



Appendix E

RF Test Data for 5.8G WIFI (Conducted Measurement)

Product Name: Rugged Tablet

Test Model: LT901

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu
Supervised by:	Li huan

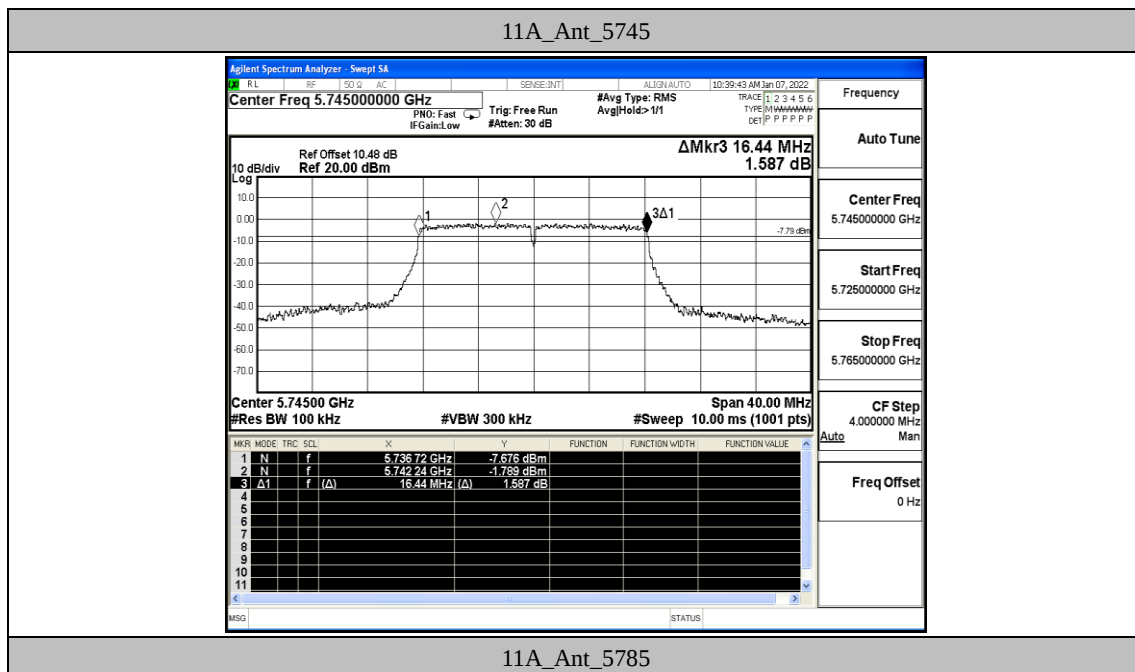


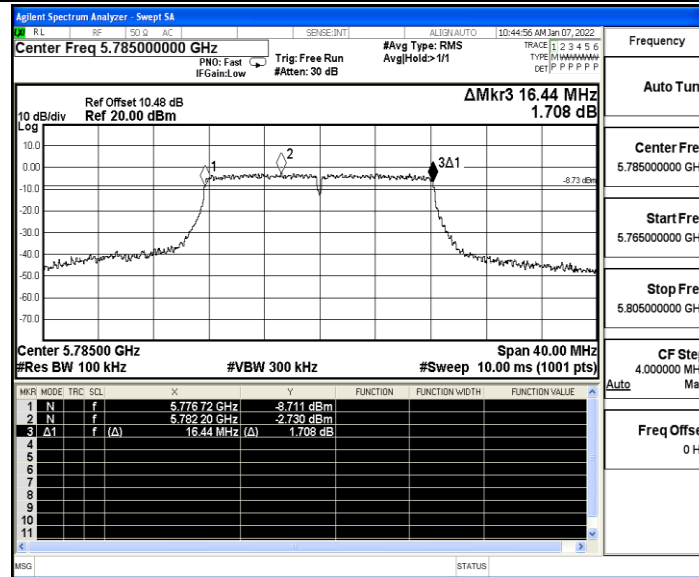
E.1 6dB bandwidth

Test Result

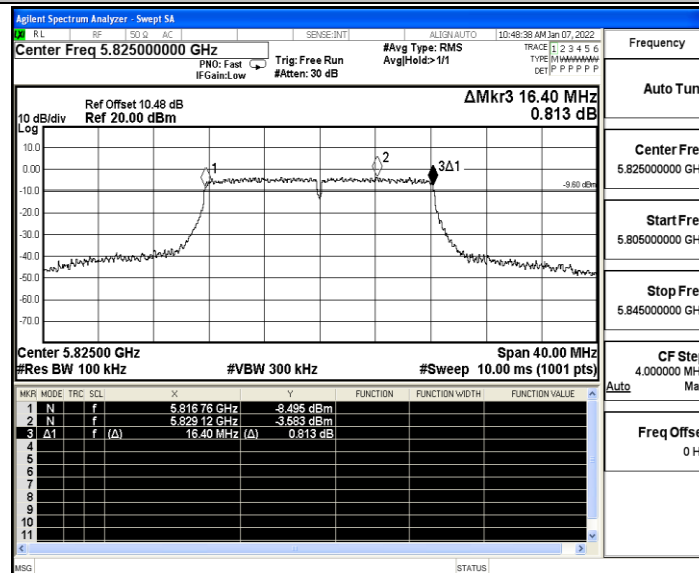
TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant	5745	16.440	5736.720	5753.160	0.5	PASS
		5785	16.440	5776.720	5793.160	0.5	PASS
		5825	16.400	5816.760	5833.160	0.5	PASS
11N20SISO	Ant	5745	17.600	5736.160	5753.760	0.5	PASS
		5785	17.600	5776.160	5793.760	0.5	PASS
		5825	17.600	5816.160	5833.760	0.5	PASS
11N40SISO	Ant	5755	36.400	5736.760	5773.160	0.5	PASS
		5795	36.400	5776.760	5813.160	0.5	PASS
11AC20SISO	Ant	5745	17.600	5736.160	5753.760	0.5	PASS
		5785	17.600	5776.160	5793.760	0.5	PASS
		5825	17.600	5816.160	5833.760	0.5	PASS
11AC40SISO	Ant	5755	36.400	5736.760	5773.160	0.5	PASS
		5795	36.400	5776.760	5813.160	0.5	PASS
11AC80SISO	Ant	5775	73.120	5737.080	5810.200	0.5	PASS

