Appendix I WIFI 2.4G Test Data
Applicant: Shenzhen Xin An Zhuo Technology Co.,Ltd.
Report No: DLE-250709003R
EUT: Recorder
M/N: S3
Standard:FCC Part15 Subpart C, Section 15.247
Test Power Supply: DC 5V/3A from Car Charger
Ambient Condition: 24.7 ℃, 52 %RH, 101.325 kPa
Test Date: 2025.07.08 **Test Engineer:** Ken Tan Ken Tan

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.000	2407.040	2417.040	0.5	PASS
		2437	10.000	2432.040	2442.040	0.5	PASS
		2462	9.520	2457.520	2467.040	0.5	PASS
11G	Ant1	2412	16.280	2403.920	2420.200	0.5	PASS
		2437	16.040	2429.160	2445.200	0.5	PASS
		2462	16.280	2453.920	2470.200	0.5	PASS
11N20SISO	Ant1	2412	16.520	2403.920	2420.440	0.5	PASS
		2437	16.600	2428.920	2445.520	0.5	PASS
		2462	16.880	2453.680	2470.560	0.5	PASS
11N40SISO	Ant1	2422	35.040	2404.560	2439.600	0.5	PASS
		2437	35.040	2419.560	2454.600	0.5	PASS
		2452	35.120	2434.480	2469.600	0.5	PASS

Test Graphs

11B_Ant1_2412

11B_Ant1_2437

11B_Ant1_2462

11G_Ant1_2412

11G_Ant1_2437

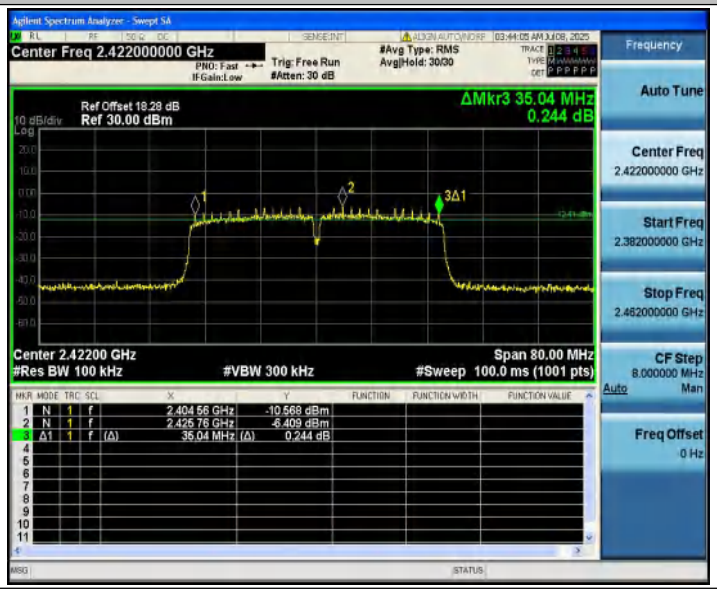
11G_Ant1_2462

11N20SISO_Ant1_2412

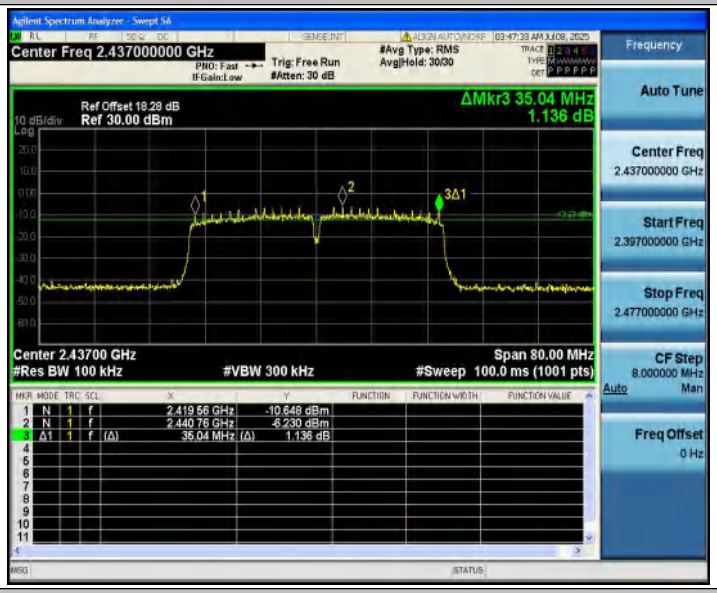
11N20SISO_Ant1_2437

11N20SISO_Ant1_2462

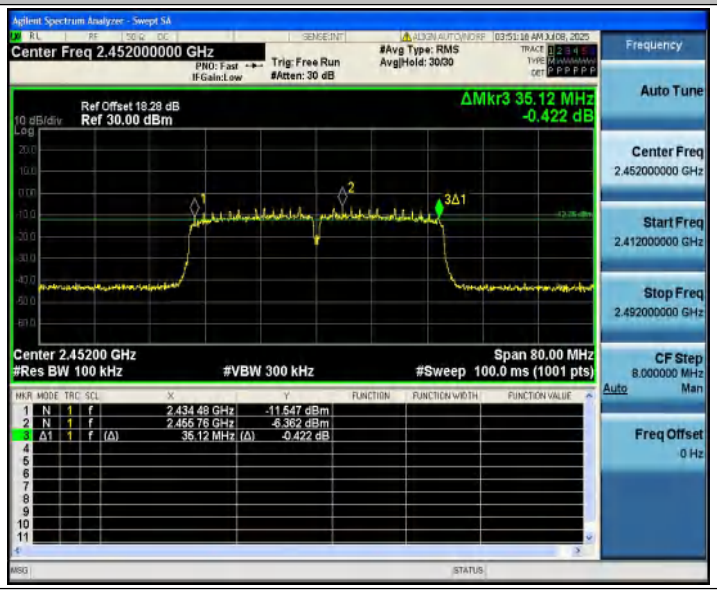
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.594	2404.7796	2419.3736	---	---
		2437	14.547	2429.7869	2444.3339	---	---
		2462	14.505	2454.7727	2469.2777	---	---
11G	Ant1	2412	16.495	2403.7653	2420.2603	---	---
		2437	16.615	2428.7256	2445.3406	---	---
		2462	16.572	2453.7242	2470.2962	---	---
11N20SISO	Ant1	2412	17.628	2403.1835	2420.8115	---	---
		2437	17.693	2428.1837	2445.8767	---	---
		2462	17.700	2453.1997	2470.8997	---	---
11N40SISO	Ant1	2422	35.983	2404.1086	2440.0916	---	---
		2437	35.849	2419.2226	2455.0716	---	---
		2452	35.929	2434.1077	2470.0367	---	---

