

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	32.94	29.49	38.45	PASS
GSM850	190	5	33.09	29.64	38.45	PASS
GSM850	251	5	33.18	29.73	38.45	PASS
GSM1900	512	0	29.67	30.07	33.00	PASS
GSM1900	661	0	30.22	30.62	33.00	PASS
GSM1900	810	0	30.23	30.63	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.87	29.42	38.45	PASS
GPRS850	128	5	2	30.73	27.28	38.45	PASS
GPRS850	128	5	3	28.79	25.34	38.45	PASS
GPRS850	128	5	4	26.68	23.23	38.45	PASS
GPRS850	190	5	1	33.06	29.61	38.45	PASS
GPRS850	190	5	2	30.82	27.37	38.45	PASS
GPRS850	190	5	3	28.86	25.41	38.45	PASS
GPRS850	190	5	4	26.74	23.29	38.45	PASS
GPRS850	251	5	1	33.13	29.68	38.45	PASS
GPRS850	251	5	2	30.81	27.36	38.45	PASS
GPRS850	251	5	3	28.88	25.43	38.45	PASS
GPRS850	251	5	4	26.72	23.27	38.45	PASS
GPRS1900	512	0	1	29.63	30.03	33.00	PASS
GPRS1900	512	0	2	27.35	27.75	33.00	PASS
GPRS1900	512	0	3	25.79	26.19	33.00	PASS
GPRS1900	512	0	4	23.65	24.05	33.00	PASS
GPRS1900	661	0	1	30.17	30.57	33.00	PASS
GPRS1900	661	0	2	27.74	28.14	33.00	PASS
GPRS1900	661	0	3	26.19	26.59	33.00	PASS
GPRS1900	661	0	4	24.03	24.43	33.00	PASS
GPRS1900	810	0	1	30.19	30.59	33.00	PASS
GPRS1900	810	0	2	27.55	27.95	33.00	PASS
GPRS1900	810	0	3	25.96	26.36	33.00	PASS
GPRS1900	810	0	4	23.79	24.19	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	25.83	22.38	38.45	PASS
EGPRS850	128	8	2	24.99	21.54	38.45	PASS
EGPRS850	128	8	3	22.92	19.47	38.45	PASS
EGPRS850	128	8	4	20.61	17.16	38.45	PASS
EGPRS850	190	8	1	25.64	22.19	38.45	PASS
EGPRS850	190	8	2	24.77	21.32	38.45	PASS
EGPRS850	190	8	3	22.79	19.34	38.45	PASS
EGPRS850	190	8	4	20.45	17	38.45	PASS
EGPRS850	251	8	1	25.73	22.28	38.45	PASS
EGPRS850	251	8	2	24.90	21.45	38.45	PASS
EGPRS850	251	8	3	22.79	19.34	38.45	PASS
EGPRS850	251	8	4	20.49	17.04	38.45	PASS
EGPRS1900	512	2	1	24.99	25.39	33.00	PASS
EGPRS1900	512	2	2	22.58	22.98	33.00	PASS
EGPRS1900	512	2	3	21.01	21.41	33.00	PASS
EGPRS1900	512	2	4	19.29	19.69	33.00	PASS
EGPRS1900	661	2	1	25.82	26.22	33.00	PASS
EGPRS1900	661	2	2	23.49	23.89	33.00	PASS
EGPRS1900	661	2	3	21.85	22.25	33.00	PASS
EGPRS1900	661	2	4	20.44	20.84	33.00	PASS
EGPRS1900	810	2	1	25.60	26	33.00	PASS
EGPRS1900	810	2	2	23.19	23.59	33.00	PASS
EGPRS1900	810	2	3	21.47	21.87	33.00	PASS
EGPRS1900	810	2	4	19.77	20.17	33.00	PASS

