



Appendix D

RF Test Data for 5.2G WIFI (Conducted Measurement)

Product Name: TABLET PC

Test Model: GACRUX

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

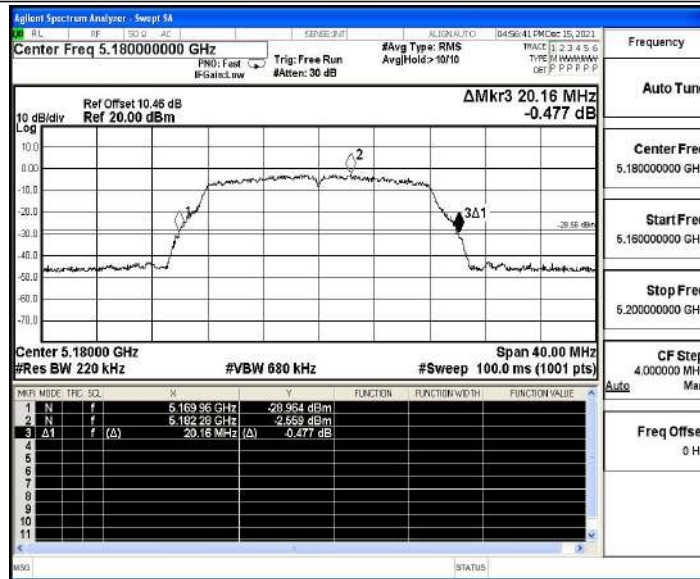
Test Result

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.160	5169.960	5190.120	---	PASS
		5220	19.920	5210.040	5229.960	---	PASS
		5240	20.000	5230.000	5250.000	---	PASS
11N20SISO	Ant1	5180	20.480	5169.760	5190.240	---	PASS
		5220	20.400	5209.760	5230.160	---	PASS
		5240	20.360	5229.840	5250.200	---	PASS
11N40SISO	Ant1	5190	40.720	5169.600	5210.320	---	PASS
		5230	40.640	5209.600	5250.240	---	PASS
11AC20SISO	Ant1	5180	20.360	5169.800	5190.160	---	PASS
		5220	20.480	5209.760	5230.240	---	PASS
		5240	20.440	5229.800	5250.240	---	PASS
11AC40SISO	Ant1	5190	40.560	5169.760	5210.320	---	PASS
		5230	40.960	5209.520	5250.480	---	PASS
11AC80SISO	Ant1	5210	80.960	5169.360	5250.320	---	PASS

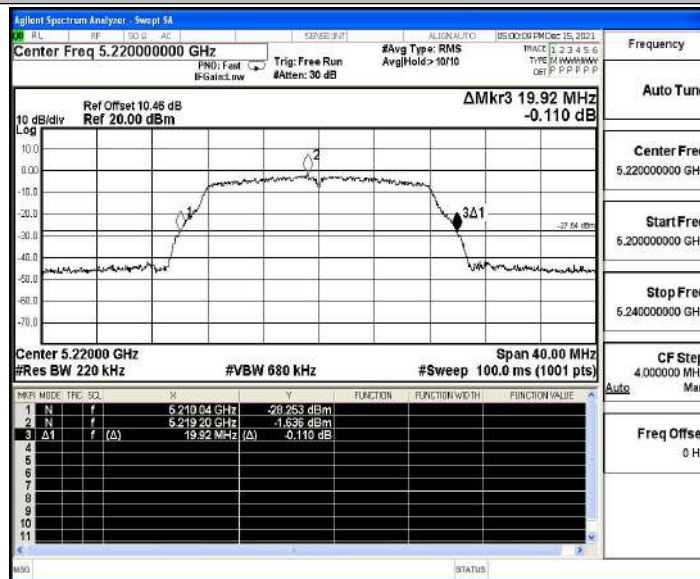


Test Graphs

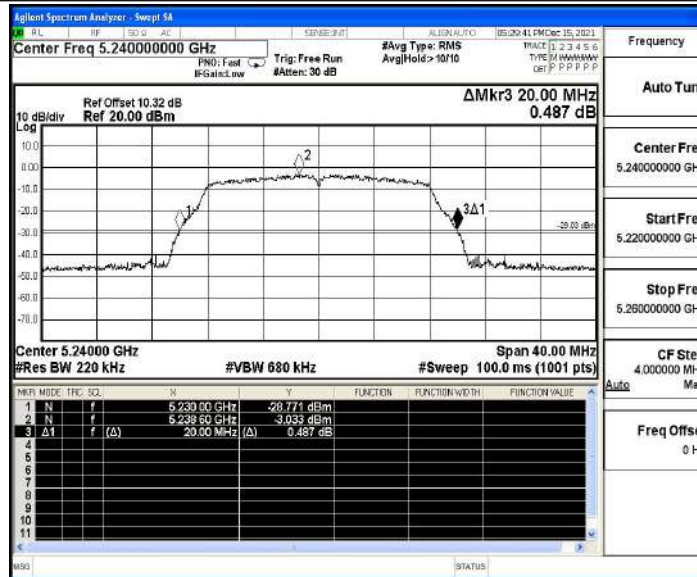
11A_Ant1_5180



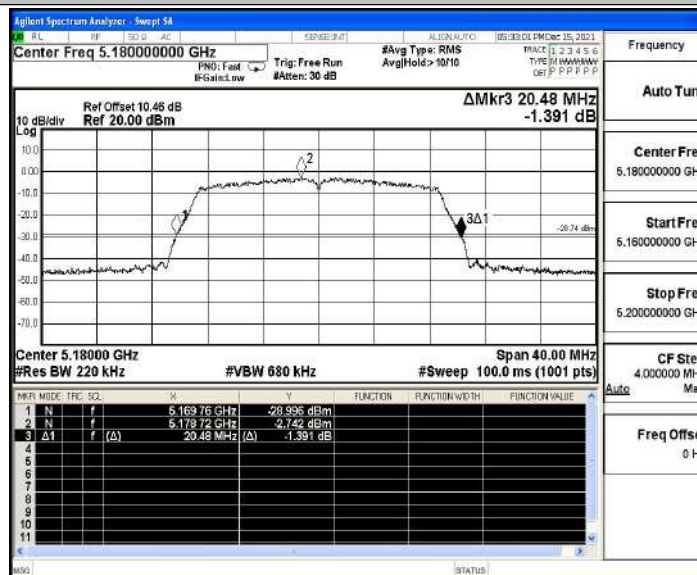
11A_Ant1_5220



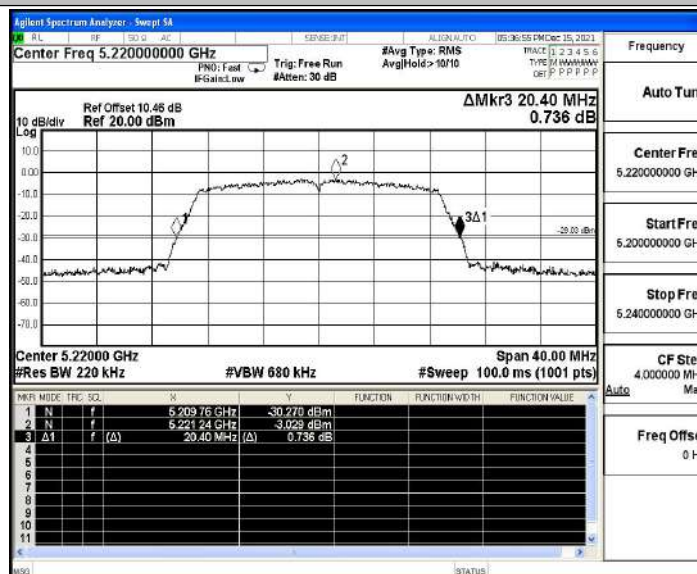
11A_Ant1_5240



11N20SISO_Ant1_5180

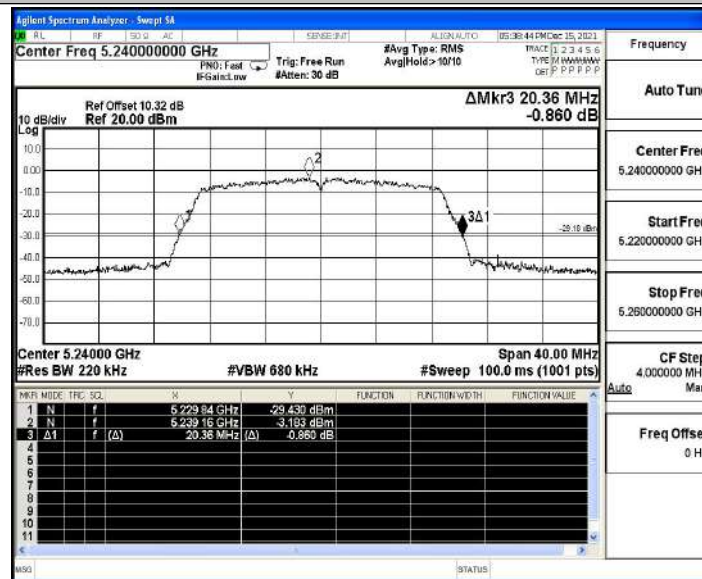


11N20SISO_Ant1_5220

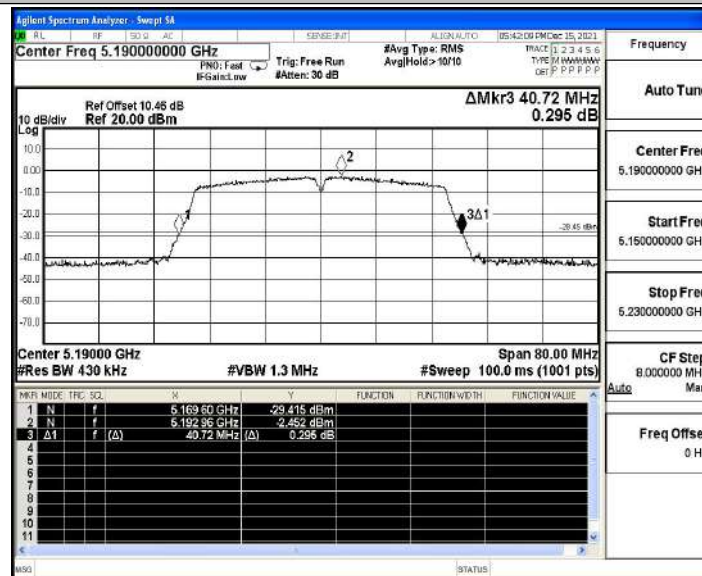




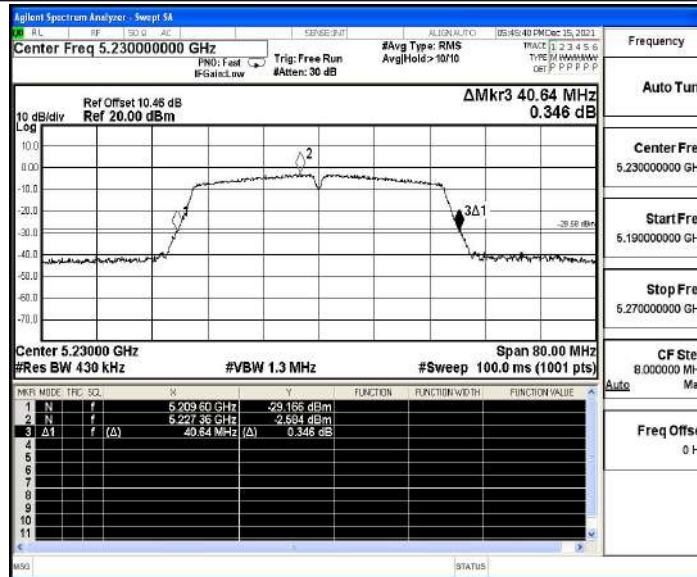
11N20SISO_Ant1_5240



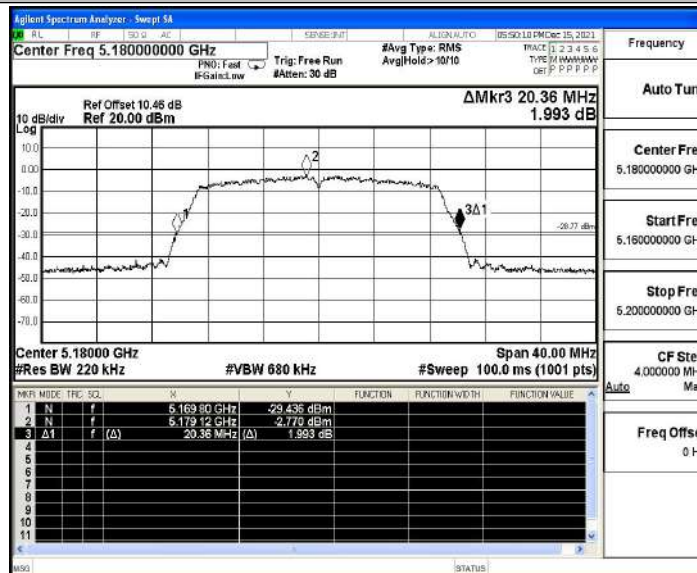
11N40SISO_Ant1_5190



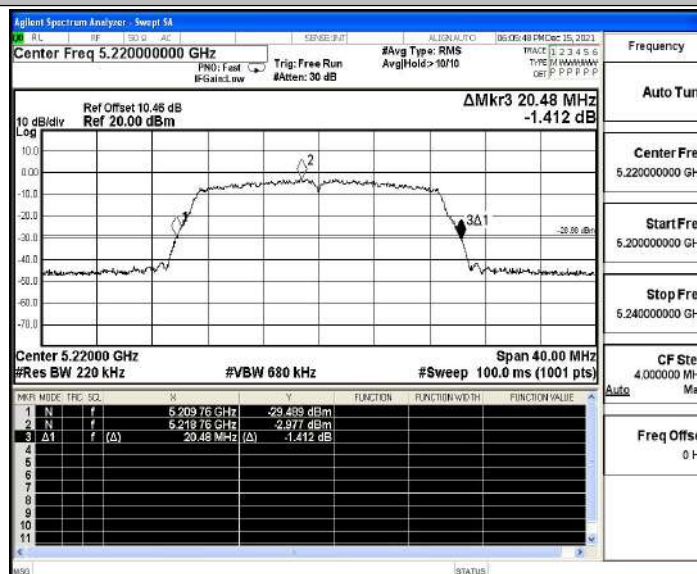
11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180

