

Appendix A: Effective (Isotropic) Radiated Power Output Data-Fold

Test Result

Band	Channel	PCL	Conducted Power (dBm)	Fold ERP/EIRP (dBm)	Unfold ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GSM850	128	5	33.21	23.86	25.76	38.45	PASS
GSM850	190	5	33.19	23.84	25.74	38.45	PASS
GSM850	251	5	33.21	23.86	25.76	38.45	PASS
GSM1900	512	0	29.88	28.15	29.83	33.00	PASS
GSM1900	661	0	29.79	28.06	29.74	33.00	PASS
GSM1900	810	0	29.79	28.06	29.74	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	Fold ERP/EIRP (dBm)	Unfold ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.11	23.76	25.66	38.45	PASS
GPRS850	128	5	2	32.37	23.02	24.92	38.45	PASS
GPRS850	128	5	3	30.63	21.28	23.18	38.45	PASS
GPRS850	128	5	4	29.55	20.20	22.10	38.45	PASS
GPRS850	190	5	1	33.10	23.75	25.65	38.45	PASS
GPRS850	190	5	2	32.37	23.02	24.92	38.45	PASS
GPRS850	190	5	3	30.64	21.29	23.19	38.45	PASS
GPRS850	190	5	4	29.56	20.21	22.11	38.45	PASS
GPRS850	251	5	1	33.12	23.77	25.67	38.45	PASS
GPRS850	251	5	2	32.40	23.05	24.95	38.45	PASS
GPRS850	251	5	3	30.68	21.33	23.23	38.45	PASS
GPRS850	251	5	4	29.59	20.24	22.14	38.45	PASS
GPRS1900	512	0	1	29.87	28.14	29.82	33.00	PASS
GPRS1900	512	0	2	29.14	27.41	29.09	33.00	PASS
GPRS1900	512	0	3	27.30	25.57	27.25	33.00	PASS
GPRS1900	512	0	4	26.26	24.53	26.21	33.00	PASS
GPRS1900	661	0	1	29.82	28.09	29.77	33.00	PASS
GPRS1900	661	0	2	29.11	27.38	29.06	33.00	PASS
GPRS1900	661	0	3	27.31	25.58	27.26	33.00	PASS
GPRS1900	661	0	4	26.27	24.54	26.22	33.00	PASS
GPRS1900	810	0	1	29.81	28.08	29.76	33.00	PASS
GPRS1900	810	0	2	29.13	27.40	29.08	33.00	PASS
GPRS1900	810	0	3	27.40	25.67	27.35	33.00	PASS
GPRS1900	810	0	4	26.33	24.60	26.28	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	Fold ERP/EIRP (dBm)	Unfold ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	28.09	18.74	20.64	38.45	PASS
EGPRS850	128	8	2	26.92	17.57	19.47	38.45	PASS
EGPRS850	128	8	3	24.96	15.61	17.51	38.45	PASS
EGPRS850	128	8	4	23.65	14.30	16.20	38.45	PASS
EGPRS850	190	8	1	28.12	18.77	20.67	38.45	PASS
EGPRS850	190	8	2	26.99	17.64	19.54	38.45	PASS
EGPRS850	190	8	3	24.99	15.64	17.54	38.45	PASS
EGPRS850	190	8	4	23.68	14.33	16.23	38.45	PASS
EGPRS850	251	8	1	28.10	18.75	20.65	38.45	PASS
EGPRS850	251	8	2	26.94	17.59	19.49	38.45	PASS
EGPRS850	251	8	3	24.95	15.60	17.50	38.45	PASS
EGPRS850	251	8	4	23.72	14.37	16.27	38.45	PASS
EGPRS1900	512	2	1	26.59	24.86	26.54	33.00	PASS
EGPRS1900	512	2	2	25.44	23.71	25.39	33.00	PASS
EGPRS1900	512	2	3	23.21	21.48	23.16	33.00	PASS
EGPRS1900	512	2	4	21.83	20.10	21.78	33.00	PASS
EGPRS1900	661	2	1	26.63	24.90	26.58	33.00	PASS
EGPRS1900	661	2	2	25.56	23.83	25.51	33.00	PASS
EGPRS1900	661	2	3	23.32	21.59	23.27	33.00	PASS
EGPRS1900	661	2	4	22.05	20.32	22.00	33.00	PASS
EGPRS1900	810	2	1	26.44	24.71	26.39	33.00	PASS
EGPRS1900	810	2	2	25.36	23.63	25.31	33.00	PASS
EGPRS1900	810	2	3	23.13	21.40	23.08	33.00	PASS
EGPRS1900	810	2	4	21.86	20.13	21.81	33.00	PASS

