



Appendix E

RF Test Data for 5.8G WIFI (Conducted Measurement)

Product Name: HyTabPlus

Trade Mark: HYUNDAI

Test Model: HT10LB3MBKWW

Environmental Conditions

Temperature:	21.5 ° C
Relative Humidity:	52.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Ken He
Supervised by:	Li Huan



Appendix E.1: 6dB Bandwidth

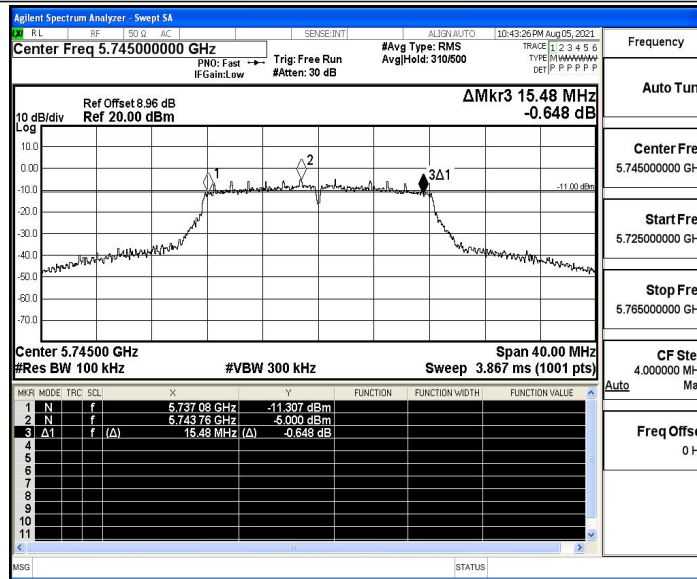
Test Result

TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.480	5737.080	5752.560	0.5	PASS
		5785	15.160	5777.440	5792.600	0.5	PASS
		5825	15.600	5817.360	5832.960	0.5	PASS
11N20SISO	Ant1	5745	16.160	5736.440	5752.600	0.5	PASS
		5785	15.760	5777.400	5793.160	0.5	PASS
		5825	15.440	5817.120	5832.560	0.5	PASS
11N40SISO	Ant1	5755	35.360	5737.320	5772.680	0.5	PASS
		5795	35.360	5777.320	5812.680	0.5	PASS

