Appendix B

GSM850&1900

CONTENT

1. Effective (Isotropic) Radiated Power Output Data

1.1. Test Result

Band	Test Mode	Channel	Power(dBm)	ERP[dBm]	Limit(dBm)	Verdict
GSM850	GSM/TM1	128	33.20	27.75	38.45	PASS
		190	33.16	27.71	38.45	PASS
		251	33.08	27.63	38.45	PASS
	GSM/TM2	128	27.45	22	38.45	PASS
		190	27.42	21.97	38.45	PASS
		251	27.34	21.89	38.45	PASS

Band	Test Mode	Channel	Power(dBm)	EIRP[dBm]	Limit(dBm)	Verdict
GSM1900	GSM/TM1	512	29.59	27.39	33	PASS
		661	30.01	27.81	33	PASS
		810	30.18	27.98	33	PASS
	GSM/TM2	512	26.20	24	33	PASS
		661	26.66	24.46	33	PASS
		810	26.86	24.66	33	PASS

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

ERP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBd]

EIRP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBi]

b: SGP=Signal Generator Level

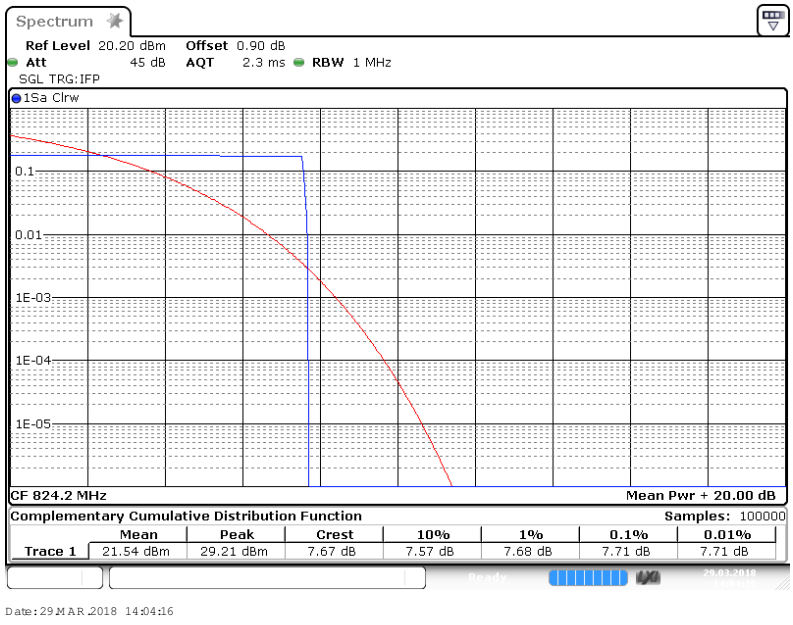
2. Peak-to-Average Ratio

2.1. Test Result

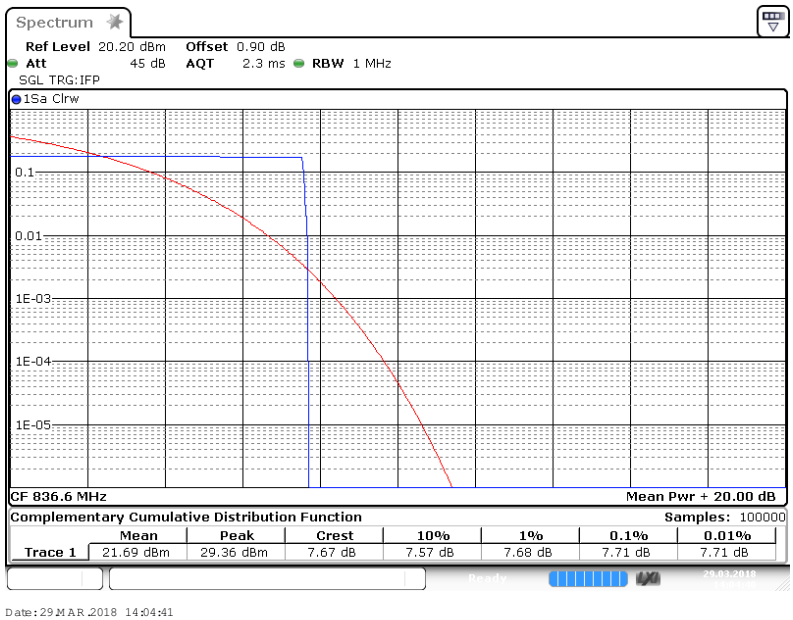
Band	Test Mode	Channel	Peak-to-Average Ratio(dB)	Limit(dBm)	Verdict
GSM850	GSM/TM1	128	7.71	13	PASS
		190	7.71	13	PASS
		251	7.71	13	PASS
	GSM/TM2	128	7.68	13	PASS
		190	7.68	13	PASS
		251	7.74	13	PASS
GSM1900	GSM/TM1	512	7.71	13	PASS
		661	7.68	13	PASS
		810	7.65	13	PASS
	GSM/TM2	512	7.74	13	PASS
		661	7.71	13	PASS
		810	7.65	13	PASS

