



Appendix D

RF Test Data for 5.2G WIFI (Conducted Measurement)

Product Name: WEBOS SMART TV

Test Model: PTVWEB75UHD

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Mark Chen
Supervised by:	Libin



D.1 26dB Bandwidth

Test Result

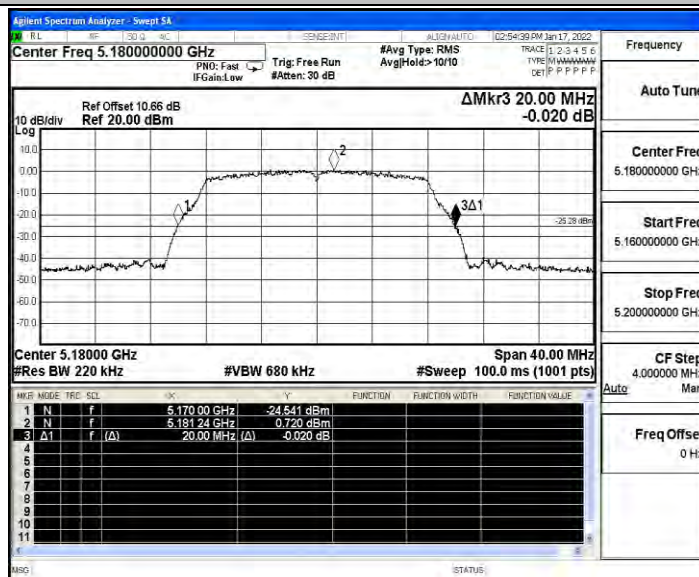
Ant0

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant0	5180	20.000	5170.000	5190.000	---	---
		5220	20.000	5210.000	5230.000	---	---
		5240	20.120	5229.920	5250.040	---	---
11N20SISO	Ant0	5180	20.280	5169.880	5190.160	---	---
		5220	20.320	5209.840	5230.160	---	---
		5240	20.320	5229.880	5250.200	---	---
11N40SISO	Ant0	5190	40.560	5169.680	5210.240	---	---
		5230	40.560	5209.760	5250.320	---	---
11AC20SISO	Ant0	5180	20.400	5169.760	5190.160	---	---
		5220	20.360	5209.800	5230.160	---	---
		5240	20.400	5229.760	5250.160	---	---
11AC40SISO	Ant0	5190	40.560	5169.680	5210.240	---	---
		5230	40.800	5209.520	5250.320	---	---
11AC80SISO	Ant0	5210	81.120	5169.360	5250.480	---	---

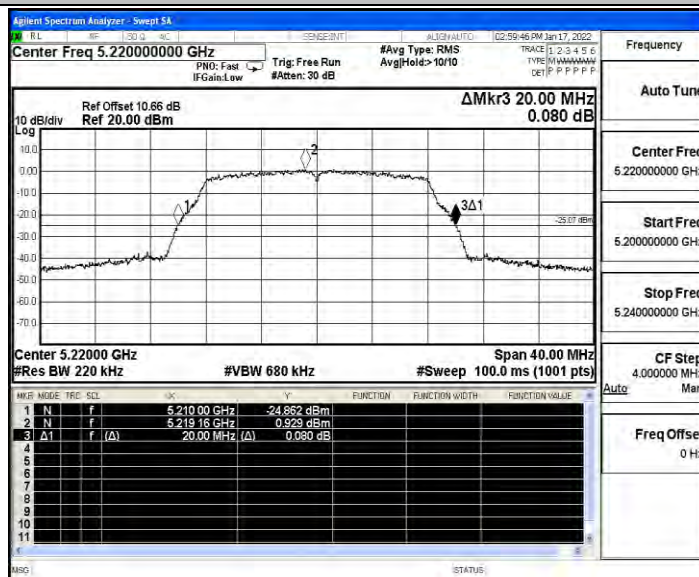


Test Graphs

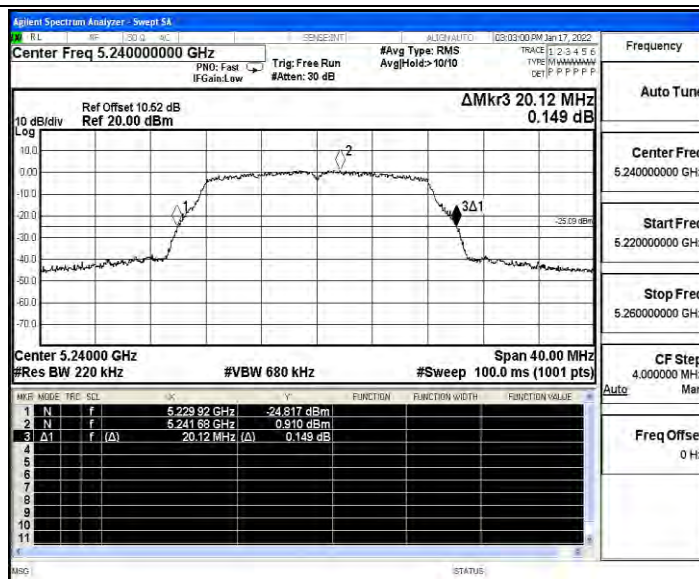
11A_Ant0_5180



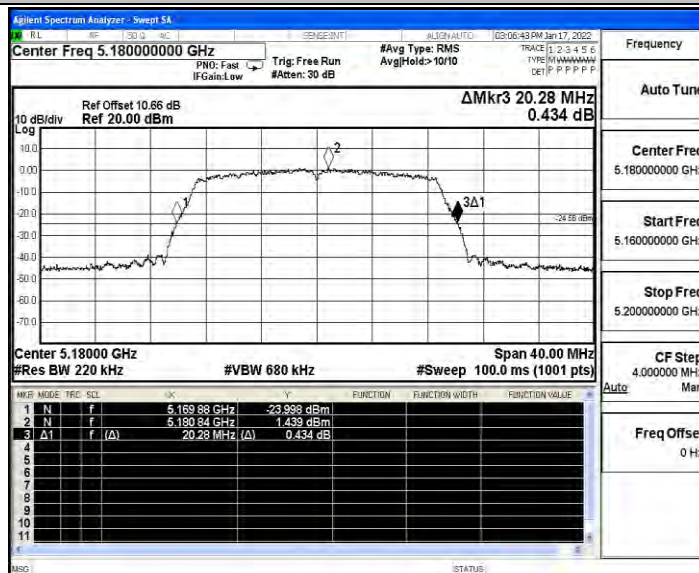
11A_Ant0_5220



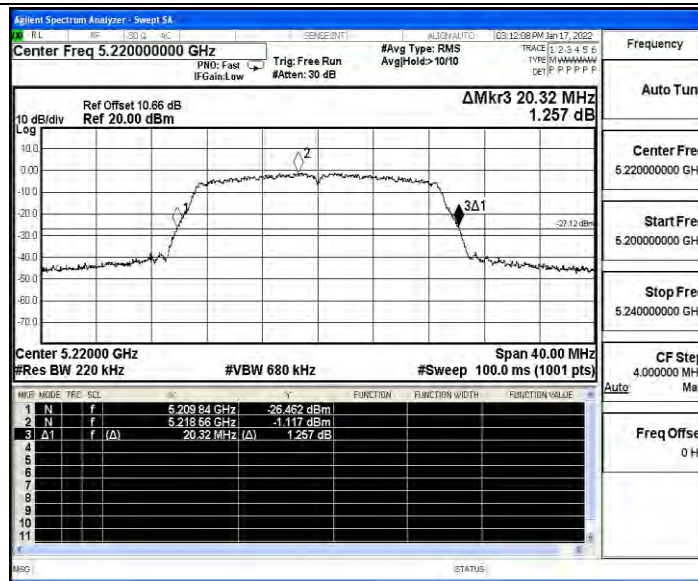
11A_Ant0_5240



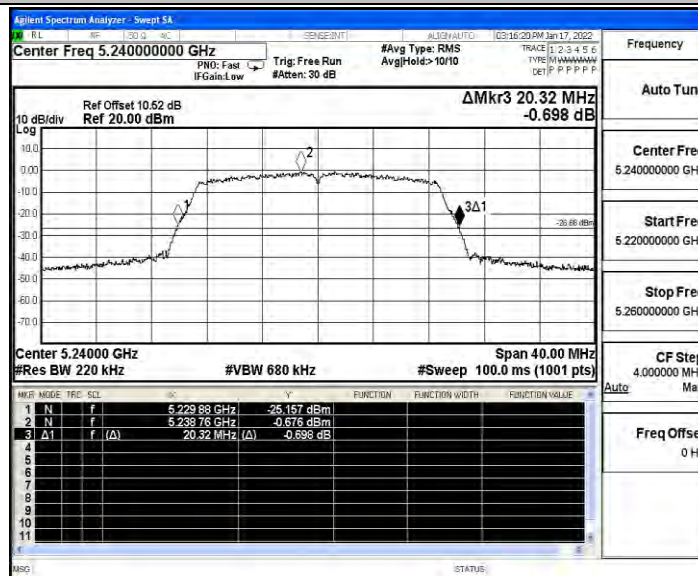
11N20SISO_Ant0_5180



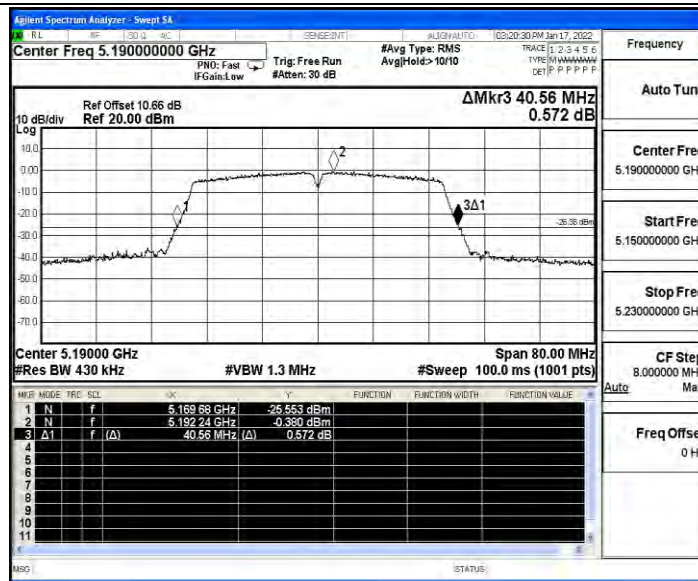
11N20SISO_Ant0_5220



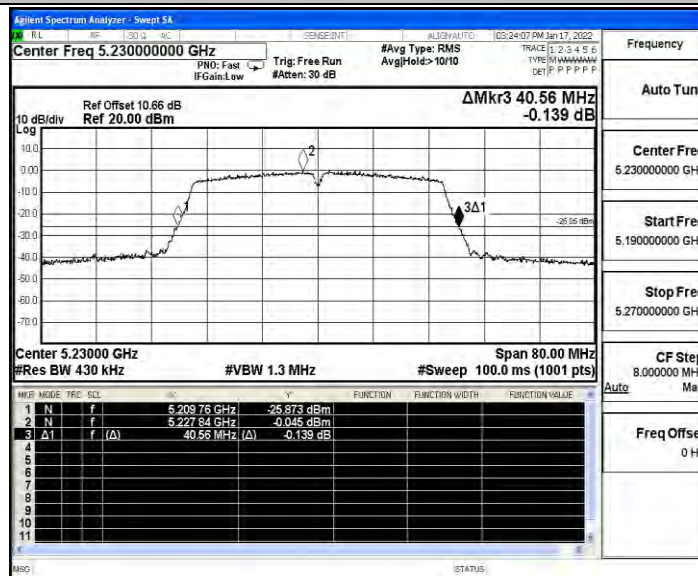
11N20SISO_Ant0_5240



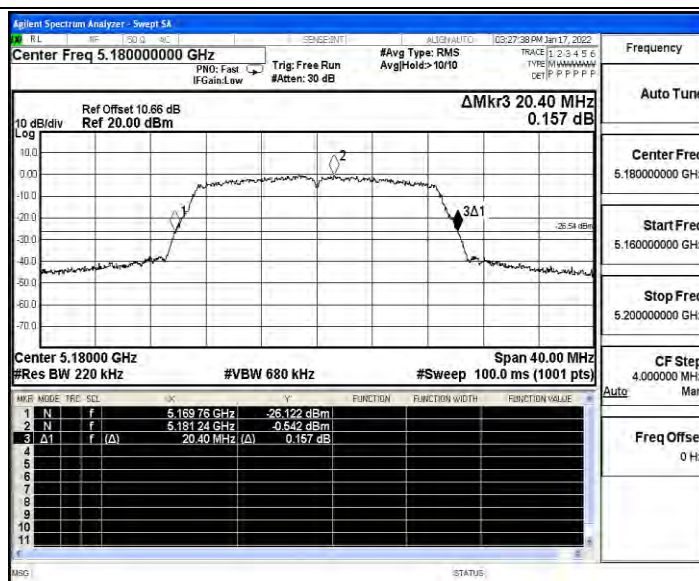
11N40SISO_Ant0_5190



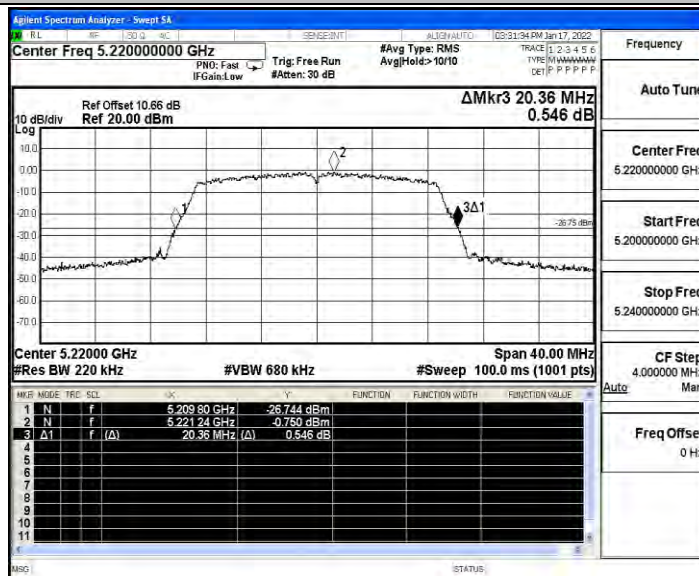
11N40SISO_Ant0_5230



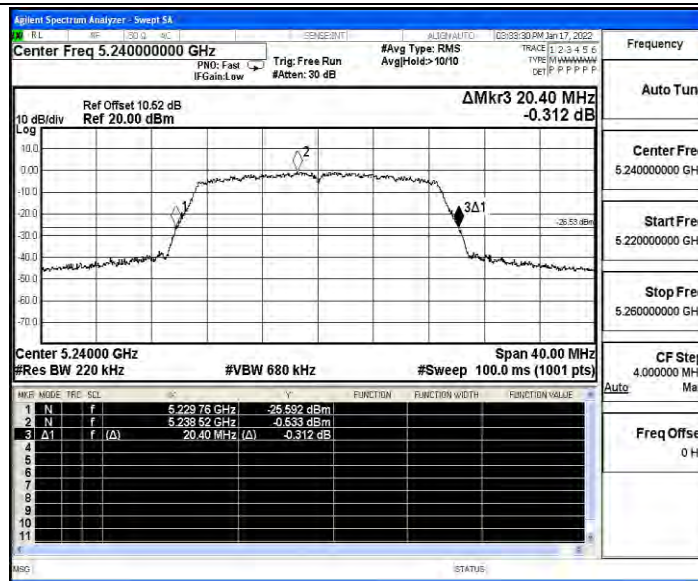
11AC20SISO_Ant0_5180



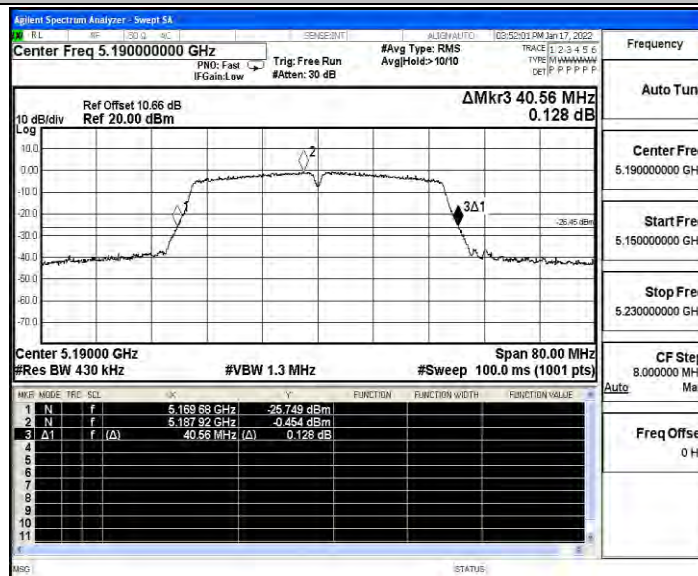
11AC20SISO_Ant0_5220



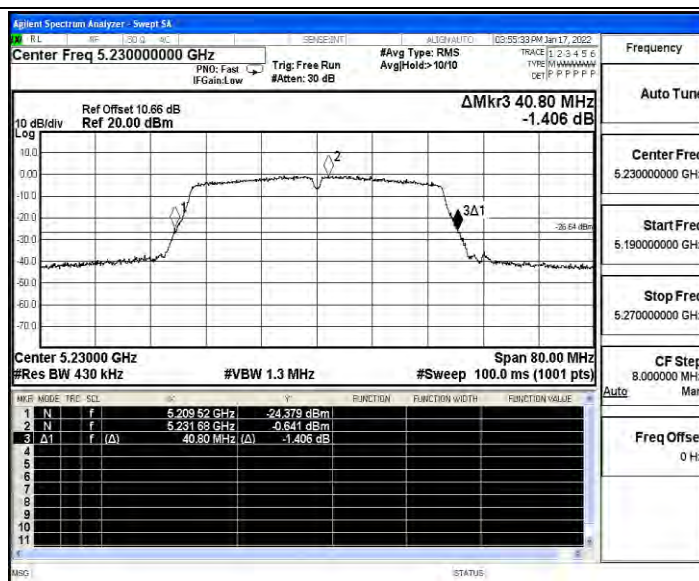
11AC20SISO_Ant0_5240



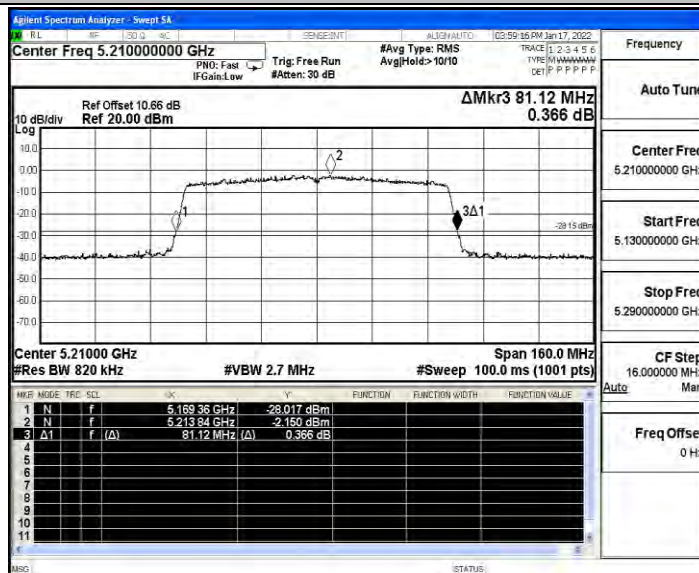
11AC40SISO_Ant0_5190



11AC40SISO_Ant0_5230



11AC80SISO_Ant0_5210





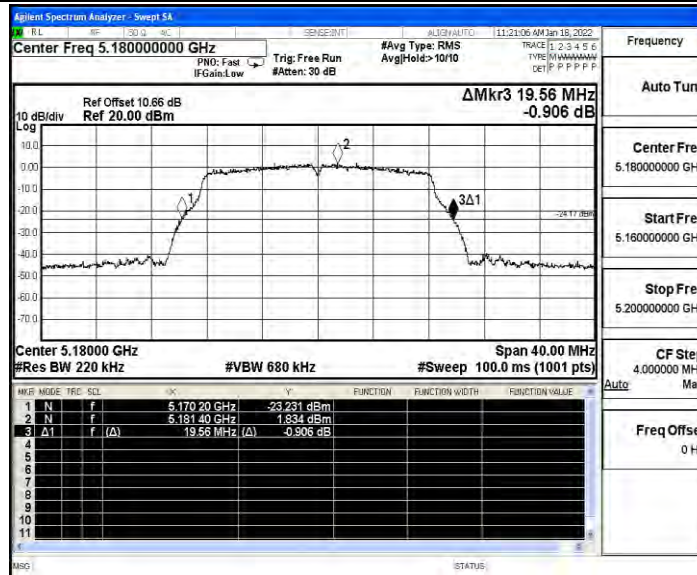
Ant1

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.560	5170.200	5189.760	---	---
		5220	19.480	5210.240	5229.720	---	---
		5240	19.400	5230.400	5249.800	---	---
11N20SISO	Ant1	5180	20.040	5170.000	5190.040	---	---
		5220	19.920	5210.080	5230.000	---	---
		5240	20.000	5230.040	5250.040	---	---
11N40SISO	Ant1	5190	40.320	5169.840	5210.160	---	---
		5230	40.480	5209.920	5250.400	---	---
11AC20SISO	Ant1	5180	20.040	5169.960	5190.000	---	---
		5220	20.000	5210.000	5230.000	---	---
		5240	20.040	5230.000	5250.040	---	---
11AC40SISO	Ant1	5190	40.480	5169.680	5210.160	---	---
		5230	40.240	5209.840	5250.080	---	---
11AC80SISO	Ant1	5210	80.800	5169.520	5250.320	---	---

