

Appendix C

RF Test Data for 5.8GWIFI (Conducted Measurement)

Product Name: Wireless Adapter

Test Model: U152

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Suichao Lai
Supervised by:	Yan Chen

C.1 Min emission bandwidth

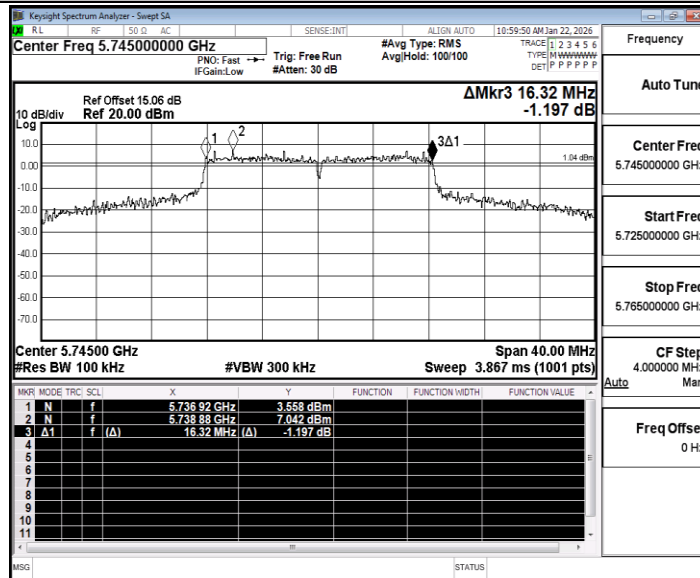
Test Result B4

TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.920	5753.240	0.5	PASS
		5785	16.280	5776.920	5793.200	0.5	PASS
		5825	16.280	5816.920	5833.200	0.5	PASS
11N20SISO	Ant1	5745	15.600	5737.600	5753.200	0.5	PASS
		5785	16.360	5776.920	5793.280	0.5	PASS
		5825	16.480	5816.960	5833.440	0.5	PASS
11N40SISO	Ant1	5755	36.000	5737.160	5773.160	0.5	PASS
		5795	35.920	5776.920	5812.840	0.5	PASS
11AC20SISO	Ant1	5745	16.280	5736.920	5753.200	0.5	PASS
		5785	16.280	5776.960	5793.240	0.5	PASS
		5825	16.520	5816.720	5833.240	0.5	PASS
11AC40SISO	Ant1	5755	36.320	5736.920	5773.240	0.5	PASS
		5795	36.080	5777.160	5813.240	0.5	PASS
11AC80SISO	Ant1	5775	72.480	5737.560	5810.040	0.5	PASS

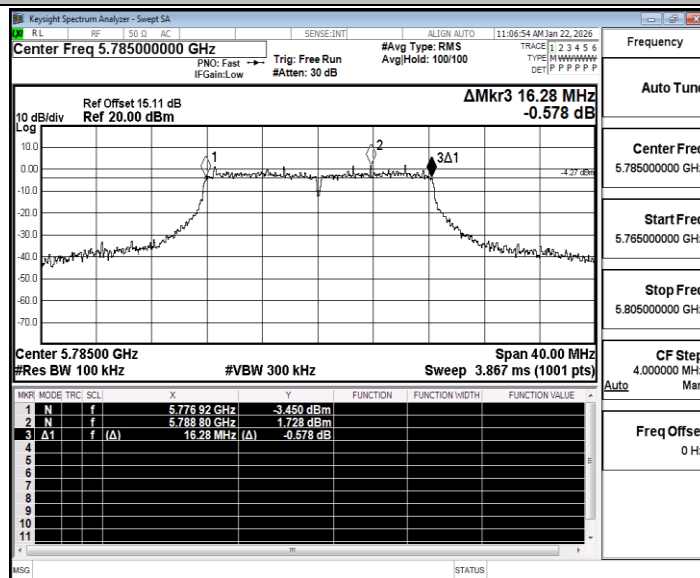
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant2	5745	15.640	5737.160	5752.800	0.5	PASS
		5785	16.280	5776.920	5793.200	0.5	PASS
		5825	16.280	5816.920	5833.200	0.5	PASS
11N20SISO	Ant2	5745	16.040	5737.320	5753.360	0.5	PASS
		5785	15.520	5777.200	5792.720	0.5	PASS
		5825	16.680	5816.720	5833.400	0.5	PASS
11N40SISO	Ant2	5755	35.280	5737.560	5772.840	0.5	PASS
		5795	35.680	5777.160	5812.840	0.5	PASS
11AC20SISO	Ant2	5745	16.280	5736.920	5753.200	0.5	PASS
		5785	16.520	5776.720	5793.240	0.5	PASS
		5825	16.280	5816.960	5833.240	0.5	PASS
11AC40SISO	Ant2	5755	35.600	5737.160	5772.760	0.5	PASS
		5795	35.360	5777.480	5812.840	0.5	PASS
11AC80SISO	Ant2	5775	75.040	5737.560	5812.600	0.5	PASS

