

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	33.39	31.44	38.45	PASS
GSM850	190	5	33.41	31.46	38.45	PASS
GSM850	251	5	33.52	31.57	38.45	PASS
GSM1900	512	0	25.79	26.59	33.00	PASS
GSM1900	661	0	26.00	26.8	33.00	PASS
GSM1900	810	0	25.96	26.76	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.38	31.43	38.45	PASS
GPRS850	128	5	2	32.58	30.63	38.45	PASS
GPRS850	128	5	3	30.75	28.8	38.45	PASS
GPRS850	128	5	4	29.54	27.59	38.45	PASS
GPRS850	190	5	1	33.39	31.44	38.45	PASS
GPRS850	190	5	2	32.59	30.64	38.45	PASS
GPRS850	190	5	3	30.75	28.8	38.45	PASS
GPRS850	190	5	4	29.53	27.58	38.45	PASS
GPRS850	251	5	1	33.49	31.54	38.45	PASS
GPRS850	251	5	2	32.69	30.74	38.45	PASS
GPRS850	251	5	3	30.89	28.94	38.45	PASS
GPRS850	251	5	4	29.69	27.74	38.45	PASS
GPRS1900	512	0	1	25.78	26.58	33.00	PASS
GPRS1900	512	0	2	24.57	25.37	33.00	PASS
GPRS1900	512	0	3	23.49	24.29	33.00	PASS
GPRS1900	512	0	4	22.19	22.99	33.00	PASS
GPRS1900	661	0	1	26.01	26.81	33.00	PASS
GPRS1900	661	0	2	24.76	25.56	33.00	PASS
GPRS1900	661	0	3	23.78	24.58	33.00	PASS
GPRS1900	661	0	4	22.54	23.34	33.00	PASS
GPRS1900	810	0	1	25.98	26.78	33.00	PASS
GPRS1900	810	0	2	24.74	25.54	33.00	PASS
GPRS1900	810	0	3	23.76	24.56	33.00	PASS
GPRS1900	810	0	4	22.56	23.36	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	28.50	26.55	38.45	PASS
EGPRS850	128	8	2	27.38	25.43	38.45	PASS
EGPRS850	128	8	3	24.94	22.99	38.45	PASS
EGPRS850	128	8	4	23.68	21.73	38.45	PASS
EGPRS850	190	8	1	28.49	26.54	38.45	PASS
EGPRS850	190	8	2	27.42	25.47	38.45	PASS
EGPRS850	190	8	3	25.15	23.2	38.45	PASS
EGPRS850	190	8	4	23.70	21.75	38.45	PASS
EGPRS850	251	8	1	28.58	26.63	38.45	PASS
EGPRS850	251	8	2	27.41	25.46	38.45	PASS
EGPRS850	251	8	3	25.19	23.24	38.45	PASS
EGPRS850	251	8	4	23.77	21.82	38.45	PASS
EGPRS1900	512	2	1	22.27	23.07	33.00	PASS
EGPRS1900	512	2	2	21.12	21.92	33.00	PASS
EGPRS1900	512	2	3	19.89	20.69	33.00	PASS
EGPRS1900	512	2	4	18.71	19.51	33.00	PASS
EGPRS1900	661	2	1	22.34	23.14	33.00	PASS
EGPRS1900	661	2	2	21.21	22.01	33.00	PASS
EGPRS1900	661	2	3	20.00	20.8	33.00	PASS
EGPRS1900	661	2	4	18.77	19.57	33.00	PASS
EGPRS1900	810	2	1	22.24	23.04	33.00	PASS
EGPRS1900	810	2	2	21.17	21.97	33.00	PASS
EGPRS1900	810	2	3	20.05	20.85	33.00	PASS
EGPRS1900	810	2	4	18.83	19.63	33.00	PASS

