



Appendix D

RF Test Data for 5.2G WIFI (Conducted Measurement)

Product Name: TABLET PC

Test Model: BELLATRIX

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	 Monkey Li
Supervised by:	 Li Huan



D.1 Emission Bandwidth

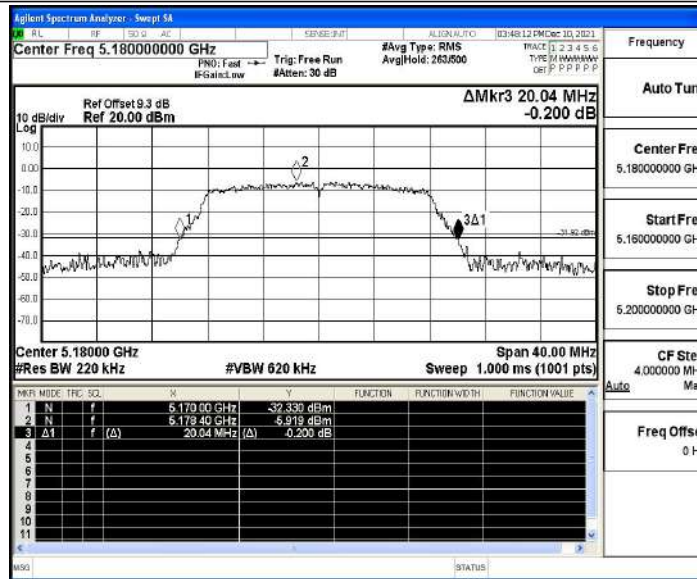
Test Result

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.040	5170.000	5190.040	---	PASS
		5200	19.760	5190.000	5209.760	---	PASS
		5240	19.680	5230.080	5249.760	---	PASS
11N20SISO	Ant1	5180	20.320	5169.840	5190.160	---	PASS
		5200	20.160	5189.960	5210.120	---	PASS
		5240	20.080	5229.920	5250.000	---	PASS
11N40SISO	Ant1	5190	40.160	5170.000	5210.160	---	PASS
		5230	40.320	5209.760	5250.080	---	PASS
11AC20SISO	Ant1	5180	20.400	5169.840	5190.240	---	PASS
		5200	20.240	5189.880	5210.120	---	PASS
		5240	20.280	5229.760	5250.040	---	PASS
11AC40SISO	Ant1	5190	40.000	5170.080	5210.080	---	PASS
		5230	40.240	5210.000	5250.240	---	PASS
11AC80SISO	Ant1	5210	80.800	5169.520	5250.320	---	PASS

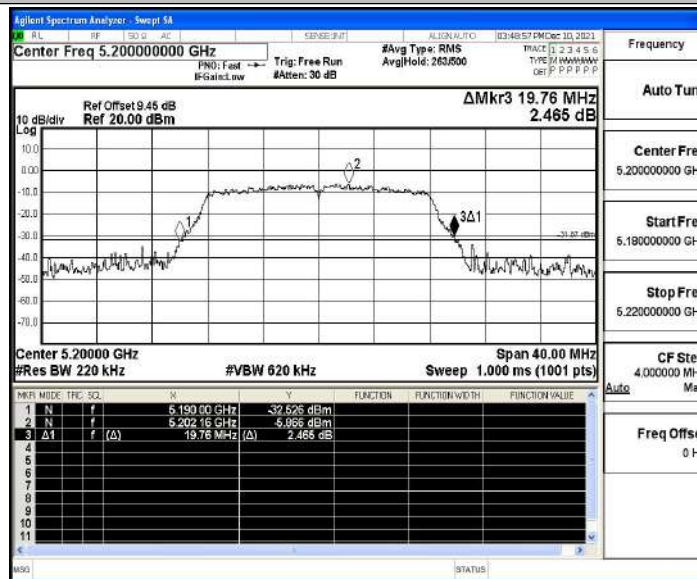


Test Graphs

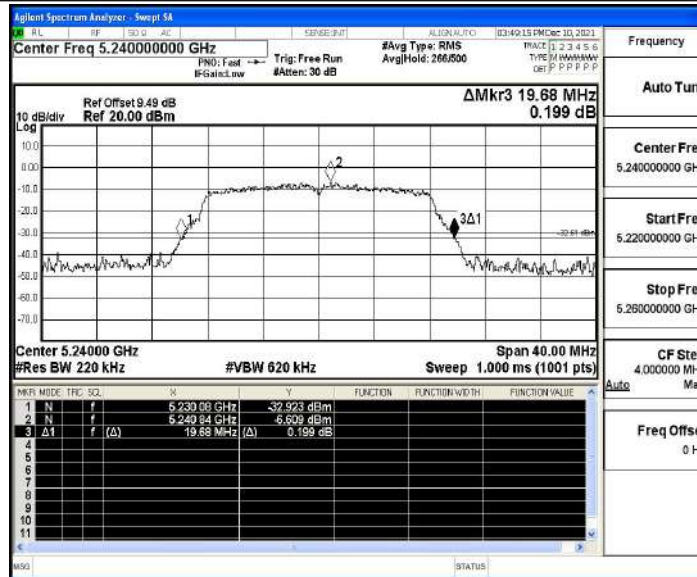
11A_Ant1_5180



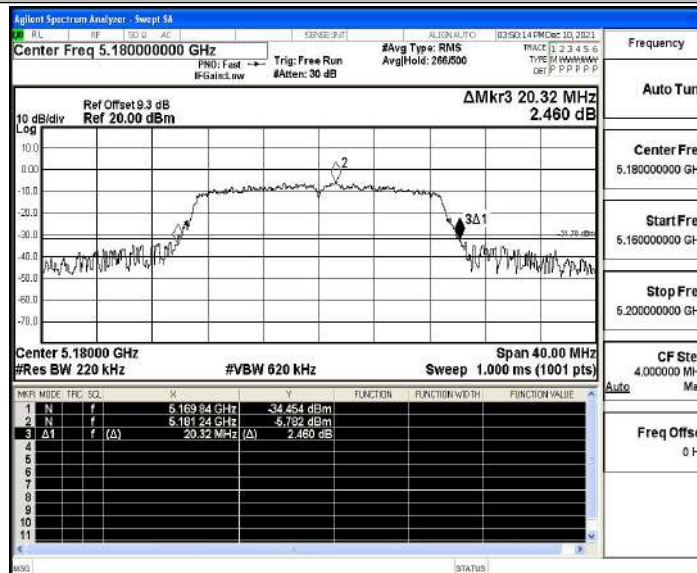
11A_Ant1_5200



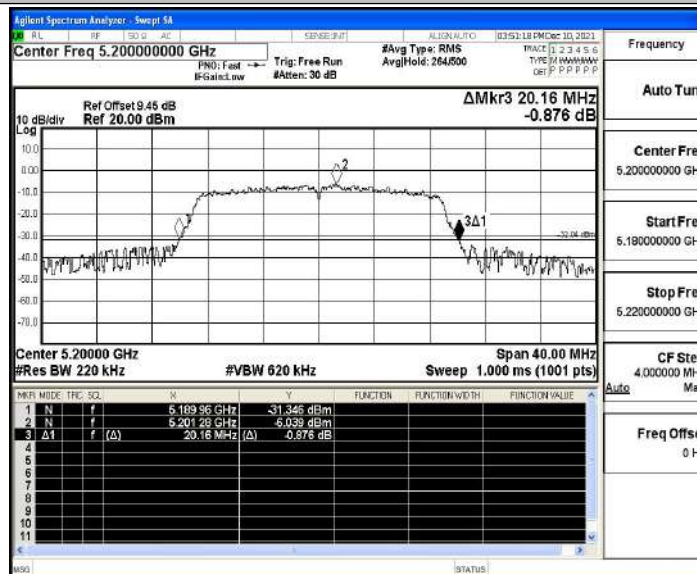
11A_Ant1_5240



11N20SISO_Ant1_5180

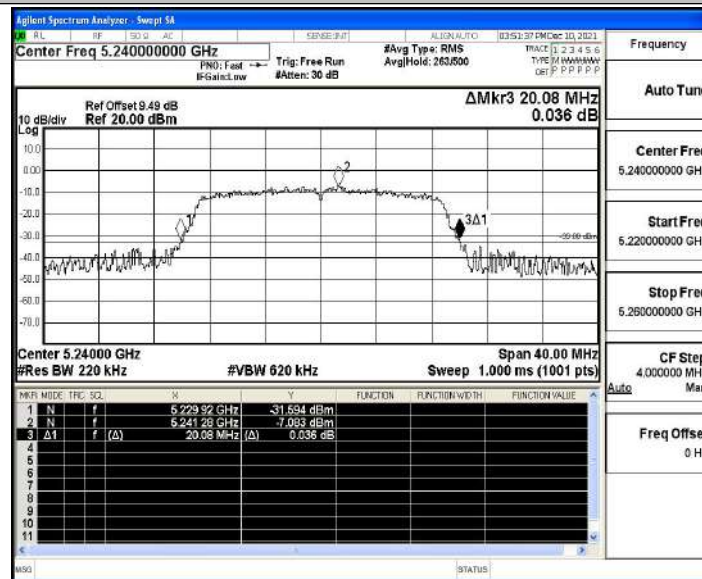


11N20SISO_Ant1_5200

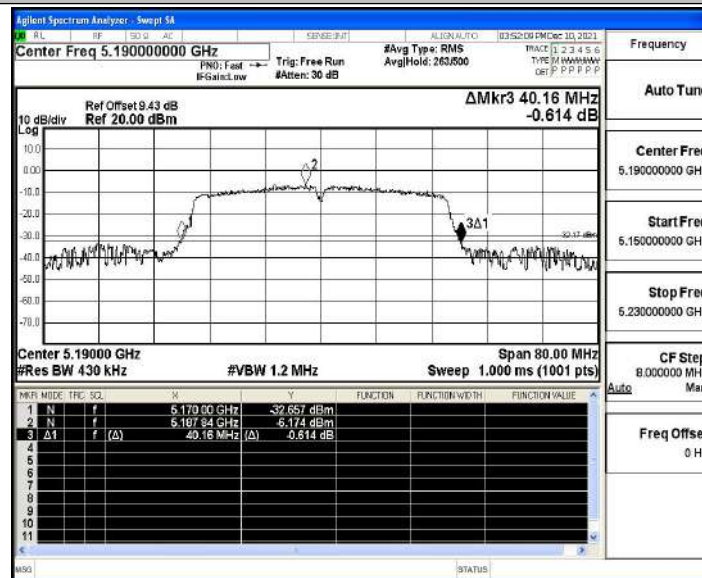




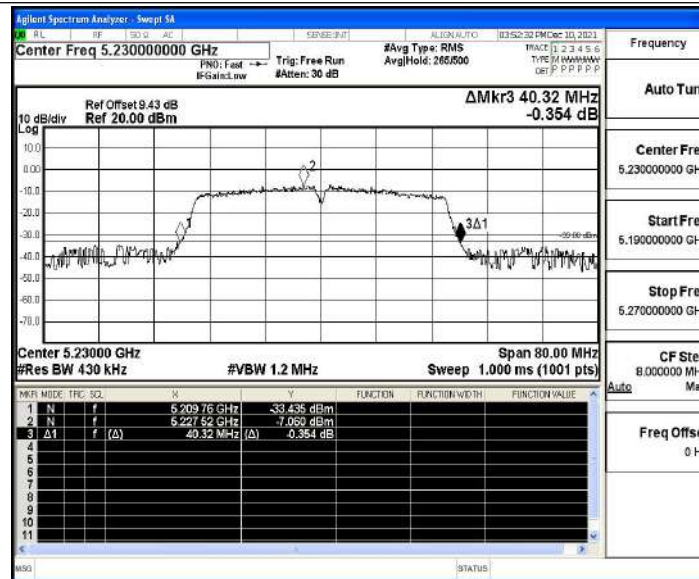
11N20SISO_Ant1_5240



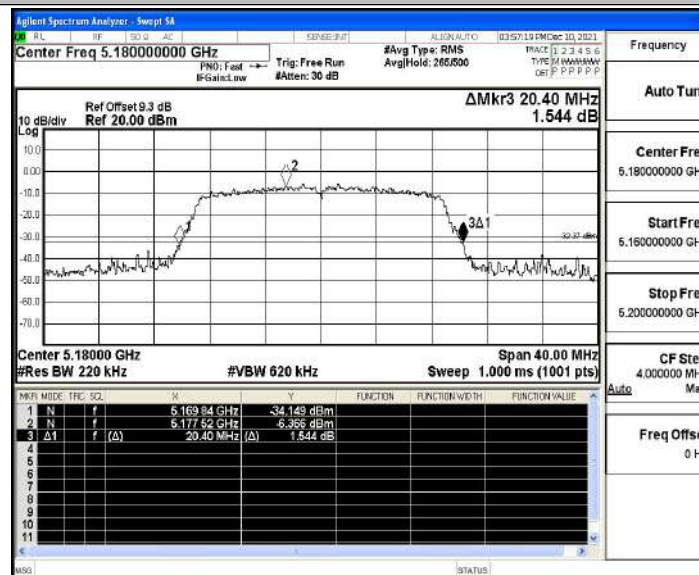
11N40SISO_Ant1_5190



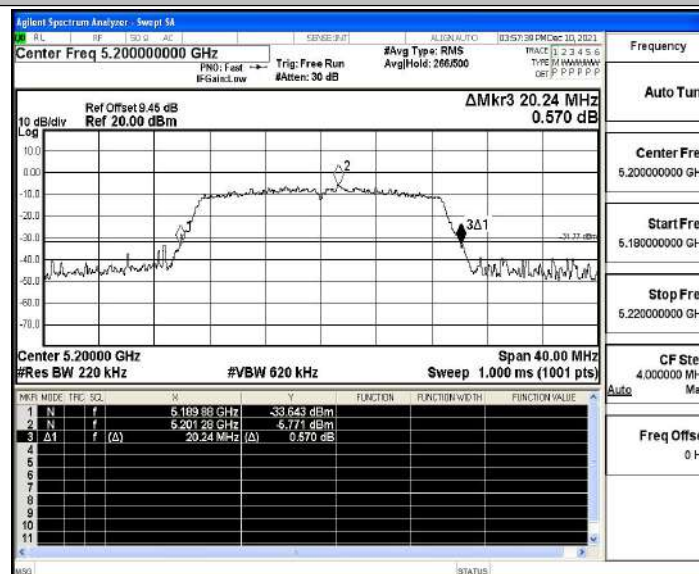
11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180