Test Graphs B4

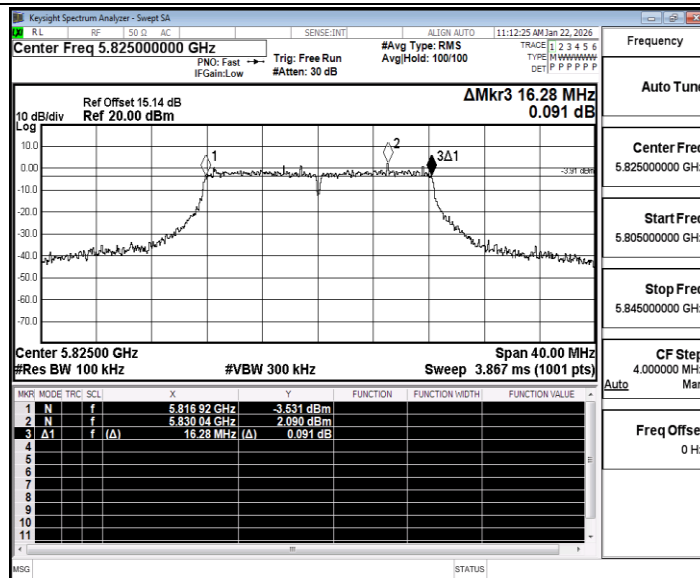
11A_Ant1_5745



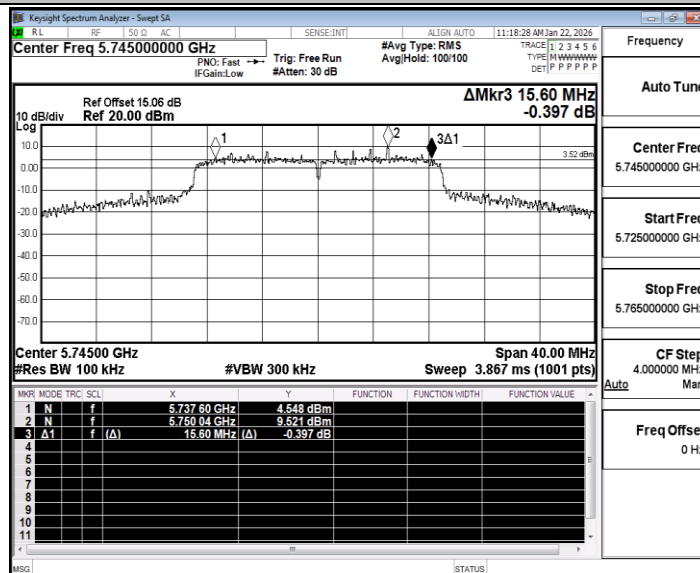
11A_Ant1_5785



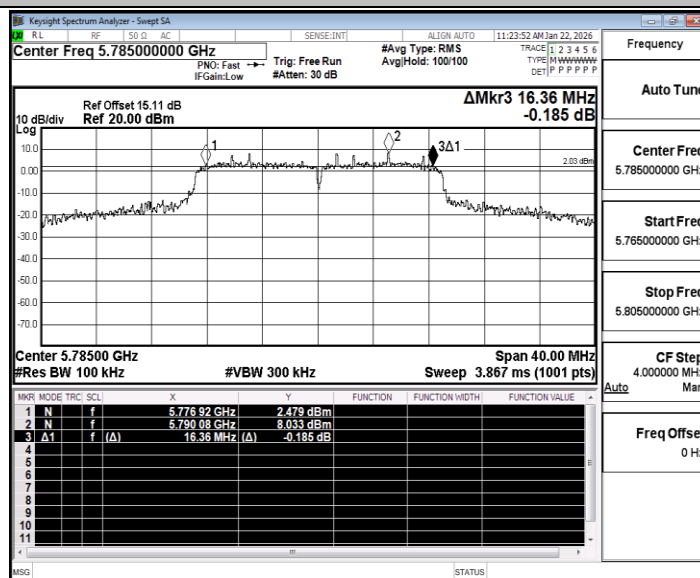
11A_Ant1_5825



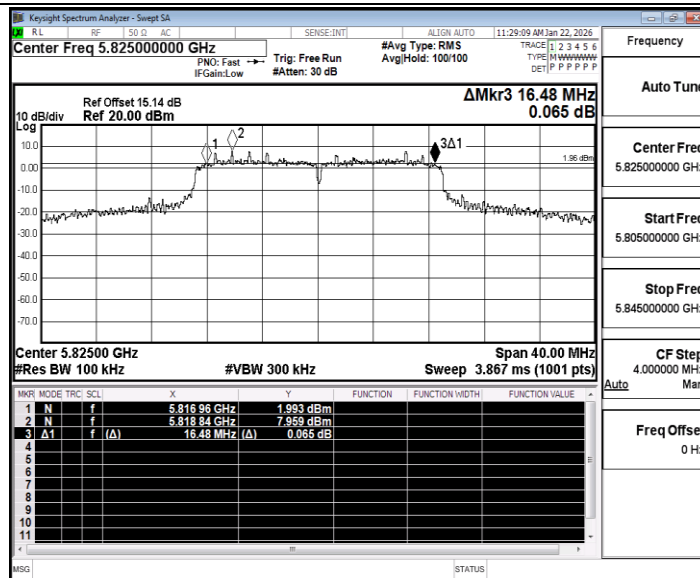
11N20SISO_Ant1_5745



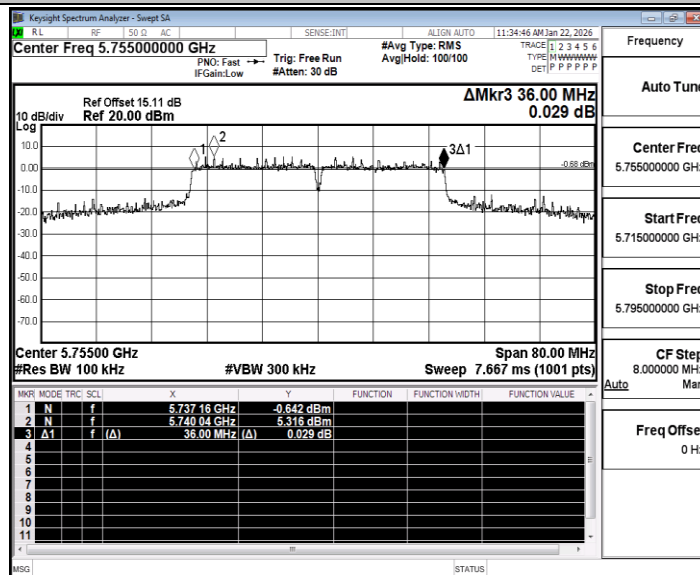
11N20SISO_Ant1_5785



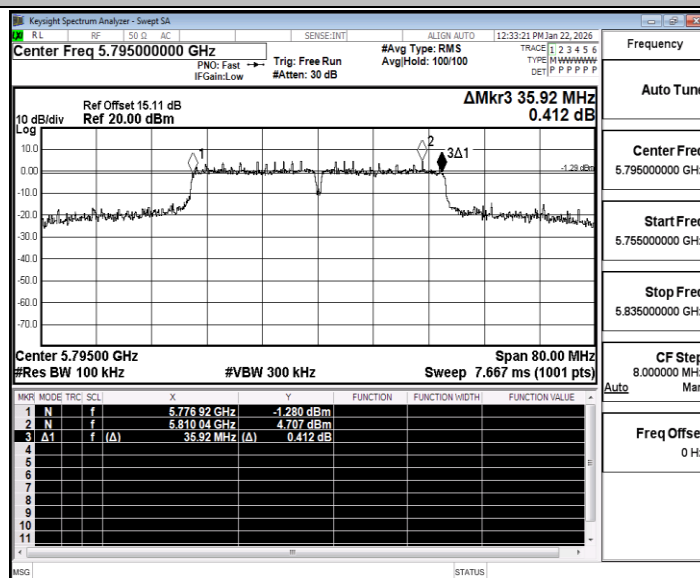
11N20SISO_Ant1_5825



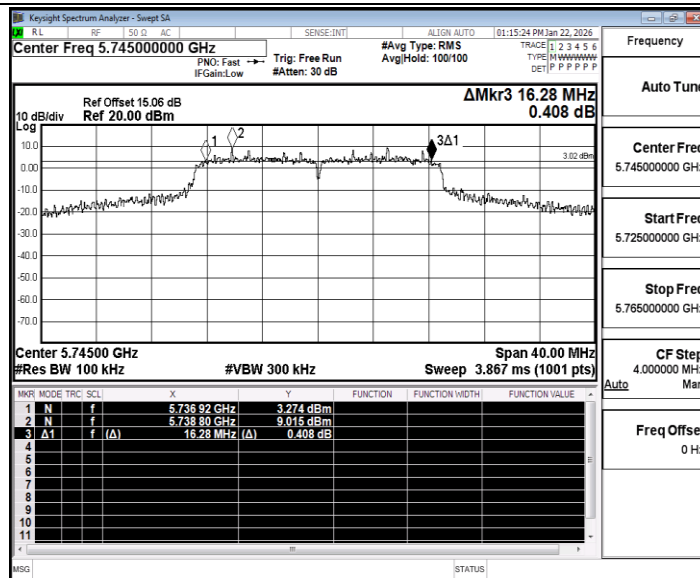
11N40SISO_Ant1_5755



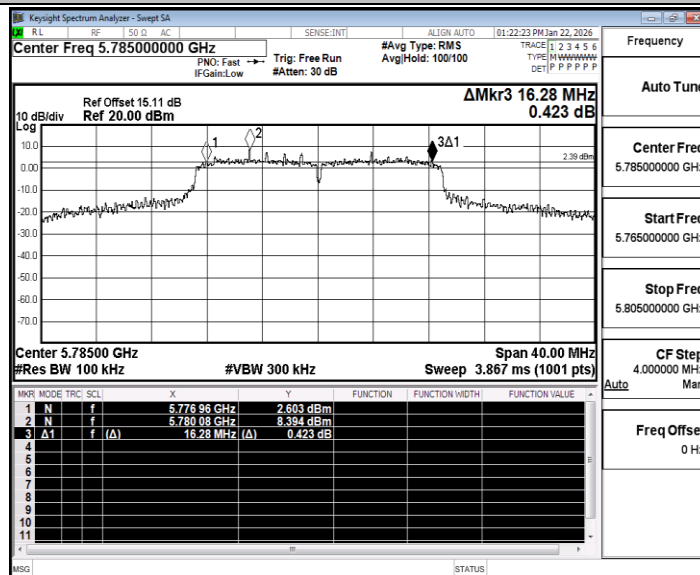
11N40SISO_Ant1_5795



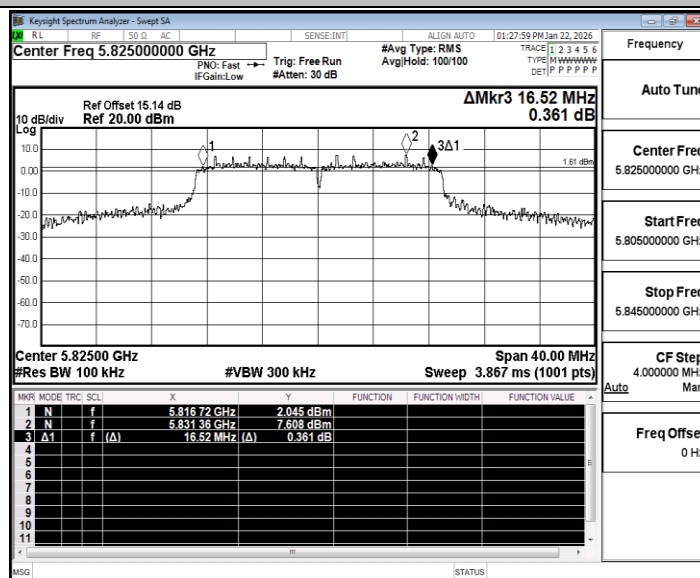
11AC20SISO_Ant1_5745



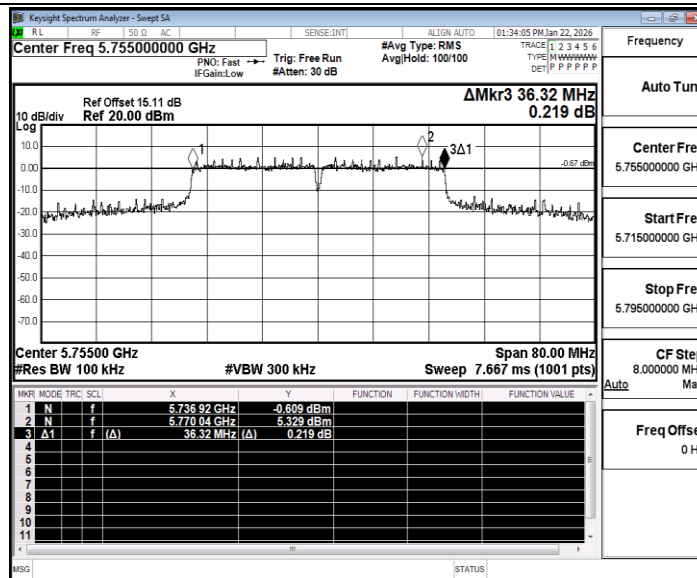
11AC20SISO_Ant1_5785



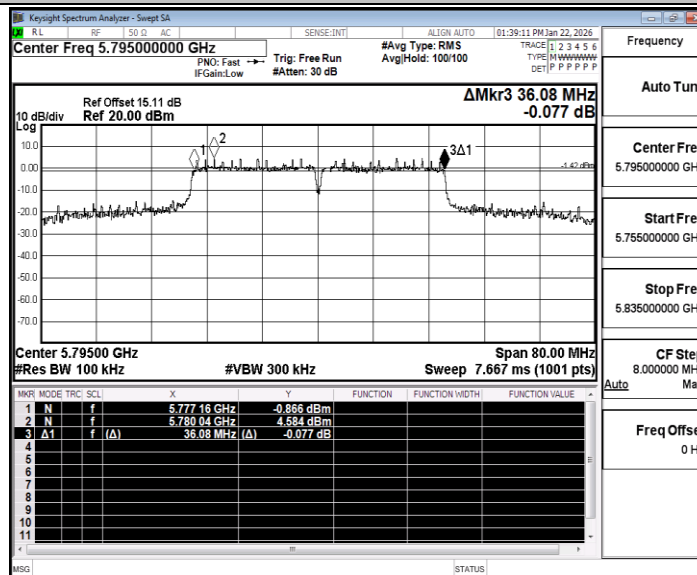
11AC20SISO_Ant1_5825



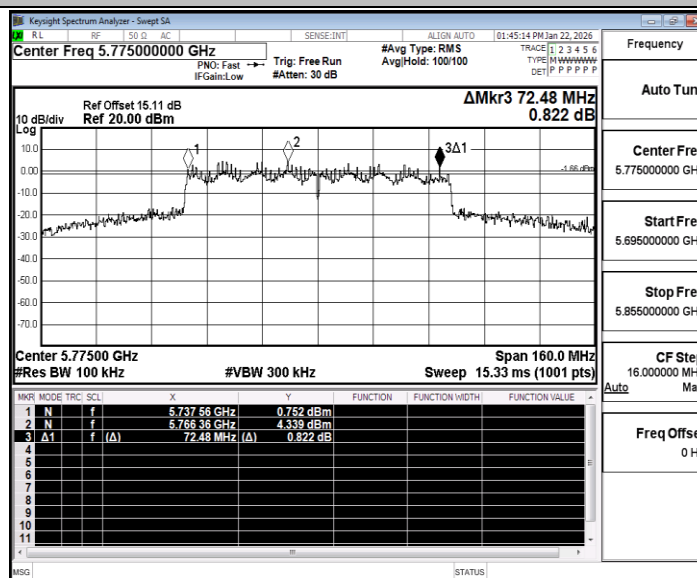
11AC40SISO_Ant1_5755



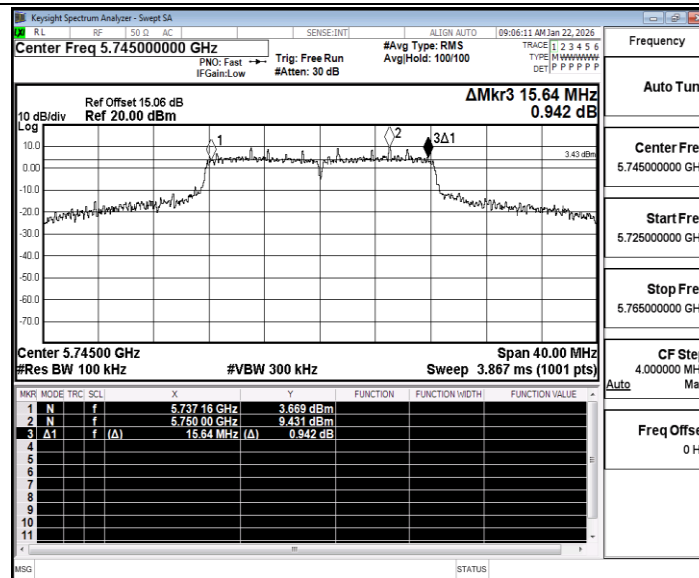
11AC40SISO_Ant1_5795



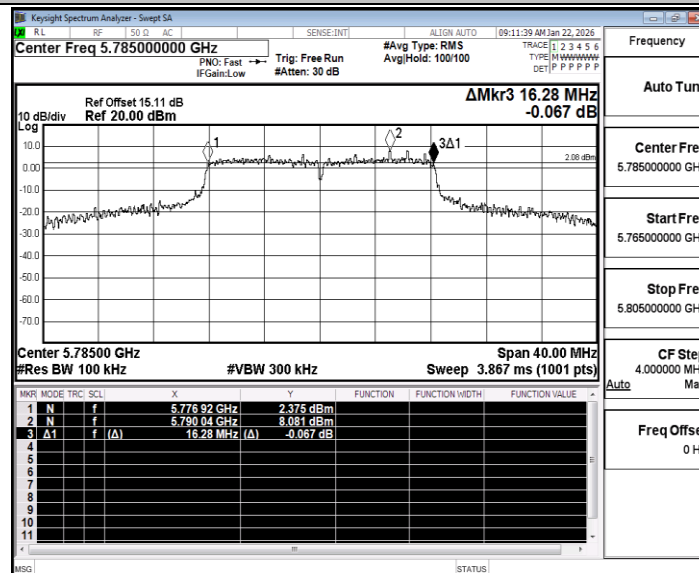
11AC80SISO_Ant1_5775



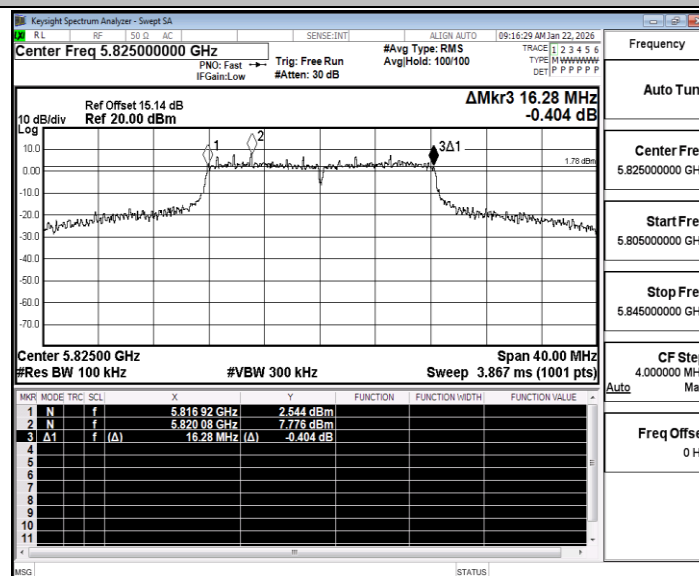
11A_Ant2_5745



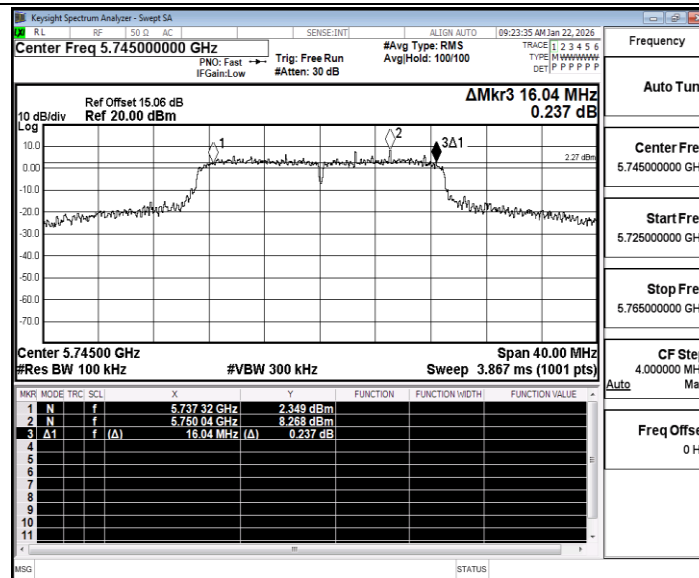
11A_Ant2_5785



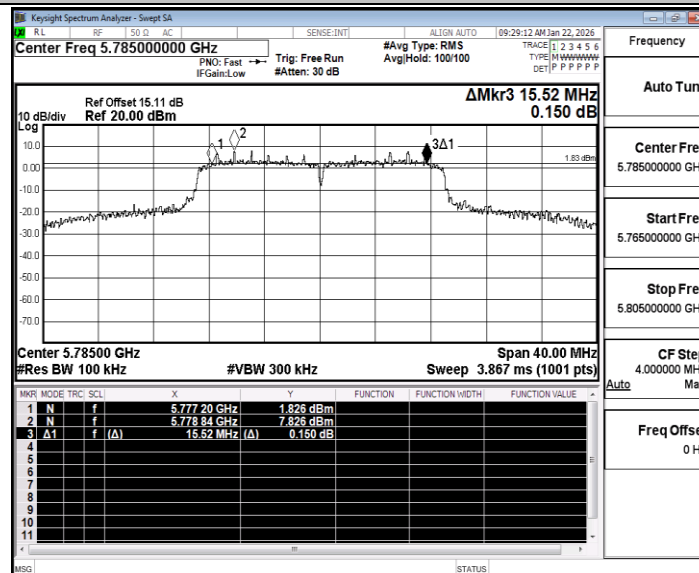
11A_Ant2_5825



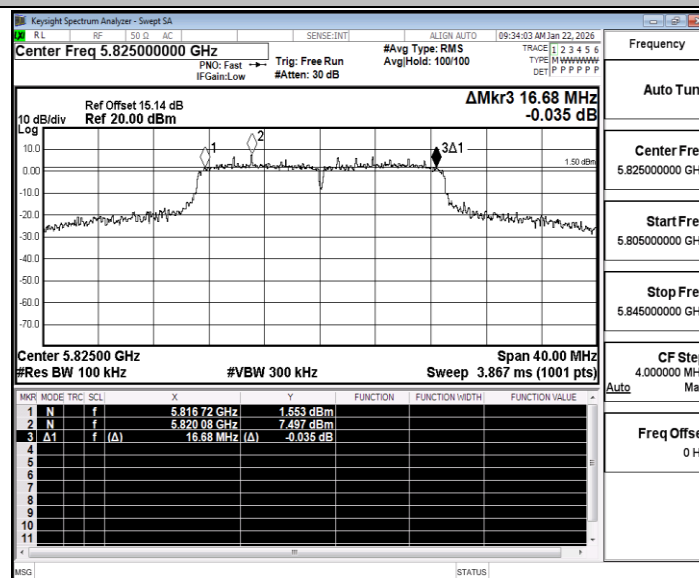
11N20SISO_Ant2_5745



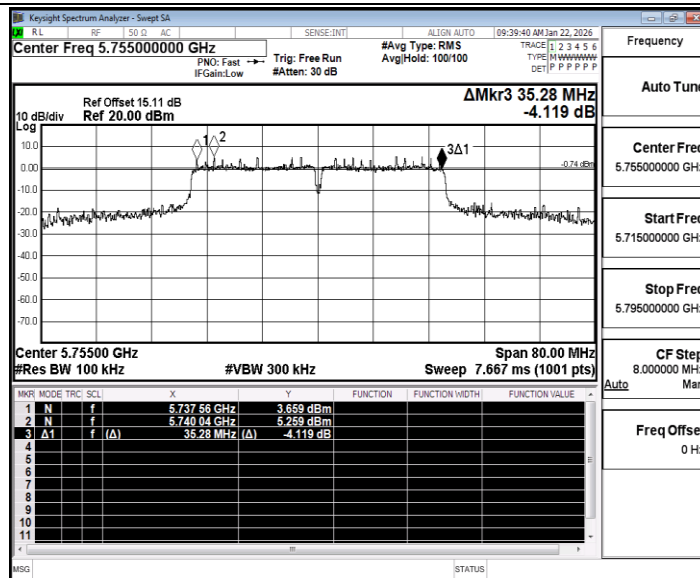
11N20SISO_Ant2_5785



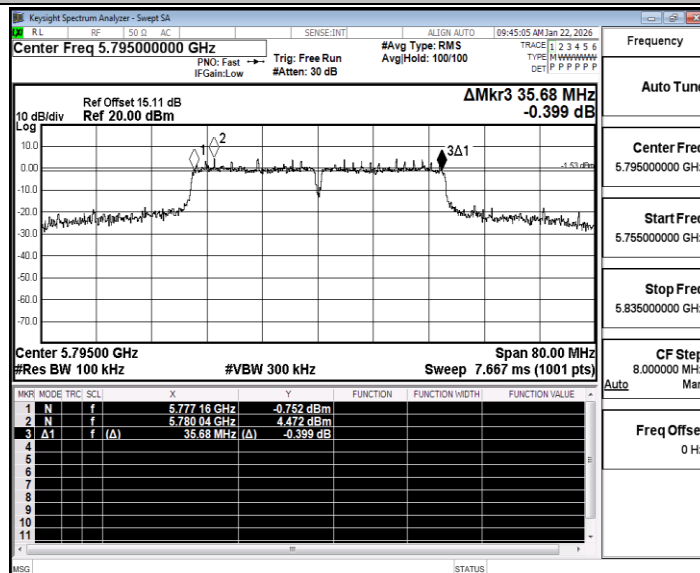
11N20SISO_Ant2_5825



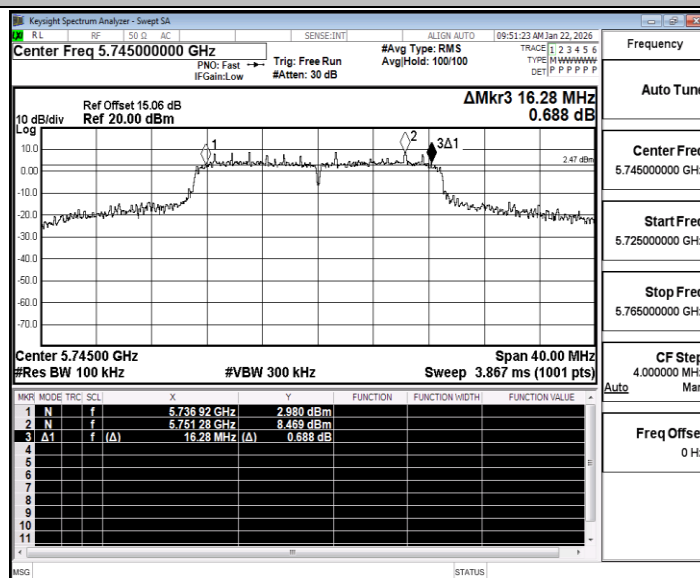
11N40SISO_Ant2_5755



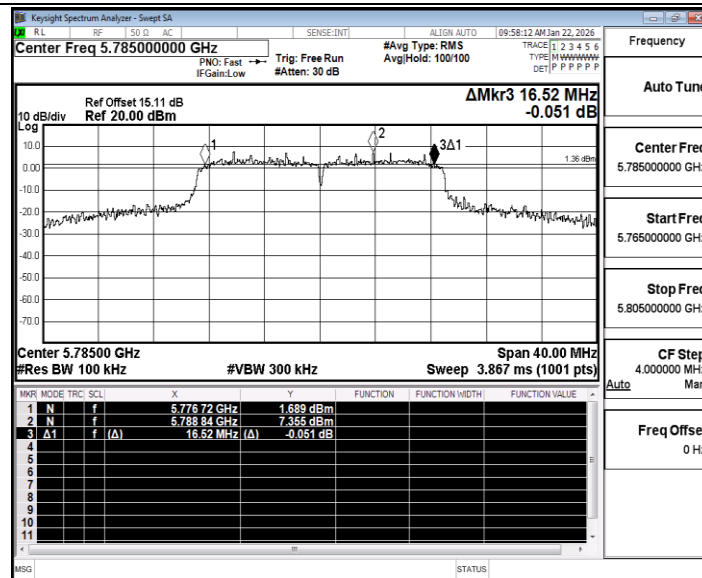
11N40SISO_Ant2_5795