Test Graphs

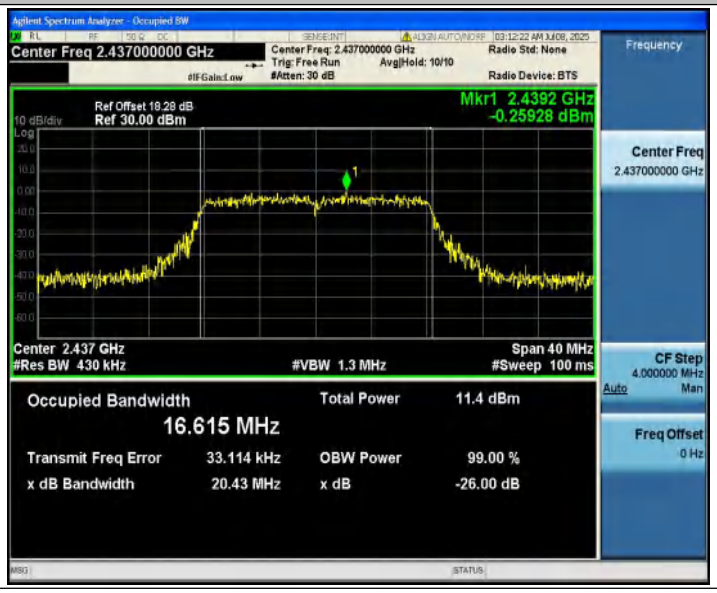
11B_Ant1_2412

11B_Ant1_2437

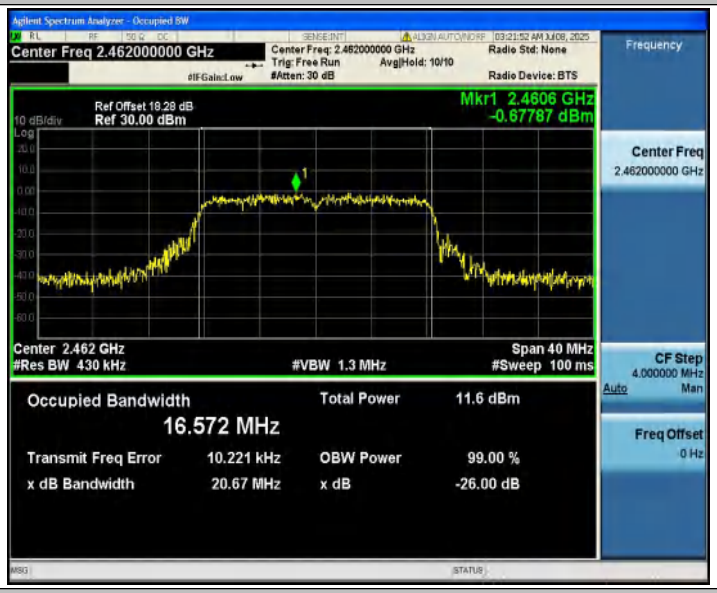
11B_Ant1_2462

11G_Ant1_2412

11G_Ant1_2437



11G_Ant1_2462

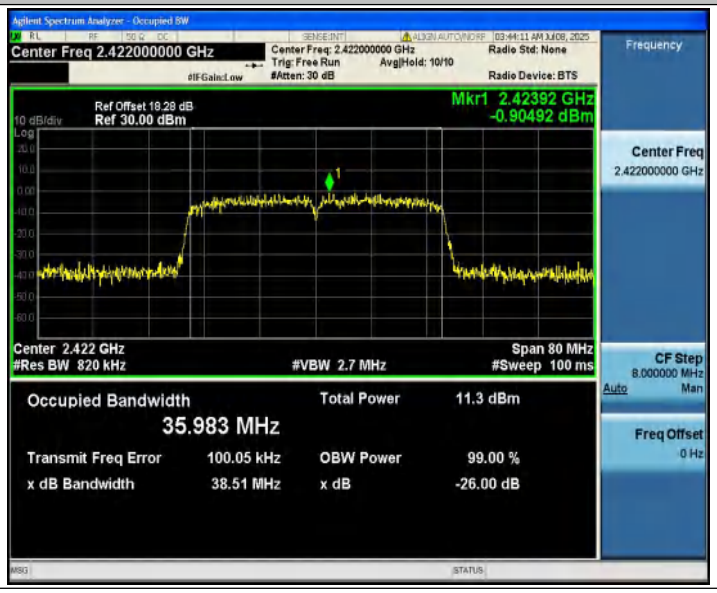


11N20SISO_Ant1_2412

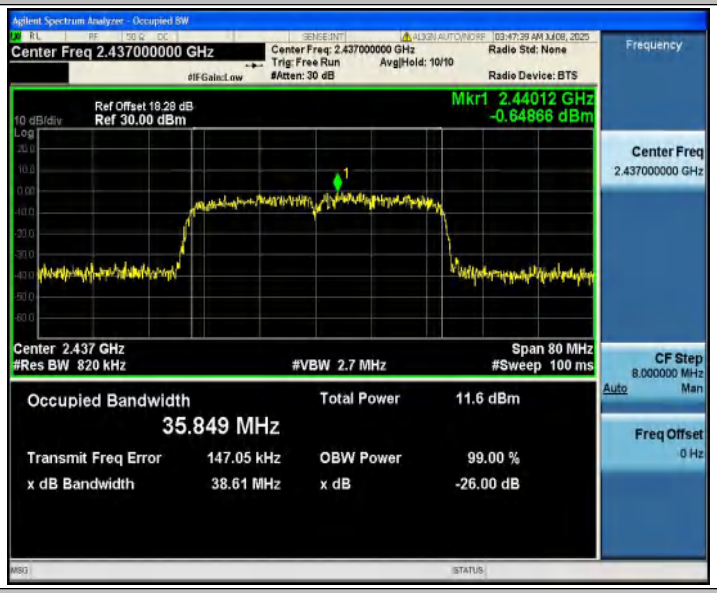
11N20SISO_Ant1_2437

11N20SISO_Ant1_2462

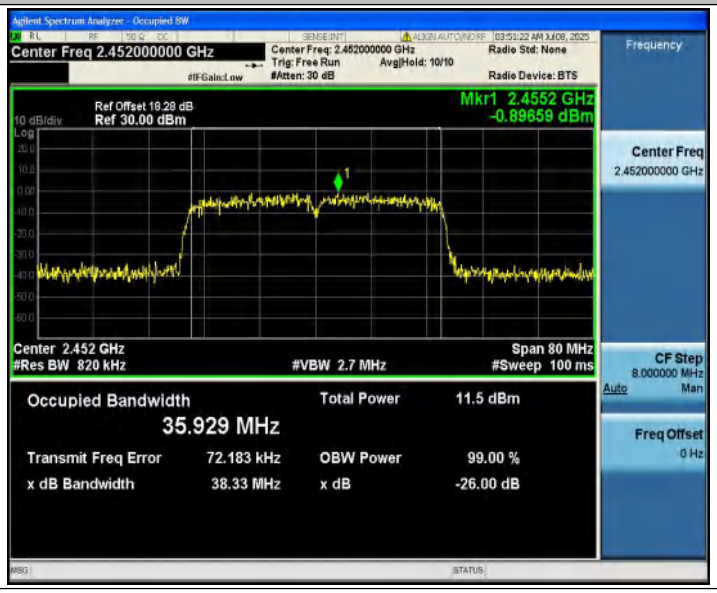
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Channel	Set Power	Peak Powert[dBm]	Conducted Limit[dBm]
11B	Ant1	2412	---	12.24	≤30.00
		2437	---	12.79	≤30.00
		2462	---	12.91	≤30.00
11G	Ant1	2412	---	15.60	≤30.00
		2437	---	15.61	≤30.00
		2462	---	15.72	≤30.00
11N20SISO	Ant1	2412	---	15.28	≤30.00
		2437	---	15.48	≤30.00
		2462	---	16.11	≤30.00
11N40SISO	Ant1	2422	---	15.38	≤30.00
		2437	---	15.54	≤30.00
		2452	---	15.53	≤30.00

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-12.25	≤8.00	PASS
		2437	-11.75	≤8.00	PASS
		2462	-10.88	≤8.00	PASS
11G	Ant1	2412	-13.11	≤8.00	PASS
		2437	-16.19	≤8.00	PASS
		2462	-16.68	≤8.00	PASS
11N20SISO	Ant1	2412	-14.82	≤8.00	PASS
		2437	-16.31	≤8.00	PASS
		2462	-15.74	≤8.00	PASS
11N40SISO	Ant1	2422	-20.01	≤8.00	PASS
		2437	-20.48	≤8.00	PASS
		2452	-20.07	≤8.00	PASS

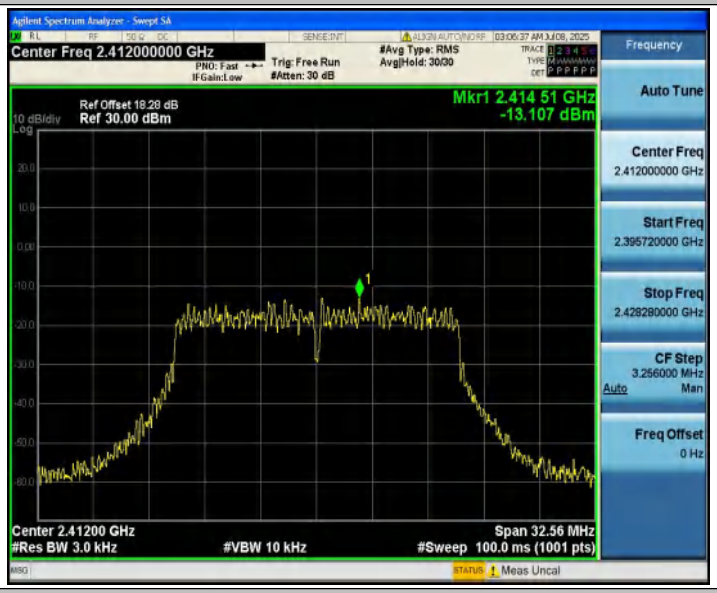
Test Graphs

11B_Ant1_2412

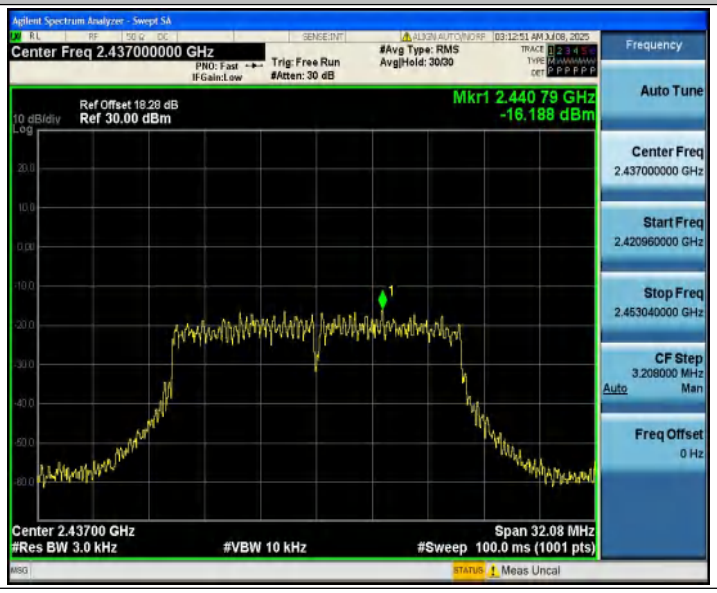
11B_Ant1_2437

11B_Ant1_2462

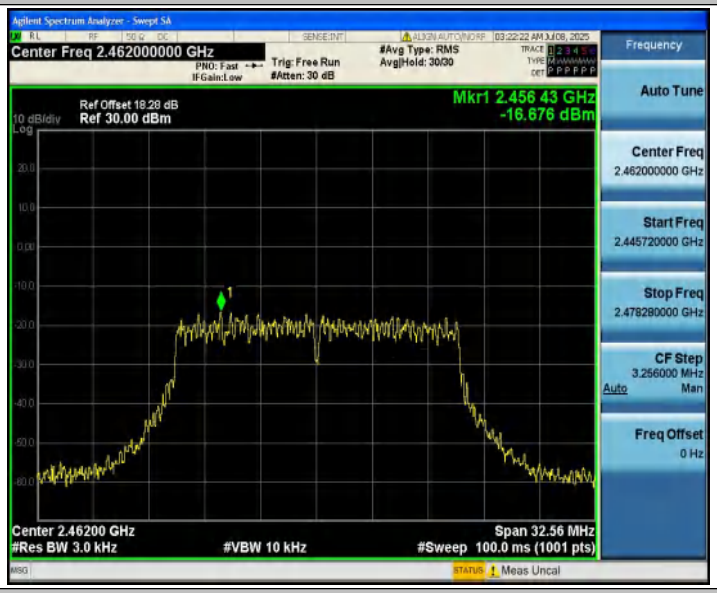
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412

11N20SISO_Ant1_2437

11N20SISO_Ant1_2462

11N40SISO_Ant1_2422

11N40SISO_Ant1_2437

11N40SISO_Ant1_2452

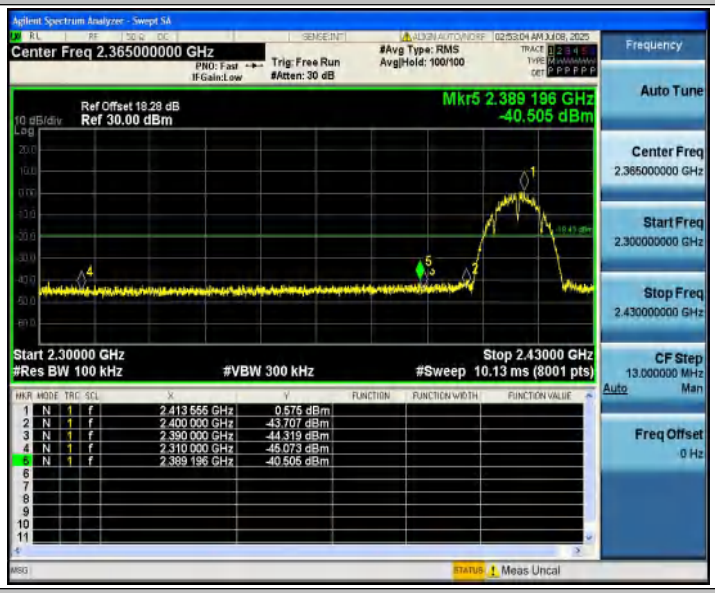
Appendix E: Band edge measurements

Test Result

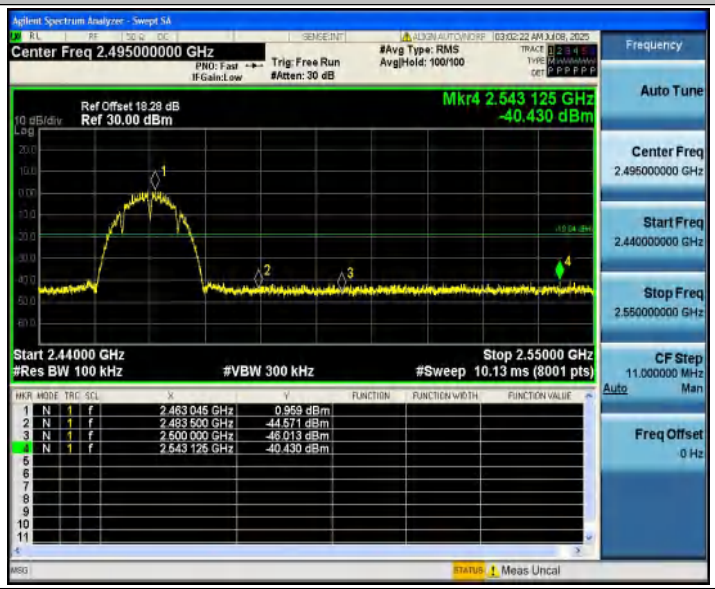
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	0.58	-40.51	≤-19.43	PASS
		High	2462	0.96	-40.43	≤-19.04	PASS
11G	Ant1	Low	2412	-0.73	-37.83	≤-20.73	PASS
		High	2462	-3.50	-41.52	≤-23.5	PASS
11N20SISO	Ant1	Low	2412	-3.63	-39.47	≤-23.63	PASS
		High	2462	-3.17	-39.49	≤-23.17	PASS
11N40SISO	Ant1	Low	2422	-6.78	-39.96	≤-26.78	PASS
		High	2452	-6.12	-41.2	≤-26.12	PASS

