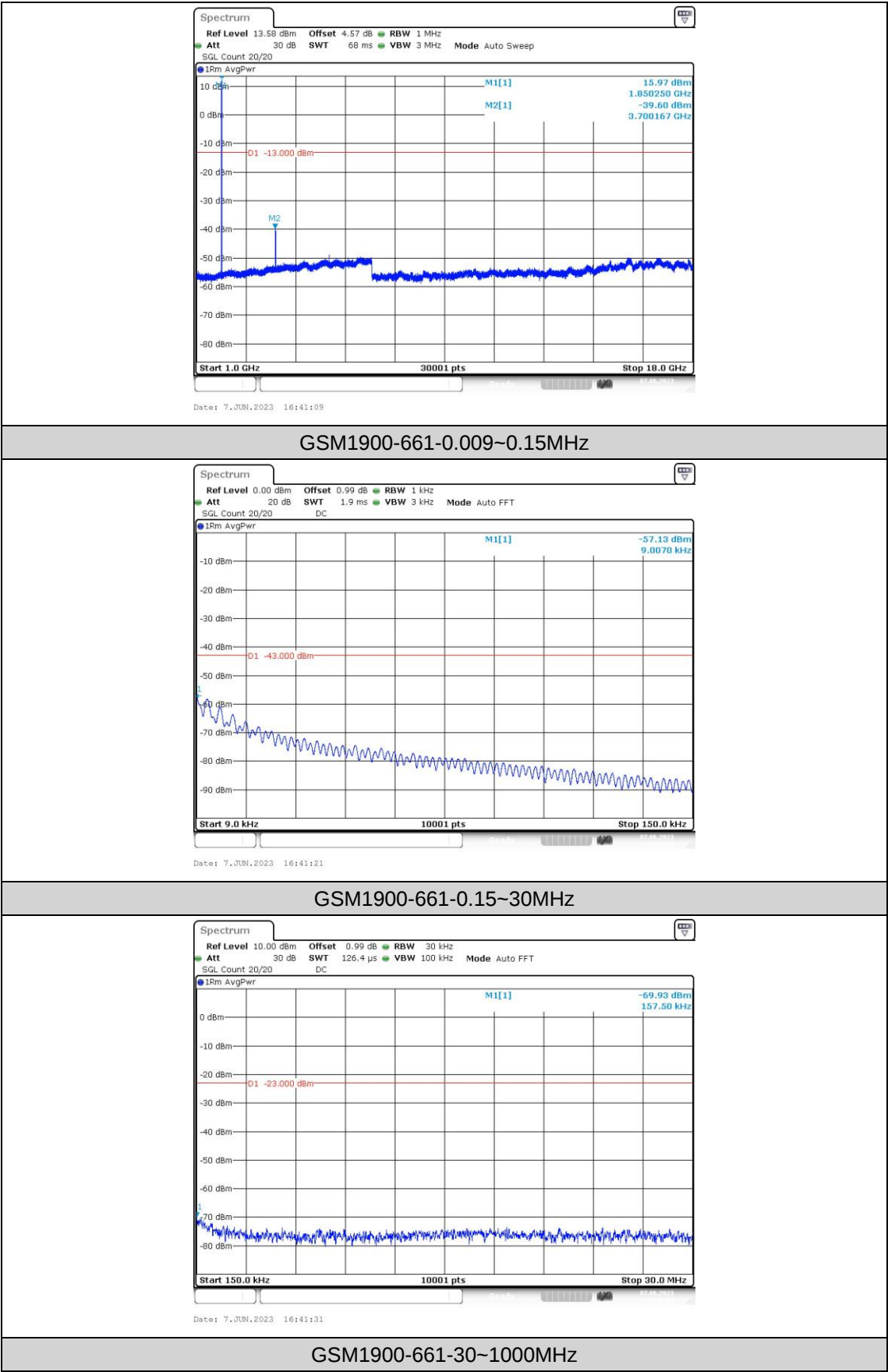
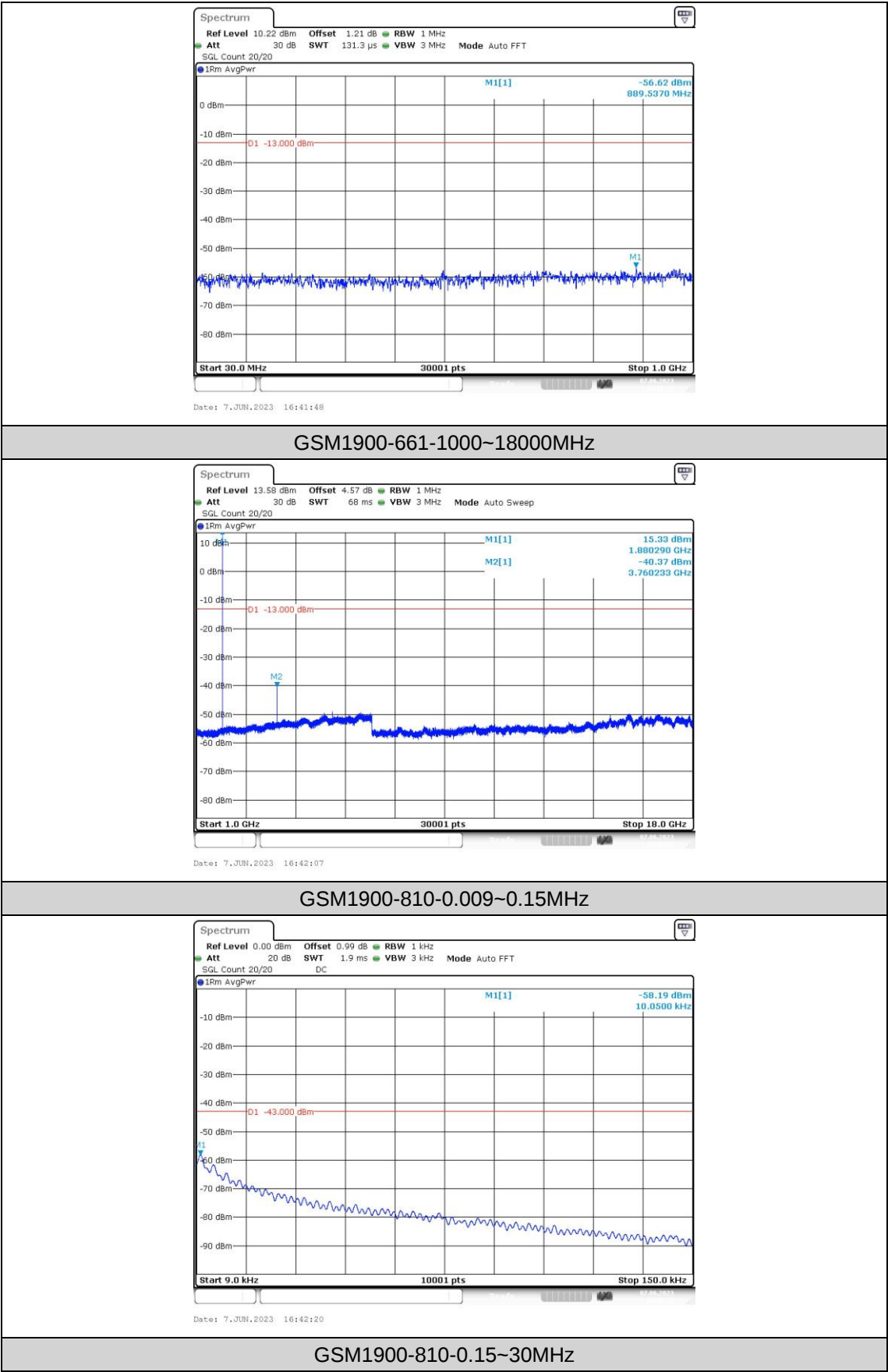
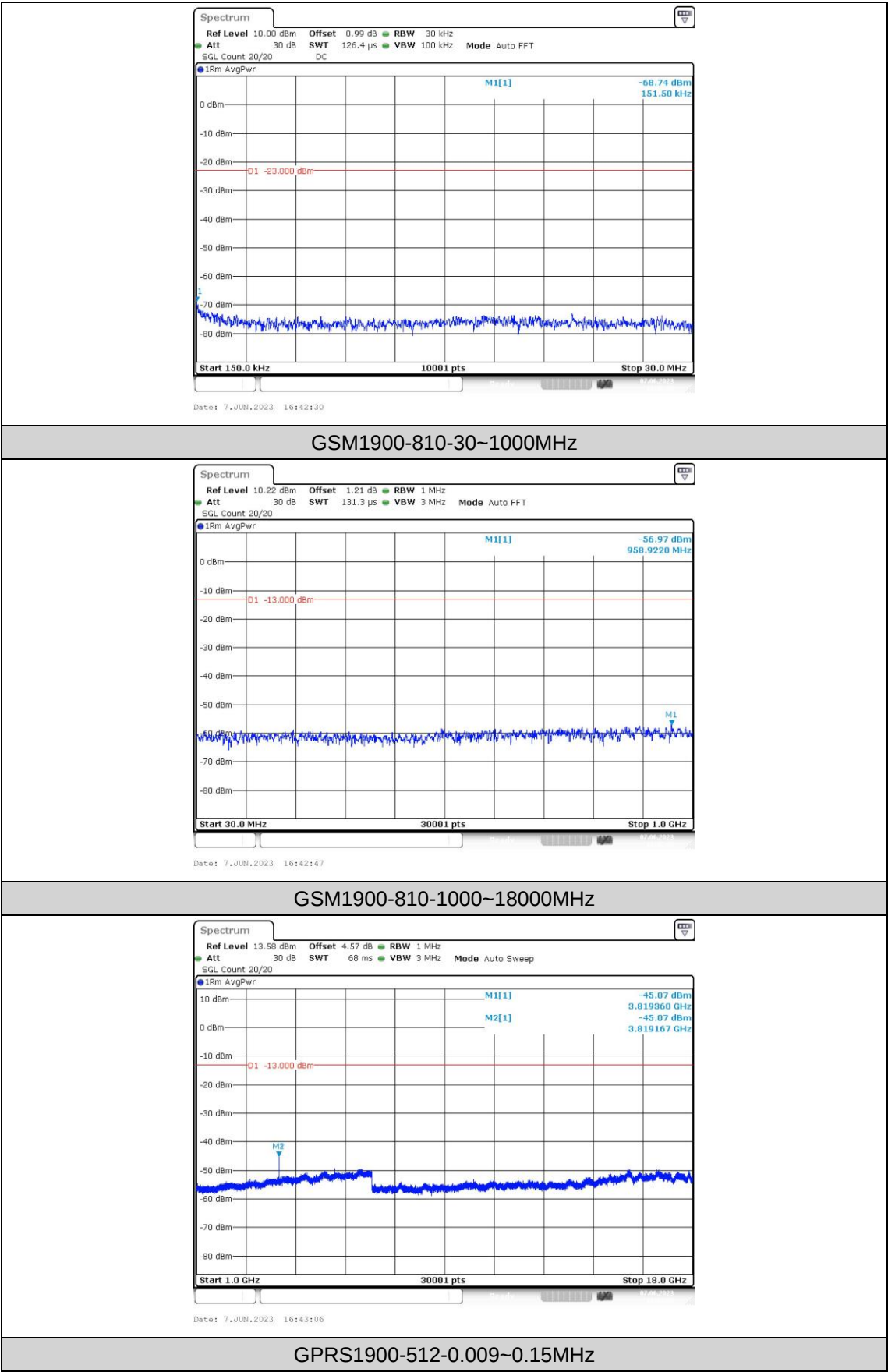
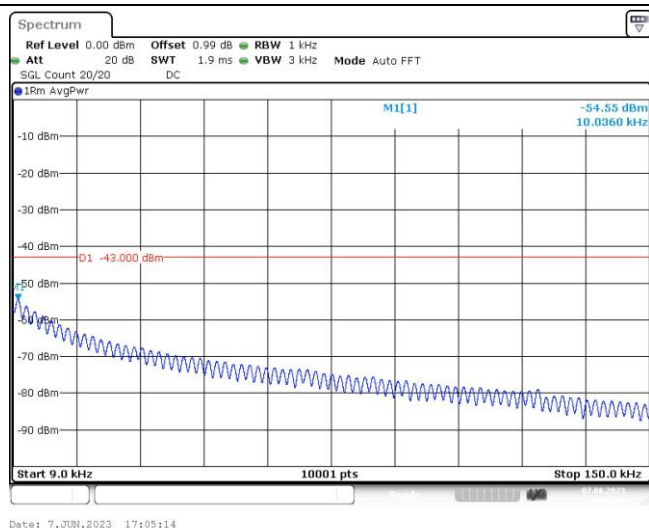


