

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	32.78	31.13	38.45	PASS
GSM850	190	5	33.31	31.66	38.45	PASS
GSM850	251	5	32.84	31.19	38.45	PASS
GSM1900	512	0	30.49	32.49	33.00	PASS
GSM1900	661	0	30.29	32.29	33.00	PASS
GSM1900	810	0	30.19	32.19	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.81	31.16	38.45	PASS
GPRS850	128	5	2	31.78	30.13	38.45	PASS
GPRS850	128	5	3	29.67	28.02	38.45	PASS
GPRS850	128	5	4	28.40	26.75	38.45	PASS
GPRS850	190	5	1	33.33	31.68	38.45	PASS
GPRS850	190	5	2	32.35	30.7	38.45	PASS
GPRS850	190	5	3	30.27	28.62	38.45	PASS
GPRS850	190	5	4	29.04	27.39	38.45	PASS
GPRS850	251	5	1	32.85	31.2	38.45	PASS
GPRS850	251	5	2	31.82	30.17	38.45	PASS
GPRS850	251	5	3	29.74	28.09	38.45	PASS
GPRS850	251	5	4	28.49	26.84	38.45	PASS
GPRS1900	512	0	1	30.58	32.58	33.00	PASS
GPRS1900	512	0	2	29.71	31.71	33.00	PASS