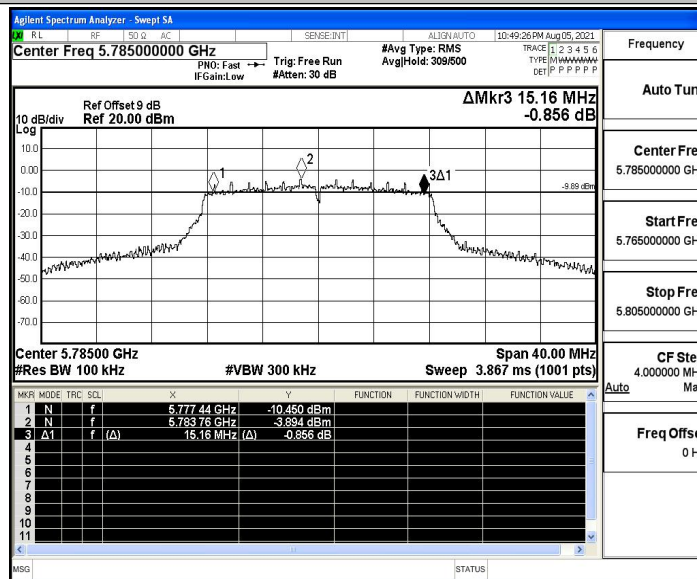


Test Graphs

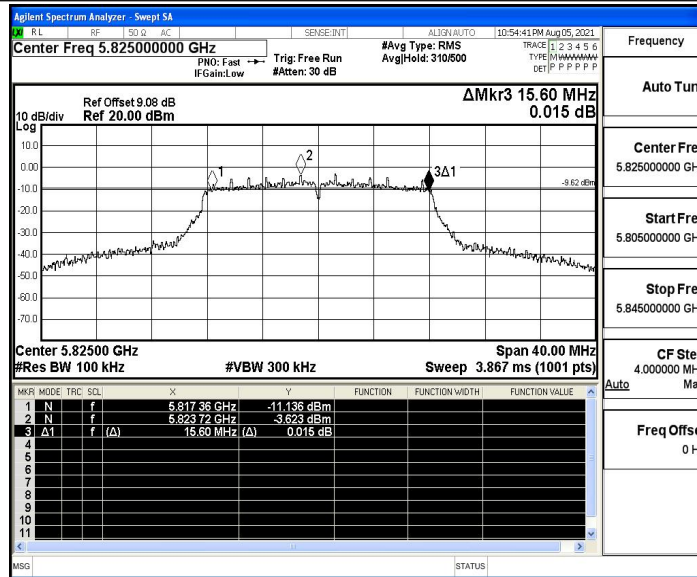
11A_Ant1_5745



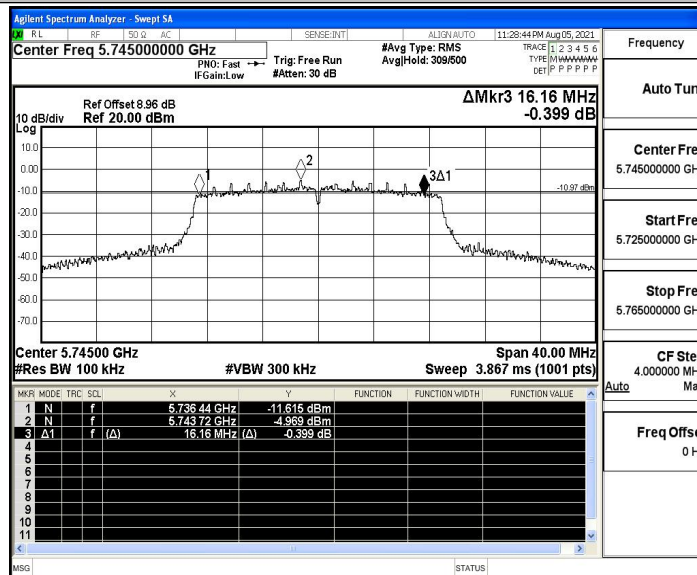
11A_Ant1_5785



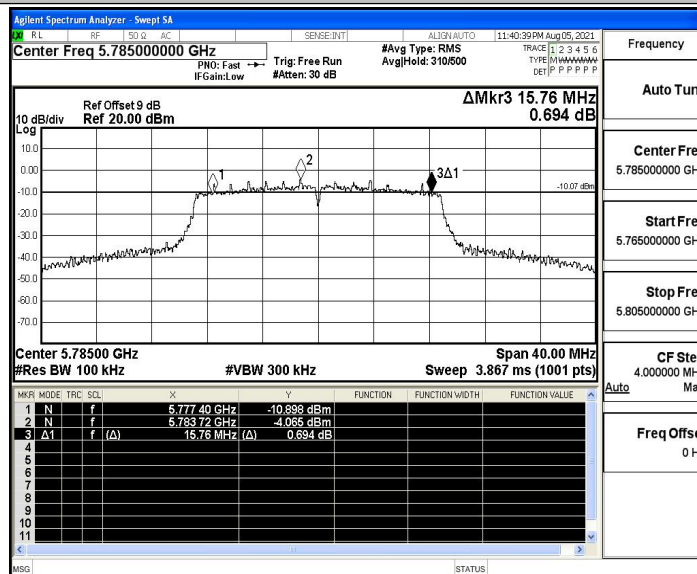
11A_Ant1_5825



11N20SISO_Ant1_5745

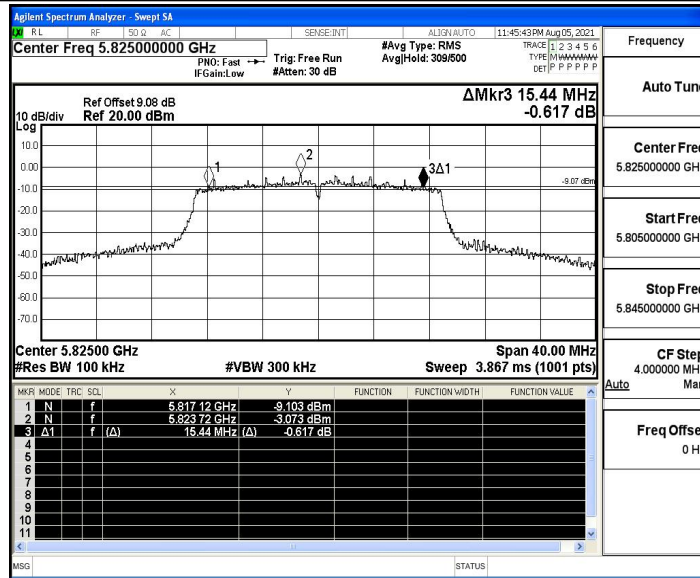


11N20SISO_Ant1_5785

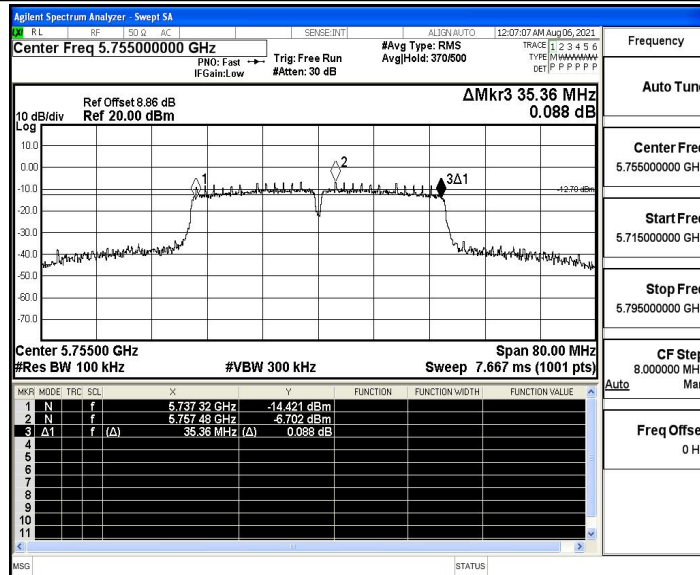




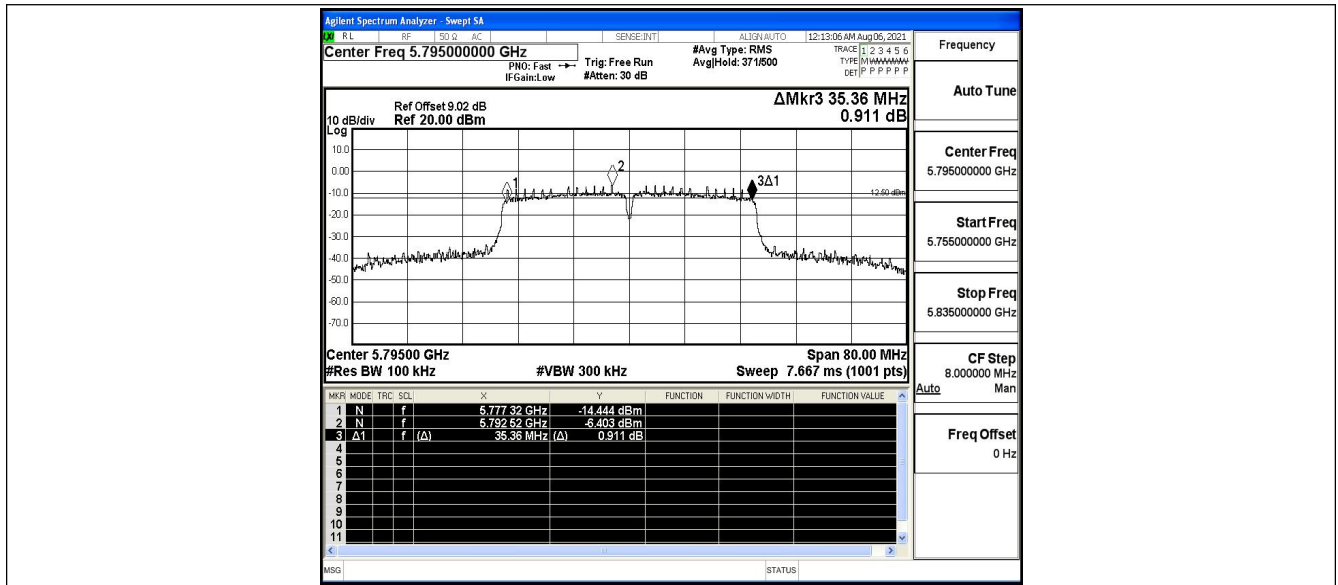
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795





