Appendix E

RF Test Data for 5.3GWIFI (Conducted Measurement)

Product Name: Smart Phone

Test Model: Air 1

Environmental Conditions

Temperature:	24.6°C
Relative Humidity:	53.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

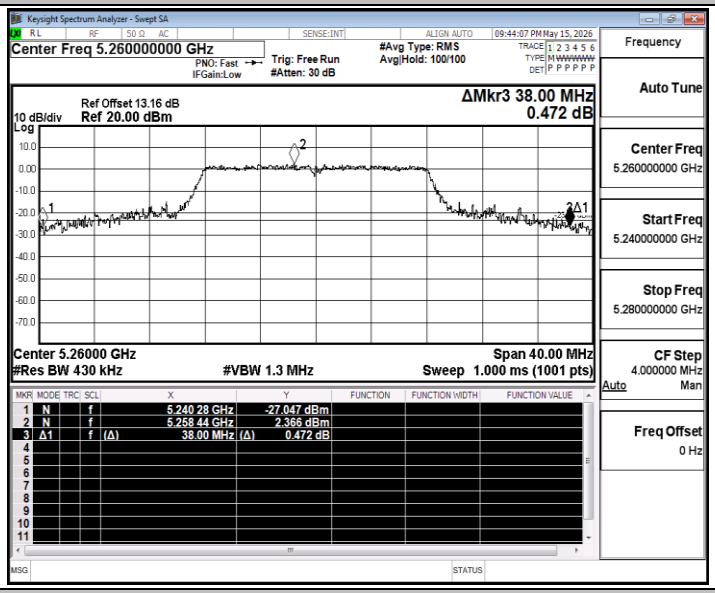
E.1 26dB Bandwidth

Test Result

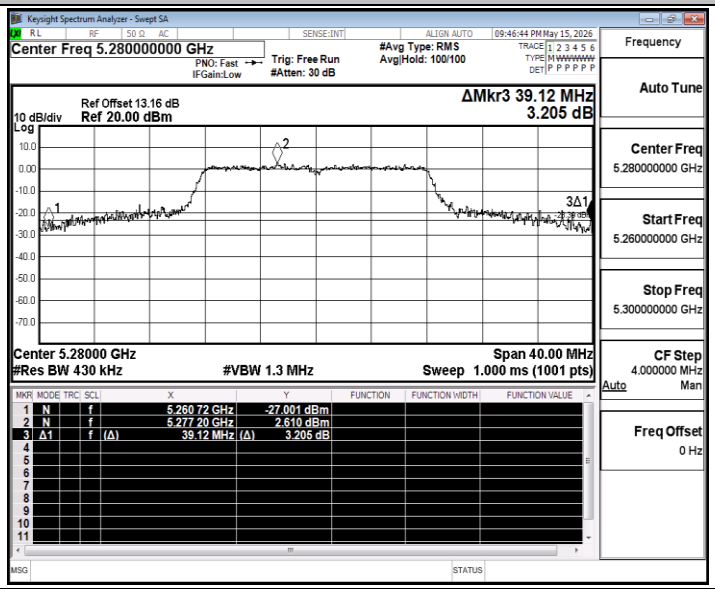
TestMode	Antenna	Freq (MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant1	5260	38.000	5240.280	5278.280	---	---
		5280	39.120	5260.720	5299.840	---	---
		5320	37.840	5301.040	5338.880	---	---
11N20SISO	Ant1	5260	38.880	5240.960	5279.840	---	---
		5280	39.400	5260.480	5299.880	---	---
		5320	40.000	5300.000	5340.000	---	---
11N40SISO	Ant1	5270	75.600	5233.440	5309.040	---	---
		5310	74.640	5273.760	5348.400	---	---
11AC20SISO	Ant1	5260	38.480	5241.120	5279.600	---	---
		5280	39.760	5260.000	5299.760	---	---
		5320	39.920	5300.000	5339.920	---	---
11AC40SISO	Ant1	5270	77.040	5230.800	5307.840	---	---
		5310	77.040	5270.880	5347.920	---	---
11AC80SISO	Ant1	5290	156.160	5210.960	5367.120	---	---

