

Appendix-A GSM

Effective (Isotropic) Radiated Power Output Data

Test Result

Ant3:

Band	Channel	Result (dBm)	ERP (dBm)	Limit(dBm)	Verdict
GSM850	128	31.63	24.88	38.45	PASS
GSM850	190	31.42	24.67	38.45	PASS
GSM850	251	31.43	24.68	38.45	PASS

Ant8:

Band	Channel	Result (dBm)	EIRP (dBm)	Limit(dBm)	Verdict
GSM1900	512	29.1	27.3	33.00	PASS
GSM1900	661	29.53	27.73	33.00	PASS
GSM1900	810	29.46	27.66	33.00	PASS

Ant3:

Band	Channel	Slot	Result (dBm)	ERP (dBm)	Limit(dBm)	Verdict
GPRS850	128	1	31.63	24.88	38.45	PASS
GPRS850	190	1	31.72	24.97	38.45	PASS
GPRS850	251	1	31.72	24.97	38.45	PASS
GPRS850	128	2	29.06	22.31	38.45	PASS
GPRS850	190	2	28.94	22.19	38.45	PASS
GPRS850	251	2	28.95	22.2	38.45	PASS
GPRS850	128	3	27.1	20.35	38.45	PASS
GPRS850	190	3	26.98	20.23	38.45	PASS
GPRS850	251	3	27.06	20.31	38.45	PASS
GPRS850	128	4	25.81	19.06	38.45	PASS
GPRS850	190	4	25.77	19.02	38.45	PASS
GPRS850	251	4	25.77	19.02	38.45	PASS

Ant8:

Band	Channel	Slot	Result (dBm)	EIRP (dBm)	Limit(dBm)	Verdict
GPRS1900	512	1	29.19	27.39	33.00	PASS
GPRS1900	661	1	29.42	27.62	33.00	PASS
GPRS1900	810	1	29.39	27.59	33.00	PASS
GPRS1900	512	2	26.63	24.83	33.00	PASS
GPRS1900	661	2	27.04	25.24	33.00	PASS
GPRS1900	810	2	26.98	25.18	33.00	PASS
GPRS1900	512	3	24.44	22.64	33.00	PASS
GPRS1900	661	3	24.99	23.19	33.00	PASS
GPRS1900	810	3	24.88	23.08	33.00	PASS
GPRS1900	512	4	23.07	21.27	33.00	PASS
GPRS1900	661	4	23.62	21.82	33.00	PASS
GPRS1900	810	4	23.51	21.71	33.00	PASS

Ant3:

Band	Channel	Slot	Result (dBm)	ERP (dBm)	Limit(dBm)	Verdict
EGPRS850	128	1	24.82	18.07	38.45	PASS
EGPRS850	190	1	25.48	18.73	38.45	PASS
EGPRS850	251	1	25.22	18.47	38.45	PASS
EGPRS850	128	2	23.04	16.29	38.45	PASS
EGPRS850	190	2	22.78	16.03	38.45	PASS
EGPRS850	251	2	22.78	16.03	38.45	PASS
EGPRS850	128	3	21.12	14.37	38.45	PASS
EGPRS850	190	3	20.79	14.04	38.45	PASS
EGPRS850	251	3	20.79	14.04	38.45	PASS
EGPRS850	128	4	19.86	13.11	38.45	PASS
EGPRS850	190	4	19.59	12.84	38.45	PASS
EGPRS850	251	4	19.57	12.82	38.45	PASS

Ant8:

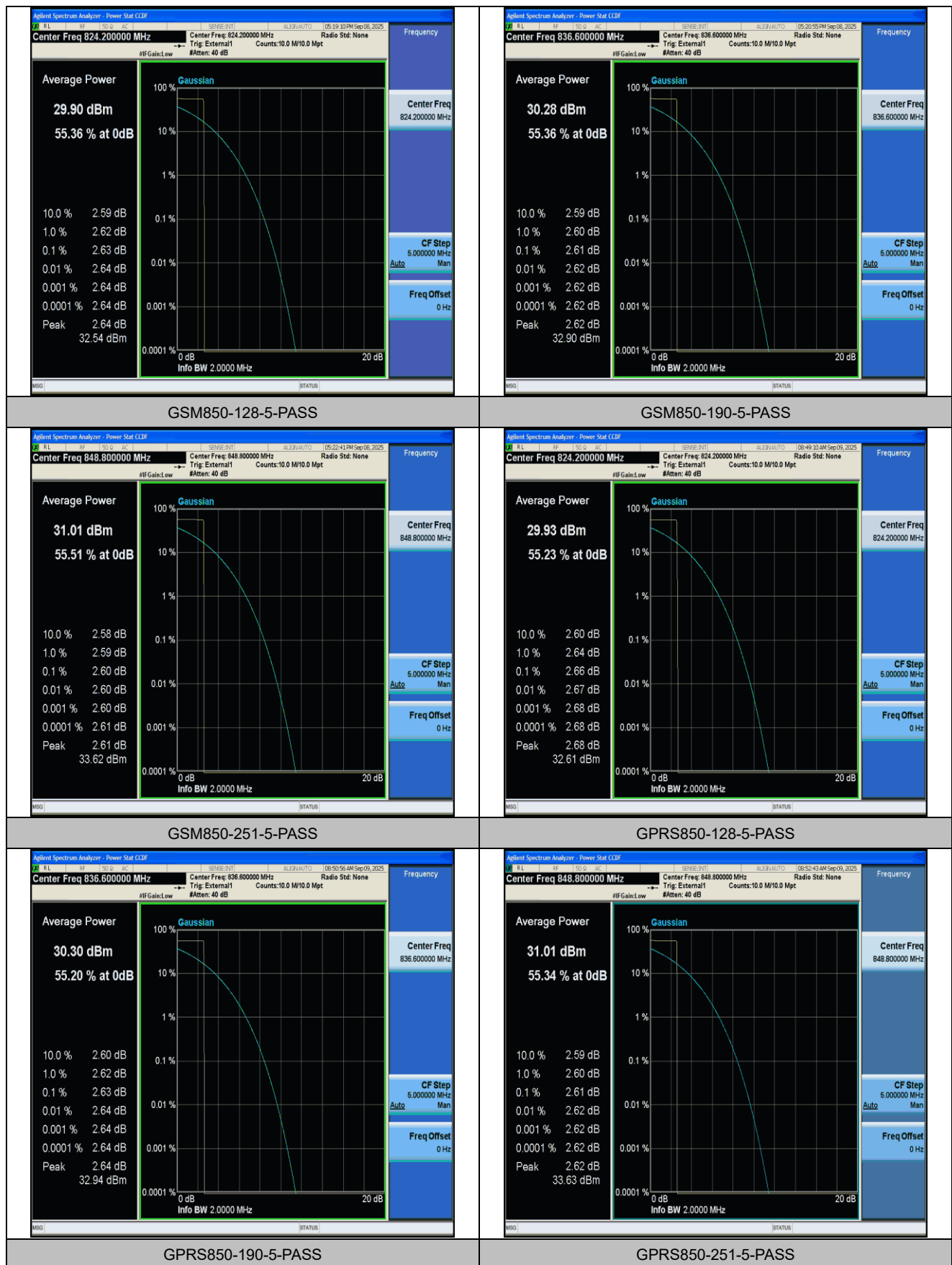
Band	Channel	Slot	Result (dBm)	EIRP (dBm)	Limit(dBm)	Verdict
EGPRS1900	512	1	24.87	23.07	33.00	PASS
EGPRS1900	661	1	25.09	23.29	33.00	PASS
EGPRS1900	810	1	24.94	23.14	33.00	PASS
EGPRS1900	512	2	22.59	20.79	33.00	PASS
EGPRS1900	661	2	22.8	21	33.00	PASS
EGPRS1900	810	2	22.67	20.87	33.00	PASS
EGPRS1900	512	3	21.09	19.29	33.00	PASS
EGPRS1900	661	3	21.29	19.49	33.00	PASS
EGPRS1900	810	3	21.13	19.33	33.00	PASS
EGPRS1900	512	4	19.38	17.58	33.00	PASS
EGPRS1900	661	4	19.6	17.8	33.00	PASS
EGPRS1900	810	4	19.47	17.67	33.00	PASS

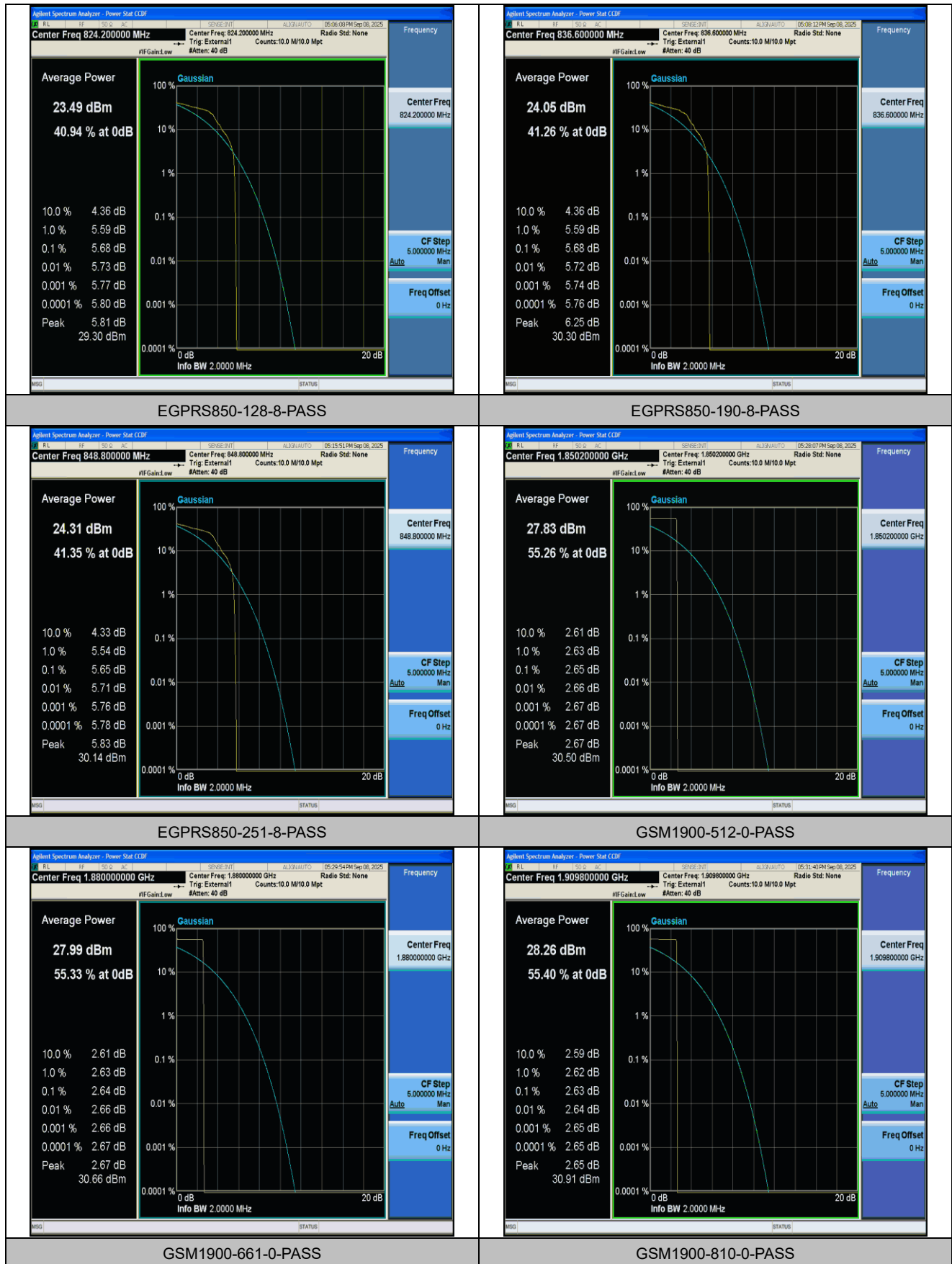
Peak-to-Average Ratio(CCDF)

