

Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.65	31.2	38.45	PASS
GPRS850	128	5	2	31.95	30.5	38.45	PASS
GPRS850	128	5	3	30.18	28.73	38.45	PASS
GPRS850	128	5	4	29.09	27.64	38.45	PASS
GPRS850	190	5	1	32.81	31.36	38.45	PASS
GPRS850	190	5	2	32.09	30.64	38.45	PASS
GPRS850	190	5	3	30.24	28.79	38.45	PASS
GPRS850	190	5	4	29.13	27.68	38.45	PASS
GPRS850	251	5	1	32.84	31.39	38.45	PASS
GPRS850	251	5	2	32.19	30.74	38.45	PASS
GPRS850	251	5	3	30.44	28.99	38.45	PASS
GPRS850	251	5	4	29.34	27.89	38.45	PASS
GPRS1900	512	0	1	29.21	30.21	33.00	PASS
GPRS1900	512	0	2	28.28	29.28	33.00	PASS
GPRS1900	512	0	3	26.36	27.36	33.00	PASS
GPRS1900	512	0	4	25.19	26.19	33.00	PASS
GPRS1900	661	0	1	29.38	30.38	33.00	PASS
GPRS1900	661	0	2	28.49	29.49	33.00	PASS
GPRS1900	661	0	3	26.58	27.58	33.00	PASS
GPRS1900	661	0	4	25.41	26.41	33.00	PASS
GPRS1900	810	0	1	29.09	30.09	33.00	PASS
GPRS1900	810	0	2	28.19	29.19	33.00	PASS
GPRS1900	810	0	3	26.29	27.29	33.00	PASS
GPRS1900	810	0	4	25.10	26.1	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	26.74	25.29	38.45	PASS
EGPRS850	128	8	2	25.60	24.15	38.45	PASS
EGPRS850	128	8	3	23.49	22.04	38.45	PASS
EGPRS850	128	8	4	22.28	20.83	38.45	PASS
EGPRS850	190	8	1	26.83	25.38	38.45	PASS
EGPRS850	190	8	2	25.65	24.2	38.45	PASS
EGPRS850	190	8	3	23.59	22.14	38.45	PASS

EGPRS850	190	8	4	22.42	20.97	38.45	PASS
EGPRS850	251	8	1	26.81	25.36	38.45	PASS
EGPRS850	251	8	2	25.72	24.27	38.45	PASS
EGPRS850	251	8	3	23.64	22.19	38.45	PASS
EGPRS850	251	8	4	22.31	20.86	38.45	PASS
EGPRS1900	512	2	1	26.75	27.75	33.00	PASS
EGPRS1900	512	2	2	25.68	26.68	33.00	PASS
EGPRS1900	512	2	3	23.68	24.68	33.00	PASS
EGPRS1900	512	2	4	22.45	23.45	33.00	PASS
EGPRS1900	661	2	1	25.91	26.91	33.00	PASS
EGPRS1900	661	2	2	24.89	25.89	33.00	PASS
EGPRS1900	661	2	3	22.85	23.85	33.00	PASS
EGPRS1900	661	2	4	21.62	22.62	33.00	PASS
EGPRS1900	810	2	1	25.17	26.17	33.00	PASS
EGPRS1900	810	2	2	24.19	25.19	33.00	PASS
EGPRS1900	810	2	3	22.15	23.15	33.00	PASS
EGPRS1900	810	2	4	20.99	21.99	33.00	PASS