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

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

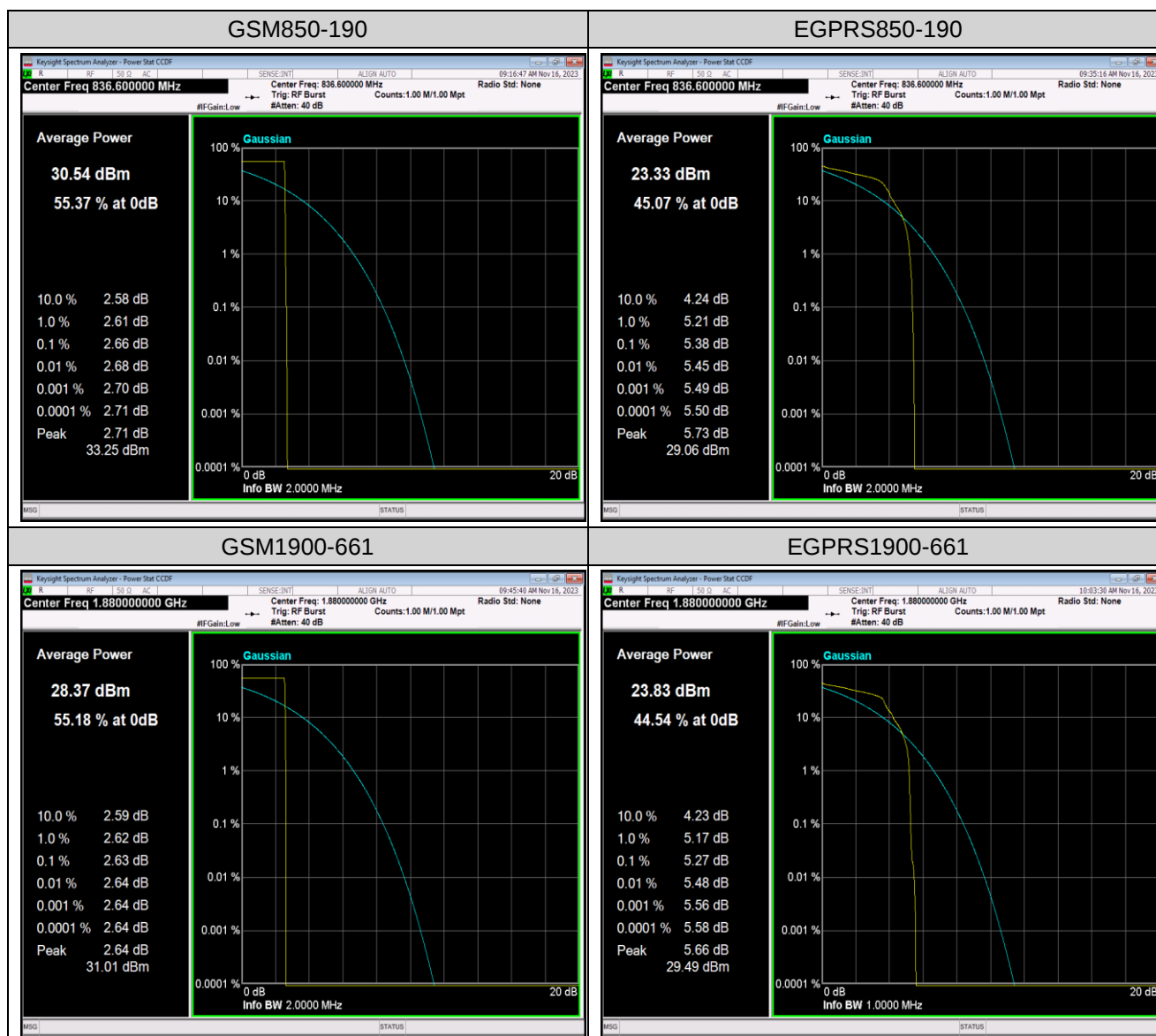
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.66	13	PASS
EGPRS850	190	8	5.38	13	PASS
GSM1900	661	0	2.63	13	PASS
EGPRS1900	661	2	5.27	13	PASS

