

Appendix B

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Portable Wireless Display Monitor

Test Model: AUSTA-A9

Environmental Conditions

Temperature:	24.6°C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

B.1 DTS Bandwidth

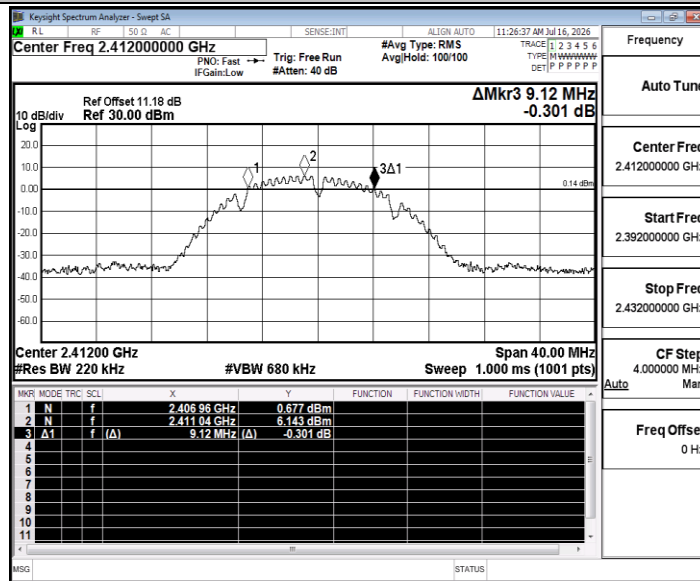
Test Result

TestMode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	9.120	2406.960	2416.080	0.5	PASS
		2437	9.600	2432.480	2442.080	0.5	PASS
		2462	9.120	2456.920	2466.040	0.5	PASS
11G	Ant1	2412	15.320	2403.840	2419.160	0.5	PASS
		2437	16.200	2429.040	2445.240	0.5	PASS
		2462	14.600	2453.840	2468.440	0.5	PASS
11N20SISO	Ant1	2412	15.160	2403.240	2418.400	0.5	PASS
		2437	17.400	2428.440	2445.840	0.5	PASS
		2462	15.240	2453.240	2468.480	0.5	PASS
11N40SISO	Ant1	2422	34.880	2403.840	2438.720	0.5	PASS
		2437	36.000	2419.320	2455.320	0.5	PASS
		2452	26.160	2438.880	2465.040	0.5	PASS

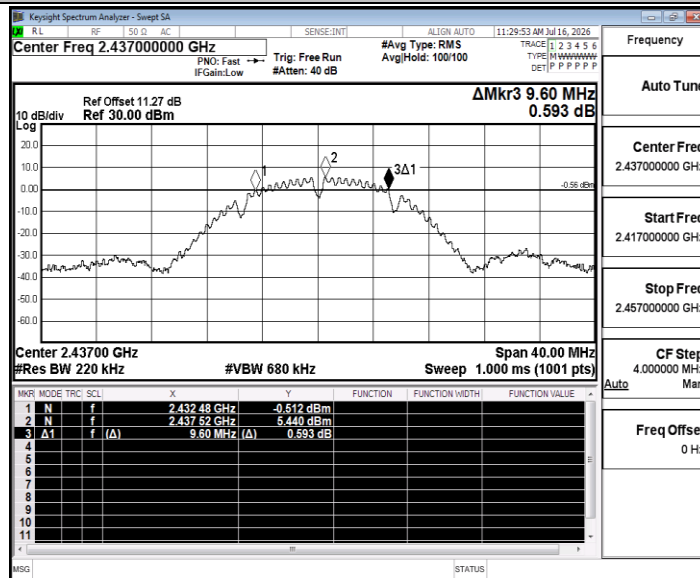
Note: offset=System attenuation +cabal loss

