

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	33.41	26.1	38.45	PASS
GSM850	190	5	33.53	26.22	38.45	PASS
GSM850	251	5	33.52	26.21	38.45	PASS
GSM1900	512	0	29.73	28.33	33.00	PASS
GSM1900	661	0	29.92	28.52	33.00	PASS
GSM1900	810	0	29.69	28.29	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.42	26.11	38.45	PASS
GPRS850	128	5	2	32.45	25.14	38.45	PASS
GPRS850	128	5	3	30.44	23.13	38.45	PASS
GPRS850	128	5	4	29.37	22.06	38.45	PASS
GPRS850	190	5	1	33.53	26.22	38.45	PASS
GPRS850	190	5	2	32.56	25.25	38.45	PASS
GPRS850	190	5	3	30.55	23.24	38.45	PASS
GPRS850	190	5	4	29.50	22.19	38.45	PASS
GPRS850	251	5	1	33.60	26.29	38.45	PASS
GPRS850	251	5	2	32.63	25.32	38.45	PASS
GPRS850	251	5	3	30.63	23.32	38.45	PASS
GPRS850	251	5	4	29.54	22.23	38.45	PASS
GPRS1900	512	0	1	29.73	28.33	33.00	PASS
GPRS1900	512	0	2	28.75	27.35	33.00	PASS
GPRS1900	512	0	3	26.75	25.35	33.00	PASS
GPRS1900	512	0	4	25.64	24.24	33.00	PASS
GPRS1900	661	0	1	29.90	28.5	33.00	PASS
GPRS1900	661	0	2	28.95	27.55	33.00	PASS
GPRS1900	661	0	3	26.98	25.58	33.00	PASS
GPRS1900	661	0	4	25.90	24.5	33.00	PASS
GPRS1900	810	0	1	29.66	28.26	33.00	PASS
GPRS1900	810	0	2	28.72	27.32	33.00	PASS
GPRS1900	810	0	3	26.75	25.35	33.00	PASS
GPRS1900	810	0	4	25.72	24.32	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.38	20.07	38.45	PASS
EGPRS850	128	8	2	26.20	18.89	38.45	PASS
EGPRS850	128	8	3	23.97	16.66	38.45	PASS
EGPRS850	128	8	4	22.58	15.27	38.45	PASS
EGPRS850	190	8	1	27.42	20.11	38.45	PASS
EGPRS850	190	8	2	26.26	18.95	38.45	PASS
EGPRS850	190	8	3	23.99	16.68	38.45	PASS
EGPRS850	190	8	4	22.66	15.35	38.45	PASS
EGPRS850	251	8	1	27.33	20.02	38.45	PASS
EGPRS850	251	8	2	26.15	18.84	38.45	PASS
EGPRS850	251	8	3	23.88	16.57	38.45	PASS
EGPRS850	251	8	4	22.55	15.24	38.45	PASS
EGPRS1900	512	2	1	26.06	24.66	33.00	PASS
EGPRS1900	512	2	2	25.01	23.61	33.00	PASS
EGPRS1900	512	2	3	23.04	21.64	33.00	PASS
EGPRS1900	512	2	4	22.00	20.6	33.00	PASS
EGPRS1900	661	2	1	25.93	24.53	33.00	PASS
EGPRS1900	661	2	2	24.91	23.51	33.00	PASS
EGPRS1900	661	2	3	22.91	21.51	33.00	PASS
EGPRS1900	661	2	4	21.89	20.49	33.00	PASS
EGPRS1900	810	2	1	25.89	24.49	33.00	PASS
EGPRS1900	810	2	2	24.88	23.48	33.00	PASS
EGPRS1900	810	2	3	22.89	21.49	33.00	PASS
EGPRS1900	810	2	4	21.78	20.38	33.00	PASS

