

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	3	33.58	28.53	38.5	PASS
GSM850	190	3	33.70	28.65	38.5	PASS
GSM850	251	3	33.39	28.34	38.5	PASS
GSM1900	512	0	30.47	29.57	33	PASS
GSM1900	661	0	30.57	29.67	33	PASS
GSM1900	810	0	30.64	29.74	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	3	1	33.60	28.55	38.5	PASS
GPRS850	128	3	2	32.60	27.55	38.5	PASS
GPRS850	128	3	3	30.60	25.55	38.5	PASS
GPRS850	128	3	4	29.49	24.44	38.5	PASS
GPRS850	190	3	1	33.64	28.59	38.5	PASS
GPRS850	190	3	2	32.67	27.62	38.5	PASS
GPRS850	190	3	3	30.64	25.59	38.5	PASS
GPRS850	190	3	4	29.53	24.48	38.5	PASS
GPRS850	251	3	1	33.37	28.32	38.5	PASS
GPRS850	251	3	2	32.41	27.36	38.5	PASS
GPRS850	251	3	3	30.35	25.30	38.5	PASS
GPRS850	251	3	4	29.26	24.21	38.5	PASS
GPRS1900	512	0	1	30.45	29.55	33	PASS
GPRS1900	512	0	2	29.47	28.57	33	PASS
GPRS1900	512	0	3	27.45	26.55	33	PASS
GPRS1900	512	0	4	26.36	25.46	33	PASS
GPRS1900	661	0	1	30.55	29.65	33	PASS
GPRS1900	661	0	2	29.62	28.72	33	PASS
GPRS1900	661	0	3	27.61	26.71	33	PASS
GPRS1900	661	0	4	26.53	25.63	33	PASS
GPRS1900	810	0	1	30.62	29.72	33	PASS
GPRS1900	810	0	2	29.71	28.81	33	PASS
GPRS1900	810	0	3	27.74	26.84	33	PASS
GPRS1900	810	0	4	26.67	25.77	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	28.25	23.20	38.5	PASS
EGPRS850	128	8	2	27.02	21.97	38.5	PASS
EGPRS850	128	8	3	24.82	19.77	38.5	PASS
EGPRS850	128	8	4	23.64	18.59	38.5	PASS
EGPRS850	190	8	1	28.12	23.07	38.5	PASS
EGPRS850	190	8	2	26.98	21.93	38.5	PASS
EGPRS850	190	8	3	24.85	19.80	38.5	PASS
EGPRS850	190	8	4	23.65	18.60	38.5	PASS
EGPRS850	251	8	1	28.20	23.15	38.5	PASS
EGPRS850	251	8	2	27.25	22.20	38.5	PASS
EGPRS850	251	8	3	24.93	19.88	38.5	PASS
EGPRS850	251	8	4	23.81	18.76	38.5	PASS
EGPRS1900	512	2	1	26.28	25.38	33	PASS
EGPRS1900	512	2	2	25.27	24.37	33	PASS
EGPRS1900	512	2	3	23.41	22.51	33	PASS
EGPRS1900	512	2	4	22.50	21.6	33	PASS
EGPRS1900	661	2	1	26.49	25.59	33	PASS
EGPRS1900	661	2	2	25.57	24.67	33	PASS
EGPRS1900	661	2	3	23.69	22.79	33	PASS
EGPRS1900	661	2	4	22.75	21.85	33	PASS
EGPRS1900	810	2	1	26.62	25.72	33	PASS
EGPRS1900	810	2	2	25.70	24.8	33	PASS
EGPRS1900	810	2	3	23.80	22.9	33	PASS
EGPRS1900	810	2	4	22.89	21.99	33	PASS

