Appendix for GSM850&GSM1900

Product Name: Smart Phone

Model No: X68

Appendix A: Average Power Output Data

Test Result

Band	Channel	ERP/EIRP(dBm)	Limit(dBm)	Verdict
GSM850	128	33.16	38.45	PASS
GSM850	190	32.89	38.45	PASS
GSM850	251	32.82	38.45	PASS
GSM1900	512	29.27	33.00	PASS
GSM1900	661	28.88	33.00	PASS
GSM1900	810	28.93	33.00	PASS

Band	Channel	Slot	Power(dBm)	Limit(dBm)	Verdict
GPRS850	128	1	33.12	38.45	PASS
GPRS850	128	2	31.90	38.45	PASS
GPRS850	128	3	29.64	38.45	PASS
GPRS850	128	4	28.32	38.45	PASS
GPRS850	190	1	32.72	38.45	PASS
GPRS850	190	2	31.59	38.45	PASS
GPRS850	190	3	29.31	38.45	PASS
GPRS850	190	4	28.05	38.45	PASS
GPRS850	251	1	32.64	38.45	PASS
GPRS850	251	2	31.51	38.45	PASS
GPRS850	251	3	29.22	38.45	PASS
GPRS850	251	4	27.95	38.45	PASS
GPRS1900	512	1	29.20	33.00	PASS
GPRS1900	512	2	27.95	33.00	PASS
GPRS1900	512	3	25.68	33.00	PASS
GPRS1900	512	4	24.48	33.00	PASS
GPRS1900	661	1	28.64	33.00	PASS
GPRS1900	661	2	27.51	33.00	PASS
GPRS1900	661	3	25.25	33.00	PASS
GPRS1900	661	4	24.05	33.00	PASS
GPRS190	810	1	28.69	33.00	PASS

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GPRS1900	810	2	27.55	33.00	PASS
GPRS1900	810	3	25.30	33.00	PASS
GPRS1900	810	4	24.08	33.00	PASS

Band	Channel	Slot	Power(dBm)	Limit(dBm)	Verdict
EGPRS850	128	1	25.88	38.45	PASS
EGPRS850	128	2	24.27	38.45	PASS
EGPRS850	128	3	21.60	38.45	PASS
EGPRS850	128	4	20.01	38.45	PASS
EGPRS850	190	1	25.74	38.45	PASS
EGPRS850	190	2	24.37	38.45	PASS
EGPRS850	190	3	21.70	38.45	PASS
EGPRS850	190	4	20.01	38.45	PASS
EGPRS850	251	1	25.80	38.45	PASS
EGPRS850	251	2	24.42	38.45	PASS
EGPRS850	251	3	21.78	38.45	PASS
EGPRS850	251	4	20.10	38.45	PASS
EGPRS1900	512	1	26.15	33.00	PASS
EGPRS1900	512	2	24.71	33.00	PASS
EGPRS1900	512	3	22.40	33.00	PASS
EGPRS1900	512	4	20.96	33.00	PASS
EGPRS19	661	1	25.79	33.00	PASS

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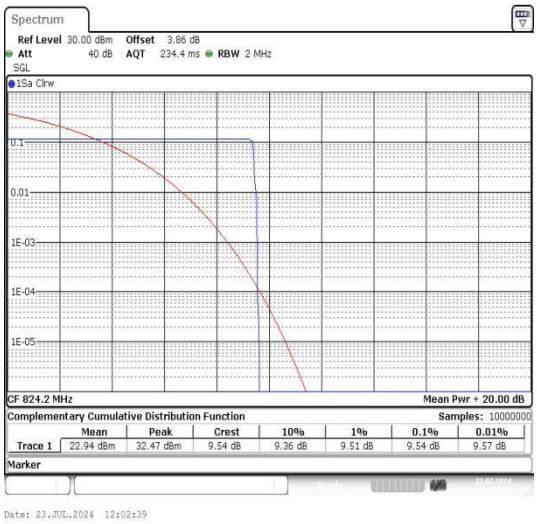
EGPRS1900	661	2	24.61	33.00	PASS
EGPRS1900	661	3	22.28	33.00	PASS
EGPRS1900	661	4	20.84	33.00	PASS
EGPRS1900	810	1	25.84	33.00	PASS
EGPRS1900	810	2	24.72	33.00	PASS
EGPRS1900	810	3	22.40	33.00	PASS
EGPRS1900	810	4	20.95	33.00	PASS

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

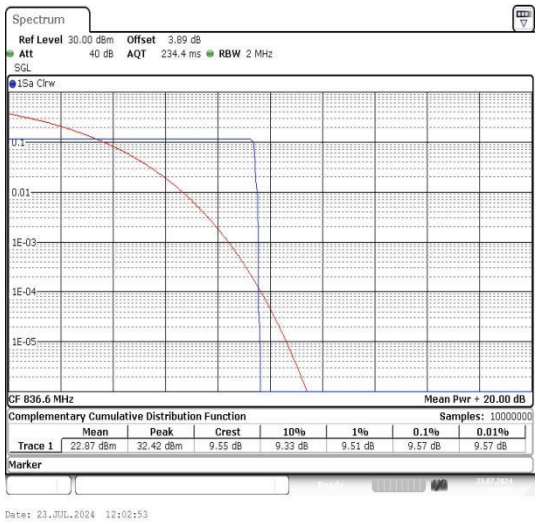
Test Result

Band	Channel	Result(dB)	Limit(dB)	Verdict
GSM850	128	9.54	13	PASS
GSM850	190	9.57	13	PASS
GSM850	251	9.57	13	PASS
GPRS850	128	9.77	13	PASS
GPRS850	190	9.74	13	PASS
GPRS850	251	9.74	13	PASS
EGPRS850	128	12.46	13	PASS
EGPRS850	190	12.61	13	PASS
EGPRS850	251	12.55	13	PASS
GSM1900	512	9.68	13	PASS
GSM1900	661	9.68	13	PASS
GSM1900	810	9.68	13	PASS
GPRS1900	512	9.94	13	PASS
GPRS1900	661	9.94	13	PASS
GPRS1900	810	9.86	13	PASS
EGPRS1900	512	12.49	13	PASS
EGPRS1900	661	12.46	13	PASS
EGPRS1900	810	12.49	13	PASS

Test Graphs



GSM850-128-5-PASS



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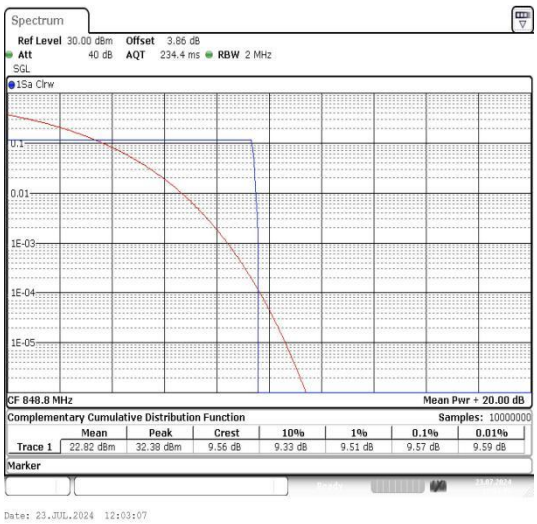

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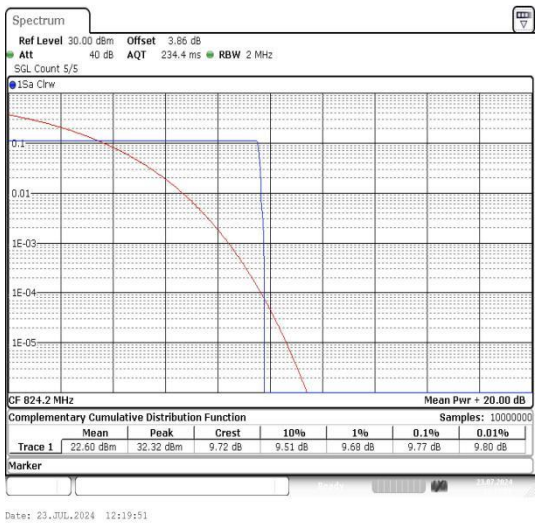

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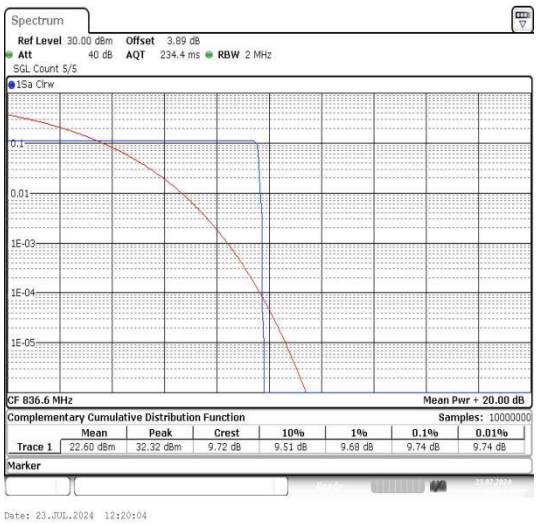

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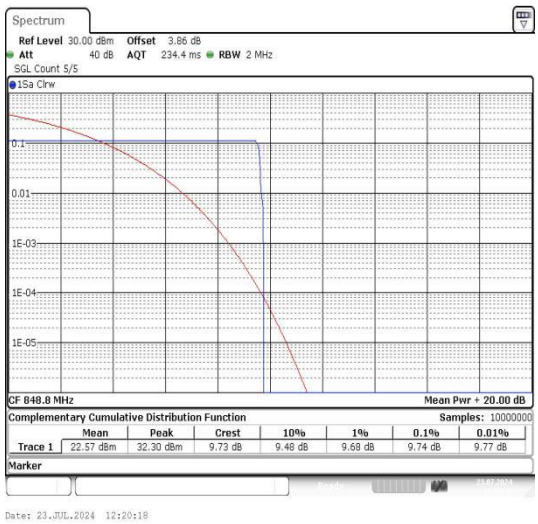
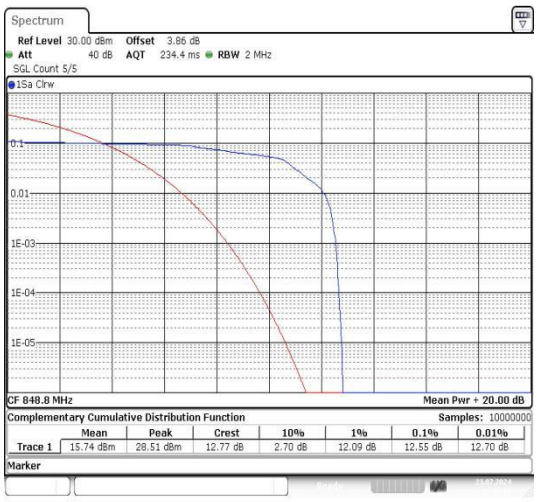