Appendix E.2: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5745	12.84	≤ 30	PASS
		5785	12.86	≤ 30	PASS
		5825	12.87	≤ 30	PASS
11N20SISO	Ant1	5745	12.92	≤ 30	PASS
		5785	12.89	≤ 30	PASS
		5825	12.96	≤ 30	PASS
11N40SISO	Ant1	5755	12.69	≤ 30	PASS
		5795	12.97	≤ 30	PASS

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



Appendix E.3: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-0.28	≤ 30	PASS
		5785	-0.19	≤ 30	PASS
		5825	-0.2	≤ 30	PASS
11N20SISO	Ant1	5745	-0.01	≤ 30	PASS
		5785	0.03	≤ 30	PASS
		5825	-0.3	≤ 30	PASS
11N40SISO	Ant1	5755	-3.41	≤ 30	PASS
		5795	-3.12	≤ 30	PASS

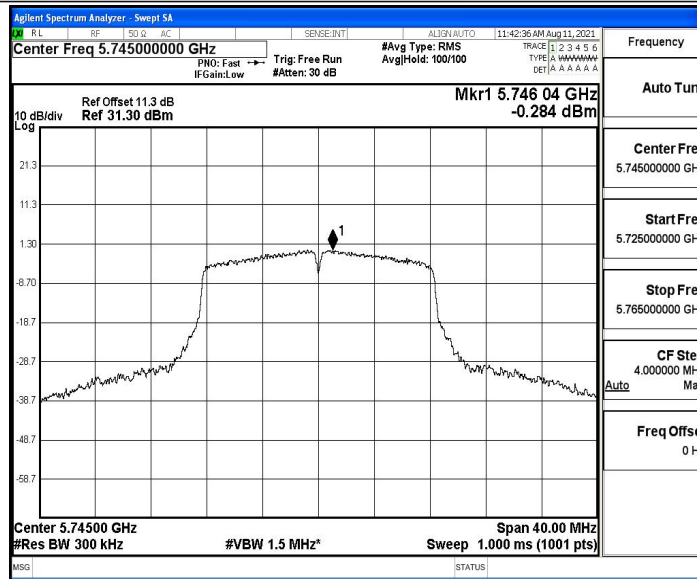
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

