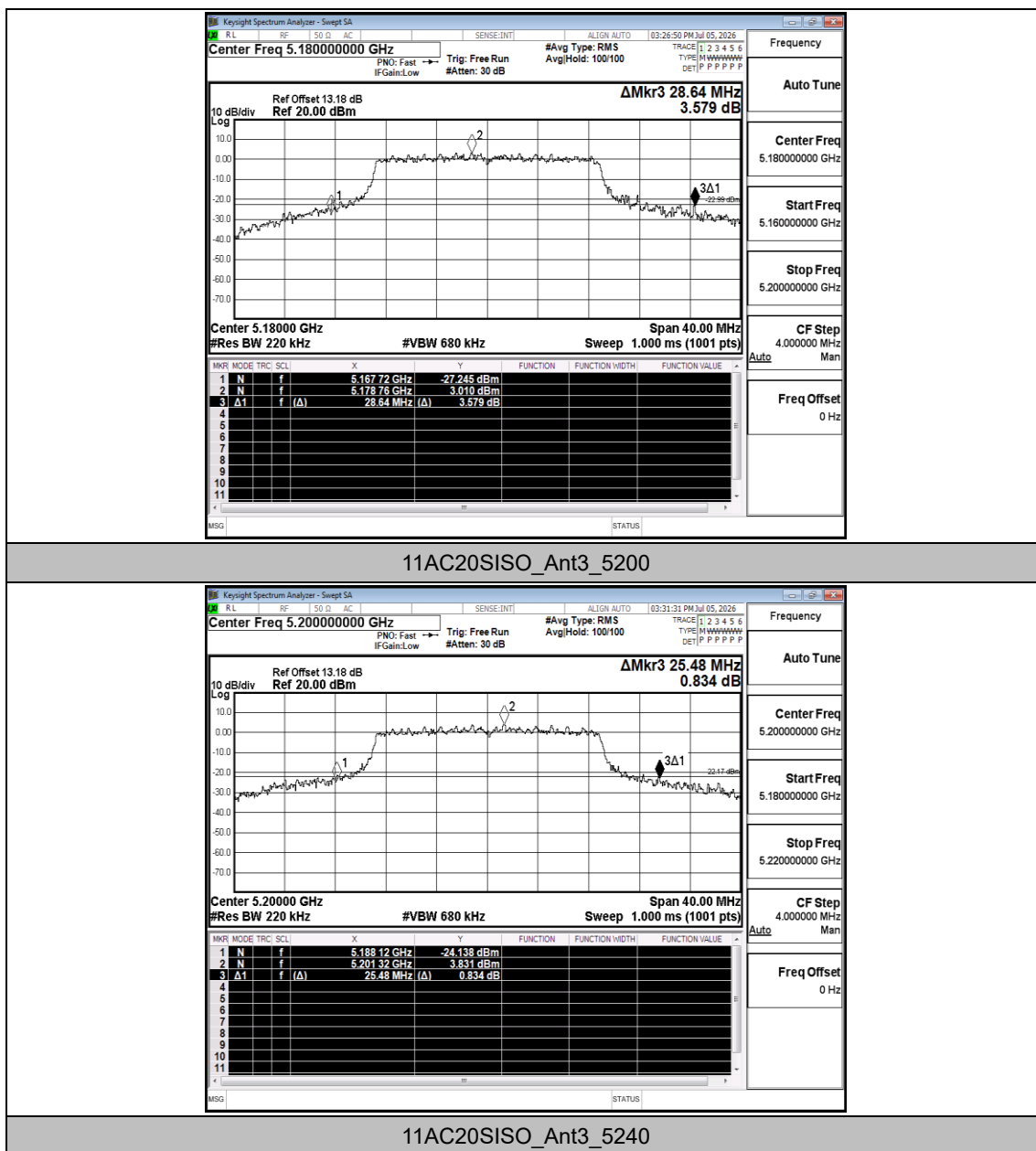
Test Graphs

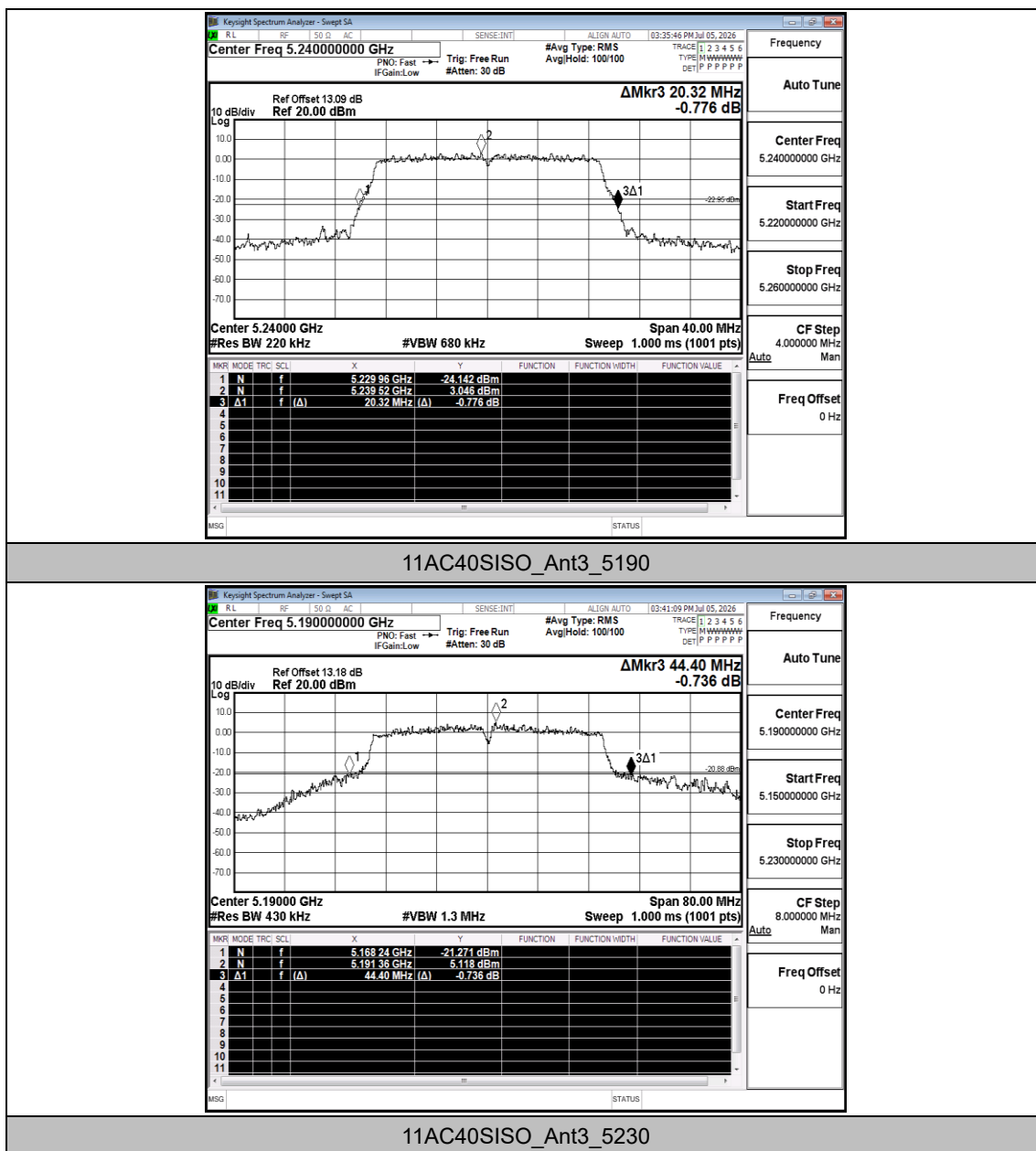


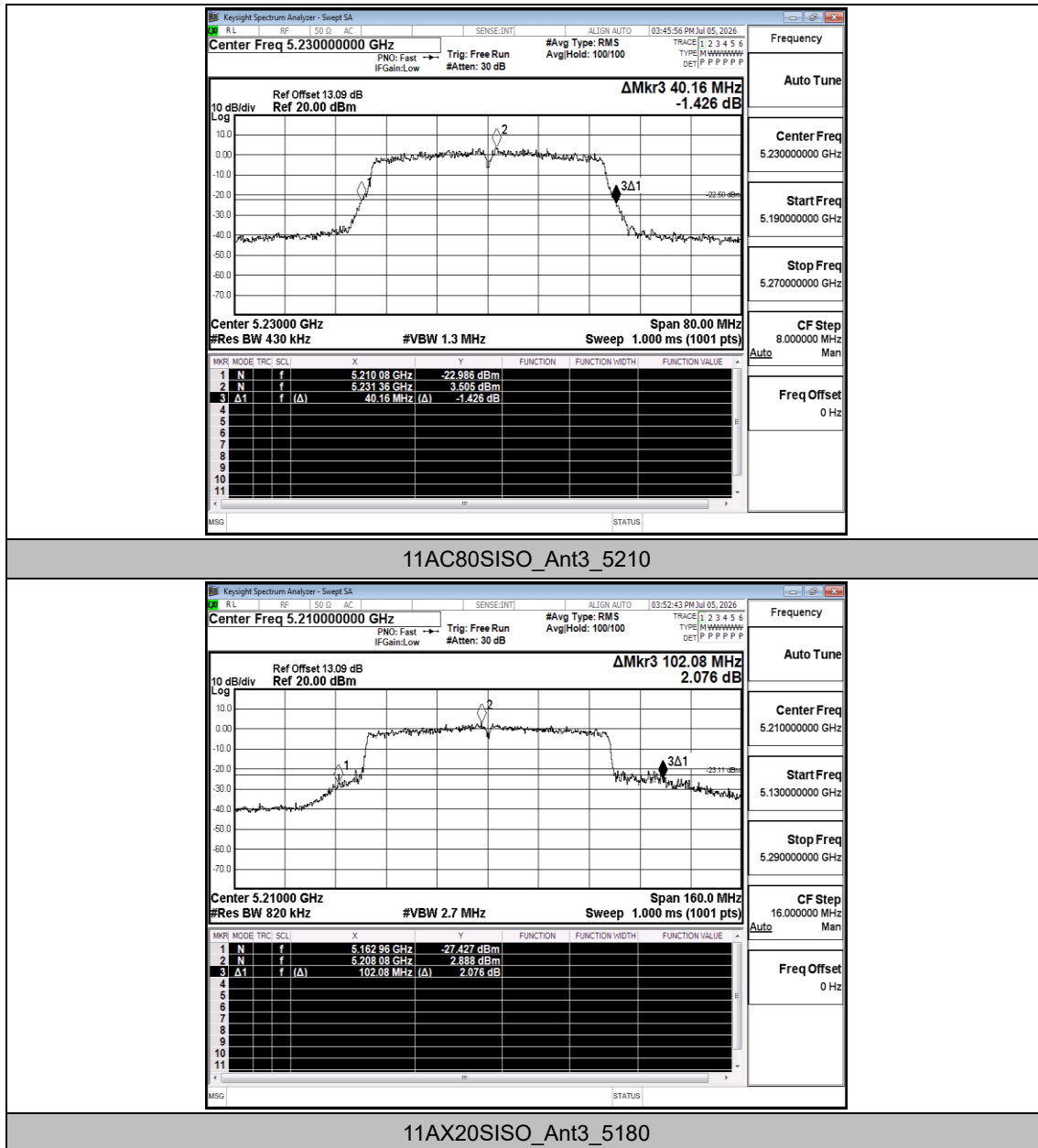


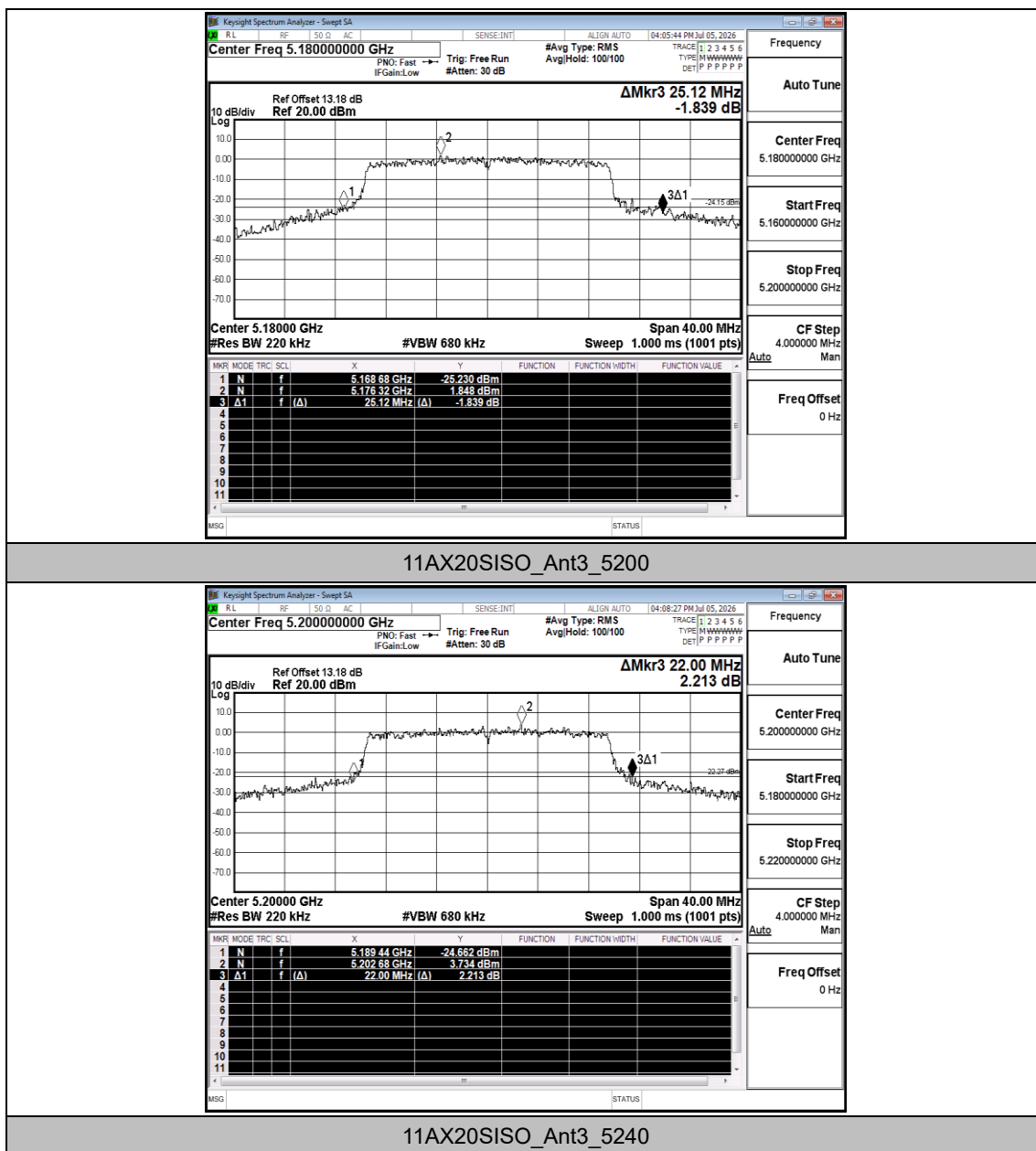


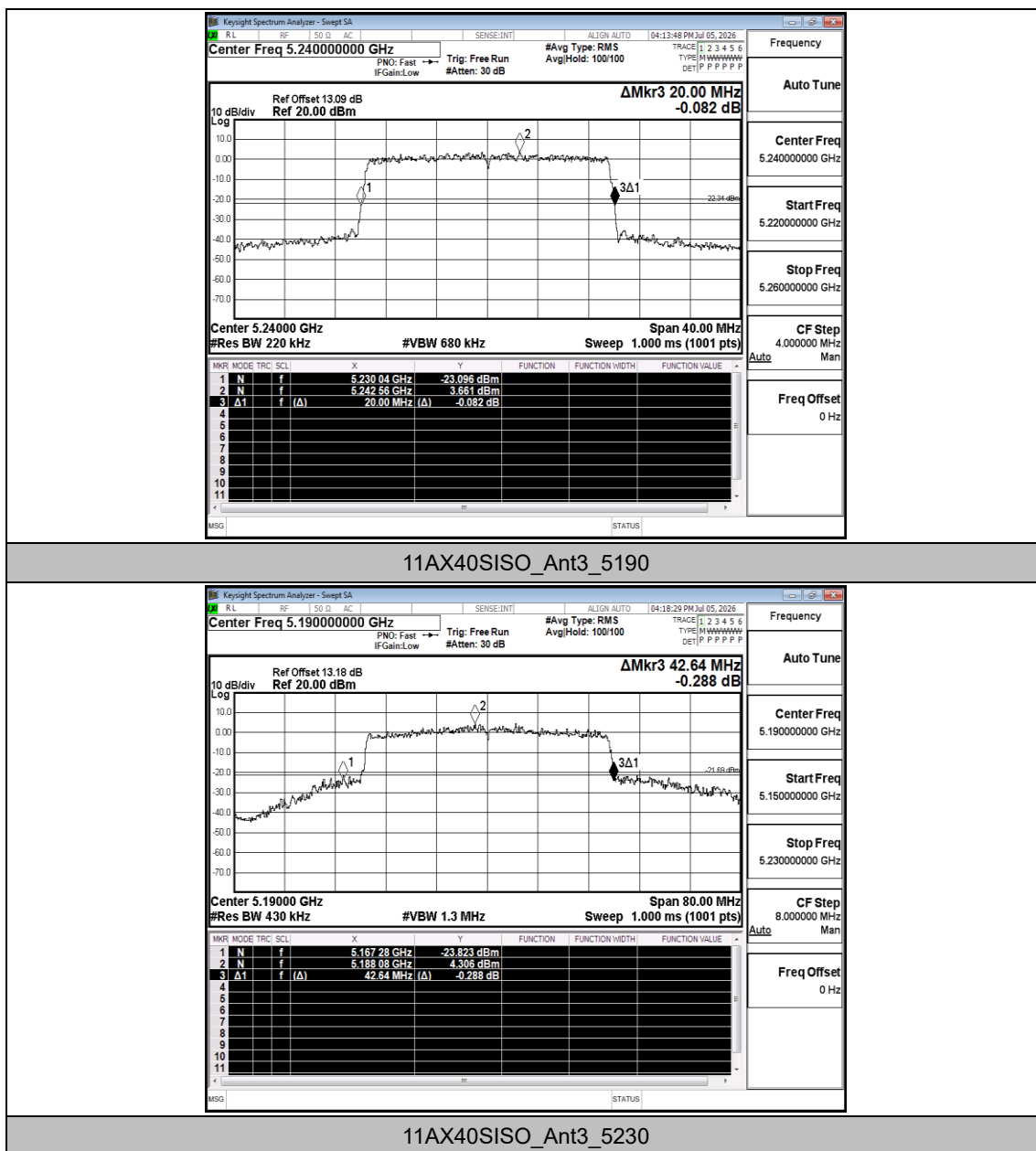


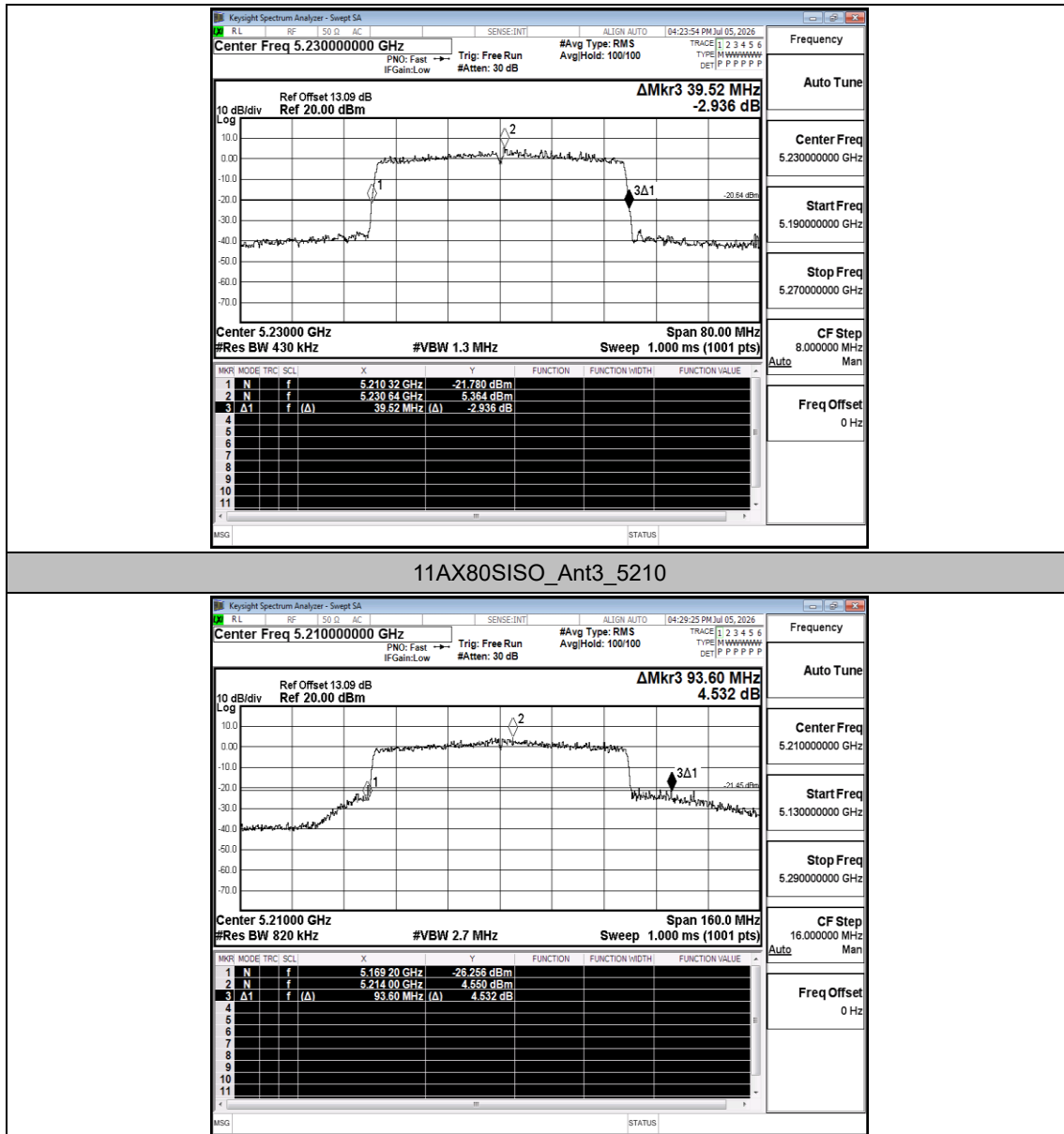












B.2 Maximum conducted output power

Test Result

Test Mode	Antenna	Freq (MHz)	TPC Mode	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	NA	17.17	0.15	17.32	≤30.00	PASS
		5200	NA	16.68	0.18	16.86	≤30.00	PASS
		5240	NA	16.61	0.18	16.79	≤30.00	PASS
11N20SISO	Ant1	5180	NA	16.72	0.16	16.88	≤30.00	PASS
		5200	NA	16.56	0.19	16.75	≤30.00	PASS
		5240	NA	16.57	0.19	16.76	≤30.00	PASS
11N40SISO	Ant1	5190	NA	16.60	0.39	16.99	≤30.00	PASS
		5230	NA	16.45	0.32	16.77	≤30.00	PASS