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

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

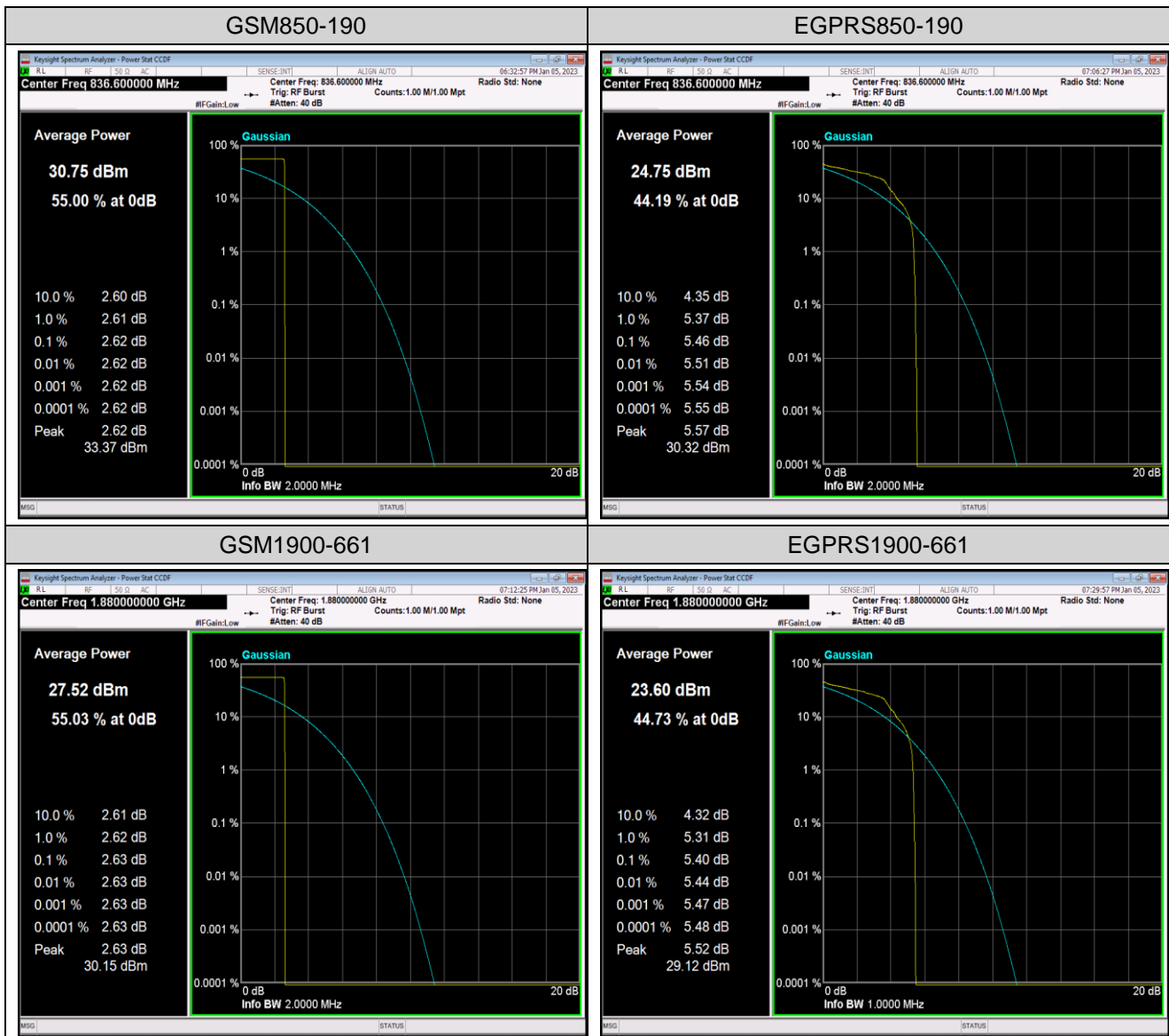
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.62	13	PASS
EGPRS850	190	8	5.46	13	PASS
GSM1900	661	0	2.63	13	PASS
EGPRS1900	661	2	5.4	13	PASS