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

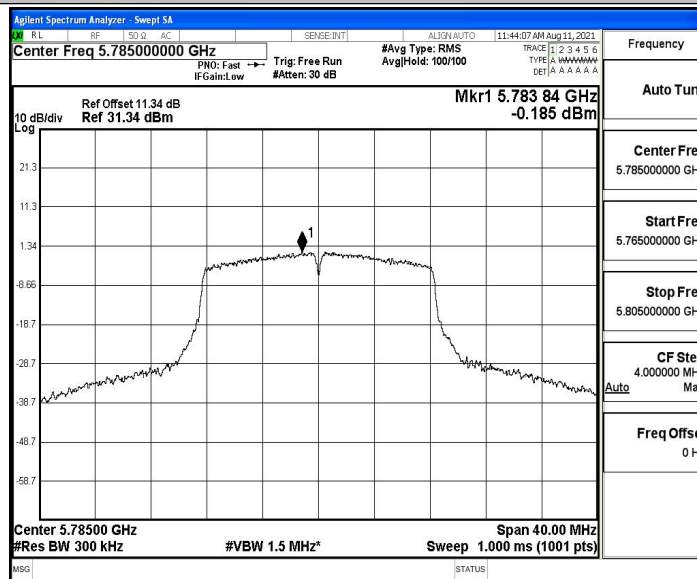


Test Graphs

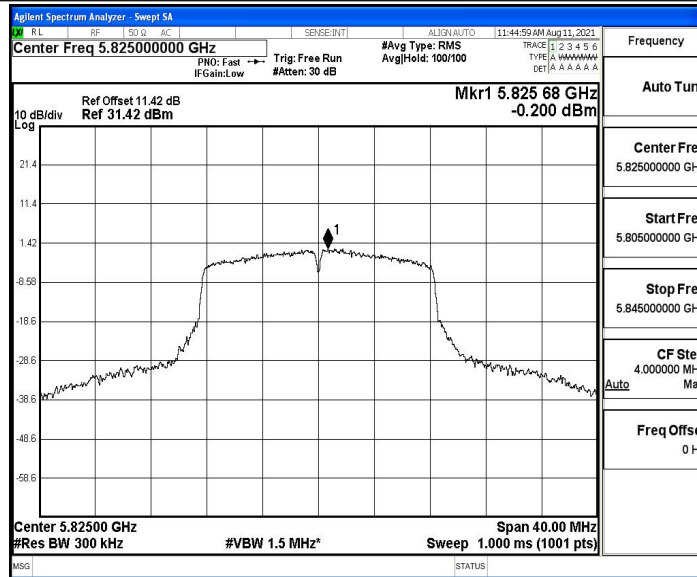
11A_Ant1_5745



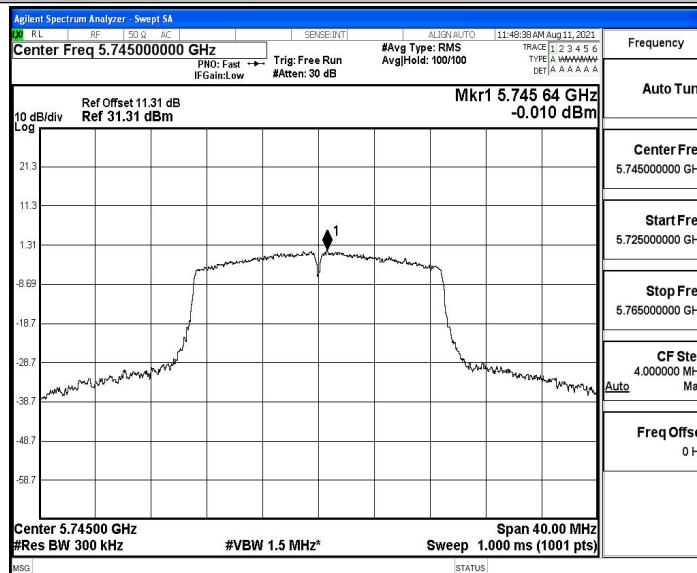
11A_Ant1_5785



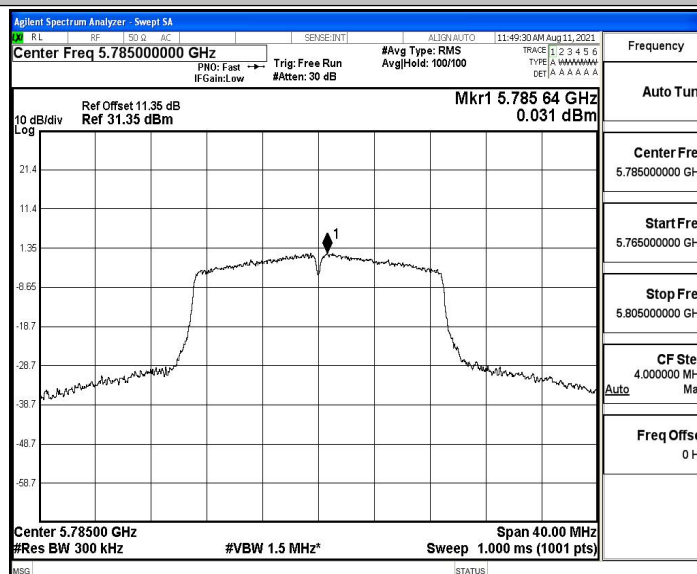
11A_Ant1_5825



11N20SISO_Ant1_5745

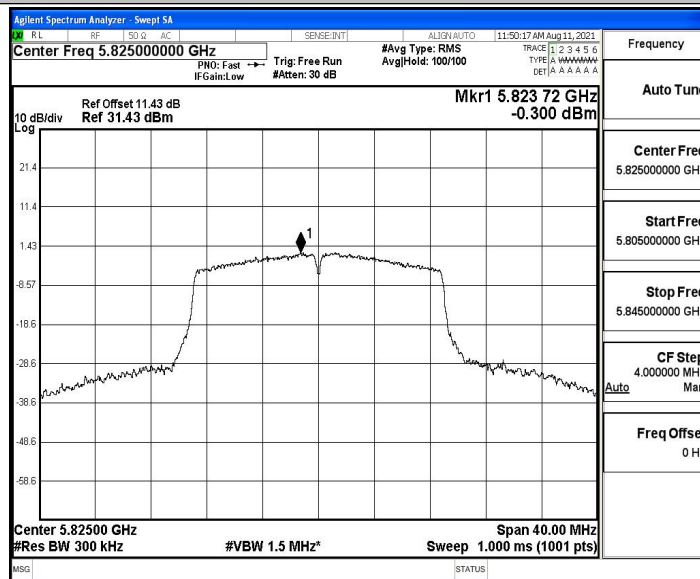


11N20SISO_Ant1_5785

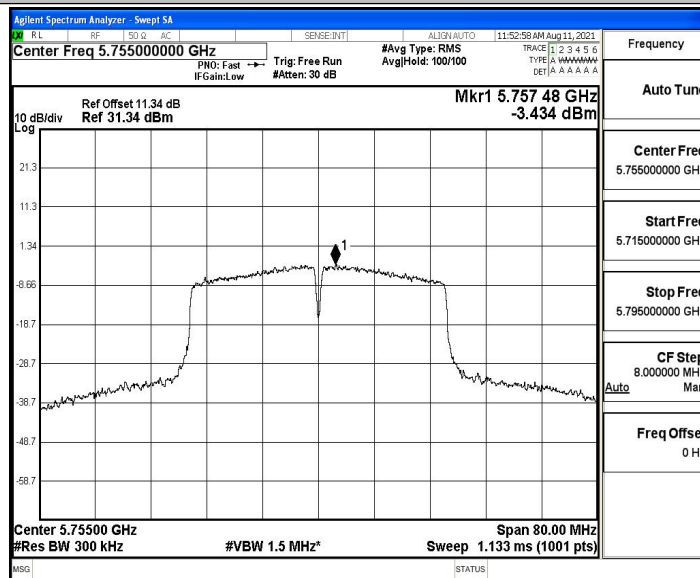




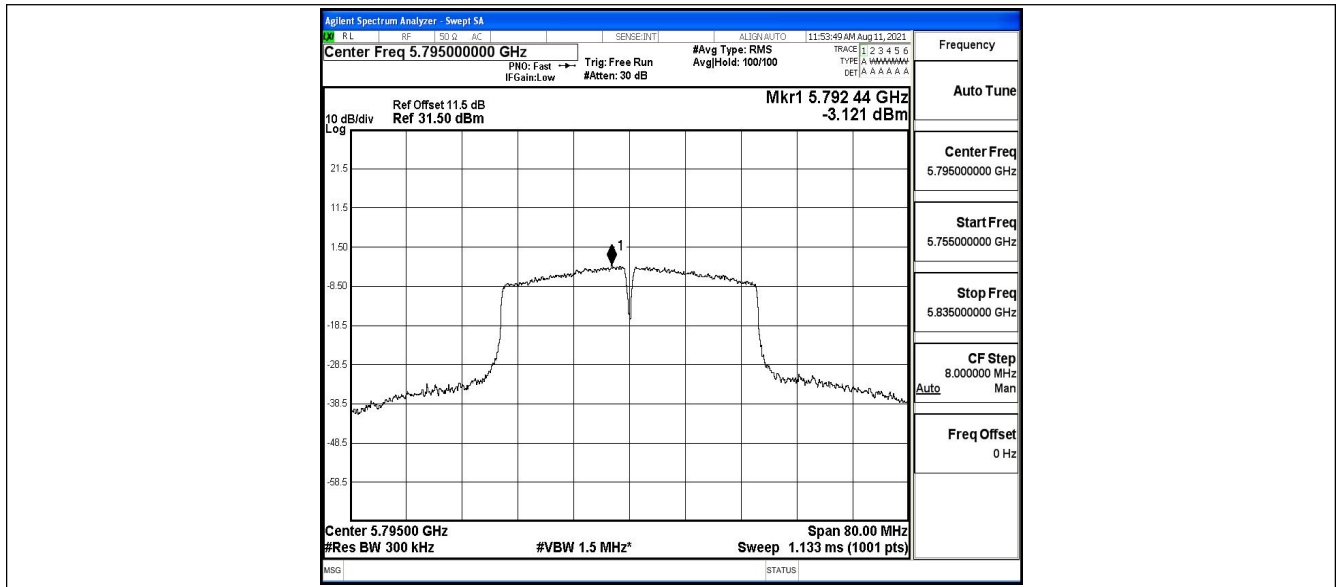
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795





