



Appendix E

RF Test Data for 5.8G WIFI (Conducted Measurement)

Product Name: Smart phone

Test Model: Smooth 6.26 Max

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

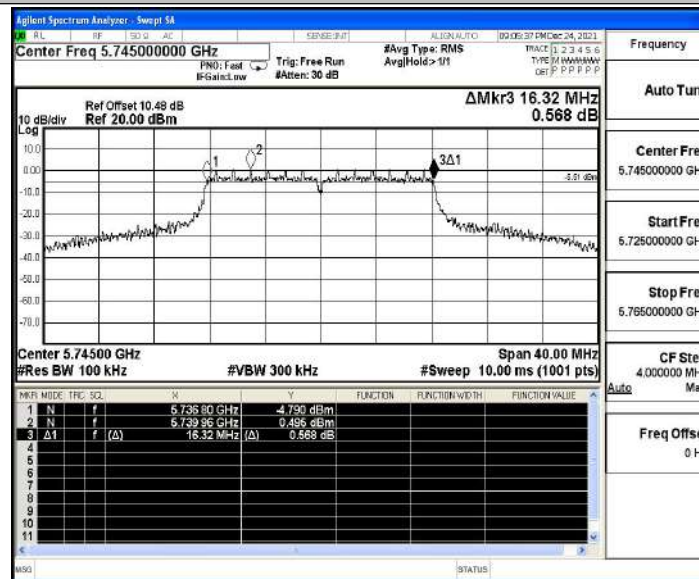
Test Result B4

TestMode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.800	5753.120	0.5	PASS
		5785	16.320	5776.800	5793.120	0.5	PASS
		5825	16.320	5816.800	5833.120	0.5	PASS
11N20SISO	Ant1	5745	17.120	5736.360	5753.480	0.5	PASS
		5785	17.280	5776.320	5793.600	0.5	PASS
		5825	17.280	5816.320	5833.600	0.5	PASS
11N40SISO	Ant1	5755	35.200	5737.400	5772.600	0.5	PASS
		5795	35.440	5777.080	5812.520	0.5	PASS
11AC20SISO	Ant1	5745	17.360	5736.200	5753.560	0.5	PASS
		5785	17.240	5776.360	5793.600	0.5	PASS
		5825	17.240	5816.360	5833.600	0.5	PASS
11AC40SISO	Ant1	5755	35.520	5737.240	5772.760	0.5	PASS
		5795	35.520	5777.080	5812.600	0.5	PASS
11AC80SISO	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS

