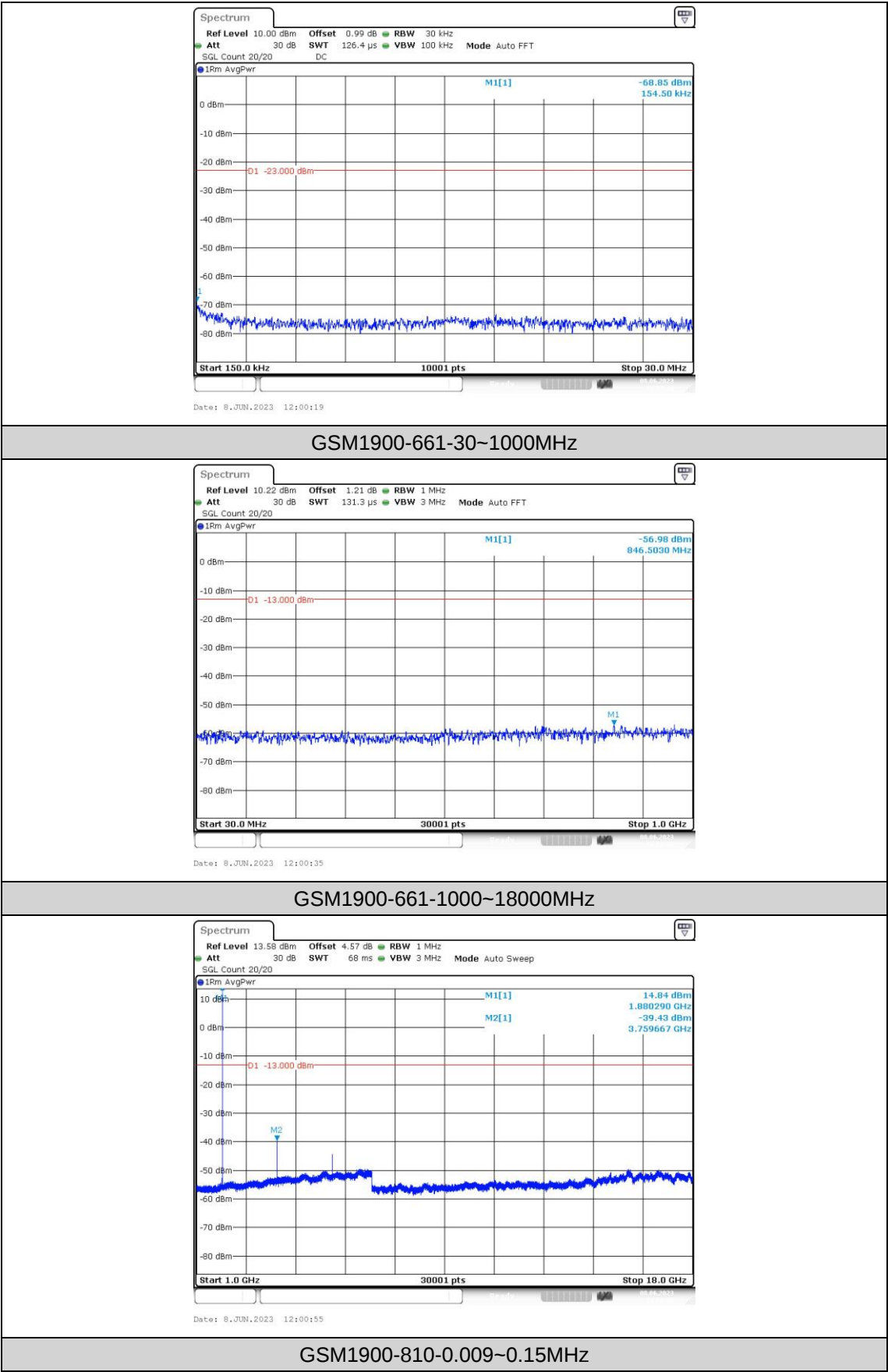
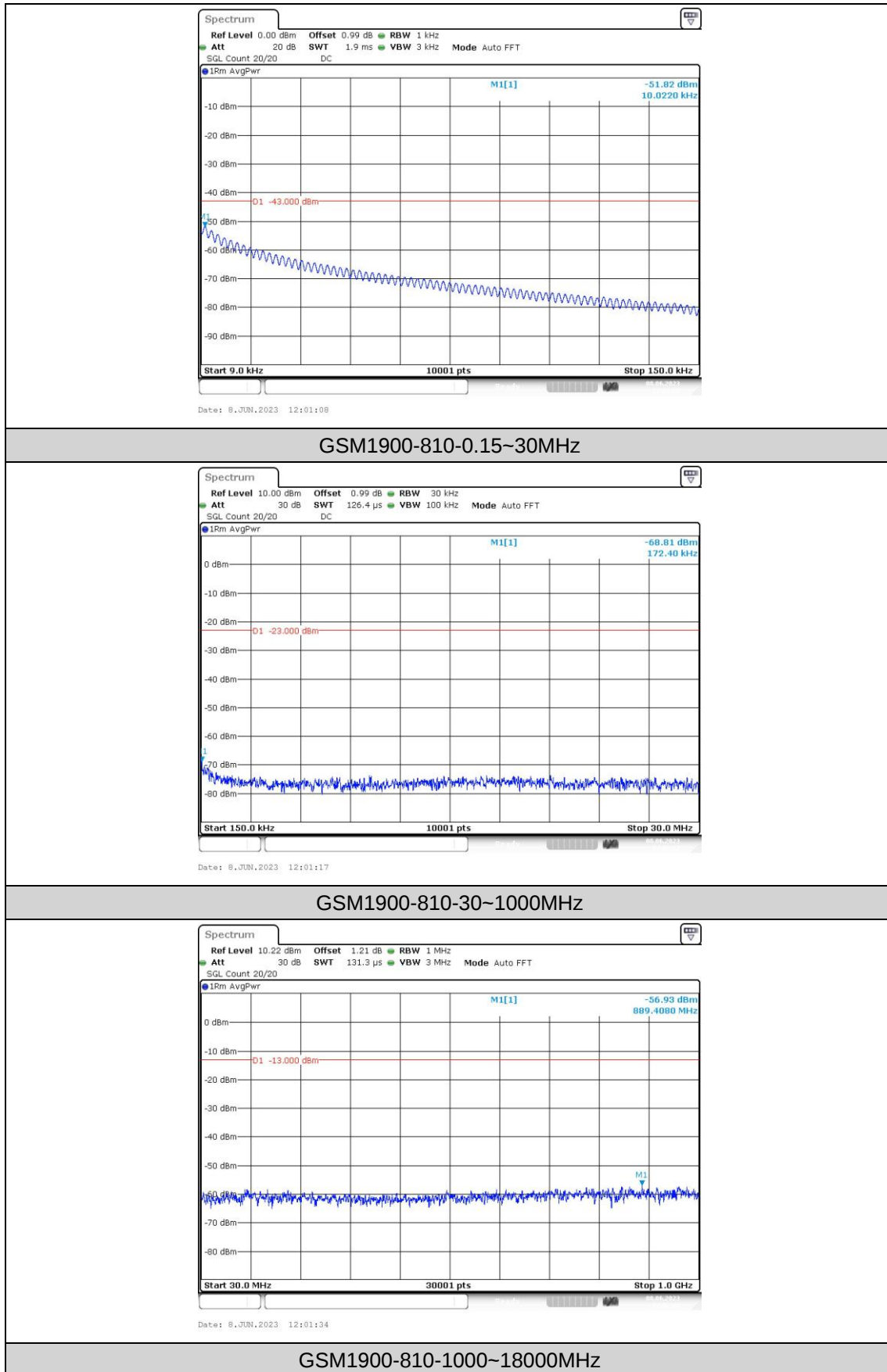