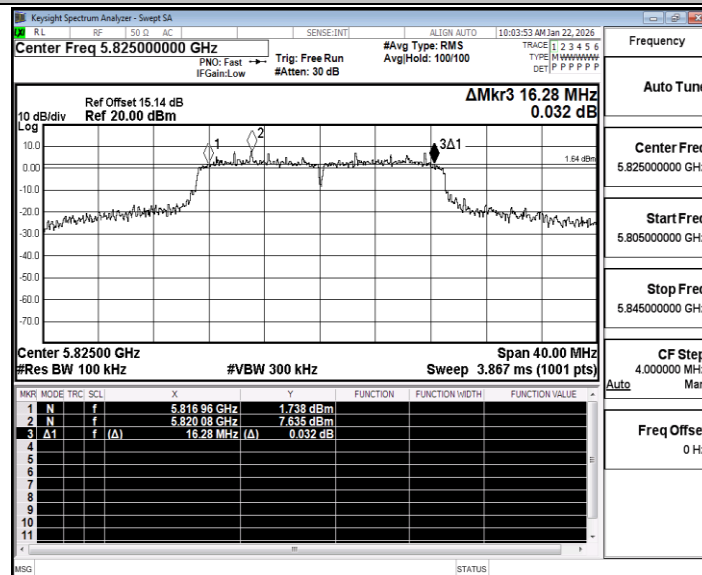
11AC20SISO_Ant2_5745



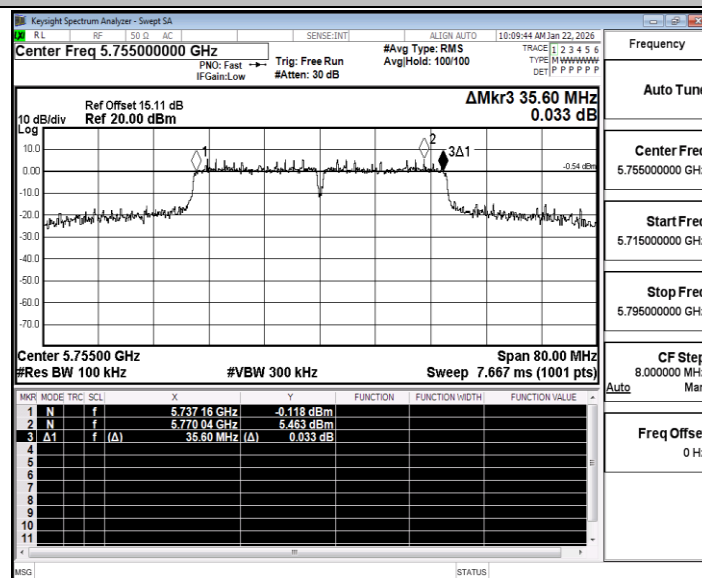
11AC20SISO_Ant2_5785



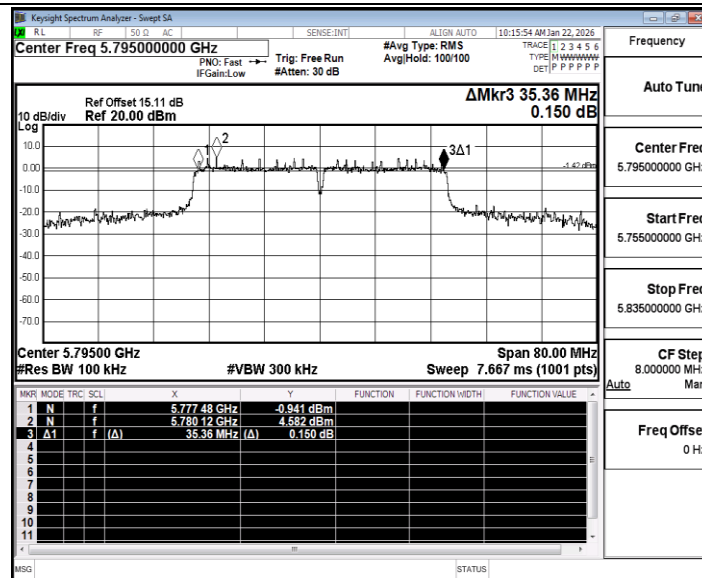
11AC20SISO_Ant2_5825



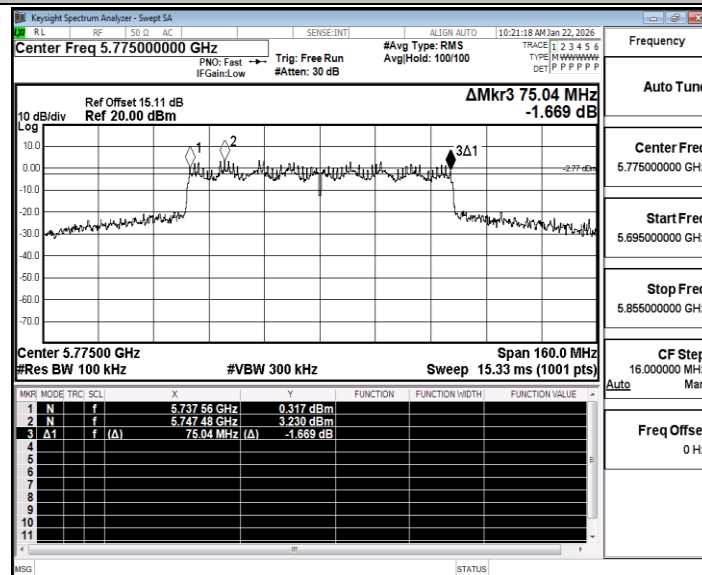
11AC40SISO_Ant2_5755



11AC40SISO_Ant2_5795



11AC80SISO_Ant2_5775



C.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	19.61	0.19	19.8	30	Pass
NVNT	a	5785	Ant1	14.44	0.19	14.63	30	Pass
NVNT	a	5825	Ant1	13.98	0.16	14.14	30	Pass
NVNT	n20	5745	Ant1	19.57	0.2	19.77	30	Pass
NVNT	n20	5785	Ant1	19.47	0.2	19.67	30	Pass
NVNT	n20	5825	Ant1	19.05	0.17	19.22	30	Pass
NVNT	n40	5755	Ant1	19.48	0.4	19.88	30	Pass
NVNT	n40	5795	Ant1	19.53	0.4	19.93	30	Pass
NVNT	ac20	5745	Ant1	19.7	0.2	19.9	30	Pass
NVNT	ac20	5785	Ant1	19.55	0.2	19.75	30	Pass
NVNT	ac20	5825	Ant1	18.99	0.2	19.19	30	Pass
NVNT	ac40	5755	Ant1	19.51	0.33	19.84	30	Pass
NVNT	ac40	5795	Ant1	19.49	0.33	19.82	30	Pass
NVNT	ac80	5775	Ant1	19.21	0.77	19.98	30	Pass

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant2	19.61	0.16	19.77	30	Pass
NVNT	a	5785	Ant2	19.32	0.19	19.51	30	Pass
NVNT	a	5825	Ant2	18.86	0.19	19.05	30	Pass
NVNT	n20	5745	Ant2	19.57	0.17	19.74	30	Pass
NVNT	n20	5785	Ant2	19.33	0.2	19.53	30	Pass
NVNT	n20	5825	Ant2	18.68	0.2	18.88	30	Pass
NVNT	n40	5755	Ant2	19.43	0.33	19.76	30	Pass
NVNT	n40	5795	Ant2	18.99	0.33	19.32	30	Pass
NVNT	ac20	5745	Ant2	19.58	0.2	19.78	30	Pass
NVNT	ac20	5785	Ant2	19.43	0.2	19.63	30	Pass