Test Graphs

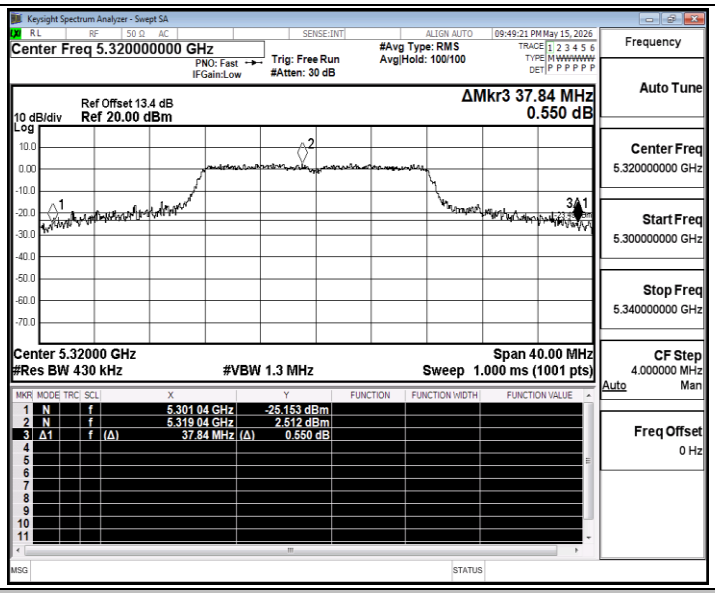
11A_Ant1_5260



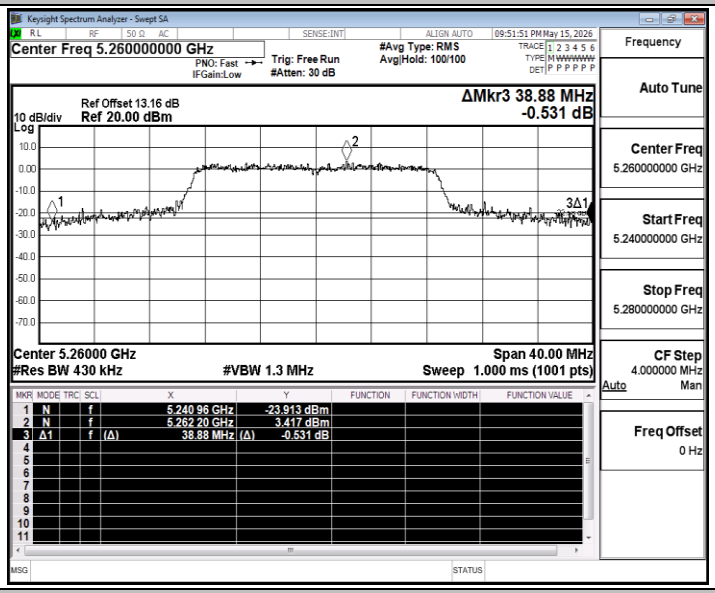
11A_Ant1_5280



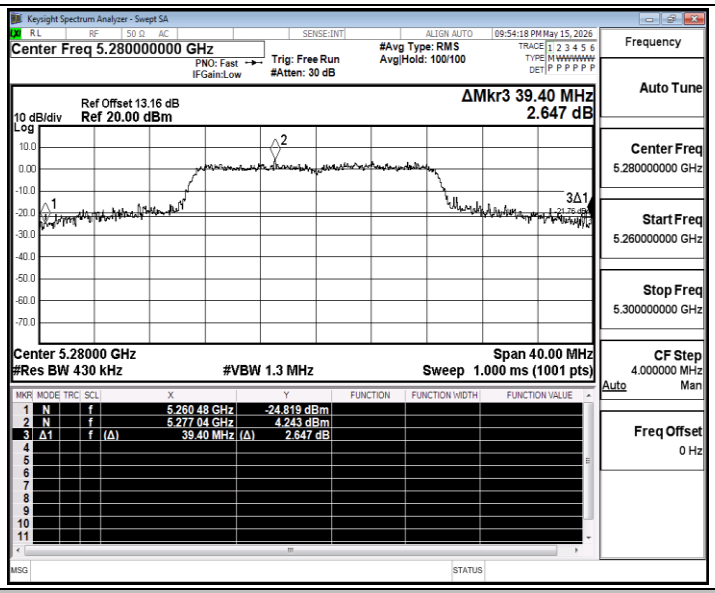
11A_Ant1_5320



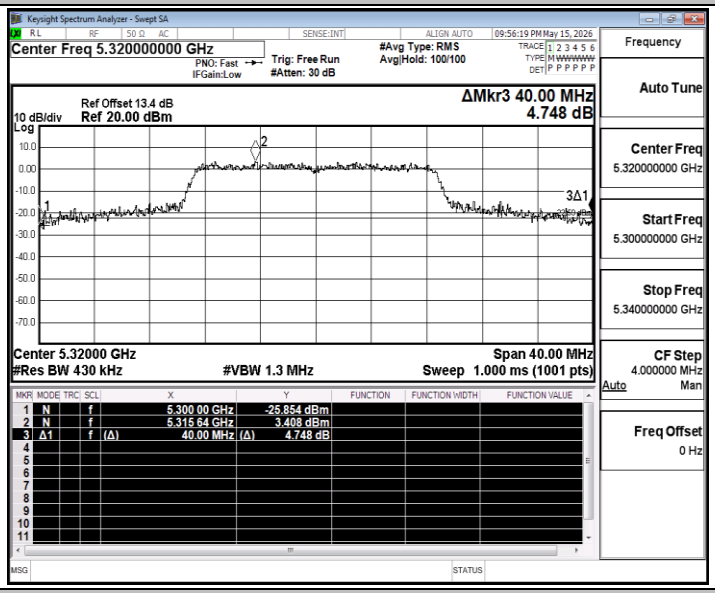
11N20SISO_Ant1_5260



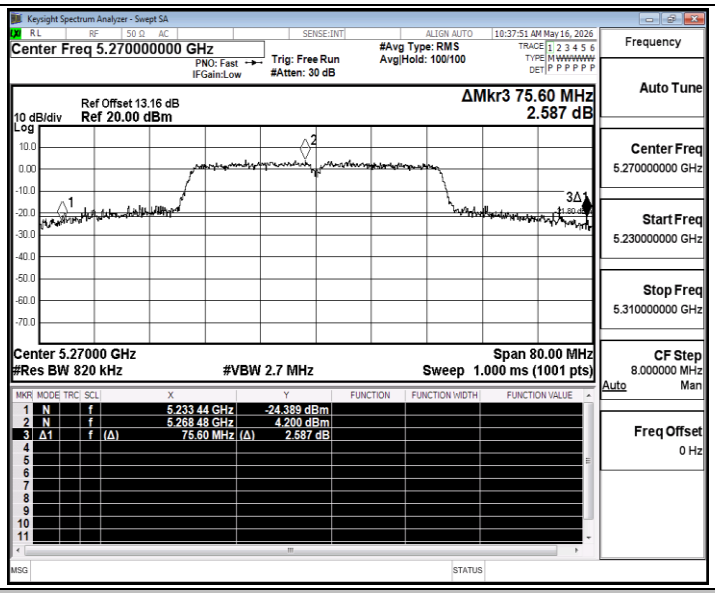
11N20SISO_Ant1_5280



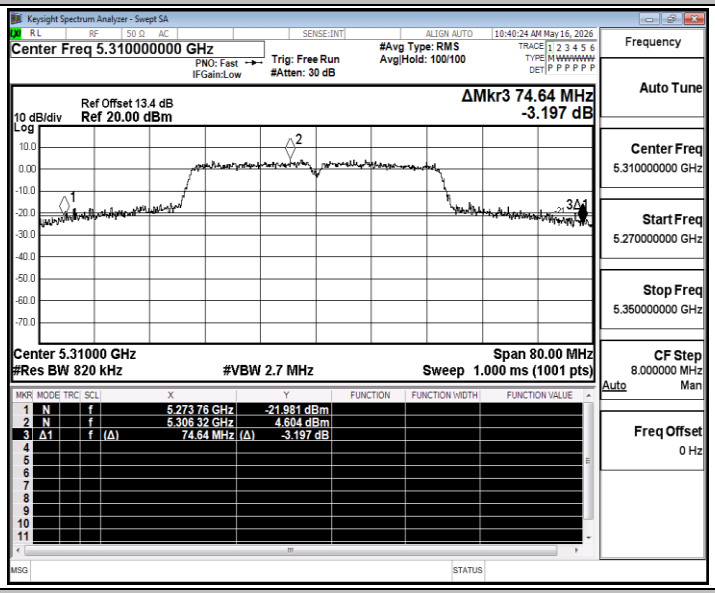
11N20SISO_Ant1_5320



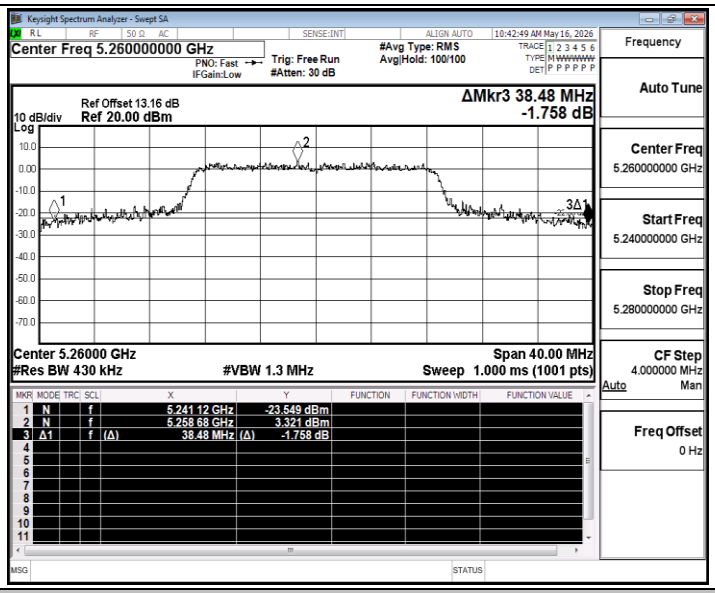
11N40SISO_Ant1_5270



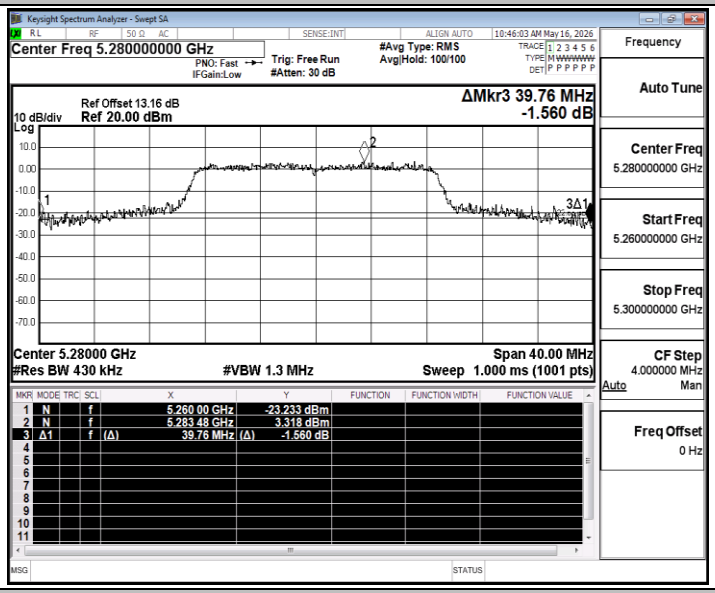
11N40SISO_Ant1_5310



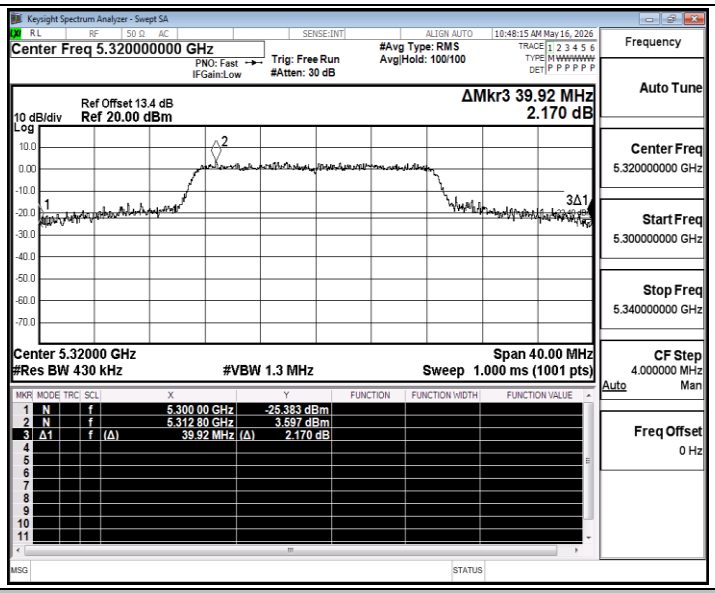
11AC20SISO_Ant1_5260



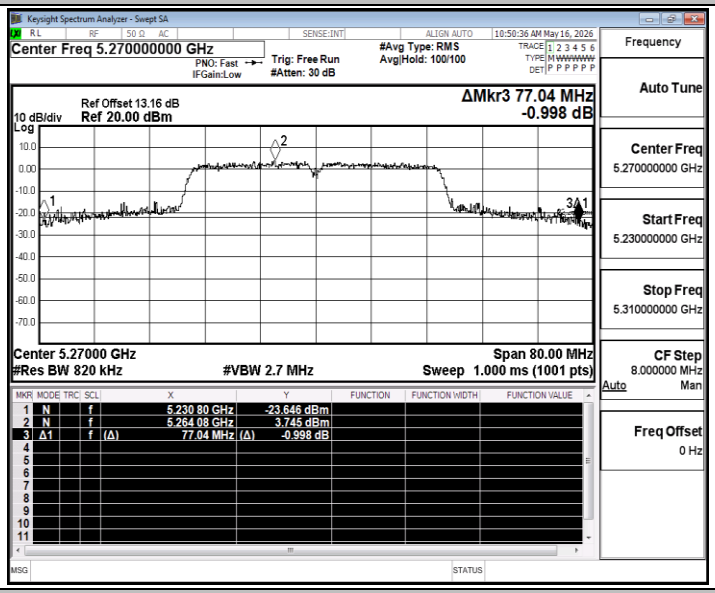
11AC20SISO_Ant1_5280



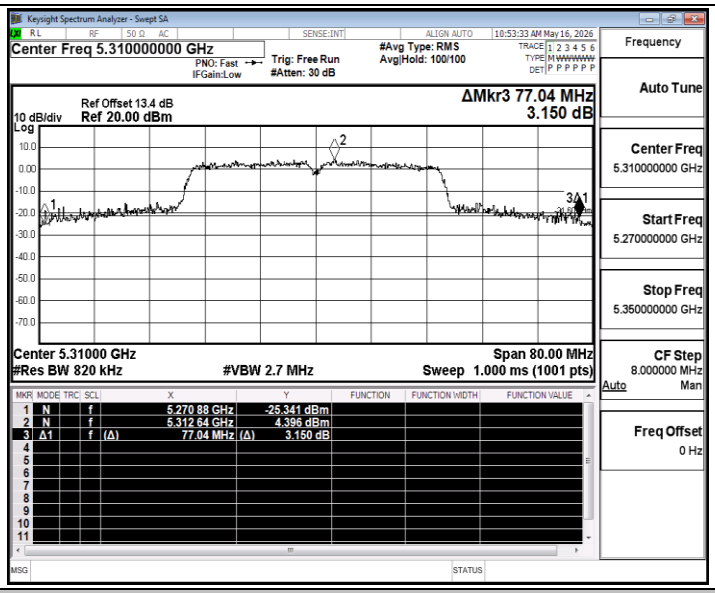
11AC20SISO_Ant1_5320



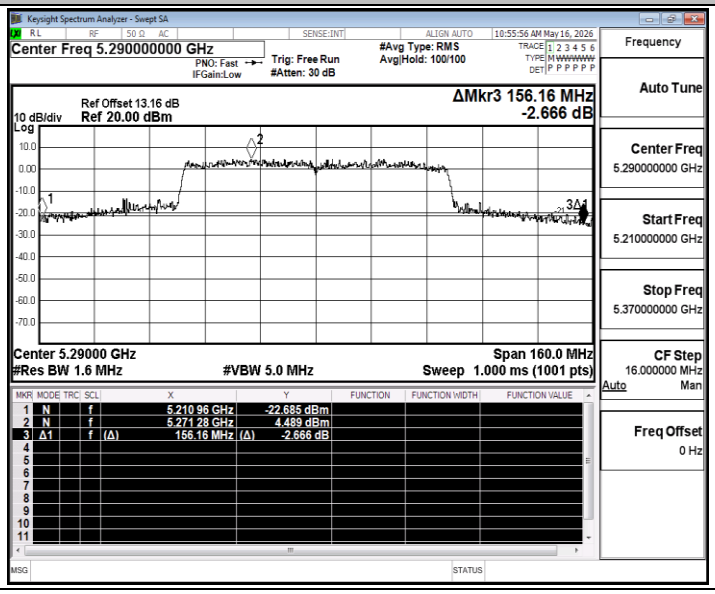
11AC40SISO_Ant1_5270



11AC40SISO_Ant1_5310



11AC80SISO_Ant1_5290