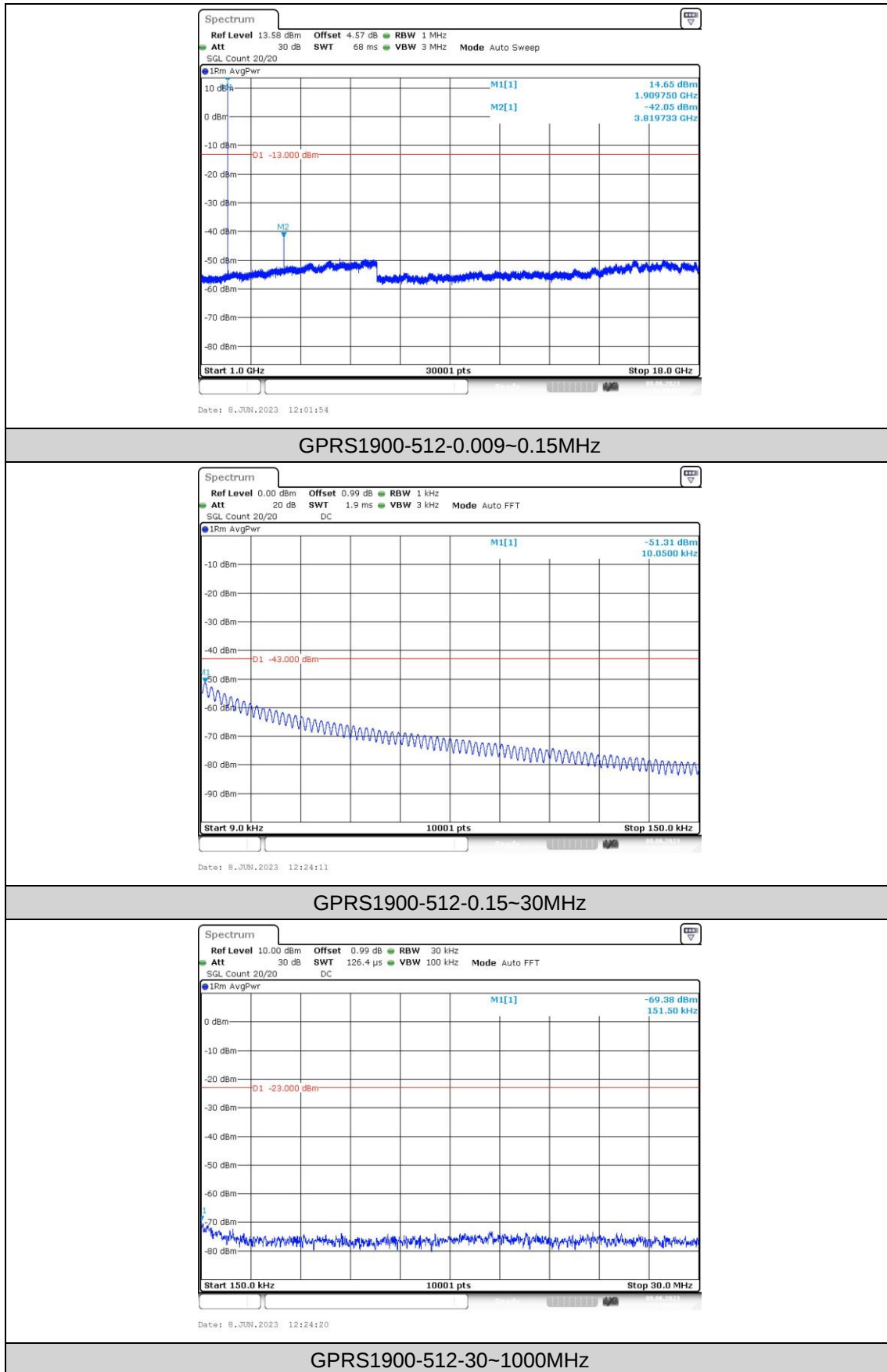
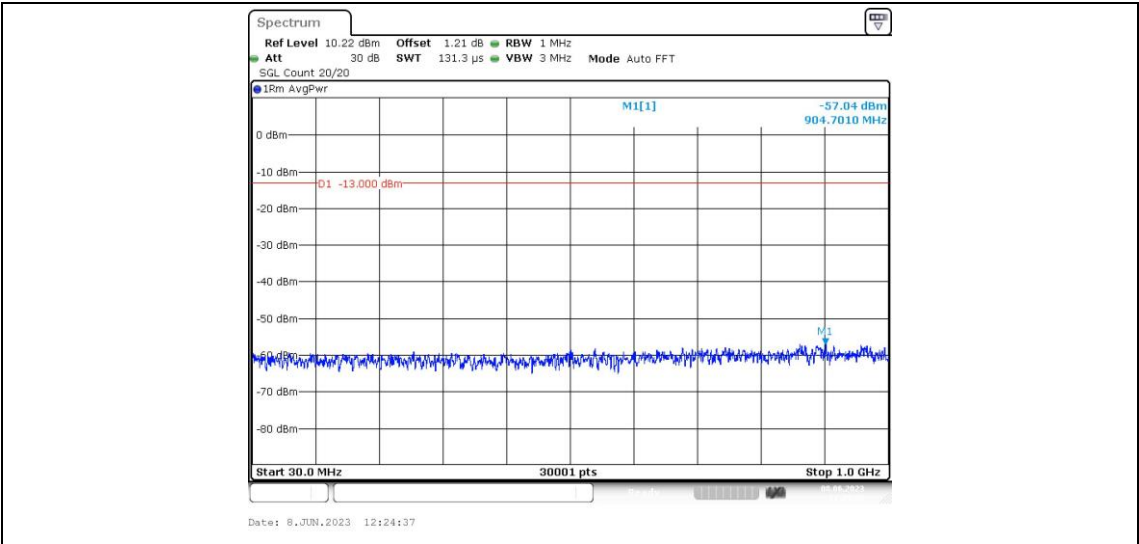