NVNT	ac20	5825	Ant2	18.73	0.2	18.93	30	Pass
NVNT	ac40	5755	Ant2	19.45	0.33	19.78	30	Pass
NVNT	ac40	5795	Ant2	19.31	0.33	19.64	30	Pass
NVNT	ac80	5775	Ant2	19.12	0.77	19.89	30	Pass

MIMO

Condition	Mode	Frequency (MHz)	Antenna			Limit (dBm)	Verdict
			Ant1	Ant2	Ant1+ Ant2		
NVNT	n20	5745	19.77	19.74	22.77	30	Pass
NVNT	n20	5785	19.67	19.53	22.61	30	Pass
NVNT	n20	5825	19.22	18.88	22.06	30	Pass
NVNT	n40	5755	19.88	19.76	22.83	30	Pass
NVNT	n40	5795	19.93	19.32	22.65	30	Pass
NVNT	ac20	5745	19.9	19.78	22.85	30	Pass
NVNT	ac20	5785	19.75	19.63	22.70	30	Pass
NVNT	ac20	5825	19.19	18.93	22.07	30	Pass
NVNT	ac40	5755	19.84	19.78	22.82	30	Pass
NVNT	ac40	5795	19.82	19.64	22.74	30	Pass
NVNT	ac80	5775	19.98	19.89	22.95	30	Pass

C.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/500KHz)	Duty Factor (dB)	Total PSD (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
NVNT	a	5745	Ant1	2.62	0.19	2.81	30	Pass
NVNT	a	5785	Ant1	-2.85	0.19	-2.66	30	Pass
NVNT	a	5825	Ant1	-3.2	0.16	-3.04	30	Pass
NVNT	n20	5745	Ant1	2.45	0.2	2.65	30	Pass
NVNT	n20	5785	Ant1	2.12	0.2	2.32	30	Pass
NVNT	n20	5825	Ant1	1.65	0.17	1.82	30	Pass
NVNT	n40	5755	Ant1	-0.56	0.4	-0.16	30	Pass
NVNT	n40	5795	Ant1	-0.76	0.4	-0.36	30	Pass
NVNT	ac20	5745	Ant1	2.43	0.2	2.63	30	Pass
NVNT	ac20	5785	Ant1	2.24	0.2	2.44	30	Pass
NVNT	ac20	5825	Ant1	1.67	0.2	1.87	30	Pass
NVNT	ac40	5755	Ant1	-0.38	0.33	-0.05	30	Pass
NVNT	ac40	5795	Ant1	-1.32	0.33	-0.99	30	Pass