Appendix E.4: Emissions in Restricted Bands

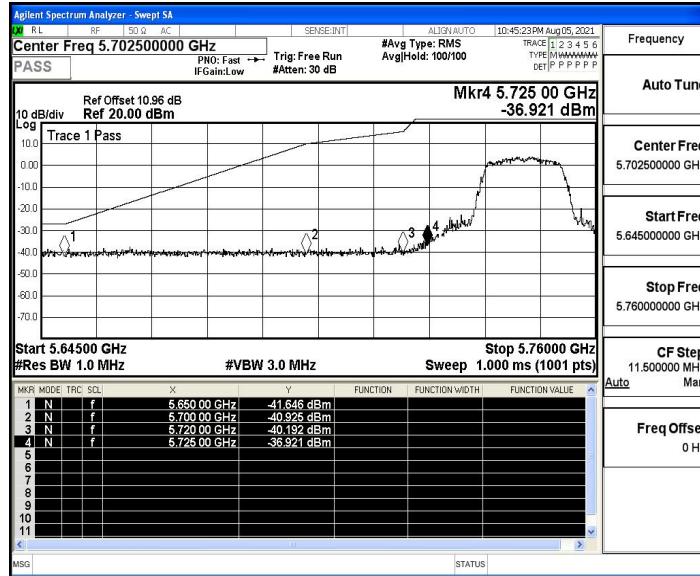
Test Result

TestMode	Antenna	ChannelName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-41.646	≤-27.00	---	---	PASS
				Peak	5700.000	-40.93	≤10.00	---	---	PASS
				Peak	5720.000	-40.19	≤15.60	---	---	PASS
				Peak	5725.000	-36.92	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-38.721	≤15.60	---	---	PASS
				Peak	5855.000	-39.48	≤27.00	---	---	PASS
				Peak	5875.000	-39.75	≤15.60	---	---	PASS
				Peak	5925.000	-40.5	≤10.00	---	---	PASS
11N20SI SO	Ant1	Low	5745	Peak	5650.000	-39.56	≤-27.00	---	---	PASS
				Peak	5700.000	-40.17	≤10.00	---	---	PASS
				Peak	5720.000	-39.69	≤15.60	---	---	PASS
				Peak	5725.000	-31.42	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-37.36	≤15.60	---	---	PASS
				Peak	5855.000	-38.38	≤27.00	---	---	PASS
				Peak	5875.000	-39.76	≤15.60	---	---	PASS
				Peak	5925.000	-40.14	≤10.00	---	---	PASS
11N40SI SO	Ant1	Low	5755	Peak	5650.000	-40.609	≤-27.00	---	---	PASS
				Peak	5700.000	-40.28	≤10.00	---	---	PASS
				Peak	5720.000	-31.11	≤15.60	---	---	PASS
				Peak	5725.000	-30.51	≤27.00	---	---	PASS
		High	5795	Peak	5850.000	-39.145	≤15.60	---	---	PASS
				Peak	5855.000	-39.79	≤27.00	---	---	PASS
				Peak	5875.000	-40.92	≤15.60	---	---	PASS
				Peak	5925.000	-39.08	≤10.00	---	---	PASS

