

Appendix B

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Smart Color E-paper Photo Frame

Test Model: SEIABW001

Environmental Conditions

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

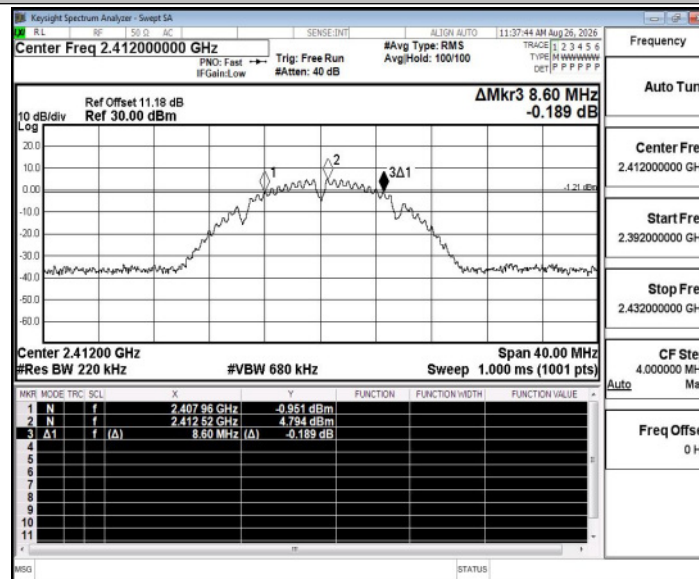
B.1 DTS Bandwidth

Test Result

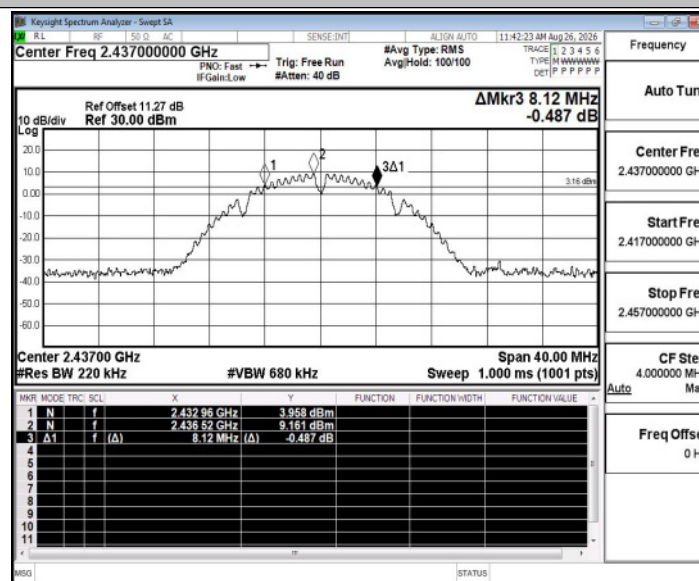
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.600	2407.960	2416.560	0.5	PASS
		2437	8.120	2432.960	2441.080	0.5	PASS
		2462	8.120	2457.960	2466.080	0.5	PASS
11G	Ant1	2412	16.120	2404.040	2420.160	0.5	PASS
		2437	15.760	2429.240	2445.000	0.5	PASS
		2462	16.040	2454.000	2470.040	0.5	PASS
11N20SISO	Ant1	2412	17.400	2403.400	2420.800	0.5	PASS
		2437	16.800	2428.680	2445.480	0.5	PASS
		2462	17.120	2453.480	2470.600	0.5	PASS
11N40SISO	Ant1	2422	29.760	2410.240	2440.000	0.5	PASS
		2437	33.920	2420.360	2454.280	0.5	PASS
		2452	35.600	2434.160	2469.760	0.5	PASS

