

Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Smart Phone

Test Model: ULTRA S25

Environmental Conditions

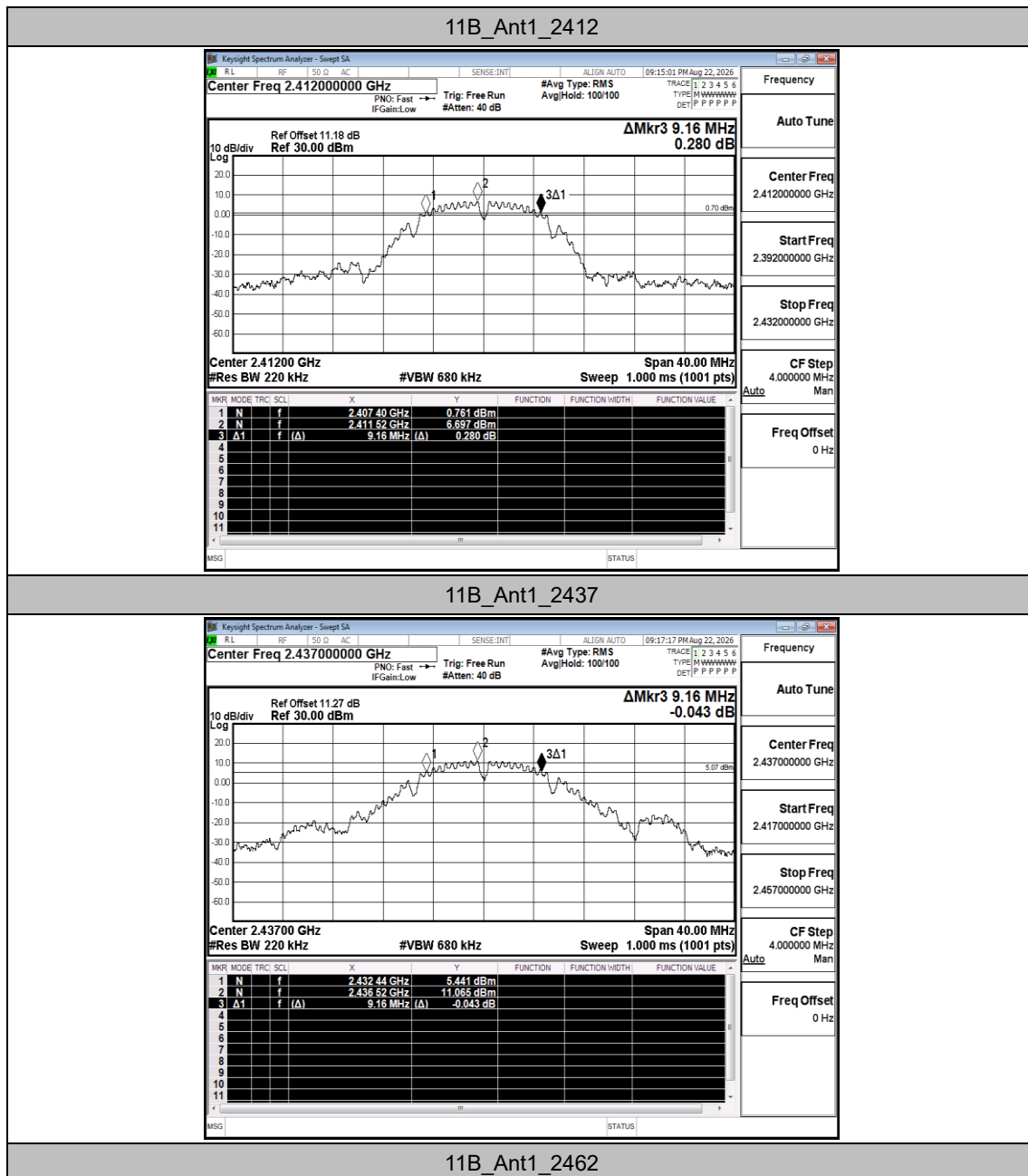
Temperature:	24.3°C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

