FCC Appendix RF Test Data

FCC ID	**:**	**2BMHLX1PRO**
Company:	**:**	**JOY MORE TRADE LIMITED**
EUT	**:**	**Smart Media Player**
Model Number	**:**	**StreamX X1Pro**
Reviewed By	**:**	**Eric Wang**

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.600	2406.960	2416.560	0.5	PASS
		2437	8.600	2432.440	2441.040	0.5	PASS
		2462	9.560	2456.960	2466.520	0.5	PASS
11G	Ant1	2412	15.760	2404.440	2420.200	0.5	PASS
		2437	15.720	2429.440	2445.160	0.5	PASS
		2462	16.280	2453.880	2470.160	0.5	PASS
11N20SISO	Ant1	2412	16.160	2404.440	2420.600	0.5	PASS
		2437	16.160	2429.440	2445.600	0.5	PASS
		2462	17.000	2453.640	2470.640	0.5	PASS
11N40SISO	Ant1	2422	35.600	2404.480	2440.080	0.5	PASS
		2437	35.120	2419.480	2454.600	0.5	PASS
		2452	35.200	2434.400	2469.600	0.5	PASS
11AX20SISO	Ant1	2412	16.200	2404.440	2420.640	0.5	PASS
		2437	15.800	2429.440	2445.240	0.5	PASS
		2462	16.040	2454.440	2470.480	0.5	PASS
11AX40SISO	Ant1	2422	35.680	2404.480	2440.160	0.5	PASS
		2437	35.120	2419.480	2454.600	0.5	PASS
		2452	35.520	2434.080	2469.600	0.5	PASS

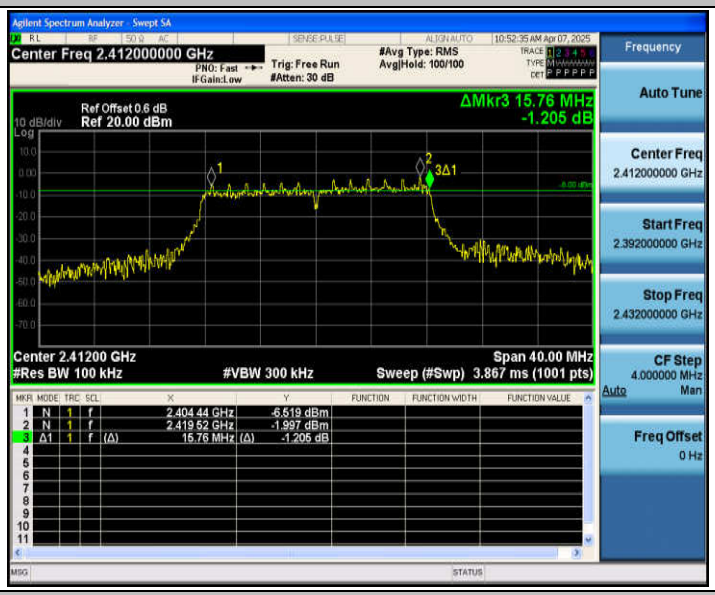
Test Graphs

11B_Ant1_2412

11B_Ant1_2437

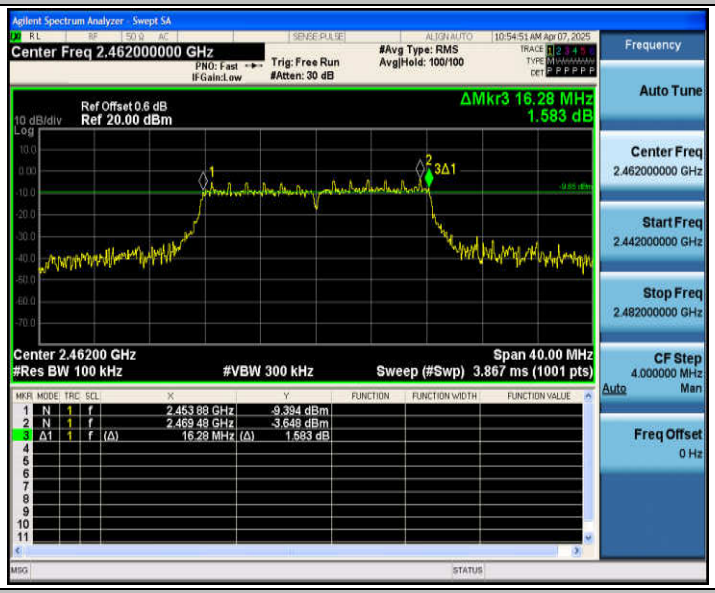
11B_Ant1_2462

11G_Ant1_2412



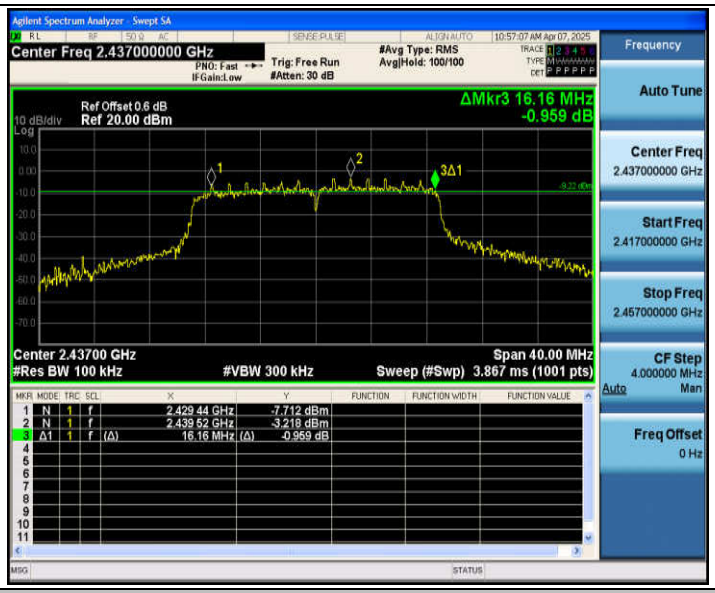
11G_Ant1_2437

11G_Ant1_2462



11N20SISO_Ant1_2412

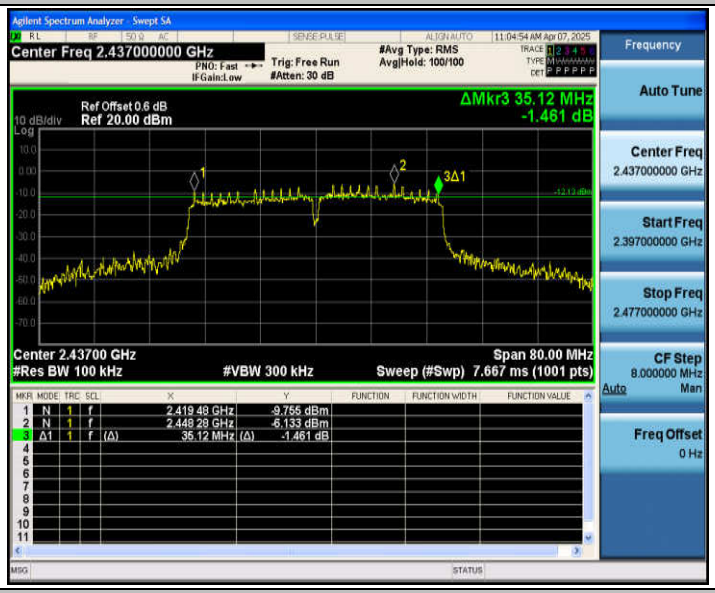
11N20SISO_Ant1_2437



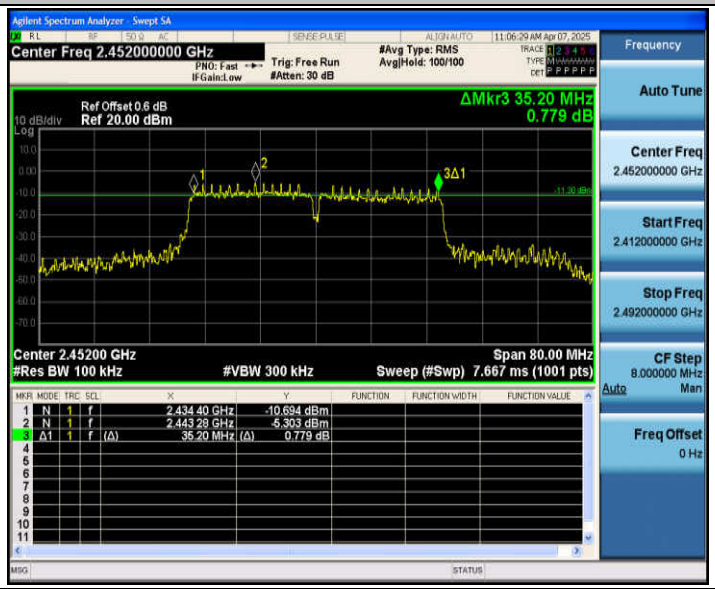
11N20SISO_Ant1_2462

11N40SISO_Ant1_2422

11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

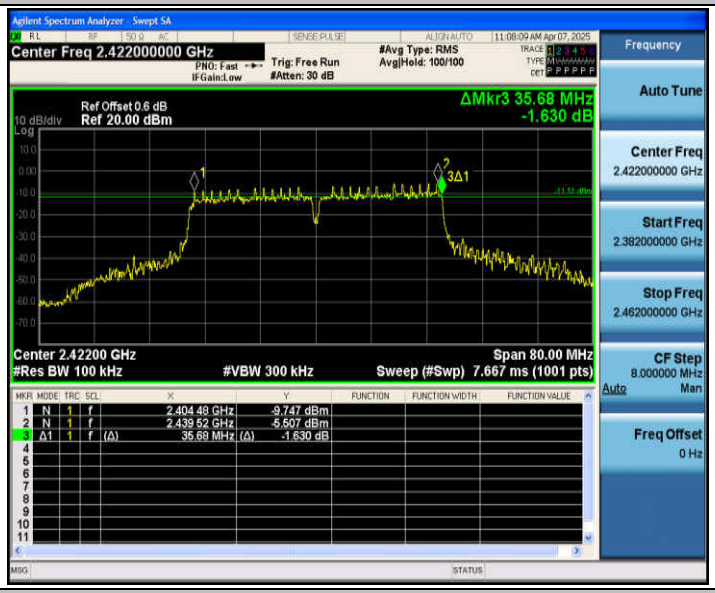


11AX20SISO_Ant1_2412

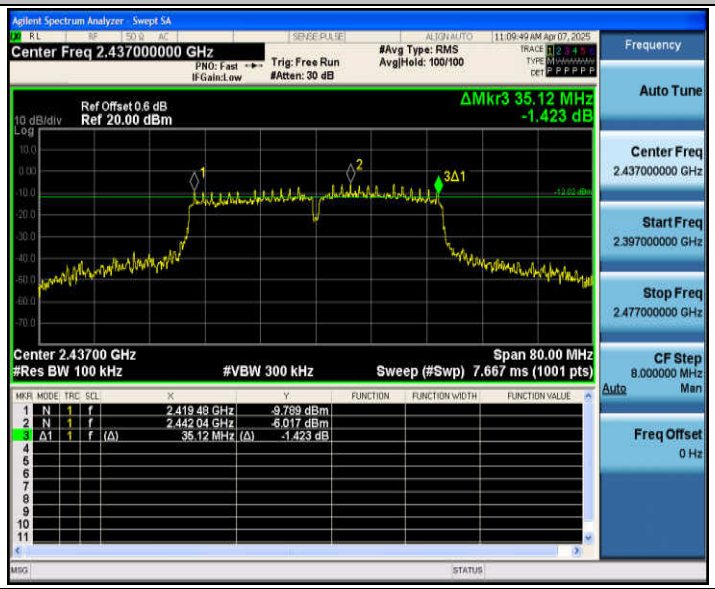
11AX20SISO_Ant1_2437

11AX20SISO_Ant1_2462

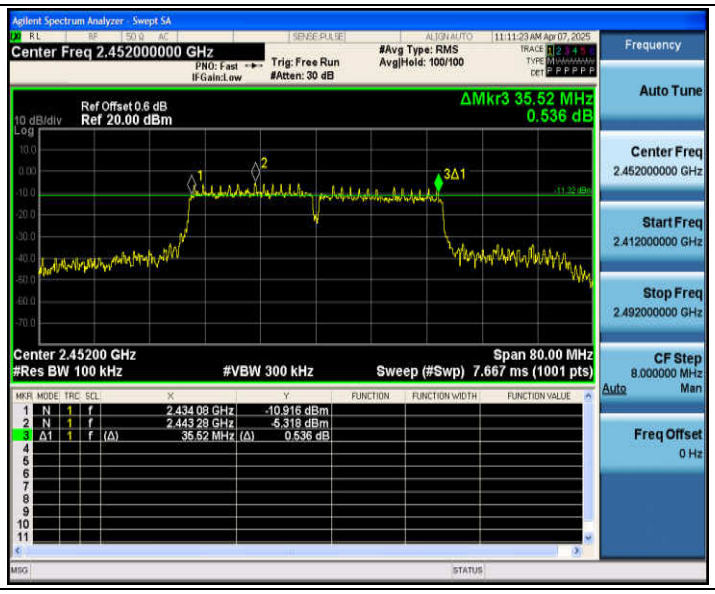
11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.452000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
11:11:23 AM Apr 07, 2025
Frequency
Auto Tune
Center Freq
2.452000000 GHz
Start Freq
2.412000000 GHz
Stop Freq
2.492000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz
Ref Offset 0.6 dB
10 dB/div
Ref 20.00 dBm
Log
ΔMkr3 35.52 MHz
0.536 dB
Center 2.45200 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 80.00 MHz
Sweep (#Swp) 7.667 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.434 08 GHz -10.916 dBm
2 N 1 f 2.443 28 GHz -5.318 dBm
3 Δ1 1 f (Δ) 35.52 MHz (Δ) 0.536 dB
MSG
STATUS