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

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

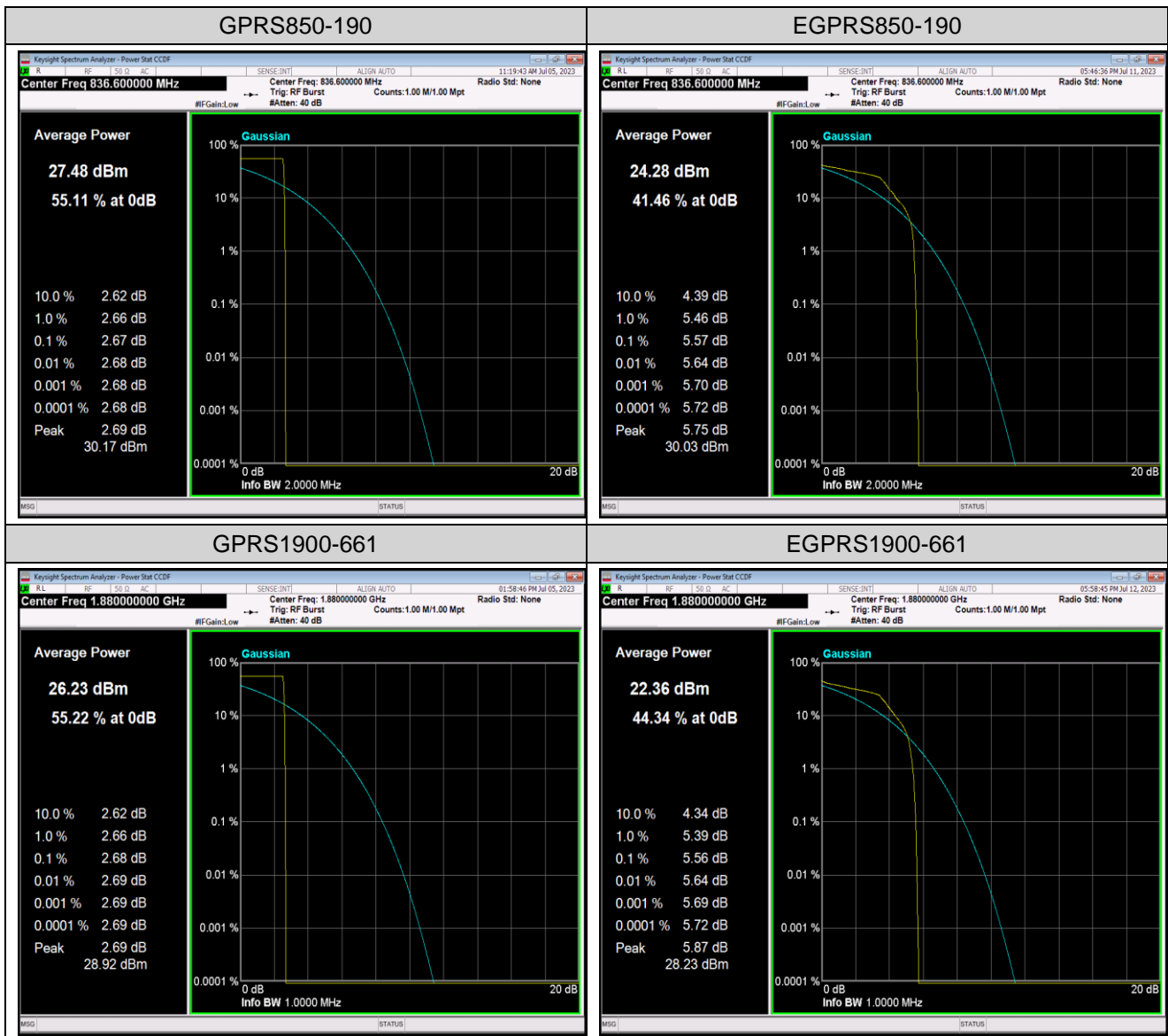
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GPRS850	190	5	2.67	13	PASS
EGPRS850	190	8	5.57	13	PASS
GPRS1900	661	0	2.68	13	PASS
EGPRS1900	661	2	5.56	13	PASS

