

Appendix B

GSM850&1900

CONTENT

	Page
1. EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA	4
1.1. <i>Test Result</i>	4
2. PEAK-TO-AVERAGE RATIO	5
2.1. <i>Test Result</i>	5
2.2. <i>Part II - Test Plots</i>	5
3. MODULATION CHARACTERISTICS	12
3.1. <i>For GSM</i>	12
3.1.1. <i>Test BAND = GSM 850</i>	12
3.1.1.1. <i>Test Mode = GSM/TM1</i>	12
3.1.1.1.1. <i>Test Channel = MCH</i>	12
3.1.1.2. <i>Test Mode = GSM/TM2</i>	13
3.1.1.2.1. <i>Test Channel = MCH</i>	13
3.1.2. <i>Test BAND = GSM 1900</i>	13
3.1.2.1. <i>Test Mode = GSM/TM1</i>	13
3.1.2.1.1. <i>Test Channel = MCH</i>	13
3.1.2.2. <i>Test Mode = GSM/TM2</i>	14
3.1.2.2.1. <i>Test Channel = MCH</i>	14
4. <i>26dB BANDWIDTH AND OCCUPIED BANDWIDTH</i>	15
4.1. <i>Test Result</i>	15
4.2. <i>Test Plots</i>	15
5. BAND EDGE COMPLIANCE	22
5.1. <i>Test Plots</i>	22
6. SPURIOUS EMISSION AT ANTENNA TERMINAL	26
6.1. <i>Test Plots</i>	26
7. FIELD STRENGTH OF SPURIOUS RADIATION	57
7.1. <i>Test Band = GSM 1900</i>	57
7.1.1. <i>Test Channel = LCH</i>	57
7.1.2. <i>Test Channel = MCH</i>	57
7.1.3. <i>Test Channel = HCH</i>	57
7.2. <i>Test Band = GSM 850</i>	58
7.2.1. <i>Test Channel = LCH</i>	58
7.2.2. <i>Test Channel = MCH</i>	58
7.2.3. <i>Test Channel = HCH</i>	59
8. FREQUENCY STABILITY	60

8.1. Frequency Error Vs Voltage.....	60
8.2. Frequency Error Vs Temperature	61

1. Effective (Isotropic) Radiated Power Output Data

1.1. Test Result

BAND	Channel	Power(dBm)	ERP(dBm)	Limit(dBm)	Verdict
GSM850	128	32.94	30.89	38.45	PASS
GSM850	190	32.99	30.94	38.45	PASS
GSM850	251	32.97	30.92	38.45	PASS
EGPRS850	128	27.29	25.24	38.45	PASS
EGPRS850	190	27.27	25.22	38.45	PASS
EGPRS850	251	27.26	25.21	38.45	PASS

BAND	Channel	Power(dBm)	EIRP(dBm)	Limit(dBm)	Verdict
GSM1900	512	30.97	32.20	33.00	PASS
GSM1900	661	30.98	32.21	33.00	PASS
GSM1900	810	30.96	32.19	33.00	PASS
EGPRS1900	512	26.61	27.84	33.00	PASS
EGPRS1900	661	26.59	27.82	33.00	PASS
EGPRS1900	810	26.57	27.80	33.00	PASS

Remark:

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

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

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

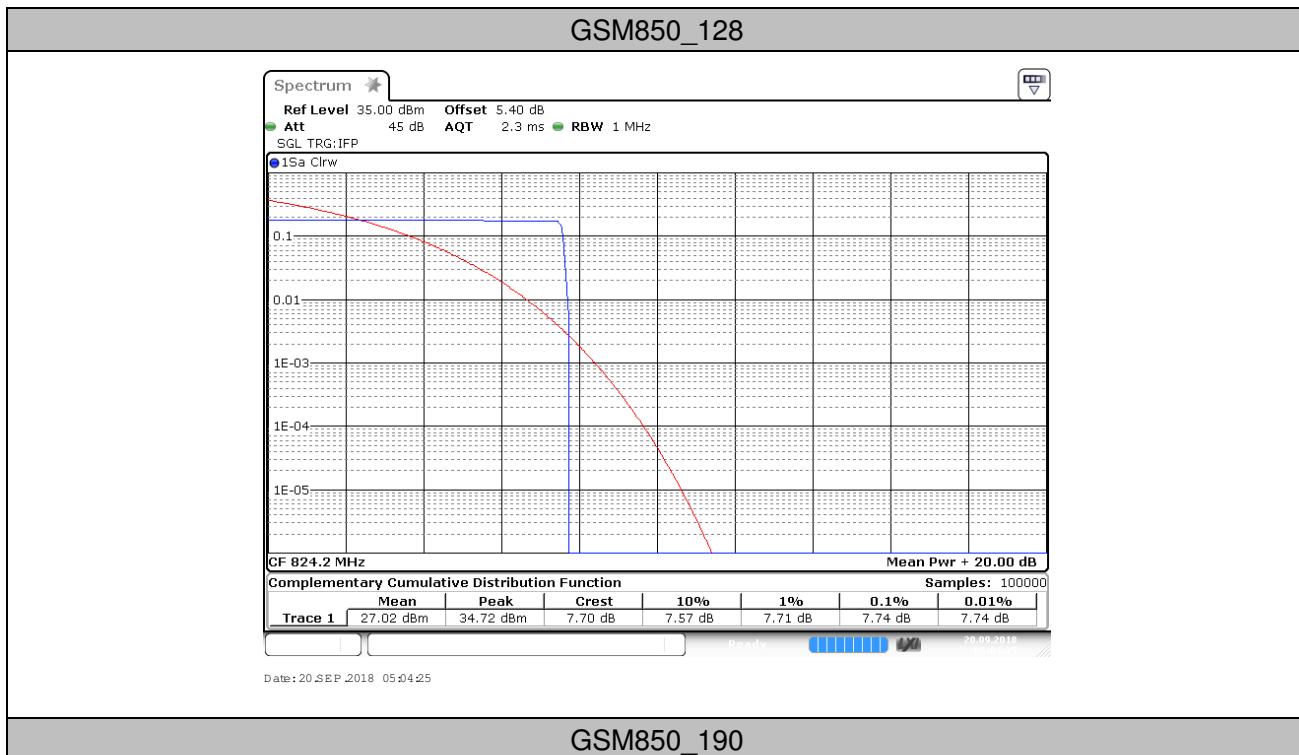
b: SGP=Signal Generator Level

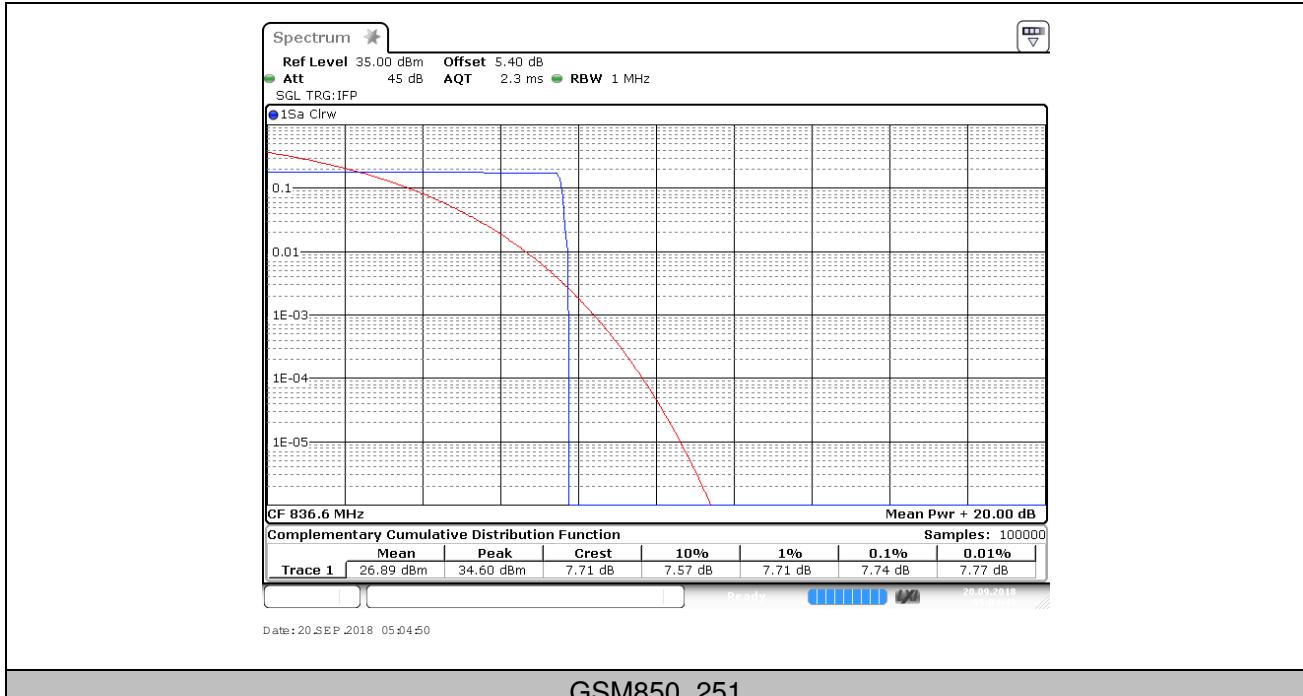
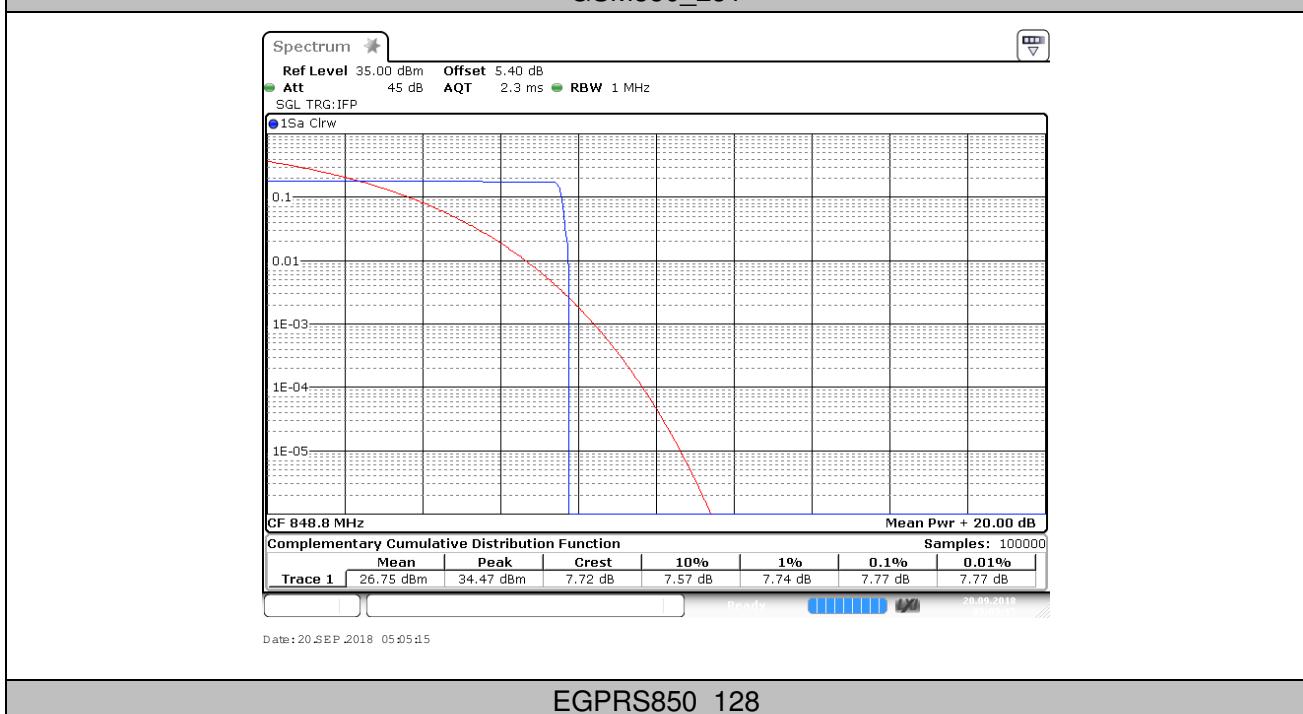
2. Peak-to-Average Ratio

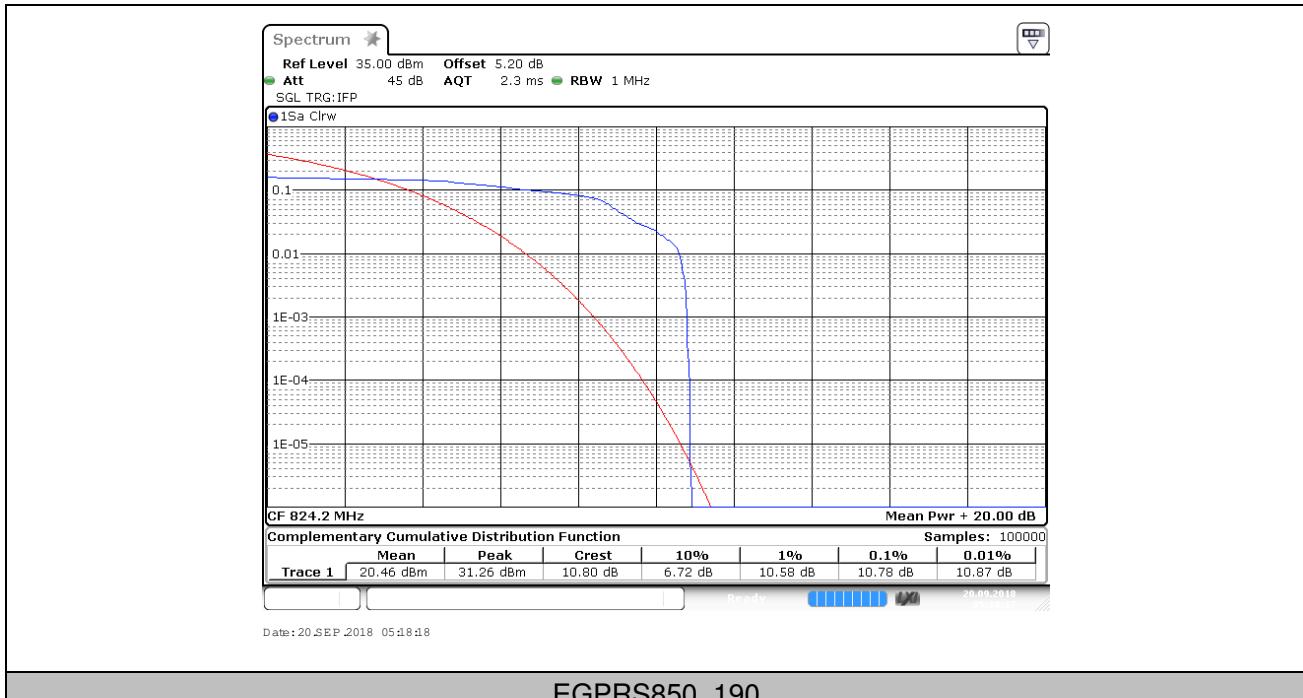
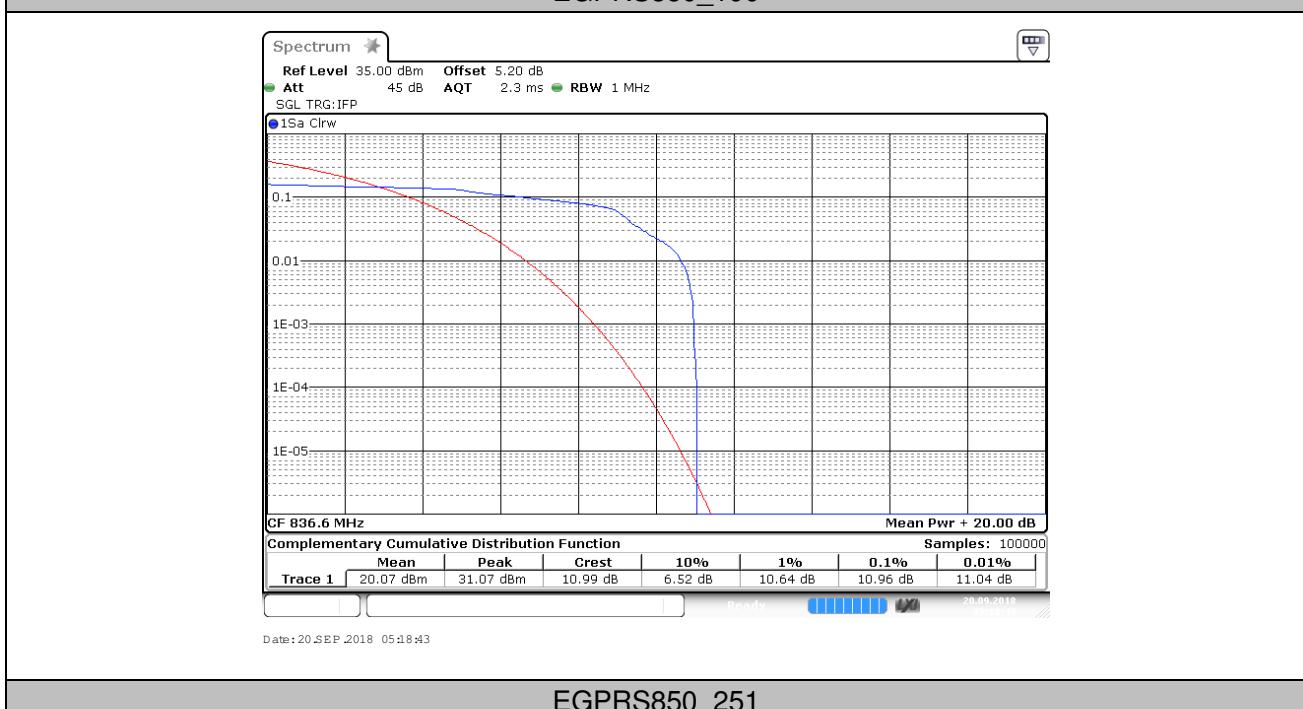
2.1. Test Result

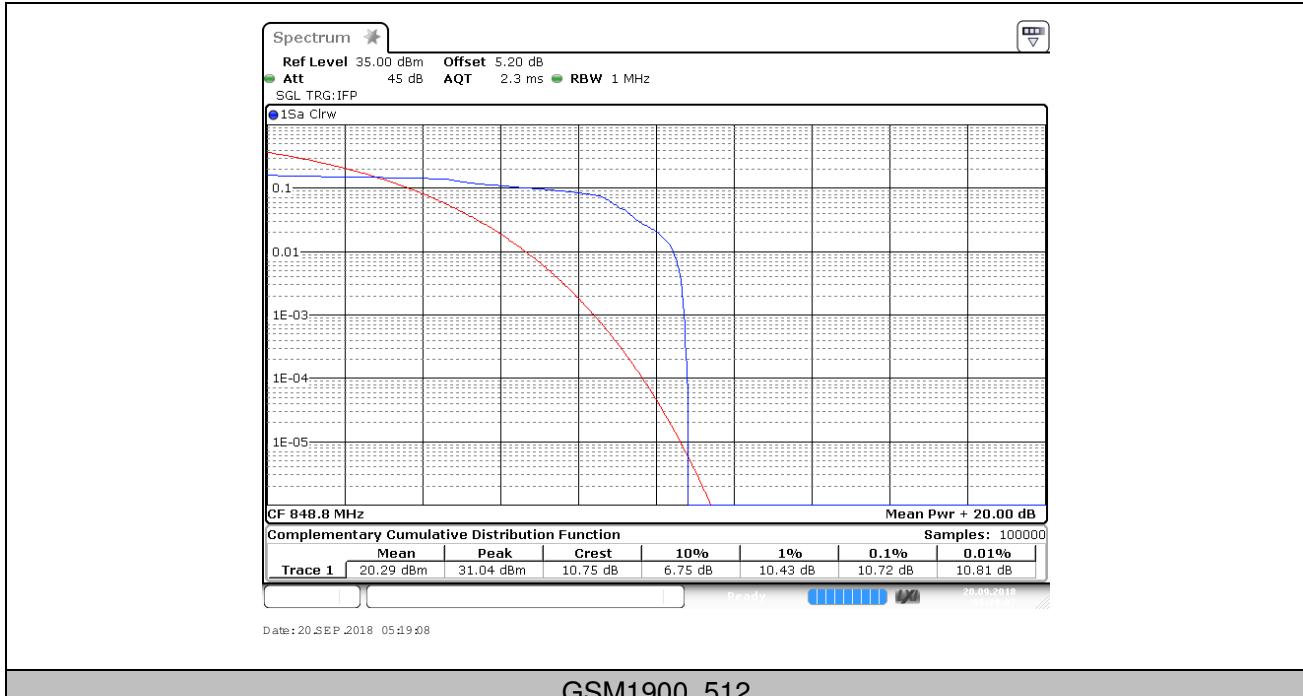
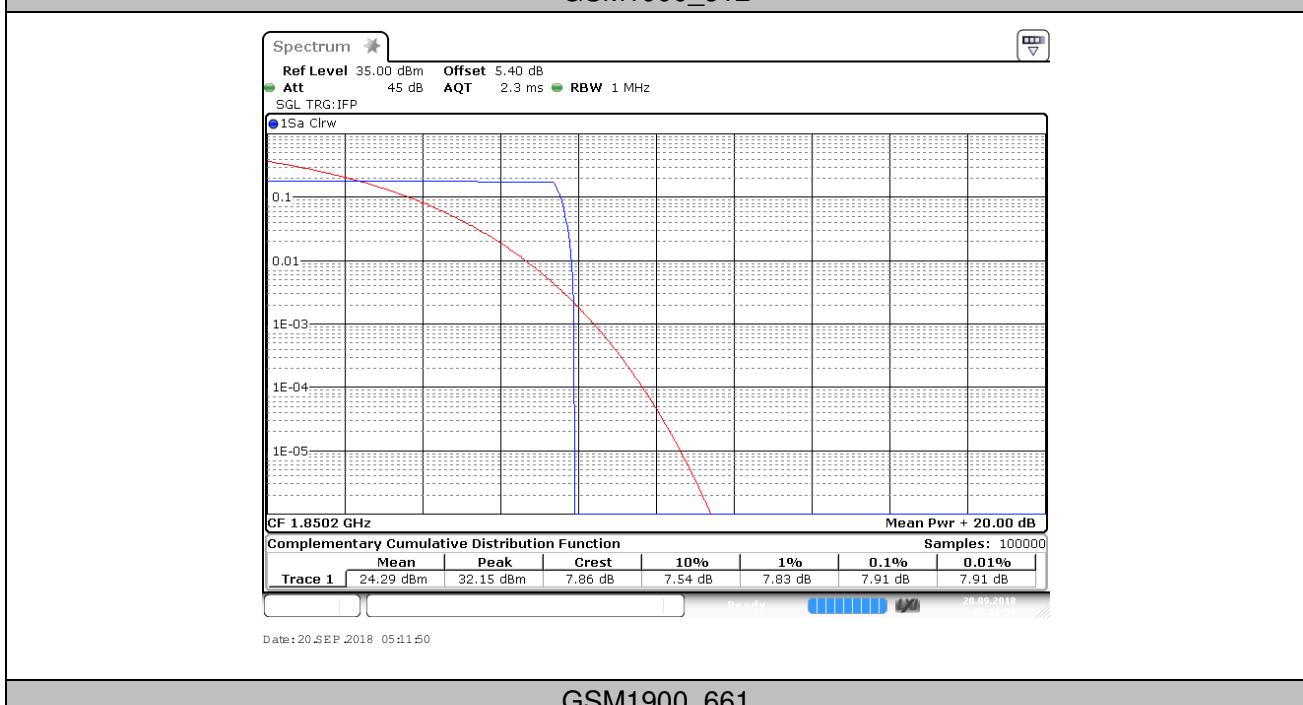
BAND	Channel	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
GSM850	128	7.74	13	PASS
GSM850	190	7.74	13	PASS
GSM850	251	7.77	13	PASS
EGPRS850	128	10.78	13	PASS
EGPRS850	190	10.96	13	PASS
EGPRS850	251	10.72	13	PASS
GSM1900	512	7.91	13	PASS
GSM1900	661	7.83	13	PASS
GSM1900	810	7.80	13	PASS
EGPRS1900	512	11.10	13	PASS
EGPRS1900	661	10.96	13	PASS
EGPRS1900	810	10.90	13	PASS

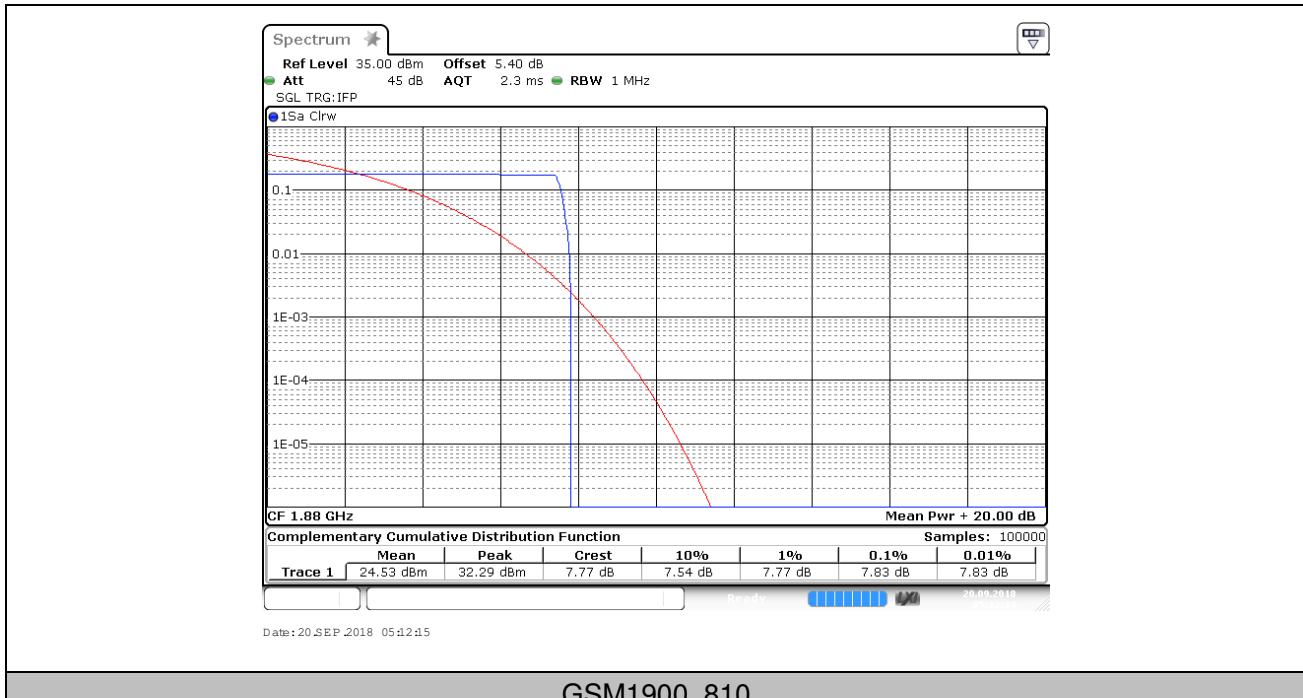
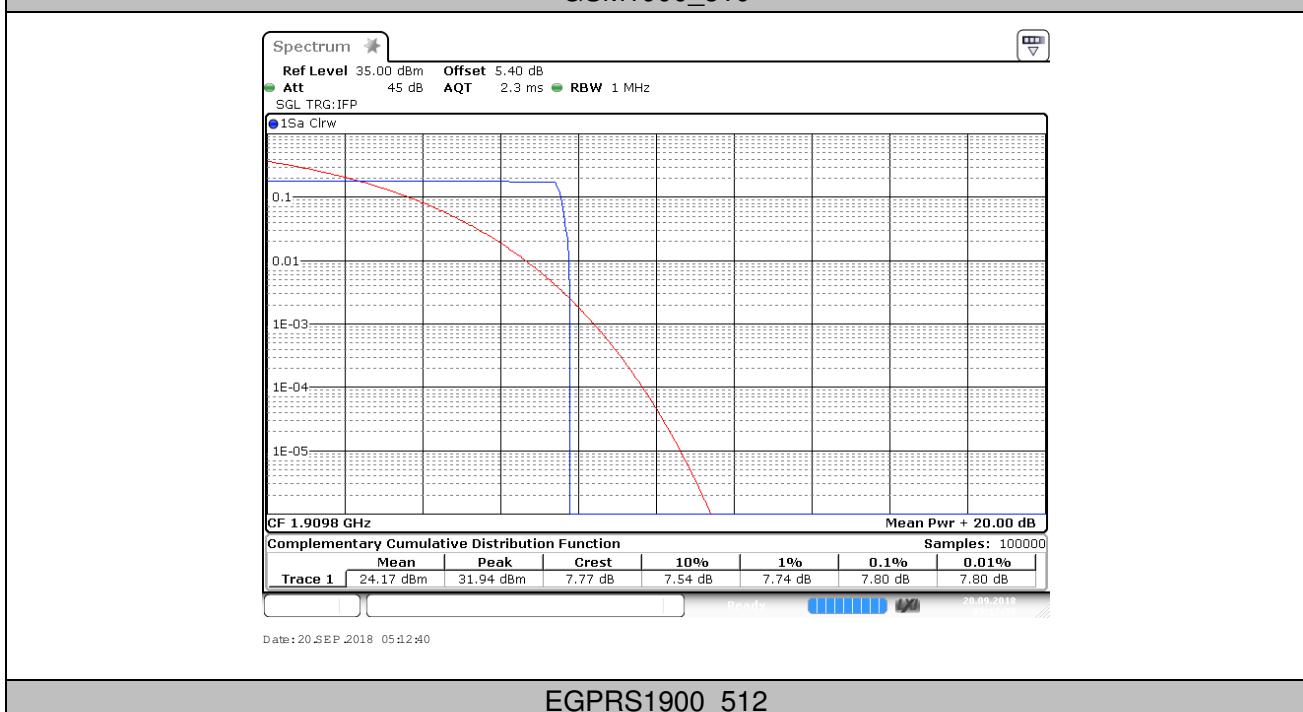
2.2. Part II - Test Plots