E.2 Maximum conducted output power

Test Result

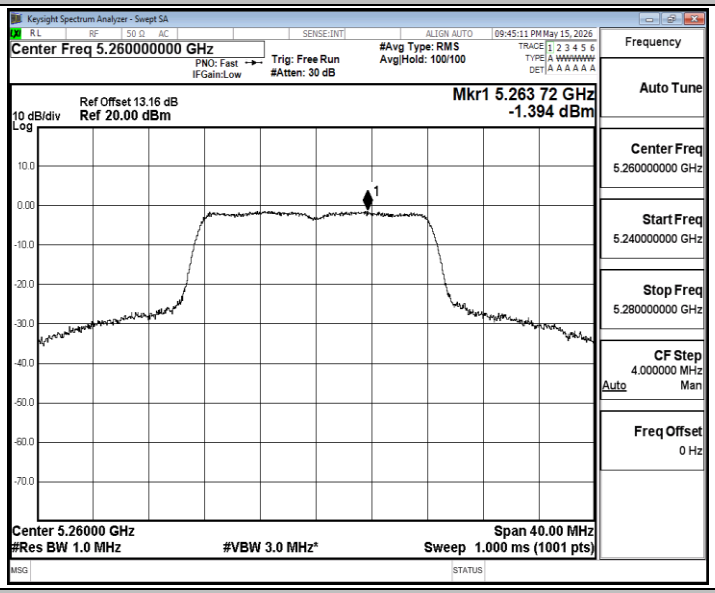
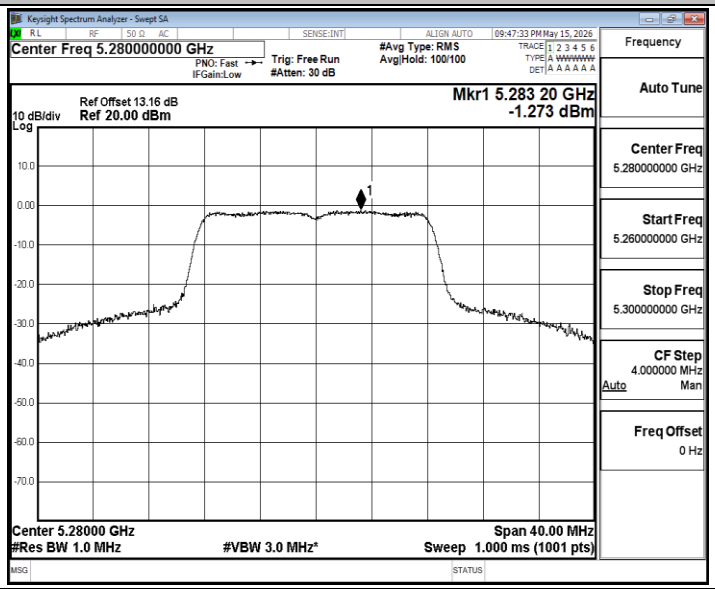
Test Mode	Antenna	Freq (MHz)	Measured Power [dBm]	DC Factor [dB]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5260	10.60	0.21	10.81	≤23.98	PASS
		5280	10.52	0.18	10.70	≤23.98	PASS
		5320	10.63	0.18	10.81	≤23.98	PASS
11N20SISO	Ant1	5260	10.77	0.25	11.02	≤23.98	PASS
		5280	10.71	0.22	10.93	≤23.98	PASS
		5320	10.81	0.22	11.03	≤23.98	PASS
11N40SISO	Ant1	5270	11.10	0.49	11.59	≤23.98	PASS
		5310	10.81	0.49	11.30	≤23.98	PASS
11AC20SISO	Ant1	5260	11.16	0.25	11.41	≤23.98	PASS
		5280	10.91	0.21	11.12	≤23.98	PASS
		5320	11.01	0.21	11.22	≤23.98	PASS
11AC40SISO	Ant1	5270	10.81	0.42	11.23	≤23.98	PASS
		5310	10.68	0.42	11.10	≤23.98	PASS
11AC80SISO	Ant1	5290	10.33	0.79	11.12	≤23.98	PASS

