

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	33.37	27.42	38.5	PASS
GSM850	190	5	33.41	27.46	38.5	PASS
GSM850	251	5	33.47	27.52	38.5	PASS
GSM1900	512	0	29.88	29.98	33	PASS
GSM1900	661	0	29.93	30.03	33	PASS
GSM1900	810	0	29.81	29.91	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.38	27.43	38.5	PASS
GPRS850	128	5	2	31.52	25.57	38.5	PASS
GPRS850	128	5	3	29.50	23.55	38.5	PASS
GPRS850	128	5	4	27.23	21.28	38.5	PASS
GPRS850	190	5	1	33.37	27.42	38.5	PASS
GPRS850	190	5	2	31.38	25.43	38.5	PASS
GPRS850	190	5	3	29.39	23.44	38.5	PASS
GPRS850	190	5	4	27.16	21.21	38.5	PASS
GPRS850	251	5	1	33.43	27.48	38.5	PASS
GPRS850	251	5	2	31.33	25.38	38.5	PASS
GPRS850	251	5	3	29.37	23.42	38.5	PASS
GPRS850	251	5	4	27.15	21.20	38.5	PASS
GPRS1900	512	0	1	29.83	29.93	33	PASS
GPRS1900	512	0	2	27.69	27.79	33	PASS
GPRS1900	512	0	3	26.08	26.18	33	PASS
GPRS1900	512	0	4	23.96	24.06	33	PASS
GPRS1900	661	0	1	29.90	30.00	33	PASS
GPRS1900	661	0	2	27.58	27.68	33	PASS
GPRS1900	661	0	3	25.95	26.05	33	PASS
GPRS1900	661	0	4	23.80	23.90	33	PASS
GPRS1900	810	0	1	29.81	29.91	33	PASS
GPRS1900	810	0	2	27.34	27.44	33	PASS
GPRS1900	810	0	3	25.69	25.79	33	PASS
GPRS1900	810	0	4	23.52	23.62	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	26.09	20.14	38.5	PASS
EGPRS850	128	8	2	24.99	19.04	38.5	PASS
EGPRS850	128	8	3	22.58	16.63	38.5	PASS
EGPRS850	128	8	4	19.96	14.01	38.5	PASS
EGPRS850	190	8	1	26.41	20.46	38.5	PASS
EGPRS850	190	8	2	25.10	19.15	38.5	PASS
EGPRS850	190	8	3	22.73	16.78	38.5	PASS
EGPRS850	190	8	4	20.34	14.39	38.5	PASS
EGPRS850	251	8	1	26.27	20.32	38.5	PASS
EGPRS850	251	8	2	25.02	19.07	38.5	PASS
EGPRS850	251	8	3	22.60	16.65	38.5	PASS
EGPRS850	251	8	4	20.50	14.55	38.5	PASS
EGPRS1900	512	2	1	26.20	26.30	33	PASS
EGPRS1900	512	2	2	24.46	24.56	33	PASS
EGPRS1900	512	2	3	22.60	22.70	33	PASS
EGPRS1900	512	2	4	20.70	20.80	33	PASS
EGPRS1900	661	2	1	25.85	25.95	33	PASS
EGPRS1900	661	2	2	24.34	24.44	33	PASS
EGPRS1900	661	2	3	22.46	22.56	33	PASS
EGPRS1900	661	2	4	20.63	20.73	33	PASS
EGPRS1900	810	2	1	25.79	25.89	33	PASS
EGPRS1900	810	2	2	24.31	24.41	33	PASS
EGPRS1900	810	2	3	22.38	22.48	33	PASS
EGPRS1900	810	2	4	20.53	20.63	33	PASS

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

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

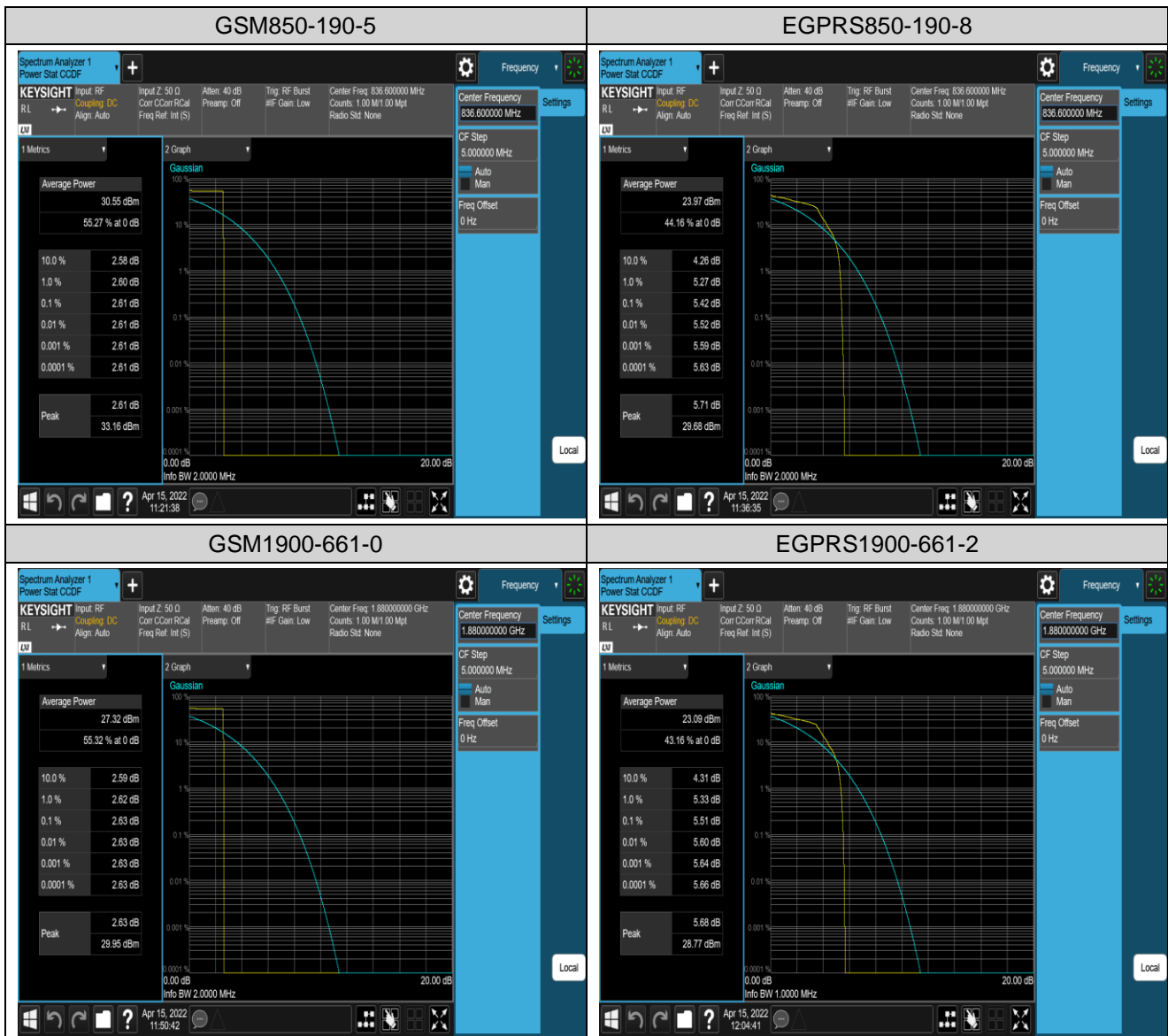
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.61	13	PASS
EGPRS850	190	8	5.42	13	PASS
GSM1900	661	0	2.63	13	PASS
EGPRS1900	661	2	5.51	13	PASS