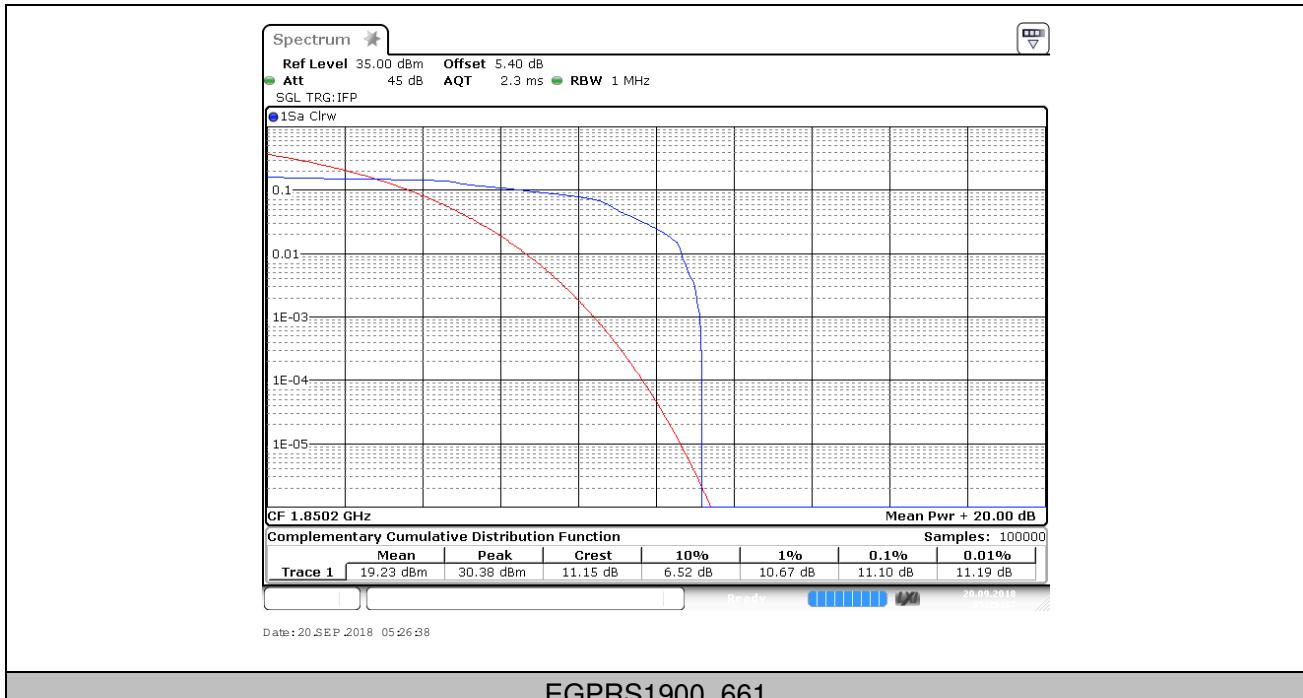
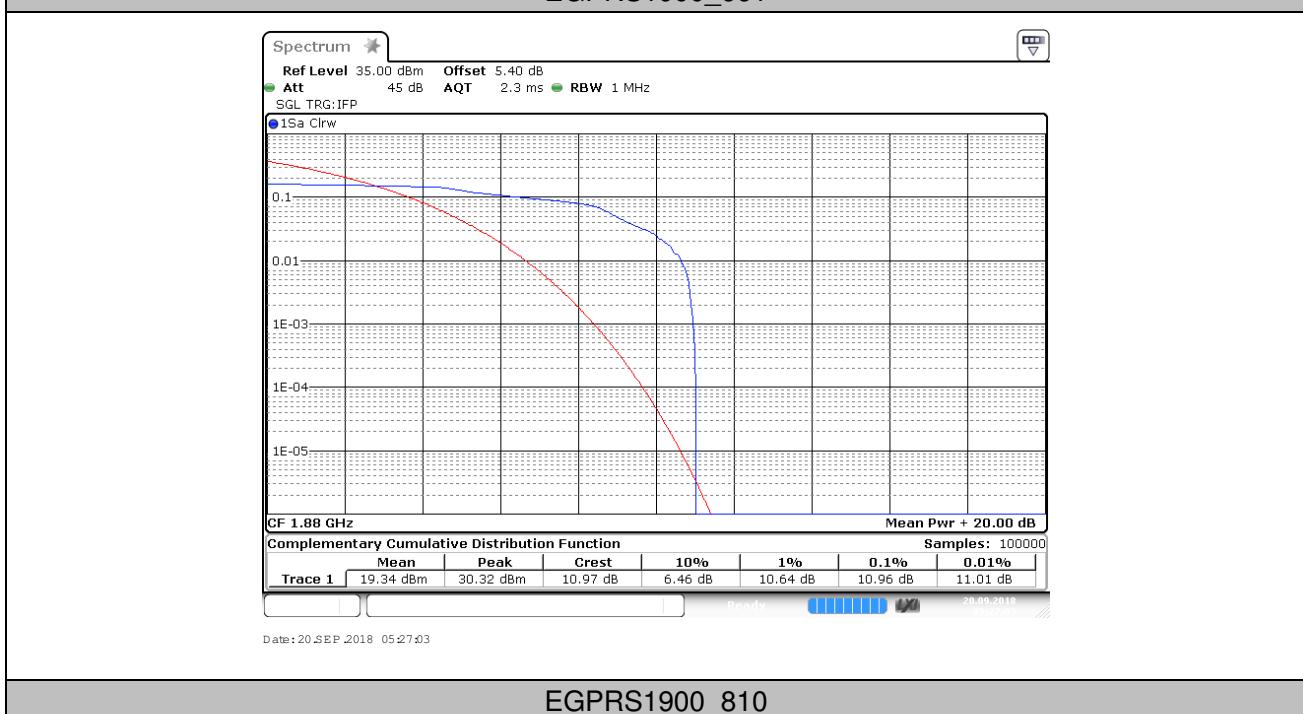


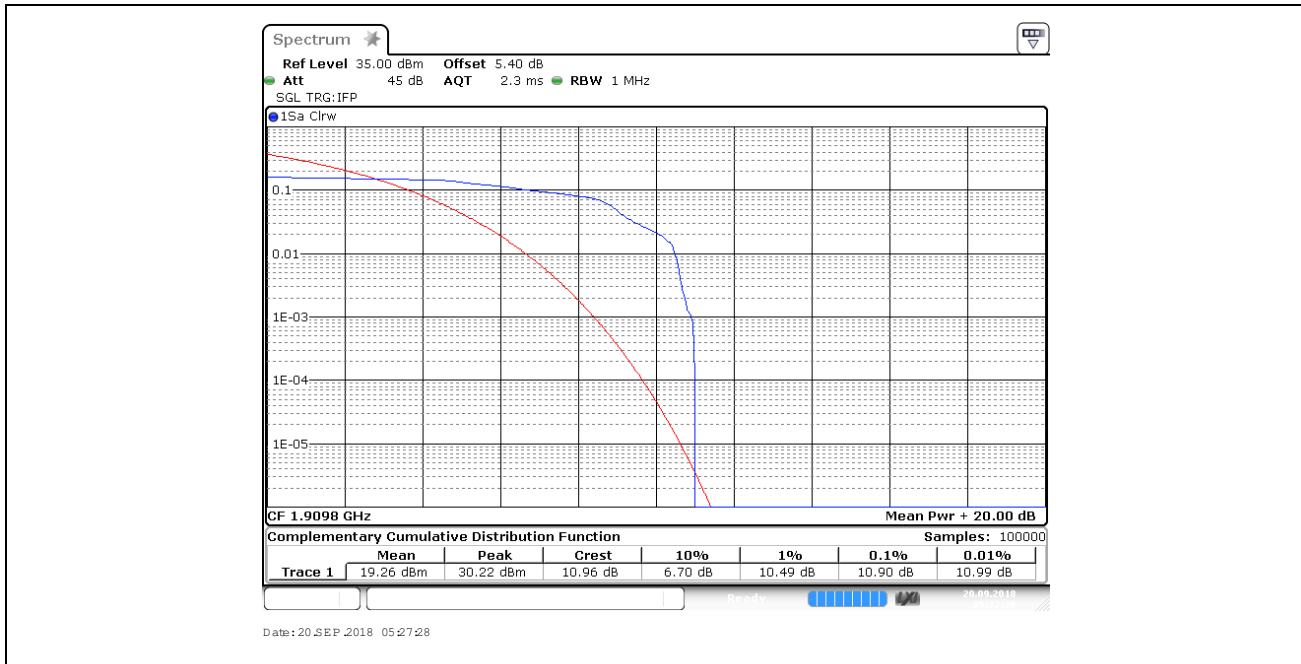

GSM850_251

EGPRS850_128

**EGPRS850_190****EGPRS850_251**


GSM1900_512

GSM1900_661

**GSM1900_810****EGPRS1900_512**

**EGPRS1900_661****EGPRS1900_810**



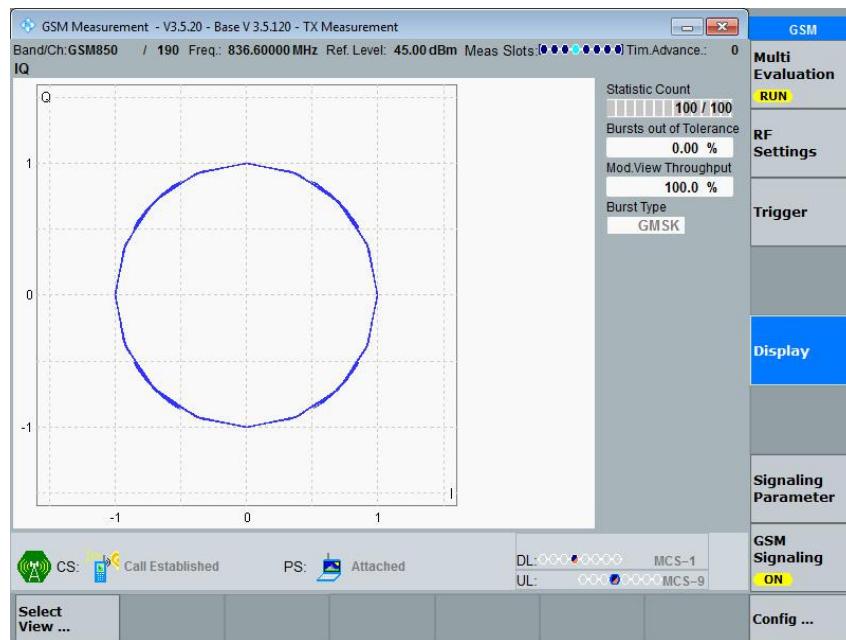
3. Modulation Characteristics

3.1. For GSM

3.1.1. Test BAND = GSM 850

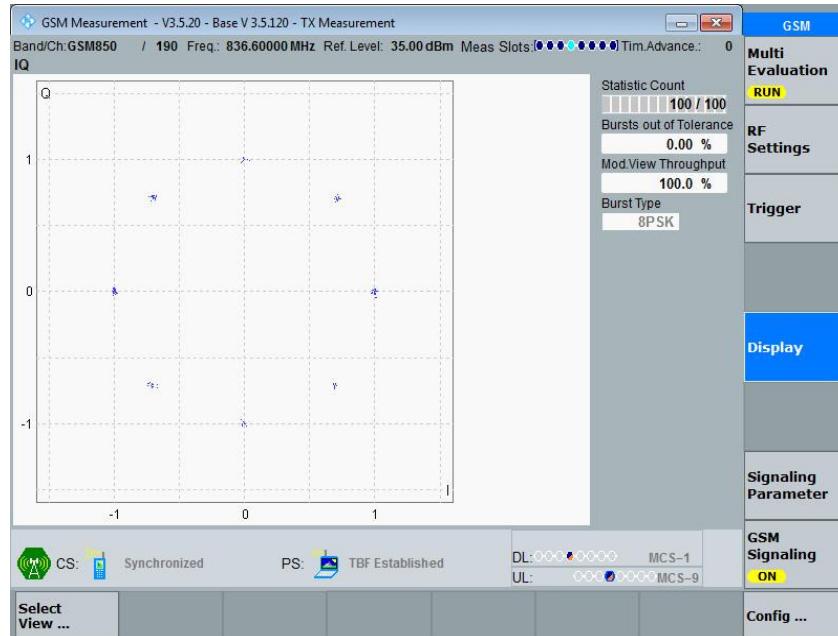
3.1.1.1. Test Mode = GSM/TM1

3.1.1.1.1. Test Channel = MCH



3.1.1.2. Test Mode = GSM/TM2

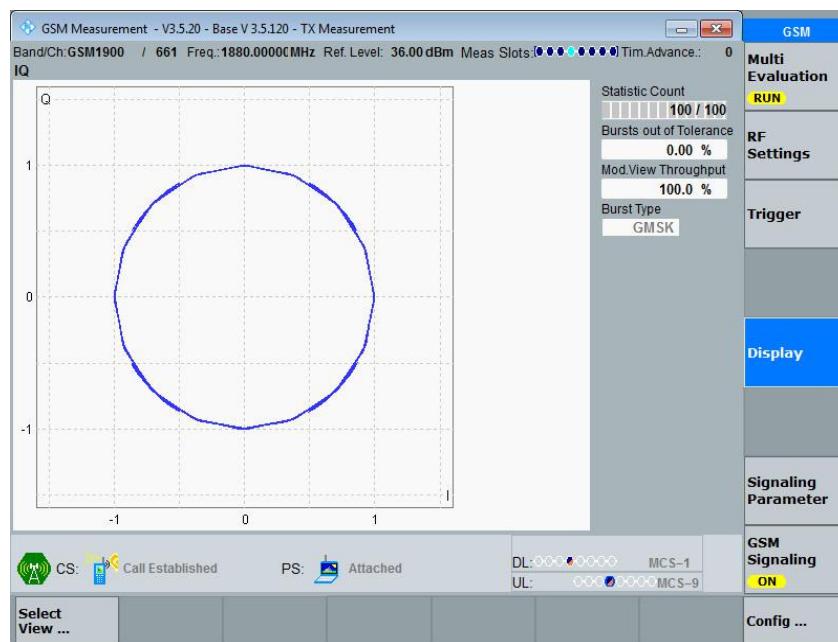
3.1.1.2.1. Test Channel = MCH

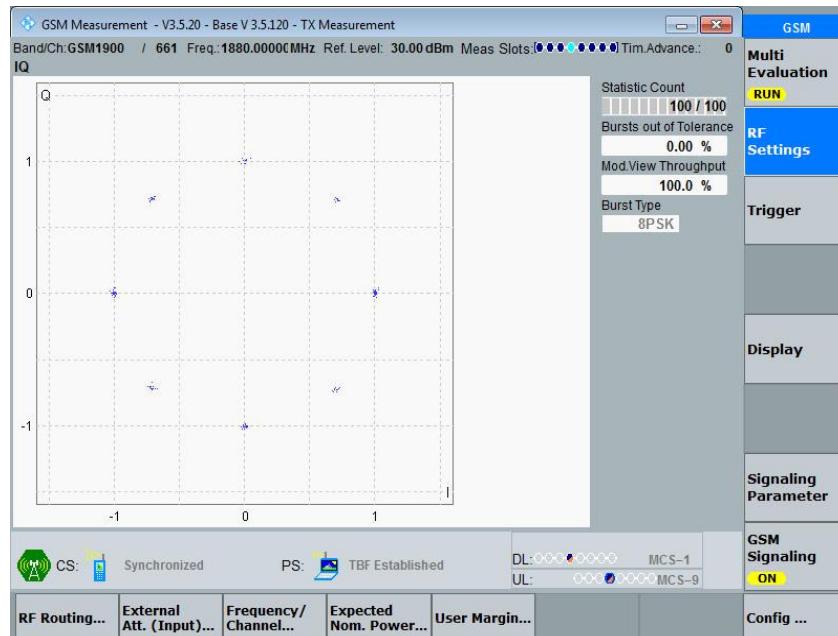


3.1.2. Test BAND = GSM 1900

3.1.2.1. Test Mode = GSM/TM1

3.1.2.1.1. Test Channel = MCH



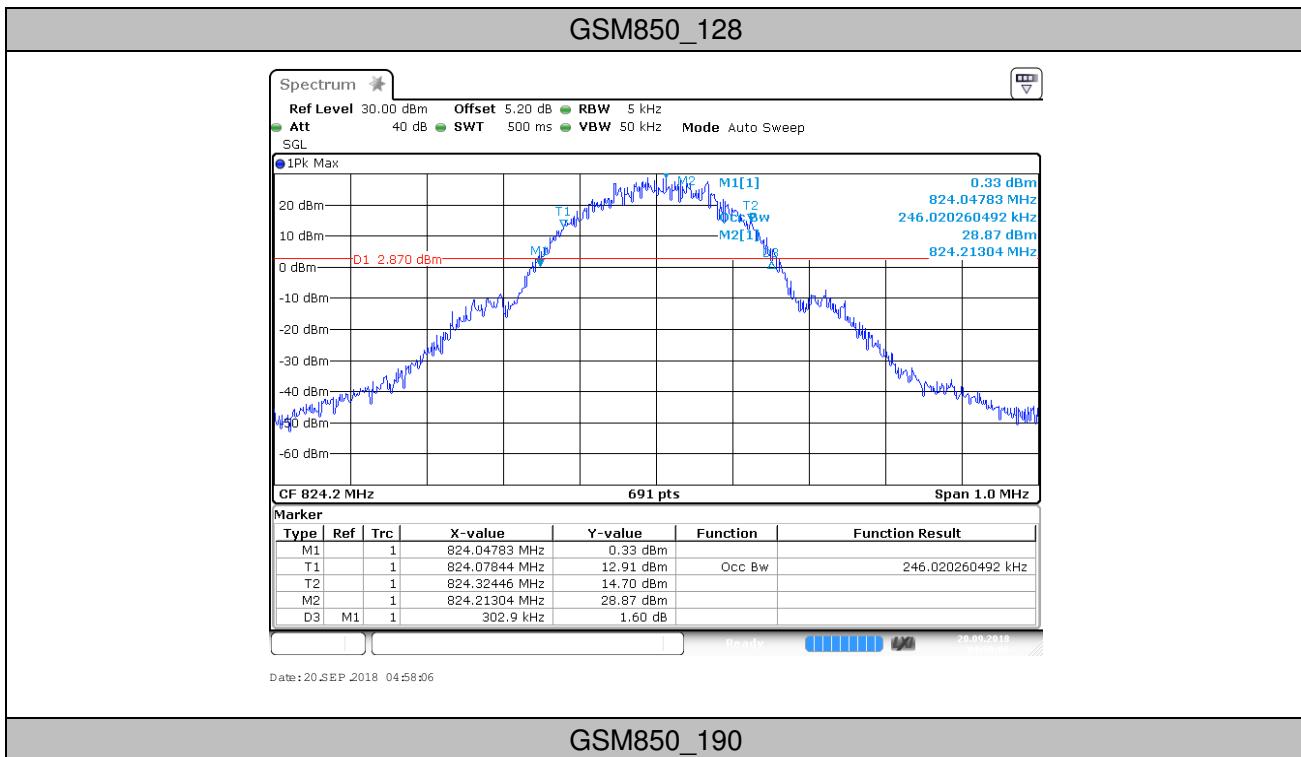
3.1.2.2. Test Mode = GSM/TM2**3.1.2.2.1. Test Channel = MCH**

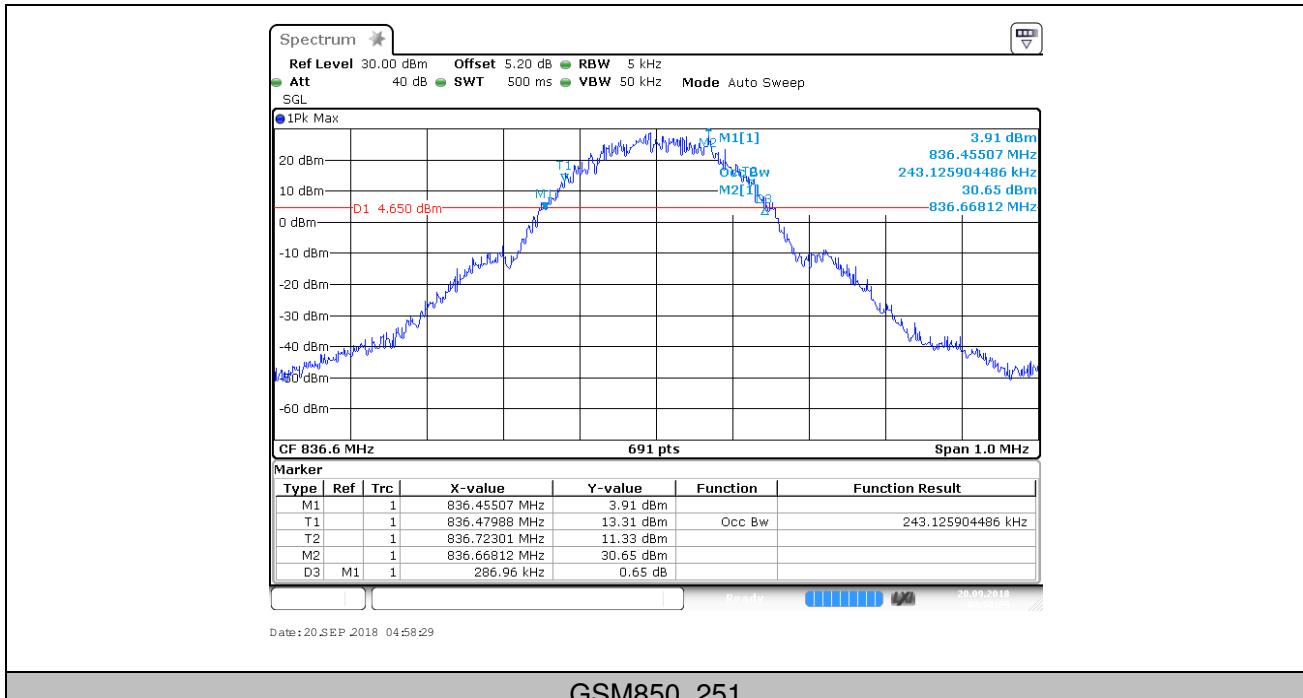
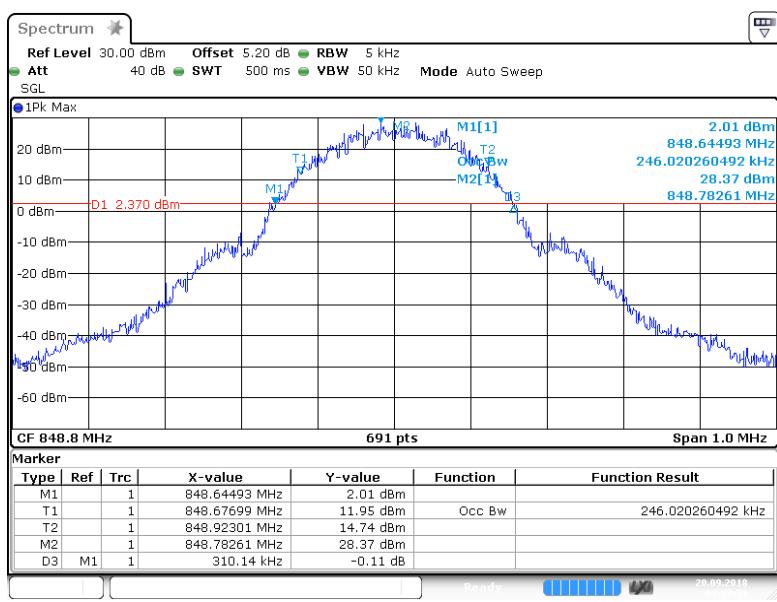
4. 26dB Bandwidth and Occupied Bandwidth

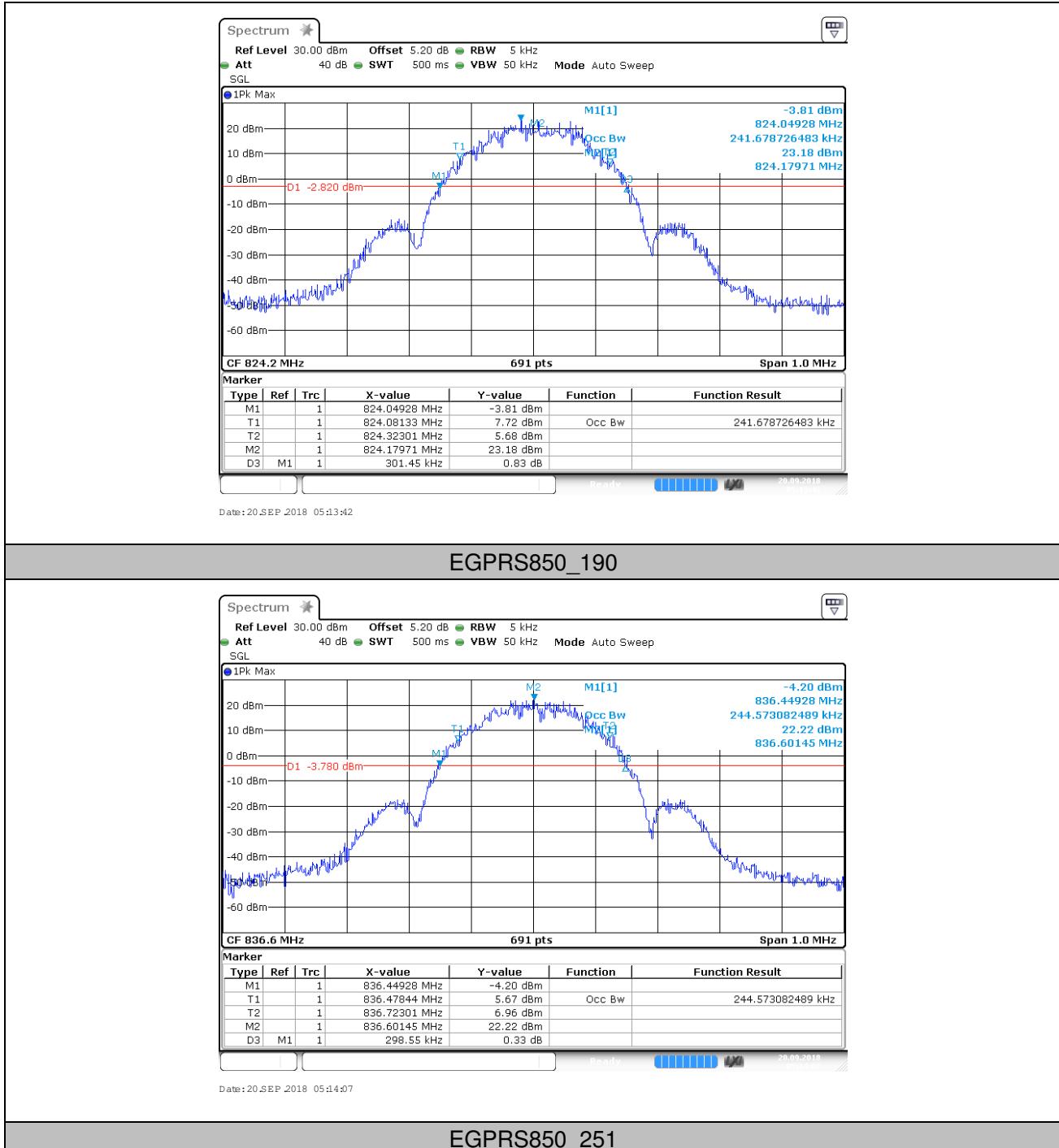
4.1. Test Result

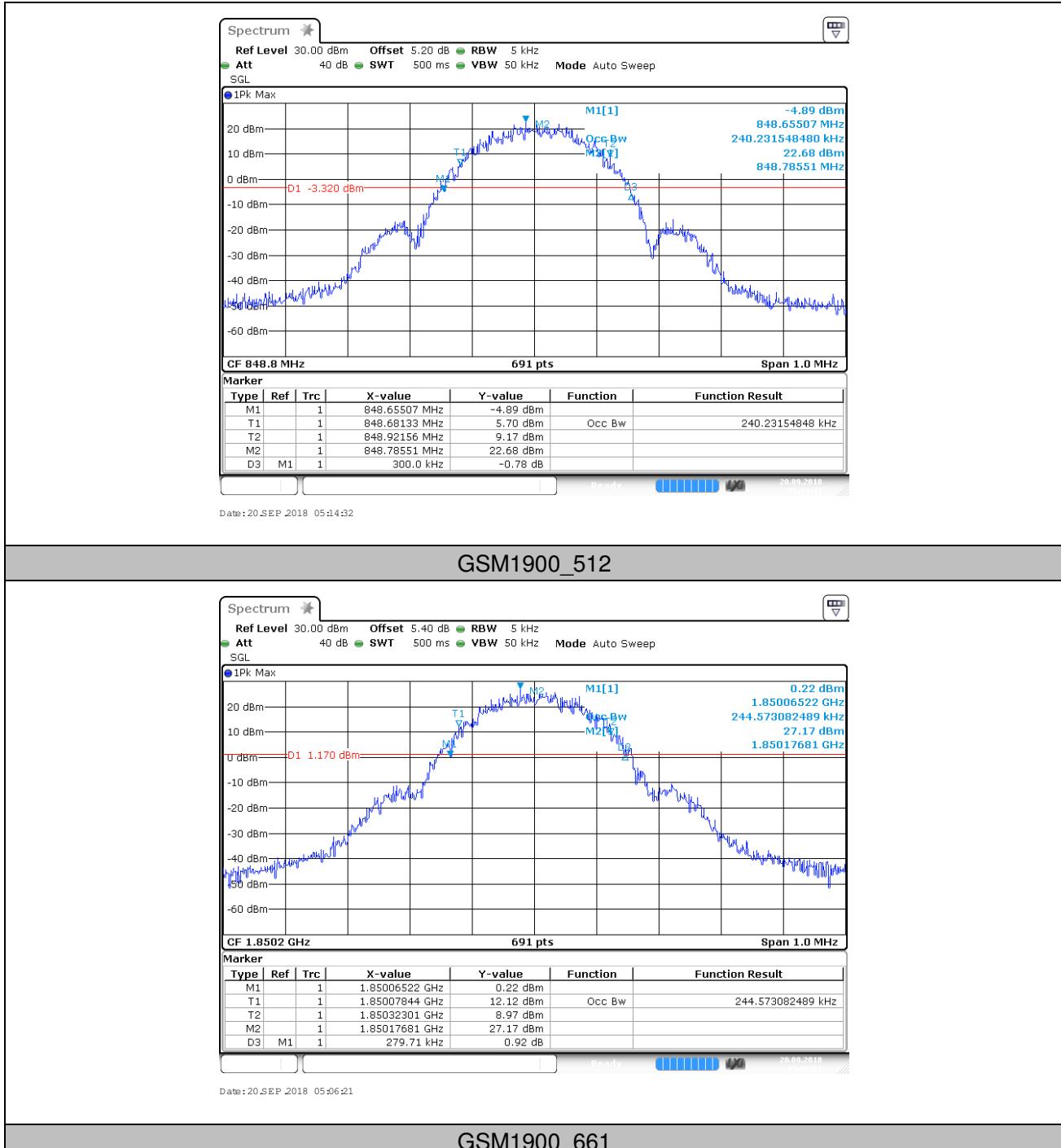
BAND	Channel	Occupied Bandwidth (kHz)	26dB Bandwidth (kHz)	Limit(kHz)	Verdict
GSM850	128	246.02	302.90	---	PASS
GSM850	190	243.13	286.96	---	PASS
GSM850	251	246.02	310.14	---	PASS
EGPRS850	128	241.68	301.45	---	PASS
EGPRS850	190	244.57	298.55	---	PASS
EGPRS850	251	240.23	300.00	---	PASS
GSM1900	512	244.57	279.71	---	PASS
GSM1900	661	247.47	313.04	---	PASS
GSM1900	810	243.13	307.25	---	PASS
EGPRS1900	512	244.57	284.06	---	PASS
EGPRS1900	661	244.57	298.55	---	PASS
EGPRS1900	810	244.57	304.35	---	PASS