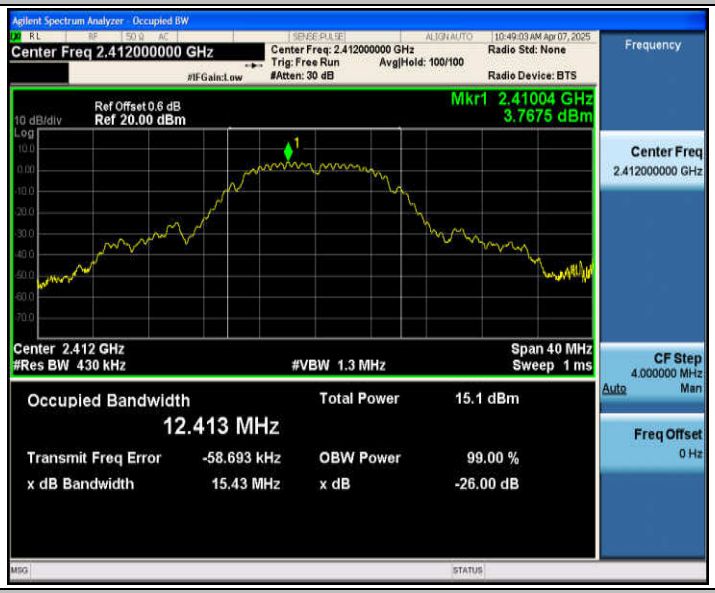
Appendix B: Occupied Channel Bandwidth

Test Result

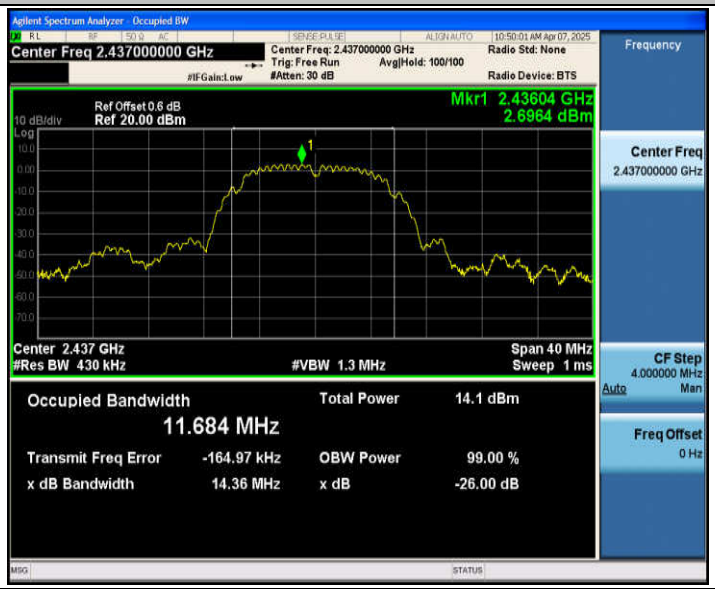
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.413	2405.7348	2418.1478	---	---
		2437	11.684	2430.9930	2442.6770	---	---
		2462	12.736	2455.4284	2468.1644	---	---
11G	Ant1	2412	16.808	2403.7360	2420.5440	---	---
		2437	16.573	2428.8366	2445.4096	---	---
		2462	16.904	2453.6186	2470.5226	---	---
11N20SISO	Ant1	2412	17.887	2403.2324	2421.1194	---	---
		2437	17.641	2428.2915	2445.9325	---	---
		2462	18.002	2453.1345	2471.1365	---	---
11N40SISO	Ant1	2422	36.326	2404.1547	2440.4807	---	---
		2437	36.024	2419.0700	2455.0940	---	---
		2452	36.452	2433.8210	2470.2730	---	---
11AX20SISO	Ant1	2412	17.877	2403.2493	2421.1263	---	---
		2437	17.673	2428.3078	2445.9808	---	---
		2462	17.995	2453.1499	2471.1449	---	---
11AX40SISO	Ant1	2422	36.289	2404.2382	2440.5272	---	---
		2437	36.077	2419.0909	2455.1679	---	---
		2452	36.461	2433.8029	2470.2639	---	---

Test Graphs

11B_Ant1_2412



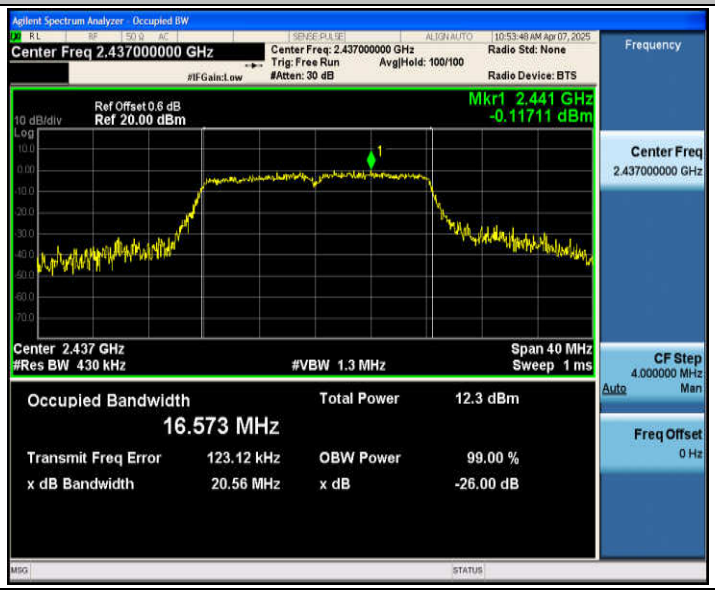
11B_Ant1_2437



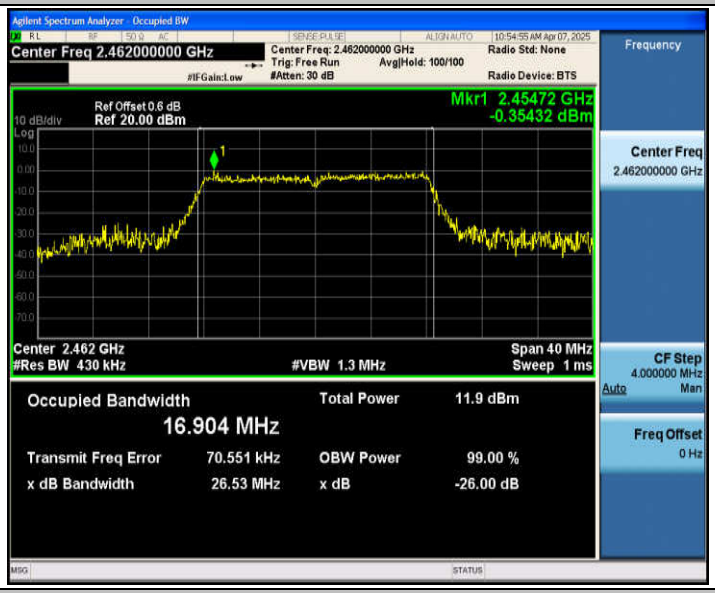
11B_Ant1_2462

11G_Ant1_2412

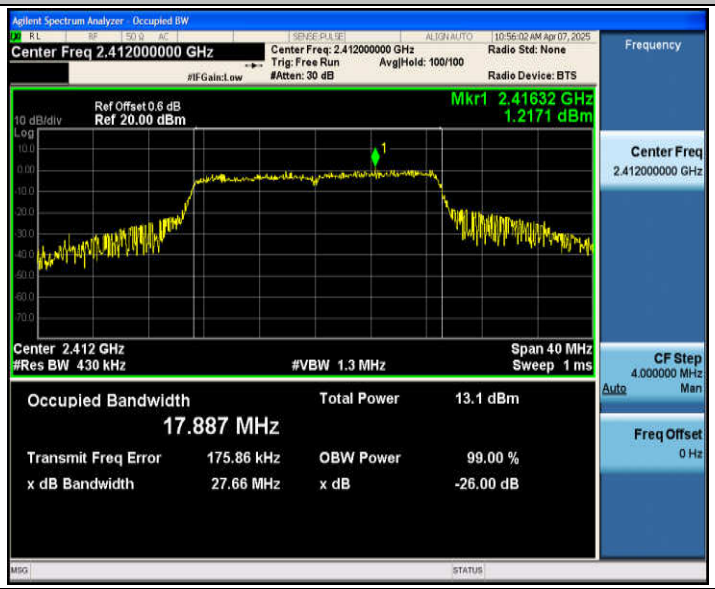
11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



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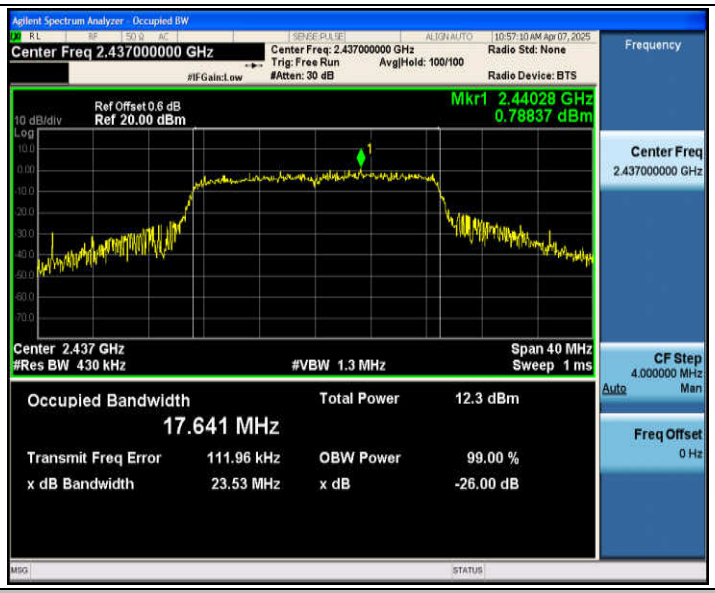

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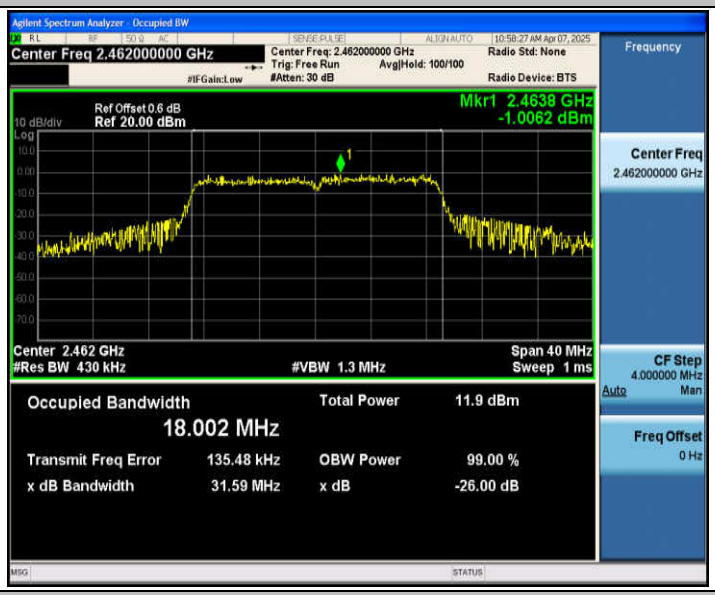
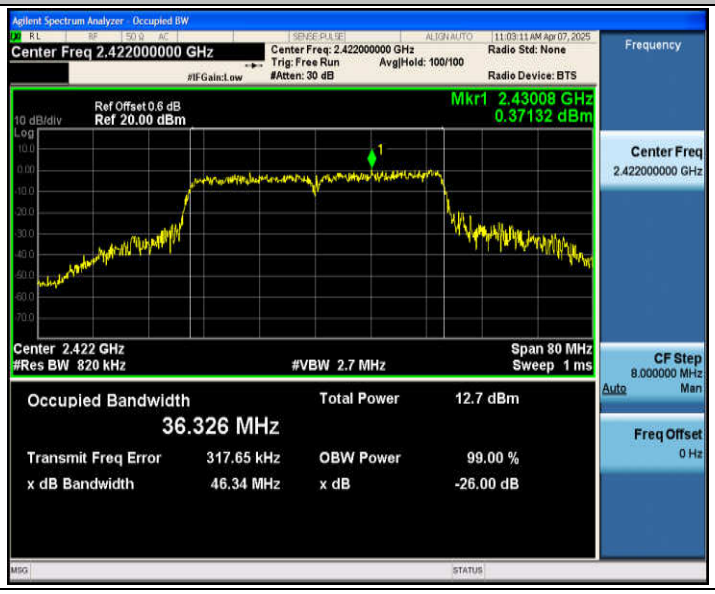
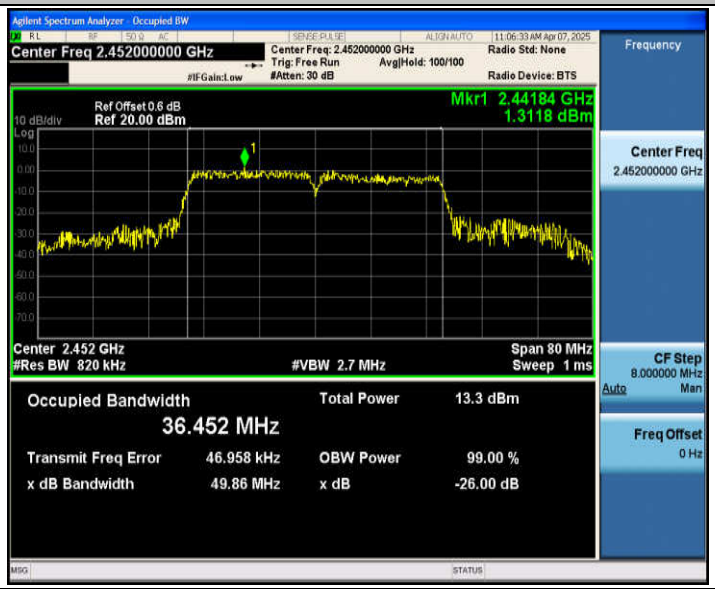