Test Graphs

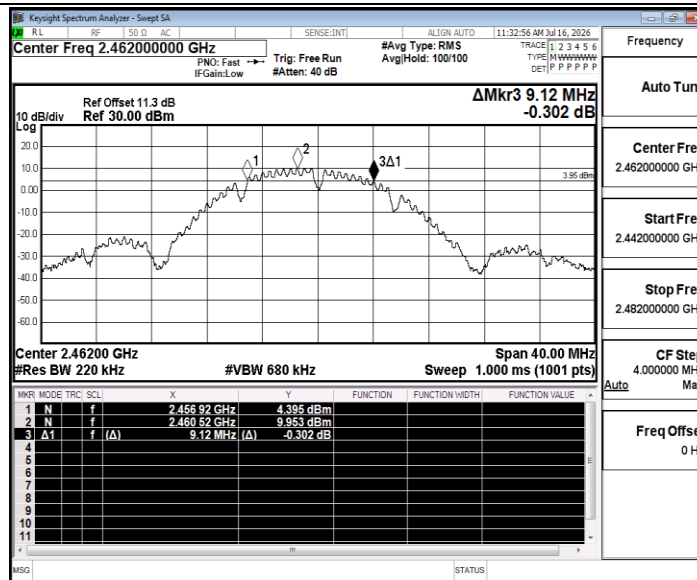
11B_Ant1_2412



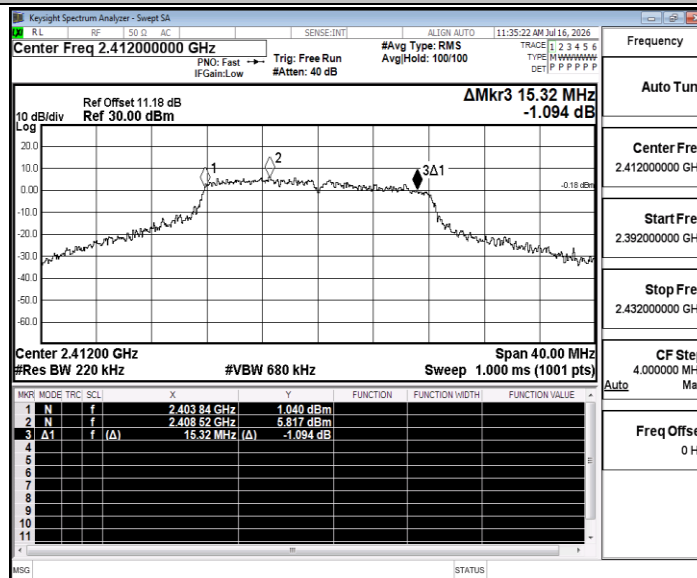
11B_Ant1_2437



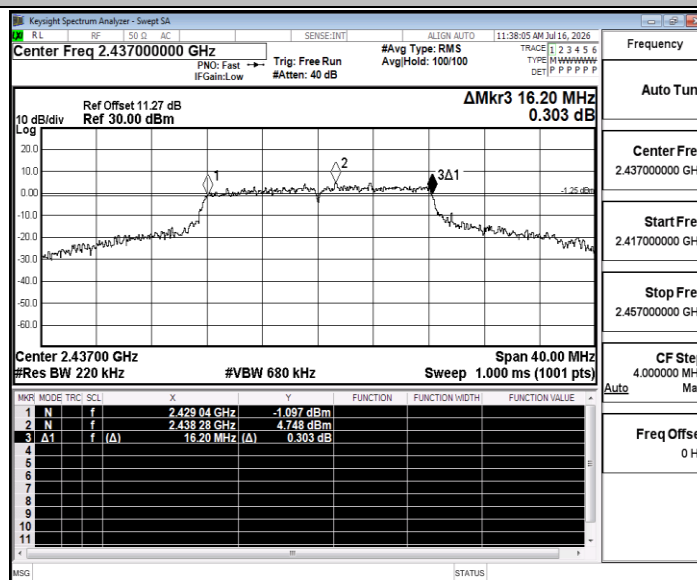
11B_Ant1_2462



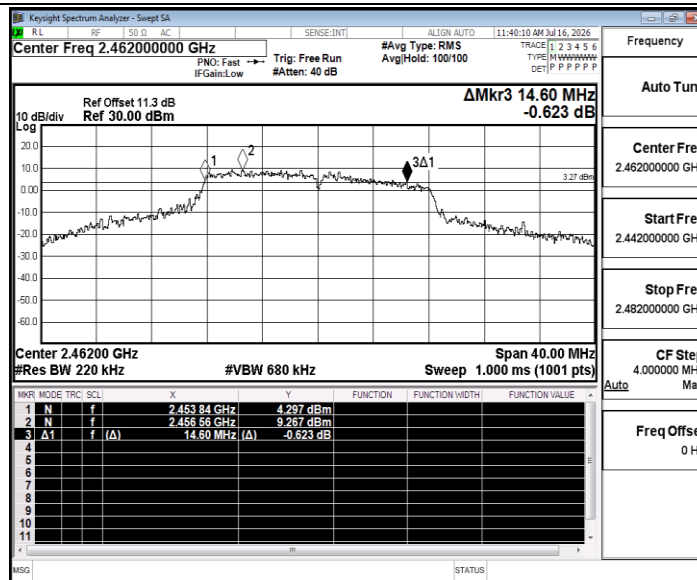
11G_Ant1_2412



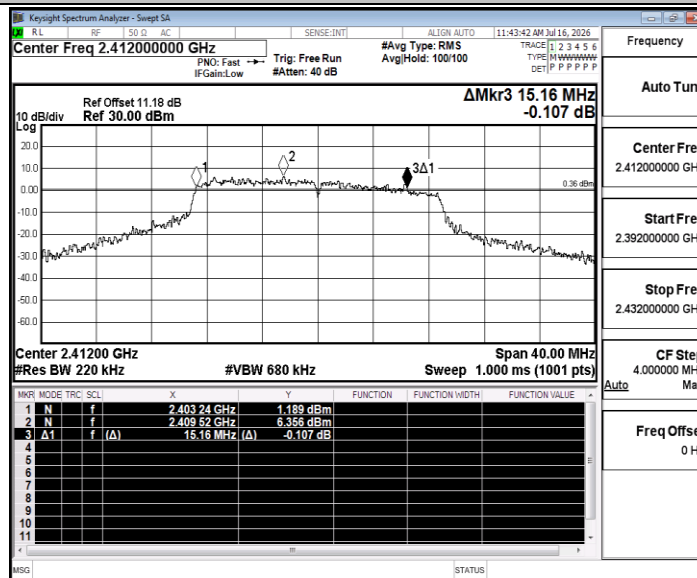
11G_Ant1_2437



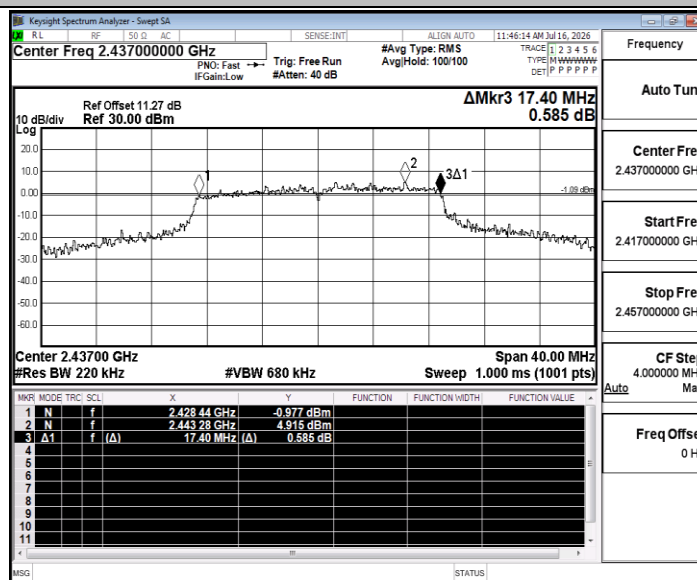
11G_Ant1_2462



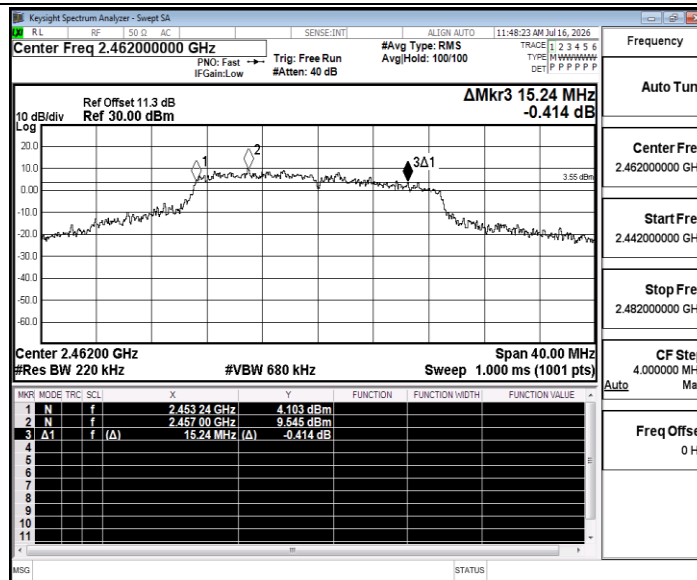
11N20SISO_Ant1_2412



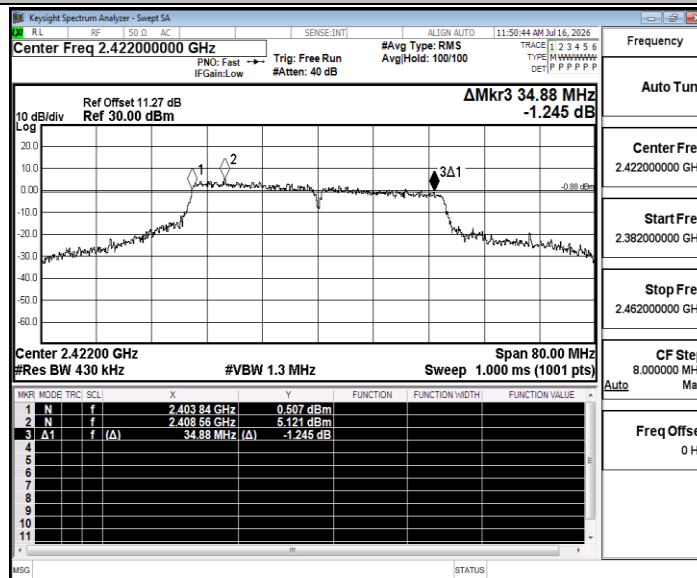
11N20SISO_Ant1_2437



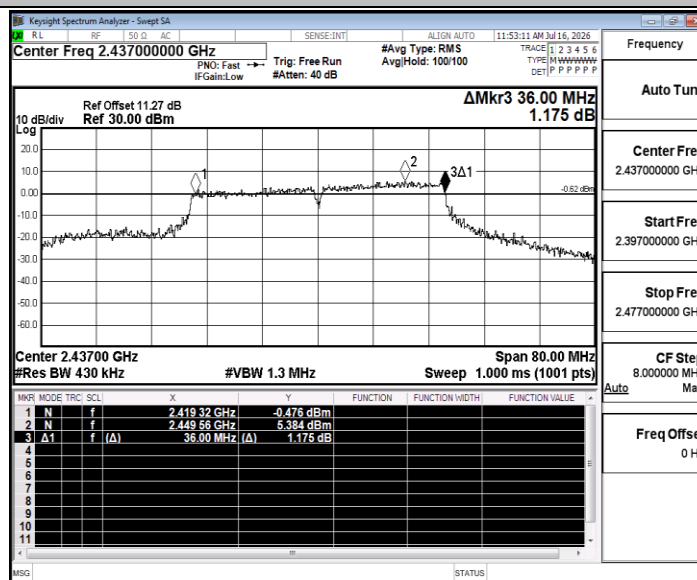
11N20SISO_Ant1_2462



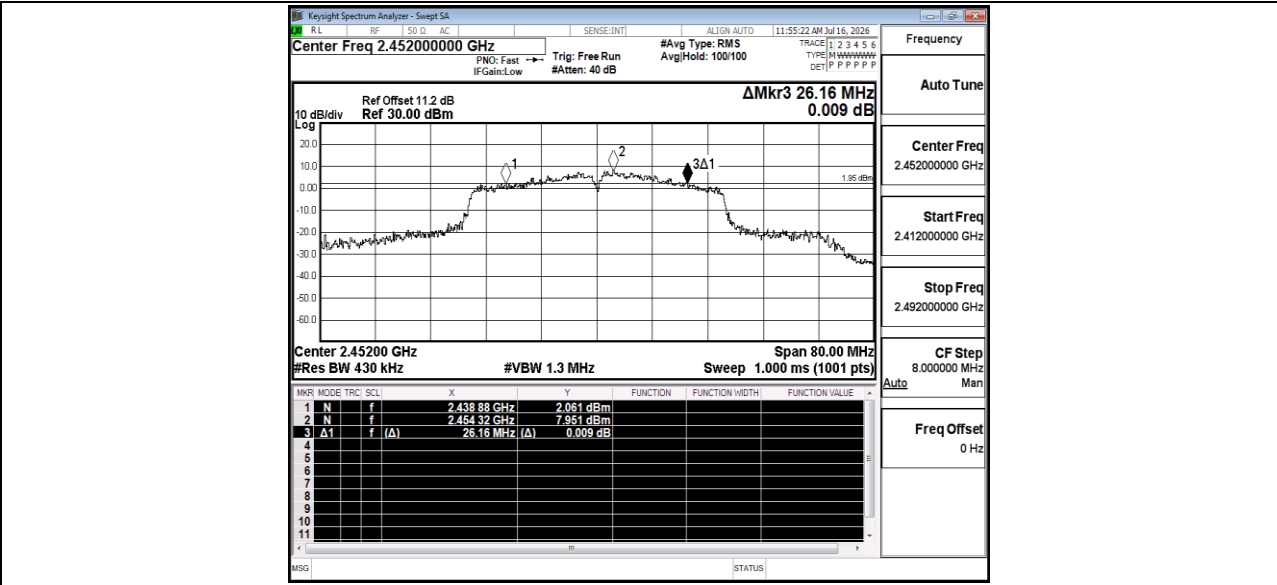
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



B.2 Maximum 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	12.87	0.5	13.37	≤30.00	PASS
		2437	12.15	1.66	13.81	≤30.00	PASS
		2462	12.53	0.5	13.03	≤30.00	PASS
11G	Ant1	2412	10.99	2.41	13.4	≤30.00	PASS
		2437	11.72	2.41	14.13	≤30.00	PASS
		2462	10.74	2.4	13.14	≤30.00	PASS
11N20SISO	Ant1	2412	10.58	2.52	13.1	≤30.00	PASS
		2437	11.4	2.53	13.93	≤30.00	PASS
		2462	11.56	2.53	14.09	≤30.00	PASS
11N40SISO	Ant1	2422	9.79	4.1	13.89	≤30.00	PASS
		2437	9.18	4.1	13.28	≤30.00	PASS
		2452	10.31	4.1	14.41	≤30.00	PASS