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

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

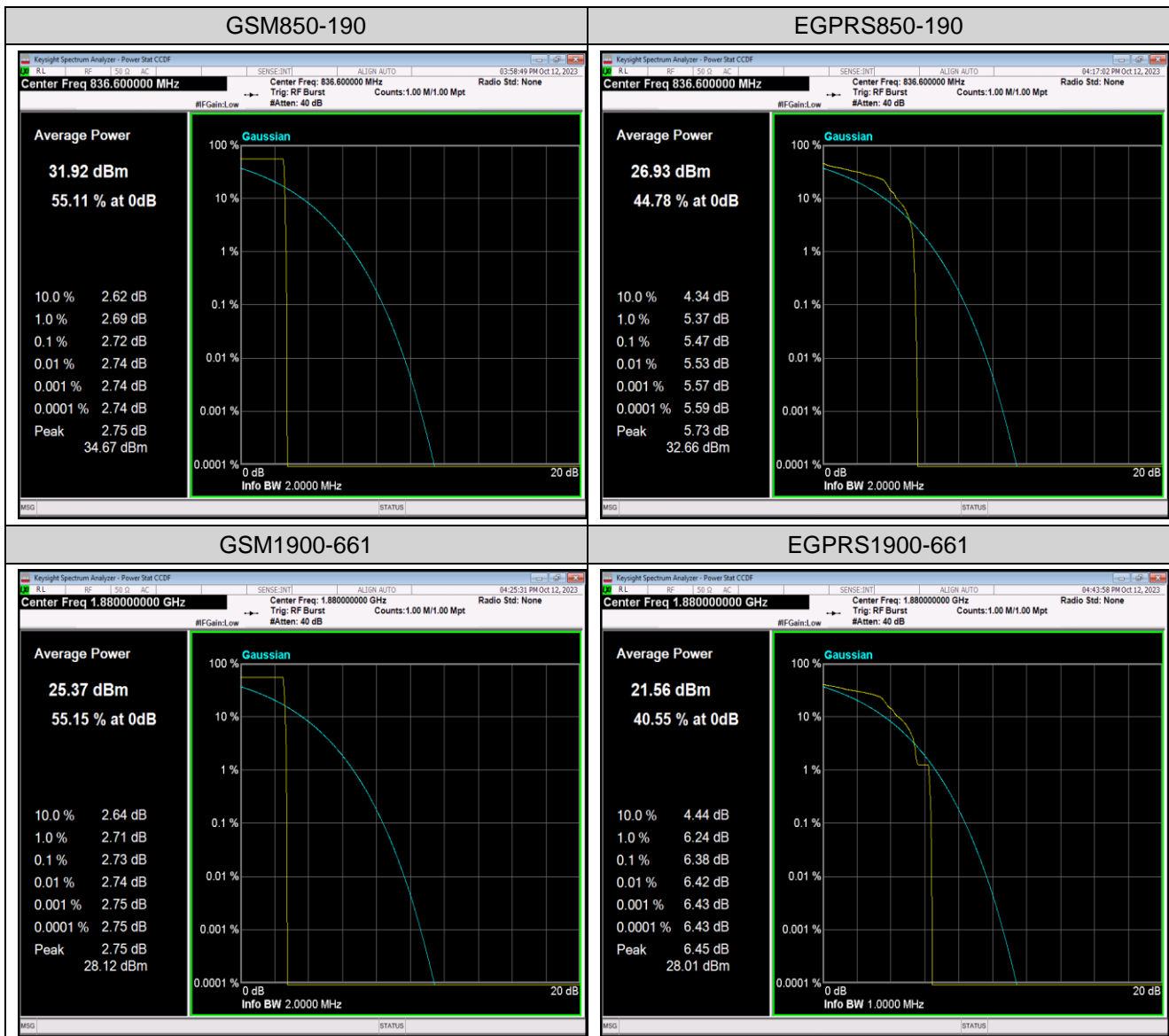
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.72	13	PASS
EGPRS850	190	8	5.47	13	PASS
GSM1900	661	0	2.73	13	PASS
EGPRS1900	661	2	6.38	13	PASS

