



Appendix E

RF Test Data for 5.8G WIFI (Conducted Measurement)

Product Name: Mini Projector

Test Model: D3-H700

Environmental Conditions

Temperature:	23.7℃
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Monkey Li
Supervised by:	Li Huan



E.1 Min emission bandwidth

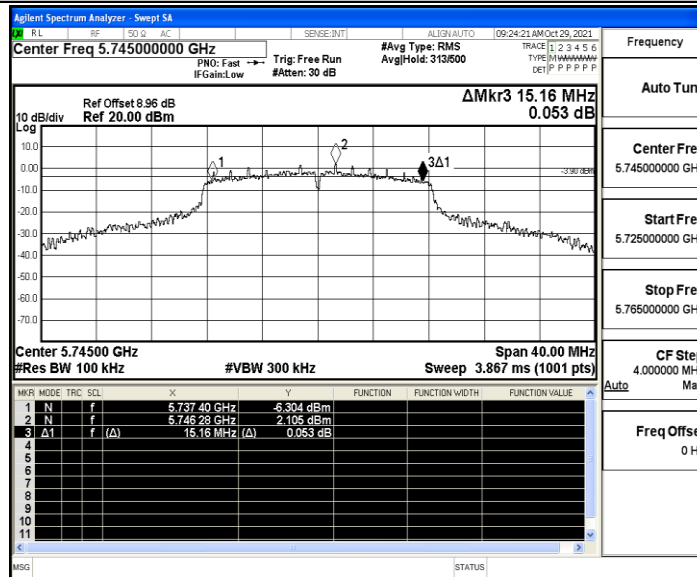
Test Result

TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.160	5737.400	5752.560	0.5	PASS
		5785	15.200	5777.400	5792.600	0.5	PASS
		5825	15.160	5817.440	5832.600	0.5	PASS
11N20SISO	Ant1	5745	15.160	5737.400	5752.560	0.5	PASS
		5785	15.080	5777.440	5792.520	0.5	PASS
		5825	15.120	5817.440	5832.560	0.5	PASS
11N40SISO	Ant1	5755	35.200	5737.400	5772.600	0.5	PASS
		5795	35.200	5777.400	5812.600	0.5	PASS
11AC20SISO	Ant1	5745	15.200	5737.400	5752.600	0.5	PASS
		5785	15.160	5777.400	5792.560	0.5	PASS
		5825	15.160	5817.440	5832.600	0.5	PASS
11AC40SISO	Ant1	5755	35.200	5737.400	5772.600	0.5	PASS
		5795	35.200	5777.400	5812.600	0.5	PASS
11AC80SISO	Ant1	5775	75.520	5737.240	5812.760	0.5	PASS

