

Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Channel	PCL	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GSM850	128	5	34.11	28.58	38.5	PASS
GSM850	190	5	34.45	28.92	38.5	PASS
GSM850	251	5	34.12	28.59	38.5	PASS
GSM1900	512	0	31.35	30.59	33	PASS
GSM1900	661	0	31.33	30.57	33	PASS
GSM1900	810	0	31.52	30.76	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	34.13	28.6	38.5	PASS
GPRS850	128	5	2	33.15	27.62	38.5	PASS
GPRS850	128	5	3	31.17	25.64	38.5	PASS
GPRS850	128	5	4	30.11	24.58	38.5	PASS
GPRS850	190	5	1	34.42	28.89	38.5	PASS
GPRS850	190	5	2	33.46	27.93	38.5	PASS
GPRS850	190	5	3	31.50	25.97	38.5	PASS
GPRS850	190	5	4	30.45	24.92	38.5	PASS
GPRS850	251	5	1	34.08	28.55	38.5	PASS
GPRS850	251	5	2	33.12	27.59	38.5	PASS
GPRS850	251	5	3	31.12	25.59	38.5	PASS
GPRS850	251	5	4	30.05	24.52	38.5	PASS
GPRS1900	512	0	1	31.35	30.59	33	PASS
GPRS1900	512	0	2	30.19	29.43	33	PASS
GPRS1900	512	0	3	27.86	27.1	33	PASS
GPRS1900	512	0	4	26.71	25.95	33	PASS
GPRS1900	661	0	1	31.35	30.59	33	PASS
GPRS1900	661	0	2	30.20	29.44	33	PASS
GPRS1900	661	0	3	27.78	27.02	33	PASS
GPRS1900	661	0	4	26.66	25.9	33	PASS
GPRS1900	810	0	1	31.53	30.77	33	PASS
GPRS1900	810	0	2	30.41	29.65	33	PASS
GPRS1900	810	0	3	28.01	27.25	33	PASS
GPRS1900	810	0	4	26.88	26.12	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.74	22.21	38.5	PASS
EGPRS850	128	8	2	26.72	21.19	38.5	PASS
EGPRS850	128	8	3	24.79	19.26	38.5	PASS
EGPRS850	128	8	4	23.72	18.19	38.5	PASS
EGPRS850	190	8	1	27.91	22.38	38.5	PASS
EGPRS850	190	8	2	26.91	21.38	38.5	PASS
EGPRS850	190	8	3	24.98	19.45	38.5	PASS
EGPRS850	190	8	4	23.89	18.36	38.5	PASS
EGPRS850	251	8	1	27.58	22.05	38.5	PASS
EGPRS850	251	8	2	26.61	21.08	38.5	PASS
EGPRS850	251	8	3	24.64	19.11	38.5	PASS
EGPRS850	251	8	4	23.59	18.06	38.5	PASS
EGPRS1900	512	2	1	26.90	26.14	33	PASS
EGPRS1900	512	2	2	25.98	25.22	33	PASS
EGPRS1900	512	2	3	23.99	23.23	33	PASS
EGPRS1900	512	2	4	22.83	22.07	33	PASS
EGPRS1900	661	2	1	26.74	25.98	33	PASS
EGPRS1900	661	2	2	25.80	25.04	33	PASS
EGPRS1900	661	2	3	23.86	23.1	33	PASS
EGPRS1900	661	2	4	22.67	21.91	33	PASS
EGPRS1900	810	2	1	26.88	26.12	33	PASS
EGPRS1900	810	2	2	25.95	25.19	33	PASS
EGPRS1900	810	2	3	23.99	23.23	33	PASS
EGPRS1900	810	2	4	22.79	22.03	33	PASS

Remark: EIRP (dBm) = Conducted power (dBm) + Antenna Gain (dBi). (For GSM1900)

ERP (dBm) = EIRP (dBm) - 2.15 (dB). (For GSM850)