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

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

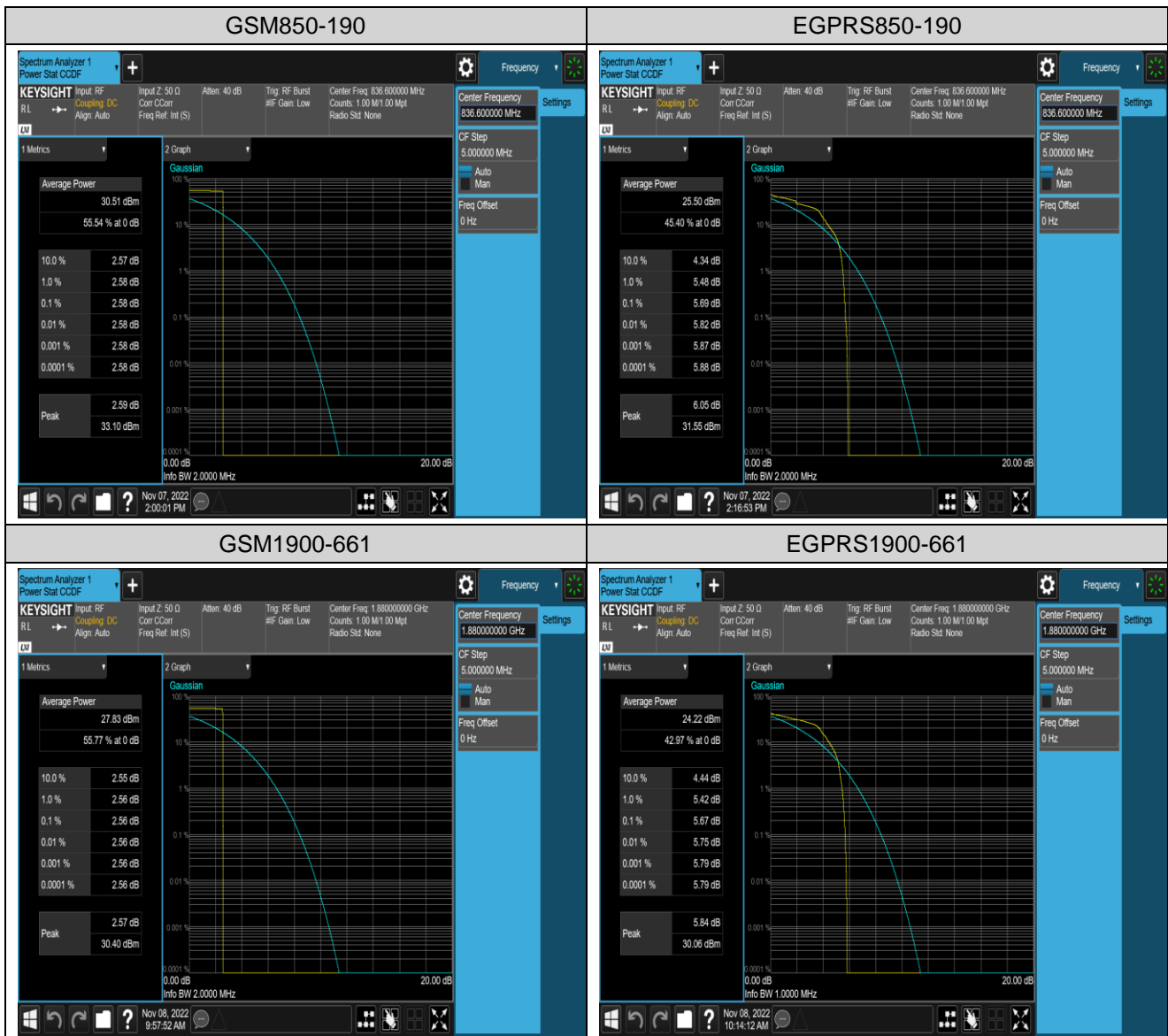
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.58	13	PASS
EGPRS850	190	8	5.69	13	PASS
GSM1900	661	0	2.56	13	PASS
EGPRS1900	661	2	5.67	13	PASS