GPRS850-251-5-PASS

EGPRS850-128-8-PASS

EGPRS850-190-8-PASS



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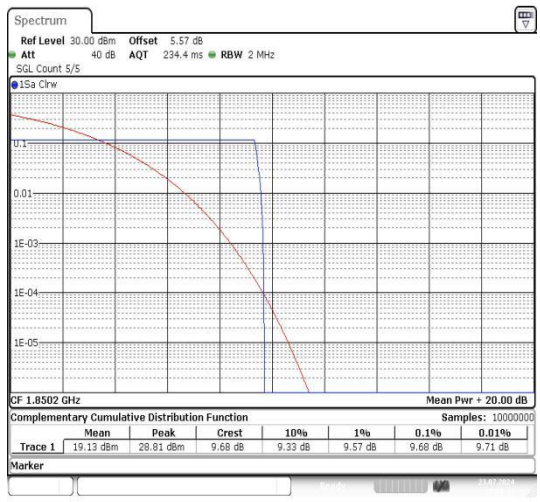
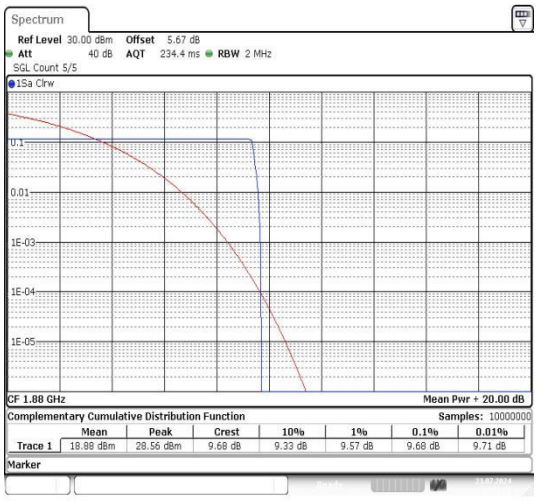


GSM1900-512-0-PASS



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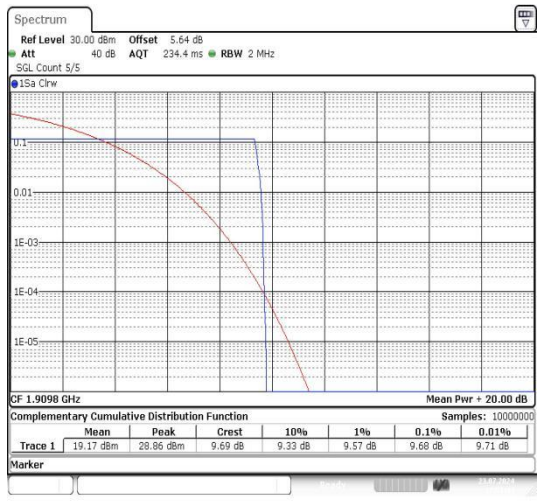

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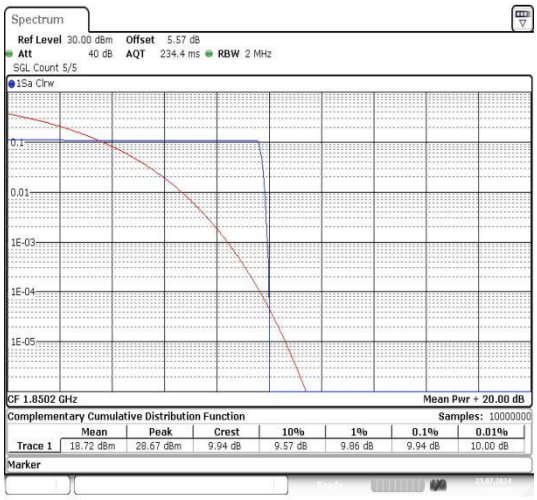

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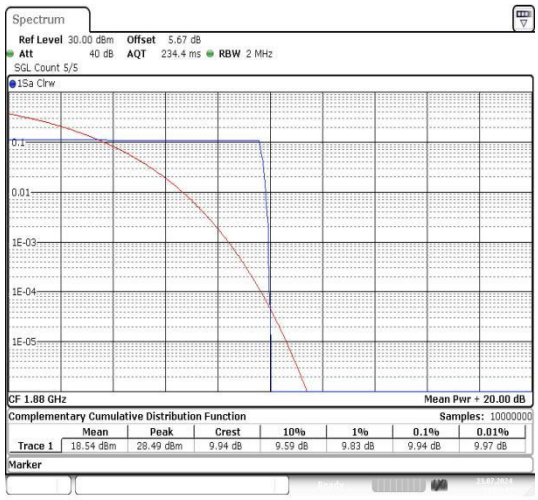

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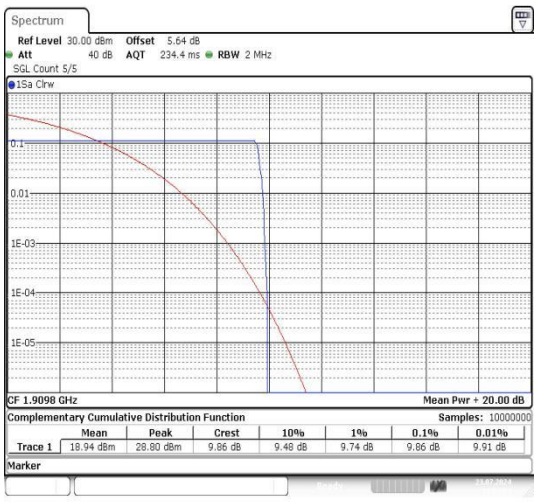

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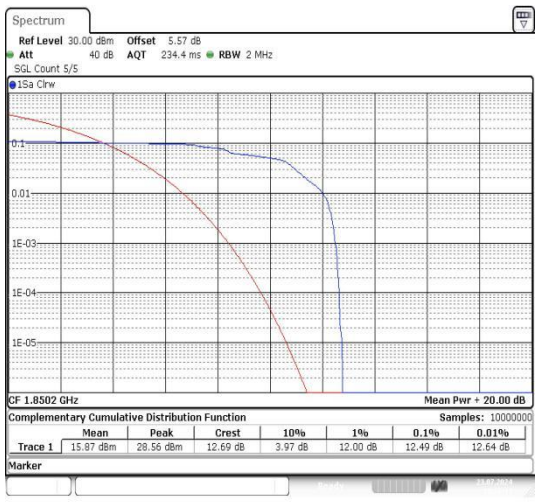

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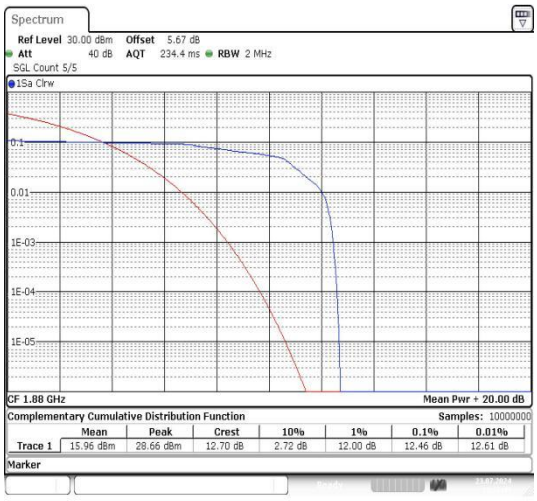

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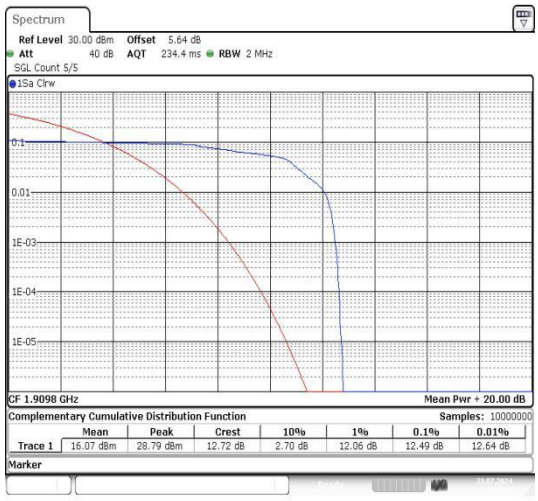


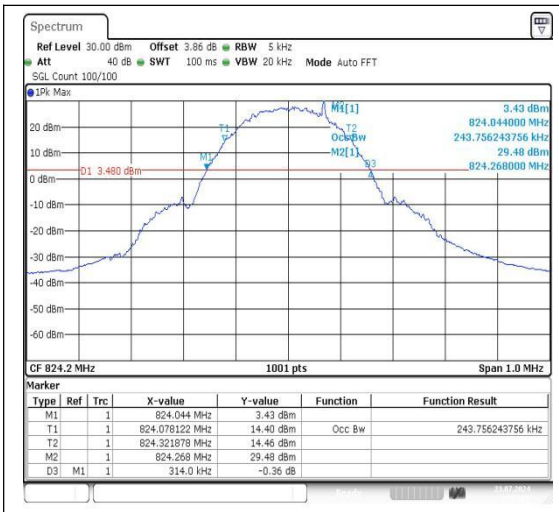
EGPRS1900-810-2-PASS

Appendix C: 26dB Bandwidth and Occupied Bandwidth

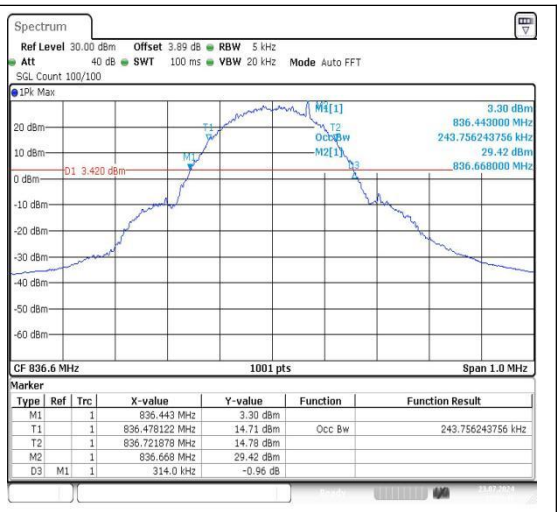
Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	0.244	0.31	---	PASS
GSM850	190	0.244	0.31	---	PASS
GSM850	251	0.245	0.32	---	PASS
GPRS850	128	0.245	0.32	---	PASS
GPRS850	190	0.244	0.32	---	PASS
GPRS850	251	0.246	0.32	---	PASS
EGPRS850	128	0.248	0.32	---	PASS
EGPRS850	190	0.247	0.33	---	PASS
EGPRS850	251	0.246	0.32	---	PASS
GSM1900	512	0.244	0.32	---	PASS
GSM1900	661	0.244	0.32	---	PASS
GSM1900	810	0.244	0.32	---	PASS
GPRS1900	512	0.244	0.32	---	PASS
GPRS1900	661	0.245	0.32	---	PASS
GPRS1900	810	0.244	0.32	---	PASS
EGPRS1900	512	0.25	0.33	---	PASS
EGPRS1900	661	0.249	0.32	---	PASS
EGPRS1900	810	0.248	0.32	---	PASS