Test Graphs

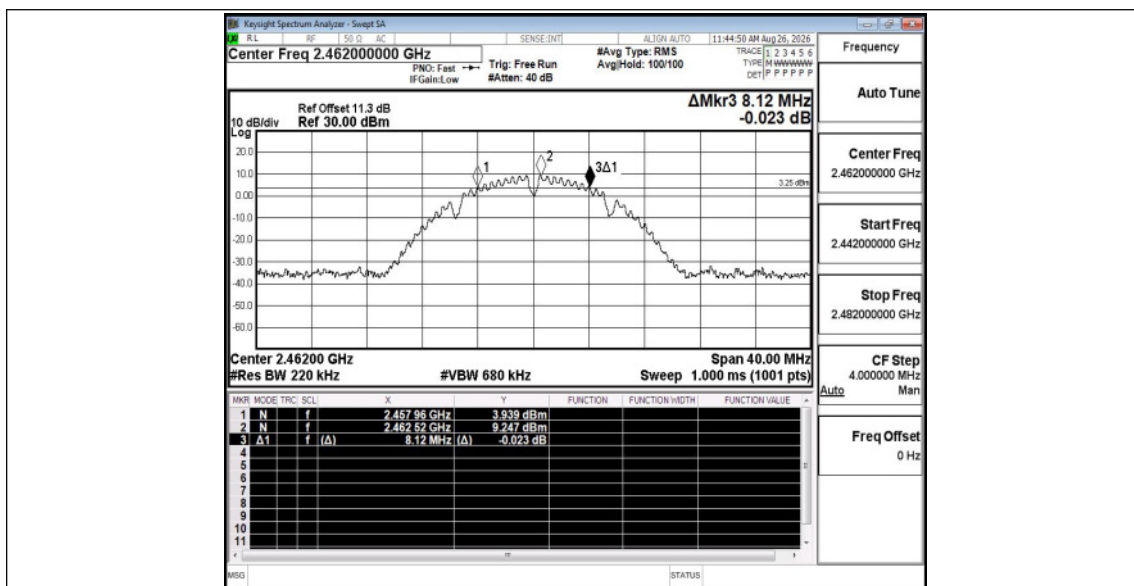
11B_Ant1_2412



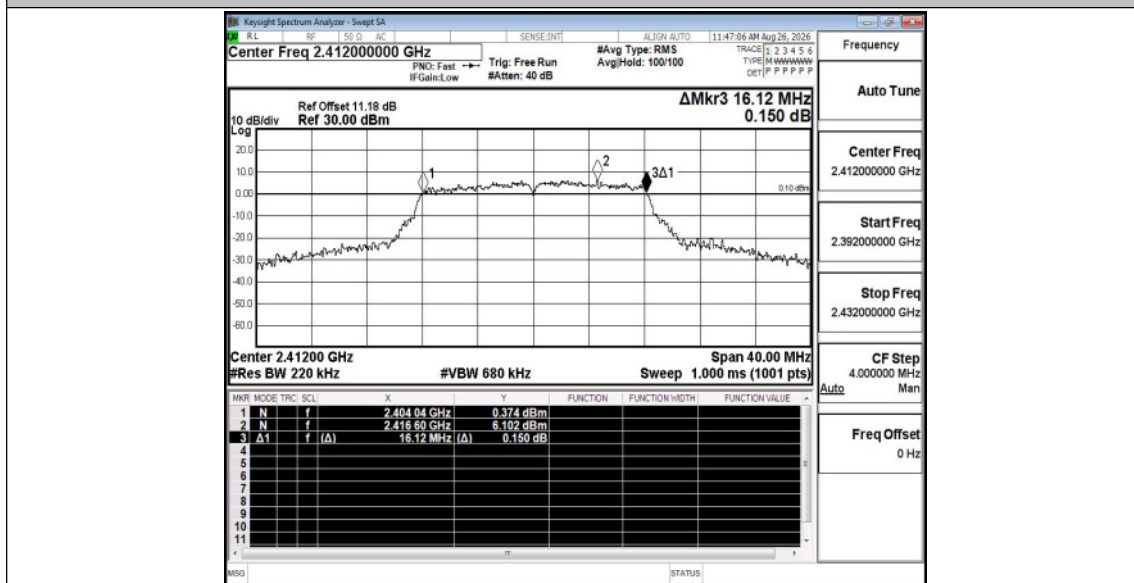
11B_Ant1_2437



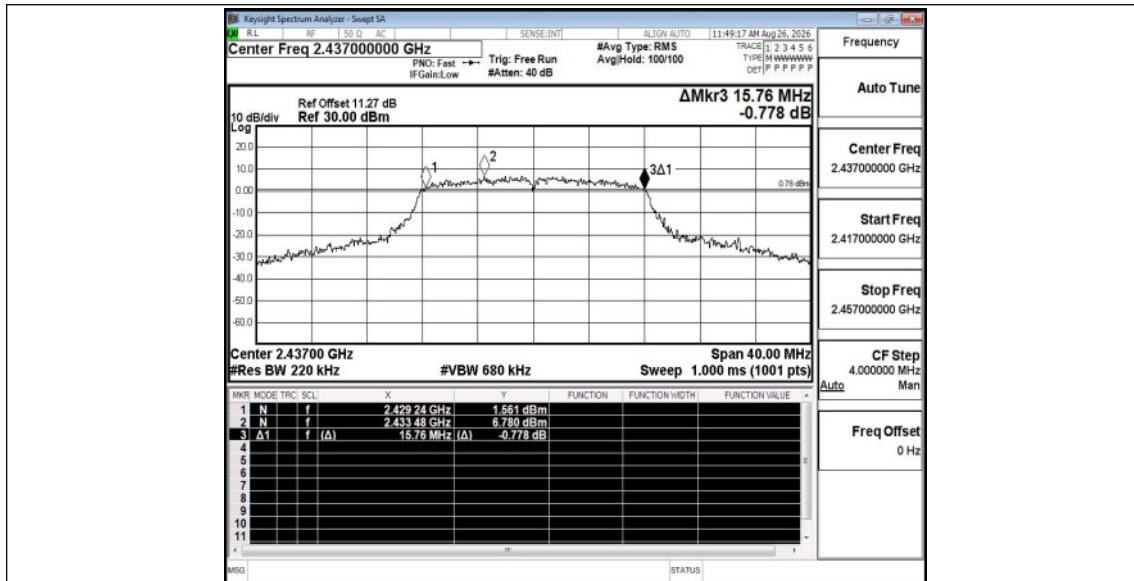
11B_Ant1_2462



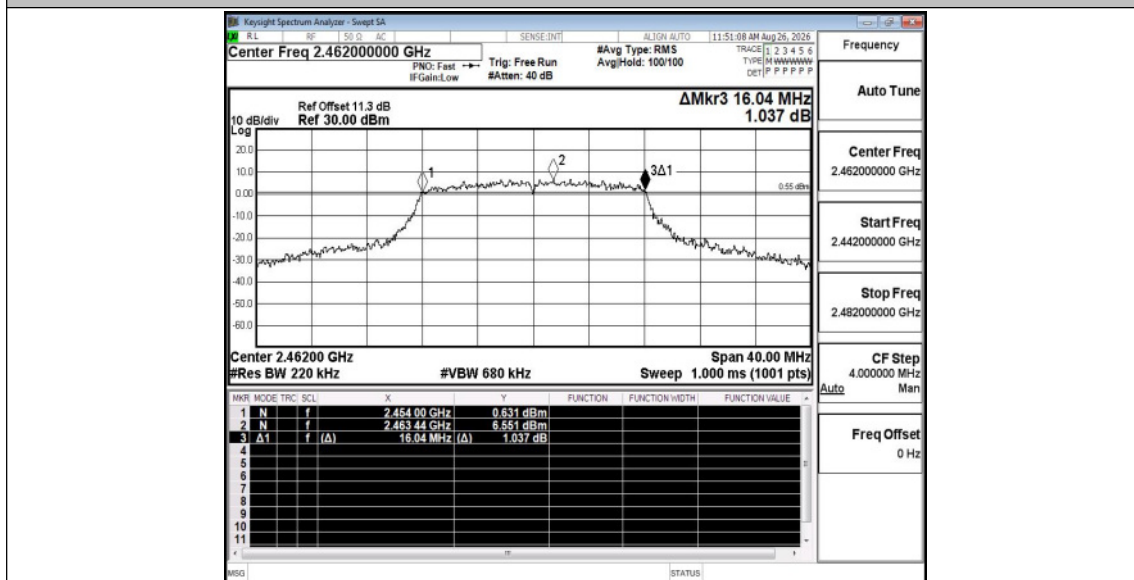
11G_Ant1_2412



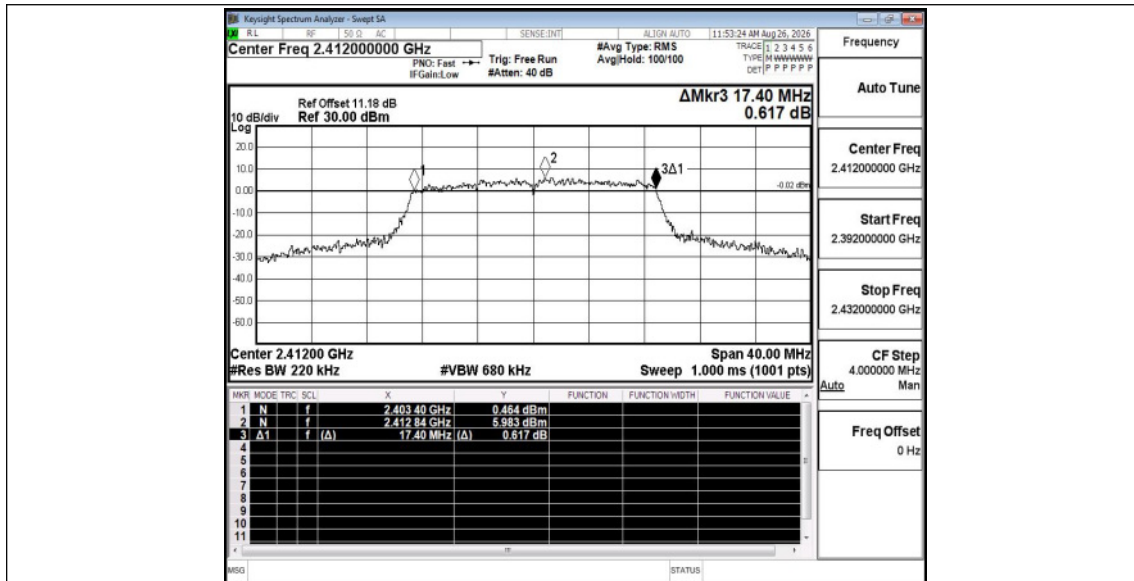
11G_Ant1_2437



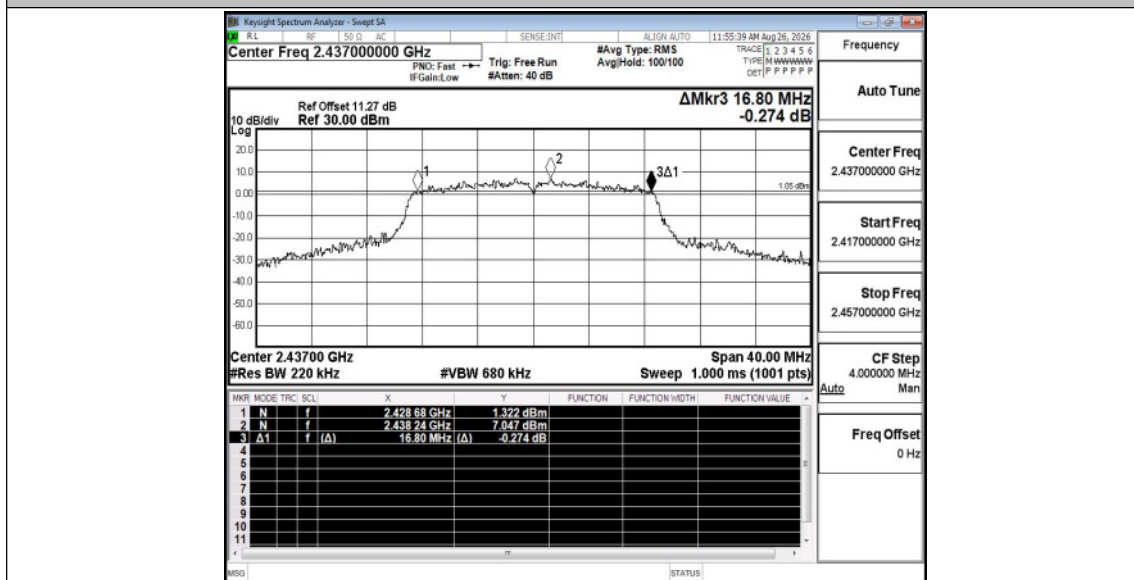
11G_Ant1_2462



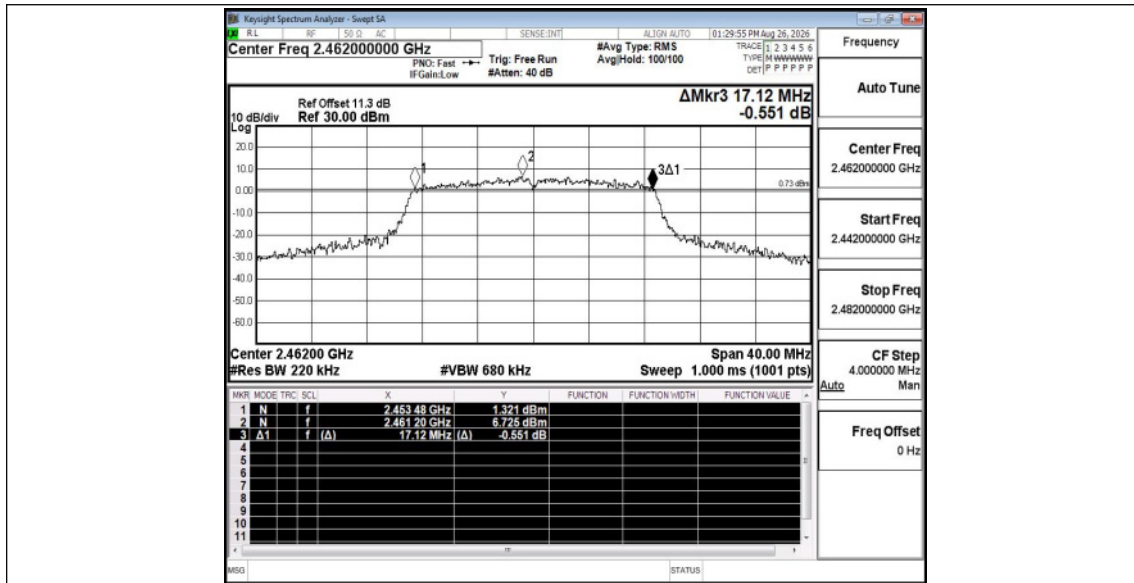
11N20SISO_Ant1_2412



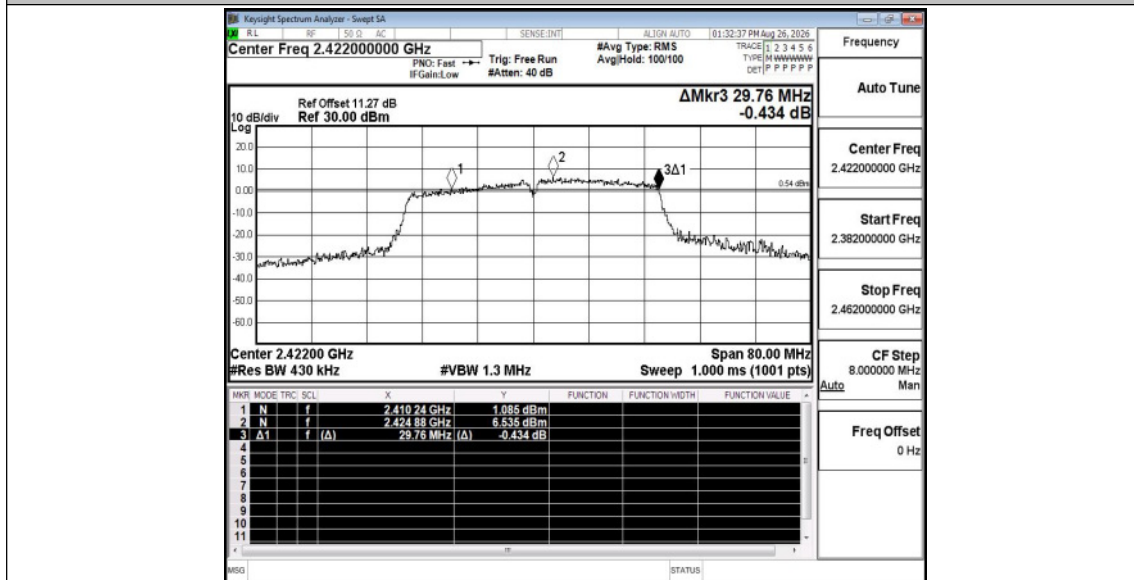
11N20SISO_Ant1_2437



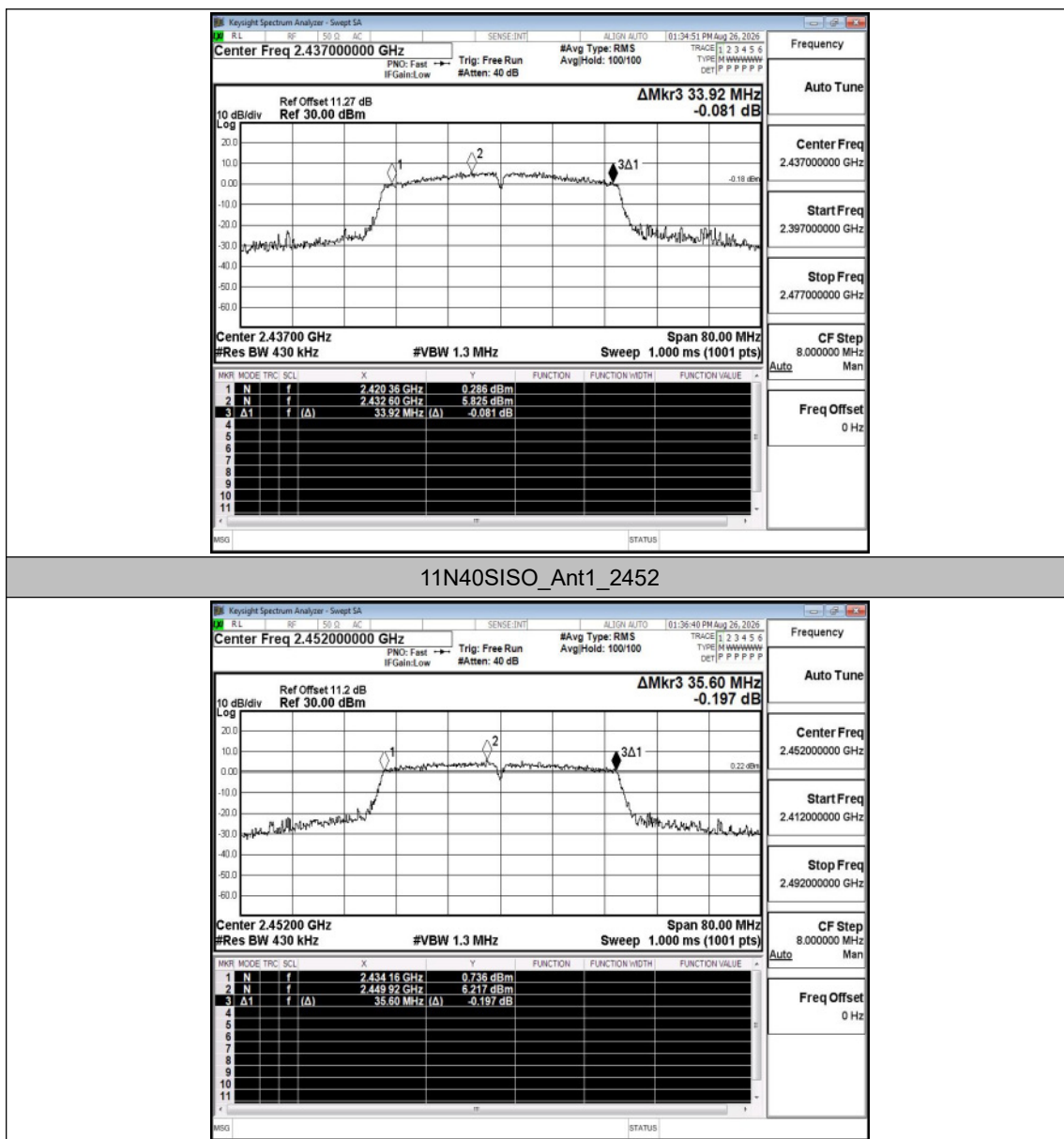
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



B.2 Maximum Average conducted output power

Test Result

TestMode	Antenna	Frequency [MHz]	Measured Power	DC Factor [dB]	AV Power [dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	15.15	0.02	15.17	≤30.00	PASS
		2437	16.22	0.02	16.24	≤30.00	PASS
		2462	16.19	0.02	16.21	≤30.00	PASS
11G	Ant1	2412	15.88	0.15	16.03	≤30.00	PASS
		2437	15.96	0.15	16.11	≤30.00	PASS
		2462	15.74	0.12	15.86	≤30.00	PASS
11N20SISO	Ant1	2412	15.84	0.13	15.97	≤30.00	PASS
		2437	15.78	0.16	15.94	≤30.00	PASS
		2462	15.86	0.16	16.02	≤30.00	PASS
11N40SISO	Ant1	2422	15.11	0.32	15.43	≤30.00	PASS
		2437	15.30	0.26	15.56	≤30.00	PASS
		2452	15.27	0.26	15.53	≤30.00	PASS

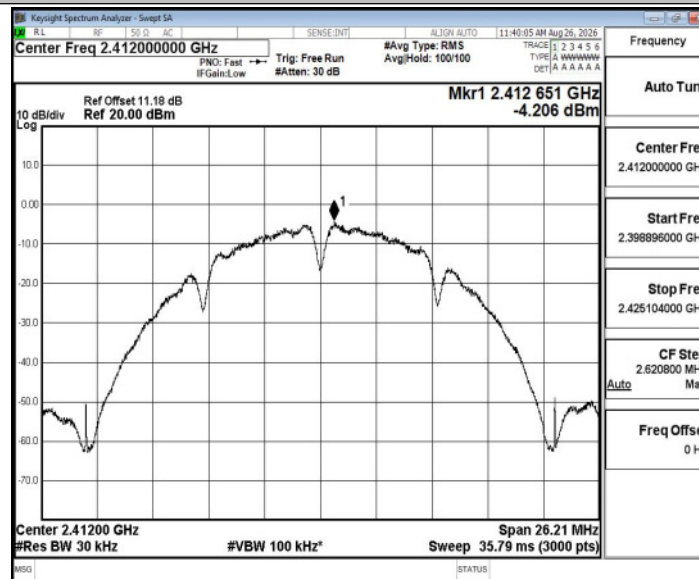
B.3 Maximum power spectral density

Test Result

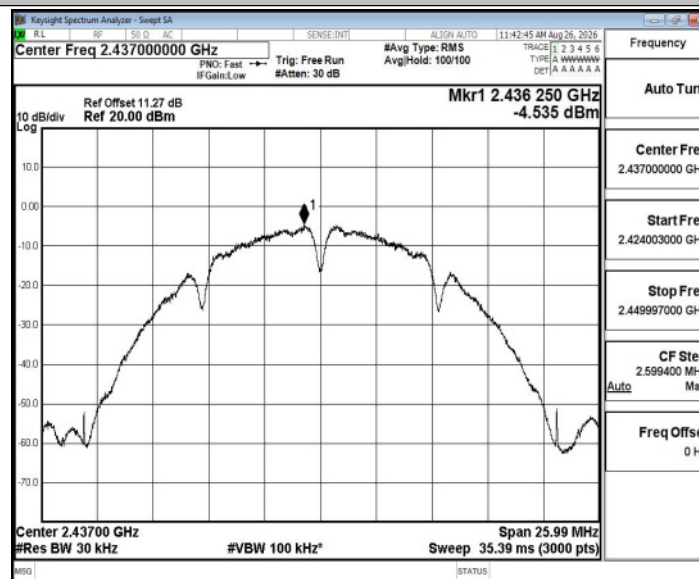
TestMode	Antenna	Frequency [MHz]	Measured PSD [dBm/30kHz]	DC Factor [dB]	Result [dBm/30kHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-4.21	0.02	-4.19	-14.19	≤8.00	PASS
		2437	-4.54	0.02	-4.52	-14.52	≤8.00	PASS
		2462	-4.55	0.02	-4.53	-14.53	≤8.00	PASS
11G	Ant1	2412	-7.8	0.15	-7.65	-17.65	≤8.00	PASS
		2437	-7.05	0.15	-6.90	-16.9	≤8.00	PASS
		2462	-7.33	0.12	-7.21	-17.21	≤8.00	PASS
11N20SISO	Ant1	2412	-7.92	0.13	-7.79	-17.79	≤8.00	PASS
		2437	-7.36	0.16	-7.20	-17.2	≤8.00	PASS
		2462	-7.93	0.16	-7.77	-17.77	≤8.00	PASS
11N40SISO	Ant1	2422	-10.38	0.32	-10.06	-20.06	≤8.00	PASS
		2437	-10.92	0.26	-10.66	-20.66	≤8.00	PASS
		2452	-11.55	0.26	-11.29	-21.29	≤8.00	PASS