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

Test Graphs

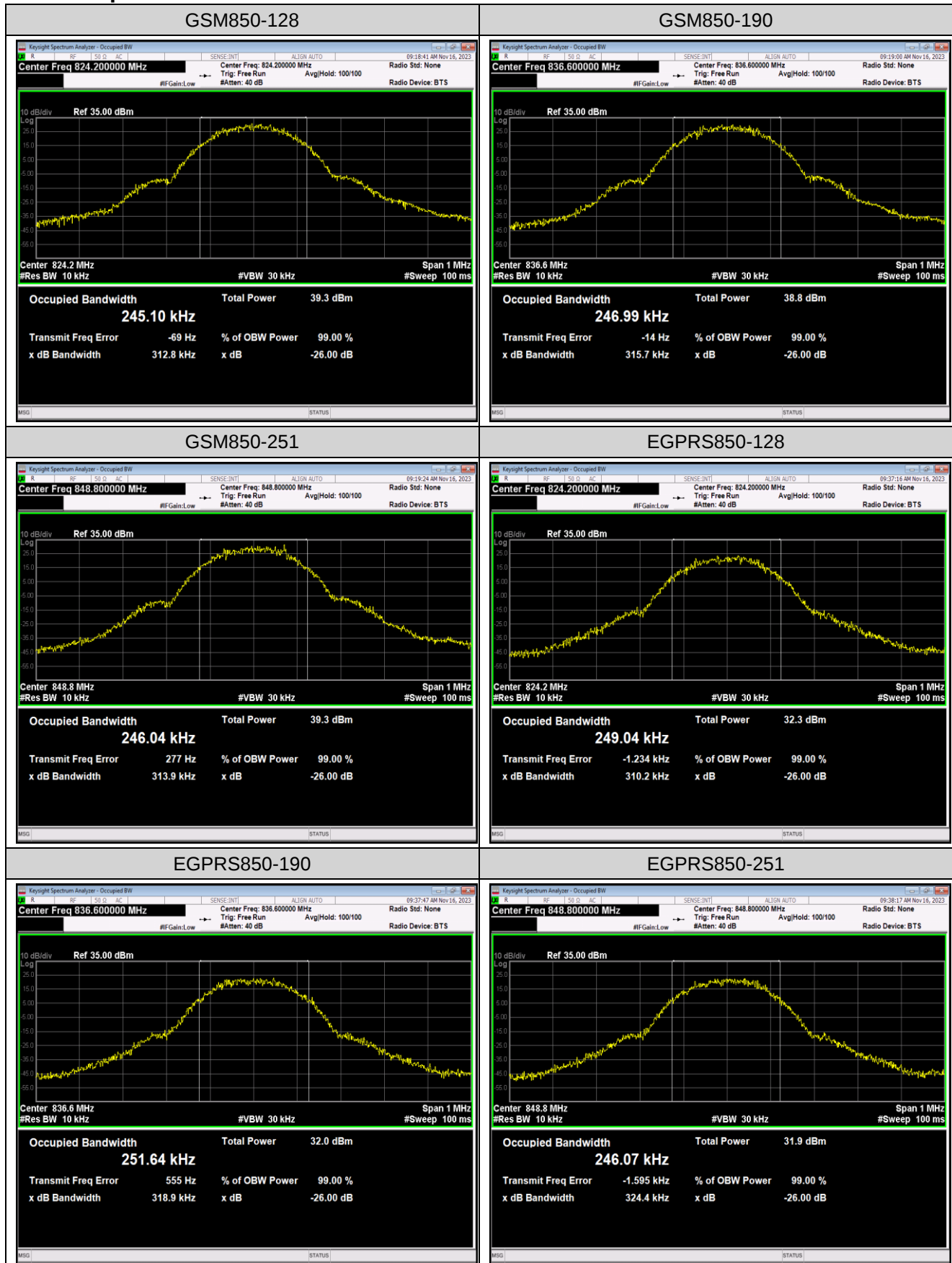


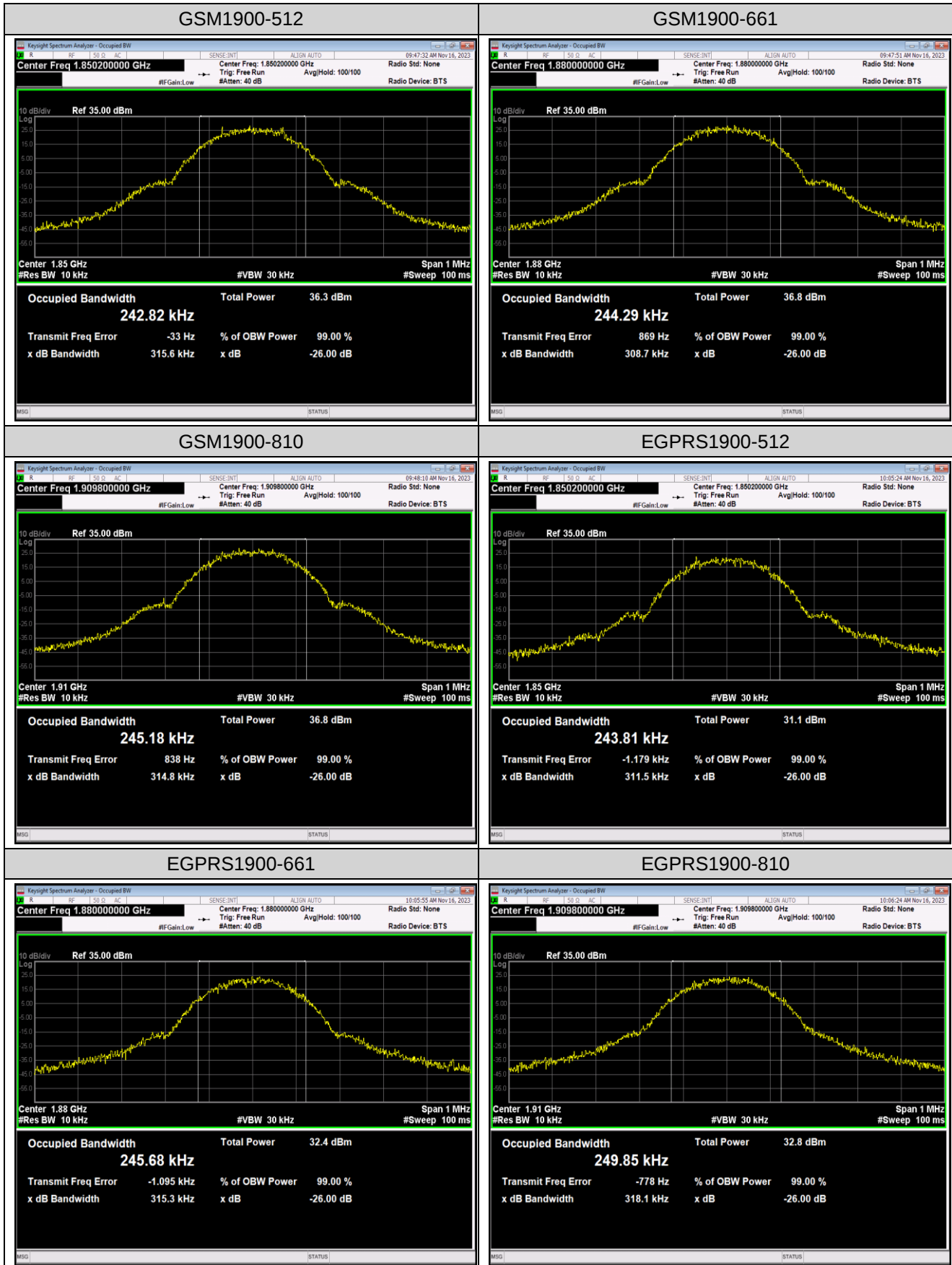
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24510	0.3128	---	PASS
GSM850	190	5	0.24699	0.3157	---	PASS
GSM850	251	5	0.24604	0.3139	---	PASS
EGPRS850	128	8	0.24904	0.3102	---	PASS
EGPRS850	190	8	0.25164	0.3189	---	PASS
EGPRS850	251	8	0.24607	0.3244	---	PASS
GSM1900	512	0	0.24282	0.3156	---	PASS
GSM1900	661	0	0.24429	0.3087	---	PASS
GSM1900	810	0	0.24518	0.3148	---	PASS
EGPRS1900	512	2	0.24381	0.3115	---	PASS
EGPRS1900	661	2	0.24568	0.3153	---	PASS
EGPRS1900	810	2	0.24985	0.3181	---	PASS