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

Test Graphs

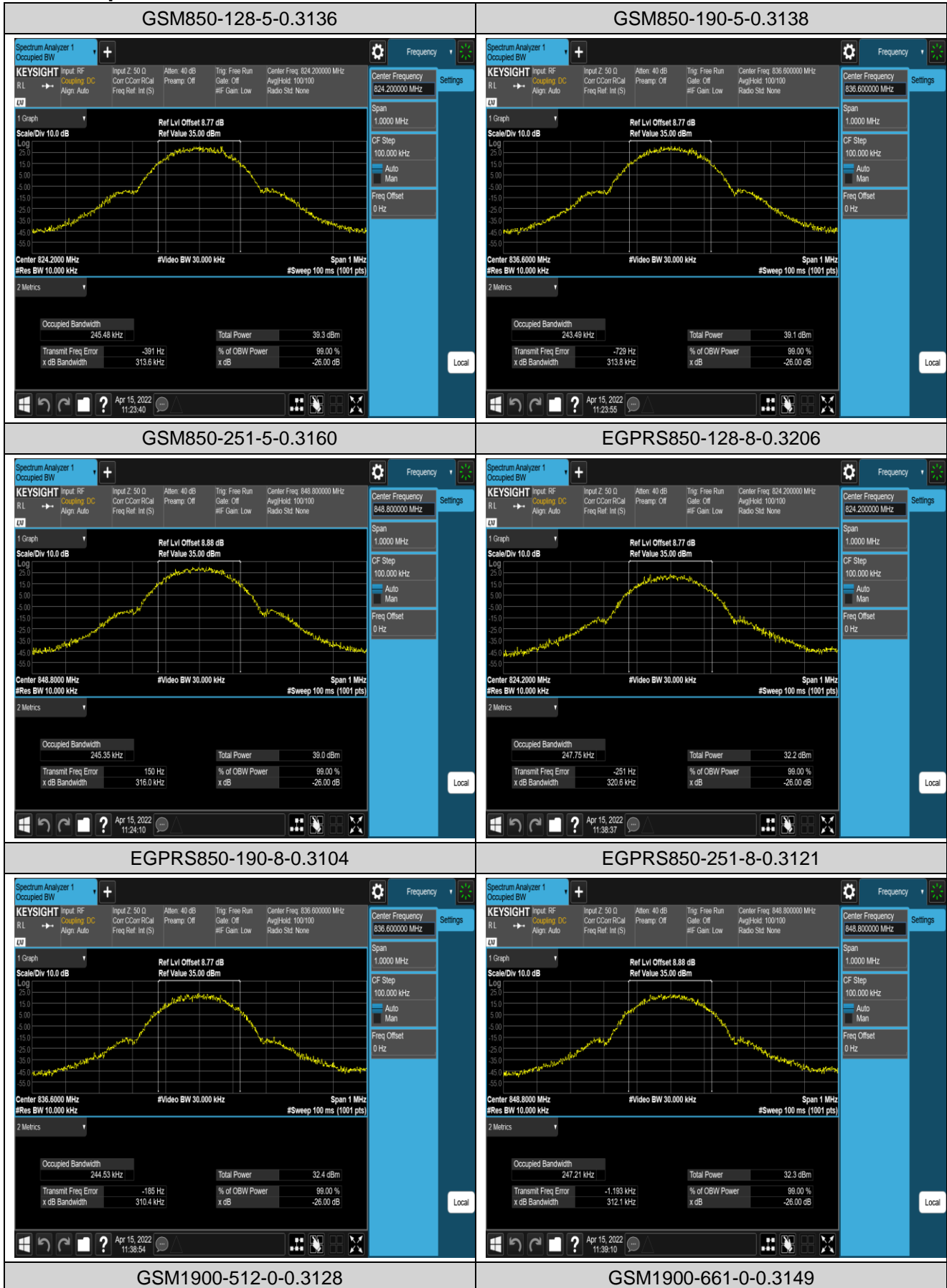


Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24548	0.3136	---	PASS
GSM850	190	5	0.24349	0.3138	---	PASS
GSM850	251	5	0.24535	0.3160	---	PASS
EGPRS850	128	8	0.24775	0.3206	---	PASS
EGPRS850	190	8	0.24453	0.3104	---	PASS
EGPRS850	251	8	0.24721	0.3121	---	PASS
GSM1900	512	0	0.24259	0.3128	---	PASS
GSM1900	661	0	0.24628	0.3149	---	PASS
GSM1900	810	0	0.24471	0.3173	---	PASS
EGPRS1900	512	2	0.24496	0.3106	---	PASS
EGPRS1900	661	2	0.24179	0.3083	---	PASS
EGPRS1900	810	2	0.24796	0.3177	---	PASS

