

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	32.82	28.88	38.45	PASS
GSM850	190	5	33.42	29.48	38.45	PASS
GSM850	251	5	33.27	29.33	38.45	PASS
GSM1900	512	0	30.67	31.69	33.00	PASS
GSM1900	661	0	30.14	31.16	33.00	PASS
GSM1900	810	0	29.40	30.42	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.80	28.86	38.45	PASS
GPRS850	128	5	2	31.60	27.66	38.45	PASS
GPRS850	128	5	3	29.46	25.52	38.45	PASS
GPRS850	128	5	4	28.36	24.42	38.45	PASS
GPRS850	190	5	1	33.41	29.47	38.45	PASS
GPRS850	190	5	2	32.17	28.23	38.45	PASS
GPRS850	190	5	3	30.01	26.07	38.45	PASS
GPRS850	190	5	4	28.89	24.95	38.45	PASS
GPRS850	251	5	1	33.26	29.32	38.45	PASS
GPRS850	251	5	2	32.09	28.15	38.45	PASS
GPRS850	251	5	3	29.92	25.98	38.45	PASS
GPRS850	251	5	4	28.80	24.86	38.45	PASS
GPRS1900	512	0	1	30.65	31.67	33.00	PASS
GPRS1900	512	0	2	29.03	30.79	33.00	PASS
GPRS1900	512	0	3	27.38	28.90	33.00	PASS
GPRS1900	512	0	4	26.02	27.84	33.00	PASS
GPRS1900	661	0	1	30.10	31.12	33.00	PASS
GPRS1900	661	0	2	29.21	30.34	33.00	PASS
GPRS1900	661	0	3	27.48	28.53	33.00	PASS
GPRS1900	661	0	4	26.11	27.46	33.00	PASS
GPRS1900	810	0	1	29.35	30.37	33.00	PASS
GPRS1900	810	0	2	28.64	29.66	33.00	PASS
GPRS1900	810	0	3	26.93	27.95	33.00	PASS
GPRS1900	810	0	4	25.92	26.94	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	25.86	21.92	38.45	PASS
EGPRS850	128	8	2	24.85	20.91	38.45	PASS
EGPRS850	128	8	3	22.81	18.87	38.45	PASS
EGPRS850	128	8	4	21.69	17.75	38.45	PASS
EGPRS850	190	8	1	26.32	22.38	38.45	PASS
EGPRS850	190	8	2	25.26	21.32	38.45	PASS
EGPRS850	190	8	3	23.30	19.36	38.45	PASS
EGPRS850	190	8	4	22.12	18.18	38.45	PASS
EGPRS850	251	8	1	26.32	22.38	38.45	PASS
EGPRS850	251	8	2	25.21	21.27	38.45	PASS
EGPRS850	251	8	3	23.25	19.31	38.45	PASS
EGPRS850	251	8	4	22.04	18.10	38.45	PASS
EGPRS1900	512	2	1	26.28	27.30	33.00	PASS
EGPRS1900	512	2	2	25.26	26.28	33.00	PASS
EGPRS1900	512	2	3	23.21	24.23	33.00	PASS
EGPRS1900	512	2	4	22.08	23.10	33.00	PASS
EGPRS1900	661	2	1	26.04	27.06	33.00	PASS
EGPRS1900	661	2	2	25.12	26.14	33.00	PASS
EGPRS1900	661	2	3	23.02	24.04	33.00	PASS
EGPRS1900	661	2	4	21.88	22.90	33.00	PASS
EGPRS1900	810	2	1	25.38	26.40	33.00	PASS
EGPRS1900	810	2	2	24.26	25.28	33.00	PASS
EGPRS1900	810	2	3	22.25	23.27	33.00	PASS
EGPRS1900	810	2	4	21.05	22.07	33.00	PASS

