

Appendix A

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Wi Fi IP Camera

Test Model: VB-8815 NHD

Environmental Conditions

Temperature:	23.4°C
Relative Humidity:	54.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

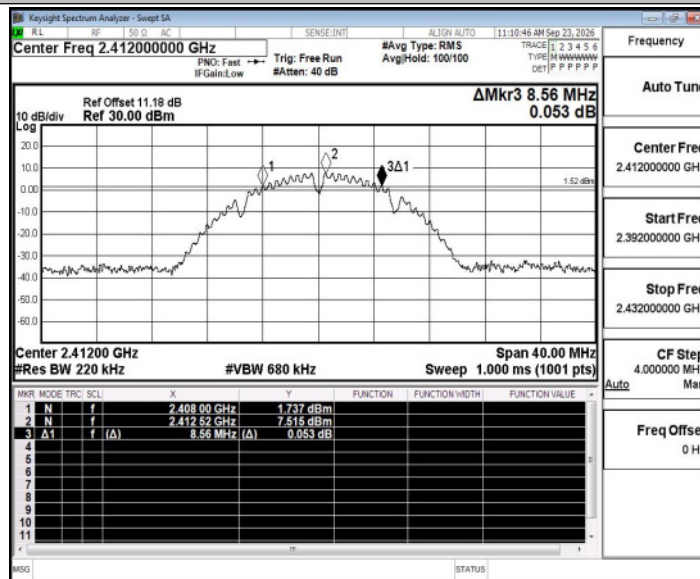
A.1 6dB Bandwidth

Test Result

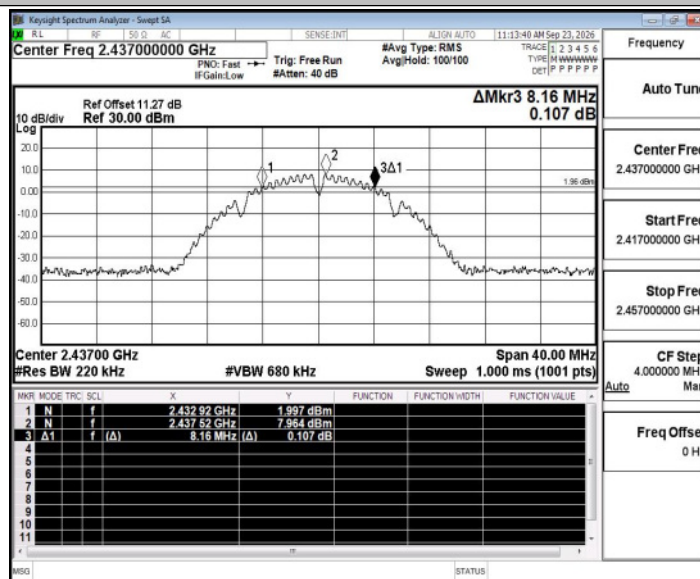
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.560	2408.000	2416.560	0.5	PASS
		2437	8.160	2432.920	2441.080	0.5	PASS
		2462	8.120	2457.960	2466.080	0.5	PASS
11G	Ant1	2412	16.160	2404.040	2420.200	0.5	PASS
		2437	16.040	2429.000	2445.040	0.5	PASS
		2462	16.080	2454.000	2470.080	0.5	PASS
11N20SISO	Ant1	2412	17.080	2403.720	2420.800	0.5	PASS
		2437	17.040	2428.360	2445.400	0.5	PASS
		2462	17.120	2453.520	2470.640	0.5	PASS
11N40SISO	Ant1	2422	32.000	2408.080	2440.080	0.5	PASS
		2437	33.600	2421.080	2454.680	0.5	PASS
		2452	36.240	2433.920	2470.160	0.5	PASS