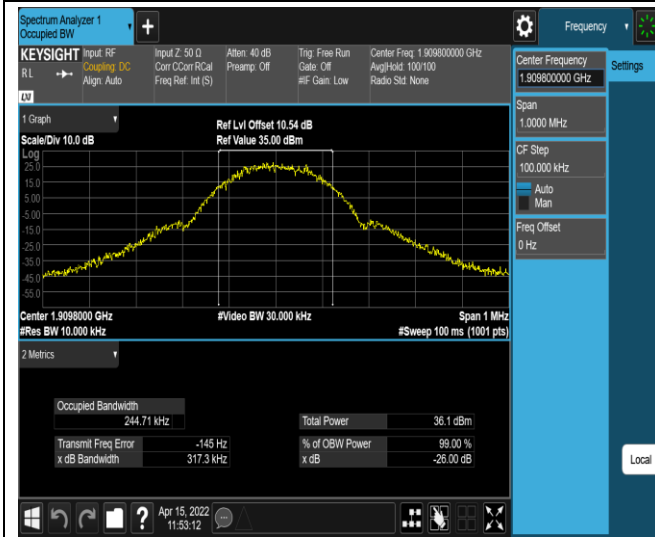
Test Graphs



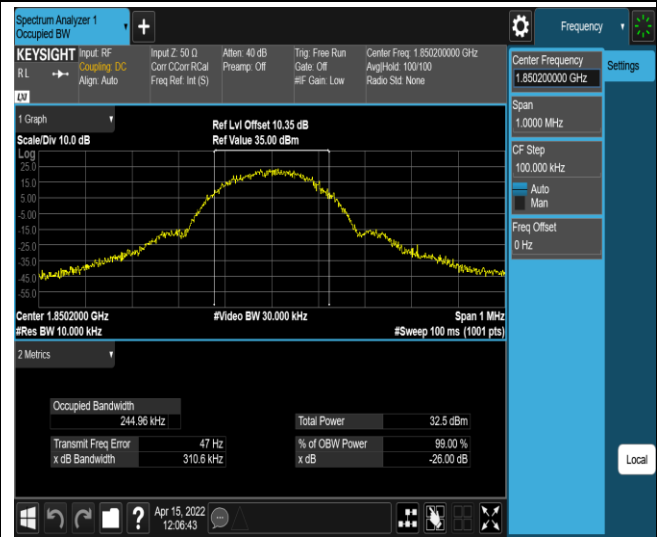


GSM1900-810-0-0.3173

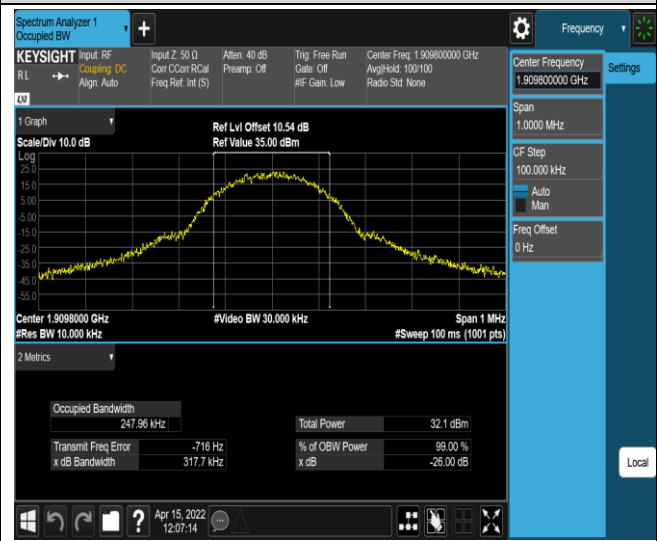
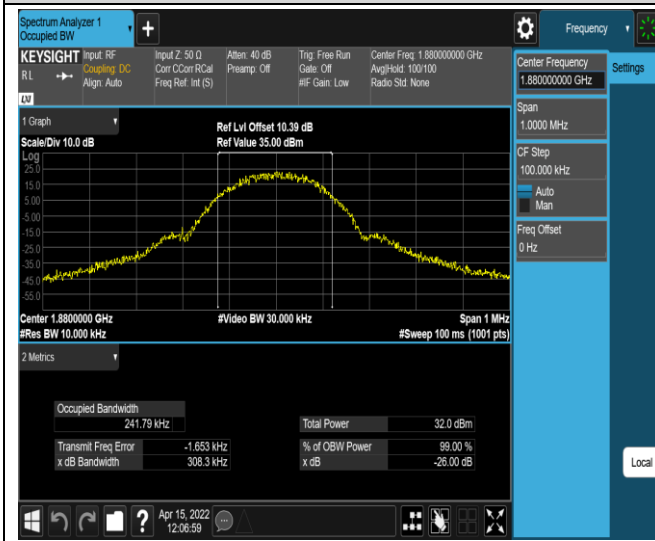
EGPRS1900-512-2-0.3106