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

Test Graphs

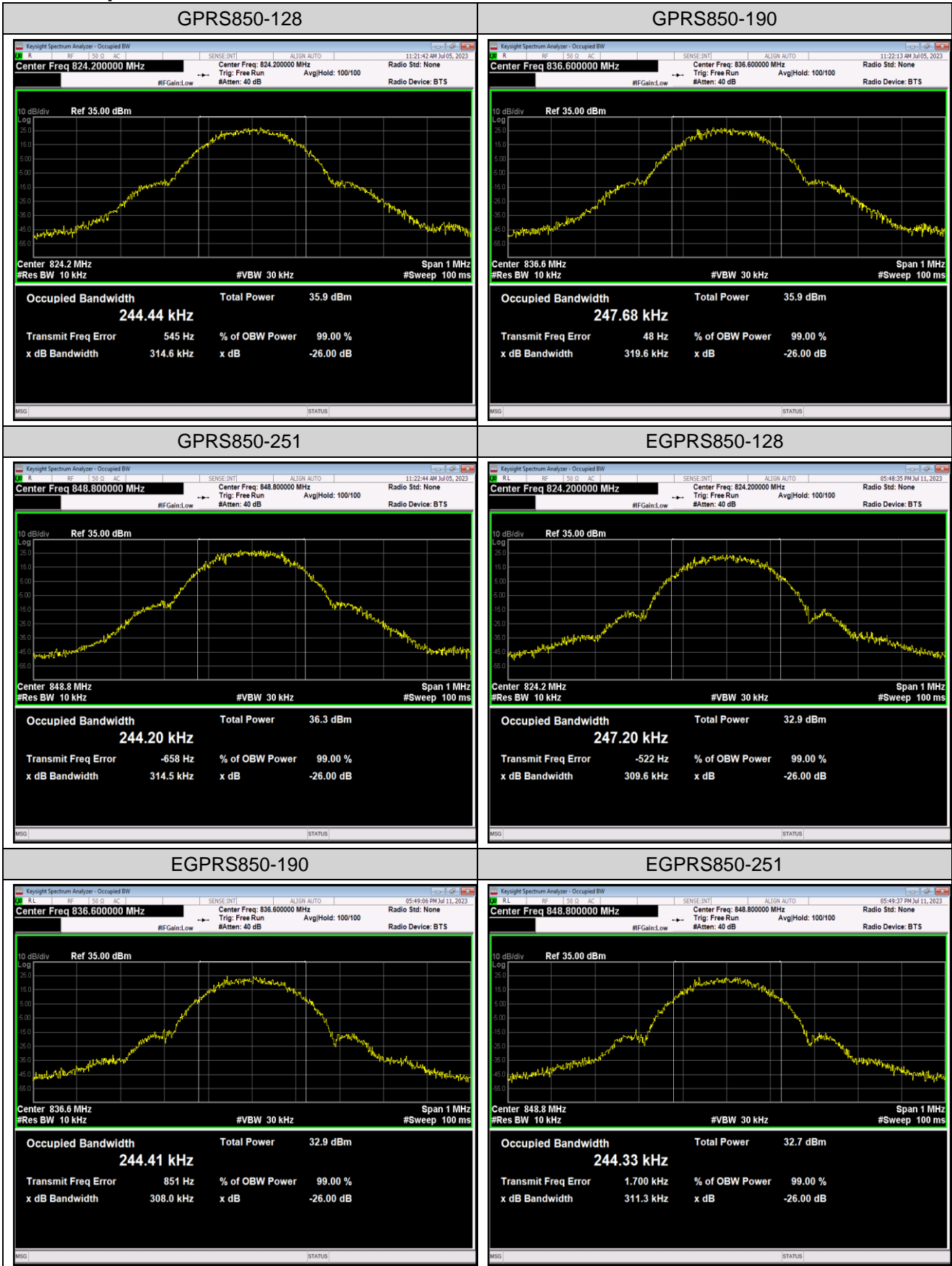


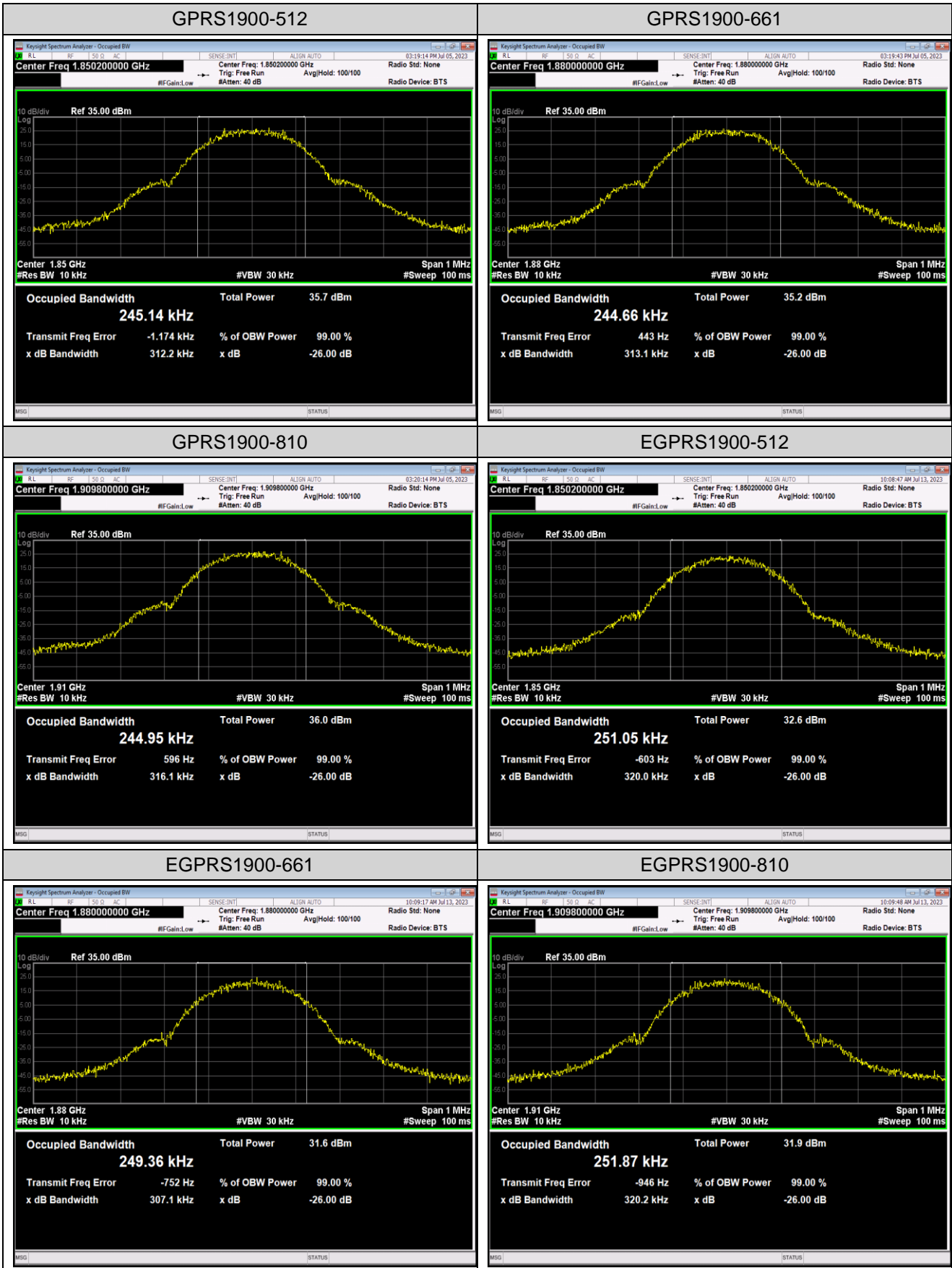
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GPRS850	128	5	0.24444	0.3146	---	PASS
GPRS850	190	5	0.24768	0.3196	---	PASS
GPRS850	251	5	0.24420	0.3145	---	PASS
EGPRS850	128	8	0.24720	0.3096	---	PASS
EGPRS850	190	8	0.24441	0.3080	---	PASS
EGPRS850	251	8	0.24433	0.3113	---	PASS
GPRS1900	512	0	0.24514	0.3122	---	PASS
GPRS1900	661	0	0.24466	0.3131	---	PASS
GPRS1900	810	0	0.24495	0.3161	---	PASS
EGPRS1900	512	2	0.25105	0.3200	---	PASS
EGPRS1900	661	2	0.24936	0.3071	---	PASS
EGPRS1900	810	2	0.25187	0.3202	---	PASS