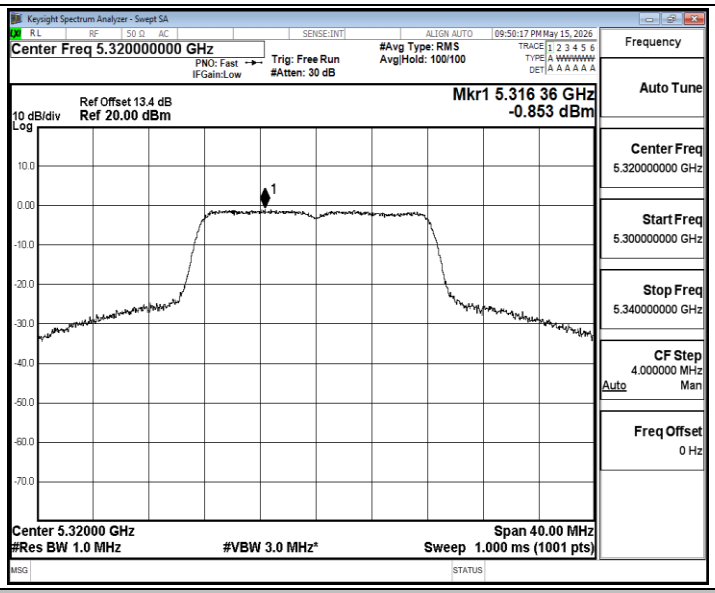
E.3 Maximum power spectral density

Test Result

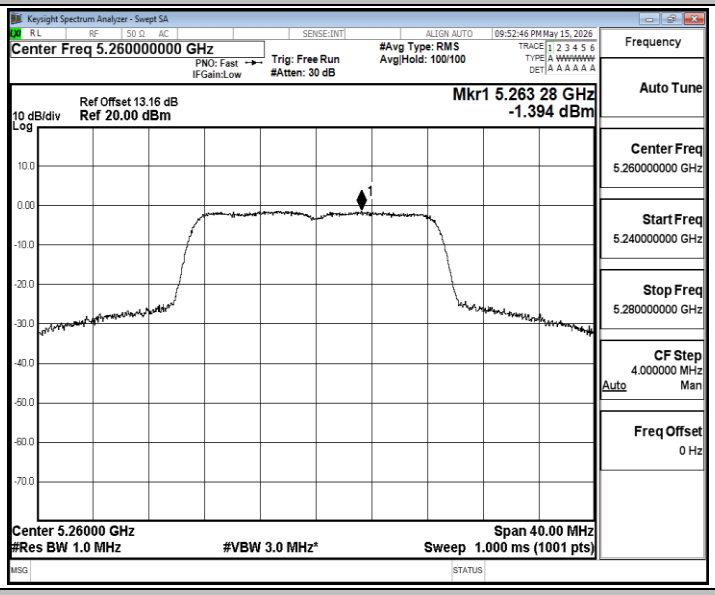
TestMode	Antenna	Freq (MHz)	Raw Data [dBm/MHz]	DC Factor	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5260	-1.39	0.21	-1.18	≤11.00	PASS
		5280	-1.27	0.18	-1.09	≤11.00	PASS
		5320	-0.85	0.18	-0.67	≤11.00	PASS
11N20SISO	Ant1	5260	-1.39	0.25	-1.14	≤11.00	PASS
		5280	-1.19	0.22	-0.97	≤11.00	PASS
		5320	-1.11	0.22	-0.89	≤11.00	PASS
11N40SISO	Ant1	5270	-3.98	0.49	-3.49	≤11.00	PASS
		5310	-3.78	0.49	-3.29	≤11.00	PASS
11AC20SISO	Ant1	5260	-1.12	0.25	-0.87	≤11.00	PASS
		5280	-1.11	0.21	-0.90	≤11.00	PASS
		5320	-1.15	0.21	-0.94	≤11.00	PASS
11AC40SISO	Ant1	5270	-4.23	0.42	-3.81	≤11.00	PASS
		5310	-4.09	0.42	-3.67	≤11.00	PASS
11AC80SISO	Ant1	5290	-7.41	0.79	-6.62	≤11.00	PASS

