

## 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	34.00	24.96	38.45	PASS
GSM850	190	5	33.97	24.93	38.45	PASS
GSM850	251	5	33.95	24.91	38.45	PASS
GSM1900	512	0	30.16	27.36	33.00	PASS
GSM1900	661	0	29.91	27.11	33.00	PASS
GSM1900	810	0	30.04	27.24	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.97	24.93	38.45	PASS
GPRS850	128	5	2	33.00	23.96	38.45	PASS
GPRS850	128	5	3	30.98	21.94	38.45	PASS
GPRS850	128	5	4	29.82	20.78	38.45	PASS
GPRS850	190	5	1	33.94	24.9	38.45	PASS
GPRS850	190	5	2	33.00	23.96	38.45	PASS
GPRS850	190	5	3	30.97	21.93	38.45	PASS
GPRS850	190	5	4	29.84	20.8	38.45	PASS
GPRS850	251	5	1	33.94	24.9	38.45	PASS
GPRS850	251	5	2	32.99	23.95	38.45	PASS
GPRS850	251	5	3	30.97	21.93	38.45	PASS
GPRS850	251	5	4	29.80	20.76	38.45	PASS
GPRS1900	512	0	1	30.16	27.36	33.00	PASS
GPRS1900	512	0	2	29.18	26.38	33.00	PASS
GPRS1900	512	0	3	27.16	24.36	33.00	PASS
GPRS1900	512	0	4	26.06	23.26	33.00	PASS
GPRS1900	661	0	1	29.96	27.16	33.00	PASS
GPRS1900	661	0	2	28.98	26.18	33.00	PASS
GPRS1900	661	0	3	26.96	24.16	33.00	PASS
GPRS1900	661	0	4	25.83	23.03	33.00	PASS
GPRS1900	810	0	1	30.09	27.29	33.00	PASS
GPRS1900	810	0	2	29.13	26.33	33.00	PASS
GPRS1900	810	0	3	27.13	24.33	33.00	PASS
GPRS1900	810	0	4	26.06	23.26	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	28.25	19.21	38.45	PASS
EGPRS850	128	8	2	27.03	17.99	38.45	PASS
EGPRS850	128	8	3	24.89	15.85	38.45	PASS
EGPRS850	128	8	4	23.44	14.4	38.45	PASS
EGPRS850	190	8	1	28.21	19.17	38.45	PASS
EGPRS850	190	8	2	27.11	18.07	38.45	PASS
EGPRS850	190	8	3	24.91	15.87	38.45	PASS
EGPRS850	190	8	4	23.50	14.46	38.45	PASS
EGPRS850	251	8	1	28.25	19.21	38.45	PASS
EGPRS850	251	8	2	27.16	18.12	38.45	PASS
EGPRS850	251	8	3	24.88	15.84	38.45	PASS
EGPRS850	251	8	4	23.53	14.49	38.45	PASS
EGPRS1900	512	2	1	26.61	23.81	33.00	PASS
EGPRS1900	512	2	2	25.53	22.73	33.00	PASS
EGPRS1900	512	2	3	23.60	20.8	33.00	PASS
EGPRS1900	512	2	4	22.46	19.66	33.00	PASS
EGPRS1900	661	2	1	26.22	23.42	33.00	PASS
EGPRS1900	661	2	2	25.28	22.48	33.00	PASS
EGPRS1900	661	2	3	23.25	20.45	33.00	PASS
EGPRS1900	661	2	4	22.15	19.35	33.00	PASS
EGPRS1900	810	2	1	26.73	23.93	33.00	PASS
EGPRS1900	810	2	2	25.67	22.87	33.00	PASS
EGPRS1900	810	2	3	23.72	20.92	33.00	PASS
EGPRS1900	810	2	4	22.56	19.76	33.00	PASS

