

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	33.24	26.09	38.45	PASS
GSM850	190	5	33.34	26.19	38.45	PASS
GSM850	251	5	33.25	26.1	38.45	PASS
GSM1900	512	0	31.02	27.02	33.00	PASS
GSM1900	661	0	31.18	27.18	33.00	PASS
GSM1900	810	0	30.88	26.88	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.26	26.11	38.45	PASS
GPRS850	128	5	2	32.49	25.34	38.45	PASS
GPRS850	128	5	3	30.72	23.57	38.45	PASS
GPRS850	128	5	4	30.63	23.48	38.45	PASS
GPRS850	190	5	1	33.34	26.19	38.45	PASS
GPRS850	190	5	2	32.58	25.43	38.45	PASS
GPRS850	190	5	3	30.79	23.64	38.45	PASS
GPRS850	190	5	4	30.70	23.55	38.45	PASS
GPRS850	251	5	1	33.27	26.12	38.45	PASS
GPRS850	251	5	2	32.53	25.38	38.45	PASS
GPRS850	251	5	3	30.78	23.63	38.45	PASS
GPRS850	251	5	4	30.71	23.56	38.45	PASS
GPRS1900	512	0	1	31.02	27.02	33.00	PASS
GPRS1900	512	0	2	30.24	26.24	33.00	PASS
GPRS1900	512	0	3	28.46	24.46	33.00	PASS
GPRS1900	512	0	4	28.75	24.75	33.00	PASS
GPRS1900	661	0	1	31.17	27.17	33.00	PASS
GPRS1900	661	0	2	30.41	26.41	33.00	PASS
GPRS1900	661	0	3	28.65	24.65	33.00	PASS
GPRS1900	661	0	4	28.81	24.81	33.00	PASS
GPRS1900	810	0	1	30.88	26.88	33.00	PASS
GPRS1900	810	0	2	30.14	26.14	33.00	PASS
GPRS1900	810	0	3	28.40	24.40	33.00	PASS
GPRS1900	810	0	4	28.72	24.72	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.80	20.65	38.45	PASS
EGPRS850	128	8	2	26.61	19.46	38.45	PASS
EGPRS850	128	8	3	24.21	17.06	38.45	PASS
EGPRS850	128	8	4	23.75	16.6	38.45	PASS
EGPRS850	190	8	1	27.59	20.44	38.45	PASS
EGPRS850	190	8	2	26.42	19.27	38.45	PASS
EGPRS850	190	8	3	24.04	16.89	38.45	PASS
EGPRS850	190	8	4	23.58	16.43	38.45	PASS
EGPRS850	251	8	1	27.75	20.6	38.45	PASS
EGPRS850	251	8	2	26.58	19.43	38.45	PASS
EGPRS850	251	8	3	24.23	17.08	38.45	PASS
EGPRS850	251	8	4	23.76	16.61	38.45	PASS
EGPRS1900	512	2	1	26.83	22.83	33.00	PASS
EGPRS1900	512	2	2	25.62	21.62	33.00	PASS
EGPRS1900	512	2	3	23.38	19.38	33.00	PASS
EGPRS1900	512	2	4	22.93	18.93	33.00	PASS
EGPRS1900	661	2	1	26.86	22.86	33.00	PASS
EGPRS1900	661	2	2	25.73	21.73	33.00	PASS
EGPRS1900	661	2	3	23.50	19.5	33.00	PASS
EGPRS1900	661	2	4	23.00	19	33.00	PASS
EGPRS1900	810	2	1	26.92	22.92	33.00	PASS
EGPRS1900	810	2	2	25.82	21.82	33.00	PASS
EGPRS1900	810	2	3	23.57	19.57	33.00	PASS
EGPRS1900	810	2	4	23.05	19.05	33.00	PASS

