

Appendix A: Effective (Isotropic) Radiated Power Output Data

(No trigger SAR Sensor)

Test Band	Test Mode	Test Channel	Max. Conducted Power[dBm]	ERP[dBm]	EIRP[dBm]	Limit[dBm]	Verdict
GSM850	GSM(Voice)	LCH	33.45	31.29	/	38.5	PASS
		MCH	33.37	31.21	/	38.5	PASS
		HCH	33.33	31.17	/	38.5	PASS
	GSM/TM1	LCH	33.43	31.27	/	38.5	PASS
		MCH	33.39	31.23	/	38.5	PASS
		HCH	33.32	31.16	/	38.5	PASS
	GSM/TM2	LCH	26.50	24.34	/	38.5	PASS
		MCH	26.30	24.14	/	38.5	PASS
		HCH	26.28	24.12	/	38.5	PASS
GSM1900	GSM(Voice)	LCH	30.25	/	28.74	33	PASS
		MCH	30.39	/	28.88	33	PASS
		HCH	30.40	/	28.89	33	PASS
	GSM/TM1	LCH	30.25	/	28.74	33	PASS
		MCH	30.37	/	28.86	33	PASS
		HCH	30.38	/	28.87	33	PASS
	GSM/TM2	LCH	25.43	/	23.92	33	PASS
		MCH	25.86	/	24.35	33	PASS
		HCH	25.97	/	24.46	33	PASS

(Trigger SAR Sensor)

Test Band	Test Mode	Test Channel	Max. Conducted Power[dBm]	ERP[dBm]	EIRP[dBm]	Limit[dBm]	Verdict
GSM850	GSM(Voice)	LCH	25.48	23.32	/	38.5	PASS
		MCH	25.33	23.17	/	38.5	PASS
		HCH	25.29	23.13	/	38.5	PASS
	GSM/TM1	LCH	25.45	23.29	/	38.5	PASS
		MCH	25.39	23.23	/	38.5	PASS
		HCH	25.33	23.17	/	38.5	PASS
	GSM/TM2	LCH	18.85	16.69	/	38.5	PASS
		MCH	18.71	16.55	/	38.5	PASS
		HCH	18.61	16.45	/	38.5	PASS
GSM1900	GSM(Voice)	LCH	22.19	/	20.68	33	PASS
		MCH	22.34	/	20.83	33	PASS
		HCH	22.39	/	20.88	33	PASS
	GSM/TM1	LCH	22.19	/	20.68	33	PASS
		MCH	22.34	/	20.83	33	PASS
		HCH	22.39	/	20.88	33	PASS
	GSM/TM2	LCH	18.02	/	16.51	33	PASS
		MCH	17.98	/	16.47	33	PASS
		HCH	17.92	/	16.41	33	PASS

Note 1:

a, For getting the ERP (Efficient Radiated Power) or EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

$$\text{ERP[dBm]} = \text{SGP[dBm]} - \text{Cable Loss[dB]} + \text{Gain[dBd]} - 2.15$$

$$\text{EIRP[dBm]} = \text{SGP[dBm]} - \text{Cable Loss[dB]} + \text{Gain[dBd]}$$

b, SGP=Signal Generator Level

c, Antenna gain of GSM 850 is -0.01dBi; Antenna gain of GSM 1900 is -1.51dBi;

Note 2:

$$\text{SET Span} = 1.5 * \text{OBW}$$

SET RBW=1% of the OBW, not to exceed 1MHz

$$\text{SET VBW} \geq 3 * \text{RBW}$$

SET SWEEP time=auto couple

Detector: RMS

Test Result (No trigger SAR Sensor)

Band	Channel	Conducted Power(dBm)	Limit(dBm)	Verdict
GSM850	128	33.45	38.5	PASS
GSM850	190	33.37	38.5	PASS
GSM850	251	33.33	38.5	PASS
GSM1900	512	30.25	33	PASS
GSM1900	661	30.39	33	PASS
GSM1900	810	30.40	33	PASS

Band	Channel	Slot	Conducted Power(dBm)	Limit(dBm)	Verdict
GPRS850	128	1	33.43	38.5	PASS
GPRS850	128	2	32.80	38.5	PASS
GPRS850	128	3	31.18	38.5	PASS
GPRS850	128	4	30.19	38.5	PASS
GPRS850	190	1	33.39	38.5	PASS
GPRS850	190	2	32.75	38.5	PASS
GPRS850	190	3	31.11	38.5	PASS
GPRS850	190	4	30.11	38.5	PASS
GPRS850	251	1	33.32	38.5	PASS
GPRS850	251	2	32.70	38.5	PASS
GPRS850	251	3	31.05	38.5	PASS
GPRS850	251	4	30.04	38.5	PASS
GPRS1900	512	1	30.25	33	PASS
GPRS1900	512	2	29.52	33	PASS
GPRS1900	512	3	27.76	33	PASS

GPRS19 00	512	4	26.71	33	PASS
GPRS19 00	661	1	30.37	33	PASS
GPRS19 00	661	2	29.66	33	PASS
GPRS19 00	661	3	27.93	33	PASS
GPRS19 00	661	4	26.89	33	PASS
GPRS19 00	810	1	30.38	33	PASS
GPRS19 00	810	2	29.70	33	PASS
GPRS19 00	810	3	28.02	33	PASS
GPRS19 00	810	4	26.95	33	PASS

Band	Channel	Slot	Conducted Power(dBm)	Limit(dBm)	Verdict
EGPRS8 50	128	1	26.50	38.5	PASS
EGPRS8 50	128	2	25.47	38.5	PASS
EGPRS8 50	128	3	23.53	38.5	PASS
EGPRS8 50	128	4	22.41	38.5	PASS
EGPRS8 50	190	1	26.30	38.5	PASS
EGPRS8 50	190	2	25.34	38.5	PASS
EGPRS8 50	190	3	23.37	38.5	PASS
EGPRS8 50	190	4	22.30	38.5	PASS
EGPRS8 50	251	1	26.28	38.5	PASS
EGPRS8 50	251	2	25.30	38.5	PASS
EGPRS8 50	251	3	23.32	38.5	PASS

EGPRS8 50	251	4	22.24	38.5	PASS
EGPRS1 900	512	1	25.43	33	PASS
EGPRS1 900	512	2	24.81	33	PASS
EGPRS1 900	512	3	22.97	33	PASS
EGPRS1 900	512	4	21.97	33	PASS
EGPRS1 900	661	1	25.86	33	PASS
EGPRS1 900	661	2	25.00	33	PASS
EGPRS1 900	661	3	23.09	33	PASS
EGPRS1 900	661	4	22.05	33	PASS
EGPRS1 900	810	1	25.97	33	PASS
EGPRS1 900	810	2	25.05	33	PASS
EGPRS1 900	810	3	23.08	33	PASS
EGPRS1 900	810	4	22.04	33	PASS