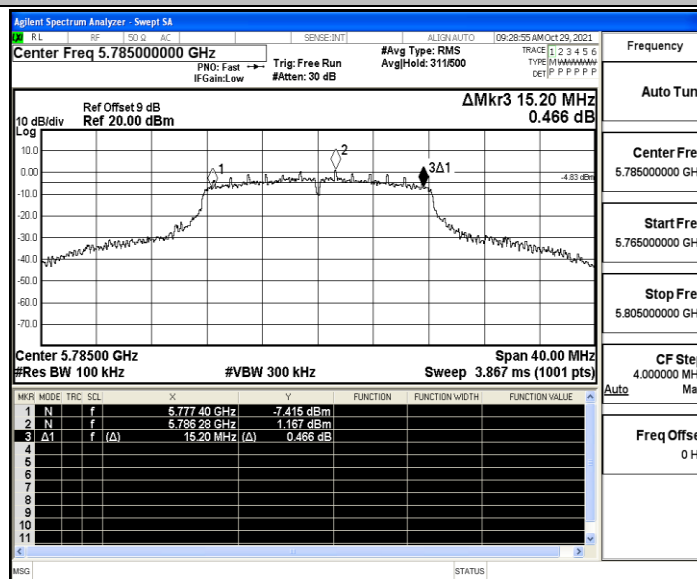


Test Graphs

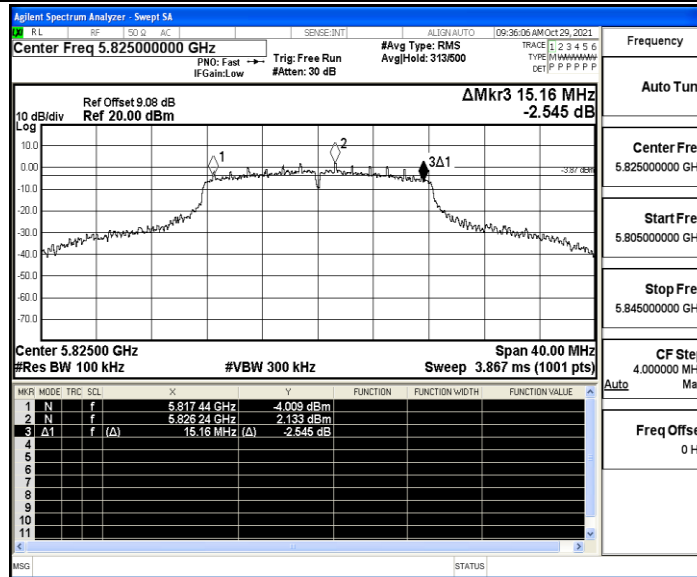
11A_Ant1_5745



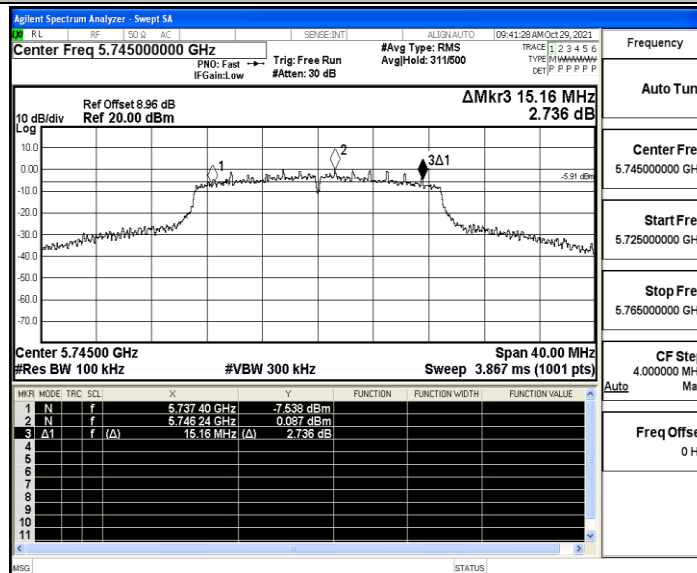
11A_Ant1_5785



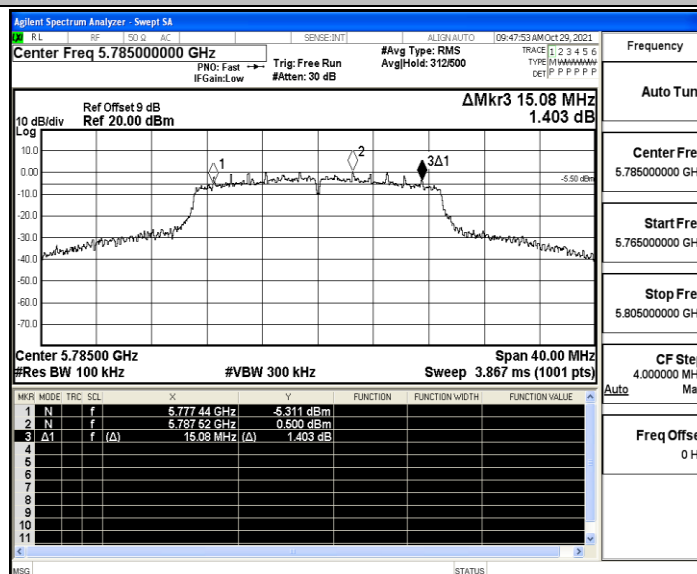
11A_Ant1_5825



11N20SISO_Ant1_5745

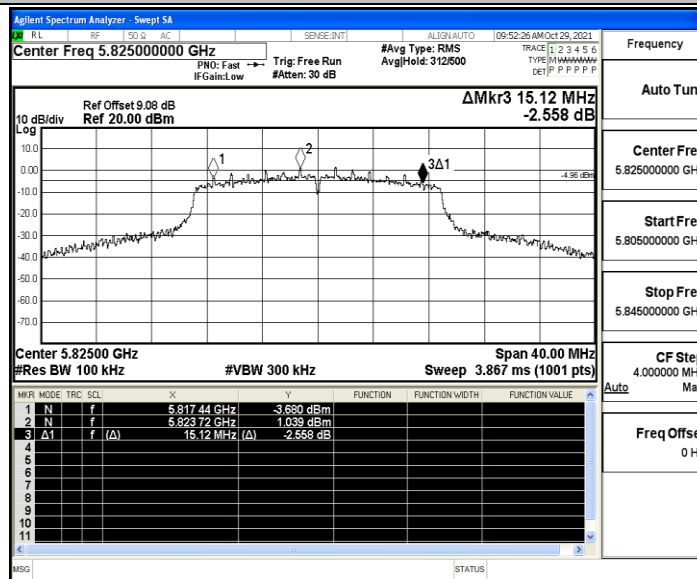


11N20SISO_Ant1_5785

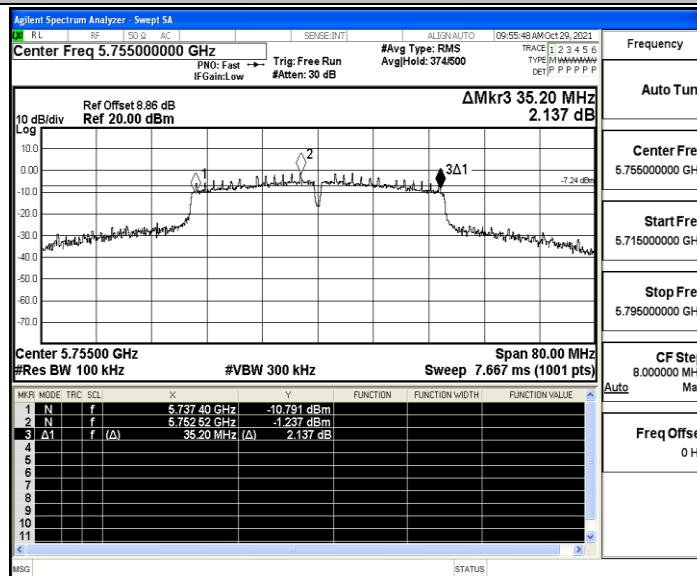




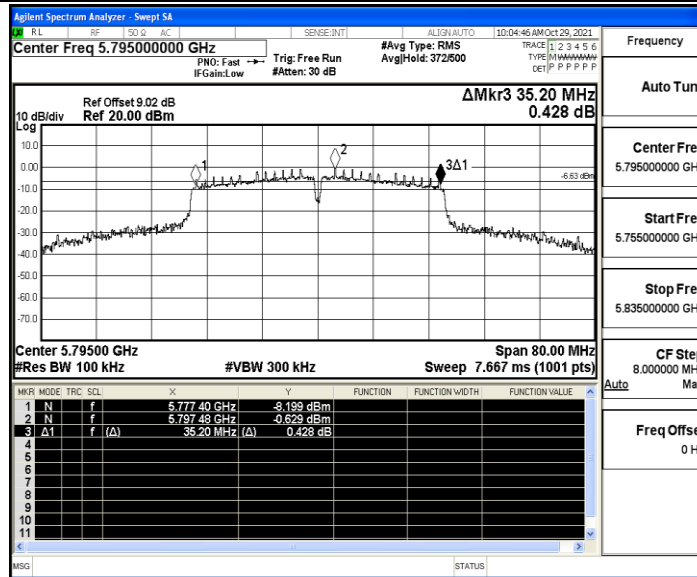
11N20SISO_Ant1_5825



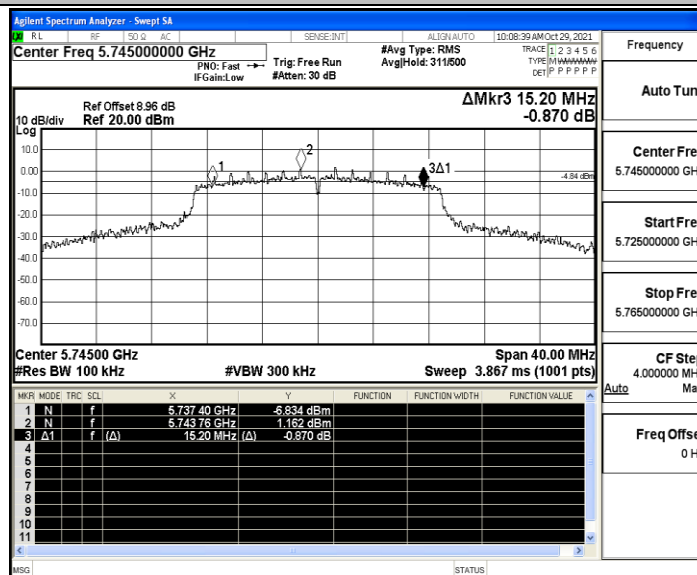
11N40SISO_Ant1_5755



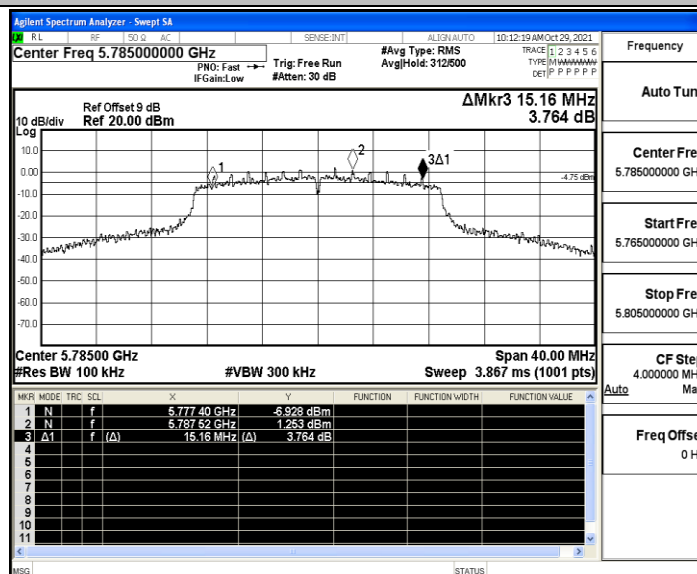
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745

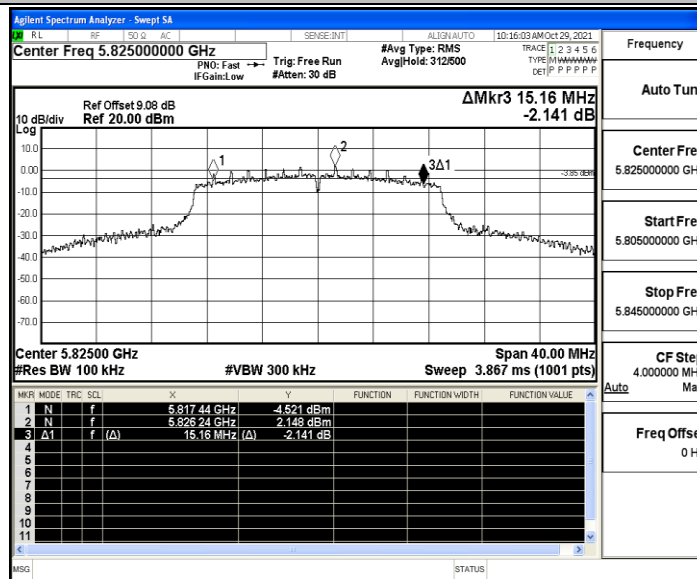


11AC20SISO_Ant1_5785

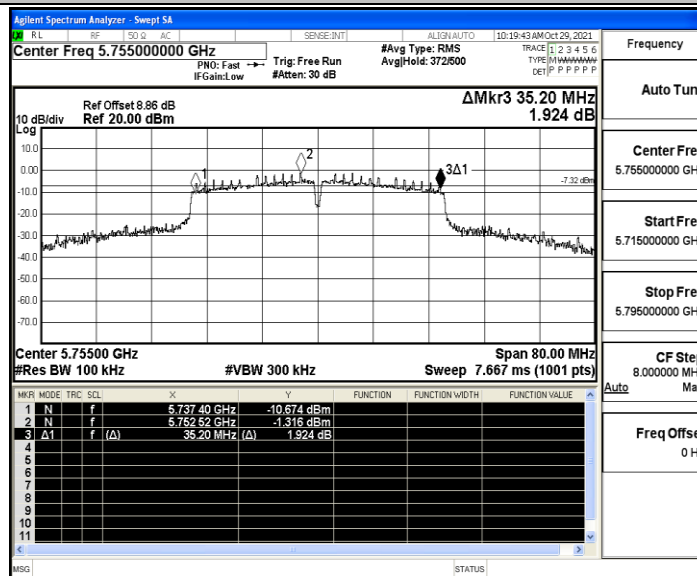




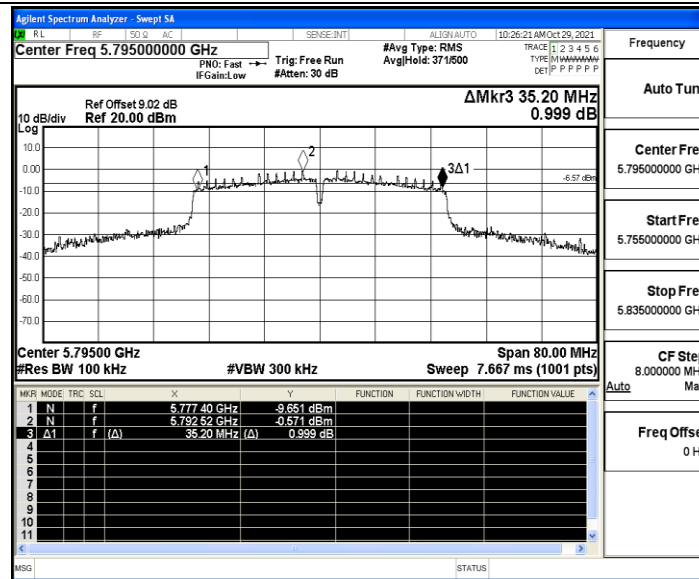
11AC20SISO_Ant1_5825



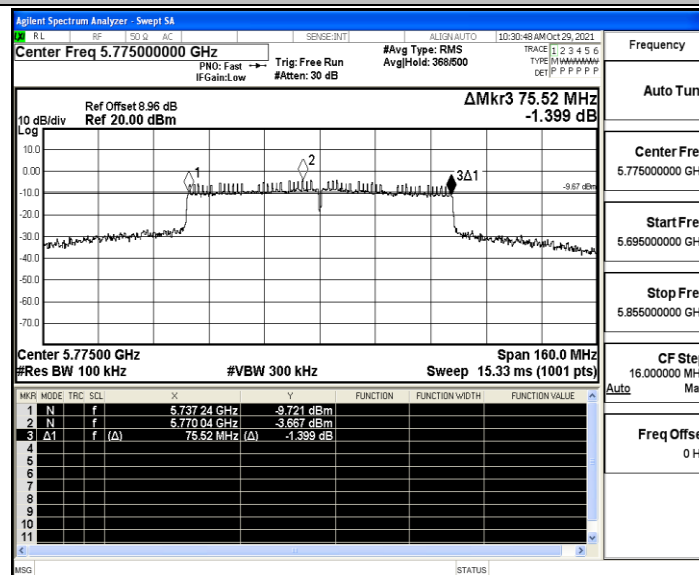
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775





E.2 Maximum conducted output power

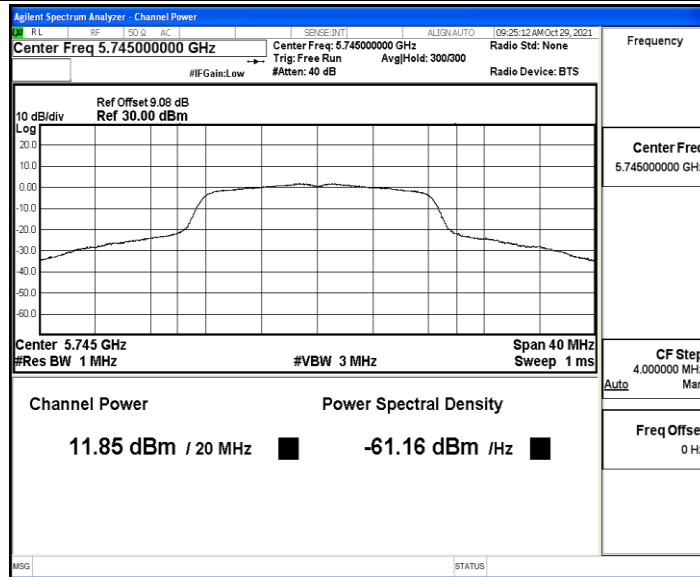
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5745	11.85	≤ 30	PASS
		5785	10.97	≤ 30	PASS
		5825	12.12	≤ 30	PASS
11N20SISO	Ant1	5745	11.02	≤ 30	PASS
		5785	11.51	≤ 30	PASS
		5825	11.37	≤ 30	PASS
11N40SISO	Ant1	5755	11.74	≤ 30	PASS
		5795	12.42	≤ 30	PASS
11AC20SISO	Ant1	5745	11.36	≤ 30	PASS
		5785	11.90	≤ 30	PASS
		5825	11.97	≤ 30	PASS
11AC40SISO	Ant1	5755	11.72	≤ 30	PASS
		5795	12.43	≤ 30	PASS
11AC80SISO	Ant1	5775	12.08	≤ 30	PASS

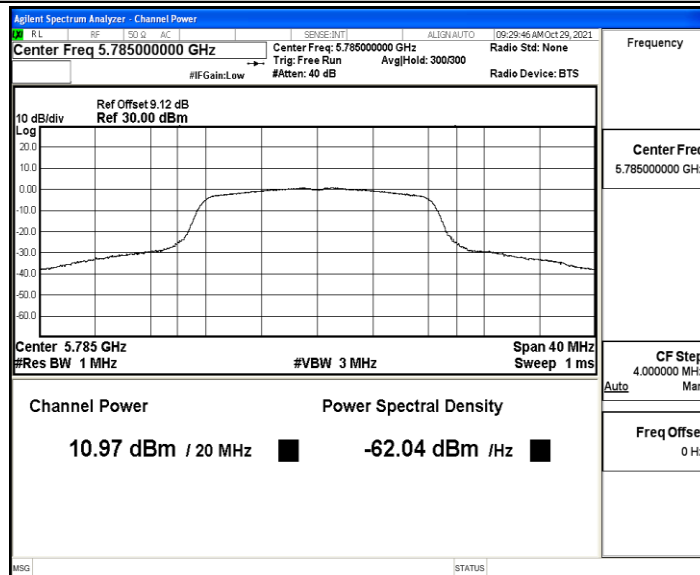
Note: The Duty Cycle Factor is compensated in the graph.