GPRS1900	512	0	3	27.72	29.72	33.00	PASS
GPRS1900	512	0	4	26.58	28.58	33.00	PASS
GPRS1900	661	0	1	30.40	32.4	33.00	PASS
GPRS1900	661	0	2	29.54	31.54	33.00	PASS
GPRS1900	661	0	3	27.56	29.56	33.00	PASS
GPRS1900	661	0	4	26.42	28.42	33.00	PASS
GPRS1900	810	0	1	30.32	32.32	33.00	PASS
GPRS1900	810	0	2	29.44	31.44	33.00	PASS
GPRS1900	810	0	3	27.45	29.45	33.00	PASS
GPRS1900	810	0	4	26.24	28.24	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.41	25.76	38.45	PASS
EGPRS850	128	8	2	25.74	24.09	38.45	PASS
EGPRS850	128	8	3	23.05	21.4	38.45	PASS
EGPRS850	128	8	4	21.28	19.63	38.45	PASS
EGPRS850	190	8	1	27.97	26.32	38.45	PASS
EGPRS850	190	8	2	26.37	24.72	38.45	PASS
EGPRS850	190	8	3	23.64	21.99	38.45	PASS
EGPRS850	190	8	4	21.84	20.19	38.45	PASS
EGPRS850	251	8	1	27.78	26.13	38.45	PASS
EGPRS850	251	8	2	26.18	24.53	38.45	PASS
EGPRS850	251	8	3	23.42	21.77	38.45	PASS
