Appendix B

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: LED strip

Test Model: AC107

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	
Supervised by:	

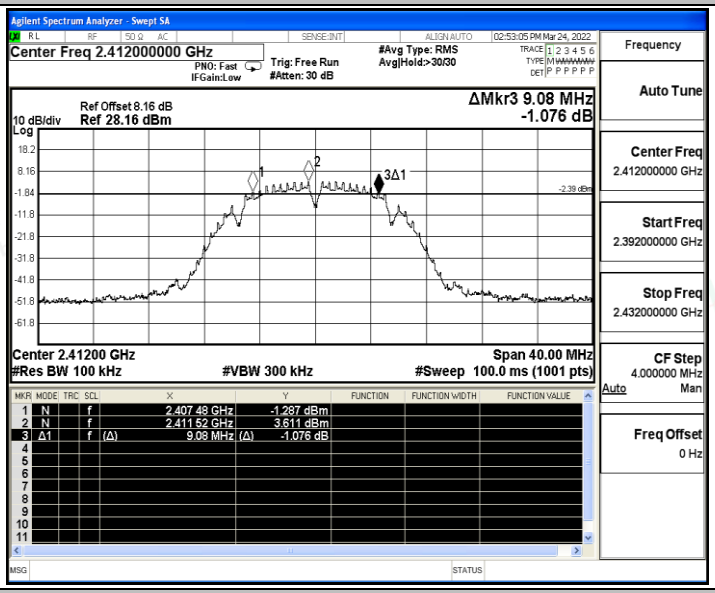
B.1 DTS Bandwidth

Test Result

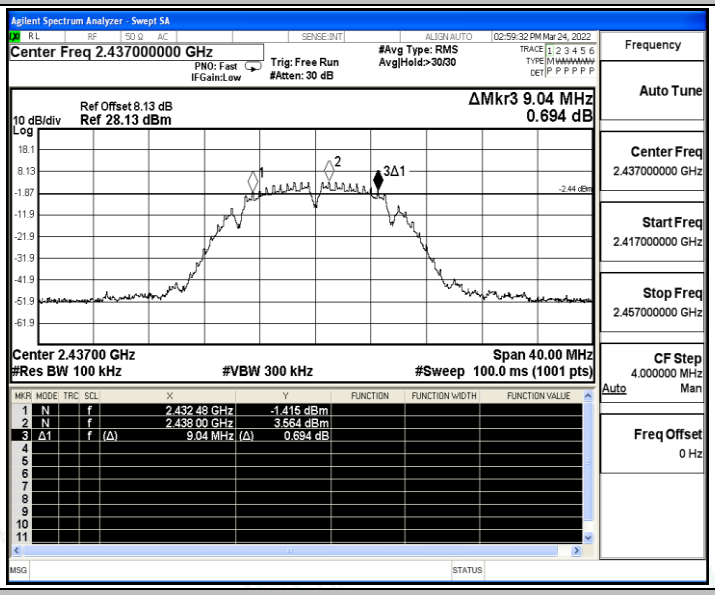
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.080	2407.480	2416.560	0.5	PASS
		2437	9.040	2432.480	2441.520	0.5	PASS
		2462	9.520	2457.000	2466.520	0.5	PASS
11G	Ant1	2412	16.400	2403.840	2420.240	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.080	2453.800	2469.880	0.5	PASS
11N20SISO	Ant1	2412	17.600	2403.200	2420.800	0.5	PASS
		2437	17.560	2428.240	2445.800	0.5	PASS
		2462	17.160	2453.200	2470.360	0.5	PASS
11N40SISO	Ant1	2422	35.680	2404.480	2440.160	0.5	PASS
		2437	35.680	2419.480	2455.160	0.5	PASS
		2452	35.440	2434.080	2469.520	0.5	PASS

