

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	3	32.96	29.31	38.5	PASS
GSM850	190	3	33.11	29.26	38.5	PASS
GSM850	251	3	33.11	29.26	38.5	PASS
GSM1900	512	0	30.36	28.66	33	PASS
GSM1900	661	0	30.34	28.64	33	PASS
GSM1900	810	0	30.20	28.5	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	3	1	33.01	29.36	38.5	PASS
GPRS850	128	3	2	31.02	27.37	38.5	PASS
GPRS850	128	3	3	29.02	25.37	38.5	PASS
GPRS850	128	3	4	26.90	23.25	38.5	PASS
GPRS850	190	3	1	33.13	29.28	38.5	PASS
GPRS850	190	3	2	31.08	27.23	38.5	PASS
GPRS850	190	3	3	29.09	25.24	38.5	PASS
GPRS850	190	3	4	26.93	23.08	38.5	PASS
GPRS850	251	3	1	33.10	29.25	38.5	PASS
GPRS850	251	3	2	30.94	27.09	38.5	PASS
GPRS850	251	3	3	28.95	25.1	38.5	PASS
GPRS850	251	3	4	26.84	22.99	38.5	PASS
GPRS1900	512	0	1	30.34	28.64	33	PASS
GPRS1900	512	0	2	28.30	26.6	33	PASS
GPRS1900	512	0	3	26.77	25.07	33	PASS
GPRS1900	512	0	4	24.77	23.07	33	PASS
GPRS1900	661	0	1	30.34	28.64	33	PASS
GPRS1900	661	0	2	28.17	26.47	33	PASS
GPRS1900	661	0	3	26.62	24.92	33	PASS
GPRS1900	661	0	4	24.63	22.93	33	PASS
GPRS1900	810	0	1	30.23	28.53	33	PASS
GPRS1900	810	0	2	28.01	26.31	33	PASS
GPRS1900	810	0	3	26.45	24.75	33	PASS
GPRS1900	810	0	4	24.44	22.74	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	26.13	22.48	38.5	PASS
EGPRS850	128	8	2	24.86	21.21	38.5	PASS
EGPRS850	128	8	3	22.07	18.42	38.5	PASS
EGPRS850	128	8	4	18.88	15.23	38.5	PASS
EGPRS850	190	8	1	26.38	22.53	38.5	PASS
EGPRS850	190	8	2	25.54	21.69	38.5	PASS
EGPRS850	190	8	3	22.95	19.1	38.5	PASS
EGPRS850	190	8	4	19.97	16.12	38.5	PASS
EGPRS850	251	8	1	25.94	22.09	38.5	PASS
EGPRS850	251	8	2	24.95	21.1	38.5	PASS
EGPRS850	251	8	3	22.28	18.43	38.5	PASS
EGPRS850	251	8	4	19.22	15.37	38.5	PASS
EGPRS1900	512	2	1	26.15	24.45	33	PASS
EGPRS1900	512	2	2	23.89	22.19	33	PASS
EGPRS1900	512	2	3	22.99	21.29	33	PASS
EGPRS1900	512	2	4	21.15	19.45	33	PASS
EGPRS1900	661	2	1	25.90	24.2	33	PASS
EGPRS1900	661	2	2	23.73	22.03	33	PASS
EGPRS1900	661	2	3	22.71	21.01	33	PASS
EGPRS1900	661	2	4	20.82	19.12	33	PASS
EGPRS1900	810	2	1	26.29	24.59	33	PASS
EGPRS1900	810	2	2	24.20	22.5	33	PASS
EGPRS1900	810	2	3	23.22	21.52	33	PASS
EGPRS1900	810	2	4	21.30	19.6	33	PASS