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

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

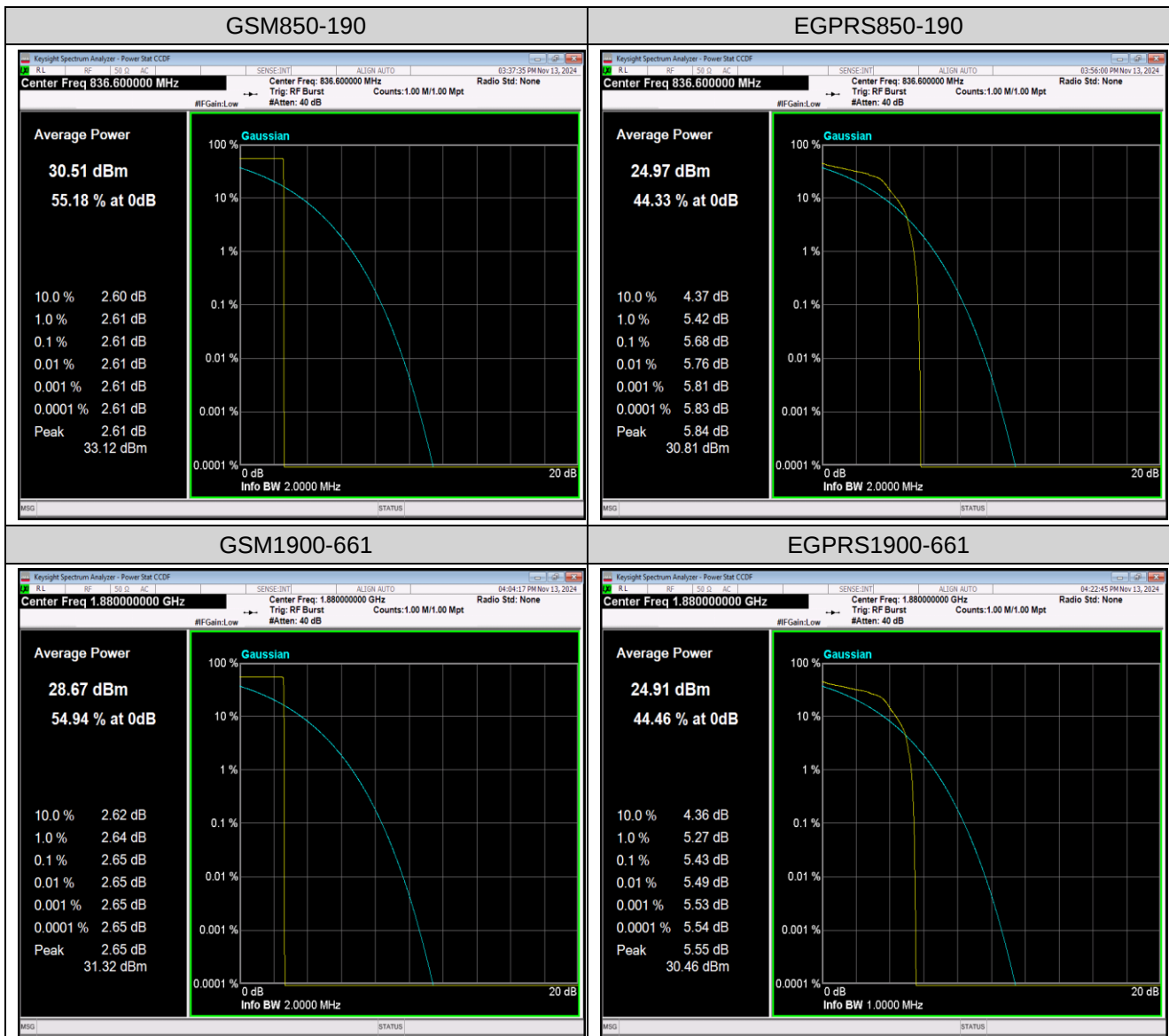
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.61	13	PASS
EGPRS850	190	8	5.68	13	PASS
GSM1900	661	0	2.65	13	PASS
EGPRS1900	661	2	5.43	13	PASS