Test Result (Trigger SAR Sensor, Reduced power)

Band	Channel	ERP/EIRP(dBm)	Limit(dBm)	Verdict
GSM850	128	25.48	38.5	PASS
GSM850	190	25.33	38.5	PASS
GSM850	251	25.29	38.5	PASS
GSM1900	512	22.19	33	PASS
GSM1900	661	22.34	33	PASS
GSM1900	810	22.39	33	PASS

Band	Channel	Slot	Power(dBm)	Limit(dBm)	Verdict
GPRS850	128	1	25.45	38.5	PASS
GPRS850	128	2	22.50	38.5	PASS
GPRS850	128	3	20.80	38.5	PASS
GPRS850	128	4	19.51	38.5	PASS
GPRS850	190	1	25.39	38.5	PASS
GPRS850	190	2	22.41	38.5	PASS
GPRS850	190	3	20.71	38.5	PASS
GPRS850	190	4	19.47	38.5	PASS
GPRS850	251	1	25.33	38.5	PASS
GPRS850	251	2	22.29	38.5	PASS
GPRS850	251	3	20.59	38.5	PASS
GPRS850	251	4	19.40	38.5	PASS
GPRS1900	512	1	22.19	33	PASS
GPRS1900	512	2	19.24	33	PASS
GPRS1900	512	3	17.51	33	PASS

GPRS19 00	512	4	16.30	33	PASS
GPRS19 00	661	1	22.34	33	PASS
GPRS19 00	661	2	19.38	33	PASS
GPRS19 00	661	3	17.63	33	PASS
GPRS19 00	661	4	16.44	33	PASS
GPRS19 00	810	1	22.39	33	PASS
GPRS19 00	810	2	19.37	33	PASS
GPRS19 00	810	3	17.66	33	PASS
GPRS19 00	810	4	16.46	33	PASS

Band	Channel	Slot	Power(dBm)	Limit(dBm)	Verdict
EGPRS8 50	128	1	18.85	38.5	PASS
EGPRS8 50	128	2	15.95	38.5	PASS
EGPRS8 50	128	3	14.13	38.5	PASS
EGPRS8 50	128	4	12.70	38.5	PASS
EGPRS8 50	190	1	18.71	38.5	PASS
EGPRS8 50	190	2	15.83	38.5	PASS
EGPRS8 50	190	3	14.06	38.5	PASS
EGPRS8 50	190	4	12.66	38.5	PASS
EGPRS8 50	251	1	18.61	38.5	PASS
EGPRS8 50	251	2	15.77	38.5	PASS
EGPRS8 50	251	3	14.05	38.5	PASS

EGPRS8 50	251	4	12.59	38.5	PASS
EGPRS1 900	512	1	18.02	33	PASS
EGPRS1 900	512	2	14.90	33	PASS
EGPRS1 900	512	3	12.90	33	PASS
EGPRS1 900	512	4	11.53	33	PASS
EGPRS1 900	661	1	17.98	33	PASS
EGPRS1 900	661	2	14.89	33	PASS
EGPRS1 900	661	3	12.92	33	PASS
EGPRS1 900	661	4	11.53	33	PASS
EGPRS1 900	810	1	17.92	33	PASS
EGPRS1 900	810	2	14.84	33	PASS
EGPRS1 900	810	3	12.94	33	PASS
EGPRS1 900	810	4	11.51	33	PASS

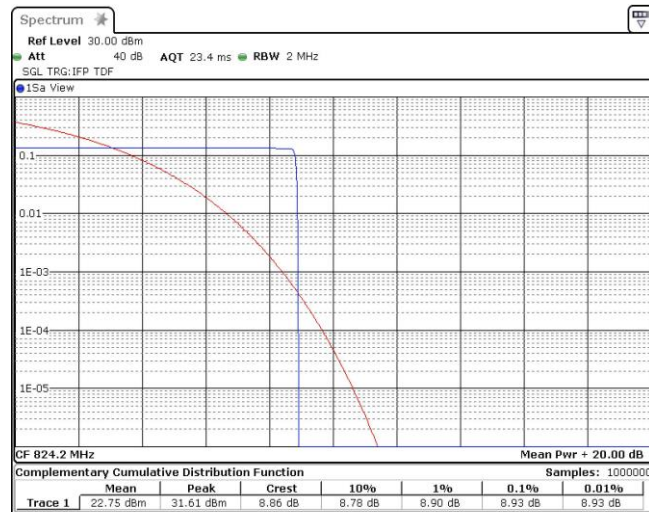
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

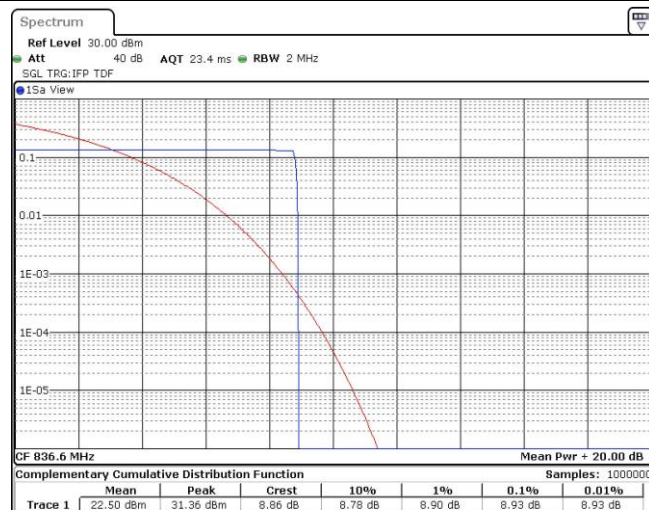
Band	Channel	Result(dB)	Limit(dB)	Verdict
GSM850	128	8.93	13	PASS
GSM850	190	8.93	13	PASS
GSM850	251	8.96	13	PASS
GPRS850	128	8.9	13	PASS
GPRS850	190	9.42	13	PASS
GPRS850	251	8.96	13	PASS
EGPRS850	128	11.51	13	PASS
EGPRS850	190	12.35	13	PASS
EGPRS850	251	11.51	13	PASS
GSM1900	512	8.9	13	PASS
GSM1900	661	8.93	13	PASS
GSM1900	810	9.8	13	PASS
GPRS1900	512	8.9	13	PASS
GPRS1900	661	9.74	13	PASS
GPRS1900	810	8.9	13	PASS
EGPRS1900	512	11.39	13	PASS
EGPRS1900	661	12.38	13	PASS
EGPRS1900	810	12.52	13	PASS