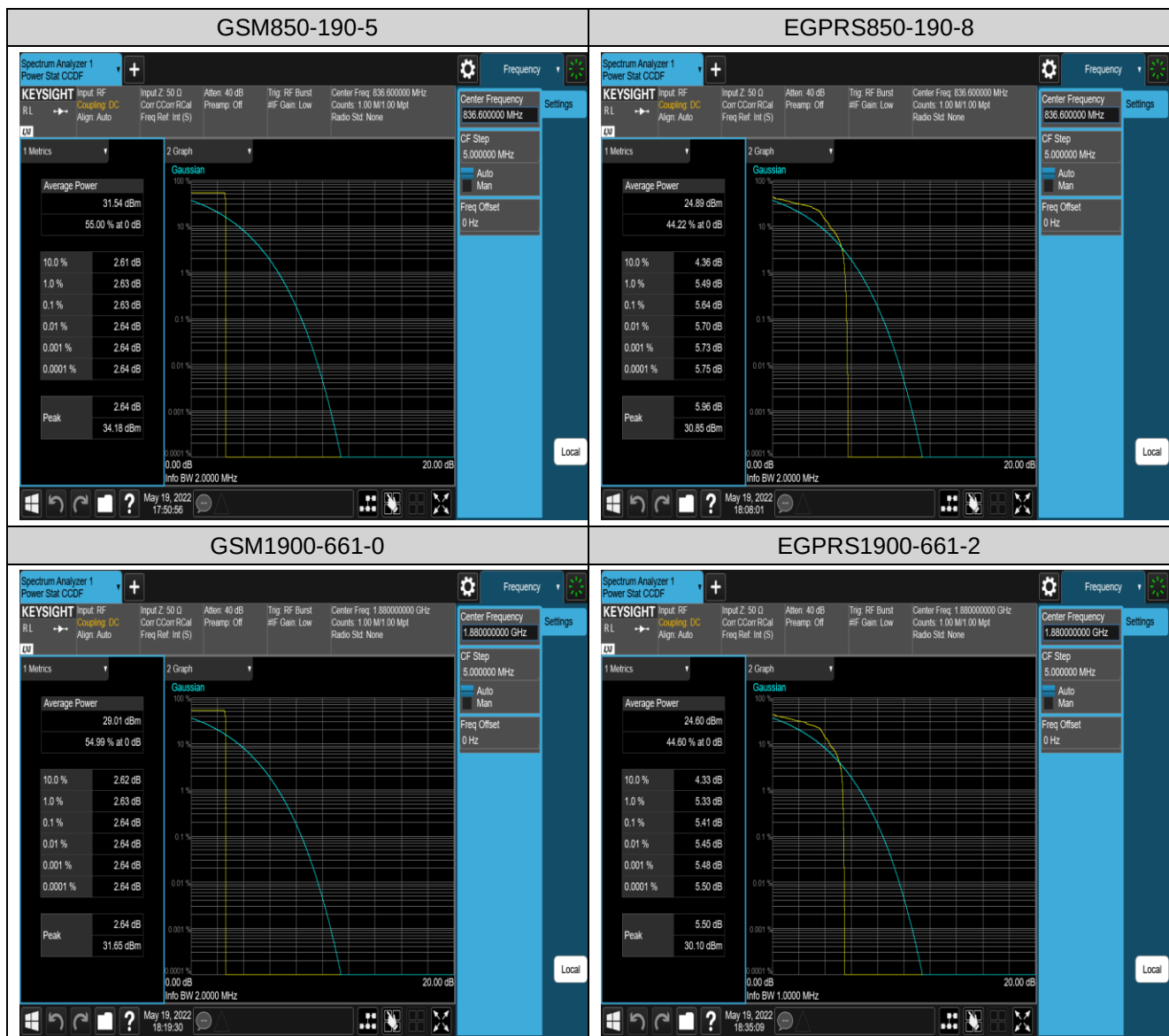
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.63	13	PASS
EGPRS850	190	8	5.64	13	PASS
GSM1900	661	0	2.64	13	PASS
EGPRS1900	661	2	5.41	13	PASS

Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

Test Graphs

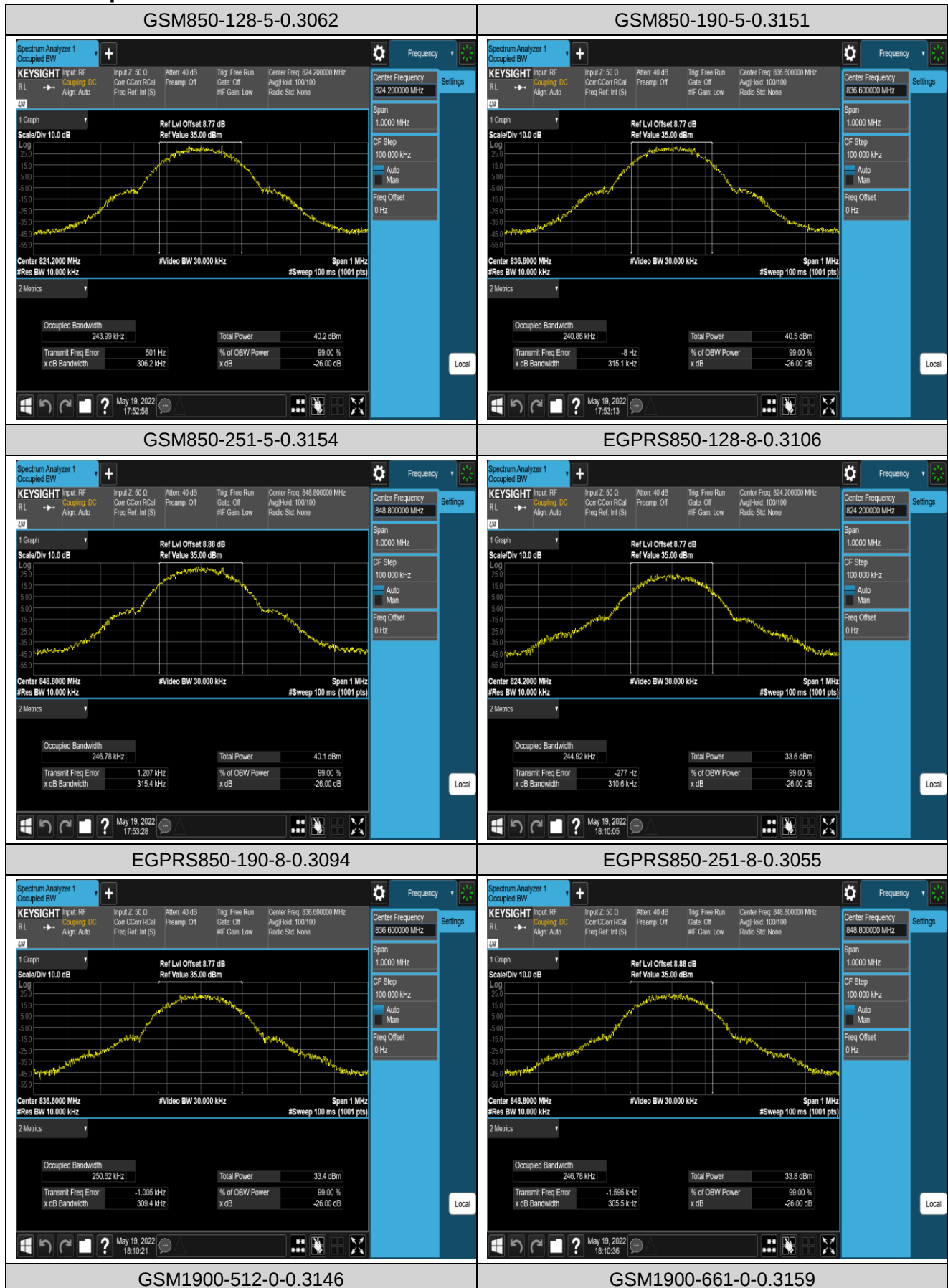


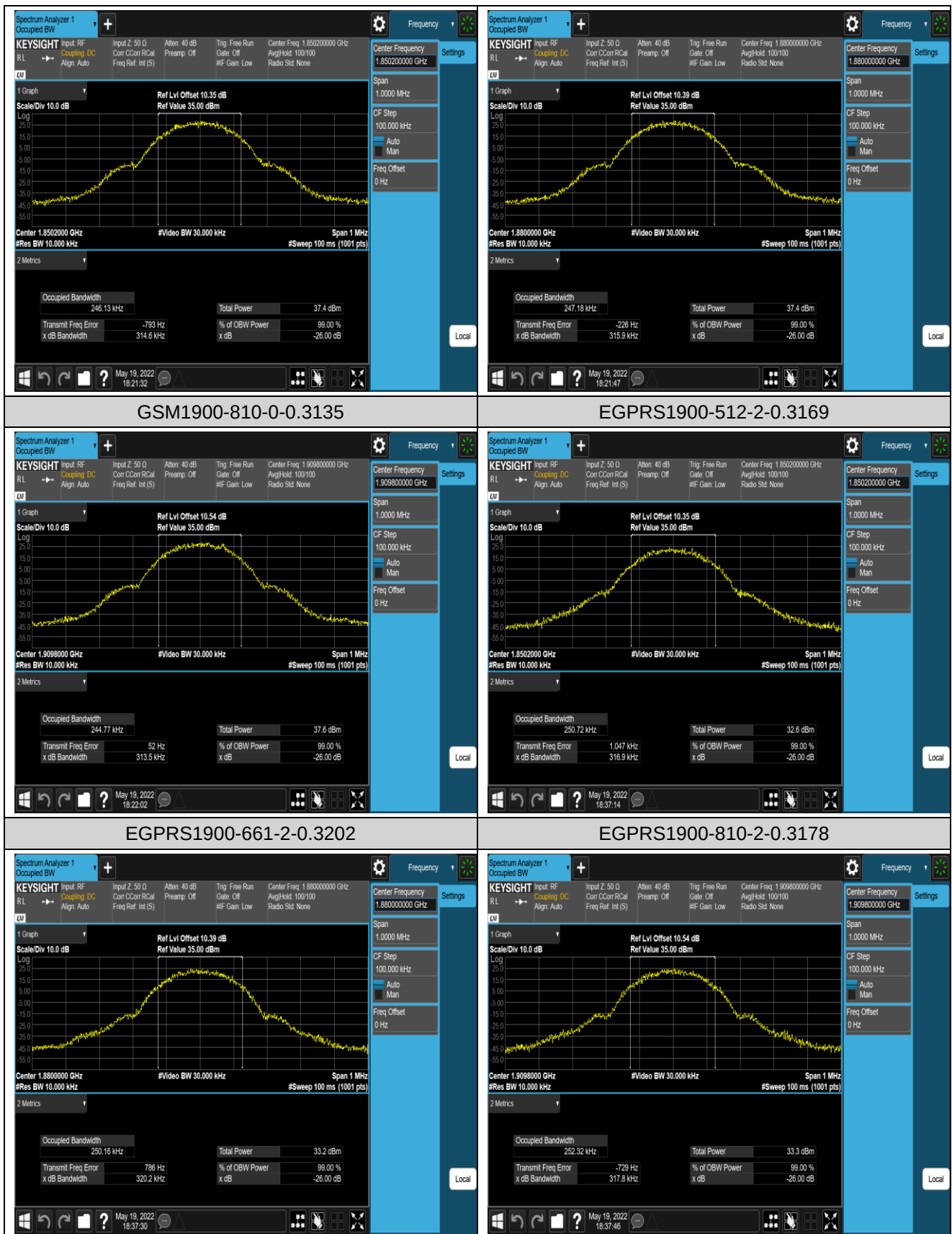
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24399	0.3062	---	PASS
GSM850	190	5	0.24086	0.3151	---	PASS
GSM850	251	5	0.24678	0.3154	---	PASS
EGPRS850	128	8	0.24492	0.3106	---	PASS
EGPRS850	190	8	0.25062	0.3094	---	PASS
EGPRS850	251	8	0.24678	0.3055	---	PASS
GSM1900	512	0	0.24613	0.3146	---	PASS
GSM1900	661	0	0.24718	0.3159	---	PASS
GSM1900	810	0	0.24477	0.3135	---	PASS
EGPRS1900	512	2	0.25072	0.3169	---	PASS
EGPRS1900	661	2	0.25016	0.3202	---	PASS
EGPRS1900	810	2	0.25232	0.3178	---	PASS

