

Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Channel	PCL	Power(dBm)	Antenna Gain (dBi)	ERP/EIRP(dBm)
GSM850	128	0	32.29	-1.07	29.07
GSM850	190	0	32.41	-1.07	29.19
GSM850	251	0	32.46	-1.07	29.24
GSM1900	512	0	29.53	-1.08	28.45
GSM1900	661	0	29.51	-1.08	28.43
GSM1900	810	0	29.16	-1.08	28.08

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi). (For GSM 1900)
ERP (dBm) = EIRP (dBm) - 2.15 (dB). (For GSM 850)

Band	Channel	PCL	Slot	Power(dBm)	Antenna Gain (dBi)	ERP/EIRP(dBm)
GPRS850	128	3	1	32.28	-1.07	29.06
GPRS850	128	3	2	30.68	-1.07	27.46
GPRS850	128	3	3	29.68	-1.07	26.46
GPRS850	128	3	4	27.69	-1.07	24.47
GPRS850	190	3	1	32.40	-1.07	29.18
GPRS850	190	3	2	30.62	-1.07	27.40
GPRS850	190	3	3	29.60	-1.07	26.38
GPRS850	190	3	4	27.56	-1.07	24.34
GPRS850	251	3	1	32.45	-1.07	29.23
GPRS850	251	3	2	30.67	-1.07	27.45
GPRS850	251	3	3	29.65	-1.07	26.43
GPRS850	251	3	4	27.64	-1.07	24.42
GPRS1900	512	0	1	29.52	-1.08	28.44
GPRS1900	512	0	2	27.60	-1.08	26.52
GPRS1900	512	0	3	26.29	-1.08	25.21
GPRS1900	512	0	4	24.47	-1.08	23.39
GPRS1900	661	0	1	29.42	-1.08	28.34
GPRS1900	661	0	2	27.80	-1.08	26.72
GPRS1900	661	0	3	26.61	-1.08	25.53
GPRS1900	661	0	4	24.89	-1.08	23.81

GPRS1900	810	0	1	29.05	-1.08	27.97
GPRS1900	810	0	2	27.59	-1.08	26.51
GPRS1900	810	0	3	26.48	-1.08	25.40
GPRS1900	810	0	4	24.88	-1.08	23.80

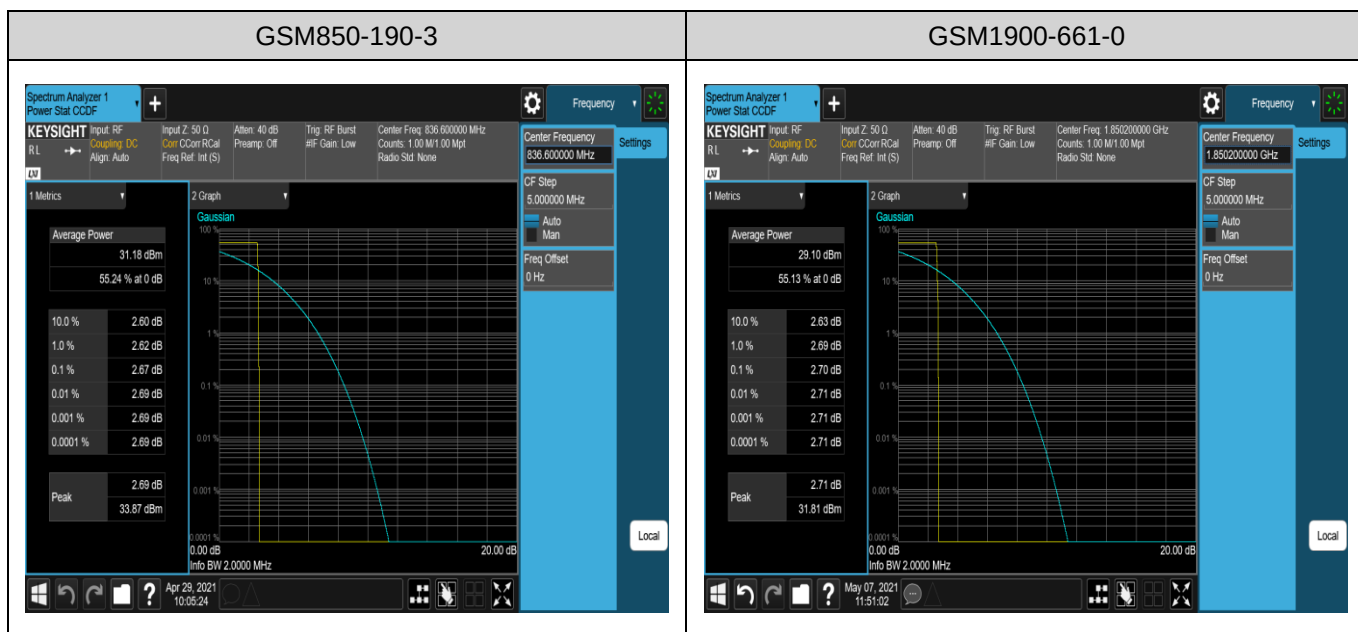
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi). (For GSM 1900)
ERP (dBm) = EIRP (dBm) - 2.15 (dB). (For GSM 850)

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

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	3	2.67	13	PASS
GSM1900	661	0	2.70	13	PASS

