Appendix D

RF Test Data for 5.3GWIFI(Conducted Measurement)

Product Name: Tablet device

Test Model: Sundial

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Nick Peng
Supervised by:	Ling Zhu

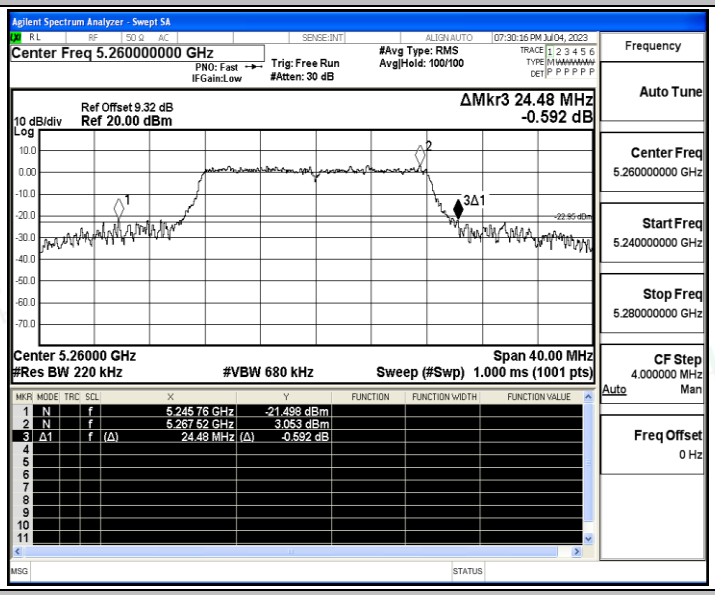
D.1 26dB Emission Bandwidth

Test Result

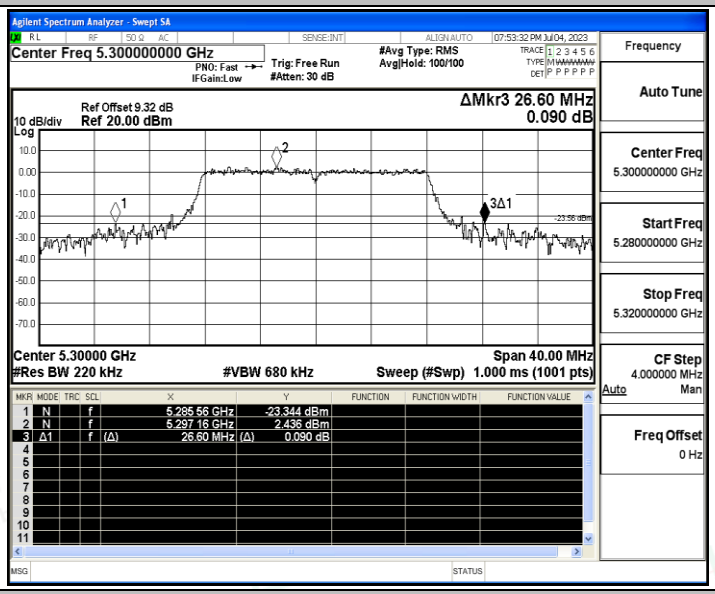
TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5260	24.480	5245.760	5270.240	---	---
		5300	26.600	5285.560	5312.160	---	---
		5320	23.840	5306.120	5329.960	---	---
11N20SISO	Ant1	5260	27.480	5244.880	5272.360	---	---
		5300	28.400	5286.360	5314.760	---	---
		5320	24.880	5307.200	5332.080	---	---
11N40SISO	Ant1	5270	49.360	5242.320	5291.680	---	---
		5310	47.920	5286.320	5334.240	---	---
11AC20SISO	Ant1	5260	28.120	5245.320	5273.440	---	---
		5300	26.000	5285.560	5311.560	---	---
		5320	25.360	5305.760	5331.120	---	---
11AC40SISO	Ant1	5270	43.600	5249.360	5292.960	---	---
		5310	44.880	5286.000	5330.880	---	---
11AC80SISO	Ant1	5290	82.880	5248.240	5331.120	---	---