Test Graphs

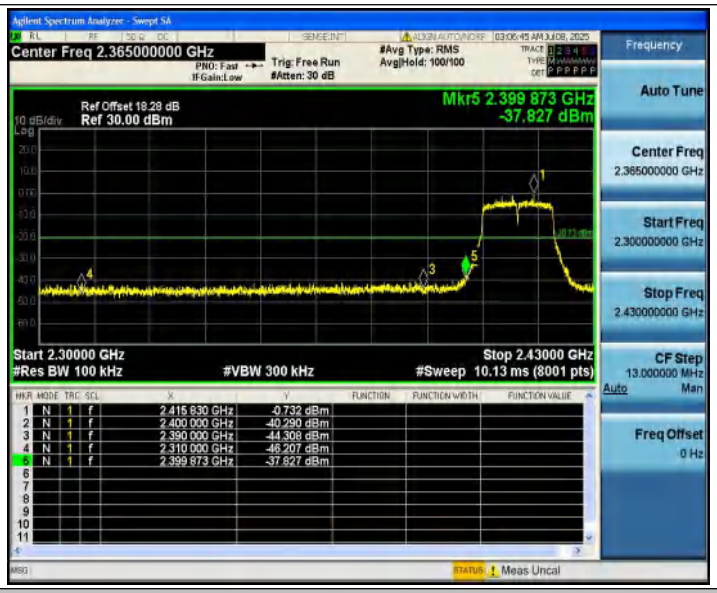
11B_Ant1_Low_2412



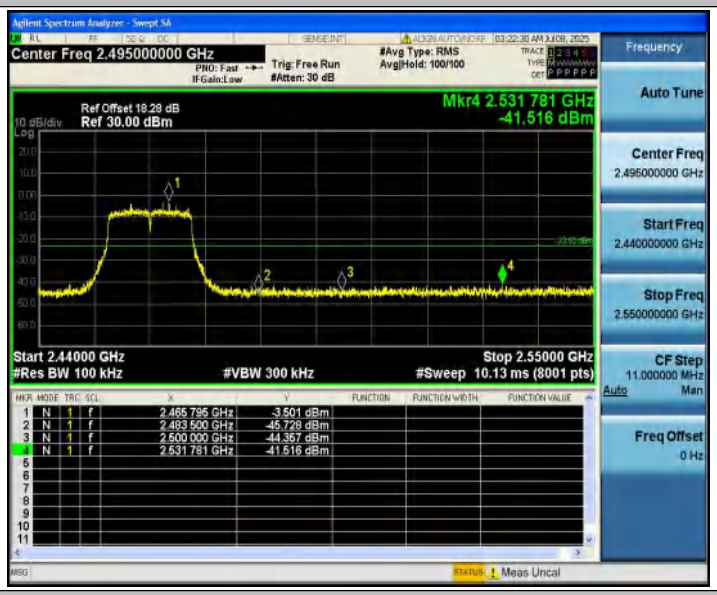
11B_Ant1_High_2462



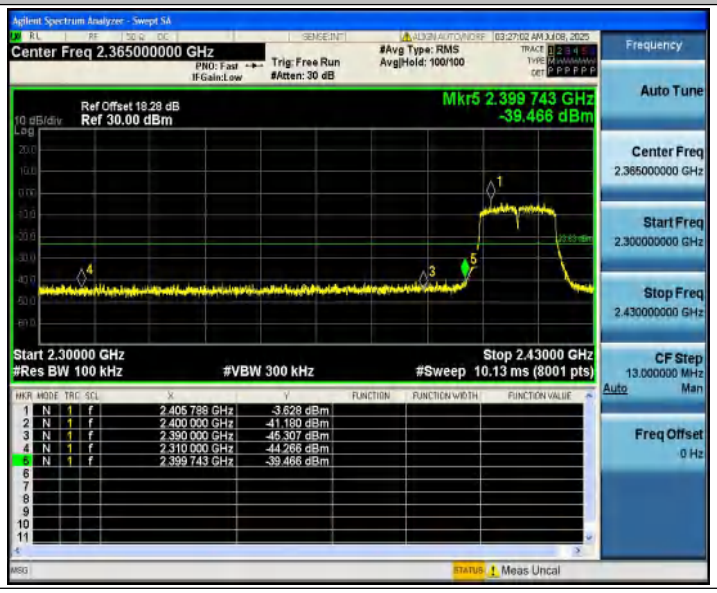
11G_Ant1_Low_2412



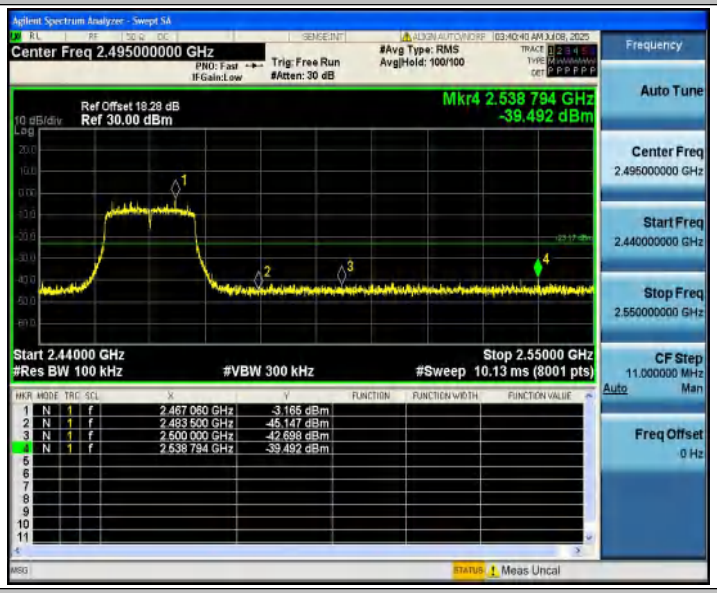
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412

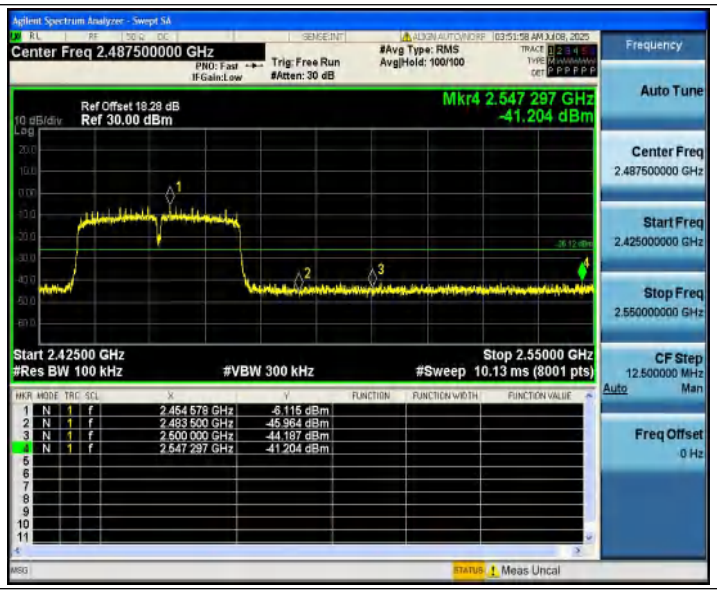


11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422

11N40SISO_Ant1_High_2452


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.487500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 18.28 dB
10 dB/div
Ref 30.00 dBm
Mkr4 2.547 297 GHz
-41.204 dBm
Start 2.42500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.55000 GHz
#Sweep 10.13 ms (8001 pts)
1 N 1 f 2.454 578 GHz -6.115 dBm
2 N 1 f 2.483 500 GHz -45.964 dBm
3 N 1 f 2.500 000 GHz -44.187 dBm
4 N 1 f 2.547 297 GHz -41.204 dBm
Frequency
Auto Tune
Center Freq
2.487500000 GHz
Start Freq
2.425000000 GHz
Stop Freq
2.550000000 GHz
CF Step
12.500000 MHz
Auto
Man
Freq Offset
0 Hz
Meas Uncal

Appendix F: Conducted Spurious Emission

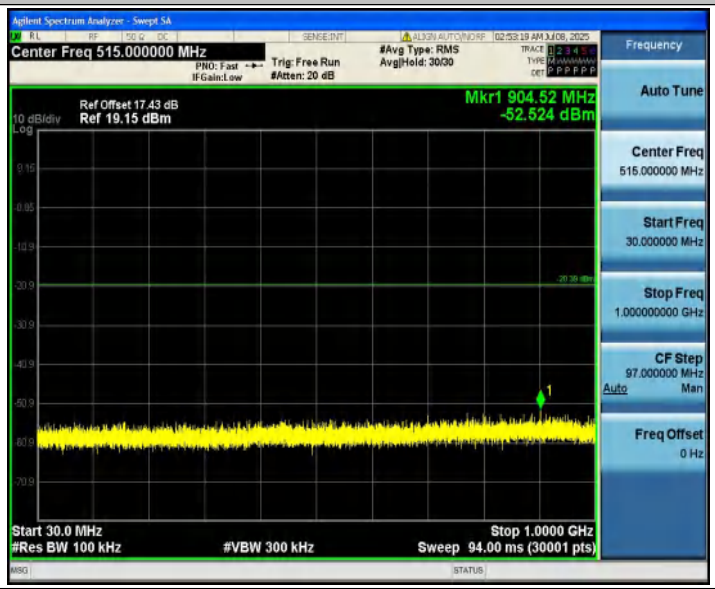
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-0.39	-0.39	---	PASS
			30~1000	-0.39	-52.52	≤-20.39	PASS
			1000~26500	-0.39	-38.8	≤-20.39	PASS
		2437	Reference	0.90	0.90	---	PASS
			30~1000	0.90	-52.88	≤-19.1	PASS
			1000~26500	0.90	-38.18	≤-19.1	PASS
		2462	Reference	-0.29	-0.29	---	PASS
			30~1000	-0.29	-53.07	≤-20.29	PASS
			1000~26500	-0.29	-38.48	≤-20.29	PASS
11G	Ant1	2412	Reference	-3.74	-3.74	---	PASS
			30~1000	-3.74	-52.58	≤-23.74	PASS
			1000~26500	-3.74	-38.23	≤-23.74	PASS
		2437	Reference	-4.24	-4.24	---	PASS
			30~1000	-4.24	-52.12	≤-24.24	PASS
			1000~26500	-4.24	-38.63	≤-24.24	PASS
		2462	Reference	-4.63	-4.63	---	PASS
			30~1000	-4.63	-52.95	≤-24.63	PASS
			1000~26500	-4.63	-38.24	≤-24.63	PASS
11N20SISO	Ant1	2412	Reference	-4.84	-4.84	---	PASS
			30~1000	-4.84	-53.28	≤-24.84	PASS
			1000~26500	-4.84	-38.44	≤-24.84	PASS
		2437	Reference	-7.18	-7.18	---	PASS
			30~1000	-7.18	-52.37	≤-27.18	PASS
			1000~26500	-7.18	-38.55	≤-27.18	PASS
		2462	Reference	-5.03	-5.03	---	PASS
			30~1000	-5.03	-52.91	≤-25.03	PASS
			1000~26500	-5.03	-37.8	≤-25.03	PASS
11N40SISO	Ant1	2422	Reference	-7.04	-7.04	---	PASS
			30~1000	-7.04	-52.94	≤-27.04	PASS
			1000~26500	-7.04	-38.38	≤-27.04	PASS
		2437	Reference	-7.34	-7.34	---	PASS
			30~1000	-7.34	-53.06	≤-27.34	PASS
			1000~26500	-7.34	-38.35	≤-27.34	PASS
		2452	Reference	-7.99	-7.99	---	PASS
			30~1000	-7.99	-53.23	≤-27.99	PASS
			1000~26500	-7.99	-38.36	≤-27.99	PASS

