

## 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	33.40	26.25	38.45	PASS
GSM850	190	5	33.48	26.33	38.45	PASS
GSM850	251	5	33.52	26.37	38.45	PASS
GSM1900	512	0	29.70	27.2	33.00	PASS
GSM1900	661	0	29.93	27.43	33.00	PASS
GSM1900	810	0	30.15	27.65	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.43	26.28	38.45	PASS
GPRS850	128	5	2	32.32	25.17	38.45	PASS
GPRS850	128	5	3	30.17	23.02	38.45	PASS
GPRS850	128	5	4	29.03	21.88	38.45	PASS
GPRS850	190	5	1	33.32	26.17	38.45	PASS
GPRS850	190	5	2	32.32	25.17	38.45	PASS
GPRS850	190	5	3	30.18	23.03	38.45	PASS
GPRS850	190	5	4	29.04	21.89	38.45	PASS
GPRS850	251	5	1	33.35	26.2	38.45	PASS
GPRS850	251	5	2	32.37	25.22	38.45	PASS
GPRS850	251	5	3	30.27	23.12	38.45	PASS
GPRS850	251	5	4	29.14	21.99	38.45	PASS
GPRS1900	512	0	1	29.68	27.18	33.00	PASS
GPRS1900	512	0	2	28.91	26.41	33.00	PASS
GPRS1900	512	0	3	27.13	24.63	33.00	PASS
GPRS1900	512	0	4	25.99	23.49	33.00	PASS
GPRS1900	661	0	1	29.87	27.37	33.00	PASS
GPRS1900	661	0	2	29.15	26.65	33.00	PASS
GPRS1900	661	0	3	27.39	24.89	33.00	PASS
GPRS1900	661	0	4	26.27	23.77	33.00	PASS
GPRS1900	810	0	1	30.09	27.59	33.00	PASS
GPRS1900	810	0	2	29.39	26.89	33.00	PASS
GPRS1900	810	0	3	27.67	25.17	33.00	PASS
GPRS1900	810	0	4	26.58	24.08	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.54	20.39	38.45	PASS
EGPRS850	128	8	2	26.16	19.01	38.45	PASS
EGPRS850	128	8	3	23.65	16.5	38.45	PASS
EGPRS850	128	8	4	22.25	15.1	38.45	PASS
EGPRS850	190	8	1	26.69	19.54	38.45	PASS
EGPRS850	190	8	2	25.73	18.58	38.45	PASS
EGPRS850	190	8	3	23.36	16.21	38.45	PASS
EGPRS850	190	8	4	22.03	14.88	38.45	PASS
EGPRS850	251	8	1	26.42	19.27	38.45	PASS
EGPRS850	251	8	2	25.47	18.32	38.45	PASS
EGPRS850	251	8	3	23.13	15.98	38.45	PASS
EGPRS850	251	8	4	21.85	14.7	38.45	PASS
EGPRS1900	512	2	1	26.13	23.63	33.00	PASS
EGPRS1900	512	2	2	25.14	22.64	33.00	PASS
EGPRS1900	512	2	3	23.12	20.62	33.00	PASS
EGPRS1900	512	2	4	22.02	19.52	33.00	PASS
EGPRS1900	661	2	1	25.99	23.49	33.00	PASS
EGPRS1900	661	2	2	25.16	22.66	33.00	PASS
EGPRS1900	661	2	3	23.25	20.75	33.00	PASS
EGPRS1900	661	2	4	22.18	19.68	33.00	PASS
EGPRS1900	810	2	1	26.83	24.33	33.00	PASS
EGPRS1900	810	2	2	26.06	23.56	33.00	PASS
EGPRS1900	810	2	3	24.12	21.62	33.00	PASS
EGPRS1900	810	2	4	23.06	20.56	33.00	PASS