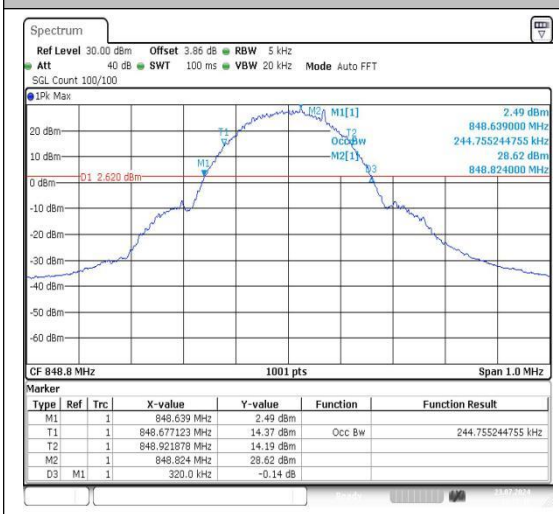
Test Graphs



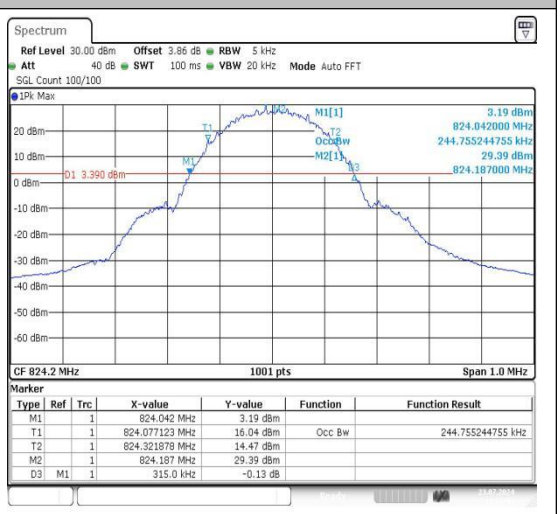
GSM850-128-5-PASS



GSM850-190-5-PASS



GSM850-251-5-PASS



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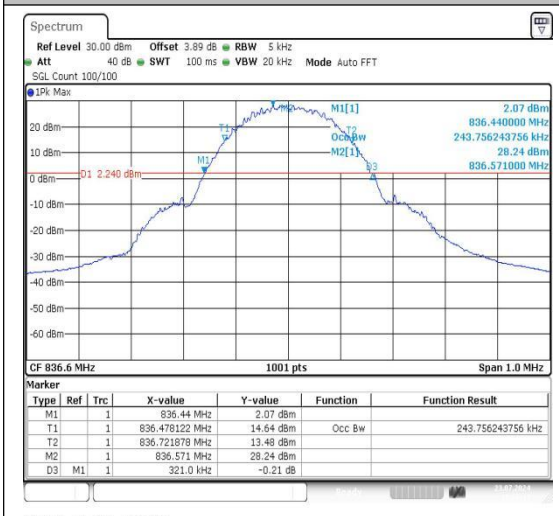

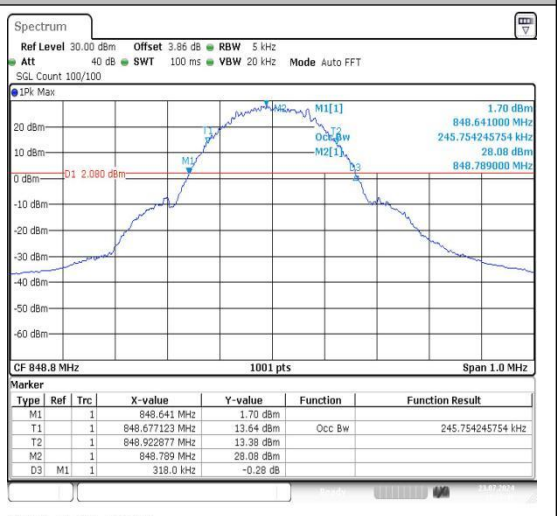

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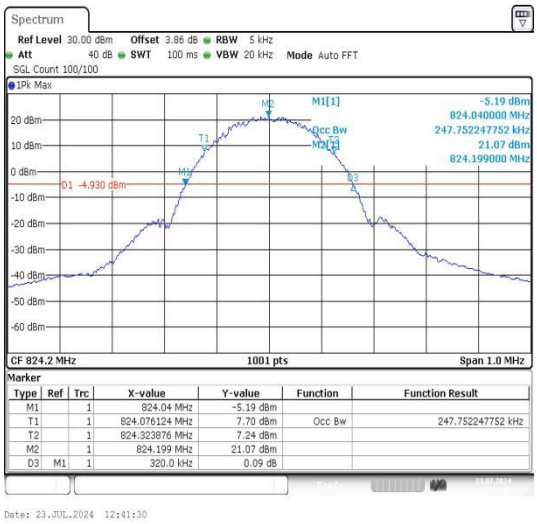

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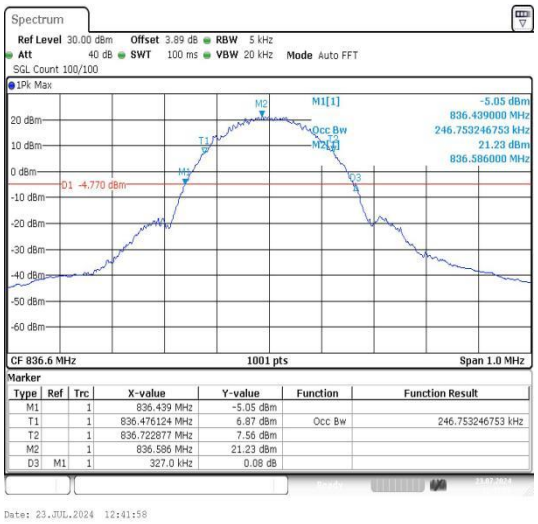
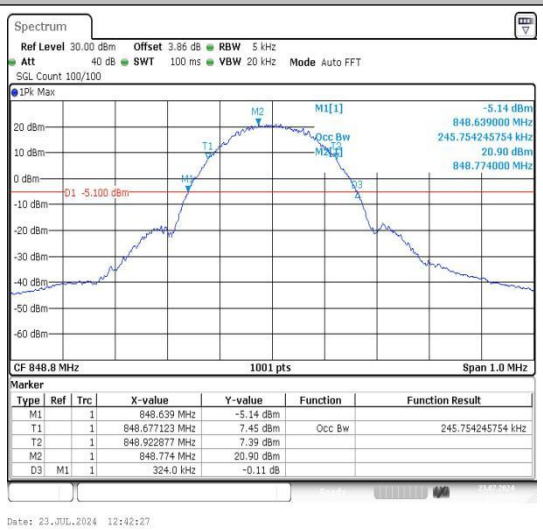


EGPRS850-128-8-PASS



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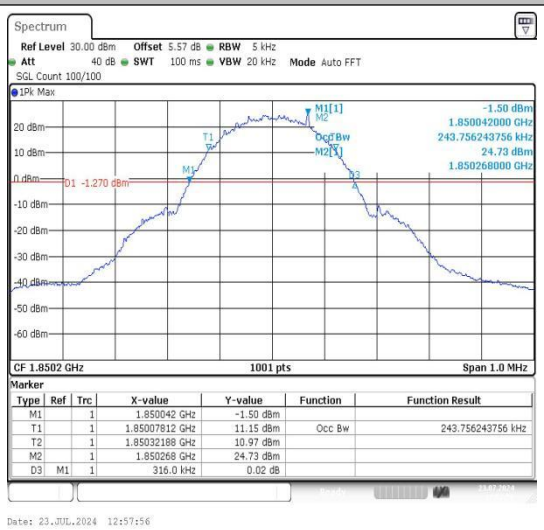
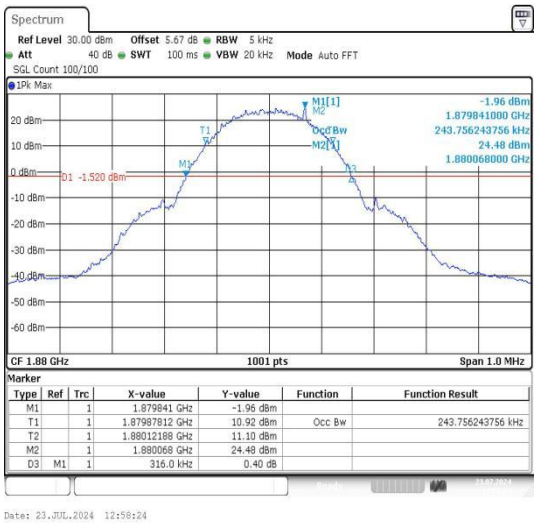
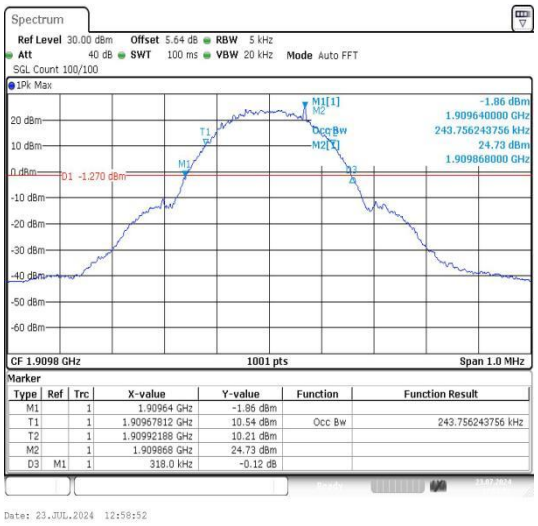


EGPRS850-251-8-PASS

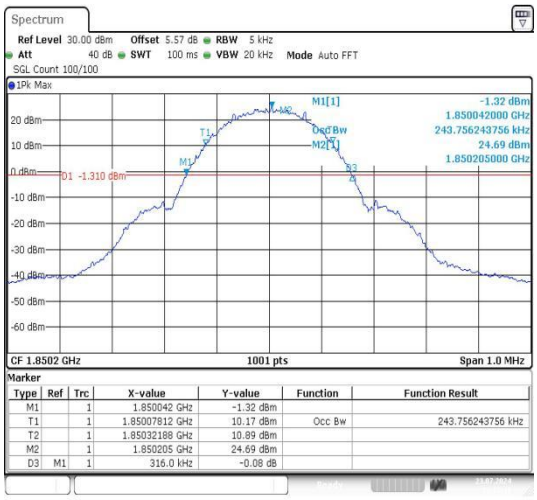


GSM1900-512-0-PASS



GSM1900-661-0-PASS

GSM1900-810-0-PASS



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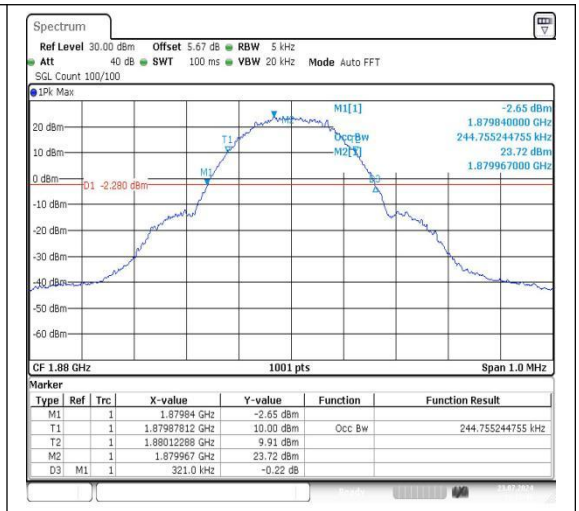