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

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

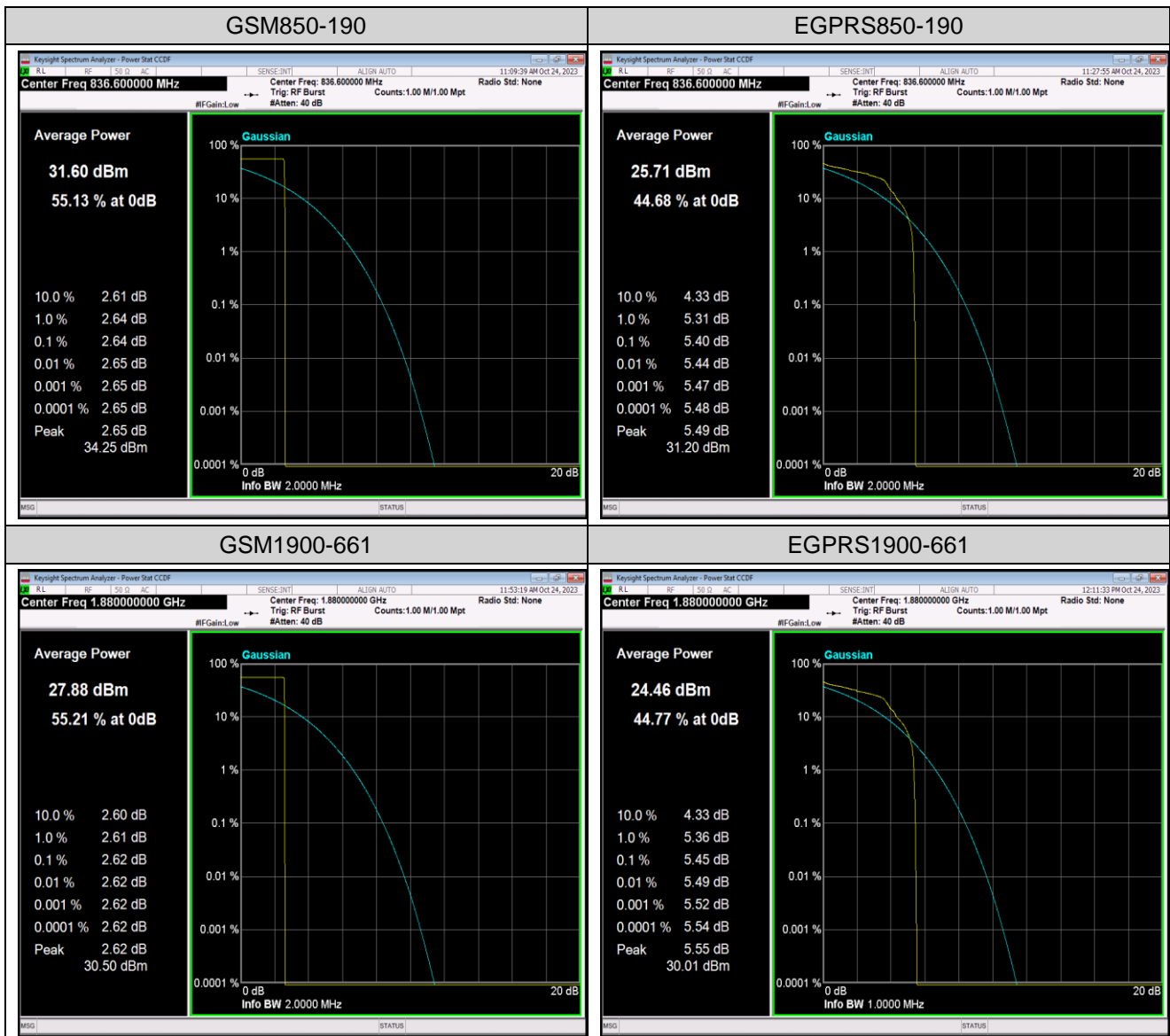
## Appendix B: Peak-to-Average Ratio(CCDF)

### Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.64	13	PASS
EGPRS850	190	8	5.4	13	PASS
GSM1900	661	0	2.62	13	PASS
EGPRS1900	661	2	5.45	13	PASS