Test Graphs

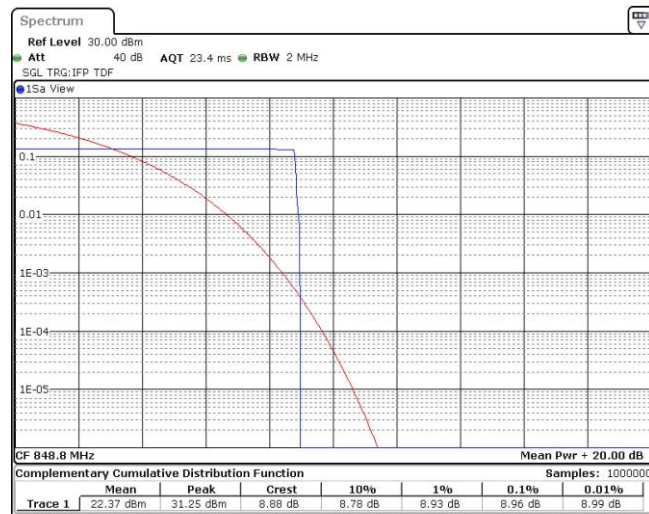
GSM850-128-3



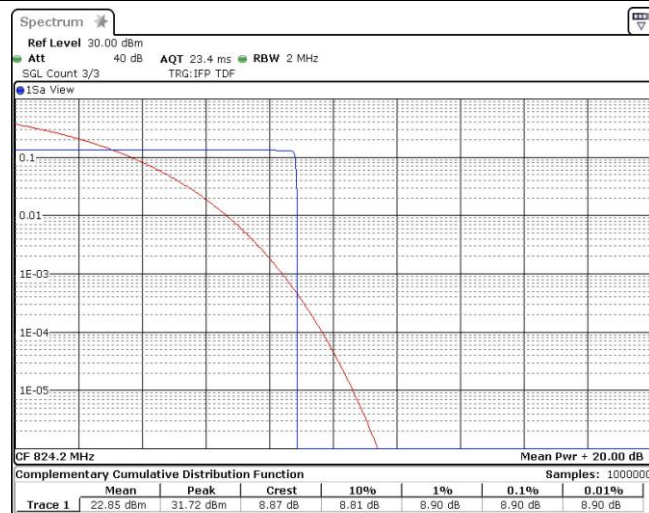
GSM850-190-3



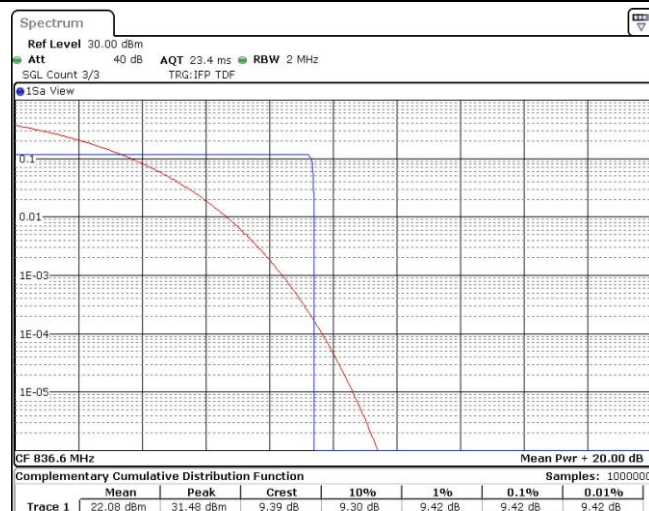
GSM850-251-3



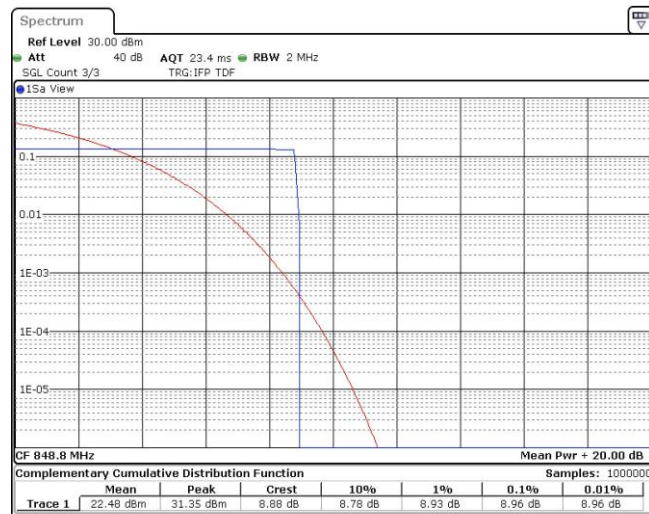
GPRS850-128-3



GPRS850-190-3



GPRS850-251-3



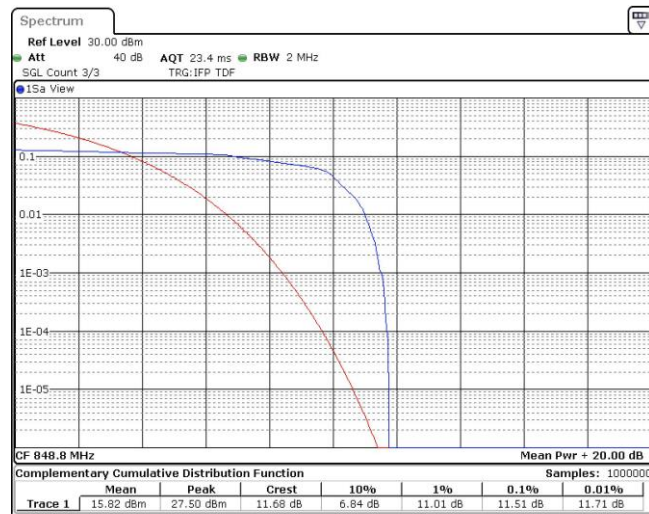
EGPRS850-128-8



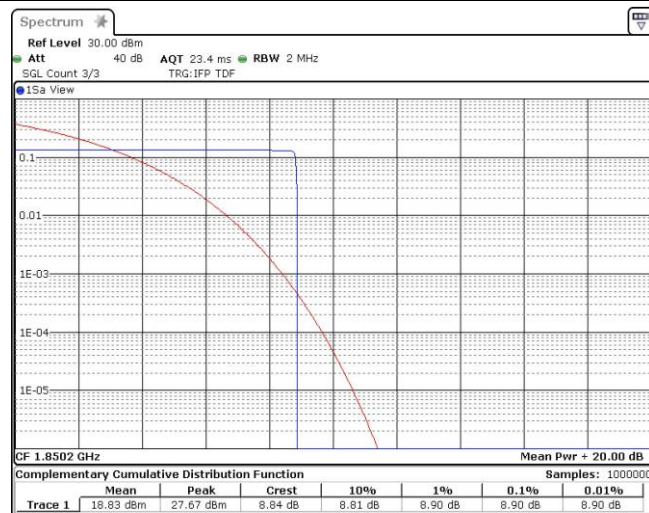
EGPRS850-190-8



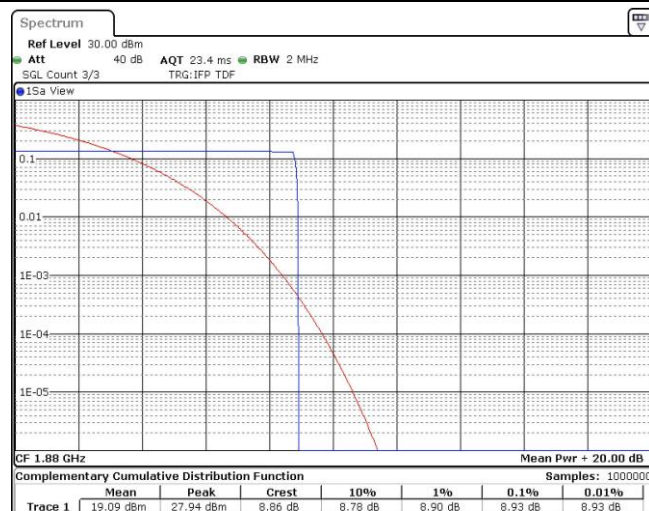
EGPRS850-251-8



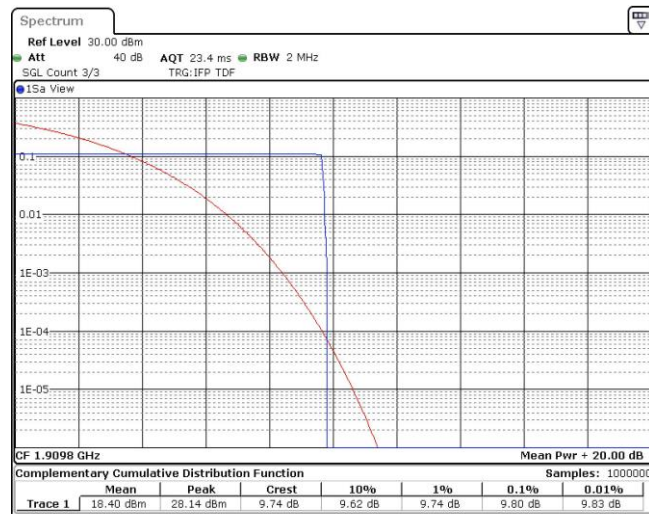
