

## 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	33.36	24.37	38.45	PASS
GSM850	190	5	33.49	24.5	38.45	PASS
GSM850	251	5	33.48	24.49	38.45	PASS
GSM1900	512	0	29.12	28.82	33.00	PASS
GSM1900	661	0	29.43	29.13	33.00	PASS
GSM1900	810	0	29.36	29.06	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.37	24.38	38.45	PASS
GPRS850	128	5	2	32.44	23.45	38.45	PASS
GPRS850	128	5	3	30.47	21.48	38.45	PASS
GPRS850	128	5	4	29.42	20.43	38.45	PASS
GPRS850	190	5	1	33.50	24.51	38.45	PASS
GPRS850	190	5	2	32.55	23.56	38.45	PASS
GPRS850	190	5	3	30.58	21.59	38.45	PASS
GPRS850	190	5	4	29.55	20.56	38.45	PASS
GPRS850	251	5	1	33.48	24.49	38.45	PASS
GPRS850	251	5	2	32.54	23.55	38.45	PASS
GPRS850	251	5	3	30.57	21.58	38.45	PASS
GPRS850	251	5	4	29.54	20.55	38.45	PASS
GPRS1900	512	0	1	29.13	28.83	33.00	PASS
GPRS1900	512	0	2	28.22	27.92	33.00	PASS
GPRS1900	512	0	3	26.29	25.99	33.00	PASS
GPRS1900	512	0	4	25.19	24.89	33.00	PASS
GPRS1900	661	0	1	29.43	29.13	33.00	PASS
GPRS1900	661	0	2	28.56	28.26	33.00	PASS
GPRS1900	661	0	3	26.62	26.32	33.00	PASS
GPRS1900	661	0	4	25.51	25.21	33.00	PASS
GPRS1900	810	0	1	29.39	29.09	33.00	PASS
GPRS1900	810	0	2	28.55	28.25	33.00	PASS
GPRS1900	810	0	3	26.65	26.35	33.00	PASS
GPRS1900	810	0	4	25.56	25.26	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.75	18.76	38.45	PASS
EGPRS850	128	8	2	26.66	17.67	38.45	PASS
EGPRS850	128	8	3	24.55	15.56	38.45	PASS
EGPRS850	128	8	4	23.50	14.51	38.45	PASS
EGPRS850	190	8	1	27.71	18.72	38.45	PASS
EGPRS850	190	8	2	26.66	17.67	38.45	PASS
EGPRS850	190	8	3	24.76	15.77	38.45	PASS
EGPRS850	190	8	4	23.50	14.51	38.45	PASS
EGPRS850	251	8	1	27.61	18.62	38.45	PASS
EGPRS850	251	8	2	26.50	17.51	38.45	PASS
EGPRS850	251	8	3	24.62	15.63	38.45	PASS
EGPRS850	251	8	4	23.36	14.37	38.45	PASS
EGPRS1900	512	2	1	25.27	24.97	33.00	PASS
EGPRS1900	512	2	2	24.39	24.09	33.00	PASS
EGPRS1900	512	2	3	22.41	22.11	33.00	PASS
EGPRS1900	512	2	4	21.35	21.05	33.00	PASS
EGPRS1900	661	2	1	25.45	25.15	33.00	PASS
EGPRS1900	661	2	2	24.61	24.31	33.00	PASS
EGPRS1900	661	2	3	22.65	22.35	33.00	PASS
EGPRS1900	661	2	4	21.67	21.37	33.00	PASS
EGPRS1900	810	2	1	25.48	25.18	33.00	PASS
EGPRS1900	810	2	2	24.74	24.44	33.00	PASS
EGPRS1900	810	2	3	22.89	22.59	33.00	PASS
EGPRS1900	810	2	4	21.82	21.52	33.00	PASS