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

Test Graphs

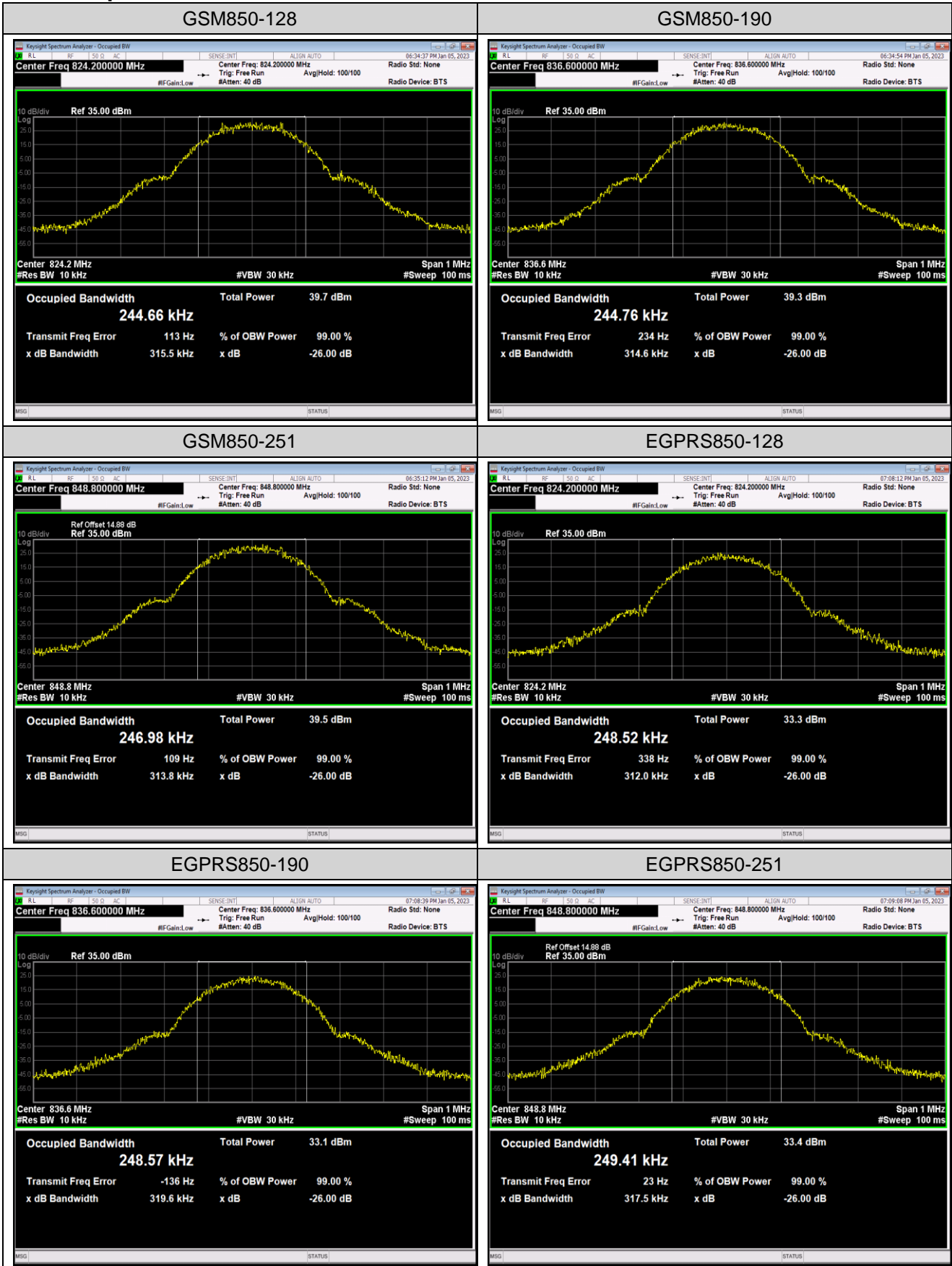


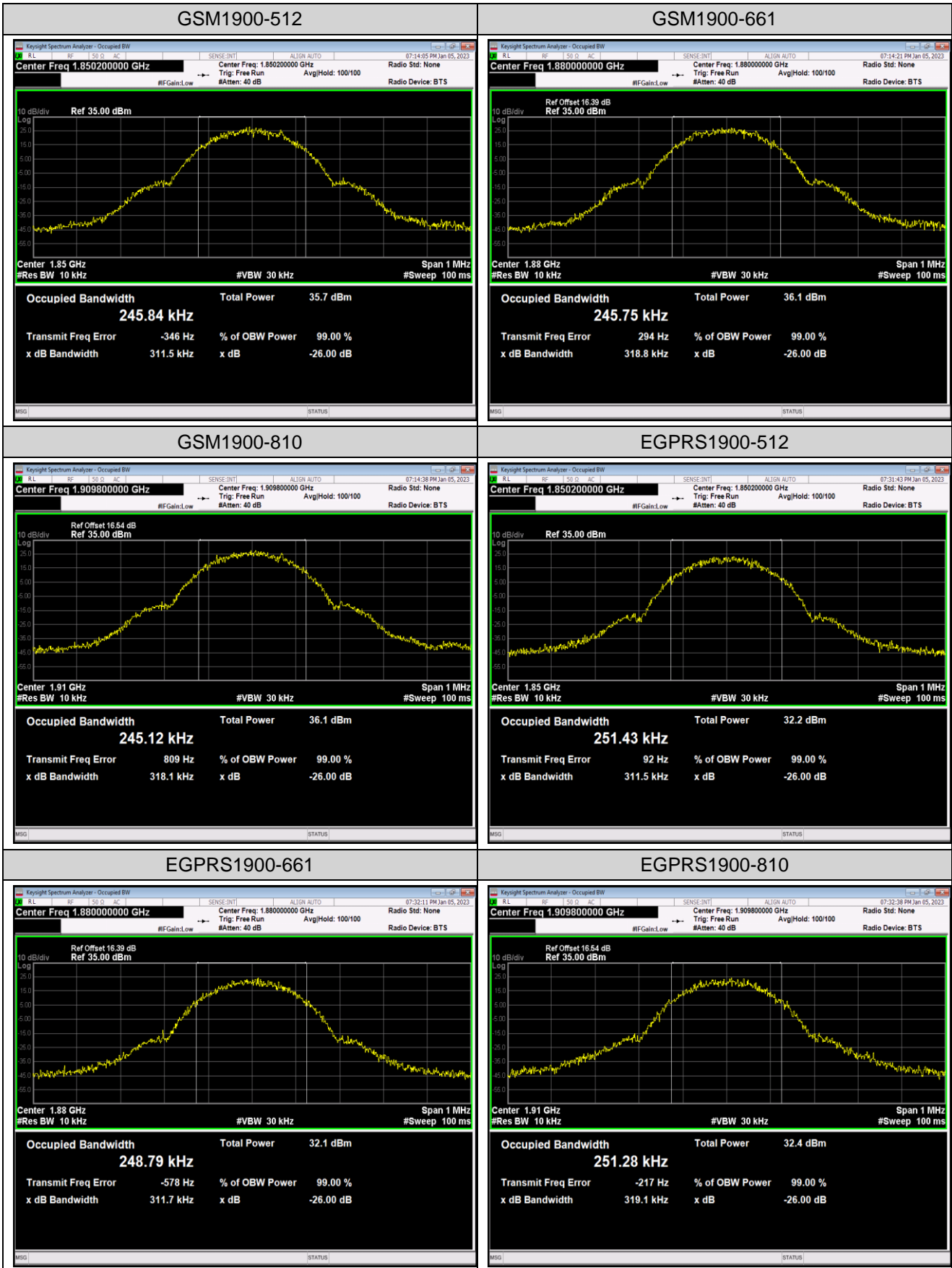
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24466	0.3155	---	PASS
GSM850	190	5	0.24476	0.3146	---	PASS
GSM850	251	5	0.24698	0.3138	---	PASS
EGPRS850	128	8	0.24852	0.3120	---	PASS
EGPRS850	190	8	0.24857	0.3196	---	PASS
EGPRS850	251	8	0.24941	0.3175	---	PASS
GSM1900	512	0	0.24584	0.3115	---	PASS
GSM1900	661	0	0.24575	0.3188	---	PASS
GSM1900	810	0	0.24512	0.3181	---	PASS
EGPRS1900	512	2	0.25143	0.3115	---	PASS
EGPRS1900	661	2	0.24879	0.3117	---	PASS
EGPRS1900	810	2	0.25128	0.3191	---	PASS