Test Graphs

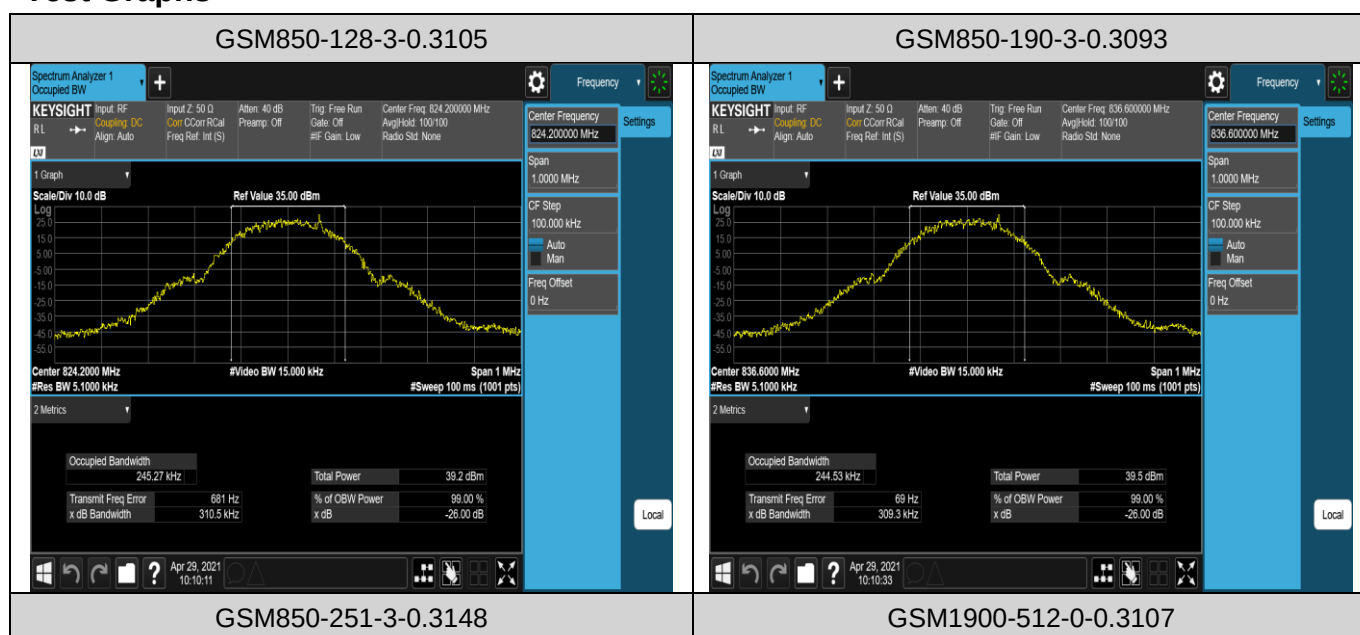


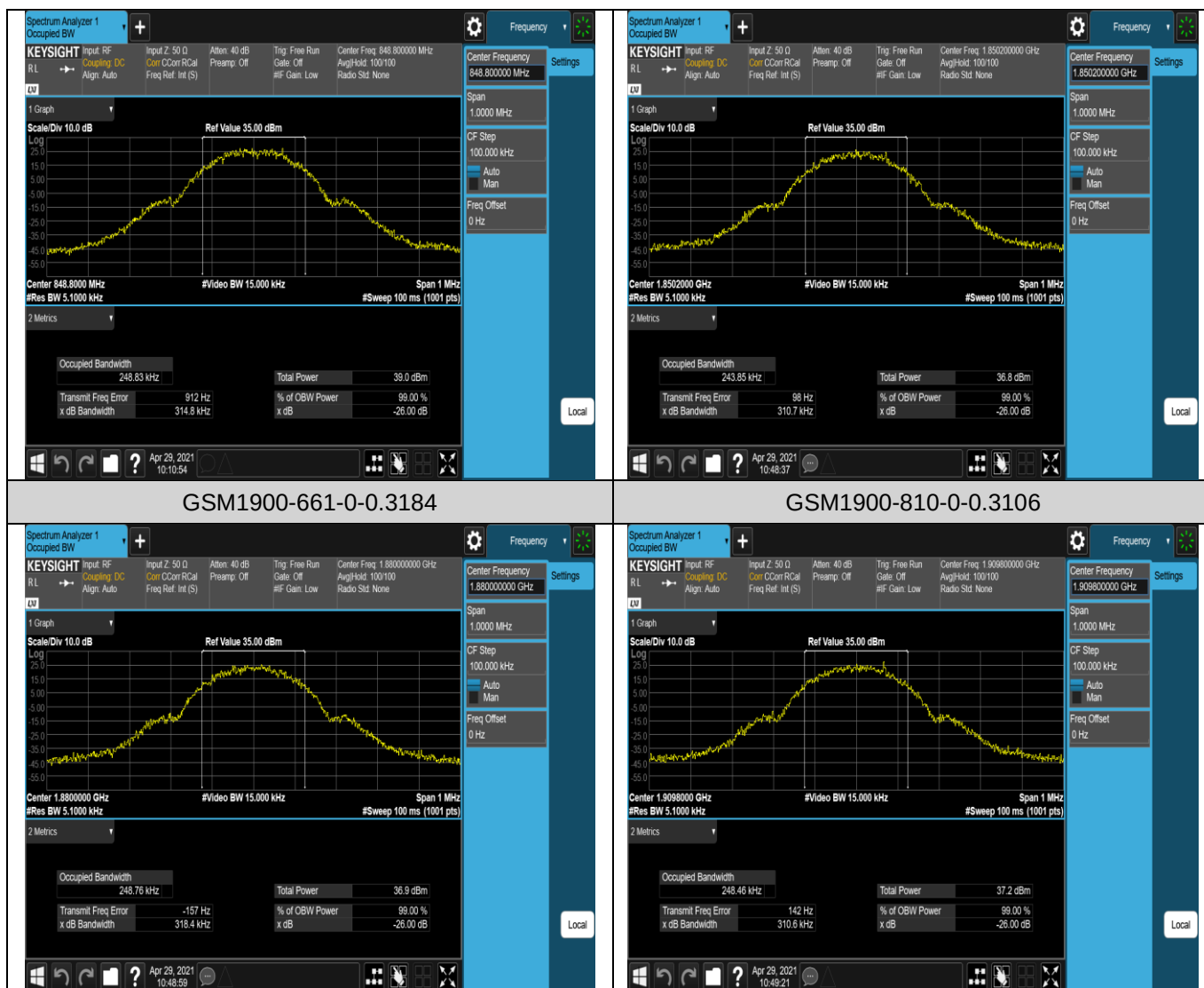
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	3	0.24527	0.3105	---	PASS
GSM850	190	3	0.24453	0.3093	---	PASS
GSM850	251	3	0.24883	0.3148	---	PASS
GSM1900	512	0	0.24385	0.3107	---	PASS
GSM1900	661	0	0.24876	0.3184	---	PASS
GSM1900	810	0	0.24846	0.3106	---	PASS