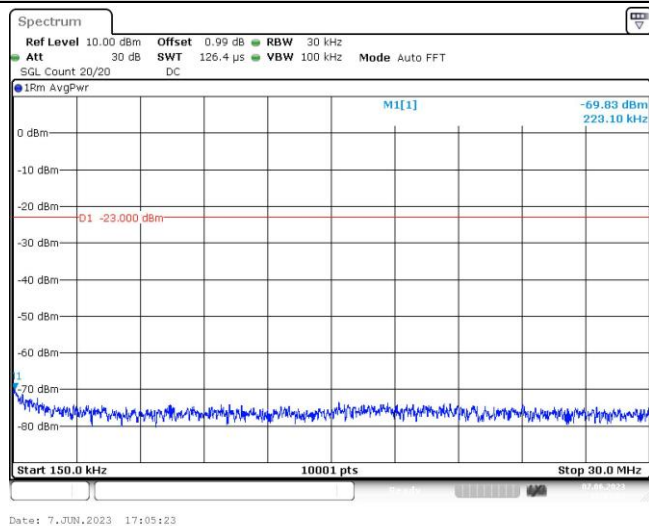




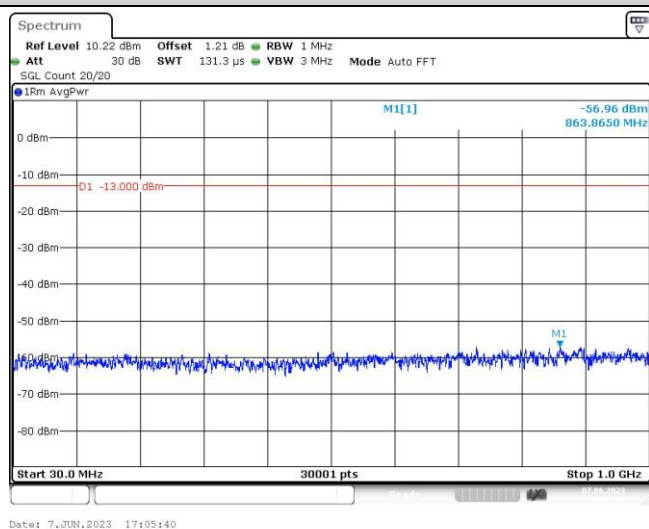




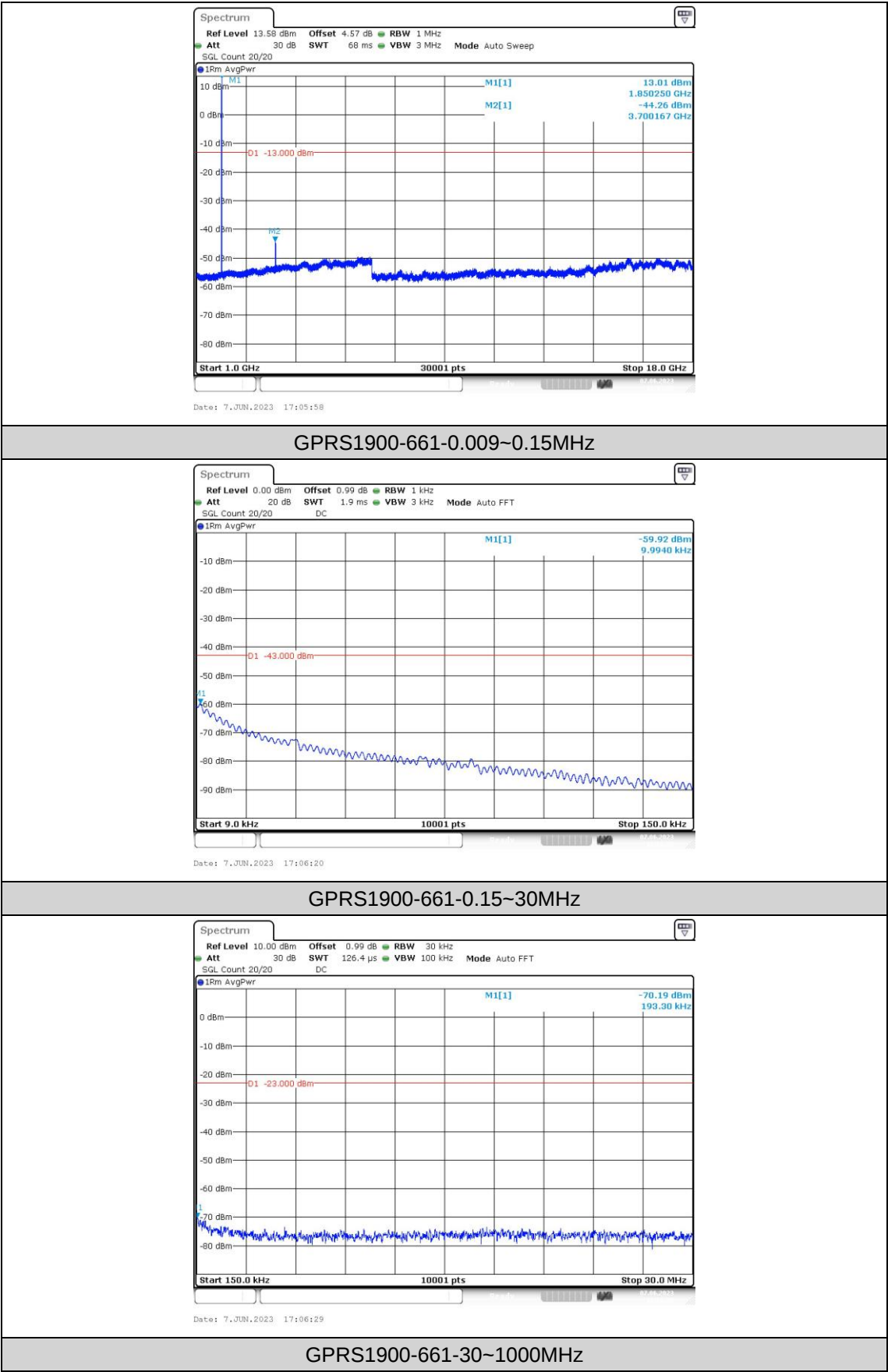
GPRS1900-512-0.15~30MHz

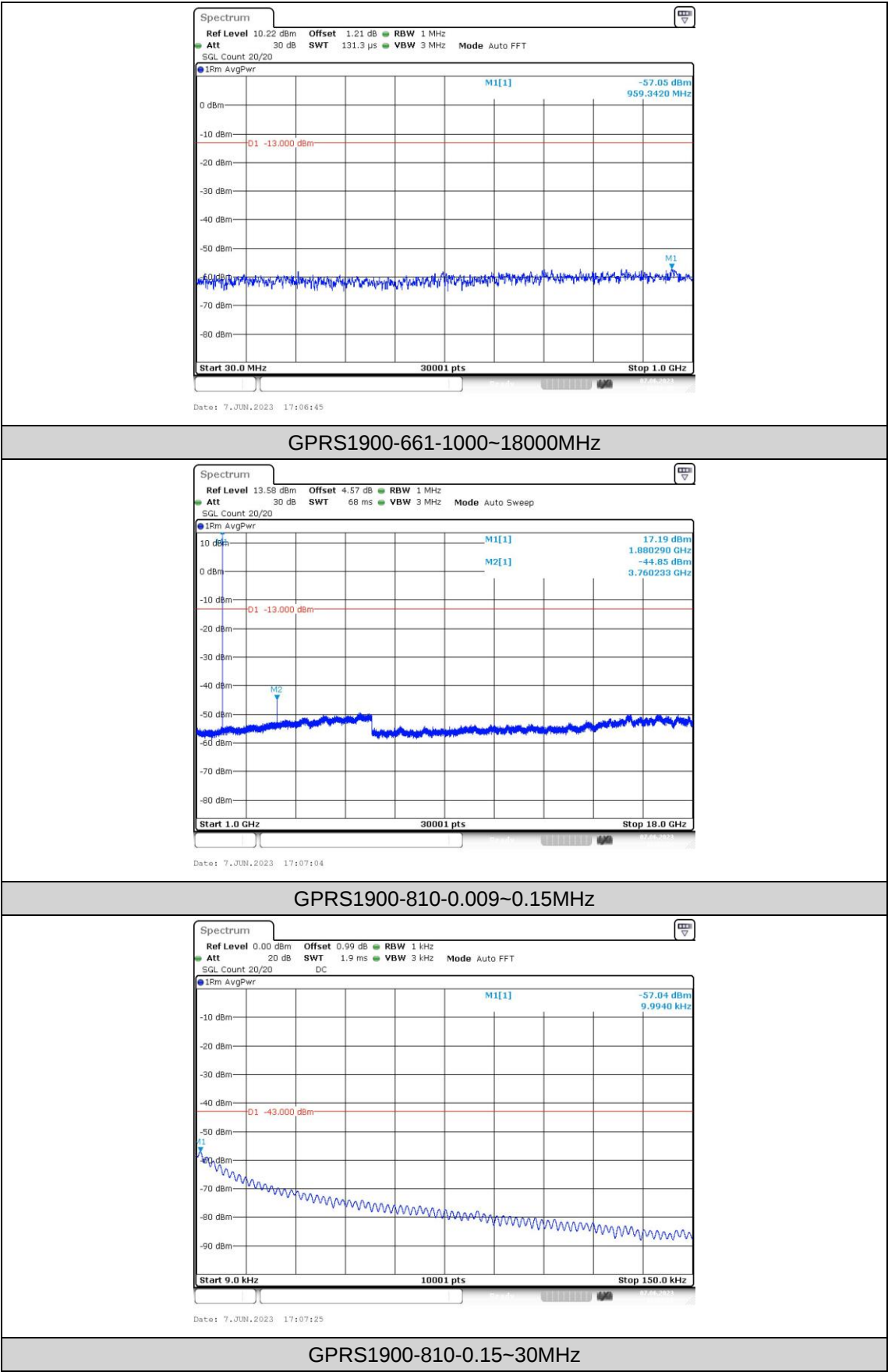


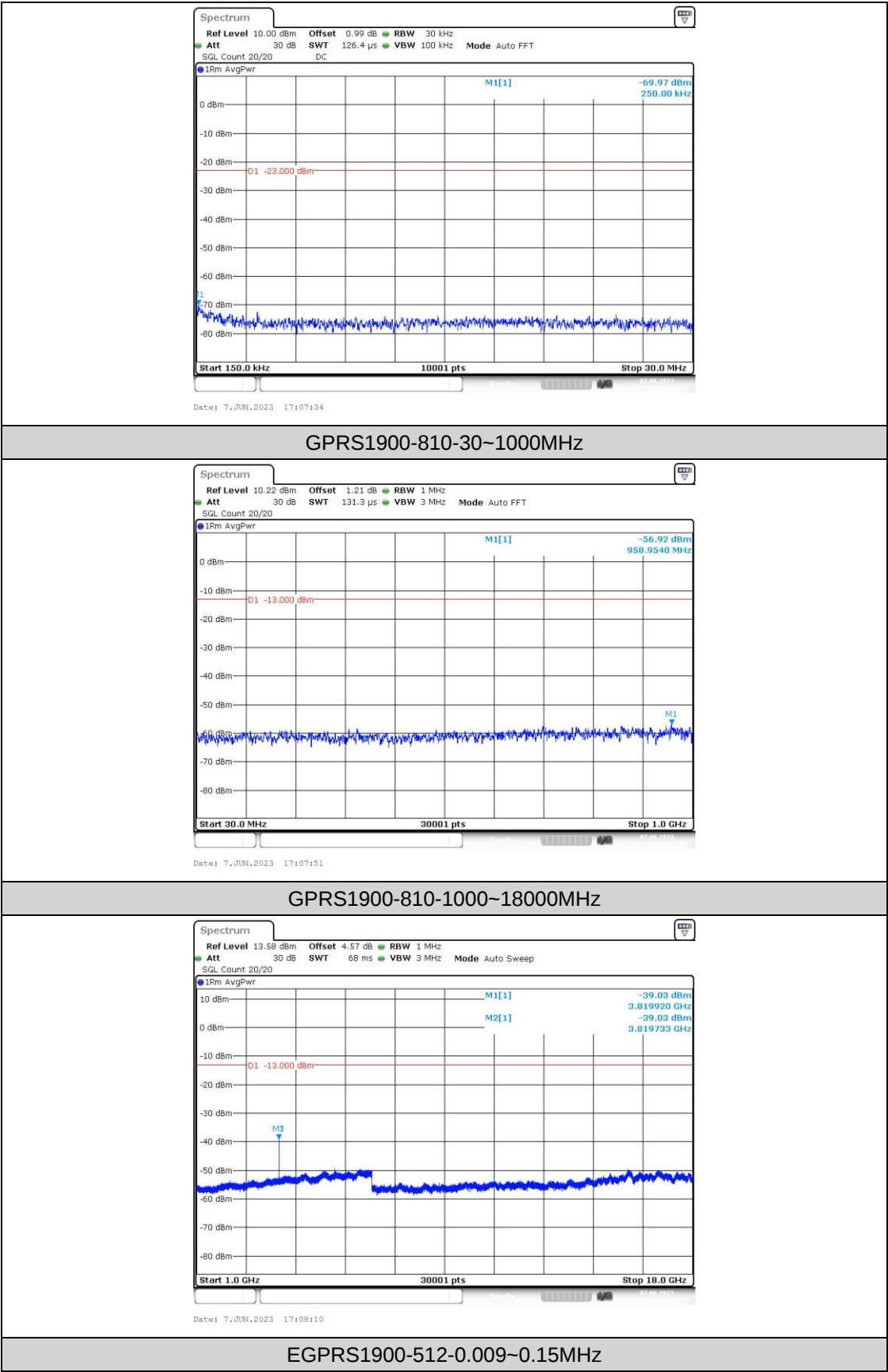
GPRS1900-512-30~1000MHz

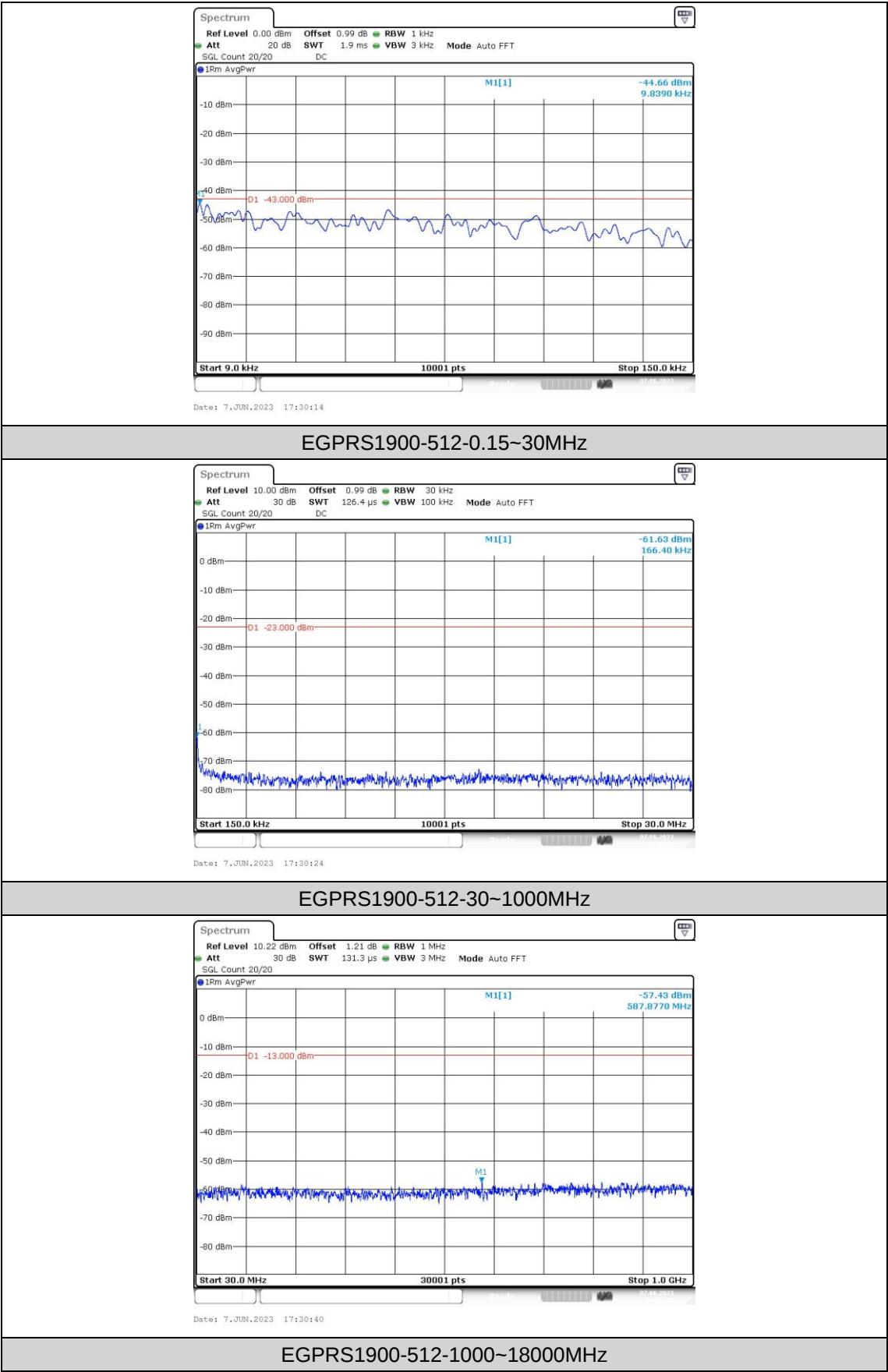


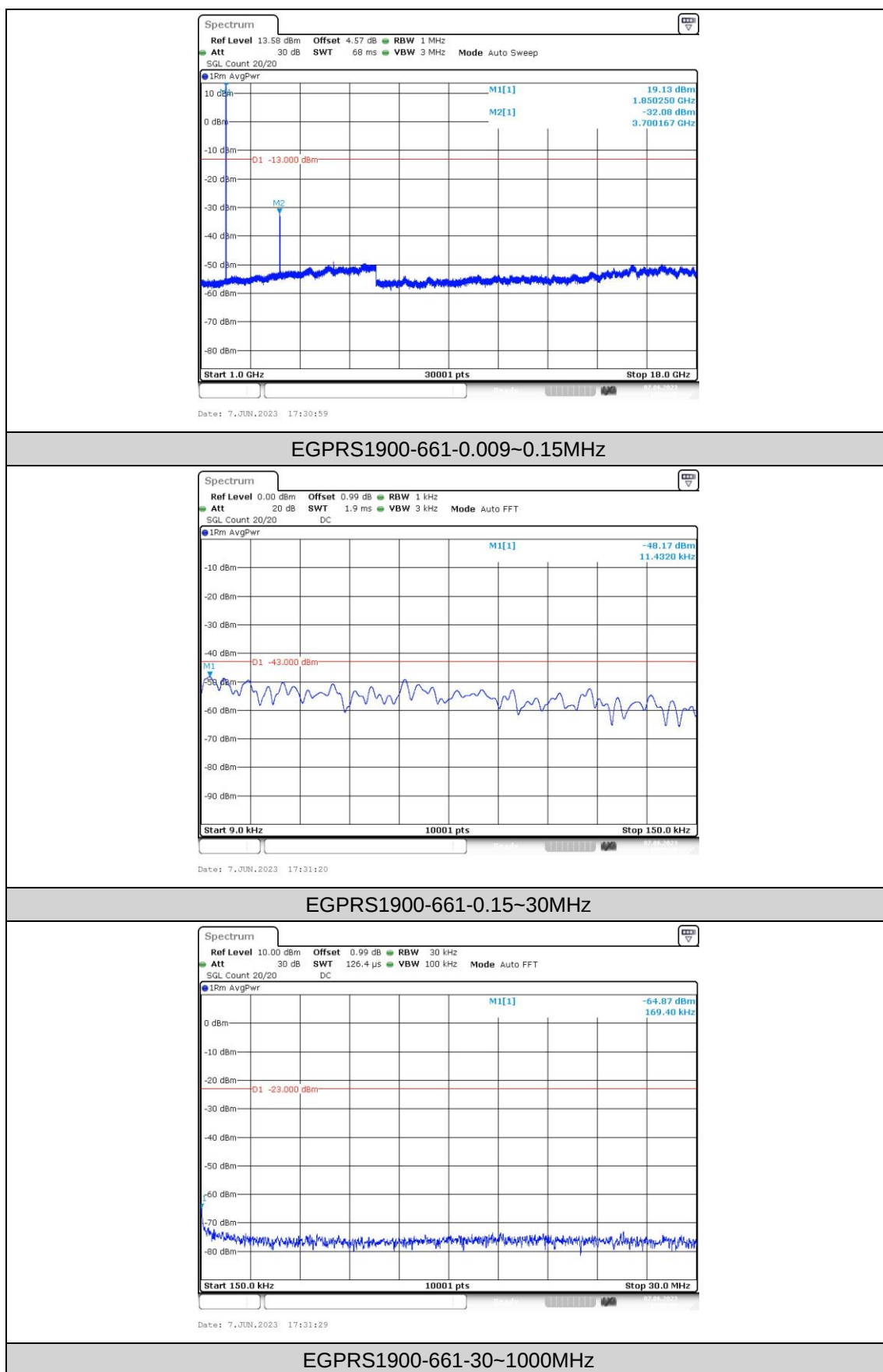
GPRS1900-512-1000~18000MHz

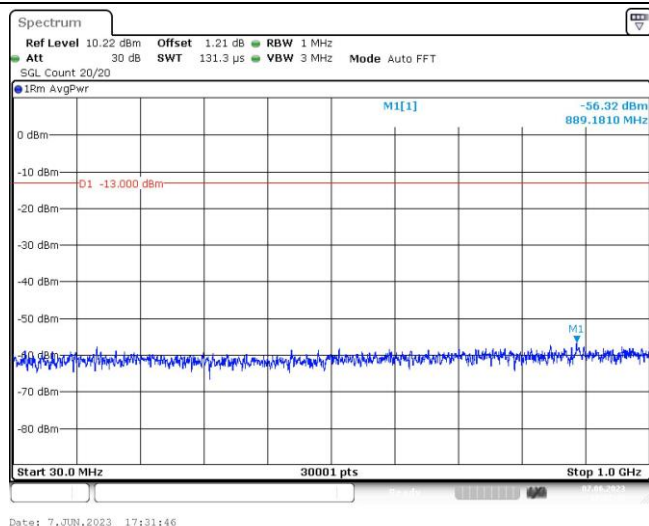




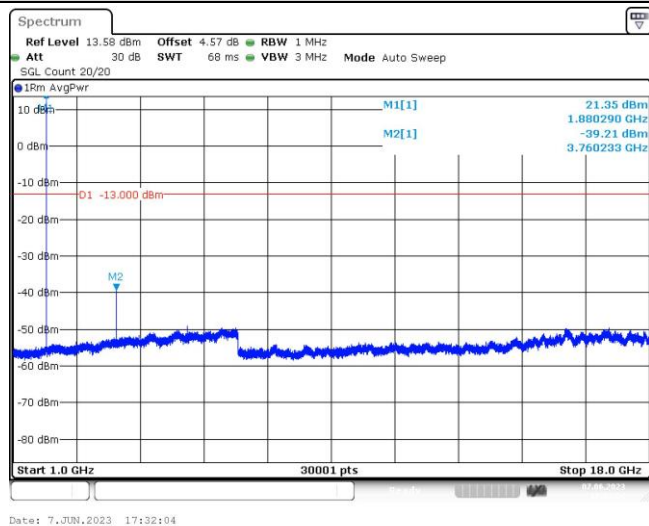




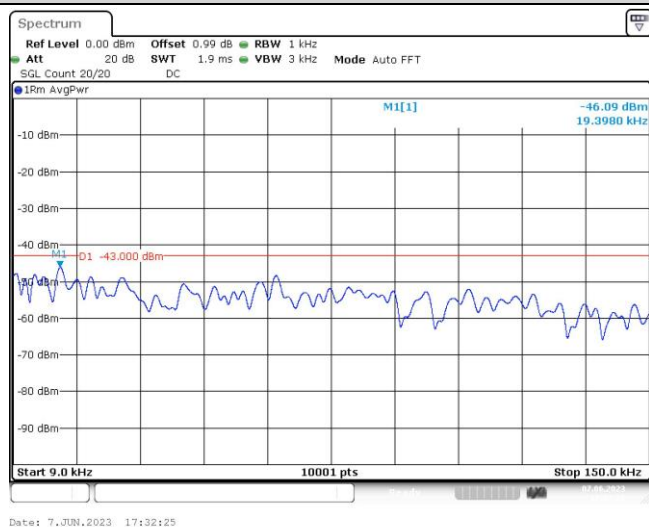




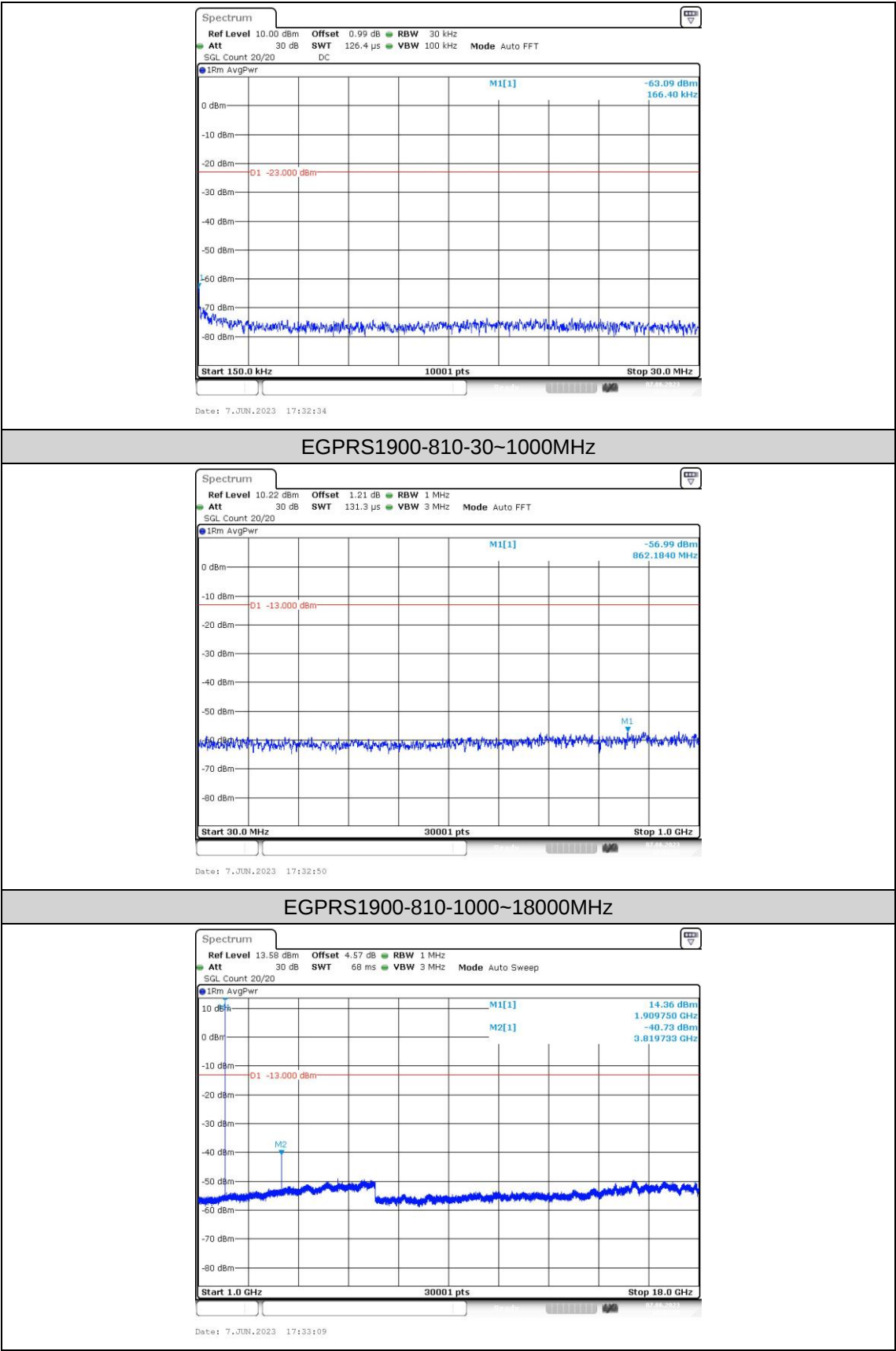
EGPRS1900-661-1000~18000MHz



EGPRS1900-810-0.009~0.15MHz



EGPRS1900-810-0.15~30MHz



Appendix F: Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	VL	NT	12.53	0.015203	±2.5	PASS
GSM850	128	VN	NT	10.62	0.012885	±2.5	PASS
GSM850	128	VH	NT	10.43	0.012655	±2.5	PASS
GSM850	190	VL	NT	10.56	0.012623	±2.5	PASS
GSM850	190	VN	NT	12.17	0.014547	±2.5	PASS
GSM850	190	VH	NT	12.01	0.014356	±2.5	PASS
GSM850	251	VL	NT	12.72	0.014986	±2.5	PASS
GSM850	251	VN	NT	10.75	0.012665	±2.5	PASS
GSM850	251	VH	NT	10.20	0.012017	±2.5	PASS
GPRS850	128	VL	NT	12.62	0.015312	±2.5	PASS
GPRS850	128	VN	NT	11.40	0.013832	±2.5	PASS