Test Graphs

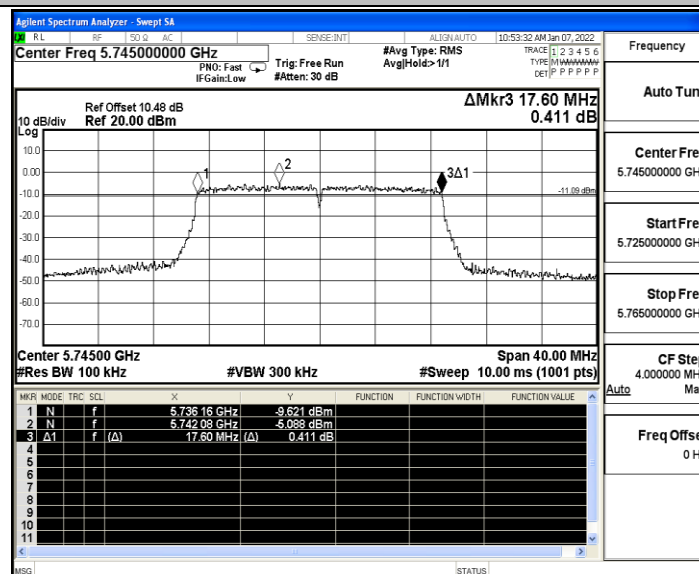




11A_Ant_5825

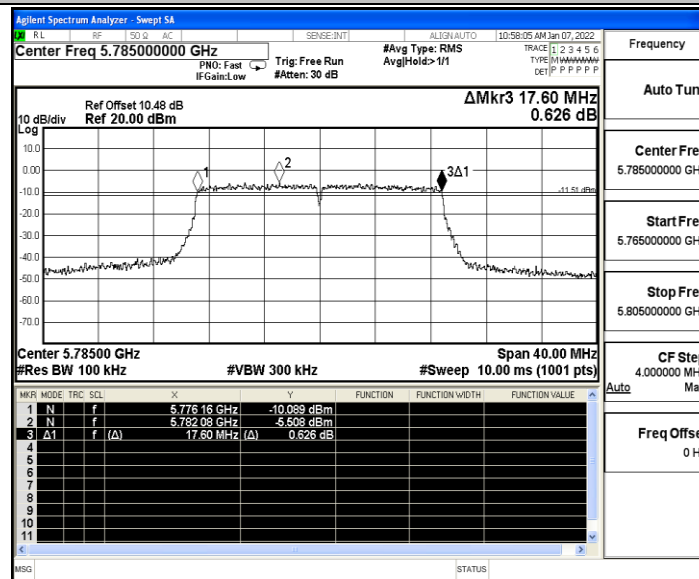


11N20SISO_Ant_5745

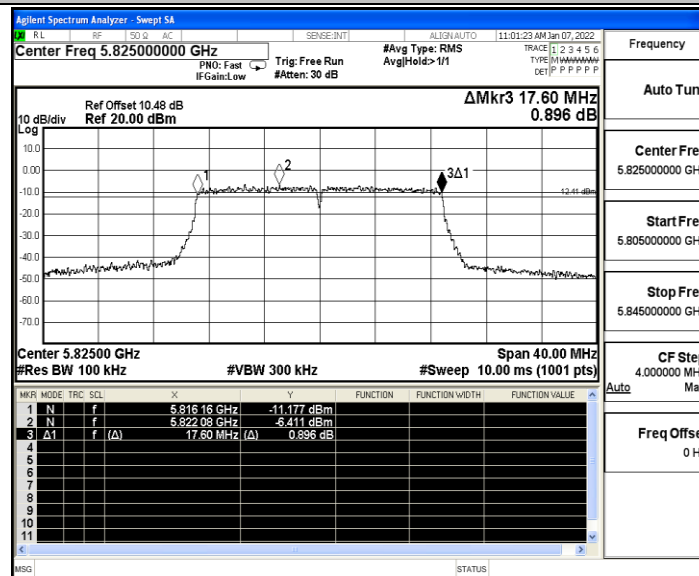




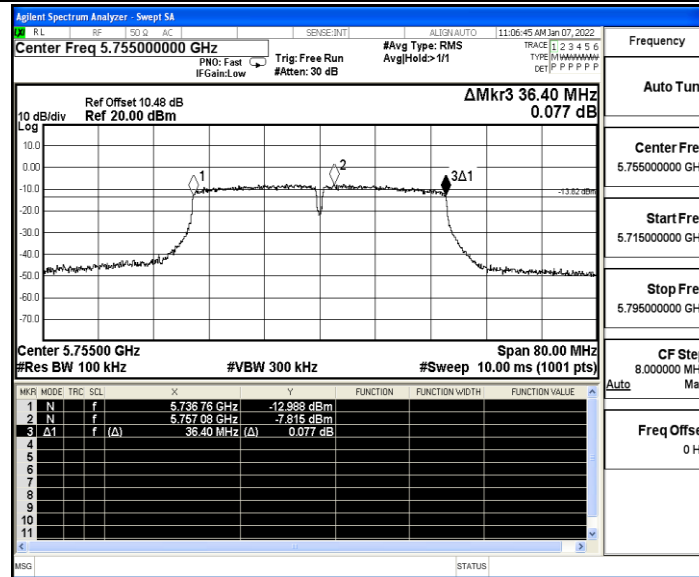
11N20SISO_Ant_5785



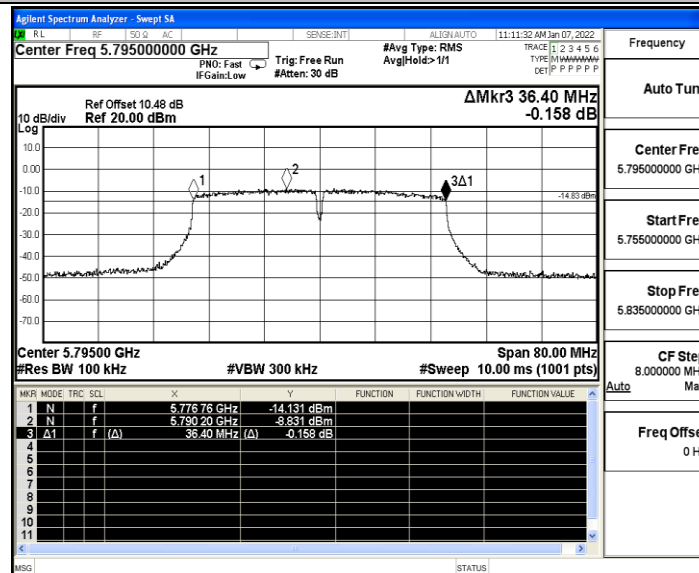
11N20SISO_Ant_5825



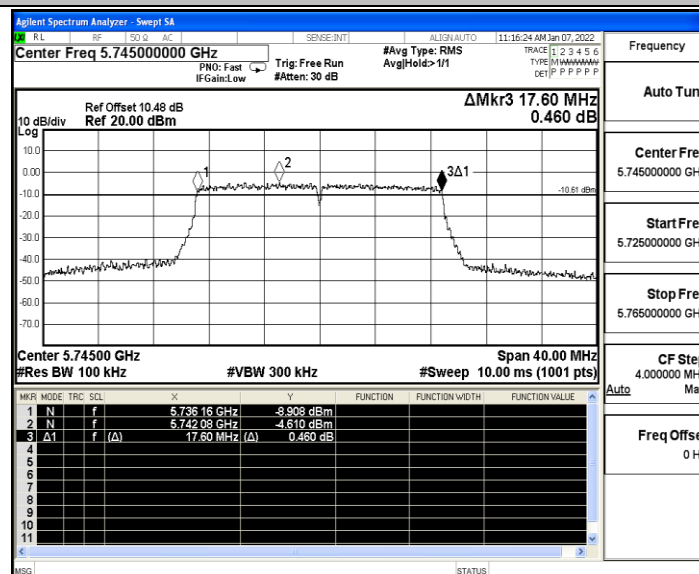
11N40SISO_Ant_5755



11N40SISO_Ant_5795

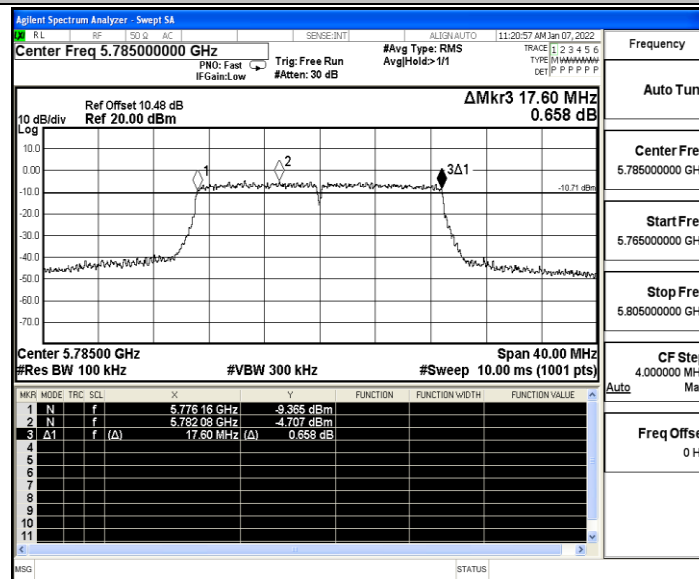


11AC20SISO_Ant_5745

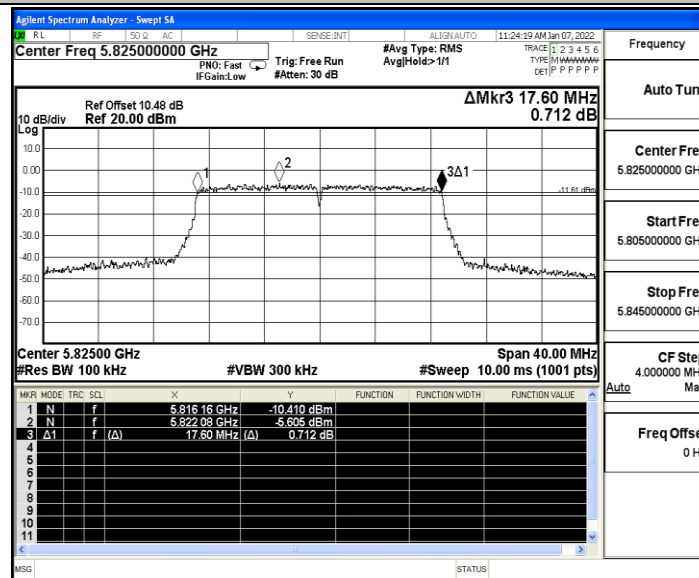




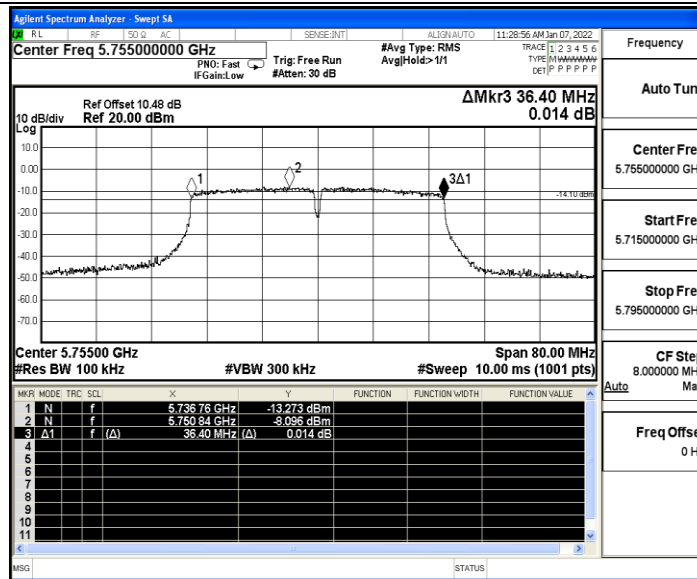
11AC20SISO_Ant_5785



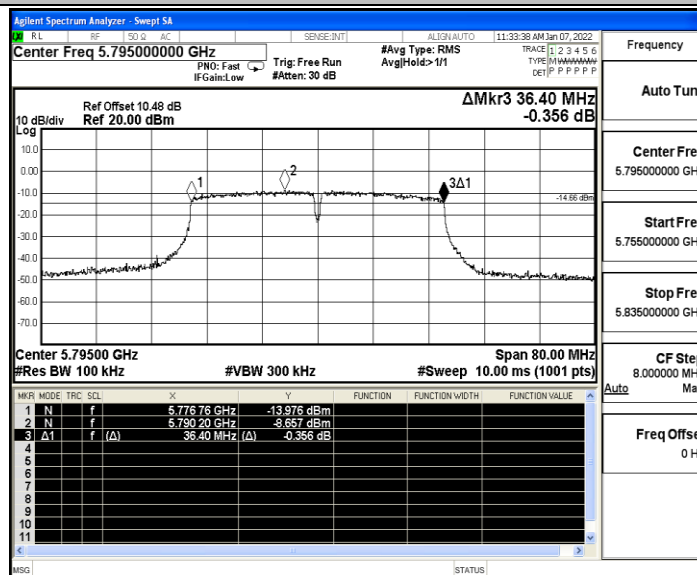
11AC20SISO_Ant_5825



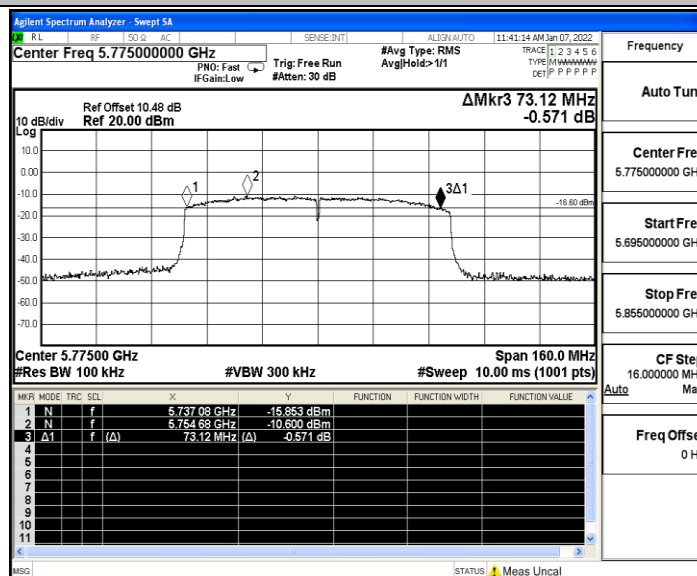
11AC40SISO_Ant_5755



11AC40SISO_Ant_5795



11AC80SISO_Ant_5775





E.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant	5745	12.54	≤30.00	PASS
		5785	11.67	≤30.00	PASS
		5825	10.93	≤30.00	PASS
11N20SISO	Ant	5745	8.69	≤30.00	PASS
		5785	8.38	≤30.00	PASS
		5825	8.25	≤30.00	PASS
11N40SISO	Ant	5755	9.36	≤30.00	PASS
		5795	8.17	≤30.00	PASS
11AC20SISO	Ant	5745	9.40	≤30.00	PASS
		5785	9.09	≤30.00	PASS
		5825	8.11	≤30.00	PASS
11AC40SISO	Ant	5755	9.10	≤30.00	PASS
		5795	8.27	≤30.00	PASS
11AC80SISO	Ant	5775	8.41	≤30.00	PASS

Note: The Duty Cycle Factor is compensated in the graph.