Test Graphs

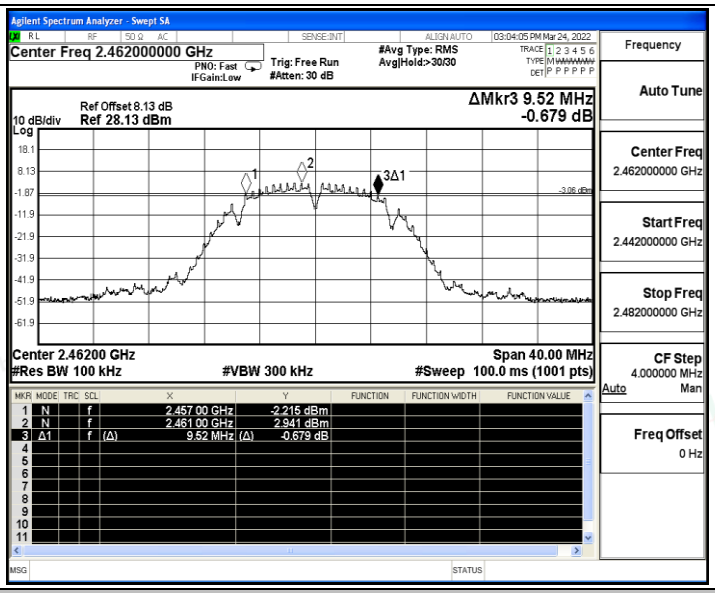
11B_Ant1_2412



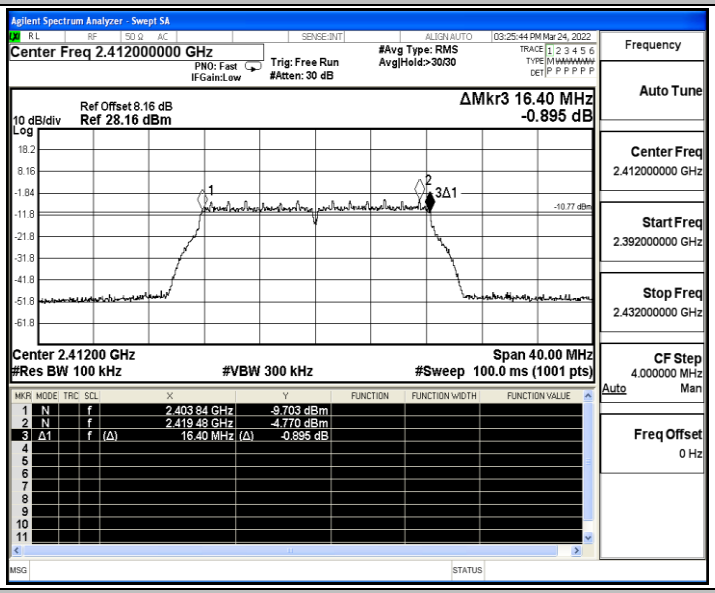
11B_Ant1_2437



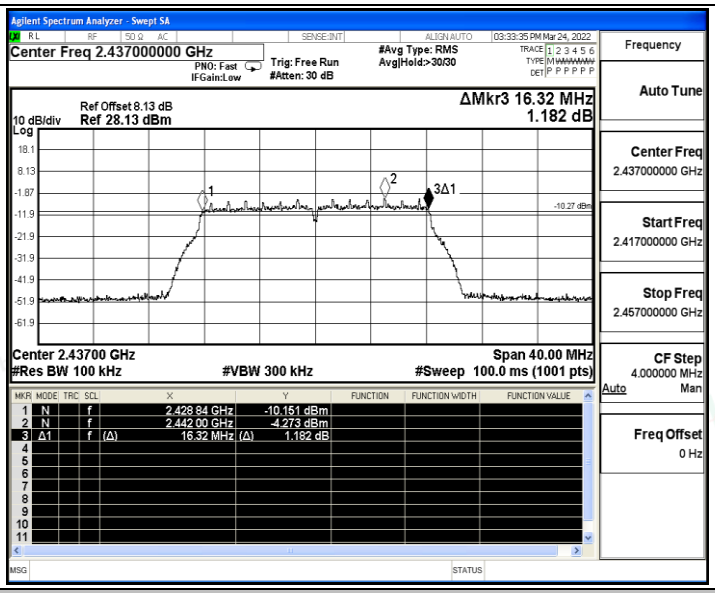
11B_Ant1_2462



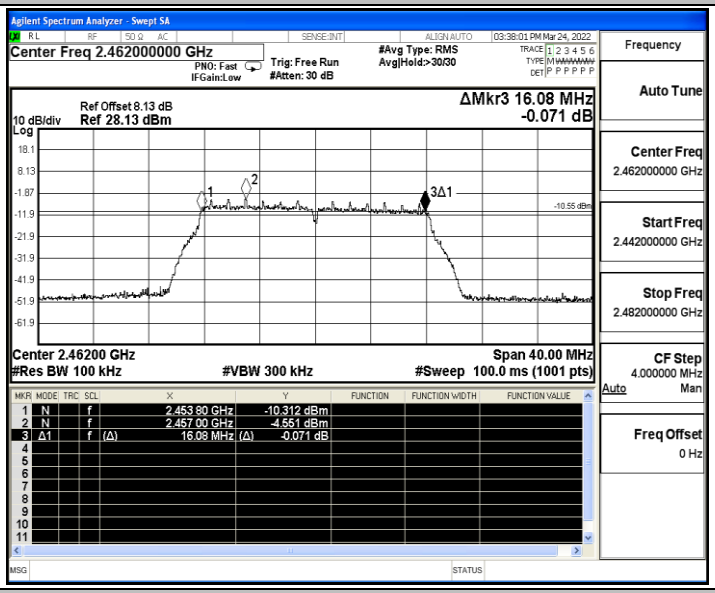
11G_Ant1_2412



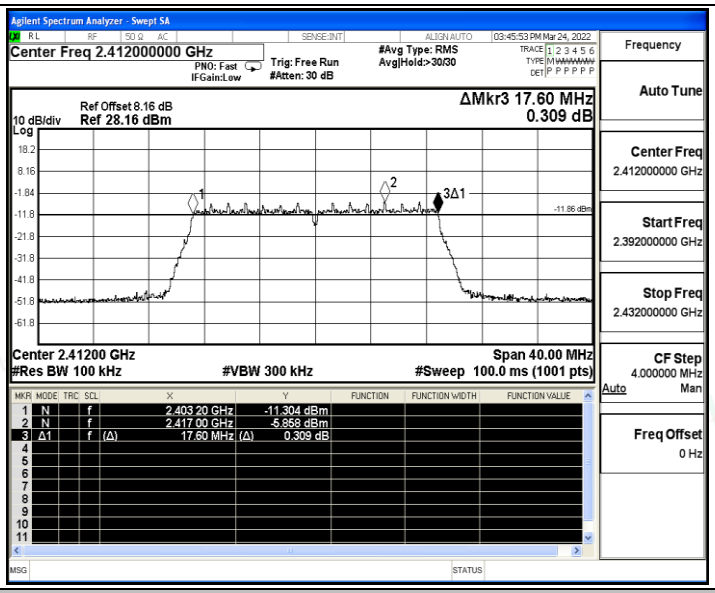
11G_Ant1_2437



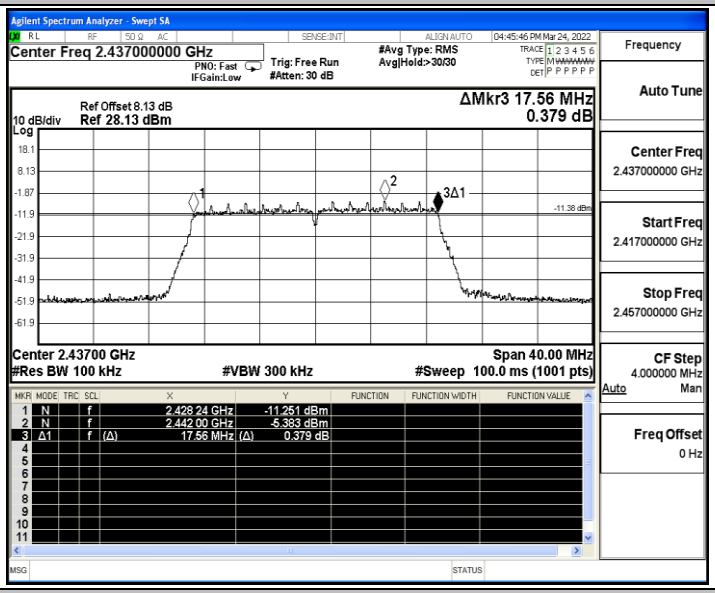
11G_Ant1_2462



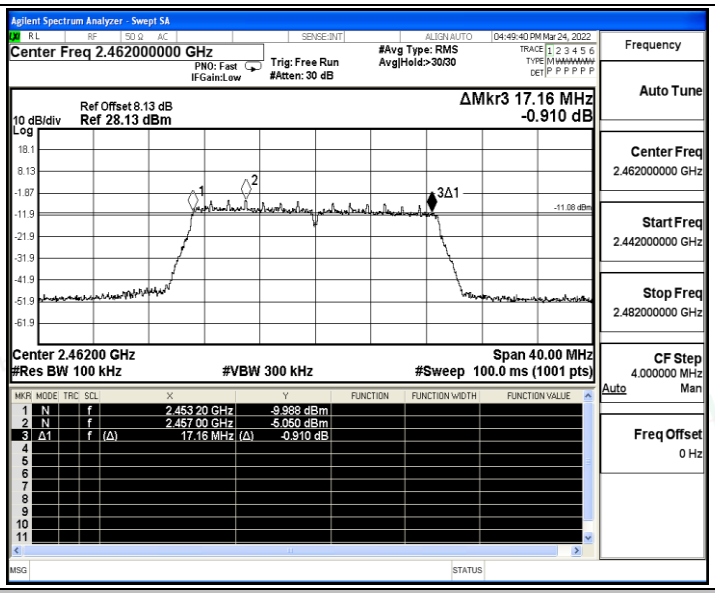
11N20SISO_Ant1_2412



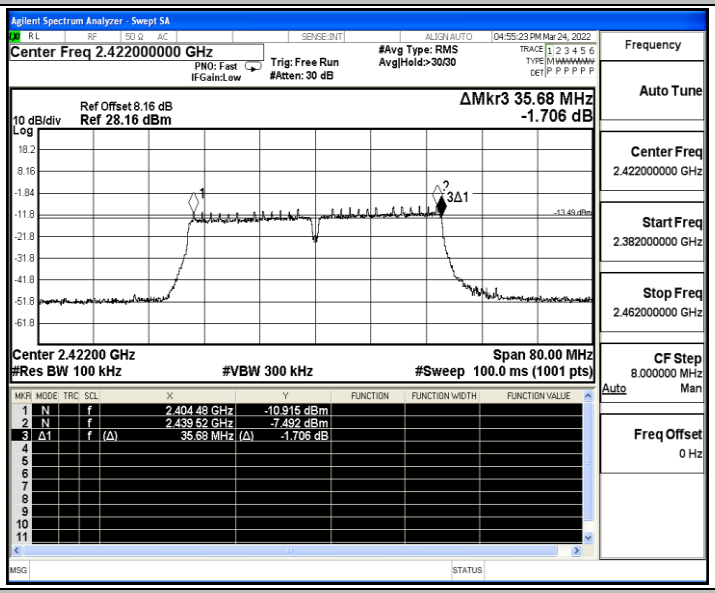
11N20SISO_Ant1_2437



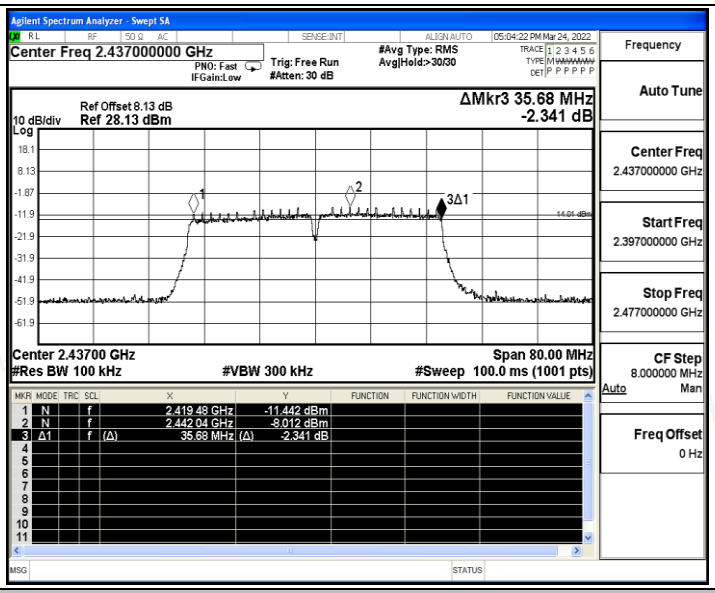
11N20SISO_Ant1_2462



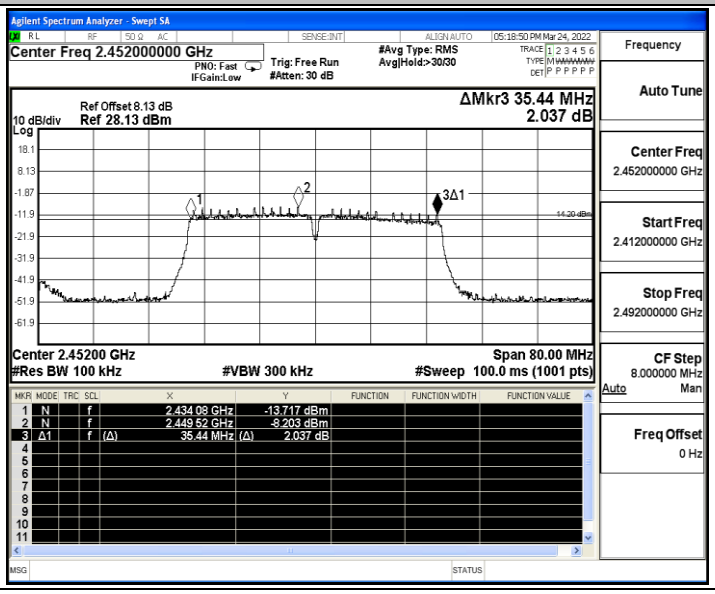
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



B.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	15.26	≤30.00	PASS
		2437	15.39	≤30.00	PASS
		2462	14.75	≤30.00	PASS
11G	Ant1	2412	14.45	≤30.00	PASS
		2437	14.76	≤30.00	PASS
		2462	14.40	≤30.00	PASS
11N20SISO	Ant1	2412	13.46	≤30.00	PASS
		2437	13.63	≤30.00	PASS
		2462	13.61	≤30.00	PASS
11N40SISO	Ant1	2422	13.72	≤30.00	PASS
		2437	13.83	≤30.00	PASS
		2452	13.70	≤30.00	PASS

