

Appendix E

RF Test Data for 5.8GWIFI (Conducted Measurement)

Product Name: Laptop

Test Model: H729AE

Environmental Conditions

Temperature:	23.5°C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

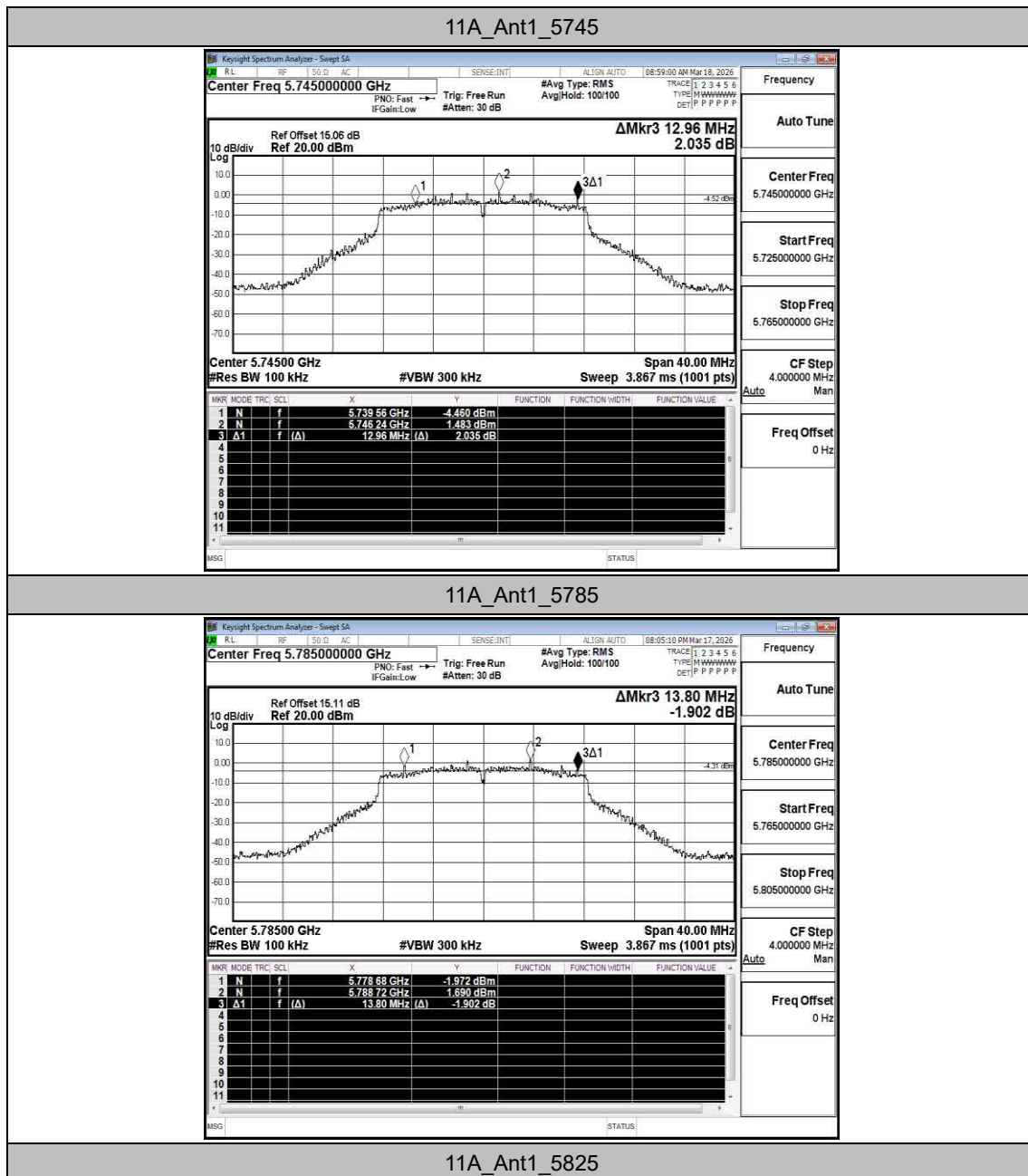
E.1 Min emission bandwidth

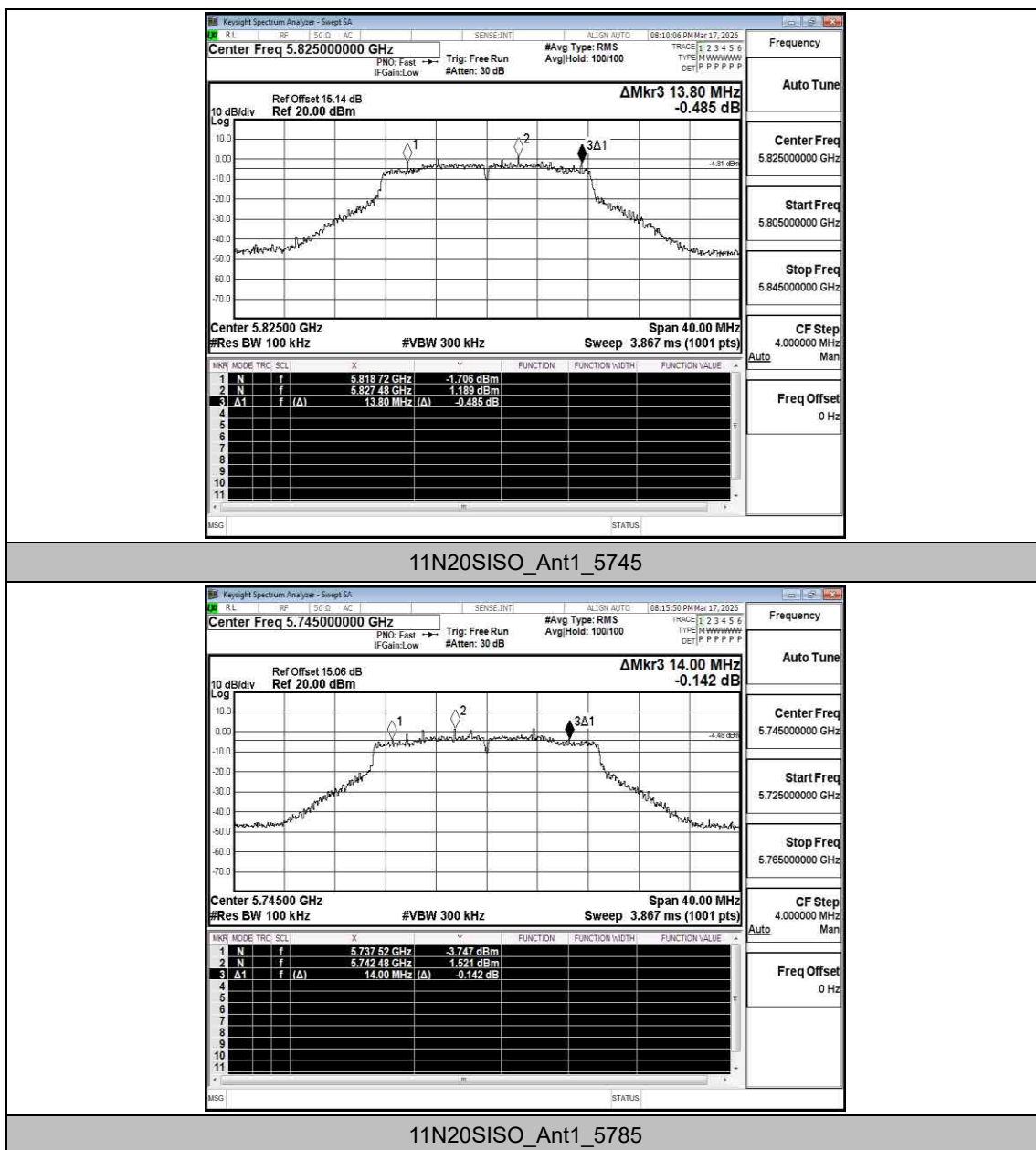
Test Result B4

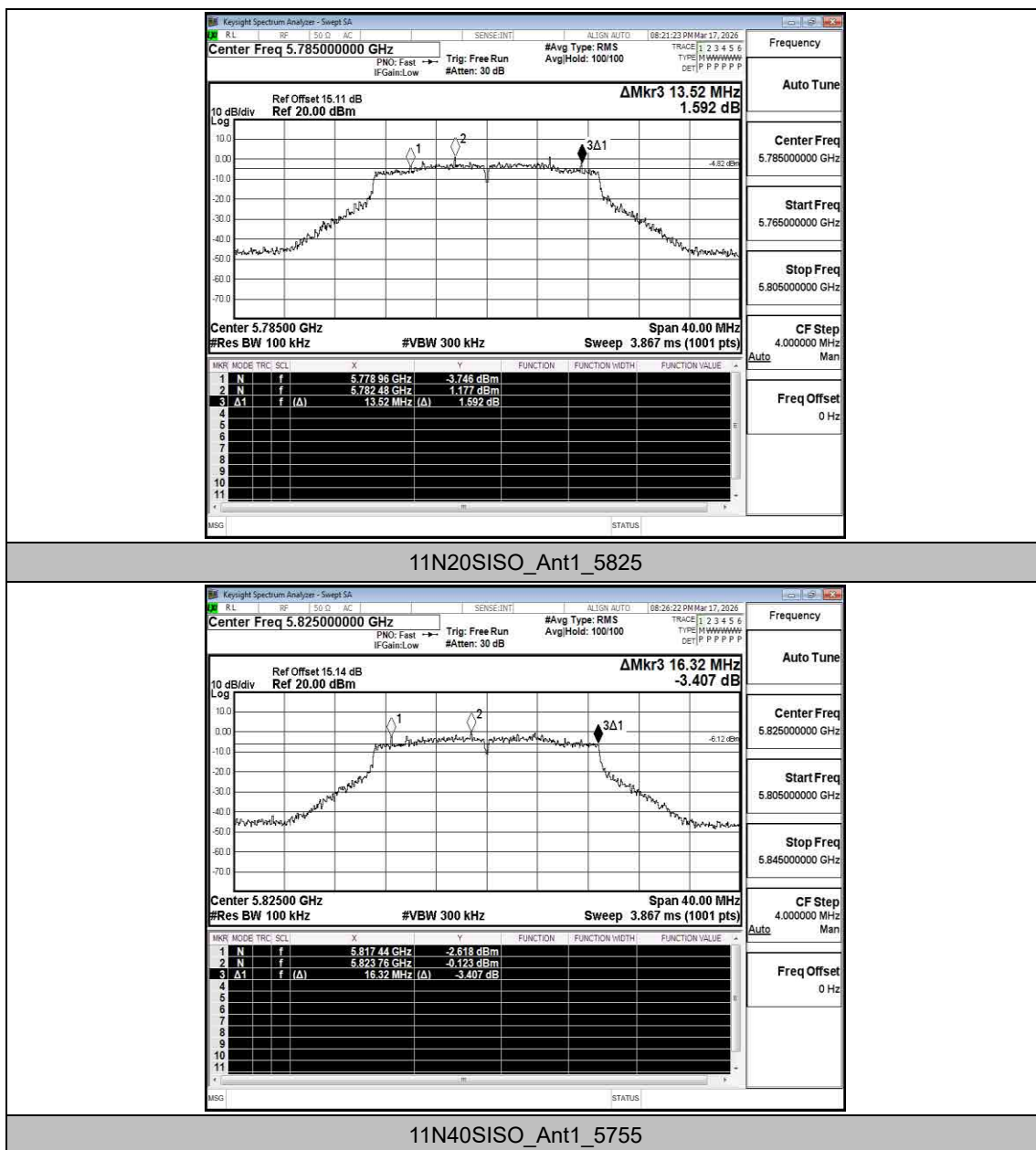
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	12.960	5739.560	5752.520	0.5	PASS
		5785	13.800	5778.680	5792.480	0.5	PASS
		5825	13.800	5818.720	5832.520	0.5	PASS
11N20SISO	Ant1	5745	14.000	5737.520	5751.520	0.5	PASS
		5785	13.520	5778.960	5792.480	0.5	PASS
		5825	16.320	5817.440	5833.760	0.5	PASS
11N40SISO	Ant1	5755	33.760	5737.480	5771.240	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC20SISO	Ant1	5745	15.320	5737.440	5752.760	0.5	PASS
		5785	15.000	5777.440	5792.440	0.5	PASS
		5825	13.840	5818.640	5832.480	0.5	PASS
11AC40SISO	Ant1	5755	30.080	5738.680	5768.760	0.5	PASS
		5795	31.040	5777.400	5808.440	0.5	PASS
11AC80SISO	Ant1	5775	73.760	5738.680	5812.440	0.5	PASS

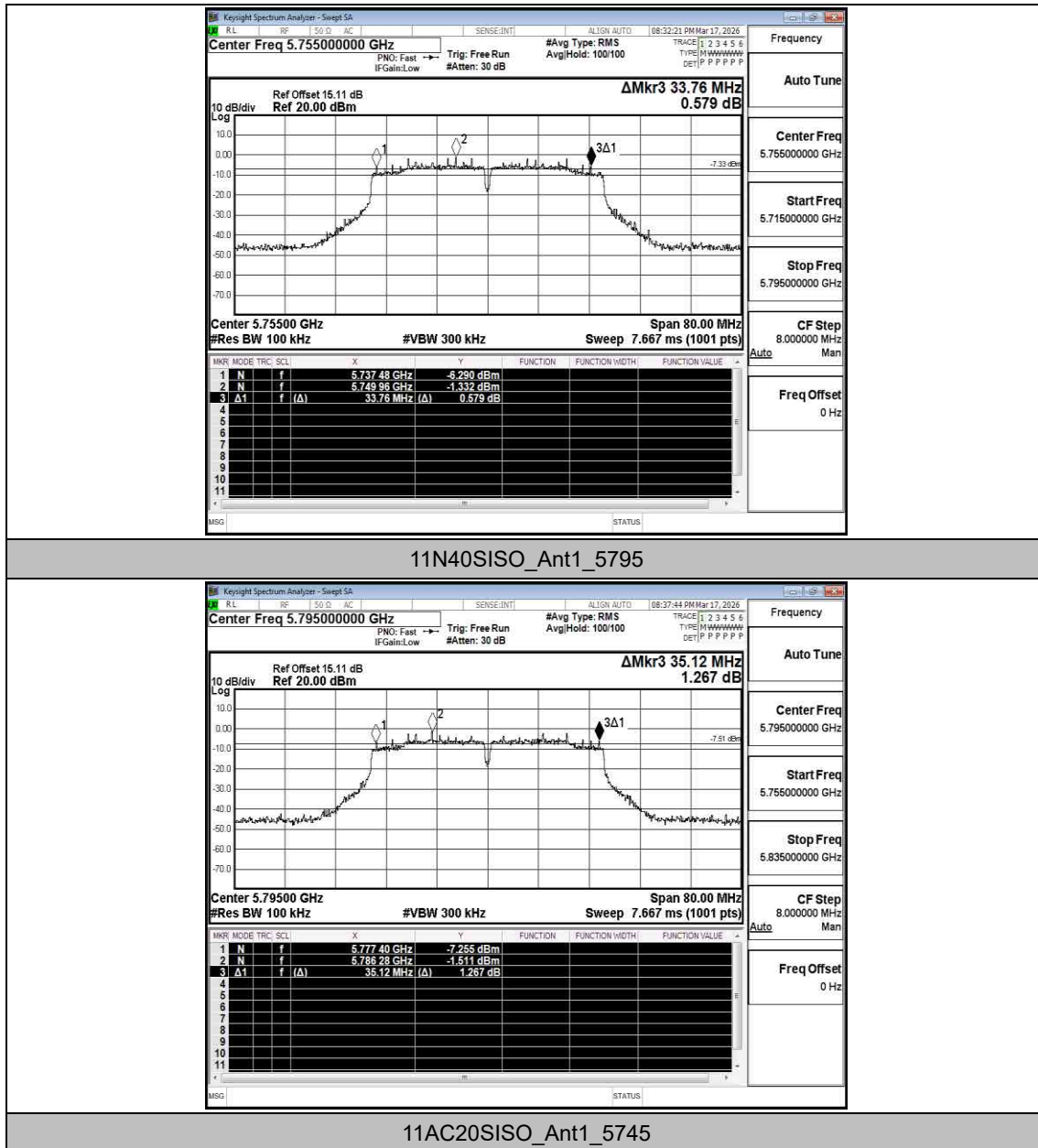
Note: offset=System attenuation +cabal loss