NVNT	ac80	5775	Ant1	-2.66	0.77	-1.89	30	Pass

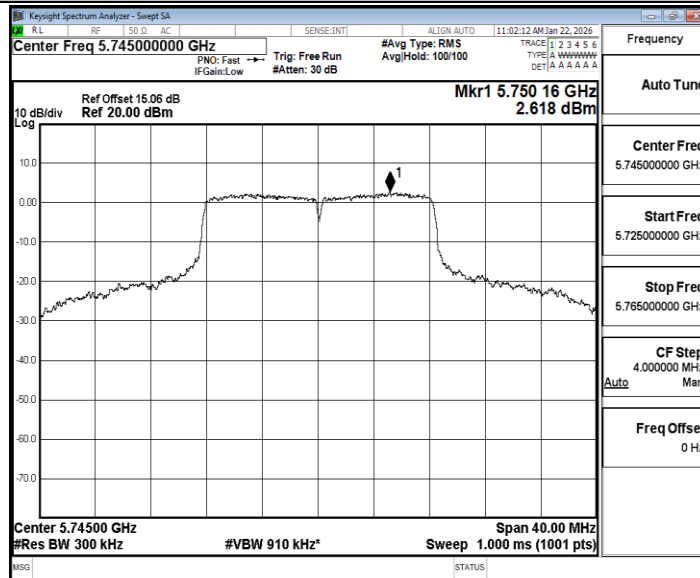
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/500KHz)	Duty Factor (dB)	Total PSD (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
NVNT	a	5745	Ant2	2.57	0.16	2.73	30	Pass
NVNT	a	5785	Ant2	2.45	0.19	2.64	30	Pass
NVNT	a	5825	Ant2	1.8	0.19	1.99	30	Pass
NVNT	n20	5745	Ant2	1.92	0.17	2.09	30	Pass
NVNT	n20	5785	Ant2	1.71	0.2	1.91	30	Pass
NVNT	n20	5825	Ant2	1.67	0.2	1.87	30	Pass
NVNT	n40	5755	Ant2	-1.15	0.33	-0.82	30	Pass
NVNT	n40	5795	Ant2	-1.38	0.33	-1.05	30	Pass
NVNT	ac20	5745	Ant2	2.05	0.2	2.25	30	Pass
NVNT	ac20	5785	Ant2	2.14	0.2	2.34	30	Pass
NVNT	ac20	5825	Ant2	1.57	0.2	1.77	30	Pass
NVNT	ac40	5755	Ant2	-0.47	0.33	-0.14	30	Pass
NVNT	ac40	5795	Ant2	-1.23	0.33	-0.9	30	Pass
NVNT	ac80	5775	Ant2	-3.32	0.77	-2.55	30	Pass

MIMO

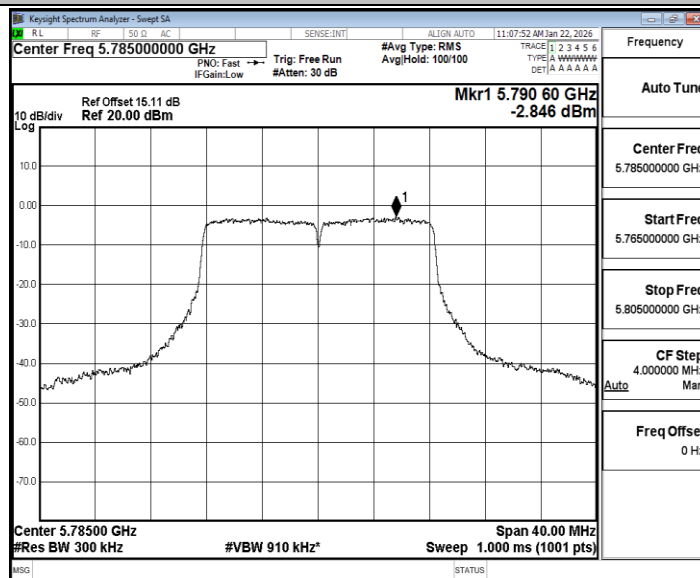
Condition	Mode	Frequency (MHz)	Total PSD (dBm/500KHz)			Limit (dBm/500KHz)	Verdict
			Ant1	Ant2	Ant1+ Ant2		
NVNT	n20	5745	2.65	2.09	5.39	30	Pass
NVNT	n20	5785	2.32	1.91	5.13	30	Pass
NVNT	n20	5825	1.82	1.87	4.86	30	Pass
NVNT	n40	5755	-0.16	-0.82	2.53	30	Pass
NVNT	n40	5795	-0.36	-1.05	2.32	30	Pass
NVNT	ac20	5745	2.63	2.25	5.45	30	Pass
NVNT	ac20	5785	2.44	2.34	5.40	30	Pass
NVNT	ac20	5825	1.87	1.77	4.83	30	Pass
NVNT	ac40	5755	-0.05	-0.14	2.92	30	Pass
NVNT	ac40	5795	-0.99	-0.9	2.07	30	Pass
NVNT	ac80	5775	-1.89	-2.55	0.80	30	Pass