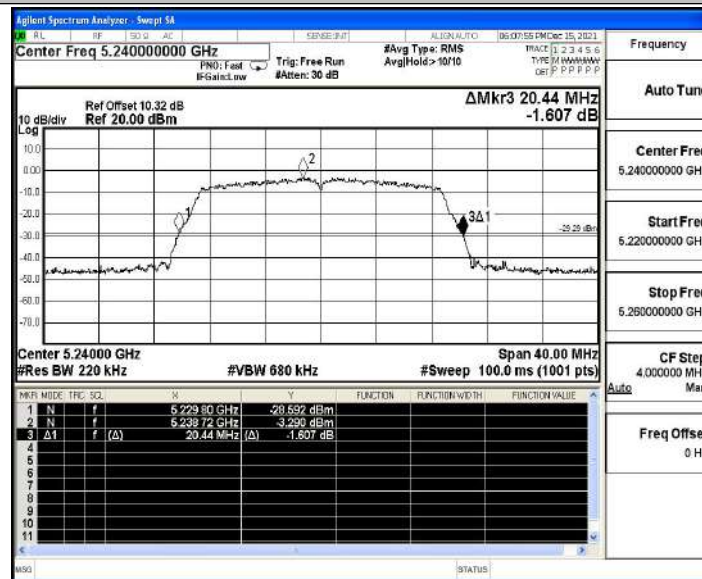


11AC20SISO_Ant1_5220

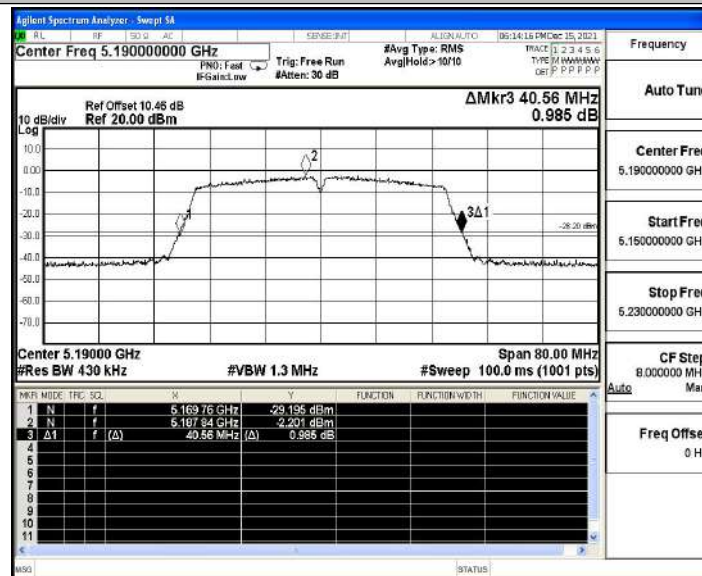




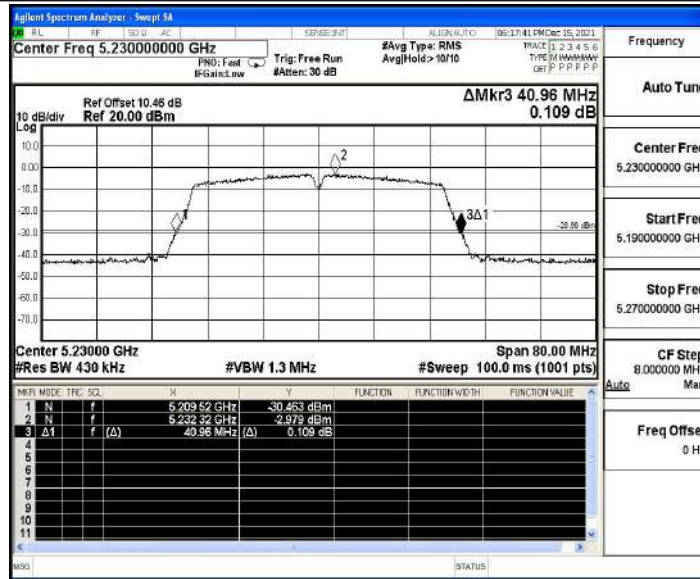
11AC20SISO_Ant1_5240



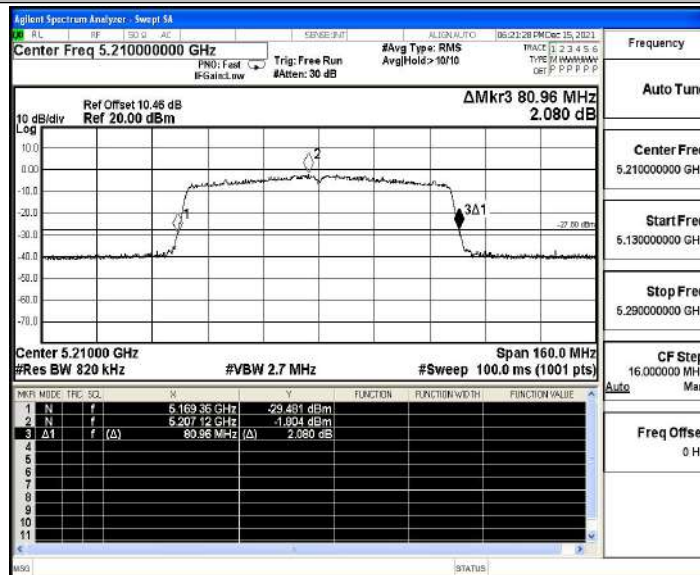
11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210





D.2 Maximum peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	6.59	≤ 23.98	PASS
		5220	6.82	≤ 23.98	PASS
		5240	6.39	≤ 23.98	PASS
11N20SISO	Ant1	5180	6.57	≤ 23.98	PASS
		5220	6.45	≤ 23.98	PASS
		5240	6.37	≤ 23.98	PASS
11N40SISO	Ant1	5190	6.63	≤ 23.98	PASS
		5230	6.55	≤ 23.98	PASS
11AC20SISO	Ant1	5180	6.70	≤ 23.98	PASS
		5220	6.54	≤ 23.98	PASS
		5240	6.29	≤ 23.98	PASS
11AC40SISO	Ant1	5190	6.67	≤ 23.98	PASS
		5230	6.49	≤ 23.98	PASS
11AC80SISO	Ant1	5210	6.57	≤ 23.98	PASS

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



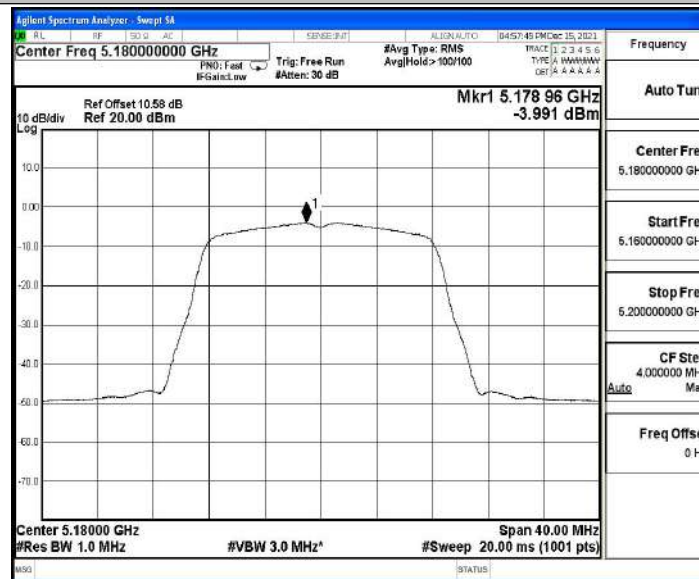
D.3 Maximum power spectral density

Test Result

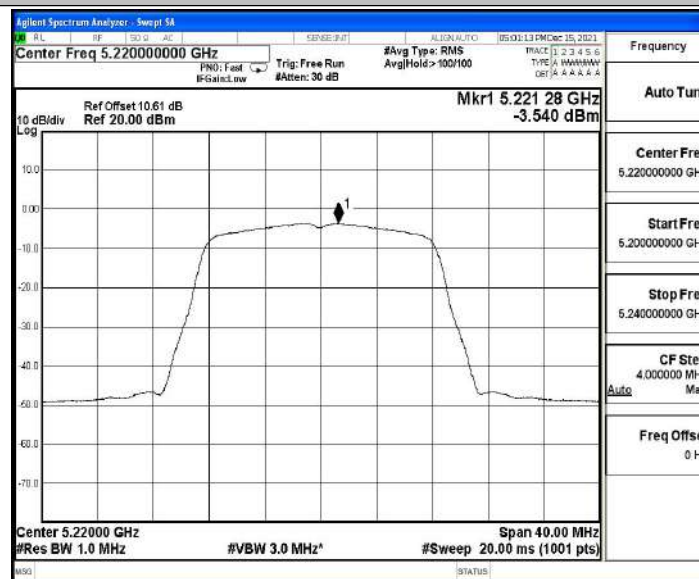
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-4.03	≤ 11	PASS
		5220	-3.49	≤ 11	PASS
		5240	-4.19	≤ 11	PASS
11N20SISO	Ant1	5180	-4.14	≤ 11	PASS
		5220	-4.34	≤ 11	PASS
		5240	-4.6	≤ 11	PASS
11N40SISO	Ant1	5190	-7	≤ 11	PASS
		5230	-7.15	≤ 11	PASS
11AC20SISO	Ant1	5180	-4.11	≤ 11	PASS
		5220	-4.3	≤ 11	PASS
		5240	-4.54	≤ 11	PASS
11AC40SISO	Ant1	5190	-6.96	≤ 11	PASS
		5230	-7.32	≤ 11	PASS
11AC80SISO	Ant1	5210	-10.07	≤ 11	PASS