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

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

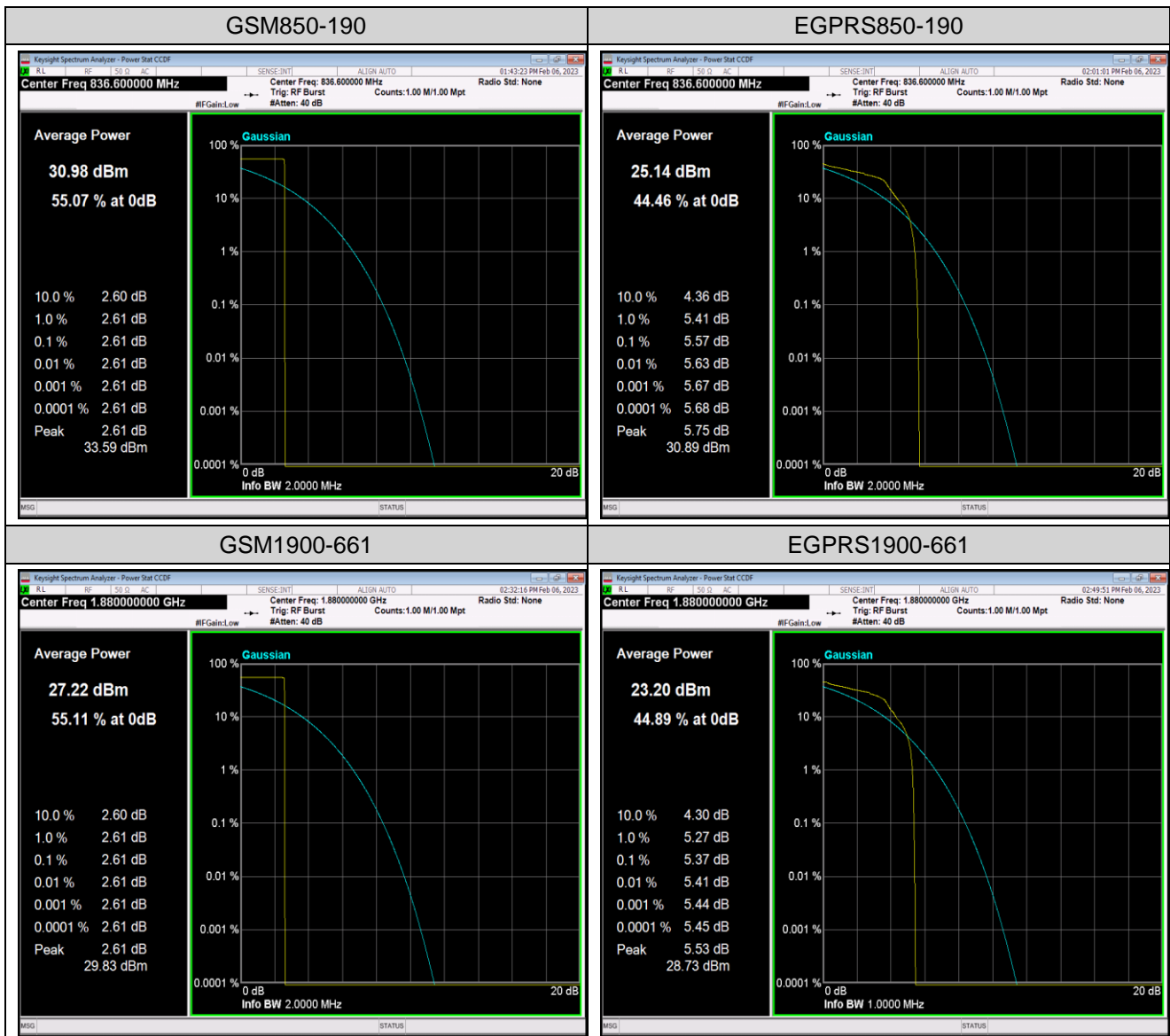
## Appendix B: Peak-to-Average Ratio(CCDF)

### Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.61	13	PASS
EGPRS850	190	8	5.57	13	PASS
GSM1900	661	0	2.61	13	PASS
EGPRS1900	661	2	5.37	13	PASS