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

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

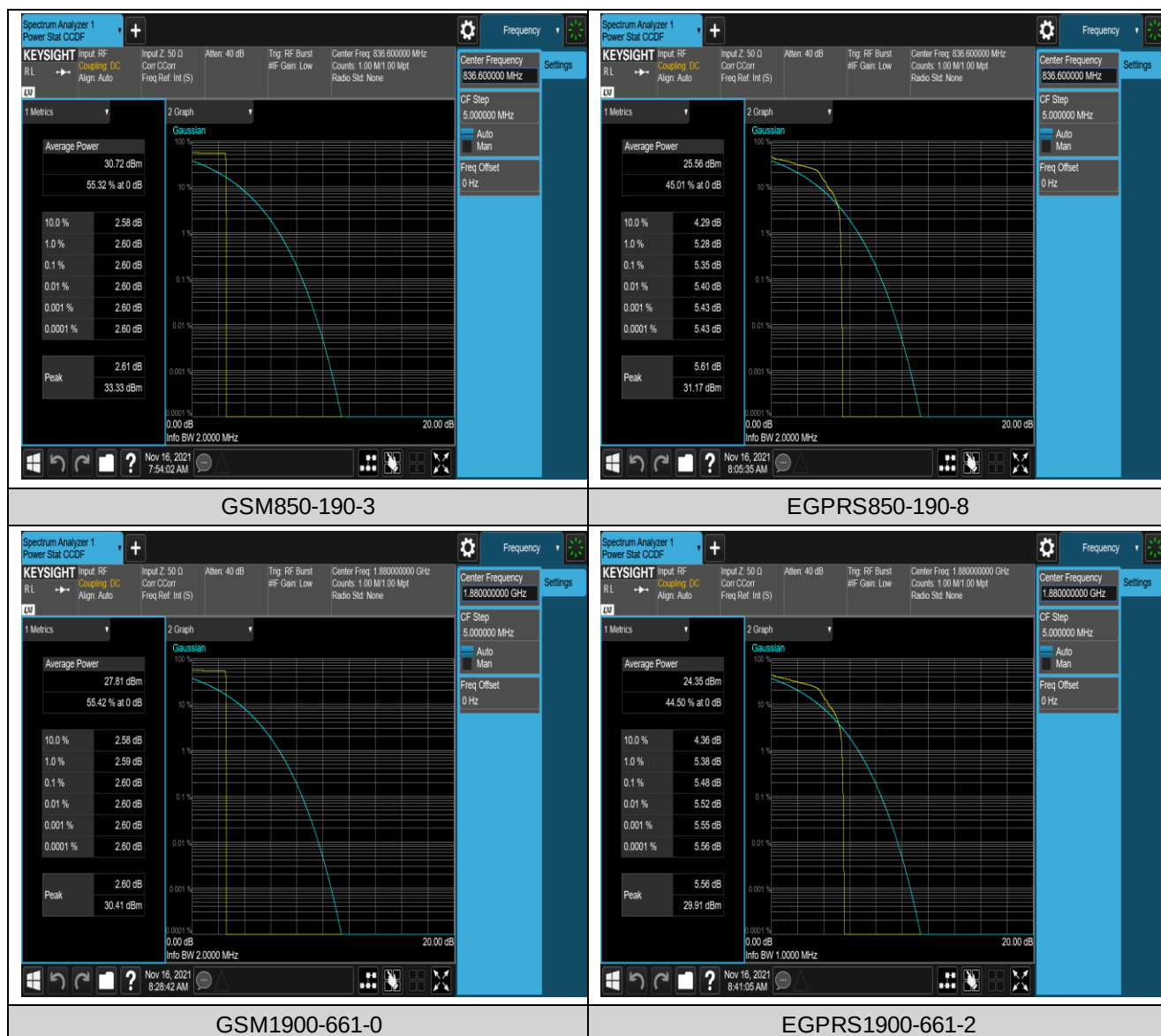
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	3	2.6	13	PASS
EGPRS850	190	8	5.35	13	PASS
GSM1900	661	0	2.6	13	PASS
EGPRS1900	661	2	5.48	13	PASS

