FCC Appendix RF Test Data

FCC ID	**:**	**2BPZJ-ZQA-6000**
Company:	**:**	**Ningbo Zhiqi Smart Appliance Co., Ltd.**
EUT	**:**	**air purifier**
Model Number	**:**	**ZQA-6000**
Report No.	**:**	**CTA25051302201**
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	9.560	2407.000	2416.560	0.5	PASS
		2437	8.480	2433.080	2441.560	0.5	PASS
		2462	9.520	2457.040	2466.560	0.5	PASS
11G	Ant1	2412	15.720	2404.440	2420.160	0.5	PASS
		2437	15.720	2429.440	2445.160	0.5	PASS
		2462	16.320	2453.880	2470.200	0.5	PASS
11N20SISO	Ant1	2412	16.160	2404.440	2420.600	0.5	PASS
		2437	15.560	2429.440	2445.000	0.5	PASS
		2462	16.960	2453.680	2470.640	0.5	PASS
11N40SISO	Ant1	2422	35.600	2404.480	2440.080	0.5	PASS
		2437	35.040	2419.480	2454.520	0.5	PASS
		2452	35.360	2434.240	2469.600	0.5	PASS

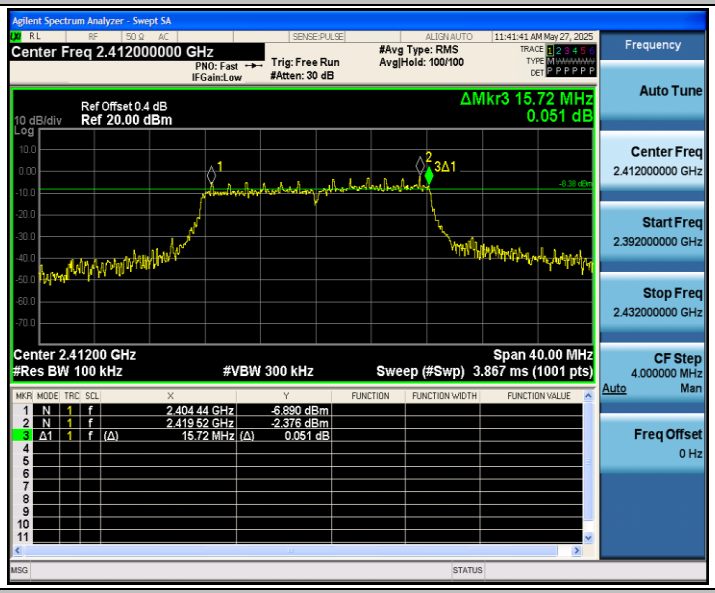
Test Graphs

11B_Ant1_2412

11B_Ant1_2437

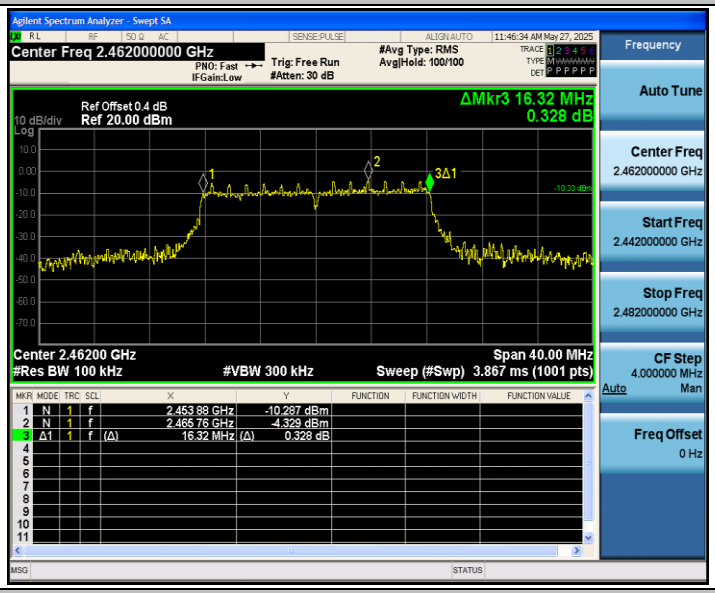
11B_Ant1_2462

11G_Ant1_2412



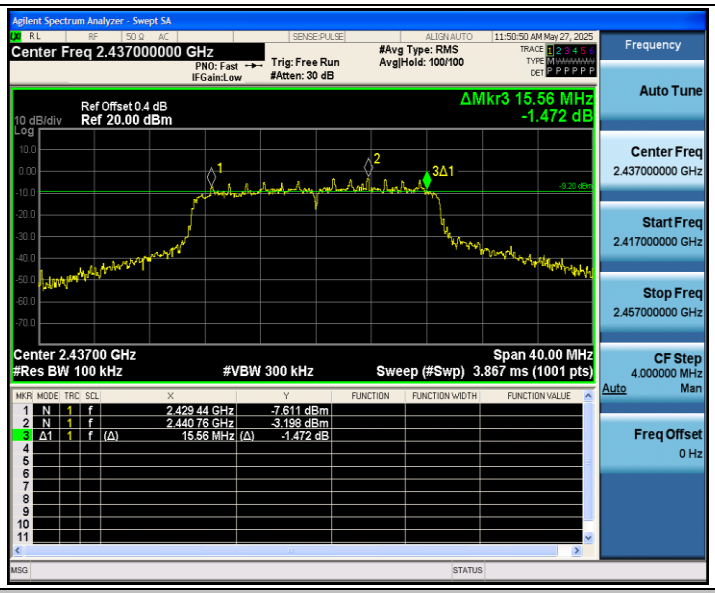
11G_Ant1_2437

11G_Ant1_2462



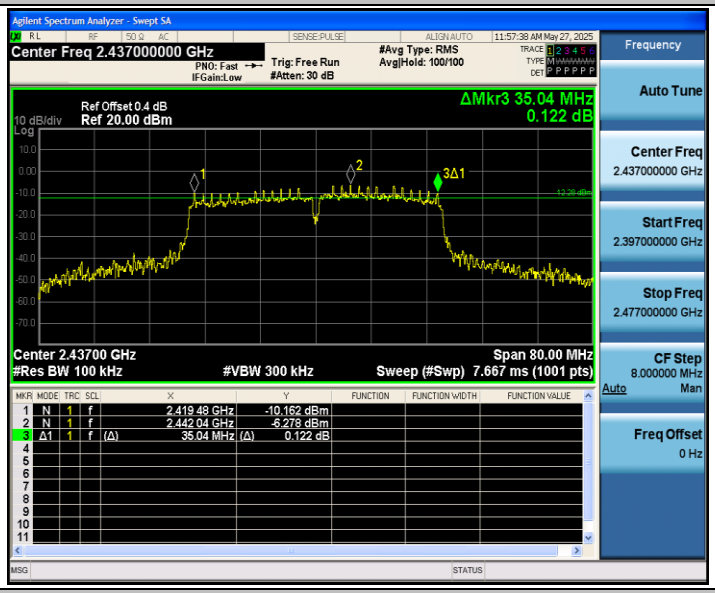
11N20SISO_Ant1_2412

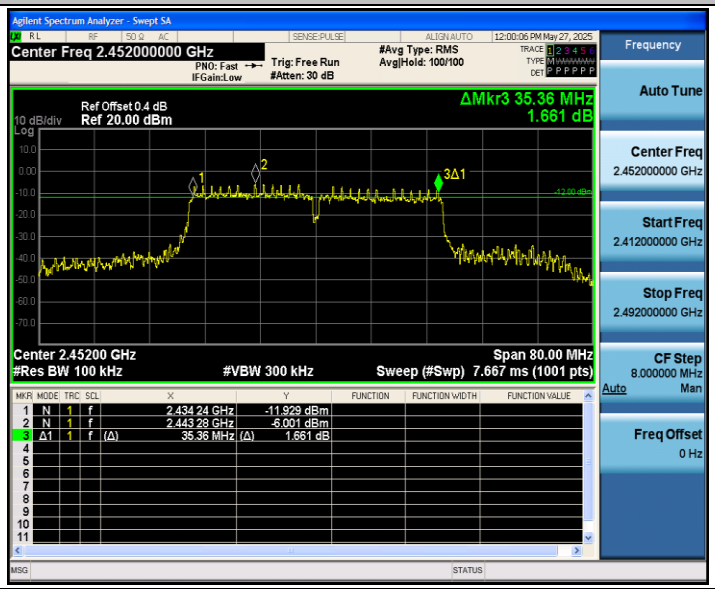
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