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

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

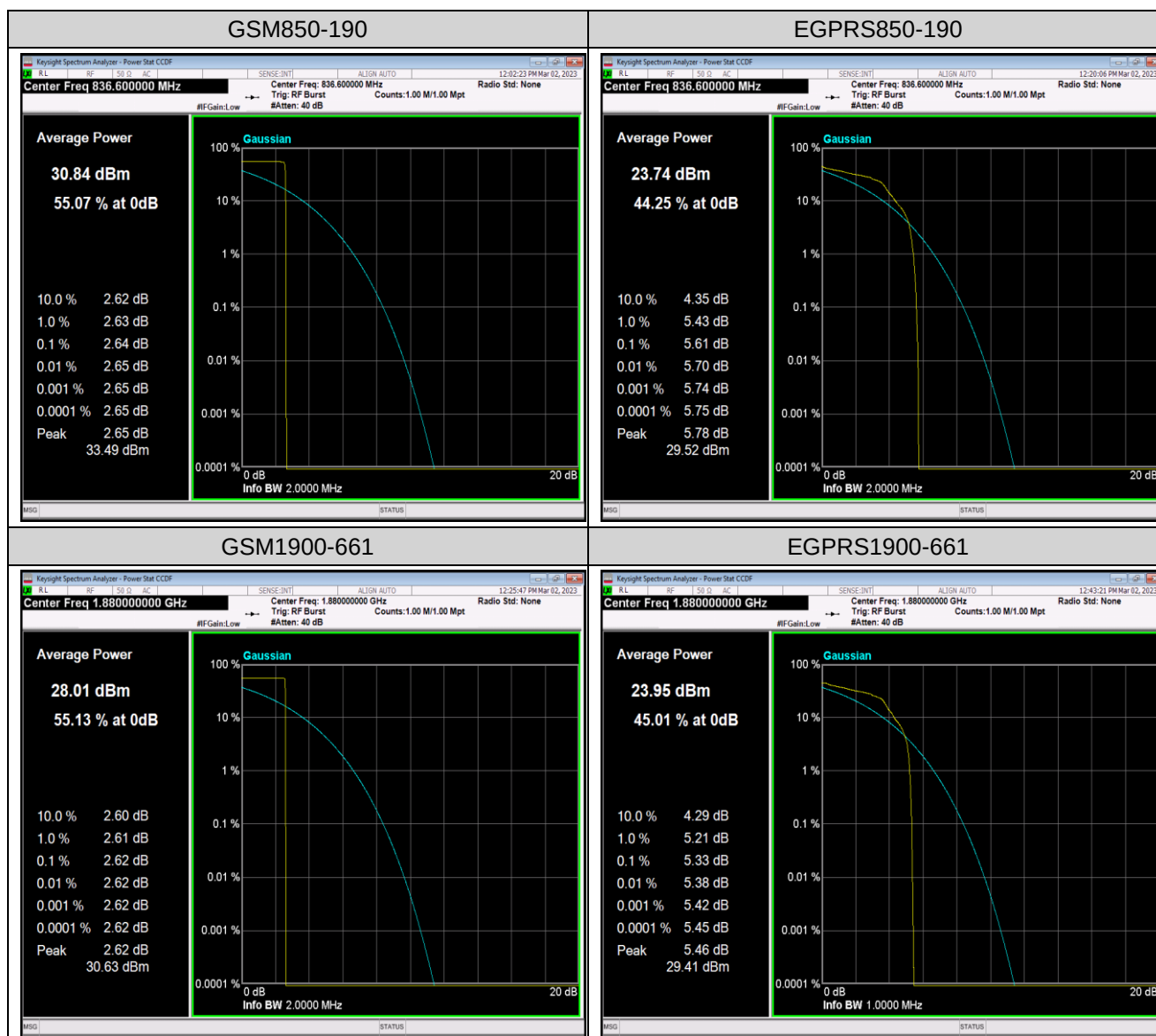
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.64	13	PASS
EGPRS850	190	8	5.61	13	PASS
GSM1900	661	0	2.62	13	PASS
EGPRS1900	661	2	5.33	13	PASS