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

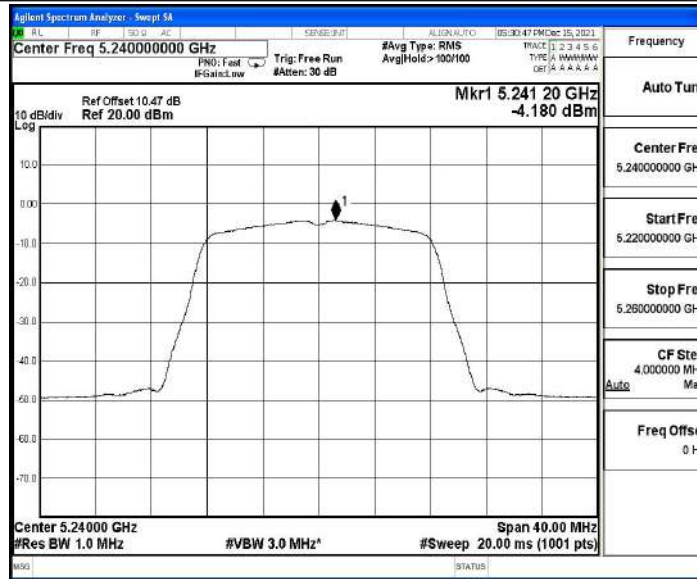
11A_Ant1_5180



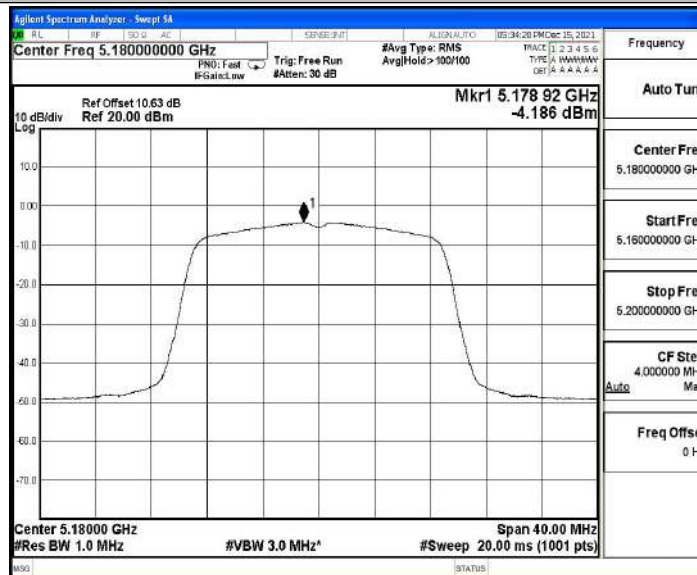
11A_Ant1_5220



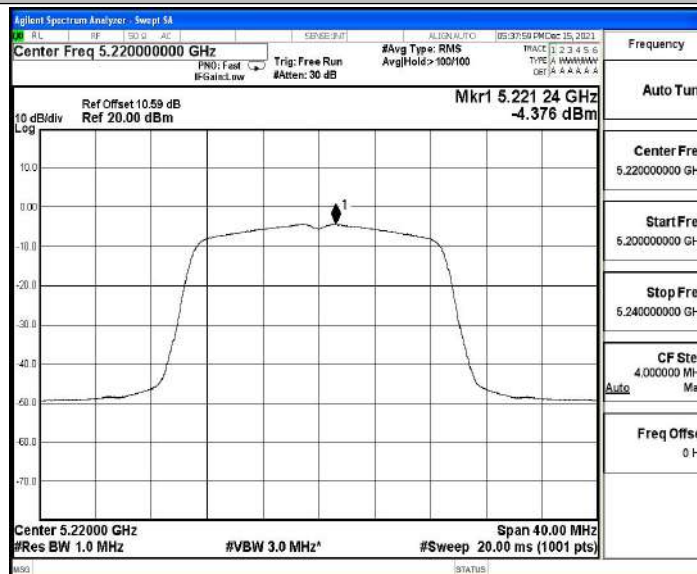
11A_Ant1_5240



11N20SISO_Ant1_5180

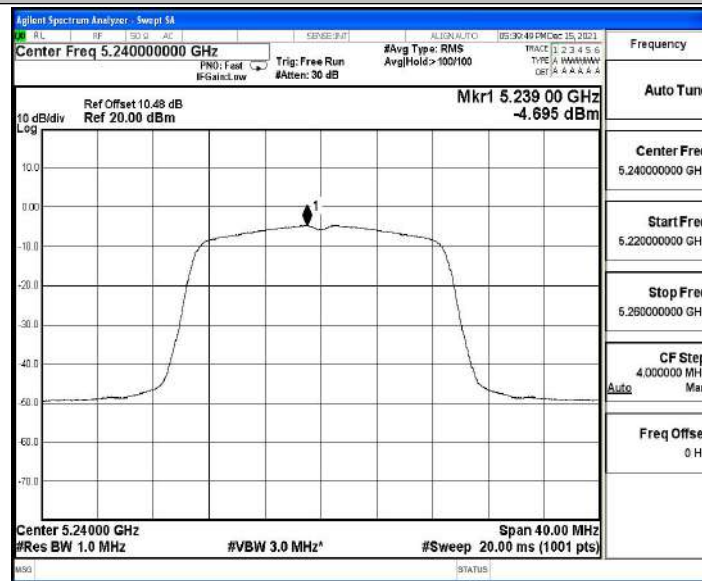


11N20SISO_Ant1_5220

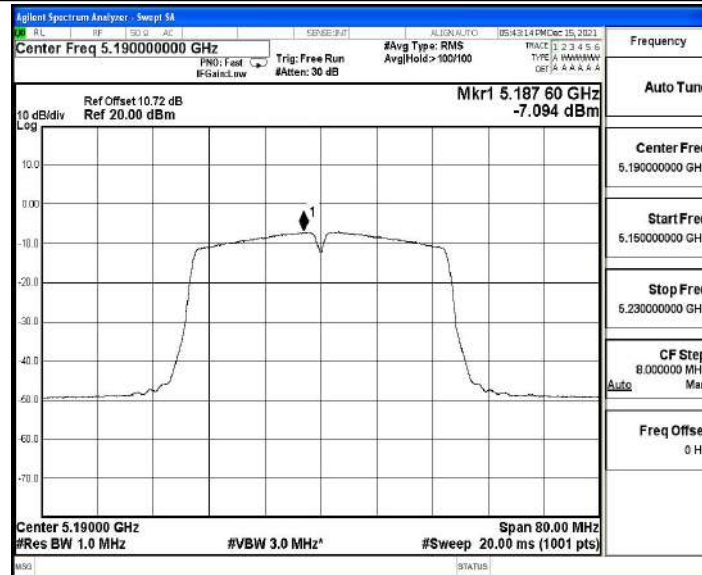




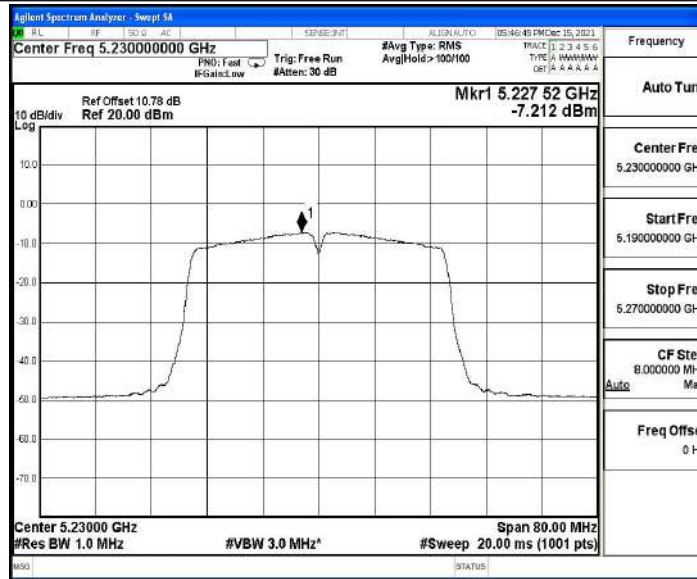
11N20SISO_Ant1_5240



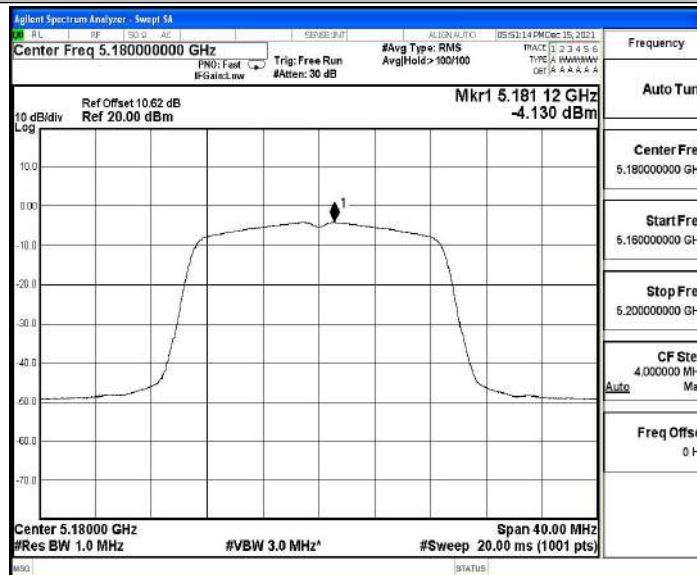
11N40SISO_Ant1_5190



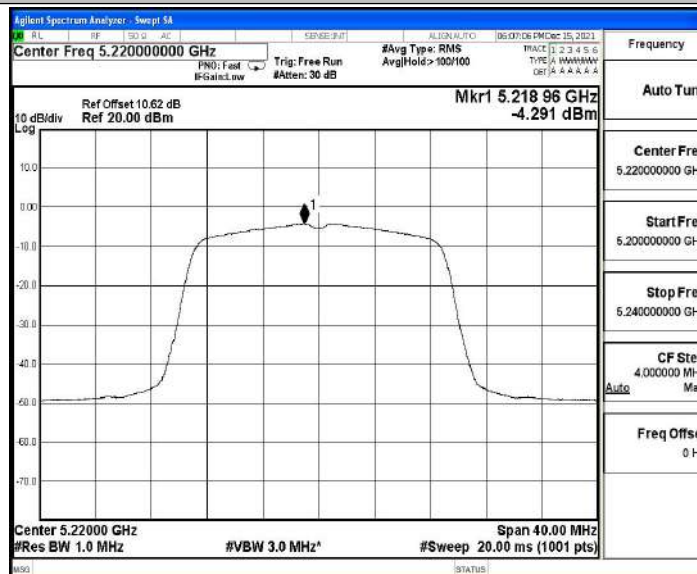
11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180