11N40SISO_Ant1_2422

11N40SISO_Ant1_2437


11N40SISO_Ant1_2452


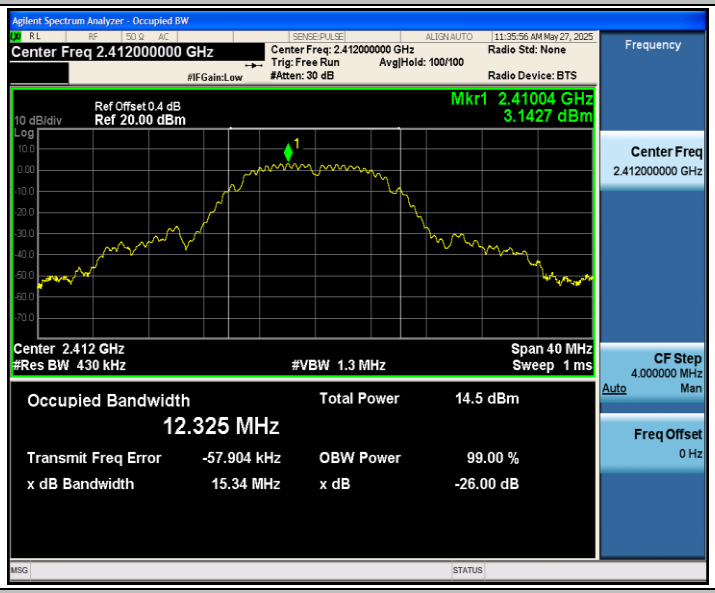
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.325	2405.7796	2418.1046	---	---
		2437	12.286	2431.1063	2443.3923	---	---
		2462	12.885	2455.3607	2468.2457	---	---
11G	Ant1	2412	16.752	2403.7740	2420.5260	---	---
		2437	16.650	2428.7870	2445.4370	---	---
		2462	16.839	2453.6814	2470.5204	---	---
11N20SISO	Ant1	2412	17.929	2403.2307	2421.1597	---	---
		2437	17.653	2428.2800	2445.9330	---	---
		2462	17.986	2453.1431	2471.1291	---	---
11N40SISO	Ant1	2422	36.312	2404.0979	2440.4099	---	---
		2437	35.983	2419.0618	2455.0448	---	---
		2452	36.412	2433.8826	2470.2946	---	---