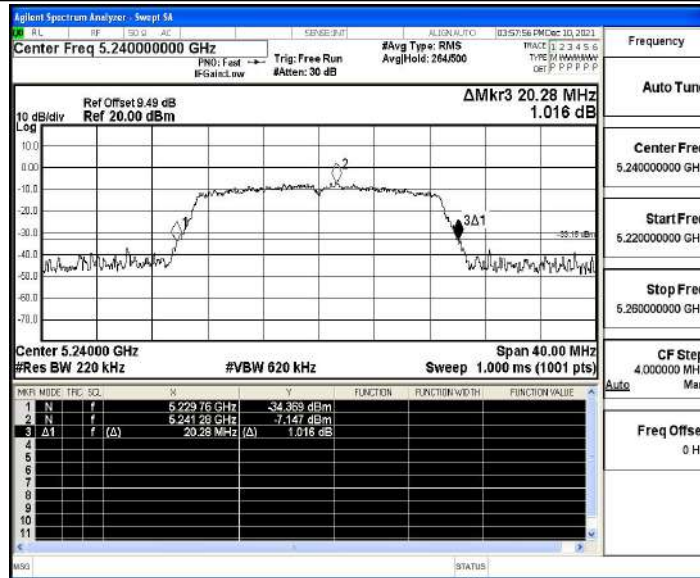


11AC20SISO_Ant1_5200

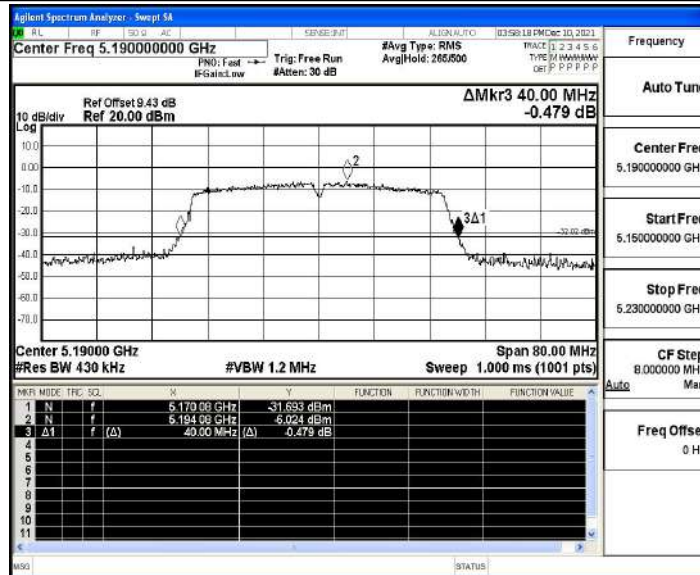




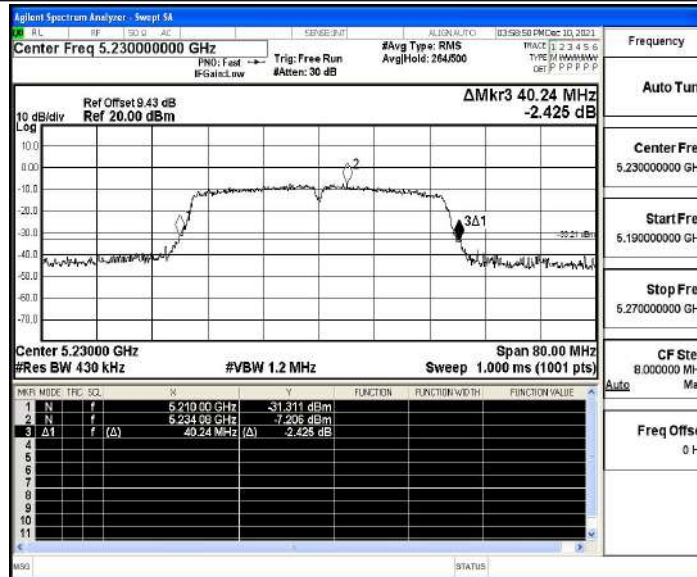
11AC20SISO_Ant1_5240



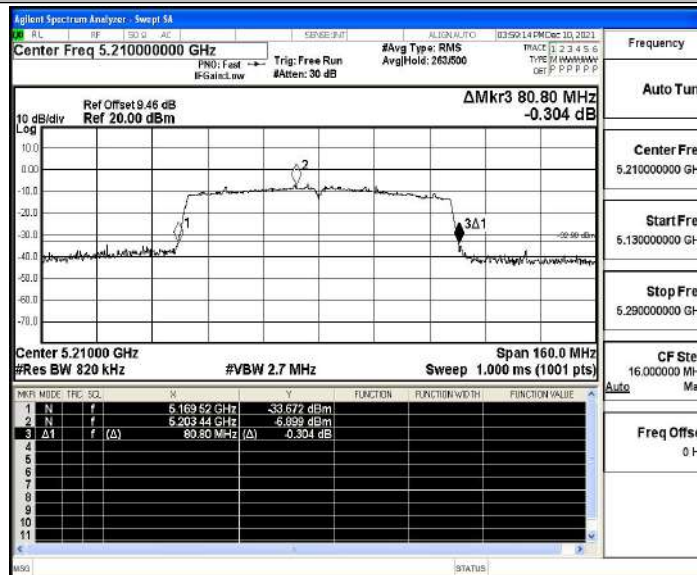
11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210





D.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	7.85	≤ 23.98	PASS
		5200	7.53	≤ 23.98	PASS
		5240	7.28	≤ 23.98	PASS
11N20SISO	Ant1	5180	7.23	≤ 23.98	PASS
		5200	7.01	≤ 23.98	PASS
		5240	7.78	≤ 23.98	PASS
11N40SISO	Ant1	5190	7.19	≤ 23.98	PASS
		5230	7.57	≤ 23.98	PASS
11AC20SISO	Ant1	5180	7.07	≤ 23.98	PASS
		5200	7.01	≤ 23.98	PASS
		5240	7.73	≤ 23.98	PASS
11AC40SISO	Ant1	5190	7.24	≤ 23.98	PASS
		5230	7.97	≤ 23.98	PASS
11AC80SISO	Ant1	5210	7.03	≤ 23.98	PASS

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



D.3 Maximum power spectral density

Test Result

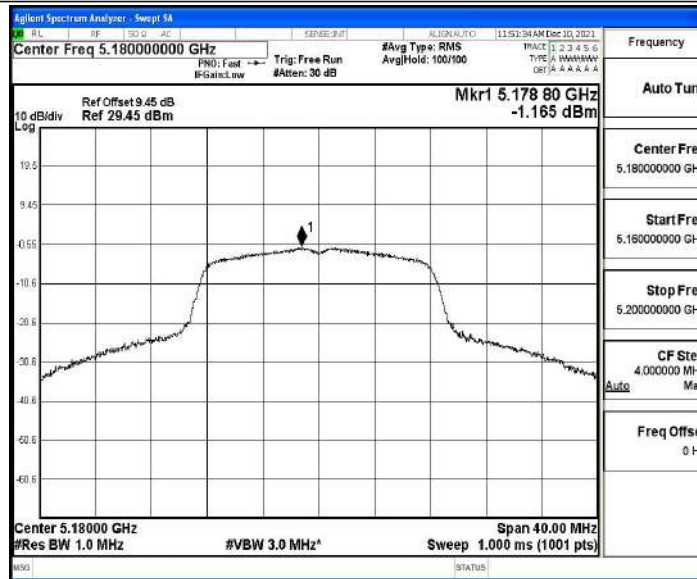
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-1.17	≤11	PASS
		5200	-1.69	≤11	PASS
		5240	-2.96	≤11	PASS
11N20SISO	Ant1	5180	-2.27	≤11	PASS
		5200	-2.39	≤11	PASS
		5240	-3.59	≤11	PASS
11N40SISO	Ant1	5190	-4.67	≤11	PASS
		5230	-6.88	≤11	PASS
11AC20SISO	Ant1	5180	-2.2	≤11	PASS
		5200	-2.34	≤11	PASS
		5240	-3.76	≤11	PASS
11AC40SISO	Ant1	5190	-5.14	≤11	PASS
		5230	-6.02	≤11	PASS
11AC80SISO	Ant1	5210	-9.28	≤11	PASS

Note: 1.The Duty Cycle Factor and RBW Factor is compensated in the graph.

