

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	33.02	26.67	38.45	PASS
GSM850	190	5	33.12	26.77	38.45	PASS
GSM850	251	5	33.07	26.72	38.45	PASS
GSM1900	512	0	30.29	31.89	33.00	PASS
GSM1900	661	0	30.41	32.01	33.00	PASS
GSM1900	810	0	30.10	31.70	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.65	26.30	38.45	PASS
GPRS850	128	5	2	31.99	25.64	38.45	PASS
GPRS850	128	5	3	30.04	23.69	38.45	PASS
GPRS850	128	5	4	28.84	22.49	38.45	PASS
GPRS850	190	5	1	32.80	26.45	38.45	PASS
GPRS850	190	5	2	32.05	25.70	38.45	PASS
GPRS850	190	5	3	30.12	23.77	38.45	PASS
GPRS850	190	5	4	28.85	22.50	38.45	PASS
GPRS850	251	5	1	32.70	26.35	38.45	PASS
GPRS850	251	5	2	31.96	25.61	38.45	PASS
GPRS850	251	5	3	29.97	23.62	38.45	PASS
GPRS850	251	5	4	28.69	22.34	38.45	PASS
GPRS1900	512	0	1	30.11	31.71	33.00	PASS
GPRS1900	512	0	2	29.45	31.05	33.00	PASS
GPRS1900	512	0	3	27.52	29.12	33.00	PASS
GPRS1900	512	0	4	26.02	27.62	33.00	PASS
GPRS1900	661	0	1	30.19	31.79	33.00	PASS
GPRS1900	661	0	2	29.57	31.17	33.00	PASS
GPRS1900	661	0	3	27.73	29.33	33.00	PASS
GPRS1900	661	0	4	26.29	27.89	33.00	PASS
GPRS1900	810	0	1	29.83	31.43	33.00	PASS
GPRS1900	810	0	2	29.21	30.81	33.00	PASS
GPRS1900	810	0	3	27.27	28.87	33.00	PASS
GPRS1900	810	0	4	25.78	27.38	33.00	PASS

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

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

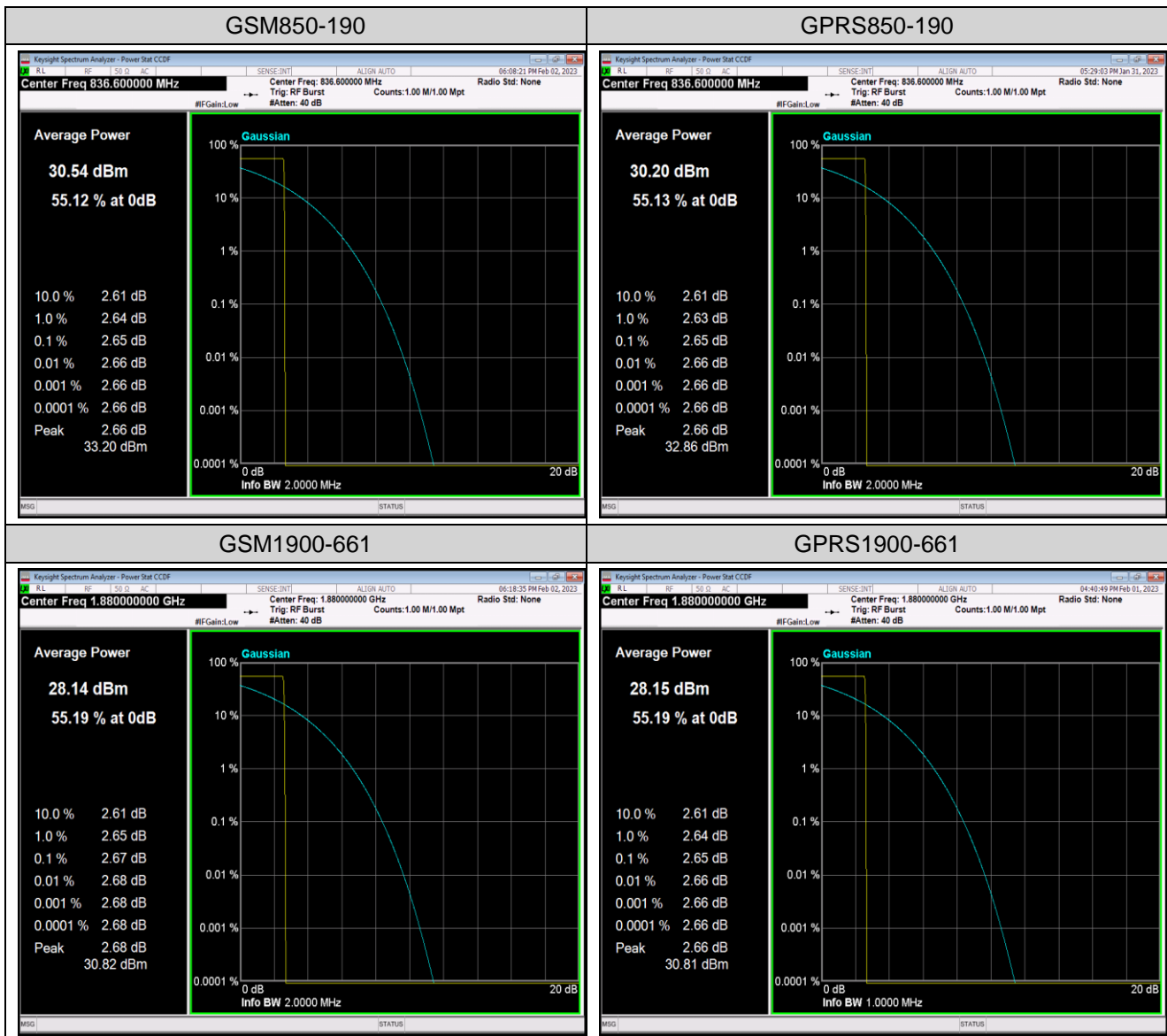
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.65	13	PASS
GPRS850	190	5	2.65	13	PASS
GSM1900	661	0	2.67	13	PASS
GPRS1900	661	0	2.65	13	PASS

