

APPENDIX A: GSM

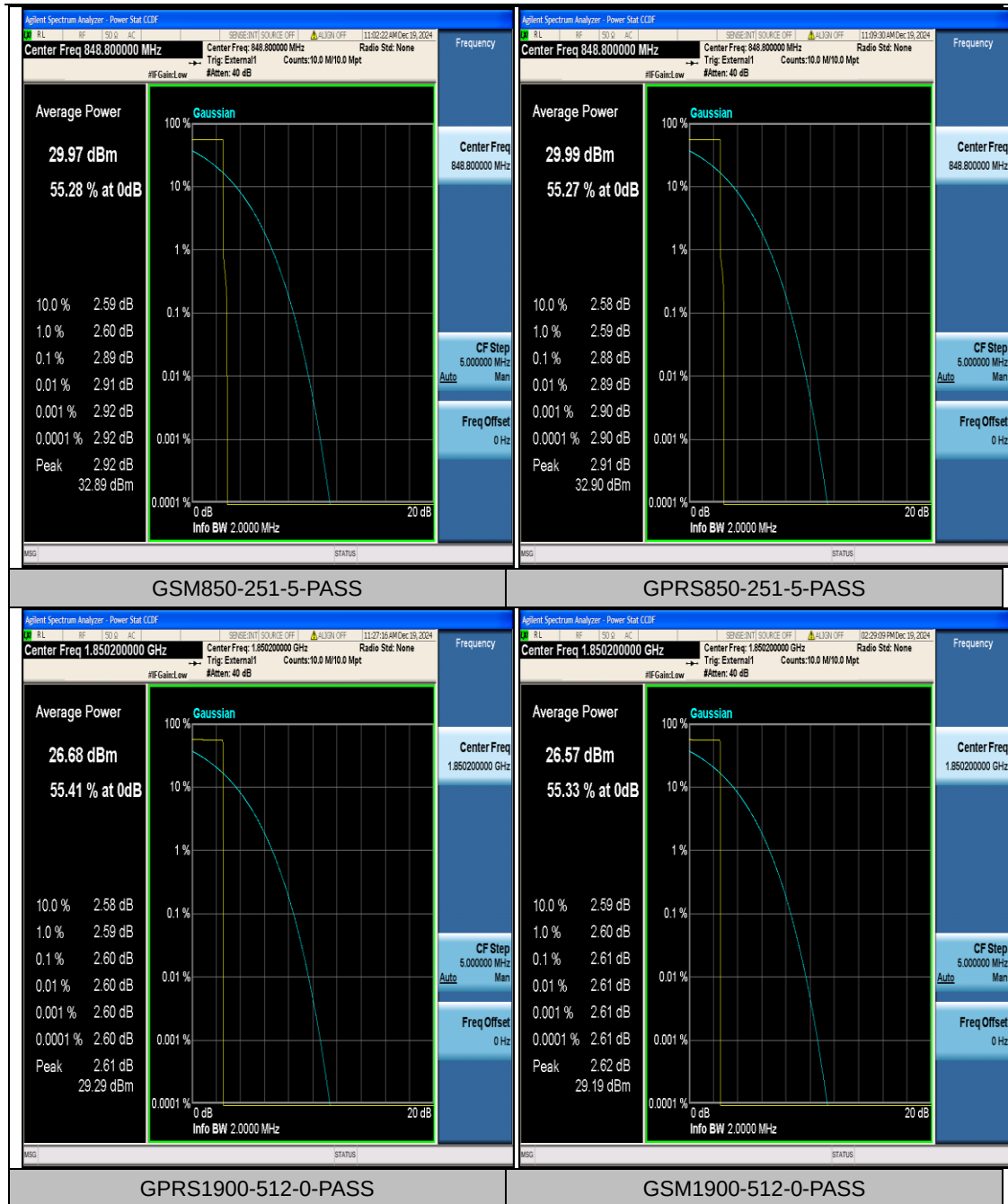
Appendix A1: Peak-to-Average Ratio(CCDF)

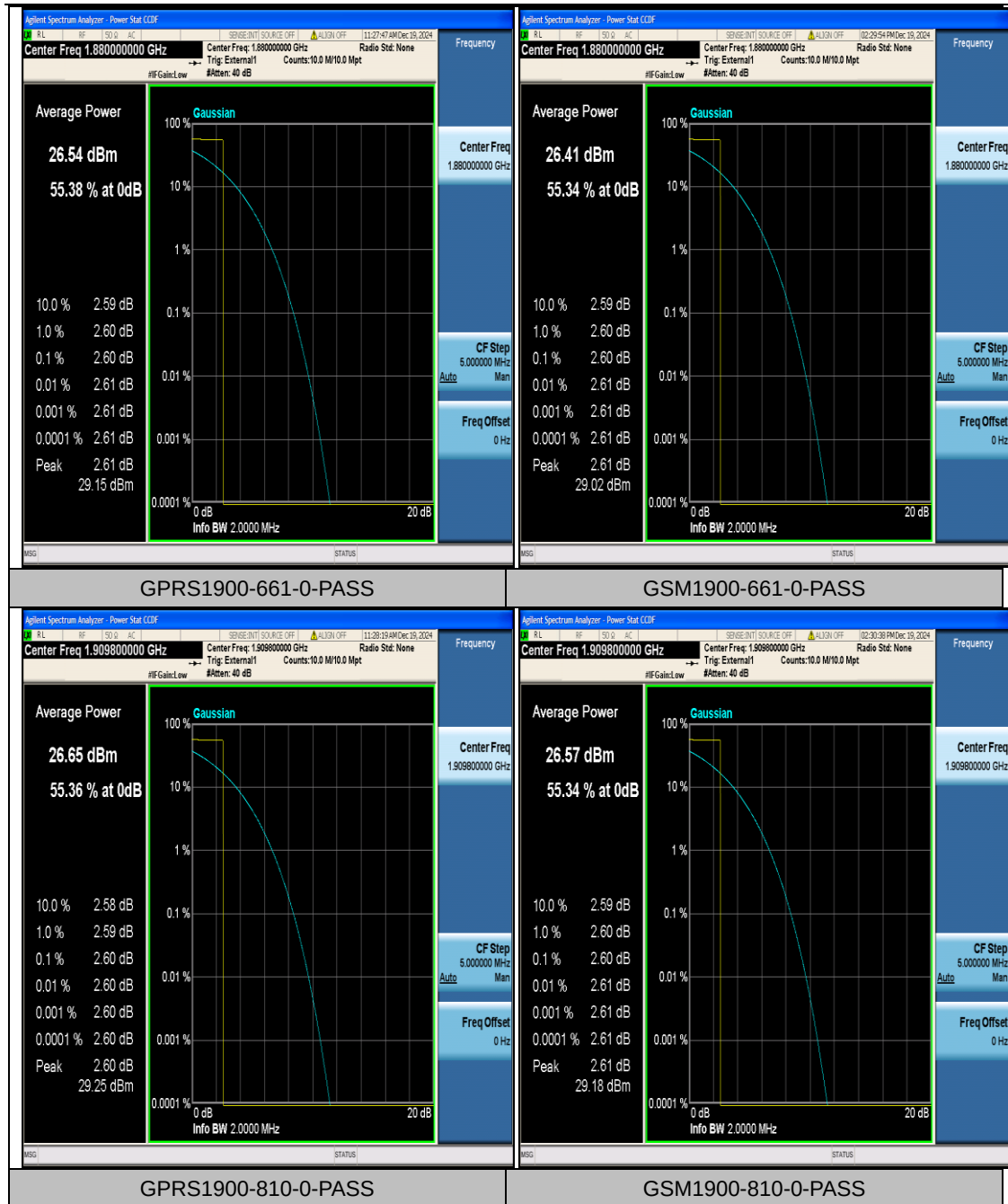
Test Result

Band	Channel	Result(dB)	Limit(dB)	Verdict
GSM850	128	2.88	13	PASS
GPRS850	128	2.89	13	PASS
GSM850	190	2.89	13	PASS
GPRS850	190	2.89	13	PASS
GSM850	251	2.89	13	PASS
GPRS850	251	2.88	13	PASS
GPRS1900	512	2.60	13	PASS
GSM1900	512	2.61	13	PASS
GPRS1900	661	2.60	13	PASS
GSM1900	661	2.60	13	PASS
GPRS1900	810	2.60	13	PASS
GSM1900	810	2.60	13	PASS