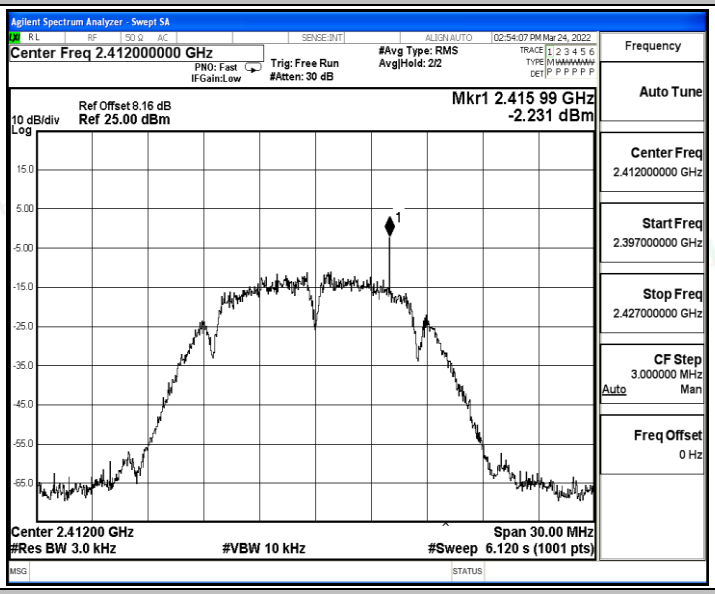
B.3 Maximum power spectral density

Test Result

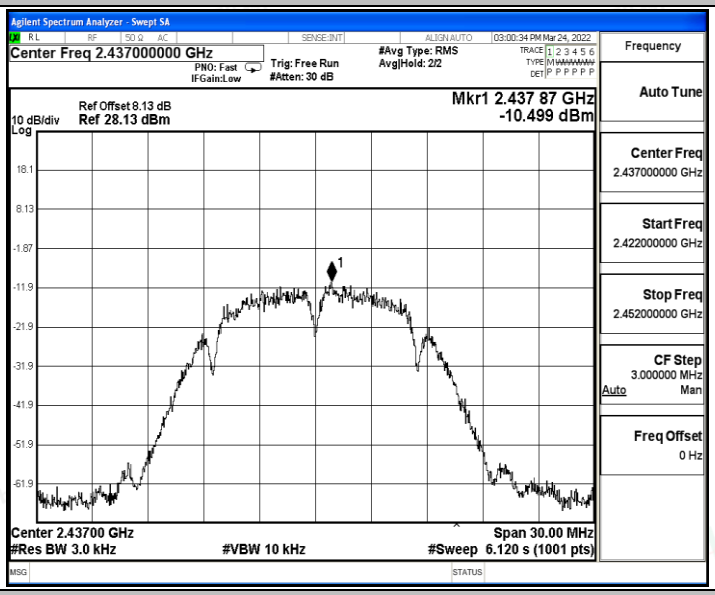
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-2.23	≤8.00	PASS
		2437	-10.5	≤8.00	PASS
		2462	-10.73	≤8.00	PASS
11G	Ant1	2412	-18.89	≤8.00	PASS
		2437	-19.2	≤8.00	PASS
		2462	-18.95	≤8.00	PASS
11N20SISO	Ant1	2412	-20.61	≤8.00	PASS
		2437	-20.17	≤8.00	PASS
		2462	-20.8	≤8.00	PASS
11N40SISO	Ant1	2422	-21.98	≤8.00	PASS
		2437	-21.45	≤8.00	PASS
		2452	-22.17	≤8.00	PASS