2.2. Test Plots

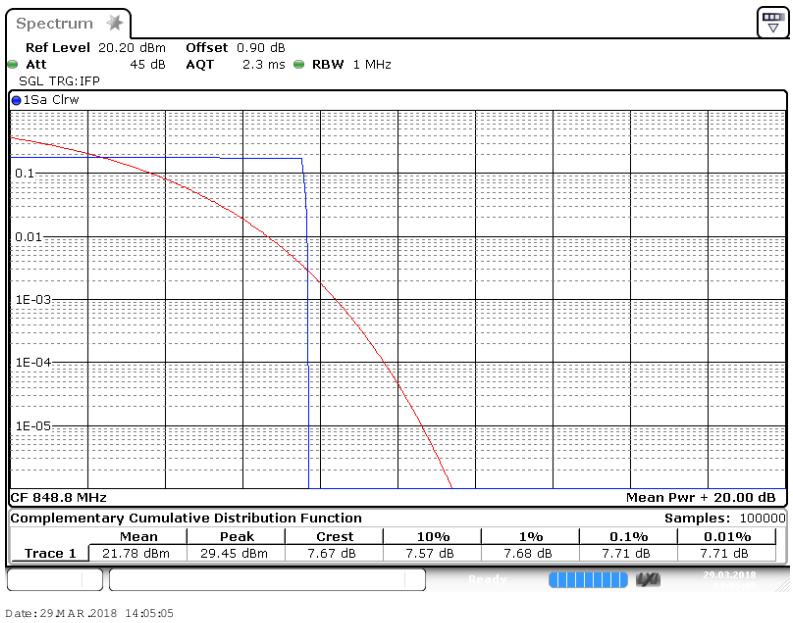
GSM850_128



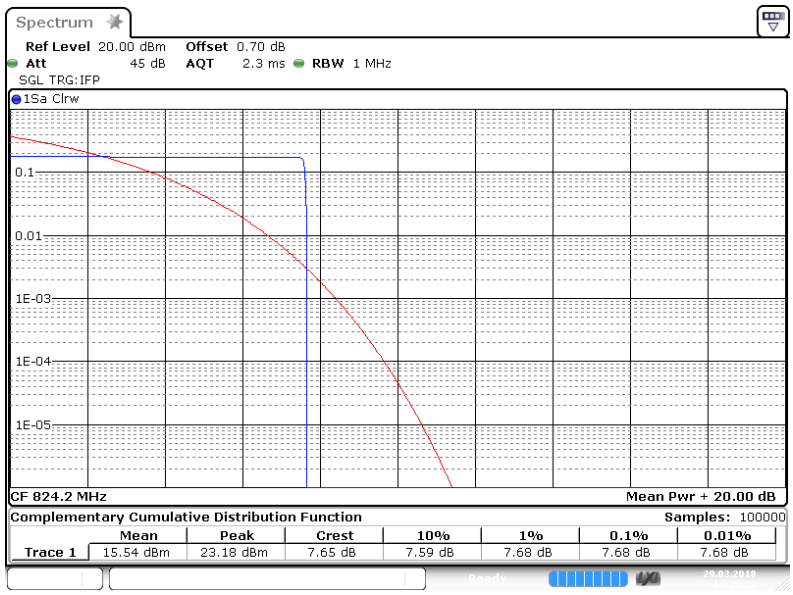
GSM850_128



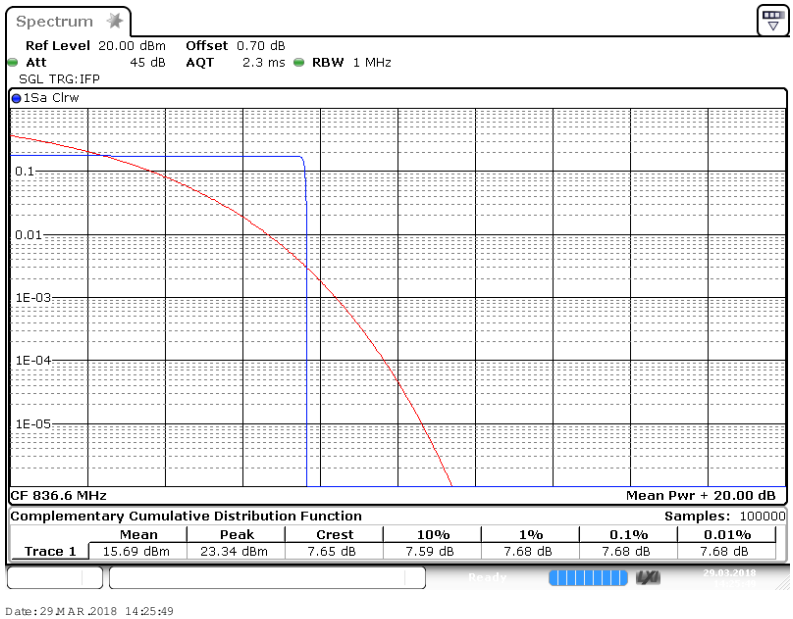
GSM850_190



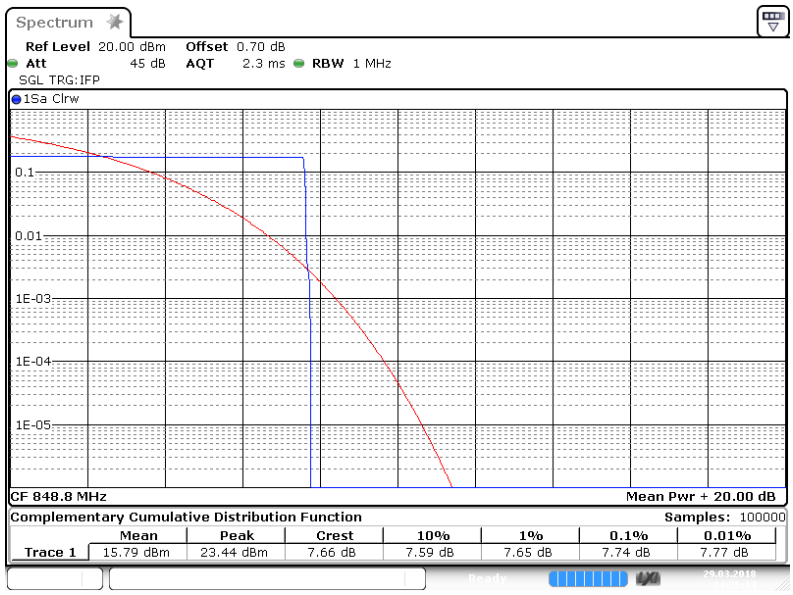
EGPRS850_128



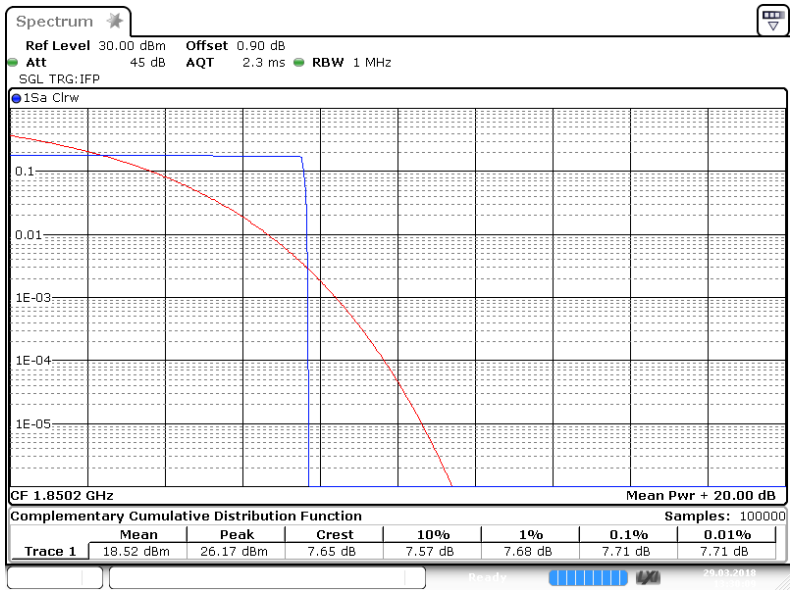
EGPRS850_190



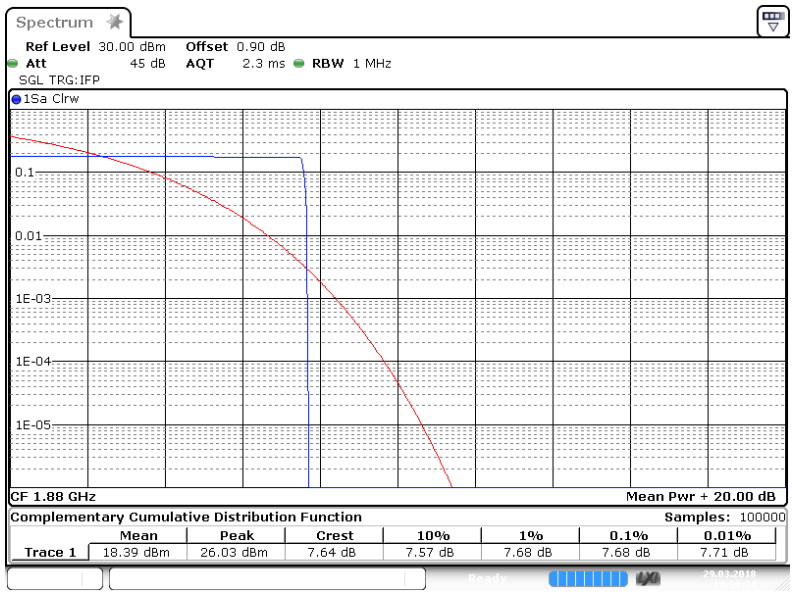
EGPRS850_251



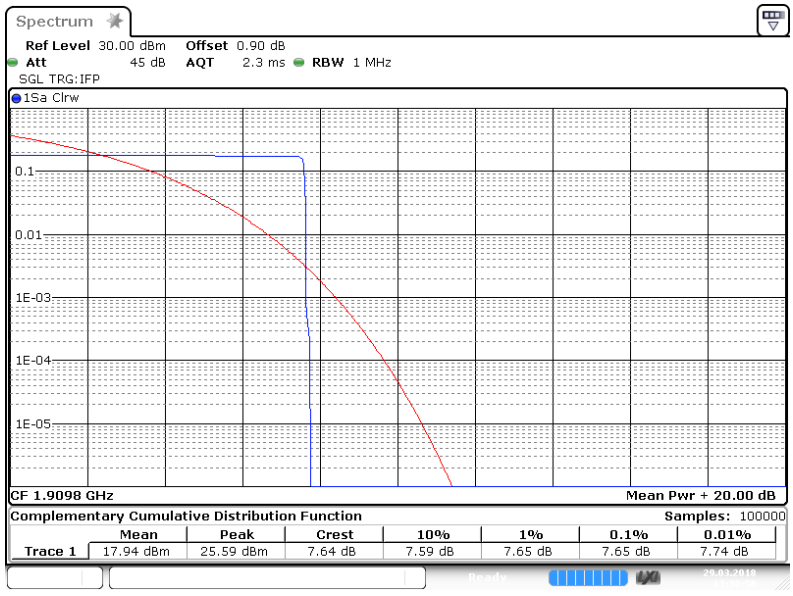
GSM1900_512