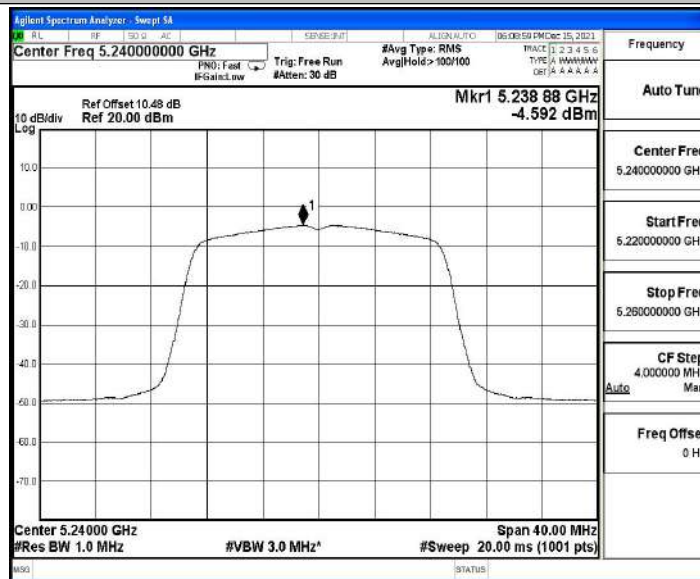


11AC20SISO_Ant1_5220

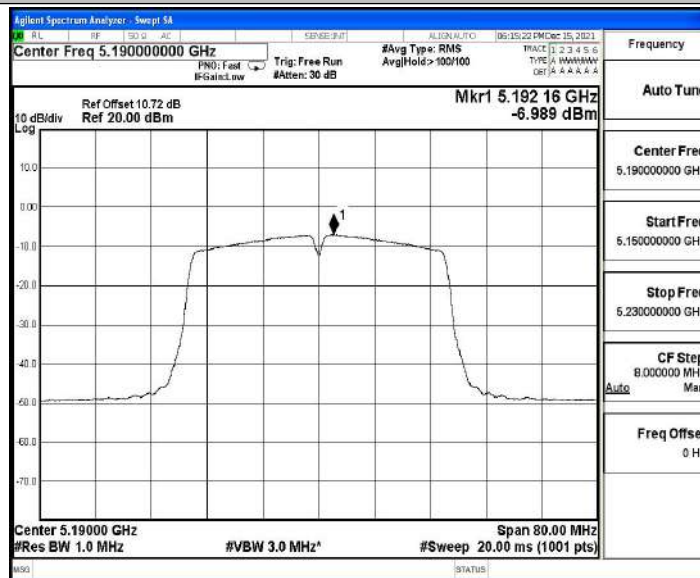




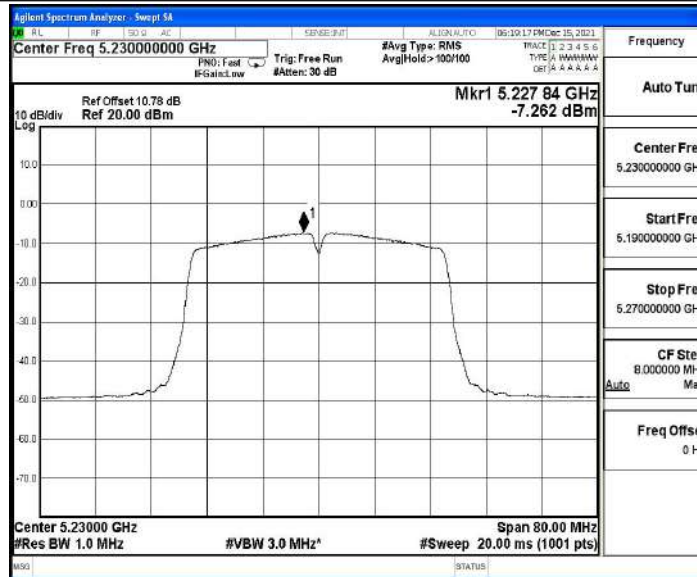
11AC20SISO_Ant1_5240



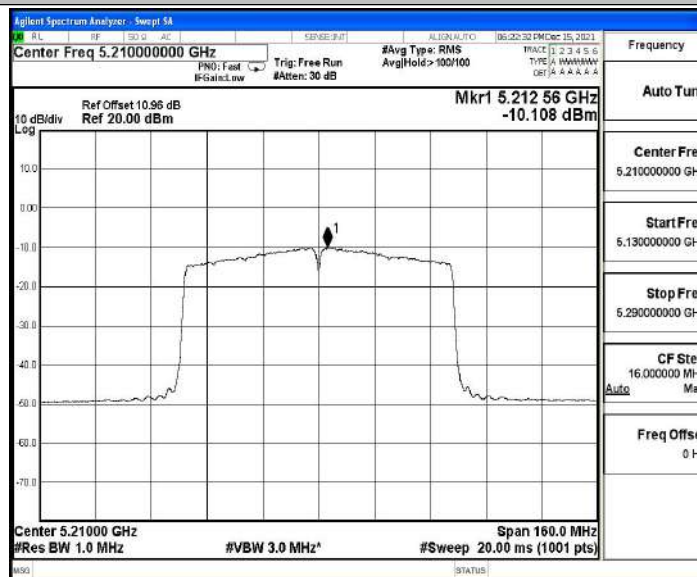
11AC40SISO_Ant1_5190



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	-57.89	≤-41.20	37.31	≤54	PASS
				AV	5148.900	-53.56	≤-41.20	41.64	≤54	PASS
				AV	5150.000	-53.41	≤-41.20	41.79	≤54	PASS
				Peak	4500.000	-48.57	≤-21.20	46.63	≤68.2	PASS
				Peak	5055.800	-44.5	≤-21.20	50.70	≤68.2	PASS
				Peak	5150.000	-45.21	≤-21.20	49.99	≤68.2	PASS
		High	5240	AV	5350.000	-55.43	≤-41.20	39.77	≤54	PASS
				AV	5353.680	-55.33	≤-41.20	39.87	≤54	PASS
				AV	5460.000	-56.11	≤-41.20	39.09	≤54	PASS
				Peak	5350.000	-47.09	≤-21.20	48.11	≤68.2	PASS
				Peak	5350.800	-44.99	≤-21.20	50.21	≤68.2	PASS
				Peak	5460.000	-46.67	≤-21.20	48.53	≤68.2	PASS
11N20SI SO	Ant1	Low	5180	AV	4500.000	-57.94	≤-41.20	37.26	≤54	PASS
				AV	5149.600	-53.44	≤-41.20	41.76	≤54	PASS
				AV	5150.000	-53.64	≤-41.20	41.56	≤54	PASS
				Peak	4500.000	-48	≤-21.20	47.20	≤68.2	PASS
				Peak	4934.000	-43.95	≤-21.20	51.25	≤68.2	PASS
				Peak	5150.000	-45.71	≤-21.20	49.49	≤68.2	PASS
		High	5240	AV	5350.000	-55.43	≤-41.20	39.77	≤54	PASS
				AV	5357.760	-55.33	≤-41.20	39.87	≤54	PASS
				AV	5460.000	-55.98	≤-41.20	39.22	≤54	PASS
				Peak	5350.000	-46.95	≤-21.20	48.25	≤68.2	PASS
				Peak	5439.840	-45.63	≤-21.20	49.57	≤68.2	PASS
				Peak	5460.000	-47.55	≤-21.20	47.65	≤68.2	PASS
11N40SI SO	Ant1	Low	5190	AV	4500.000	-57.48	≤-41.20	37.72	≤54	PASS
				AV	5149.600	-53.02	≤-41.20	42.18	≤54	PASS
				AV	5150.000	-53.29	≤-41.20	41.91	≤54	PASS
				Peak	4500.000	-49.07	≤-21.20	46.13	≤68.2	PASS
				Peak	5129.300	-44.3	≤-21.20	50.90	≤68.2	PASS
				Peak	5150.000	-43.86	≤-21.20	51.34	≤68.2	PASS
		High	5230	AV	5350.000	-55.05	≤-41.20	40.15	≤54	PASS
				AV	5351.320	-54.88	≤-41.20	40.32	≤54	PASS
				AV	5460.000	-55.69	≤-41.20	39.51	≤54	PASS
				Peak	5350.000	-48.39	≤-21.20	46.81	≤68.2	PASS
				Peak	5437.900	-44.83	≤-21.20	50.37	≤68.2	PASS
				Peak	5460.000	-46.84	≤-21.20	48.36	≤68.2	PASS
11AC20S	Ant1	Low	5180	AV	4500.000	-57.89	≤-41.20	37.31	≤54	PASS



ISO				AV	5146.800	-53.58	≤ -41.20	41.62	≤ 54	PASS
				AV	5150.000	-53.47	≤ -41.20	41.73	≤ 54	PASS
				Peak	4500.000	-49.39	≤ -21.20	45.81	≤ 68.2	PASS
				Peak	5141.200	-44.55	≤ -21.20	50.65	≤ 68.2	PASS
				Peak	5150.000	-46.3	≤ -21.20	48.90	≤ 68.2	PASS
				Peak	5150.000	-46.3	≤ -21.20	48.90	≤ 68.2	PASS
		High	5240	AV	5350.000	-55.51	≤ -41.20	39.69	≤ 54	PASS
				AV	5356.800	-55.28	≤ -41.20	39.92	≤ 54	PASS
				AV	5460.000	-55.89	≤ -41.20	39.31	≤ 54	PASS
				Peak	5350.000	-48.13	≤ -21.20	47.07	≤ 68.2	PASS
				Peak	5351.280	-45.23	≤ -21.20	49.97	≤ 68.2	PASS
				Peak	5460.000	-47.8	≤ -21.20	47.40	≤ 68.2	PASS
11AC40S ISO	Ant1	Low	5190	AV	4500.000	-56.79	≤ -41.20	38.41	≤ 54	PASS
				AV	5149.600	-52.72	≤ -41.20	42.48	≤ 54	PASS
				AV	5150.000	-52.77	≤ -41.20	42.43	≤ 54	PASS
				Peak	4500.000	-48.76	≤ -21.20	46.44	≤ 68.2	PASS
				Peak	4899.700	-44.2	≤ -21.20	51.00	≤ 68.2	PASS
				Peak	5150.000	-45.14	≤ -21.20	50.06	≤ 68.2	PASS
		High	5230	AV	5350.000	-55.37	≤ -41.20	39.83	≤ 54	PASS
				AV	5351.320	-55.01	≤ -41.20	40.19	≤ 54	PASS
				AV	5460.000	-55.52	≤ -41.20	39.68	≤ 54	PASS
				Peak	5350.000	-47.57	≤ -21.20	47.63	≤ 68.2	PASS
				Peak	5386.420	-45.43	≤ -21.20	49.77	≤ 68.2	PASS
				Peak	5460.000	-47.39	≤ -21.20	47.81	≤ 68.2	PASS
11AC80S ISO	Ant1	Low	5210	AV	4500.000	-56.46	≤ -41.20	38.74	≤ 54	PASS
				AV	5149.500	-50.65	≤ -41.20	44.55	≤ 54	PASS
				AV	5150.000	-50.7	≤ -41.20	44.50	≤ 54	PASS
				Peak	4500.000	-48.59	≤ -21.20	46.61	≤ 68.2	PASS
				Peak	4797.750	-43.31	≤ -21.20	51.89	≤ 68.2	PASS
				Peak	5150.000	-44.42	≤ -21.20	50.78	≤ 68.2	PASS
		High	5210	AV	5350.000	-54.8	≤ -41.20	40.40	≤ 54	PASS
				AV	5355.280	-54.69	≤ -41.20	40.51	≤ 54	PASS
				AV	5460.000	-55.49	≤ -41.20	39.71	≤ 54	PASS
				Peak	5350.000	-47.7	≤ -21.20	47.50	≤ 68.2	PASS
				Peak	5445.440	-45.8	≤ -21.20	49.40	≤ 68.2	PASS
				Peak	5460.000	-47.33	≤ -21.20	47.87	≤ 68.2	PASS

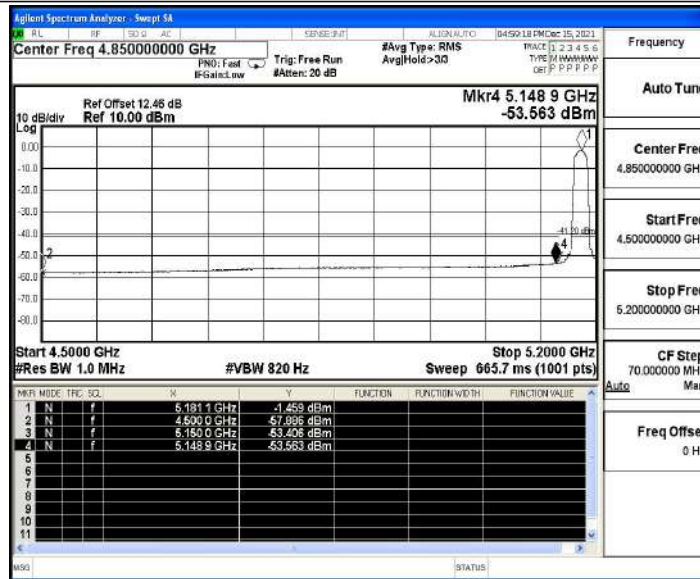
Note:

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.