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

Test Graphs

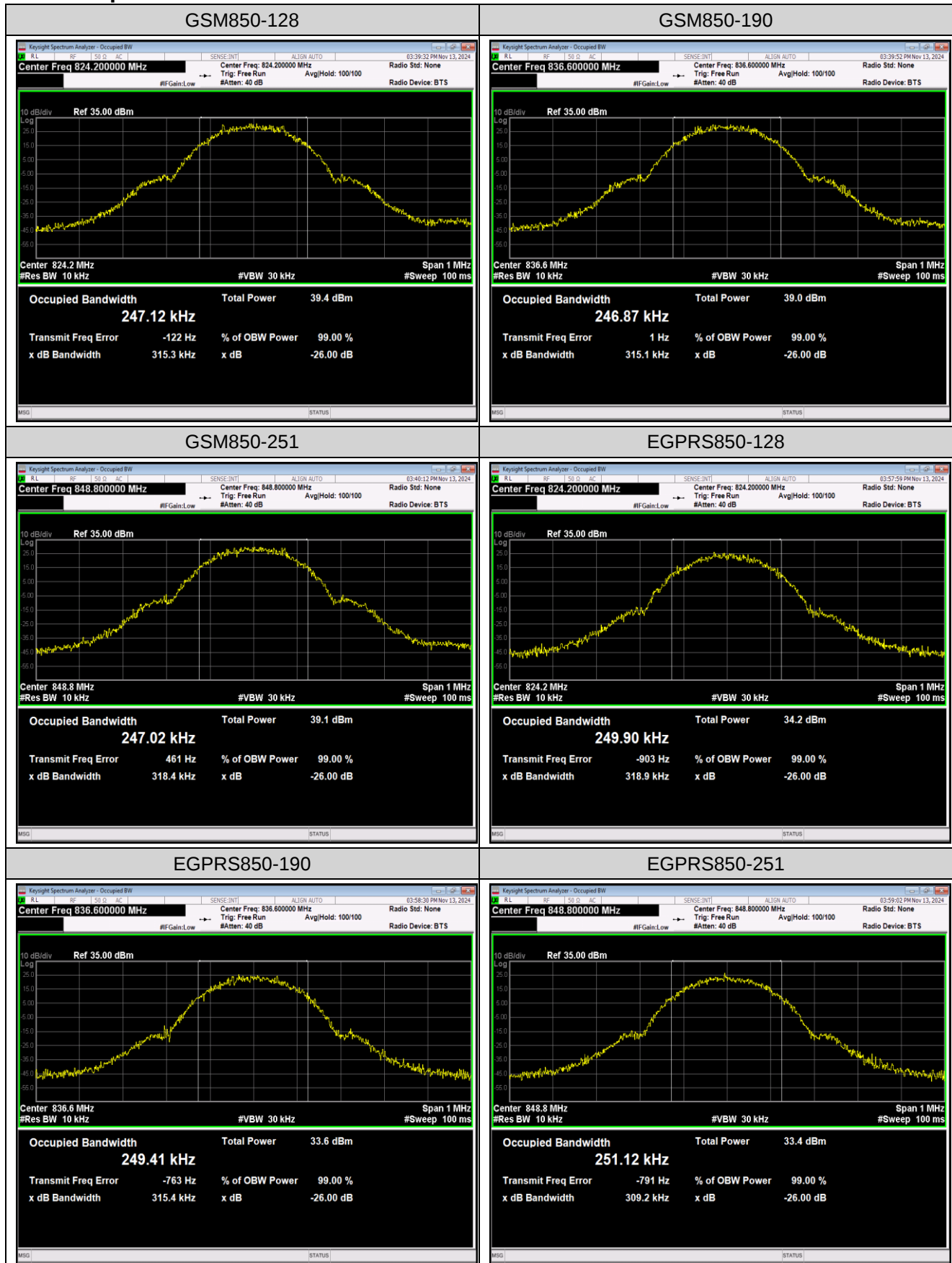


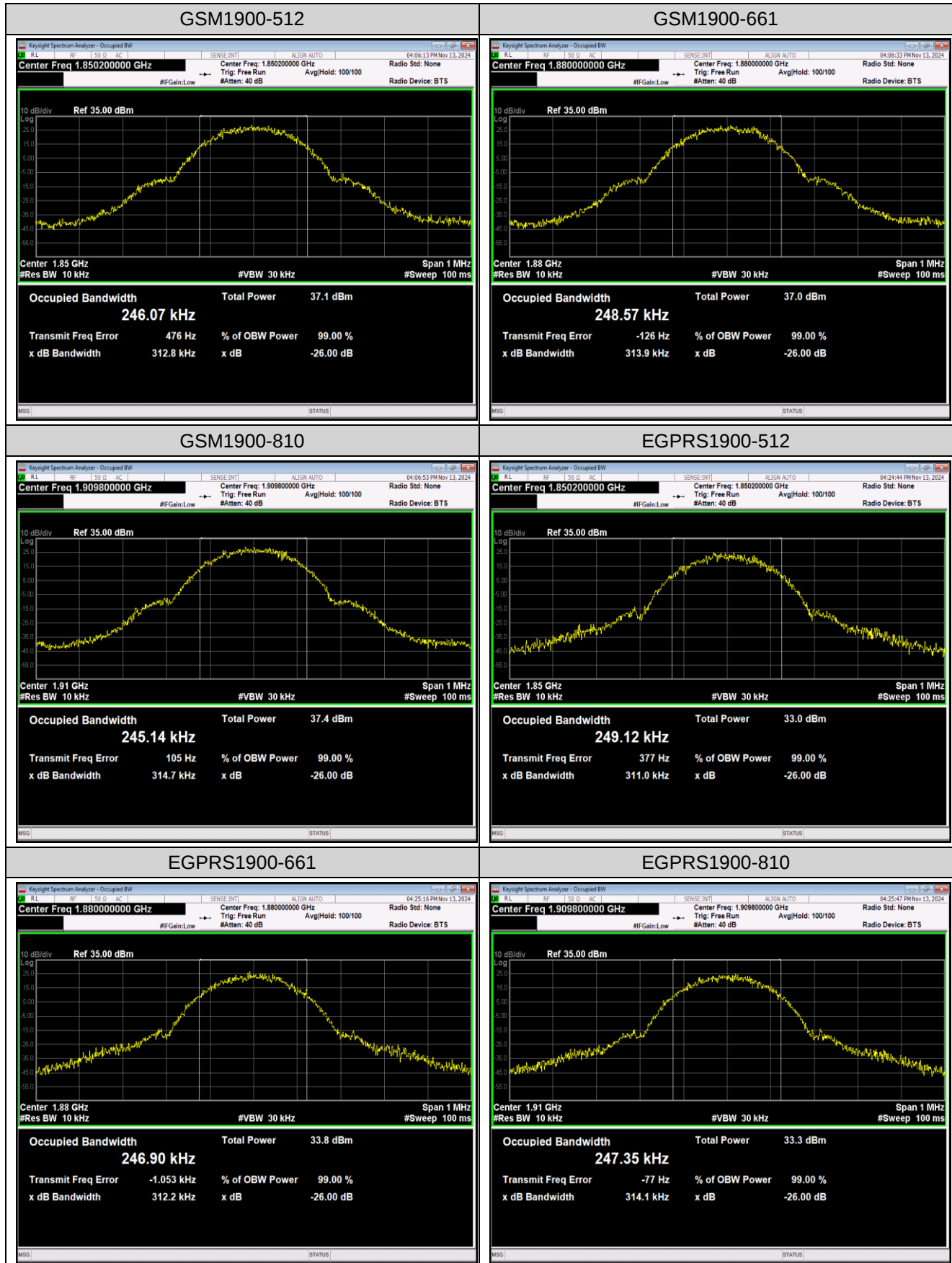
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24712	0.3153	---	PASS
GSM850	190	5	0.24687	0.3151	---	PASS
GSM850	251	5	0.24702	0.3184	---	PASS
EGPRS850	128	8	0.24990	0.3189	---	PASS
EGPRS850	190	8	0.24941	0.3154	---	PASS
EGPRS850	251	8	0.25112	0.3092	---	PASS
GSM1900	512	0	0.24607	0.3128	---	PASS
GSM1900	661	0	0.24857	0.3139	---	PASS
GSM1900	810	0	0.24514	0.3147	---	PASS
EGPRS1900	512	2	0.24912	0.3110	---	PASS
EGPRS1900	661	2	0.24690	0.3122	---	PASS
EGPRS1900	810	2	0.24735	0.3141	---	PASS

