

Appendix B

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: LED Panel Device

Test Model: PRO300

Environmental Conditions

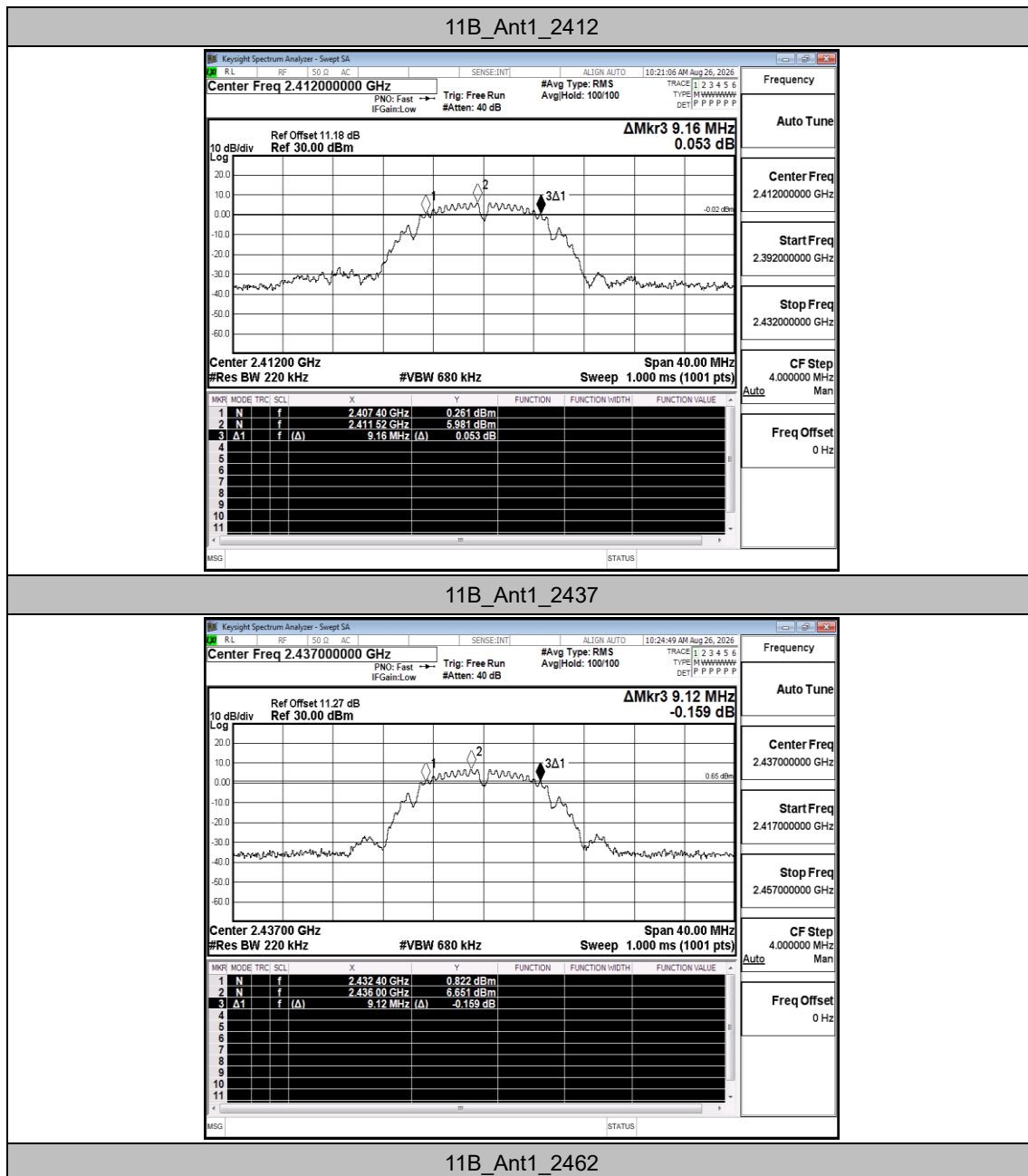
Temperature:	23.2°C
Relative Humidity:	54.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

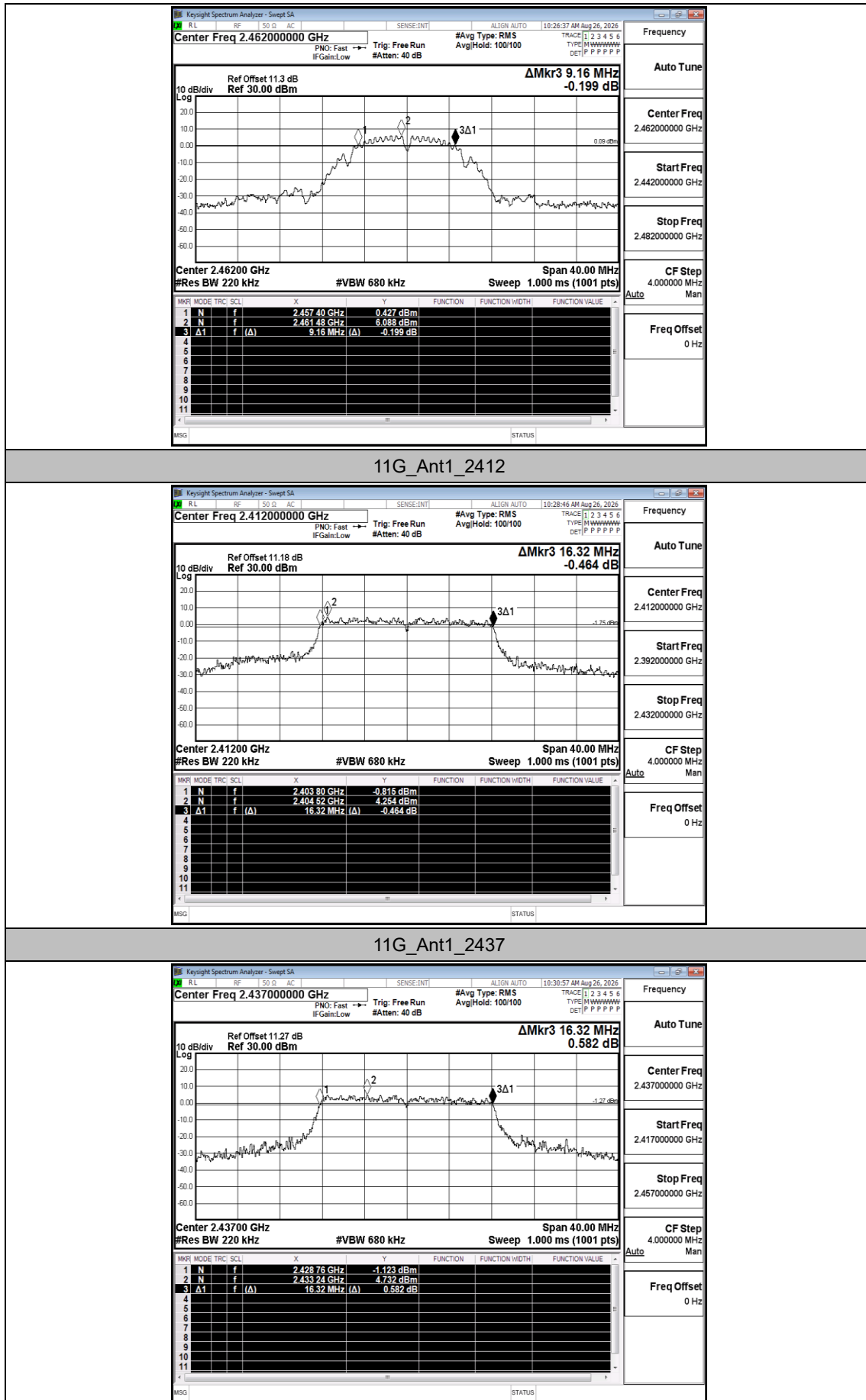
B.1 DTS Bandwidth

Test Result

TestMode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	9.160	2407.400	2416.560	0.5	PASS
		2437	9.120	2432.400	2441.520	0.5	PASS
		2462	9.160	2457.400	2466.560	0.5	PASS
11G	Ant1	2412	16.320	2403.800	2420.120	0.5	PASS
		2437	16.320	2428.760	2445.080	0.5	PASS
		2462	16.160	2453.840	2470.000	0.5	PASS
11N20SISO	Ant1	2412	17.280	2403.200	2420.480	0.5	PASS
		2437	17.360	2428.200	2445.560	0.5	PASS
		2462	17.080	2453.240	2470.320	0.5	PASS
11N40SISO	Ant1	2422	36.080	2404.080	2440.160	0.5	PASS
		2437	35.600	2419.000	2454.600	0.5	PASS
		2452	21.840	2434.160	2456.000	0.5	PASS