Note: offset=System attenuation +cabal loss

B.3 Maximum power spectral density

Test Result

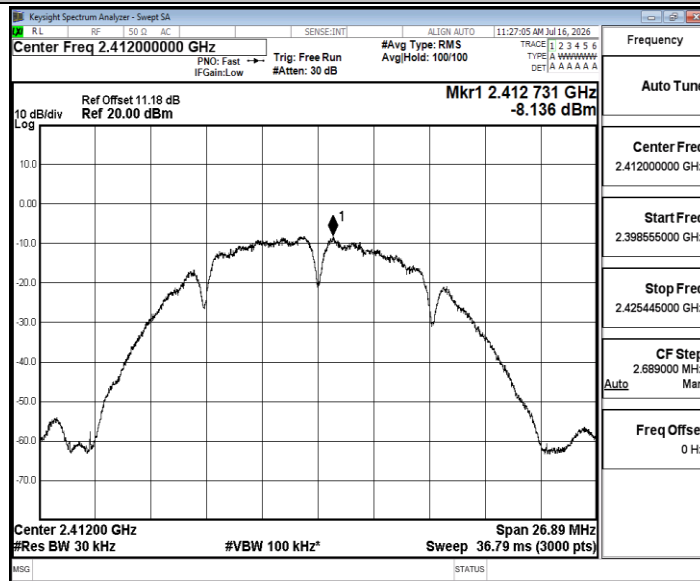
TestMode	Antenna	Frequency [MHz]	Measured PSD [dBm/30kHz]	DC Factor [dB]	Result [dBm/30kHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-8.14	0.5	-7.64	-17.64	≤8.00	PASS
		2437	-8.36	1.66	-6.7	-16.7	≤8.00	PASS
		2462	-7.9	0.5	-7.4	-17.4	≤8.00	PASS
11G	Ant1	2412	-12.55	2.41	-10.14	-20.14	≤8.00	PASS
		2437	-11.66	2.41	-9.25	-19.25	≤8.00	PASS
		2462	-11.59	2.4	-9.19	-19.19	≤8.00	PASS
11N20SISO	Ant1	2412	-12.81	2.52	-10.29	-20.29	≤8.00	PASS
		2437	-12.42	2.53	-9.89	-19.89	≤8.00	PASS
		2462	-11.37	2.53	-8.84	-18.84	≤8.00	PASS
11N40SISO	Ant1	2422	-15.48	4.1	-11.38	-21.38	≤8.00	PASS
		2437	-16.83	4.1	-12.73	-22.73	≤8.00	PASS
		2452	-14.66	4.1	-10.56	-20.56	≤8.00	PASS

Note: offset=System attenuation +cable loss

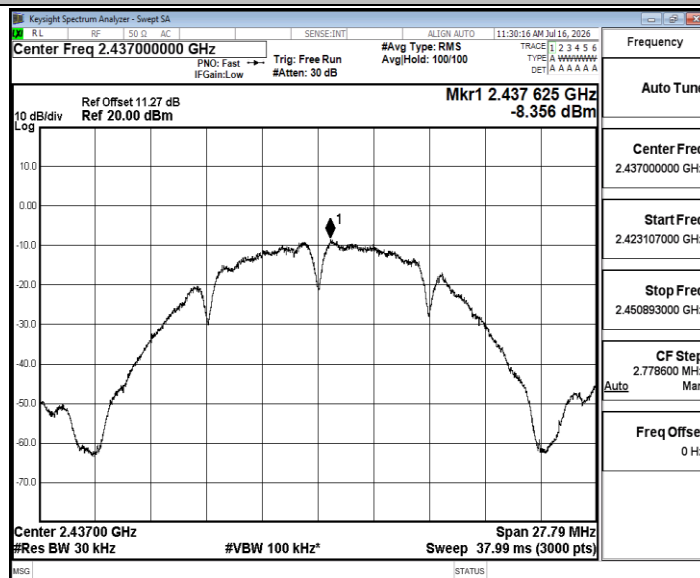
Result[dBm/3kHz]=Result[dBm/30kHz]+10*Log(3/30)

