

Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Tablet

Test Model: HELIOS12 16G

Environmental Conditions

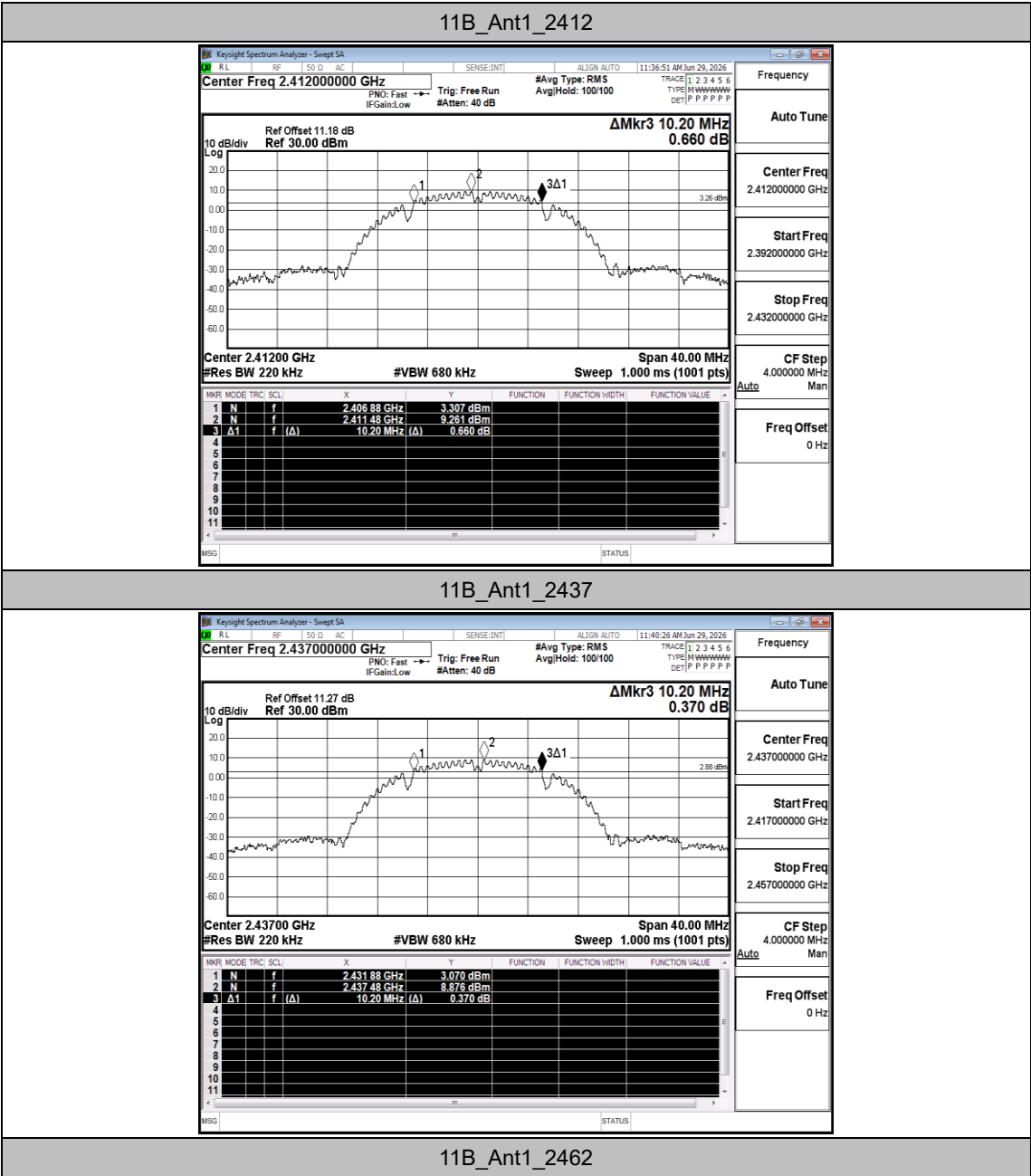
Temperature:	24.5°C
Relative Humidity:	53.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

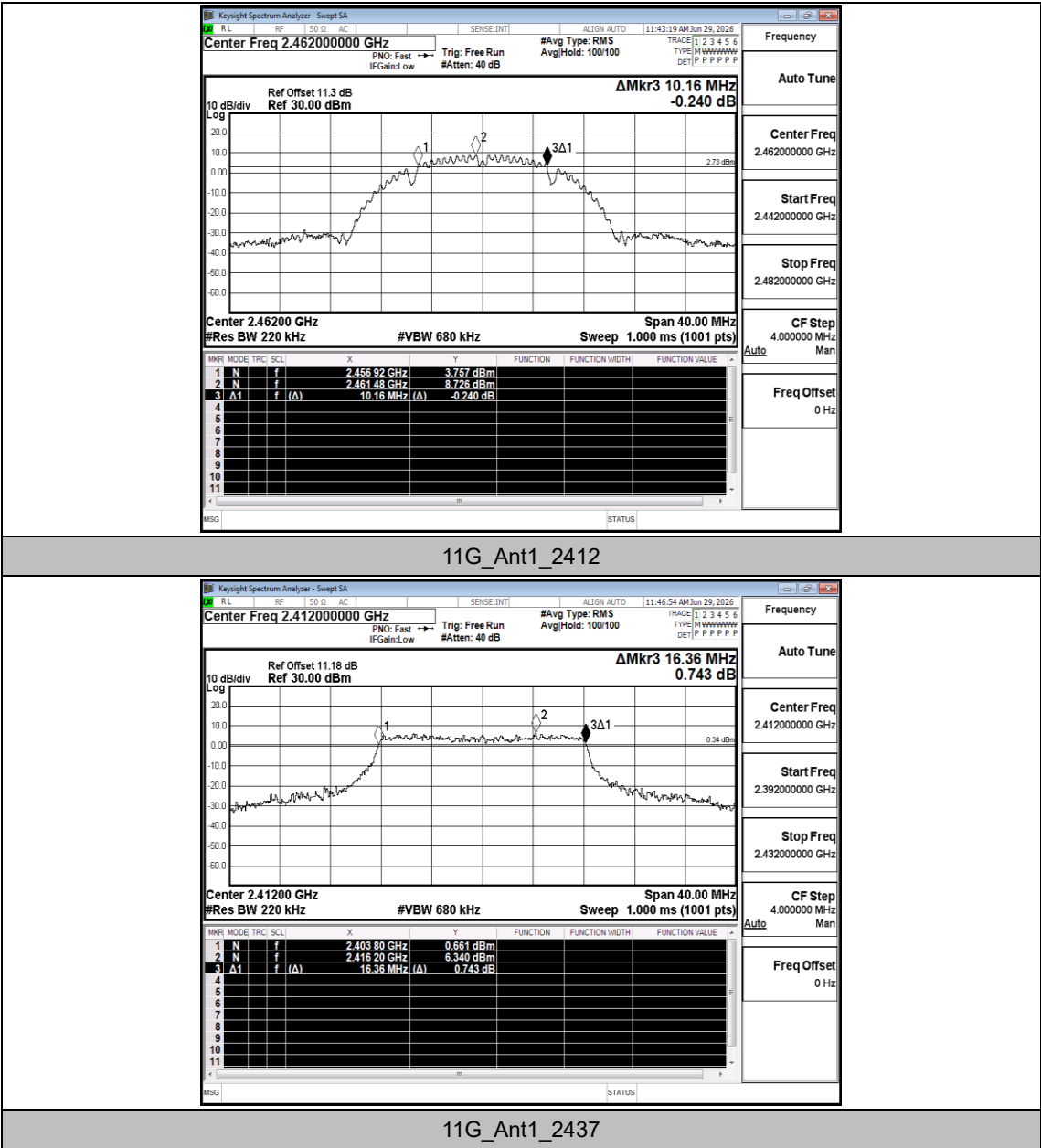
C.1 6dB Bandwidth

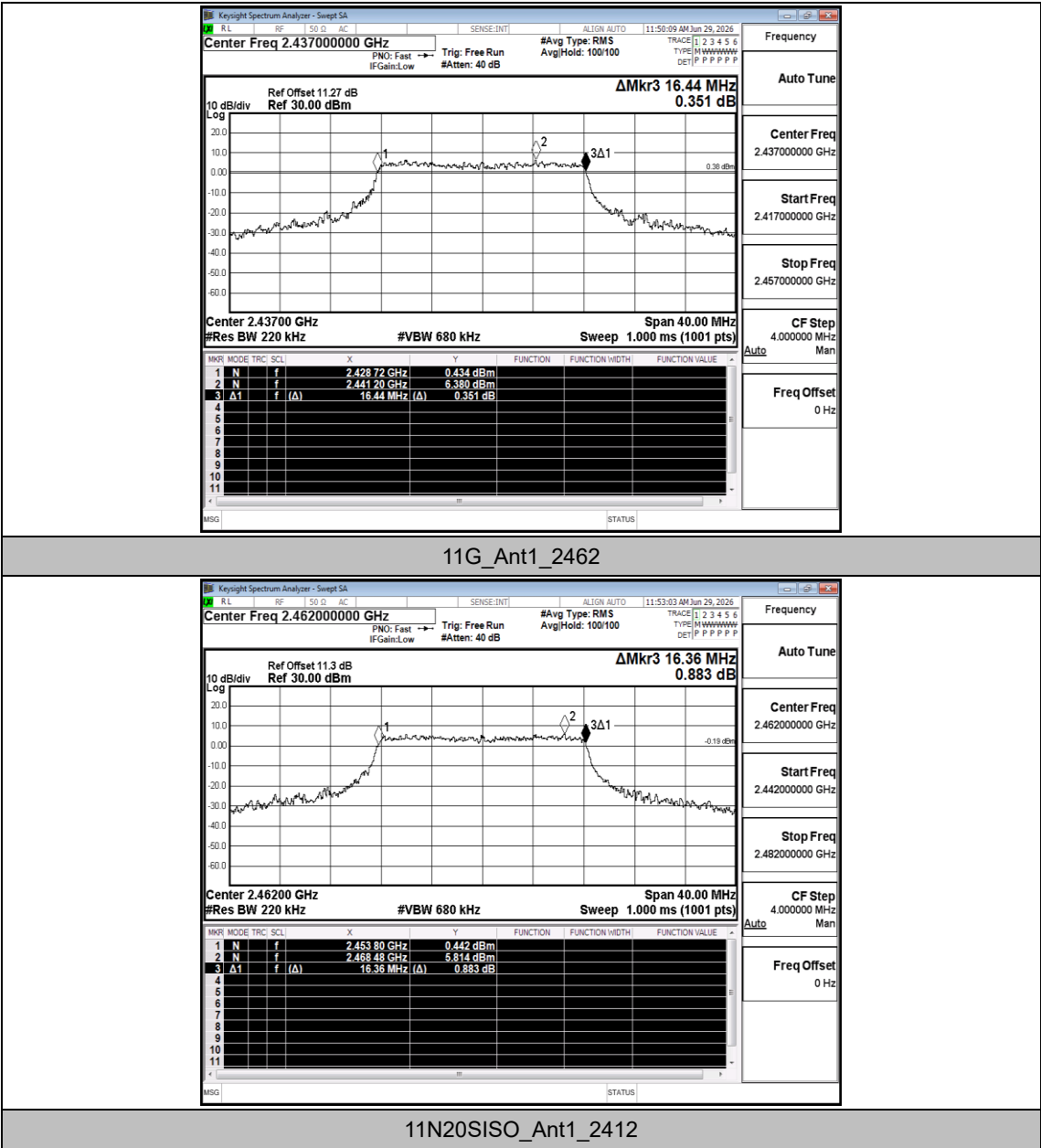
Test Result

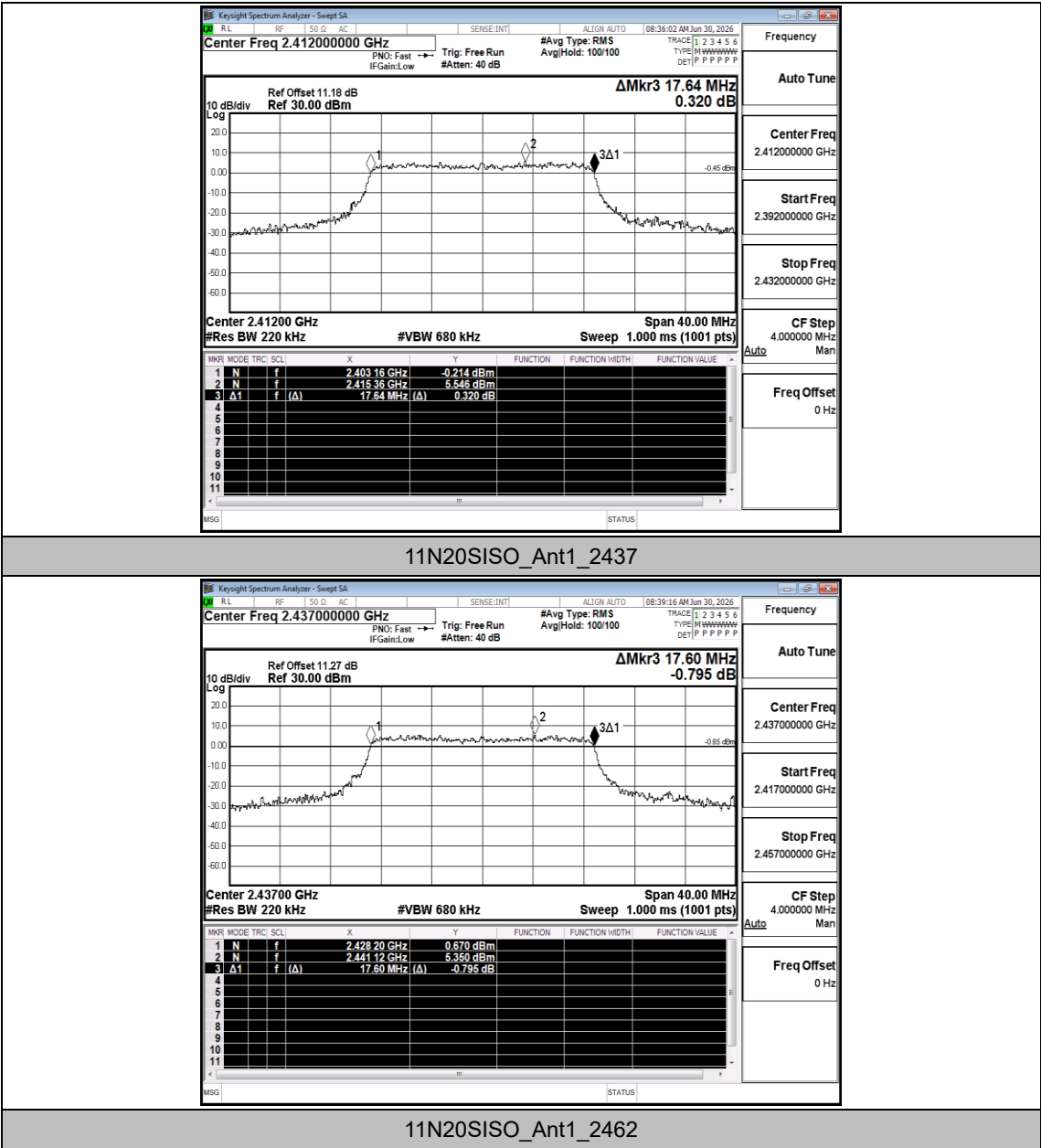
TestMode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	10.200	2406.880	2417.080	0.5	PASS
		2437	10.200	2431.880	2442.080	0.5	PASS
		2462	10.160	2456.920	2467.080	0.5	PASS
11G	Ant1	2412	16.360	2403.800	2420.160	0.5	PASS
		2437	16.440	2428.720	2445.160	0.5	PASS
		2462	16.360	2453.800	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.640	2403.160	2420.800	0.5	PASS
		2437	17.600	2428.200	2445.800	0.5	PASS
		2462	17.520	2453.240	2470.760	0.5	PASS
11N40SISO	Ant1	2422	36.000	2404.000	2440.000	0.5	PASS
		2437	35.920	2419.000	2454.920	0.5	PASS
		2452	36.080	2434.000	2470.080	0.5	PASS