Test Graphs

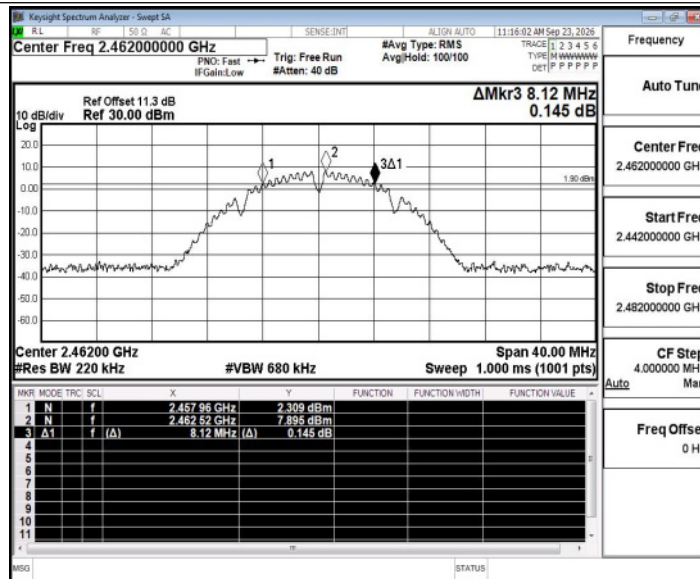
11B_Ant1_2412



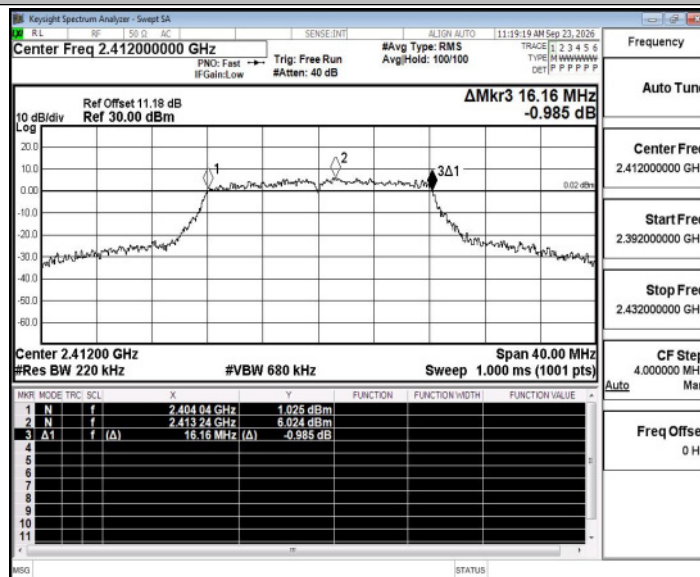
11B_Ant1_2437



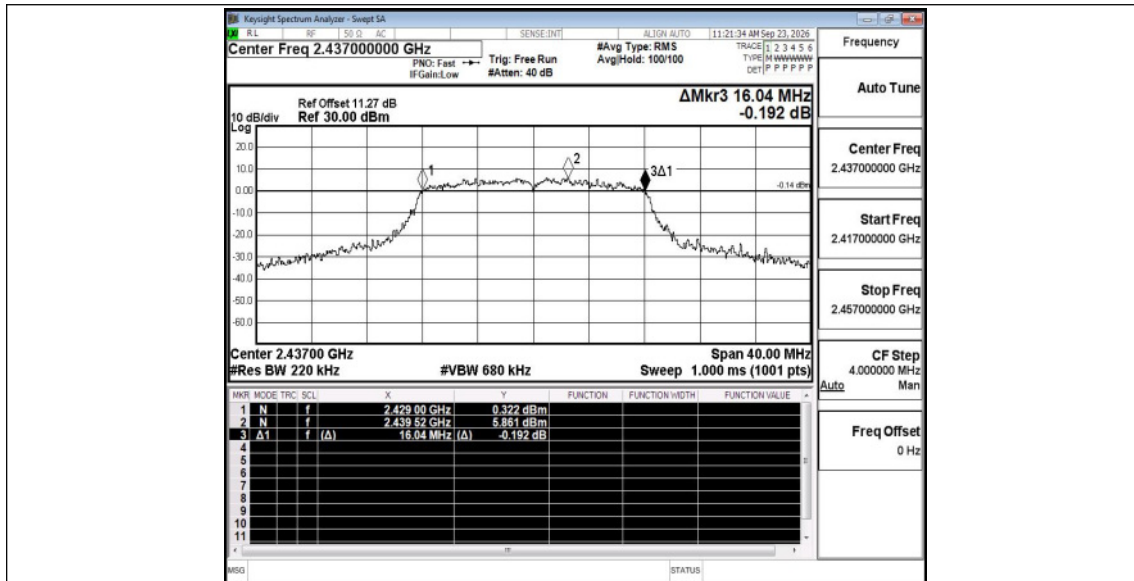
11B_Ant1_2462



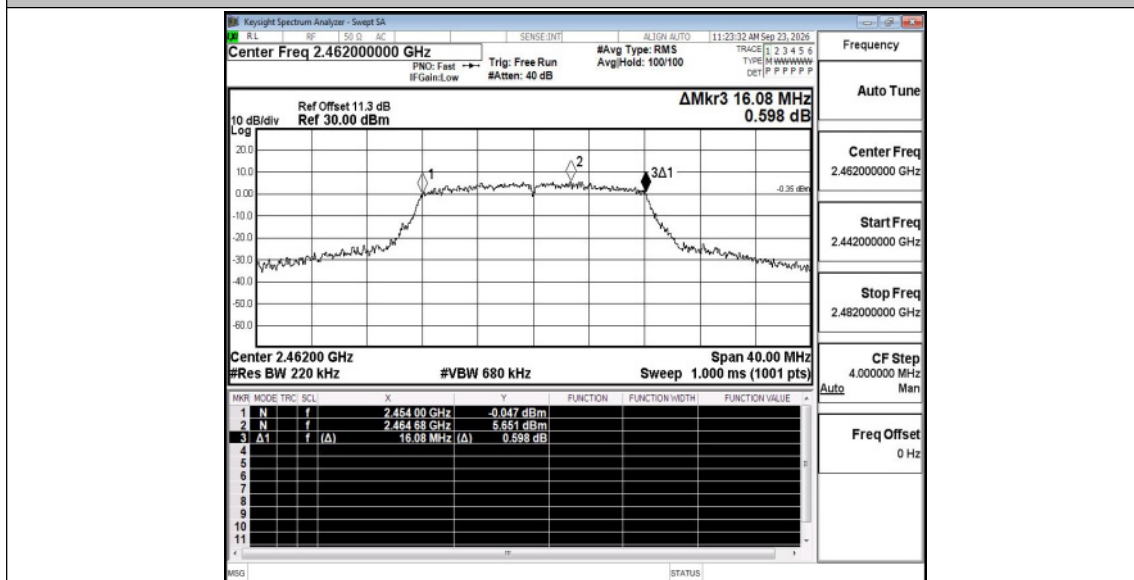
11G_Ant1_2412



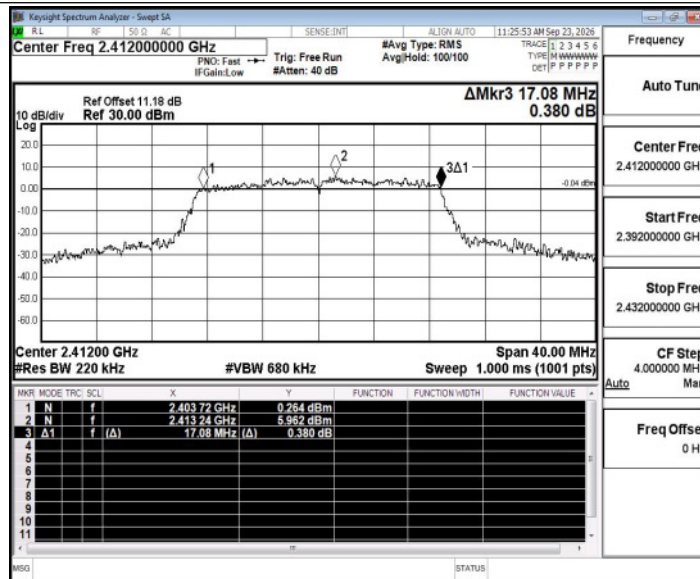
11G_Ant1_2437



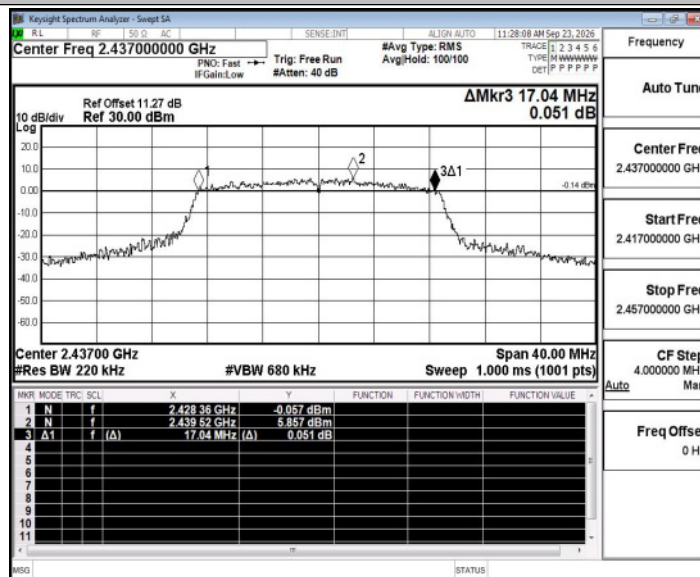
11G_Ant1_2462



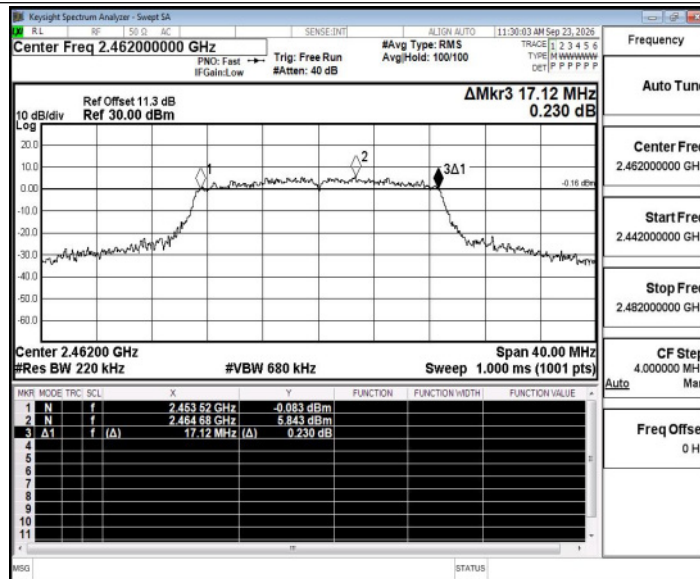
11N20SISO_Ant1_2412



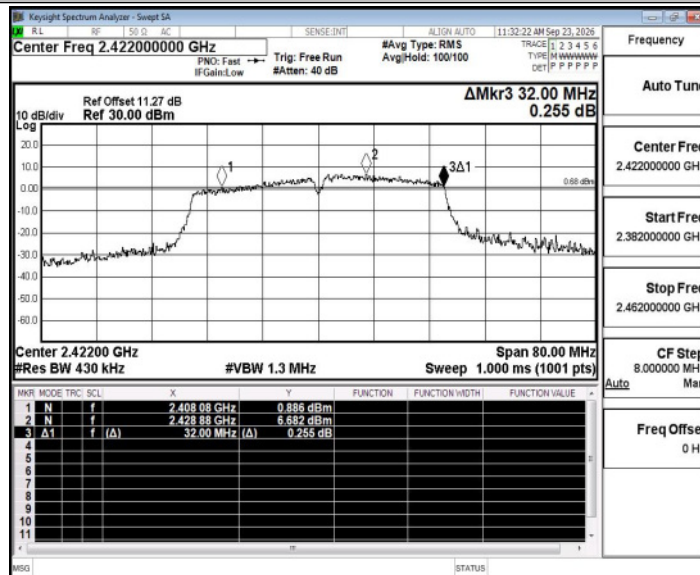
11N20SISO_Ant1_2437



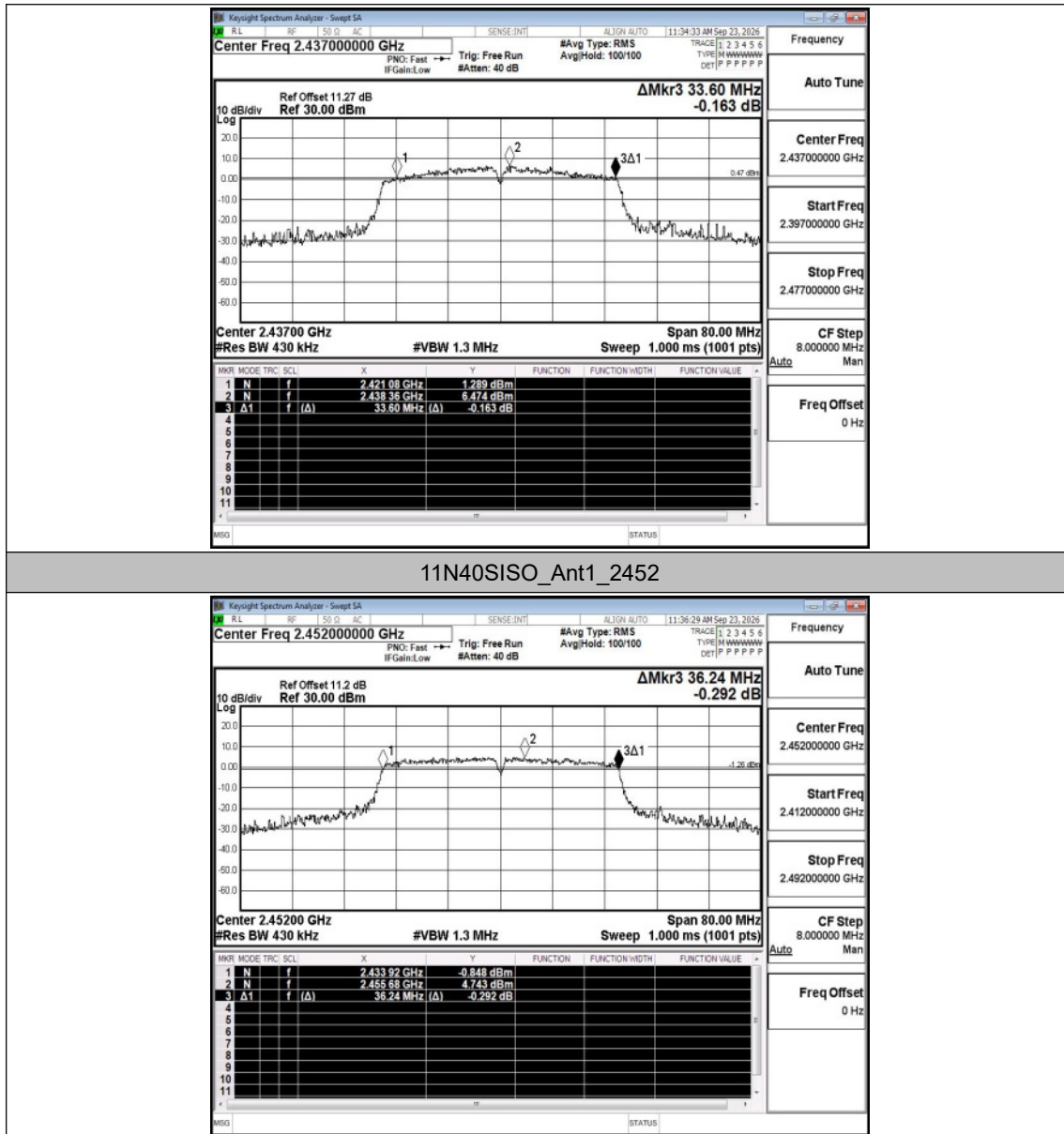
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



A.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	14.96	0.02	14.98	≤30.00	PASS
		2437	14.95	0.02	14.97	≤30.00	PASS
		2462	15.88	0.02	15.90	≤30.00	PASS
11G	Ant1	2412	15.78	0.12	15.90	≤30.00	PASS
		2437	15.24	0.15	15.39	≤30.00	PASS
		2462	15.07	0.12	15.19	≤30.00	PASS
11N20SISO	Ant1	2412	15.02	0.13	15.15	≤30.00	PASS
		2437	15.21	0.13	15.34	≤30.00	PASS
		2462	15.04	0.13	15.17	≤30.00	PASS
11N40SISO	Ant1	2422	15.36	0.26	15.62	≤30.00	PASS
		2437	15.41	0.26	15.67	≤30.00	PASS
		2452	15.31	0.32	15.63	≤30.00	PASS

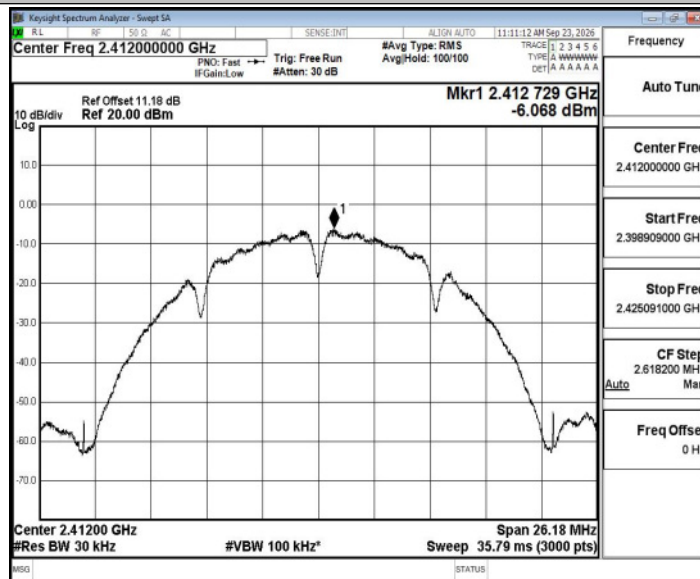
A.3 Maximum power spectral density

Test Result

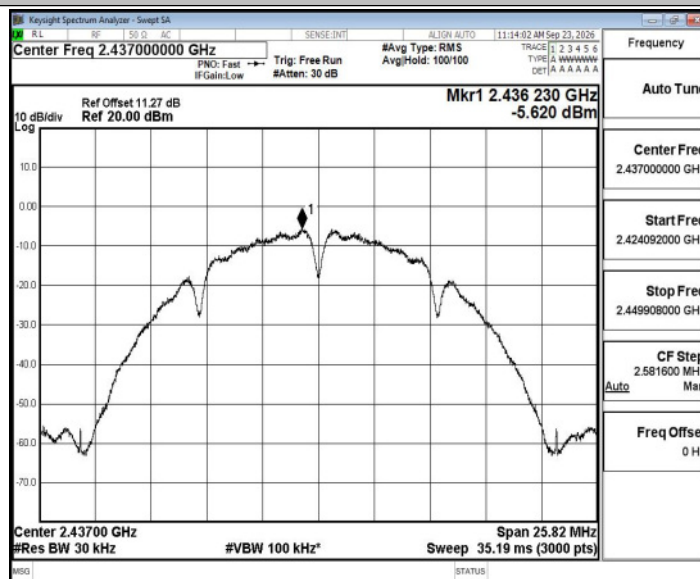
TestMode	Antenna	Frequency [MHz]	Measured PSD [dBm/30kHz]	DC Factor [dB]	Result [dBm/30kHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-6.07	0.02	-6.05	-16.05	≤8.00	PASS
		2437	-5.62	0.02	-5.60	-15.60	≤8.00	PASS
		2462	-5.05	0.02	-5.03	-15.03	≤8.00	PASS
11G	Ant1	2412	-8.31	0.12	-8.19	-18.19	≤8.00	PASS
		2437	-8.35	0.15	-8.20	-18.20	≤8.00	PASS
		2462	-8.54	0.12	-8.42	-18.42	≤8.00	PASS
11N20SISO	Ant1	2412	-8.9	0.13	-8.77	-18.77	≤8.00	PASS
		2437	-8.34	0.13	-8.21	-18.21	≤8.00	PASS
		2462	-8.24	0.13	-8.11	-18.11	≤8.00	PASS
11N40SISO	Ant1	2422	-10.3	0.26	-10.04	-20.04	≤8.00	PASS
		2437	-10.76	0.26	-10.50	-20.50	≤8.00	PASS
		2452	-11.33	0.32	-11.01	-21.01	≤8.00	PASS