Test Graphs



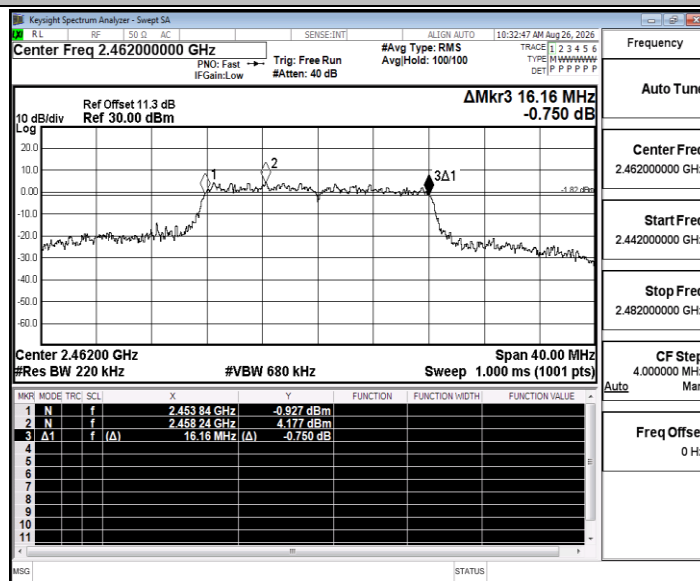


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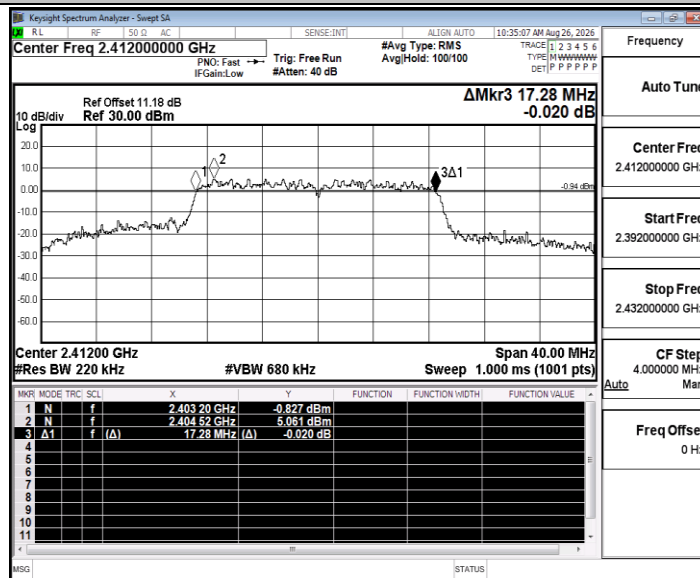
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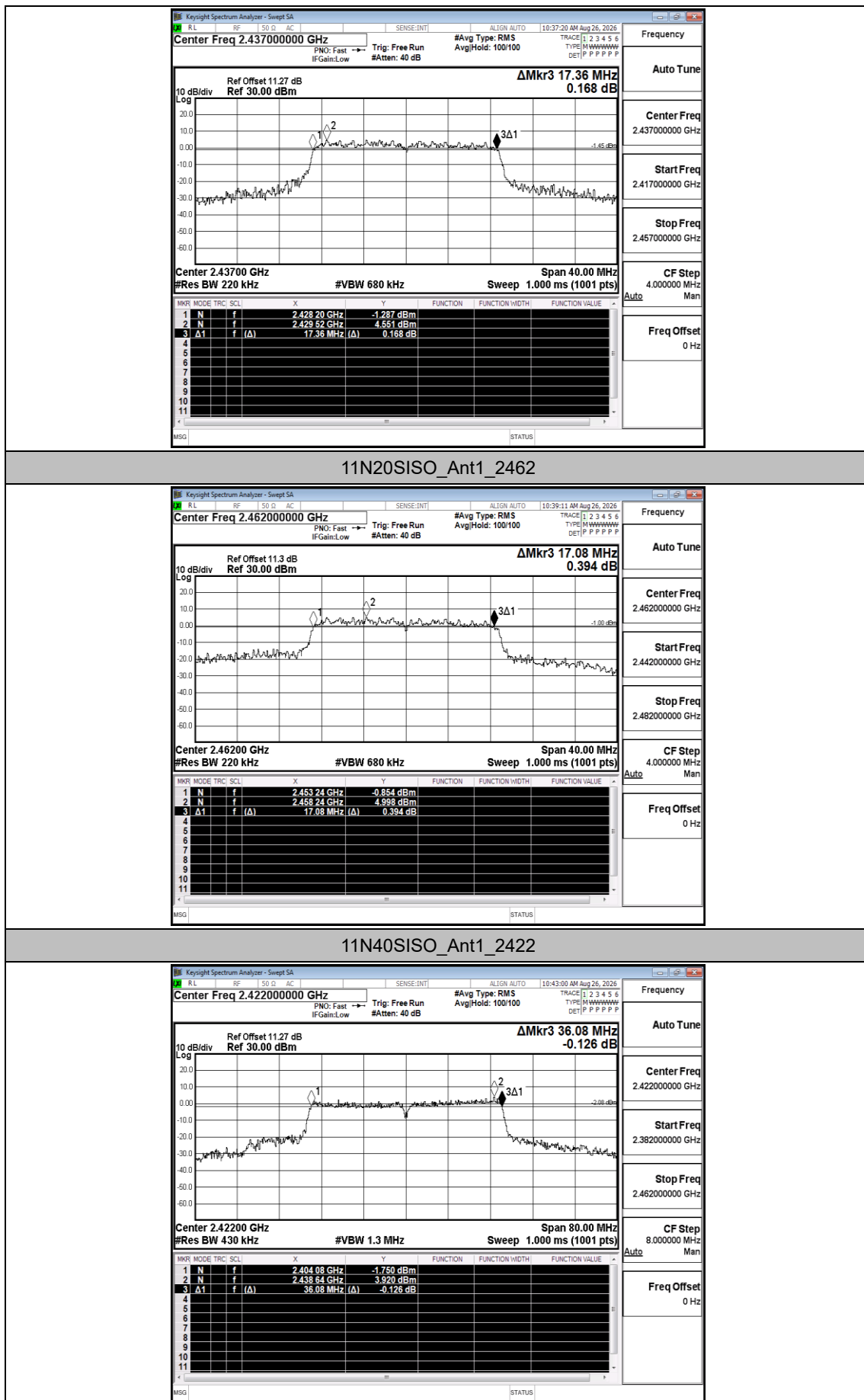
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437

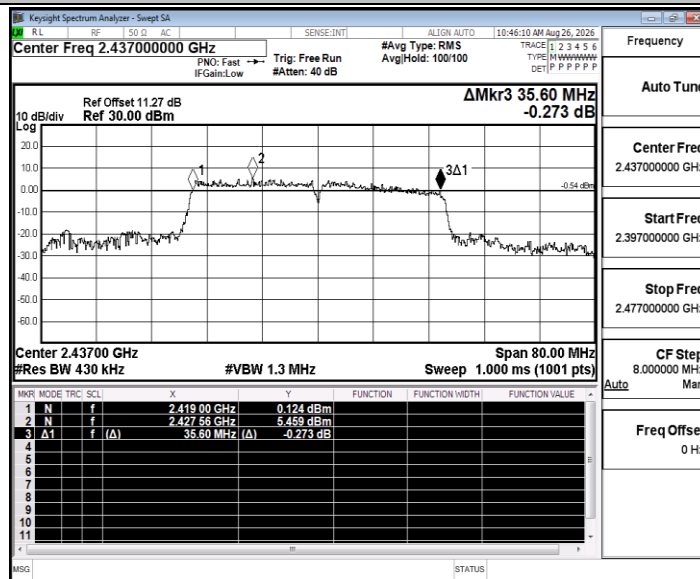


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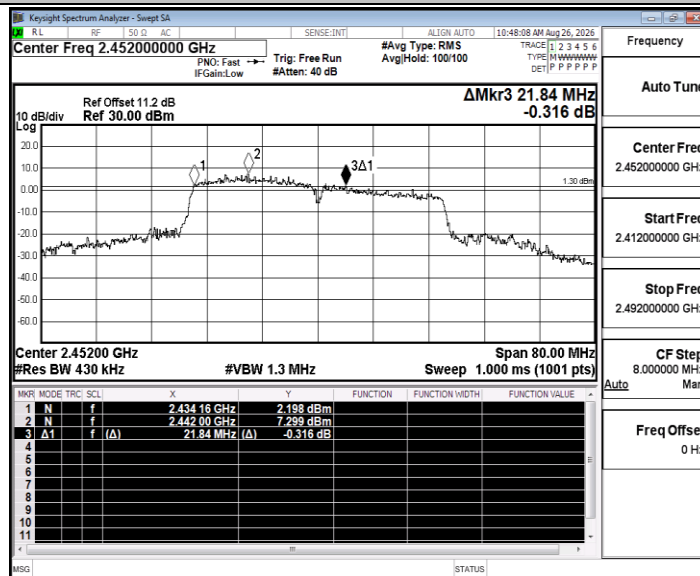
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11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



B.2 Maximum Average conducted output power

Test Result Average

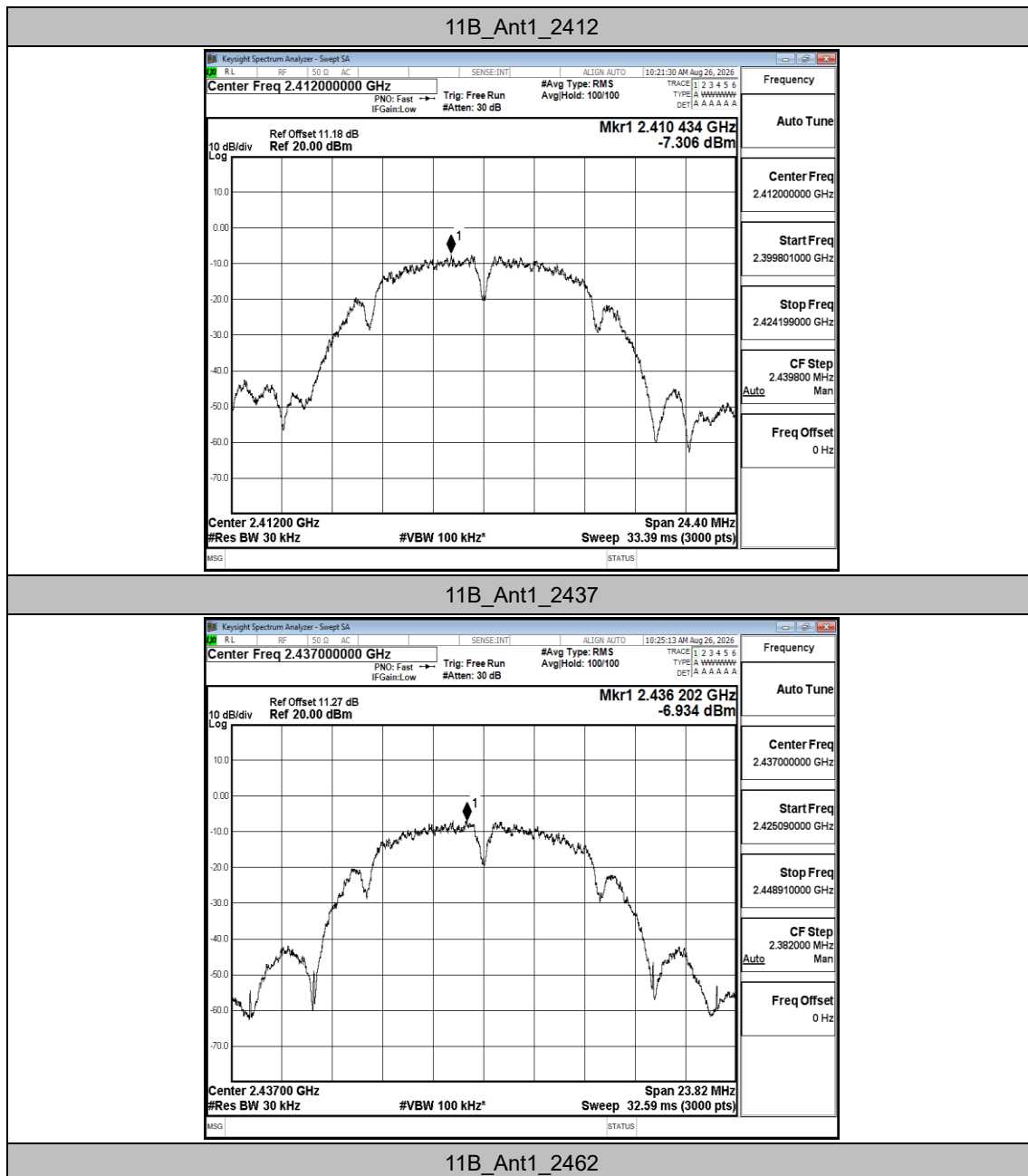
TestMode	Antenna	Frequency [MHz]	Measured Power	DC Factor [dB]	AV Power [dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	13.93	0.28	14.21	≤30.00	PASS
		2437	14.49	0.34	14.83	≤30.00	PASS
		2462	13.86	0.28	14.14	≤30.00	PASS
11G	Ant1	2412	12.15	2.14	14.29	≤30.00	PASS
		2437	12.74	1.76	14.50	≤30.00	PASS
		2462	11.75	1.76	13.51	≤30.00	PASS
11N20SISO	Ant1	2412	13.08	1.89	14.97	≤30.00	PASS
		2437	12.79	1.76	14.55	≤30.00	PASS
		2462	12.65	1.76	14.41	≤30.00	PASS
11N40SISO	Ant1	2422	10.34	2.43	12.77	≤30.00	PASS
		2437	12.52	2.43	14.95	≤30.00	PASS
		2452	12.89	2.69	15.58	≤30.00	PASS