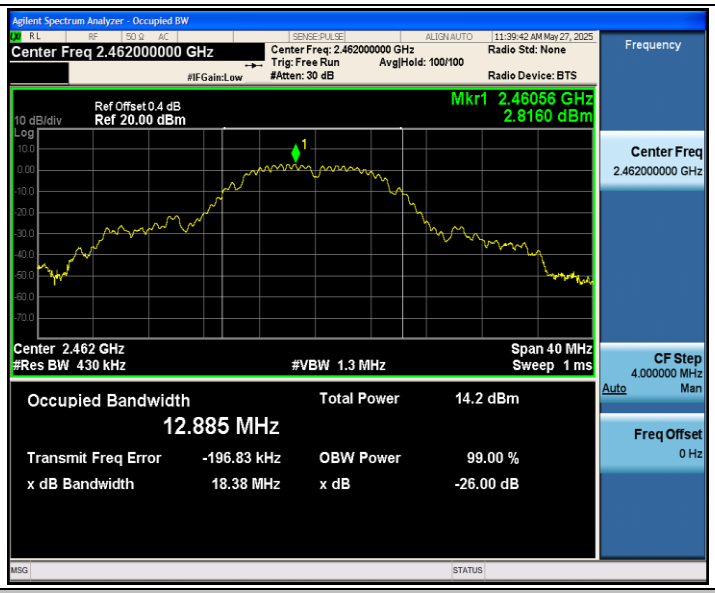
Test Graphs

11B_Ant1_2412

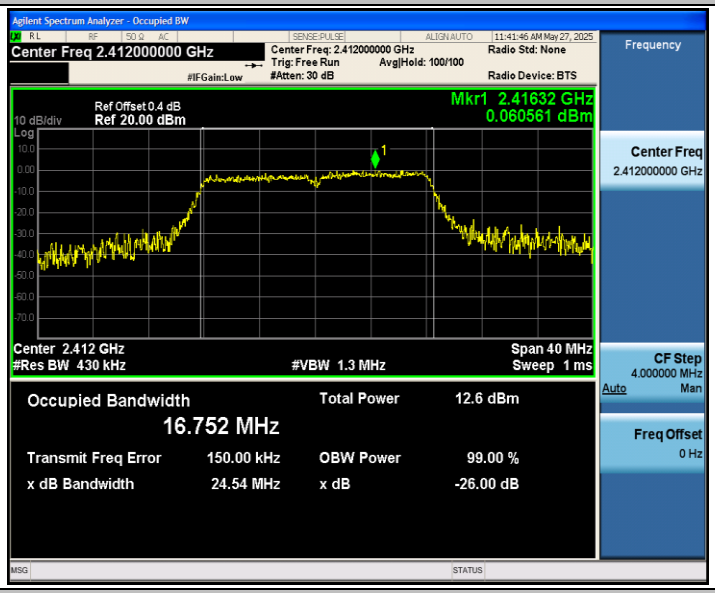


11B_Ant1_2437

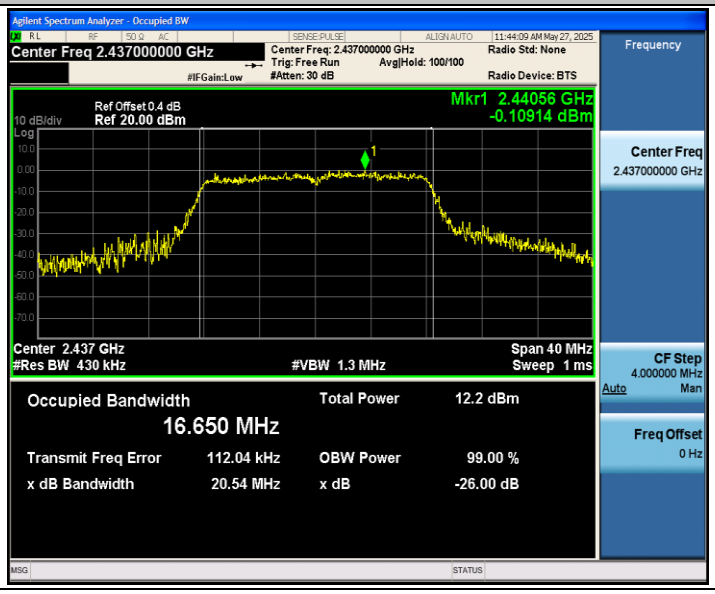
11B_Ant1_2462



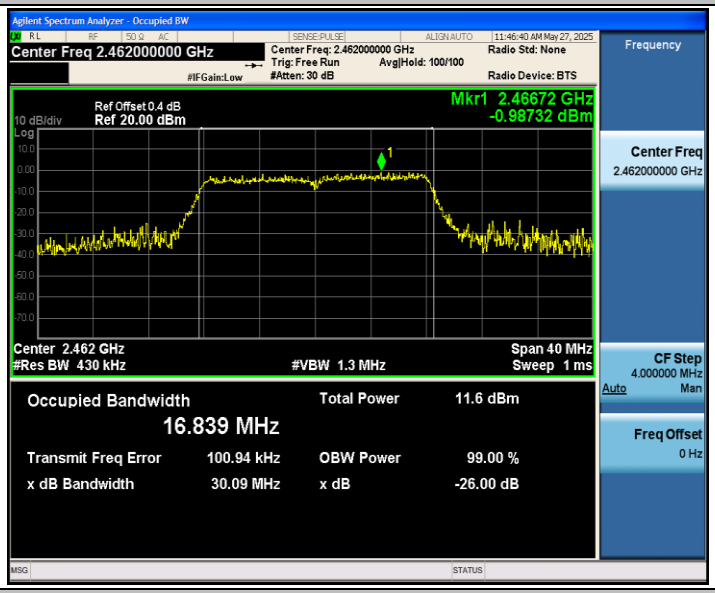
11G_Ant1_2412



11G_Ant1_2437

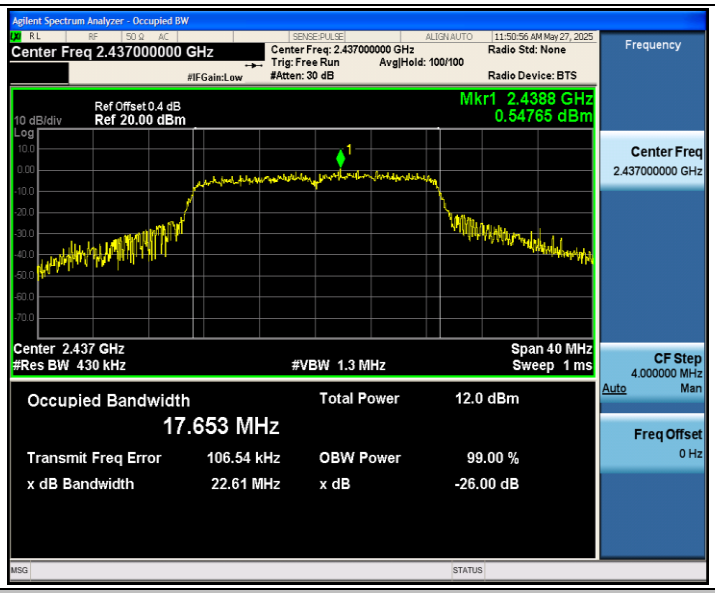


11G_Ant1_2462



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

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	14.46	≤30.00	PASS
		2437	14.46	≤30.00	PASS
		2462	14.02	≤30.00	PASS
11G	Ant1	2412	13.27	≤30.00	PASS
		2437	12.85	≤30.00	PASS
		2462	12.25	≤30.00	PASS
11N20SISO	Ant1	2412	13.10	≤30.00	PASS
		2437	12.48	≤30.00	PASS
		2462	12.16	≤30.00	PASS
11N40SISO	Ant1	2422	12.38	≤30.00	PASS
		2437	11.92	≤30.00	PASS
		2452	12.93	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

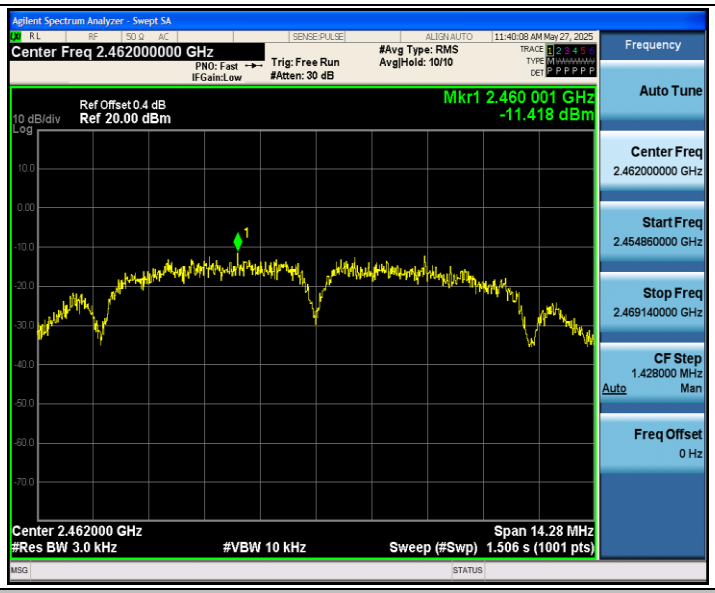
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.17	≤8.00	PASS
		2437	-11.03	≤8.00	PASS
		2462	-11.42	≤8.00	PASS
11G	Ant1	2412	-18.30	≤8.00	PASS
		2437	-18.75	≤8.00	PASS
		2462	-19.41	≤8.00	PASS
11N20SISO	Ant1	2412	-17.81	≤8.00	PASS
		2437	-18.22	≤8.00	PASS
		2462	-18.89	≤8.00	PASS
11N40SISO	Ant1	2422	-21.89	≤8.00	PASS
		2437	-22.59	≤8.00	PASS
		2452	-21.53	≤8.00	PASS