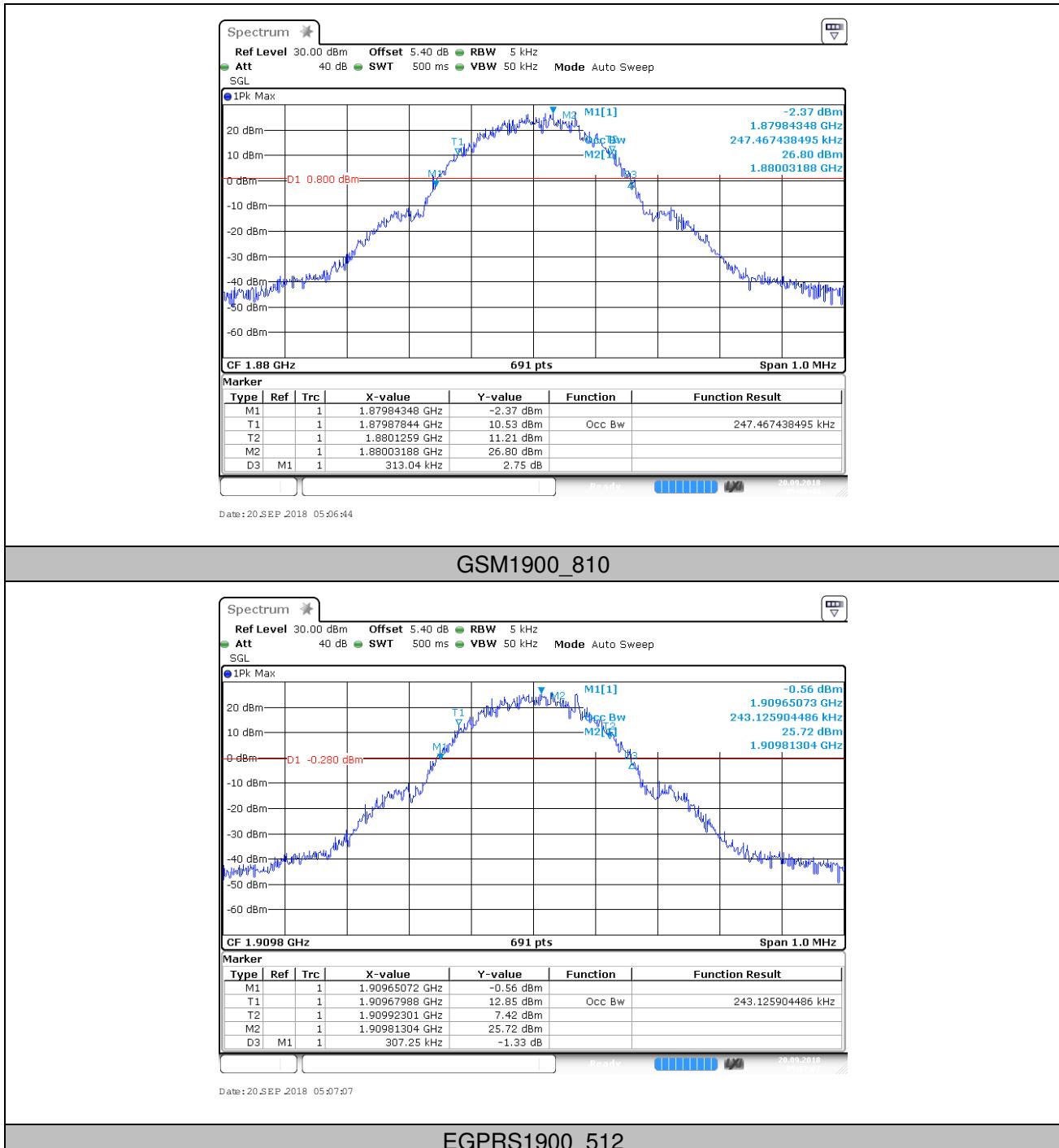
4.2. Test Plots

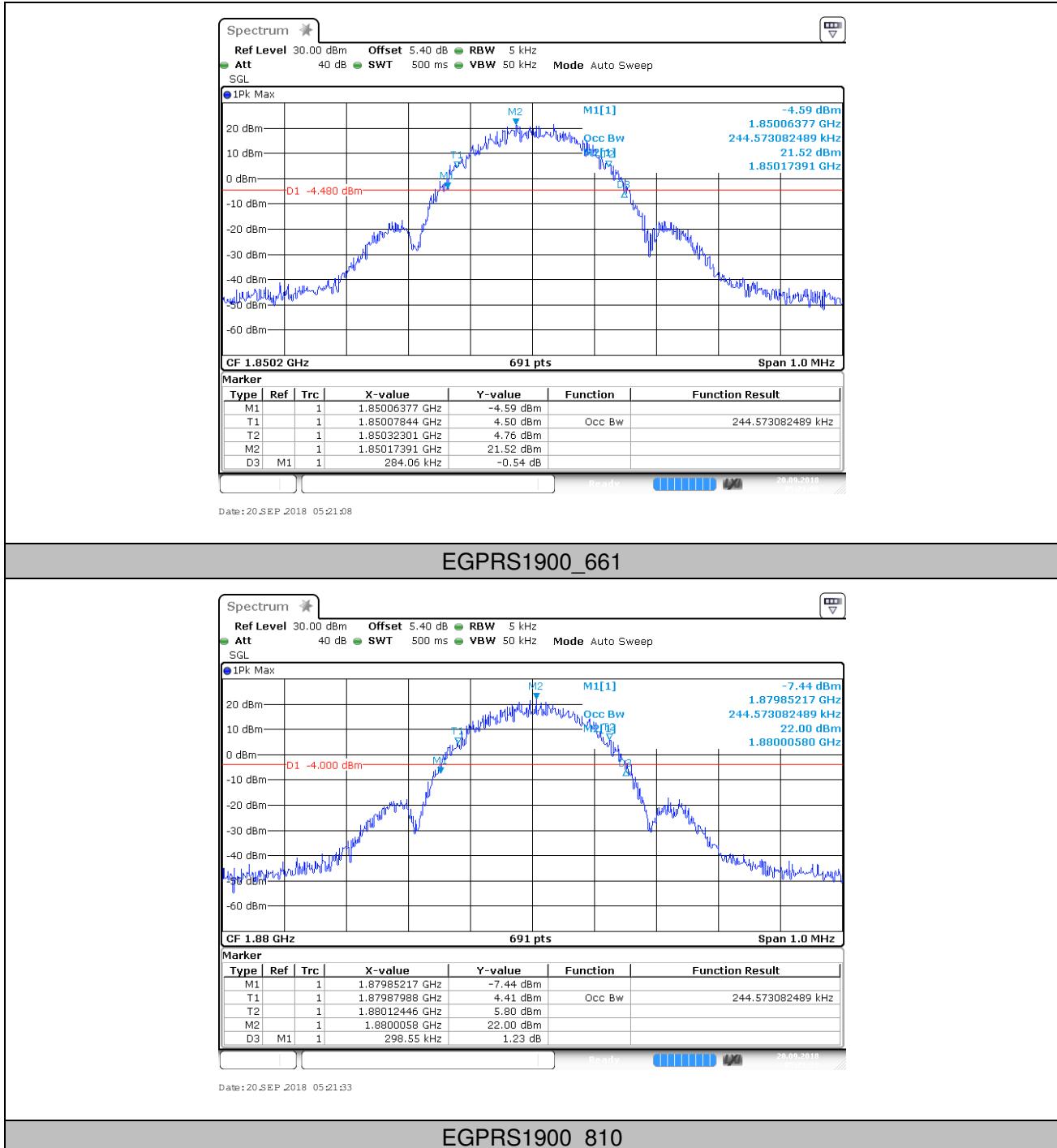


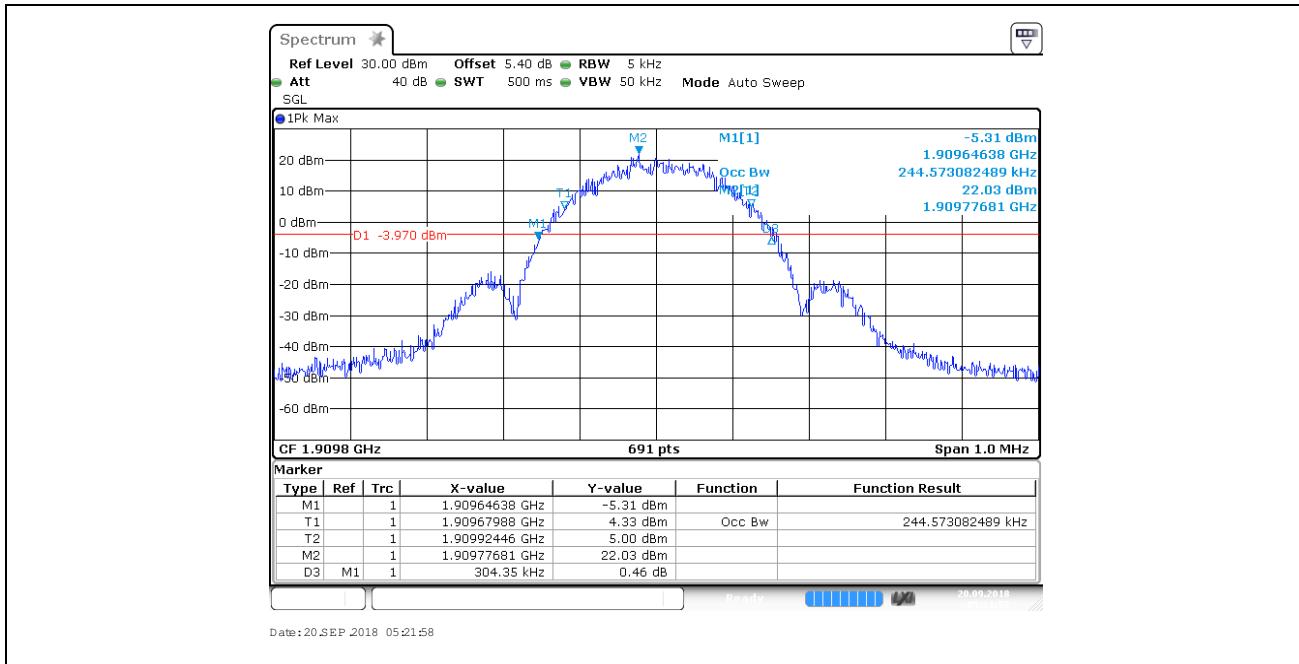

GSM850_251

EGPRS850_128





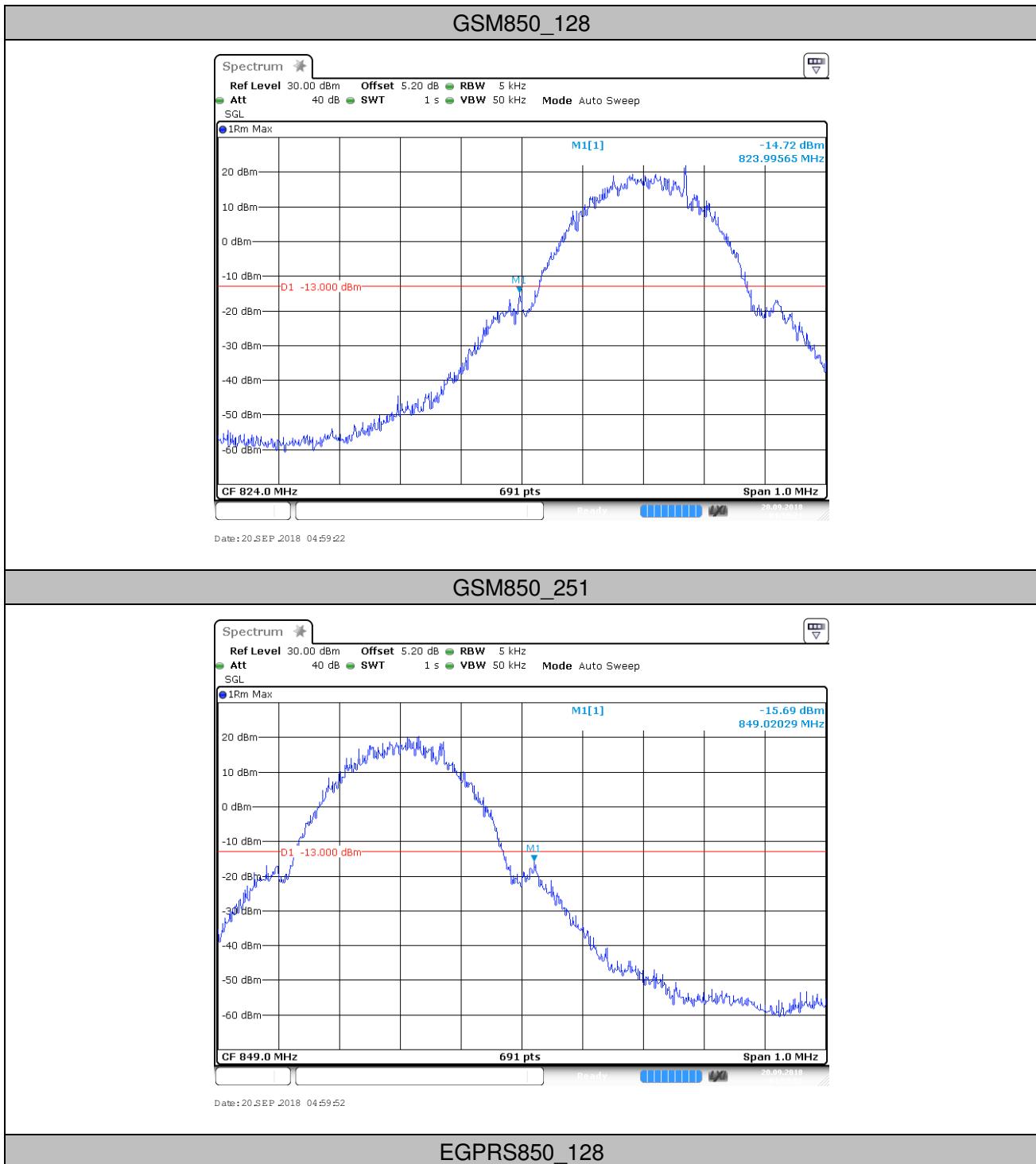


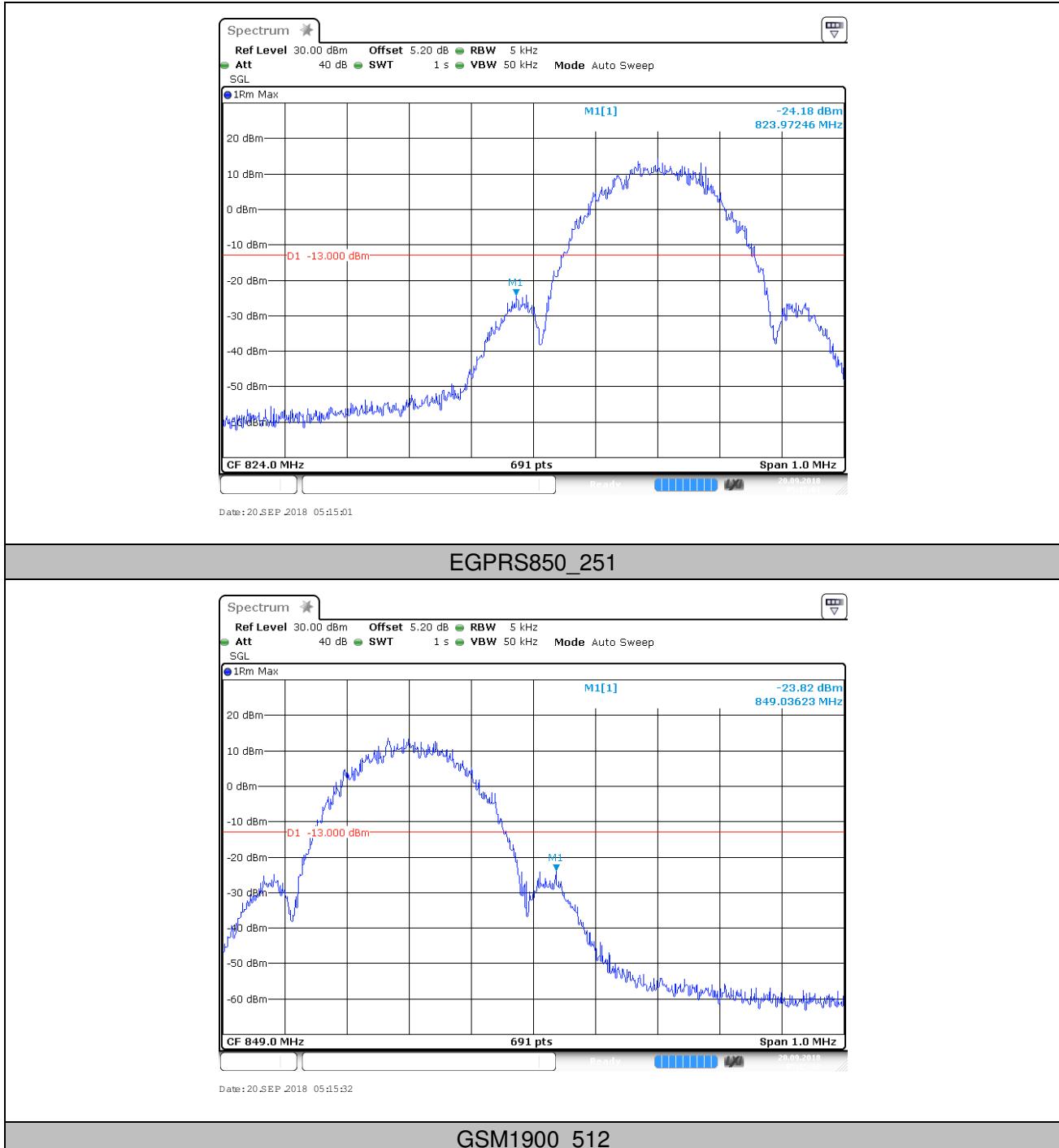


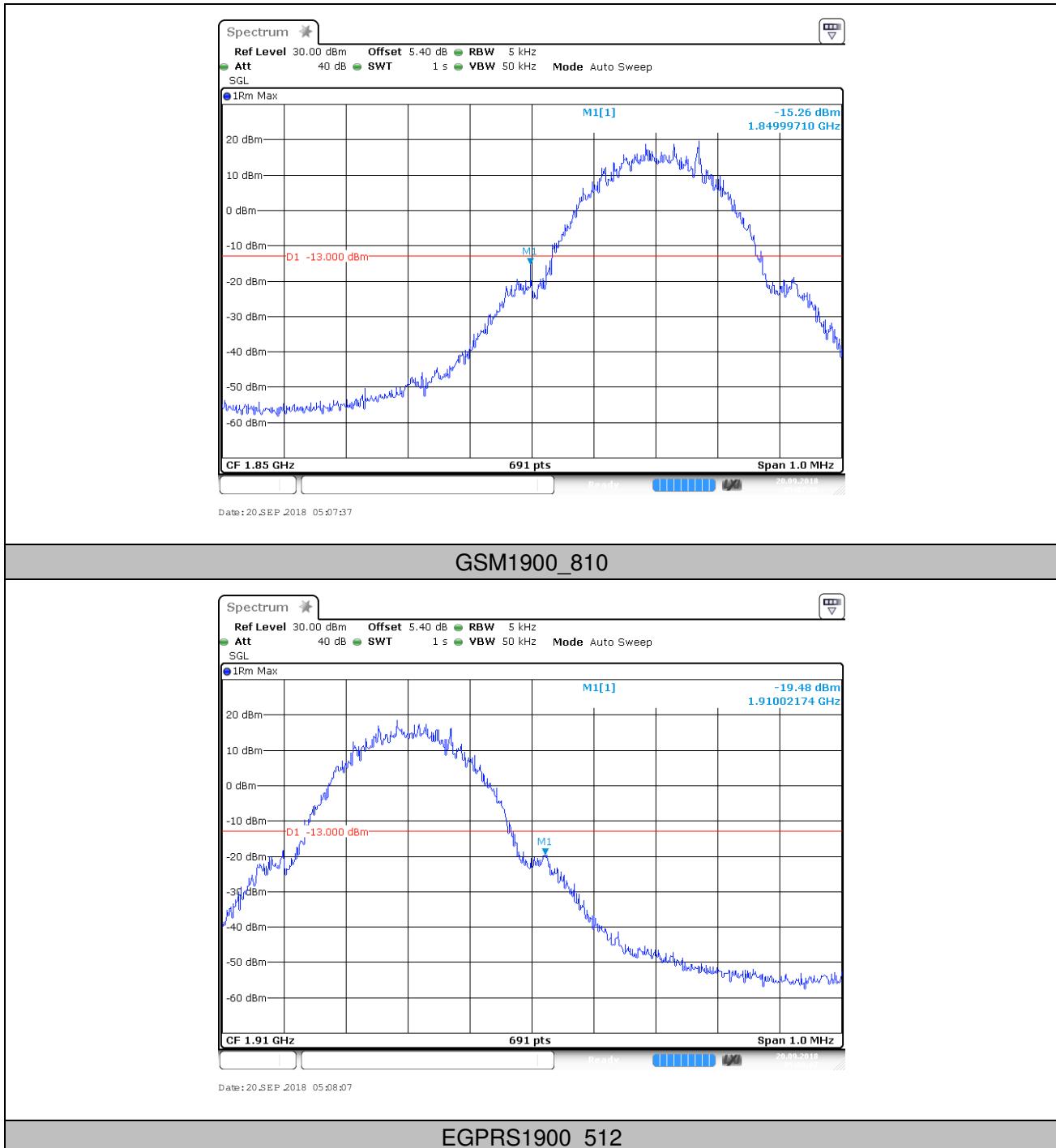


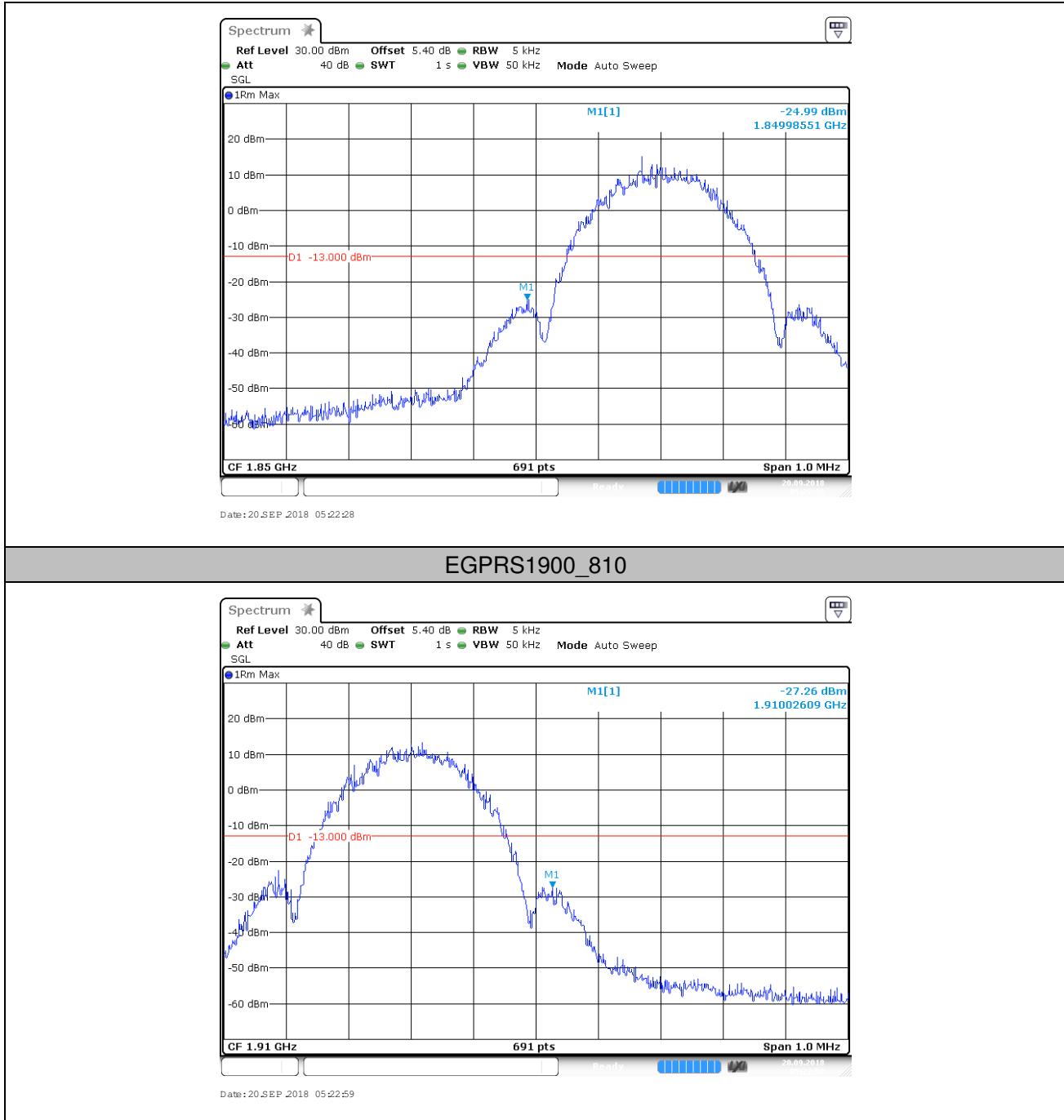
5. Band Edge Compliance

5.1. Test Plots







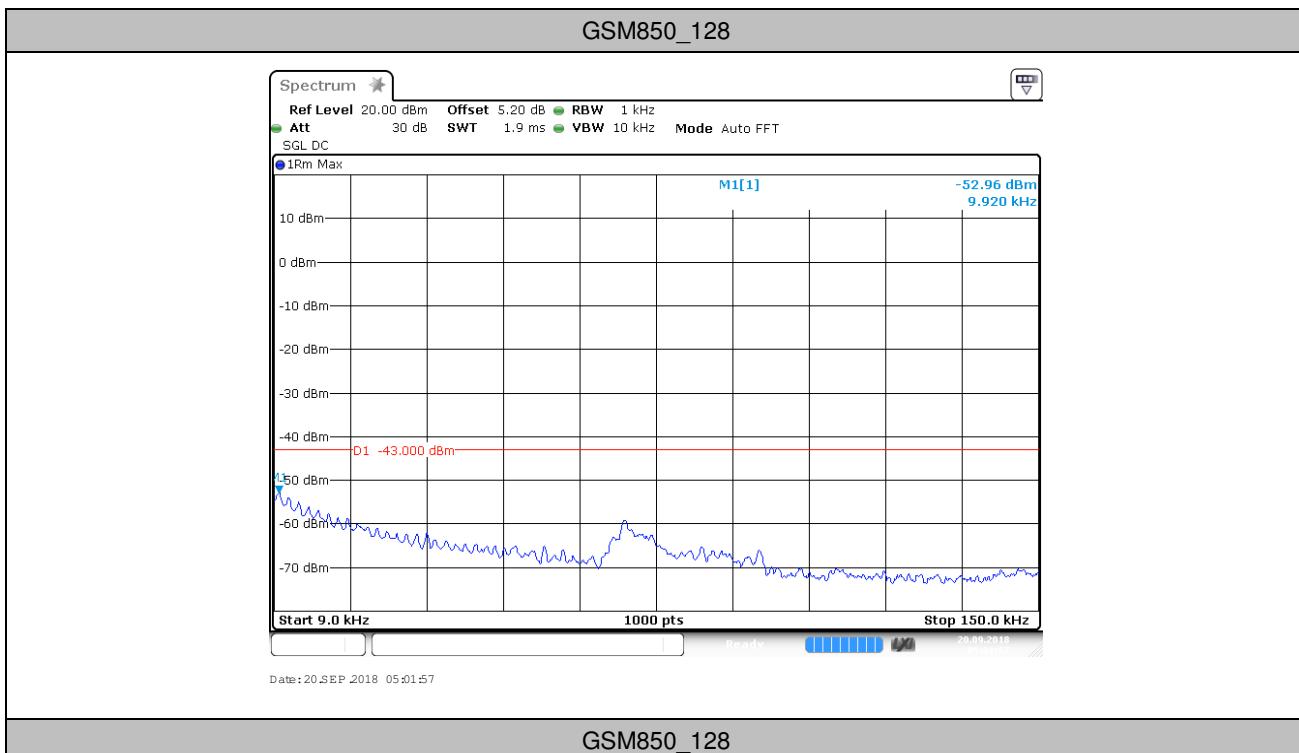


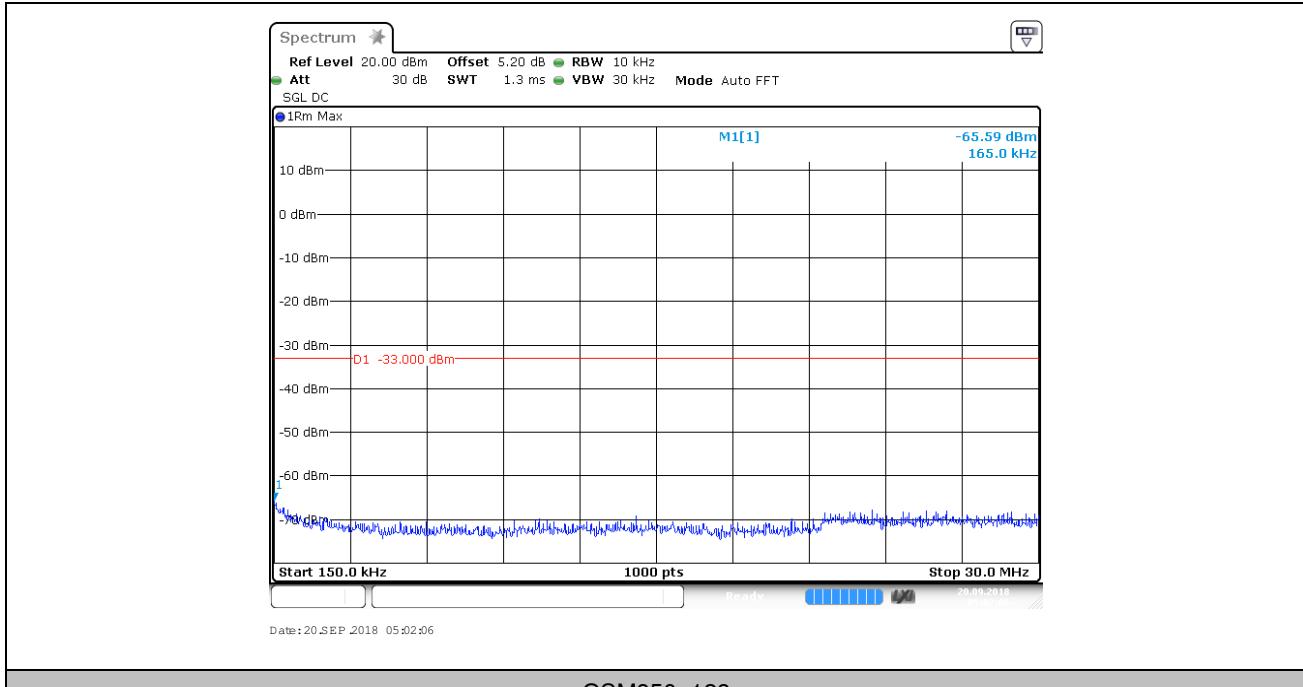
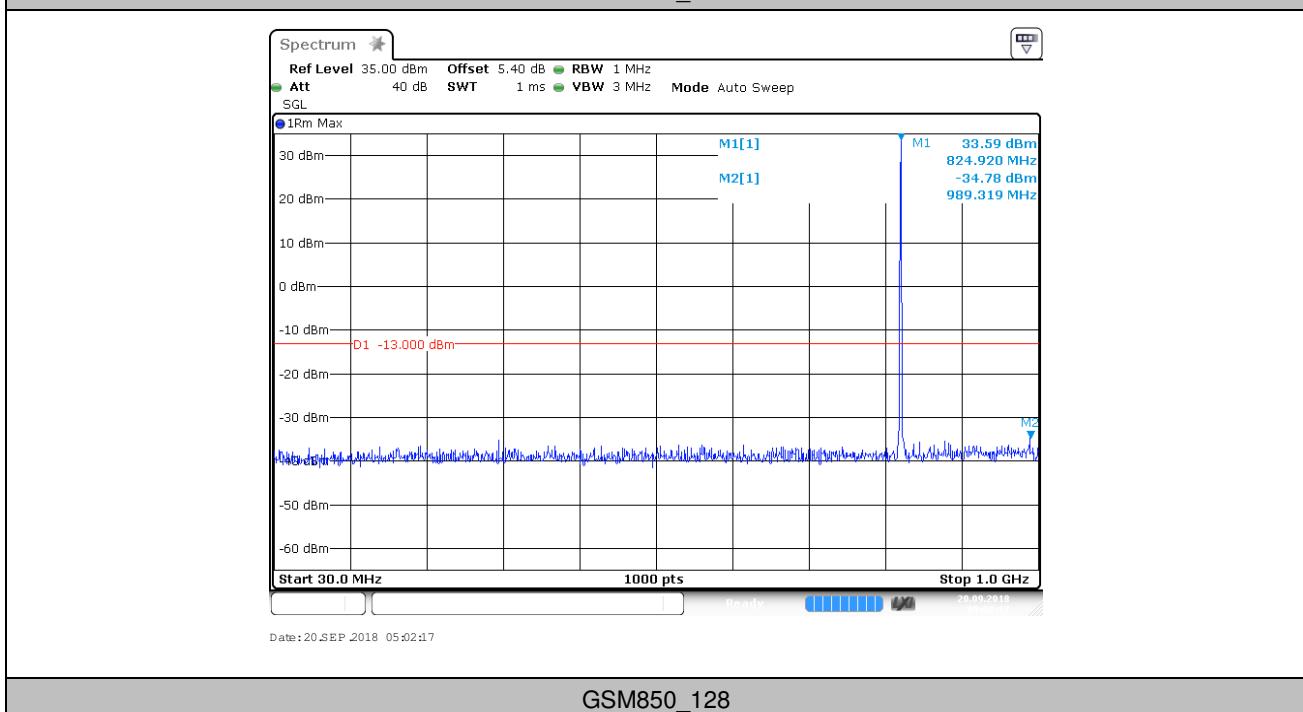
6. Spurious Emission at Antenna Terminal