GSM1900-512-0



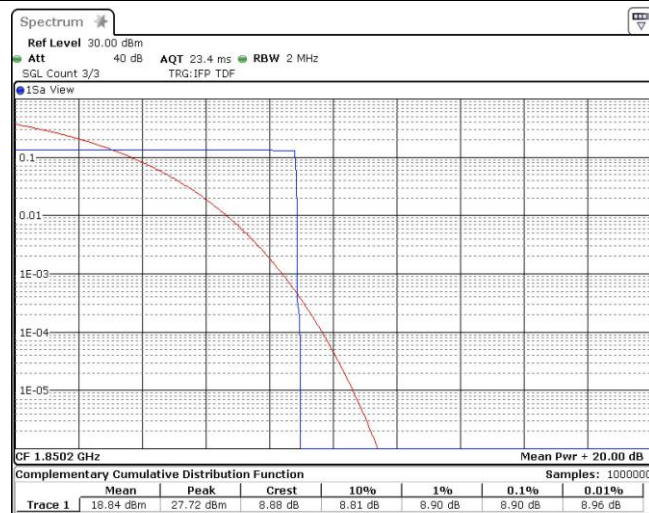
GSM1900-661-0



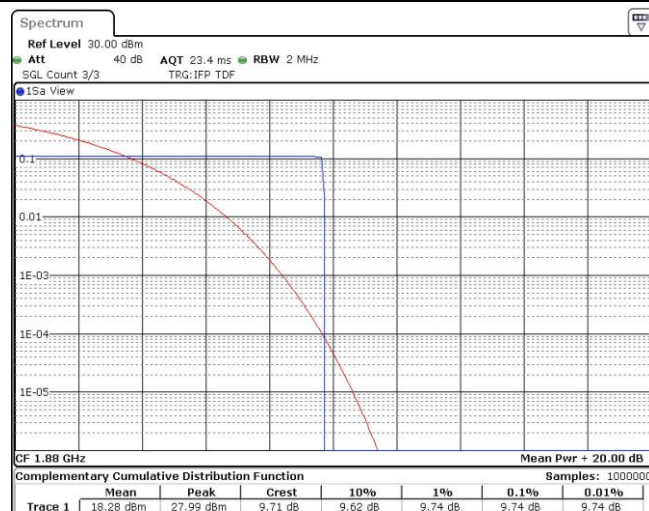
GSM1900-810-0



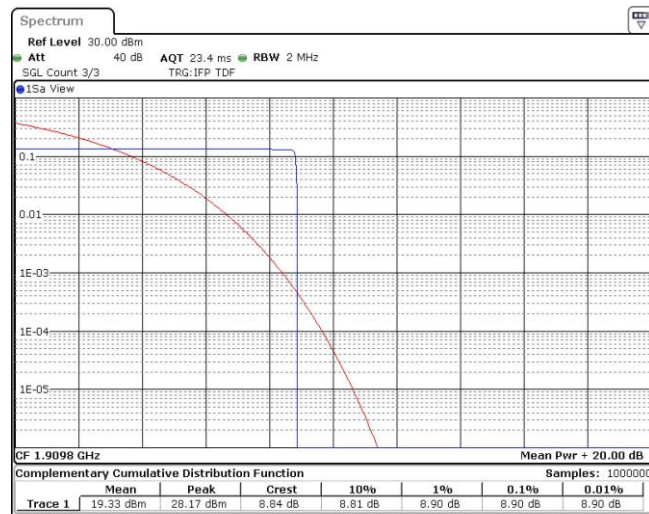
GPRS1900-512-0



GPRS1900-661-0



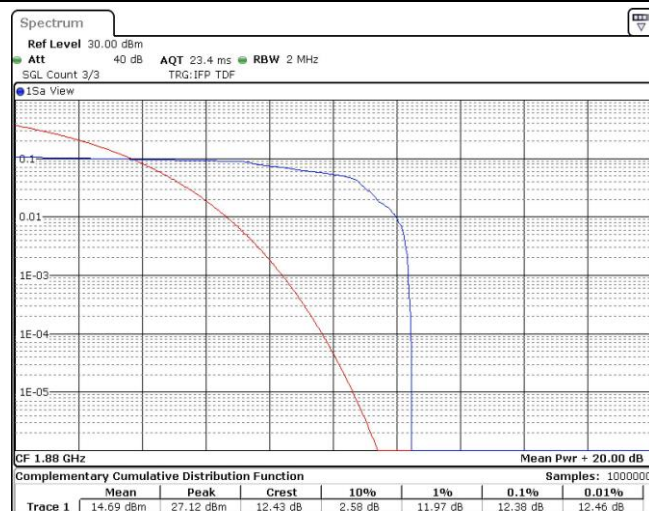
GPRS1900-810-0



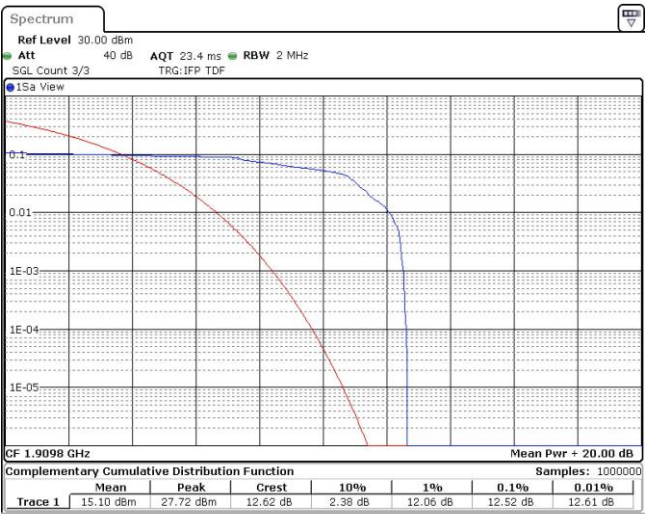
EGPRS1900-512-2



EGPRS1900-661-2



EGPRS1900-810-2



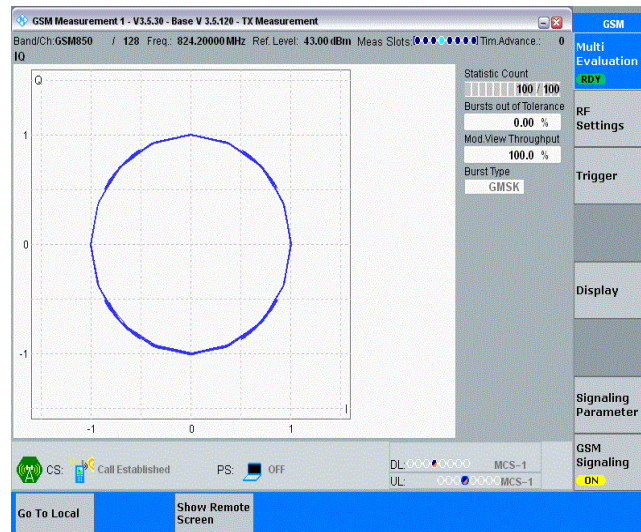
Appendix C: Modulation Characteristics

Test Result