11AC20SISO	Ant1	5180	NA	16.51	0.51	17.02	≤30.00	PASS
		5200	NA	16.37	0.51	16.88	≤30.00	PASS
		5240	NA	16.39	0.51	16.90	≤30.00	PASS
11AC40SISO	Ant1	5190	NA	17.22	0.90	18.12	≤30.00	PASS
		5230	NA	17.02	0.76	17.78	≤30.00	PASS
11AC80SISO	Ant1	5210	NA	16.00	1.46	17.46	≤30.00	PASS
11AX20SISO	Ant1	5180	NA	17.40	0.57	17.97	≤30.00	PASS
		5200	NA	17.28	0.57	17.85	≤30.00	PASS
		5240	NA	17.21	0.57	17.78	≤30.00	PASS
11AX40SISO	Ant1	5190	NA	17.68	0.58	18.26	≤30.00	PASS
		5230	NA	17.53	0.58	18.11	≤30.00	PASS
11AX80SISO	Ant1	5210	NA	17.03	0.59	17.62	≤30.00	PASS

Test Mode	Antenna	Freq (MHz)	TPC Mode	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant2	5180	NA	11.50	0.18	11.68	≤30.00	PASS
		5200	NA	11.74	0.18	11.92	≤30.00	PASS
		5240	NA	12.61	0.15	12.76	≤30.00	PASS