E.3 Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result [dBm/500KHz]	Limit[dBm/500KHz]	Verdict
11A	Ant	5745	-1.81	≤ 30.00	PASS
		5785	-2.7	≤ 30.00	PASS
		5825	-3.41	≤ 30.00	PASS
11N20SISO	Ant	5745	-5.95	≤ 30.00	PASS
		5785	-6.21	≤ 30.00	PASS
		5825	-6.5	≤ 30.00	PASS
11N40SISO	Ant	5755	-7.94	≤ 30.00	PASS
		5795	-9.12	≤ 30.00	PASS
11AC20SISO	Ant	5745	-5.19	≤ 30.00	PASS
		5785	-5.5	≤ 30.00	PASS
		5825	-6.55	≤ 30.00	PASS
11AC40SISO	Ant	5755	-8.24	≤ 30.00	PASS
		5795	-9.02	≤ 30.00	PASS
11AC80SISO	Ant	5775	-11.92	≤ 30.00	PASS

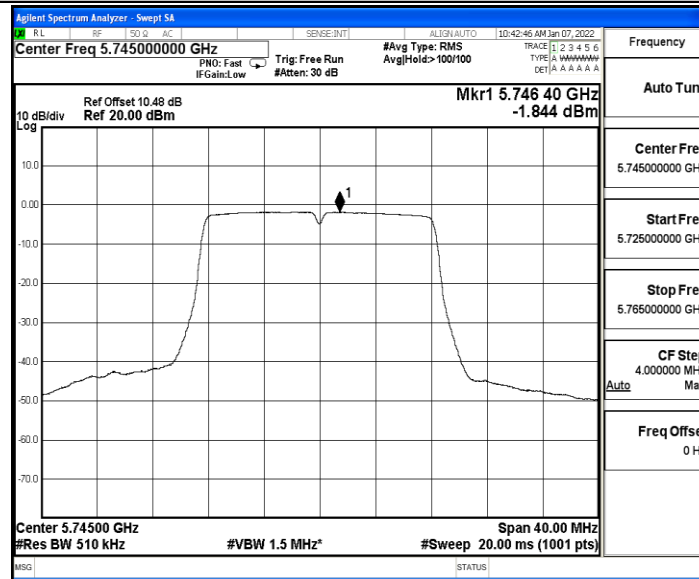
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