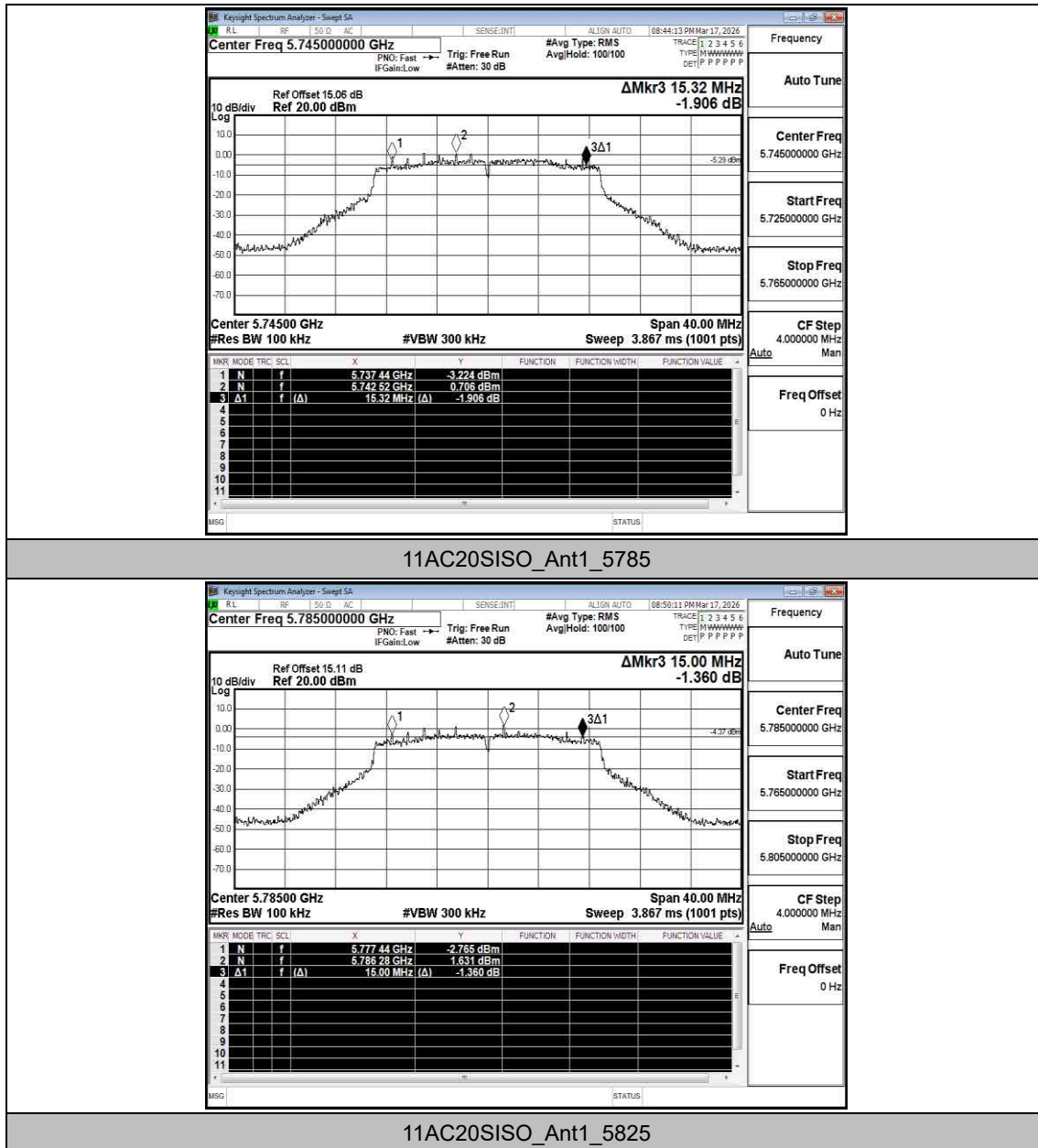
Test Graphs B4

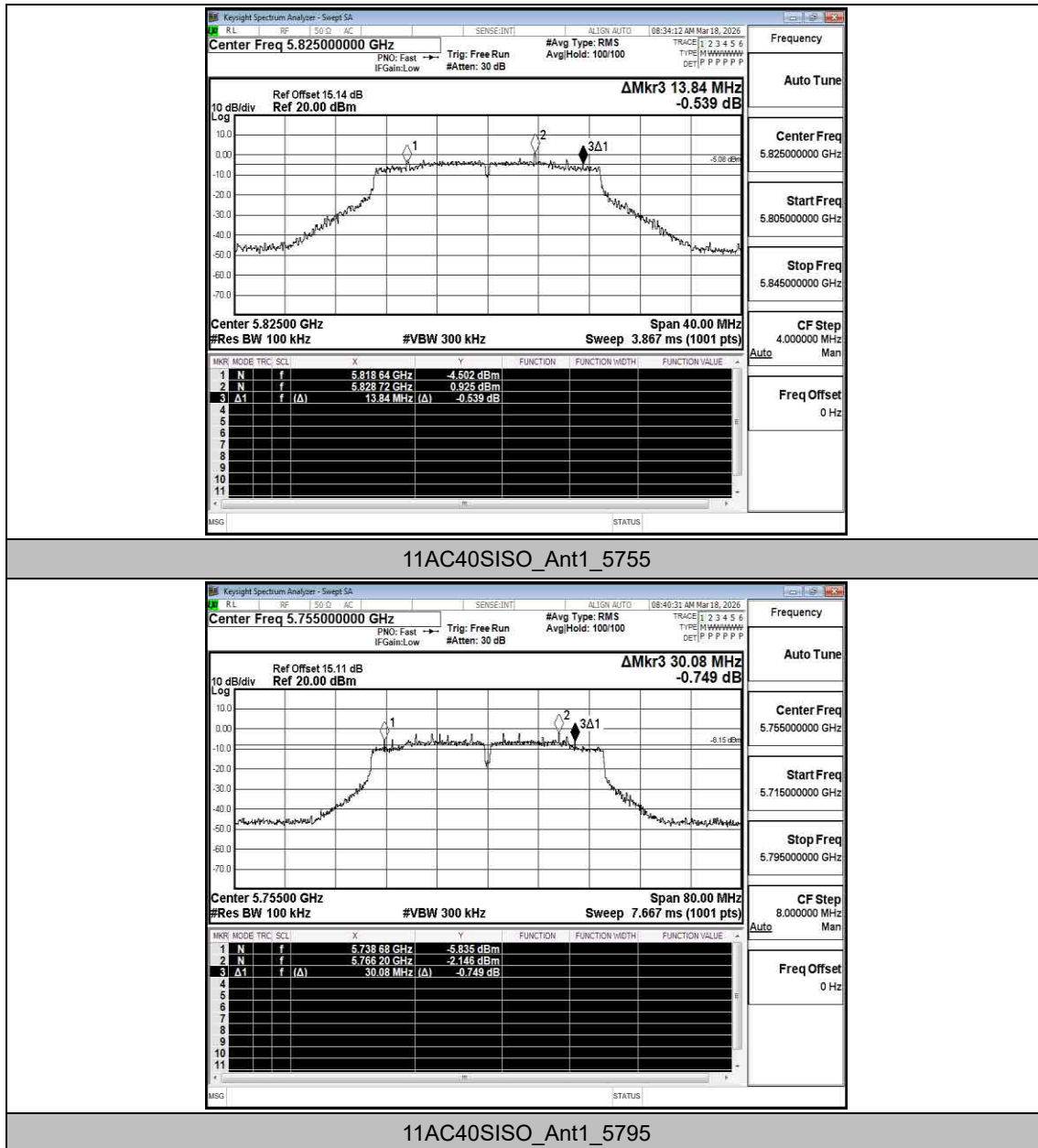


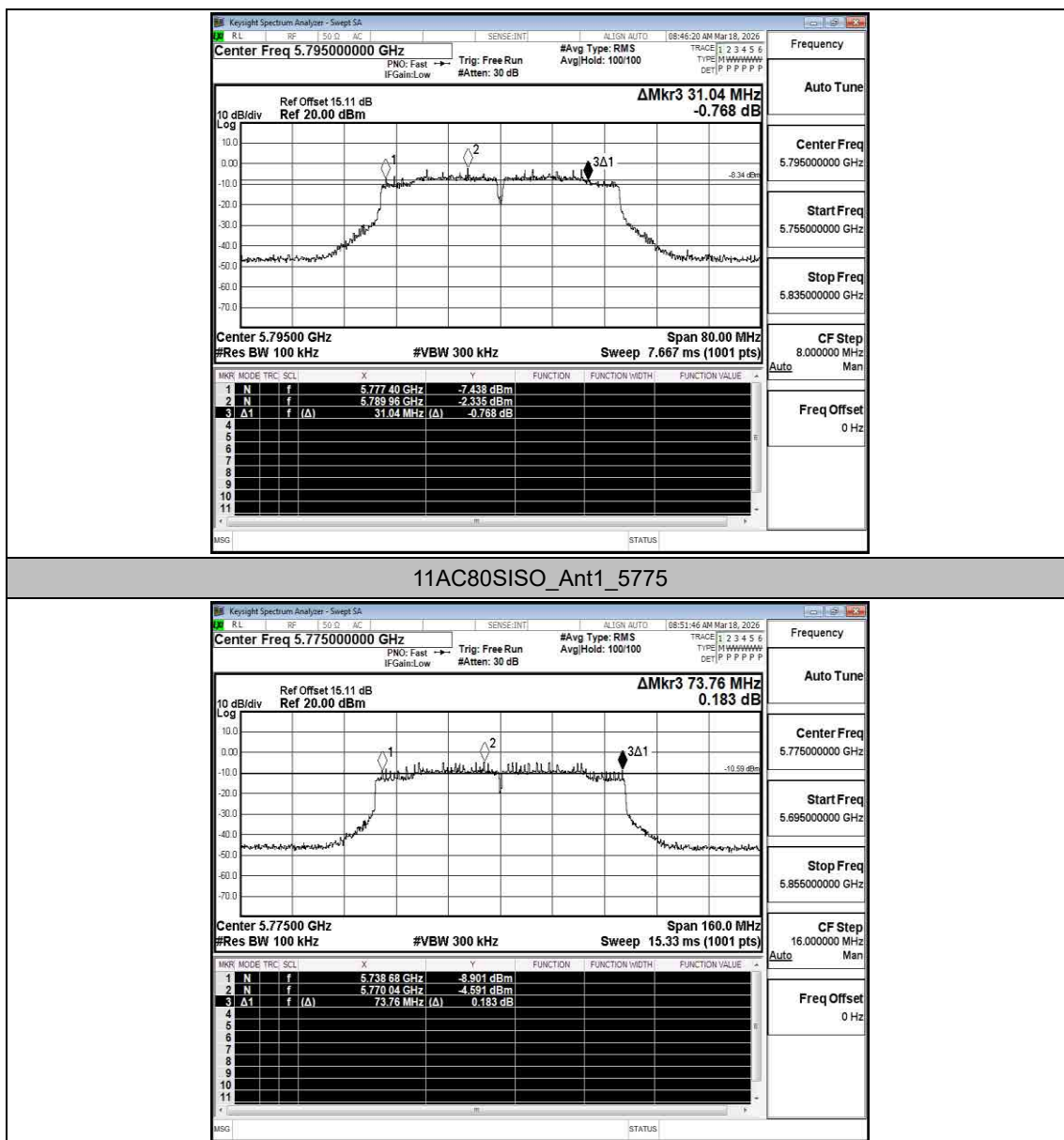










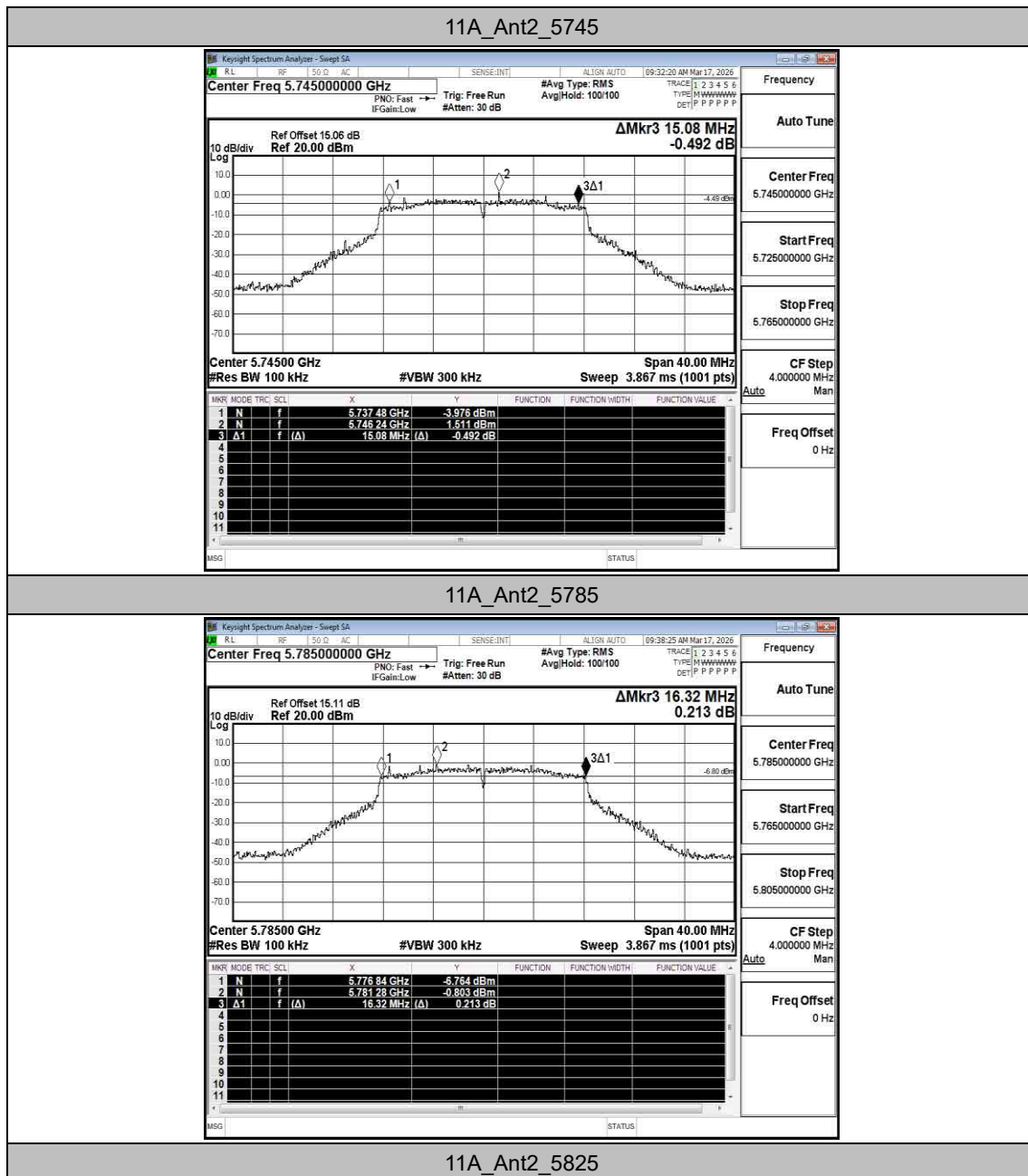


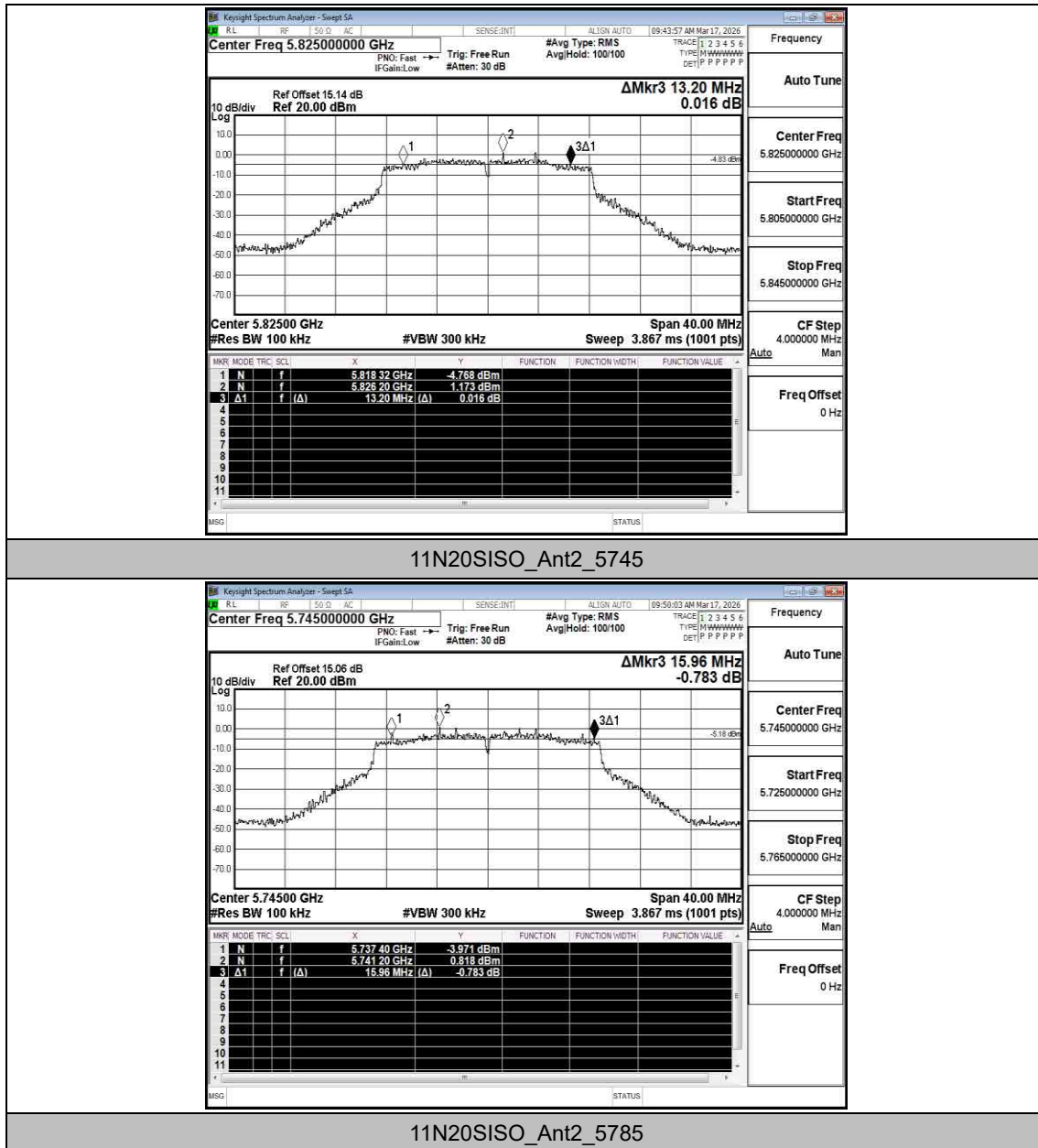
Test Result B4

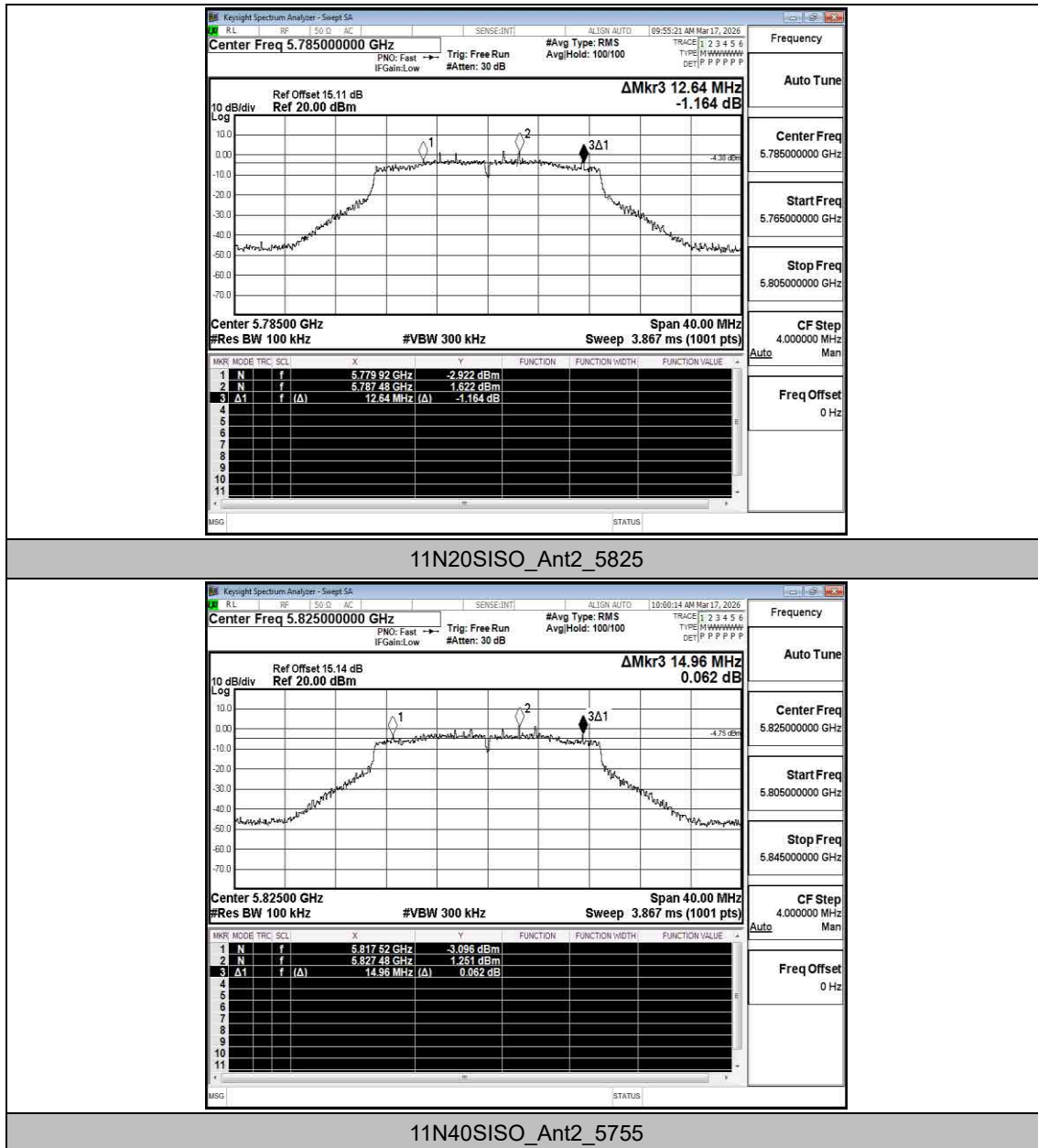
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant2	5745	15.080	5737.480	5752.560	0.5	PASS
		5785	16.320	5776.840	5793.160	0.5	PASS
		5825	13.200	5818.320	5831.520	0.5	PASS
11N20SISO	Ant2	5745	15.960	5737.400	5753.360	0.5	PASS