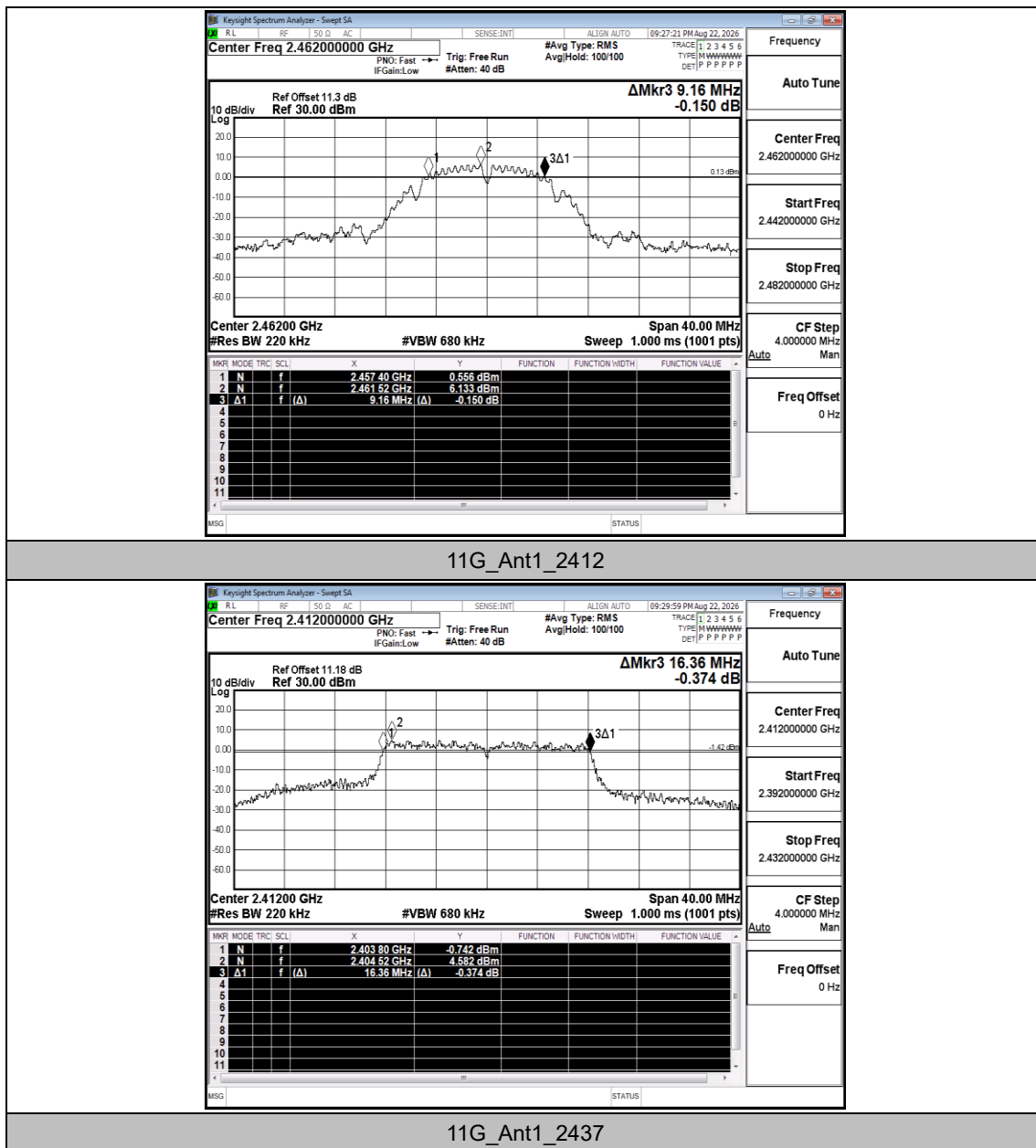
C.1 DTS Bandwidth

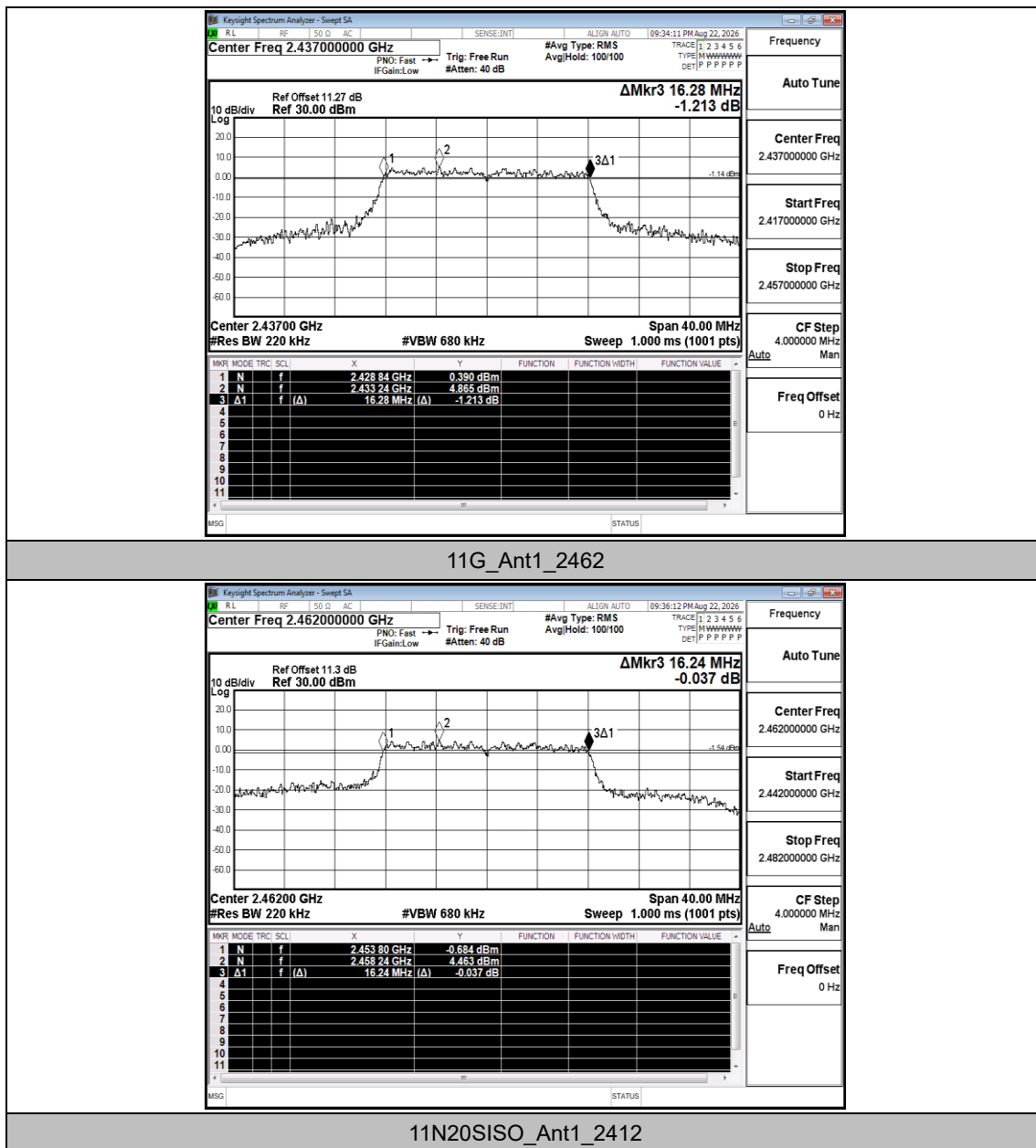
Test Result

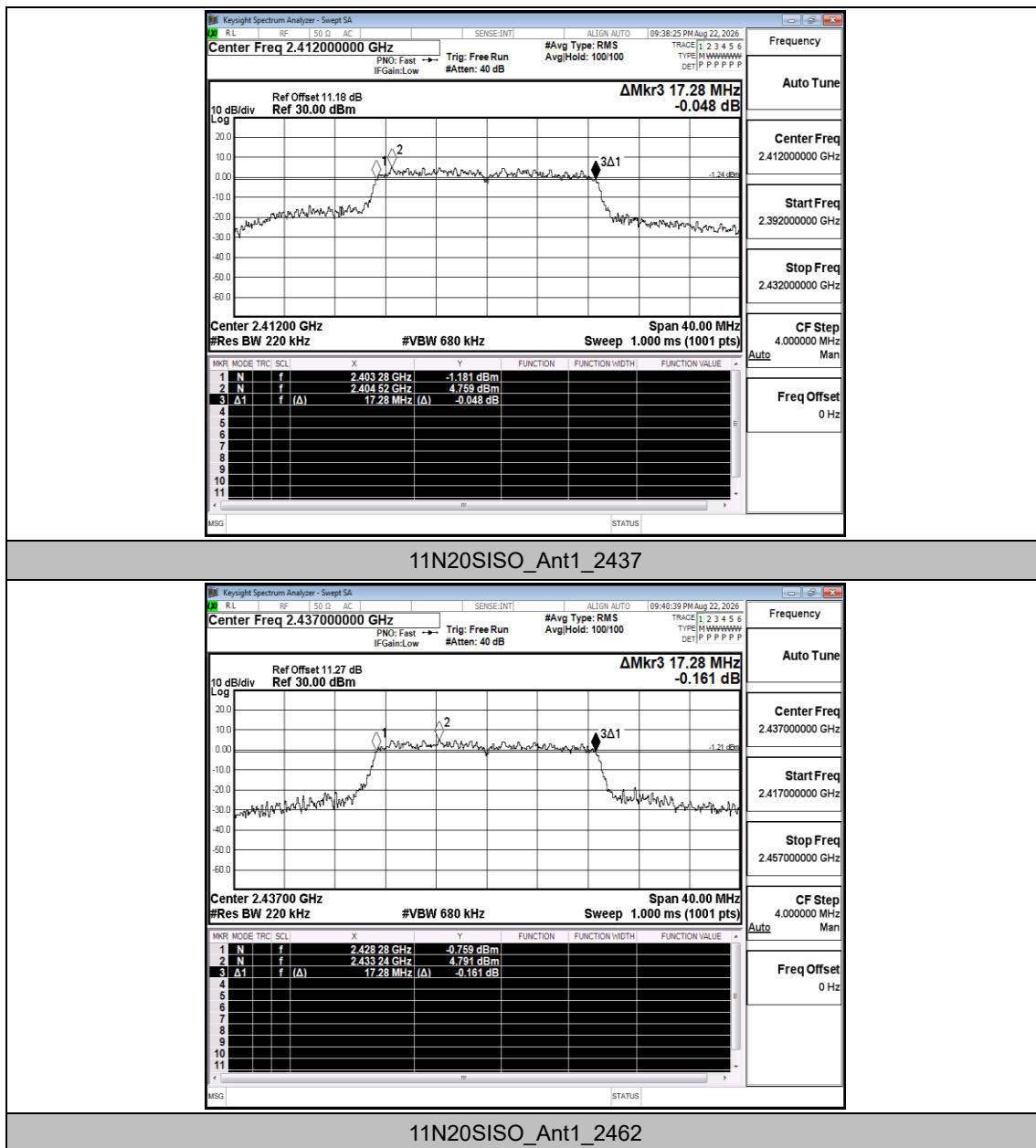
TestMode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	9.160	2407.400	2416.560	0.5	PASS
		2437	9.160	2432.440	2441.600	0.5	PASS
		2462	9.160	2457.400	2466.560	0.5	PASS
11G	Ant1	2412	16.360	2403.800	2420.160	0.5	PASS
		2437	16.280	2428.840	2445.120	0.5	PASS
		2462	16.240	2453.800	2470.040	0.5	PASS
11N20SISO	Ant1	2412	17.280	2403.280	2420.560	0.5	PASS
		2437	17.280	2428.280	2445.560	0.5	PASS
		2462	17.240	2453.320	2470.560	0.5	PASS
11N40SISO	Ant1	2422	35.920	2404.240	2440.160	0.5	PASS
		2437	35.520	2419.000	2454.520	0.5	PASS
		2452	21.040	2434.080	2455.120	0.5	PASS