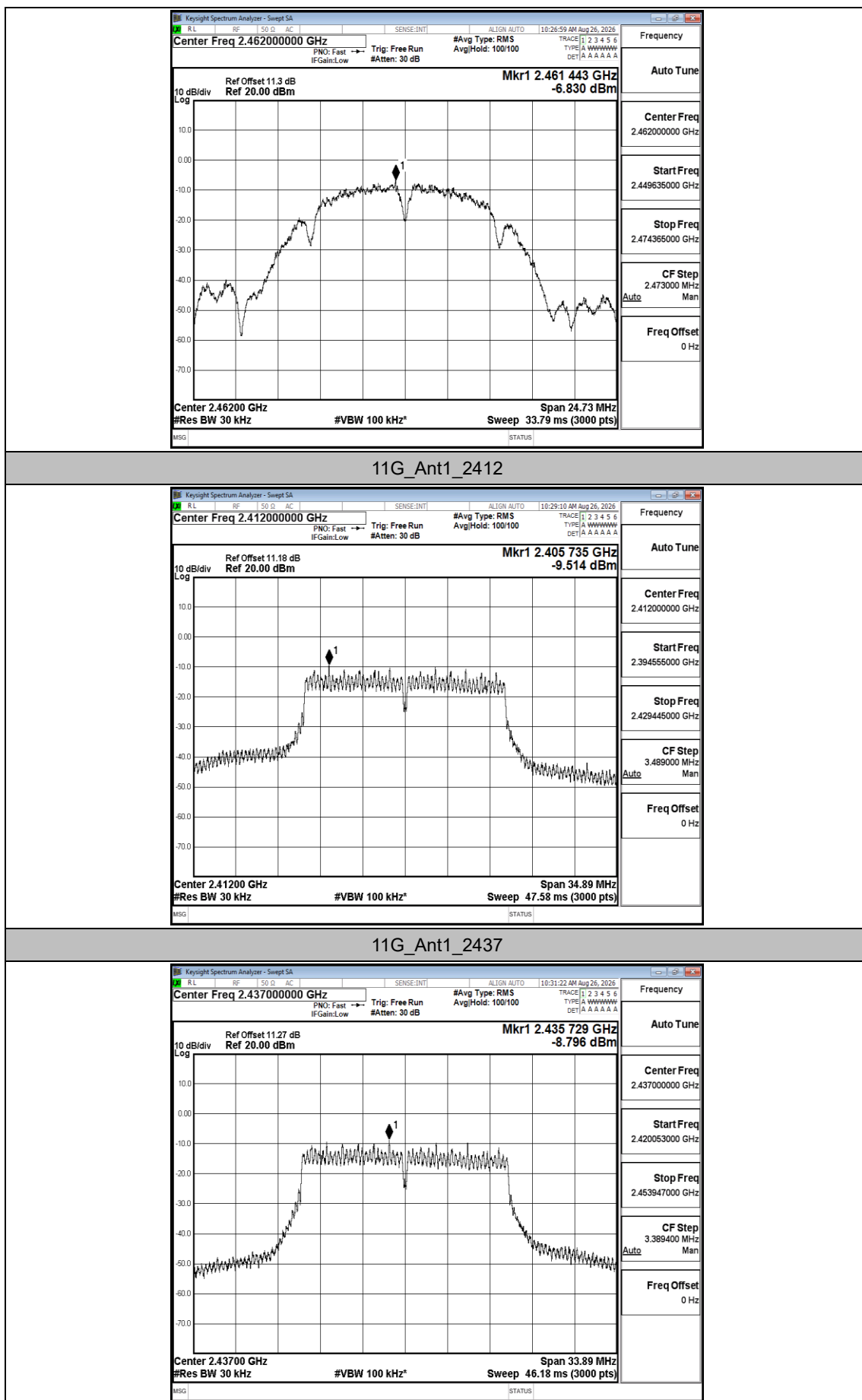
B.3 Maximum power spectral density

Test Result

TestMode	Antenna	Frequency [MHz]	Measured PSD [dBm/30kHz]	DC Factor [dB]	Result[dBm/30kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-7.31	0.28	-7.03	≤8.00	PASS
		2437	-6.93	0.34	-6.59	≤8.00	PASS
		2462	-6.83	0.28	-6.55	≤8.00	PASS
11G	Ant1	2412	-9.51	2.14	-7.37	≤8.00	PASS
		2437	-8.8	1.76	-7.04	≤8.00	PASS
		2462	-9.65	1.76	-7.89	≤8.00	PASS
11N20SISO	Ant1	2412	-9.06	1.89	-7.17	≤8.00	PASS
		2437	-9.39	1.76	-7.63	≤8.00	PASS
		2462	-8.49	1.76	-6.73	≤8.00	PASS
11N40SISO	Ant1	2422	-13.21	2.43	-10.78	≤8.00	PASS
		2437	-10.47	2.43	-8.04	≤8.00	PASS
		2452	-9.13	2.69	-6.44	≤8.00	PASS

Test Graphs



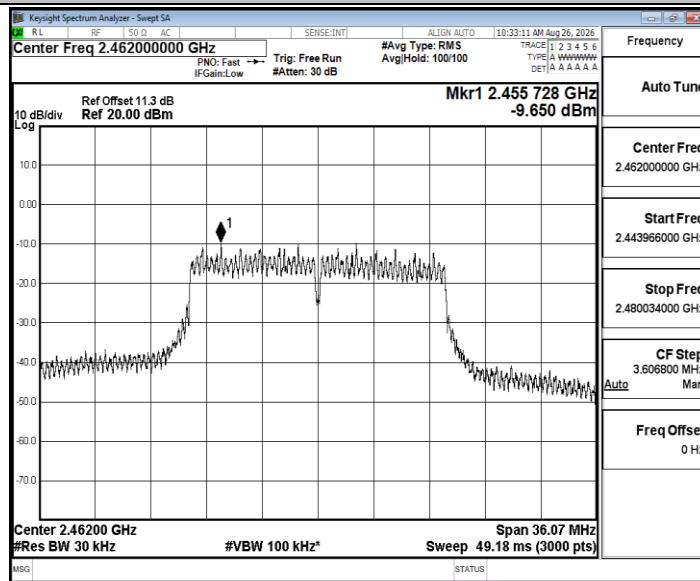


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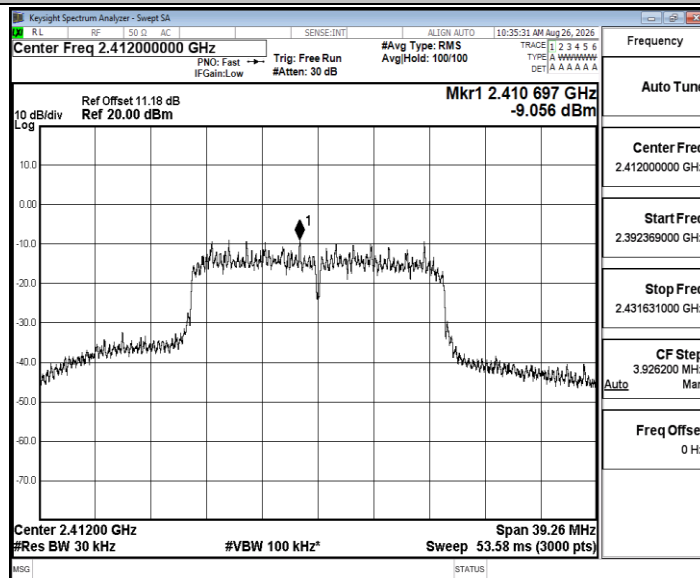
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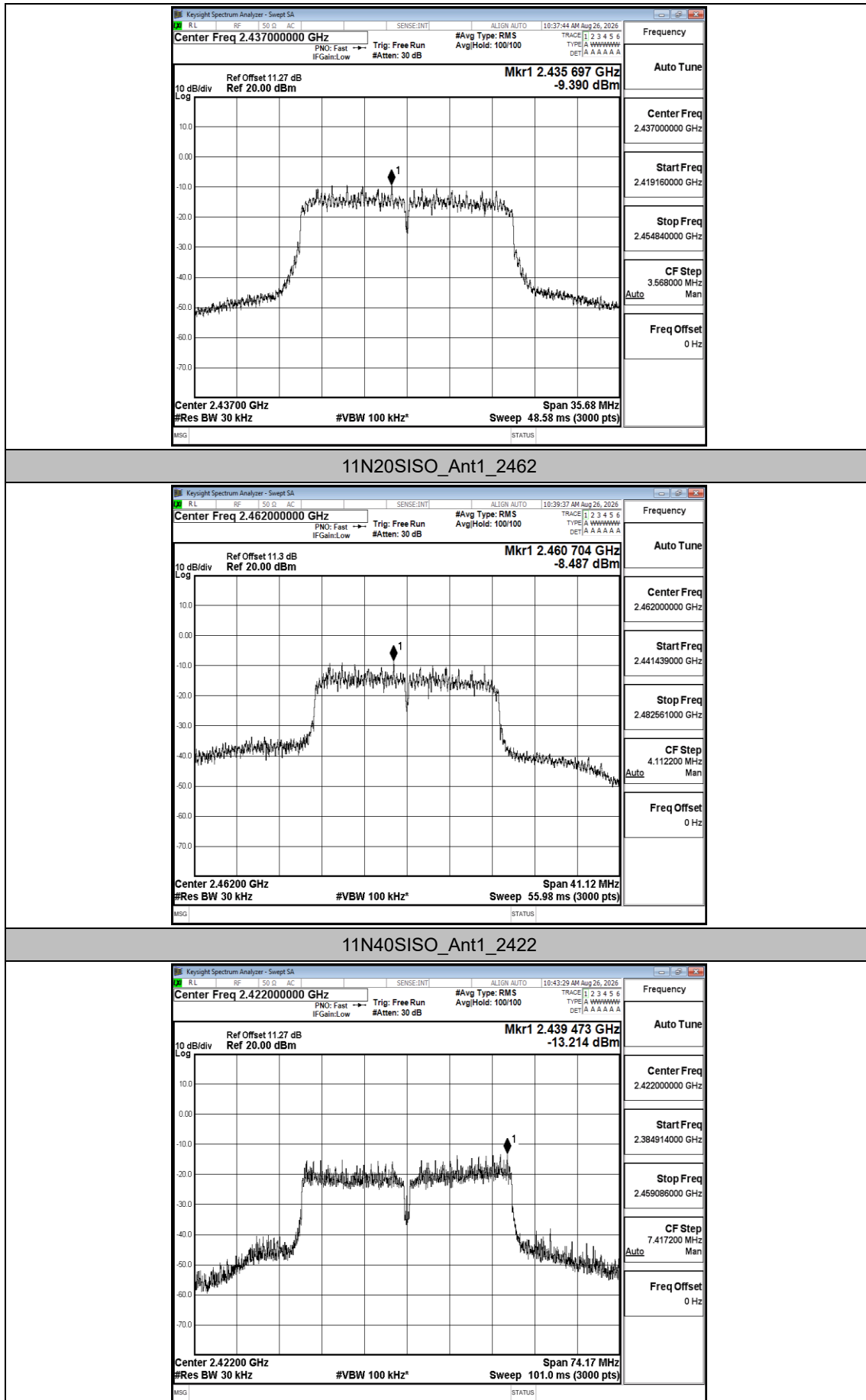
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437