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

### Test Graphs

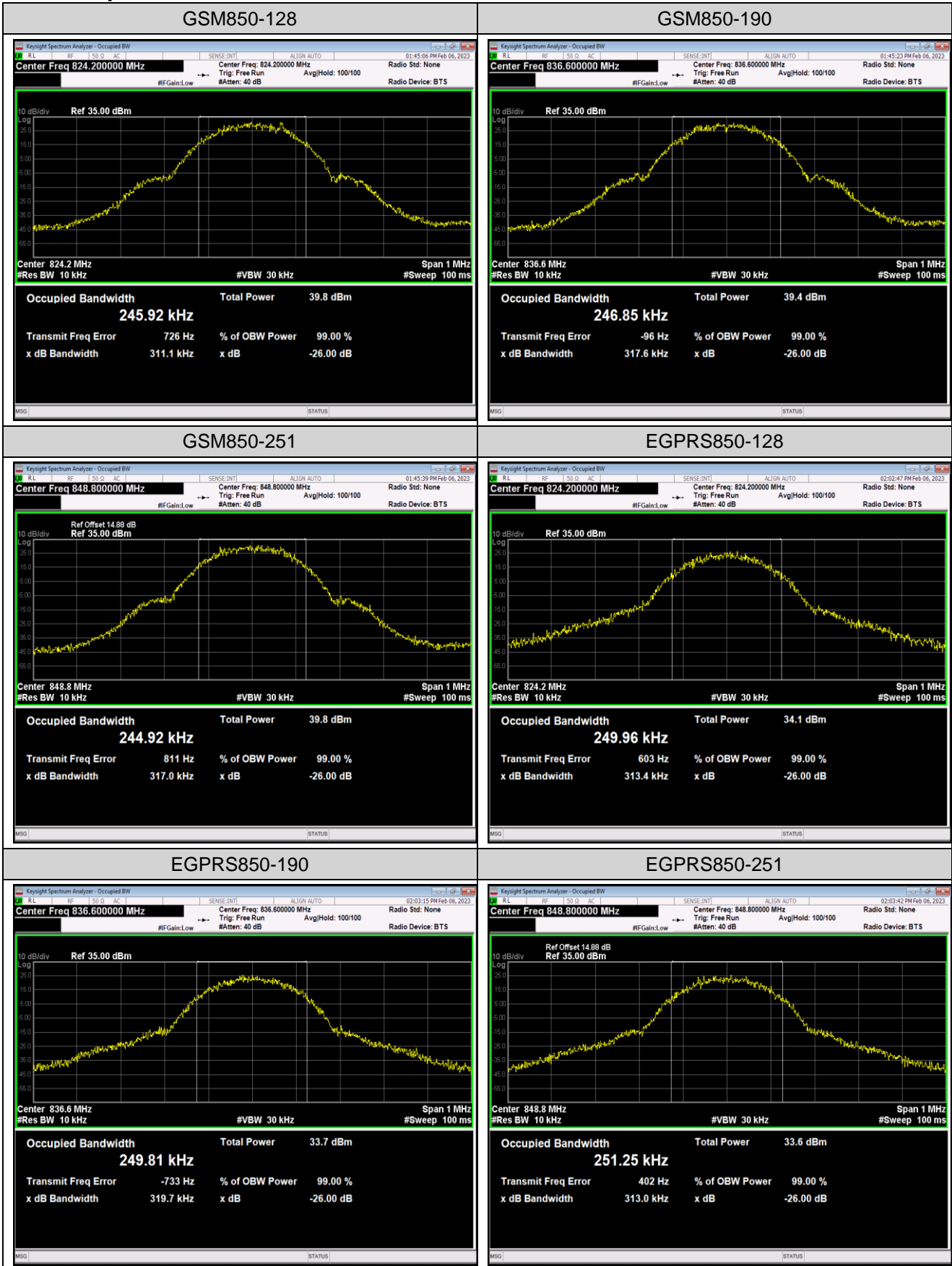


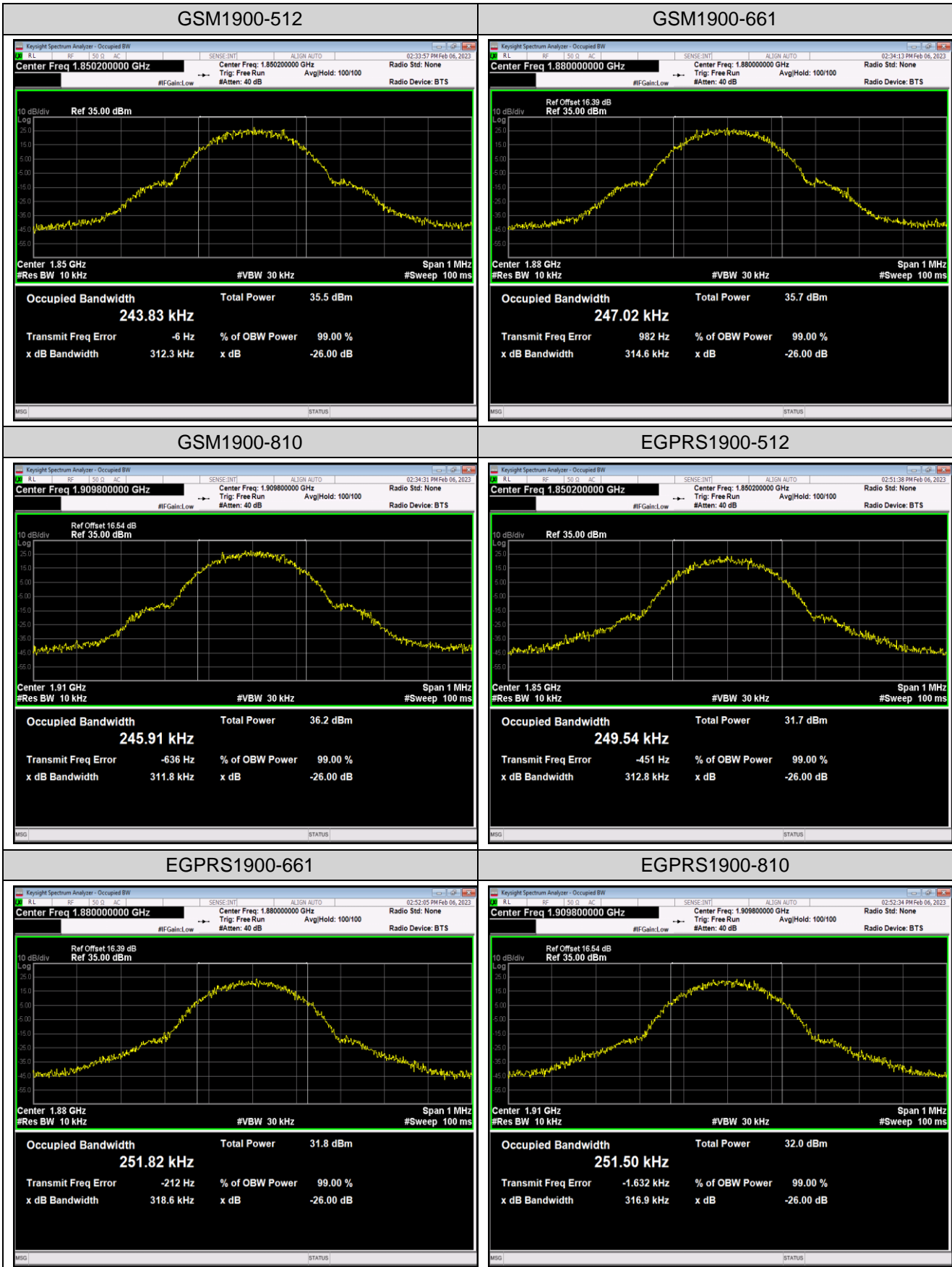
## Appendix C: 26dB Bandwidth and Occupied Bandwidth

### Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24592	0.3111	---	PASS
GSM850	190	5	0.24685	0.3176	---	PASS
GSM850	251	5	0.24492	0.3170	---	PASS
EGPRS850	128	8	0.24996	0.3134	---	PASS
EGPRS850	190	8	0.24981	0.3197	---	PASS
EGPRS850	251	8	0.25125	0.3130	---	PASS
GSM1900	512	0	0.24383	0.3123	---	PASS
GSM1900	661	0	0.24702	0.3146	---	PASS
GSM1900	810	0	0.24591	0.3118	---	PASS
EGPRS1900	512	2	0.24954	0.3128	---	PASS
EGPRS1900	661	2	0.25182	0.3186	---	PASS
EGPRS1900	810	2	0.25150	0.3169	---	PASS

Test Graphs

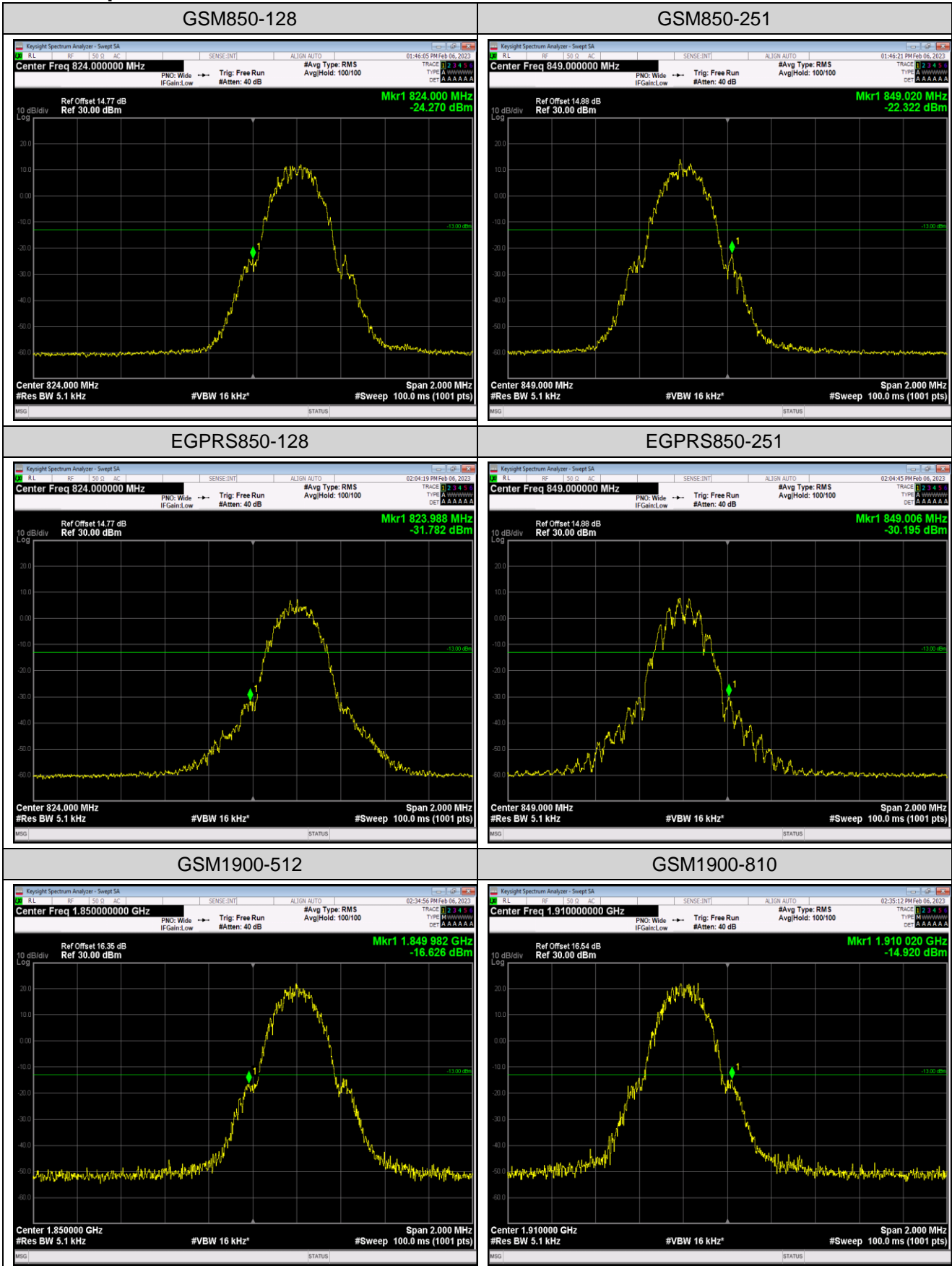