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

Test Graphs

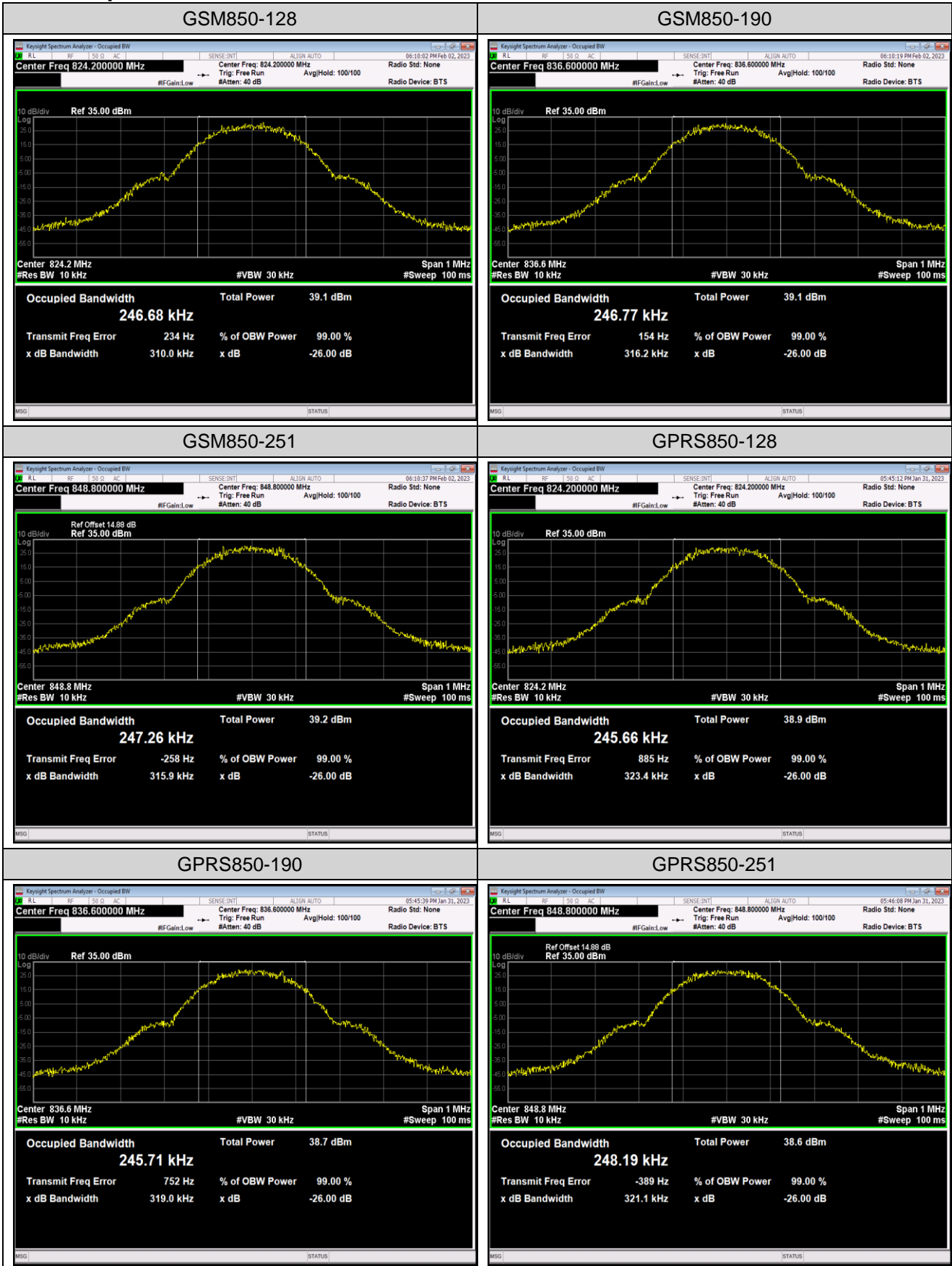


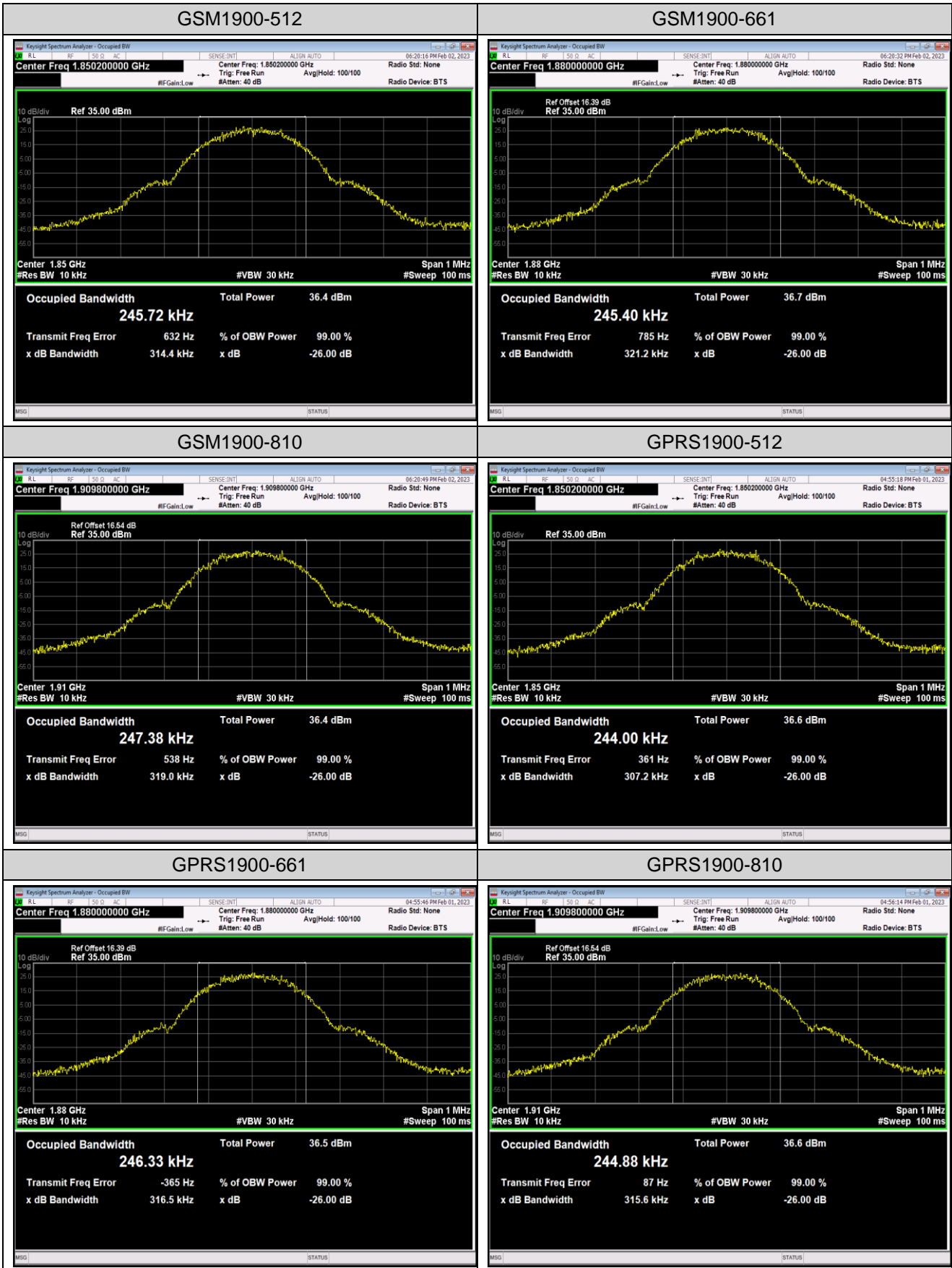
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24668	0.3100	---	PASS
GSM850	190	5	0.24677	0.3162	---	PASS
GSM850	251	5	0.24726	0.3159	---	PASS
GPRS850	128	5	0.24566	0.3234	---	PASS
GPRS850	190	5	0.24571	0.3190	---	PASS
GPRS850	251	5	0.24819	0.3211	---	PASS
GSM1900	512	0	0.24572	0.3144	---	PASS
GSM1900	661	0	0.24540	0.3212	---	PASS
GSM1900	810	0	0.24738	0.3190	---	PASS
GPRS1900	512	0	0.24400	0.3072	---	PASS
GPRS1900	661	0	0.24633	0.3165	---	PASS
GPRS1900	810	0	0.24488	0.3156	---	PASS