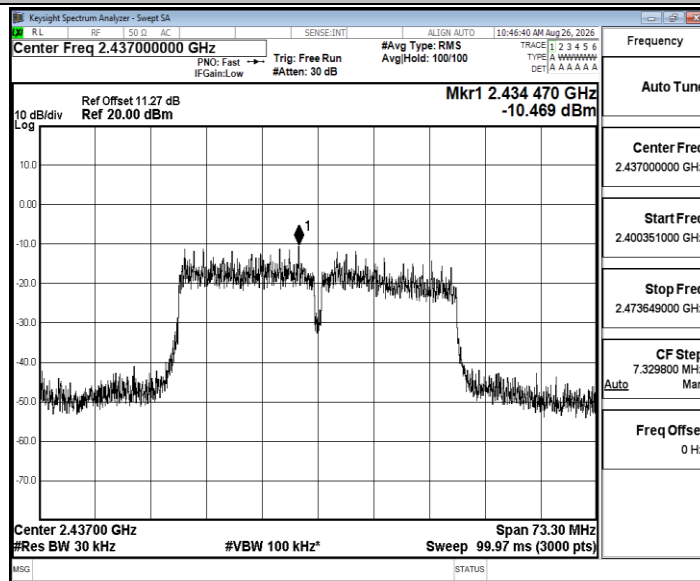


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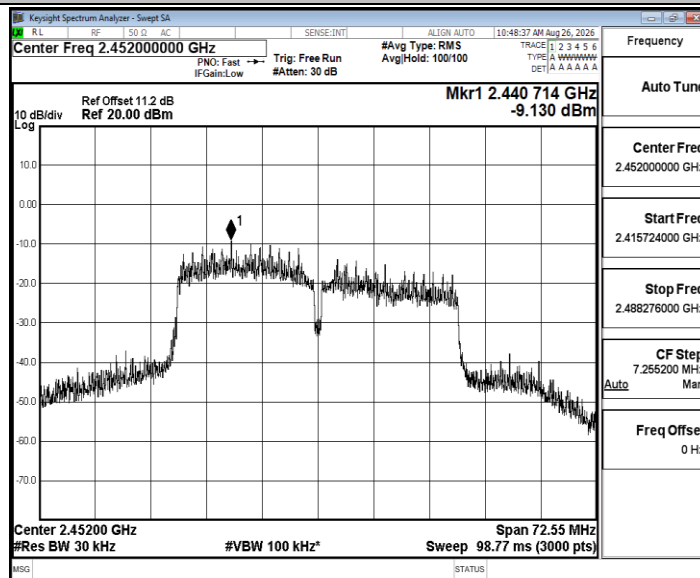
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11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

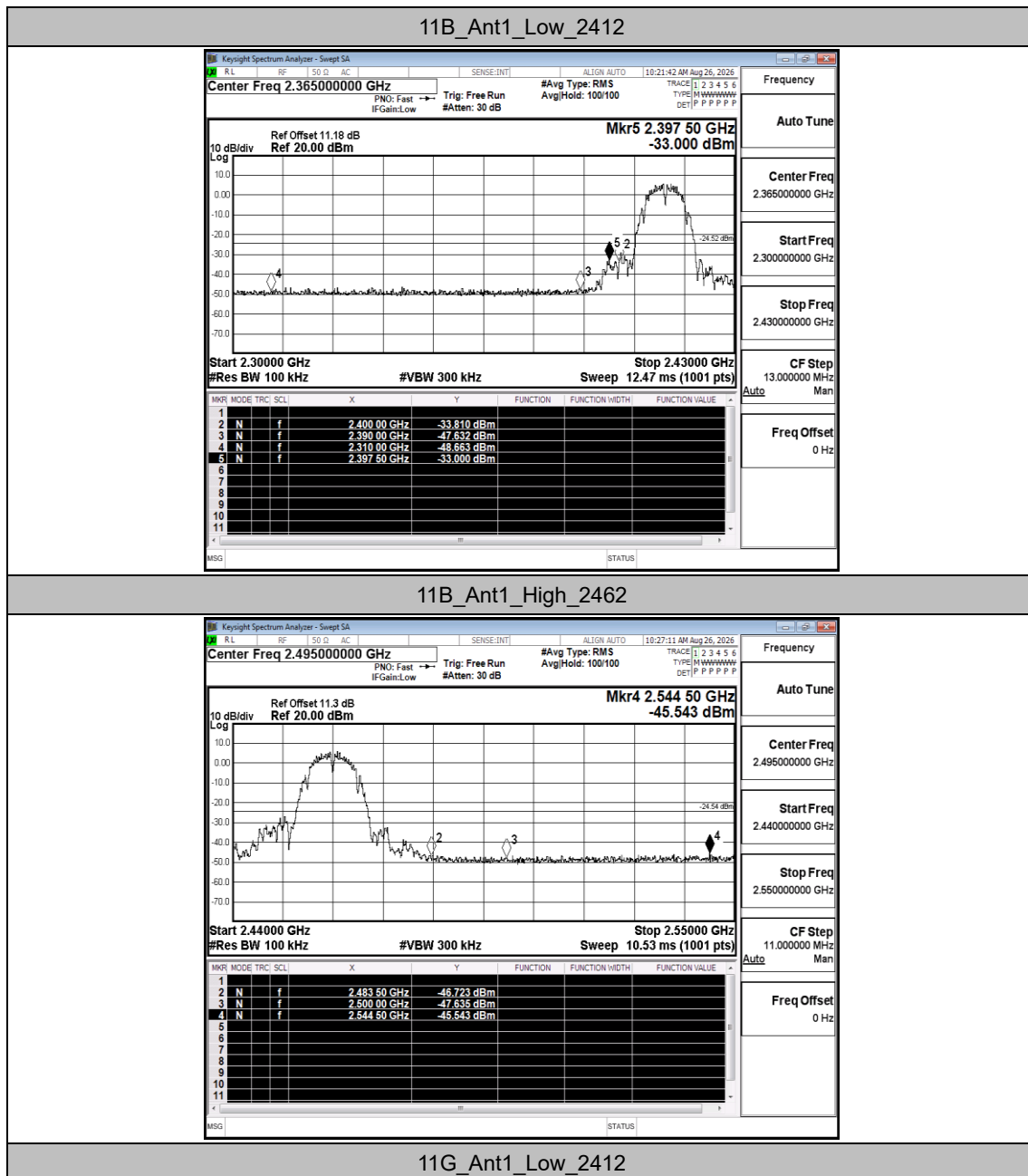


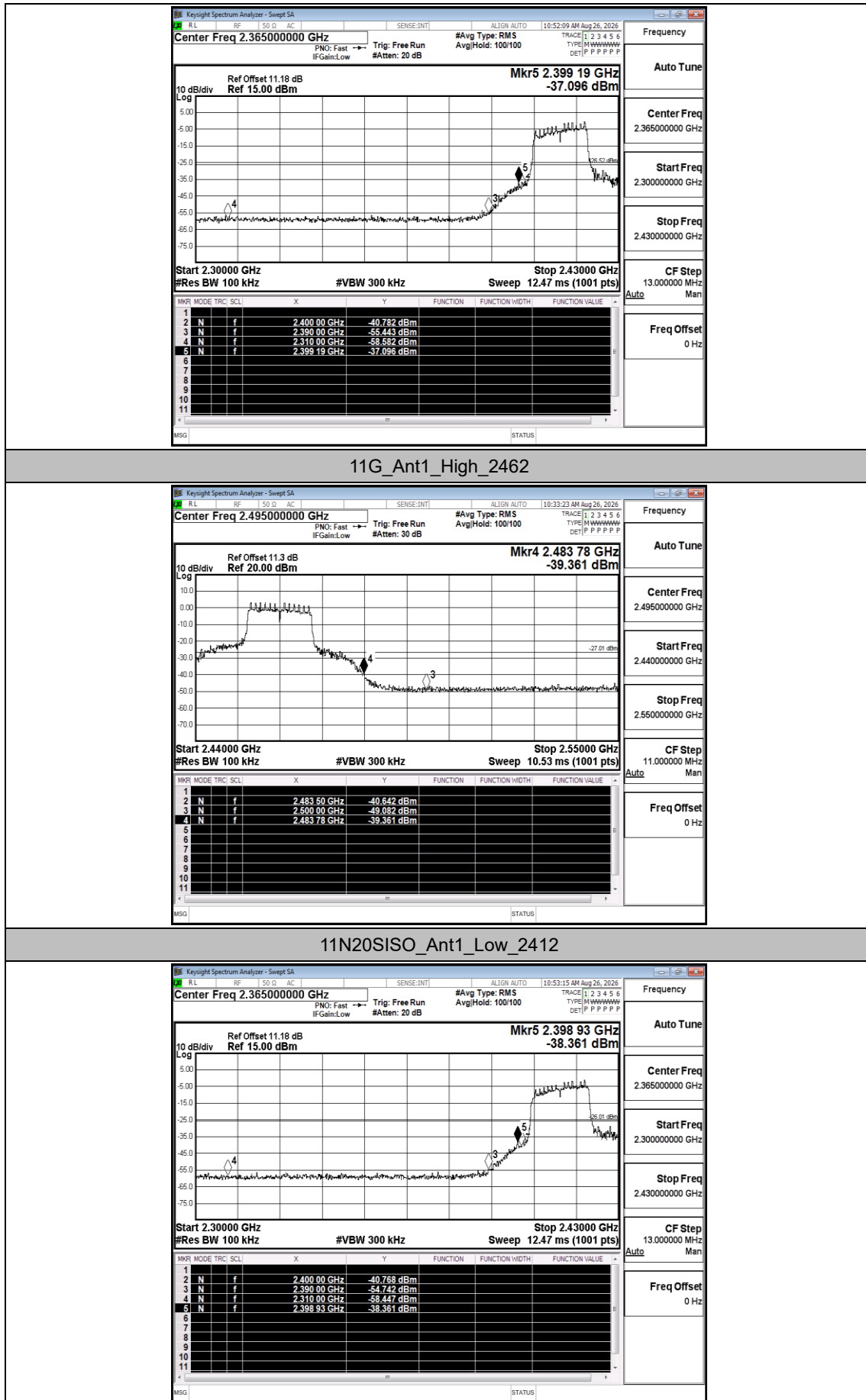
B.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.48	-33	≤-24.52	PASS
		High	2462	5.46	-45.54	≤-24.54	PASS
11G	Ant1	Low	2412	3.48	-37.1	≤-26.52	PASS
		High	2462	2.99	-39.36	≤-27.01	PASS
11N20SISO	Ant1	Low	2412	3.99	-38.36	≤-26.01	PASS
		High	2462	3.91	-34.74	≤-26.09	PASS
11N40SISO	Ant1	Low	2422	-0.05	-30.3	≤-30.05	PASS
		High	2452	3.66	-32.72	≤-26.34	PASS