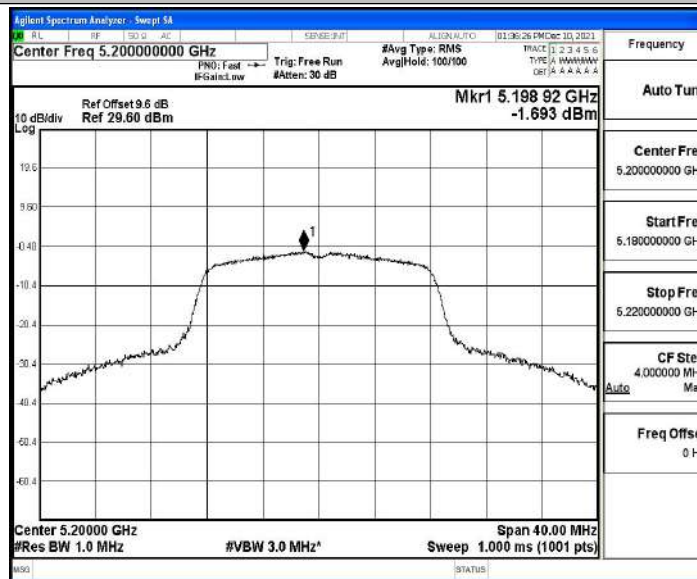


Test Graphs

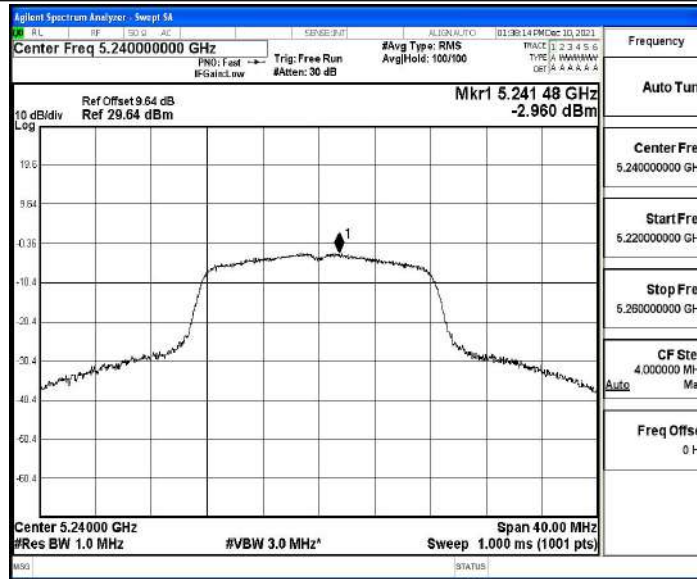
11A_Ant1_5180



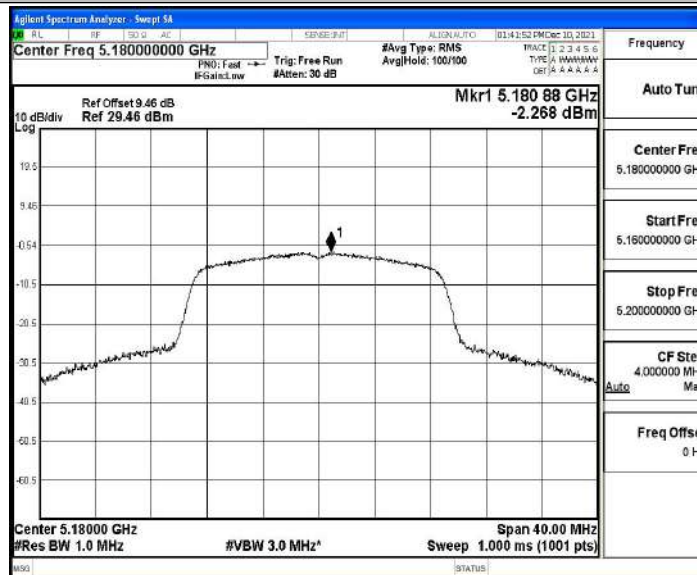
11A_Ant1_5200



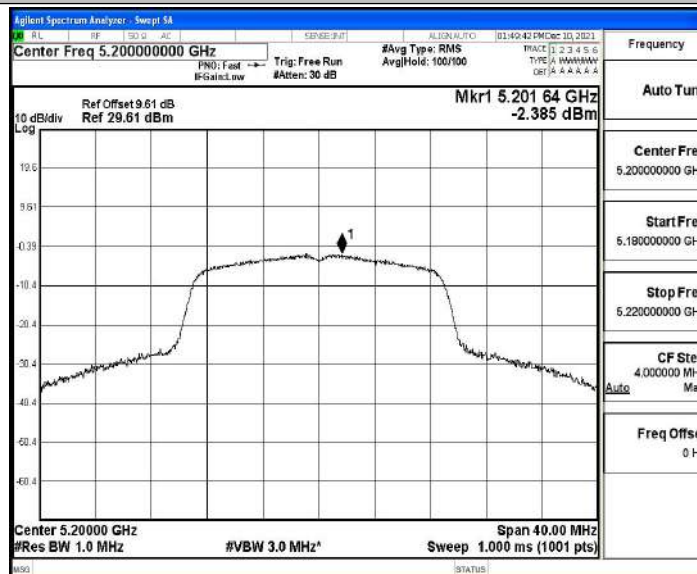
11A_Ant1_5240



11N20SISO_Ant1_5180

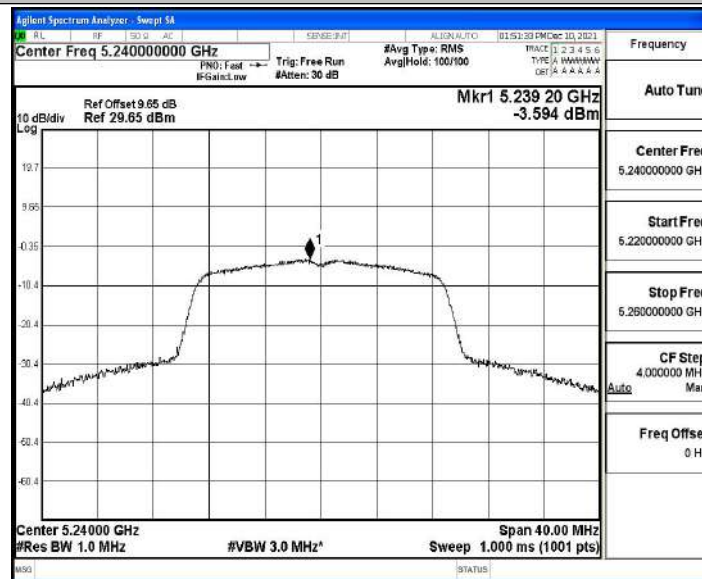


11N20SISO_Ant1_5200

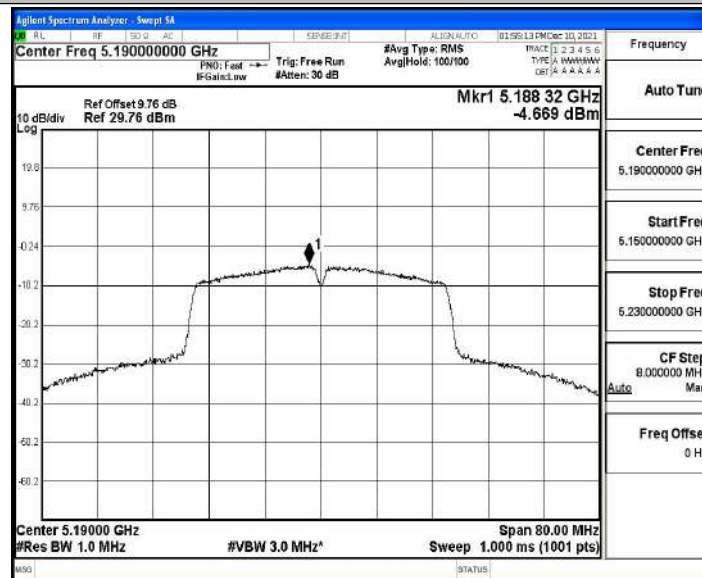




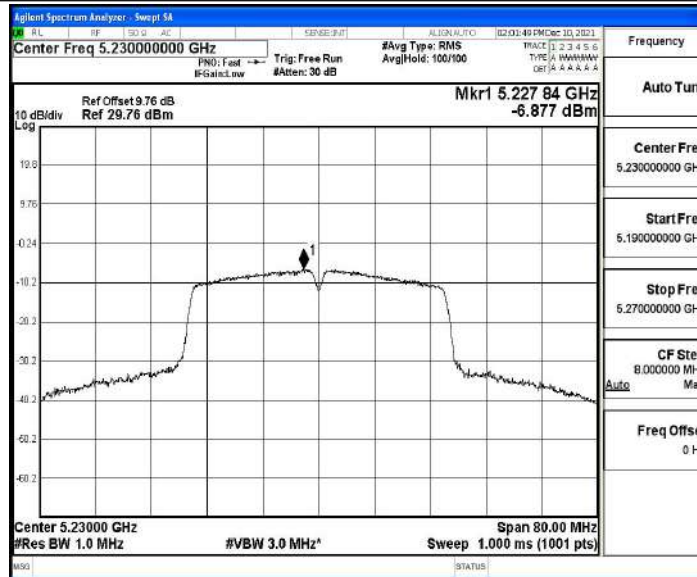
11N20SISO_Ant1_5240



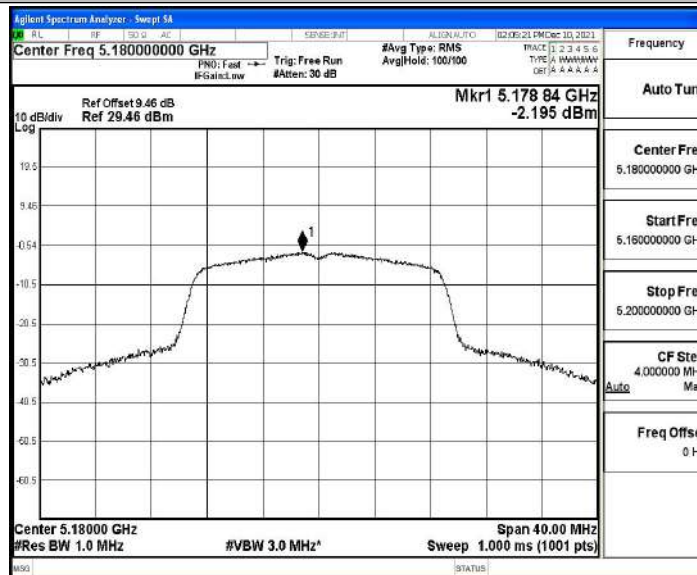
11N40SISO_Ant1_5190



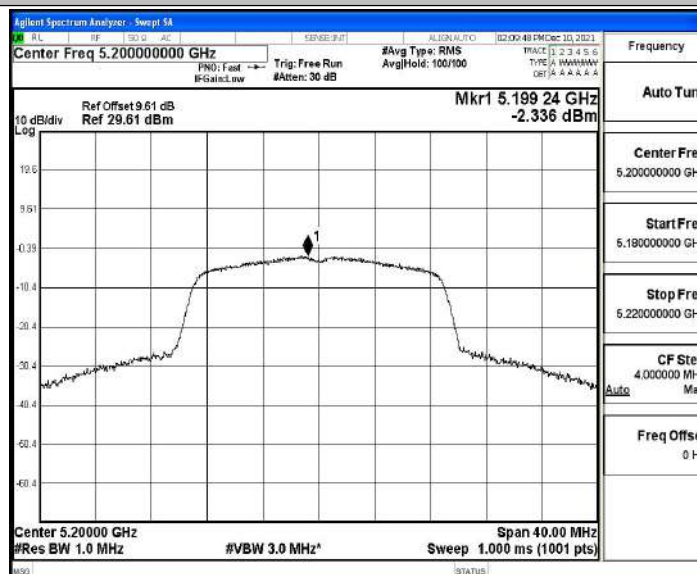
11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180

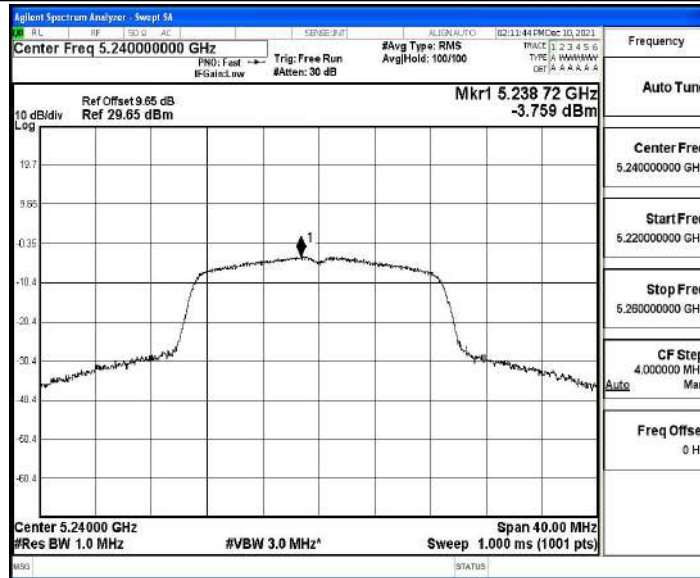


11AC20SISO_Ant1_5200

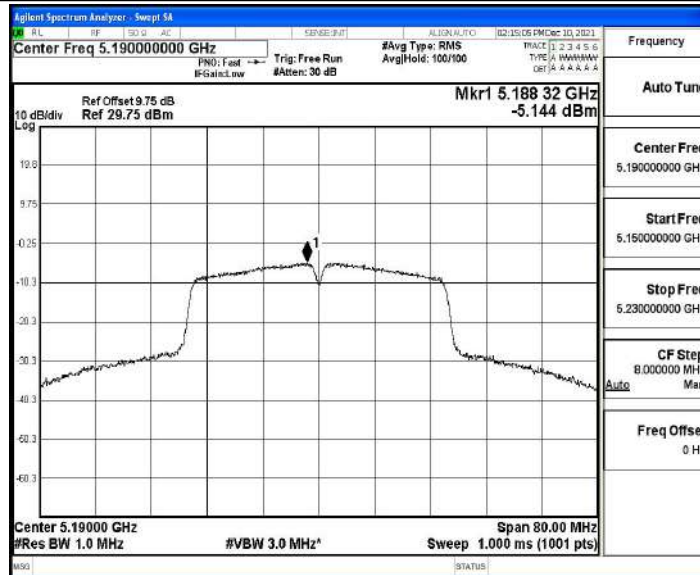




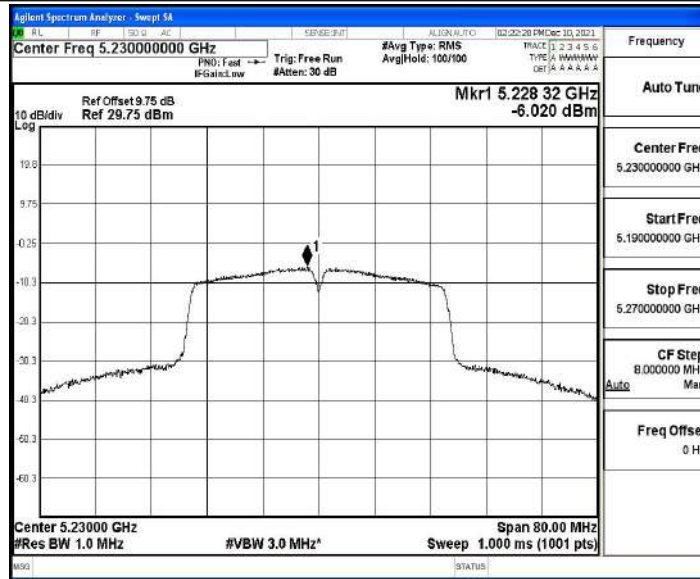
11AC20SISO_Ant1_5240



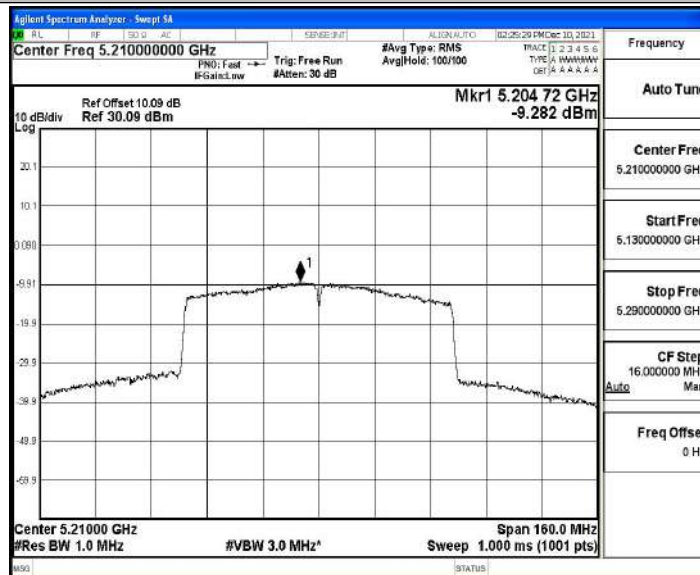
11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210