Test Graphs

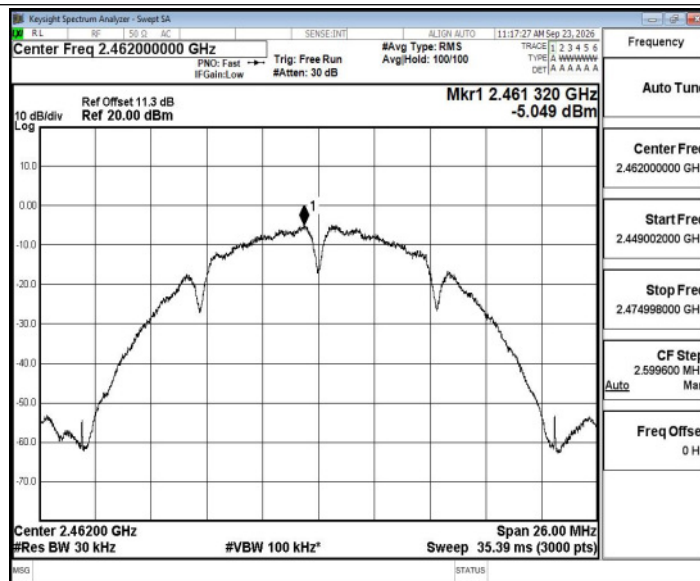
11B_Ant1_2412



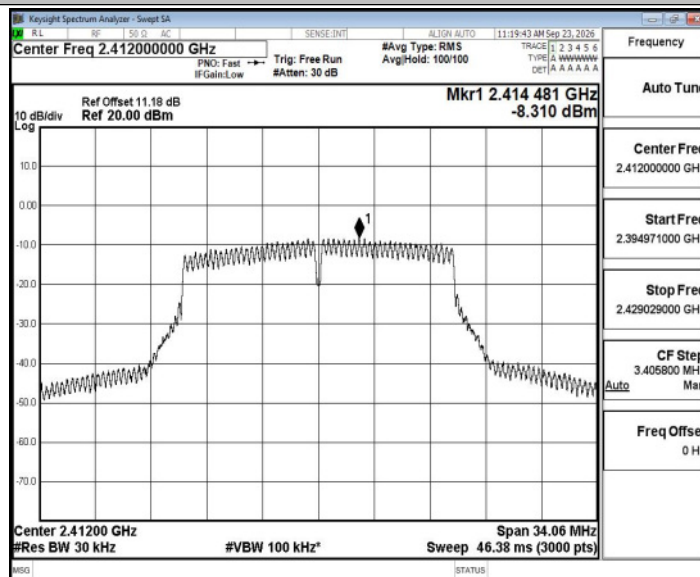
11B_Ant1_2437



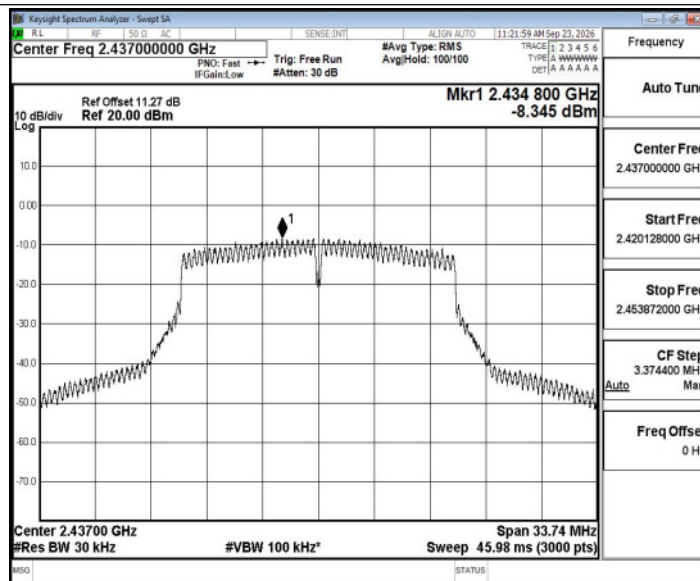
11B_Ant1_2462



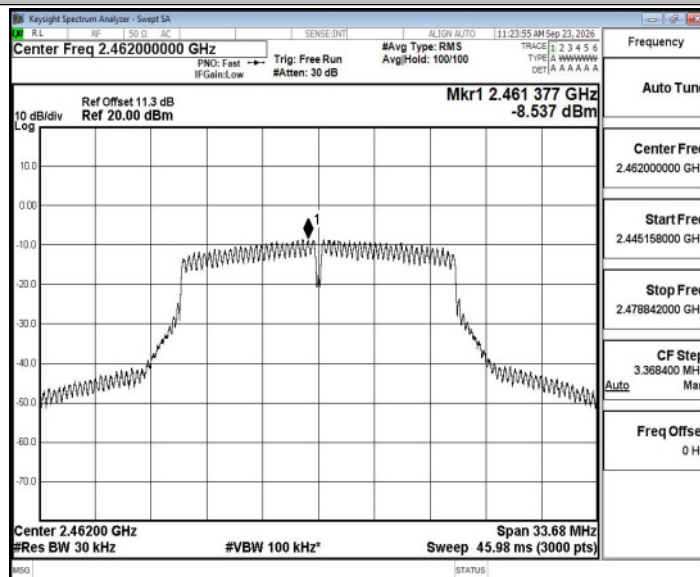
11G_Ant1_2412



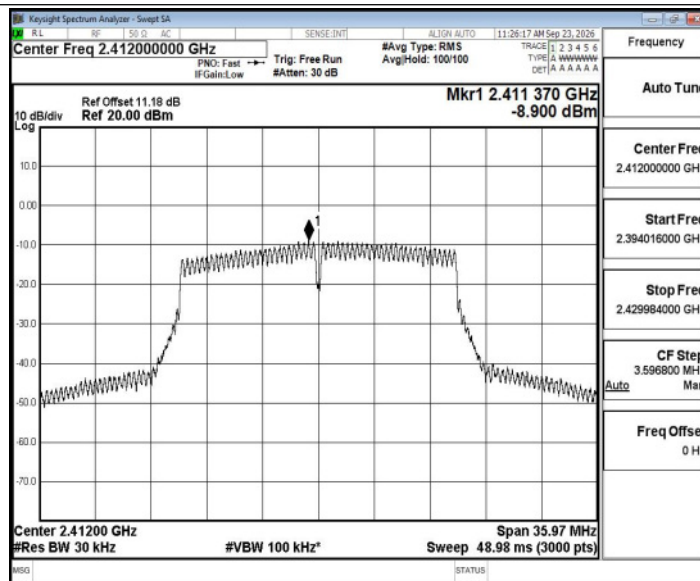
11G_Ant1_2437



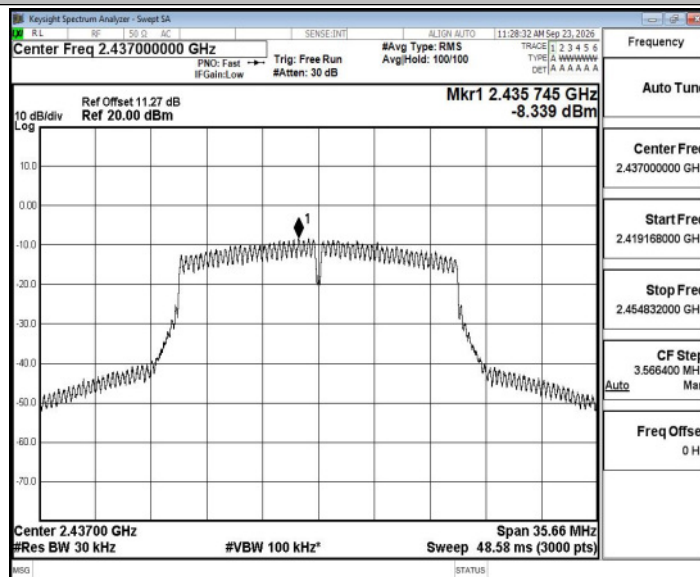
11G_Ant1_2462



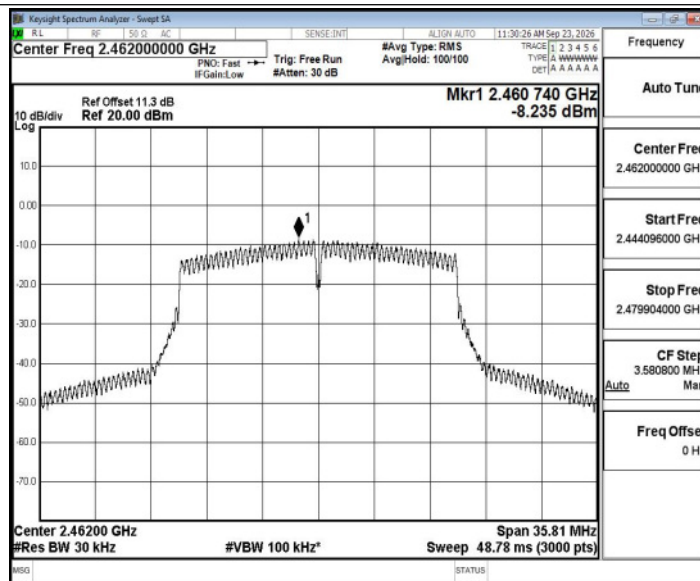
11N20SISO_Ant1_2412



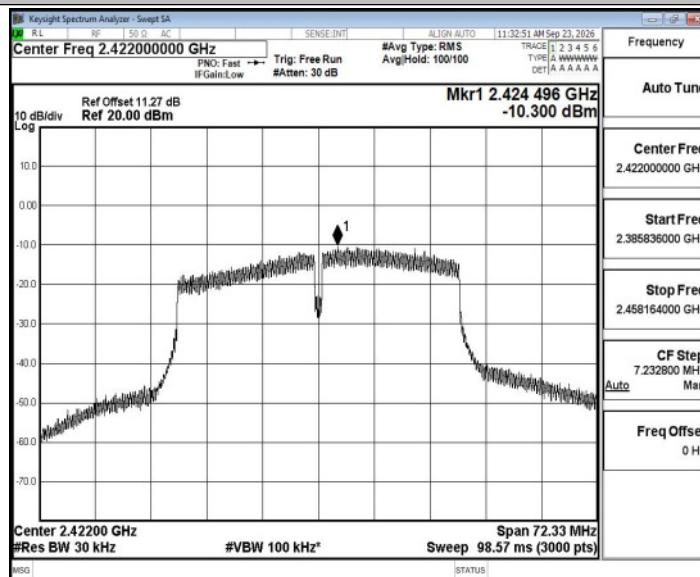
11N20SISO_Ant1_2437



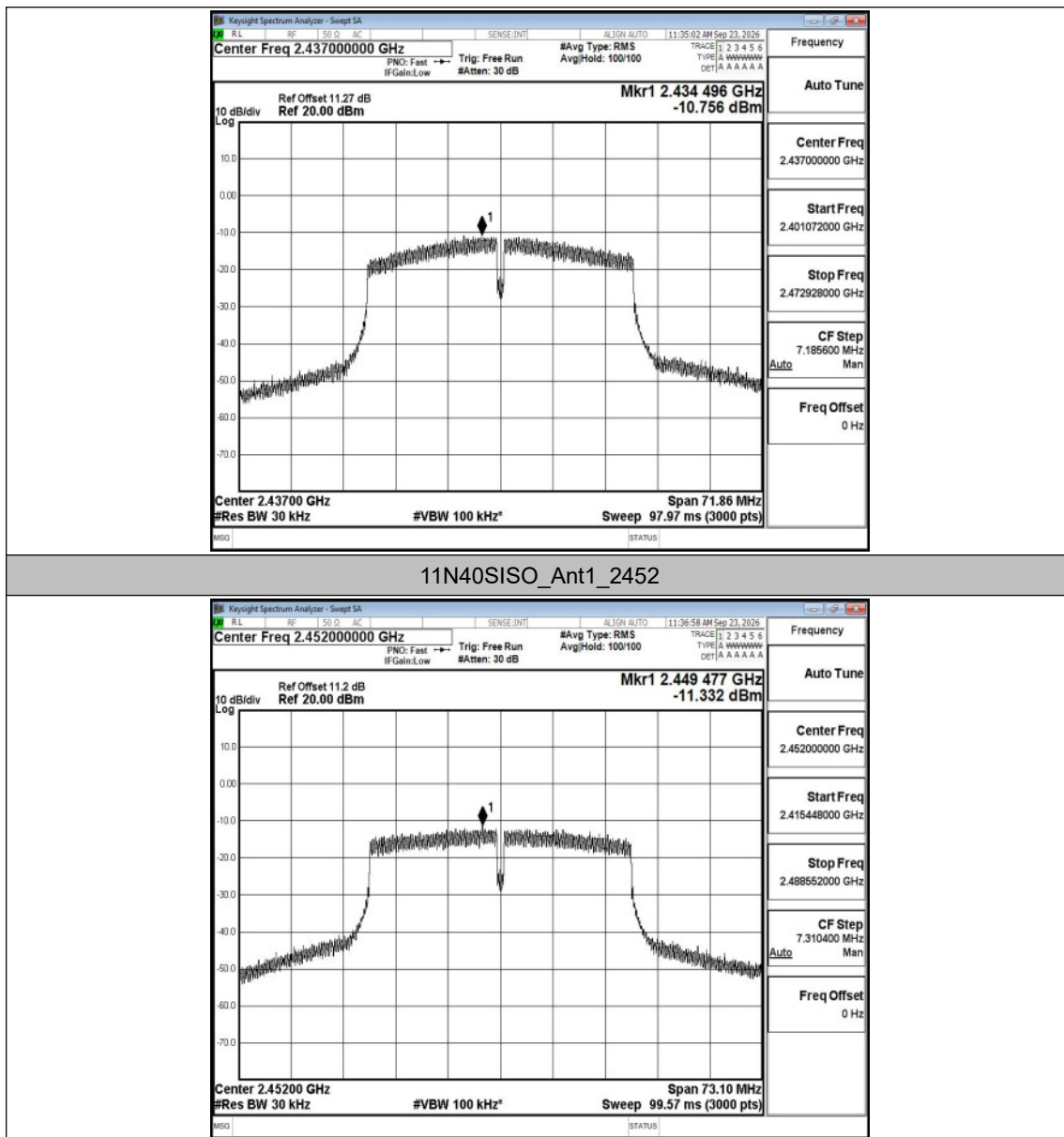
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



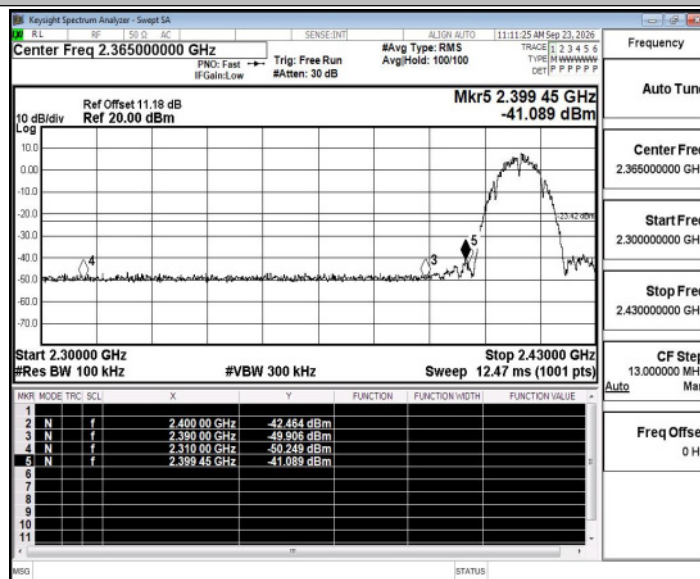
A.4 Band edge measurements

Test Result

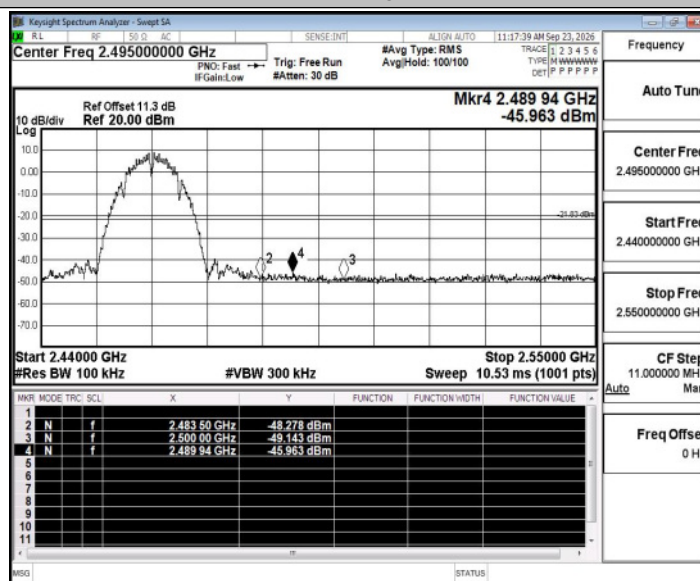
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	6.58	-41.09	≤-23.42	PASS
		High	2462	8.17	-45.96	≤-21.83	PASS
11G	Ant1	Low	2412	4.88	-25.74	≤-25.12	PASS
		High	2462	4.77	-41.52	≤-25.23	PASS
11N20SISO	Ant1	Low	2412	4.58	-27.65	≤-25.42	PASS
		High	2462	4.31	-39.47	≤-25.69	PASS
11N40SISO	Ant1	Low	2422	3.71	-31.95	≤-26.29	PASS
		High	2452	2.14	-30.89	≤-27.86	PASS