EGPRS1900-661-2-0.3083



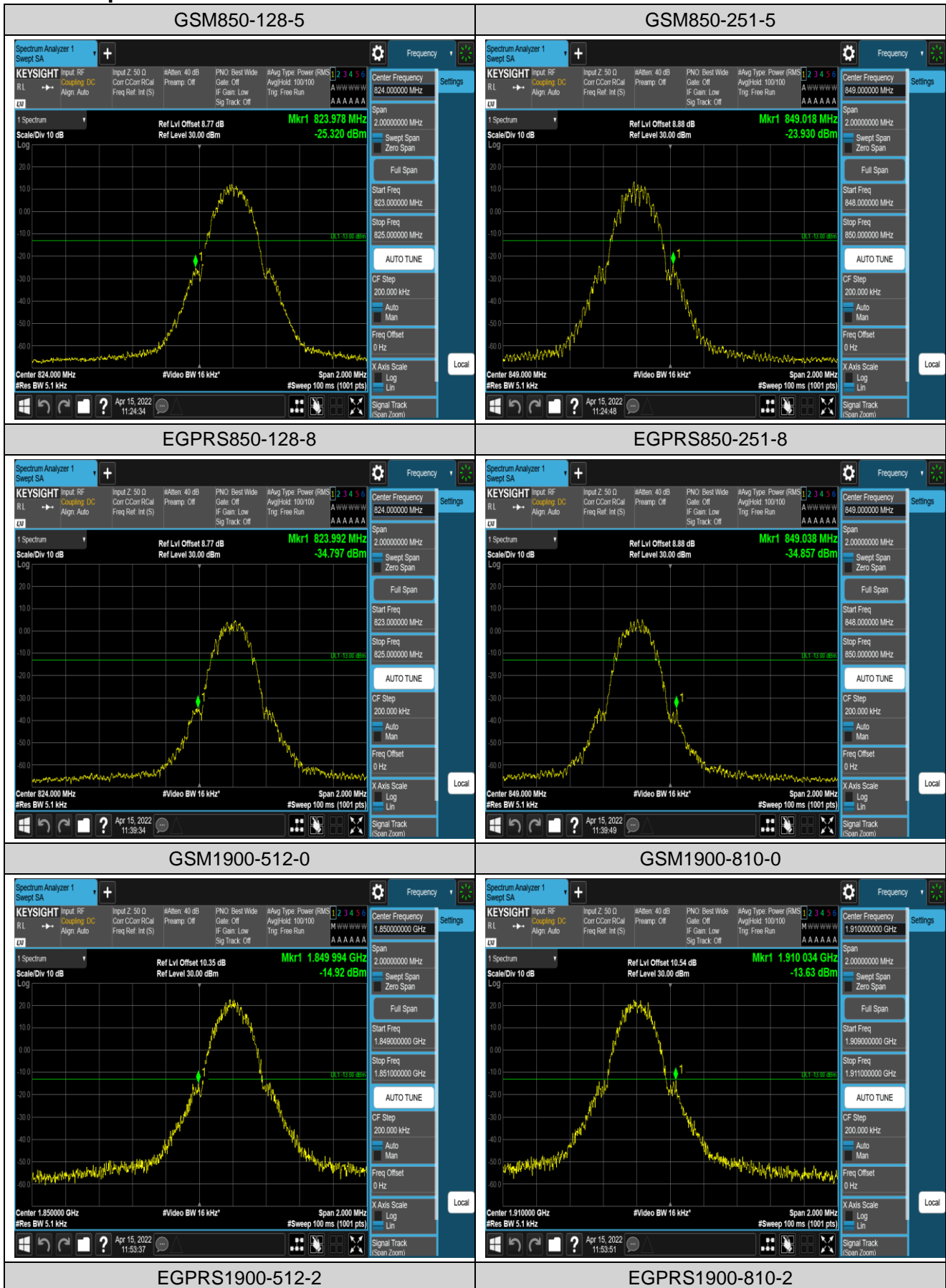
EGPRS1900-810-2-0.3177

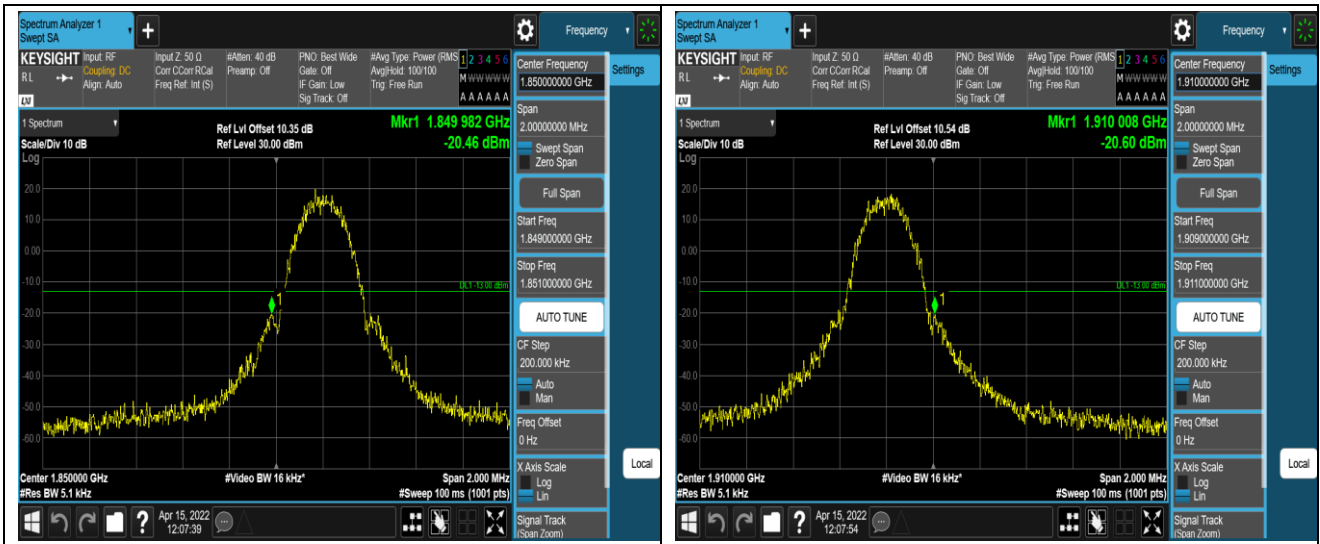


Appendix D: Band Edge**Test Result**

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-25.32	-13	PASS
GSM850	251	5	849.02	-23.93	-13	PASS
EGPRS850	128	8	823.99	-34.80	-13	PASS
EGPRS850	251	8	849.04	-34.86	-13	PASS
GSM1900	512	0	1849.99	-14.92	-13	PASS
GSM1900	810	0	1910.03	-13.63	-13	PASS
EGPRS1900	512	2	1849.98	-20.46	-13	PASS
EGPRS1900	810	2	1910.01	-20.60	-13	PASS