Test Graphs

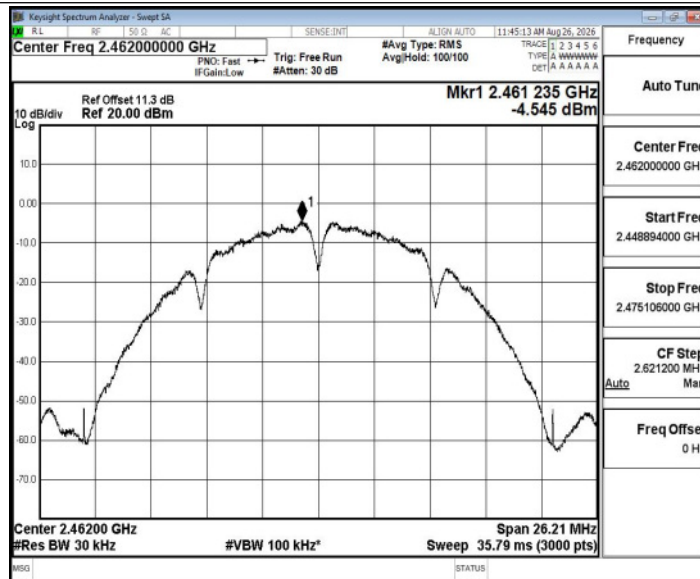
11B_Ant1_2412



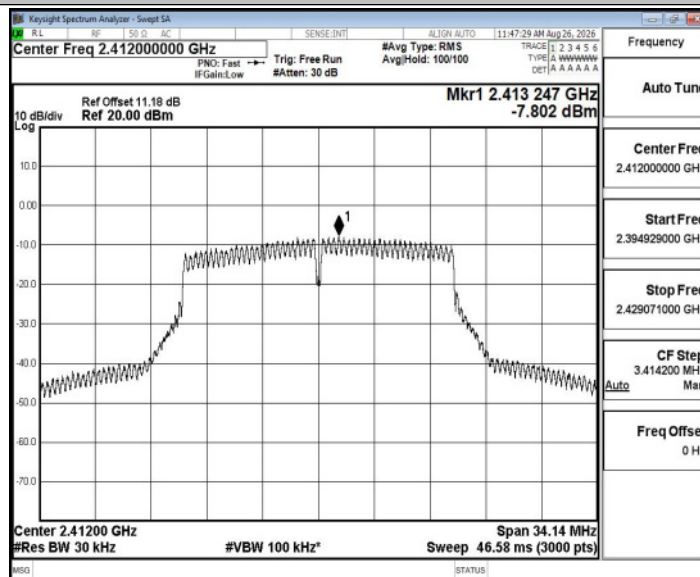
11B_Ant1_2437



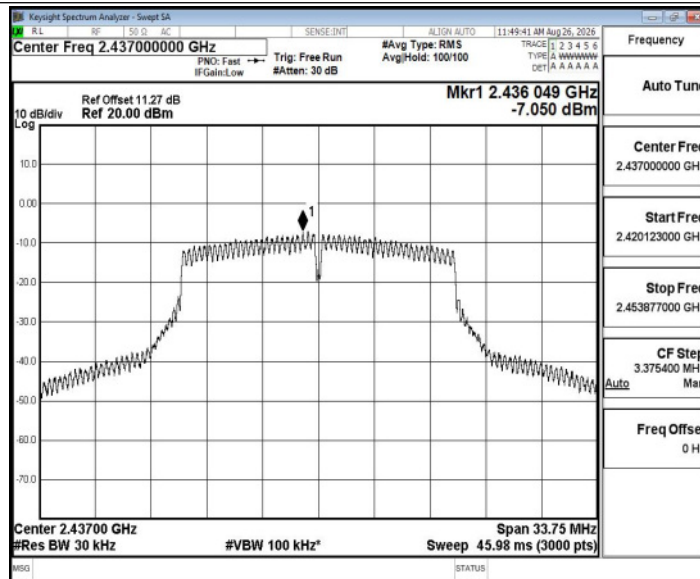
11B_Ant1_2462



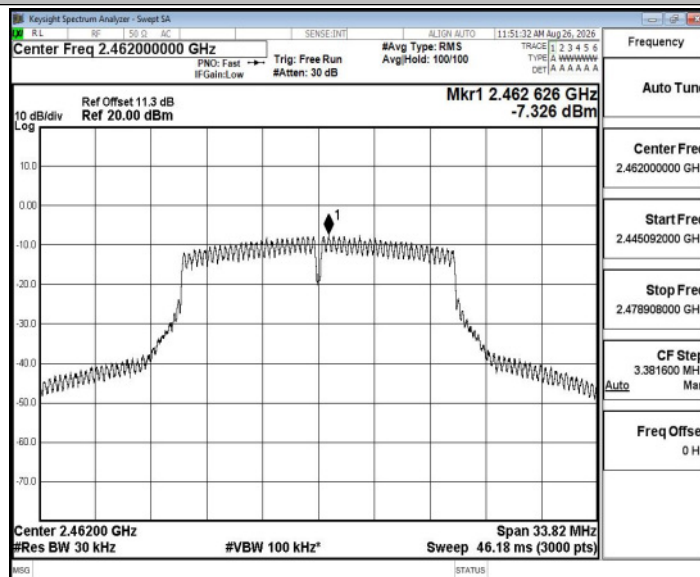
11G_Ant1_2412



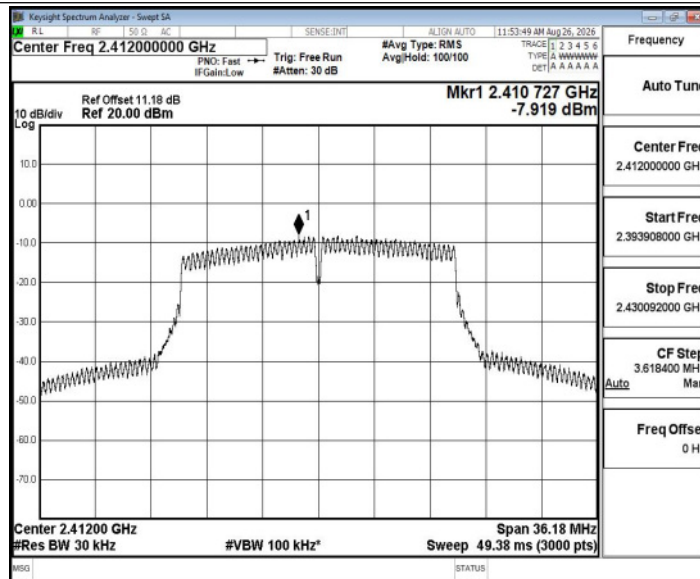
11G_Ant1_2437



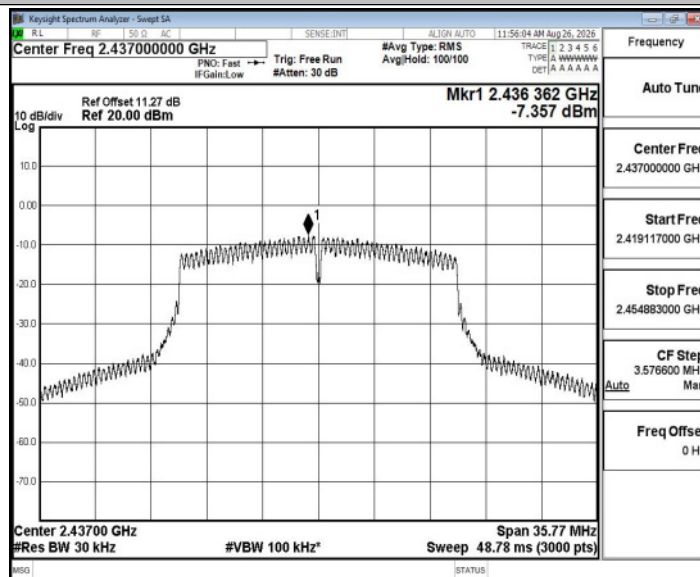
11G_Ant1_2462



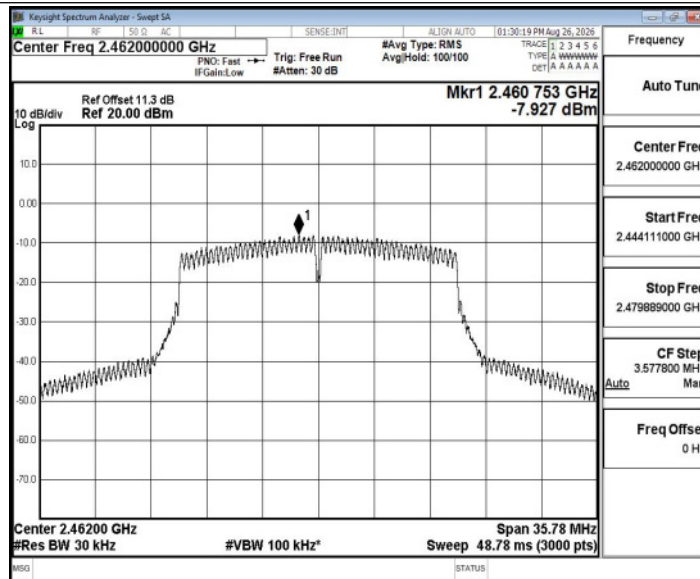
11N20SISO_Ant1_2412



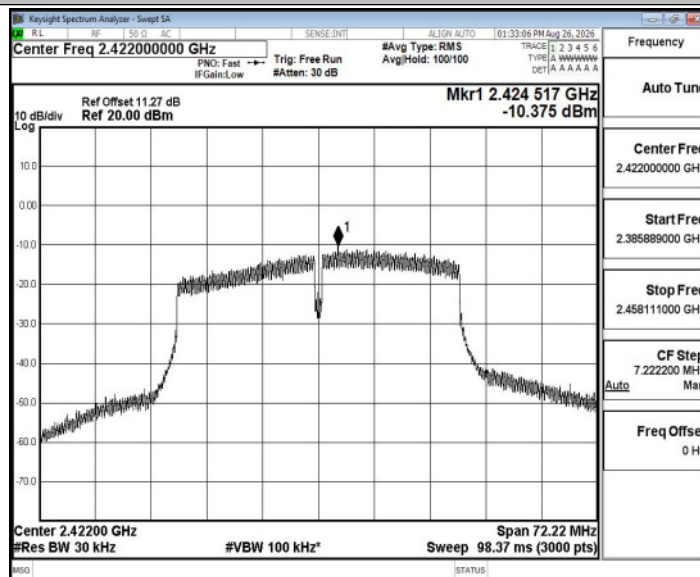
11N20SISO_Ant1_2437



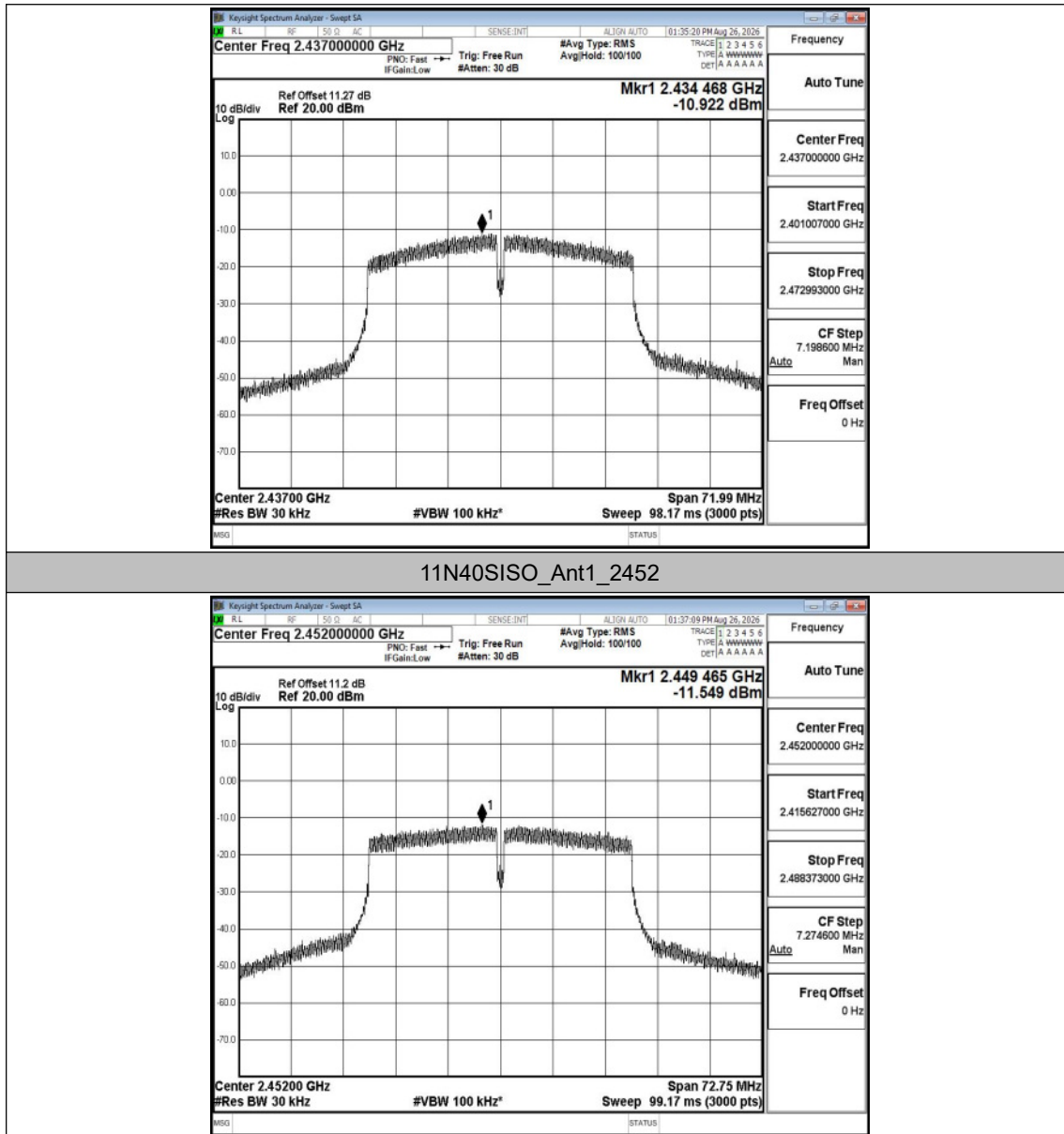
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