EGPRS850	251	8	4	21.66	20.01	38.45	PASS
EGPRS1900	512	2	1	27.48	29.48	33.00	PASS
EGPRS1900	512	2	2	26.32	28.32	33.00	PASS
EGPRS1900	512	2	3	24.15	26.15	33.00	PASS
EGPRS1900	512	2	4	22.76	24.76	33.00	PASS
EGPRS1900	661	2	1	27.46	29.46	33.00	PASS
EGPRS1900	661	2	2	26.22	28.22	33.00	PASS
EGPRS1900	661	2	3	24.04	26.04	33.00	PASS
EGPRS1900	661	2	4	22.70	24.7	33.00	PASS
EGPRS1900	810	2	1	27.70	29.7	33.00	PASS
EGPRS1900	810	2	2	26.46	28.46	33.00	PASS
EGPRS1900	810	2	3	24.25	26.25	33.00	PASS
EGPRS1900	810	2	4	22.89	24.89	33.00	PASS

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

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

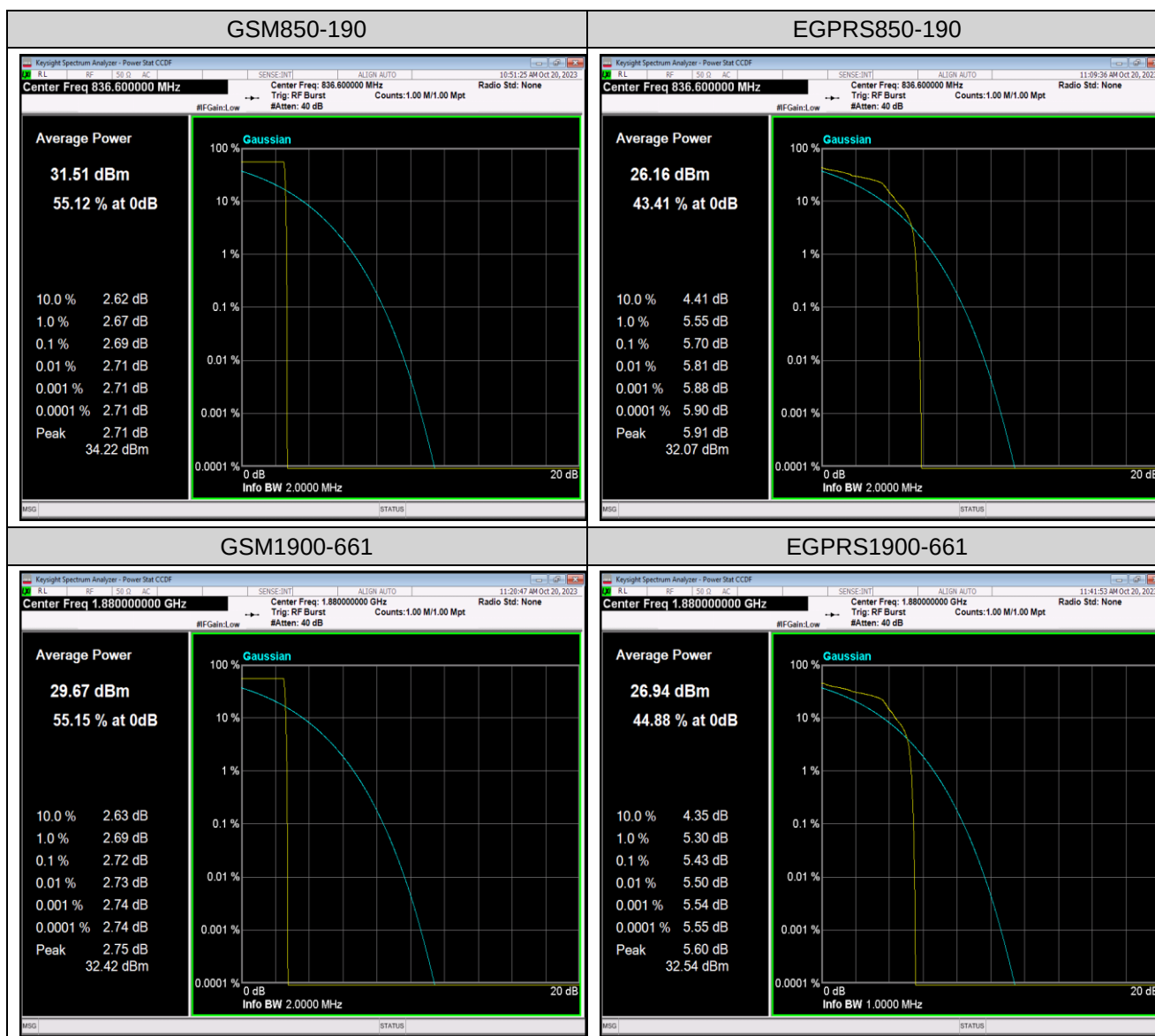
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.69	13	PASS
EGPRS850	190	8	5.7	13	PASS
GSM1900	661	0	2.72	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