Test Graphs



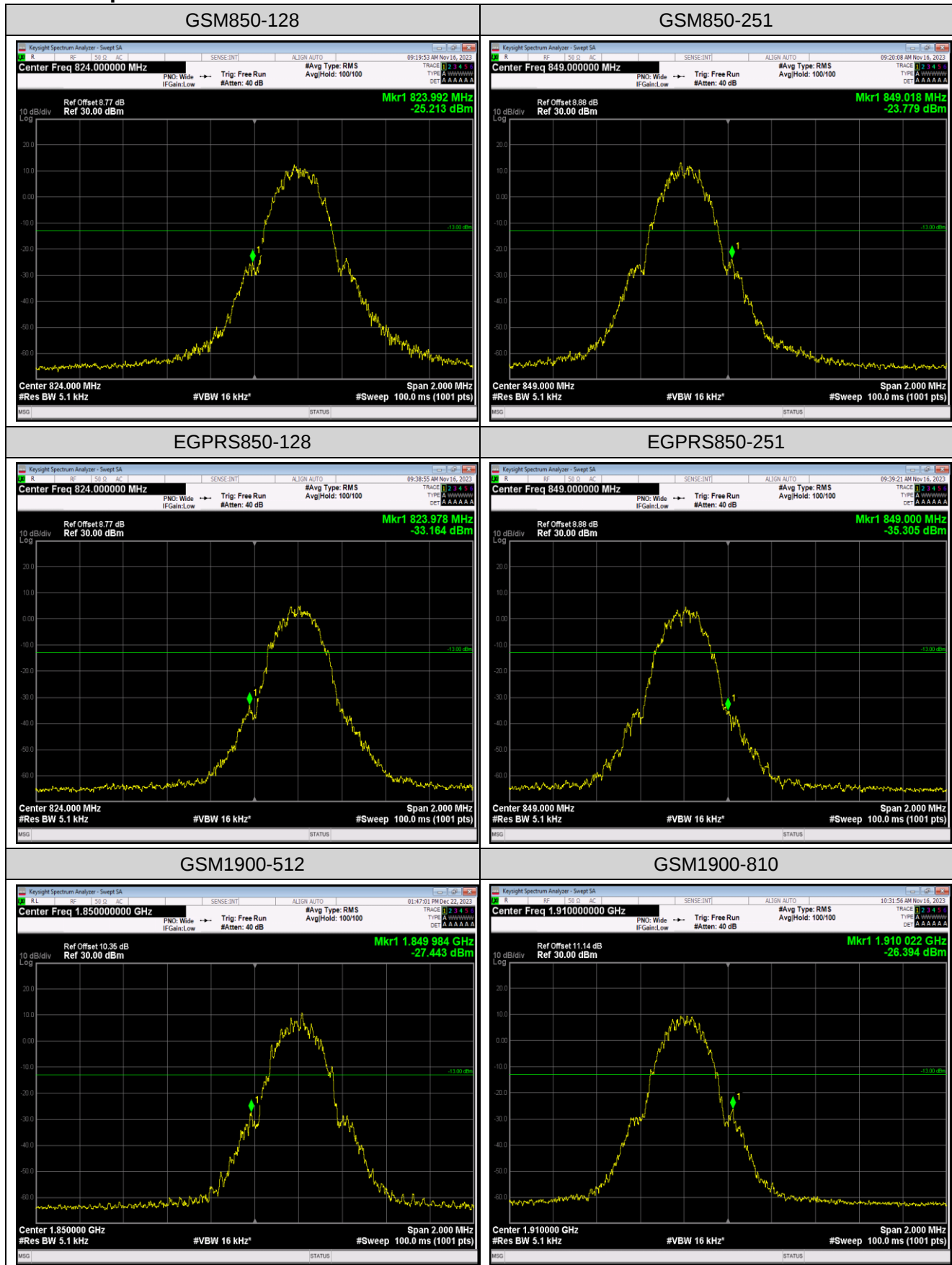


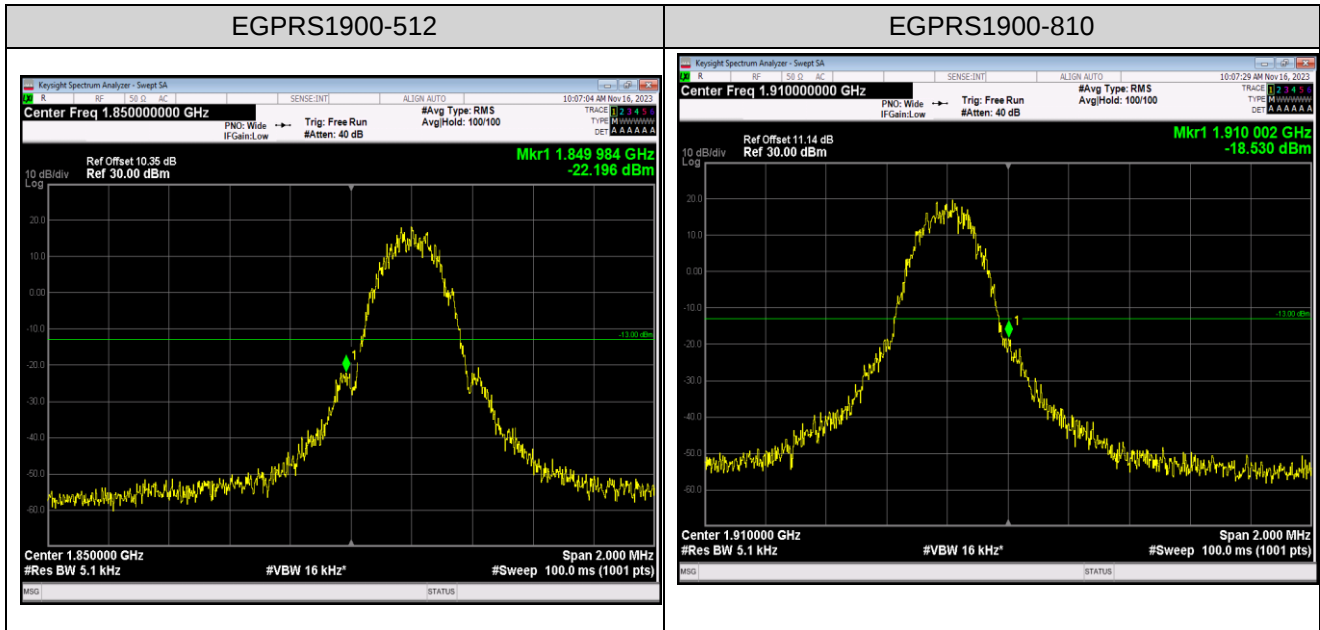
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.99	-25.21	-13	PASS
GSM850	251	5	849.02	-23.78	-13	PASS
EGPRS850	128	8	823.98	-33.16	-13	PASS
EGPRS850	251	8	849.00	-35.30	-13	PASS
GSM1900	512	0	1849.89	-27.44	-13	PASS
GSM1900	810	0	1910.02	-26.39	-13	PASS
EGPRS1900	512	2	1849.98	-22.20	-13	PASS
EGPRS1900	810	2	1910.00	-18.53	-13	PASS