11N40SISO_Ant1_2422

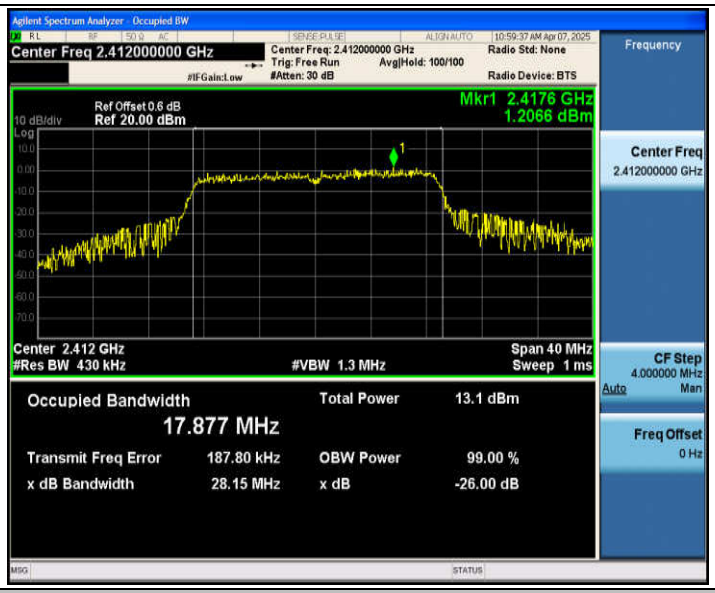


11N40SISO_Ant1_2437

11N40SISO_Ant1_2452



11AX20SISO_Ant1_2412



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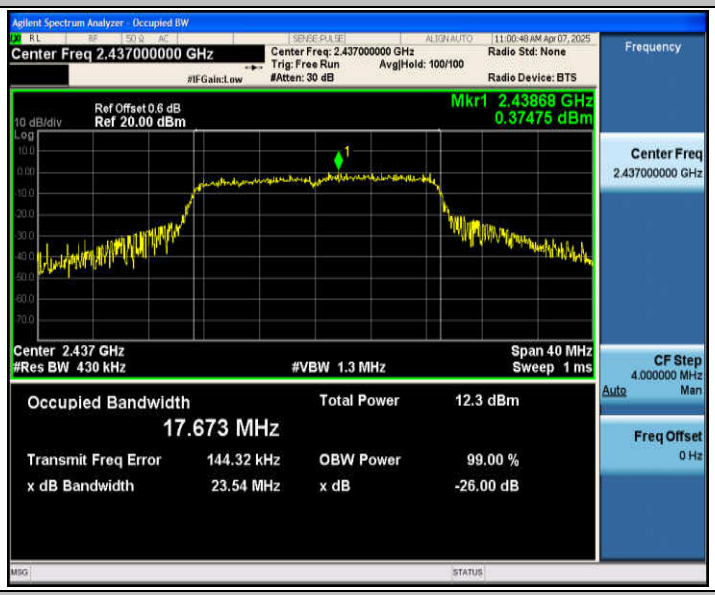
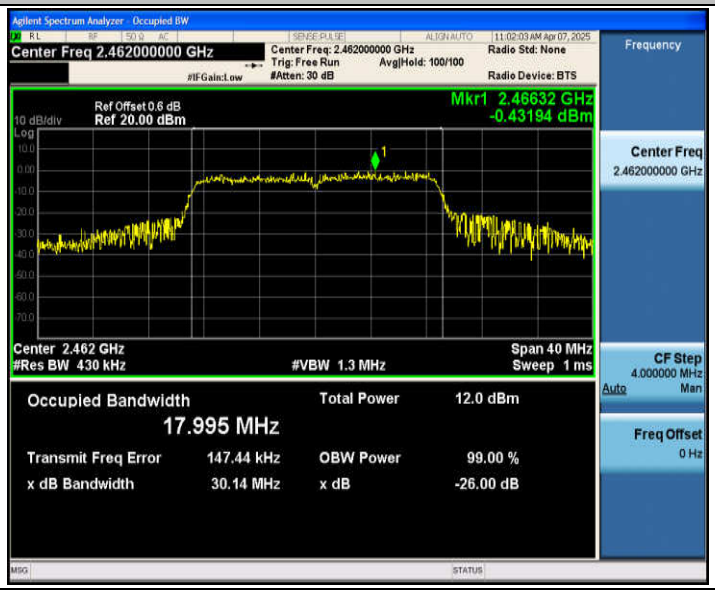
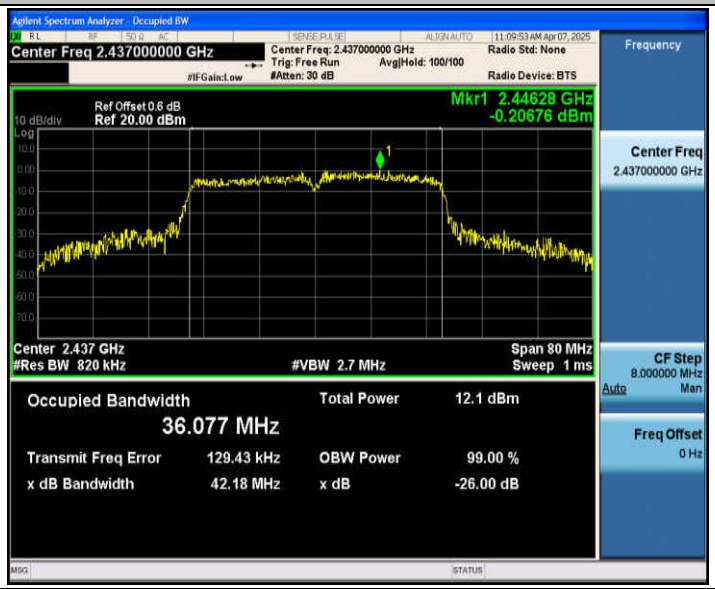


11AX20SISO_Ant1_2462



11AX40SISO_Ant1_2422

11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452

Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.452000000 GHz
Center Freq: 2.452000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
11:11:27 AM Apr 07, 2025
Frequency
Ref Offset 0.6 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.44936 GHz
0.84360 dBm
Center 2.452 GHz
#Res BW 820 kHz
#VBW 2.7 MHz
Span 80 MHz
Sweep 1 ms
Occupied Bandwidth
36.461 MHz
Total Power 13.2 dBm
Transmit Freq Error 33.403 kHz
OBW Power 99.00 %
x dB Bandwidth 55.57 MHz
x dB -26.00 dB
Center Freq
2.452000000 GHz
CF Step
8.000000 MHz
Auto Man
Freq Offset
0 Hz

Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	15.01	≤30.00	PASS
		2437	13.81	≤30.00	PASS
		2462	13.90	≤30.00	PASS
11G	Ant1	2412	13.46	≤30.00	PASS
		2437	12.94	≤30.00	PASS
		2462	12.60	≤30.00	PASS
11N20SISO	Ant1	2412	13.51	≤30.00	PASS
		2437	12.91	≤30.00	PASS
		2462	12.59	≤30.00	PASS
11N40SISO	Ant1	2422	12.79	≤30.00	PASS
		2437	12.23	≤30.00	PASS
		2452	13.20	≤30.00	PASS
11AX20SISO	Ant1	2412	13.56	≤30.00	PASS
		2437	12.62	≤30.00	PASS
		2462	12.37	≤30.00	PASS
11AX40SISO	Ant1	2422	12.82	≤30.00	PASS
		2437	12.14	≤30.00	PASS
		2452	13.23	≤30.00	PASS

Appendix D: Maximum power spectral density

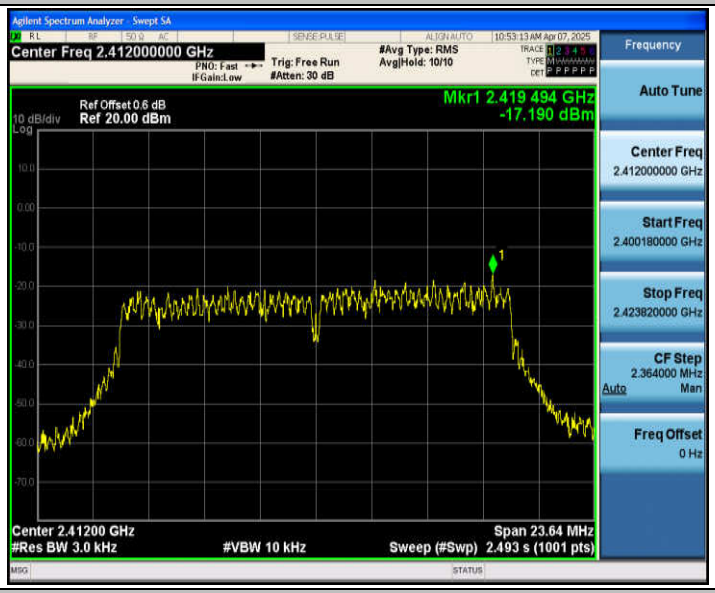
Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-10.86	≤8.00	PASS
		2437	-11.26	≤8.00	PASS
		2462	-11.68	≤8.00	PASS
11G	Ant1	2412	-17.19	≤8.00	PASS
		2437	-19.09	≤8.00	PASS
		2462	-19.63	≤8.00	PASS
11N20SISO	Ant1	2412	-18.37	≤8.00	PASS
		2437	-17.45	≤8.00	PASS
		2462	-19.36	≤8.00	PASS
11N40SISO	Ant1	2422	-21.00	≤8.00	PASS
		2437	-22.26	≤8.00	PASS
		2452	-21.16	≤8.00	PASS
11AX20SISO	Ant1	2412	-17.98	≤8.00	PASS
		2437	-19.15	≤8.00	PASS
		2462	-20.14	≤8.00	PASS
11AX40SISO	Ant1	2422	-20.74	≤8.00	PASS
		2437	-22.29	≤8.00	PASS
		2452	-20.77	≤8.00	PASS

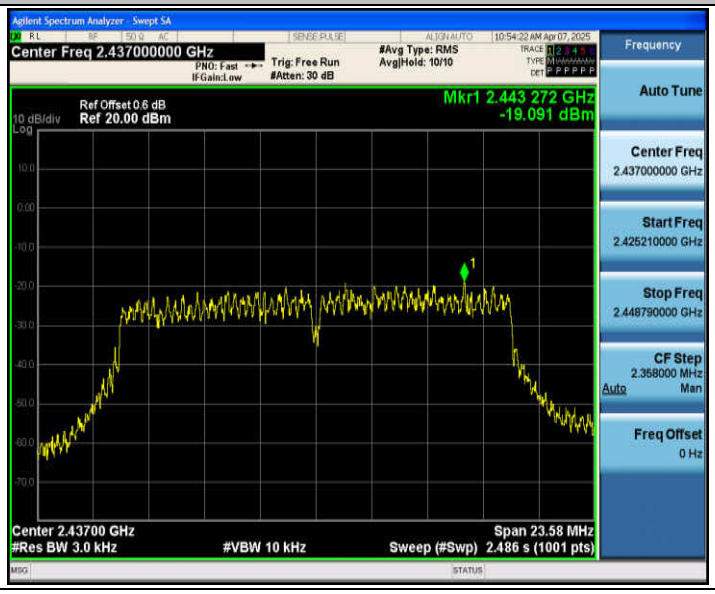
Test Graphs

11B_Ant1_2412
11B_Ant1_2437
11B_Ant1_2462

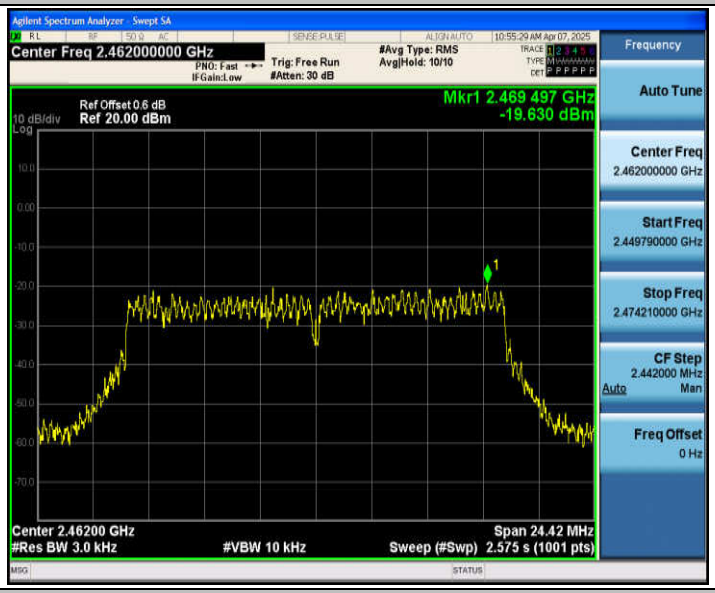
11G_Ant1_2412



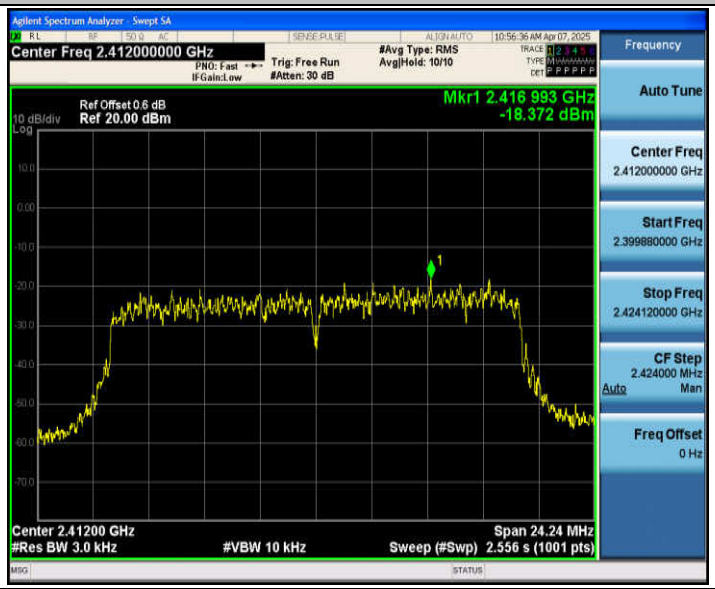
11G_Ant1_2437



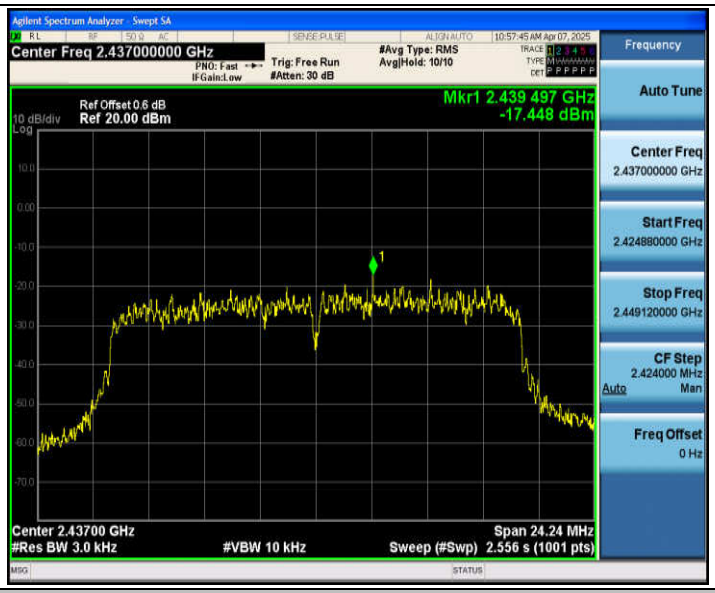
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