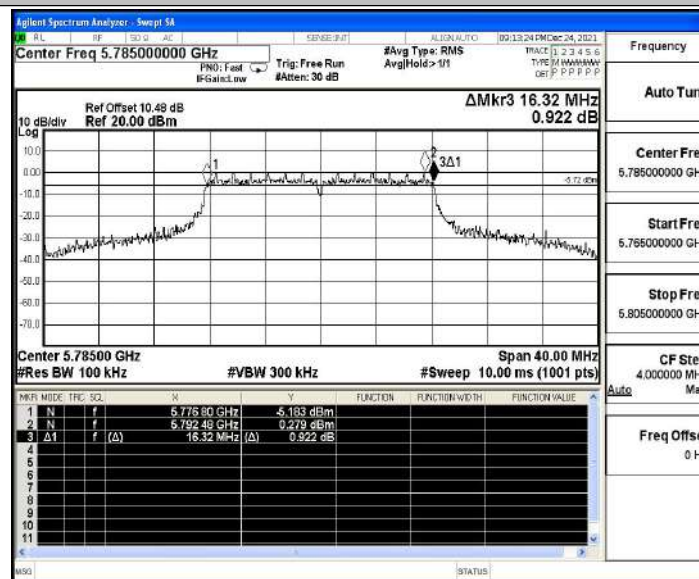


Test Graphs B4

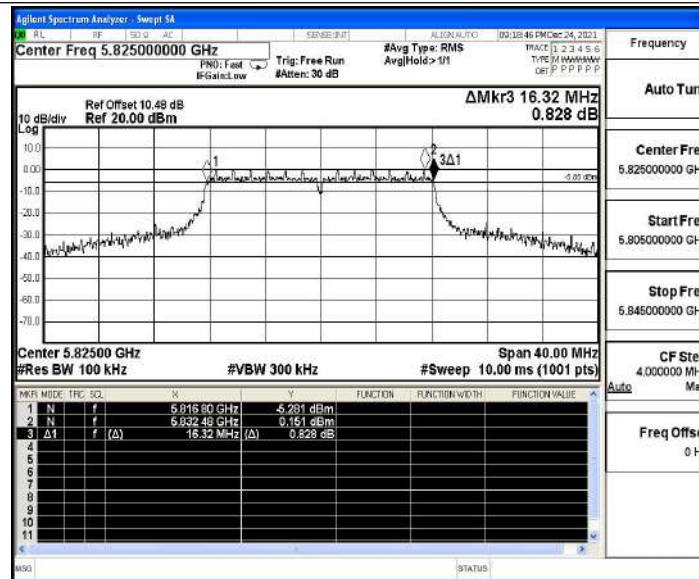
11A_Ant1_5745



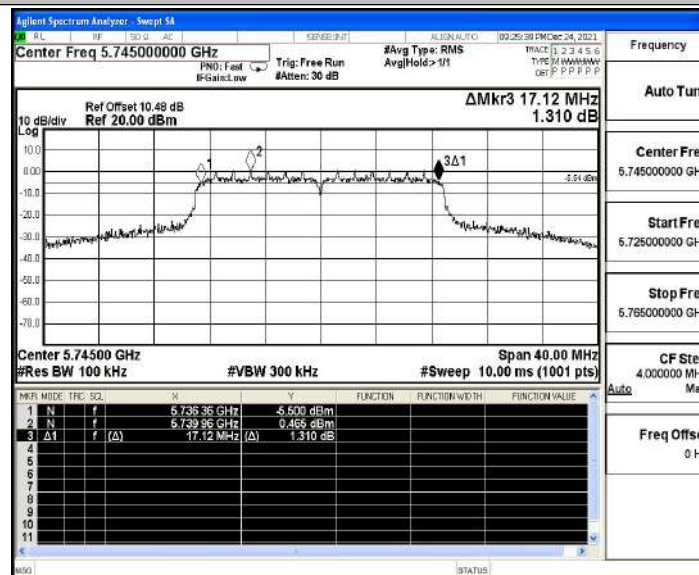
11A_Ant1_5785



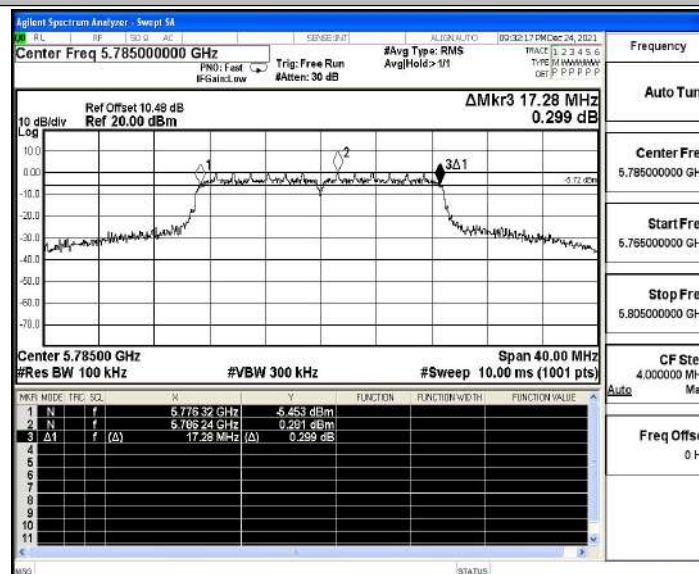
11A_Ant1_5825



11N20SISO_Ant1_5745

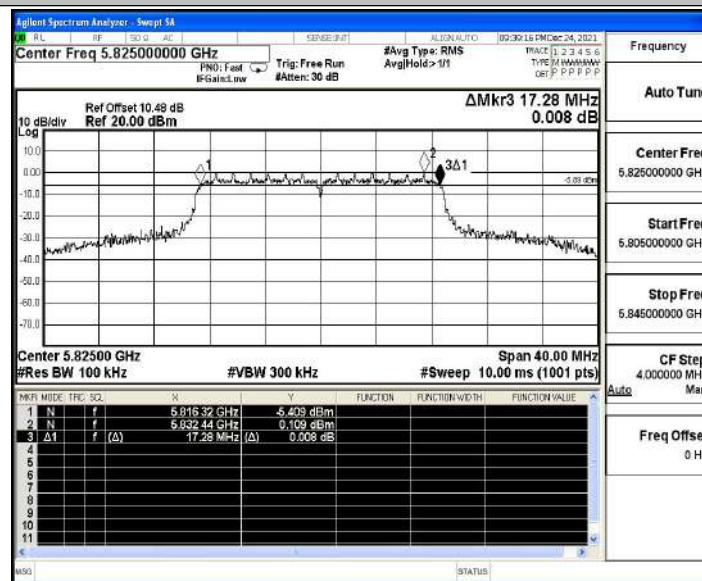


11N20SISO_Ant1_5785

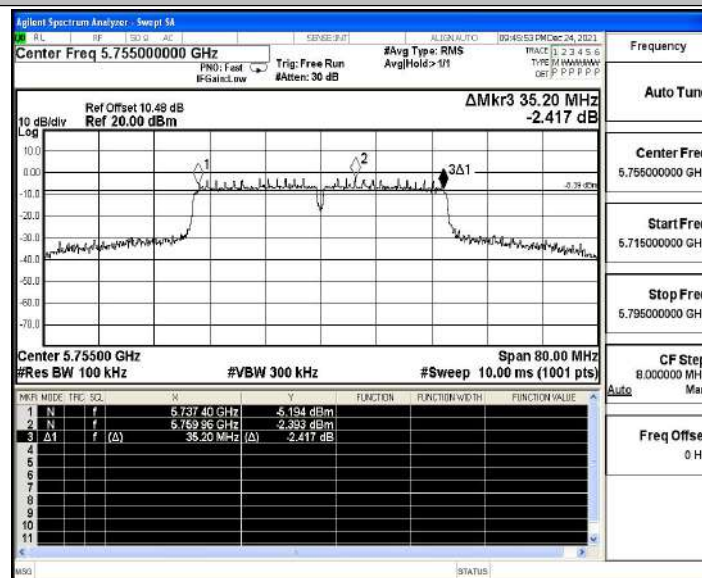




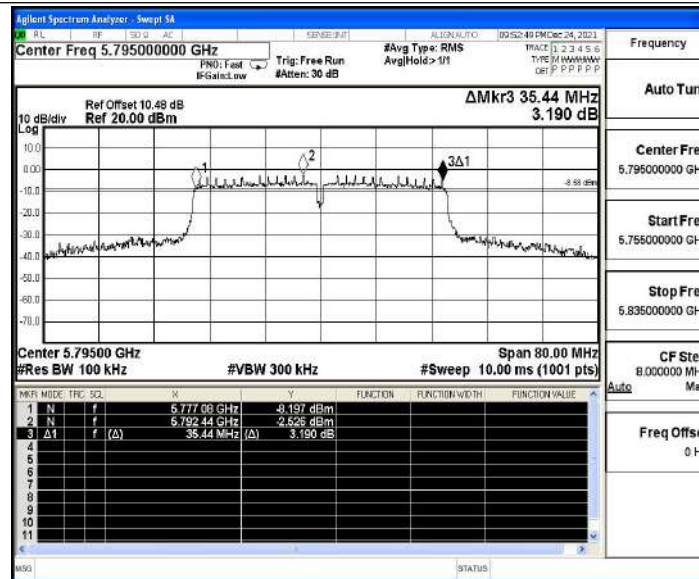
11N20SISO_Ant1_5825



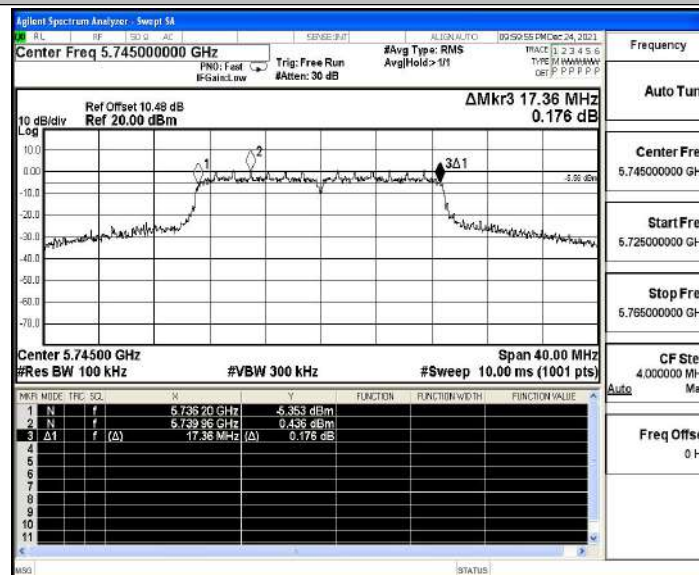
11N40SISO_Ant1_5755



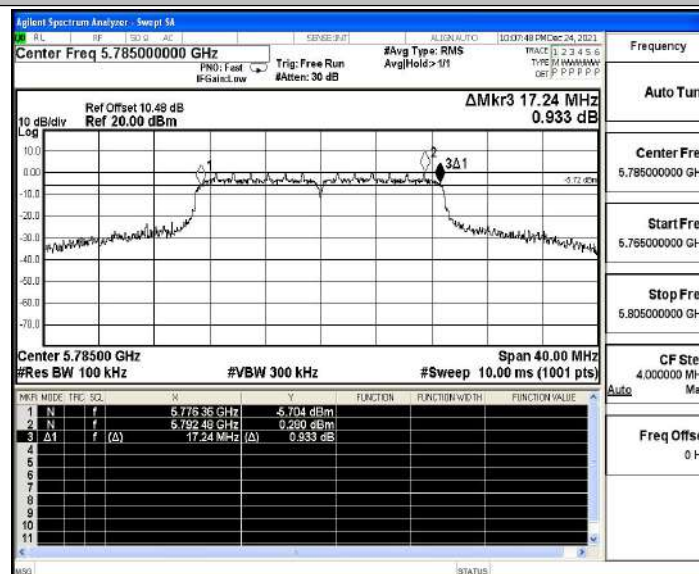
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745

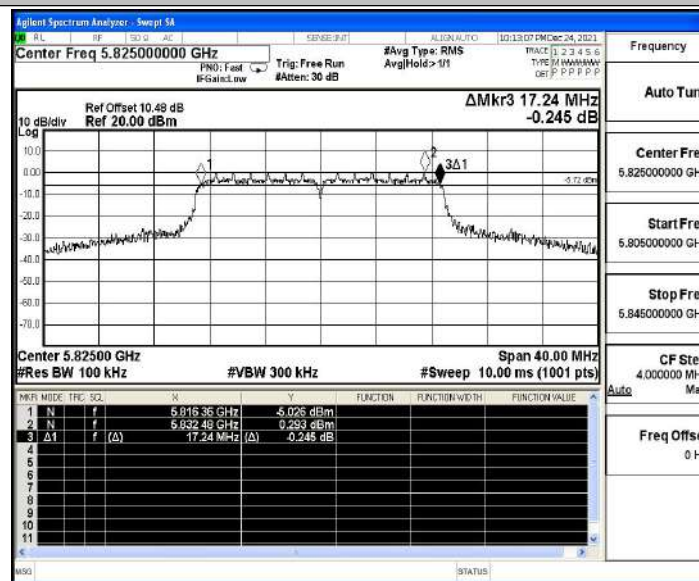


11AC20SISO_Ant1_5785

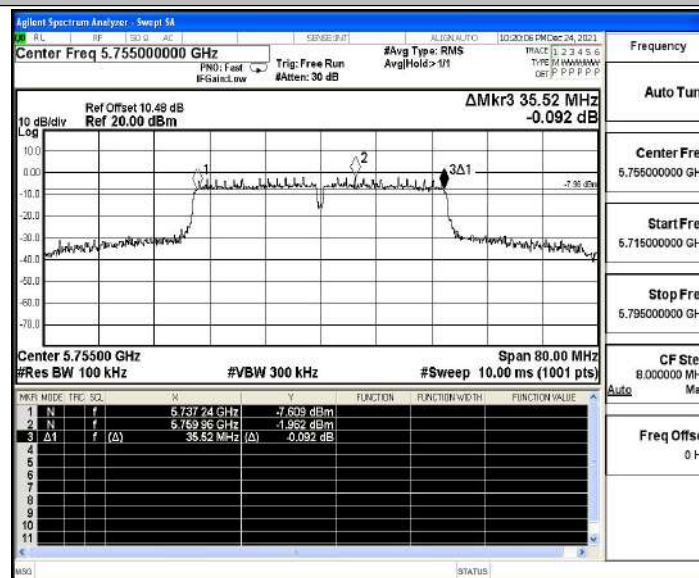




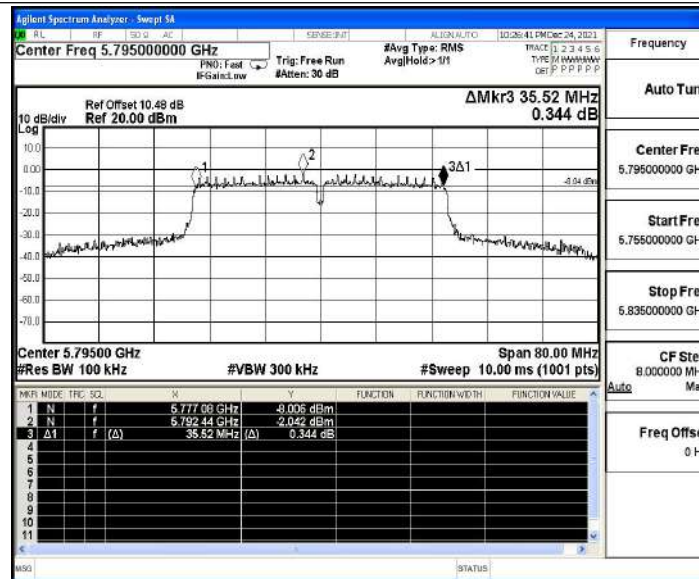
11AC20SISO_Ant1_5825



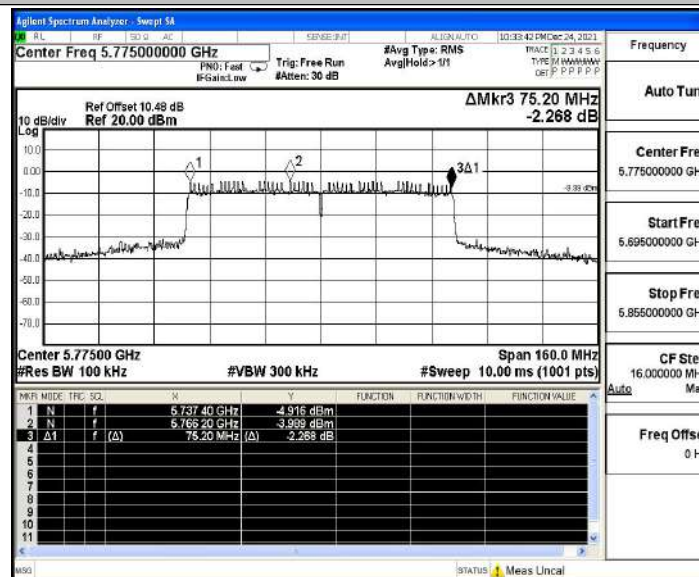
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775





E.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5745	11.72	≤30	PASS
		5785	12.35	≤30	PASS
		5825	11.44	≤30	PASS
11N20SISO	Ant1	5745	11.88	≤30	PASS
		5785	11.81	≤30	PASS
		5825	11.60	≤30	PASS
11N40SISO	Ant1	5755	11.41	≤30	PASS
		5795	11.32	≤30	PASS
11AC20SISO	Ant1	5745	11.85	≤30	PASS
		5785	11.75	≤30	PASS
		5825	11.85	≤30	PASS
11AC40SISO	Ant1	5755	11.87	≤30	PASS
		5795	12.06	≤30	PASS
11AC80SISO	Ant1	5775	12.01	≤30	PASS

Note: The Duty Cycle Factor is compensated in test Results.