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

Test Graphs

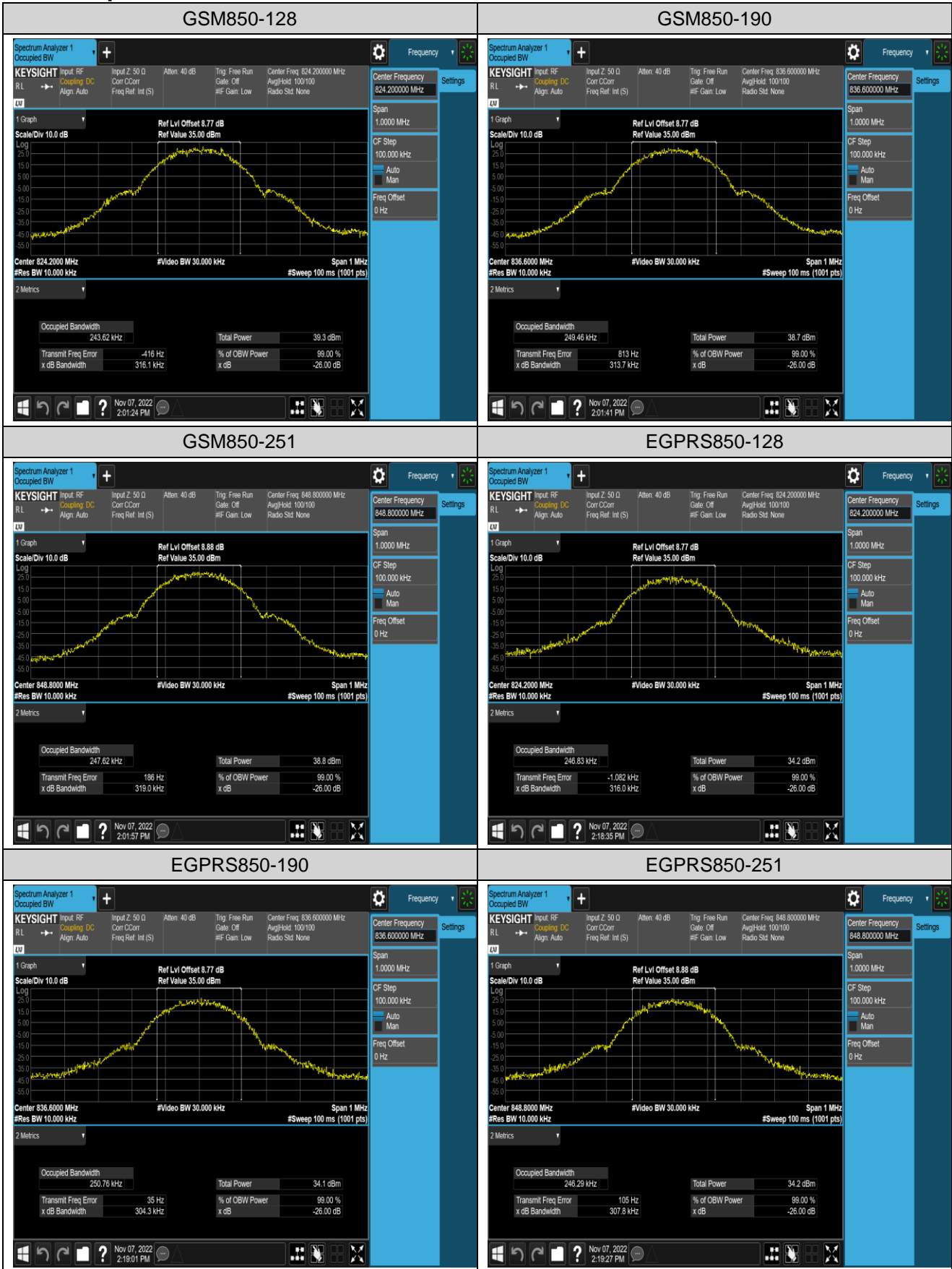


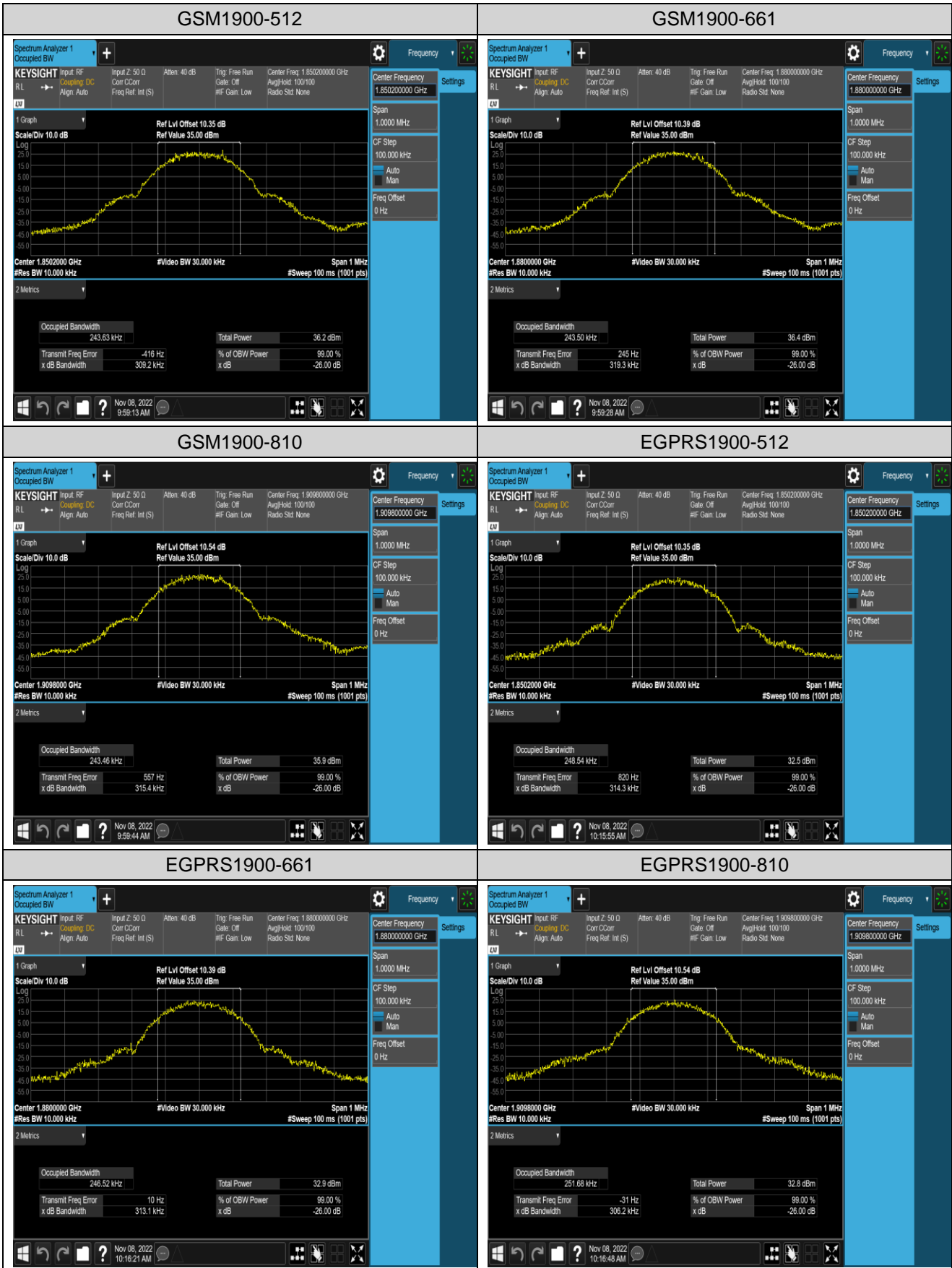
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24362	0.3161	---	PASS
GSM850	190	5	0.24946	0.3137	---	PASS
GSM850	251	5	0.24762	0.3190	---	PASS
EGPRS850	128	8	0.24683	0.3160	---	PASS
EGPRS850	190	8	0.25076	0.3043	---	PASS
EGPRS850	251	8	0.24629	0.3078	---	PASS
GSM1900	512	0	0.24363	0.3092	---	PASS
GSM1900	661	0	0.24350	0.3193	---	PASS
GSM1900	810	0	0.24346	0.3154	---	PASS
EGPRS1900	512	2	0.24854	0.3143	---	PASS
EGPRS1900	661	2	0.24652	0.3131	---	PASS
EGPRS1900	810	2	0.25168	0.3062	---	PASS