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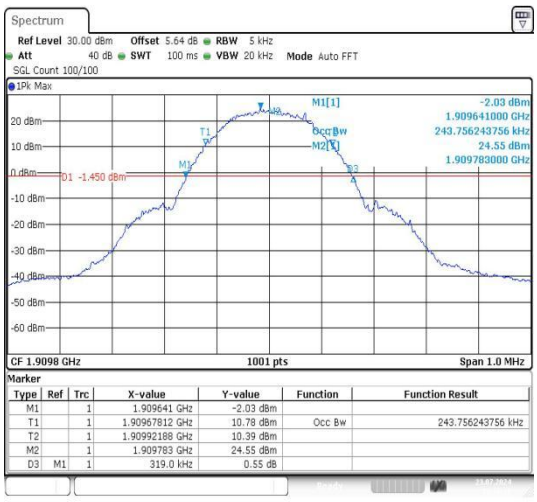
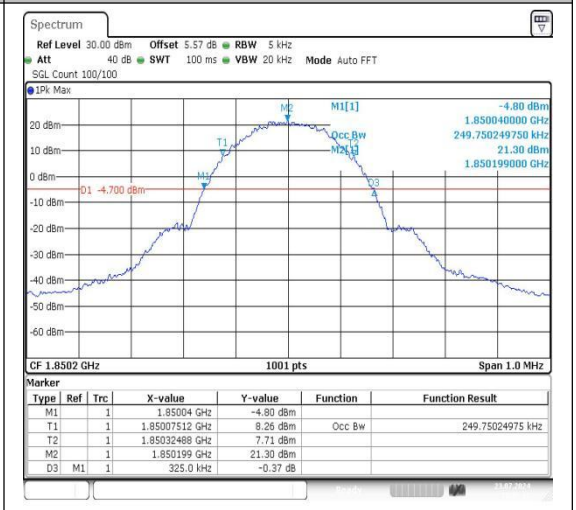


GPRS1900-810-0-PASS



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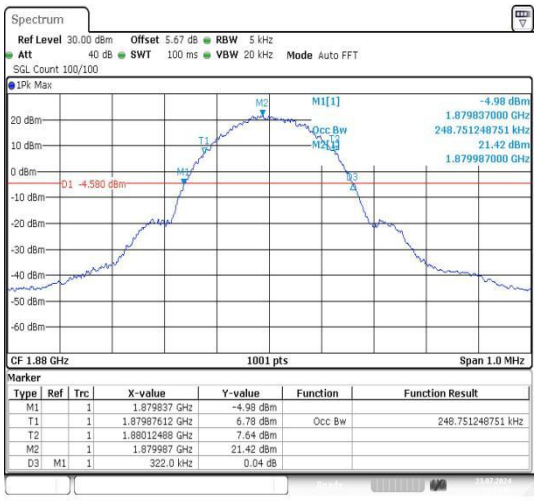

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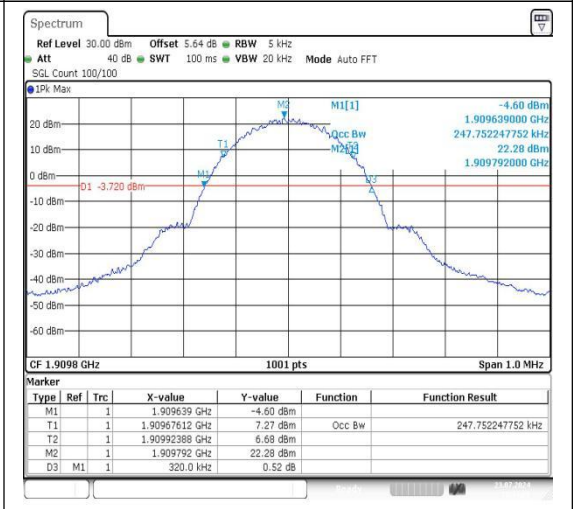


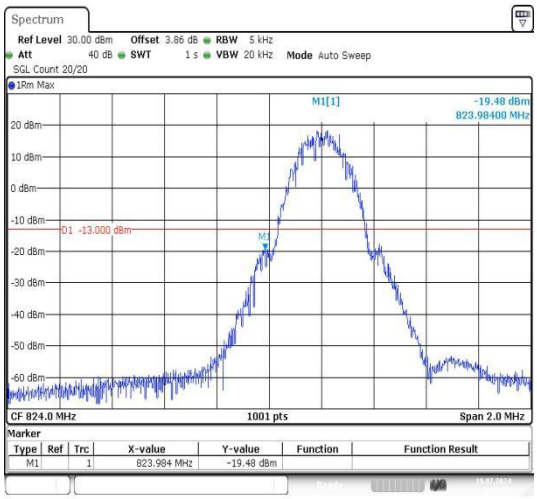
EGPRS1900-810-2-PASS

Appendix D: Band Edge

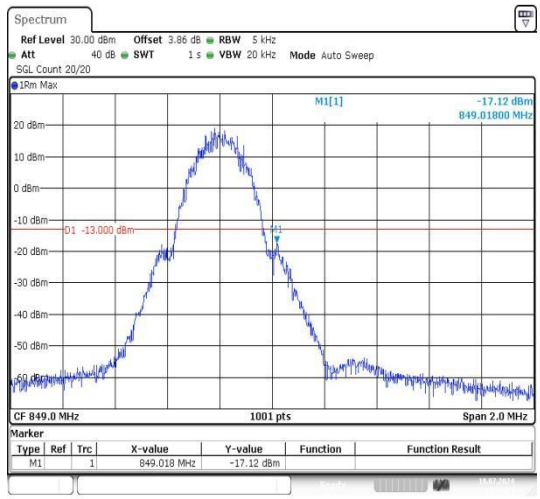
Test Result

Band	Channel	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	823.98	-11.39	-13	PASS
GSM850	251	849.02	-12.13	-13	PASS
GPRS850	128	823.99	-11.95	-13	PASS
GPRS850	251	849.01	-11.93	-13	PASS
EGPRS850	128	823.96	-24.95	-13	PASS
EGPRS850	251	849.02	-23.09	-13	PASS
GSM1900	512	1849.98	-15.07	-13	PASS
GSM1900	810	1910.02	-14.72	-13	PASS
GPRS1900	512	1849.98	-15.32	-13	PASS
GPRS1900	810	1910.01	-17.48	-13	PASS
EGPRS1900	512	1849.97	-22.30	-13	PASS
EGPRS1900	810	1910.01	-20.66	-13	PASS

Test Graphs



GSM850-128-5-PASS



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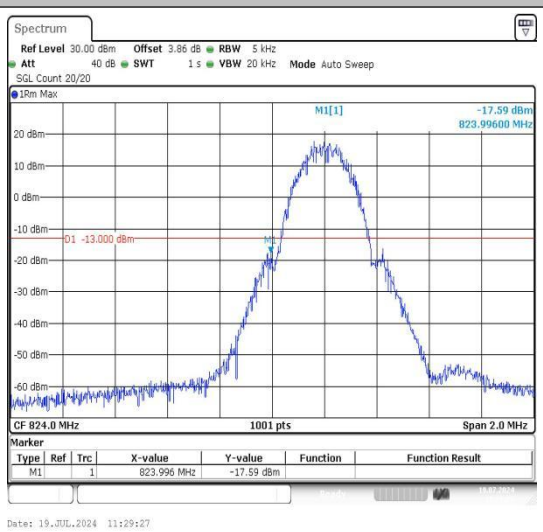

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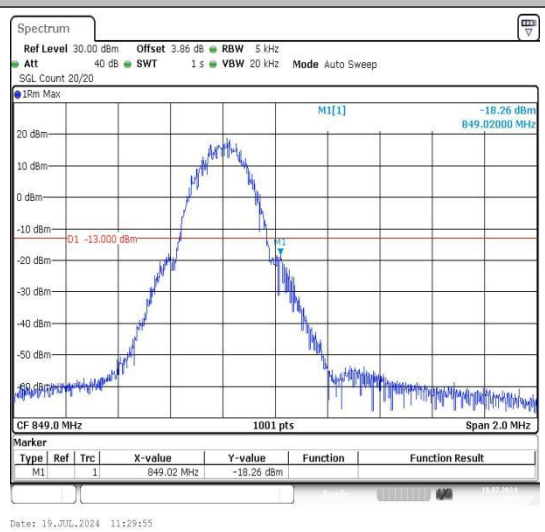

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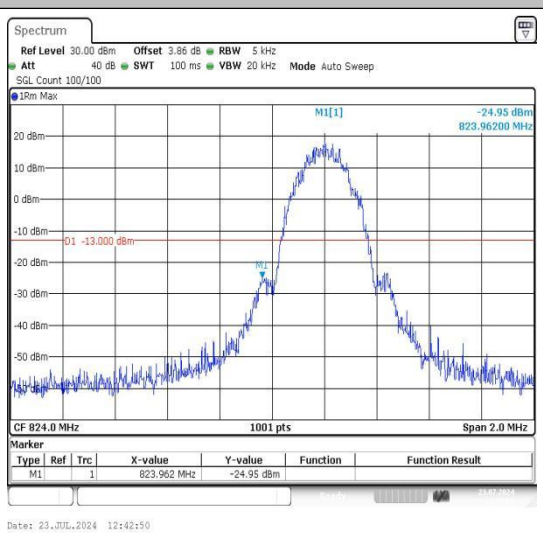
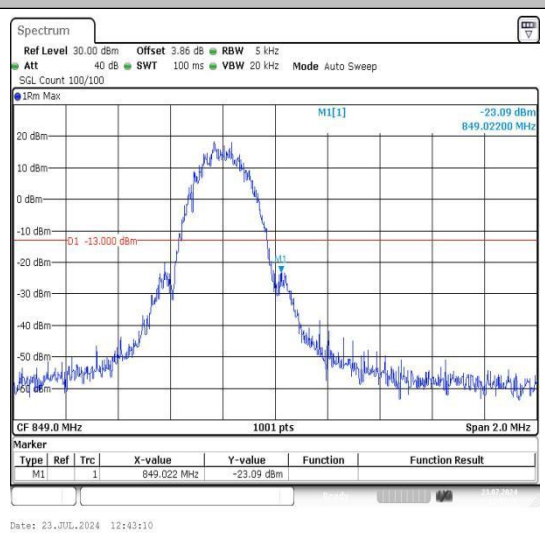