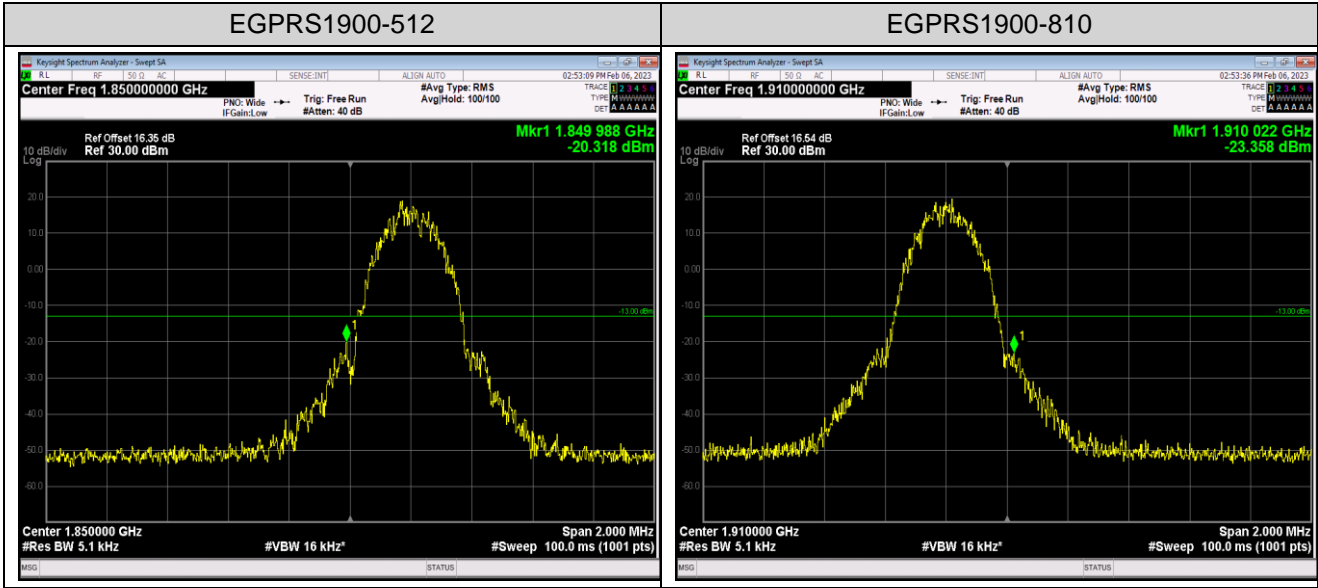
**Appendix D: Band Edge****Test Result**

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-24.27	-13	PASS
GSM850	251	5	849.02	-22.32	-13	PASS
EGPRS850	128	8	823.99	-31.78	-13	PASS
EGPRS850	251	8	849.01	-30.20	-13	PASS
GSM1900	512	0	1849.98	-16.63	-13	PASS
GSM1900	810	0	1910.02	-14.92	-13	PASS
EGPRS1900	512	2	1849.99	-20.32	-13	PASS
EGPRS1900	810	2	1910.02	-23.36	-13	PASS

Test Graphs







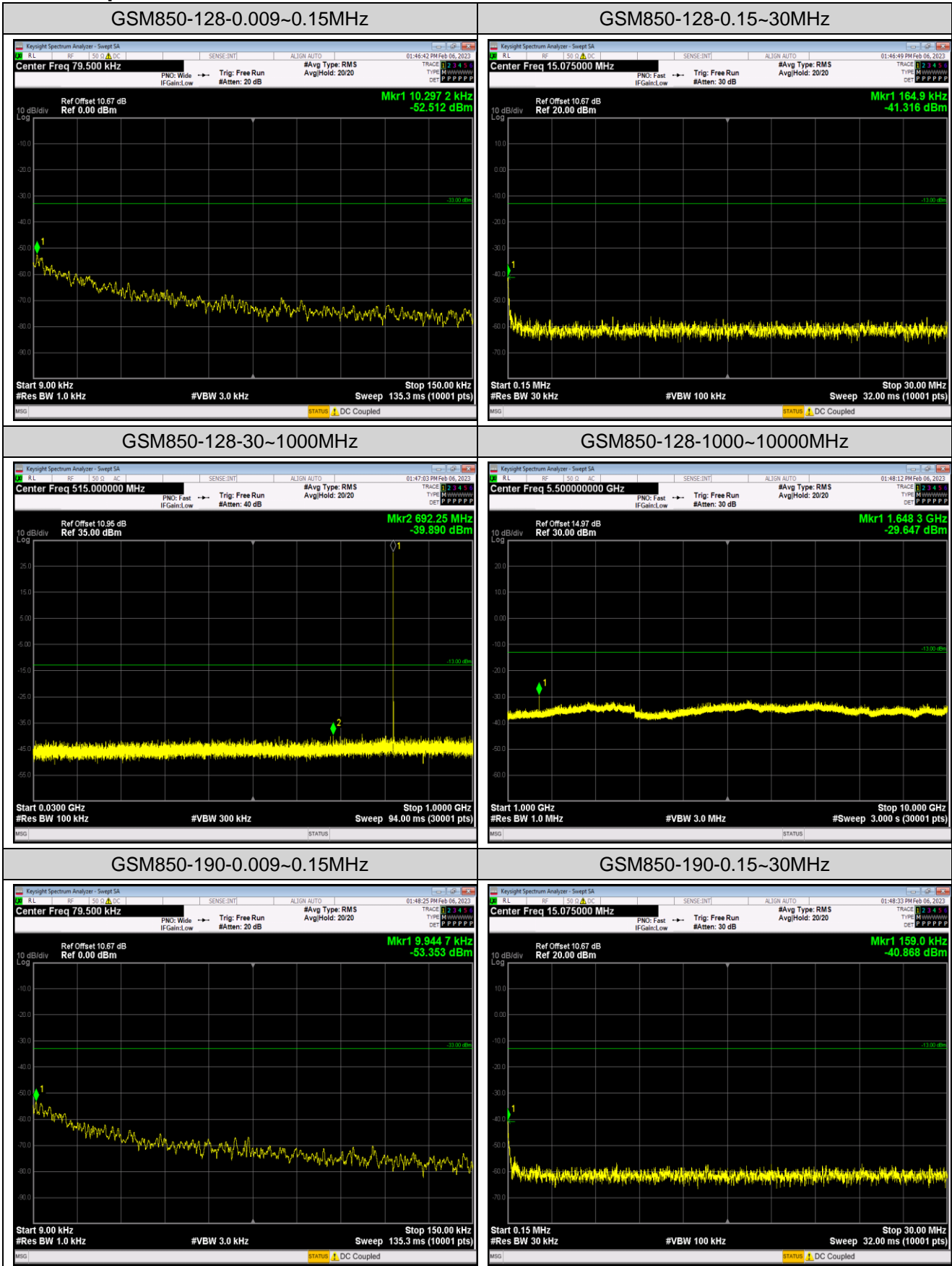
## Appendix E: Conducted Spurious Emission