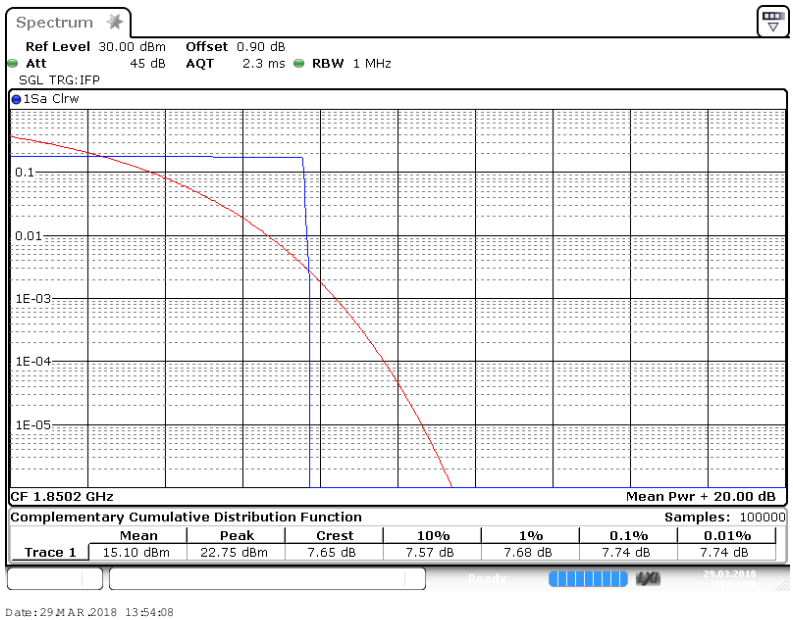
GSM1900_661



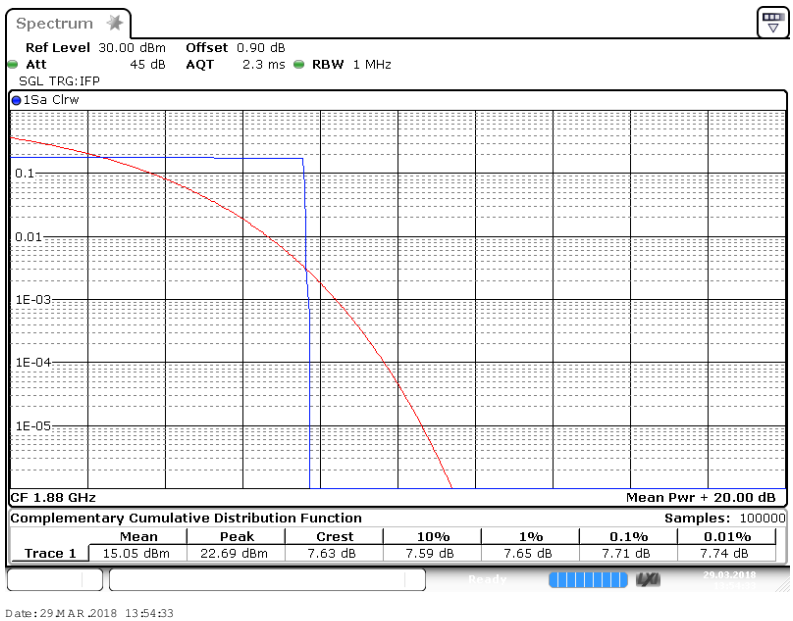
GSM1900_810



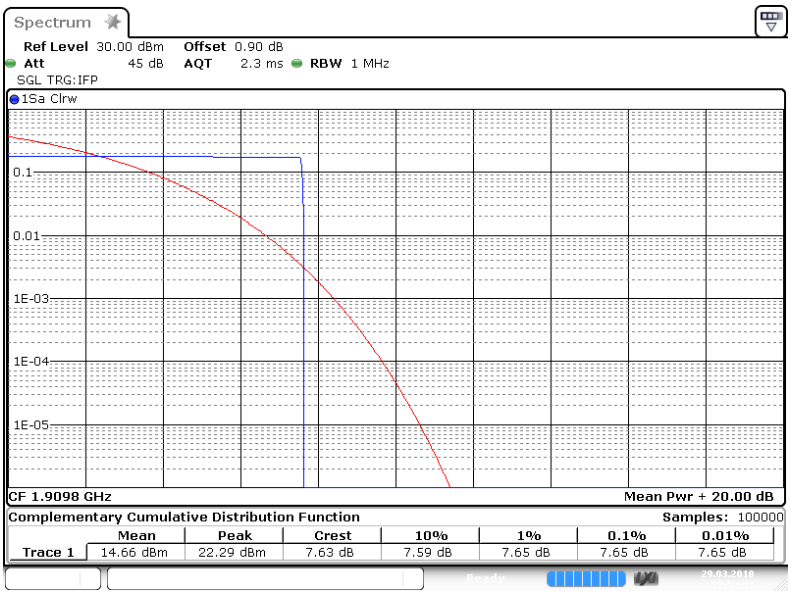
EGPRS1900_512



EGPRS 1900_661



EGPRS1900_810



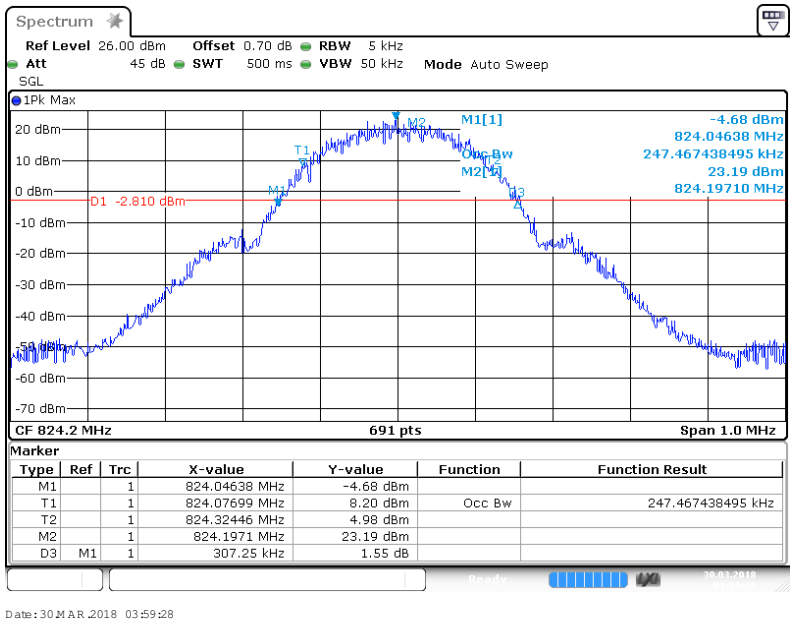
3. 26dB Bandwidth and Occupied Bandwidth

3.1. Test Result

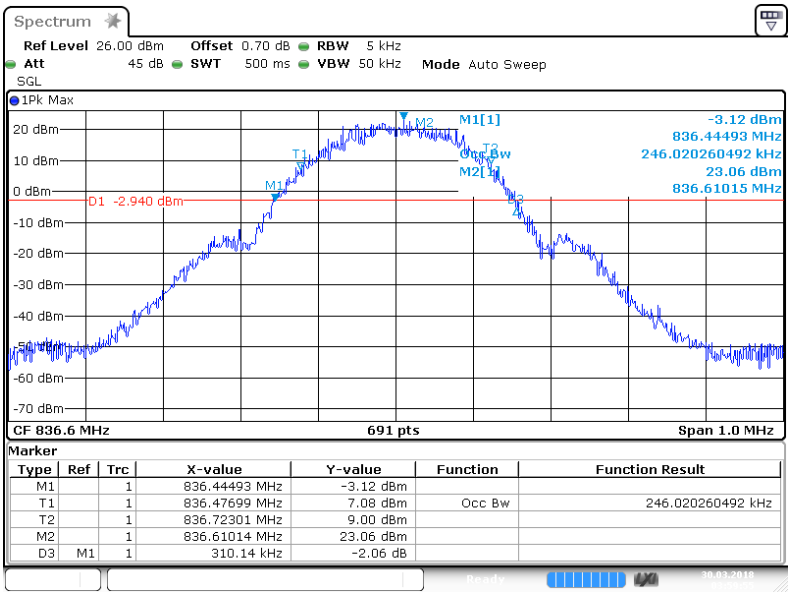
Band	Test Mode	Channel	Occupied Bandwidth (kHz)	26dB Bandwidth (kHz)	Limit(kHz)	Verdict
GSM850	GSM/TM1	128	247.48	307.25	---	PASS
		190	246.02	310.14	---	PASS
		251	248.91	298.55	---	PASS
	GSM/TM2	128	244.57	304.35	---	PASS
		190	246.02	305.80	---	PASS
		251	244.57	305.80	---	PASS
GSM1900	GSM/TM1	512	246.02	310.14	---	PASS
		661	244.57	310.14	---	PASS
		810	246.02	314.49	---	PASS
	GSM/TM2	512	244.57	307.25	---	PASS
		661	246.02	313.04	---	PASS
		810	247.47	308.70	---	PASS

