

## 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	32.83	25.73	38.45	PASS
GSM850	190	5	32.92	25.82	38.45	PASS
GSM850	251	5	32.50	25.4	38.45	PASS
GSM1900	512	0	28.28	24.89	33.00	PASS
GSM1900	661	0	28.05	24.66	33.00	PASS
GSM1900	810	0	27.44	24.05	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.84	25.74	38.45	PASS
GPRS850	128	5	2	32.05	24.95	38.45	PASS
GPRS850	128	5	3	30.27	23.17	38.45	PASS
GPRS850	128	5	4	29.18	22.08	38.45	PASS
GPRS850	190	5	1	32.91	25.81	38.45	PASS
GPRS850	190	5	2	32.13	25.03	38.45	PASS
GPRS850	190	5	3	30.33	23.23	38.45	PASS
GPRS850	190	5	4	29.25	22.15	38.45	PASS
GPRS850	251	5	1	32.48	25.38	38.45	PASS
GPRS850	251	5	2	31.71	24.61	38.45	PASS
GPRS850	251	5	3	29.93	22.83	38.45	PASS
GPRS850	251	5	4	28.85	21.75	38.45	PASS
GPRS1900	512	0	1	28.28	24.89	33.00	PASS
GPRS1900	512	0	2	27.66	24.27	33.00	PASS
GPRS1900	512	0	3	26.22	22.83	33.00	PASS
GPRS1900	512	0	4	25.22	21.83	33.00	PASS
GPRS1900	661	0	1	28.05	24.66	33.00	PASS
GPRS1900	661	0	2	27.52	24.13	33.00	PASS
GPRS1900	661	0	3	26.22	22.83	33.00	PASS
GPRS1900	661	0	4	25.38	21.99	33.00	PASS
GPRS1900	810	0	1	27.46	24.07	33.00	PASS
GPRS1900	810	0	2	26.96	23.57	33.00	PASS
GPRS1900	810	0	3	25.73	22.34	33.00	PASS
GPRS1900	810	0	4	24.94	21.55	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.23	20.13	38.45	PASS
EGPRS850	128	8	2	26.00	18.9	38.45	PASS
EGPRS850	128	8	3	23.93	16.83	38.45	PASS
EGPRS850	128	8	4	22.58	15.48	38.45	PASS
EGPRS850	190	8	1	27.09	19.99	38.45	PASS
EGPRS850	190	8	2	25.87	18.77	38.45	PASS
EGPRS850	190	8	3	23.83	16.73	38.45	PASS
EGPRS850	190	8	4	22.49	15.39	38.45	PASS
EGPRS850	251	8	1	27.30	20.2	38.45	PASS
EGPRS850	251	8	2	26.20	19.1	38.45	PASS
EGPRS850	251	8	3	23.99	16.89	38.45	PASS
EGPRS850	251	8	4	22.67	15.57	38.45	PASS
EGPRS1900	512	2	1	24.29	20.9	33.00	PASS
EGPRS1900	512	2	2	23.24	19.85	33.00	PASS
EGPRS1900	512	2	3	21.11	17.72	33.00	PASS
EGPRS1900	512	2	4	19.87	16.48	33.00	PASS
EGPRS1900	661	2	1	24.26	20.87	33.00	PASS
EGPRS1900	661	2	2	23.10	19.71	33.00	PASS
EGPRS1900	661	2	3	21.05	17.66	33.00	PASS
EGPRS1900	661	2	4	19.81	16.42	33.00	PASS
EGPRS1900	810	2	1	24.16	20.77	33.00	PASS
EGPRS1900	810	2	2	23.08	19.69	33.00	PASS
EGPRS1900	810	2	3	21.06	17.67	33.00	PASS
EGPRS1900	810	2	4	19.70	16.31	33.00	PASS