Test Graphs





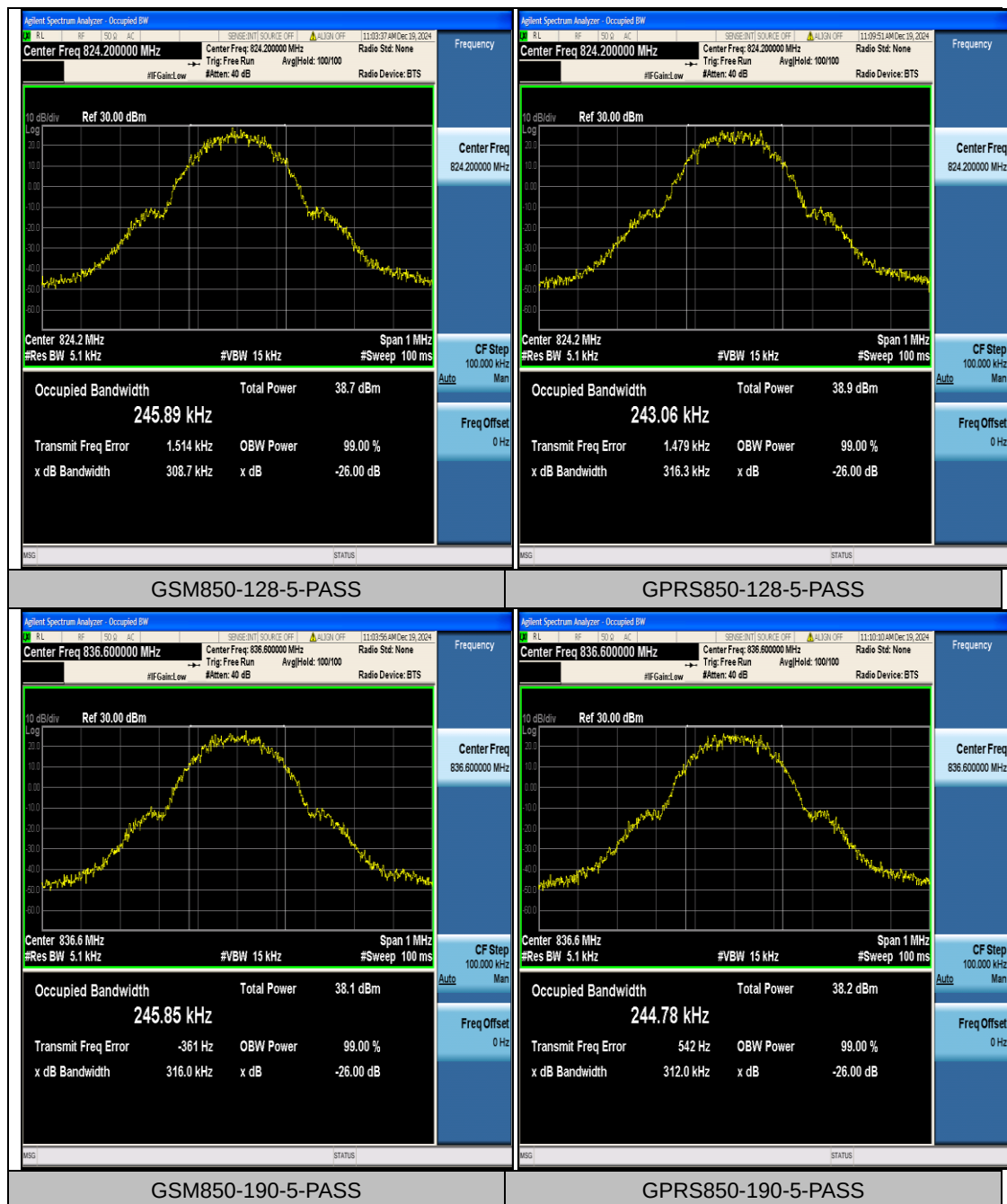


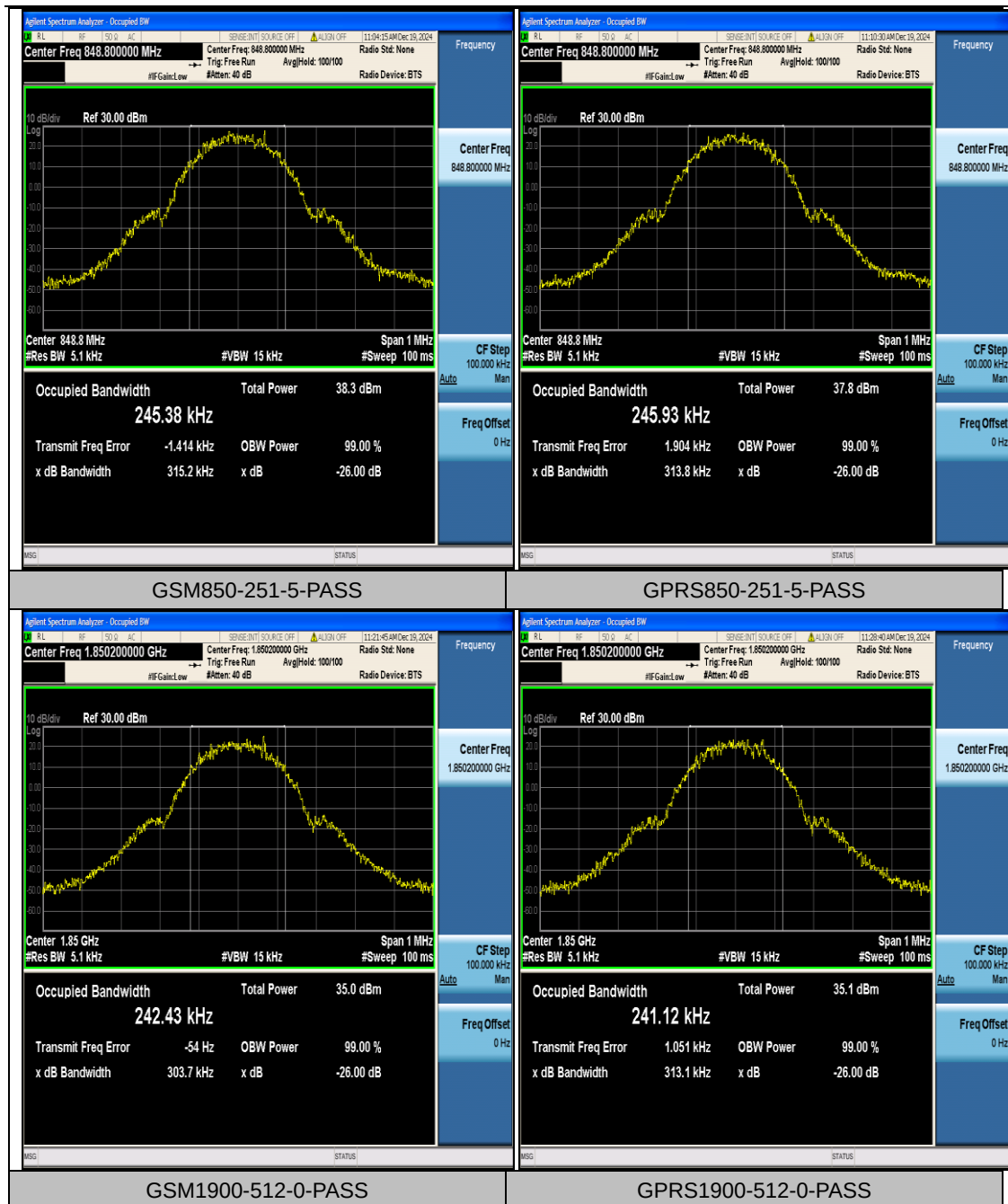
Appendix A2: 26dB Bandwidth and Occupied Bandwidth

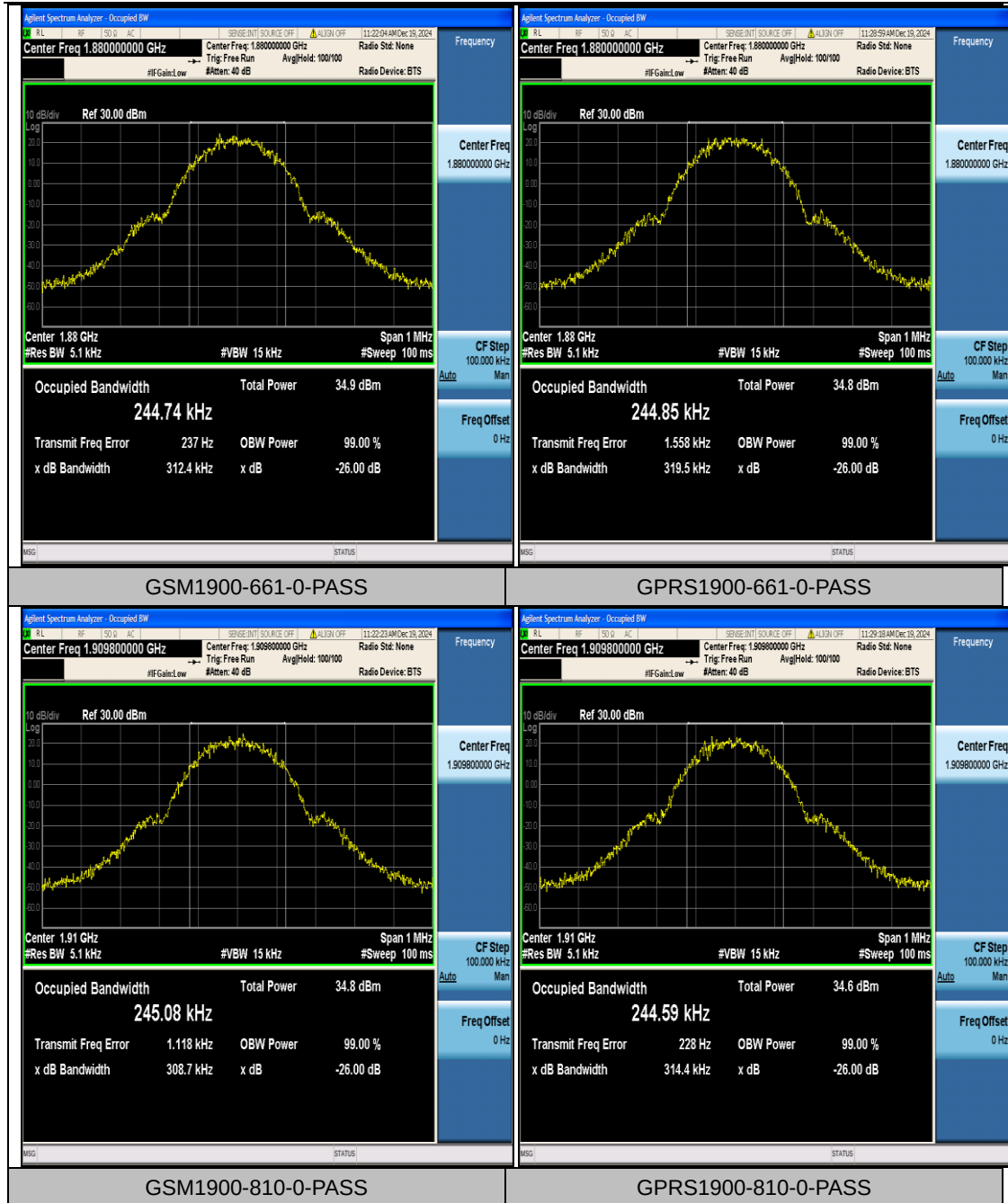
Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	0.24589	0.3087	---	PASS
GPRS850	128	0.24306	0.3163	---	PASS
GSM850	190	0.24585	0.3160	---	PASS
GPRS850	190	0.24478	0.3120	---	PASS
GSM850	251	0.24538	0.3152	---	PASS
GPRS850	251	0.24593	0.3138	---	PASS
GSM1900	512	0.24243	0.3037	---	PASS
GPRS1900	512	0.24112	0.3131	---	PASS
GSM1900	661	0.24474	0.3124	---	PASS
GPRS1900	661	0.24485	0.3195	---	PASS
GSM1900	810	0.24508	0.3087	---	PASS
GPRS1900	810	0.24459	0.3144	---	PASS