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

Test Graphs

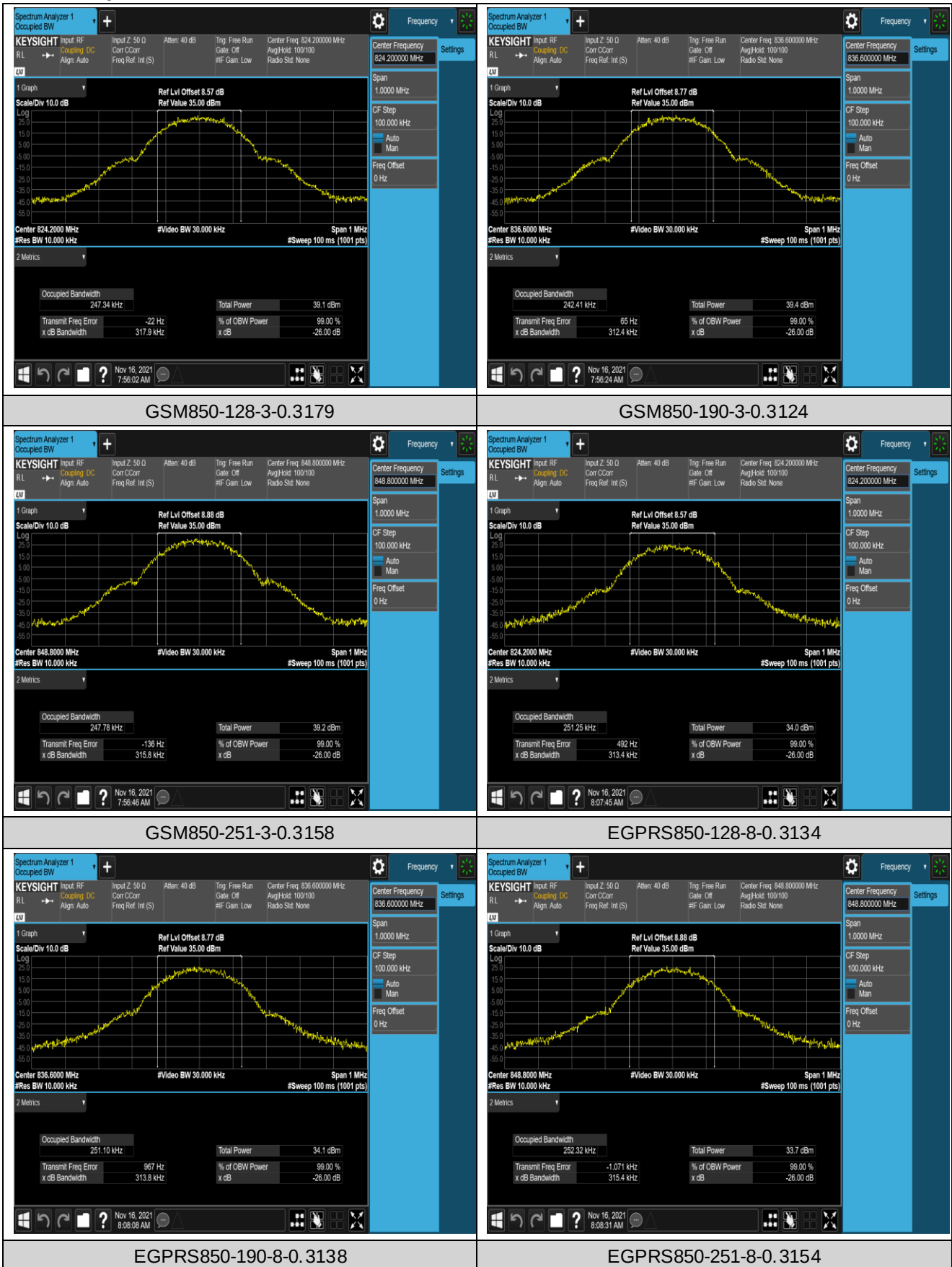


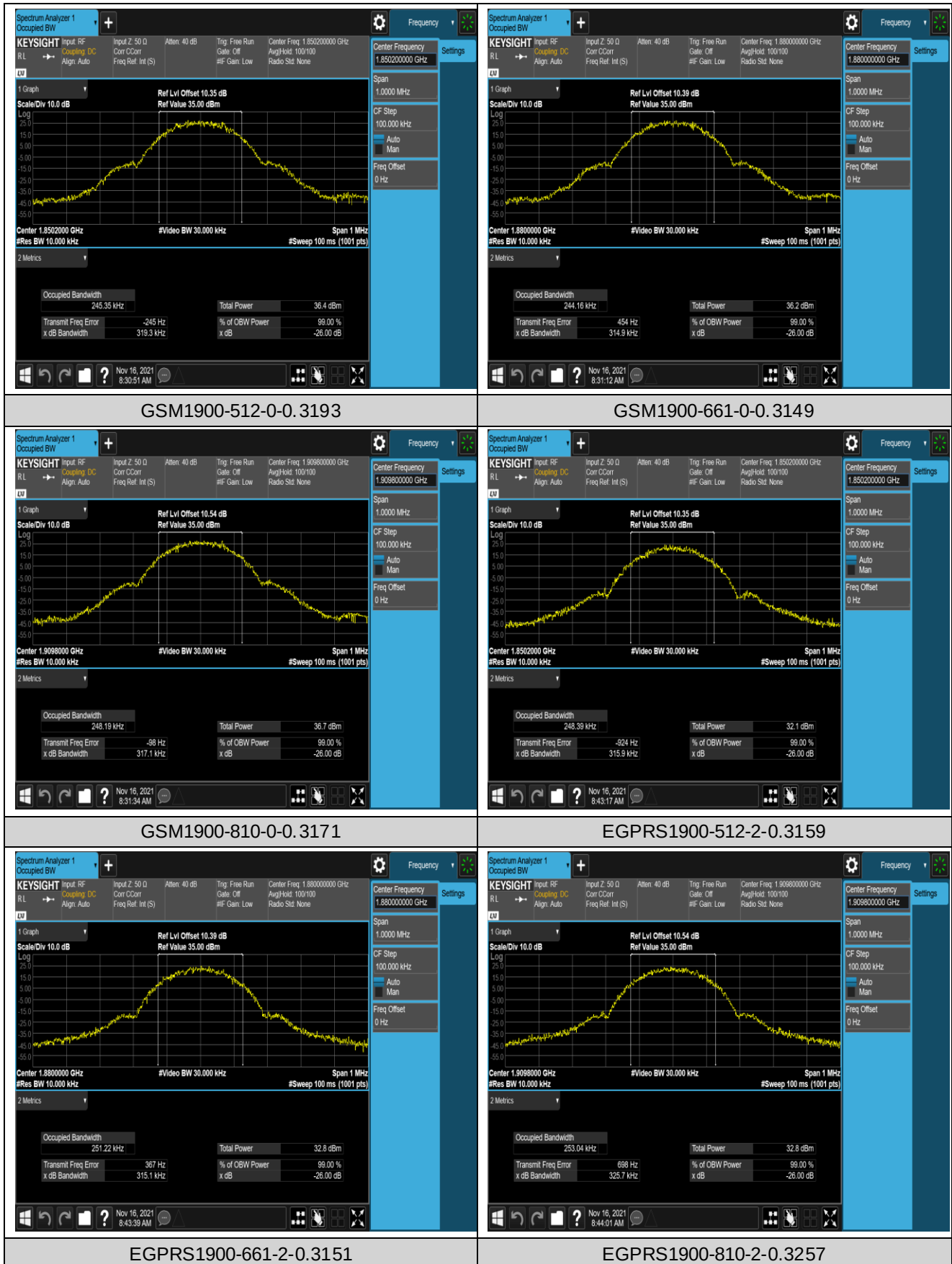
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	3	0.24734	0.3179	---	PASS
GSM850	190	3	0.24241	0.3124	---	PASS
GSM850	251	3	0.24778	0.3158	---	PASS
EGPRS850	128	8	0.25125	0.3134	---	PASS
EGPRS850	190	8	0.25110	0.3138	---	PASS
EGPRS850	251	8	0.25232	0.3154	---	PASS
GSM1900	512	0	0.24535	0.3193	---	PASS
GSM1900	661	0	0.24416	0.3149	---	PASS
GSM1900	810	0	0.24819	0.3171	---	PASS
EGPRS1900	512	2	0.24839	0.3159	---	PASS
EGPRS1900	661	2	0.25122	0.3151	---	PASS
EGPRS1900	810	2	0.25304	0.3257	---	PASS