11N20SISO	Ant2	5180	NA	12.01	0.19	12.20	≤30.00	PASS
		5200	NA	12.69	0.20	12.89	≤30.00	PASS
		5240	NA	13.97	0.20	14.17	≤30.00	PASS
11N40SISO	Ant2	5190	NA	13.11	0.32	13.43	≤30.00	PASS
		5230	NA	13.80	0.38	14.18	≤30.00	PASS
11AC20SISO	Ant2	5180	NA	12.91	0.51	13.42	≤30.00	PASS
		5200	NA	13.10	0.51	13.61	≤30.00	PASS
		5240	NA	13.99	0.51	14.50	≤30.00	PASS
11AC40SISO	Ant2	5190	NA	12.80	0.90	13.70	≤30.00	PASS
		5230	NA	13.42	0.90	14.32	≤30.00	PASS
11AC80SISO	Ant2	5210	NA	11.98	1.55	13.53	≤30.00	PASS
11AX20SISO	Ant2	5180	NA	13.09	0.57	13.66	≤30.00	PASS
		5200	NA	13.37	0.57	13.94	≤30.00	PASS
		5240	NA	14.23	0.48	14.71	≤30.00	PASS
11AX40SISO	Ant2	5190	NA	13.37	0.48	13.85	≤30.00	PASS
		5230	NA	14.07	0.48	14.55	≤30.00	PASS