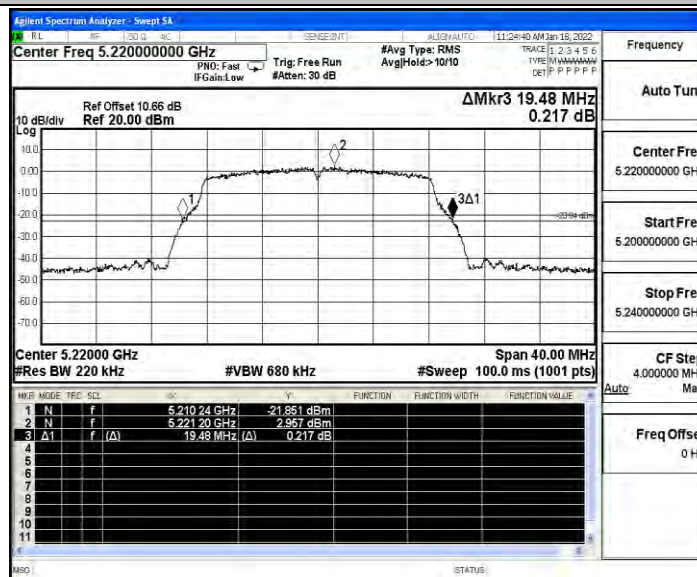


Test Graphs

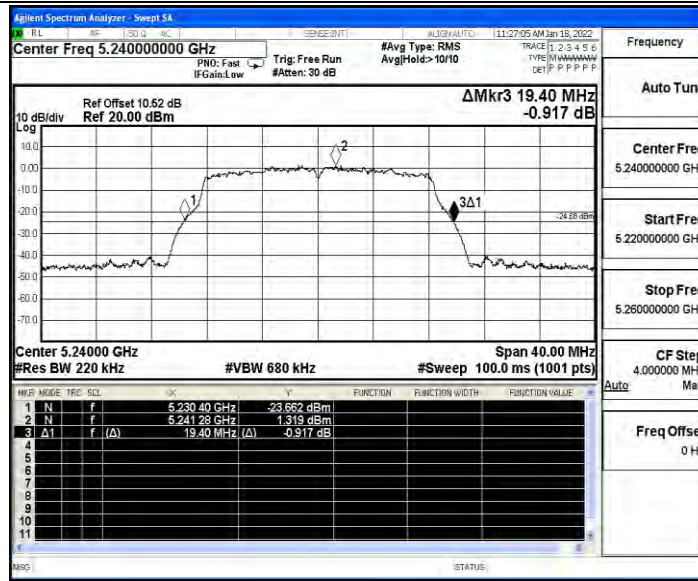
11A_Ant1_5180



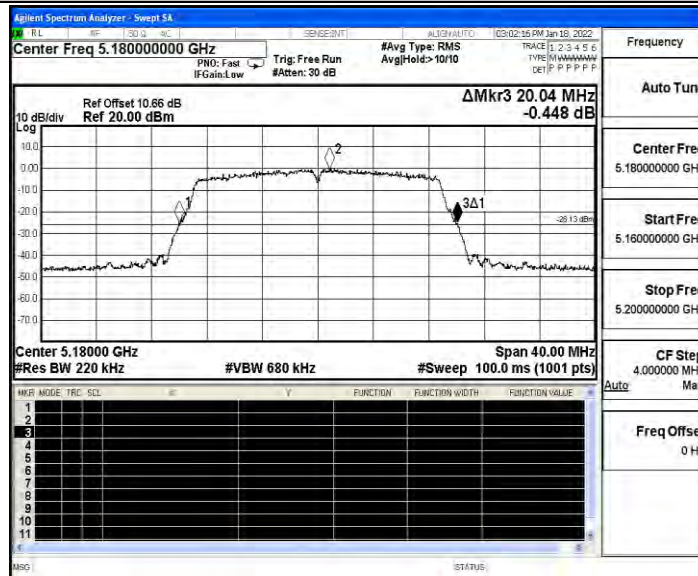
11A_Ant1_5220



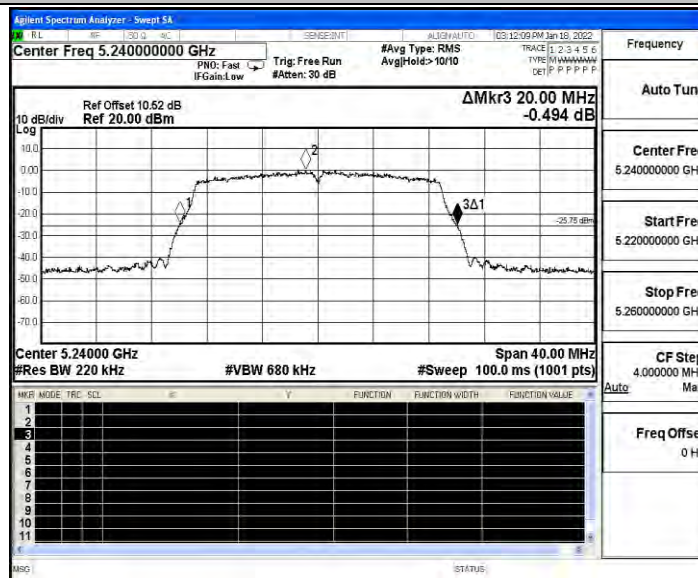
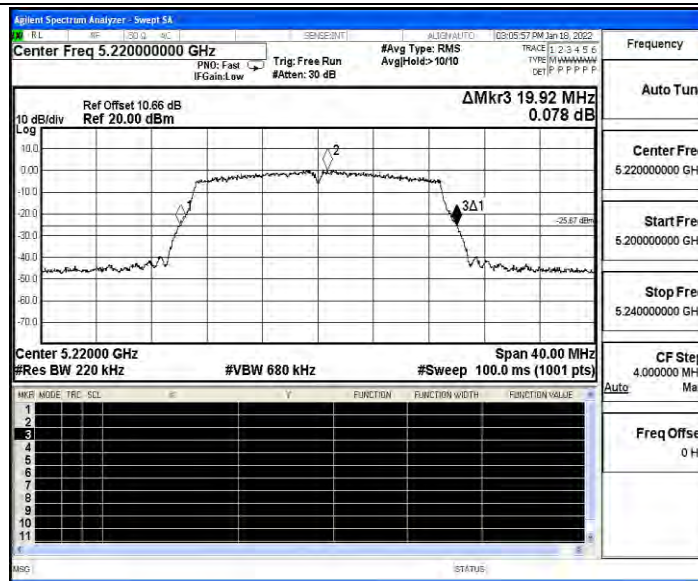
11A_Ant1_5240

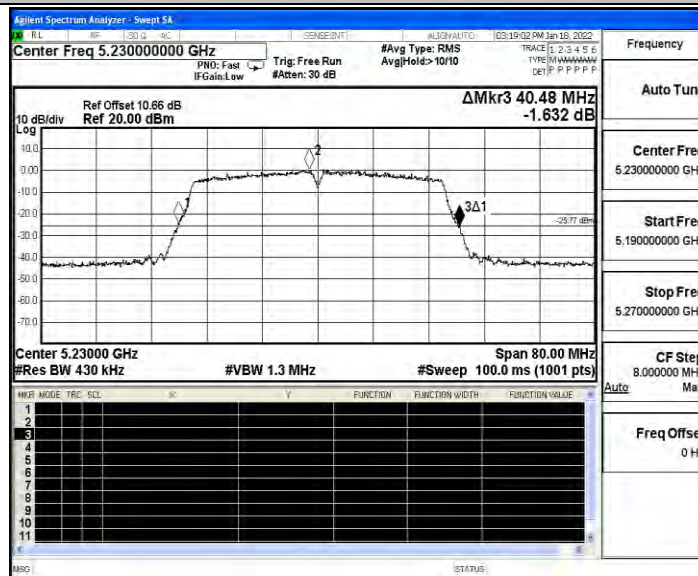
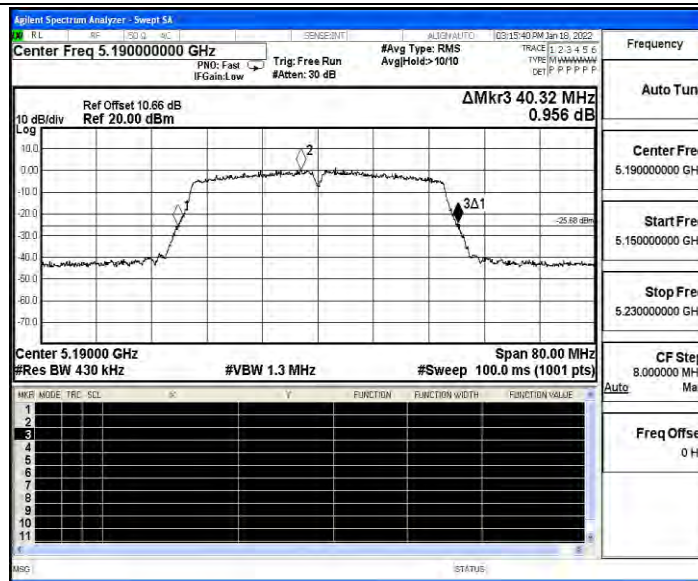


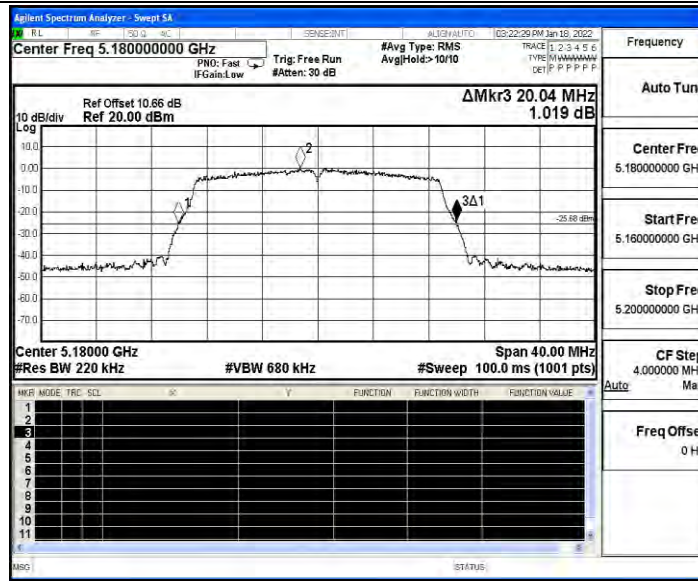
11N20SISO_Ant1_5180



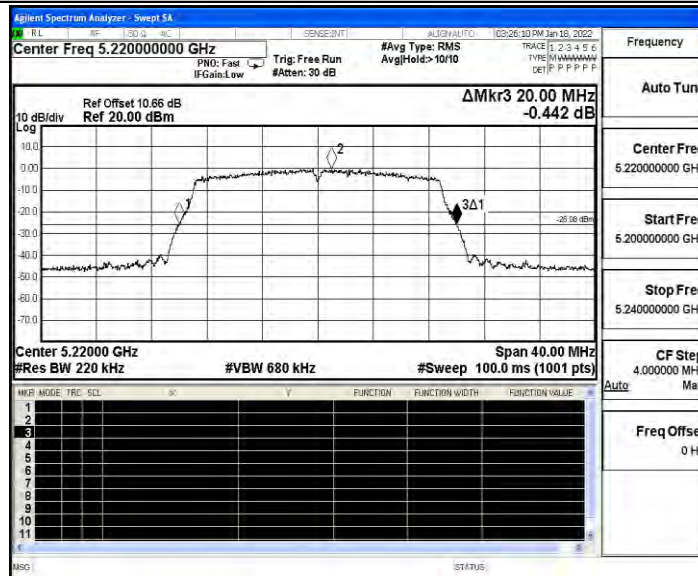
11N20SISO_Ant1_5220



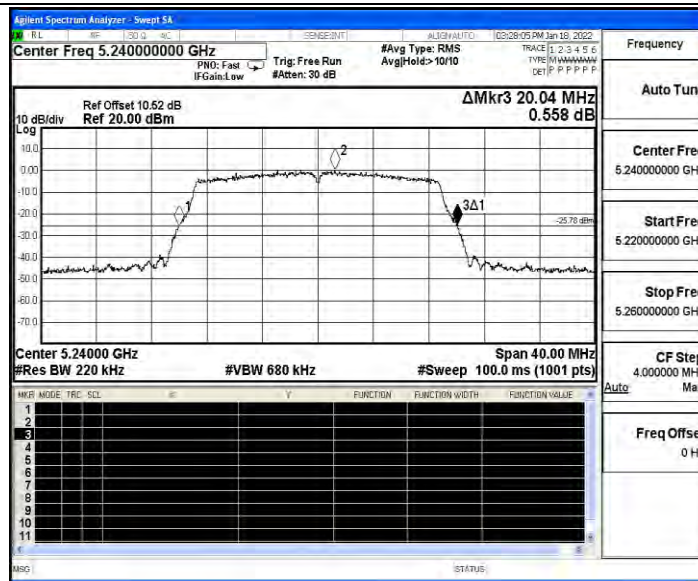




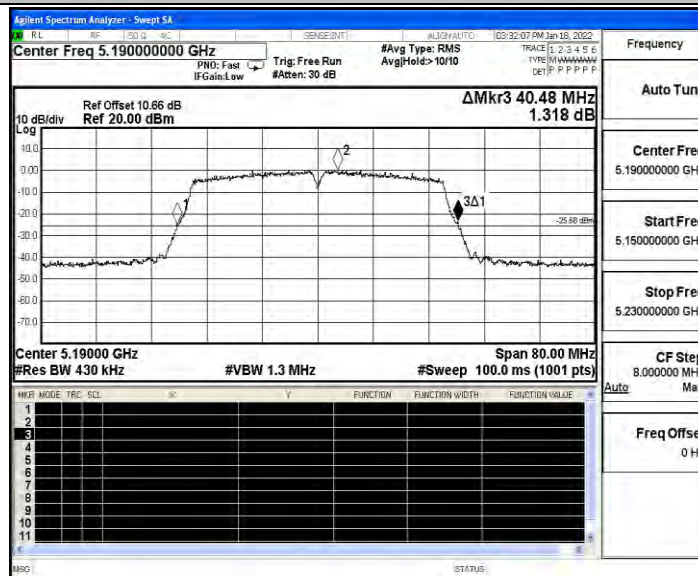
11AC20SISO_Ant1_5220



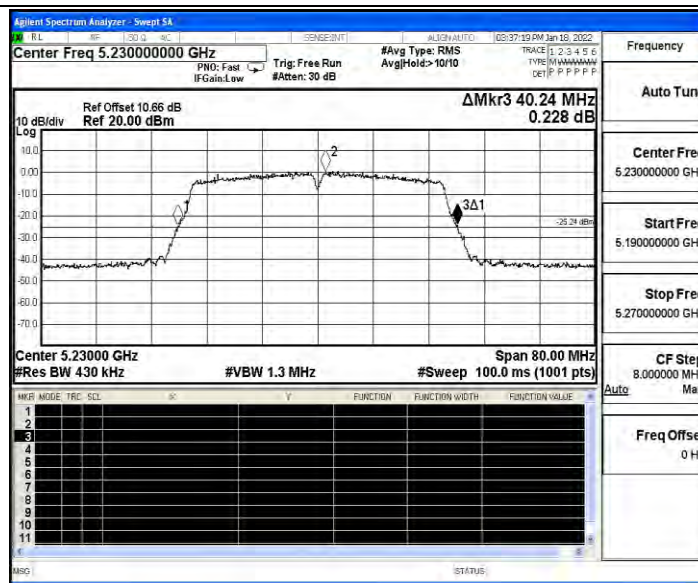
11AC20SISO_Ant1_5240



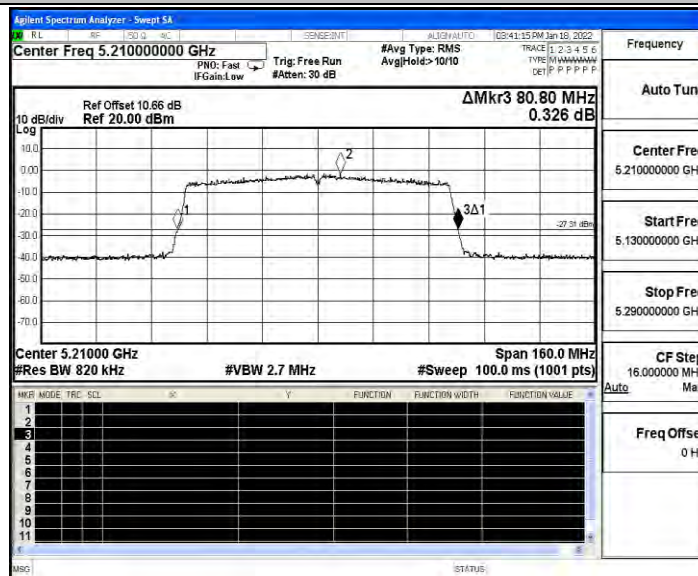
11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210





D.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant0	5180	9.94	≤ 23.98	PASS
		5220	9.98	≤ 23.98	PASS
		5240	10.02	≤ 23.98	PASS
11N20SISO	Ant0	5180	8.11	≤ 23.98	PASS
		5220	8.93	≤ 23.98	PASS
		5240	8.38	≤ 23.98	PASS
11N40SISO	Ant0	5190	8.50	≤ 23.98	PASS
		5230	8.46	≤ 23.98	PASS
11AC20SISO	Ant0	5180	8.63	≤ 23.98	PASS
		5220	8.31	≤ 23.98	PASS
		5240	8.26	≤ 23.98	PASS
11AC40SISO	Ant0	5190	8.55	≤ 23.98	PASS
		5230	8.97	≤ 23.98	PASS
11AC80SISO	Ant0	5210	6.78	≤ 23.98	PASS

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	9.84	≤ 23.98	PASS
		5220	9.75	≤ 23.98	PASS
		5240	9.86	≤ 23.98	PASS
11N20SISO	Ant1	5180	8.24	≤ 23.98	PASS
		5220	8.44	≤ 23.98	PASS
		5240	8.33	≤ 23.98	PASS
11N40SISO	Ant1	5190	8.31	≤ 23.98	PASS
		5230	8.13	≤ 23.98	PASS
11AC20SISO	Ant1	5180	8.33	≤ 23.98	PASS
		5220	8.30	≤ 23.98	PASS
		5240	8.05	≤ 23.98	PASS
11AC40SISO	Ant1	5190	8.05	≤ 23.98	PASS
		5230	8.27	≤ 23.98	PASS
11AC80SISO	Ant1	5210	8.55	≤ 23.98	PASS



MIMO

Test Mode	Channel	Frequency (MHz)	Ant 0 Conducted Power (dBm)	Ant 1 Conducted Power (dBm)	MIMO AV Conducted Power (dBm)	Limit (dBm)	Verdict
11N20	36	5180	8.11	8.24	11.19	≤23.98	Pass
	40	5200	8.93	8.44	11.70		Pass
	48	5240	8.38	8.33	11.37		Pass
11N40	38	5190	8.50	8.31	11.42	≤23.98	Pass
	46	5230	8.46	8.13	11.31		Pass
11AC20	36	5180	8.63	8.33	11.49	≤23.98	Pass
	40	5200	8.31	8.30	11.32		Pass
	48	5240	8.26	8.05	11.17		Pass
11AC40	38	5190	8.55	8.05	11.32	≤23.98	Pass
	46	5230	8.97	8.27	11.64		Pass
11AC80	42	5210	6.78	8.55	10.76	≤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	Ant0	5180	-0.51	≤11.00	PASS
		5220	-0.50	≤11.00	PASS
		5240	-0.54	≤11.00	PASS
11N20SISO	Ant0	5180	-2.58	≤11.00	PASS
		5220	-1.73	≤11.00	PASS
		5240	-2.28	≤11.00	PASS
11N40SISO	Ant0	5190	-5.20	≤11.00	PASS
		5230	-5.38	≤11.00	PASS
11AC20SISO	Ant0	5180	-2.18	≤11.00	PASS
		5220	-2.35	≤11.00	PASS
		5240	-2.40	≤11.00	PASS
11AC40SISO	Ant0	5190	-5.10	≤11.00	PASS
		5230	-4.92	≤11.00	PASS
11AC80SISO	Ant0	5210	-10.03	≤11.00	PASS

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-0.44	≤11.00	PASS
		5220	-0.65	≤11.00	PASS
		5240	-0.38	≤11.00	PASS
11N20SISO	Ant1	5180	-2.29	≤11.00	PASS
		5220	-1.90	≤11.00	PASS
		5240	-2.33	≤11.00	PASS
11N40SISO	Ant1	5190	-5.17	≤11.00	PASS
		5230	-5.30	≤11.00	PASS
11AC20SISO	Ant1	5180	-2.02	≤11.00	PASS
		5220	-2.23	≤11.00	PASS
		5240	-2.39	≤11.00	PASS
11AC40SISO	Ant1	5190	-5.34	≤11.00	PASS
		5230	-5.08	≤11.00	PASS
11AC80SISO	Ant1	5210	-7.62	≤11.00	PASS



MIMO

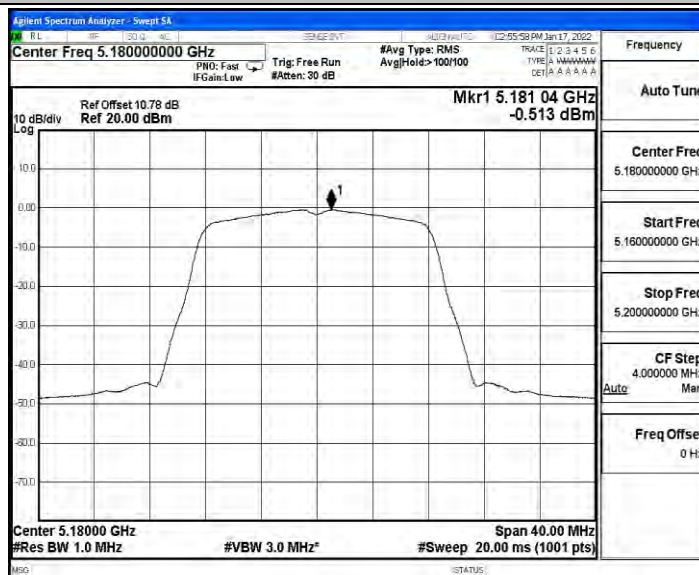
Test Mode	Channel	Frequency (MHz)	Ant 0 PSD [dBm/MHz]	Ant 1 PSD [dBm/MHz]	MIMO PSD [dBm/MHz]	Limit [dBm/MHz]	Verdict
11N20	36	5180	-2.58	-2.29	0.58	≤11	Pass
	40	5200	-1.73	-1.90	1.20		Pass
	48	5240	-2.28	-2.33	0.71		Pass
11N40	38	5190	-5.20	-5.17	-2.17	≤11	Pass
	46	5230	-5.38	-5.30	-2.33		Pass
11AC20	36	5180	-2.18	-2.02	0.91	≤11	Pass
	40	5200	-2.35	-2.23	0.72		Pass
	48	5240	-2.40	-2.39	0.62		Pass
11AC40	38	5190	-5.10	-5.34	-2.21	≤11	Pass
	46	5230	-4.92	-5.08	-1.99		Pass
11AC80	42	5210	-10.03	-7.62	-5.65	≤11	Pass