GPRS850	128	VH	NT	11.01	0.013358	±2.5	PASS
GPRS850	190	VL	NT	10.43	0.012467	±2.5	PASS
GPRS850	190	VN	NT	9.36	0.011188	±2.5	PASS
GPRS850	190	VH	NT	9.59	0.011463	±2.5	PASS
GPRS850	251	VL	NT	7.43	0.008754	±2.5	PASS
GPRS850	251	VN	NT	5.91	0.006963	±2.5	PASS
GPRS850	251	VH	NT	5.78	0.006810	±2.5	PASS
EGPRS850	128	VL	NT	5.52	0.006697	±2.5	PASS
EGPRS850	128	VN	NT	3.45	0.004186	±2.5	PASS
EGPRS850	128	VH	NT	3.87	0.004695	±2.5	PASS
EGPRS850	190	VL	NT	6.52	0.007793	±2.5	PASS
EGPRS850	190	VN	NT	4.13	0.004937	±2.5	PASS
EGPRS850	190	VH	NT	7.33	0.008762	±2.5	PASS
EGPRS850	251	VL	NT	6.46	0.007611	±2.5	PASS
EGPRS850	251	VN	NT	9.59	0.011298	±2.5	PASS

EGPRS850	251	VH	NT	6.68	0.007870	±2.5	PASS
GSM1900	512	VL	NT	26.89	0.014534	±2.5	PASS
GSM1900	512	VN	NT	28.61	0.015463	±2.5	PASS
GSM1900	512	VH	NT	21.92	0.011847	±2.5	PASS
GSM1900	661	VL	NT	22.54	0.011989	±2.5	PASS
GSM1900	661	VN	NT	21.50	0.011436	±2.5	PASS
GSM1900	661	VH	NT	24.92	0.013255	±2.5	PASS
GSM1900	810	VL	NT	16.89	0.008844	±2.5	PASS
GSM1900	810	VN	NT	15.40	0.008064	±2.5	PASS
GSM1900	810	VH	NT	17.89	0.009367	±2.5	PASS
GPRS1900	512	VL	NT	17.95	0.009702	±2.5	PASS
GPRS1900	512	VN	NT	22.63	0.012231	±2.5	PASS
GPRS1900	512	VH	NT	24.60	0.013296	±2.5	PASS