Test Graphs



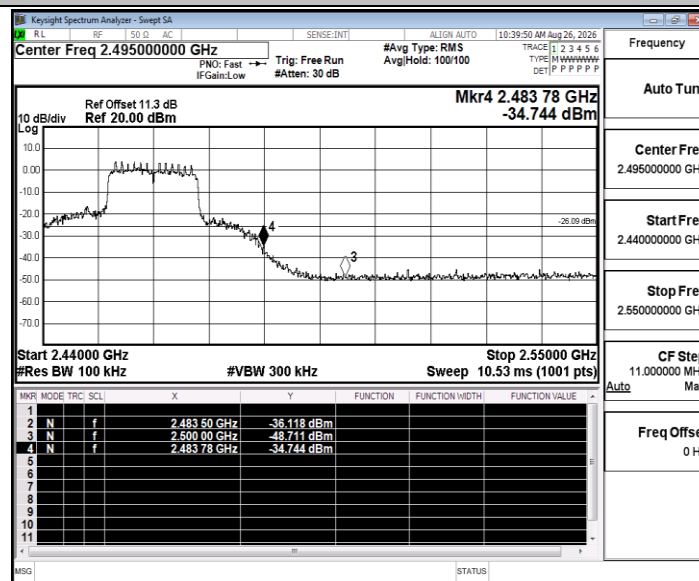


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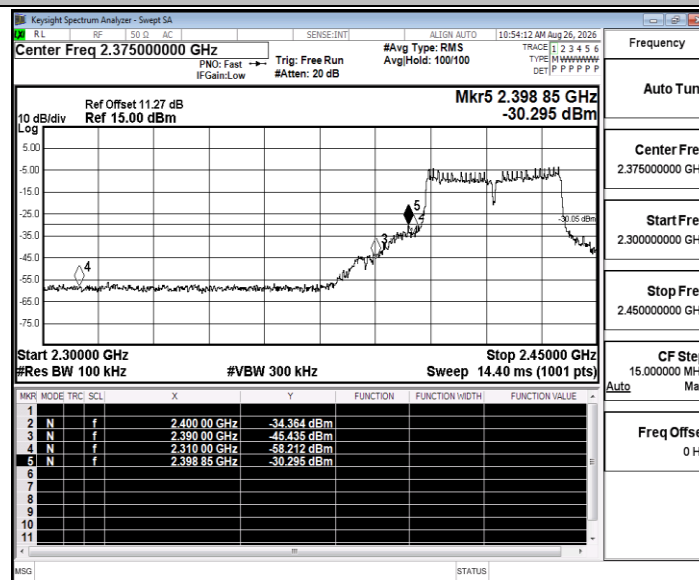
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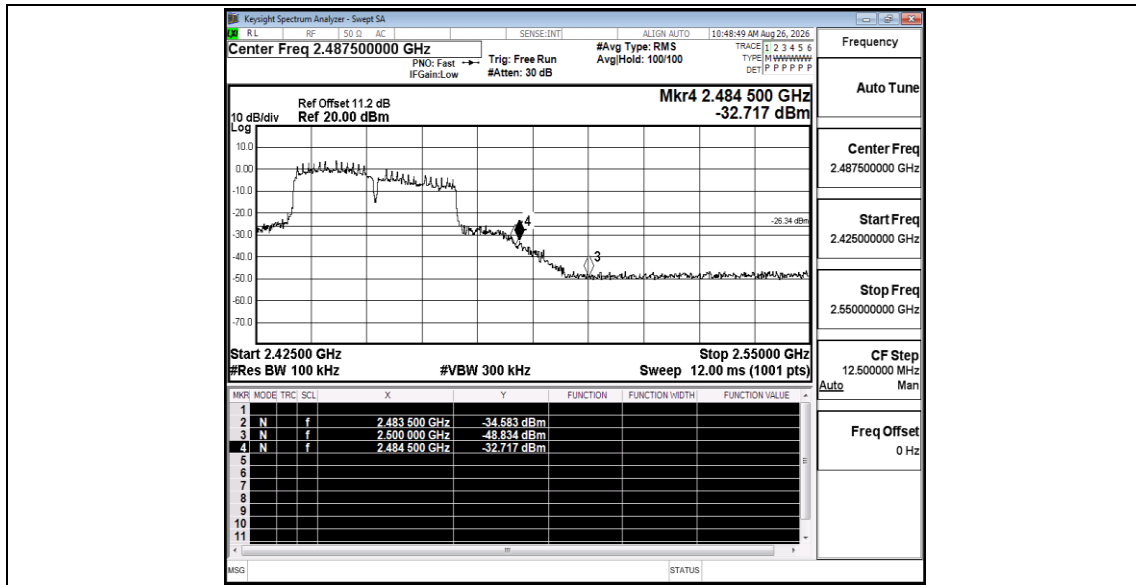
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