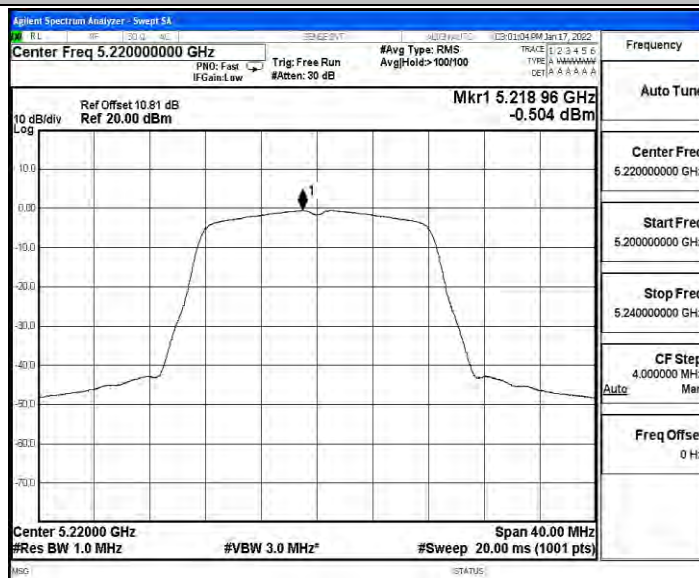
Test Graphs

Ant0

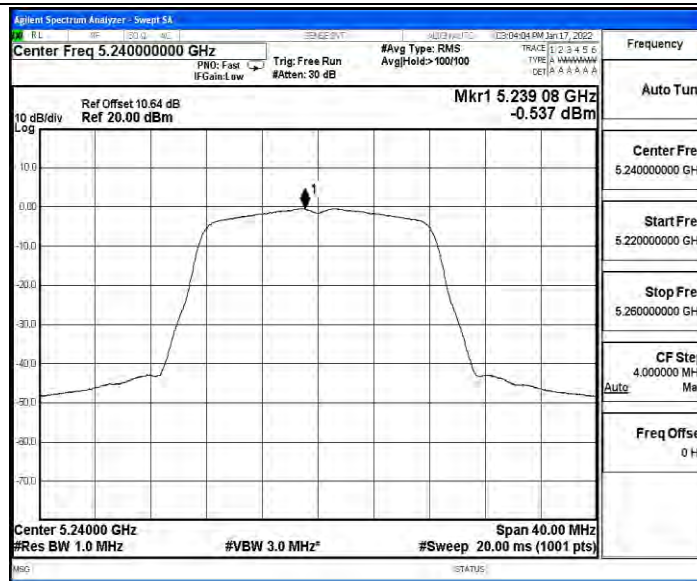
11A_Ant0_5180



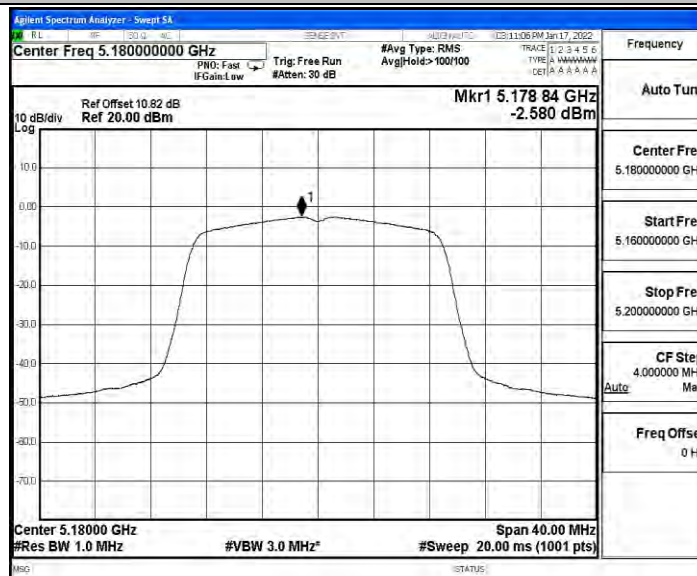
11A_Ant0_5220



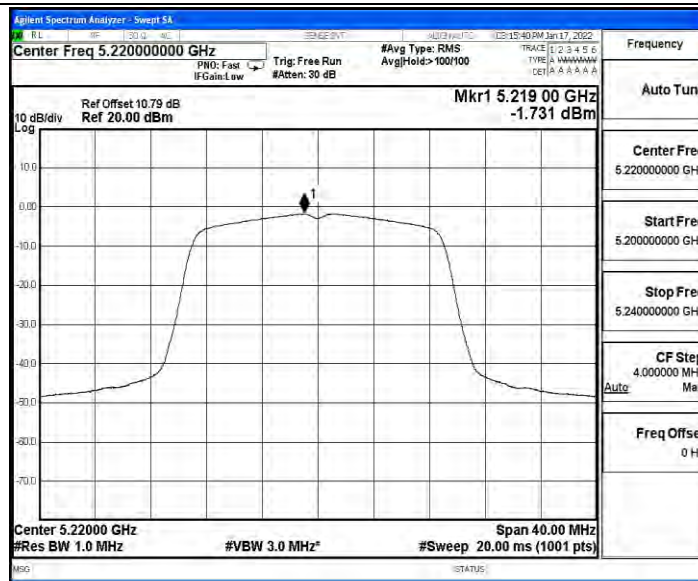
11A_Ant0_5240



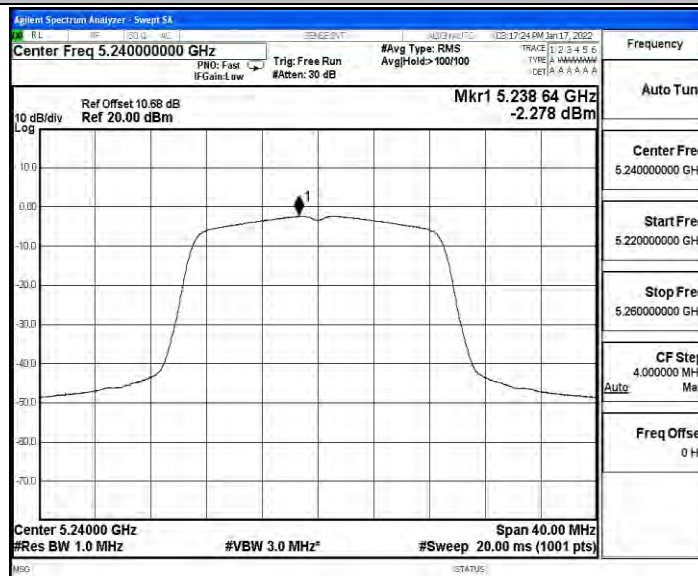
11N20SISO_Ant0_5180



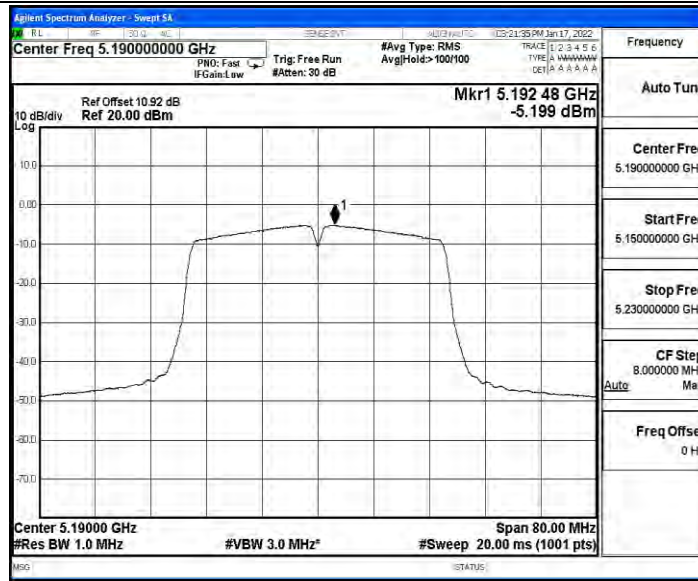
11N20SISO_Ant0_5220



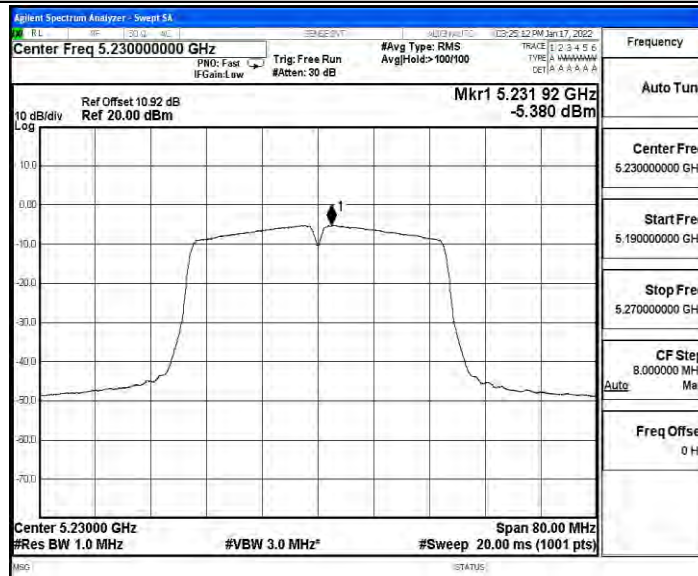
11N20SISO_Ant0_5240



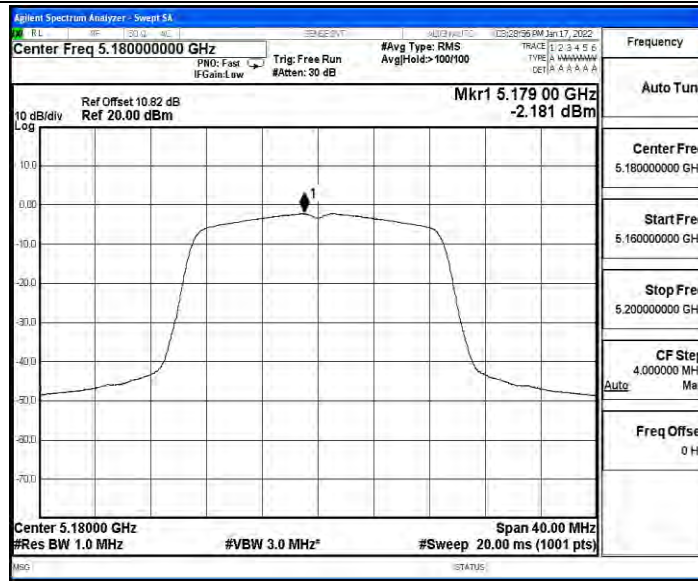
11N40SISO_Ant0_5190



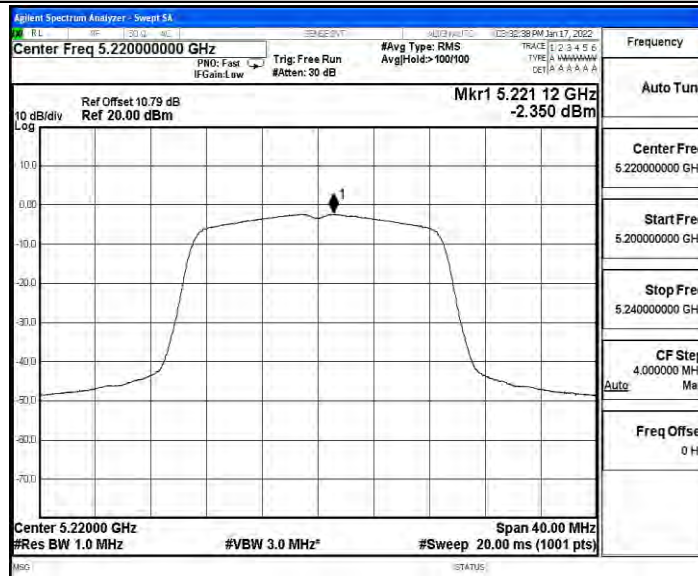
11N40SISO_Ant0_5230



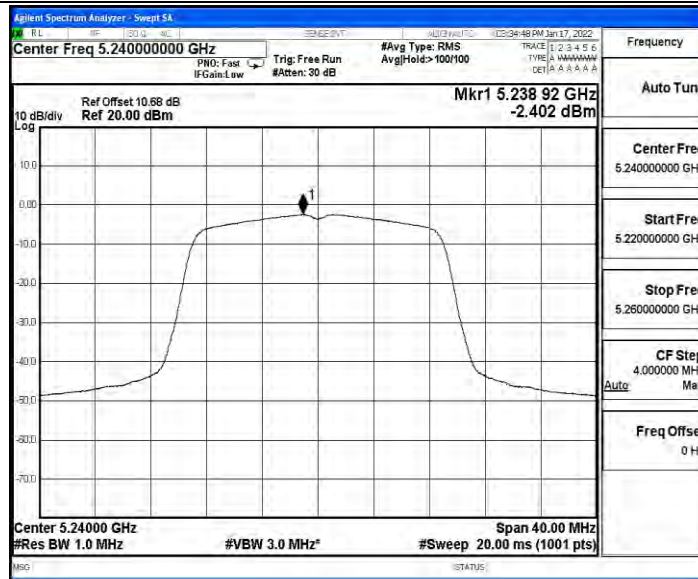
11AC20SISO_Ant0_5180



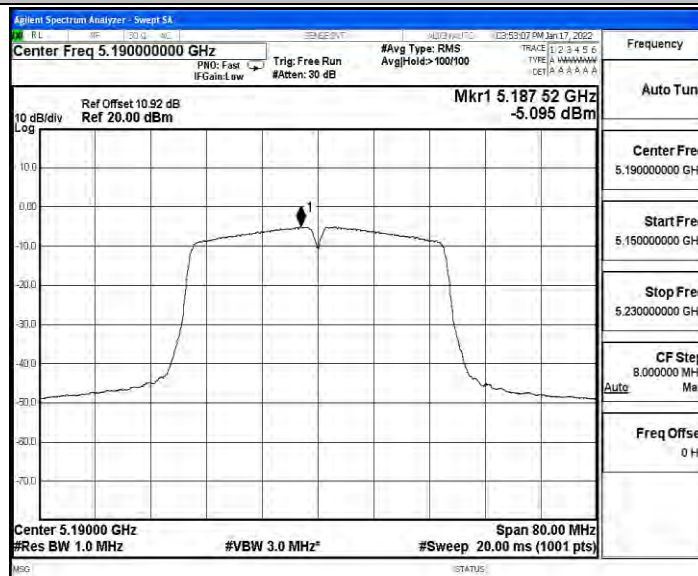
11AC20SISO_Ant0_5220



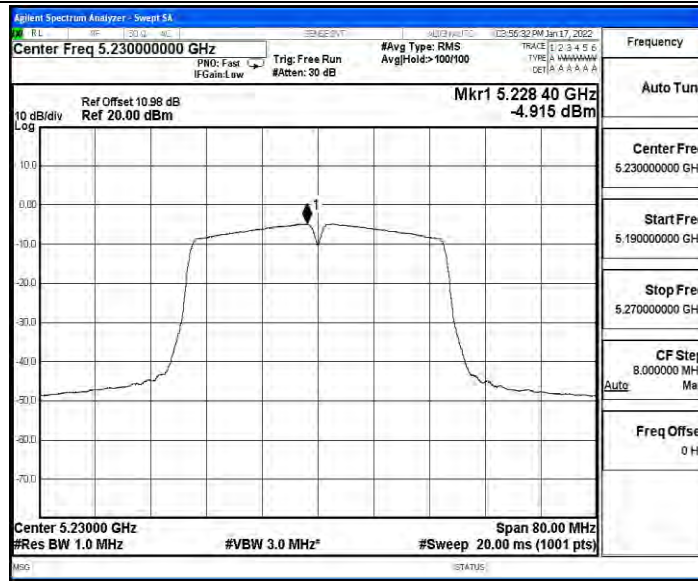
11AC20SISO_Ant0_5240



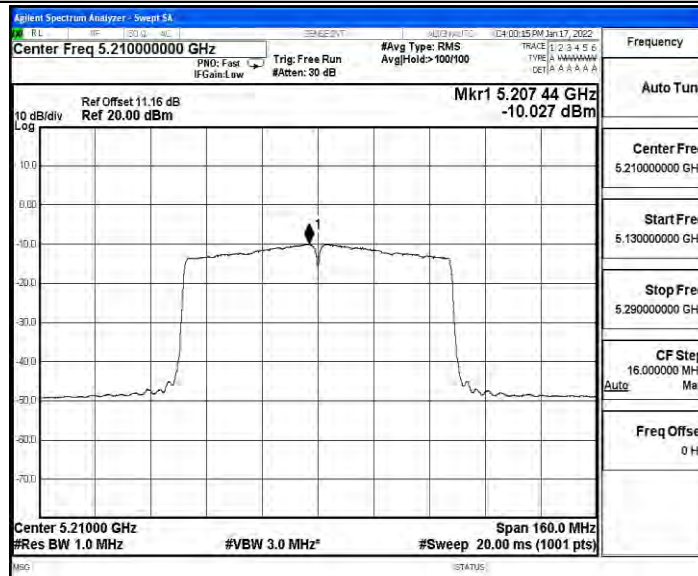
11AC40SISO_Ant0_5190



11AC40SISO_Ant0_5230



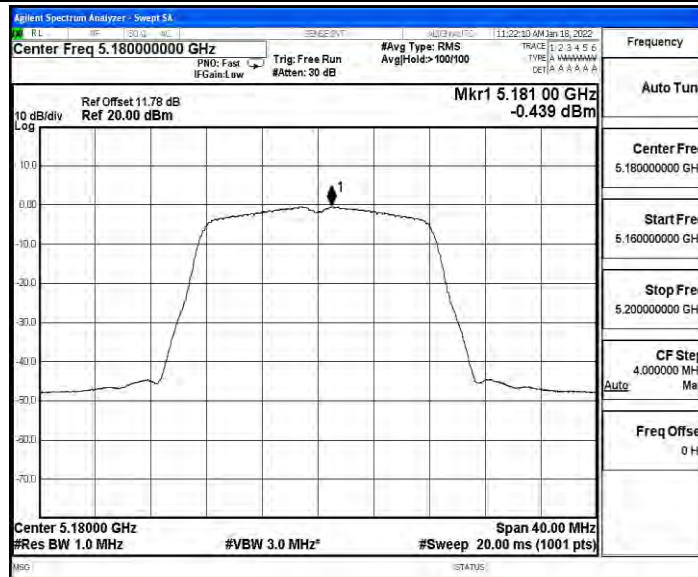
11AC80SISO_Ant0_5210



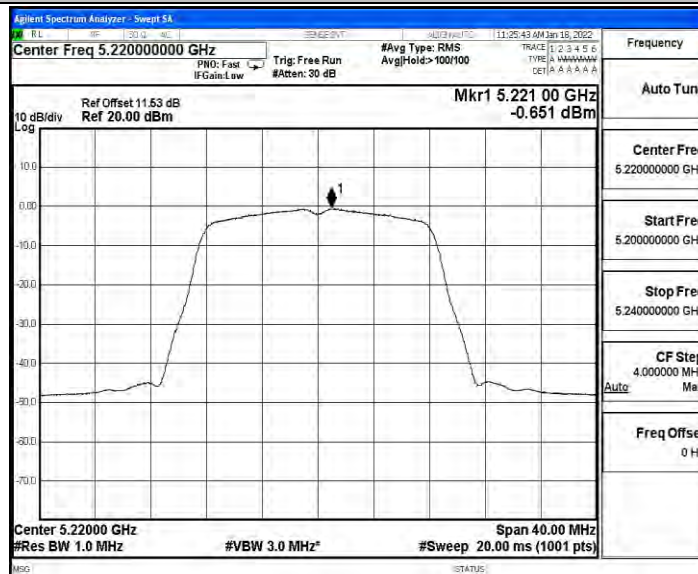


Ant1

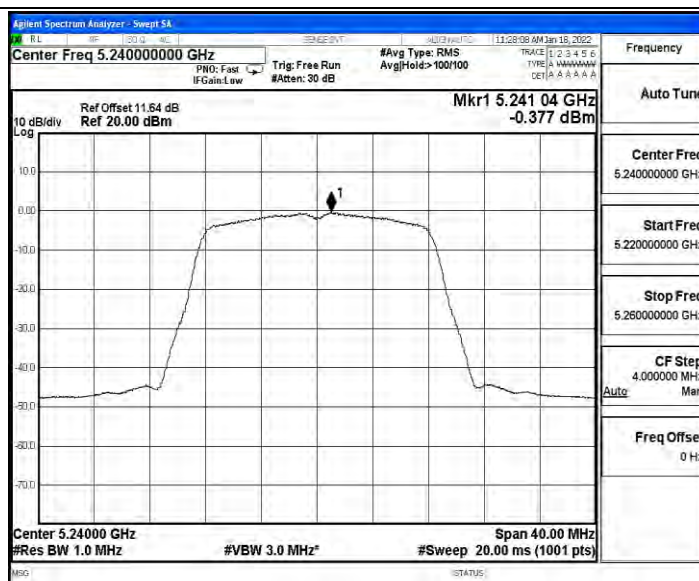
11A_Ant1_5180



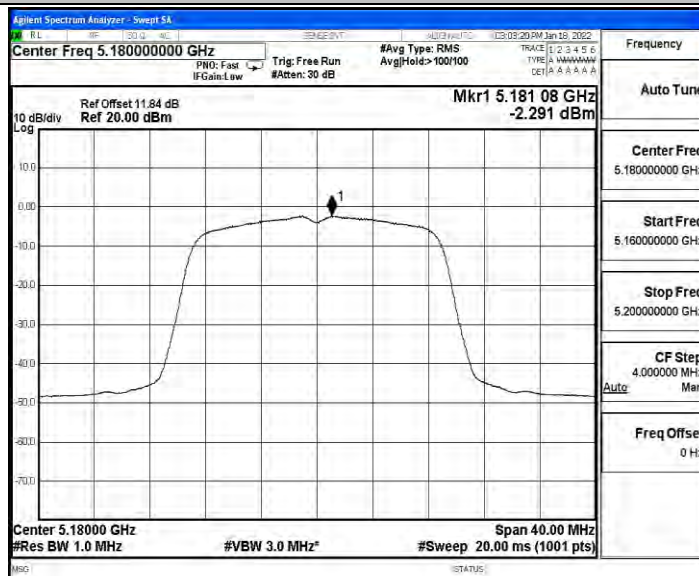
11A_Ant1_5220



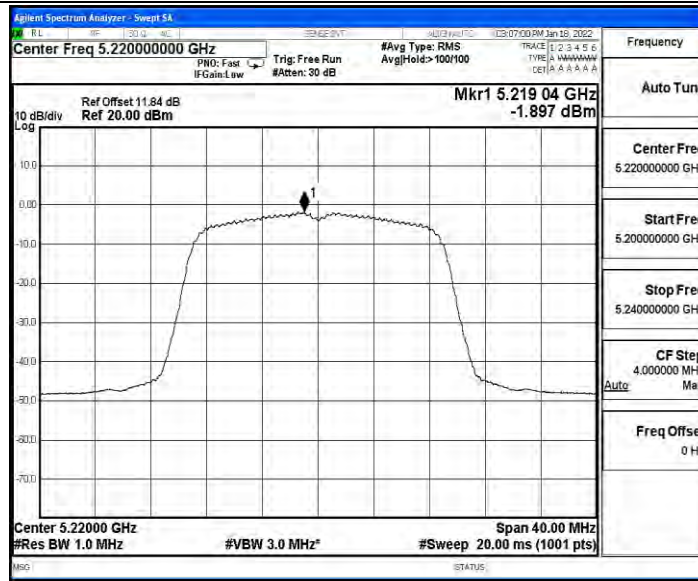
11A_Ant1_5240



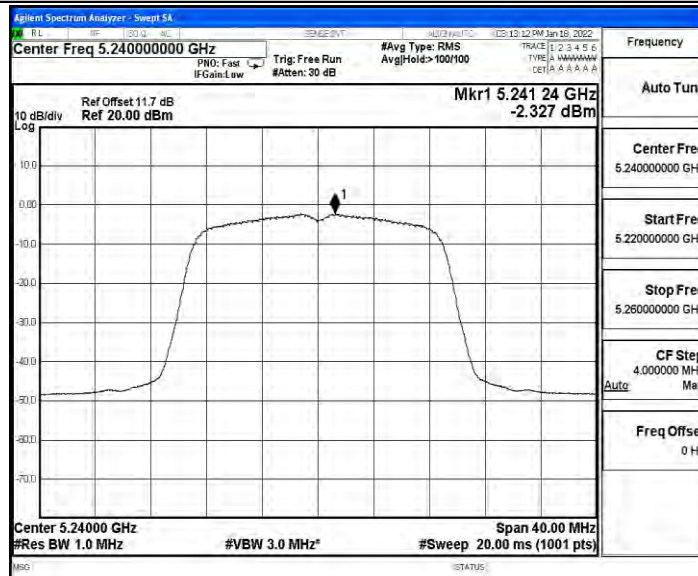
11N20SISO_Ant1_5180



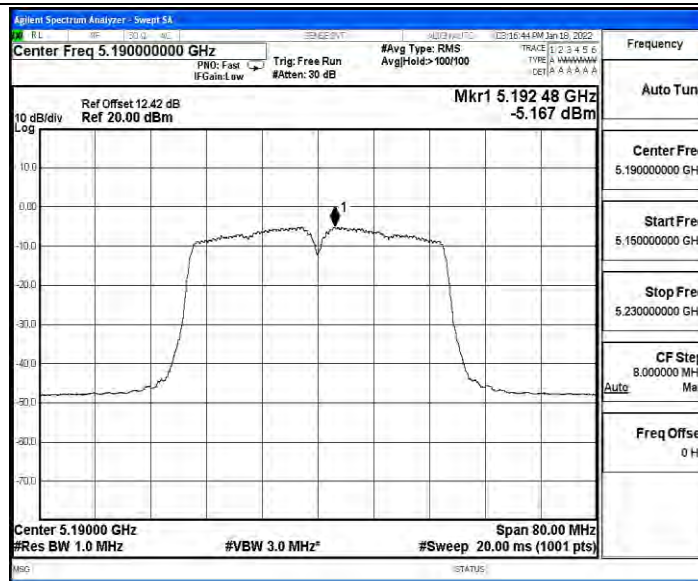
11N20SISO_Ant1_5220



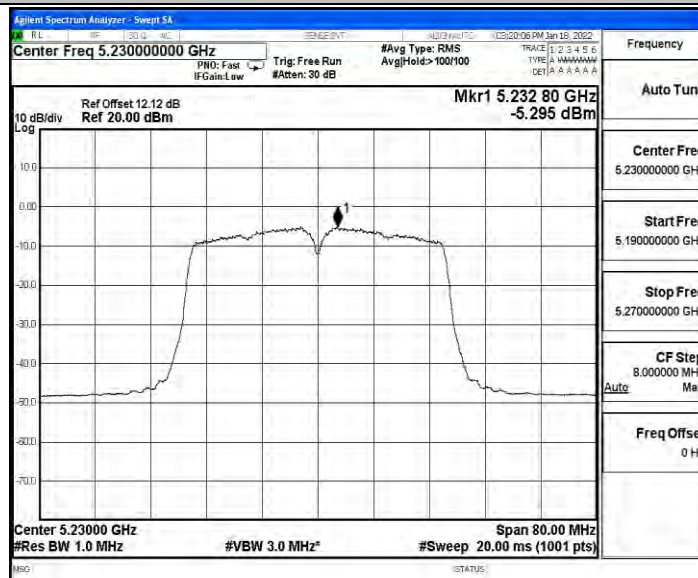
11N20SISO_Ant1_5240



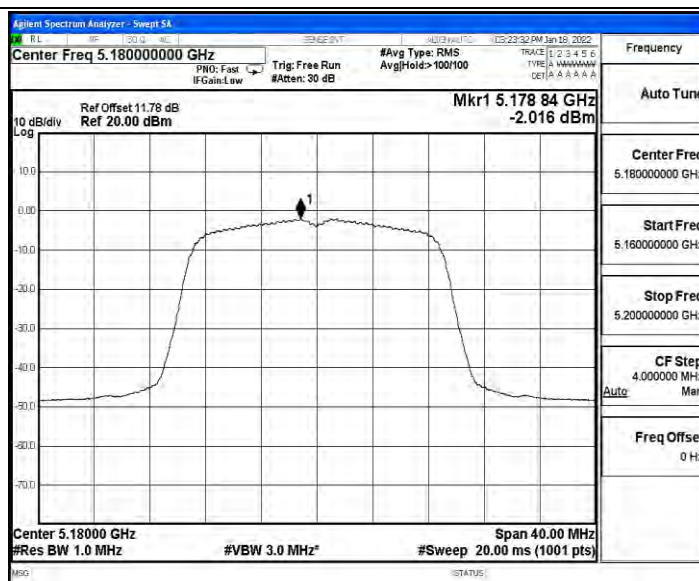
11N40SISO_Ant1_5190



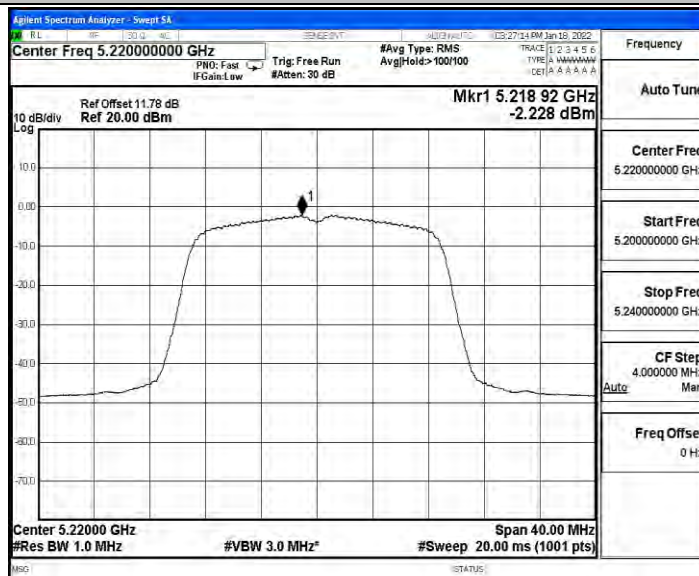
11N40SISO_Ant1_5230



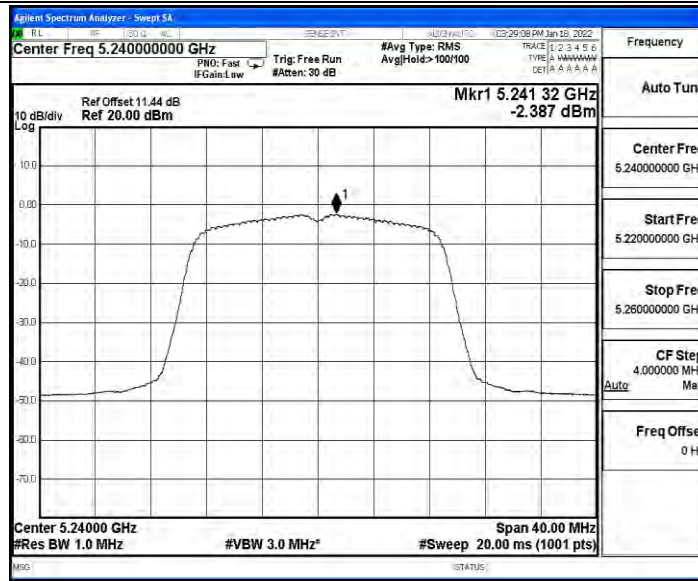
11AC20SISO_Ant1_5180



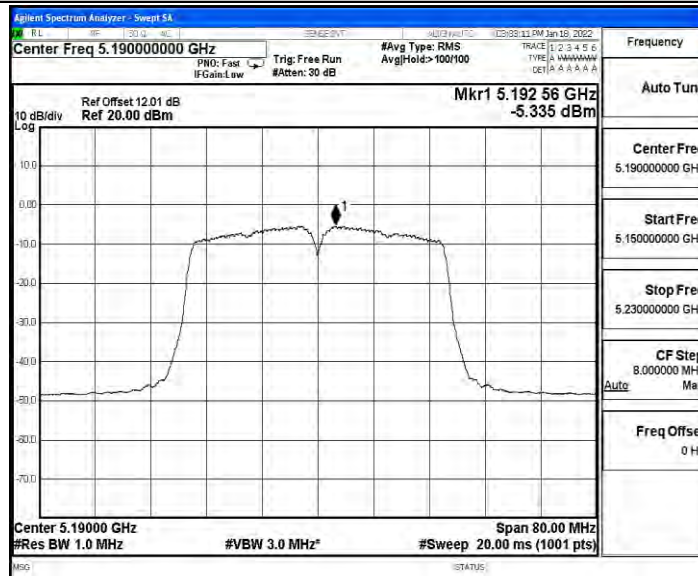
11AC20SISO_Ant1_5220



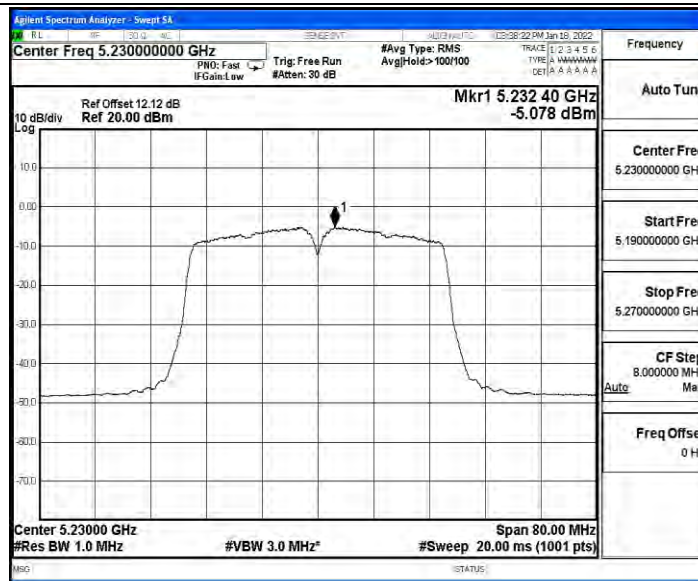
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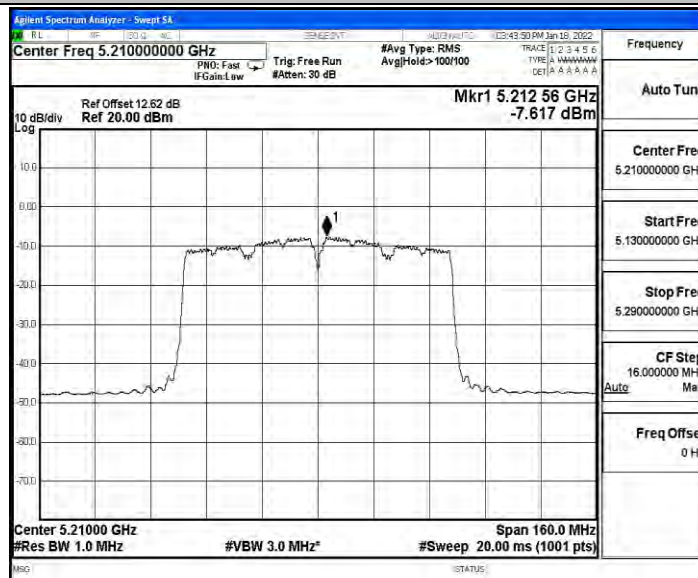
11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210





D.4 Emissions in Restricted Bands

Test Result

Ant0

Test Mode	Antenna	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant0	5180	AV	4500.000	-47.69	≤-41.20	47.51	≤54	PASS
			AV	4854.200	-45.46	≤-41.20	49.74	≤54	PASS
			AV	5150.000	-45.73	≤-41.20	49.47	≤54	PASS
			Peak	4500.000	-38.37	≤-21.20	56.83	≤74	PASS
			Peak	4980.900	-34.12	≤-21.20	61.08	≤74	PASS
			Peak	5150.000	-37	≤-21.20	58.20	≤74	PASS
		5240	AV	5350.000	-46.22	≤-41.20	48.98	≤54	PASS
			AV	5379.840	-46.13	≤-41.20	49.07	≤54	PASS
			AV	5460.000	-46.44	≤-41.20	48.76	≤54	PASS
			Peak	5350.000	-38.96	≤-21.20	56.24	≤74	PASS
			Peak	5369.760	-35.19	≤-21.20	60.01	≤74	PASS
			Peak	5460.000	-36.6	≤-21.20	58.60	≤74	PASS
11N20 SISO	Ant0	5180	AV	4500.000	-47.59	≤-41.20	47.61	≤54	PASS
			AV	4832.500	-45.45	≤-41.20	49.75	≤54	PASS
			AV	5150.000	-45.95	≤-41.20	49.25	≤54	PASS
			Peak	4500.000	-39.38	≤-21.20	55.82	≤74	PASS
			Peak	4846.500	-33.87	≤-21.20	61.33	≤74	PASS
			Peak	5150.000	-37.11	≤-21.20	58.09	≤74	PASS
		5240	AV	5350.000	-46.49	≤-41.20	48.71	≤54	PASS
			AV	5352.960	-46.15	≤-41.20	49.05	≤54	PASS
			AV	5460.000	-46.56	≤-41.20	48.64	≤54	PASS
			Peak	5350.000	-35.89	≤-21.20	59.31	≤74	PASS
			Peak	5350.080	-35.89	≤-21.20	59.31	≤74	PASS
			Peak	5460.000	-37.77	≤-21.20	57.43	≤74	PASS
11N40 SISO	Ant0	5190	AV	4500.000	-47.18	≤-41.20	48.02	≤54	PASS
			AV	4812.200	-45.11	≤-41.20	50.09	≤54	PASS
			AV	5150.000	-45.16	≤-41.20	50.04	≤54	PASS
			Peak	4500.000	-39.41	≤-21.20	55.79	≤74	PASS
			Peak	4918.600	-34.97	≤-21.20	60.23	≤74	PASS
			Peak	5150.000	-36.57	≤-21.20	58.63	≤74	PASS
		5230	AV	5350.000	-46.1	≤-41.20	49.10	≤54	PASS
			AV	5367.440	-45.69	≤-41.20	49.51	≤54	PASS
			AV	5460.000	-46.05	≤-41.20	49.15	≤54	PASS
			Peak	5350.000	-37.95	≤-21.20	57.25	≤74	PASS



11AC2 0SISO	Ant0	5180	Peak	5389.020	-35.05	≤-21.20	60.15	≤74	PASS
			Peak	5460.000	-37.03	≤-21.20	58.17	≤74	PASS
			AV	4500.000	-47.59	≤-41.20	47.61	≤54	PASS
			AV	4806.600	-45.47	≤-41.20	49.73	≤54	PASS
			AV	5150.000	-45.81	≤-41.20	49.39	≤54	PASS
			Peak	4500.000	-39.05	≤-21.20	56.15	≤74	PASS
			Peak	4877.300	-34.44	≤-21.20	60.76	≤74	PASS
			Peak	5150.000	-37.1	≤-21.20	58.10	≤74	PASS
		5240	AV	5350.000	-46.52	≤-41.20	48.68	≤54	PASS
			AV	5412.000	-46.16	≤-41.20	49.04	≤54	PASS
			AV	5460.000	-46.56	≤-41.20	48.64	≤54	PASS
			Peak	5350.000	-38.94	≤-21.20	56.26	≤74	PASS
			Peak	5381.520	-35.66	≤-21.20	59.54	≤74	PASS
			Peak	5460.000	-38.23	≤-21.20	56.97	≤74	PASS
11AC4 0SISO	Ant0	5190	AV	4500.000	-47.21	≤-41.20	47.99	≤54	PASS
			AV	4847.900	-45.03	≤-41.20	50.17	≤54	PASS
			AV	5150.000	-44.91	≤-41.20	50.29	≤54	PASS
			Peak	4500.000	-39.67	≤-21.20	55.53	≤74	PASS
			Peak	4875.900	-34.58	≤-21.20	60.62	≤74	PASS
			Peak	5150.000	-37.32	≤-21.20	57.88	≤74	PASS
		5230	AV	5350.000	-46.11	≤-41.20	49.09	≤54	PASS
			AV	5382.260	-45.73	≤-41.20	49.47	≤54	PASS
			AV	5460.000	-46.07	≤-41.20	49.13	≤54	PASS
			Peak	5350.000	-38.47	≤-21.20	56.73	≤74	PASS
			Peak	5432.440	-35.57	≤-21.20	59.63	≤74	PASS
			Peak	5460.000	-37.44	≤-21.20	57.76	≤74	PASS
11AC8 0SISO	Ant0	5210	AV	4500.000	-47.07	≤-41.20	48.13	≤54	PASS
			AV	5148.750	-44.45	≤-41.20	50.75	≤54	PASS
			AV	5150.000	-44.08	≤-41.20	51.12	≤54	PASS
			Peak	4500.000	-38.39	≤-21.20	56.81	≤74	PASS
			Peak	4923.750	-35	≤-21.20	60.20	≤74	PASS
			Peak	5150.000	-37.48	≤-21.20	57.72	≤74	PASS
		5210	AV	5350.000	-45.92	≤-41.20	49.28	≤54	PASS
			AV	5435.640	-45.04	≤-41.20	50.16	≤54	PASS
			AV	5460.000	-45.94	≤-41.20	49.26	≤54	PASS
			Peak	5350.000	-38.81	≤-21.20	56.39	≤74	PASS
			Peak	5396.440	-35.27	≤-21.20	59.93	≤74	PASS
			Peak	5460.000	-38.26	≤-21.20	56.94	≤74	PASS



Ant1

Test Mode	Antenna	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant1	5180	AV	4500.000	-46.52	≤-41.20	48.68	≤54	PASS
			AV	4792.600	-44.09	≤-41.20	51.11	≤54	PASS
			AV	5150.000	-44.88	≤-41.20	50.32	≤54	PASS
			Peak	4500.000	-37.89	≤-21.20	57.31	≤74	PASS
			Peak	4994.200	-34.95	≤-21.20	60.25	≤74	PASS
			Peak	5150.000	-37.95	≤-21.20	57.25	≤74	PASS
		5240	AV	5350.000	-45.47	≤-41.20	49.73	≤54	PASS
			AV	5359.920	-44.58	≤-41.20	50.62	≤54	PASS
			AV	5460.000	-45.4	≤-41.20	49.80	≤54	PASS
			Peak	5350.000	-37.37	≤-21.20	57.83	≤74	PASS
			Peak	5417.760	-36.19	≤-21.20	59.01	≤74	PASS
			Peak	5460.000	-37.53	≤-21.20	57.67	≤74	PASS
11N20 SISO	Ant1	5180	AV	4500.000	-46.33	≤-41.20	48.87	≤54	PASS
			AV	4836.700	-43.75	≤-41.20	51.45	≤54	PASS
			AV	5150.000	-44.98	≤-41.20	50.22	≤54	PASS