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

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

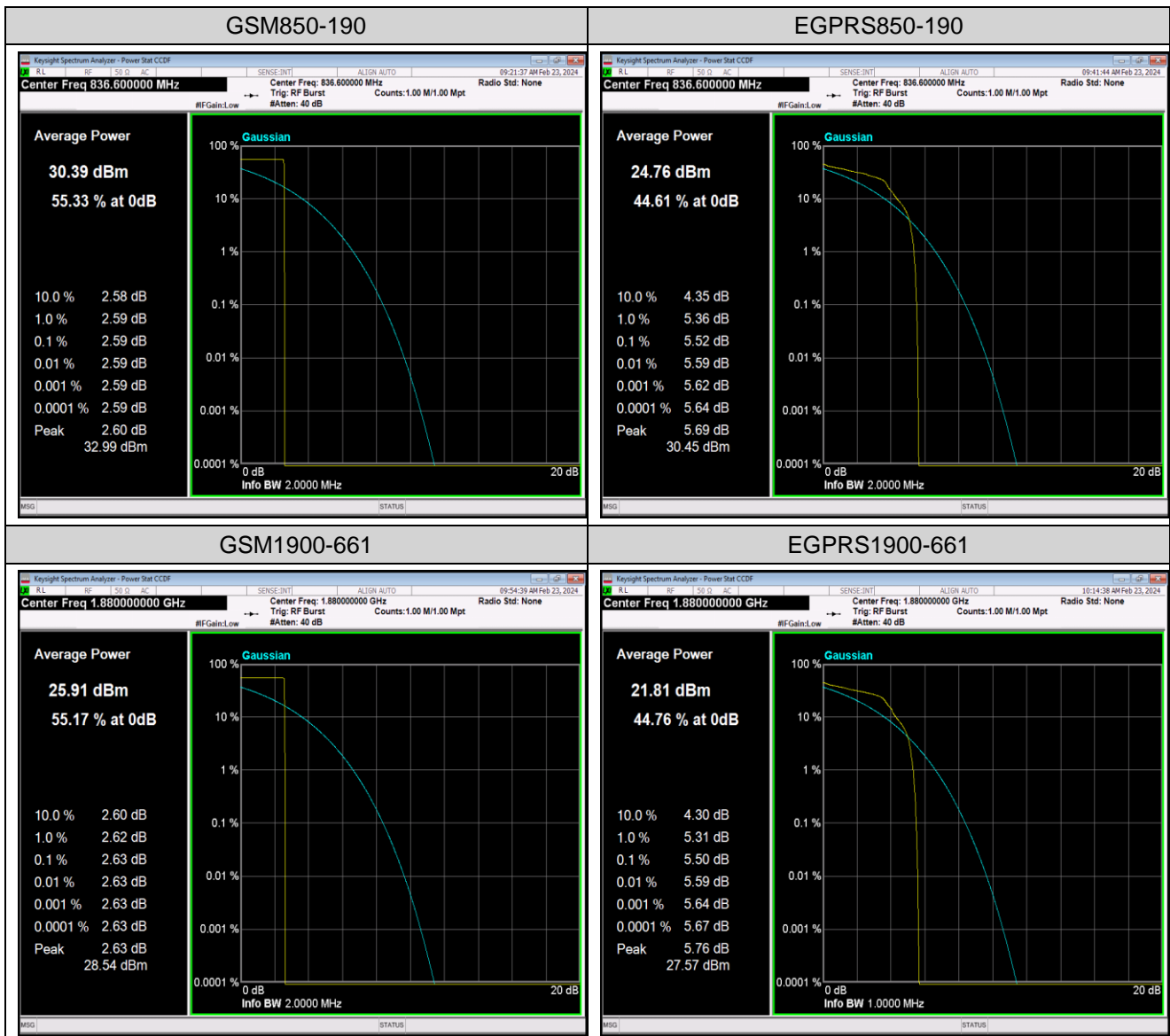
## Appendix B: Peak-to-Average Ratio(CCDF)

### Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.59	13	PASS
EGPRS850	190	8	5.52	13	PASS
GSM1900	661	0	2.63	13	PASS
EGPRS1900	661	2	5.5	13	PASS