Test Graphs

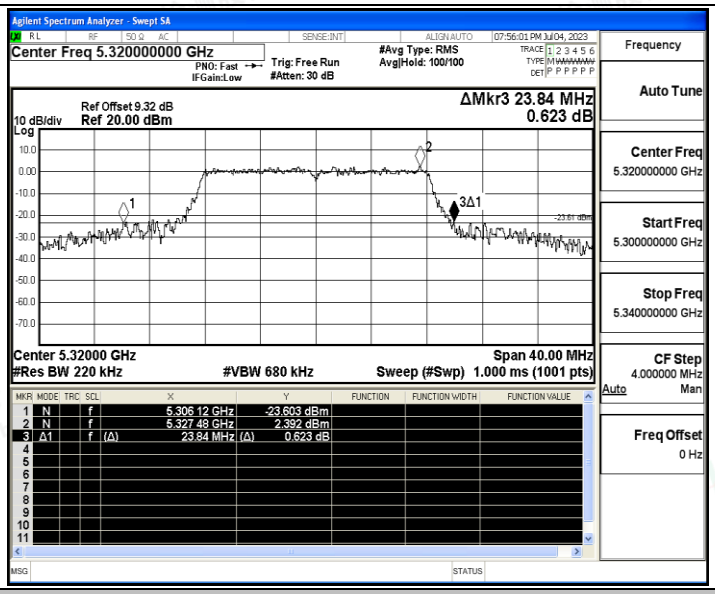
11A_Ant1_5260



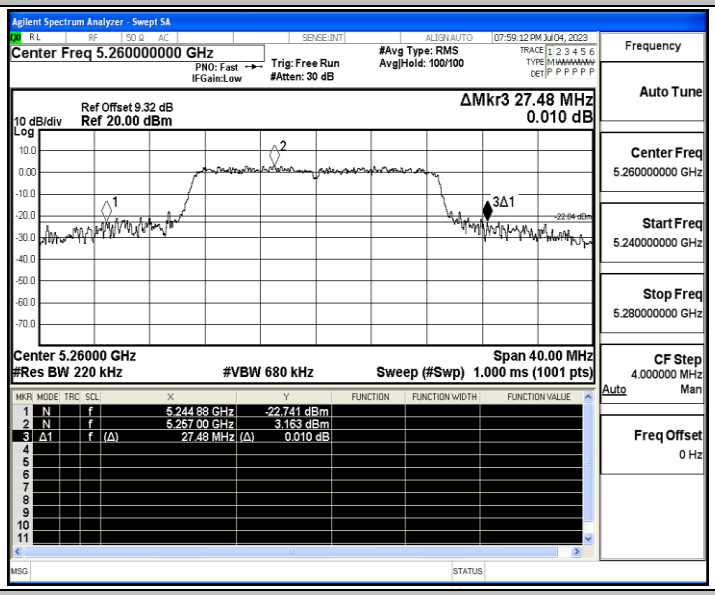
11A_Ant1_5300



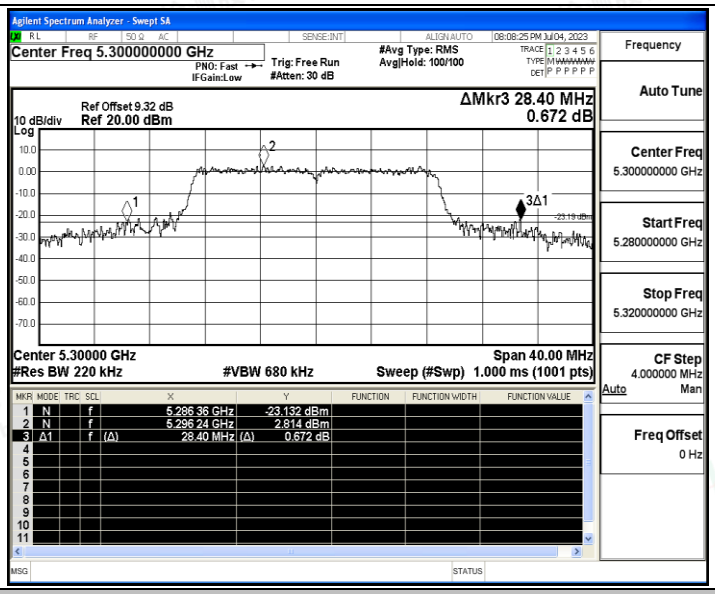
11A_Ant1_5320



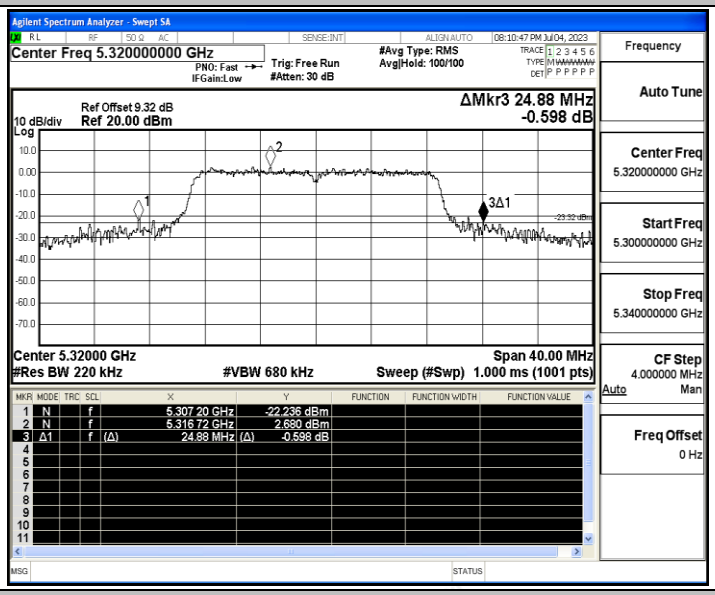
11N20SISO_Ant1_5260



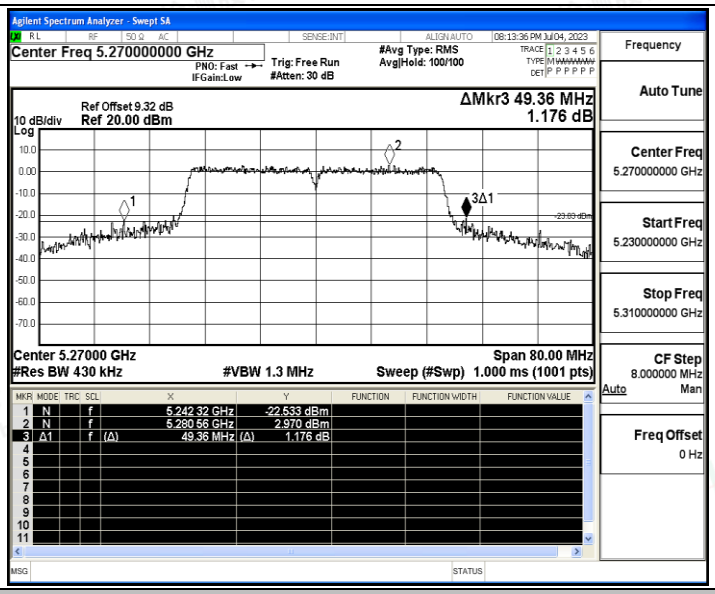
11N20SISO_Ant1_5300



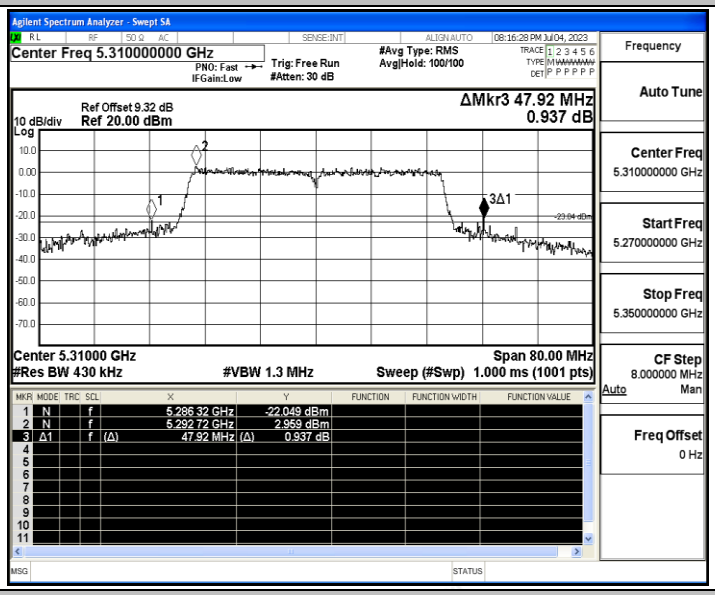
11N20SISO_Ant1_5320



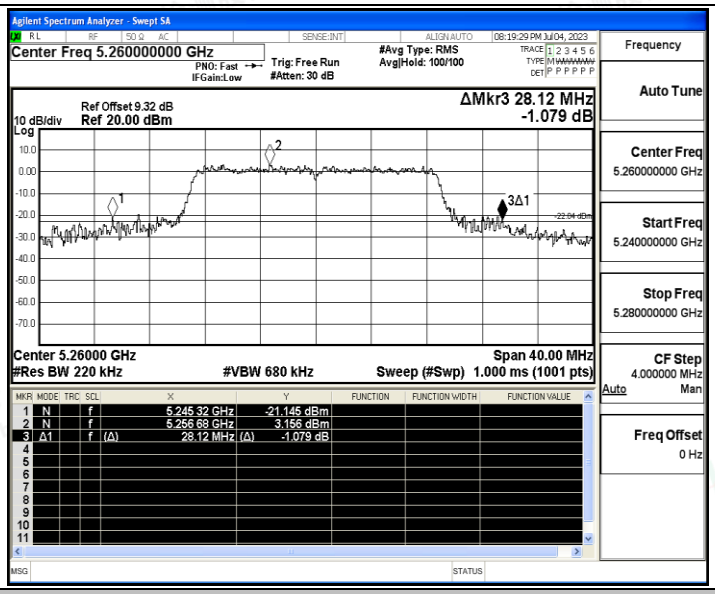
11N40SISO_Ant1_5270



11N40SISO_Ant1_5310



11AC20SISO_Ant1_5260



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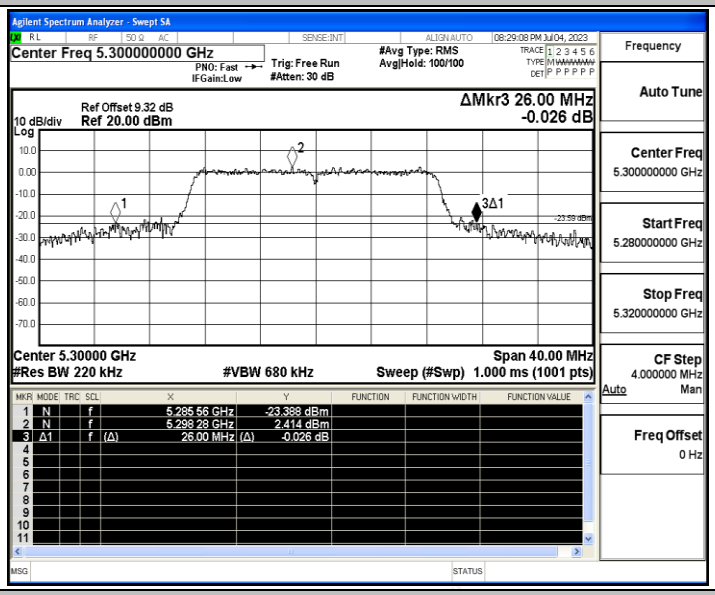

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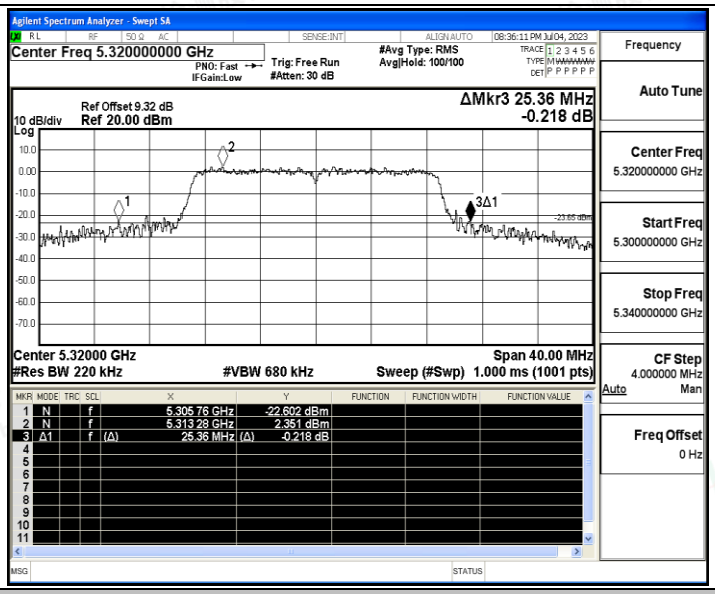
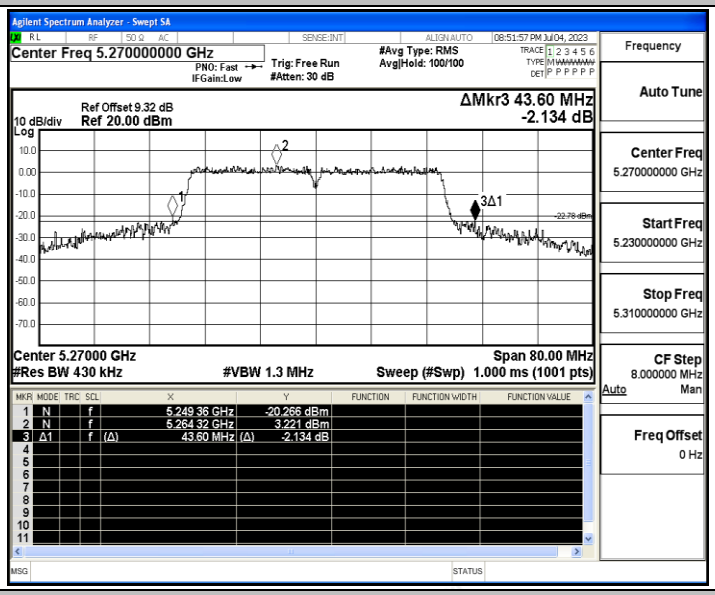
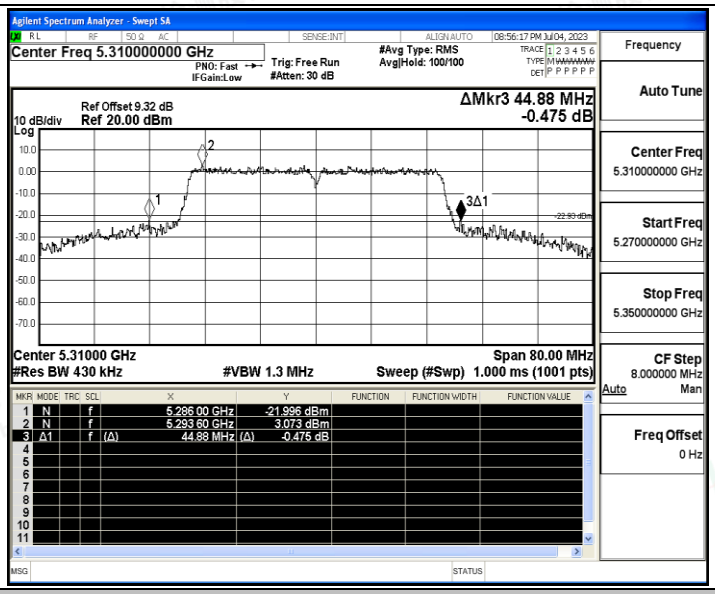


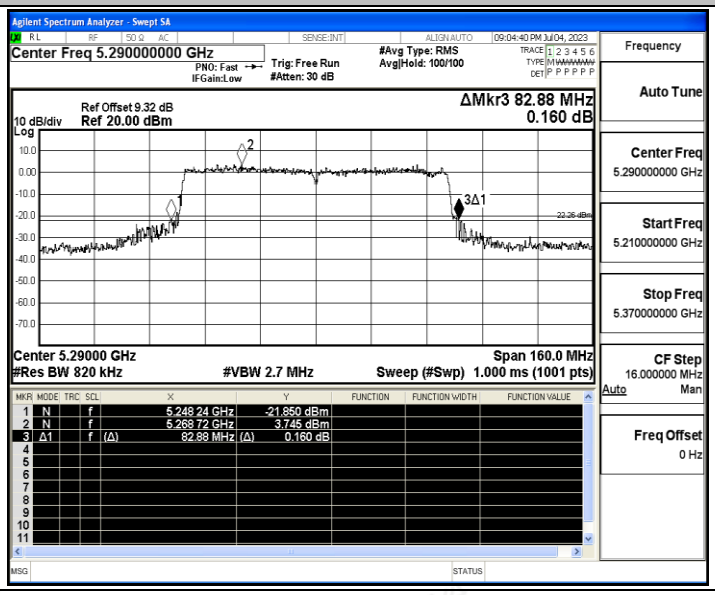
11AC40SISO_Ant1_5270



11AC40SISO_Ant1_5310



11AC80SISO_Ant1_5290



D.2 Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5260	13.49	≤24	PASS
		5300	12.97	≤24	PASS
		5320	12.80	≤24	PASS
11N20SISO	Ant1	5260	13.95	≤24	PASS
		5300	13.21	≤24	PASS
		5320	12.80	≤24	PASS
11N40SISO	Ant1	5270	13.46	≤24	PASS
		5310	12.80	≤24	PASS
11AC20SISO	Ant1	5260	13.66	≤24	PASS
		5300	13.17	≤24	PASS
		5320	13.03	≤24	PASS
11AC40SISO	Ant1	5270	13.62	≤24	PASS
		5310	13.03	≤24	PASS
11AC80SISO	Ant1	5290	13.02	≤24	PASS

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

D.3 Maximum power spectral density

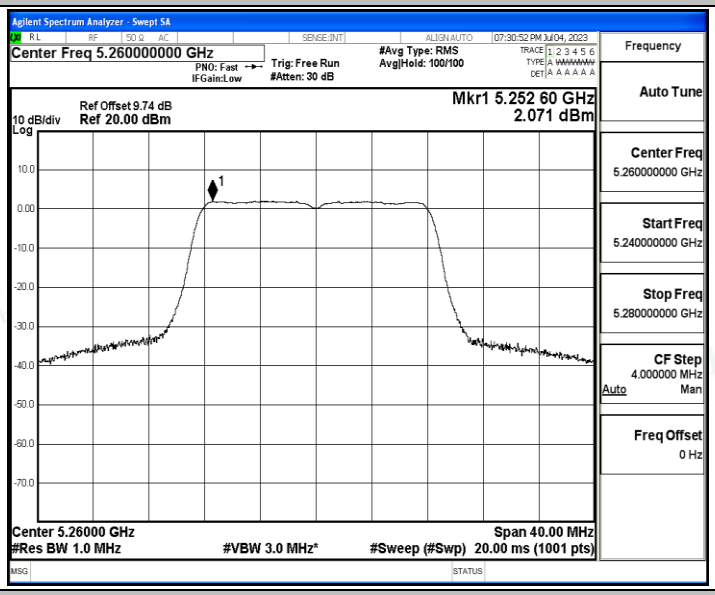
Test Result

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5260	2.07	≤11.00	PASS
		5300	1.53	≤11.00	PASS
		5320	1.28	≤11.00	PASS
11N20SISO	Ant1	5260	2.37	≤11.00	PASS
		5300	1.67	≤11.00	PASS
		5320	1.21	≤11.00	PASS
11N40SISO	Ant1	5270	-0.84	≤11.00	PASS
		5310	-1.53	≤11.00	PASS
11AC20SISO	Ant1	5260	2.13	≤11.00	PASS
		5300	1.48	≤11.00	PASS
		5320	1.35	≤11.00	PASS
11AC40SISO	Ant1	5270	-0.79	≤11.00	PASS
		5310	-1.43	≤11.00	PASS
11AC80SISO	Ant1	5290	-3.68	≤11.00	PASS

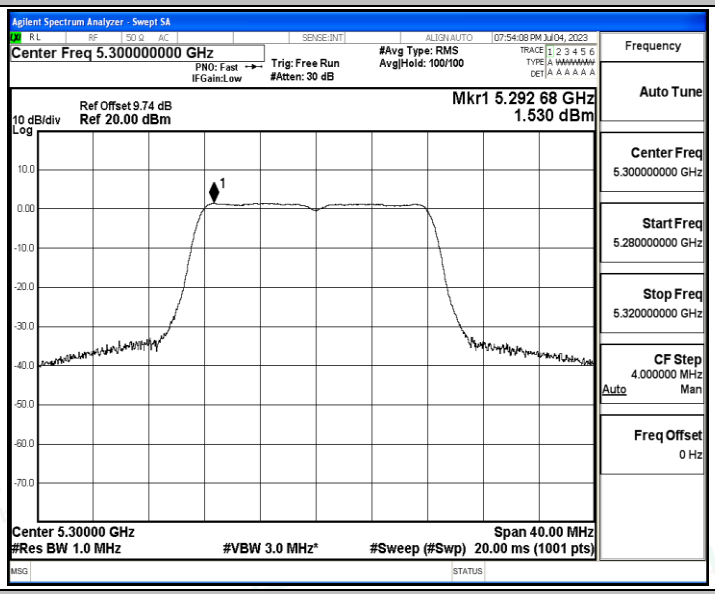
Note：1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