Test Graphs





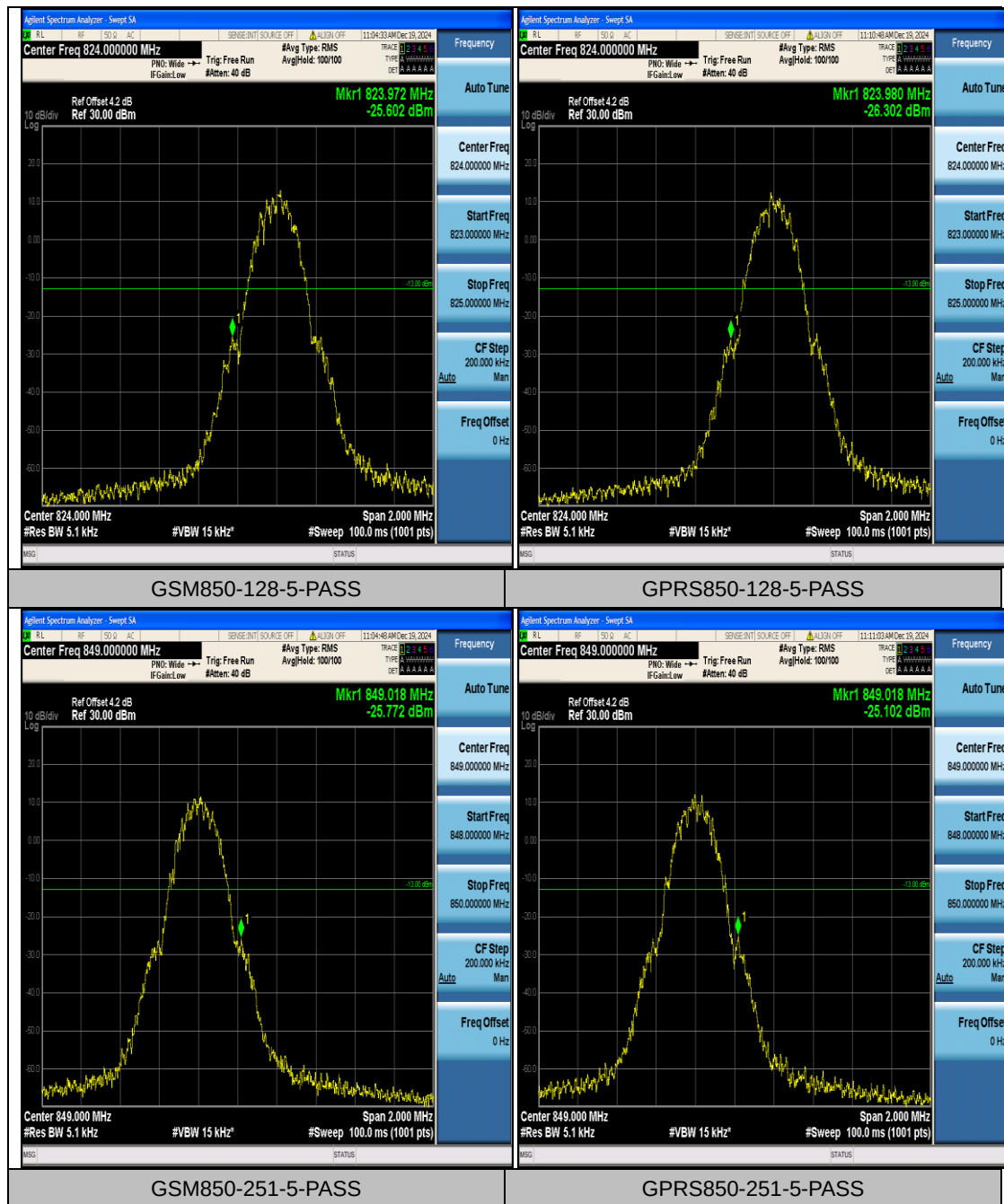


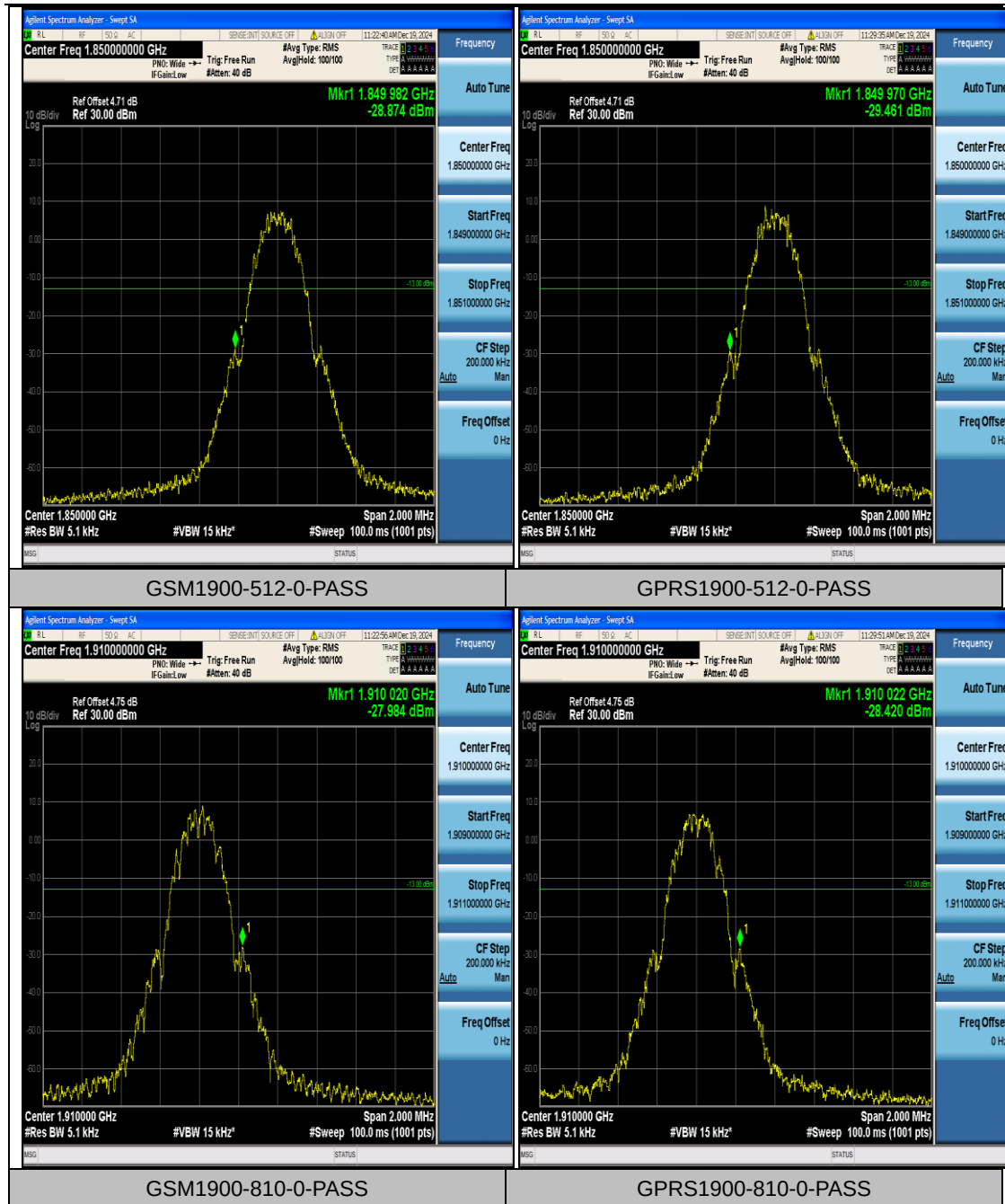
Appendix A3: Band Edge

Test Result

Band	Channel	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	823.97	-25.60	-13	PASS
GPRS850	128	823.98	-26.30	-13	PASS
GSM850	251	849.02	-25.77	-13	PASS
GPRS850	251	849.02	-25.10	-13	PASS
GSM1900	512	1849.98	-28.87	-13	PASS
GPRS1900	512	1849.97	-29.46	-13	PASS
GSM1900	810	1910.02	-27.98	-13	PASS
GPRS1900	810	1910.02	-28.42	-13	PASS