Test Graphs



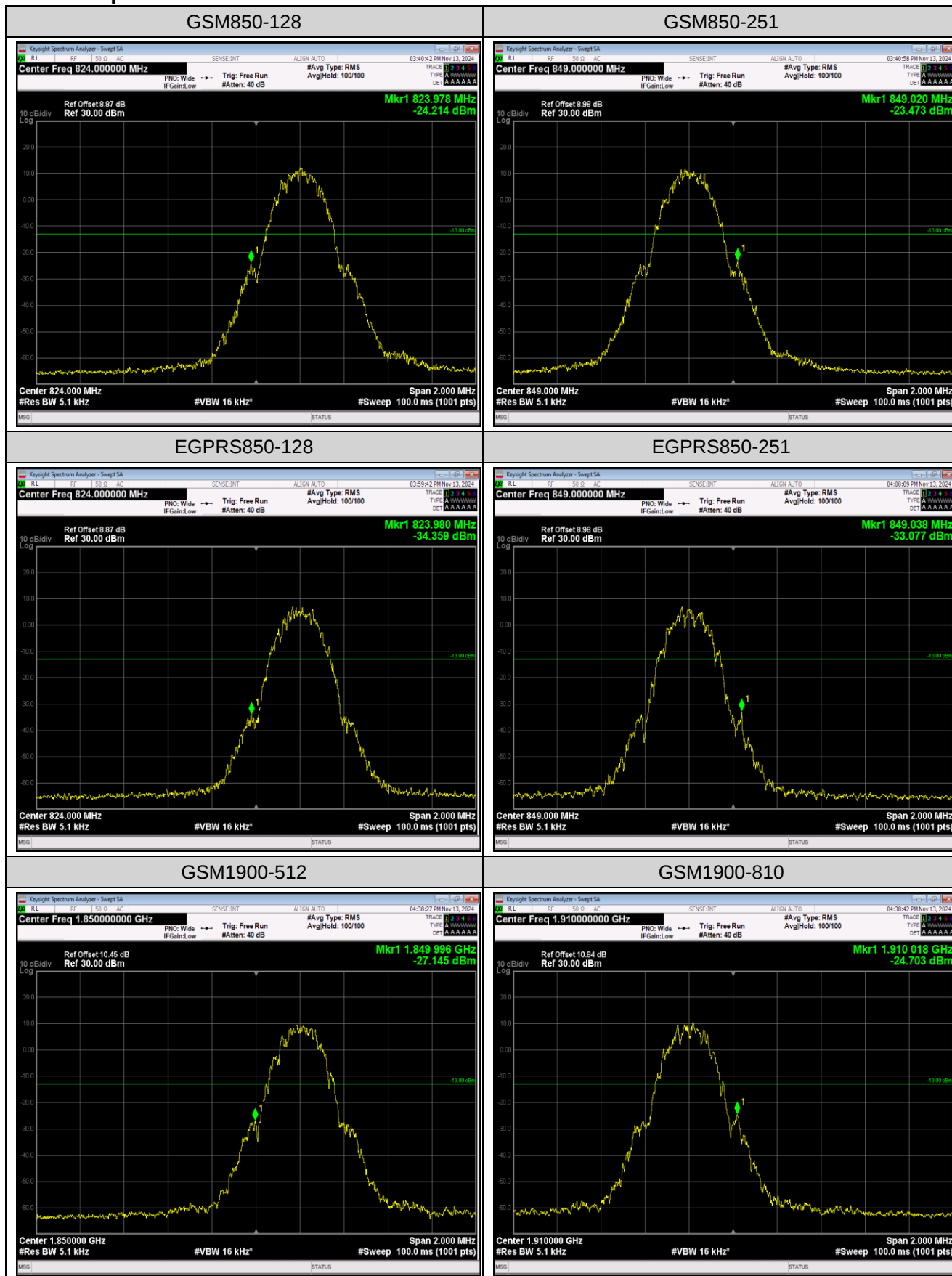


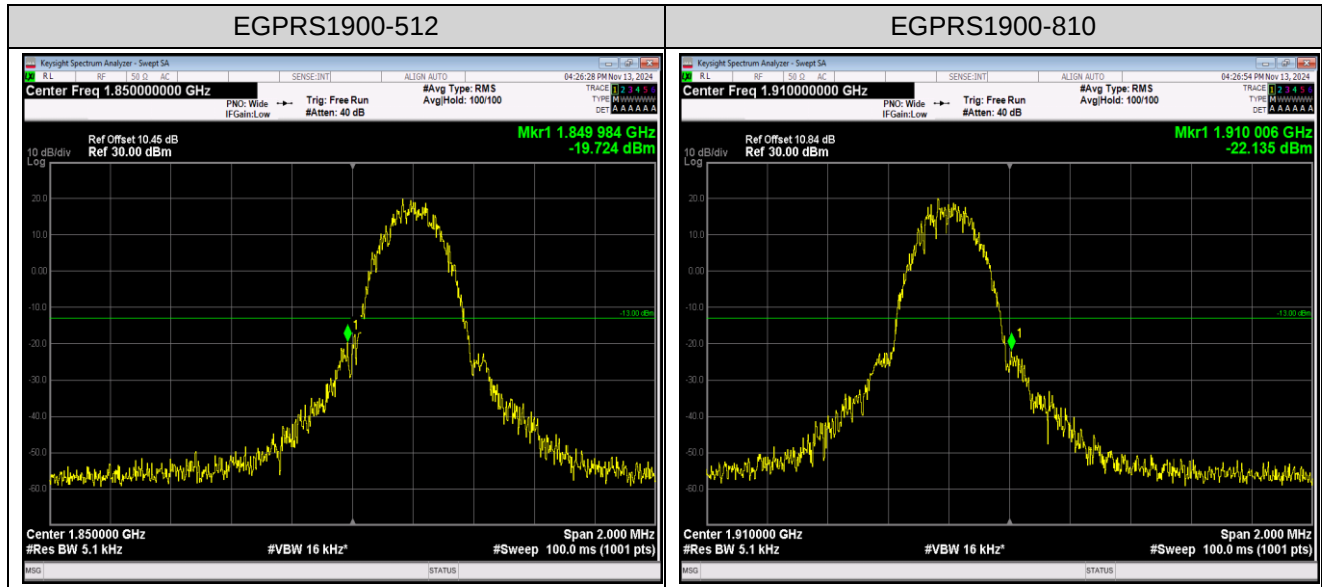
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-24.21	-13	PASS
GSM850	251	5	849.02	-23.47	-13	PASS
EGPRS850	128	8	823.98	-34.36	-13	PASS
EGPRS850	251	8	849.04	-33.08	-13	PASS
GSM1900	512	0	1850.00	-27.15	-13	PASS
GSM1900	810	0	1910.02	-24.70	-13	PASS
EGPRS1900	512	2	1849.98	-19.72	-13	PASS
EGPRS1900	810	2	1910.01	-22.13	-13	PASS