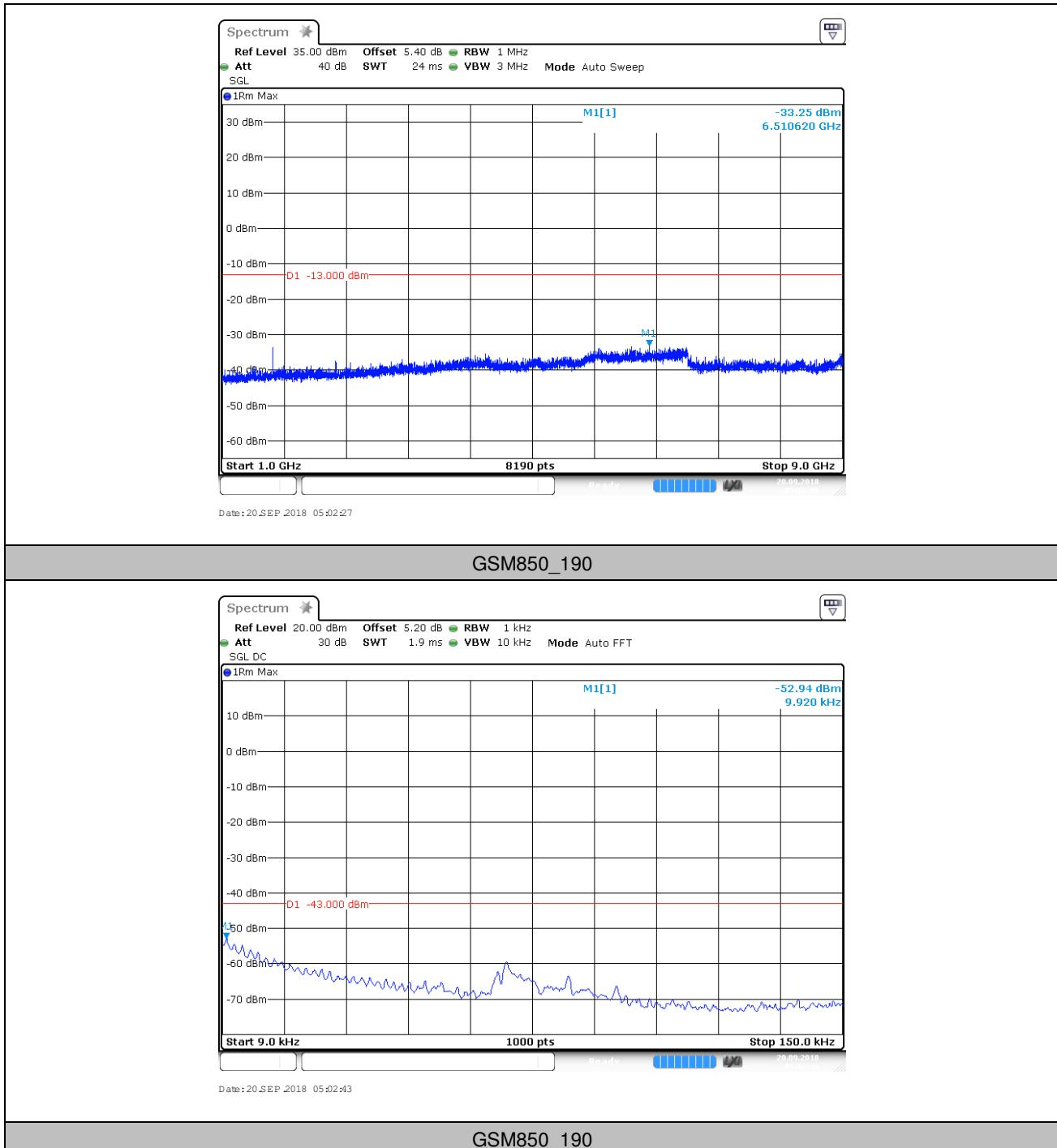
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< \text{RBW}/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (\text{Span} / \text{RBW})$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

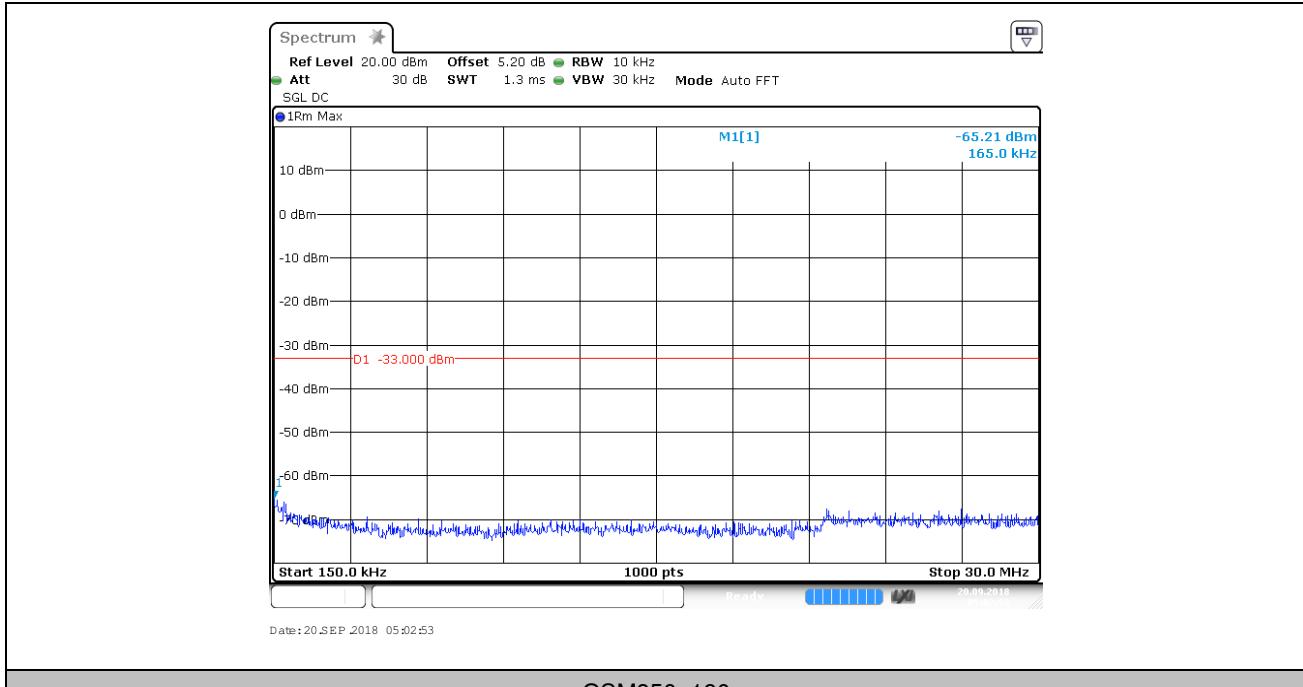
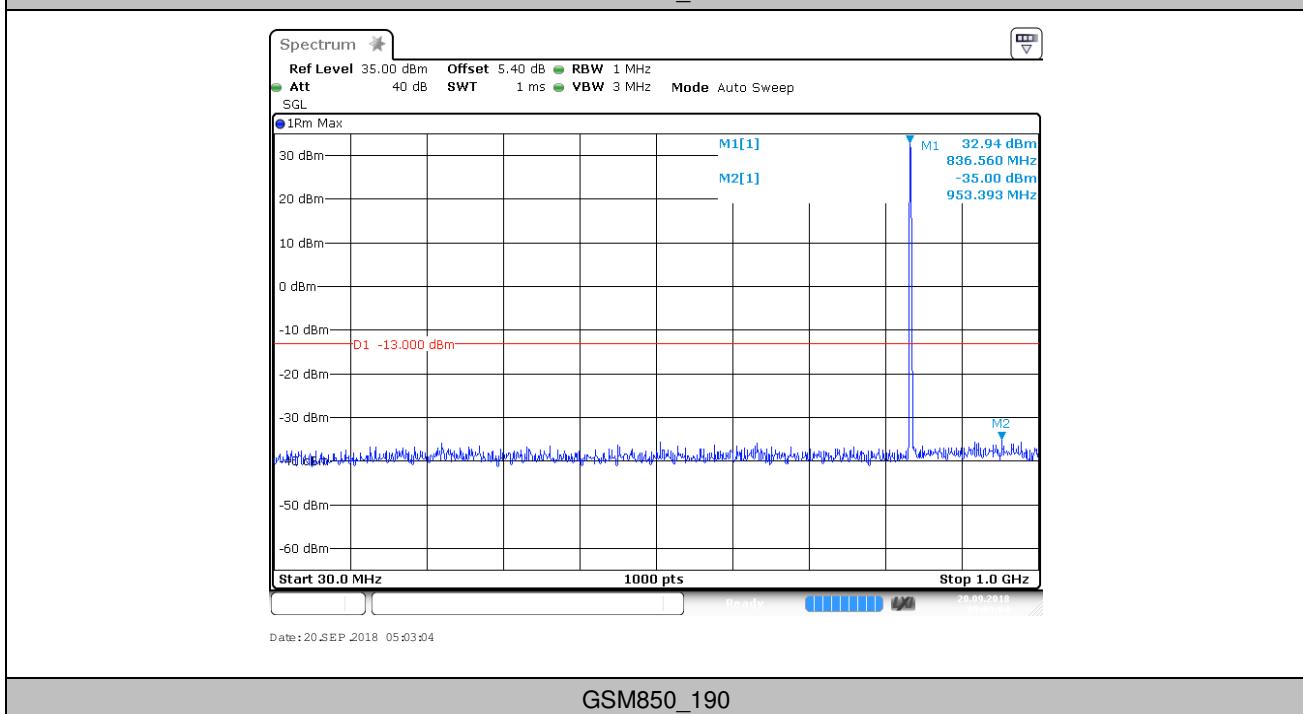
Remark2: only the worst case data displayed in this report.

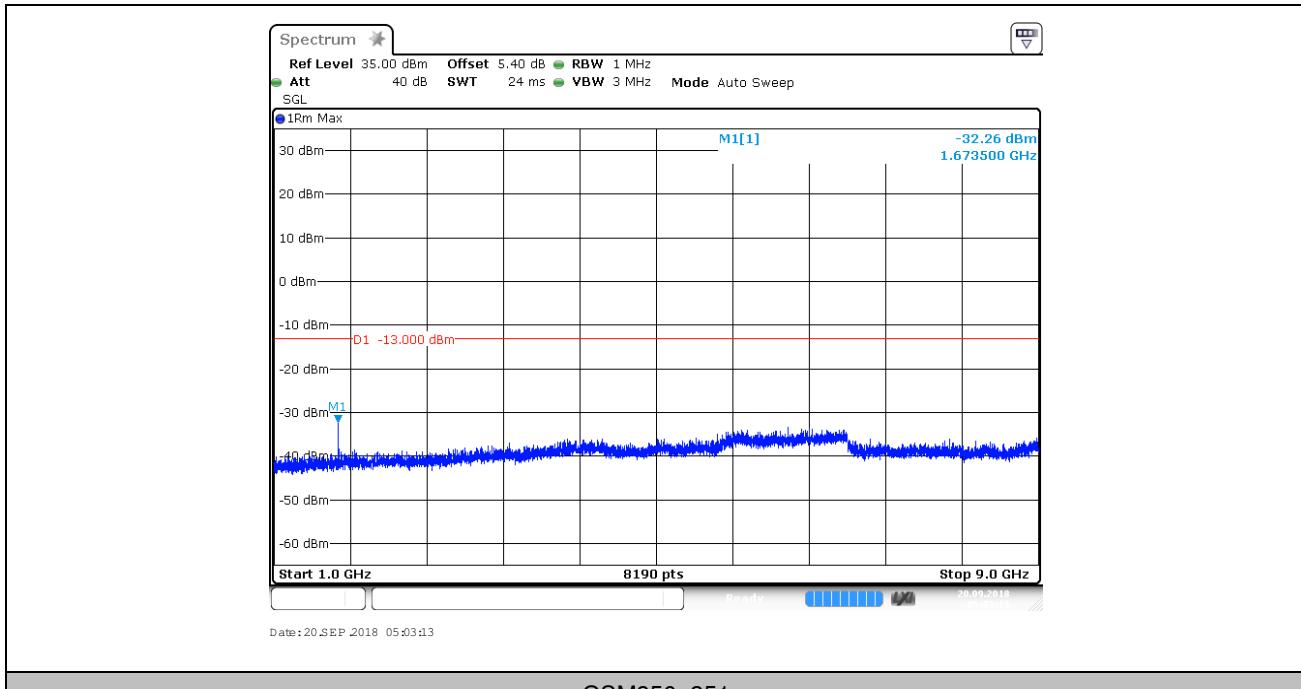
6.1. Test Plots



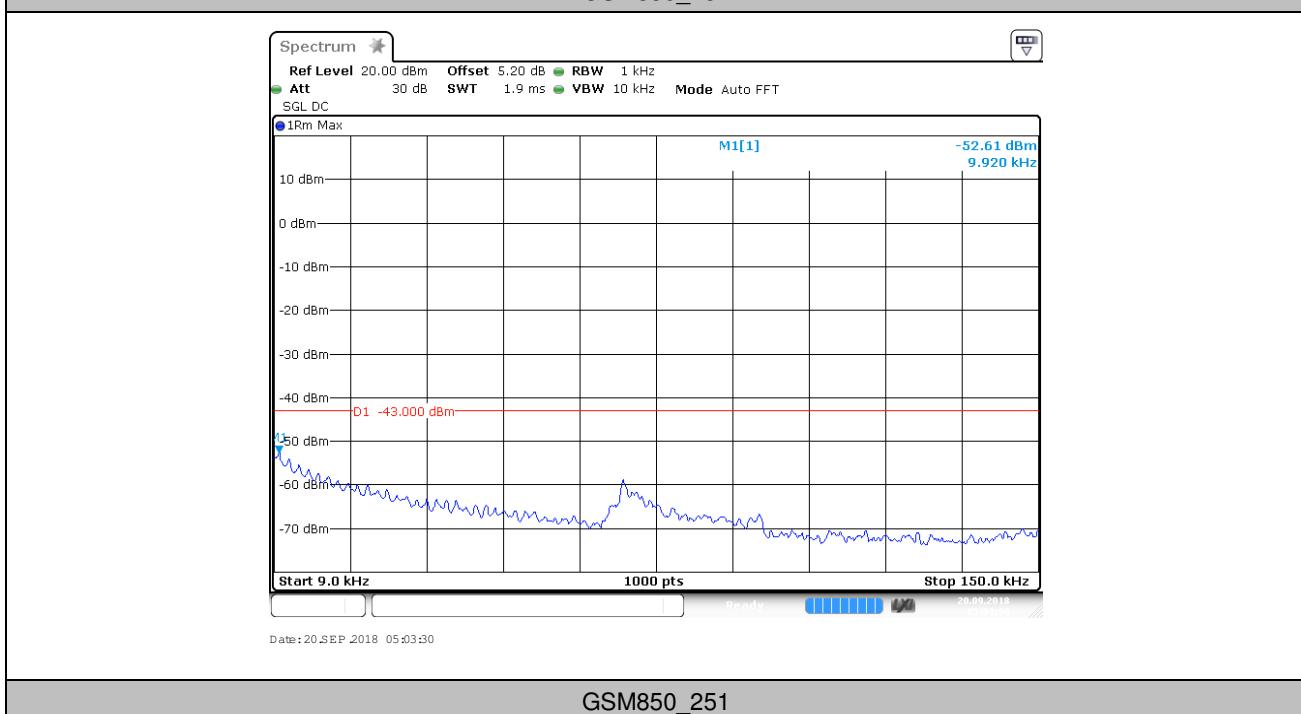

GSM850_128

GSM850_128



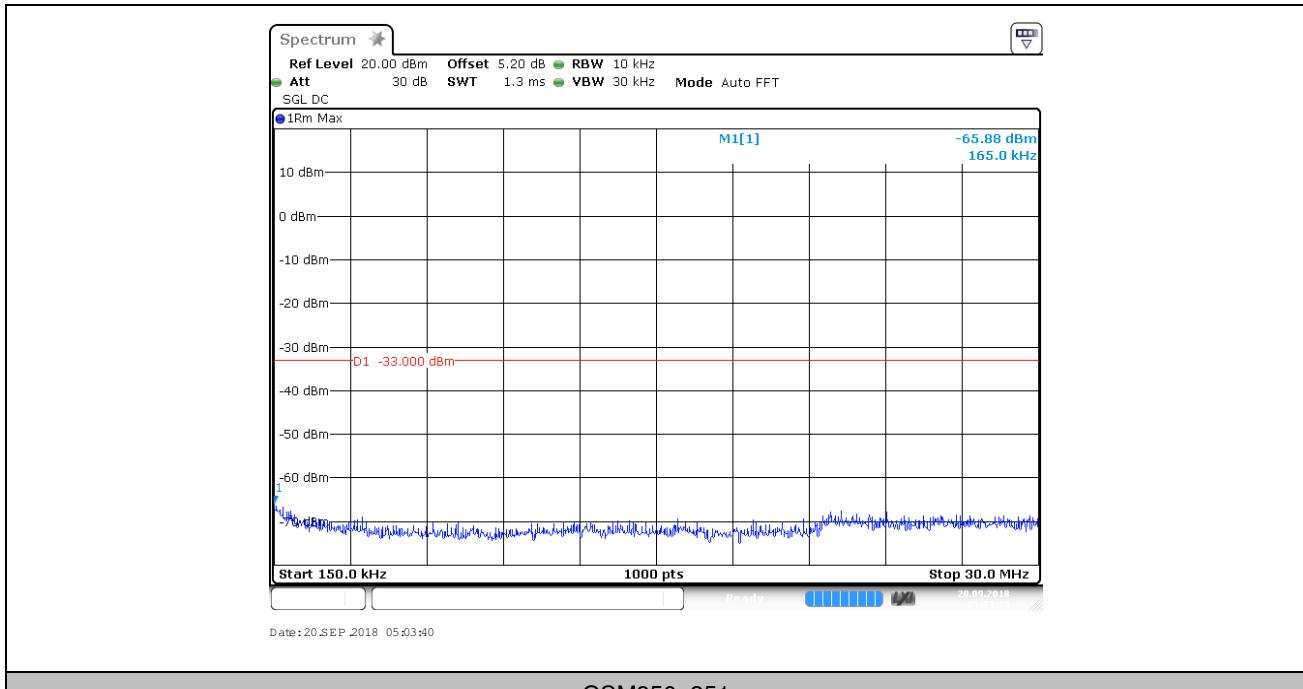
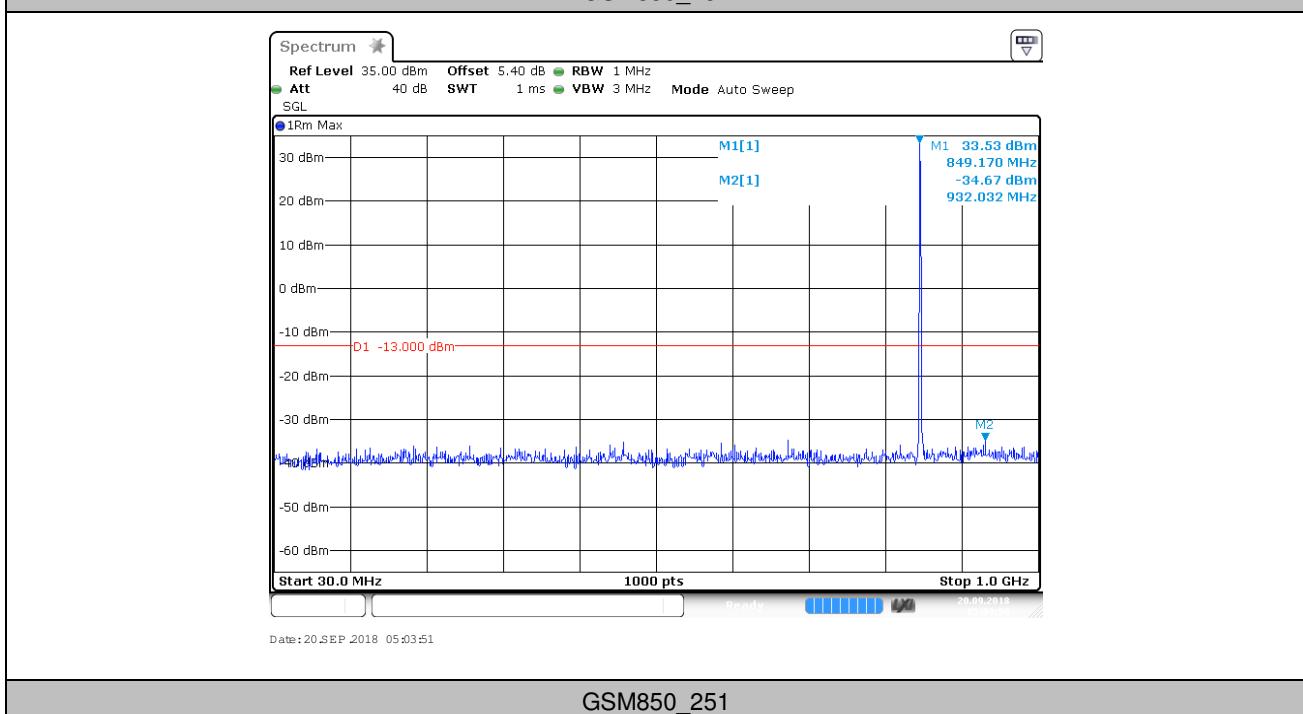
**GSM850_190****GSM850_190**