D.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	Ant1	Low	5180	AV	4500.000	-48.92	≤-41.20	46.28	≤54	PASS
				AV	4850.000	-46.73	≤-41.20	48.47	≤54	PASS
				AV	5150.000	-47.42	≤-41.20	47.78	≤54	PASS
				Peak	4500.000	-42.56	≤-21.20	52.64	≤68.2	PASS
				Peak	4949.400	-37.36	≤-21.20	57.84	≤68.2	PASS
				Peak	5150.000	-40.57	≤-21.20	54.63	≤68.2	PASS
		High	5240	AV	5350.000	-47.49	≤-41.20	47.71	≤54	PASS
				AV	5406.480	-47.14	≤-41.20	48.06	≤54	PASS
				AV	5460.000	-47.41	≤-41.20	47.79	≤54	PASS
				Peak	5350.000	-40.07	≤-21.20	55.13	≤68.2	PASS
				Peak	5424.240	-36.56	≤-21.20	58.64	≤68.2	PASS
				Peak	5460.000	-40.47	≤-21.20	54.73	≤68.2	PASS
11N20SI SO	Ant1	Low	5180	AV	4500.000	-48.97	≤-41.20	46.23	≤54	PASS
				AV	4840.900	-46.83	≤-41.20	48.37	≤54	PASS
				AV	5150.000	-47.4	≤-41.20	47.80	≤54	PASS
				Peak	4500.000	-42.75	≤-21.20	52.45	≤68.2	PASS
				Peak	4999.100	-37.27	≤-21.20	57.93	≤68.2	PASS
				Peak	5150.000	-39.65	≤-21.20	55.55	≤68.2	PASS
		High	5240	AV	5350.000	-47.47	≤-41.20	47.73	≤54	PASS
				AV	5388.000	-47.22	≤-41.20	47.98	≤54	PASS
				AV	5460.000	-47.51	≤-41.20	47.69	≤54	PASS
				Peak	5350.000	-40.47	≤-21.20	54.73	≤68.2	PASS
				Peak	5395.440	-37.34	≤-21.20	57.86	≤68.2	PASS
				Peak	5460.000	-40.3	≤-21.20	54.90	≤68.2	PASS
11N40SI SO	Ant1	Low	5190	AV	4500.000	-48.42	≤-41.20	46.78	≤54	PASS
				AV	4862.600	-46.15	≤-41.20	49.05	≤54	PASS
				AV	5150.000	-47.1	≤-41.20	48.10	≤54	PASS
				Peak	4500.000	-41.6	≤-21.20	53.60	≤68.2	PASS
				Peak	4782.800	-37.25	≤-21.20	57.95	≤68.2	PASS
				Peak	5150.000	-40.51	≤-21.20	54.69	≤68.2	PASS
		High	5230	AV	5350.000	-47.1	≤-41.20	48.10	≤54	PASS
				AV	5446.740	-46.8	≤-41.20	48.40	≤54	PASS
				AV	5460.000	-47.17	≤-41.20	48.03	≤54	PASS
				Peak	5350.000	-41.04	≤-21.20	54.16	≤68.2	PASS
				Peak	5445.960	-37.95	≤-21.20	57.25	≤68.2	PASS
				Peak	5460.000	-39.25	≤-21.20	55.95	≤68.2	PASS
11AC20S	Ant1	Low	5180	AV	4500.000	-48.98	≤-41.20	46.22	≤54	PASS



ISO				AV	5149.600	-42.65	≤ -41.20	52.55	≤ 54	PASS
				AV	5150.000	-42.21	≤ -41.20	52.99	≤ 54	PASS
				Peak	4500.000	-41.83	≤ -21.20	53.37	≤ 68.2	PASS
				Peak	5149.600	-35.41	≤ -21.20	59.79	≤ 68.2	PASS
				Peak	5150.000	-35.34	≤ -21.20	59.86	≤ 68.2	PASS
		High	5240	AV	5350.000	-47.45	≤ -41.20	47.75	≤ 54	PASS
				AV	5373.600	-47.16	≤ -41.20	48.04	≤ 54	PASS
				AV	5460.000	-47.46	≤ -41.20	47.74	≤ 54	PASS
				Peak	5350.000	-40.51	≤ -21.20	54.69	≤ 68.2	PASS
				Peak	5410.800	-37.73	≤ -21.20	57.47	≤ 68.2	PASS
				Peak	5460.000	-41.4	≤ -21.20	53.80	≤ 68.2	PASS
11AC40S ISO	Ant1	Low	5190	AV	4500.000	-48.43	≤ -41.20	46.77	≤ 54	PASS
				AV	4868.200	-46.35	≤ -41.20	48.85	≤ 54	PASS
				AV	5150.000	-46.93	≤ -41.20	48.27	≤ 54	PASS
				Peak	4500.000	-41.35	≤ -21.20	53.85	≤ 68.2	PASS
				Peak	4782.800	-37.28	≤ -21.20	57.92	≤ 68.2	PASS
				Peak	5150.000	-39.78	≤ -21.20	55.42	≤ 68.2	PASS
		High	5230	AV	5350.000	-47.06	≤ -41.20	48.14	≤ 54	PASS
				AV	5409.820	-46.8	≤ -41.20	48.40	≤ 54	PASS
				AV	5460.000	-47.26	≤ -41.20	47.94	≤ 54	PASS
				Peak	5350.000	-39.87	≤ -21.20	55.33	≤ 68.2	PASS
				Peak	5446.740	-37.31	≤ -21.20	57.89	≤ 68.2	PASS
				Peak	5460.000	-41.17	≤ -21.20	54.03	≤ 68.2	PASS
11AC80S ISO	Ant1	Low	5210	AV	4500.000	-48.31	≤ -41.20	46.89	≤ 54	PASS
				AV	4939.500	-45.79	≤ -41.20	49.41	≤ 54	PASS
				AV	5150.000	-46.24	≤ -41.20	48.96	≤ 54	PASS
				Peak	4500.000	-41.27	≤ -21.20	53.93	≤ 68.2	PASS
				Peak	4796.250	-36.49	≤ -21.20	58.71	≤ 68.2	PASS
				Peak	5150.000	-40.62	≤ -21.20	54.58	≤ 68.2	PASS
		High	5210	AV	5350.000	-47.02	≤ -41.20	48.18	≤ 54	PASS
				AV	5448.800	-46.35	≤ -41.20	48.85	≤ 54	PASS
				AV	5460.000	-46.95	≤ -41.20	48.25	≤ 54	PASS
				Peak	5350.000	-40.06	≤ -21.20	55.14	≤ 68.2	PASS
				Peak	5355.840	-37.09	≤ -21.20	58.11	≤ 68.2	PASS
				Peak	5460.000	-39.15	≤ -21.20	56.05	≤ 68.2	PASS

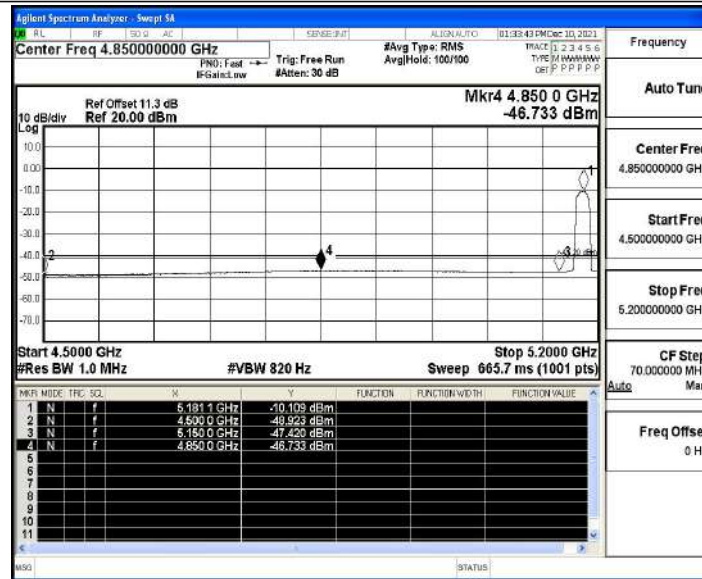
Note:

1. The Antenna Gain is compensated in the graph.
2. For transmitters operating in 5150-5350 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.