		5785	12.640	5779.920	5792.560	0.5	PASS
		5825	14.960	5817.520	5832.480	0.5	PASS
11N40SISO	Ant2	5755	35.040	5737.480	5772.520	0.5	PASS
		5795	31.440	5779.880	5811.320	0.5	PASS
11AC20SISO	Ant2	5745	16.040	5737.080	5753.120	0.5	PASS
		5785	16.920	5776.200	5793.120	0.5	PASS
		5825	13.840	5818.680	5832.520	0.5	PASS
11AC40SISO	Ant2	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC80SISO	Ant2	5775	75.040	5737.400	5812.440	0.5	PASS

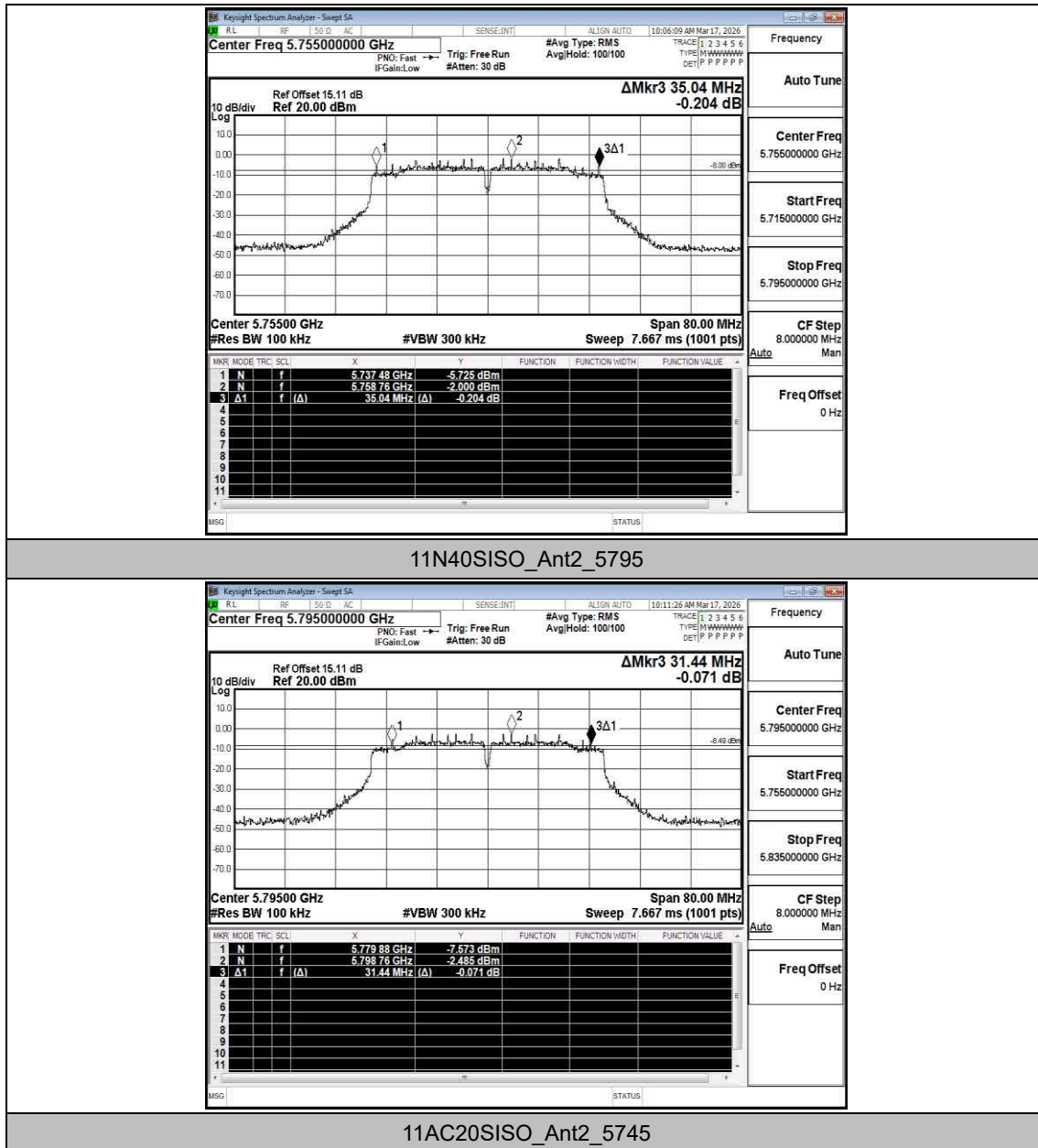
Note: offset=System attenuation +cabal loss