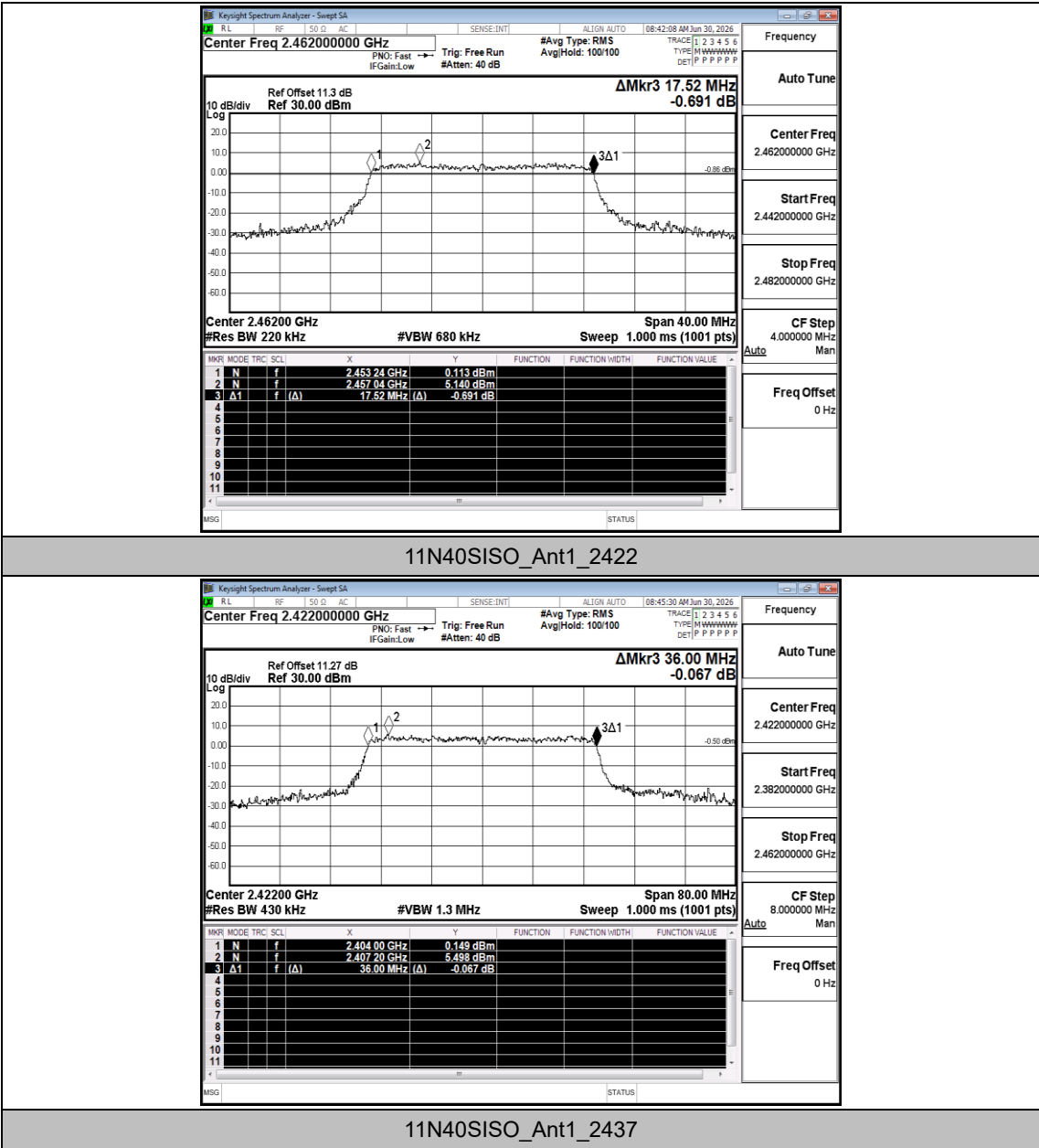
Test Graphs

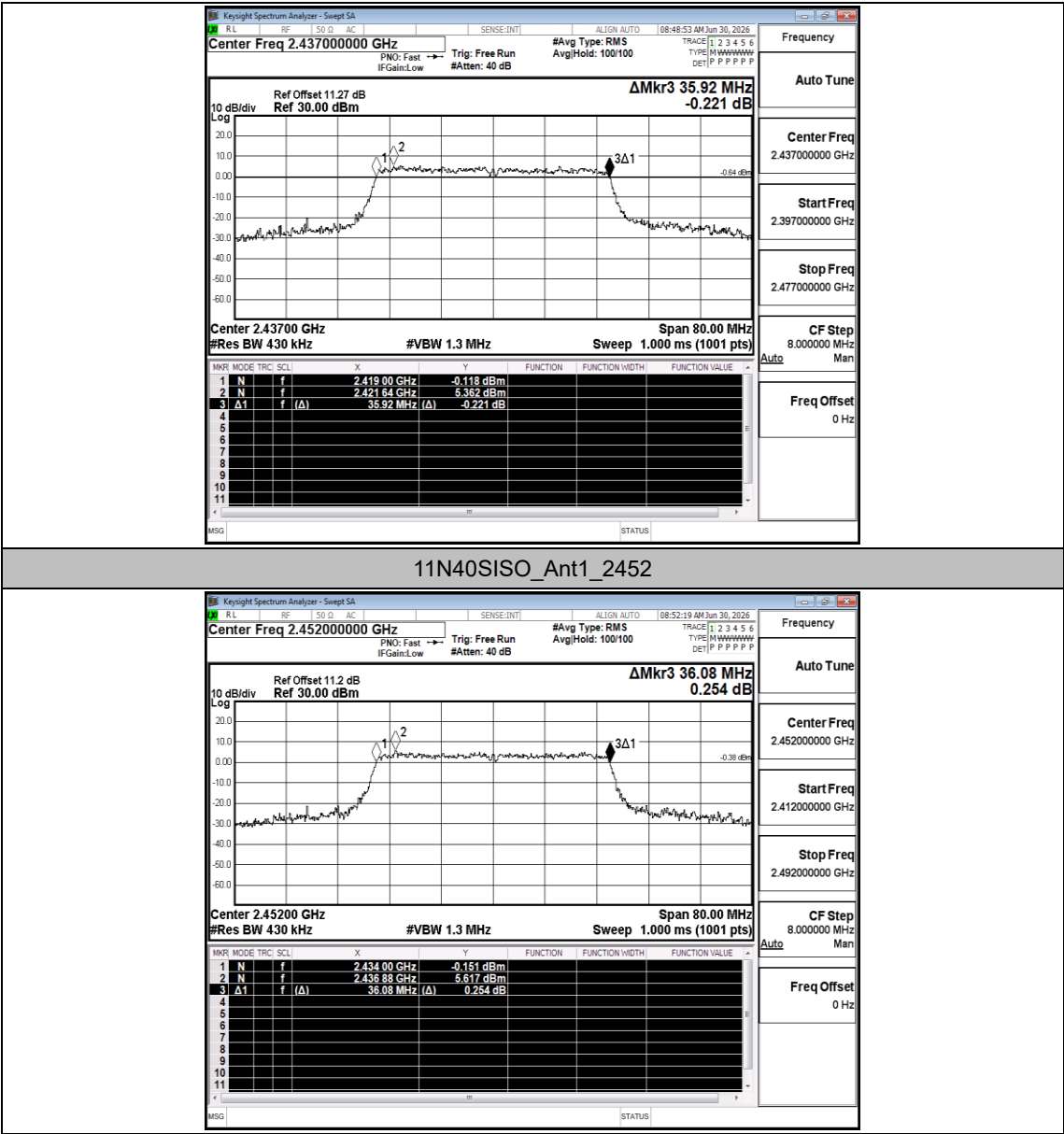








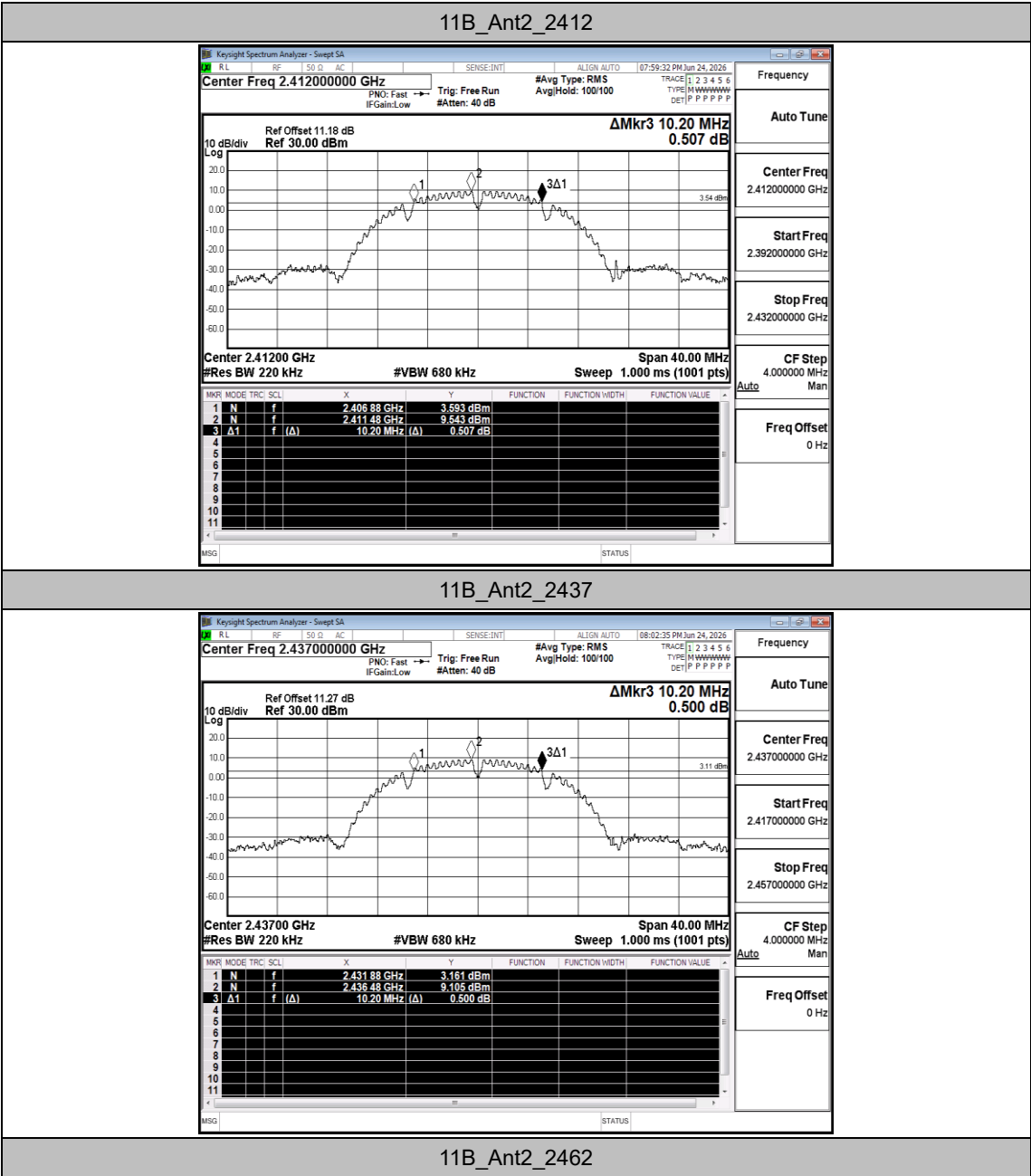


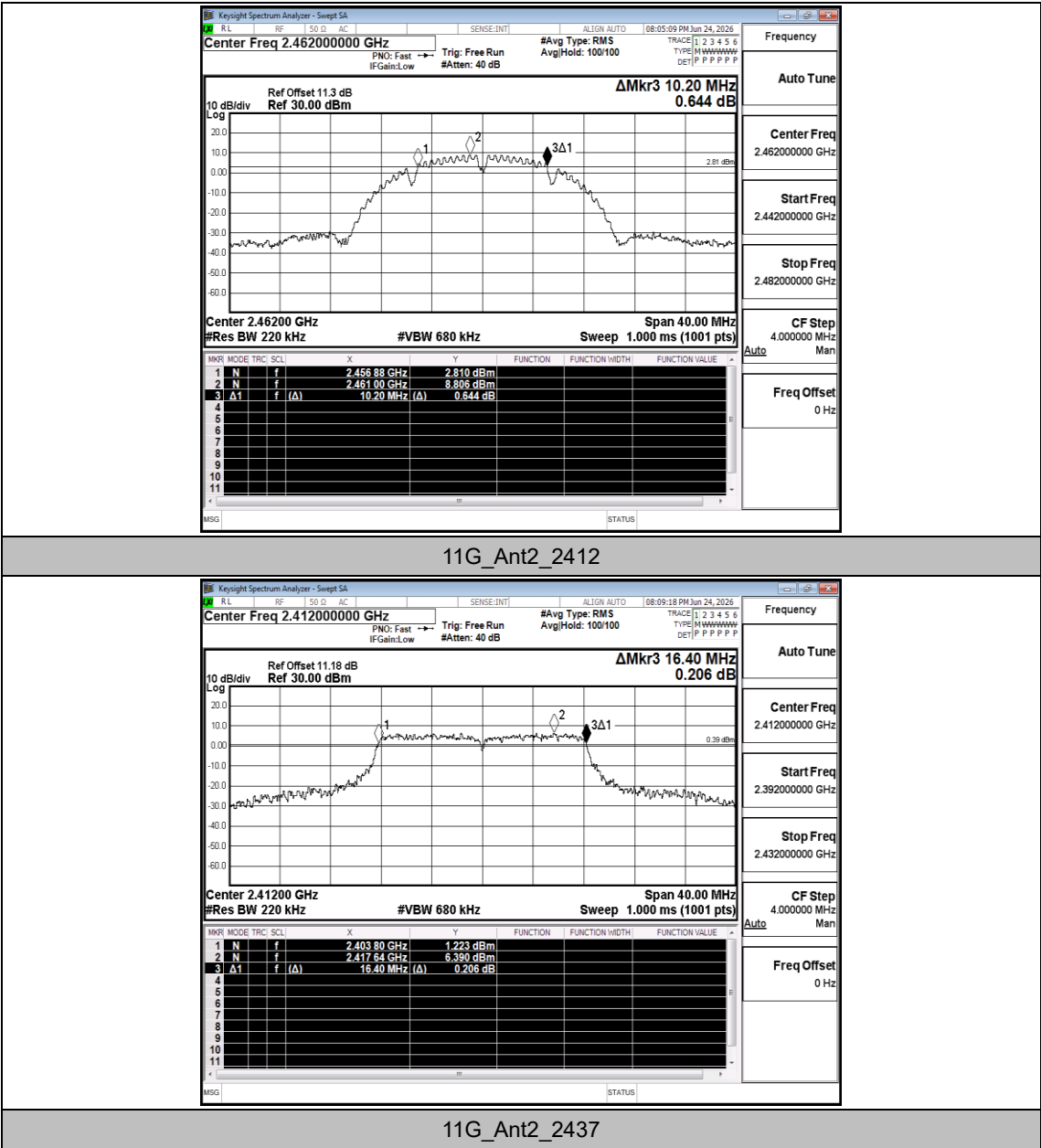


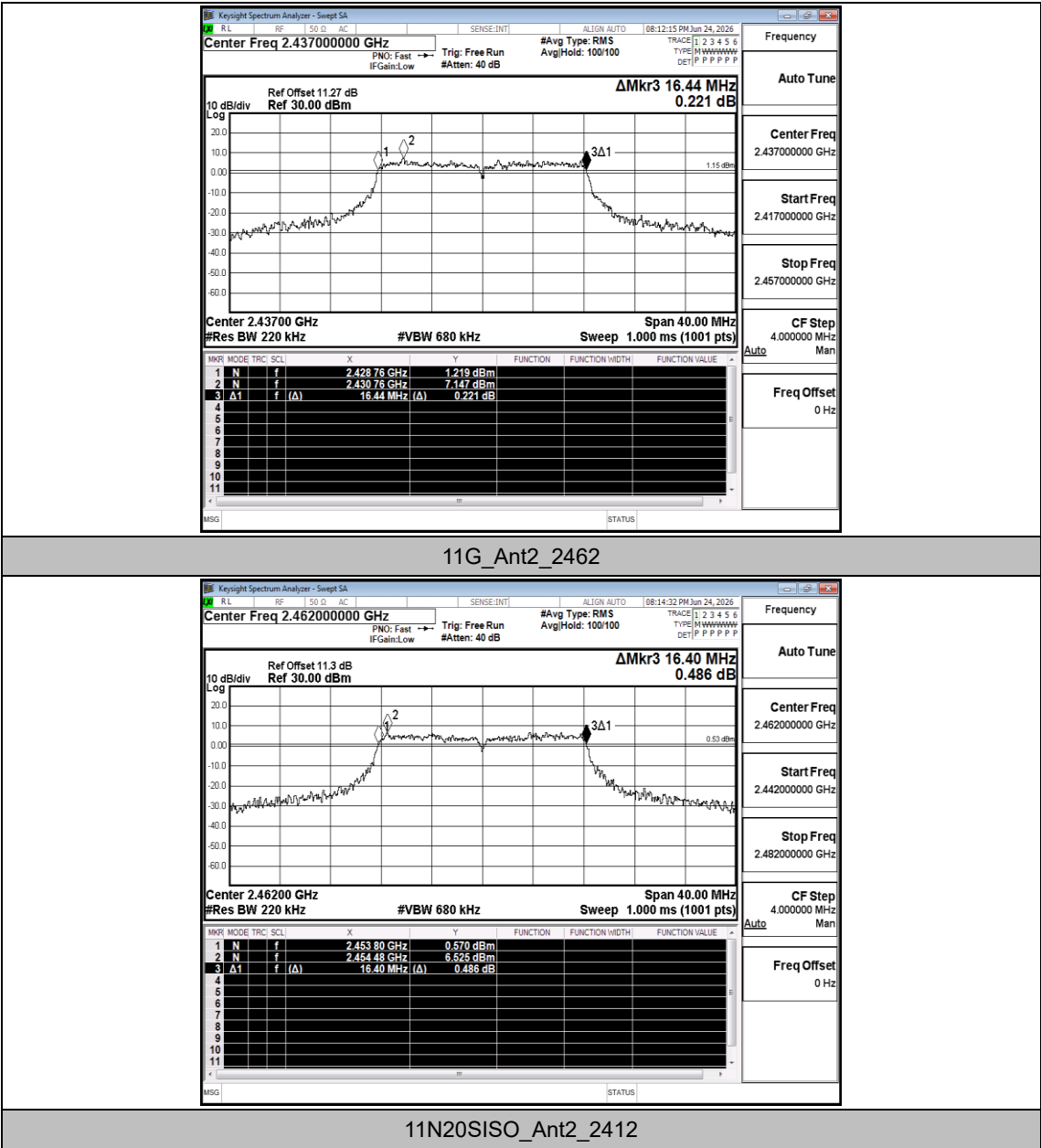
Test Result

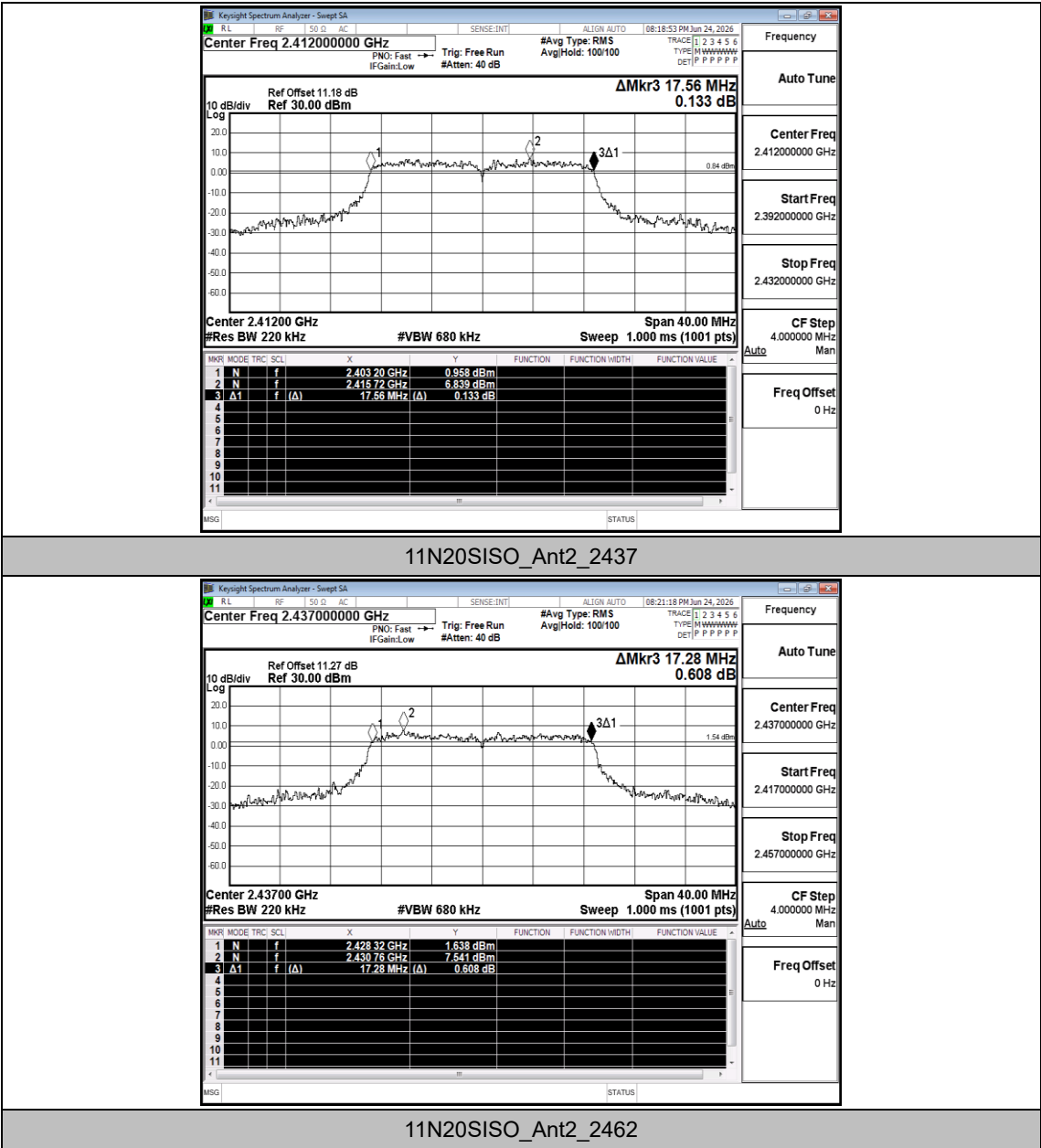
TestMode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11B	Ant2	2412	10.200	2406.880	2417.080	0.5	PASS
		2437	10.200	2431.880	2442.080	0.5	PASS
		2462	10.200	2456.880	2467.080	0.5	PASS
11G	Ant2	2412	16.400	2403.800	2420.200	0.5	PASS
		2437	16.440	2428.760	2445.200	0.5	PASS
		2462	16.400	2453.800	2470.200	0.5	PASS
11N20SISO	Ant2	2412	17.560	2403.200	2420.760	0.5	PASS
		2437	17.280	2428.320	2445.600	0.5	PASS
		2462	17.440	2453.280	2470.720	0.5	PASS
11N40SISO	Ant2	2422	36.080	2403.920	2440.000	0.5	PASS
		2437	36.160	2418.920	2455.080	0.5	PASS
		2452	36.000	2433.920	2469.920	0.5	PASS