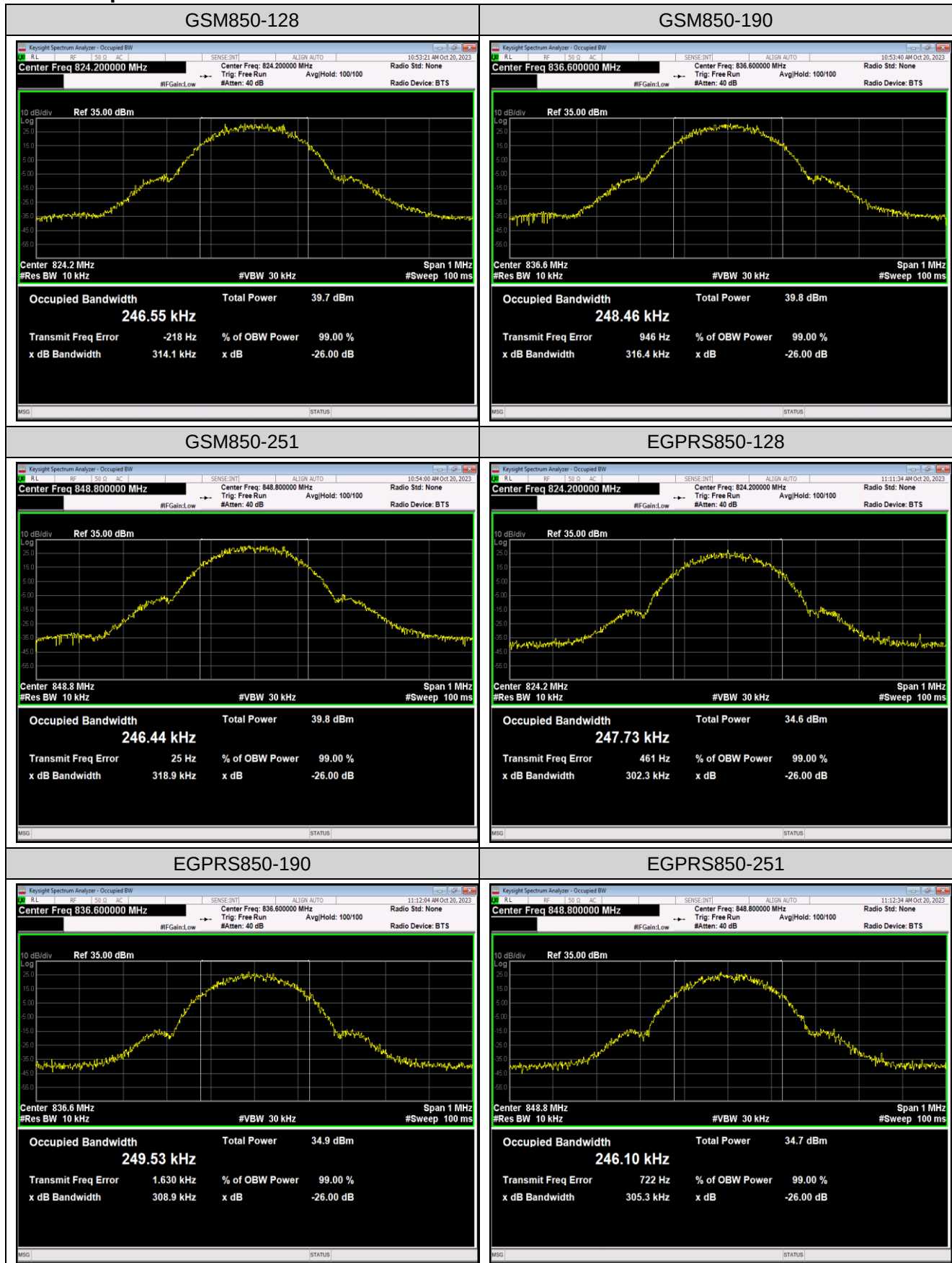


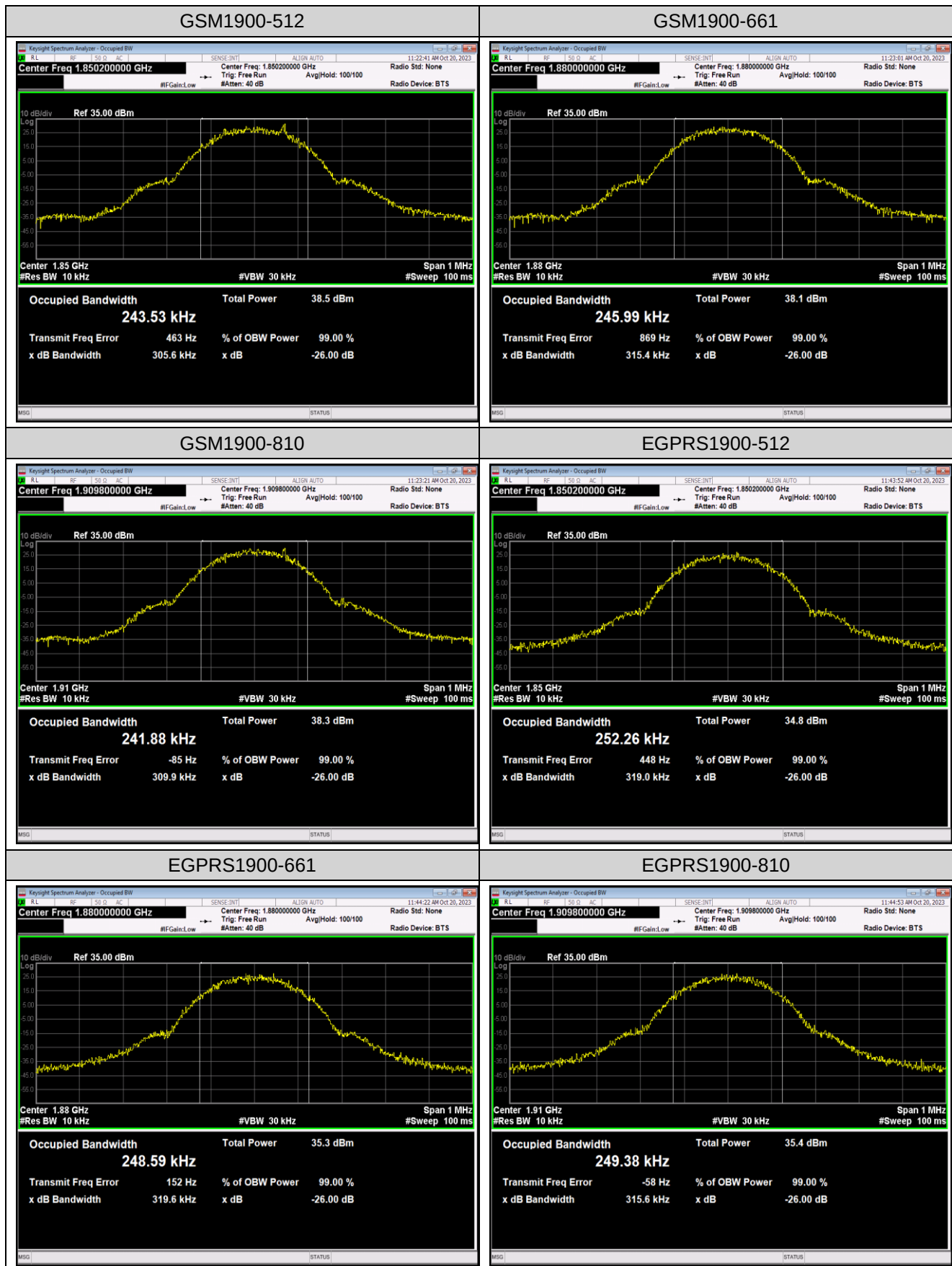
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24655	0.3141	---	PASS
GSM850	190	5	0.24846	0.3164	---	PASS
GSM850	251	5	0.24644	0.3189	---	PASS
EGPRS850	128	8	0.24773	0.3023	---	PASS
EGPRS850	190	8	0.24953	0.3089	---	PASS
EGPRS850	251	8	0.24610	0.3053	---	PASS
GSM1900	512	0	0.24353	0.3056	---	PASS
GSM1900	661	0	0.24599	0.3154	---	PASS
GSM1900	810	0	0.24188	0.3099	---	PASS
EGPRS1900	512	2	0.25226	0.3190	---	PASS
EGPRS1900	661	2	0.24859	0.3196	---	PASS
EGPRS1900	810	2	0.24938	0.3156	---	PASS

Test Graphs



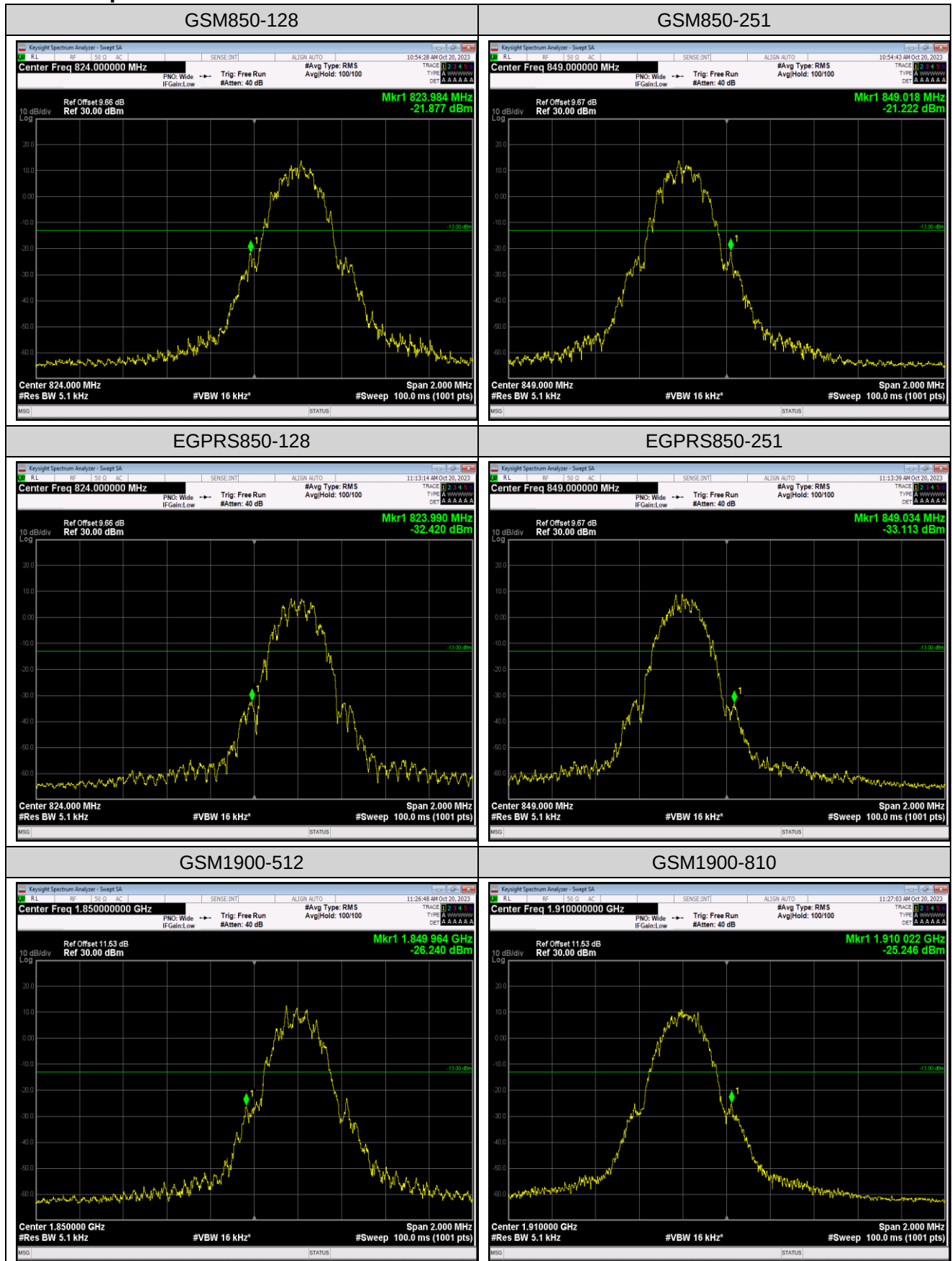


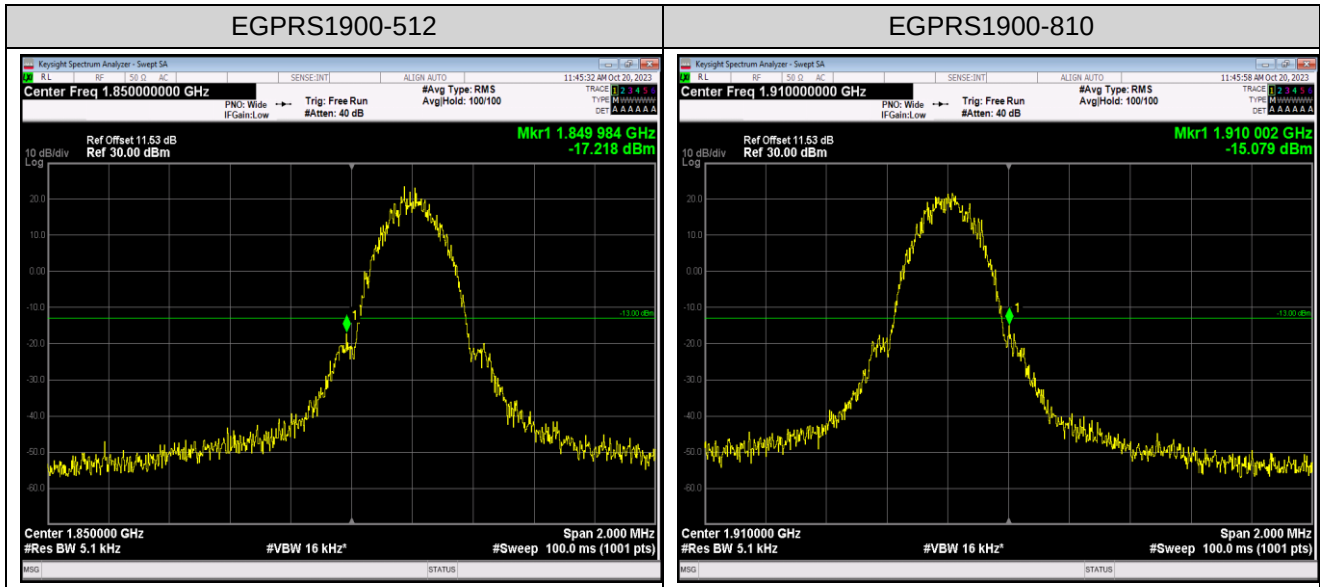
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-21.88	-13	PASS
GSM850	251	5	849.02	-21.22	-13	PASS
EGPRS850	128	8	823.99	-32.42	-13	PASS
EGPRS850	251	8	849.03	-33.11	-13	PASS