Test Graphs

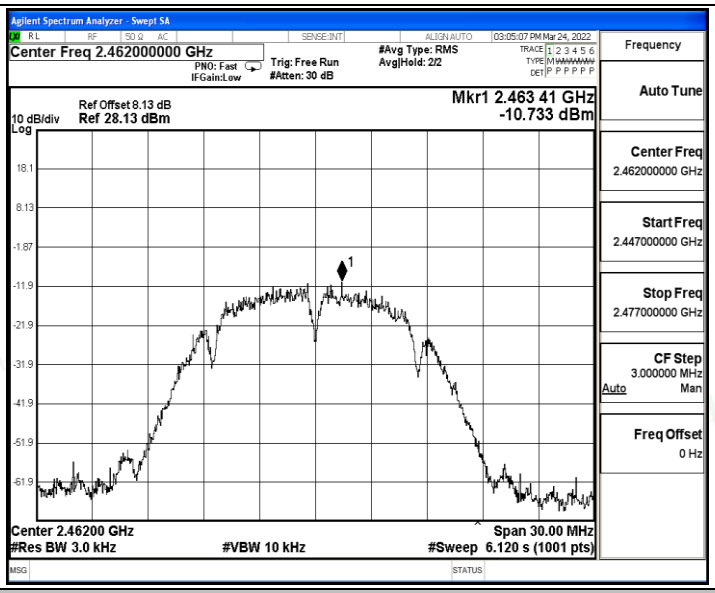
11B_Ant1_2412



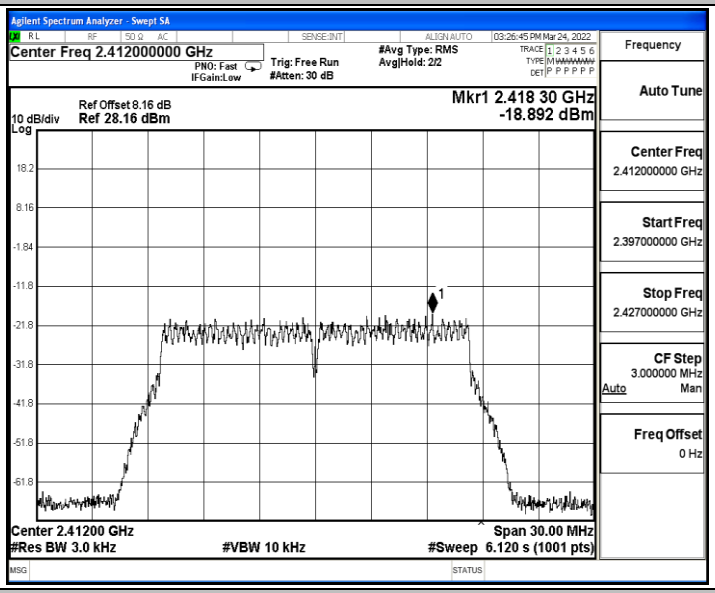
11B_Ant1_2437



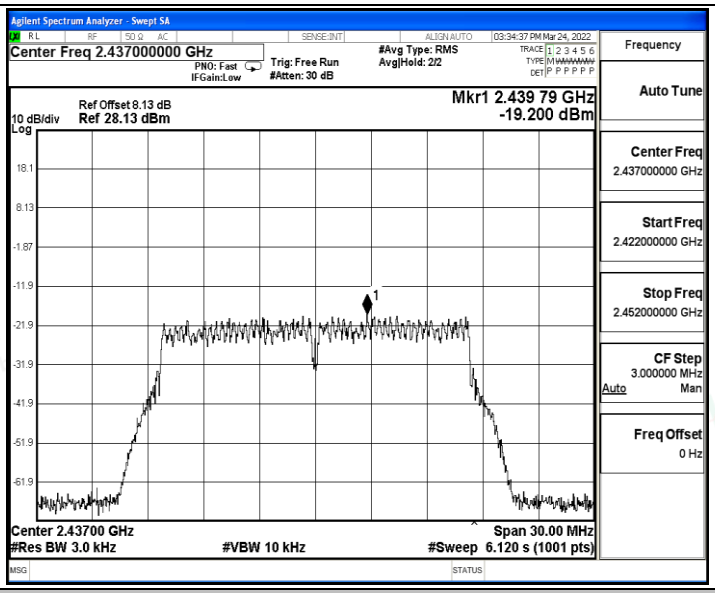
11B_Ant1_2462



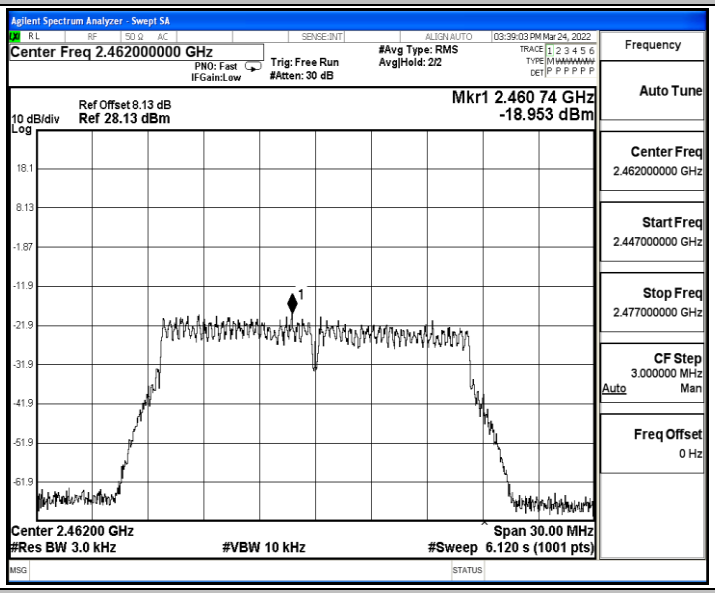
11G_Ant1_2412



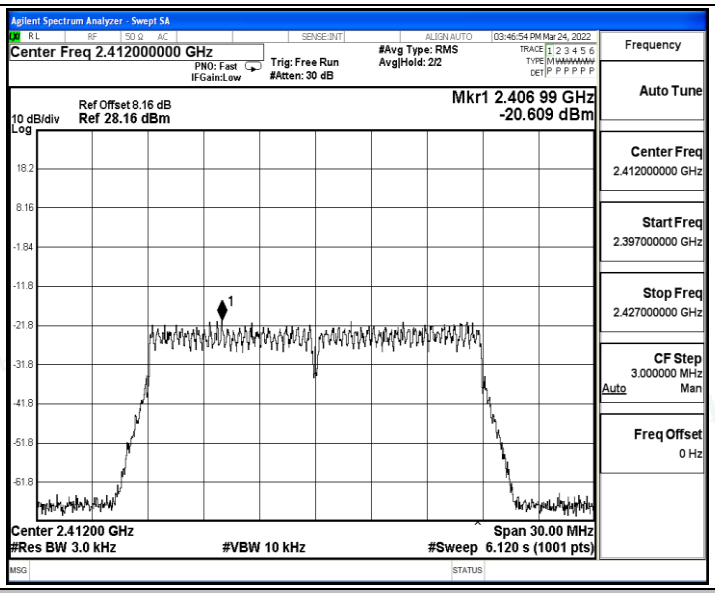
11G_Ant1_2437



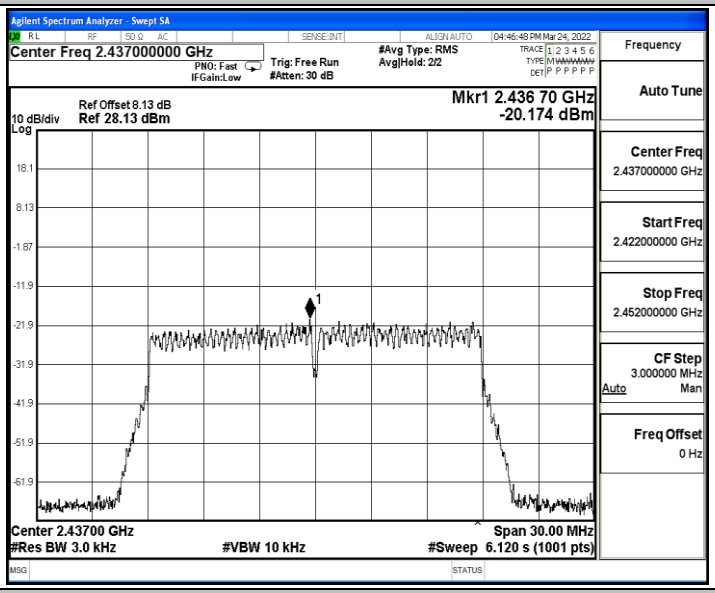
11G_Ant1_2462



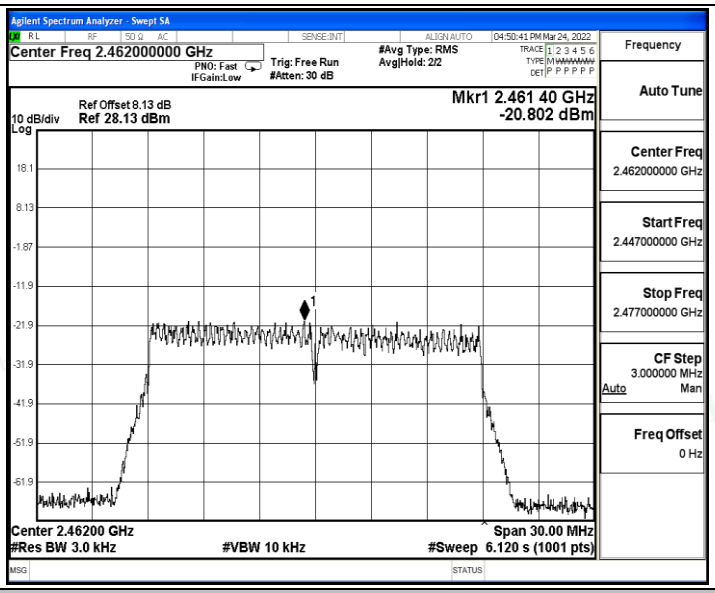
11N20SISO_Ant1_2412



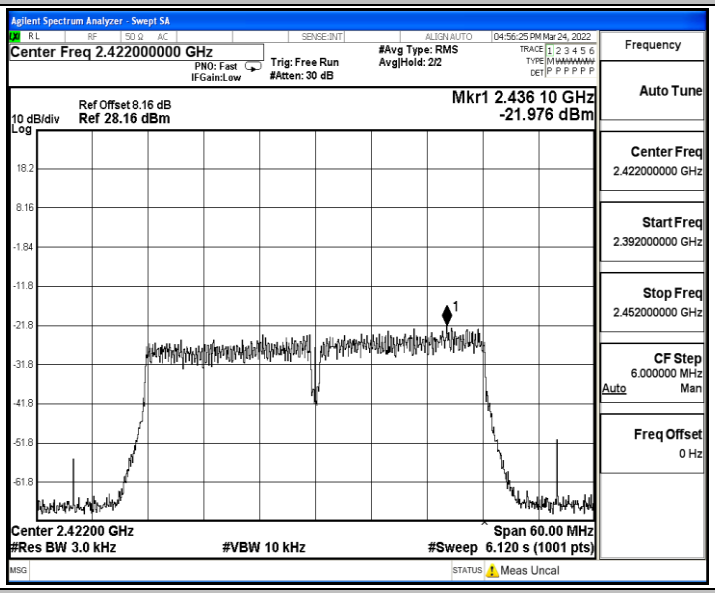
11N20SISO_Ant1_2437



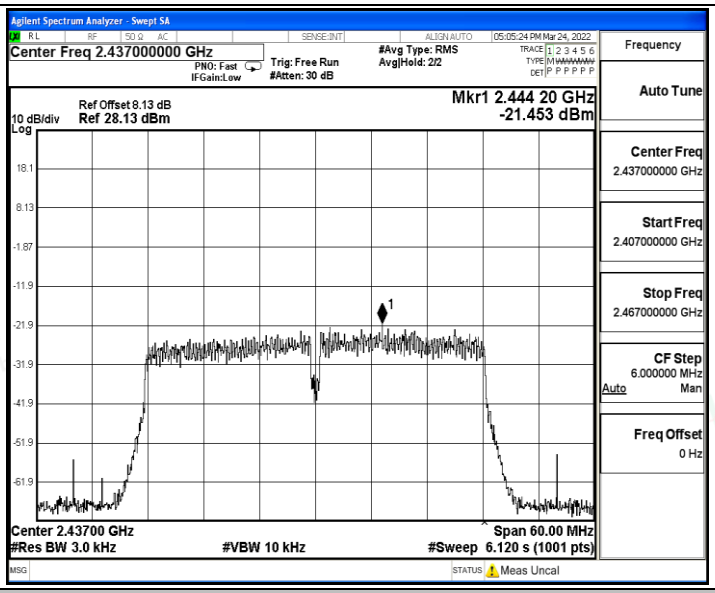
11N20SISO_Ant1_2462



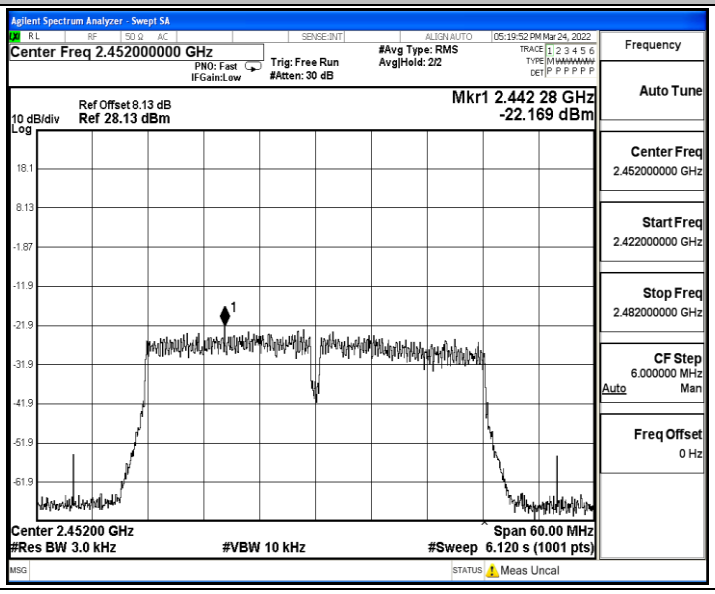
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