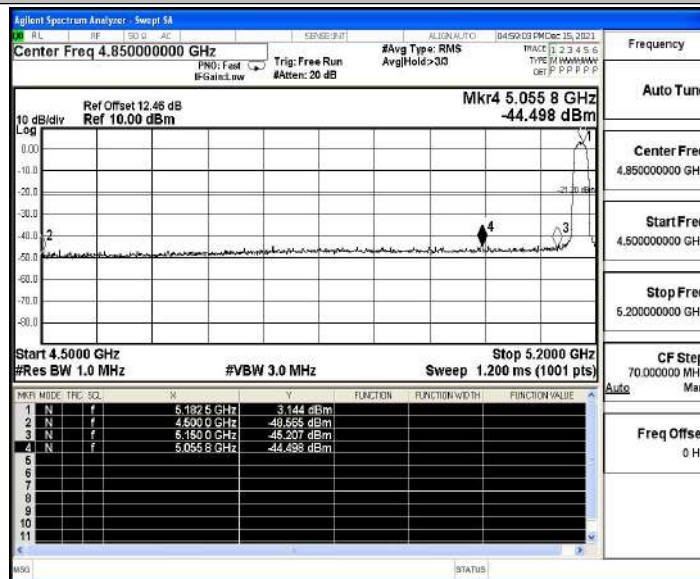


Test Graphs

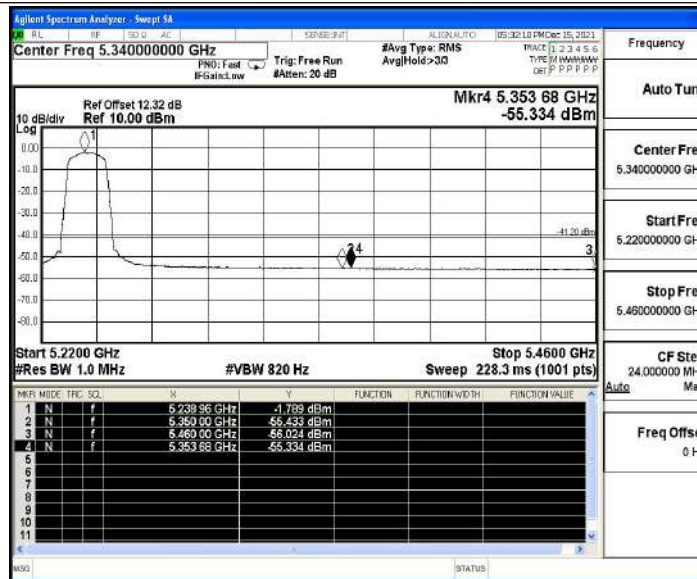
11A_Ant1_Low_5180_AV



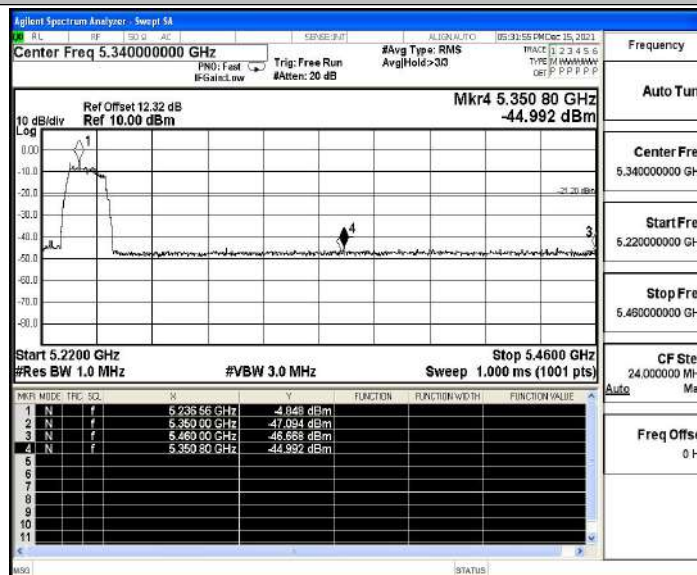
11A_Ant1_Low_5180_Peak



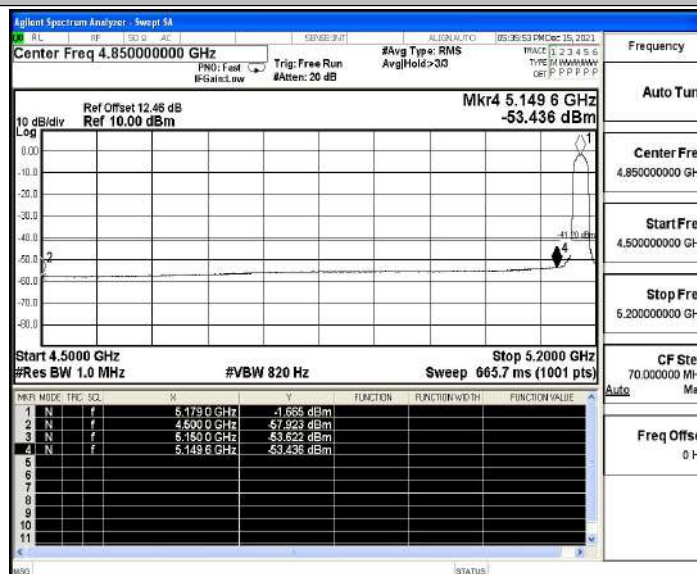
11A_Ant1_High_5240_AV



11A_Ant1_High_5240_Peak

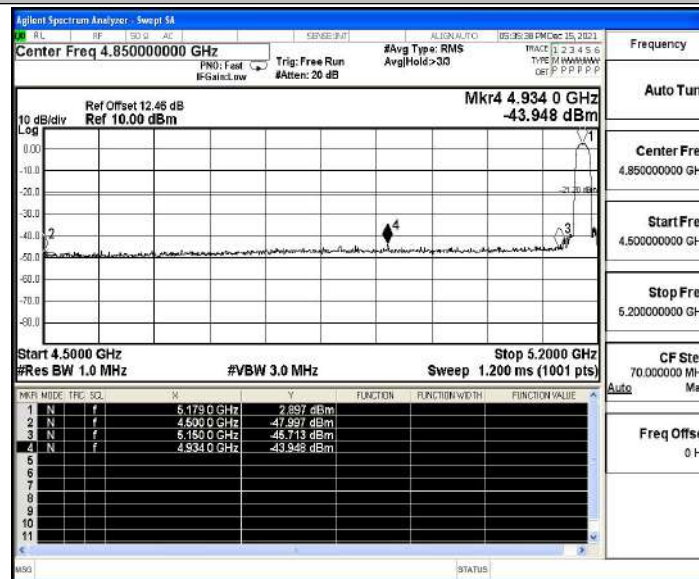


11N20SISO_Ant1_Low_5180_AV

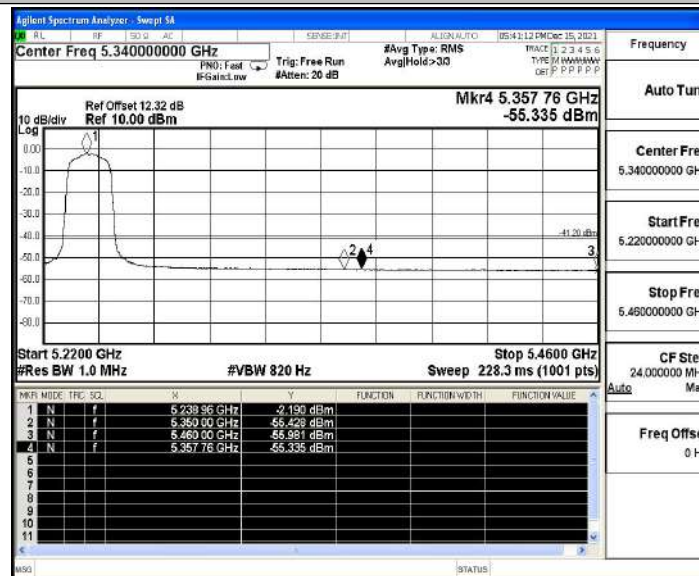




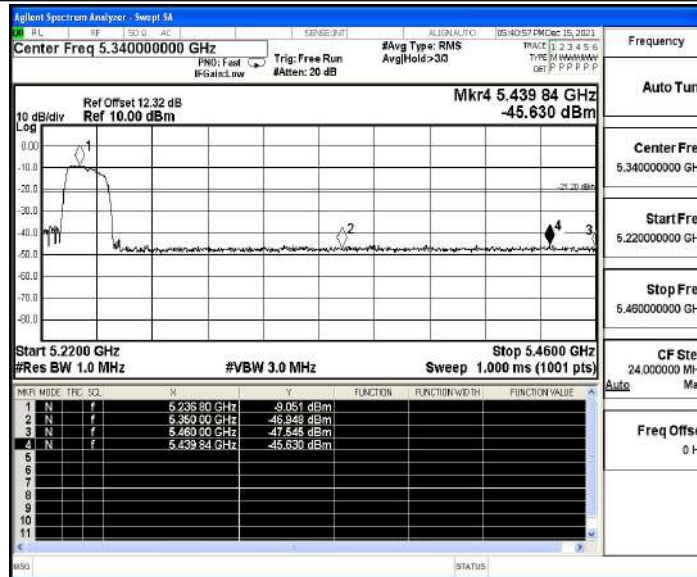
11N20SISO_Ant1_Low_5180_Peak



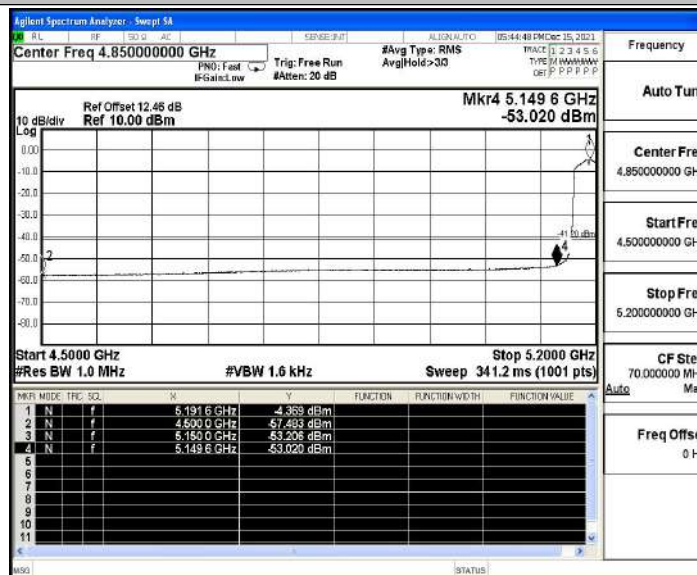
11N20SISO_Ant1_High_5240_AV



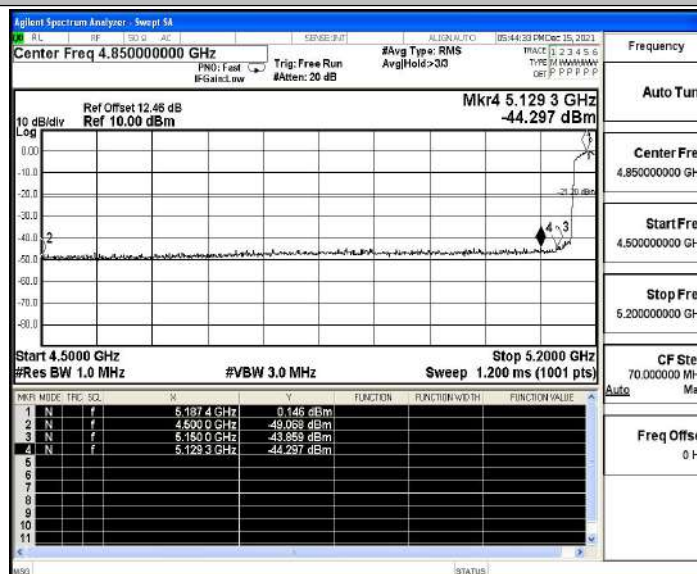
11N20SISO_Ant1_High_5240_Peak



11N40SISO_Ant1_Low_5190_AV

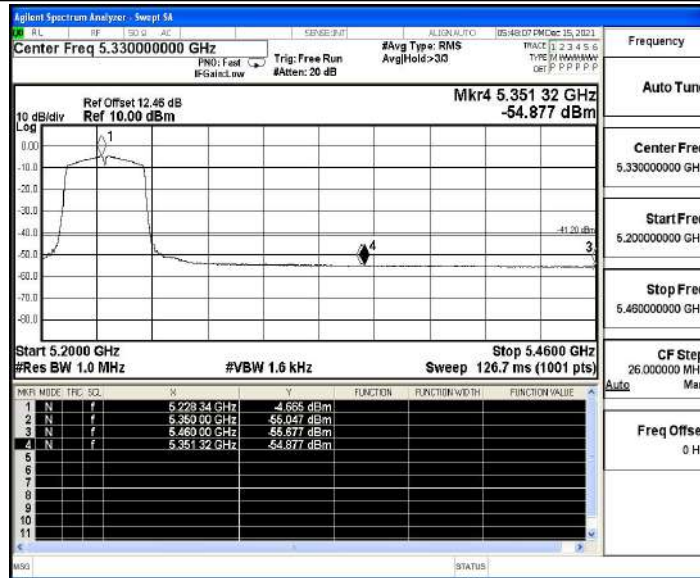


11N40SISO_Ant1_Low_5190_Peak

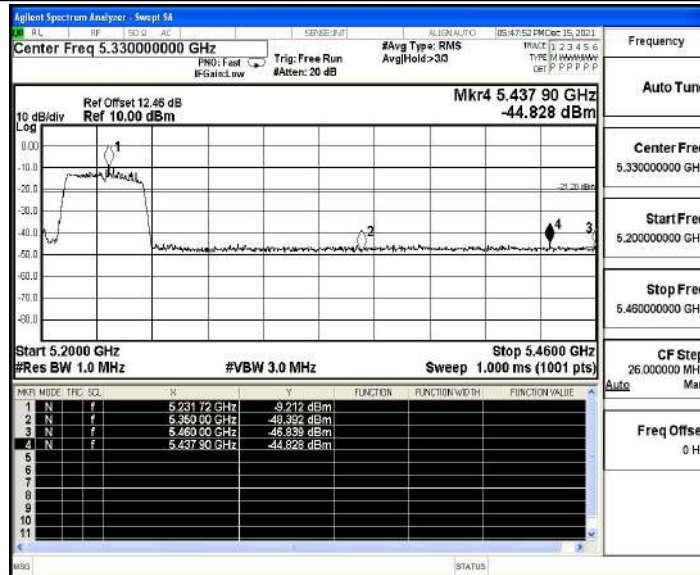




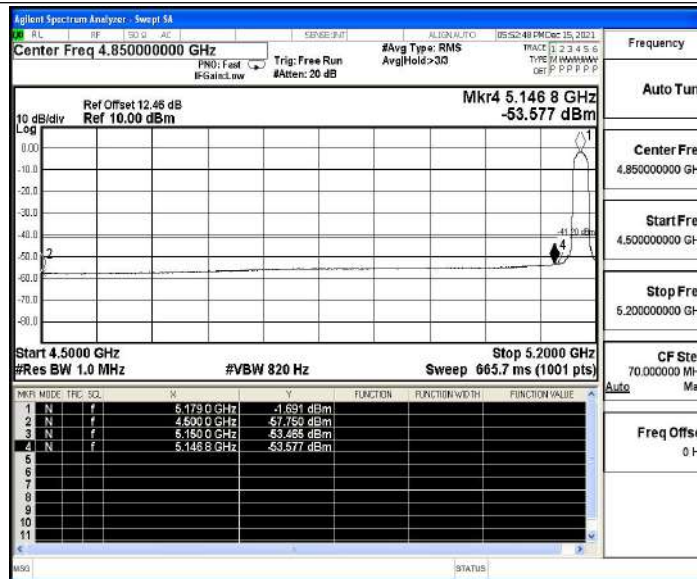
11N40SISO_Ant1_High_5230_AV



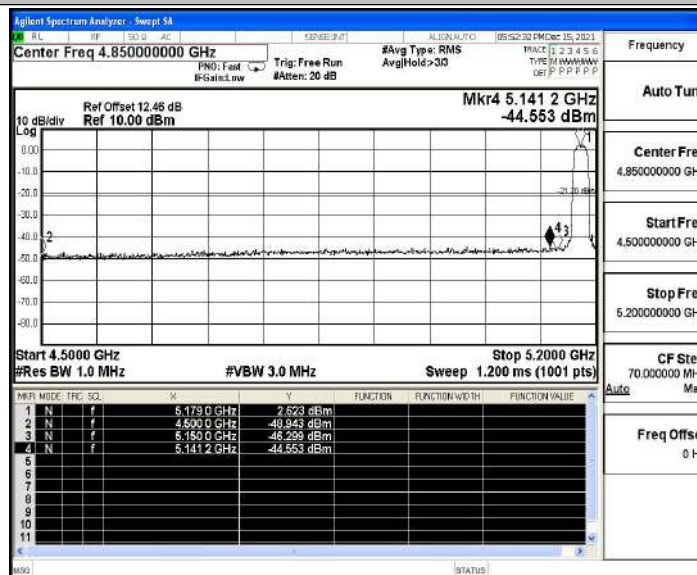
11N40SISO_Ant1_High_5230_Peak



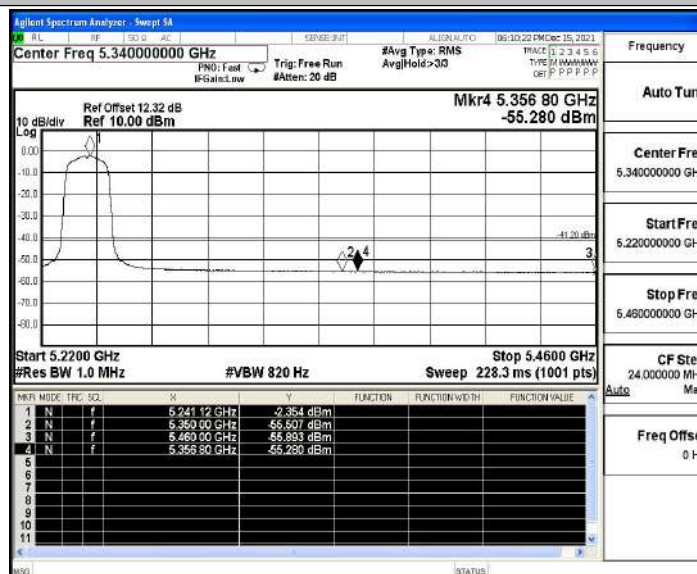
11AC20SISO_Ant1_Low_5180_AV



11AC20SISO_Ant1_Low_5180_Peak

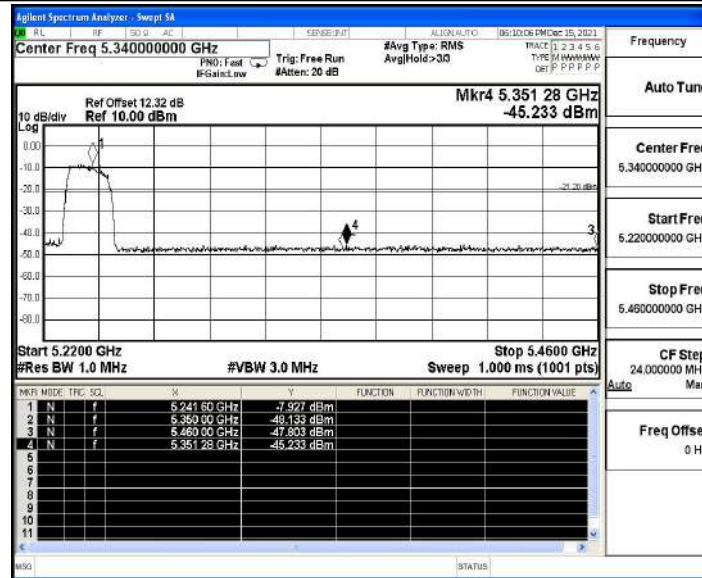


11AC20SISO_Ant1_High_5240_AV

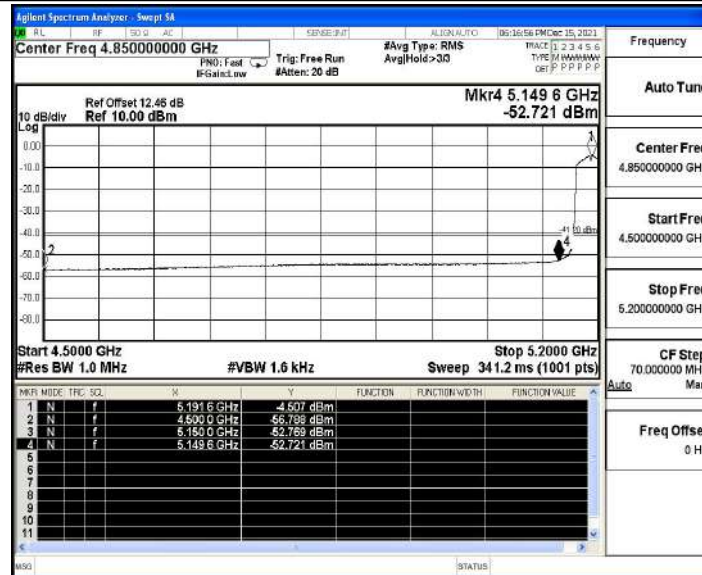




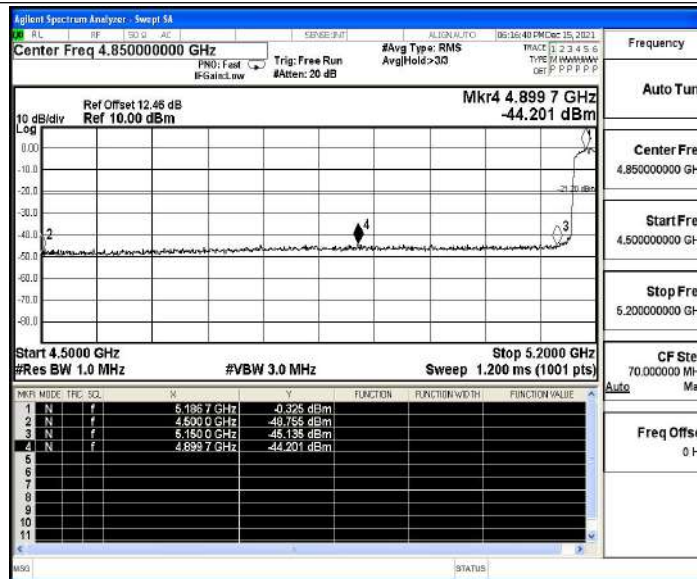
11AC20SISO_Ant1_High_5240_Peak



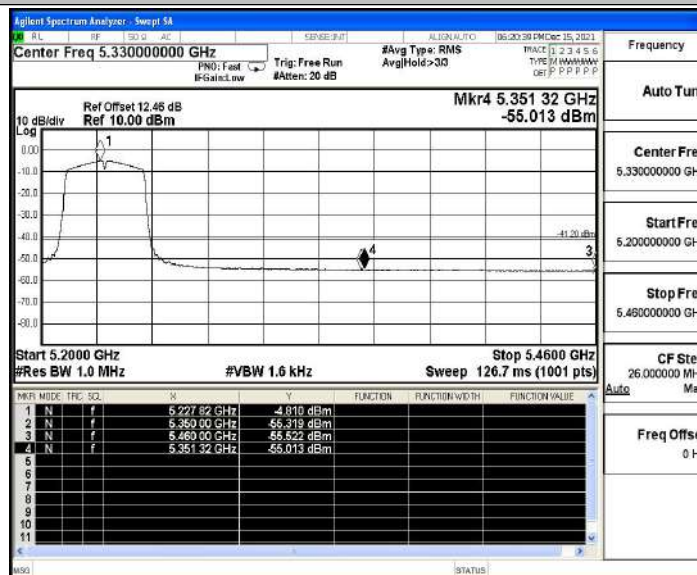
11AC40SISO_Ant1_Low_5190_AV



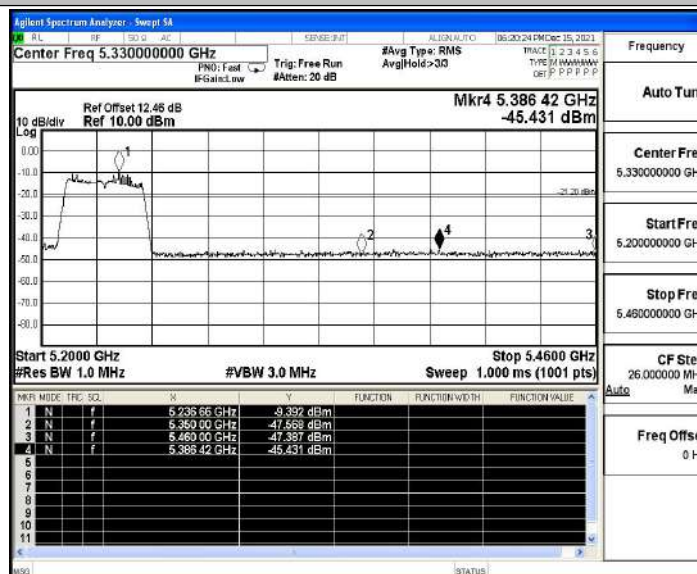
11AC40SISO_Ant1_Low_5190_Peak



11AC40SISO_Ant1_High_5230_AV

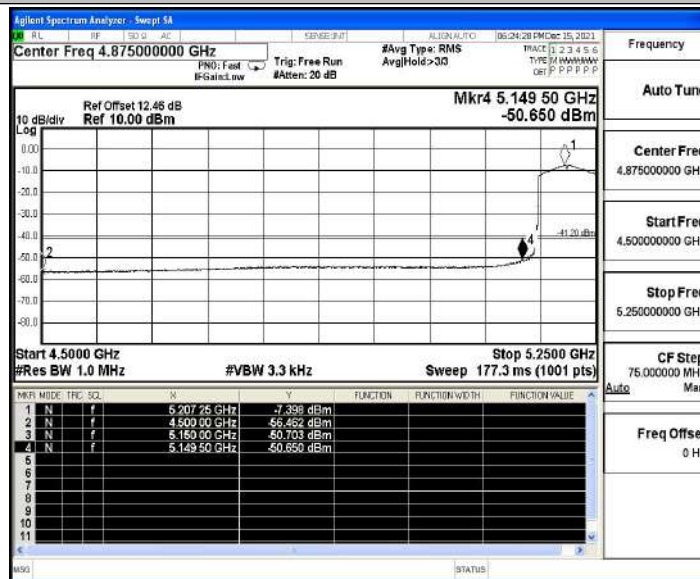


11AC40SISO_Ant1_High_5230_Peak

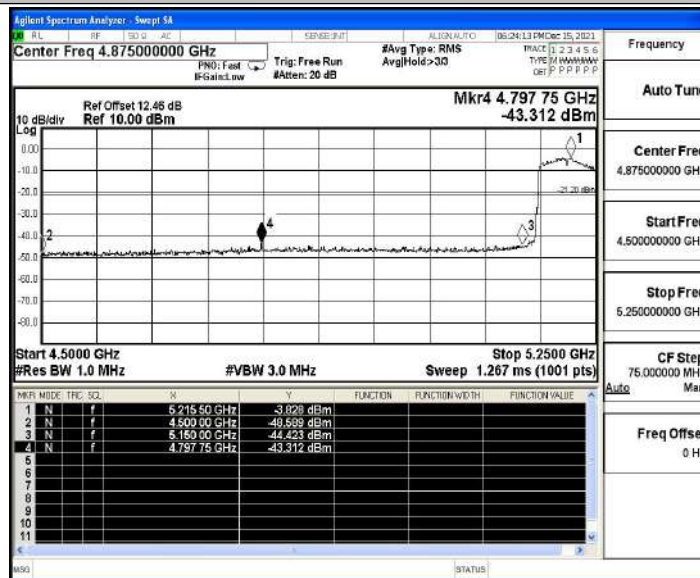