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

Test Graphs

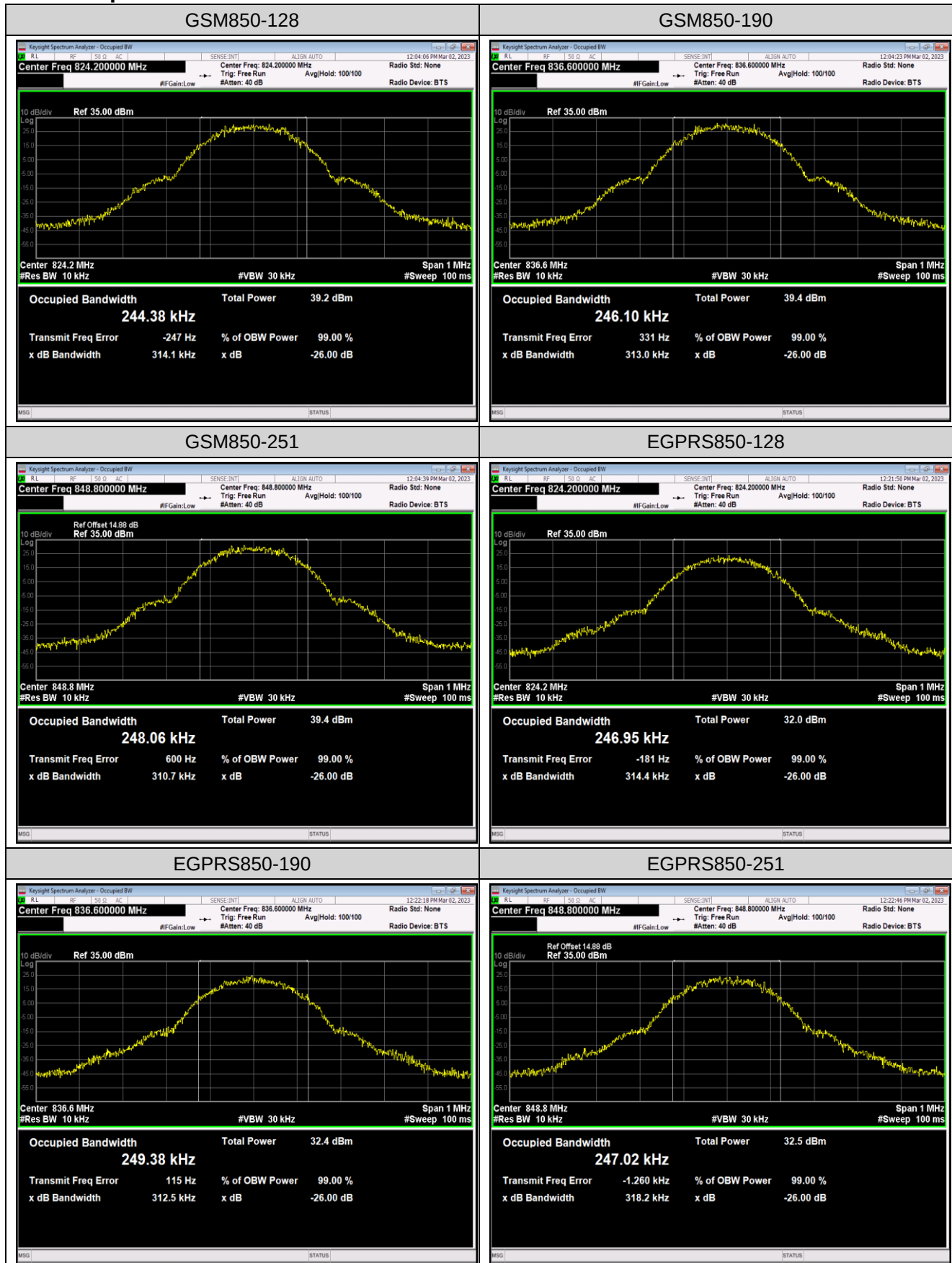


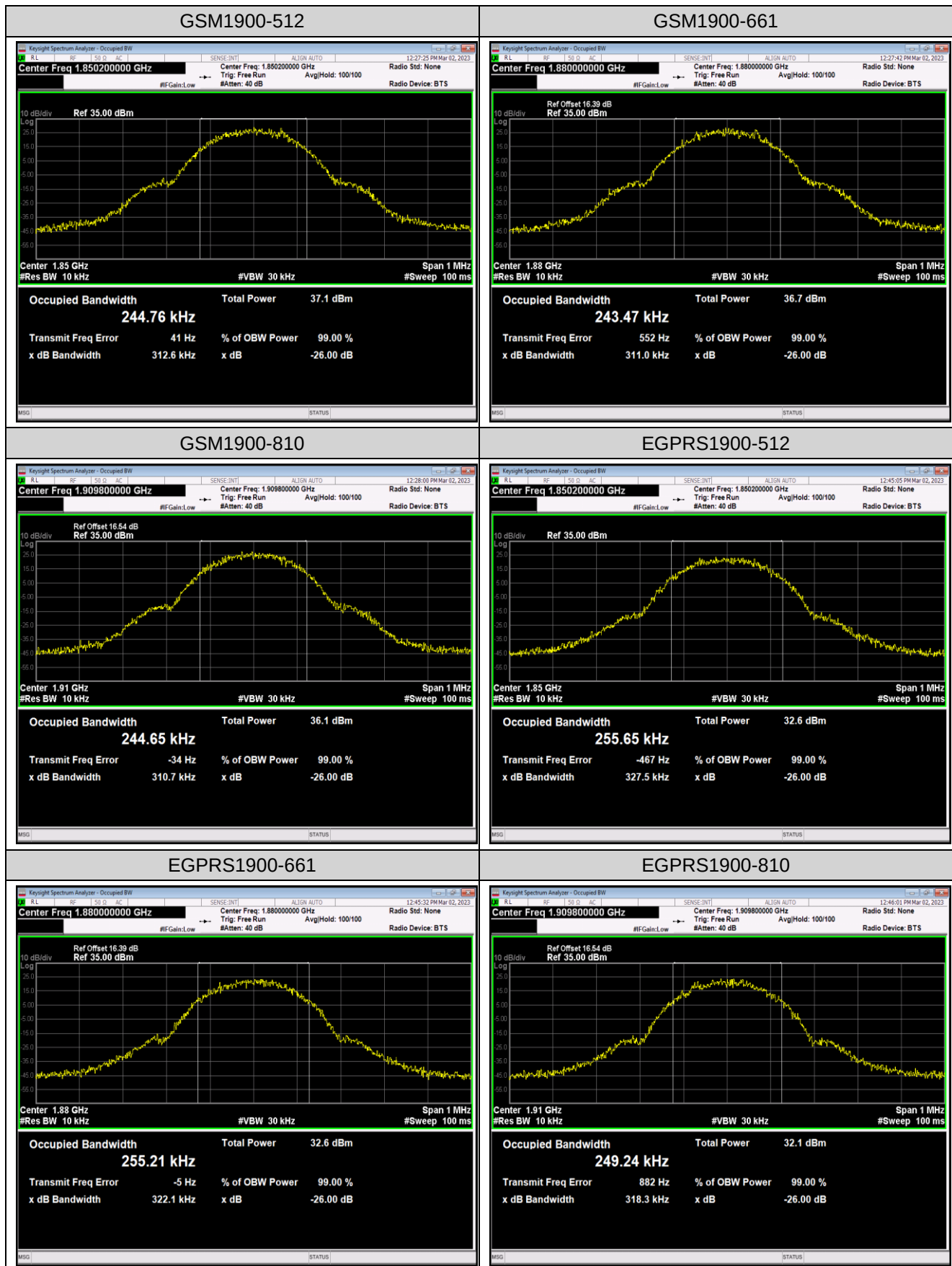
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24438	0.3141	---	PASS
GSM850	190	5	0.24610	0.3130	---	PASS
GSM850	251	5	0.24806	0.3107	---	PASS
EGPRS850	128	8	0.24695	0.3144	---	PASS
EGPRS850	190	8	0.24938	0.3125	---	PASS
EGPRS850	251	8	0.24702	0.3182	---	PASS
GSM1900	512	0	0.24476	0.3126	---	PASS
GSM1900	661	0	0.24347	0.3110	---	PASS
GSM1900	810	0	0.24465	0.3107	---	PASS
EGPRS1900	512	2	0.25565	0.3275	---	PASS
EGPRS1900	661	2	0.25521	0.3221	---	PASS
EGPRS1900	810	2	0.24924	0.3183	---	PASS