Test Graphs





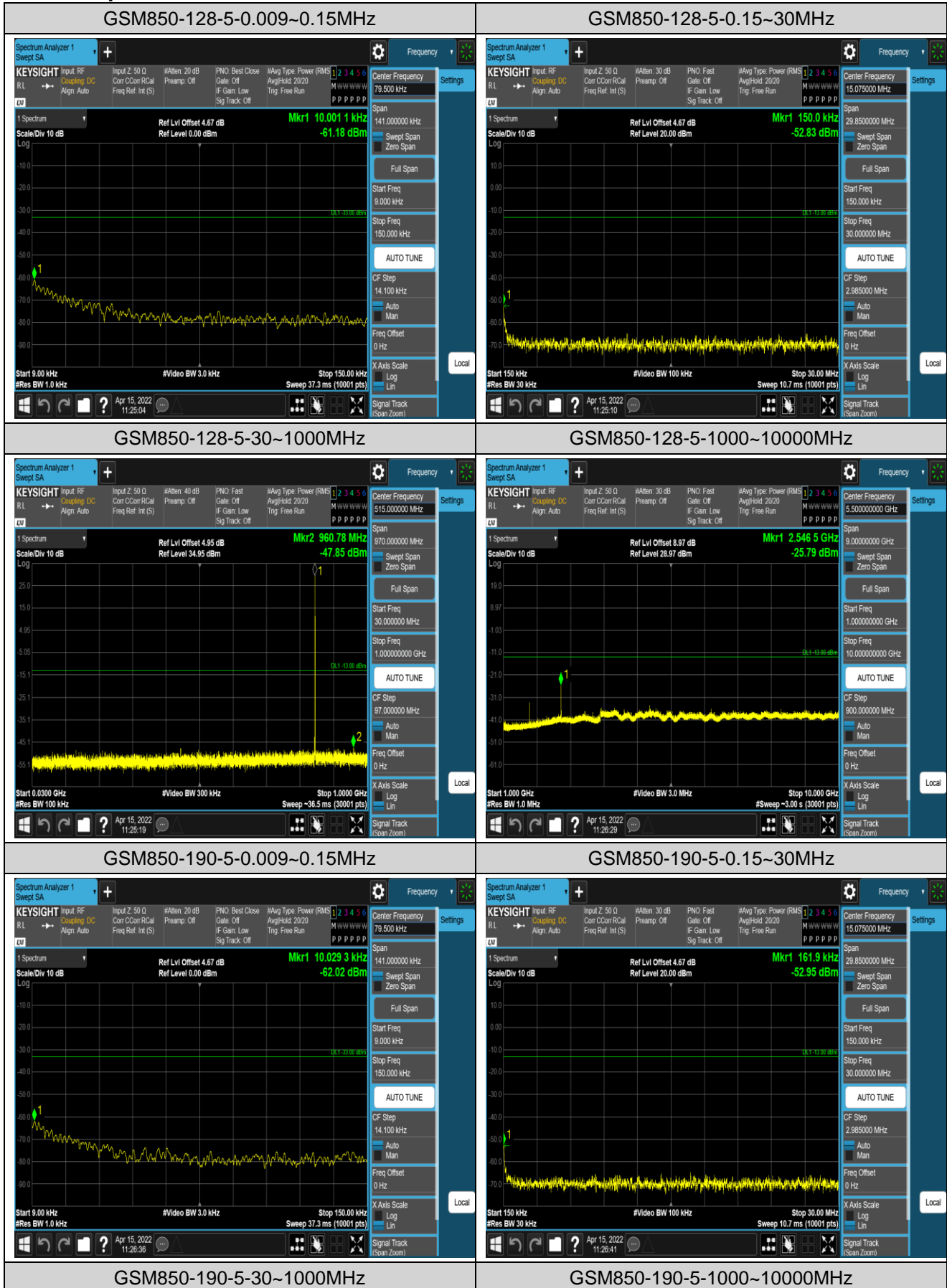
Appendix E: Conducted Spurious Emission

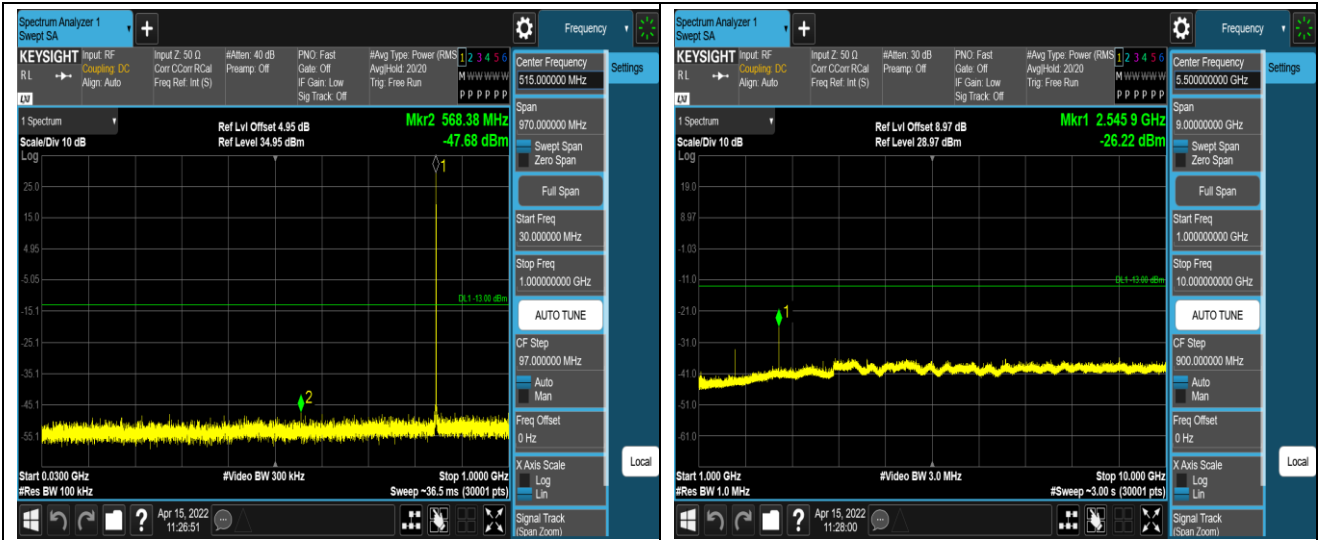
Test Result

Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-61.18	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-52.83	-13	PASS
GSM850	128	5	30~1000MHz	960.78	-47.85	-13	PASS
GSM850	128	5	1000~10000MHz	2546.5	-25.79	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-62.02	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-52.95	-13	PASS
GSM850	190	5	30~1000MHz	568.38	-47.68	-13	PASS
GSM850	190	5	1000~10000MHz	2545.9	-26.22	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-61.64	-33	PASS
GSM850	251	5	0.15~30MHz	0.2	-52.04	-13	PASS
GSM850	251	5	30~1000MHz	692.06	-47.12	-13	PASS
GSM850	251	5	1000~10000MHz	2546.5	-25.75	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-70.06	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-52.8	-23	PASS