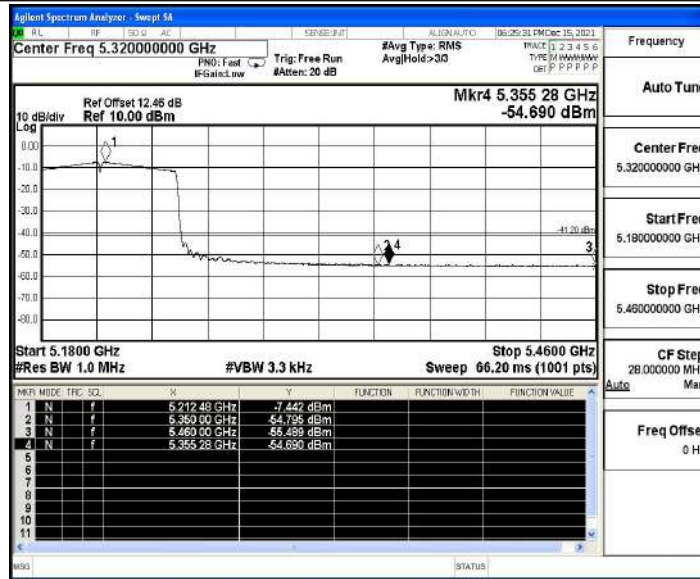
11AC80SISO_Ant1_Low_5210_AV



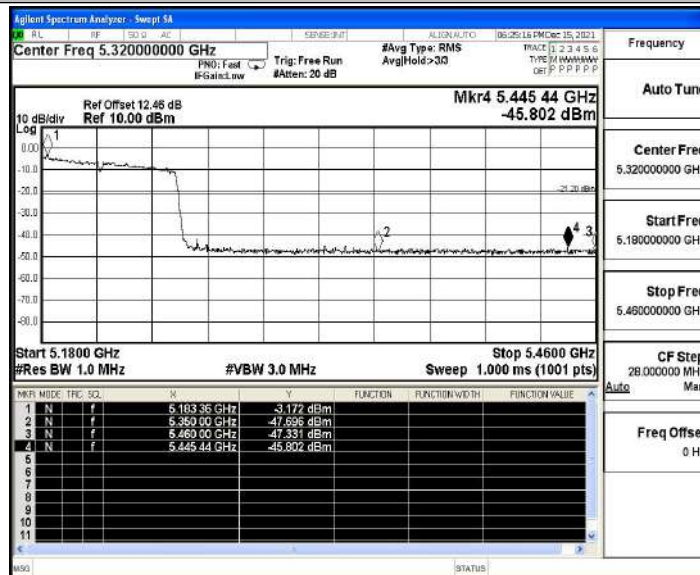
11AC80SISO_Ant1_Low_5210_Peak



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	0	0	20	PASS
			LV	NT	0	0	20	PASS
			HV	NT	0	0	20	PASS
		5220	NV	NT	-20000	-3.831418	20	PASS
			LV	NT	-20000	-3.831418	20	PASS
			HV	NT	-20000	-3.831418	20	PASS
		5240	NV	NT	-20000	-3.816794	20	PASS
			LV	NT	-20000	-3.816794	20	PASS
			HV	NT	-20000	-3.816794	20	PASS
11AC40SISO	Ant1	5190	NV	NT	0	0	20	PASS
			LV	NT	0	0	20	PASS
			HV	NT	0	0	20	PASS
		5230	NV	NT	0	0	20	PASS
			LV	NT	0	0	20	PASS
			HV	NT	0	0	20	PASS
11AC80SISO	Ant1	5210	NV	NT	0	0	20	PASS
			LV	NT	0	0	20	PASS
			HV	NT	0	0	20	PASS

Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20SISO	Ant1	5180	NV	-30	-20000	-3.861004	20	PASS
			NV	-20	-20000	-3.861004	20	PASS
			NV	-10	-20000	-3.861004	20	PASS
			NV	0	-20000	-3.861004	20	PASS
			NV	10	-20000	-3.861004	20	PASS
			NV	20	-20000	-3.861004	20	PASS
			NV	30	-20000	-3.861004	20	PASS
			NV	40	-20000	-3.861004	20	PASS
			NV	50	-20000	-3.861004	20	PASS
		5220	NV	-30	-20000	-3.831418	20	PASS
			NV	-20	-20000	-3.831418	20	PASS
			NV	-10	-20000	-3.831418	20	PASS
			NV	0	-20000	-3.831418	20	PASS
			NV	10	-20000	-3.831418	20	PASS
			NV	20	-20000	-3.831418	20	PASS



			NV	20	-20000	-3.831418	20	PASS
			NV	30	-20000	-3.831418	20	PASS
			NV	40	-20000	-3.831418	20	PASS
			NV	50	-20000	-3.831418	20	PASS
		5240	NV	-30	-20000	-3.816794	20	PASS
			NV	-20	-20000	-3.816794	20	PASS
			NV	-10	-20000	-3.816794	20	PASS