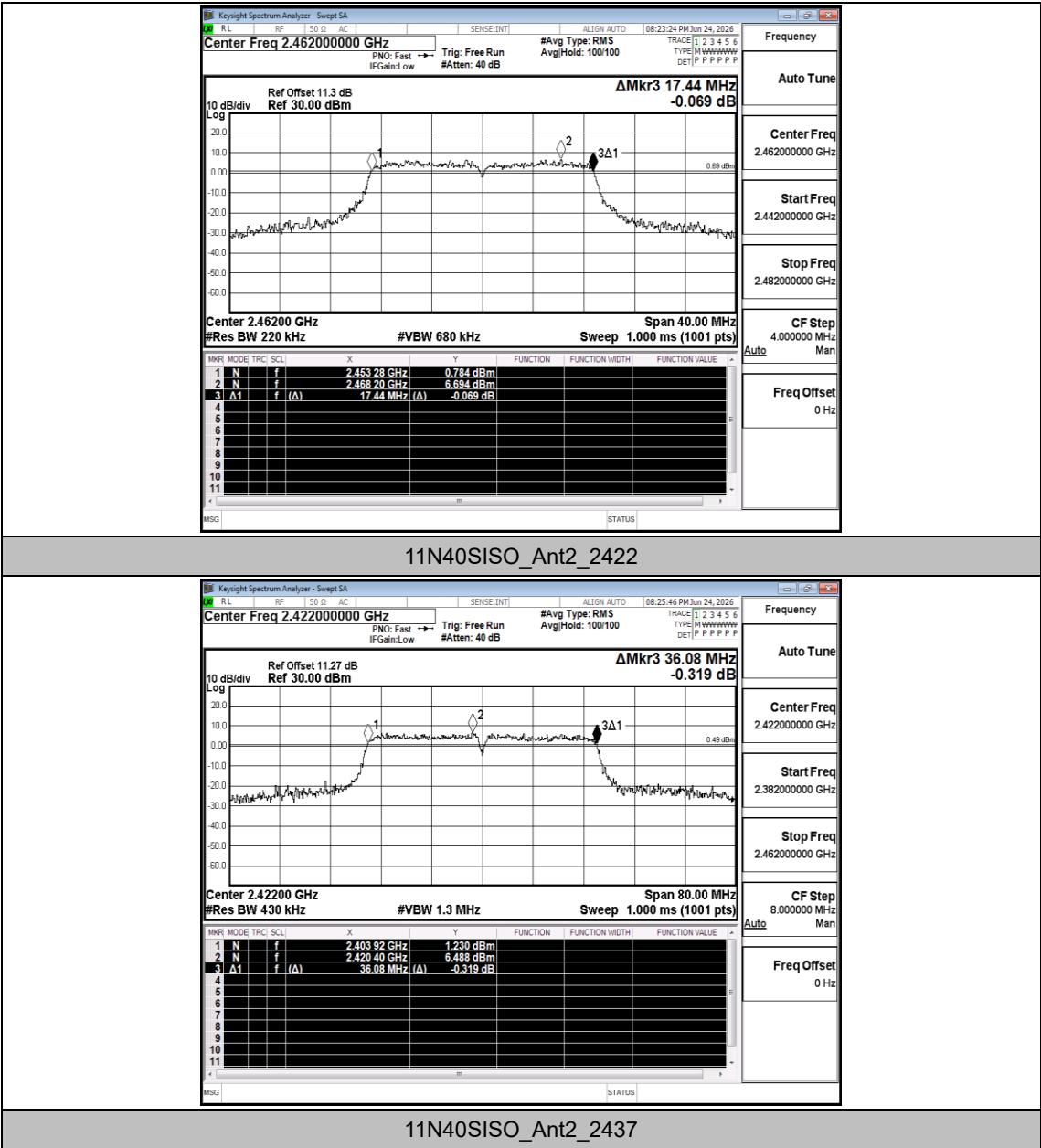
Test Graphs

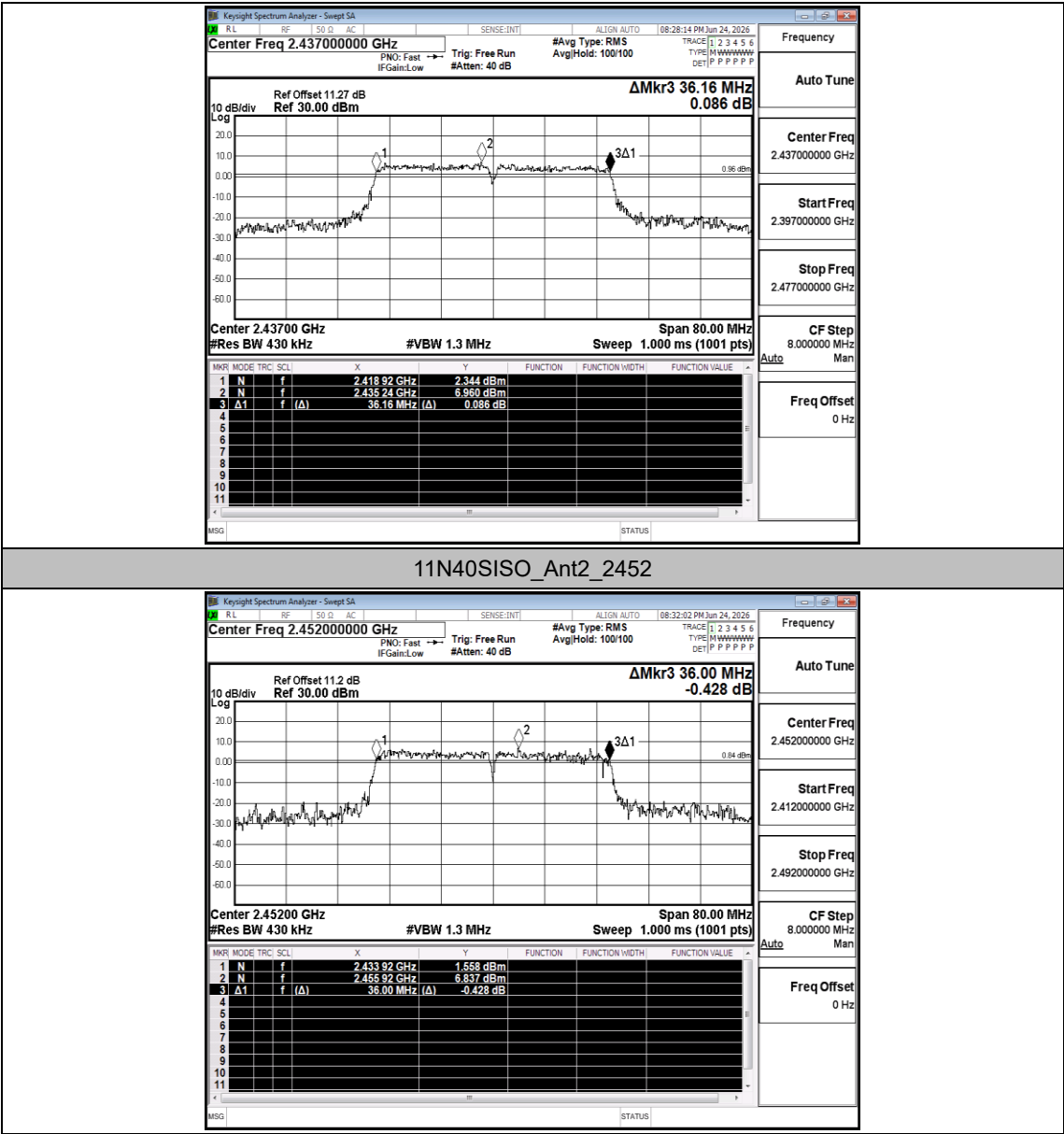












C.2 Maximum Average conducted output power

Test Result

TestMode	Antenna	Frequency [MHz]	Measured Power	DC Factor [dB]	AV Power [dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	18.49	0.00	18.49	≤30.00	PASS
		2437	18.01	0.00	18.01	≤30.00	PASS
		2462	17.50	0.00	17.50	≤30.00	PASS
11G	Ant1	2412	16.51	0.00	16.51	≤30.00	PASS
		2437	16.45	0.00	16.45	≤30.00	PASS
		2462	15.94	0.00	15.94	≤30.00	PASS
11N20SISO	Ant1	2412	16.64	0.00	16.64	≤30.00	PASS
		2437	16.51	0.00	16.51	≤30.00	PASS
		2462	15.94	0.00	15.94	≤30.00	PASS
11N40SISO	Ant1	2422	16.78	0.00	16.78	≤30.00	PASS
		2437	16.46	0.00	16.46	≤30.00	PASS
		2452	16.11	0.00	16.11	≤30.00	PASS

Test Result

TestMode	Antenna	Frequency [MHz]	Measured Power	DC Factor [dB]	AV Power [dBm]	Conducted Limit[dBm]	Verdict
11B	Ant2	2412	16.97	0.51	17.48	≤30.00	PASS
		2437	16.43	0.51	16.94	≤30.00	PASS
		2462	15.88	0.50	16.38	≤30.00	PASS
11G	Ant2	2412	14.77	2.41	17.18	≤30.00	PASS
		2437	14.32	2.41	16.73	≤30.00	PASS
		2462	14.18	2.39	16.57	≤30.00	PASS
11N20SISO	Ant2	2412	14.71	2.54	17.25	≤30.00	PASS
		2437	14.39	2.51	16.90	≤30.00	PASS
		2462	14.12	2.52	16.64	≤30.00	PASS
11N40SISO	Ant2	2422	13.44	4.16	17.60	≤30.00	PASS
		2437	13.34	4.16	17.50	≤30.00	PASS
		2452	8.15	9.11	17.26	≤30.00	PASS

C.3 Maximum power spectral density

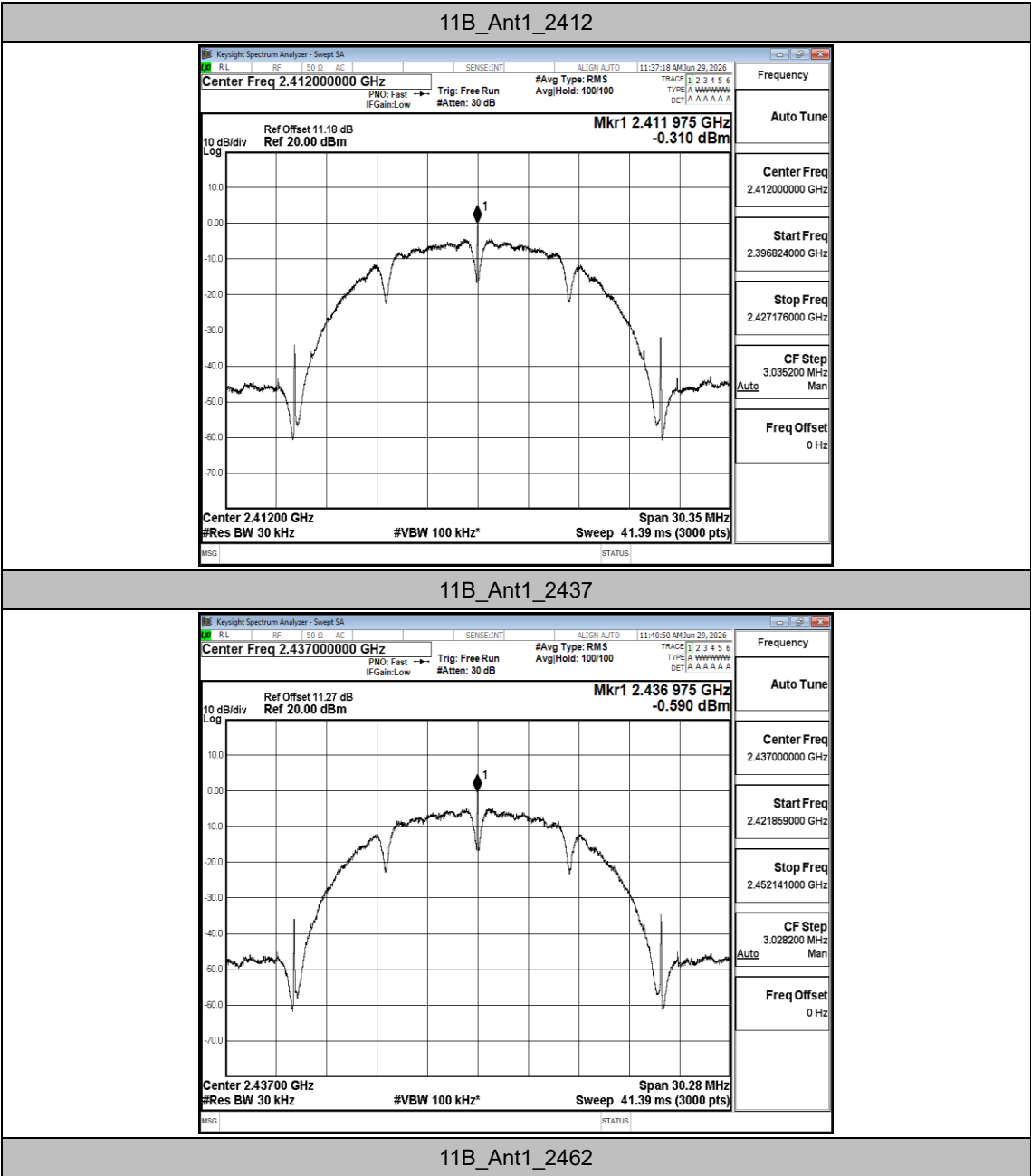
Test Result

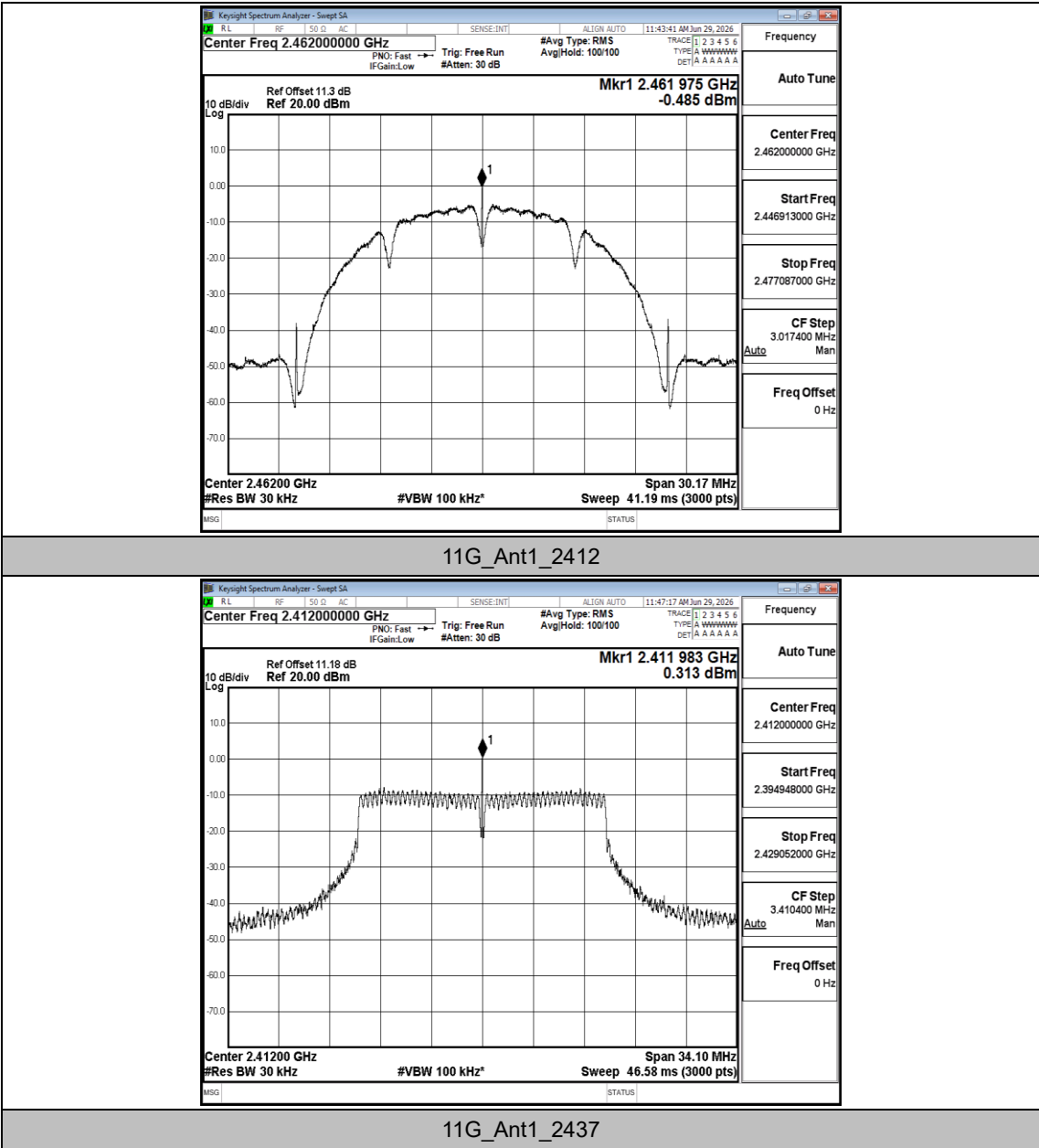
TestMode	Antenna	Frequency [MHz]	Measured PSD [dBm/30kHz]	DC Factor [dB]	Result [dBm/30kHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-0.31	0.00	-0.31	-10.31	≤8.00	PASS
		2437	-0.59	0.00	-0.59	-10.59	≤8.00	PASS
		2462	-0.49	0.00	-0.49	-10.49	≤8.00	PASS
11G	Ant1	2412	0.31	0.00	0.31	-9.69	≤8.00	PASS
		2437	-0.15	0.00	-0.15	-10.15	≤8.00	PASS
		2462	-0.29	0.00	-0.29	-10.29	≤8.00	PASS
11N20SISO	Ant1	2412	0.12	0.00	0.12	-9.88	≤8.00	PASS
		2437	-0.37	0.00	-0.37	-10.37	≤8.00	PASS
		2462	-0.61	0.00	-0.61	-10.61	≤8.00	PASS
11N40SISO	Ant1	2422	-0.17	0.00	-0.17	-10.17	≤8.00	PASS
		2437	-0.71	0.00	-0.71	-10.71	≤8.00	PASS
		2452	-0.53	0.00	-0.53	-10.53	≤8.00	PASS