E.3 Maximum power spectral density

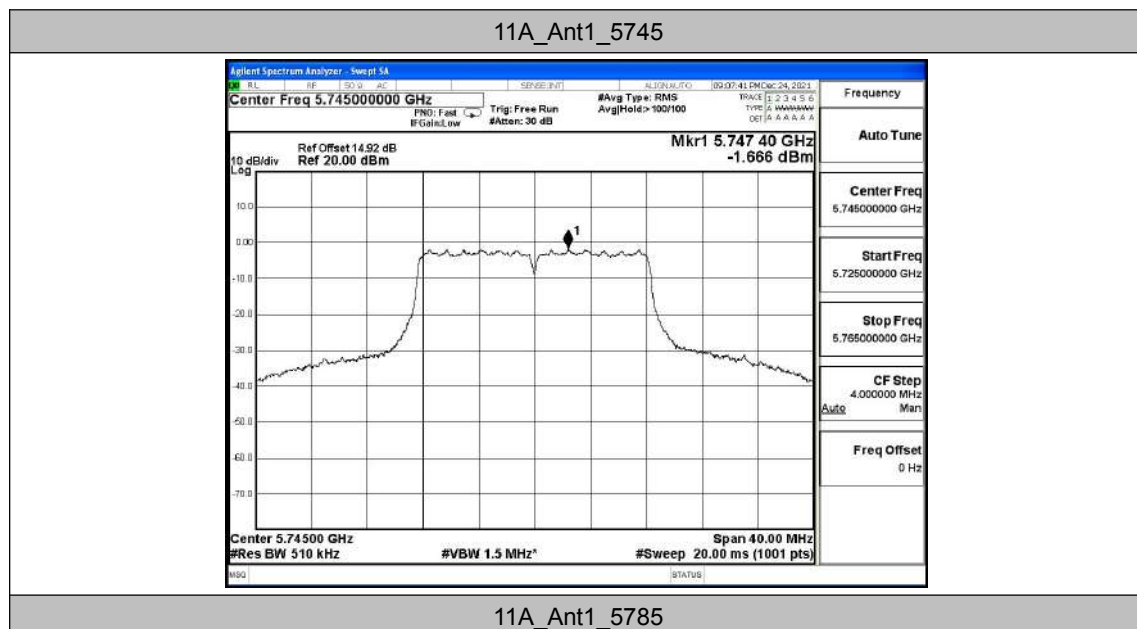
Test Result

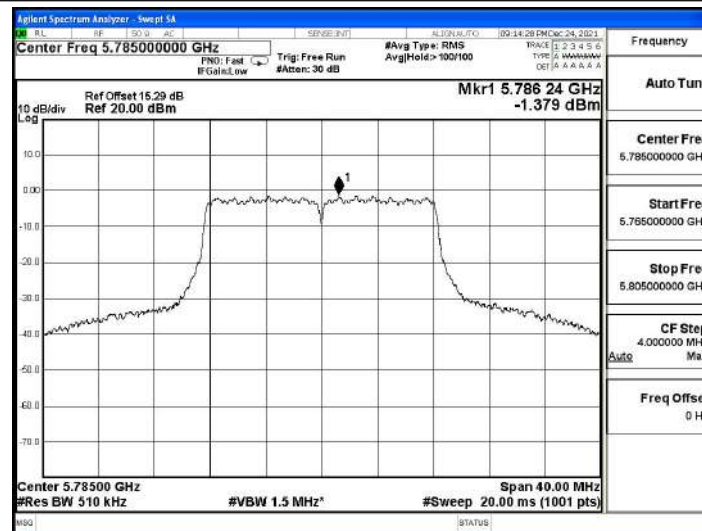
TestMode	Antenna	Frequency[MHz]	Result [dBm/500KHz]	Limit[dBm/500KHz]	Verdict
11A	Ant1	5745	-1.67	≤30.00	PASS
		5785	-1.38	≤30.00	PASS
		5825	-2.25	≤30.00	PASS
11N20SISO	Ant1	5745	-1.51	≤30.00	PASS
		5785	-1.14	≤30.00	PASS
		5825	-2.11	≤30.00	PASS
11N40SISO	Ant1	5755	-4.65	≤30.00	PASS
		5795	-4.06	≤30.00	PASS
11AC20SISO	Ant1	5745	-1.99	≤30.00	PASS
		5785	-1.93	≤30.00	PASS
		5825	-1.28	≤30.00	PASS
11AC40SISO	Ant1	5755	-3.72	≤30.00	PASS
		5795	-3.92	≤30.00	PASS
11AC80SISO	Ant1	5775	-6.03	≤30.00	PASS

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

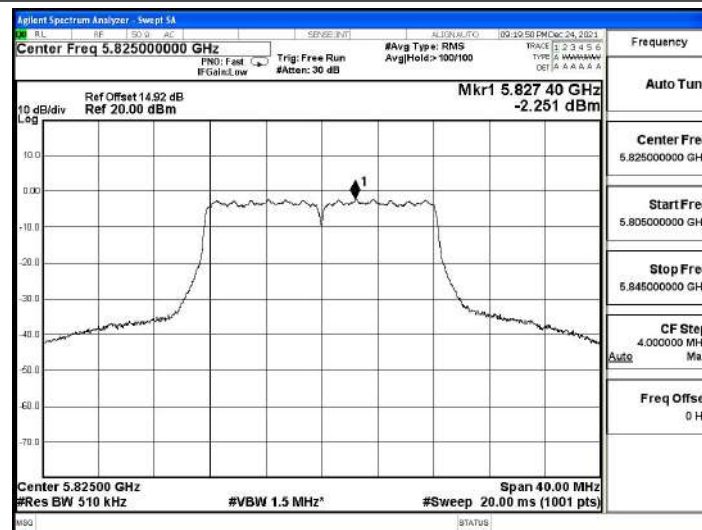
2.The Duty Cycle Factor is compensated in the graph.