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

Test Graphs

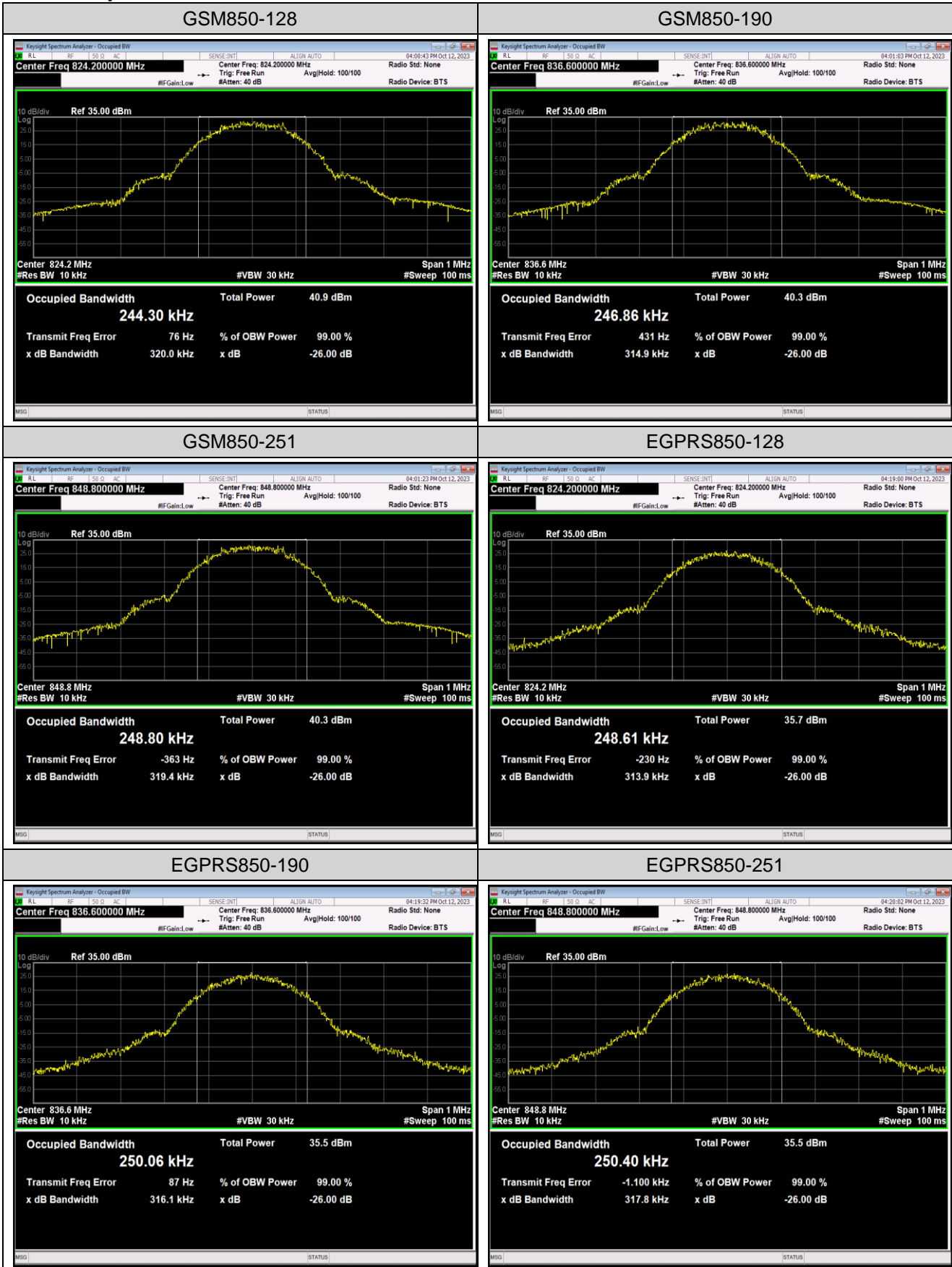


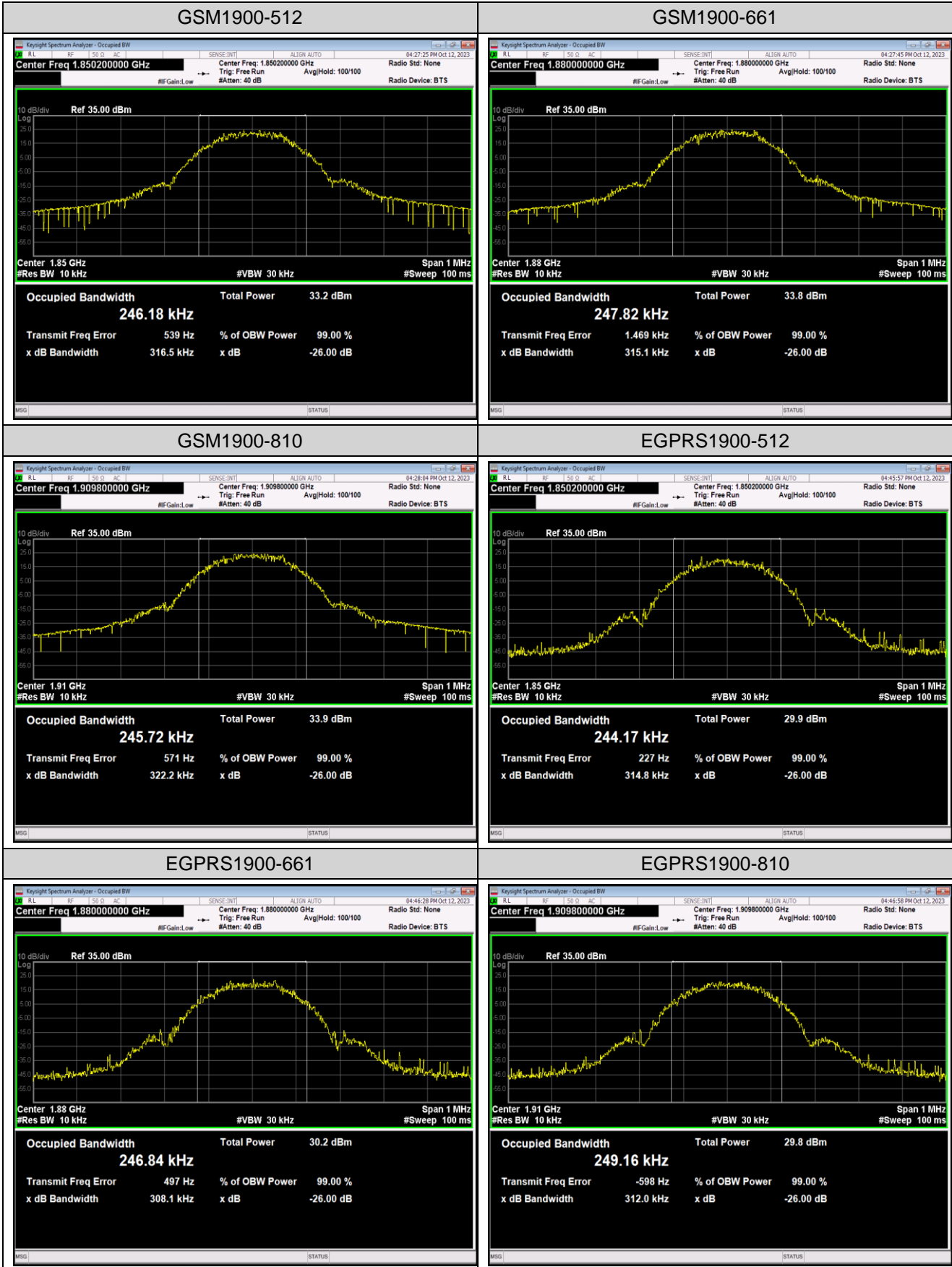
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24430	0.3200	---	PASS
GSM850	190	5	0.24686	0.3149	---	PASS
GSM850	251	5	0.24880	0.3194	---	PASS
EGPRS850	128	8	0.24861	0.3139	---	PASS
EGPRS850	190	8	0.25006	0.3161	---	PASS
EGPRS850	251	8	0.25040	0.3178	---	PASS
GSM1900	512	0	0.24618	0.3165	---	PASS
GSM1900	661	0	0.24782	0.3151	---	PASS
GSM1900	810	0	0.24572	0.3222	---	PASS
EGPRS1900	512	2	0.24417	0.3148	---	PASS
EGPRS1900	661	2	0.24684	0.3081	---	PASS
EGPRS1900	810	2	0.24916	0.3120	---	PASS