11AX80SISO	Ant2	5210	NA	13.14	0.59	13.73	≤30.00	PASS

Test Mode	Antenna	Freq (MHz)	TPC Mode	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant3	5180	NA	12.63	0.18	12.81	≤30.00	PASS
		5200	NA	12.81	0.18	12.99	≤30.00	PASS
		5240	NA	13.62	0.21	13.83	≤30.00	PASS
11N20SISO	Ant3	5180	NA	13.05	0.19	13.24	≤30.00	PASS
		5200	NA	13.44	0.16	13.60	≤30.00	PASS
		5240	NA	14.05	0.16	14.21	≤30.00	PASS
11N40SISO	Ant3	5190	NA	14.21	0.38	14.59	≤30.00	PASS
		5230	NA	14.85	0.39	15.24	≤30.00	PASS
11AC20SISO	Ant3	5180	NA	14.18	0.51	14.69	≤30.00	PASS
		5200	NA	14.46	0.51	14.97	≤30.00	PASS
		5240	NA	14.23	0.51	14.74	≤30.00	PASS
11AC40SISO	Ant3	5190	NA	14.03	0.90	14.93	≤30.00	PASS
		5230	NA	12.67	0.90	13.57	≤30.00	PASS
11AC80SISO	Ant3	5210	NA	11.22	1.25	12.47	≤30.00	PASS