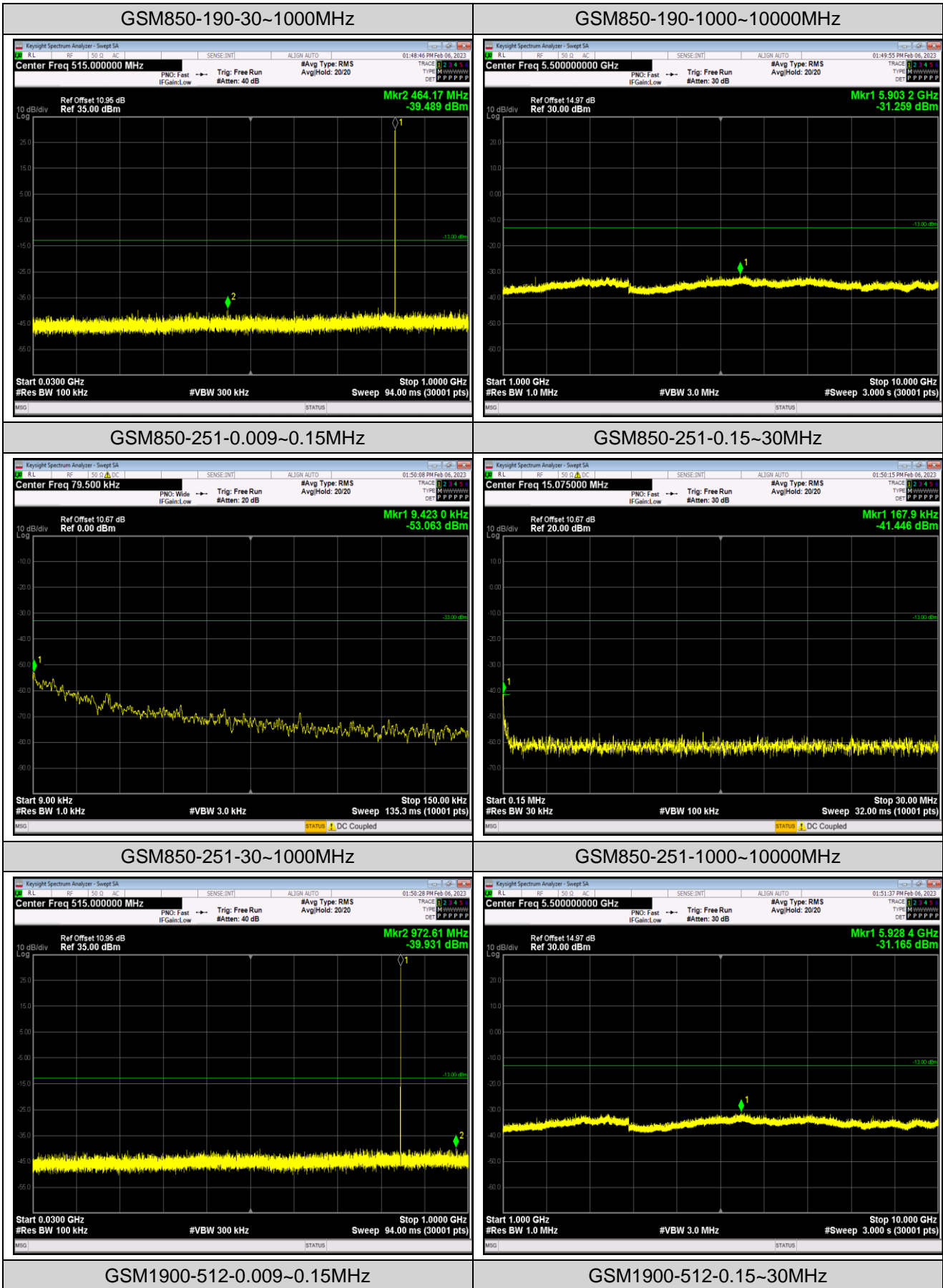
### Test Result

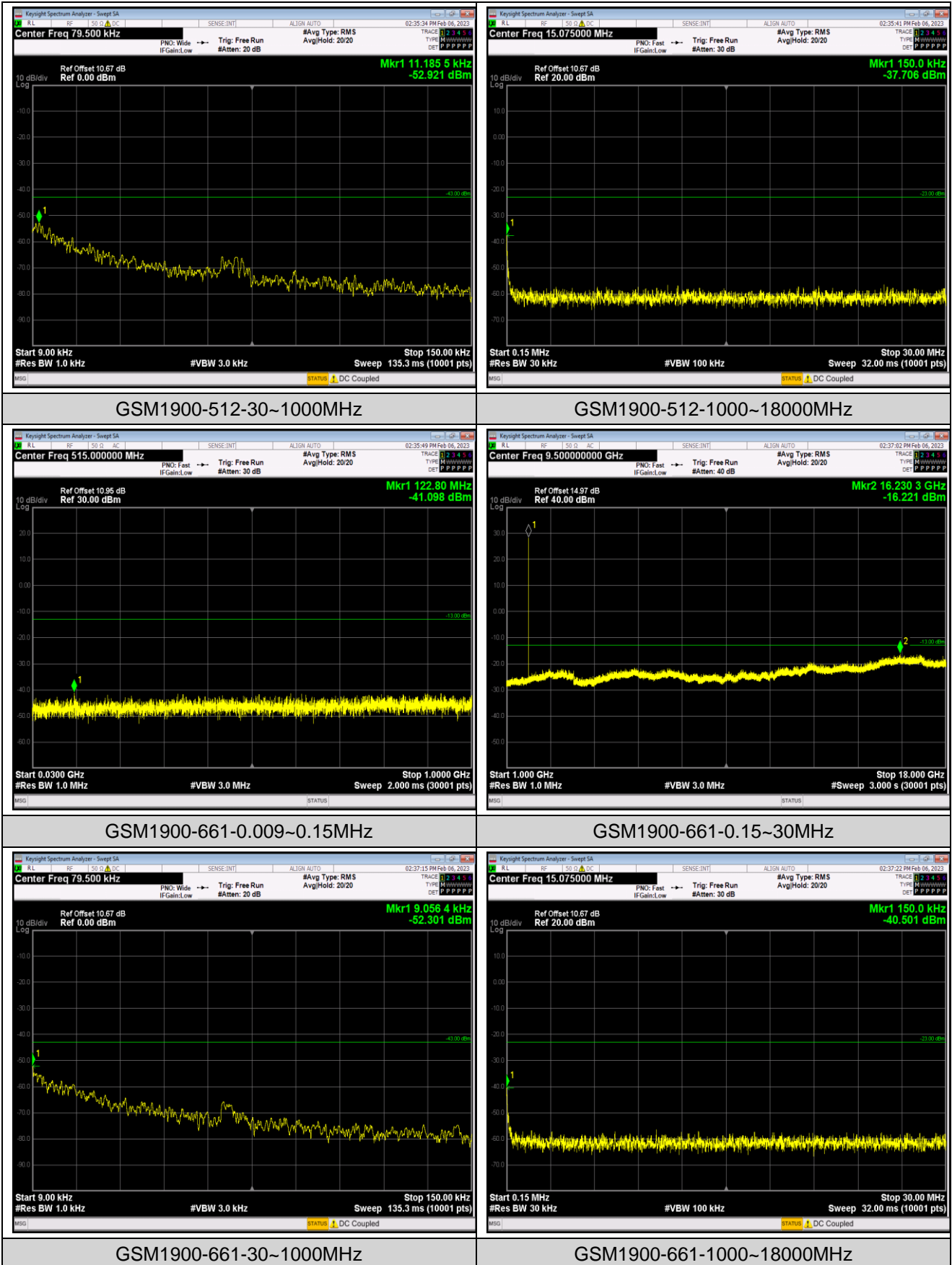
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-52.51	-33	PASS
GSM850	128	5	0.15~30MHz	0.16	-41.32	-13	PASS
GSM850	128	5	30~1000MHz	692.25	-39.89	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-29.65	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-53.35	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-40.87	-13	PASS
GSM850	190	5	30~1000MHz	464.17	-39.49	-13	PASS
GSM850	190	5	1000~10000MHz	5903.2	-31.26	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-53.06	-33	PASS
GSM850	251	5	0.15~30MHz	0.17	-41.45	-13	PASS
GSM850	251	5	30~1000MHz	972.61	-39.93	-13	PASS
GSM850	251	5	1000~10000MHz	5928.4	-31.17	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-52.92	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-37.71	-23	PASS
GSM1900	512	0	30~1000MHz	122.8	-41.1	-13	PASS
GSM1900	512	0	1000~18000MHz	16230.3	-16.22	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-52.3	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-40.5	-23	PASS
GSM1900	661	0	30~1000MHz	888.58	-40.78	-13	PASS
GSM1900	661	0	1000~18000MHz	17095.03	-15.67	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-52.2	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-39.5	-23	PASS
GSM1900	810	0	30~1000MHz	377.1	-40.18	-13	PASS
GSM1900	810	0	1000~18000MHz	17055.37	-16.26	-13	PASS