Test Graphs

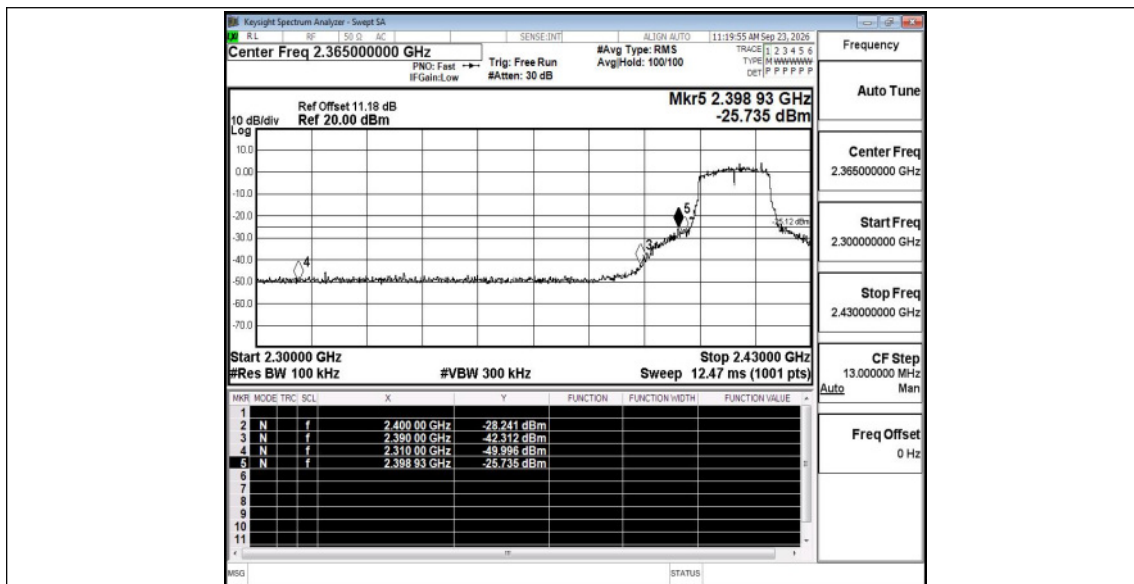
11B_Ant1_Low_2412



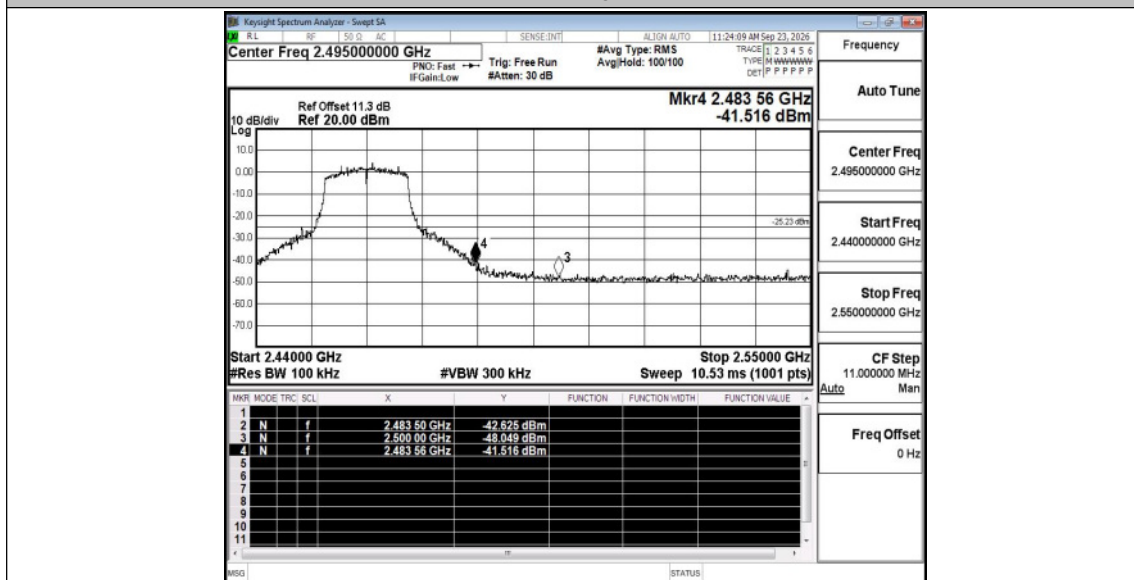
11B_Ant1_High_2462



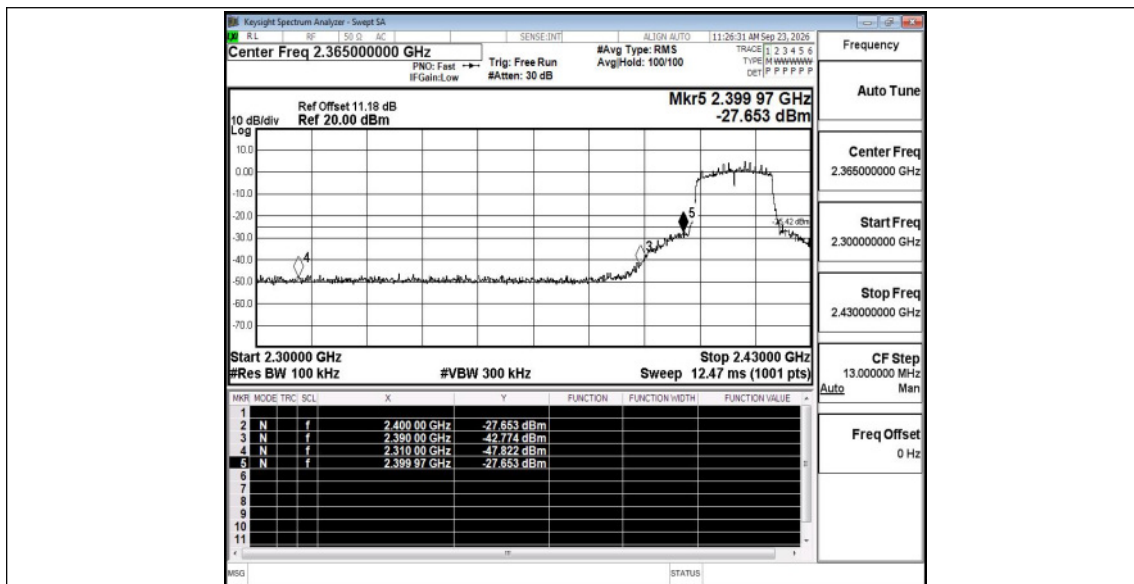
11G_Ant1_Low_2412



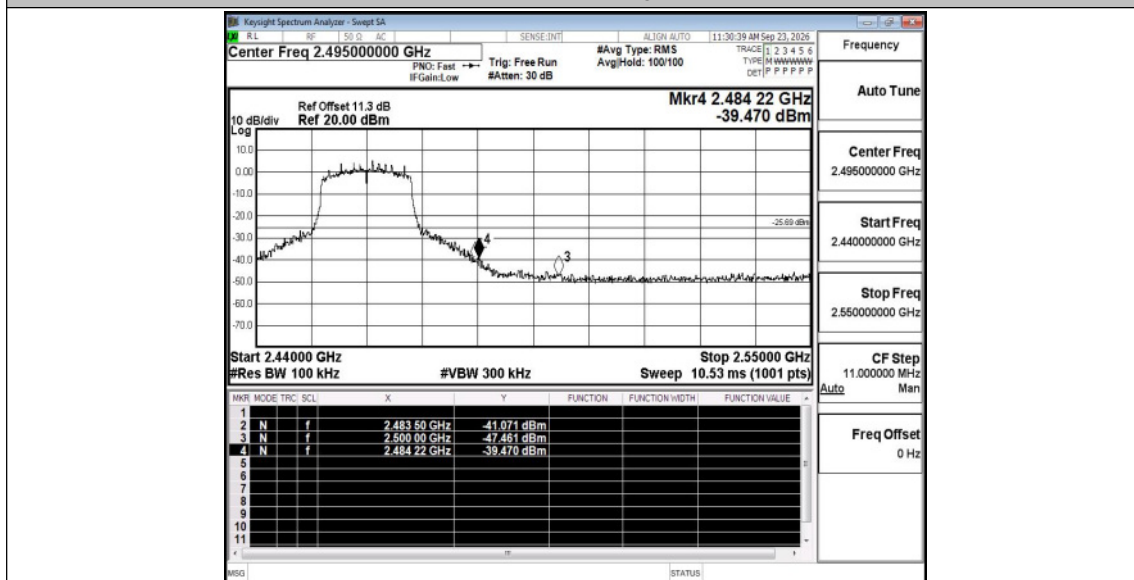
11G_Ant1_High_2462



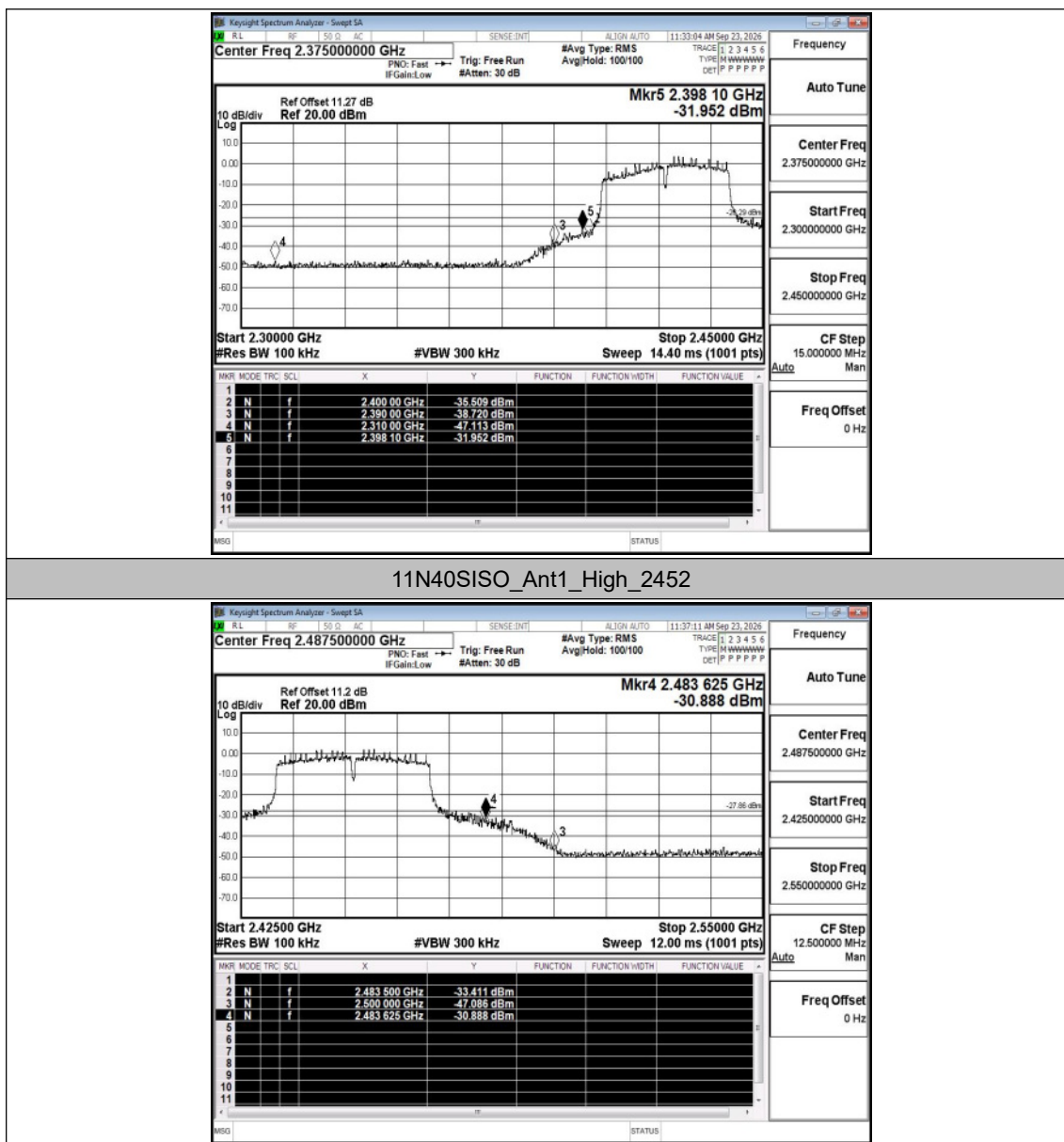
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422