Test Graphs

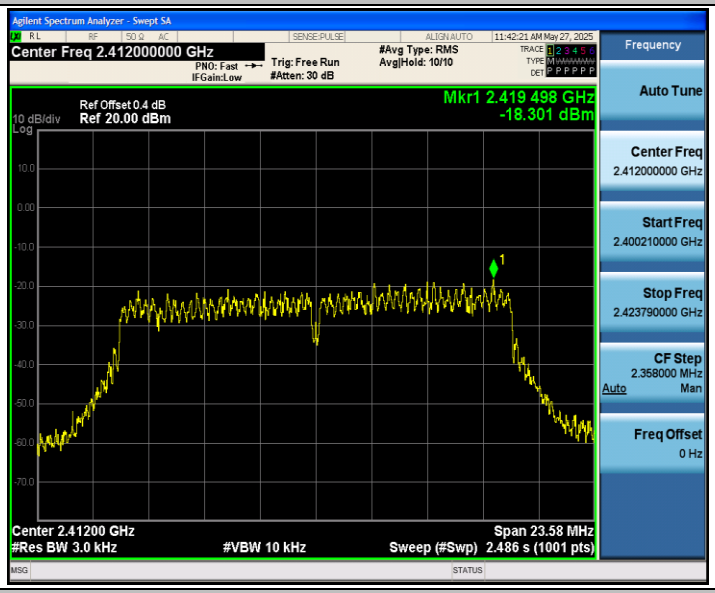
11B_Ant1_2412

11B_Ant1_2437

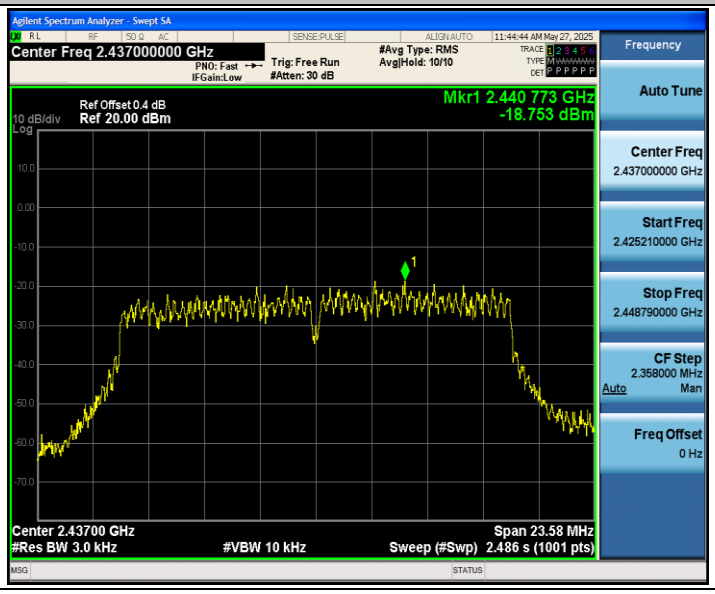
11B_Ant1_2462



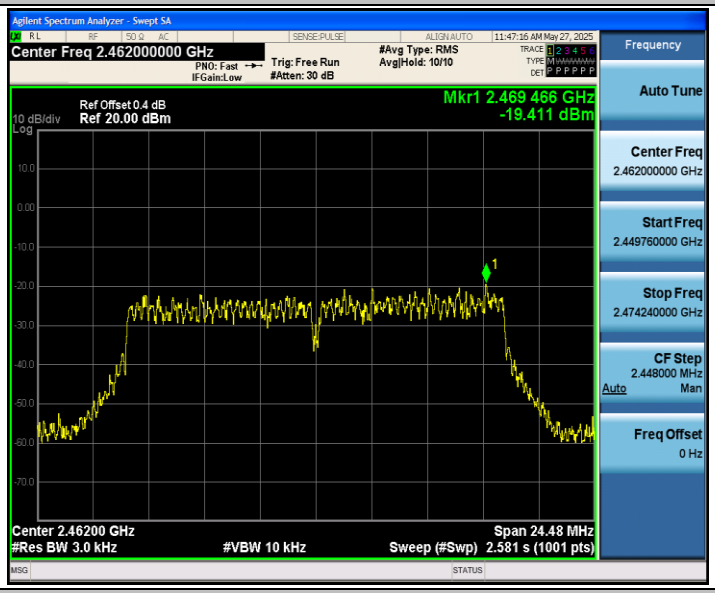
11G_Ant1_2412



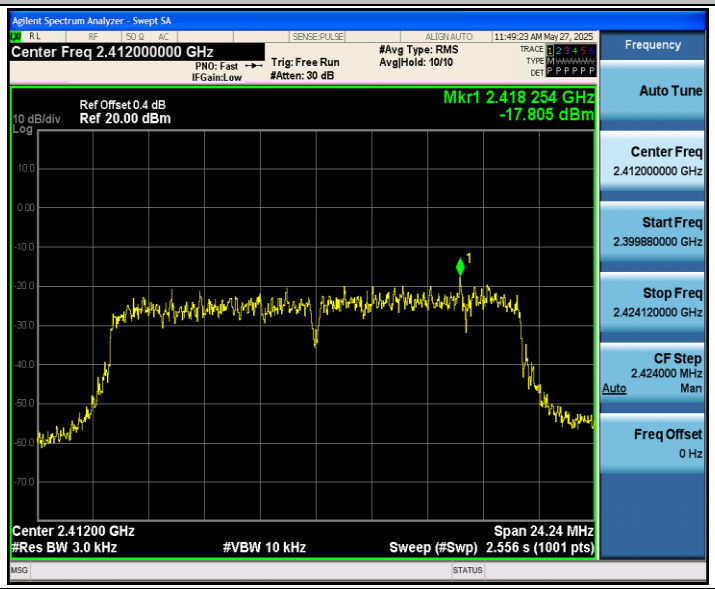
11G_Ant1_2437



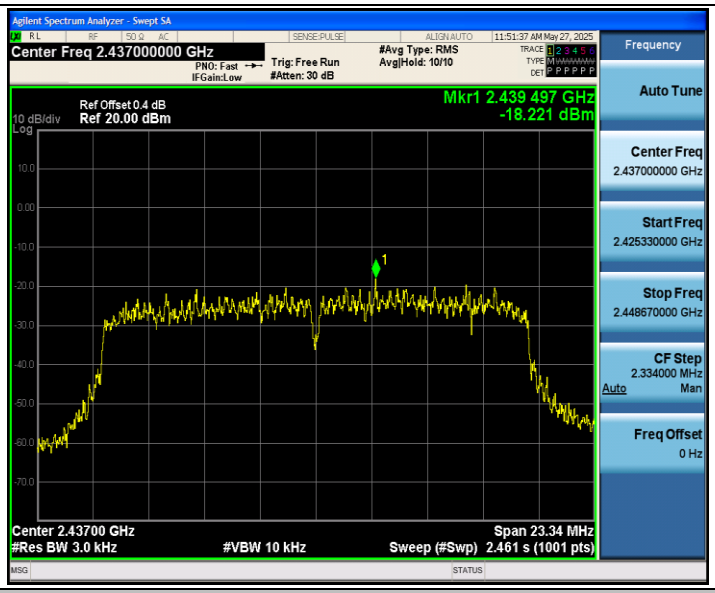
11G_Ant1_2462



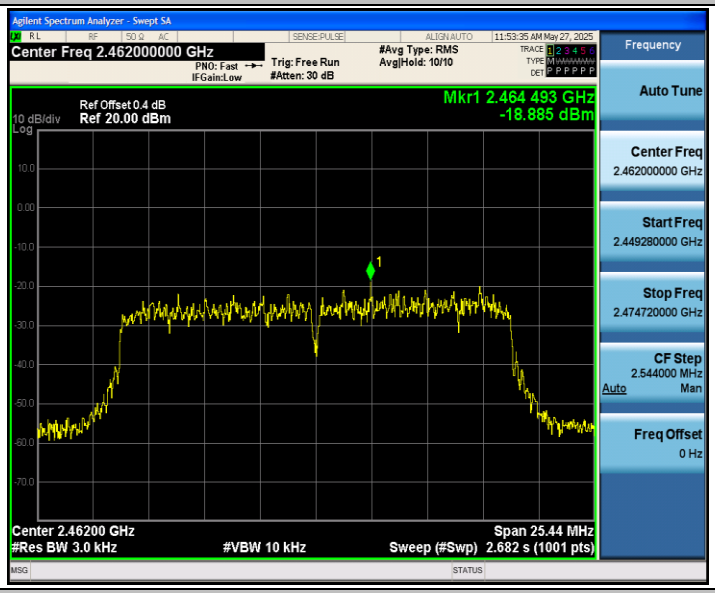
11N20SISO_Ant1_2412



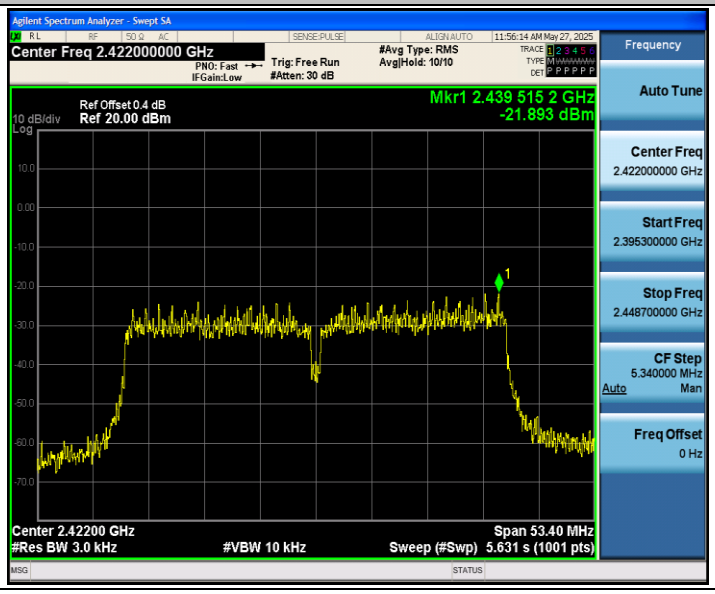
11N20SISO_Ant1_2437

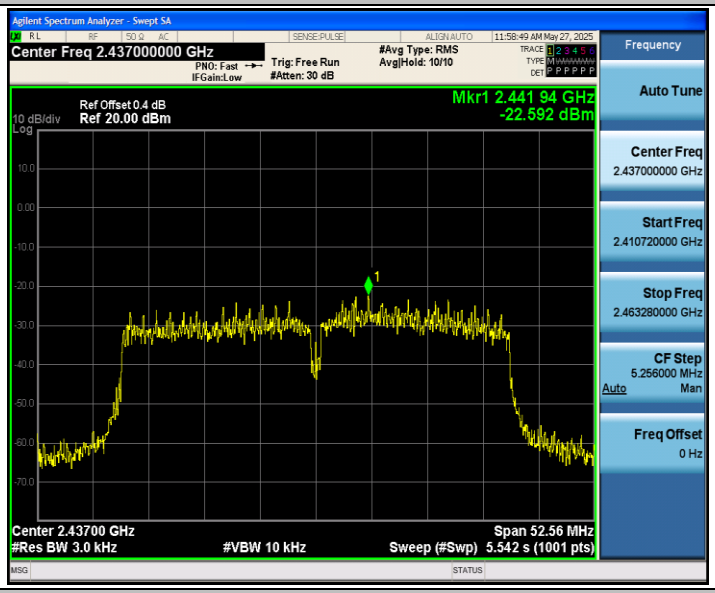


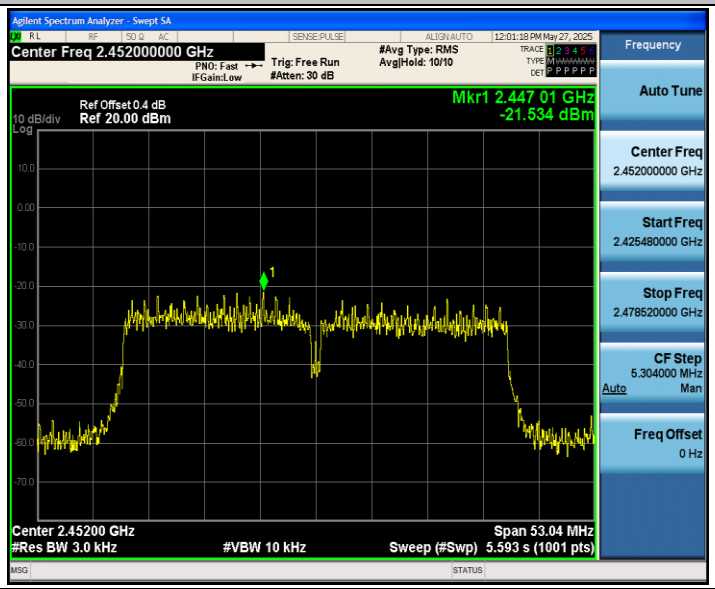
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437