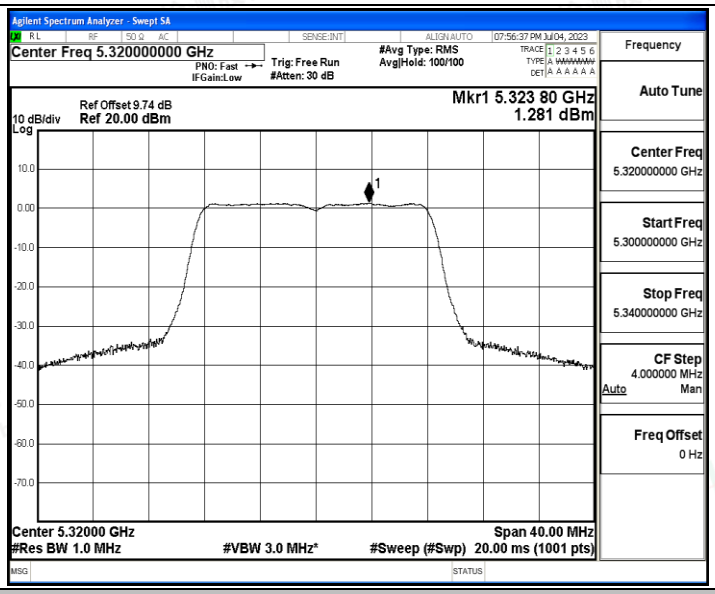
11A_Ant1_5260



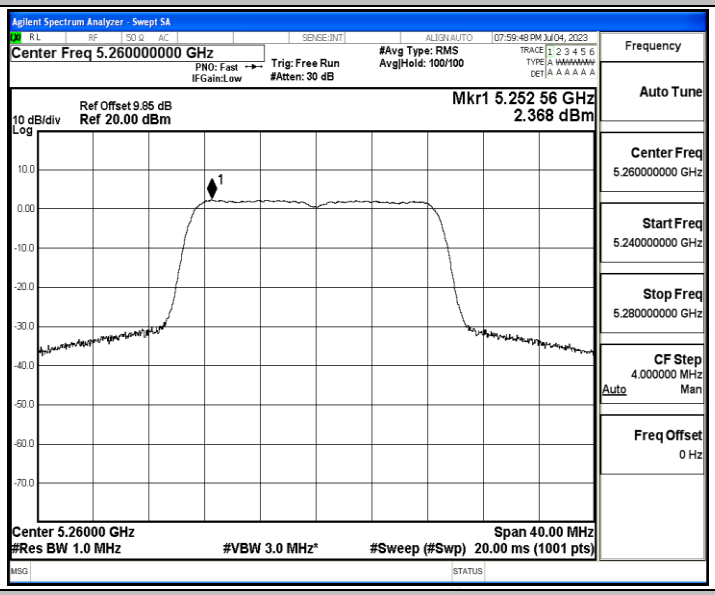
11A_Ant1_5300



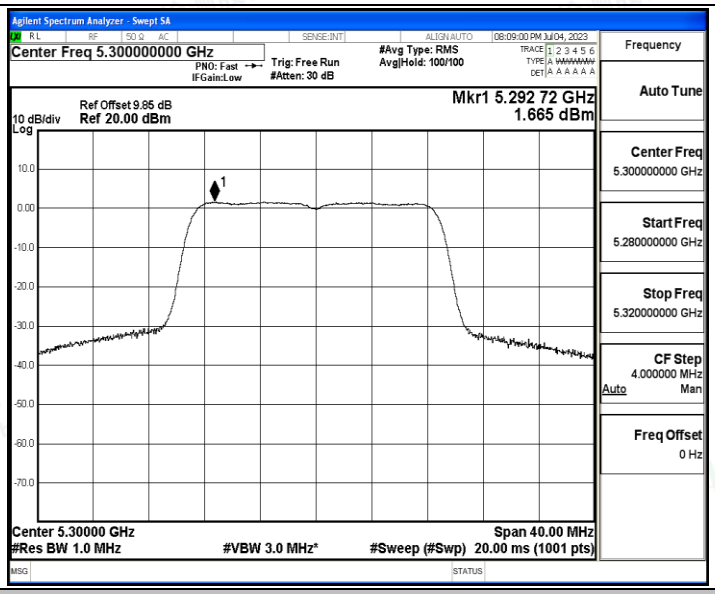
11A_Ant1_5320



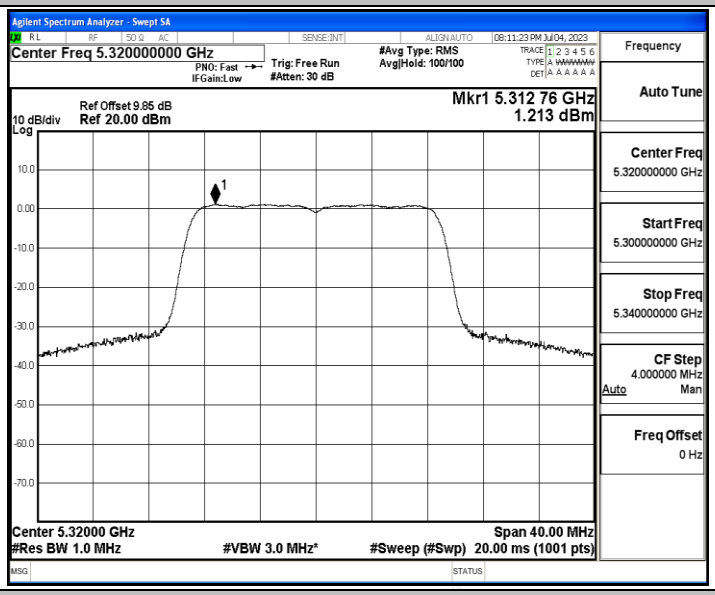
11N20SISO_Ant1_5260



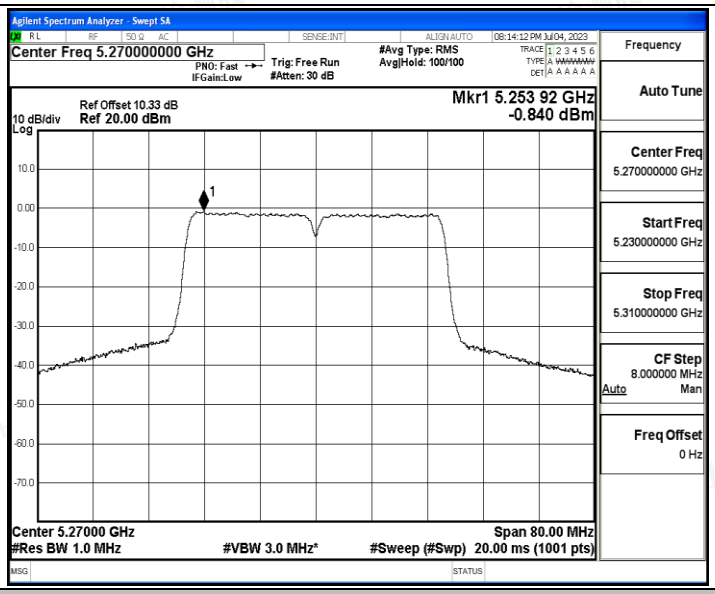
11N20SISO_Ant1_5300



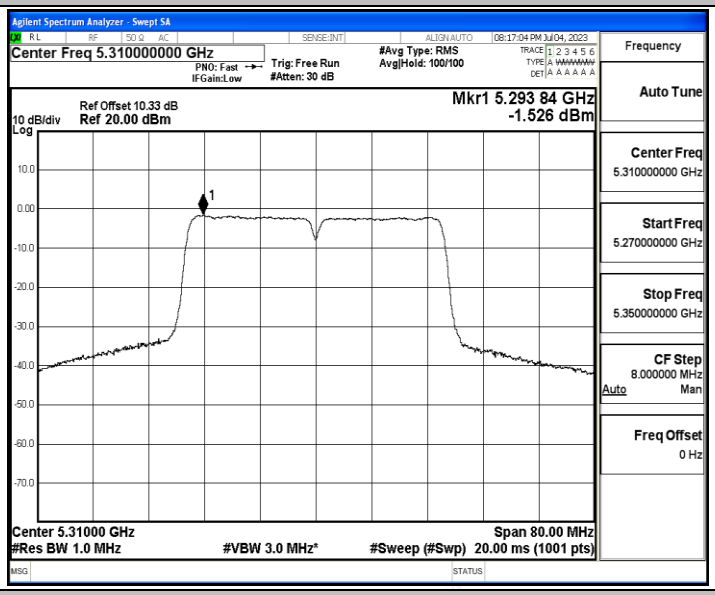
11N20SISO_Ant1_5320



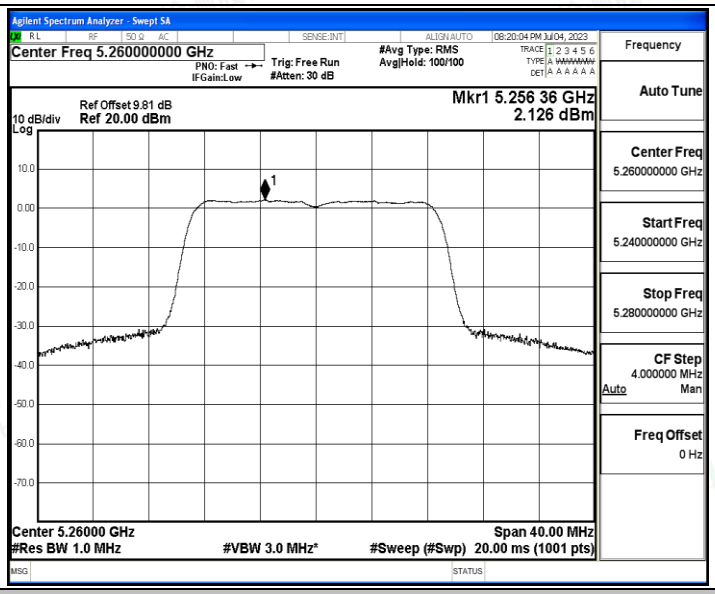
11N40SISO_Ant1_5270



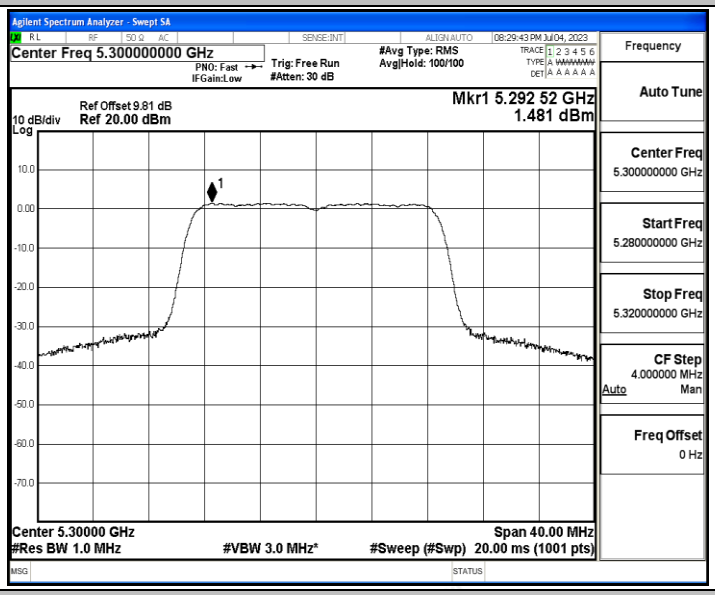
11N40SISO_Ant1_5310



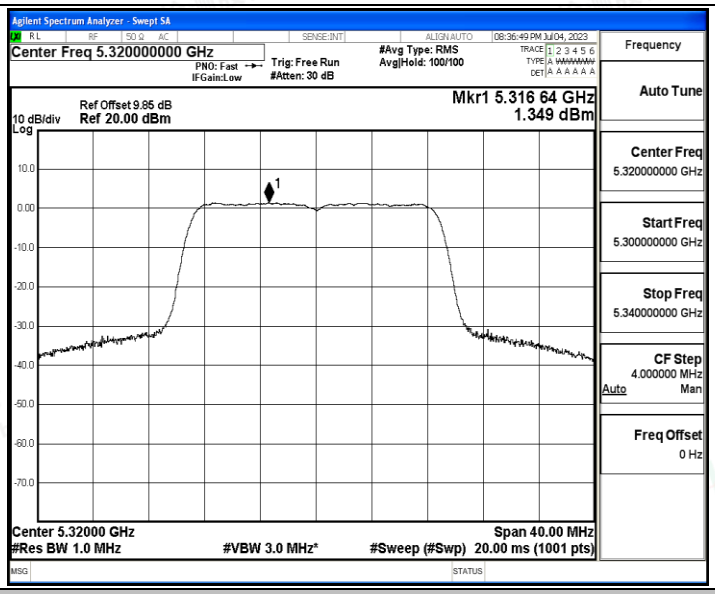
11AC20SISO_Ant1_5260



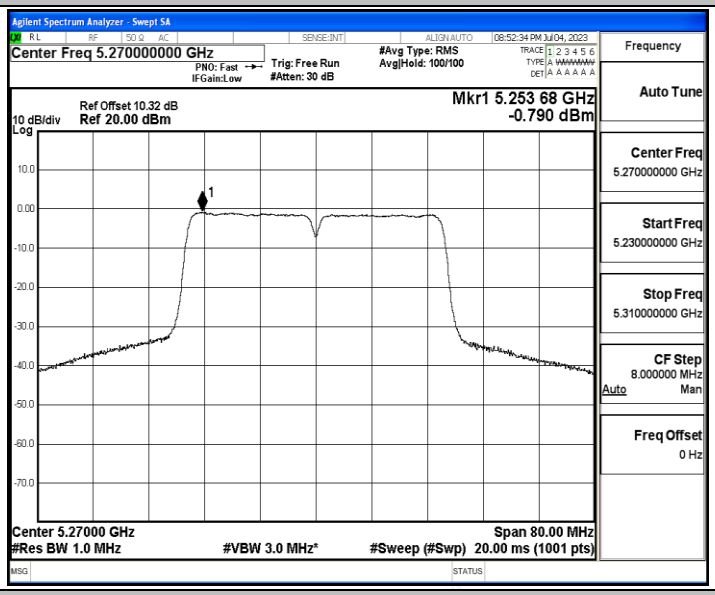
11AC20SISO_Ant1_5300



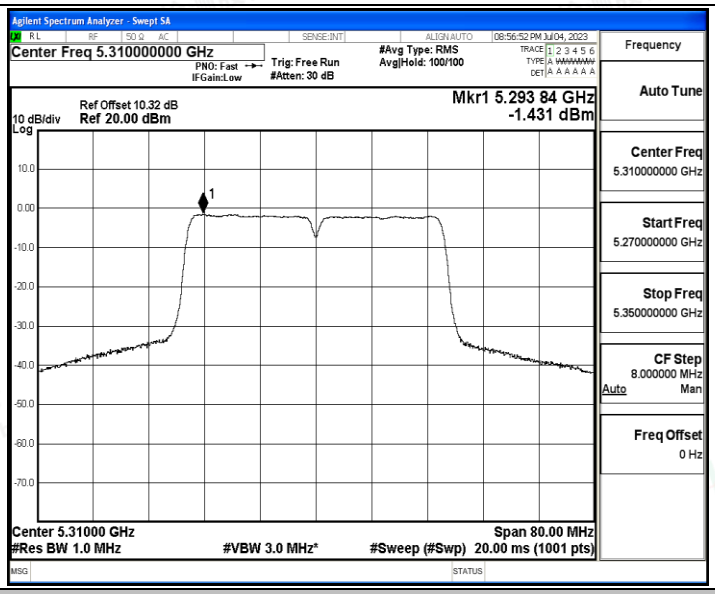
11AC20SISO_Ant1_5320



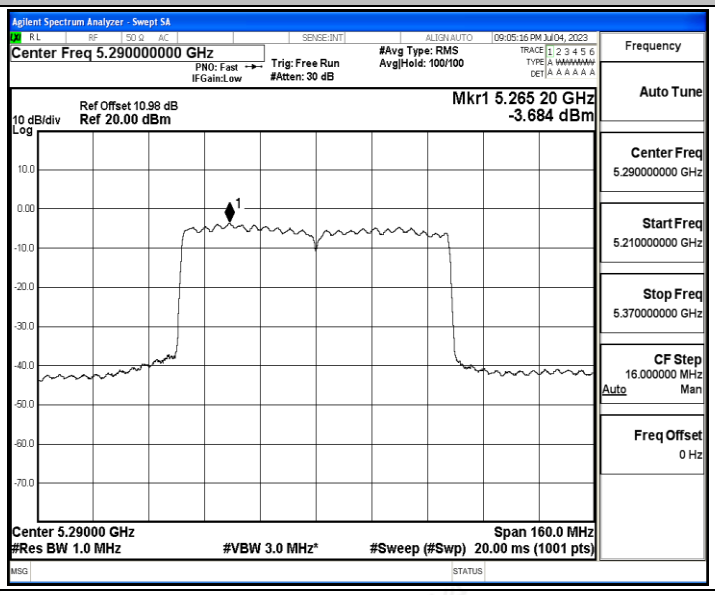
11AC40SISO_Ant1_5270



11AC40SISO_Ant1_5310



11AC80SISO_Ant1_5290



D.4 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Frequency[MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant1	Low	5260	AV	4500.000	-58.17	≤-41.20	37.03	≤54	PASS
				AV	4787.560	-51.34	≤-41.20	43.86	≤54	PASS
				AV	5150.000	-54.89	≤-41.20	40.31	≤54	PASS
				Peak	4500.000	-50.84	≤-21.20	44.36	≤74	PASS
				Peak	4787.560	-45.35	≤-21.20	49.85	≤74	PASS
				Peak	5150.000	-46.88	≤-21.20	48.32	≤74	PASS
		High	5320	AV	5350.000	-46.89	≤-41.20	48.31	≤54	PASS
				AV	5350.080	-46.89	≤-41.20	48.31	≤54	PASS
				AV	5460.000	-57.23	≤-41.20	37.97	≤54	PASS
				Peak	5350.000	-37.51	≤-21.20	57.69	≤74	PASS
				Peak	5354.080	-34.85	≤-21.20	60.35	≤74	PASS
				Peak	5460.000	-51.21	≤-21.20	43.99	≤74	PASS
11N20SISO	Ant1	Low	5260	AV	4500.000	-58.14	≤-41.20	37.06	≤54	PASS
				AV	4787.560	-50.72	≤-41.20	44.48	≤54	PASS
				AV	5150.000	-54.62	≤-41.20	40.58	≤54	PASS
				Peak	4500.000	-50.49	≤-21.20	44.71	≤74	PASS
				Peak	4788.350	-44.89	≤-21.20	50.31	≤74	PASS
				Peak	5150.000	-47.55	≤-21.20	47.65	≤74	PASS
		High	5320	AV	5350.000	-43.81	≤-41.20	51.39	≤54	PASS
				AV	5350.080	-43.81	≤-41.20	51.39	≤54	PASS
				AV	5460.000	-57.06	≤-41.20	38.14	≤54	PASS
				Peak	5350.000	-34.72	≤-21.20	60.48	≤74	PASS
				Peak	5350.720	-32.98	≤-21.20	62.22	≤74	PASS
				Peak	5460.000	-51.25	≤-21.20	43.95	≤74	PASS
11N40SISO	Ant1	Low	5270	AV	4500.000	-57.93	≤-41.20	37.27	≤54	PASS
				AV	4807.310	-46.32	≤-41.20	48.88	≤54	PASS
				AV	5150.000	-54.82	≤-41.20	40.38	≤54	PASS
				Peak	4500.000	-52.7	≤-21.20	42.50	≤74	PASS
				Peak	4806.520	-40.61	≤-21.20	54.59	≤74	PASS
				Peak	5150.000	-49.92	≤-21.20	45.28	≤74	PASS
		High	5310	AV	5350.000	-48.63	≤-41.20	46.57	≤54	PASS