Test Graphs



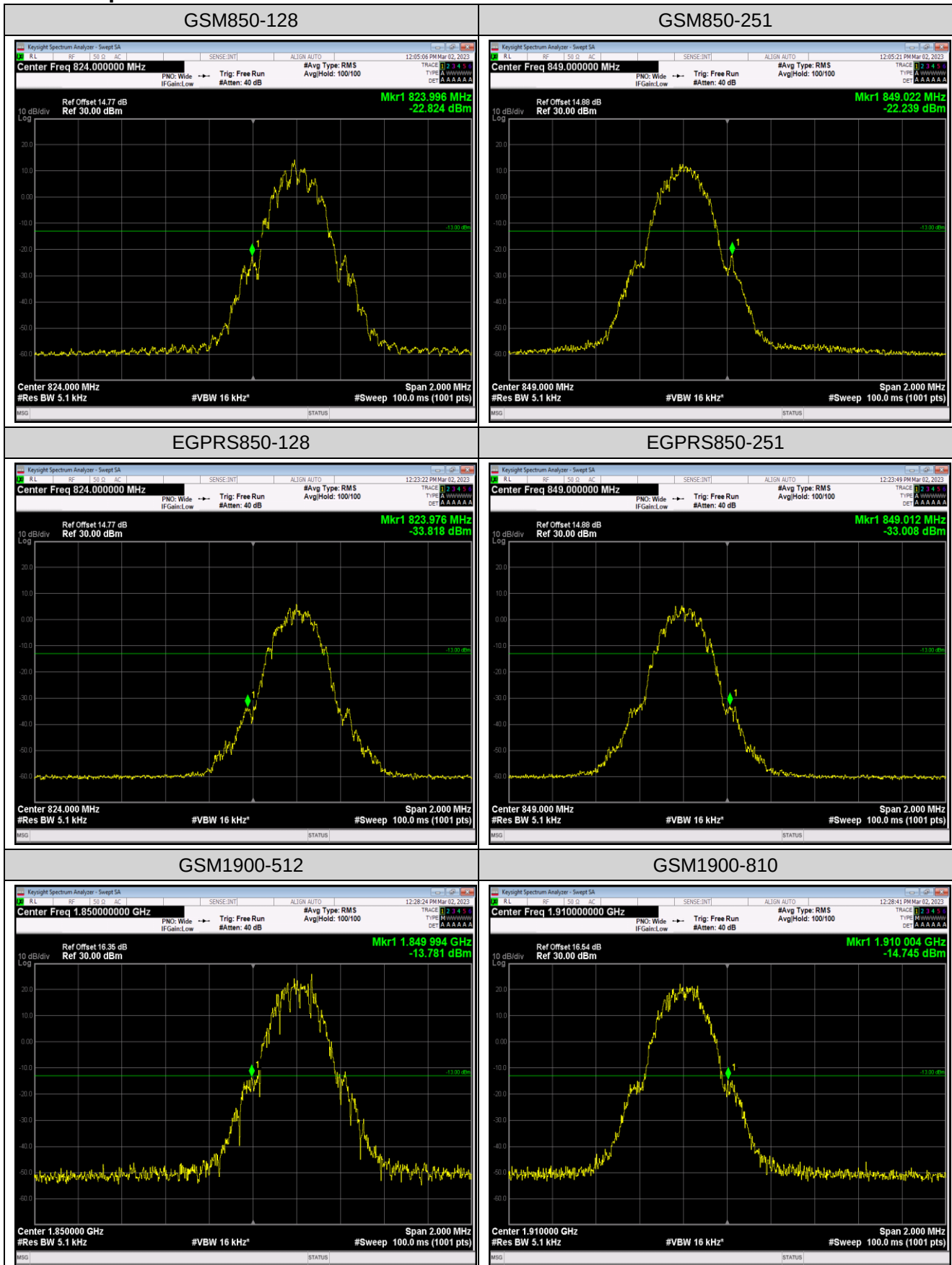


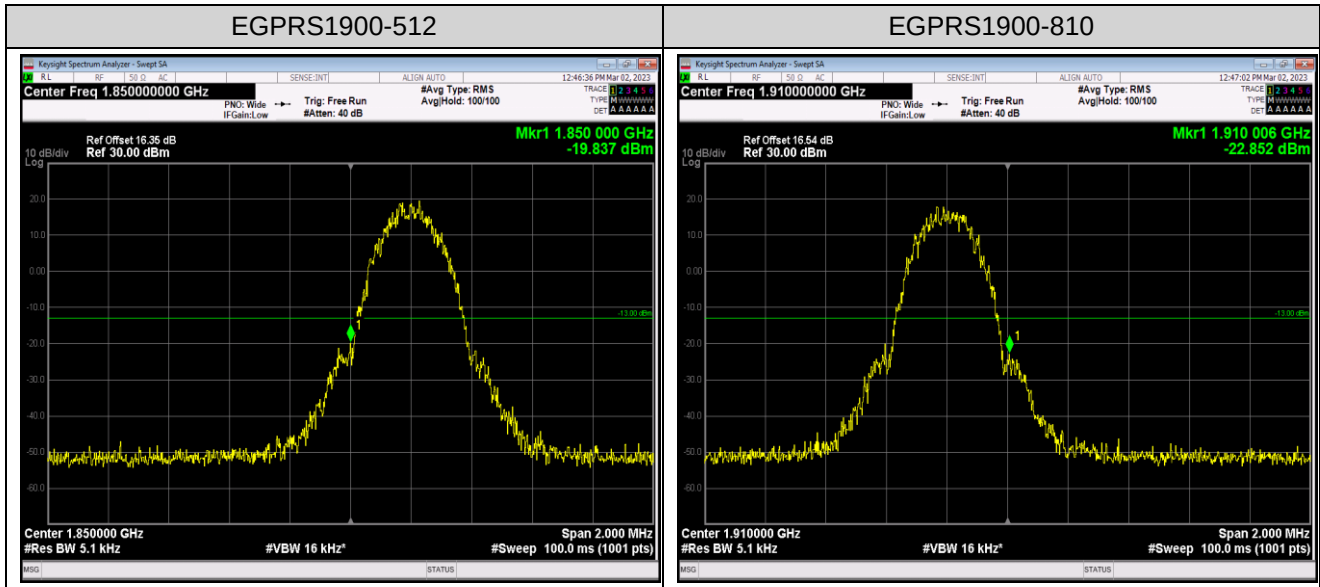
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-22.82	-13	PASS
GSM850	251	5	849.02	-22.24	-13	PASS
EGPRS850	128	8	823.98	-33.82	-13	PASS
EGPRS850	251	8	849.01	-33.01	-13	PASS
GSM1900	512	0	1849.99	-13.78	-13	PASS
GSM1900	810	0	1910.00	-14.74	-13	PASS
EGPRS1900	512	2	1850.00	-19.84	-13	PASS
EGPRS1900	810	2	1910.01	-22.85	-13	PASS