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

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

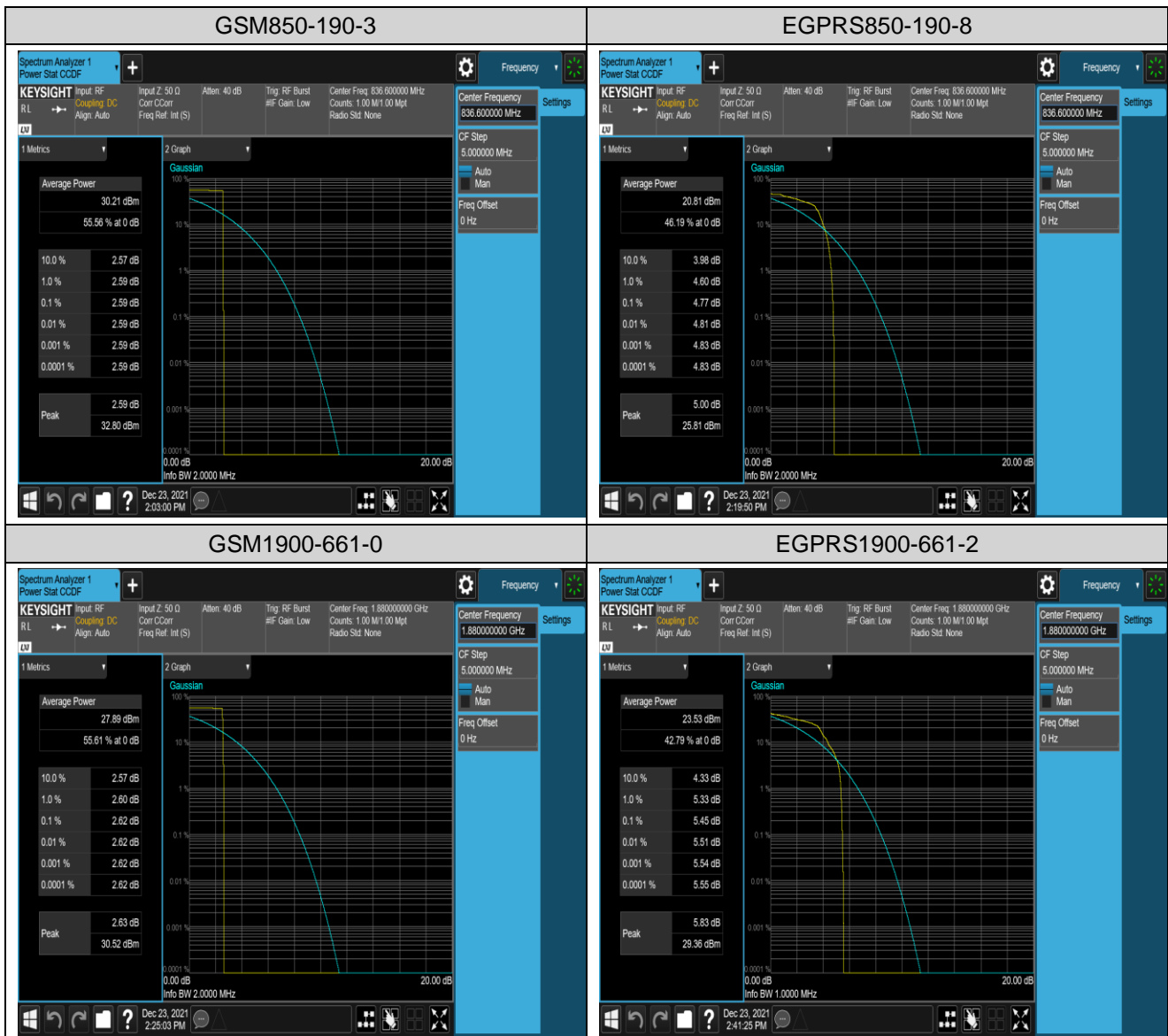
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	3	2.59	13	PASS
EGPRS850	190	8	4.77	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