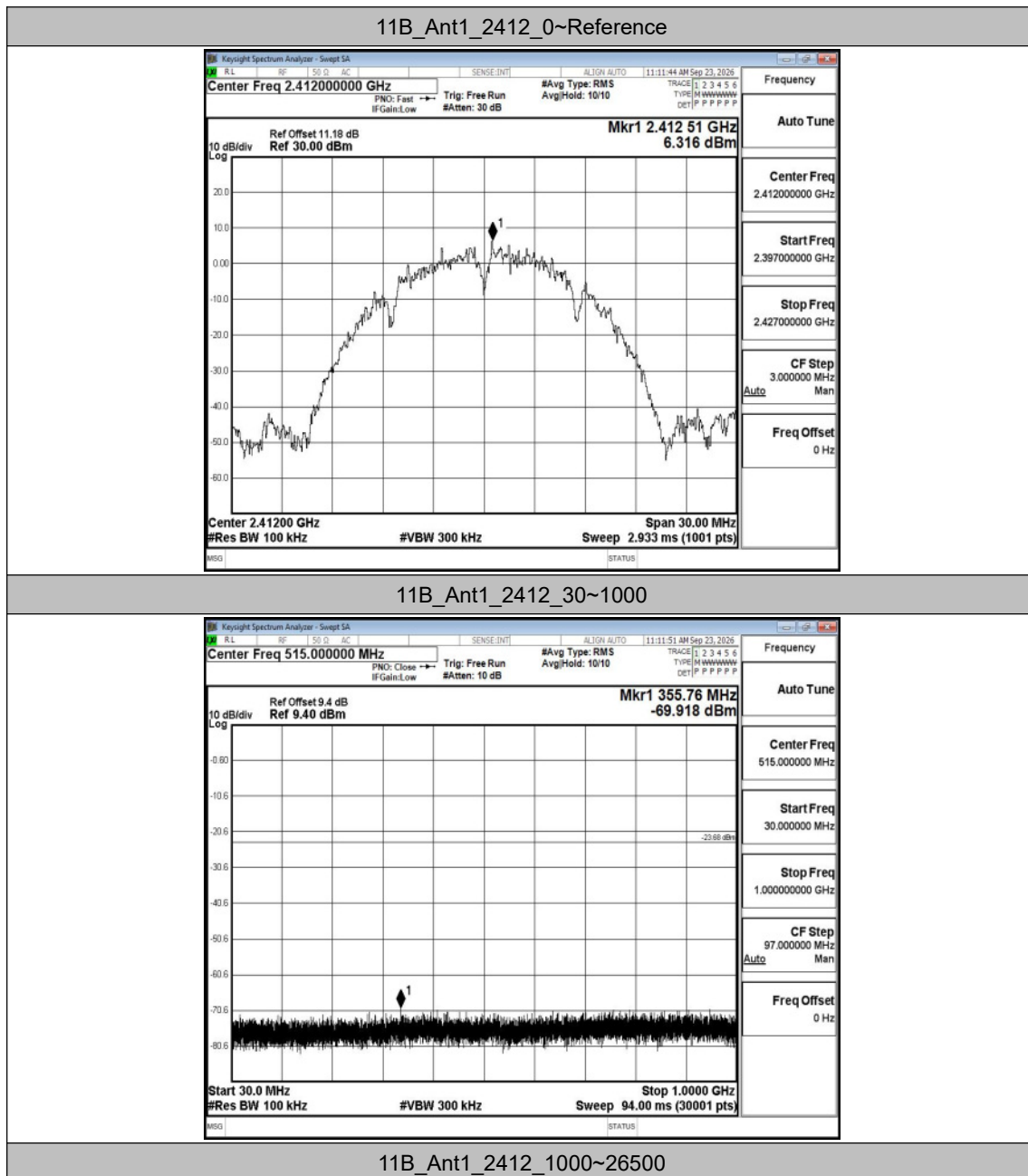


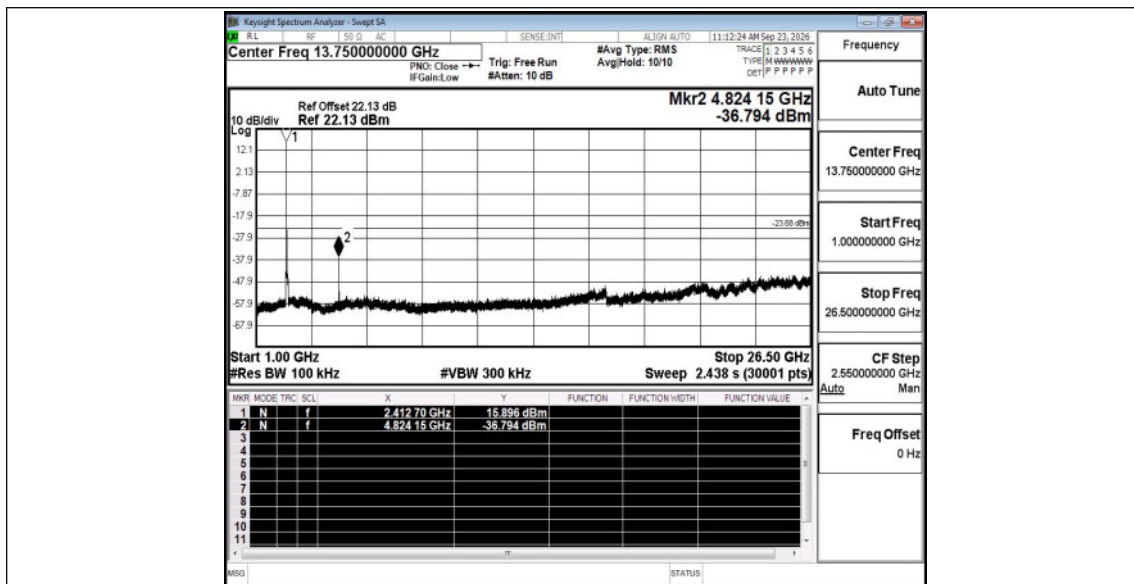
A.5 Conducted Spurious Emission

Test Result

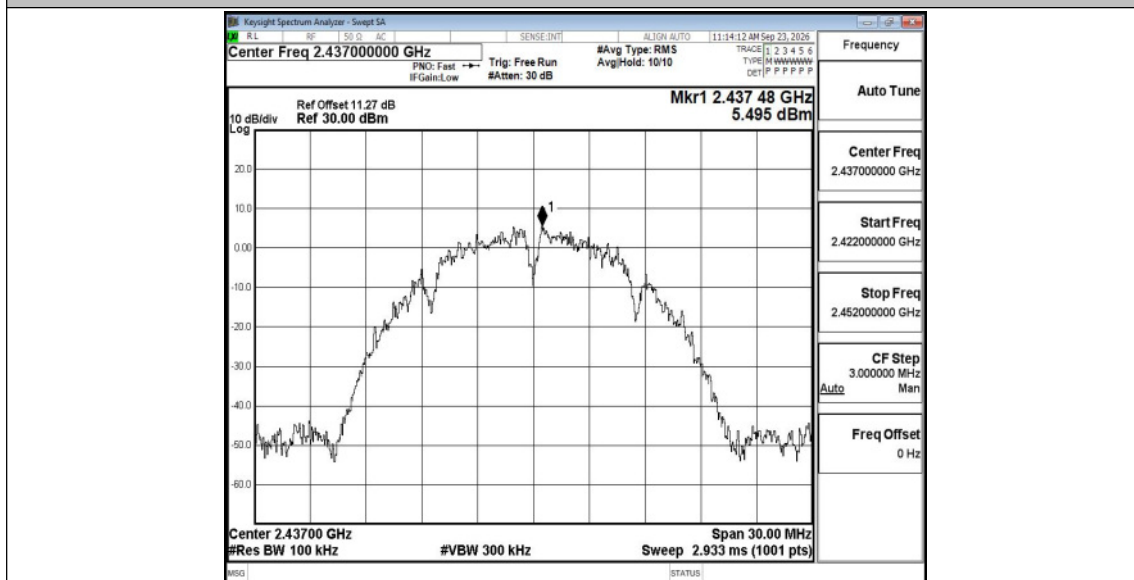
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	6.32	6.32	---	PASS
			30~1000	6.32	-69.92	≤-23.68	PASS
			1000~26500	6.32	-36.79	≤-23.68	PASS
		2437	Reference	5.50	5.50	---	PASS
			30~1000	5.50	-68.83	≤-24.5	PASS
			1000~26500	5.50	-40.29	≤-24.5	PASS
		2462	Reference	5.71	5.71	---	PASS
			30~1000	5.71	-68.65	≤-24.29	PASS
			1000~26500	5.71	-40.25	≤-24.29	PASS
11G	Ant1	2412	Reference	2.32	2.32	---	PASS
			30~1000	2.32	-69.9	≤-27.68	PASS
			1000~26500	2.32	-43.56	≤-27.68	PASS
		2437	Reference	4.16	4.16	---	PASS
			30~1000	4.16	-69.56	≤-25.84	PASS
			1000~26500	4.16	-44.85	≤-25.84	PASS
		2462	Reference	2.03	2.03	---	PASS
			30~1000	2.03	-69.66	≤-27.97	PASS
			1000~26500	2.03	-44.81	≤-27.97	PASS
11N20SISO	Ant1	2412	Reference	2.84	2.84	---	PASS
			30~1000	2.84	-69.6	≤-27.16	PASS
			1000~26500	2.84	-43.18	≤-27.16	PASS
		2437	Reference	2.70	2.70	---	PASS
			30~1000	2.70	-69.85	≤-27.3	PASS
			1000~26500	2.70	-44.54	≤-27.3	PASS
		2462	Reference	1.94	1.94	---	PASS
			30~1000	1.94	-69.91	≤-28.06	PASS
			1000~26500	1.94	-44.83	≤-28.06	PASS
11N40SISO	Ant1	2422	Reference	1.03	1.03	---	PASS
			30~1000	1.03	-69.26	≤-28.97	PASS
			1000~26500	1.03	-43.96	≤-28.97	PASS
		2437	Reference	0.02	0.02	---	PASS
			30~1000	0.02	-68.88	≤-29.98	PASS
			1000~26500	0.02	-44.51	≤-29.98	PASS
		2452	Reference	0.87	0.87	---	PASS
			30~1000	0.87	-68.92	≤-29.13	PASS
			1000~26500	0.87	-44.12	≤-29.13	PASS