GPRS1900	661	VL	NT	17.76	0.009447	±2.5	PASS
GPRS1900	661	VN	NT	13.72	0.007298	±2.5	PASS
GPRS1900	661	VH	NT	17.43	0.009271	±2.5	PASS
GPRS1900	810	VL	NT	15.46	0.008095	±2.5	PASS
GPRS1900	810	VN	NT	21.08	0.011038	±2.5	PASS
GPRS1900	810	VH	NT	17.63	0.009231	±2.5	PASS
EGPRS1900	512	VL	NT	21.21	0.011464	±2.5	PASS
EGPRS1900	512	VN	NT	17.69	0.009561	±2.5	PASS
EGPRS1900	512	VH	NT	19.05	0.010296	±2.5	PASS
EGPRS1900	661	VL	NT	20.11	0.010697	±2.5	PASS
EGPRS1900	661	VN	NT	14.53	0.007729	±2.5	PASS
EGPRS1900	661	VH	NT	19.21	0.010218	±2.5	PASS
EGPRS1900	810	VL	NT	14.56	0.007624	±2.5	PASS
EGPRS1900	810	VN	NT	14.17	0.007420	±2.5	PASS
EGPRS1900	810	VH	NT	18.02	0.009436	±2.5	PASS

Temperature							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	NV	-30	8.43	0.010228	±2.5	PASS
GSM850	128	NV	-20	19.98	0.024242	±2.5	PASS
GSM850	128	NV	-10	16.40	0.019898	±2.5	PASS
GSM850	128	NV	0	19.24	0.023344	±2.5	PASS
GSM850	128	NV	10	17.95	0.021779	±2.5	PASS
GSM850	128	NV	20	14.46	0.017544	±2.5	PASS
GSM850	128	NV	30	14.66	0.017787	±2.5	PASS
GSM850	128	NV	40	15.40	0.018685	±2.5	PASS
GSM850	128	NV	50	14.08	0.017083	±2.5	PASS
GSM850	190	NV	-30	14.30	0.017093	±2.5	PASS