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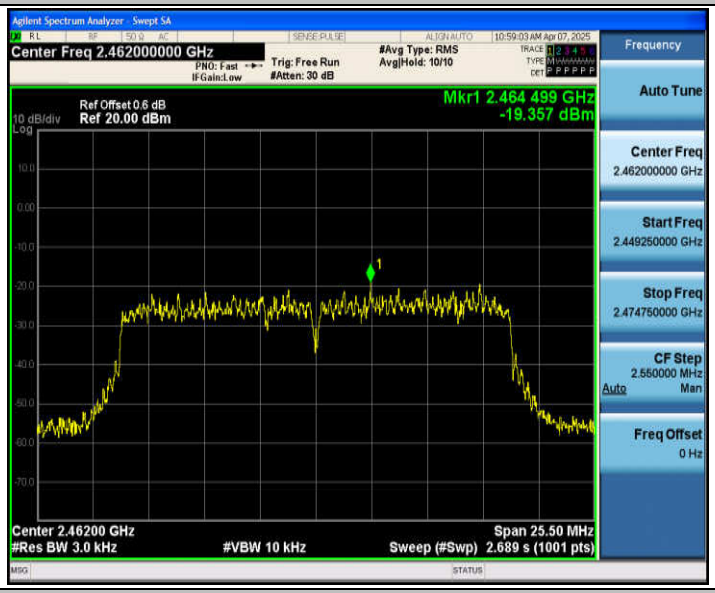
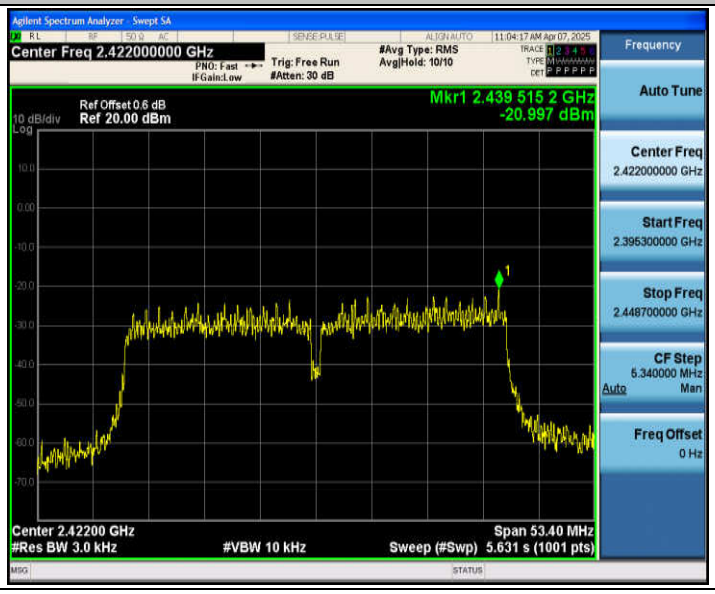
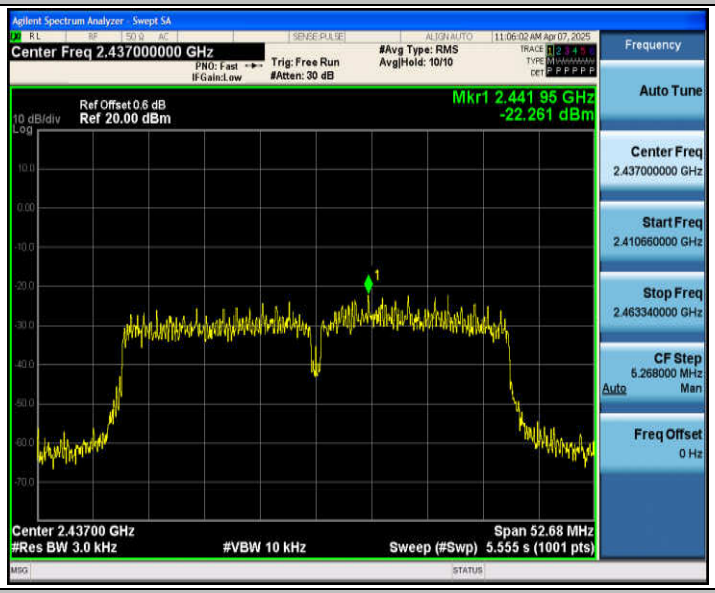


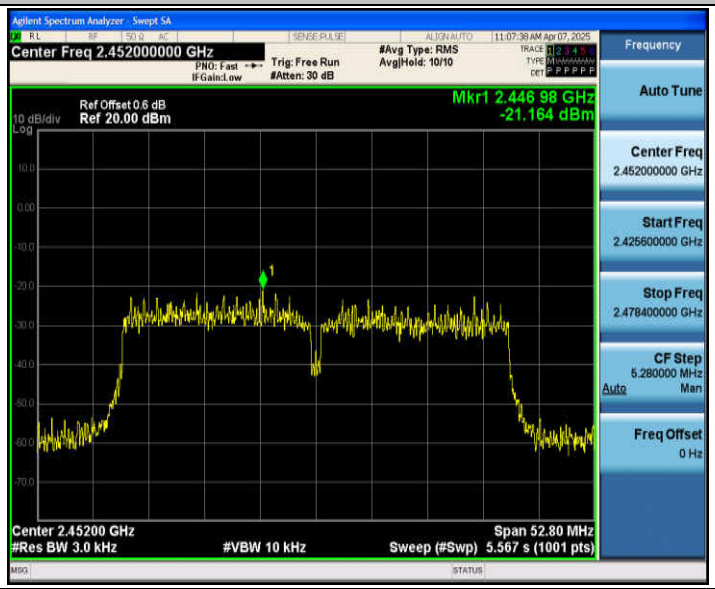
11N40SISO_Ant1_2422



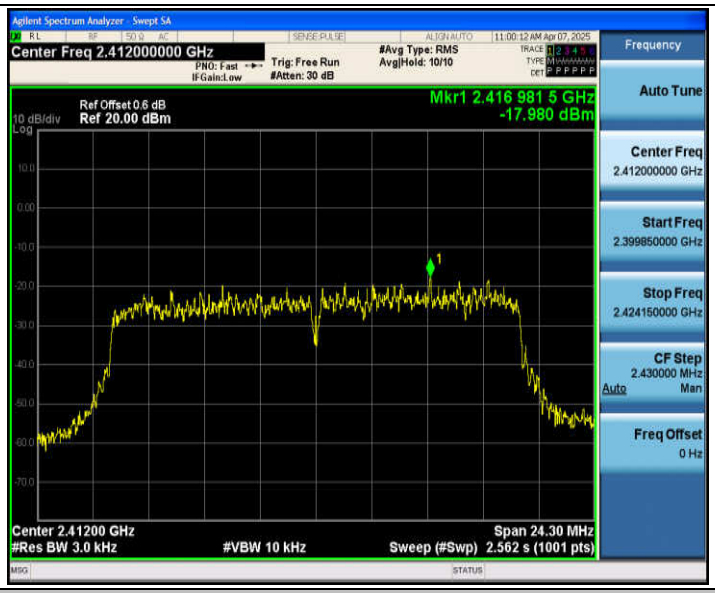
11N40SISO_Ant1_2437



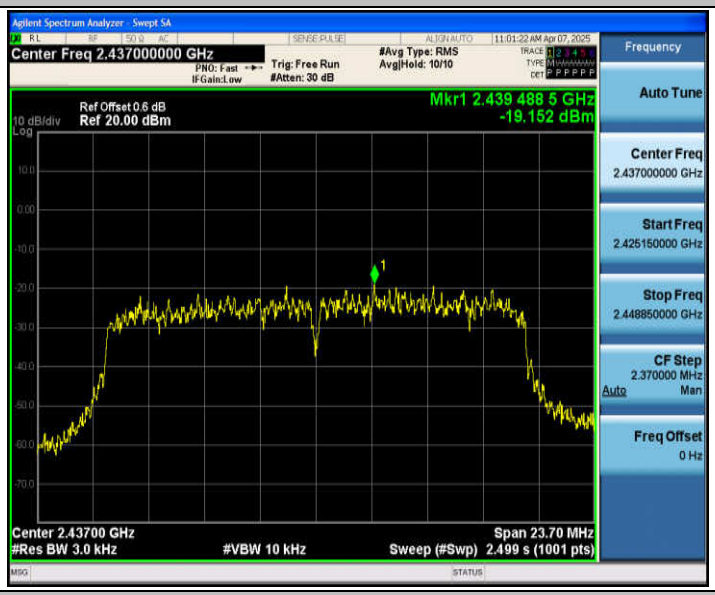
11N40SISO_Ant1_2452



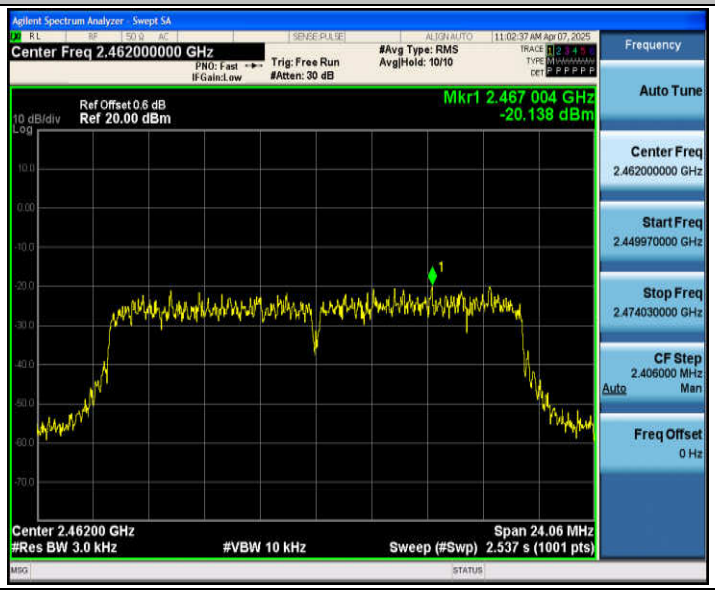
11AX20SISO_Ant1_2412



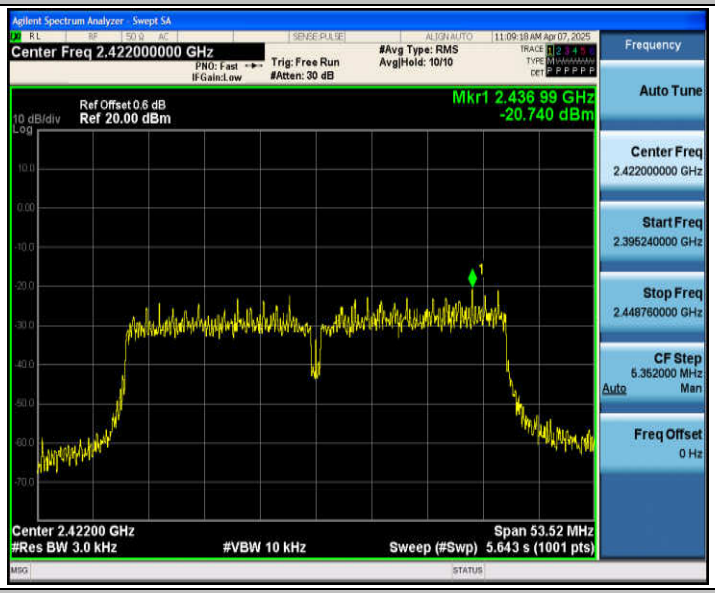
11AX20SISO_Ant1_2437



11AX20SISO_Ant1_2462



11AX40SISO_Ant1_2422



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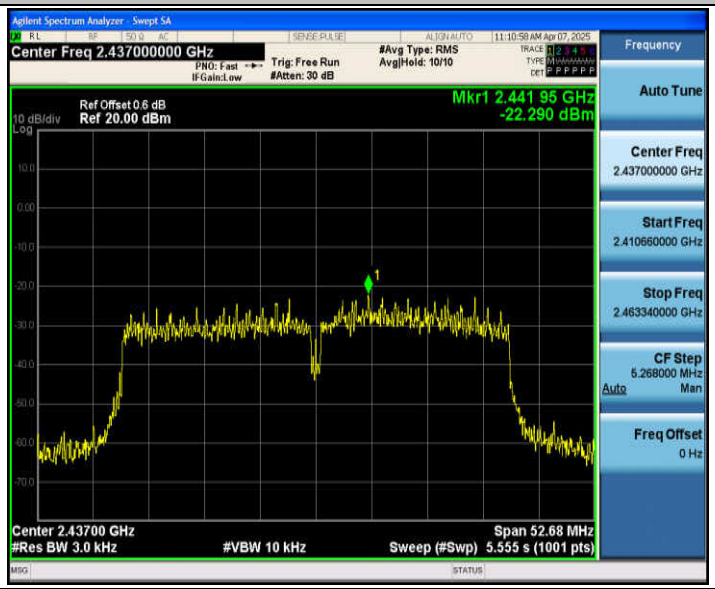
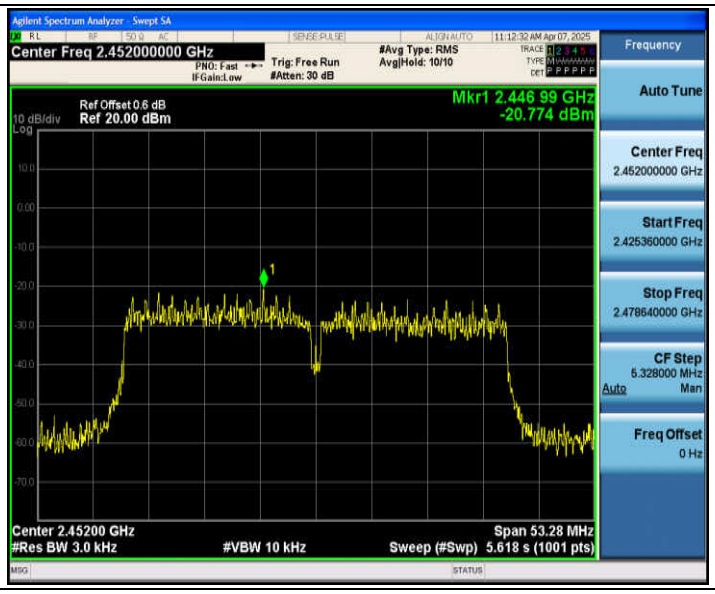