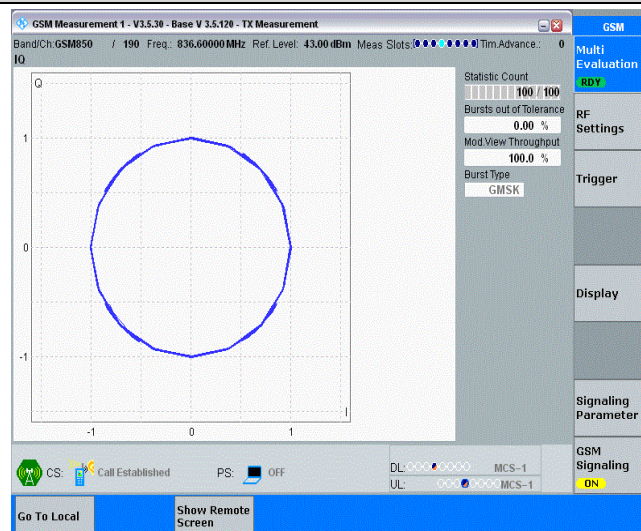
Band	Channel	Result	Verdict
GSM850	128	PASS	PASS
GSM850	190	PASS	PASS
GSM850	251	PASS	PASS
GPRS850	128	PASS	PASS
GPRS850	190	PASS	PASS
GPRS850	251	PASS	PASS
EGPRS850	128	PASS	PASS
EGPRS850	190	PASS	PASS
EGPRS850	251	PASS	PASS
GSM1900	512	PASS	PASS
GSM1900	661	PASS	PASS
GSM1900	810	PASS	PASS
GPRS1900	512	PASS	PASS
GPRS1900	661	PASS	PASS
GPRS1900	810	PASS	PASS
EGPRS1900	512	PASS	PASS
EGPRS1900	661	PASS	PASS
EGPRS1900	810	PASS	PASS