Test Graphs



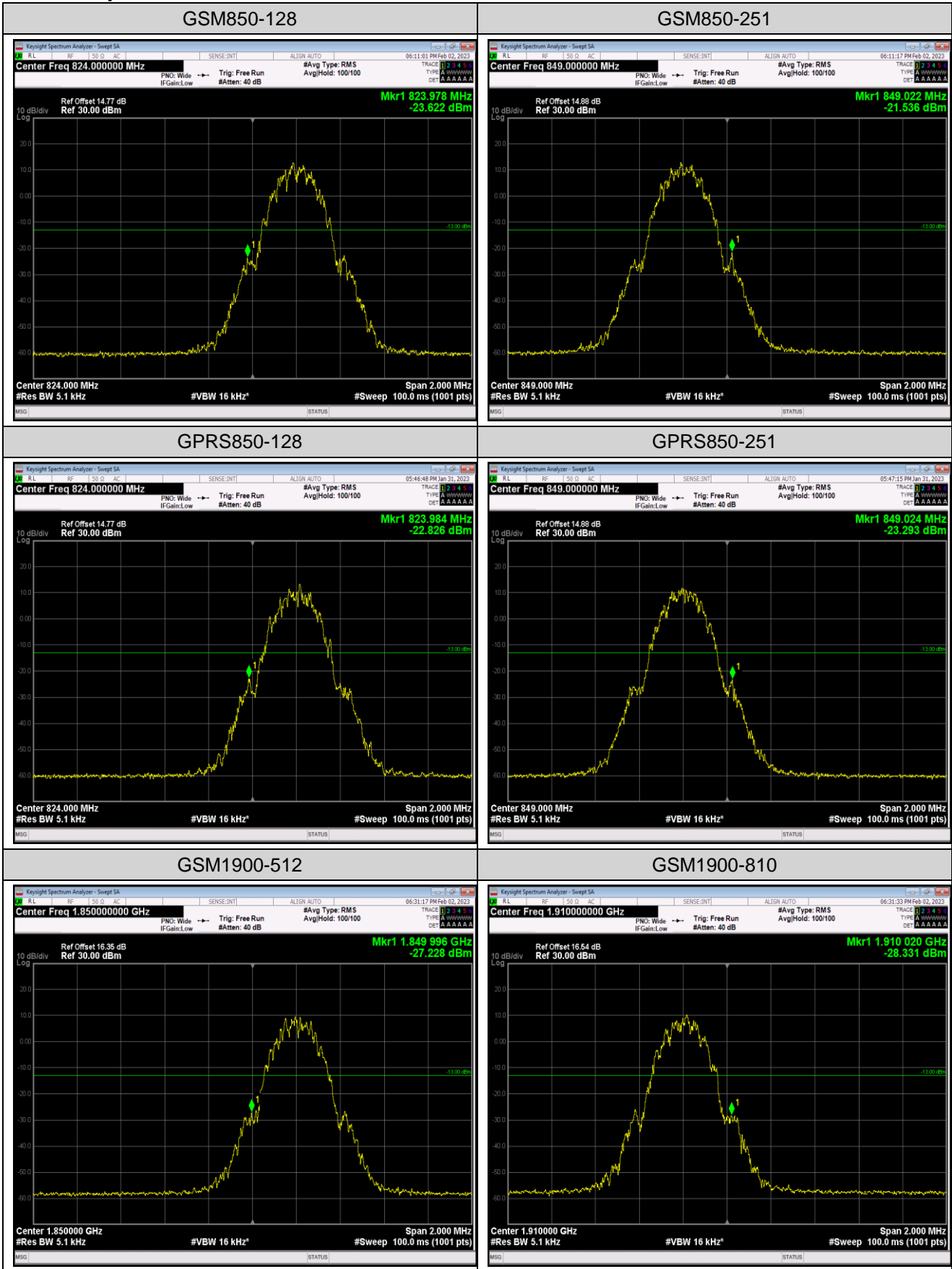


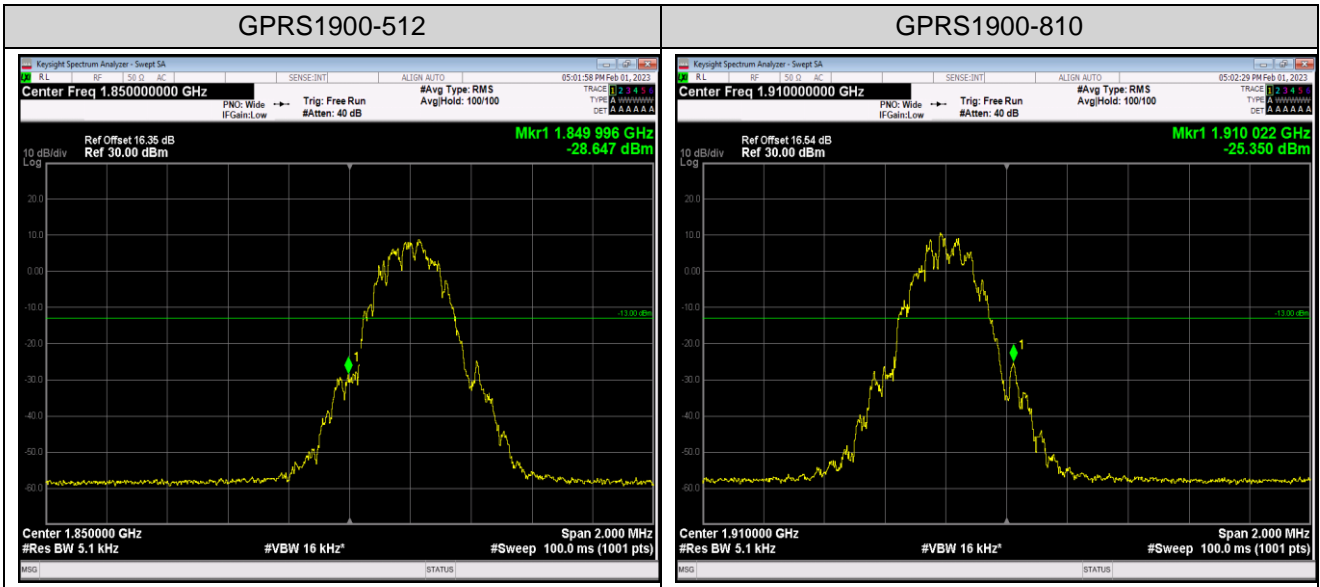
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-23.62	-13	PASS
GSM850	251	5	849.02	-21.54	-13	PASS
GPRS850	128	5	823.98	-22.83	-13	PASS
GPRS850	251	5	849.02	-23.29	-13	PASS
GSM1900	512	0	1850.00	-27.23	-13	PASS
GSM1900	810	0	1910.02	-28.33	-13	PASS
GPRS1900	512	0	1850.00	-28.65	-13	PASS
GPRS1900	810	0	1910.02	-25.35	-13	PASS