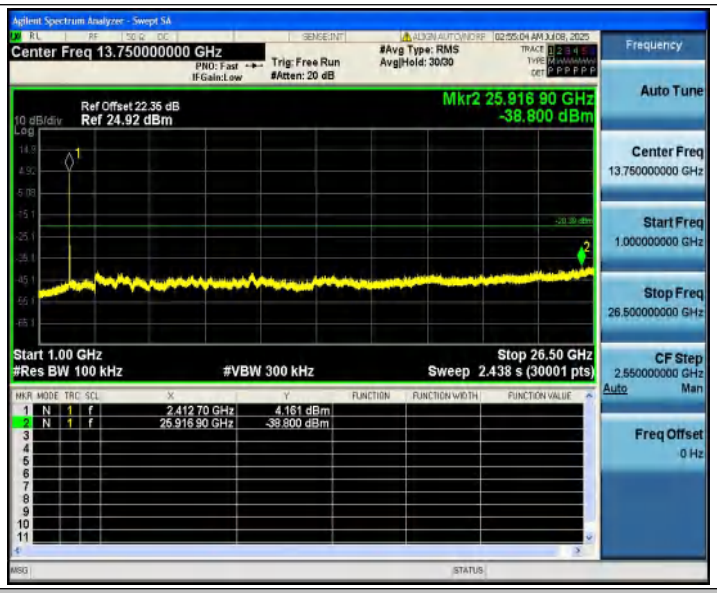
Test Graphs

11B_Ant1_2412_0~Reference

11B_Ant1_2412_30~1000

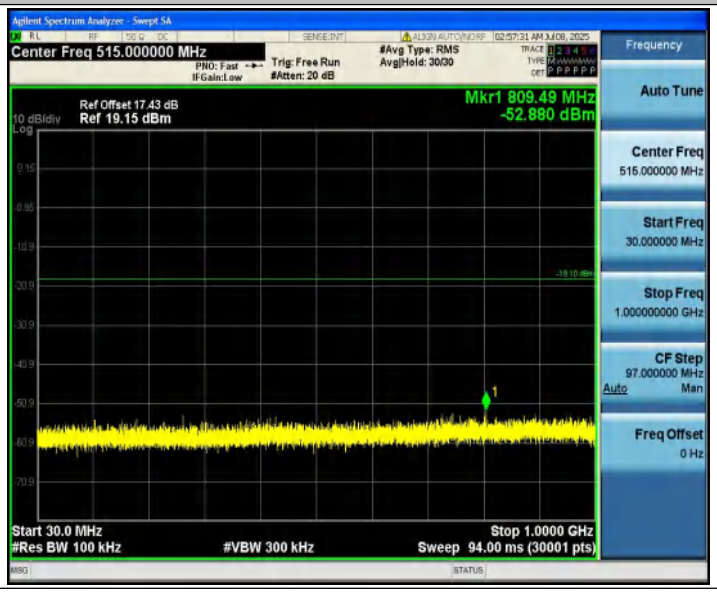


11B_Ant1_2412_1000~26500

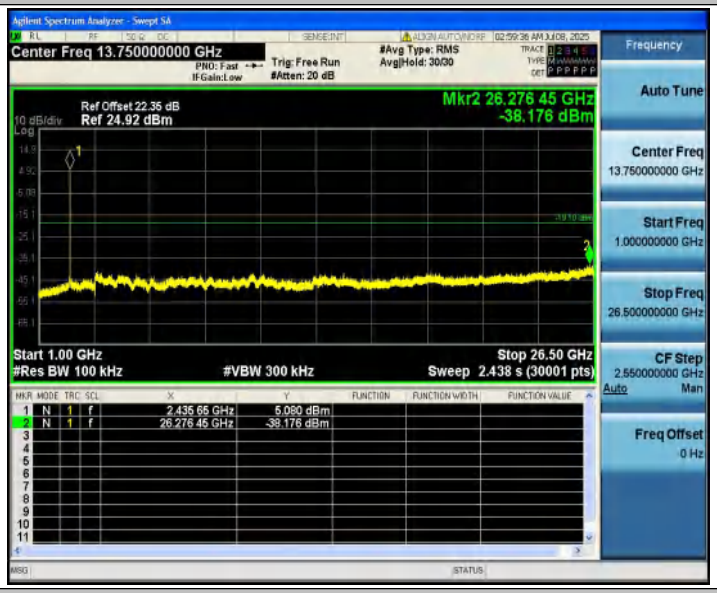


11B_Ant1_2437_0~Reference

11B_Ant1_2437_30~1000

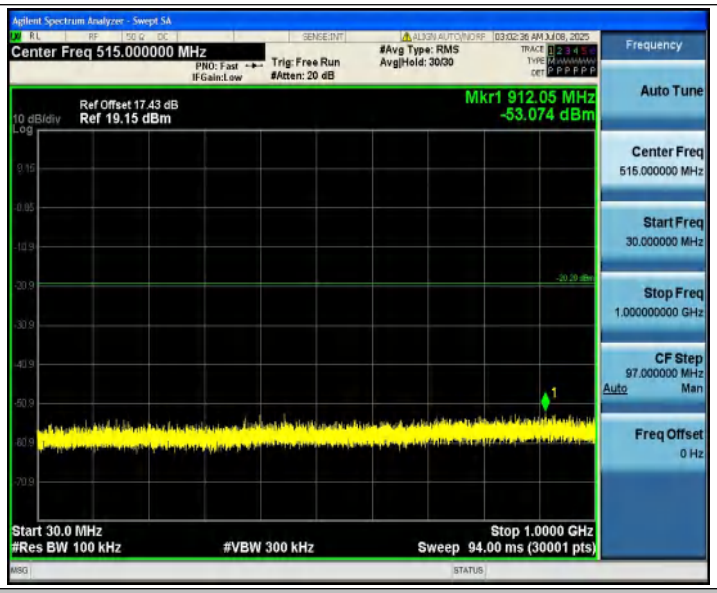


11B_Ant1_2437_1000~26500

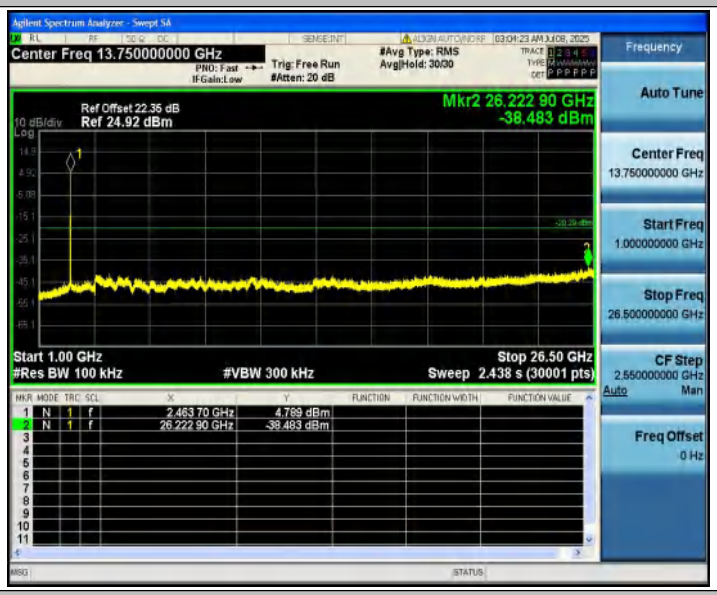


11B_Ant1_2462_0~Reference

11B_Ant1_2462_30~1000

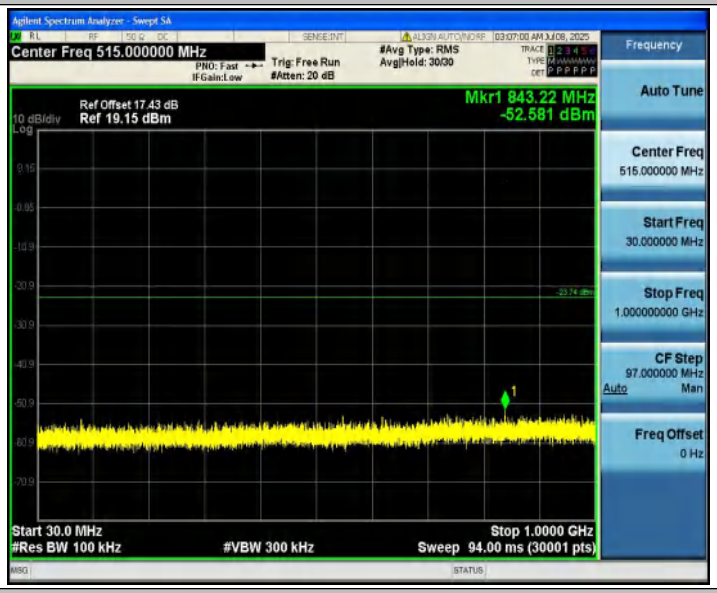


11B_Ant1_2462_1000~26500

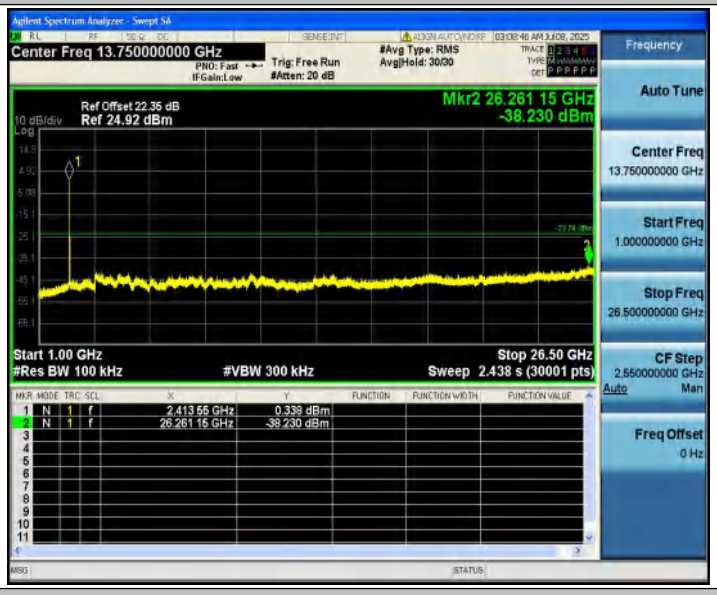


11G_Ant1_2412_0~Reference

11G_Ant1_2412_30~1000

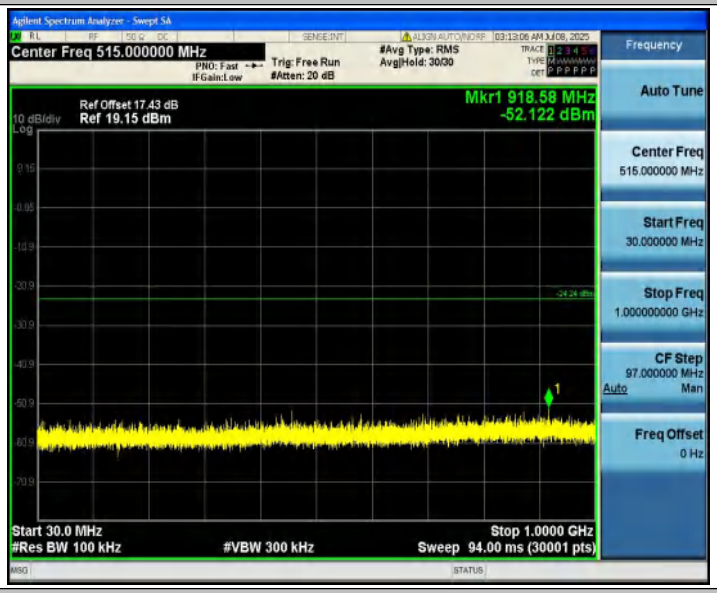