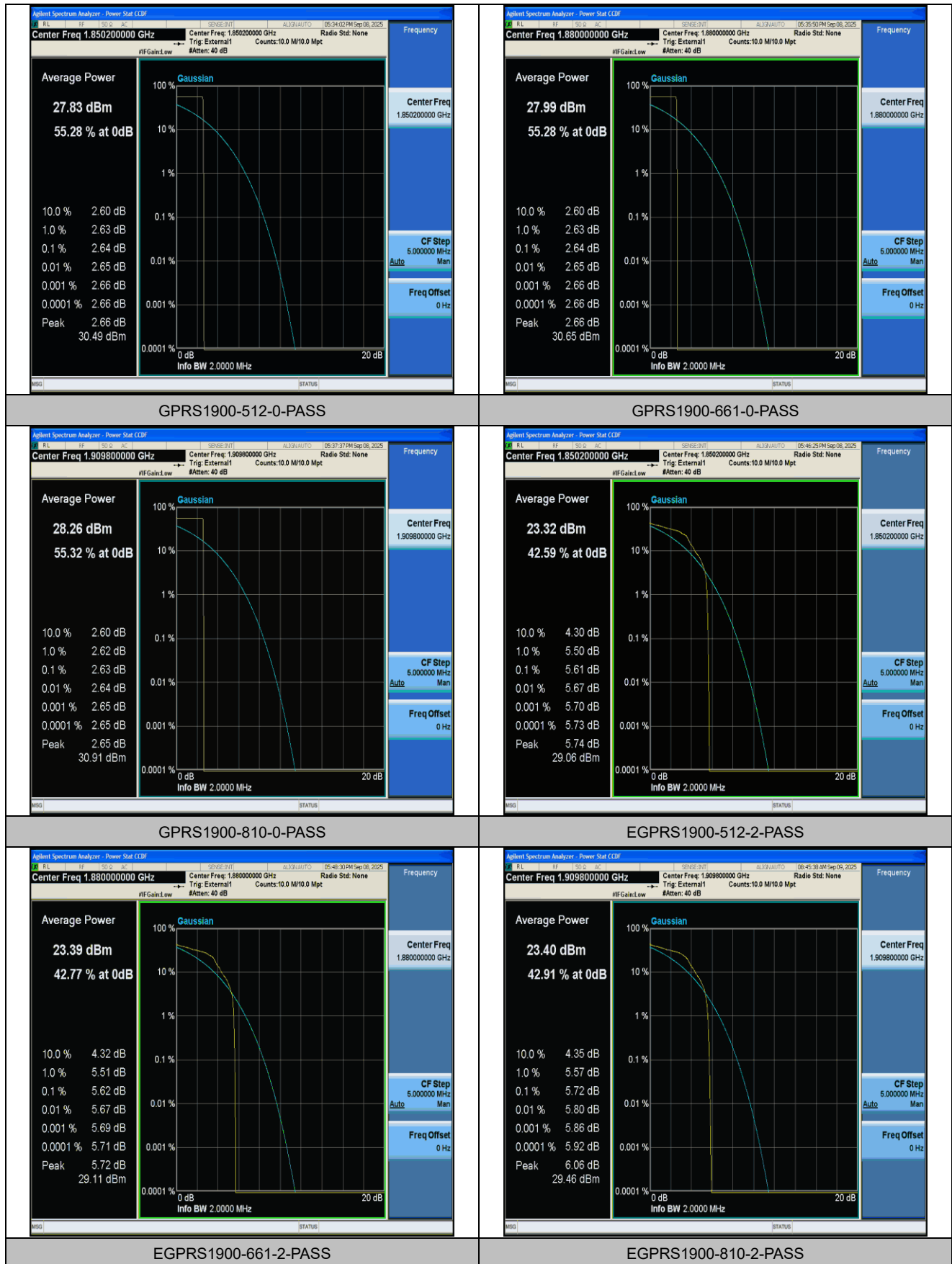
Test Result

Band	Channel	Result(dB)	Limit(dB)	Verdict
GSM850	128	2.63	13	PASS
GSM850	190	2.61	13	PASS
GSM850	251	2.60	13	PASS
GPRS850	128	2.66	13	PASS
GPRS850	190	2.63	13	PASS
GPRS850	251	2.61	13	PASS
EGPRS850	128	5.68	13	PASS
EGPRS850	190	5.68	13	PASS
EGPRS850	251	5.65	13	PASS
GSM1900	512	2.65	13	PASS
GSM1900	661	2.64	13	PASS
GSM1900	810	2.63	13	PASS
GPRS1900	512	2.64	13	PASS
GPRS1900	661	2.64	13	PASS
GPRS1900	810	2.63	13	PASS
EGPRS1900	512	5.61	13	PASS
EGPRS1900	661	5.62	13	PASS
EGPRS1900	810	5.72	13	PASS