Test Graphs



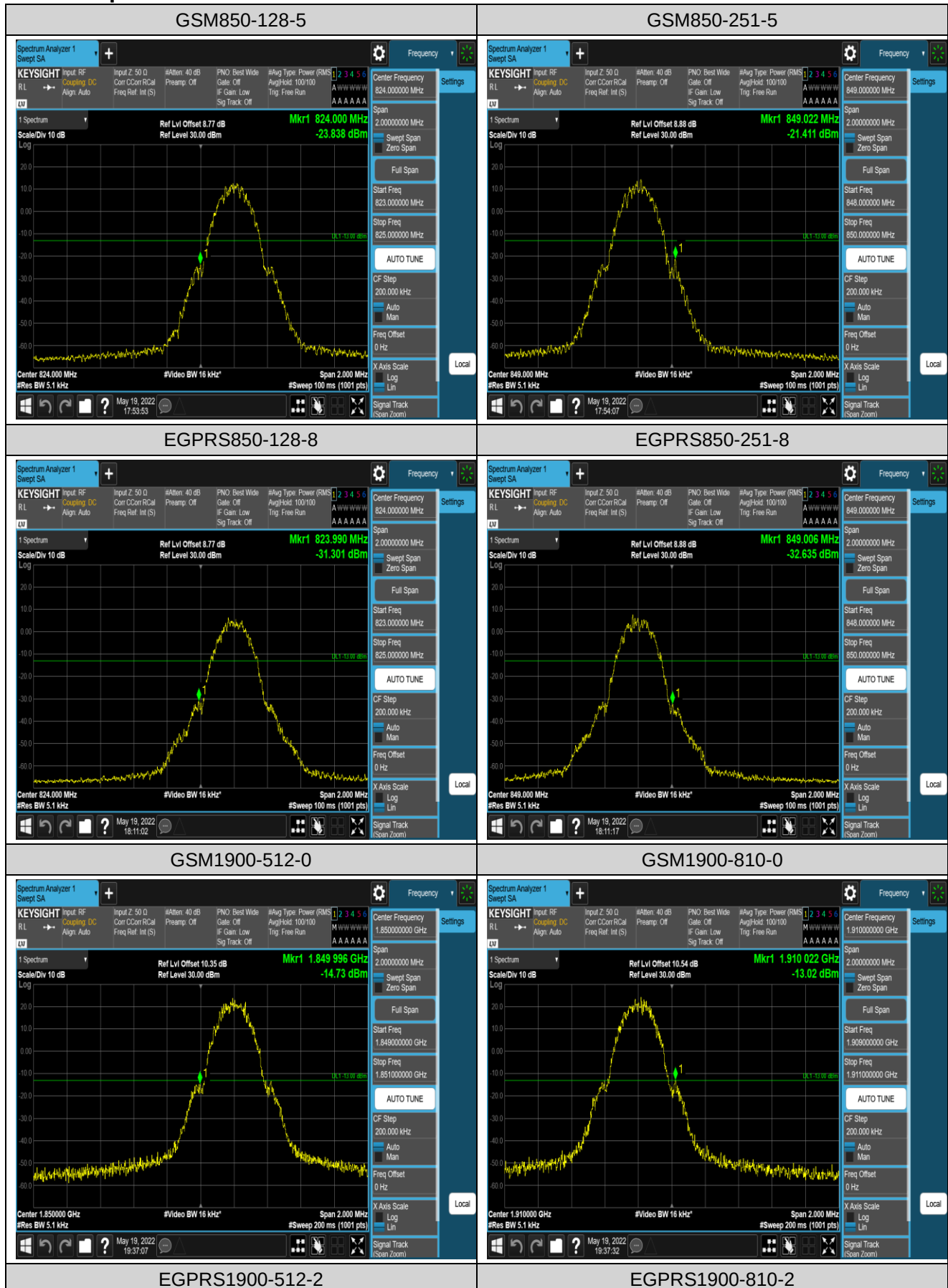


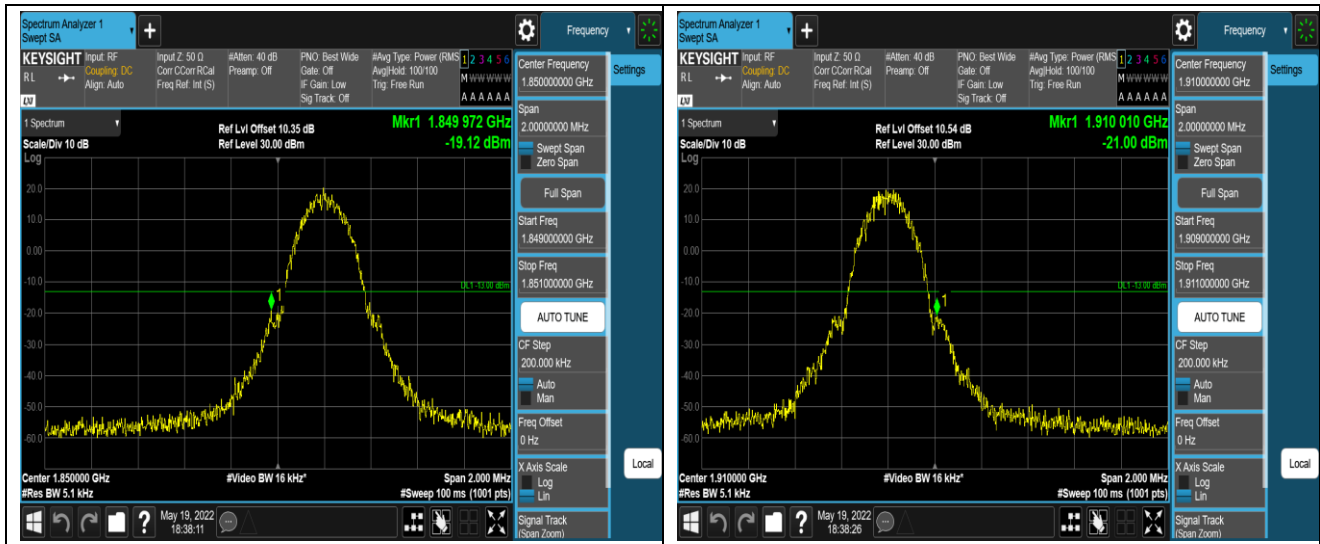
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-23.84	-13	PASS
GSM850	251	5	849.02	-21.41	-13	PASS
EGPRS850	128	8	823.99	-31.30	-13	PASS
EGPRS850	251	8	849.01	-32.64	-13	PASS
GSM1900	512	0	1850.00	-14.73	-13	PASS
GSM1900	810	0	1910.02	-13.02	-13	PASS
EGPRS1900	512	2	1849.97	-19.12	-13	PASS
EGPRS1900	810	2	1910.01	-21.00	-13	PASS