Test Graphs

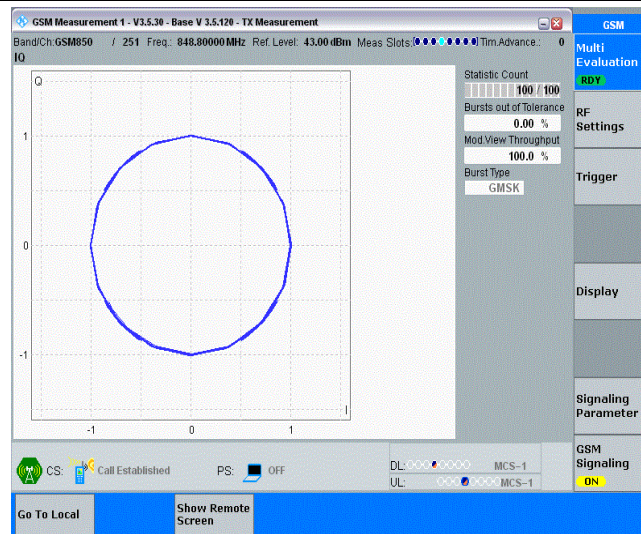
GSM850-128-3



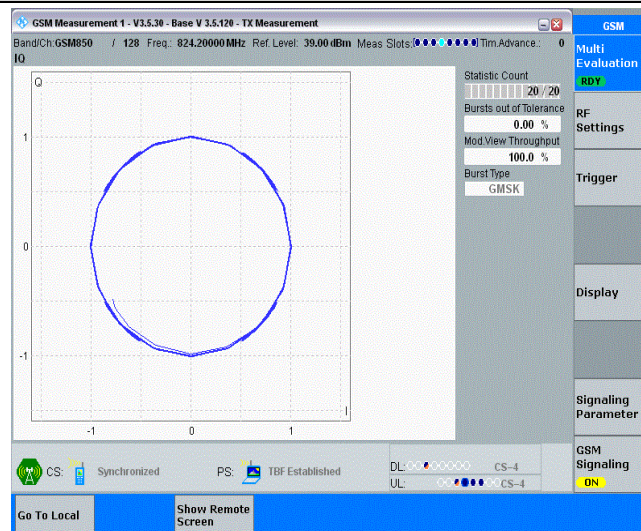
GSM850-190-3



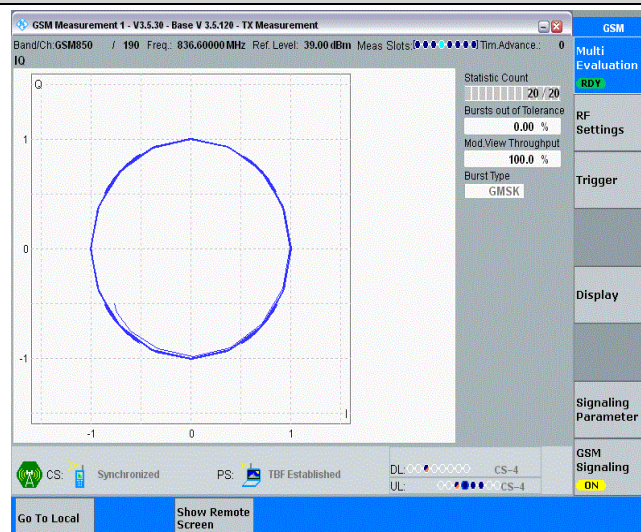
GSM850-251-3



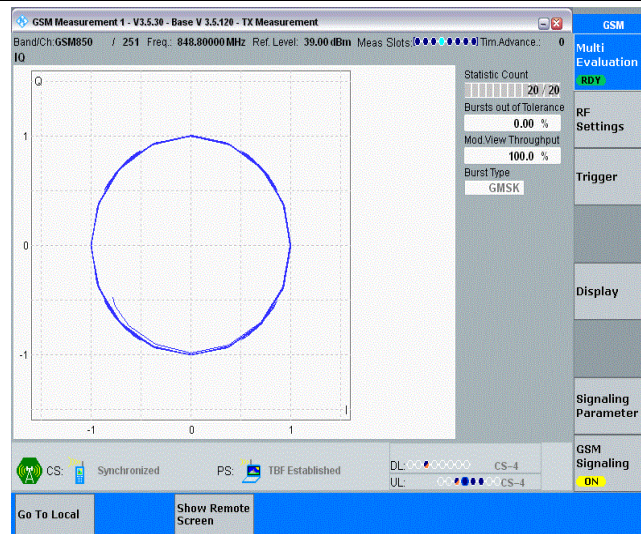
GPRS850-128-3



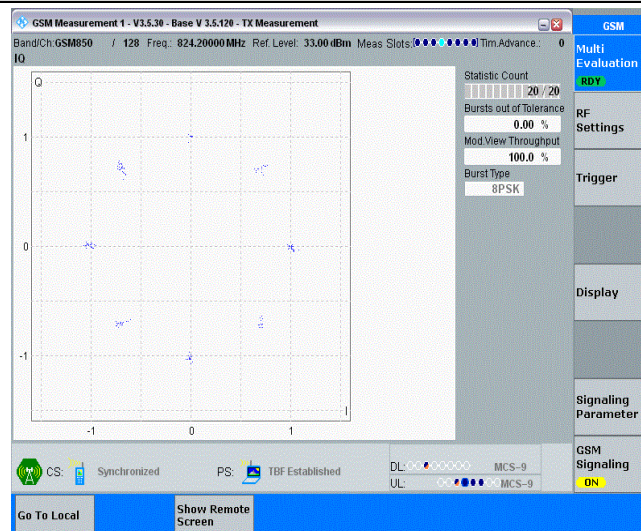
GPRS850-190-3



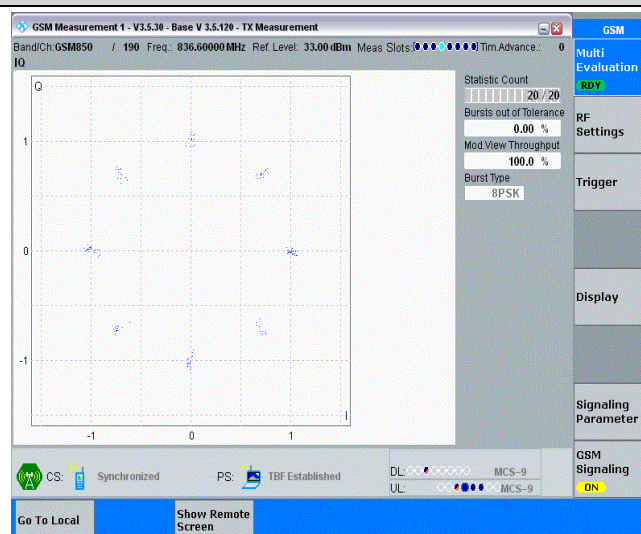
GPRS850-251-3



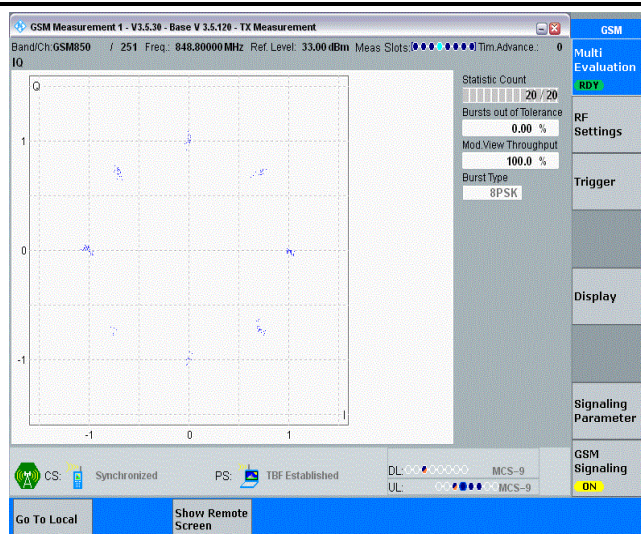
EGPRS850-128-8



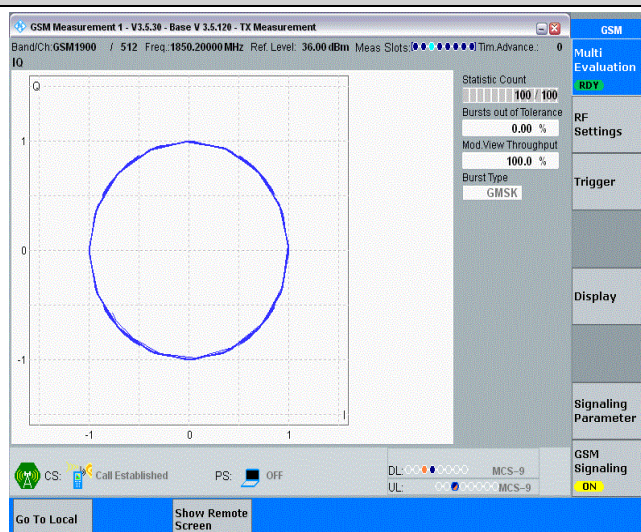
EGPRS850-190-8



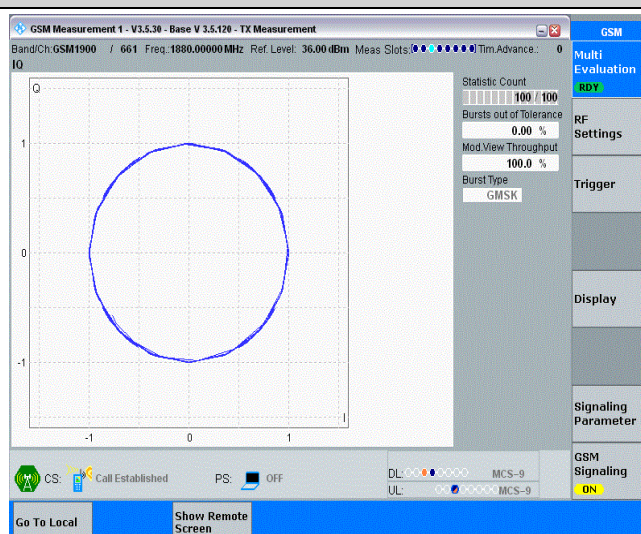
EGPRS850-251-8



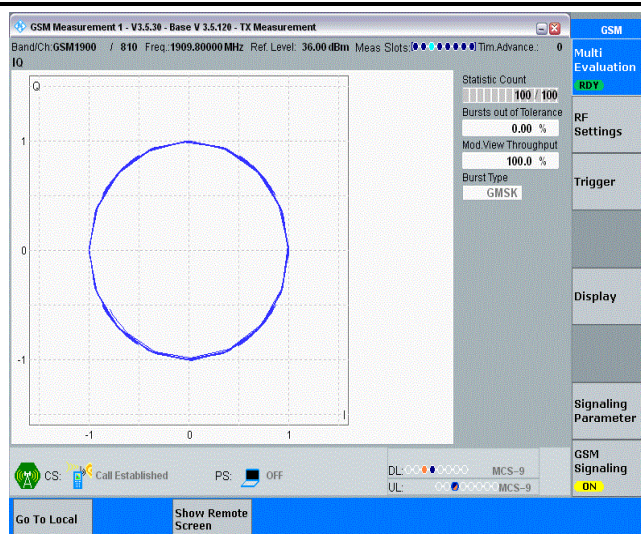
GSM1900-512-0