EGPRS850-128-8-PASS



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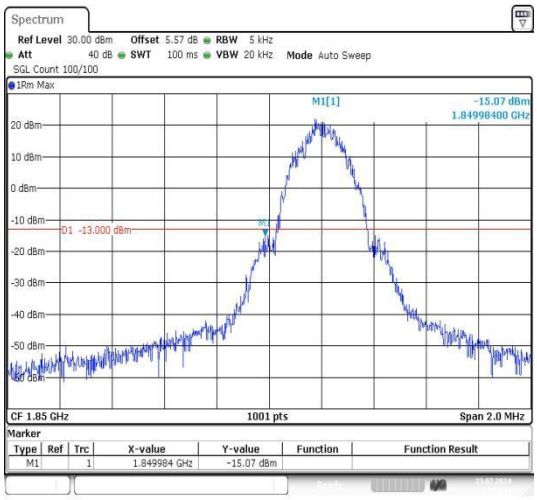
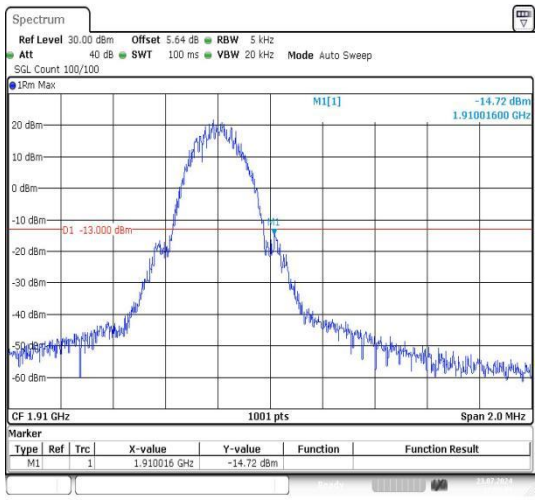
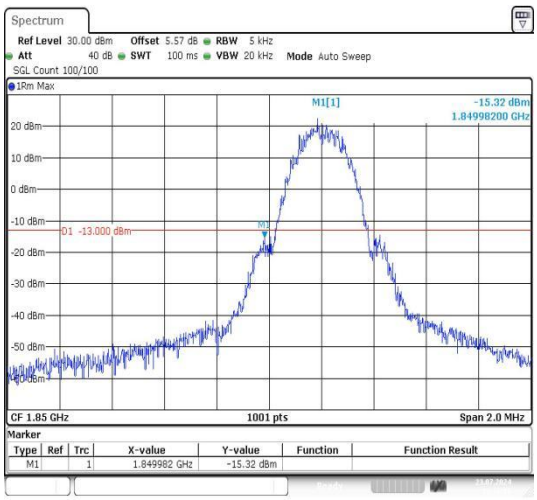


GSM1900-512-0-PASS



GSM1900-810-0-PASS



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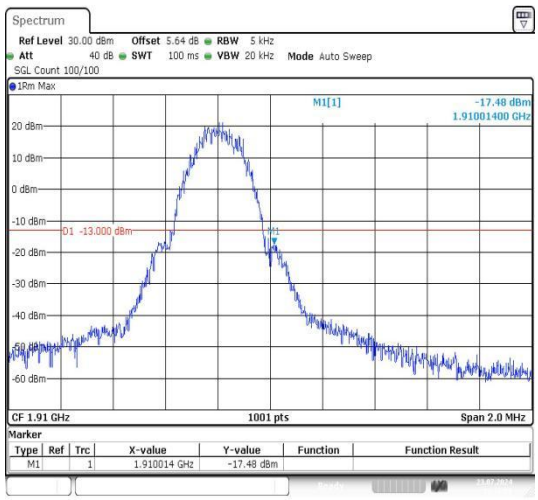

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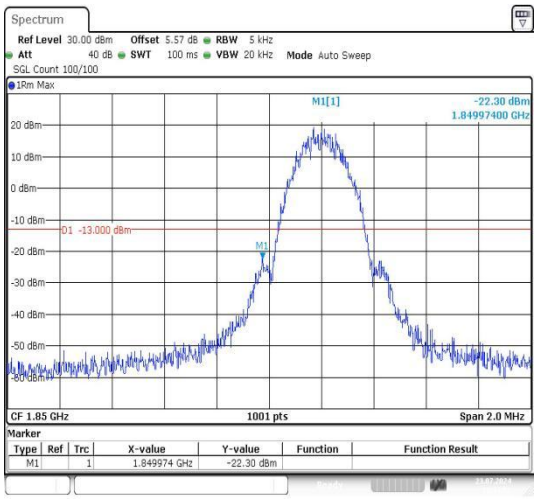
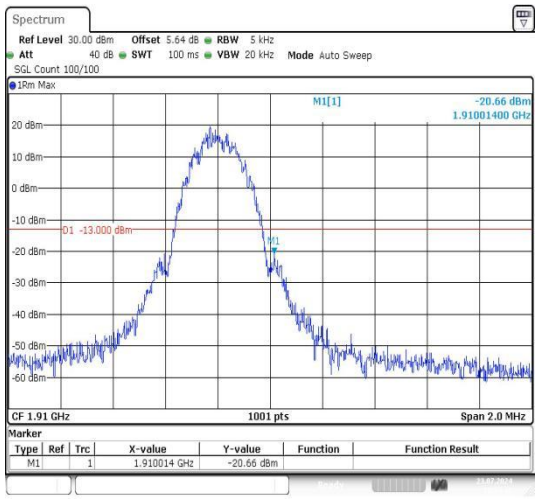


EGPRS1900-512-2-PASS



EGPRS1900-810-2-PASS

Appendix E: Conducted Spurious Emission

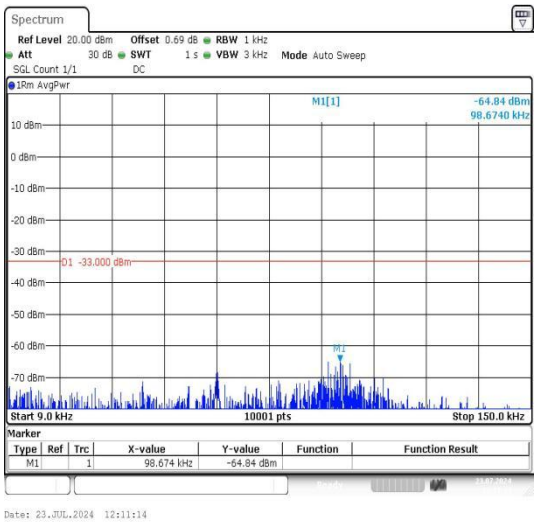
Test Result

Band	Channel	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	0.009~0.15MHz	0.1	-64.84	-33	PASS
GSM850	128	0.15~30MHz	0.2	-62.81	-23	PASS
GSM850	128	30~1000MHz	938.57	-51.74	-13	PASS
GSM850	128	1000~10000MHz	2472.5	-36.59	-13	PASS
GSM850	190	0.009~0.15MHz	0.1	-62.98	-33	PASS
GSM850	190	0.15~30MHz	0.32	-63.85	-23	PASS
GSM850	190	30~1000MHz	994.54	-51.9	-13	PASS
GSM850	190	1000~10000MHz	1673.33	-39.35	-13	PASS
GSM850	251	0.009~0.15MHz	0.1	-61.82	-33	PASS
GSM850	251	0.15~30MHz	0.15	-63.09	-23	PASS
GSM850	251	30~1000MHz	739.68	-51.65	-13	PASS
GSM850	251	1000~10000MHz	6646.26	-49.87	-13	PASS
GPRS850	128	0.009~0.15MHz	0.1	-65.19	-33	PASS
GPRS850	128	0.15~30MHz	0.17	-62.73	-23	PASS
GPRS850	128	30~1000MHz	988.33	-51.82	-13	PASS
GPRS850	128	1000~10000MHz	2473.1	-38.86	-13	PASS
GPRS850	190	0.009~0.15MHz	0.1	-68.35	-33	PASS
GPRS850	190	0.15~30MHz	0.16	-64.01	-23	PASS
GPRS850	190	30~1000MHz	962.98	-51.78	-13	PASS
GPRS850	190	1000~10000MHz	2510.6	-42.92	-13	PASS
GPRS850	251	0.009~0.15MHz	0.1	-66.15	-33	PASS
GPRS850	251	0.15~30MHz	0.16	-63.61	-23	PASS
GPRS850	251	30~1000MHz	975.85	-51.63	-13	PASS
GPRS850	251	1000~10000MHz	1697.63	-35.3	-13	PASS
EGPRS850	128	0.009~0.15MHz	0.1	-65.67	-33	PASS
EGPRS850	128	0.15~30MHz	0.16	-63.67	-23	PASS
EGPRS850	128	30~1000MHz	965.79	-52.08	-13	PASS
EGPRS850	128	1000~10000MHz	6651.06	-49.8	-13	PASS
EGPRS850	190	0.009~0.15MHz	0.09	-65.35	-33	PASS
EGPRS850	190	0.15~30MHz	0.16	-62.09	-23	PASS
EGPRS850	190	30~1000MHz	970.61	-51.77	-13	PASS
EGPRS850	190	1000~10000MHz	6564.06	-49.7	-13	PASS
EGPRS850	251	0.009~0.15MHz	0.01	-65.11	-33	PASS
EGPRS850	251	0.15~30MHz	0.18	-64.35	-23	PASS
EGPRS850	251	30~1000MHz	990.24	-51.95	-13	PASS