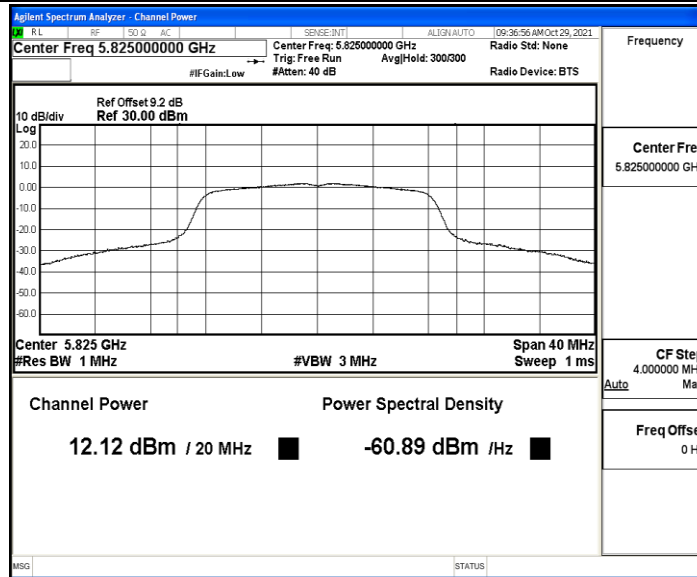
11A_Ant1_5745



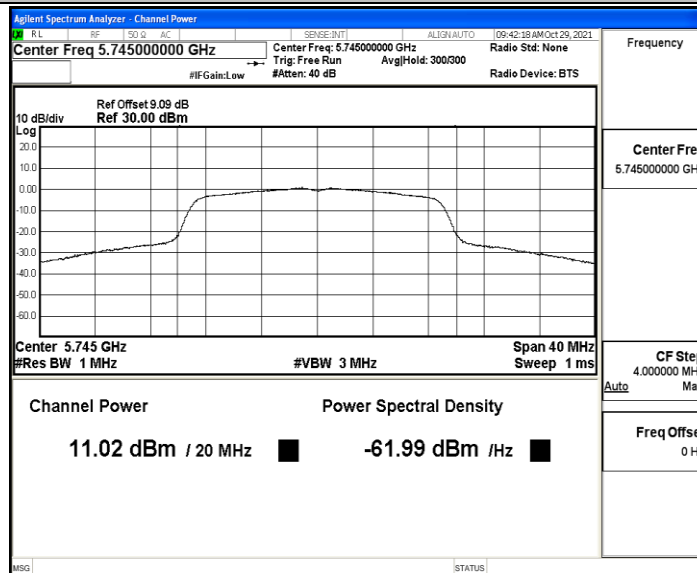
11A_Ant1_5785



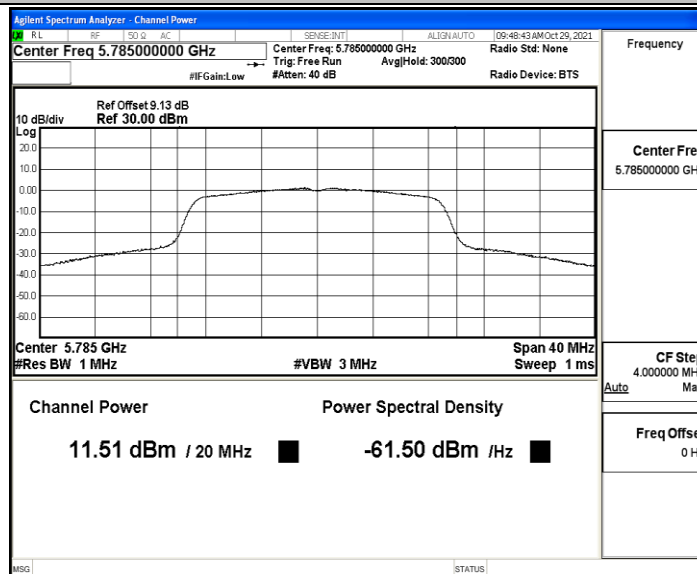
11A_Ant1_5825



11N20SISO_Ant1_5745

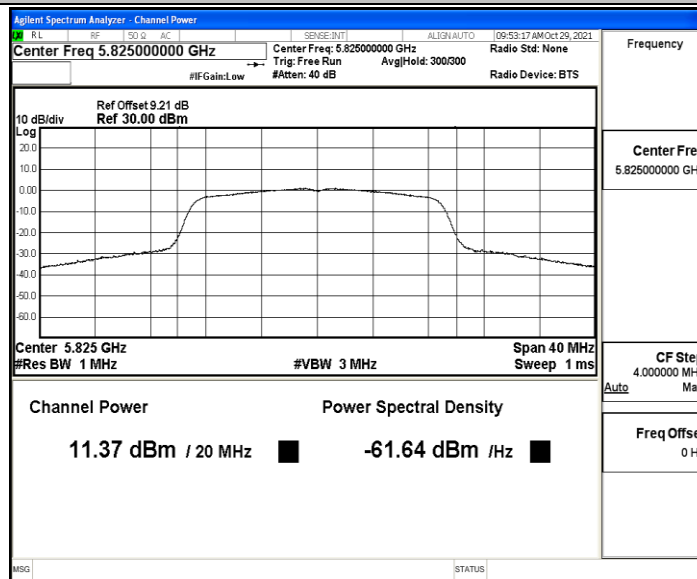


11N20SISO_Ant1_5785

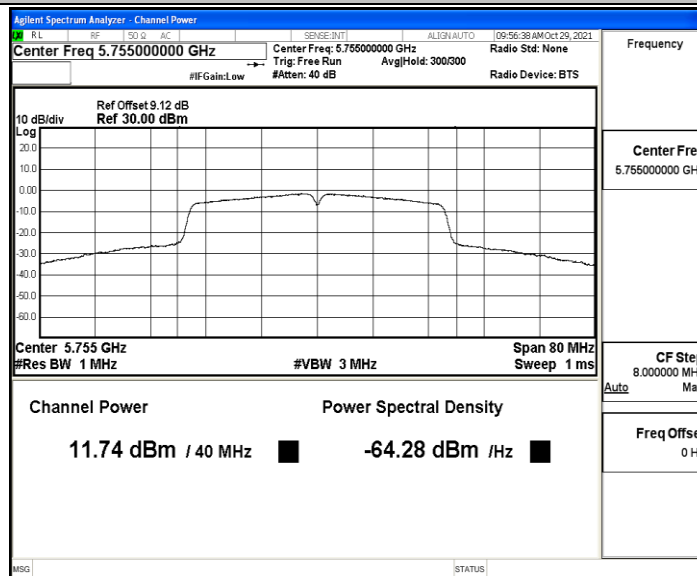




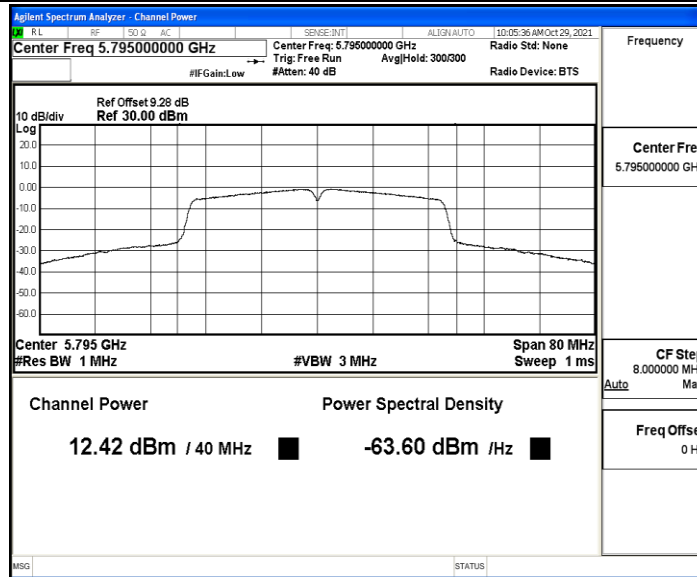
11N20SISO_Ant1_5825



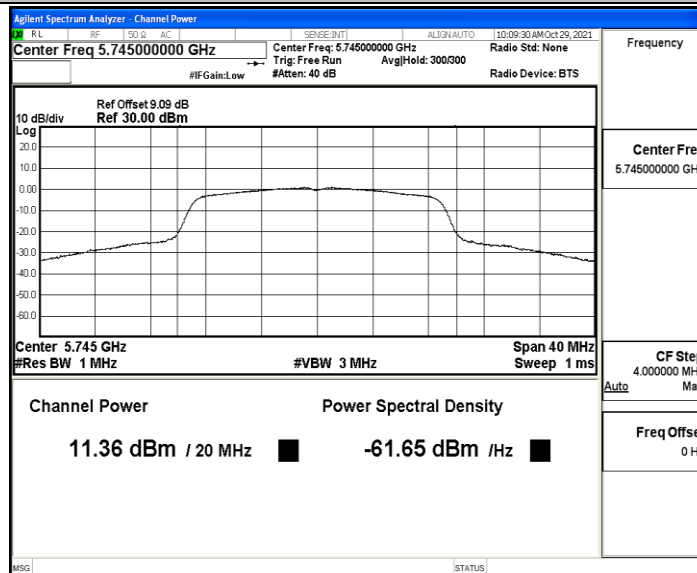
11N40SISO_Ant1_5755



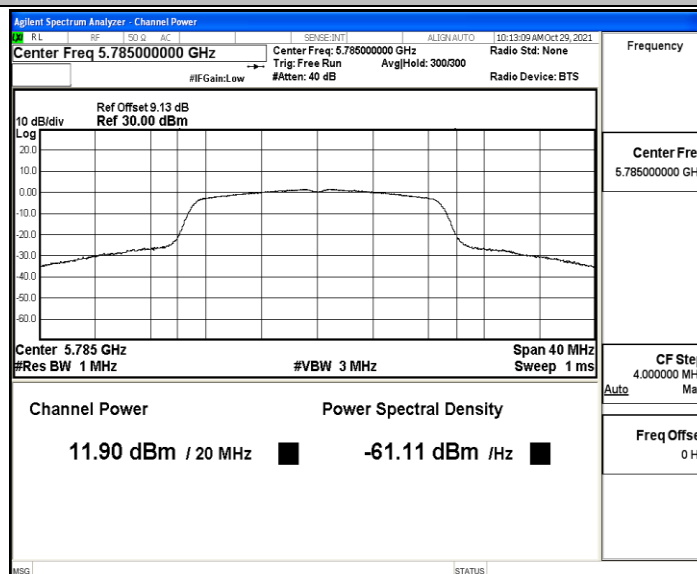
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745

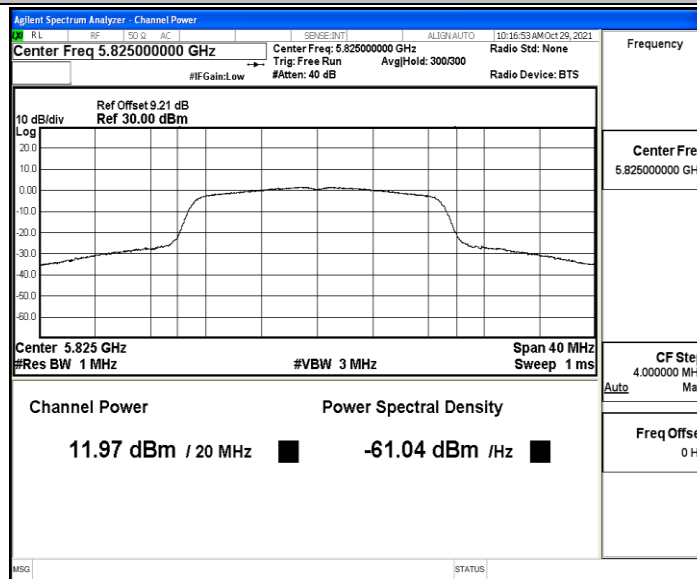


11AC20SISO_Ant1_5785

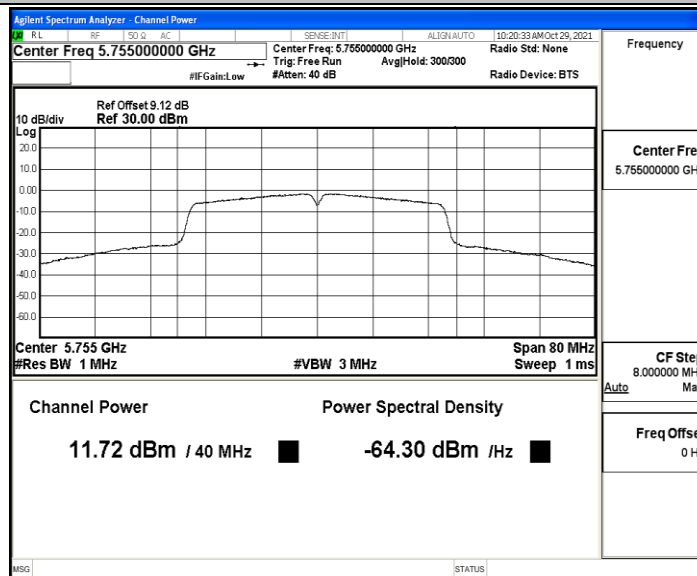




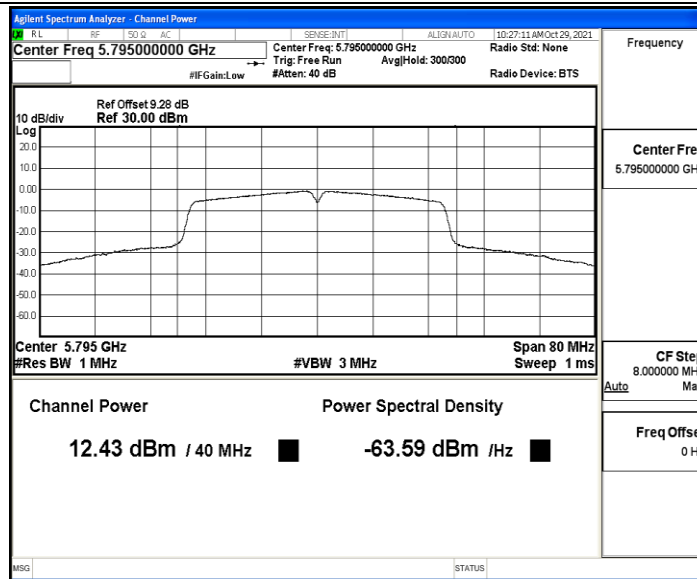
11AC20SISO_Ant1_5825



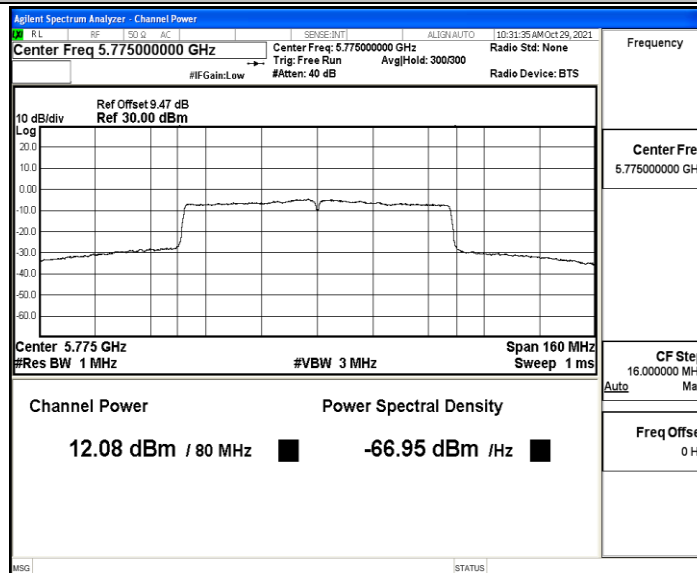
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775