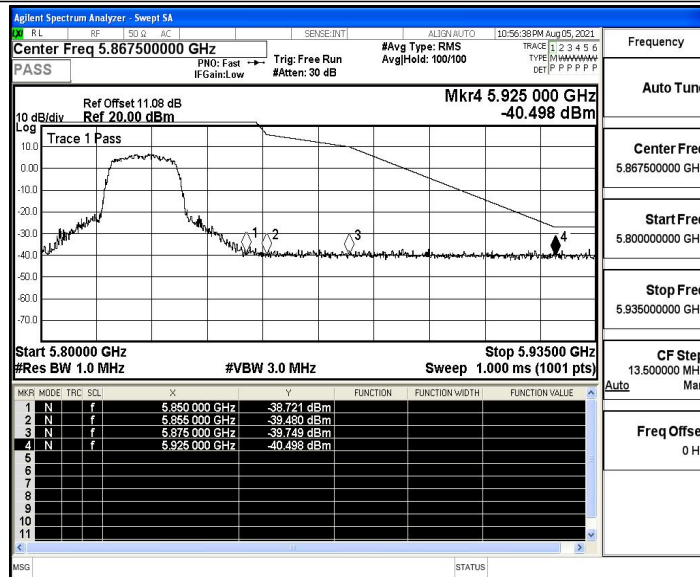


Test Graphs

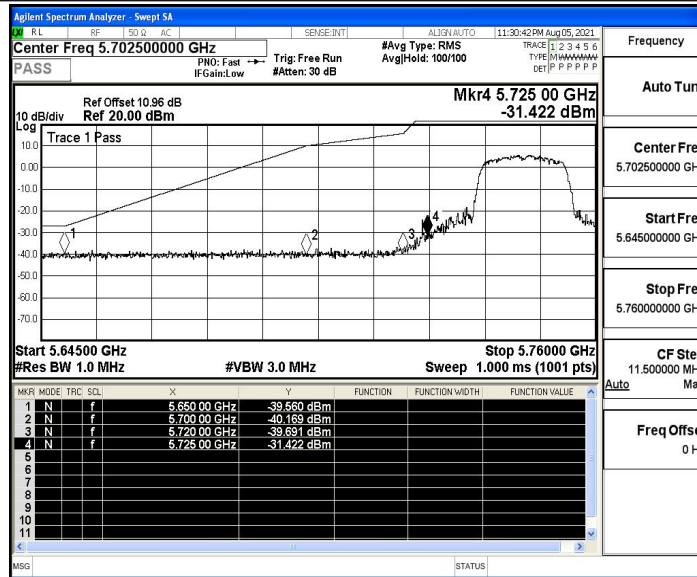
11A_Ant1_Low_5745_Peak



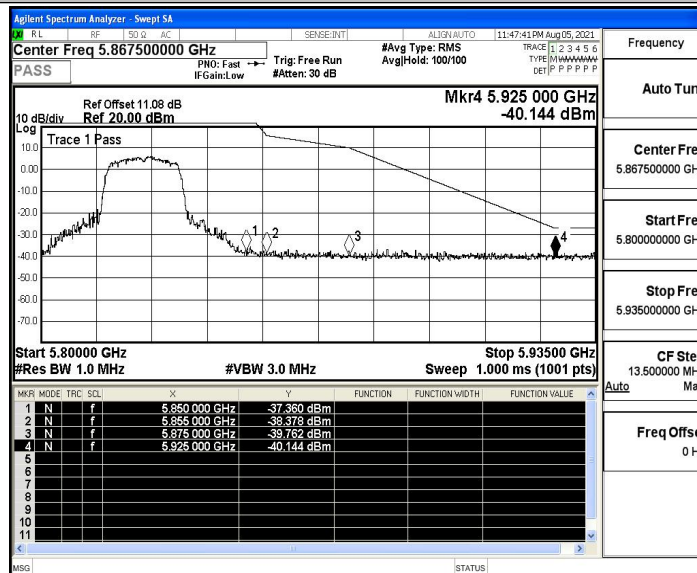
11A_Ant1_High_5825_Peak



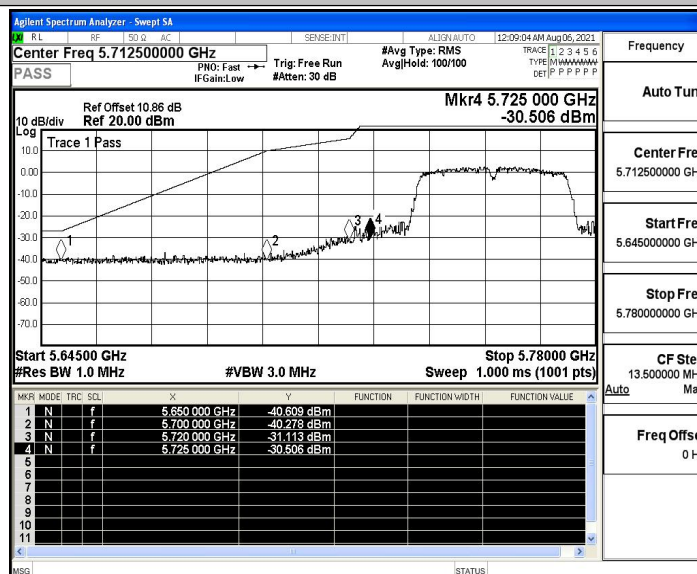
11N20SISO_Ant1_Low_5745_Peak



11N20SISO_Ant1_High_5825_Peak

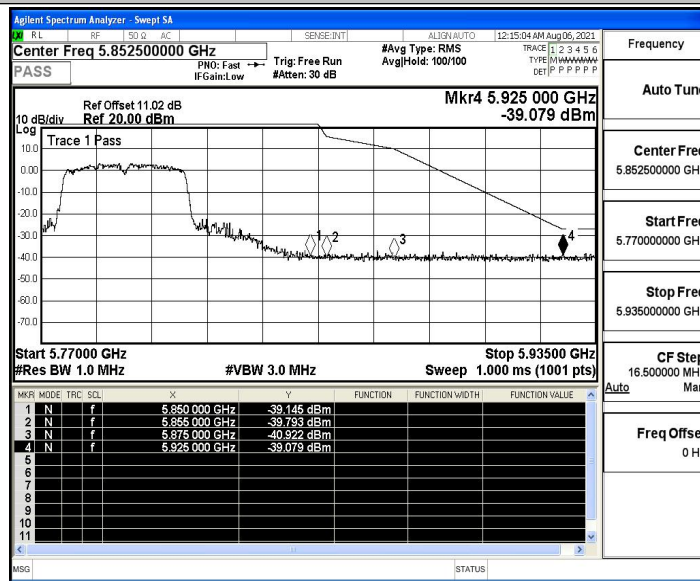


11N40SISO_Ant1_Low_5755_Peak





11N40SISO_Ant1_High_5795_Peak





Appendix E.5: Frequency Stability

Test Result

Voltage								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5745	NV	NT	-9000	-1.56658	20	PASS
			LV	NT	-8000	-1.392515	20	PASS
			HV	NT	-9000	-1.56658	20	PASS
		5785	NV	NT	-9000	-1.555748	20	PASS
			LV	NT	-9000	-1.555748	20	PASS
			HV	NT	-10000	-1.728608	20	PASS
		5825	NV	NT	-12000	-2.060086	20	PASS
			LV	NT	-11000	-1.888412	20	PASS
			HV	NT	-11000	-1.888412	20	PASS
11N20SISO	Ant1	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	-12000	-2.060086	20	PASS
			LV	NT	-12000	-2.060086	20	PASS
			HV	NT	-12000	-2.060086	20	PASS
11N40SISO	Ant1	5755	NV	NT	-9000	-1.563858	20	PASS
			LV	NT	-9000	-1.563858	20	PASS
			HV	NT	-9000	-1.563858	20	PASS
		5795	NV	NT	-9000	-1.553063	20	PASS
			LV	NT	-9000	-1.553063	20	PASS
			HV	NT	-9000	-1.553063	20	PASS

Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5745	NV	-30	-8000	-1.392515	20	PASS
			NV	-20	-8000	-1.392515	20	PASS
			NV	-10	-9000	-1.56658	20	PASS
			NV	0	-8000	-1.392515	20	PASS
			NV	10	-9000	-1.56658	20	PASS
			NV	20	-9000	-1.56658	20	PASS
			NV	30	-9000	-1.56658	20	PASS
			NV	40	-9000	-1.56658	20	PASS