Test Graphs



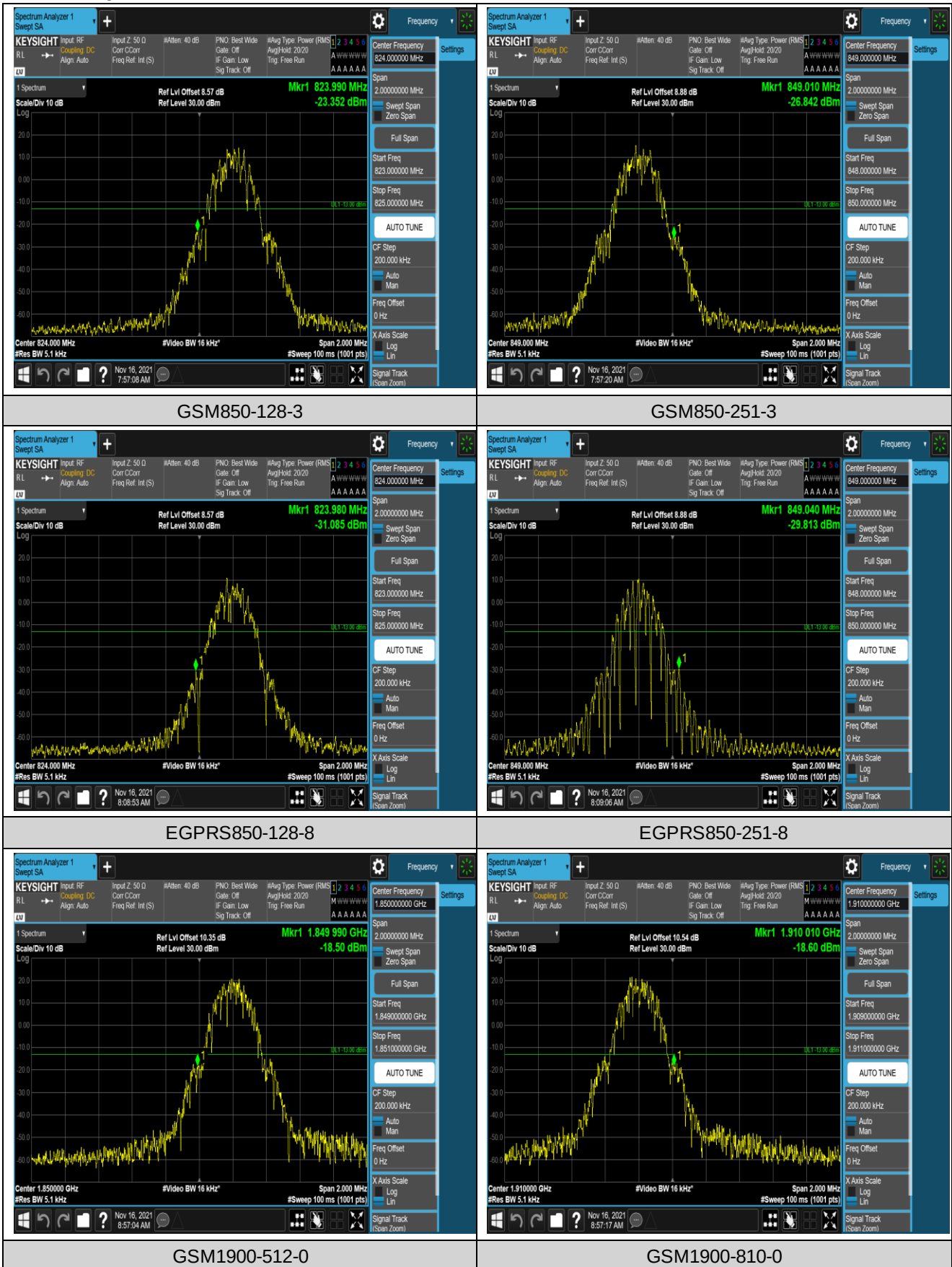


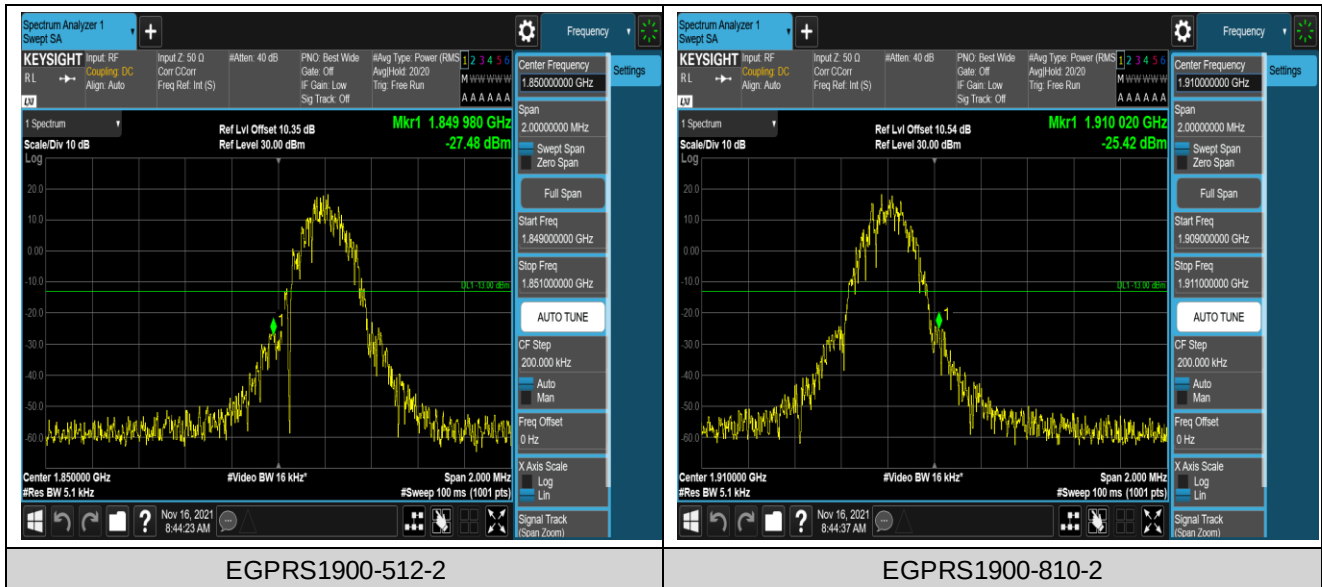
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	3	823.99	-22.97	-13	PASS
GSM850	251	3	849.01	-25.43	-13	PASS
EGPRS850	128	8	823.98	-31.08	-13	PASS
EGPRS850	251	8	849.04	-28.43	-13	PASS
GSM1900	512	0	1849.99	-17.26	-13	PASS
GSM1900	810	0	1910.01	-14.87	-13	PASS
EGPRS1900	512	2	1849.98	-23.13	-13	PASS
EGPRS1900	810	2	1910.02	-21.72	-13	PASS