Test Graphs





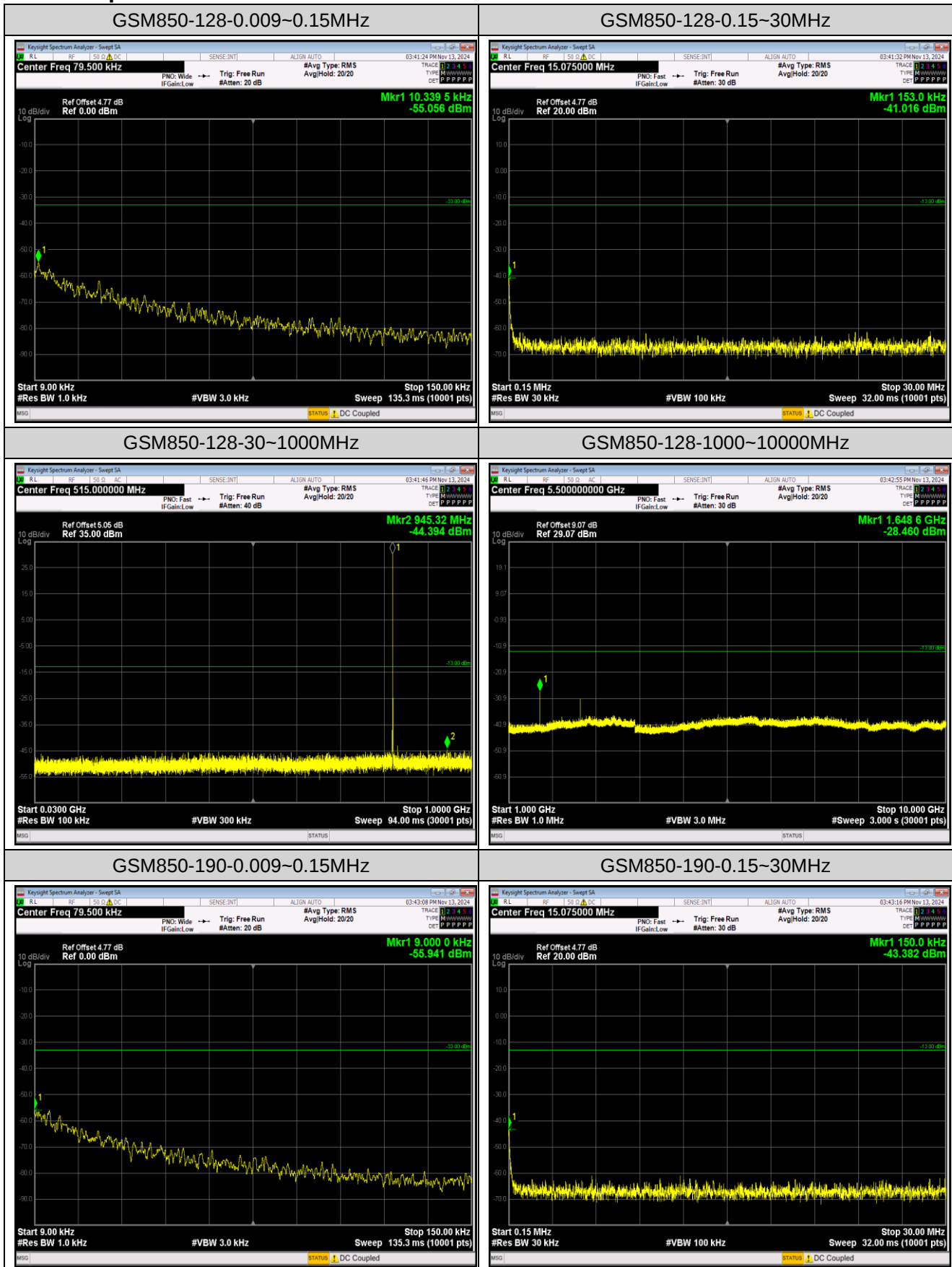
Appendix E: Conducted Spurious Emission

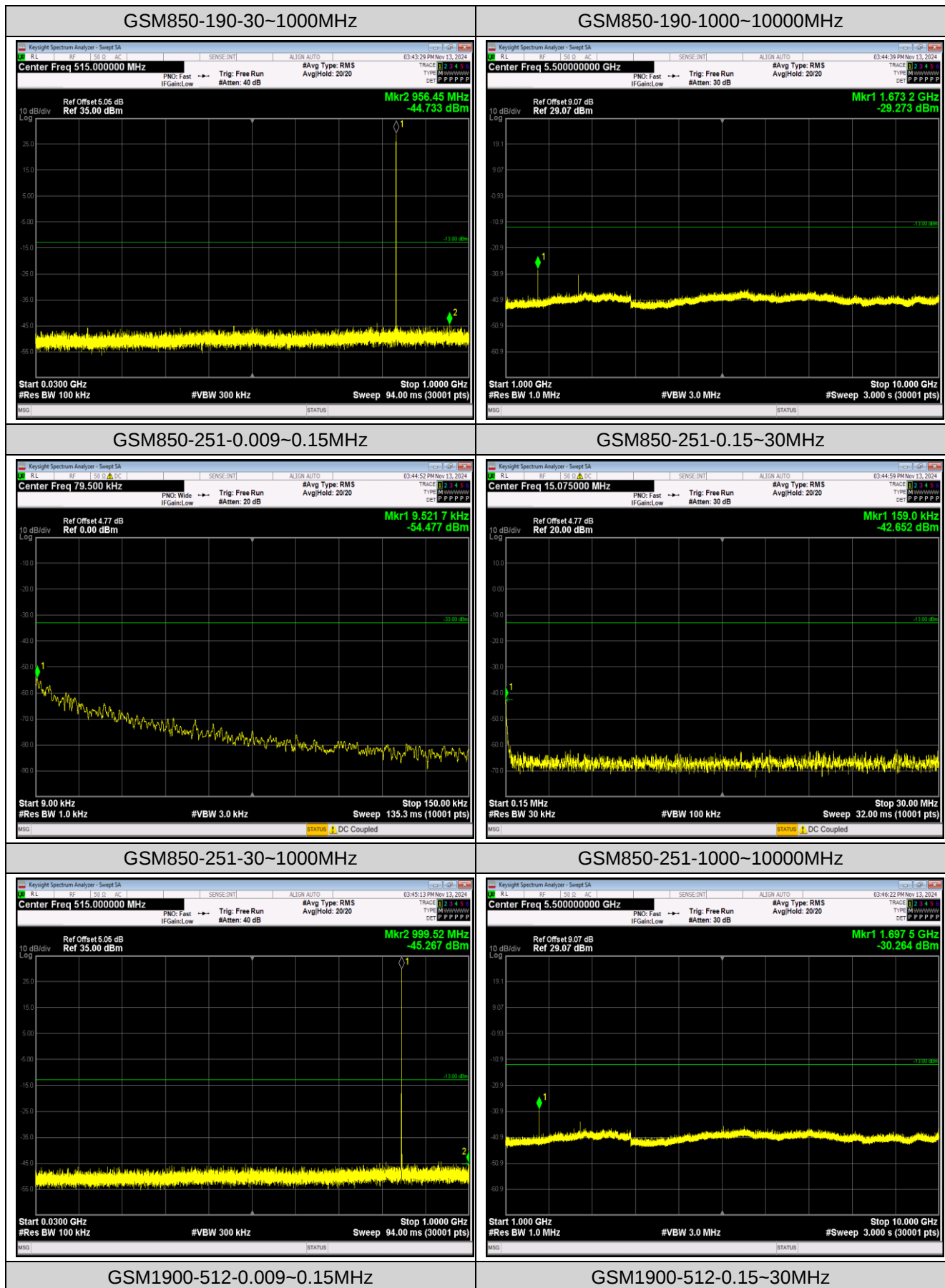
Test Result

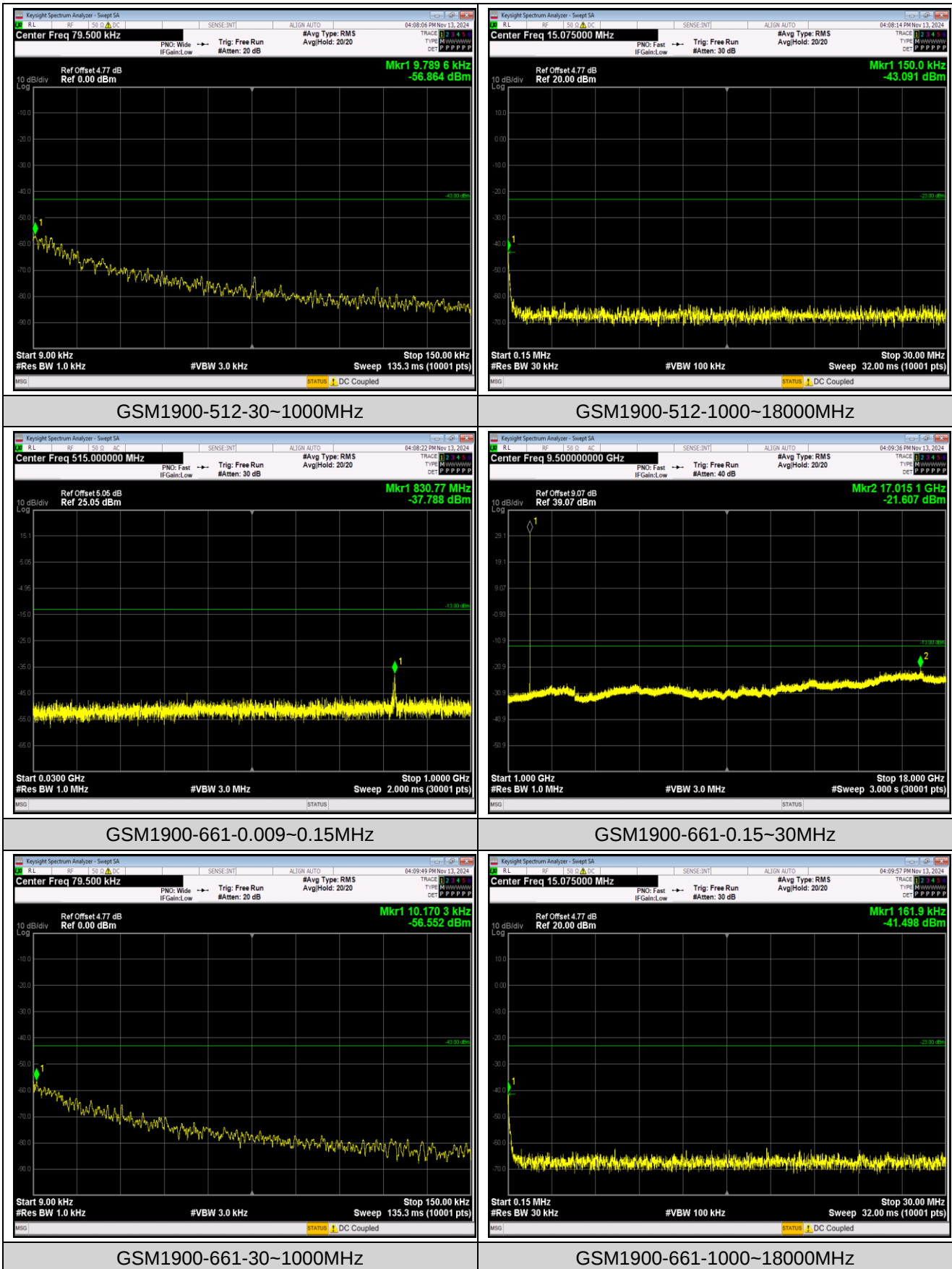
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-55.06	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-41.02	-13	PASS
GSM850	128	5	30~1000MHz	945.32	-44.39	-13	PASS
GSM850	128	5	1000~10000MHz	1648.6	-28.46	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-55.94	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-43.38	-13	PASS
GSM850	190	5	30~1000MHz	956.45	-44.73	-13	PASS
GSM850	190	5	1000~10000MHz	1673.2	-29.27	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-54.48	-33	PASS
GSM850	251	5	0.15~30MHz	0.16	-42.65	-13	PASS
GSM850	251	5	30~1000MHz	999.52	-45.27	-13	PASS
GSM850	251	5	1000~10000MHz	1697.5	-30.26	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-56.86	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-43.09	-23	PASS
GSM1900	512	0	30~1000MHz	830.77	-37.79	-13	PASS
GSM1900	512	0	1000~18000MHz	17015.13	-21.61	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-56.55	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-41.5	-23	PASS
GSM1900	661	0	30~1000MHz	470.02	-44.93	-13	PASS
GSM1900	661	0	1000~18000MHz	16735.77	-22.16	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-55.14	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-41.28	-23	PASS
GSM1900	810	0	30~1000MHz	375.84	-45.53	-13	PASS
GSM1900	810	0	1000~18000MHz	16356.1	-21.91	-13	PASS