				AV	5350.240	-48.55	≤-41.20	46.65	≤54	PASS
				AV	5460.000	-56.96	≤-41.20	38.24	≤54	PASS
				Peak	5350.000	-39.02	≤-21.20	56.18	≤74	PASS

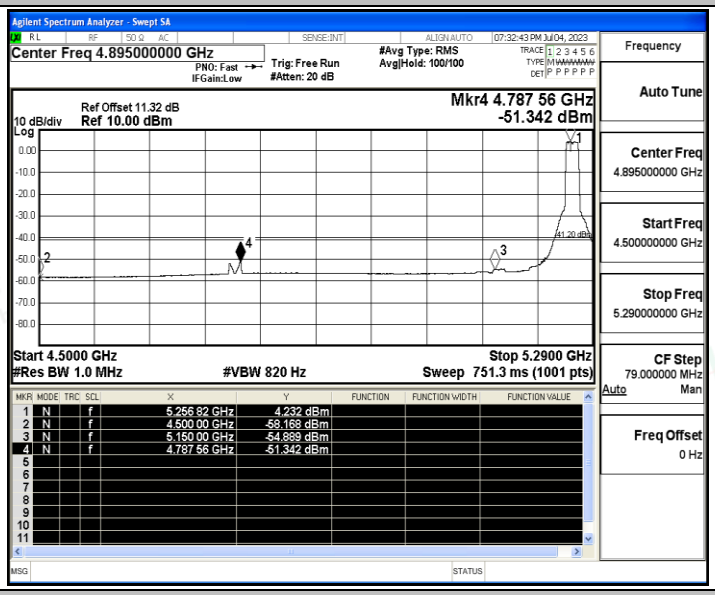
				Peak	5351.200	-36.69	≤-21.20	58.51	≤74	PASS
				Peak	5460.000	-51.31	≤-21.20	43.89	≤74	PASS
11AC20SISO	Ant1	Low	5260	AV	4500.000	-58.26	≤-41.20	36.94	≤54	PASS
				AV	4787.560	-50.99	≤-41.20	44.21	≤54	PASS
				AV	5150.000	-54.86	≤-41.20	40.34	≤54	PASS
				Peak	4500.000	-53.49	≤-21.20	41.71	≤74	PASS
				Peak	4771.760	-44.67	≤-21.20	50.53	≤74	PASS
				Peak	5150.000	-47.61	≤-21.20	47.59	≤74	PASS
		High	5320	AV	5350.000	-45.1	≤-41.20	50.10	≤54	PASS
				AV	5350.240	-45.06	≤-41.20	50.14	≤54	PASS
				AV	5460.000	-57.22	≤-41.20	37.98	≤54	PASS
				Peak	5350.000	-38.36	≤-21.20	56.84	≤74	PASS
				Peak	5353.920	-31.85	≤-21.20	63.35	≤74	PASS
				Peak	5460.000	-51.76	≤-21.20	43.44	≤74	PASS
11AC40SISO	Ant1	Low	5270	AV	4500.000	-57.96	≤-41.20	37.24	≤54	PASS
				AV	4807.310	-46.45	≤-41.20	48.75	≤54	PASS
				AV	5150.000	-54.64	≤-41.20	40.56	≤54	PASS
				Peak	4500.000	-50.75	≤-21.20	44.45	≤74	PASS
				Peak	4773.340	-40.23	≤-21.20	54.97	≤74	PASS
				Peak	5150.000	-48	≤-21.20	47.20	≤74	PASS
		High	5310	AV	5350.000	-48.28	≤-41.20	46.92	≤54	PASS
				AV	5350.080	-48.28	≤-41.20	46.92	≤54	PASS
				AV	5460.000	-57.28	≤-41.20	37.92	≤54	PASS
				Peak	5350.000	-33.15	≤-21.20	62.05	≤74	PASS
				Peak	5350.080	-33.15	≤-21.20	62.05	≤74	PASS
				Peak	5460.000	-50.85	≤-21.20	44.35	≤74	PASS
11AC80SISO	Ant1	Low	5290	AV	4500.000	-57.67	≤-41.20	37.53	≤54	PASS
				AV	5146.570	-54.96	≤-41.20	40.24	≤54	PASS
				AV	5150.000	-55.49	≤-41.20	39.71	≤54	PASS
				Peak	4500.000	-51.99	≤-21.20	43.21	≤74	PASS
				Peak	5072.700	-46.5	≤-21.20	48.70	≤74	PASS
				Peak	5150.000	-48.81	≤-21.20	46.39	≤74	PASS
		High	5290	AV	5350.000	-49.97	≤-41.20	45.23	≤54	PASS
				AV	5352.400	-49.89	≤-41.20	45.31	≤54	PASS
				AV	5460.000	-56.48	≤-41.20	38.72	≤54	PASS
				Peak	5350.000	-43.6	≤-21.20	51.60	≤74	PASS
				Peak	5364.600	-39.34	≤-21.20	55.86	≤74	PASS
				Peak	5460.000	-49.5	≤-21.20	45.70	≤74	PASS

Note:

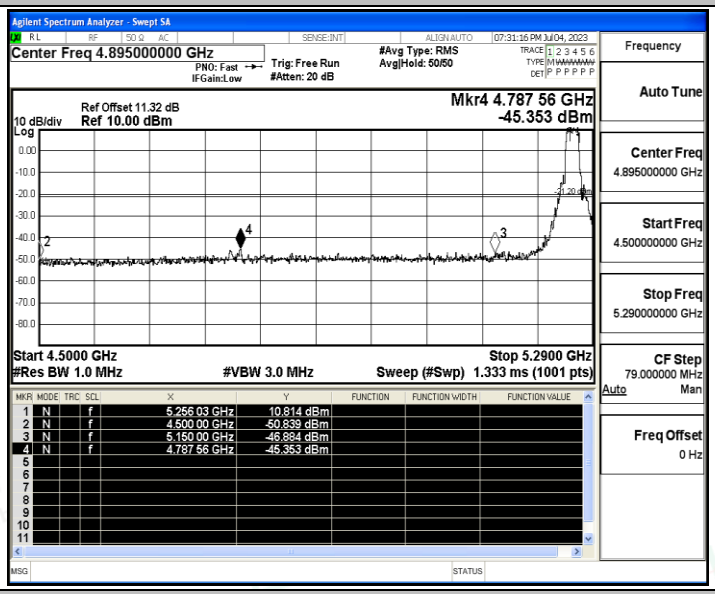
1. The Antenna Gain is compensated in the graph.
2. For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

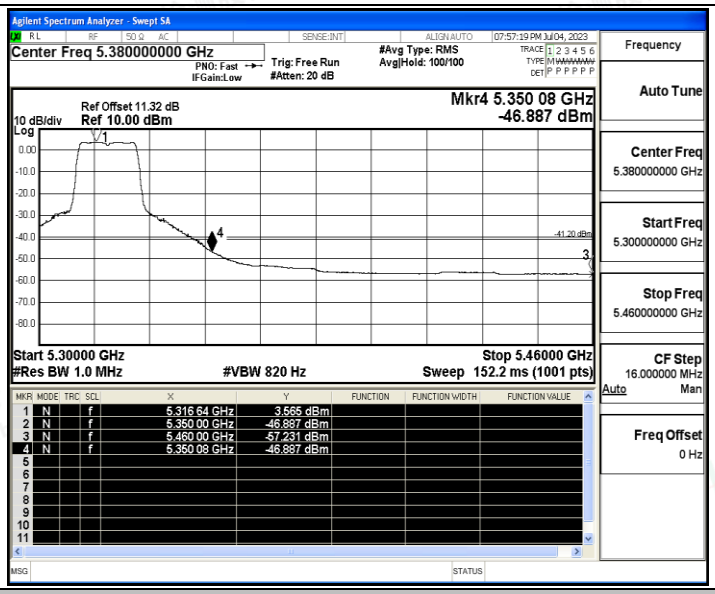
11A_Ant1_Low_5260_AV



11A_Ant1_Low_5260_Peak



11A_Ant1_High_5320_AV



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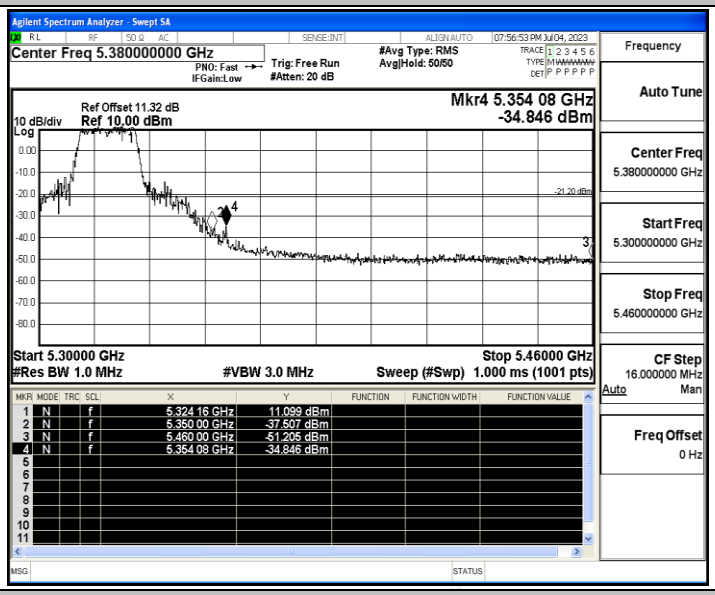