11AX40SISO_Ant1_2452


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.452000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 10/10
11:12:32 AM Apr 07, 2025
Frequency
Auto Tune
Center Freq
2.452000000 GHz
Start Freq
2.425360000 GHz
Stop Freq
2.478640000 GHz
CF Step
5.328000 MHz
Auto
Man
Freq Offset
0 Hz
Ref Offset 0.6 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.446 99 GHz
-20.774 dBm
Center 2.45200 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 53.28 MHz
Sweep (#Swp) 5.618 s (1001 pts)

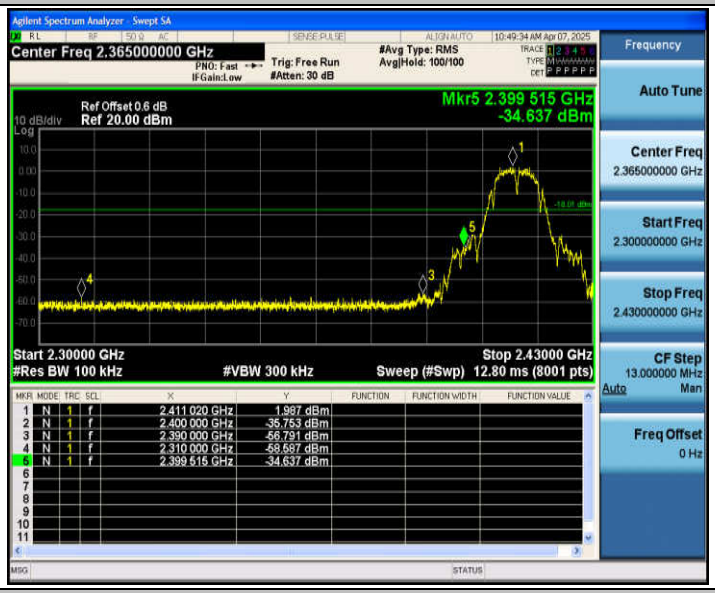
Appendix E: Band edge measurements

Test Result

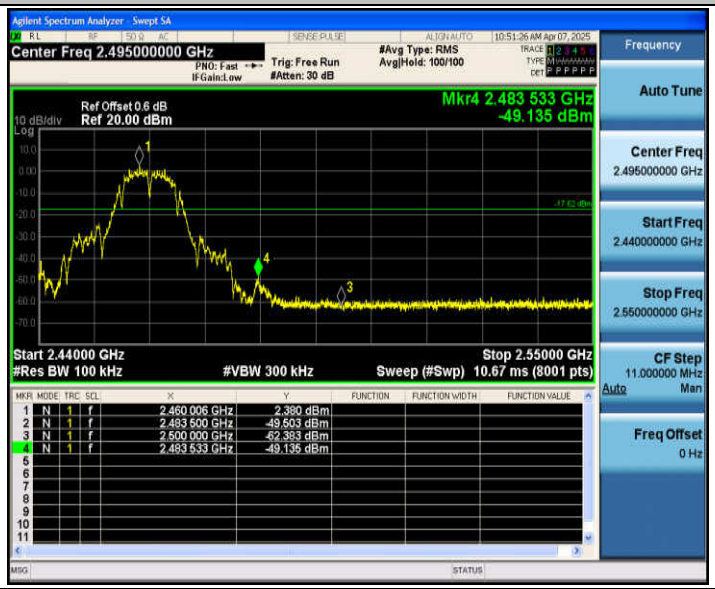
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.99	-34.64	≤-18.01	PASS
		High	2462	2.38	-49.14	≤-17.62	PASS
11G	Ant1	Low	2412	-1.98	-34.04	≤-21.98	PASS
		High	2462	-3.34	-34.62	≤-23.34	PASS
11N20SISO	Ant1	Low	2412	-1.98	-35.04	≤-21.98	PASS
		High	2462	-3.42	-36.01	≤-23.42	PASS
11N40SISO	Ant1	Low	2422	-5.46	-39.47	≤-25.46	PASS
		High	2452	-5.39	-35.16	≤-25.39	PASS
11AX20SISO	Ant1	Low	2412	-2.44	-35.86	≤-22.44	PASS
		High	2462	-3.40	-39.71	≤-23.4	PASS
11AX40SISO	Ant1	Low	2422	-5.59	-39.37	≤-25.59	PASS
		High	2452	-5.30	-35.3	≤-25.3	PASS

Test Graphs

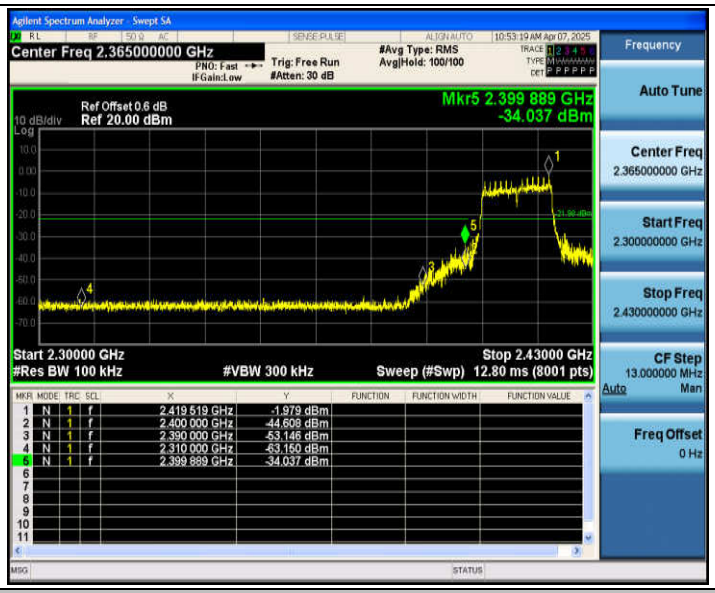
11B_Ant1_Low_2412



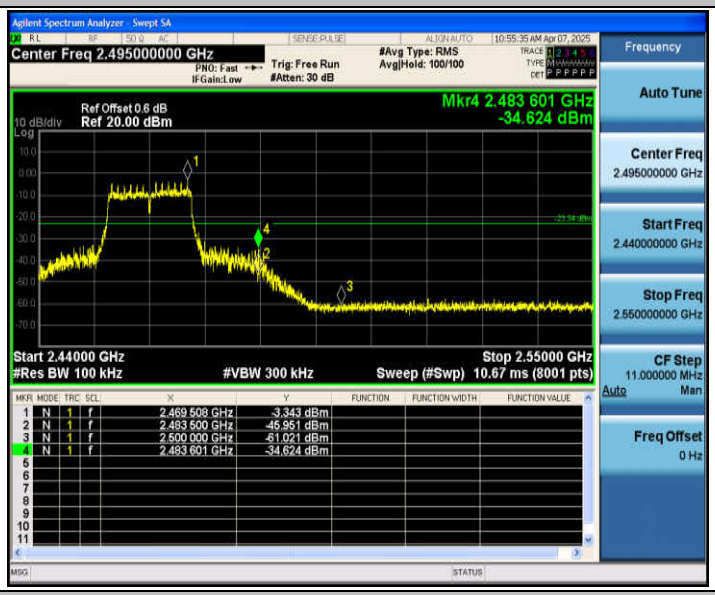
11B_Ant1_High_2462



11G_Ant1_Low_2412



11G_Ant1_High_2462



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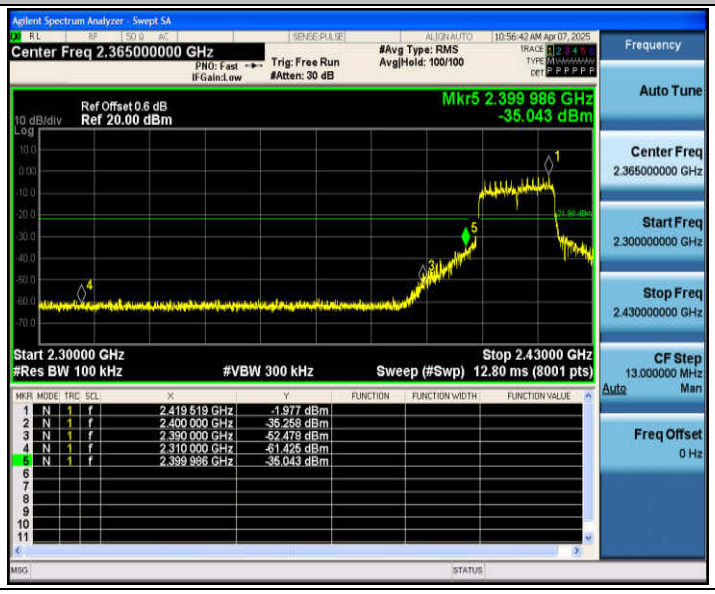

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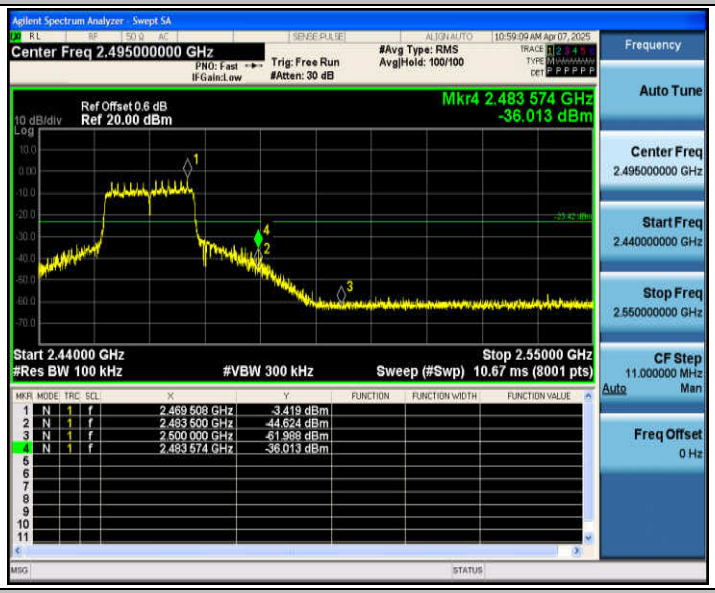
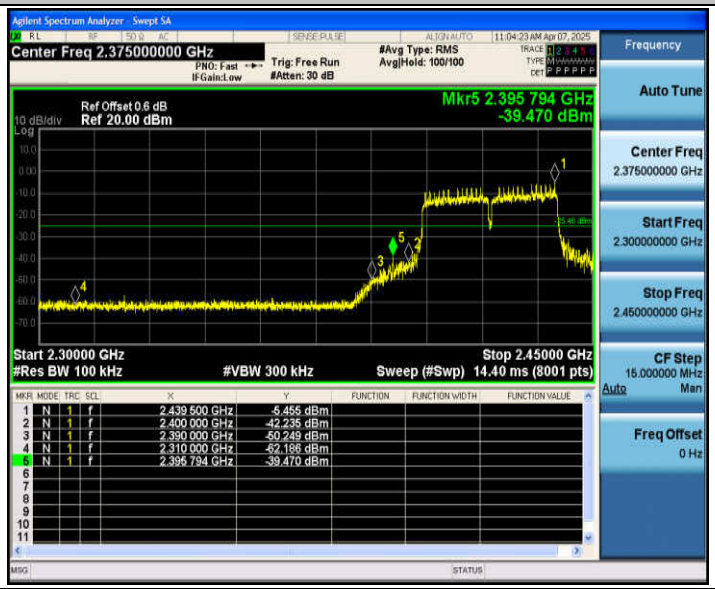
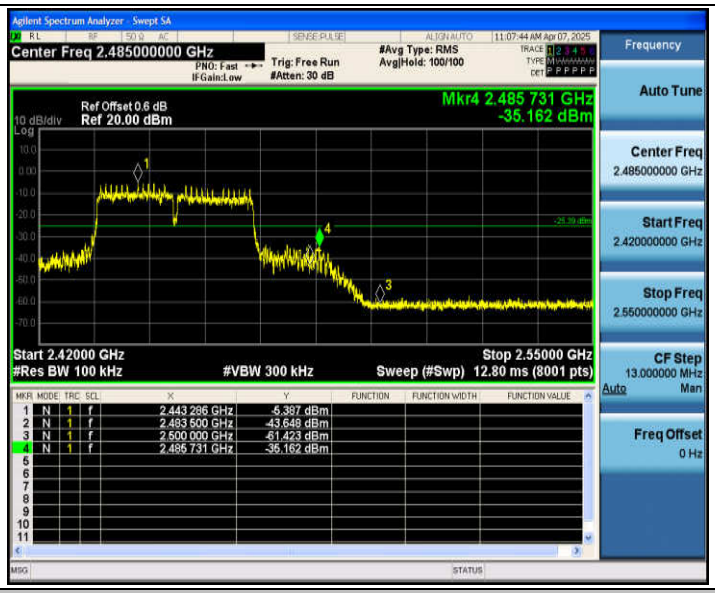