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

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

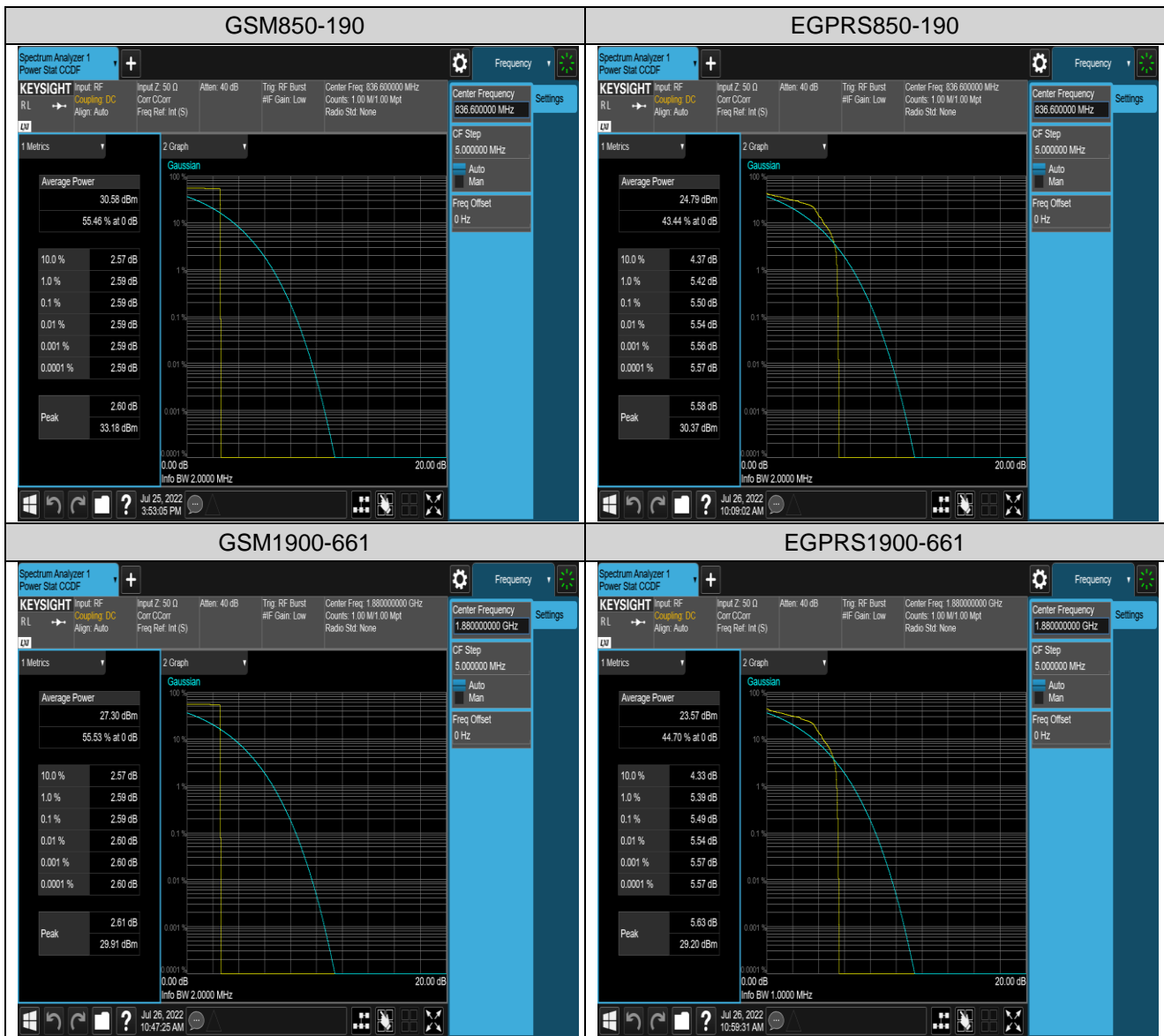
## Appendix B: Peak-to-Average Ratio(CCDF)

### Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.59	13	PASS
EGPRS850	190	8	5.5	13	PASS
GSM1900	661	0	2.59	13	PASS
EGPRS1900	661	2	5.49	13	PASS