Test Graphs

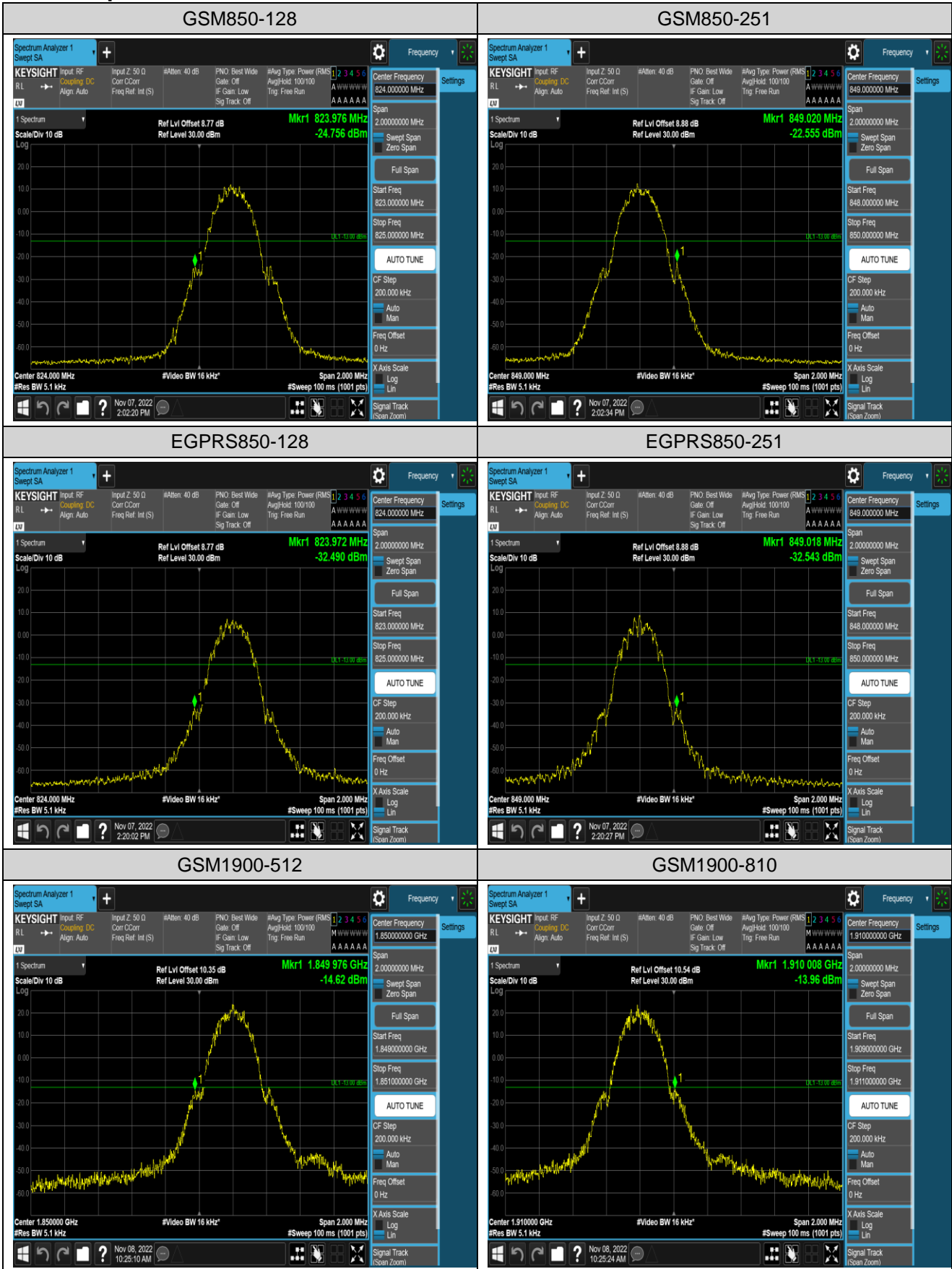


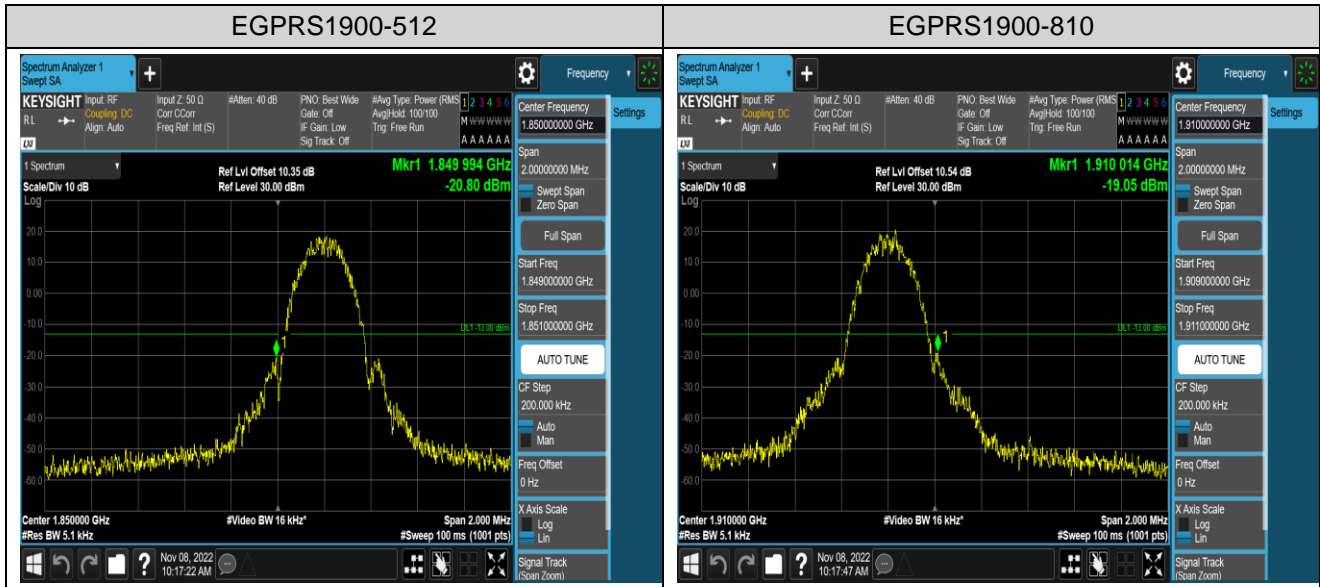


Appendix D: Band Edge**Test Result**

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-24.76	-13	PASS
GSM850	251	5	849.02	-22.56	-13	PASS
EGPRS850	128	8	823.97	-32.49	-13	PASS
EGPRS850	251	8	849.02	-32.54	-13	PASS
GSM1900	512	0	1849.98	-14.62	-13	PASS
GSM1900	810	0	1910.01	-13.96	-13	PASS
EGPRS1900	512	2	1849.99	-20.80	-13	PASS
EGPRS1900	810	2	1910.01	-19.05	-13	PASS