GSM850	190	NV	-20	3.65	0.004363	±2.5	PASS
GSM850	190	NV	-10	8.33	0.009957	±2.5	PASS
GSM850	190	NV	0	8.94	0.010686	±2.5	PASS
GSM850	190	NV	10	10.53	0.012587	±2.5	PASS
GSM850	190	NV	20	11.30	0.013507	±2.5	PASS
GSM850	190	NV	30	6.55	0.007829	±2.5	PASS
GSM850	190	NV	40	8.46	0.010112	±2.5	PASS
GSM850	190	NV	50	6.94	0.008295	±2.5	PASS
GSM850	251	NV	-30	12.04	0.014185	±2.5	PASS
GSM850	251	NV	-20	5.23	0.006162	±2.5	PASS
GSM850	251	NV	-10	11.46	0.013501	±2.5	PASS
GSM850	251	NV	0	9.49	0.011180	±2.5	PASS
GSM850	251	NV	10	9.46	0.011145	±2.5	PASS
GSM850	251	NV	20	10.75	0.012665	±2.5	PASS
GSM850	251	NV	30	15.66	0.018450	±2.5	PASS
GSM850	251	NV	40	7.68	0.009048	±2.5	PASS
GSM850	251	NV	50	5.13	0.006044	±2.5	PASS
GPRS850	128	NV	-30	9.40	0.011405	±2.5	PASS
GPRS850	128	NV	-20	12.07	0.014645	±2.5	PASS
GPRS850	128	NV	-10	10.46	0.012691	±2.5	PASS
GPRS850	128	NV	0	8.94	0.010847	±2.5	PASS
GPRS850	128	NV	10	9.72	0.011793	±2.5	PASS
GPRS850	128	NV	20	9.85	0.011951	±2.5	PASS
GPRS850	128	NV	30	8.91	0.010810	±2.5	PASS
GPRS850	128	NV	40	9.07	0.011005	±2.5	PASS
GPRS850	128	NV	50	10.27	0.012461	±2.5	PASS
GPRS850	190	NV	-30	8.33	0.009957	±2.5	PASS
GPRS850	190	NV	-20	10.46	0.012503	±2.5	PASS