Test Graphs

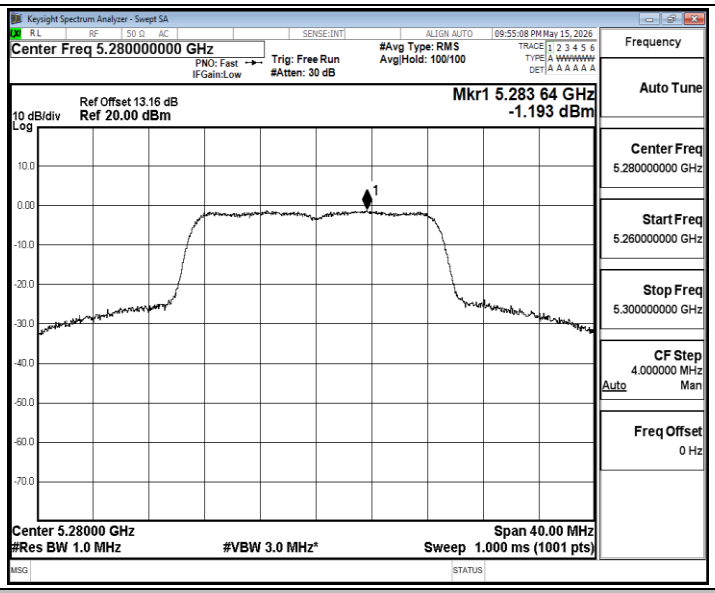
11A_Ant1_5260

11A_Ant1_5280

11A_Ant1_5320



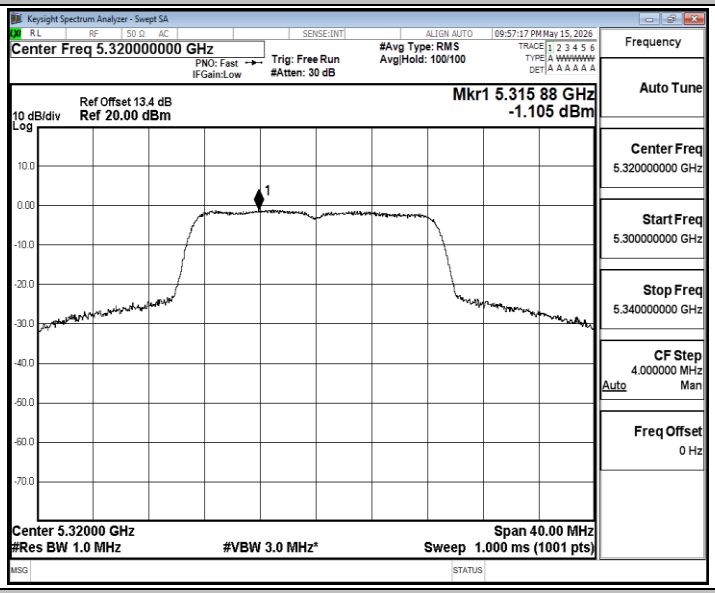
11N20SISO_Ant1_5260



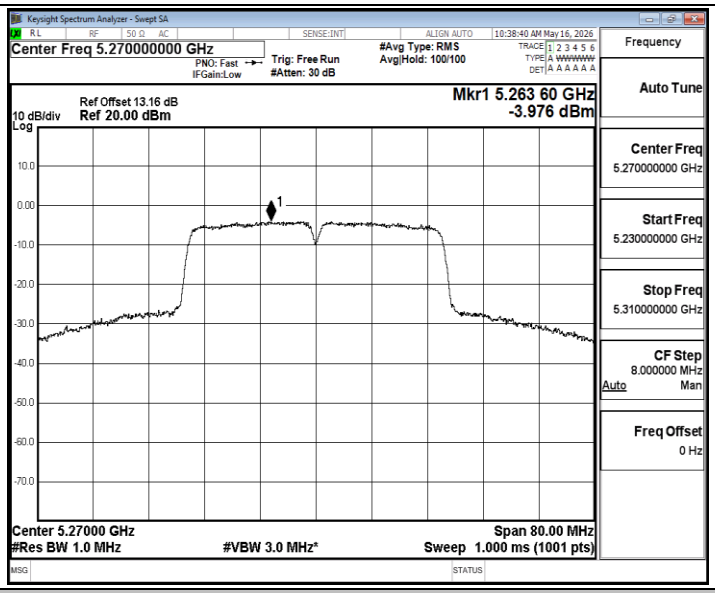
11N20SISO_Ant1_5280



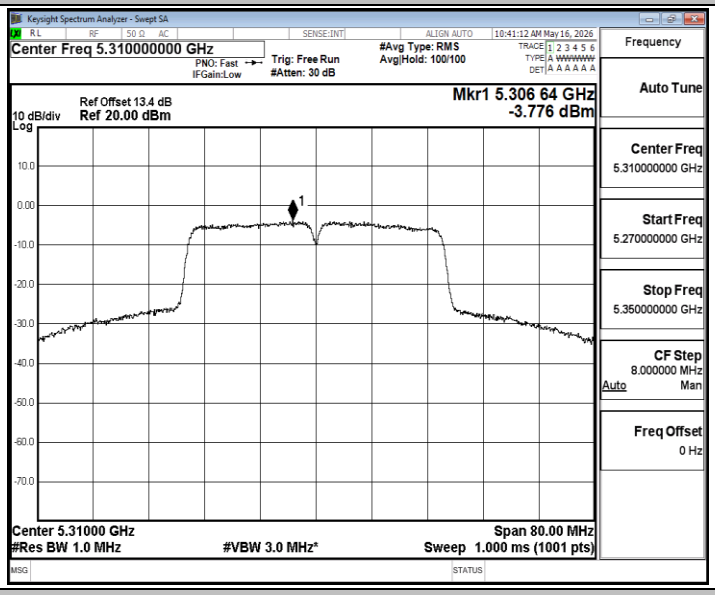
11N20SISO_Ant1_5320



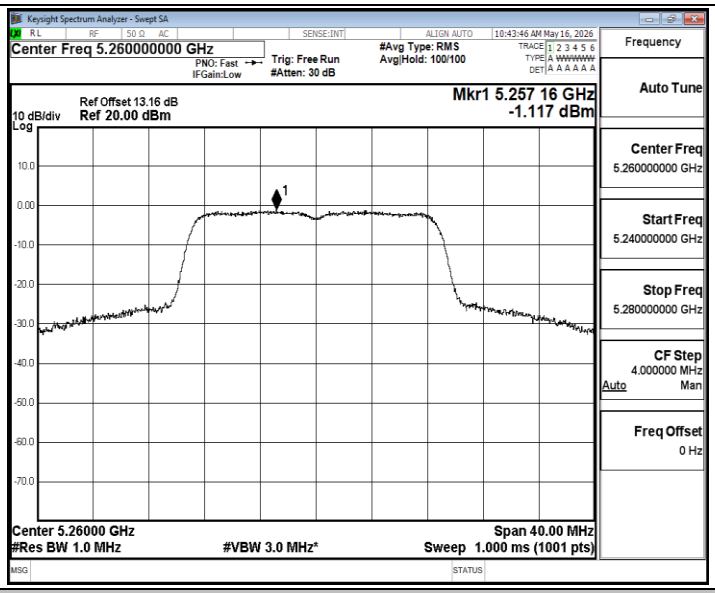
11N40SISO_Ant1_5270



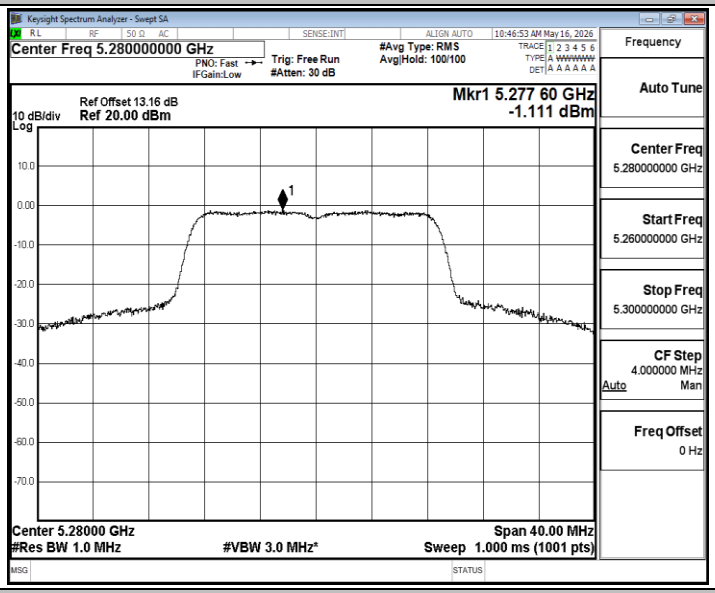
11N40SISO_Ant1_5310



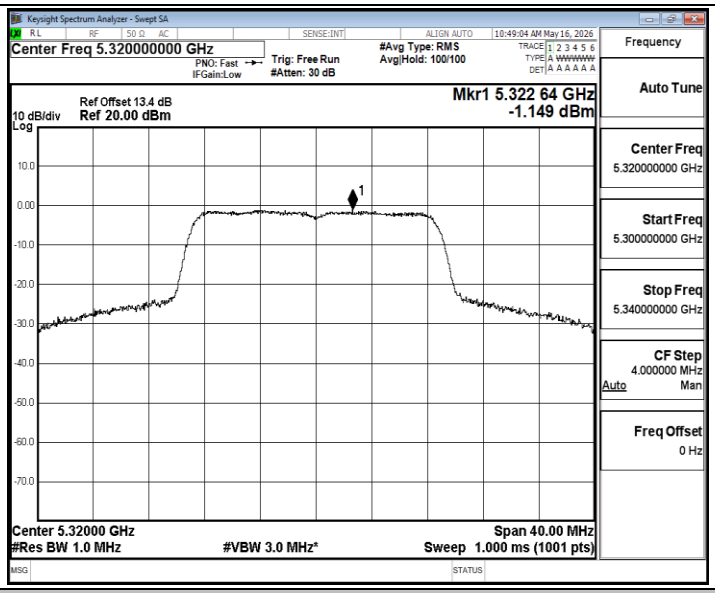
11AC20SISO_Ant1_5260



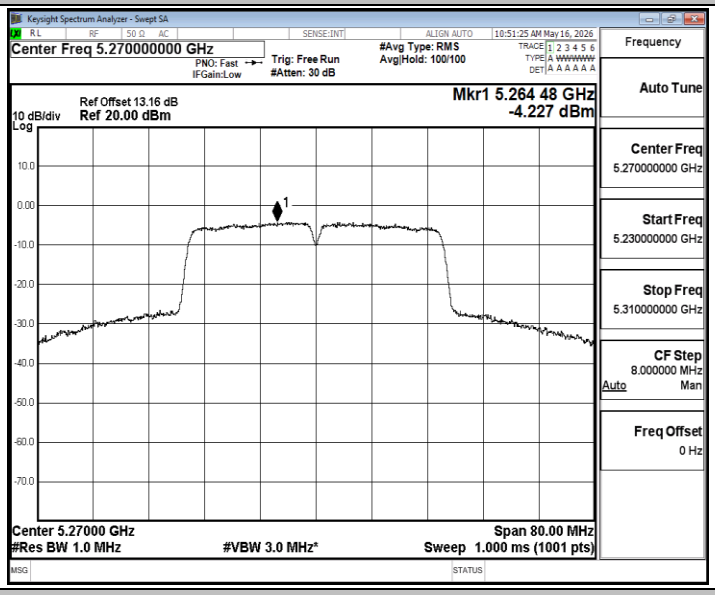
11AC20SISO_Ant1_5280



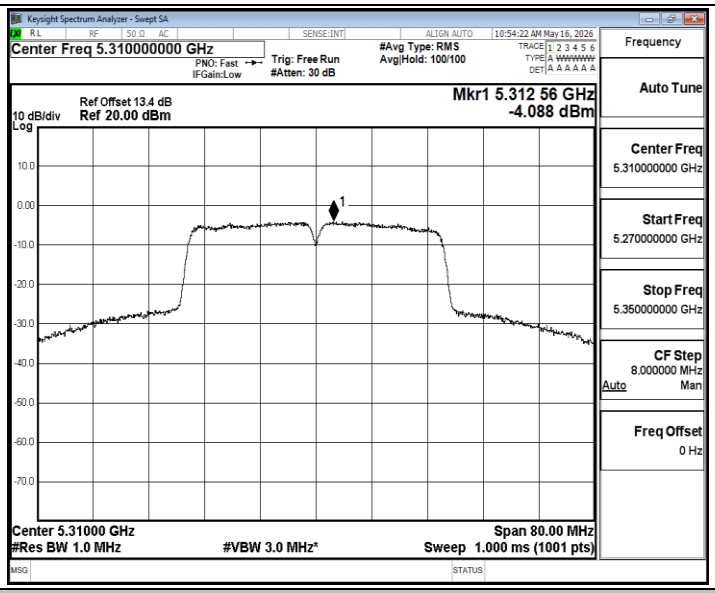
11AC20SISO_Ant1_5320



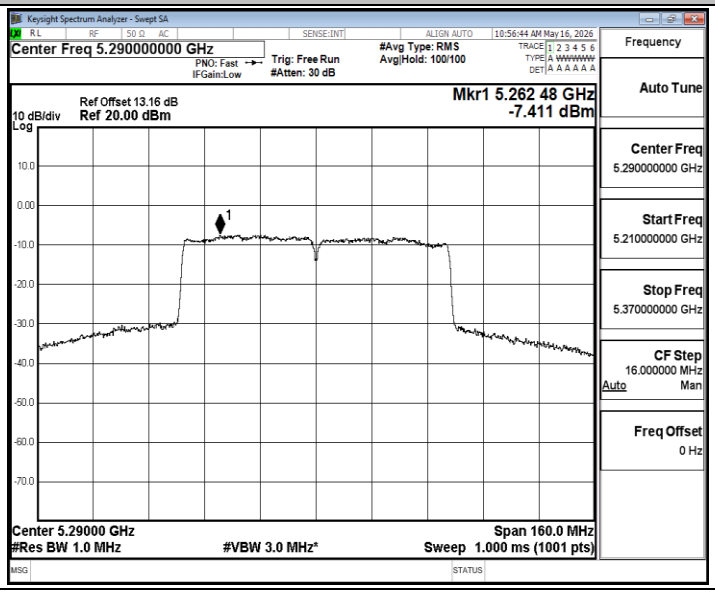
11AC40SISO_Ant1_5270



11AC40SISO_Ant1_5310



11AC80SISO_Ant1_5290



E.4 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant1	Low	5260	AV	4500.000	-62.15	≤-43.41	2.00	0.21	35.26	≤54	PASS
				AV	4772.550	-53.71	≤-43.41	2.00	0.21	43.70	≤54	PASS
				AV	5150.000	-59.1	≤-43.41	2.00	0.21	38.31	≤54	PASS
				Peak	4500.000	-54.01	≤-29.00	2.00	0.00	43.19	≤68.2	PASS
				Peak	4787.560	-45.49	≤-29.00	2.00	0.00	51.71	≤68.2	PASS
				Peak	5150.000	-52.49	≤-29.00	2.00	0.00	44.71	≤68.2	PASS
		High	5320	AV	5350.000	-44.8	≤-43.38	2.00	0.18	52.58	≤54	PASS
				AV	5350.080	-44.8	≤-43.38	2.00	0.18	52.58	≤54	PASS
				AV	5460.000	-61.18	≤-43.38	2.00	0.18	36.20	≤54	PASS
				Peak	5350.000	-35.01	≤-29.00	2.00	0.00	62.19	≤68.2	PASS
				Peak	5351.200	-32.26	≤-29.00	2.00	0.00	64.94	≤68.2	PASS