Test Graphs

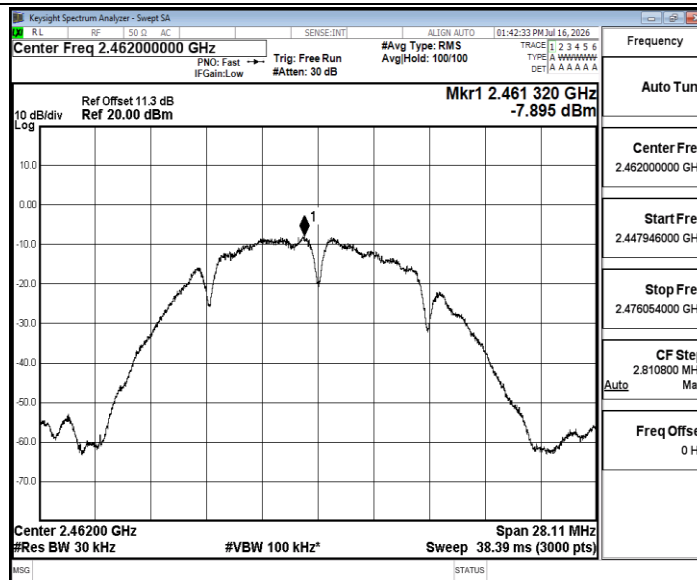
11B_Ant1_2412



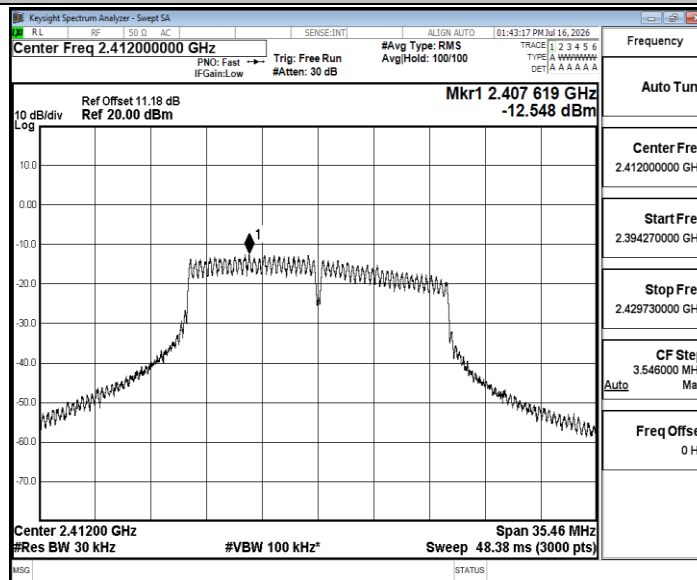
11B_Ant1_2437



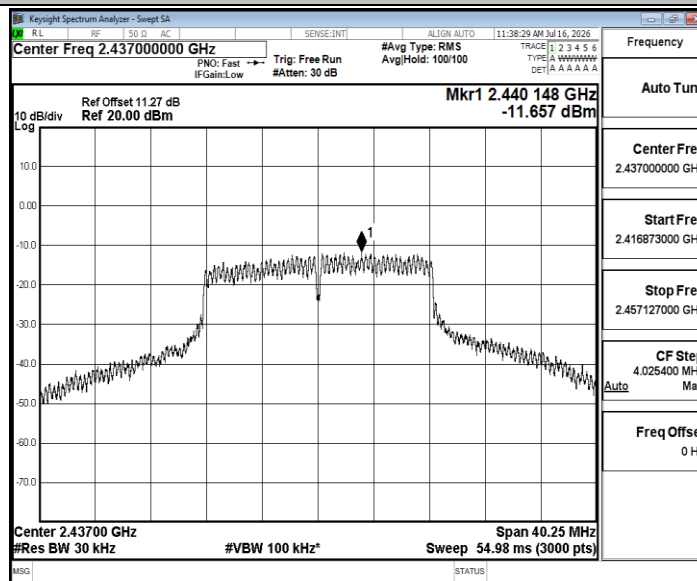
11B_Ant1_2462



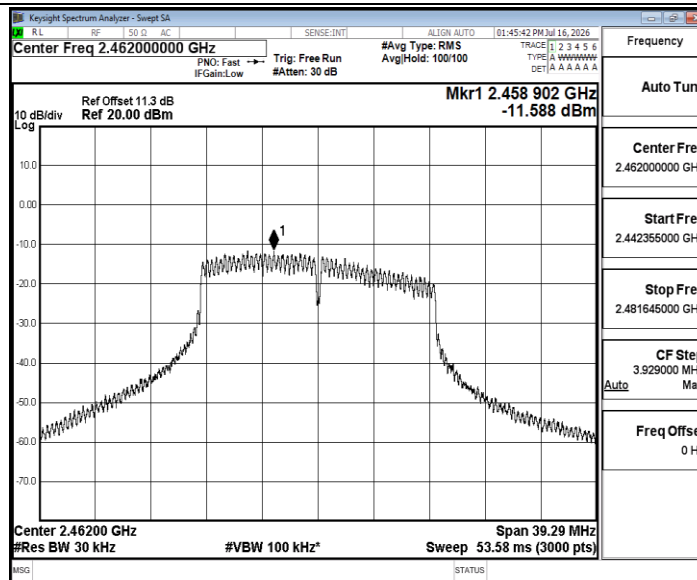
11G_Ant1_2412



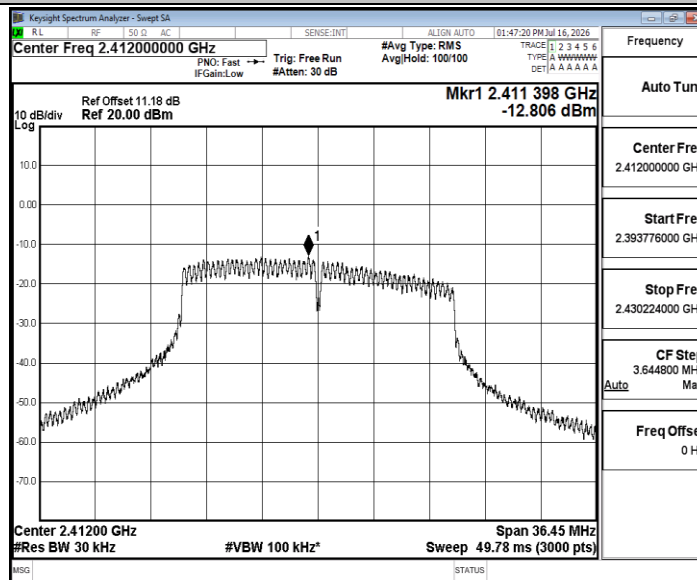
11G_Ant1_2437



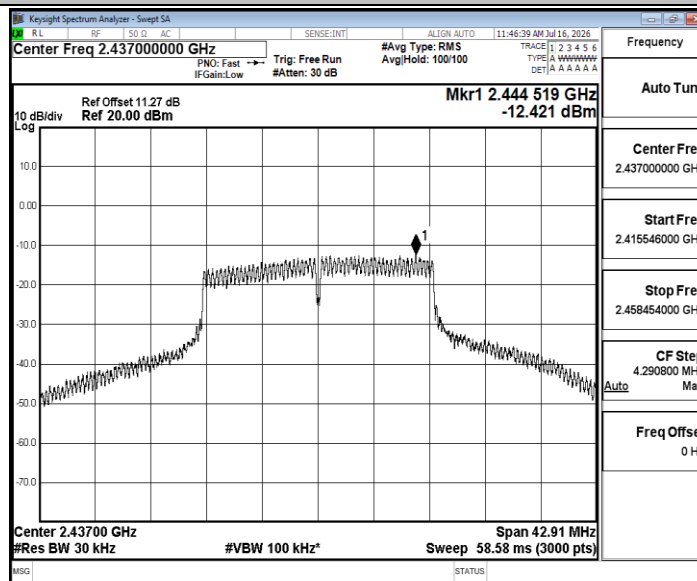
11G_Ant1_2462



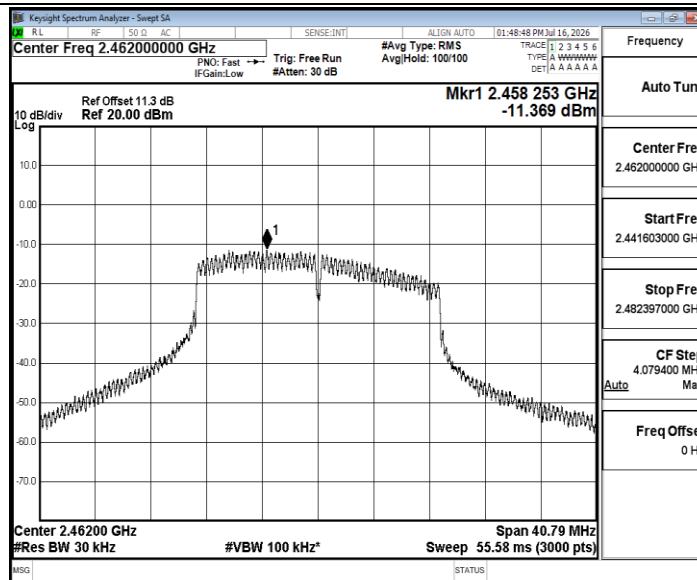
11N20SISO_Ant1_2412



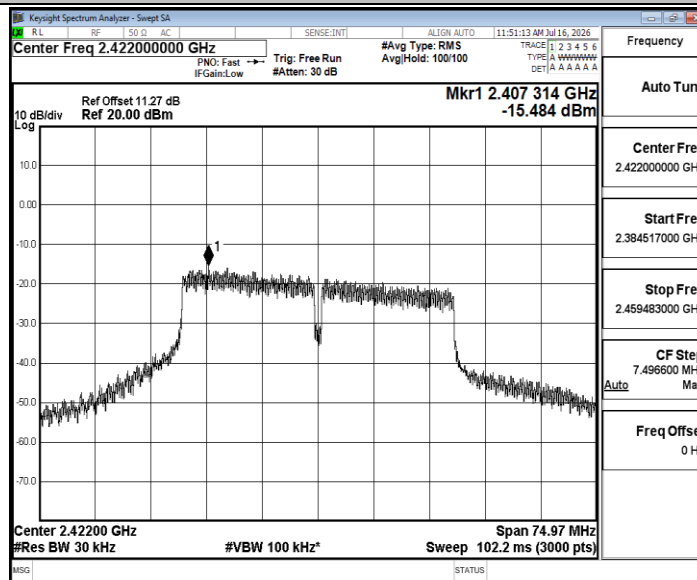
11N20SISO_Ant1_2437



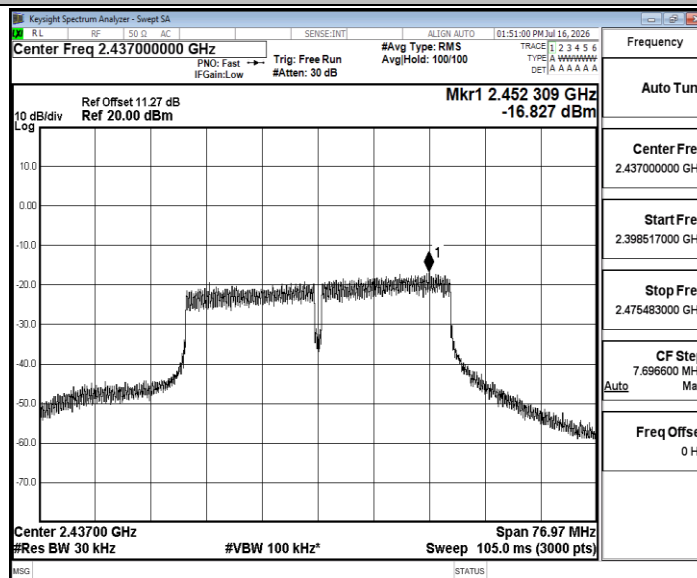
11N20SISO_Ant1_2462



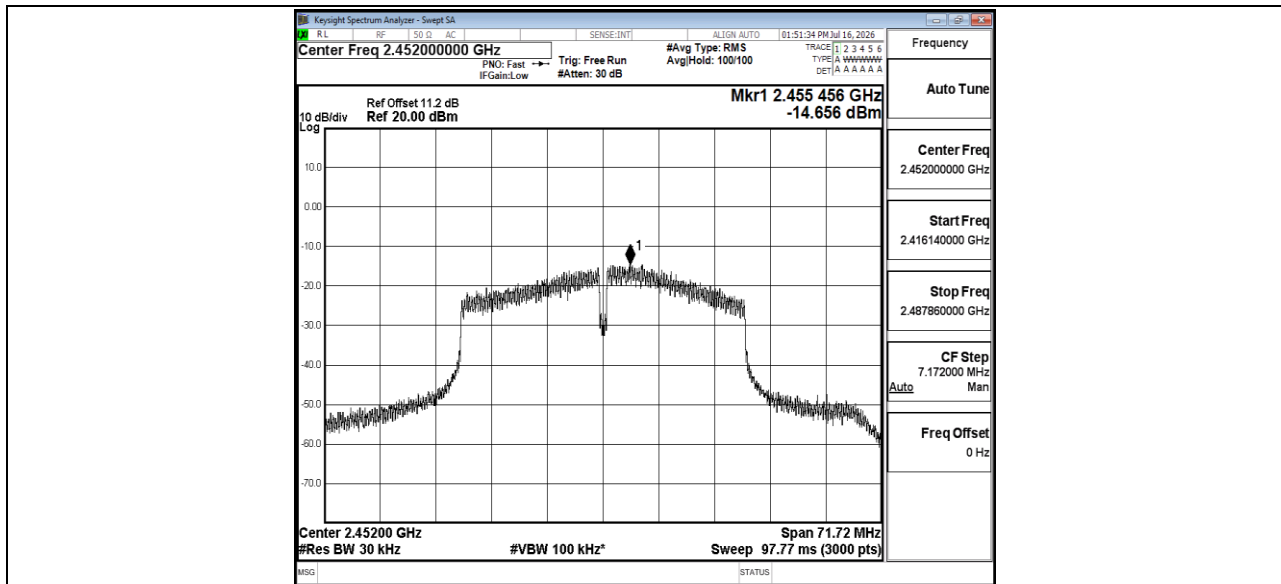
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