Test Graphs





Appendix E: Conducted Spurious Emission

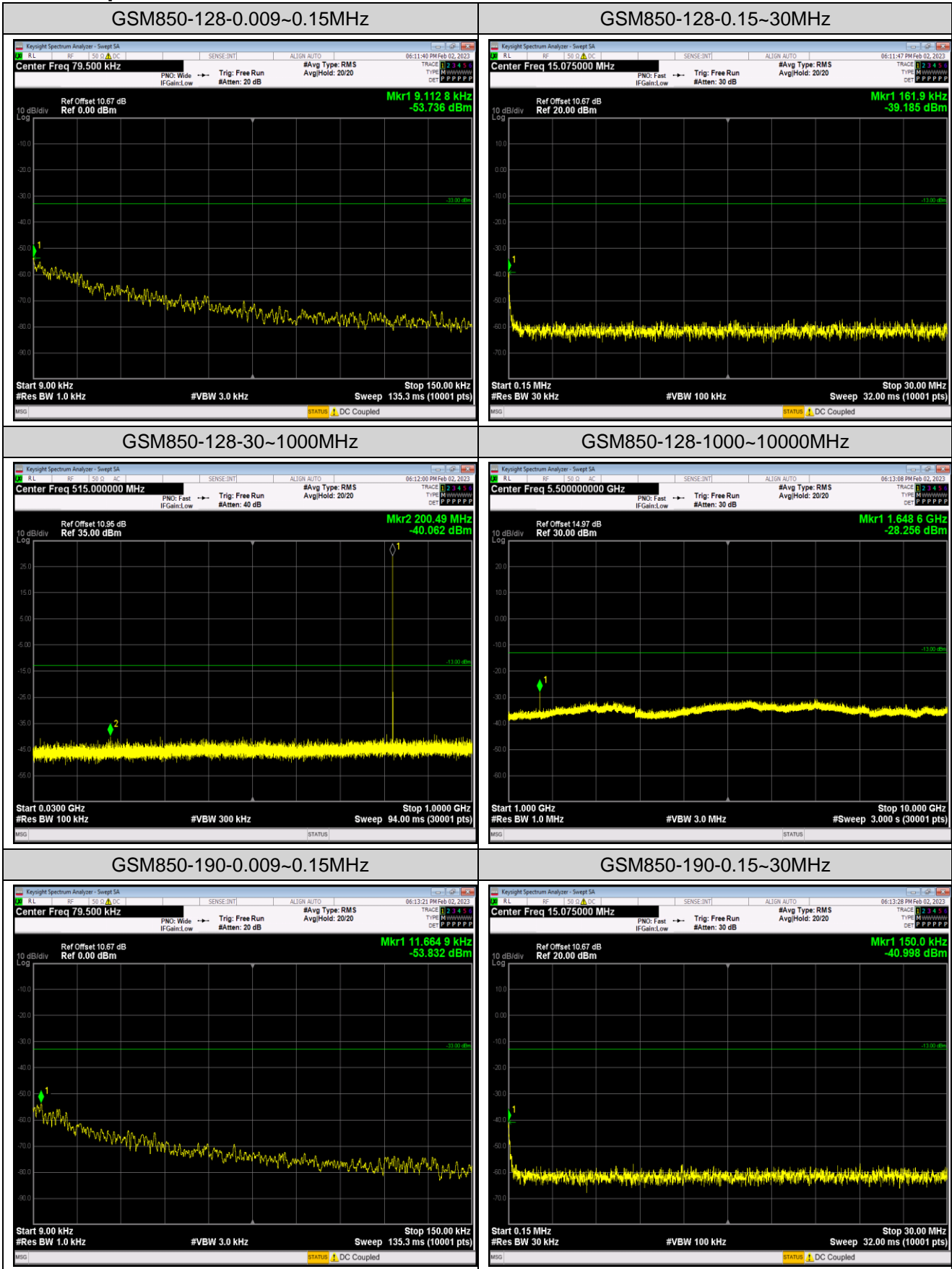
Test Result

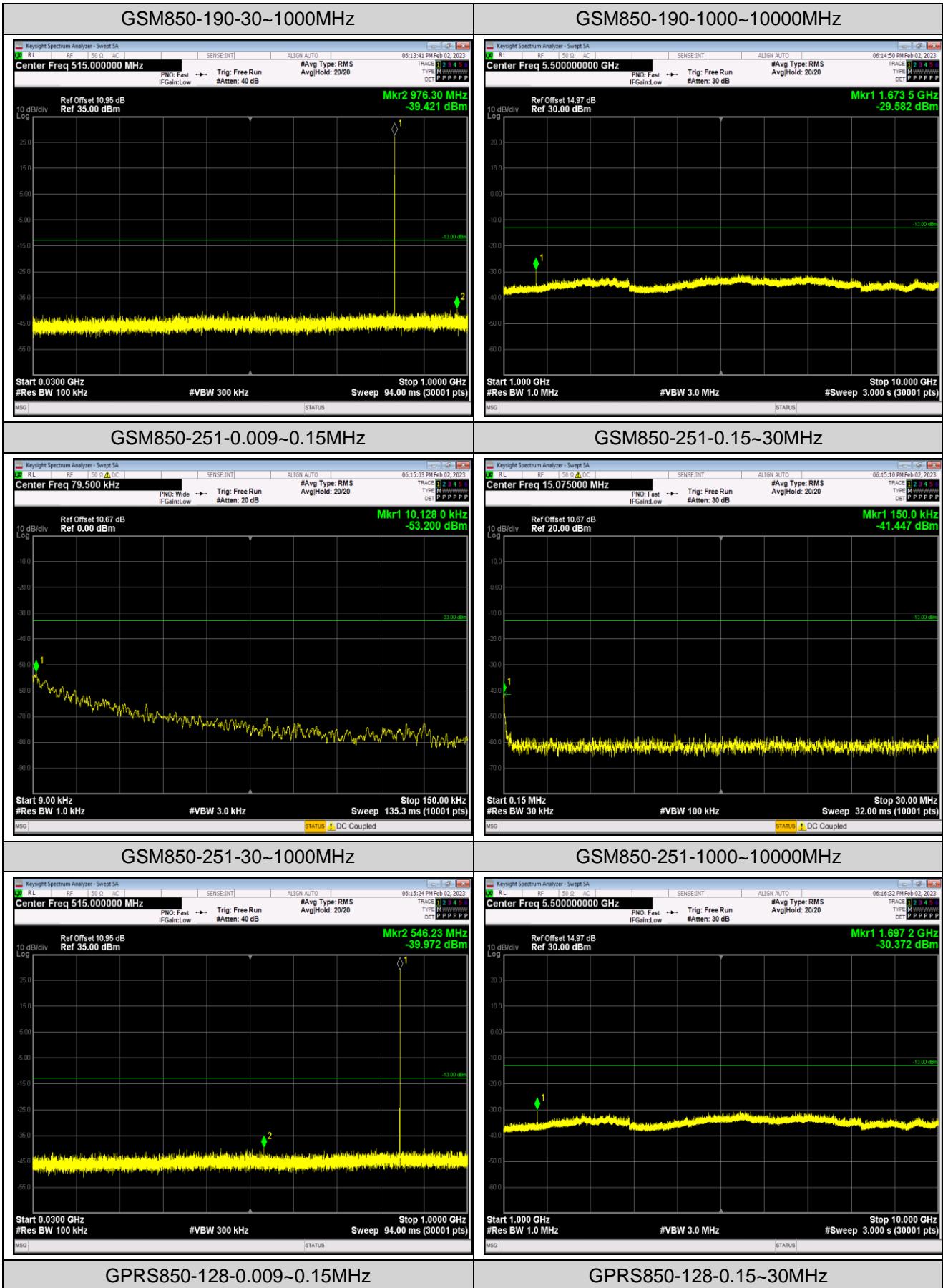
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-53.74	-33	PASS
GSM850	128	5	0.15~30MHz	0.16	-39.19	-13	PASS
GSM850	128	5	30~1000MHz	200.49	-40.06	-13	PASS
GSM850	128	5	1000~10000MHz	1648.6	-28.26	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-53.83	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-41	-13	PASS
GSM850	190	5	30~1000MHz	976.3	-39.42	-13	PASS
GSM850	190	5	1000~10000MHz	1673.5	-29.58	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-53.2	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-41.45	-13	PASS
GSM850	251	5	30~1000MHz	546.23	-39.97	-13	PASS
GSM850	251	5	1000~10000MHz	1697.2	-30.37	-13	PASS
GPRS850	128	5	0.009~0.15MHz	0.01	-53.83	-33	PASS
GPRS850	128	5	0.15~30MHz	0.15	-38.49	-13	PASS
GPRS850	128	5	30~1000MHz	701.63	-38.53	-13	PASS
GPRS850	128	5	1000~10000MHz	1648.3	-28.61	-13	PASS
GPRS850	190	5	0.009~0.15MHz	0.01	-54.89	-33	PASS
GPRS850	190	5	0.15~30MHz	0.16	-41.43	-13	PASS
GPRS850	190	5	30~1000MHz	376.16	-39.18	-13	PASS
GPRS850	190	5	1000~10000MHz	1672.9	-29.72	-13	PASS
GPRS850	251	5	0.009~0.15MHz	0.01	-53.85	-33	PASS
GPRS850	251	5	0.15~30MHz	0.15	-39.49	-13	PASS
GPRS850	251	5	30~1000MHz	966.05	-39.22	-13	PASS
GPRS850	251	5	1000~10000MHz	6013.6	-30.35	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-53.75	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-41.28	-23	PASS
GSM1900	512	0	30~1000MHz	422.04	-40.28	-13	PASS
GSM1900	512	0	1000~18000MHz	16928.43	-16.46	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-51.92	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-41.88	-23	PASS
GSM1900	661	0	30~1000MHz	776.06	-40.14	-13	PASS
GSM1900	661	0	1000~18000MHz	17028.17	-15.29	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-53.98	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-41.26	-23	PASS
GSM1900	810	0	30~1000MHz	915.19	-40.6	-13	PASS
GSM1900	810	0	1000~18000MHz	16195.73	-16.61	-13	PASS

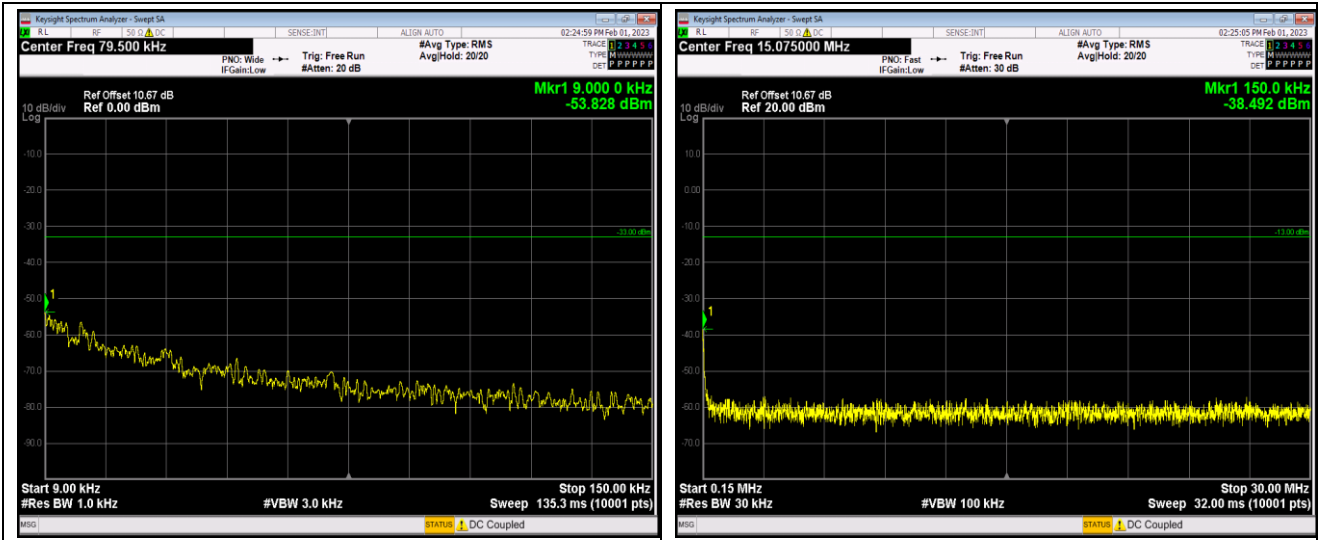
GPRS1900	512	0	0.009~0.15MHz	0.01	-53.35	-43	PASS
GPRS1900	512	0	0.15~30MHz	0.16	-41.53	-23	PASS
GPRS1900	512	0	30~1000MHz	775.64	-40.4	-13	PASS
GPRS1900	512	0	1000~18000MHz	17008.33	-16.56	-13	PASS
GPRS1900	661	0	0.009~0.15MHz	0.01	-52.48	-43	PASS
GPRS1900	661	0	0.15~30MHz	0.15	-41.33	-23	PASS
GPRS1900	661	0	30~1000MHz	95.05	-41.22	-13	PASS
GPRS1900	661	0	1000~18000MHz	17030.43	-16.33	-13	PASS
GPRS1900	810	0	0.009~0.15MHz	0.01	-54.55	-43	PASS
GPRS1900	810	0	0.15~30MHz	0.18	-41.67	-23	PASS
GPRS1900	810	0	30~1000MHz	724	-39.72	-13	PASS
GPRS1900	810	0	1000~18000MHz	16344.2	-16.47	-13	PASS