Test Graphs

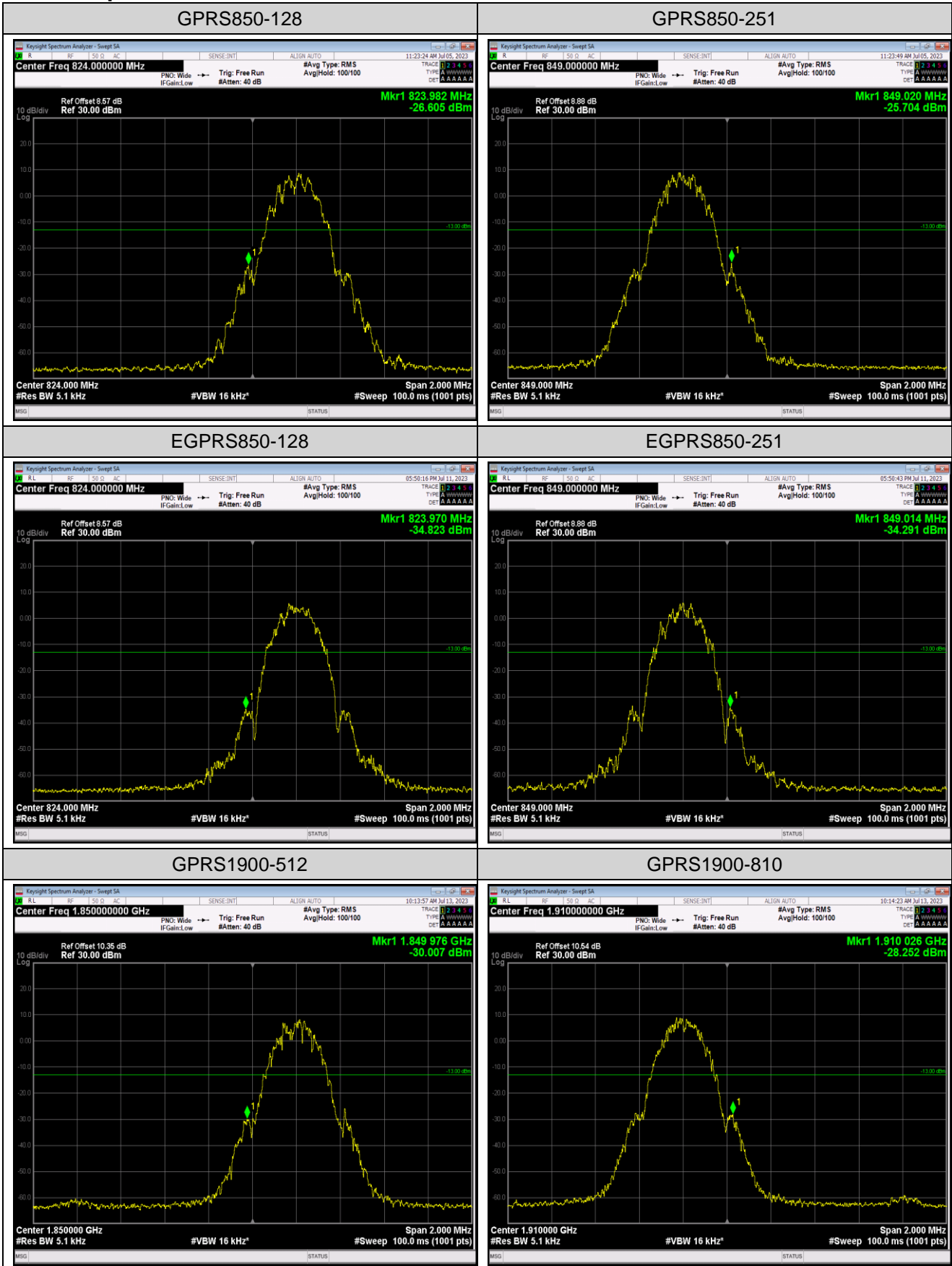


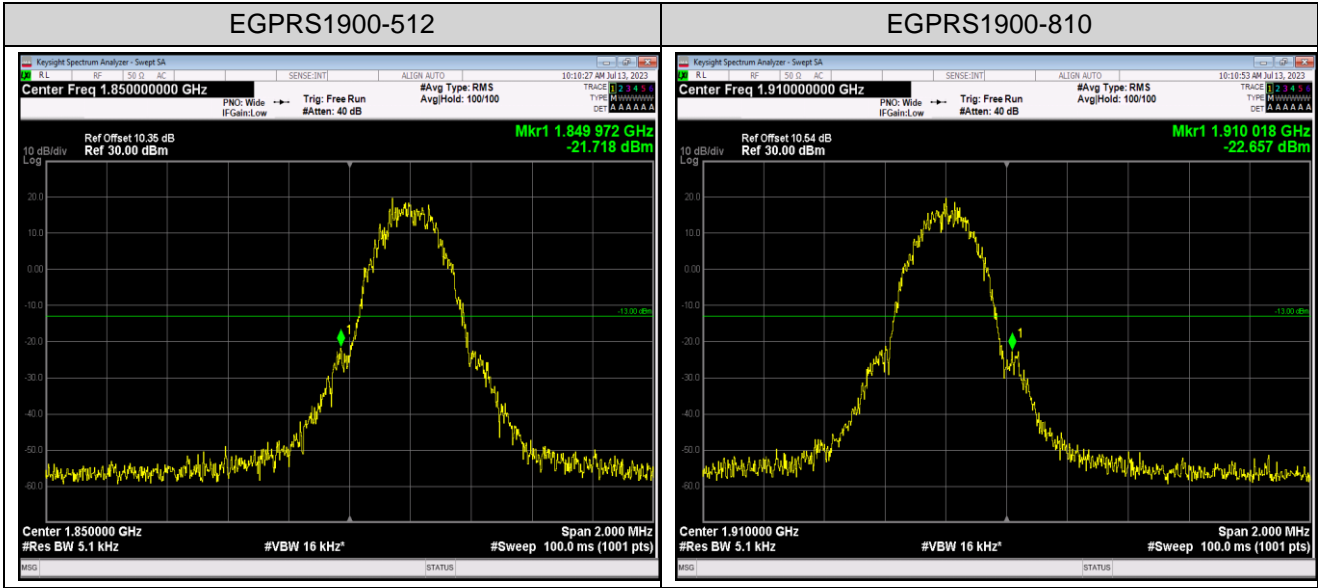


Appendix D: Band Edge**Test Result**

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GPRS850	128	5	823.98	-26.61	-13	PASS
GPRS850	251	5	849.02	-25.70	-13	PASS
EGPRS850	128	8	823.97	-34.82	-13	PASS
EGPRS850	251	8	849.01	-34.29	-13	PASS
GPRS1900	512	0	1849.98	-30.01	-13	PASS
GPRS1900	810	0	1910.03	-28.25	-13	PASS
EGPRS1900	512	2	1849.97	-21.72	-13	PASS
EGPRS1900	810	2	1910.02	-22.66	-13	PASS