11AX20SISO	Ant3	5180	NA	12.29	0.57	12.86	≤30.00	PASS
		5200	NA	13.05	0.57	13.62	≤30.00	PASS
		5240	NA	13.89	0.57	14.46	≤30.00	PASS
11AX40SISO	Ant3	5190	NA	13.17	0.57	13.74	≤30.00	PASS
		5230	NA	13.75	0.58	14.33	≤30.00	PASS
11AX80SISO	Ant3	5210	NA	12.90	0.59	13.49	≤30.00	PASS

MIMO

Mode	Frequency (MHz)	Total Power (dBm)				Limit (dBm)	Verdict
		Ant1	Ant2	Ant3	Ant1+Ant2+ Ant3		
11N20SISO	5180	16.88	12.20	13.24	19.37	≤30.00	Pass
11N20SISO	5200	16.75	12.89	13.60	19.53	≤30.00	Pass
11N20SISO	5240	16.76	14.17	14.21	20.00	≤30.00	Pass
11N40SISO	5190	16.99	13.43	14.59	20.03	≤30.00	Pass
11N40SISO	5230	16.77	14.18	15.24	20.30	≤30.00	Pass
11AC20SISO	5180	17.02	13.42	14.69	20.08	≤30.00	Pass
11AC20SISO	5200	16.88	13.61	14.97	20.13	≤30.00	Pass