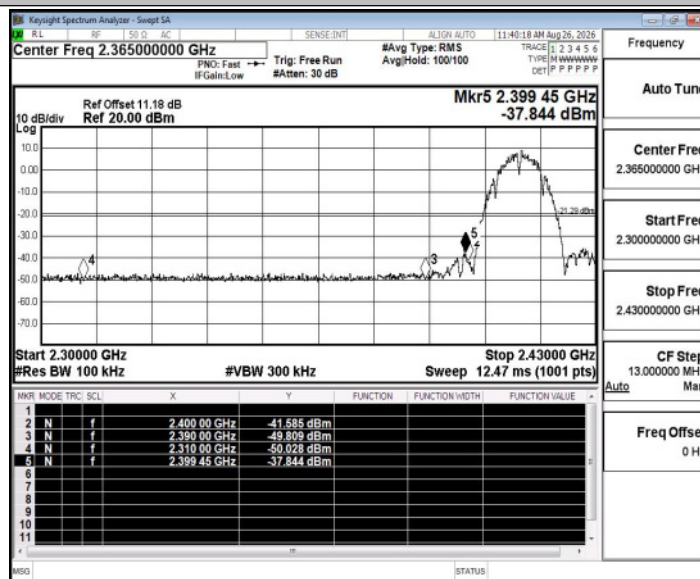
B.4 Band edge measurements

Test Result

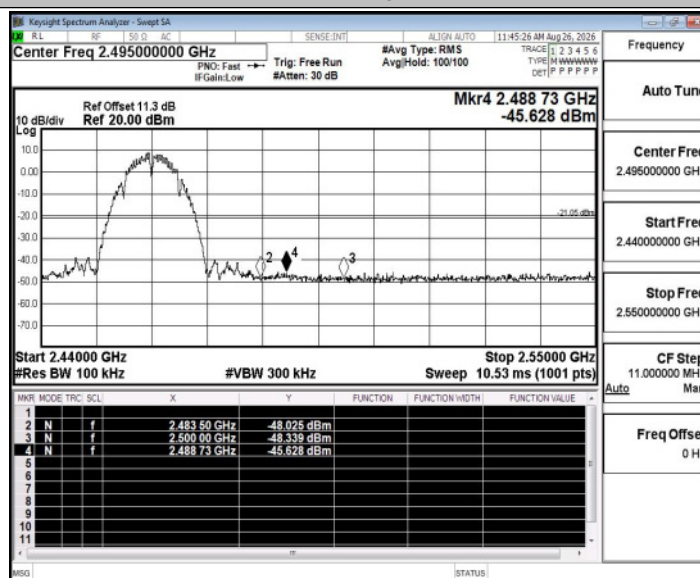
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	8.71	-37.84	≤-21.29	PASS
		High	2462	8.95	-45.63	≤-21.05	PASS
11G	Ant1	Low	2412	5.13	-24.87	≤-24.87	PASS
		High	2462	5.92	-39.43	≤-24.08	PASS
11N20SISO	Ant1	Low	2412	5.41	-36.66	≤-24.59	PASS
		High	2462	5.06	-38.1	≤-24.94	PASS
11N40SISO	Ant1	Low	2422	3.11	-32.1	≤-26.89	PASS
		High	2452	2.01	-30.41	≤-27.99	PASS