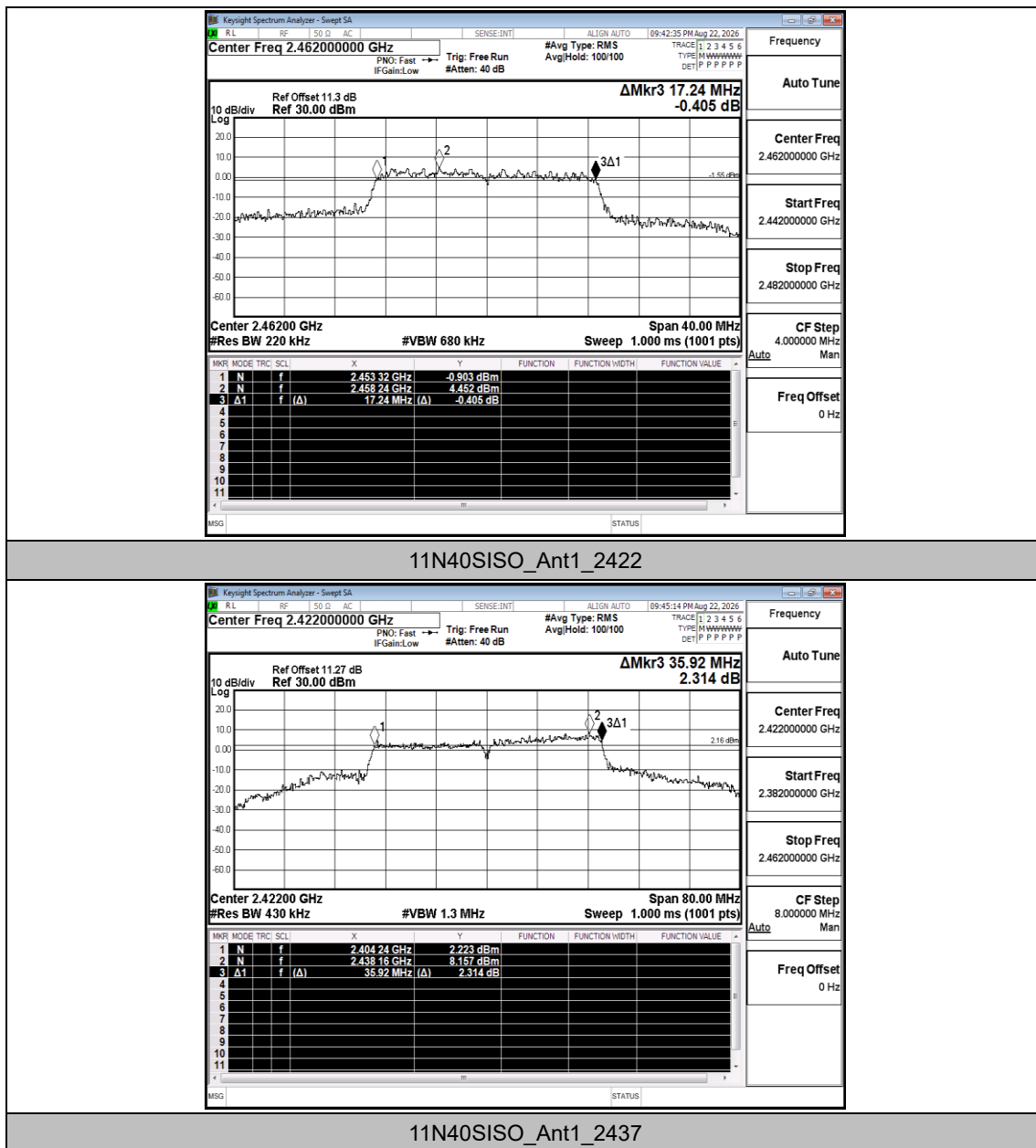
Test Graphs

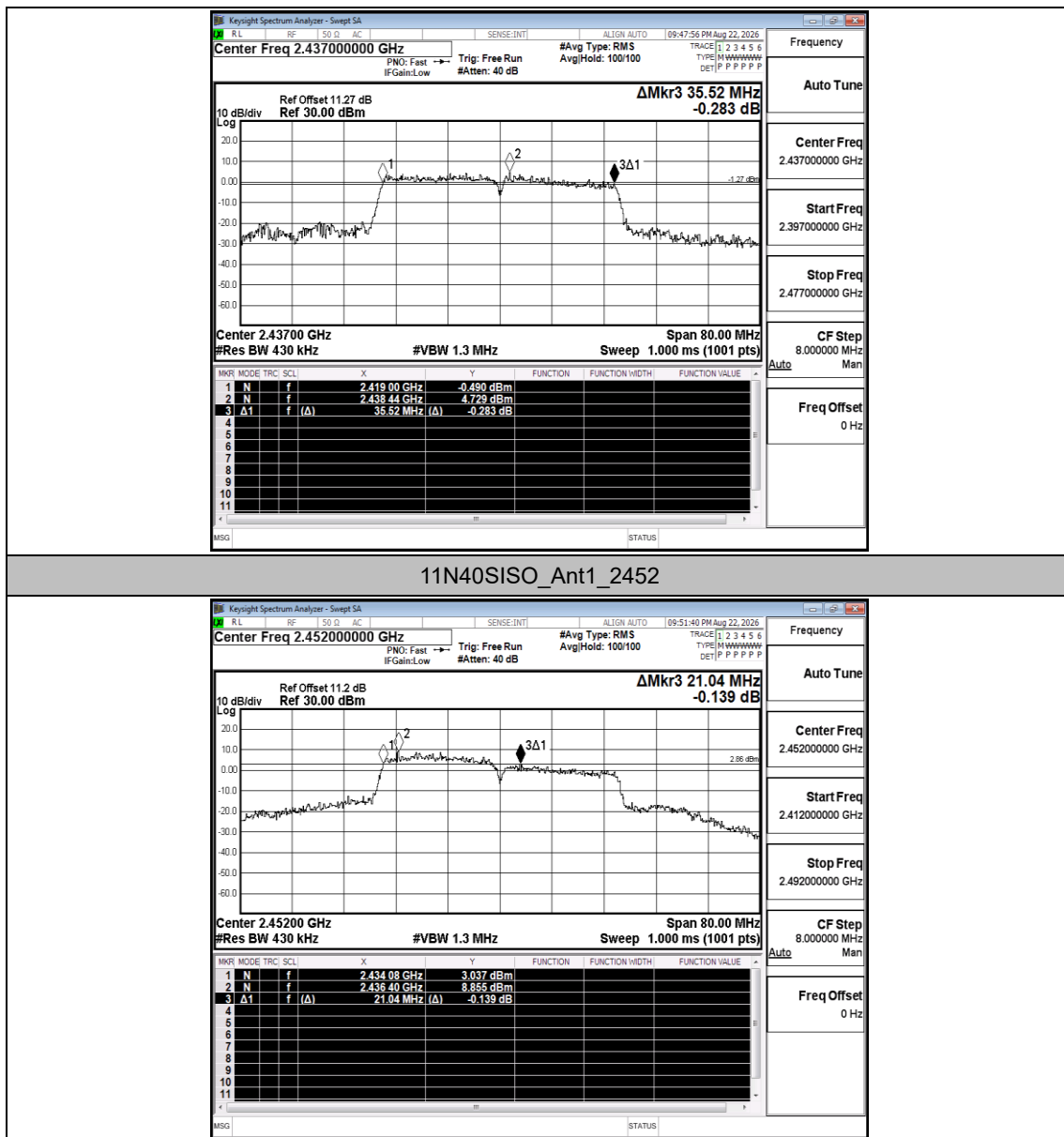












C.2 Maximum Average conducted output power

Test Result Average

TestMode	Antenna	Frequency [MHz]	Measured Power	DC Factor [dB]	AV Power [dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	14.59	0.34	14.93	≤30.00	PASS
		2437	14.53	0.34	14.87	≤30.00	PASS
		2462	13.96	0.34	14.30	≤30.00	PASS
11G	Ant1	2412	12.52	1.76	14.28	≤30.00	PASS
		2437	12.86	2.14	15.00	≤30.00	PASS
		2462	12.09	1.76	13.85	≤30.00	PASS
11N20SISO	Ant1	2412	12.73	2.14	14.87	≤30.00	PASS
		2437	12.92	1.76	14.68	≤30.00	PASS
		2462	12.25	1.76	14.01	≤30.00	PASS
11N40SISO	Ant1	2422	14.57	3.01	17.58	≤30.00	PASS
		2437	11.37	3.01	14.38	≤30.00	PASS
		2452	14.08	2.69	16.77	≤30.00	PASS