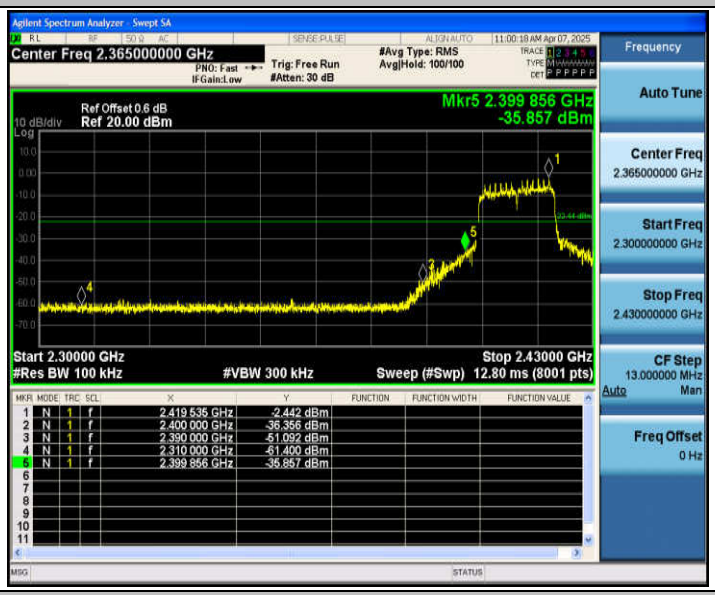
11N40SISO_Ant1_Low_2422



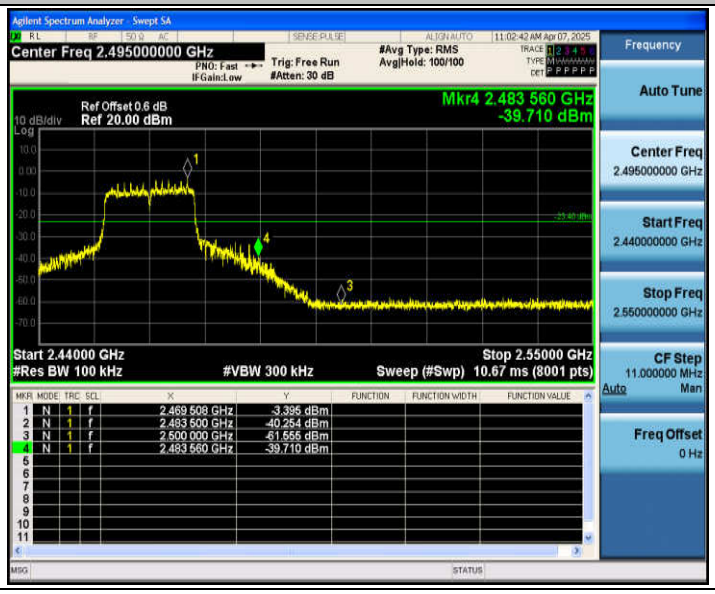
11N40SISO_Ant1_High_2452



11AX20SISO_Ant1_Low_2412



11AX20SISO_Ant1_High_2462



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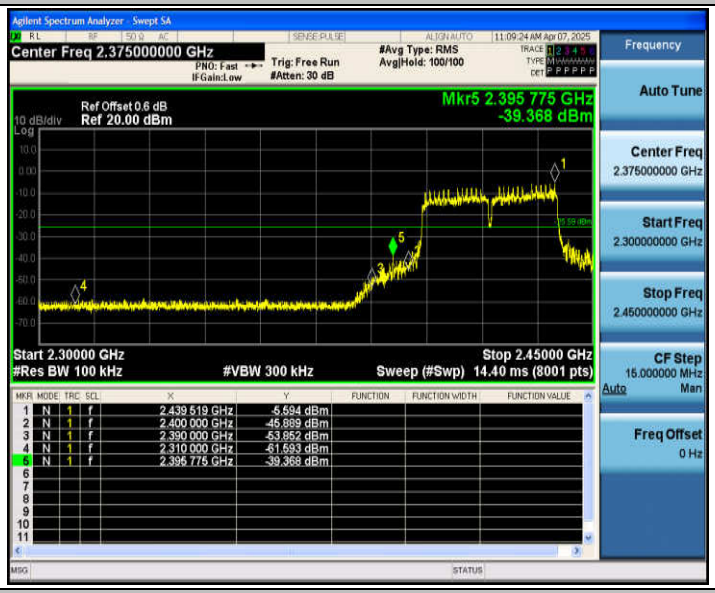

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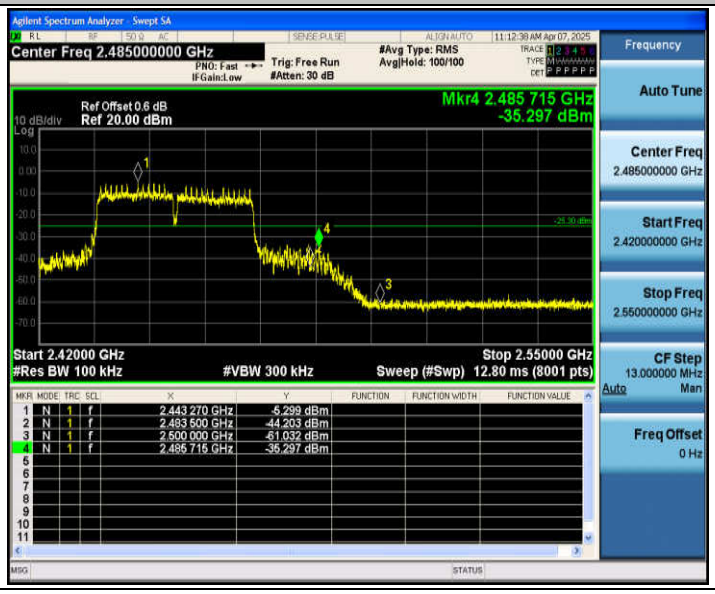


Appendix F: Conducted Spurious Emission

Test Result

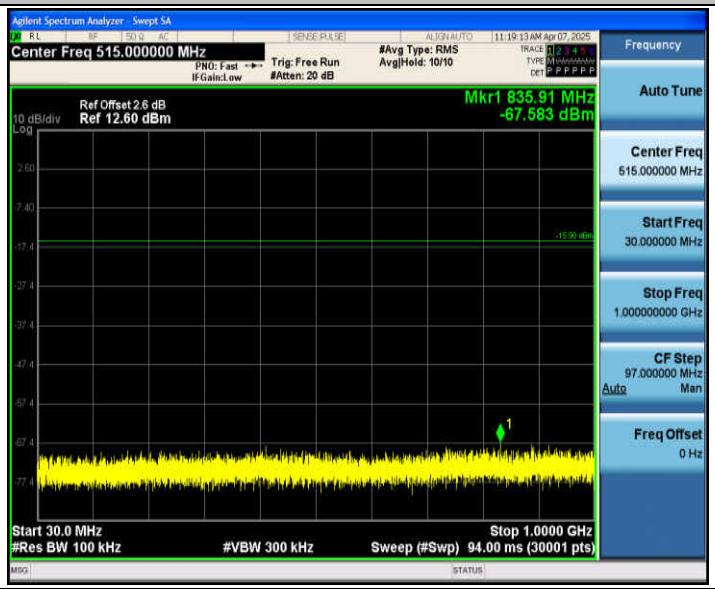
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.10	4.10	---	PASS
			30~1000	4.10	-67.58	≤-15.9	PASS
			1000~26500	4.10	-40.31	≤-15.9	PASS
		2437	Reference	2.82	2.82	---	PASS
			30~1000	2.82	-67.59	≤-17.18	PASS
			1000~26500	2.82	-38.3	≤-17.18	PASS
		2462	Reference	3.22	3.22	---	PASS
			30~1000	3.22	-67.49	≤-16.78	PASS
			1000~26500	3.22	-31.74	≤-16.78	PASS
11G	Ant1	2412	Reference	-0.28	-0.28	---	PASS
			30~1000	-0.28	-67.39	≤-20.28	PASS
			1000~26500	-0.28	-47.69	≤-20.28	PASS
		2437	Reference	-1.25	-1.25	---	PASS
			30~1000	-1.25	-67.72	≤-21.25	PASS
			1000~26500	-1.25	-51.15	≤-21.25	PASS
		2462	Reference	-2.86	-2.86	---	PASS
			30~1000	-2.86	-67.82	≤-22.86	PASS
			1000~26500	-2.86	-45.62	≤-22.86	PASS
11N20SISO	Ant1	2412	Reference	-0.84	-0.84	---	PASS
			30~1000	-0.84	-67.73	≤-20.84	PASS
			1000~26500	-0.84	-52.35	≤-20.84	PASS
		2437	Reference	-1.70	-1.70	---	PASS
			30~1000	-1.70	-67.98	≤-21.7	PASS
			1000~26500	-1.70	-51.53	≤-21.7	PASS
		2462	Reference	-2.12	-2.12	---	PASS
			30~1000	-2.12	-68.11	≤-22.12	PASS
			1000~26500	-2.12	-44.67	≤-22.12	PASS
11N40SISO	Ant1	2422	Reference	-3.87	-3.87	---	PASS
			30~1000	-3.87	-66.88	≤-23.87	PASS
			1000~26500	-3.87	-50.69	≤-23.87	PASS
		2437	Reference	-4.64	-4.64	---	PASS
			30~1000	-4.64	-68.11	≤-24.64	PASS
			1000~26500	-4.64	-49.3	≤-24.64	PASS
		2452	Reference	-3.67	-3.67	---	PASS
			30~1000	-3.67	-67.84	≤-23.67	PASS
			1000~26500	-3.67	-49.24	≤-23.67	PASS
11AX20SISO	Ant1	2412	Reference	-1.57	-1.57	---	PASS

			30~1000	-1.57	-68.07	≤-21.57	PASS
			1000~26500	-1.57	-48.91	≤-21.57	PASS
		2437	Reference	-1.62	-1.62	---	PASS
			30~1000	-1.62	-68.09	≤-21.62	PASS
			1000~26500	-1.62	-53.19	≤-21.62	PASS
		2462	Reference	-3.38	-3.38	---	PASS
			30~1000	-3.38	-67.8	≤-23.38	PASS
			1000~26500	-3.38	-44.2	≤-23.38	PASS
11AX40SISO	Ant1	2422	Reference	-3.68	-3.68	---	PASS
			30~1000	-3.68	-67.01	≤-23.68	PASS
			1000~26500	-3.68	-54.25	≤-23.68	PASS
		2437	Reference	-4.11	-4.11	---	PASS
			30~1000	-4.11	-68.37	≤-24.11	PASS
			1000~26500	-4.11	-46.43	≤-24.11	PASS
		2452	Reference	-4.41	-4.41	---	PASS
			30~1000	-4.41	-67.26	≤-24.41	PASS
			1000~26500	-4.41	-46.84	≤-24.41	PASS