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

Test Graphs

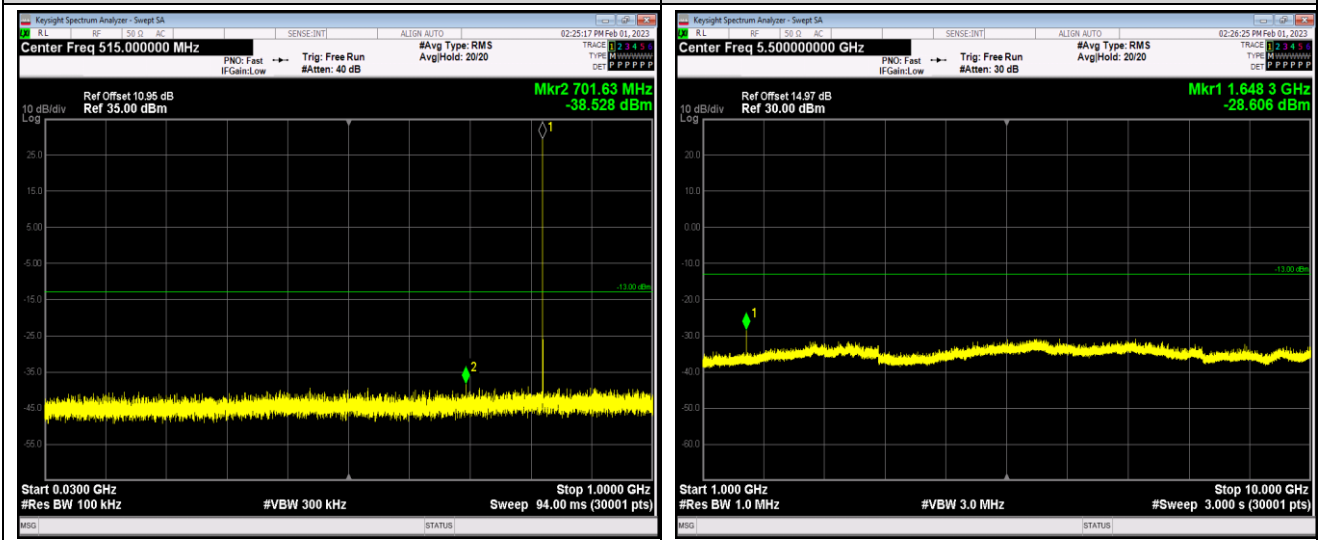






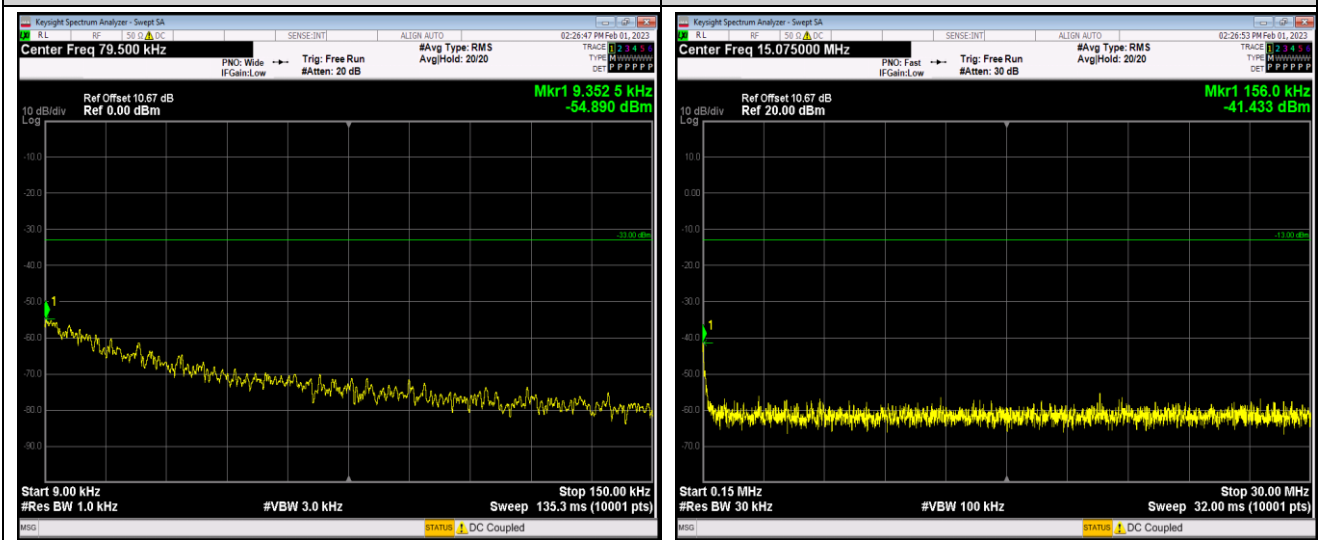
GPRS850-128-30~1000MHz

GPRS850-128-1000~10000MHz



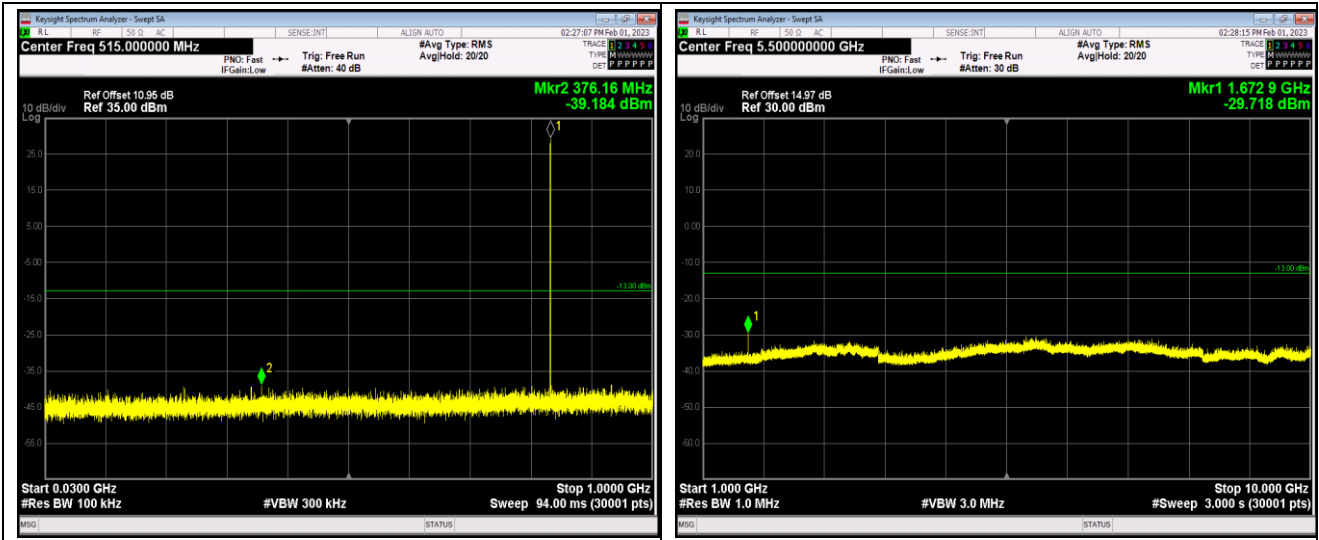
GPRS850-190-0.009~0.15MHz

GPRS850-190-0.15~30MHz



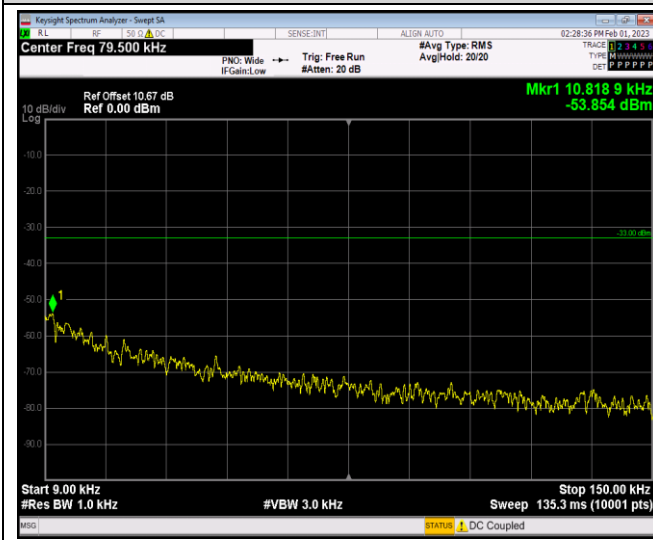
GPRS850-190-30~1000MHz

GPRS850-190-1000~10000MHz

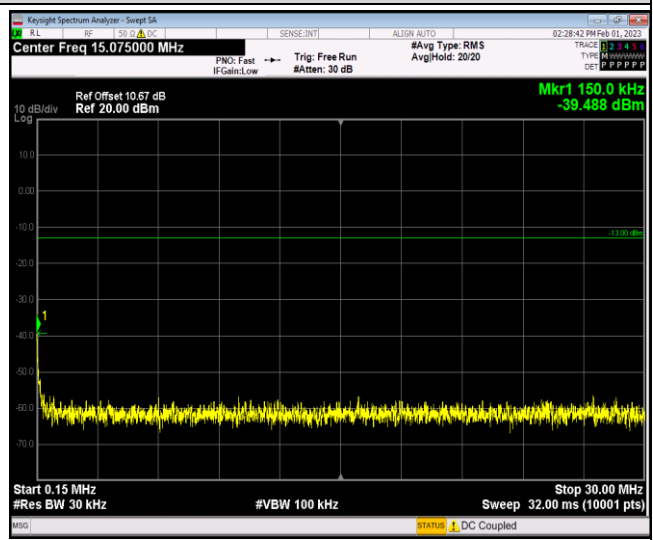


GPRS850-251-0.009~0.15MHz

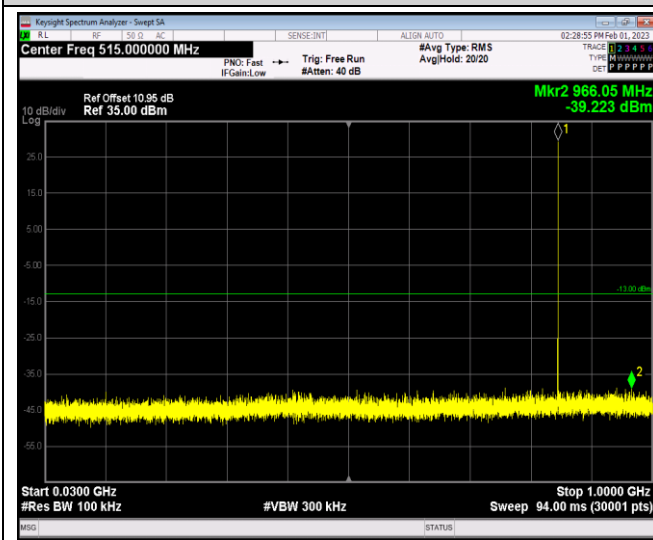
GPRS850-251-0.15~30MHz



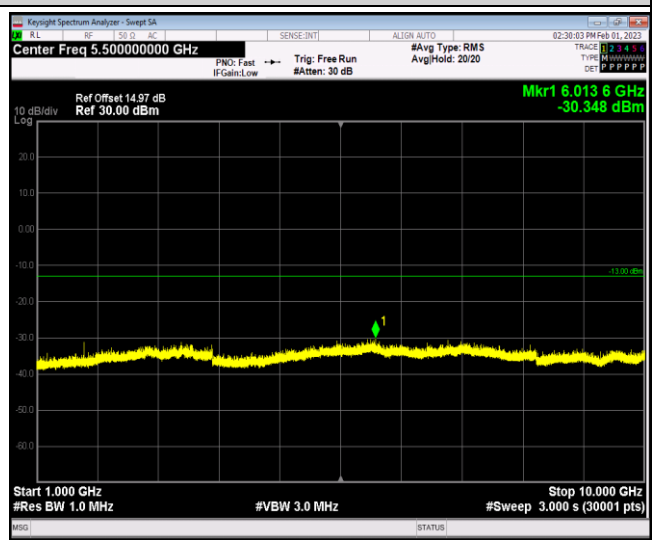
GPRS850-251-30~1000MHz



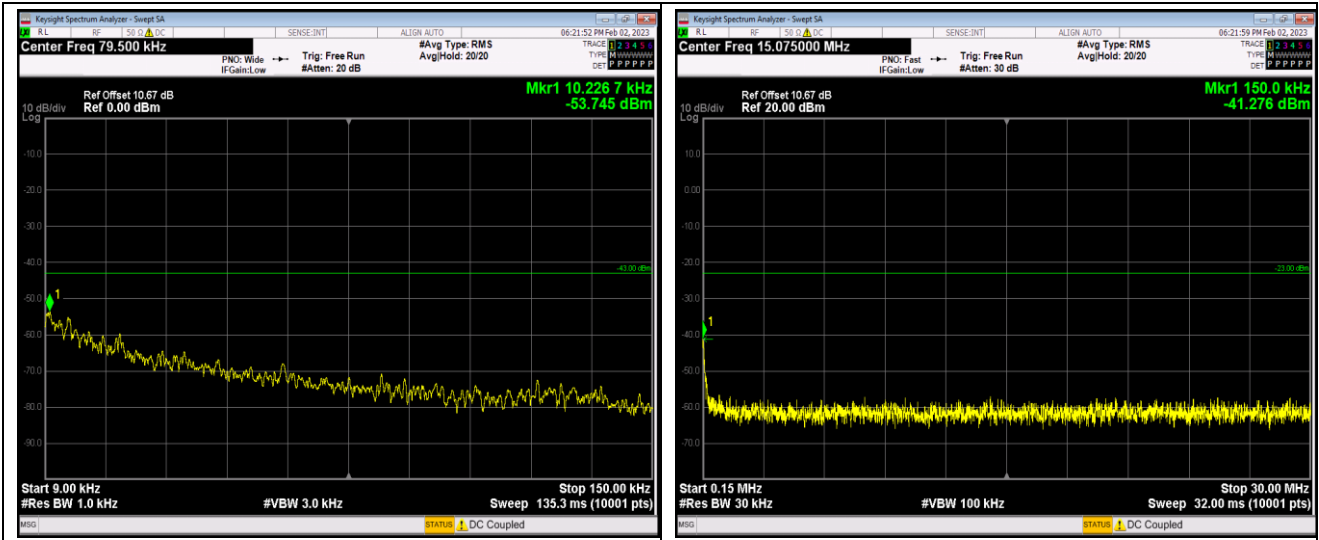
GPRS850-251-1000~10000MHz



GSM1900-512-0.009~0.15MHz

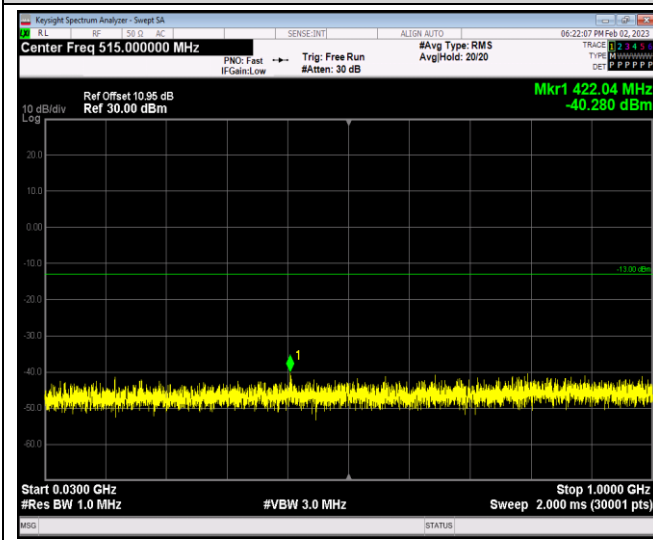