Test Graphs

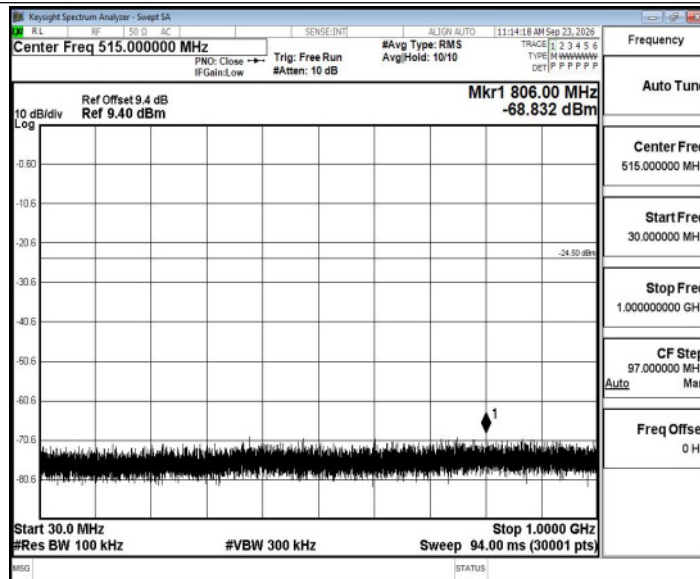




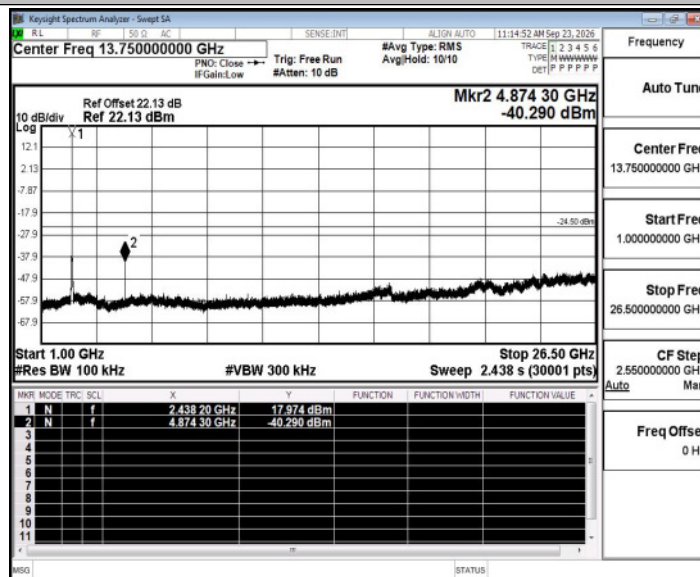
11B_Ant1_2437_0~Reference



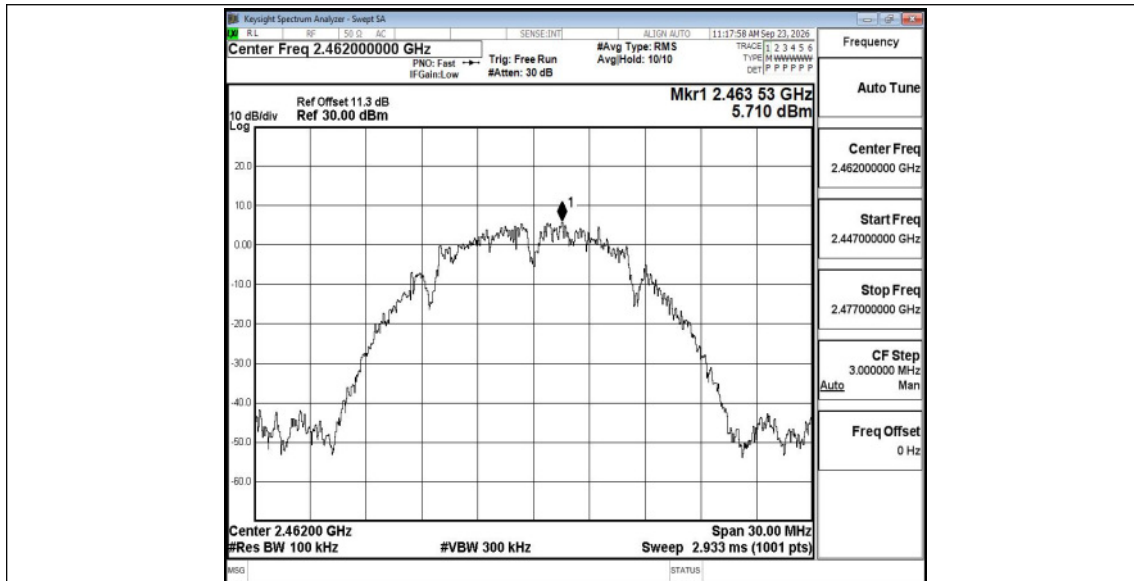
11B_Ant1_2437_30~1000



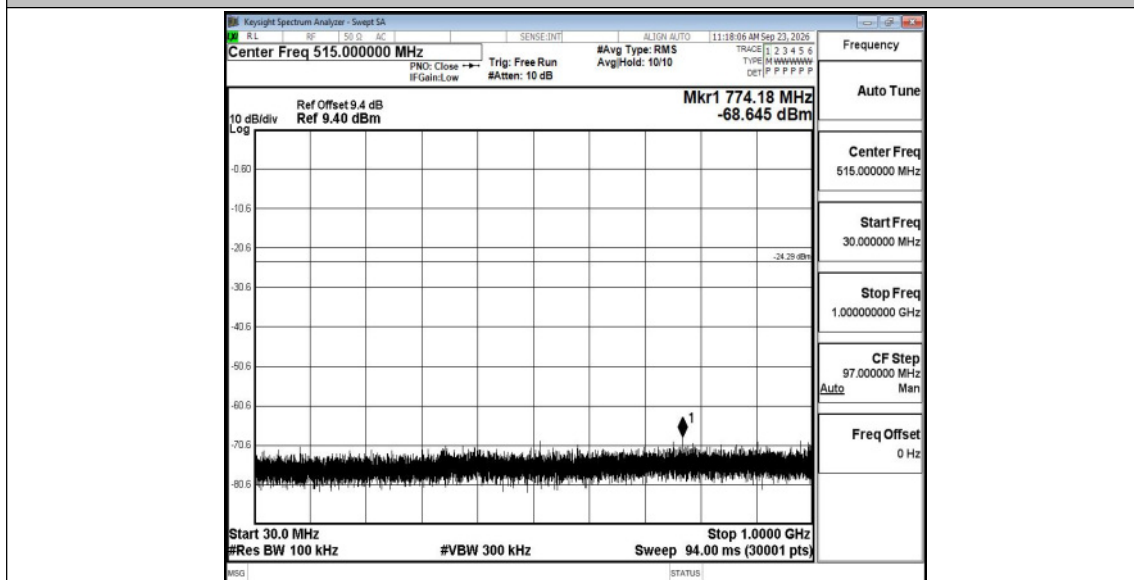
11B_Ant1_2437_1000~26500



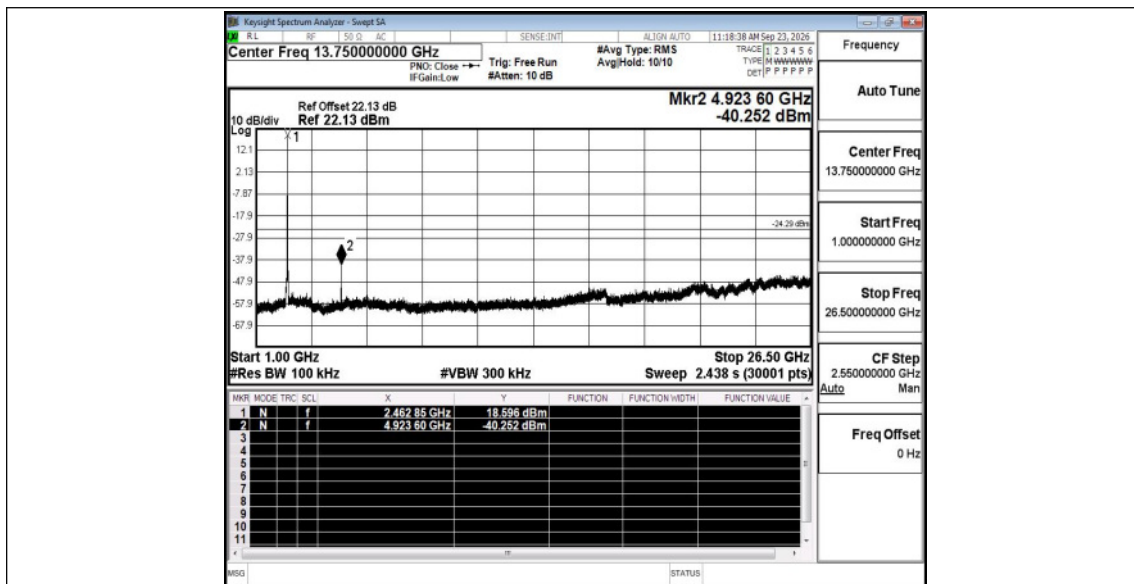
11B_Ant1_2462_0~Reference



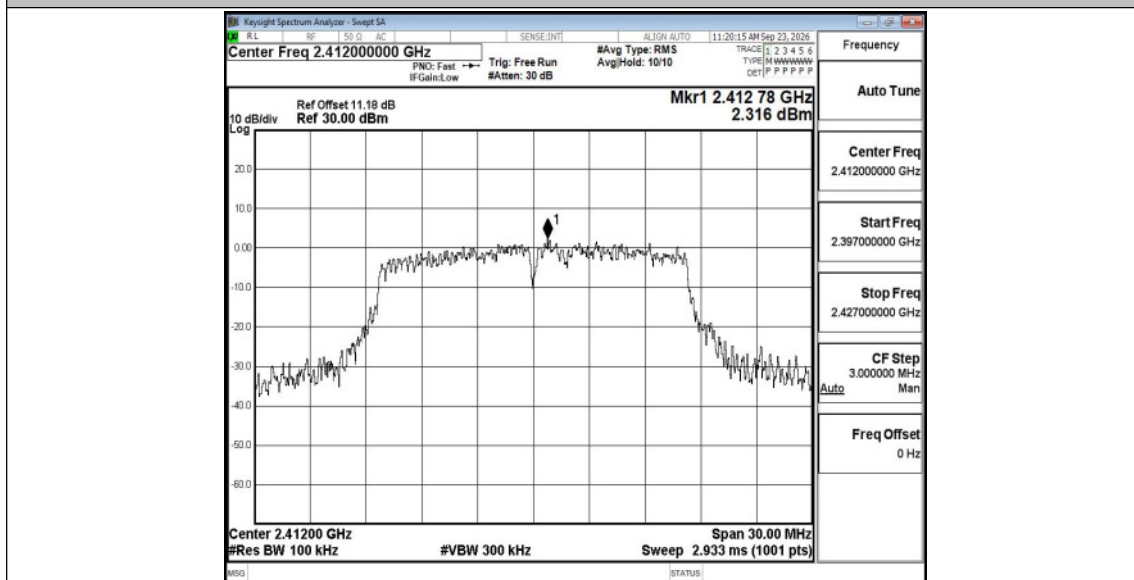
11B_Ant1_2462_30~1000



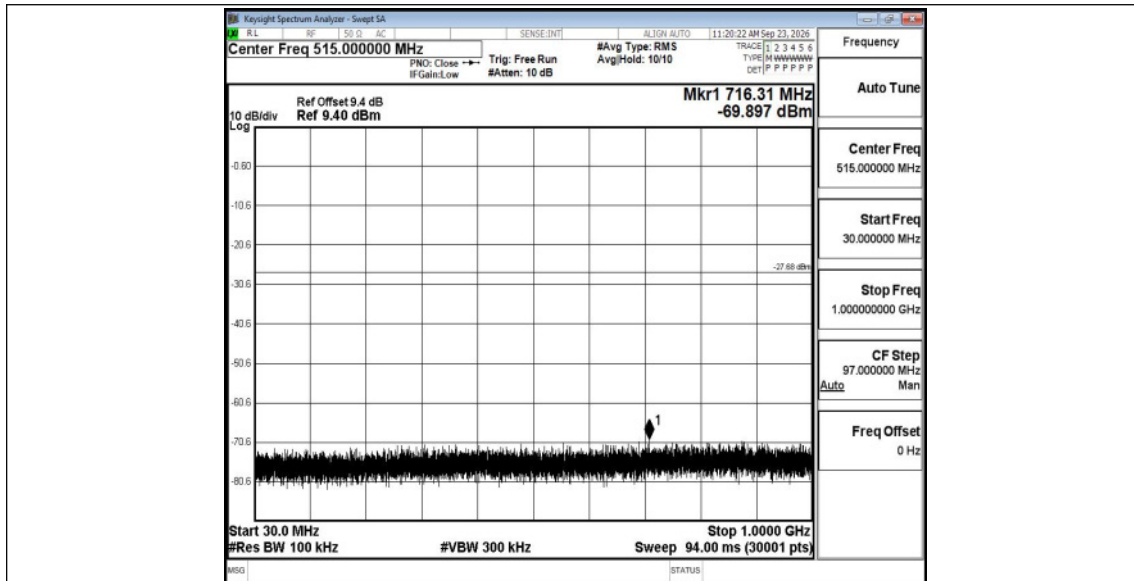
11B_Ant1_2462_1000~26500



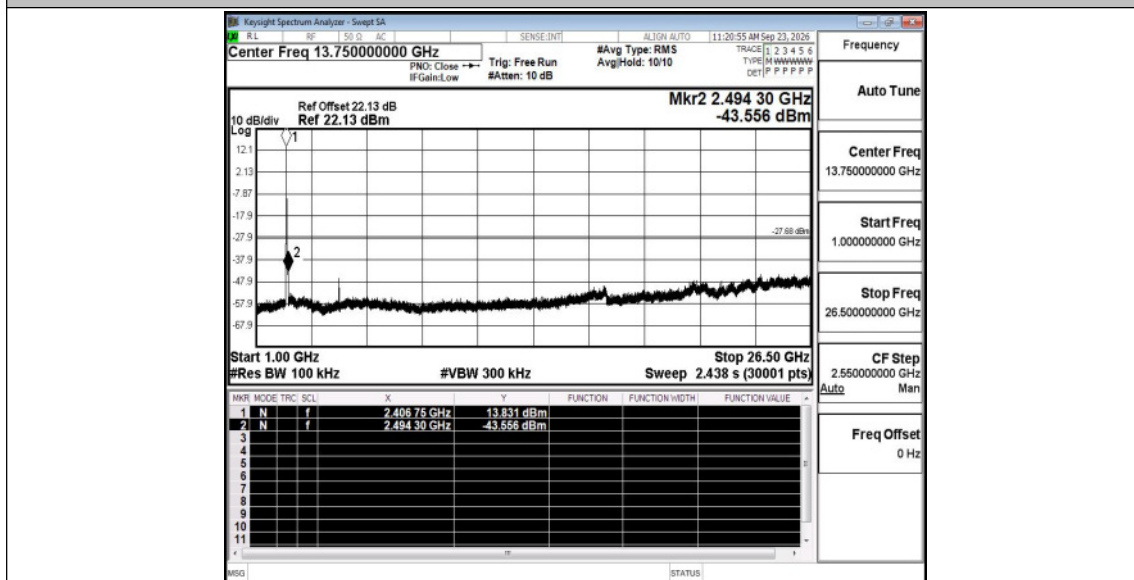
11G_Ant1_2412_0~Reference



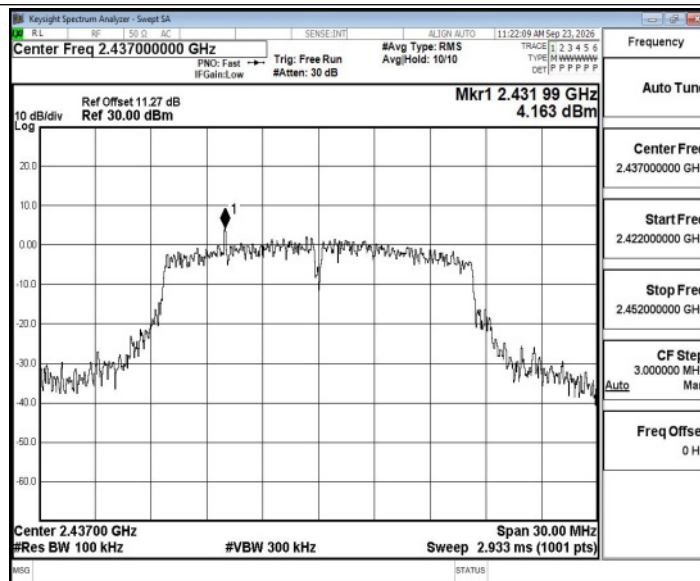