Test Graphs

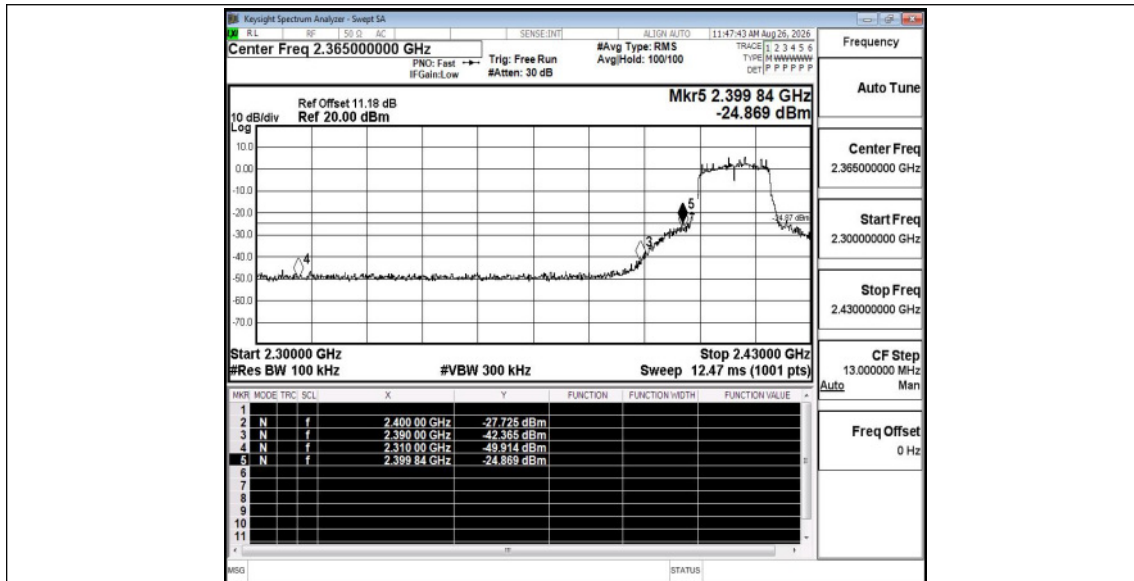
11B_Ant1_Low_2412



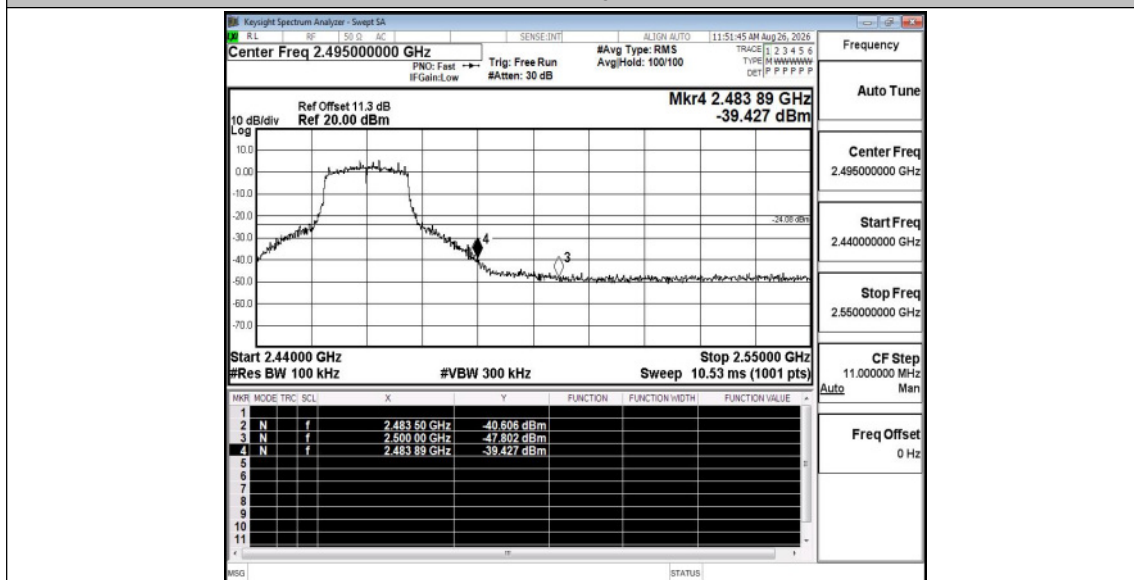
11B_Ant1_High_2462



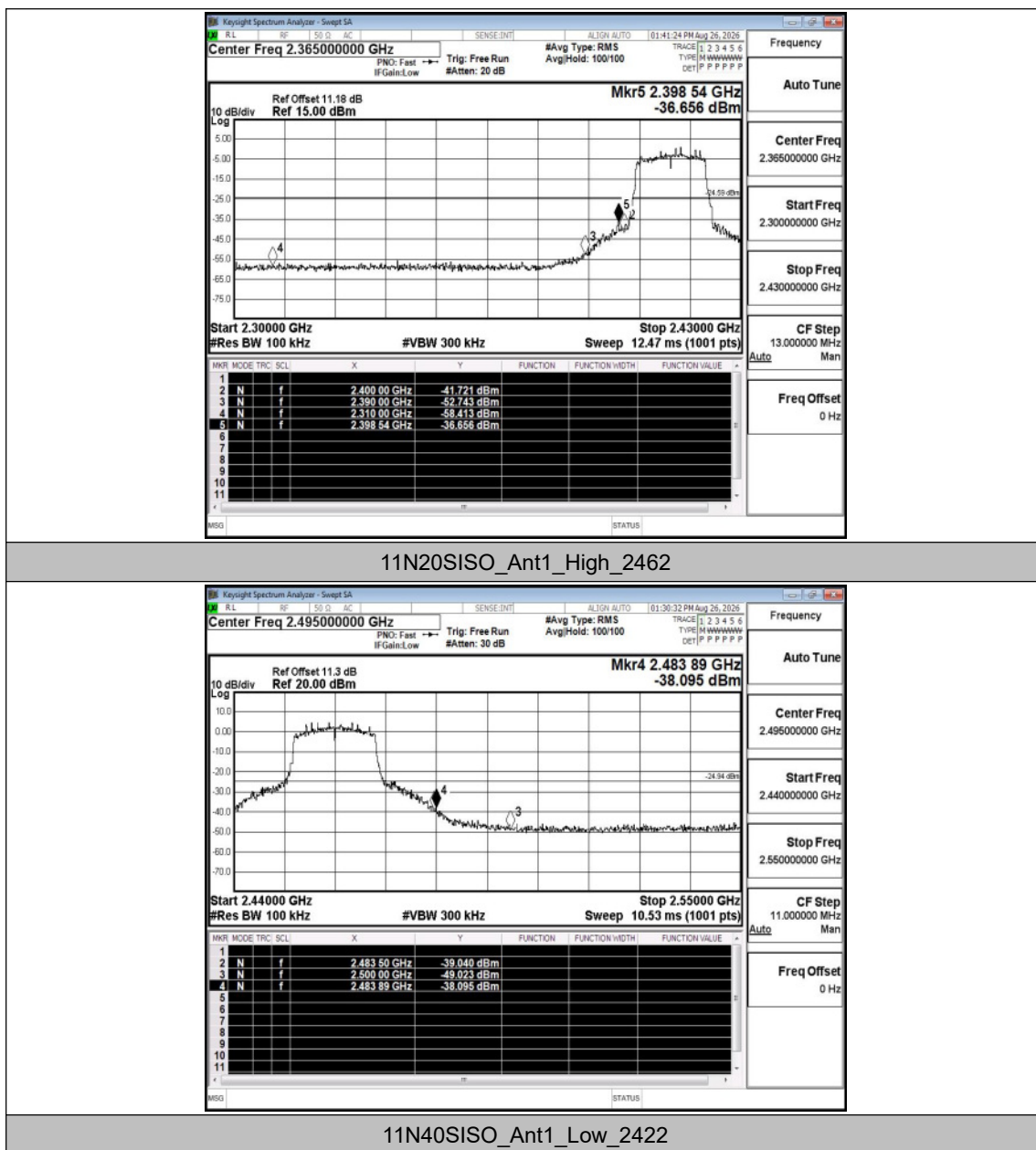
11G_Ant1_Low_2412

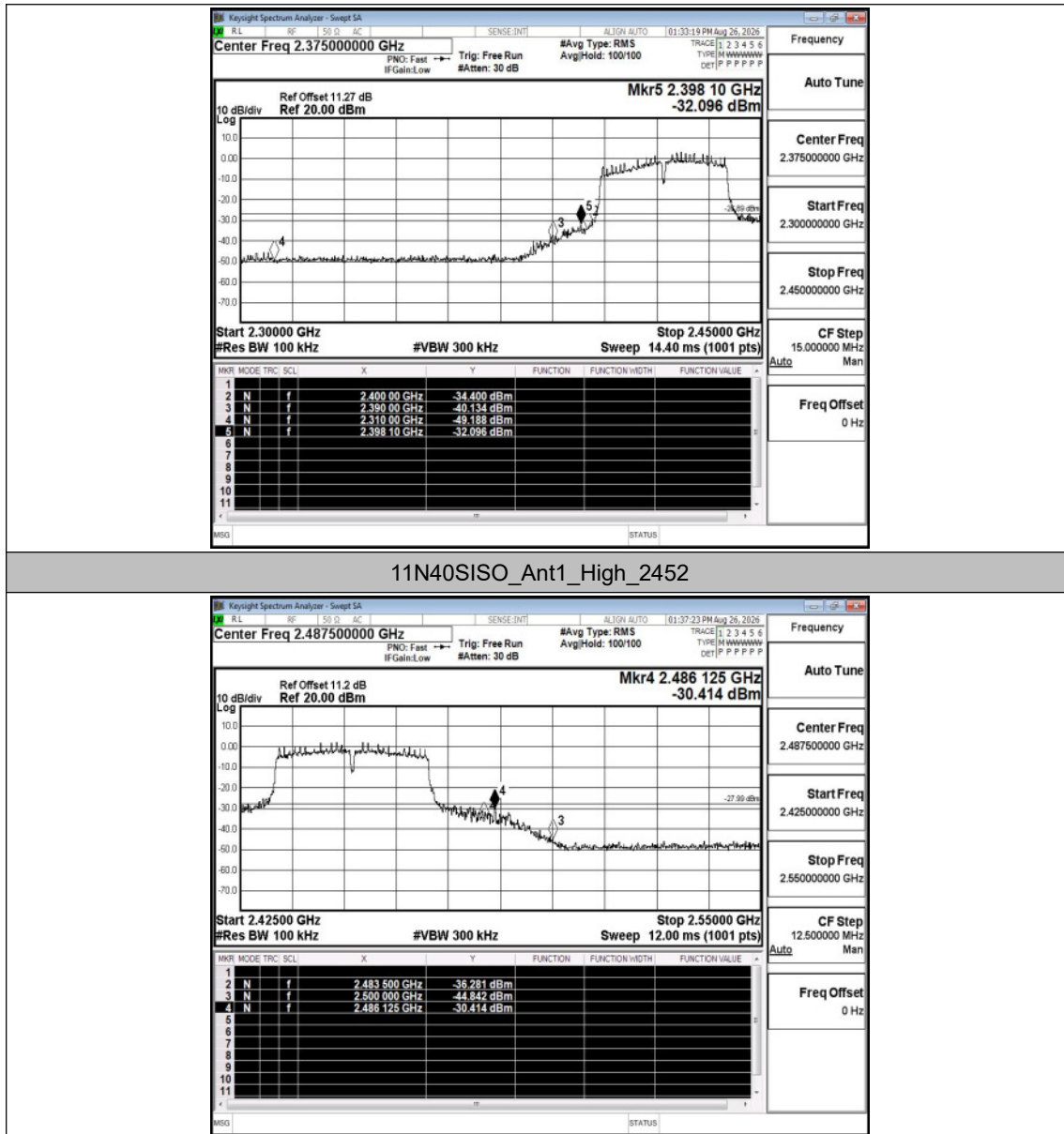


11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412





B.5 Conducted Spurious Emission

Test Result

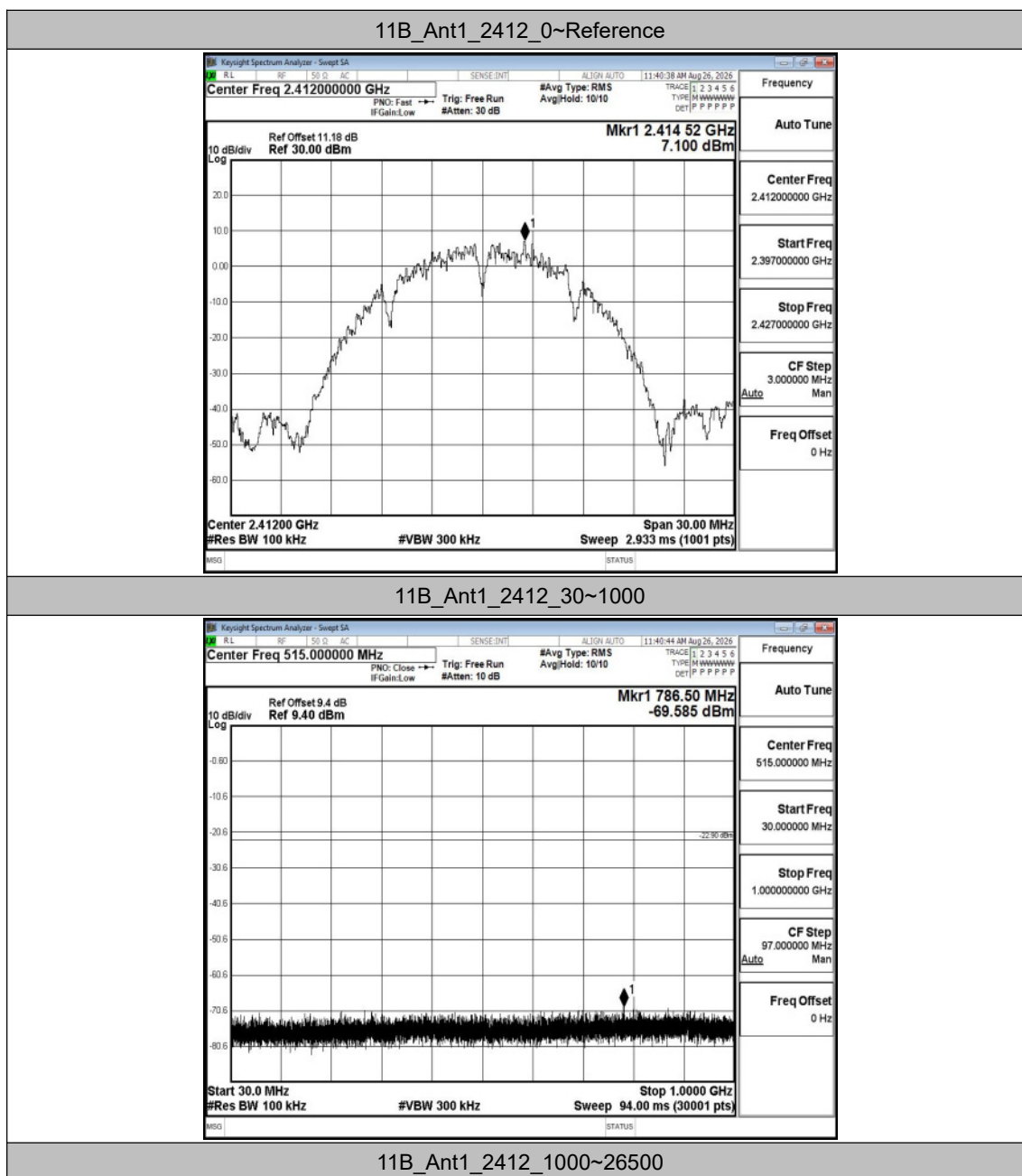
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	7.10	7.10	---	PASS
			30~1000	7.10	-69.59	≤-22.9	PASS
			1000~26500	7.10	-35.11	≤-22.9	PASS
		2437	Reference	7.50	7.50	---	PASS
			30~1000	7.50	-69.28	≤-22.5	PASS
			1000~26500	7.50	-39.84	≤-22.5	PASS
		2462	Reference	8.47	8.47	---	PASS
			30~1000	8.47	-69.82	≤-21.53	PASS
			1000~26500	8.47	-39.77	≤-21.53	PASS
11G	Ant1	2412	Reference	5.14	5.14	---	PASS
			30~1000	5.14	-69.84	≤-24.86	PASS
			1000~26500	5.14	-43.93	≤-24.86	PASS
		2437	Reference	2.18	2.18	---	PASS
			30~1000	2.18	-54.84	≤-27.82	PASS
			1000~26500	2.18	-44.22	≤-27.82	PASS
		2462	Reference	4.90	4.90	---	PASS
			30~1000	4.90	-69.81	≤-25.1	PASS
			1000~26500	4.90	-44	≤-25.1	PASS
11N20SISO	Ant1	2412	Reference	4.76	4.76	---	PASS
			30~1000	4.76	-69.66	≤-25.24	PASS
			1000~26500	4.76	-44.06	≤-25.24	PASS
		2437	Reference	3.86	3.86	---	PASS
			30~1000	3.86	-69.76	≤-26.14	PASS
			1000~26500	3.86	-44.24	≤-26.14	PASS
		2462	Reference	4.57	4.57	---	PASS
			30~1000	4.57	-69.82	≤-25.43	PASS
			1000~26500	4.57	-44.38	≤-25.43	PASS
11N40SISO	Ant1	2422	Reference	2.42	2.42	---	PASS
			30~1000	2.42	-69.73	≤-27.58	PASS
			1000~26500	2.42	-44.99	≤-27.58	PASS
		2437	Reference	1.24	1.24	---	PASS
			30~1000	1.24	-70.16	≤-28.76	PASS
			1000~26500	1.24	-44.54	≤-28.76	PASS
		2452	Reference	2.28	2.28	---	PASS
			30~1000	2.28	-68.88	≤-27.72	PASS
			1000~26500	2.28	-44.78	≤-27.72	PASS

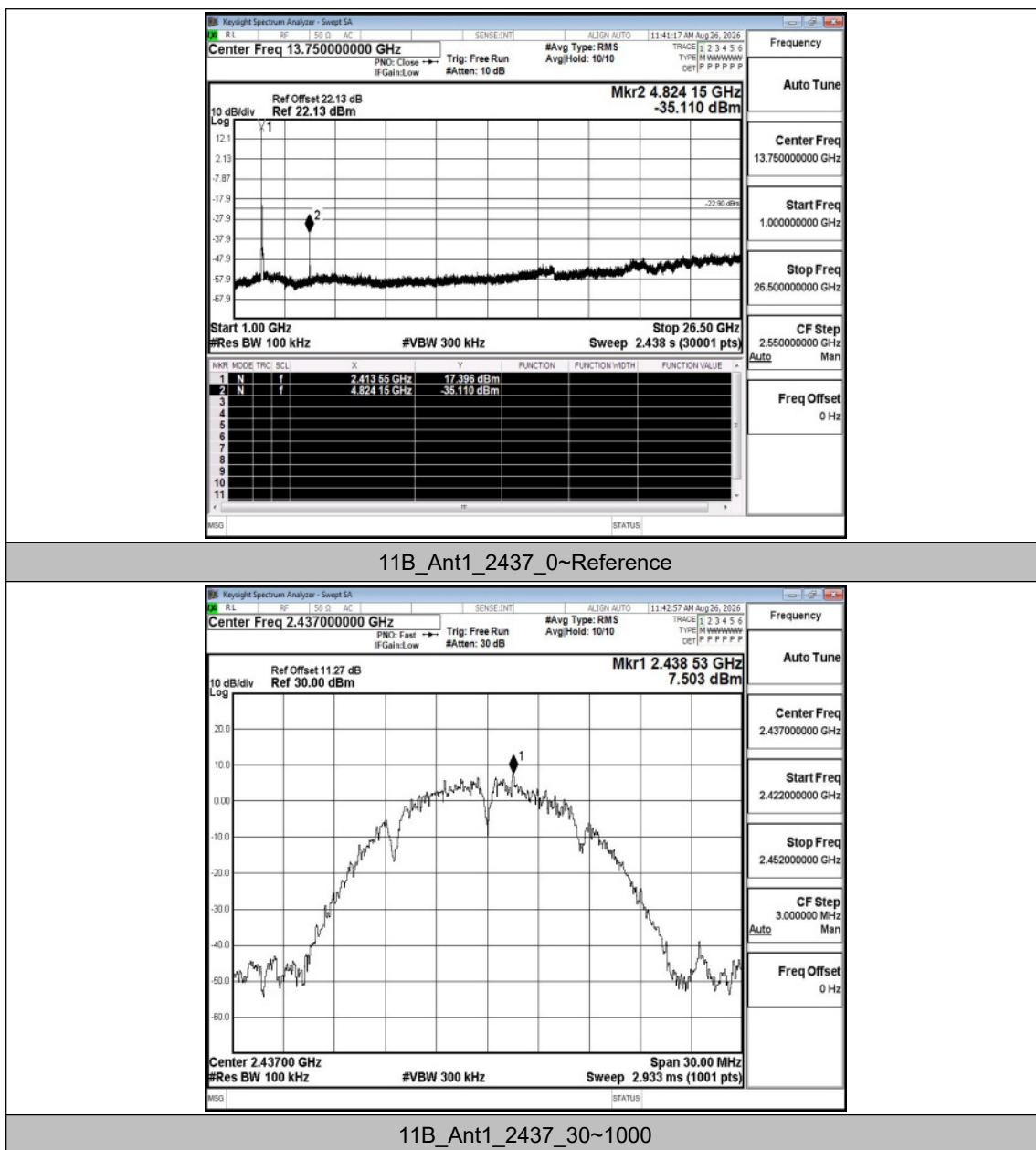
Guangzhou LCS Compliance Testing Laboratory Ltd.

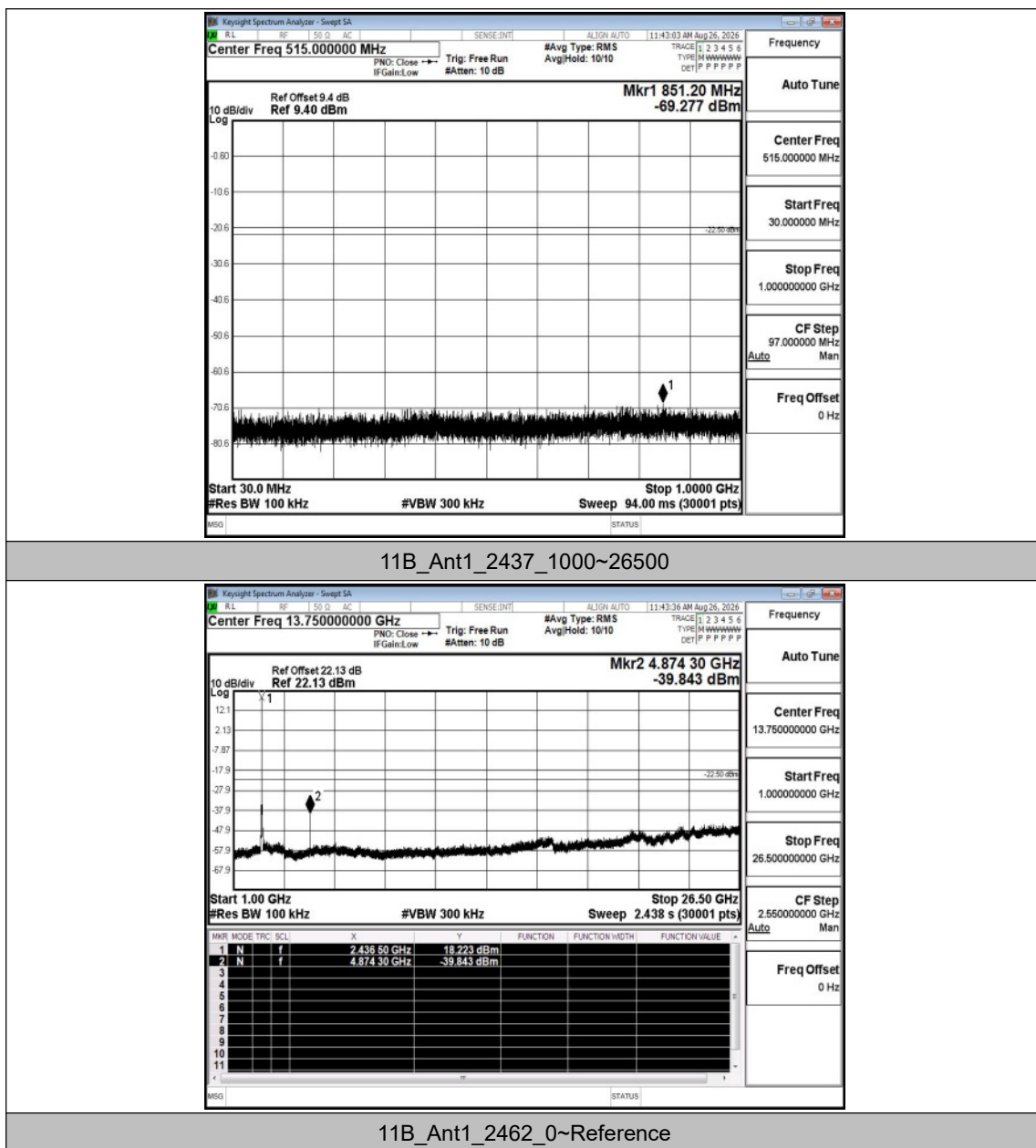
Add: No.44-1, Qianfeng North Road, Shiqi, Panyu District, Guangzhou, Guangdong, China