11G_Ant1_2412_1000~26500

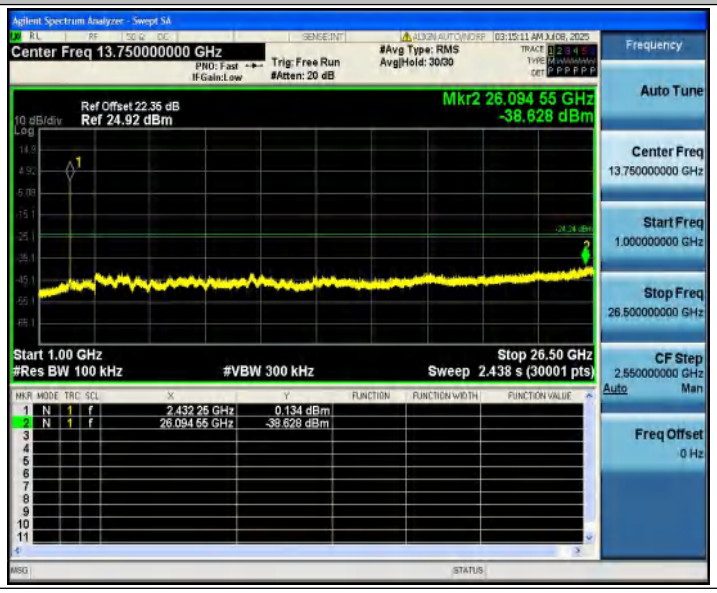


11G_Ant1_2437_0~Reference

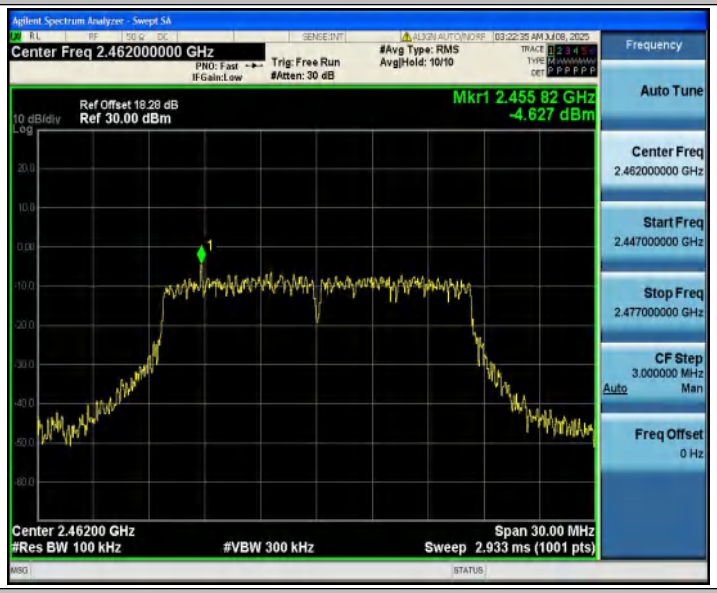
11G_Ant1_2437_30~1000



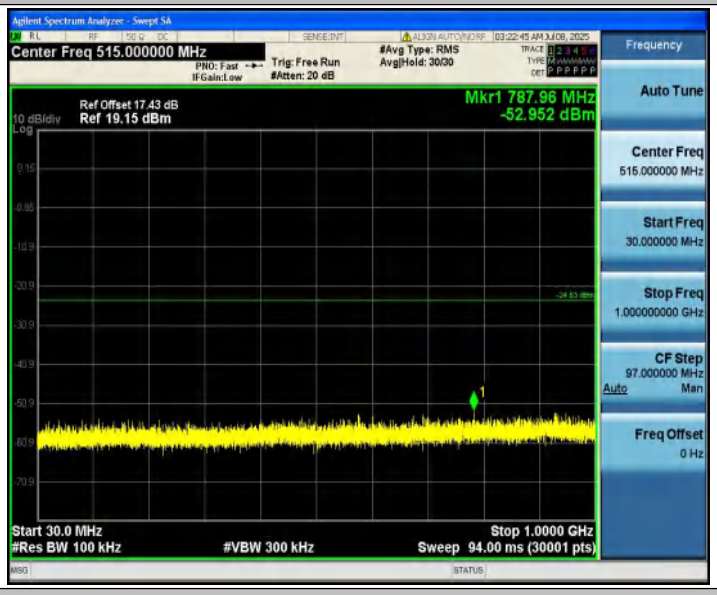
11G_Ant1_2437_1000~26500



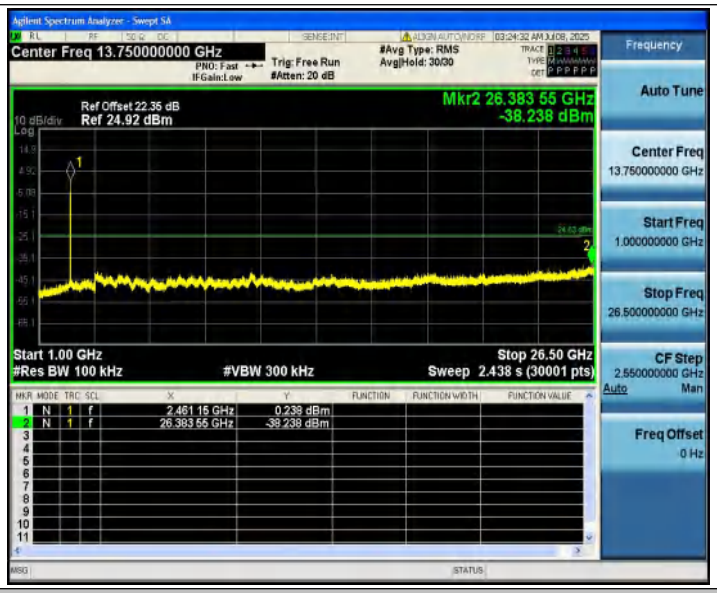
11G_Ant1_2462_0~Reference



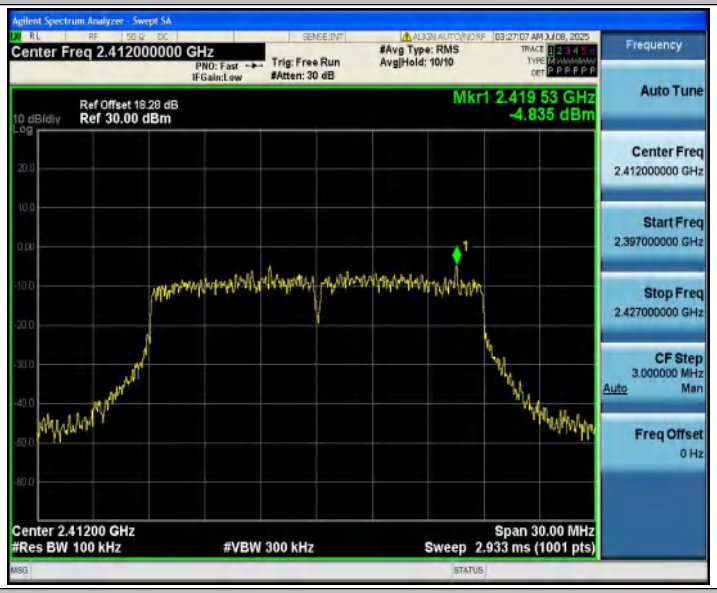
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



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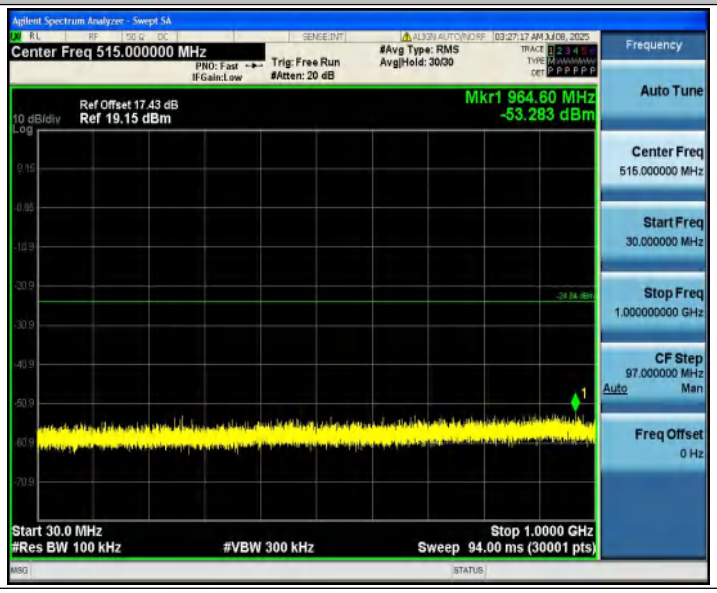

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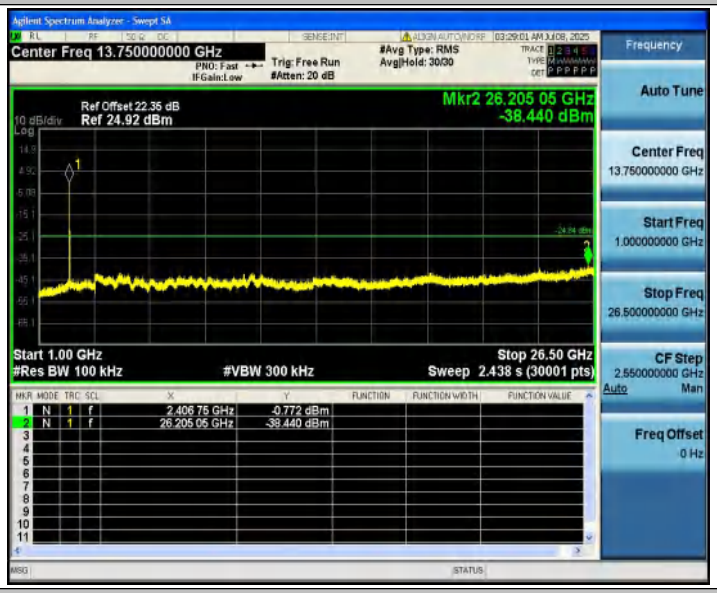
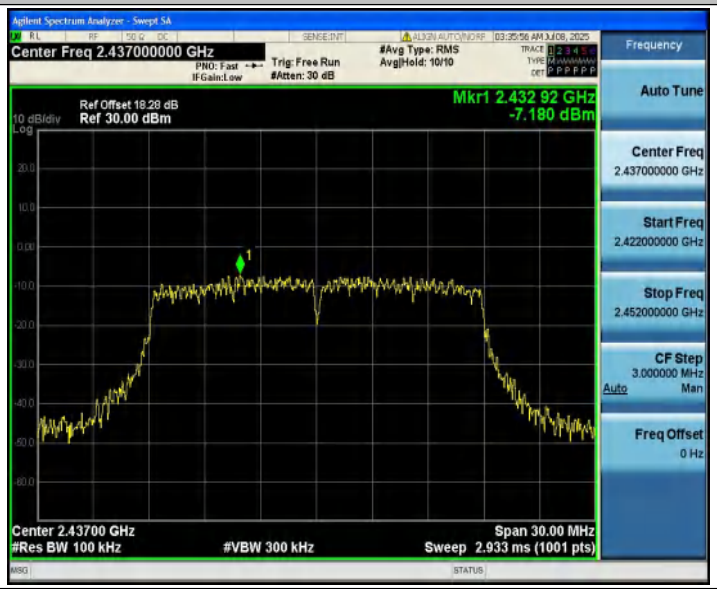