Test Graphs





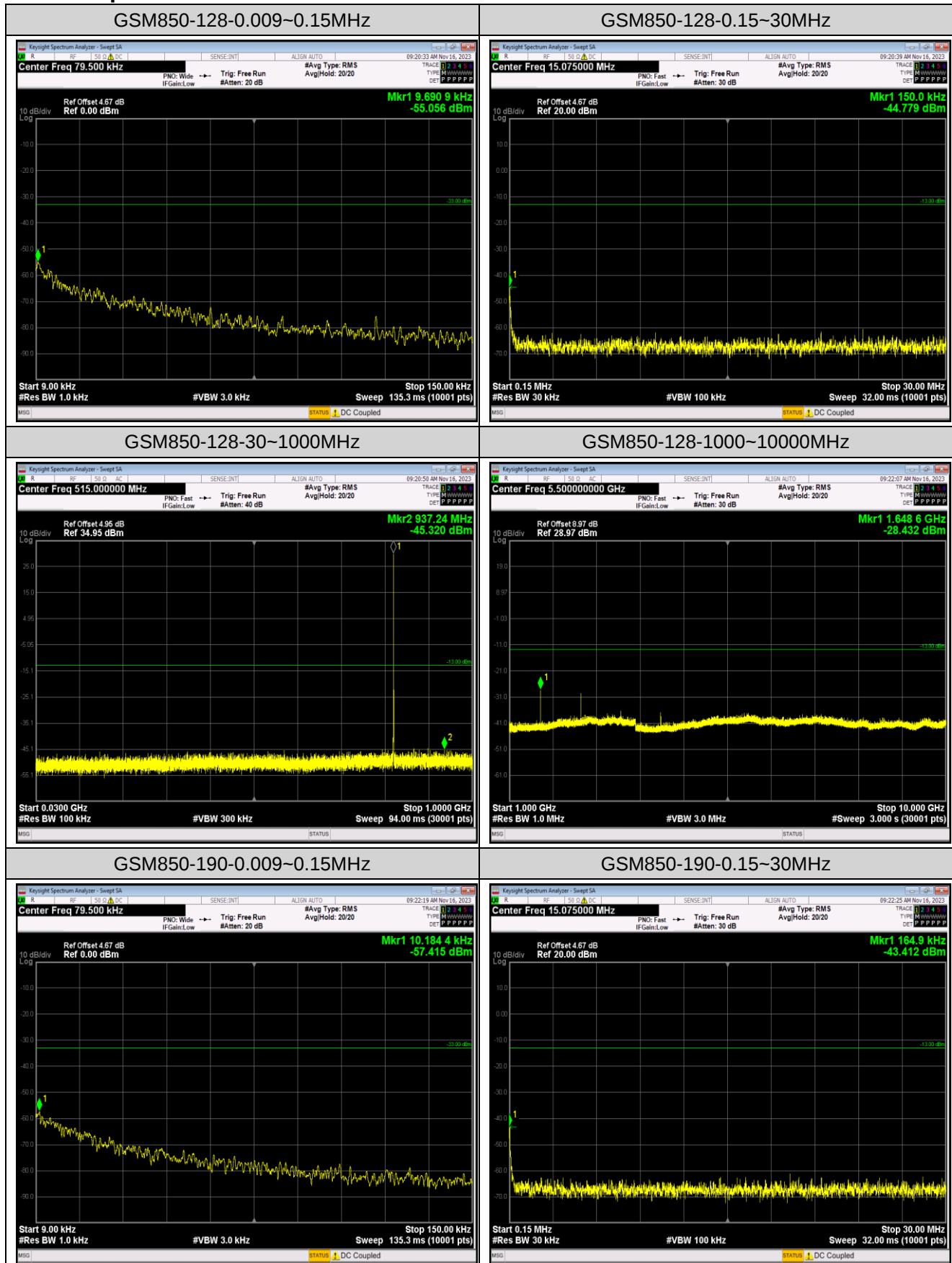
Appendix E: Conducted Spurious Emission

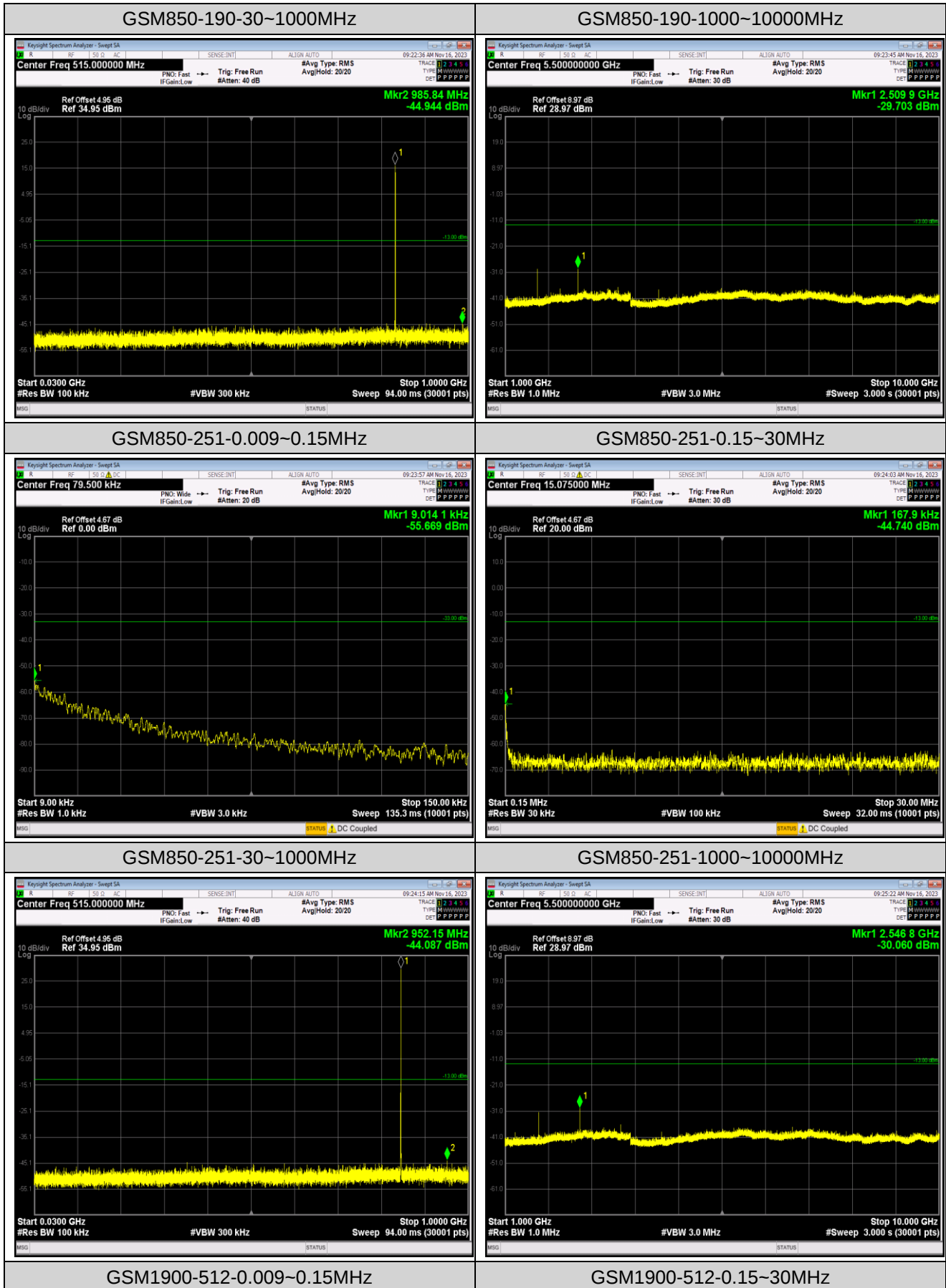
Test Result

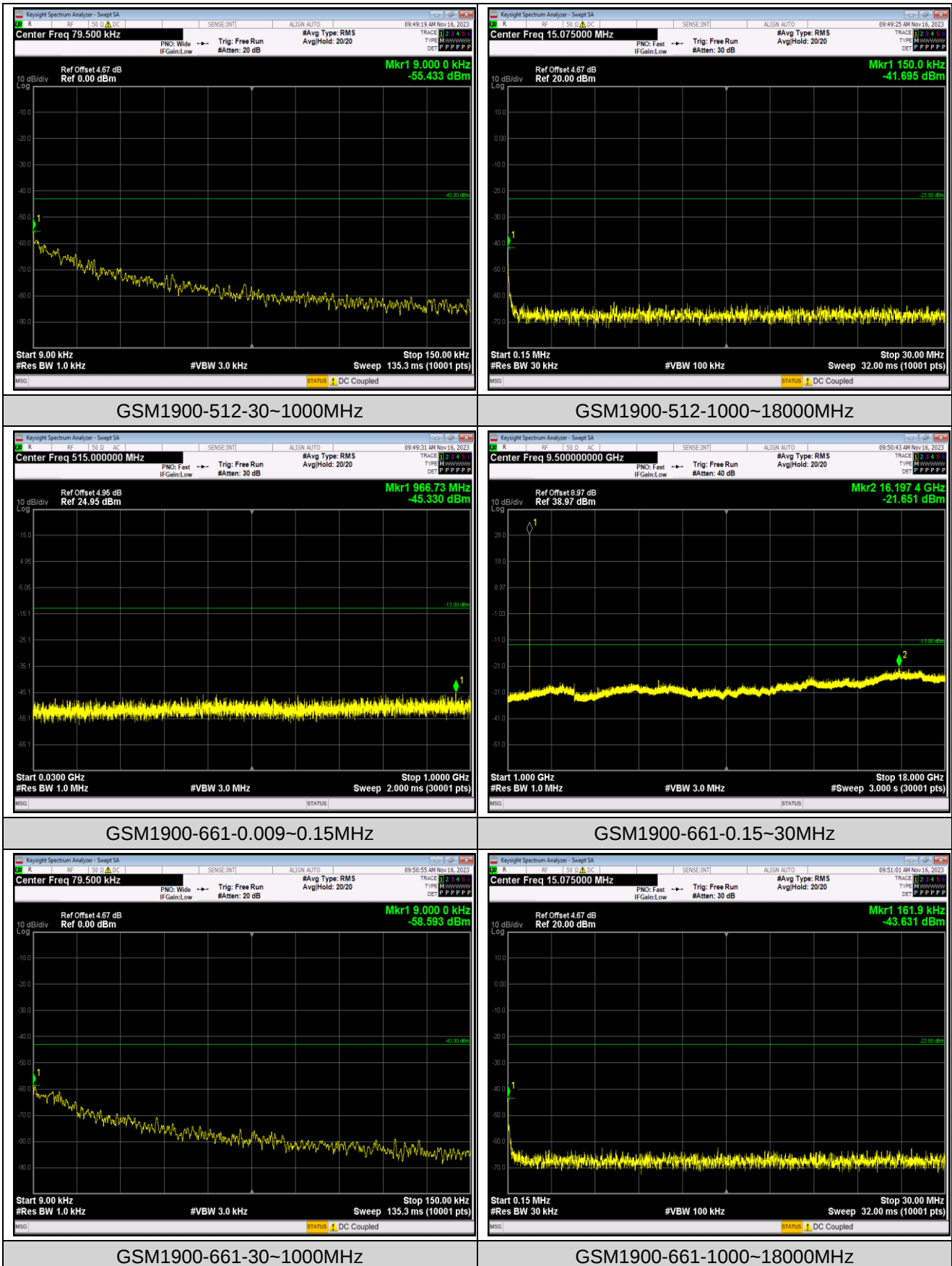
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-55.06	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-44.78	-13	PASS
GSM850	128	5	30~1000MHz	937.24	-45.32	-13	PASS
GSM850	128	5	1000~10000MHz	1648.6	-28.43	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-57.42	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-43.41	-13	PASS
GSM850	190	5	30~1000MHz	985.84	-44.94	-13	PASS
GSM850	190	5	1000~10000MHz	2509.9	-29.7	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-55.67	-33	PASS
GSM850	251	5	0.15~30MHz	0.17	-44.74	-13	PASS
GSM850	251	5	30~1000MHz	952.15	-44.09	-13	PASS
GSM850	251	5	1000~10000MHz	2546.8	-30.06	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.43	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-41.7	-23	PASS
GSM1900	512	0	30~1000MHz	966.73	-45.33	-13	PASS
GSM1900	512	0	1000~18000MHz	16197.43	-21.65	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-58.59	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-43.63	-23	PASS
GSM1900	661	0	30~1000MHz	310.43	-45.49	-13	PASS
GSM1900	661	0	1000~18000MHz	16991.9	-21.99	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-58.31	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-45.18	-23	PASS
GSM1900	810	0	30~1000MHz	870.47	-45.46	-13	PASS
GSM1900	810	0	1000~18000MHz	17267.3	-16.22	-13	PASS