GSM1900	512	0	1849.96	-26.24	-13	PASS
GSM1900	810	0	1910.02	-25.25	-13	PASS
EGPRS1900	512	2	1849.98	-17.22	-13	PASS
EGPRS1900	810	2	1910.00	-15.08	-13	PASS

Test Graphs





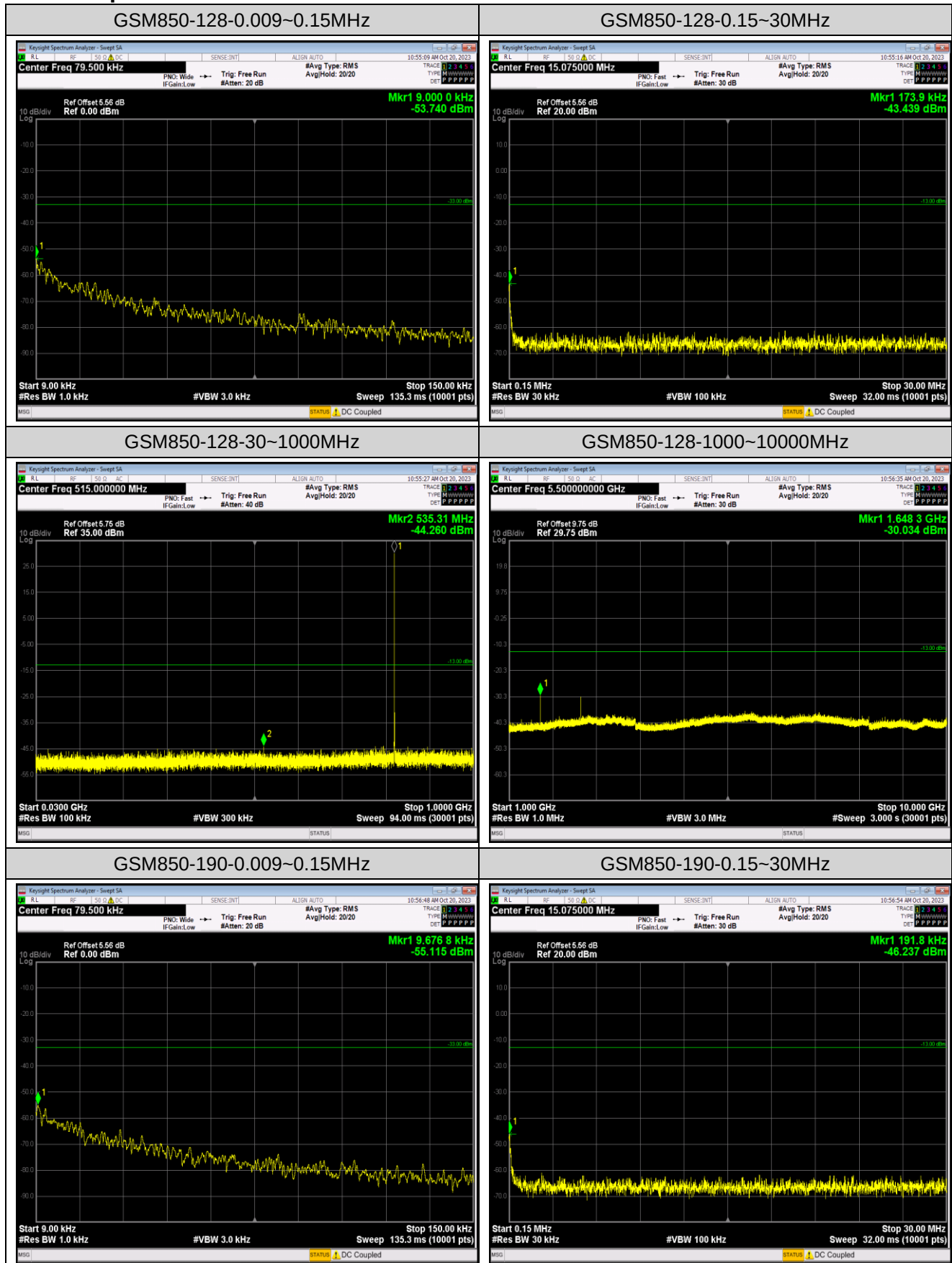
Appendix E: Conducted Spurious Emission

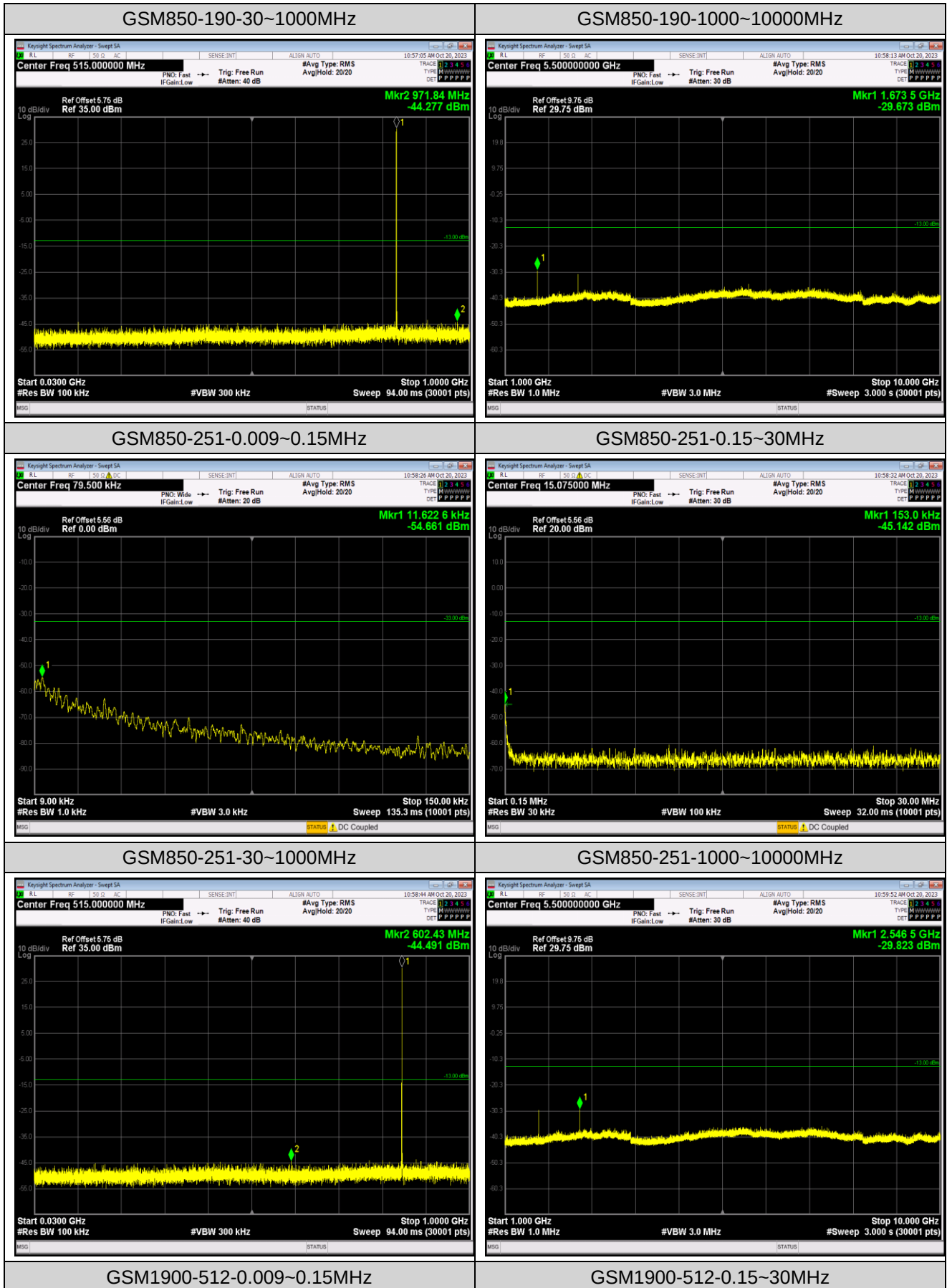
Test Result

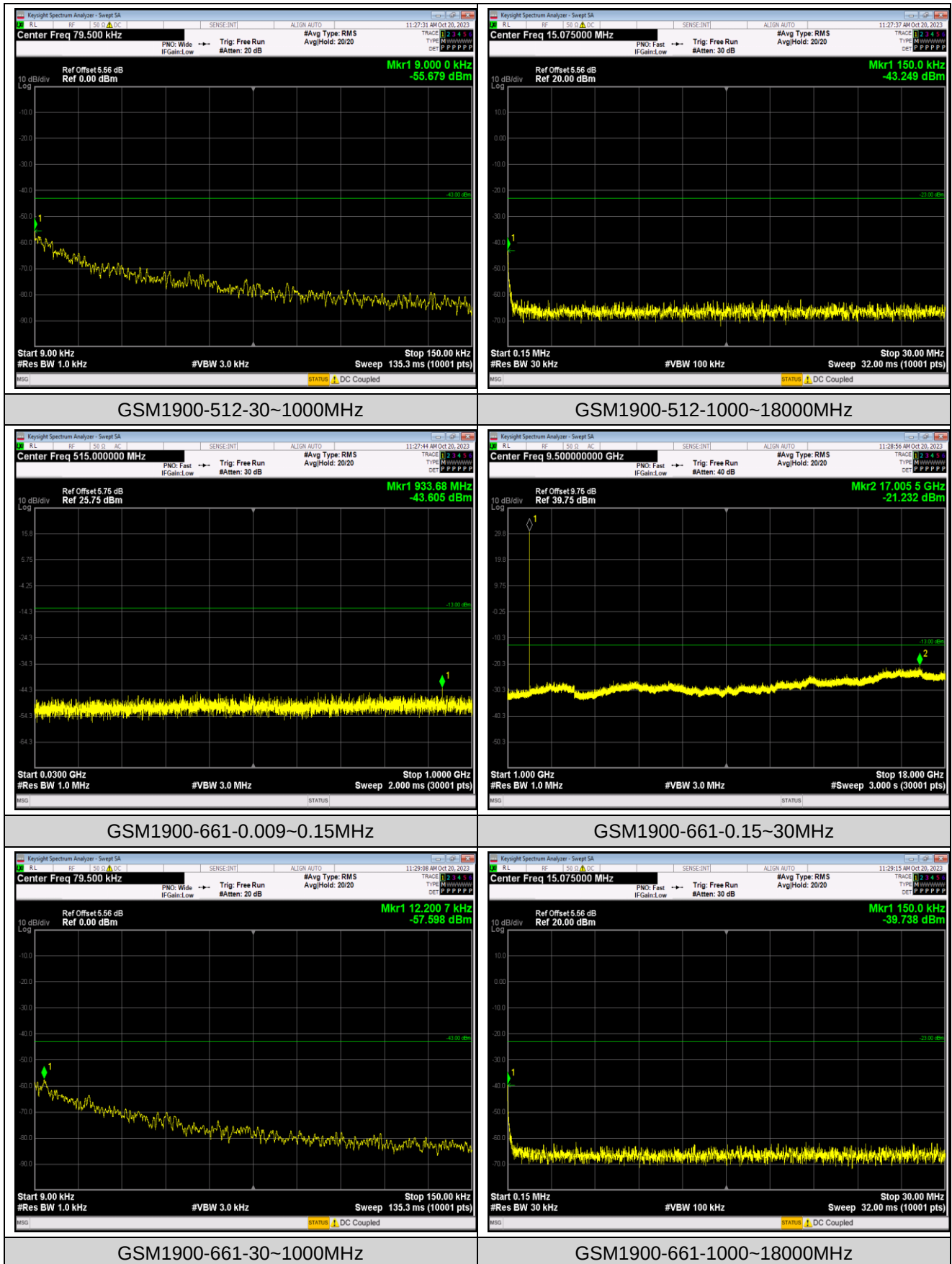
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-53.74	-33	PASS
GSM850	128	5	0.15~30MHz	0.17	-43.44	-13	PASS
GSM850	128	5	30~1000MHz	535.31	-44.26	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-30.03	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-55.12	-33	PASS
GSM850	190	5	0.15~30MHz	0.19	-46.24	-13	PASS
GSM850	190	5	30~1000MHz	971.84	-44.28	-13	PASS
GSM850	190	5	1000~10000MHz	1673.5	-29.67	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-54.66	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-45.14	-13	PASS