E.3 Maximum power spectral density

Test Result

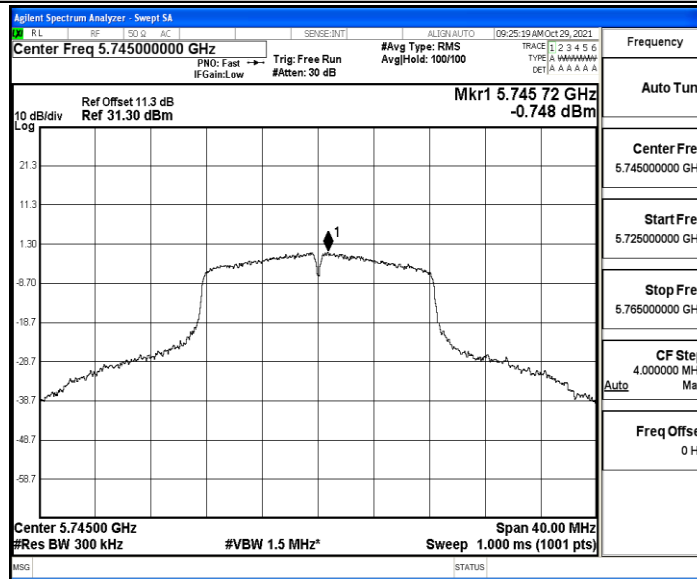
TestMode	Antenna	Channel	measured conducted PSD	Duty Cycle Factor	RBW factor [dB]	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5745	-0.75	0.9720	2.218	2.44	≤30	PASS
		5785	-1.75	0.9720	2.218	1.44	≤30	PASS
		5825	-0.5	0.9720	2.218	2.69	≤30	PASS
11N20SISO	Ant1	5745	-2.08	0.9701	2.218	1.11	≤30	PASS
		5785	-1.05	0.9701	2.218	2.14	≤30	PASS
		5825	-1.46	0.9701	2.218	1.73	≤30	PASS
11N40SISO	Ant1	5755	-4.28	0.9412	2.218	-1.12	≤30	PASS
		5795	-3.68	0.9412	2.218	-0.52	≤30	PASS
11AC20SISO	Ant1	5745	-1.46	0.9704	2.218	1.73	≤30	PASS
		5785	-0.98	0.9704	2.218	2.21	≤30	PASS
		5825	-1.15	0.9704	2.218	2.04	≤30	PASS
11AC40SISO	Ant1	5755	-4.29	0.9420	2.218	-1.13	≤30	PASS
		5795	-3.49	0.9420	2.218	-0.33	≤30	PASS
11AC80SISO	Ant1	5775	-7.69	0.8889	2.218	-4.58	≤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.