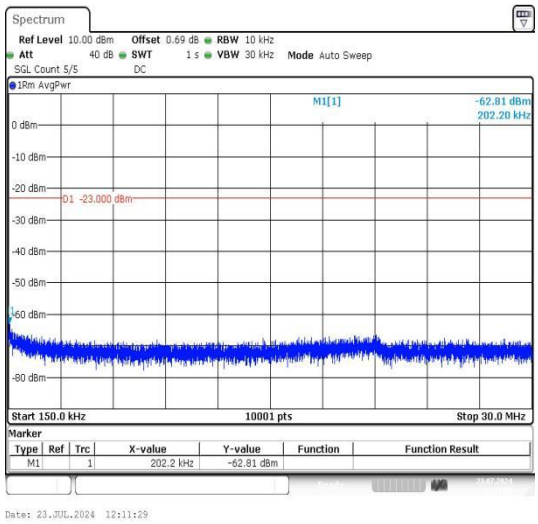
EGPRS850	251	1000~10000MHz	6612.96	-49.95	-13	PASS
GSM1900	512	0.009~0.15MHz	0.02	-74.65	-43	PASS
GSM1900	512	0.15~30MHz	0.18	-63.65	-33	PASS
GSM1900	512	30~1000MHz	948.12	-48.72	-13	PASS
GSM1900	512	1000~3000MHz	2975.73	-37.6	-13	PASS
GSM1900	512	3000~18000MHz	6614.13	-47.16	-13	PASS
GSM1900	661	0.009~0.15MHz	0.02	-74.41	-43	PASS
GSM1900	661	0.15~30MHz	0.18	-64.08	-33	PASS
GSM1900	661	30~1000MHz	992.94	-48.82	-13	PASS
GSM1900	661	1000~3000MHz	2919.6	-37.8	-13	PASS
GSM1900	661	3000~18000MHz	5640.16	-44.98	-13	PASS
GSM1900	810	0.009~0.15MHz	0.01	-74.91	-43	PASS
GSM1900	810	0.15~30MHz	0.15	-62.56	-33	PASS
GSM1900	810	30~1000MHz	916.11	-48.69	-13	PASS
GSM1900	810	1000~3000MHz	2924.2	-37.76	-13	PASS
GSM1900	810	3000~18000MHz	3819.72	-35.79	-13	PASS
GPRS1900	512	0.009~0.15MHz	0.01	-74.16	-43	PASS
GPRS1900	512	0.15~30MHz	0.16	-63.4	-33	PASS
GPRS1900	512	30~1000MHz	996.14	-48.83	-13	PASS
GPRS1900	512	1000~3000MHz	2941.87	-37.71	-13	PASS
GPRS1900	512	3000~18000MHz	3700.23	-34.56	-13	PASS
GPRS1900	661	0.009~0.15MHz	0.01	-75.41	-43	PASS
GPRS1900	661	0.15~30MHz	0.18	-64.7	-33	PASS
GPRS1900	661	30~1000MHz	993.91	-48.77	-13	PASS
GPRS1900	661	1000~3000MHz	2964.4	-37.89	-13	PASS
GPRS1900	661	3000~18000MHz	3760.22	-35.7	-13	PASS
GPRS1900	810	0.009~0.15MHz	0.01	-73.69	-43	PASS
GPRS1900	810	0.15~30MHz	0.17	-63.27	-33	PASS
GPRS1900	810	30~1000MHz	988.54	-48.73	-13	PASS
GPRS1900	810	1000~3000MHz	2935.8	-37.8	-13	PASS
GPRS1900	810	3000~18000MHz	5729.66	-45.41	-13	PASS
EGPRS1900	512	0.009~0.15MHz	0.05	-69.12	-43	PASS
EGPRS1900	512	0.15~30MHz	0.15	-64.05	-33	PASS
EGPRS1900	512	30~1000MHz	978	-48.71	-13	PASS
EGPRS1900	512	1000~3000MHz	2952.53	-37.77	-13	PASS
EGPRS1900	512	3000~18000MHz	5550.66	-46.17	-13	PASS
EGPRS1900	661	0.009~0.15MHz	0.05	-69.46	-43	PASS
EGPRS1900	661	0.15~30MHz	0.18	-63.42	-33	PASS
EGPRS1900	661	30~1000MHz	987.73	-48.66	-13	PASS
EGPRS1900	661	1000~3000MHz	2949	-37.85	-13	PASS
EGPRS1900	661	3000~18000MHz	3759.72	-39.47	-13	PASS
EGPRS1900	810	0.009~0.15MHz	0.05	-69.94	-43	PASS

EGPRS1900	810	0.15~30MHz	0.18	-63.77	-33	PASS
EGPRS1900	810	30~1000MHz	968.4	-48.69	-13	PASS
EGPRS1900	810	1000~3000MHz	2939.2	-37.72	-13	PASS
EGPRS1900	810	3000~18000MHz	6598.13	-47.12	-13	PASS

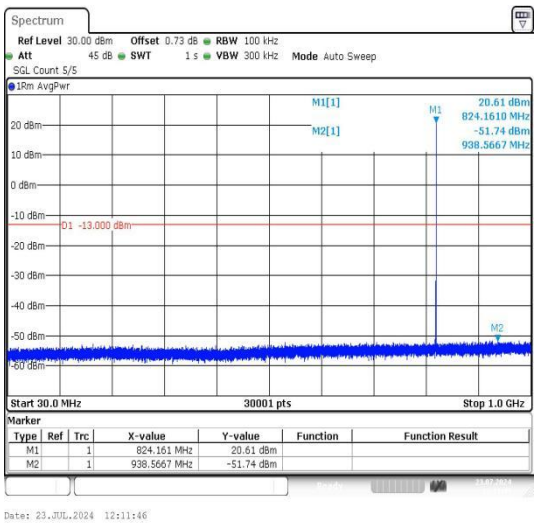
Test Graphs



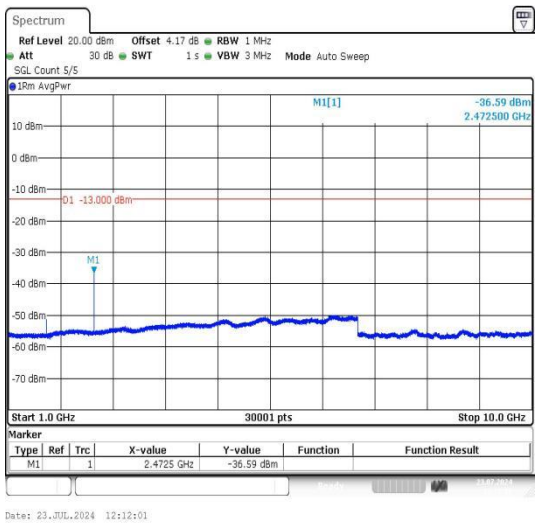
GSM850-128-5-0.009~0.15MHz-PASS



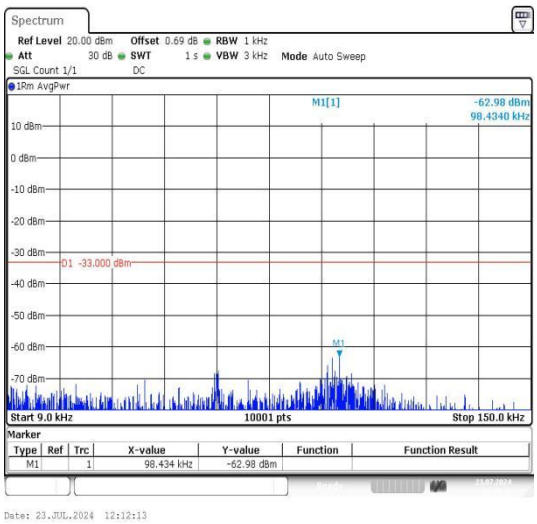
GSM850-128-5-0.15~30MHz-PASS



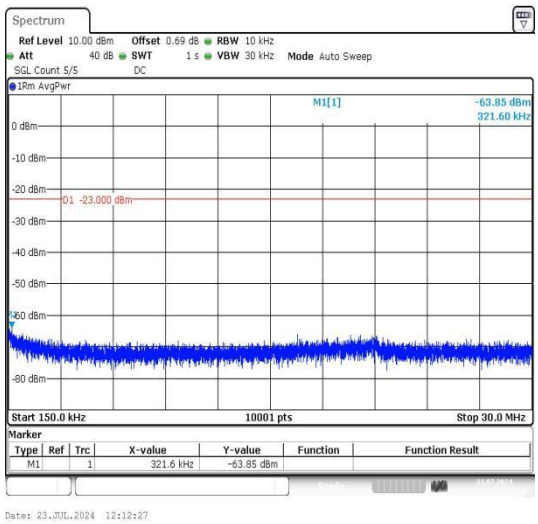
GSM850-128-5-30~1000MHz-PASS



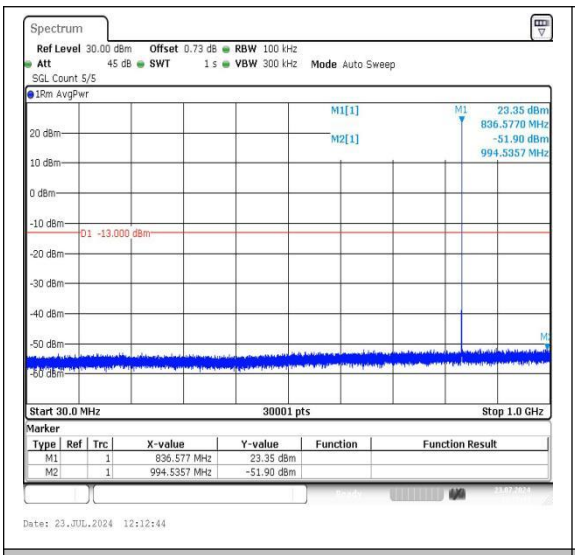
GSM850-128-5-1000~10000MHz-PASS



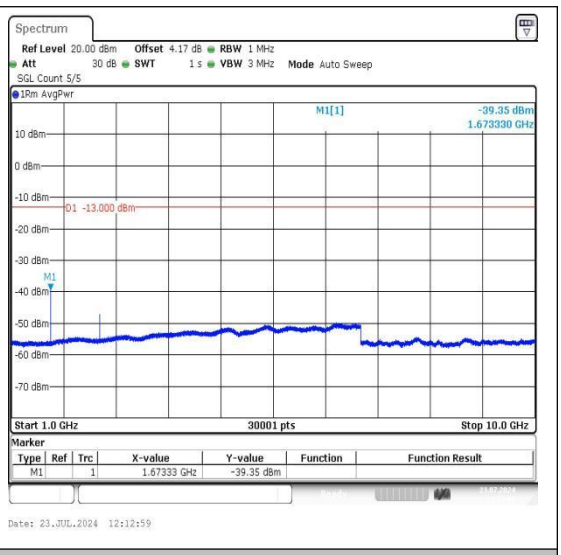
GSM850-190-5-0.009~0.15MHz-PASS



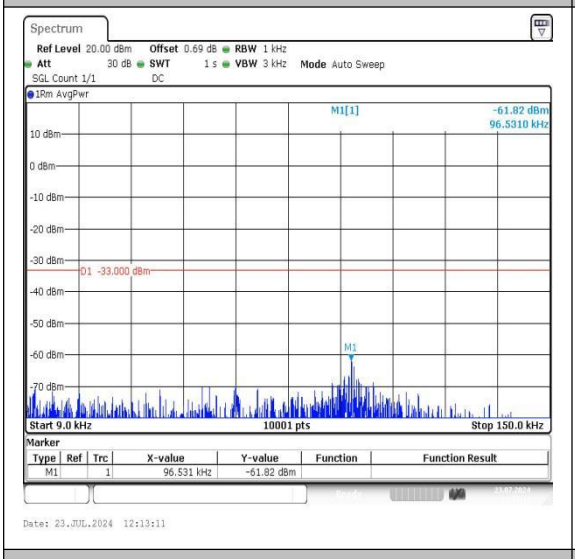
GSM850-190-5-0.15~30MHz-PASS



GSM850-190-5-30~1000MHz-PASS



GSM850-190-5-1000~10000MHz-PASS



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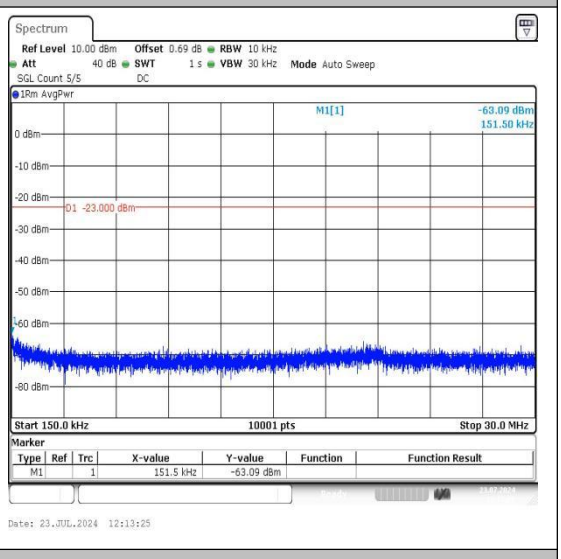