			NV	0	-20000	-3.816794	20	PASS
			NV	10	-20000	-3.816794	20	PASS
			NV	20	-20000	-3.816794	20	PASS
			NV	30	-20000	-3.816794	20	PASS
			NV	40	-20000	-3.816794	20	PASS
			NV	50	-20000	-3.816794	20	PASS
11AC40SIS O	Ant1	5190	NV	-30	0	0	20	PASS
			NV	-20	0	0	20	PASS
			NV	-10	0	0	20	PASS
			NV	0	0	0	20	PASS
			NV	10	0	0	20	PASS
			NV	20	0	0	20	PASS
			NV	30	0	0	20	PASS
			NV	40	0	0	20	PASS
			NV	50	0	0	20	PASS
		5230	NV	-30	0	0	20	PASS
			NV	-20	0	0	20	PASS
			NV	-10	0	0	20	PASS
			NV	0	0	0	20	PASS
			NV	10	0	0	20	PASS
			NV	20	0	0	20	PASS
			NV	30	0	0	20	PASS
			NV	40	0	0	20	PASS
			NV	50	0	0	20	PASS
11AC80SIS O	Ant1	5210	NV	-30	0	0	20	PASS
			NV	-20	0	0	20	PASS
			NV	-10	0	0	20	PASS
			NV	0	0	0	20	PASS
			NV	10	0	0	20	PASS
			NV	20	0	0	20	PASS
			NV	30	0	0	20	PASS
			NV	40	0	0	20	PASS
			NV	50	0	0	20	PASS

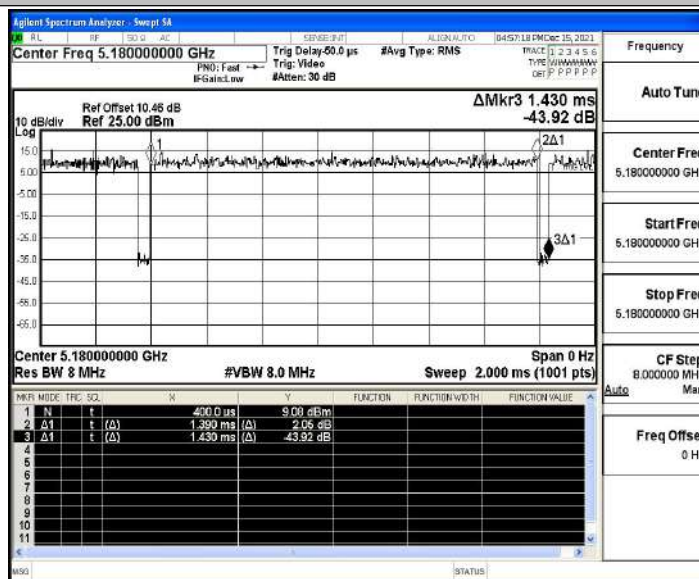


D.6 Duty Cycle

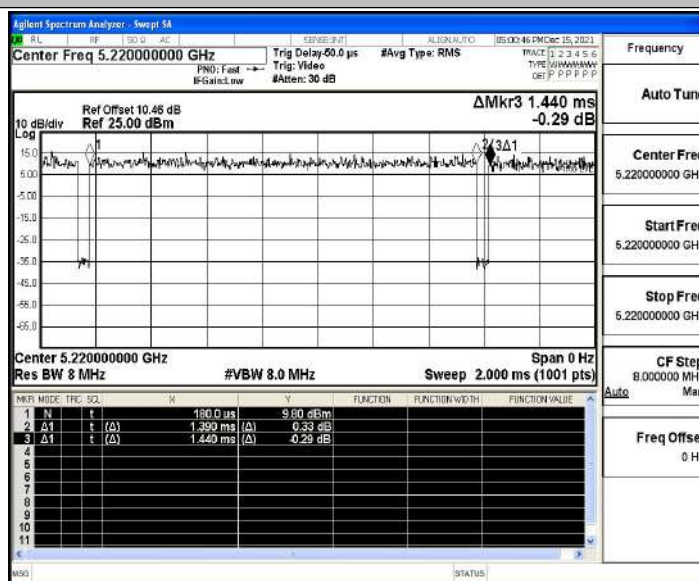
Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[KHz]	Verdict
11A	Ant1	5180	1.39	1.43	97.20	0.72	PASS
		5220	1.39	1.44	96.53	0.72	PASS
		5240	1.39	1.44	96.53	0.72	PASS
11N20SISO	Ant1	5180	1.29	1.34	96.27	0.77	PASS
		5220	1.30	1.34	97.01	0.77	PASS
		5240	1.30	1.35	96.30	0.77	PASS
11N40SISO	Ant1	5190	0.65	0.69	94.20	1.56	PASS
		5230	0.65	0.70	92.86	1.56	PASS
11AC20SISO	Ant1	5180	1.31	1.36	96.32	0.76	PASS
		5220	1.31	1.36	96.32	0.76	PASS
		5240	1.31	1.36	96.32	0.76	PASS
11AC40SISO	Ant1	5190	0.65	0.69	94.20	1.54	PASS
		5230	0.65	0.70	92.86	1.54	PASS
11AC80SISO	Ant1	5210	0.33	0.37	89.19	3.13	PASS