GSM850	251	5	30~1000MHz	602.43	-44.49	-13	PASS
GSM850	251	5	1000~10000MHz	2546.5	-29.82	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.68	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-43.25	-23	PASS
GSM1900	512	0	30~1000MHz	933.68	-43.61	-13	PASS
GSM1900	512	0	1000~18000MHz	17005.5	-21.23	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-57.6	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-39.74	-23	PASS
GSM1900	661	0	30~1000MHz	853.17	-45.02	-13	PASS
GSM1900	661	0	1000~18000MHz	16958.47	-21.44	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-57.86	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-42.3	-23	PASS
GSM1900	810	0	30~1000MHz	785.31	-45.41	-13	PASS
GSM1900	810	0	1000~18000MHz	16326.63	-20.55	-13	PASS

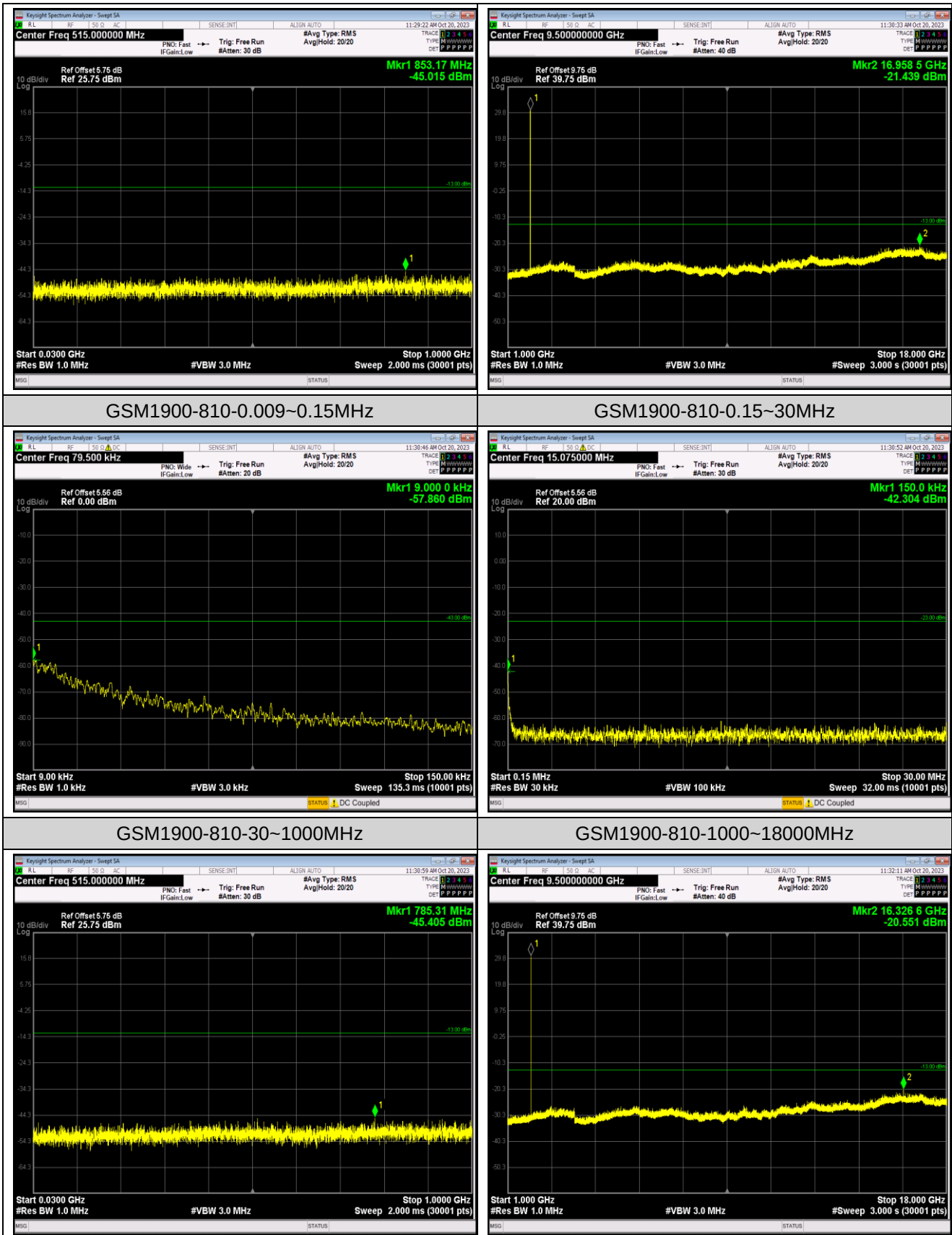