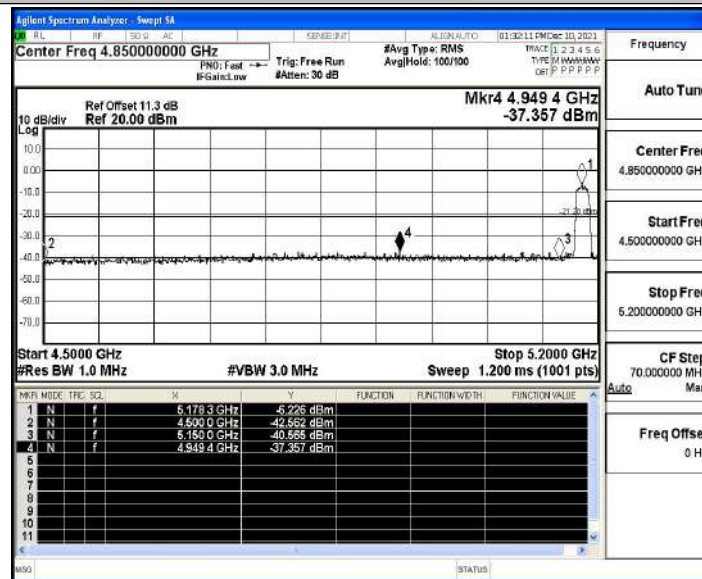


Test Graphs

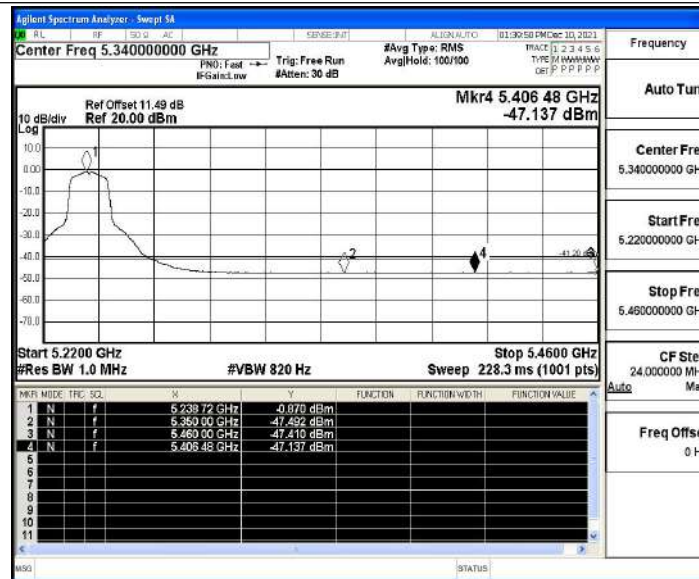
11A_Ant1_Low_5180_AV



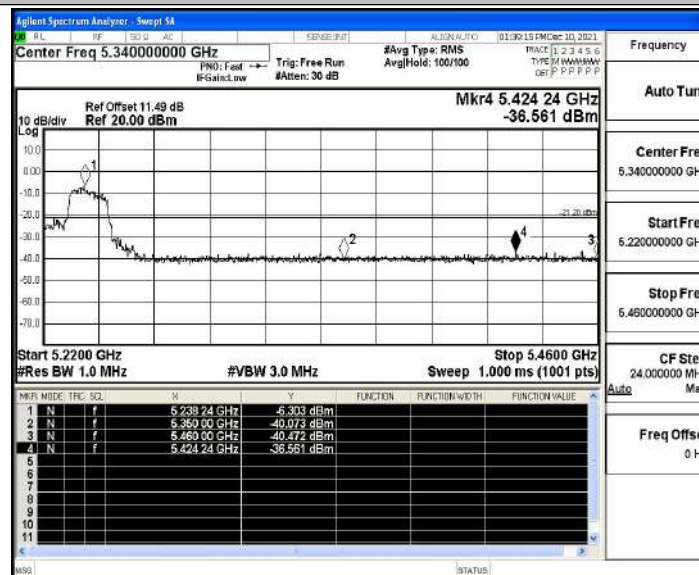
11A_Ant1_Low_5180_Peak



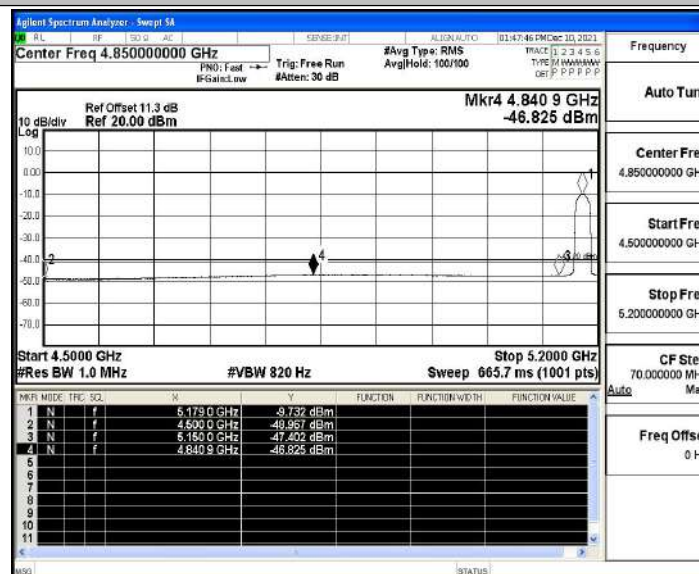
11A_Ant1_High_5240_AV



11A_Ant1_High_5240_Peak

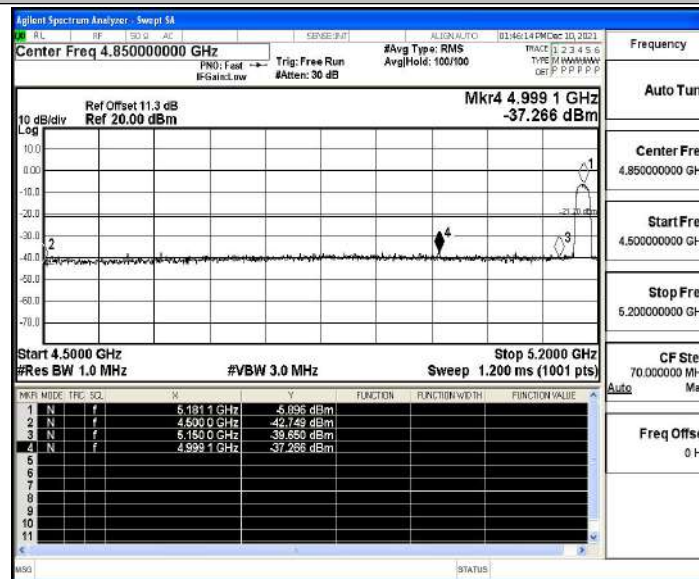


11N20SISO_Ant1_Low_5180_AV

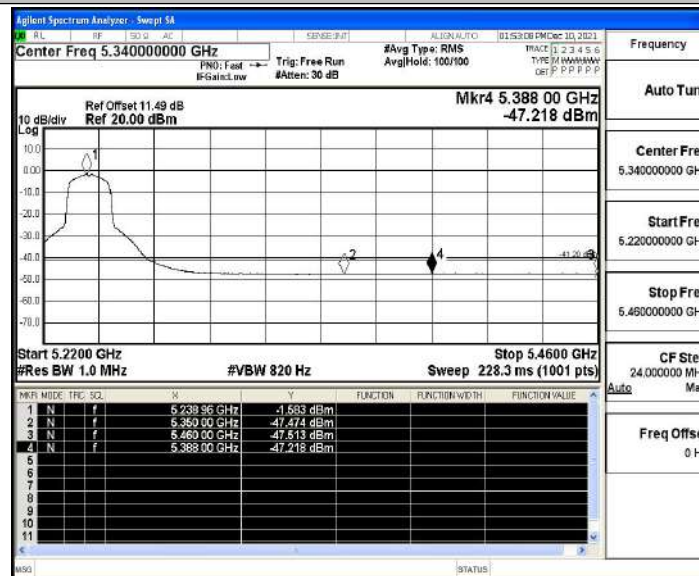




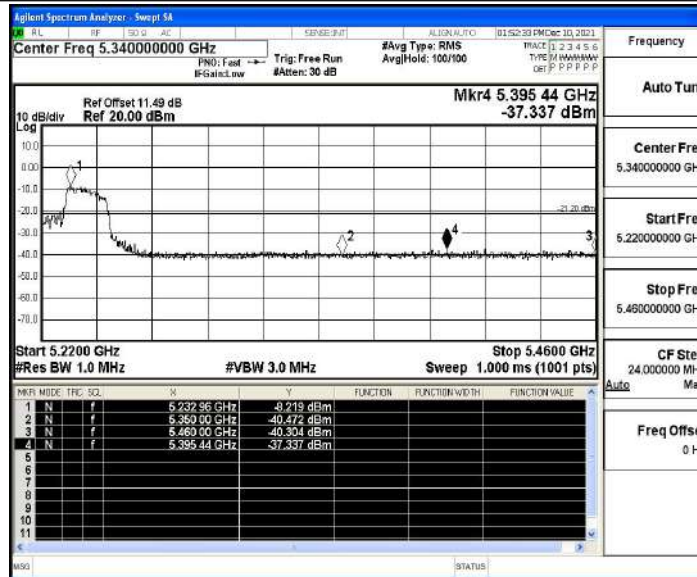
11N20SISO_Ant1_Low_5180_Peak



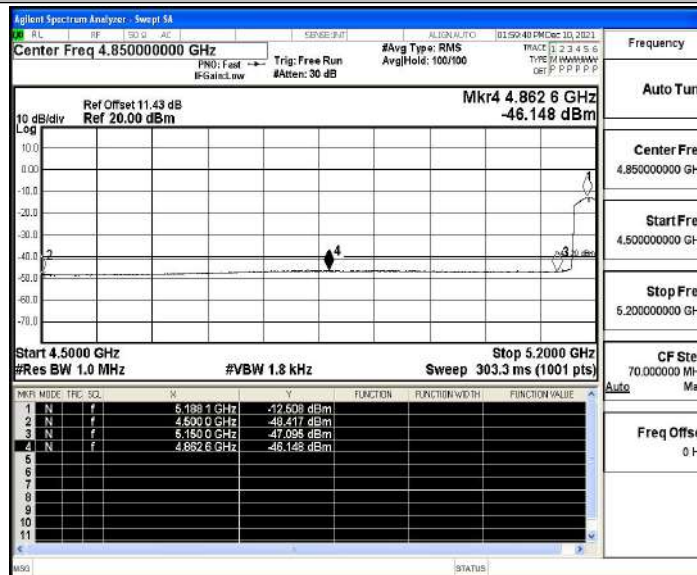
11N20SISO_Ant1_High_5240_AV



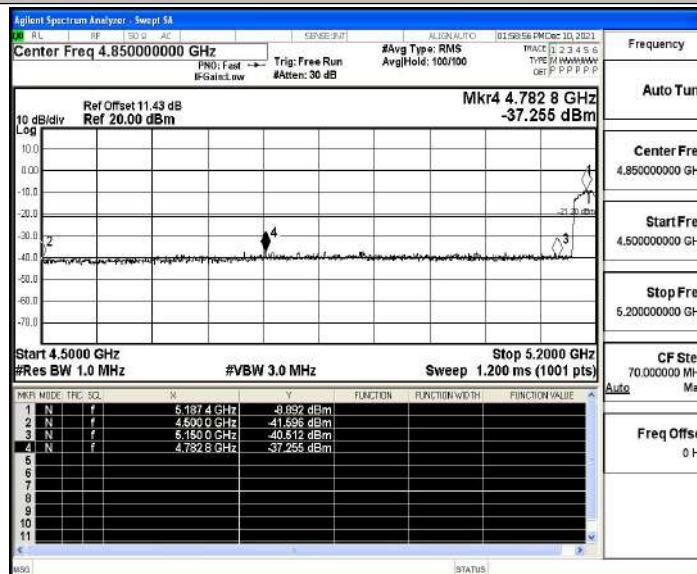
11N20SISO_Ant1_High_5240_Peak



11N40SISO_Ant1_Low_5190_AV

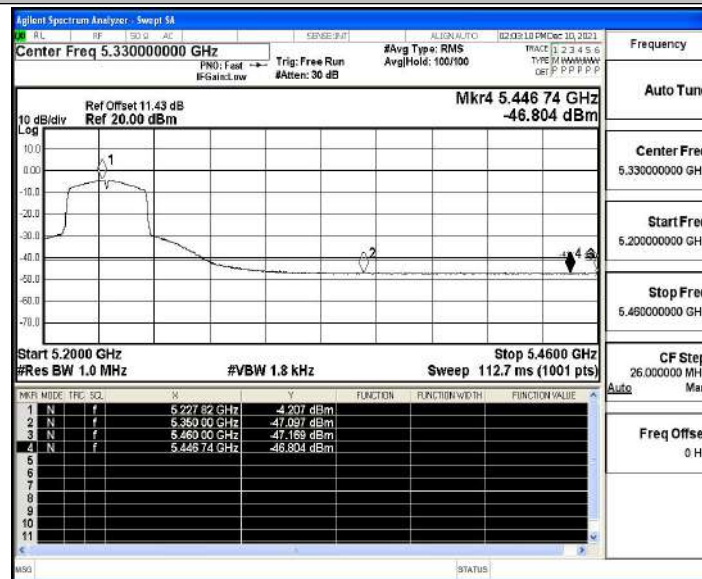


11N40SISO_Ant1_Low_5190_Peak

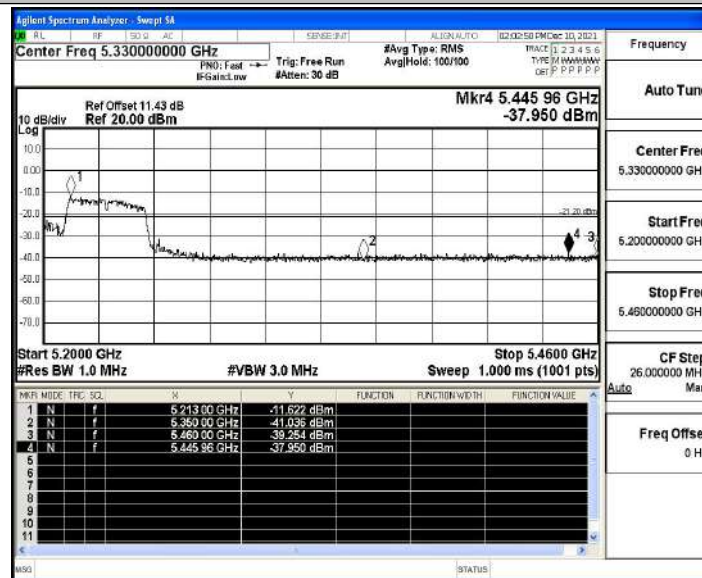




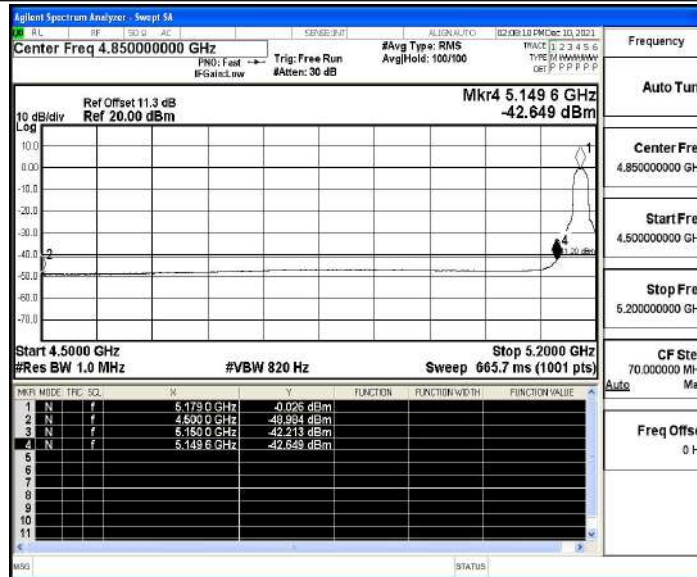
11N40SISO_Ant1_High_5230_AV



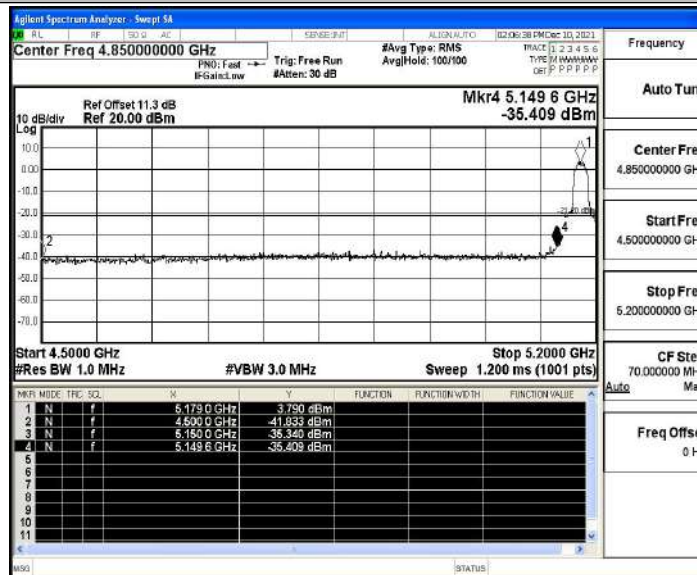
11N40SISO_Ant1_High_5230_Peak



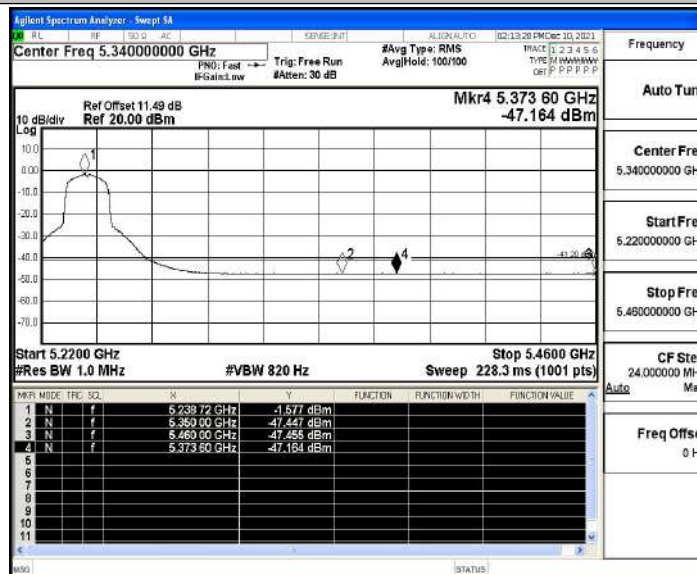
11AC20SISO_Ant1_Low_5180_AV



11AC20SISO_Ant1_Low_5180_Peak

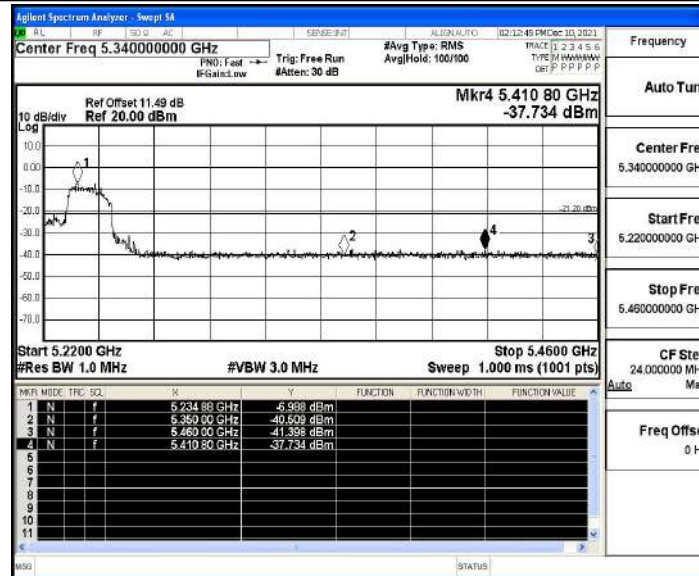


11AC20SISO_Ant1_High_5240_AV

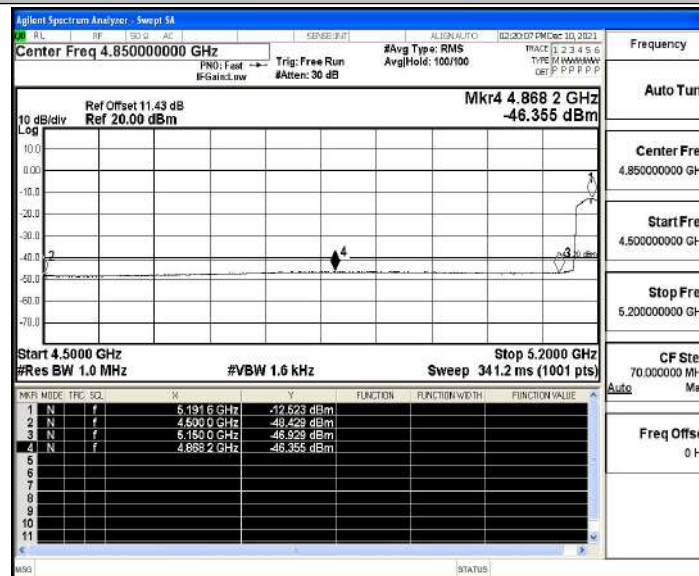




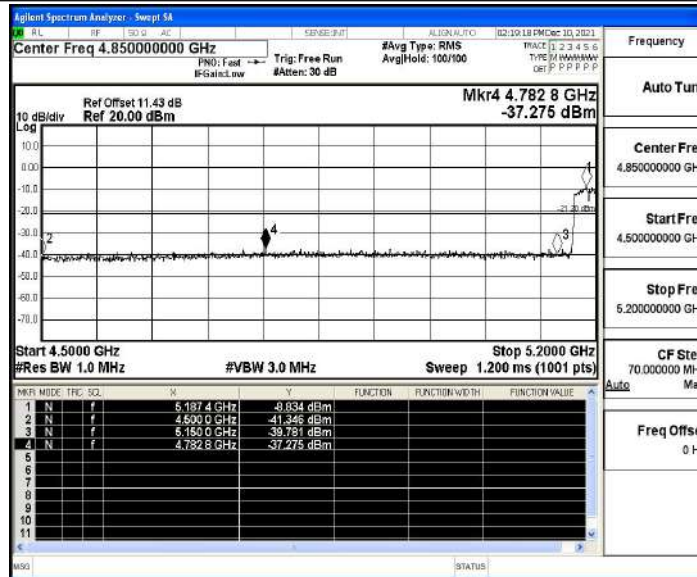
11AC20SISO_Ant1_High_5240_Peak



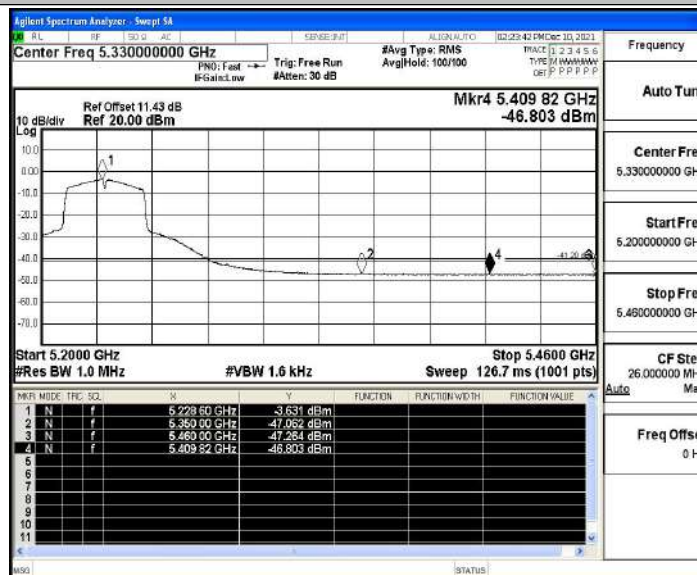
11AC40SISO_Ant1_Low_5190_AV



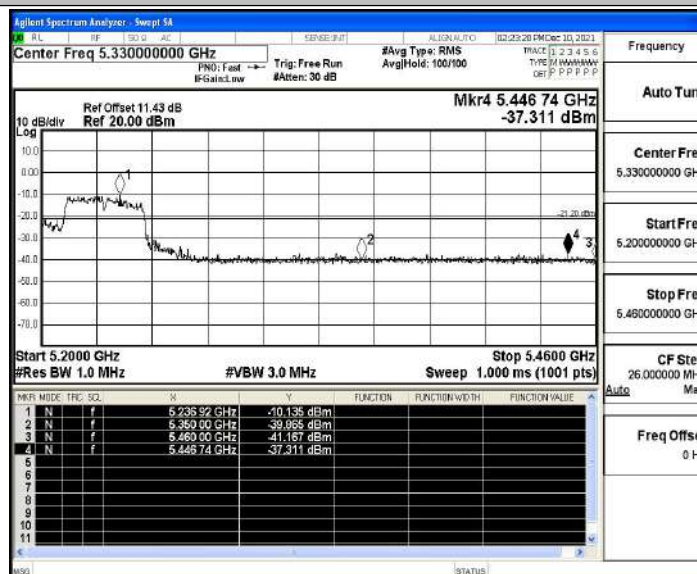
11AC40SISO_Ant1_Low_5190_Peak



11AC40ISO_Ant1_High_5230_AV

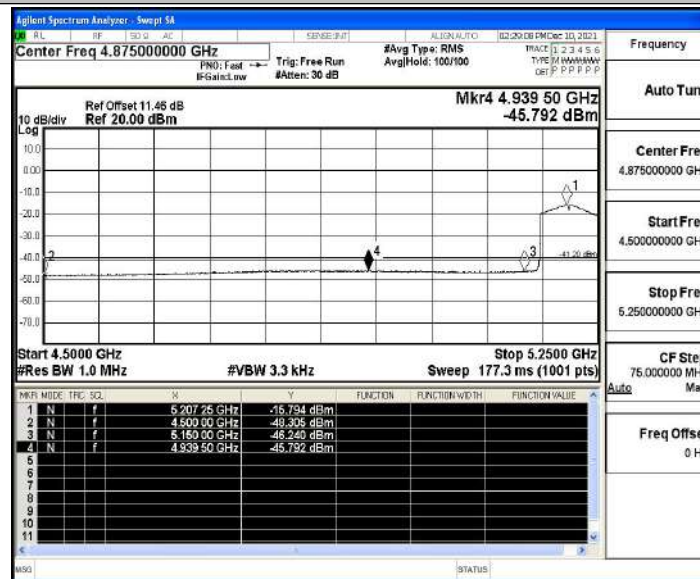


11AC40ISO_Ant1_High_5230_Peak

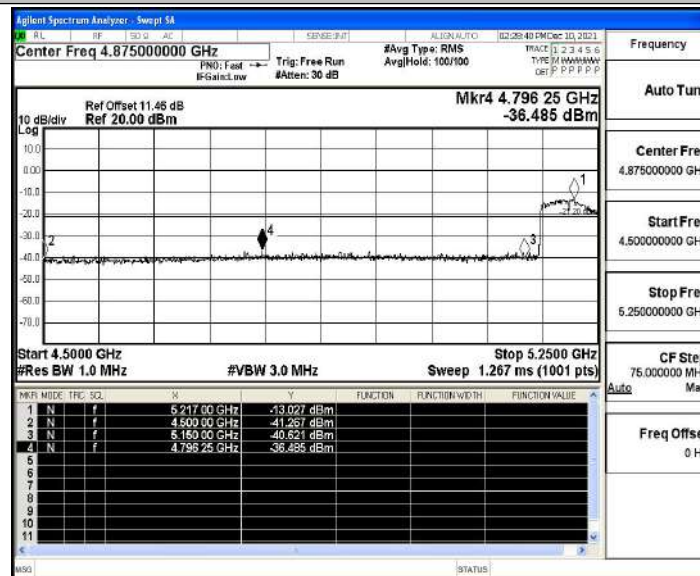




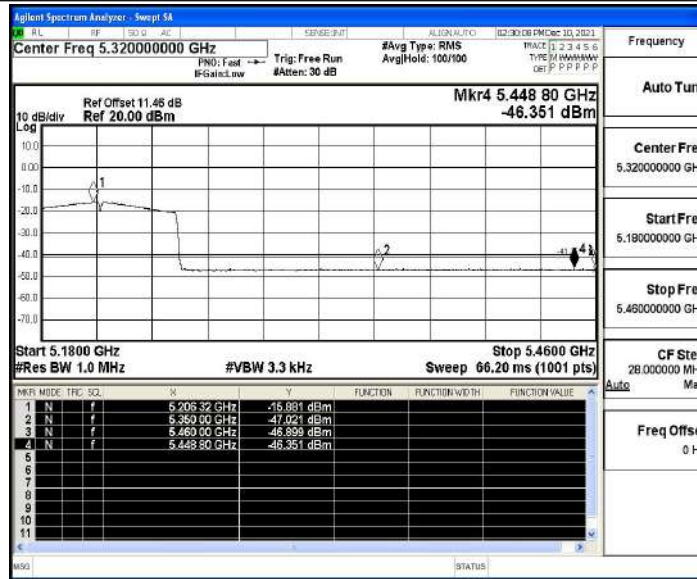
11AC80SISO_Ant1_Low_5210_AV



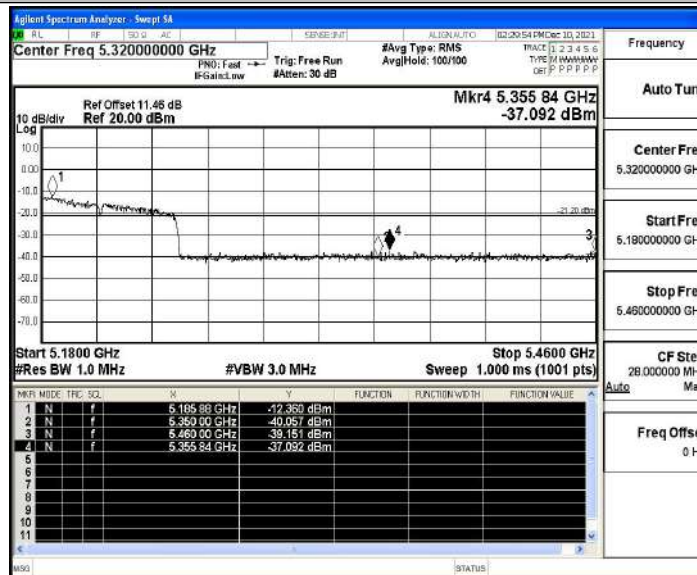
11AC80SISO_Ant1_Low_5210_Peak



11AC80SISO_Ant1_High_5210_AV



11AC80SISO_Ant1_High_5210_Peak