GPRS850	190	NV	-10	8.94	0.010686	±2.5	PASS
GPRS850	190	NV	0	11.56	0.013818	±2.5	PASS
GPRS850	190	NV	10	8.36	0.009993	±2.5	PASS
GPRS850	190	NV	20	8.72	0.010423	±2.5	PASS
GPRS850	190	NV	30	11.40	0.013627	±2.5	PASS
GPRS850	190	NV	40	11.49	0.013734	±2.5	PASS
GPRS850	190	NV	50	11.24	0.013435	±2.5	PASS
GPRS850	251	NV	-30	9.91	0.011675	±2.5	PASS
GPRS850	251	NV	-20	4.84	0.005702	±2.5	PASS
GPRS850	251	NV	-10	13.04	0.015363	±2.5	PASS
GPRS850	251	NV	0	13.43	0.015822	±2.5	PASS
GPRS850	251	NV	10	12.30	0.014491	±2.5	PASS
GPRS850	251	NV	20	13.46	0.015858	±2.5	PASS
GPRS850	251	NV	30	12.11	0.014267	±2.5	PASS
GPRS850	251	NV	40	12.37	0.014574	±2.5	PASS
GPRS850	251	NV	50	11.24	0.013242	±2.5	PASS
EGPRS850	128	NV	-30	7.36	0.008930	±2.5	PASS
EGPRS850	128	NV	-20	3.84	0.004659	±2.5	PASS
EGPRS850	128	NV	-10	4.58	0.005557	±2.5	PASS
EGPRS850	128	NV	0	4.68	0.005678	±2.5	PASS
EGPRS850	128	NV	10	6.17	0.007486	±2.5	PASS
EGPRS850	128	NV	20	3.00	0.003640	±2.5	PASS
EGPRS850	128	NV	30	5.29	0.006418	±2.5	PASS
EGPRS850	128	NV	40	4.49	0.005448	±2.5	PASS
EGPRS850	128	NV	50	6.20	0.007522	±2.5	PASS
EGPRS850	190	NV	-30	10.07	0.012037	±2.5	PASS
EGPRS850	190	NV	-20	4.78	0.005714	±2.5	PASS
EGPRS850	190	NV	-10	6.91	0.008260	±2.5	PASS
EGPRS850	190	NV	0	10.17	0.012156	±2.5	PASS

EGPRS85 0	190	NV	10	7.52	0.008989	±2.5	PASS
EGPRS85 0	190	NV	20	6.91	0.008260	±2.5	PASS
EGPRS85 0	190	NV	30	9.62	0.011499	±2.5	PASS
EGPRS85 0	190	NV	40	7.07	0.008451	±2.5	PASS
EGPRS85 0	190	NV	50	5.59	0.006682	±2.5	PASS
EGPRS85 0	251	NV	-30	7.49	0.008824	±2.5	PASS
EGPRS85 0	251	NV	-20	9.14	0.010768	±2.5	PASS
EGPRS85 0	251	NV	-10	12.07	0.014220	±2.5	PASS
EGPRS85 0	251	NV	0	11.98	0.014114	±2.5	PASS
EGPRS85 0	251	NV	10	11.95	0.014079	±2.5	PASS
EGPRS85 0	251	NV	20	7.55	0.008895	±2.5	PASS
EGPRS85 0	251	NV	30	7.91	0.009319	±2.5	PASS
EGPRS85 0	251	NV	40	11.85	0.013961	±2.5	PASS
EGPRS85 0	251	NV	50	10.17	0.011982	±2.5	PASS
GSM1900	512	NV	-30	27.28	0.014744	±2.5	PASS
GSM1900	512	NV	-20	24.57	0.013280	±2.5	PASS
GSM1900	512	NV	-10	20.44	0.011047	±2.5	PASS
GSM1900	512	NV	0	28.31	0.015301	±2.5	PASS
GSM1900	512	NV	10	25.86	0.013977	±2.5	PASS
GSM1900	512	NV	20	25.25	0.013647	±2.5	PASS
GSM1900	512	NV	30	22.41	0.012112	±2.5	PASS
GSM1900	512	NV	40	22.24	0.012020	±2.5	PASS
GSM1900	512	NV	50	19.76	0.010680	±2.5	PASS
GSM1900	661	NV	-30	22.47	0.011952	±2.5	PASS
GSM1900	661	NV	-20	22.05	0.011729	±2.5	PASS
GSM1900	661	NV	-10	26.09	0.013878	±2.5	PASS
GSM1900	661	NV	0	15.34	0.008160	±2.5	PASS
GSM1900	661	NV	10	21.83	0.011612	±2.5	PASS

GSM1900	661	NV	20	10.46	0.005564	±2.5	PASS
GSM1900	661	NV	30	23.73	0.012622	±2.5	PASS
GSM1900	661	NV	40	30.67	0.016314	±2.5	PASS
GSM1900	661	NV	50	26.38	0.014032	±2.5	PASS
GSM1900	810	NV	-30	14.33	0.007503	±2.5	PASS
GSM1900	810	NV	-20	10.91	0.005713	±2.5	PASS
GSM1900	810	NV	-10	14.85	0.007776	±2.5	PASS
GSM1900	810	NV	0	7.91	0.004142	±2.5	PASS
GSM1900	810	NV	10	25.76	0.013488	±2.5	PASS
GSM1900	810	NV	20	21.63	0.011326	±2.5	PASS
GSM1900	810	NV	30	24.73	0.012949	±2.5	PASS
GSM1900	810	NV	40	19.69	0.010310	±2.5	PASS
GSM1900	810	NV	50	18.37	0.009619	±2.5	PASS
GPRS1900	512	NV	-30	12.79	0.006913	±2.5	PASS
GPRS1900	512	NV	-20	12.85	0.006945	±2.5	PASS
GPRS1900	512	NV	-10	24.25	0.013107	±2.5	PASS
GPRS1900	512	NV	0	19.95	0.010783	±2.5	PASS
GPRS1900	512	NV	10	16.66	0.009004	±2.5	PASS
GPRS1900	512	NV	20	17.31	0.009356	±2.5	PASS
GPRS1900	512	NV	30	19.34	0.010453	±2.5	PASS
GPRS1900	512	NV	40	23.83	0.012880	±2.5	PASS
GPRS1900	512	NV	50	24.09	0.013020	±2.5	PASS
GPRS1900	661	NV	-30	17.24	0.009170	±2.5	PASS
GPRS1900	661	NV	-20	8.52	0.004532	±2.5	PASS
GPRS1900	661	NV	-10	15.34	0.008160	±2.5	PASS
GPRS1900	661	NV	0	18.24	0.009702	±2.5	PASS
GPRS1900	661	NV	10	17.89	0.009516	±2.5	PASS
GPRS1900	661	NV	20	20.76	0.011043	±2.5	PASS
GPRS1900	661	NV	30	17.53	0.009324	±2.5	PASS
GPRS1900	661	NV	40	22.54	0.011989	±2.5	PASS
GPRS1900	661	NV	50	18.85	0.010027	±2.5	PASS
GPRS1900	810	NV	-30	15.43	0.008079	±2.5	PASS
GPRS1900	810	NV	-20	15.53	0.008132	±2.5	PASS
GPRS1900	810	NV	-10	15.92	0.008336	±2.5	PASS
GPRS1900	810	NV	0	15.53	0.008132	±2.5	PASS
GPRS1900	810	NV	10	5.84	0.003058	±2.5	PASS
GPRS1900	810	NV	20	11.11	0.005817	±2.5	PASS
GPRS1900	810	NV	30	16.76	0.008776	±2.5	PASS
GPRS1900	810	NV	40	13.20	0.006912	±2.5	PASS
GPRS1900	810	NV	50	17.60	0.009216	±2.5	PASS
EGPRS19	512	NV	-30	16.69	0.009021	±2.5	PASS

00							
EGPRS19 00	512	NV	-20	24.60	0.013296	±2.5	PASS
EGPRS19 00	512	NV	-10	25.31	0.013680	±2.5	PASS
EGPRS19 00	512	NV	0	34.06	0.018409	±2.5	PASS
EGPRS19 00	512	NV	10	30.67	0.016577	±2.5	PASS
EGPRS19 00	512	NV	20	31.32	0.016928	±2.5	PASS
EGPRS19 00	512	NV	30	26.09	0.014101	±2.5	PASS
EGPRS19 00	512	NV	40	35.22	0.019036	±2.5	PASS
EGPRS19 00	512	NV	50	23.37	0.012631	±2.5	PASS
EGPRS19 00	661	NV	-30	18.47	0.009824	±2.5	PASS
EGPRS19 00	661	NV	-20	14.37	0.007644	±2.5	PASS
EGPRS19 00	661	NV	-10	22.79	0.012122	±2.5	PASS
EGPRS19 00	661	NV	0	23.54	0.012521	±2.5	PASS
EGPRS19 00	661	NV	10	18.66	0.009926	±2.5	PASS
EGPRS19 00	661	NV	20	21.47	0.011420	±2.5	PASS
EGPRS19 00	661	NV	30	22.41	0.011920	±2.5	PASS
EGPRS19 00	661	NV	40	25.31	0.013463	±2.5	PASS
EGPRS19 00	661	NV	50	26.22	0.013947	±2.5	PASS
EGPRS19 00	810	NV	-30	16.11	0.008435	±2.5	PASS
EGPRS19 00	810	NV	-20	15.92	0.008336	±2.5	PASS
EGPRS19 00	810	NV	-10	7.33	0.003838	±2.5	PASS
EGPRS19	810	NV	0	19.40	0.010158	±2.5	PASS