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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	11.49	0.013734	±2.5	Pass
	-20	11.33	0.013543		
	-10	12.14	0.014511		
	0	12.59	0.015049		
	10	12.98	0.015515		
	20	7.97	0.009527		
	30	13.50	0.016137		
	40	9.52	0.011379		
	50	10.11	0.012085		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	13.08	0.015635	±2.5	Pass
	3.80	11.78	0.014081		
	4.35	10.20	0.012192		
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	9.07	0.010842	±2.5	Pass
	-20	8.59	0.010268		
	-10	11.07	0.013232		
	0	5.55	0.006634		
	10	9.43	0.011272		
	20	16.34	0.019531		
	30	15.17	0.018133		
	40	15.24	0.018217		
	50	12.88	0.015396		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	7.30	0.008726	±2.5	Pass
	3.80	5.68	0.006789		
	4.35	9.98	0.011929		
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	25.93	0.013793	Within authorized band for PCS 1900	Pass
	-20	30.67	0.016314		
	-10	25.44	0.013532		
	0	29.54	0.015713		
	10	32.32	0.017191		
	20	26.80	0.014255		
	30	28.83	0.015335		
	40	32.77	0.017431		
	50	29.44	0.015660		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	33.06	0.017585	Within authorized band for PCS 1900	Pass
	3.80	24.99	0.013293		
	4.35	31.41	0.016707		
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	23.63	0.012569	Within authorized band for PCS 1900	Pass
	-20	23.41	0.012452		
	-10	28.12	0.014957		
	0	26.47	0.014080		
	10	38.03	0.020229		
	20	36.64	0.019489		
	30	39.65	0.021090		
	40	36.90	0.019628		
	50	33.84	0.018000		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	28.28	0.015043	Within authorized band for PCS 1900	Pass
	3.80	19.40	0.010319		
	4.35	27.48	0.014617		
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