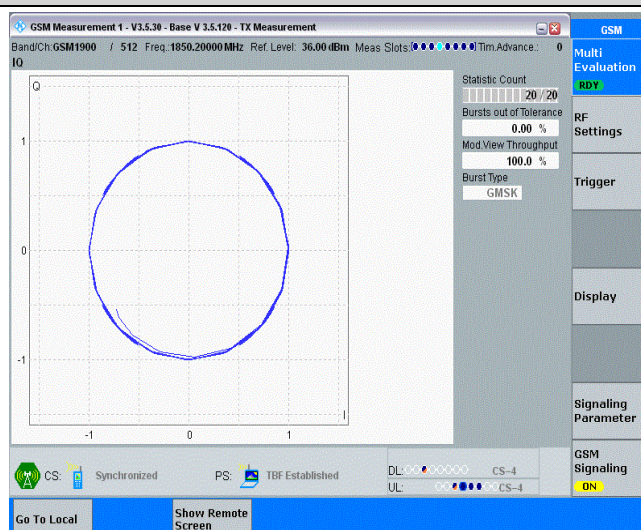
GSM1900-661-0



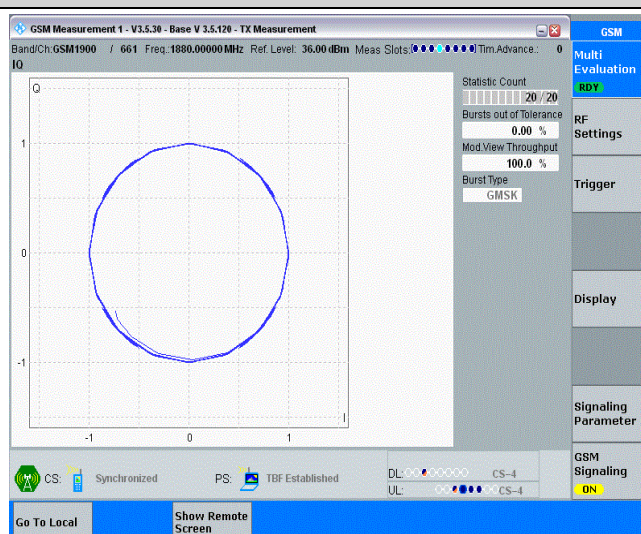
GSM1900-810-0



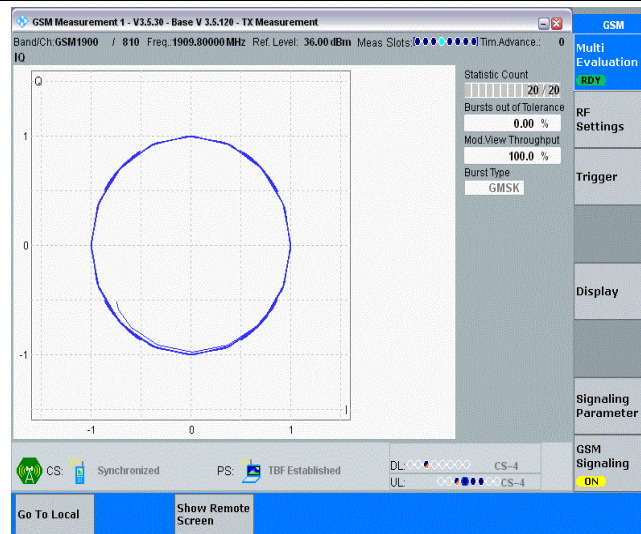
GPRS1900-512-0



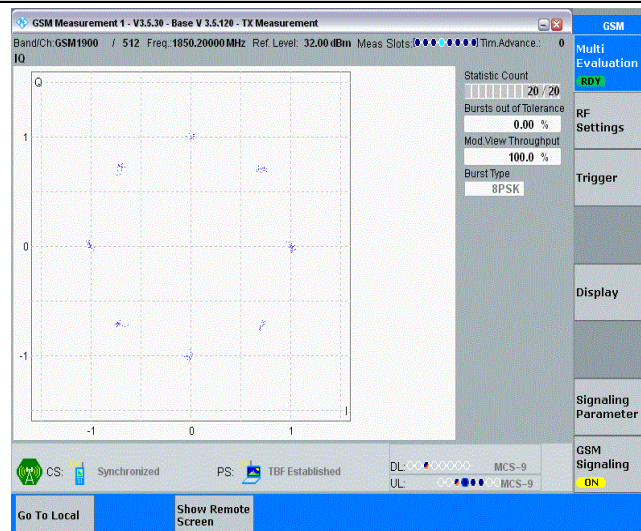
GPRS1900-661-0



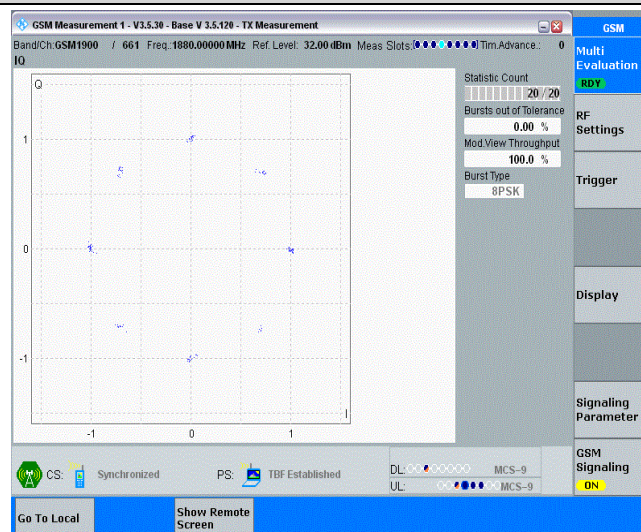
GPRS1900-810-0



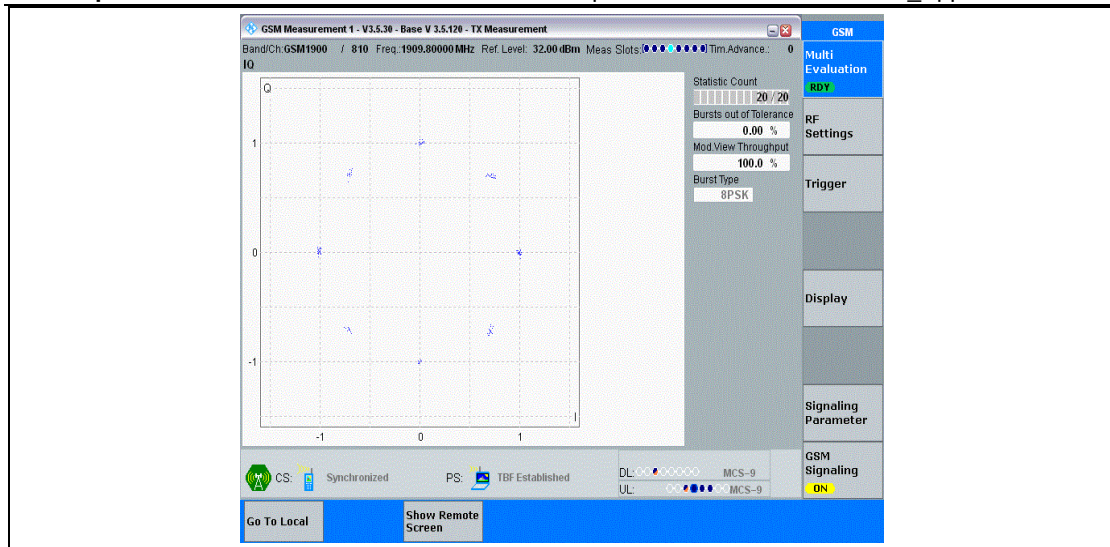
EGPRS1900-512-2



EGPRS1900-661-2



EGPRS1900-810-2



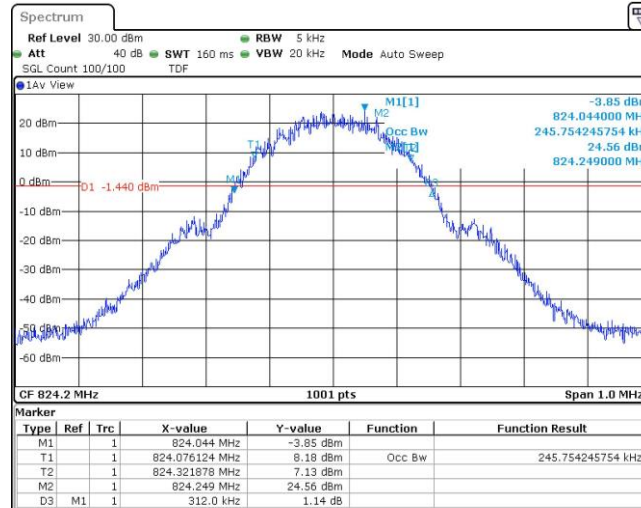
Appendix D: 26dB Bandwidth and Occupied Bandwidth

Test Result

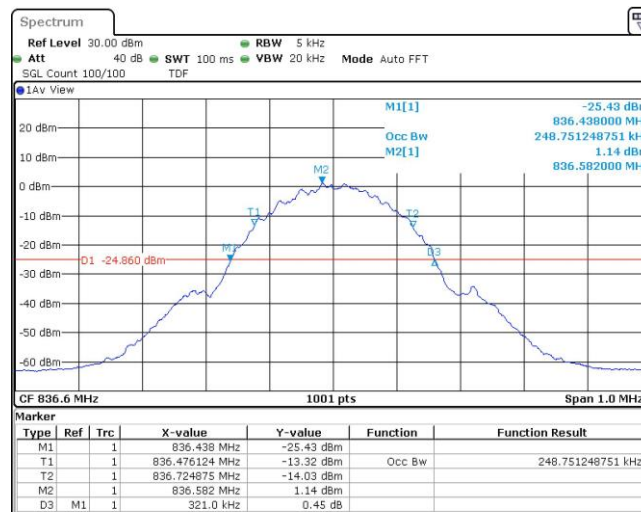
Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	0.246	0.31	---	PASS
GSM850	190	0.249	0.32	---	PASS
GSM850	251	0.249	0.32	---	PASS
GPRS850	128	0.247	0.32	---	PASS
GPRS850	190	0.247	0.32	---	PASS
GPRS850	251	0.247	0.32	---	PASS
EGPRS850	128	0.253	0.33	---	PASS
EGPRS850	190	0.254	0.34	---	PASS
EGPRS850	251	0.256	0.34	---	PASS
GSM1900	512	0.247	0.32	---	PASS
GSM1900	661	0.248	0.32	---	PASS
GSM1900	810	0.247	0.32	---	PASS
GPRS1900	512	0.247	0.32	---	PASS
GPRS1900	661	0.245	0.32	---	PASS
GPRS1900	810	0.247	0.32	---	PASS
EGPRS1900	512	0.254	0.33	---	PASS
EGPRS1900	661	0.253	0.32	---	PASS
EGPRS1900	810	0.25	0.32	---	PASS

Test Graphs

GSM850-128-3-0.31



GSM850-190-3-0.32



GSM850-251-3-0.32