			Peak	4500.000	-39.16	≤-21.20	56.04	≤74	PASS
			Peak	4887.100	-35.23	≤-21.20	59.97	≤74	PASS
			Peak	5150.000	-37.43	≤-21.20	57.77	≤74	PASS
		5240	AV	5350.000	-45.5	≤-41.20	49.70	≤54	PASS
			AV	5453.280	-44.66	≤-41.20	50.54	≤54	PASS
			AV	5460.000	-45.71	≤-41.20	49.49	≤54	PASS
			Peak	5350.000	-38.06	≤-21.20	57.14	≤74	PASS
			Peak	5416.560	-36.32	≤-21.20	58.88	≤74	PASS
			Peak	5460.000	-38.03	≤-21.20	57.17	≤74	PASS
11N40 SISO	Ant1	5190	AV	4500.000	-46.31	≤-41.20	48.89	≤54	PASS
			AV	4843.700	-44.76	≤-41.20	50.47	≤54	PASS
			AV	5150.000	-44.37	≤-41.20	50.83	≤54	PASS
			Peak	4500.000	-38.92	≤-21.20	56.28	≤74	PASS
			Peak	4829.700	-34.93	≤-21.20	60.27	≤74	PASS
			Peak	5150.000	-37.11	≤-21.20	58.09	≤74	PASS
		5230	AV	5350.000	-44.88	≤-41.20	50.32	≤54	PASS
			AV	5428.020	-43.92	≤-41.20	51.28	≤54	PASS
			AV	5460.000	-45.11	≤-41.20	50.09	≤54	PASS
			Peak	5350.000	-37.31	≤-21.20	57.89	≤74	PASS
			Peak	5358.860	-35.66	≤-21.20	59.54	≤74	PASS
			Peak	5460.000	-37.88	≤-21.20	57.32	≤74	PASS
11AC2	Ant1	5180	AV	4500.000	-46.54	≤-41.20	48.66	≤54	PASS



0SISO			AV	4808.700	-44.19	≤ -41.20	51.01	≤ 54	PASS
			AV	5150.000	-44.57	≤ -41.20	50.63	≤ 54	PASS
			Peak	4500.000	-38.58	≤ -21.20	56.62	≤ 74	PASS
			Peak	4948.000	-35.02	≤ -21.20	60.18	≤ 74	PASS
			Peak	5150.000	-36.62	≤ -21.20	58.58	≤ 74	PASS
		5240	AV	5350.000	-45.38	≤ -41.20	49.82	≤ 54	PASS
			AV	5411.760	-44.51	≤ -41.20	50.69	≤ 54	PASS
			AV	5460.000	-45.51	≤ -41.20	49.69	≤ 54	PASS
			Peak	5350.000	-37.93	≤ -21.20	57.27	≤ 74	PASS
			Peak	5366.160	-36.6	≤ -21.20	58.60	≤ 74	PASS
			Peak	5460.000	-38.24	≤ -21.20	56.96	≤ 74	PASS
11AC4 0SISO	Ant1	5190	AV	4500.000	-46.32	≤ -41.20	48.88	≤ 54	PASS
			AV	4854.900	-44.64	≤ -41.20	50.56	≤ 54	PASS
			AV	5150.000	-44.51	≤ -41.20	50.69	≤ 54	PASS
			Peak	4500.000	-39.15	≤ -21.20	56.05	≤ 74	PASS
			Peak	4794.700	-35.34	≤ -21.20	59.86	≤ 74	PASS
			Peak	5150.000	-37.42	≤ -21.20	57.78	≤ 74	PASS
		5230	AV	5350.000	-44.9	≤ -41.20	50.30	≤ 54	PASS
			AV	5437.640	-44.07	≤ -41.20	51.13	≤ 54	PASS
			AV	5460.000	-44.79	≤ -41.20	50.41	≤ 54	PASS
			Peak	5350.000	-37.63	≤ -21.20	57.57	≤ 74	PASS
			Peak	5401.760	-35.75	≤ -21.20	59.45	≤ 74	PASS
			Peak	5460.000	-38.83	≤ -21.20	56.37	≤ 74	PASS
11AC8 0SISO	Ant1	5210	AV	4500.000	-45.46	≤ -41.20	49.77	≤ 54	PASS
			AV	5115.750	-45.89	≤ -41.20	49.34	≤ 54	PASS
			AV	5150.000	-45.41	≤ -41.20	49.82	≤ 54	PASS
			Peak	4500.000	-38.38	≤ -21.20	56.82	≤ 74	PASS
			Peak	4867.500	-35.27	≤ -21.20	59.93	≤ 74	PASS
			Peak	5150.000	-36.98	≤ -21.20	58.22	≤ 74	PASS
		5210	AV	5350.000	-44.51	≤ -41.20	50.69	≤ 54	PASS
			AV	5413.800	-44.26	≤ -41.20	50.94	≤ 54	PASS
			AV	5460.000	-44.44	≤ -41.20	50.76	≤ 54	PASS
			Peak	5350.000	-38.35	≤ -21.20	56.85	≤ 74	PASS
			Peak	5399.800	-35.98	≤ -21.20	59.22	≤ 74	PASS
			Peak	5460.000	-38.12	≤ -21.20	57.08	≤ 74	PASS



MIMO

Test Mode	Channel	Detector	Freq. [MHz]	ANT 0 Result [dBm]	ANT 1 Result [dBm]	sum [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11N20	5180	AV	4500.000	-47.59	-46.33	-43.90	51.33	≤54	PASS
		AV	4832.500	-45.45	-43.75	-41.51	53.72	≤54	PASS
		AV	5150.000	-45.95	-44.98	-42.43	52.80	≤54	PASS
		Peak	4500.000	-39.38	-39.16	-36.26	58.97	≤74	PASS
		Peak	4846.500	-33.87	-35.23	-31.49	63.74	≤74	PASS
		Peak	5150.000	-37.11	-37.43	-34.26	60.97	≤74	PASS
	5240	AV	5350.000	-46.49	-45.5	-42.96	52.27	≤54	PASS
		AV	5352.960	-46.15	-44.66	-42.33	52.90	≤54	PASS
		AV	5460.000	-46.56	-45.71	-43.10	52.13	≤54	PASS
		Peak	5350.000	-35.89	-38.06	-33.83	61.40	≤74	PASS
		Peak	5350.080	-35.89	-36.32	-33.09	62.14	≤74	PASS
		Peak	5460.000	-37.77	-38.03	-34.89	60.34	≤74	PASS
11N40	5190	AV	4500.000	-47.18	-46.31	-43.71	51.52	≤54	PASS
		AV	4812.200	-45.11	-44.76	-41.92	53.31	≤54	PASS
		AV	5150.000	-45.16	-44.37	-41.74	53.49	≤54	PASS
		Peak	4500.000	-39.41	-38.92	-36.15	59.08	≤74	PASS
		Peak	4918.600	-34.97	-34.93	-31.94	63.29	≤74	PASS
		Peak	5150.000	-36.57	-37.11	-33.82	61.41	≤74	PASS
	5230	AV	5350.000	-46.1	-44.88	-42.44	52.79	≤54	PASS
		AV	5367.440	-45.69	-43.92	-41.71	53.52	≤54	PASS
		AV	5460.000	-46.05	-45.11	-42.54	52.69	≤54	PASS
		Peak	5350.000	-37.95	-37.31	-34.61	60.62	≤74	PASS
		Peak	5389.020	-35.05	-35.66	-32.33	62.90	≤74	PASS
		Peak	5460.000	-37.03	-37.88	-34.42	60.81	≤74	PASS
11AC20	5180	AV	4500.000	-47.59	-46.54	-44.02	51.21	≤54	PASS
		AV	4806.600	-45.47	-44.19	-41.77	53.46	≤54	PASS
		AV	5150.000	-45.81	-44.57	-42.14	53.09	≤54	PASS
		Peak	4500.000	-39.05	-38.58	-35.80	59.43	≤74	PASS
		Peak	4877.300	-34.44	-35.02	-31.71	63.52	≤74	PASS
		Peak	5150.000	-37.1	-36.62	-33.84	61.39	≤74	PASS
	5240	AV	5350.000	-46.52	-45.38	-42.90	52.33	≤54	PASS
		AV	5412.000	-46.16	-44.51	-42.25	52.98	≤54	PASS
		AV	5460.000	-46.56	-45.51	-42.99	52.24	≤54	PASS
		Peak	5350.000	-38.94	-37.93	-35.40	59.83	≤74	PASS
		Peak	5381.520	-35.66	-36.6	-33.09	62.14	≤74	PASS
		Peak	5460.000	-38.23	-38.24	-35.22	60.01	≤74	PASS
11AC40	5190	AV	4500.000	-47.21	-46.32	-43.73	51.50	≤54	PASS



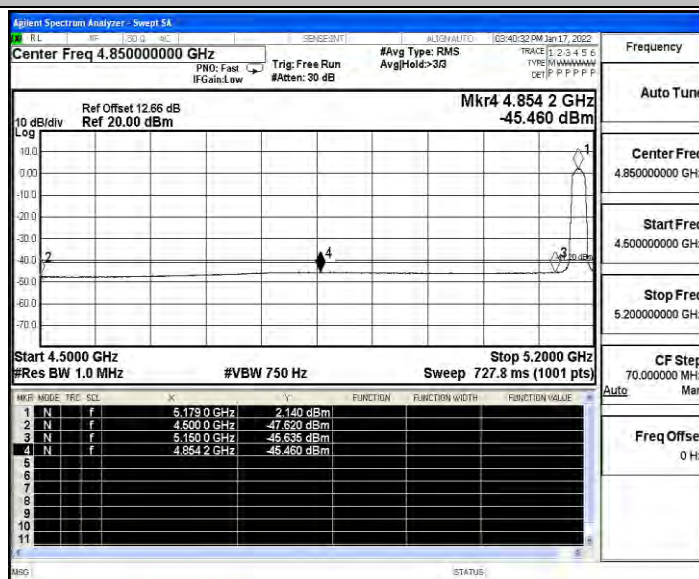
		AV	4847.900	-45.03	-44.64	-41.82	53.41	≤54	PASS
		AV	5150.000	-44.91	-44.51	-41.70	53.53	≤54	PASS
		Peak	4500.000	-39.67	-39.15	-36.39	58.84	≤74	PASS
		Peak	4875.900	-34.58	-35.34	-31.93	63.30	≤74	PASS
		Peak	5150.000	-37.32	-37.42	-34.36	60.87	≤74	PASS
	5230	AV	5350.000	-46.11	-44.9	-42.45	52.78	≤54	PASS
		AV	5382.260	-45.73	-44.07	-41.81	53.42	≤54	PASS
		AV	5460.000	-46.07	-44.79	-42.37	52.86	≤54	PASS
		Peak	5350.000	-38.47	-37.63	-35.02	60.21	≤74	PASS
		Peak	5432.440	-35.57	-35.75	-32.65	62.58	≤74	PASS
		Peak	5460.000	-37.44	-38.83	-35.07	60.16	≤74	PASS
11AC80	5210	AV	4500.000	-47.07	-45.46	-43.18	52.05	≤54	PASS
		AV	5148.750	-44.45	-45.89	-42.10	53.13	≤54	PASS
		AV	5150.000	-44.08	-45.41	-41.68	53.55	≤54	PASS
		Peak	4500.000	-38.39	-38.38	-35.37	59.86	≤74	PASS
		Peak	4923.750	-35	-35.27	-32.12	63.11	≤74	PASS
		Peak	5150.000	-37.48	-36.98	-34.21	61.02	≤74	PASS
	5210	AV	5350.000	-45.92	-44.51	-42.15	53.08	≤54	PASS
		AV	5435.640	-45.04	-44.26	-41.62	53.61	≤54	PASS
		AV	5460.000	-45.94	-44.44	-42.12	53.11	≤54	PASS
		Peak	5350.000	-38.81	-38.35	-35.56	59.67	≤74	PASS
		Peak	5396.440	-35.27	-35.98	-32.60	62.63	≤74	PASS
		Peak	5460.000	-38.26	-38.12	-35.18	60.05	≤74	PASS

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.