Test Graphs





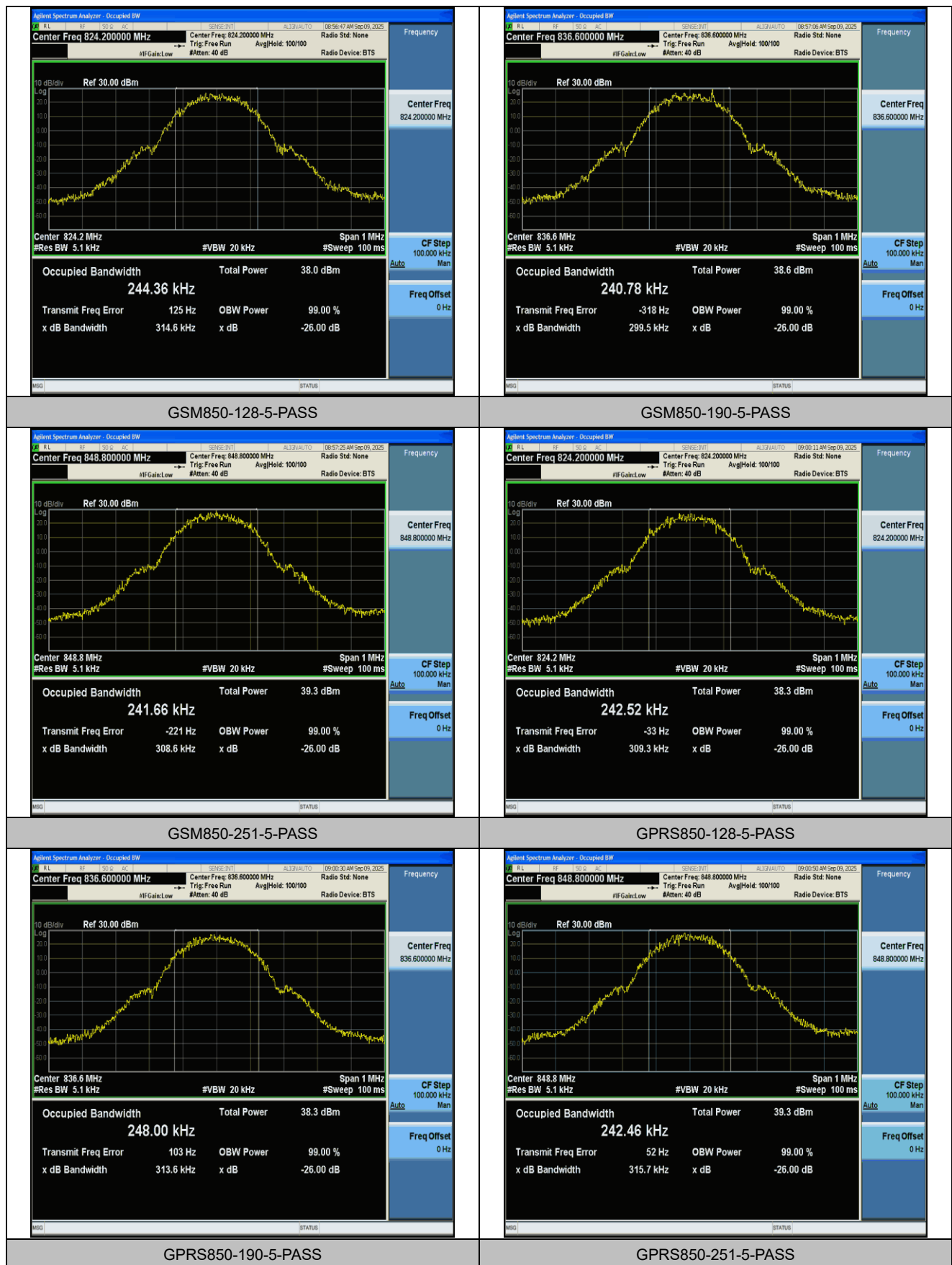


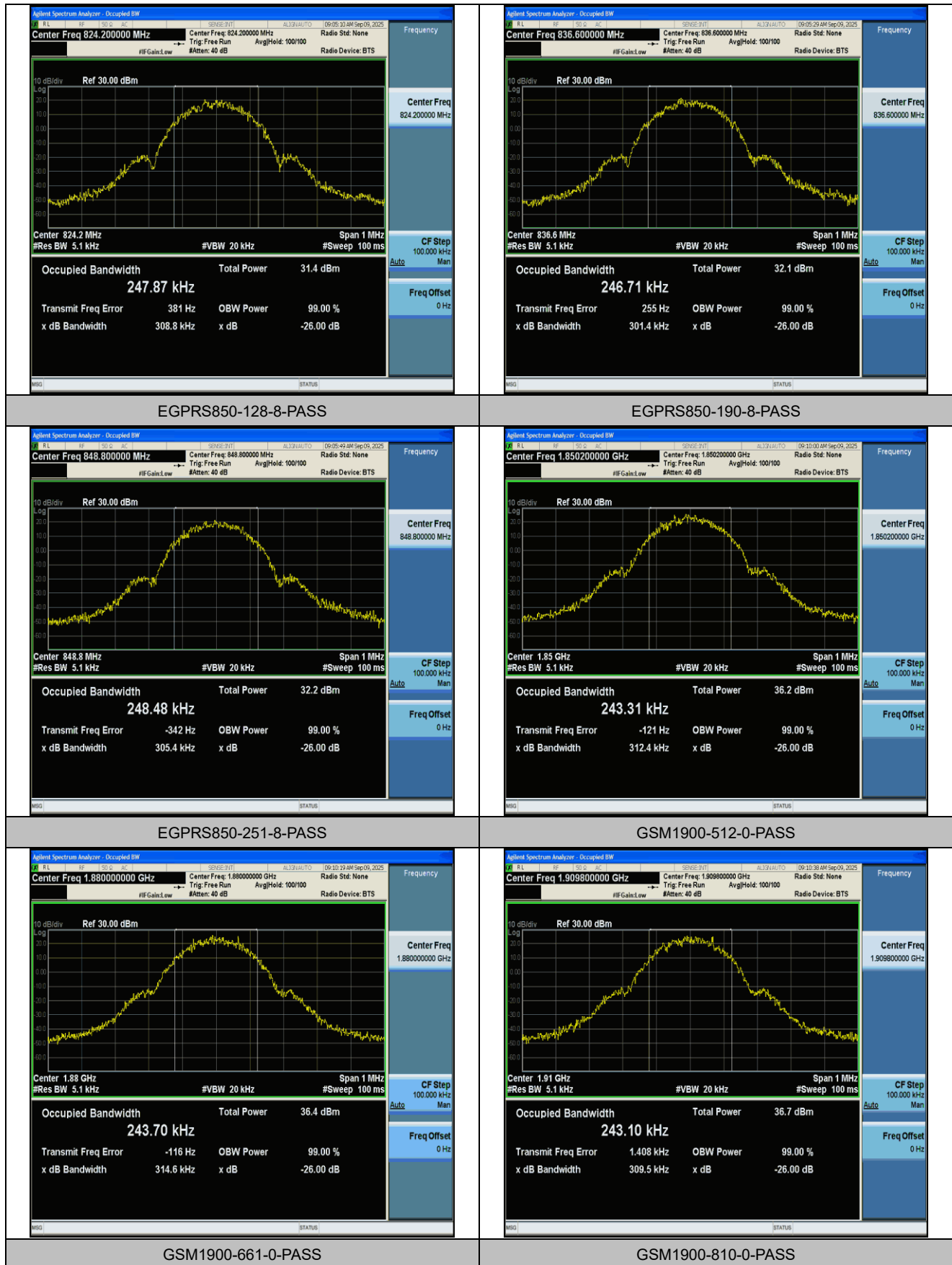
26dB Bandwidth and Occupied Bandwidth

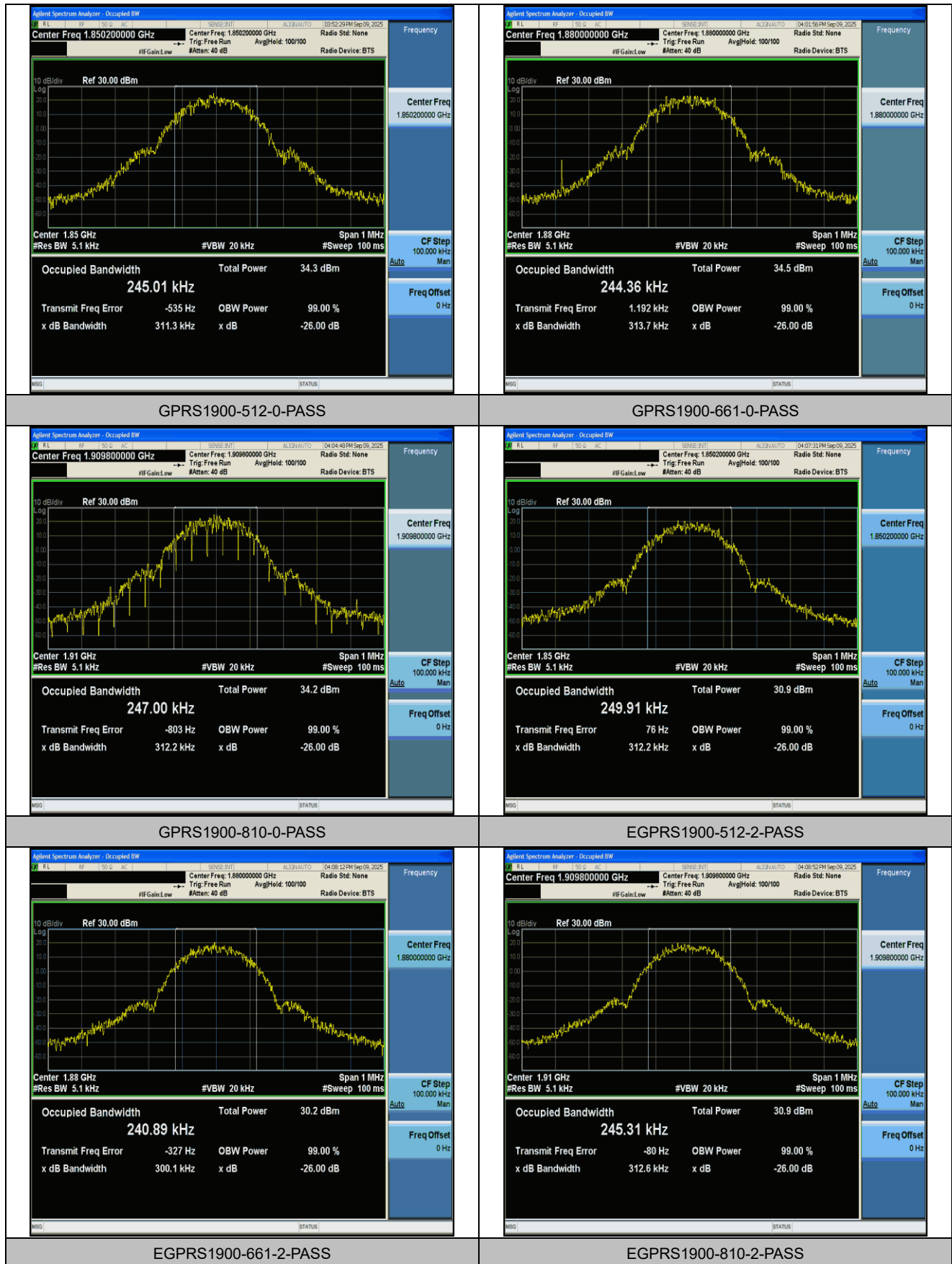
Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	0.24436	0.3146	---	PASS
GSM850	190	0.24078	0.2995	---	PASS
GSM850	251	0.24166	0.3086	---	PASS
GPRS850	128	0.24252	0.3093	---	PASS
GPRS850	190	0.24800	0.3136	---	PASS
GPRS850	251	0.24246	0.3157	---	PASS
EGPRS850	128	0.24787	0.3088	---	PASS
EGPRS850	190	0.24671	0.3014	---	PASS
EGPRS850	251	0.24848	0.3054	---	PASS
GSM1900	512	0.24331	0.3124	---	PASS
GSM1900	661	0.24370	0.3146	---	PASS
GSM1900	810	0.24310	0.3095	---	PASS
GPRS1900	512	0.24501	0.3113	---	PASS
GPRS1900	661	0.24436	0.3137	---	PASS
GPRS1900	810	0.24700	0.3122	---	PASS
EGPRS1900	512	0.24991	0.3122	---	PASS
EGPRS1900	661	0.24089	0.3001	---	PASS
EGPRS1900	810	0.24531	0.3126	---	PASS