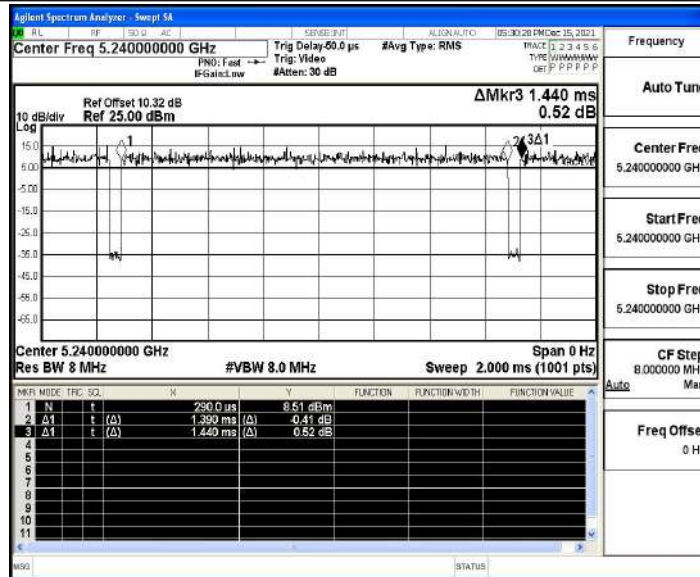
11A Ant1 5180



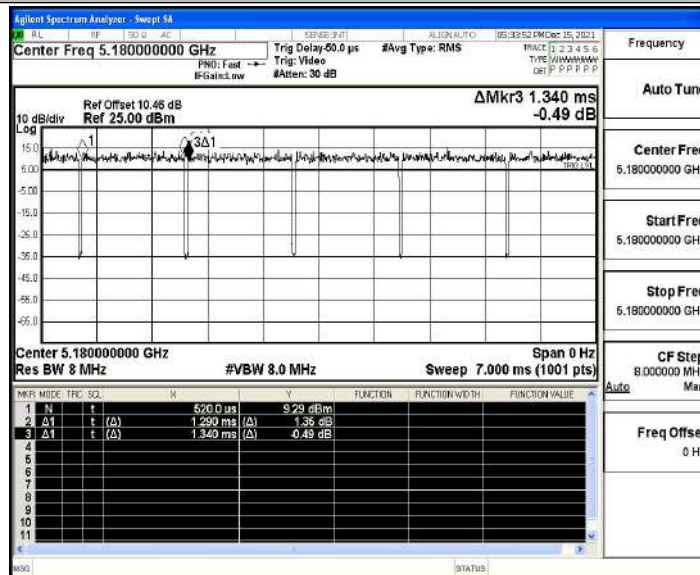
11A Ant1 5220



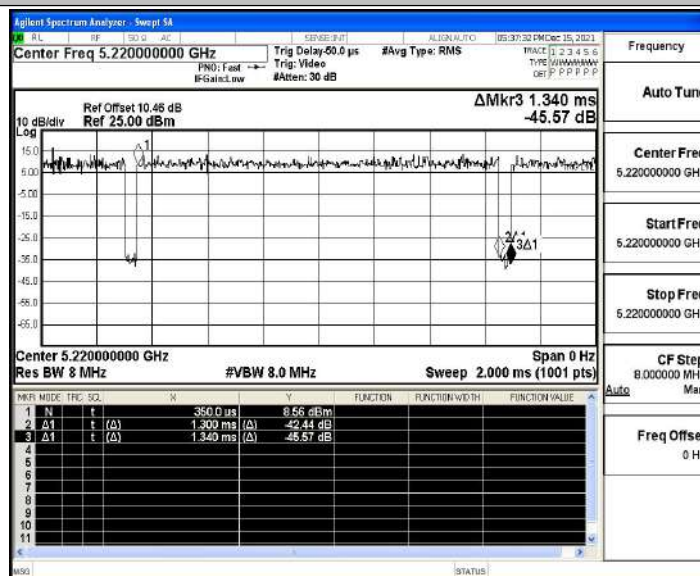
11A Ant1 5240



11N20SISO_Ant1_5180

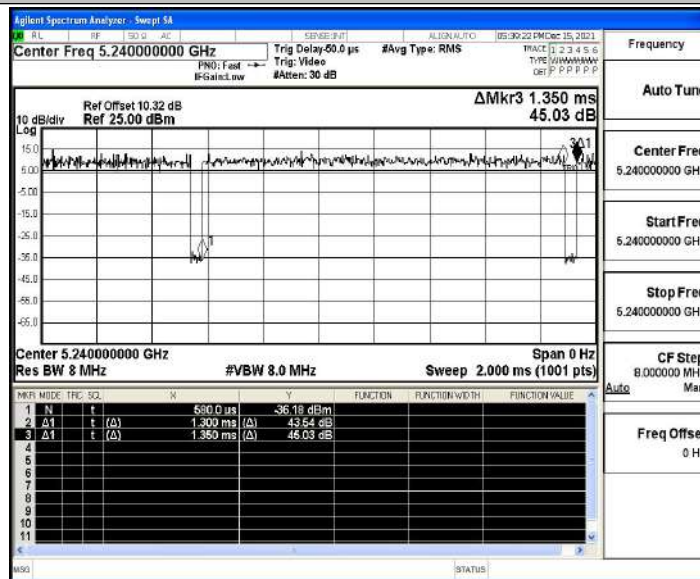


11N20SISO_Ant1_5220

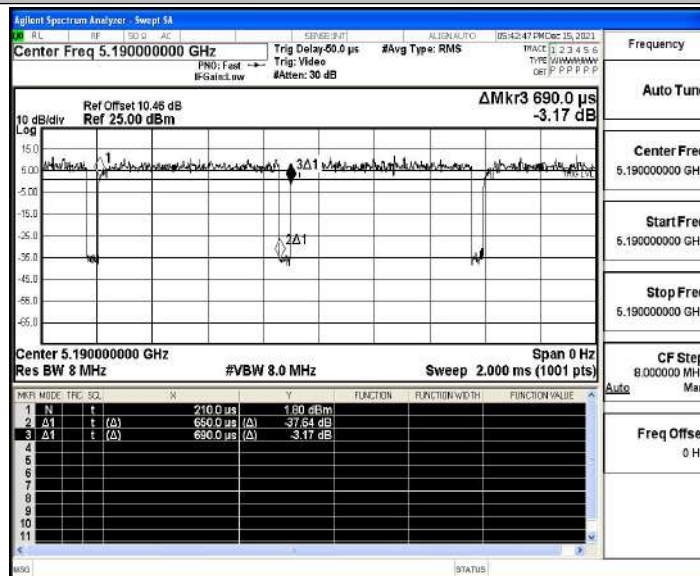




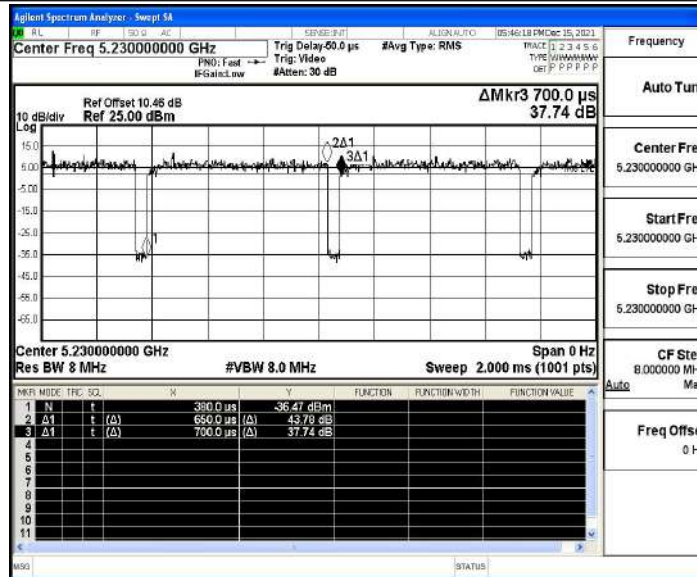
11N20SISO_Ant1_5240



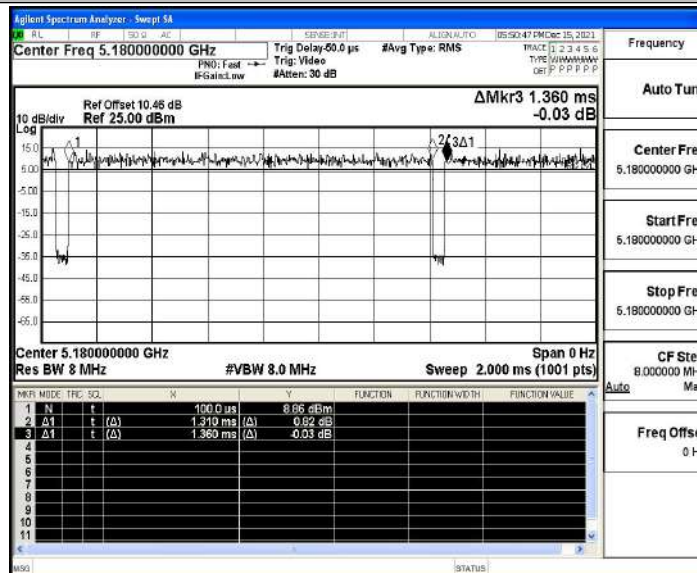
11N40SISO_Ant1_5190



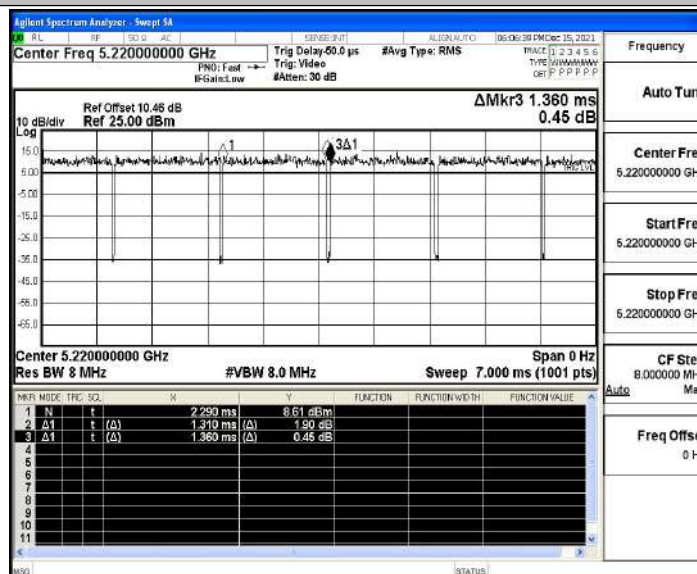
11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180

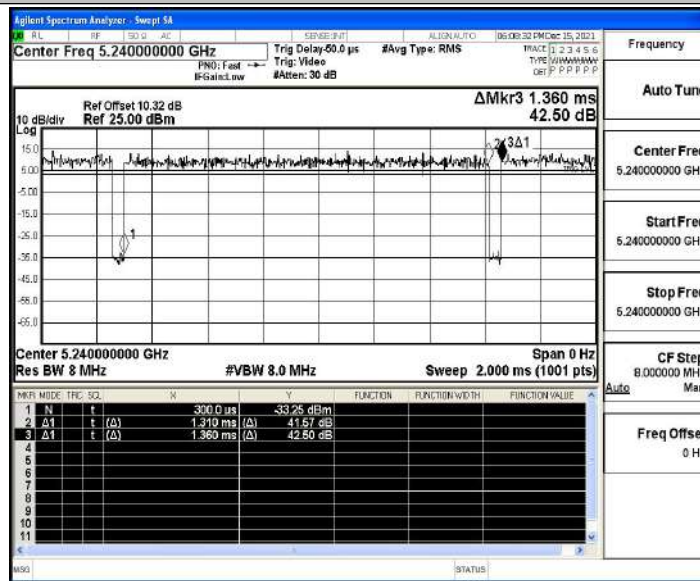


11AC20SISO_Ant1_5220

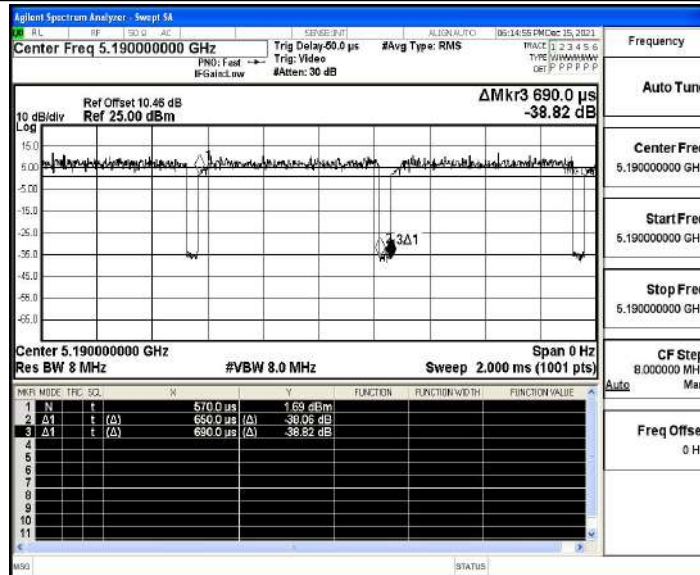




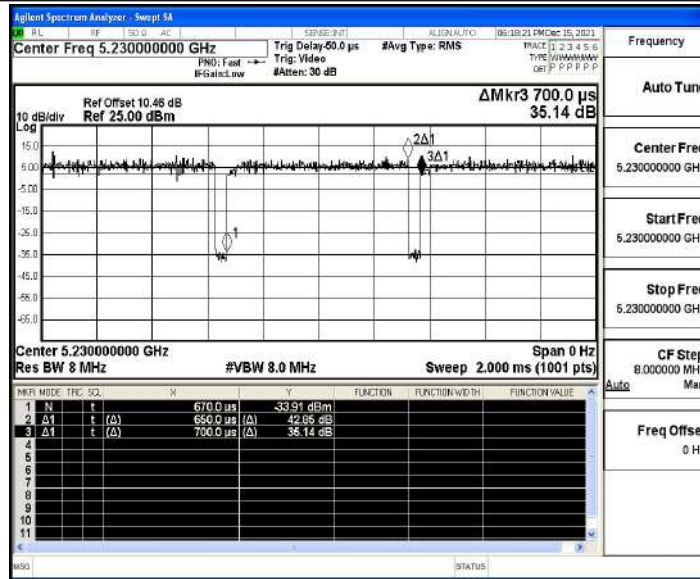
11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210