Test Graphs



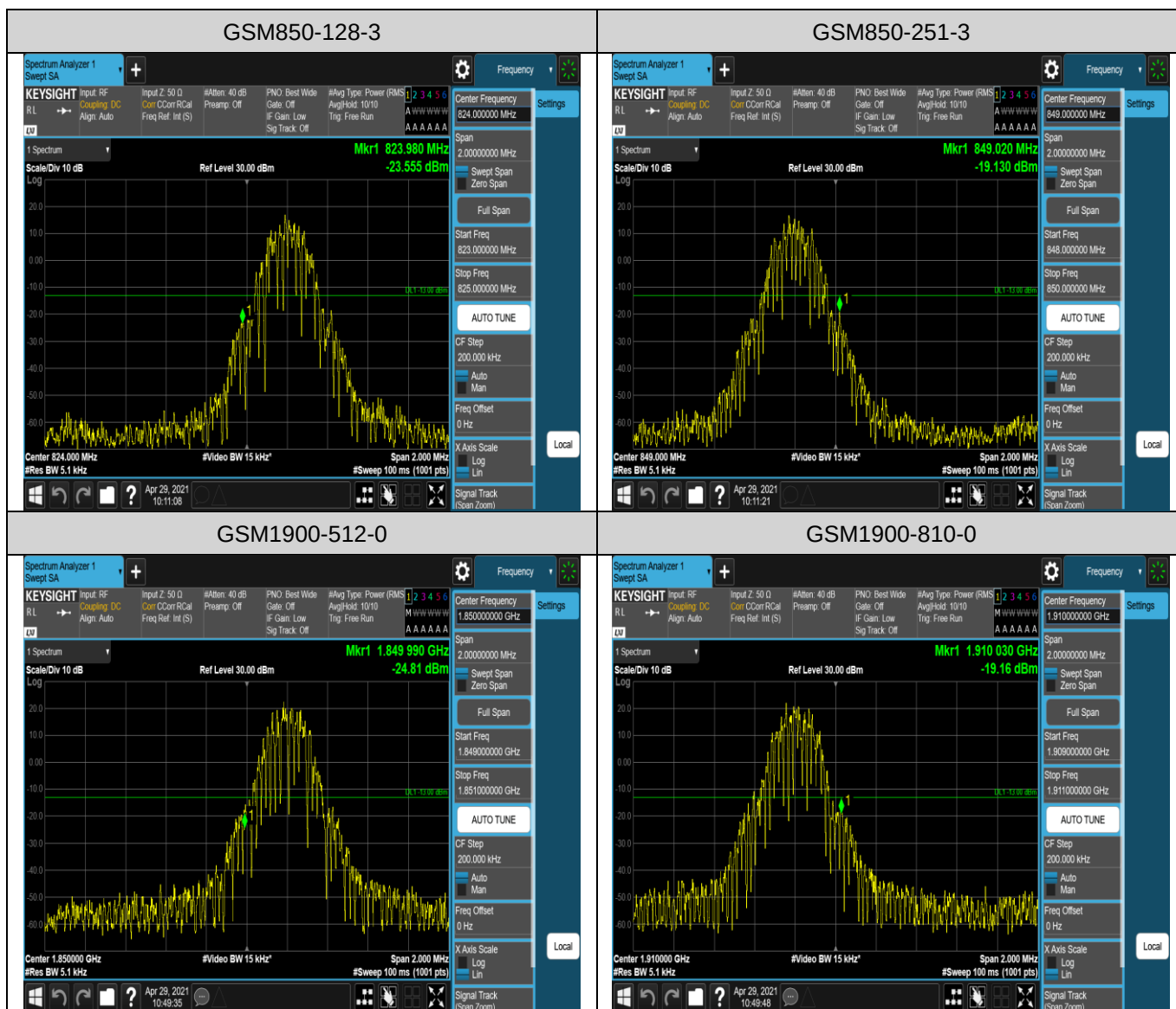


Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	3	823.98	-22.27	-13	PASS
GSM850	251	3	849.02	-19.13	-13	PASS
GSM1900	512	0	1849.99	-15.67	-13	PASS
GSM1900	810	0	1910.03	-14.48	-13	PASS