GSM1900-512-0.15~30MHz

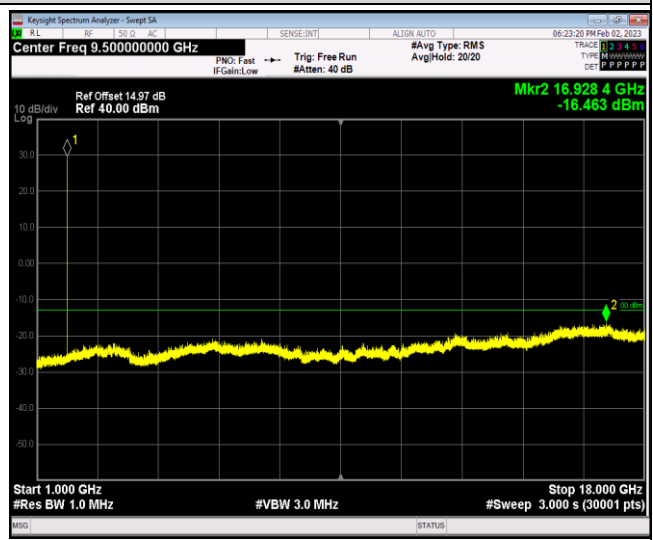


GSM1900-512-30~1000MHz

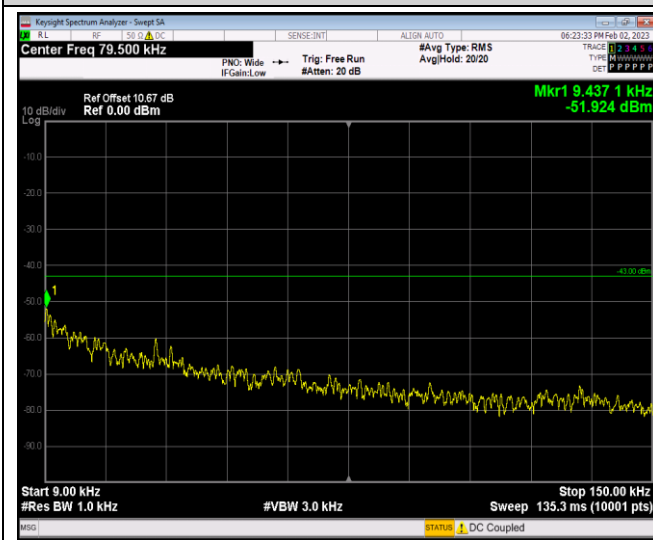
GSM1900-512-1000~18000MHz



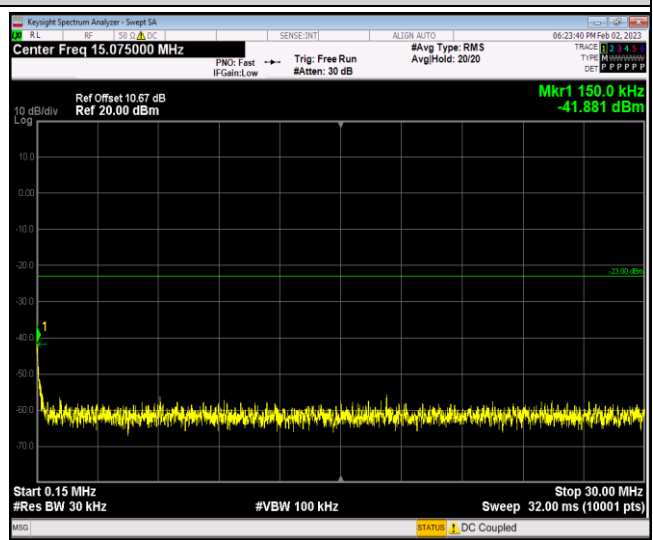
GSM1900-661-0.009~0.15MHz



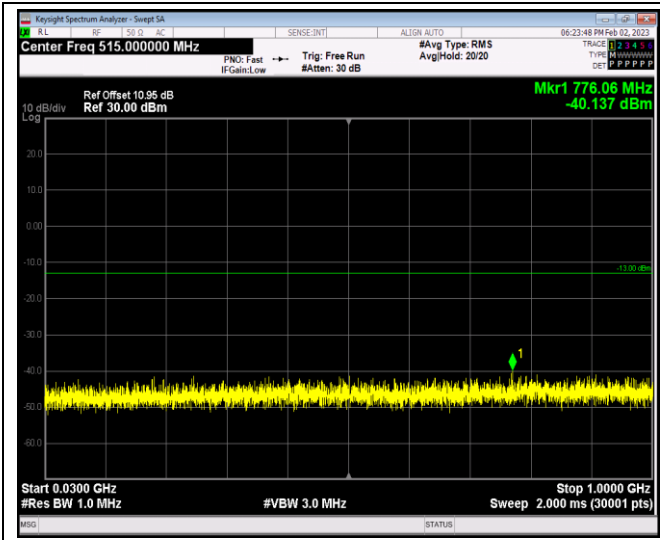
GSM1900-661-0.15~30MHz



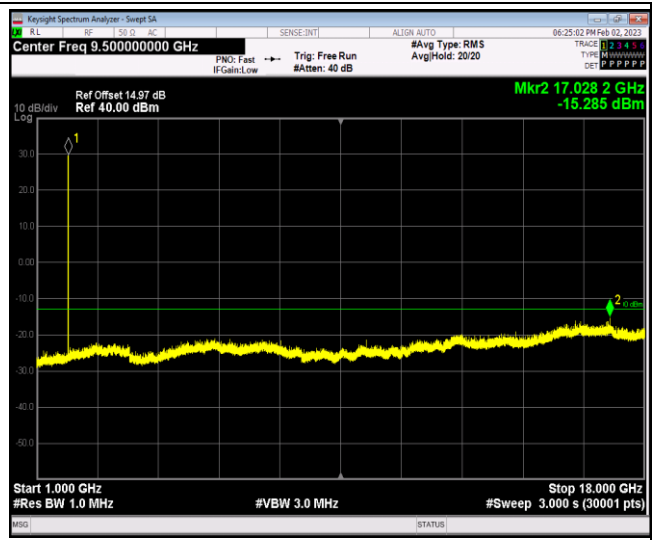
GSM1900-661-30~1000MHz



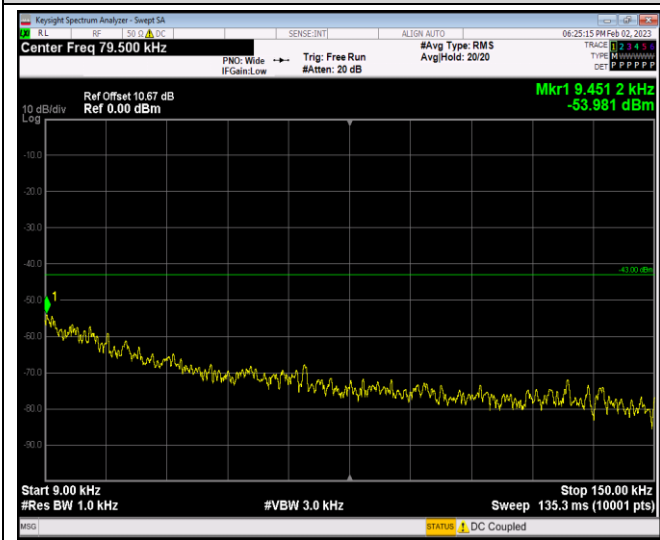
GSM1900-661-1000~18000MHz



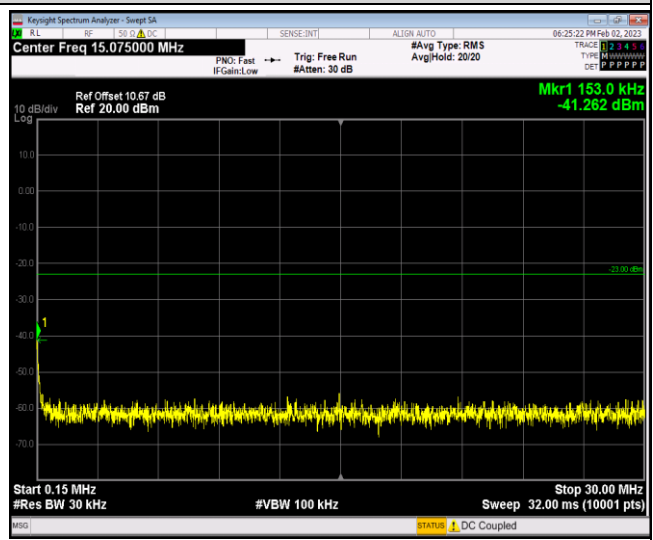
GSM1900-810-0.009~0.15MHz



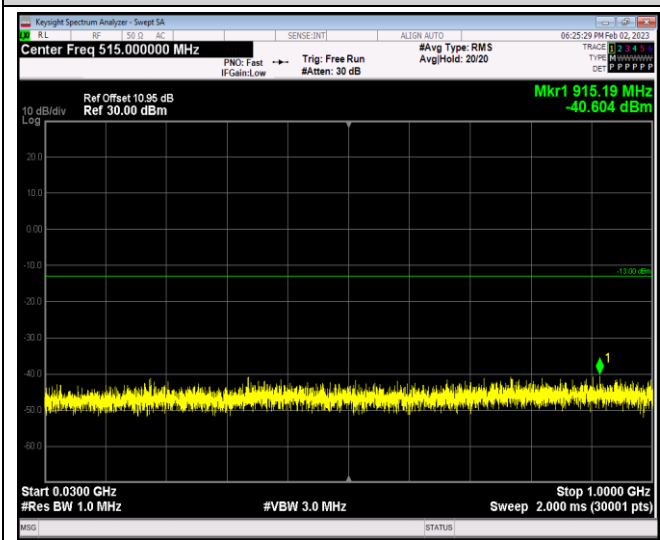
GSM1900-810-0.15~30MHz



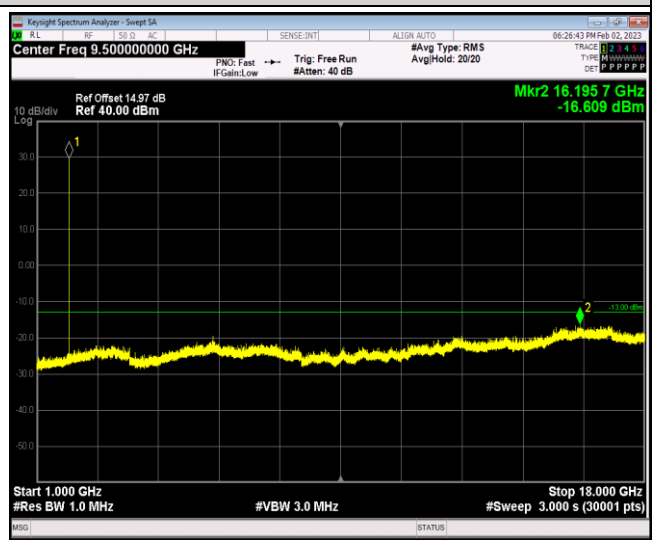
GSM1900-810-30~1000MHz



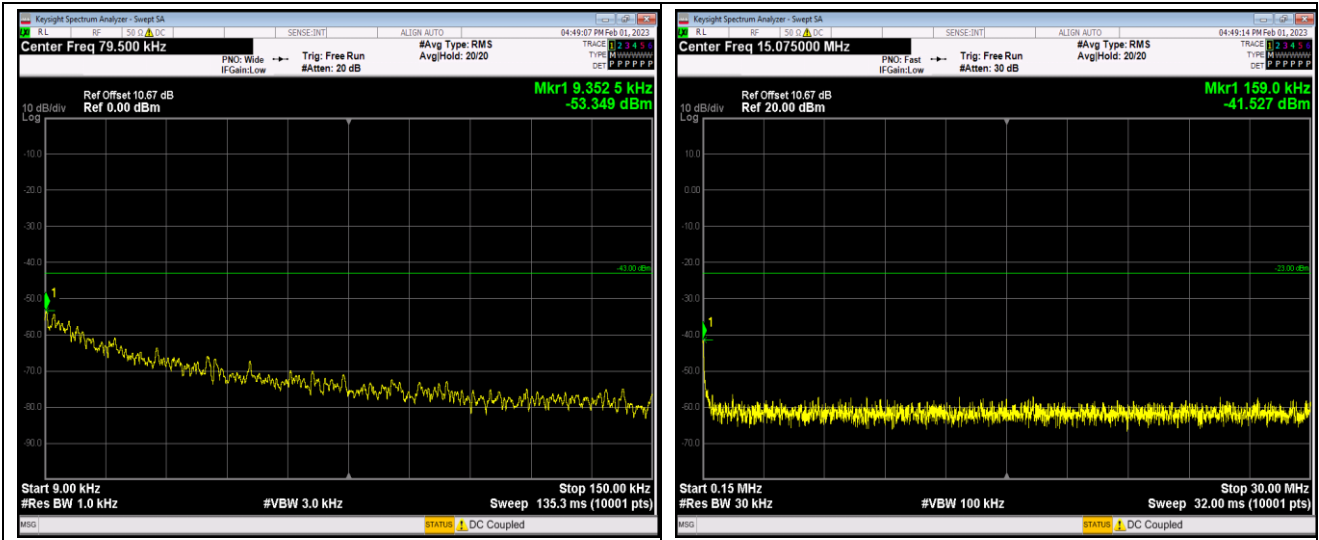
GSM1900-810-1000~18000MHz



GPRS1900-512-0.009~0.15MHz