11AC20SISO	5240	16.90	14.50	14.74	20.29	≤30.00	Pass
11AC40SISO	5190	18.12	13.70	14.93	20.77	≤30.00	Pass
11AC40SISO	5230	17.78	14.32	13.57	20.40	≤30.00	Pass
11AC80SISO	5210	17.46	13.53	12.47	19.82	≤30.00	Pass
11AX20SISO	5180	17.97	13.66	12.86	20.22	≤30.00	Pass
11AX20SISO	5200	17.85	13.94	13.62	20.36	≤30.00	Pass
11AX20SISO	5240	17.78	14.71	14.46	20.70	≤30.00	Pass
11AX40SISO	5190	18.26	13.85	13.74	20.60	≤30.00	Pass
11AX40SISO	5230	18.11	14.55	14.33	20.80	≤30.00	Pass
11AX80SISO	5210	17.62	13.73	13.49	20.16	≤30.00	Pass

B.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	5.04	0.15	5.19	≤17.00	PASS
		5200	4.9	0.18	5.08	≤17.00	PASS
		5240	4.97	0.18	5.15	≤17.00	PASS
11N20SISO	Ant1	5180	4.61	0.16	4.77	≤17.00	PASS
		5200	4.64	0.19	4.83	≤17.00	PASS
		5240	4.62	0.19	4.81	≤17.00	PASS