B.4 Band edge measurements

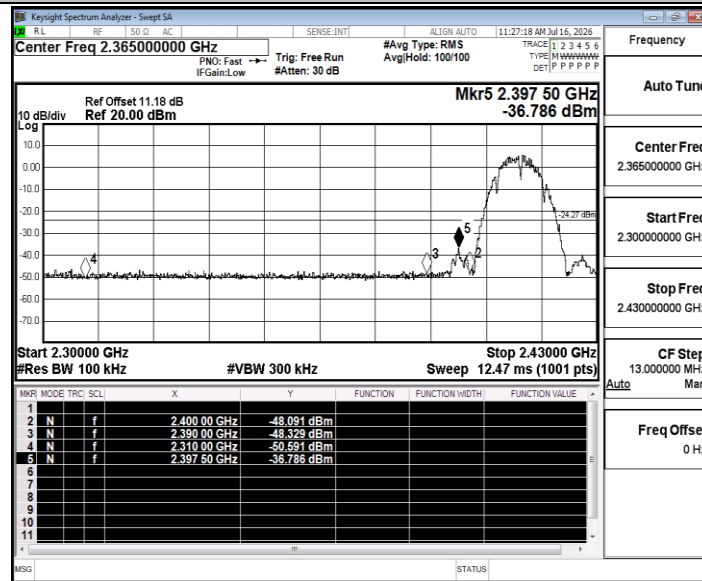
Test Result

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.73	-36.79	≤-24.27	PASS
		High	2462	9.26	-46.01	≤-20.74	PASS
11G	Ant1	Low	2412	4.74	-34.68	≤-25.26	PASS
		High	2462	8.61	-27.65	≤-21.39	PASS
11N20SISO	Ant1	Low	2412	5.03	-29.6	≤-24.97	PASS
		High	2462	8.92	-25.1	≤-21.08	PASS
11N40SISO	Ant1	Low	2422	1.49	-35.2	≤-28.51	PASS
		High	2452	4.94	-48.34	≤-25.06	PASS

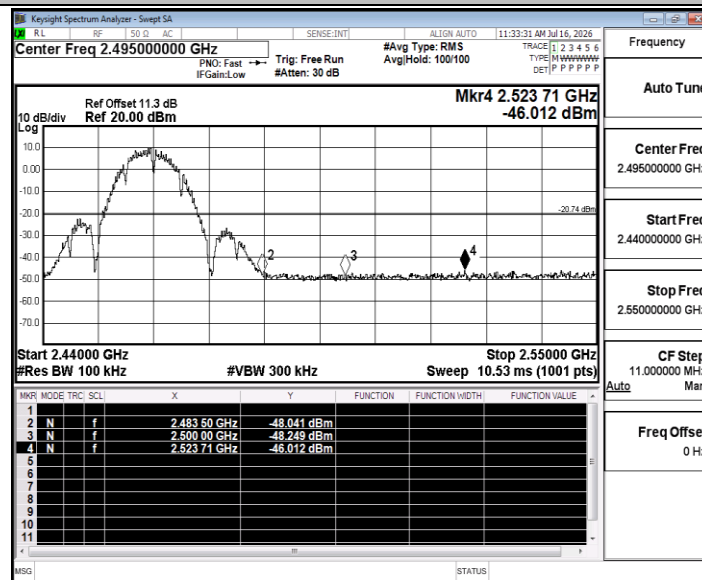
Note: offset=System attenuation +cabal loss