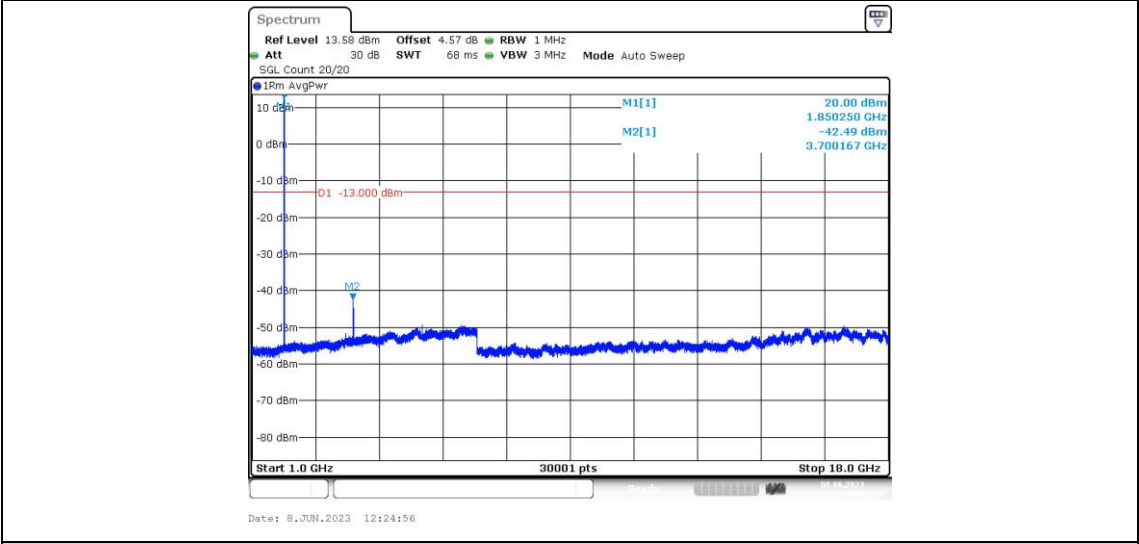




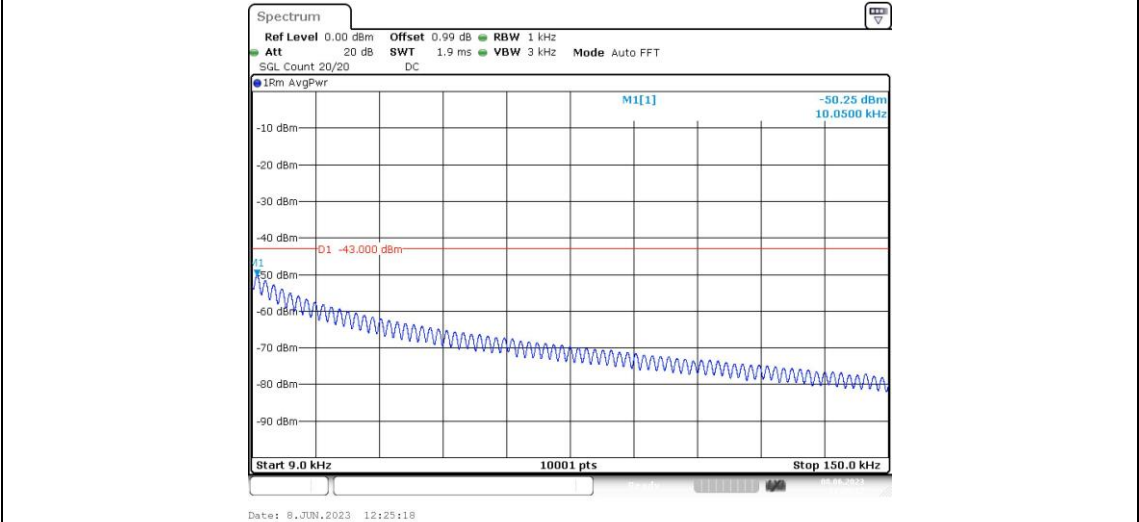




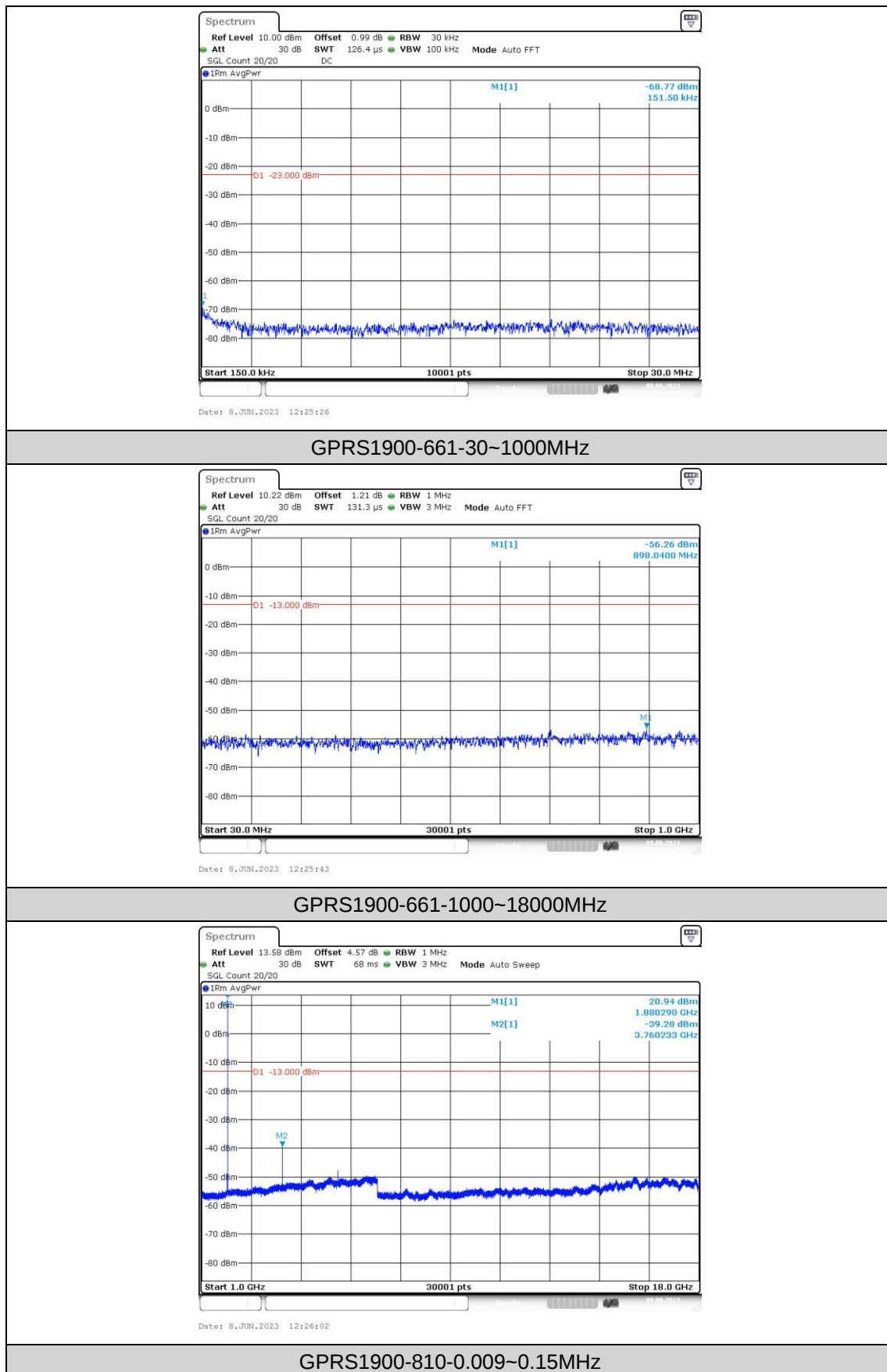
GPRS1900-512-1000~18000MHz

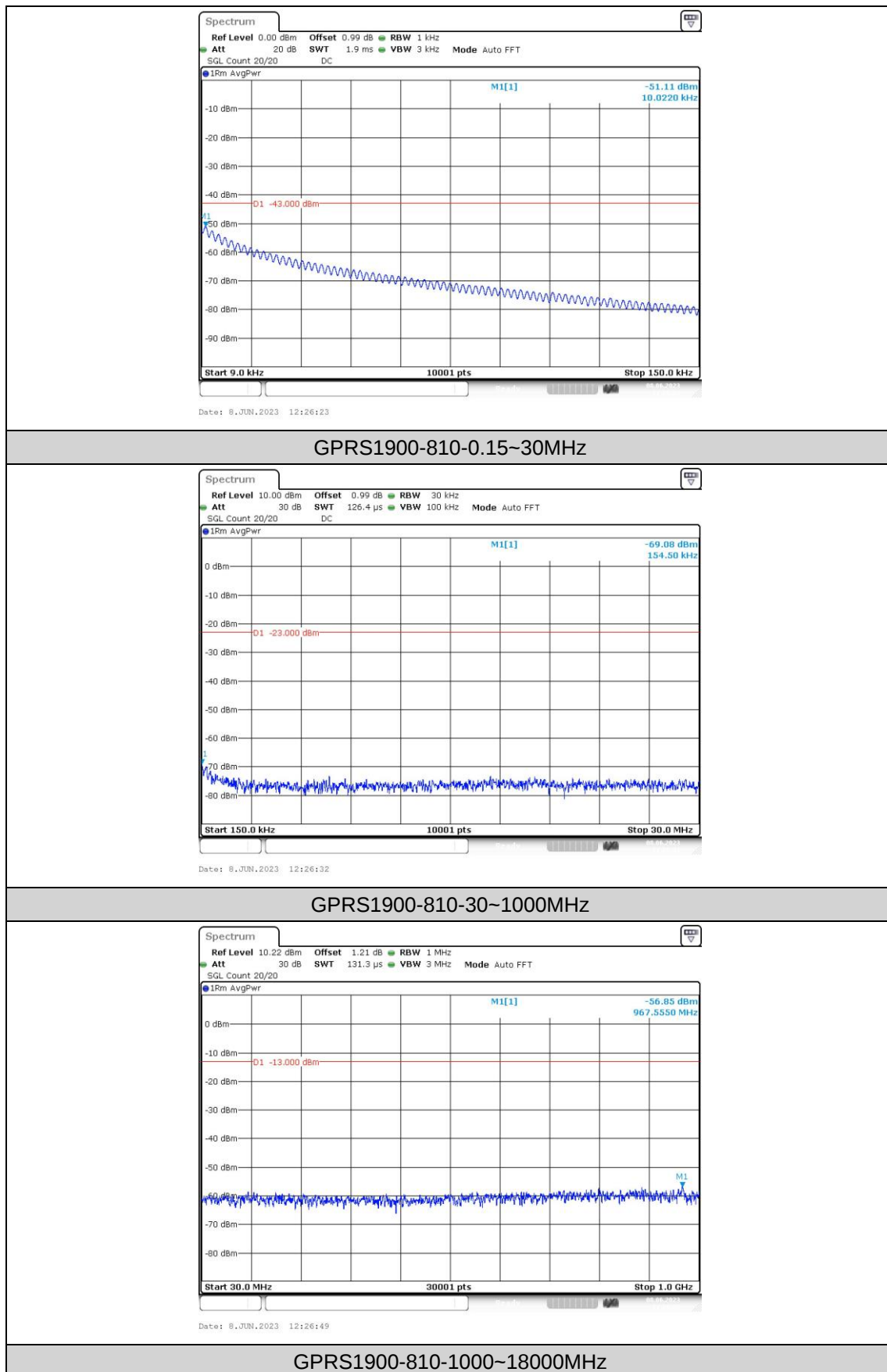


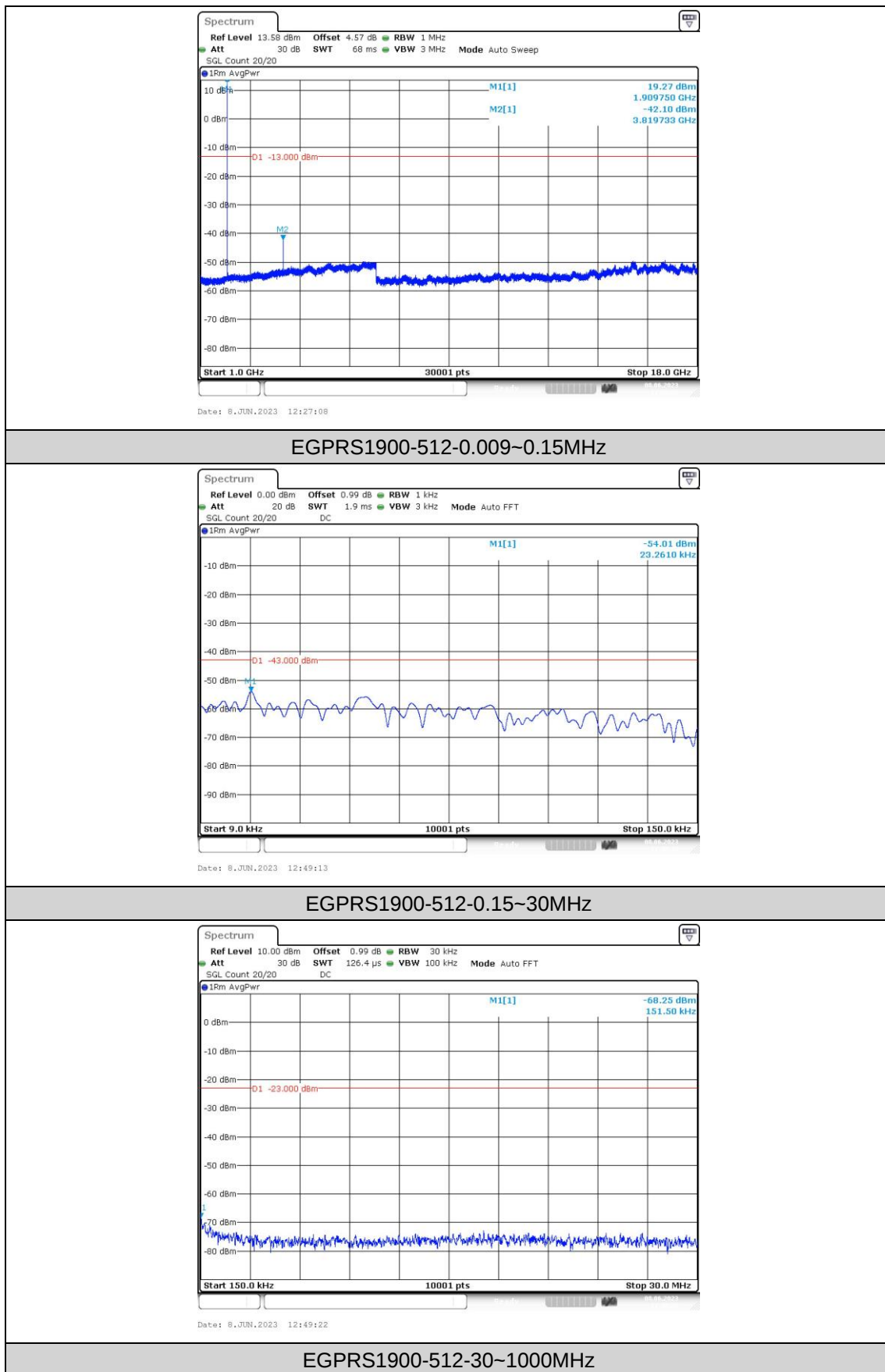
GPRS1900-661-0.009~0.15MHz

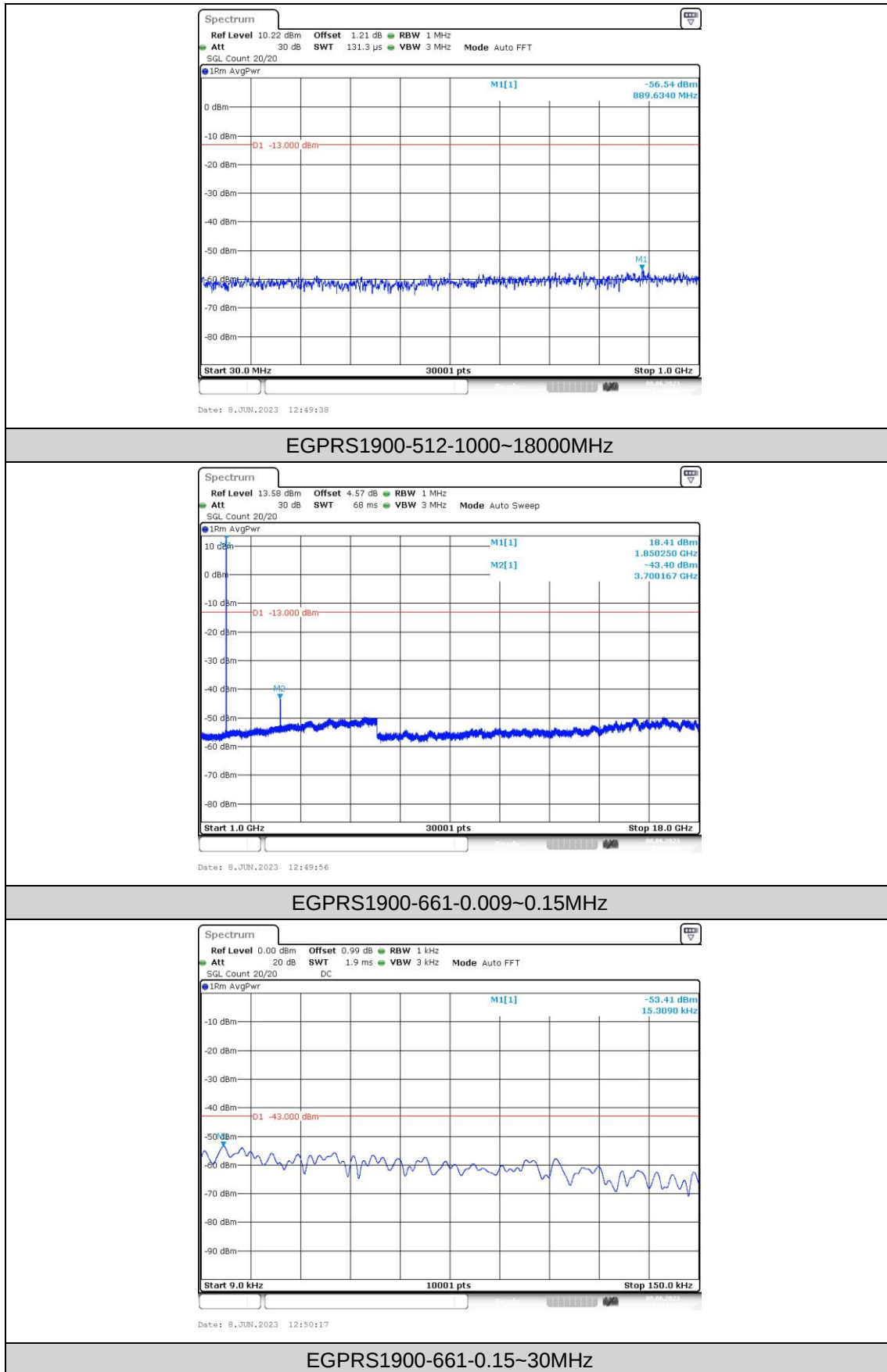


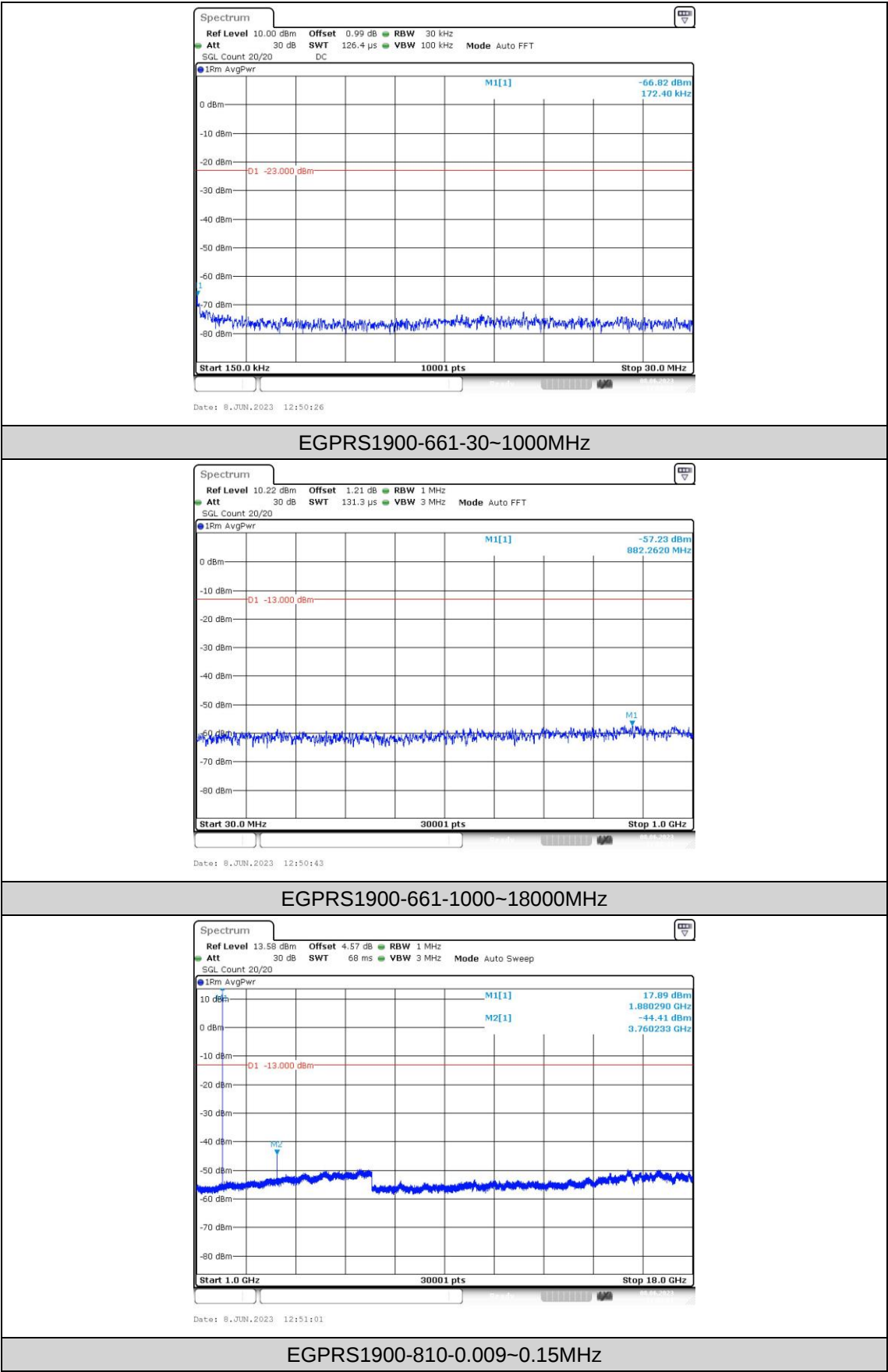
GPRS1900-661-0.15~30MHz

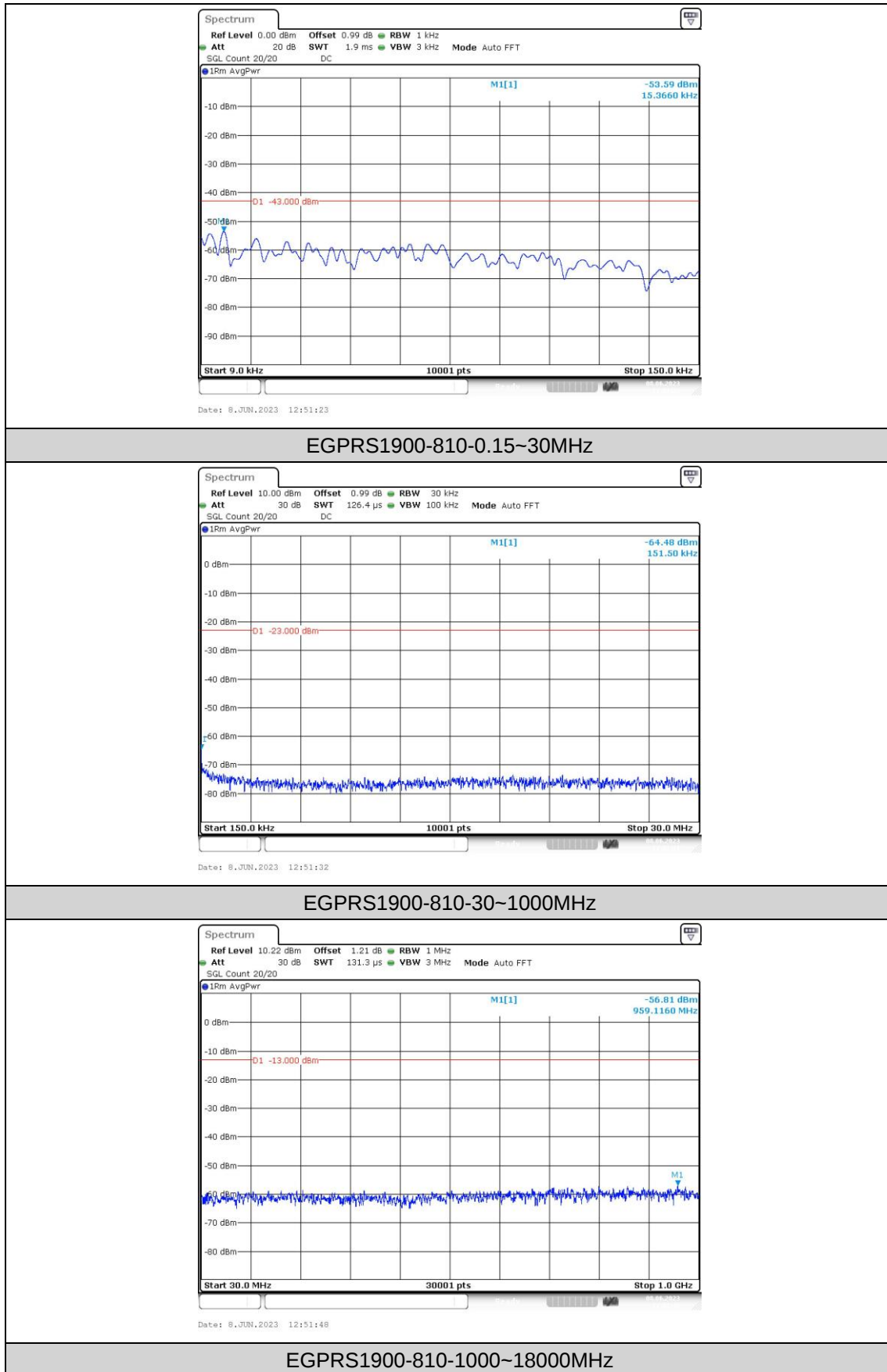


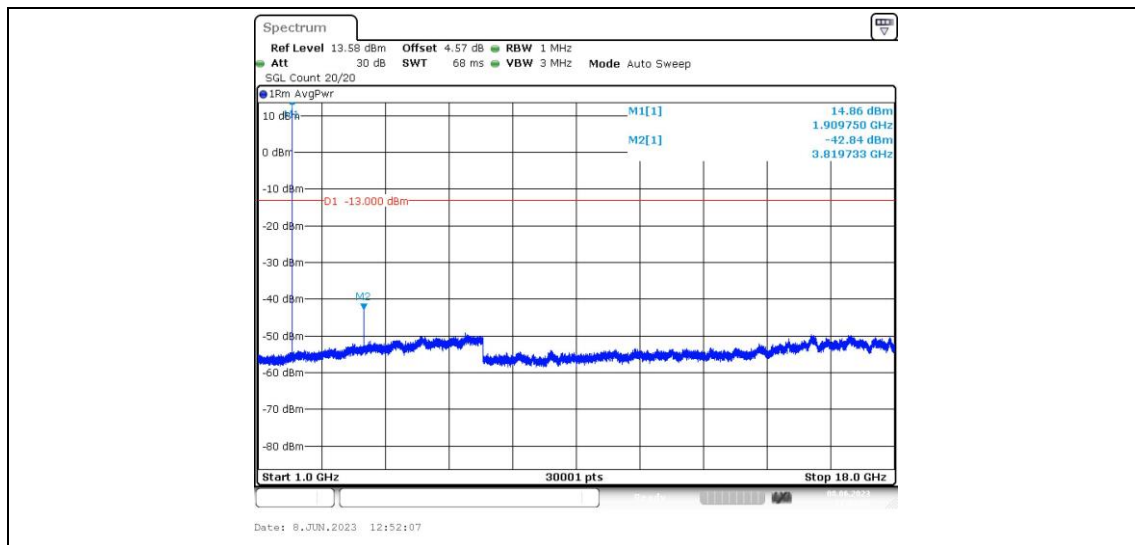