Test Graphs



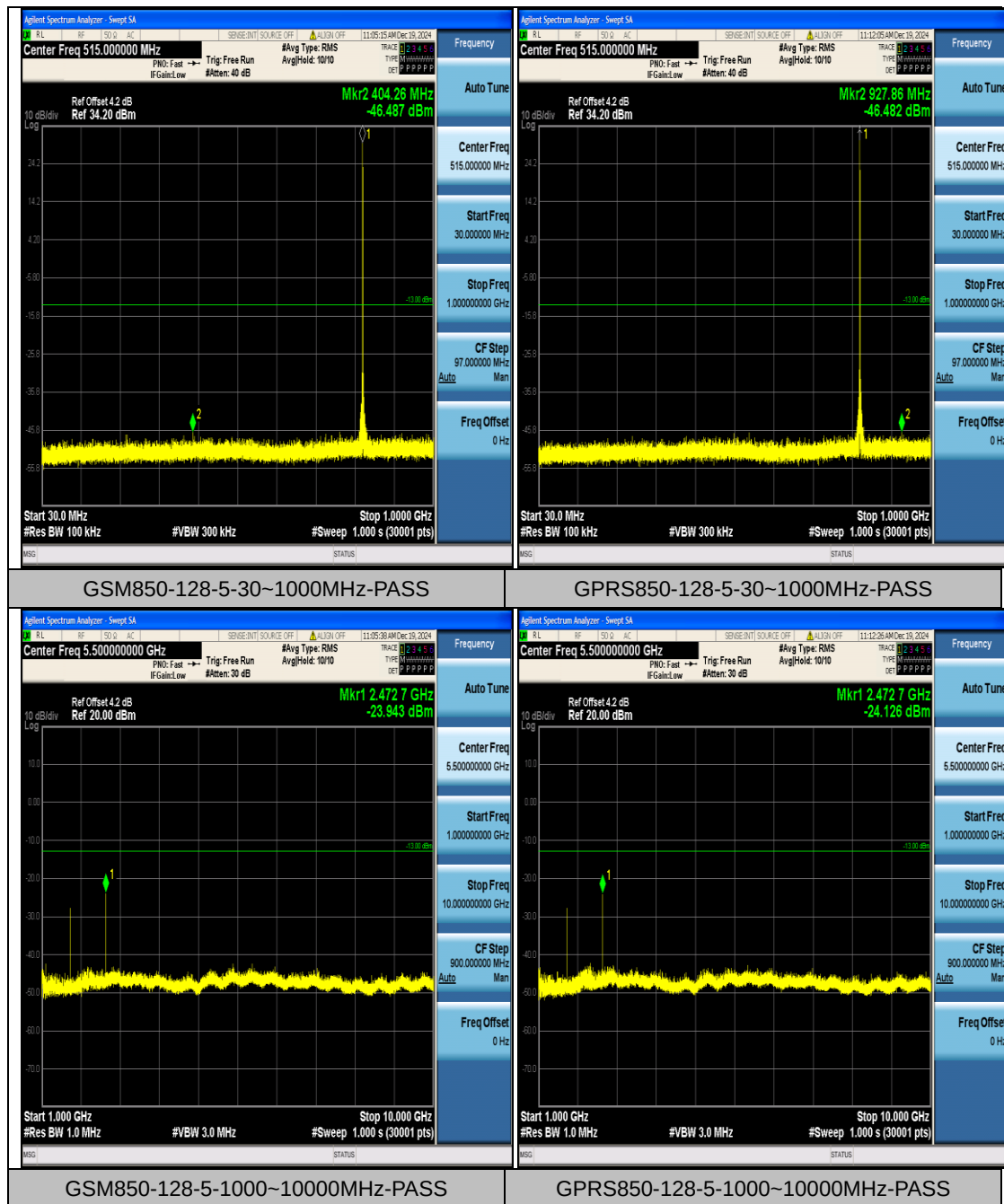


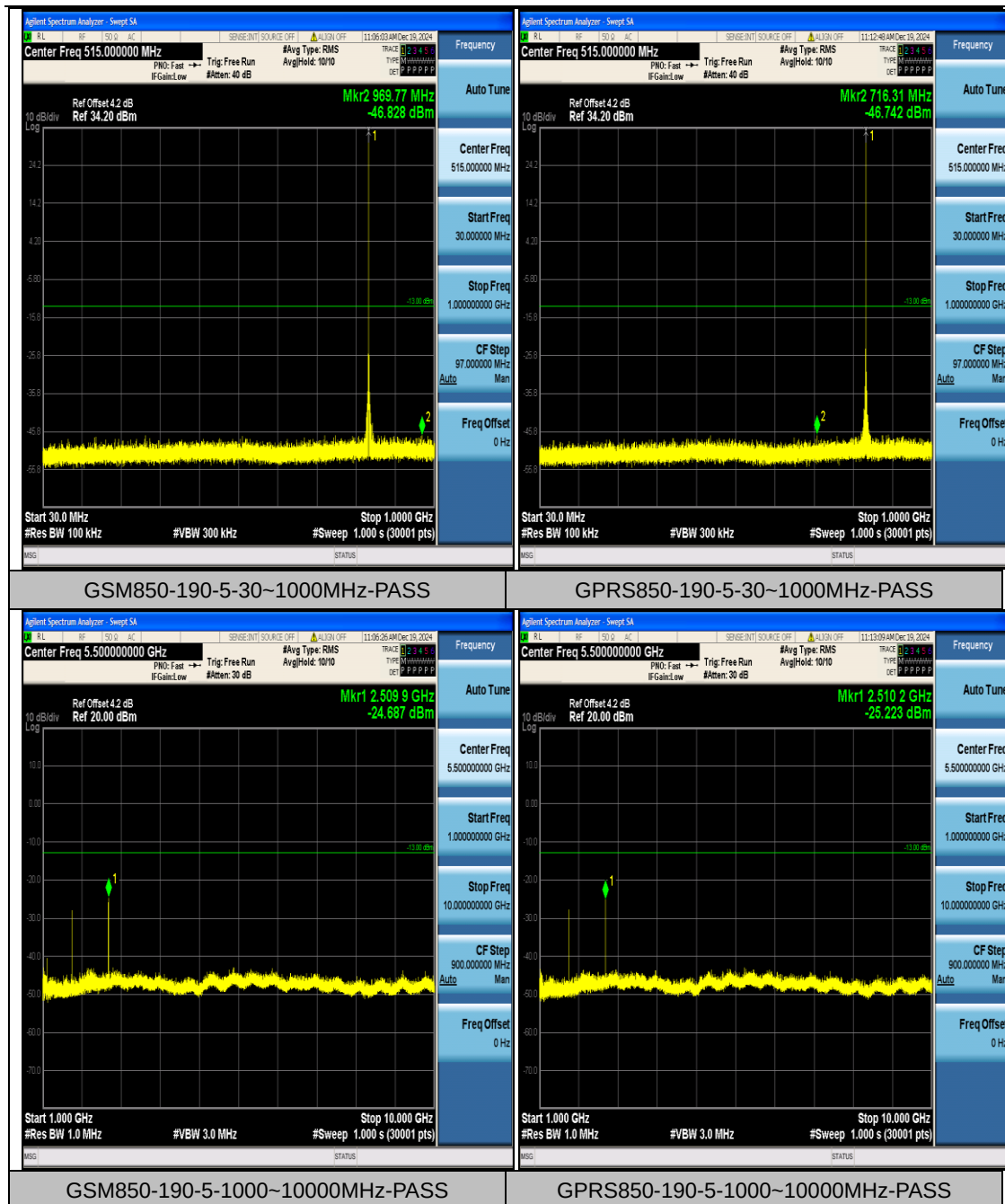
Appendix A4: Conducted Spurious Emission