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

### Test Graphs

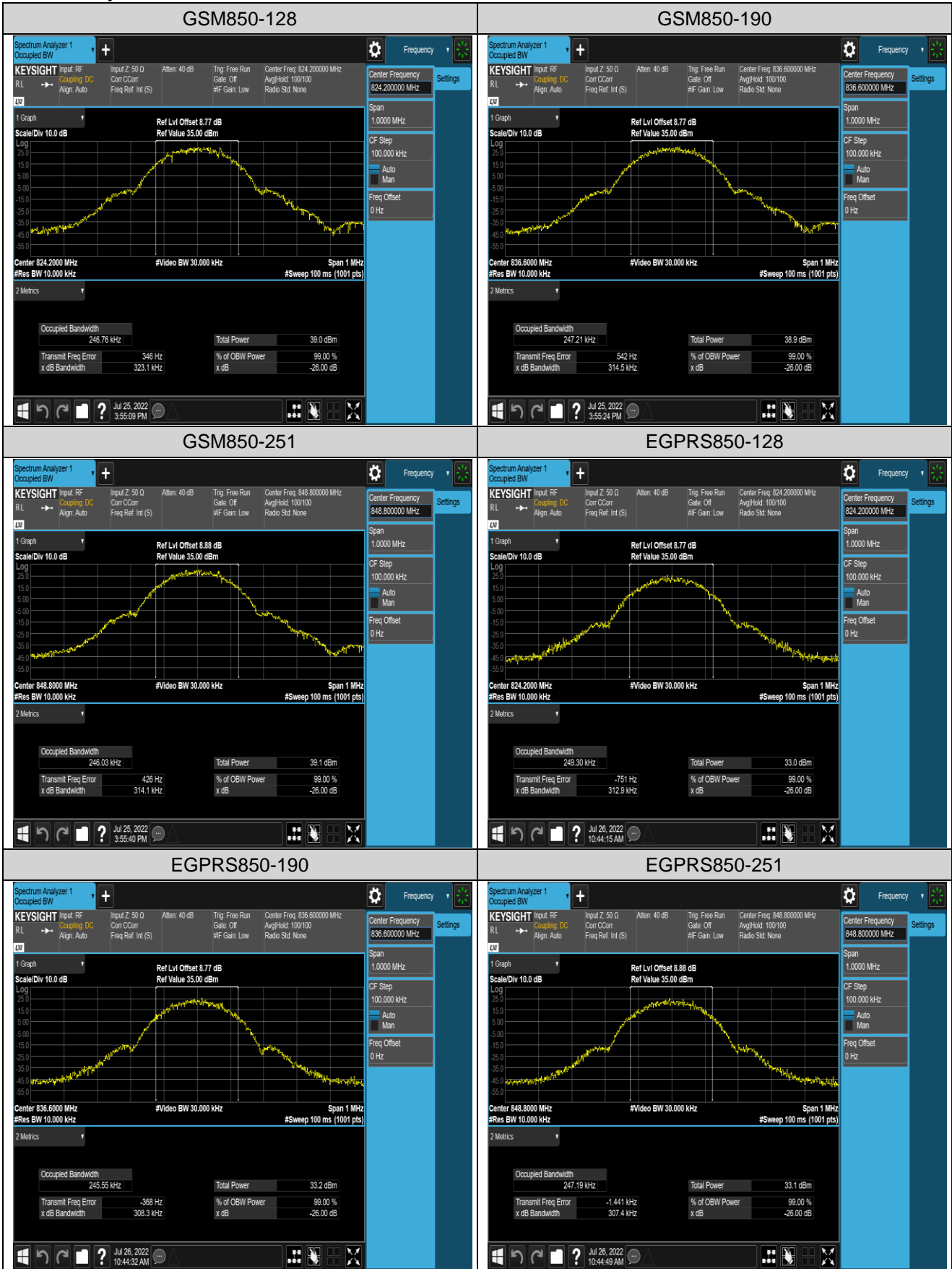


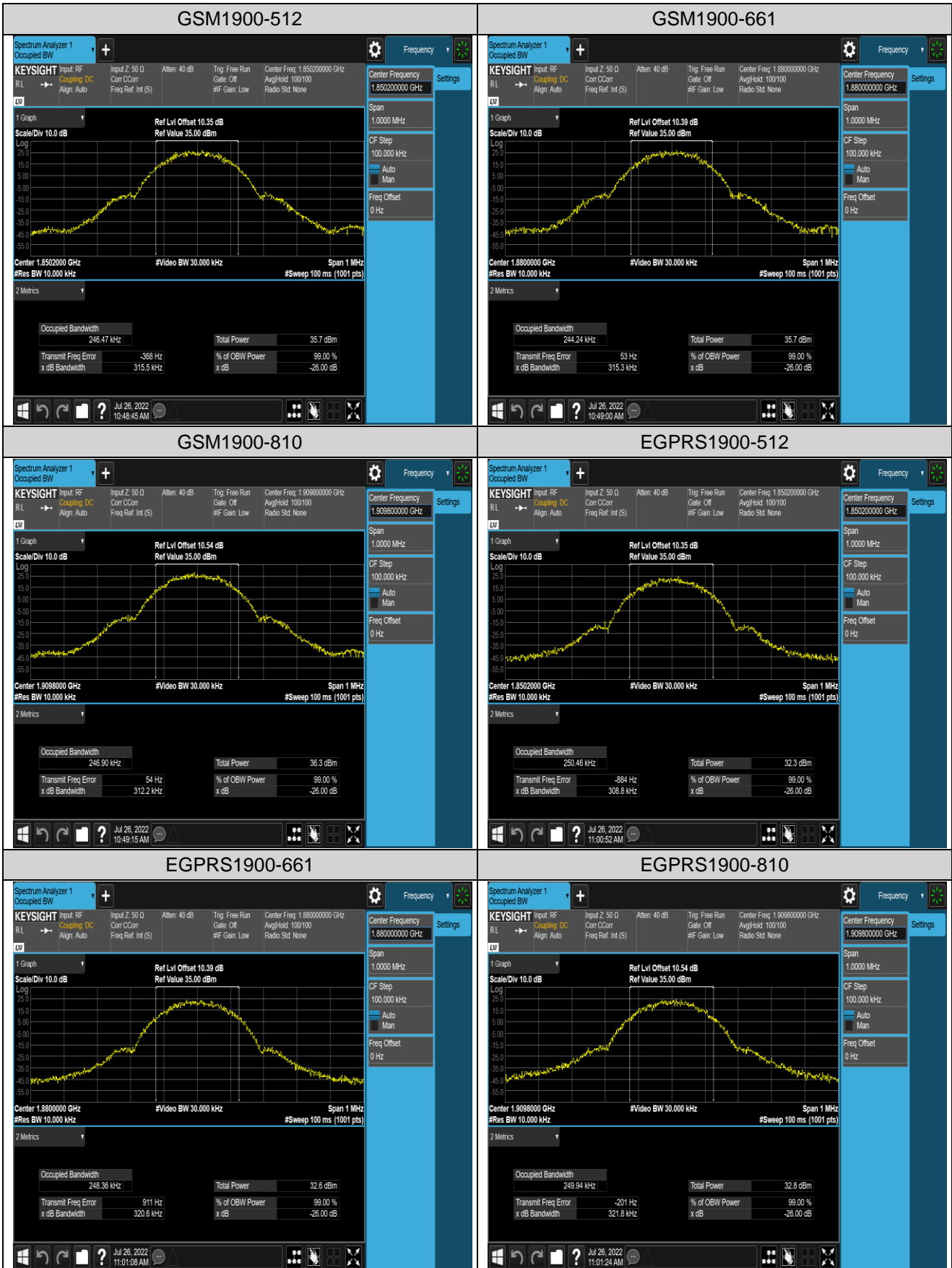
## Appendix C: 26dB Bandwidth and Occupied Bandwidth

### Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24676	0.3231	---	PASS
GSM850	190	5	0.24721	0.3145	---	PASS
GSM850	251	5	0.24603	0.3141	---	PASS
EGPRS850	128	8	0.24930	0.3129	---	PASS
EGPRS850	190	8	0.24555	0.3083	---	PASS
EGPRS850	251	8	0.24719	0.3074	---	PASS
GSM1900	512	0	0.24647	0.3155	---	PASS
GSM1900	661	0	0.24424	0.3153	---	PASS
GSM1900	810	0	0.24690	0.3122	---	PASS
EGPRS1900	512	2	0.25046	0.3088	---	PASS
EGPRS1900	661	2	0.24836	0.3206	---	PASS
EGPRS1900	810	2	0.24994	0.3218	---	PASS

Test Graphs



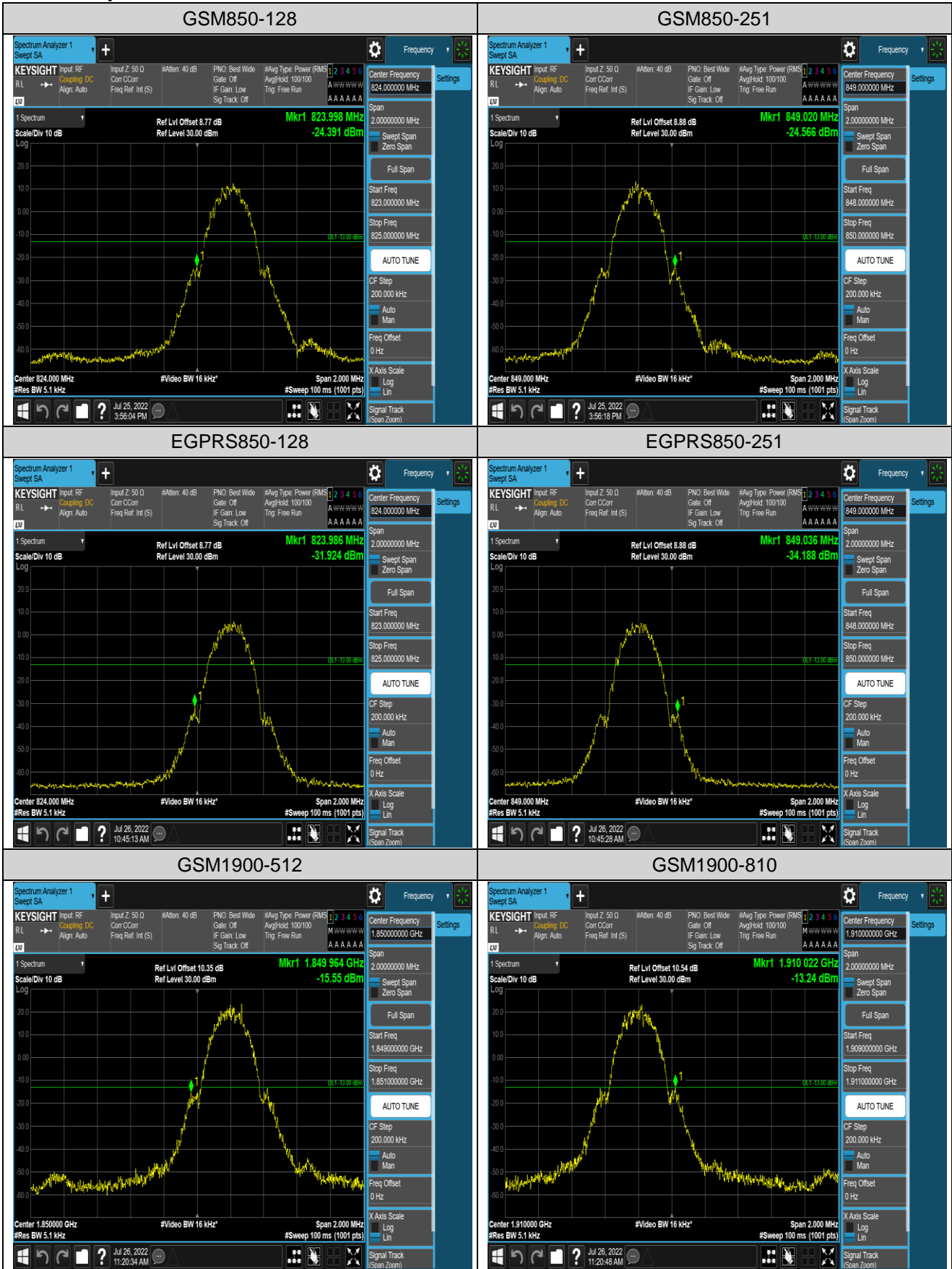


## Appendix D: Band Edge

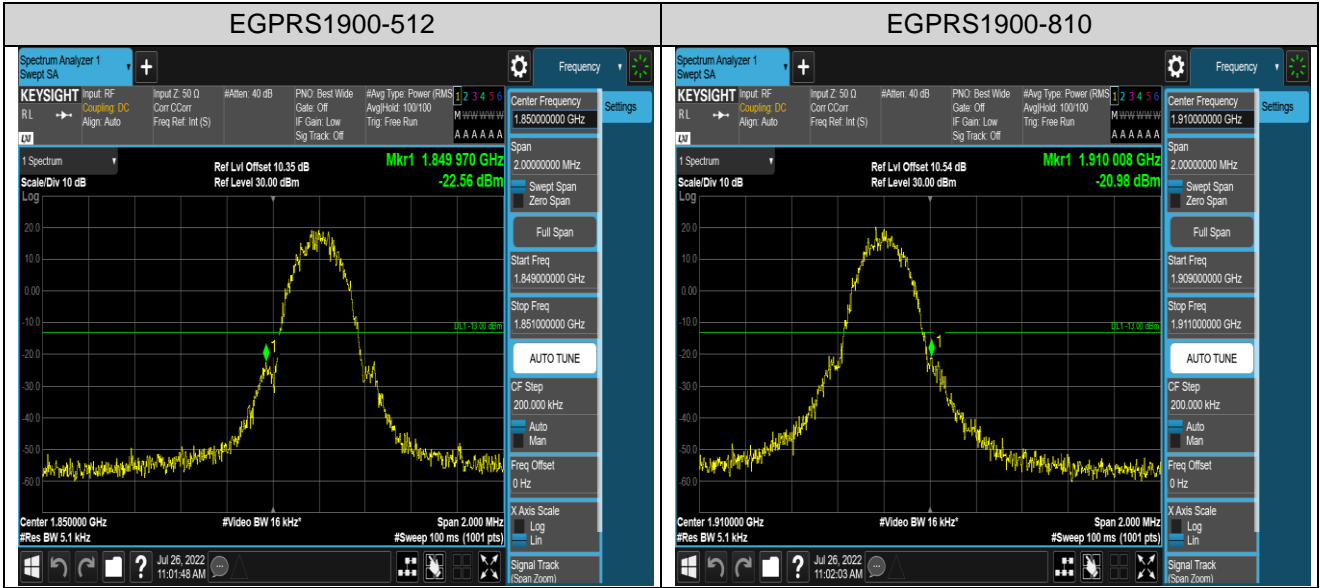
### Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-24.39	-13	PASS
GSM850	251	5	849.02	-24.57	-13	PASS
EGPRS850	128	8	823.99	-31.92	-13	PASS
EGPRS850	251	8	849.04	-34.19	-13	PASS
GSM1900	512	0	1849.96	-15.55	-13	PASS
GSM1900	810	0	1910.02	-13.24	-13	PASS
EGPRS1900	512	2	1849.97	-22.56	-13	PASS
EGPRS1900	810	2	1910.01	-20.98	-13	PASS

Test Graphs







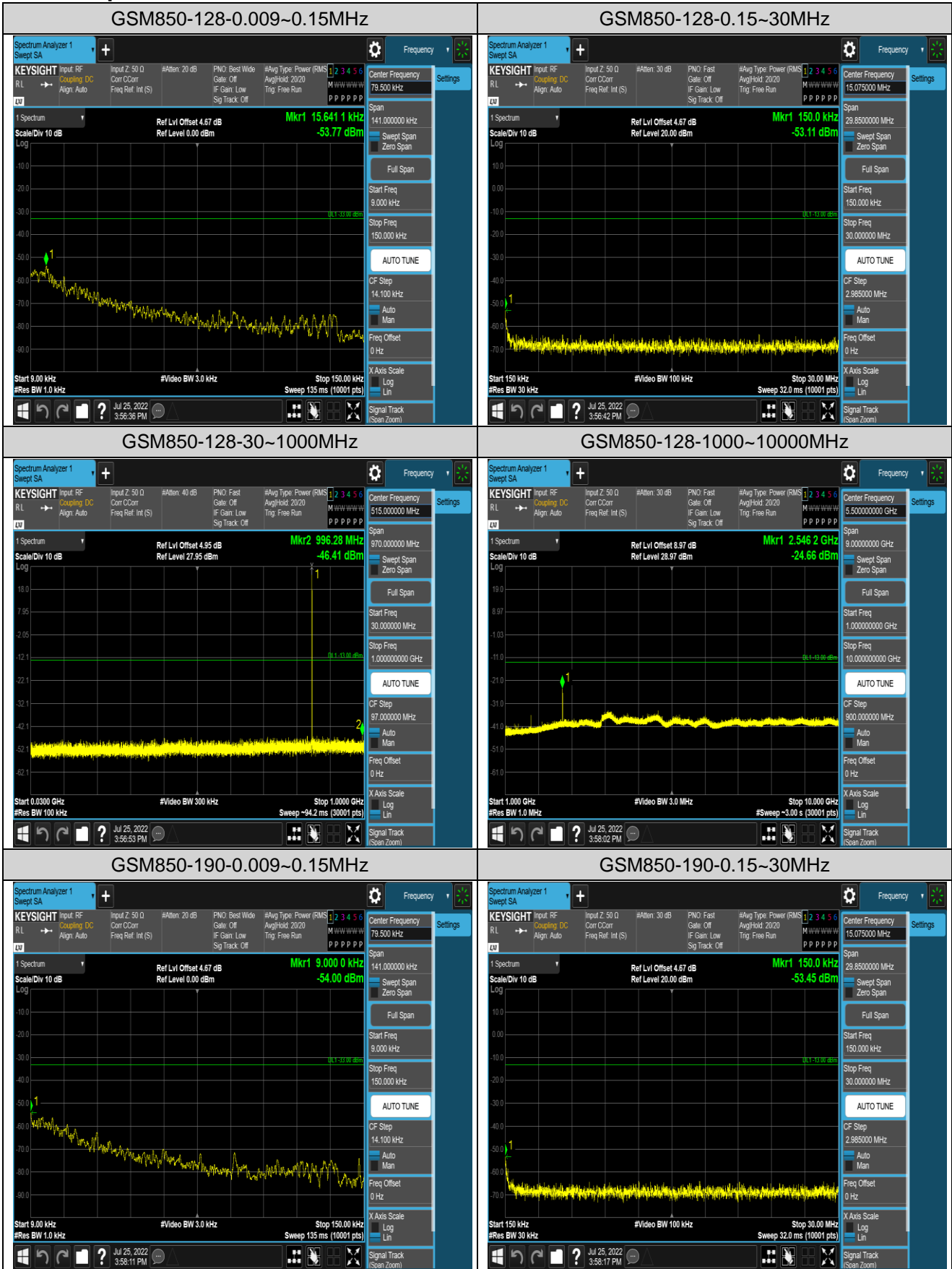
## Appendix E: Conducted Spurious Emission