Test Graphs

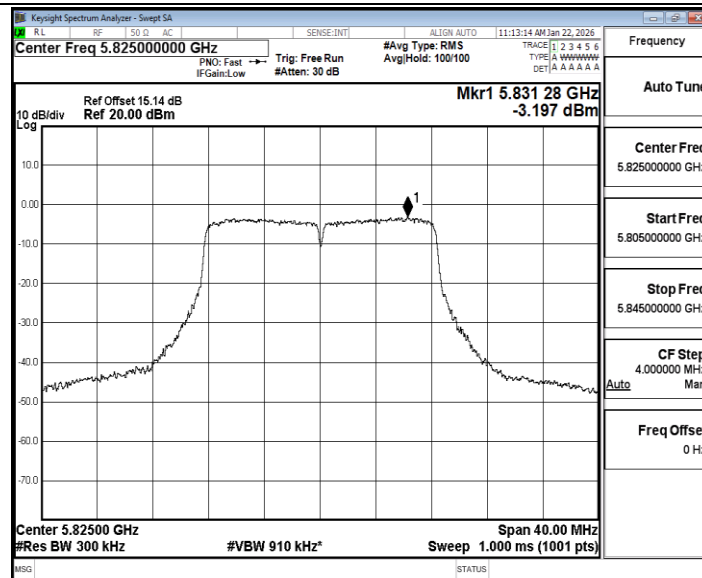
11A_Ant1_5745



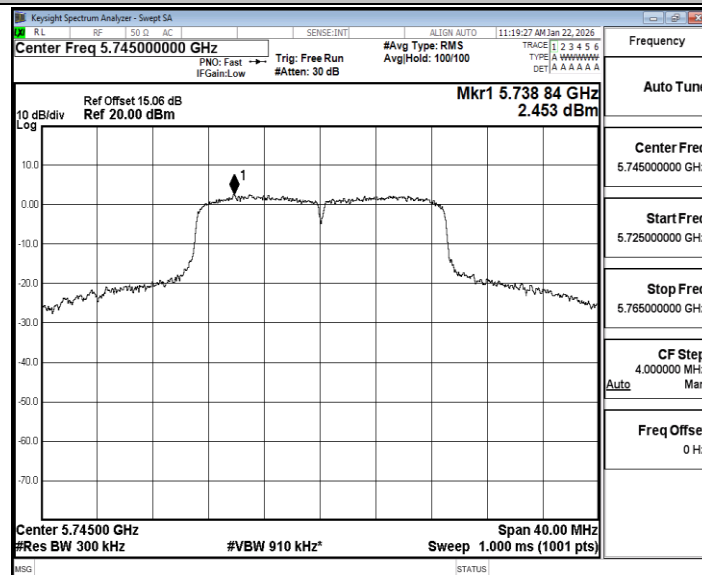
11A_Ant1_5785



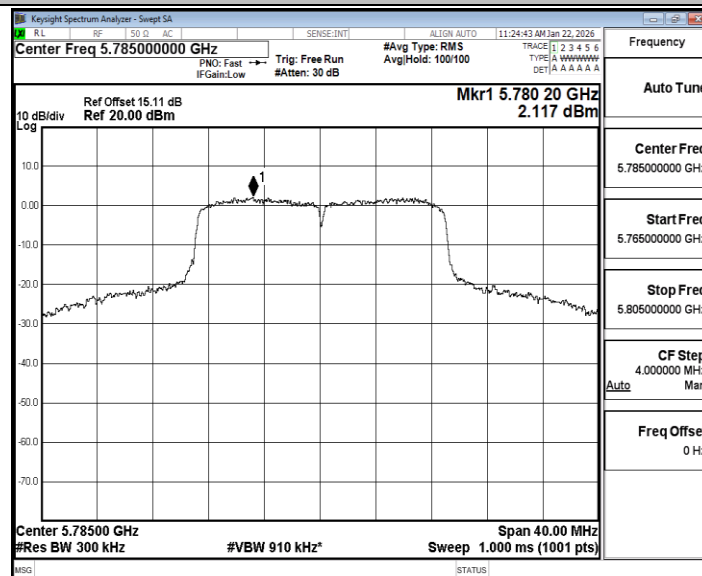
11A_Ant1_5825



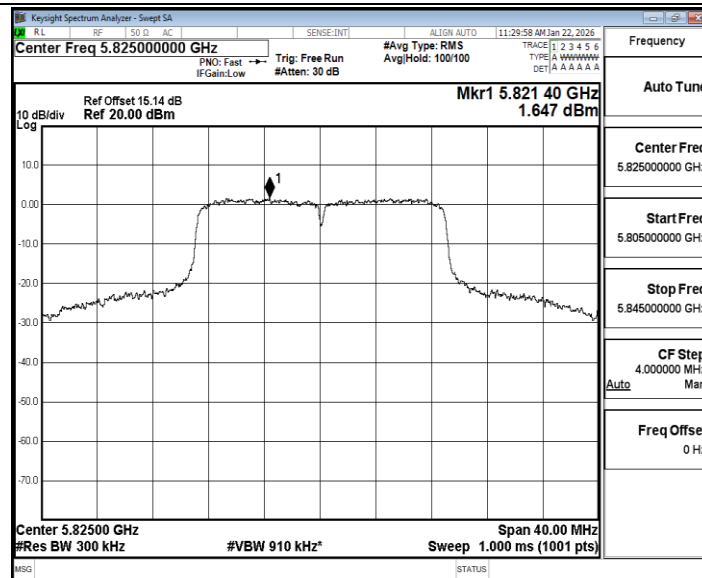
11N20SISO_Ant1_5745



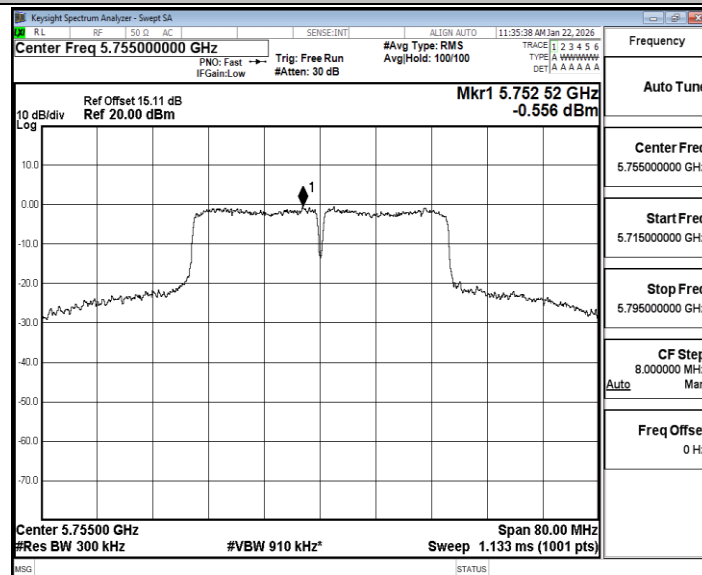
11N20SISO_Ant1_5785



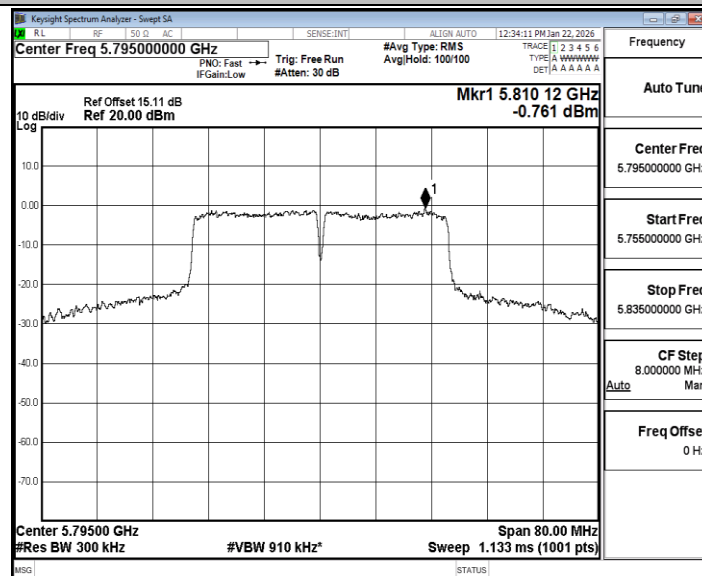
11N20SISO_Ant1_5825



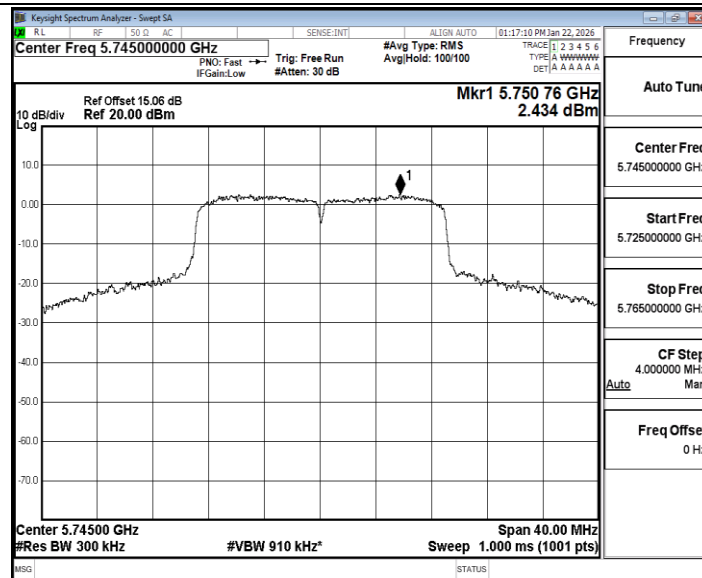
11N40SISO_Ant1_5755



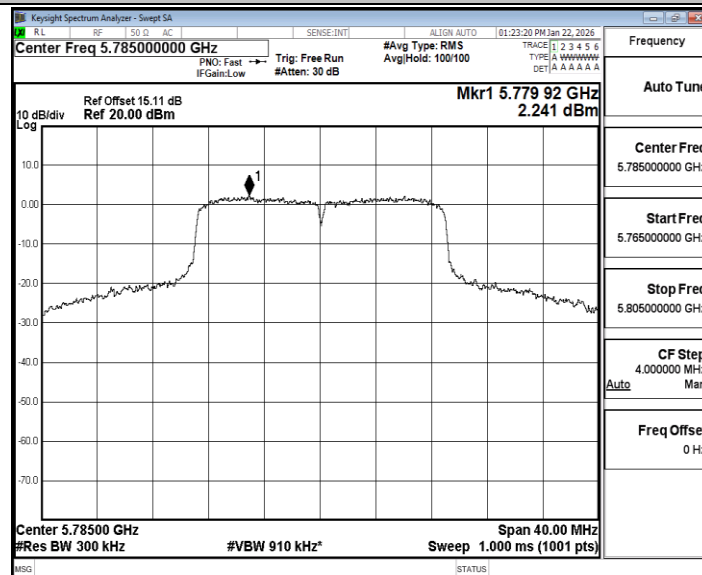
11N40SISO_Ant1_5795



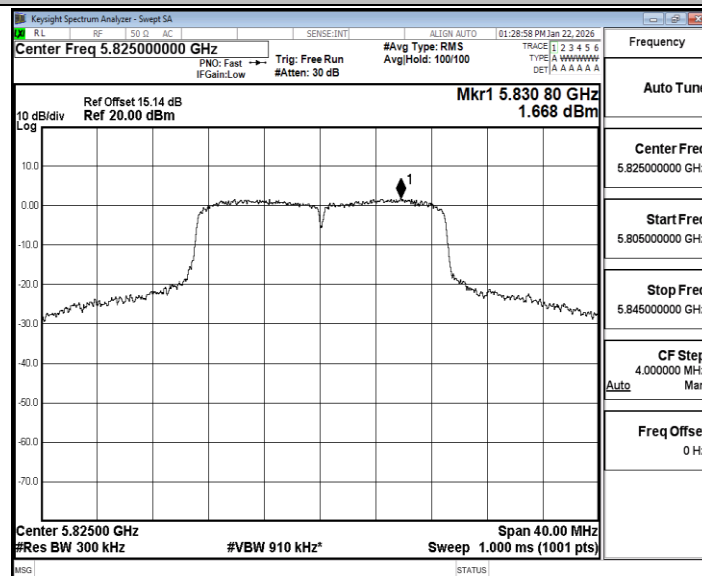
11AC20SISO_Ant1_5745



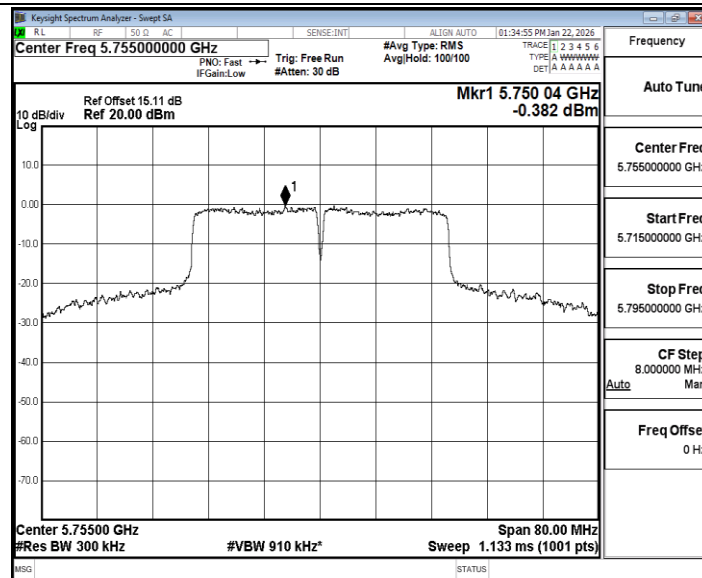
11AC20SISO_Ant1_5785



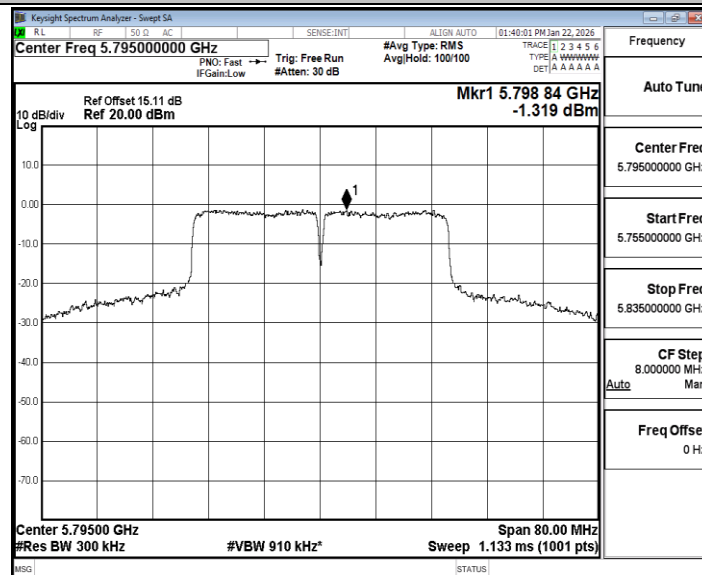
11AC20SISO_Ant1_5825



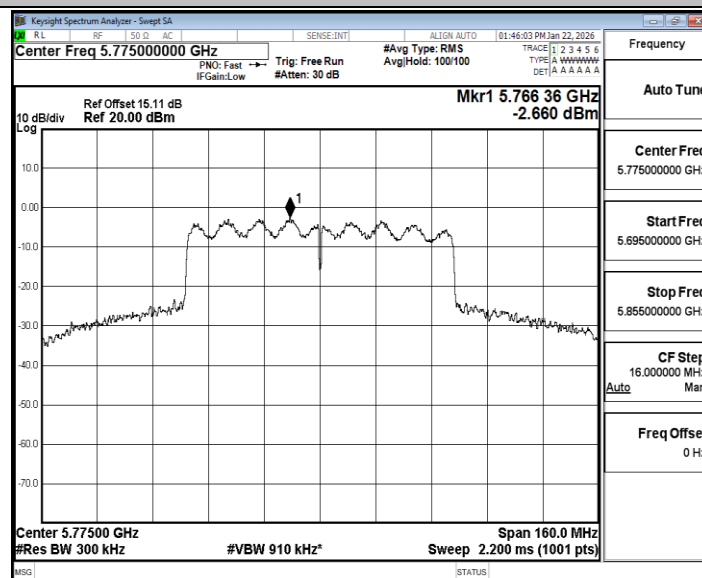
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