Test Graphs





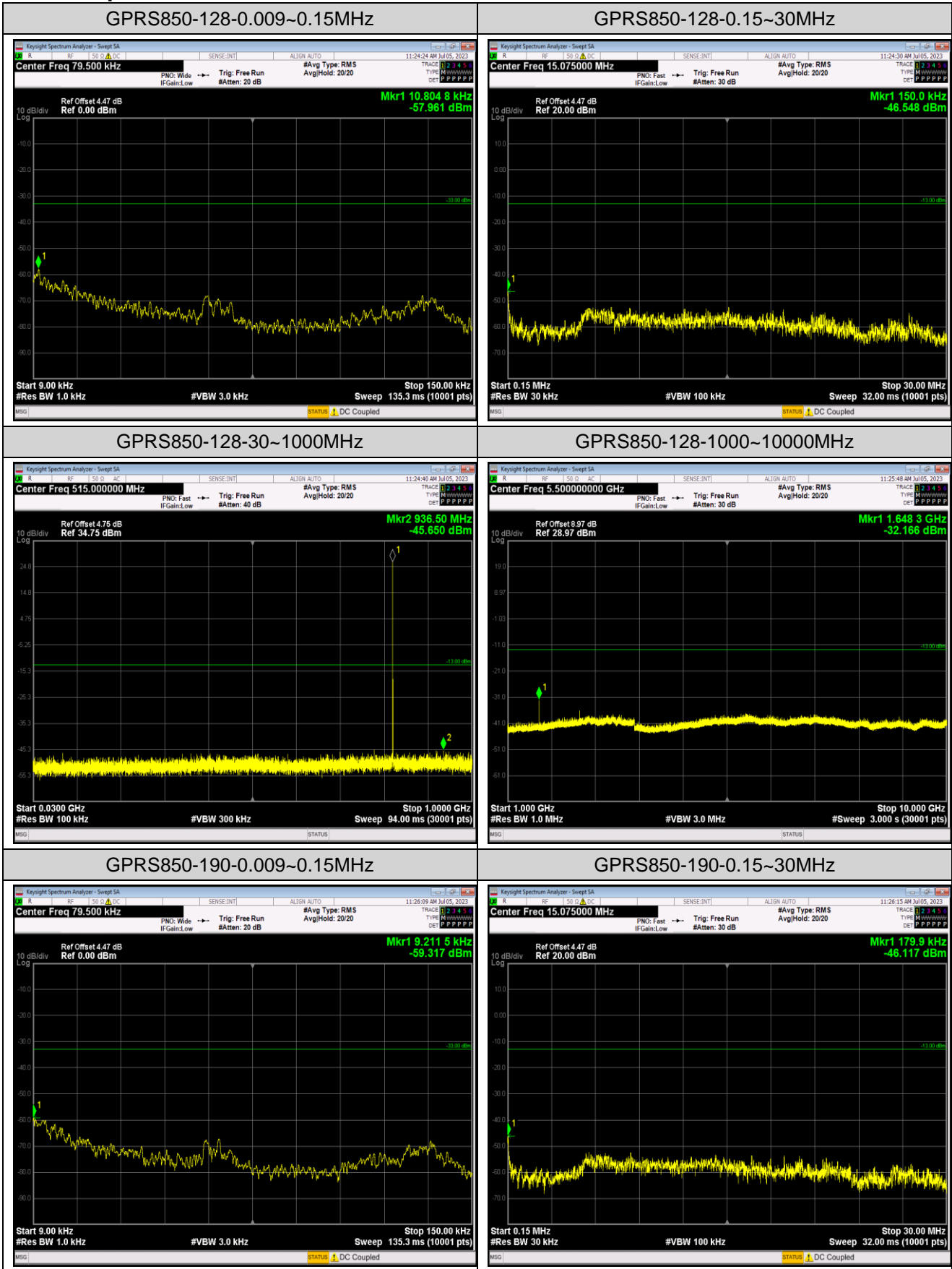
Appendix E: Conducted Spurious Emission

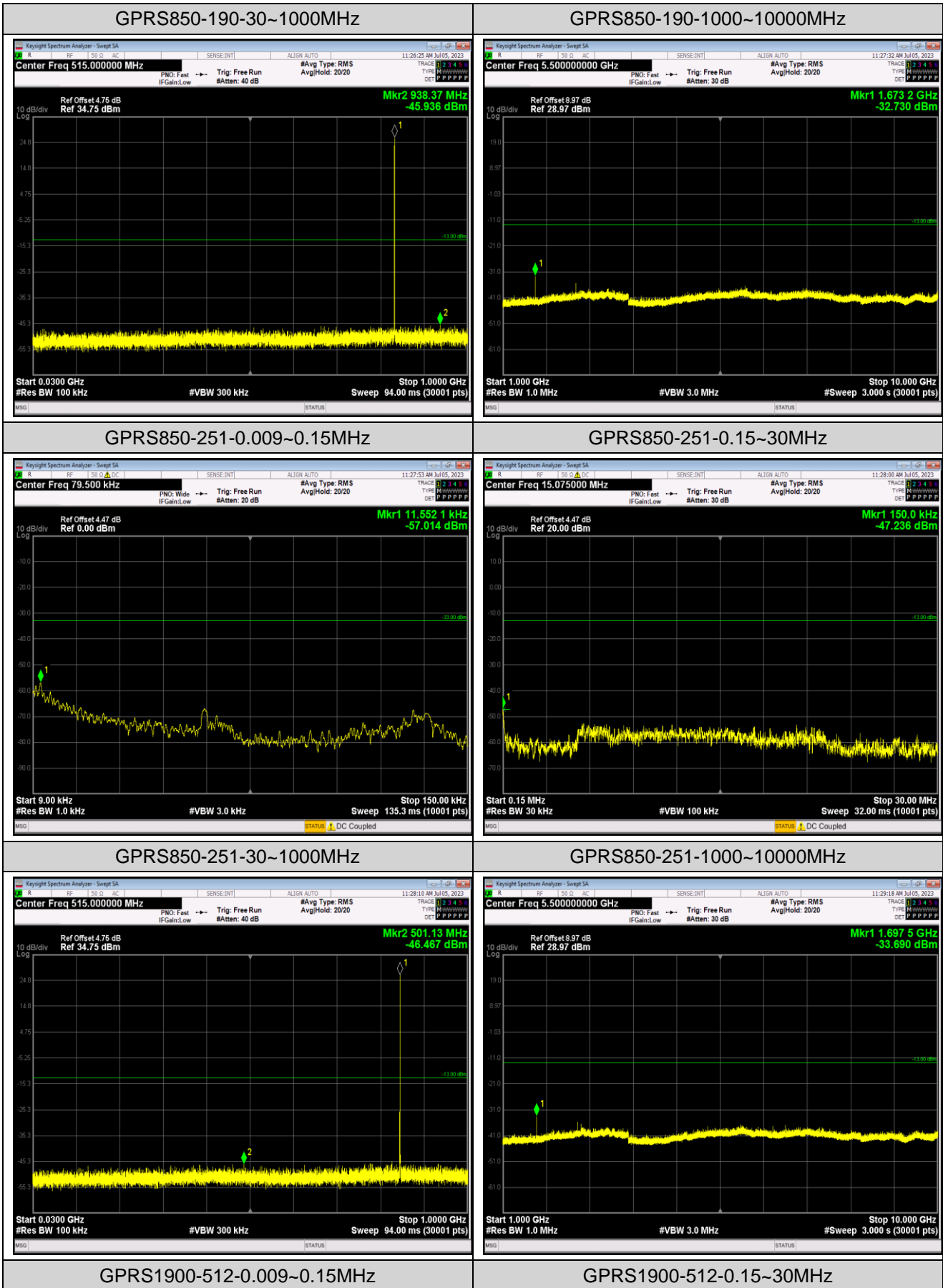
Test Result

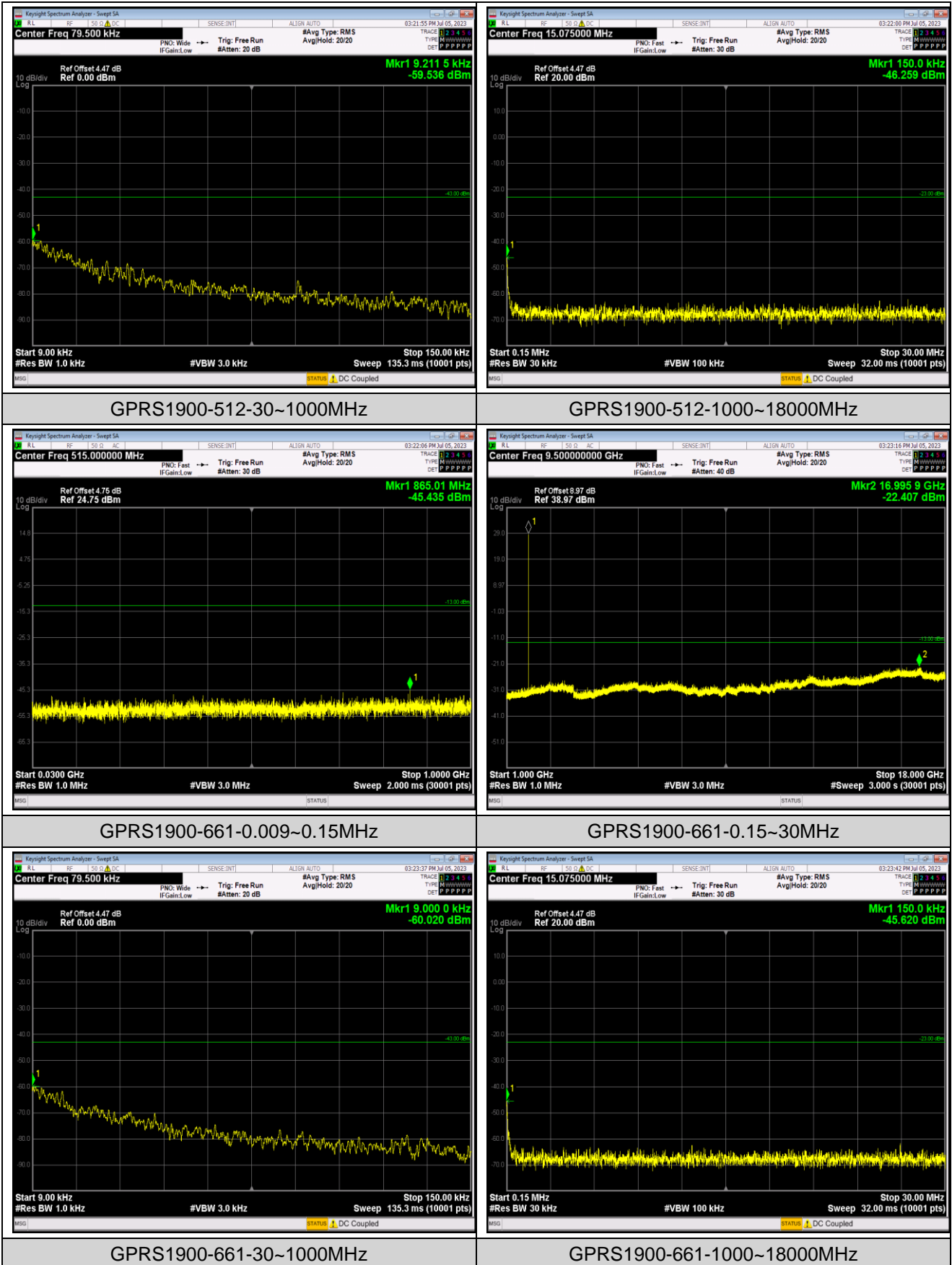
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GPRS850	128	5	0.009~0.15MHz	0.01	-57.96	-33	PASS
GPRS850	128	5	0.15~30MHz	0.15	-46.55	-13	PASS
GPRS850	128	5	30~1000MHz	936.5	-45.65	-13	PASS
GPRS850	128	5	1000~10000MHz	1648.3	-32.17	-13	PASS
GPRS850	190	5	0.009~0.15MHz	0.01	-59.32	-33	PASS
GPRS850	190	5	0.15~30MHz	0.18	-46.12	-13	PASS
GPRS850	190	5	30~1000MHz	938.37	-45.94	-13	PASS
GPRS850	190	5	1000~10000MHz	1673.2	-32.73	-13	PASS
GPRS850	251	5	0.009~0.15MHz	0.01	-57.01	-33	PASS
GPRS850	251	5	0.15~30MHz	0.15	-47.24	-13	PASS
GPRS850	251	5	30~1000MHz	501.13	-46.47	-13	PASS
GPRS850	251	5	1000~10000MHz	1697.5	-33.69	-13	PASS
GPRS1900	512	0	0.009~0.15MHz	0.01	-59.54	-43	PASS
GPRS1900	512	0	0.15~30MHz	0.15	-46.26	-23	PASS
GPRS1900	512	0	30~1000MHz	865.01	-45.44	-13	PASS
GPRS1900	512	0	1000~18000MHz	16995.87	-22.41	-13	PASS
GPRS1900	661	0	0.009~0.15MHz	0.01	-60.02	-43	PASS
GPRS1900	661	0	0.15~30MHz	0.15	-45.62	-23	PASS
GPRS1900	661	0	30~1000MHz	857.44	-46.67	-13	PASS
GPRS1900	661	0	1000~18000MHz	16228.03	-21.98	-13	PASS
GPRS1900	810	0	0.009~0.15MHz	0.01	-57.87	-43	PASS
GPRS1900	810	0	0.15~30MHz	0.15	-45.65	-23	PASS
GPRS1900	810	0	30~1000MHz	998.74	-46.8	-13	PASS
GPRS1900	810	0	1000~18000MHz	16846.27	-22.22	-13	PASS