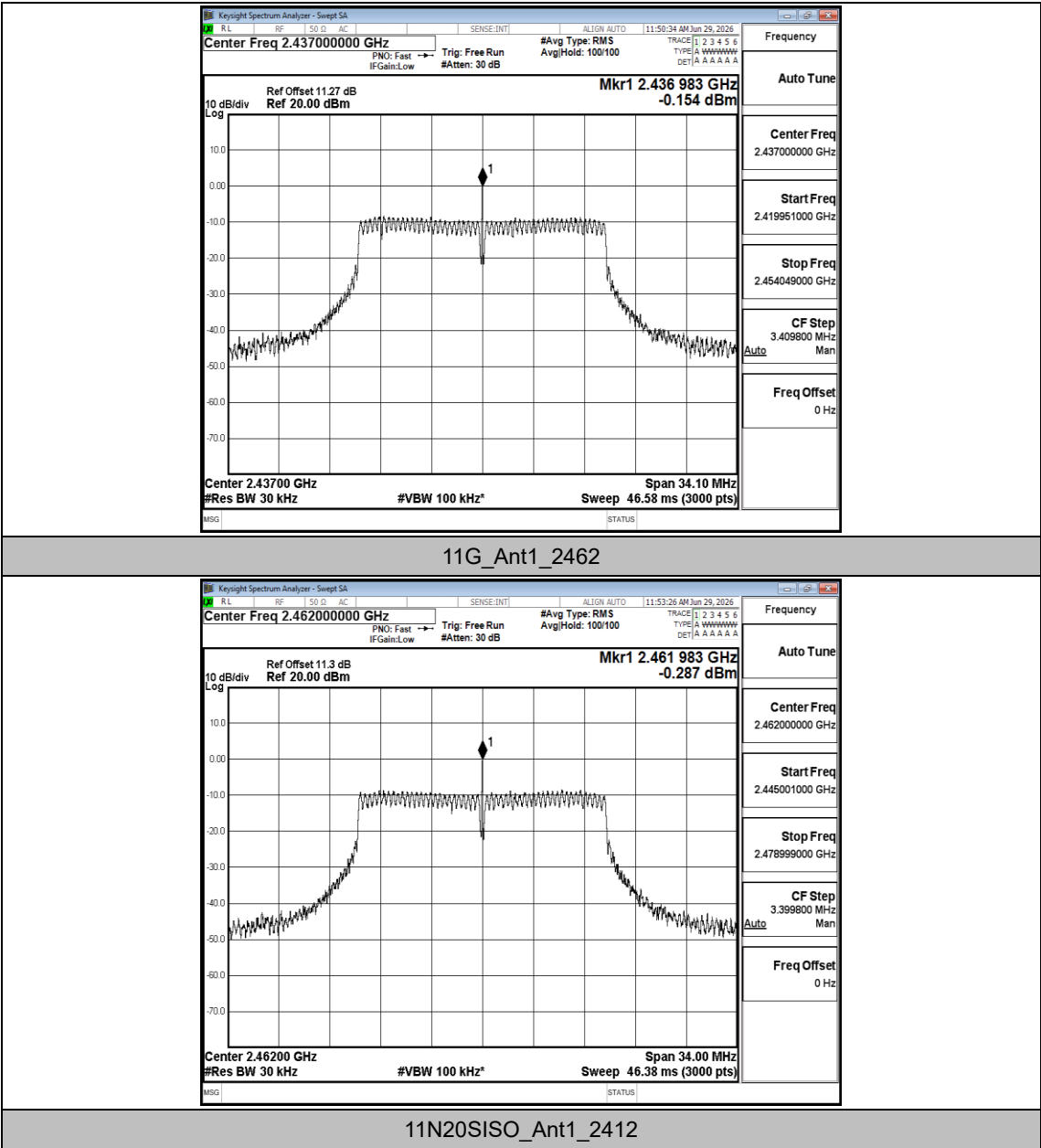
Note: offset=System attenuation +cable loss

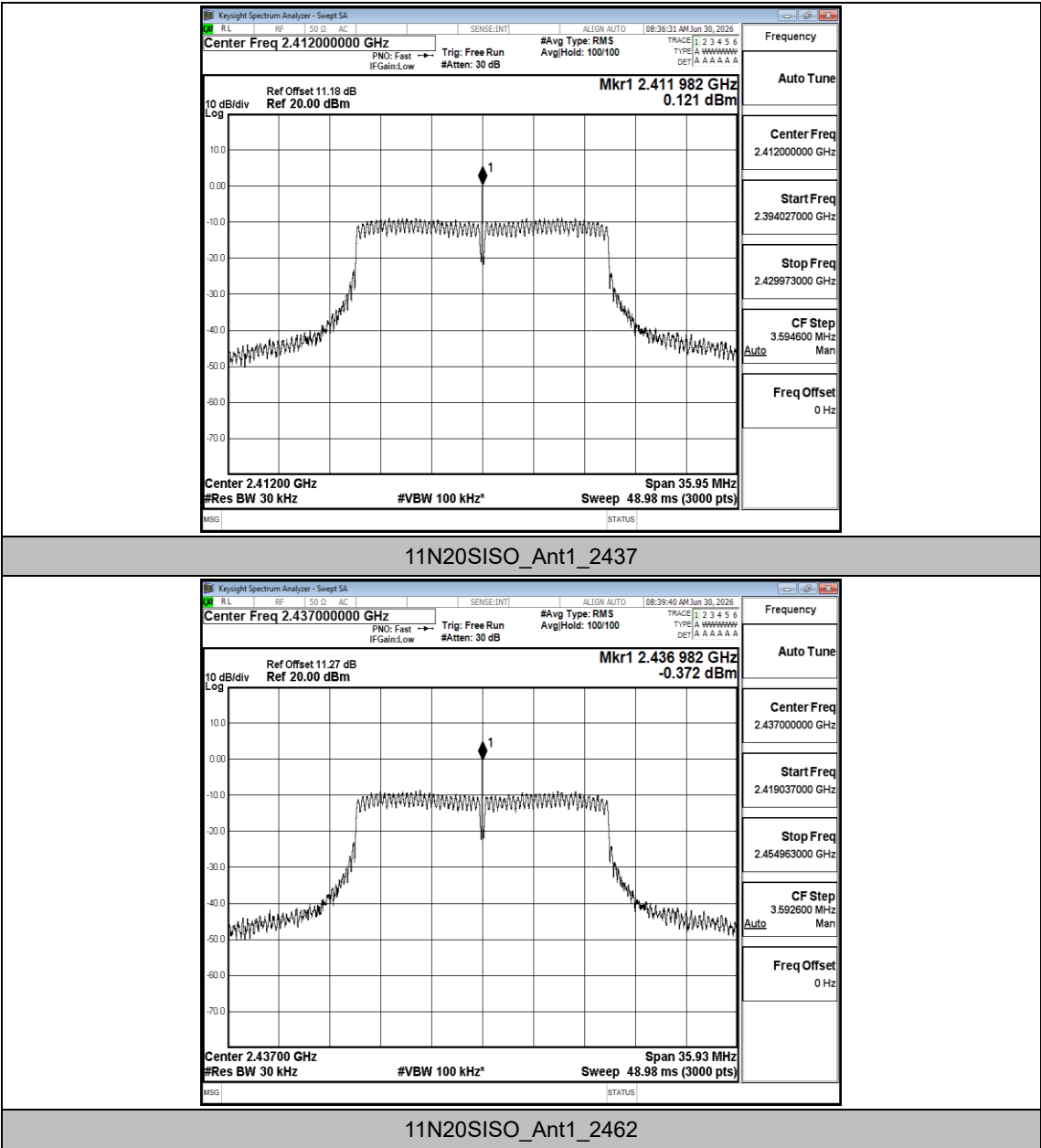
Result[dBm/3kHz] =Result[dBm/30kHz] +10*Log (3/30)