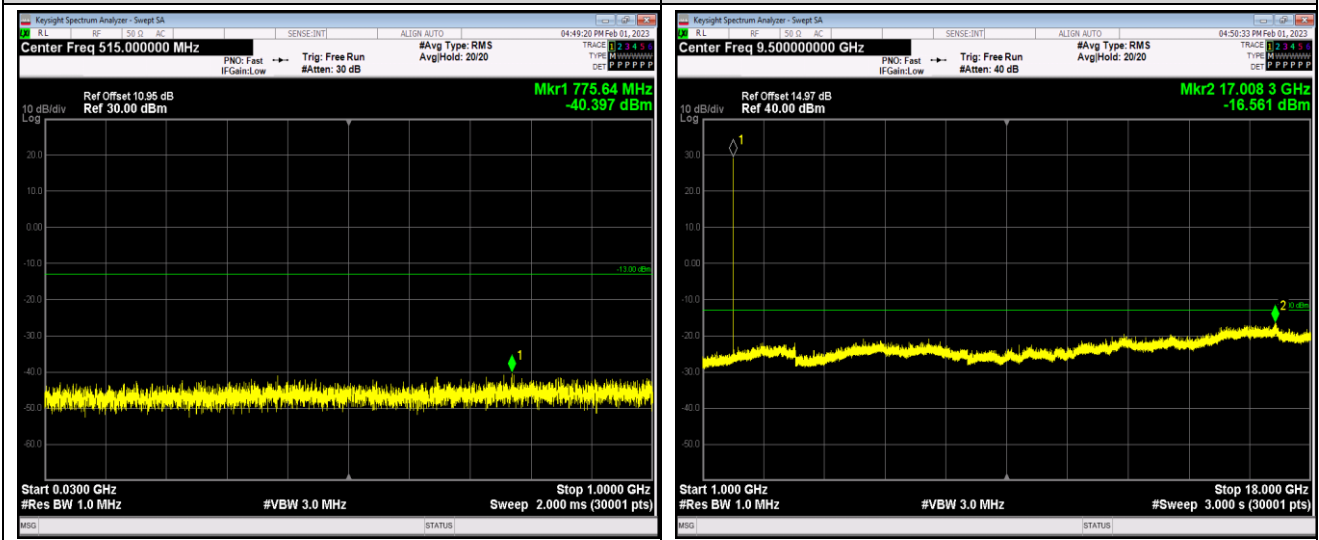


GPRS1900-512-0.15~30MHz



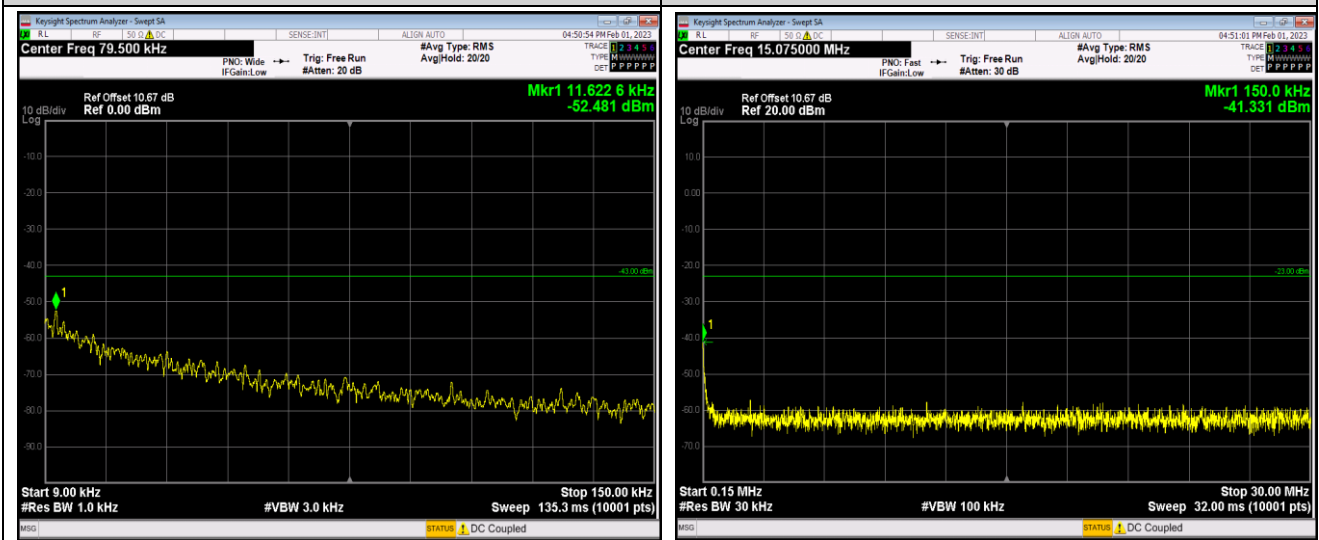
GPRS1900-512-30~1000MHz

GPRS1900-512-1000~18000MHz



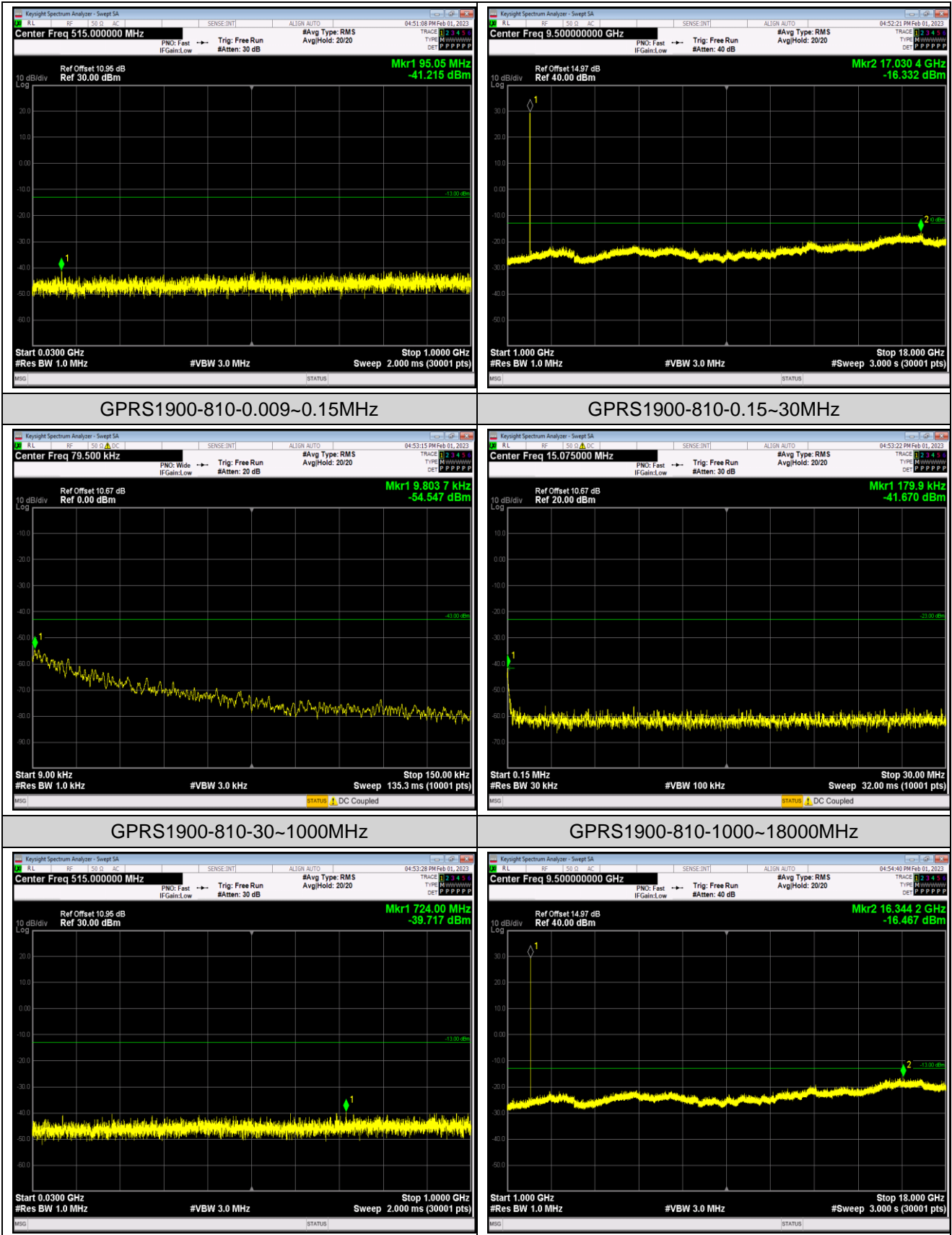
GPRS1900-661-0.009~0.15MHz

GPRS1900-661-0.15~30MHz



GPRS1900-661-30~1000MHz

GPRS1900-661-1000~18000MHz



GPRS1900-810-0.009~0.15MHz

GPRS1900-810-0.15~30MHz

GPRS1900-810-30~1000MHz

GPRS1900-810-1000~18000MHz

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		
3.70	-30	21.76	0.026010	±2.5	Pass
	-20	20.70	0.024743		
	-10	19.11	0.022842		
	0	17.34	0.020727		
	10	21.76	0.026010		
	20	16.43	0.019639		
	30	14.66	0.017523		
	40	14.30	0.017093		
	50	17.40	0.020798		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.15	20.92	0.025006	±2.5	Pass
	3.70	18.11	0.021647		
	4.20	21.73	0.025974		
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		
3.70	-30	123.27	0.065569	Within authorized band for PCS 1900	Pass
	-20	122.30	0.065053		
	-10	119.13	0.063367		
	0	120.33	0.064005		
	10	115.78	0.061585		
	20	113.97	0.060622		
	30	112.39	0.059782		
	40	115.49	0.061431		
	50	112.65	0.059920		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.15	117.52	0.062511	Within authorized band for PCS 1900	Pass
	3.70	105.09	0.055899		
	4.20	125.50	0.066755		
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
GPRS850	190	PASS	PASS
GSM1900	661	PASS	PASS
GPRS1900	661	PASS	PASS

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

Test Graphs