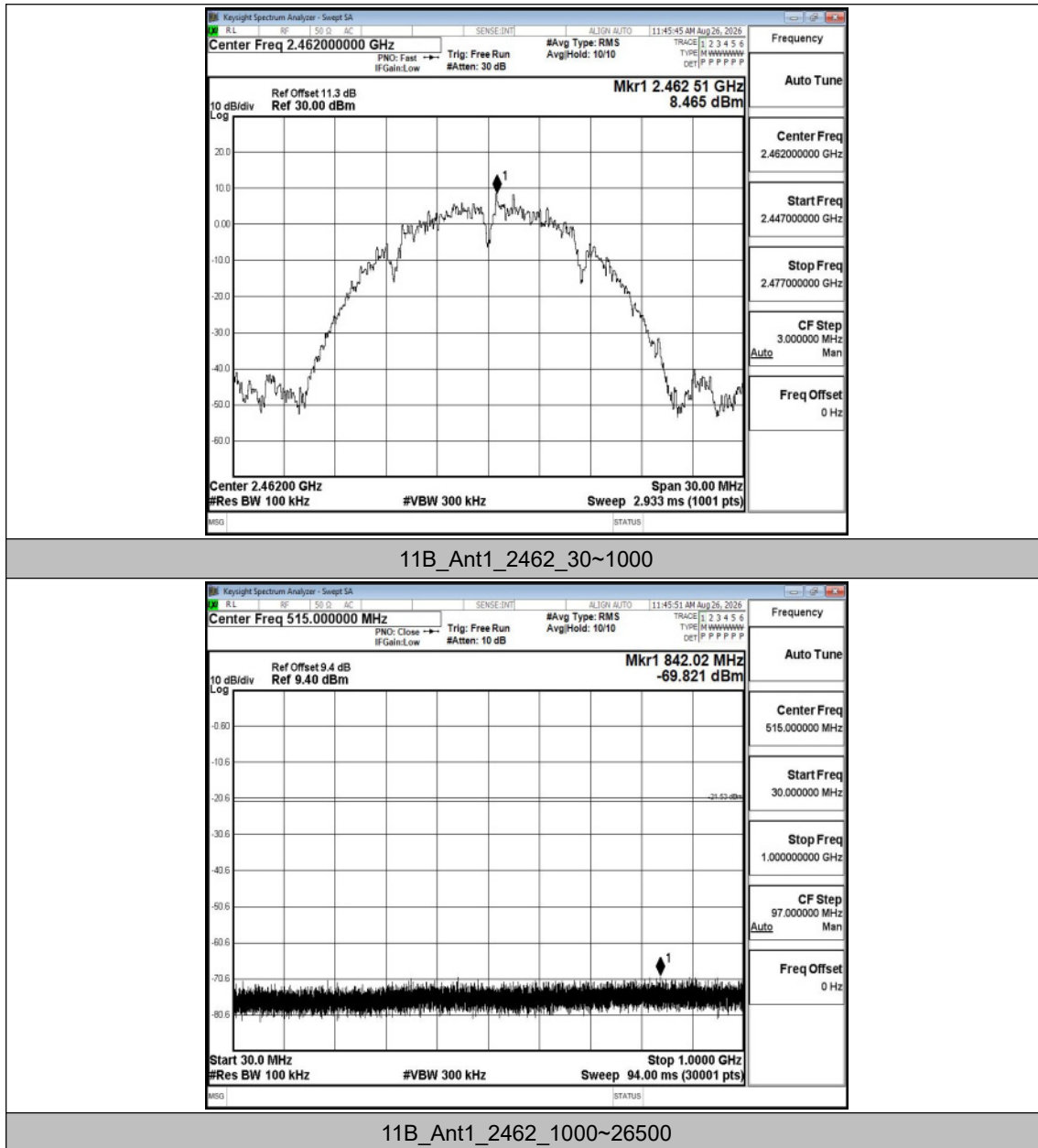
Tel: +(86) 020-39166689 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