3.2. Test Plots

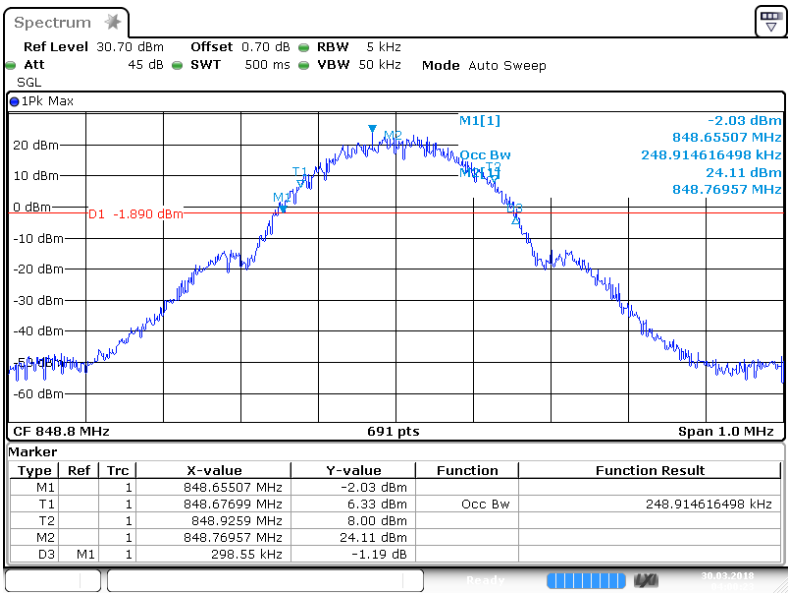
GSM850_128



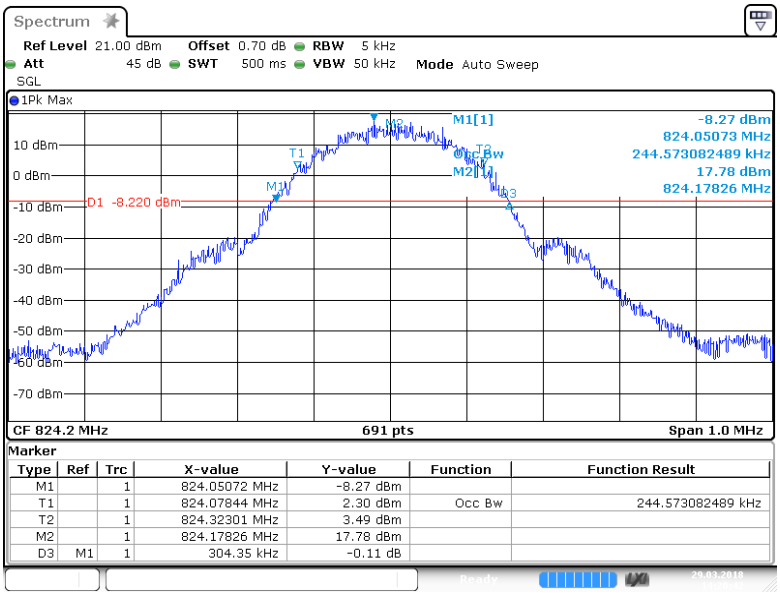
GSM850_190



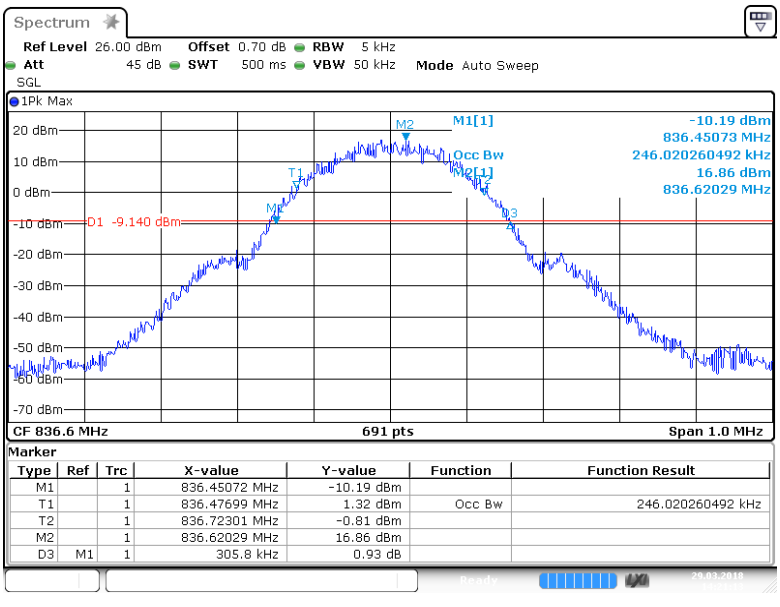
GSM850_251



EGPRS850_128



EGPRS850_190



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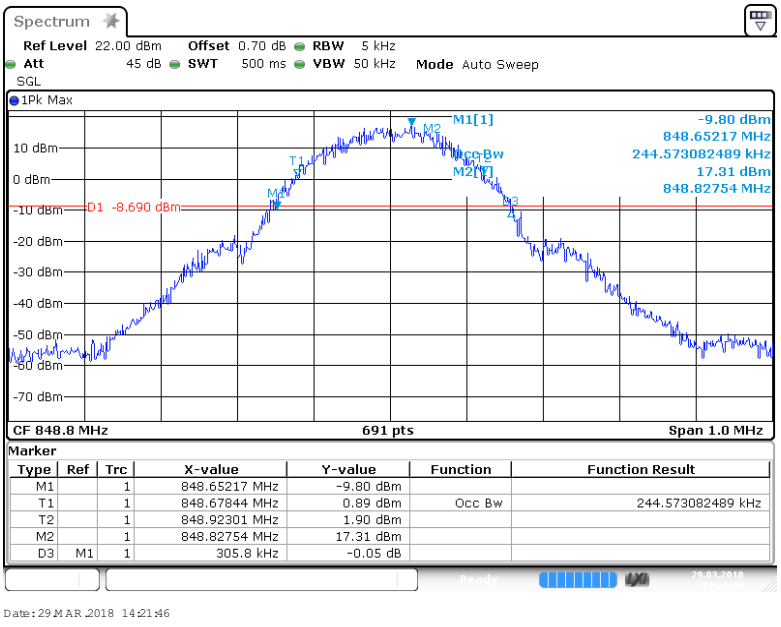
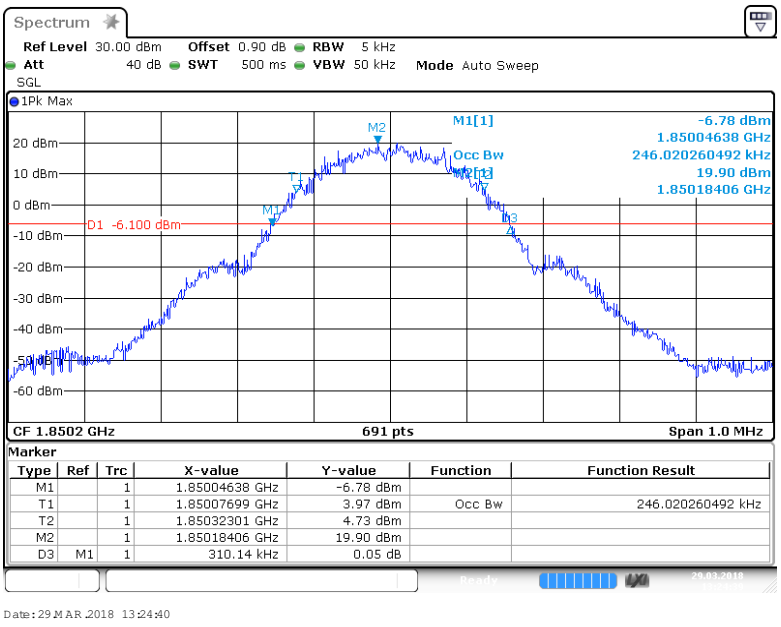
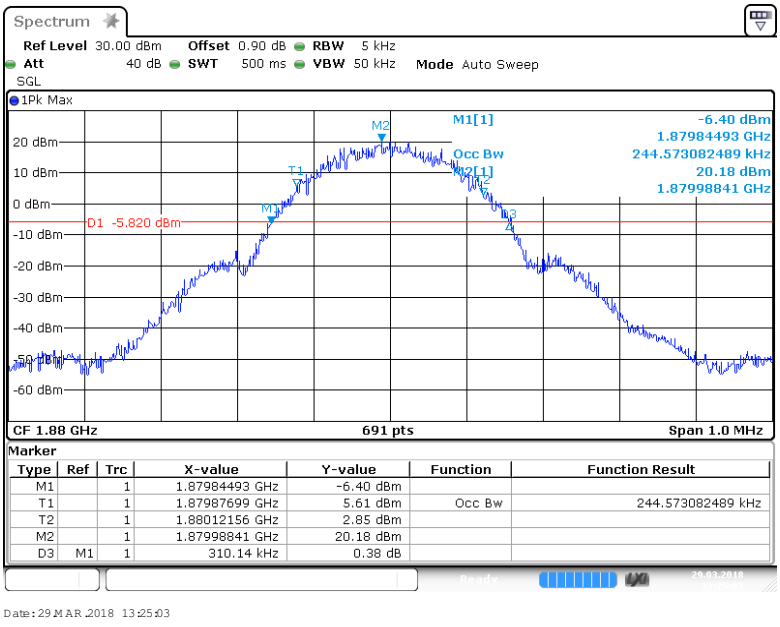