Test Graphs

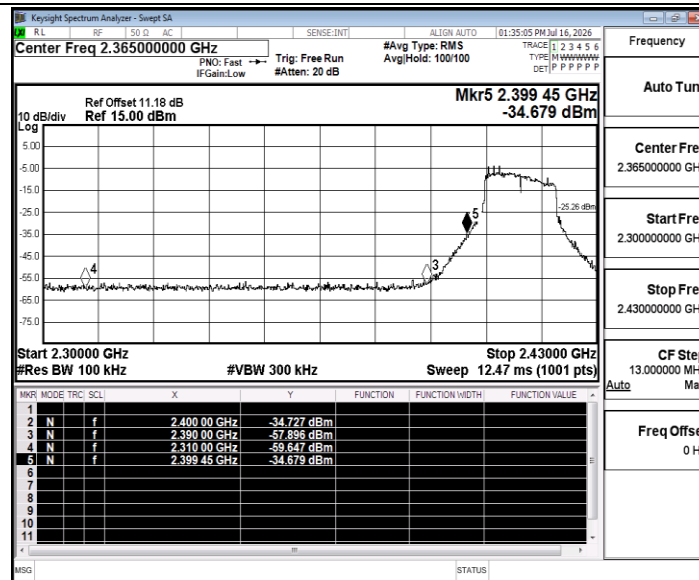
11B_Ant1_Low_2412



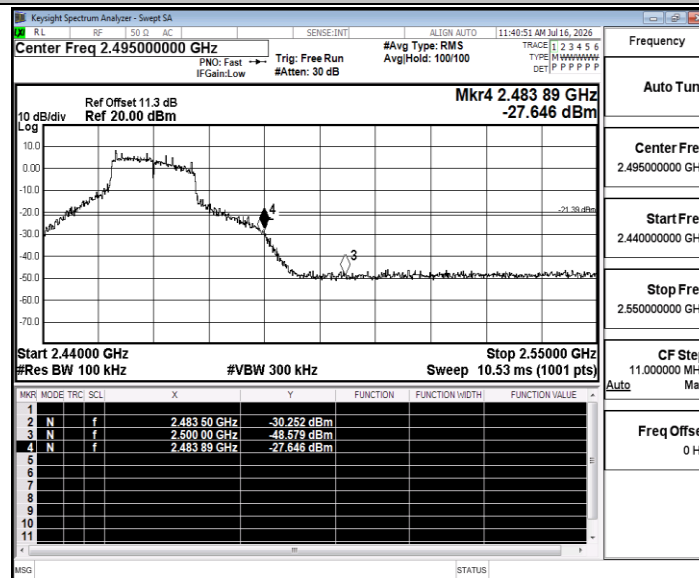
11B_Ant1_High_2462



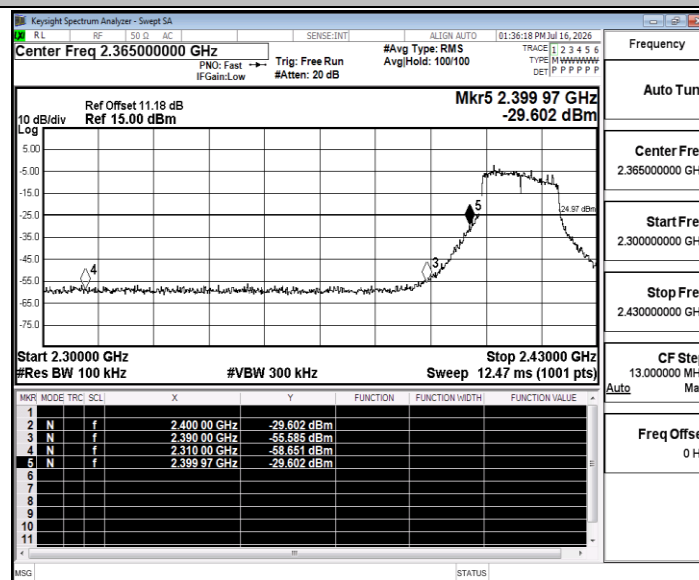
11G_Ant1_Low_2412



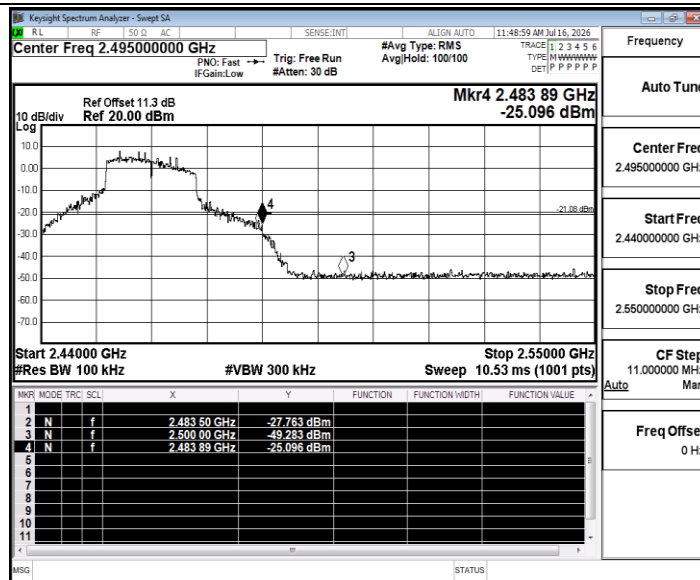
11G_Ant1_High_2462



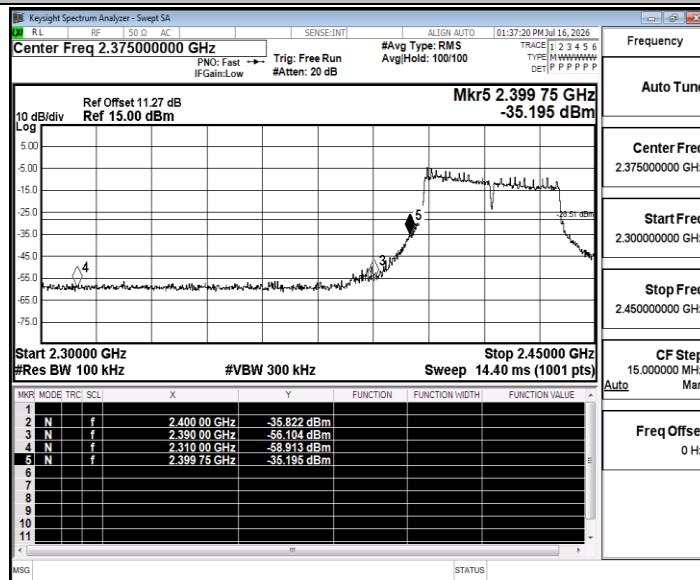
11N20SISO_Ant1_Low_2412



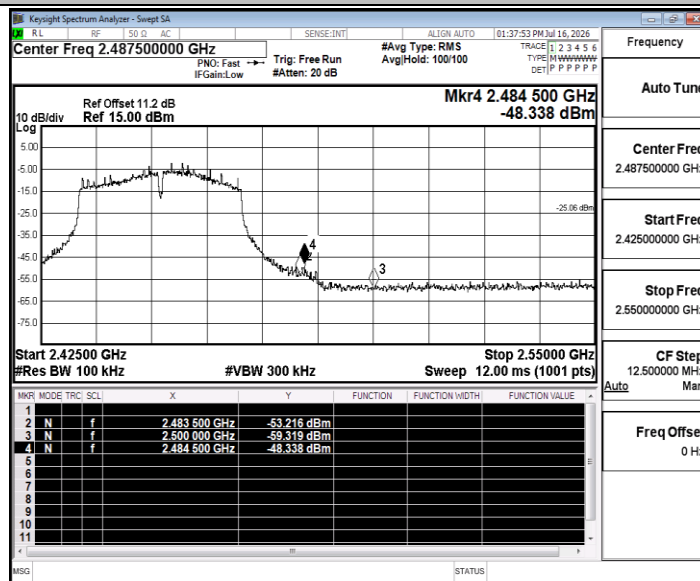
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

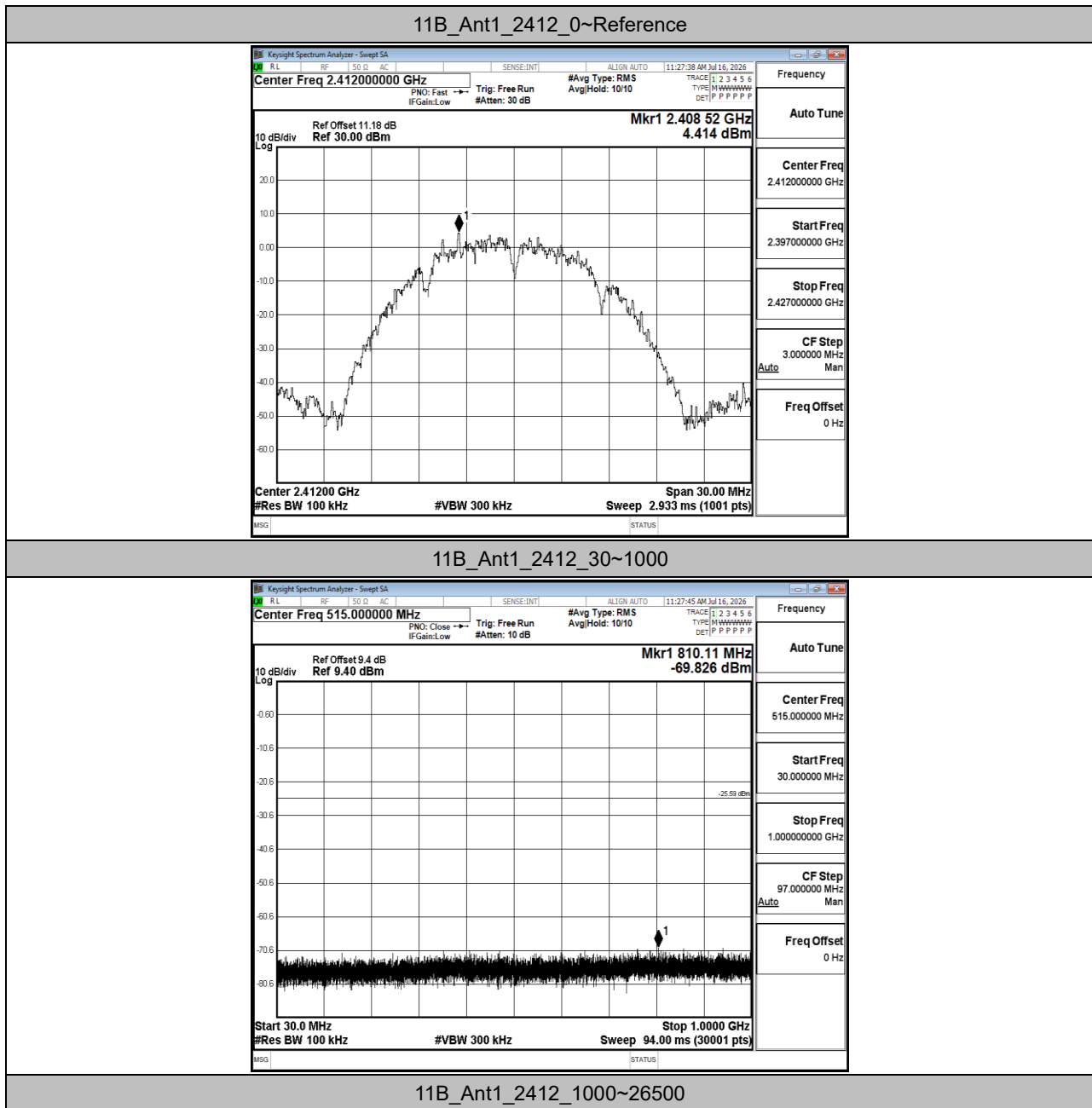


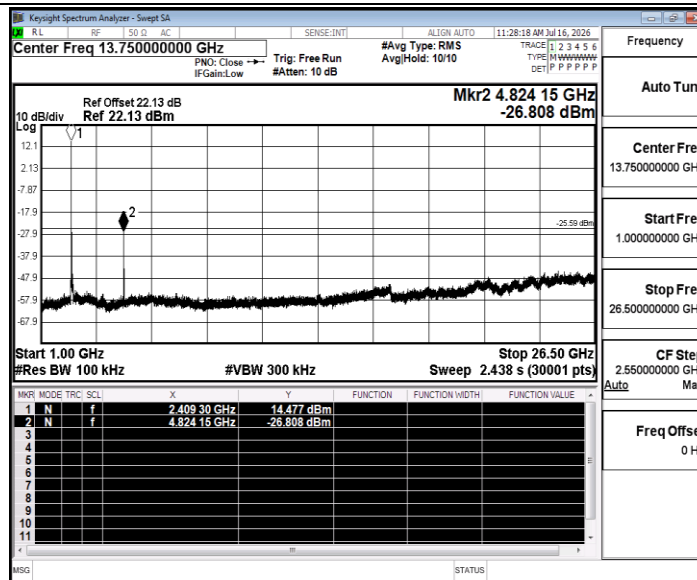
B.5 Conducted Spurious Emission

Test Result

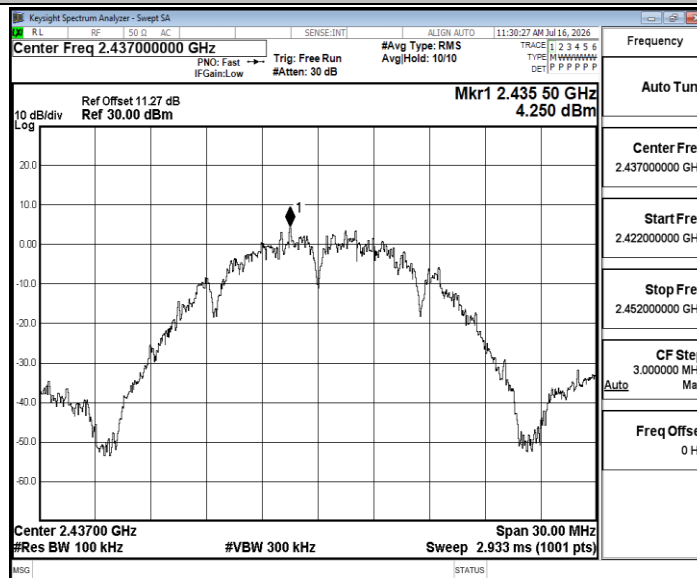
TestMode	Antenna	Frequency [MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.41	4.41	---	PASS
			30~1000	4.41	-69.83	≤-25.59	PASS
			1000~26500	4.41	-26.81	≤-25.59	PASS
		2437	Reference	4.25	4.25	---	PASS
			30~1000	4.25	-70.21	≤-25.75	PASS
			1000~26500	4.25	-26.48	≤-25.75	PASS
		2462	Reference	8.66	8.66	---	PASS
			30~1000	8.66	-69.9	≤-21.34	PASS
			1000~26500	8.66	-23.92	≤-21.34	PASS
11G	Ant1	2412	Reference	4.73	4.73	---	PASS
			30~1000	4.73	-70.36	≤-25.27	PASS
			1000~26500	4.73	-34.98	≤-25.27	PASS
		2437	Reference	0.05	0.05	---	PASS
			30~1000	0.05	-69.79	≤-29.95	PASS
			1000~26500	0.05	-36.34	≤-29.95	PASS
		2462	Reference	8.79	8.79	---	PASS
			30~1000	8.79	-69.2	≤-21.21	PASS
			1000~26500	8.79	-35.15	≤-21.21	PASS
11N20SISO	Ant1	2412	Reference	3.08	3.08	---	PASS
			30~1000	3.08	-69.98	≤-26.92	PASS
			1000~26500	3.08	-37.44	≤-26.92	PASS
		2437	Reference	3.25	3.25	---	PASS
			30~1000	3.25	-69.88	≤-26.75	PASS
			1000~26500	3.25	-36.81	≤-26.75	PASS
		2462	Reference	8.06	8.06	---	PASS
			30~1000	8.06	-69.53	≤-21.94	PASS
			1000~26500	8.06	-30.45	≤-21.94	PASS
11N40SISO	Ant1	2422	Reference	-1.85	-1.85	---	PASS
			30~1000	-1.85	-69.82	≤-31.85	PASS
			1000~26500	-1.85	-33.49	≤-31.85	PASS
		2437	Reference	-1.06	-1.06	---	PASS
			30~1000	-1.06	-68.96	≤-31.06	PASS
			1000~26500	-1.06	-38.03	≤-31.06	PASS
		2452	Reference	1.42	1.42	---	PASS
			30~1000	1.42	-68.3	≤-28.58	PASS
			1000~26500	1.42	-40.52	≤-28.58	PASS