Test Graphs





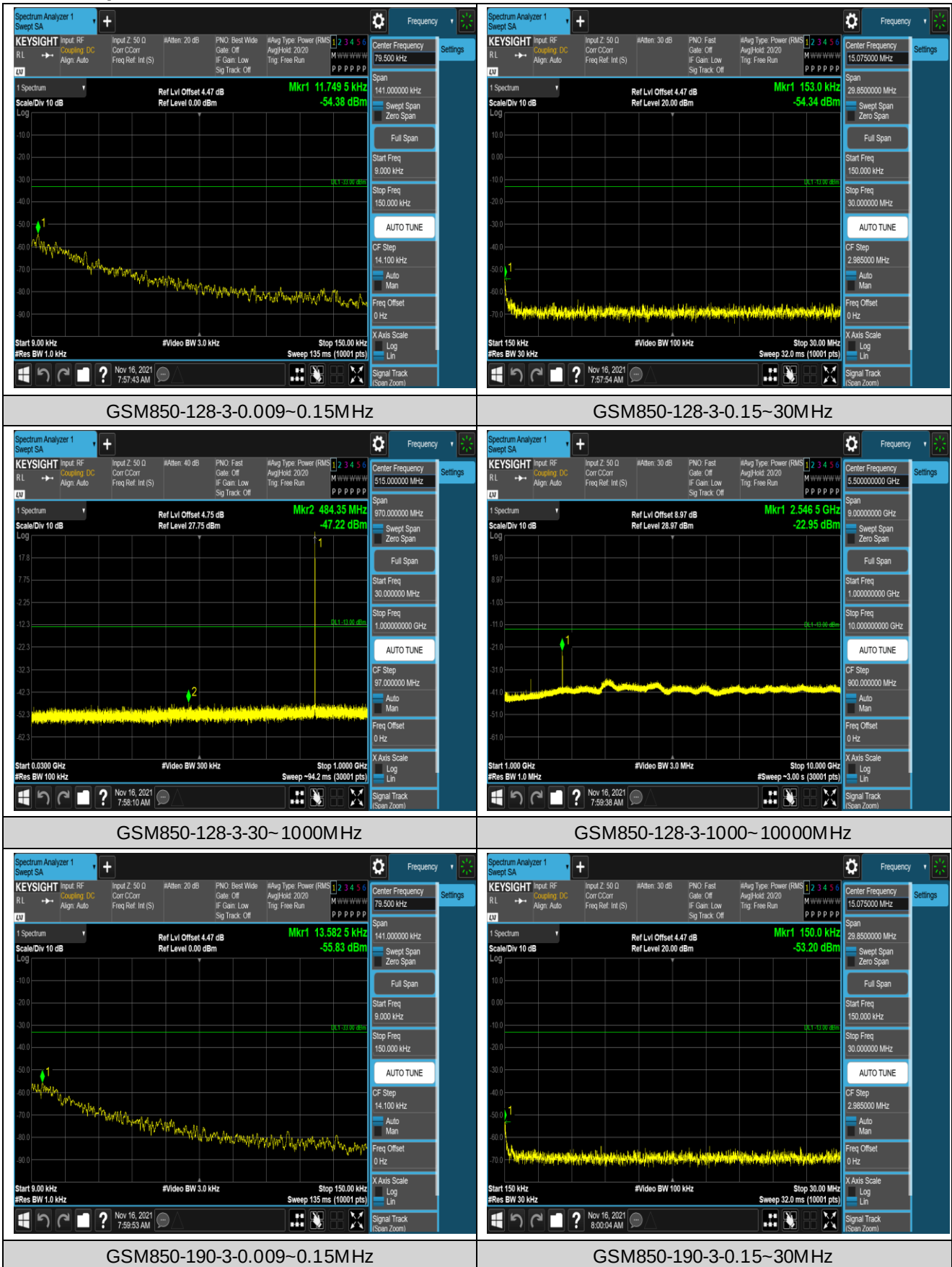
Appendix E: Conducted Spurious Emission

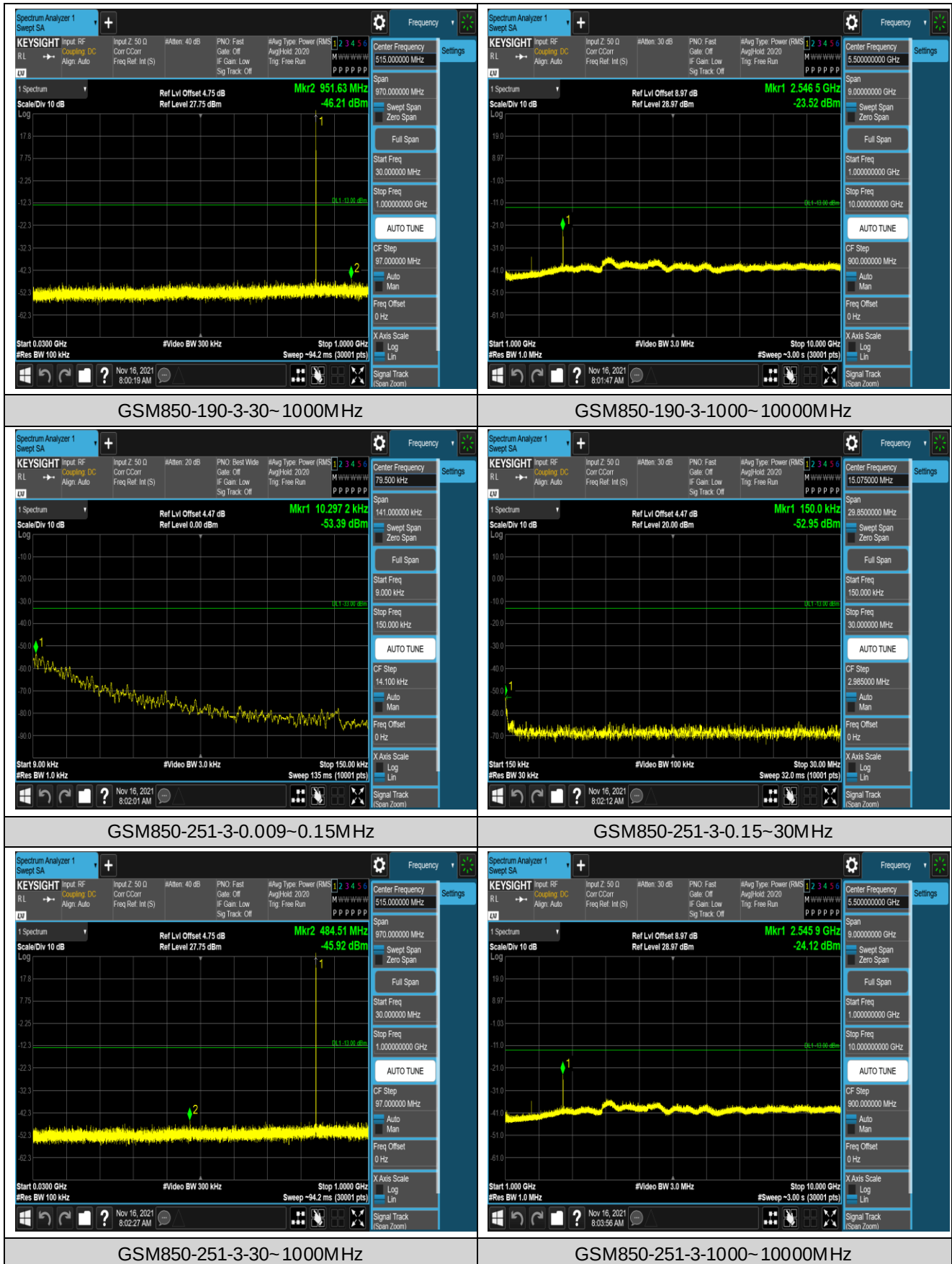
Test Result

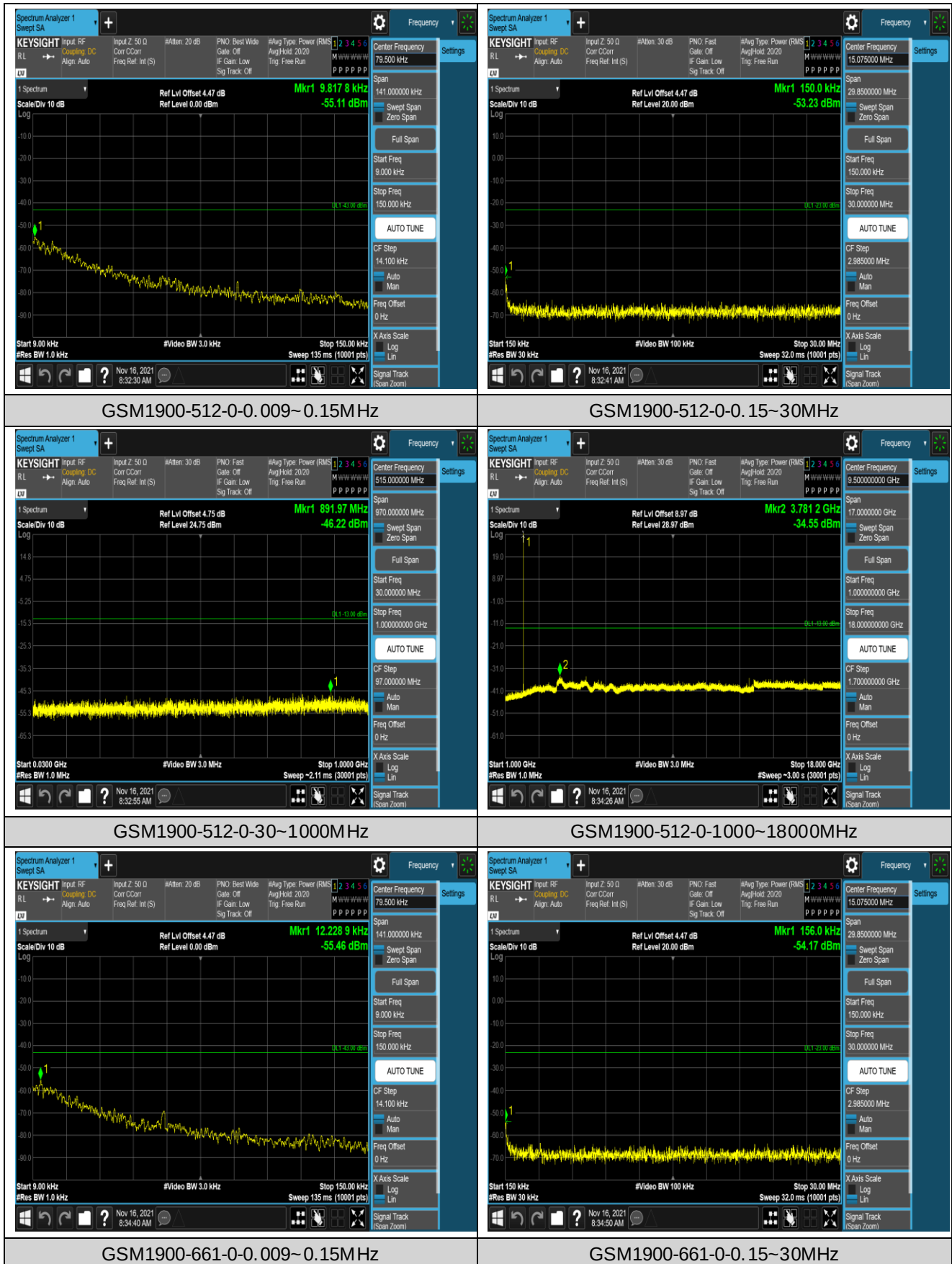
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	3	0.009~0.15MHz	0.01	-54.38	-33	PASS
GSM850	128	3	0.15~30MHz	0.15	-54.34	-13	PASS
GSM850	128	3	30~1000MHz	484.35	-47.22	-13	PASS
GSM850	128	3	1000~10000MHz	2546.5	-22.95	-13	PASS
GSM850	190	3	0.009~0.15MHz	0.01	-55.83	-33	PASS
GSM850	190	3	0.15~30MHz	0.15	-53.2	-13	PASS
GSM850	190	3	30~1000MHz	951.63	-46.21	-13	PASS
GSM850	190	3	1000~10000MHz	2546.5	-23.52	-13	PASS
GSM850	251	3	0.009~0.15MHz	0.01	-53.39	-33	PASS
GSM850	251	3	0.15~30MHz	0.15	-52.95	-13	PASS
GSM850	251	3	30~1000MHz	484.51	-45.92	-13	PASS
GSM850	251	3	1000~10000MHz	2545.9	-24.12	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.12	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-53.23	-23	PASS
GSM1900	512	0	30~1000MHz	891.97	-46.22	-13	PASS
GSM1900	512	0	1000~18000MHz	3781.2	-34.55	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-55.46	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-54.17	-23	PASS
GSM1900	661	0	30~1000MHz	998.12	-46.06	-13	PASS
GSM1900	661	0	1000~18000MHz	3790.83	-34.65	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-55.64	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-52.61	-23	PASS
GSM1900	810	0	30~1000MHz	955.02	-46.85	-13	PASS
GSM1900	810	0	1000~18000MHz	3801.03	-34.27	-13	PASS