Test Graphs





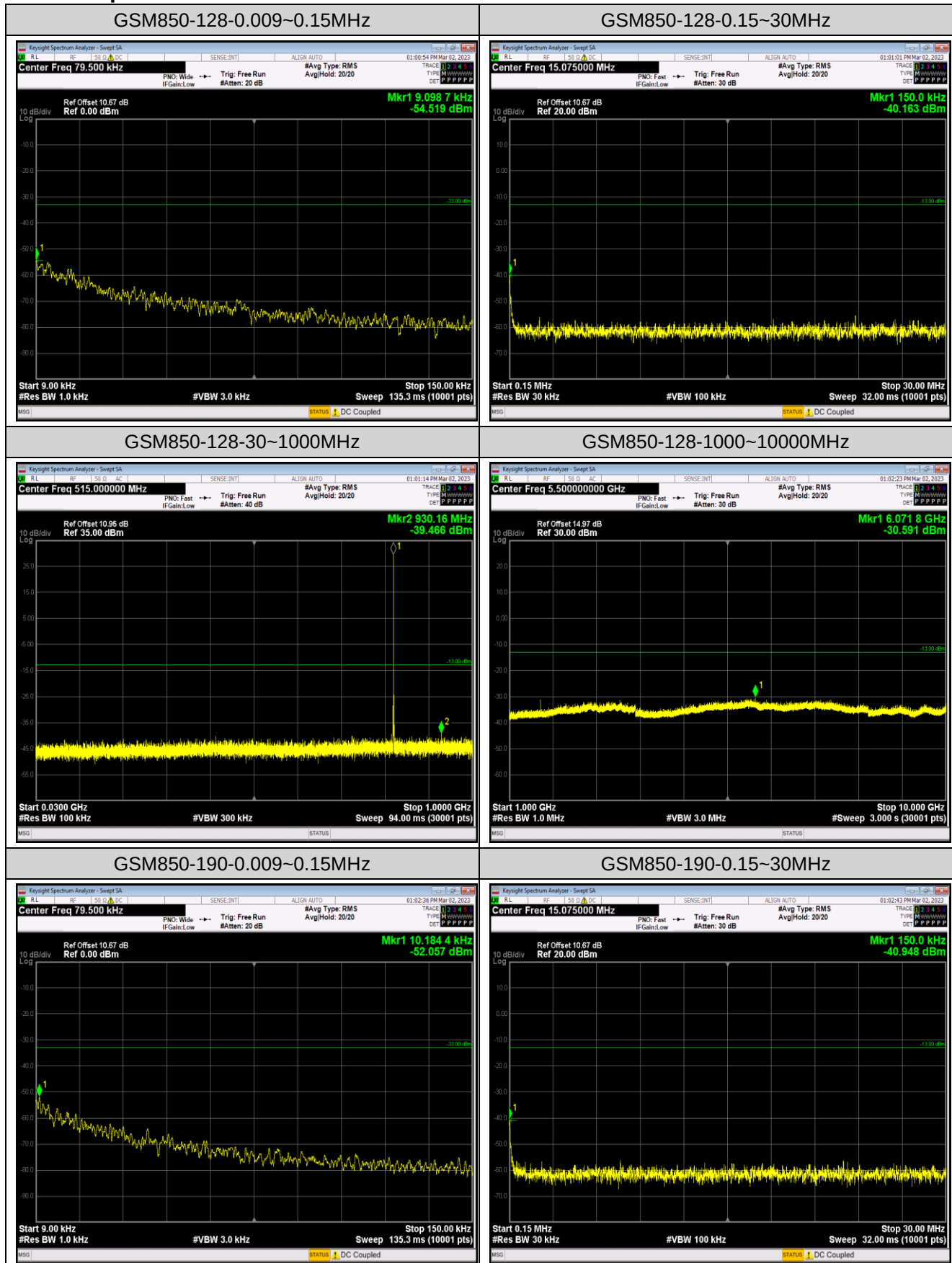
Appendix E: Conducted Spurious Emission

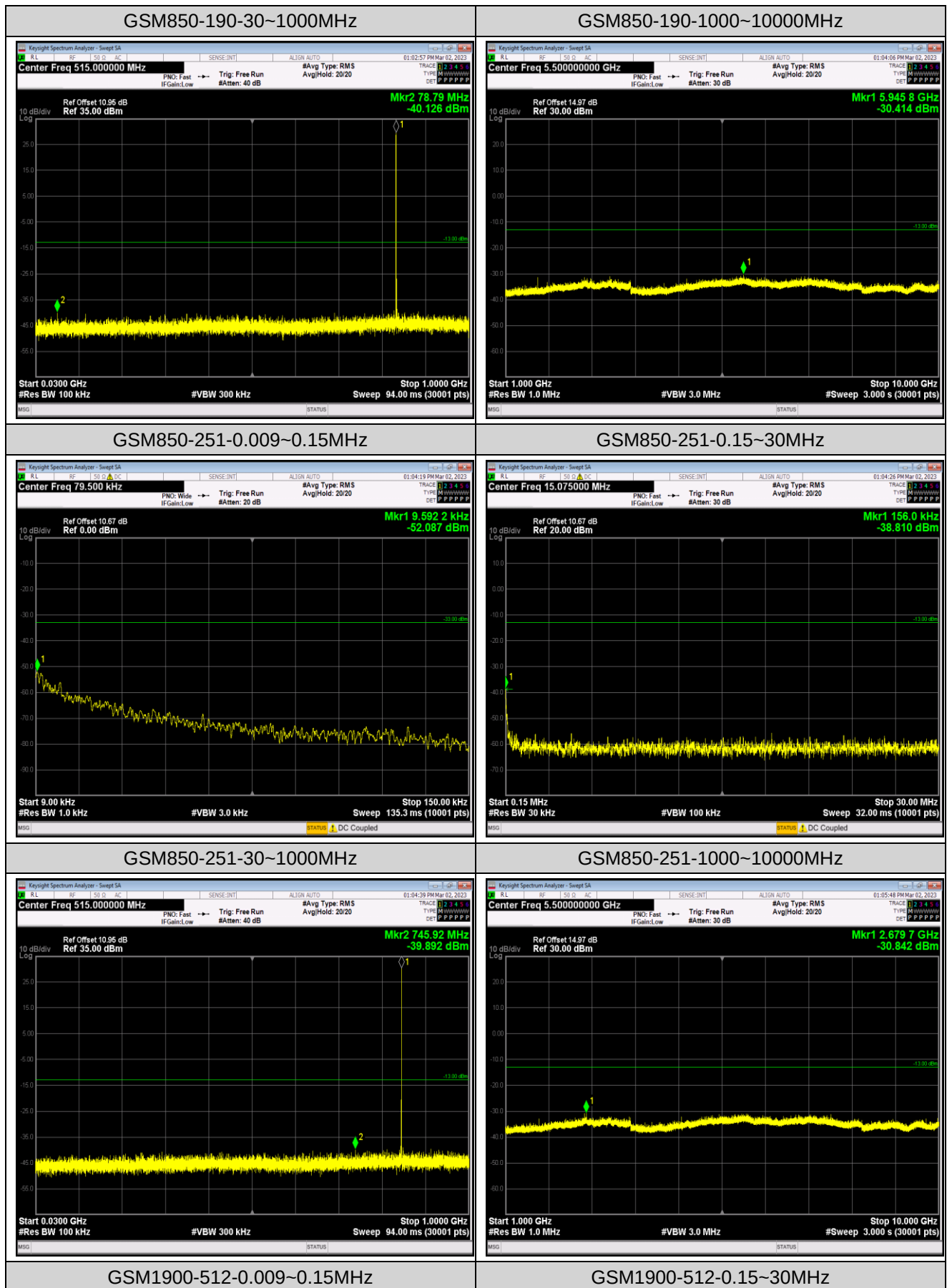
Test Result

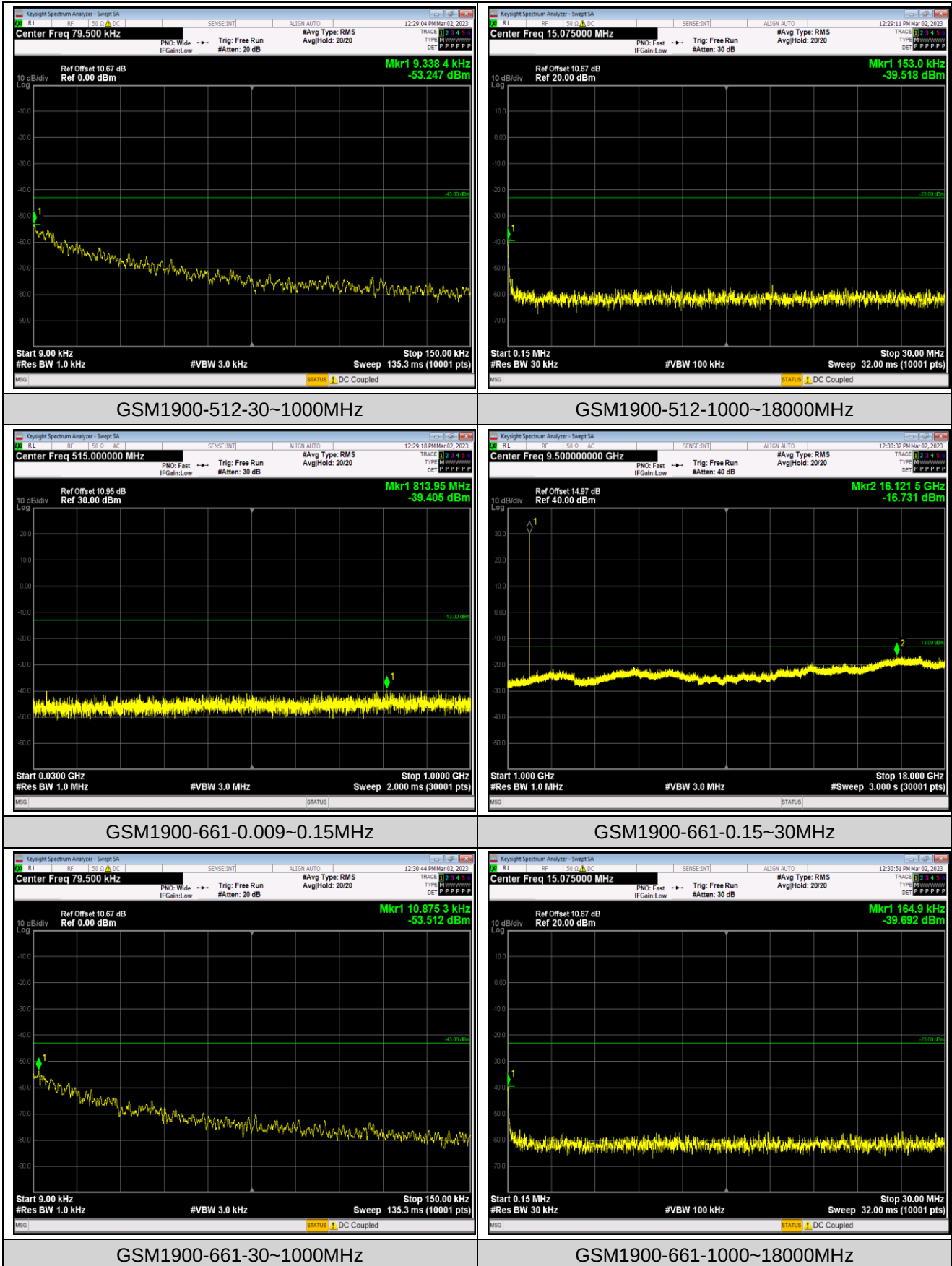
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-54.52	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-40.16	-13	PASS
GSM850	128	5	30~1000MHz	930.16	-39.47	-13	PASS
GSM850	128	5	1000~10000MHz	6071.8	-30.59	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-52.06	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-40.95	-13	PASS
GSM850	190	5	30~1000MHz	78.79	-40.13	-13	PASS
GSM850	190	5	1000~10000MHz	5945.8	-30.41	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-52.09	-33	PASS
GSM850	251	5	0.15~30MHz	0.16	-38.81	-13	PASS
GSM850	251	5	30~1000MHz	745.92	-39.89	-13	PASS
GSM850	251	5	1000~10000MHz	2679.7	-30.84	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-53.25	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-39.52	-23	PASS
GSM1900	512	0	30~1000MHz	813.95	-39.41	-13	PASS
GSM1900	512	0	1000~18000MHz	16121.5	-16.73	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-53.51	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-39.69	-23	PASS
GSM1900	661	0	30~1000MHz	957.19	-39.88	-13	PASS
GSM1900	661	0	1000~18000MHz	16981.7	-15.9	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-53.01	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-41.19	-23	PASS
GSM1900	810	0	30~1000MHz	972.71	-40.13	-13	PASS
GSM1900	810	0	1000~18000MHz	16128.87	-16.47	-13	PASS