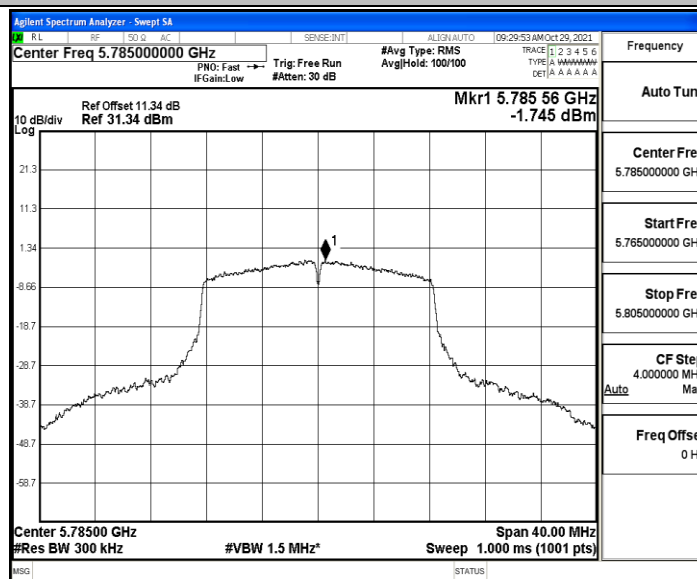


Test Graphs

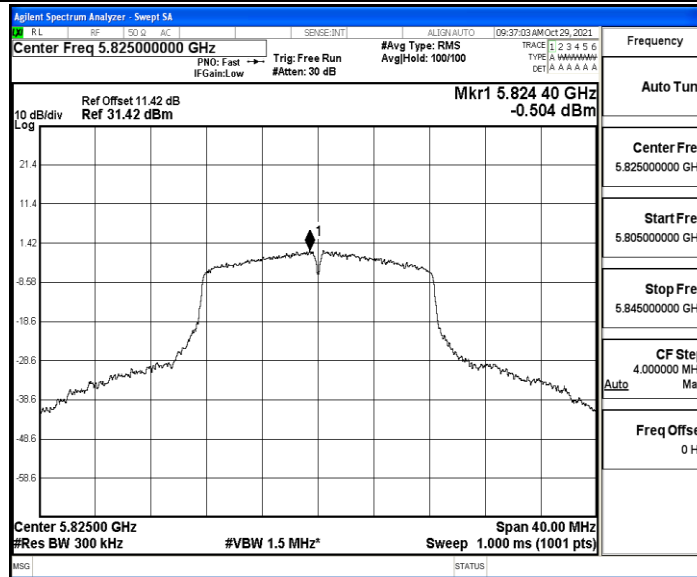
11A_Ant1_5745



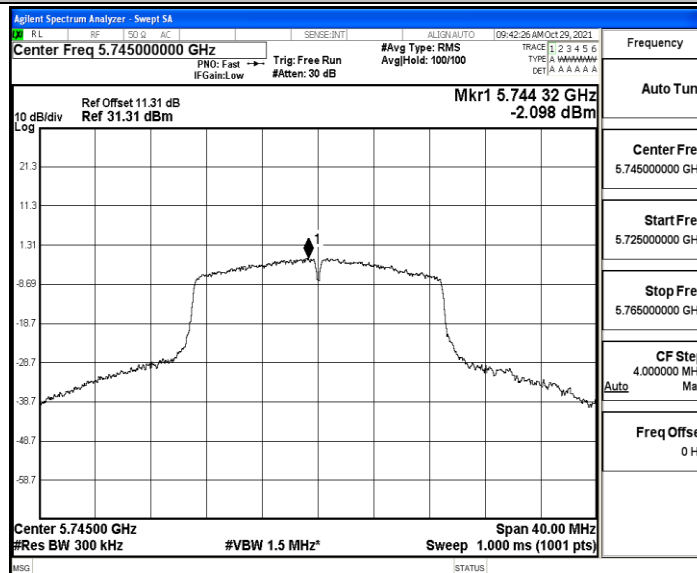
11A_Ant1_5785



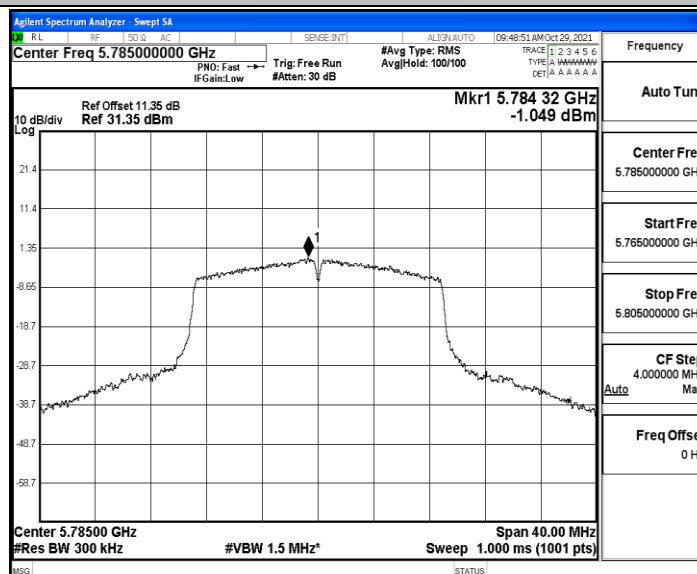
11A_Ant1_5825



11N20SISO_Ant1_5745

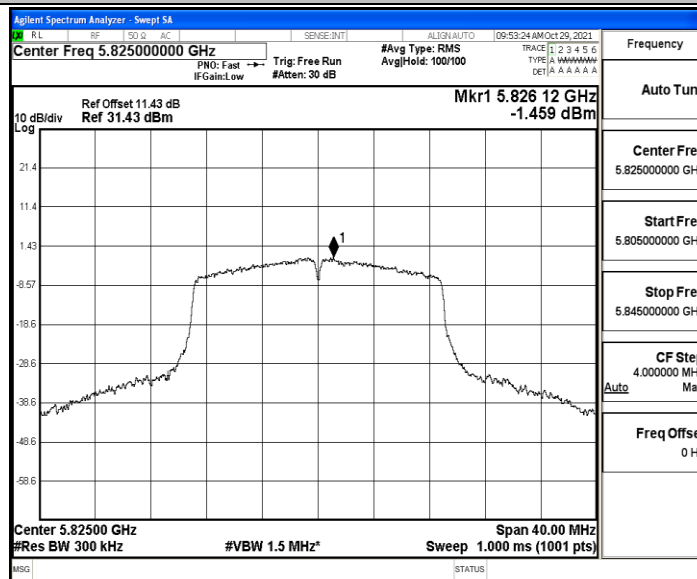


11N20SISO_Ant1_5785

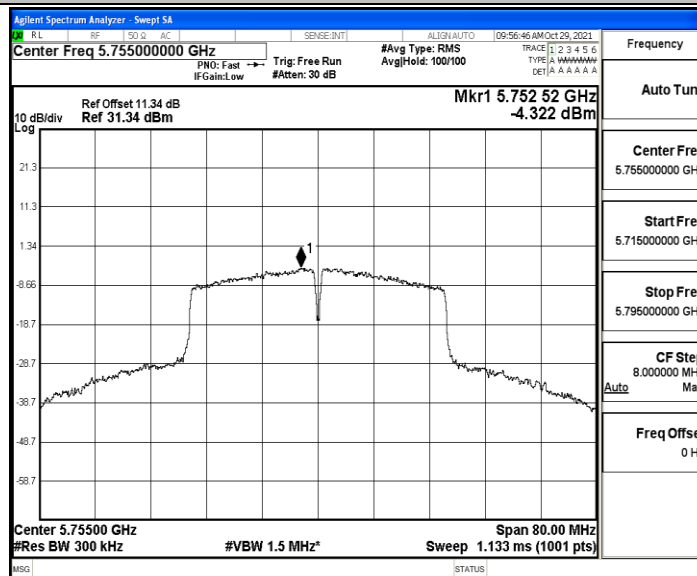




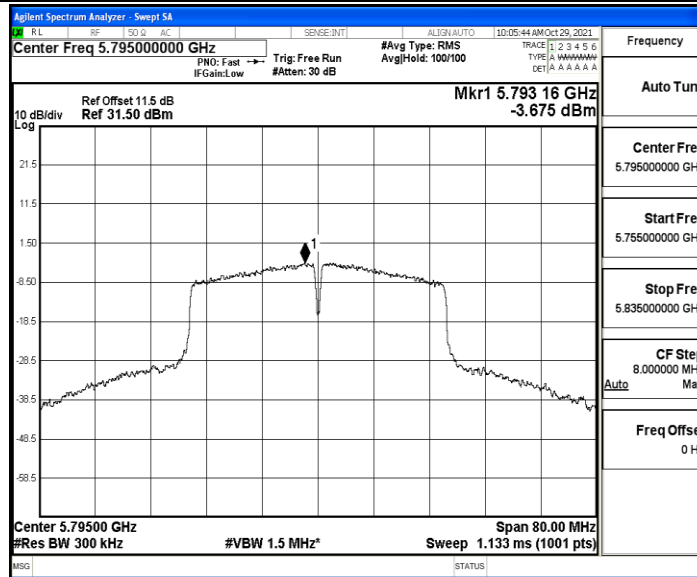
11N20SISO_Ant1_5825



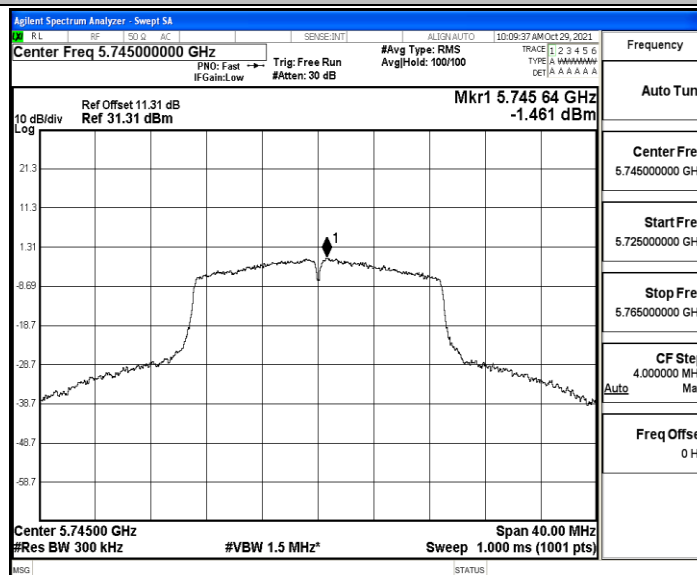
11N40SISO_Ant1_5755



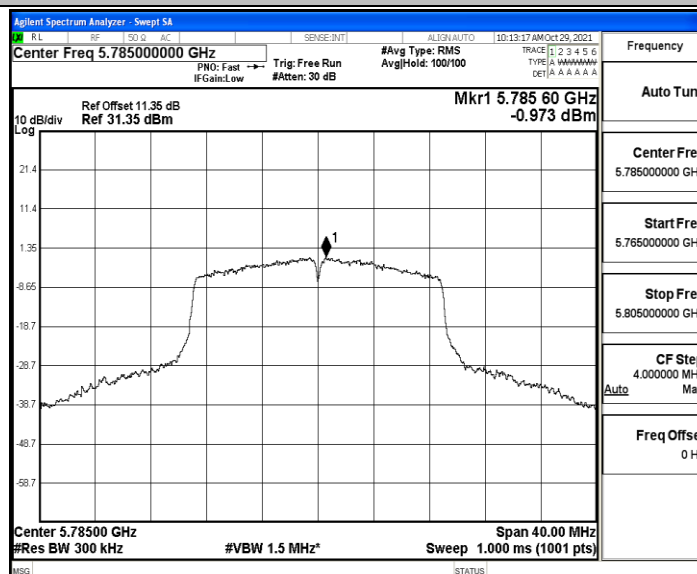
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745

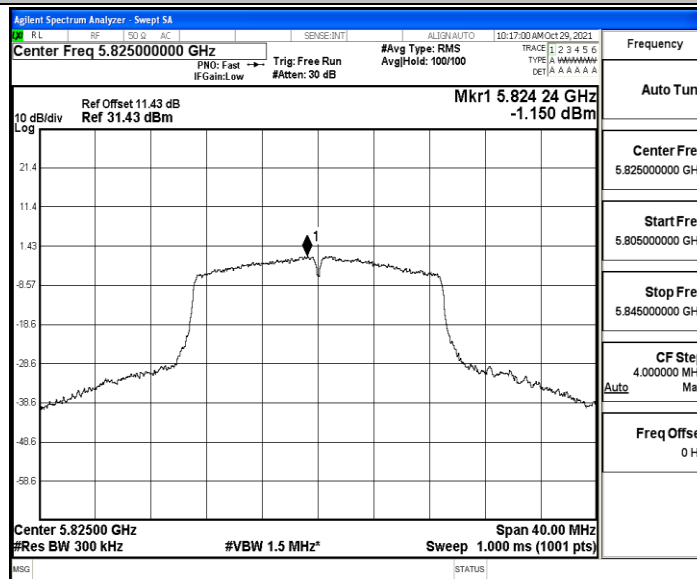


11AC20SISO_Ant1_5785

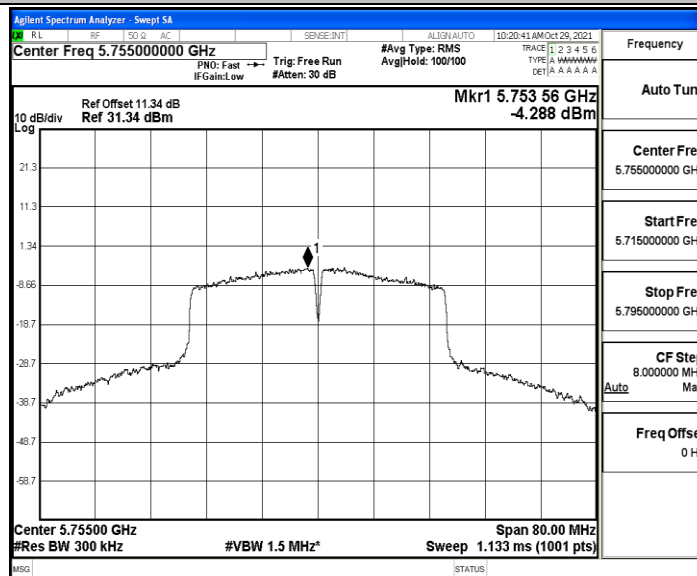




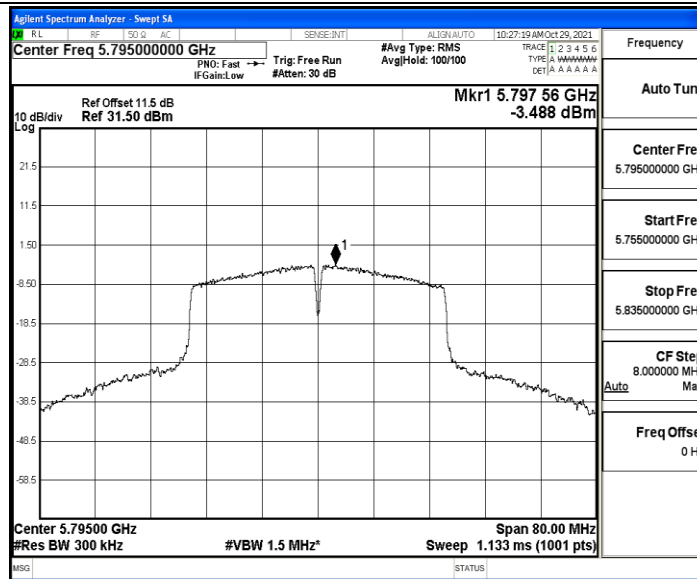
11AC20SISO_Ant1_5825



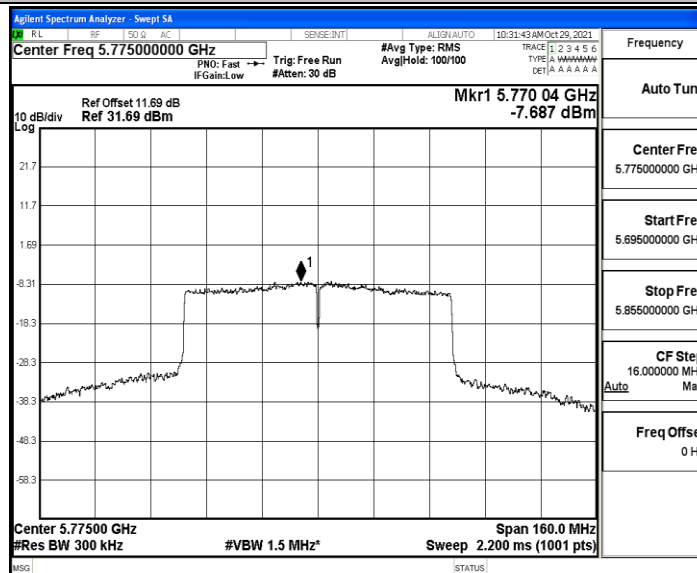
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775





E.4 Emissions in Restricted Bands

Test Result

TestMod e	Antenn a	ChNam e	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-39.511	≤ -27.0 0	---	---	PASS
				Peak	5700.000	-39.25	≤ 10.00	---	---	PASS
				Peak	5720.000	-31.83	≤ 15.60	---	---	PASS
				Peak	5725.000	-23.91	≤ 27.00	---	---	PASS
		High	5825	Peak	5850.000	-31.475	≤ 15.60	---	---	PASS
				Peak	5855.000	-36.33	≤ 27.00	---	---	PASS
				Peak	5875.000	-40.12	≤ 15.60	---	---	PASS
				Peak	5925.000	-40.94	≤ 10.00	---	---	PASS
11N20SI SO	Ant1	Low	5745	Peak	5650.000	-39.386	≤ -27.0 0	---	---	PASS
				Peak	5700.000	-39.36	≤ 10.00	---	---	PASS
				Peak	5720.000	-34.66	≤ 15.60	---	---	PASS
				Peak	5725.000	-21.71	≤ 27.00	---	---	PASS
		High	5825	Peak	5850.000	-32.813	≤ 15.60	---	---	PASS
				Peak	5855.000	-38.96	≤ 27.00	---	---	PASS
				Peak	5875.000	-38.83	≤ 15.60	---	---	PASS
				Peak	5925.000	-39.95	≤ 10.00	---	---	PASS
11N40SI SO	Ant1	Low	5755	Peak	5650.000	-39.069	≤ -27.0 0	---	---	PASS
				Peak	5700.000	-33.68	≤ 10.00	---	---	PASS
				Peak	5720.000	-22.19	≤ 15.60	---	---	PASS
				Peak	5725.000	-17.94	≤ 27.00	---	---	PASS
		High	5795	Peak	5850.000	-30.52	≤ 15.60	---	---	PASS
				Peak	5855.000	-38.98	≤ 27.00	---	---	PASS
				Peak	5875.000	-40.45	≤ 15.60	---	---	PASS
				Peak	5925.000	-40.61	≤ 10.00	---	---	PASS
11AC20 SISO	Ant1	Low	5745	Peak	5650.000	-40.297	≤ -27.0 0	---	---	PASS
				Peak	5700.000	-38.8	≤ 10.00	---	---	PASS
				Peak	5720.000	-32.19	≤ 15.60	---	---	PASS
				Peak	5725.000	-23.8	≤ 27.00	---	---	PASS
		High	5825	Peak	5850.000	-32.708	≤ 15.60	---	---	PASS
				Peak	5855.000	-37.23	≤ 27.00	---	---	PASS
				Peak	5875.000	-39.42	≤ 15.60	---	---	PASS
				Peak	5925.000	-39.09	≤ 10.00	---	---	PASS