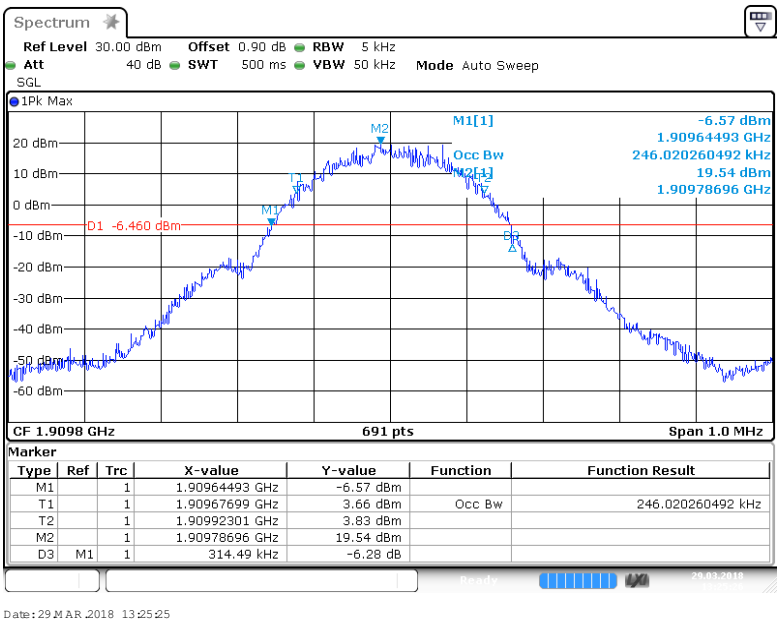
GSM1900_512



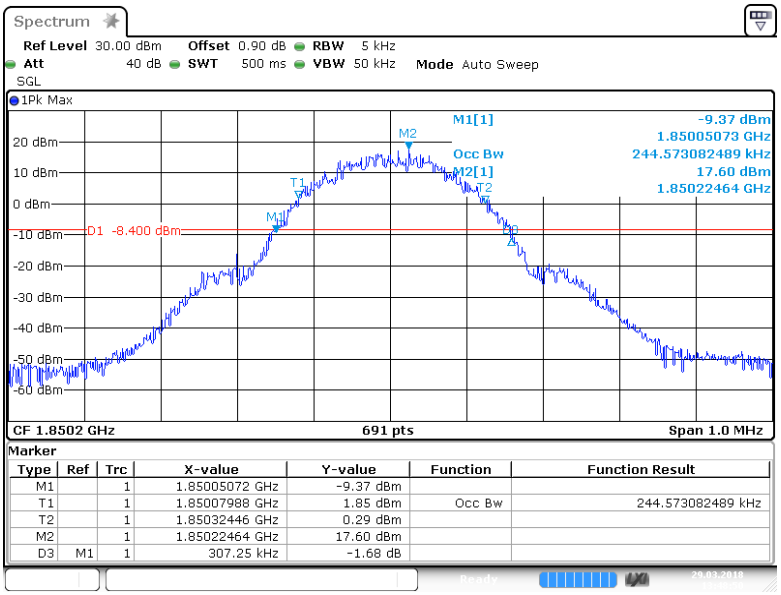
GSM1900_661



GSM1900_810



EGPRS1900_512



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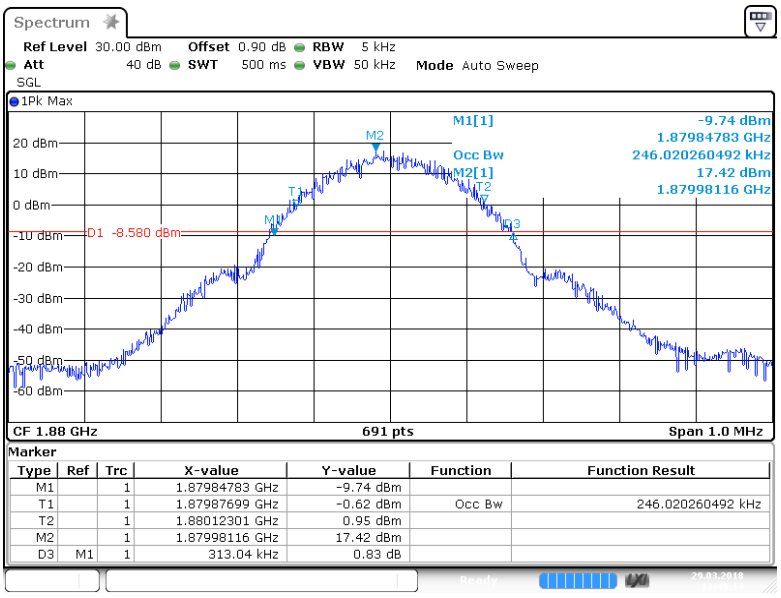
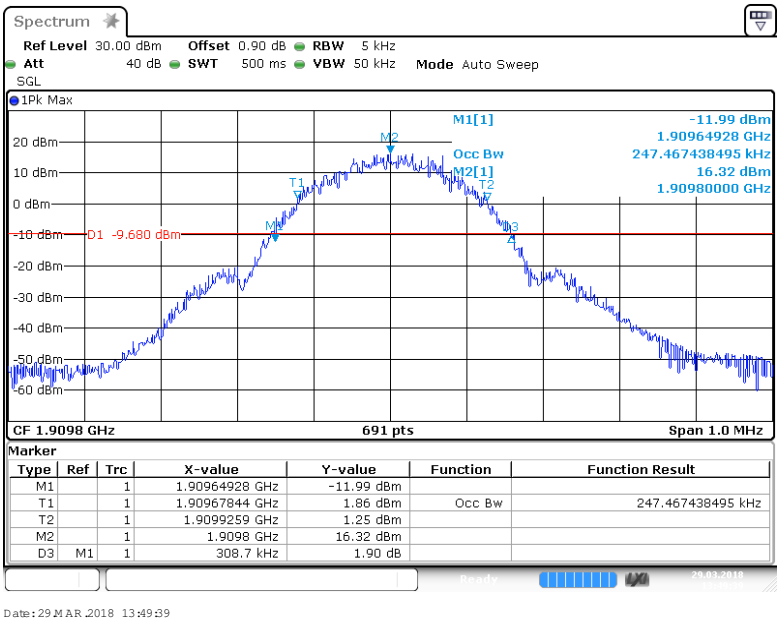