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

### Test Graphs

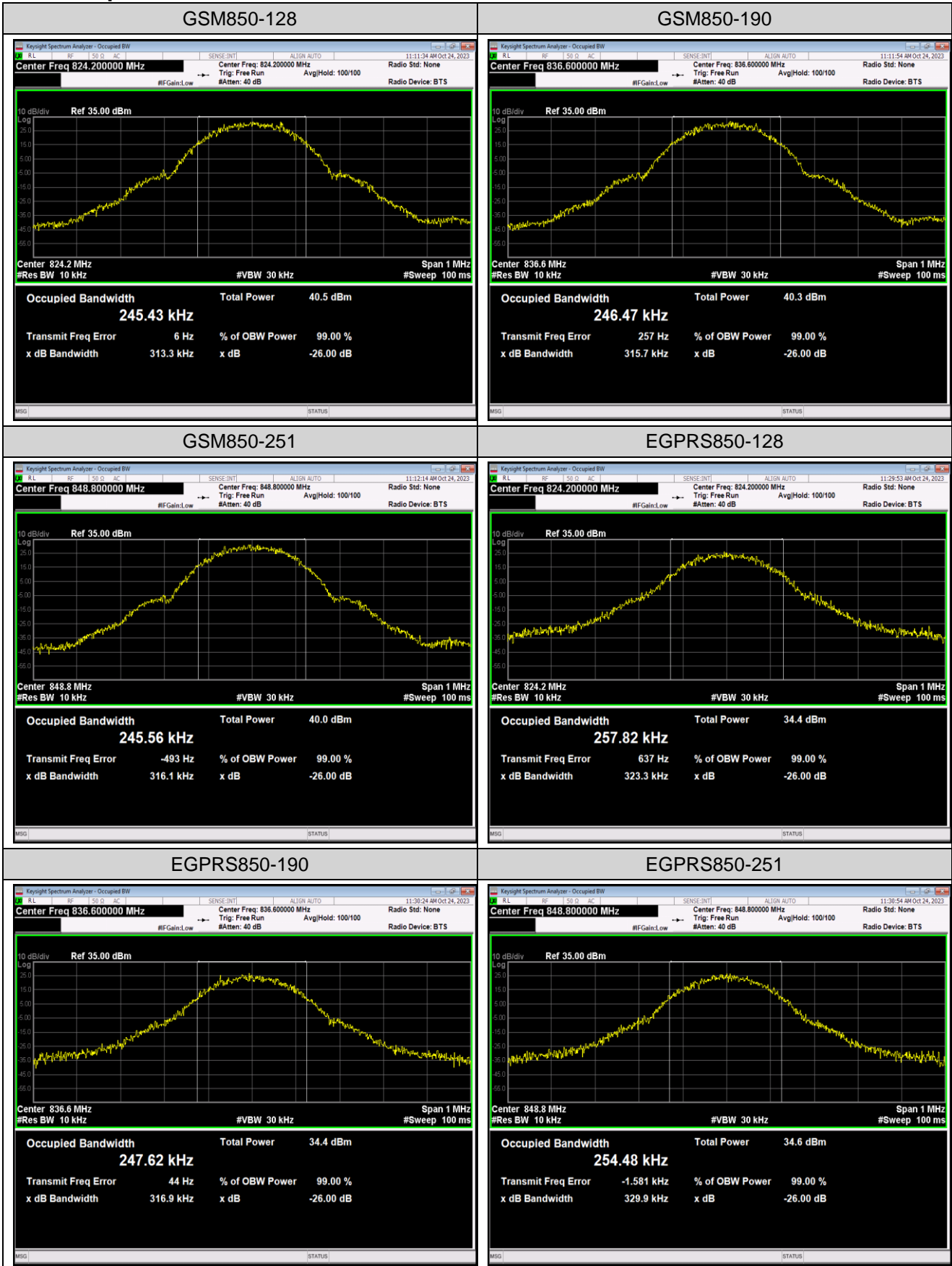


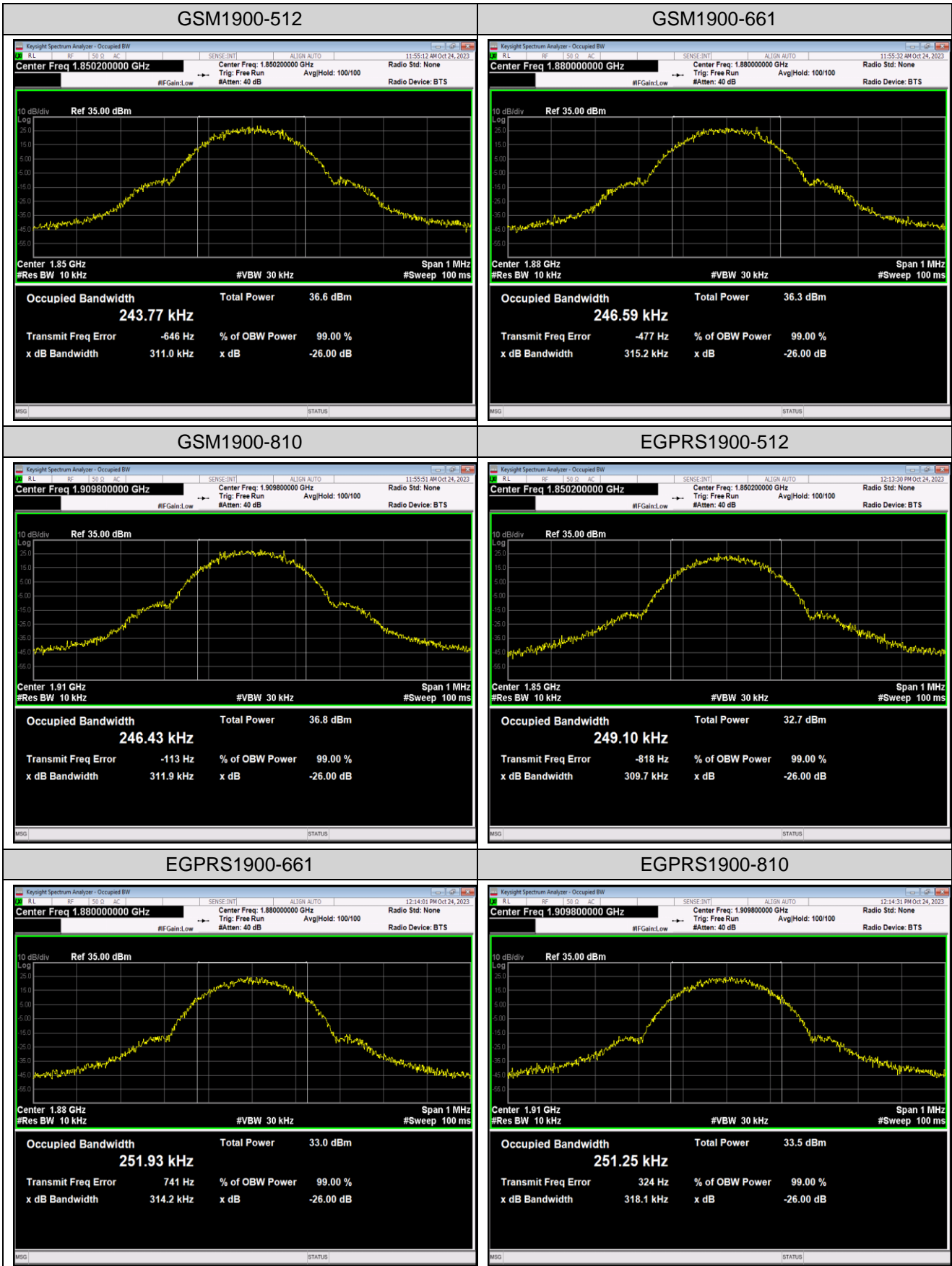
## Appendix C: 26dB Bandwidth and Occupied Bandwidth

### Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24543	0.3133	---	PASS
GSM850	190	5	0.24647	0.3157	---	PASS
GSM850	251	5	0.24556	0.3161	---	PASS
EGPRS850	128	8	0.25782	0.3233	---	PASS
EGPRS850	190	8	0.24762	0.3169	---	PASS
EGPRS850	251	8	0.25448	0.3299	---	PASS
GSM1900	512	0	0.24377	0.3110	---	PASS
GSM1900	661	0	0.24659	0.3152	---	PASS
GSM1900	810	0	0.24643	0.3119	---	PASS
EGPRS1900	512	2	0.24910	0.3097	---	PASS
EGPRS1900	661	2	0.25193	0.3142	---	PASS
EGPRS1900	810	2	0.25125	0.3181	---	PASS

Test Graphs

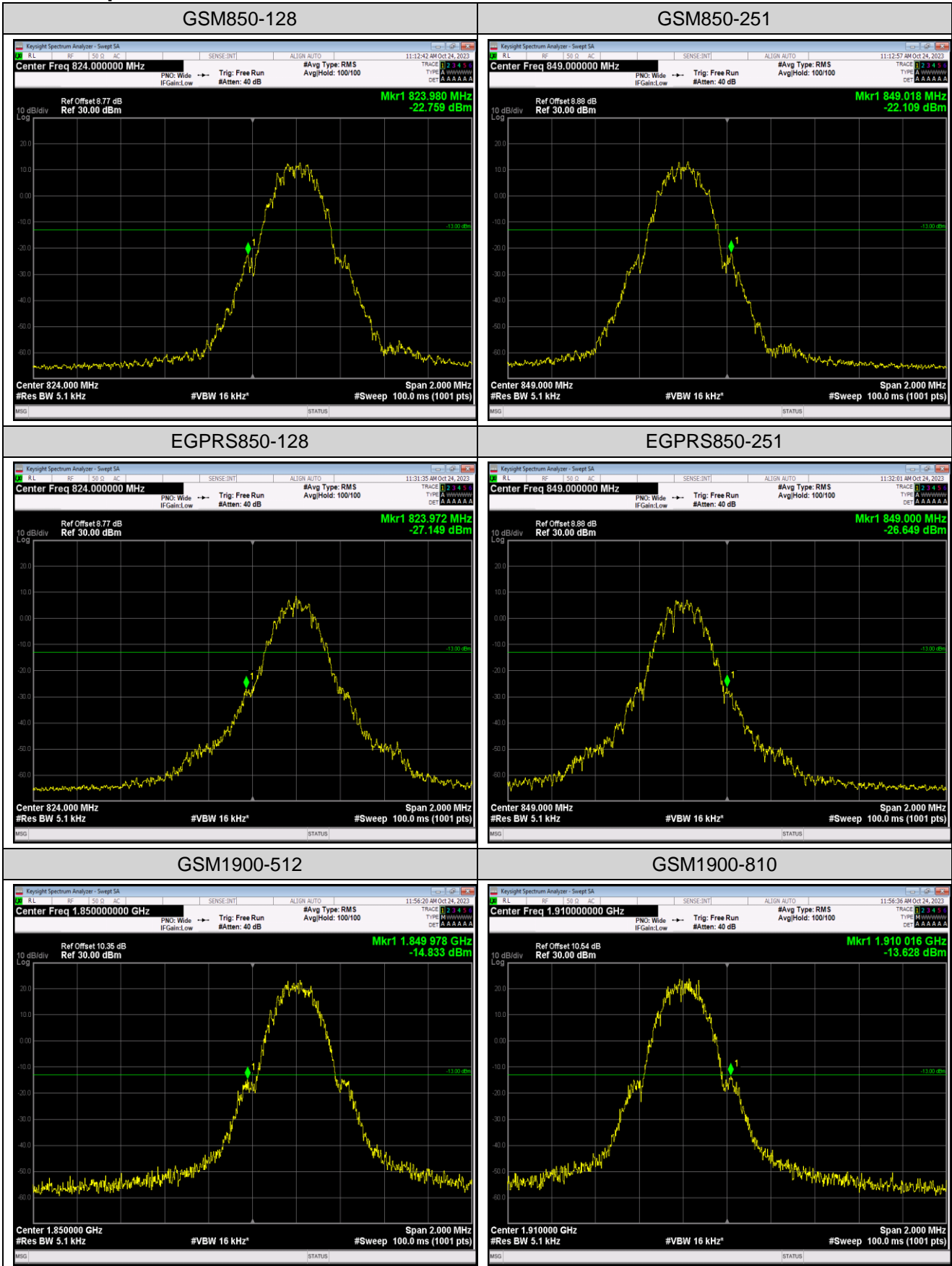