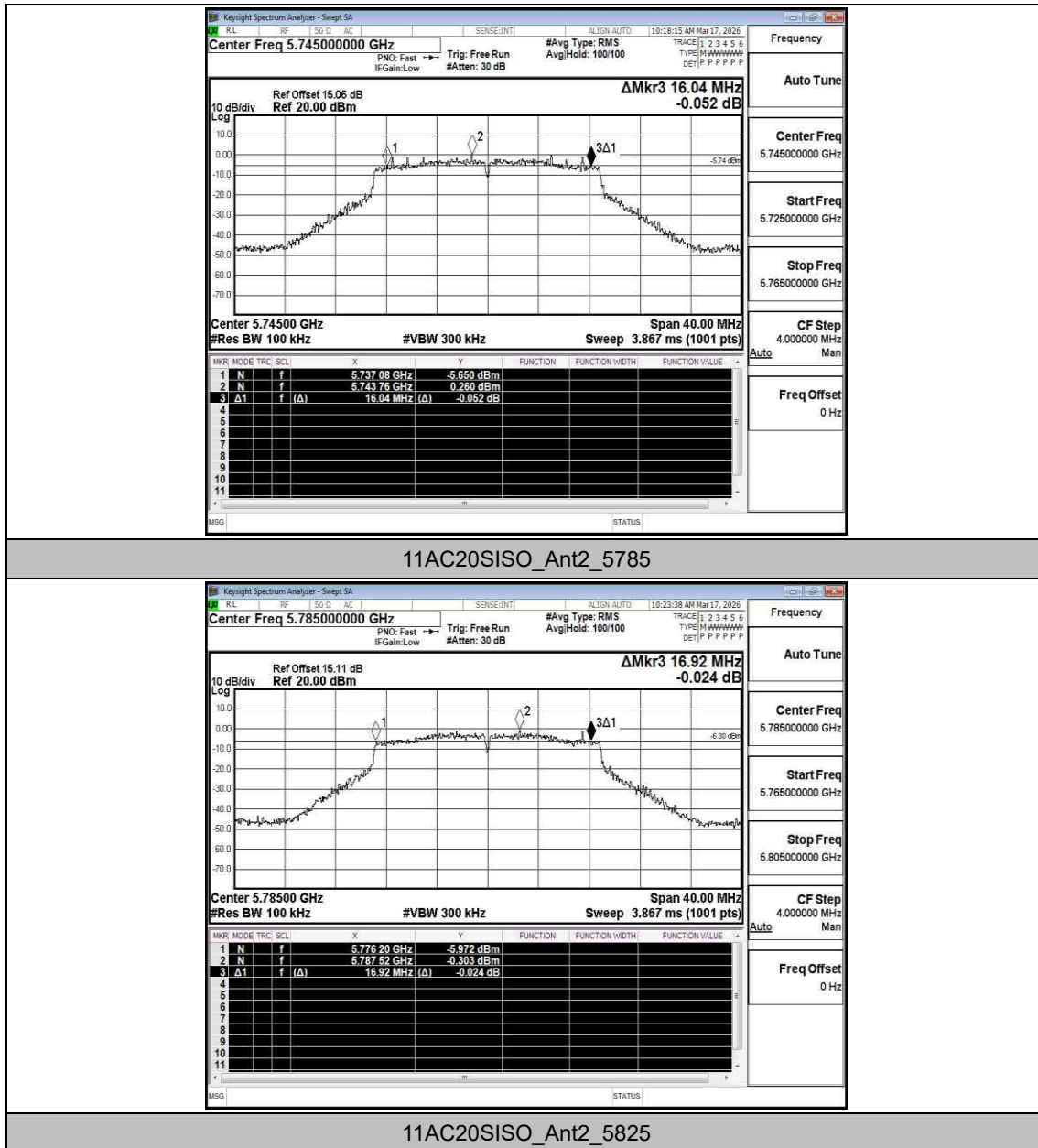
Test Graphs B4

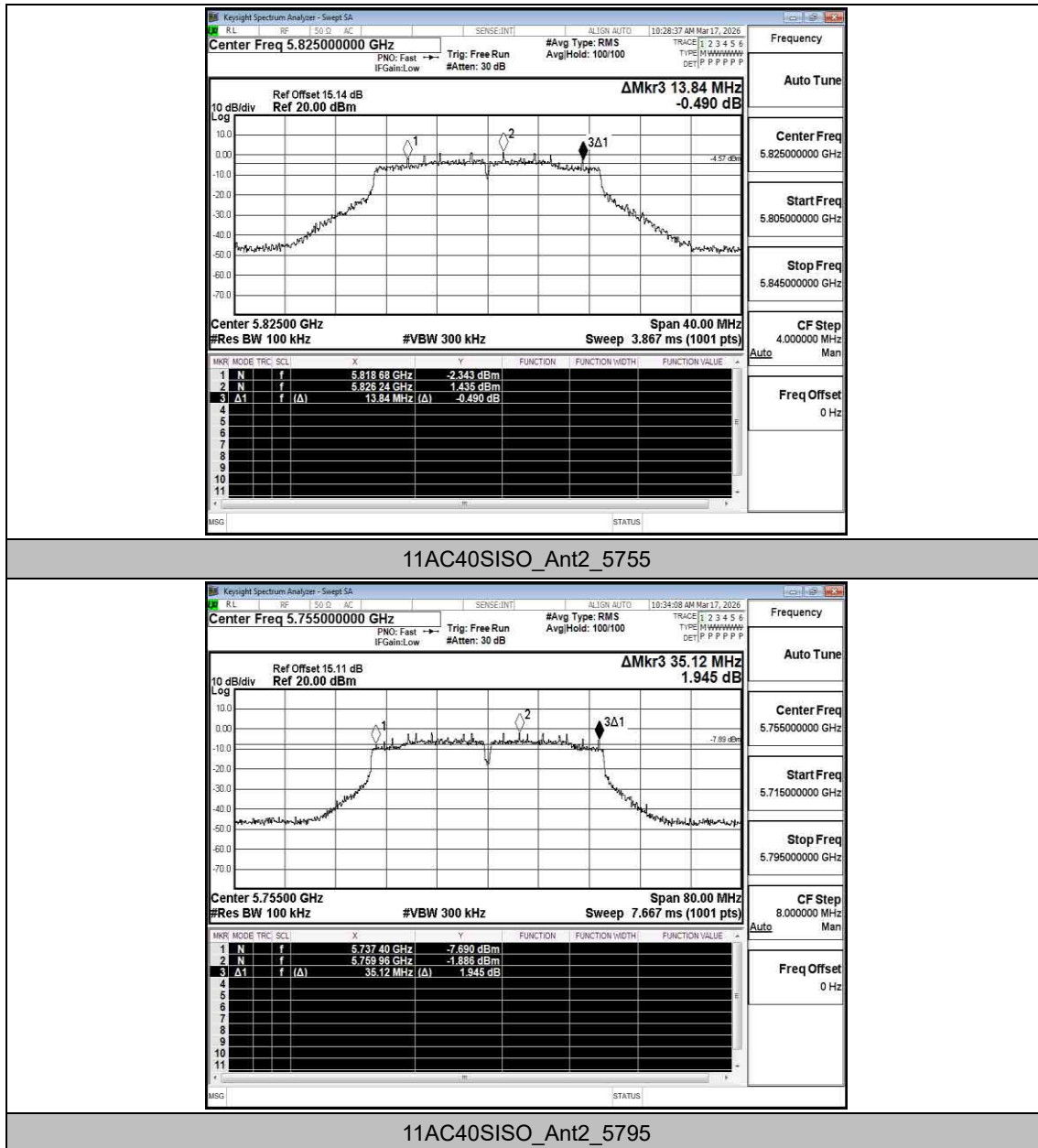


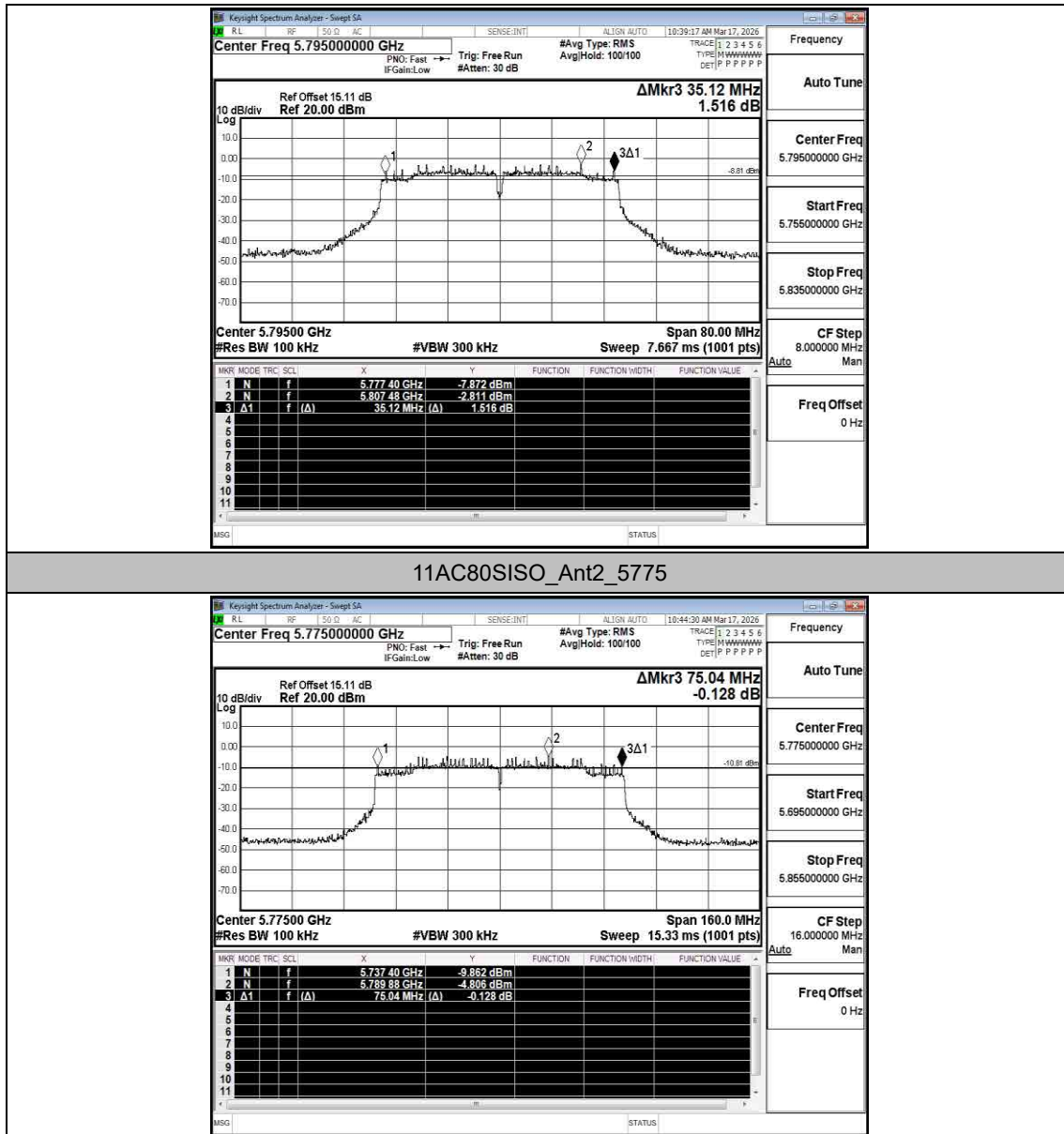












E.2 Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Freq(MHz)	TPC Mode	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	NA	12.81	0.22	13.03	≤30.00	PASS
		5785	NA	12.75	0.24	12.99	≤30.00	PASS
		5825	NA	12.64	0.24	12.88	≤30.00	PASS
11N20SISO	Ant1	5745	NA	13.11	0.13	13.24	≤30.00	PASS
		5785	NA	13.04	0.11	13.15	≤30.00	PASS
		5825	NA	12.60	0.15	12.75	≤30.00	PASS
11N40SISO	Ant1	5755	NA	12.94	0.30	13.24	≤30.00	PASS
		5795	NA	12.83	0.18	13.01	≤30.00	PASS
11AC20SISO	Ant1	5745	NA	12.81	0.17	12.98	≤30.00	PASS
		5785	NA	12.71	0.15	12.86	≤30.00	PASS
		5825	NA	12.11	0.24	12.35	≤30.00	PASS
11AC40SISO	Ant1	5755	NA	12.75	0.22	12.97	≤30.00	PASS
		5795	NA	12.72	0.26	12.98	≤30.00	PASS
11AC80SISO	Ant1	5775	NA	12.61	0.52	13.13	≤30.00	PASS

Test Mode	Antenna	Freq(MHz)	TPC Mode	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant2	5745	NA	11.88	0.94	12.82	≤30.00	PASS
		5785	NA	11.77	0.96	12.73	≤30.00	PASS
		5825	NA	11.84	0.94	12.78	≤30.00	PASS
11N20SISO	Ant2	5745	NA	12.79	0.13	12.92	≤30.00	PASS
		5785	NA	12.67	1.06	13.73	≤30.00	PASS
		5825	NA	12.44	0.11	12.55	≤30.00	PASS
11N40SISO	Ant2	5755	NA	12.74	0.26	13.00	≤30.00	PASS
		5795	NA	12.18	0.18	12.36	≤30.00	PASS
11AC20SISO	Ant2	5745	NA	12.63	0.15	12.78	≤30.00	PASS
		5785	NA	12.53	0.17	12.70	≤30.00	PASS
		5825	NA	12.77	0.19	12.96	≤30.00	PASS
11AC40SISO	Ant2	5755	NA	12.62	0.26	12.88	≤30.00	PASS
		5795	NA	13.13	0.26	13.39	≤30.00	PASS
11AC80SISO	Ant2	5775	NA	13.22	0.44	13.66	≤30.00	PASS

MIMO

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)			Limit (dBm)	Verdict
			Ant1	Ant2	Ant1+Ant2		
NVNT	11N20SISO	5745	13.24	12.92	16.09	30	Pass
NVNT		5785	13.15	13.73	16.46	30	Pass
NVNT		5825	12.75	12.55	15.66	30	Pass
NVNT	11N40SISO	5755	13.24	13.00	16.13	30	Pass
NVNT		5795	13.01	12.36	15.71	30	Pass
NVNT	11AC20SISO	5745	12.98	12.78	15.89	30	Pass
NVNT		5785	12.86	12.70	15.79	30	Pass
NVNT		5825	12.35	12.96	15.68	30	Pass
NVNT	11AC40SISO	5755	12.97	12.88	15.94	30	Pass
NVNT		5795	12.98	13.39	16.20	30	Pass
NVNT	11AC80SISO	5775	13.13	13.66	16.41	30	Pass

Note: offset=System attenuation +cabel loss

E.3 Maximum power spectral density

Test Result

TestMode	Antenna	Freq (MHz)	Raw Data [dBm/300kHz]	DC Factor	RBW Factor	Result [dBm/500kHz]	Limit [dBm/500kHz]	Verdict
11A	Ant1	5745	-4.82	0.22	2.22	-2.38	≤30.00	PASS
		5785	-4.33	0.24	2.22	-1.87	≤30.00	PASS
		5825	-4.77	0.24	2.22	-2.31	≤30.00	PASS
11N20SISO	Ant1	5745	-4.37	0.13	2.22	-2.02	≤30.00	PASS
		5785	-4.94	0.11	2.22	-2.61	≤30.00	PASS
		5825	-4.69	0.15	2.22	-2.32	≤30.00	PASS
11N40SISO	Ant1	5755	-7.88	0.30	2.22	-5.36	≤30.00	PASS
		5795	-8.15	0.18	2.22	-5.75	≤30.00	PASS
11AC20SISO	Ant1	5745	-4.38	0.17	2.22	-1.99	≤30.00	PASS
		5785	-4.78	0.15	2.22	-2.41	≤30.00	PASS
		5825	-5.3	0.24	2.22	-2.84	≤30.00	PASS
11AC40SISO	Ant1	5755	-8.82	0.22	2.22	-6.38	≤30.00	PASS
		5795	-9.22	0.26	2.22	-6.74	≤30.00	PASS
11AC80SISO	Ant1	5775	-12.8	0.52	2.22	-10.06	≤30.00	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

Test Result

TestMode	Antenna	Freq (MHz)	Raw Data [dBm/300kHz]	DC Factor	RBW Factor	Result [dBm/500kHz]	Limit [dBm/500kHz]	Verdict
11A	Ant2	5745	-5.06	0.94	2.22	-1.90	≤30.00	PASS
		5785	-5.45	0.96	2.22	-2.27	≤30.00	PASS
		5825	-5.44	0.94	2.22	-2.28	≤30.00	PASS
11N20SISO	Ant2	5745	-5.32	0.13	2.22	-2.97	≤30.00	PASS
		5785	-4.73	1.06	2.22	-1.45	≤30.00	PASS
		5825	-4.44	0.11	2.22	-2.11	≤30.00	PASS
11N40SISO	Ant2	5755	-8.14	0.26	2.22	-5.66	≤30.00	PASS
		5795	-8.7	0.18	2.22	-6.30	≤30.00	PASS
11AC20SISO	Ant2	5745	-4.73	0.15	2.22	-2.36	≤30.00	PASS
		5785	-5.23	0.17	2.22	-2.84	≤30.00	PASS
		5825	-5.04	0.19	2.22	-2.63	≤30.00	PASS
11AC40SISO	Ant2	5755	-8.33	0.26	2.22	-5.85	≤30.00	PASS
		5795	-6.74	0.26	2.22	-4.26	≤30.00	PASS
11AC80SISO	Ant2	5775	-10.77	0.44	2.22	-8.11	≤30.00	PASS

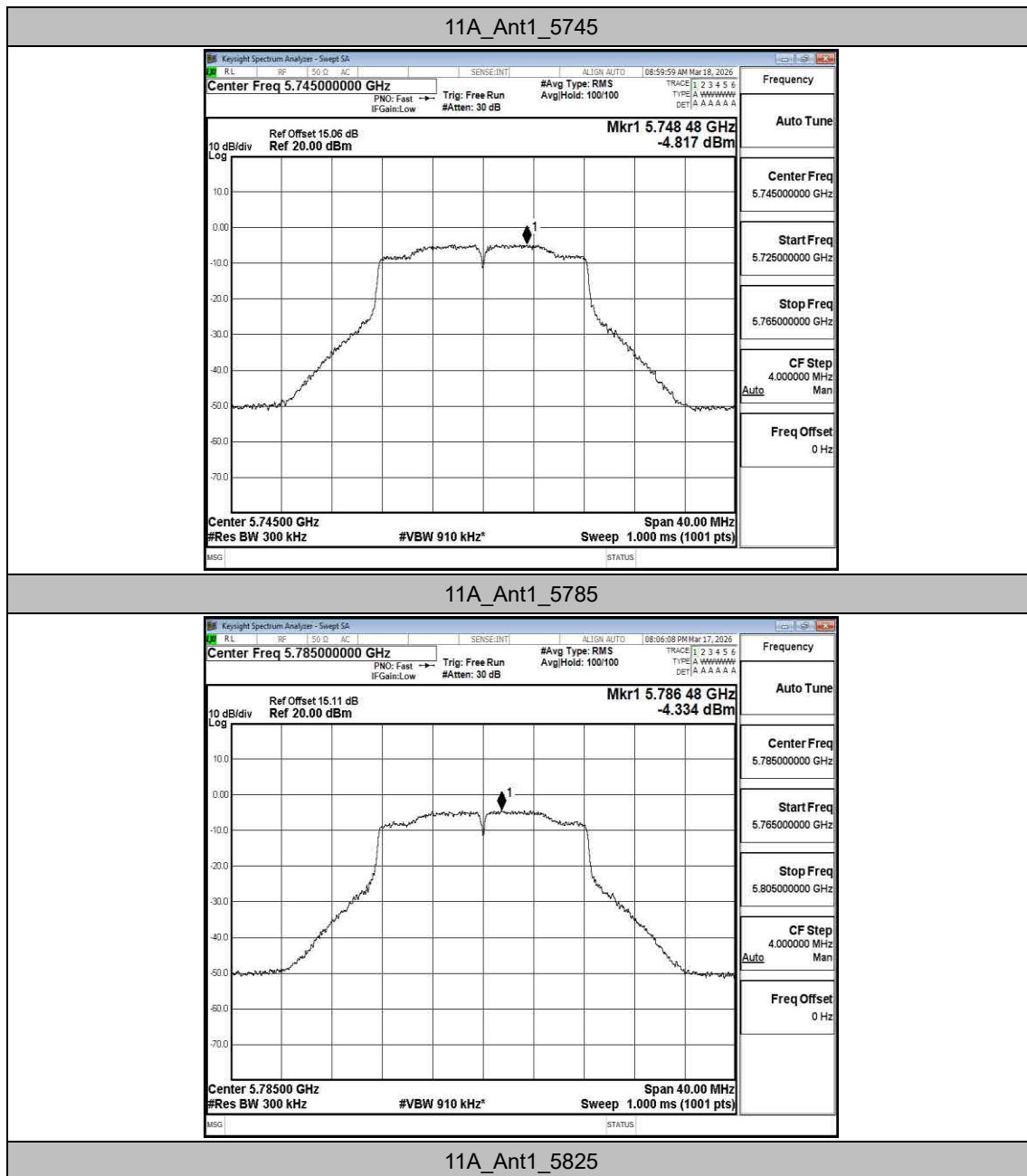
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