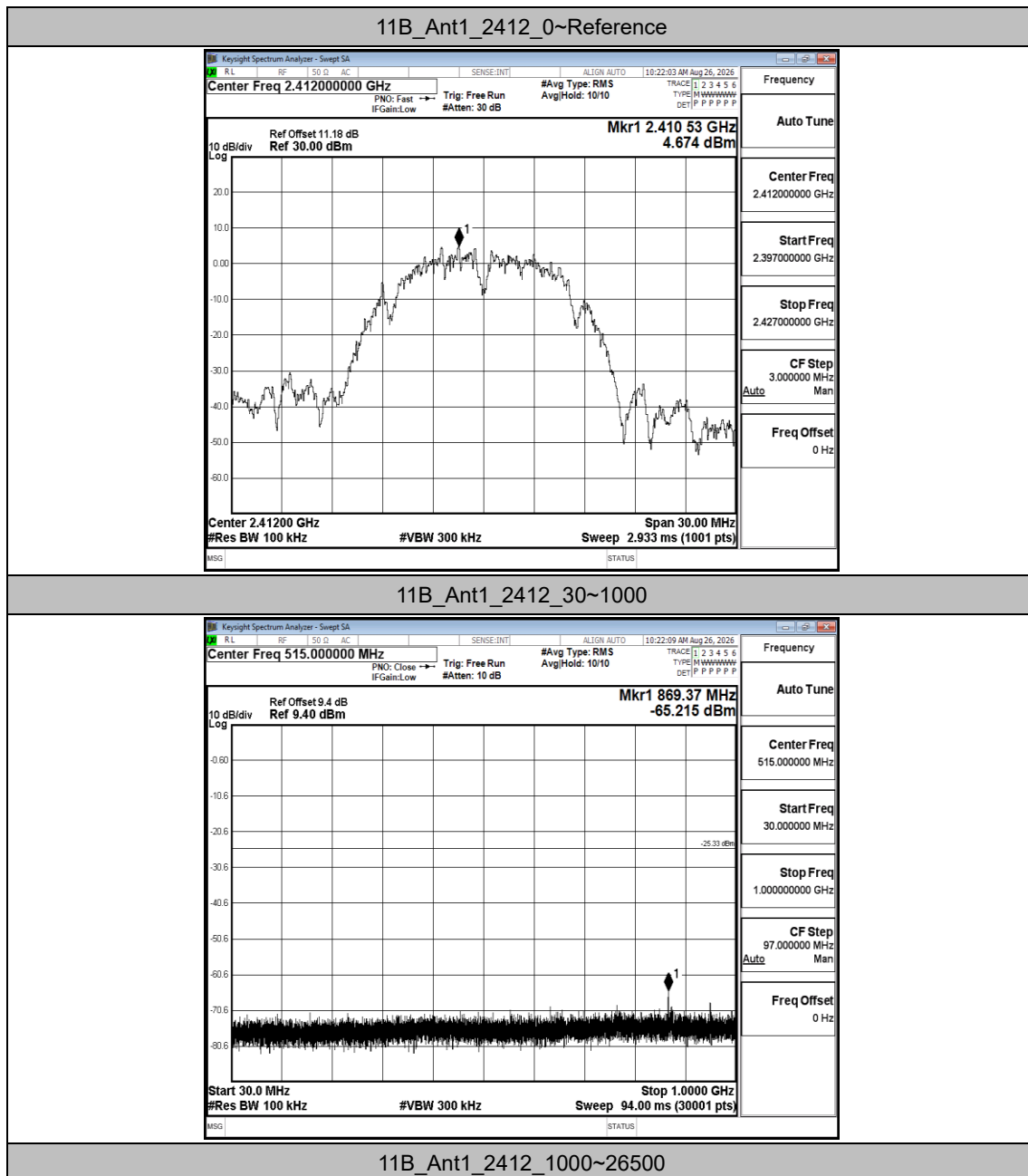


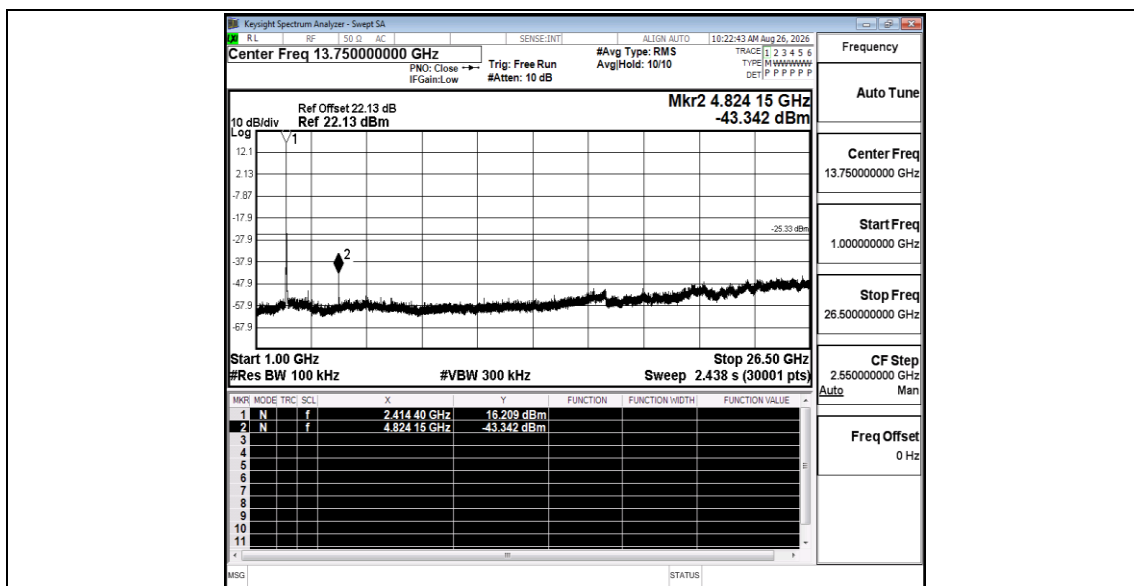
B.5 Conducted Spurious Emission

Test Result

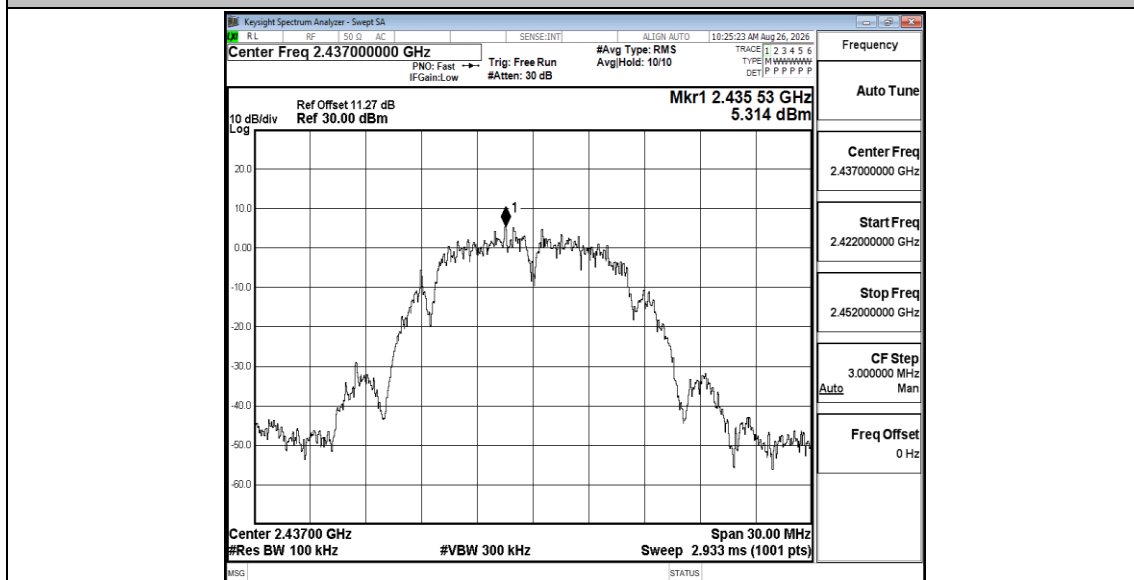
TestMode	Antenna	Frequency [MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.67	4.67	---	PASS
			30~1000	4.67	-65.22	≤-25.33	PASS
			1000~26500	4.67	-43.34	≤-25.33	PASS
		2437	Reference	5.31	5.31	---	PASS
			30~1000	5.31	-66.54	≤-24.69	PASS
			1000~26500	5.31	-44.32	≤-24.69	PASS
		2462	Reference	3.98	3.98	---	PASS
			30~1000	3.98	-63.87	≤-26.02	PASS
			1000~26500	3.98	-44.18	≤-26.02	PASS
11G	Ant1	2412	Reference	3.19	3.19	---	PASS
			30~1000	3.19	-67.59	≤-26.81	PASS
			1000~26500	3.19	-44.99	≤-26.81	PASS
		2437	Reference	3.14	3.14	---	PASS
			30~1000	3.14	-65.34	≤-26.86	PASS
			1000~26500	3.14	-45.01	≤-26.86	PASS
		2462	Reference	2.74	2.74	---	PASS
			30~1000	2.74	-65.27	≤-27.26	PASS
			1000~26500	2.74	-44.52	≤-27.26	PASS
11N20SISO	Ant1	2412	Reference	4.00	4.00	---	PASS
			30~1000	4.00	-65.71	≤-26	PASS
			1000~26500	4.00	-44.82	≤-26	PASS
		2437	Reference	2.69	2.69	---	PASS
			30~1000	2.69	-64.54	≤-27.31	PASS
			1000~26500	2.69	-44.68	≤-27.31	PASS
		2462	Reference	3.63	3.63	---	PASS
			30~1000	3.63	-64.31	≤-26.37	PASS
			1000~26500	3.63	-44.76	≤-26.37	PASS
11N40SISO	Ant1	2422	Reference	-0.31	-0.31	---	PASS
			30~1000	-0.31	-66.59	≤-30.31	PASS
			1000~26500	-0.31	-43.65	≤-30.31	PASS
		2437	Reference	1.31	1.31	---	PASS
			30~1000	1.31	-63.63	≤-28.69	PASS
			1000~26500	1.31	-43.73	≤-28.69	PASS
		2452	Reference	2.73	2.73	---	PASS
			30~1000	2.73	-65.84	≤-27.27	PASS
			1000~26500	2.73	-44.56	≤-27.27	PASS

Test Graphs

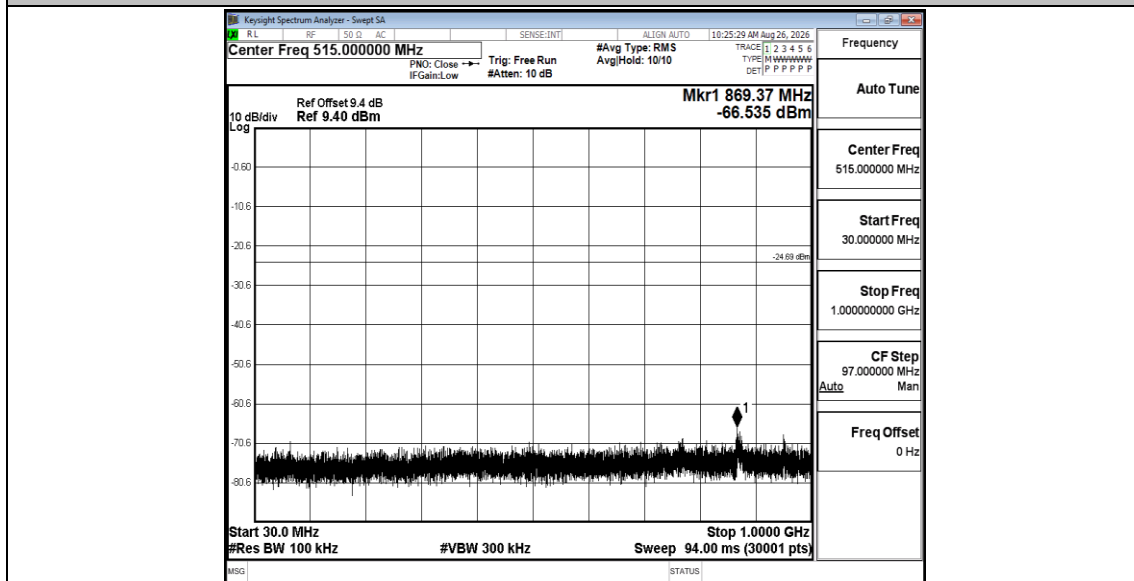




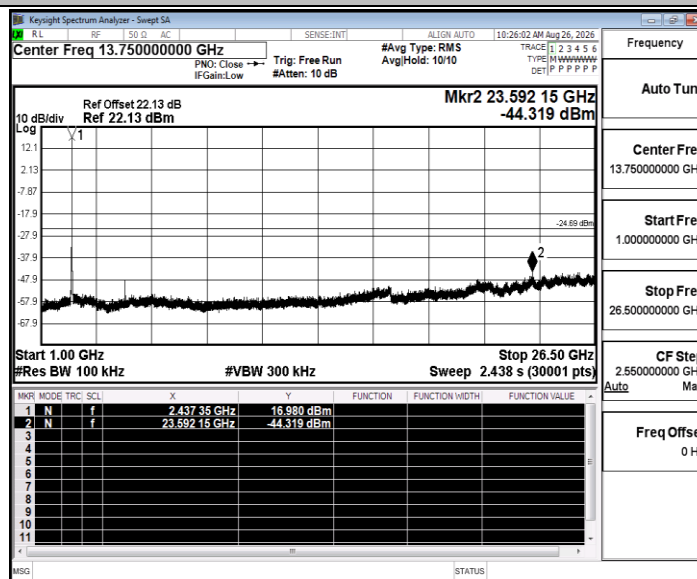
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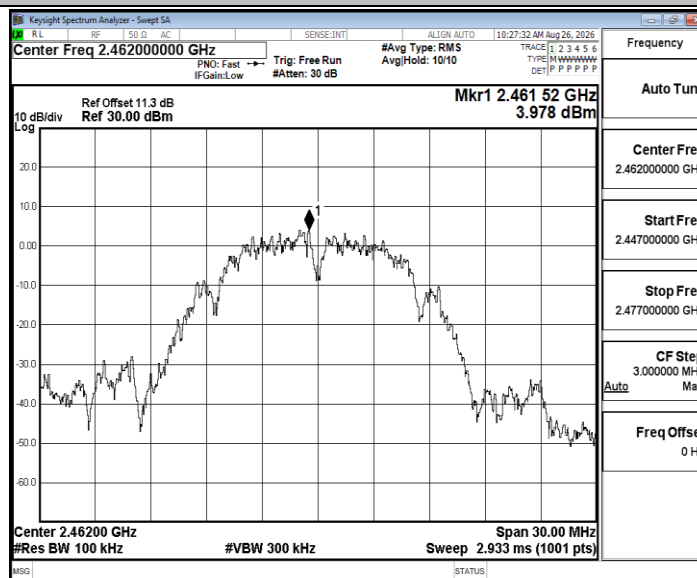
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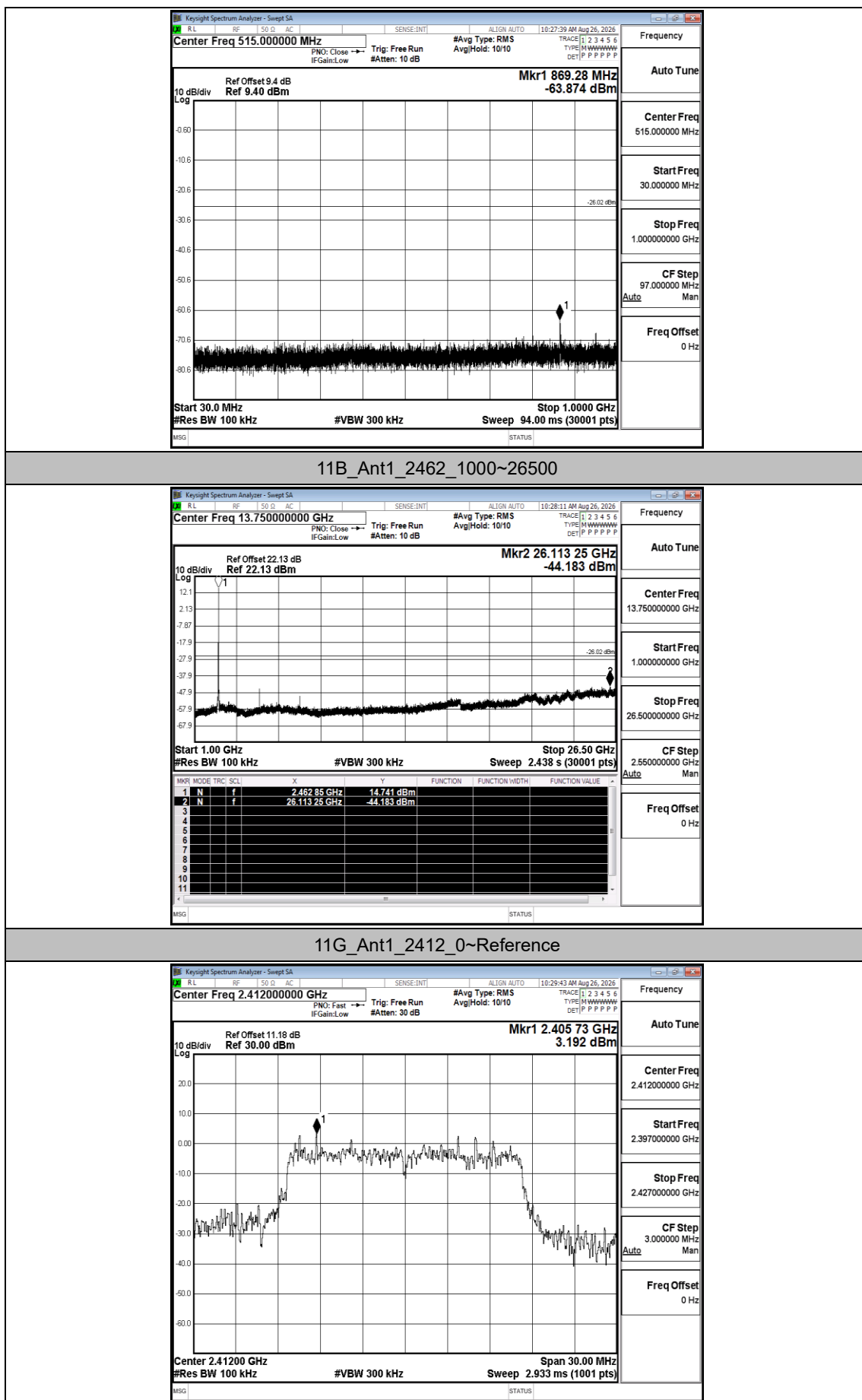
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11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000