Test Graphs

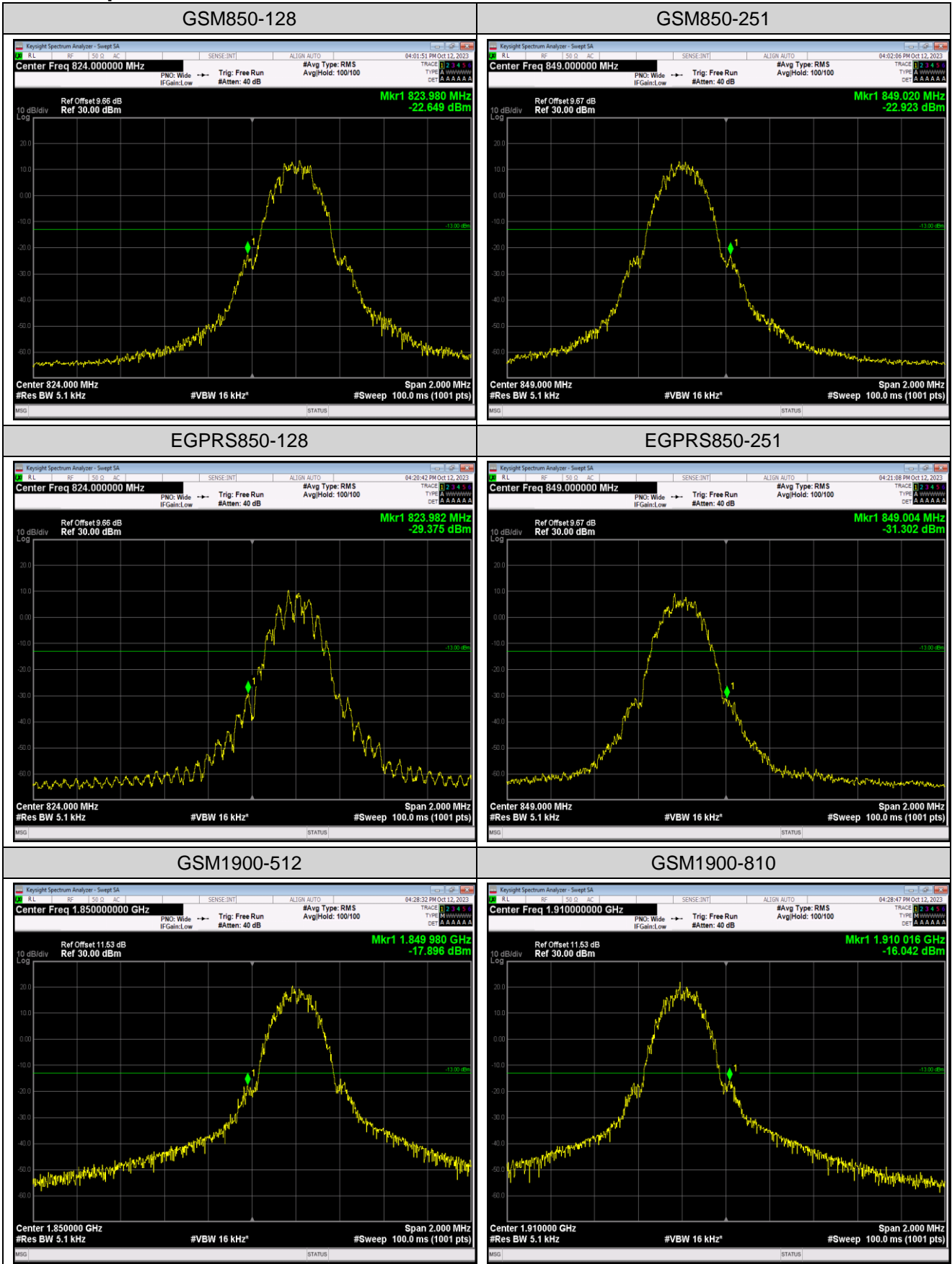


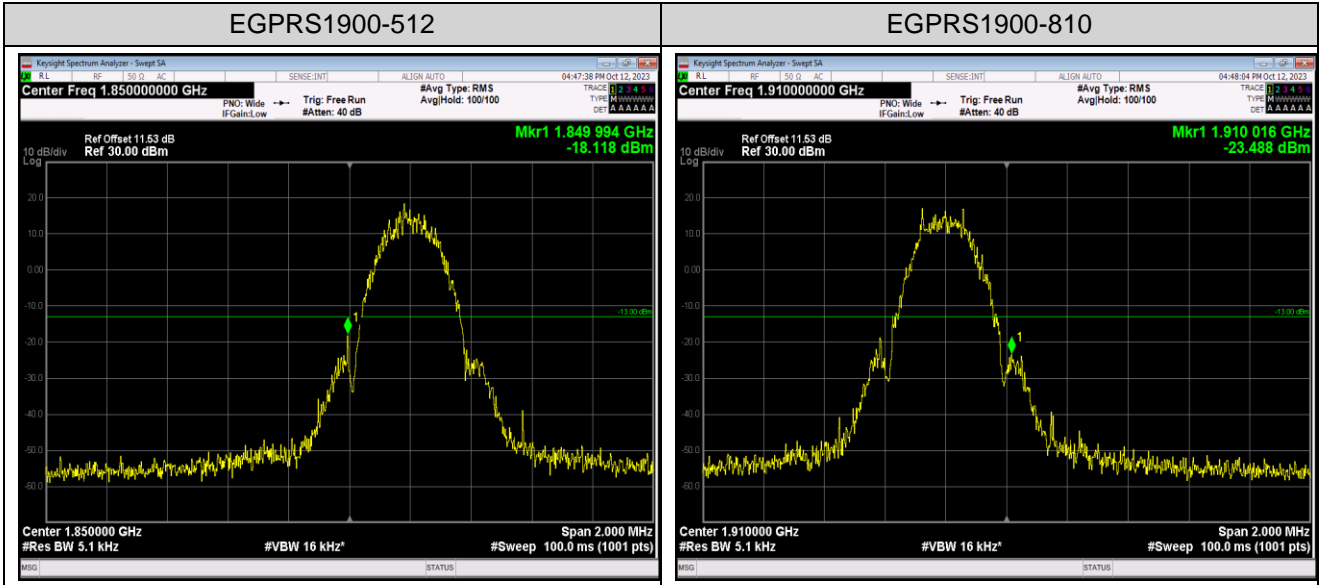


Appendix D: Band Edge**Test Result**

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-22.65	-13	PASS
GSM850	251	5	849.02	-22.92	-13	PASS
EGPRS850	128	8	823.98	-29.37	-13	PASS
EGPRS850	251	8	849.00	-31.30	-13	PASS
GSM1900	512	0	1849.98	-17.90	-13	PASS
GSM1900	810	0	1910.02	-16.04	-13	PASS
EGPRS1900	512	2	1849.99	-18.12	-13	PASS
EGPRS1900	810	2	1910.02	-23.49	-13	PASS