				Peak	5460.000	-53.39	≤-29.00	2.00	0.00	43.81	≤68.2	PASS
11N20SISO	Ant1	Low	5260	AV	4500.000	-61.94	≤-43.45	2.00	0.25	35.51	≤54	PASS
				AV	4787.560	-53.28	≤-43.45	2.00	0.25	44.17	≤54	PASS
				AV	5150.000	-58.82	≤-43.45	2.00	0.25	38.63	≤54	PASS
				Peak	4500.000	-53.97	≤-29.00	2.00	0.00	43.23	≤68.2	PASS
				Peak	4771.760	-44.16	≤-29.00	2.00	0.00	53.04	≤68.2	PASS
				Peak	5150.000	-51.37	≤-29.00	2.00	0.00	45.83	≤68.2	PASS
		High	5320	AV	5350.000	-52.27	≤-43.42	2.00	0.22	45.15	≤54	PASS
				AV	5350.080	-52.27	≤-43.42	2.00	0.22	45.15	≤54	PASS
				AV	5460.000	-67.6	≤-43.42	2.00	0.22	29.82	≤54	PASS
				Peak	5350.000	-38.31	≤-29.00	2.00	0.00	58.89	≤68.2	PASS
				Peak	5352.000	-34.7	≤-29.00	2.00	0.00	62.50	≤68.2	PASS
				Peak	5460.000	-60.39	≤-29.00	2.00	0.00	36.81	≤68.2	PASS
11N40SISO	Ant1	Low	5270	AV	4500.000	-62.31	≤-43.69	2.00	0.49	35.38	≤54	PASS
				AV	4806.520	-49.4	≤-43.69	2.00	0.49	48.29	≤54	PASS
				AV	5150.000	-58.86	≤-43.69	2.00	0.49	38.83	≤54	PASS
				Peak	4500.000	-53.95	≤-29.00	2.00	0.00	43.25	≤68.2	PASS
				Peak	4806.520	-41	≤-29.00	2.00	0.00	56.20	≤68.2	PASS
				Peak	5150.000	-49.9	≤-29.00	2.00	0.00	47.30	≤68.2	PASS
		High	5310	AV	5350.000	-51.44	≤-43.69	2.00	0.49	46.25	≤54	PASS
				AV	5350.080	-51.44	≤-43.69	2.00	0.49	46.25	≤54	PASS
				AV	5460.000	-66.57	≤-43.69	2.00	0.49	31.12	≤54	PASS
				Peak	5350.000	-39.49	≤-29.00	2.00	0.00	57.71	≤68.2	PASS
				Peak	5350.720	-38.3	≤-29.00	2.00	0.00	58.90	≤68.2	PASS