Test Graphs

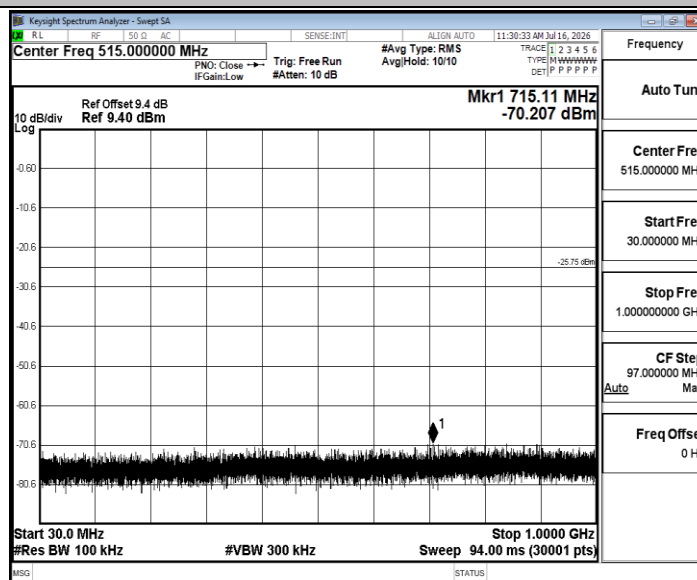




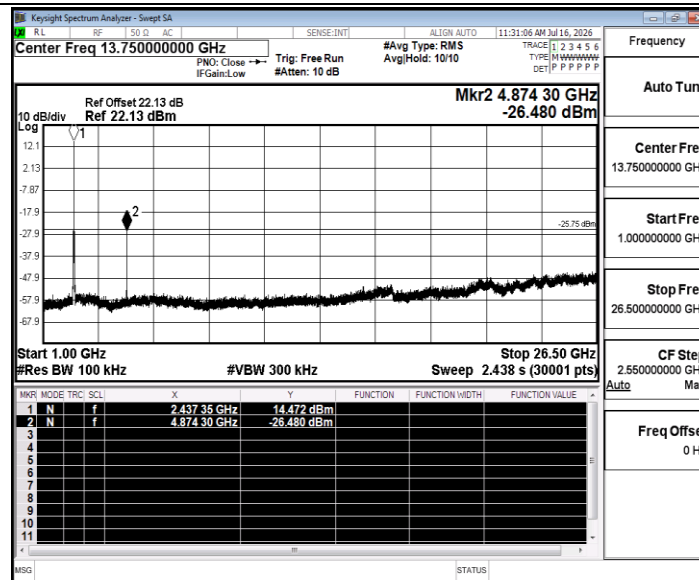
11B_Ant1_2437_0~Reference



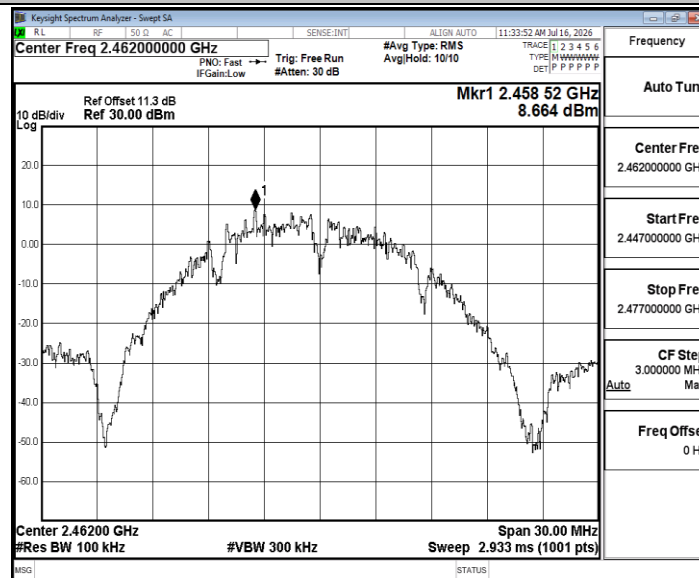
11B_Ant1_2437_30~1000



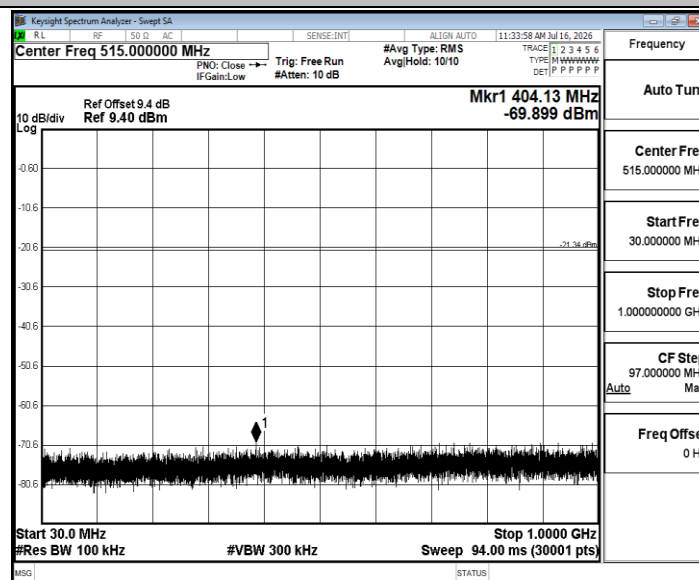
11B_Ant1_2437_1000~26500



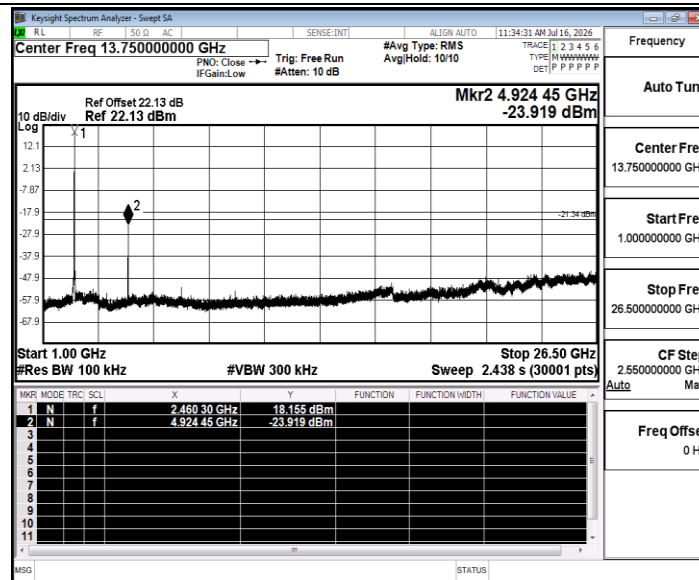
11B_Ant1_2462_0~Reference



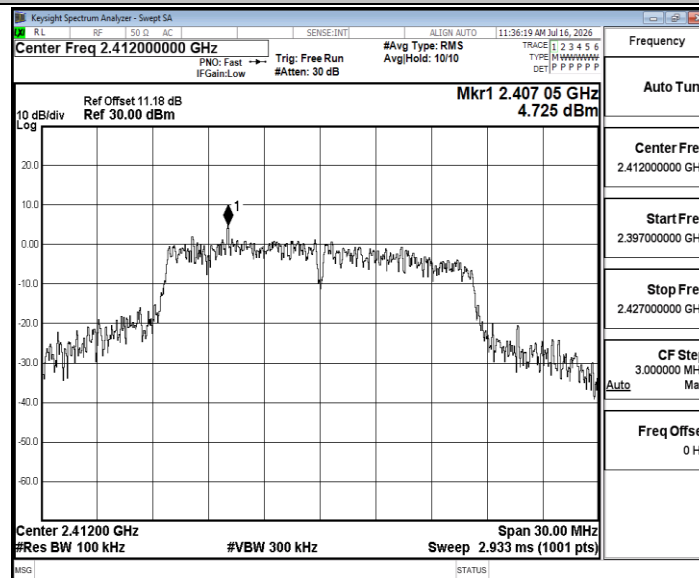
11B_Ant1_2462_30~1000



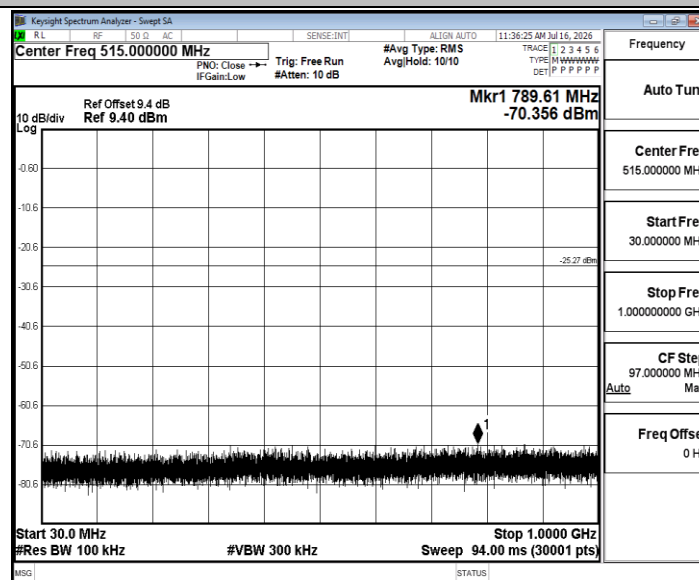
11B_Ant1_2462_1000~26500