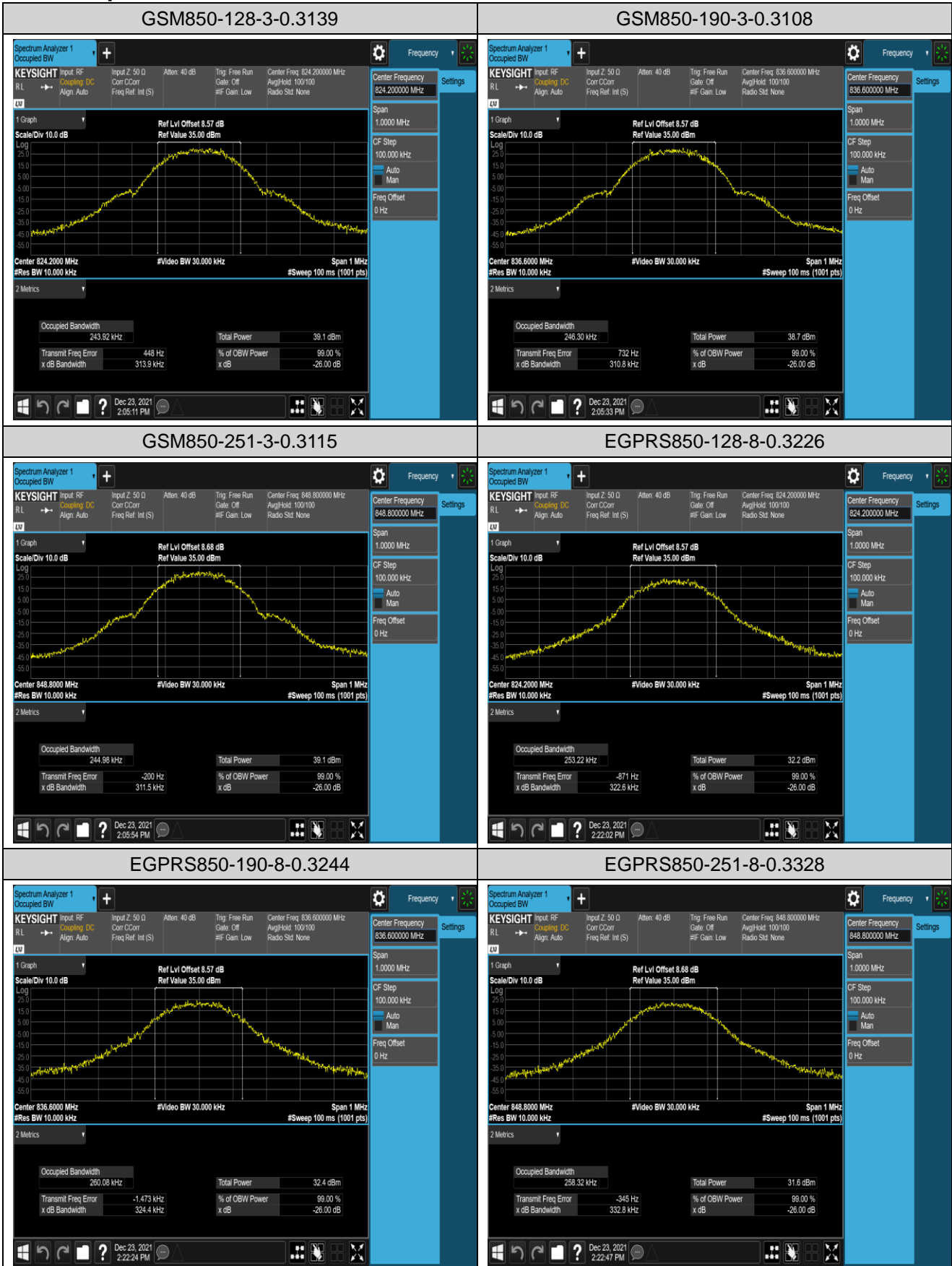


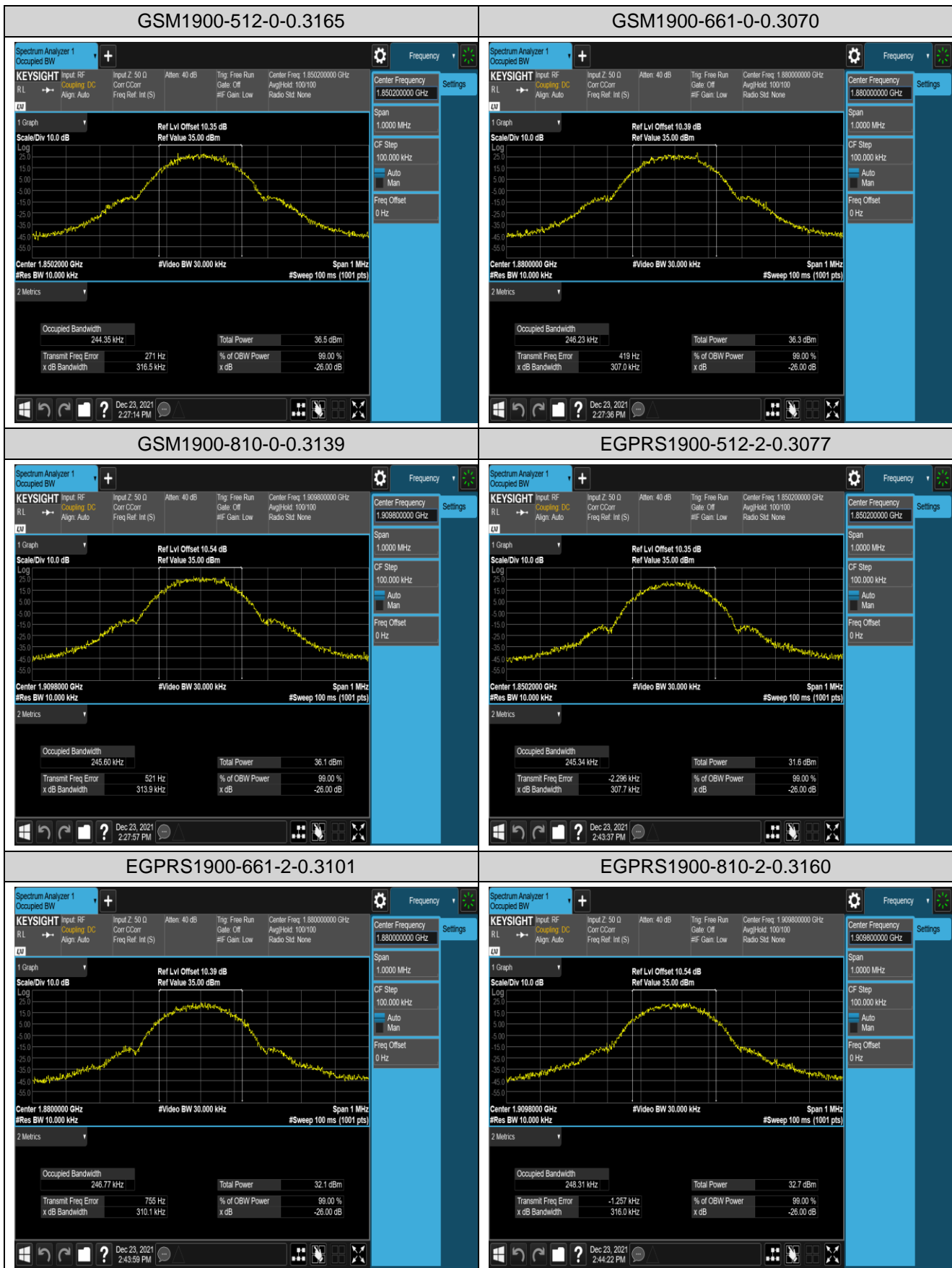
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	3	0.24392	0.3139	---	PASS
GSM850	190	3	0.24630	0.3108	---	PASS
GSM850	251	3	0.24498	0.3115	---	PASS
EGPRS850	128	8	0.25322	0.3226	---	PASS
EGPRS850	190	8	0.26008	0.3244	---	PASS
EGPRS850	251	8	0.25832	0.3328	---	PASS
GSM1900	512	0	0.24435	0.3165	---	PASS
GSM1900	661	0	0.24623	0.3070	---	PASS
GSM1900	810	0	0.24560	0.3139	---	PASS
EGPRS1900	512	2	0.24534	0.3077	---	PASS
EGPRS1900	661	2	0.24677	0.3101	---	PASS
EGPRS1900	810	2	0.24831	0.3160	---	PASS