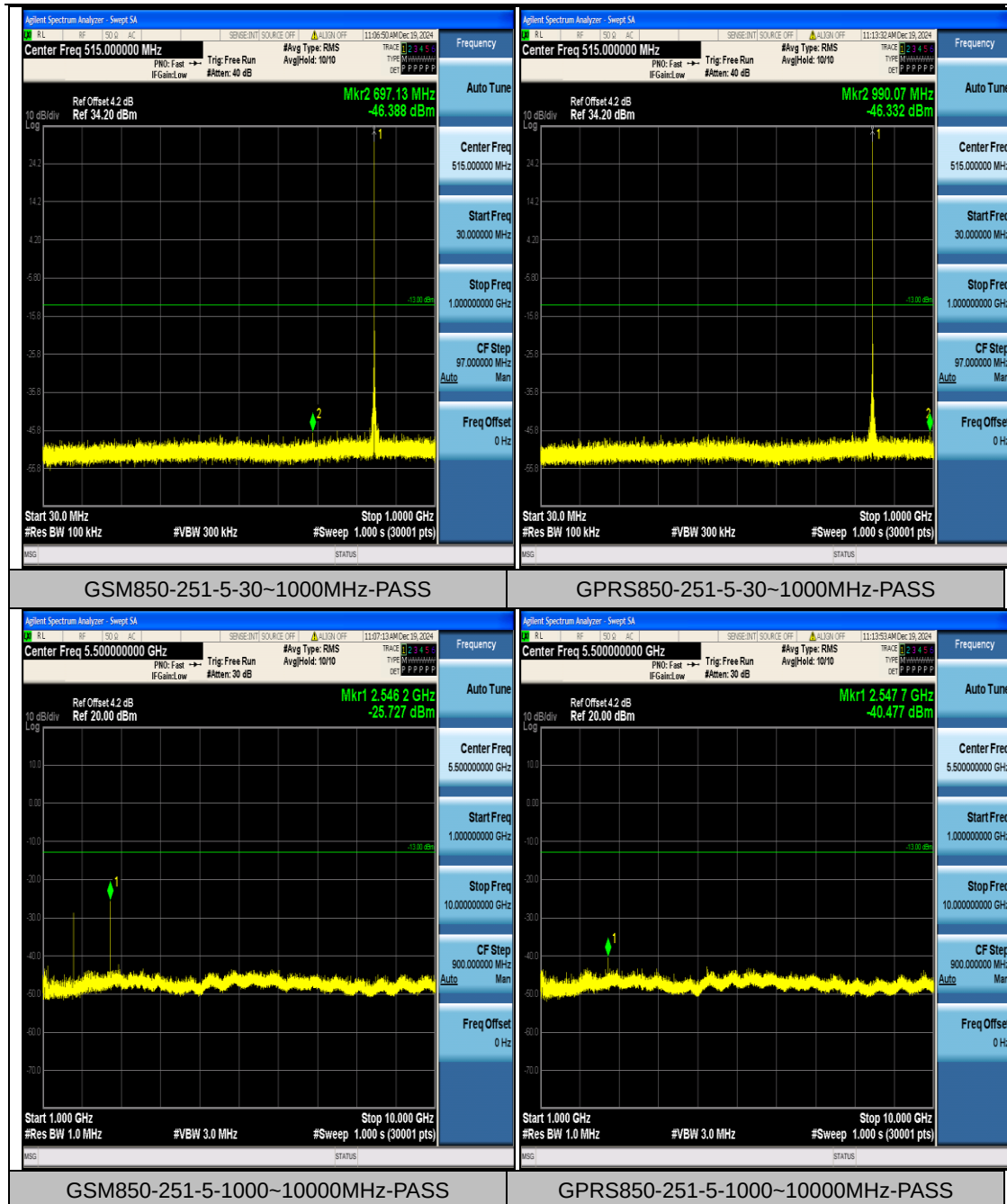
Test Result

Band	Channel	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	30~1000MHz	404.26	-46.49	-13	PASS
GPRS850	128	30~1000MHz	927.86	-46.48	-13	PASS
GSM850	128	1000~10000MHz	2472.7	-23.94	-13	PASS
GPRS850	128	1000~10000MHz	2472.7	-24.13	-13	PASS
GSM850	190	30~1000MHz	969.77	-46.83	-13	PASS
GPRS850	190	30~1000MHz	716.31	-46.74	-13	PASS
GSM850	190	1000~10000MHz	2509.9	-24.69	-13	PASS
GPRS850	190	1000~10000MHz	2510.2	-25.22	-13	PASS
GSM850	251	30~1000MHz	697.13	-46.39	-13	PASS
GPRS850	251	30~1000MHz	990.07	-46.33	-13	PASS
GSM850	251	1000~10000MHz	2546.2	-25.73	-13	PASS
GPRS850	251	1000~10000MHz	2547.7	-40.48	-13	PASS
GSM1900	512	30~1000MHz	922.85	-45.71	-13	PASS
GPRS1900	512	30~1000MHz	943.38	-45.59	-13	PASS
GSM1900	512	1000~3000MHz	2667.8	-26.68	-13	PASS
GPRS1900	512	1000~3000MHz	2750	-27.24	-13	PASS
GSM1900	512	3000~18000MHz	16289.5	-38.11	-13	PASS
GPRS1900	512	3000~18000MHz	16175.5	-37.87	-13	PASS
GSM1900	661	30~1000MHz	678.83	-45.71	-13	PASS
GPRS1900	661	30~1000MHz	835.75	-46.04	-13	PASS
GSM1900	661	1000~3000MHz	2643.87	-26.96	-13	PASS
GPRS1900	661	1000~3000MHz	2695.93	-26.96	-13	PASS
GSM1900	661	3000~18000MHz	16497.5	-38.49	-13	PASS
GPRS1900	661	3000~18000MHz	16515	-38.26	-13	PASS
GSM1900	810	30~1000MHz	278.35	-45.72	-13	PASS
GPRS1900	810	30~1000MHz	746.05	-45.63	-13	PASS
GSM1900	810	1000~3000MHz	2615.13	-27.25	-13	PASS
GPRS1900	810	1000~3000MHz	2991	-27.3	-13	PASS
GSM1900	810	3000~18000MHz	16383.5	-38.12	-13	PASS
GPRS1900	810	3000~18000MHz	16414.5	-38.79	-13	PASS