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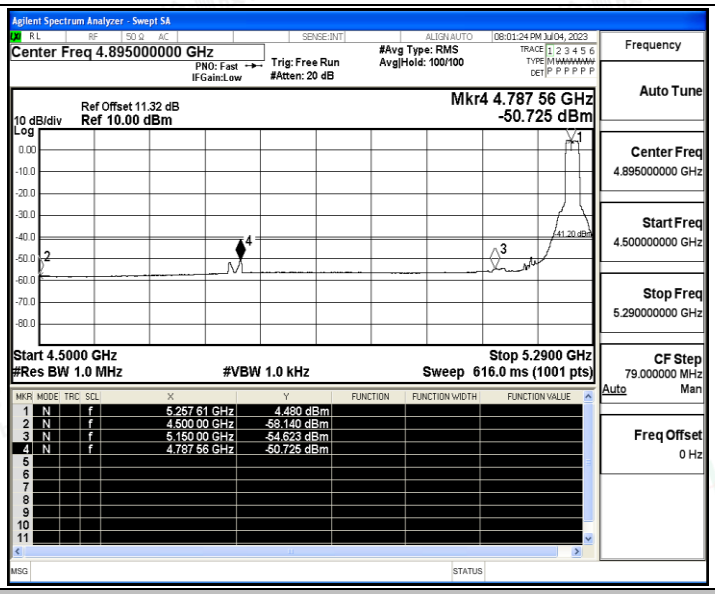

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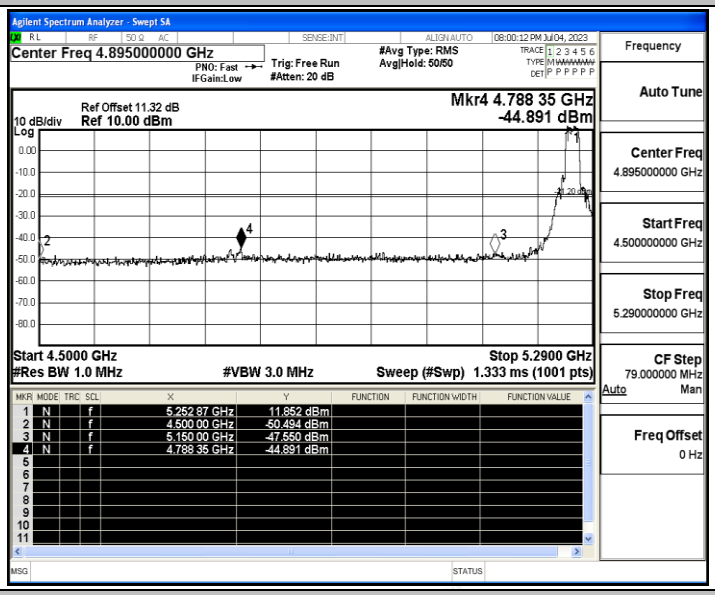

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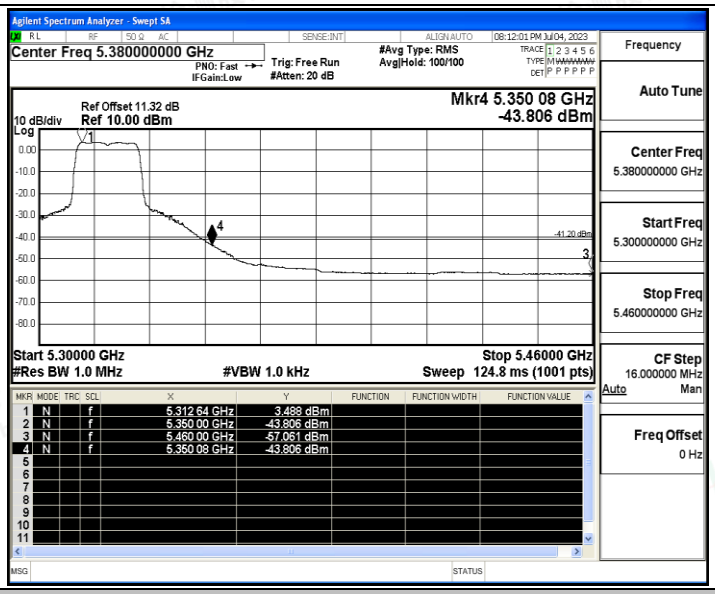

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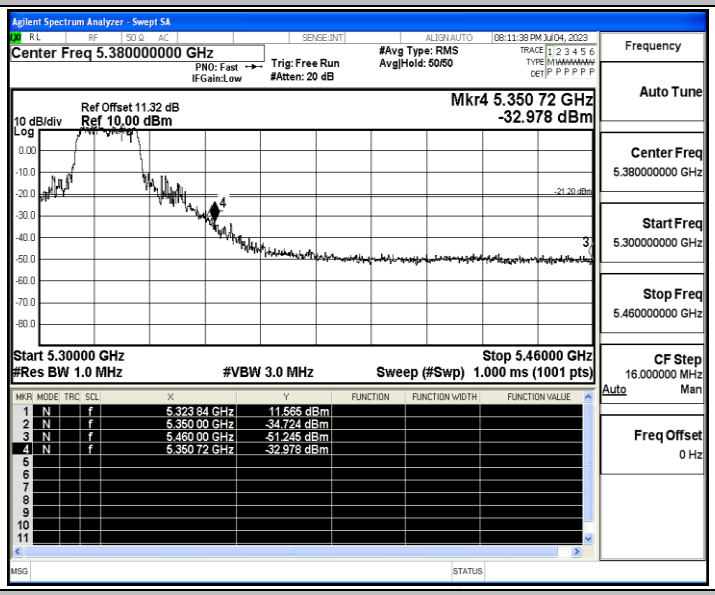

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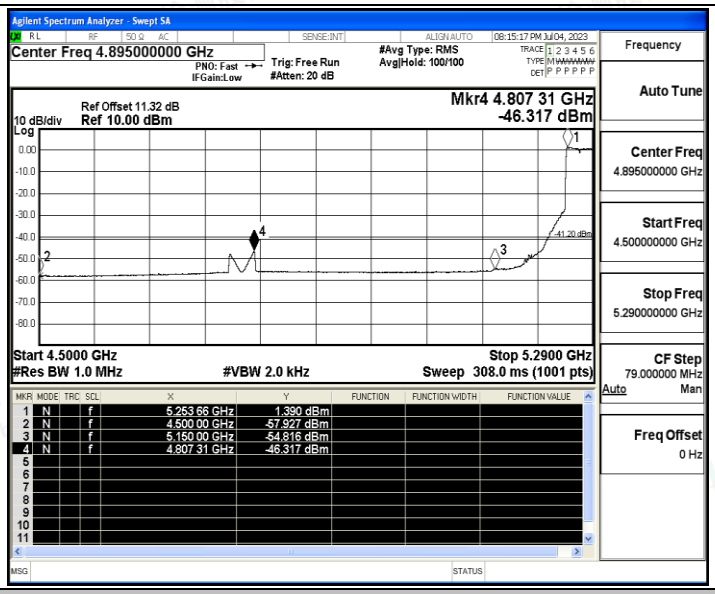

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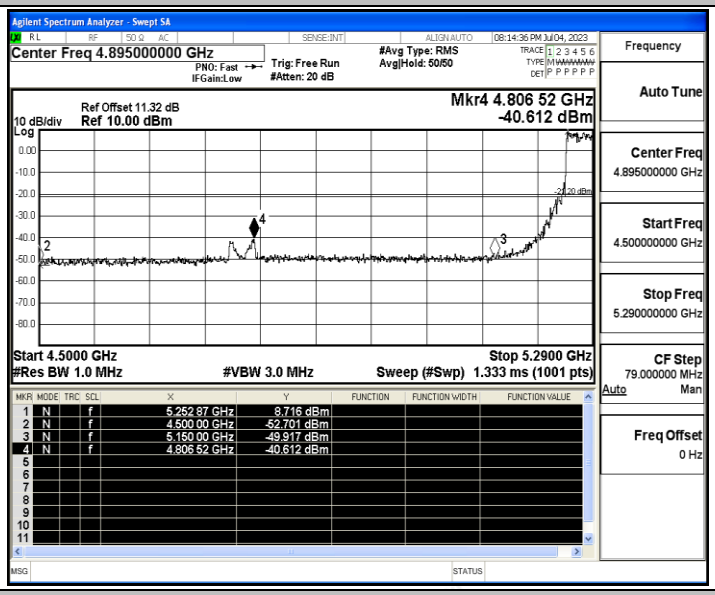

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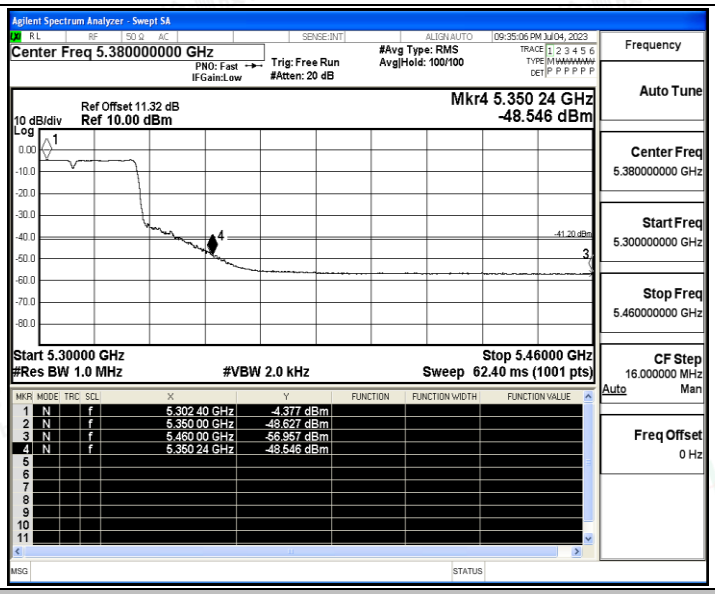

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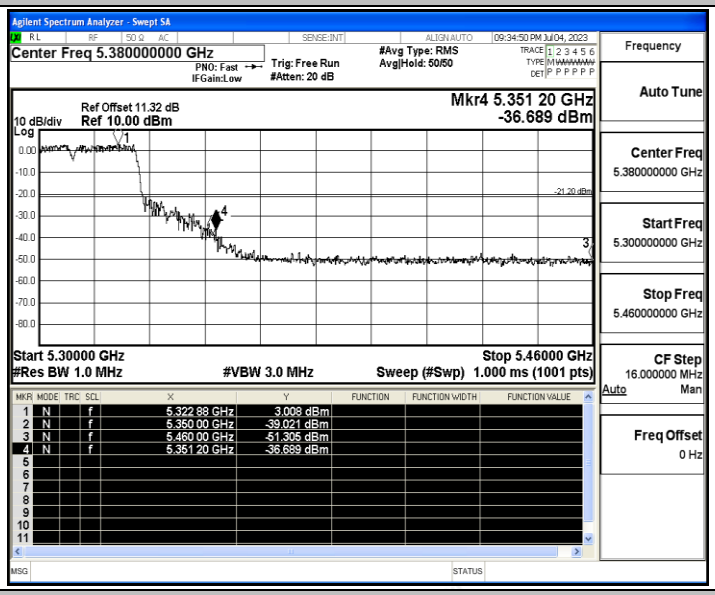
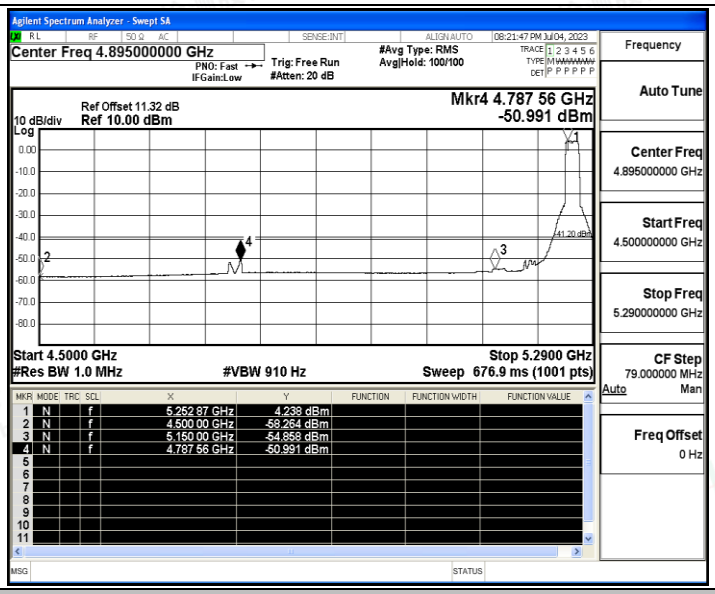