GSM1900	512	0	30~1000MHz	886.57	-46.81	-13	PASS
GSM1900	512	0	1000~18000MHz	5729.97	-34.77	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-70.01	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-53.43	-23	PASS
GSM1900	661	0	30~1000MHz	870.41	-48.31	-13	PASS
GSM1900	661	0	1000~18000MHz	5729.4	-34.31	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-71.67	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-54.25	-23	PASS
GSM1900	810	0	30~1000MHz	968.09	-47.5	-13	PASS
GSM1900	810	0	1000~18000MHz	5729.4	-35.23	-13	PASS

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

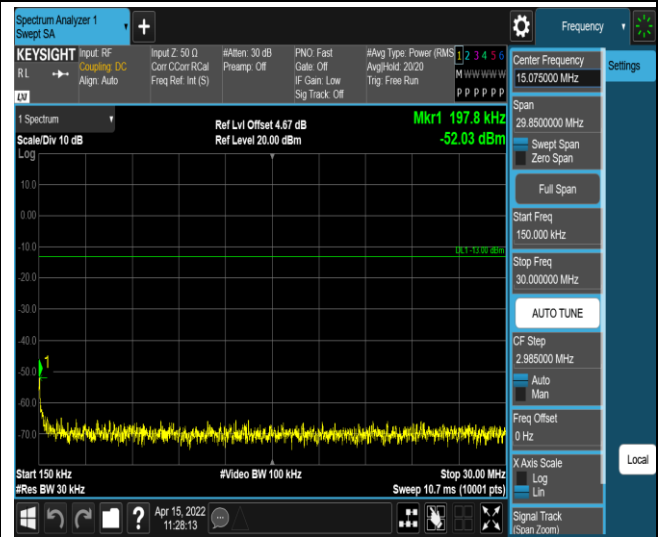
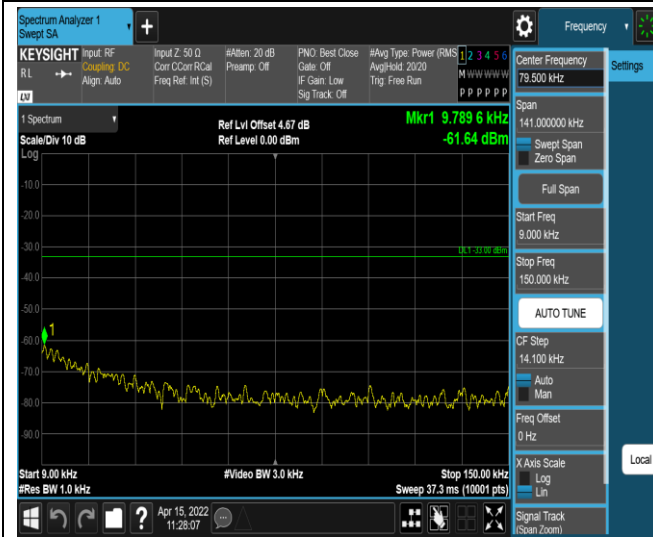
Test Graphs





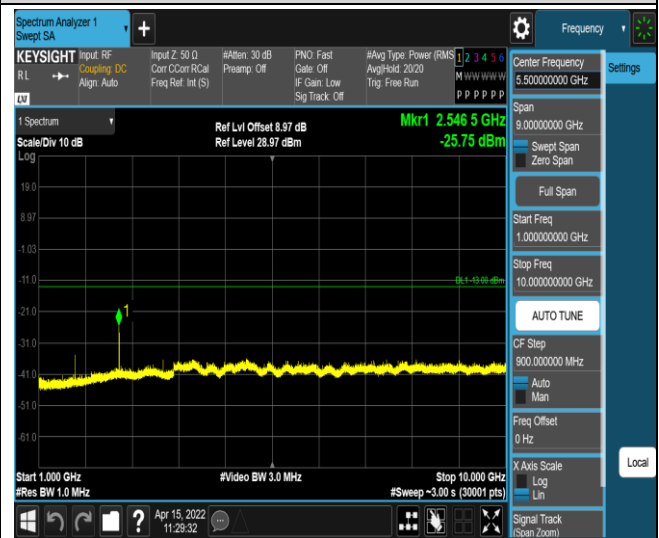
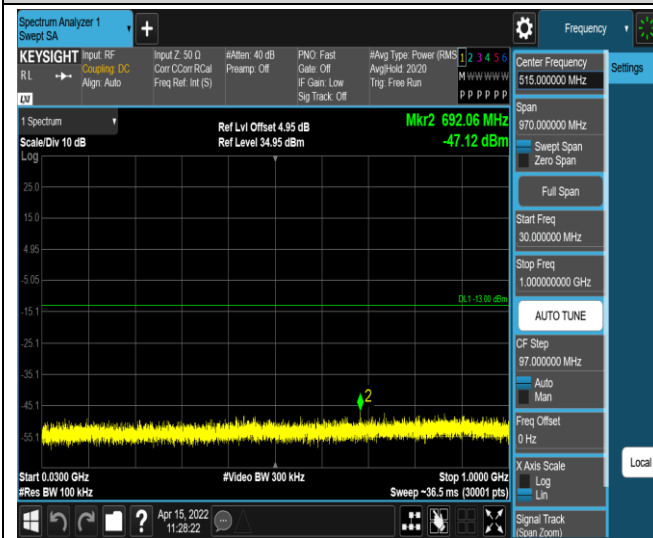
GSM850-251-5-0.009~0.15MHz