Test Graphs



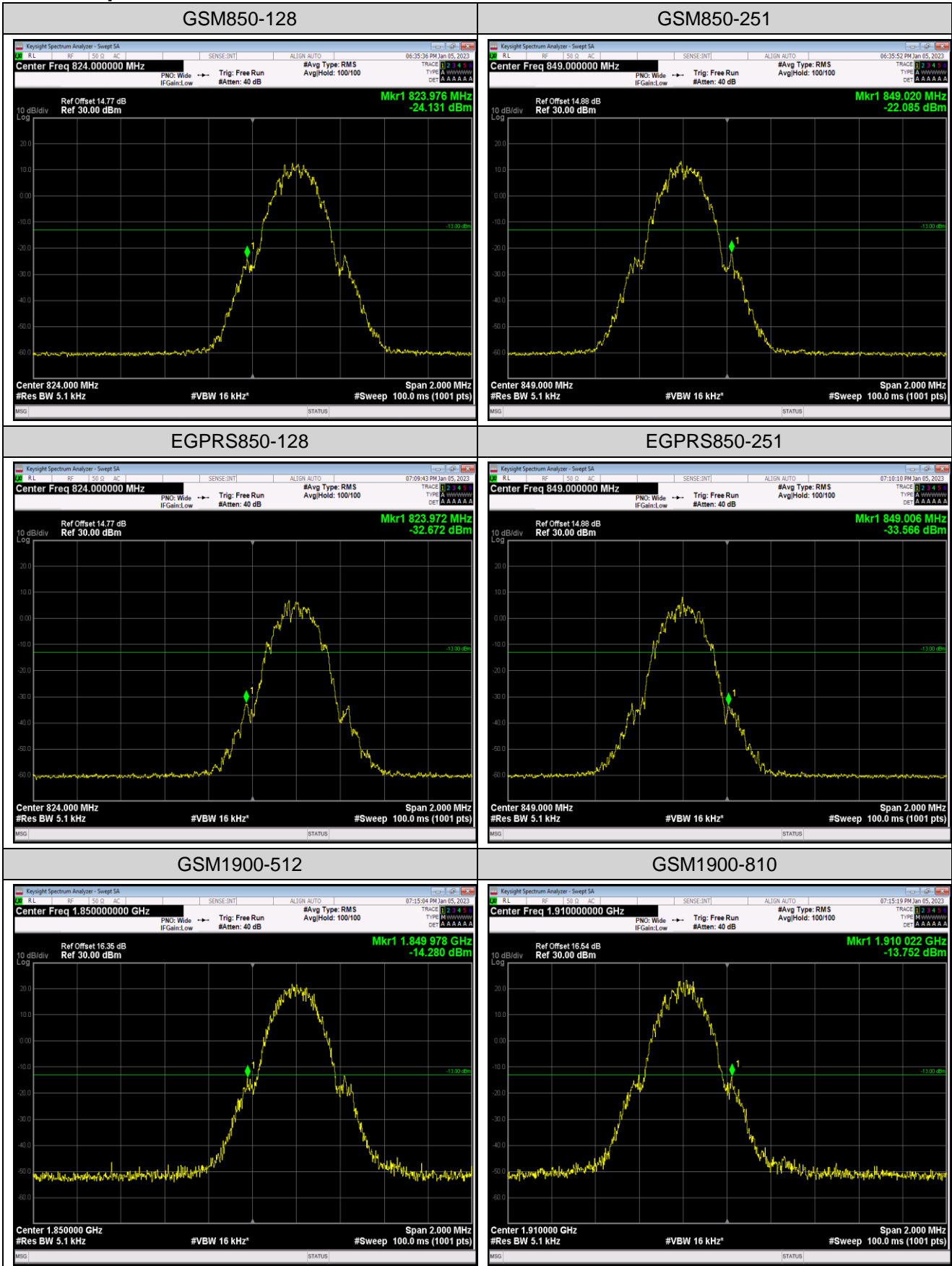


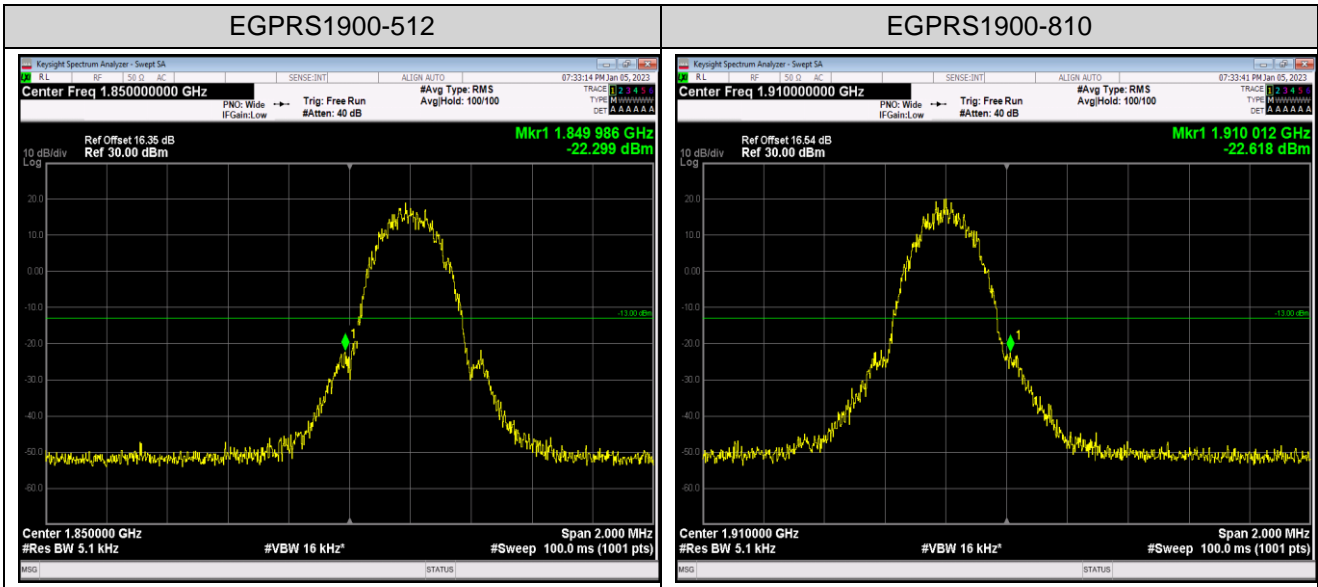
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-24.13	-13	PASS
GSM850	251	5	849.02	-22.09	-13	PASS
EGPRS850	128	8	823.97	-32.67	-13	PASS
EGPRS850	251	8	849.01	-33.57	-13	PASS
GSM1900	512	0	1849.98	-14.28	-13	PASS
GSM1900	810	0	1910.02	-13.75	-13	PASS
EGPRS1900	512	2	1849.99	-22.30	-13	PASS
EGPRS1900	810	2	1910.01	-22.62	-13	PASS