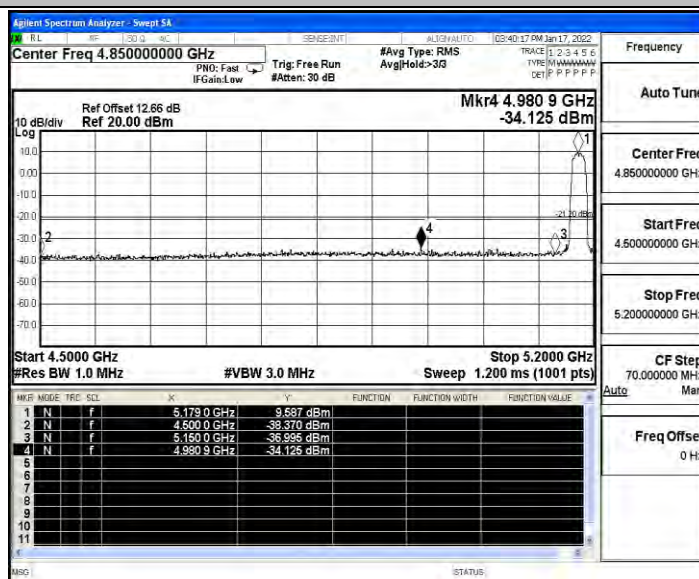


Test Graphs

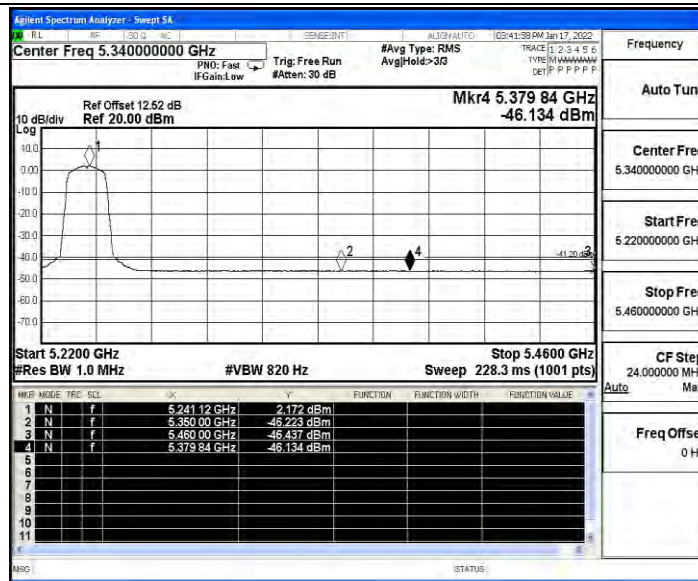
11A_Ant0_Low_5180_AV



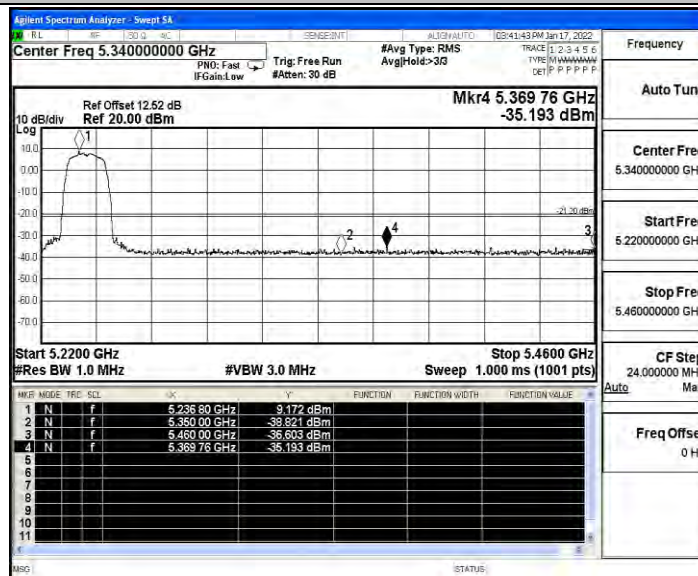
11A_Ant0_Low_5180_Peak



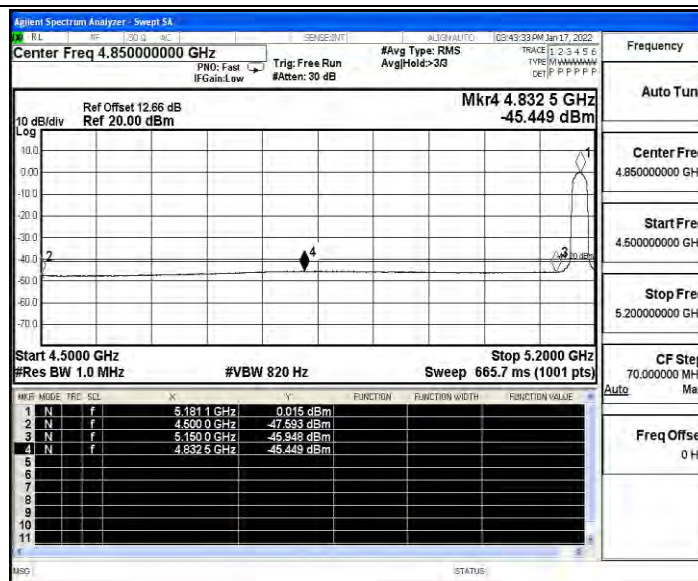
11A_Ant0_High_5240_AV



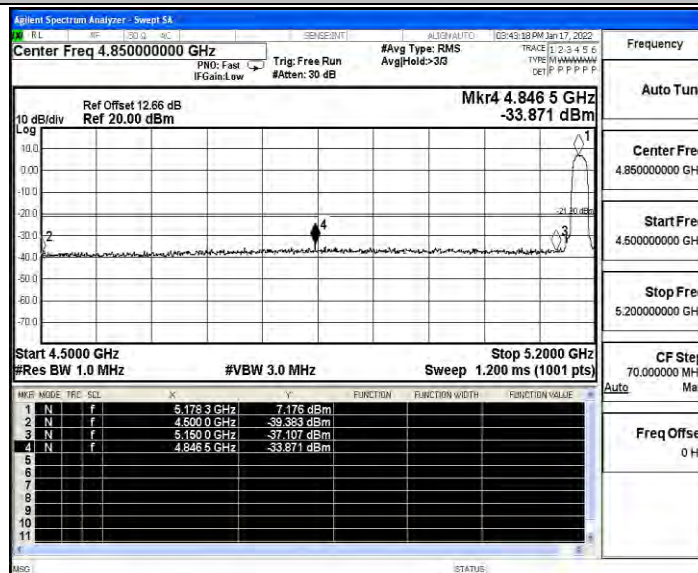
11A_Ant0_High_5240_Peak



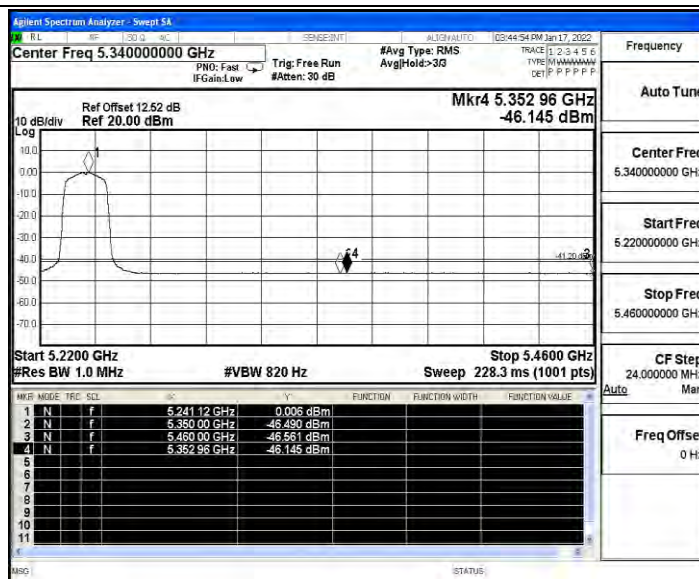
11N20SISO_Ant0_Low_5180_AV



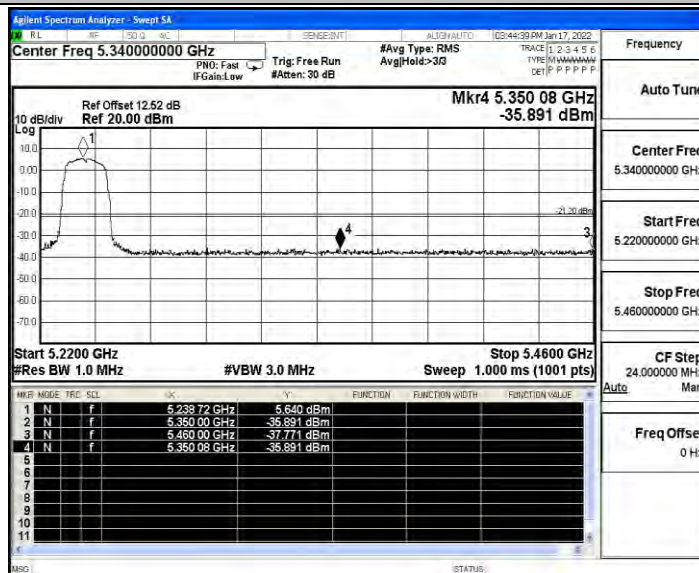
11N20SISO_Ant0_Low_5180_Peak



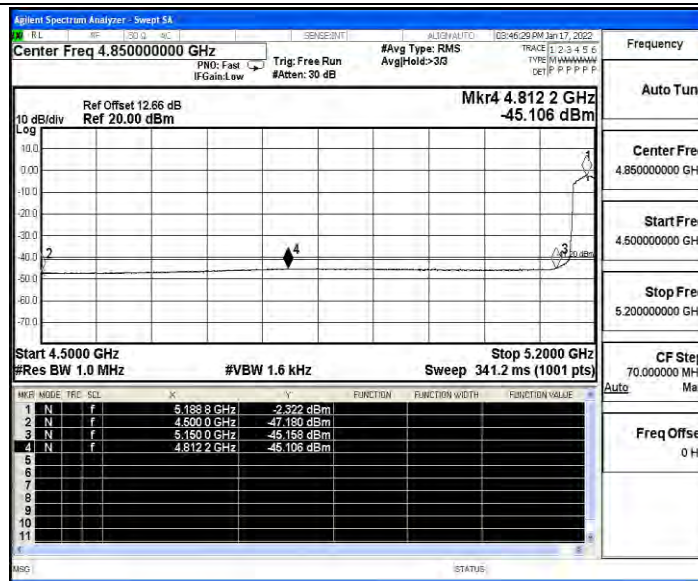
11N20SISO_Ant0_High_5240_AV



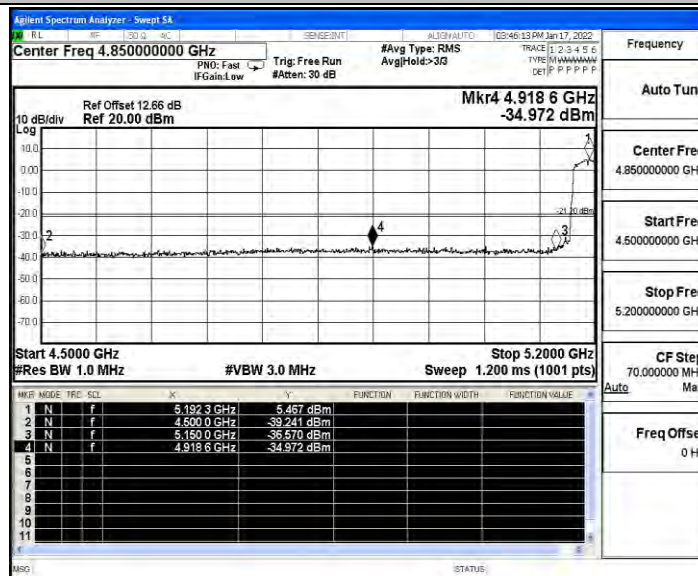
11N20SISO_Ant0_High_5240_Peak



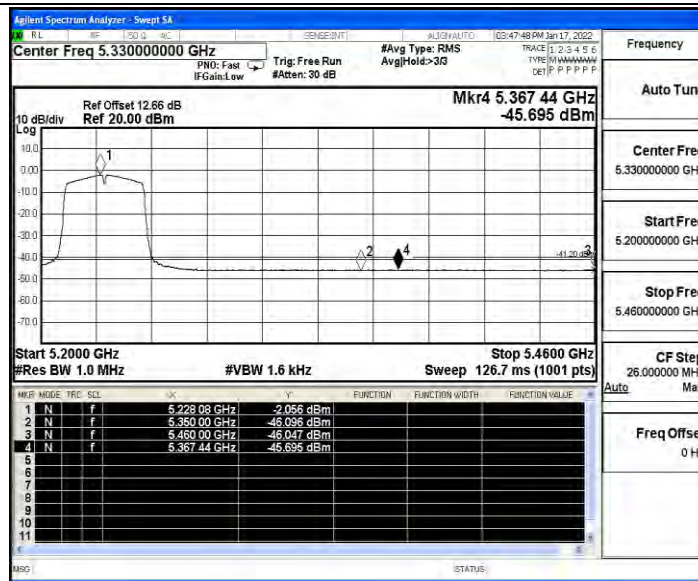
11N40SISO_Ant0_Low_5190_AV



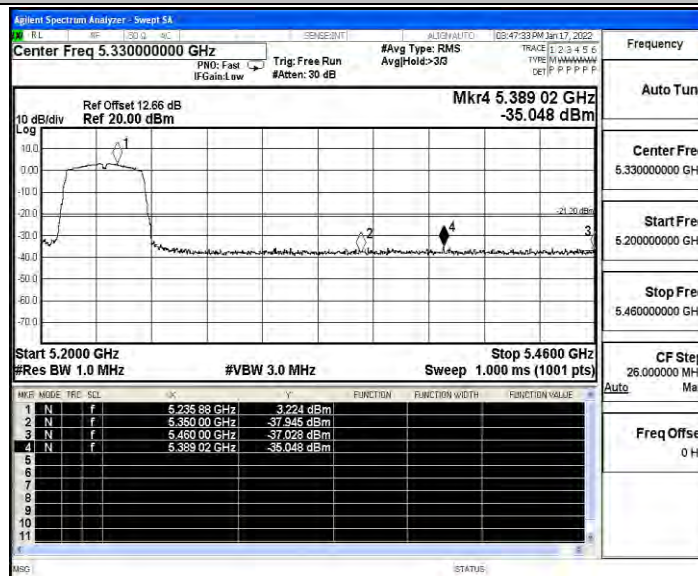
11N40SISO_Ant0_Low_5190_Peak



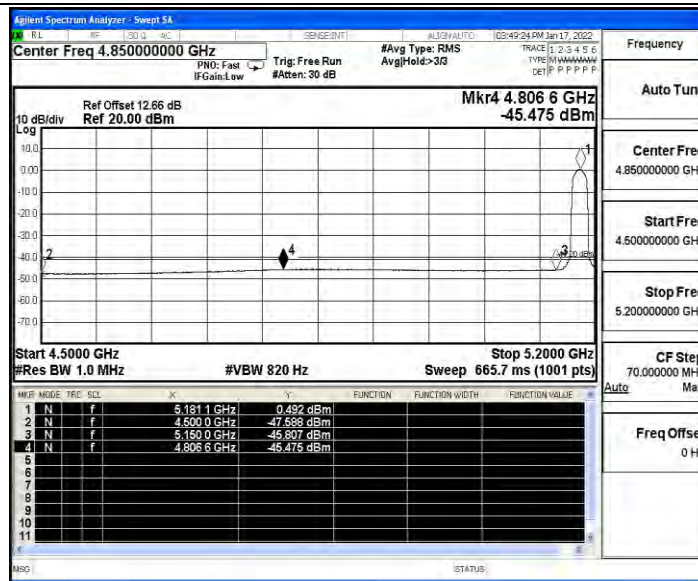
11N40SISO_Ant0_High_5230_AV



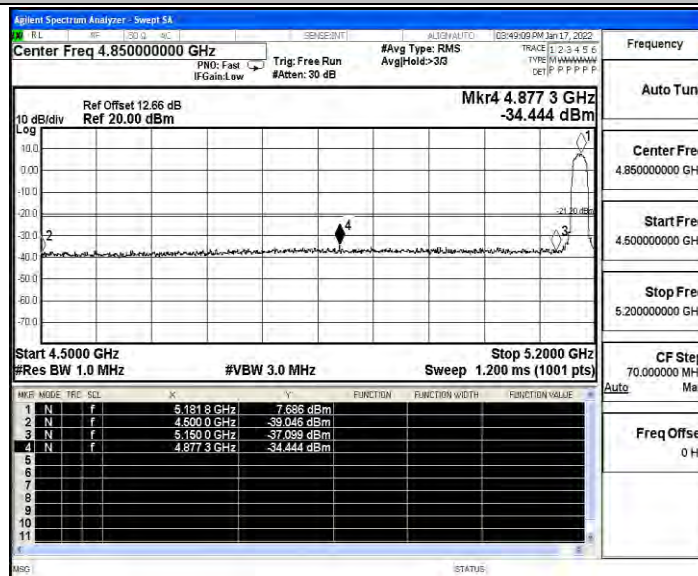
11N40SISO_Ant0_High_5230_Peak



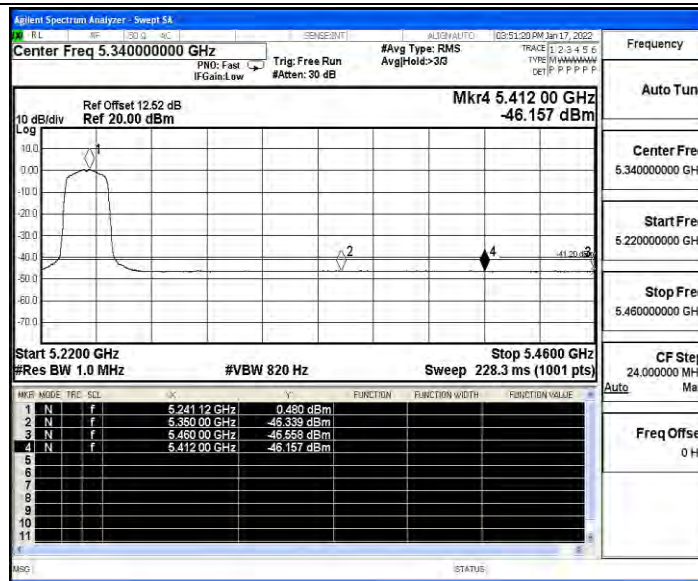
11AC20SISO_Ant0_Low_5180_AV



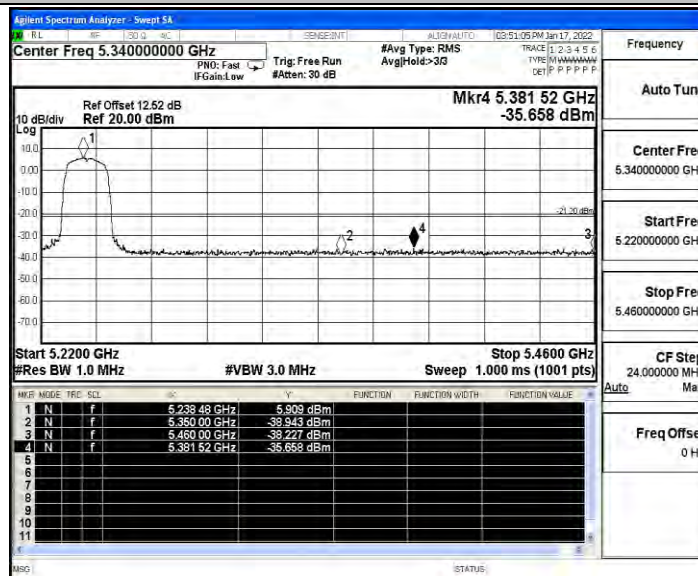
11AC20SISO_Ant0_Low_5180_Peak



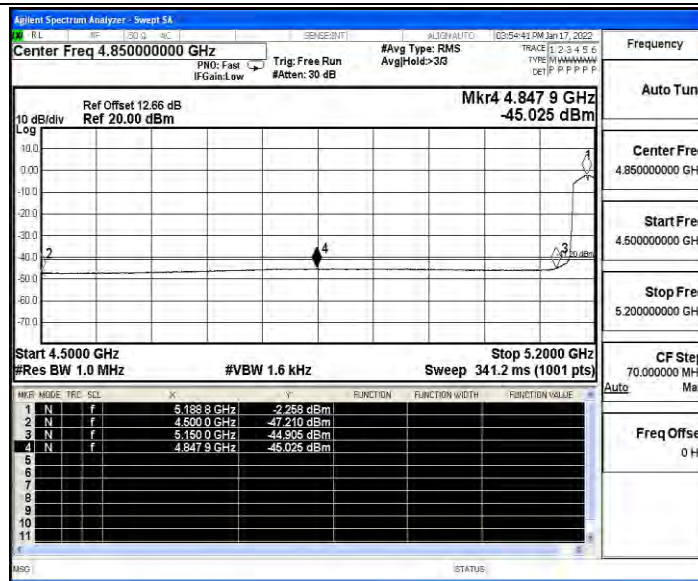
11AC20SISO_Ant0_High_5240_AV



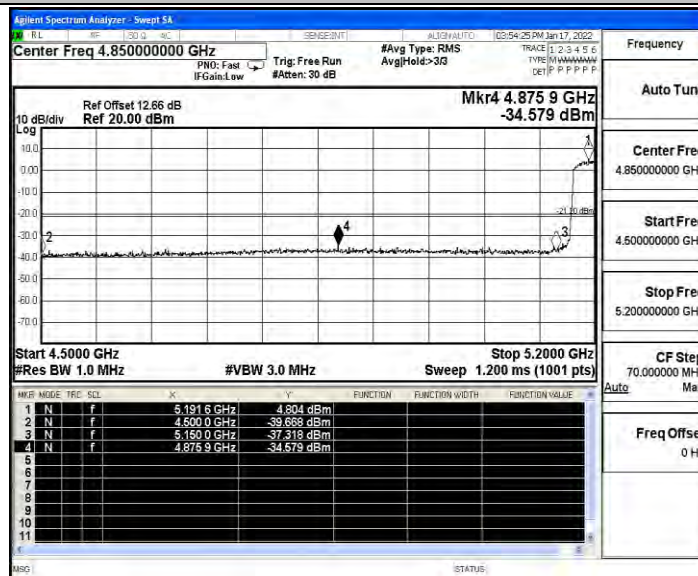
11AC20SISO_Ant0_High_5240_Peak



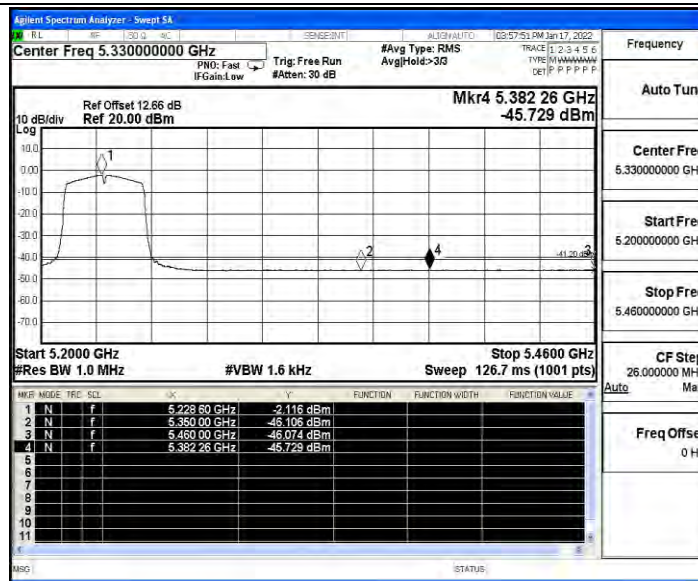
11AC40SISO_Ant0_Low_5190_AV



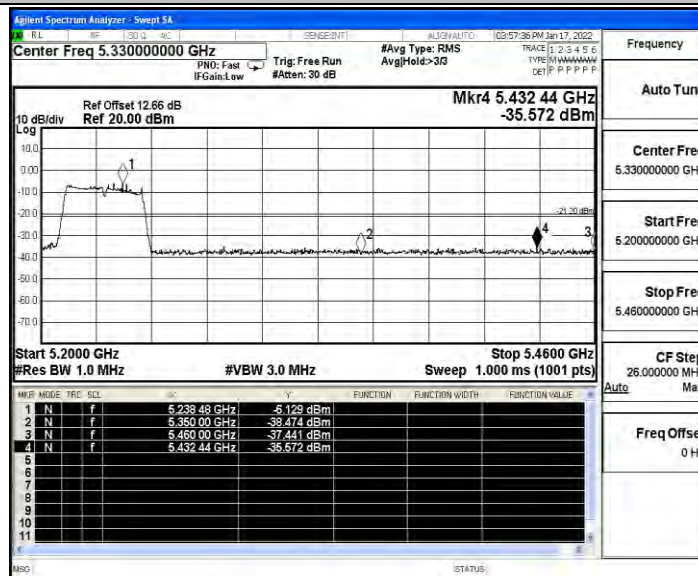
11AC40SISO_Ant0_Low_5190_Peak



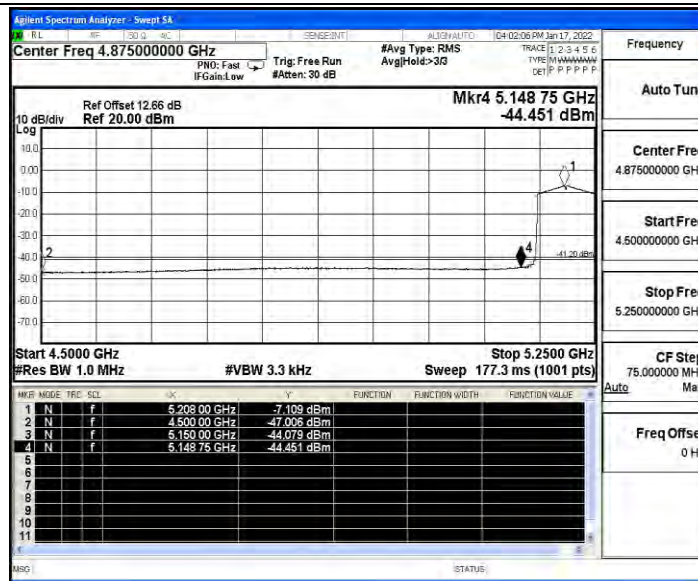
11AC40SISO_Ant0_High_5230_AV



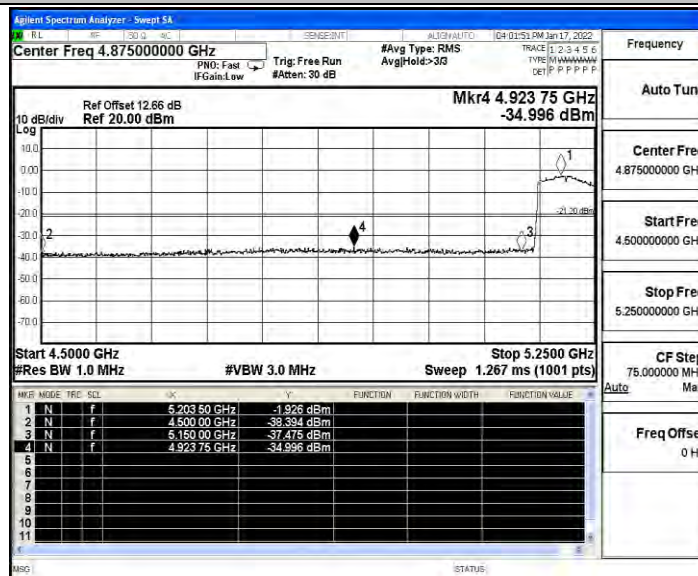
11AC40SISO_Ant0_High_5230_Peak



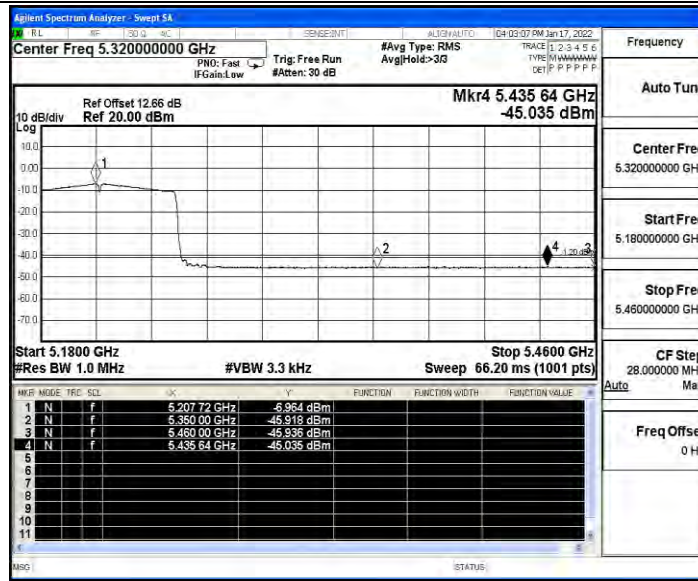
11AC80SISO_Ant0_Low_5210_AV



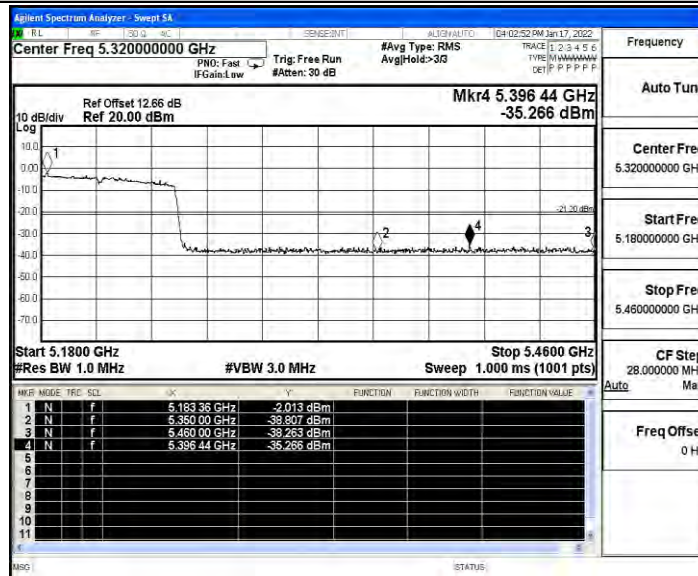
11AC80SISO_Ant0_Low_5210_Peak



11AC80SISO_Ant0_High_5210_AV



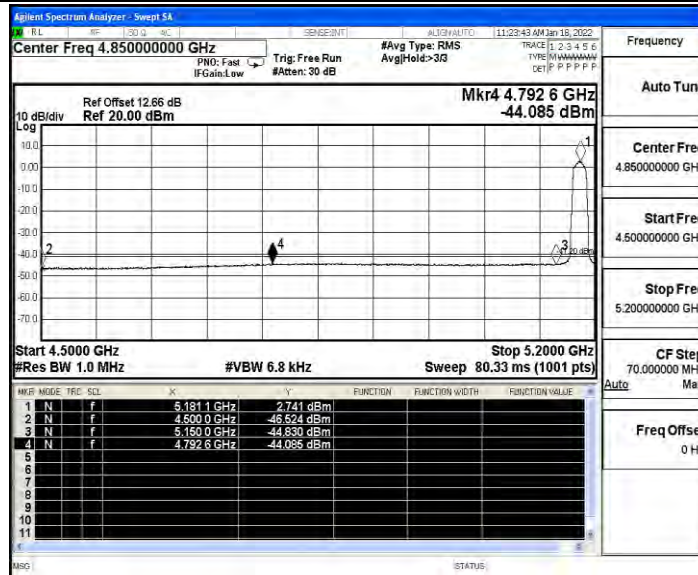
11AC80SISO_Ant0_High_5210_Peak



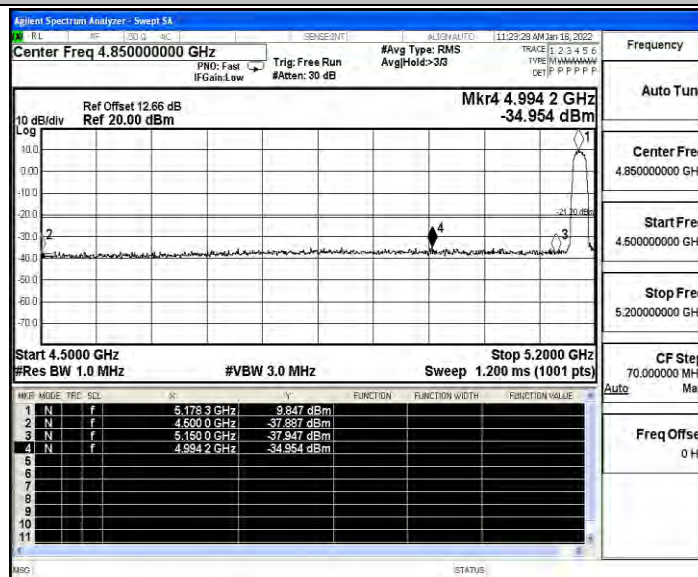


Test Graphs

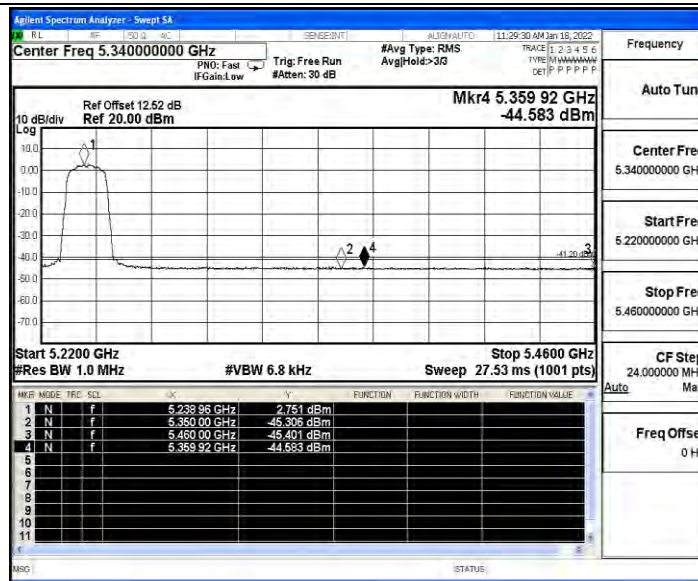
11A_Ant1_Low_5180_AV



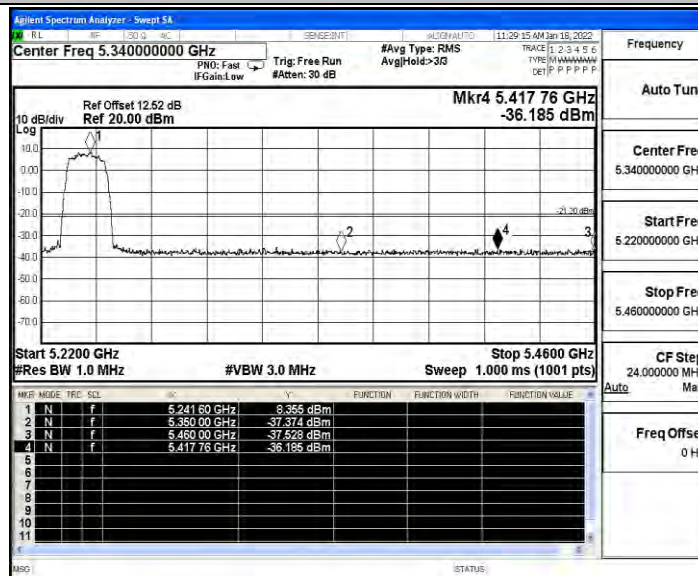
11A_Ant1_Low_5180_Peak



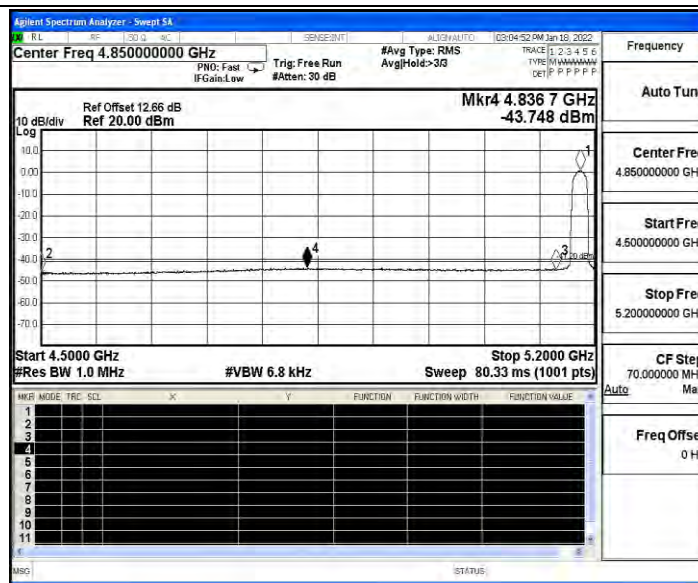
11A_Ant1_High_5240_AV



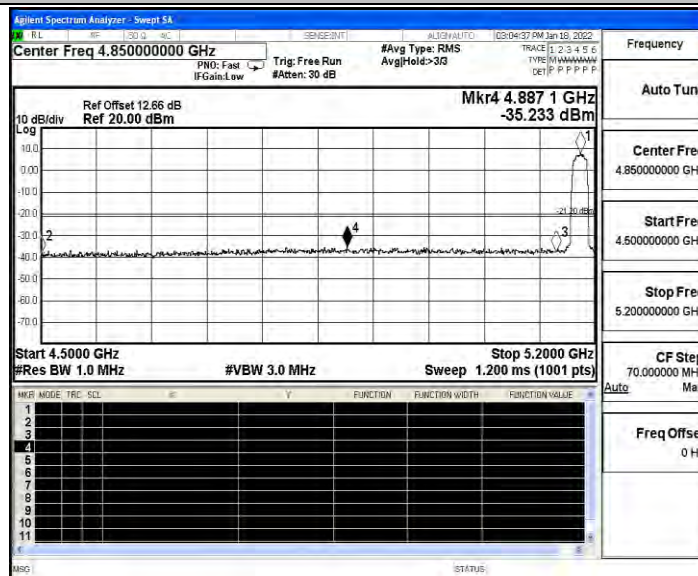
11A_Ant1_High_5240_Peak



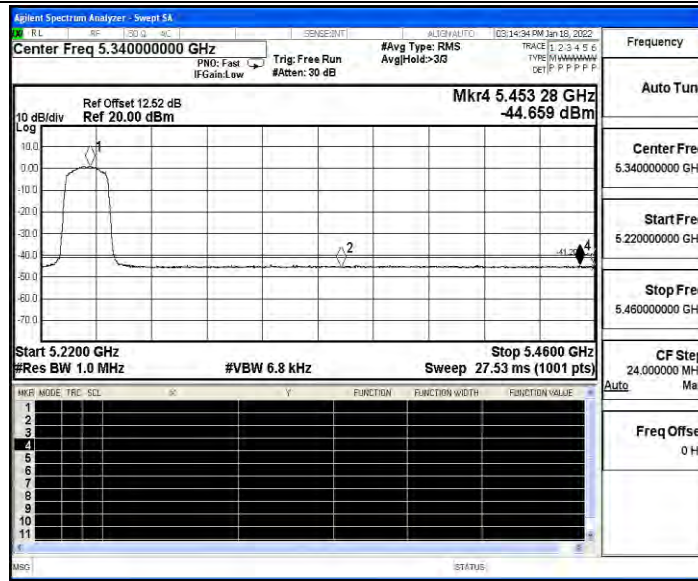
11N20SISO_Ant1_Low_5180_AV



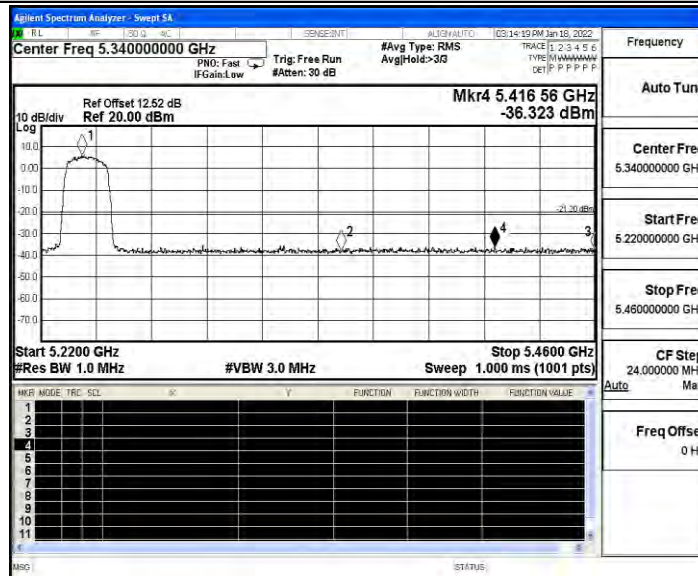
11N20SISO_Ant1_Low_5180_Peak



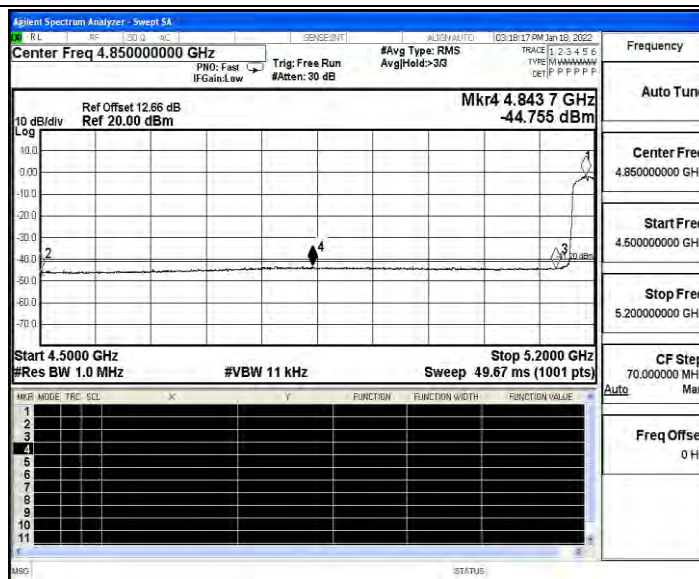
11N20SISO_Ant1_High_5240_AV



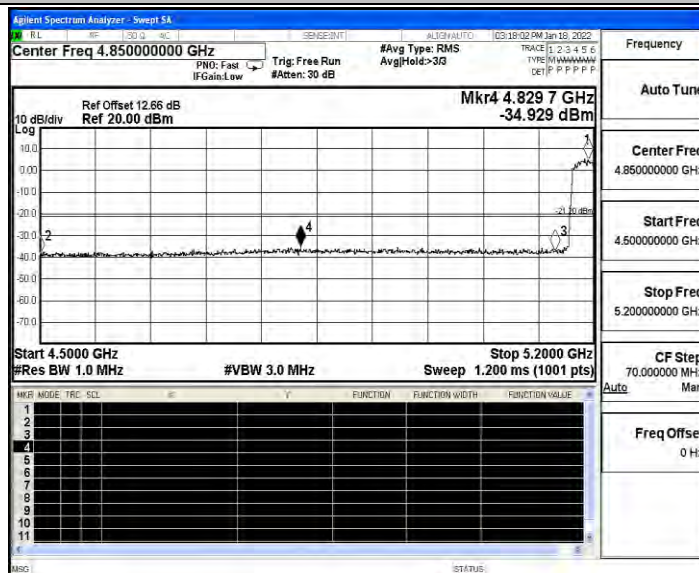
11N20SISO_Ant1_High_5240_Peak



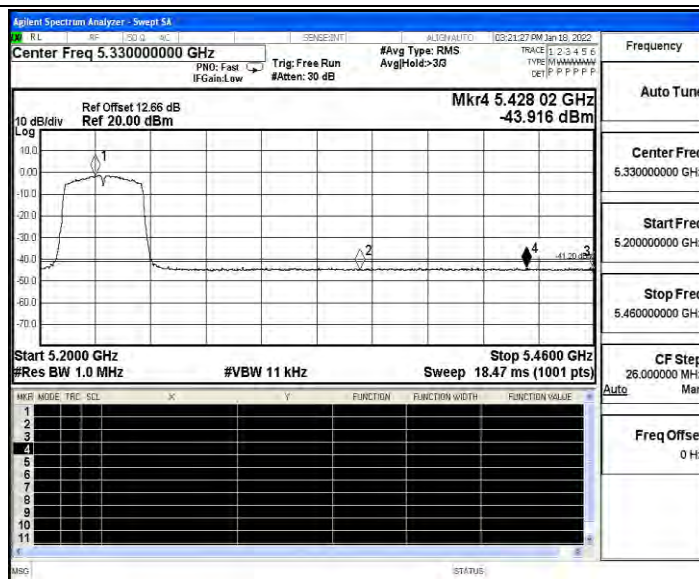
11N40SISO_Ant1_Low_5190_AV



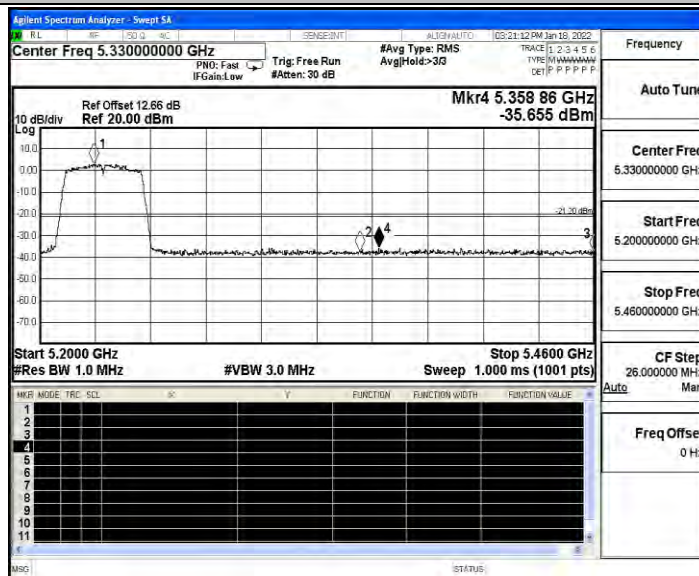
11N40SISO_Ant1_Low_5190_Peak



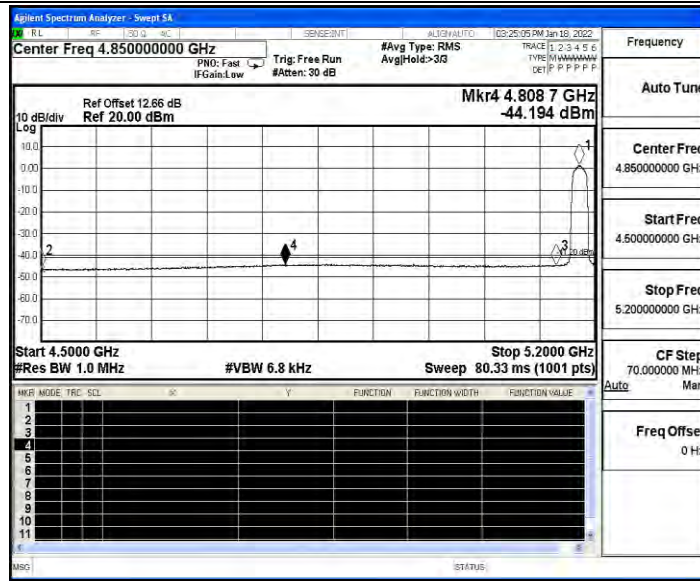
11N40SISO_Ant1_High_5230_AV



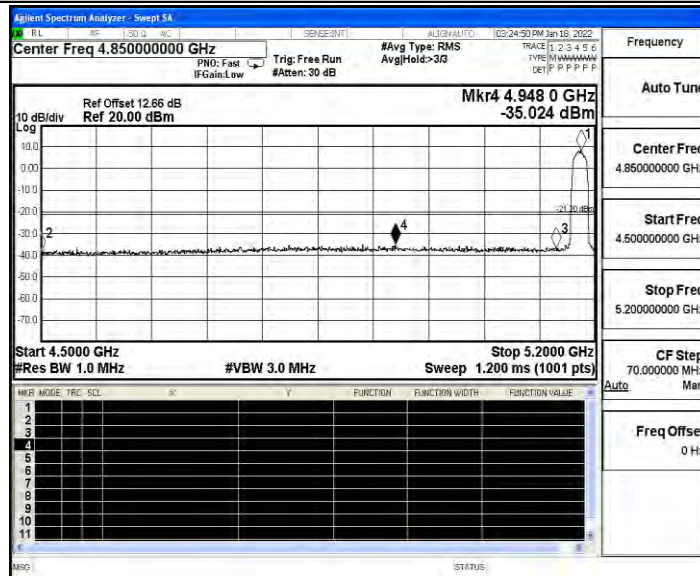
11N40SISO_Ant1_High_5230_Peak



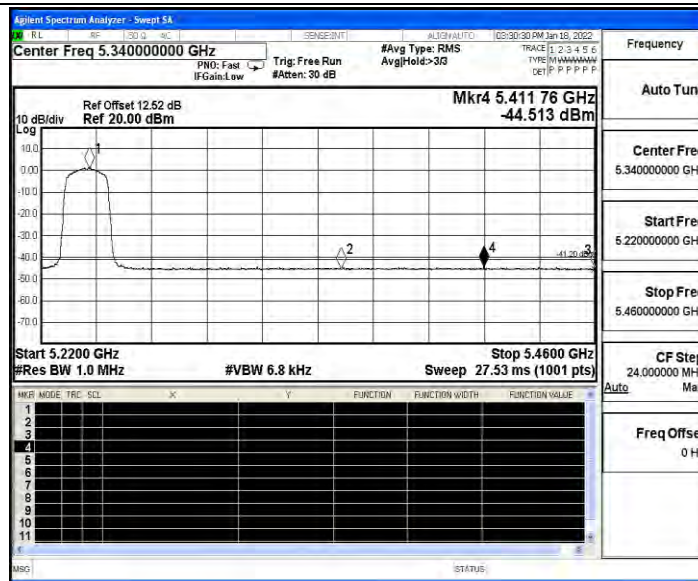
11AC20SISO_Ant1_Low_5180_AV



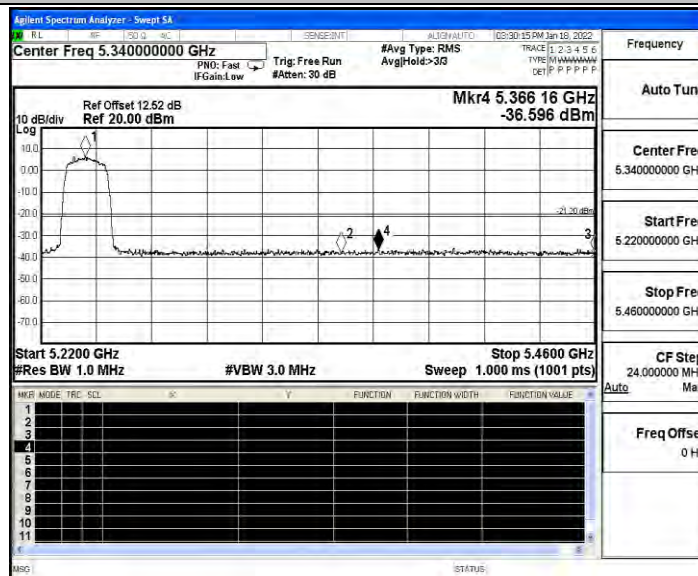
11AC20SISO_Ant1_Low_5180_Peak



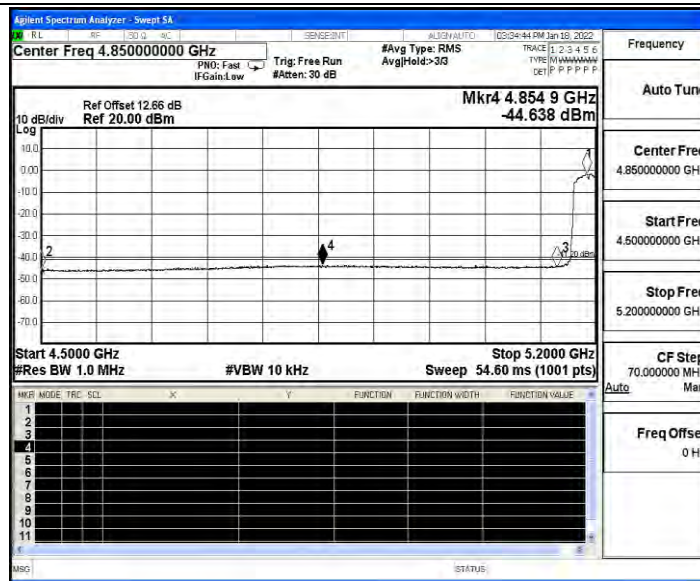