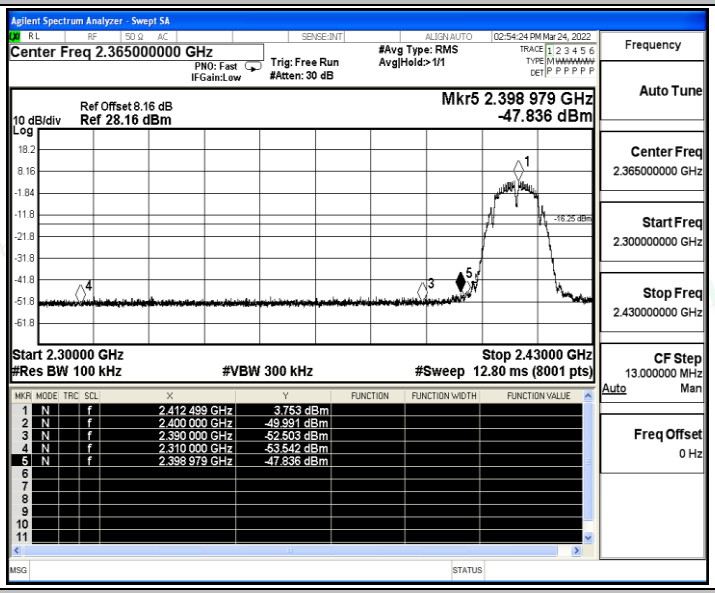
B.4 Band edge measurements

Test Result

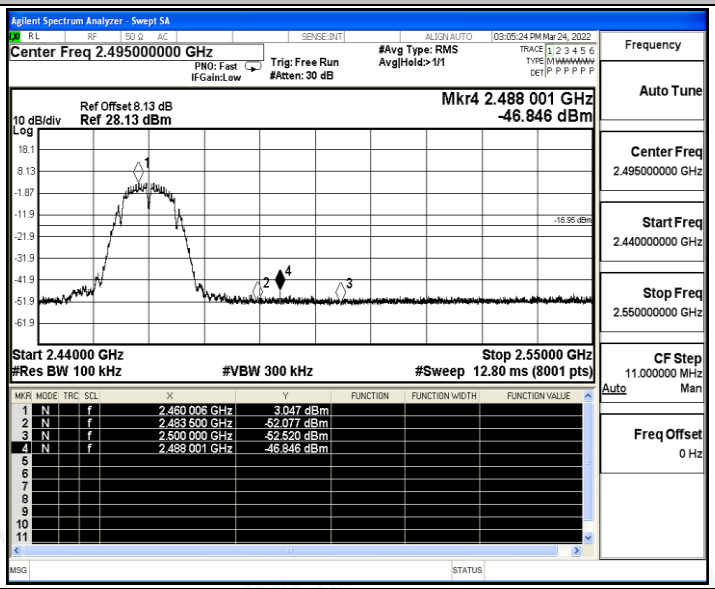
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	3.75	-47.84	≤-16.25	PASS
		High	2462	3.05	-46.85	≤-16.95	PASS
11G	Ant1	Low	2412	-4.64	-48.84	≤-24.64	PASS
		High	2462	-4.66	-46.26	≤-24.66	PASS
11N20SISO	Ant1	Low	2412	-5.70	-47.24	≤-25.7	PASS
		High	2462	-4.98	-45.98	≤-24.98	PASS
11N40SISO	Ant1	Low	2422	-8.60	-48.39	≤-28.6	PASS
		High	2452	-7.89	-48.11	≤-27.89	PASS