Test Graphs



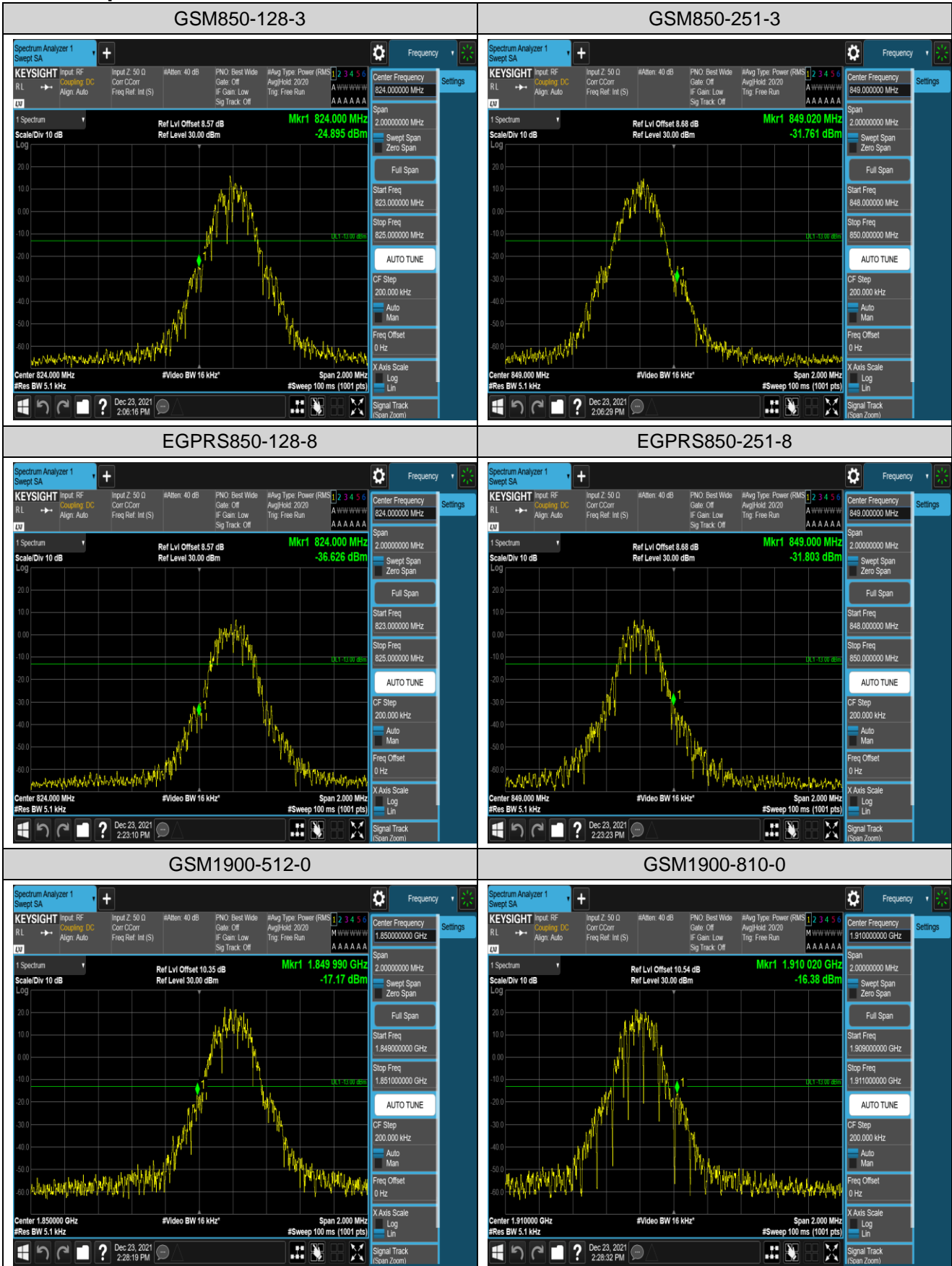


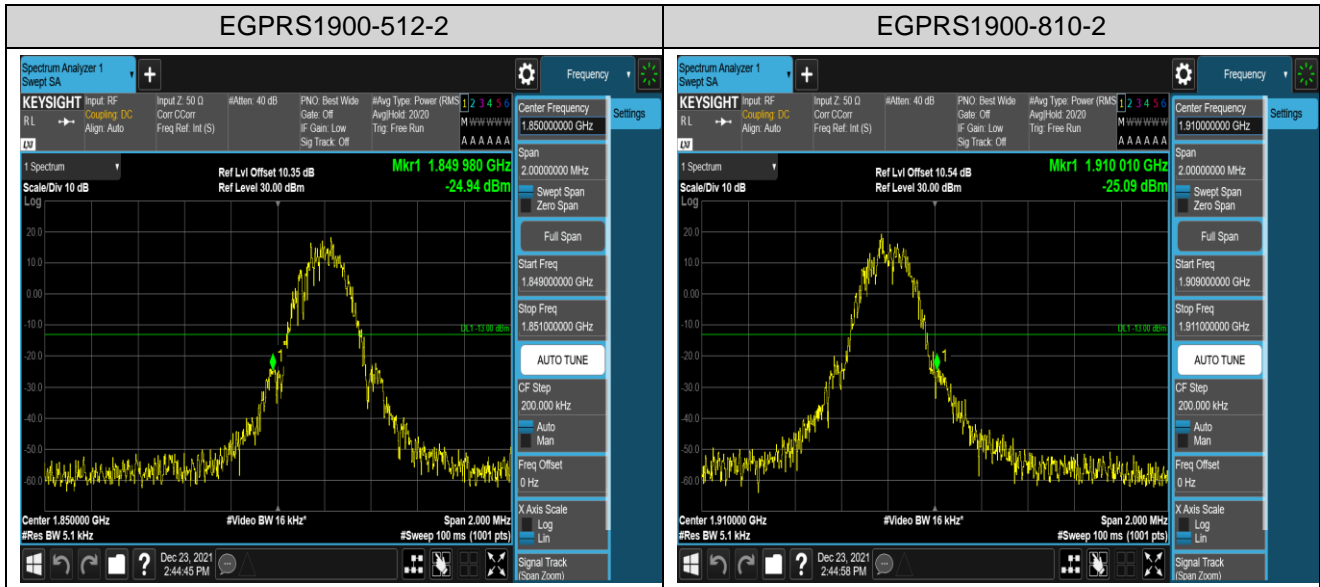
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	3	824.00	-23.53	-13	PASS
GSM850	251	3	849.02	-24.43	-13	PASS
EGPRS850	128	8	824.00	-31.68	-13	PASS
EGPRS850	251	8	849.00	-31.80	-13	PASS
GSM1900	512	0	1849.99	-14.09	-13	PASS
GSM1900	810	0	1910.02	-15.35	-13	PASS
EGPRS1900	512	2	1849.98	-22.07	-13	PASS
EGPRS1900	810	2	1910.01	-22.81	-13	PASS