			NV	50	-9000	-1.56658	20	PASS
		5785	NV	-30	-9000	-1.555748	20	PASS
			NV	-20	-9000	-1.555748	20	PASS
			NV	-10	-9000	-1.555748	20	PASS
			NV	0	-10000	-1.728608	20	PASS
			NV	10	-10000	-1.728608	20	PASS
			NV	20	-10000	-1.728608	20	PASS
			NV	30	-10000	-1.728608	20	PASS
			NV	40	-10000	-1.728608	20	PASS
			NV	50	-10000	-1.728608	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	-11000	-1.888412	20	PASS
			NV	20	-11000	-1.888412	20	PASS
			NV	30	-11000	-1.888412	20	PASS
			NV	40	-11000	-1.888412	20	PASS
11N20SISO	Ant1	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	-10000	-1.740644	20	PASS
			NV	30	-10000	-1.740644	20	PASS
			NV	40	-10000	-1.740644	20	PASS
		5785	NV	50	-10000	-1.740644	20	PASS
			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	-10000	-1.728608	20	PASS
			NV	40	-11000	-1.901469	20	PASS
			NV	50	-11000	-1.901469	20	PASS
		5825	NV	-30	-12000	-2.060086	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	-11000	-1.888412	20	PASS
			NV	20	-11000	-1.888412	20	PASS



			NV	30	-11000	-1.888412	20	PASS
			NV	40	-11000	-1.888412	20	PASS
			NV	50	-11000	-1.888412	20	PASS
11N40SISO	Ant1	5755	NV	-30	-9000	-1.563858	20	PASS
			NV	-20	-9000	-1.563858	20	PASS
			NV	-10	-9000	-1.563858	20	PASS
			NV	0	-9000	-1.563858	20	PASS
			NV	10	-9000	-1.563858	20	PASS
			NV	20	-9000	-1.563858	20	PASS
			NV	30	-9000	-1.563858	20	PASS
			NV	40	-9000	-1.563858	20	PASS
			NV	50	-9000	-1.563858	20	PASS
		5795	NV	-30	-9000	-1.553063	20	PASS
			NV	-20	-9000	-1.553063	20	PASS
			NV	-10	-9000	-1.553063	20	PASS
			NV	0	-9000	-1.553063	20	PASS
			NV	10	-9000	-1.553063	20	PASS
			NV	20	-9000	-1.553063	20	PASS
			NV	30	-9000	-1.553063	20	PASS
			NV	40	-9000	-1.553063	20	PASS
			NV	50	-9000	-1.553063	20	PASS



Appendix E.6: Duty Cycle

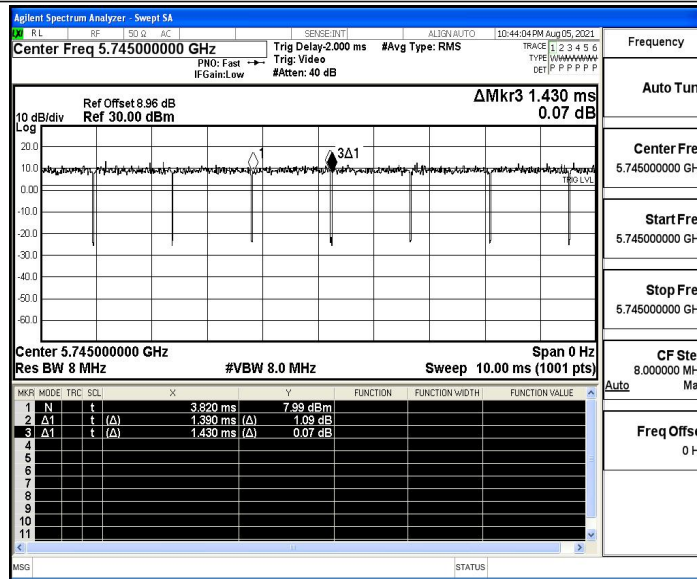
Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11A	Ant1	5745	1.39	1.43	97.20	---	PASS
		5785	1.39	1.43	97.20	---	PASS
		5825	1.39	1.43	97.20	---	PASS
11N20SISO	Ant1	5745	1.30	1.34	97.01	---	PASS
		5785	1.30	1.34	97.01	---	PASS
		5825	1.30	1.34	97.01	---	PASS
11N40SISO	Ant1	5755	0.64	0.68	94.12	---	PASS
		5795	0.64	0.68	94.12	---	PASS