Test Graphs





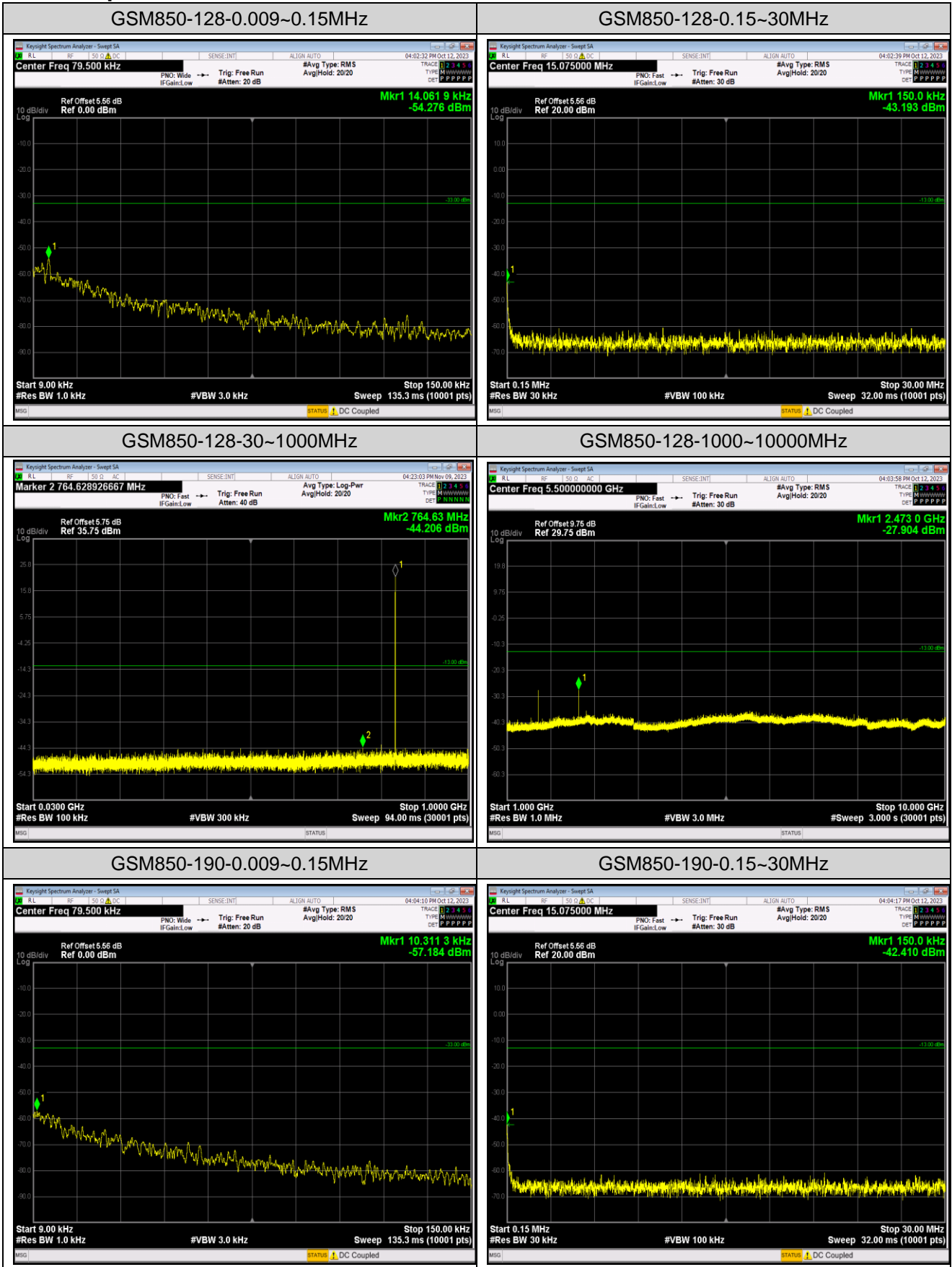
Appendix E: Conducted Spurious Emission

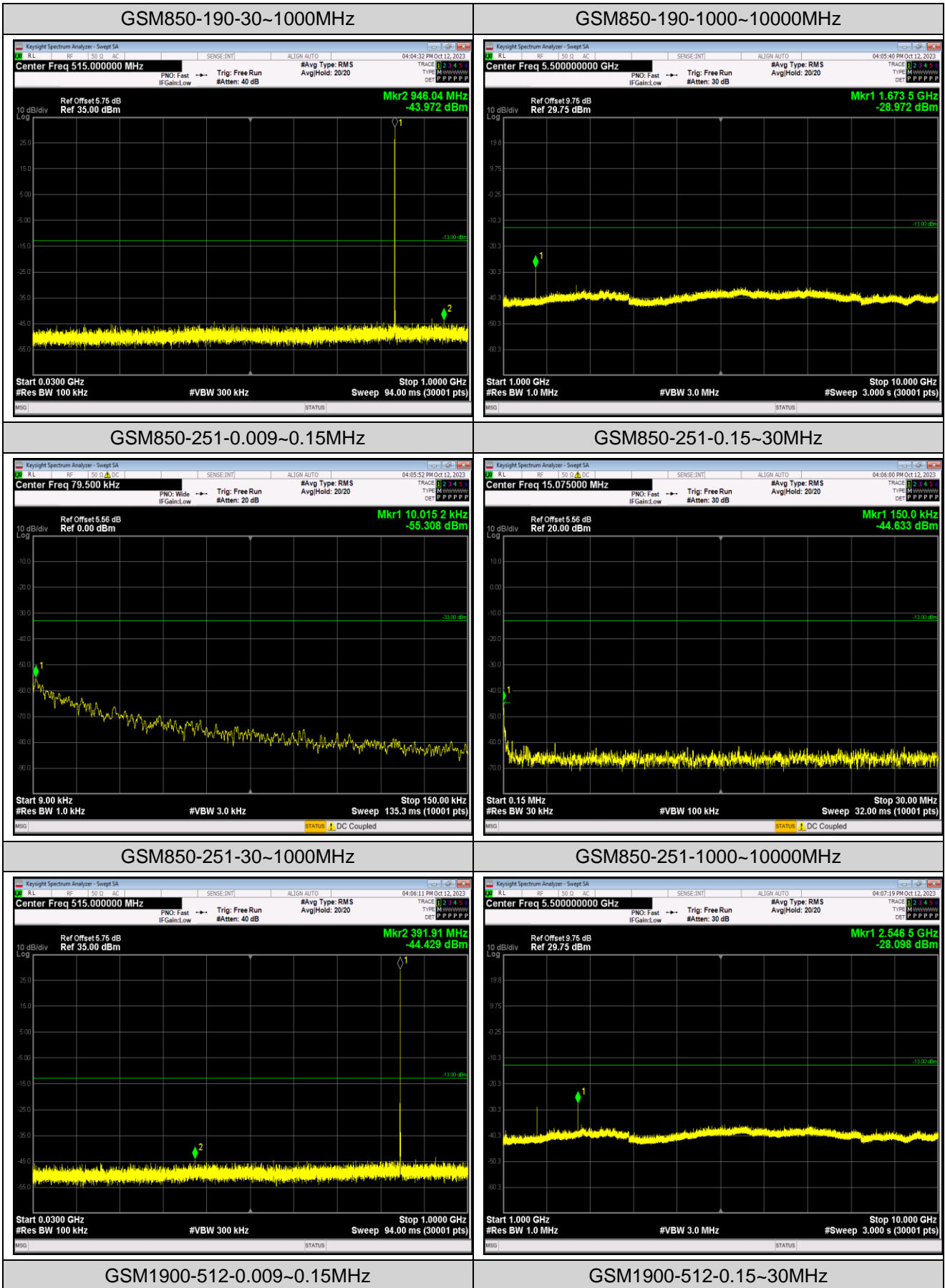
Test Result

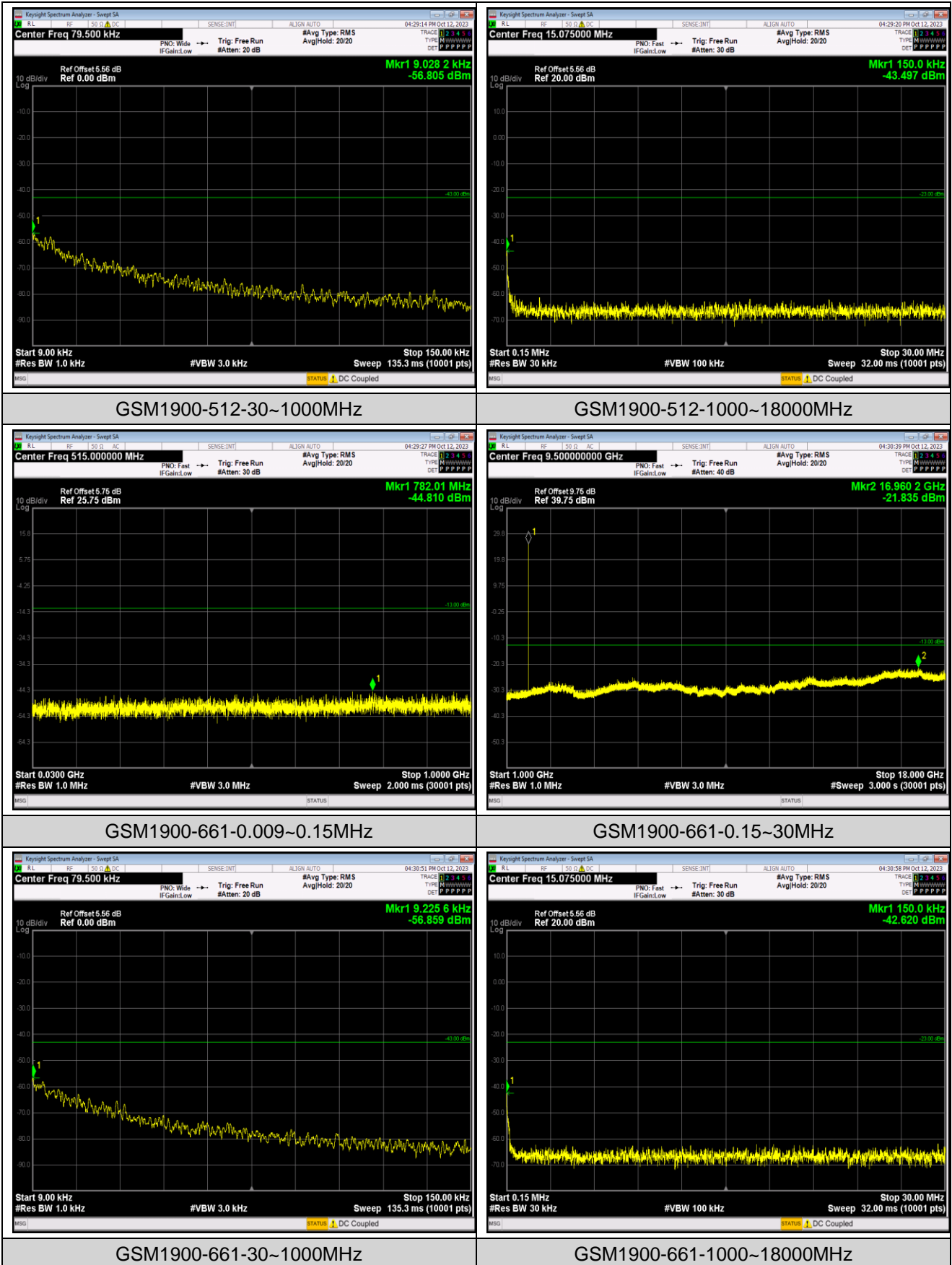
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-54.28	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-43.19	-13	PASS
GSM850	128	5	30~1000MHz	707.22	-44.43	-13	PASS
GSM850	128	5	1000~10000MHz	2473	-27.9	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-57.18	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-42.41	-13	PASS
GSM850	190	5	30~1000MHz	946.04	-43.97	-13	PASS
GSM850	190	5	1000~10000MHz	1673.5	-28.97	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-55.31	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-44.63	-13	PASS
GSM850	251	5	30~1000MHz	391.91	-44.43	-13	PASS
GSM850	251	5	1000~10000MHz	2546.5	-28.1	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-56.81	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-43.5	-23	PASS
GSM1900	512	0	30~1000MHz	782.01	-44.81	-13	PASS
GSM1900	512	0	1000~18000MHz	16960.17	-21.84	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-56.86	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-42.62	-23	PASS
GSM1900	661	0	30~1000MHz	790.61	-45.3	-13	PASS
GSM1900	661	0	1000~18000MHz	16205.93	-20.95	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.57	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-43.75	-23	PASS
GSM1900	810	0	30~1000MHz	912.96	-44.71	-13	PASS
GSM1900	810	0	1000~18000MHz	17023.63	-21.18	-13	PASS