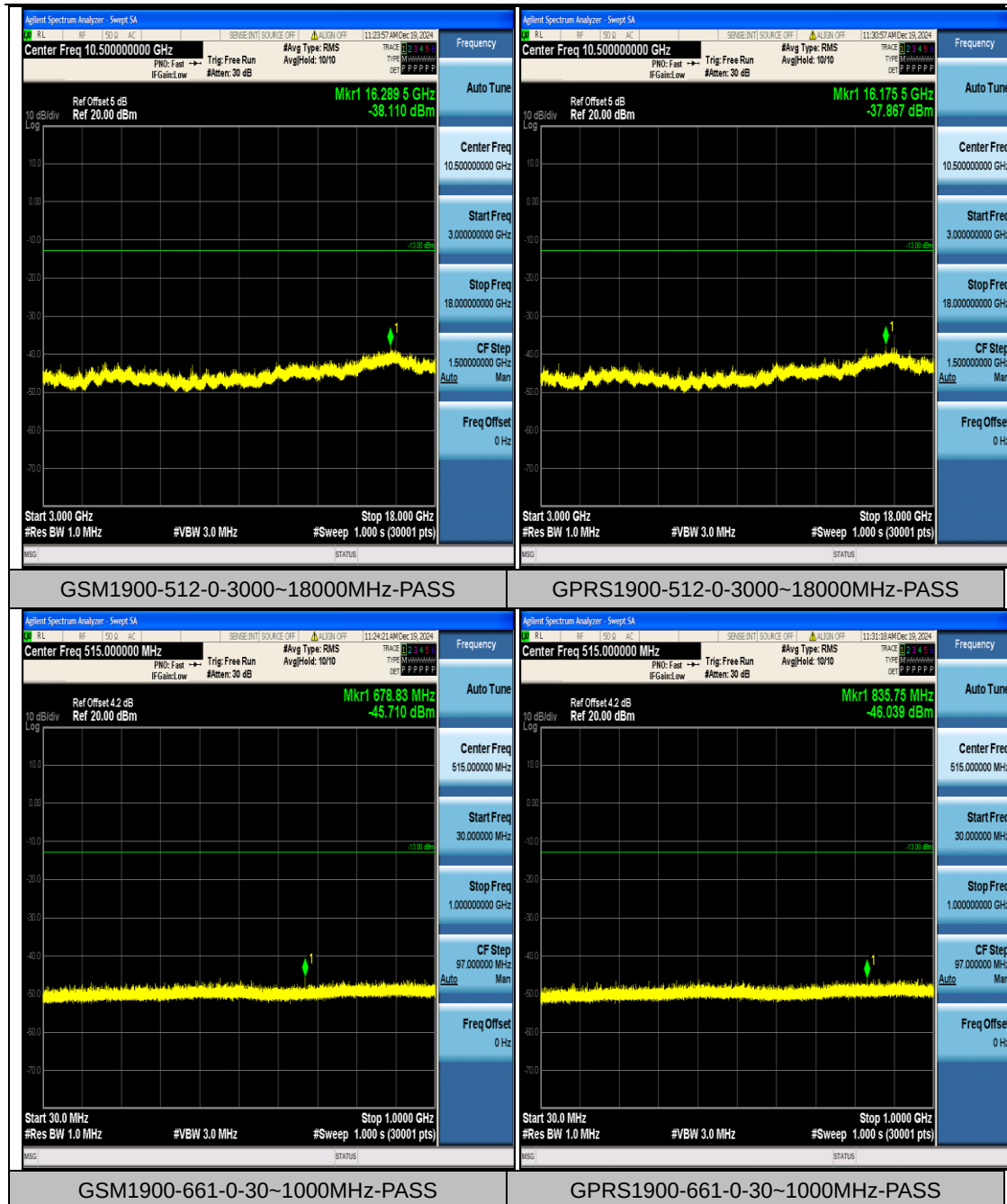
Test Graphs

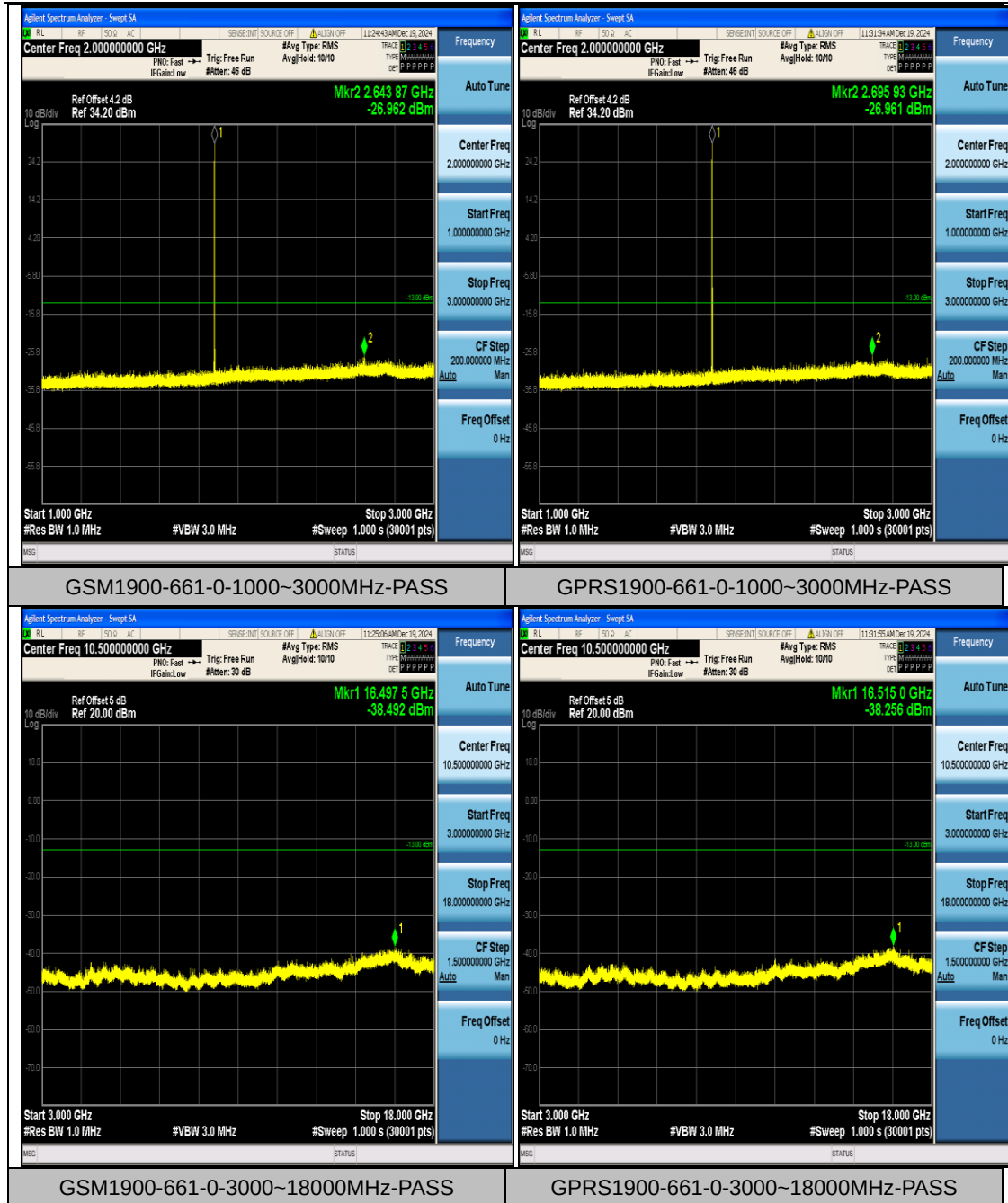




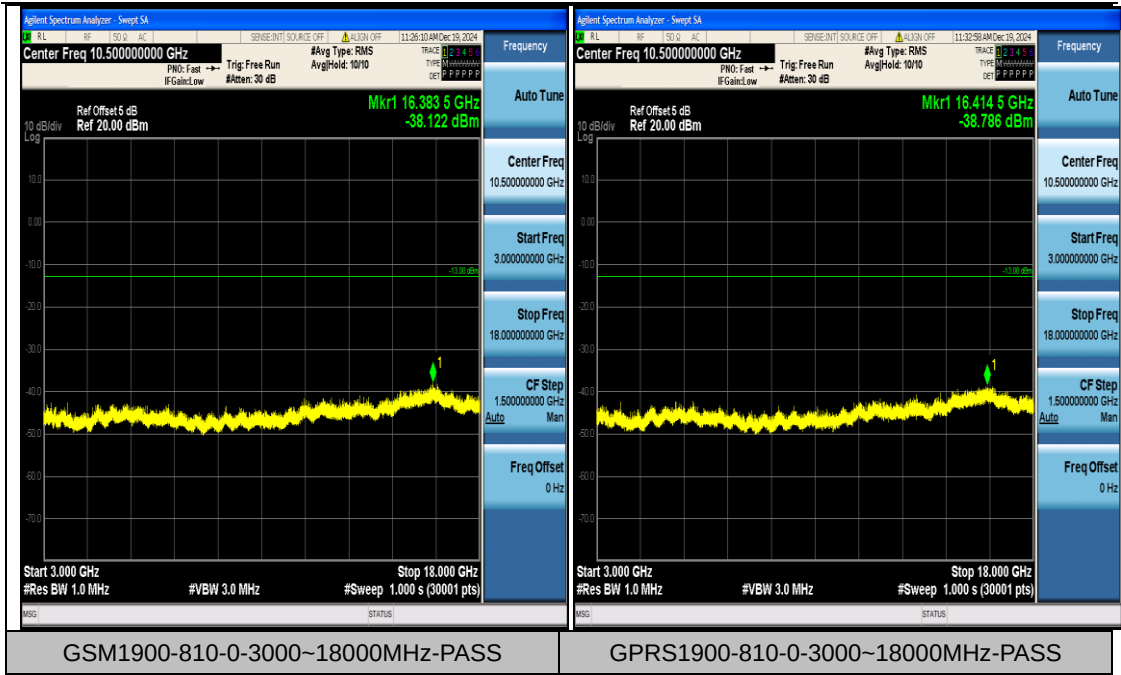












Appendix A5: Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	190	VN	NT	-2.97	-0.003550	±2.5	PASS
GSM850	190	VL	NT	-5.10	-0.006096	±2.5	PASS
GSM850	190	VH	NT	-7.07	-0.008451	±2.5	PASS
GPRS850	190	VN	NT	1.07	0.001279	±2.5	PASS
GPRS850	190	VL	NT	0.06	0.000072	±2.5	PASS
GPRS850	190	VH	NT	2.10	0.002510	±2.5	PASS
GSM1900	661	VN	NT	-14.08	-0.007489	±2.5	PASS
GSM1900	661	VL	NT	1.13	0.000601	±2.5	PASS
GSM1900	661	VH	NT	-4.65	-0.002473	±2.5	PASS
GPRS1900	661	VN	NT	10.69	0.005686	±2.5	PASS
GPRS1900	661	VL	NT	2.07	0.001101	±2.5	PASS
GPRS1900	661	VH	NT	-3.23	-0.001718	±2.5	PASS

Temperature							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	190	NV	-30	-6.72	-0.008033	±2.5	PASS
GSM850	190	NV	-20	1.68	0.002008	±2.5	PASS
GSM850	190	NV	-10	-3.33	-0.003980	±2.5	PASS
GSM850	190	NV	0	1.23	0.001470	±2.5	PASS
GSM850	190	NV	10	-1.87	-0.002235	±2.5	PASS
GSM850	190	NV	20	-6.07	-0.007256	±2.5	PASS
GSM850	190	NV	30	-7.52	-0.008989	±2.5	PASS
GSM850	190	NV	40	4.94	0.005905	±2.5	PASS
GSM850	190	NV	50	-1.52	-0.001817	±2.5	PASS
GPRS850	190	NV	-30	-2.71	-0.003239	±2.5	PASS
GPRS850	190	NV	-20	0.23	0.000275	±2.5	PASS
GPRS850	190	NV	-10	0.87	0.001040	±2.5	PASS
GPRS850	190	NV	0	-0.61	-0.000729	±2.5	PASS
GPRS850	190	NV	10	2.13	0.002546	±2.5	PASS
GPRS850	190	NV	20	-2.87	-0.003431	±2.5	PASS
GPRS850	190	NV	30	0.45	0.000538	±2.5	PASS
GPRS850	190	NV	40	2.39	0.002857	±2.5	PASS
GPRS850	190	NV	50	-0.52	-0.000622	±2.5	PASS

GSM1900	661	NV	-30	-11.59	-0.006165	±2.5	PASS
GSM1900	661	NV	-20	-3.07	-0.001633	±2.5	PASS
GSM1900	661	NV	-10	-2.87	-0.001527	±2.5	PASS
GSM1900	661	NV	0	1.45	0.000771	±2.5	PASS
GSM1900	661	NV	10	0.68	0.000362	±2.5	PASS
GSM1900	661	NV	20	6.33	0.003367	±2.5	PASS
GSM1900	661	NV	30	5.84	0.003106	±2.5	PASS
GSM1900	661	NV	40	6.42	0.003415	±2.5	PASS
GSM1900	661	NV	50	7.10	0.003777	±2.5	PASS
GPRS1900	661	NV	-30	-1.07	-0.000569	±2.5	PASS
GPRS1900	661	NV	-20	-2.36	-0.001255	±2.5	PASS
GPRS1900	661	NV	-10	3.45	0.001835	±2.5	PASS
GPRS1900	661	NV	0	-2.36	-0.001255	±2.5	PASS
GPRS1900	661	NV	10	8.72	0.004638	±2.5	PASS
GPRS1900	661	NV	20	3.39	0.001803	±2.5	PASS
GPRS1900	661	NV	30	3.81	0.002027	±2.5	PASS
GPRS1900	661	NV	40	7.36	0.003915	±2.5	PASS
GPRS1900	661	NV	50	-12.62	-0.006713	±2.5	PASS

Appendix B:WCDMA

AppendixB1:Peak-to-Average Ratio

Test Result(WCDMA)

Band	Channel	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band2	9262	2.52	13	PASS
Band2	9400	2.83	13	PASS
Band2	9538	2.77	13	PASS
Band5	4132	3.44	13	PASS
Band5	4182	3.35	13	PASS
Band5	4233	3.45	13	PASS