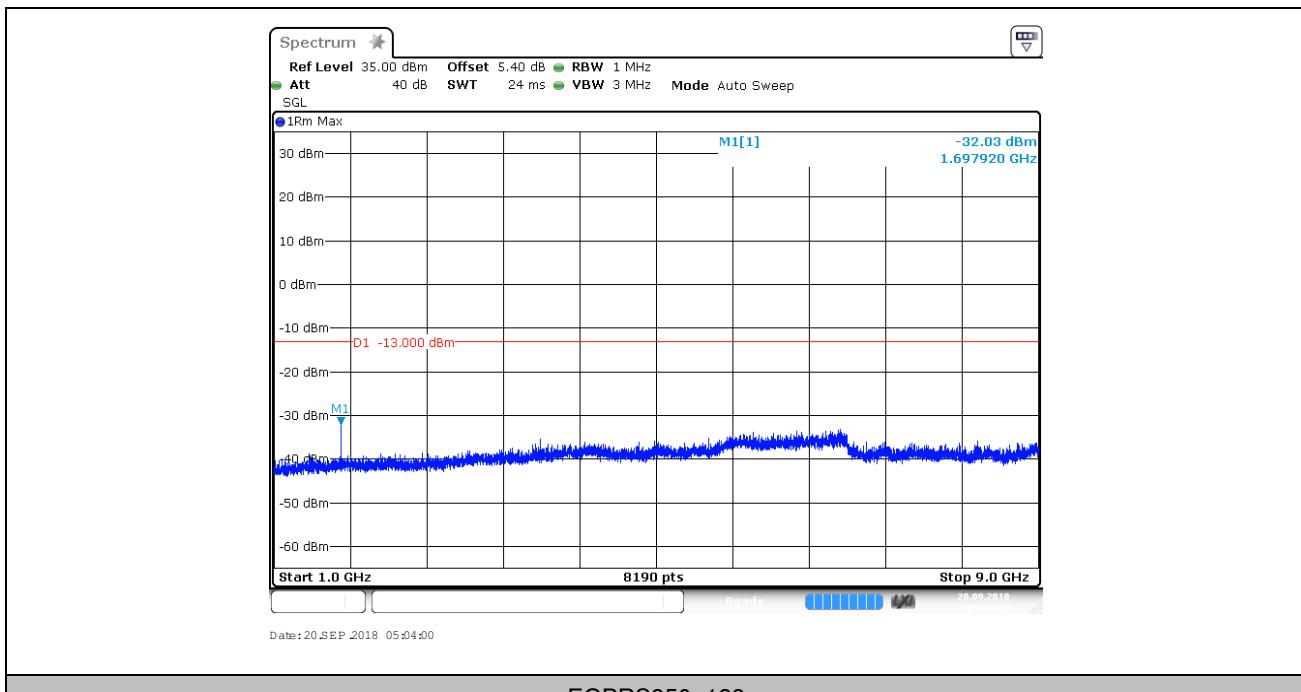


GSM850_251

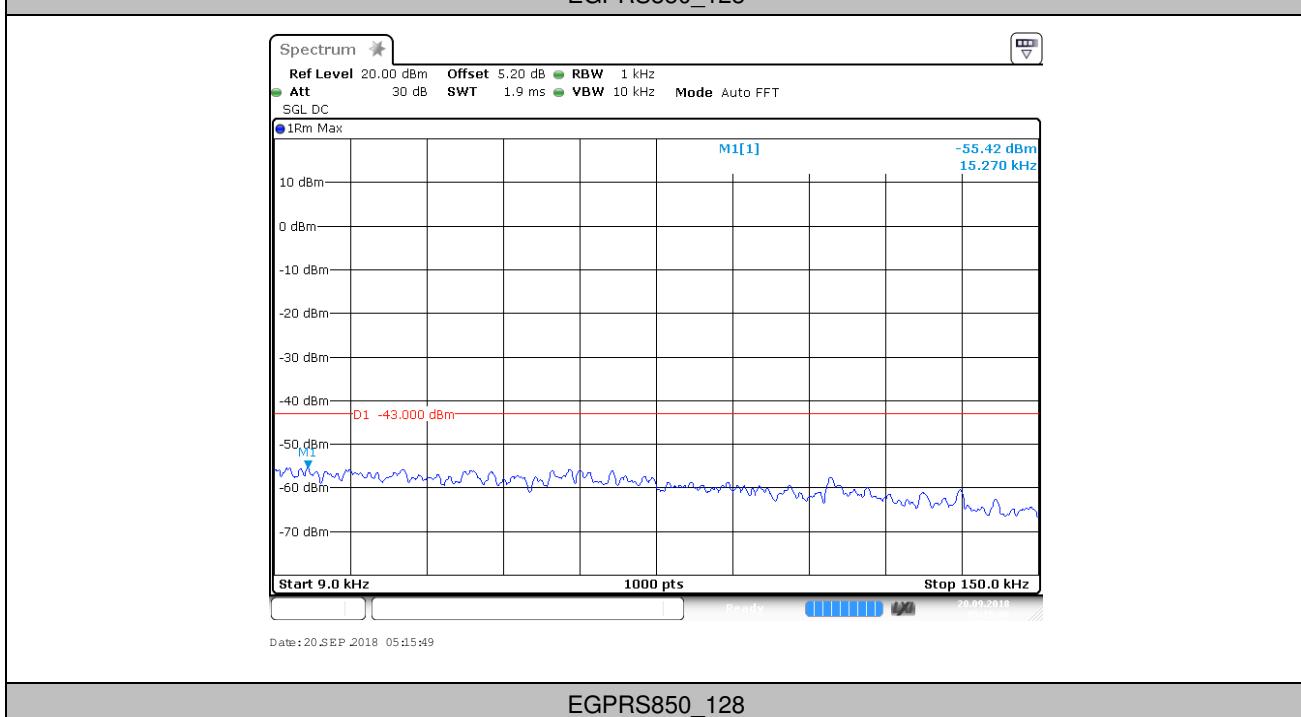


GSM850_251

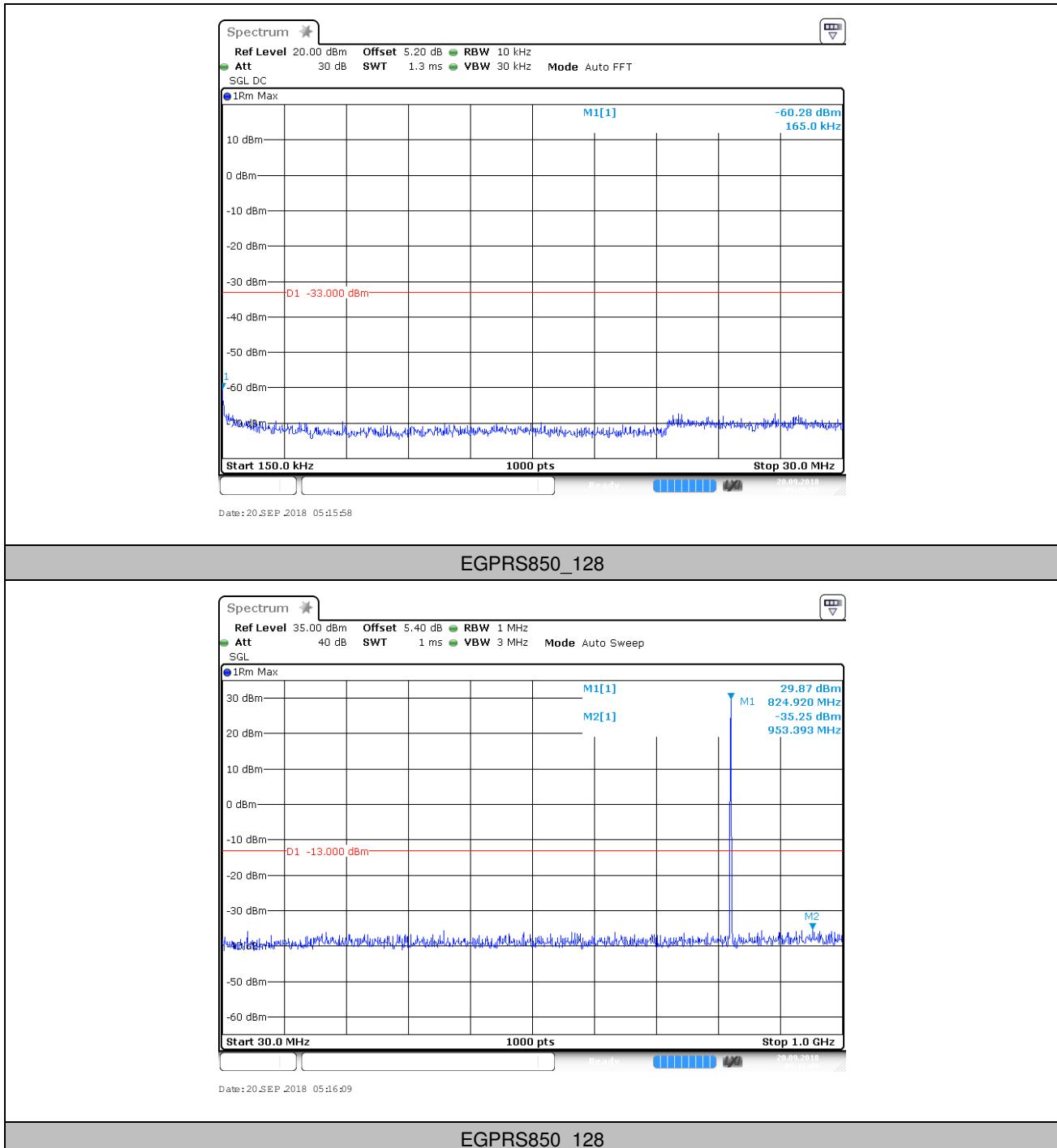
**GSM850_251****GSM850_251**

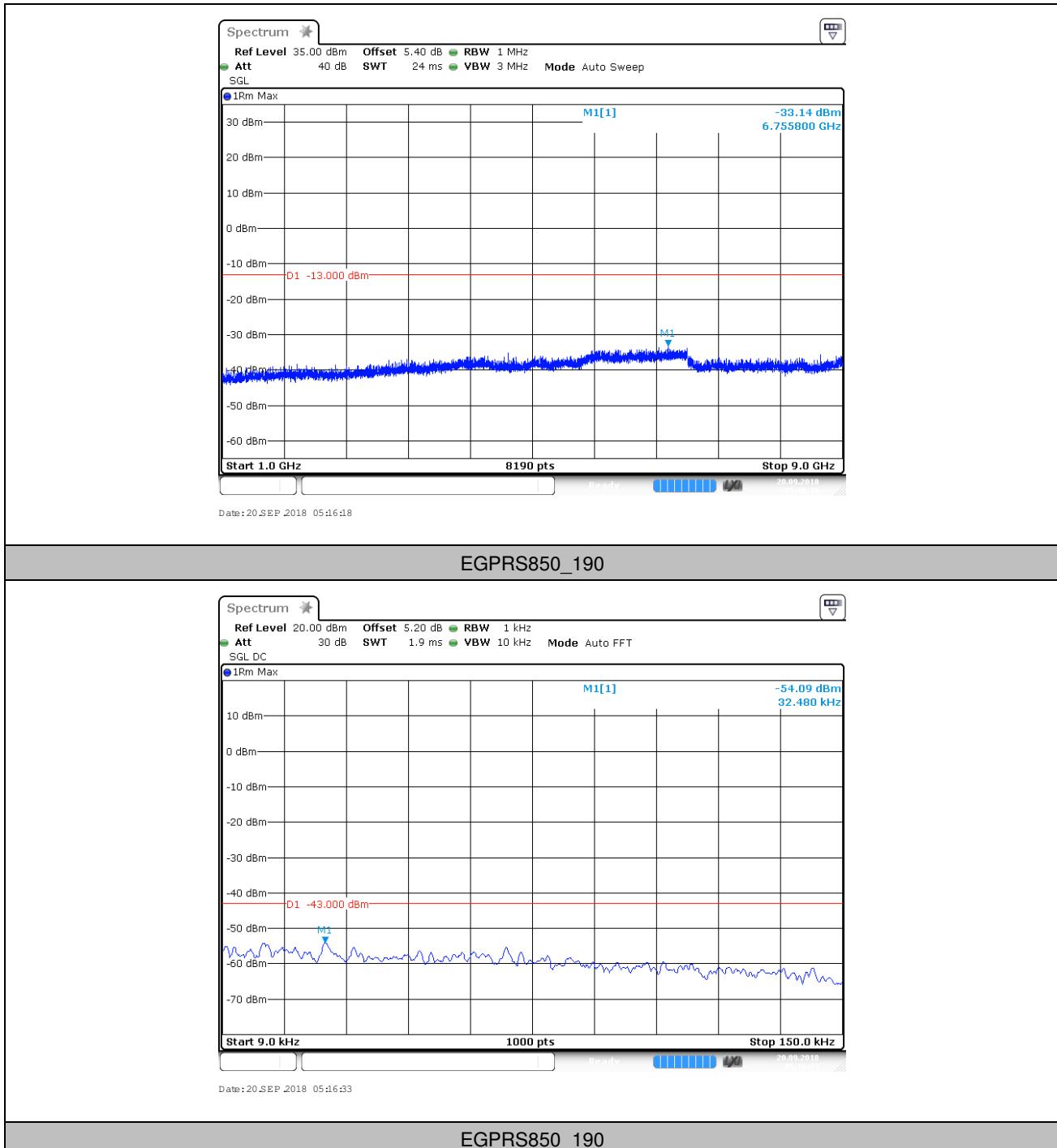


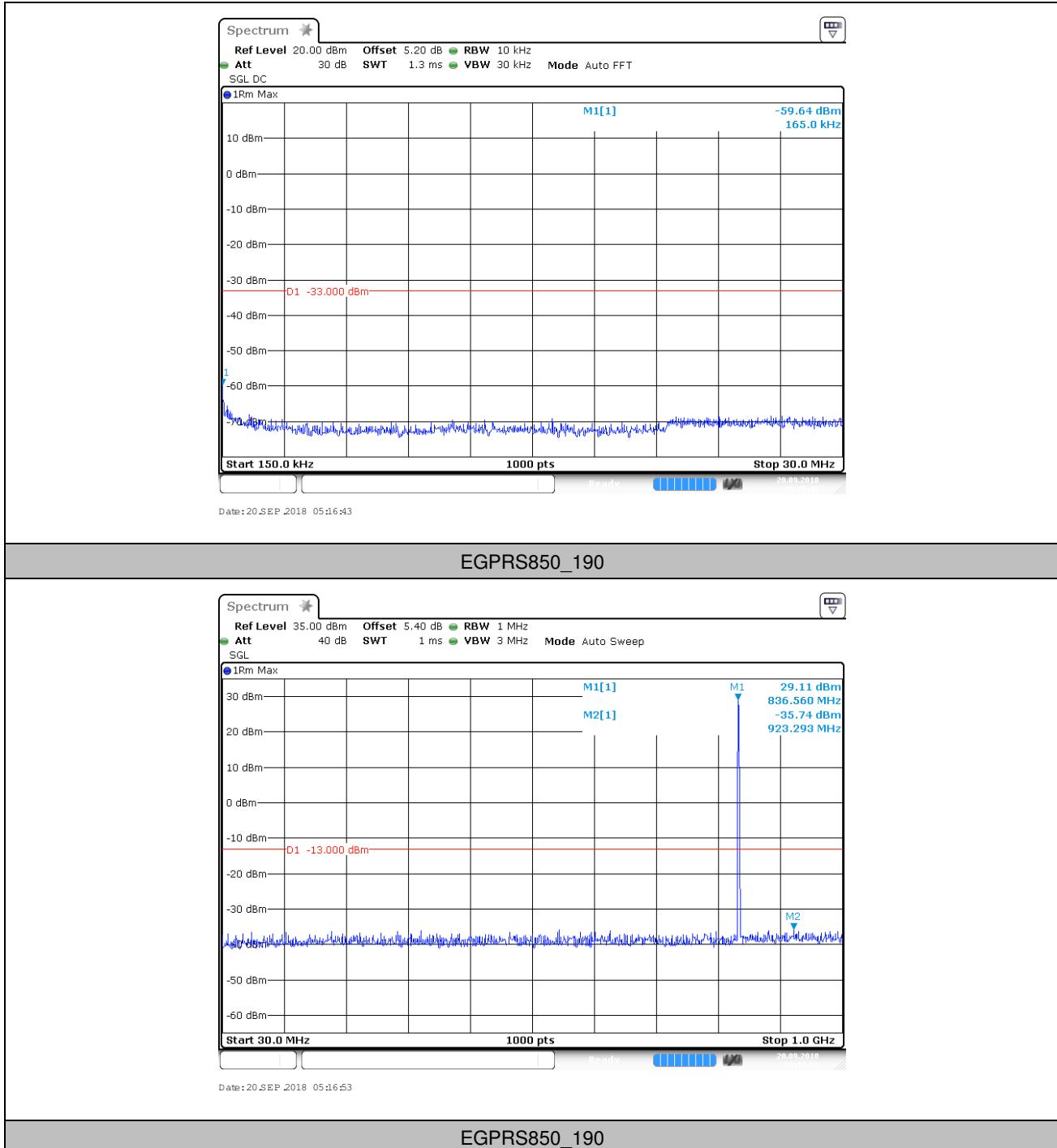
EGPRS850_128

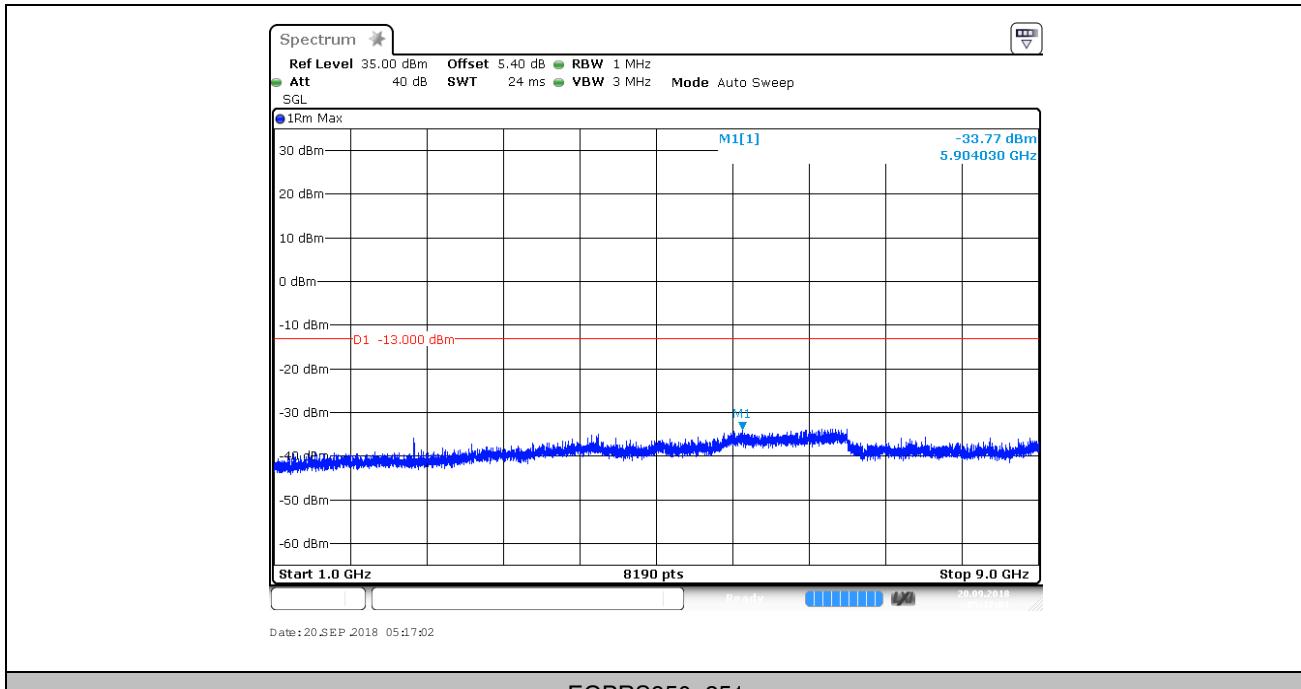


EGPRS850_128

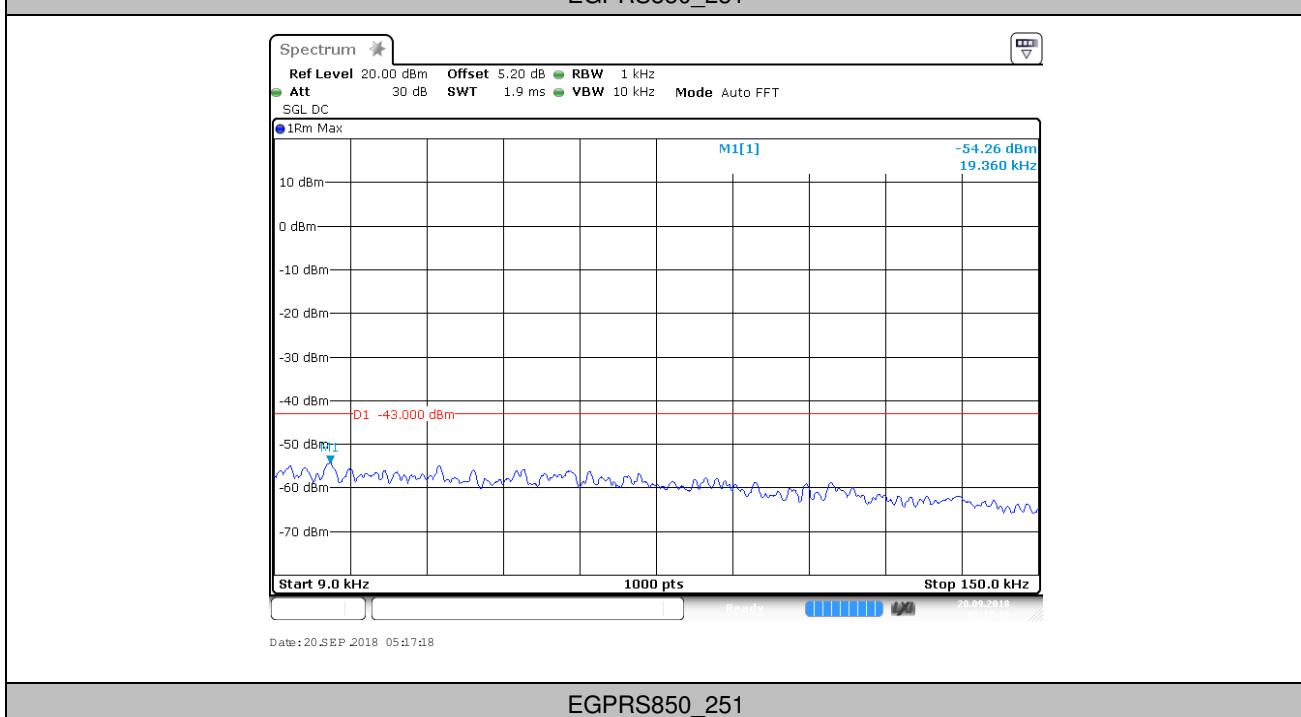




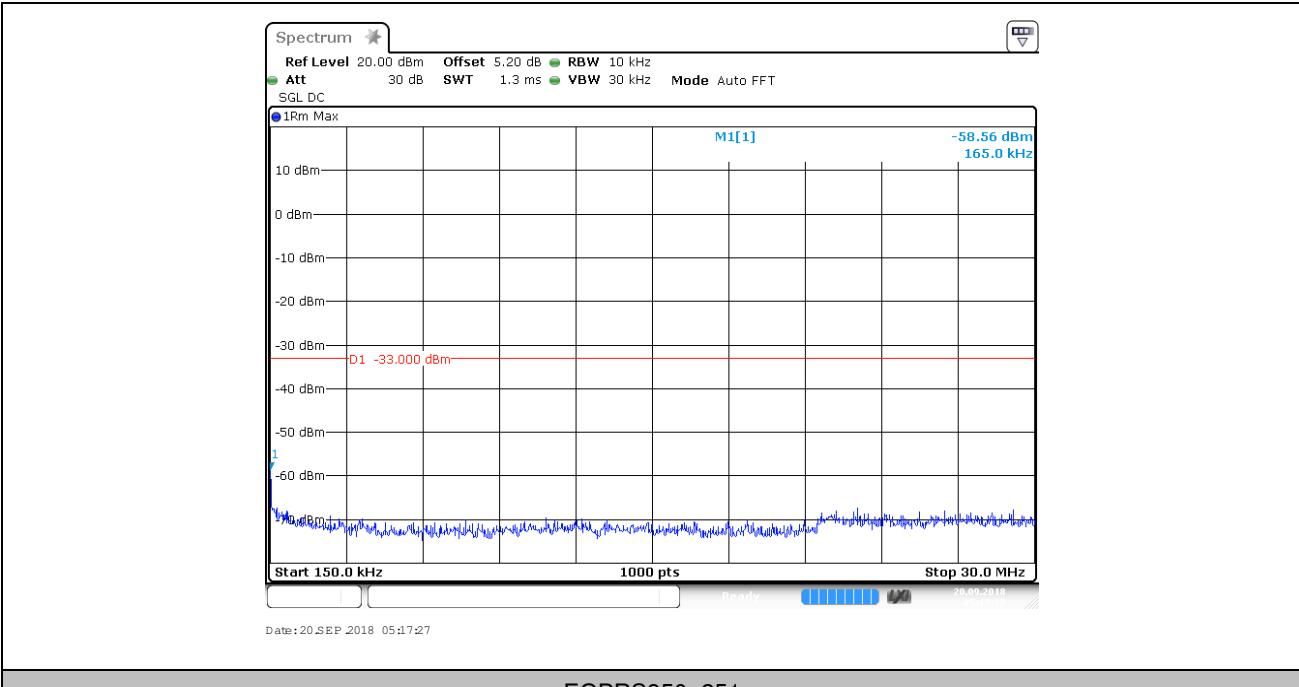
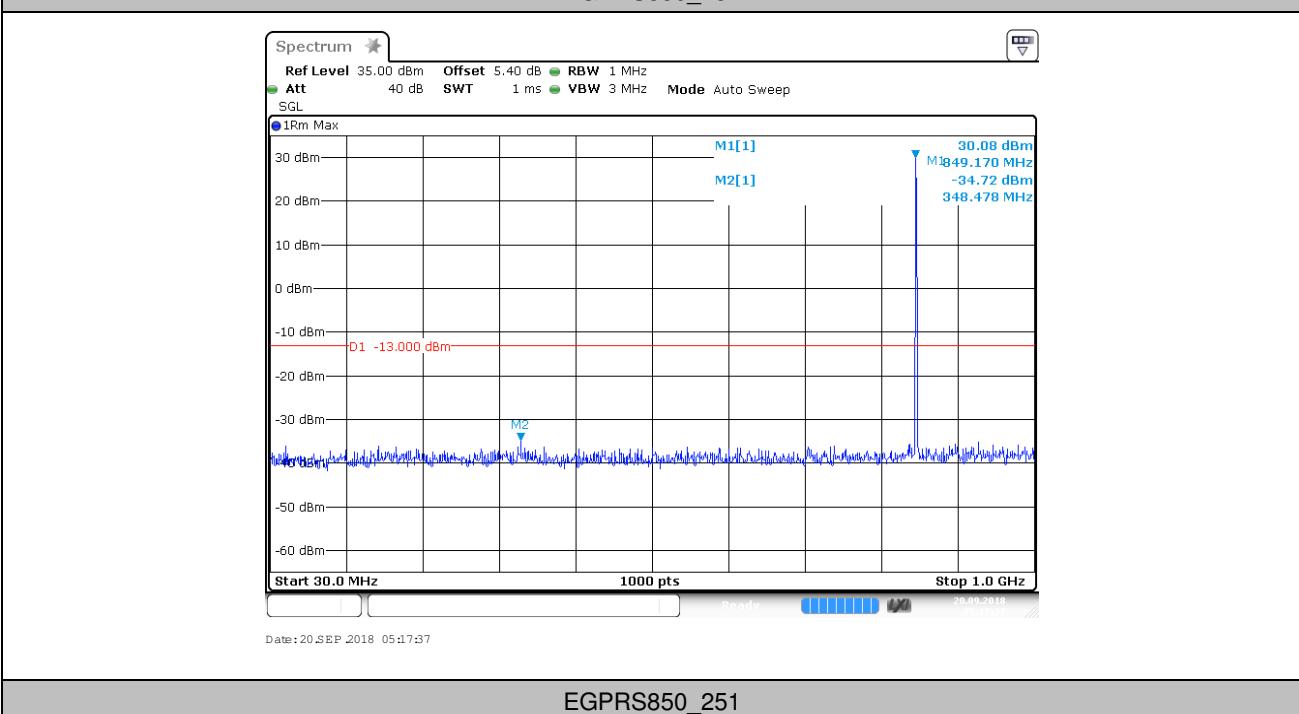


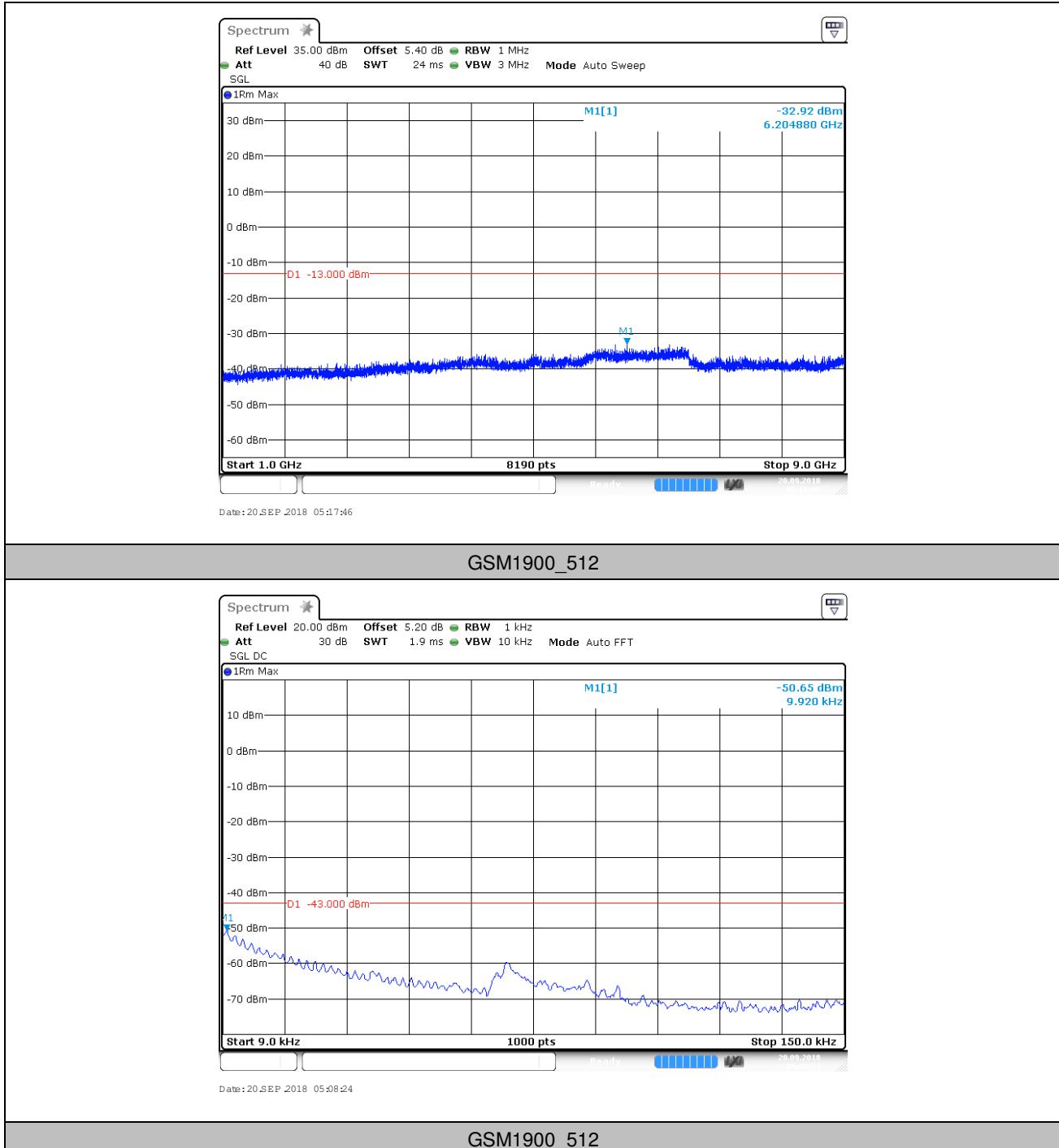


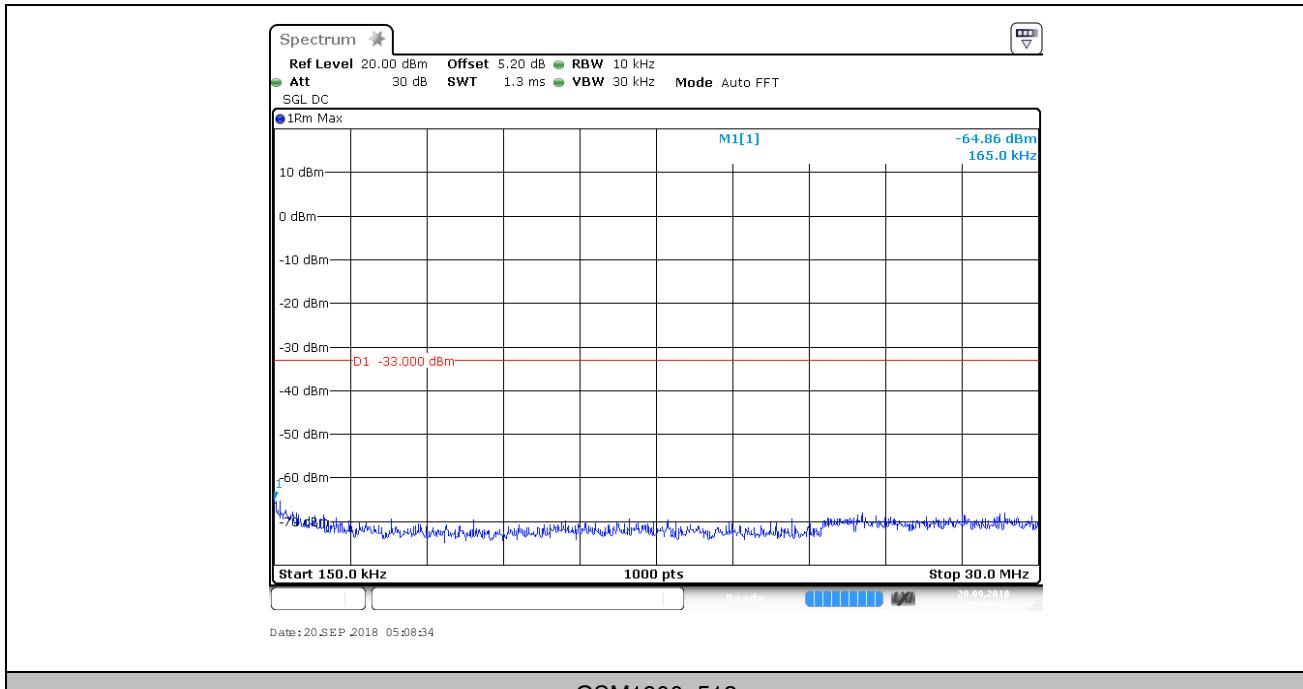
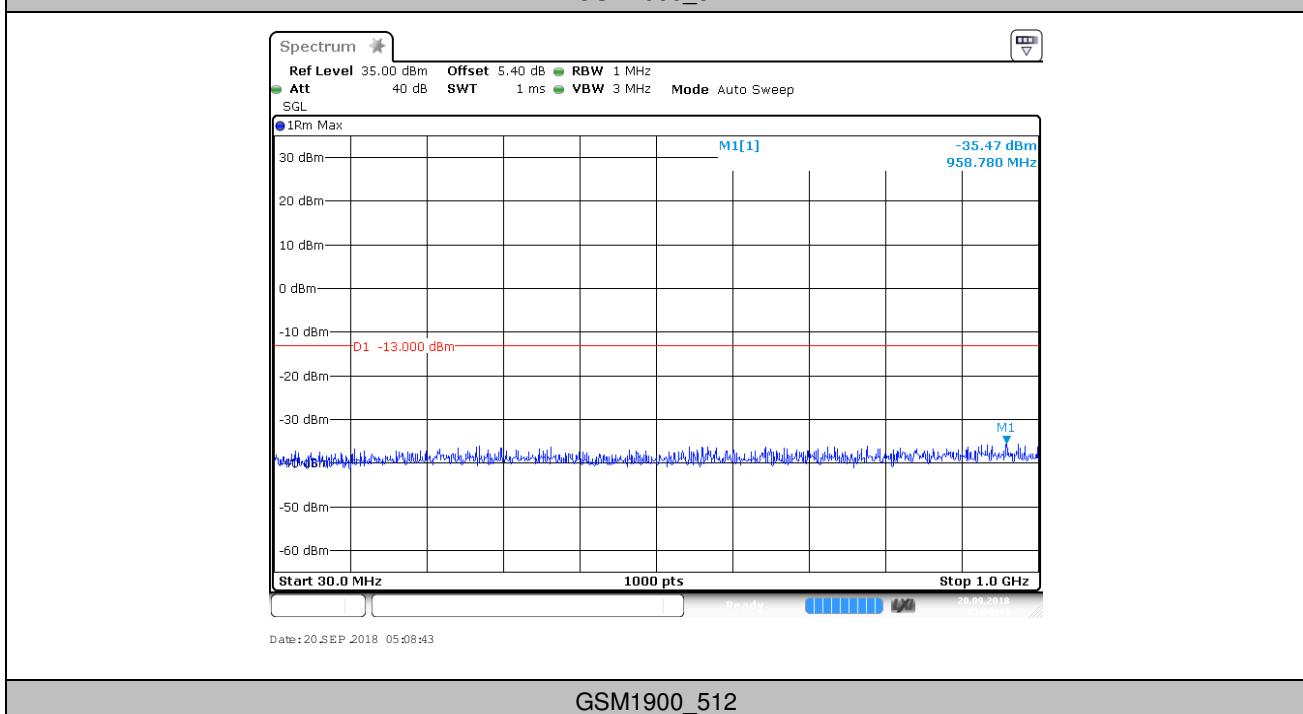
EGPRS850_251