Test Graphs





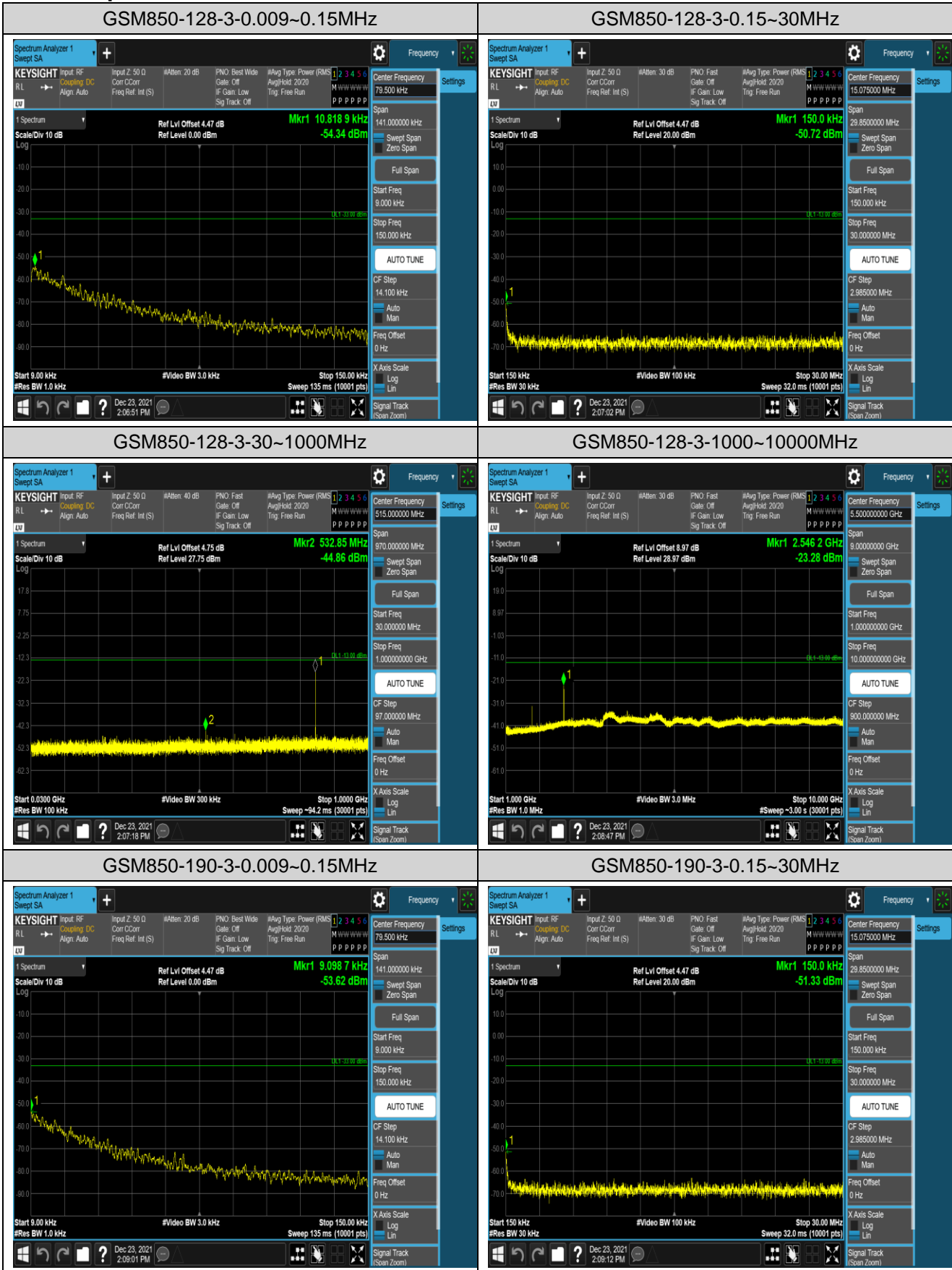
Appendix E: Conducted Spurious Emission

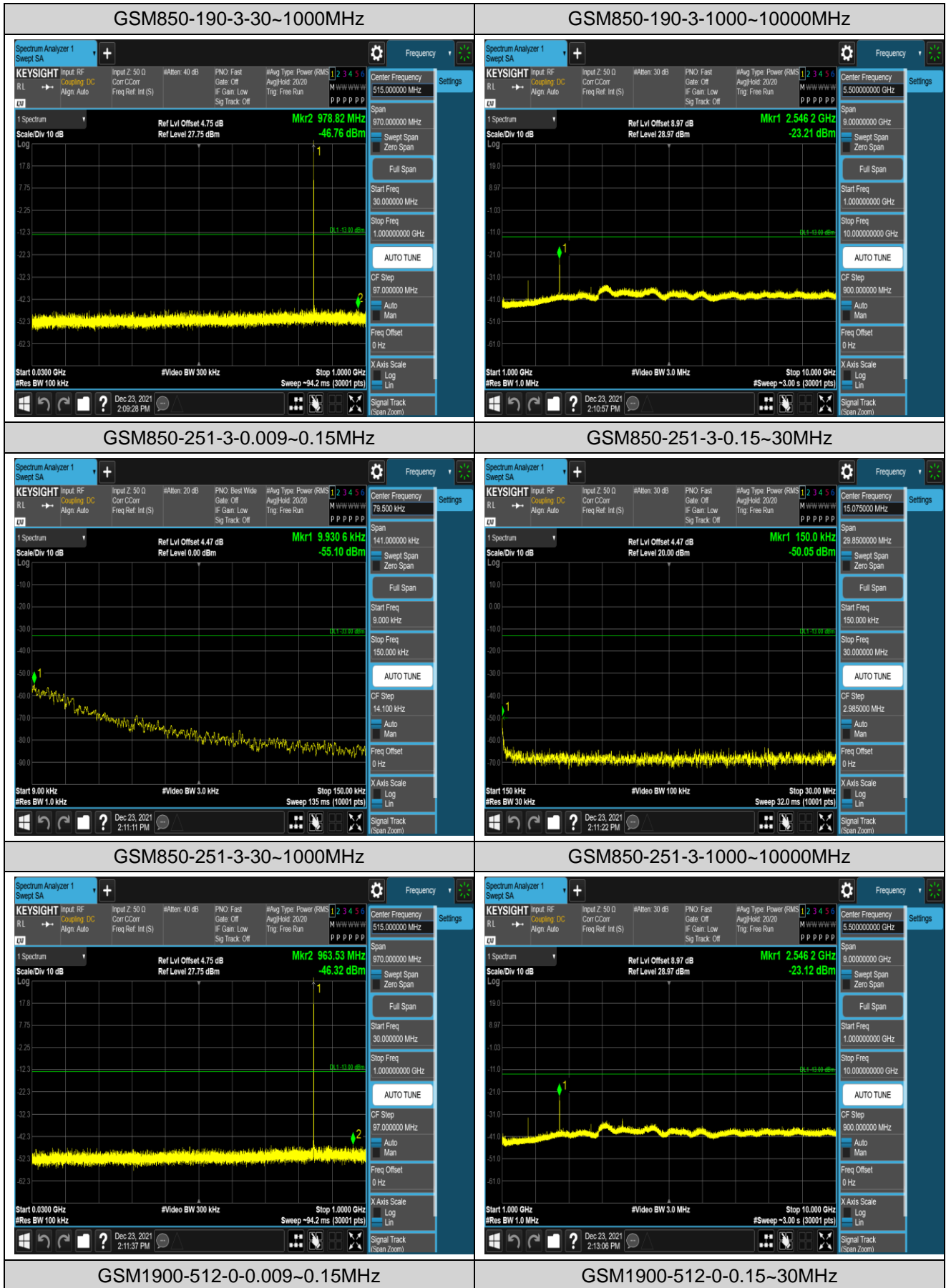
Test Result

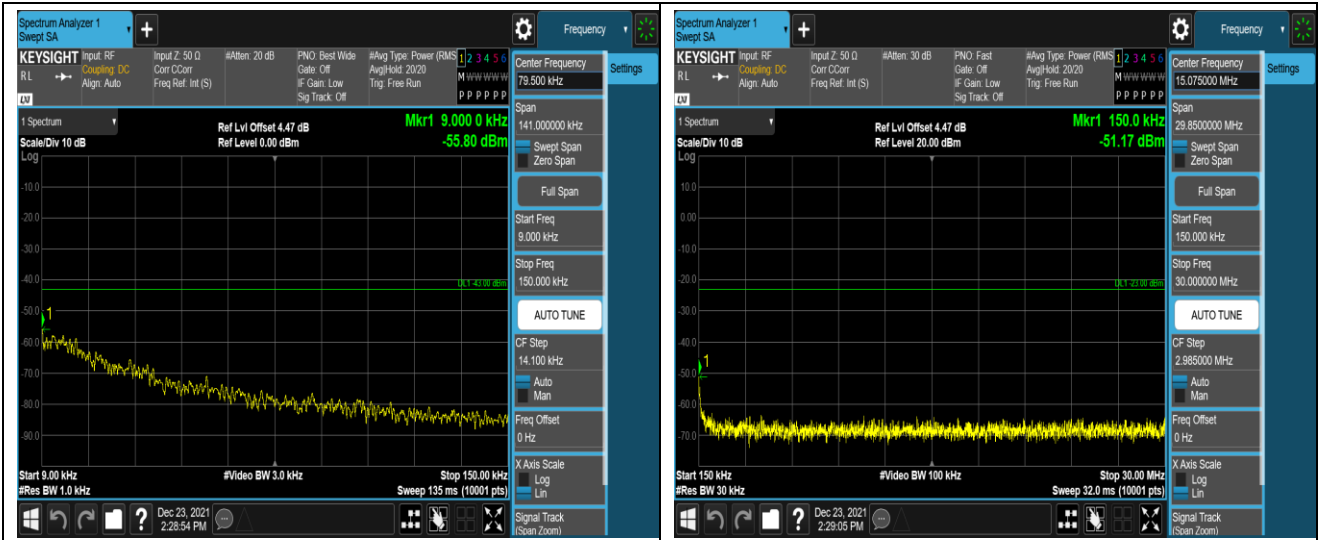
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	3	0.009~0.15MHz	0.01	-54.34	-33	PASS
GSM850	128	3	0.15~30MHz	0.15	-50.72	-13	PASS
GSM850	128	3	30~1000MHz	532.85	-44.86	-13	PASS
GSM850	128	3	1000~10000MHz	2546.2	-23.28	-13	PASS
GSM850	190	3	0.009~0.15MHz	0.01	-53.62	-33	PASS
GSM850	190	3	0.15~30MHz	0.15	-51.33	-13	PASS
GSM850	190	3	30~1000MHz	978.82	-46.76	-13	PASS
GSM850	190	3	1000~10000MHz	2546.2	-23.21	-13	PASS
GSM850	251	3	0.009~0.15MHz	0.01	-55.1	-33	PASS
GSM850	251	3	0.15~30MHz	0.15	-50.05	-13	PASS
GSM850	251	3	30~1000MHz	963.53	-46.32	-13	PASS
GSM850	251	3	1000~10000MHz	2546.2	-23.12	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.8	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-51.18	-23	PASS
GSM1900	512	0	30~1000MHz	835.46	-46.78	-13	PASS
GSM1900	512	0	1000~18000MHz	3844.1	-34.6	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-57	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-53.08	-23	PASS
GSM1900	661	0	30~1000MHz	856.41	-47.3	-13	PASS
GSM1900	661	0	1000~18000MHz	3787.43	-34.14	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-57.45	-43	PASS
GSM1900	810	0	0.15~30MHz	0.17	-52.53	-23	PASS
GSM1900	810	0	30~1000MHz	727.4	-45.98	-13	PASS
GSM1900	810	0	1000~18000MHz	3794.23	-34.65	-13	PASS