Test Graphs

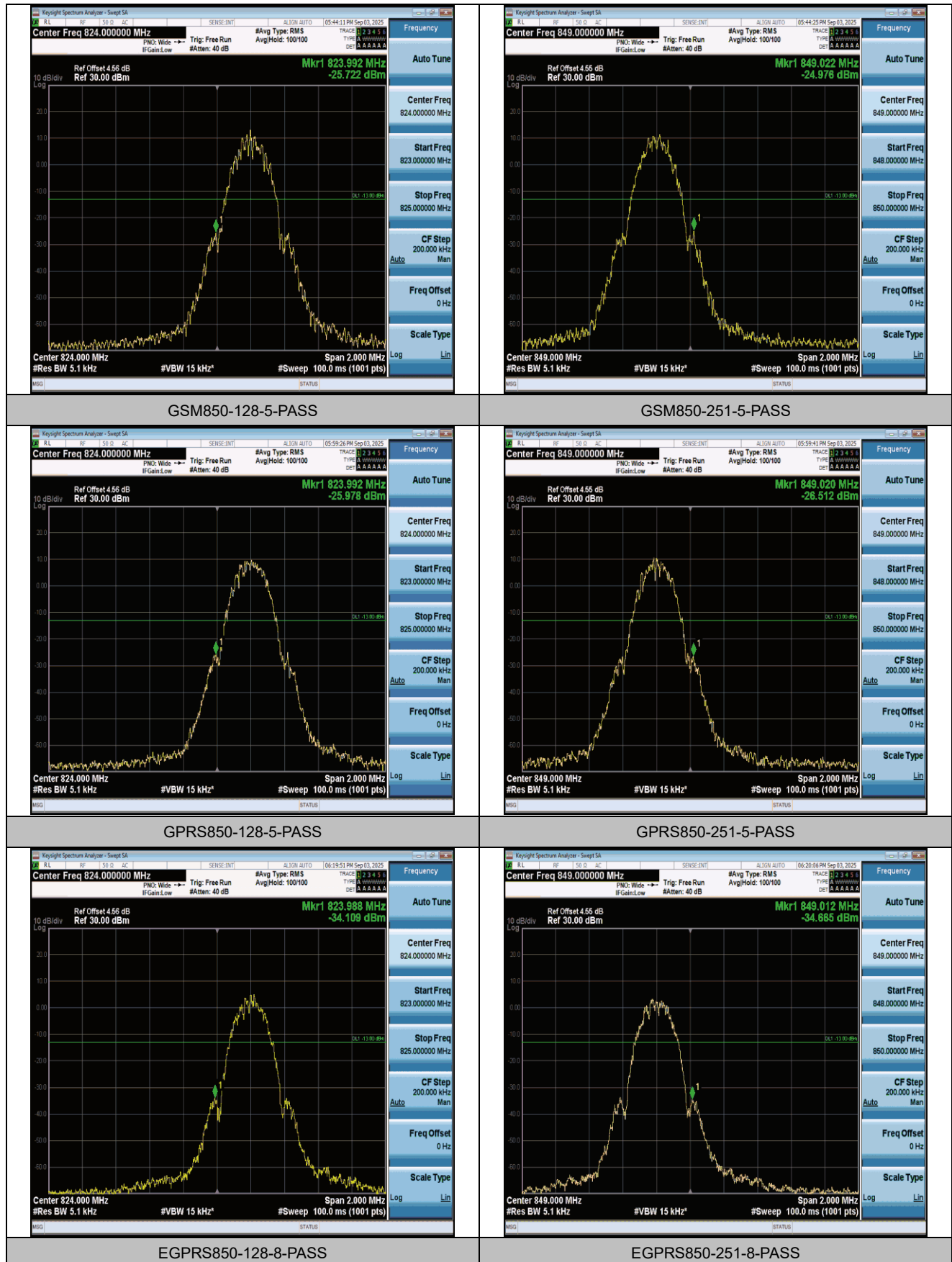


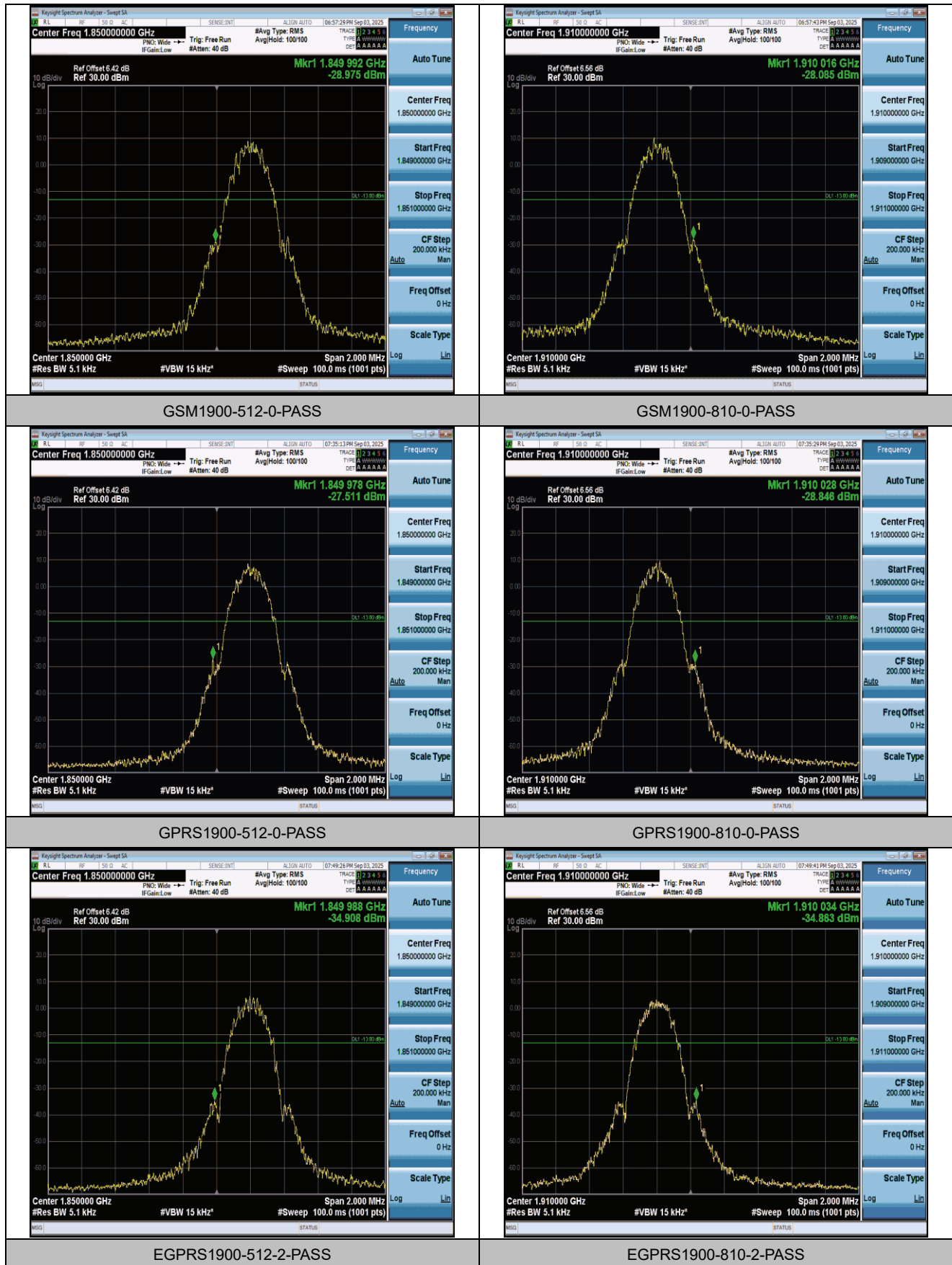




Band Edge

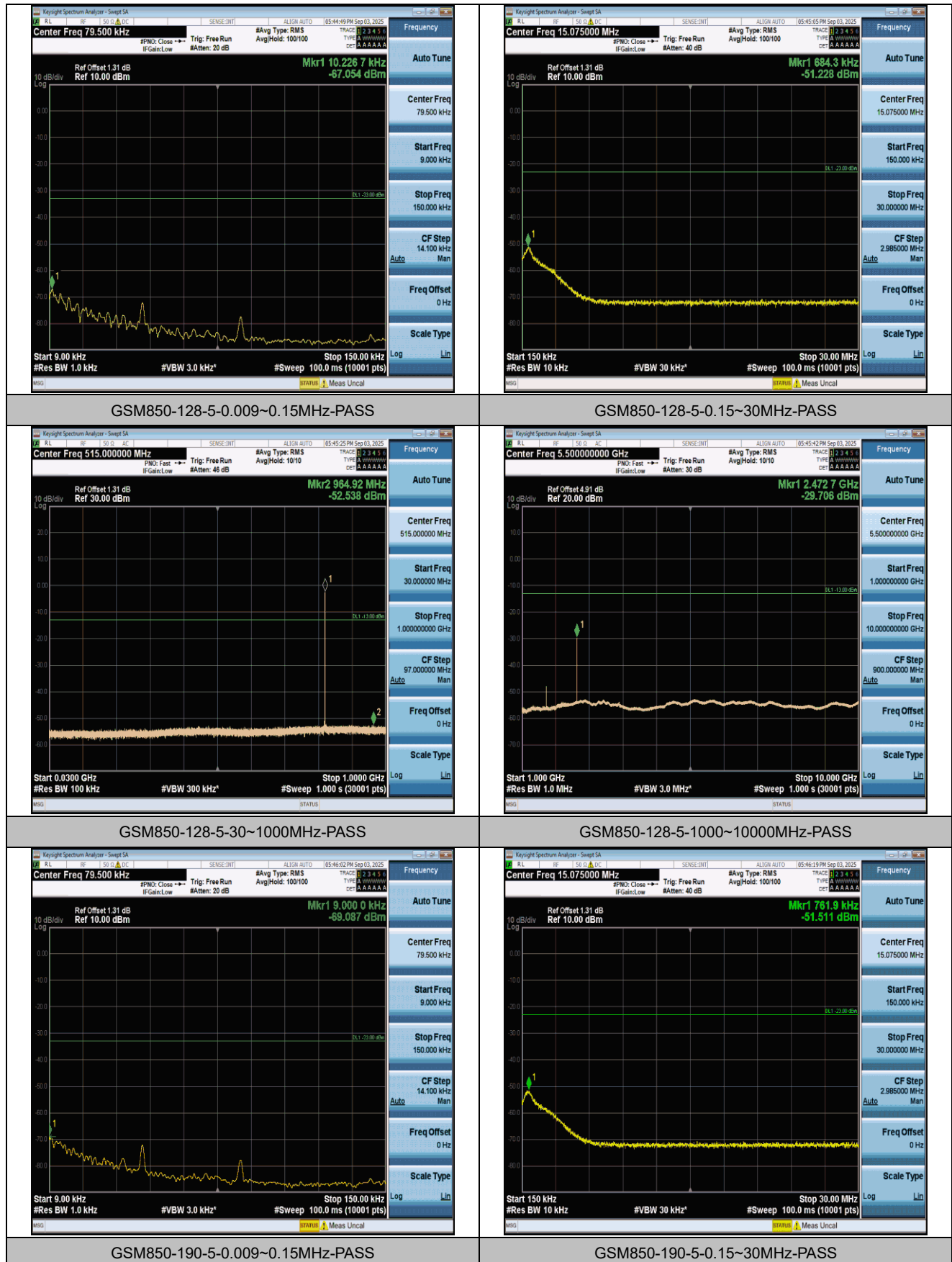
Test Graphs

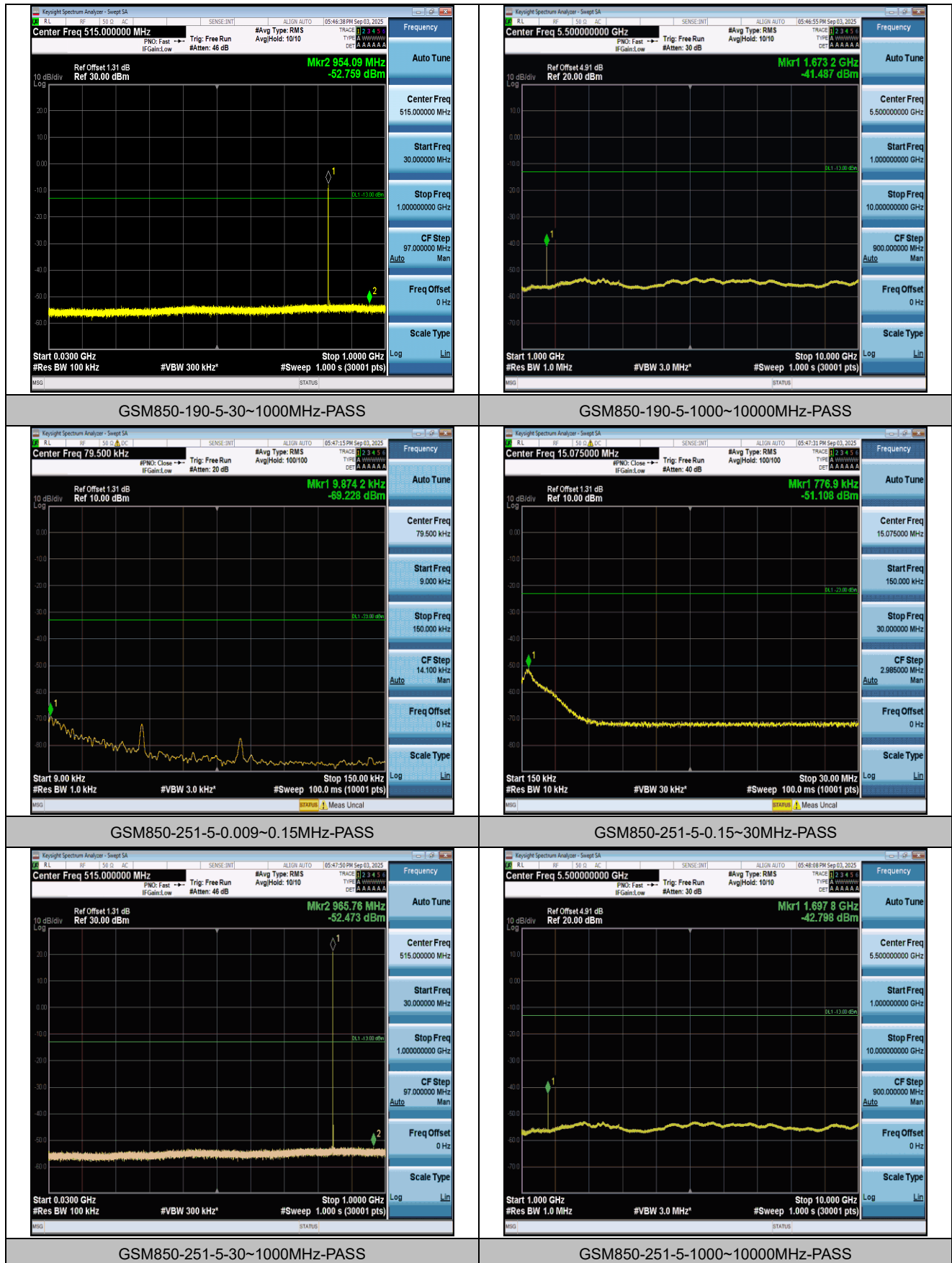


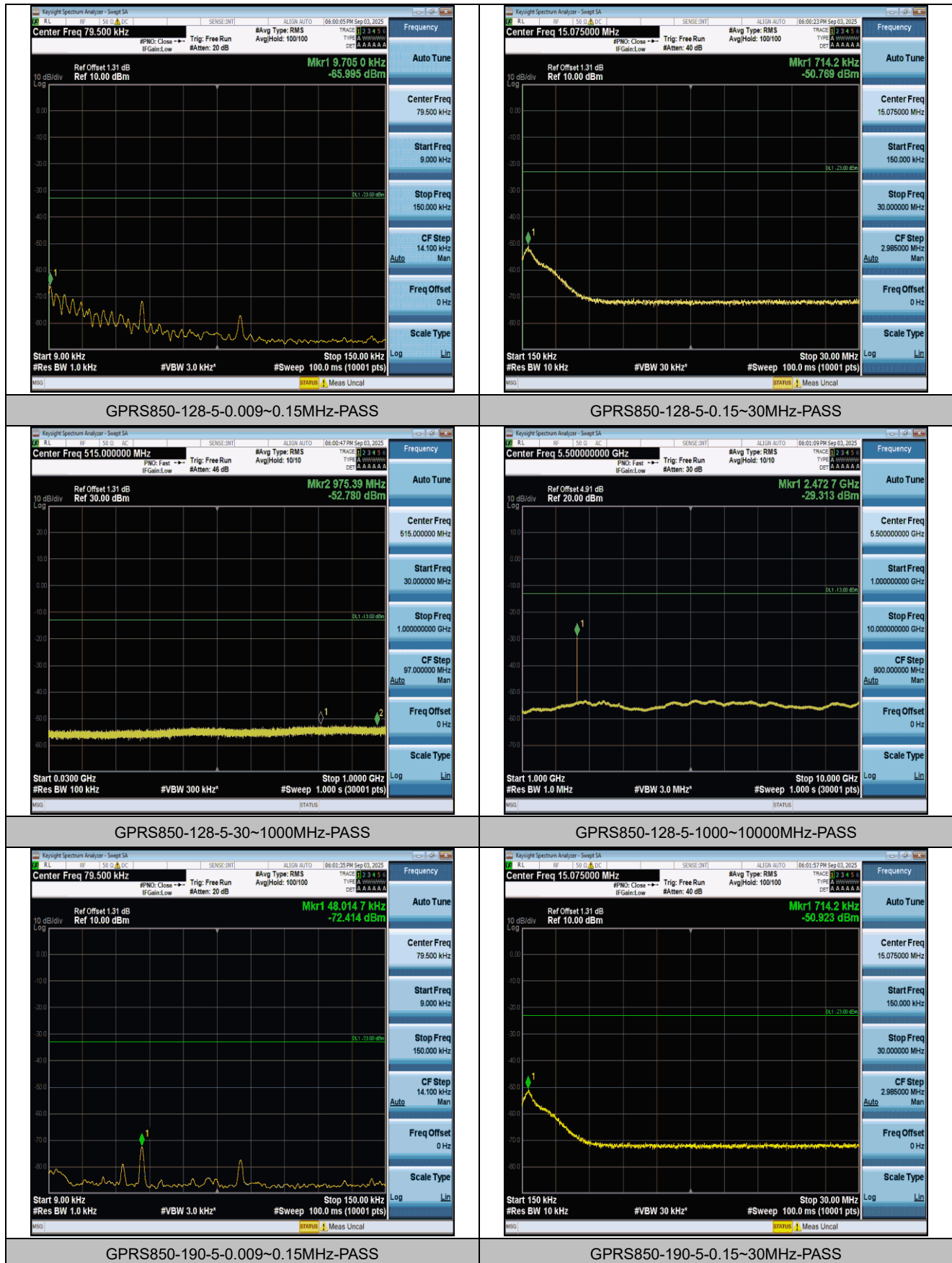


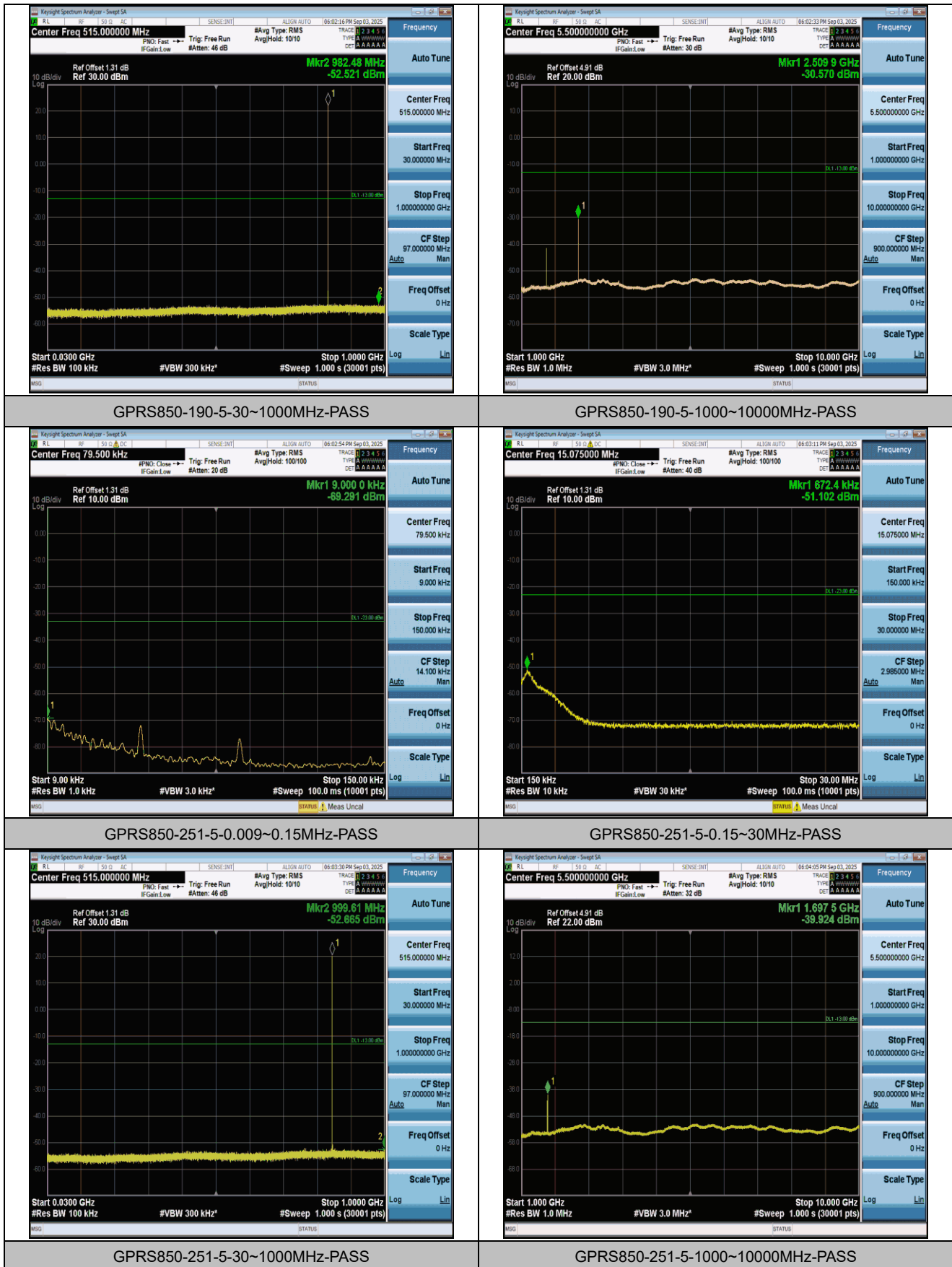
Conducted Spurious Emission

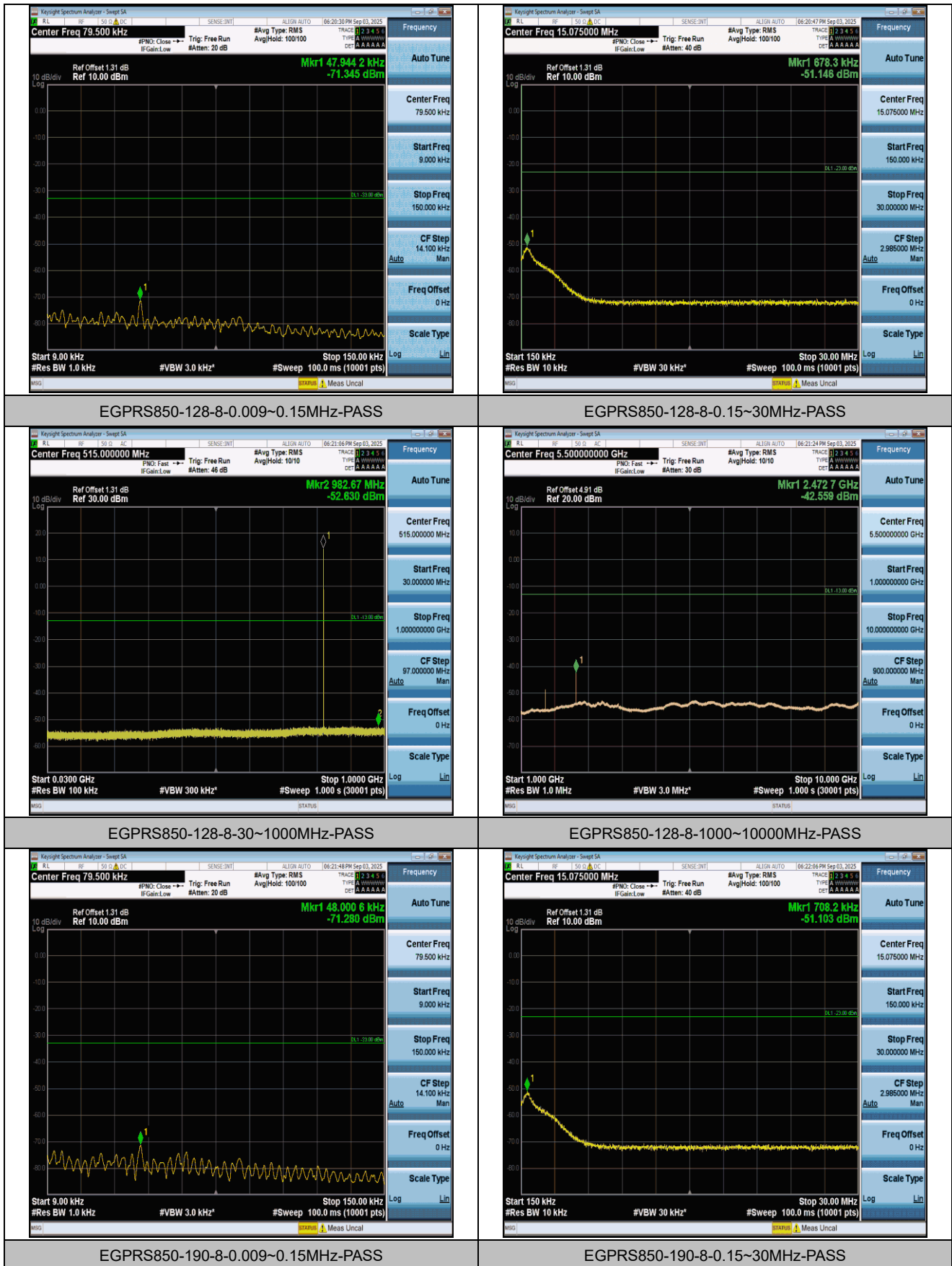
Test Graphs