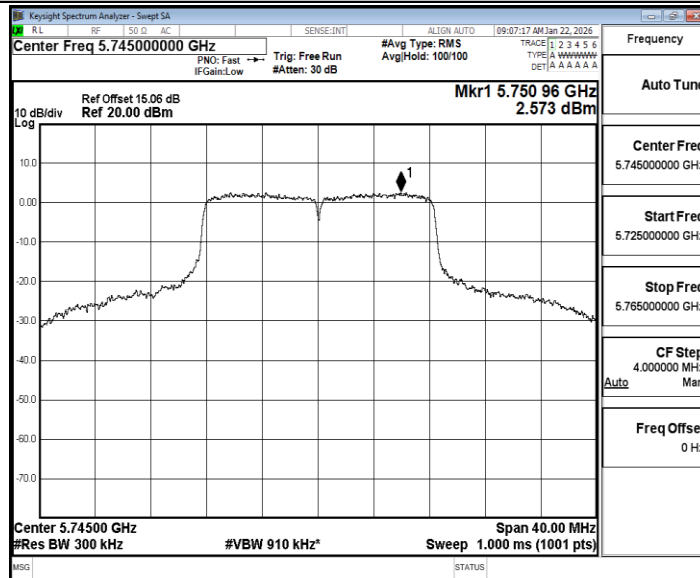


11AC80SISO_Ant1_5775

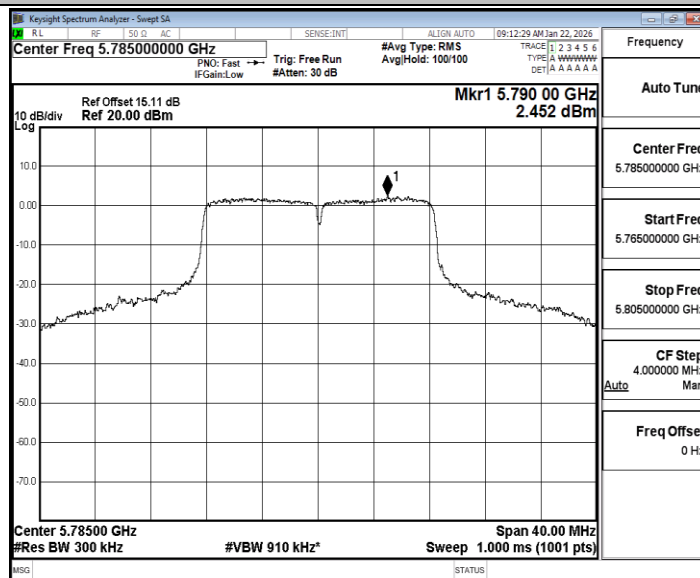


Test Graphs

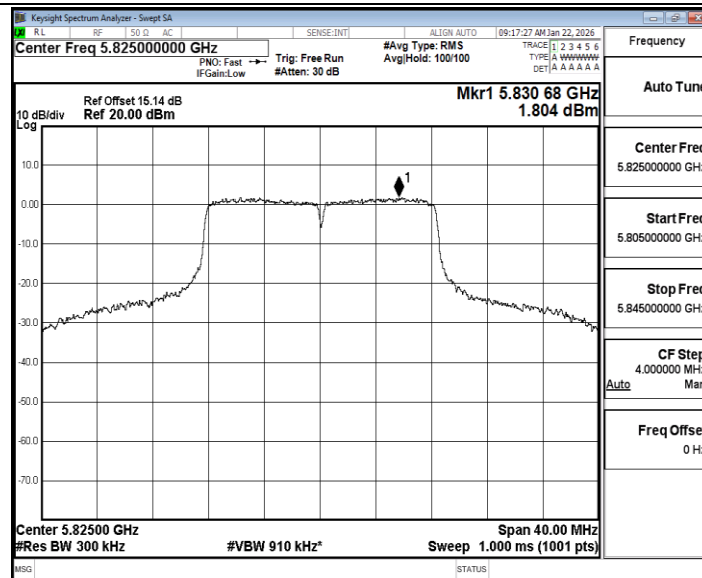
11A_Ant2_5745



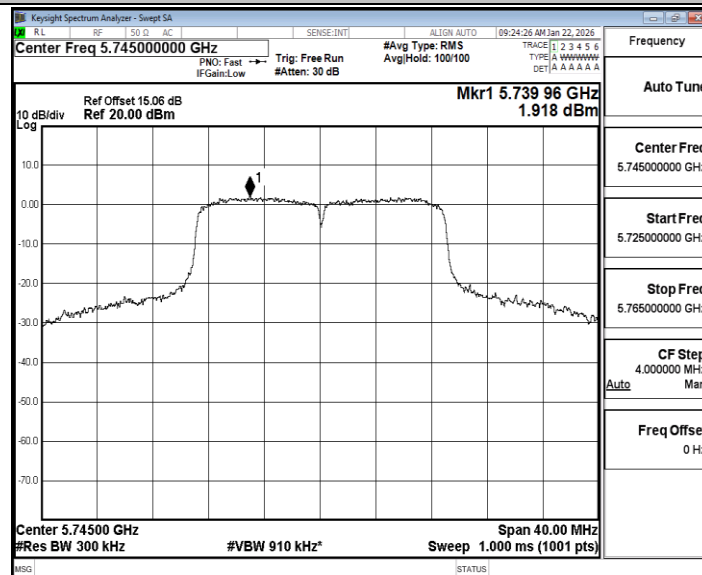
11A_Ant2_5785



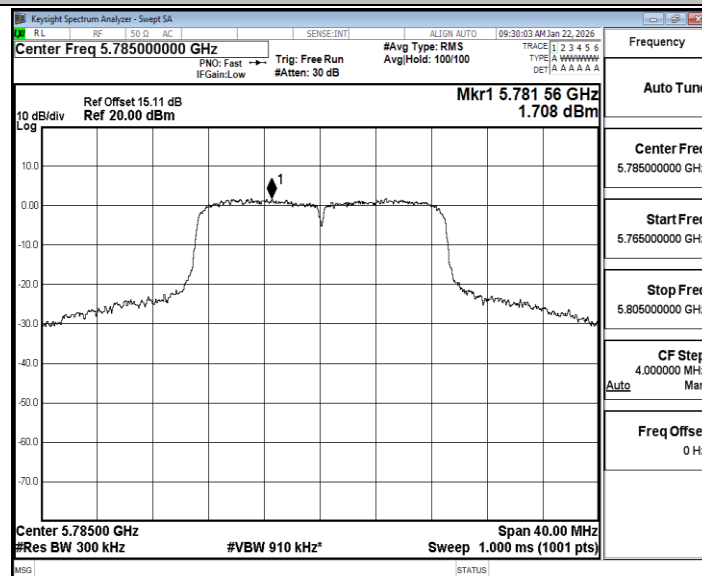
11A_Ant2_5825



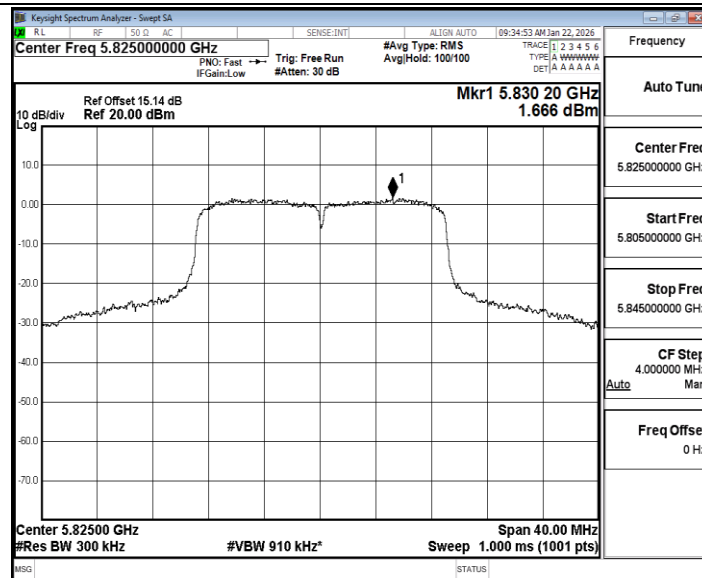
11N20SISO_Ant2_5745



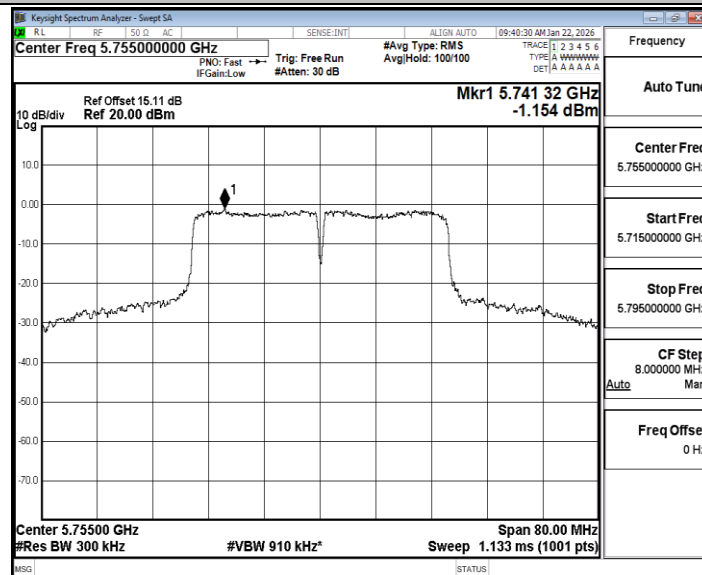
11N20SISO_Ant2_5785



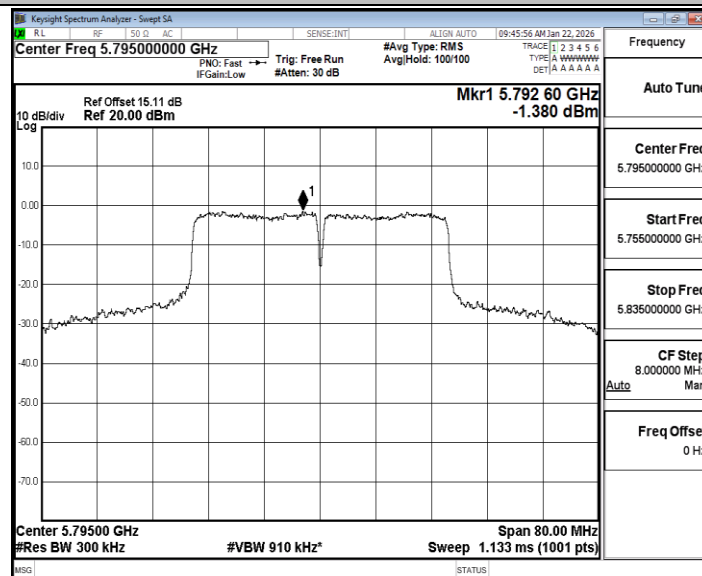
11N20SISO_Ant2_5825



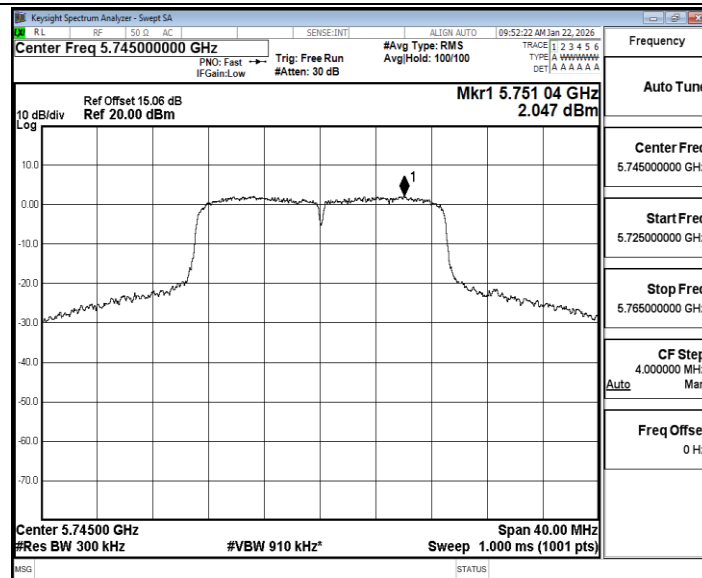
11N40SISO_Ant2_5755



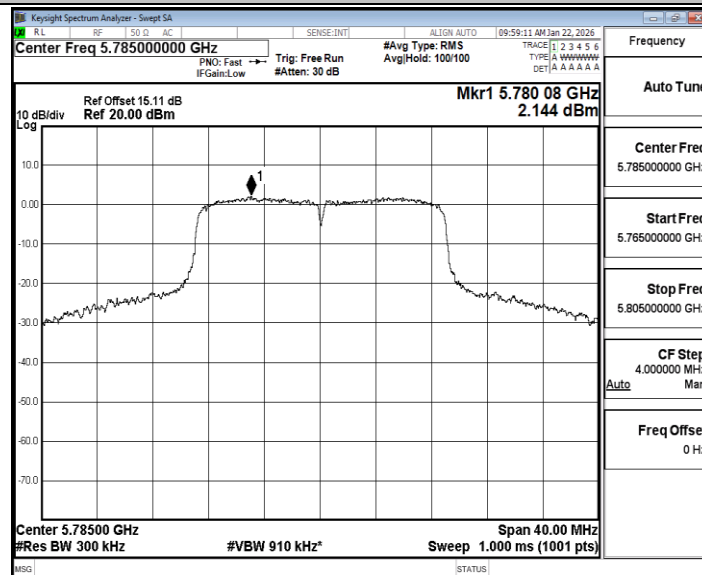
11N40SISO_Ant2_5795



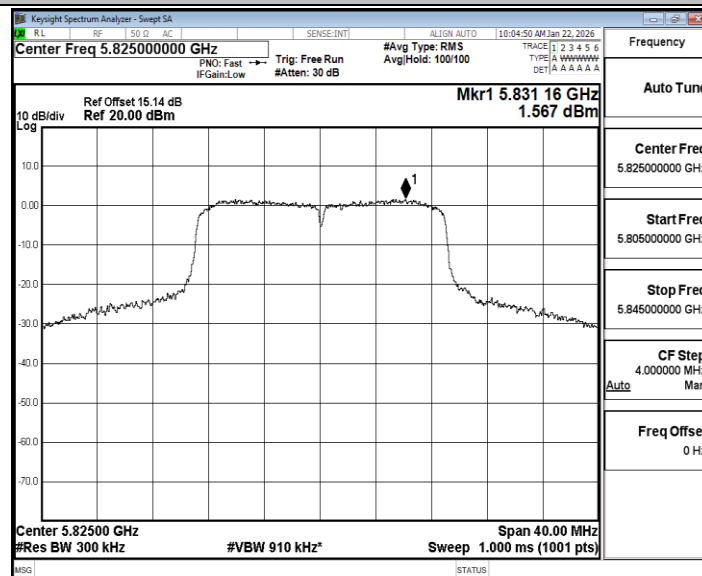
11AC20SISO_Ant2_5745



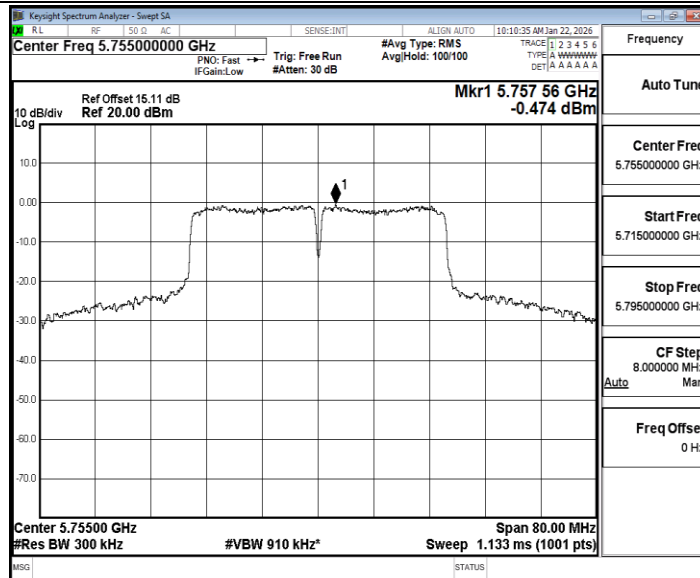
11AC20SISO_Ant2_5785



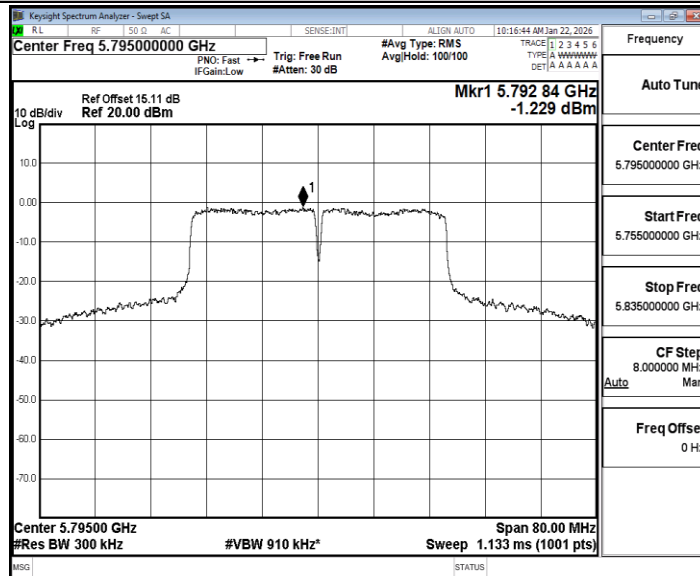
11AC20SISO_Ant2_5825



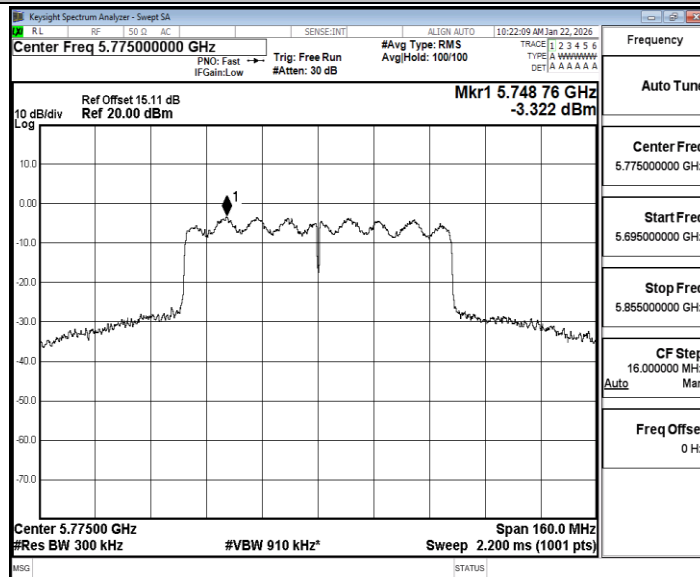
11AC40SISO_Ant2_5755



11AC40SISO_Ant2_5795



11AC80SISO_Ant2_5775



C.4 Emissions in Restricted Bands

Test Result

Test Mode	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	5745	Peak	5650.000	-37.305	≤-29.74	2.74	0.00	---	---	PASS
				Peak	5700.000	-35.05	≤7.26	2.74	0.00	---	---	PASS
				Peak	5720.000	-19.09	≤12.86	2.74	0.00	---	---	PASS
				Peak	5725.000	-11.72	≤24.26	2.74	0.00	---	---	PASS
		High	5825	Peak	5850.000	13.159	≤24.26	2.74	0.00	---	---	PASS
				Peak	5855.000	-5.19	≤12.86	2.74	0.00	---	---	PASS
				Peak	5875.000	-28.75	≤7.26	2.74	0.00	---	---	PASS
				Peak	5925.000	-35.03	≤-29.74	2.74	0.00	---	---	PASS
11N 20SI SO	Ant1	Low	5745	Peak	5650.000	-36.018	≤-29.74	2.74	0.00	---	---	PASS
				Peak	5700.000	-35.66	≤7.26	2.74	0.00	---	---	PASS
				Peak	5720.000	-19.5	≤12.86	2.74	0.00	---	---	PASS
				Peak	5725.000	-12	≤24.26	2.74	0.00	---	---	PASS
		High	5825	Peak	5850.000	-24.365	≤24.26	2.74	0.00	---	---	PASS
				Peak	5855.000	-33.07	≤12.86	2.74	0.00	---	---	PASS
				Peak	5875.000	-37.21	≤7.26	2.74	0.00	---	---	PASS
				Peak	5925.000	-37.54	≤-29.74	2.74	0.00	---	---	PASS
11N 40SI SO	Ant1	Low	5755	Peak	5650.000	-35.084	≤-29.74	2.74	0.00	---	---	PASS
				Peak	5700.000	-29.51	≤7.26	2.74	0.00	---	---	PASS
				Peak	5720.000	-10.64	≤12.86	2.74	0.00	---	---	PASS
				Peak	5725.000	-11.71	≤24.26	2.74	0.00	---	---	PASS