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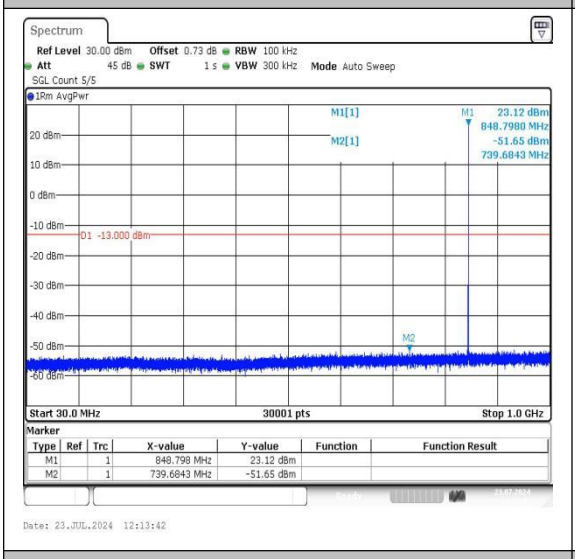
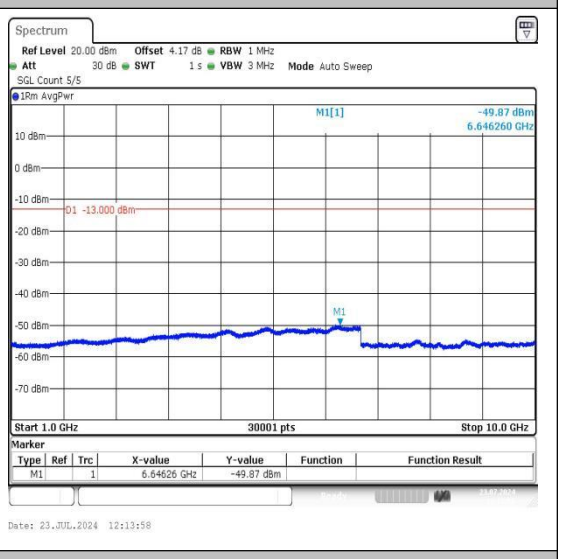
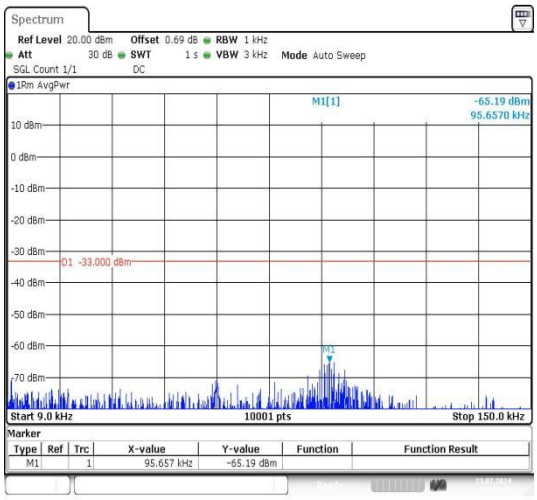