C.3 Maximum power spectral density

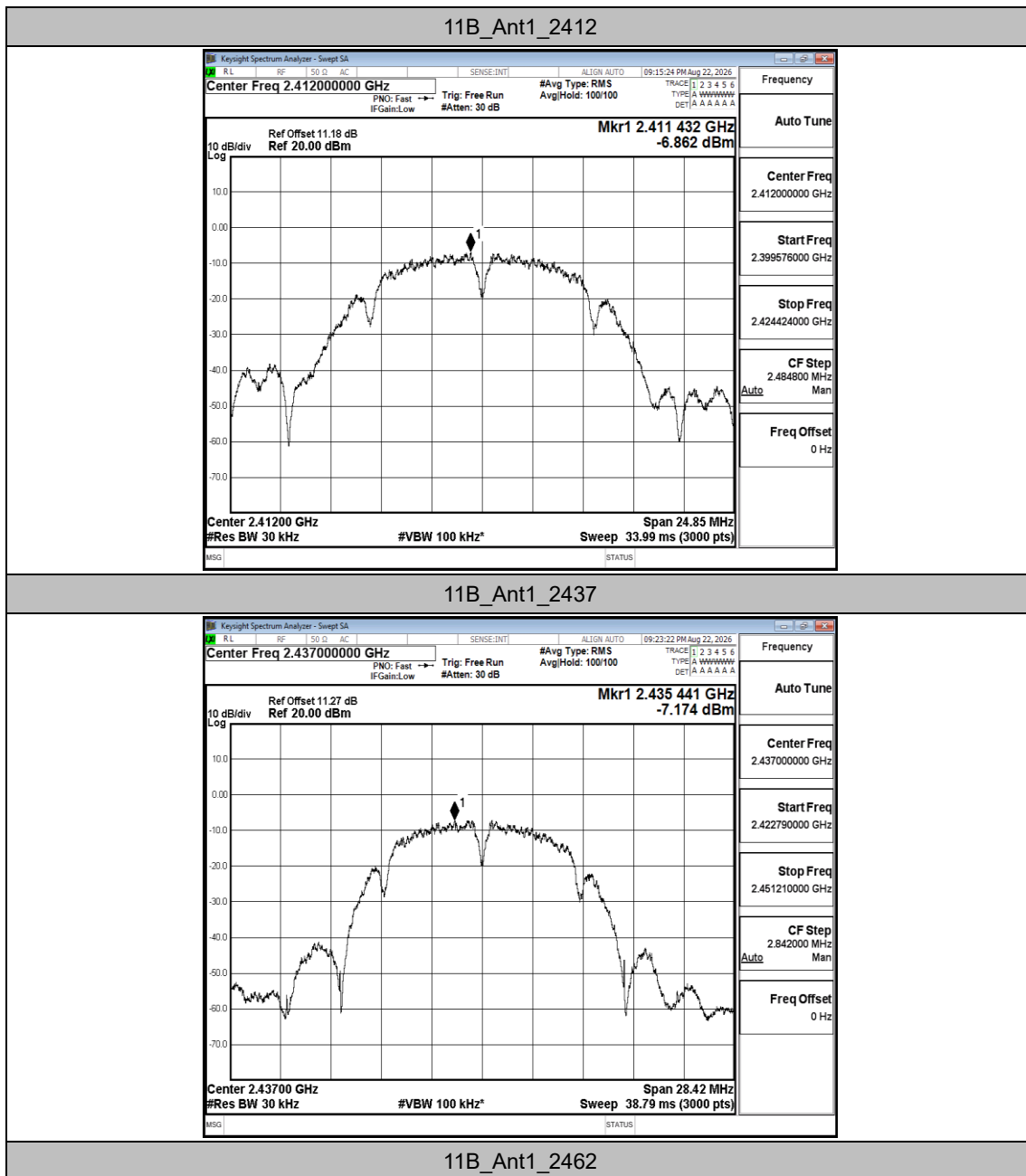
Test Result

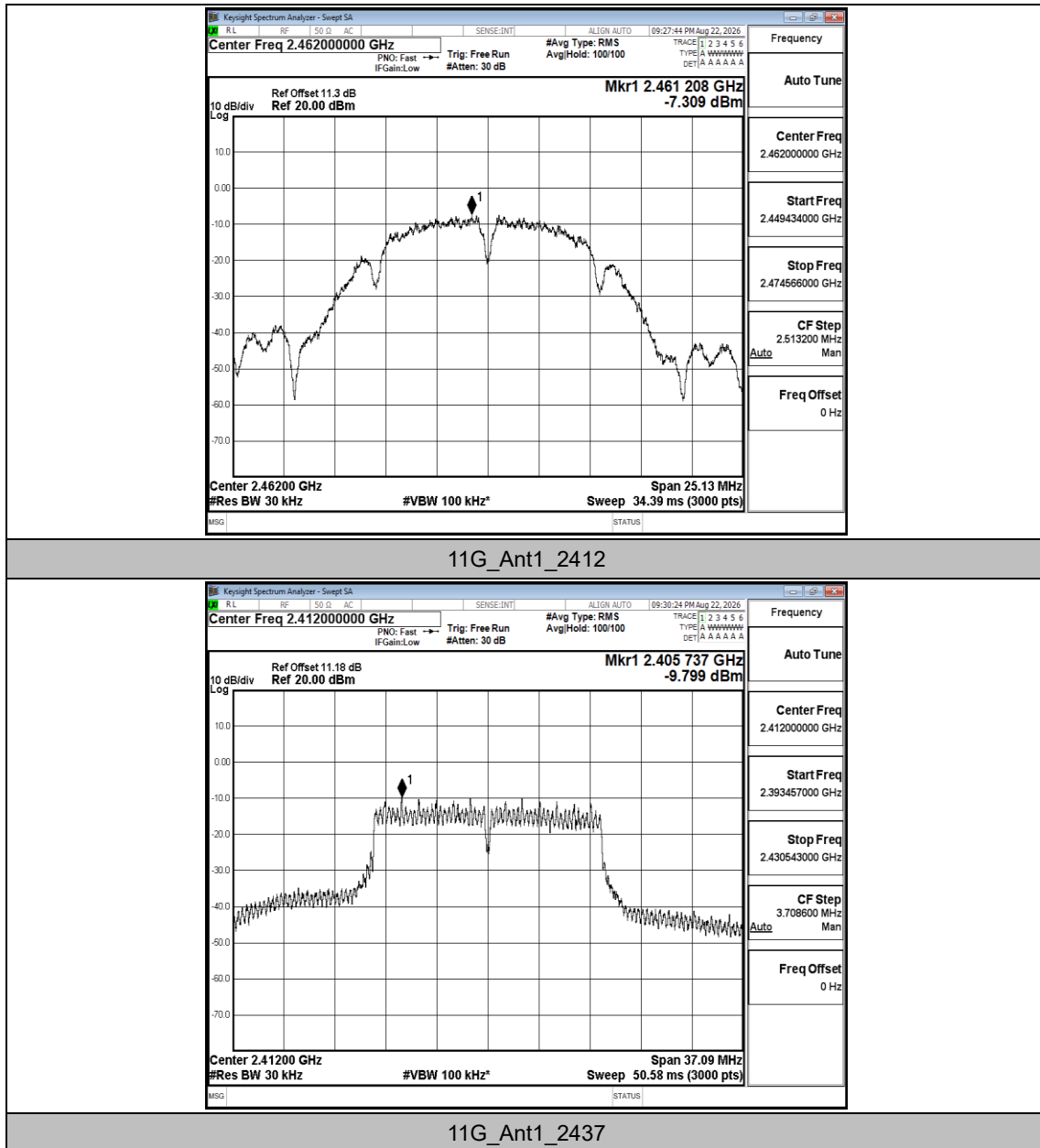
TestMode	Antenna	Frequency [MHz]	Measured PSD [dBm/30kHz]	DC Factor [dB]	Result [dBm/30kHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-6.86	0.34	-6.52	-16.52	≤8.00	PASS
		2437	-7.17	0.34	-6.83	-16.83	≤8.00	PASS
		2462	-7.31	0.34	-6.97	-16.97	≤8.00	PASS
11G	Ant1	2412	-9.8	1.76	-8.04	-18.04	≤8.00	PASS
		2437	-9.11	2.14	-6.97	-16.97	≤8.00	PASS
		2462	-9.43	1.76	-7.67	-17.67	≤8.00	PASS
11N20SISO	Ant1	2412	-9.43	2.14	-7.29	-17.29	≤8.00	PASS
		2437	-8.96	1.76	-7.20	-17.2	≤8.00	PASS
		2462	-9.4	1.76	-7.64	-17.64	≤8.00	PASS
11N40SISO	Ant1	2422	-7.59	3.01	-4.58	-14.58	≤8.00	PASS
		2437	-12.28	3.01	-9.27	-19.27	≤8.00	PASS
		2452	-7.26	2.69	-4.57	-14.57	≤8.00	PASS