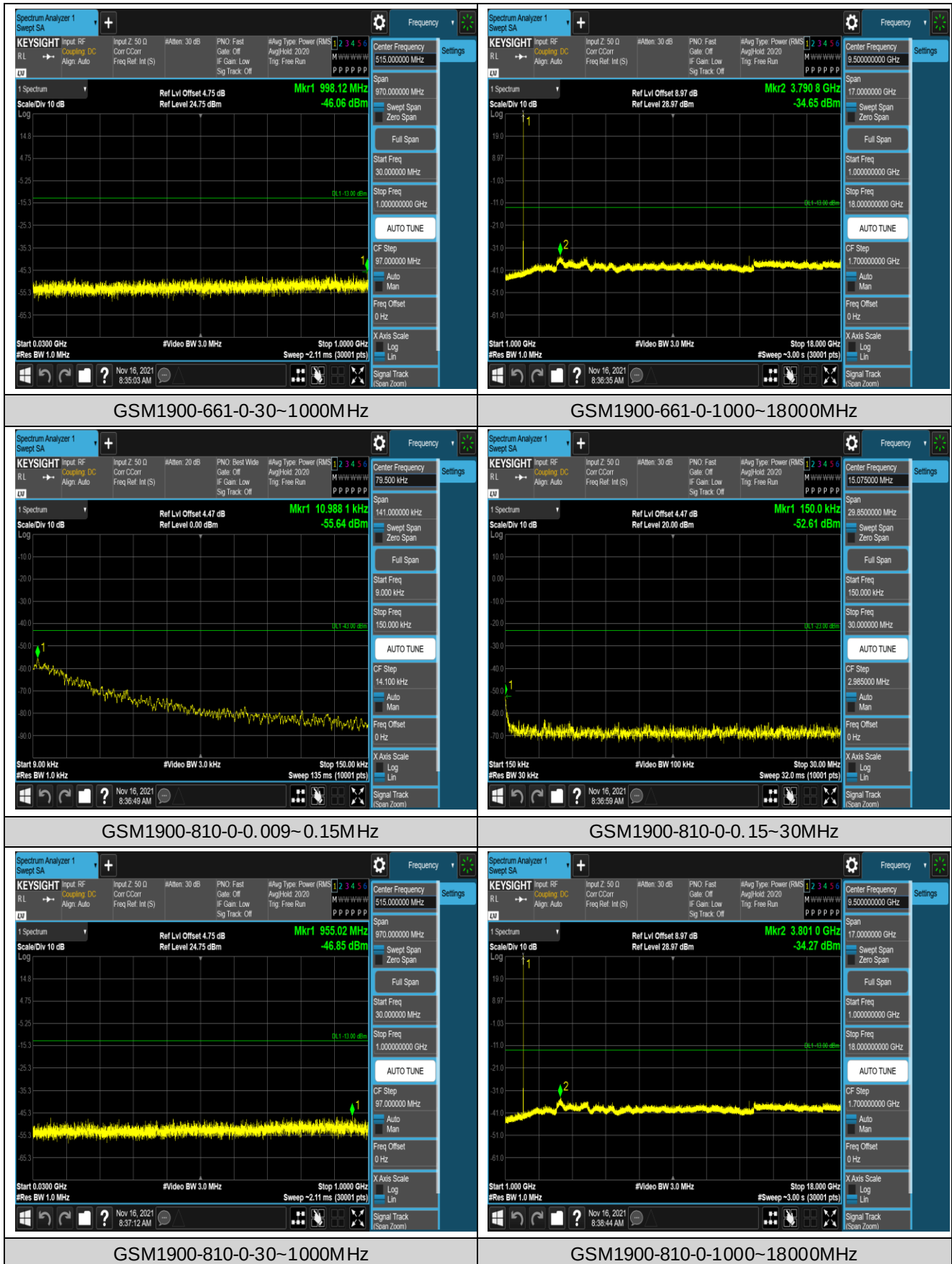
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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		
3.85	-30	15.72	0.018790	±2.5	Pass
	-20	4.91	0.005869		
	-10	11.27	0.013471		
	0	12.33	0.014738		
	10	3.36	0.004016		
	20	-12.66	-0.015133		
	30	-8.85	-0.010579		
	40	2.39	0.002857		
	50	7.97	0.009527		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	7.49	0.008953	±2.5	Pass
	3.85	7.65	0.009144		
	4.23	12.95	0.015479		
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		
3.85	-30	-13.24	-0.015826	±2.5	Pass
	-20	-8.88	-0.010614		
	-10	-7.43	-0.008881		
	0	-5.23	-0.006251		
	10	-9.46	-0.011308		
	20	-6.33	-0.007566		
	30	-3.62	-0.004327		
	40	-8.33	-0.009957		
	50	-8.39	-0.010029		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-13.95	-0.016675	±2.5	Pass
	3.85	-17.31	-0.020691		
	4.23	-11.04	-0.013196		
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		
3.85	-30	46.94	0.024968	Within authorized band for PCS 1900	Pass
	-20	38.10	0.020266		
	-10	42.49	0.022601		
	0	30.25	0.016090		
	10	36.61	0.019473		
	20	41.94	0.022309		
	30	30.06	0.015989		
	40	34.00	0.018085		
	50	28.12	0.014957		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	42.33	0.022516	Within authorized band for PCS 1900	Pass
	3.85	26.64	0.014170		
	4.23	49.69	0.026431		
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		
3.85	-30	17.40	0.009255	Within authorized band for PCS 1900	Pass
	-20	30.70	0.016330		
	-10	32.03	0.017037		
	0	34.38	0.018287		
	10	32.45	0.017261		
	20	29.19	0.015527		
	30	33.32	0.017723		
	40	34.38	0.018287		
	50	26.31	0.013995		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	21.31	0.011335	Within authorized band for PCS 1900	Pass
	3.85	23.31	0.012399		
	4.23	22.83	0.012144		
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