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

Test Graphs

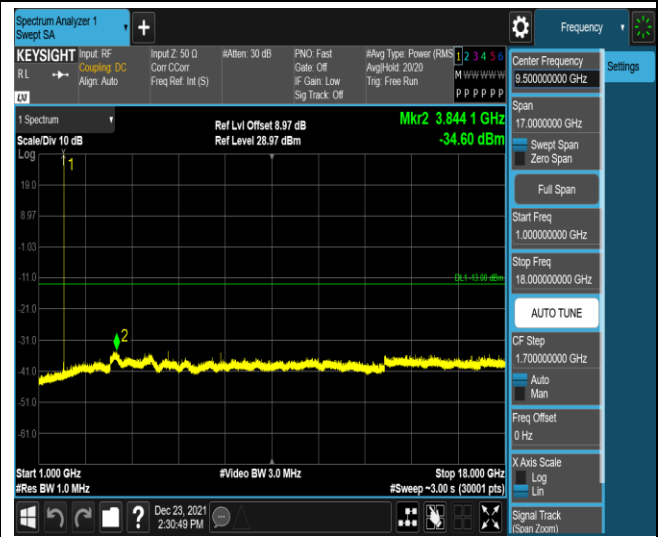
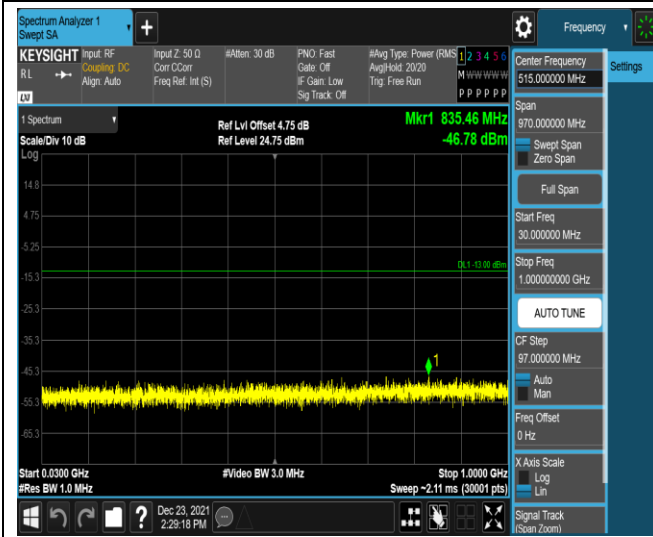