Appendix F: Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	VL	NT	10.07	0.012218	±2.5	PASS
GSM850	128	VN	NT	7.07	0.008578	±2.5	PASS
GSM850	128	VH	NT	9.10	0.011041	±2.5	PASS
GSM850	190	VL	NT	6.88	0.008224	±2.5	PASS
GSM850	190	VN	NT	6.07	0.007256	±2.5	PASS
GSM850	190	VH	NT	7.14	0.008535	±2.5	PASS
GSM850	251	VL	NT	5.78	0.006810	±2.5	PASS
GSM850	251	VN	NT	4.46	0.005254	±2.5	PASS
GSM850	251	VH	NT	7.30	0.008600	±2.5	PASS
GPRS850	128	VL	NT	-1.52	-0.001844	±2.5	PASS
GPRS850	128	VN	NT	-0.36	-0.000437	±2.5	PASS
GPRS850	128	VH	NT	0.19	0.000231	±2.5	PASS
GPRS850	190	VL	NT	3.00	0.003586	±2.5	PASS
GPRS850	190	VN	NT	-0.36	-0.000430	±2.5	PASS
GPRS850	190	VH	NT	3.94	0.004710	±2.5	PASS
GPRS850	251	VL	NT	2.97	0.003499	±2.5	PASS
GPRS850	251	VN	NT	-0.55	-0.000648	±2.5	PASS
GPRS850	251	VH	NT	-1.55	-0.001826	±2.5	PASS
EGPRS850	128	VL	NT	0.77	0.000934	±2.5	PASS
EGPRS850	128	VN	NT	-6.81	-0.008263	±2.5	PASS
EGPRS850	128	VH	NT	-0.03	-0.000036	±2.5	PASS
EGPRS850	190	VL	NT	3.65	0.004363	±2.5	PASS
EGPRS850	190	VN	NT	-2.45	-0.002929	±2.5	PASS
EGPRS850	190	VH	NT	2.49	0.002976	±2.5	PASS
EGPRS850	251	VL	NT	2.26	0.002663	±2.5	PASS
EGPRS850	251	VN	NT	0.16	0.000189	±2.5	PASS
EGPRS850	251	VH	NT	2.78	0.003275	±2.5	PASS
GSM1900	512	VL	NT	18.08	0.009772	±2.5	PASS
GSM1900	512	VN	NT	23.79	0.012858	±2.5	PASS
GSM1900	512	VH	NT	18.21	0.009842	±2.5	PASS
GSM1900	661	VL	NT	25.47	0.013548	±2.5	PASS
GSM1900	661	VN	NT	24.34	0.012947	±2.5	PASS
GSM1900	661	VH	NT	21.18	0.011266	±2.5	PASS
GSM1900	810	VL	NT	36.77	0.019253	±2.5	PASS