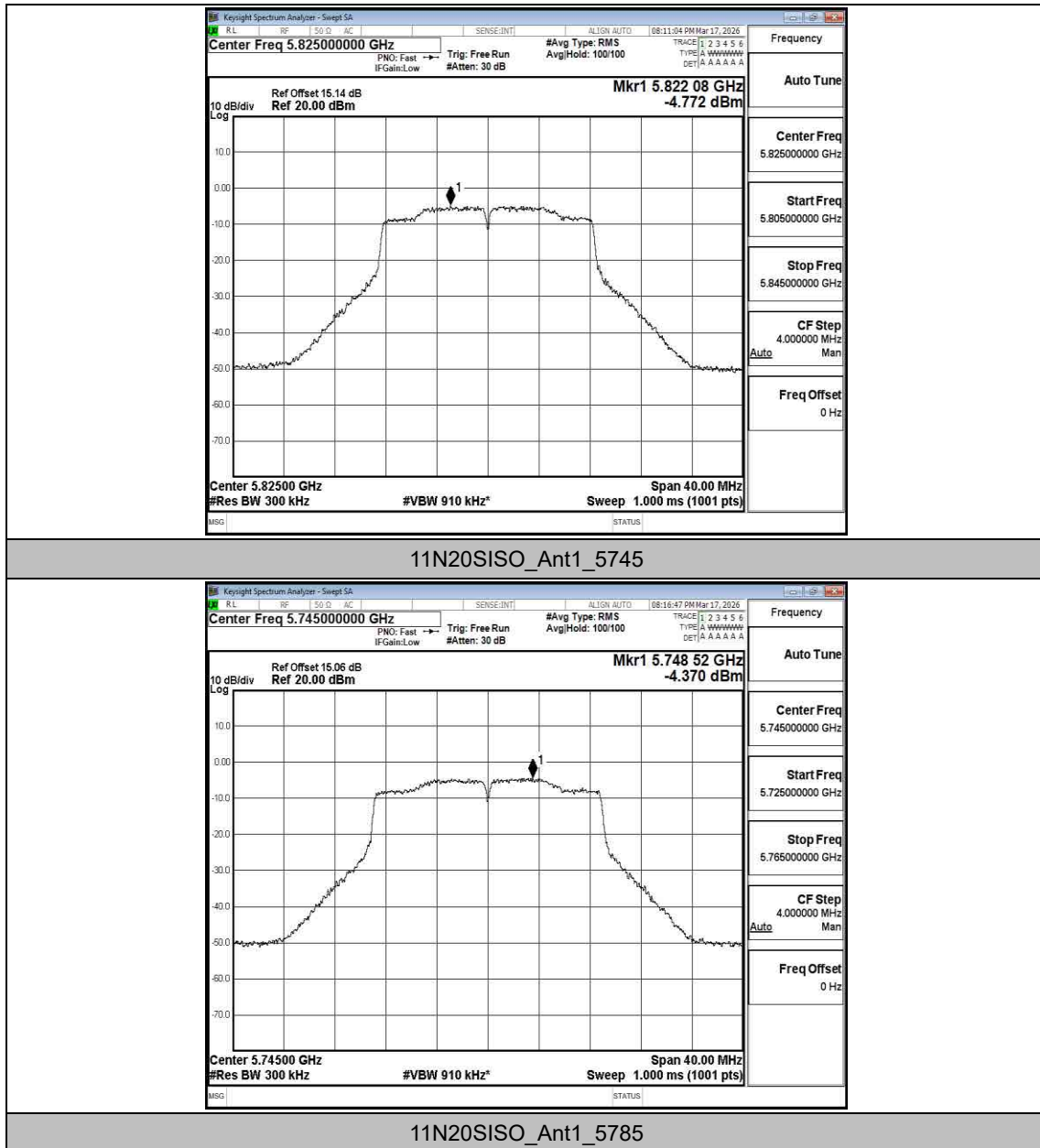
MIMO

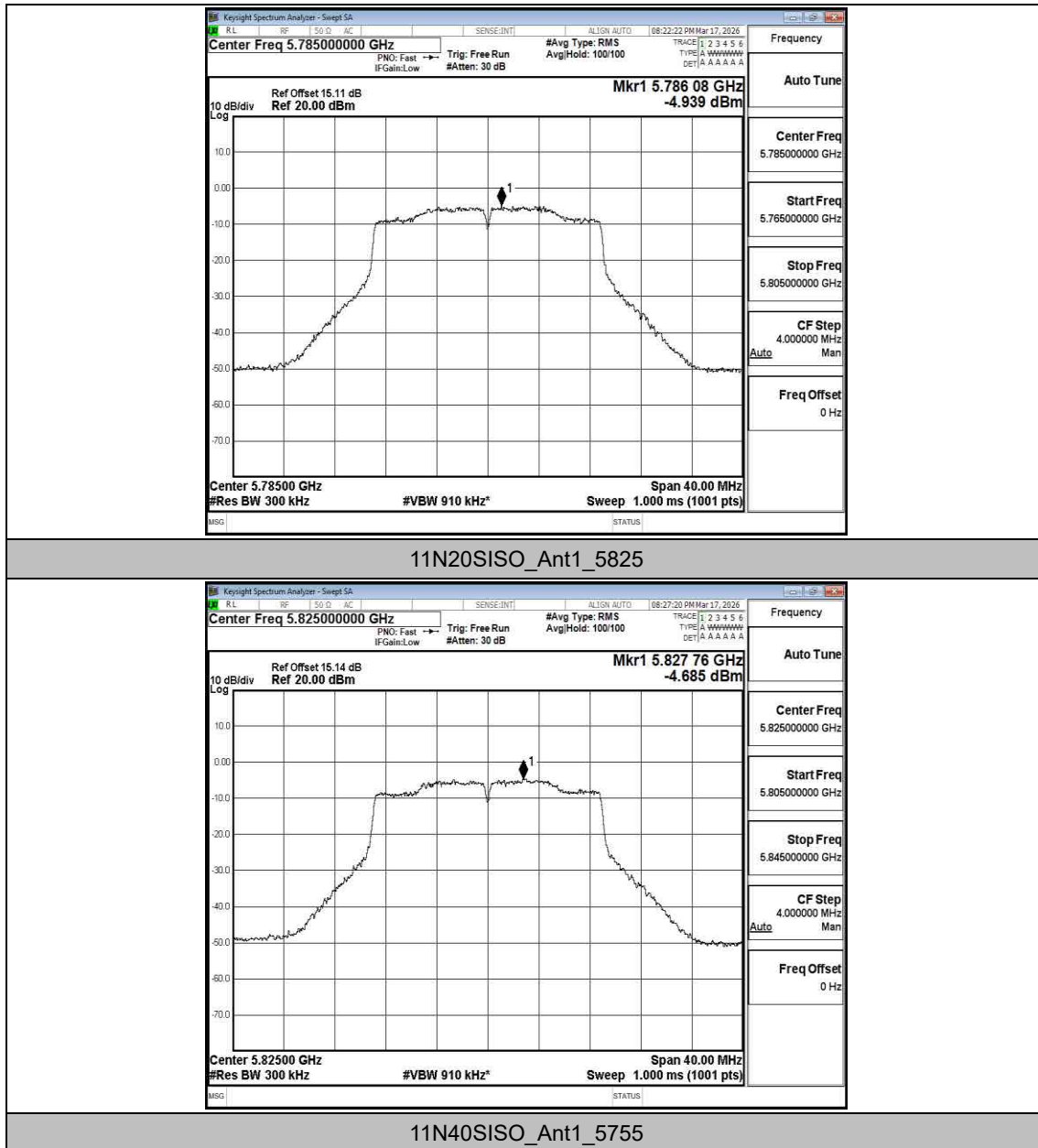
Condition	Mode	Frequency (MHz)	Total PSD (dBm/500KHz)			Limit (dBm/500KHz)	Verdict
			Ant1	Ant2	Ant1+Ant2		
NVNT	n20	5745	-2.02	-2.97	0.54	29.53	Pass
NVNT	n20	5785	-2.61	-1.45	1.02	29.53	Pass
NVNT	n20	5825	-2.32	-2.11	0.80	29.53	Pass
NVNT	n40	5755	-5.36	-5.66	-2.50	29.53	Pass
NVNT	n40	5795	-5.75	-6.30	-3.01	29.53	Pass
NVNT	ac20	5745	-1.99	-2.36	0.84	29.53	Pass
NVNT	ac20	5785	-2.41	-2.84	0.39	29.53	Pass
NVNT	ac20	5825	-2.84	-2.63	0.28	29.53	Pass
NVNT	ac40	5755	-6.38	-5.85	-3.10	29.53	Pass
NVNT	ac40	5795	-6.74	-4.26	-2.32	29.53	Pass
NVNT	ac80	5775	-10.06	-8.11	-5.97	29.53	Pass

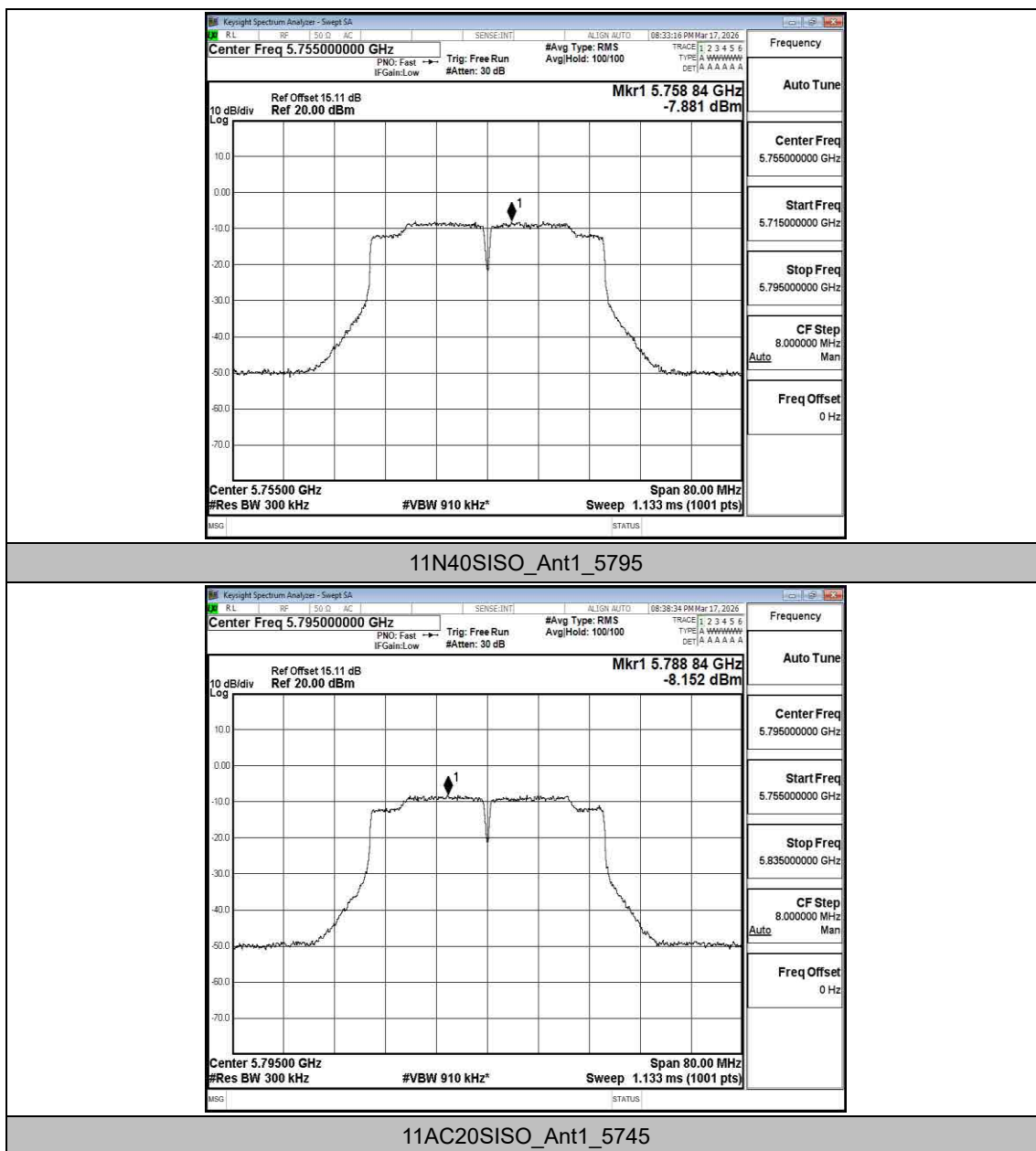
Note: offset=System attenuation +cabel loss