11N20SISO_Ant1_2437_0~Reference



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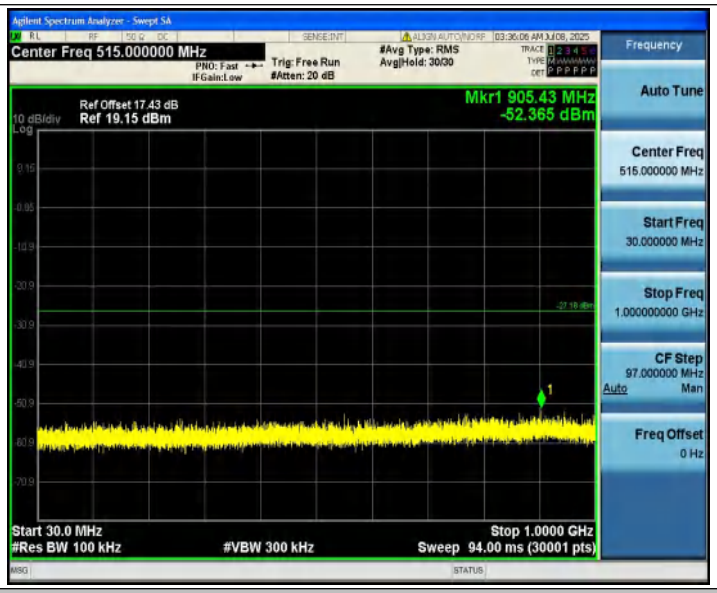

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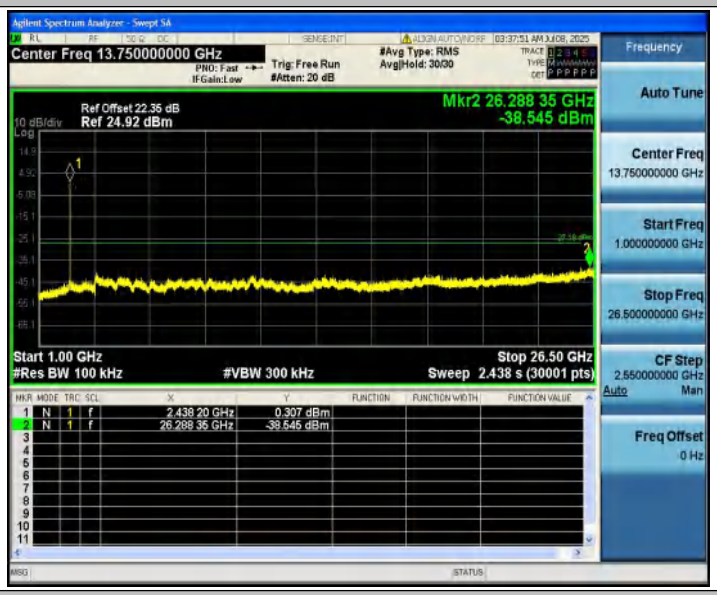

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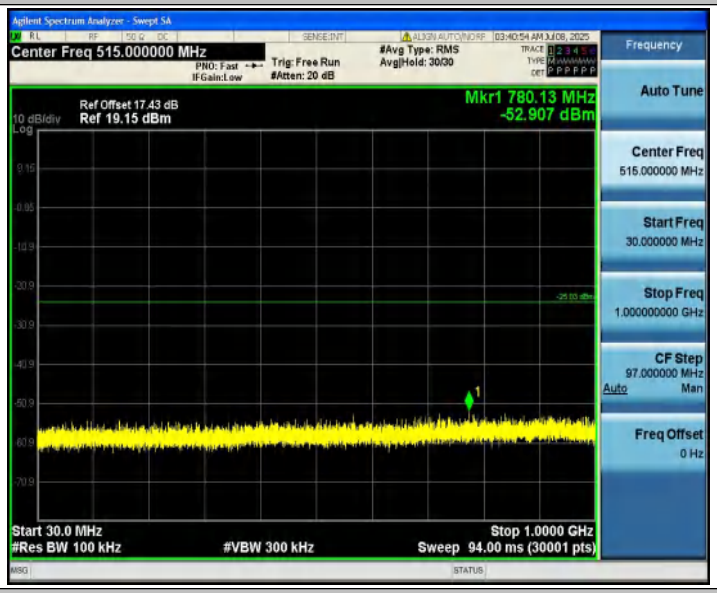

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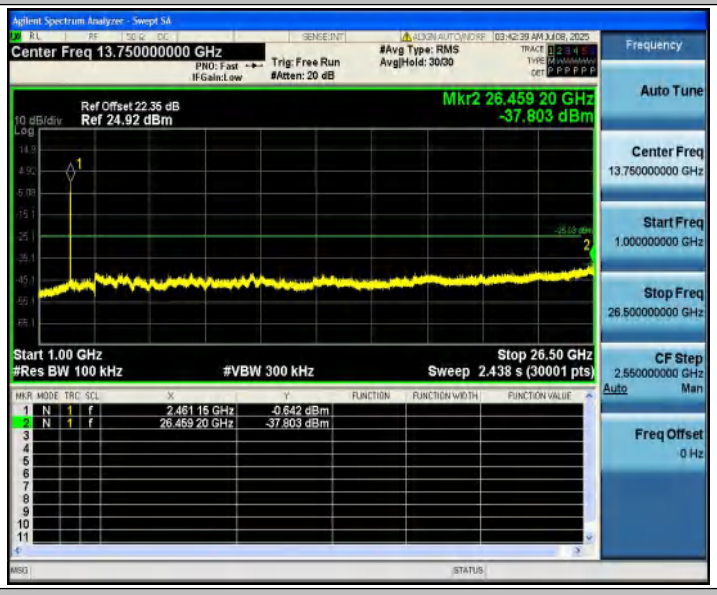

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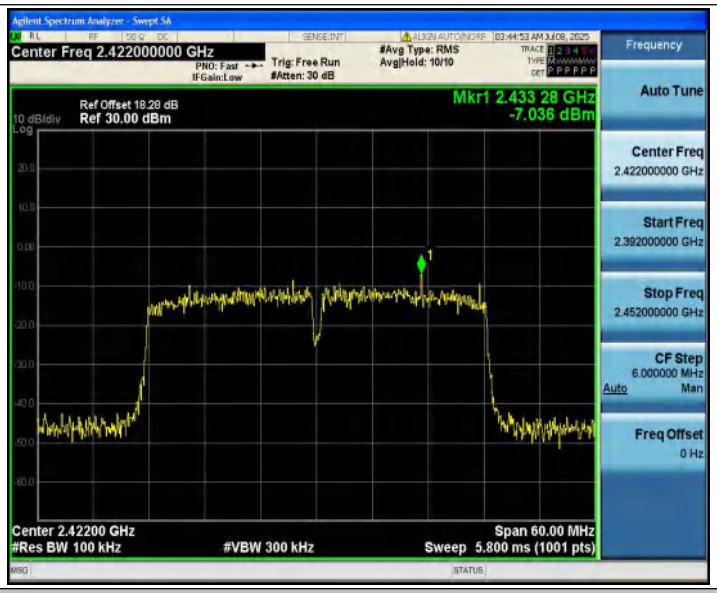

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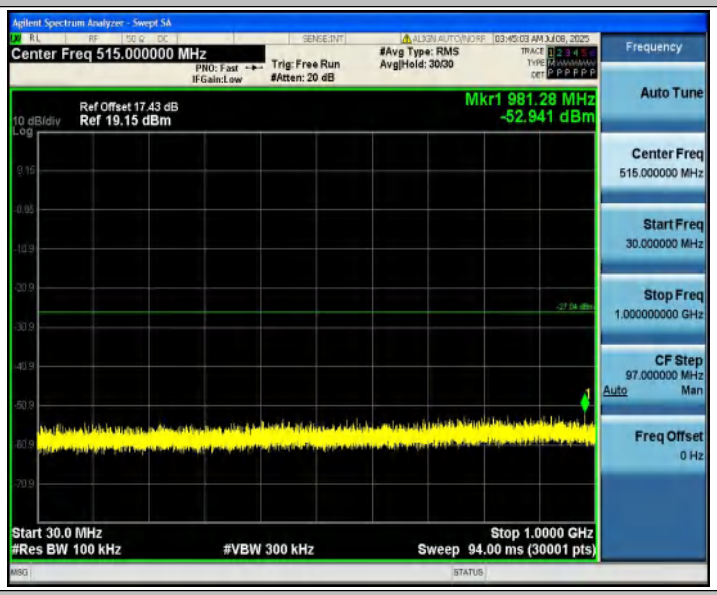

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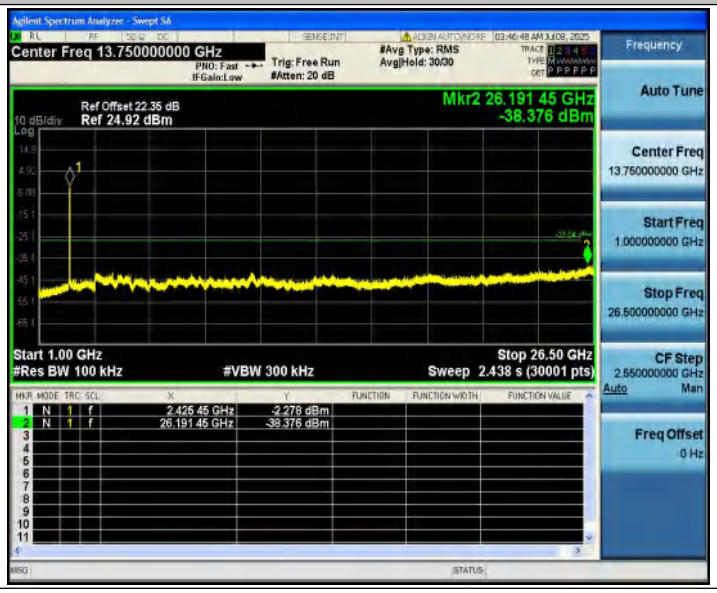