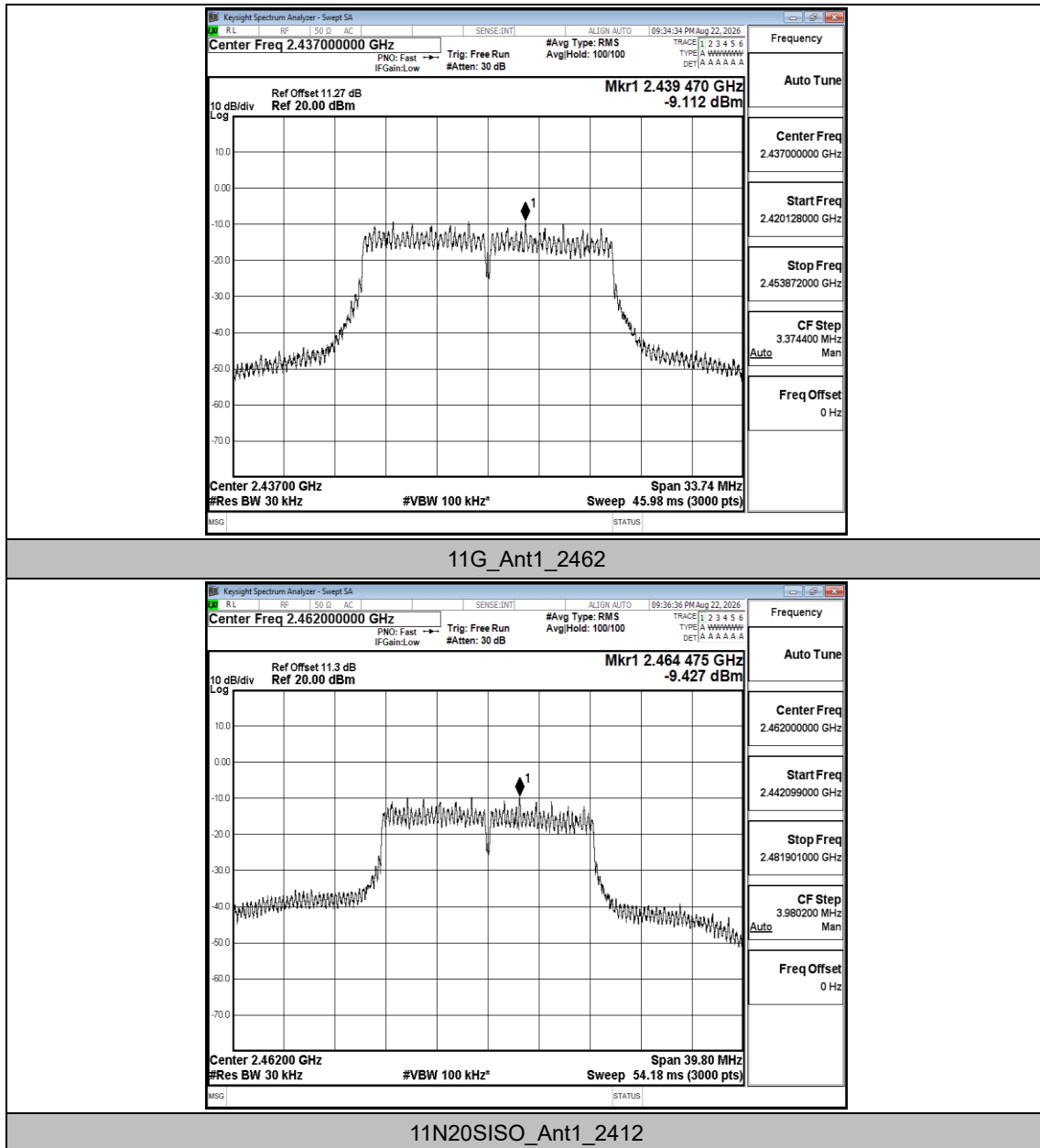
Note: offset=System attenuation +cable loss

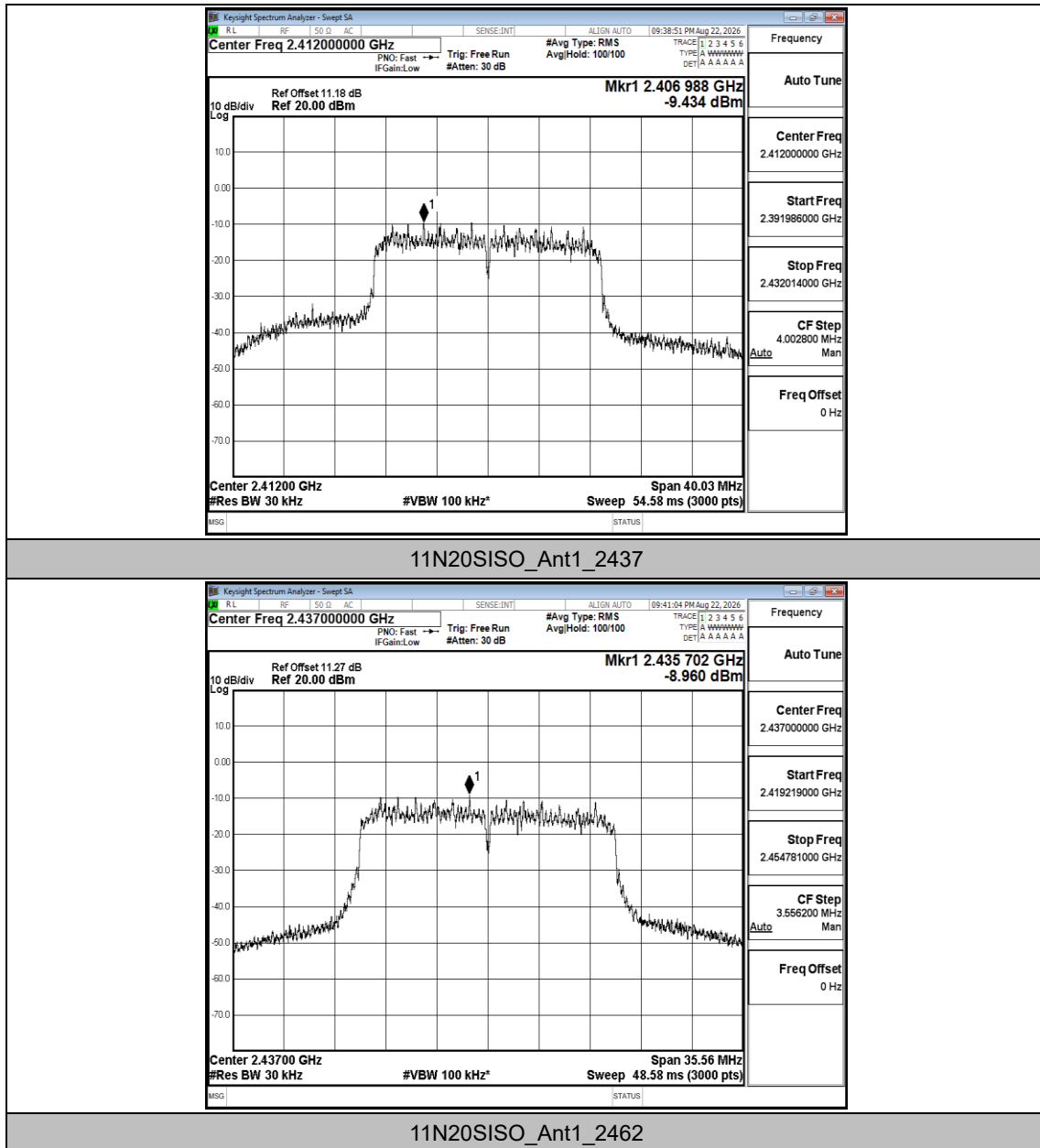
Result[dBm/3kHz] =Result[dBm/30kHz] +10*Log (3/30)