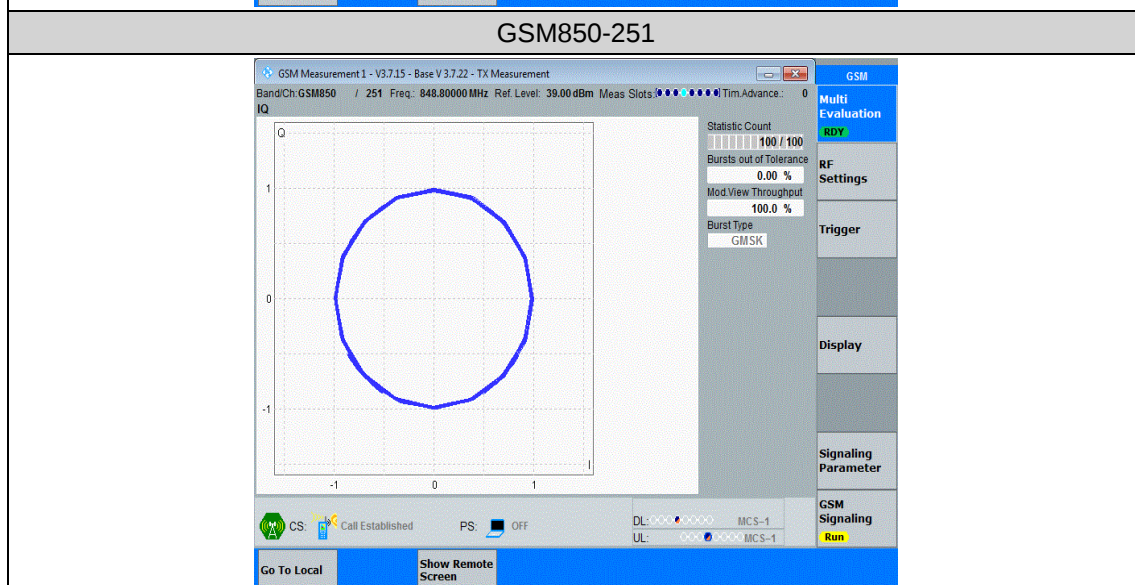
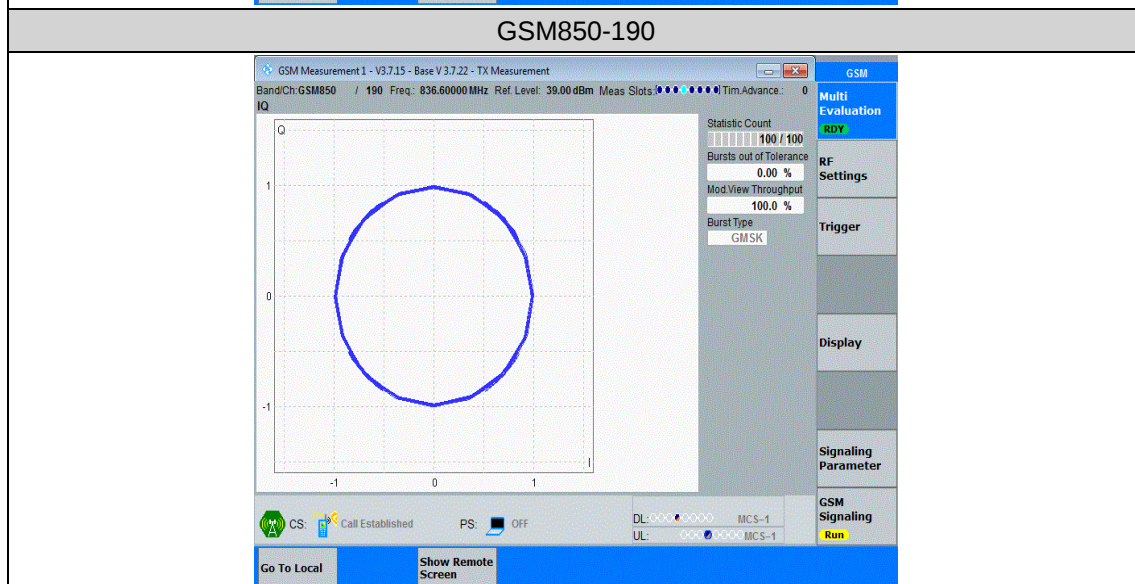
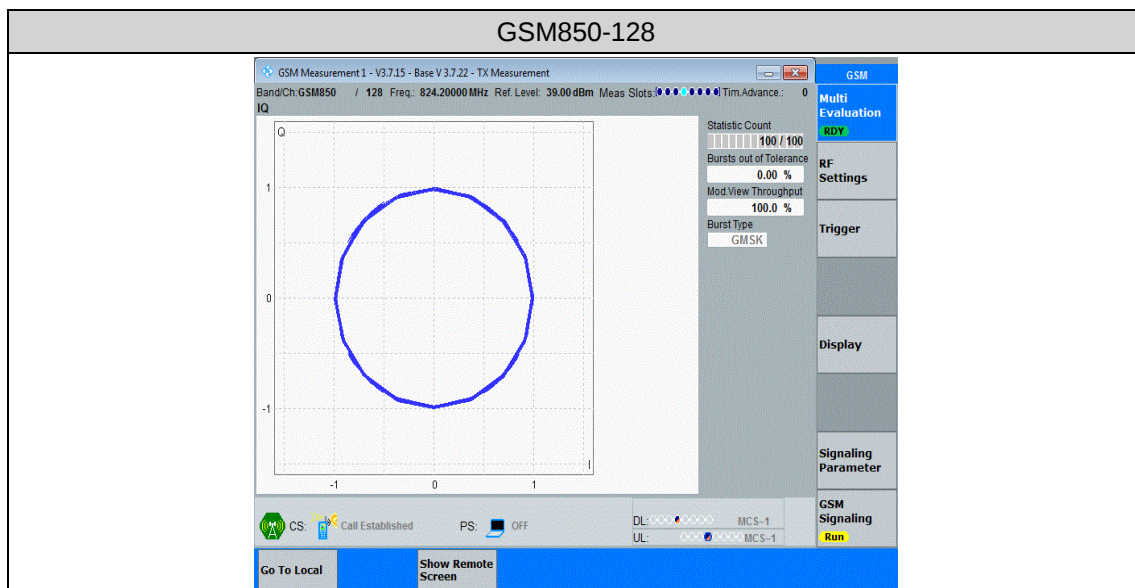
00							
EGPRS19 00	810	NV	10	18.14	0.009498	±2.5	PASS
EGPRS19 00	810	NV	20	14.33	0.007503	±2.5	PASS
EGPRS19 00	810	NV	30	8.36	0.004377	±2.5	PASS
EGPRS19 00	810	NV	40	22.57	0.011818	±2.5	PASS
EGPRS19 00	810	NV	50	10.72	0.005613	±2.5	PASS