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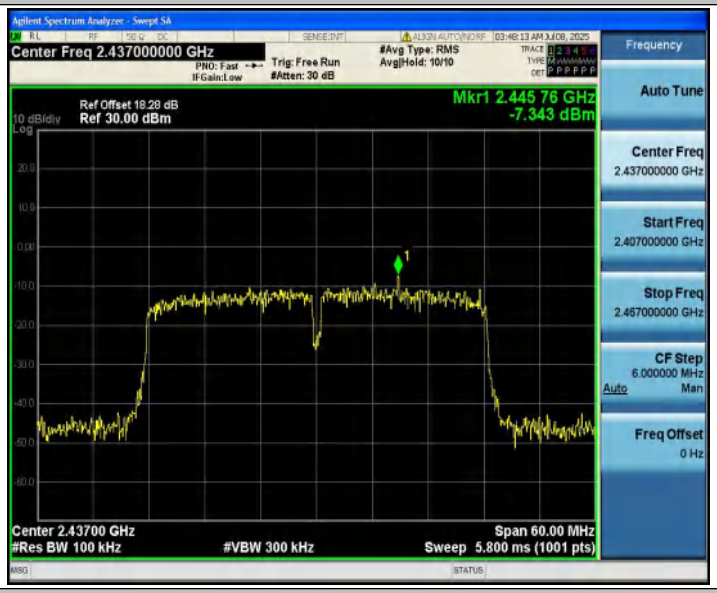

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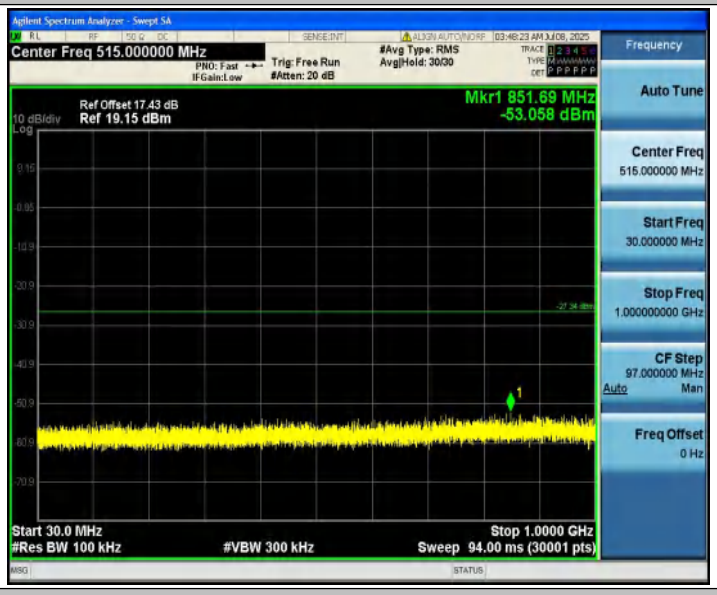
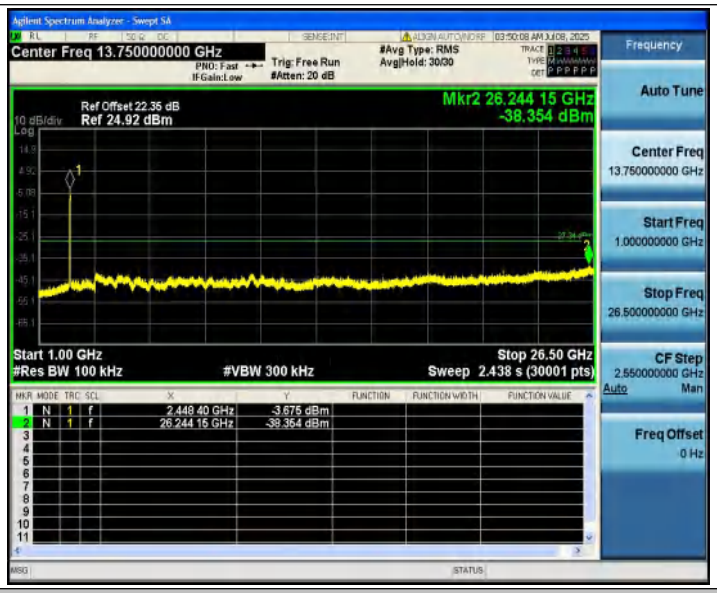
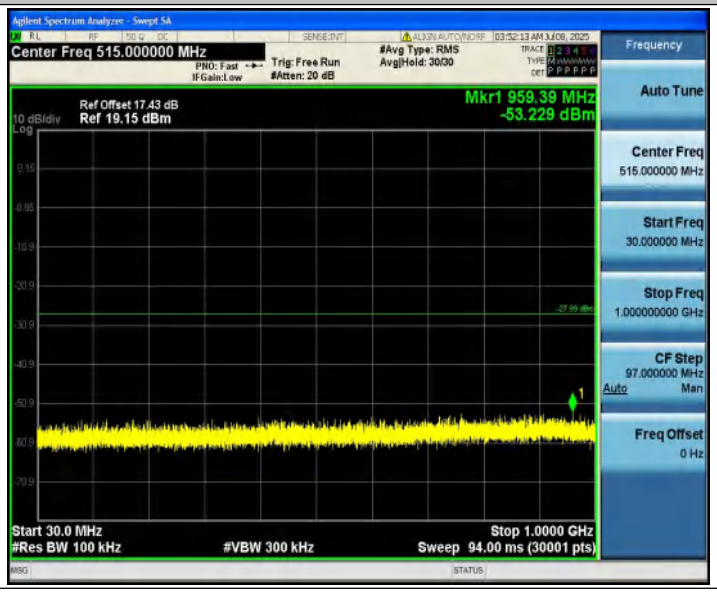


11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference

11N40SISO_Ant1_2452_30~1000



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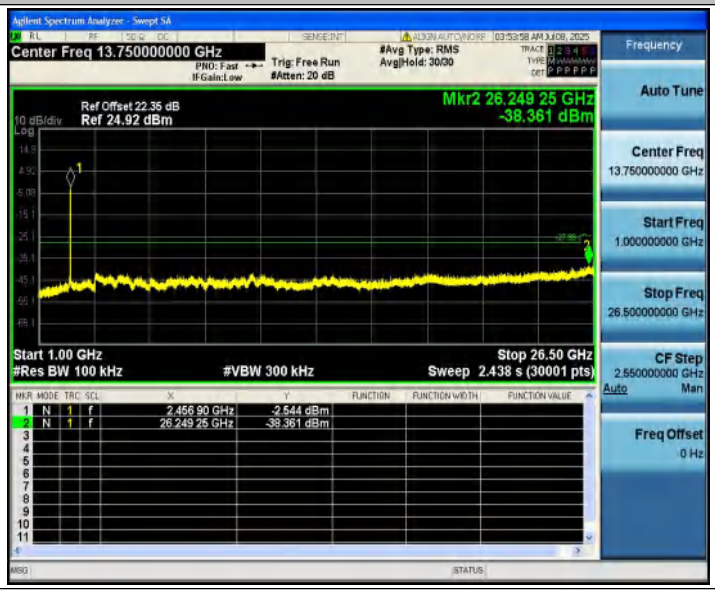


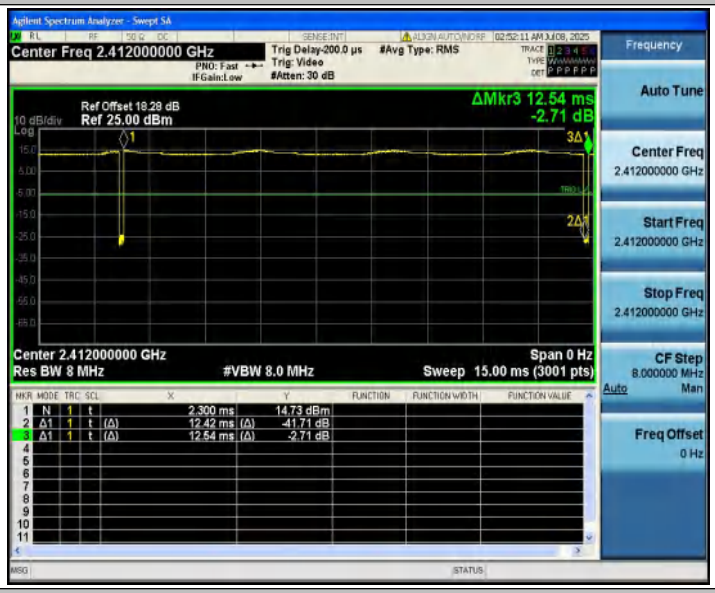
Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	12.42	12.54	99.04	---	---
		2437	12.42	12.55	98.96	---	---
		2462	12.41	12.54	98.96	---	---
11G	Ant1	2412	2.07	2.20	94.09	---	---
		2437	2.07	2.20	94.09	---	---
		2462	2.06	2.19	94.06	---	---
11N20SISO	Ant1	2412	1.92	2.05	93.66	---	---
		2437	1.92	2.05	93.66	---	---
		2462	1.92	2.05	93.66	---	---
11N40SISO	Ant1	2422	0.94	1.07	87.85	---	---
		2437	0.94	1.07	87.85	---	---
		2452	0.94	1.07	87.85	---	---

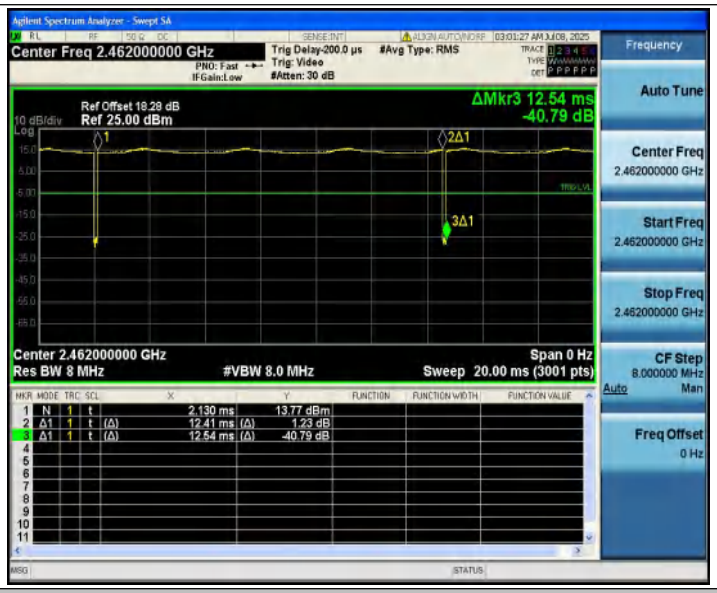
Test Graphs

11B_Ant1_2412



11B_Ant1_2437

11B_Ant1_2462



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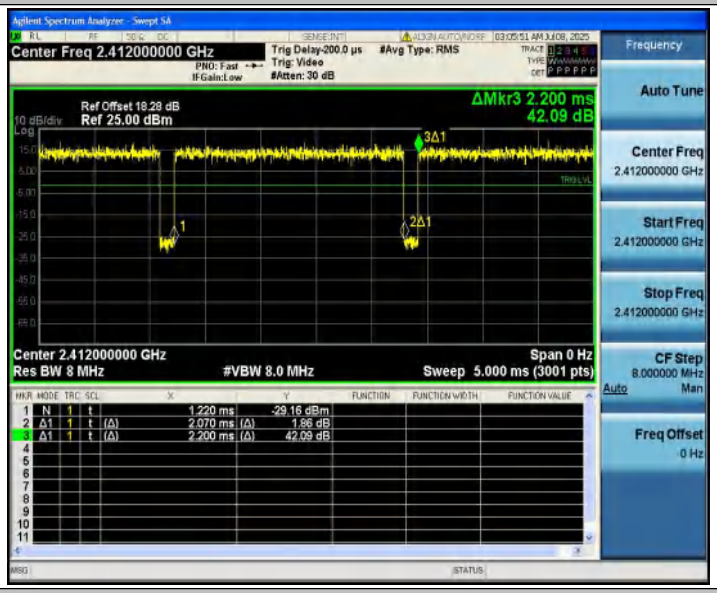