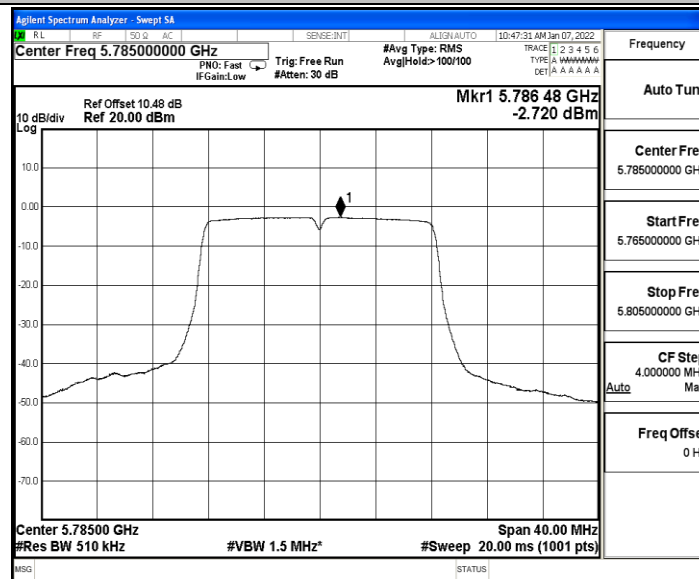


Test Graphs

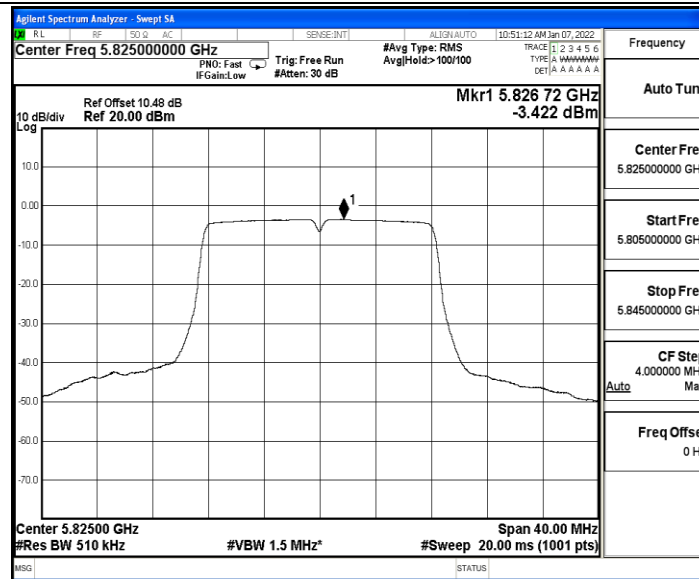
11A_Ant_5745



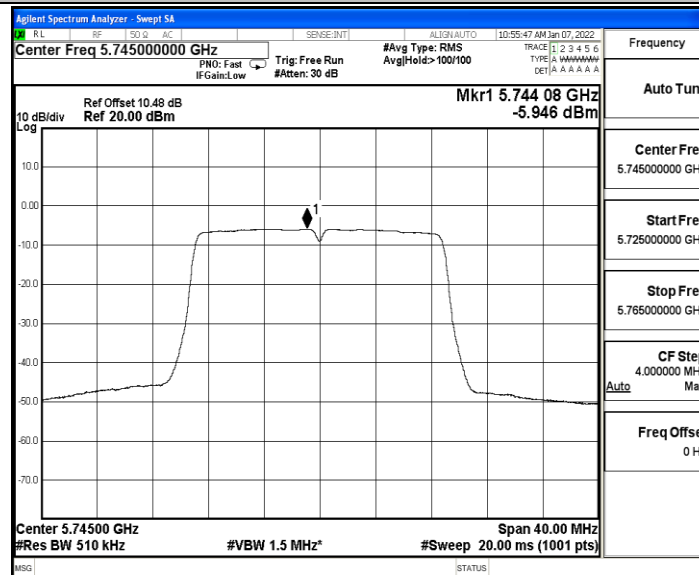
11A_Ant_5785



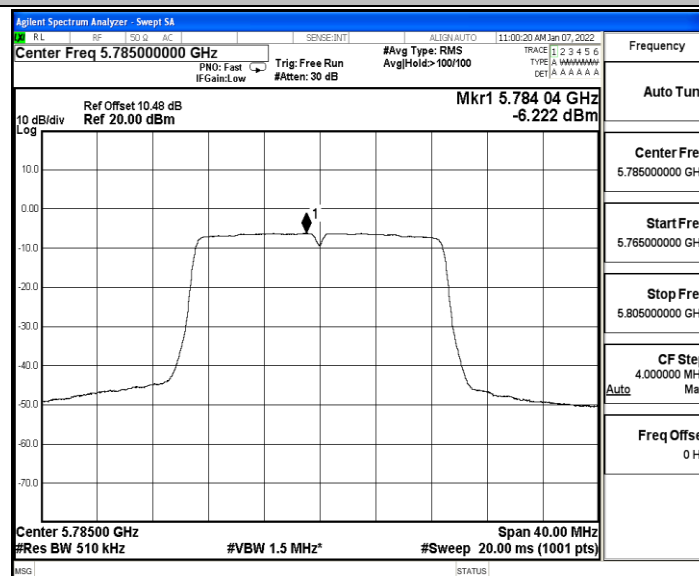
11A_Ant_5825



11N20SISO_Ant_5745

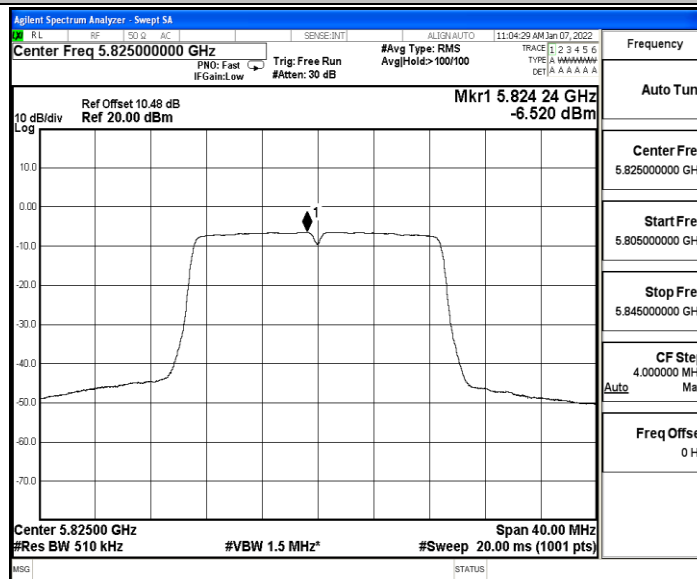


11N20SISO_Ant_5785

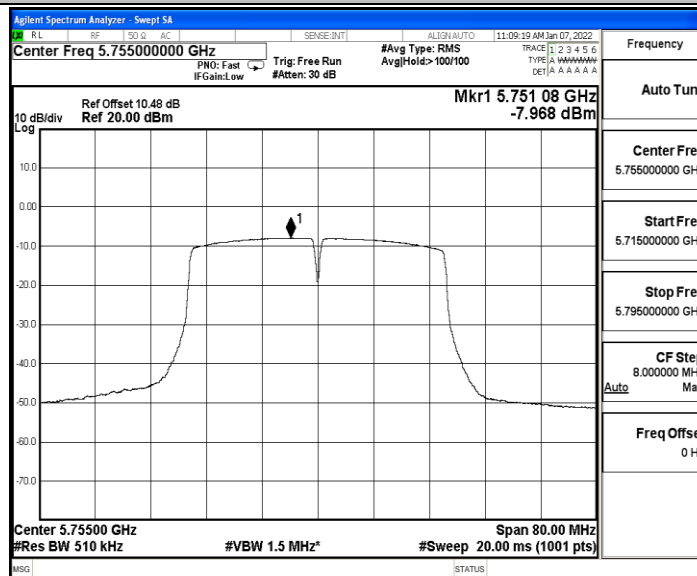




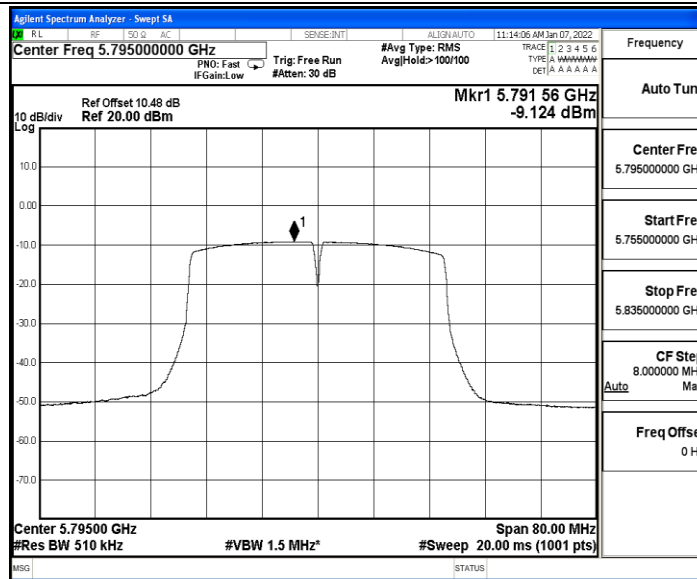
11N20SISO_Ant_5825



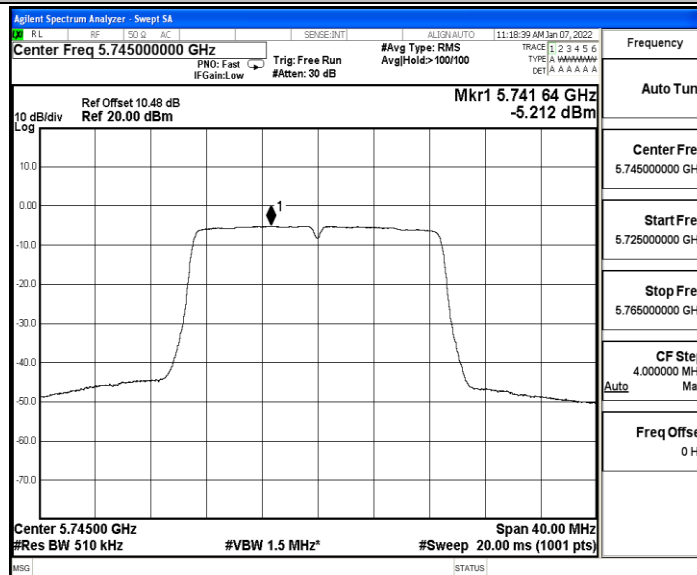
11N40SISO_Ant_5755



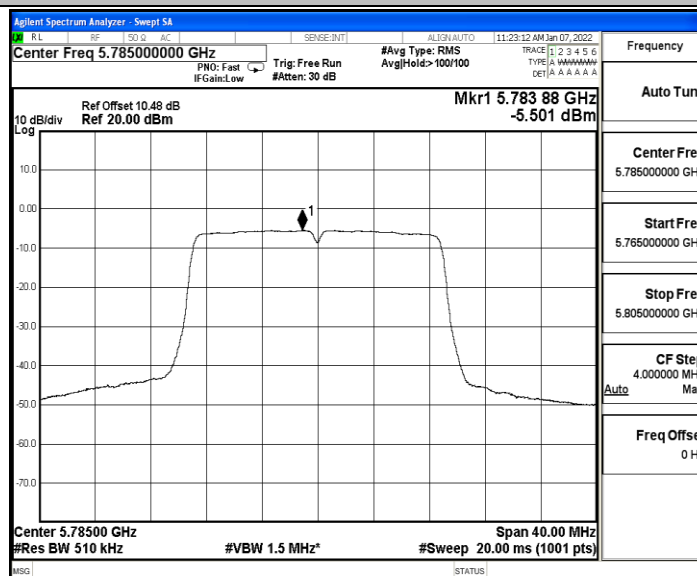
11N40SISO_Ant_5795



11AC20SISO_Ant_5745

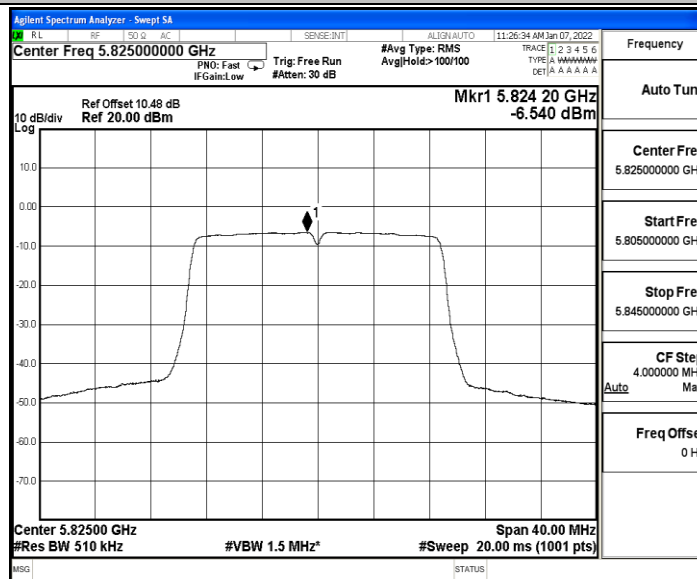


11AC20SISO_Ant_5785

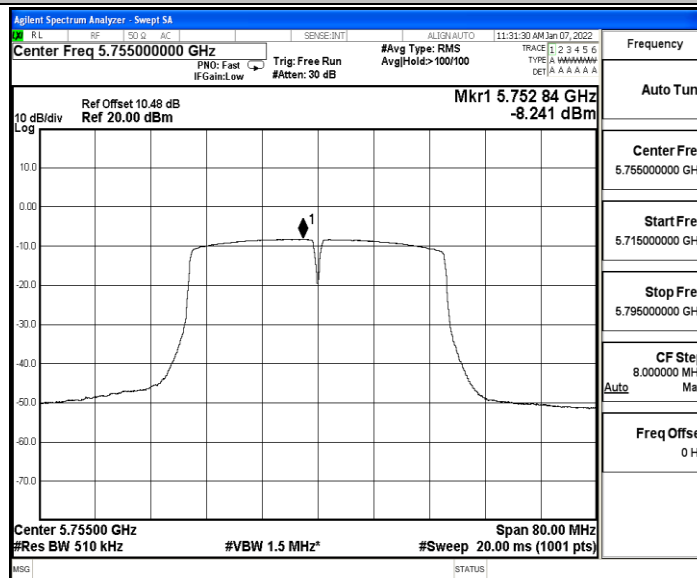




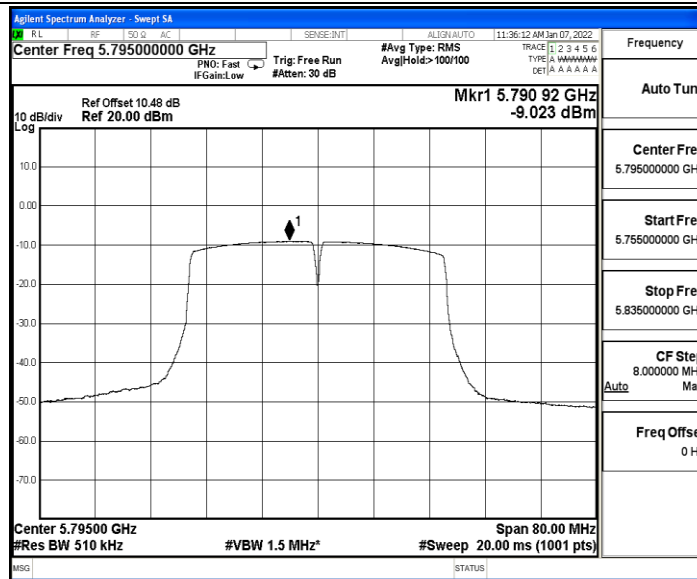
11AC20SISO_Ant_5825



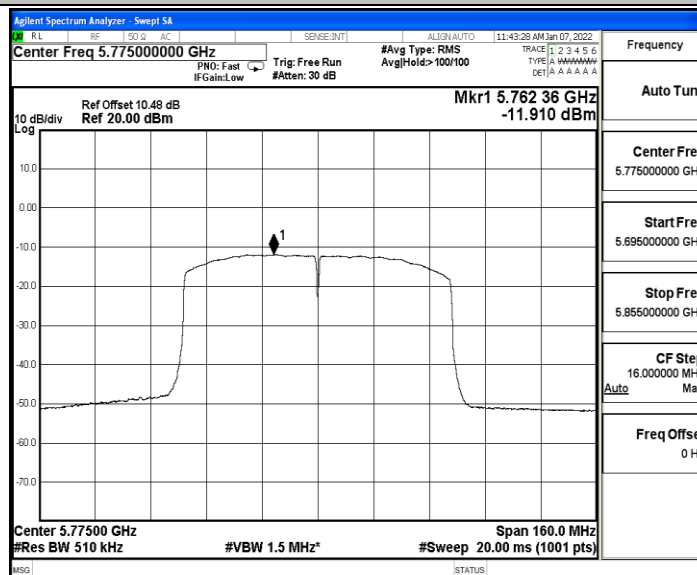
11AC40SISO_Ant_5755



11AC40SISO_Ant_5795



11AC80SISO_Ant_5775





E.4 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant	Low	5745	Peak	5650.000	-43.669	≤-27.00	---	---	PASS
				Peak	5700.000	-43.6	≤10.00	---	---	PASS
				Peak	5720.000	-36.14	≤15.60	---	---	PASS
				Peak	5725.000	-33.05	≤27.00	- --	- --	PASS
		High	5825	Peak	5850.000	-41.98	≤15.60	---	---	PASS
				Peak	5855.000	-43.52	≤27.00	---	---	PASS
				Peak	5875.000	-44.61	≤15.60	---	---	PASS
				Peak	5925.000	-46.11	≤10.00	- --	- --	PASS
11N20SISO	Ant	Low	5745	Peak	5650.000	-46.276	≤-27.00	---	---	PASS
				Peak	5700.000	-47.28	≤10.00	---	---	PASS
				Peak	5720.000	-42.4	≤15.60	---	---	PASS
				Peak	5725.000	-34.99	≤27.00	- --	- --	PASS
		High	5825	Peak	5850.000	-44.24	≤15.60	---	---	PASS
				Peak	5855.000	-46.07	≤27.00	---	---	PASS
				Peak	5875.000	-47.18	≤15.60	---	---	PASS
				Peak	5925.000	-47.69	≤10.00	- --	- --	PASS