Test Graphs

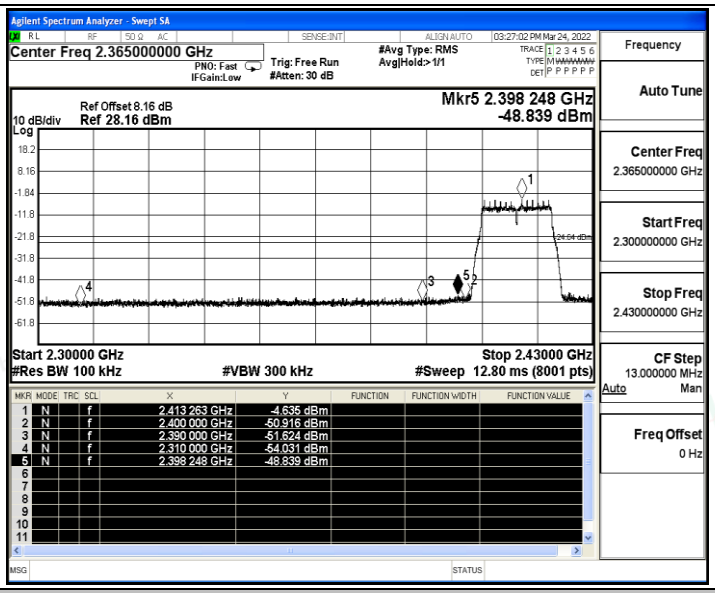
11B_Ant1_Low_2412



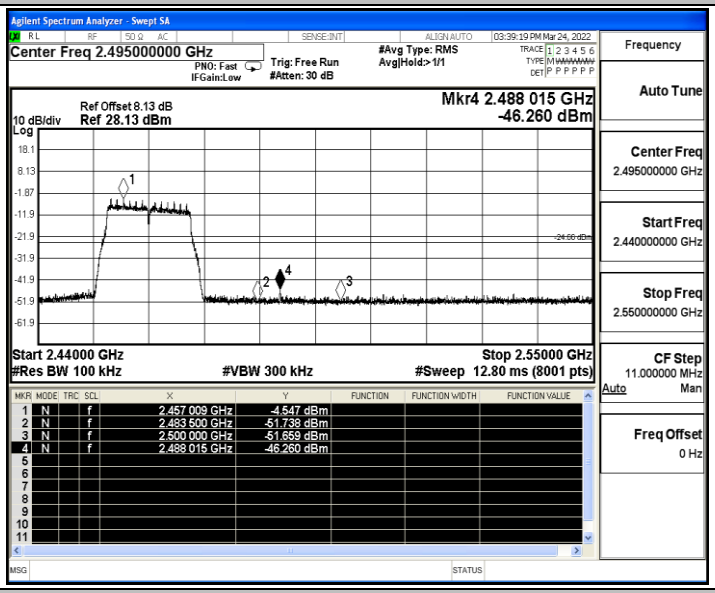
11B_Ant1_High_2462



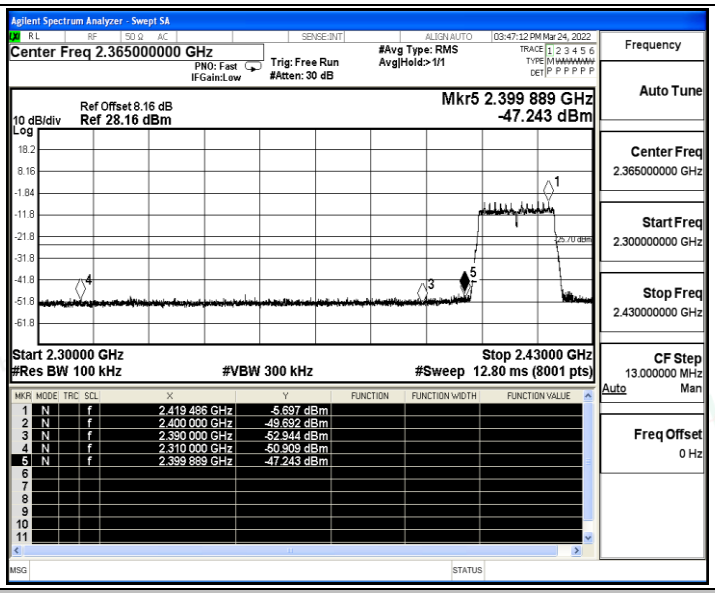
11G_Ant1_Low_2412



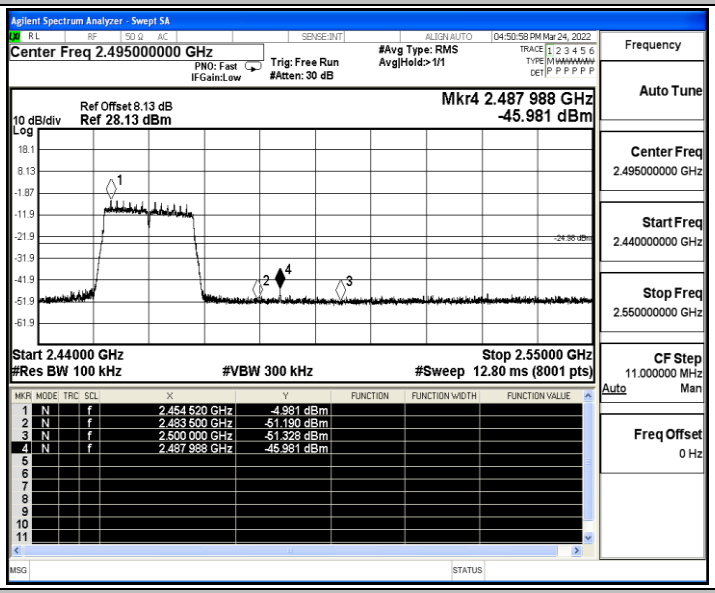
11G_Ant1_High_2462



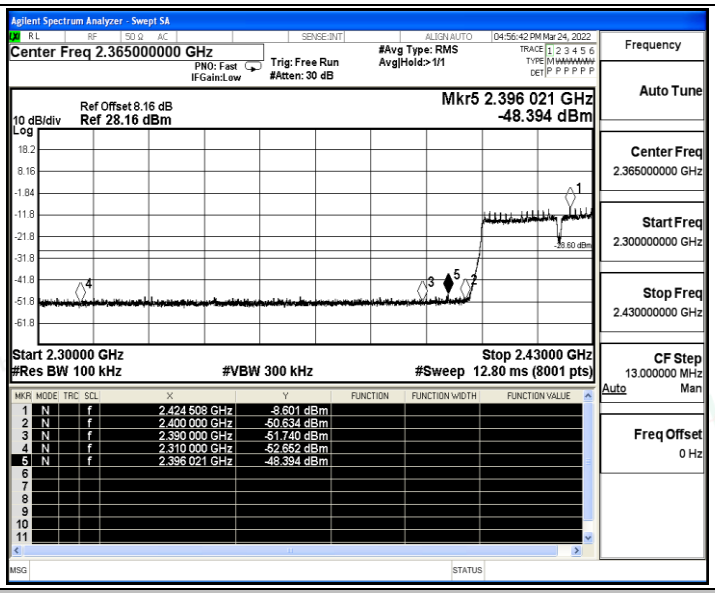
11N20SISO_Ant1_Low_2412



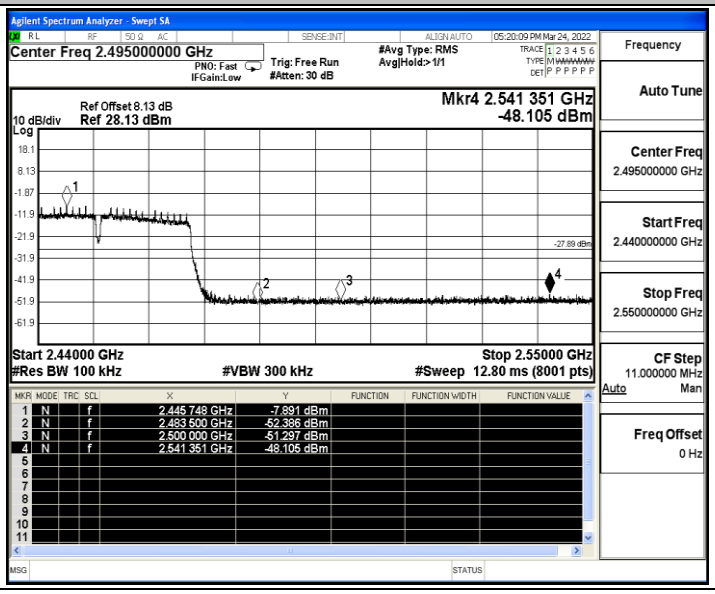
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



B.5 Conducted Spurious Emission

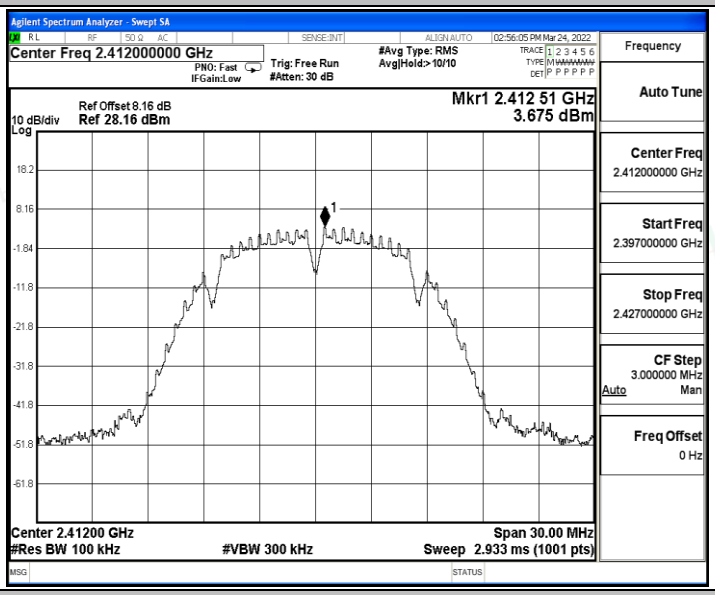
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	3.68	3.68	---	PASS
			30~1000	3.68	-42.11	≤-16.32	PASS
			1000~26500	3.68	-46.97	≤-16.32	PASS
		2437	Reference	3.74	3.74	---	PASS
			30~1000	3.74	-53.02	≤-16.26	PASS
			1000~26500	3.74	-46.65	≤-16.26	PASS
		2462	Reference	2.71	2.71	---	PASS
			30~1000	2.71	-48.4	≤-17.29	PASS
			1000~26500	2.71	-47.12	≤-17.29	PASS
11G	Ant1	2412	Reference	-4.63	-4.63	---	PASS
			30~1000	-4.63	-54.18	≤-24.63	PASS
			1000~26500	-4.63	-46	≤-24.63	PASS
		2437	Reference	-4.01	-4.01	---	PASS
			30~1000	-4.01	-53.55	≤-24.01	PASS
			1000~26500	-4.01	-46.61	≤-24.01	PASS
		2462	Reference	-4.46	-4.46	---	PASS
			30~1000	-4.46	-54.31	≤-24.46	PASS
			1000~26500	-4.46	-46.76	≤-24.46	PASS
11N20SISO	Ant1	2412	Reference	-5.63	-5.63	---	PASS
			30~1000	-5.63	-53.02	≤-25.63	PASS
			1000~26500	-5.63	-46.26	≤-25.63	PASS
		2437	Reference	-5.38	-5.38	---	PASS
			30~1000	-5.38	-55.68	≤-25.38	PASS
			1000~26500	-5.38	-46.35	≤-25.38	PASS
		2462	Reference	-5.23	-5.23	---	PASS
			30~1000	-5.23	-55.74	≤-25.23	PASS
			1000~26500	-5.23	-46.62	≤-25.23	PASS
11N40SISO	Ant1	2422	Reference	-7.64	-7.64	---	PASS
			30~1000	-7.64	-54.5	≤-27.64	PASS
			1000~26500	-7.64	-46.79	≤-27.64	PASS
		2437	Reference	-7.89	-7.89	---	PASS
			30~1000	-7.89	-54.9	≤-27.89	PASS
			1000~26500	-7.89	-46.58	≤-27.89	PASS
		2452	Reference	-8.01	-8.01	---	PASS
			30~1000	-8.01	-54.78	≤-28.01	PASS