Test Graphs

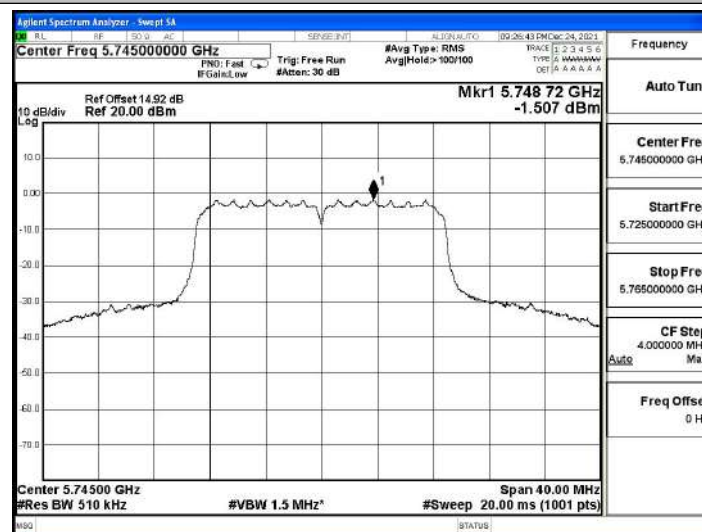




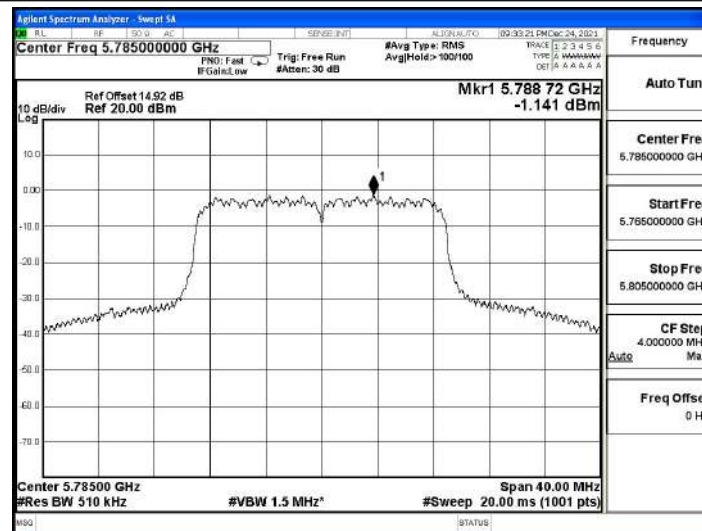
11A_Ant1_5825



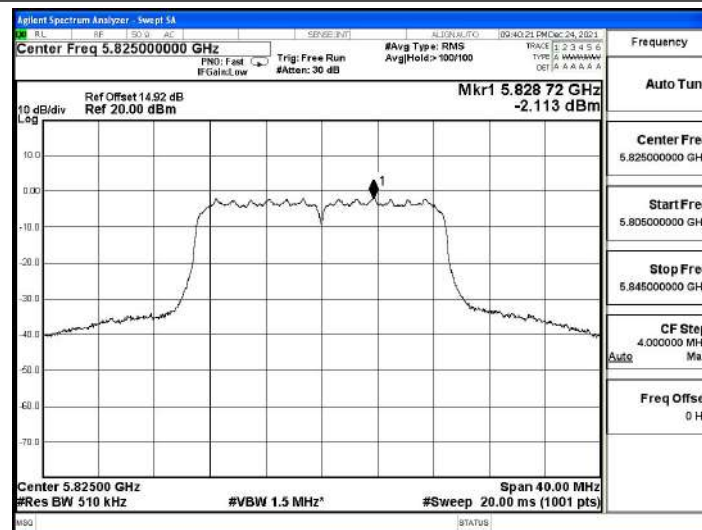
11N20SISO_Ant1_5745



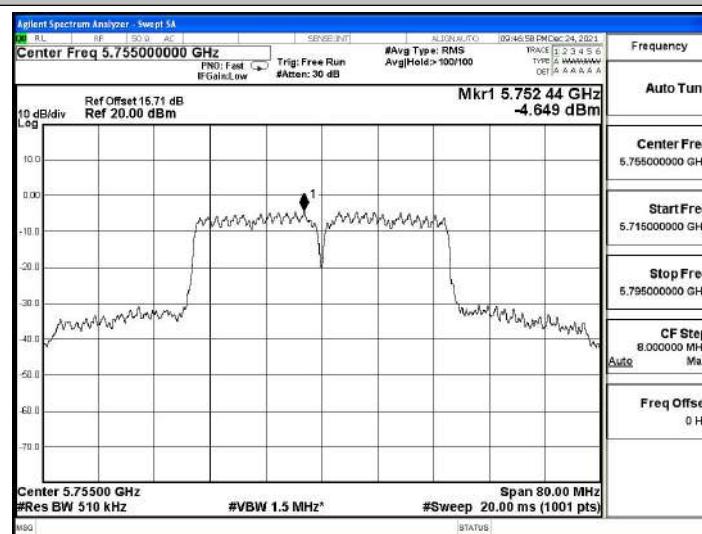
11N20SISO_Ant1_5785



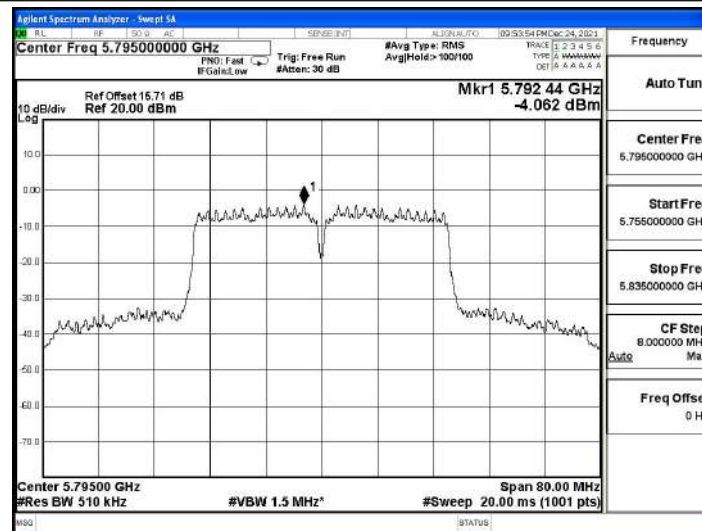
11N20SISO_Ant1_5825



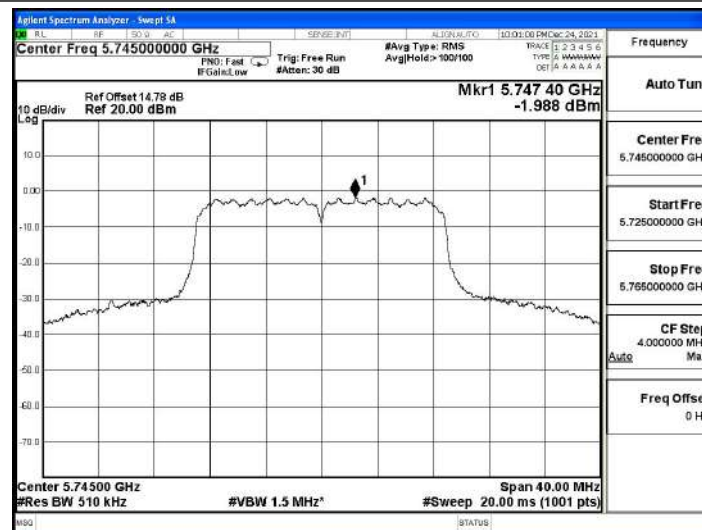
11N40SISO_Ant1_5755



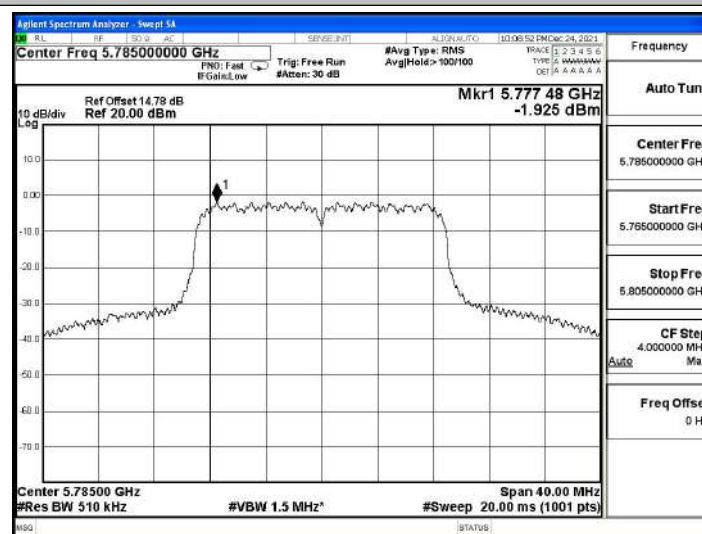
11N40SISO_Ant1_5795



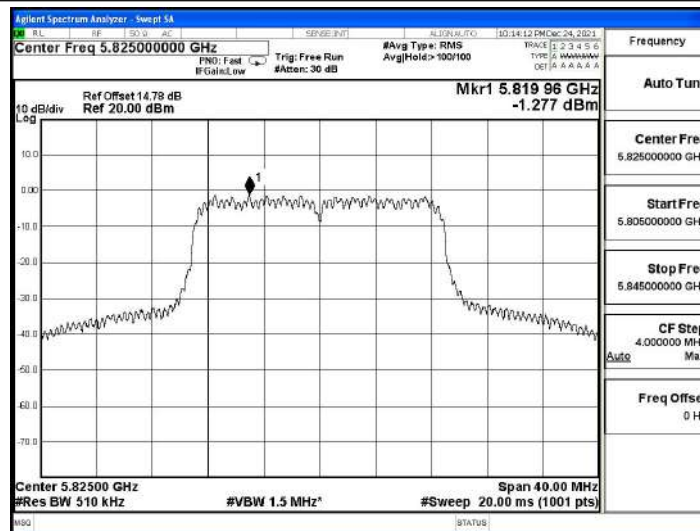
11AC20SISO_Ant1_5745



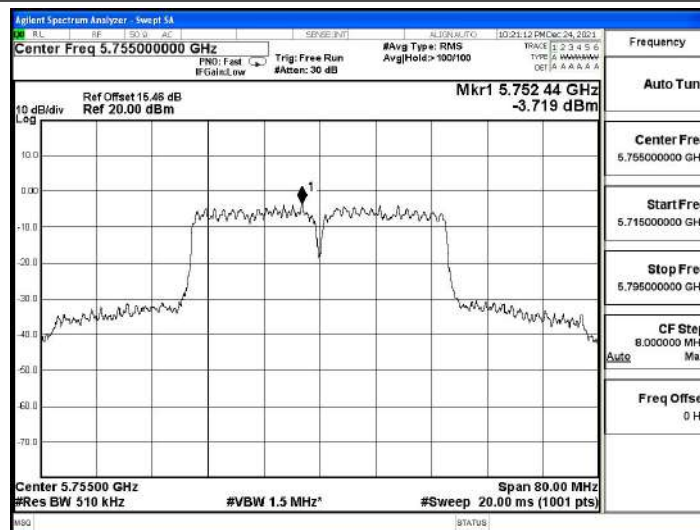
11AC20SISO_Ant1_5785



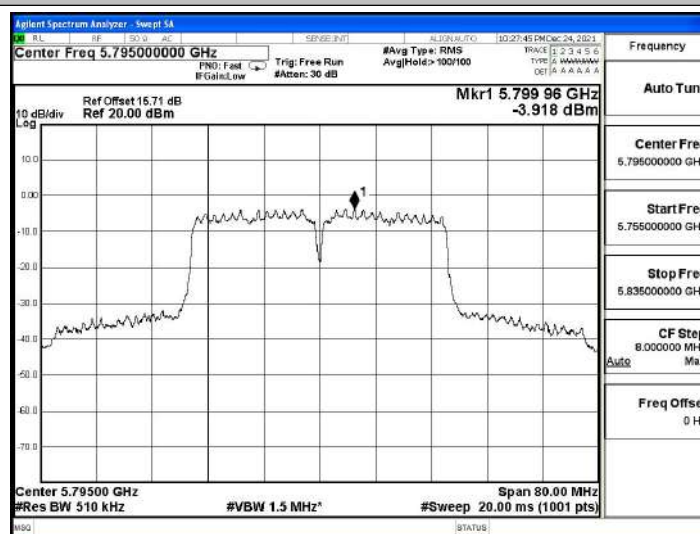
11AC20SISO_Ant1_5825



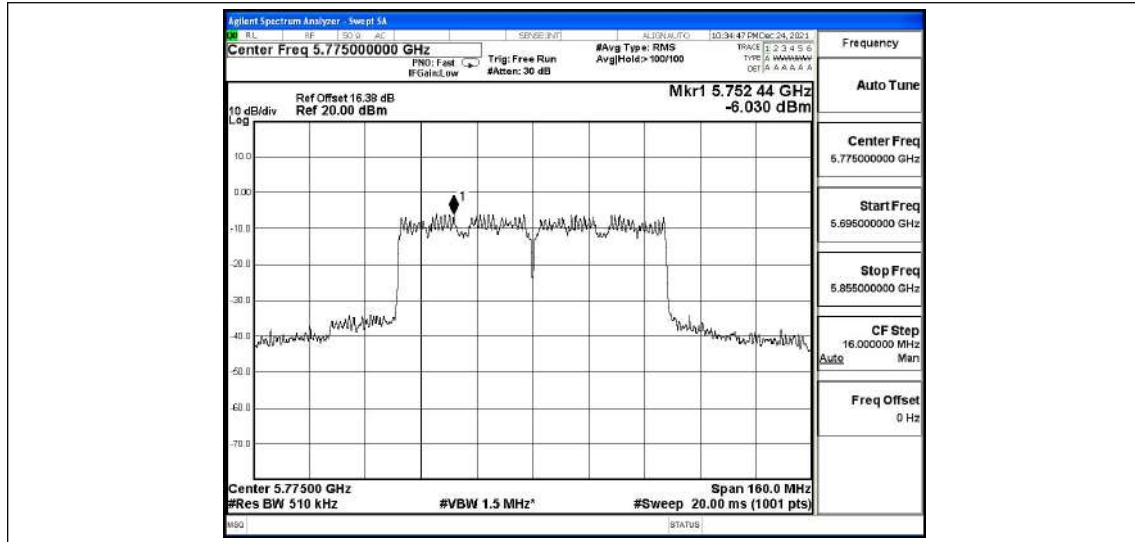
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775



E.4 Emissions in Restricted Bands

Test Result

TestMode	Antenna	Channel Name	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-48.054	≤-27.00	PASS
				Peak	5700.000	-46.37	≤10.00	PASS
				Peak	5720.000	-30.12	≤15.60	PASS
				Peak	5725.000	-19.45	≤27.00	PASS
		High	5825	Peak	5850.000	-33.593	≤15.60	PASS
				Peak	5855.000	-38.26	≤27.00	PASS
				Peak	5875.000	-45.2	≤15.60	PASS
				Peak	5925.000	-47.13	≤10.00	PASS
11N20SISO	Ant1	Low	5745	Peak	5650.000	-47.933	≤-27.00	PASS
				Peak	5700.000	-44.98	≤10.00	PASS
				Peak	5720.000	-26.56	≤15.60	PASS
				Peak	5725.000	-16.34	≤27.00	PASS
		High	5825	Peak	5850.000	-31.614	≤15.60	PASS
				Peak	5855.000	-37.41	≤27.00	PASS
				Peak	5875.000	-45.1	≤15.60	PASS
				Peak	5925.000	-47.28	≤10.00	PASS
11N40SISO	Ant1	Low	5755	Peak	5650.000	-47.629	≤-27.00	PASS
				Peak	5700.000	-36.56	≤10.00	PASS
				Peak	5720.000	-23.98	≤15.60	PASS
				Peak	5725.000	-19.75	≤27.00	PASS
		High	5795	Peak	5850.000	-38.777	≤15.60	PASS
				Peak	5855.000	-43.98	≤27.00	PASS
				Peak	5875.000	-47.05	≤15.60	PASS
				Peak	5925.000	-46.69	≤10.00	PASS