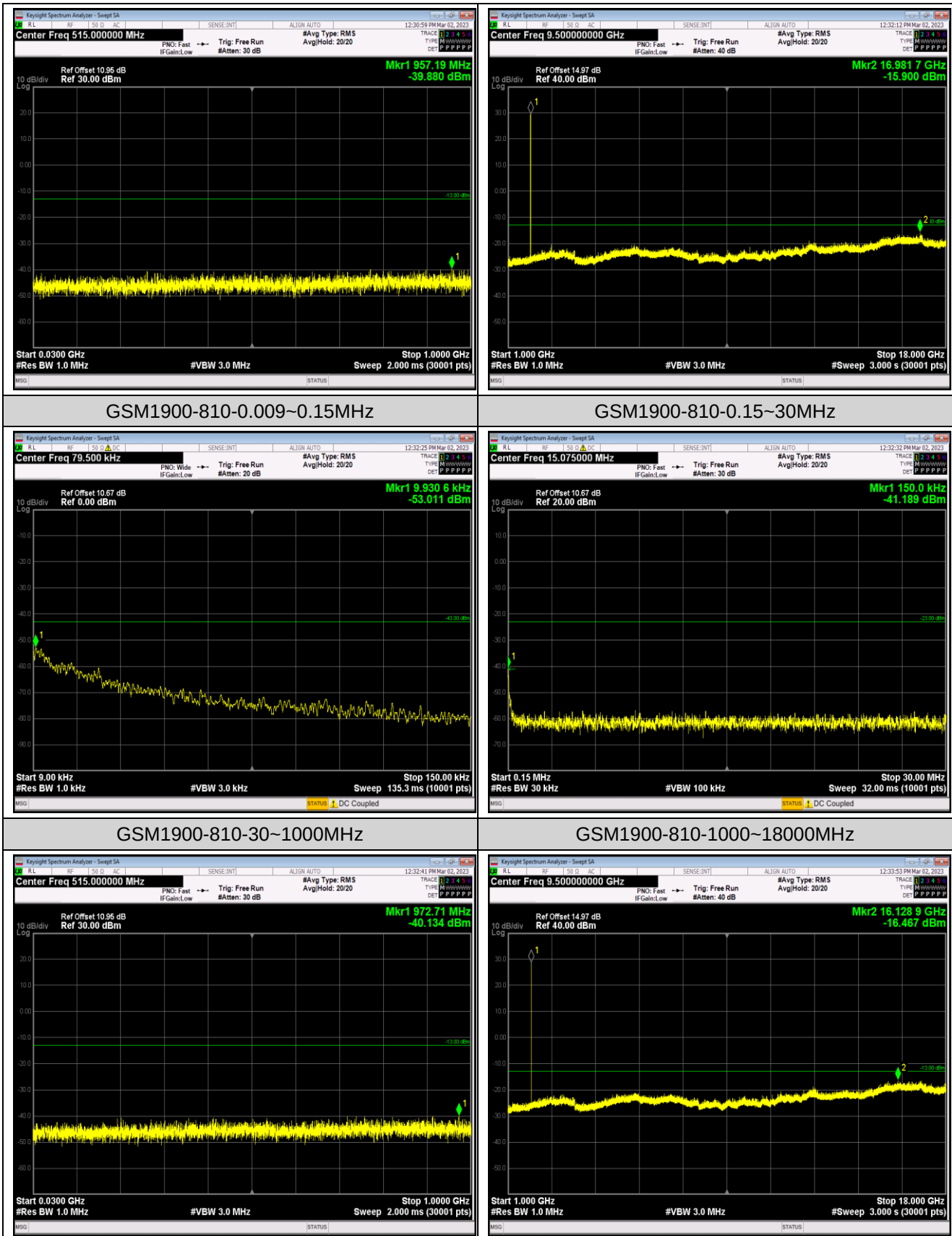
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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	-4.26	-0.005092	±2.5	Pass
	-20	-5.36	-0.006407		
	-10	-8.07	-0.009646		
	0	-7.46	-0.008917		
	10	-4.97	-0.005941		
	20	-7.65	-0.009144		
	30	-8.23	-0.009837		
	40	-6.13	-0.007327		
	50	-4.91	-0.005869		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	-2.87	-0.003431	±2.5	Pass
	3.80	-7.20	-0.008606		
	4.35	-3.65	-0.004363		
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	-3.26	-0.003897	±2.5	Pass
	-20	-3.52	-0.004208		
	-10	-3.20	-0.003825		
	0	0.68	0.000813		
	10	2.29	0.002737		
	20	0.26	0.000311		
	30	-1.87	-0.002235		
	40	-1.10	-0.001315		
	50	1.81	0.002164		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	-2.00	-0.002391	±2.5	Pass
	3.80	-2.84	-0.003395		
	4.35	-1.03	-0.001231		
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	14.46	0.007691	Within authorized band for PCS 1900	Pass
	-20	6.75	0.003590		
	-10	9.78	0.005202		
	0	14.43	0.007676		
	10	13.46	0.007160		
	20	8.49	0.004516		
	30	7.91	0.004207		
	40	10.20	0.005426		
	50	9.98	0.005309		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	11.75	0.006250	Within authorized band for PCS 1900	Pass
	3.80	11.46	0.006096		
	4.35	18.11	0.009633		
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	13.27	0.007059	Within authorized band for PCS 1900	Pass
	-20	12.62	0.006713		
	-10	15.43	0.008207		
	0	11.69	0.006218		
	10	10.20	0.005426		
	20	18.47	0.009824		
	30	21.99	0.011697		
	40	18.27	0.009718		
	50	21.66	0.011521		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	14.50	0.007713	Within authorized band for PCS 1900	Pass
	3.80	15.11	0.008037		
	4.35	10.46	0.005564		
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