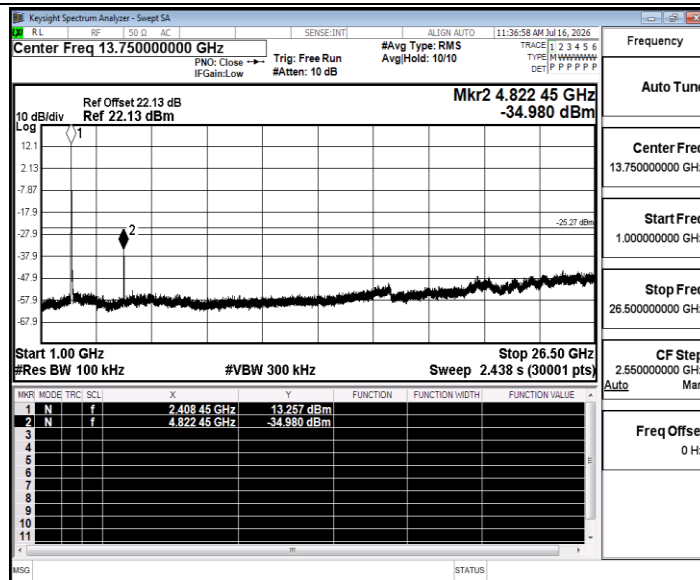
11G_Ant1_2412_0~Reference



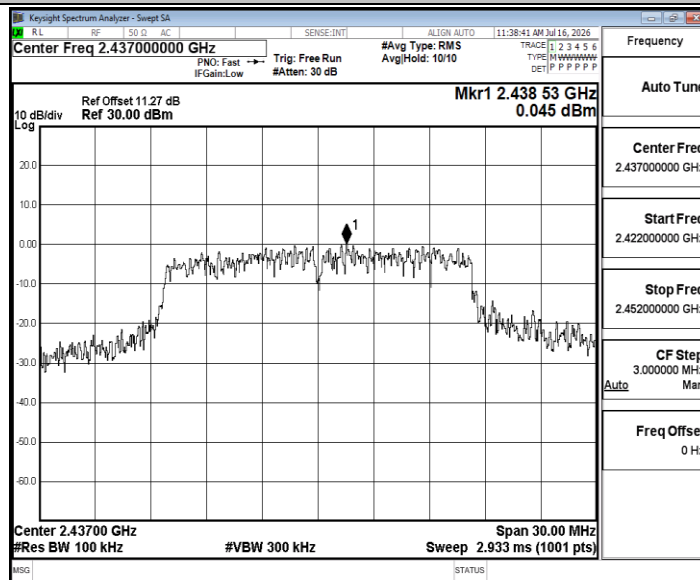
11G_Ant1_2412_30~1000



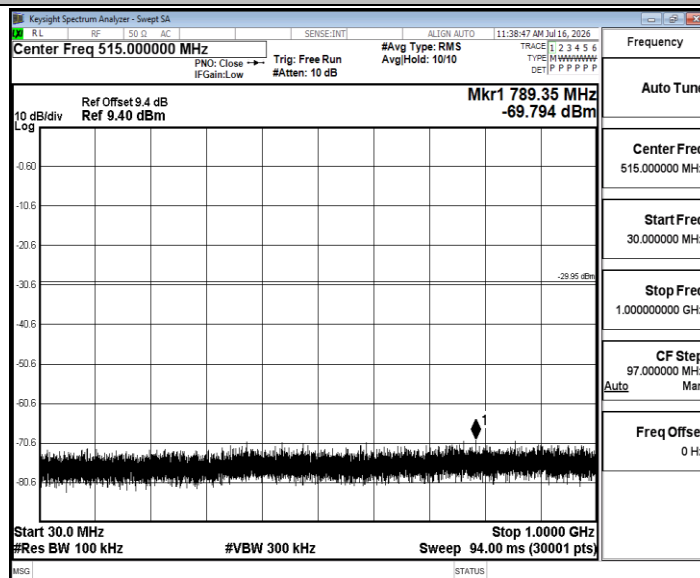
11G_Ant1_2412_1000~26500



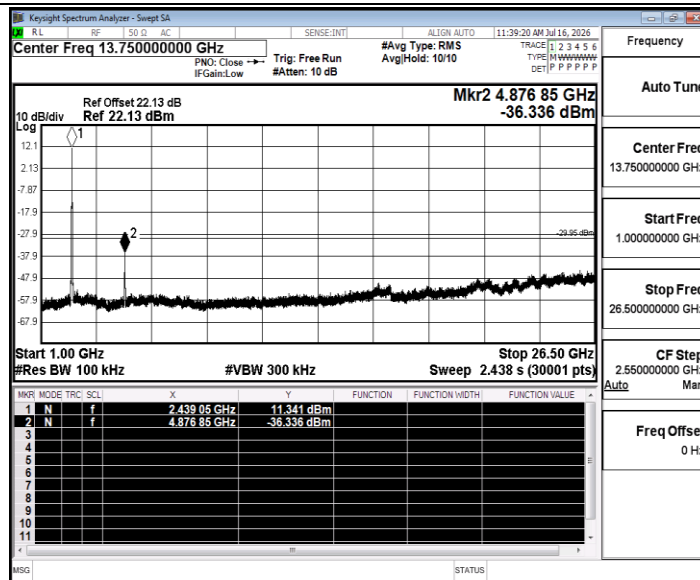
11G_Ant1_2437_0~Reference



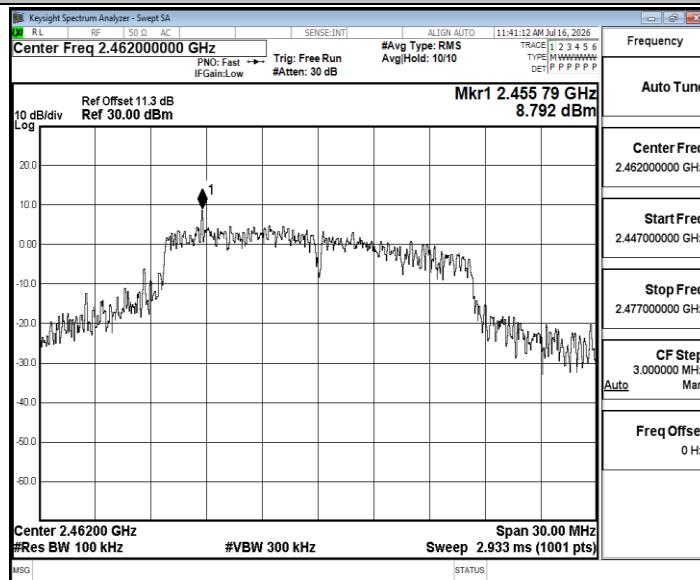
11G_Ant1_2437_30~1000



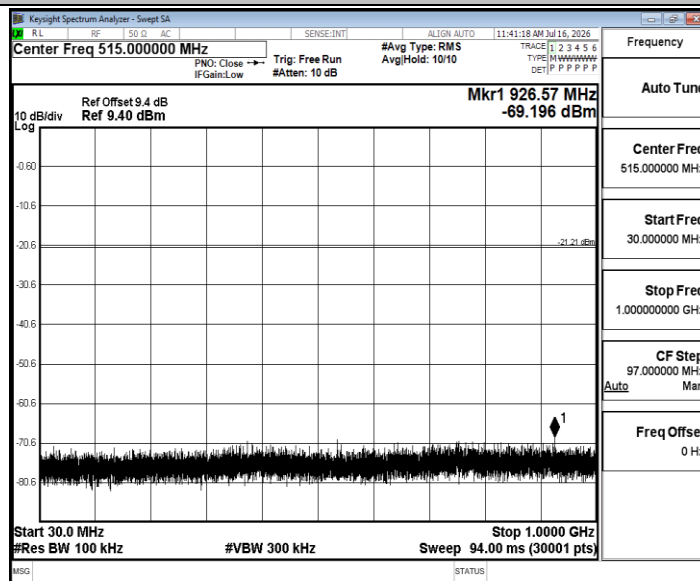
11G_Ant1_2437_1000~26500



11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500