11AC20SISO_Ant1_Low_5260_AV



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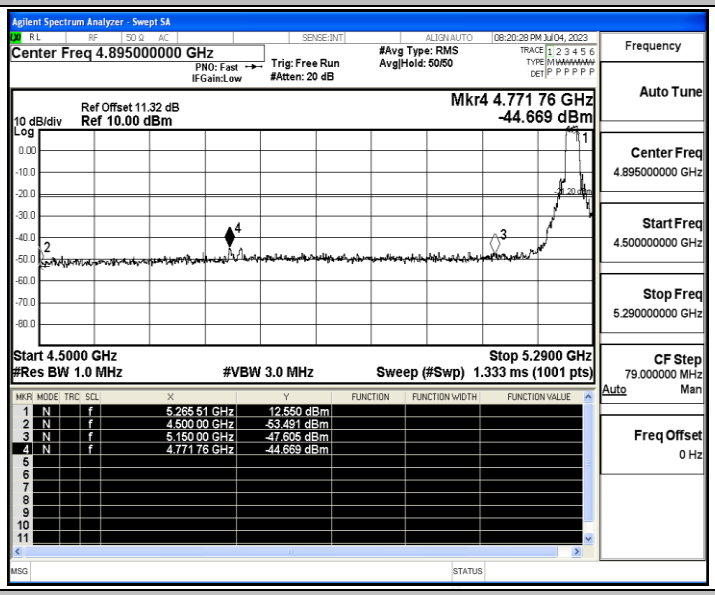

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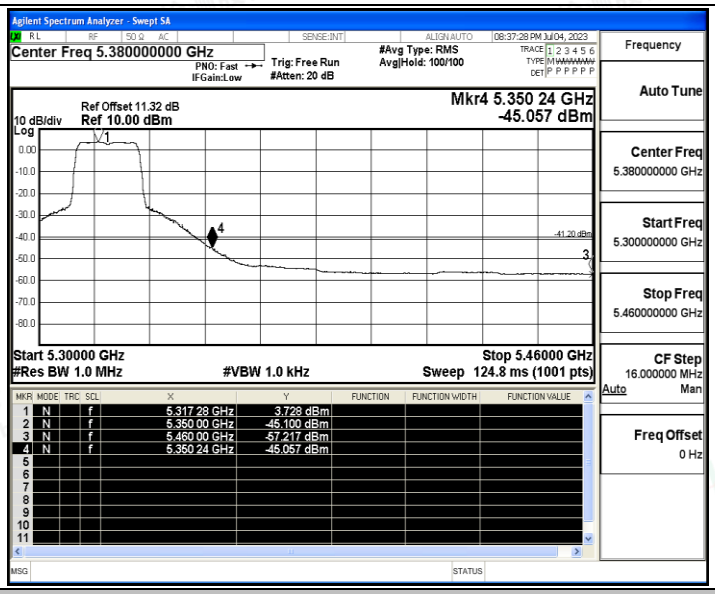

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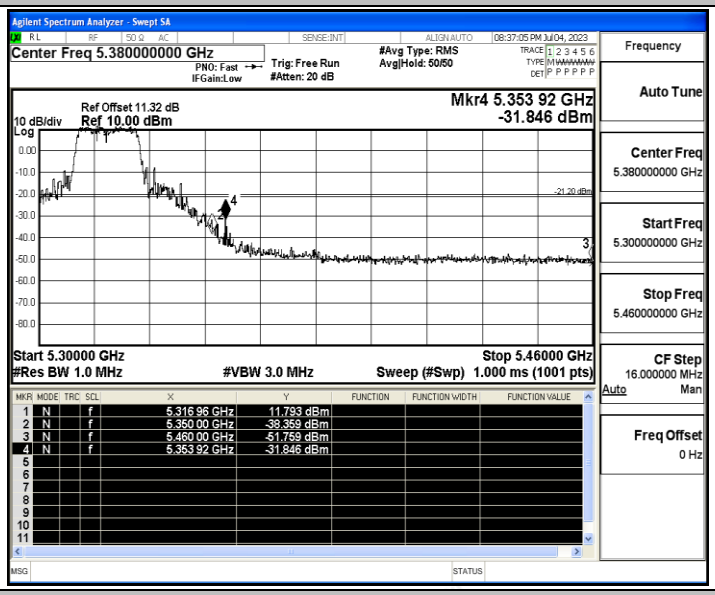

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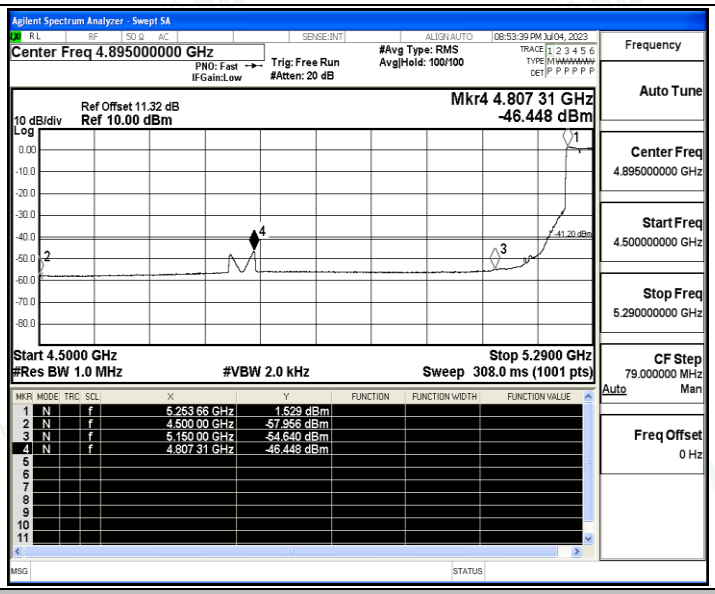

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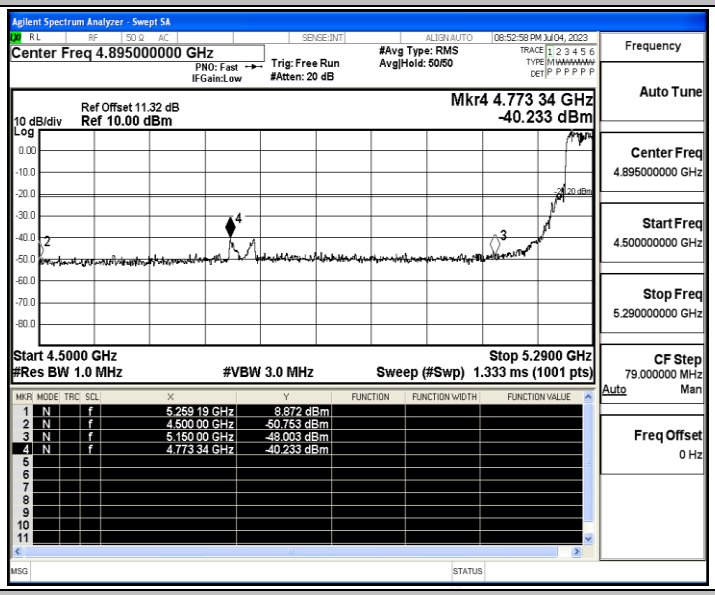

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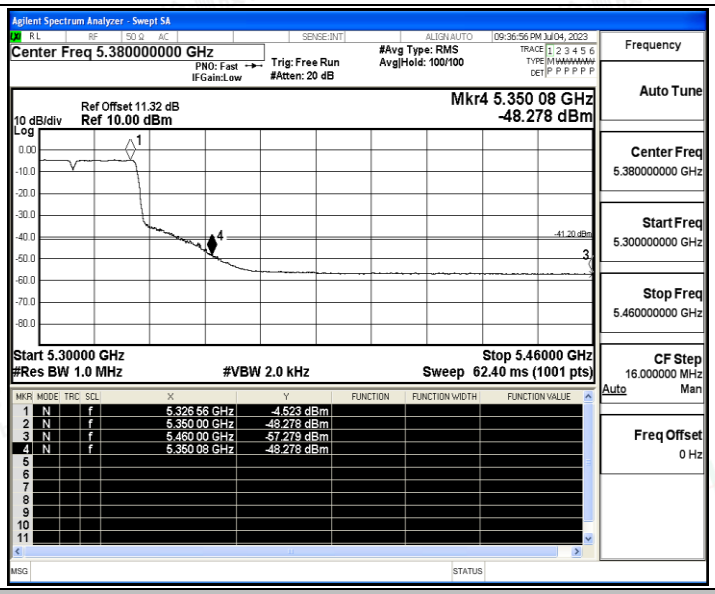

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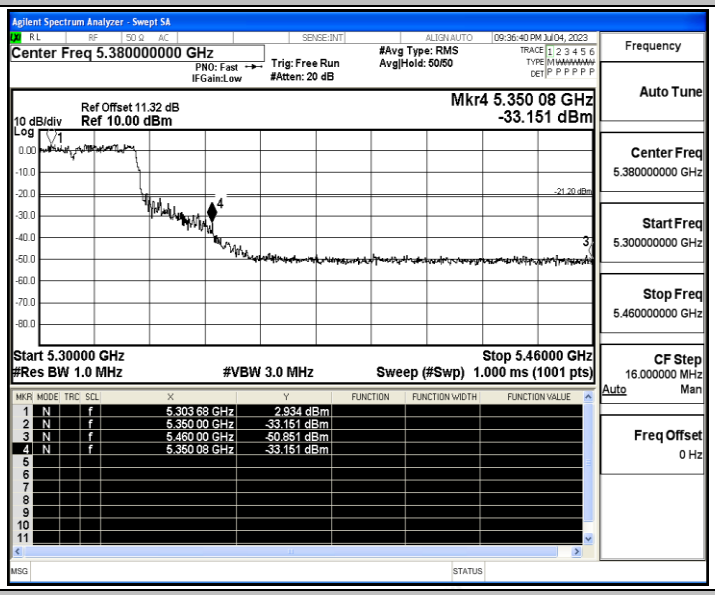

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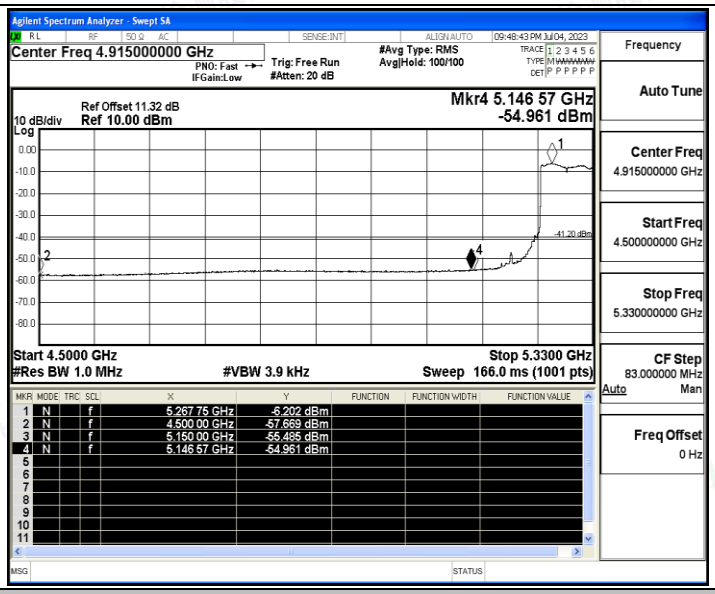

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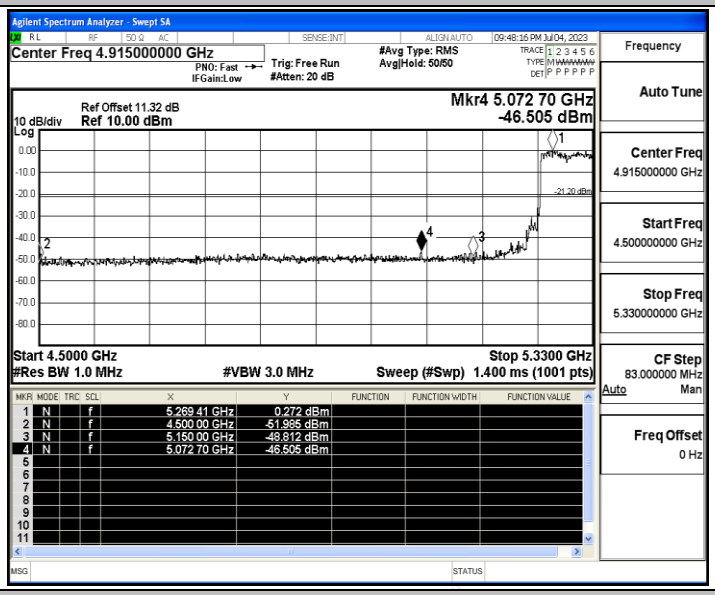