11N40SISO_Ant1_2452


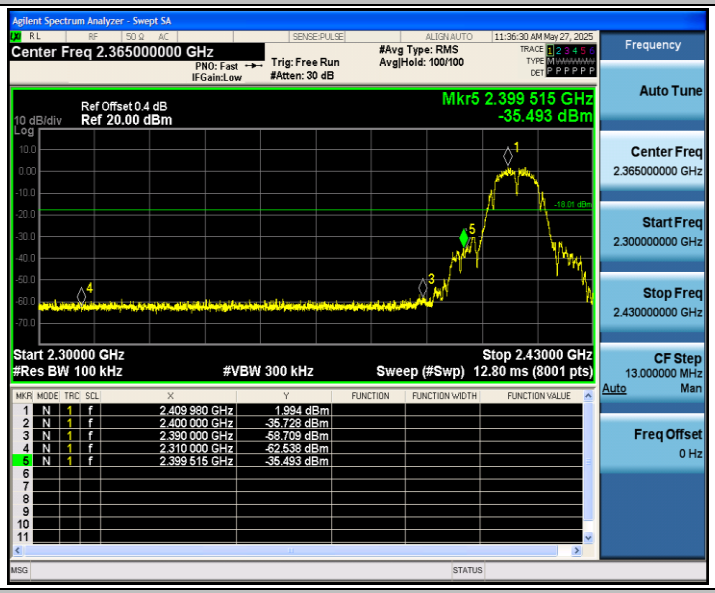
Appendix E: Band edge measurements

Test Result

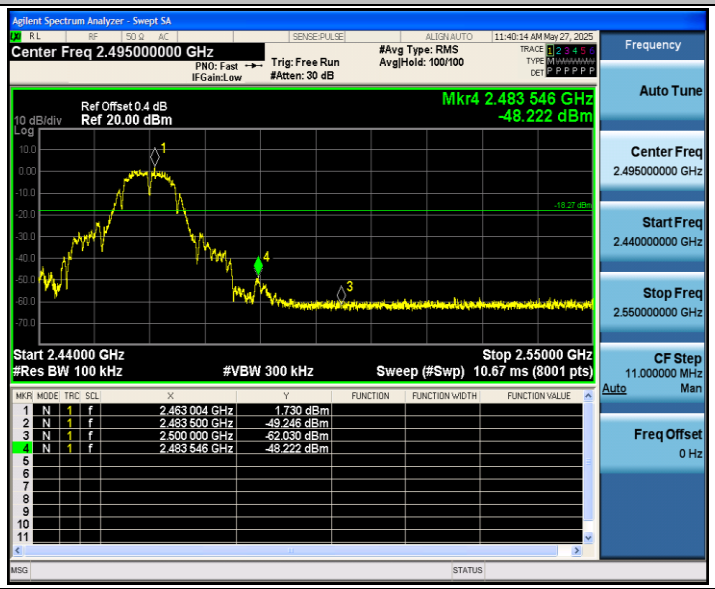
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.99	-35.49	≤-18.01	PASS
		High	2462	1.73	-48.22	≤-18.27	PASS
11G	Ant1	Low	2412	-2.38	-36.49	≤-22.38	PASS
		High	2462	-3.86	-41.17	≤-23.86	PASS
11N20SISO	Ant1	Low	2412	-2.44	-36.02	≤-22.44	PASS
		High	2462	-3.79	-39.88	≤-23.79	PASS
11N40SISO	Ant1	Low	2422	-6.04	-38.63	≤-26.04	PASS
		High	2452	-6.00	-36.56	≤-26	PASS