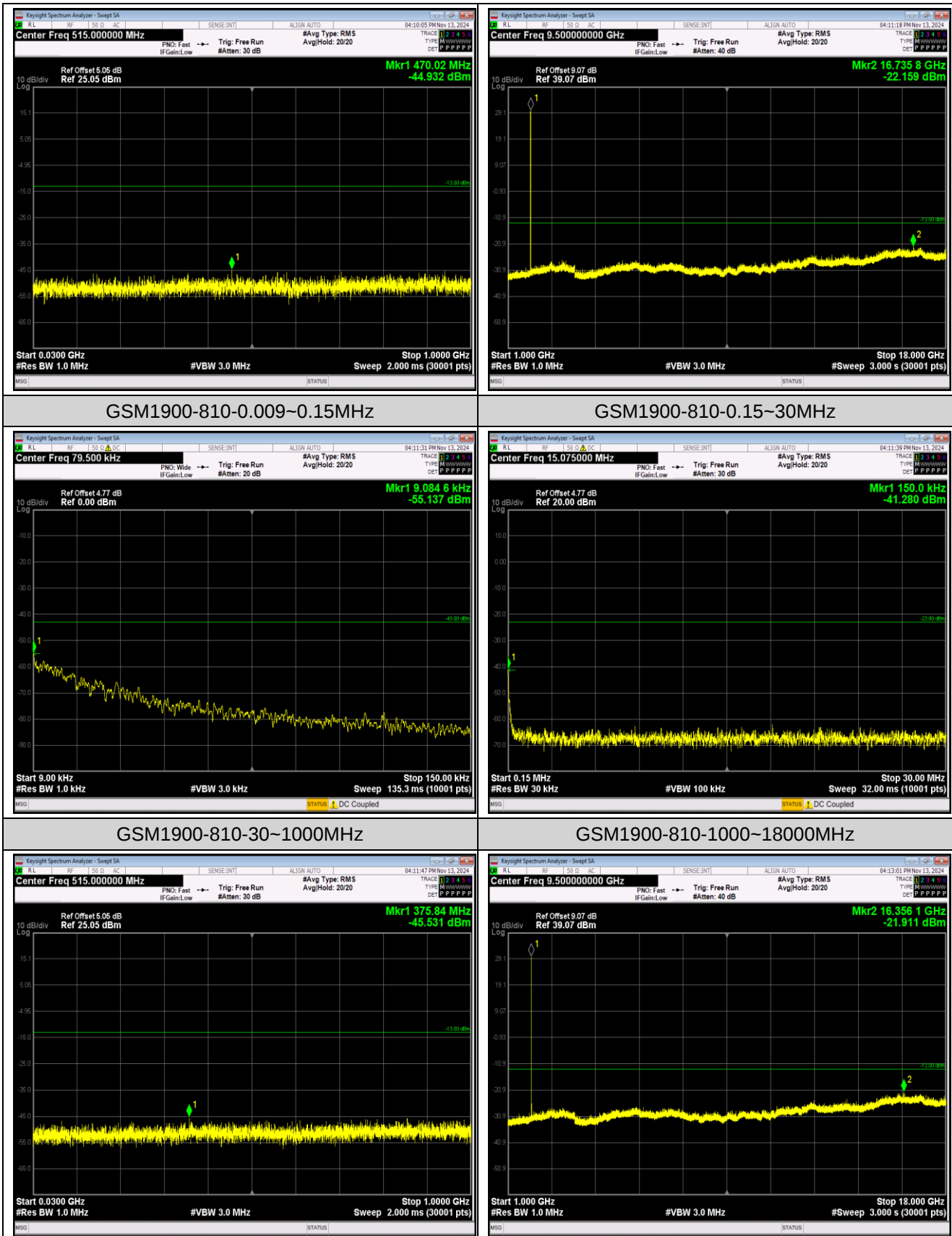
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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		
3.91	-30	-2.84	-0.003395	±2.5	Pass
	-20	0.90	0.001076		
	-10	0.10	0.000120		
	0	0.71	0.000849		
	10	-2.07	-0.002474		
	20	0.29	0.000347		
	30	3.75	0.004482		
	40	-0.19	-0.000227		
	50	2.26	0.002701		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-4.58	-0.005475	±2.5	Pass
	3.91	-4.13	-0.004937		
	4.50	-3.39	-0.004052		
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		
3.91	-30	0.32	0.000383	±2.5	Pass
	-20	2.32	0.002773		
	-10	5.00	0.005977		
	0	5.88	0.007028		
	10	9.46	0.011308		
	20	11.66	0.013937		
	30	10.46	0.012503		
	40	13.14	0.015706		
	50	9.94	0.011881		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	4.42	0.005283	±2.5	Pass
	3.91	4.39	0.005247		
	4.50	2.42	0.002893		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.91	-30	6.10	0.003245	Within authorized band for PCS 1900	Pass
	-20	5.81	0.003090		
	-10	4.46	0.002372		
	0	6.01	0.003197		
	10	10.98	0.005840		
	20	14.40	0.007660		
	30	1.55	0.000824		
	40	-0.26	-0.000138		
	50	3.94	0.002096		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	3.00	0.001596	Within authorized band for PCS 1900	Pass
	3.91	5.13	0.002729		
	4.50	4.81	0.002559		
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		
3.91	-30	2.81	0.001495	Within authorized band for PCS 1900	Pass
	-20	-2.71	-0.001441		
	-10	-4.58	-0.002436		
	0	-1.78	-0.000947		
	10	-9.88	-0.005255		
	20	8.30	0.004415		
	30	3.81	0.002027		
	40	7.55	0.004016		
	50	8.43	0.004484		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-2.23	-0.001186	Within authorized band for PCS 1900	Pass
	3.91	-0.39	-0.000207		
	4.50	-5.07	-0.002697		
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