11AC40 SISO	Ant1	Low	5755	Peak	5650.000	-41.247	≤ -27.0 0	---	---	PASS
				Peak	5700.000	-35.72	≤ 10.00	---	---	PASS
				Peak	5720.000	-20.9	≤ 15.60	---	---	PASS
				Peak	5725.000	-19.81	≤ 27.00	- - -	- - -	PASS
		High	5795	Peak	5850.000	-35.268	≤ 15.60	---	---	PASS
				Peak	5855.000	-39.26	≤ 27.00	---	---	PASS
				Peak	5875.000	-38.27	≤ 15.60	---	---	PASS
				Peak	5925.000	-40.67	≤ 10.00	- - -	- - -	PASS
11AC80 SISO	Ant1	Low	5775	Peak	5650.000	-33.739	≤ -27.0 0	---	---	PASS
				Peak	5700.000	-24.85	≤ 10.00	---	---	PASS
				Peak	5720.000	-20.26	≤ 15.60	---	---	PASS
				Peak	5725.000	-19.21	≤ 27.00	- - -	- - -	PASS
		High	5775	Peak	5850.000	-25.464	≤ 15.60	---	---	PASS
				Peak	5855.000	-26.49	≤ 27.00	---	---	PASS
				Peak	5875.000	-34.23	≤ 15.60	---	---	PASS
				Peak	5925.000	-40.64	≤ 10.00	- - -	- - -	PASS

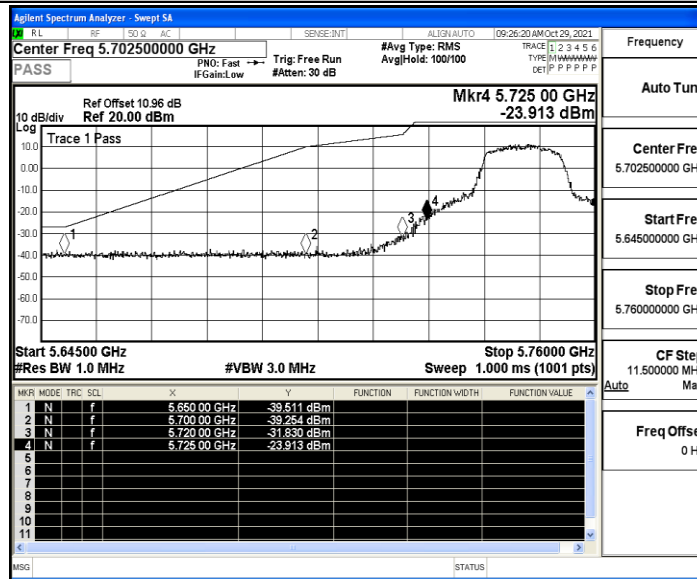
Note:

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.