Test Graphs

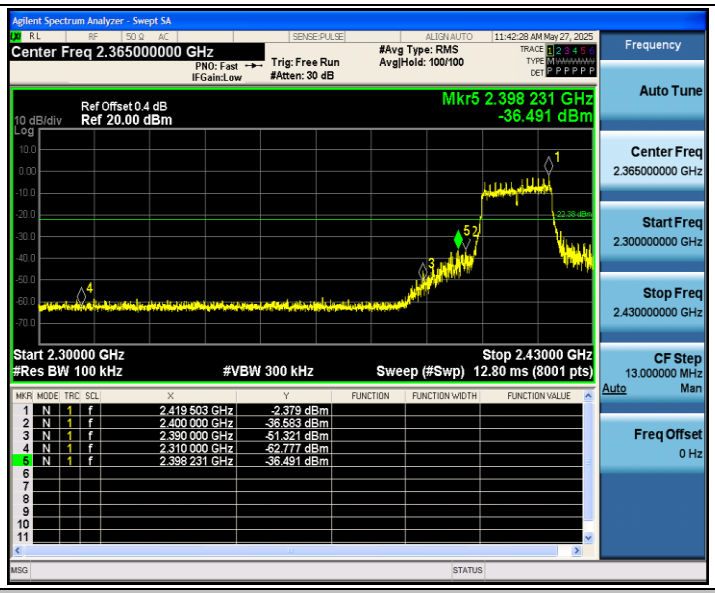
11B_Ant1_Low_2412



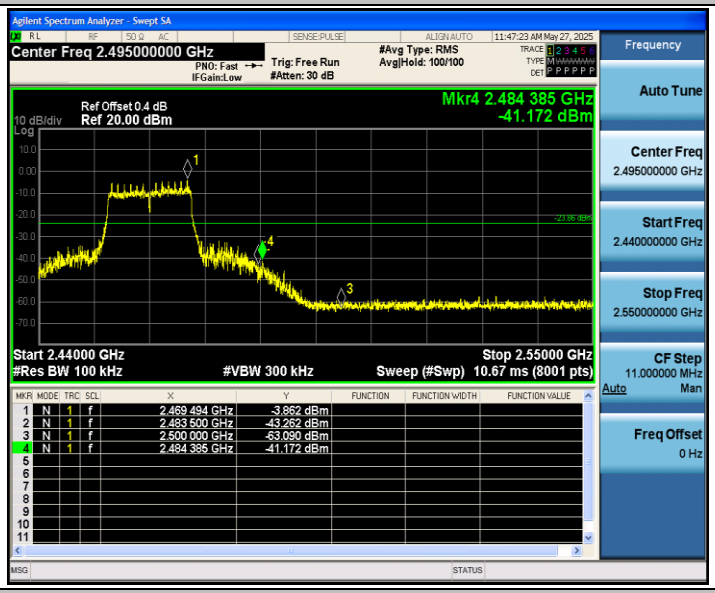
11B_Ant1_High_2462



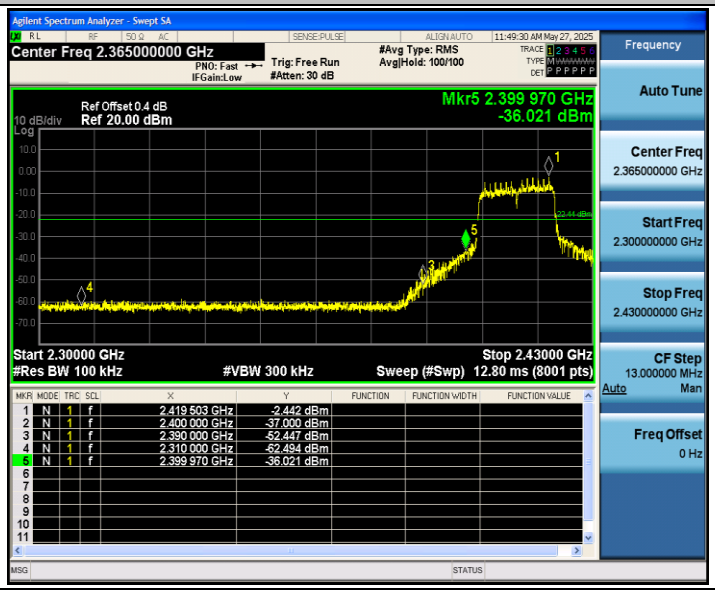
11G_Ant1_Low_2412



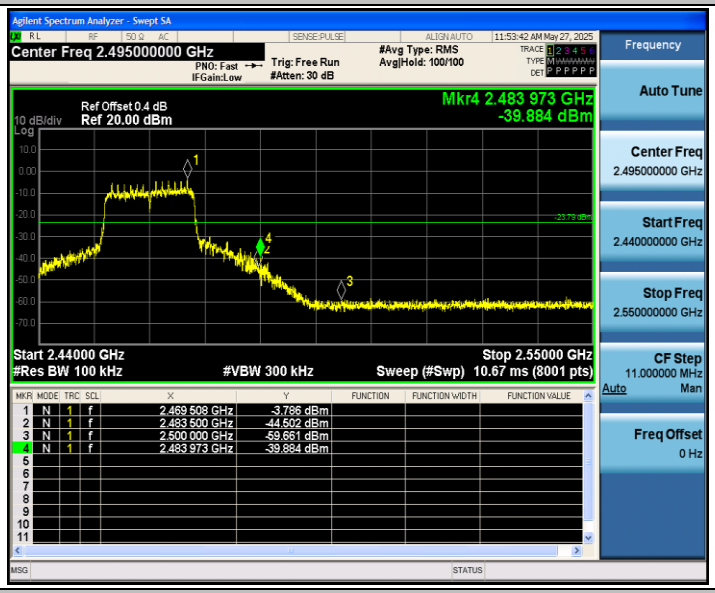
11G_Ant1_High_2462



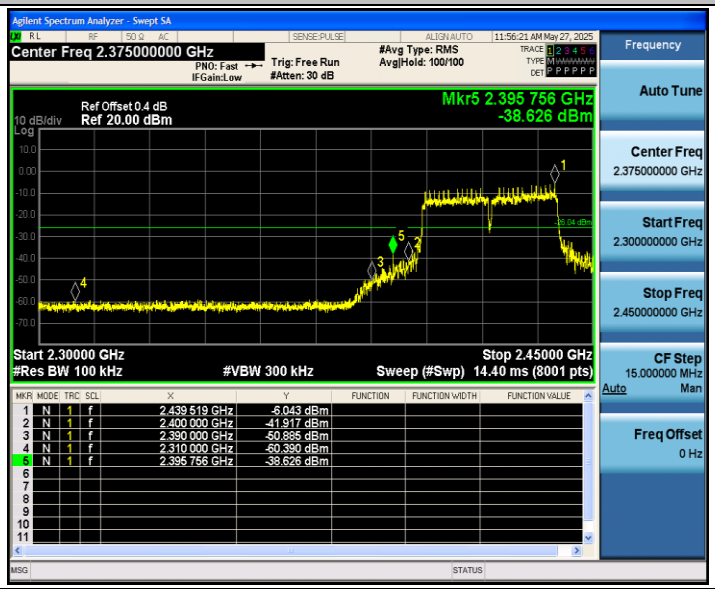
11N20SISO_Ant1_Low_2412



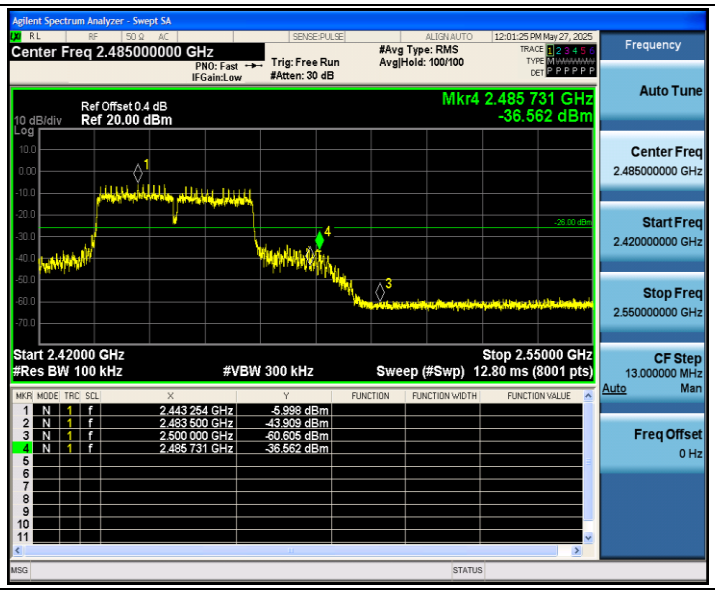
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.485000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
12:01:25 PM May 27, 2025
Frequency
Auto Tune
Center Freq
2.485000000 GHz
Start Freq
2.420000000 GHz
Stop Freq
2.550000000 GHz
CF Step
13.000000 MHz
Auto
Man
Freq Offset
0 Hz
Ref Offset 0.4 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr4 2.485 731 GHz
-36.562 dBm
-26.00 dBm
Start 2.42000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.55000 GHz
Sweep (#Swp) 12.80 ms (8001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.443 254 GHz -5.998 dBm
2 N 1 f 2.483 500 GHz -43.909 dBm
3 N 1 f 2.500 000 GHz -60.605 dBm
4 N 1 f 2.485 731 GHz -36.562 dBm
MSG
STATUS

Appendix F: Conducted Spurious Emission

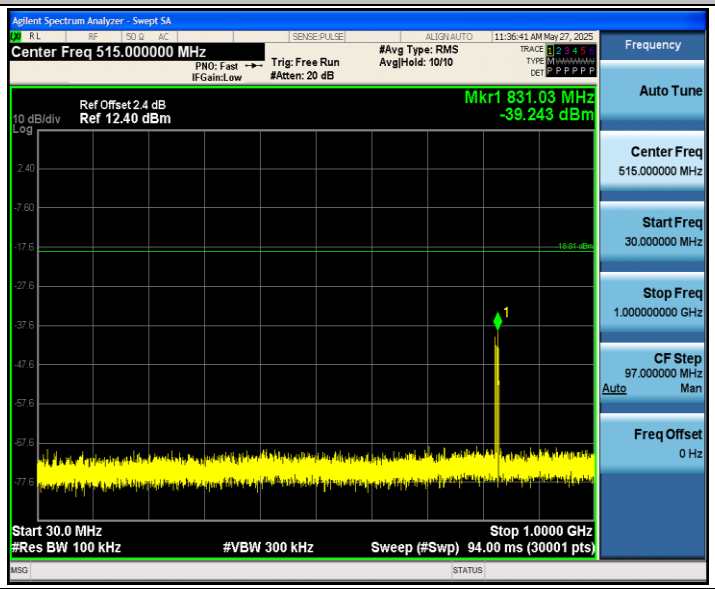
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.19	1.19	---	PASS
			30~1000	1.19	-39.24	≤-18.81	PASS
			1000~26500	1.19	-38.15	≤-18.81	PASS
		2437	Reference	1.51	1.51	---	PASS
			30~1000	1.51	-68.01	≤-18.49	PASS
			1000~26500	1.51	-36.1	≤-18.49	PASS
		2462	Reference	0.45	0.45	---	PASS
			30~1000	0.45	-67.39	≤-19.55	PASS
			1000~26500	0.45	-30.12	≤-19.55	PASS
11G	Ant1	2412	Reference	-3.48	-3.48	---	PASS
			30~1000	-3.48	-67.8	≤-23.48	PASS
			1000~26500	-3.48	-48.12	≤-23.48	PASS
		2437	Reference	-3.38	-3.38	---	PASS
			30~1000	-3.38	-55.5	≤-23.38	PASS
			1000~26500	-3.38	-51.23	≤-23.38	PASS
		2462	Reference	-4.47	-4.47	---	PASS
			30~1000	-4.47	-28.41	≤-24.47	PASS
			1000~26500	-4.47	-43.84	≤-24.47	PASS
11N20SISO	Ant1	2412	Reference	-3.77	-3.77	---	PASS
			30~1000	-3.77	-66.56	≤-23.77	PASS
			1000~26500	-3.77	-47.81	≤-23.77	PASS
		2437	Reference	-4.02	-4.02	---	PASS
			30~1000	-4.02	-66.78	≤-24.02	PASS
			1000~26500	-4.02	-49.11	≤-24.02	PASS
		2462	Reference	-3.72	-3.72	---	PASS
			30~1000	-3.72	-62.84	≤-23.72	PASS
			1000~26500	-3.72	-46.02	≤-23.72	PASS
11N40SISO	Ant1	2422	Reference	-6.13	-6.13	---	PASS
			30~1000	-6.13	-64.84	≤-26.13	PASS
			1000~26500	-6.13	-53.66	≤-26.13	PASS
		2437	Reference	-7.02	-7.02	---	PASS
			30~1000	-7.02	-66.14	≤-27.02	PASS
			1000~26500	-7.02	-54.77	≤-27.02	PASS
		2452	Reference	-6.68	-6.68	---	PASS
			30~1000	-6.68	-61.01	≤-26.68	PASS
			1000~26500	-6.68	-48.83	≤-26.68	PASS