11N40SISO	Ant	Low	5755	Peak	5650.000	-47.028	≤-27.00	---	---	PASS
				Peak	5700.000	-46.11	≤10.00	---	---	PASS
				Peak	5720.000	-37.2	≤15.60	---	---	PASS
				Peak	5725.000	-34.99	≤27.00	- --	- --	PASS
		High	5795	Peak	5850.000	-45.58	≤15.60	---	---	PASS
				Peak	5855.000	-45.99	≤27.00	---	---	PASS
				Peak	5875.000	-46	≤15.60	---	---	PASS
				Peak	5925.000	-46.05	≤10.00	- --	- --	PASS
11AC20SISO	Ant	Low	5745	Peak	5650.000	-47.256	≤-27.00	---	---	PASS
				Peak	5700.000	-46	≤10.00	---	---	PASS
				Peak	5720.000	-40.41	≤15.60	---	---	PASS
				Peak	5725.000	-34.43	≤27.00	- --	- --	PASS
		High	5825	Peak	5850.000	-42.519	≤15.60	---	---	PASS
				Peak	5855.000	-46.04	≤27.00	---	---	PASS
				Peak	5875.000	-44.83	≤15.60	---	---	PASS
				Peak	5925.000	-46.23	≤10.00	- --	- --	PASS
11AC40SISO	Ant	Low	5755	Peak	5650.000	-46.955	≤-27.00	---	---	PASS
				Peak	5700.000	-45.38	≤10.00	---	---	PASS
				Peak	5720.000	-35.3	≤15.60	---	---	PASS
				Peak	5725.000	-34.32	≤27.00	- --	- --	PASS
		High	5795	Peak	5850.000	-46.319	≤15.60	---	---	PASS



11AC80SI SO	Ant	Low	5775	Peak	5855.000	-46.3	≤ 27.00	---	---	PASS
				Peak	5875.000	-47.42	≤ 15.60	---	---	PASS
				Peak	5925.000	-47.89	≤ 10.00	- - -	- - -	PASS
				Peak	5650.000	-47.674	≤ -27.00	---	---	PASS
		High	5775	Peak	5700.000	-41.45	≤ 10.00	---	---	PASS
				Peak	5720.000	-37.4	≤ 15.60	---	---	PASS
				Peak	5725.000	-35.79	≤ 27.00	- - -	- - -	PASS
				Peak	5850.000	-44.388	≤ 15.60	---	---	PASS
				Peak	5855.000	-45.86	≤ 27.00	---	---	PASS
				Peak	5875.000	-46.81	≤ 15.60	---	---	PASS
				Peak	5925.000	-47.4	≤ 10.00	- - -	- - -	PASS

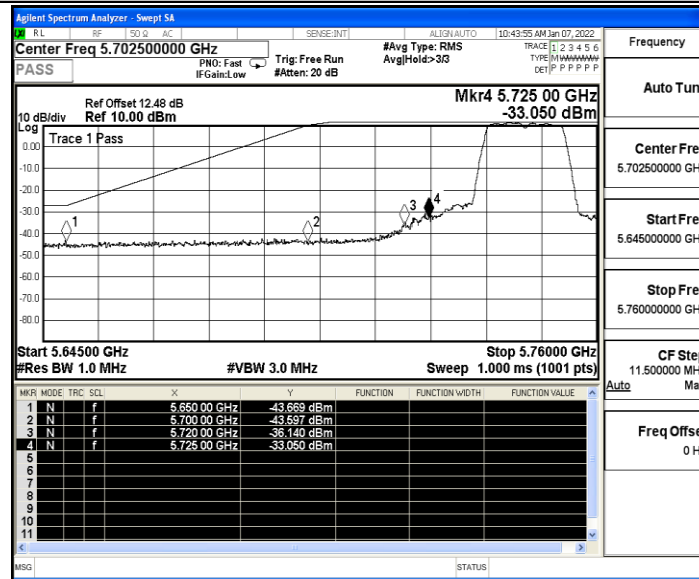
Note:

1. The Antenna Gain is compensated in the graph.

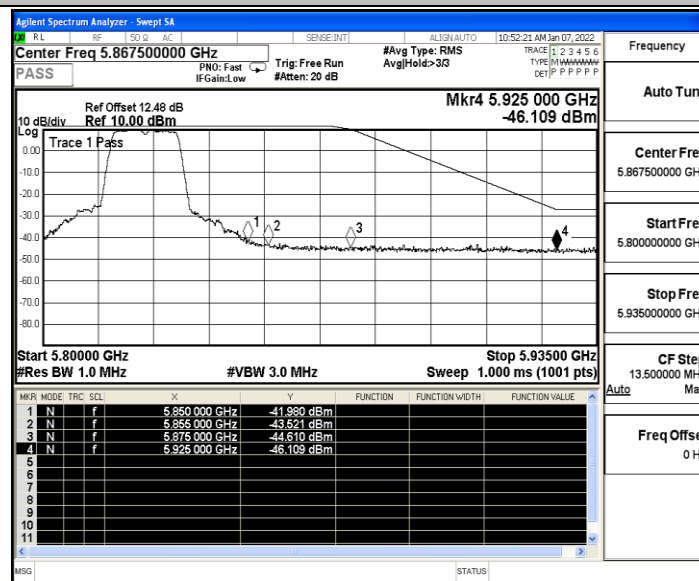


Test Graphs

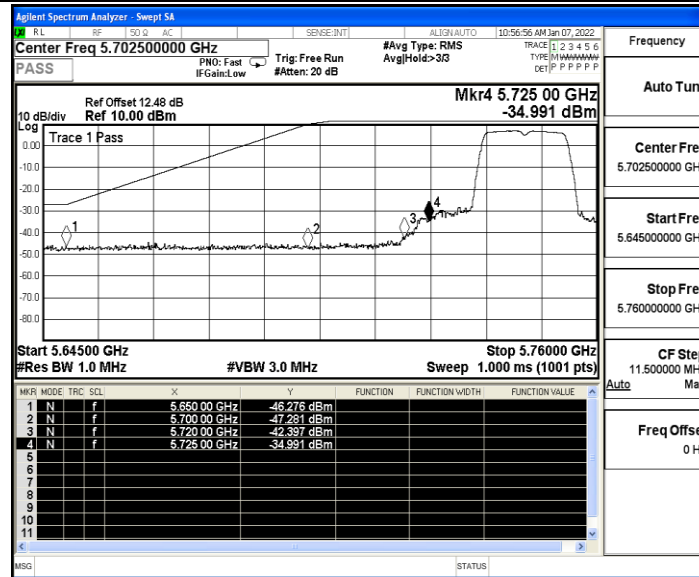
11A_Ant_Low_5745_Peak



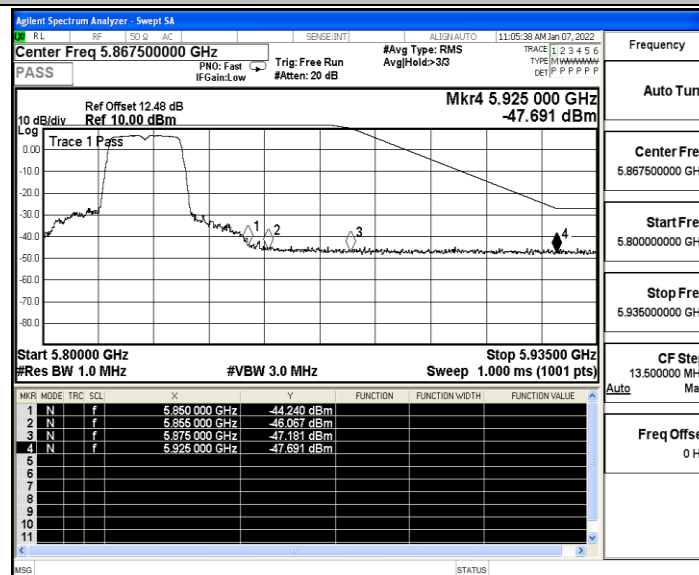
11A_Ant_High_5825_Peak



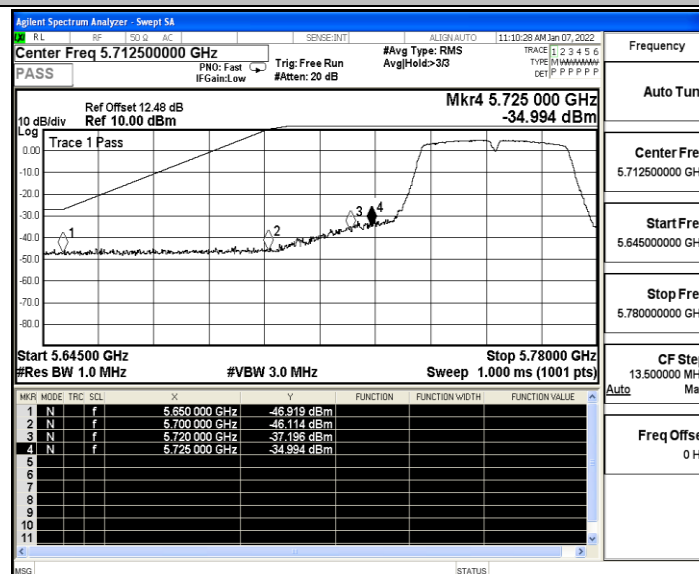
11N20ISO_Ant_Low_5745_Peak



11N20SISO_Ant_High_5825_Peak

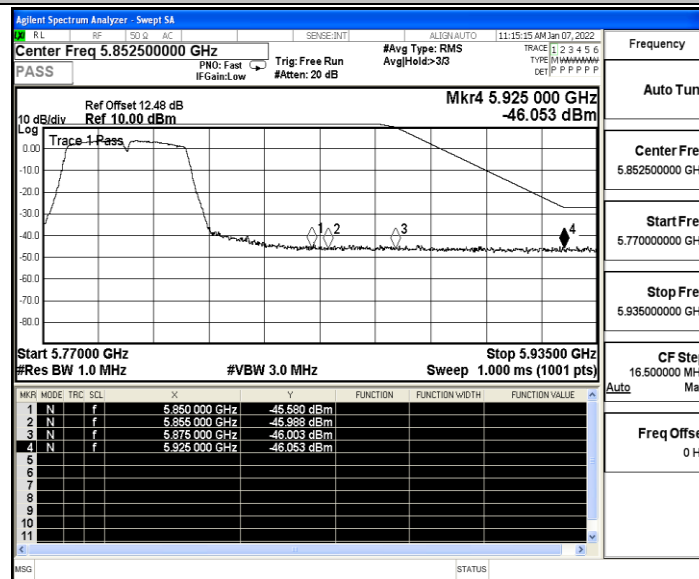


11N40SISO_Ant_Low_5755_Peak

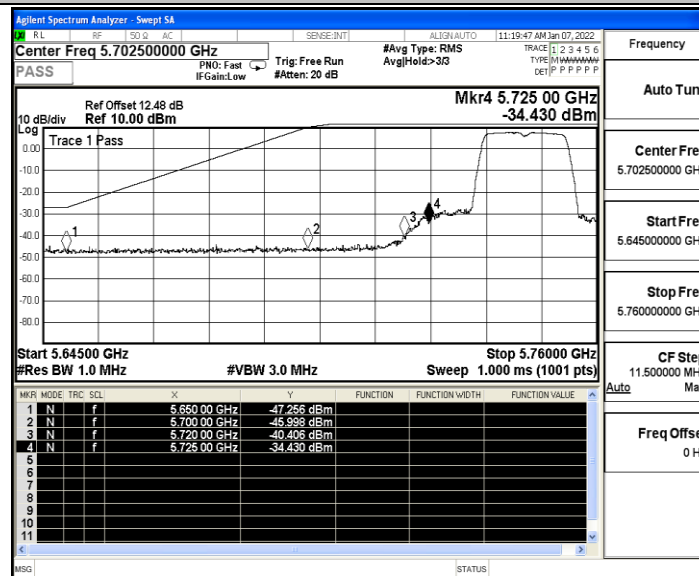




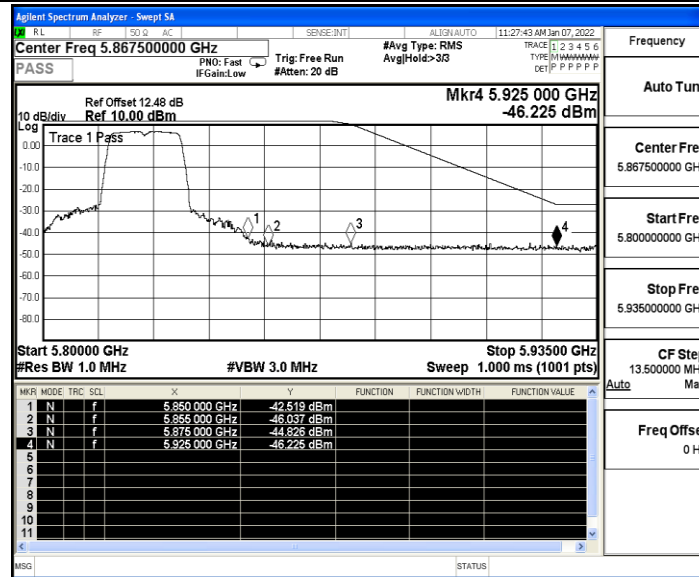
11N40SISO_Ant_High_5795_Peak



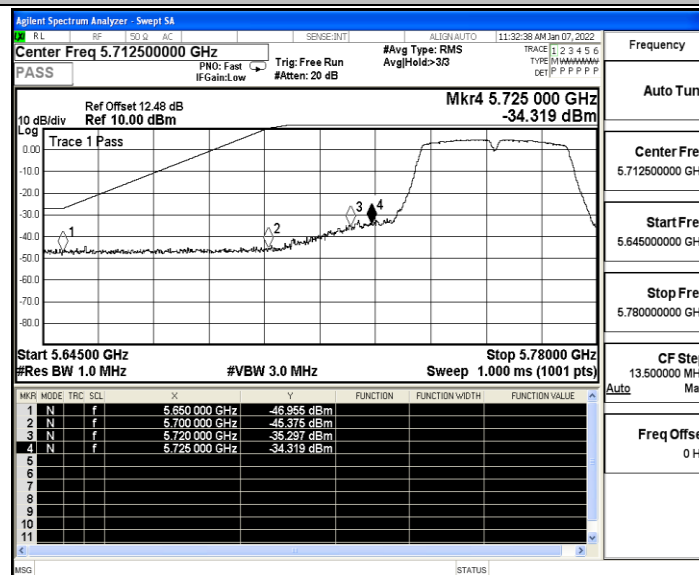
11AC20SISO_Ant_Low_5745_Peak



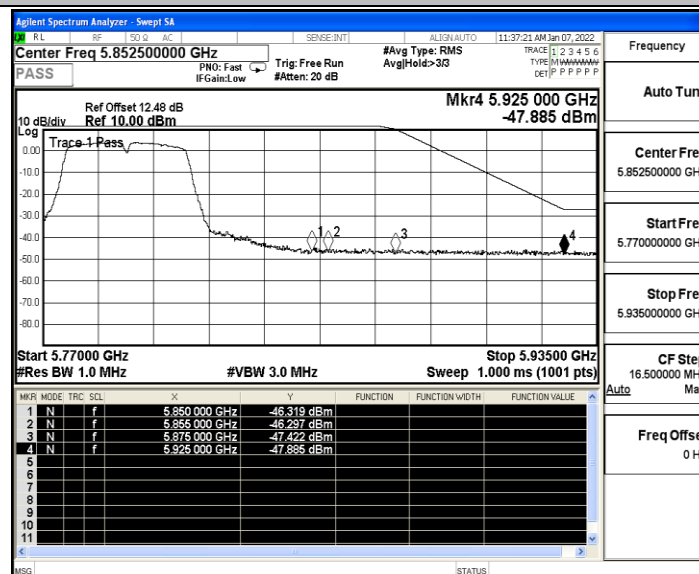
11AC20SISO_Ant_High_5825_Peak



11AC40SISO_Ant_Low_5755_Peak

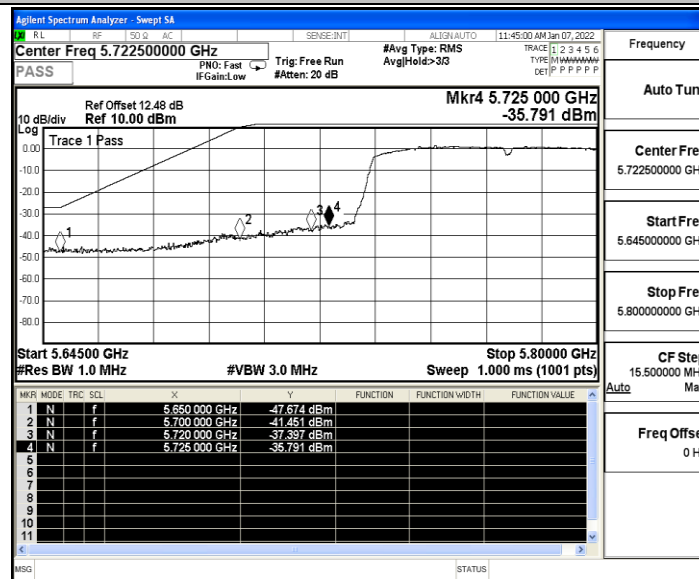


11AC40SISO_Ant_High_5795_Peak

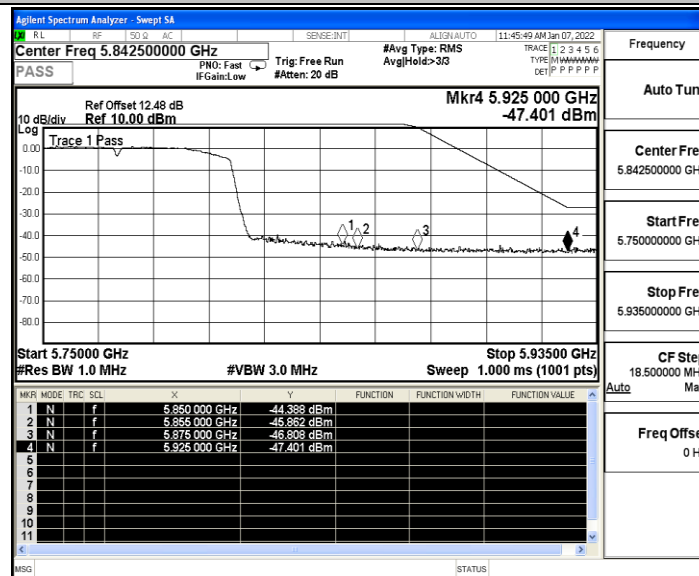




11AC80SISO_Ant_Low_5775_Peak



11AC80SISO_Ant_High_5775_Peak





E.5 Frequency Stability

Test Result

Voltage								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant	5745	NV	NT	-10000	-1.740644	20	PASS
			LV	NT	-10000	-1.740644	20	PASS
			HV	NT	-10000	-1.740644	20	PASS
		5785	NV	NT	-10000	-1.728608	20	PASS
			LV	NT	-10000	-1.728608	20	PASS
			HV	NT	-11000	-1.901469	20	PASS
		5825	NV	NT	-11000	-1.888412	20	PASS
			LV	NT	-11000	-1.888412	20	PASS
			HV	NT	-11000	-1.888412	20	PASS

Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant	5745	NV	-30	-10000	-1.740644	20	PASS
			NV	-20	-10000	-1.740644	20	PASS
			NV	-10	-10000	-1.740644	20	PASS
			NV	0	-10000	-1.740644	20	PASS
			NV	10	-10000	-1.740644	20	PASS
			NV	20	-11000	-1.914708	20	PASS
			NV	30	-10000	-1.740644	20	PASS
			NV	40	-11000	-1.914708	20	PASS
			NV	50	-11000	-1.914708	20	PASS
		5785	NV	-30	-11000	-1.901469	20	PASS
			NV	-20	-11000	-1.901469	20	PASS
			NV	-10	-11000	-1.901469	20	PASS
			NV	0	-11000	-1.901469	20	PASS
			NV	10	-11000	-1.901469	20	PASS
			NV	20	-11000	-1.901469	20	PASS
			NV	30	-11000	-1.901469	20	PASS
			NV	40	-11000	-1.901469	20	PASS
			NV	50	-11000	-1.901469	20	PASS
		5825	NV	-30	-11000	-1.888412	20	PASS
			NV	-20	-11000	-1.888412	20	PASS
			NV	-10	-11000	-1.888412	20	PASS
			NV	0	-11000	-1.888412	20	PASS
			NV	10	-12000	-2.060086	20	PASS



			NV	20	-12000	-2.060086	20	PASS
			NV	30	-11000	-1.888412	20	PASS
			NV	40	-12000	-2.060086	20	PASS
			NV	50	-12000	-2.060086	20	PASS



E.6 Duty Cycle

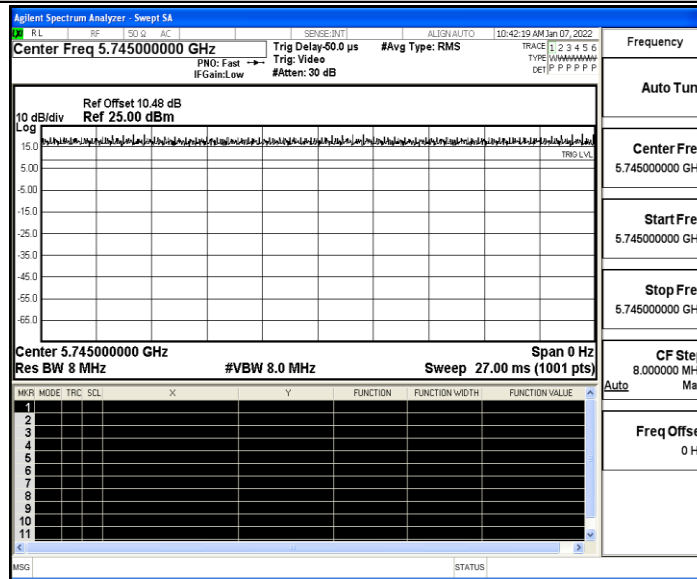
Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11A	Ant	5745	27.00	27.00	100.00	---	---
		5785	27.00	27.00	100.00	---	---
		5825	27.00	27.00	100.00	---	---
11N20SISO	Ant	5745	27.00	27.00	100.00	---	---
		5785	27.00	27.00	100.00	---	---
		5825	27.00	27.00	100.00	---	---
11N40SISO	Ant	5755	27.00	27.00	100.00	---	---
		5795	27.00	27.00	100.00	---	---
11AC20SISO	Ant	5745	27.00	27.00	100.00	---	---
		5785	27.00	27.00	100.00	---	---
		5825	27.00	27.00	100.00	---	---
11AC40SISO	Ant	5755	27.00	27.00	100.00	---	---
		5795	27.00	27.00	100.00	---	---
11AC80SISO	Ant	5775	27.00	27.00	100.00	---	---

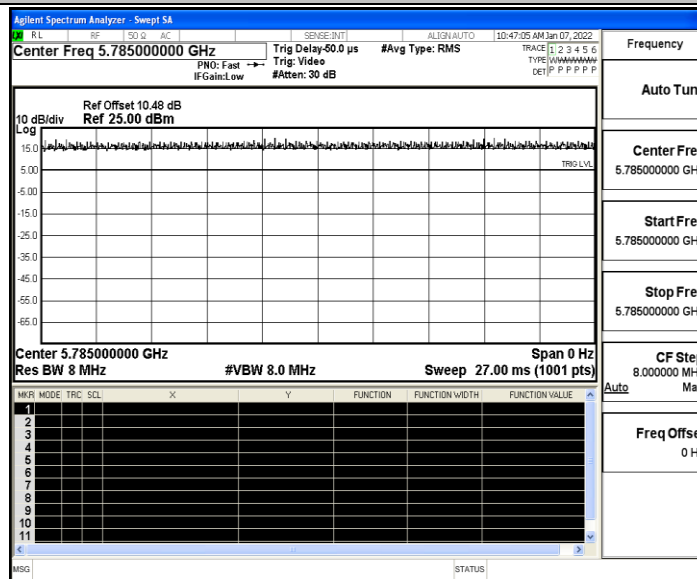


Test Graphs

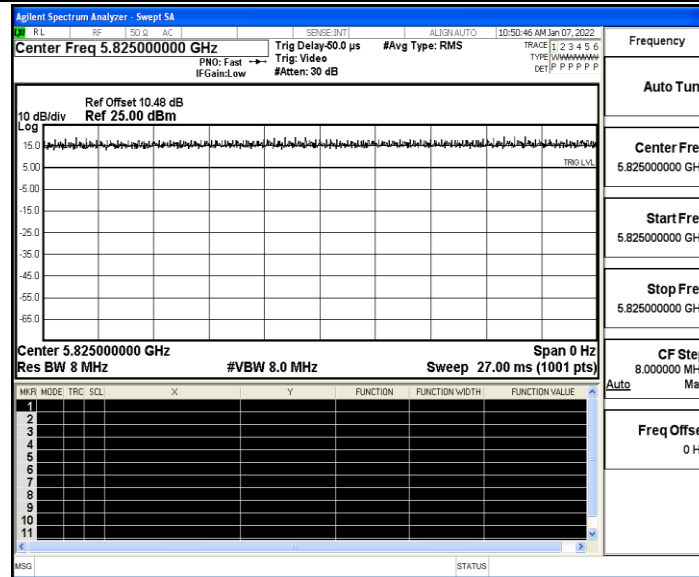
11A_Ant_5745



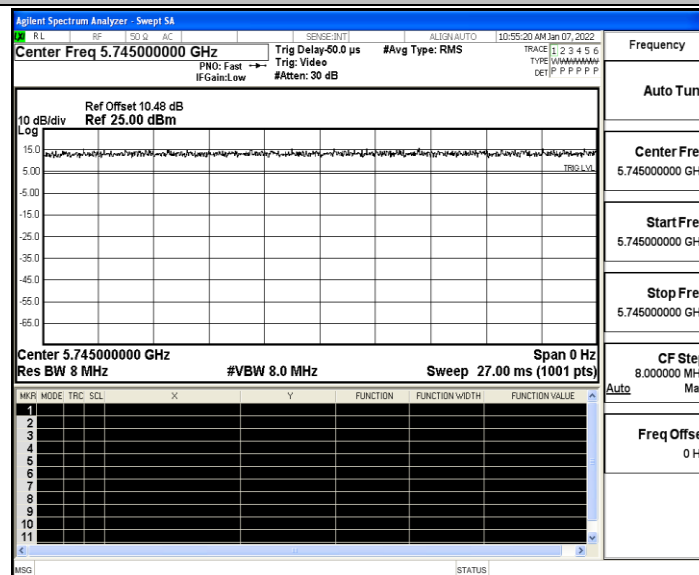
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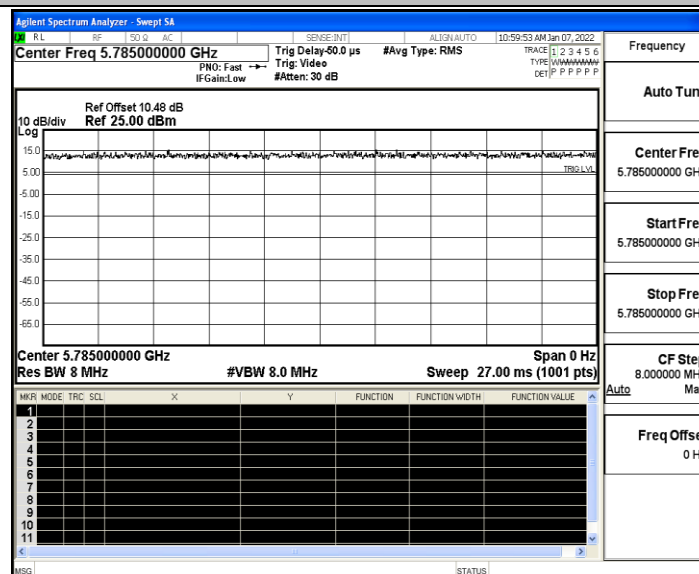
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11N20SISO_Ant_5745