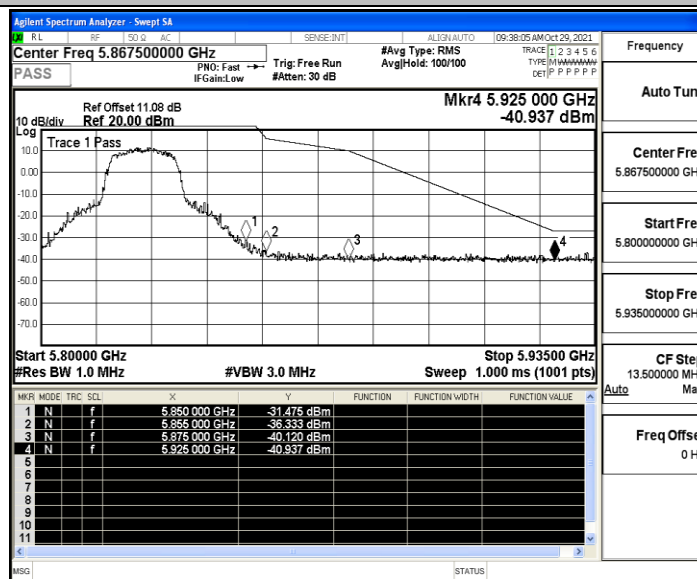


Test Graphs

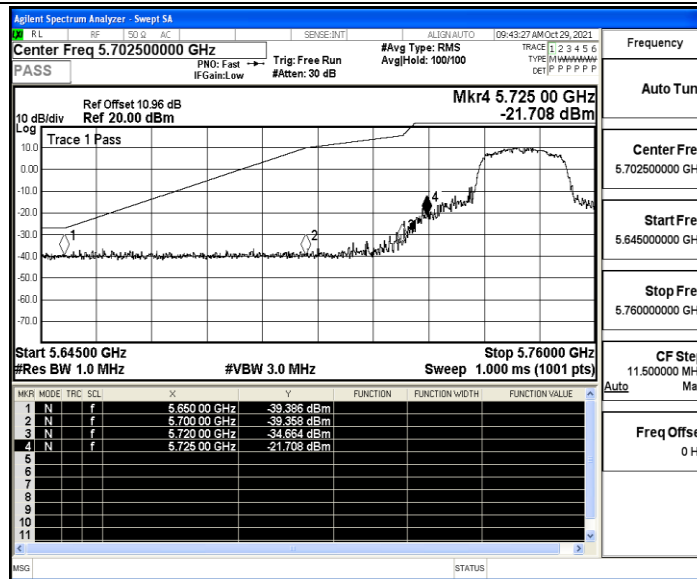
11A_Ant1_Low_5745_Peak



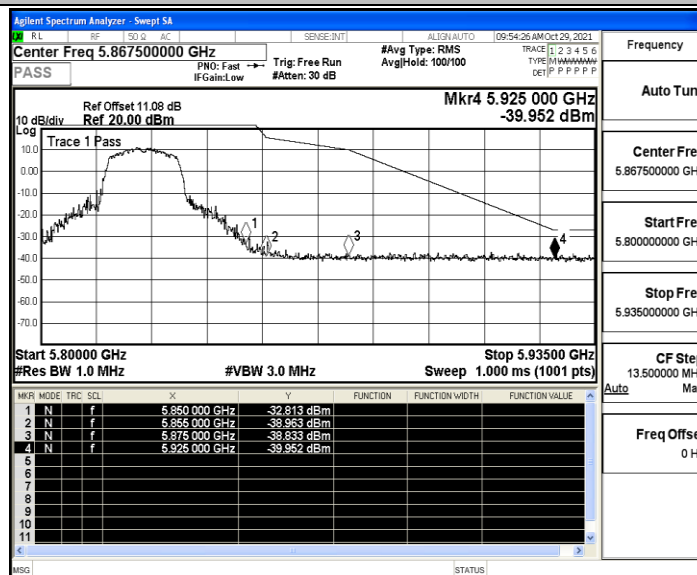
11A_Ant1_High_5825_Peak



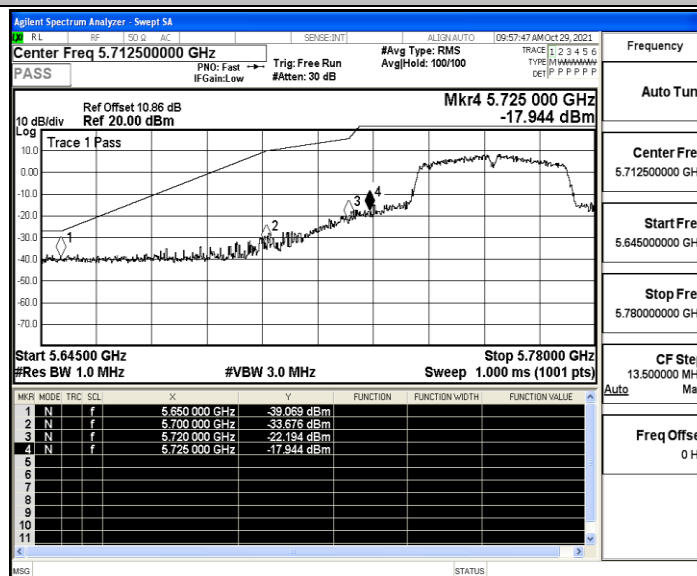
11N20SISO_Ant1_Low_5745_Peak



11N20SISO_Ant1_High_5825_Peak

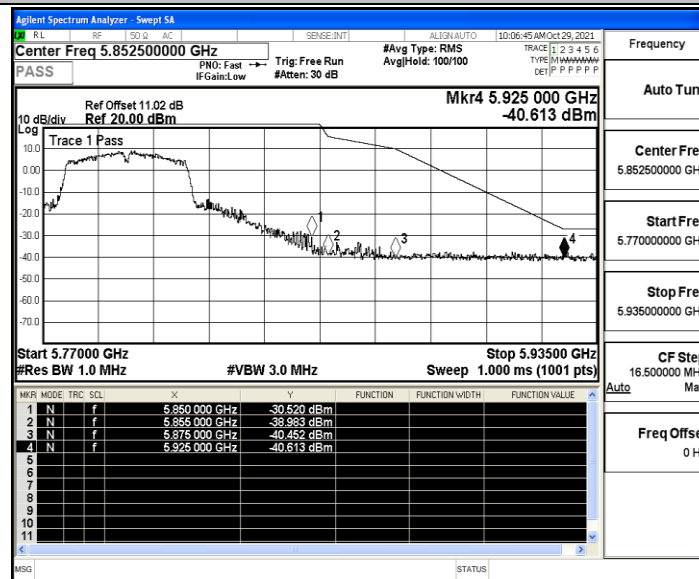


11N40SISO_Ant1_Low_5755_Peak

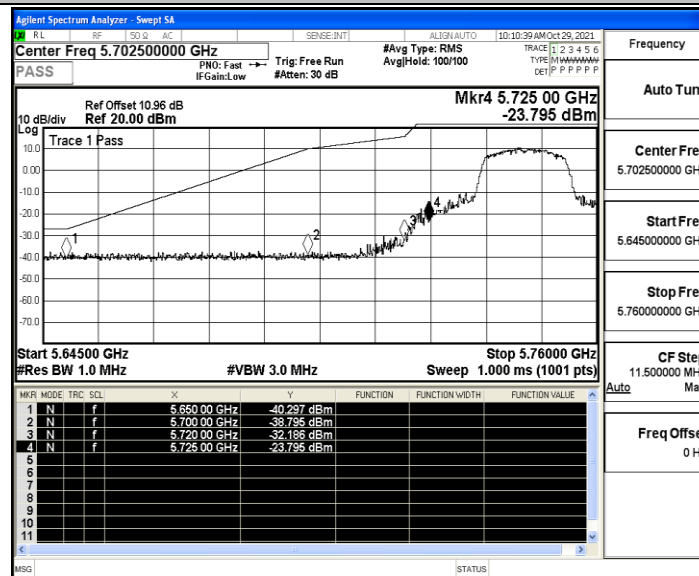




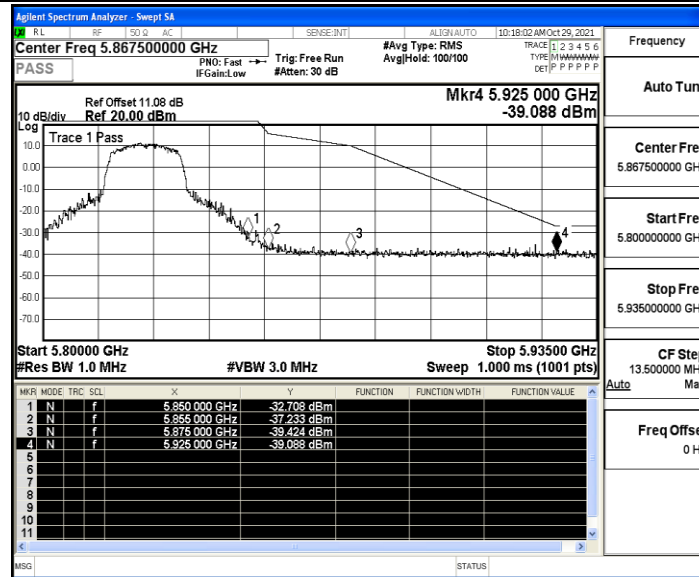
11N40SISO_Ant1_High_5795_Peak



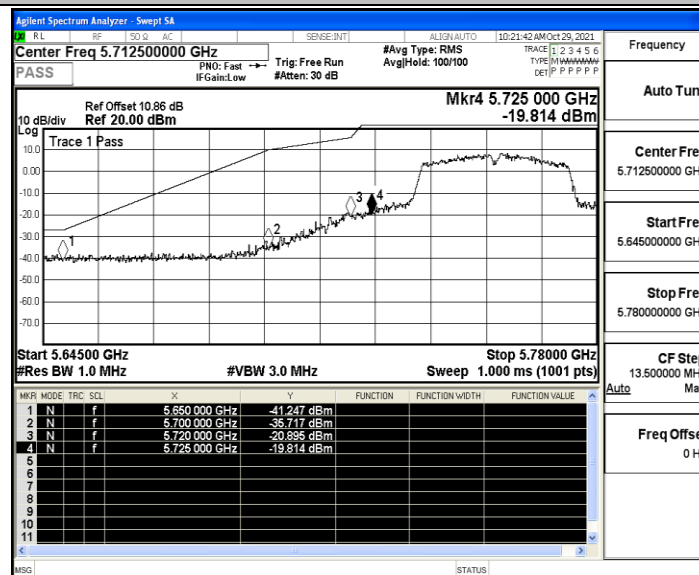
11AC20SISO_Ant1_Low_5745_Peak



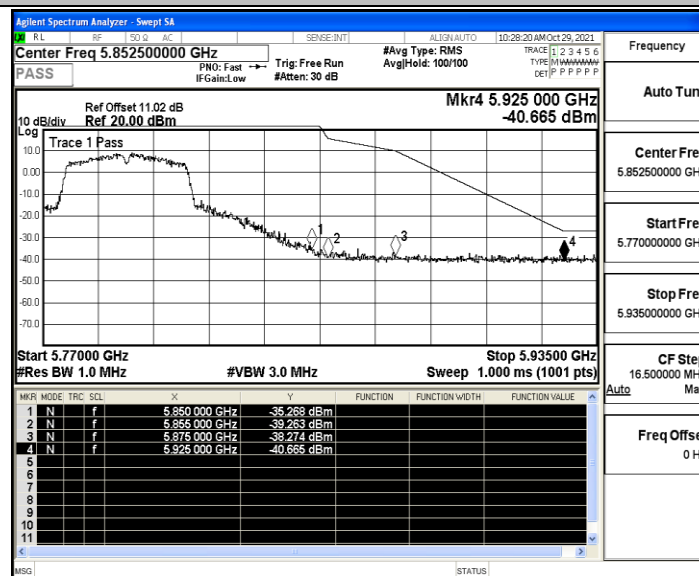
11AC20SISO_Ant1_High_5825_Peak



11AC40SISO_Ant1_Low_5755_Peak

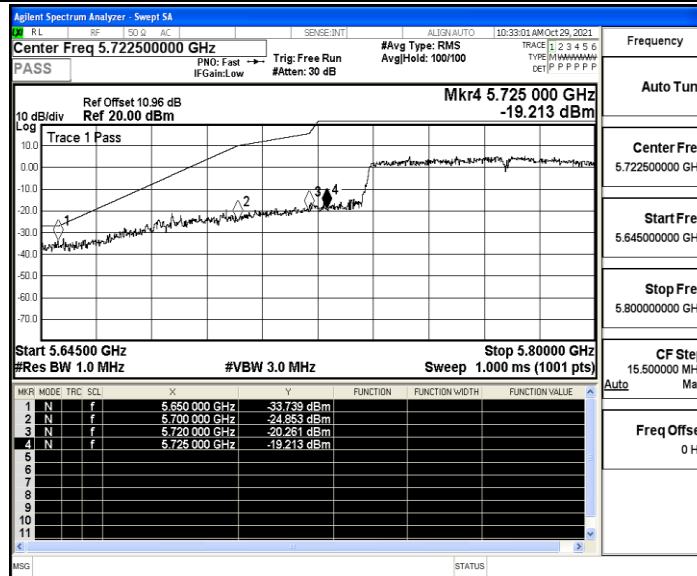


11AC40SISO_Ant1_High_5795_Peak

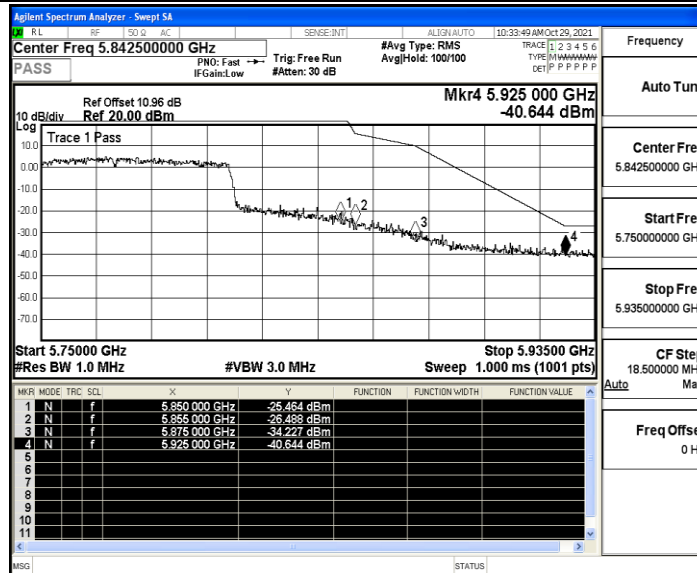




11AC80SISO_Ant1_Low_5775_Peak



11AC80SISO_Ant1_High_5775_Peak





E.5 Frequency Stability

Test Result

Voltage								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20SIS O	Ant1	5745	NV	NT	-6000	-1.044386	20	PASS
			LV	NT	-8000	-1.392515	20	PASS
			HV	NT	-9000	-1.56658	20	PASS
		5785	NV	NT	-7000	-1.210026	20	PASS
			LV	NT	-7000	-1.210026	20	PASS
			HV	NT	-7000	-1.210026	20	PASS
		5825	NV	NT	-8000	-1.373391	20	PASS
			LV	NT	-8000	-1.373391	20	PASS
			HV	NT	-8000	-1.373391	20	PASS
11AC40SIS O	Ant1	5755	NV	NT	-6000	-1.042572	20	PASS
			LV	NT	-7000	-1.216334	20	PASS
			HV	NT	-8000	-1.390096	20	PASS
		5795	NV	NT	-9000	-1.553063	20	PASS
			LV	NT	-9000	-1.553063	20	PASS
			HV	NT	-9000	-1.553063	20	PASS
11AC80SIS O	Ant1	5775	NV	NT	-19000	-3.290043	20	PASS
			LV	NT	-20000	-3.463203	20	PASS
			HV	NT	-22000	-3.809524	20	PASS

Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20SIS O	Ant1	5745	NV	-30	-10000	-1.740644	20	PASS
			NV	-20	-9000	-1.56658	20	PASS
			NV	-10	-8000	-1.392515	20	PASS
			NV	0	-8000	-1.392515	20	PASS
			NV	10	-7000	-1.218451	20	PASS
			NV	20	-7000	-1.218451	20	PASS
			NV	30	-7000	-1.218451	20	PASS
			NV	40	-7000	-1.218451	20	PASS
			NV	50	-7000	-1.218451	20	PASS
		5785	NV	-30	-7000	-1.210026	20	PASS
			NV	-20	-7000	-1.210026	20	PASS
			NV	-10	-7000	-1.210026	20	PASS
			NV	0	-7000	-1.210026	20	PASS
			NV	0	-7000	-1.210026	20	PASS



			NV	10	-7000	-1.210026	20	PASS
			NV	20	-7000	-1.210026	20	PASS
			NV	30	-7000	-1.210026	20	PASS
			NV	40	-7000	-1.210026	20	PASS
			NV	50	-7000	-1.210026	20	PASS
		5825	NV	-30	-8000	-1.373391	20	PASS
			NV	-20	-8000	-1.373391	20	PASS
			NV	-10	-8000	-1.373391	20	PASS
			NV	0	-8000	-1.373391	20	PASS
			NV	10	-8000	-1.373391	20	PASS
			NV	20	-8000	-1.373391	20	PASS
			NV	30	-9000	-1.545064	20	PASS
			NV	40	-8000	-1.373391	20	PASS
			NV	50	-9000	-1.545064	20	PASS
11AC40SIS O	Ant1	5755	NV	-30	-8000	-1.390096	20	PASS
			NV	-20	-8000	-1.390096	20	PASS
			NV	-10	-8000	-1.390096	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	-10000	-1.725626	20	PASS
			NV	-10	-10000	-1.725626	20	PASS
			NV	0	-9000	-1.553063	20	PASS
			NV	10	-10000	-1.725626	20	PASS
			NV	20	-9000	-1.553063	20	PASS
			NV	30	-10000	-1.725626	20	PASS
			NV	40	-10000	-1.725626	20	PASS
			NV	50	-10000	-1.725626	20	PASS
11AC80SIS O	Ant1	5775	NV	-30	-22000	-3.809524	20	PASS
			NV	-20	-24000	-4.155844	20	PASS
			NV	-10	-24000	-4.155844	20	PASS
			NV	0	-26000	-4.502165	20	PASS
			NV	10	-26000	-4.502165	20	PASS
			NV	20	-27000	-4.675325	20	PASS
			NV	30	-29000	-5.021645	20	PASS
			NV	40	-28000	-4.848485	20	PASS
			NV	50	-29000	-5.021645	20	PASS



E.6 Duty Cycle

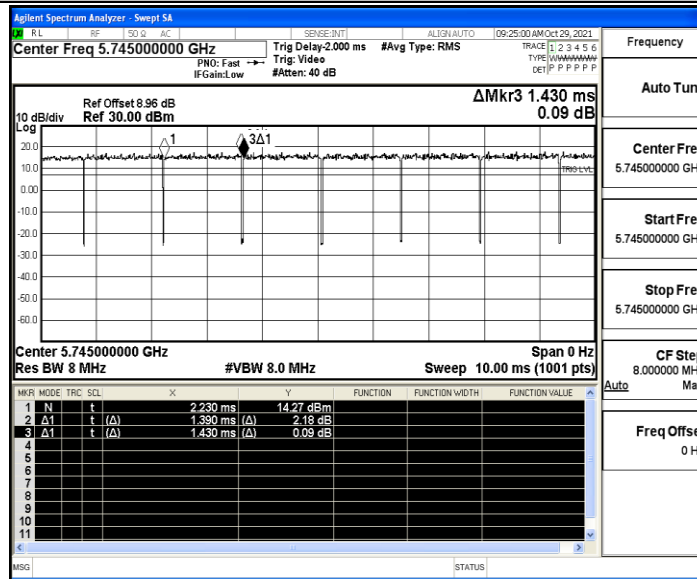
Test Result

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
11AC20SISO	Ant1	5745	1.31	1.35	97.04	---	PASS
		5785	1.31	1.35	97.04	---	PASS
		5825	1.31	1.35	97.04	---	PASS
11AC40SISO	Ant1	5755	0.65	0.69	94.20	---	PASS
		5795	0.65	0.69	94.20	---	PASS
11AC80SISO	Ant1	5775	0.32	0.36	88.89	---	PASS