Test Graphs





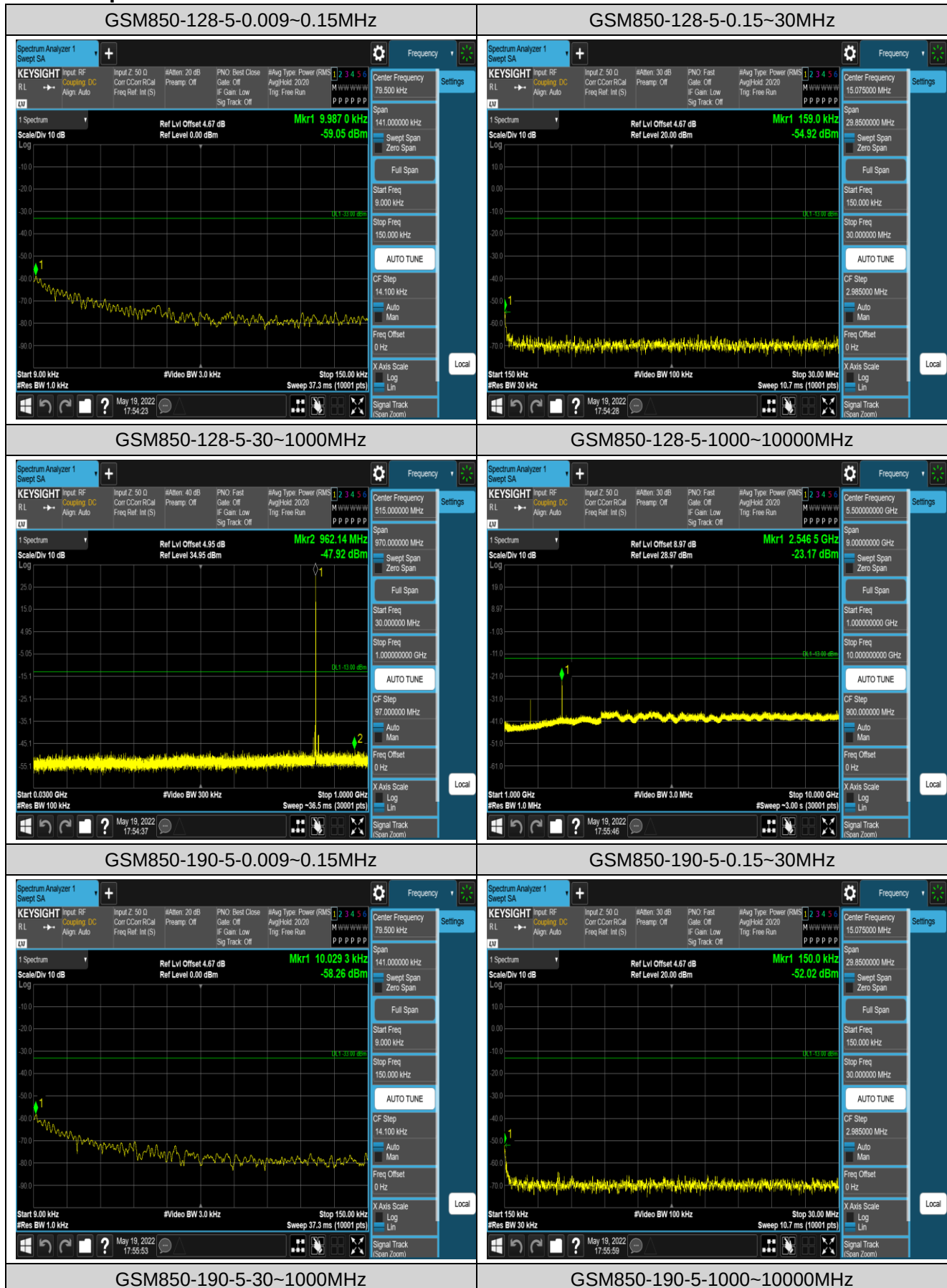
Appendix E: Conducted Spurious Emission

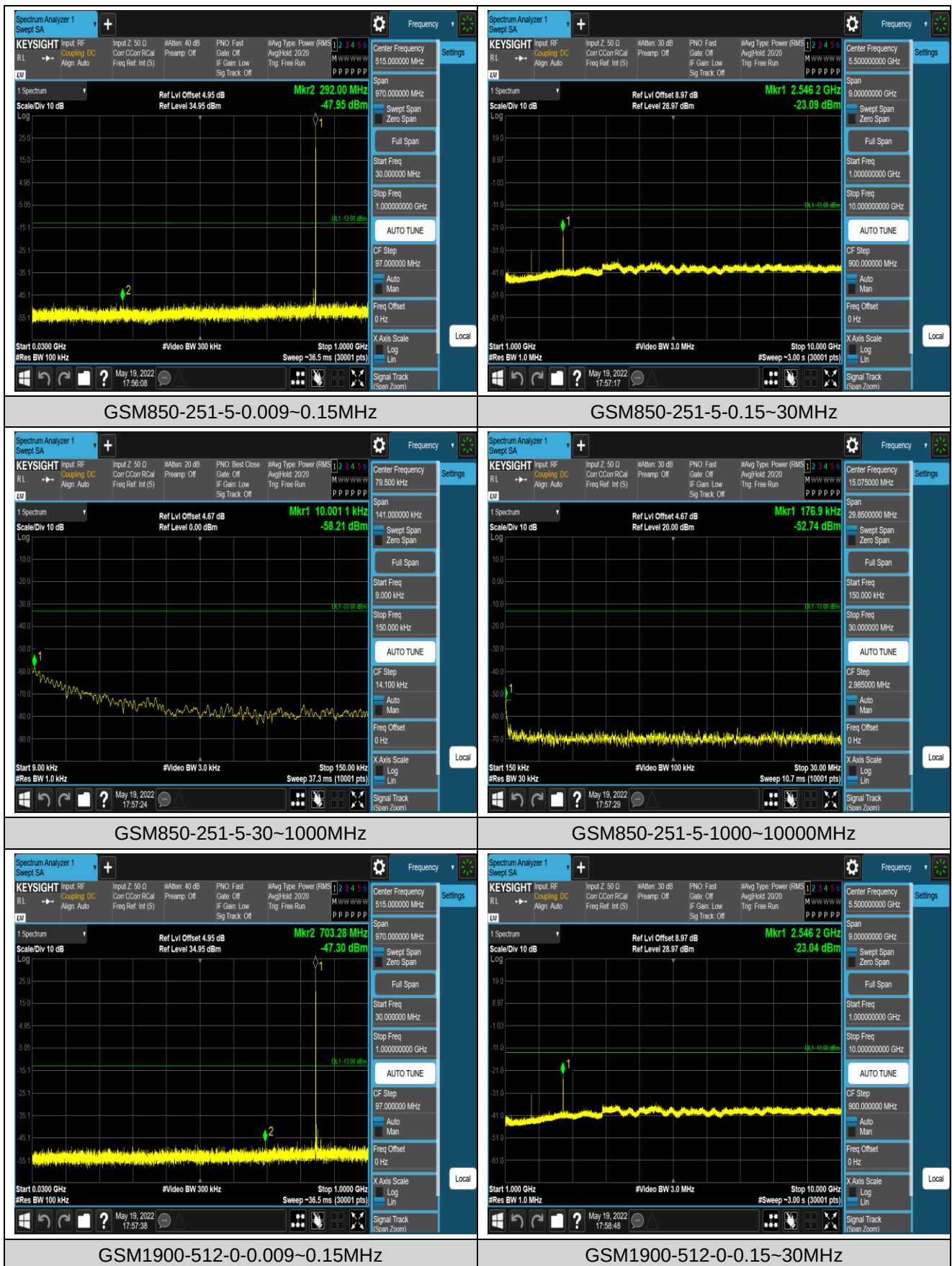
Test Result

Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-59.05	-33	PASS
GSM850	128	5	0.15~30MHz	0.16	-54.92	-13	PASS
GSM850	128	5	30~1000MHz	962.14	-47.92	-13	PASS
GSM850	128	5	1000~10000MHz	2546.5	-23.17	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-58.26	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-52.02	-13	PASS
GSM850	190	5	30~1000MHz	292	-47.95	-13	PASS
GSM850	190	5	1000~10000MHz	2546.2	-23.09	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-58.21	-33	PASS
GSM850	251	5	0.15~30MHz	0.18	-52.74	-13	PASS
GSM850	251	5	30~1000MHz	703.28	-47.3	-13	PASS
GSM850	251	5	1000~10000MHz	2546.2	-23.04	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-67.12	-43	PASS
GSM1900	512	0	0.15~30MHz	0.17	-53.37	-23	PASS
GSM1900	512	0	30~1000MHz	868.27	-47	-13	PASS
GSM1900	512	0	1000~18000MHz	14278.13	-35.12	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-67.34	-43	PASS
GSM1900	661	0	0.15~30MHz	0.21	-53.38	-23	PASS
GSM1900	661	0	30~1000MHz	503.36	-47.61	-13	PASS
GSM1900	661	0	1000~18000MHz	3819.73	-34.75	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-66.58	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-52.7	-23	PASS
GSM1900	810	0	30~1000MHz	904.94	-46.24	-13	PASS
GSM1900	810	0	1000~18000MHz	3819.17	-34.56	-13	PASS