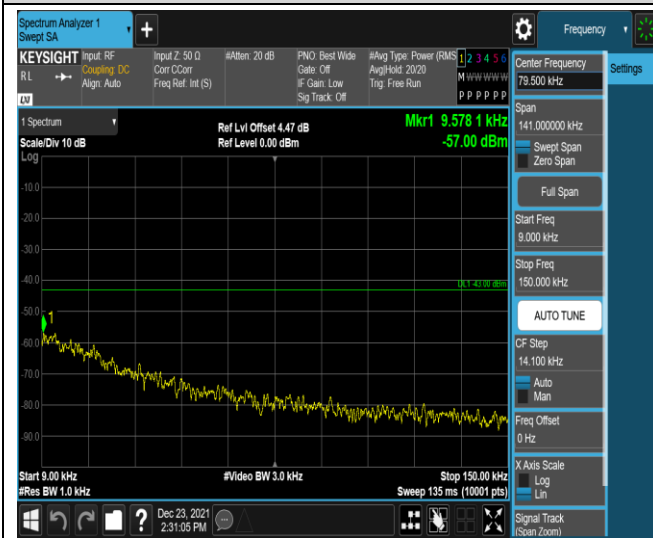
GSM1900-512-0-30~1000MHz

GSM1900-512-0-1000~18000MHz



GSM1900-661-0-0.009~0.15MHz

GSM1900-661-0-0.15~30MHz



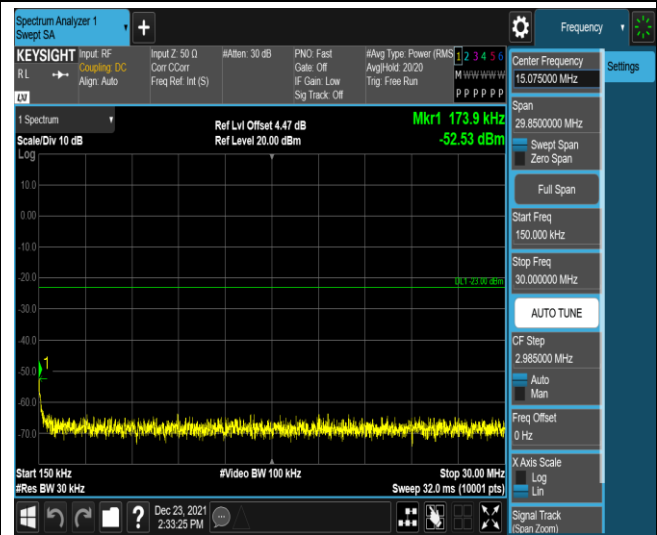
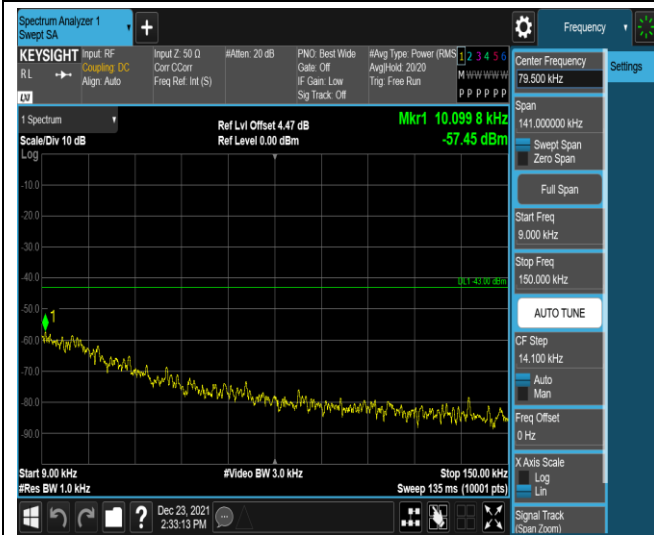
GSM1900-661-0-30~1000MHz

GSM1900-661-0-1000~18000MHz



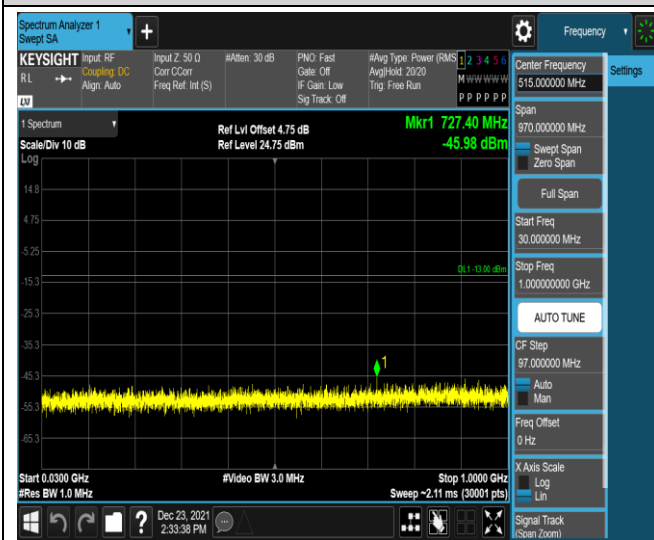
GSM1900-810-0-0.009~0.15MHz

GSM1900-810-0-0.15~30MHz



GSM1900-810-0-30~1000MHz

GSM1900-810-0-1000~18000MHz



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		
3.85	-30	-9.17	-0.010961	±2.5	Pass
	-20	-6.23	-0.007447		
	-10	-10.91	-0.013041		
	0	-9.78	-0.011690		
	10	-4.55	-0.005439		
	20	-11.20	-0.013388		
	30	-3.75	-0.004482		
	40	1.68	0.002008		
	50	-4.71	-0.005630		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-7.26	-0.008678	±2.5	Pass
	3.85	-9.78	-0.011690		
	4.40	-7.55	-0.009025		
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		
3.85	-30	15.43	0.018444	±2.5	Pass
	-20	14.40	0.017213		
	-10	22.34	0.026703		
	0	15.98	0.019101		
	10	12.66	0.015133		
	20	16.53	0.019759		
	30	19.05	0.022771		
	40	15.05	0.017989		
	50	23.41	0.027982		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	15.24	0.018217	±2.5	Pass
	3.85	14.63	0.017487		
	4.40	18.11	0.021647		
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		
3.85	-30	7.59	0.004037	Within authorized band for PCS 1900	Pass
	-20	3.62	0.001926		
	-10	11.56	0.006149		
	0	16.34	0.008691		
	10	20.79	0.011059		
	20	6.07	0.003229		
	30	4.23	0.002250		
	40	8.20	0.004362		
	50	8.49	0.004516		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	14.98	0.007968	Within authorized band for PCS 1900	Pass
	3.85	18.60	0.009894		
	4.40	5.17	0.002750		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Reference Frequency: EGPRS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.85	-30	-5.62	-0.002989	Within authorized band for PCS 1900	Pass
	-20	-9.78	-0.005202		
	-10	-8.81	-0.004686		
	0	-16.79	-0.008931		
	10	-4.88	-0.002596		
	20	-1.52	-0.000809		
	30	-14.40	-0.007660		
	40	-9.49	-0.005048		
	50	-0.16	-0.000085		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-6.78	-0.003606	Within authorized band for PCS 1900	Pass
	3.85	-17.24	-0.009170		
	4.40	-4.49	-0.002388		
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