GSM850-251-5-0.15~30MHz



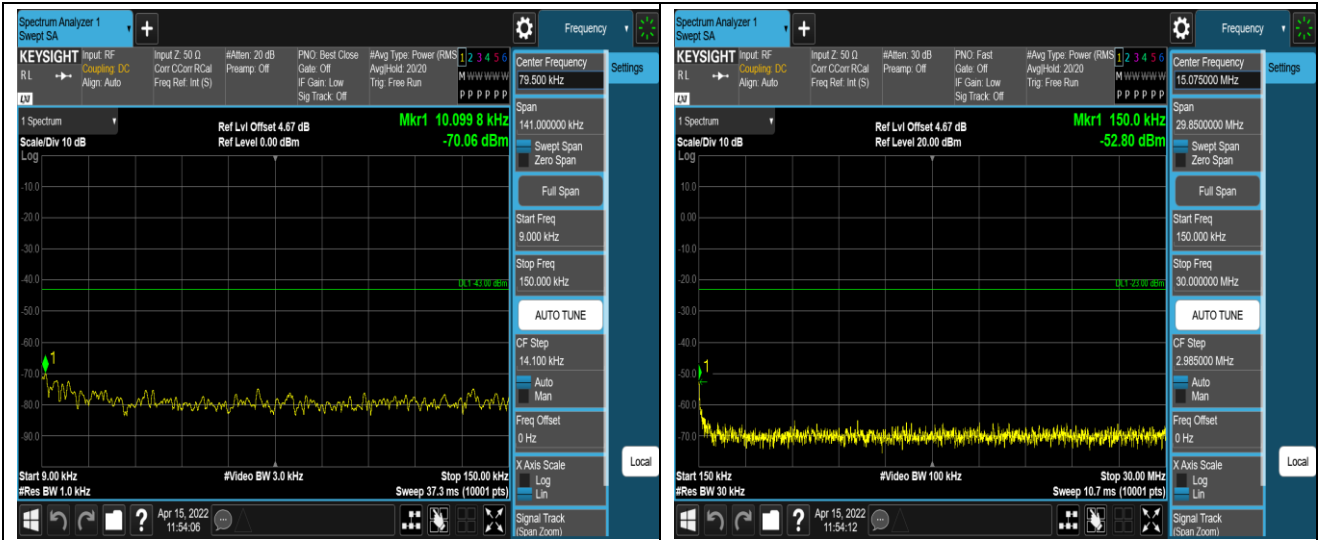
GSM850-251-5-30~1000MHz

GSM850-251-5-1000~10000MHz



GSM1900-512-0-0.009~0.15MHz

GSM1900-512-0-0.15~30MHz



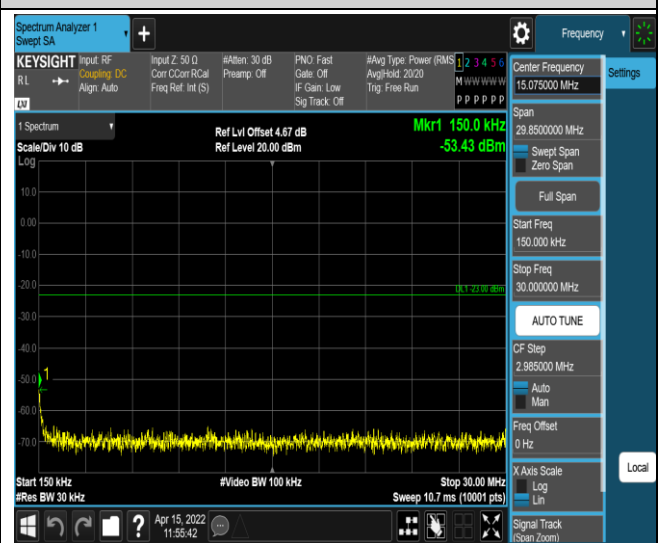
GSM1900-512-0-30~1000MHz

GSM1900-512-0-1000~18000MHz



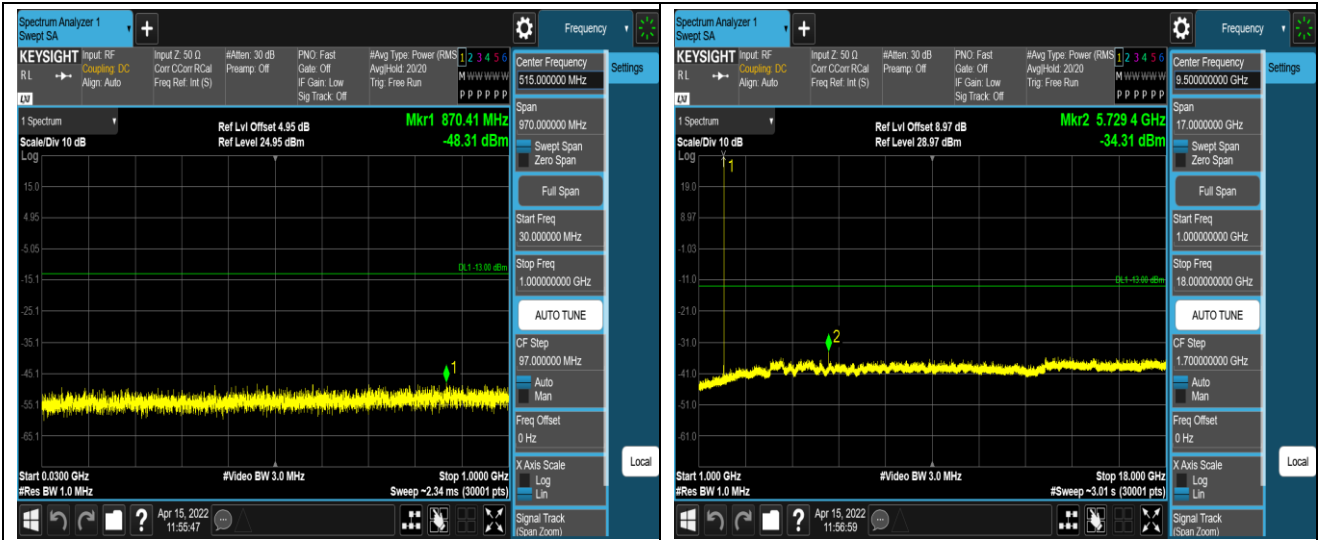
GSM1900-661-0-0.009~0.15MHz

GSM1900-661-0-0.15~30MHz



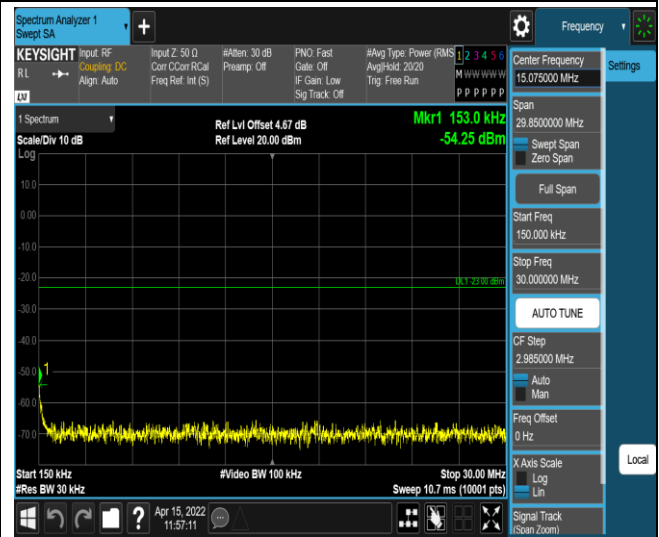
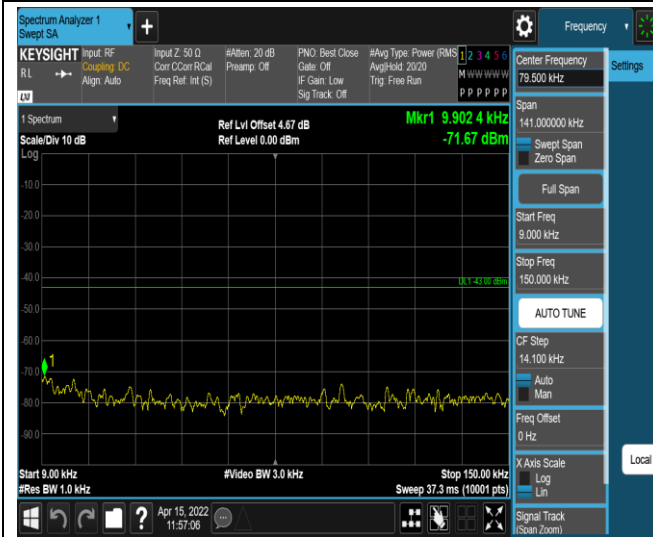
GSM1900-661-0-30~1000MHz

GSM1900-661-0-1000~18000MHz



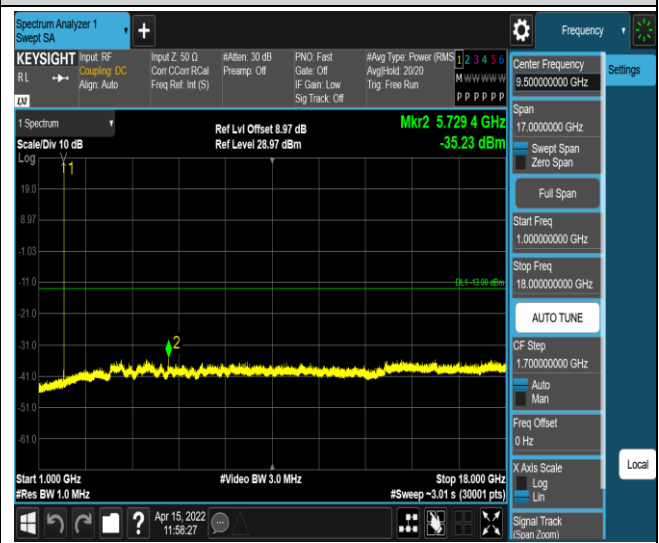
GSM1900-810-0-0.009~0.15MHz

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	10.62	0.012694	±2.5	Pass
	-20	10.94	0.013077		
	-10	10.40	0.012431		
	0	10.14	0.012120		
	10	7.94	0.009491		
	20	5.36	0.006407		
	30	4.97	0.005941		
	40	8.91	0.010650		
	50	11.98	0.014320		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	13.88	0.016591	±2.5	Pass
	3.85	3.58	0.004279		
	4.40	3.62	0.004327		
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	4.55	0.005439	±2.5	Pass
	-20	19.24	0.022998		
	-10	12.88	0.015396		
	0	12.33	0.014738		
	10	8.72	0.010423		
	20	6.81	0.008140		
	30	16.66	0.019914		
	40	13.20	0.015778		
	50	15.92	0.019029		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	8.04	0.009610	±2.5	Pass
	3.85	5.46	0.006526		
	4.40	17.08	0.020416		
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	-5.84	-0.003106	Within authorized band for PCS 1900	Pass
	-20	-6.88	-0.003660		
	-10	-4.52	-0.002404		
	0	3.55	0.001888		
	10	9.72	0.005170		
	20	7.59	0.004037		
	30	-0.03	-0.000016		
	40	5.71	0.003037		
	50	6.04	0.003213		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-3.68	-0.001957	Within authorized band for PCS 1900	Pass
	3.85	-3.62	-0.001926		
	4.40	-9.10	-0.004840		
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	-3.29	-0.001750	Within authorized band for PCS 1900	Pass
	-20	-13.30	-0.007074		
	-10	-6.04	-0.003213		
	0	-10.65	-0.005665		
	10	-0.74	-0.000394		
	20	1.55	0.000824		
	30	-3.55	-0.001888		
	40	-1.78	-0.000947		
	50	3.58	0.001904		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-14.11	-0.007505	Within authorized band for PCS 1900	Pass
	3.85	2.78	0.001479		
	4.40	-6.17	-0.003282		
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