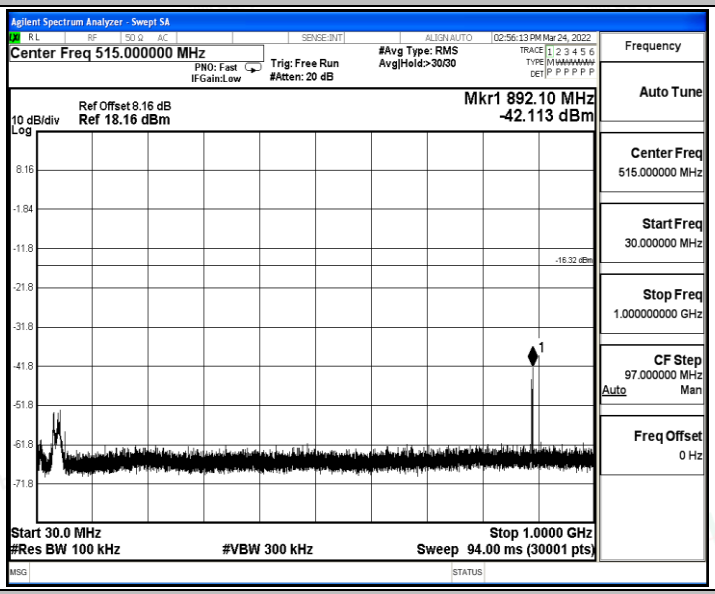
			1000~26500	-8.01	-46.56	≤-28.01	PASS

Test Graphs

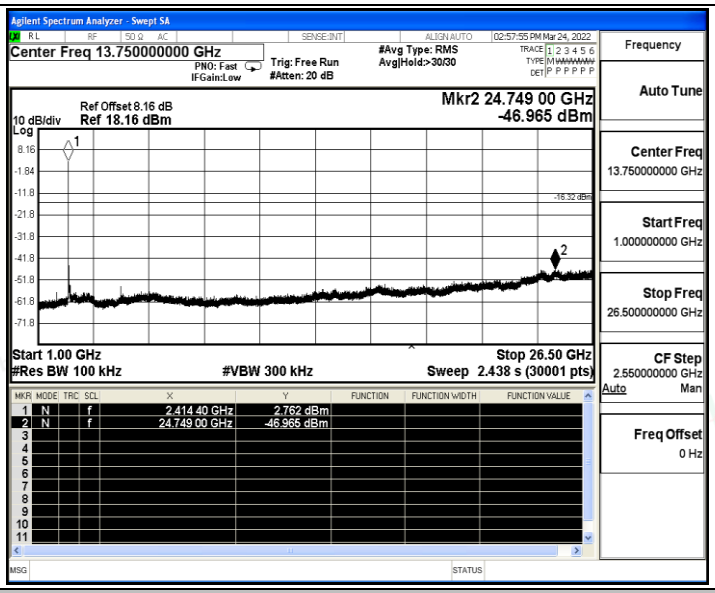
11B_Ant1_2412_0~Reference



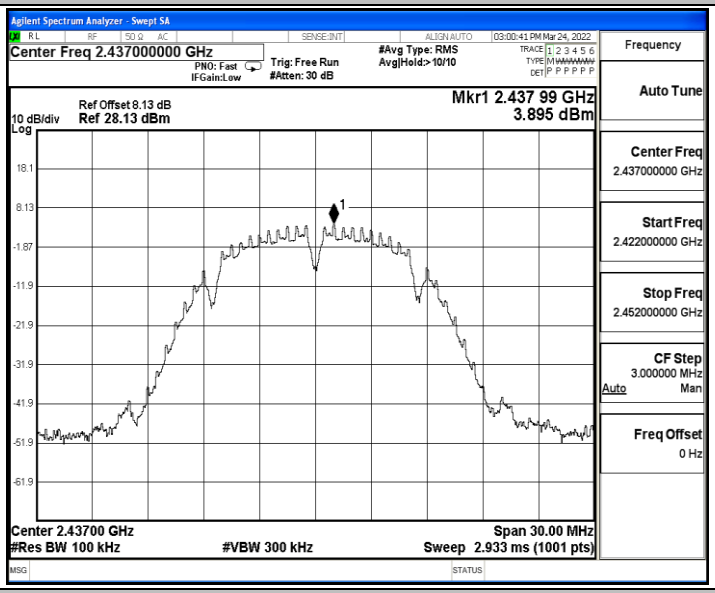
11B_Ant1_2412_30~1000



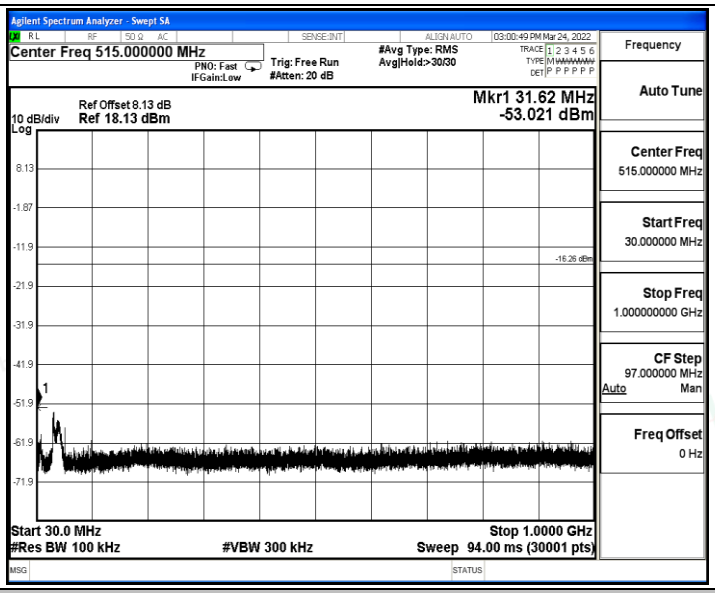
11B_Ant1_2412_1000~26500



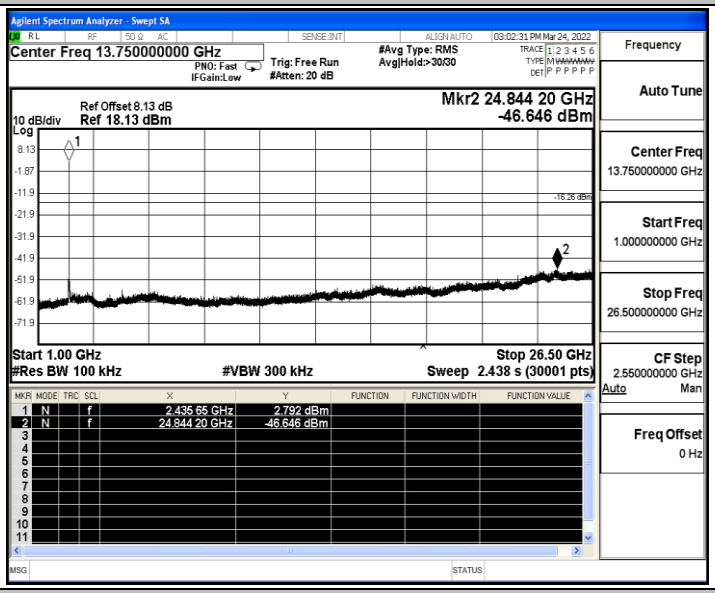
11B_Ant1_2437_0~Reference



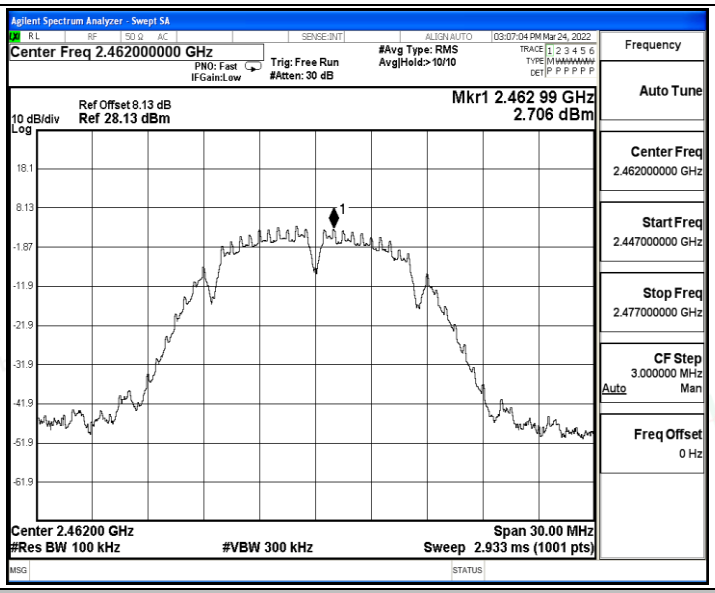
11B_Ant1_2437_30~1000



11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



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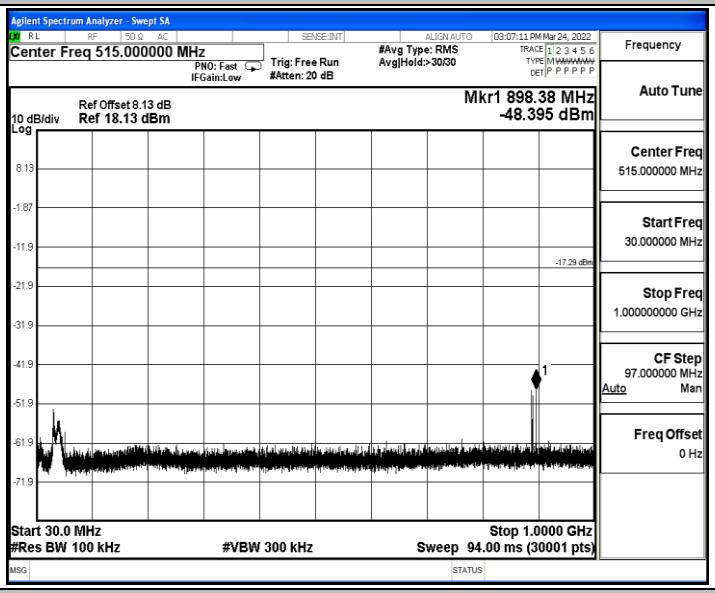

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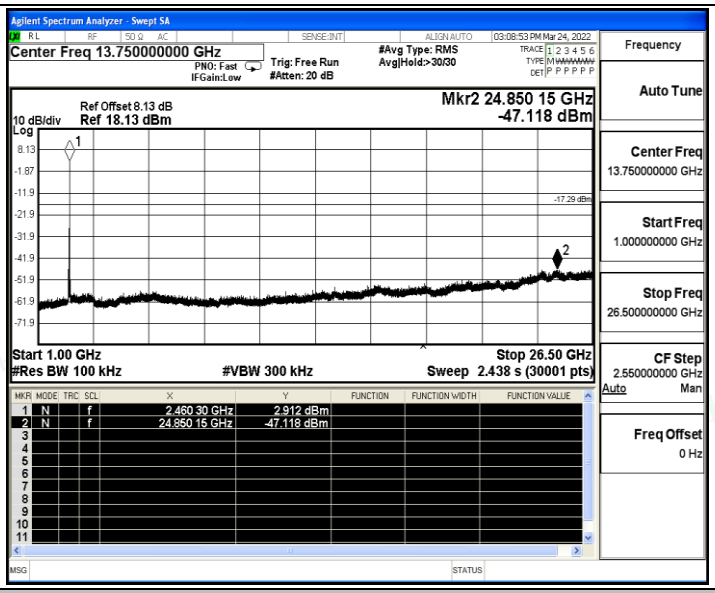