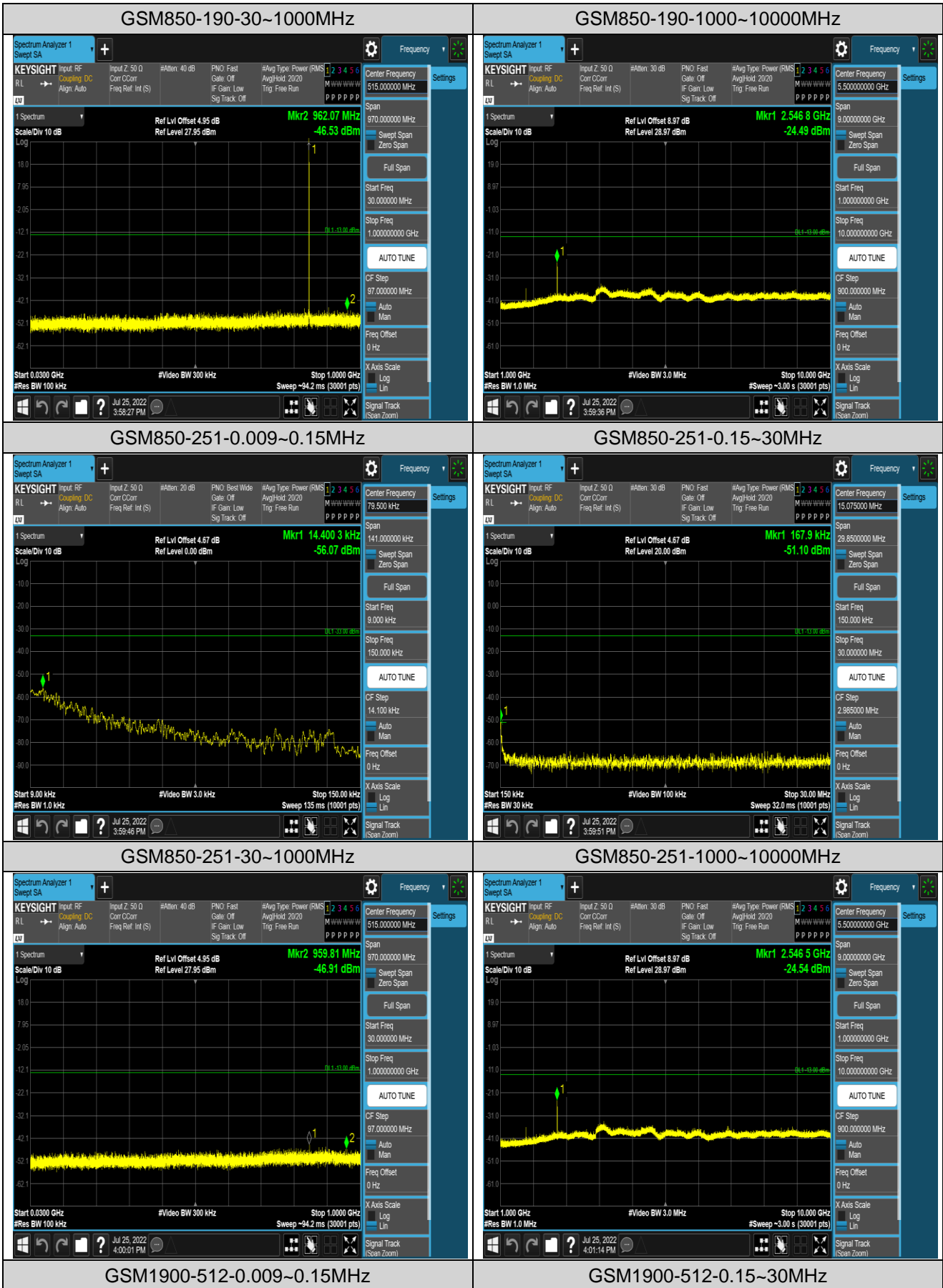
### Test Result

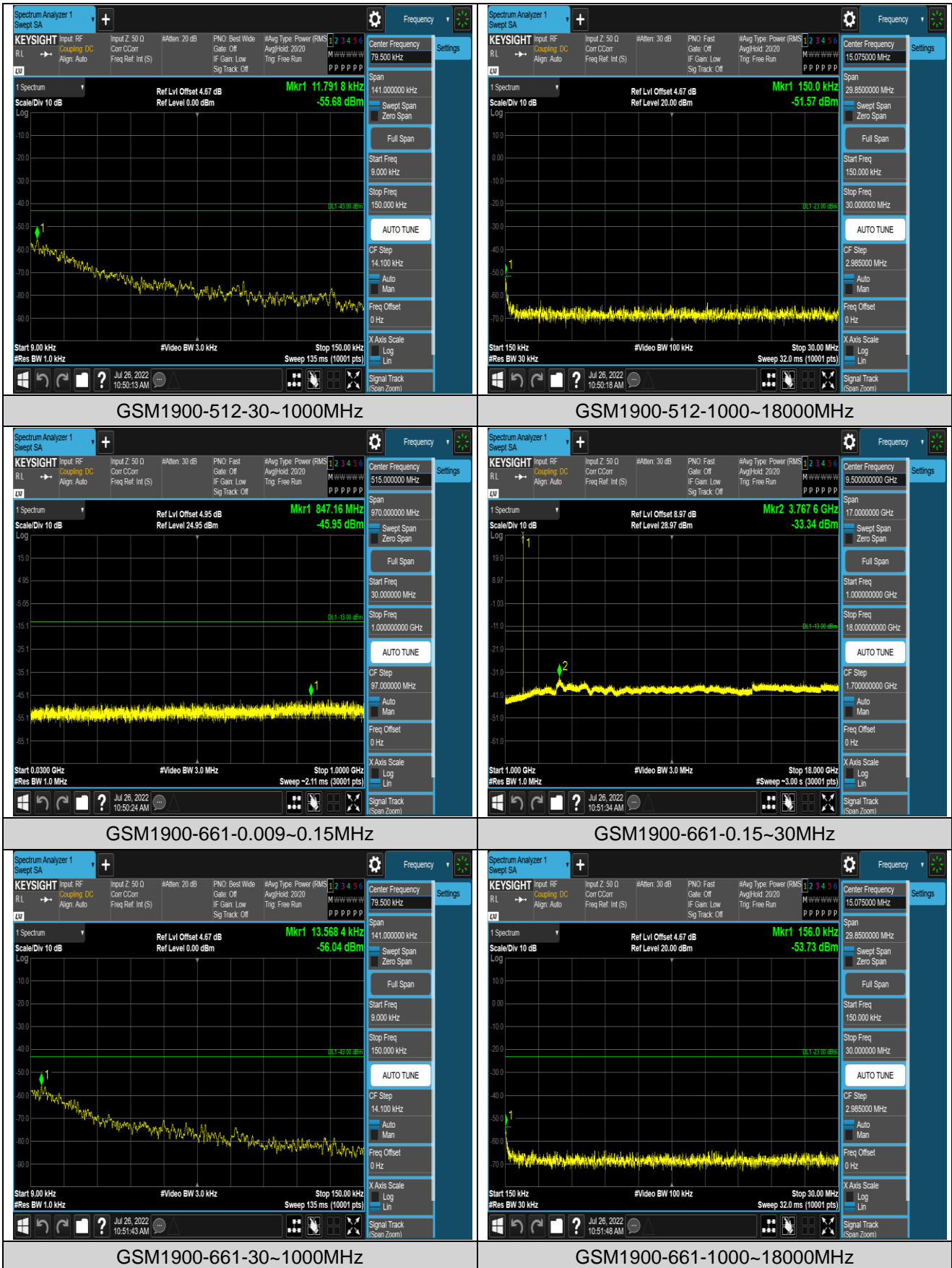
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.02	-53.77	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-53.11	-13	PASS
GSM850	128	5	30~1000MHz	996.28	-46.41	-13	PASS
GSM850	128	5	1000~10000MHz	2546.2	-24.66	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-54	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-53.45	-13	PASS
GSM850	190	5	30~1000MHz	962.07	-46.53	-13	PASS
GSM850	190	5	1000~10000MHz	2546.8	-24.49	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-56.07	-33	PASS
GSM850	251	5	0.15~30MHz	0.17	-51.1	-13	PASS
GSM850	251	5	30~1000MHz	959.81	-46.91	-13	PASS
GSM850	251	5	1000~10000MHz	2546.5	-24.54	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.68	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-51.58	-23	PASS
GSM1900	512	0	30~1000MHz	847.16	-45.95	-13	PASS
GSM1900	512	0	1000~18000MHz	3767.6	-33.34	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-56.04	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-53.73	-23	PASS
GSM1900	661	0	30~1000MHz	879.46	-46.31	-13	PASS
GSM1900	661	0	1000~18000MHz	3788	-33.71	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.05	-43	PASS
GSM1900	810	0	0.15~30MHz	0.16	-53.35	-23	PASS
GSM1900	810	0	30~1000MHz	932.29	-46	-13	PASS
GSM1900	810	0	1000~18000MHz	3832.2	-33.58	-13	PASS