11G_Ant1_2412_30~1000



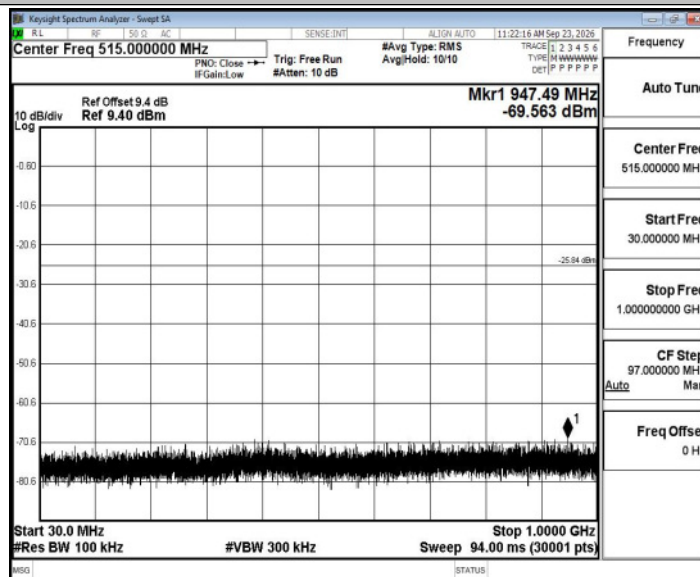
11G_Ant1_2412_1000~26500



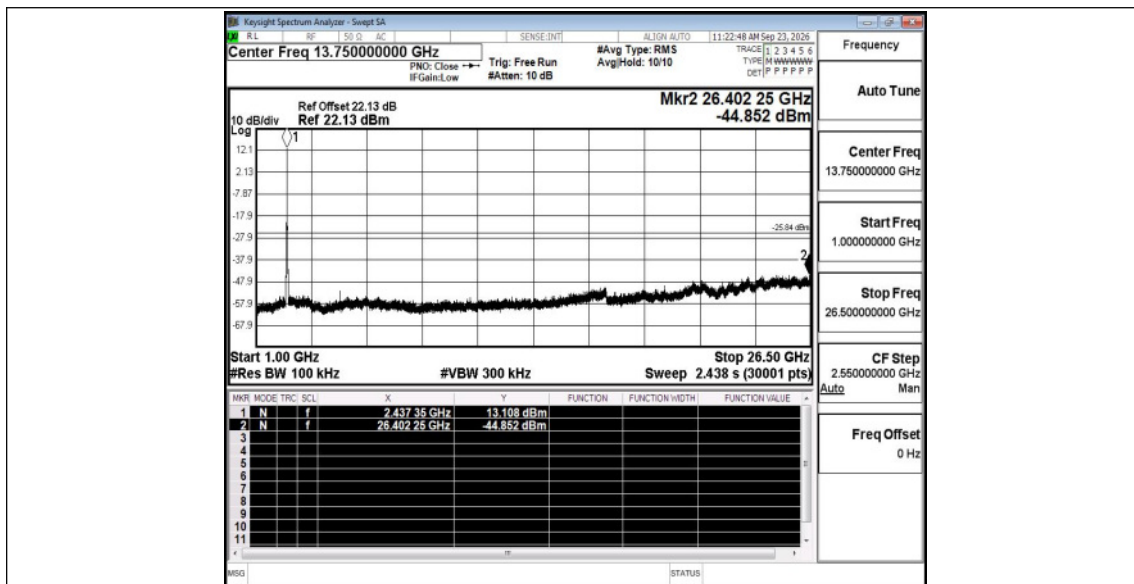
11G_Ant1_2437_0~Reference



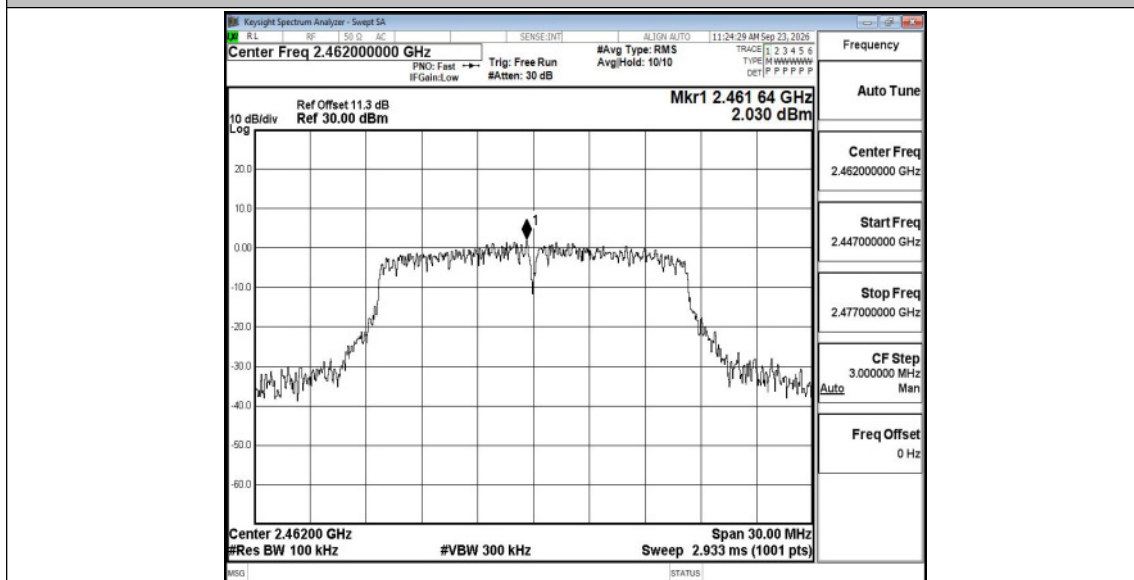
11G_Ant1_2437_30~1000



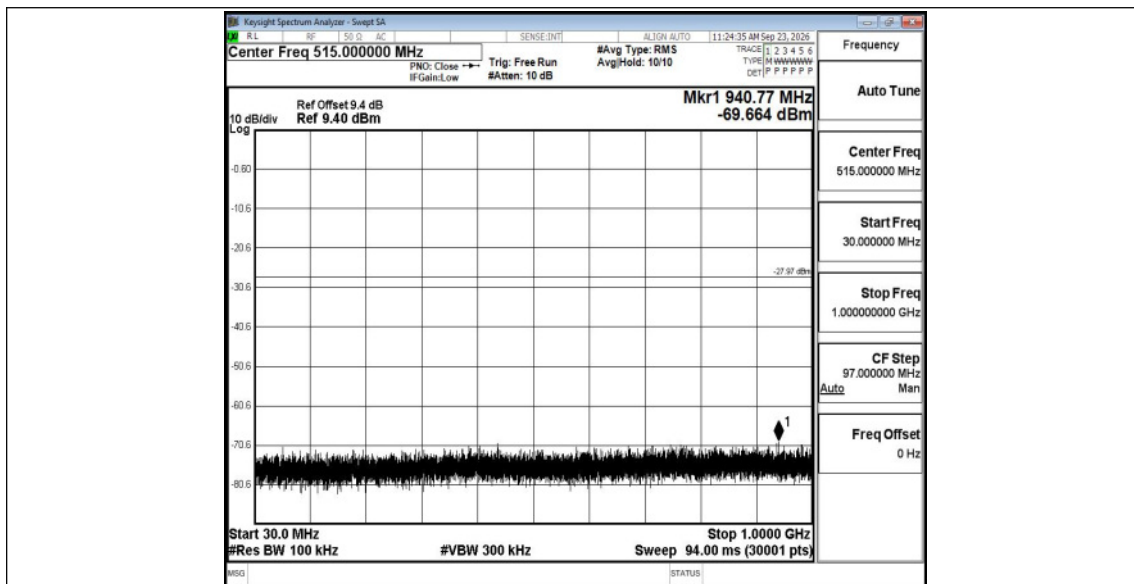
11G_Ant1_2437_1000~26500



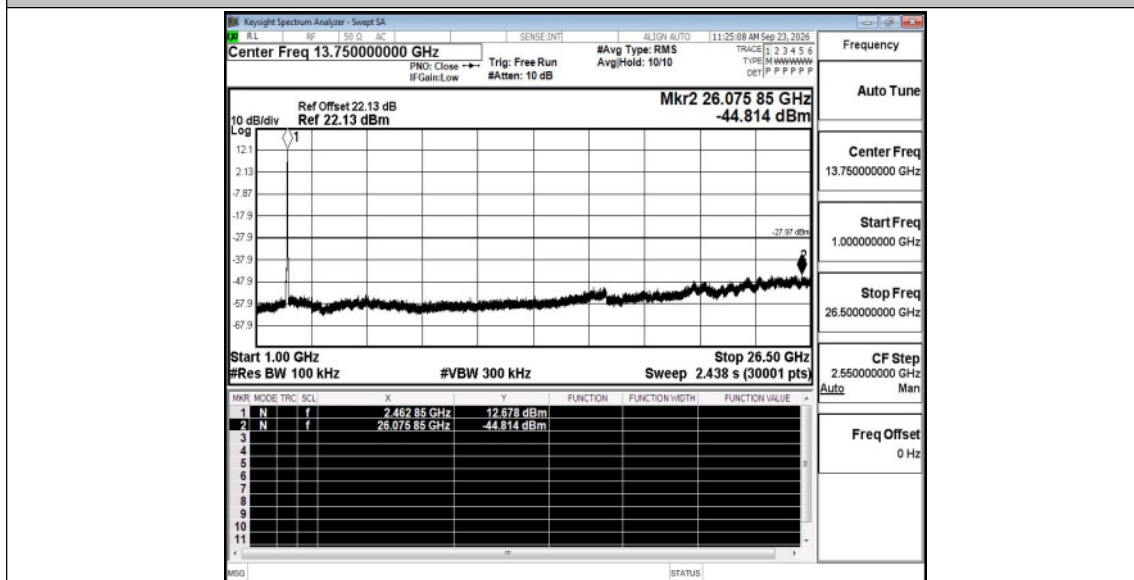
11G_Ant1_2462_0~Reference



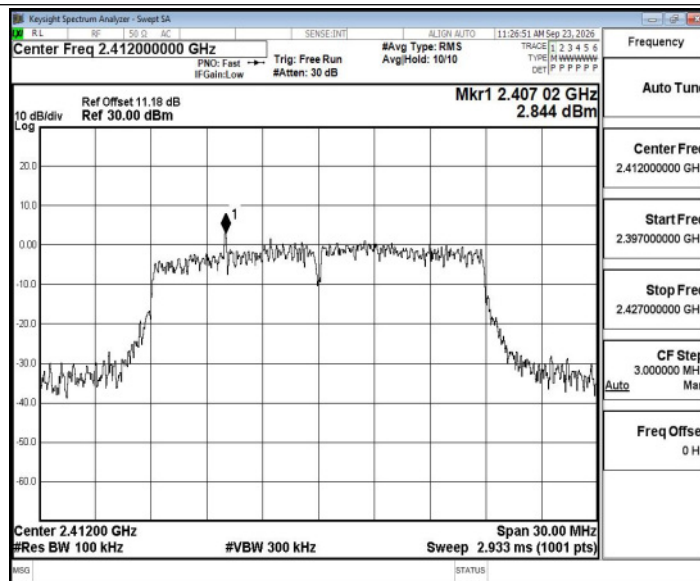
11G_Ant1_2462_30~1000



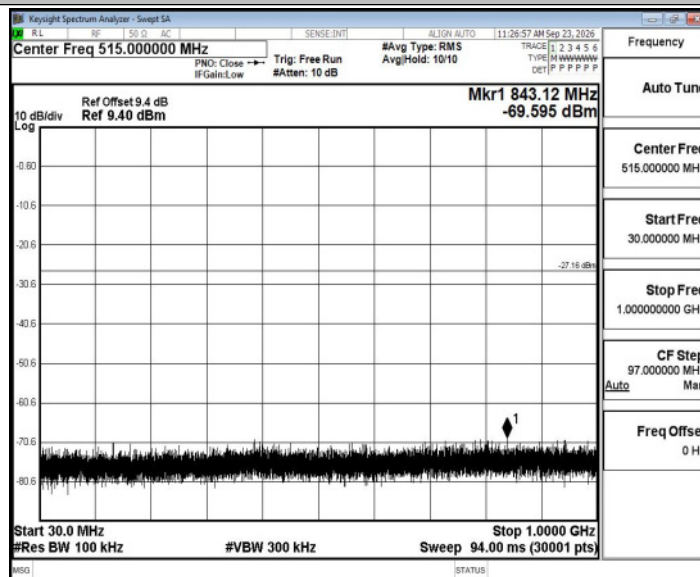
11G_Ant1_2462_1000~26500



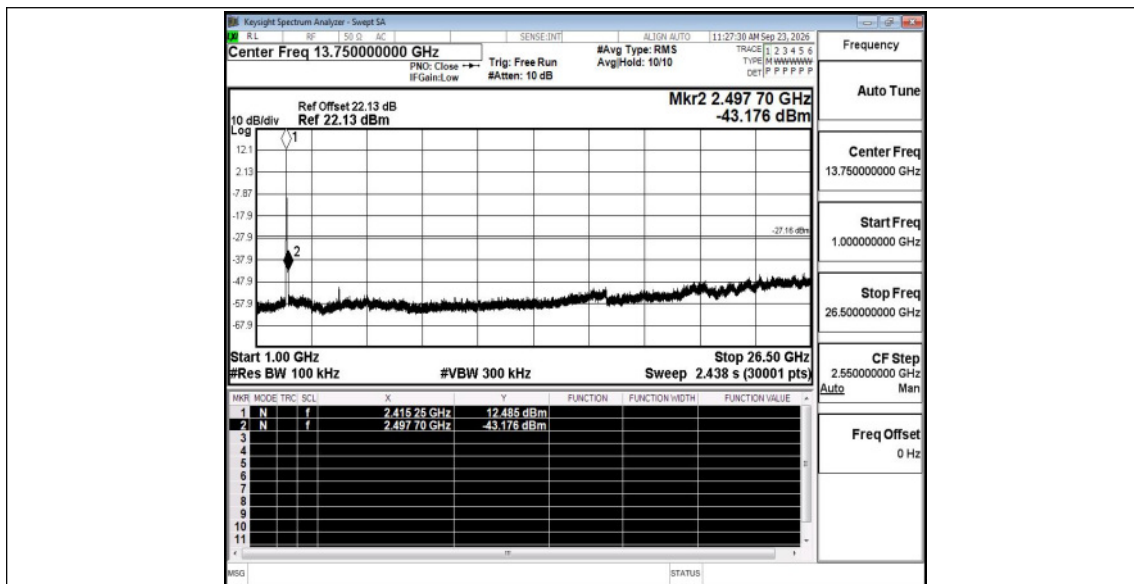
11N20SISO_Ant1_2412_0~Reference