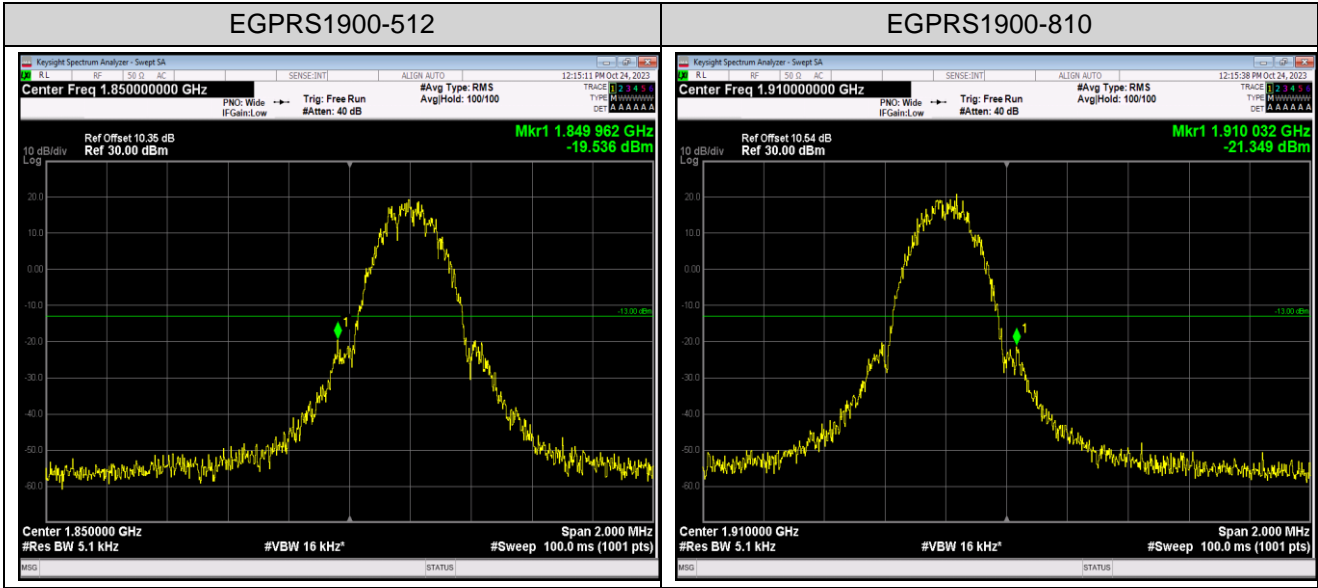
**Appendix D: Band Edge****Test Result**

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-22.76	-13	PASS
GSM850	251	5	849.02	-22.11	-13	PASS
EGPRS850	128	8	823.97	-27.15	-13	PASS
EGPRS850	251	8	849.00	-26.65	-13	PASS
GSM1900	512	0	1849.98	-14.83	-13	PASS
GSM1900	810	0	1910.02	-13.63	-13	PASS
EGPRS1900	512	2	1849.96	-19.54	-13	PASS
EGPRS1900	810	2	1910.03	-21.35	-13	PASS

Test Graphs







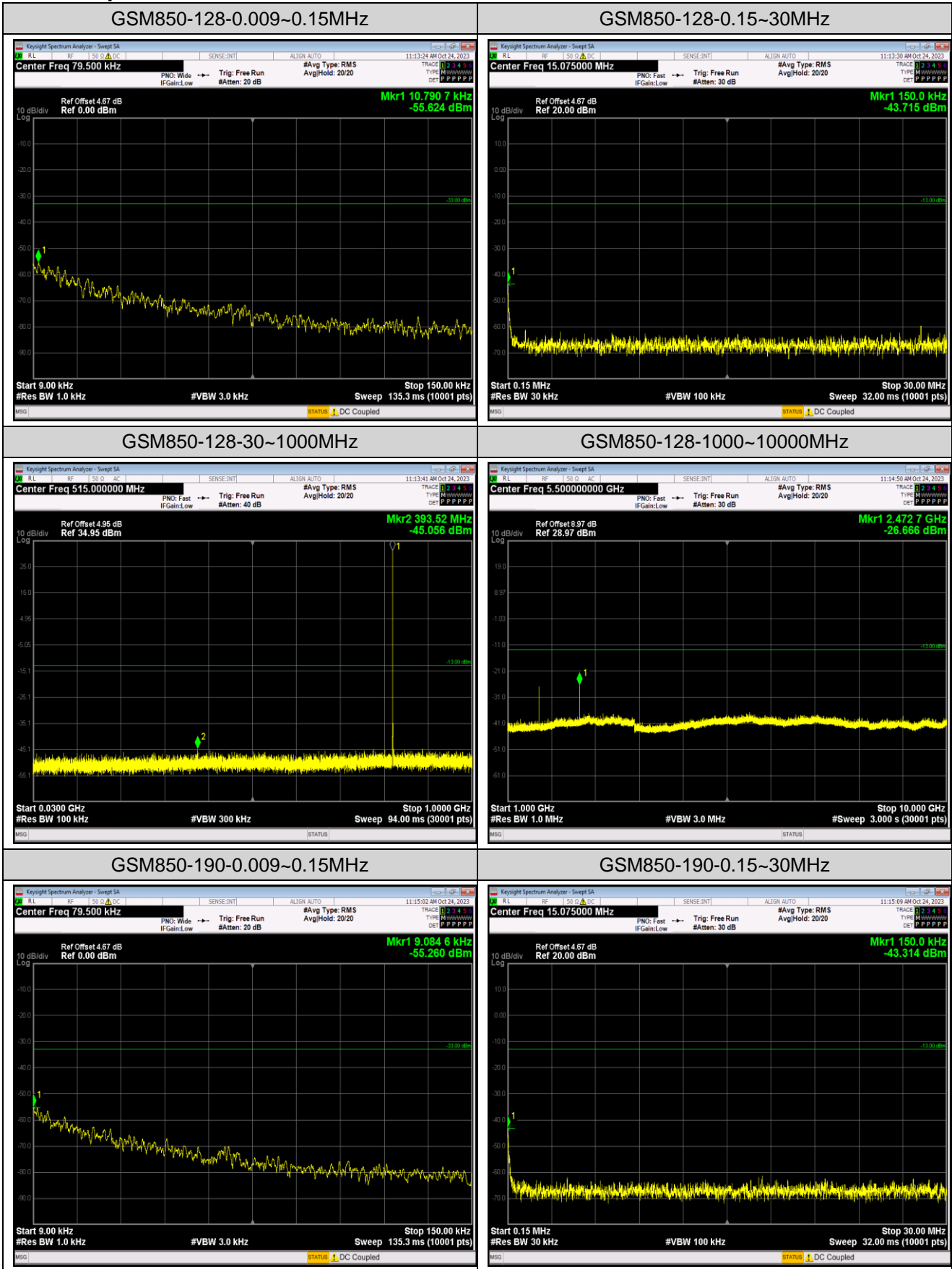
## Appendix E: Conducted Spurious Emission