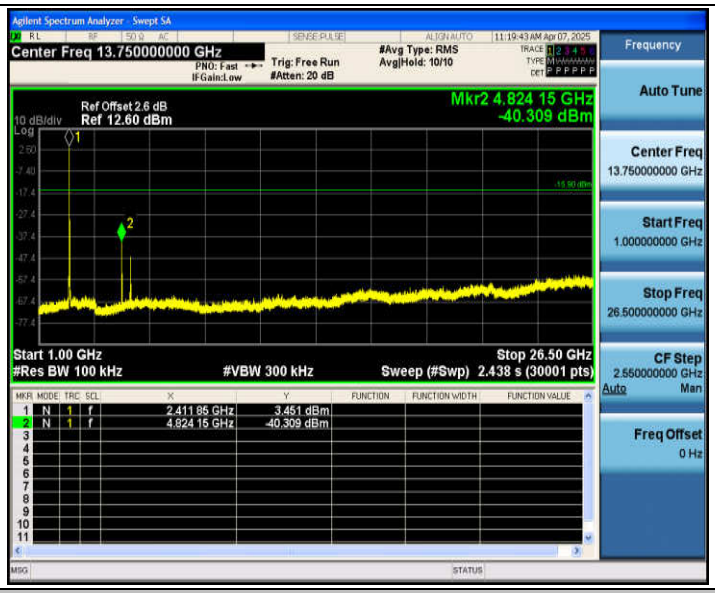
Test Graphs

11B_Ant1_2412_0~Reference

11B_Ant1_2412_30~1000

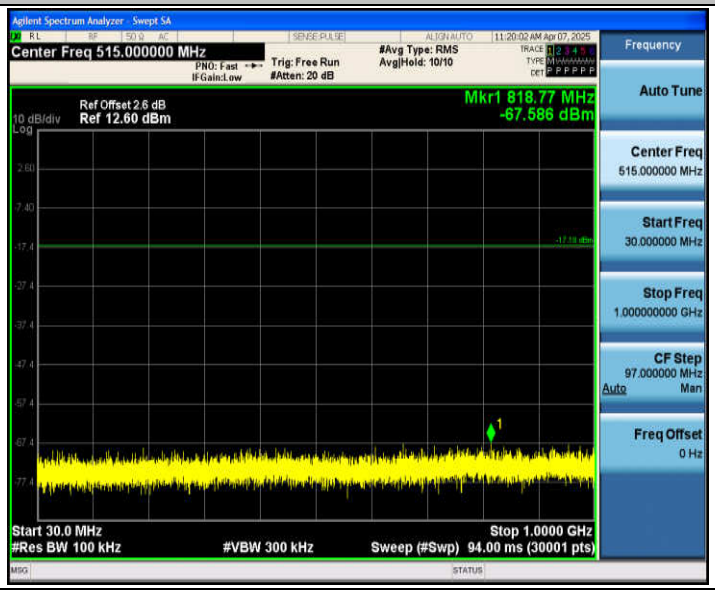


11B_Ant1_2412_1000~26500

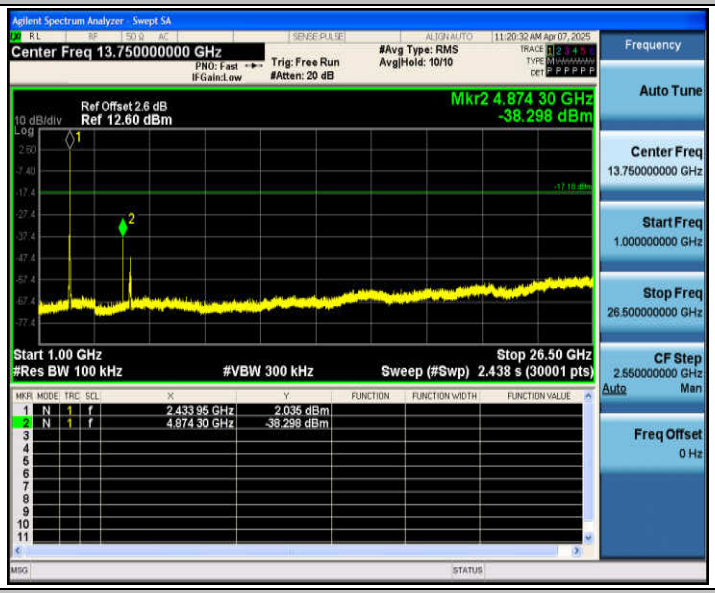


11B_Ant1_2437_0~Reference

11B_Ant1_2437_30~1000



11B_Ant1_2437_1000~26500



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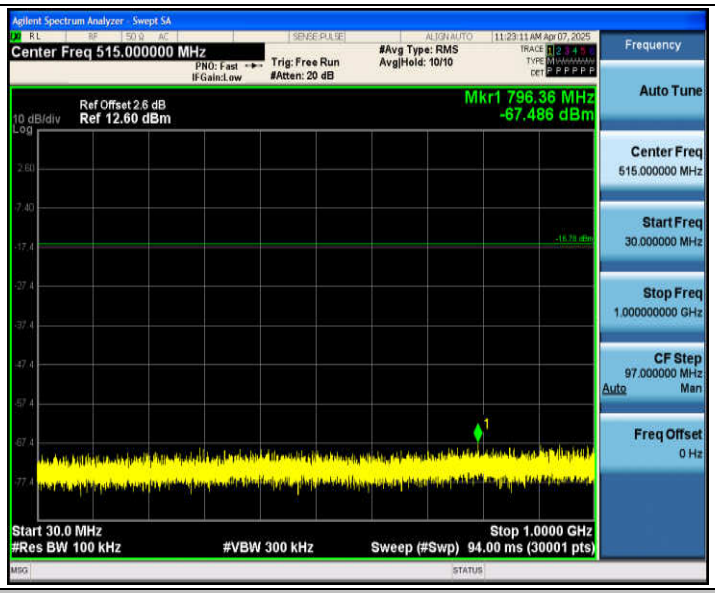
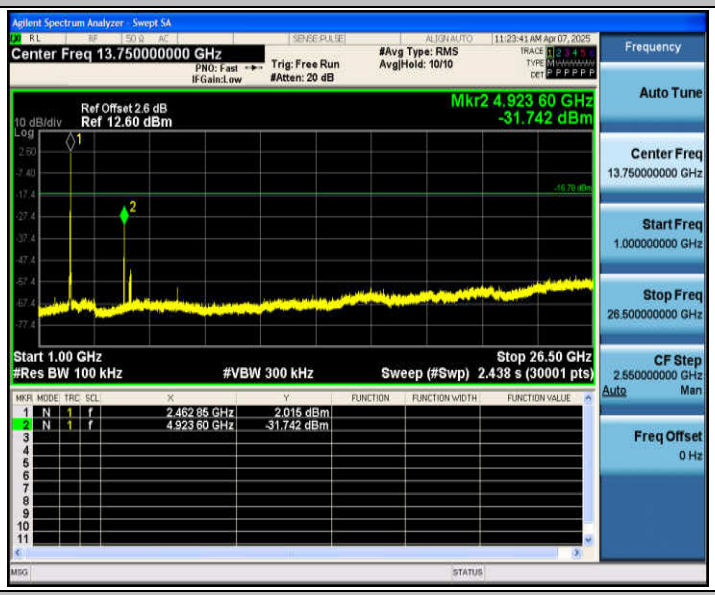
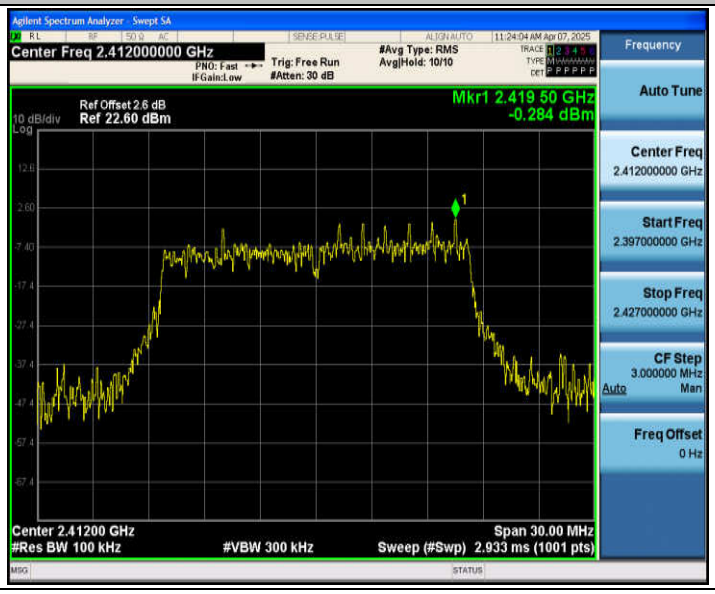
11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



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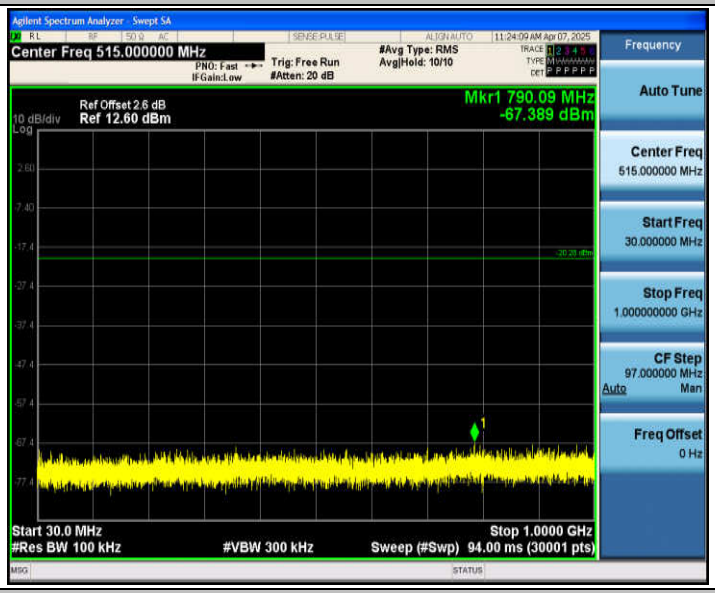

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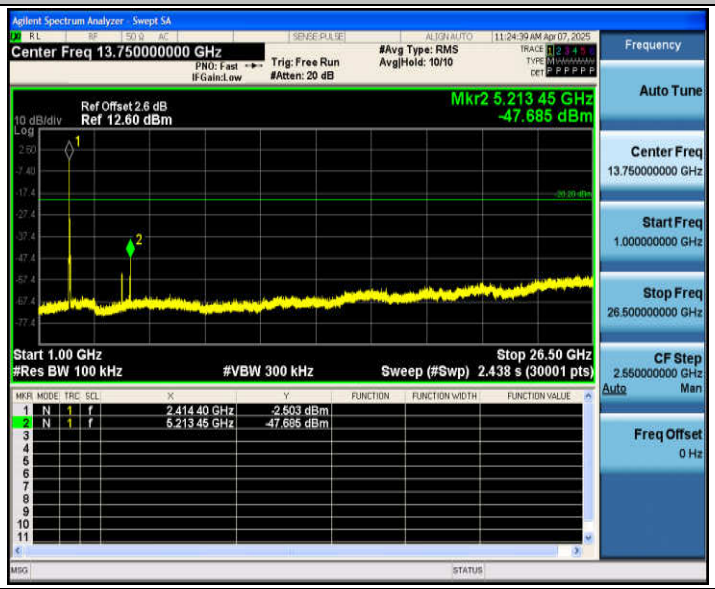
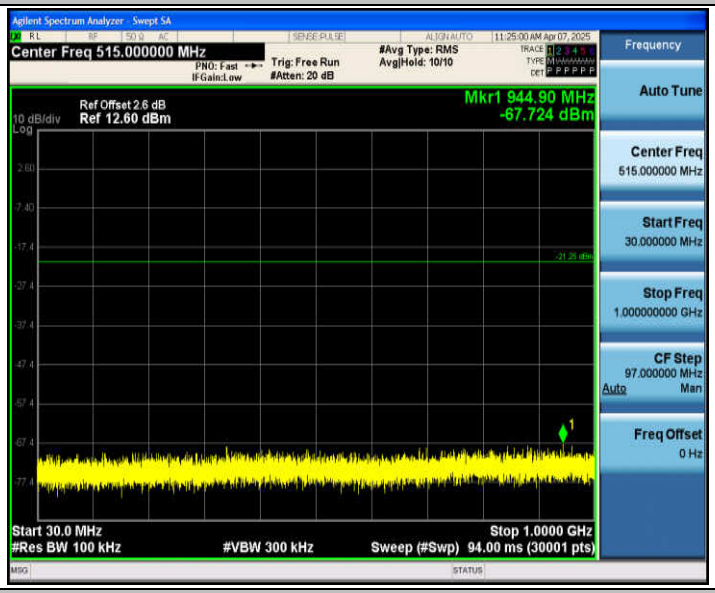
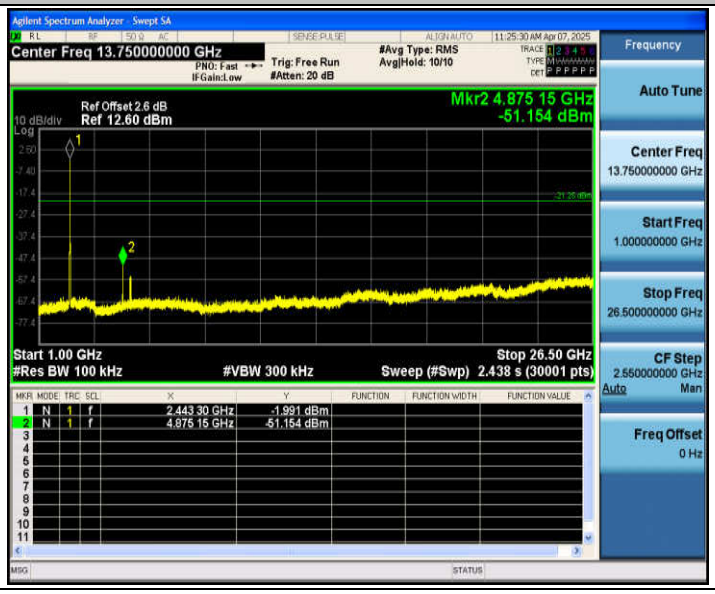


11G_Ant1_2437_0~Reference

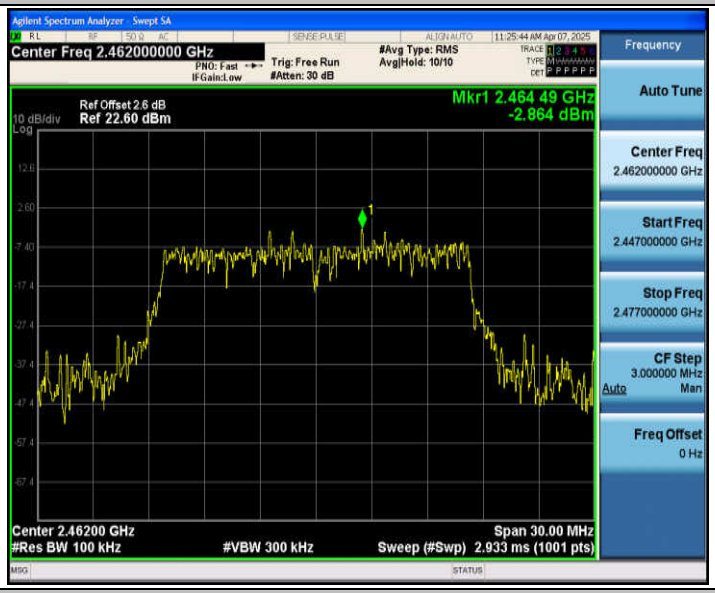
11G_Ant1_2437_30~1000



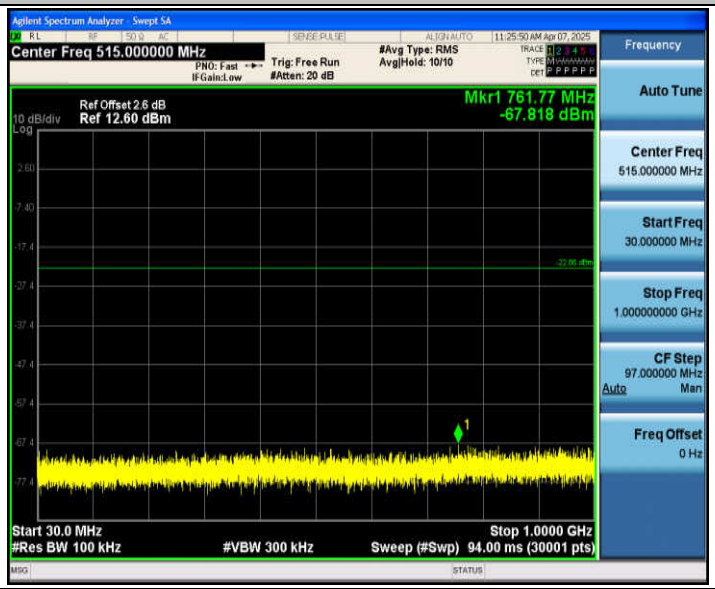
11G_Ant1_2437_1000~26500



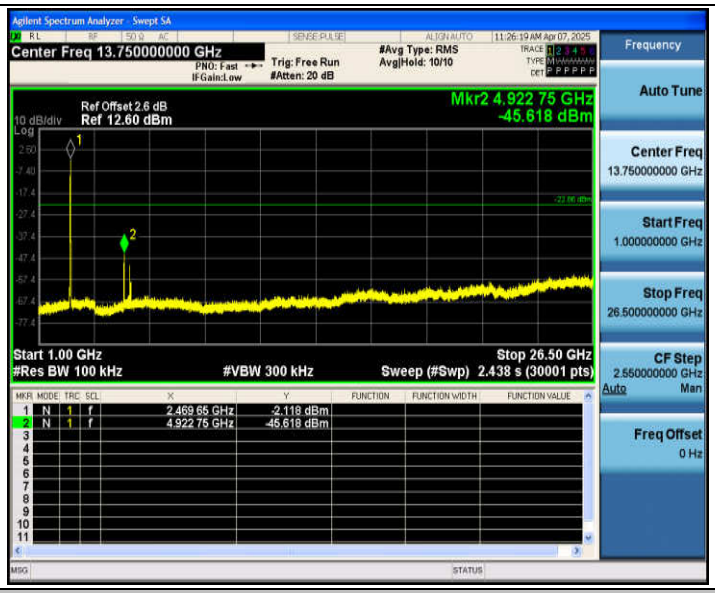
11G_Ant1_2462_0~Reference



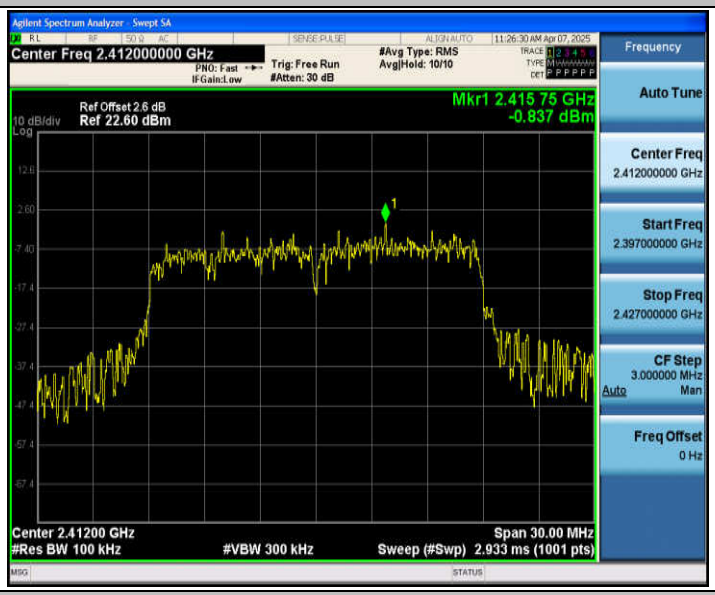
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