Test Graphs



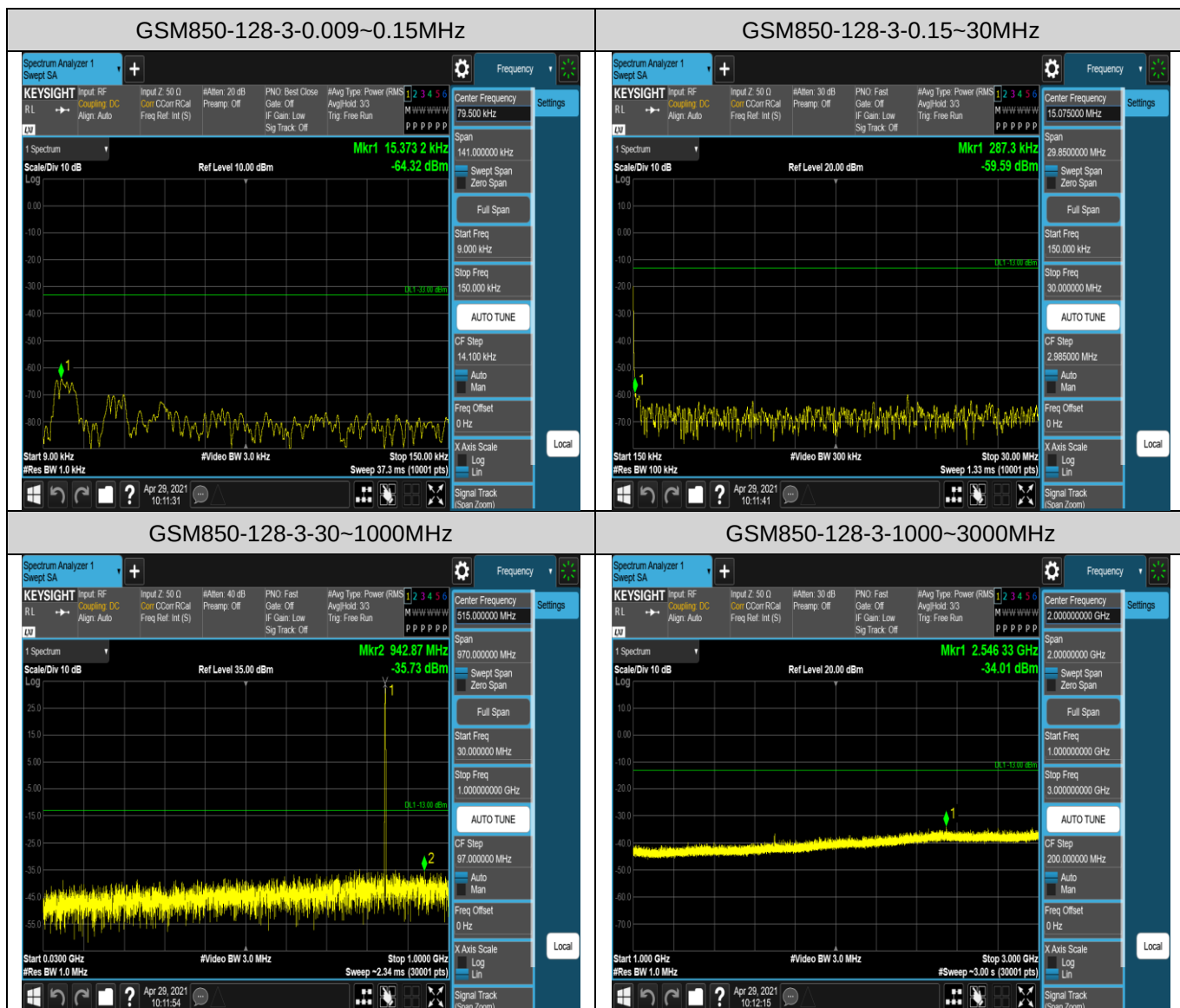
Appendix E: Conducted Spurious Emission

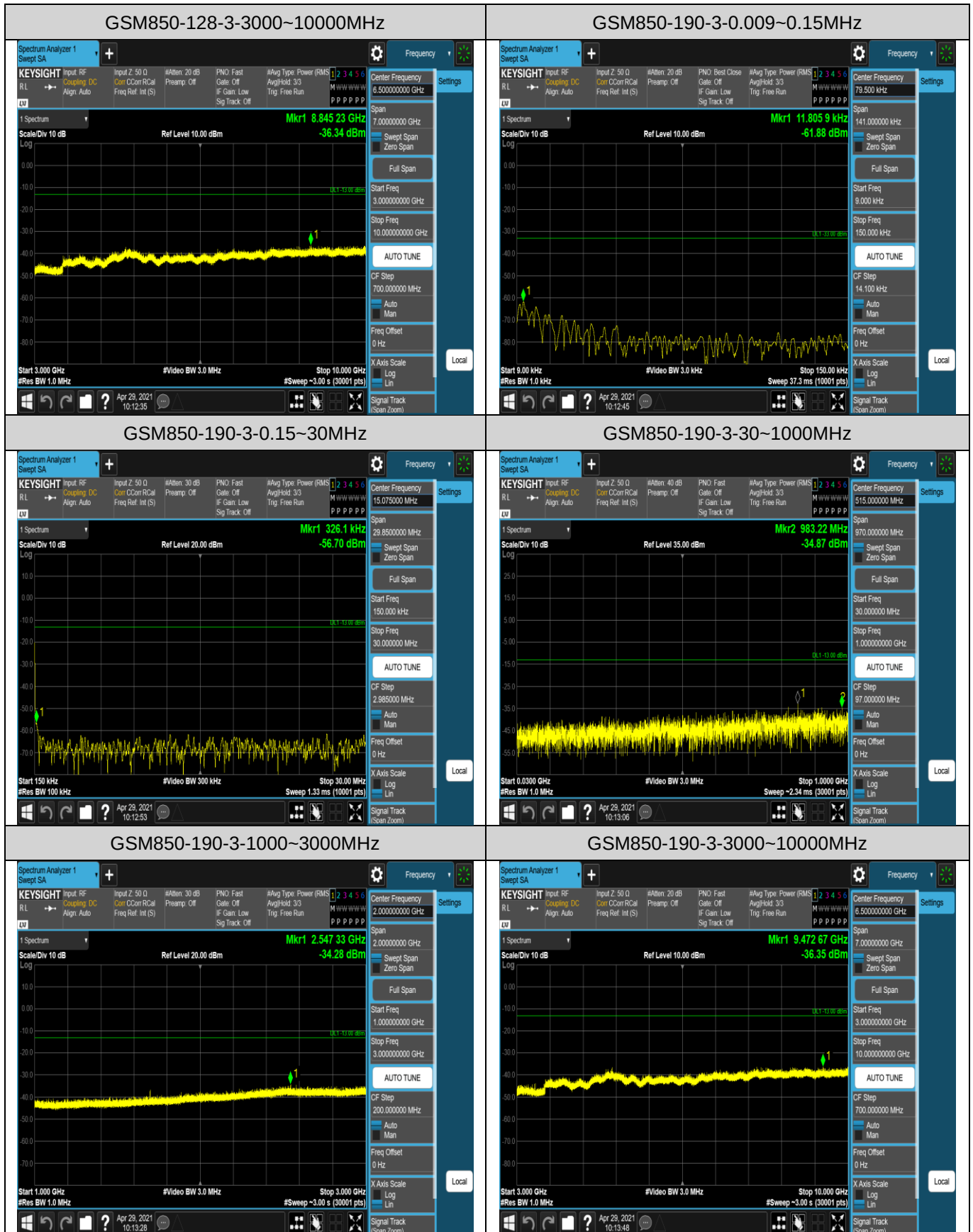
Test Result

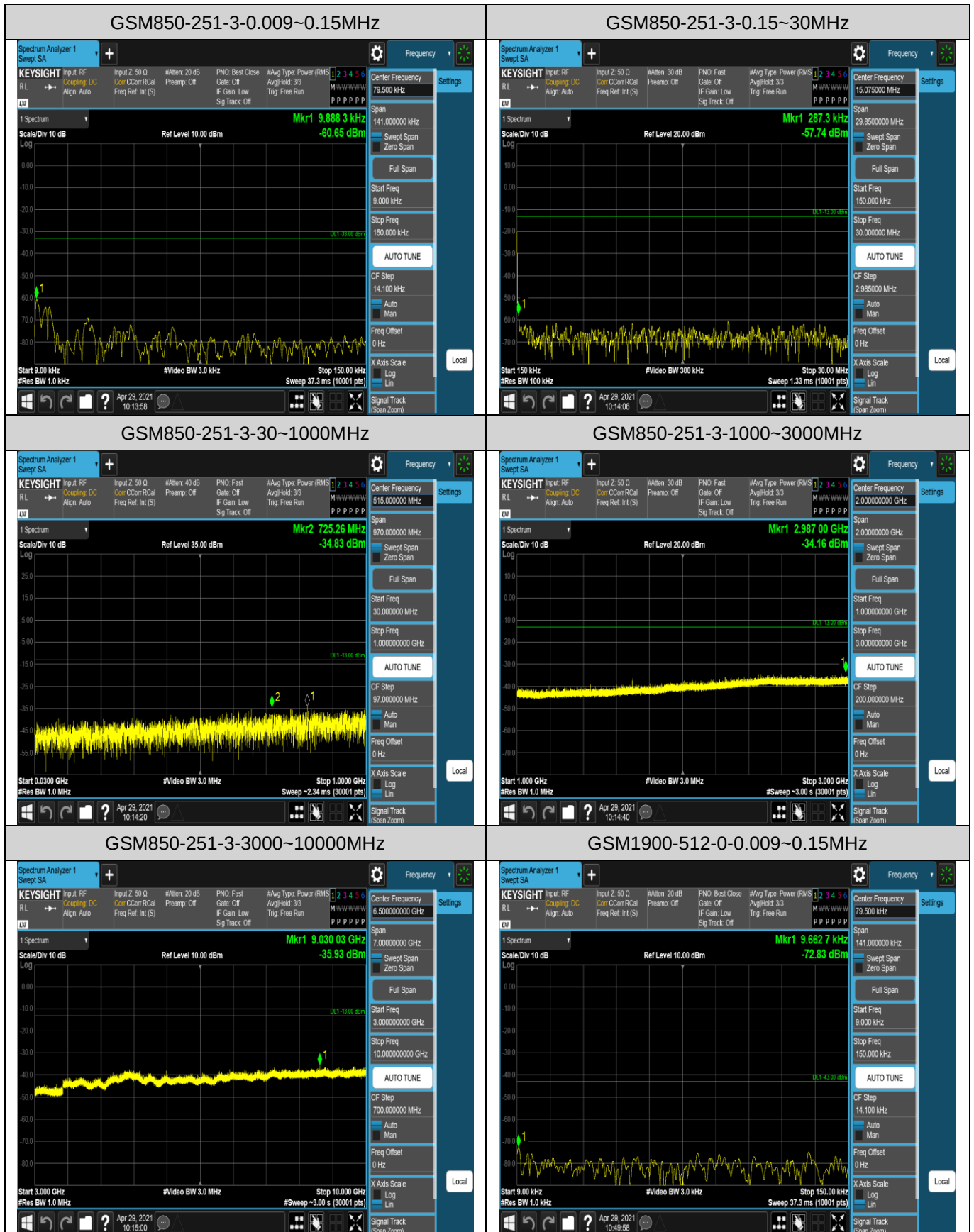
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	3	0.009~0.15MHz	0.02	-64.32	-33	PASS
GSM850	128	3	0.15~30MHz	0.29	-59.59	-13	PASS
GSM850	128	3	30~1000MHz	942.87	-35.73	-13	PASS
GSM850	128	3	1000~3000MHz	2546.33	-34.01	-13	PASS
GSM850	128	3	3000~10000MHz	8845.23	-36.34	-13	PASS
GSM850	190	3	0.009~0.15MHz	0.01	-61.88	-33	PASS
GSM850	190	3	0.15~30MHz	0.33	-56.7	-13	PASS
GSM850	190	3	30~1000MHz	983.22	-34.88	-13	PASS
GSM850	190	3	1000~3000MHz	2547.33	-34.28	-13	PASS
GSM850	190	3	3000~10000MHz	9472.67	-36.35	-13	PASS
GSM850	251	3	0.009~0.15MHz	0.01	-60.65	-33	PASS
GSM850	251	3	0.15~30MHz	0.29	-57.74	-13	PASS
GSM850	251	3	30~1000MHz	725.26	-34.83	-13	PASS
GSM850	251	3	1000~3000MHz	2987	-34.16	-13	PASS
GSM850	251	3	3000~10000MHz	9030.03	-35.93	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-72.83	-43	PASS
GSM1900	512	0	0.15~30MHz	0.29	-55.58	-23	PASS
GSM1900	512	0	30~1000MHz	945.36	-44.45	-13	PASS
GSM1900	512	0	1000~3000MHz	2546.13	-25.15	-13	PASS
GSM1900	512	0	3000~10000MHz	9149.5	-35.99	-13	PASS
GSM1900	512	0	10000~18000MHz	17645.07	-28.47	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-70.93	-43	PASS
GSM1900	661	0	0.15~30MHz	26.38	-60.31	-23	PASS
GSM1900	661	0	30~1000MHz	919.81	-44.11	-13	PASS
GSM1900	661	0	1000~3000MHz	2484	-24.07	-13	PASS
GSM1900	661	0	3000~10000MHz	9153	-35.82	-13	PASS
GSM1900	661	0	10000~18000MHz	17959.2	-28.08	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.02	-74.42	-43	PASS
GSM1900	810	0	0.15~30MHz	0.29	-56.5	-23	PASS
GSM1900	810	0	30~1000MHz	993.73	-45.17	-13	PASS
GSM1900	810	0	1000~3000MHz	2887.47	-24.82	-13	PASS