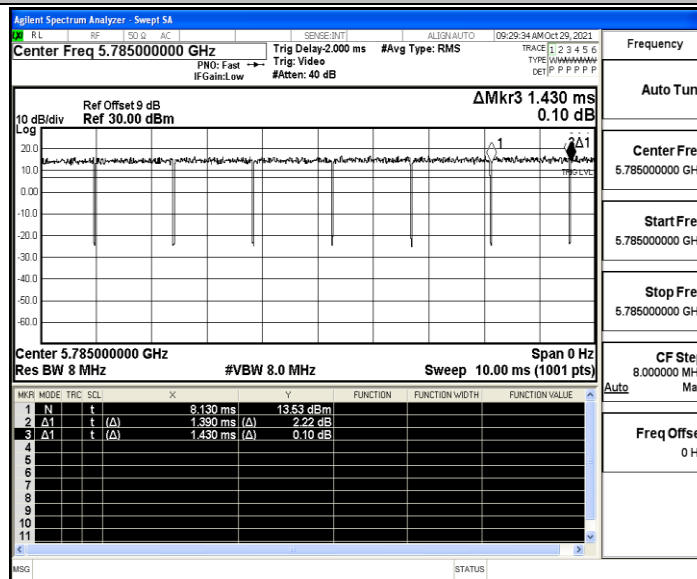


Test Graphs

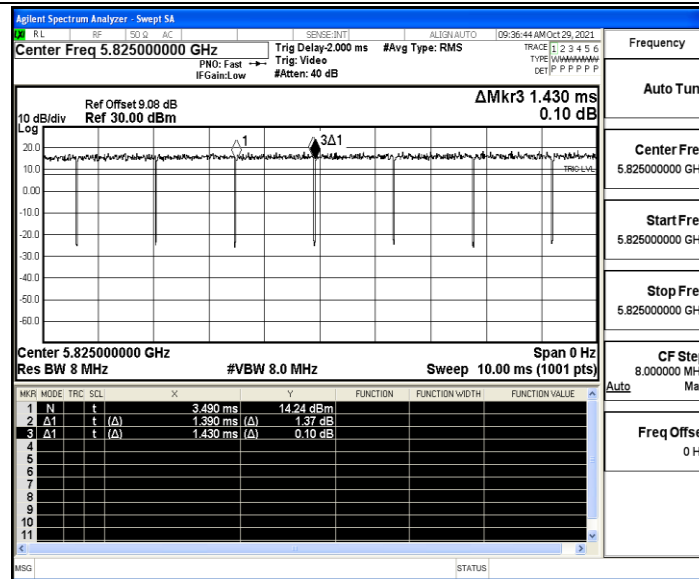
11A_Ant1_5745



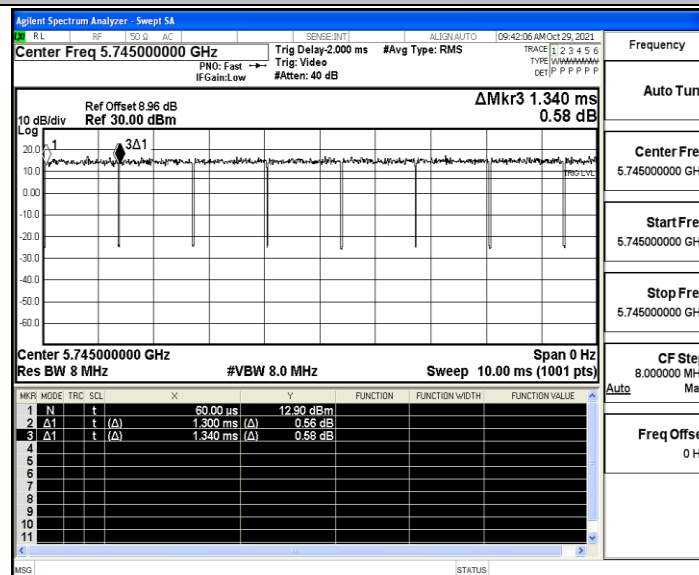
11A_Ant1_5785



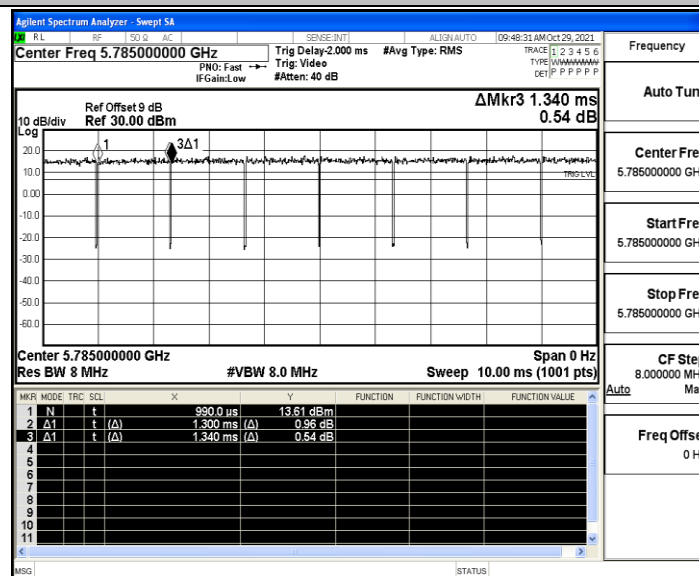
11A_Ant1_5825



11N20SISO_Ant1_5745

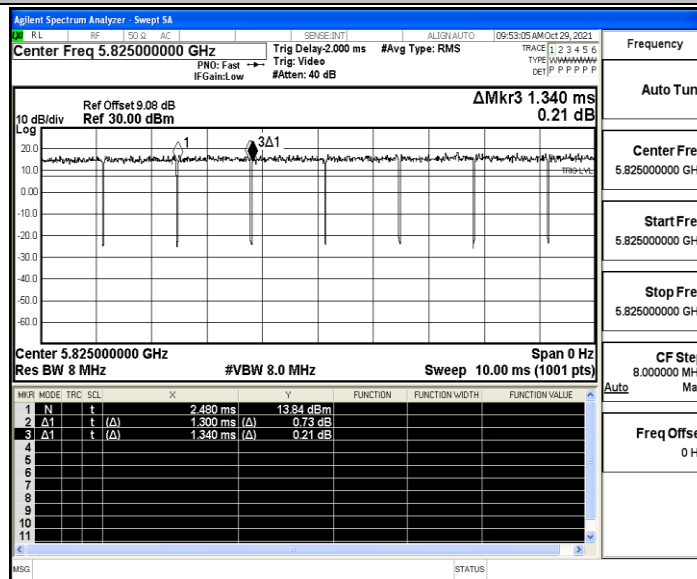


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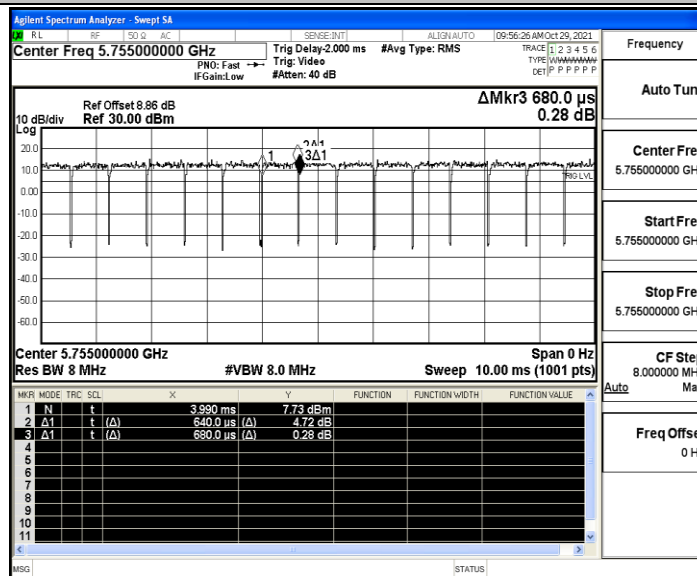




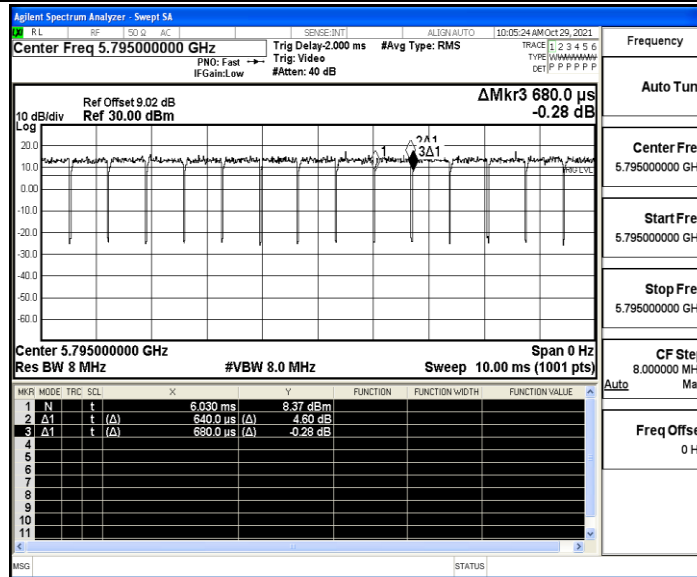
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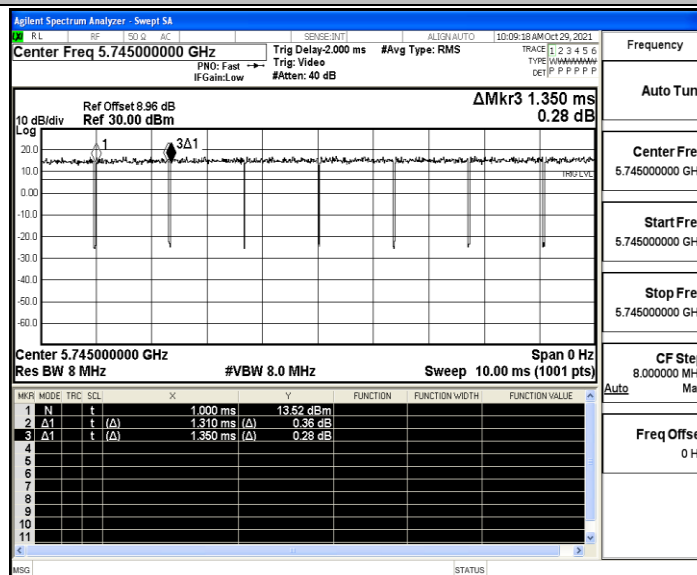
11N40SISO_Ant1_5755



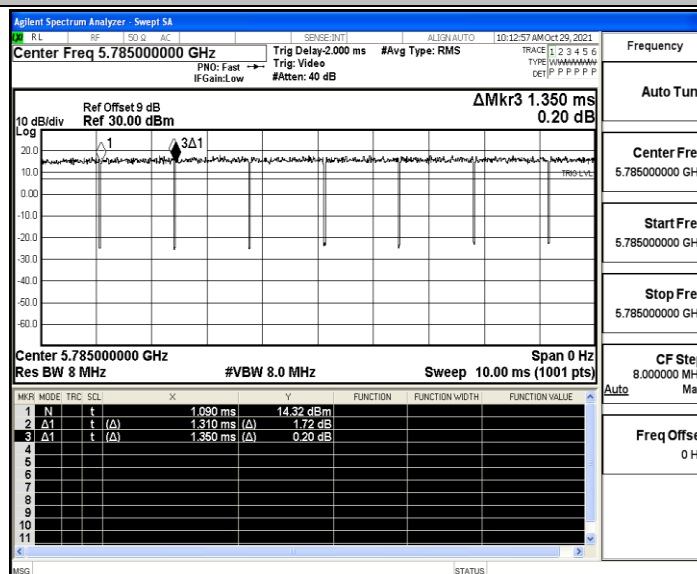
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745

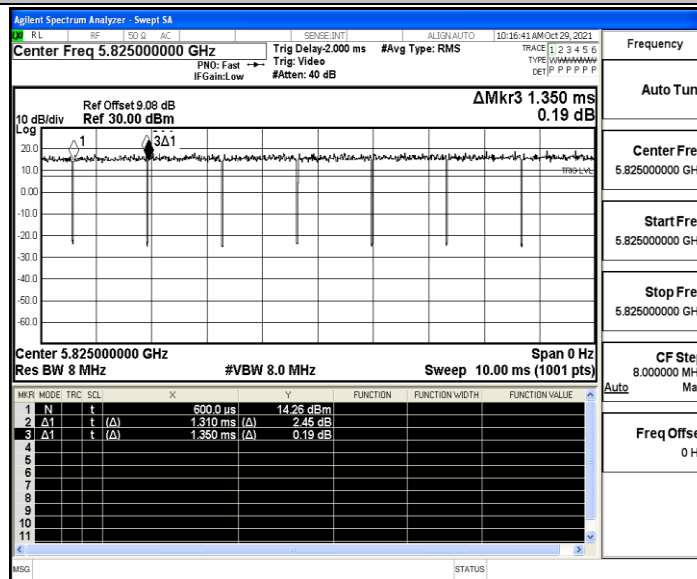


11AC20SISO_Ant1_5785

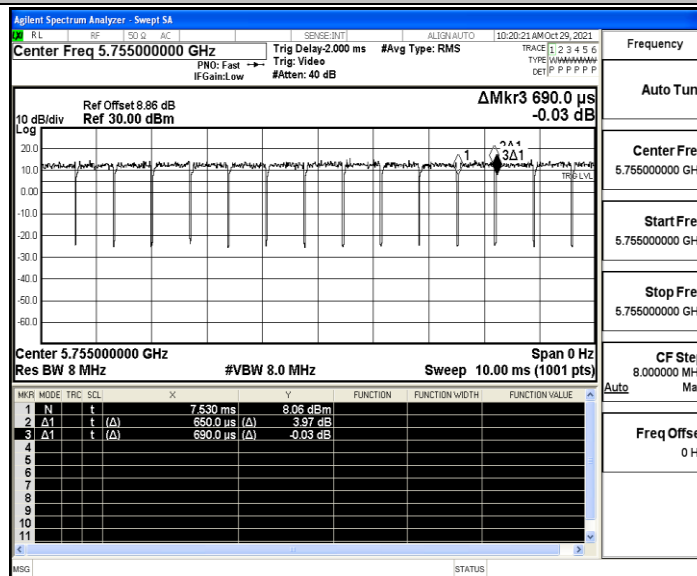




11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