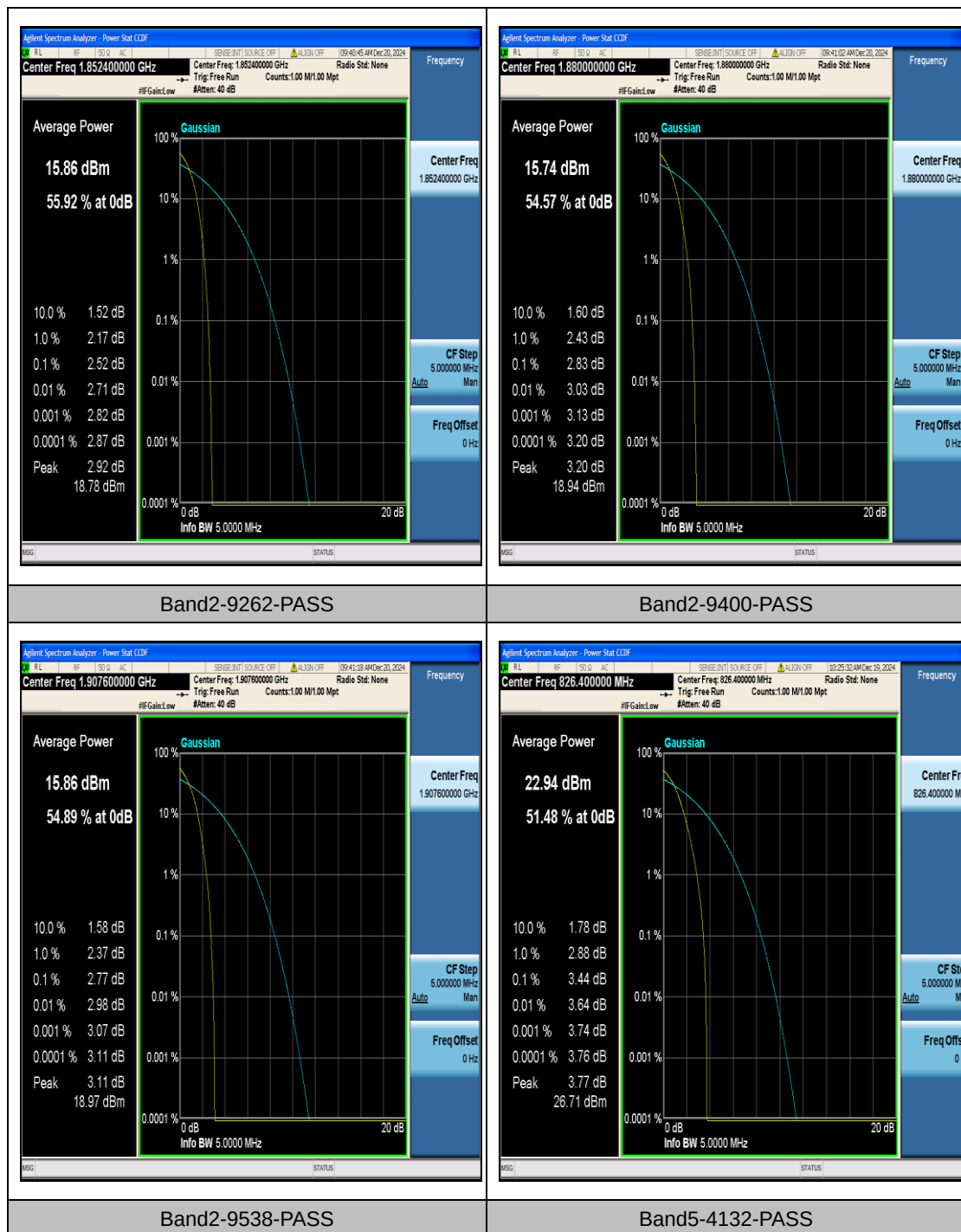
Test Result(HSDPA)

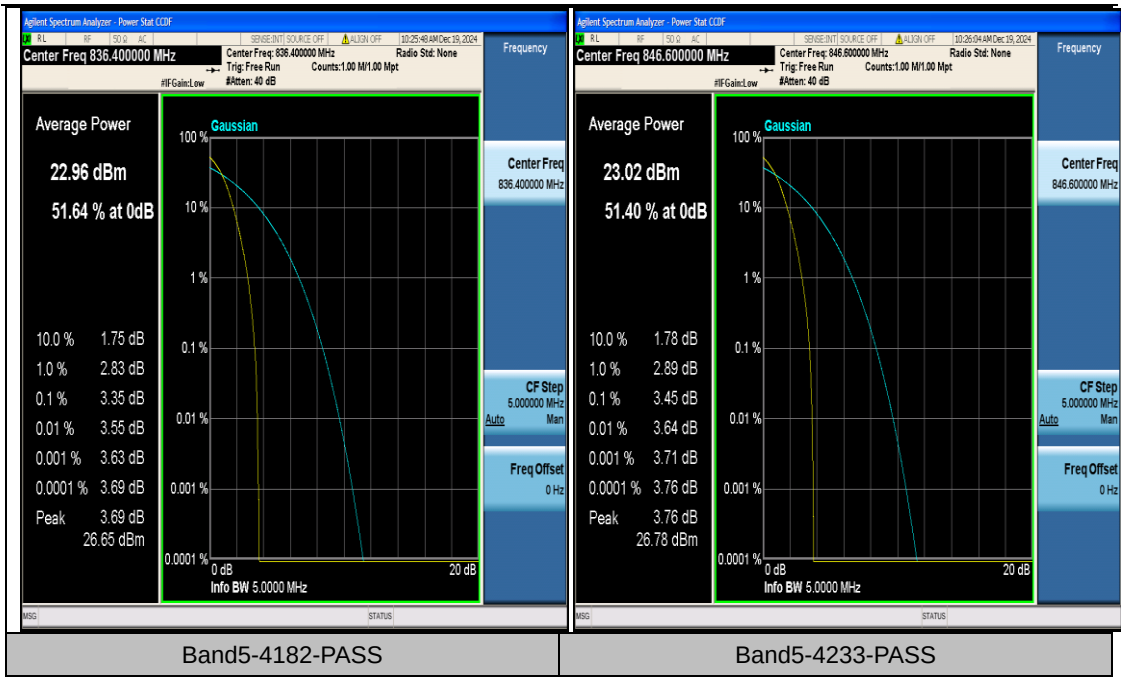
Band	Channel	SubTest	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band2	9262	1	2.83	13	PASS
Band2	9400	1	3.06	13	PASS
Band2	9538	1	2.98	13	PASS
Band5	4132	1	3.48	13	PASS
Band5	4182	1	3.38	13	PASS
Band5	4233	1	3.48	13	PASS

Test Result(HSUPA)

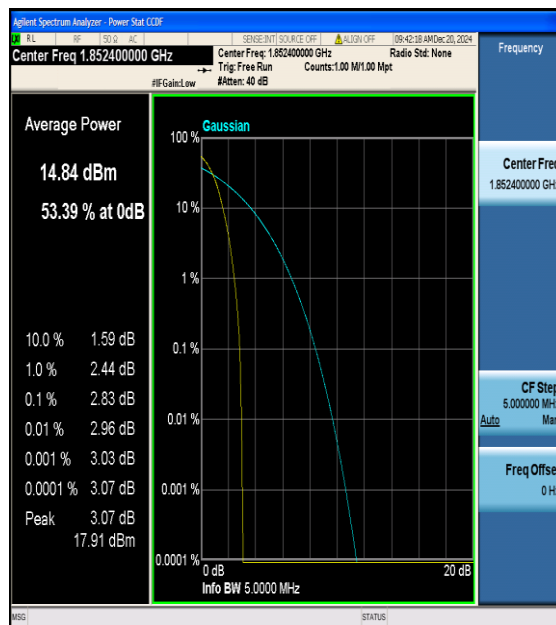
Band	Channel	SubTest	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band2	9262	1	3.73	13	PASS
Band2	9400	1	4.15	13	PASS
Band2	9538	1	4.26	13	PASS
Band5	4132	1	4.89	13	PASS
Band5	4182	1	4.82	13	PASS
Band5	4233	1	4.88	13	PASS

Test Graphs(WCDMA)