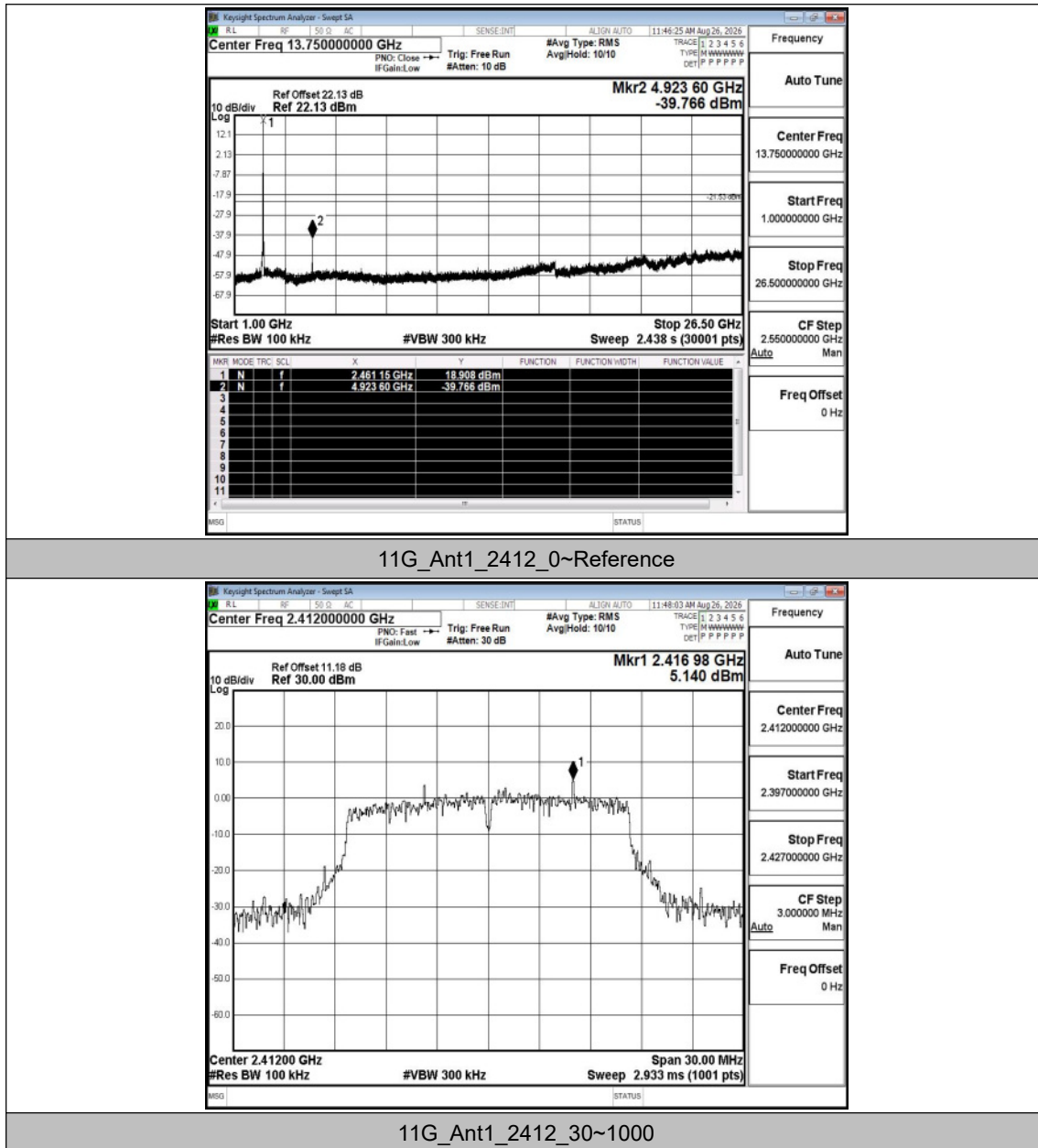
Test Graphs

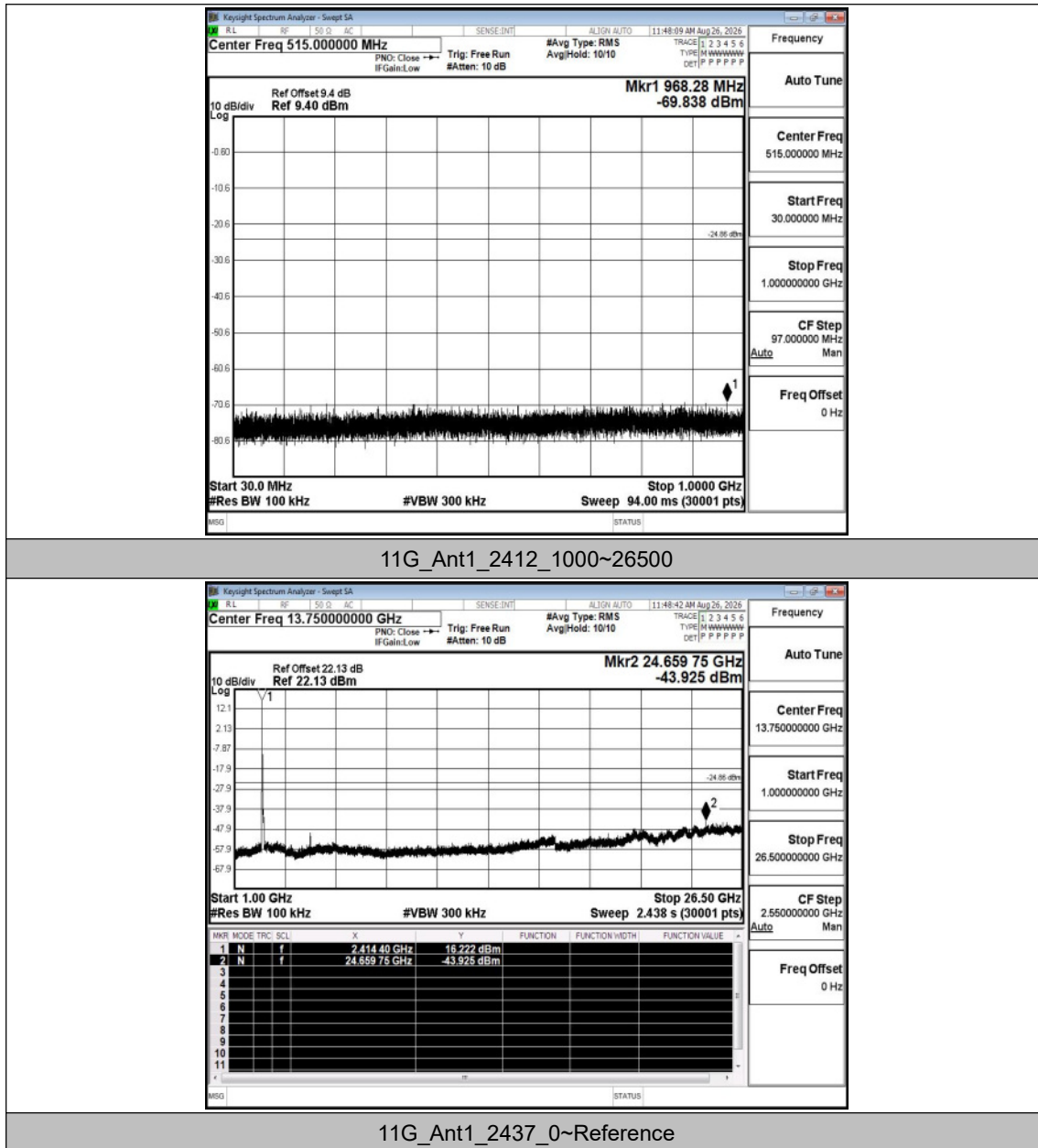


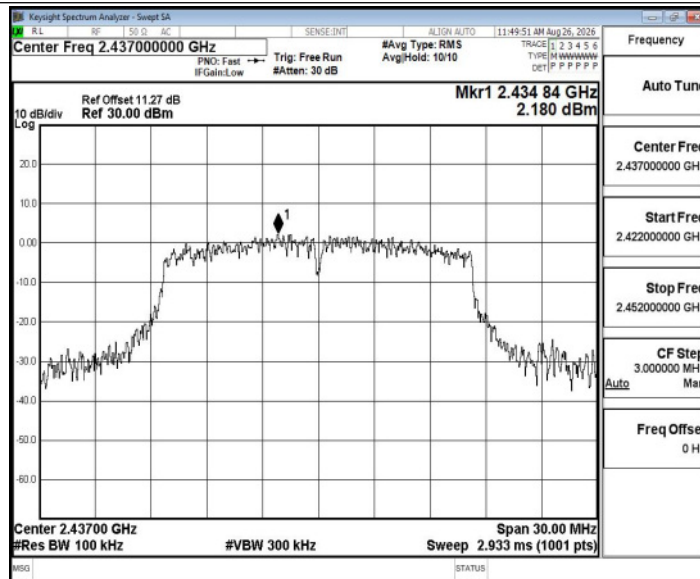




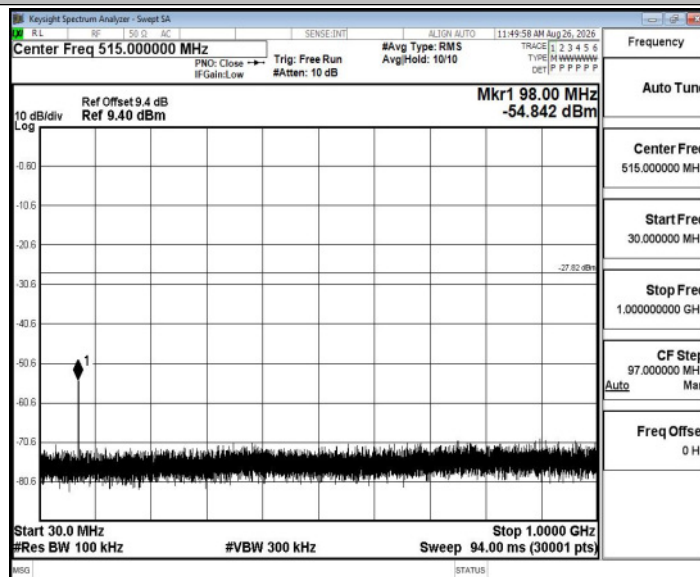




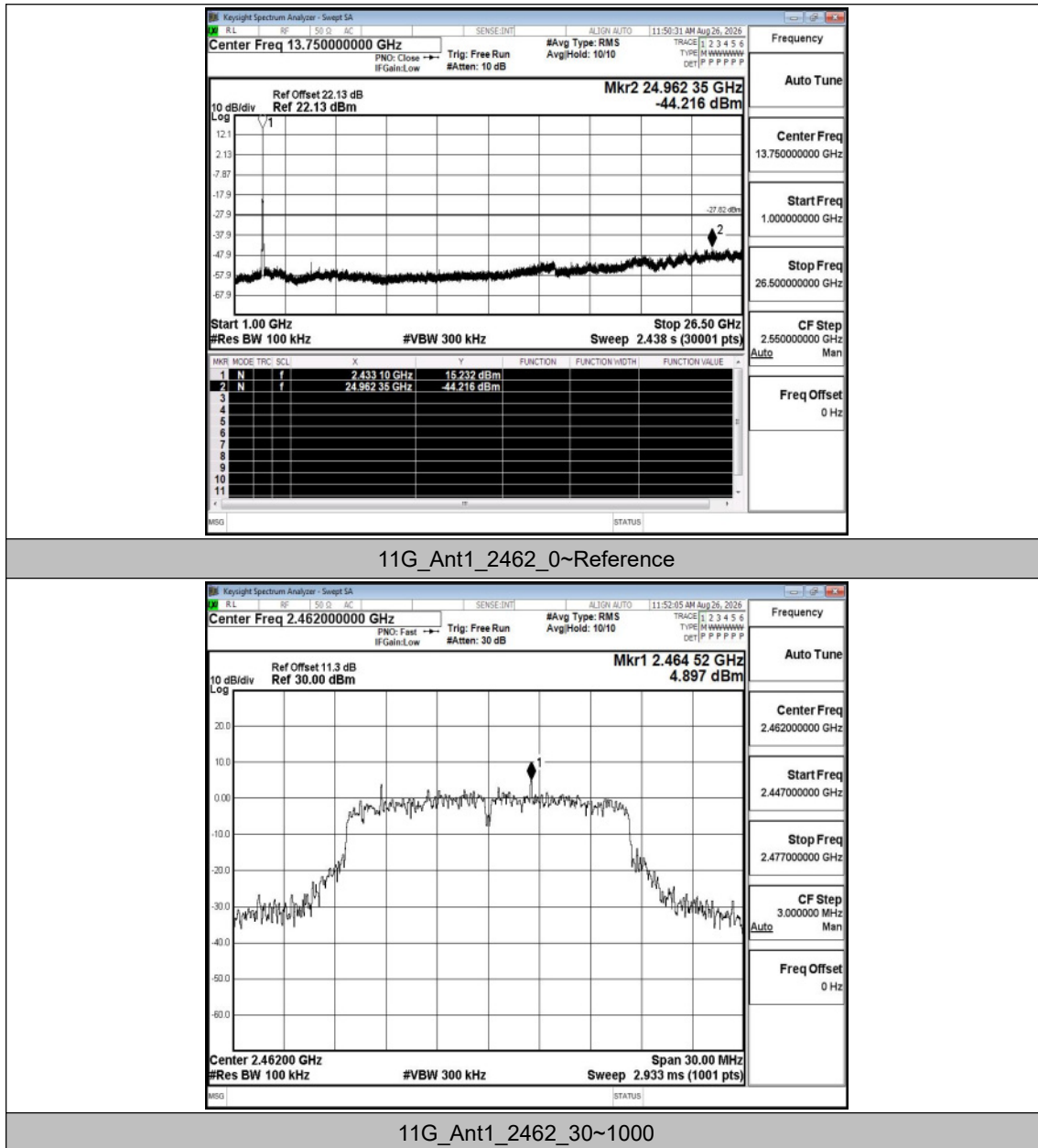


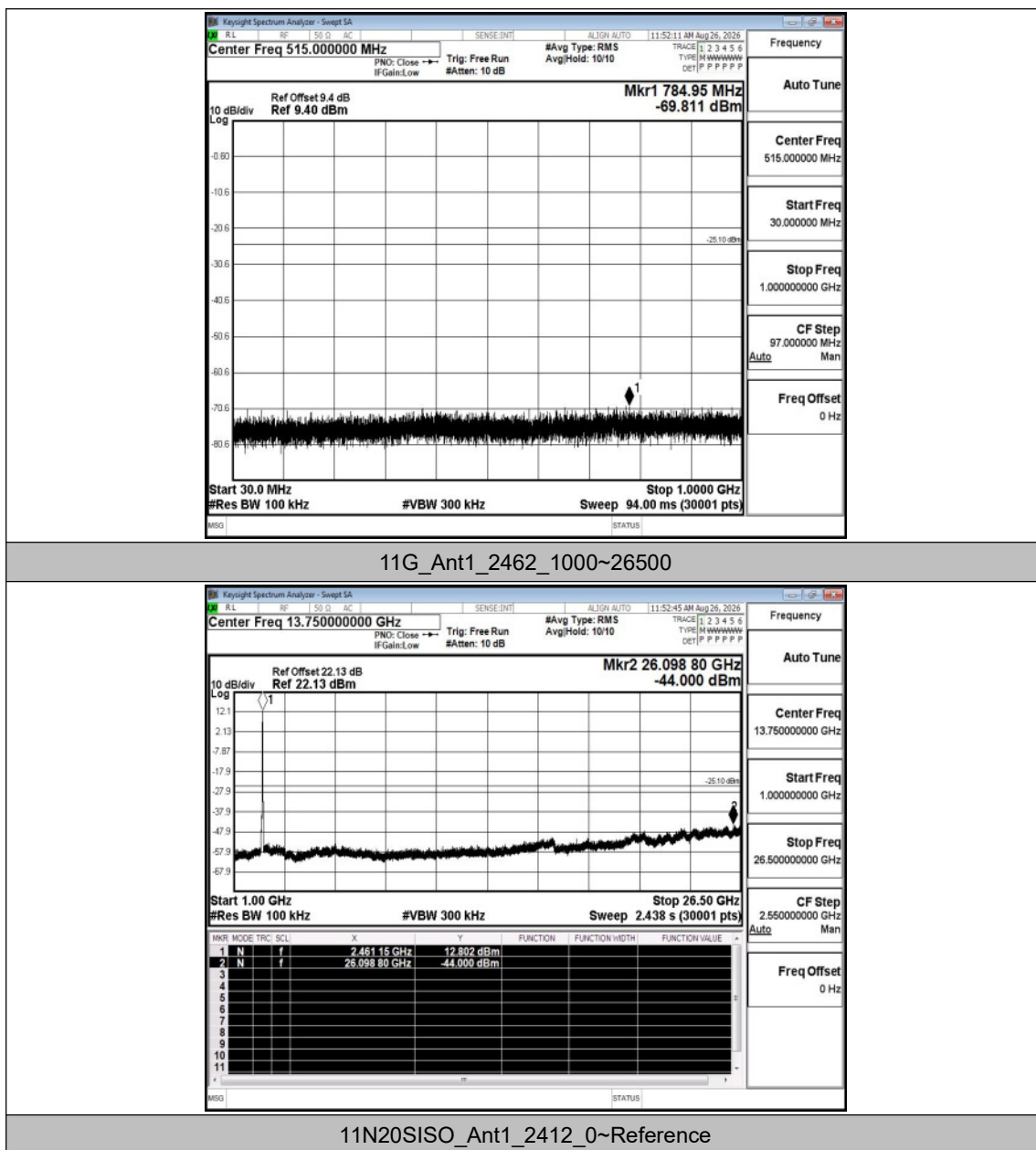


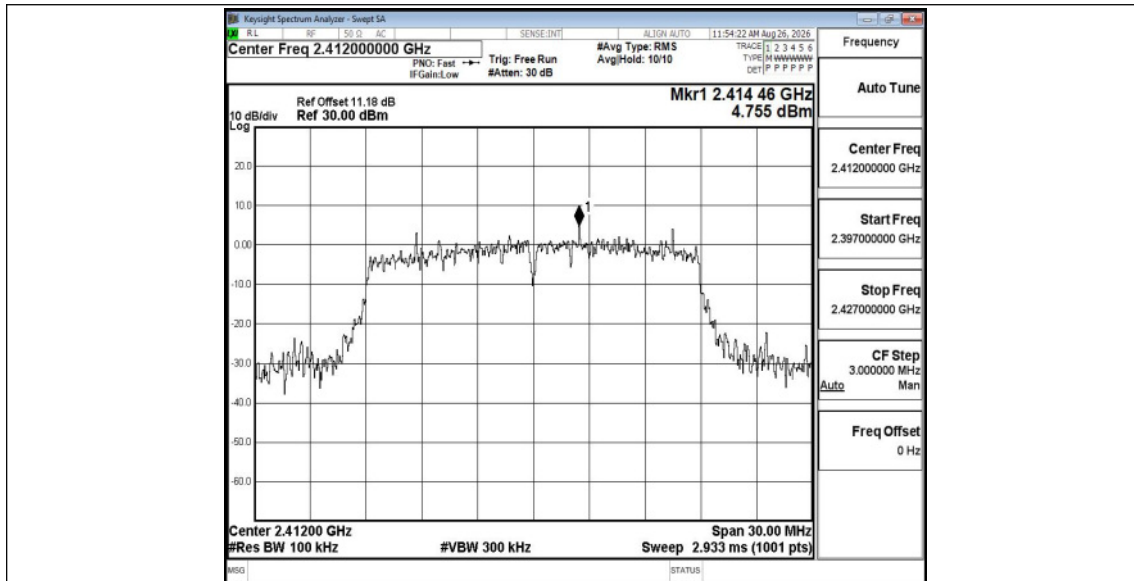
11G_Ant1_2437_30~1000



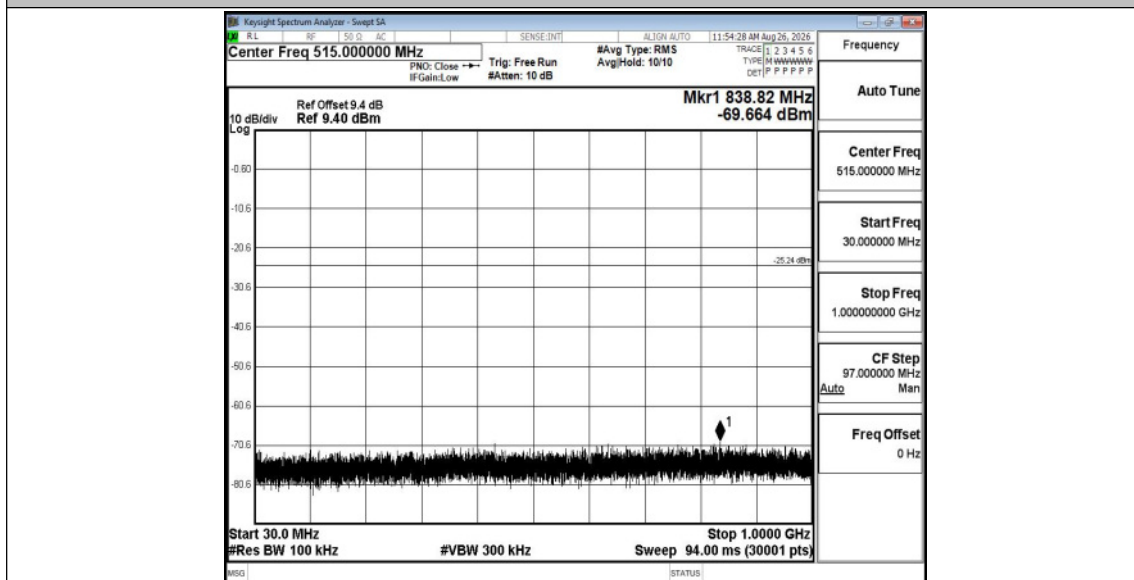
11G_Ant1_2437_1000~26500



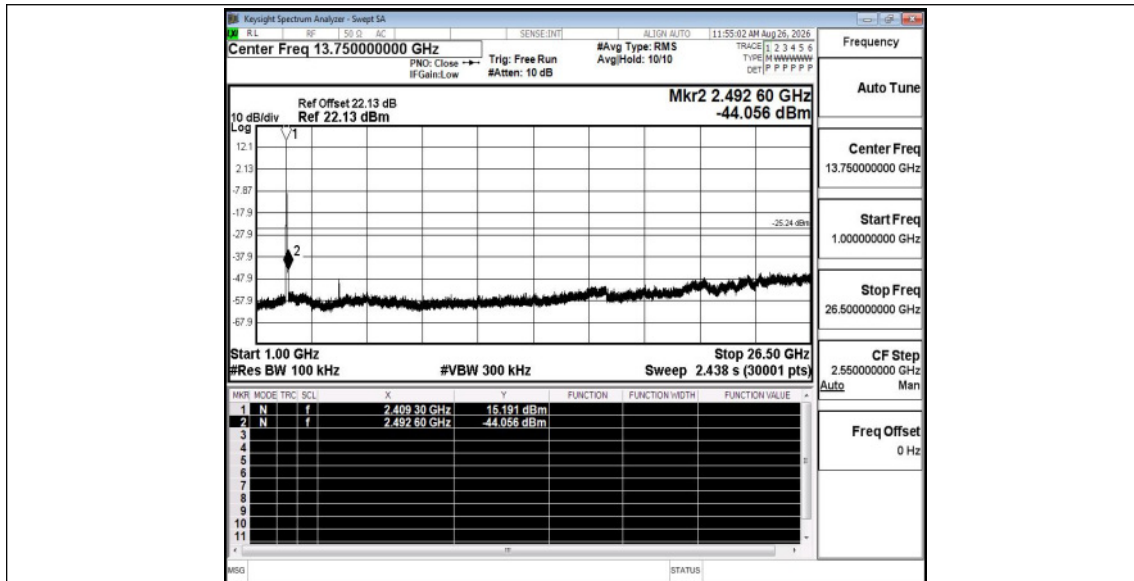




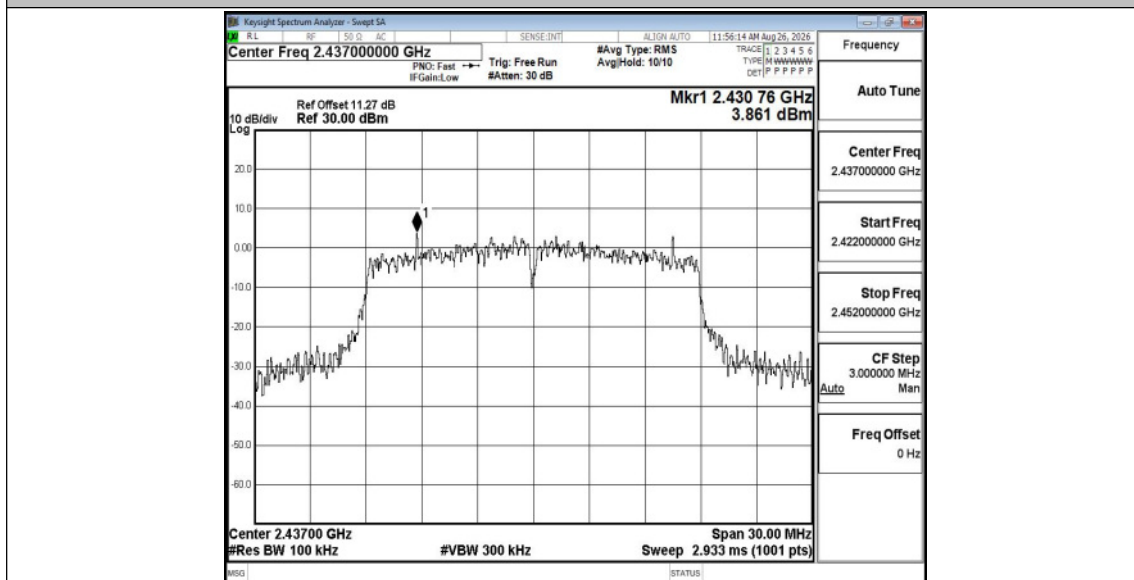