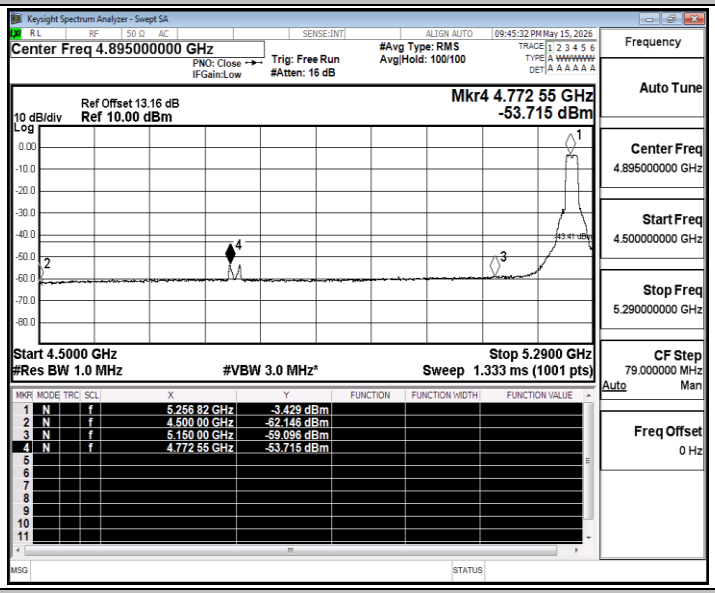
				Peak	5460.000	-58.8	≤-29.00	2.00	0.00	38.40	≤68.2	PASS
11AC20SISO	Ant1	Low	5260	AV	4500.000	-62.28	≤-43.45	2.00	0.25	35.17	≤54	PASS
				AV	4787.560	-53.3	≤-43.45	2.00	0.25	44.15	≤54	PASS
				AV	5150.000	-59.22	≤-43.45	2.00	0.25	38.23	≤54	PASS
				Peak	4500.000	-54.01	≤-29.00	2.00	0.00	43.19	≤68.2	PASS
				Peak	4787.560	-44.51	≤-29.00	2.00	0.00	52.69	≤68.2	PASS
				Peak	5150.000	-51.28	≤-29.00	2.00	0.00	45.92	≤68.2	PASS
		High	5320	AV	5350.000	-54.83	≤-43.41	2.00	0.21	42.58	≤54	PASS
				AV	5351.680	-53.5	≤-43.41	2.00	0.21	43.91	≤54	PASS
				AV	5460.000	-67.1	≤-43.41	2.00	0.21	30.31	≤54	PASS
				Peak	5350.000	-41.5	≤-29.00	2.00	0.00	55.70	≤68.2	PASS
				Peak	5350.400	-34.99	≤-29.00	2.00	0.00	62.21	≤68.2	PASS
				Peak	5460.000	-59.44	≤-29.00	2.00	0.00	37.76	≤68.2	PASS
11AC40SISO	Ant1	Low	5270	AV	4500.000	-62.13	≤-43.62	2.00	0.42	35.49	≤54	PASS
				AV	4805.730	-49.66	≤-43.62	2.00	0.42	47.96	≤54	PASS
				AV	5150.000	-58.81	≤-43.62	2.00	0.42	38.81	≤54	PASS
				Peak	4500.000	-53.25	≤-29.00	2.00	0.00	43.95	≤68.2	PASS
				Peak	4806.520	-41.05	≤-29.00	2.00	0.00	56.15	≤68.2	PASS
				Peak	5150.000	-51.44	≤-29.00	2.00	0.00	45.76	≤68.2	PASS
		High	5310	AV	5350.000	-51.27	≤-43.62	2.00	0.42	46.35	≤54	PASS
				AV	5351.040	-50.83	≤-43.62	2.00	0.42	46.79	≤54	PASS
				AV	5460.000	-67.23	≤-43.62	2.00	0.42	30.39	≤54	PASS
				Peak	5350.000	-39.4	≤-29.00	2.00	0.00	57.80	≤68.2	PASS
				Peak	5351.360	-38.46	≤-29.00	2.00	0.00	58.74	≤68.2	PASS
				Peak	5460.000	-60.59	≤-29.00	2.00	0.00	36.61	≤68.2	PASS
11AC80SISO	Ant1	Low	5290	AV	4500.000	-62.09	≤-43.99	2.00	0.79	35.90	≤54	PASS
				AV	5145.600	-53.71	≤-43.99	2.00	0.79	44.28	≤54	PASS
				AV	5150.000	-54.27	≤-43.99	2.00	0.79	43.72	≤54	PASS
				Peak	4500.000	-54.16	≤-29.00	2.00	0.00	43.04	≤68.2	PASS
				Peak	5128.800	-39.09	≤-29.00	2.00	0.00	58.11	≤68.2	PASS
				Peak	5150.000	-38.48	≤-29.00	2.00	0.00	58.72	≤68.2	PASS
		High	5290	AV	5350.000	-53.89	≤-43.99	2.00	0.79	44.10	≤54	PASS
				AV	5350.200	-53.53	≤-43.99	2.00	0.79	44.46	≤54	PASS
				AV	5460.000	-65.36	≤-43.99	2.00	0.79	32.63	≤54	PASS
				Peak	5350.000	-44.11	≤-29.00	2.00	0.00	53.09	≤68.2	PASS
				Peak	5351.000	-39.78	≤-29.00	2.00	0.00	57.42	≤68.2	PASS
				Peak	5460.000	-57.52	≤-29.00	2.00	0.00	39.68	≤68.2	PASS

Note:

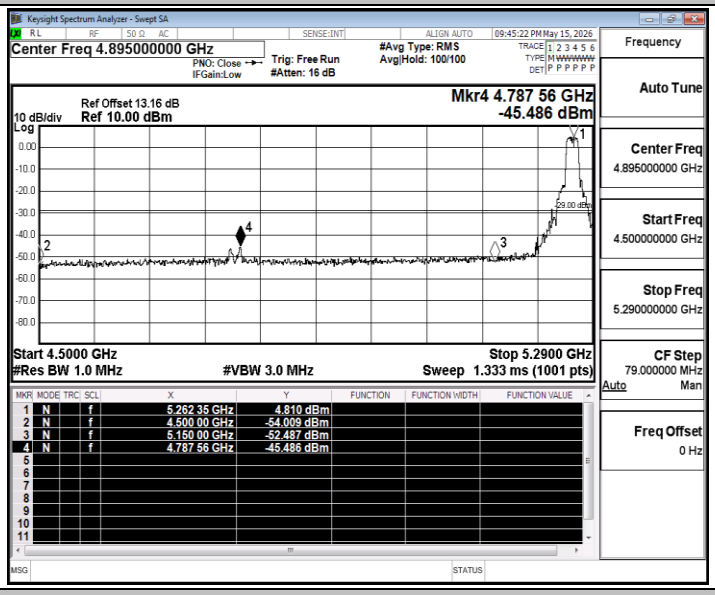
1. The Antenna Gain is compensated in the graph.

Test Graphs

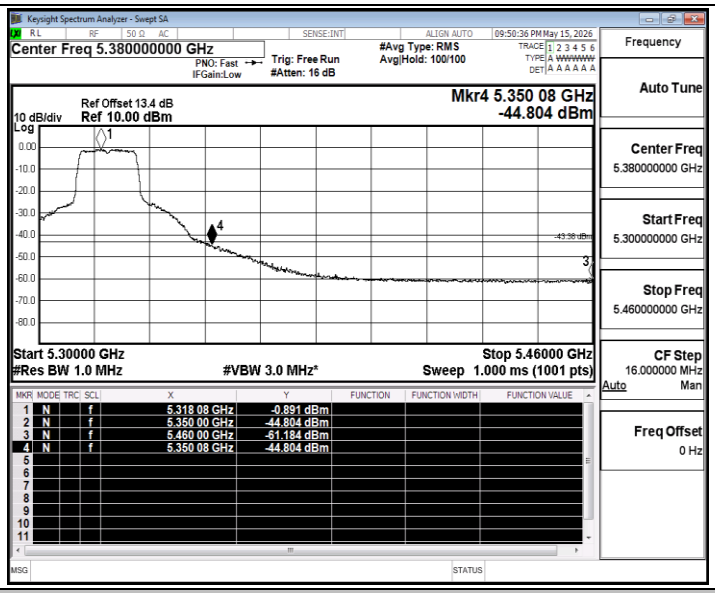
11A_Ant1_Low_5260_AV



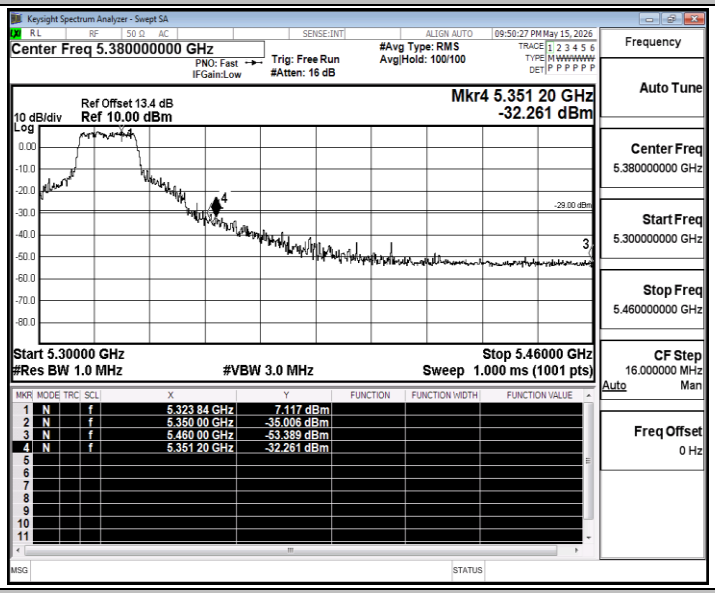
11A_Ant1_Low_5260_Peak



11A_Ant1_High_5320_AV



11A_Ant1_High_5320_Peak



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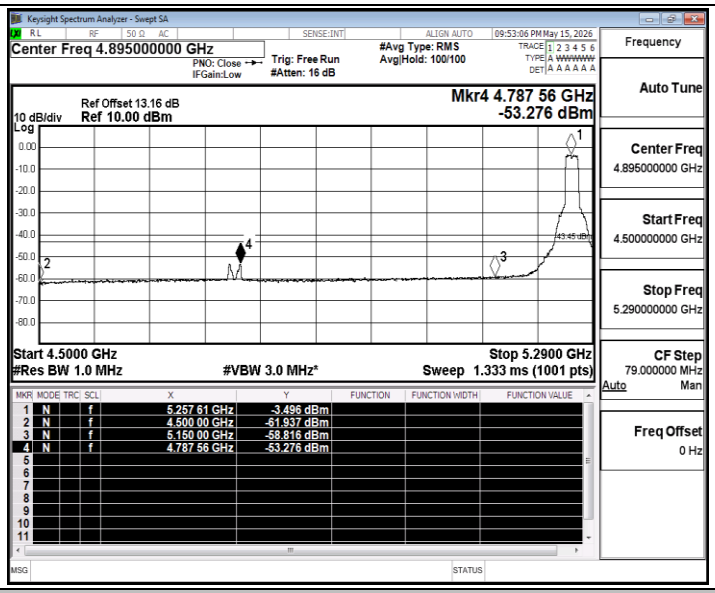