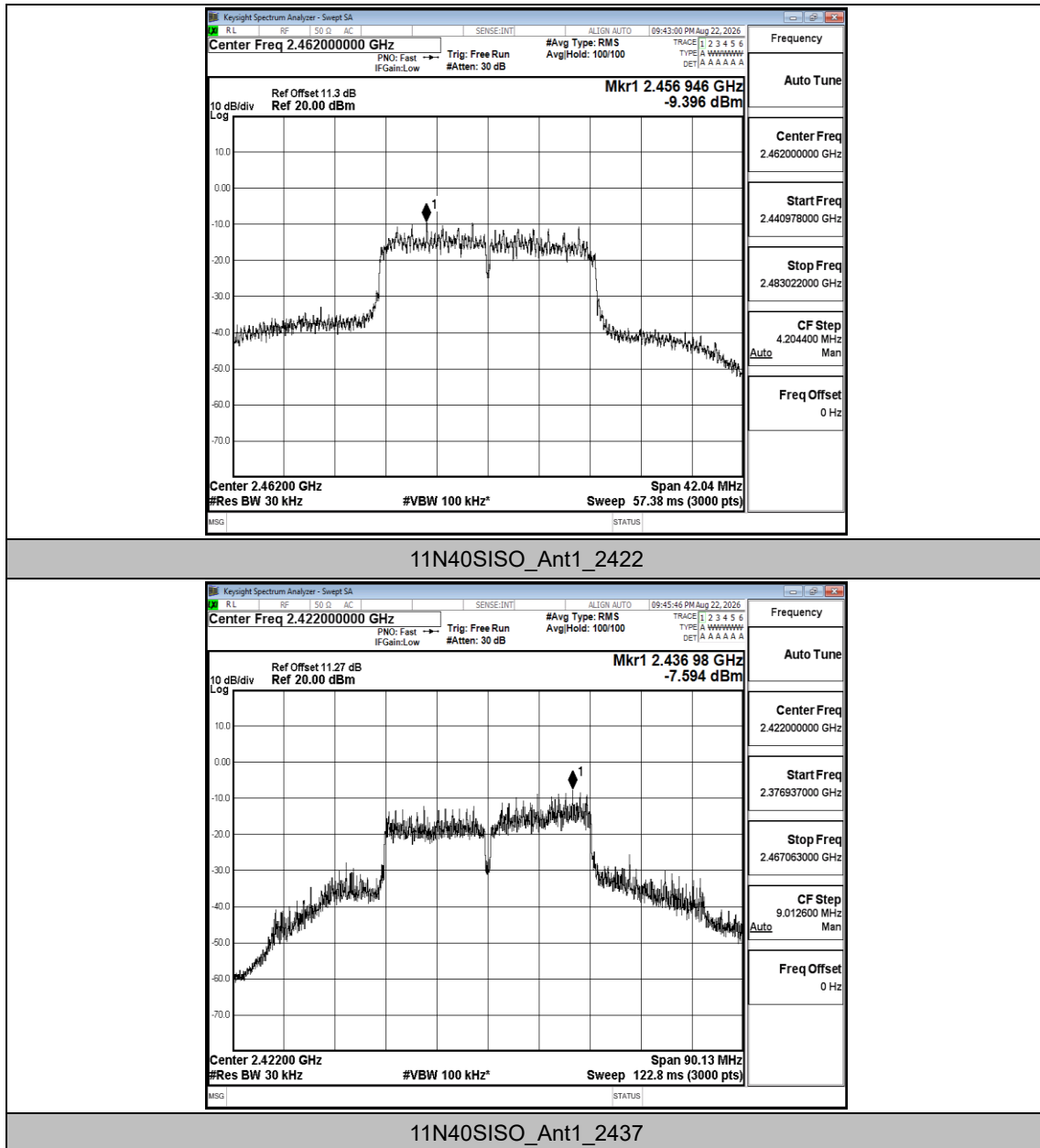
Test Graphs

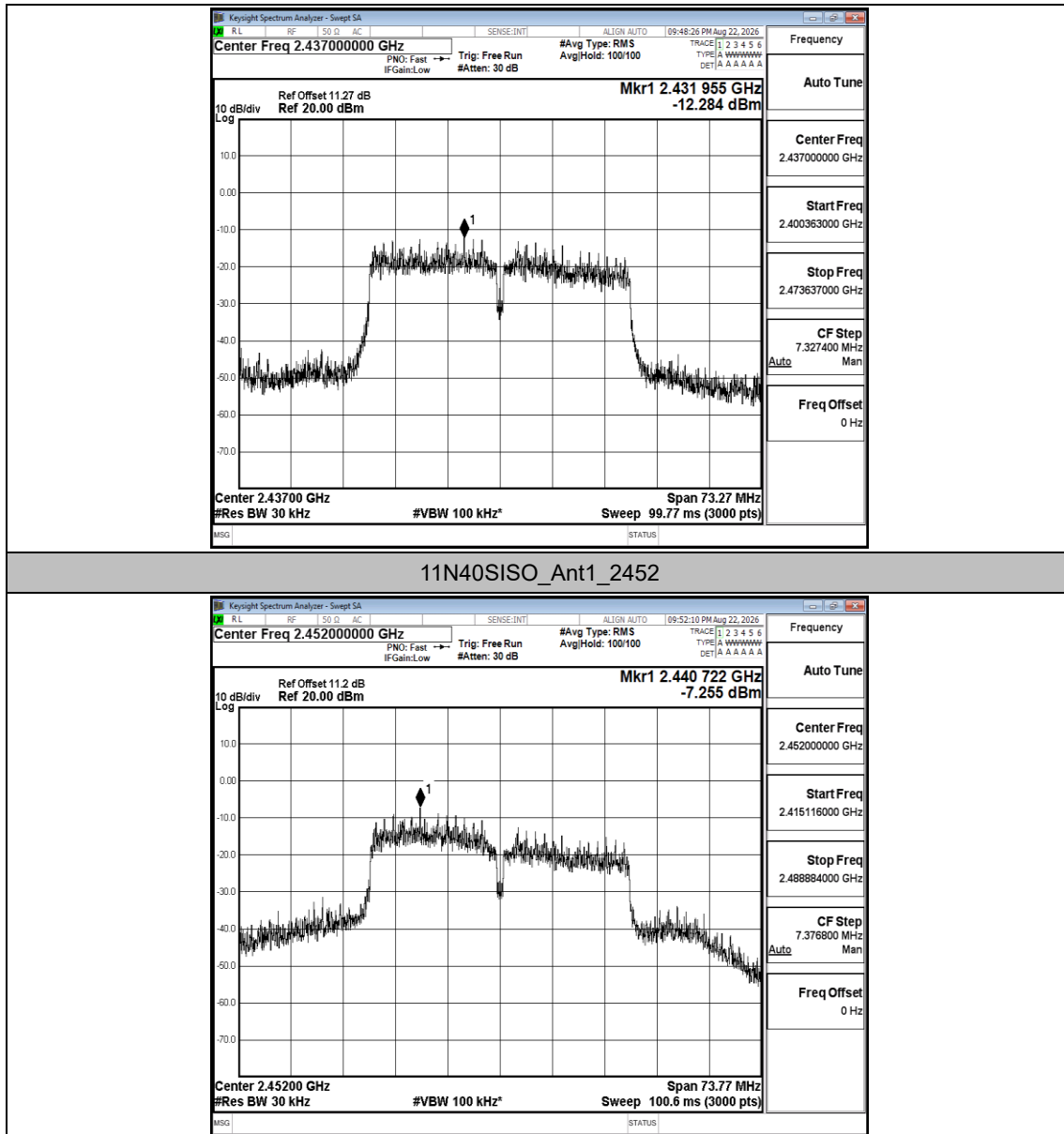










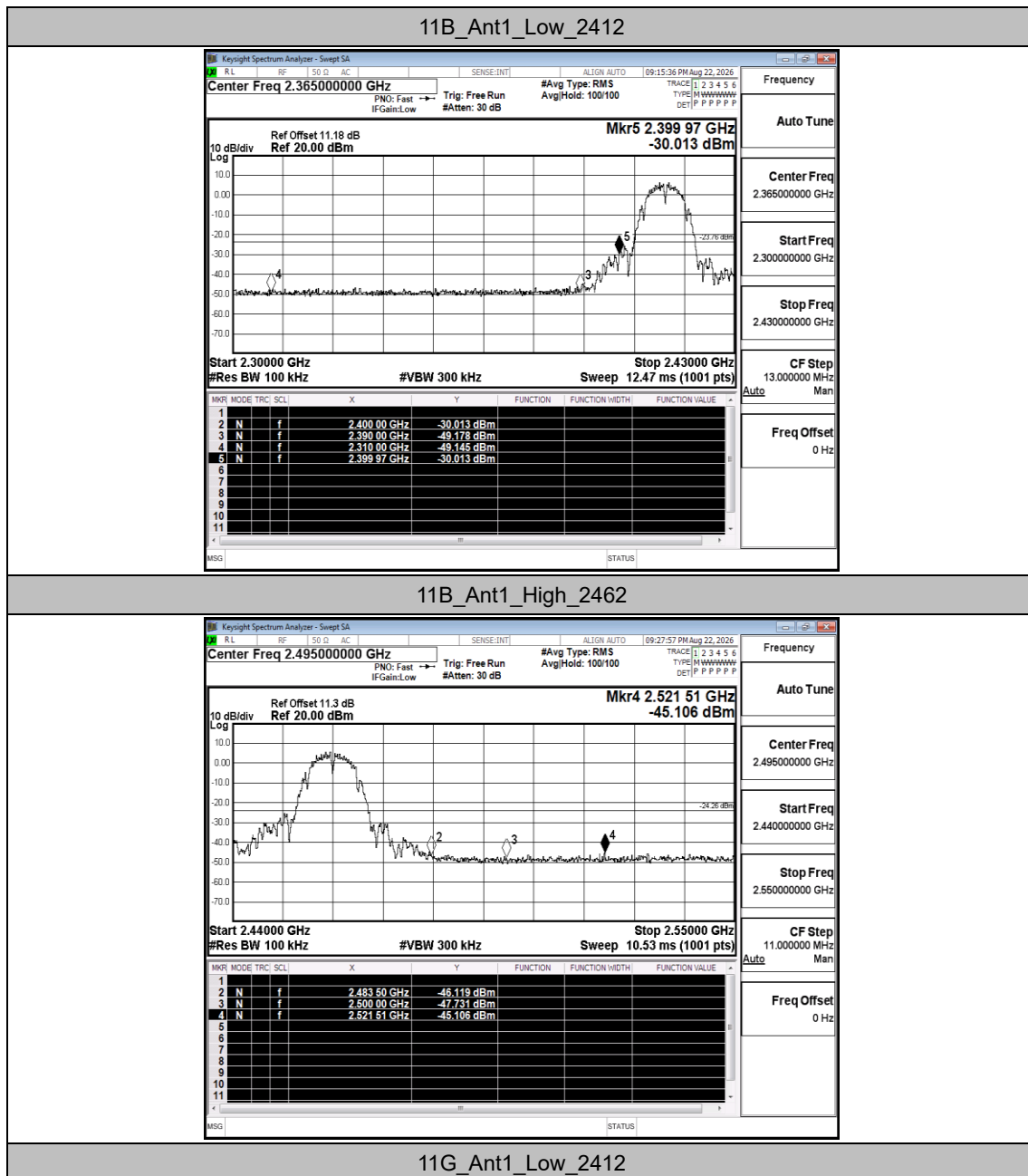


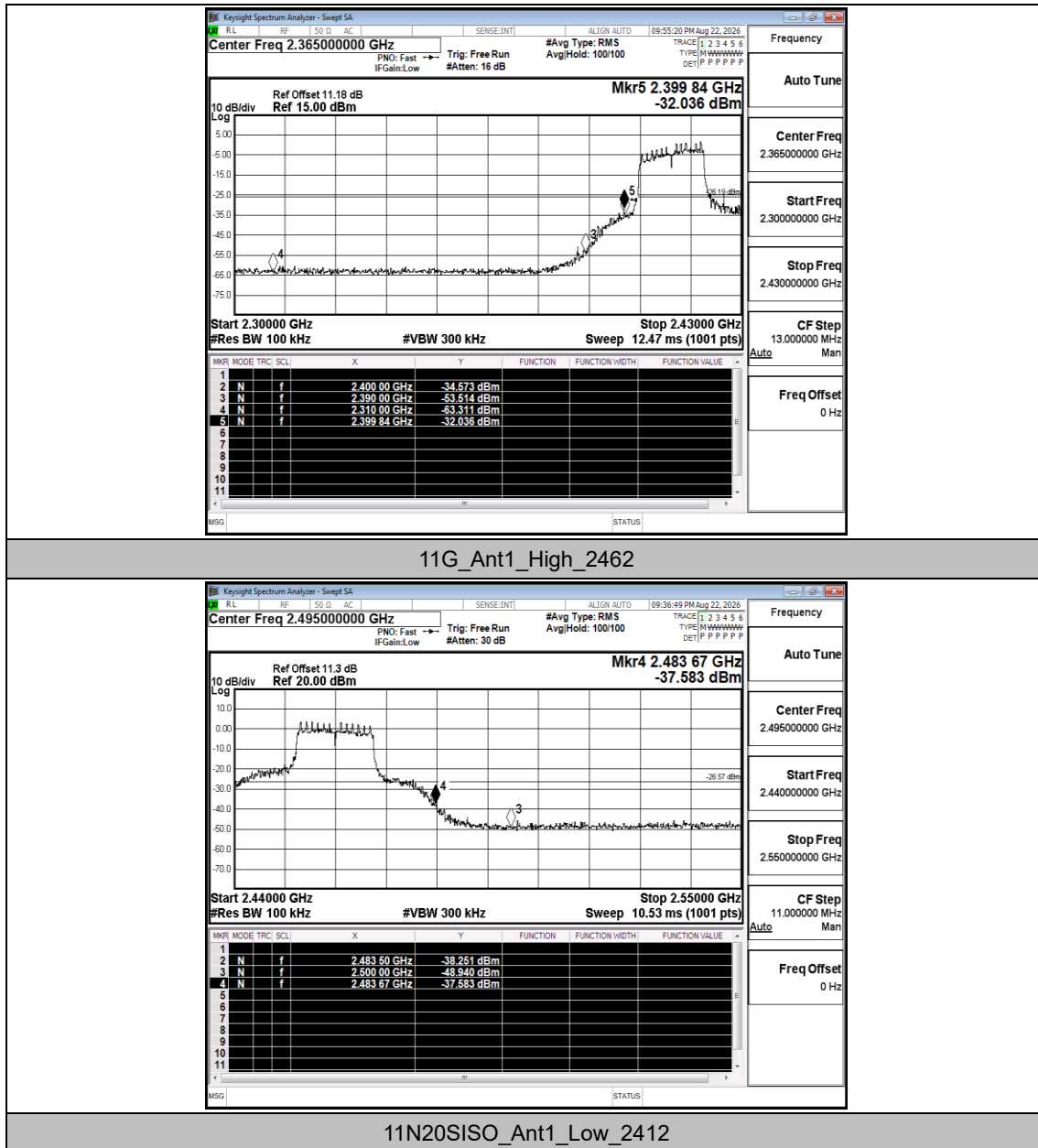
C.4 Band edge measurements

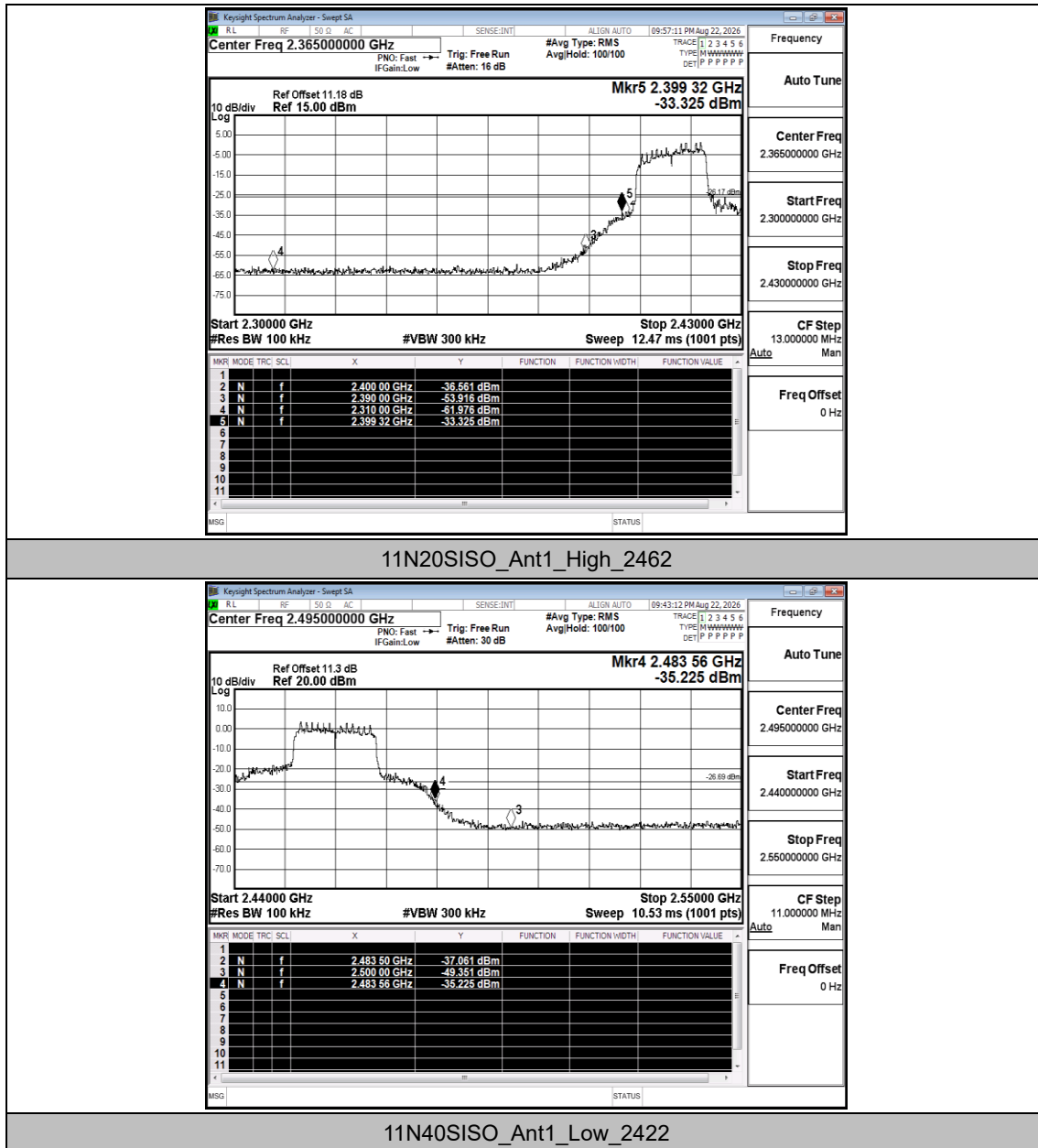
Test Result

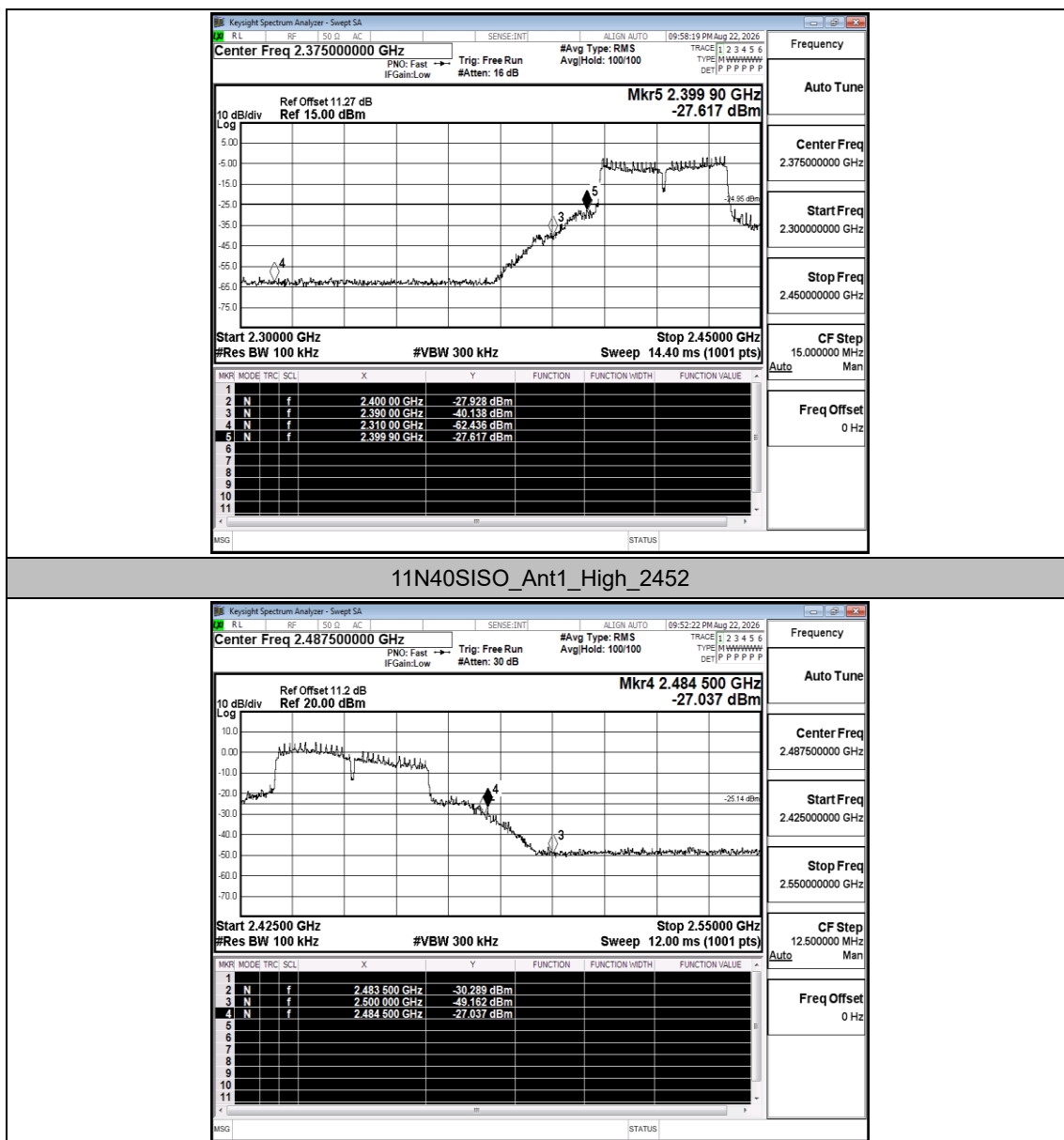
TestMode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	6.24	-30.01	≤ -23.76	PASS
		High	2462	5.74	-45.11	≤ -24.26	PASS
11G	Ant1	Low	2412	3.81	-32.04	≤ -26.19	PASS
		High	2462	3.43	-37.58	≤ -26.57	PASS
11N20SISO	Ant1	Low	2412	3.83	-33.33	≤ -26.17	PASS
		High	2462	3.31	-35.23	≤ -26.69	PASS
11N40SISO	Ant1	Low	2422	5.05	-27.62	≤ -24.95	PASS
		High	2452	4.86	-27.04	≤ -25.14	PASS

Test Graphs