Test Graphs





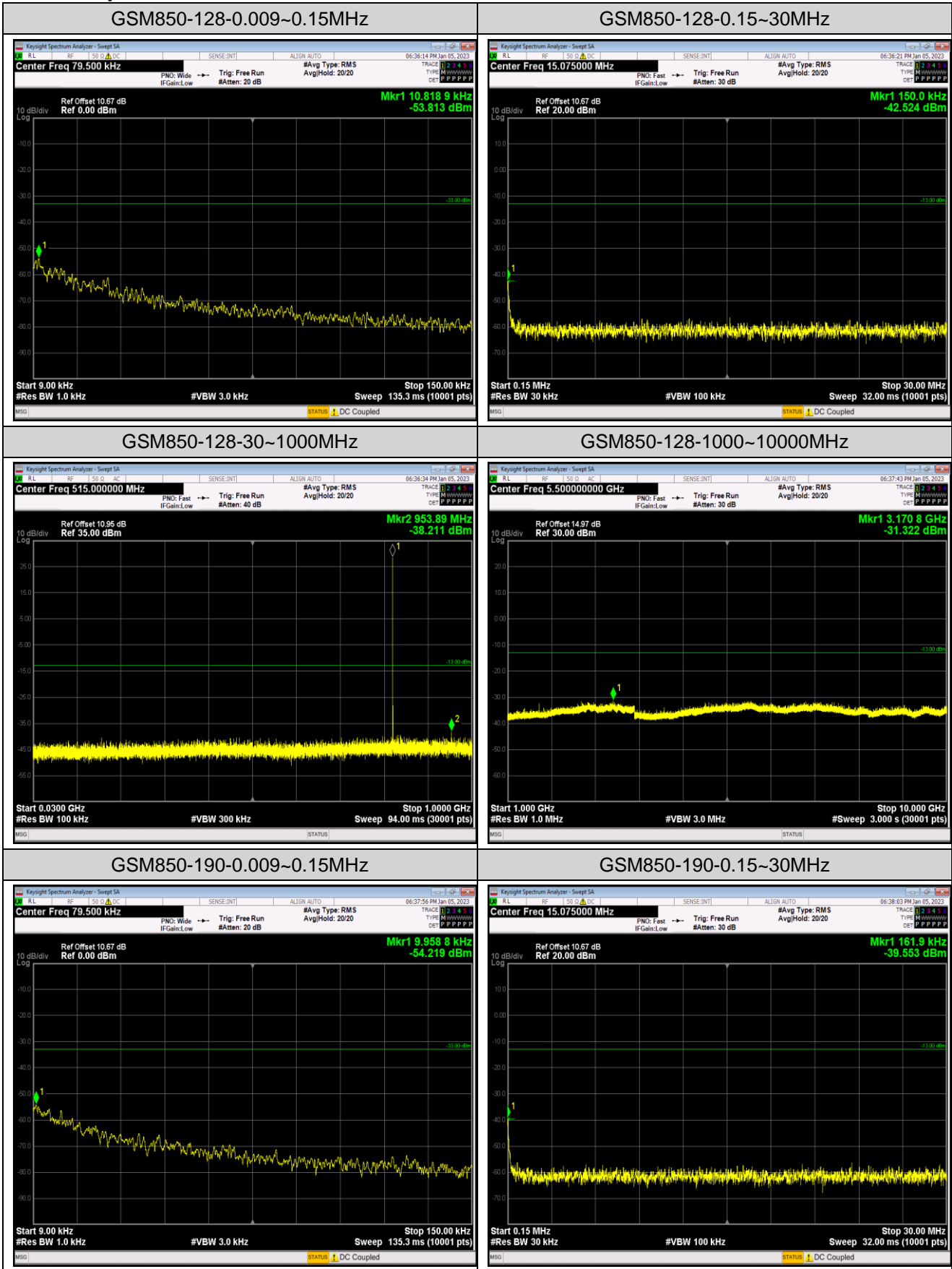
Appendix E: Conducted Spurious Emission

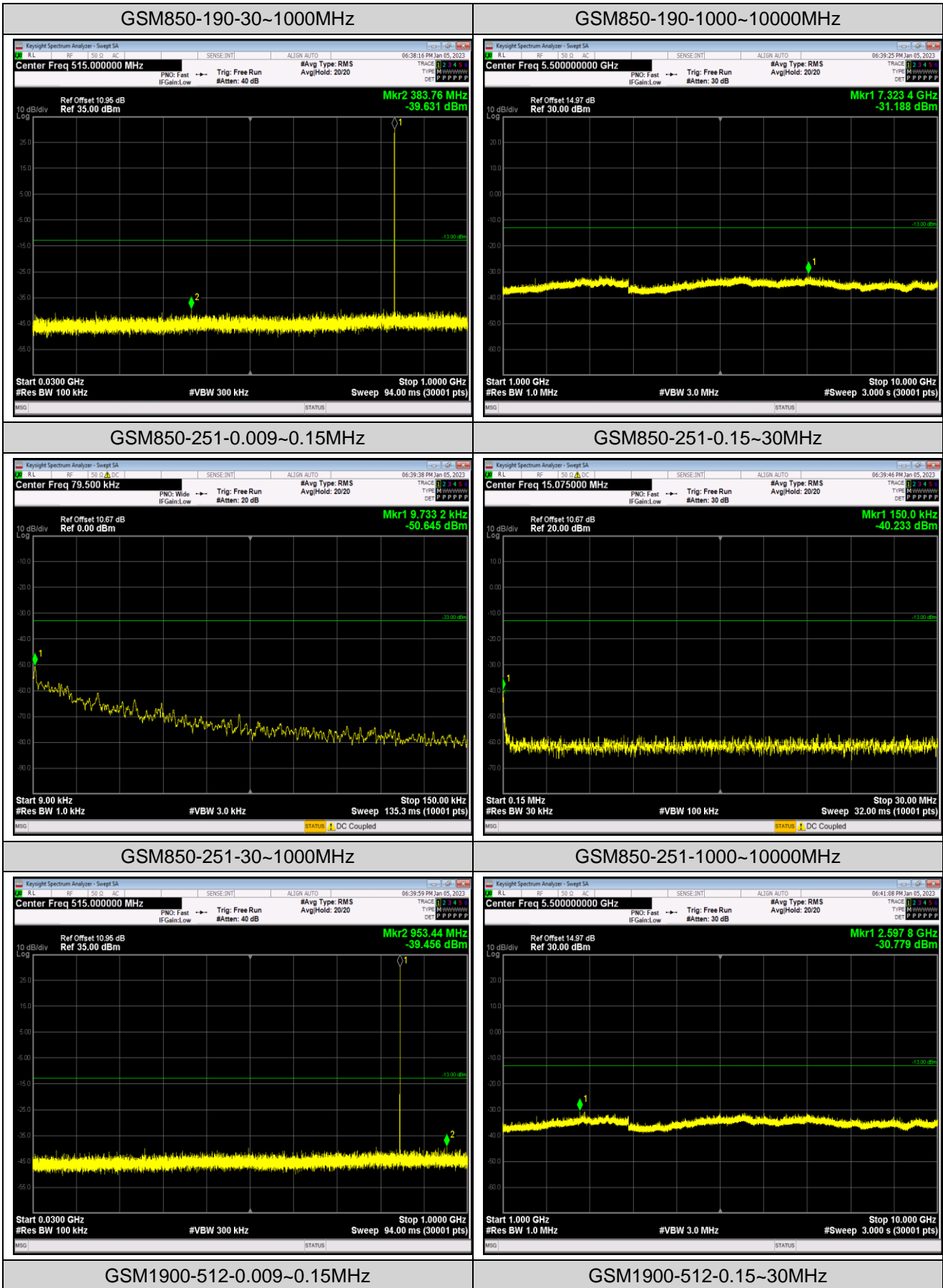
Test Result

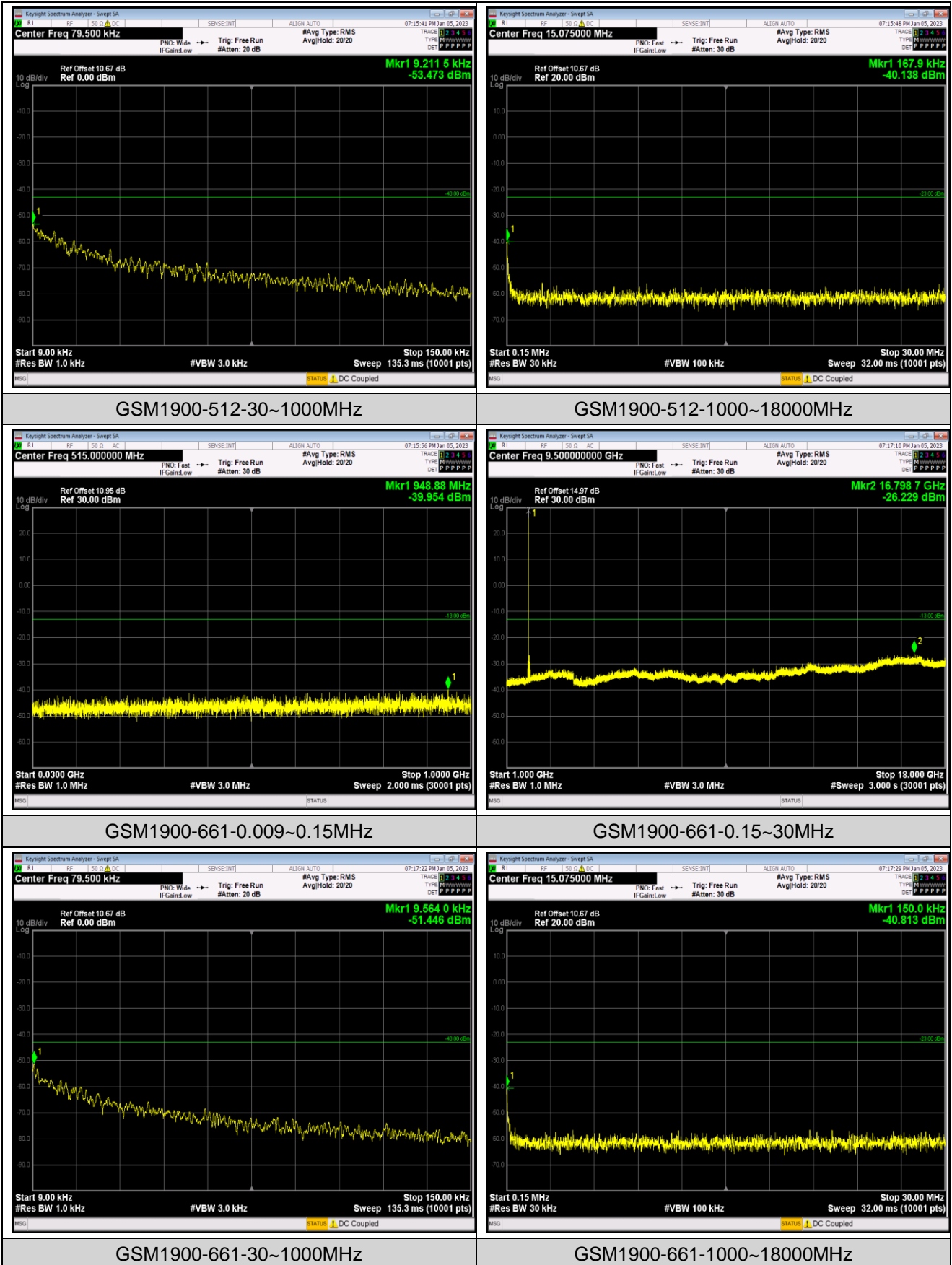
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-53.81	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-42.52	-13	PASS
GSM850	128	5	30~1000MHz	953.89	-38.21	-13	PASS
GSM850	128	5	1000~10000MHz	3170.8	-31.32	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-54.22	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-39.55	-13	PASS
GSM850	190	5	30~1000MHz	383.76	-39.63	-13	PASS
GSM850	190	5	1000~10000MHz	7323.4	-31.19	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-50.65	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-40.23	-13	PASS
GSM850	251	5	30~1000MHz	953.44	-39.46	-13	PASS
GSM850	251	5	1000~10000MHz	2597.8	-30.78	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-53.47	-43	PASS
GSM1900	512	0	0.15~30MHz	0.17	-40.14	-23	PASS
GSM1900	512	0	30~1000MHz	948.88	-39.95	-13	PASS
GSM1900	512	0	1000~18000MHz	16798.67	-26.23	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-51.45	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-40.81	-23	PASS
GSM1900	661	0	30~1000MHz	905.43	-40.26	-13	PASS
GSM1900	661	0	1000~18000MHz	17044.6	-26.1	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-52.88	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-39.52	-23	PASS
GSM1900	810	0	30~1000MHz	970.51	-40.72	-13	PASS
GSM1900	810	0	1000~18000MHz	16221.8	-25.8	-13	PASS