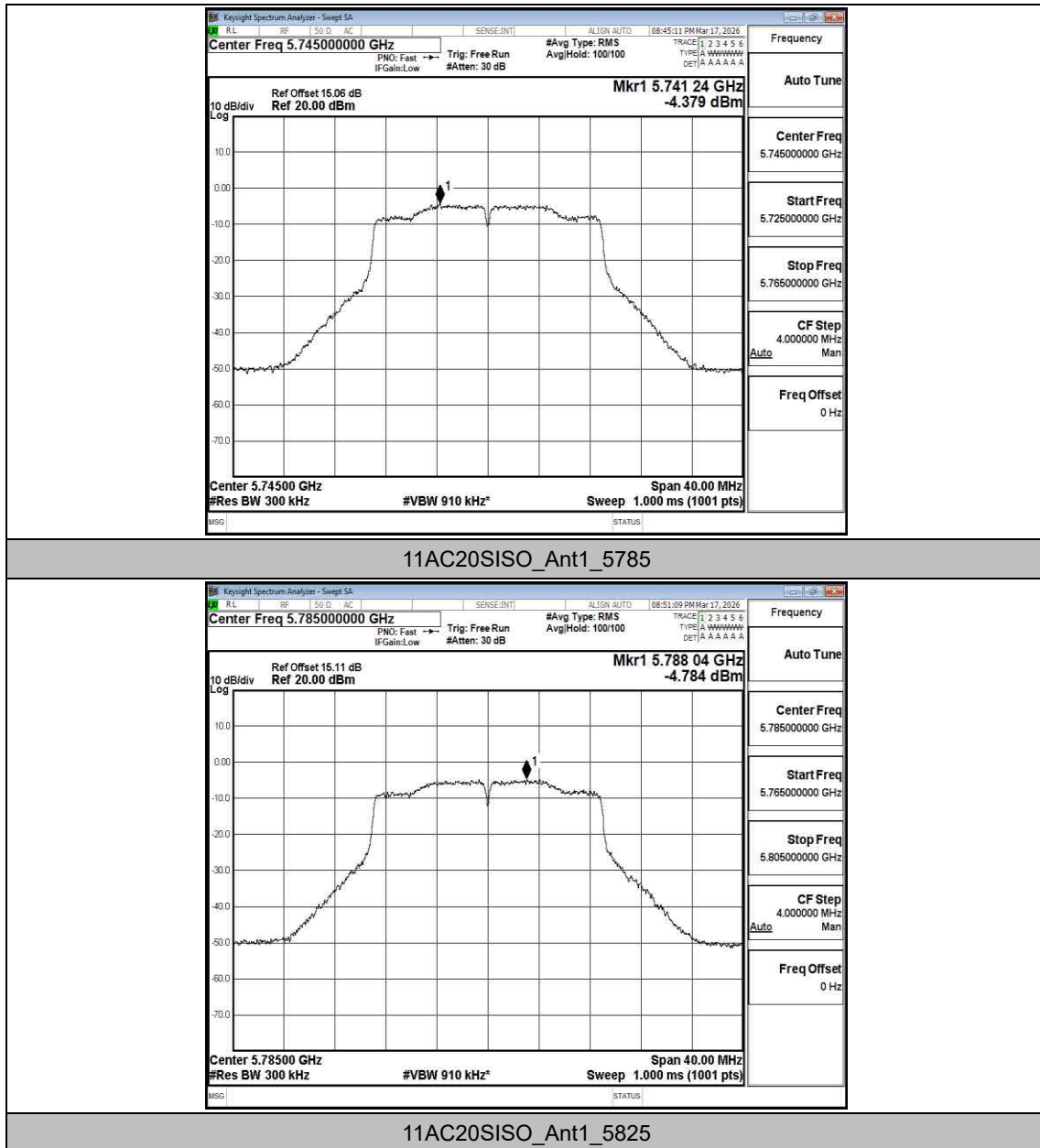
Test Graphs

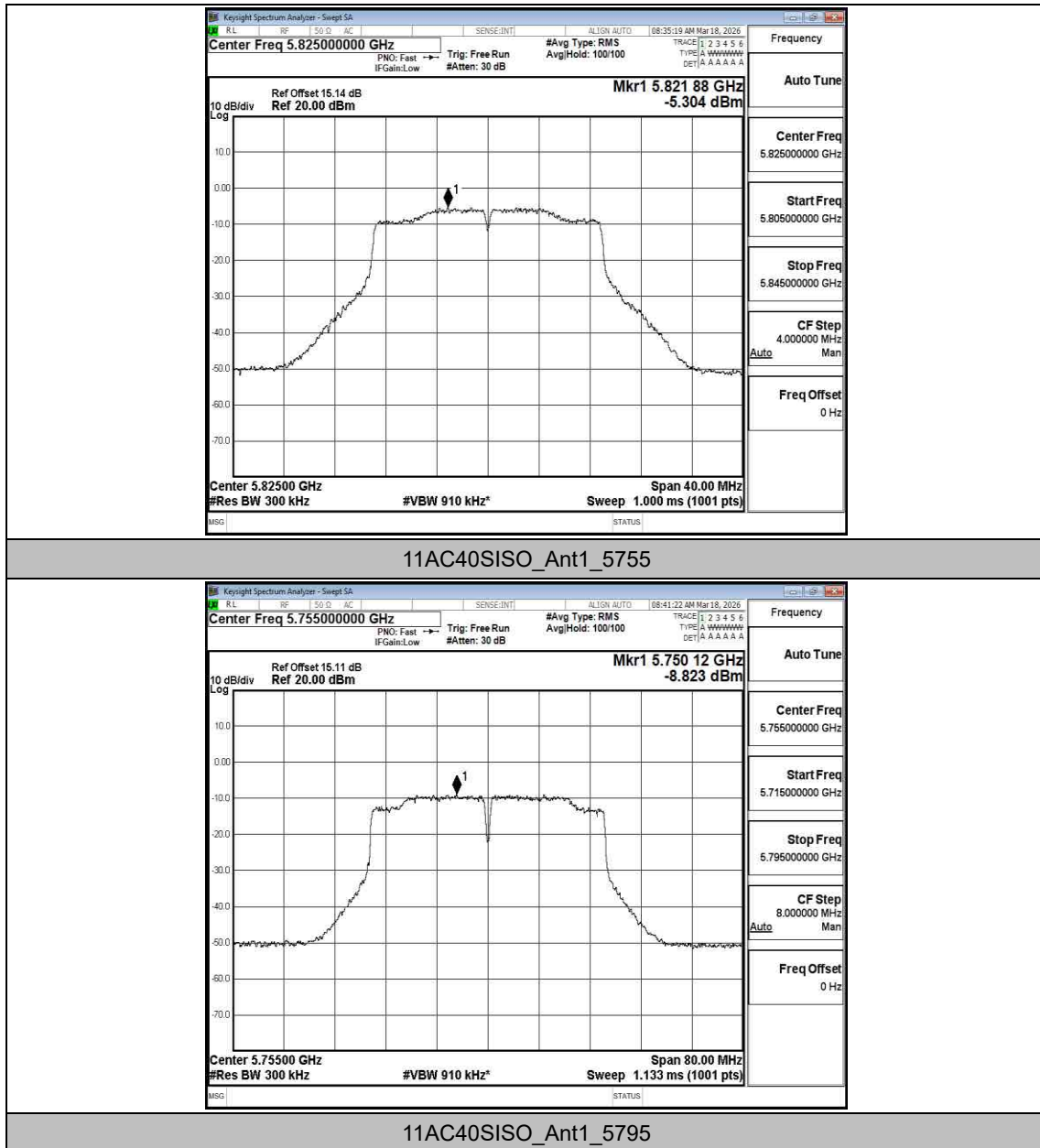


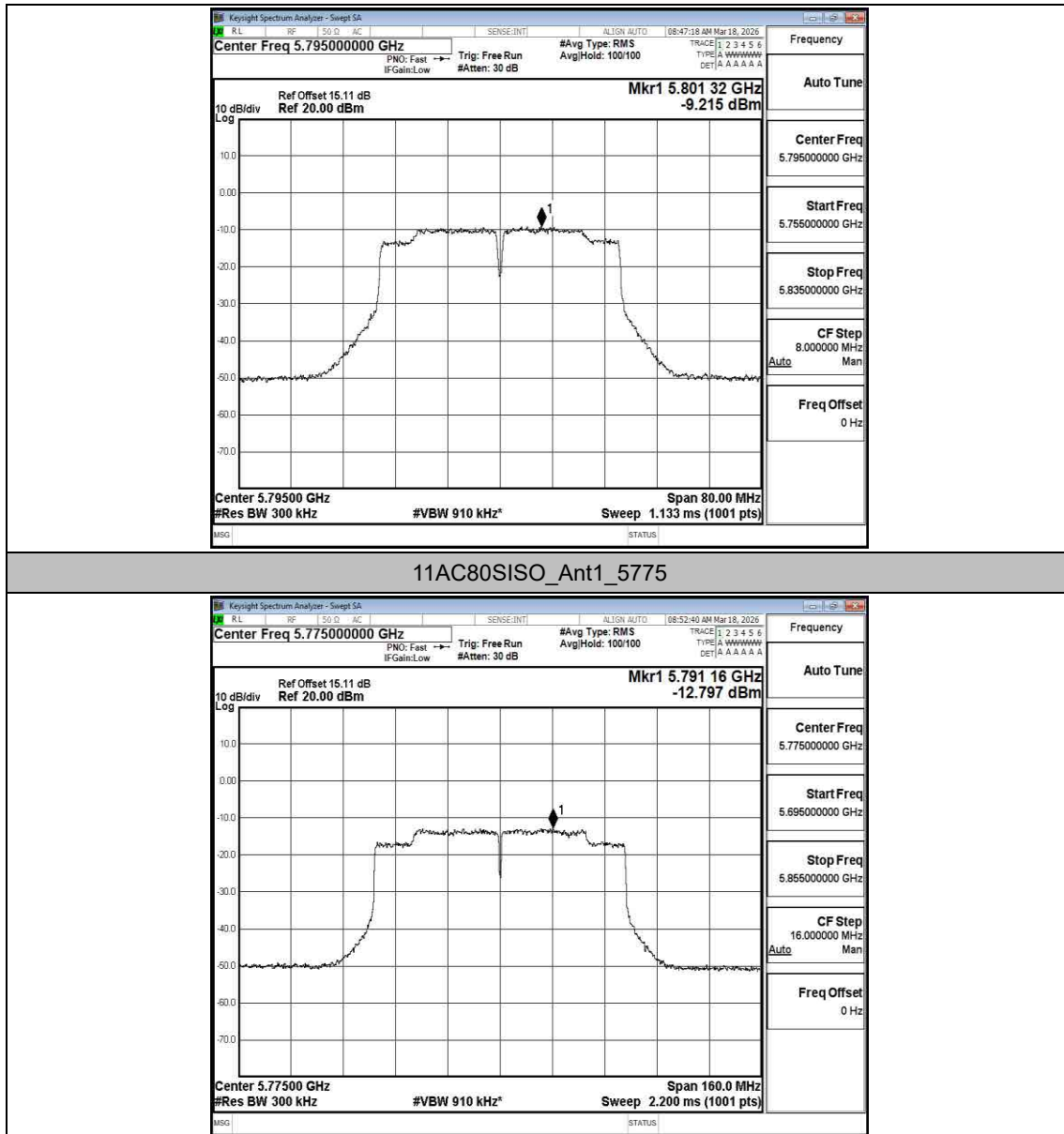




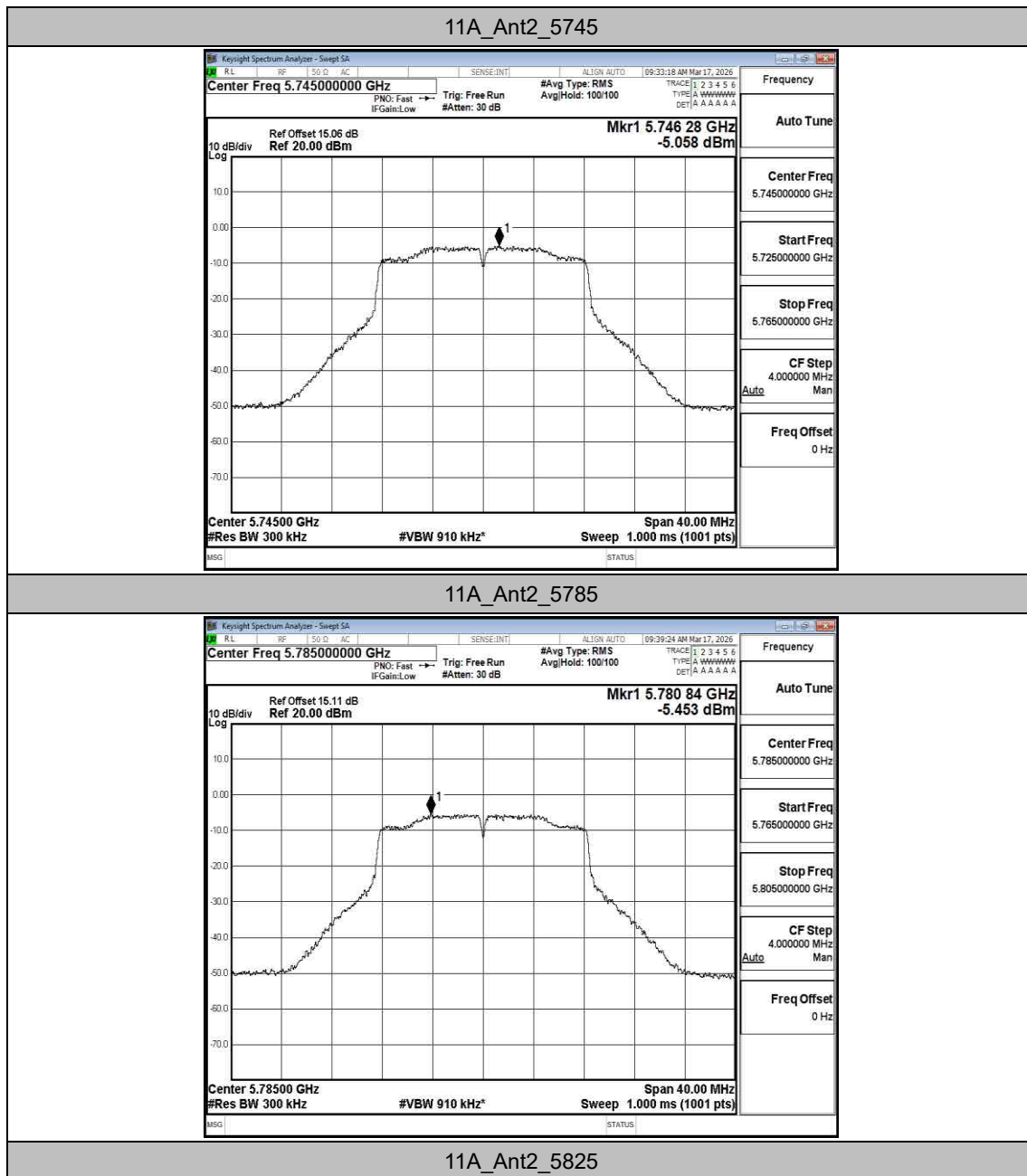


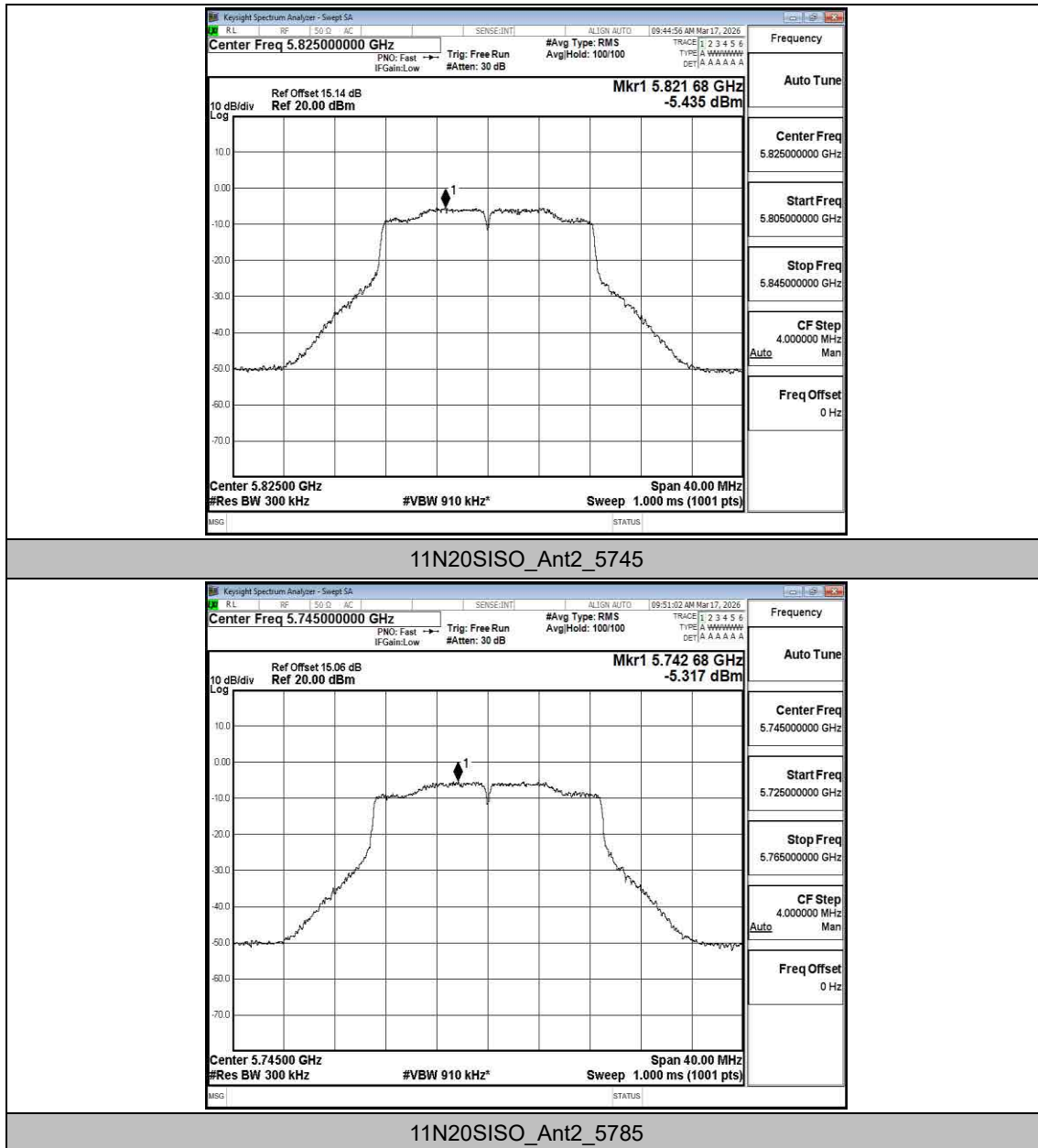


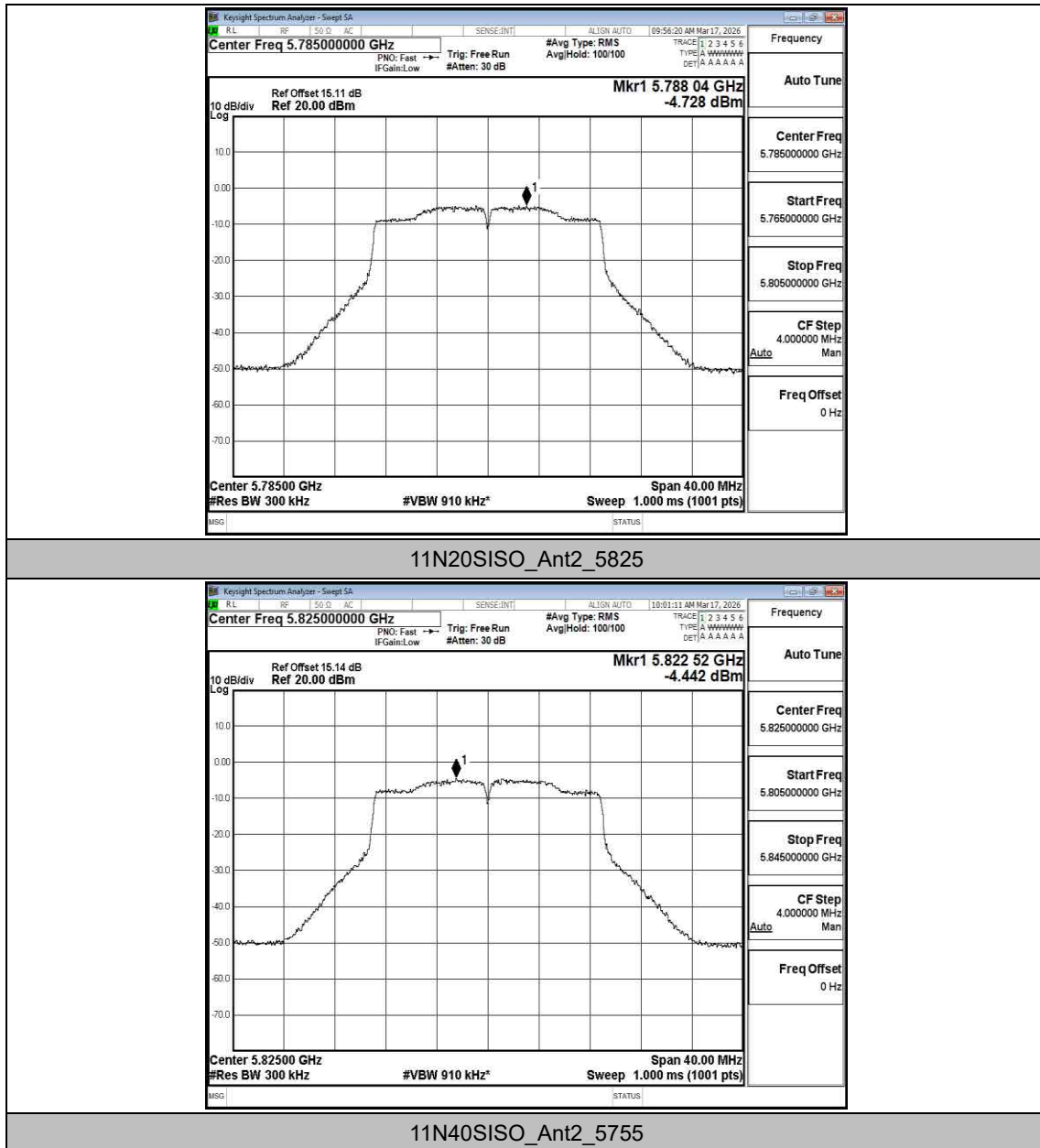


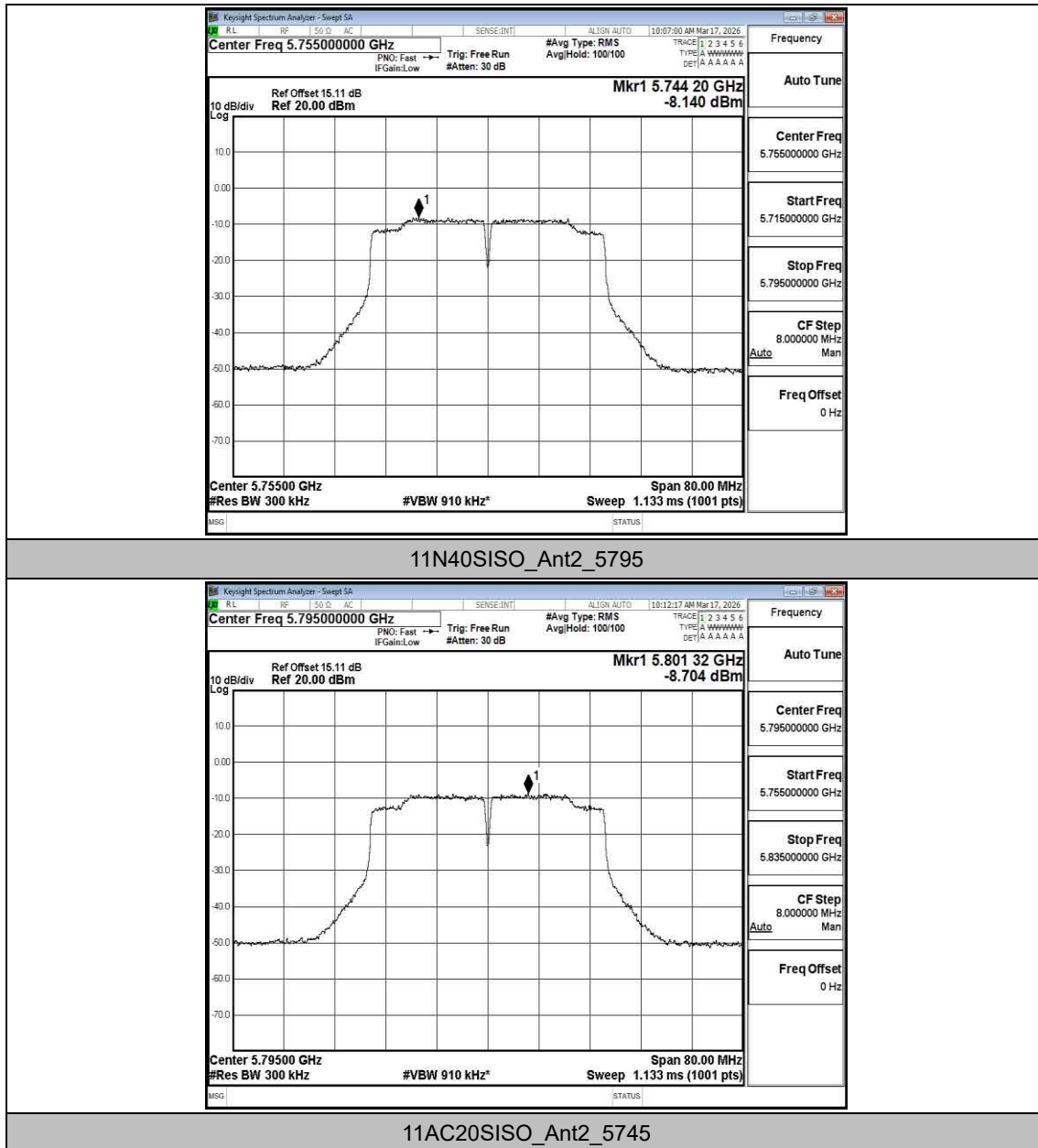


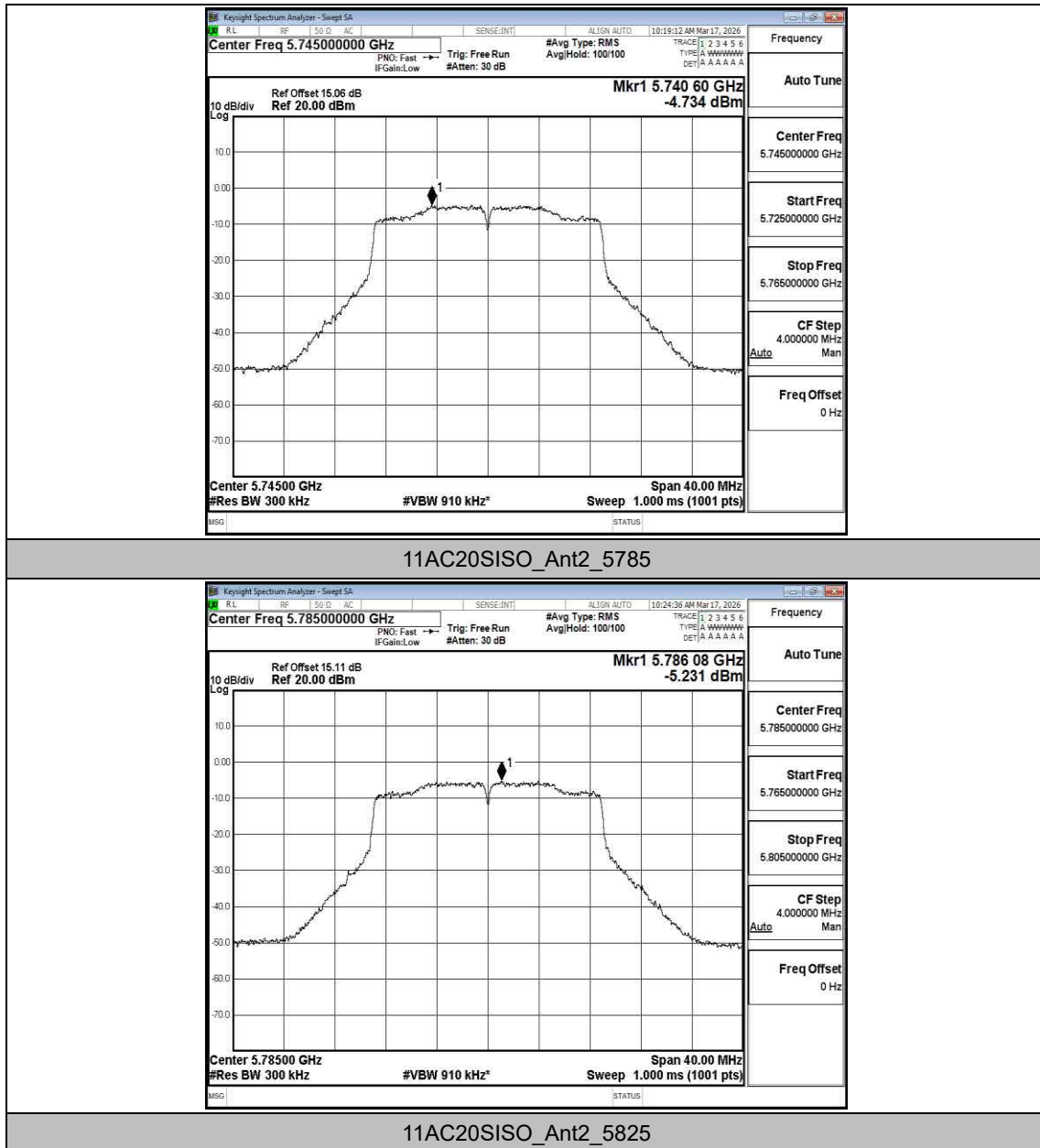
Test Graphs

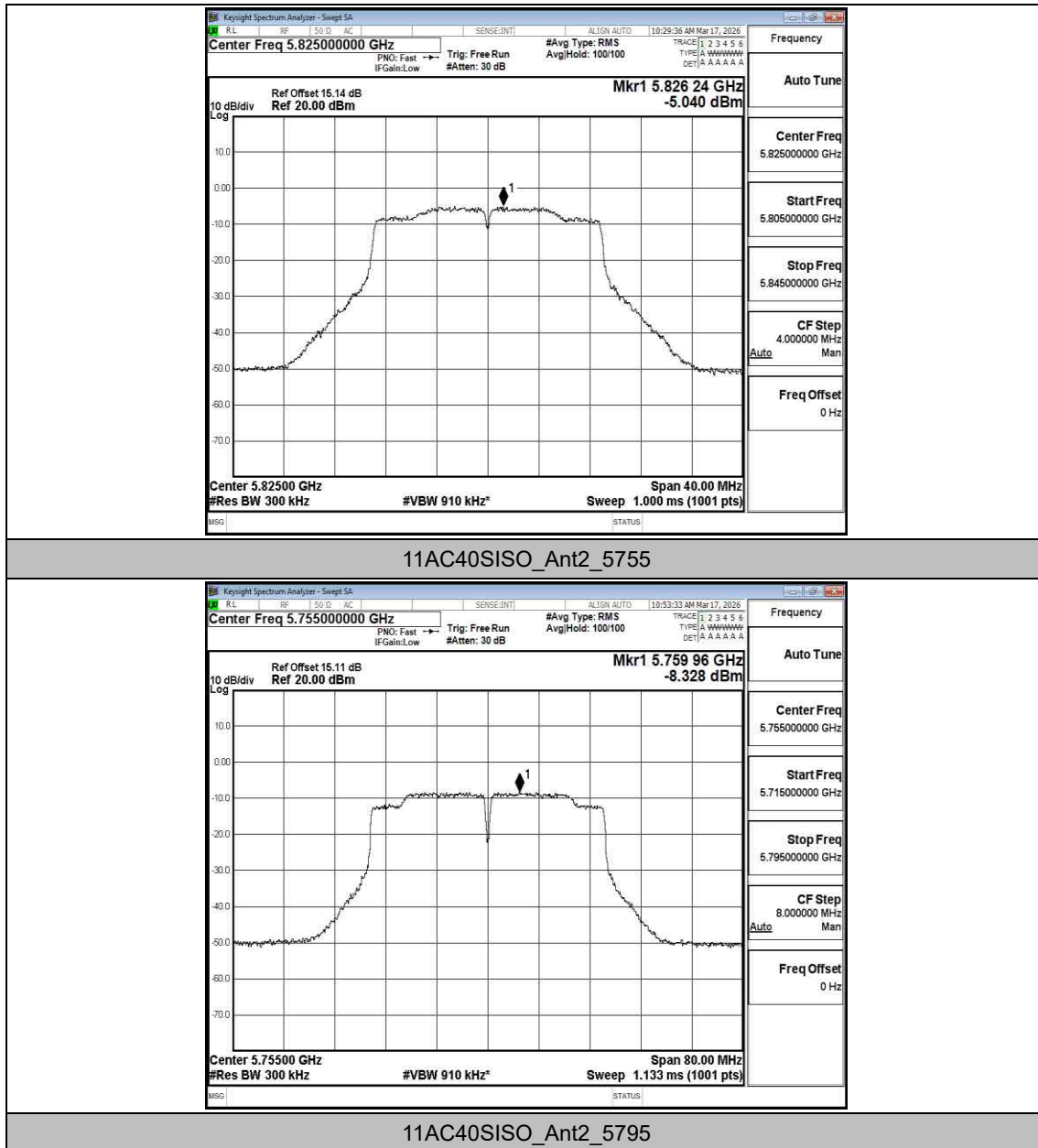


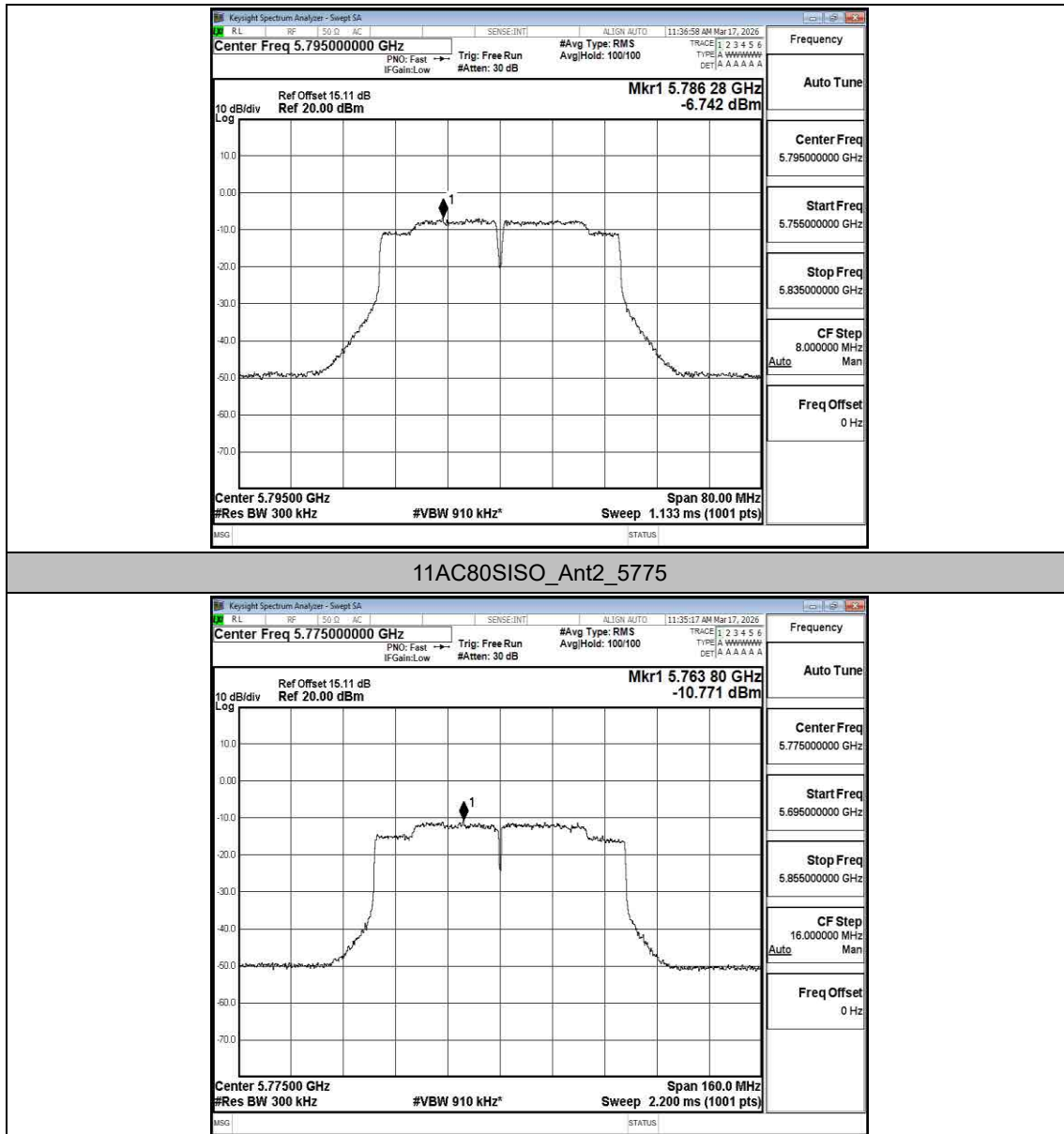












E.4 Emissions in Restricted Bands

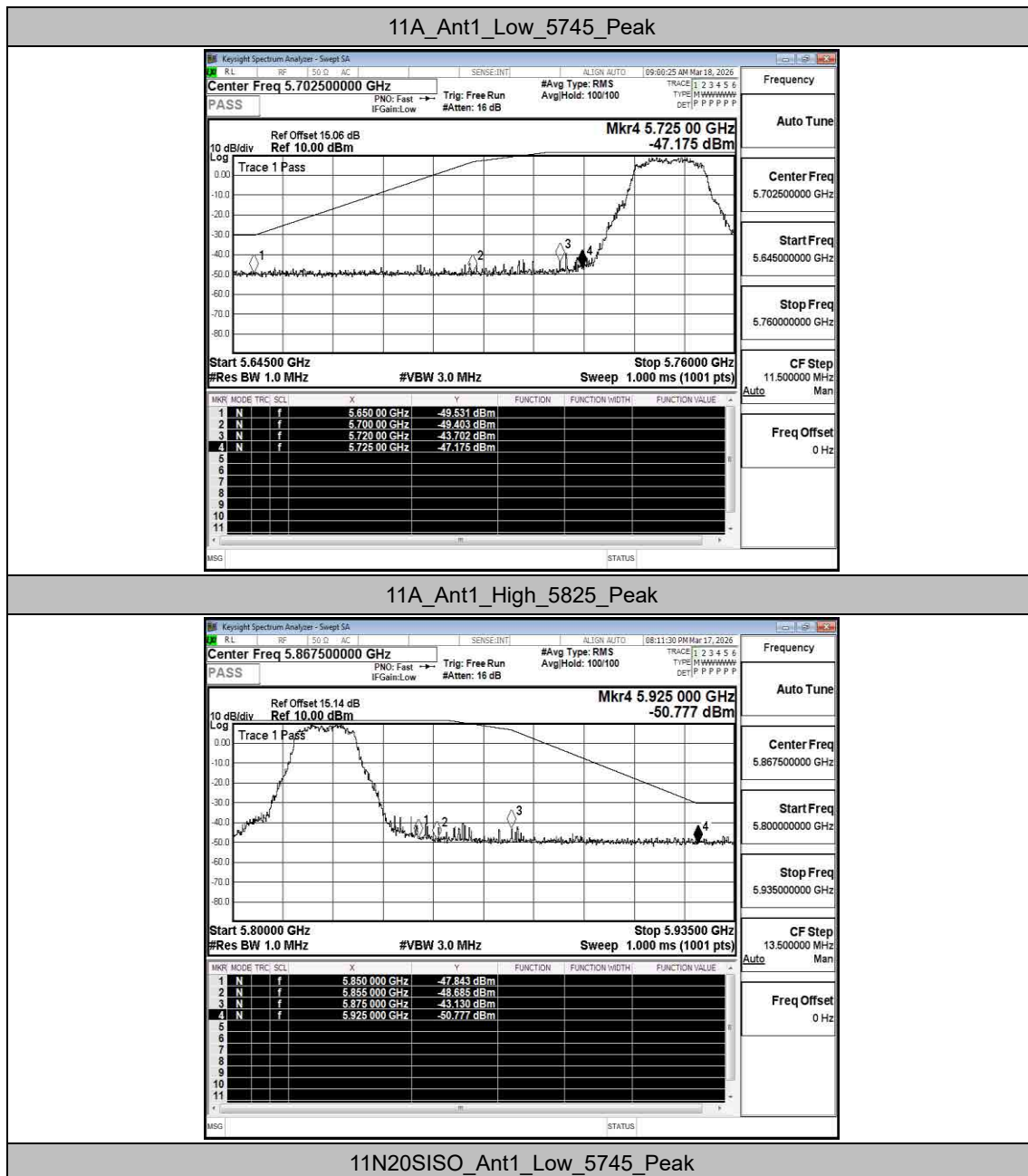
Test Result

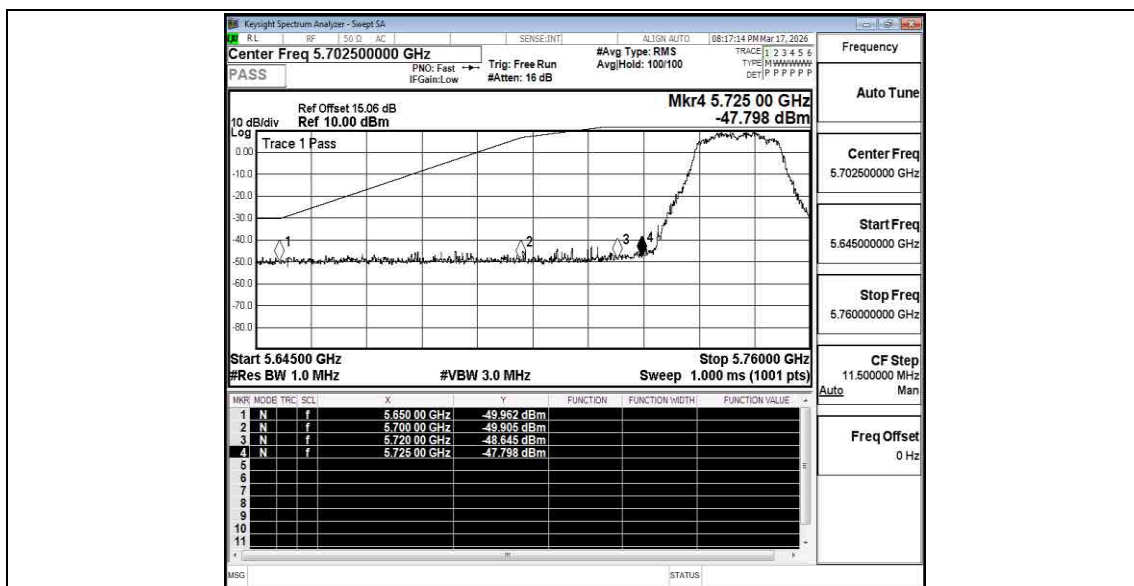
TestMode	Antenna	ChName	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-49.531	≤-30.42	3.42	PASS
				Peak	5700.000	-49.4	≤6.58	3.42	PASS
				Peak	5720.000	-43.7	≤12.18	3.42	PASS
				Peak	5725.000	-47.18	≤23.58	3.42	PASS
		High	5825	Peak	5850.000	-47.843	≤23.58	3.42	PASS
				Peak	5855.000	-48.69	≤12.18	3.42	PASS
				Peak	5875.000	-43.13	≤6.58	3.42	PASS
				Peak	5925.000	-50.78	≤-30.42	3.42	PASS
11N20SISO	Ant1	Low	5745	Peak	5650.000	-49.962	≤-30.42	3.42	PASS