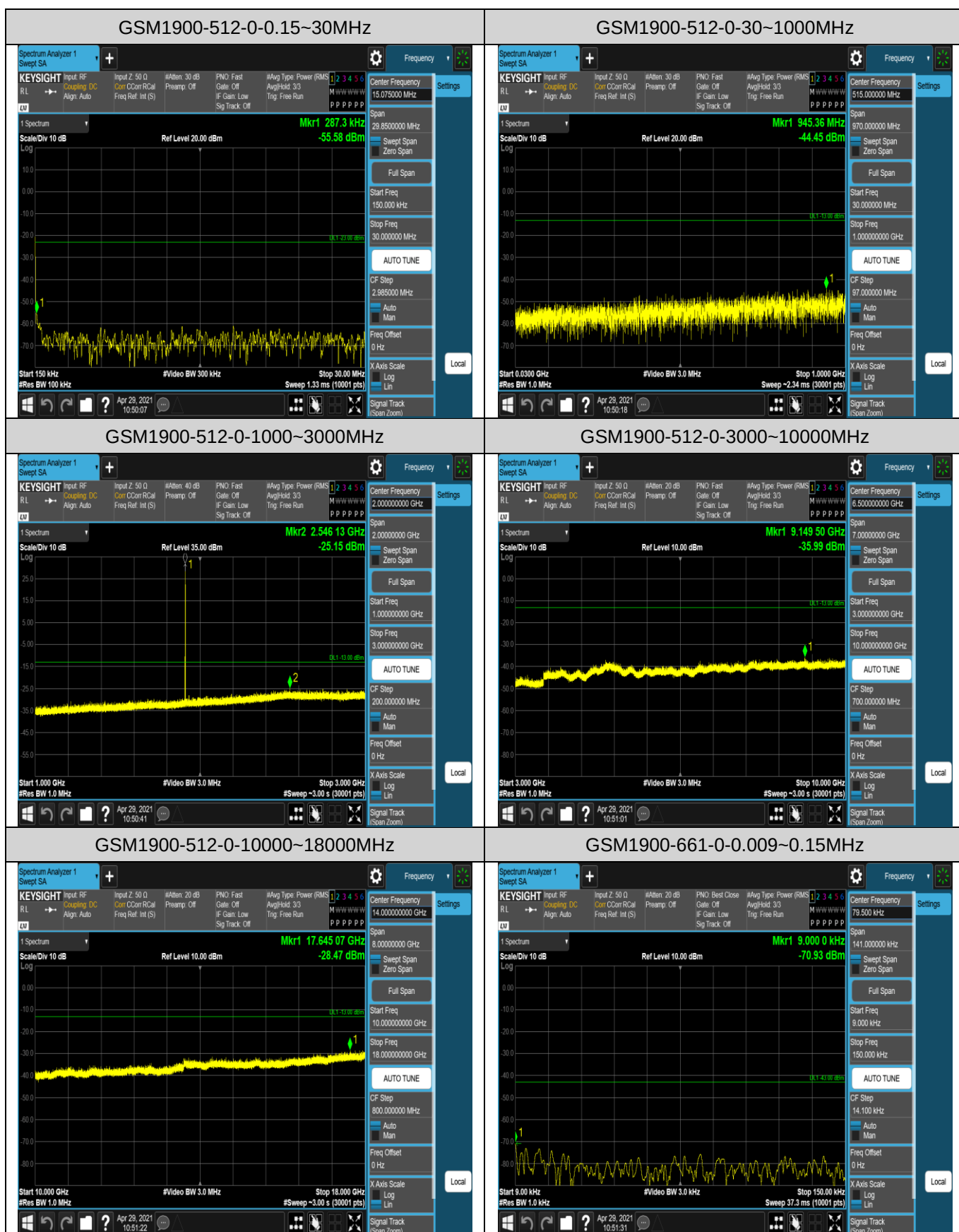
GSM1900	810	0	3000~10000MHz	9515.83	-35.88	-13	PASS
GSM1900	810	0	10000~18000MHz	17731.2	-27.86	-13	PASS