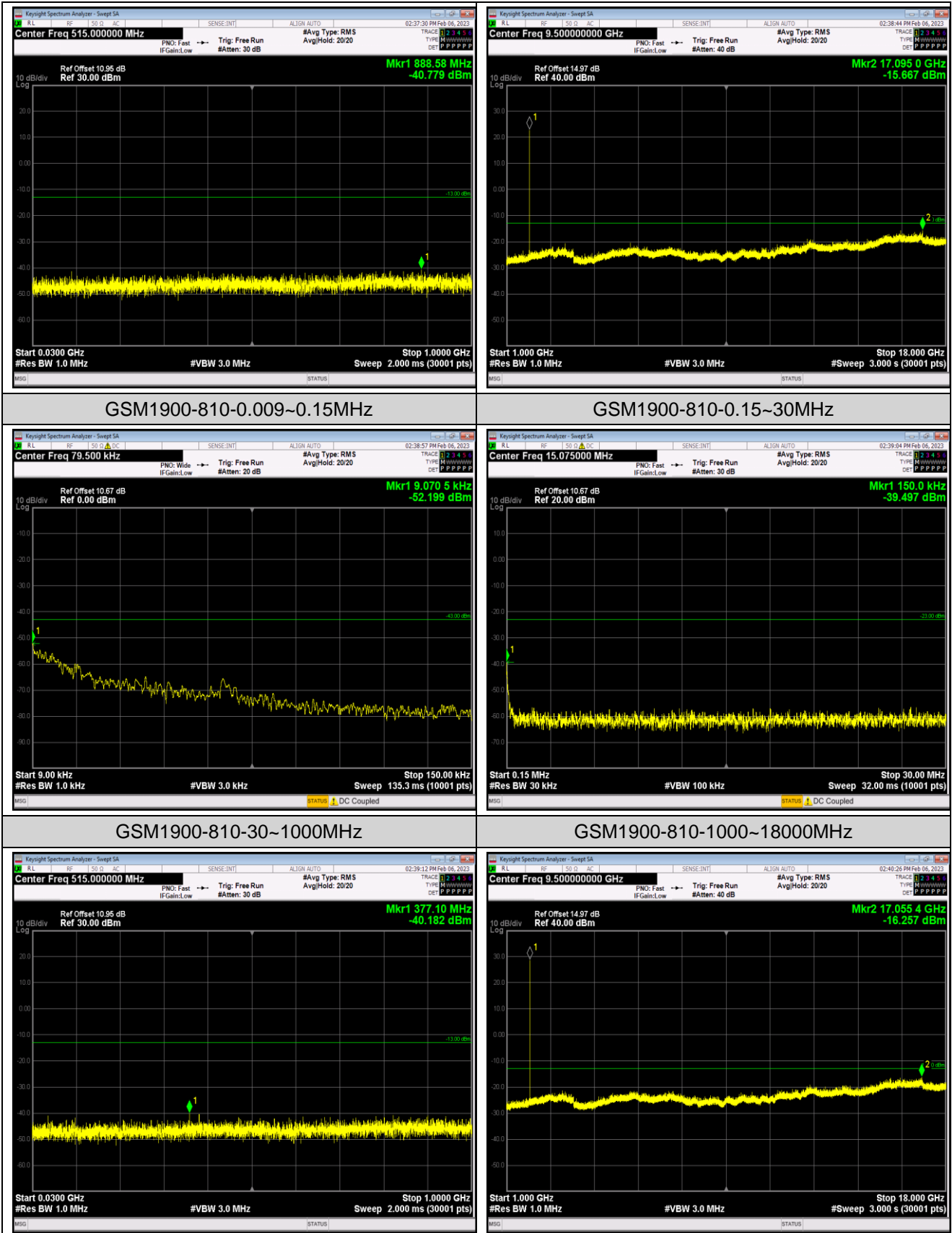
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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		
3.89	-30	-2.26	-0.002701	±2.5	Pass
	-20	-6.01	-0.007184		
	-10	3.94	0.004710		
	0	-1.65	-0.001972		
	10	1.84	0.002199		
	20	-1.68	-0.002008		
	30	-1.90	-0.002271		
	40	0.42	0.000502		
	50	1.16	0.001387		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	2.65	0.003168	±2.5	Pass
	3.89	-3.52	-0.004208		
	4.48	-1.52	-0.001817		
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		
3.89	-30	-7.97	-0.009527	±2.5	Pass
	-20	-10.11	-0.012085		
	-10	-6.36	-0.007602		
	0	-6.36	-0.007602		
	10	-7.97	-0.009527		
	20	-2.71	-0.003239		
	30	-4.91	-0.005869		
	40	-3.49	-0.004172		
	50	-7.62	-0.009108		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-6.88	-0.008224	±2.5	Pass
	3.89	-5.29	-0.006323		
	4.48	-9.88	-0.011810		
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		
3.89	-30	-5.52	-0.002936	Within authorized band for PCS 1900	Pass
	-20	-10.65	-0.005665		
	-10	-3.55	-0.001888		
	0	-7.78	-0.004138		
	10	-2.81	-0.001495		
	20	-1.32	-0.000702		
	30	-5.52	-0.002936		
	40	-18.37	-0.009771		
	50	-12.56	-0.006681		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-7.59	-0.004037	Within authorized band for PCS 1900	Pass
	3.89	-1.97	-0.001048		
	4.35	-11.30	-0.006011		
<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		
3.89	-30	-9.33	-0.004963	Within authorized band for PCS 1900	Pass
	-20	-13.01	-0.006920		
	-10	-6.49	-0.003452		
	0	-5.62	-0.002989		
	10	-3.55	-0.001888		
	20	-5.97	-0.003176		
	30	1.45	0.000771		
	40	0.94	0.000500		
	50	-1.03	-0.000548		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-6.10	-0.003245	Within authorized band for PCS 1900	Pass
	3.89	-8.49	-0.004516		
	4.35	-9.81	-0.005218		
<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