11AC20SIS O	Ant1	Low	5745	Peak	5650.000	-45.886	≤ -27.00	PASS
				Peak	5700.000	-44.1	≤ 10.00	PASS
				Peak	5720.000	-27.56	≤ 15.60	PASS
				Peak	5725.000	-17.6	≤ 27.00	PASS
		High	5825	Peak	5850.000	-29.773	≤ 15.60	PASS
				Peak	5855.000	-36.36	≤ 27.00	PASS
				Peak	5875.000	-46.55	≤ 15.60	PASS
				Peak	5925.000	-47.69	≤ 10.00	PASS
11AC40SIS O	Ant1	Low	5755	Peak	5650.000	-46.504	≤ -27.00	PASS
				Peak	5700.000	-37.29	≤ 10.00	PASS
				Peak	5720.000	-21.99	≤ 15.60	PASS
				Peak	5725.000	-18.34	≤ 27.00	PASS
		High	5795	Peak	5850.000	-37.982	≤ 15.60	PASS
				Peak	5855.000	-39.38	≤ 27.00	PASS
				Peak	5875.000	-46.77	≤ 15.60	PASS
				Peak	5925.000	-45.96	≤ 10.00	PASS
11AC80SIS O	Ant1	Low	5775	Peak	5650.000	-43.049	≤ -27.00	PASS
				Peak	5700.000	-26	≤ 10.00	PASS
				Peak	5720.000	-23.31	≤ 15.60	PASS
				Peak	5725.000	-22.18	≤ 27.00	PASS
		High	5775	Peak	5850.000	-27.055	≤ 15.60	PASS
				Peak	5855.000	-27.16	≤ 27.00	PASS
				Peak	5875.000	-32.05	≤ 15.60	PASS
				Peak	5925.000	-46.2	≤ 10.00	PASS

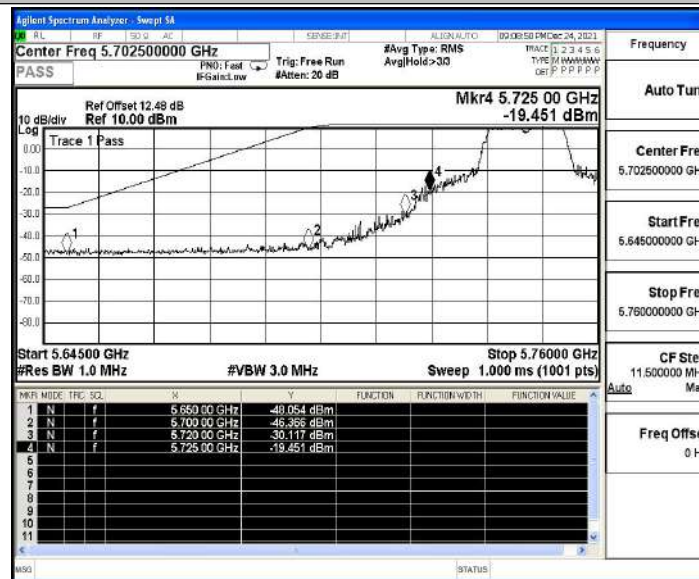
Note:

1. The Antenna Gain is compensated in the graph.

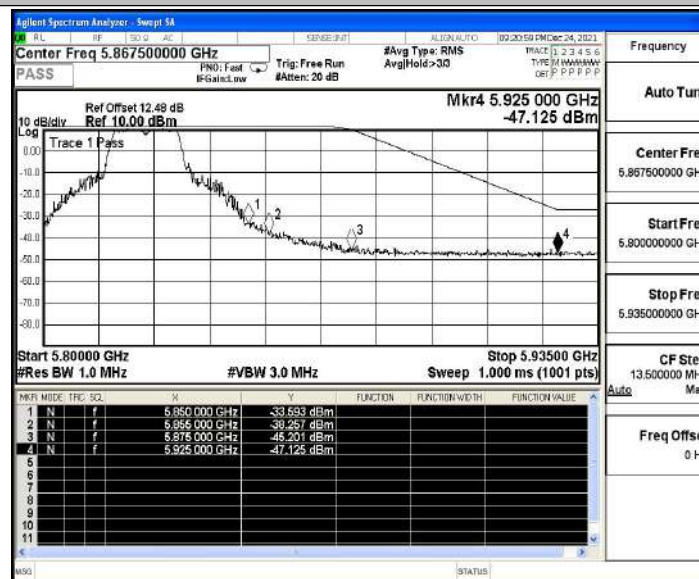


Test Graphs

11A_Ant1_Low_5745_Peak



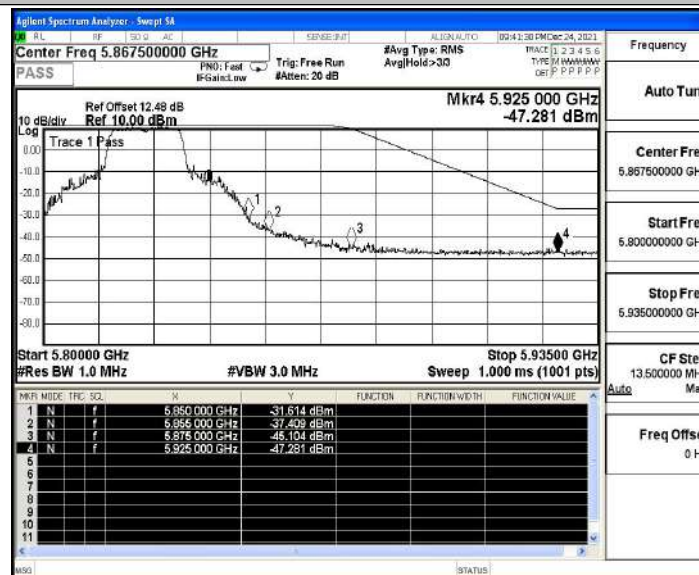
11A_Ant1_High_5825_Peak



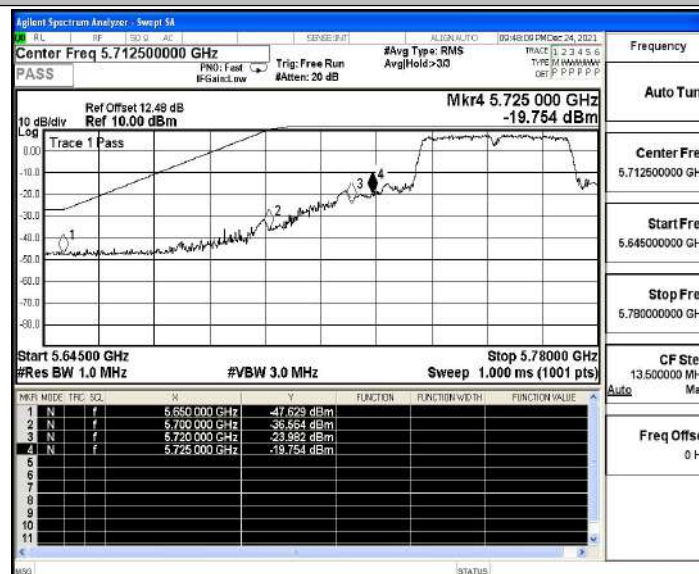
11N20SISO_Ant1_Low_5745_Peak



11N20SISO_Ant1_High_5825_Peak

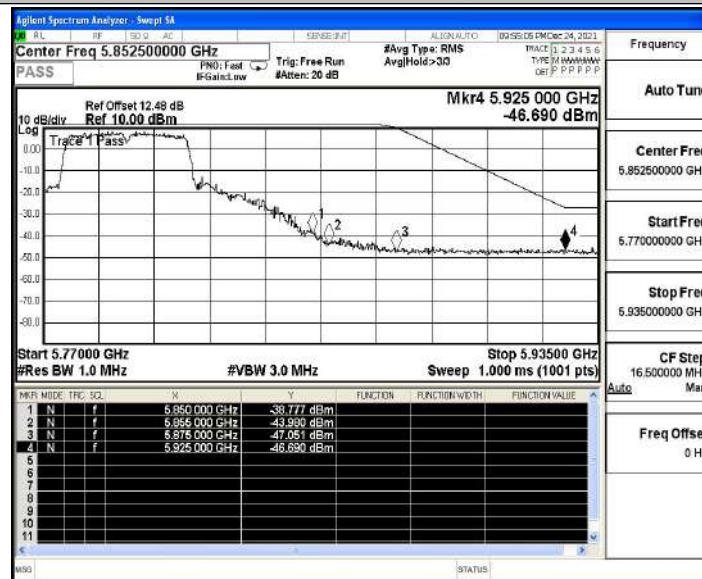


11N40SISO_Ant1_Low_5755_Peak

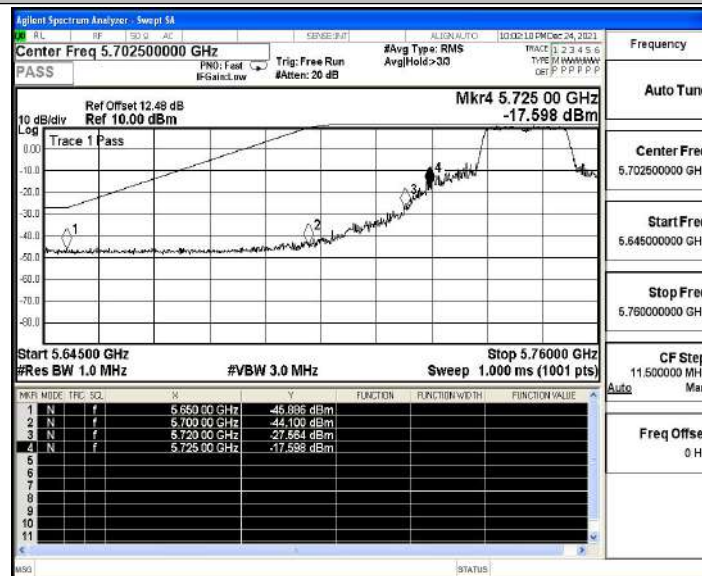




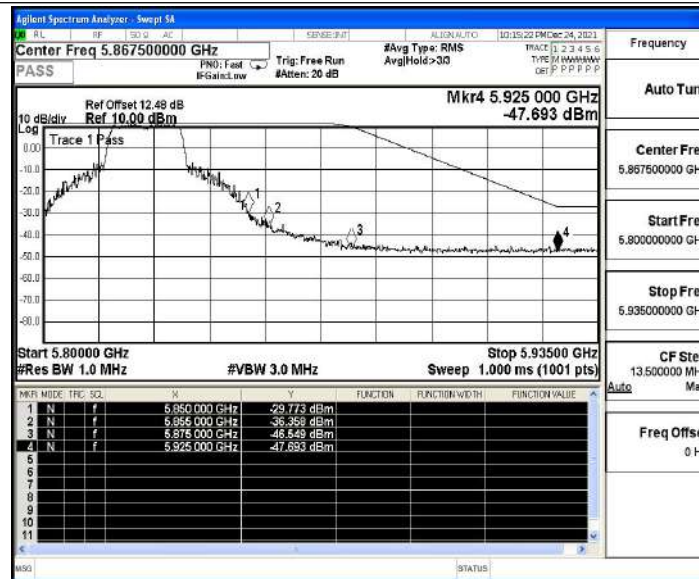
11N40SISO_Ant1_High_5795_Peak



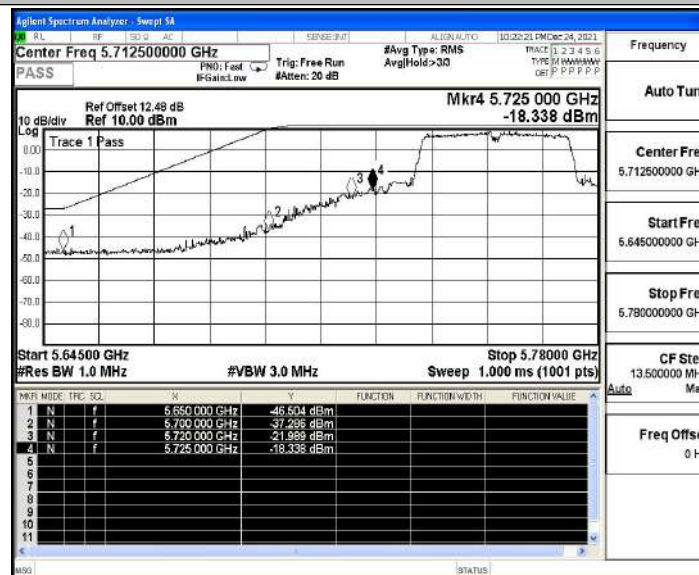
11AC20SISO_Ant1_Low_5745_Peak



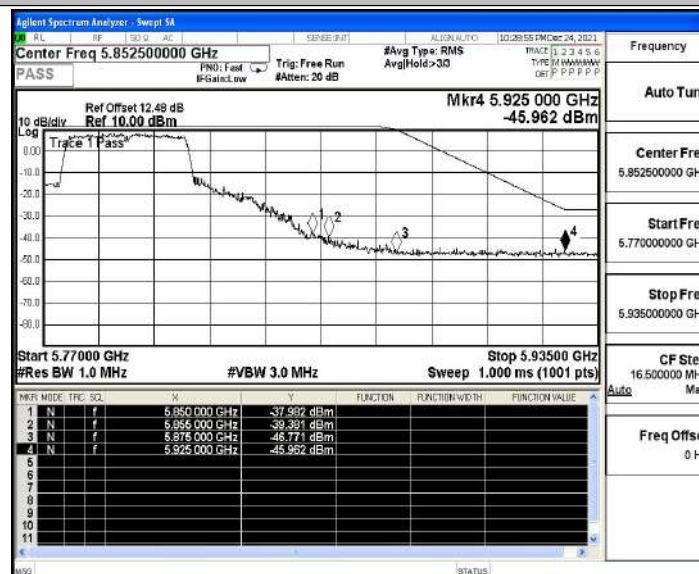
11AC20SISO_Ant1_High_5825_Peak



11AC40SISO_Ant1_Low_5755_Peak

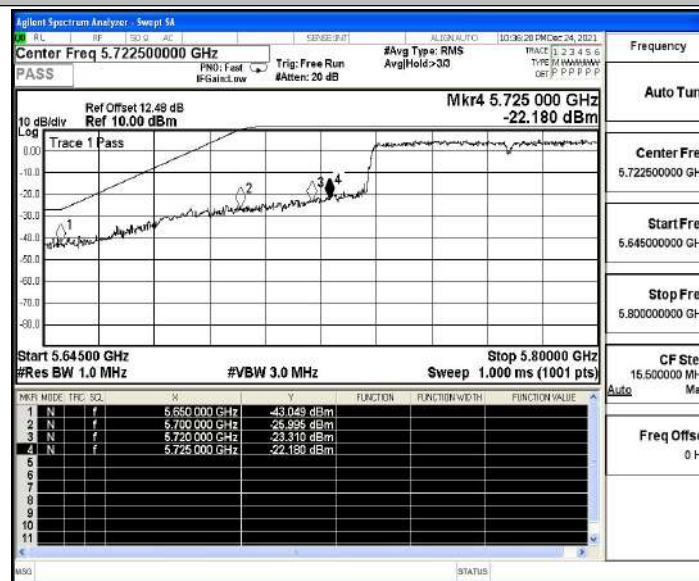


11AC40SISO_Ant1_High_5795_Peak

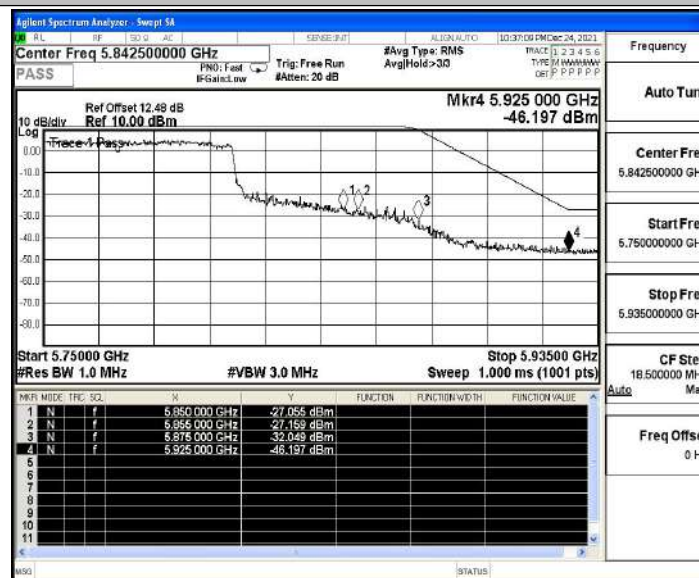




11AC80SISO_Ant1_Low_5775_Peak



11AC80SISO_Ant1_High_5775_Peak





E.5 Frequency Stability

Test Result

Voltage								
TestMode	Antenna	Frequen cy[MHz]	Voltage [Vdc]	Temper ature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5745	NV	NT	-60000	-10.443864	20	PASS
			LV	NT	-40000	-6.962576	20	PASS
			HV	NT	-60000	-10.443864	20	PASS
		5785	NV	NT	-60000	-10.371651	20	PASS
			LV	NT	-20000	-3.457217	20	PASS
			HV	NT	-60000	-10.371651	20	PASS
		5825	NV	NT	-20000	-3.433476	20	PASS
			LV	NT	-40000	-6.866953	20	PASS
			HV	NT	-20000	-3.433476	20	PASS
11N20SI SO	Ant1	5745	NV	NT	-60000	-10.443864	20	PASS
			LV	NT	-40000	-6.962576	20	PASS
			HV	NT	-20000	-3.481288	20	PASS
		5785	NV	NT	-40000	-6.914434	20	PASS
			LV	NT	-40000	-6.914434	20	PASS
			HV	NT	-40000	-6.914434	20	PASS
		5825	NV	NT	-40000	-6.866953	20	PASS
			LV	NT	-20000	-3.433476	20	PASS
			HV	NT	0	0	20	PASS
11N40SI SO	Ant1	5755	NV	NT	-80000	-13.900956	20	PASS
			LV	NT	-40000	-6.950478	20	PASS
			HV	NT	-40000	-6.950478	20	PASS
		5795	NV	NT	-40000	-6.902502	20	PASS
			LV	NT	-40000	-6.902502	20	PASS
			HV	NT	0	0	20	PASS
11AC20S ISO	Ant1	5745	NV	NT	-40000	-6.962576	20	PASS
			LV	NT	-40000	-6.962576	20	PASS
			HV	NT	-20000	-3.481288	20	PASS
		5785	NV	NT	-20000	-3.457217	20	PASS
			LV	NT	-40000	-6.914434	20	PASS
			HV	NT	-40000	-6.914434	20	PASS
		5825	NV	NT	-40000	-6.866953	20	PASS
			LV	NT	-40000	-6.866953	20	PASS
			HV	NT	-40000	-6.866953	20	PASS
11AC40S ISO	Ant1	5755	NV	NT	-80000	-13.900956	20	PASS
			LV	NT	-80000	-13.900956	20	PASS
			HV	NT	-40000	-6.950478	20	PASS



		5795	NV	NT	0	0	20	PASS
			LV	NT	-40000	-6.902502	20	PASS
			HV	NT	-80000	-13.805004	20	PASS
11AC80S ISO	Ant1	5775	NV	NT	-80000	-13.852814	20	PASS
			LV	NT	-80000	-13.852814	20	PASS
			HV	NT	-80000	-13.852814	20	PASS

Temperature								
TestMode	Antenna	Frequen cy[MHz]	Voltage [Vdc]	Temper ature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5745	NV	-30	-40000	-6.962576	20	PASS
			NV	-20	-60000	-10.443864	20	PASS
			NV	-10	-20000	-3.481288	20	PASS
			NV	0	-40000	-6.962576	20	PASS
			NV	10	-20000	-3.481288	20	PASS
			NV	20	-60000	-10.443864	20	PASS
			NV	30	-40000	-6.962576	20	PASS
			NV	40	-60000	-10.443864	20	PASS
		5785	NV	-30	-40000	-6.914434	20	PASS
			NV	-20	-60000	-10.371651	20	PASS
			NV	-10	-40000	-6.914434	20	PASS
			NV	0	-20000	-3.457217	20	PASS
			NV	10	-60000	-10.371651	20	PASS
			NV	20	-20000	-3.457217	20	PASS
			NV	30	-40000	-6.914434	20	PASS
			NV	40	-60000	-10.371651	20	PASS
		5825	NV	-30	-20000	-3.433476	20	PASS
			NV	-20	-40000	-6.866953	20	PASS
			NV	-10	-40000	-6.866953	20	PASS
			NV	0	-20000	-3.433476	20	PASS
			NV	10	-40000	-6.866953	20	PASS
			NV	20	-20000	-3.433476	20	PASS
			NV	30	-20000	-3.433476	20	PASS
			NV	40	-60000	-10.300429	20	PASS
11N20SI SO	Ant1	5745	NV	-30	-40000	-6.962576	20	PASS
			NV	-20	-40000	-6.962576	20	PASS
			NV	-10	-40000	-6.962576	20	PASS
			NV	0	-40000	-6.962576	20	PASS
			NV	10	-40000	-6.962576	20	PASS
			NV	20	-40000	-6.962576	20	PASS