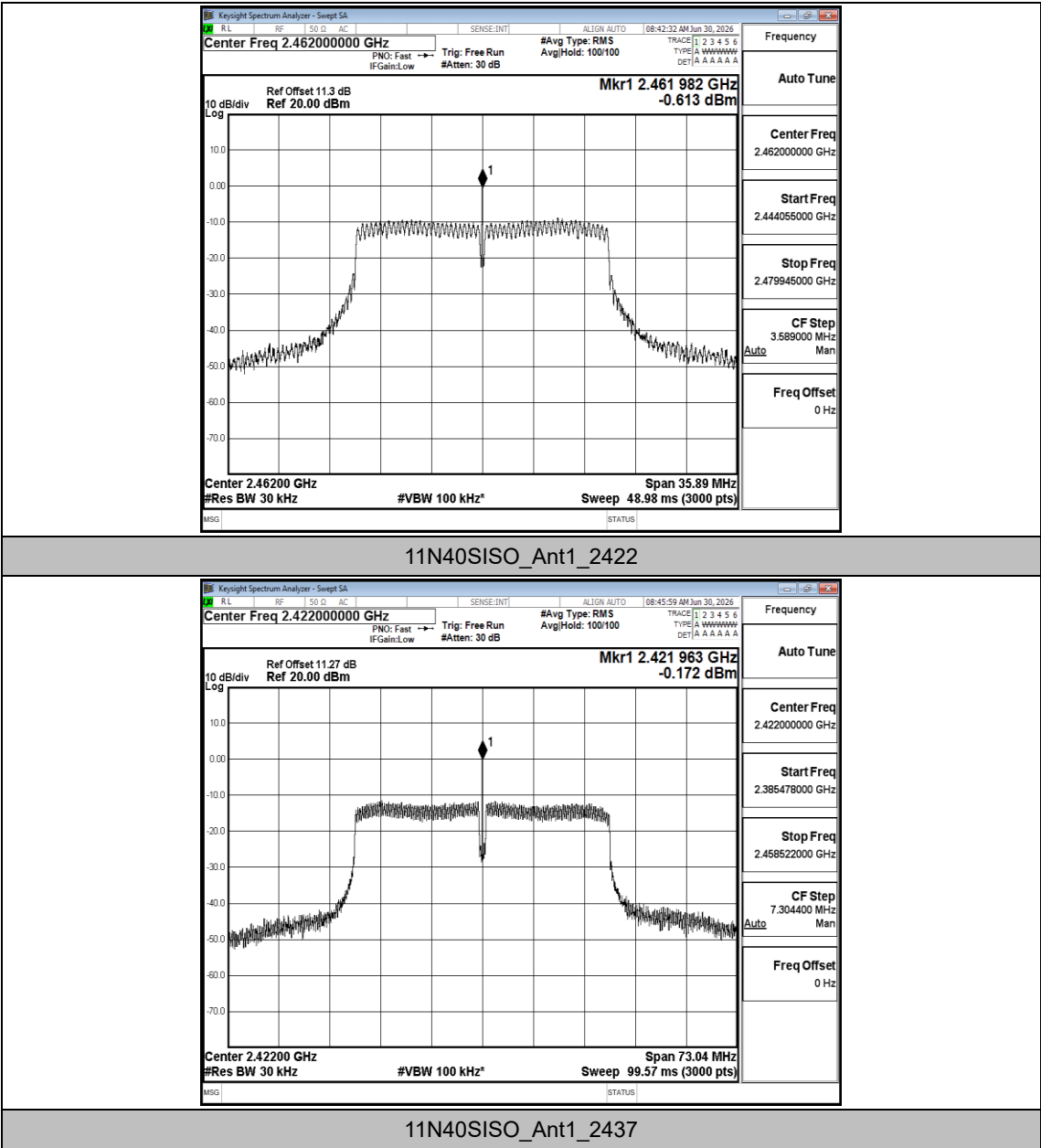
Test Graphs

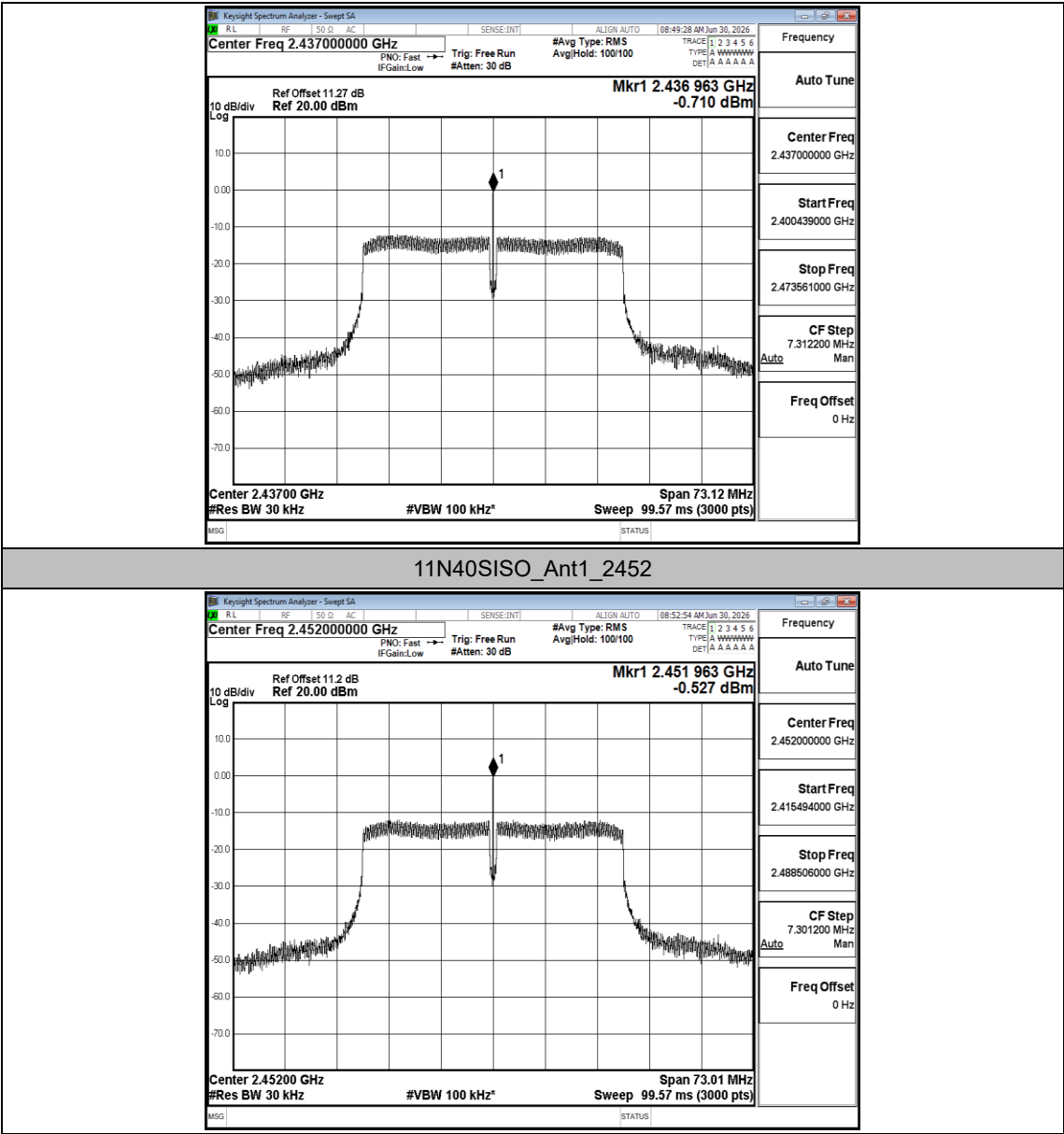












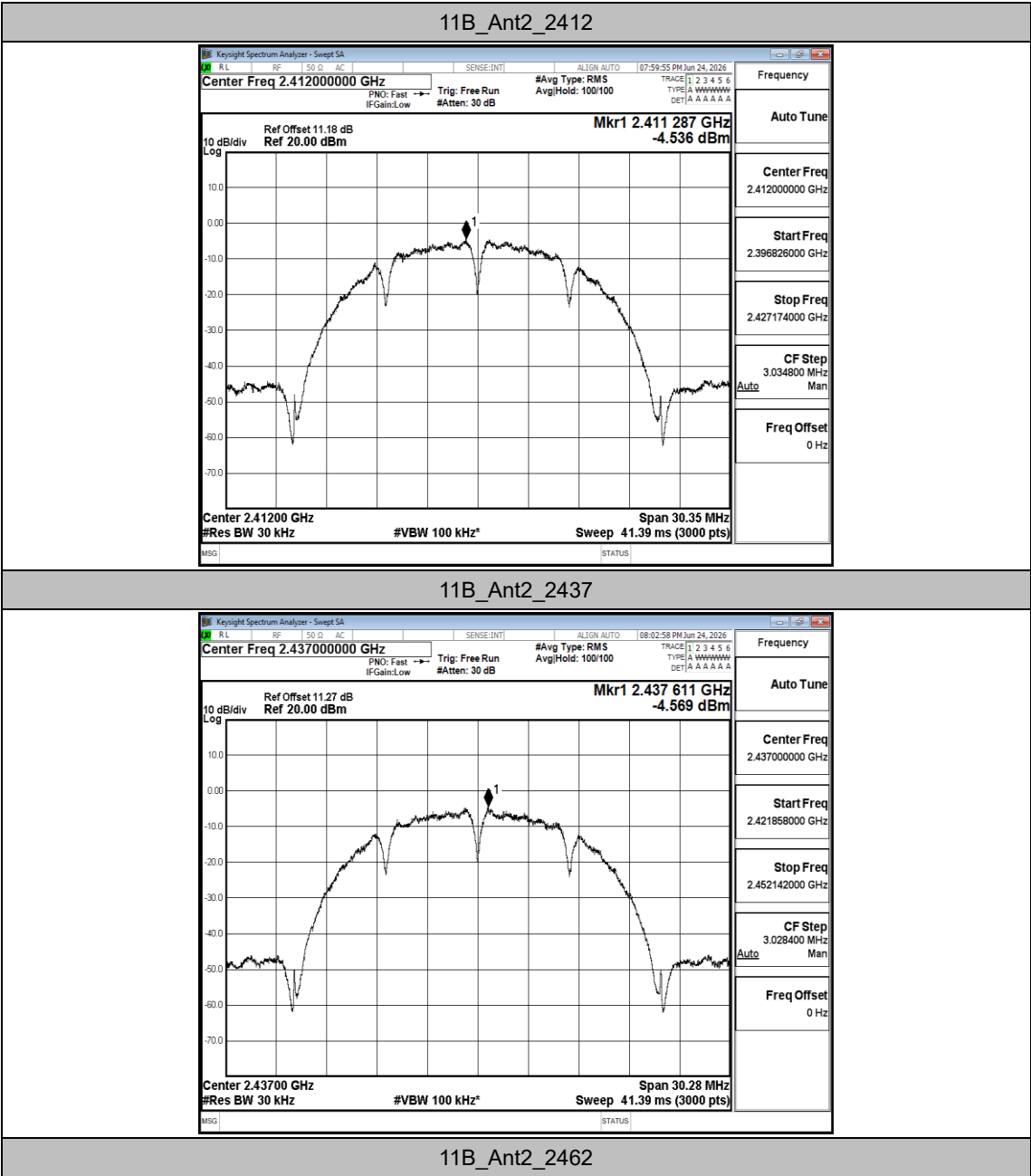
Test Result

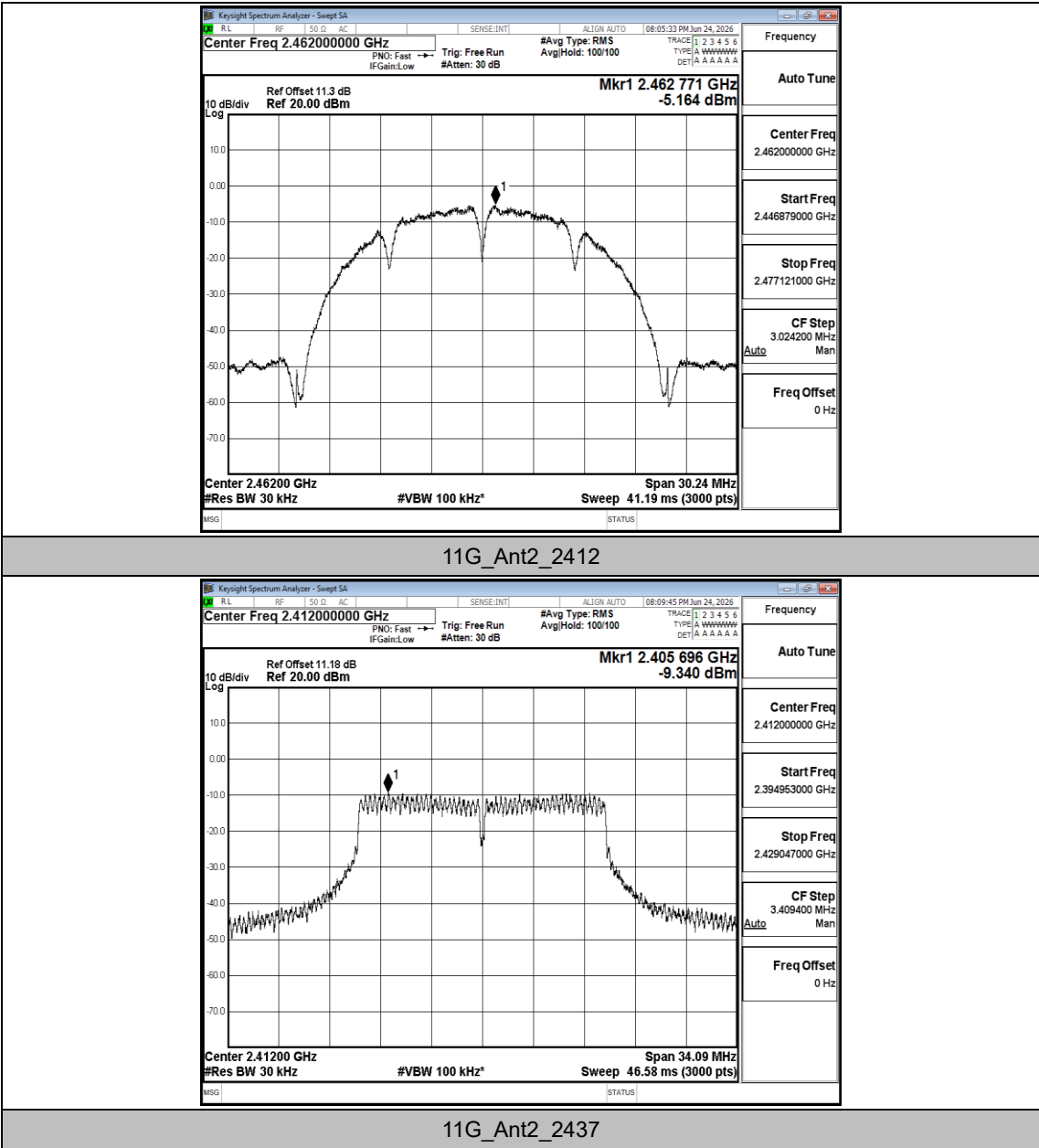
TestMode	Antenna	Frequency[MHz]	Measured PSD [dBm/30kHz]	DC Factor [dB]	Result [dBm/30kHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant2	2412	-4.54	0.51	-4.03	-14.03	≤8.00	PASS
		2437	-4.57	0.51	-4.06	-14.06	≤8.00	PASS
		2462	-5.16	0.50	-4.66	-14.66	≤8.00	PASS
11G	Ant2	2412	-9.34	2.41	-6.93	-16.93	≤8.00	PASS
		2437	-9.35	2.41	-6.94	-16.94	≤8.00	PASS
		2462	-9.35	2.39	-6.96	-16.96	≤8.00	PASS
11N20SISO	Ant2	2412	-9.18	2.54	-6.64	-16.64	≤8.00	PASS
		2437	-9.01	2.51	-6.50	-16.50	≤8.00	PASS
		2462	-9.19	2.52	-6.67	-16.67	≤8.00	PASS
11N40SISO	Ant2	2422	-12.07	4.16	-7.91	-17.91	≤8.00	PASS
		2437	-12.21	4.16	-8.05	-18.05	≤8.00	PASS
		2452	-15.39	9.11	-6.28	-16.28	≤8.00	PASS

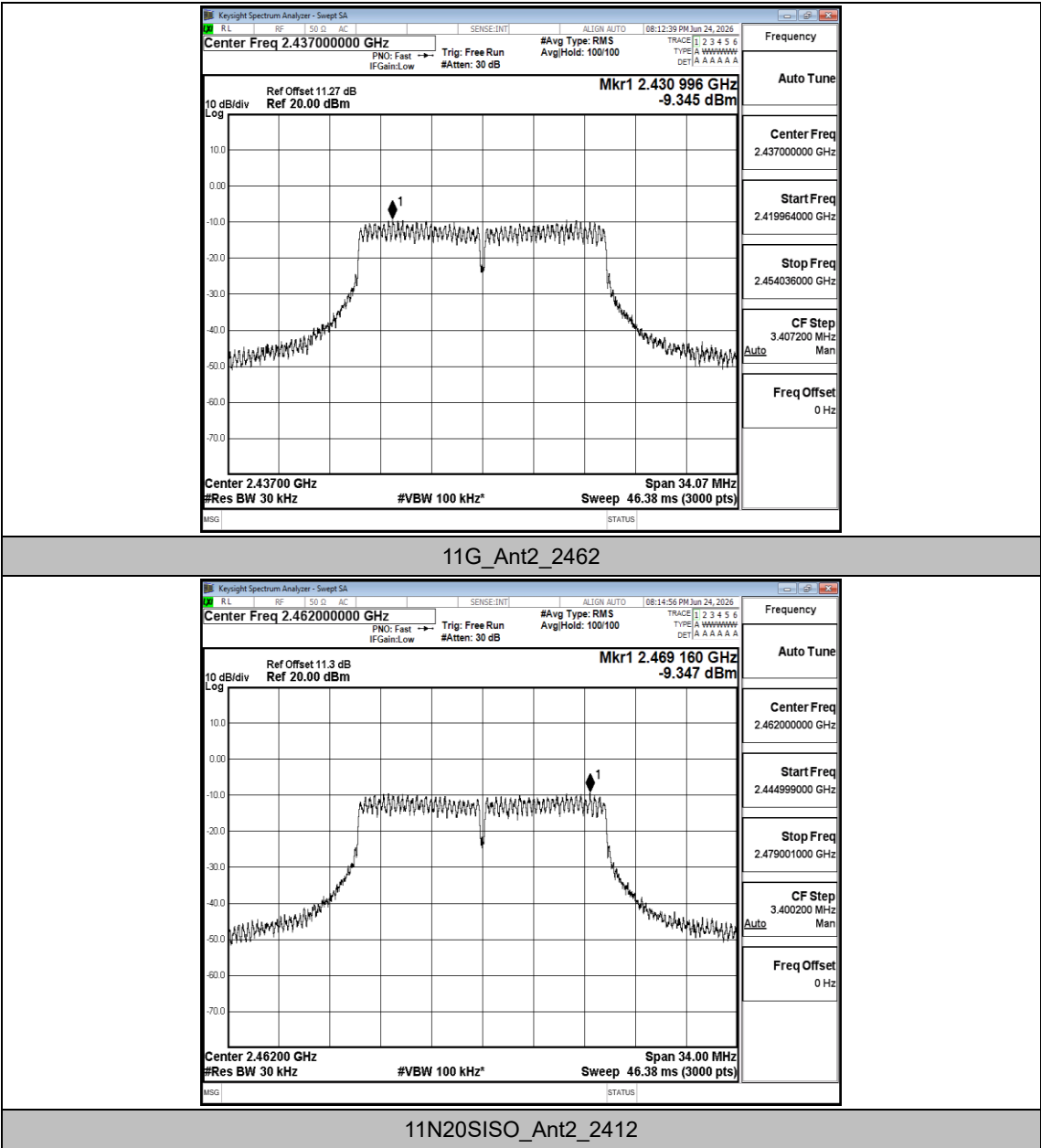
Note: offset=System attenuation +cable loss