Test Graphs





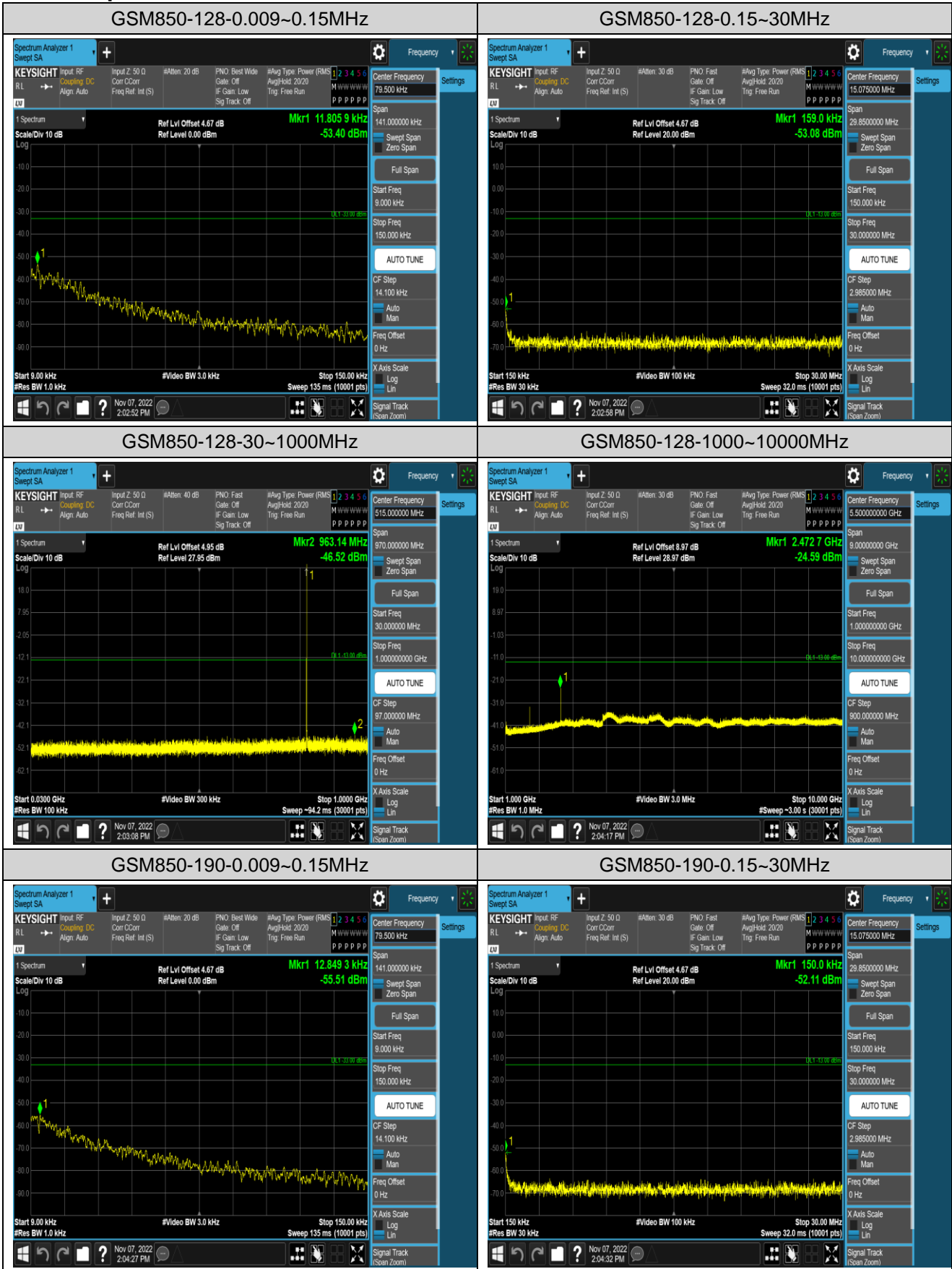
Appendix E: Conducted Spurious Emission

Test Result

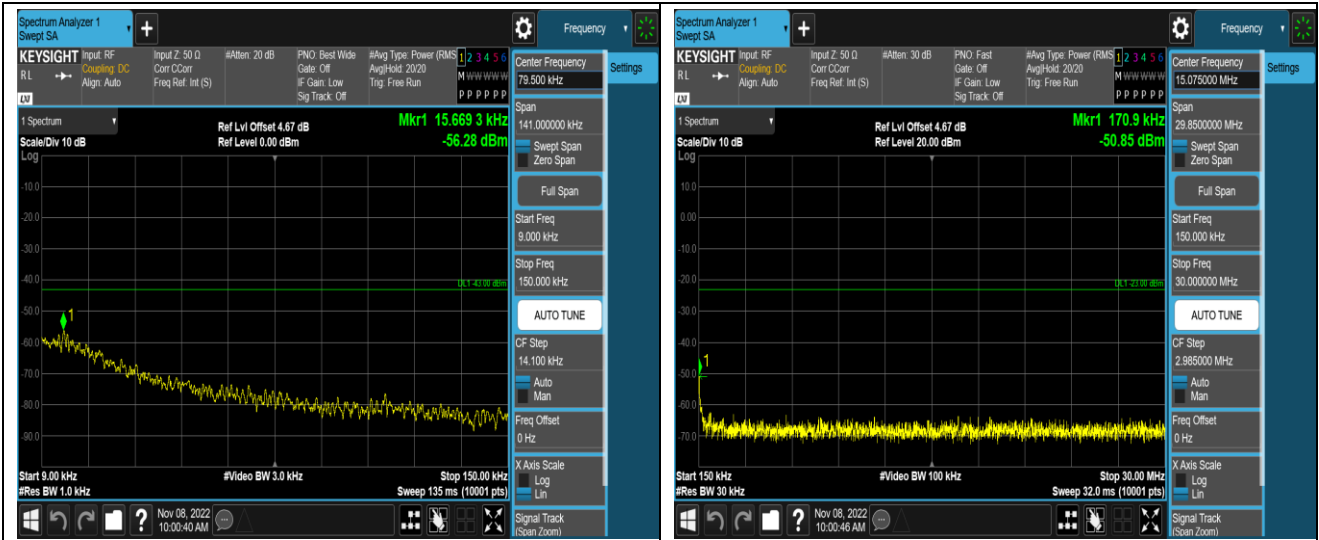
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-53.4	-33	PASS
GSM850	128	5	0.15~30MHz	0.16	-53.08	-13	PASS
GSM850	128	5	30~1000MHz	963.14	-46.52	-13	PASS
GSM850	128	5	1000~10000MHz	2472.7	-24.59	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-55.51	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-52.11	-13	PASS
GSM850	190	5	30~1000MHz	152.54	-46.53	-13	PASS
GSM850	190	5	1000~10000MHz	2509.9	-24.28	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-54.58	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-53.37	-13	PASS
GSM850	251	5	30~1000MHz	955.57	-46.27	-13	PASS
GSM850	251	5	1000~10000MHz	2546.5	-23.78	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.02	-56.28	-43	PASS
GSM1900	512	0	0.15~30MHz	0.17	-50.85	-23	PASS
GSM1900	512	0	30~1000MHz	878.46	-46.44	-13	PASS
GSM1900	512	0	1000~18000MHz	3845.23	-34.49	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-56.84	-43	PASS
GSM1900	661	0	0.15~30MHz	0.19	-51.29	-23	PASS
GSM1900	661	0	30~1000MHz	852.92	-46.15	-13	PASS
GSM1900	661	0	1000~18000MHz	3845.23	-33.98	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.2	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-52.29	-23	PASS
GSM1900	810	0	30~1000MHz	841.66	-46.69	-13	PASS
GSM1900	810	0	1000~18000MHz	3759.67	-34.32	-13	PASS