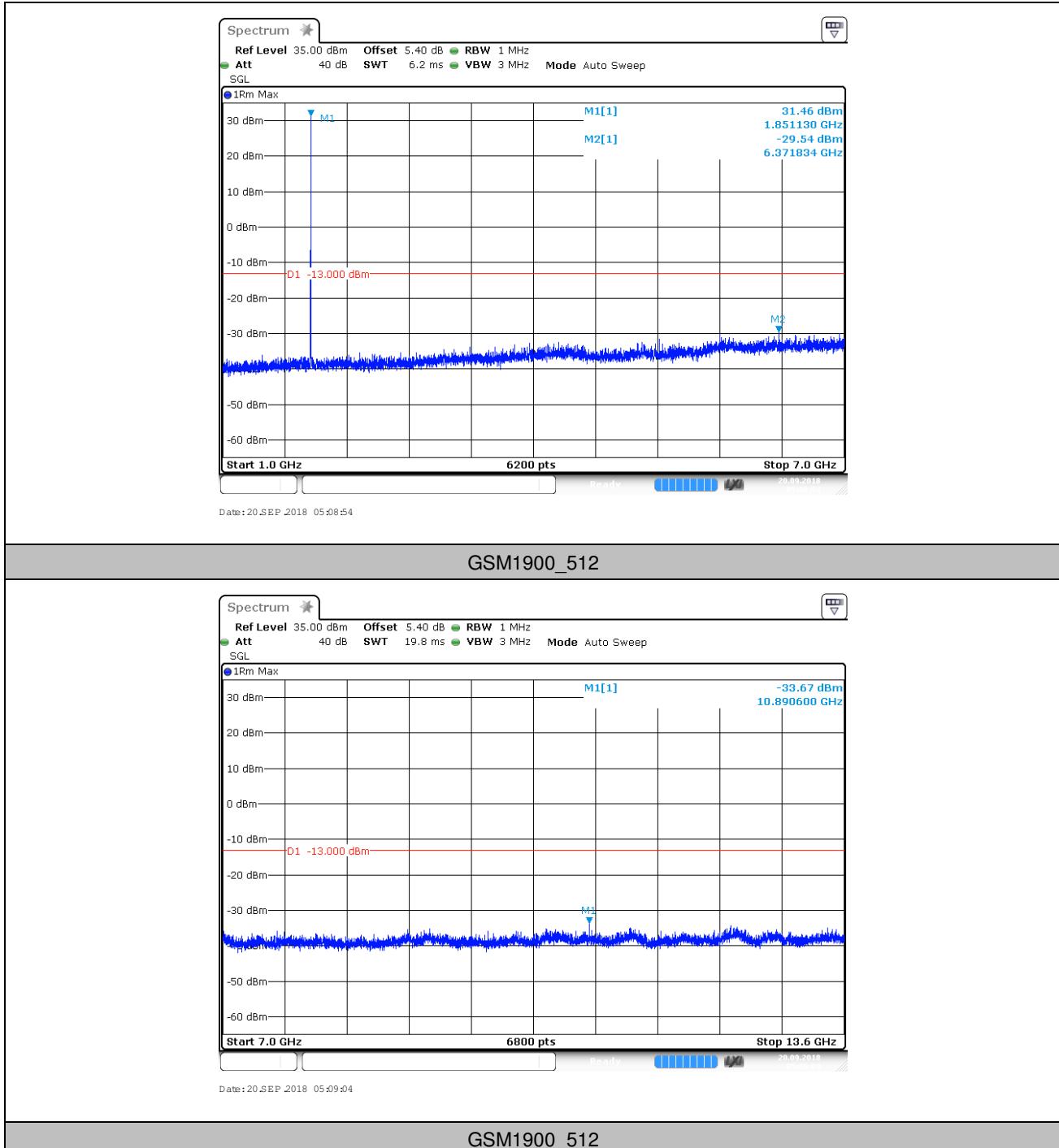


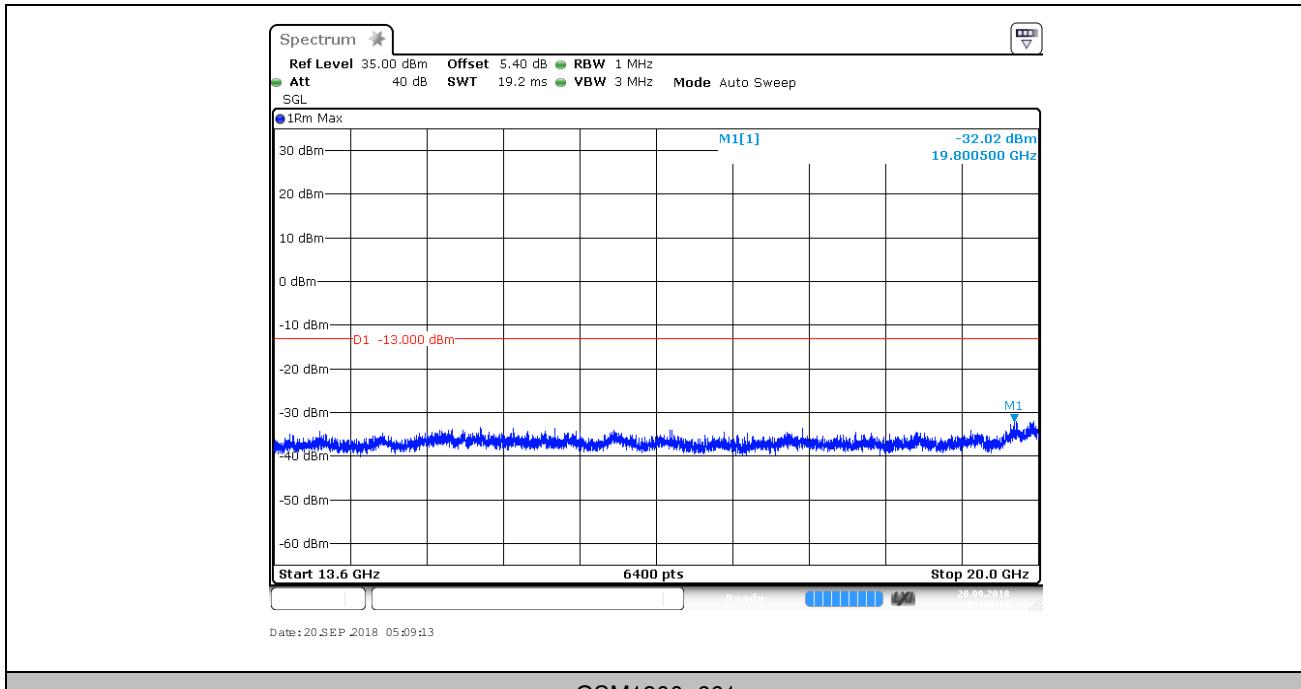
EGPRS850_251

**EGPRS850_251****EGPRS850_251**

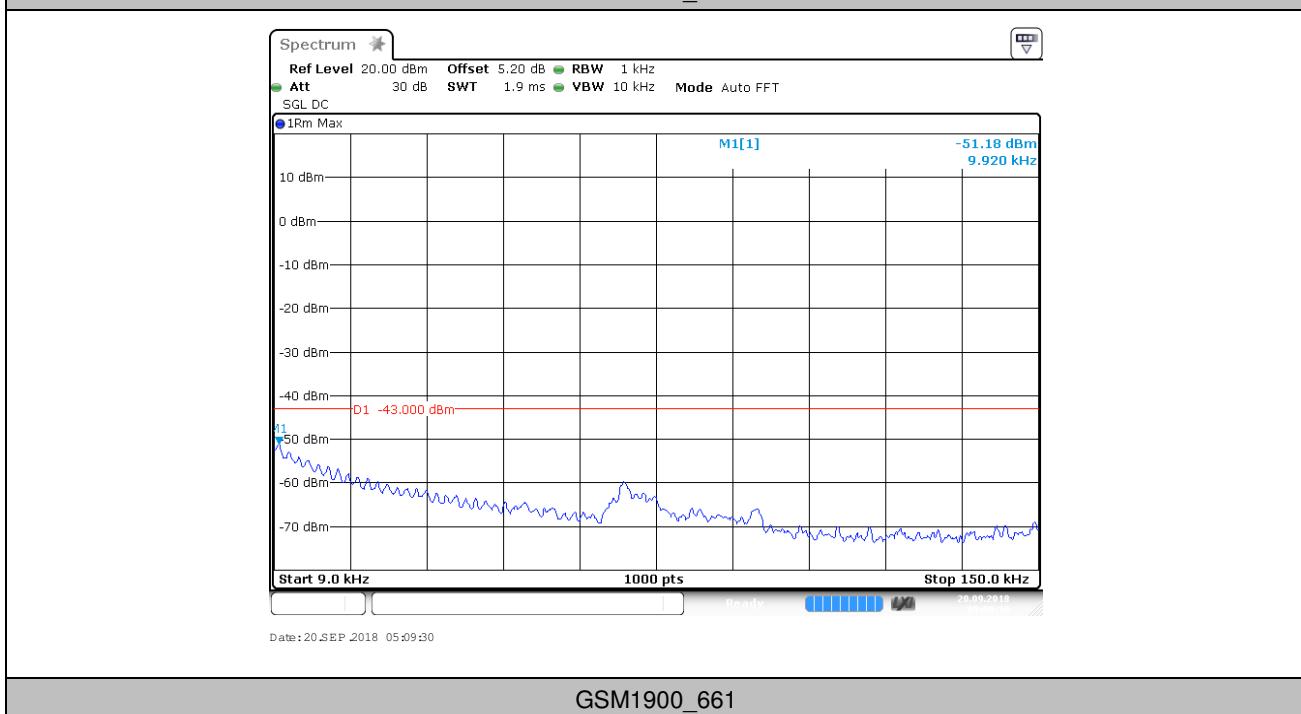


**GSM1900_512****GSM1900_512**

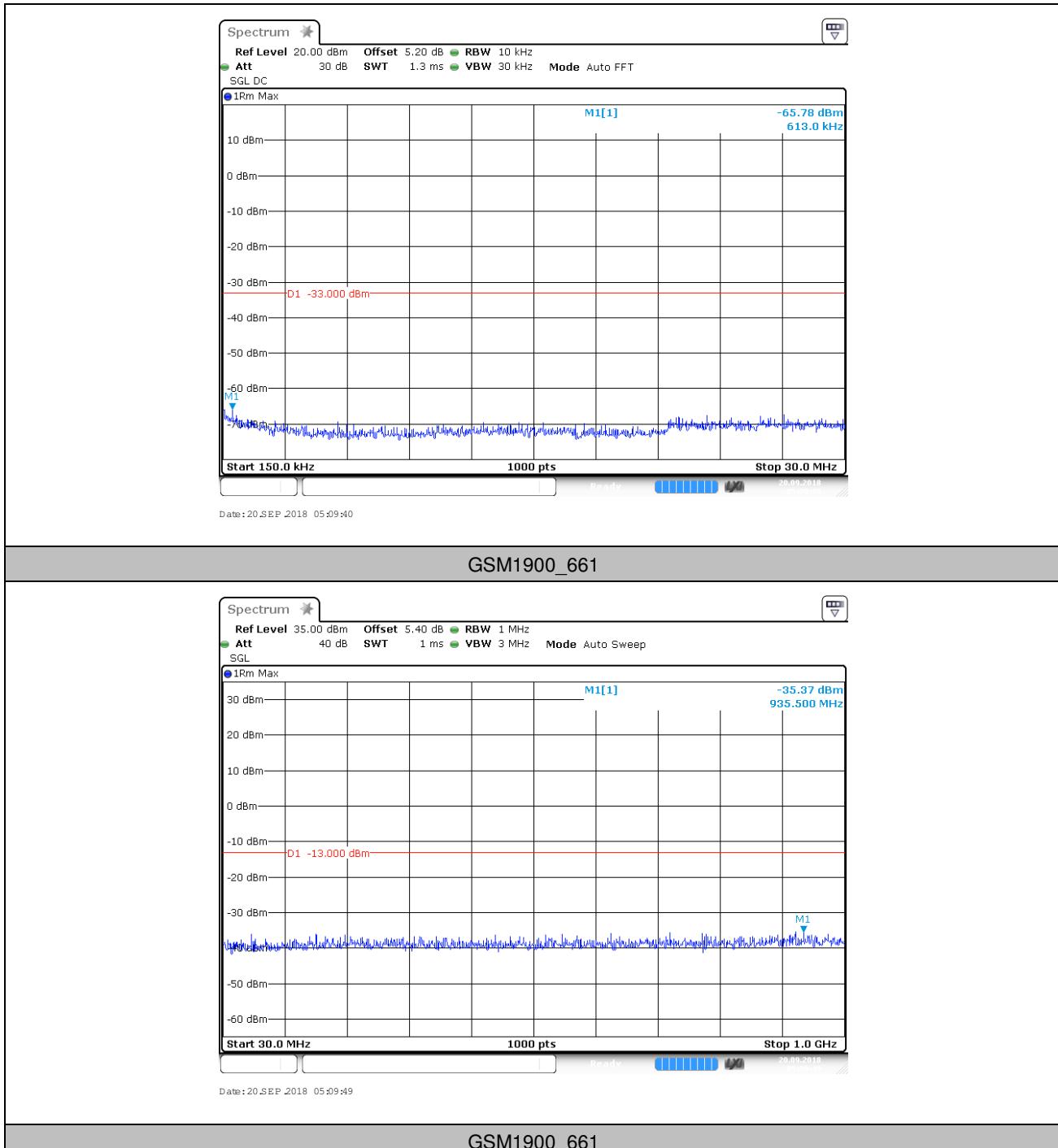


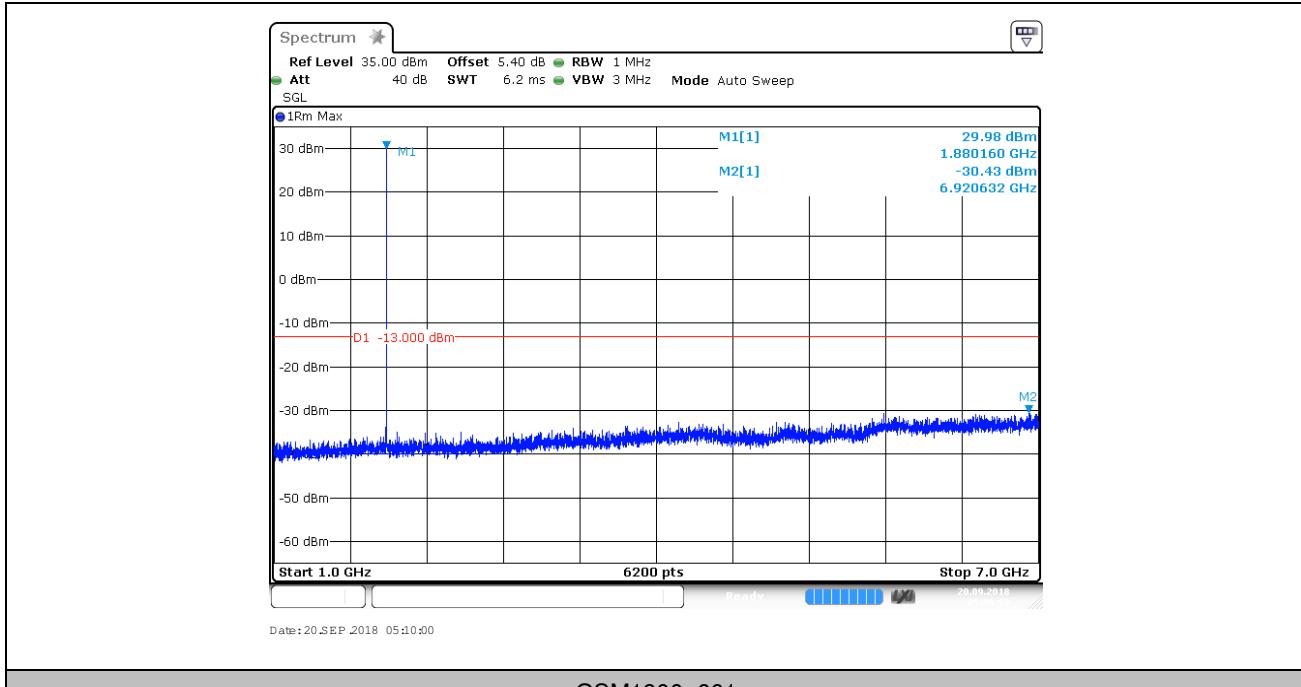


GSM1900_661

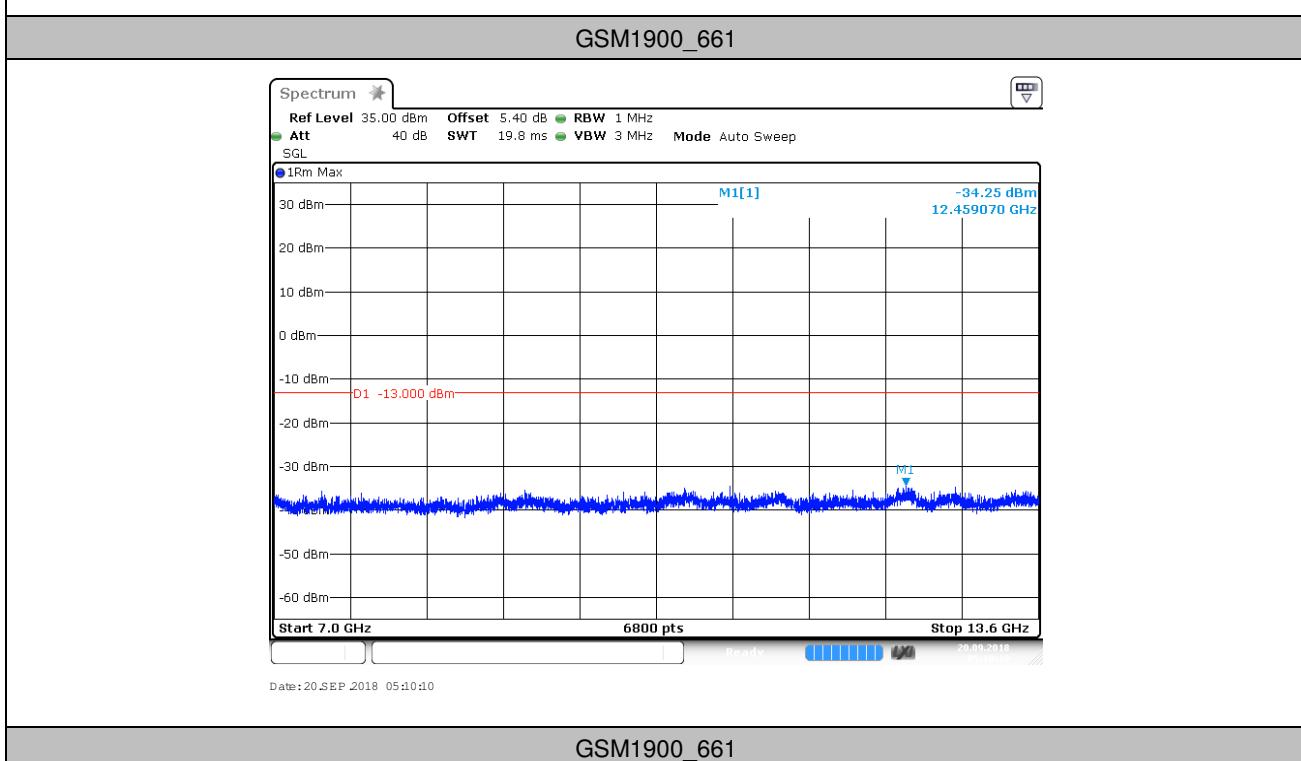


GSM1900_661

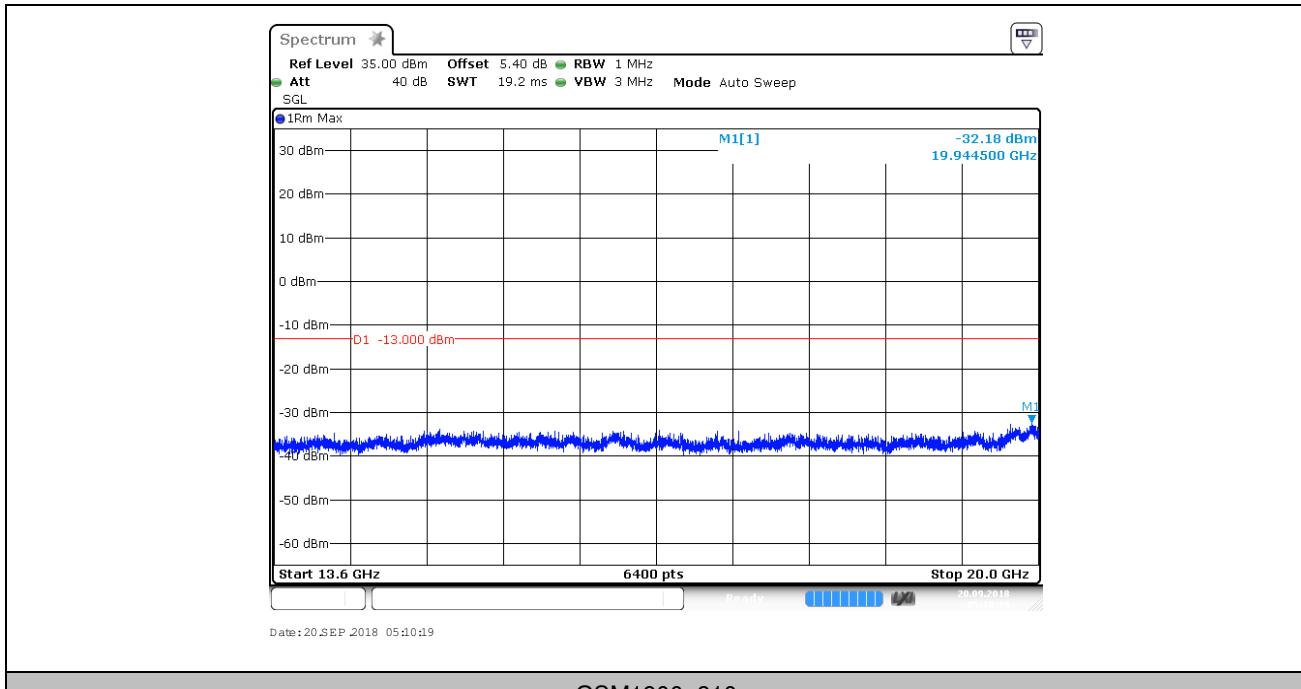




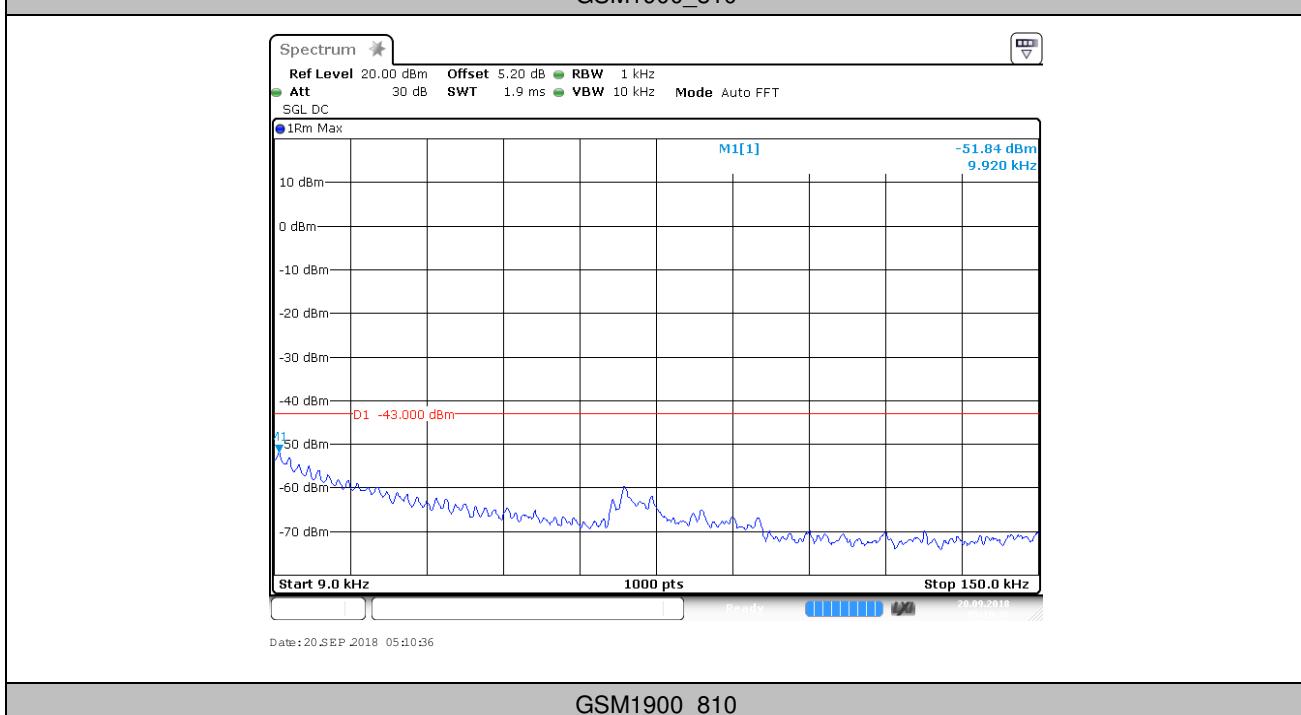
GSM1900_661



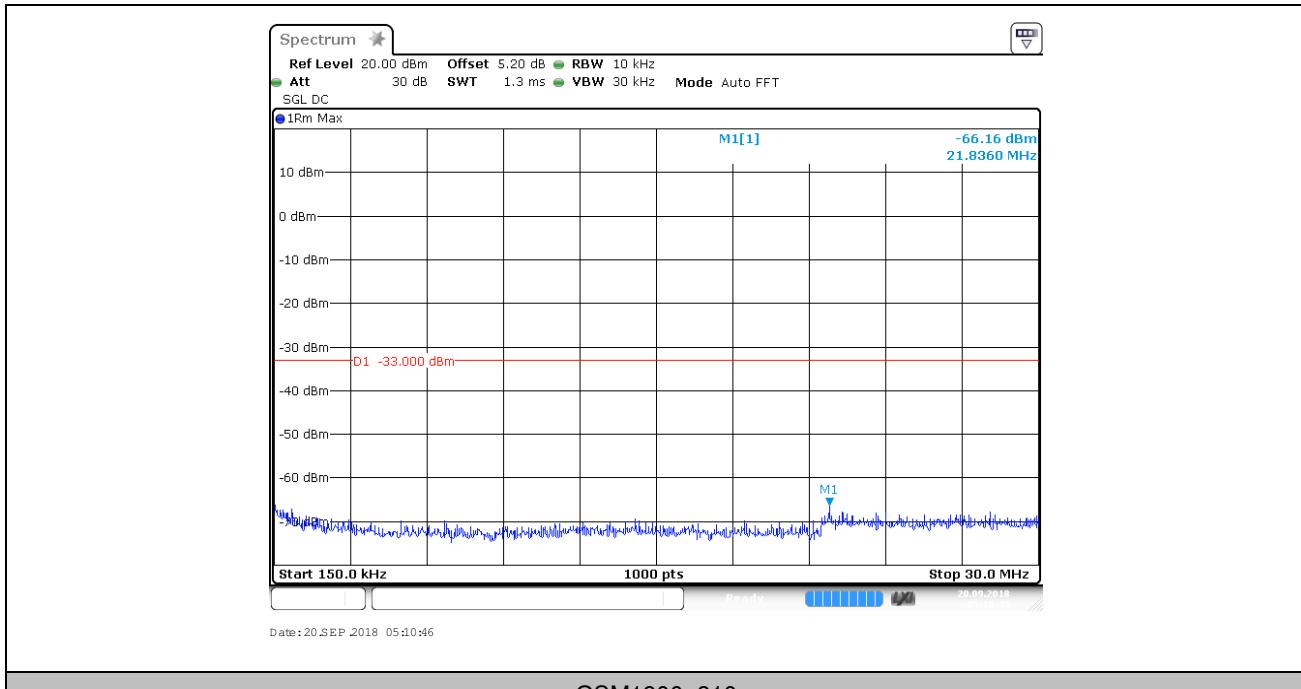
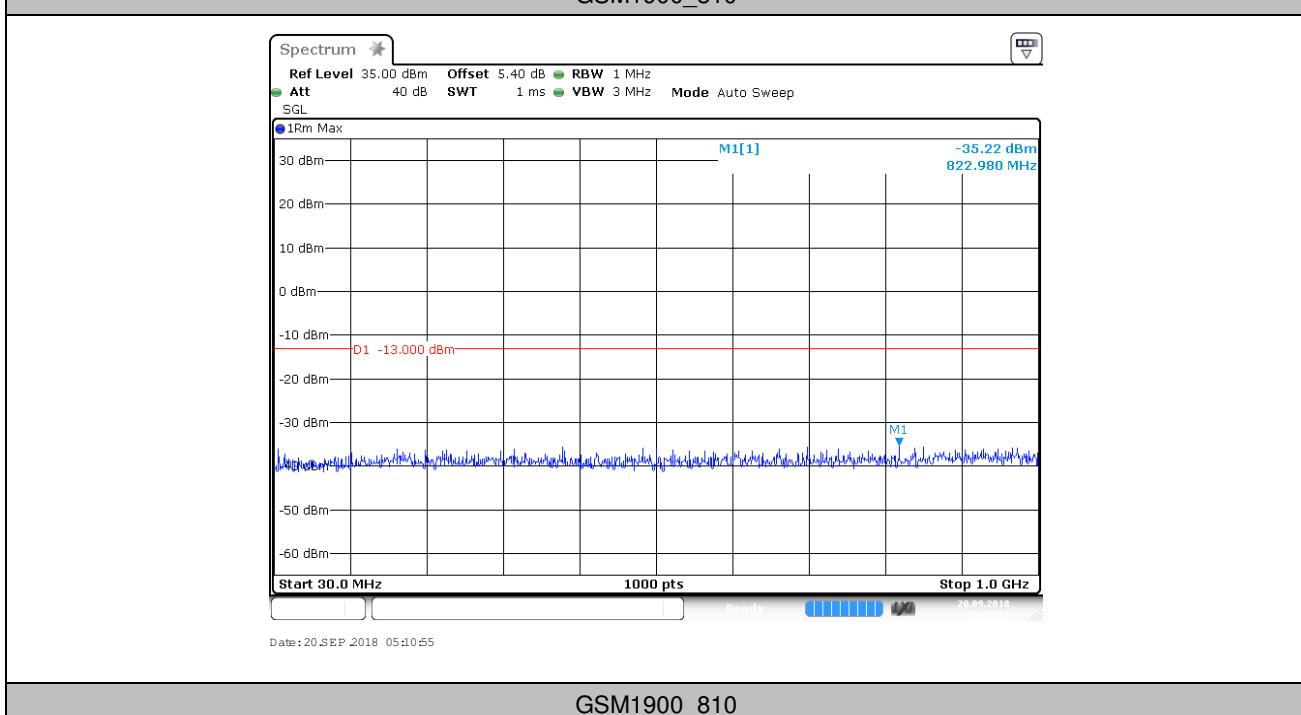
GSM1900_661