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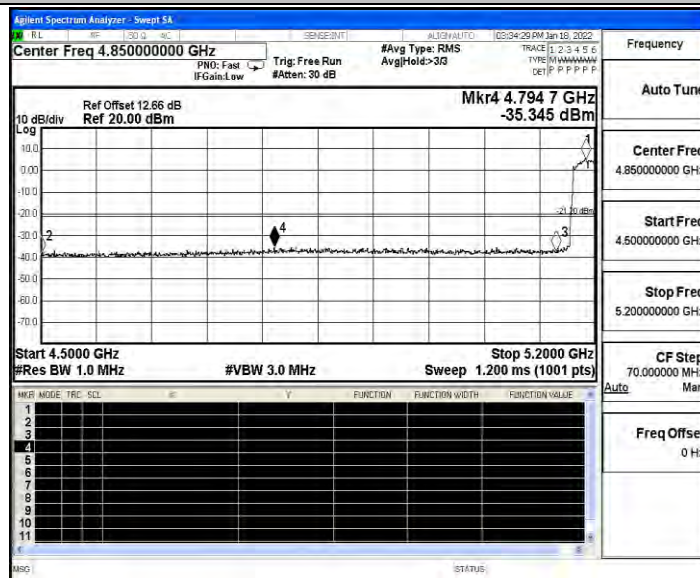
11AC20SISO_Ant1_High_5240_Peak



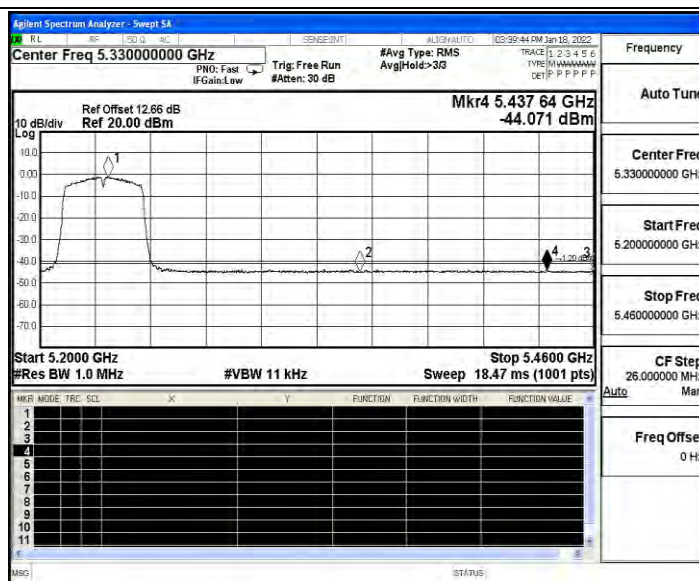
11AC40SISO_Ant1_Low_5190_AV



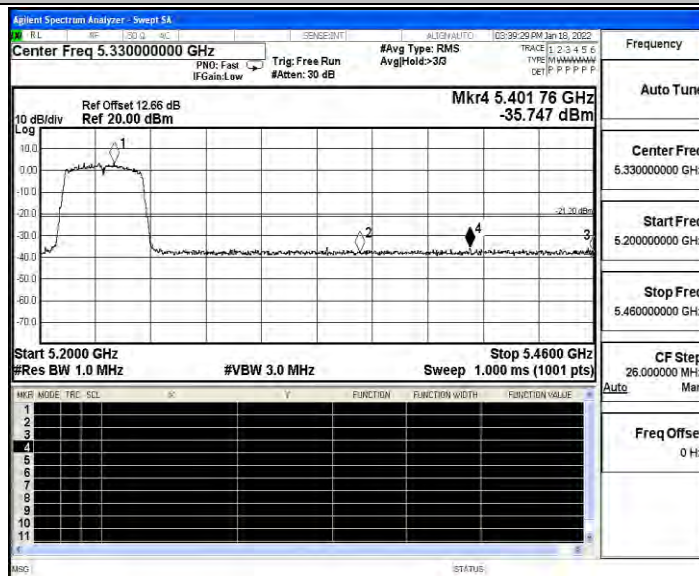
11AC40SISO_Ant1_Low_5190_Peak



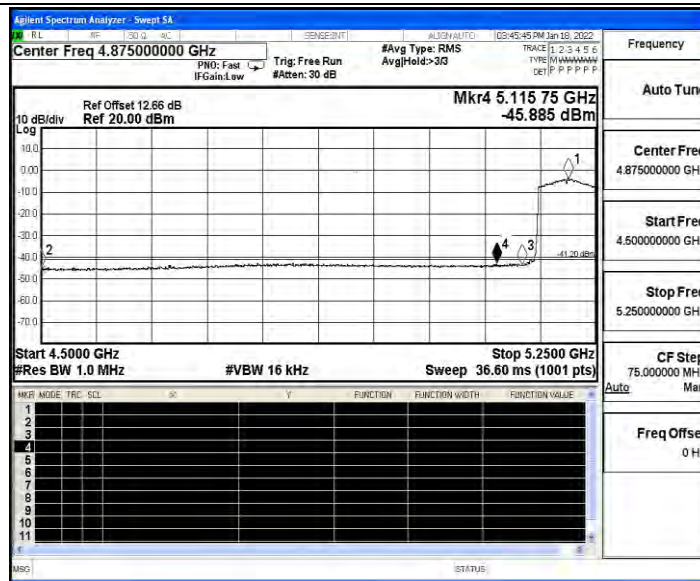
11AC40SISO_Ant1_High_5230_AV



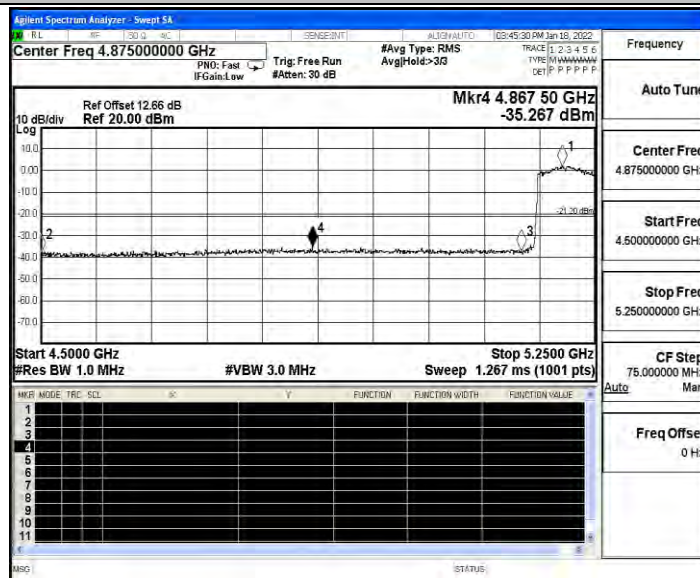
11AC40SISO_Ant1_High_5230_Peak



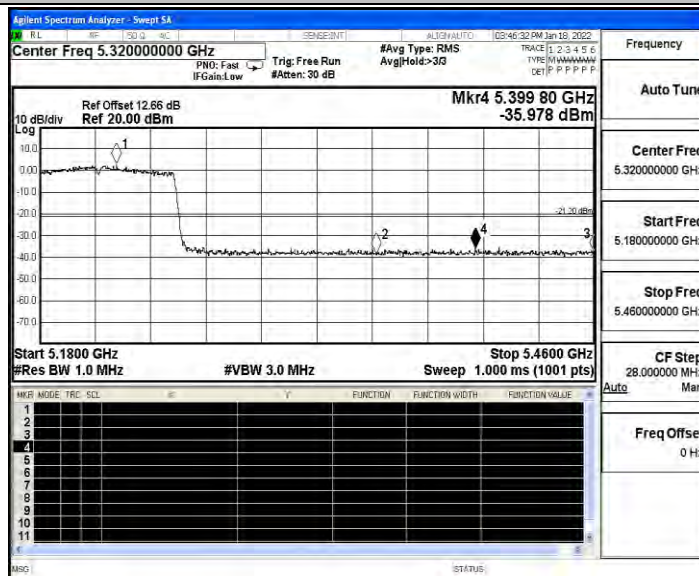
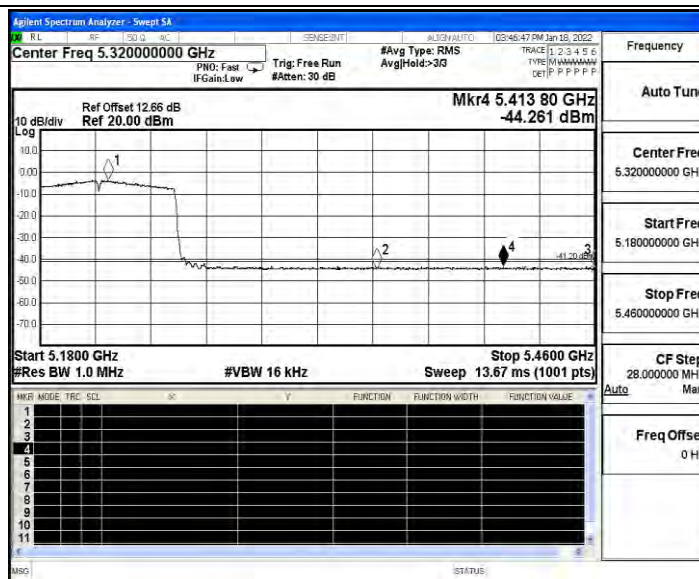
11AC80SISO_Ant1_Low_5210_AV



11AC80SISO_Ant1_Low_5210_Peak



11AC80SISO_Ant1_High_5210_AV





D.5 Frequency Stability

Test Result

Ant0

Voltage								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20SI SO	Ant0	5180	NV	NT	0	0	20	PASS
			LV	NT	0	0	20	PASS
			HV	NT	-1000	-0.19305	20	PASS
		5220	NV	NT	-4000	-0.766284	20	PASS
			LV	NT	-4000	-0.766284	20	PASS
			HV	NT	-4000	-0.766284	20	PASS
		5240	NV	NT	-6000	-1.145038	20	PASS
			LV	NT	-6000	-1.145038	20	PASS
			HV	NT	-6000	-1.145038	20	PASS
11AC40SI SO	Ant0	5190	NV	NT	-6000	-1.156069	20	PASS
			LV	NT	-7000	-1.348748	20	PASS
			HV	NT	-7000	-1.348748	20	PASS
		5230	NV	NT	-7000	-1.338432	20	PASS
			LV	NT	-7000	-1.338432	20	PASS
			HV	NT	-7000	-1.338432	20	PASS

Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20SI SO	Ant0	5180	NV	-30	-1000	-0.19305	20	PASS
			NV	-20	-2000	-0.3861	20	PASS
			NV	-10	-2000	-0.3861	20	PASS
			NV	0	-2000	-0.3861	20	PASS
			NV	10	-3000	-0.579151	20	PASS
			NV	20	-3000	-0.579151	20	PASS
			NV	30	-3000	-0.579151	20	PASS
			NV	40	-3000	-0.579151	20	PASS
			NV	50	-4000	-0.772201	20	PASS
		5220	NV	-30	-5000	-0.957854	20	PASS
			NV	-20	-5000	-0.957854	20	PASS
			NV	-10	-5000	-0.957854	20	PASS
			NV	0	-5000	-0.957854	20	PASS
			NV	10	-5000	-0.957854	20	PASS
			NV	20	-5000	-0.957854	20	PASS



			NV	30	-5000	-0.957854	20	PASS
			NV	40	-6000	-1.149425	20	PASS
			NV	50	-6000	-1.149425	20	PASS
		5240	NV	-30	-6000	-1.145038	20	PASS
			NV	-20	-6000	-1.145038	20	PASS
			NV	-10	-6000	-1.145038	20	PASS
			NV	0	-6000	-1.145038	20	PASS
			NV	10	-6000	-1.145038	20	PASS
			NV	20	-6000	-1.145038	20	PASS
			NV	30	-7000	-1.335878	20	PASS
			NV	40	-7000	-1.335878	20	PASS
			NV	50	-7000	-1.335878	20	PASS
11AC40SI SO	Ant0	5190	NV	-30	-7000	-1.348748	20	PASS
			NV	-20	-7000	-1.348748	20	PASS
			NV	-10	-7000	-1.348748	20	PASS
			NV	0	-7000	-1.348748	20	PASS
			NV	10	-7000	-1.348748	20	PASS
			NV	20	-7000	-1.348748	20	PASS
			NV	30	-7000	-1.348748	20	PASS
			NV	40	-7000	-1.348748	20	PASS
			NV	50	-7000	-1.348748	20	PASS
		5230	NV	-30	-7000	-1.338432	20	PASS
			NV	-20	-7000	-1.338432	20	PASS
			NV	-10	-8000	-1.529637	20	PASS
			NV	0	-7000	-1.338432	20	PASS
			NV	10	-8000	-1.529637	20	PASS
			NV	20	-8000	-1.529637	20	PASS
			NV	30	-8000	-1.529637	20	PASS
			NV	40	-8000	-1.529637	20	PASS
			NV	50	-8000	-1.529637	20	PASS



Ant1