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

Test Graphs



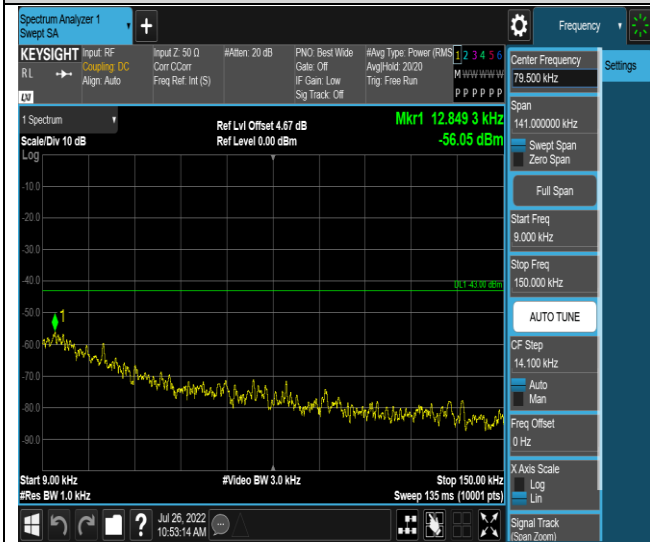






GSM1900-810-0.009~0.15MHz

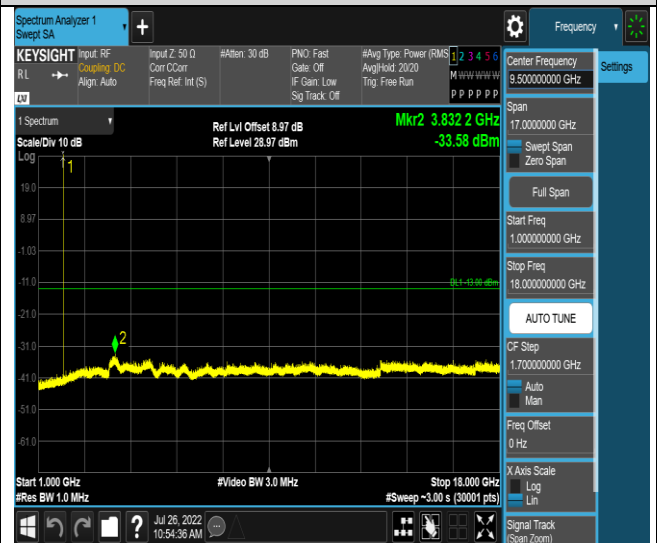
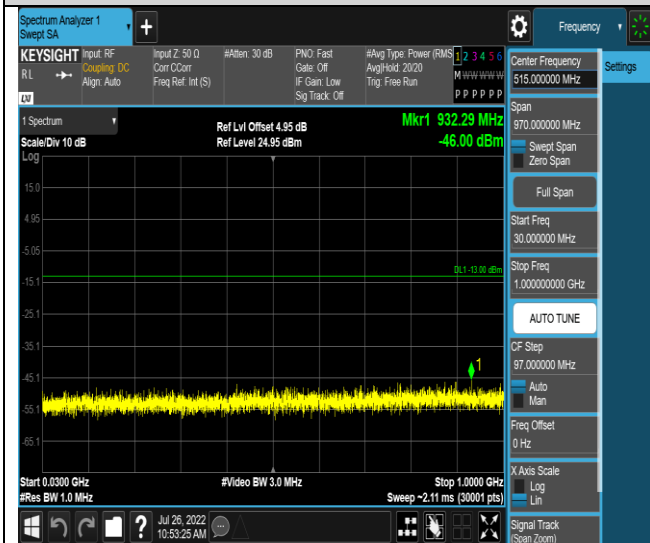
GSM1900-810-0.15~30MHz



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		
3.85	-30	3.62	0.004327	±2.5	Pass
	-20	1.26	0.001506		
	-10	2.84	0.003395		
	0	2.20	0.002630		
	10	2.49	0.002976		
	20	7.68	0.009180		
	30	7.07	0.008451		
	40	8.27	0.009885		
	50	6.94	0.008295		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.60	1.94	0.002319	±2.5	Pass
	3.85	7.97	0.009527		
	4.40	8.01	0.009574		
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	-0.90	-0.001076	±2.5	Pass
	-20	3.45	0.004124		
	-10	-0.29	-0.000347		
	0	0.71	0.000849		
	10	-2.58	-0.003084		
	20	-7.97	-0.009527		
	30	-9.69	-0.011583		
	40	-8.78	-0.010495		
	50	-6.33	-0.007566		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.60	1.23	0.001470	±2.5	Pass
	3.85	3.84	0.004590		
	4.40	0.36	0.000430		
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	22.28	0.011851	Within authorized band for PCS 1900	Pass
	-20	34.58	0.018394		
	-10	15.14	0.008053		
	0	7.52	0.004000		
	10	12.79	0.006803		
	20	22.05	0.011729		
	30	8.56	0.004553		
	40	10.85	0.005771		
	50	19.76	0.010511		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.60	20.60	0.010957	Within authorized band for PCS 1900	Pass
	3.85	20.37	0.010835		
	4.40	20.86	0.011096		
<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		
3.85	-30	23.34	0.012415	Within authorized band for PCS 1900	Pass
	-20	19.86	0.010564		
	-10	22.57	0.012005		
	0	22.08	0.011745		
	10	14.17	0.007537		
	20	16.56	0.008809		
	30	58.50	0.031117		
	40	33.87	0.018016		
	50	38.16	0.020298		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.60	13.50	0.007181	Within authorized band for PCS 1900	Pass
	3.85	16.37	0.008707		
	4.40	22.28	0.011851		
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