EGPRS1900_810



4. Modulation Characteristics

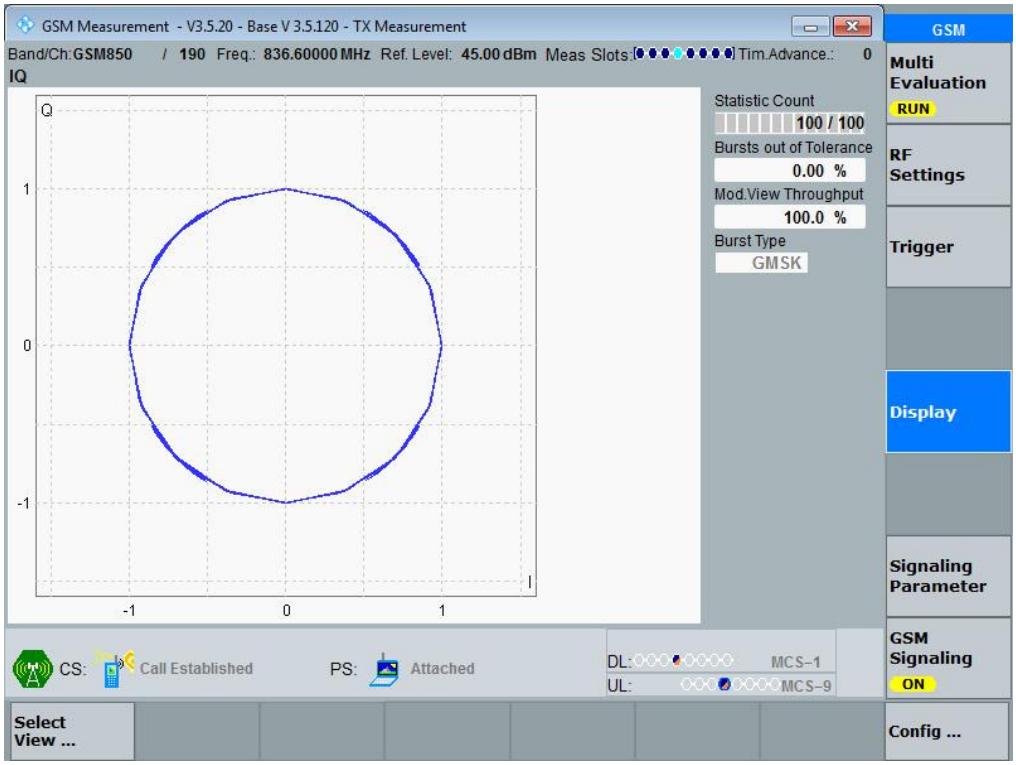
Part I - Test Plots

4.1. For GSM

4.1.1. Test Band = GSM 850

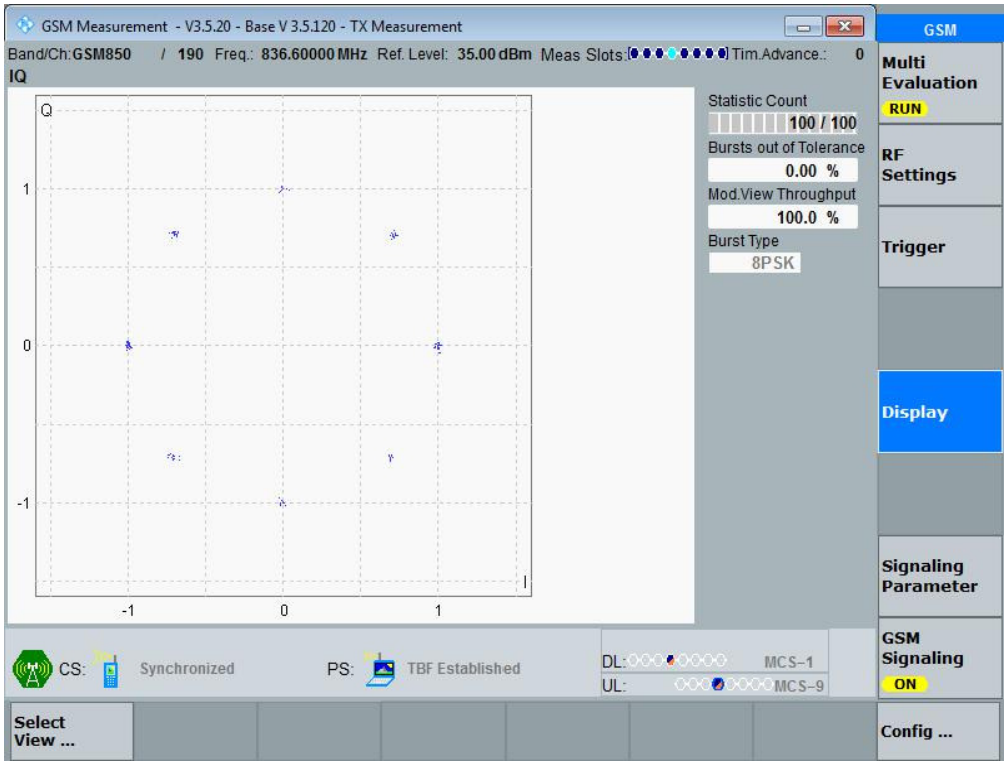
4.1.1.1. Test Mode = GSM/TM1

4.1.1.1.1. Test Channel = MCH



4.1.1.2. Test Mode = GSM/TM2