Voltage								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20SI SO	Ant1	5180	NV	NT	1000	0.19305	20	PASS
			LV	NT	0	0	20	PASS
			HV	NT	0	0	20	PASS
		5220	NV	NT	-2000	-0.383142	20	PASS
			LV	NT	-3000	-0.574713	20	PASS
			HV	NT	-3000	-0.574713	20	PASS
		5240	NV	NT	-4000	-0.763359	20	PASS
			LV	NT	-4000	-0.763359	20	PASS
			HV	NT	-4000	-0.763359	20	PASS
11AC40SI SO	Ant1	5190	NV	NT	-5000	-0.963391	20	PASS
			LV	NT	-5000	-0.963391	20	PASS
			HV	NT	-5000	-0.963391	20	PASS
		5230	NV	NT	-6000	-1.147228	20	PASS
			LV	NT	-7000	-1.338432	20	PASS
			HV	NT	-6000	-1.147228	20	PASS

Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20SI SO	Ant1	5180	NV	-30	-1000	-0.19305	20	PASS
			NV	-20	-1000	-0.19305	20	PASS
			NV	-10	-1000	-0.19305	20	PASS
			NV	0	-1000	-0.19305	20	PASS
			NV	10	-2000	-0.3861	20	PASS
			NV	20	-2000	-0.3861	20	PASS
			NV	30	-2000	-0.3861	20	PASS
			NV	40	-2000	-0.3861	20	PASS
			NV	50	-3000	-0.579151	20	PASS
		5220	NV	-30	-3000	-0.574713	20	PASS
			NV	-20	-3000	-0.574713	20	PASS
			NV	-10	-3000	-0.574713	20	PASS
			NV	0	-3000	-0.574713	20	PASS
			NV	10	-4000	-0.766284	20	PASS
			NV	20	-4000	-0.766284	20	PASS
			NV	30	-4000	-0.766284	20	PASS
			NV	40	-4000	-0.766284	20	PASS
			NV	50	-4000	-0.766284	20	PASS



		5240	NV	-30	-4000	-0.763359	20	PASS
			NV	-20	-5000	-0.954198	20	PASS
			NV	-10	-5000	-0.954198	20	PASS
			NV	0	-5000	-0.954198	20	PASS
			NV	10	-5000	-0.954198	20	PASS
			NV	20	-5000	-0.954198	20	PASS
			NV	30	-5000	-0.954198	20	PASS
			NV	40	-5000	-0.954198	20	PASS
			NV	50	-5000	-0.954198	20	PASS
11AC40SI SO	Ant1	5190	NV	-30	-5000	-0.963391	20	PASS
			NV	-20	-5000	-0.963391	20	PASS
			NV	-10	-6000	-1.156069	20	PASS
			NV	0	-6000	-1.156069	20	PASS
			NV	10	-6000	-1.156069	20	PASS
			NV	20	-6000	-1.156069	20	PASS
			NV	30	-6000	-1.156069	20	PASS
			NV	40	-6000	-1.156069	20	PASS
			NV	50	-6000	-1.156069	20	PASS
		5230	NV	-30	-7000	-1.338432	20	PASS
			NV	-20	-7000	-1.338432	20	PASS
			NV	-10	-7000	-1.338432	20	PASS
			NV	0	-7000	-1.338432	20	PASS
			NV	10	-7000	-1.338432	20	PASS
			NV	20	-7000	-1.338432	20	PASS
			NV	30	-7000	-1.338432	20	PASS
			NV	40	-7000	-1.338432	20	PASS
			NV	50	-7000	-1.338432	20	PASS



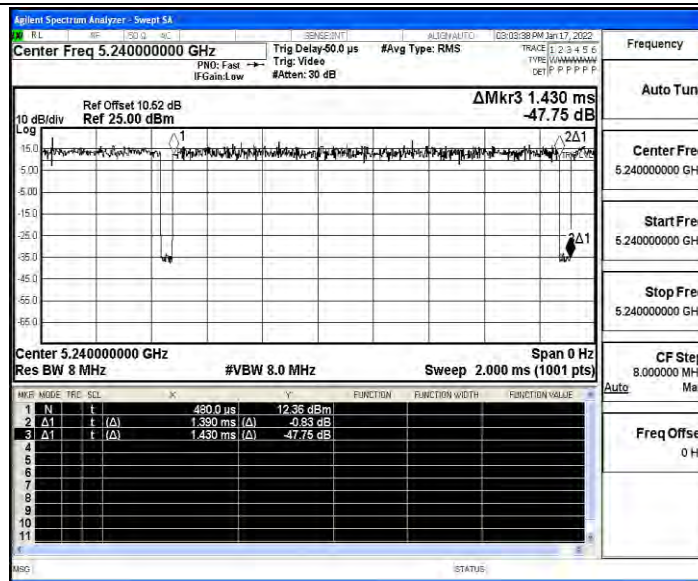
D.6 Duty Cycle

Test Result

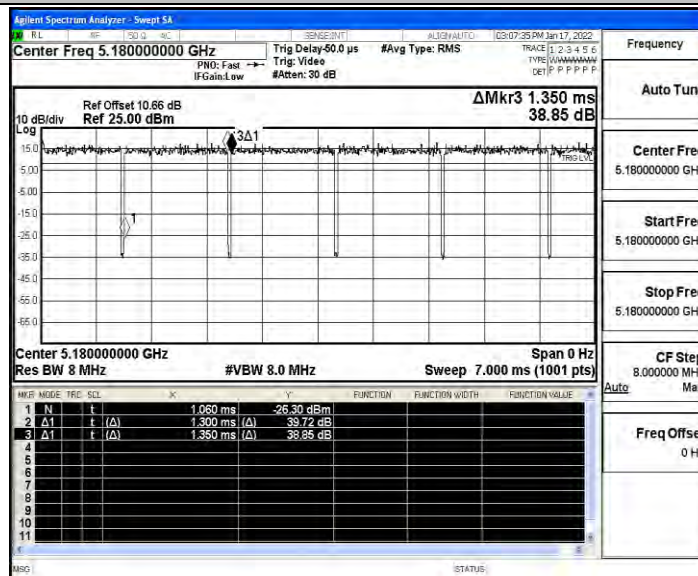
Ant0

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11A	Ant0	5180	1.40	1.44	97.22	---	---
		5220	1.40	1.45	96.55	---	---
		5240	1.39	1.43	97.20	---	---
11N20SISO	Ant0	5180	1.30	1.35	96.30	---	---
		5220	1.30	1.34	97.01	---	---
		5240	1.30	1.35	96.30	---	---
11N40SISO	Ant0	5190	0.65	0.69	94.20	---	---
		5230	0.65	0.69	94.20	---	---
11AC20SISO	Ant0	5180	1.31	1.36	96.32	---	---
		5220	1.32	1.36	97.06	---	---
		5240	1.30	1.35	96.30	---	---
11AC40SISO	Ant0	5190	0.65	0.69	94.20	---	---
		5230	0.65	0.70	92.86	---	---
11AC80SISO	Ant0	5210	0.33	0.37	89.19	---	---