Appendix G: Modulation Characteristics

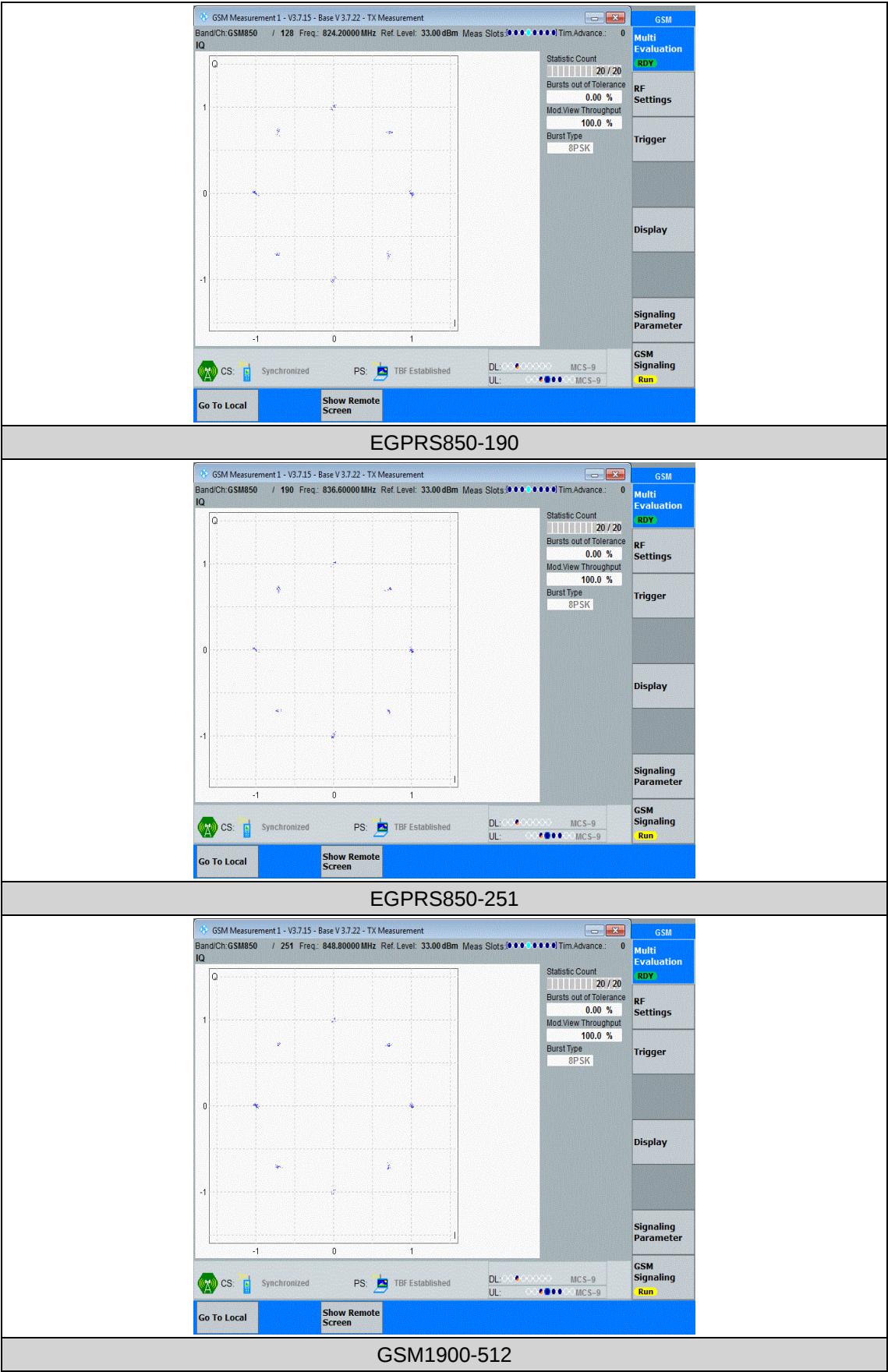
Test Result

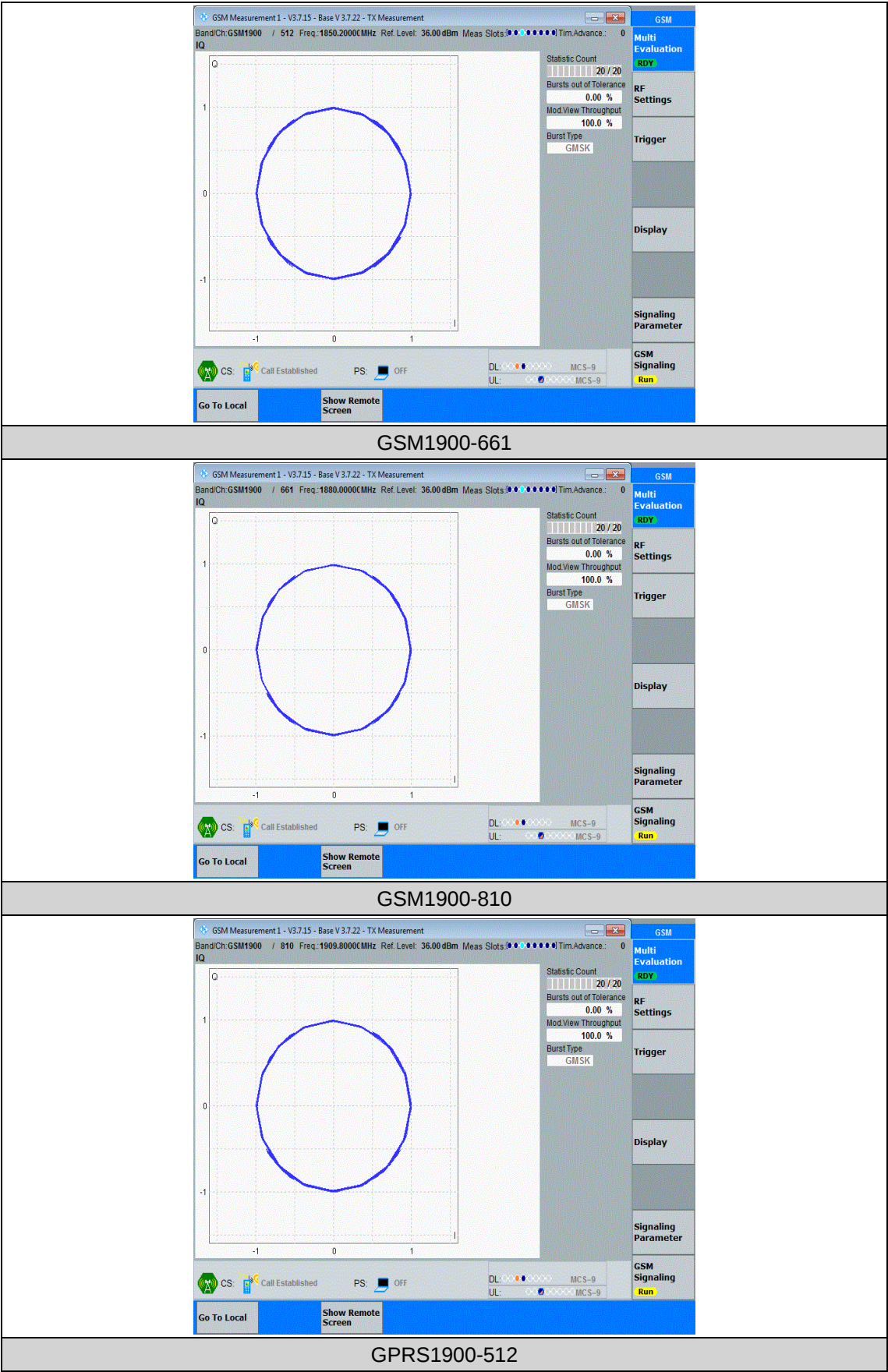
Band	Channel	Result	Verdict
GSM850	128	PASS	PASS
GSM850	190	PASS	PASS
GSM850	251	PASS	PASS
GPRS850	128	PASS	PASS
GPRS850	190	PASS	PASS
GPRS850	251	PASS	PASS
EGPRS850	128	PASS	PASS
EGPRS850	190	PASS	PASS
EGPRS850	251	PASS	PASS
GSM1900	512	PASS	PASS
GSM1900	661	PASS	PASS
GSM1900	810	PASS	PASS
GPRS1900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

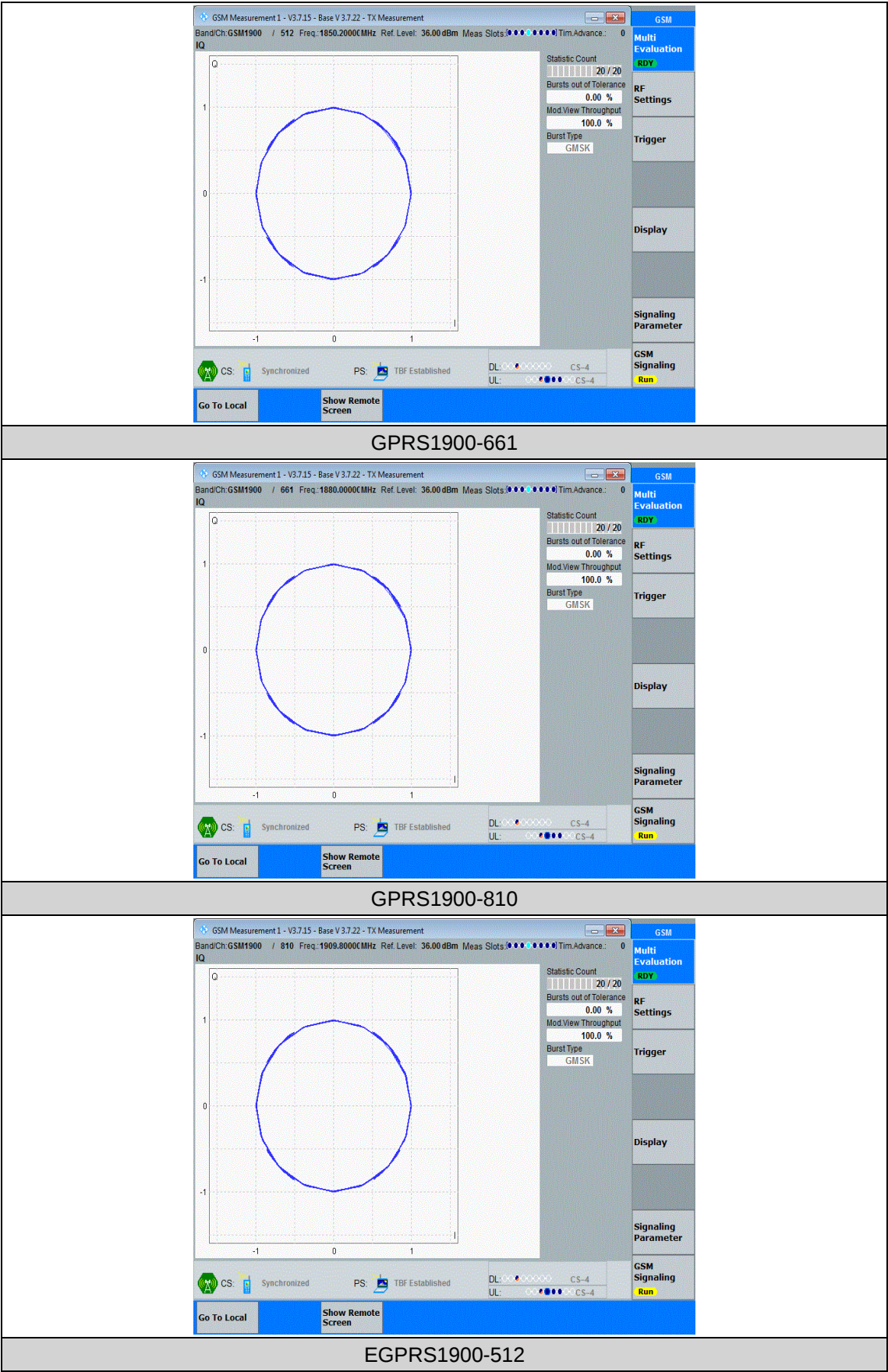
Test Graphs











GSM Measurement 1 - V3.7.15 - Base V 3.7.22 - TX Measurement

BandCh: GSM1900 / 661 Freq: 1880.0000MHz Ref Level: 32.00dBm Meas Slots: 20 / 20 Tim Advance: 0

IQ

Statistic Count: 20 / 20

Bursts out of Tolerance: 0.00 %

Mod View Throughput: 100.0 %

Burst Type: 8PSK

DL: MCS-9

UL: MCS-9

Go To Local Show Remote Screen Run

GSM Measurement 1 - V3.7.15 - Base V3.7.22 - TX Measurement

Band/Ch: GSM1900 / 810 Freq: 1909.8000 MHz Ref Level: 32.00 dBm Meas Slots: 0 Tim Advance: 0

IQ

Statistic Count: 20 / 20

Bursts out of Tolerance: 0.00 %

Mod View Throughput: 100.0 %

Burst Type: 8PSK

Q

1

0

-1

-1 0 1

I

DL: MCS-9

UL: MCS-9

Go To Local

Show Remote Screen

Synchronized

PS

TBF Established

DL: MCS-9

UL: MCS-9

GSM

Multi Evaluation

RDY

RF Settings

Trigger

Display

Signaling Parameter

GSM Signaling

Run