			NV	30	-40000	-6.962576	20	PASS
			NV	40	-40000	-6.962576	20	PASS
			NV	50	-40000	-6.962576	20	PASS
		5785	NV	-30	-60000	-10.371651	20	PASS
			NV	-20	-40000	-6.914434	20	PASS
			NV	-10	-40000	-6.914434	20	PASS
			NV	0	-40000	-6.914434	20	PASS
			NV	10	-40000	-6.914434	20	PASS
			NV	20	-40000	-6.914434	20	PASS
			NV	30	-40000	-6.914434	20	PASS
			NV	40	-20000	-3.457217	20	PASS
			NV	50	-20000	-3.457217	20	PASS
		5825	NV	-30	-40000	-6.866953	20	PASS
			NV	-20	-80000	-13.733906	20	PASS
			NV	-10	-40000	-6.866953	20	PASS
			NV	0	-40000	-6.866953	20	PASS
			NV	10	-20000	-3.433476	20	PASS
			NV	20	-40000	-6.866953	20	PASS
			NV	30	-40000	-6.866953	20	PASS
			NV	40	-20000	-3.433476	20	PASS
			NV	50	-40000	-6.866953	20	PASS
11N40SI SO	Ant1	5755	NV	-30	-80000	-13.900956	20	PASS
			NV	-20	-40000	-6.950478	20	PASS
			NV	-10	-80000	-13.900956	20	PASS
			NV	0	-40000	-6.950478	20	PASS
			NV	10	-80000	-13.900956	20	PASS
			NV	20	-40000	-6.950478	20	PASS
			NV	30	-40000	-6.950478	20	PASS
			NV	40	-80000	-13.900956	20	PASS
			NV	50	-80000	-13.900956	20	PASS
		5795	NV	-30	-80000	-13.805004	20	PASS
			NV	-20	-40000	-6.902502	20	PASS
			NV	-10	0	0	20	PASS
			NV	0	-80000	-13.805004	20	PASS
			NV	10	-40000	-6.902502	20	PASS
			NV	20	-40000	-6.902502	20	PASS
			NV	30	-40000	-6.902502	20	PASS
			NV	40	-40000	-6.902502	20	PASS
			NV	50	0	0	20	PASS
11AC20S ISO	Ant1	5745	NV	-30	-40000	-6.962576	20	PASS
			NV	-20	-40000	-6.962576	20	PASS
			NV	-10	-40000	-6.962576	20	PASS
			NV	0	-40000	-6.962576	20	PASS



			NV	10	-40000	-6.962576	20	PASS
			NV	20	-20000	-3.481288	20	PASS
			NV	30	-40000	-6.962576	20	PASS
			NV	40	-40000	-6.962576	20	PASS
			NV	50	-40000	-6.962576	20	PASS
		5785	NV	-30	-40000	-6.914434	20	PASS
			NV	-20	-40000	-6.914434	20	PASS
			NV	-10	-40000	-6.914434	20	PASS
			NV	0	-40000	-6.914434	20	PASS
			NV	10	-40000	-6.914434	20	PASS
			NV	20	-20000	-3.457217	20	PASS
			NV	30	-40000	-6.914434	20	PASS
			NV	40	-40000	-6.914434	20	PASS
			NV	50	-20000	-3.457217	20	PASS
		5825	NV	-30	-40000	-6.866953	20	PASS
			NV	-20	-40000	-6.866953	20	PASS
			NV	-10	-40000	-6.866953	20	PASS
			NV	0	-20000	-3.433476	20	PASS
			NV	10	-40000	-6.866953	20	PASS
			NV	20	-40000	-6.866953	20	PASS
			NV	30	-40000	-6.866953	20	PASS
			NV	40	-20000	-3.433476	20	PASS
			NV	50	-40000	-6.866953	20	PASS
11AC40S ISO	Ant1	5755	NV	-30	-40000	-6.950478	20	PASS
			NV	-20	0	0	20	PASS
			NV	-10	0	0	20	PASS
			NV	0	-40000	-6.950478	20	PASS
			NV	10	0	0	20	PASS
			NV	20	-40000	-6.950478	20	PASS
			NV	30	-40000	-6.950478	20	PASS
			NV	40	-40000	-6.950478	20	PASS
			NV	50	-80000	-13.900956	20	PASS
		5795	NV	-30	-40000	-6.902502	20	PASS
			NV	-20	-40000	-6.902502	20	PASS
			NV	-10	-40000	-6.902502	20	PASS
			NV	0	-80000	-13.805004	20	PASS
			NV	10	-40000	-6.902502	20	PASS
			NV	20	-40000	-6.902502	20	PASS
			NV	30	0	0	20	PASS
			NV	40	0	0	20	PASS
			NV	50	0	0	20	PASS
11AC80S ISO	Ant1	5775	NV	-30	-80000	-13.852814	20	PASS
			NV	-20	-80000	-13.852814	20	PASS



			NV	-10	-80000	-13.852814	20	PASS
			NV	0	-80000	-13.852814	20	PASS
			NV	10	-80000	-13.852814	20	PASS
			NV	20	0	0	20	PASS
			NV	30	-80000	-13.852814	20	PASS
			NV	40	-80000	-13.852814	20	PASS
			NV	50	-80000	-13.852814	20	PASS



E.6 Duty Cycle

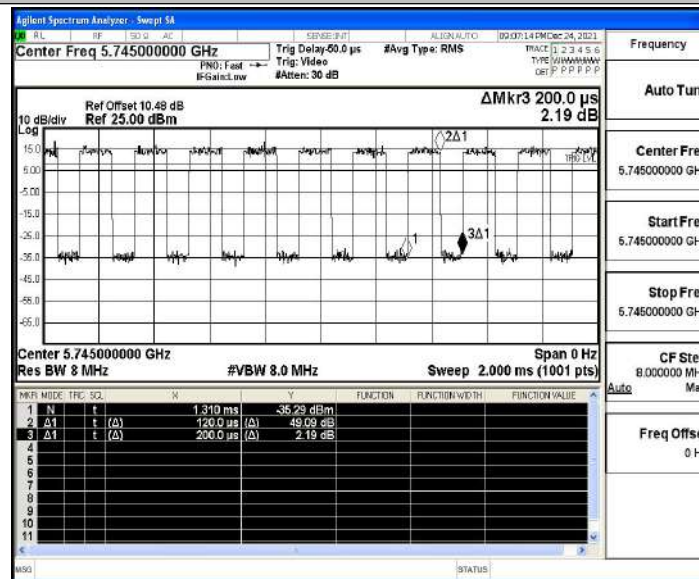
Test Result

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5745	0.12	0.20	60.00
		5785	0.11	0.20	55.00
		5825	0.12	0.20	60.00
11N20SISO	Ant1	5745	0.12	0.20	60.00
		5785	0.12	0.20	60.00
		5825	0.12	0.20	60.00
11N40SISO	Ant1	5755	0.08	0.16	50.00
		5795	0.08	0.16	50.00
11AC20SISO	Ant1	5745	0.13	0.21	61.90
		5785	0.13	0.21	61.90
		5825	0.13	0.21	61.90
11AC40SISO	Ant1	5755	0.09	0.17	52.94
		5795	0.08	0.16	50.00
11AC80SISO	Ant1	5775	0.06	0.14	42.86