11N40SISO	Ant1	5190	2.47	0.39	2.86	≤17.00	PASS
		5230	2.24	0.32	2.56	≤17.00	PASS
11AC20SISO	Ant1	5180	4.52	0.51	5.03	≤17.00	PASS
		5200	4.47	0.51	4.98	≤17.00	PASS
		5240	4.86	0.51	5.37	≤17.00	PASS
11AC40SISO	Ant1	5190	3.27	0.90	4.17	≤17.00	PASS
		5230	2.54	0.76	3.30	≤17.00	PASS
11AC80SISO	Ant1	5210	-0.51	1.46	0.95	≤17.00	PASS
11AX20SISO	Ant1	5180	5.05	0.57	5.62	≤17.00	PASS
		5200	4.66	0.57	5.23	≤17.00	PASS
		5240	5.05	0.57	5.62	≤17.00	PASS
11AX40SISO	Ant1	5190	2.94	0.58	3.52	≤17.00	PASS
		5230	3.17	0.58	3.75	≤17.00	PASS
11AX80SISO	Ant1	5210	-0.16	0.59	0.43	≤17.00	PASS

TestMode	Antenna	Freq (MHz)	Raw Data [dBm/MHz]	DC Factor	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant2	5180	0.07	0.18	0.25	≤17.00	PASS