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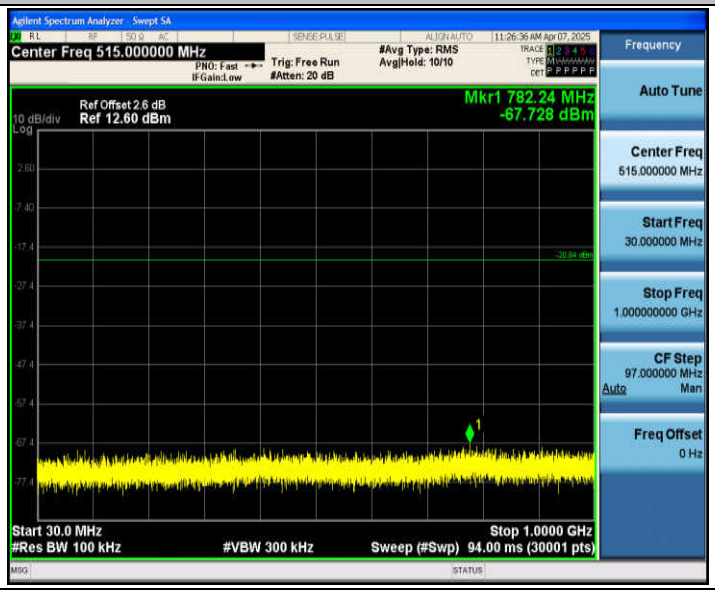

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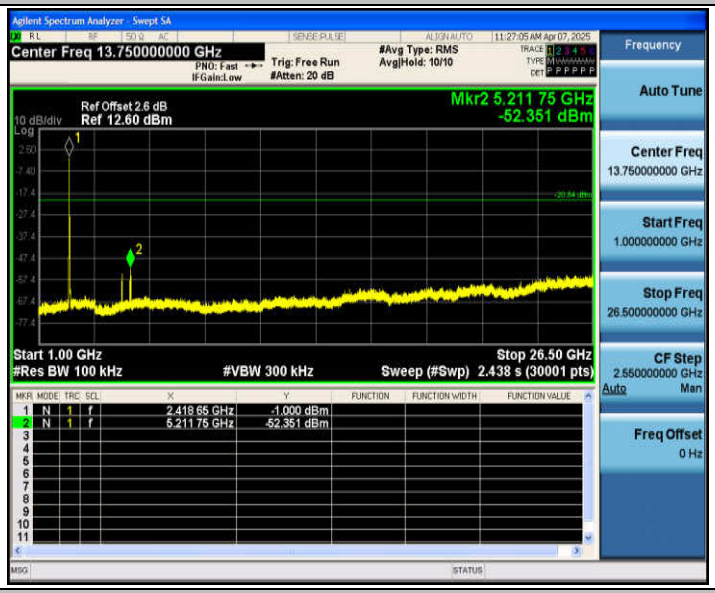
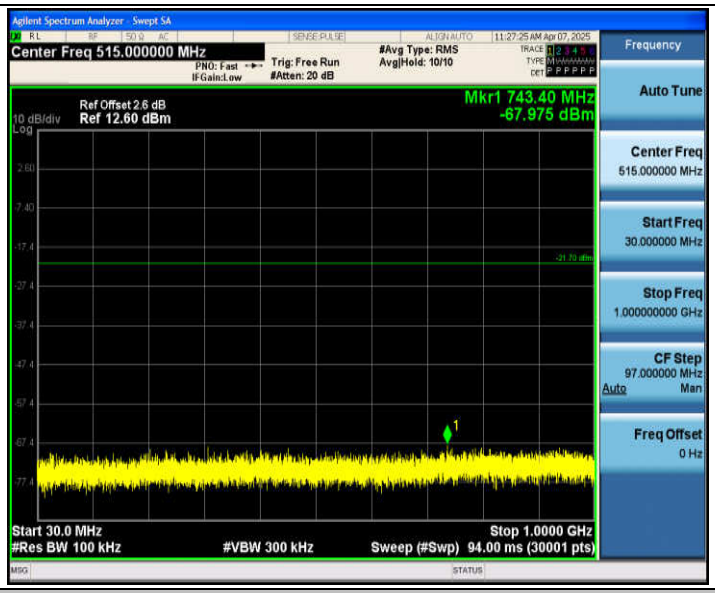
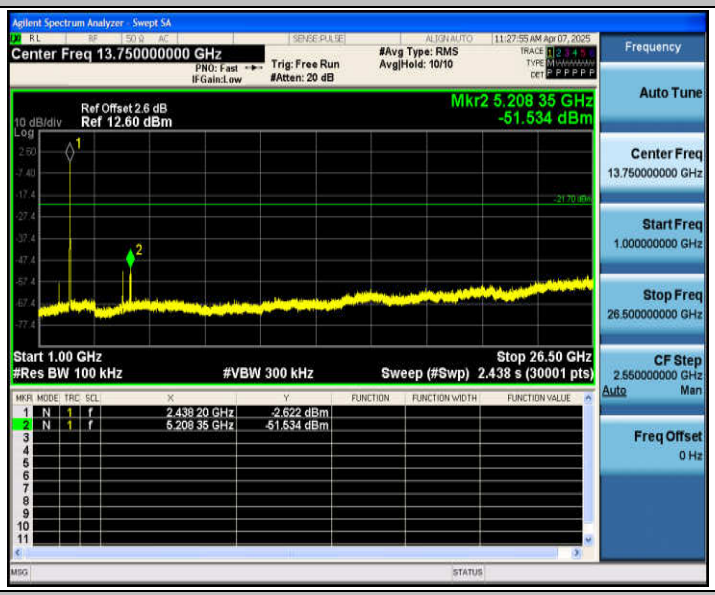


11N20SISO_Ant1_2437_0~Reference

11N20SISO_Ant1_2437_30~1000

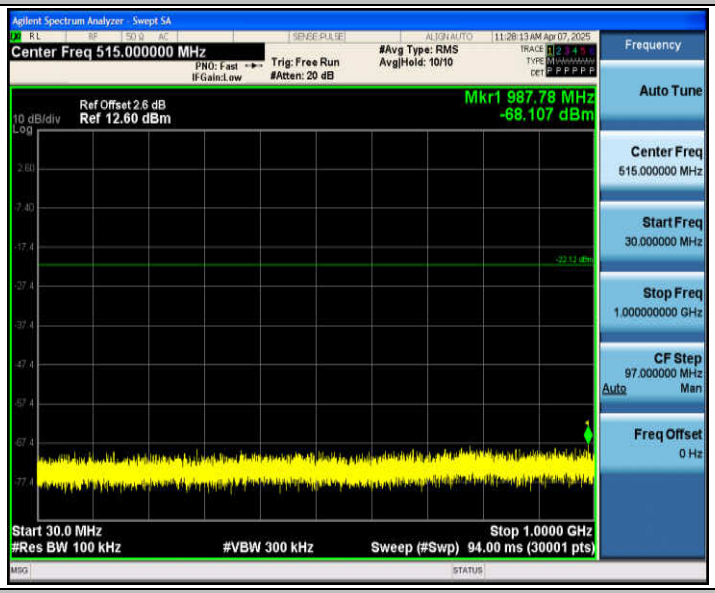


11N20SISO_Ant1_2437_1000~26500

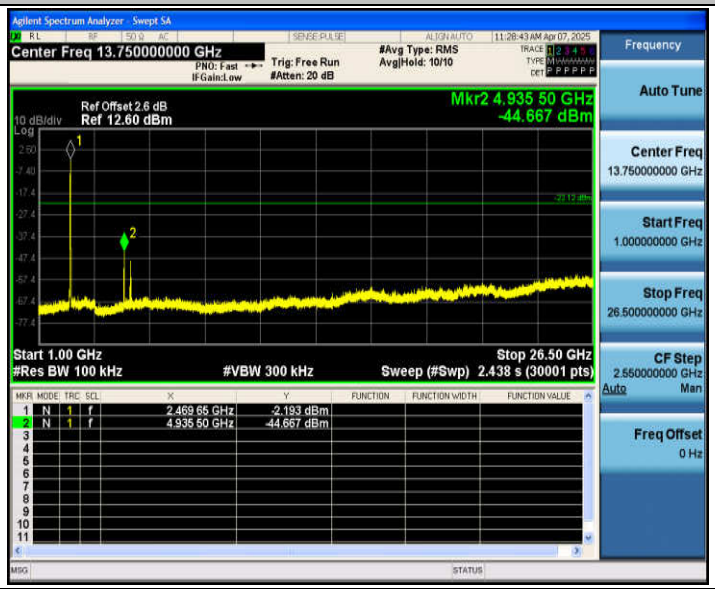


11N20SISO_Ant1_2462_0~Reference

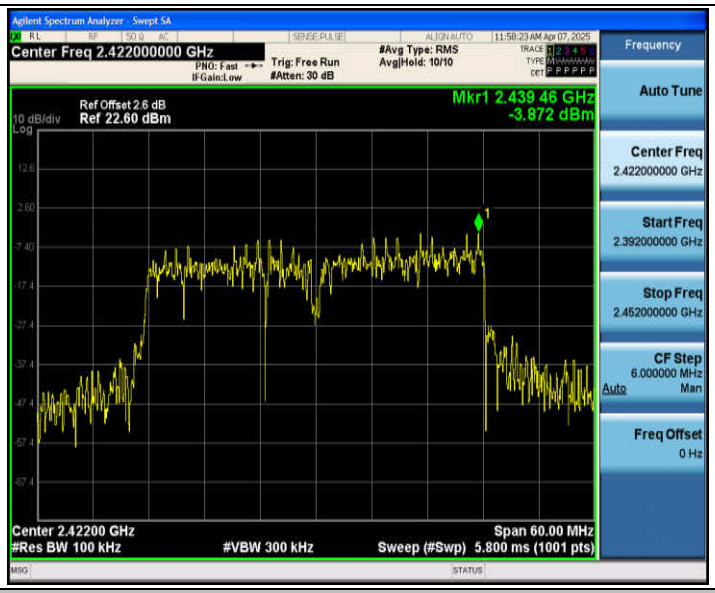
11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



11N40SISO_Ant1_2422_0~Reference



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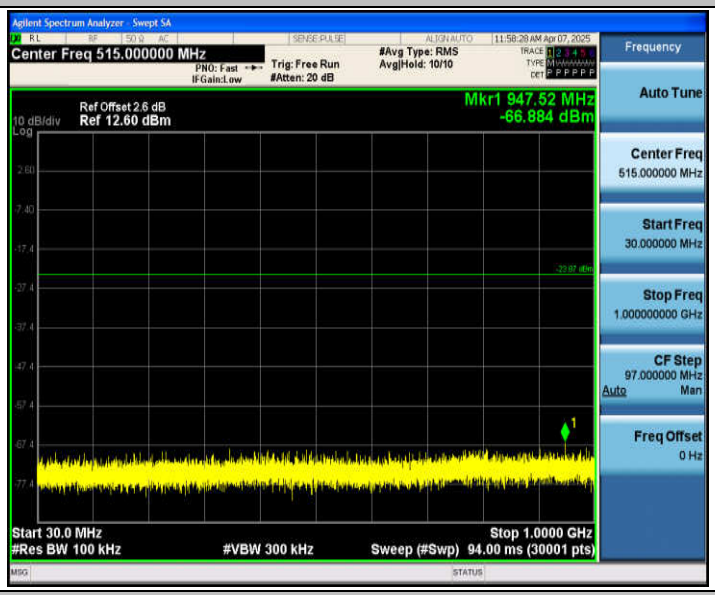
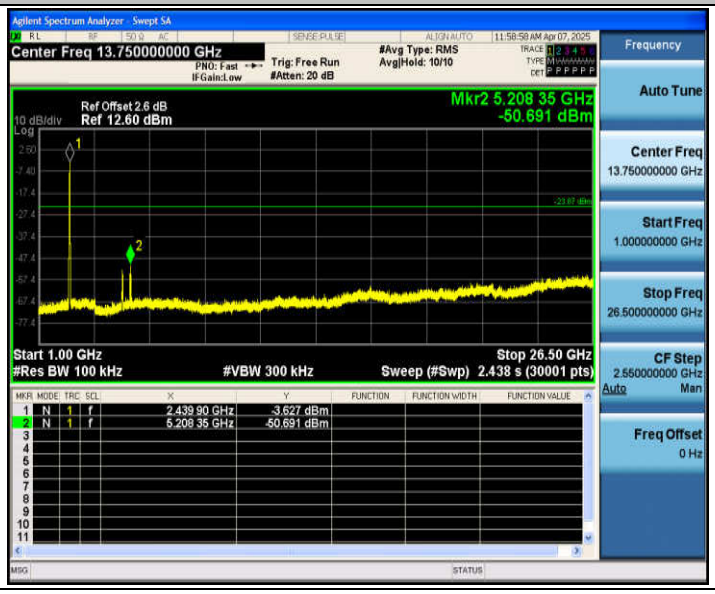
11N40SISO_Ant1_2422_1000~26500