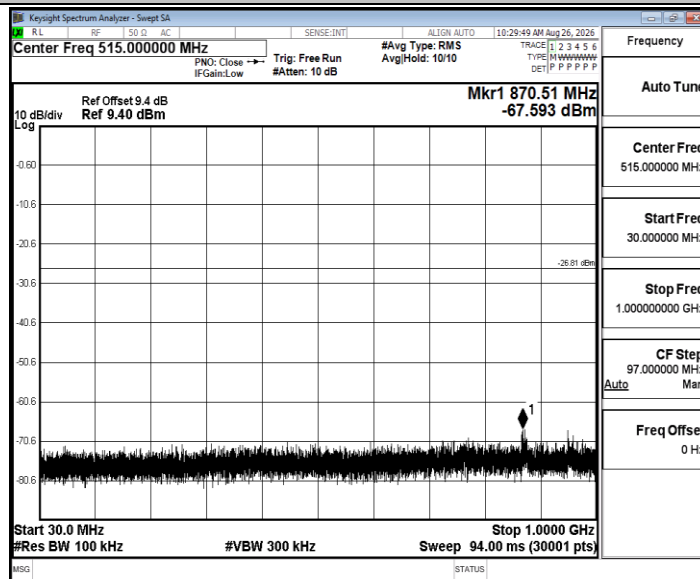


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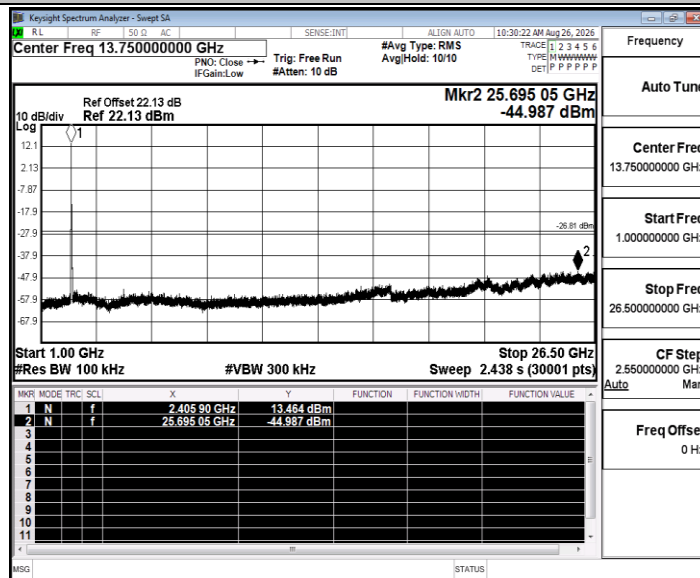
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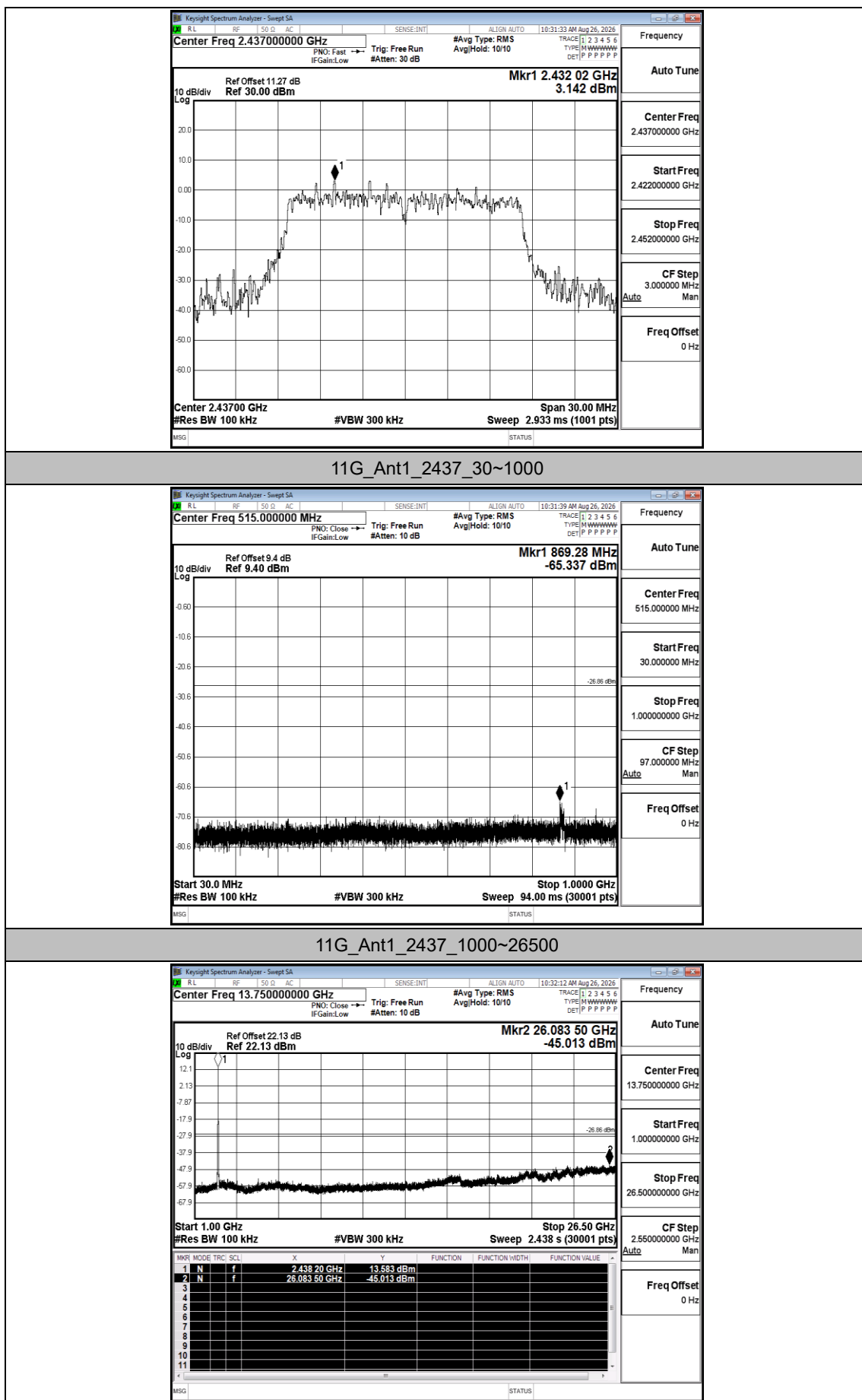
11G_Ant1_2412_30~1000