		High	5795	Peak	5850.000	-34.18	≤24.26	2.74	0.00	---	---	PASS
				Peak	5855.000	-34.66	≤12.86	2.74	0.00	---	---	PASS
				Peak	5875.000	-37.37	≤7.26	2.74	0.00	---	---	PASS
				Peak	5925.000	-36.01	≤-29.74	2.74	0.00	---	---	PASS
11A C20 SISO	Ant1	Low	5745	Peak	5650.000	-36.453	≤-29.74	2.74	0.00	---	---	PASS
				Peak	5700.000	-33.51	≤7.26	2.74	0.00	---	---	PASS
				Peak	5720.000	-21.7	≤12.86	2.74	0.00	---	---	PASS
				Peak	5725.000	-12.24	≤24.26	2.74	0.00	---	---	PASS
		High	5825	Peak	5850.000	-23.638	≤24.26	2.74	0.00	---	---	PASS
				Peak	5855.000	-27.07	≤12.86	2.74	0.00	---	---	PASS
				Peak	5875.000	-37.23	≤7.26	2.74	0.00	---	---	PASS
				Peak	5925.000	-36.9	≤-29.74	2.74	0.00	---	---	PASS
11A C40 SISO	Ant1	Low	5755	Peak	5650.000	-35.814	≤-29.74	2.74	0.00	---	---	PASS
				Peak	5700.000	-26.41	≤7.26	2.74	0.00	---	---	PASS
				Peak	5720.000	-9.43	≤12.86	2.74	0.00	---	---	PASS
				Peak	5725.000	-11.37	≤24.26	2.74	0.00	---	---	PASS
		High	5795	Peak	5850.000	-27.176	≤24.26	2.74	0.00	---	---	PASS

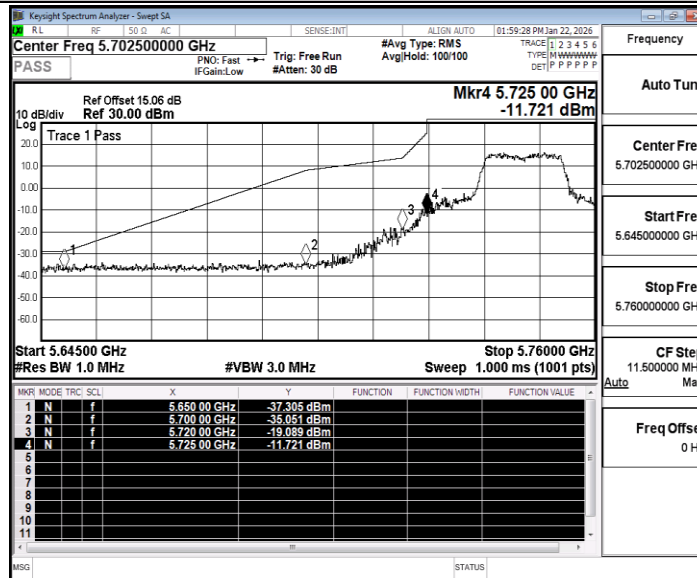
				Peak	5855.000	-26.45	≤ 12.86	2.74	0.00	---	---	PASS
				Peak	5875.000	-35.47	≤ 7.26	2.74	0.00	---	---	PASS
				Peak	5925.000	-37.57	≤ -29.74	2.74	0.00	- --	- --	PASS
11A C80 SIS O	Ant1	Low	5775	Peak	5650.000	-30.834	≤ -29.74	2.74	0.00	---	---	PASS
				Peak	5700.000	-17.63	≤ 7.26	2.74	0.00	---	---	PASS
				Peak	5720.000	-13.13	≤ 12.86	2.74	0.00	---	---	PASS
				Peak	5725.000	-11.93	≤ 24.26	2.74	0.00	- --	- --	PASS
		High	5775	Peak	5850.000	-16.658	≤ 24.26	2.74	0.00	---	---	PASS
				Peak	5855.000	-15.91	≤ 12.86	2.74	0.00	---	---	PASS
				Peak	5875.000	-25.08	≤ 7.26	2.74	0.00	---	---	PASS
				Peak	5925.000	-33.83	≤ -29.74	2.74	0.00	- --	- --	PASS

Note:

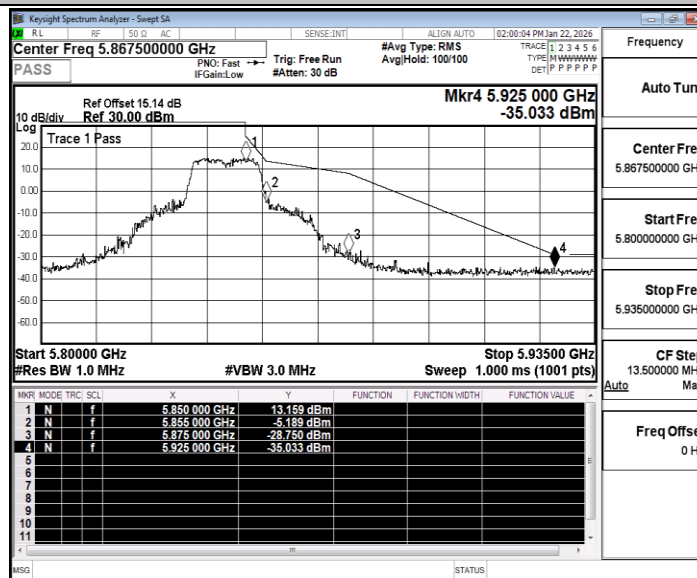
1. The Antenna Gain is compensated in the graph.
2. For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

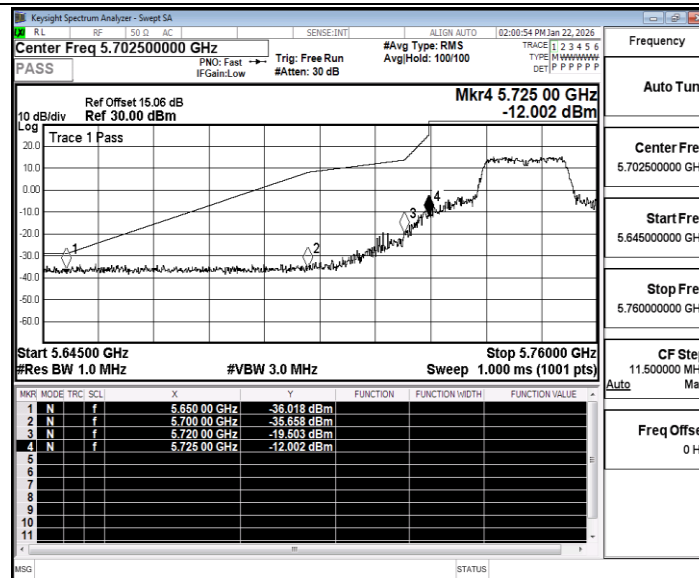
11A_Ant1_Low_5745_Peak



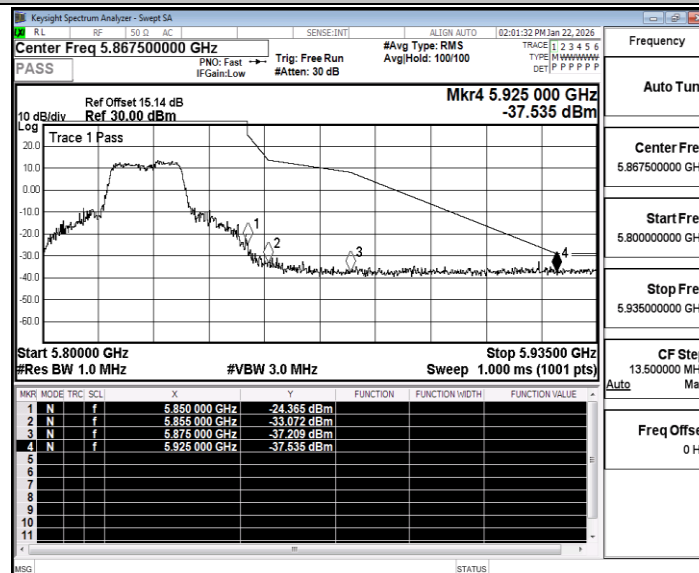
11A_Ant1_High_5825_Peak



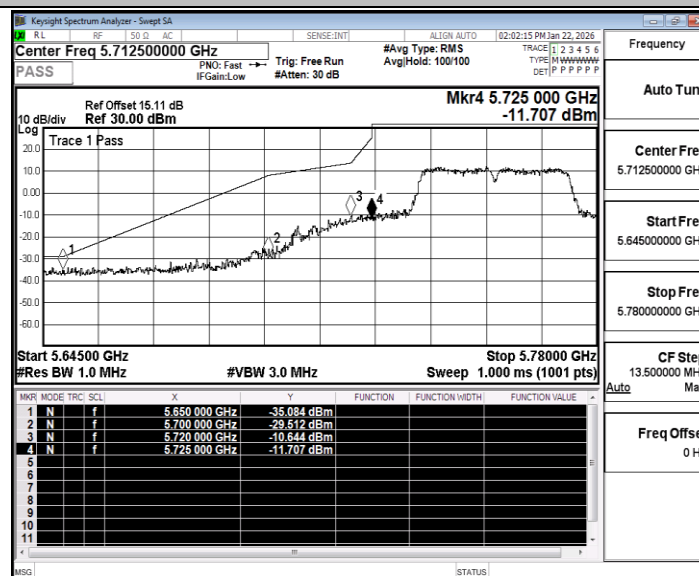
11N20SISO_Ant1_Low_5745_Peak



11N20SISO_Ant1_High_5825_Peak



11N40SISO_Ant1_Low_5755_Peak



11N40SISO_Ant1_High_5795_Peak