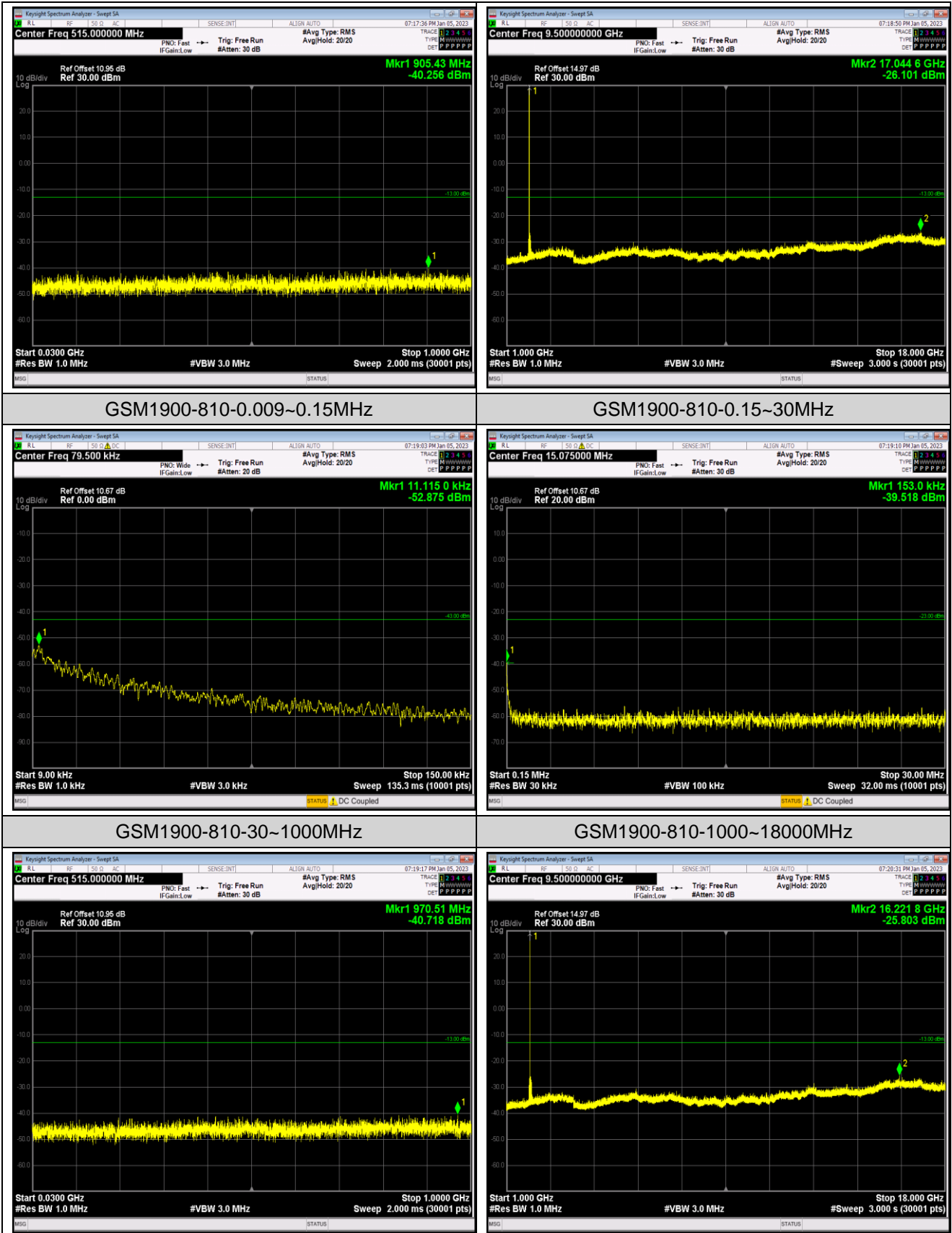
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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		
3.87	-30	12.33	0.014738	±2.5	Pass
	-20	11.01	0.013160		
	-10	10.01	0.011965		
	0	11.72	0.014009		
	10	8.65	0.010339		
	20	8.17	0.009766		
	30	8.72	0.010423		
	40	9.01	0.010770		
	50	10.14	0.012120		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.40	13.04	0.015587	±2.5	Pass
	3.87	8.04	0.009610		
	4.45	12.82	0.015324		
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		
3.87	-30	1.97	0.002355	±2.5	Pass
	-20	2.20	0.002630		
	-10	2.84	0.003395		
	0	1.61	0.001924		
	10	0.52	0.000622		
	20	4.84	0.005785		
	30	6.42	0.007674		
	40	5.91	0.007064		
	50	7.94	0.009491		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.40	3.00	0.003586	±2.5	Pass
	3.87	2.23	0.002666		
	4.45	2.16	0.002582		
<i>Remark: All channel had been tested, but only the worst case data displayed in this report.</i>					

Reference Frequency: PCS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	18.69	0.009941	Within authorized band for PCS 1900	Pass
	-20	22.37	0.011899		
	-10	25.15	0.013378		
	0	23.92	0.012723		
	10	23.92	0.012723		
	20	31.74	0.016883		
	30	25.96	0.013809		
	40	24.47	0.013016		
	50	23.73	0.012622		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.40	25.47	0.013548	Within authorized band for PCS 1900	Pass
	3.87	26.99	0.014356		
	4.45	23.83	0.012676		
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		
3.87	-30	26.70	0.014202	Within authorized band for PCS 1900	Pass
	-20	18.76	0.009979		
	-10	20.11	0.010697		
	0	20.47	0.010888		
	10	24.54	0.013053		
	20	23.47	0.012484		
	30	9.10	0.004840		
	40	19.66	0.010457		
	50	24.67	0.013122		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.40	21.28	0.011319	Within authorized band for PCS 1900	Pass
	3.87	16.98	0.009032		
	4.45	18.76	0.009979		
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