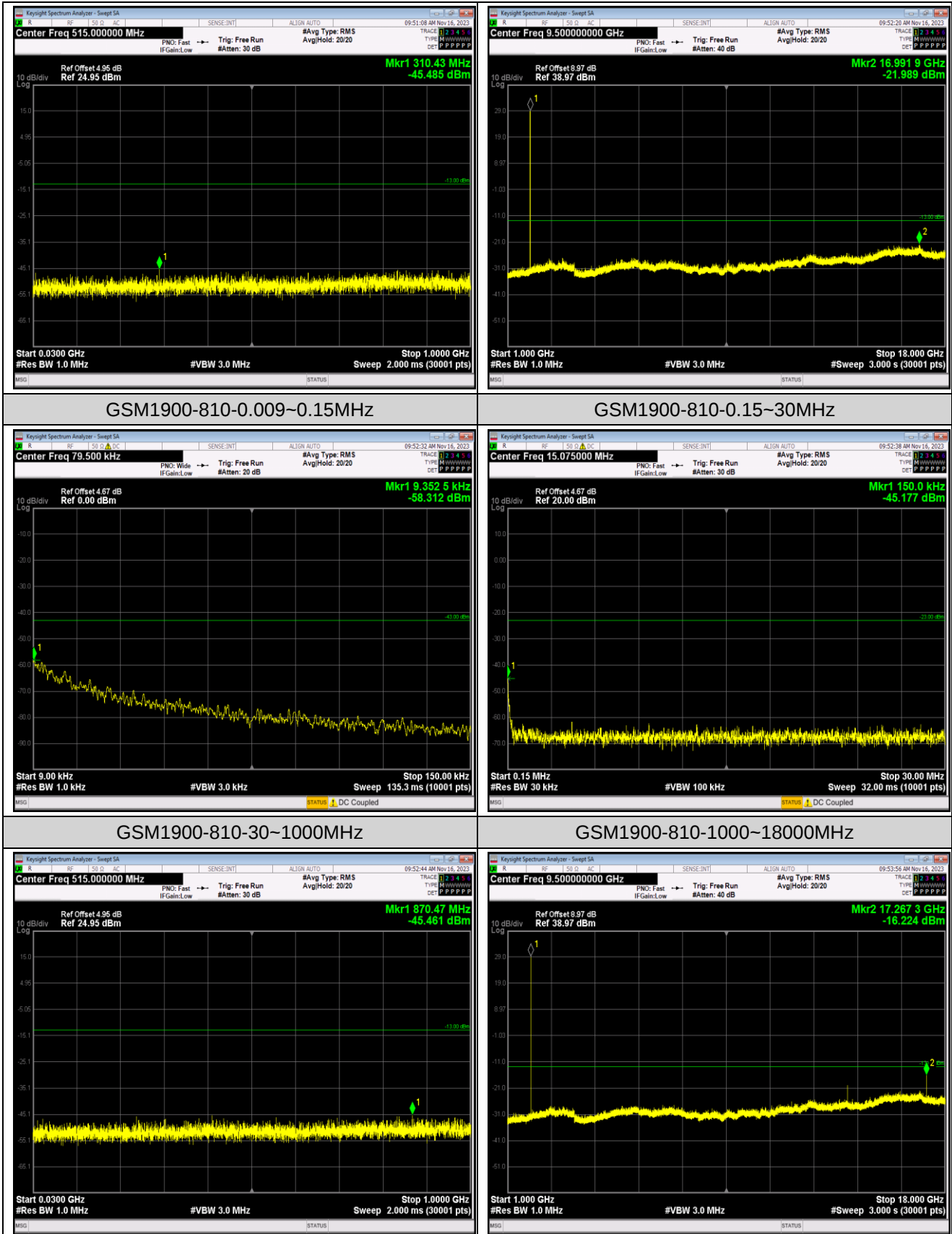
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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		
3.80	-30	8.30	0.009921	±2.5	Pass
	-20	7.72	0.009228		
	-10	2.36	0.002821		
	0	5.07	0.006060		
	10	0.00	0.000000		
	20	1.03	0.001231		
	30	5.55	0.006634		
	40	6.94	0.008295		
	50	7.10	0.008487		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	6.36	0.007602	±2.5	Pass
	3.80	8.10	0.009682		
	4.35	7.01	0.008379		
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		
3.80	-30	8.56	0.010232	±2.5	Pass
	-20	6.91	0.008260		
	-10	6.81	0.008140		
	0	7.14	0.008535		
	10	9.59	0.011463		
	20	4.71	0.005630		
	30	12.11	0.014475		
	40	5.59	0.006682		
	50	10.27	0.012276		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	4.49	0.005367	±2.5	Pass
	3.80	7.68	0.009180		
	4.35	10.56	0.012623		
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		
3.80	-30	16.08	0.008553	Within authorized band for PCS 1900	Pass
	-20	10.88	0.005787		
	-10	4.55	0.002420		
	0	19.18	0.010202		
	10	14.88	0.007915		
	20	15.82	0.008415		
	30	5.29	0.002814		
	40	0.03	0.000016		
	50	13.11	0.006973		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	18.31	0.009739	Within authorized band for PCS 1900	Pass
	3.80	11.40	0.006064		
	4.35	-1.26	-0.000670		
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		
3.80	-30	12.33	0.006559	Within authorized band for PCS 1900	Pass
	-20	15.82	0.008415		
	-10	15.01	0.007984		
	0	7.39	0.003931		
	10	12.43	0.006612		
	20	15.85	0.008431		
	30	12.33	0.006559		
	40	7.72	0.004106		
	50	15.40	0.008191		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	10.62	0.005649	Within authorized band for PCS 1900	Pass
	3.80	3.87	0.002059		
	4.35	14.53	0.007729		
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