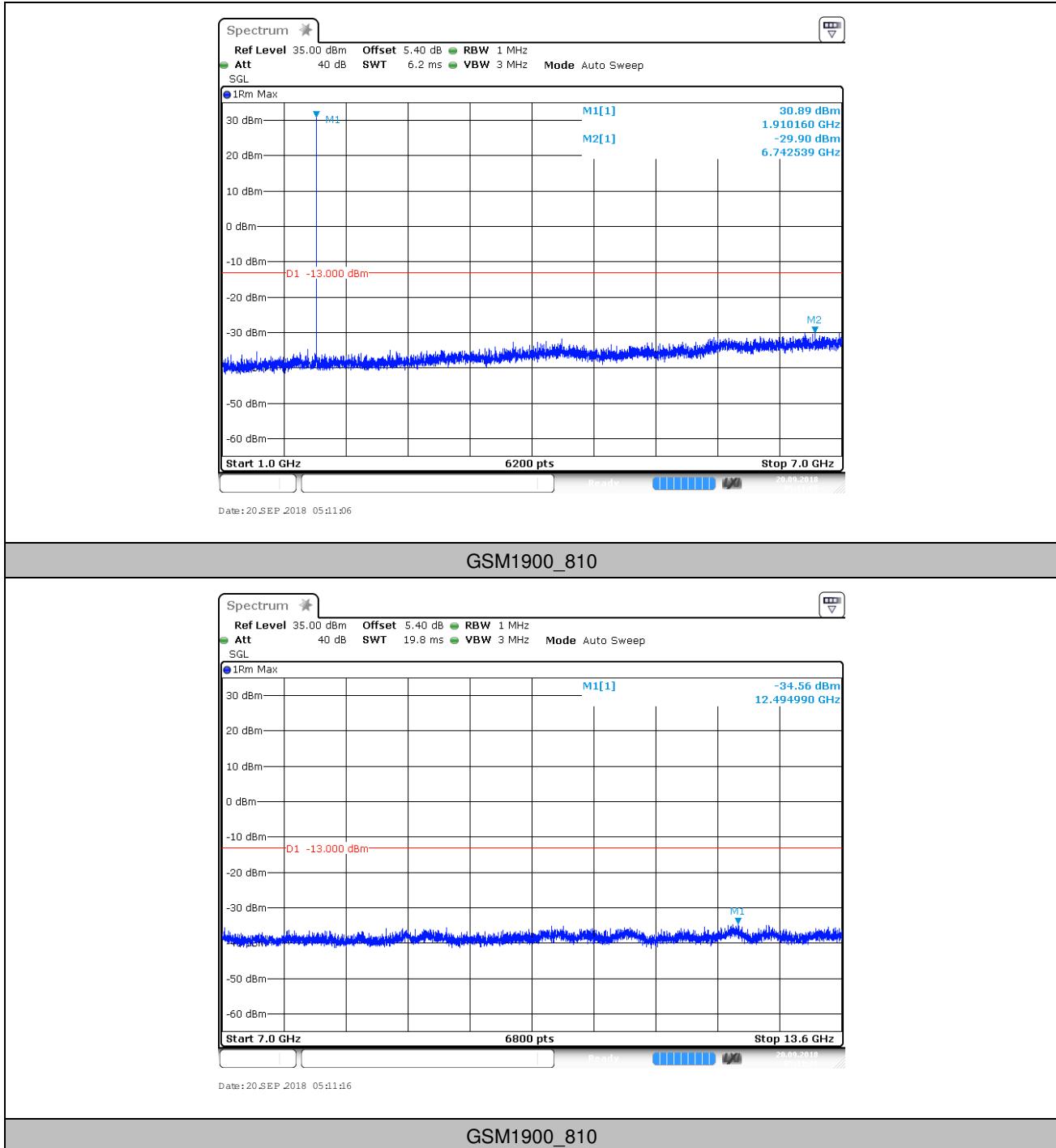


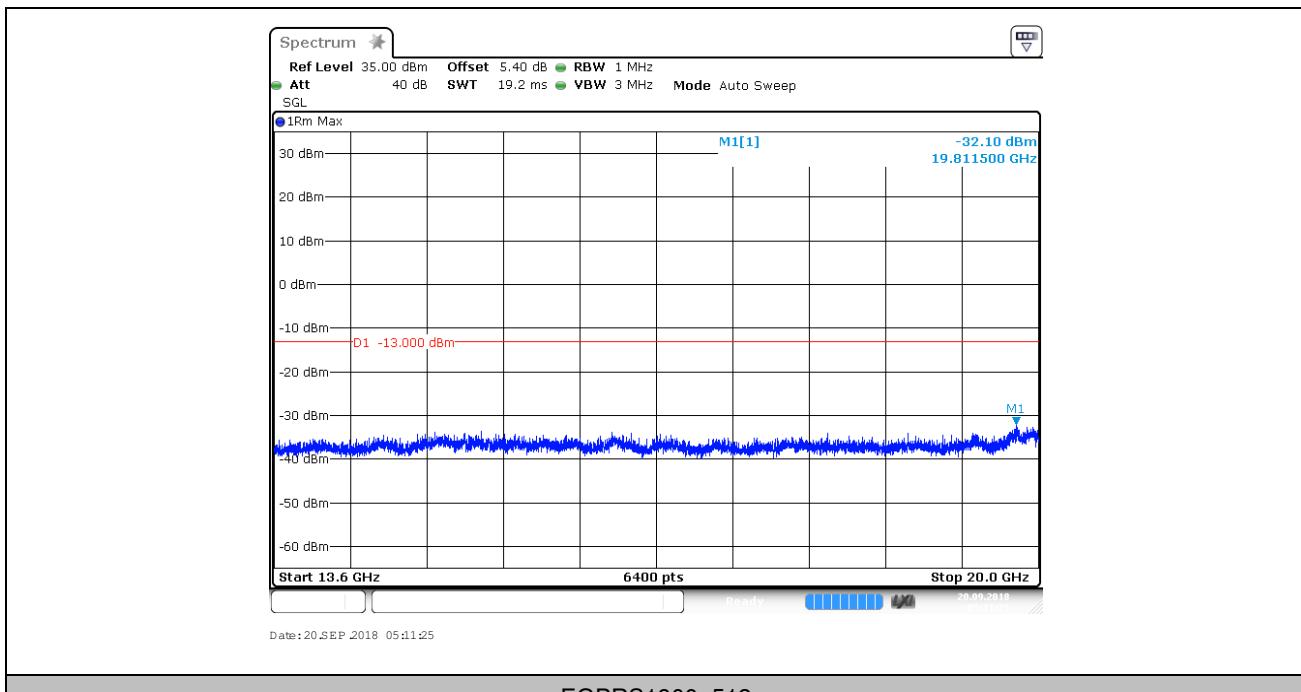
GSM1900_810



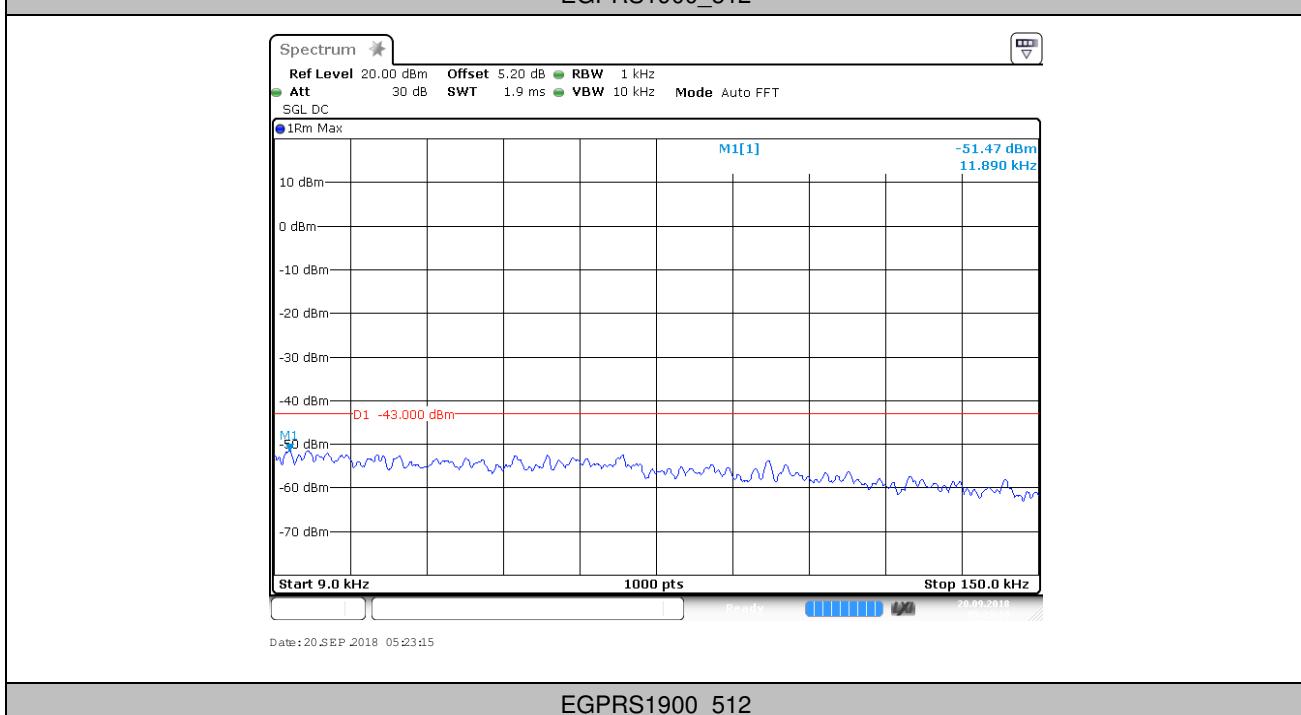
GSM1900_810

**GSM1900_810****GSM1900_810**

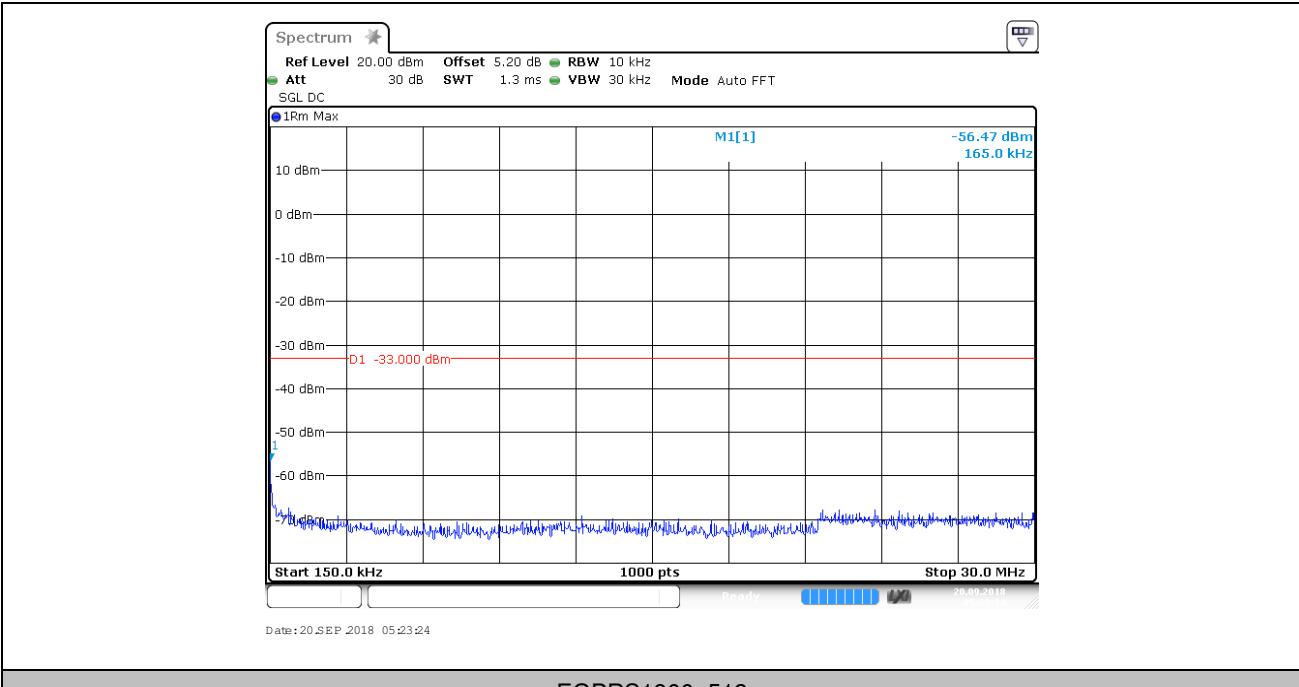




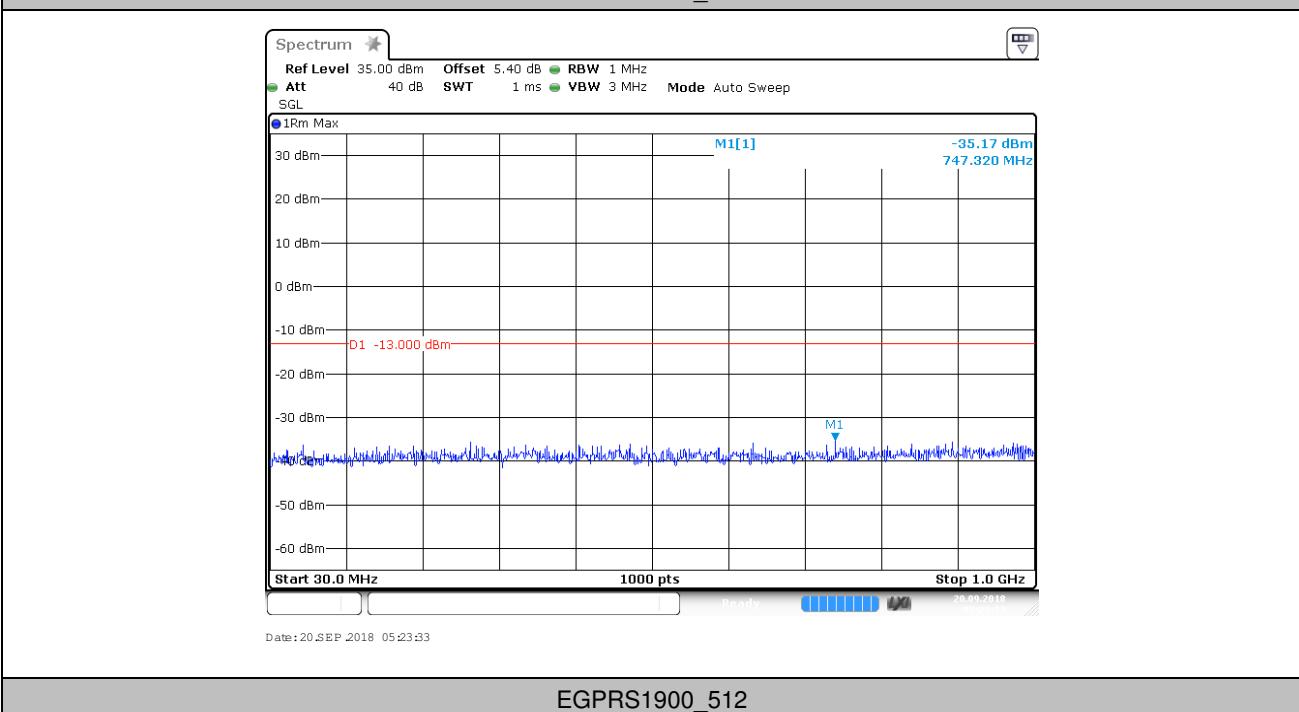
EGPRS1900_512



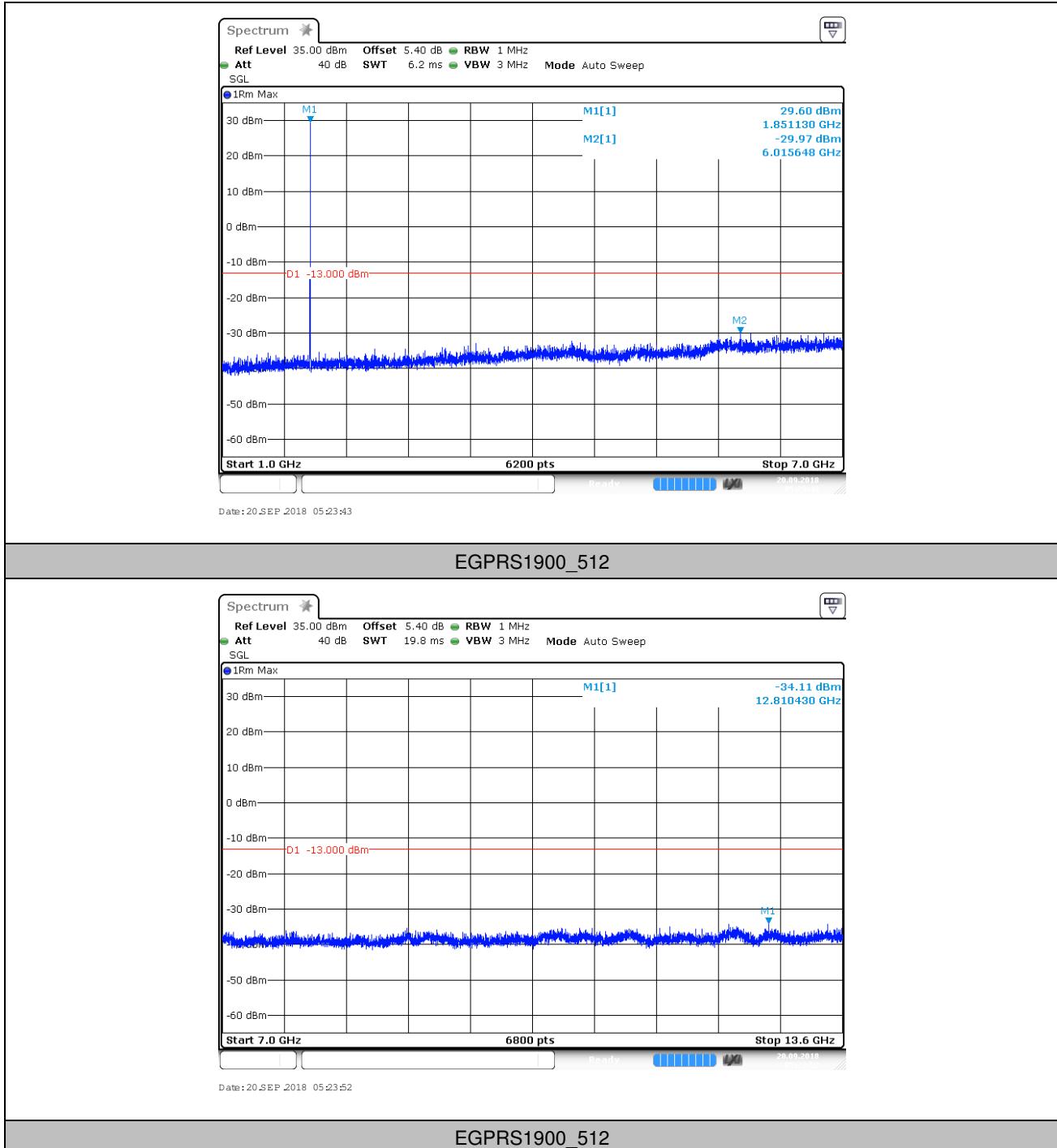
EGPRS1900_512

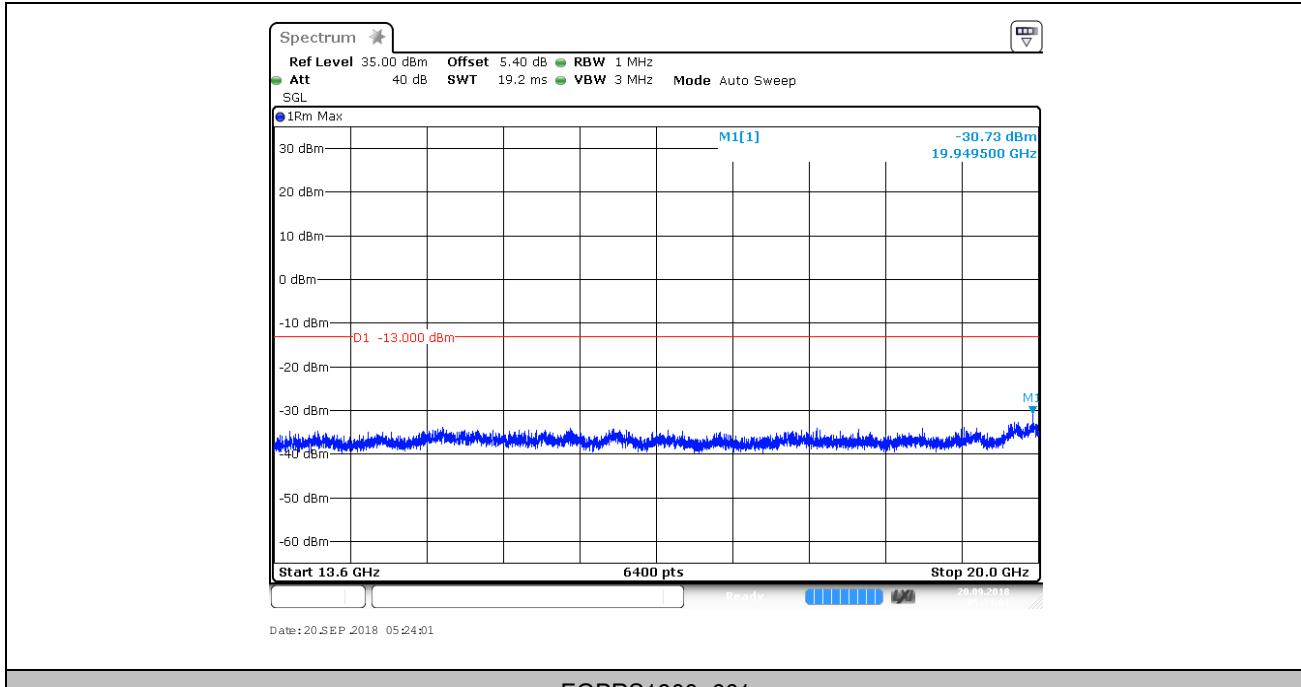


EGPRS1900_512

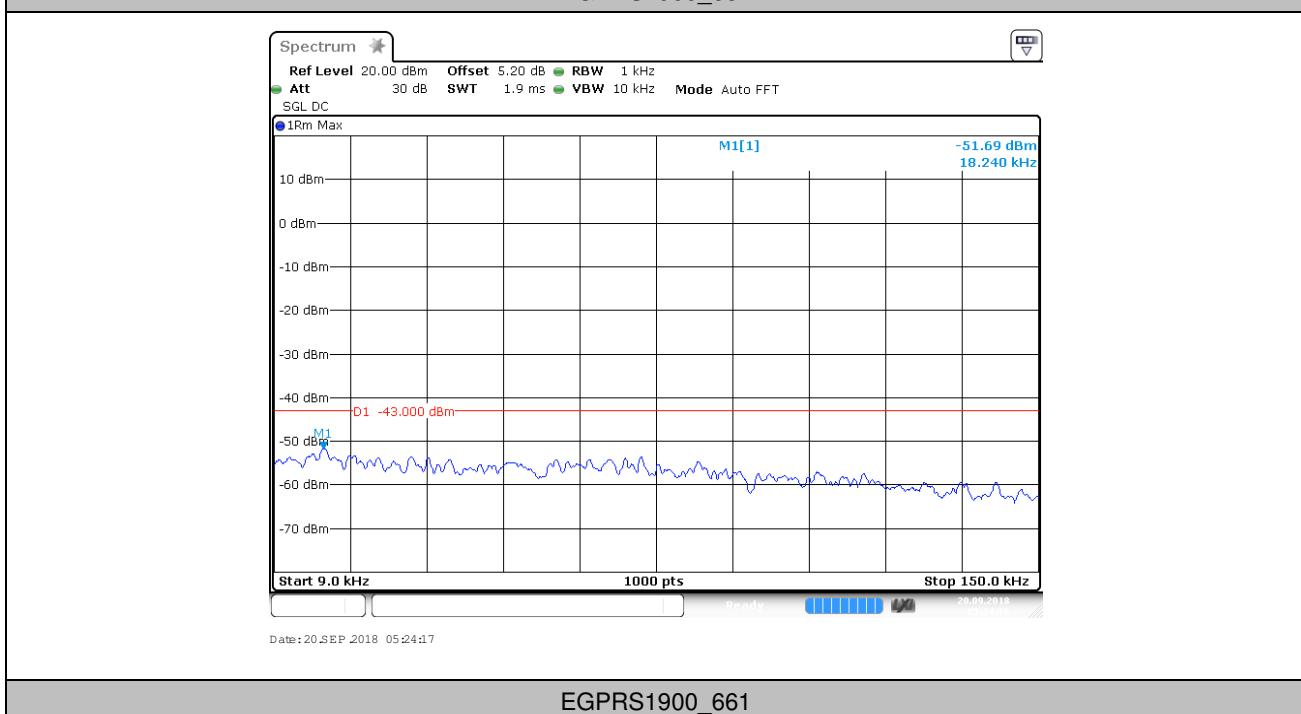


EGPRS1900_512

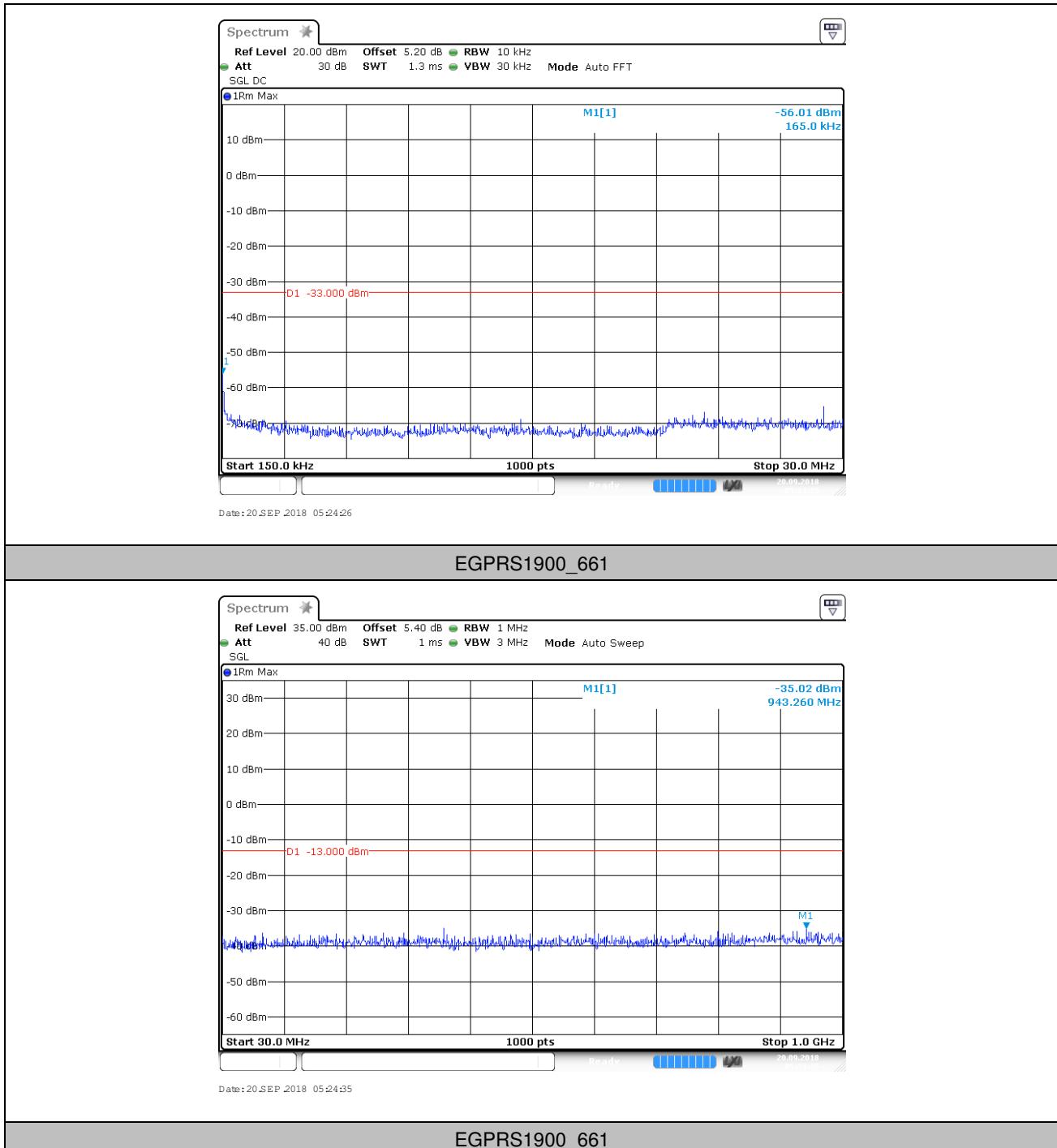


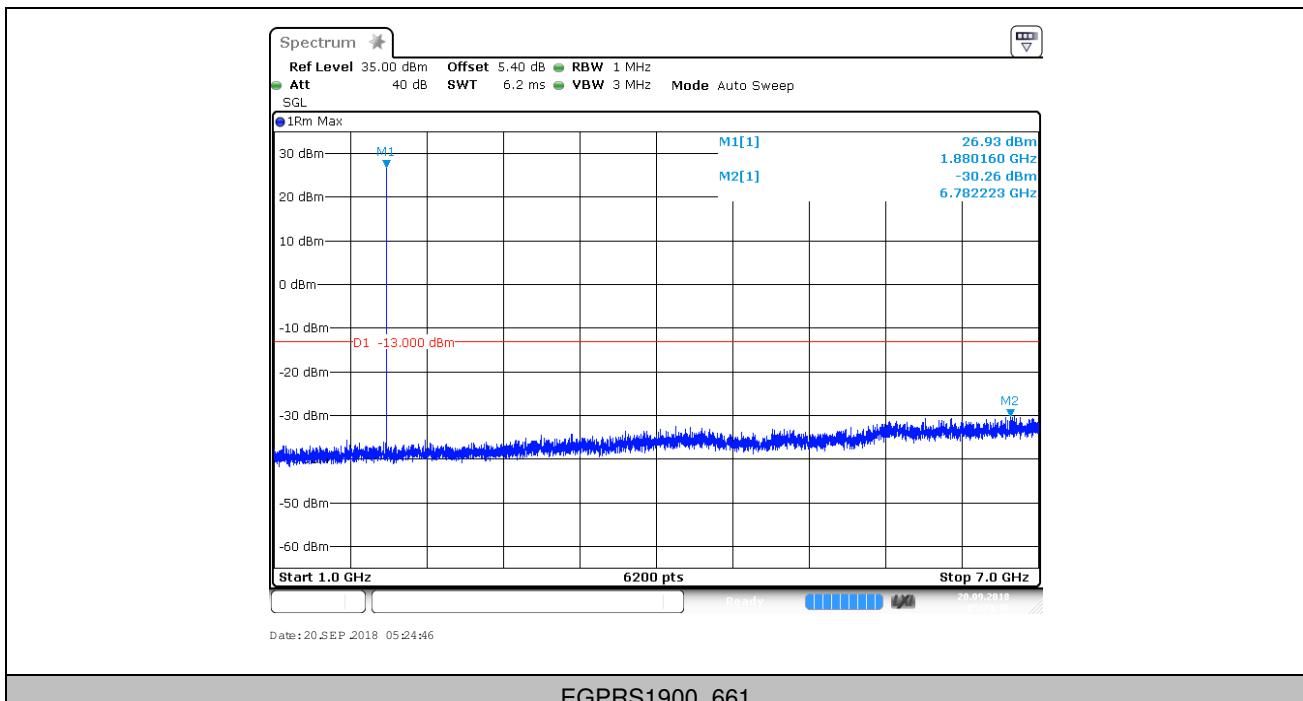


EGPRS1900_661

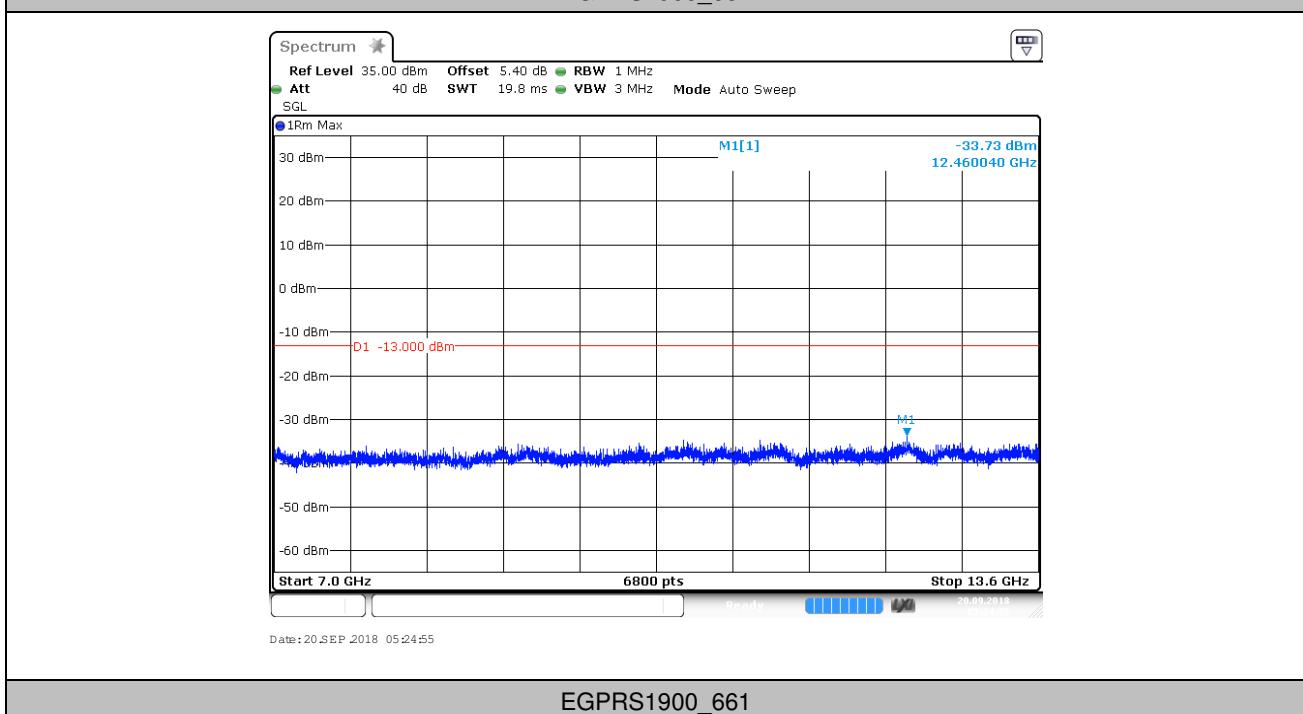


EGPRS1900_661

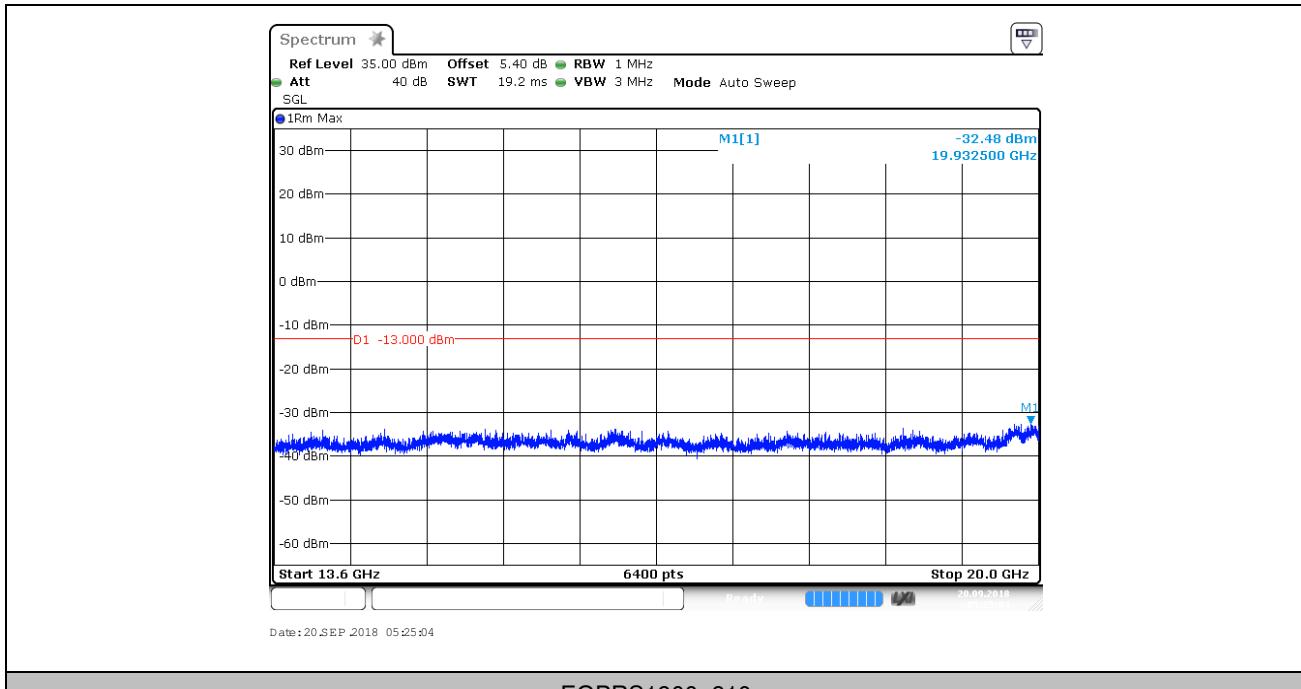




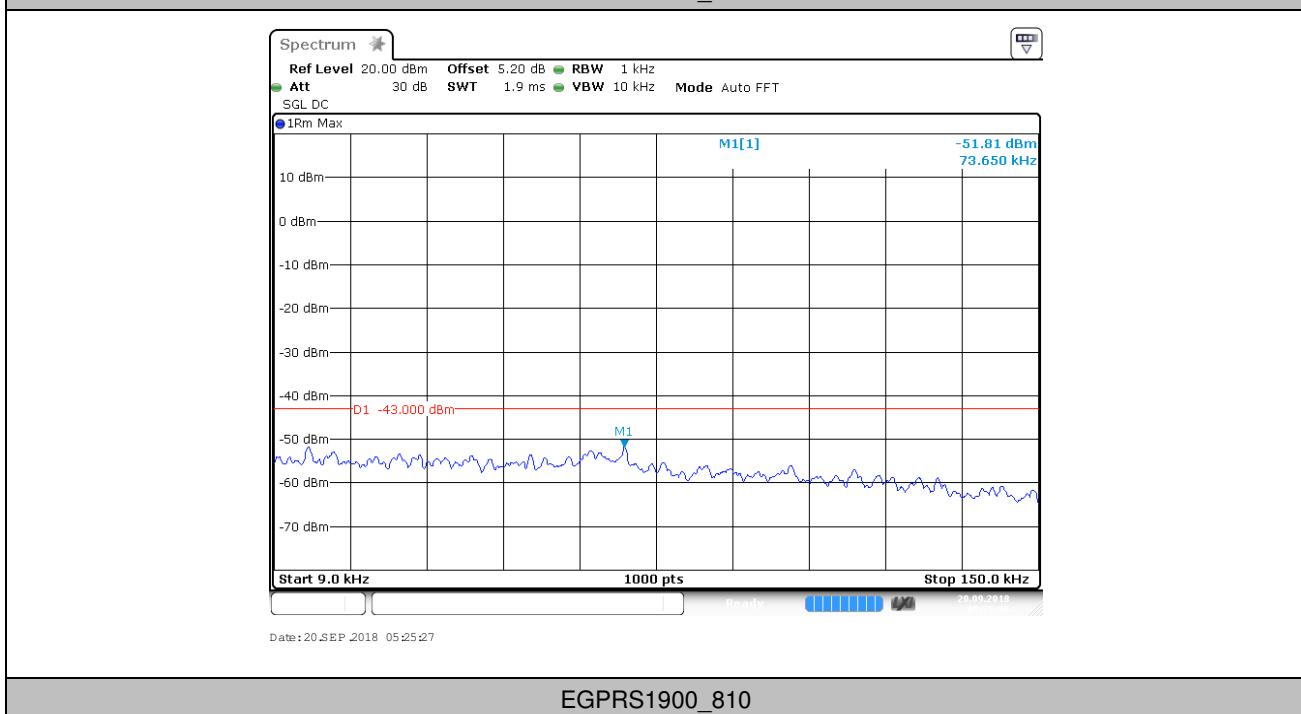
EGPRS1900_661



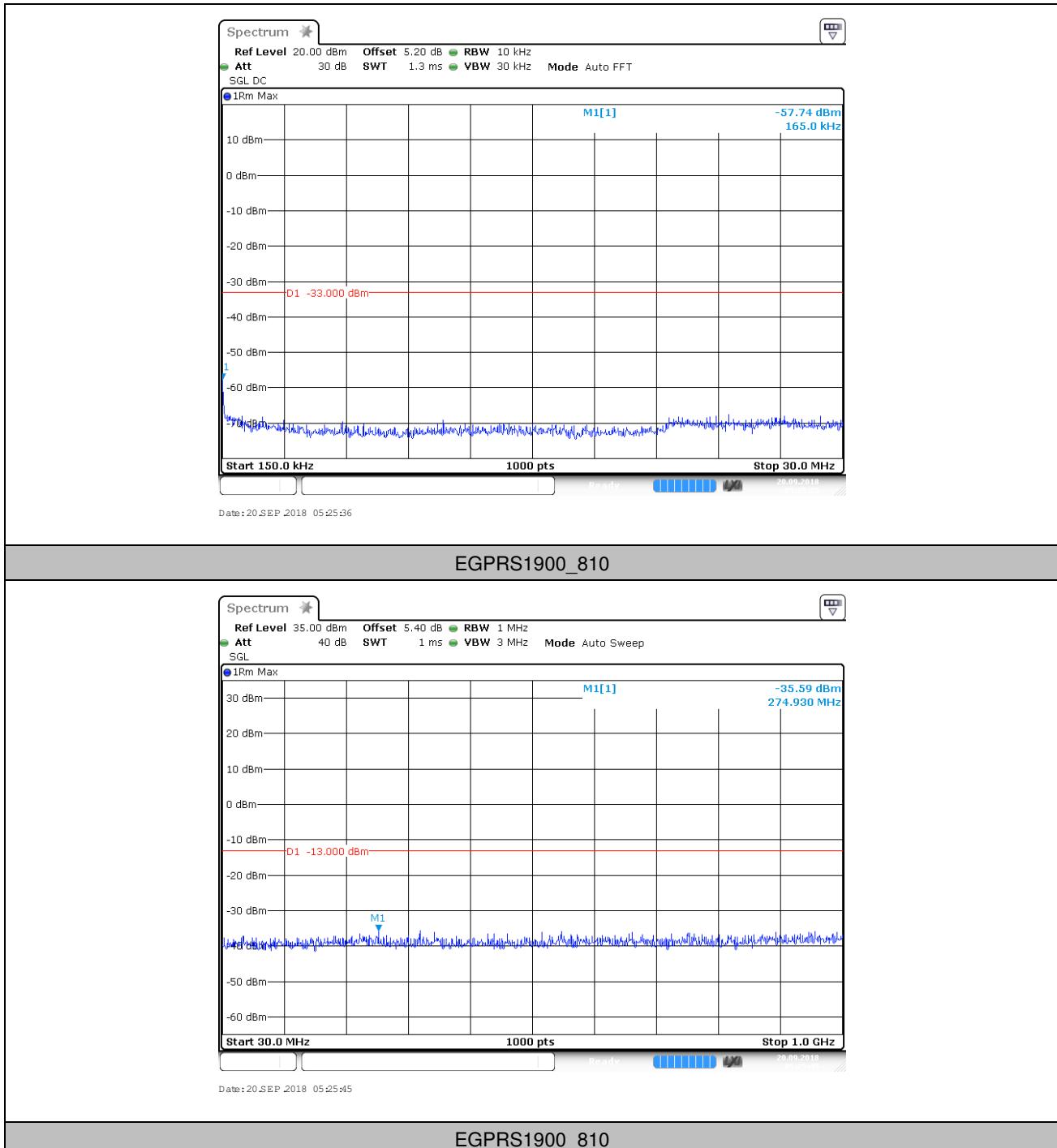
EGPRS1900_661

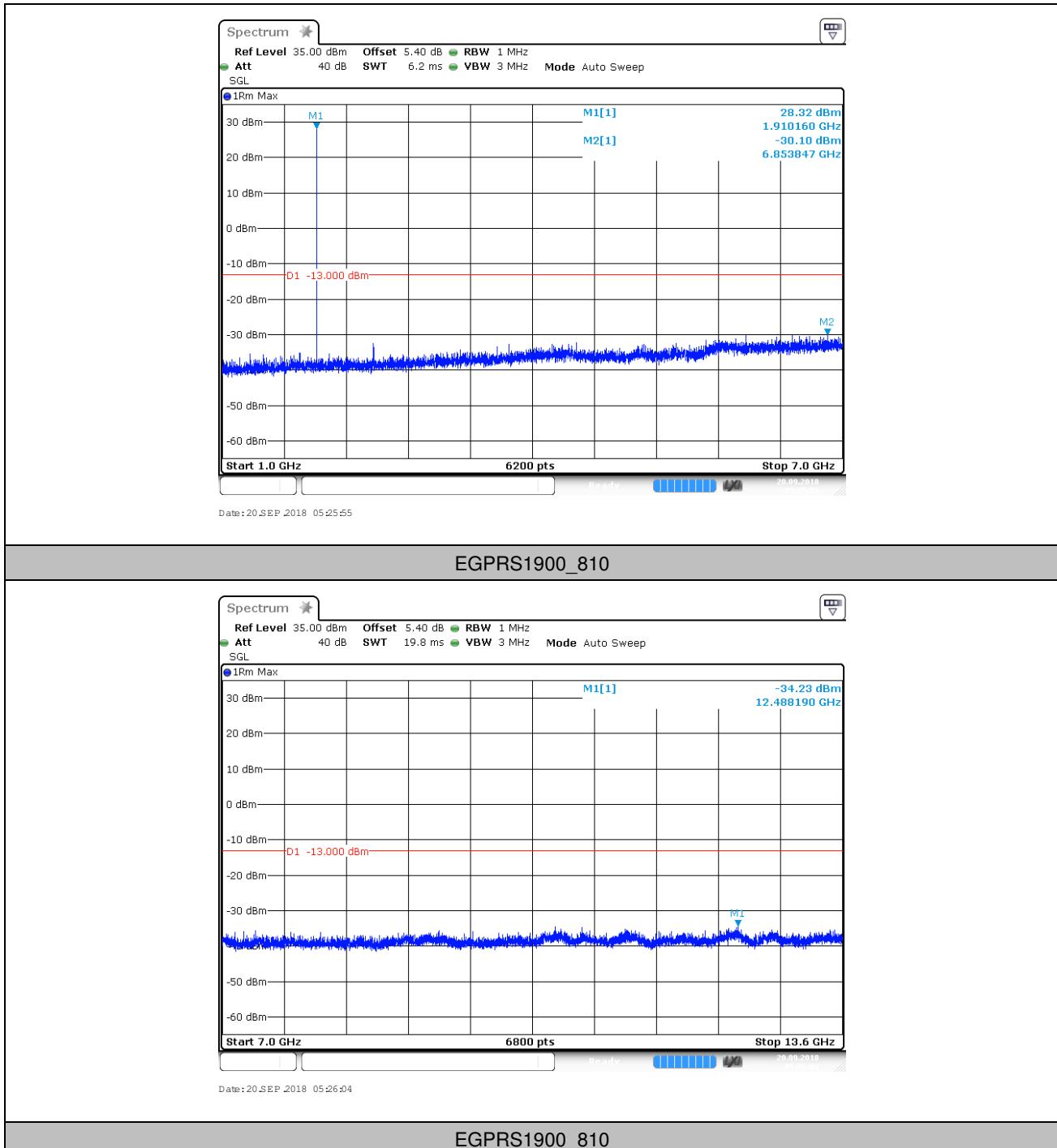


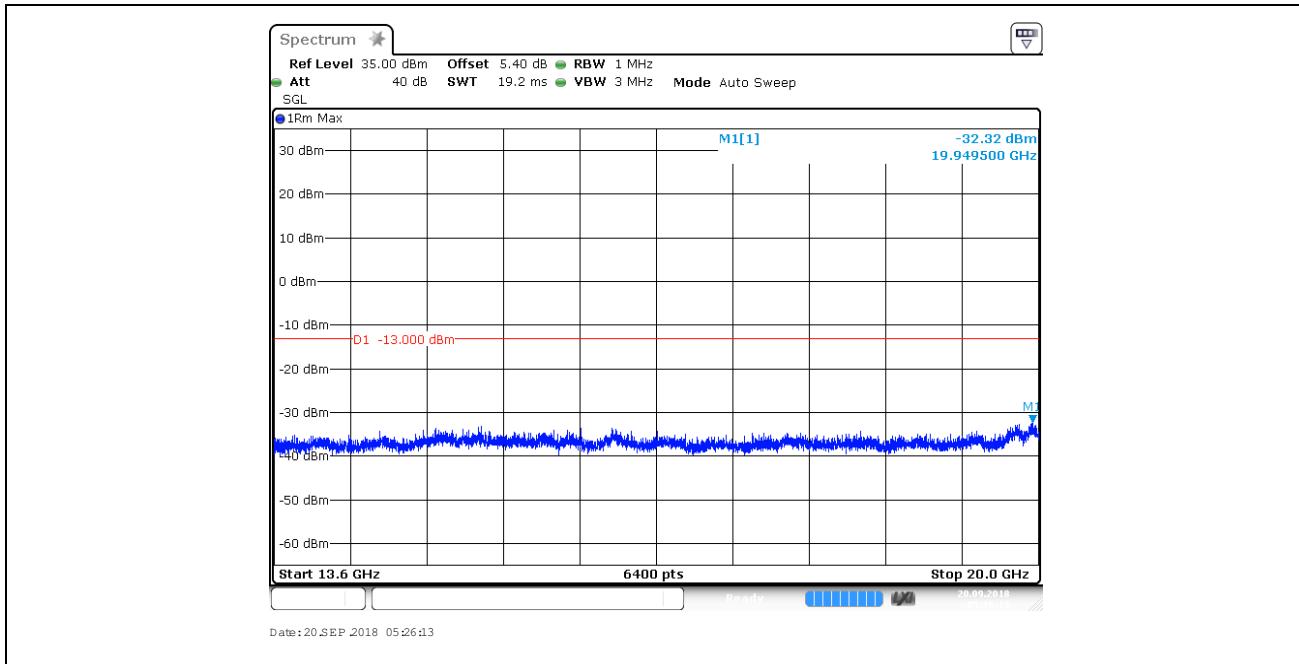
EGPRS1900_810



EGPRS1900_810







7. Field Strength of Spurious Radiation

7.1. Test Band = GSM 1900

7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
62.252500	-70.53	-13.00	57.53	Horizontal
142.908000	-74.72	-13.00	61.72	Horizontal
604.822000	-71.76	-13.00	58.76	Horizontal
3700.000000	-56.21	-13.00	43.21	Horizontal
5802.800000	-54.65	-13.00	41.65	Horizontal
7672.150000	-52.78	-13.00	39.78	Horizontal
76.560000	-72.36	-13.00	59.36	Vertical
297.574500	-73.31	-13.00	60.31	Vertical
681.597500	-70.01	-13.00	57.01	Vertical
3723.800000	-56.84	-13.00	43.84	Vertical
5458.400000	-54.92	-13.00	41.92	Vertical
7671.800000	-52.58	-13.00	39.58	Vertical

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
60.991500	-69.94	-13.00	56.94	Horizontal
145.381500	-75.76	-13.00	62.76	Horizontal
470.380000	-72.51	-13.00	59.51	Horizontal
3759.500000	-50.11	-13.00	37.11	Horizontal
5640.400000	-50.52	-13.00	37.52	Horizontal
8555.900000	-51.72	-13.00	38.72	Horizontal
73.844000	-73.58	-13.00	60.58	Vertical
297.574500	-73.30	-13.00	60.30	Vertical
681.597500	-71.41	-13.00	58.41	Vertical
3760.550000	-49.77	-13.00	36.77	Vertical
5639.700000	-50.83	-13.00	37.83	Vertical
7967.550000	-51.67	-13.00	38.67	Vertical

7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
61.864500	-69.78	-13.00	56.78	Horizontal
144.023500	-75.82	-13.00	62.82	Horizontal
470.380000	-73.27	-13.00	60.27	Horizontal
3920.500000	-55.85	-13.00	42.85	Horizontal
5964.850000	-53.34	-13.00	40.34	Horizontal
7984.700000	-52.10	-13.00	39.10	Horizontal

82.962000	-73.15	-13.00	56.78	Vertical
297.574500	-72.90	-13.00	62.82	Vertical
604.822000	-71.10	-13.00	60.27	Vertical
3819.700000	-51.29	-13.00	42.85	Vertical
5975.700000	-53.56	-13.00	40.34	Vertical
7852.400000	-52.28	-13.00	39.10	Vertical

7.2. Test Band = GSM 850

7.2.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
60.846000	-69.01	-13.00	56.01	Horizontal
139.173500	-74.12	-13.00	61.12	Horizontal
470.428500	-72.55	-13.00	59.55	Horizontal
1648.500000	-47.29	-13.00	34.29	Horizontal
2472.375000	-19.88	-13.00	6.88	Horizontal
3296.800000	-46.53	-13.00	33.53	Horizontal
4121.050000	-39.11	-13.00	26.11	Horizontal
4944.600000	-49.54	-13.00	36.54	Horizontal
5768.850000	-39.49	-13.00	26.49	Horizontal
84.950500	-72.54	-13.00	59.54	Vertical
297.574500	-73.88	-13.00	60.88	Vertical
604.773500	-71.79	-13.00	58.79	Vertical
1648.275000	-47.39	-13.00	34.39	Vertical
2472.450000	-21.58	-13.00	8.58	Vertical
3296.450000	-50.50	-13.00	37.50	Vertical
4120.700000	-33.82	-13.00	20.82	Vertical
4945.300000	-51.18	-13.00	38.18	Vertical
5769.900000	-40.63	-13.00	27.63	Vertical

7.2.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
59.730500	-70.41	-13.00	57.41	Horizontal
144.848000	-75.93	-13.00	62.93	Horizontal
470.380000	-73.42	-13.00	60.42	Horizontal
1673.100000	-43.07	-13.00	30.07	Horizontal
2509.875000	-45.04	-13.00	32.04	Horizontal
9202.000000	-50.96	-13.00	37.96	Horizontal
62.349500	-74.47	-13.00	61.47	Vertical
297.574500	-72.59	-13.00	59.59	Vertical
604.822000	-72.76	-13.00	59.76	Vertical
1672.950000	-47.02	-13.00	34.02	Vertical
2510.100000	-44.73	-13.00	31.73	Vertical
9203.400000	-50.97	-13.00	37.97	Vertical

7.2.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
59.779000	-69.29	-13.00	56.29	Horizontal
143.975000	-75.01	-13.00	62.01	Horizontal
467.470000	-74.08	-13.00	61.08	Horizontal
1697.475000	-38.37	-13.00	25.37	Horizontal
2546.700000	-43.95	-13.00	30.95	Horizontal
3476.350000	-57.71	-13.00	44.71	Horizontal
82.962000	-73.71	-13.00	60.71	Vertical
297.574500	-72.50	-13.00	59.50	Vertical
604.773500	-72.02	-13.00	59.02	Vertical
1697.700000	-42.99	-13.00	29.99	Vertical
2546.625000	-43.21	-13.00	30.21	Vertical
4218.000000	-54.90	-13.00	41.90	Vertical

Remark:

- 1) The disturbance above 12.75GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data had been displayed.
- 2) We have tested all modulation and all Bandwidth , but only the worst case data presented in this report.

8. Frequency Stability

8.1. Frequency Error Vs Voltage

Voltage							
BAND	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	VL	TN	12.30	0.014925	±2.5	PASS
GSM850	128	VN	TN	7.14	0.008657	±2.5	PASS
GSM850	128	VH	TN	4.49	0.005445	±2.5	PASS
GSM850	190	VL	TN	5.78	0.006908	±2.5	PASS
GSM850	190	VN	TN	-0.06	-0.000077	±2.5	PASS
GSM850	190	VH	TN	-1.61	-0.001930	±2.5	PASS
GSM850	251	VL	TN	8.49	0.010004	±2.5	PASS
GSM850	251	VN	TN	8.14	0.009585	±2.5	PASS
GSM850	251	VH	TN	7.97	0.009395	±2.5	PASS
EGPRS850	128	VL	TN	20.44	0.024796	±2.5	PASS
EGPRS850	128	VN	TN	29.86	0.036234	±2.5	PASS
EGPRS850	128	VH	TN	29.25	0.035490	±2.5	PASS
EGPRS850	190	VL	TN	19.21	0.022962	±2.5	PASS
EGPRS850	190	VN	TN	31.22	0.037318	±2.5	PASS
EGPRS850	190	VH	TN	29.12	0.034810	±2.5	PASS
EGPRS850	251	VL	TN	24.83	0.029250	±2.5	PASS
EGPRS850	251	VN	TN	24.18	0.028490	±2.5	PASS