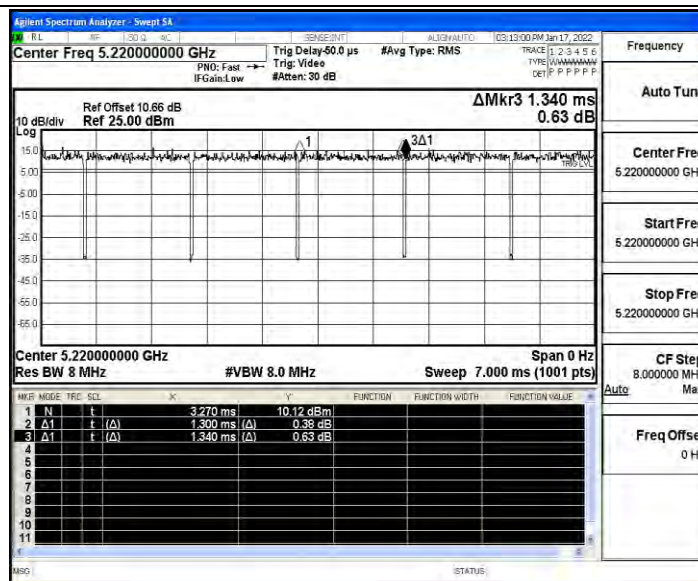




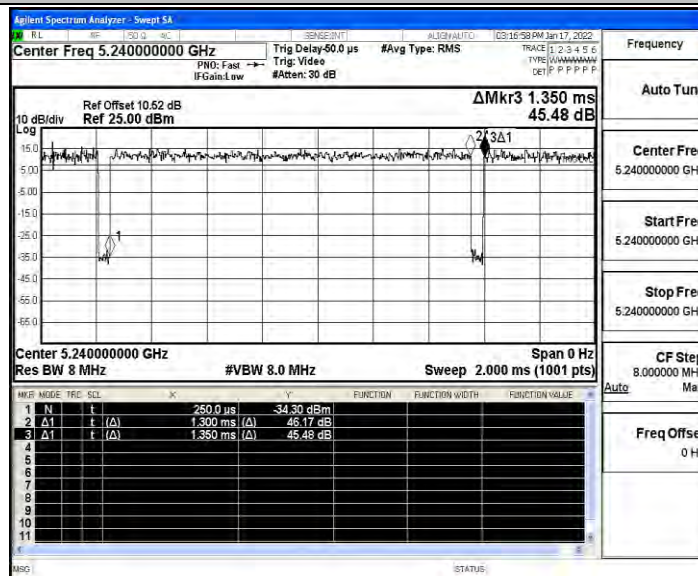
11N20SISO_Ant0_5180



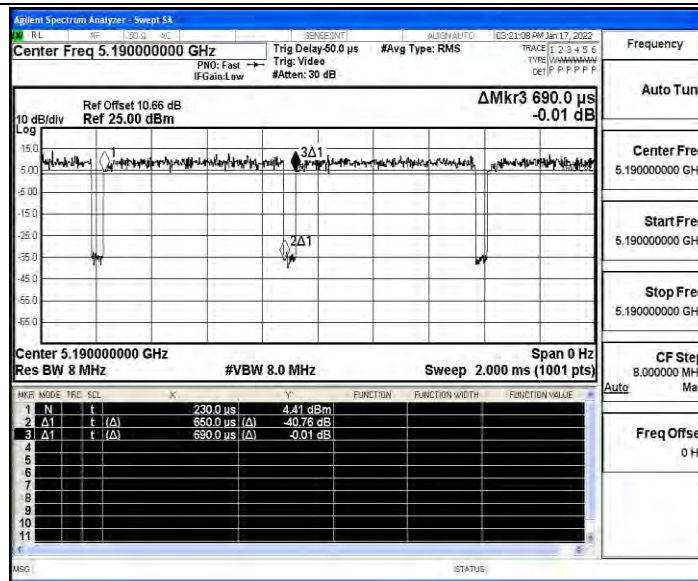
11N20SISO_Ant0_5220



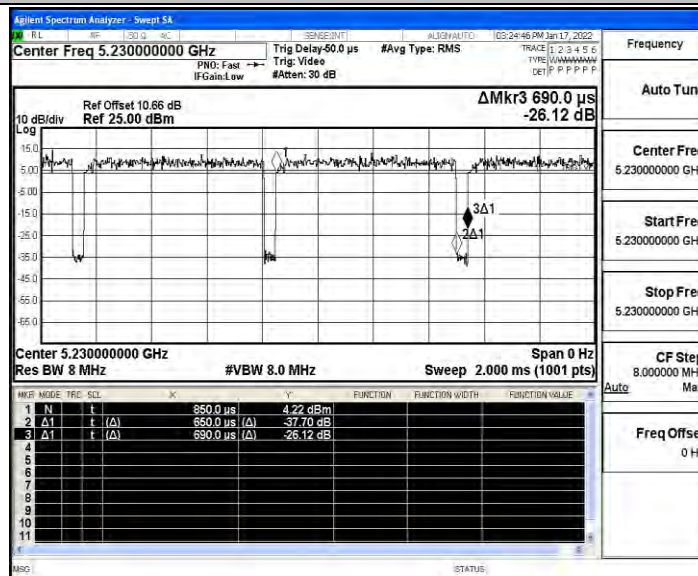
11N20SISO_Ant0_5240



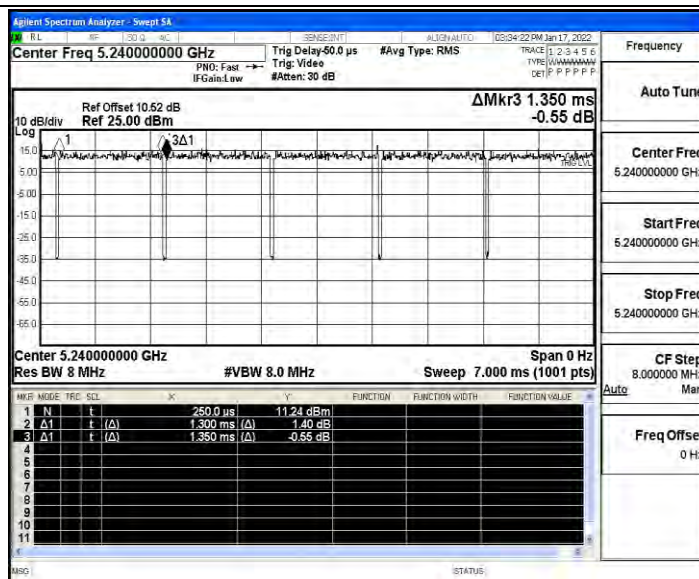
11N40SISO_Ant0_5190



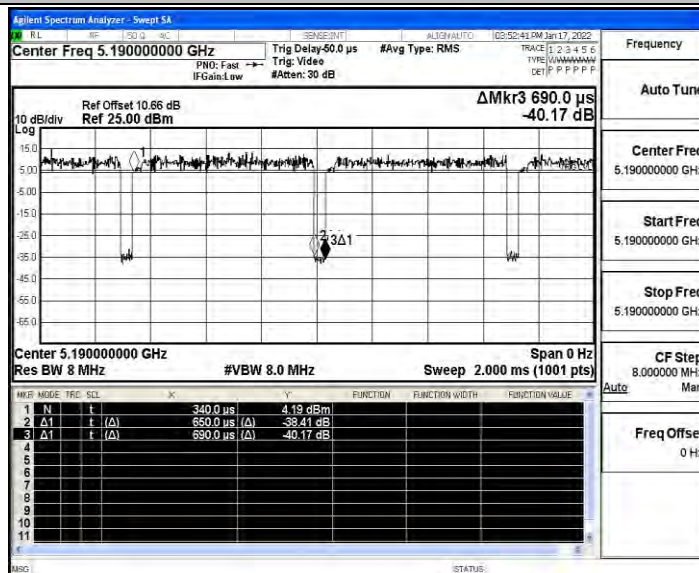
11N40SISO_Ant0_5230



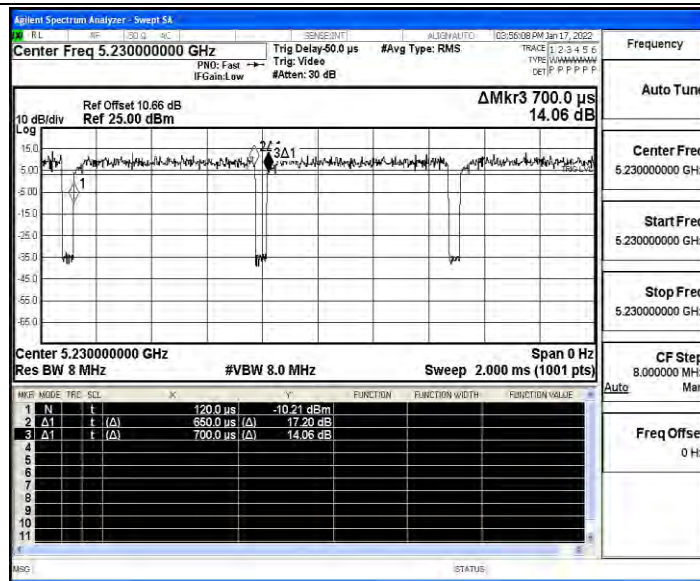
11AC20SISO_Ant0_5180



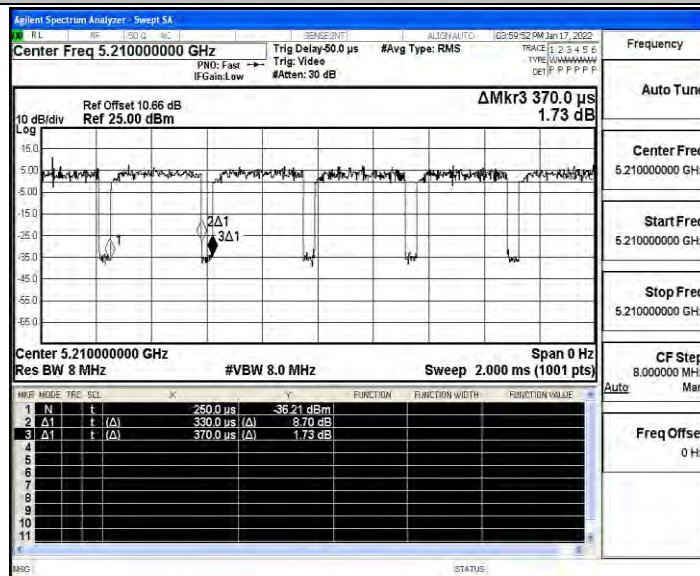
11AC40SISO_Ant0_5190



11AC40SISO_Ant0_5230



11AC80SISO_Ant0_5210





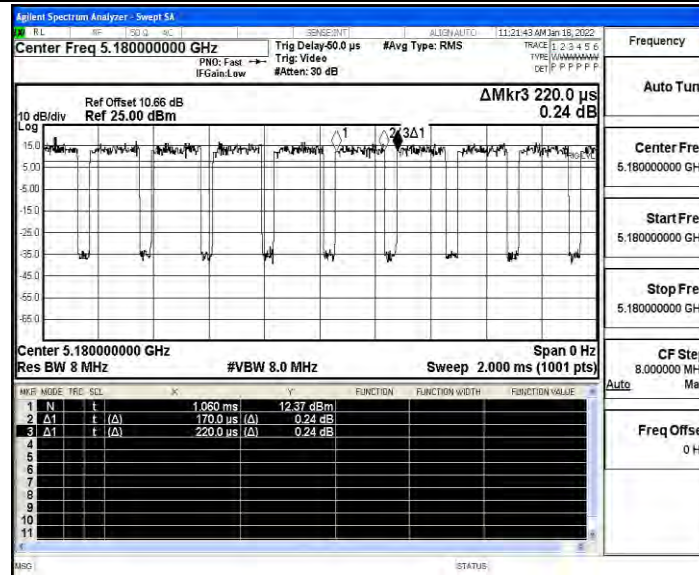
Ant1

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11A	Ant1	5180	0.17	0.22	77.27	---	---
		5220	0.18	0.22	81.82	---	---
		5240	0.17	0.22	77.27	---	---
11N20SISO	Ant1	5180	0.16	0.21	76.19	---	---
		5220	0.16	0.21	76.19	---	---
		5240	0.16	0.21	76.19	---	---
11N40SISO	Ant1	5190	0.10	0.15	66.67	---	---
		5230	0.10	0.14	71.43	---	---
11AC20SISO	Ant1	5180	0.17	0.22	77.27	---	---
		5220	0.17	0.22	77.27	---	---
		5240	0.17	0.21	80.95	---	---
11AC40SISO	Ant1	5190	0.11	0.15	73.33	---	---
		5230	0.10	0.14	71.43	---	---
11AC80SISO	Ant1	5210	0.07	0.11	63.64	---	---

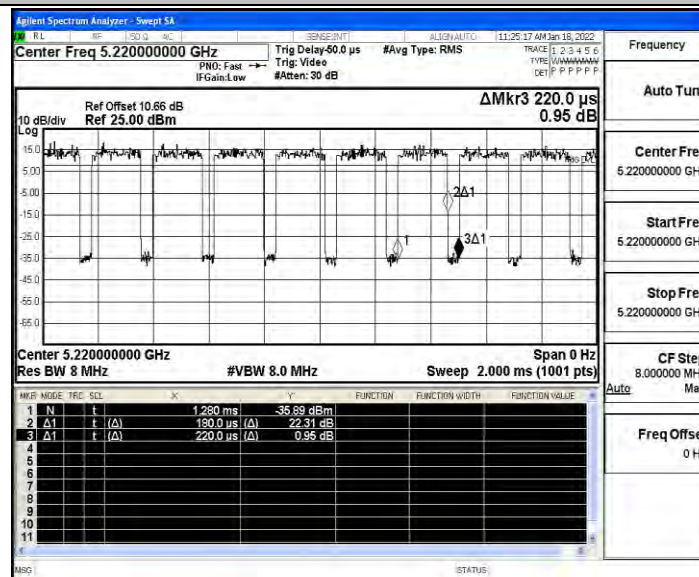


Test Graphs

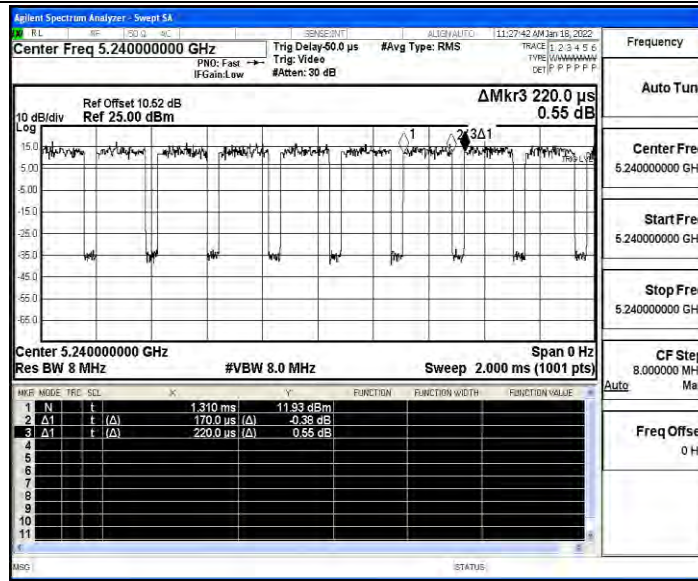
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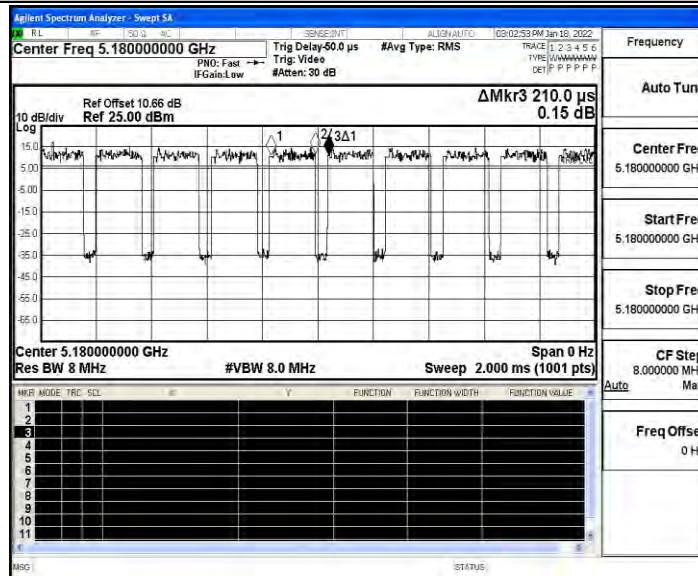
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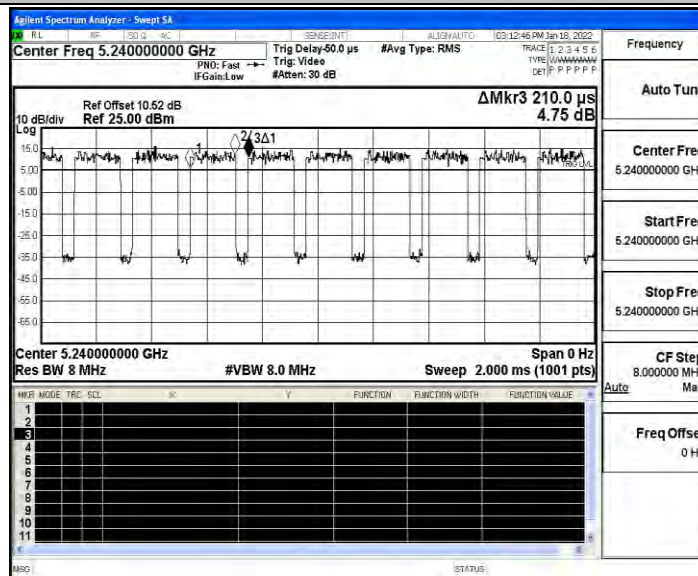
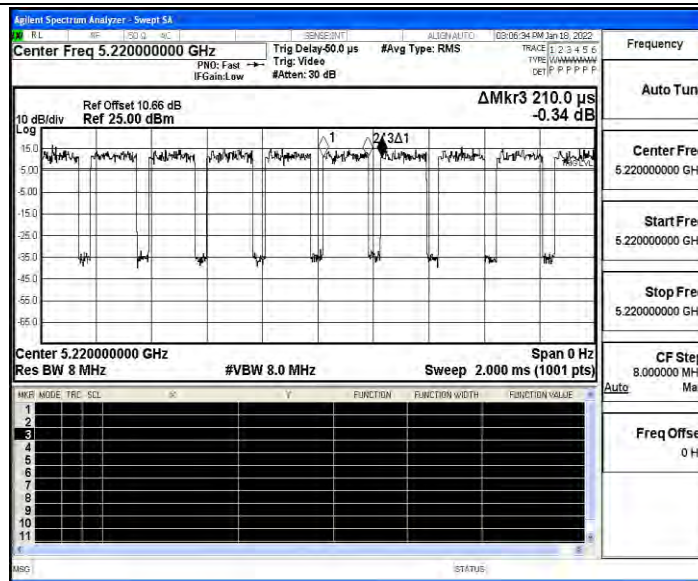
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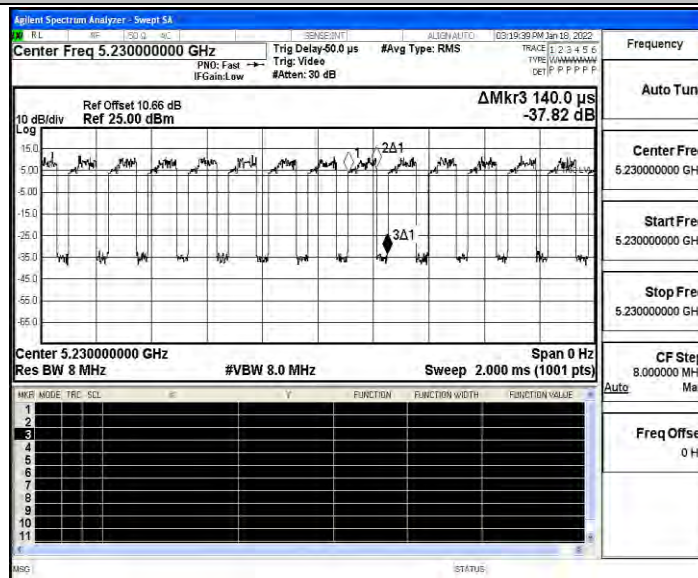
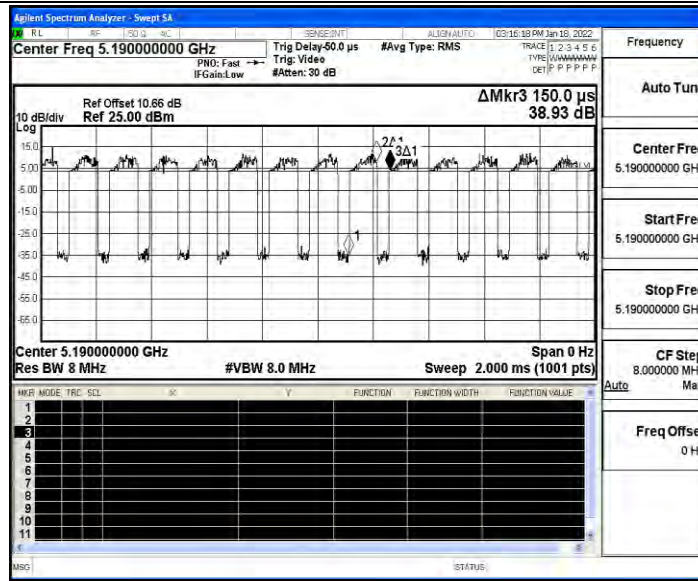


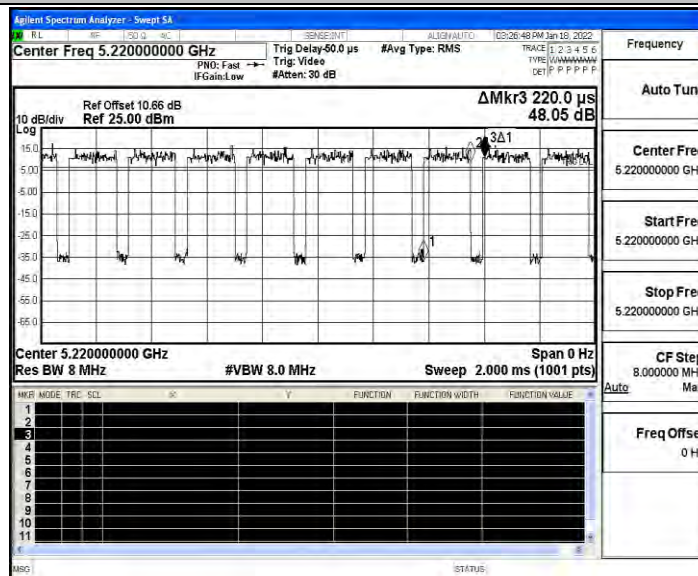
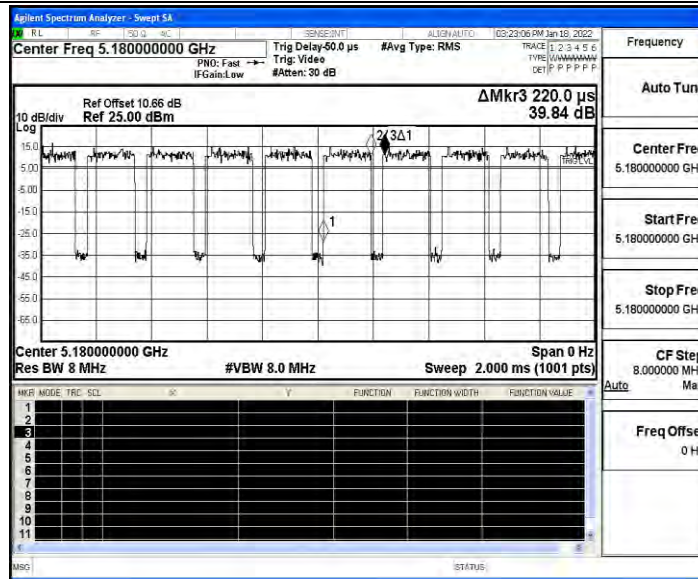
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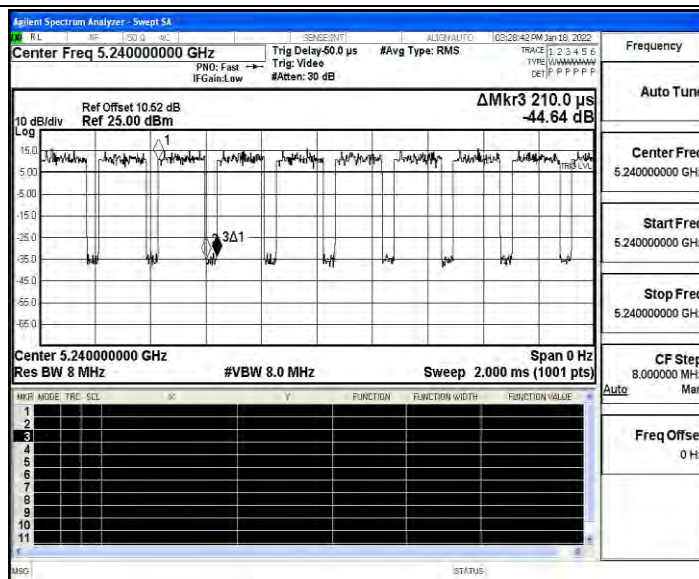


11N20SISO_Ant1_5220

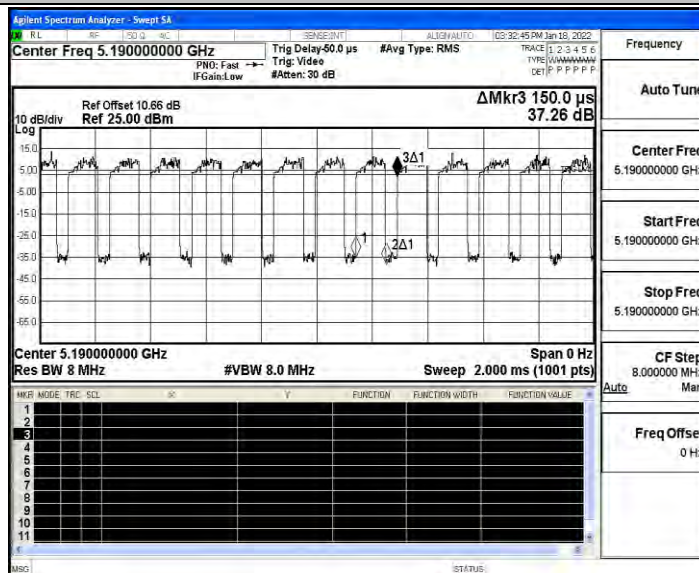








11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230