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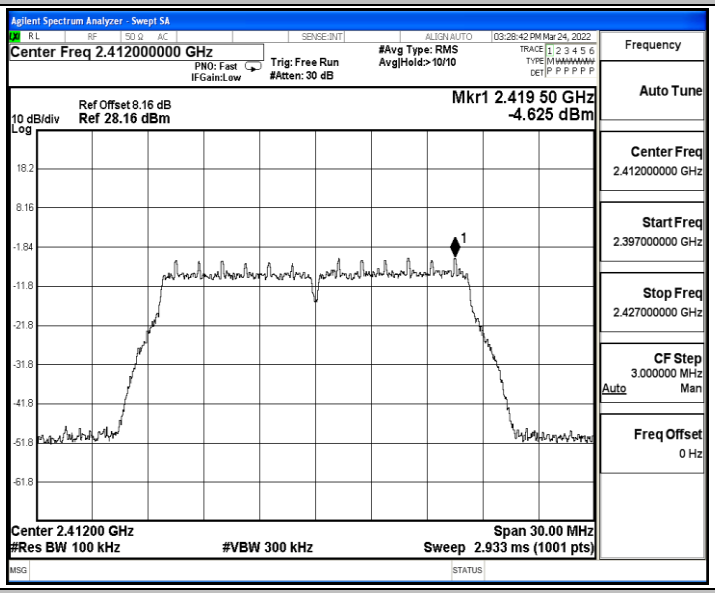

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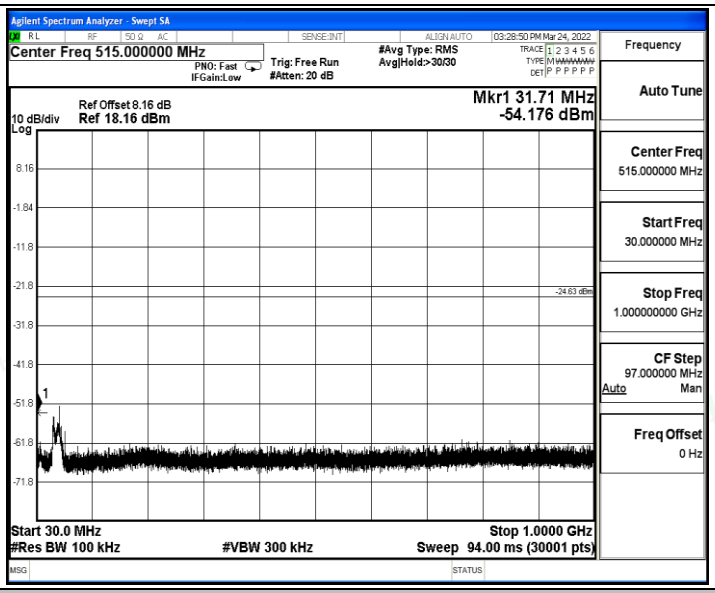

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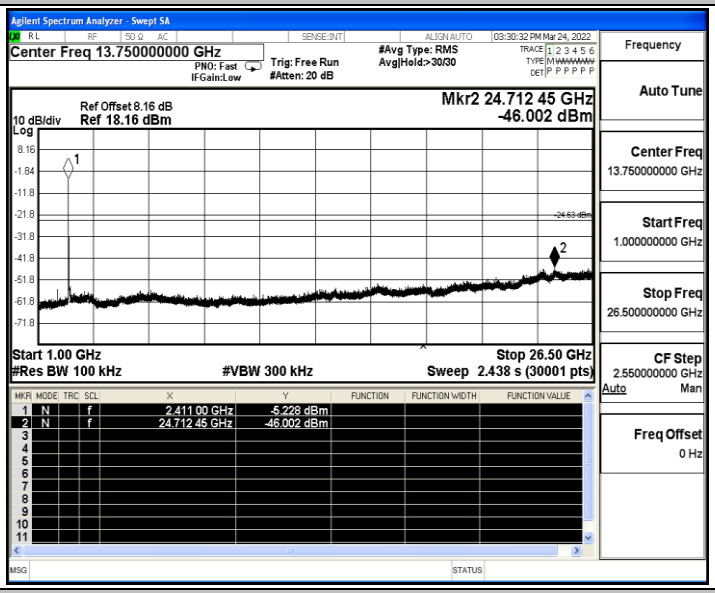

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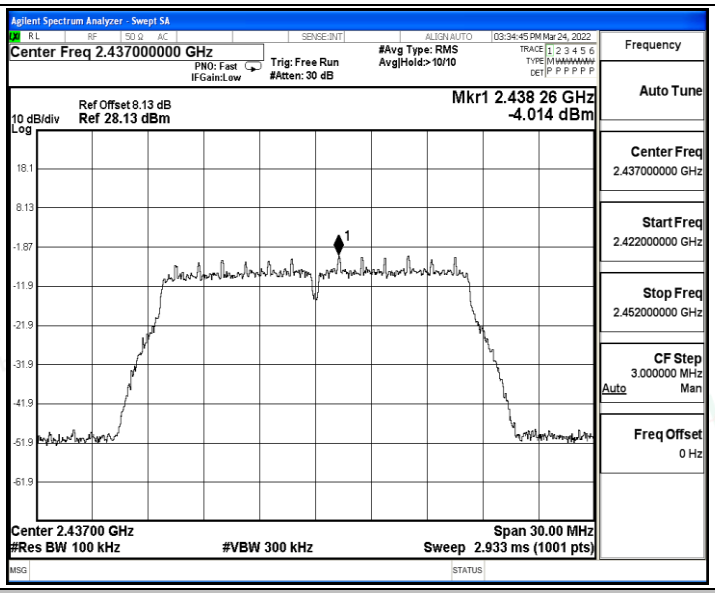

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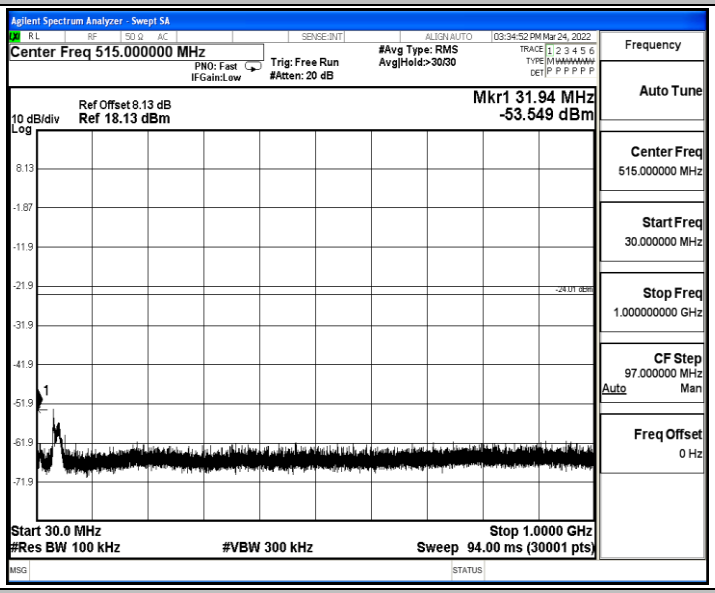

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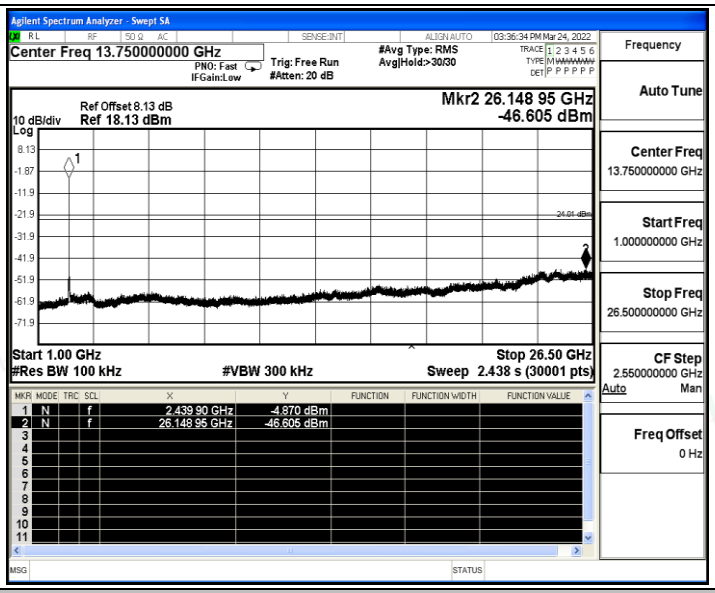

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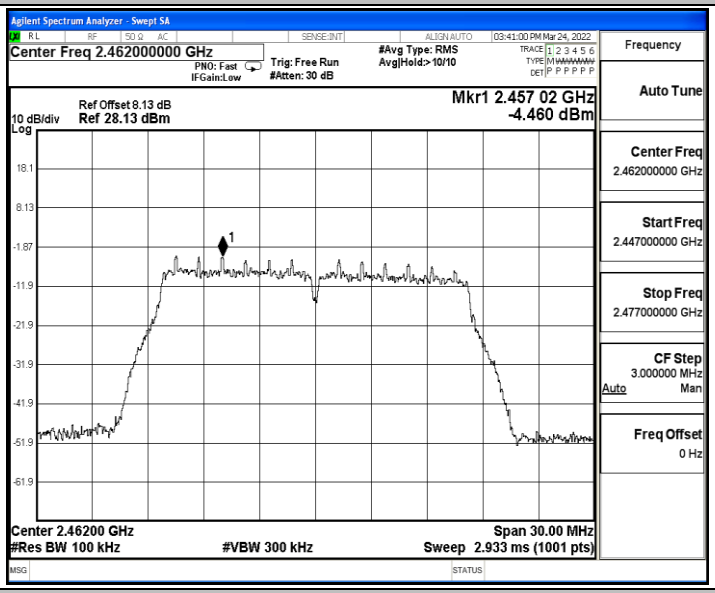

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