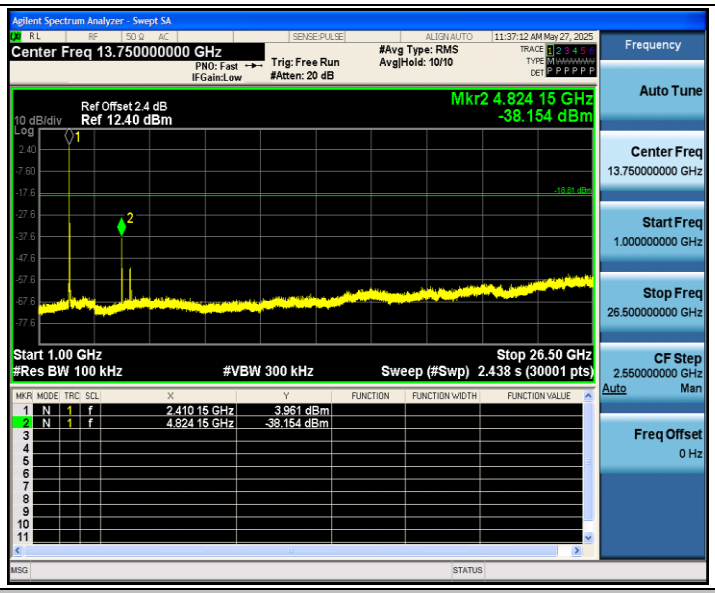
Test Graphs

11B_Ant1_2412_0~Reference

11B_Ant1_2412_30~1000

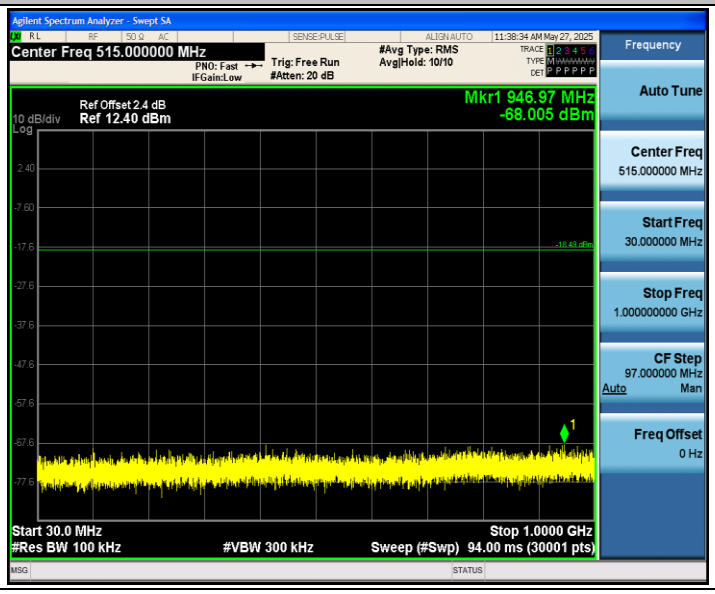


11B_Ant1_2412_1000~26500

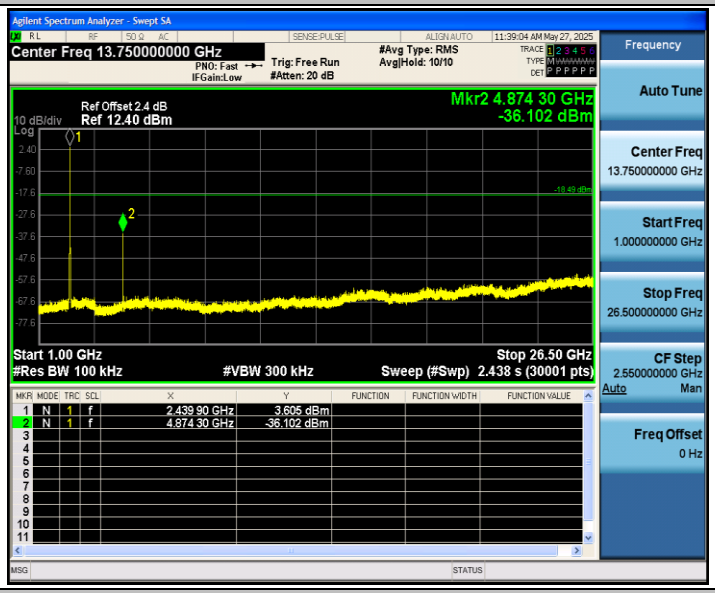


11B_Ant1_2437_0~Reference

11B_Ant1_2437_30~1000



11B_Ant1_2437_1000~26500



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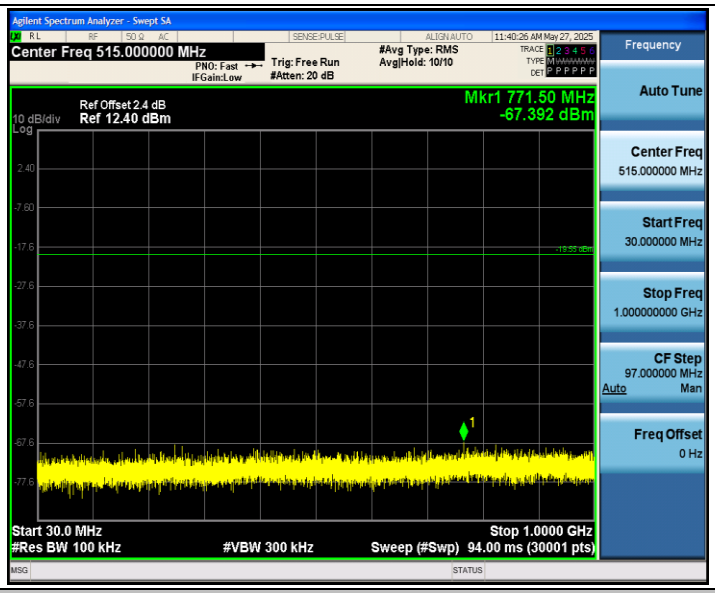

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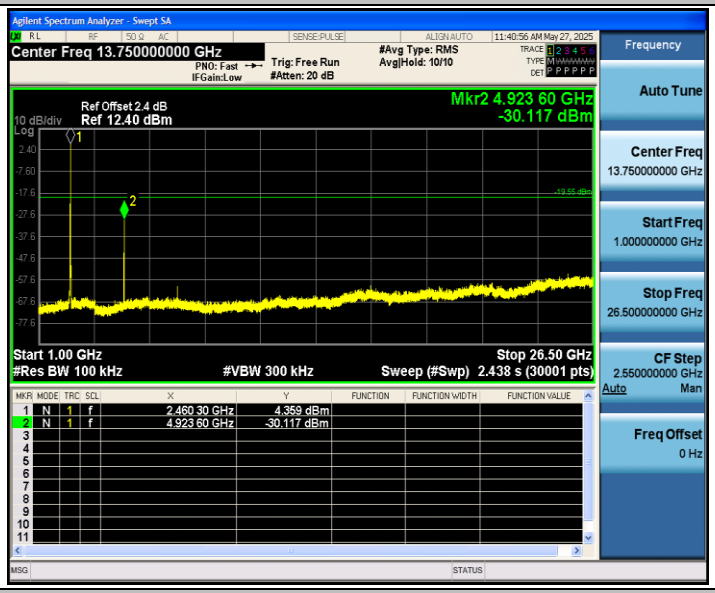

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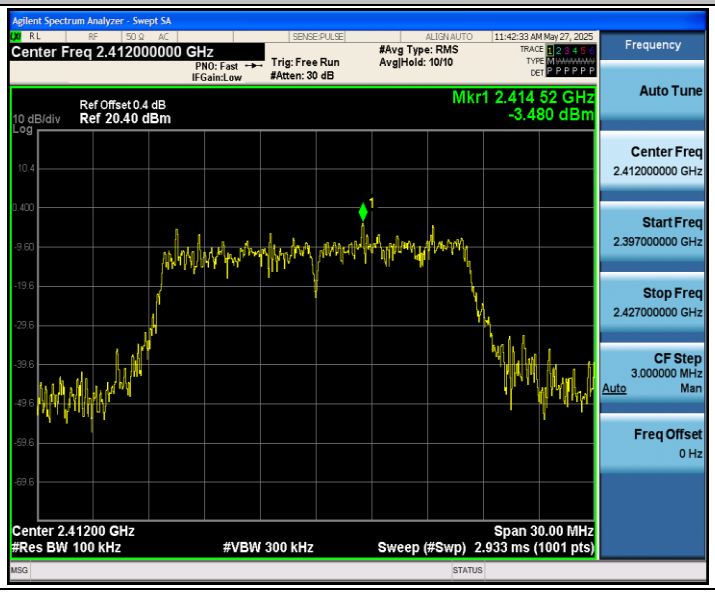

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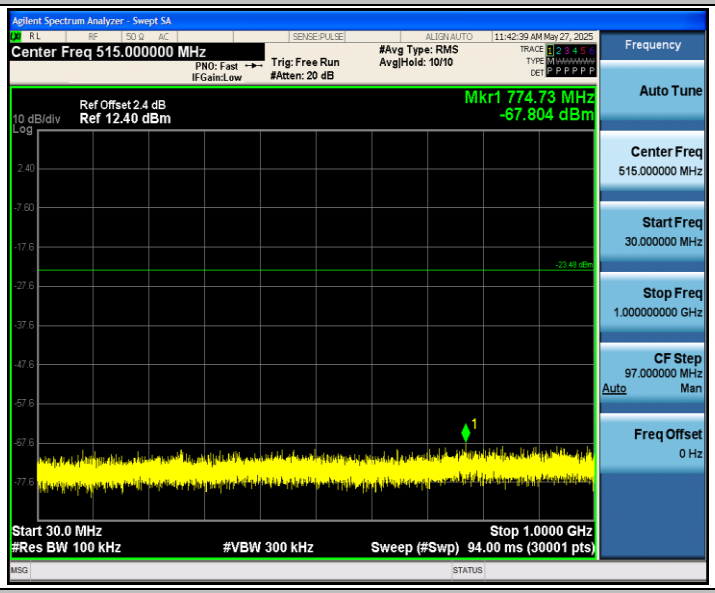