D.5 Frequency Stability

Test Result

Voltage								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20SISO	Ant1	5180	NV	NT	-3000	-0.579151	20	PASS
			LV	NT	-3000	-0.579151	20	PASS
			HV	NT	-3000	-0.579151	20	PASS
		5200	NV	NT	-4000	-0.769231	20	PASS
			LV	NT	-4000	-0.769231	20	PASS
			HV	NT	-4000	-0.769231	20	PASS
		5240	NV	NT	-4000	-0.763359	20	PASS
			LV	NT	-4000	-0.763359	20	PASS
			HV	NT	-4000	-0.763359	20	PASS
11AC40SISO	Ant1	5190	NV	NT	-4000	-0.770713	20	PASS
			LV	NT	-4000	-0.770713	20	PASS
			HV	NT	-4000	-0.770713	20	PASS
		5230	NV	NT	-4000	-0.764818	20	PASS
			LV	NT	-4000	-0.764818	20	PASS
			HV	NT	-4000	-0.764818	20	PASS
11AC80SISO	Ant1	5210	NV	NT	-4000	-0.767754	20	PASS
			LV	NT	-4000	-0.767754	20	PASS
			HV	NT	-4000	-0.767754	20	PASS

Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20SISO	Ant1	5180	NV	-30	-3000	-0.579151	20	PASS
			NV	-20	-4000	-0.772201	20	PASS
			NV	-10	-4000	-0.772201	20	PASS
			NV	0	-4000	-0.772201	20	PASS
			NV	10	-4000	-0.772201	20	PASS
			NV	20	-4000	-0.772201	20	PASS
			NV	30	-4000	-0.772201	20	PASS
			NV	40	-4000	-0.772201	20	PASS
			NV	50	-4000	-0.772201	20	PASS
		5200	NV	-30	-4000	-0.769231	20	PASS
			NV	-20	-4000	-0.769231	20	PASS
			NV	-10	-4000	-0.769231	20	PASS
			NV	0	-4000	-0.769231	20	PASS
			NV	10	-4000	-0.769231	20	PASS
			NV	20	-4000	-0.769231	20	PASS



			NV	20	-4000	-0.769231	20	PASS
			NV	30	-4000	-0.769231	20	PASS
			NV	40	-4000	-0.769231	20	PASS
			NV	50	-4000	-0.769231	20	PASS
		5240	NV	-30	-4000	-0.763359	20	PASS
			NV	-20	-4000	-0.763359	20	PASS
			NV	-10	-4000	-0.763359	20	PASS
			NV	0	-4000	-0.763359	20	PASS
			NV	10	-4000	-0.763359	20	PASS
			NV	20	-4000	-0.763359	20	PASS