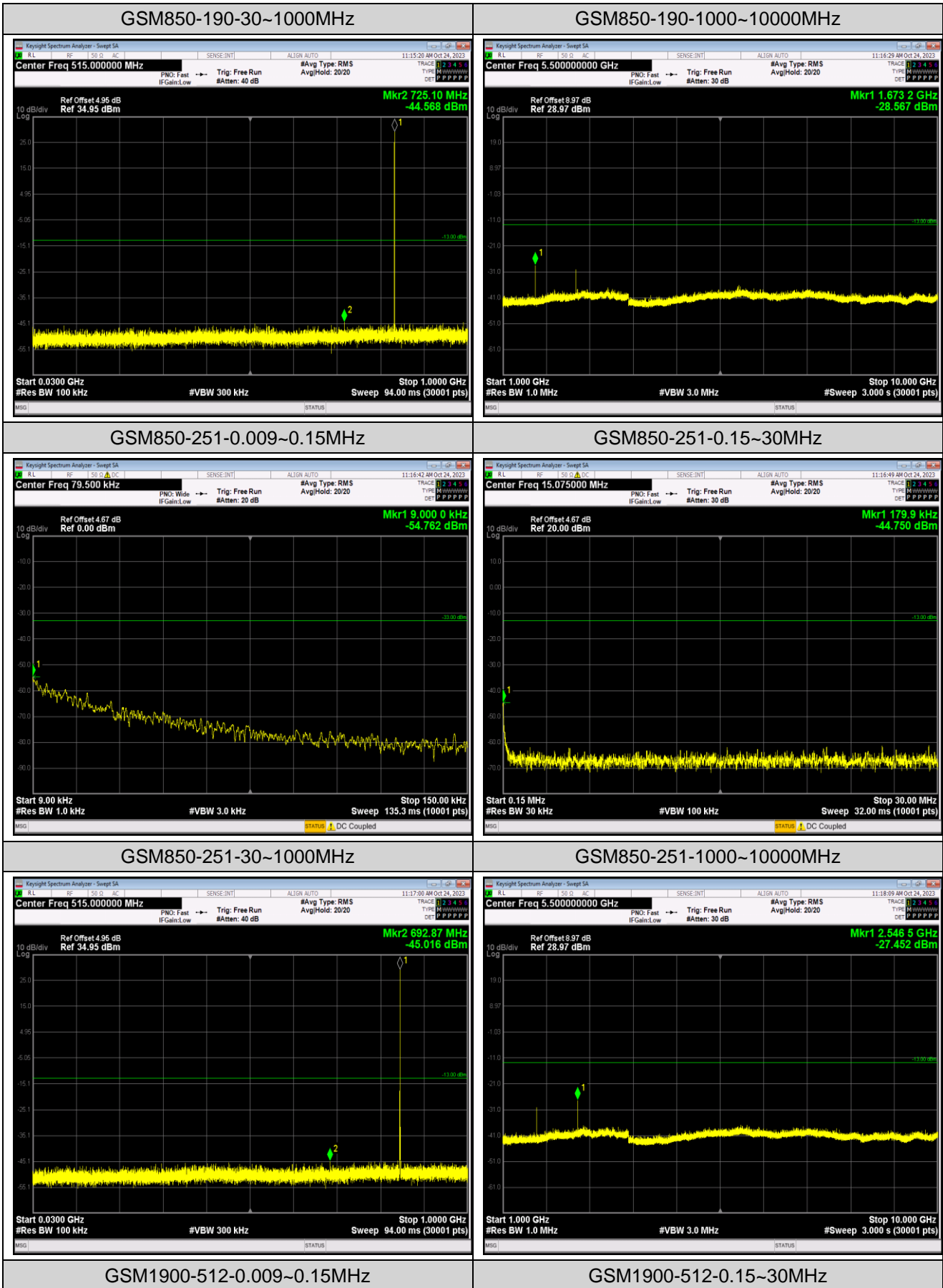
### Test Result

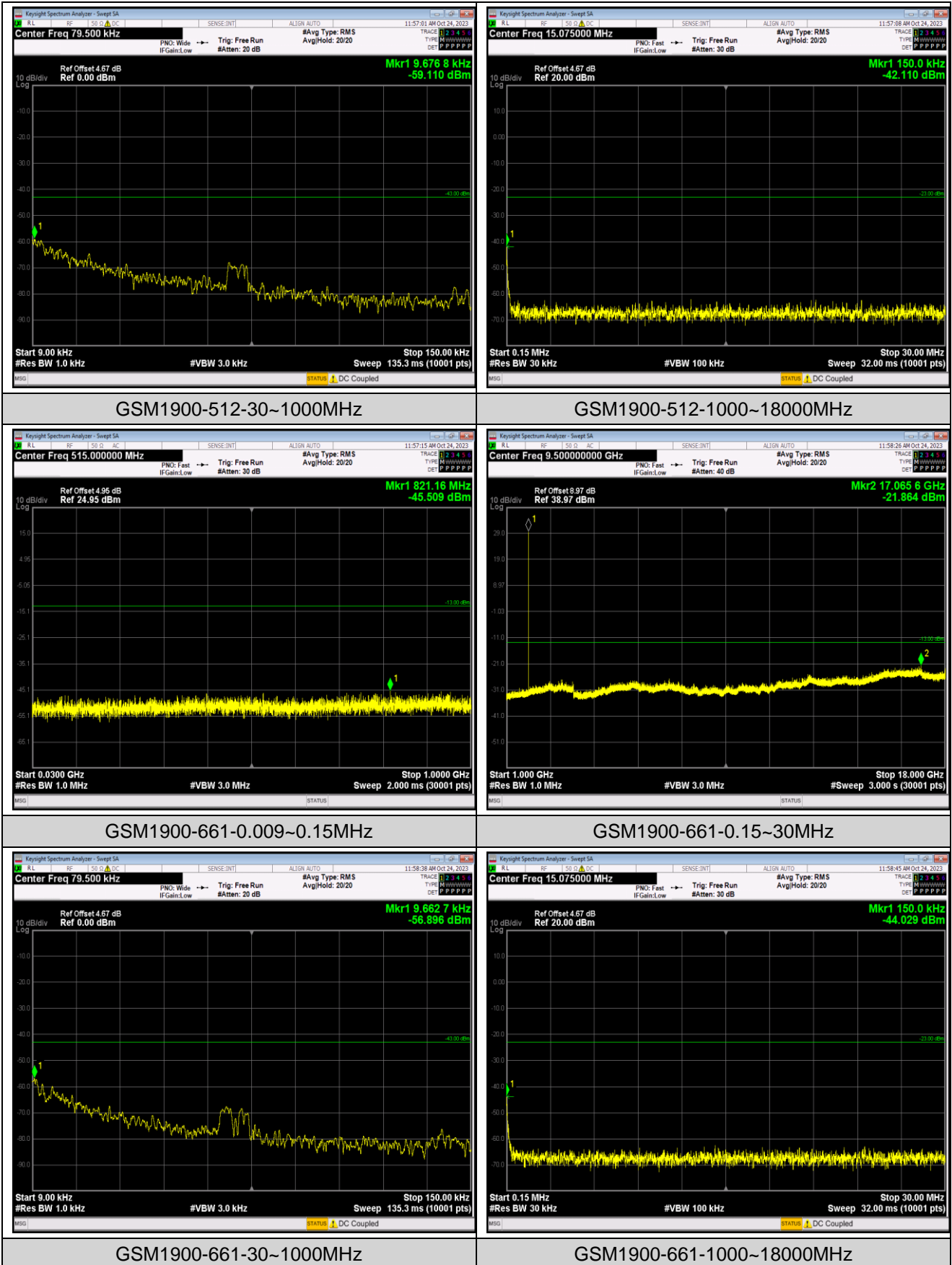
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-55.62	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-43.72	-13	PASS
GSM850	128	5	30~1000MHz	393.52	-45.06	-13	PASS
GSM850	128	5	1000~10000MHz	2472.7	-26.67	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-55.26	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-43.31	-13	PASS
GSM850	190	5	30~1000MHz	725.1	-44.57	-13	PASS
GSM850	190	5	1000~10000MHz	1673.2	-28.57	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-54.76	-33	PASS
GSM850	251	5	0.15~30MHz	0.18	-44.75	-13	PASS
GSM850	251	5	30~1000MHz	692.87	-45.02	-13	PASS
GSM850	251	5	1000~10000MHz	2546.5	-27.45	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-59.11	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-42.11	-23	PASS
GSM1900	512	0	30~1000MHz	821.16	-45.51	-13	PASS
GSM1900	512	0	1000~18000MHz	17065.57	-21.86	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-56.9	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-44.03	-23	PASS
GSM1900	661	0	30~1000MHz	788.12	-45.7	-13	PASS
GSM1900	661	0	1000~18000MHz	15636.43	-22.24	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.76	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-44.85	-23	PASS
GSM1900	810	0	30~1000MHz	274.08	-45.26	-13	PASS
GSM1900	810	0	1000~18000MHz	16989.63	-21.1	-13	PASS