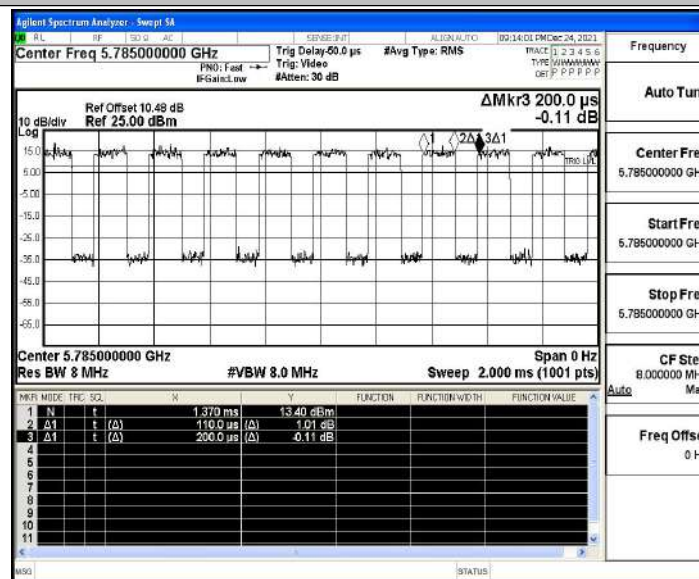


Test Graphs

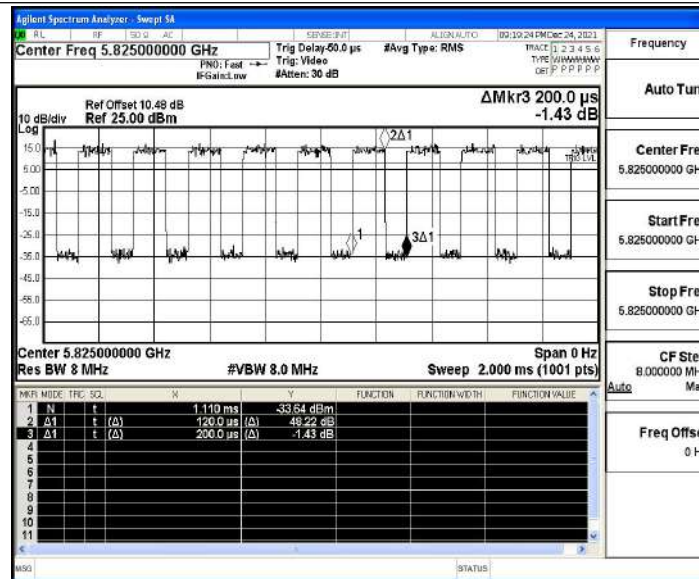
11A_Ant1_5745



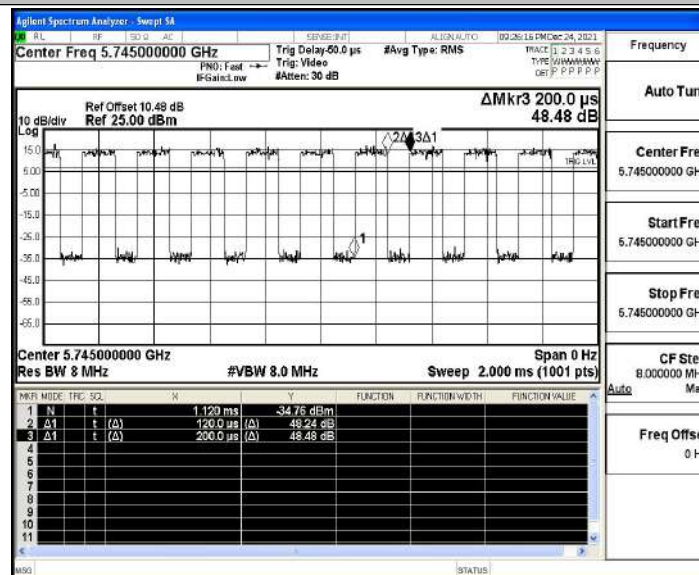
11A_Ant1_5785



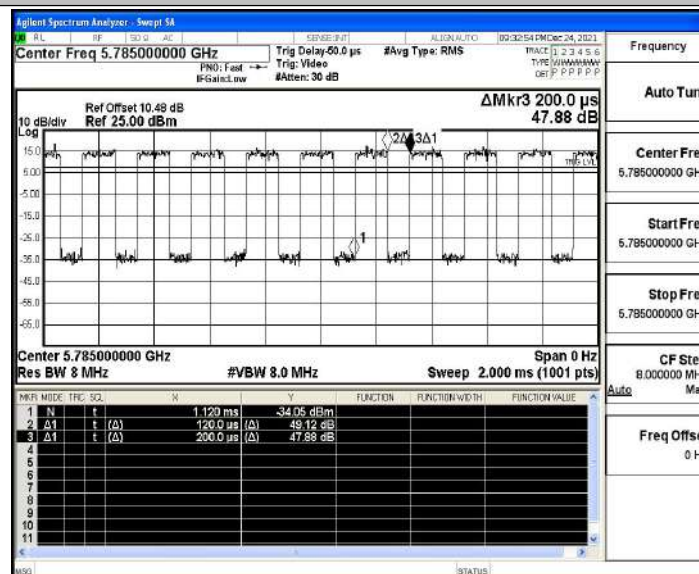
11A_Ant1_5825



11N20SISO_Ant1_5745

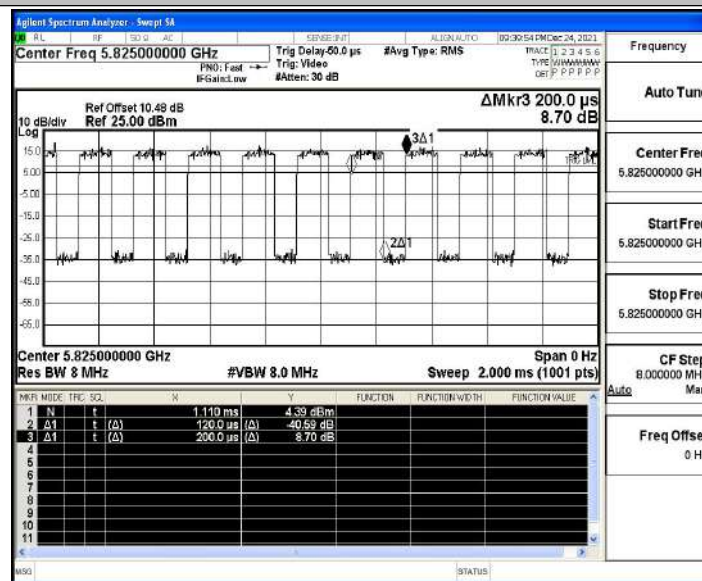


11N20SISO_Ant1_5785

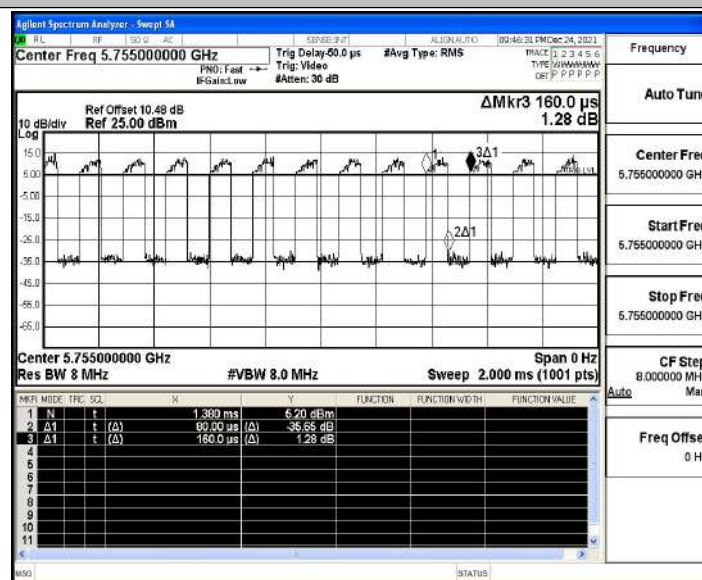




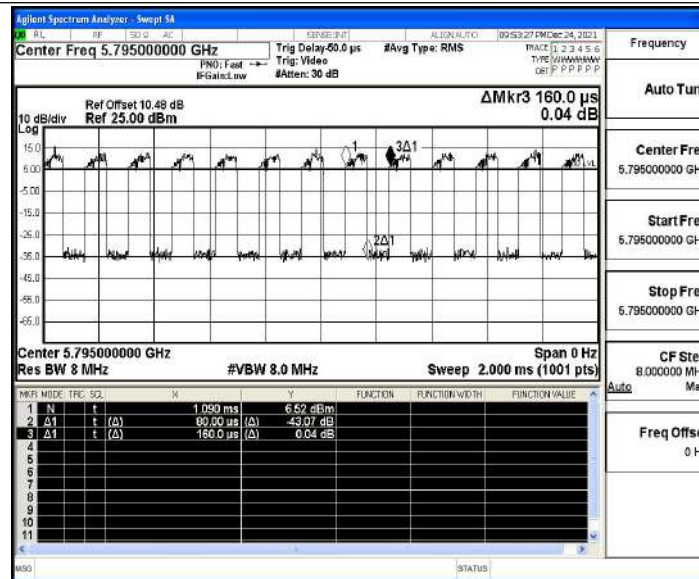
11N20SISO_Ant1_5825



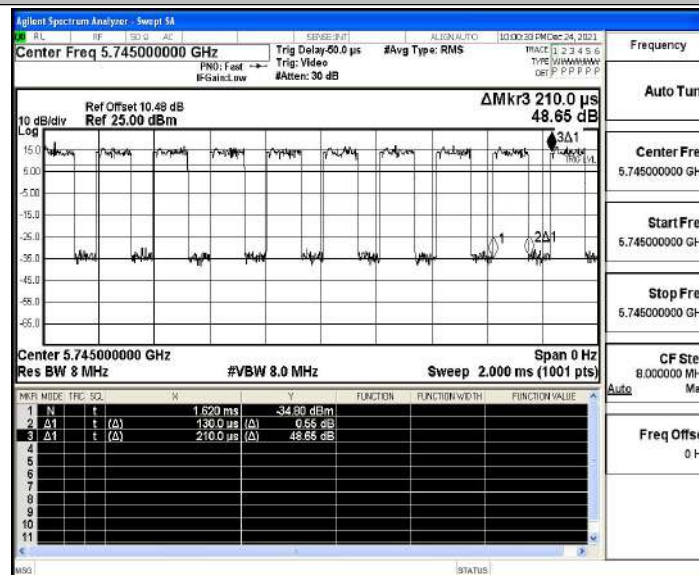
11N40SISO_Ant1_5755



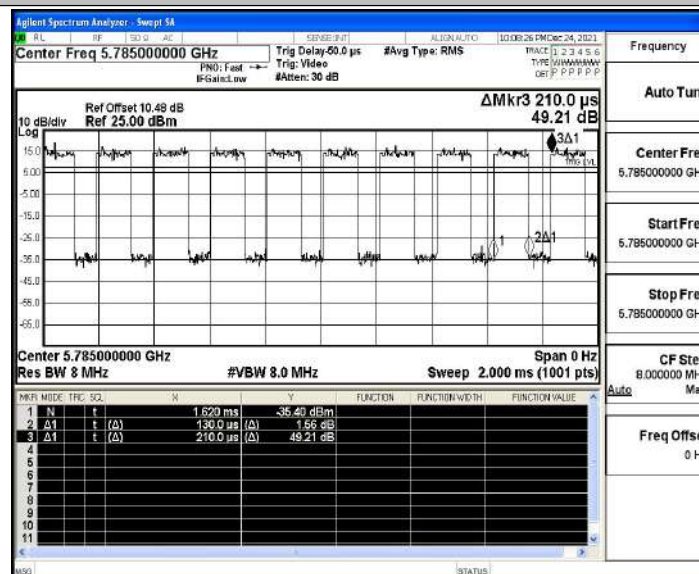
11N40SISO_Ant1_5795

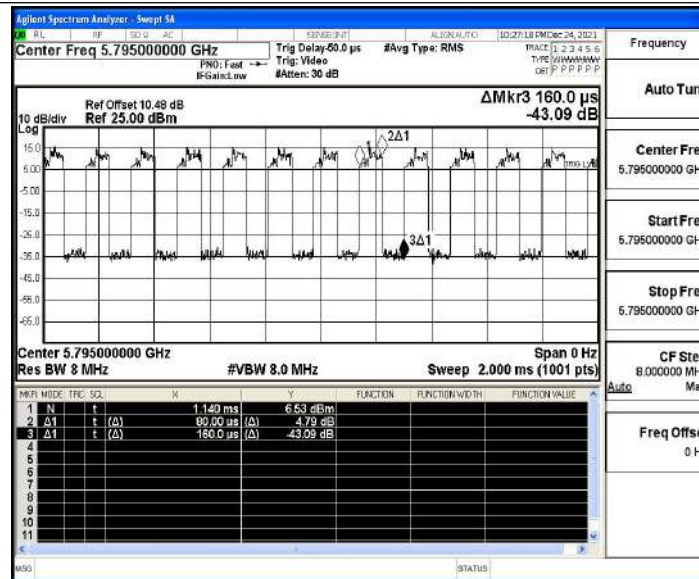


11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785





11AC80SISO_Ant1_5775