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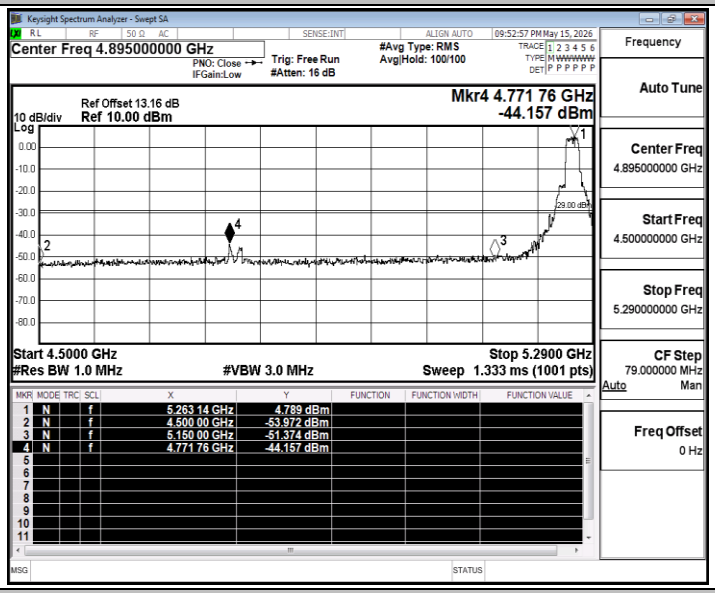

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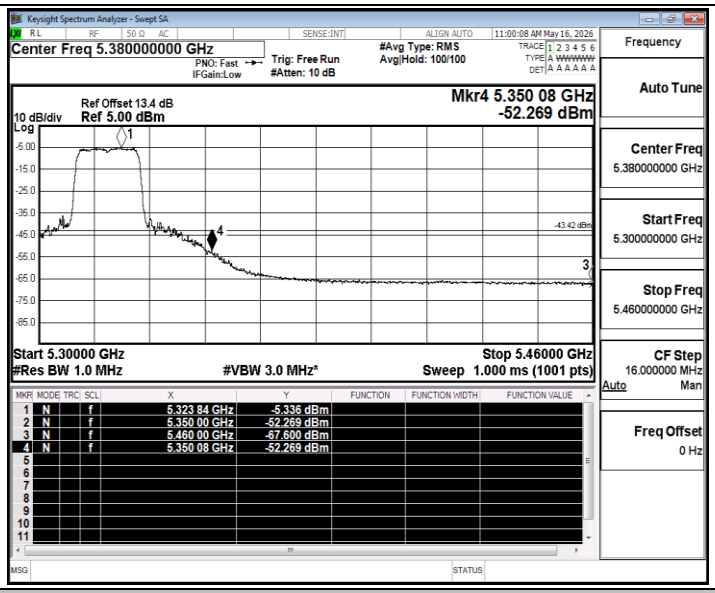

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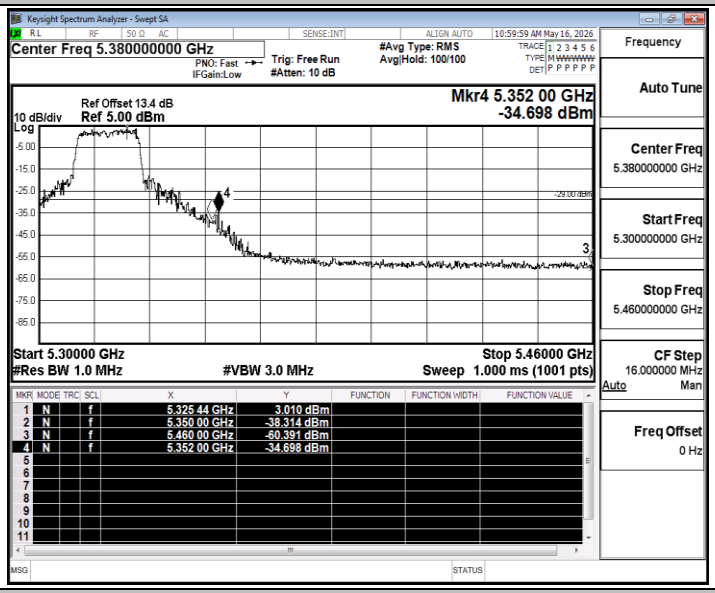
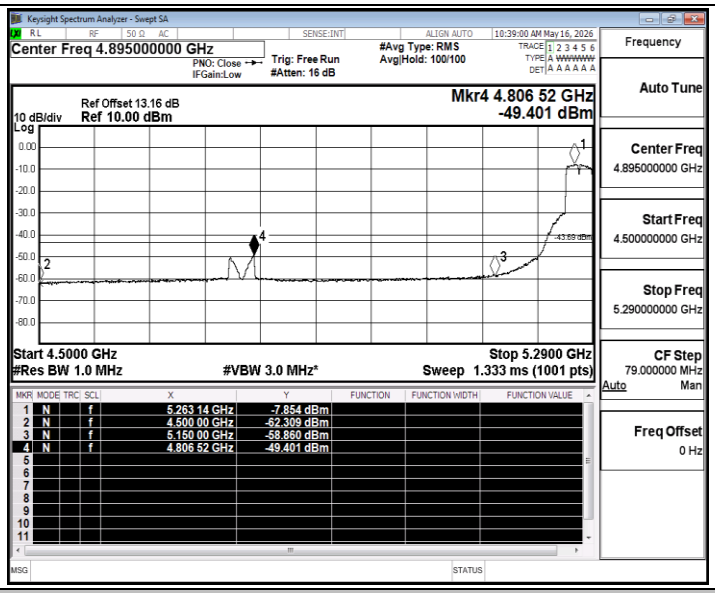


11N40SISO_Ant1_Low_5270_AV



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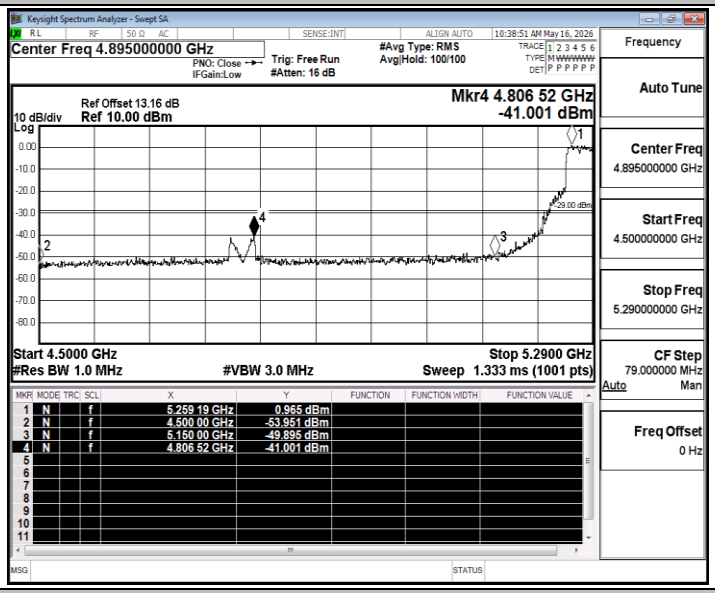

11N40SISO_Ant1_High_5310_AV