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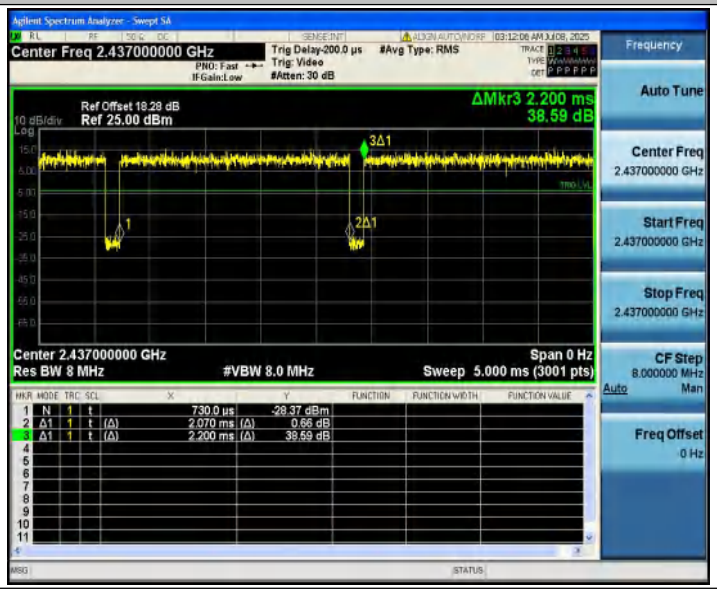

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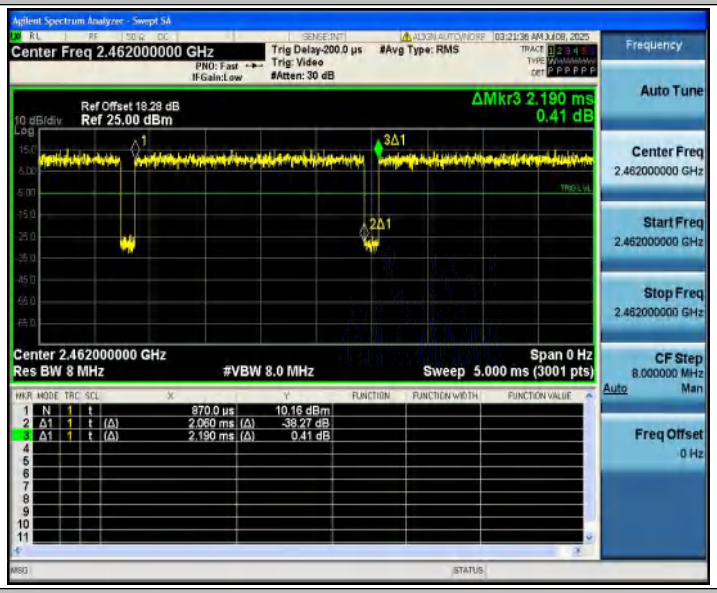

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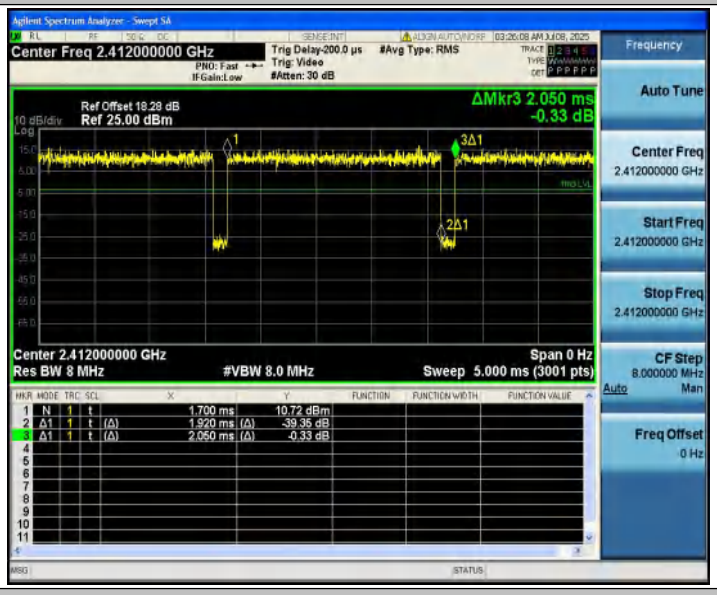

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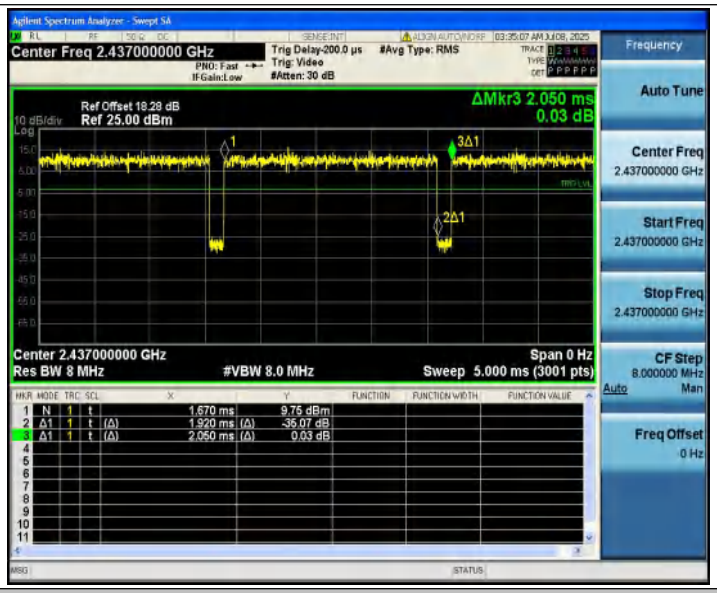

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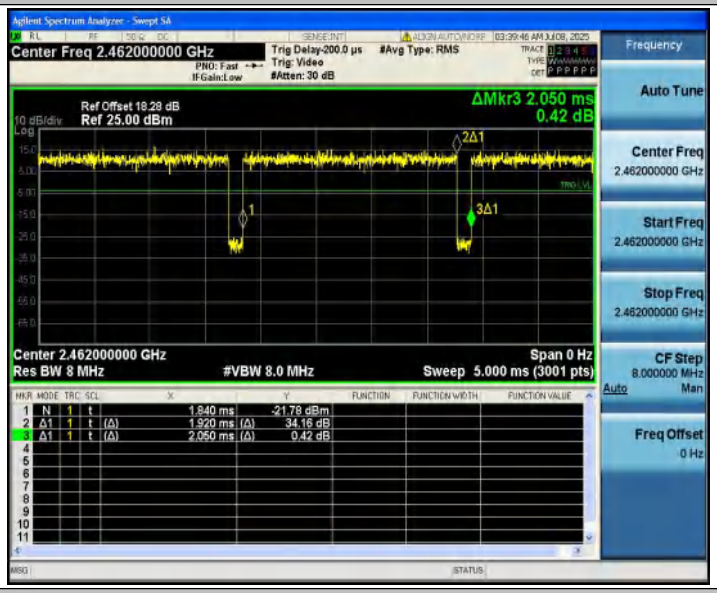

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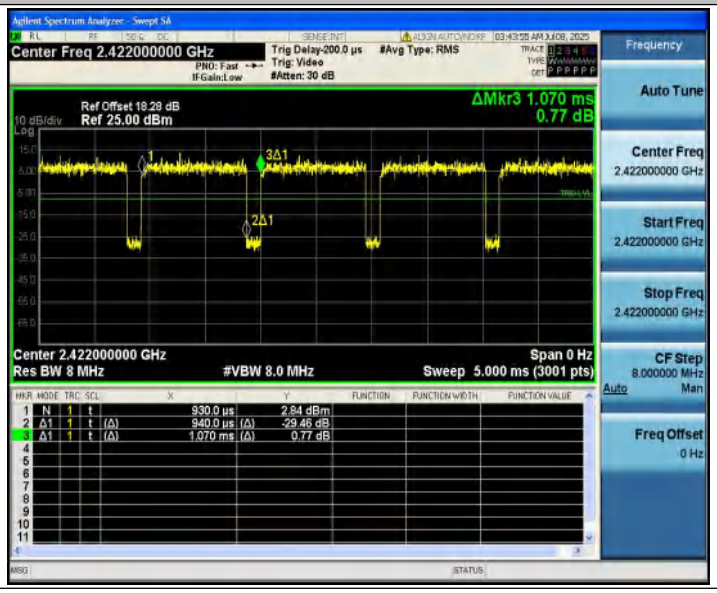

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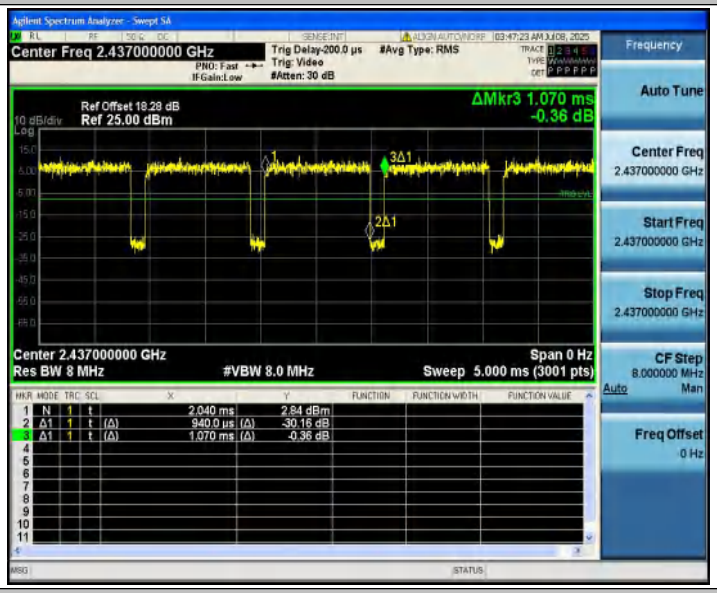
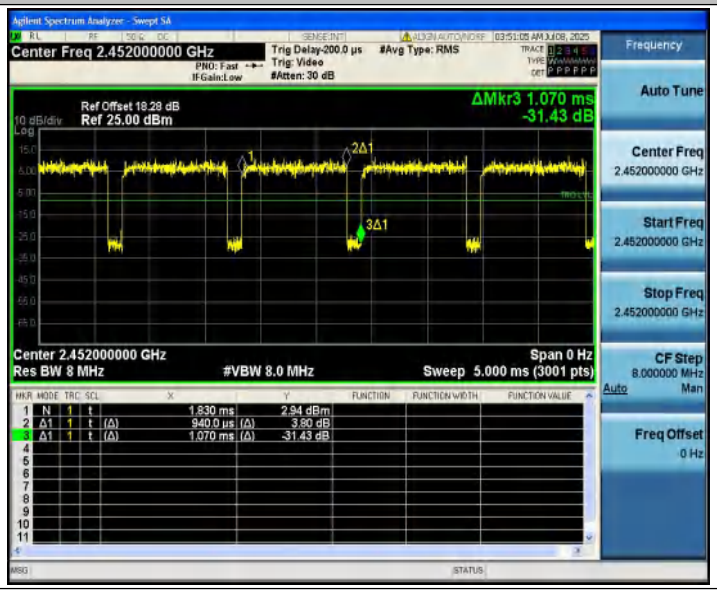
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