GSM1900	810	VN	NT	26.60	0.013928	±2.5	PASS
GSM1900	810	VH	NT	29.74	0.015572	±2.5	PASS
GPRS1900	512	VL	NT	17.40	0.009404	±2.5	PASS
GPRS1900	512	VN	NT	9.91	0.005356	±2.5	PASS
GPRS1900	512	VH	NT	11.20	0.006053	±2.5	PASS
GPRS1900	661	VL	NT	18.56	0.009872	±2.5	PASS
GPRS1900	661	VN	NT	21.53	0.011452	±2.5	PASS
GPRS1900	661	VH	NT	19.63	0.010441	±2.5	PASS
GPRS1900	810	VL	NT	18.08	0.009467	±2.5	PASS
GPRS1900	810	VN	NT	21.15	0.011074	±2.5	PASS
GPRS1900	810	VH	NT	19.34	0.010127	±2.5	PASS
EGPRS1900	512	VL	NT	22.60	0.012215	±2.5	PASS
EGPRS1900	512	VN	NT	18.50	0.009999	±2.5	PASS
EGPRS1900	512	VH	NT	22.70	0.012269	±2.5	PASS
EGPRS1900	661	VL	NT	18.95	0.010080	±2.5	PASS
EGPRS1900	661	VN	NT	15.50	0.008245	±2.5	PASS
EGPRS1900	661	VH	NT	14.21	0.007559	±2.5	PASS
EGPRS1900	810	VL	NT	18.21	0.009535	±2.5	PASS
EGPRS1900	810	VN	NT	21.60	0.011310	±2.5	PASS
EGPRS1900	810	VH	NT	17.37	0.009095	±2.5	PASS

Temperature							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	NV	-30	10.20	0.012376	±2.5	PASS
GSM850	128	NV	-20	14.82	0.017981	±2.5	PASS
GSM850	128	NV	-10	9.43	0.011441	±2.5	PASS
GSM850	128	NV	0	7.10	0.008614	±2.5	PASS
GSM850	128	NV	10	10.17	0.012339	±2.5	PASS
GSM850	128	NV	20	9.81	0.011902	±2.5	PASS
GSM850	128	NV	30	6.72	0.008153	±2.5	PASS
GSM850	128	NV	40	10.78	0.013079	±2.5	PASS
GSM850	128	NV	50	6.10	0.007401	±2.5	PASS
GSM850	190	NV	-30	7.14	0.008535	±2.5	PASS
GSM850	190	NV	-20	8.36	0.009993	±2.5	PASS
GSM850	190	NV	-10	5.65	0.006754	±2.5	PASS
GSM850	190	NV	0	8.39	0.010029	±2.5	PASS
GSM850	190	NV	10	7.59	0.009072	±2.5	PASS
GSM850	190	NV	20	5.33	0.006371	±2.5	PASS
GSM850	190	NV	30	8.91	0.010650	±2.5	PASS

GSM850	190	NV	40	6.65	0.007949	±2.5	PASS
GSM850	190	NV	50	4.04	0.004829	±2.5	PASS
GSM850	251	NV	-30	5.26	0.006197	±2.5	PASS
GSM850	251	NV	-20	1.61	0.001897	±2.5	PASS
GSM850	251	NV	-10	5.94	0.006998	±2.5	PASS
GSM850	251	NV	0	6.52	0.007681	±2.5	PASS
GSM850	251	NV	10	6.26	0.007375	±2.5	PASS
GSM850	251	NV	20	4.94	0.005820	±2.5	PASS
GSM850	251	NV	30	1.42	0.001673	±2.5	PASS
GSM850	251	NV	40	4.97	0.005855	±2.5	PASS
GSM850	251	NV	50	-0.97	-0.001143	±2.5	PASS
GPRS850	128	NV	-30	0.48	0.000582	±2.5	PASS
GPRS850	128	NV	-20	6.49	0.007874	±2.5	PASS
GPRS850	128	NV	-10	9.72	0.011793	±2.5	PASS
GPRS850	128	NV	0	7.39	0.008966	±2.5	PASS
GPRS850	128	NV	10	2.13	0.002584	±2.5	PASS
GPRS850	128	NV	20	7.36	0.008930	±2.5	PASS
GPRS850	128	NV	30	10.85	0.013164	±2.5	PASS
GPRS850	128	NV	40	9.94	0.012060	±2.5	PASS
GPRS850	128	NV	50	8.59	0.010422	±2.5	PASS
GPRS850	190	NV	-30	1.52	0.001817	±2.5	PASS
GPRS850	190	NV	-20	0.39	0.000466	±2.5	PASS
GPRS850	190	NV	-10	2.39	0.002857	±2.5	PASS
GPRS850	190	NV	0	3.26	0.003897	±2.5	PASS
GPRS850	190	NV	10	4.65	0.005558	±2.5	PASS
GPRS850	190	NV	20	2.49	0.002976	±2.5	PASS
GPRS850	190	NV	30	7.30	0.008726	±2.5	PASS
GPRS850	190	NV	40	4.42	0.005283	±2.5	PASS
GPRS850	190	NV	50	1.49	0.001781	±2.5	PASS
GPRS850	251	NV	-30	-3.58	-0.004218	±2.5	PASS
GPRS850	251	NV	-20	-1.00	-0.001178	±2.5	PASS
GPRS850	251	NV	-10	3.29	0.003876	±2.5	PASS
GPRS850	251	NV	0	1.19	0.001402	±2.5	PASS
GPRS850	251	NV	10	3.07	0.003617	±2.5	PASS
GPRS850	251	NV	20	6.07	0.007151	±2.5	PASS
GPRS850	251	NV	30	9.78	0.011522	±2.5	PASS
GPRS850	251	NV	40	3.65	0.004300	±2.5	PASS
GPRS850	251	NV	50	1.00	0.001178	±2.5	PASS
EGPRS850	128	NV	-30	-3.65	-0.004429	±2.5	PASS
EGPRS850	128	NV	-20	-6.30	-0.007644	±2.5	PASS

EGPRS850	128	NV	-10	-15.24	-0.018491	±2.5	PASS
EGPRS850	128	NV	0	-4.46	-0.005411	±2.5	PASS
EGPRS850	128	NV	10	-9.52	-0.011551	±2.5	PASS
EGPRS850	128	NV	20	-12.40	-0.015045	±2.5	PASS
EGPRS850	128	NV	30	2.16	0.002621	±2.5	PASS
EGPRS850	128	NV	40	-9.30	-0.011284	±2.5	PASS
EGPRS850	128	NV	50	-13.72	-0.016646	±2.5	PASS
EGPRS850	190	NV	-30	9.23	0.011033	±2.5	PASS
EGPRS850	190	NV	-20	-1.68	-0.002008	±2.5	PASS
EGPRS850	190	NV	-10	14.17	0.016938	±2.5	PASS
EGPRS850	190	NV	0	1.94	0.002319	±2.5	PASS
EGPRS850	190	NV	10	-14.82	-0.017715	±2.5	PASS
EGPRS850	190	NV	20	-14.21	-0.016985	±2.5	PASS
EGPRS850	190	NV	30	4.04	0.004829	±2.5	PASS
EGPRS850	190	NV	40	-7.88	-0.009419	±2.5	PASS
EGPRS850	190	NV	50	15.56	0.018599	±2.5	PASS
EGPRS850	251	NV	-30	-0.48	-0.000566	±2.5	PASS
EGPRS850	251	NV	-20	-1.84	-0.002168	±2.5	PASS
EGPRS850	251	NV	-10	-12.88	-0.015174	±2.5	PASS
EGPRS850	251	NV	0	-14.43	-0.017000	±2.5	PASS
EGPRS850	251	NV	10	-10.98	-0.012936	±2.5	PASS
EGPRS850	251	NV	20	-14.75	-0.017377	±2.5	PASS
EGPRS850	251	NV	30	-11.01	-0.012971	±2.5	PASS
EGPRS850	251	NV	40	-13.30	-0.015669	±2.5	PASS
EGPRS850	251	NV	50	-11.17	-0.013160	±2.5	PASS
GSM1900	512	NV	-30	21.34	0.011534	±2.5	PASS
GSM1900	512	NV	-20	26.99	0.014588	±2.5	PASS
GSM1900	512	NV	-10	22.92	0.012388	±2.5	PASS
GSM1900	512	NV	0	24.80	0.013404	±2.5	PASS
GSM1900	512	NV	10	32.90	0.017782	±2.5	PASS
GSM1900	512	NV	20	25.83	0.013961	±2.5	PASS
GSM1900	512	NV	30	22.63	0.012231	±2.5	PASS
GSM1900	512	NV	40	23.41	0.012653	±2.5	PASS
GSM1900	512	NV	50	23.12	0.012496	±2.5	PASS
GSM1900	661	NV	-30	24.80	0.013191	±2.5	PASS
GSM1900	661	NV	-20	29.74	0.015819	±2.5	PASS
GSM1900	661	NV	-10	24.05	0.012793	±2.5	PASS
GSM1900	661	NV	0	24.09	0.012814	±2.5	PASS
GSM1900	661	NV	10	21.28	0.011319	±2.5	PASS
GSM1900	661	NV	20	32.74	0.017415	±2.5	PASS