C.5 Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency [MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	5.05	5.05	---	PASS
			30~1000	5.05	-67.9	≤-24.95	PASS
			1000~26500	5.05	-40.18	≤-24.95	PASS
		2437	Reference	5.80	5.80	---	PASS
			30~1000	5.80	-65.83	≤-24.2	PASS
			1000~26500	5.80	-44.62	≤-24.2	PASS
		2462	Reference	4.60	4.60	---	PASS
			30~1000	4.60	-68.7	≤-25.4	PASS
			1000~26500	4.60	-39.83	≤-25.4	PASS
11G	Ant1	2412	Reference	2.86	2.86	---	PASS
			30~1000	2.86	-67.44	≤-27.14	PASS
			1000~26500	2.86	-43.91	≤-27.14	PASS
		2437	Reference	3.01	3.01	---	PASS
			30~1000	3.01	-67.91	≤-26.99	PASS
			1000~26500	3.01	-44.21	≤-26.99	PASS
		2462	Reference	2.87	2.87	---	PASS
			30~1000	2.87	-69.41	≤-27.13	PASS
			1000~26500	2.87	-44.59	≤-27.13	PASS
11N20SISO	Ant1	2412	Reference	3.55	3.55	---	PASS
			30~1000	3.55	-68.16	≤-26.45	PASS
			1000~26500	3.55	-44.49	≤-26.45	PASS
		2437	Reference	3.48	3.48	---	PASS
			30~1000	3.48	-68.32	≤-26.52	PASS
			1000~26500	3.48	-44.39	≤-26.52	PASS
		2462	Reference	3.05	3.05	---	PASS
			30~1000	3.05	-69.32	≤-26.95	PASS
			1000~26500	3.05	-44.26	≤-26.95	PASS
11N40SISO	Ant1	2422	Reference	4.70	4.70	---	PASS
			30~1000	4.70	-66.59	≤-25.3	PASS
			1000~26500	4.70	-44.02	≤-25.3	PASS
		2437	Reference	0.22	0.22	---	PASS
			30~1000	0.22	-68.46	≤-29.78	PASS
			1000~26500	0.22	-44.81	≤-29.78	PASS
		2452	Reference	4.79	4.79	---	PASS
			30~1000	4.79	-67.83	≤-25.21	PASS
			1000~26500	4.79	-44.26	≤-25.21	PASS

Test Graphs