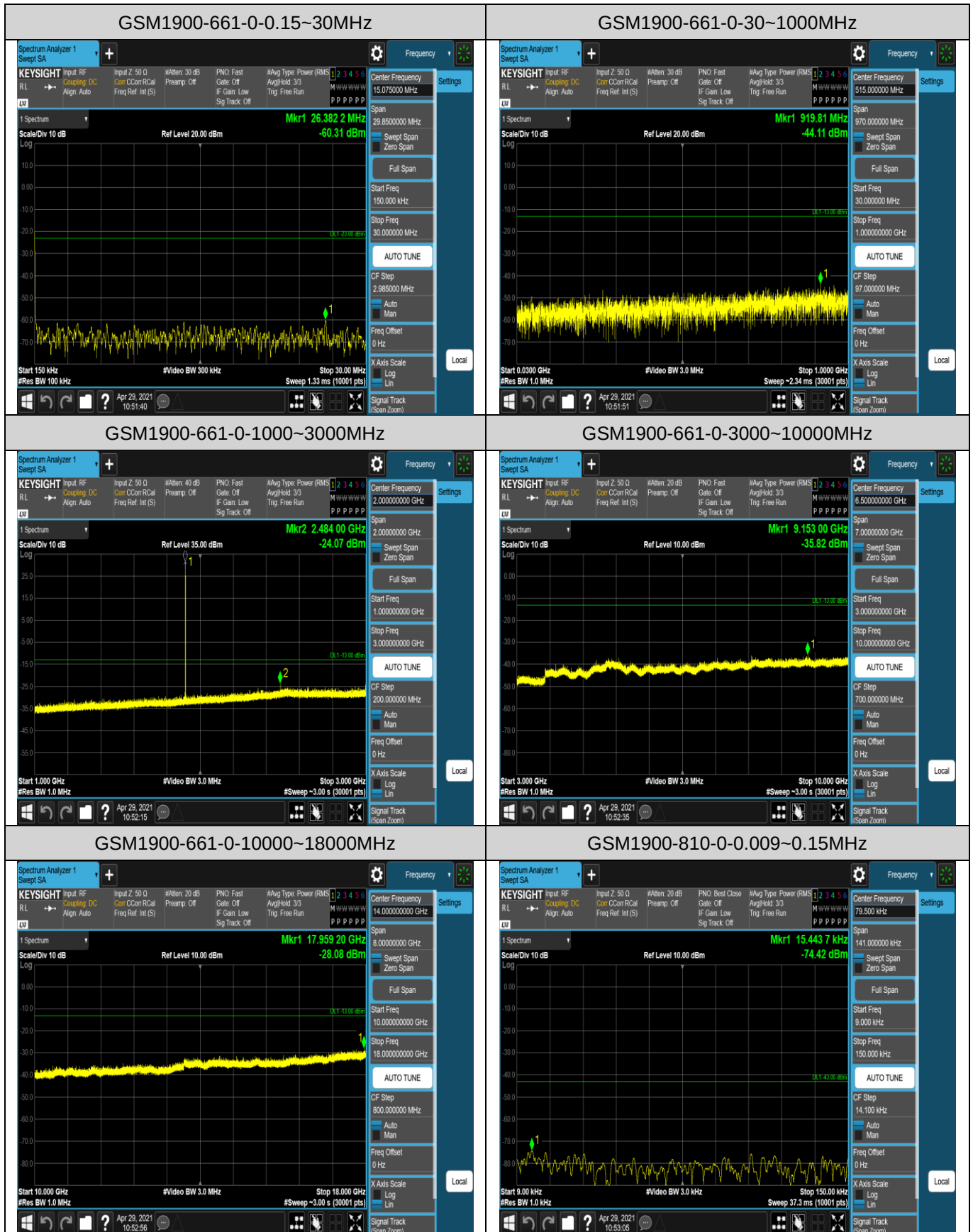
Test Graphs

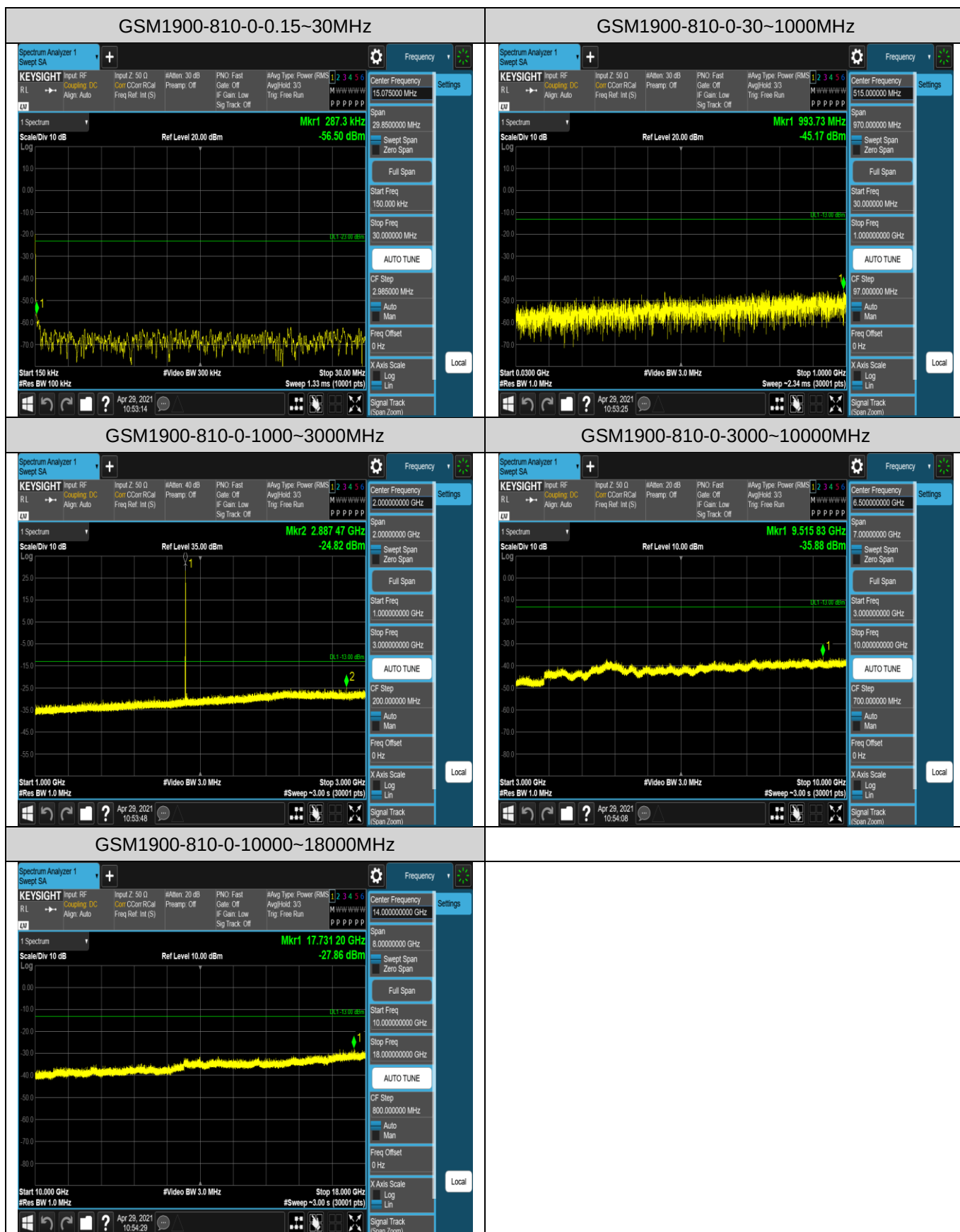












Appendix F: Frequency Stability

Test Result

Reference Frequency: GSM850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	19.18	0.022926	±2.5	Pass
	-20	20.21	0.024157		
	-10	15.66	0.018719		
	0	15.14	0.018097		
	10	26.51	0.031688		
	20	24.38	0.029142		
	30	18.24	0.021803		
	40	18.08	0.021611		
	50	26.02	0.031102		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	23.96	0.028640	±2.5	Pass
	3.80	21.76	0.026010		
	4.18	21.50	0.025699		
Note: Only the worst case shown in the report.					

Reference Frequency: PCS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	22.89	0.012176	Within authorized band for PCS 1900	Pass
	-20	22.31	0.011867		
	-10	19.76	0.010511		
	0	23.41	0.012452		
	10	19.02	0.010117		
	20	21.95	0.011676		
	30	25.28	0.013447		
	40	17.98	0.009564		
	50	20.21	0.010750		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	19.40	0.010319	Within authorized band for PCS 1900	Pass
	3.80	21.92	0.011660		
	4.18	20.60	0.010957		
Note: Only the worst case shown in the report.					