			NV	30	-4000	-0.763359	20	PASS
			NV	40	-4000	-0.763359	20	PASS
			NV	50	-4000	-0.763359	20	PASS
11AC40SIS O	Ant1	5190	NV	-30	-4000	-0.770713	20	PASS
			NV	-20	-4000	-0.770713	20	PASS
			NV	-10	-4000	-0.770713	20	PASS
			NV	0	-4000	-0.770713	20	PASS
			NV	10	-4000	-0.770713	20	PASS
			NV	20	-4000	-0.770713	20	PASS
			NV	30	-4000	-0.770713	20	PASS
			NV	40	-4000	-0.770713	20	PASS
			NV	50	-4000	-0.770713	20	PASS
		5230	NV	-30	-4000	-0.764818	20	PASS
			NV	-20	-4000	-0.764818	20	PASS
			NV	-10	-4000	-0.764818	20	PASS
			NV	0	-4000	-0.764818	20	PASS
			NV	10	-4000	-0.764818	20	PASS
			NV	20	-4000	-0.764818	20	PASS
			NV	30	-4000	-0.764818	20	PASS
			NV	40	-4000	-0.764818	20	PASS
			NV	50	-4000	-0.764818	20	PASS
11AC80SIS O	Ant1	5210	NV	-30	-4000	-0.767754	20	PASS
			NV	-20	-4000	-0.767754	20	PASS
			NV	-10	-4000	-0.767754	20	PASS
			NV	0	-4000	-0.767754	20	PASS
			NV	10	-4000	-0.767754	20	PASS
			NV	20	-4000	-0.767754	20	PASS
			NV	30	-4000	-0.767754	20	PASS
			NV	40	-4000	-0.767754	20	PASS
			NV	50	-4000	-0.767754	20	PASS



D.6 Duty Cycle

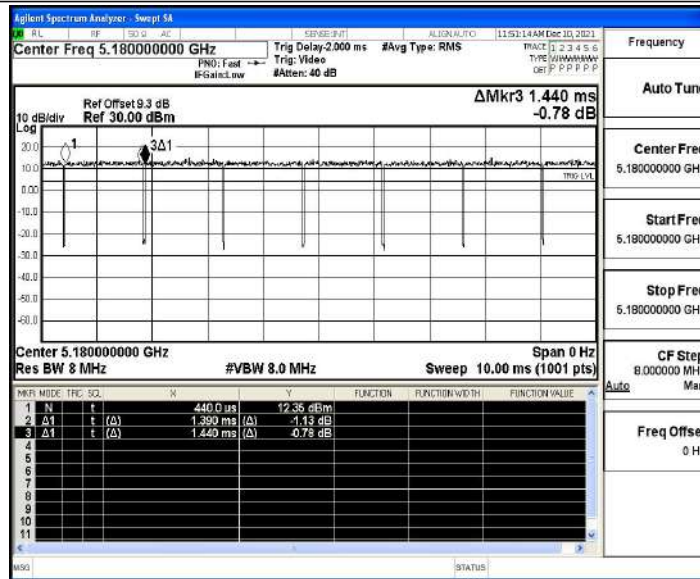
Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[KHz]	Verdict
11A	Ant1	5180	1.39	1.44	96.53	0.72	PASS
		5200	1.39	1.44	96.53	0.72	PASS
		5240	1.39	1.44	96.53	0.72	PASS
11N20SISO	Ant1	5180	1.30	1.35	96.30	0.77	PASS
		5200	1.30	1.35	96.30	0.77	PASS
		5240	1.30	1.35	96.30	0.77	PASS
11N40SISO	Ant1	5190	0.64	0.69	92.75	1.56	PASS
		5230	0.64	0.69	92.75	1.56	PASS
11AC20SISO	Ant1	5180	1.31	1.36	96.32	0.76	PASS
		5200	1.31	1.36	96.32	0.76	PASS
		5240	1.31	1.36	96.32	0.76	PASS
11AC40SISO	Ant1	5190	0.65	0.70	92.86	1.54	PASS
		5230	0.65	0.70	92.86	1.54	PASS
11AC80SISO	Ant1	5210	0.32	0.37	86.49	3.13	PASS