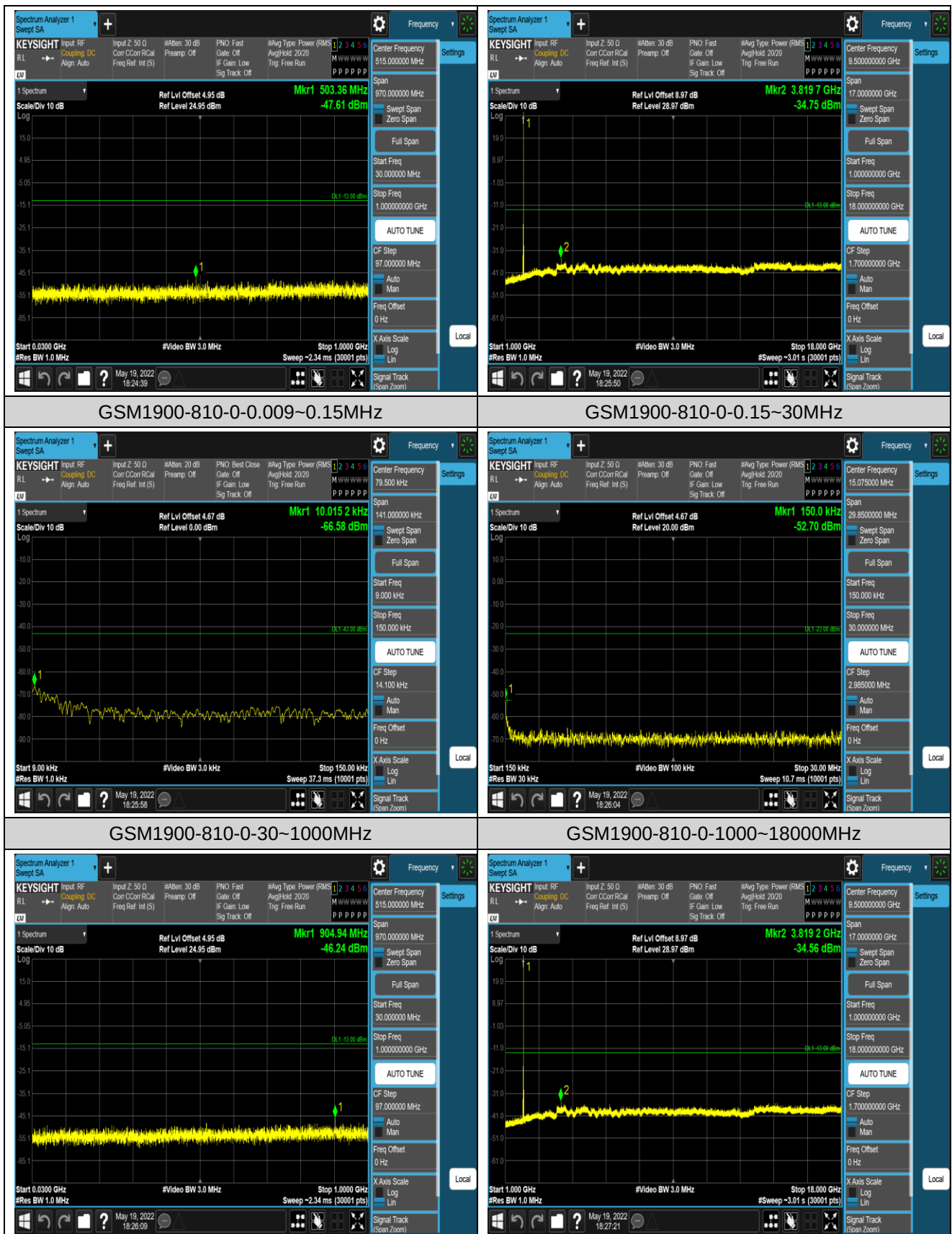
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

Test Graphs









Appendix F: Frequency Stability

Test Result

Reference Frequency: GSM850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	-16.72	-0.019986	±2.5	Pass
	-20	-12.75	-0.015240		
	-10	-13.30	-0.015898		
	0	-13.11	-0.015671		
	10	-1.07	-0.001279		
	20	2.55	0.003048		
	30	0.65	0.000777		
	40	-0.97	-0.001159		
	50	-6.65	-0.007949		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-15.50	-0.018527	±2.5	Pass
	3.87	-7.81	-0.009335		
	4.45	-11.27	-0.013471		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Reference Frequency: EGPRS850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	0.74	0.000885	±2.5	Pass
	-20	0.87	0.001040		
	-10	4.49	0.005367		
	0	4.04	0.004829		
	10	4.46	0.005331		
	20	0.23	0.000275		
	30	1.07	0.001279		
	40	2.00	0.002391		
	50	-2.97	-0.003550		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	0.00	0.000000	±2.5	Pass
	3.87	-4.39	-0.005247		
	4.45	-0.87	-0.001040		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Reference Frequency: PCS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	-38.61	-0.020537	Within authorized band for PCS 1900	Pass
	-20	-29.93	-0.015920		
	-10	-39.13	-0.020814		
	0	-25.34	-0.013479		
	10	6.55	0.003484		
	20	7.94	0.004223		
	30	-0.58	-0.000309		
	40	-10.62	-0.005649		
	50	-12.95	-0.006888		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-38.52	-0.020489	Within authorized band for PCS 1900	Pass
	3.87	-26.86	-0.014287		
	4.45	-31.51	-0.016761		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Reference Frequency: EGPRS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	-12.69	-0.006750	Within authorized band for PCS 1900	Pass
	-20	-7.07	-0.003761		
	-10	4.88	0.002596		
	0	-0.77	-0.000410		
	10	2.29	0.001218		
	20	0.87	0.000463		
	30	-2.03	-0.001080		
	40	-3.68	-0.001957		
	50	-4.49	-0.002388		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-9.33	-0.004963	Within authorized band for PCS 1900	Pass
	3.87	-10.65	-0.005665		
	4.45	-10.72	-0.005702		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Appendix G: Modulation Characteristics

Test Result

Band	Channel	Result	Verdict
GSM850	190	PASS	PASS
EGPRS850	190	PASS	PASS
GSM1900	661	PASS	PASS
EGPRS1900	661	PASS	PASS

Remark: All channel had been tested, but only the worst case data displayed in this report.

Test Graphs