11G_Ant1_2412_1000~26500



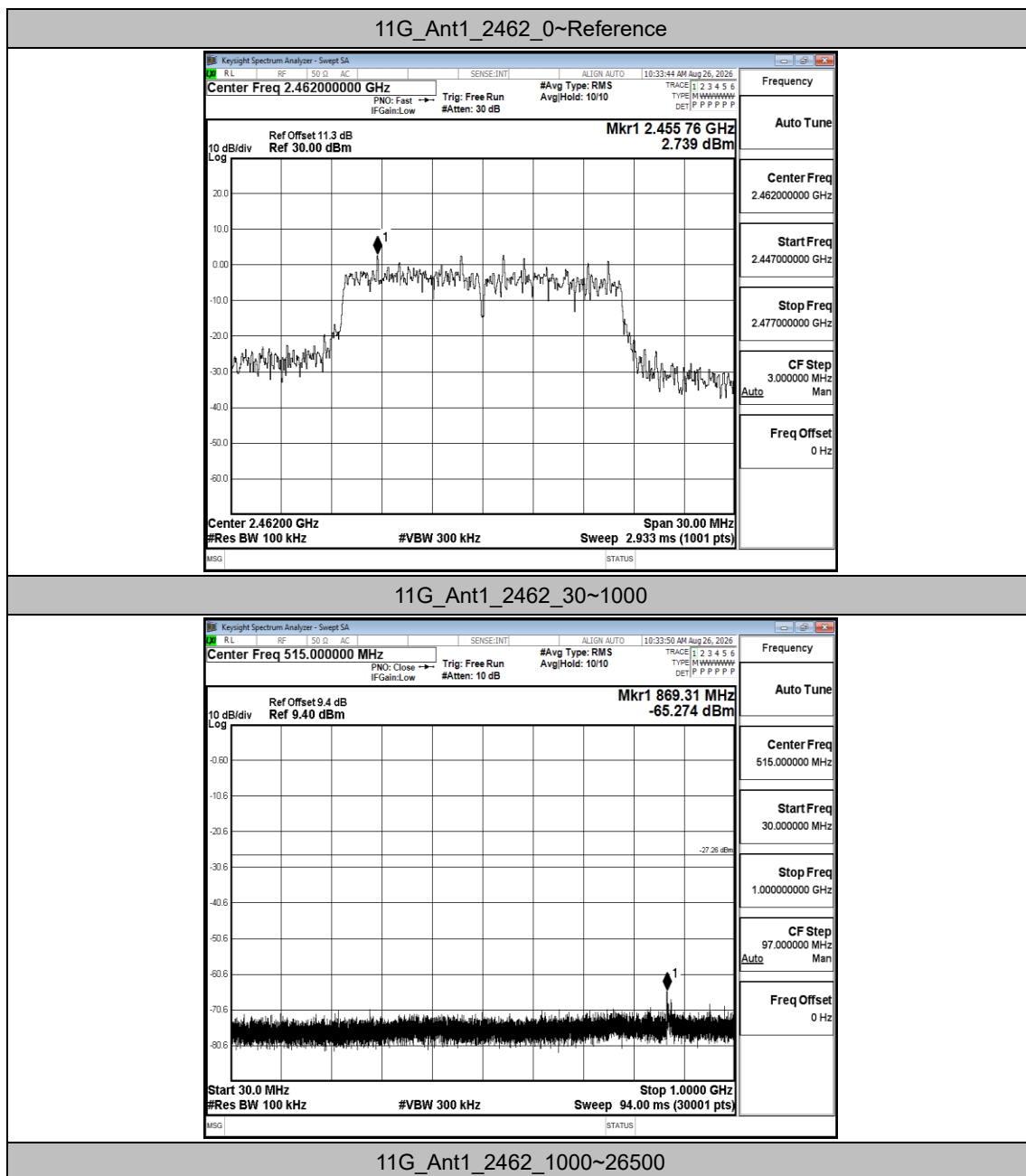
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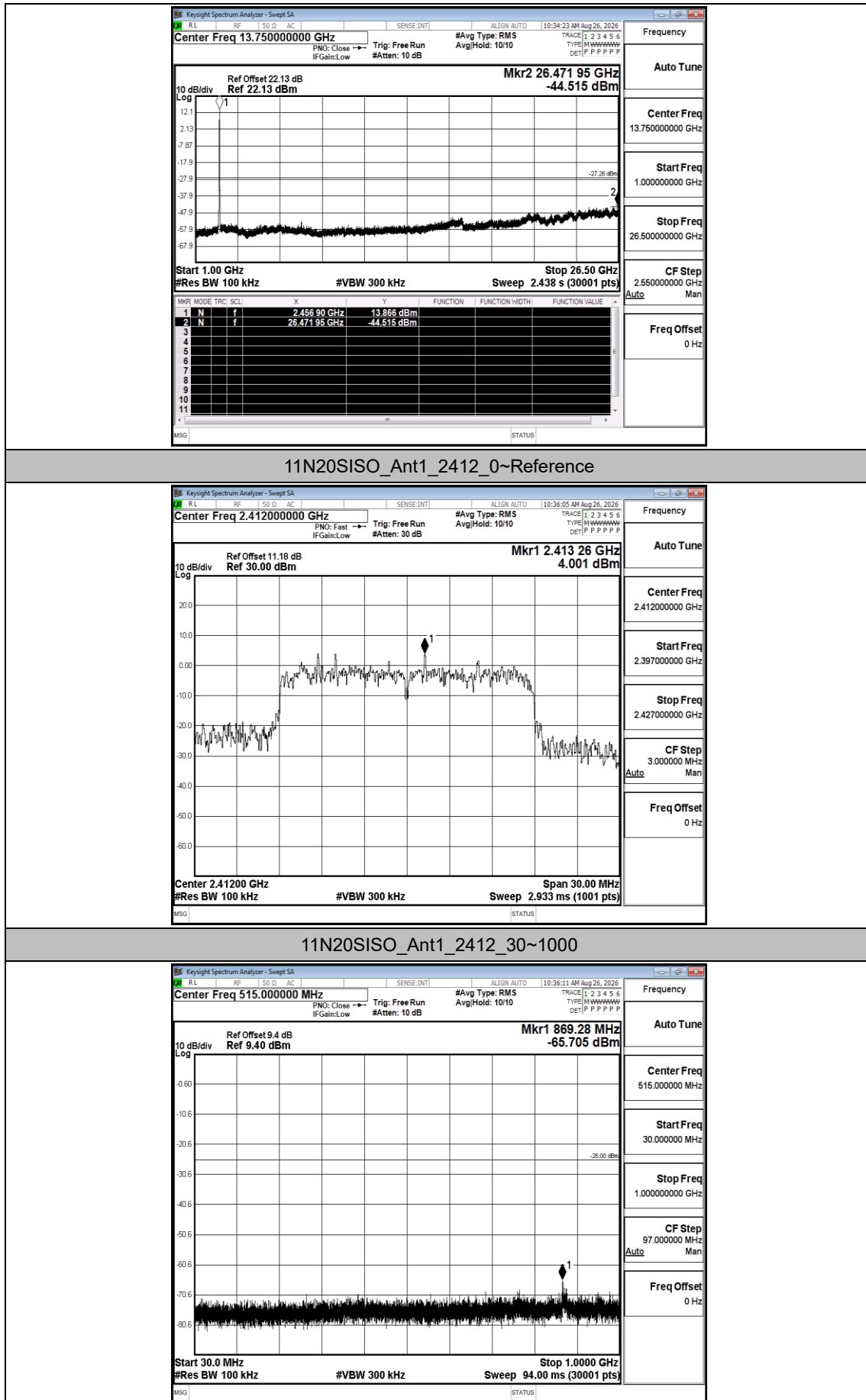


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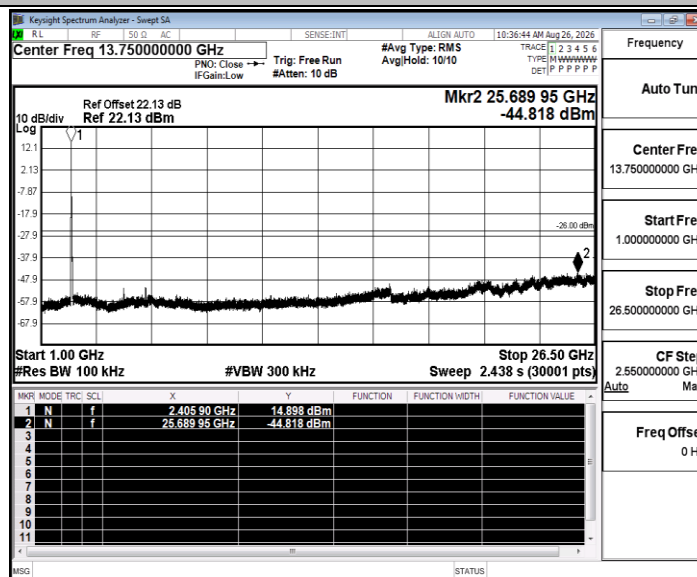


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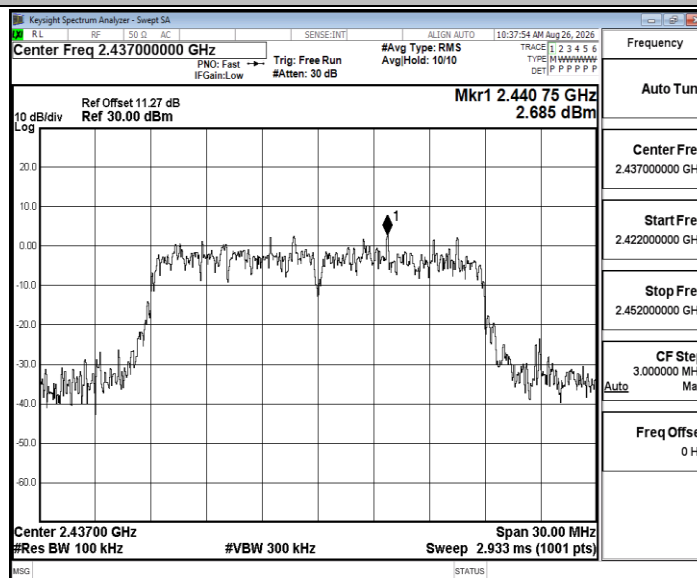
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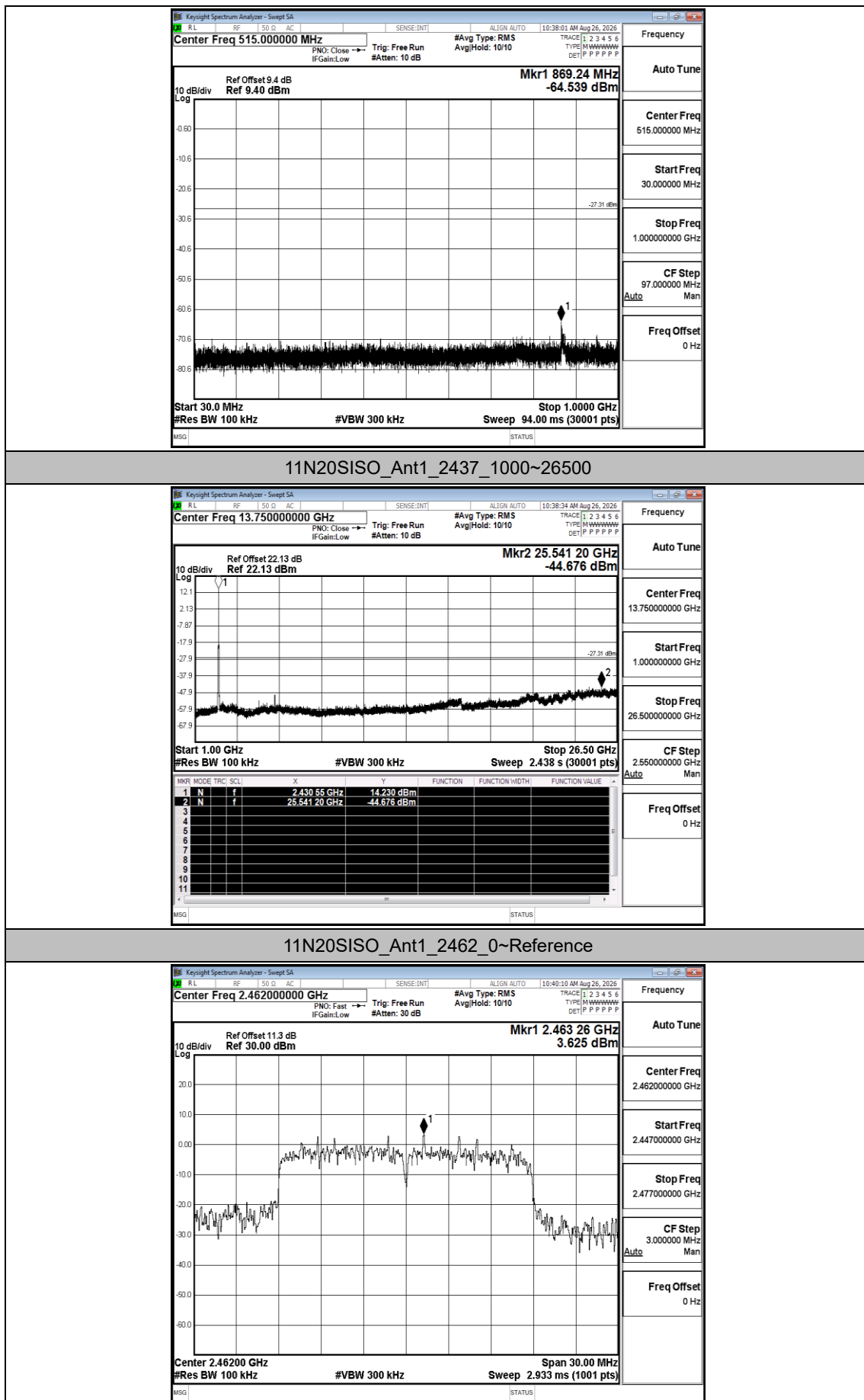
11N20SISO_Ant1_2412_1000~26500



11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



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