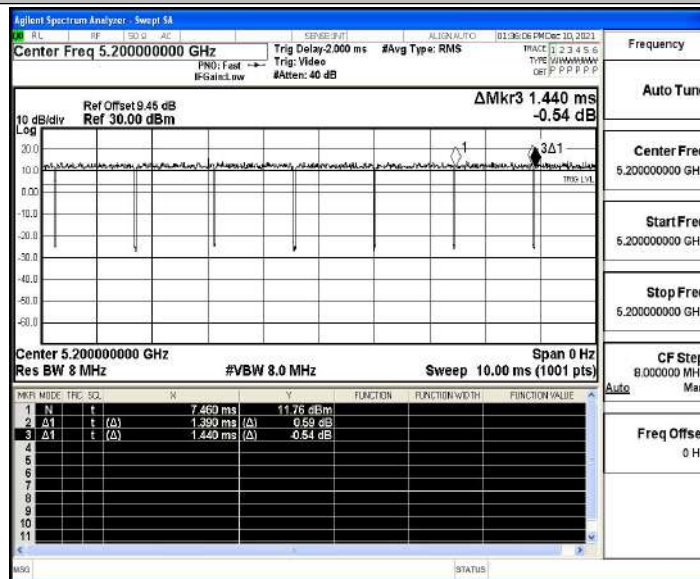


Test Graphs

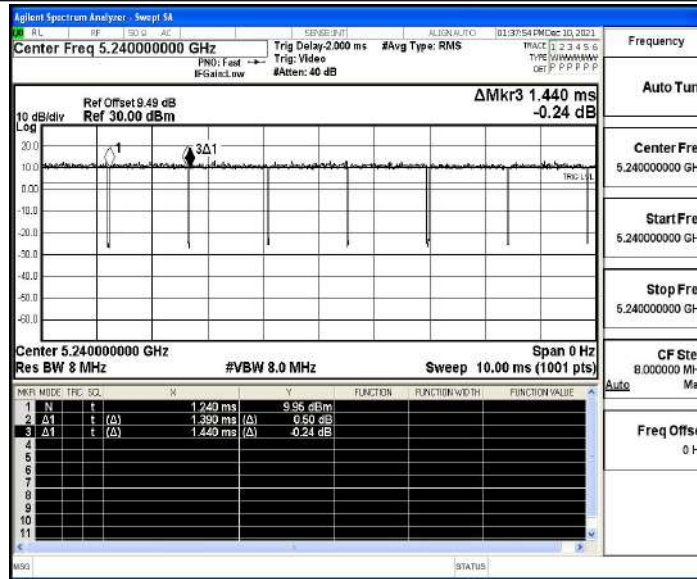
11A_Ant1_5180



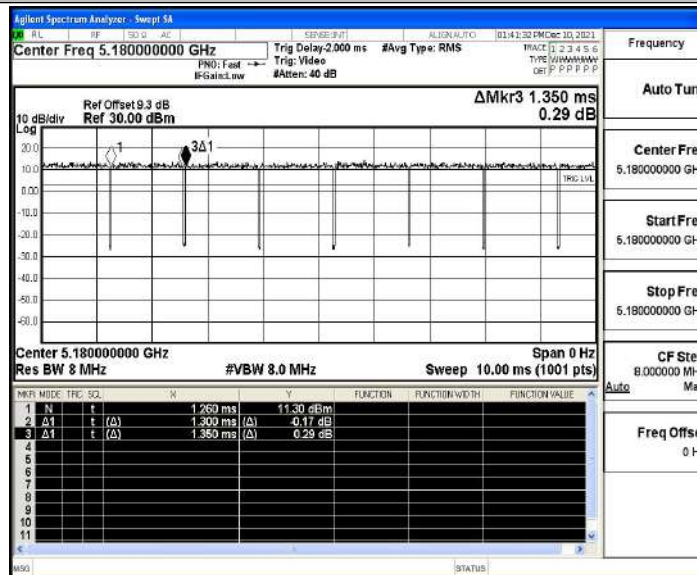
11A_Ant1_5200



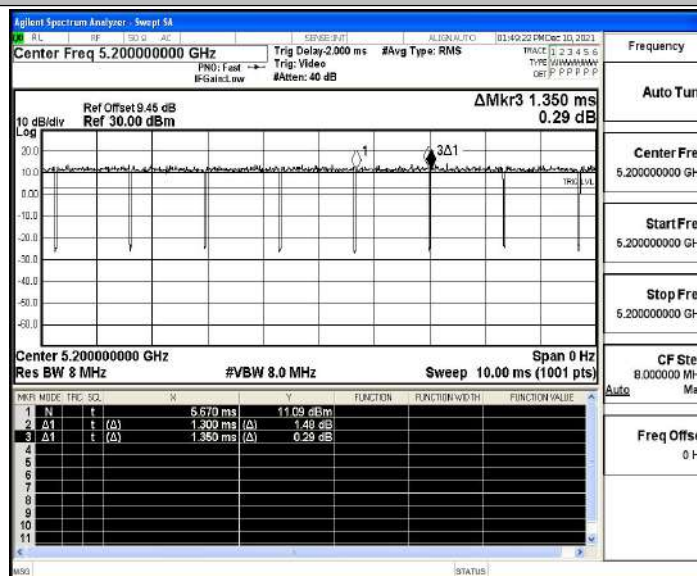
11A_Ant1_5240



11N20SISO_Ant1_5180

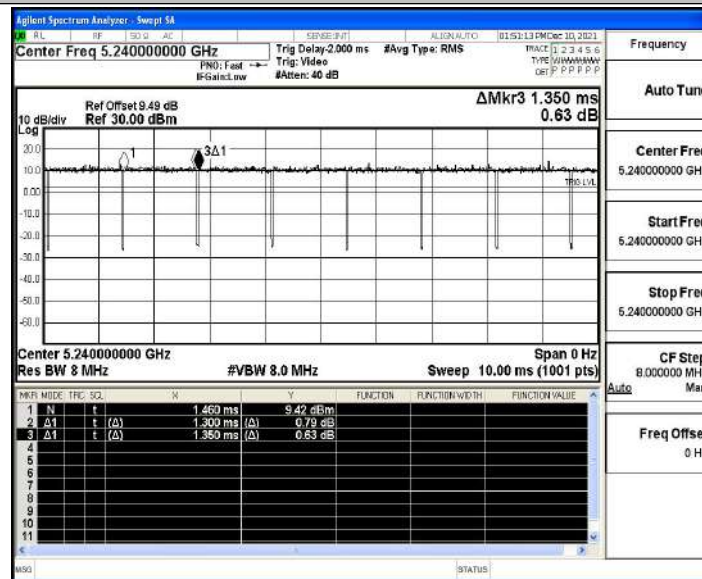


11N20SISO_Ant1_5200

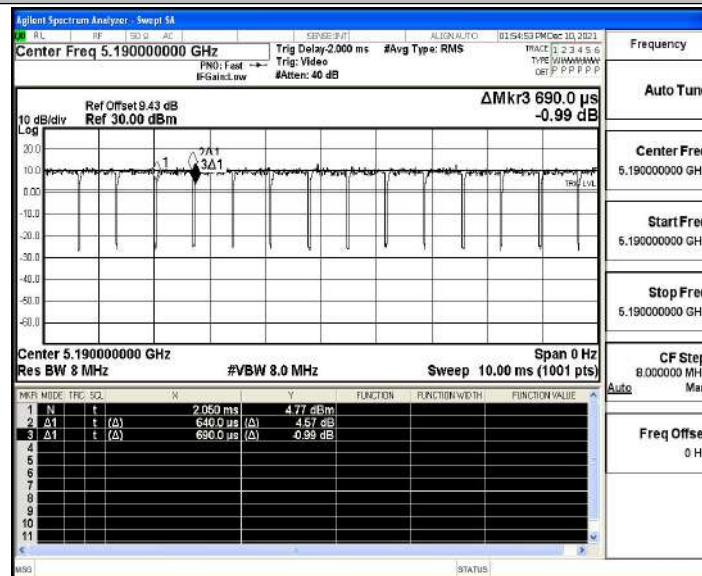




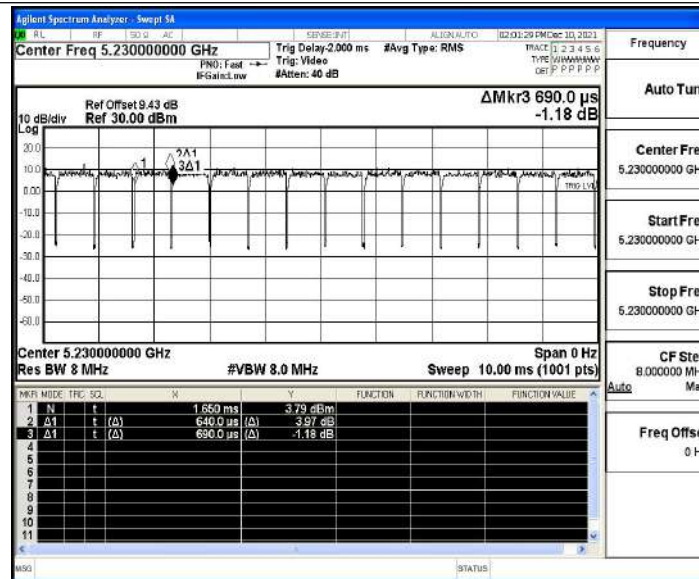
11N20SISO_Ant1_5240



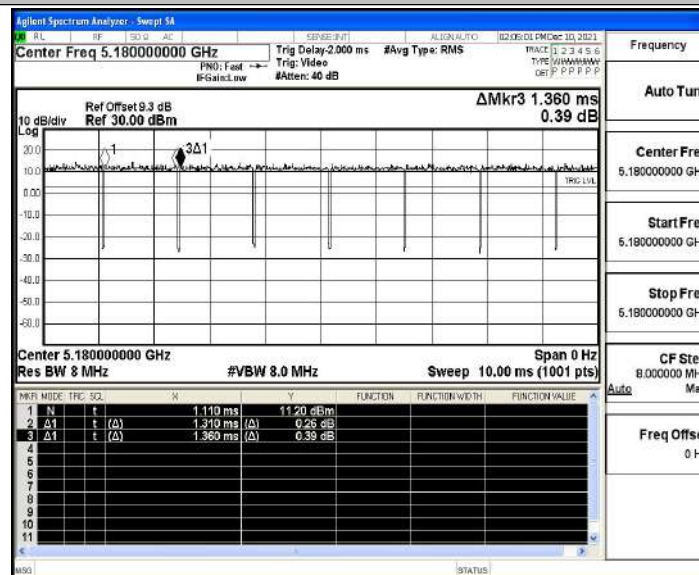
11N40SISO_Ant1_5190



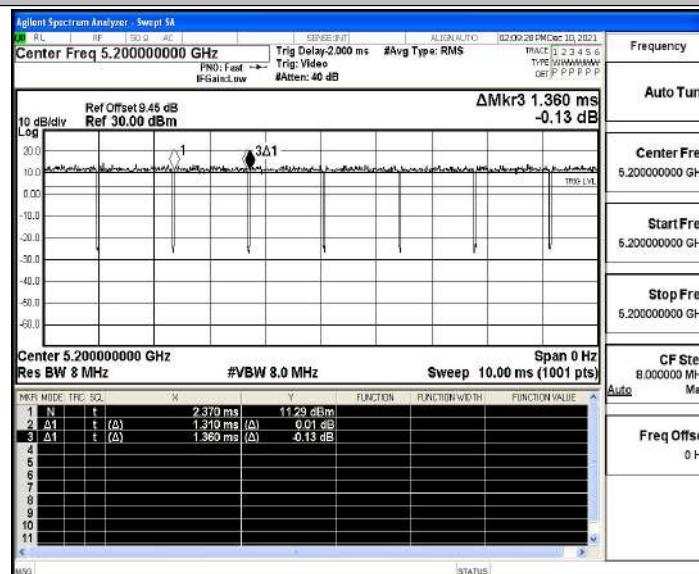
11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180

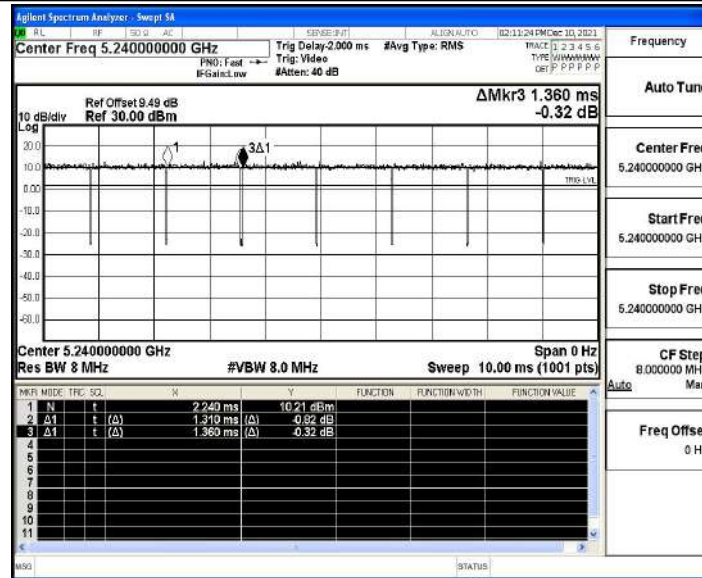


11AC20SISO_Ant1_5200

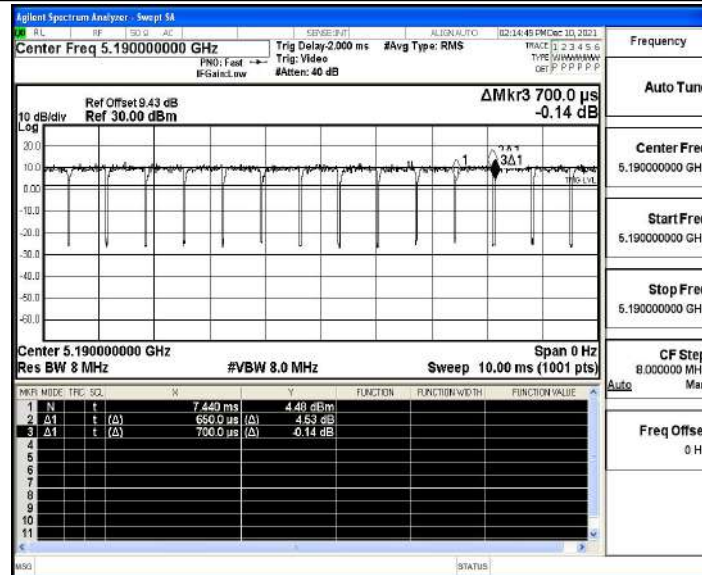




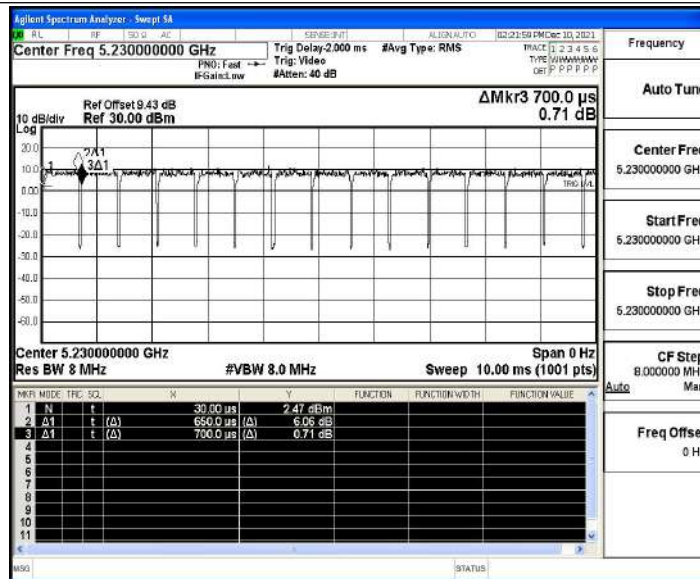
11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210