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

Test Graphs

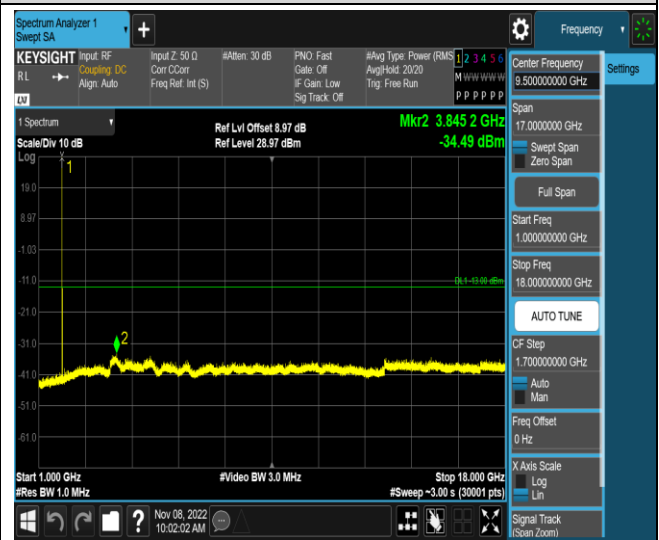






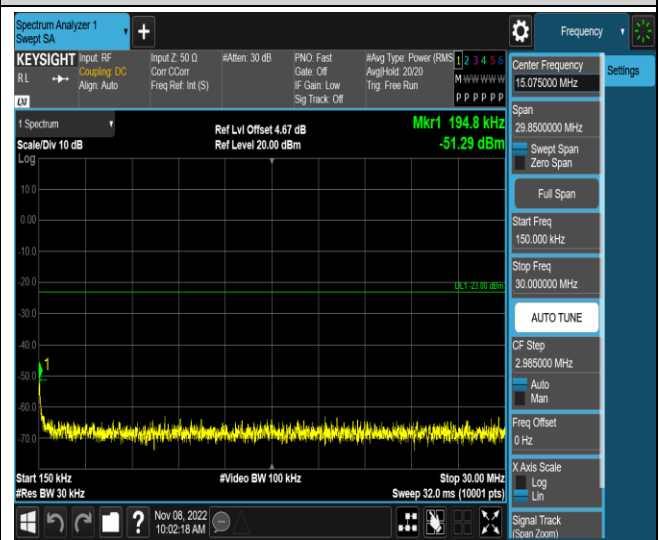
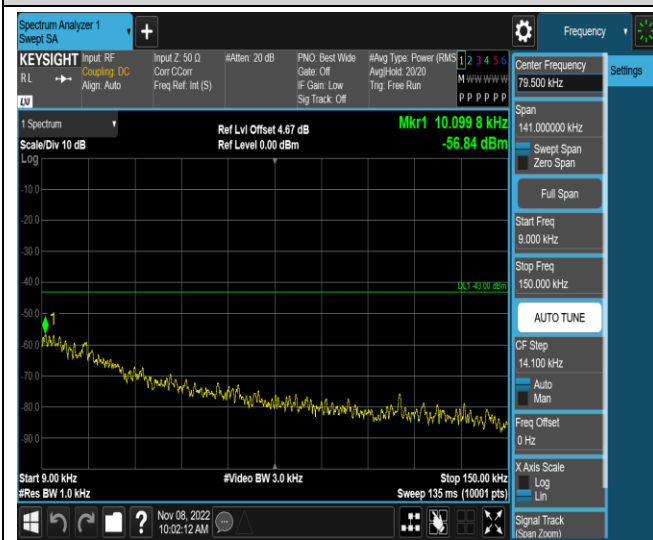
GSM1900-512-30~1000MHz