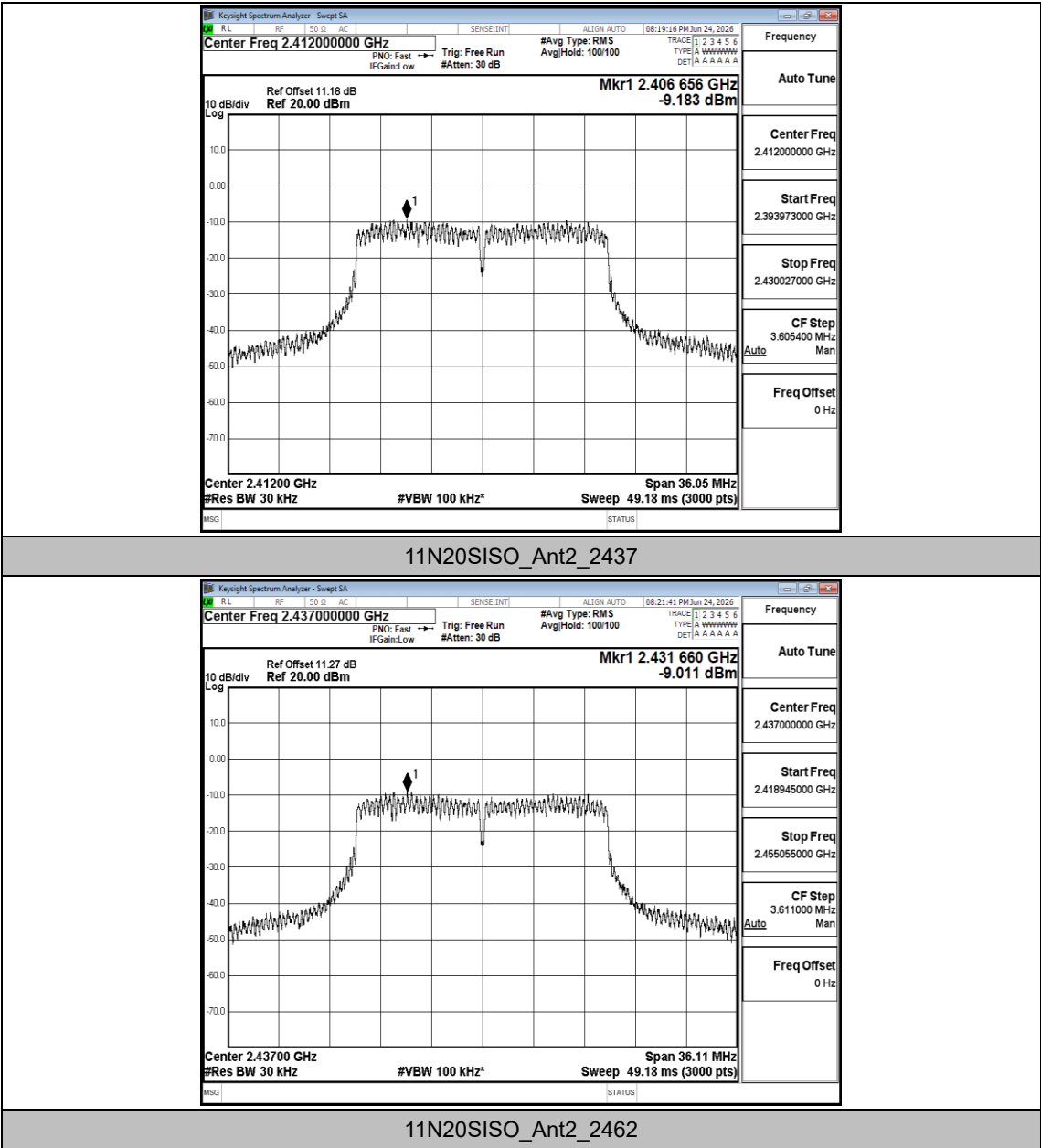
Result[dBm/3kHz] =Result[dBm/30kHz] +10*Log (3/30)