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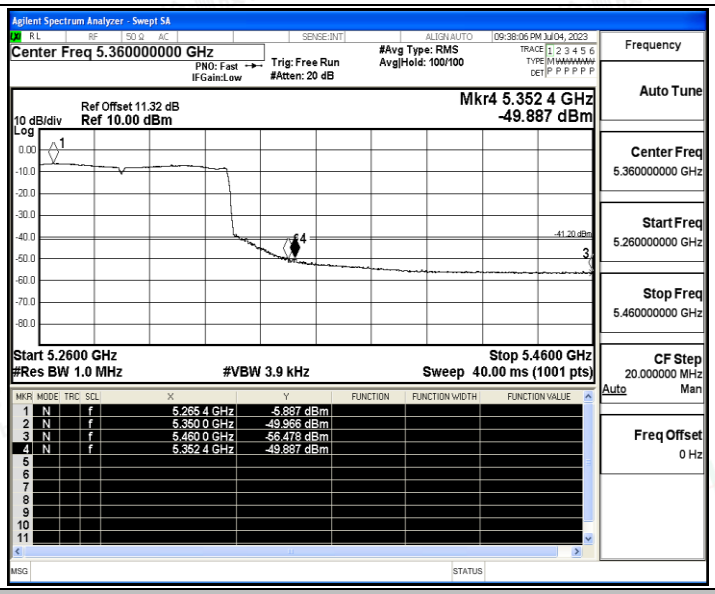

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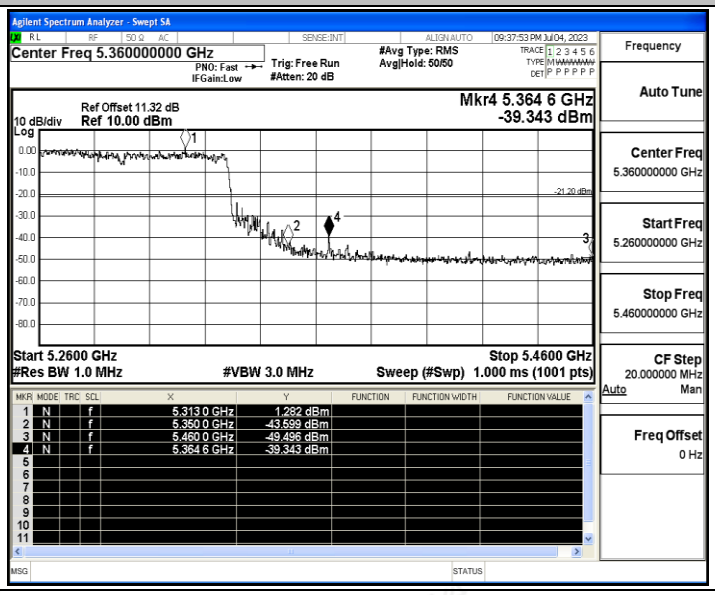


D.5 Frequency Stability

Test Result

Voltage								
TestMode	Antenna	Frequency[MHz]	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20S ISO	Ant1	5260	NV	NT	-60000.00	-11.406844	20	PASS
			LV	NT	-40000.00	-7.604563	20	PASS
			HV	NT	-20000.00	-3.802281	20	PASS
		5300	NV	NT	-60000.00	-11.320755	20	PASS
			LV	NT	-20000.00	-3.773585	20	PASS
			HV	NT	0.00	0.000000	20	PASS
		5320	NV	NT	-60000.00	-11.278195	20	PASS
			LV	NT	-20000.00	-3.759398	20	PASS
			HV	NT	-20000.00	-3.759398	20	PASS
11AC40S ISO	Ant1	5270	NV	NT	0.00	0.000000	20	PASS
			LV	NT	-80000.00	-15.180266	20	PASS
			HV	NT	-40000.00	-7.590133	20	PASS
		5310	NV	NT	-40000.00	-7.532957	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	-40000.00	-7.532957	20	PASS
11AC80S ISO	Ant1	5290	NV	NT	-80000.00	-15.122873	20	PASS
			LV	NT	0.00	0.000000	20	PASS
			HV	NT	-80000.00	-15.122873	20	PASS

Temperature								
TestMode	Antenna	Frequency[MHz]	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20S ISO	Ant1	5260	NV	-30	-20000.00	-3.802281	20	PASS
			NV	-20	-20000.00	-3.802281	20	PASS
			NV	-10	-20000.00	-3.802281	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	-40000.00	-7.604563	20	PASS
			NV	20	-40000.00	-7.604563	20	PASS
			NV	30	-20000.00	-3.802281	20	PASS
			NV	40	-40000.00	-7.604563	20	PASS
			NV	50	-20000.00	-3.802281	20	PASS
		5300	NV	-30	0.00	0.000000	20	PASS
			NV	-20	-40000.00	-7.547170	20	PASS

			NV	-10	0.00	0.000000	20	PASS
			NV	0	-20000.00	-3.773585	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	-80000.00	-15.094340	20	PASS
			NV	30	-40000.00	-7.547170	20	PASS
			NV	40	-40000.00	-7.547170	20	PASS
			NV	50	-40000.00	-7.547170	20	PASS
		5320	NV	-30	-40000.00	-7.518797	20	PASS
			NV	-20	-20000.00	-3.759398	20	PASS
			NV	-10	-20000.00	-3.759398	20	PASS
			NV	0	-20000.00	-3.759398	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	-20000.00	-3.759398	20	PASS
			NV	30	-20000.00	-3.759398	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	20000.00	3.759398	20	PASS
11AC40S ISO	Ant1	5270	NV	-30	-40000.00	-7.590133	20	PASS
			NV	-20	-40000.00	-7.590133	20	PASS
			NV	-10	-80000.00	-15.180266	20	PASS
			NV	0	-40000.00	-7.590133	20	PASS
			NV	10	-40000.00	-7.590133	20	PASS
			NV	20	-40000.00	-7.590133	20	PASS
			NV	30	-80000.00	-15.180266	20	PASS
			NV	40	-40000.00	-7.590133	20	PASS
			NV	50	-80000.00	-15.180266	20	PASS
		5310	NV	-30	-80000.00	-15.065913	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	-80000.00	-15.065913	20	PASS
			NV	20	-40000.00	-7.532957	20	PASS
			NV	30	-80000.00	-15.065913	20	PASS
			NV	40	-40000.00	-7.532957	20	PASS
			NV	50	-40000.00	-7.532957	20	PASS
11AC80S ISO	Ant1	5290	NV	-30	-80000.00	-15.122873	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	-80000.00	-15.122873	20	PASS
			NV	0	-80000.00	-15.122873	20	PASS
			NV	10	-80000.00	-15.122873	20	PASS

			NV	20	0.00	0.000000	20	PASS
			NV	30	-80000.00	-15.122873	20	PASS
			NV	40	-80000.00	-15.122873	20	PASS
			NV	50	0.00	0.000000	20	PASS

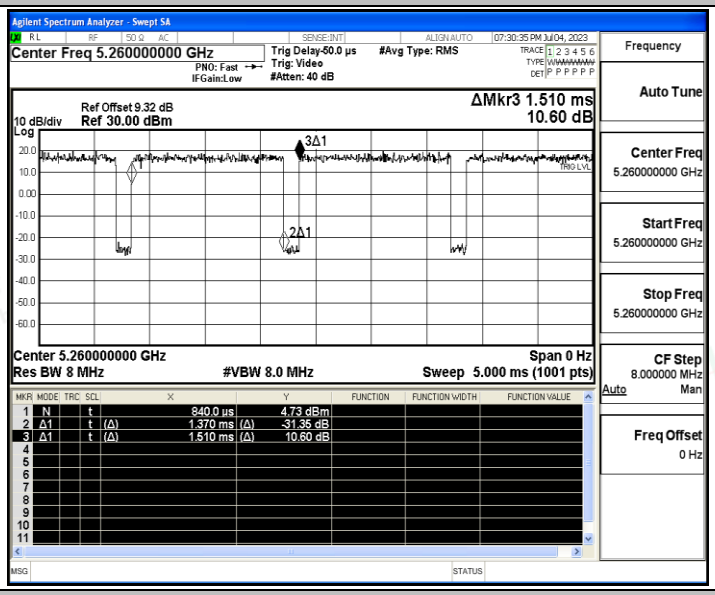
D.6 Duty Cycle

Test Result

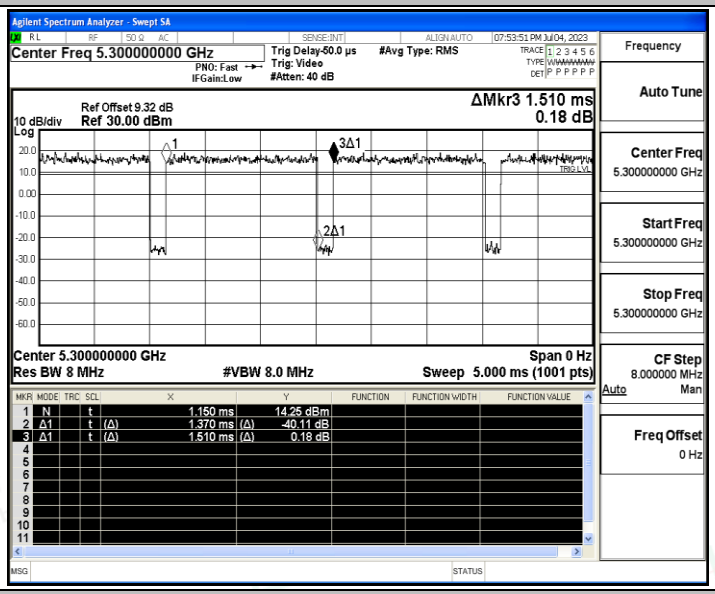
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5260	1.37	1.51	90.73
		5300	1.37	1.51	90.73
		5320	1.37	1.51	90.73
11N20SISO	Ant1	5260	1.15	1.30	88.46
		5300	1.15	1.30	88.46
		5320	1.15	1.30	88.46
11N40SISO	Ant1	5270	0.57	0.72	79.17
		5310	0.57	0.72	79.17
11AC20SISO	Ant1	5260	1.16	1.30	89.23
		5300	1.16	1.30	89.23
		5320	1.15	1.30	88.46
11AC40SISO	Ant1	5270	0.58	0.73	79.45
		5310	0.58	0.73	79.45
11AC80SISO	Ant1	5290	0.30	0.44	68.18

Test Graphs

11A_Ant1_5260



11A_Ant1_5300



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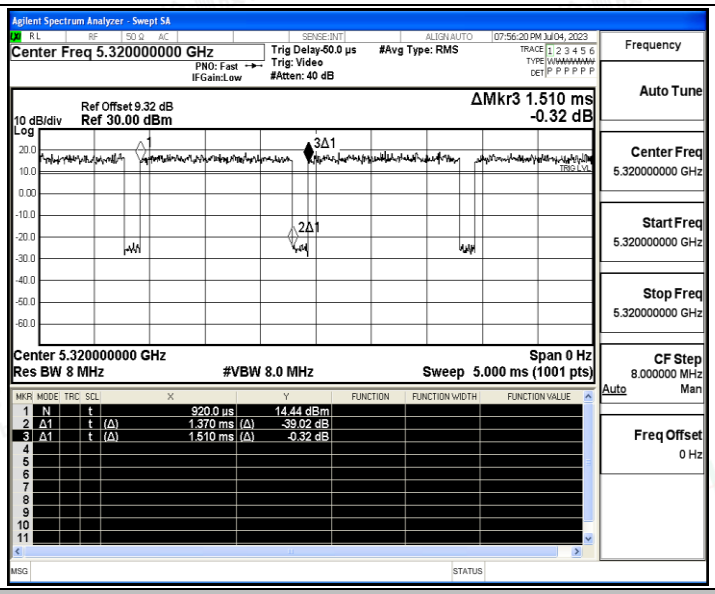

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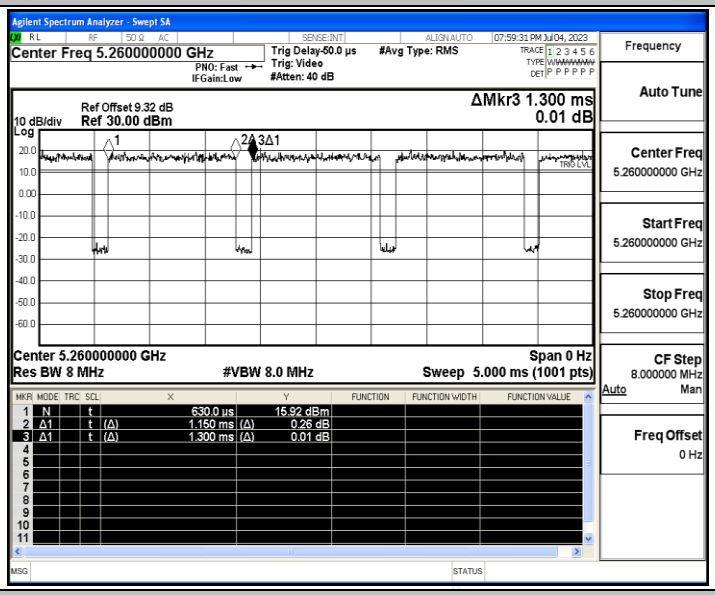