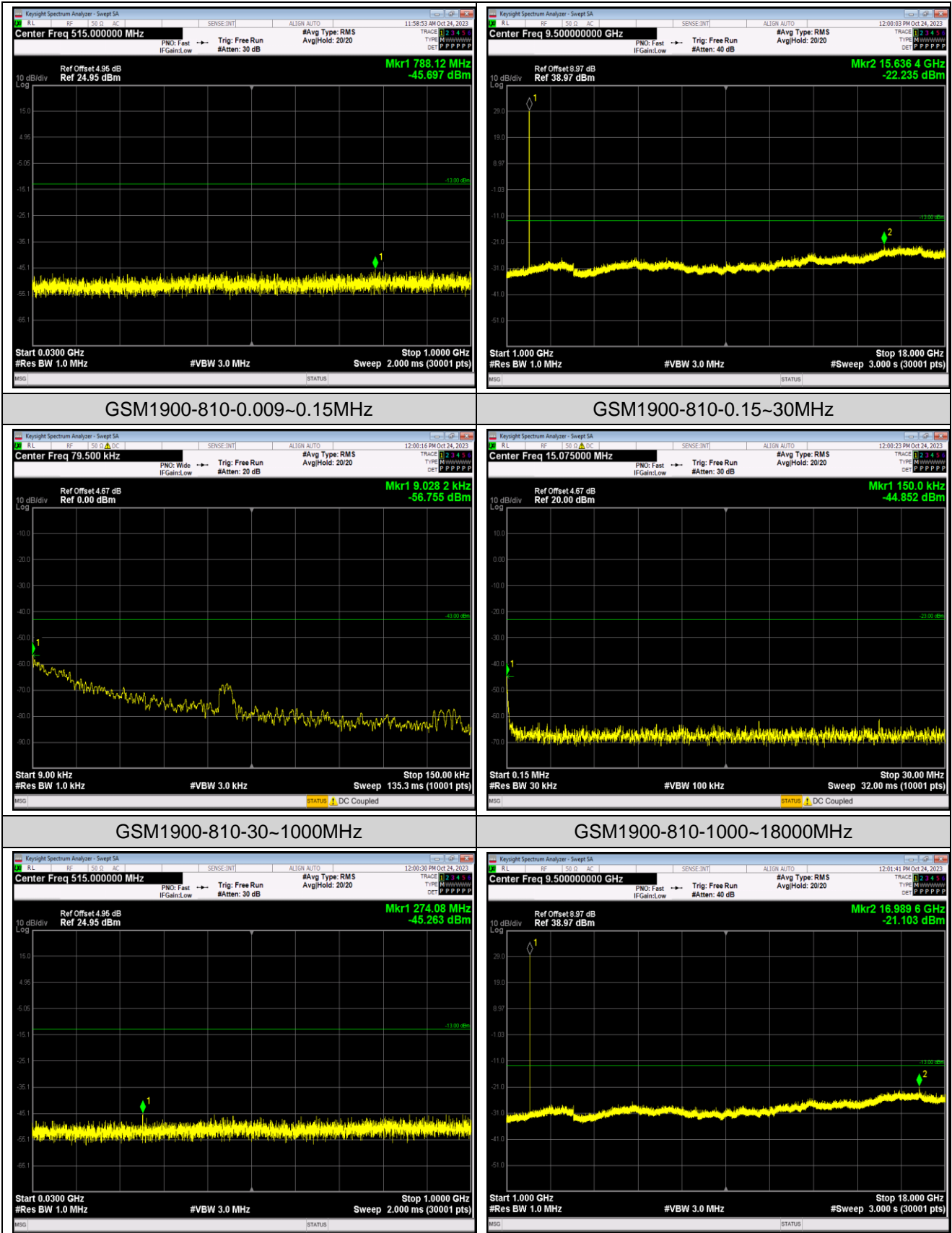
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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	0.45	0.000538	±2.5	Pass
	-20	-7.78	-0.009300		
	-10	-0.36	-0.000430		
	0	-5.26	-0.006287		
	10	-4.10	-0.004901		
	20	-4.84	-0.005785		
	30	-6.72	-0.008033		
	40	-2.52	-0.003012		
	50	-7.26	-0.008678		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-8.27	-0.009885	±2.5	Pass
	3.87	-6.33	-0.007566		
	4.45	-5.33	-0.006371		
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	-21.63	-0.025855	±2.5	Pass
	-20	-16.95	-0.020261		
	-10	-11.72	-0.014009		
	0	-12.95	-0.015479		
	10	-17.43	-0.020834		
	20	-12.85	-0.015360		
	30	-13.92	-0.016639		
	40	-14.50	-0.017332		
	50	-12.91	-0.015432		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-15.24	-0.018217	±2.5	Pass
	3.87	-13.75	-0.016436		
	4.45	-12.49	-0.014929		
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		
3.87	-30	-14.24	-0.007574	Within authorized band for PCS 1900	Pass
	-20	-8.59	-0.004569		
	-10	3.13	0.001665		
	0	-7.14	-0.003798		
	10	-3.49	-0.001856		
	20	-6.33	-0.003367		
	30	-0.39	-0.000207		
	40	2.87	0.001527		
	50	6.49	0.003452		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-0.23	-0.000122	Within authorized band for PCS 1900	Pass
	3.87	-8.01	-0.004261		
	4.45	-10.14	-0.005394		
<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		
3.87	-30	-13.62	-0.007245	Within authorized band for PCS 1900	Pass
	-20	-2.49	-0.001324		
	-10	-8.85	-0.004707		
	0	-3.94	-0.002096		
	10	-4.42	-0.002351		
	20	-5.49	-0.002920		
	30	3.26	0.001734		
	40	4.91	0.002612		
	50	1.49	0.000793		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-11.01	-0.005856	Within authorized band for PCS 1900	Pass
	3.87	-9.98	-0.005309		
	4.45	-1.55	-0.000824		
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