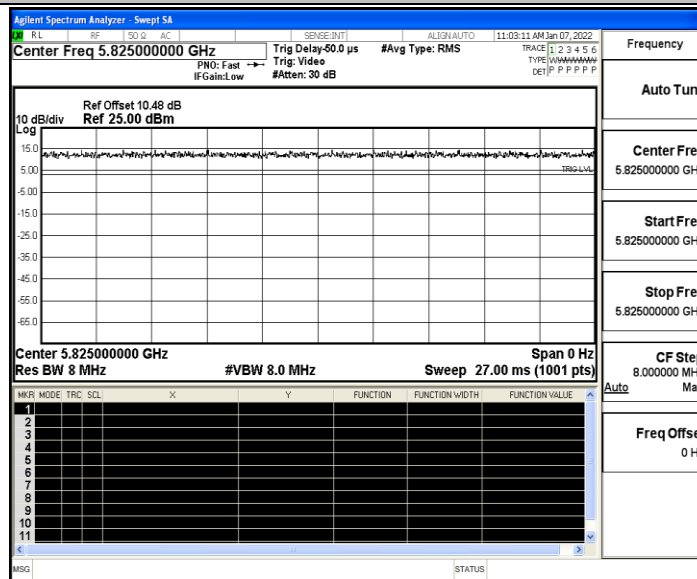


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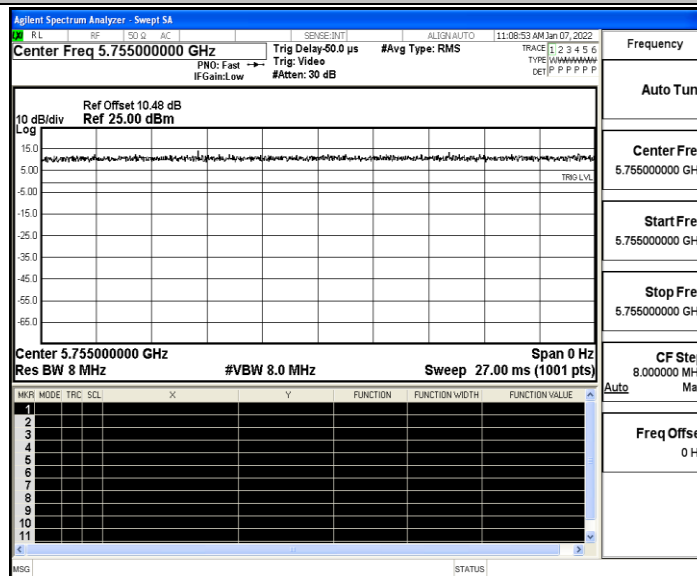




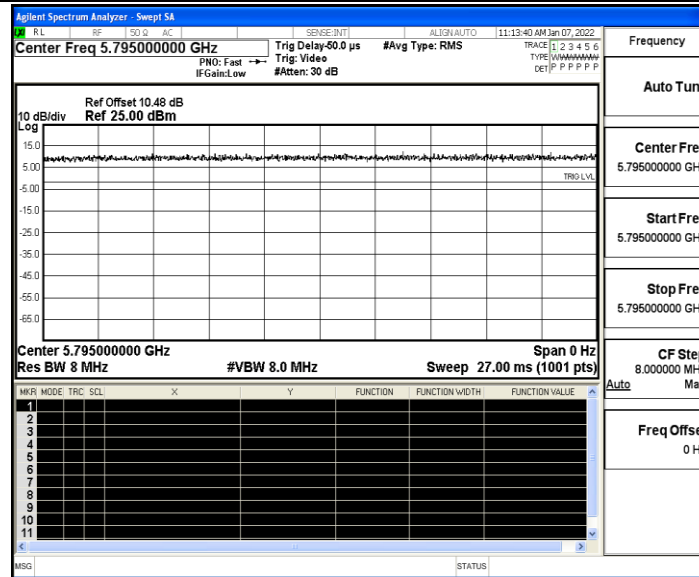
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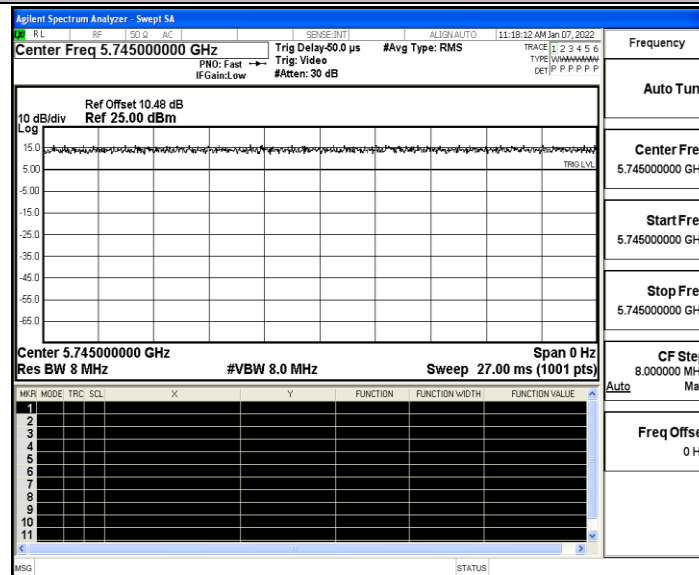
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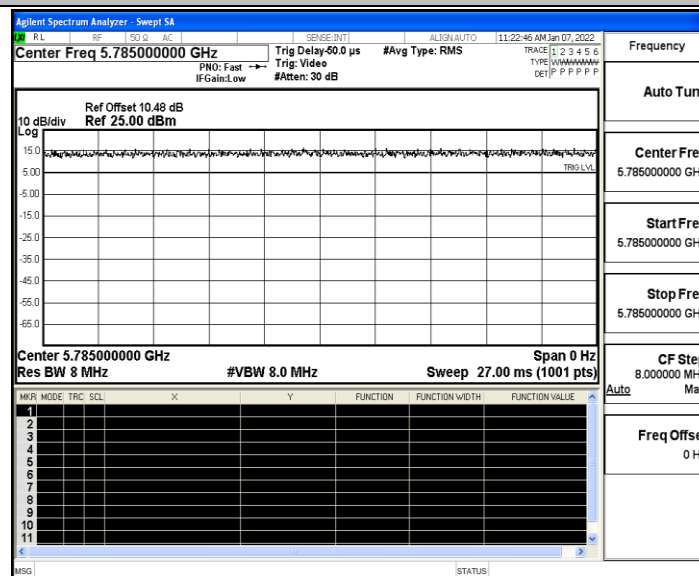
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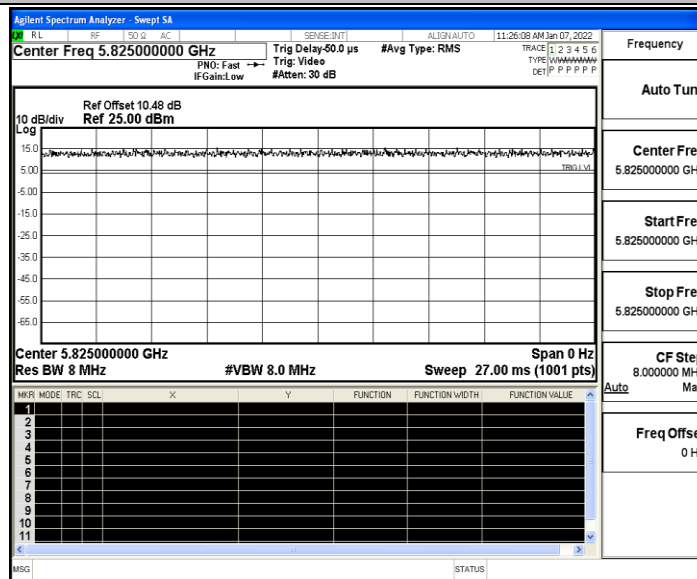


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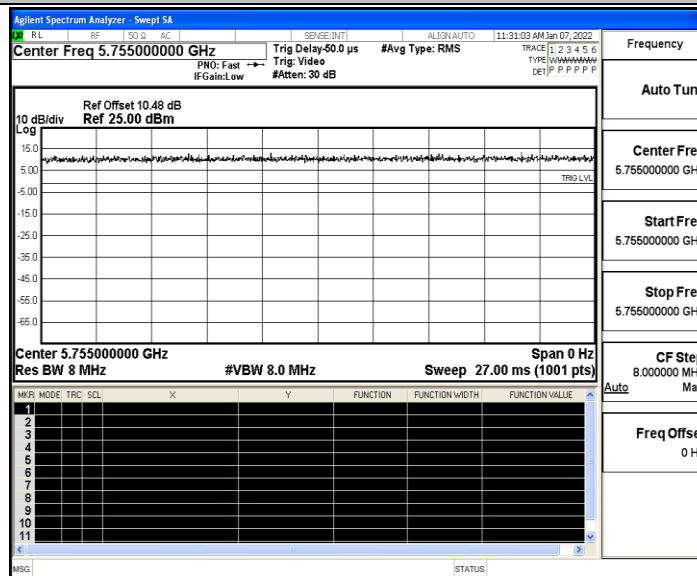




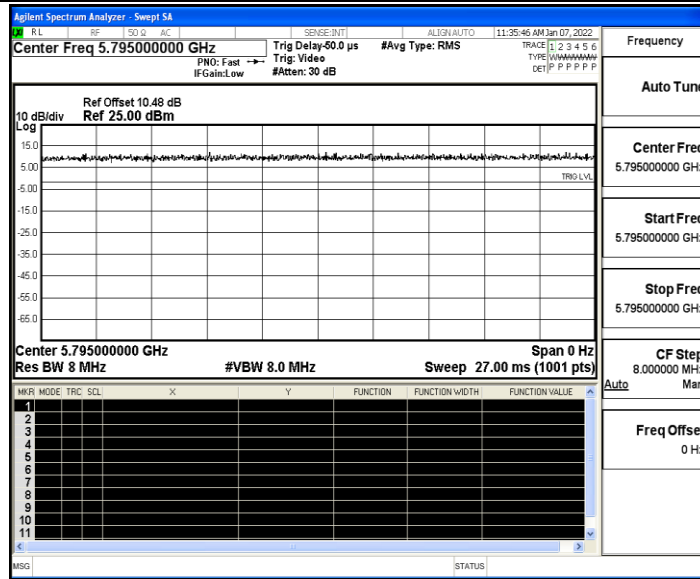
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11AC40SISO_Ant_5755



11AC40SISO_Ant_5795



11AC80SISO_Ant_5775