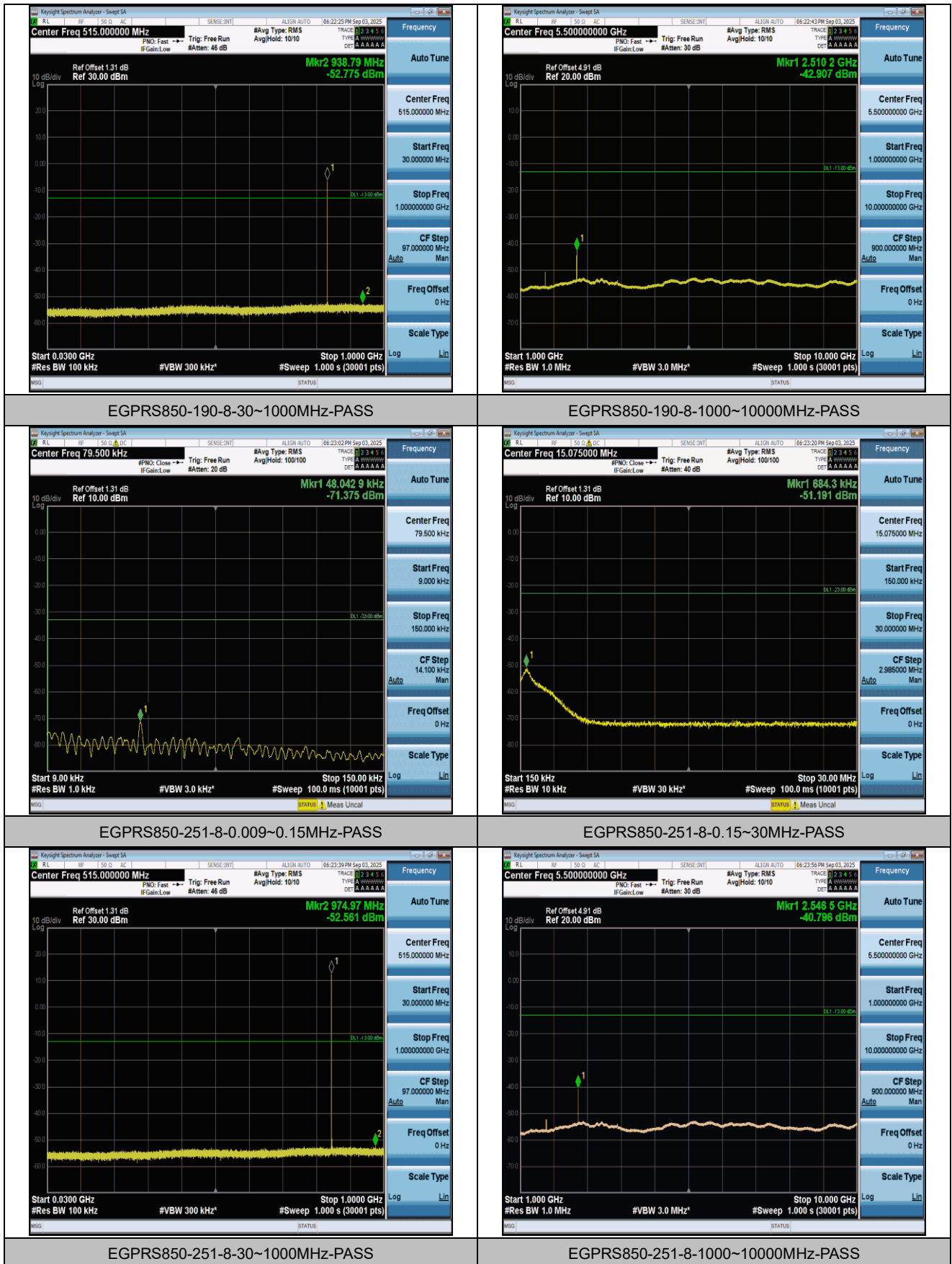


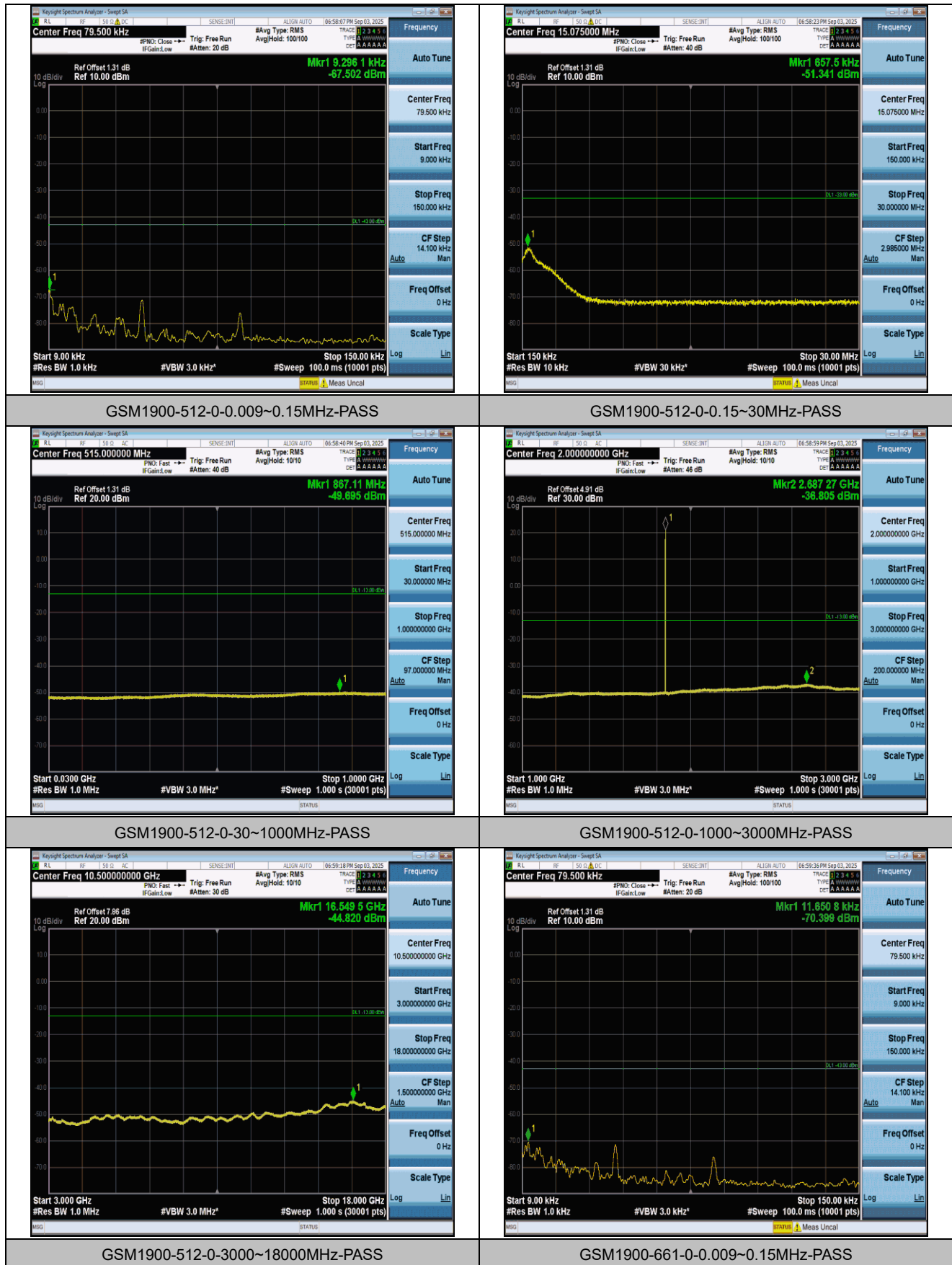


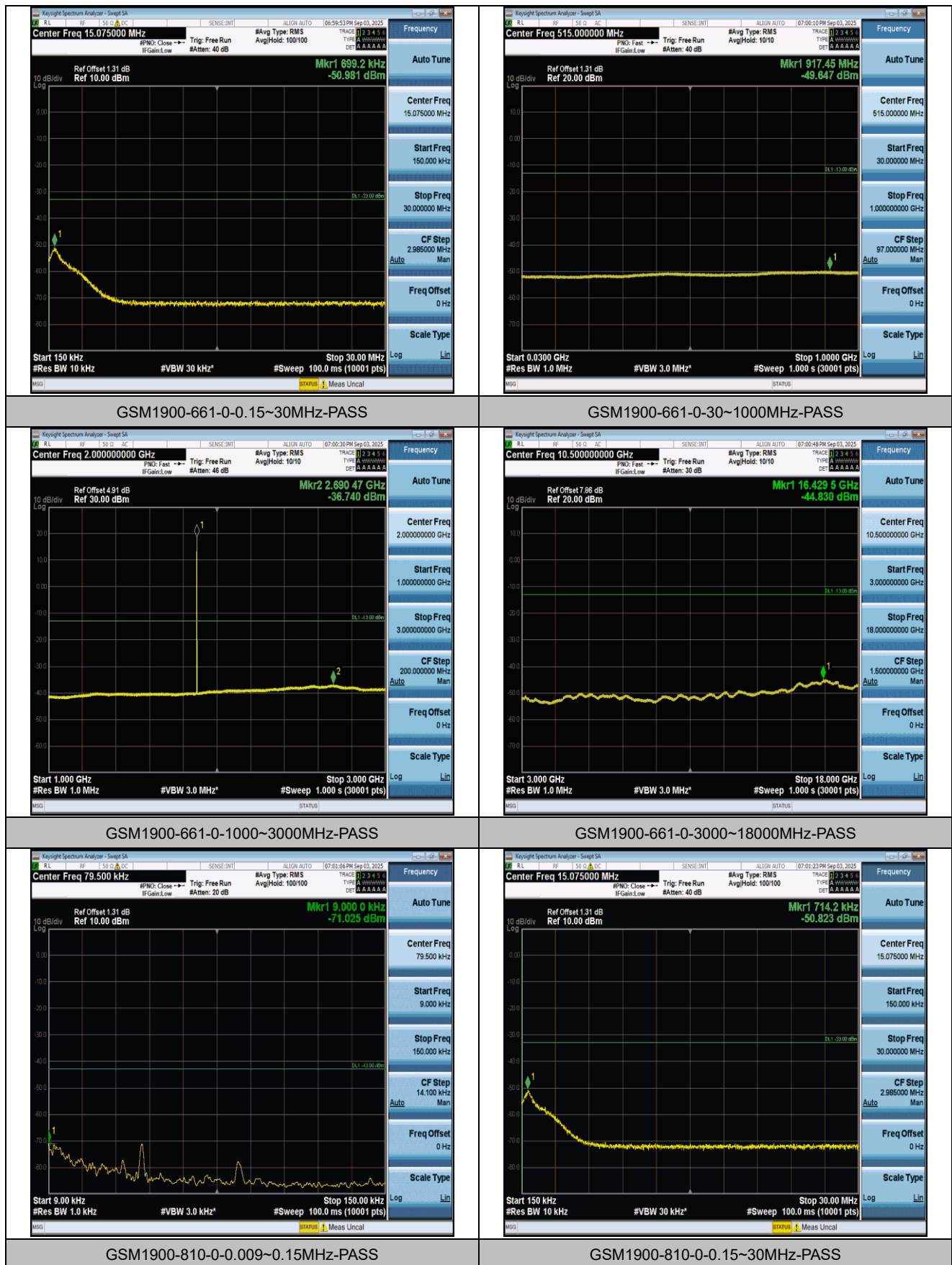


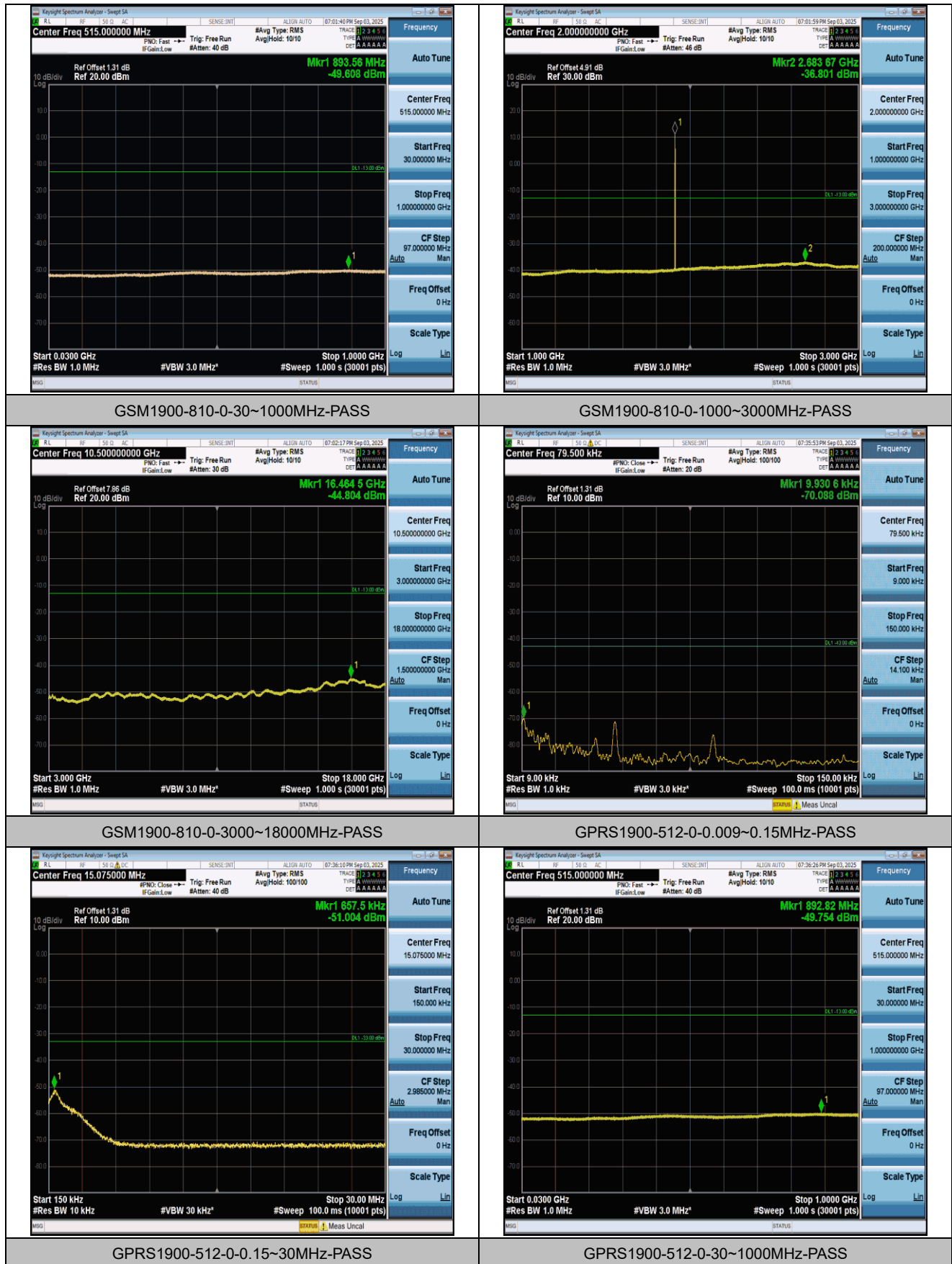


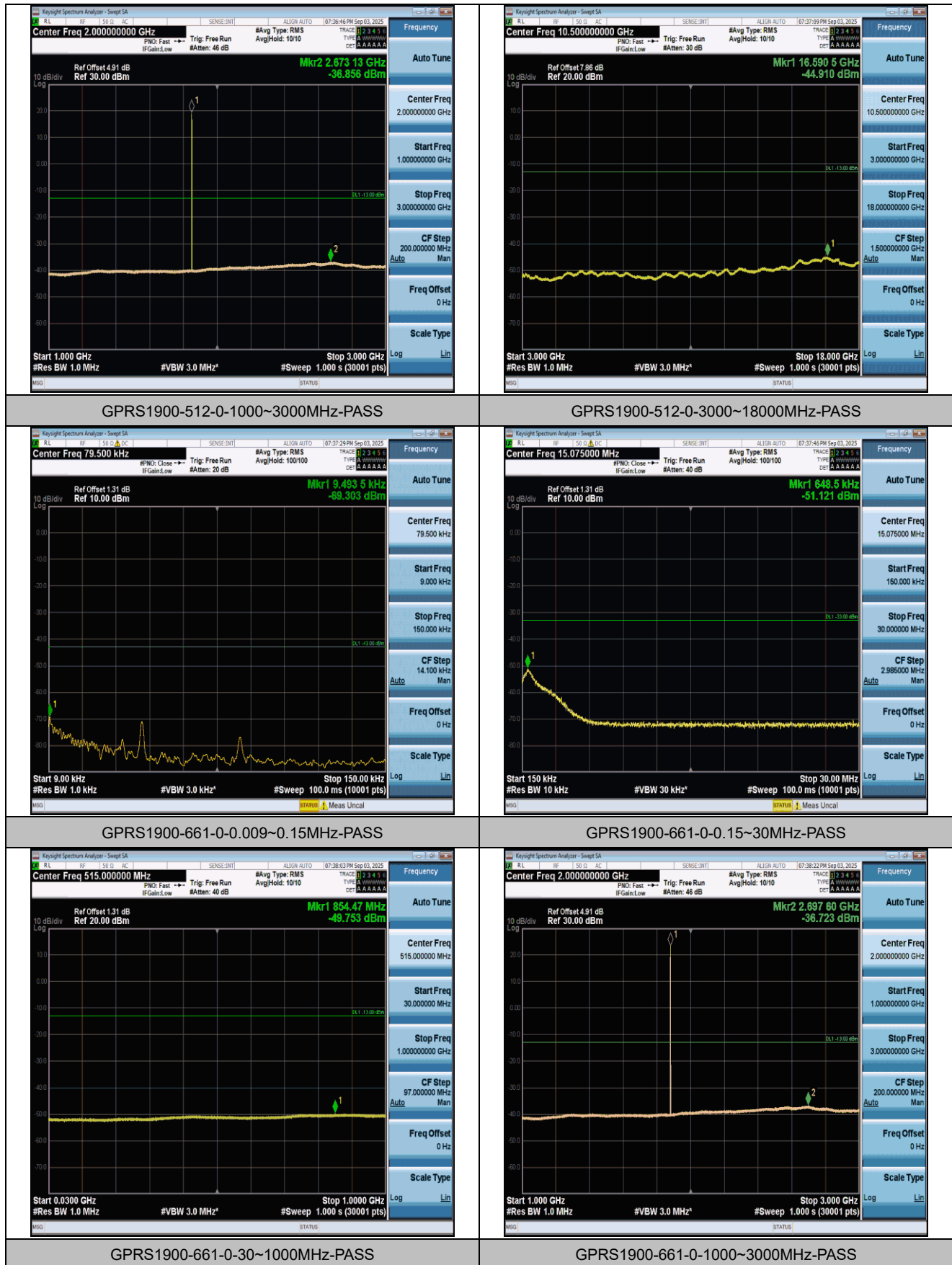


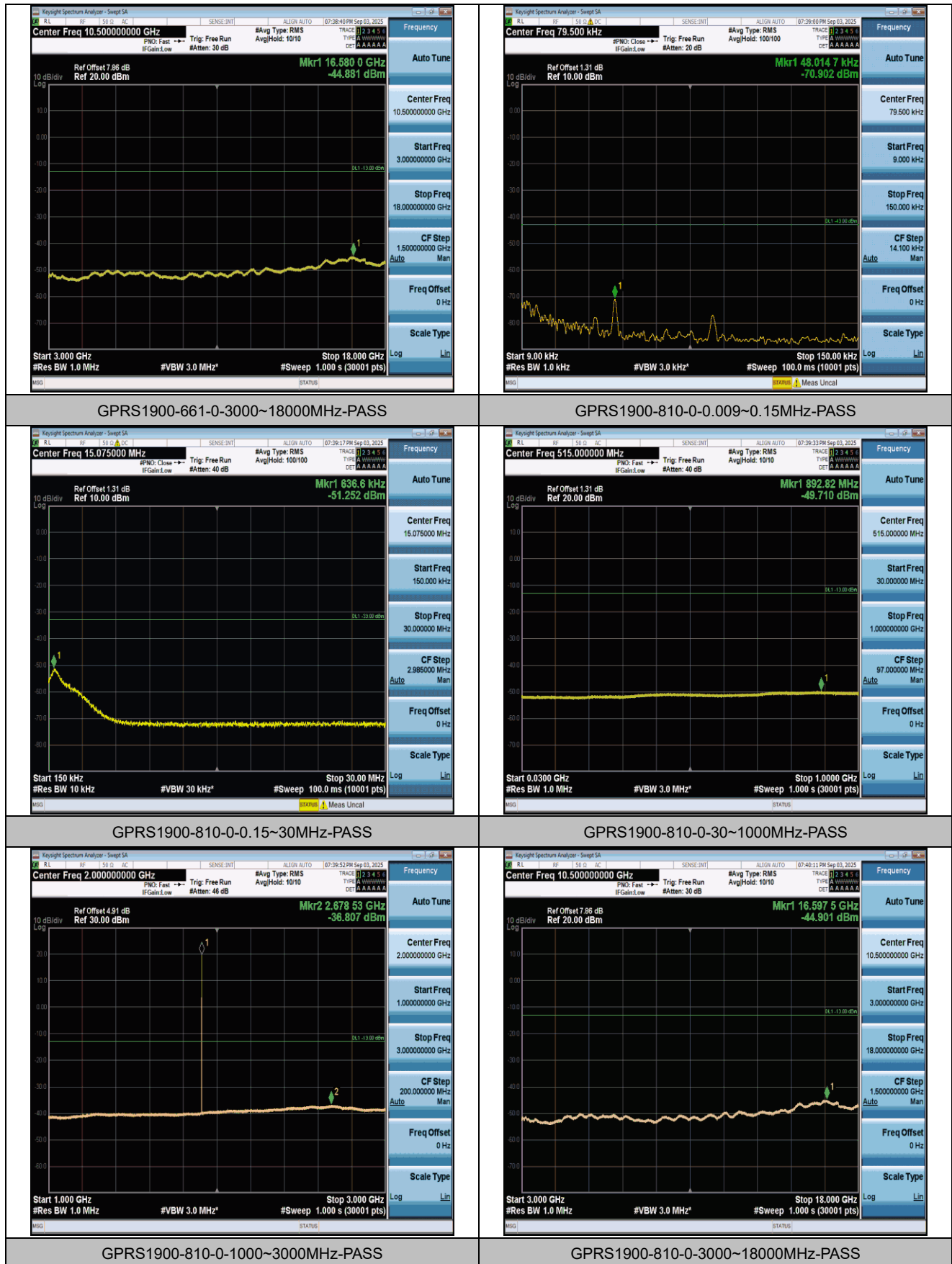


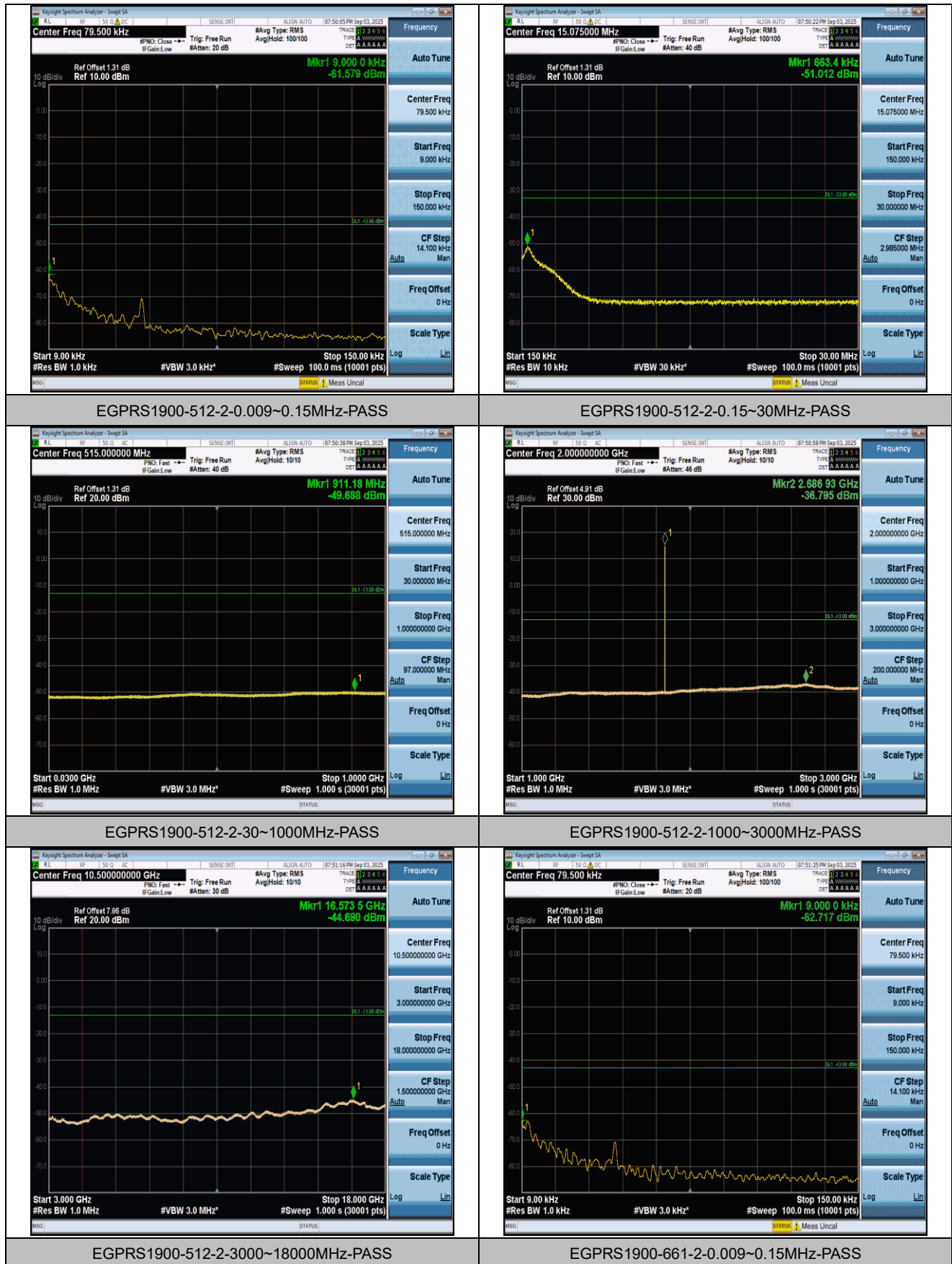


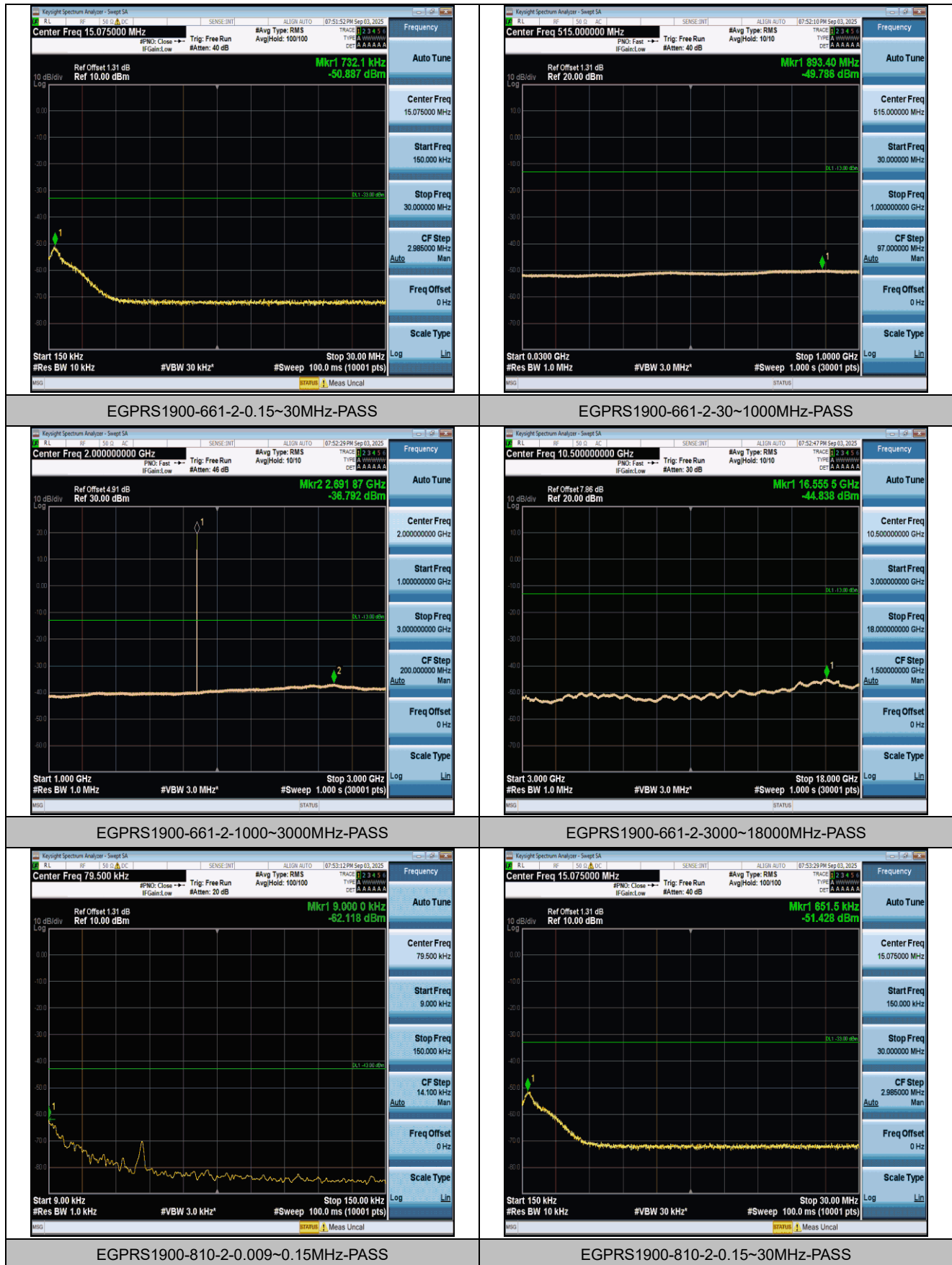


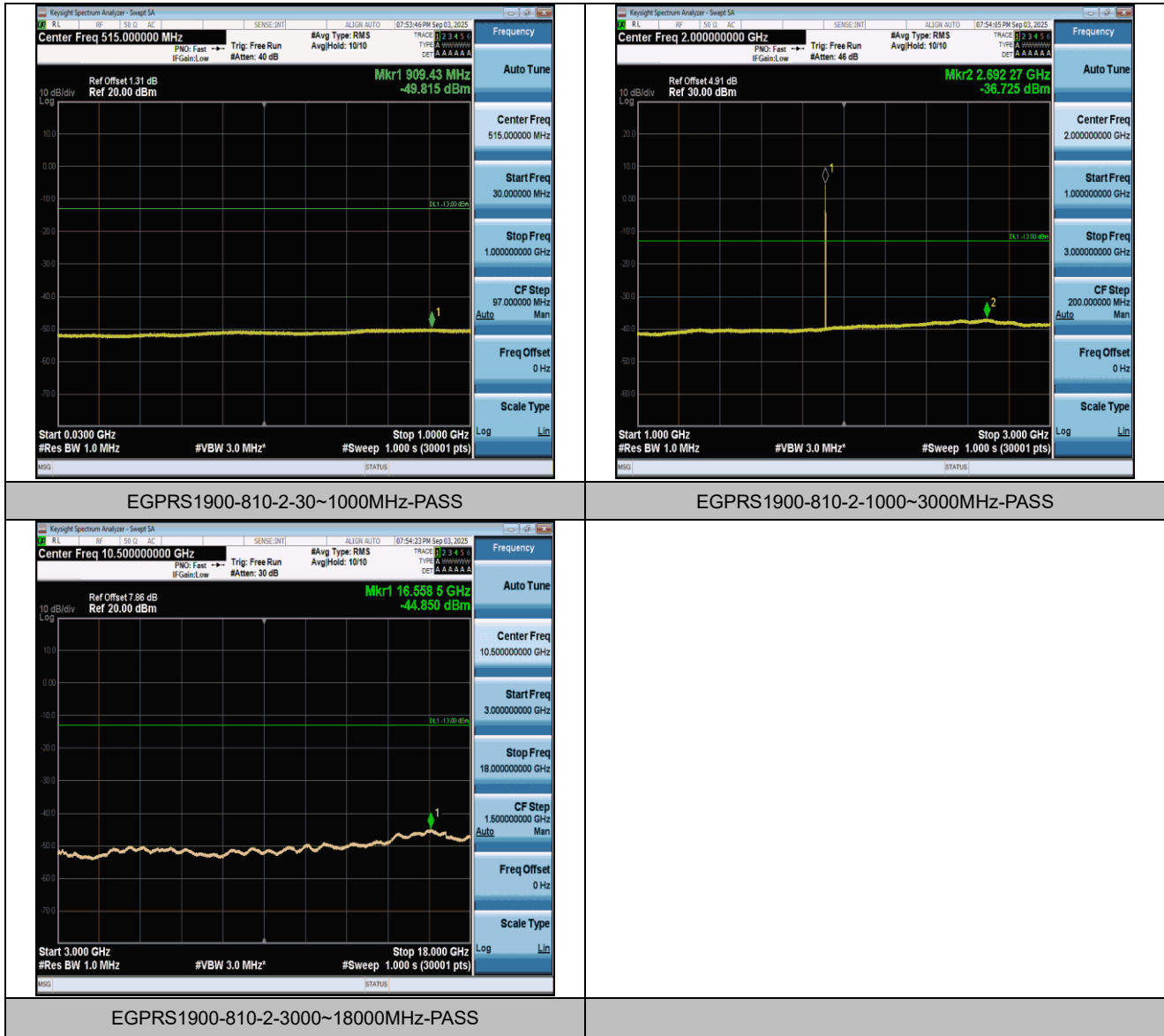












Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	190	VN	NT	-1.07	-0.001279	±2.5	PASS
GSM850	190	VL	NT	2.20	0.002630	±2.5	PASS
GSM850	190	VH	NT	-0.29	-0.000347	±2.5	PASS
GSM1900	661	VN	NT	-6.55	-0.003484	---	PASS
GSM1900	661	VL	NT	-8.36	-0.004447	---	PASS
GSM1900	661	VH	NT	-6.84	-0.003638	---	PASS

Temperature							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	190	NV	-30	2.00	0.002391	±2.5	PASS
GSM850	190	NV	-20	-0.48	-0.000574	±2.5	PASS
GSM850	190	NV	-10	2.71	0.003239	±2.5	PASS
GSM850	190	NV	0	-0.45	-0.000538	±2.5	PASS
GSM850	190	NV	10	1.23	0.001470	±2.5	PASS
GSM850	190	NV	20	4.65	0.005558	±2.5	PASS
GSM850	190	NV	30	0.42	0.000502	±2.5	PASS
GSM850	190	NV	40	2.00	0.002391	±2.5	PASS
GSM850	190	NV	50	4.07	0.004865	±2.5	PASS
GSM1900	661	NV	-30	-10.04	-0.005340	---	PASS
GSM1900	661	NV	-20	-4.39	-0.002335	---	PASS
GSM1900	661	NV	-10	-5.17	-0.002750	---	PASS
GSM1900	661	NV	0	-5.23	-0.002782	---	PASS
GSM1900	661	NV	10	-5.33	-0.002835	---	PASS
GSM1900	661	NV	20	-5.42	-0.002883	---	PASS
GSM1900	661	NV	30	-4.26	-0.002266	---	PASS
GSM1900	661	NV	40	-10.33	-0.005495	---	PASS
GSM1900	661	NV	50	-7.30	-0.003883	---	PASS

~The End~