		5200	0.18	0.18	0.36	≤17.00	PASS
		5240	0.92	0.15	1.07	≤17.00	PASS
11N20SISO	Ant2	5180	0.4	0.19	0.59	≤17.00	PASS
		5200	0.84	0.20	1.04	≤17.00	PASS
		5240	2.08	0.20	2.28	≤17.00	PASS
11N40SISO	Ant2	5190	-0.58	0.32	-0.26	≤17.00	PASS
		5230	0.05	0.38	0.43	≤17.00	PASS
11AC20SISO	Ant2	5180	1.43	0.51	1.94	≤17.00	PASS
		5200	1.26	0.51	1.77	≤17.00	PASS
		5240	2.08	0.51	2.59	≤17.00	PASS
11AC40SISO	Ant2	5190	-1.47	0.90	-0.57	≤17.00	PASS
		5230	-0.44	0.90	0.46	≤17.00	PASS
11AC80SISO	Ant2	5210	-4.8	1.55	-3.25	≤17.00	PASS
11AX20SISO	Ant2	5180	0.61	0.57	1.18	≤17.00	PASS
		5200	0.83	0.57	1.40	≤17.00	PASS
		5240	2.13	0.48	2.61	≤17.00	PASS
11AX40SISO	Ant2	5190	-1.11	0.48	-0.63	≤17.00	PASS
		5230	-0.19	0.48	0.29	≤17.00	PASS
11AX80SISO	Ant2	5210	-3.63	0.59	-3.04	≤17.00	PASS