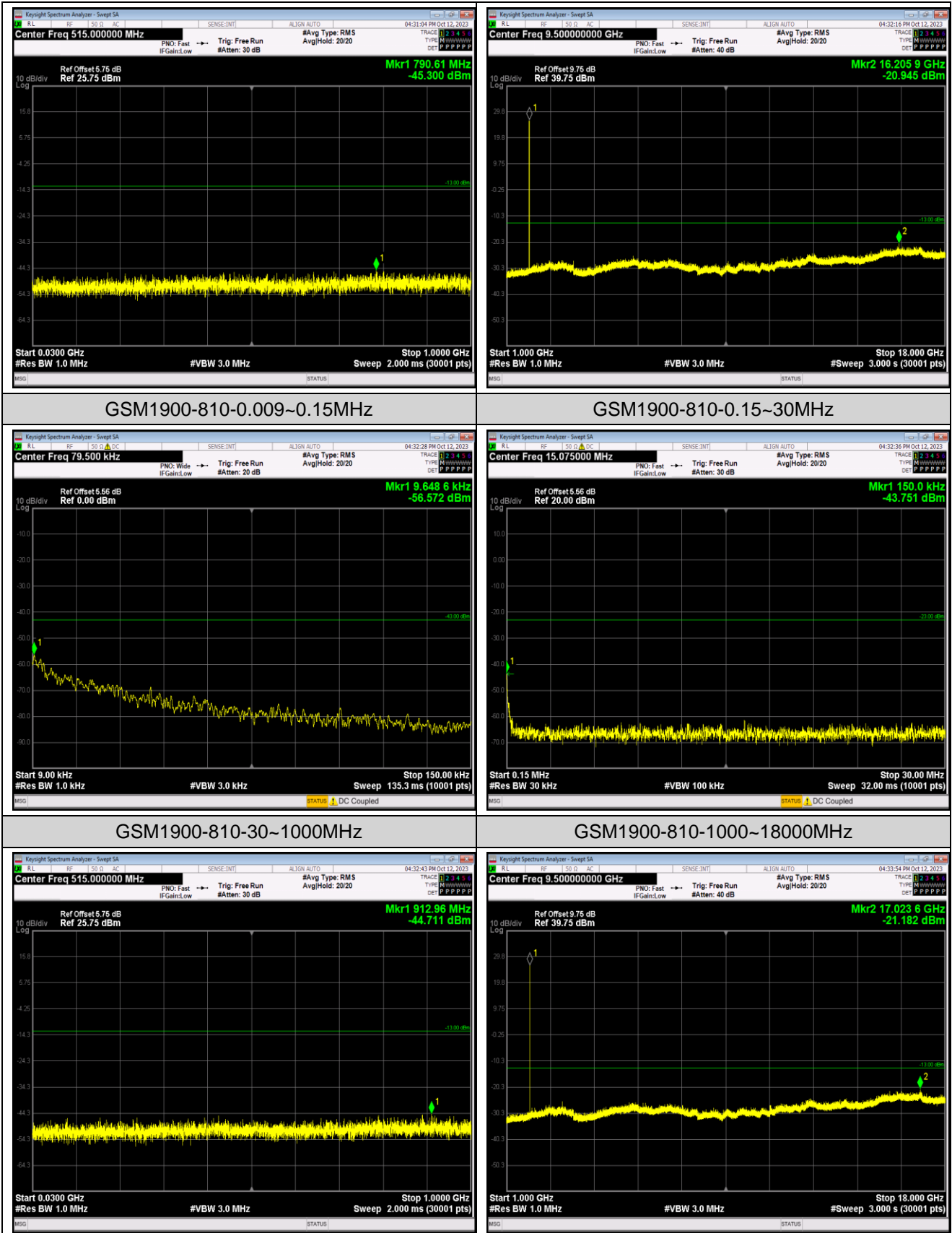
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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	8.75	0.010459	±2.5	Pass
	-20	12.88	0.015396		
	-10	6.88	0.008224		
	0	11.43	0.013662		
	10	10.40	0.012431		
	20	11.82	0.014129		
	30	9.33	0.011152		
	40	8.59	0.010268		
	50	12.91	0.015432		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	10.88	0.013005	±2.5	Pass
	3.80	8.46	0.010112		
	4.35	9.65	0.011535		
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	9.69	0.011583	±2.5	Pass
	-20	7.59	0.009072		
	-10	7.65	0.009144		
	0	11.59	0.013854		
	10	22.34	0.026703		
	20	17.24	0.020607		
	30	17.72	0.021181		
	40	17.66	0.021109		
	50	15.24	0.018217		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	12.40	0.014822	±2.5	Pass
	3.80	7.52	0.008989		
	4.35	10.33	0.012348		
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	12.20	0.006489	Within authorized band for PCS 1900	Pass
	-20	10.11	0.005378		
	-10	14.30	0.007606		
	0	23.05	0.012261		
	10	23.25	0.012367		
	20	16.95	0.009016		
	30	16.63	0.008846		
	40	17.98	0.009564		
	50	14.40	0.007660		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	22.34	0.011883	Within authorized band for PCS 1900	Pass
	3.80	21.70	0.011543		
	4.35	16.21	0.008622		
<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		
3.80	-30	18.56	0.009872	Within authorized band for PCS 1900	Pass
	-20	19.66	0.010457		
	-10	20.70	0.011011		
	0	15.82	0.008415		
	10	28.06	0.014926		
	20	36.97	0.019665		
	30	35.06	0.018649		
	40	35.58	0.018926		
	50	37.35	0.019867		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	19.27	0.010250	Within authorized band for PCS 1900	Pass
	3.80	17.56	0.009340		
	4.35	14.85	0.007899		
<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
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