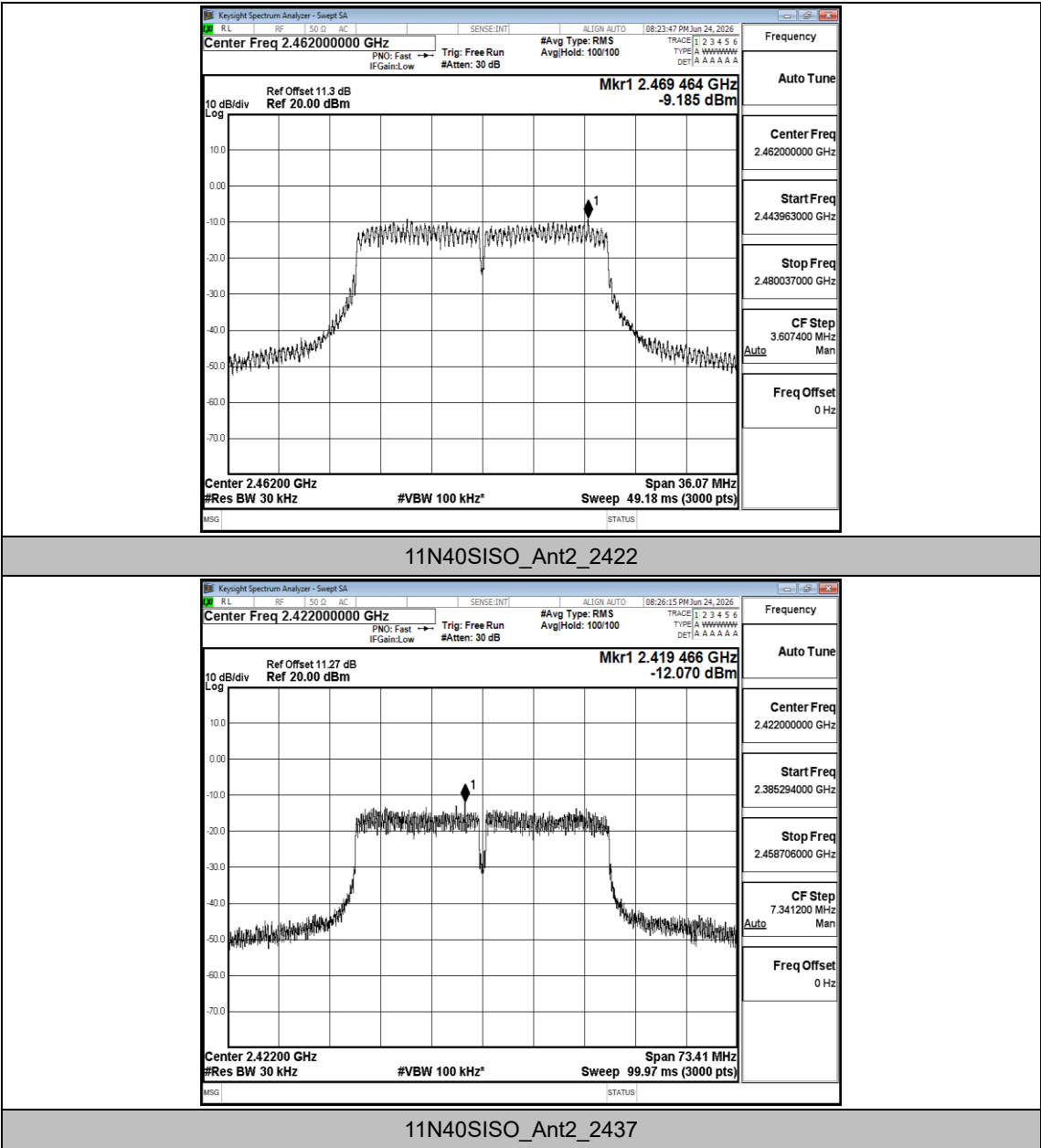
Test Graphs

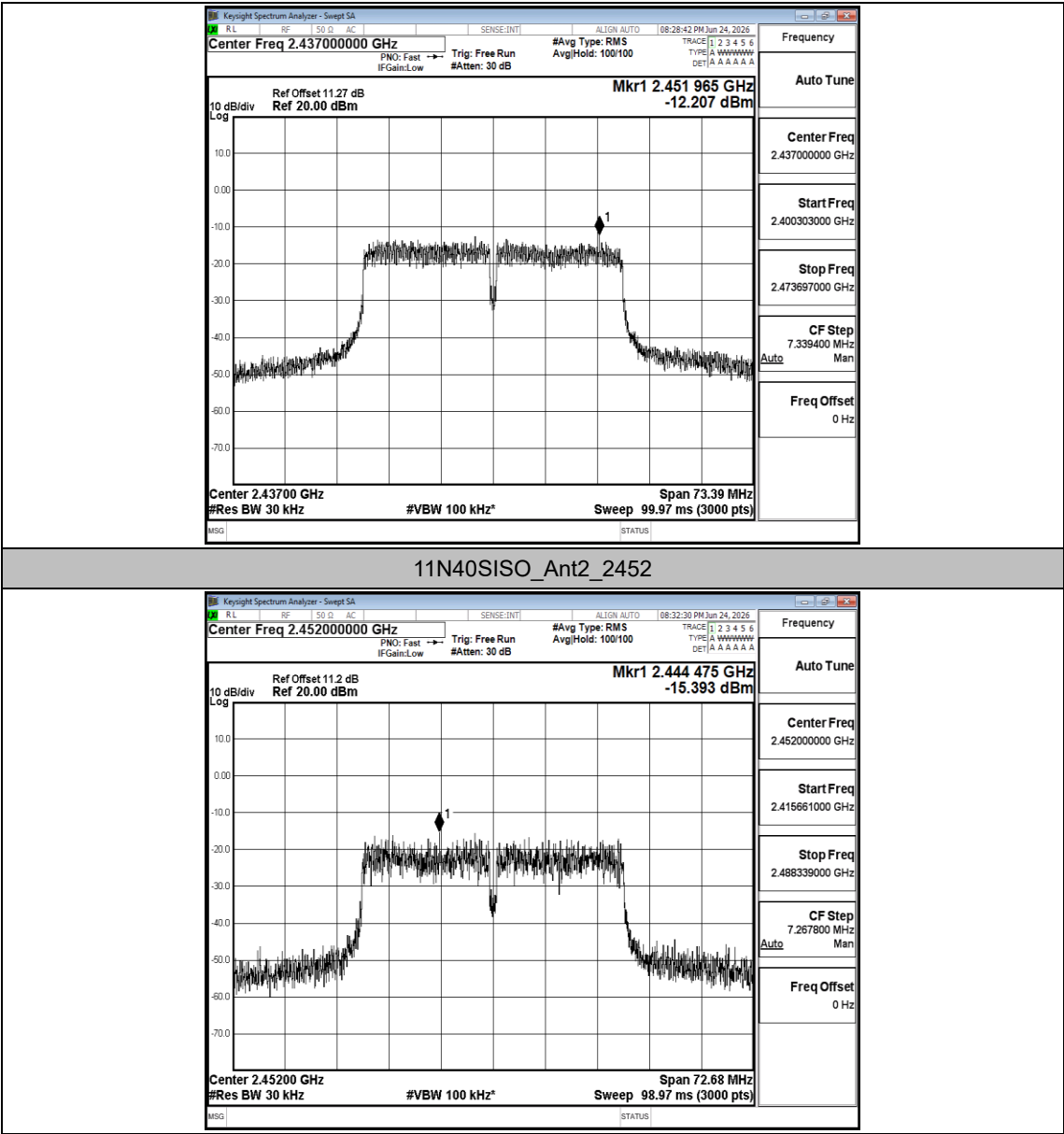










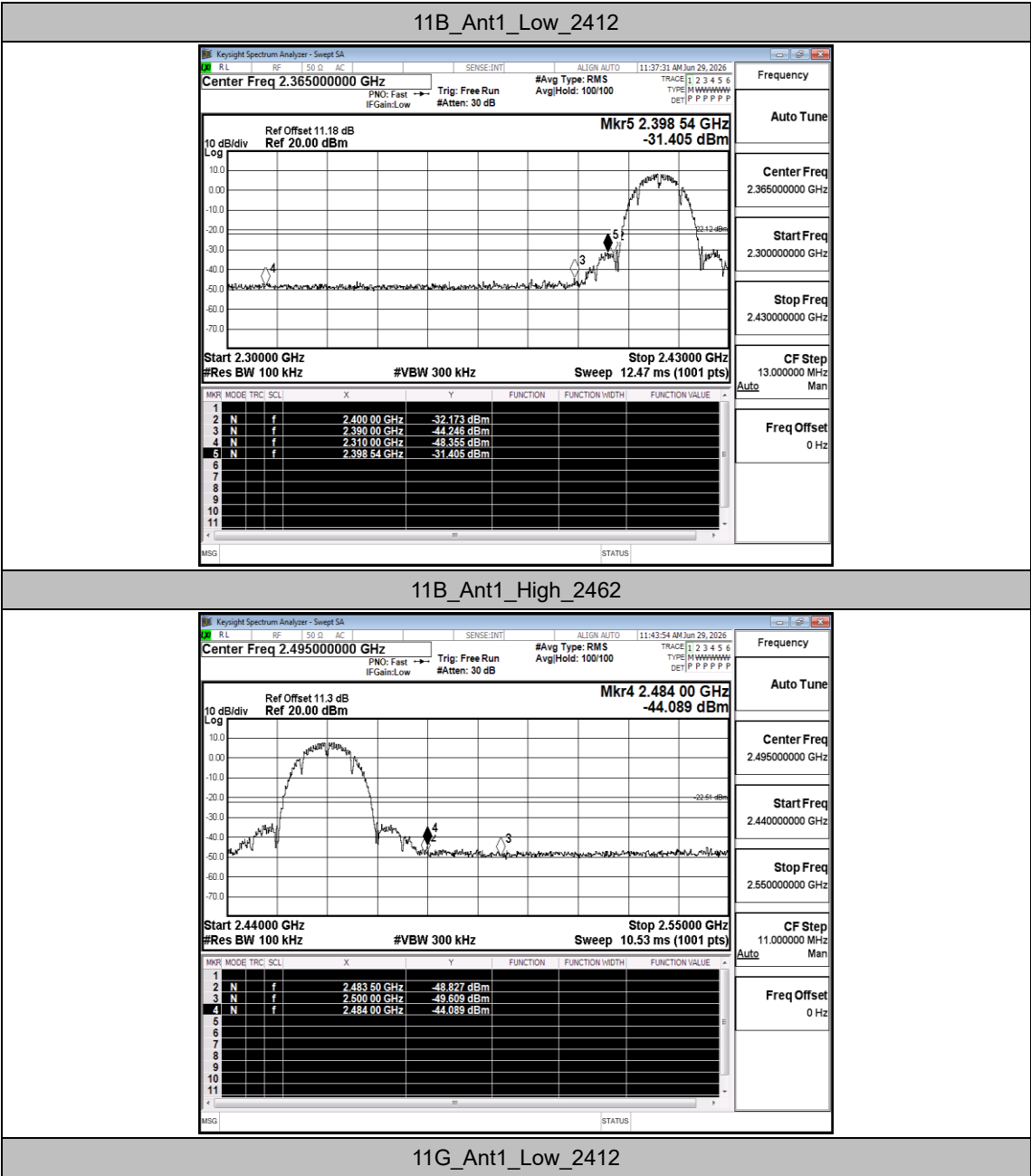


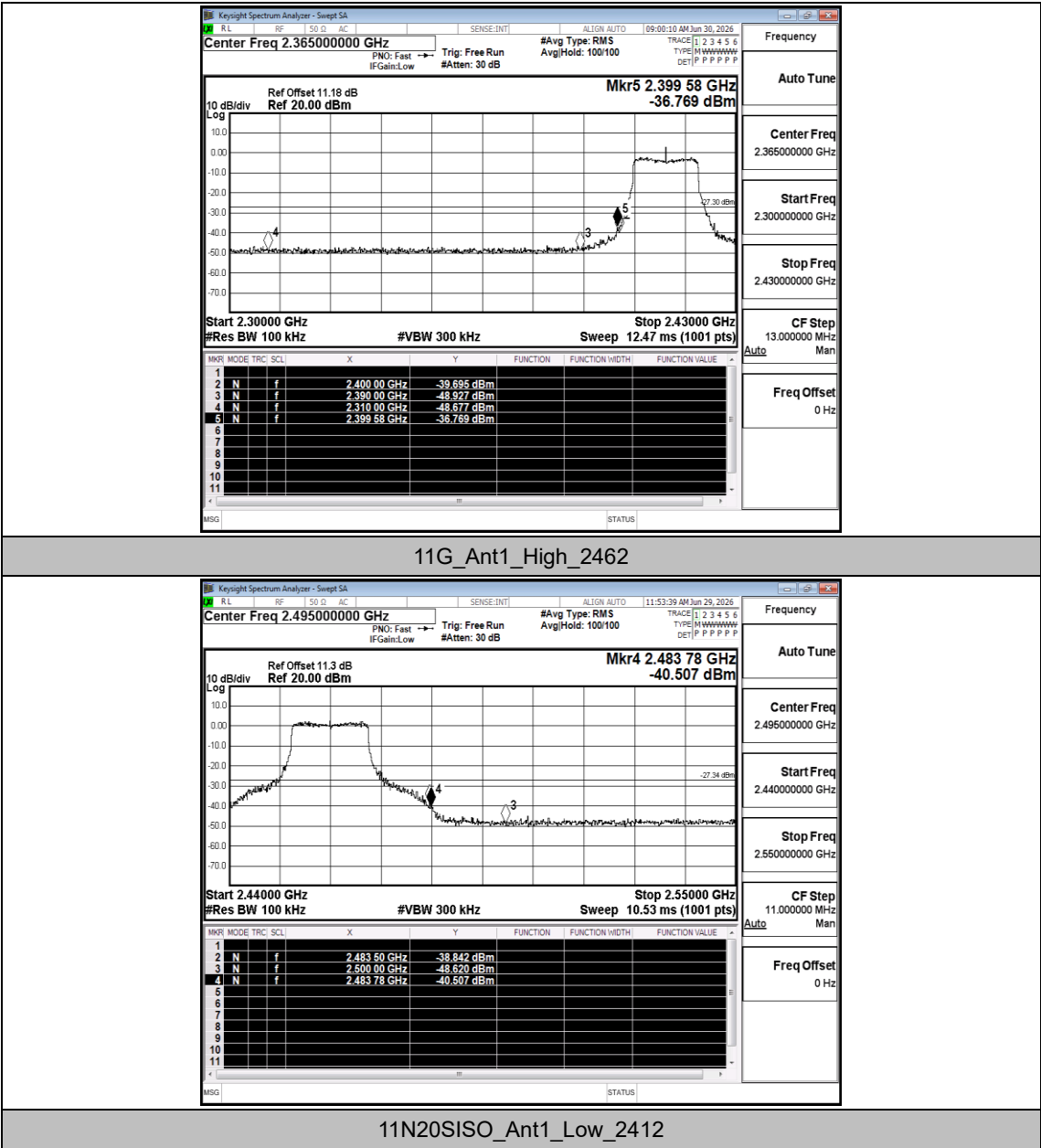
C.4 Band edge measurements

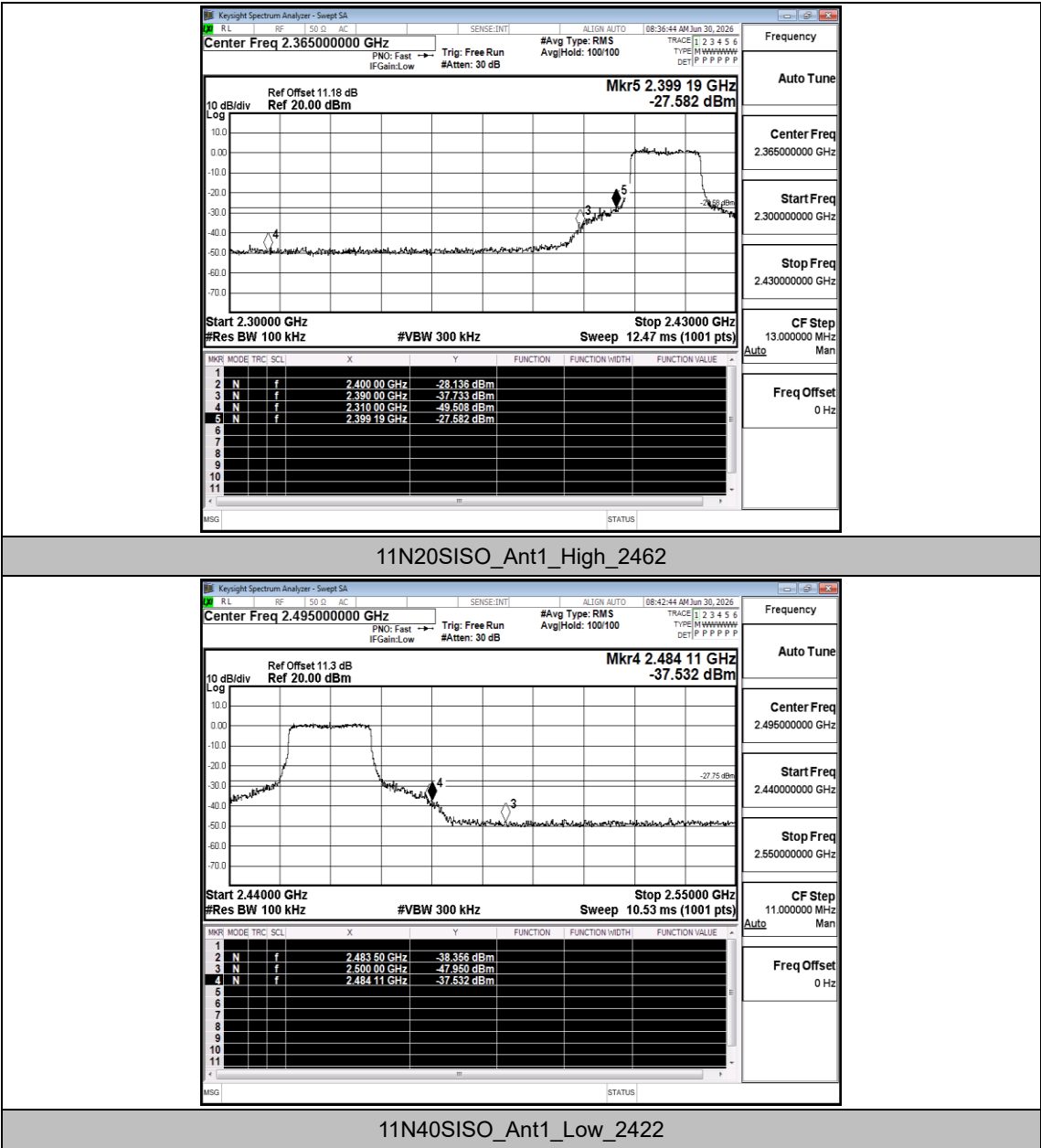
Test Result

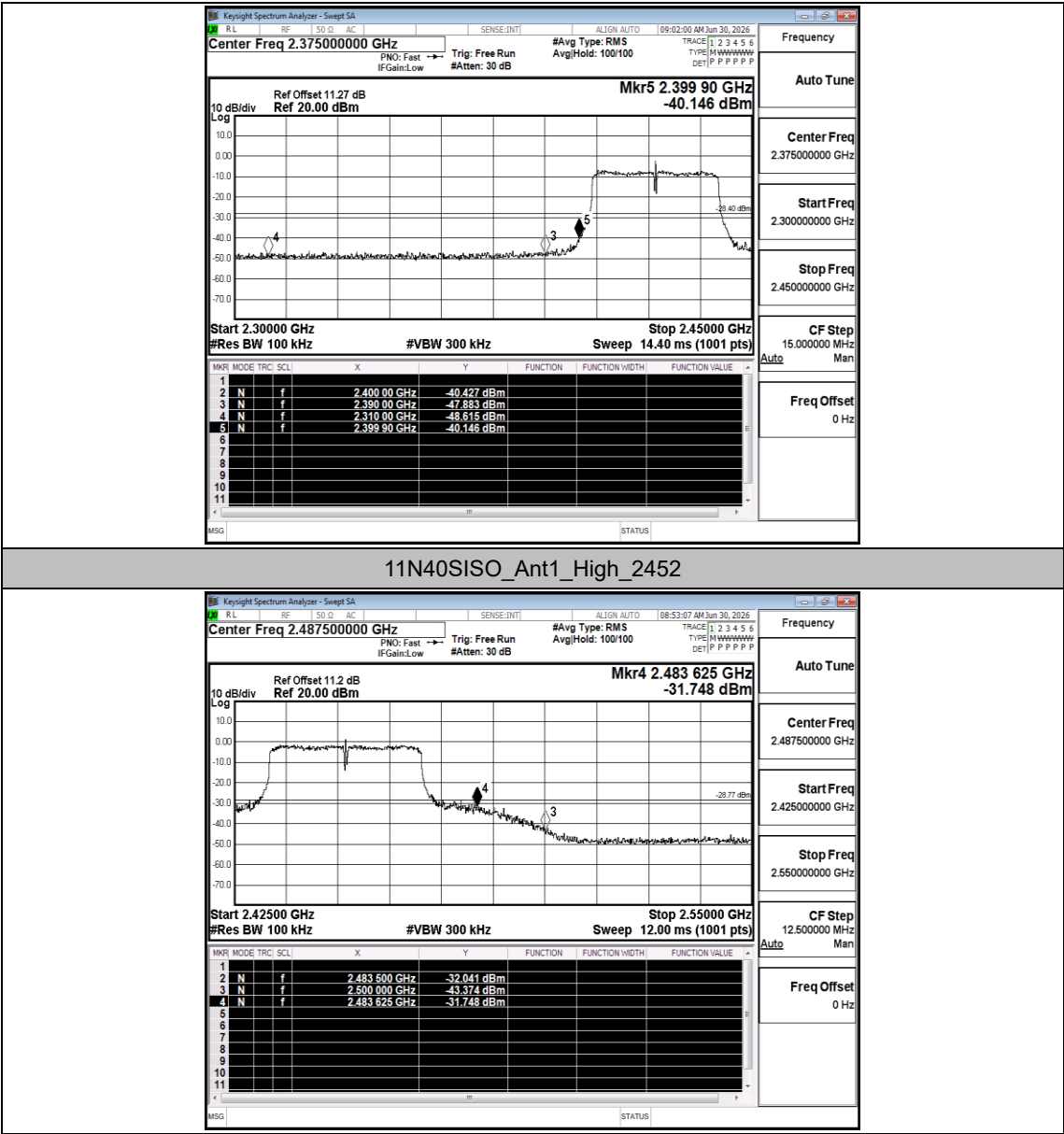
TestMode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	7.88	-31.41	≤ -22.12	PASS
		High	2462	7.49	-44.09	≤ -22.51	PASS
11G	Ant1	Low	2412	2.70	-36.77	≤ -27.3	PASS
		High	2462	2.66	-40.51	≤ -27.34	PASS
11N20SISO	Ant1	Low	2412	2.42	-27.58	≤ -27.58	PASS
		High	2462	2.25	-37.53	≤ -27.75	PASS
11N40SISO	Ant1	Low	2422	1.60	-40.15	≤ -28.4	PASS
		High	2452	1.23	-31.75	≤ -28.77	PASS

Test Graphs









Test Result

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant2	Low	2412	8.59	-30.22	≤-21.41	PASS
		High	2462	8.32	-45.66	≤-21.68	PASS
11G	Ant2	Low	2412	6.63	-24.01	≤-23.37	PASS
		High	2462	6.12	-37.26	≤-23.88	PASS
11N20SISO	Ant2	Low	2412	6.57	-39.63	≤-23.43	PASS
		High	2462	5.65	-35.13	≤-24.35	PASS
11N40SISO	Ant2	Low	2422	3.58	-37.38	≤-26.42	PASS
		High	2452	3.31	-26.81	≤-26.69	PASS

Test Graphs