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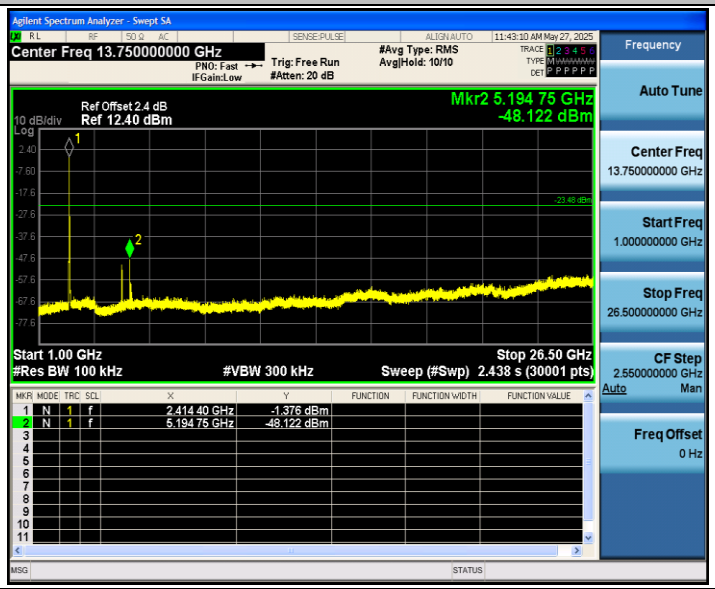

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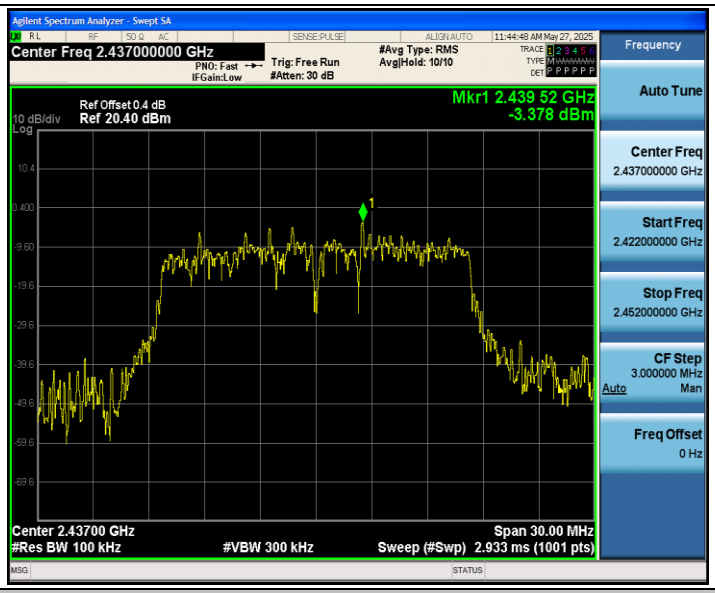

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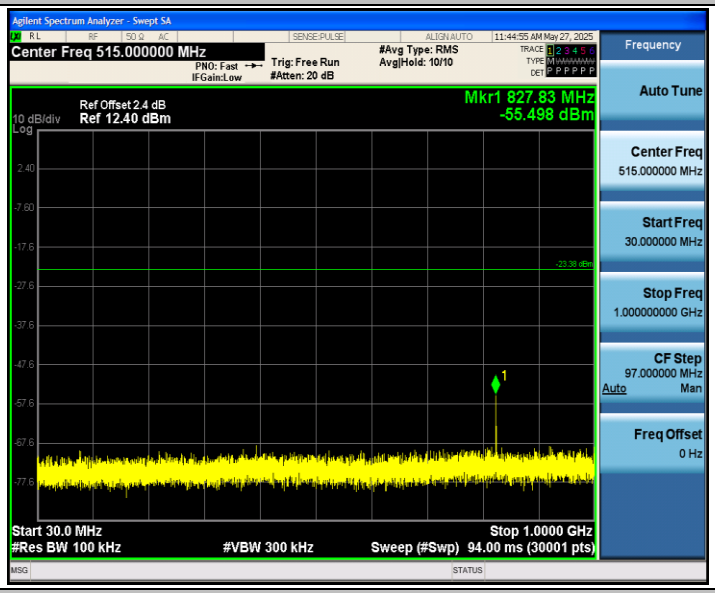

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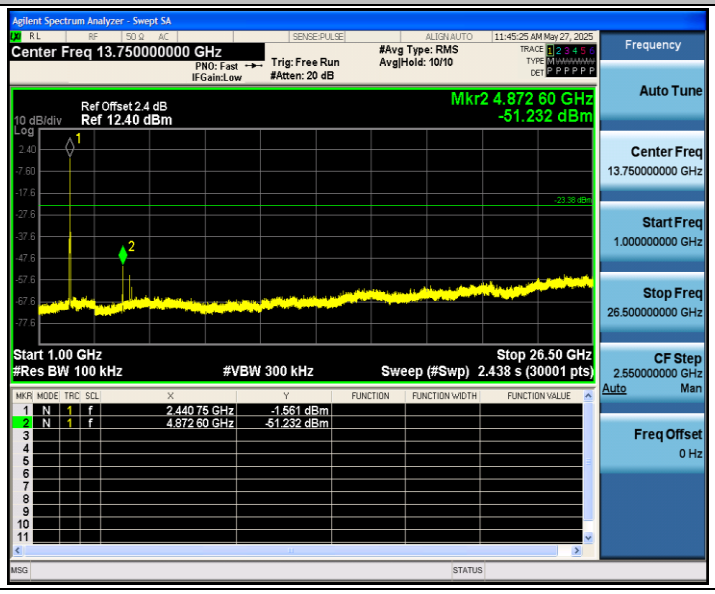

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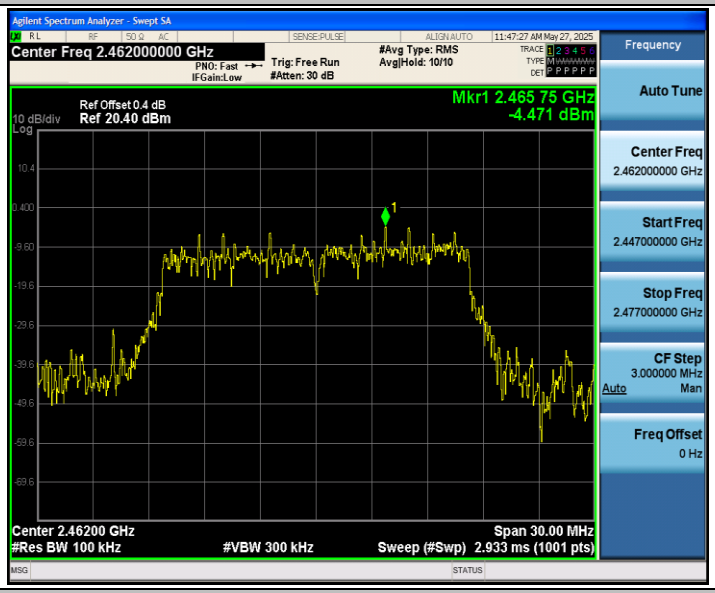

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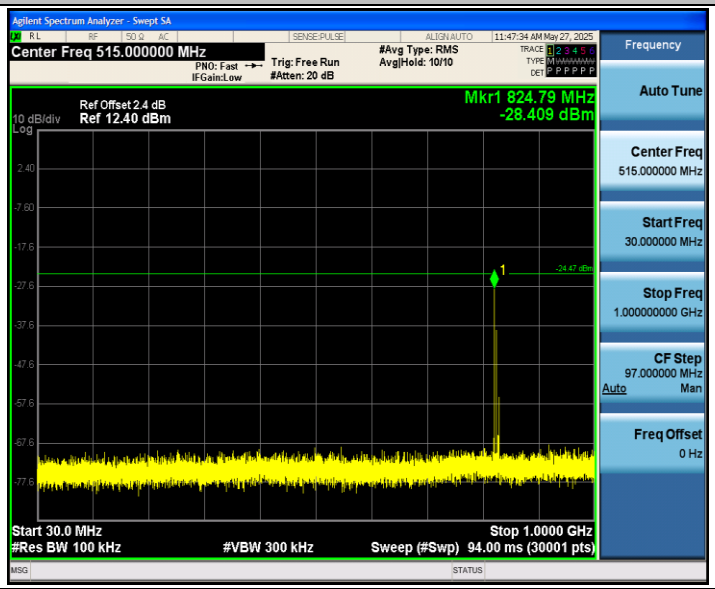

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