11N20SISO_Ant1_2412_30~1000



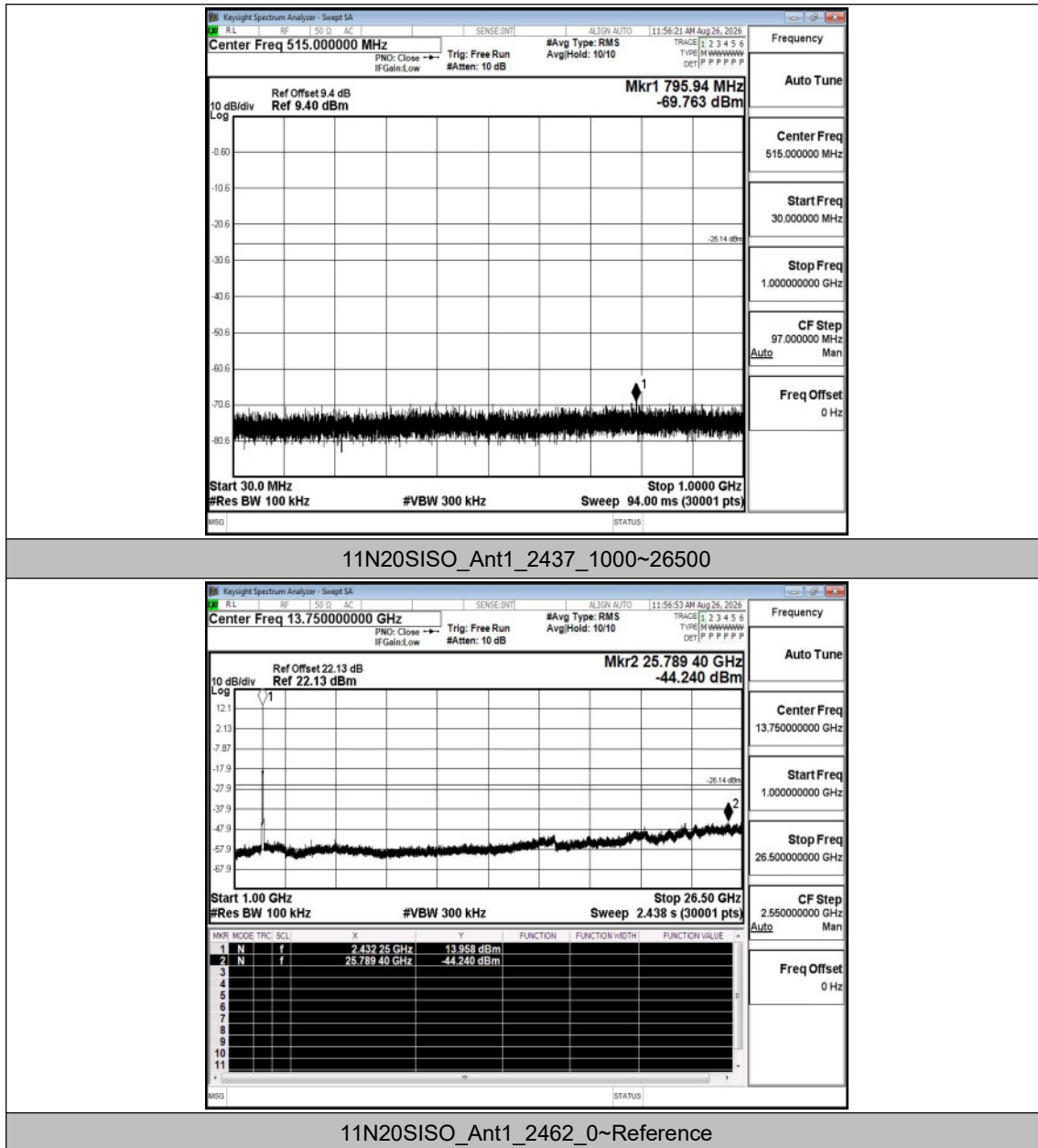
11N20SISO_Ant1_2412_1000~26500

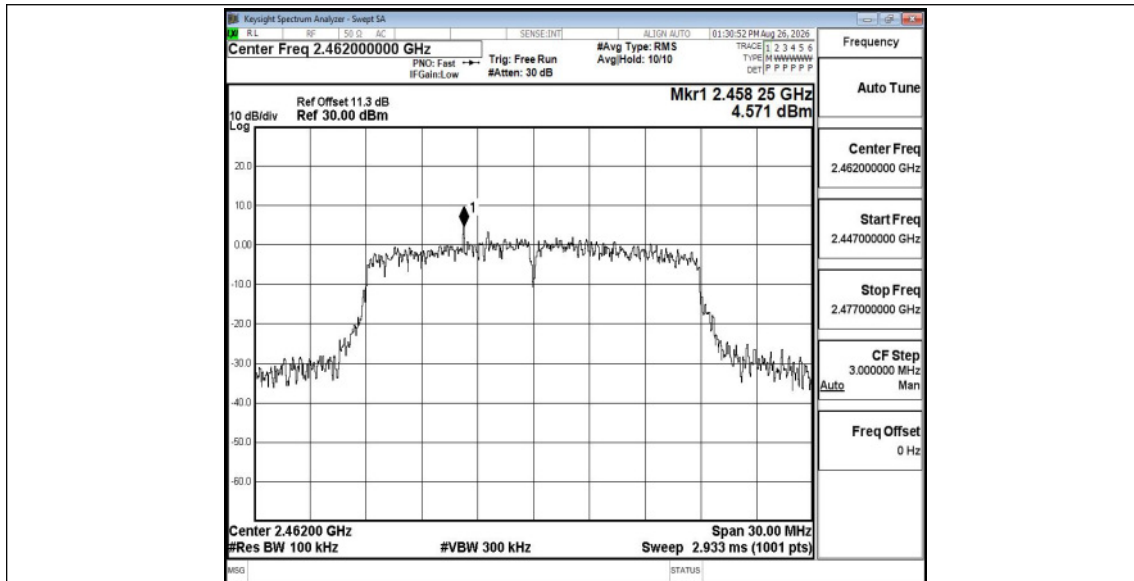


11N20SISO_Ant1_2437_0~Reference

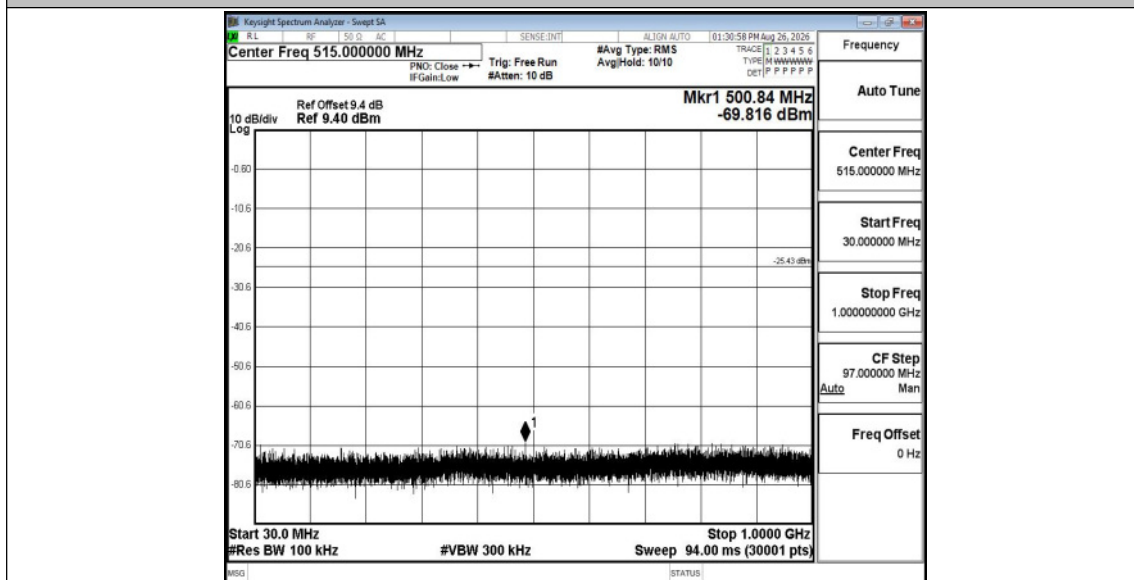


11N20SISO_Ant1_2437_30~1000

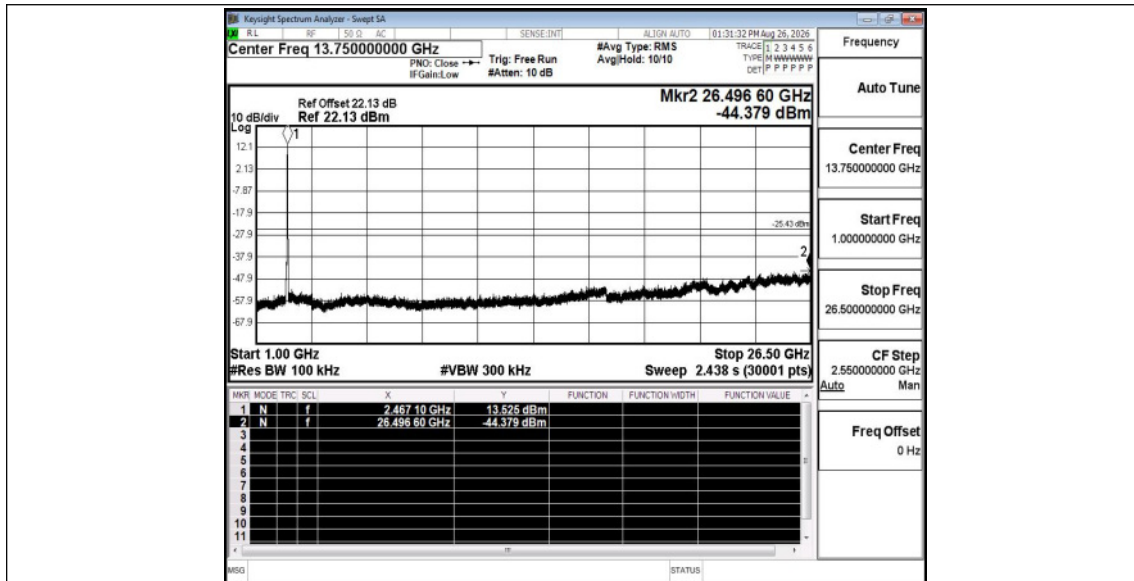




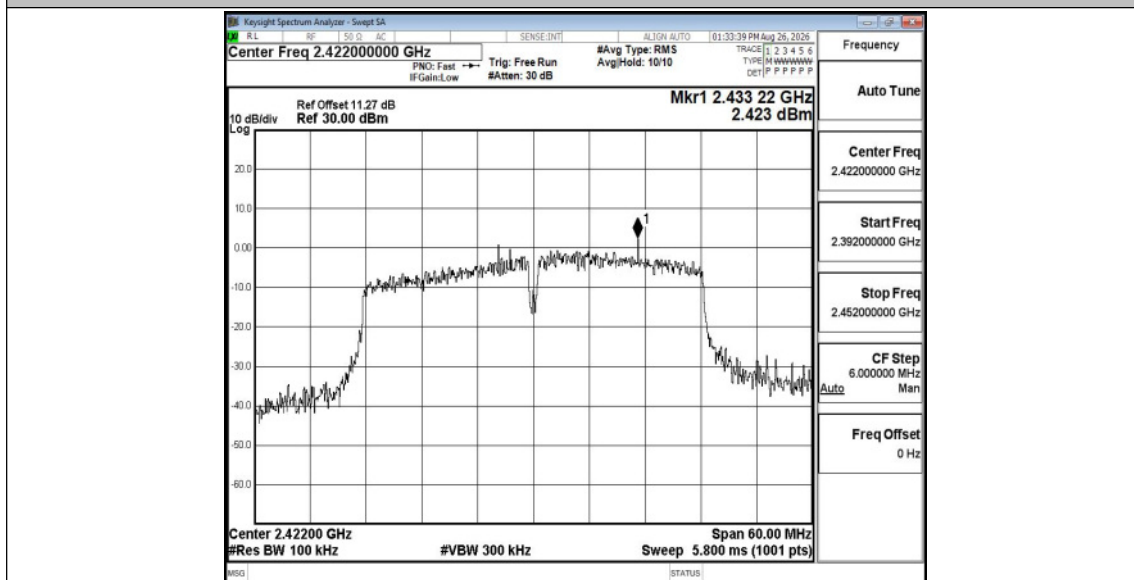
11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



11N40SISO_Ant1_2422_0~Reference



11N40SISO_Ant1_2422_30~1000