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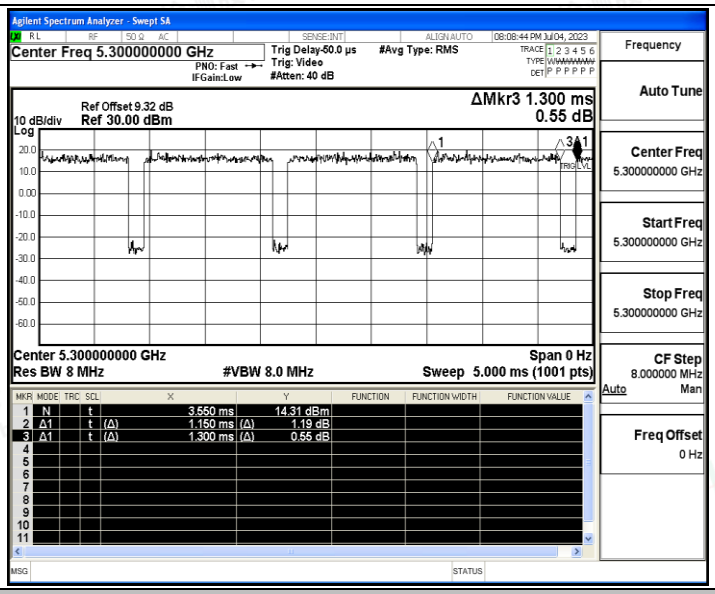

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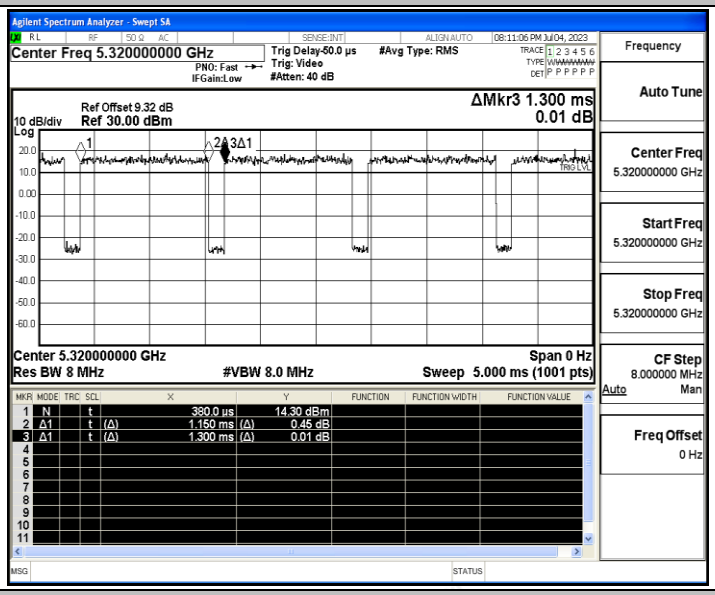

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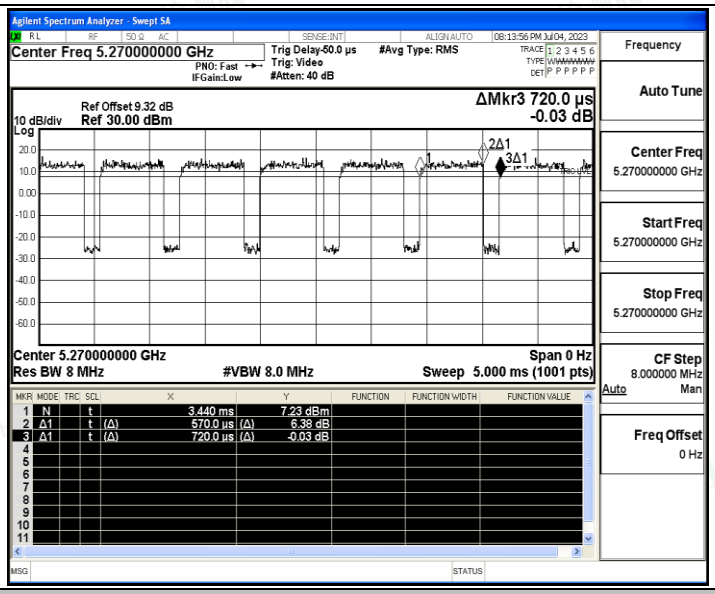

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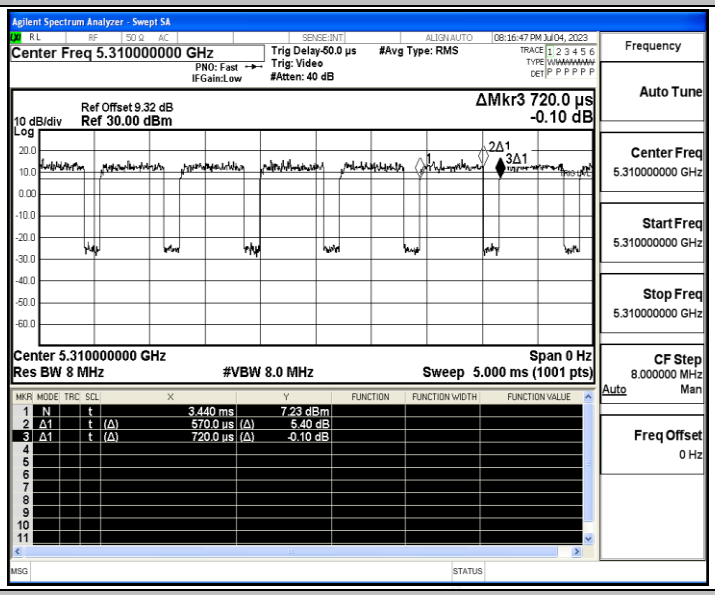

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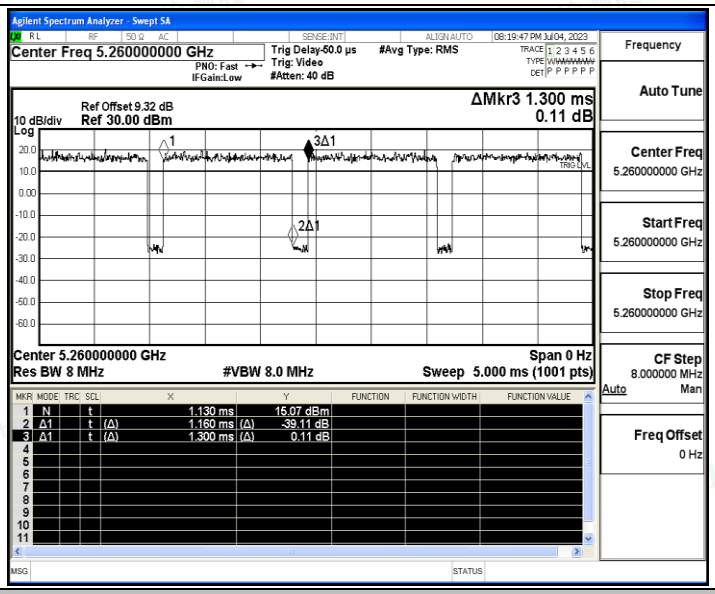

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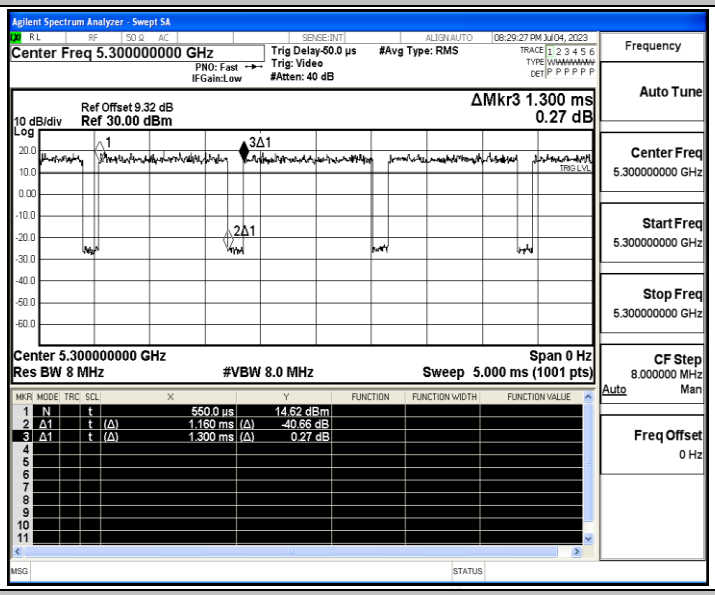

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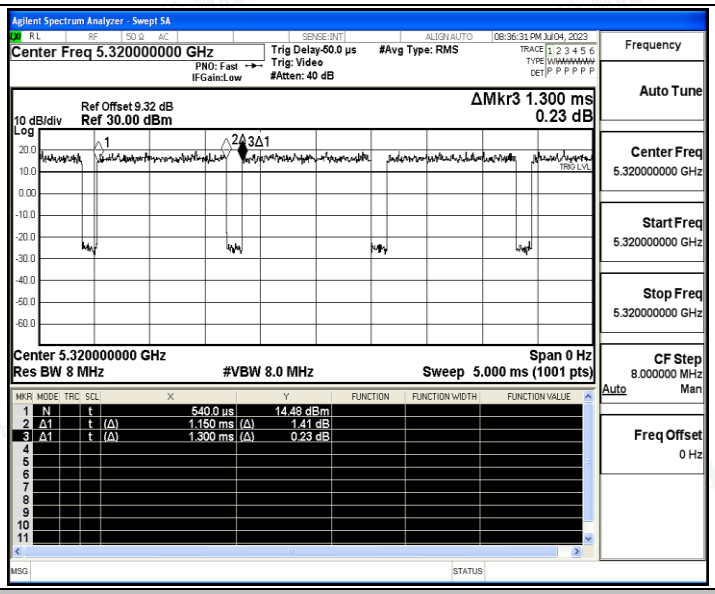

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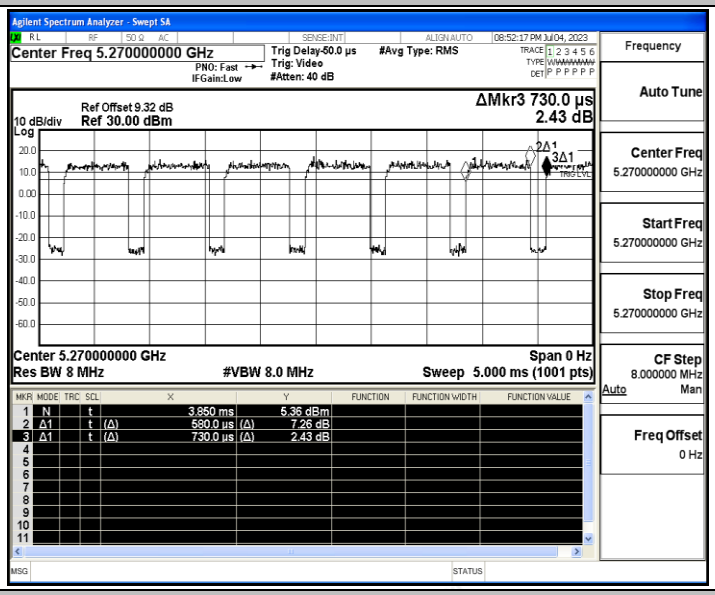

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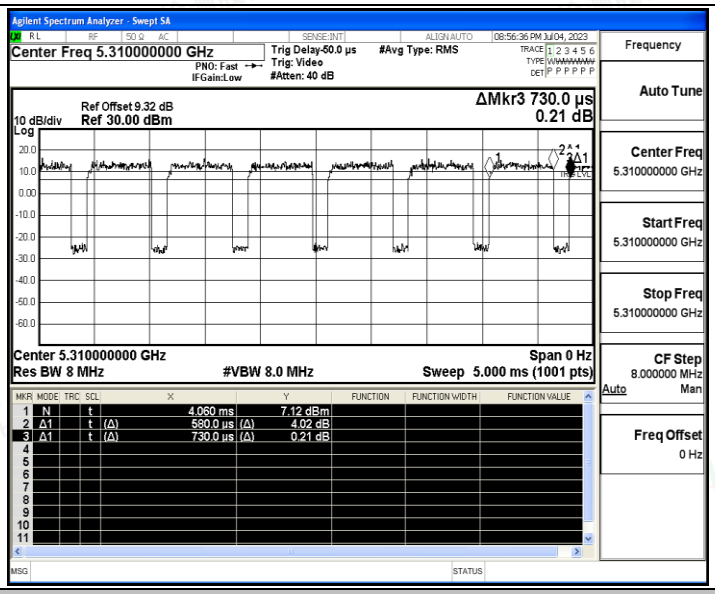
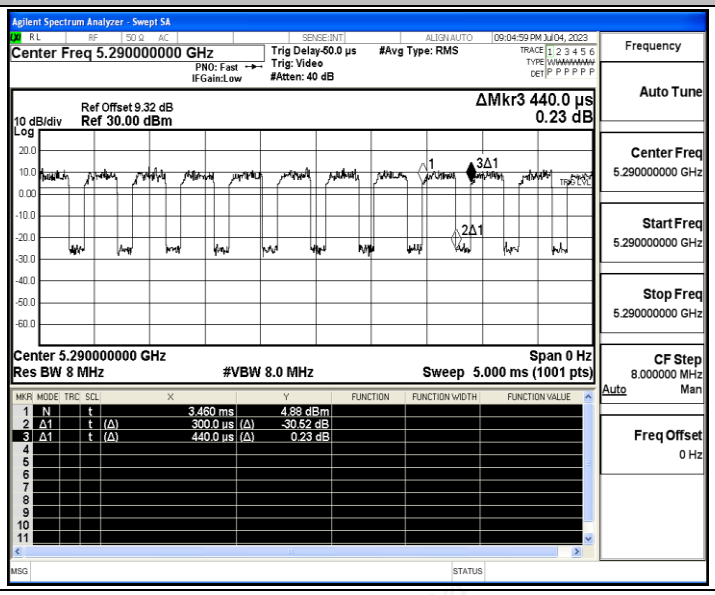
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