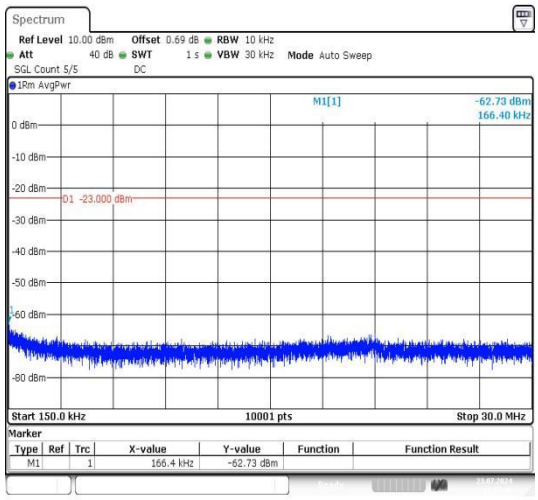
GSM850-251-5-30~1000MHz-PASS



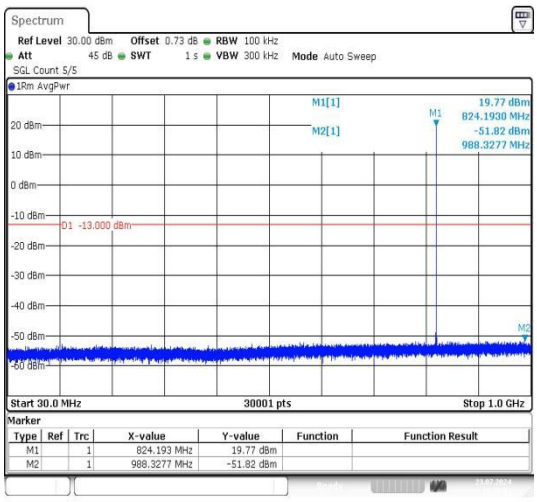
GSM850-251-5-1000~10000MHz-PASS



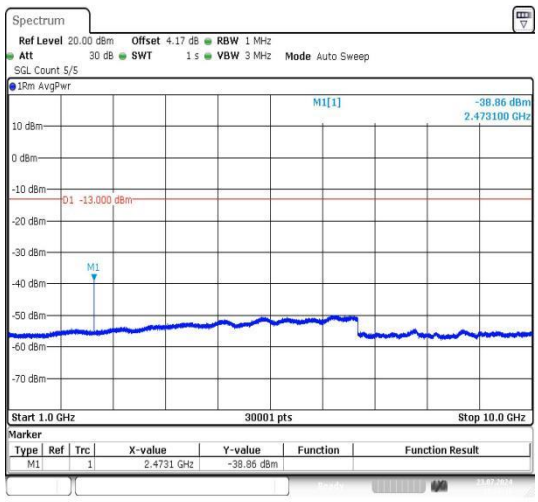
GPRS850-128-5-0.009~0.15MHz-PASS



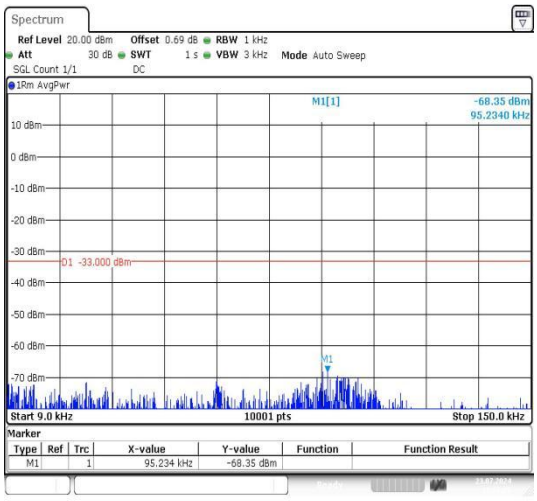
GPRS850-128-5-0.15~30MHz-PASS



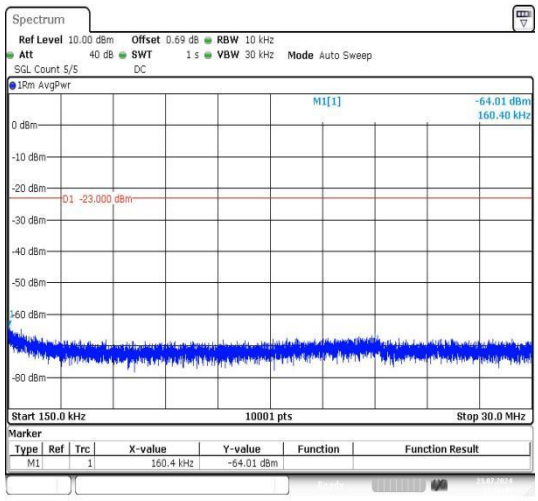
GPRS850-128-5-30~1000MHz-PASS



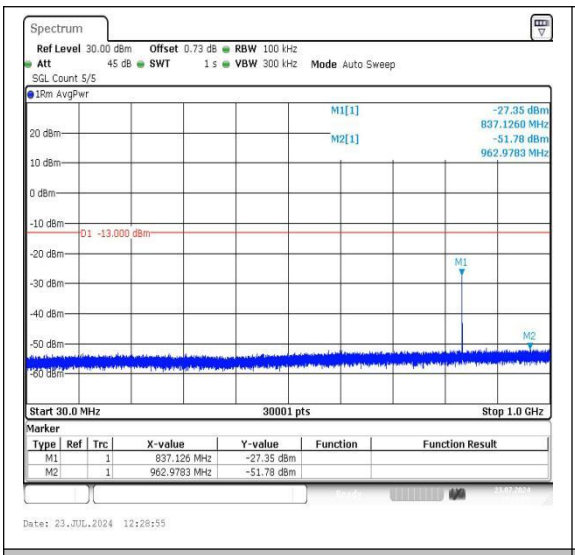
GPRS850-128-5-1000~10000MHz-PASS



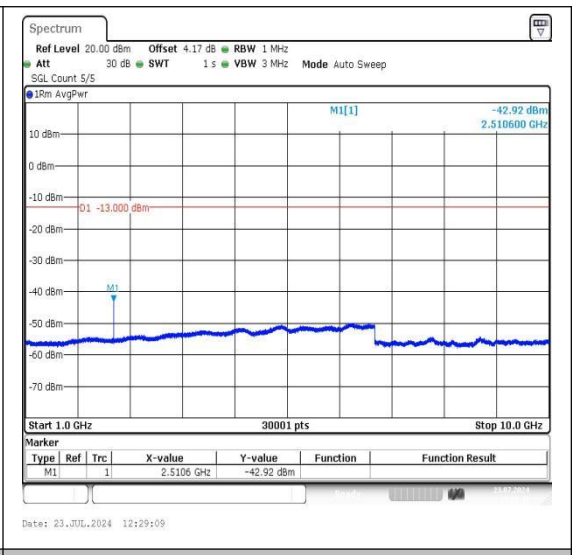
GPRS850-190-5-0.009~0.15MHz-PASS



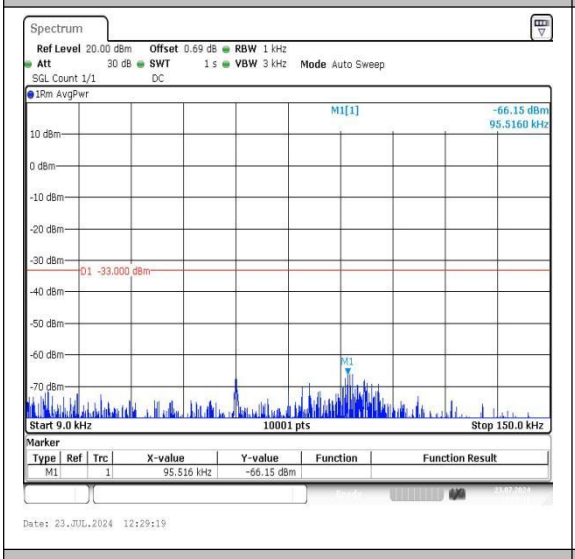
GPRS850-190-5-0.15~30MHz-PASS



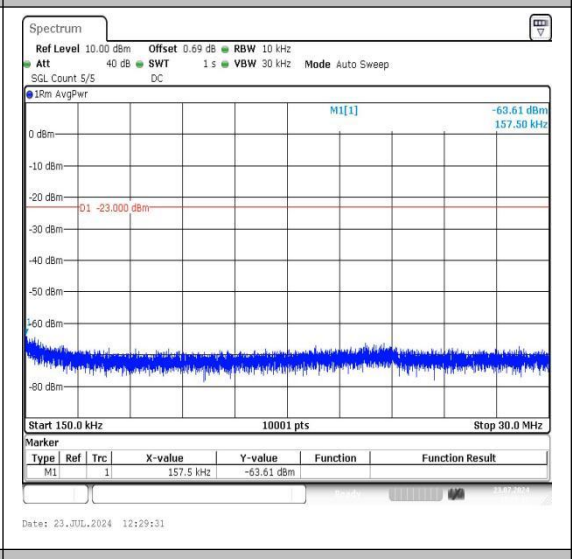
GPRS850-190-5-30~1000MHz-PASS



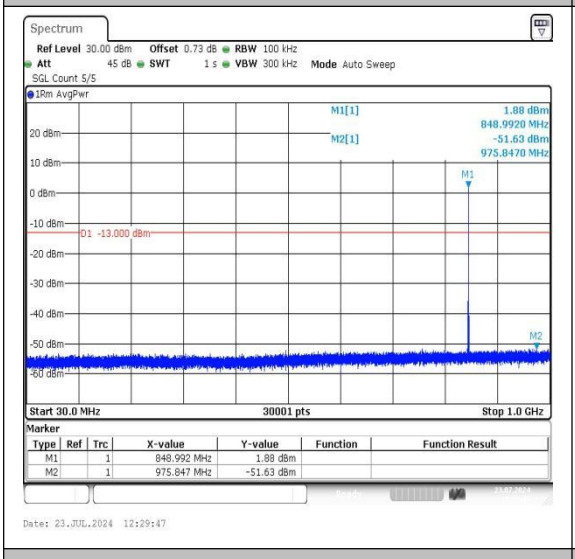
GPRS850-190-5-1000~10000MHz-PASS



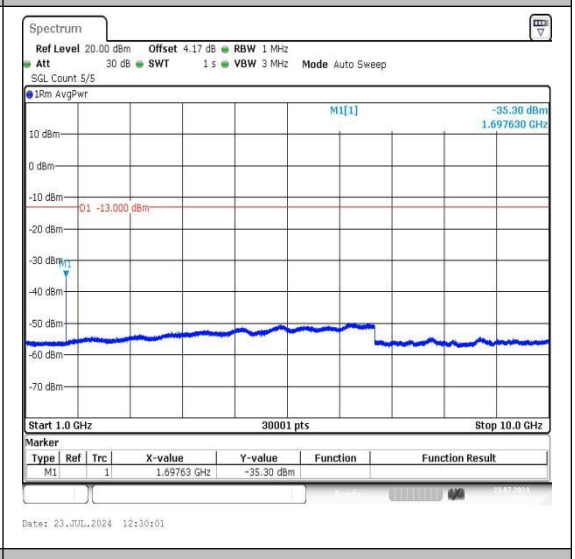
GPRS850-251-5-0.009~0.15MHz-PASS



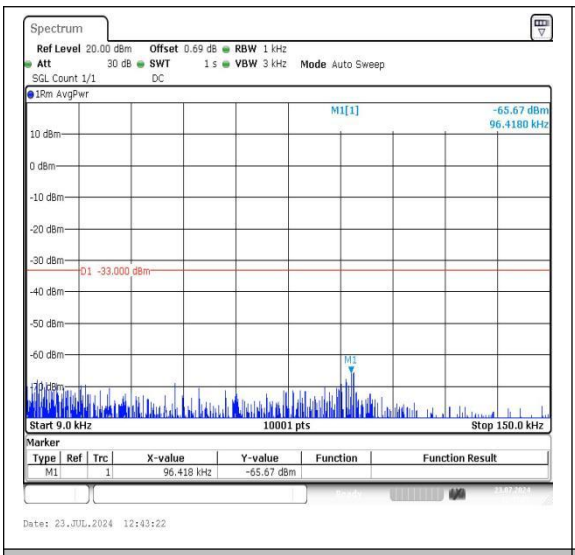
GPRS850-251-5-0.15~30MHz-PASS



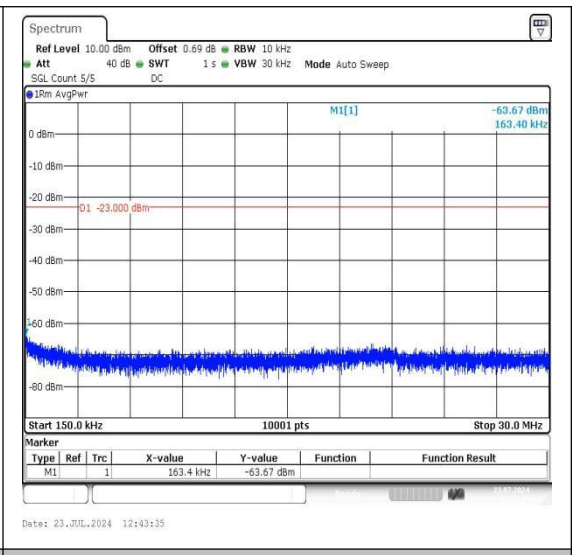
GPRS850-251-5-30~1000MHz-PASS



GPRS850-251-5-1000~10000MHz-PASS



EGPRS850-128-8-0.009~0.15MHz-PASS



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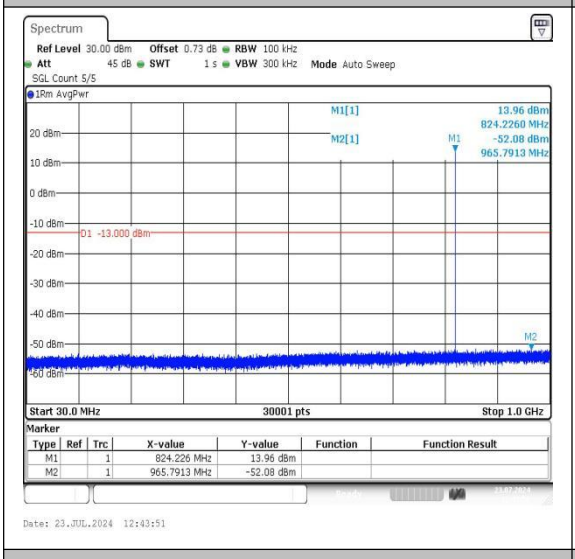
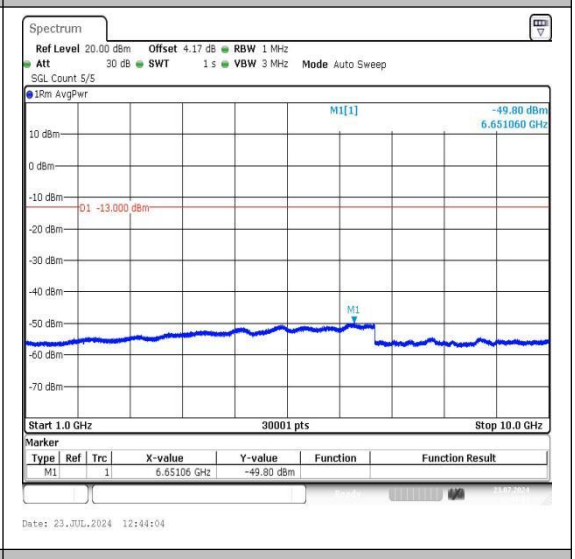
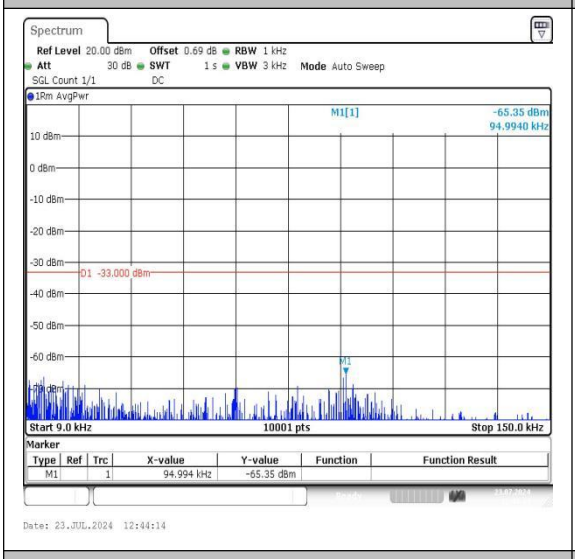


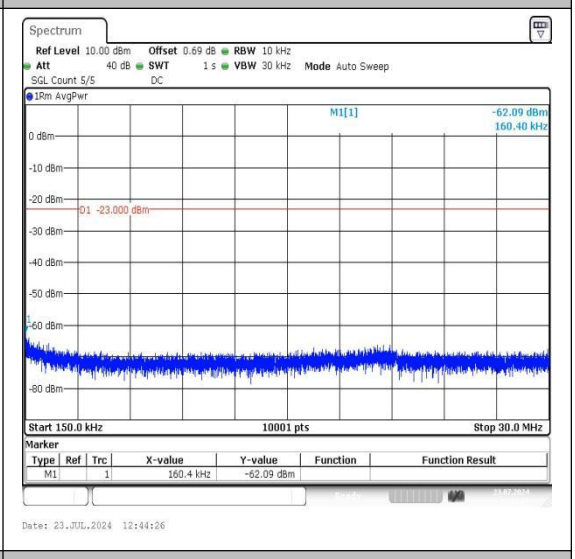
EGPRS850-128-8-30~1000MHz-PASS



EGPRS850-128-8-1000~10000MHz-PASS



EGPRS850-190-8-0.009~0.15MHz-PASS



EGPRS850-190-8-0.15~30MHz-PASS