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

### Test Graphs

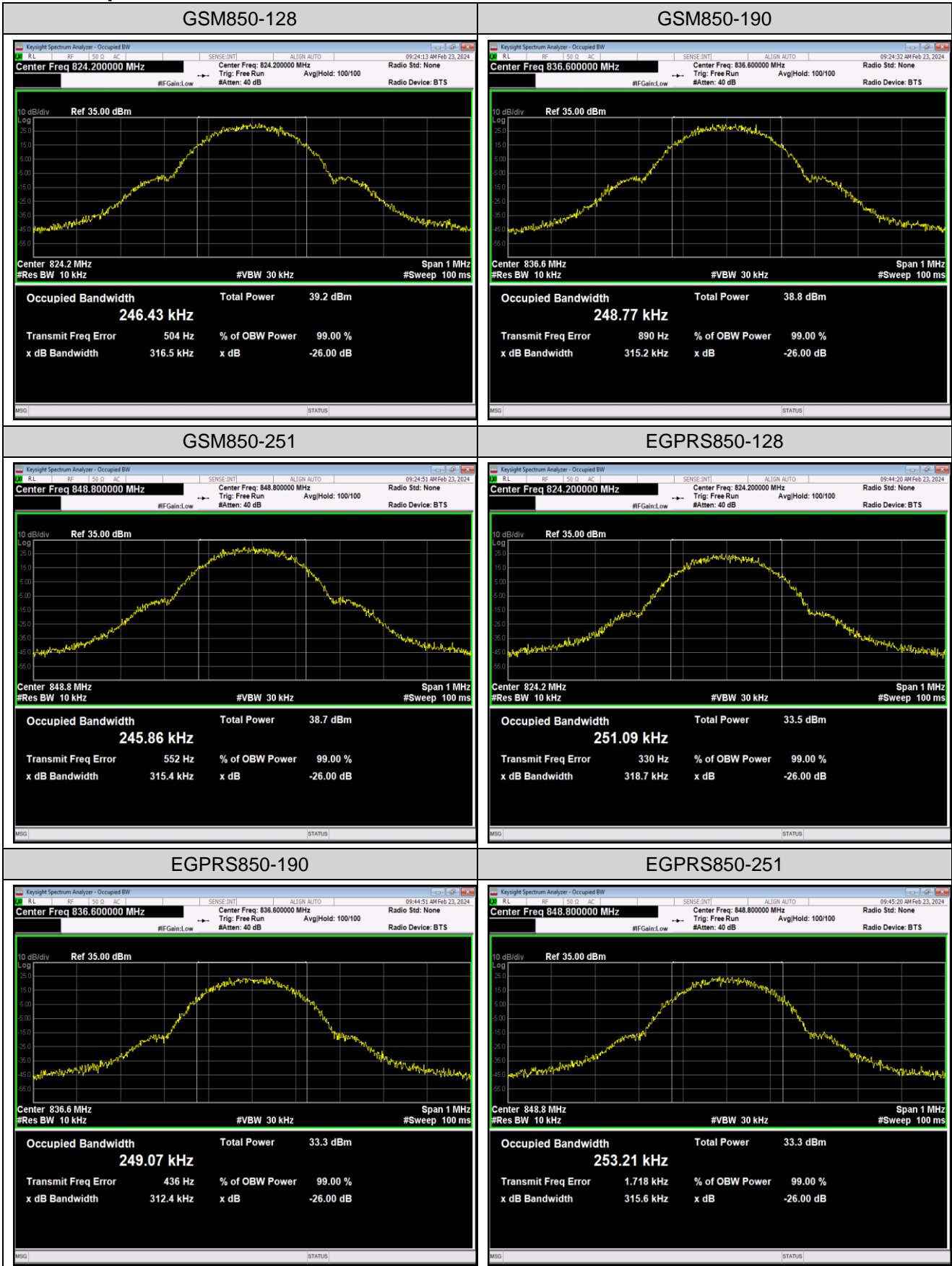


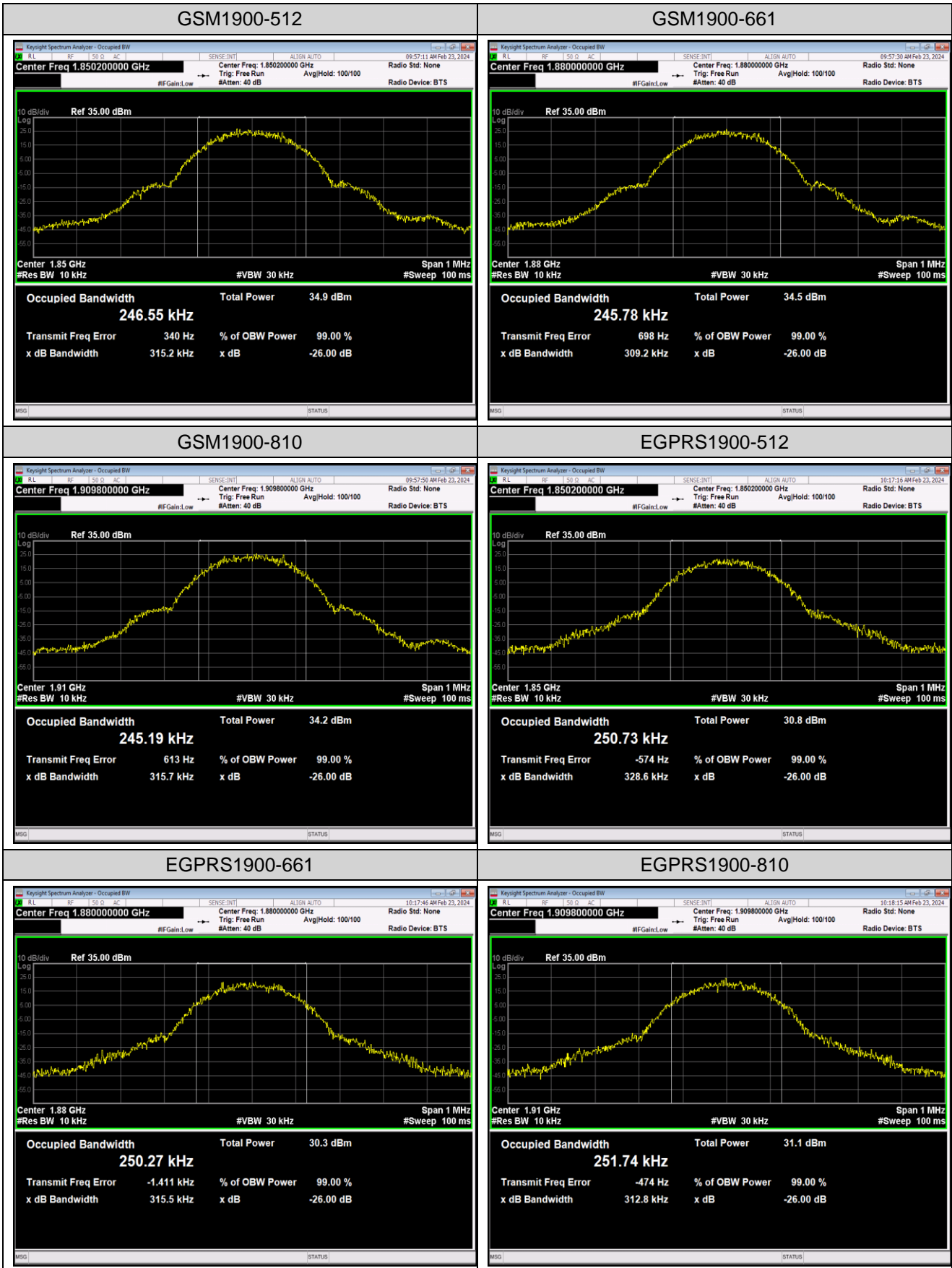
## Appendix C: 26dB Bandwidth and Occupied Bandwidth

### Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24643	0.3165	---	PASS
GSM850	190	5	0.24877	0.3152	---	PASS
GSM850	251	5	0.24586	0.3154	---	PASS
EGPRS850	128	8	0.25109	0.3187	---	PASS
EGPRS850	190	8	0.24907	0.3124	---	PASS
EGPRS850	251	8	0.25321	0.3156	---	PASS
GSM1900	512	0	0.24655	0.3152	---	PASS
GSM1900	661	0	0.24578	0.3092	---	PASS
GSM1900	810	0	0.24519	0.3157	---	PASS
EGPRS1900	512	2	0.25073	0.3286	---	PASS
EGPRS1900	661	2	0.25027	0.3155	---	PASS
EGPRS1900	810	2	0.25174	0.3128	---	PASS

Test Graphs



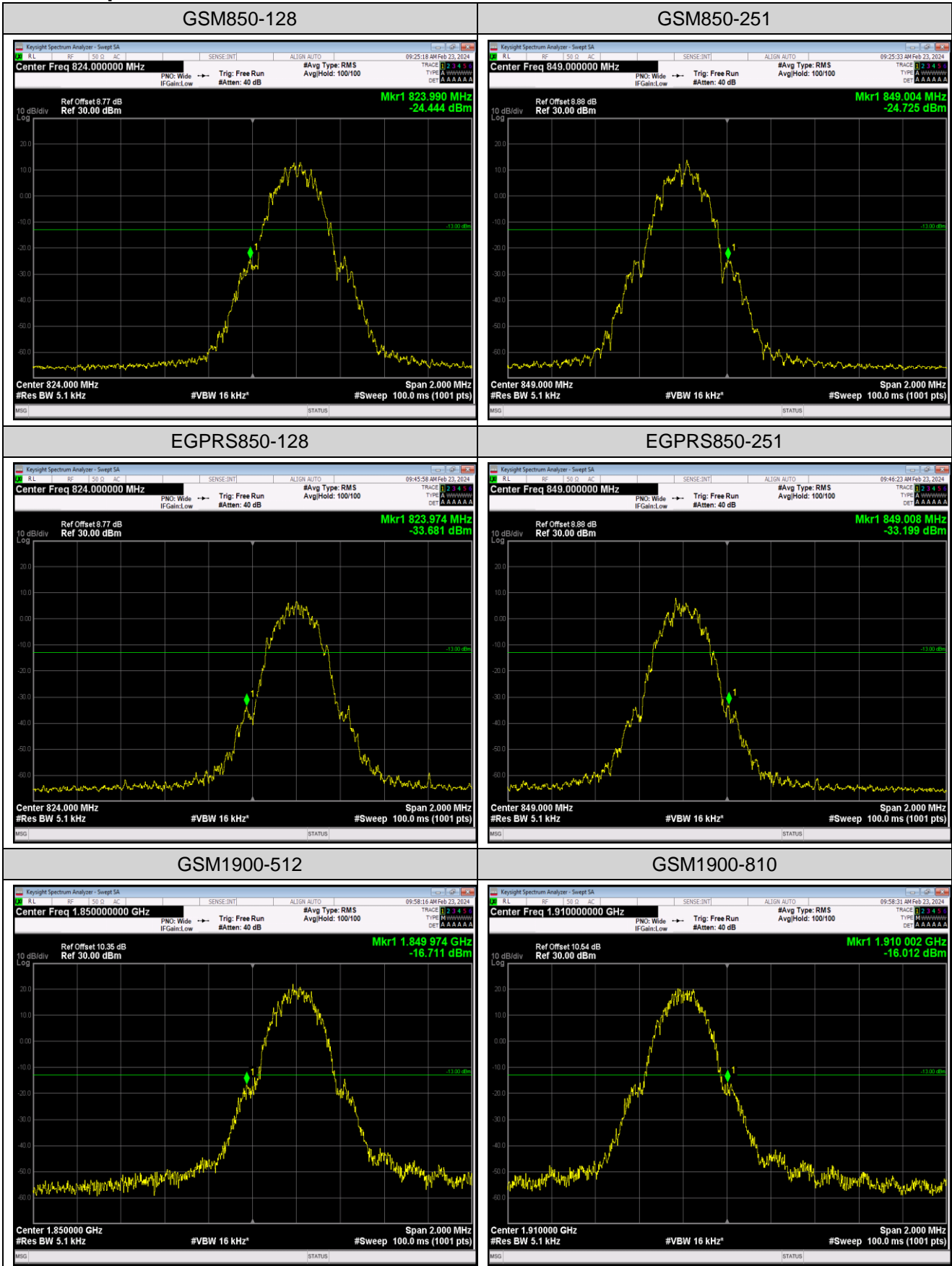


## Appendix D: Band Edge

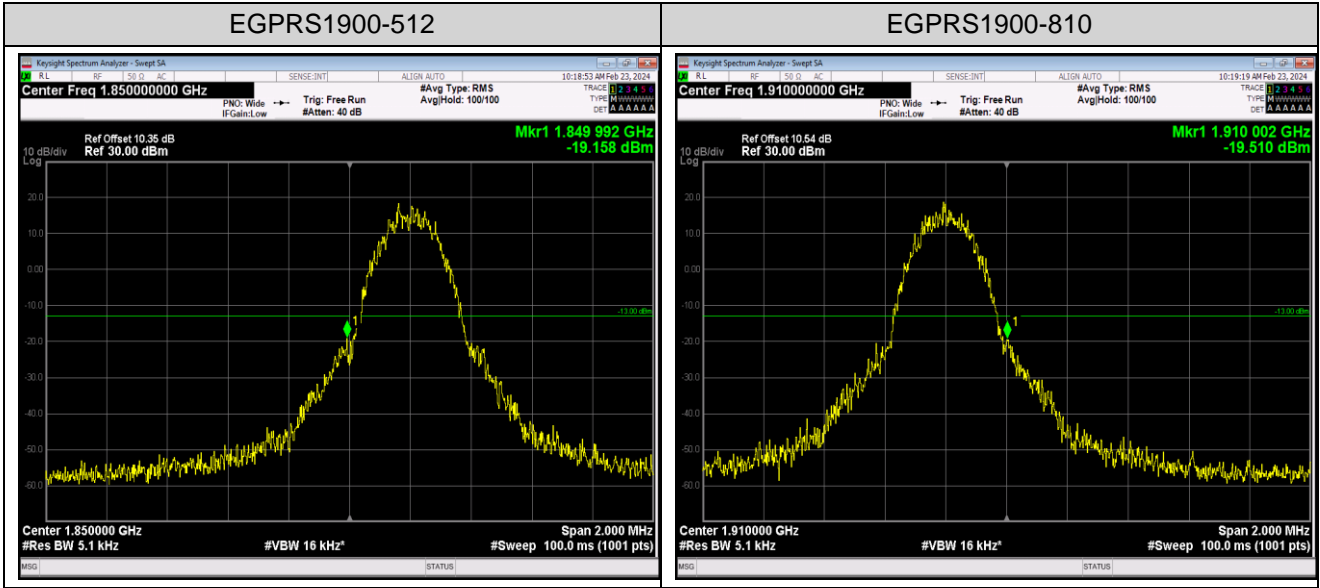
### Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.99	-24.44	-13	PASS
GSM850	251	5	849.00	-24.72	-13	PASS
EGPRS850	128	8	823.97	-33.68	-13	PASS
EGPRS850	251	8	849.01	-33.20	-13	PASS
GSM1900	512	0	1849.97	-16.71	-13	PASS
GSM1900	810	0	1910.00	-16.01	-13	PASS
EGPRS1900	512	2	1849.99	-19.16	-13	PASS
EGPRS1900	810	2	1910.00	-19.51	-13	PASS

Test Graphs







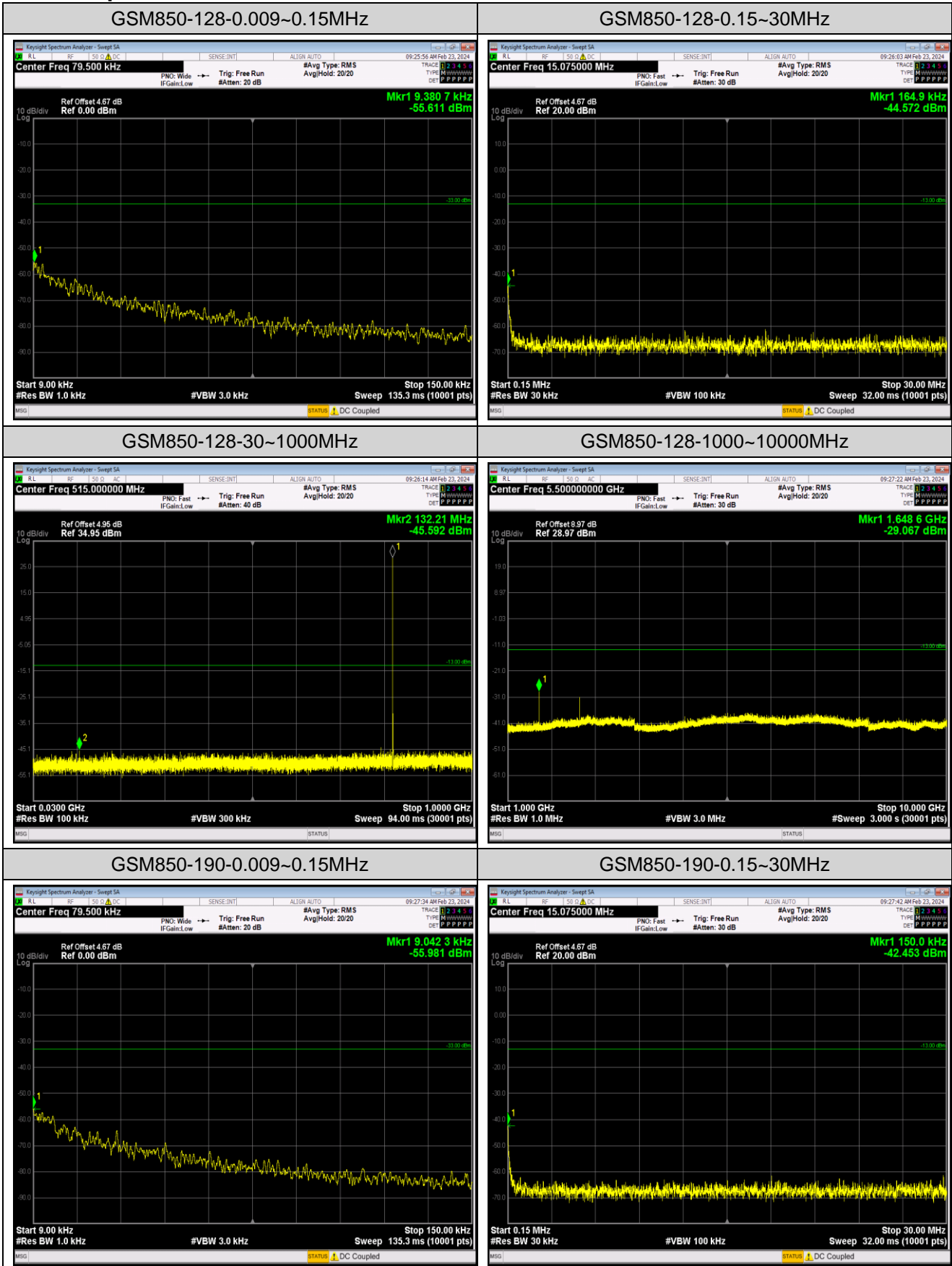
## Appendix E: Conducted Spurious Emission