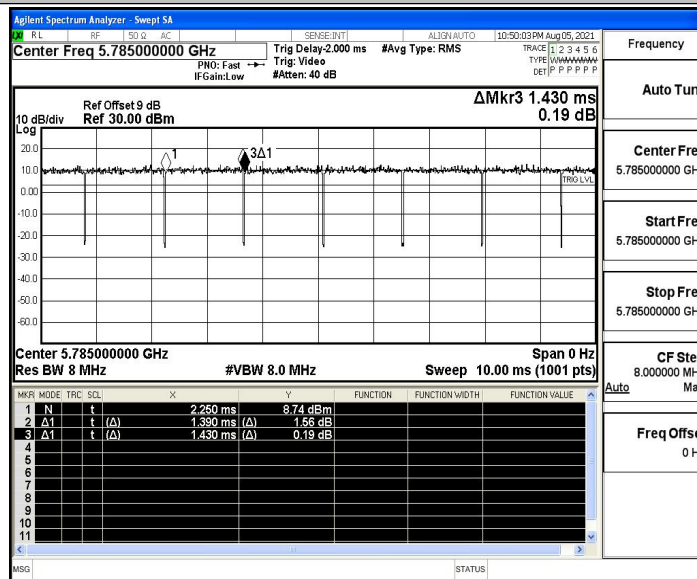


Test Graphs

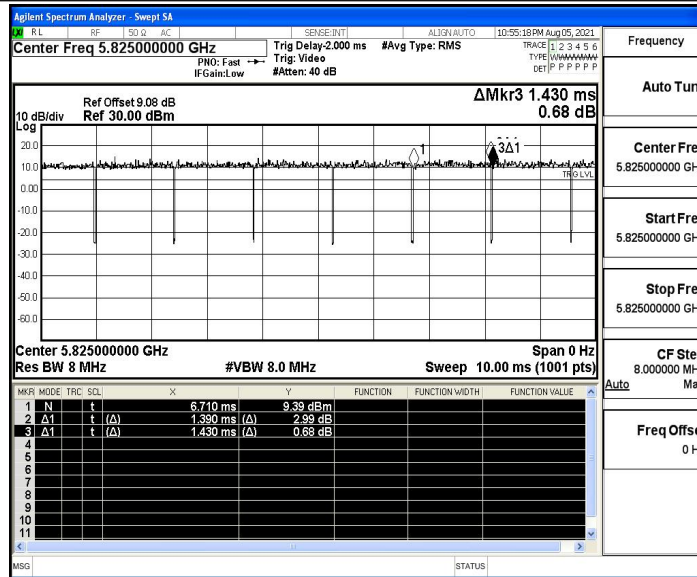
11A_Ant1_5745



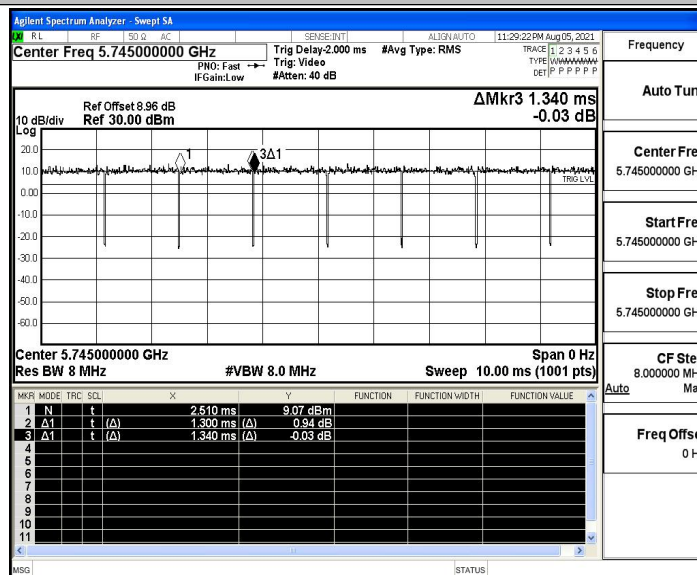
11A_Ant1_5785



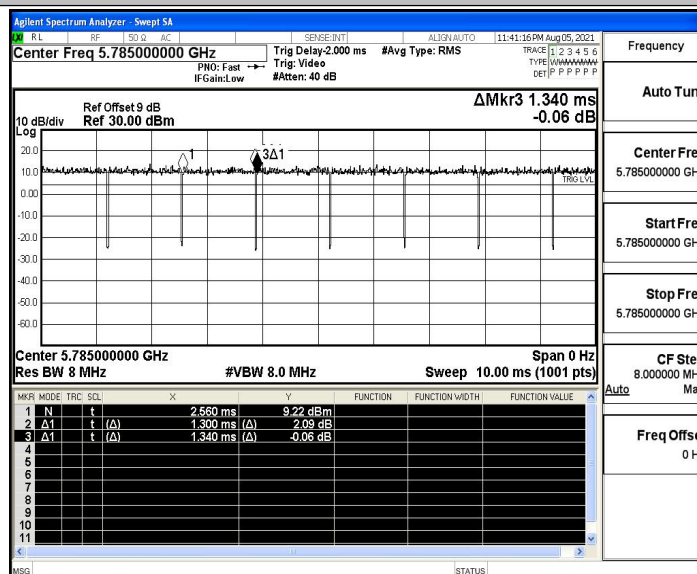
11A_Ant1_5825



11N20SISO_Ant1_5745

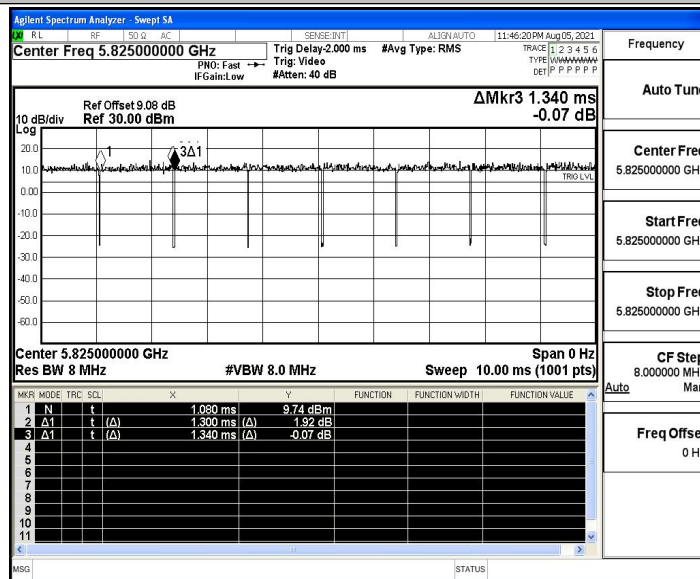


11N20SISO_Ant1_5785

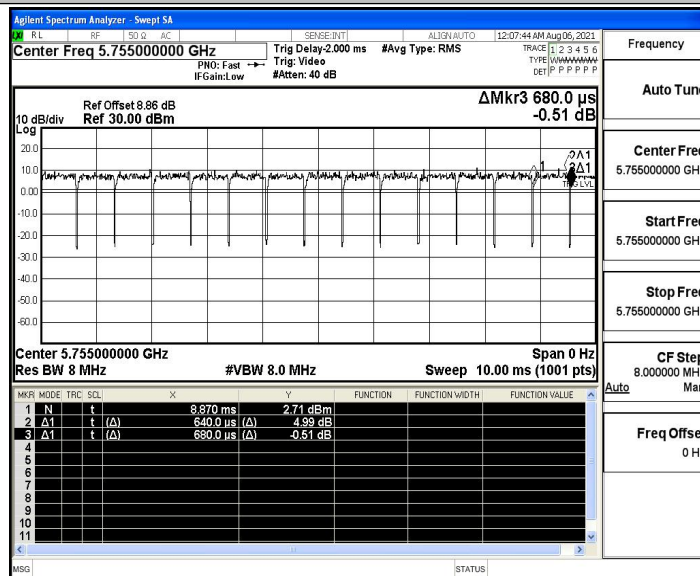




11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