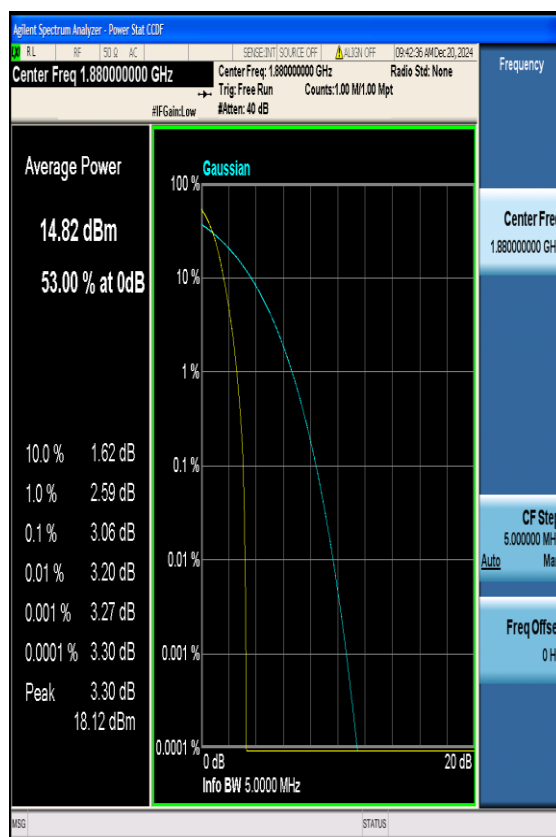




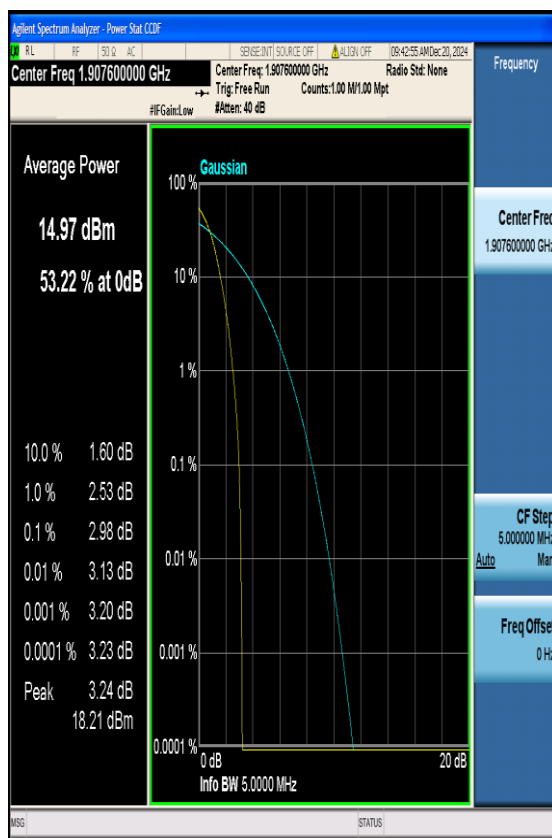
Test Graphs(HSDPA)



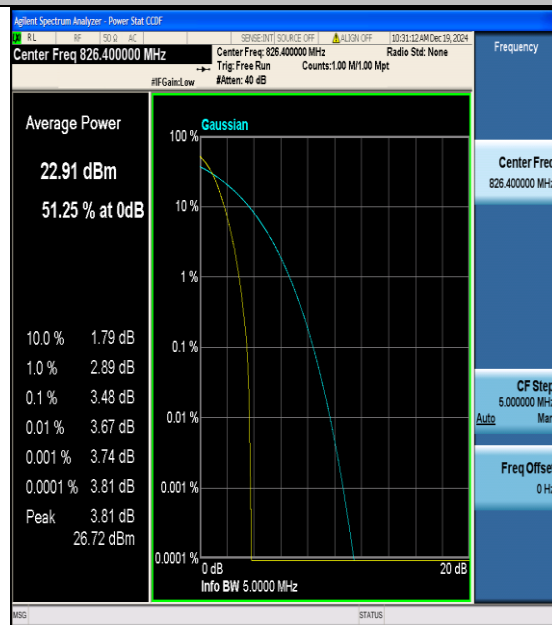
Band2-9262-1-PASS



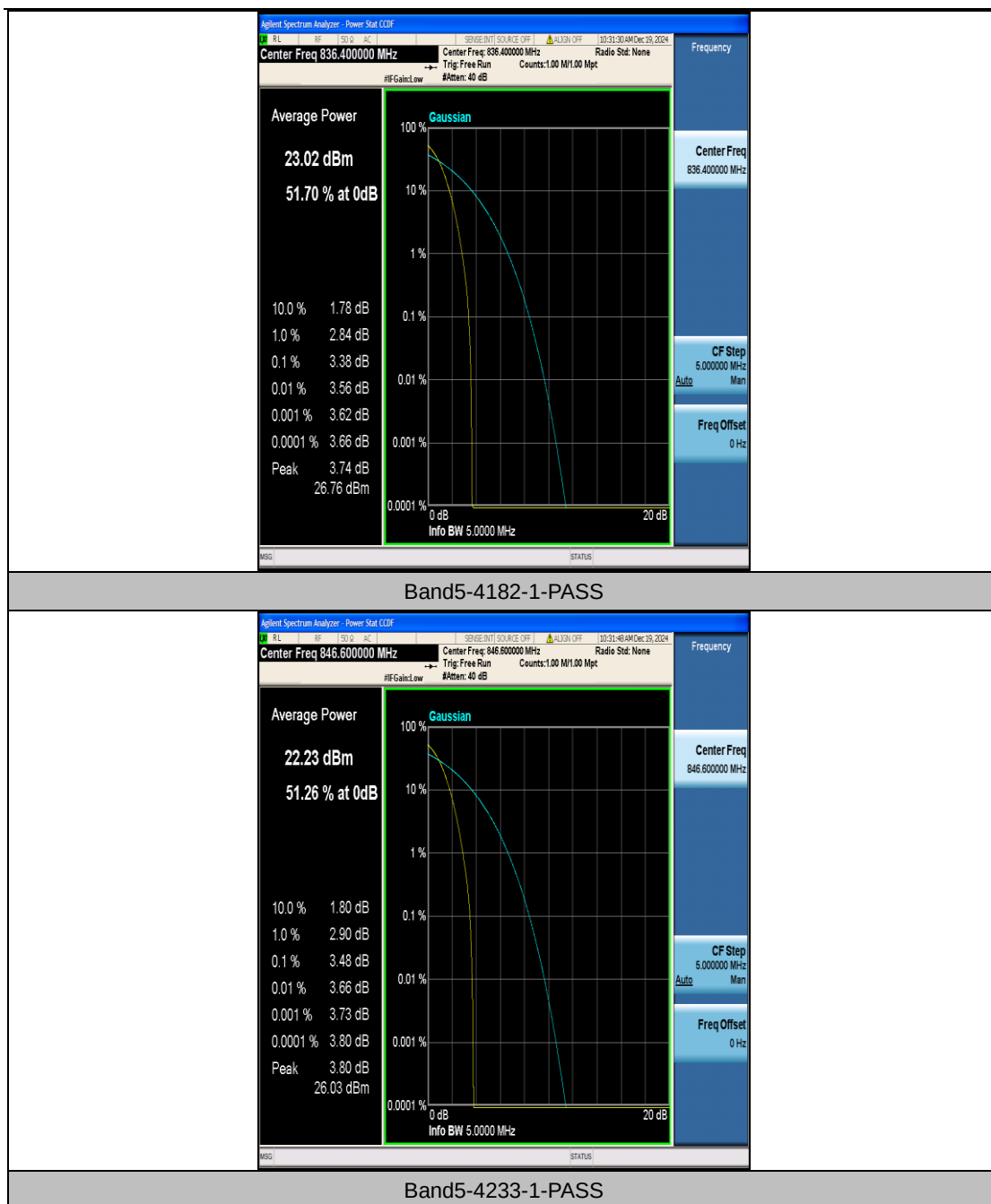
Band2-9400-1-PASS



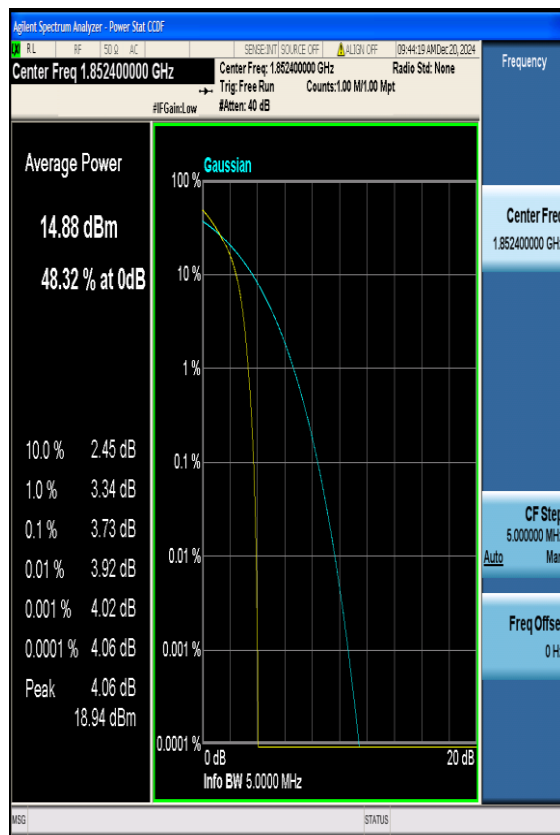
Band2-9538-1-PASS



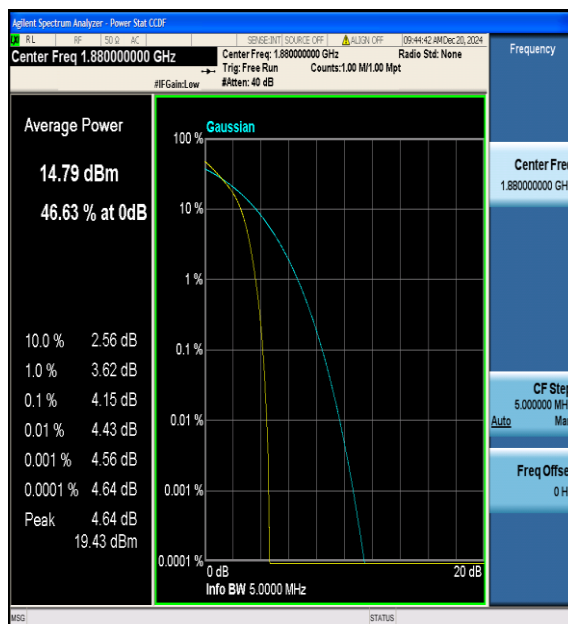
Band5-4132-1-PASS



Test Graphs(HSUPA)



Band2-9262-1-PASS



Band2-9400-1-PASS