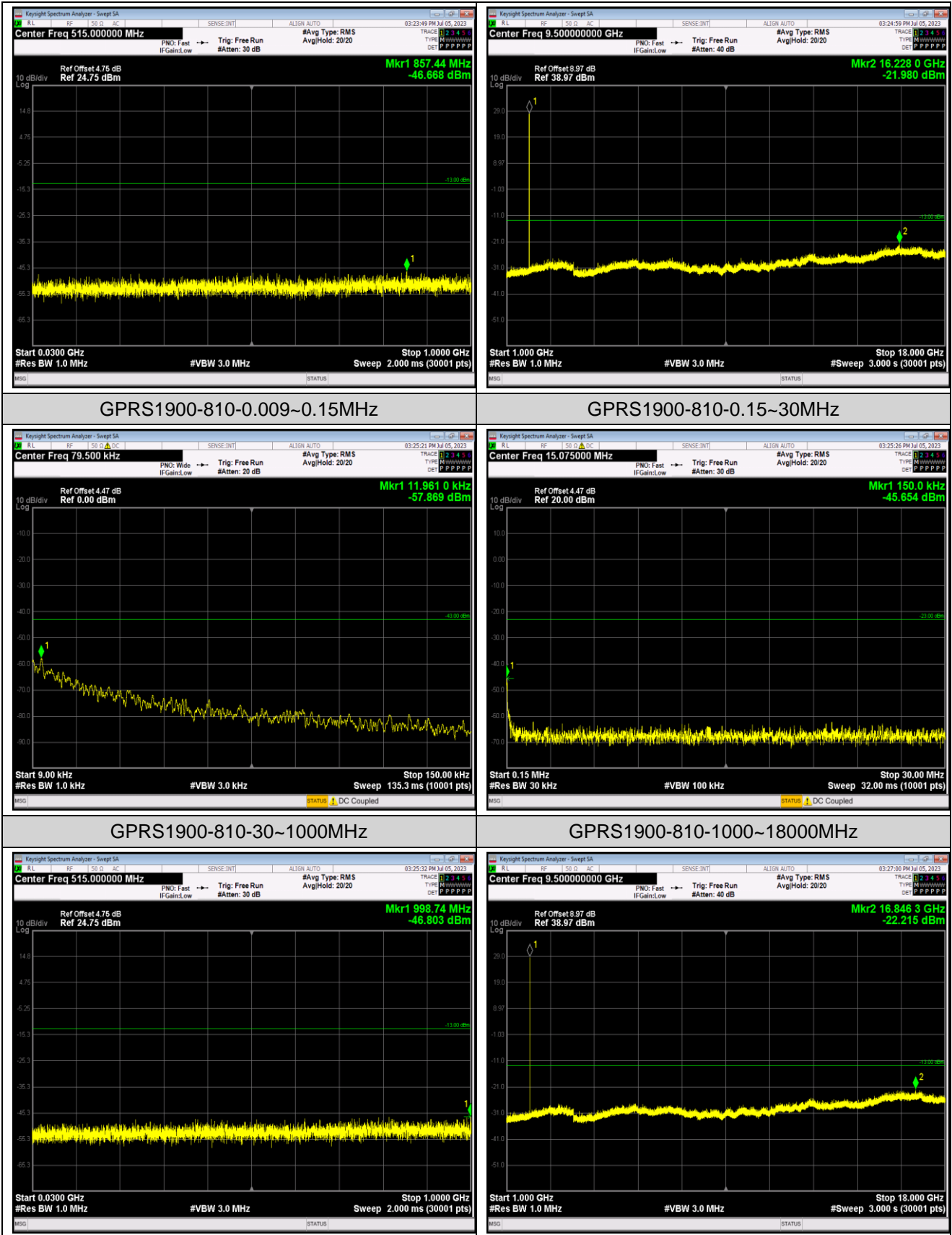
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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		
3.70	-30	7.62	0.009108	±2.5	Pass
	-20	9.33	0.011152		
	-10	12.85	0.015360		
	0	6.20	0.007411		
	10	12.20	0.014583		
	20	12.98	0.015515		
	30	12.43	0.014858		
	40	17.85	0.021336		
	50	15.82	0.018910		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	5.17	0.006180	±2.5	Pass
	3.70	6.10	0.007291		
	4.20	11.40	0.013627		
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		
3.70	-30	1.10	0.001315	±2.5	Pass
	-20	1.36	0.001626		
	-10	3.87	0.004626		
	0	3.00	0.003586		
	10	-6.33	-0.007566		
	20	-5.94	-0.007100		
	30	-1.23	-0.001470		
	40	-2.55	-0.003048		
	50	0.19	0.000227		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	1.10	0.001315	±2.5	Pass
	3.70	-1.68	-0.002008		
	4.20	-0.23	-0.000275		
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		
3.70	-30	109.42	0.058202	Within authorized band for PCS 1900	Pass
	-20	106.25	0.056516		
	-10	108.45	0.057686		
	0	107.90	0.057394		
	10	111.58	0.059351		
	20	110.39	0.058718		
	30	111.10	0.059096		
	40	115.00	0.061170		
	50	112.81	0.060005		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	111.35	0.059229	Within authorized band for PCS 1900	Pass
	3.70	108.29	0.057601		
	4.20	104.32	0.055489		
<i>Remark: All channel had been tested, but only the worst case data displayed in this report.</i>					

Reference Frequency: EGPRS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	2.74	0.001457	Within authorized band for PCS 1900	Pass
	-20	0.58	0.000309		
	-10	4.62	0.002457		
	0	2.23	0.001186		
	10	8.88	0.004723		
	20	9.85	0.005239		
	30	2.81	0.001495		
	40	-6.59	-0.003505		
	50	-6.52	-0.003468		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	1.84	0.000979	Within authorized band for PCS 1900	Pass
	3.70	-1.42	-0.000755		
	4.20	3.13	0.001665		
<i>Remark: All channel had been tested, but only the worst case data displayed in this report.</i>					

Appendix G: Modulation Characteristics

Test Result

Band	Channel	Result	Verdict
GPRS850	190	PASS	PASS
EGPRS850	190	PASS	PASS
GPRS1900	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