EGPRS850	251	VH	TN	23.47	0.027653	±2.5	PASS
GSM1900	512	VL	TN	-3.87	-0.002094	±2.5	PASS
GSM1900	512	VN	TN	0.71	0.000384	±2.5	PASS
GSM1900	512	VH	TN	1.00	0.000541	±2.5	PASS
GSM1900	661	VL	TN	-7.52	-0.004001	±2.5	PASS
GSM1900	661	VN	TN	-5.94	-0.003160	±2.5	PASS
GSM1900	661	VH	TN	-6.59	-0.003503	±2.5	PASS
GSM1900	810	VL	TN	-13.11	-0.006864	±2.5	PASS
GSM1900	810	VN	TN	-6.59	-0.003449	±2.5	PASS
GSM1900	810	VH	TN	-13.30	-0.006965	±2.5	PASS
EGPRS1900	512	VL	TN	-5.29	-0.002862	±2.5	PASS
EGPRS1900	512	VN	TN	22.70	0.012267	±2.5	PASS
EGPRS1900	512	VH	TN	17.53	0.009475	±2.5	PASS
EGPRS1900	661	VL	TN	0.36	0.000189	±2.5	PASS
EGPRS1900	661	VN	TN	27.35	0.014546	±2.5	PASS
EGPRS1900	661	VH	TN	15.59	0.008295	±2.5	PASS
EGPRS1900	810	VL	TN	3.81	0.001995	±2.5	PASS
EGPRS1900	810	VN	TN	0.74	0.000389	±2.5	PASS
EGPRS1900	810	VH	TN	1.74	0.000913	±2.5	PASS

8.2. Frequency Error Vs Temperature

Temperature							
BAND	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	VN	-30	14.11	0.017118	±2.5	PASS
GSM850	128	VN	-20	12.72	0.015434	±2.5	PASS
GSM850	128	VN	-10	10.30	0.012496	±2.5	PASS
GSM850	128	VN	0	4.36	0.005288	±2.5	PASS
GSM850	128	VN	10	9.94	0.012065	±2.5	PASS
GSM850	128	VN	20	9.36	0.011360	±2.5	PASS
GSM850	128	VN	30	9.62	0.011673	±2.5	PASS
GSM850	128	VN	40	5.39	0.006542	±2.5	PASS
GSM850	128	VN	50	9.94	0.012065	±2.5	PASS
GSM850	190	VN	-30	0.32	0.000386	±2.5	PASS
GSM850	190	VN	-20	8.14	0.009725	±2.5	PASS
GSM850	190	VN	-10	7.91	0.009455	±2.5	PASS
GSM850	190	VN	0	6.91	0.008259	±2.5	PASS
GSM850	190	VN	10	10.43	0.012465	±2.5	PASS
GSM850	190	VN	20	6.94	0.008297	±2.5	PASS
GSM850	190	VN	30	8.98	0.010729	±2.5	PASS
GSM850	190	VN	40	5.36	0.006406	±2.5	PASS
GSM850	190	VN	50	1.87	0.002238	±2.5	PASS
GSM850	251	VN	-30	7.36	0.008672	±2.5	PASS
GSM850	251	VN	-20	11.11	0.013085	±2.5	PASS
GSM850	251	VN	-10	9.46	0.011145	±2.5	PASS
GSM850	251	VN	0	5.17	0.006086	±2.5	PASS
GSM850	251	VN	10	11.20	0.013199	±2.5	PASS
GSM850	251	VN	20	4.55	0.005363	±2.5	PASS
GSM850	251	VN	30	9.75	0.011487	±2.5	PASS
GSM850	251	VN	40	5.68	0.006695	±2.5	PASS
GSM850	251	VN	50	9.14	0.010764	±2.5	PASS
EGPRS850	128	VN	-30	24.89	0.030202	±2.5	PASS
EGPRS850	128	VN	-20	26.31	0.031925	±2.5	PASS
EGPRS850	128	VN	-10	24.70	0.029967	±2.5	PASS
EGPRS850	128	VN	0	23.02	0.027930	±2.5	PASS
EGPRS850	128	VN	10	25.67	0.031142	±2.5	PASS
EGPRS850	128	VN	20	13.72	0.016648	±2.5	PASS
EGPRS850	128	VN	30	14.40	0.017471	±2.5	PASS
EGPRS850	128	VN	40	16.66	0.020213	±2.5	PASS
EGPRS850	128	VN	50	18.98	0.023033	±2.5	PASS
EGPRS850	190	VN	-30	26.73	0.031954	±2.5	PASS
EGPRS850	190	VN	-20	26.64	0.031838	±2.5	PASS
EGPRS850	190	VN	-10	25.99	0.031066	±2.5	PASS
EGPRS850	190	VN	0	22.31	0.026667	±2.5	PASS
EGPRS850	190	VN	10	25.96	0.031028	±2.5	PASS
EGPRS850	190	VN	20	25.44	0.030410	±2.5	PASS
EGPRS850	190	VN	30	25.70	0.030719	±2.5	PASS

EGPRS850	190	VN	40	23.37	0.027940	±2.5	PASS
EGPRS850	190	VN	50	24.12	0.028828	±2.5	PASS
EGPRS850	251	VN	-30	23.89	0.028147	±2.5	PASS
EGPRS850	251	VN	-20	22.83	0.026892	±2.5	PASS
EGPRS850	251	VN	-10	25.80	0.030392	±2.5	PASS
EGPRS850	251	VN	0	22.31	0.026284	±2.5	PASS
EGPRS850	251	VN	10	23.05	0.027158	±2.5	PASS
EGPRS850	251	VN	20	24.25	0.028566	±2.5	PASS
EGPRS850	251	VN	30	23.50	0.027691	±2.5	PASS
EGPRS850	251	VN	40	25.12	0.029593	±2.5	PASS
EGPRS850	251	VN	50	22.79	0.026854	±2.5	PASS
GSM1900	512	VN	-30	1.29	0.000698	±2.5	PASS
GSM1900	512	VN	-20	2.94	0.001588	±2.5	PASS
GSM1900	512	VN	-10	-2.78	-0.001501	±2.5	PASS
GSM1900	512	VN	0	-3.20	-0.001728	±2.5	PASS
GSM1900	512	VN	10	-1.55	-0.000838	±2.5	PASS
GSM1900	512	VN	20	-5.13	-0.002775	±2.5	PASS
GSM1900	512	VN	30	-4.46	-0.002408	±2.5	PASS
GSM1900	512	VN	40	-3.97	-0.002146	±2.5	PASS
GSM1900	512	VN	50	-5.33	-0.002879	±2.5	PASS
GSM1900	661	VN	-30	-5.36	-0.002851	±2.5	PASS
GSM1900	661	VN	-20	-7.52	-0.004001	±2.5	PASS
GSM1900	661	VN	-10	-1.71	-0.000910	±2.5	PASS
GSM1900	661	VN	0	-6.33	-0.003366	±2.5	PASS
GSM1900	661	VN	10	-7.20	-0.003830	±2.5	PASS
GSM1900	661	VN	20	-10.88	-0.005787	±2.5	PASS
GSM1900	661	VN	30	-4.62	-0.002456	±2.5	PASS
GSM1900	661	VN	40	-8.62	-0.004585	±2.5	PASS
GSM1900	661	VN	50	-2.65	-0.001408	±2.5	PASS
GSM1900	810	VN	-30	-12.40	-0.006492	±2.5	PASS
GSM1900	810	VN	-20	-7.17	-0.003753	±2.5	PASS
GSM1900	810	VN	-10	-8.20	-0.004294	±2.5	PASS
GSM1900	810	VN	0	-13.66	-0.007151	±2.5	PASS
GSM1900	810	VN	10	-14.43	-0.007557	±2.5	PASS
GSM1900	810	VN	20	-10.23	-0.005359	±2.5	PASS
GSM1900	810	VN	30	-15.82	-0.008284	±2.5	PASS
GSM1900	810	VN	40	-19.50	-0.010211	±2.5	PASS
GSM1900	810	VN	50	-13.01	-0.006813	±2.5	PASS
EGPRS1900	512	VN	-30	4.10	0.002216	±2.5	PASS
EGPRS1900	512	VN	-20	-8.98	-0.004851	±2.5	PASS
EGPRS1900	512	VN	-10	-5.81	-0.003141	±2.5	PASS
EGPRS1900	512	VN	0	7.36	0.003979	±2.5	PASS
EGPRS1900	512	VN	10	5.78	0.003124	±2.5	PASS
EGPRS1900	512	VN	20	8.49	0.004589	±2.5	PASS
EGPRS1900	512	VN	30	10.72	0.005793	±2.5	PASS
EGPRS1900	512	VN	40	12.62	0.006823	±2.5	PASS
EGPRS1900	512	VN	50	12.46	0.006736	±2.5	PASS
EGPRS1900	661	VN	-30	11.91	0.006337	±2.5	PASS
EGPRS1900	661	VN	-20	7.36	0.003916	±2.5	PASS

EGPRS1900	661	VN	-10	11.07	0.005890	±2.5	PASS
EGPRS1900	661	VN	0	9.10	0.004843	±2.5	PASS
EGPRS1900	661	VN	10	8.94	0.004757	±2.5	PASS
EGPRS1900	661	VN	20	7.97	0.004242	±2.5	PASS
EGPRS1900	661	VN	30	9.52	0.005066	±2.5	PASS
EGPRS1900	661	VN	40	9.75	0.005186	±2.5	PASS
EGPRS1900	661	VN	50	7.39	0.003933	±2.5	PASS
EGPRS1900	810	VN	-30	2.91	0.001521	±2.5	PASS
EGPRS1900	810	VN	-20	6.20	0.003246	±2.5	PASS
EGPRS1900	810	VN	-10	4.88	0.002553	±2.5	PASS
EGPRS1900	810	VN	0	6.65	0.003483	±2.5	PASS
EGPRS1900	810	VN	10	7.39	0.003871	±2.5	PASS
EGPRS1900	810	VN	20	5.68	0.002975	±2.5	PASS
EGPRS1900	810	VN	30	4.52	0.002367	±2.5	PASS
EGPRS1900	810	VN	40	6.68	0.003499	±2.5	PASS
EGPRS1900	810	VN	50	3.42	0.001792	±2.5	PASS

The End