				Peak	5700.000	-49.91	≤6.58	3.42	PASS
				Peak	5720.000	-48.65	≤12.18	3.42	PASS
				Peak	5725.000	-47.8	≤23.58	3.42	PASS
		High	5825	Peak	5850.000	-45.233	≤23.58	3.42	PASS
				Peak	5855.000	-48.22	≤12.18	3.42	PASS
				Peak	5875.000	-50.35	≤6.58	3.42	PASS
				Peak	5925.000	-49.5	≤-30.42	3.42	PASS
11N40SISO	Ant1	Low	5755	Peak	5650.000	-49.711	≤-30.42	3.42	PASS
				Peak	5700.000	-47.74	≤6.58	3.42	PASS
				Peak	5720.000	-42.65	≤12.18	3.42	PASS
				Peak	5725.000	-44.08	≤23.58	3.42	PASS
		High	5795	Peak	5850.000	-45.099	≤23.58	3.42	PASS
				Peak	5855.000	-47.48	≤12.18	3.42	PASS
				Peak	5875.000	-48.59	≤6.58	3.42	PASS
				Peak	5925.000	-50.44	≤-30.42	3.42	PASS
11AC20SISO	Ant1	Low	5745	Peak	5650.000	-49.485	≤-30.42	3.42	PASS
				Peak	5700.000	-49.9	≤6.58	3.42	PASS
				Peak	5720.000	-47.05	≤12.18	3.42	PASS
				Peak	5725.000	-45.81	≤23.58	3.42	PASS
		High	5825	Peak	5850.000	-46.729	≤23.58	3.42	PASS
				Peak	5855.000	-48.31	≤12.18	3.42	PASS
				Peak	5875.000	-50.95	≤6.58	3.42	PASS
				Peak	5925.000	-50.33	≤-30.42	3.42	PASS