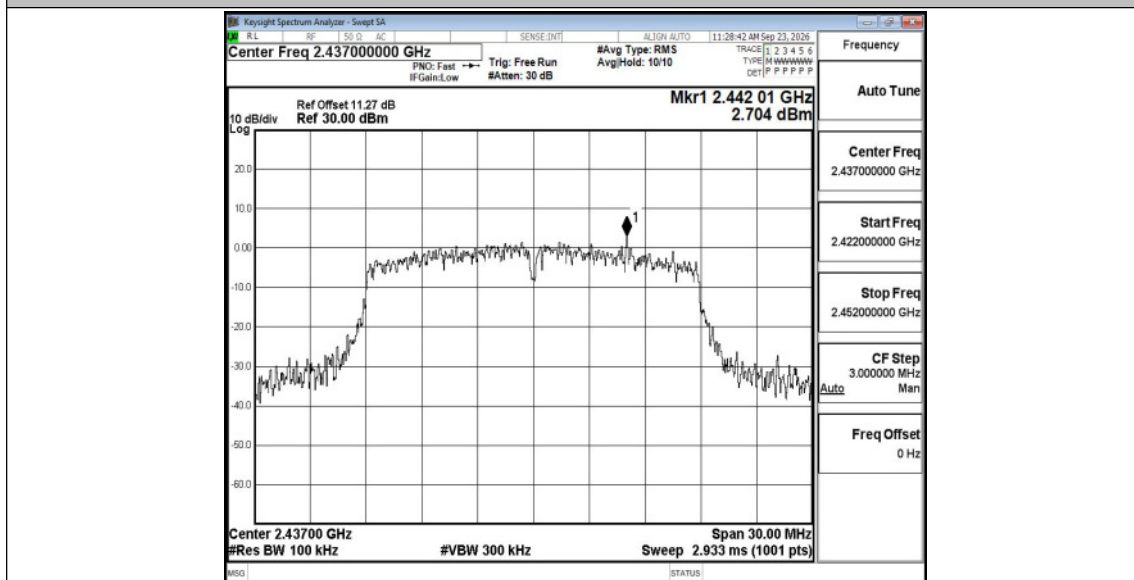
11N20SISO_Ant1_2412_30~1000



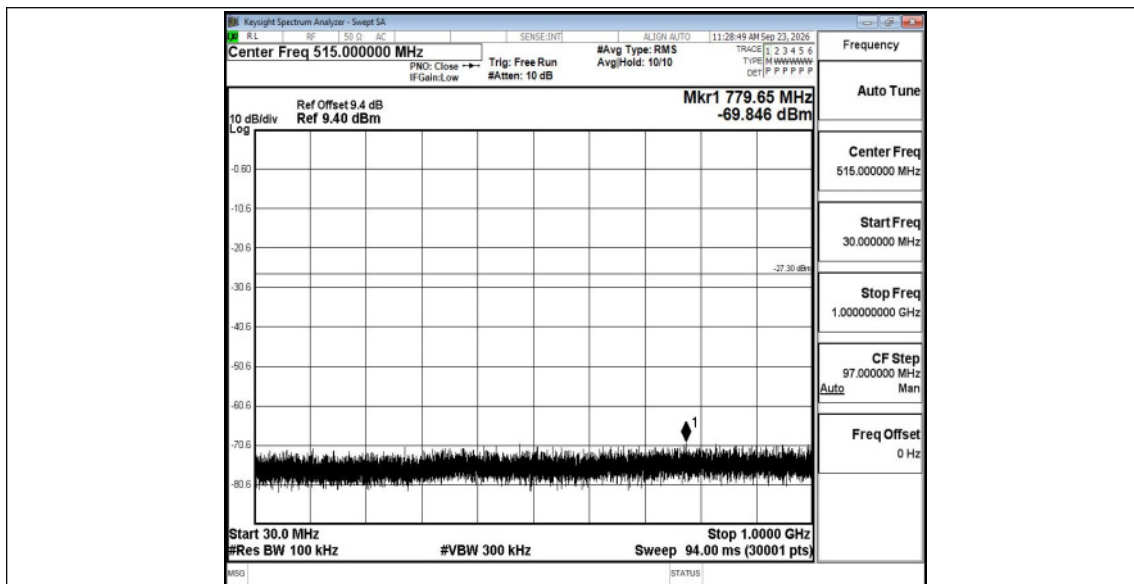
11N20SISO_Ant1_2412_1000~26500



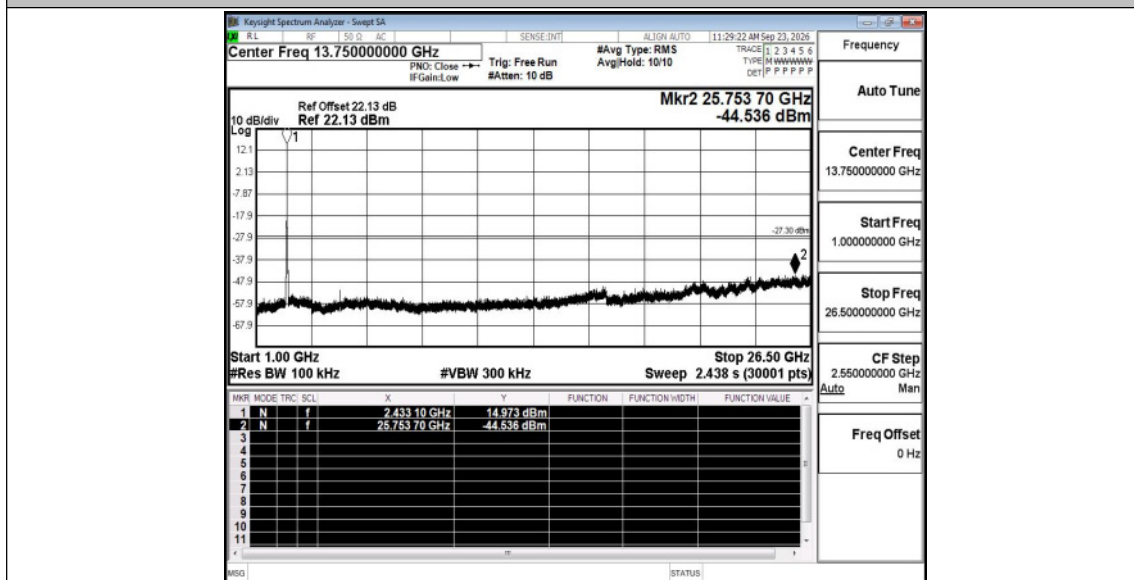
11N20SISO_Ant1_2437_0~Reference



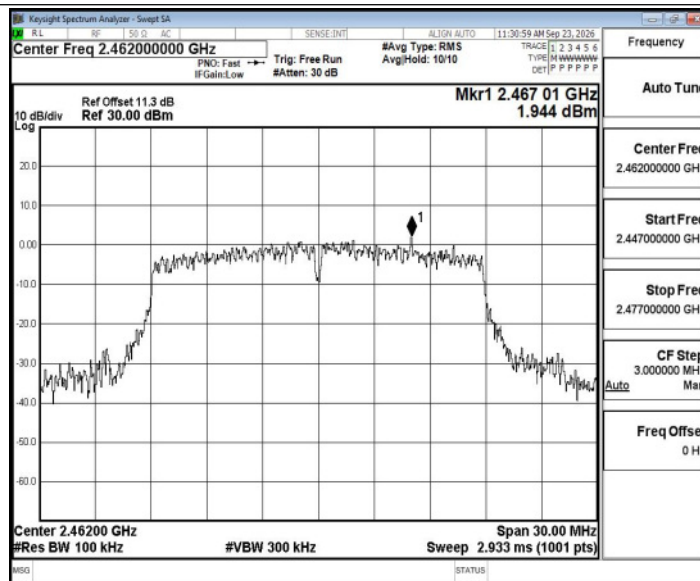
11N20SISO_Ant1_2437_30~1000



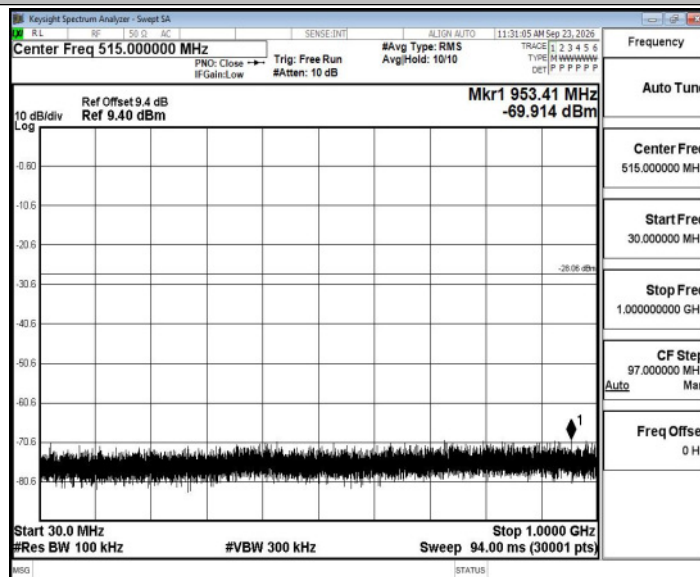
11N20SISO_Ant1_2437_1000~26500



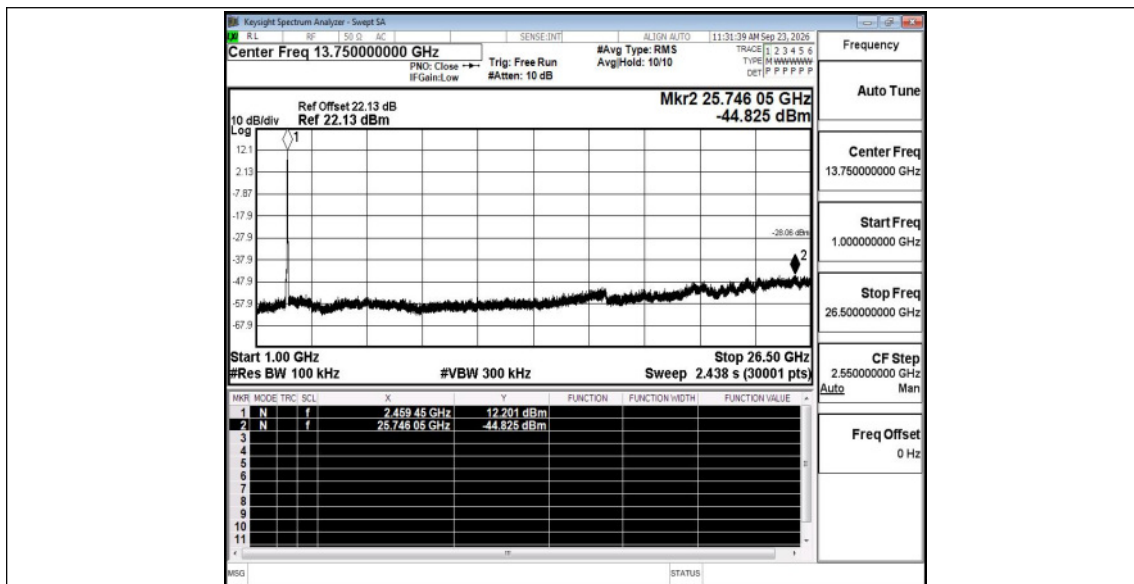
11N20SISO_Ant1_2462_0~Reference



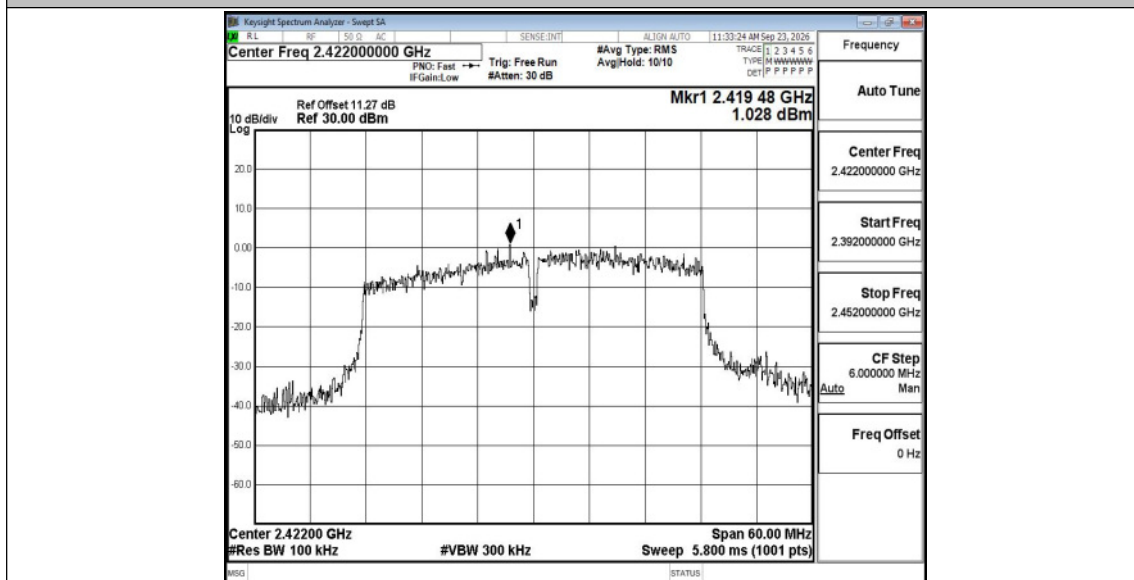
11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



11N40SISO_Ant1_2422_0~Reference



11N40SISO_Ant1_2422_30~1000