GSM1900	661	NV	30	27.31	0.014527	±2.5	PASS
GSM1900	661	NV	40	32.87	0.017484	±2.5	PASS
GSM1900	661	NV	50	28.06	0.014926	±2.5	PASS
GSM1900	810	NV	-30	29.77	0.015588	±2.5	PASS
GSM1900	810	NV	-20	33.13	0.017347	±2.5	PASS
GSM1900	810	NV	-10	29.06	0.015216	±2.5	PASS
GSM1900	810	NV	0	31.83	0.016667	±2.5	PASS
GSM1900	810	NV	10	29.70	0.015551	±2.5	PASS
GSM1900	810	NV	20	34.58	0.018107	±2.5	PASS
GSM1900	810	NV	30	34.87	0.018258	±2.5	PASS
GSM1900	810	NV	40	27.99	0.014656	±2.5	PASS
GSM1900	810	NV	50	32.83	0.017190	±2.5	PASS
GPRS1900	512	NV	-30	12.14	0.006561	±2.5	PASS
GPRS1900	512	NV	-20	23.57	0.012739	±2.5	PASS
GPRS1900	512	NV	-10	28.41	0.015355	±2.5	PASS
GPRS1900	512	NV	0	21.89	0.011831	±2.5	PASS
GPRS1900	512	NV	10	22.08	0.011934	±2.5	PASS
GPRS1900	512	NV	20	24.34	0.013155	±2.5	PASS
GPRS1900	512	NV	30	16.27	0.008794	±2.5	PASS
GPRS1900	512	NV	40	20.89	0.011291	±2.5	PASS
GPRS1900	512	NV	50	20.31	0.010977	±2.5	PASS
GPRS1900	661	NV	-30	19.15	0.010186	±2.5	PASS
GPRS1900	661	NV	-20	24.28	0.012915	±2.5	PASS
GPRS1900	661	NV	-10	27.70	0.014734	±2.5	PASS
GPRS1900	661	NV	0	26.41	0.014048	±2.5	PASS
GPRS1900	661	NV	10	27.54	0.014649	±2.5	PASS
GPRS1900	661	NV	20	30.74	0.016351	±2.5	PASS
GPRS1900	661	NV	30	26.76	0.014234	±2.5	PASS
GPRS1900	661	NV	40	26.38	0.014032	±2.5	PASS
GPRS1900	661	NV	50	29.19	0.015527	±2.5	PASS
GPRS1900	810	NV	-30	25.15	0.013169	±2.5	PASS
GPRS1900	810	NV	-20	24.86	0.013017	±2.5	PASS
GPRS1900	810	NV	-10	29.38	0.015384	±2.5	PASS
GPRS1900	810	NV	0	34.71	0.018175	±2.5	PASS
GPRS1900	810	NV	10	-9.56	-0.005006	±2.5	PASS
GPRS1900	810	NV	20	25.51	0.013357	±2.5	PASS
GPRS1900	810	NV	30	33.55	0.017567	±2.5	PASS
GPRS1900	810	NV	40	38.71	0.020269	±2.5	PASS
GPRS1900	810	NV	50	30.22	0.015824	±2.5	PASS
EGPRS1900	512	NV	-30	23.76	0.012842	±2.5	PASS

EGPRS1900	512	NV	-20	27.60	0.014917	±2.5	PASS
EGPRS1900	512	NV	-10	26.47	0.014307	±2.5	PASS
EGPRS1900	512	NV	0	31.64	0.017101	±2.5	PASS
EGPRS1900	512	NV	10	29.41	0.015896	±2.5	PASS
EGPRS1900	512	NV	20	28.57	0.015442	±2.5	PASS
EGPRS1900	512	NV	30	27.86	0.015058	±2.5	PASS
EGPRS1900	512	NV	40	25.73	0.013907	±2.5	PASS
EGPRS1900	512	NV	50	27.70	0.014971	±2.5	PASS
EGPRS1900	661	NV	-30	20.82	0.011074	±2.5	PASS
EGPRS1900	661	NV	-20	19.82	0.010543	±2.5	PASS
EGPRS1900	661	NV	-10	15.30	0.008138	±2.5	PASS
EGPRS1900	661	NV	0	17.98	0.009564	±2.5	PASS
EGPRS1900	661	NV	10	24.54	0.013053	±2.5	PASS
EGPRS1900	661	NV	20	25.41	0.013516	±2.5	PASS
EGPRS1900	661	NV	30	24.31	0.012931	±2.5	PASS
EGPRS1900	661	NV	40	23.21	0.012346	±2.5	PASS
EGPRS1900	661	NV	50	26.80	0.014255	±2.5	PASS
EGPRS1900	810	NV	-30	11.07	0.005796	±2.5	PASS
EGPRS1900	810	NV	-20	14.17	0.007420	±2.5	PASS
EGPRS1900	810	NV	-10	13.98	0.007320	±2.5	PASS
EGPRS1900	810	NV	0	13.62	0.007132	±2.5	PASS
EGPRS1900	810	NV	10	24.63	0.012897	±2.5	PASS
EGPRS1900	810	NV	20	18.82	0.009854	±2.5	PASS
EGPRS1900	810	NV	30	19.98	0.010462	±2.5	PASS
EGPRS1900	810	NV	40	27.48	0.014389	±2.5	PASS
EGPRS1900	810	NV	50	18.37	0.009619	±2.5	PASS

Appendix G: Modulation Characteristics

Test Result

Band	Channel	Result	Verdict
GSM850	128	PASS	PASS
GSM850	190	PASS	PASS
GSM850	251	PASS	PASS
GPRS850	128	PASS	PASS
GPRS850	190	PASS	PASS
GPRS850	251	PASS	PASS
EGPRS850	128	PASS	PASS
EGPRS850	190	PASS	PASS
EGPRS850	251	PASS	PASS
GSM1900	512	PASS	PASS
GSM1900	661	PASS	PASS
GSM1900	810	PASS	PASS
GPRS1900	512	PASS	PASS
GPRS1900	661	PASS	PASS
GPRS1900	810	PASS	PASS
EGPRS1900	512	PASS	PASS
EGPRS1900	661	PASS	PASS
EGPRS1900	810	PASS	PASS

Test Graphs