11AC40SISO	Ant1	Low	5755	Peak	5650.000	-50.485	≤-30.42	3.42	PASS
				Peak	5700.000	-48.73	≤6.58	3.42	PASS
				Peak	5720.000	-44.28	≤12.18	3.42	PASS

		High	5795	Peak	5725.000	-43.59	≤23.58	3.42	PASS
				Peak	5850.000	-46.722	≤23.58	3.42	PASS
				Peak	5855.000	-49.27	≤12.18	3.42	PASS
				Peak	5875.000	-47.93	≤6.58	3.42	PASS
				Peak	5925.000	-48.63	≤-30.42	3.42	PASS
11AC80SISO	Ant1	Low	5775	Peak	5650.000	-48.947	≤-30.42	3.42	PASS
				Peak	5700.000	-47.12	≤6.58	3.42	PASS
				Peak	5720.000	-46.71	≤12.18	3.42	PASS
				Peak	5725.000	-36.47	≤23.58	3.42	PASS
		High	5775	Peak	5850.000	-44.983	≤23.58	3.42	PASS
				Peak	5855.000	-47.76	≤12.18	3.42	PASS
				Peak	5875.000	-48.2	≤6.58	3.42	PASS
				Peak	5925.000	-49.08	≤-30.42	3.42	PASS

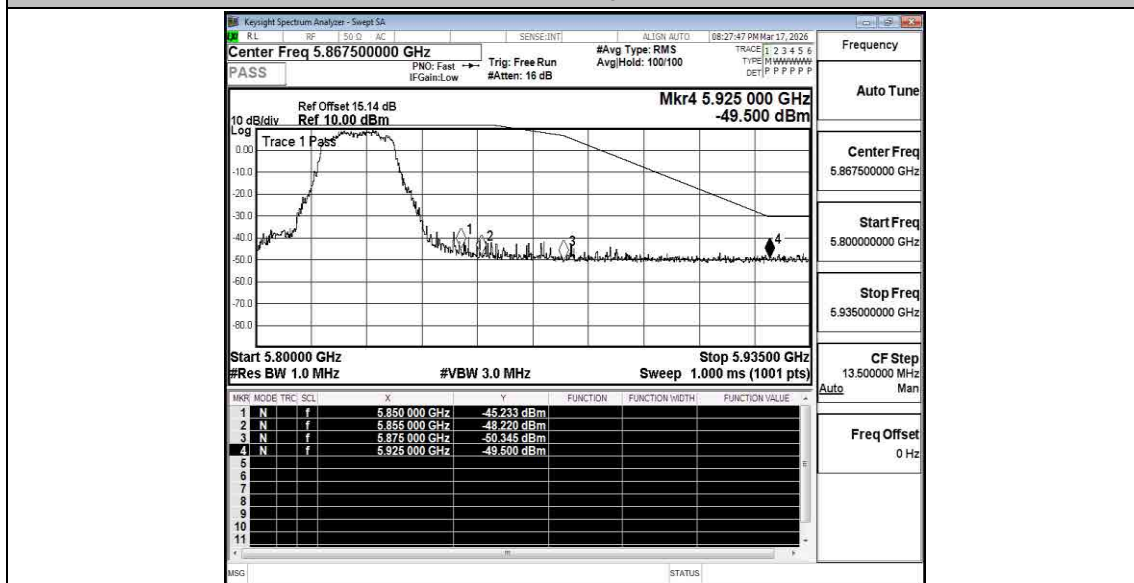
Note: Note: offset=System attenuation +caval loss

Test Graphs

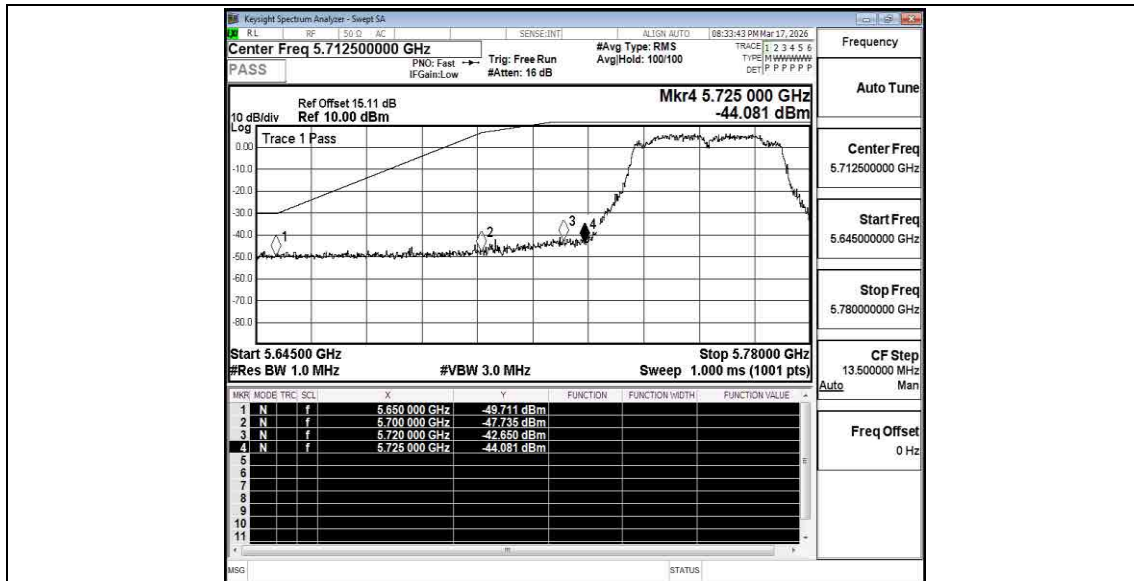




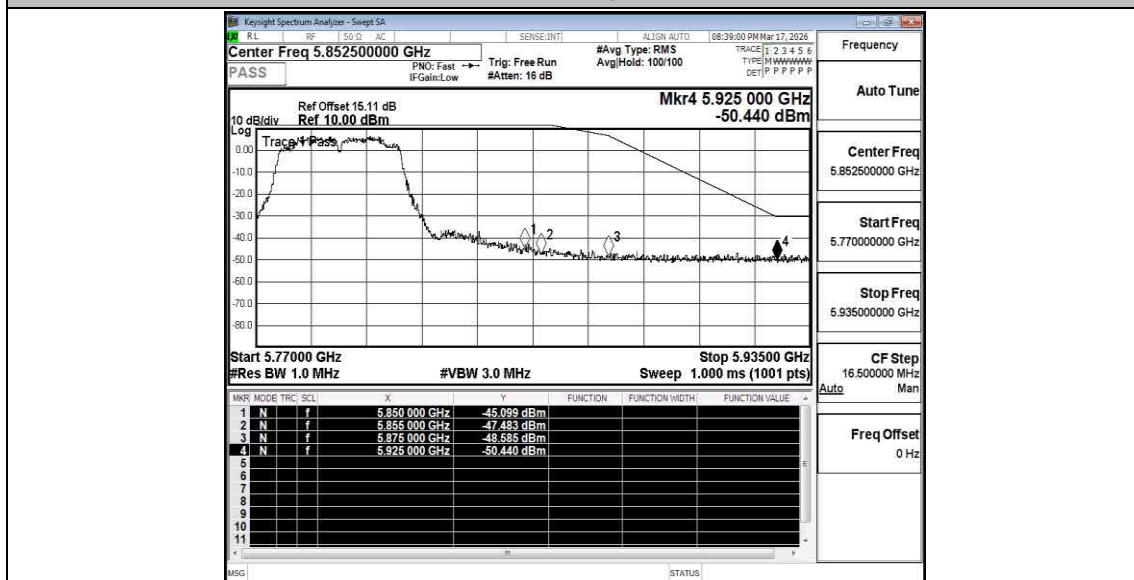
11N20SISO_Ant1_High_5825_Peak



11N40SISO_Ant1_Low_5755_Peak



11N40SISO_Ant1_High_5795_Peak



11AC20SISO_Ant1_Low_5745_Peak