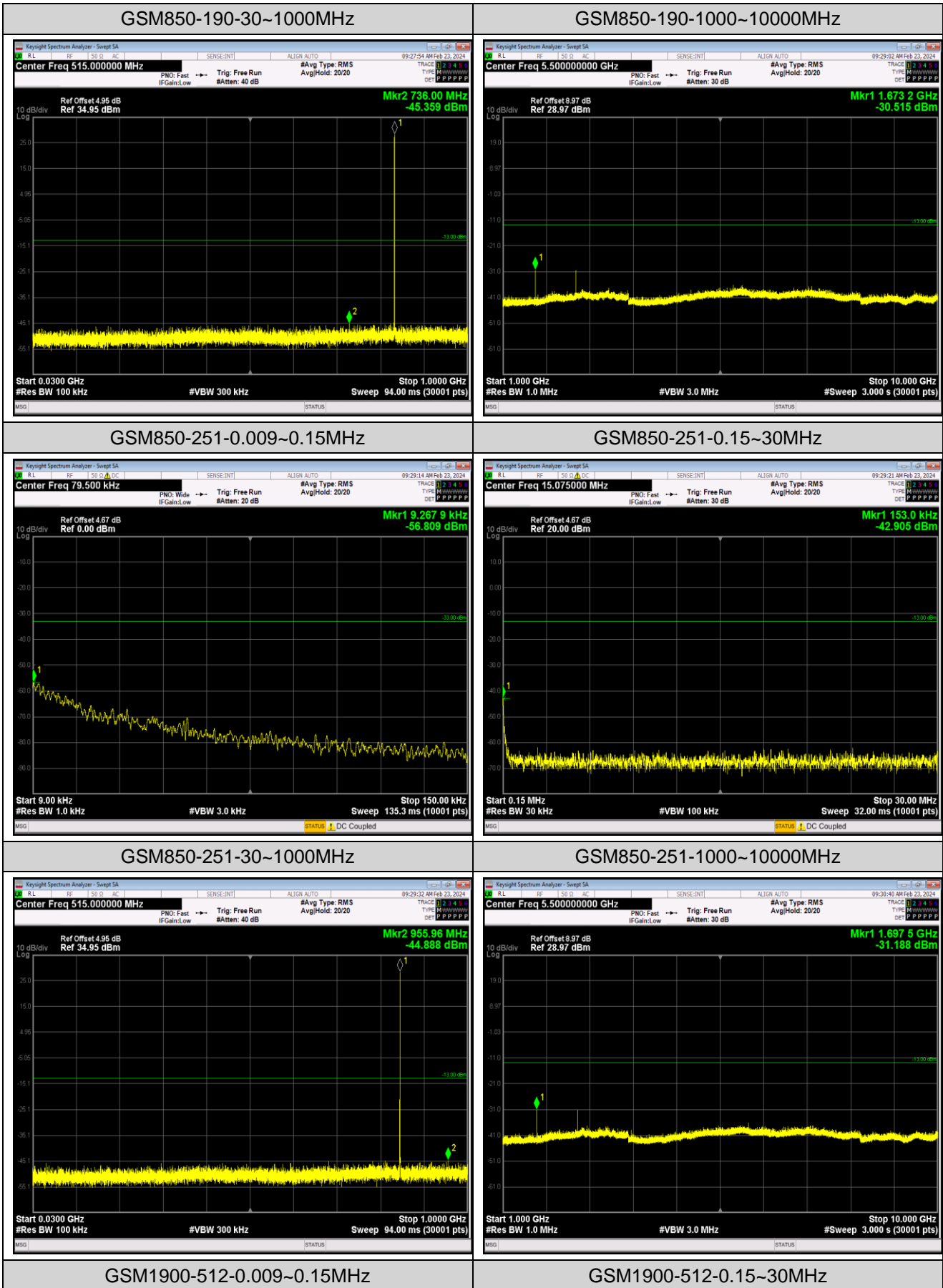
### Test Result

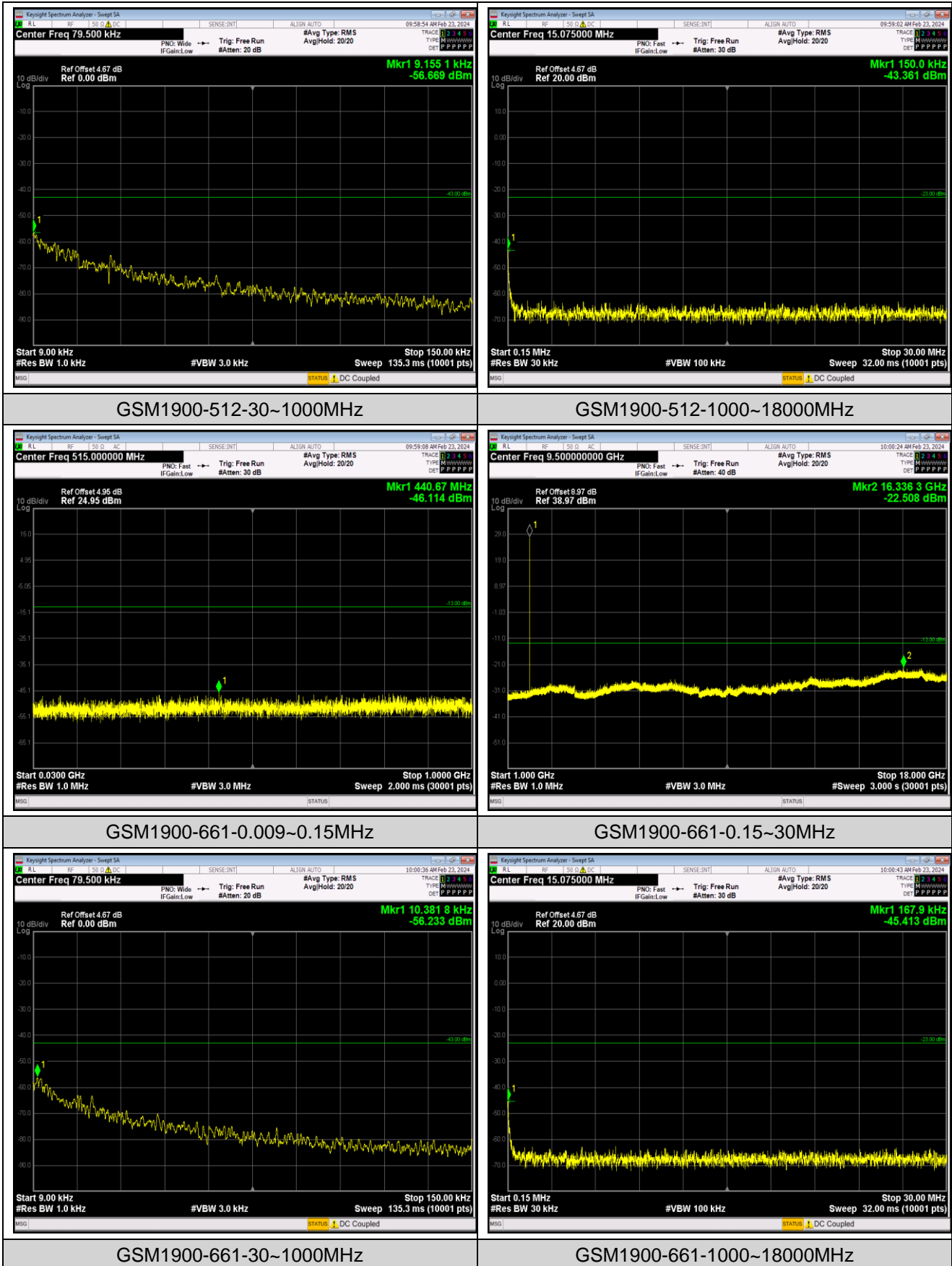
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-55.61	-33	PASS
GSM850	128	5	0.15~30MHz	0.16	-44.57	-13	PASS
GSM850	128	5	30~1000MHz	132.21	-45.59	-13	PASS
GSM850	128	5	1000~10000MHz	1648.6	-29.07	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-55.98	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-42.45	-13	PASS
GSM850	190	5	30~1000MHz	736	-45.36	-13	PASS
GSM850	190	5	1000~10000MHz	1673.2	-30.52	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-56.81	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-42.91	-13	PASS
GSM850	251	5	30~1000MHz	955.96	-44.89	-13	PASS
GSM850	251	5	1000~10000MHz	1697.5	-31.19	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-56.67	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-43.36	-23	PASS
GSM1900	512	0	30~1000MHz	440.67	-46.11	-13	PASS
GSM1900	512	0	1000~18000MHz	16336.27	-22.51	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-56.23	-43	PASS
GSM1900	661	0	0.15~30MHz	0.17	-45.41	-23	PASS
GSM1900	661	0	30~1000MHz	924.66	-46.18	-13	PASS
GSM1900	661	0	1000~18000MHz	17040.63	-22.56	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-57.14	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-46.39	-23	PASS
GSM1900	810	0	30~1000MHz	850.33	-44.64	-13	PASS
GSM1900	810	0	1000~18000MHz	15805.3	-22.48	-13	PASS