GSM1900-512-1000~18000MHz



GSM1900-661-0.009~0.15MHz

GSM1900-661-0.15~30MHz



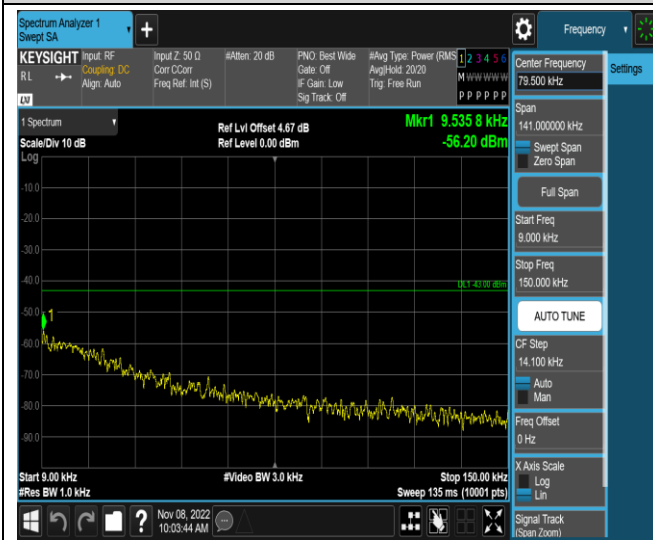
GSM1900-661-30~1000MHz

GSM1900-661-1000~18000MHz

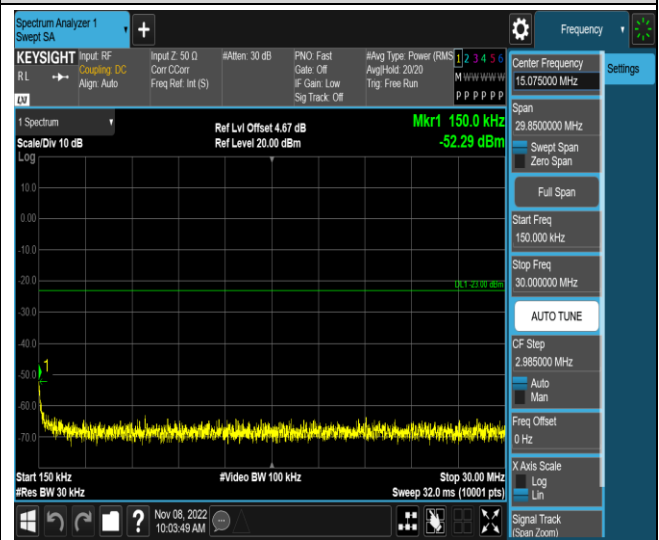


GSM1900-810-0.009~0.15MHz

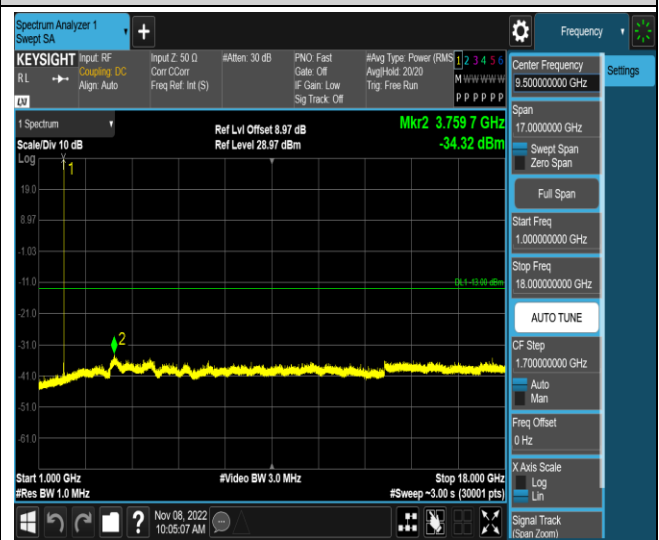
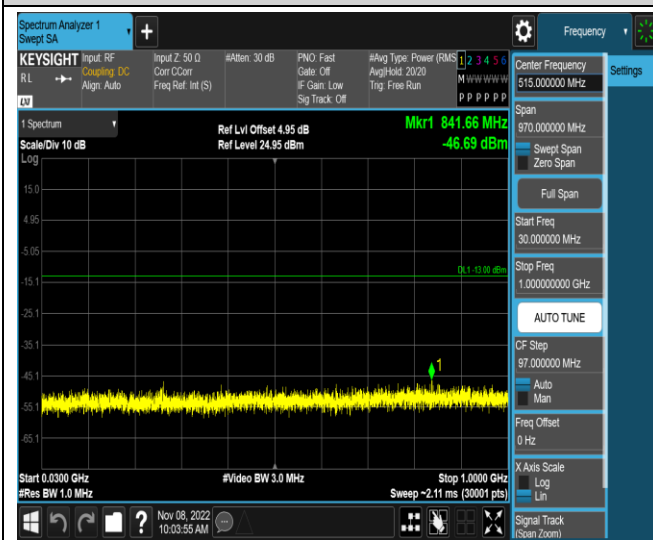
GSM1900-810-0.15~30MHz



GSM1900-810-30~1000MHz



GSM1900-810-1000~18000MHz



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	-12.98	-0.015515	±2.5	Pass
	-20	-12.46	-0.014894		
	-10	-12.46	-0.014894		
	0	-10.78	-0.012885		
	10	-11.30	-0.013507		
	20	-12.17	-0.014547		
	30	-10.78	-0.012885		
	40	-11.40	-0.013627		
	50	-10.69	-0.012778		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-3.13	-0.003741	±2.5	Pass
	3.89	-6.23	-0.007447		
	4.48	-10.69	-0.012778		
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	-4.42	-0.005283	±2.5	Pass
	-20	-7.10	-0.008487		
	-10	-7.20	-0.008606		
	0	-11.75	-0.014045		
	10	-2.26	-0.002701		
	20	-3.87	-0.004626		
	30	-5.23	-0.006251		
	40	-4.33	-0.005176		
	50	-4.65	-0.005558		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-9.91	-0.011846	±2.5	Pass
	3.89	-5.00	-0.005977		
	4.48	-8.01	-0.009574		
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	-7.39	-0.003931	Within authorized band for PCS 1900	Pass
	-20	-6.39	-0.003399		
	-10	-10.23	-0.005441		
	0	-13.53	-0.007197		
	10	-3.94	-0.002096		
	20	-6.07	-0.003229		
	30	-8.65	-0.004601		
	40	-14.40	-0.007660		
	50	-9.17	-0.004878		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-6.13	-0.003261	Within authorized band for PCS 1900	Pass
	3.89	-8.88	-0.004723		
	4.48	-6.30	-0.003351		
<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	-8.59	-0.004569	Within authorized band for PCS 1900	Pass
	-20	-9.91	-0.005271		
	-10	-7.33	-0.003899		
	0	-9.46	-0.005032		
	10	-14.01	-0.007452		
	20	2.52	0.001340		
	30	7.17	0.003814		
	40	2.16	0.001149		
	50	4.13	0.002197		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-10.59	-0.005633	Within authorized band for PCS 1900	Pass
	3.89	-11.88	-0.006319		
	4.48	-12.17	-0.006473		
<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