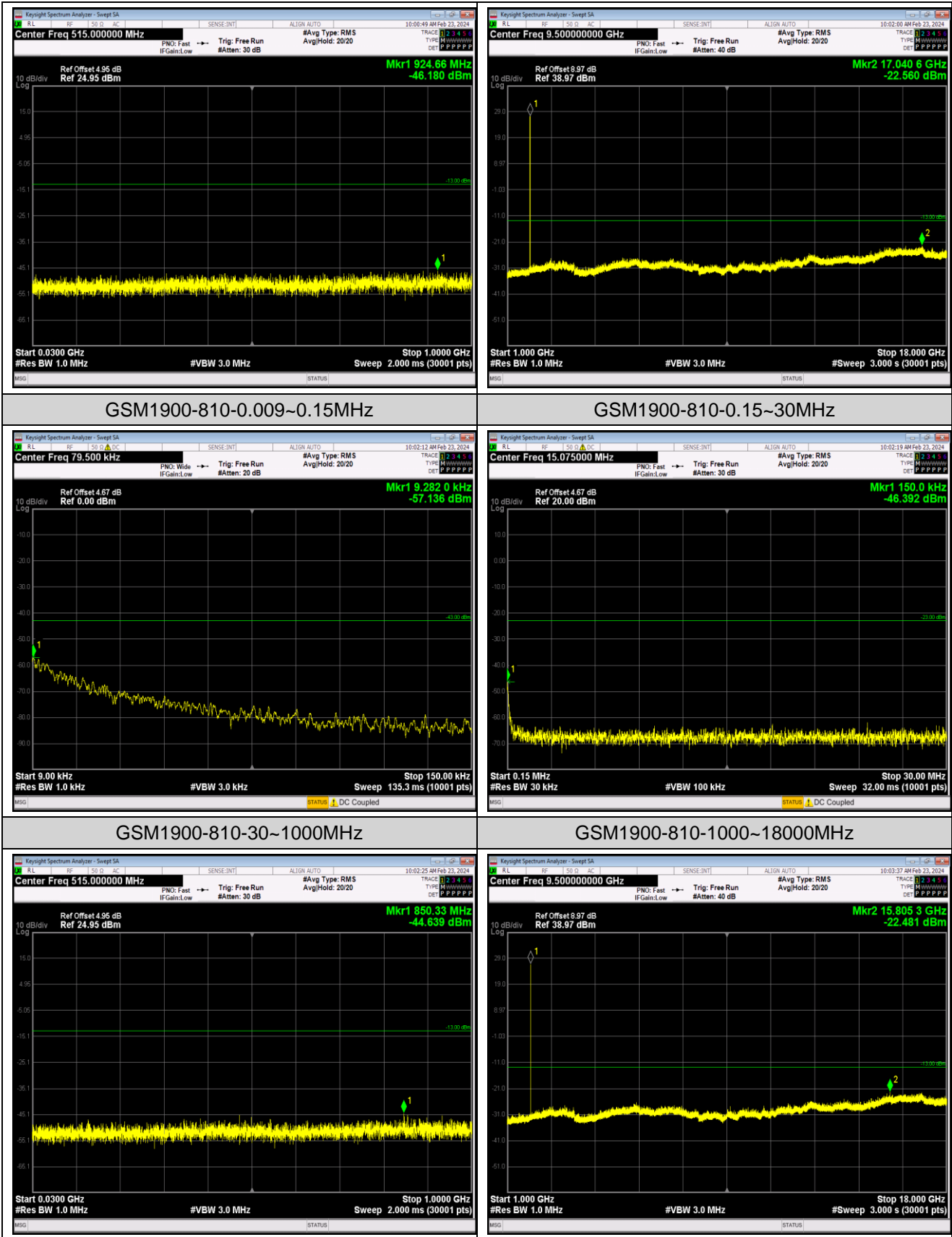
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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	-7.91	-0.009455	±2.5	Pass
	-20	-9.69	-0.011583		
	-10	-5.55	-0.006634		
	0	-5.65	-0.006754		
	10	3.42	0.004088		
	20	-4.58	-0.005475		
	30	-5.84	-0.006981		
	40	0.87	0.001040		
	50	-5.55	-0.006634		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-3.78	-0.004518	±2.5	Pass
	3.87	-7.68	-0.009180		
	4.45	-5.71	-0.006825		
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	-6.36	-0.007602	±2.5	Pass
	-20	-6.52	-0.007793		
	-10	-7.46	-0.008917		
	0	-16.95	-0.020261		
	10	-10.40	-0.012431		
	20	-11.91	-0.014236		
	30	-11.56	-0.013818		
	40	-13.82	-0.016519		
	50	-14.46	-0.017284		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-4.71	-0.005630	±2.5	Pass
	3.87	-8.81	-0.010531		
	4.45	-8.78	-0.010495		
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	-1.55	-0.000824	Within authorized band for PCS 1900	Pass
	-20	1.32	0.000702		
	-10	1.13	0.000601		
	0	-3.20	-0.001702		
	10	-5.91	-0.003144		
	20	0.77	0.000410		
	30	0.26	0.000138		
	40	-18.37	-0.009771		
	50	-13.50	-0.007181		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-5.84	-0.003106	Within authorized band for PCS 1900	Pass
	3.87	-13.50	-0.007181		
	4.45	2.39	0.001271		
<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	-24.99	-0.013293	Within authorized band for PCS 1900	Pass
	-20	-16.50	-0.008777		
	-10	-10.94	-0.005819		
	0	-21.95	-0.011676		
	10	-32.51	-0.017293		
	20	-7.07	-0.003761		
	30	-11.36	-0.006043		
	40	-12.95	-0.006888		
	50	6.94	0.003691		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-21.34	-0.011351	Within authorized band for PCS 1900	Pass
	3.87	-20.53	-0.010920		
	4.45	-22.21	-0.011814		
<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