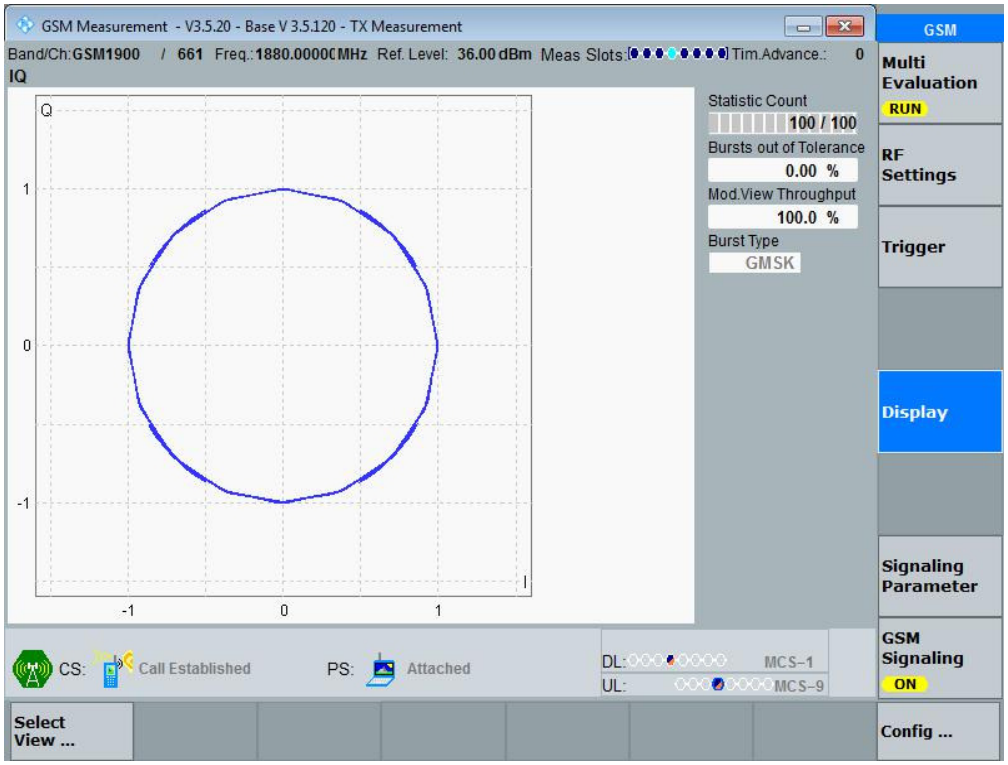
4.1.1.2.1. Test Channel = MCH



4.1.2. Test Band = GSM 1900

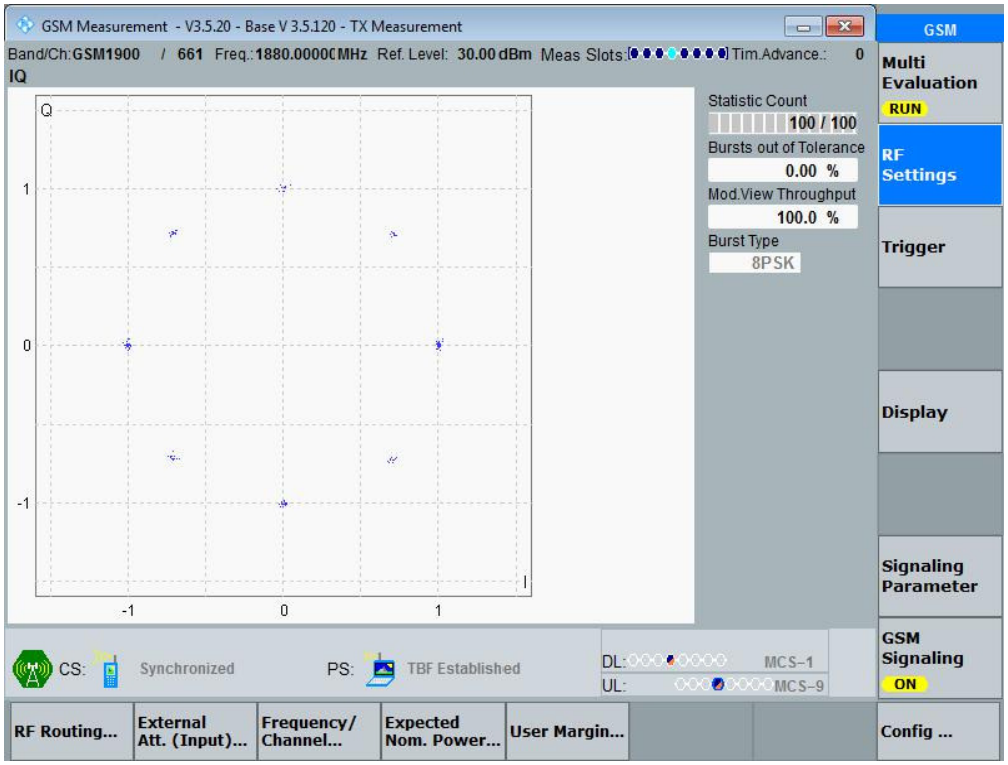
4.1.2.1. Test Mode = GSM/TM1

4.1.2.1.1. Test Channel = MCH



4.1.2.2. Test Mode = GSM/TM2

4.1.2.2.1. Test Channel = MCH



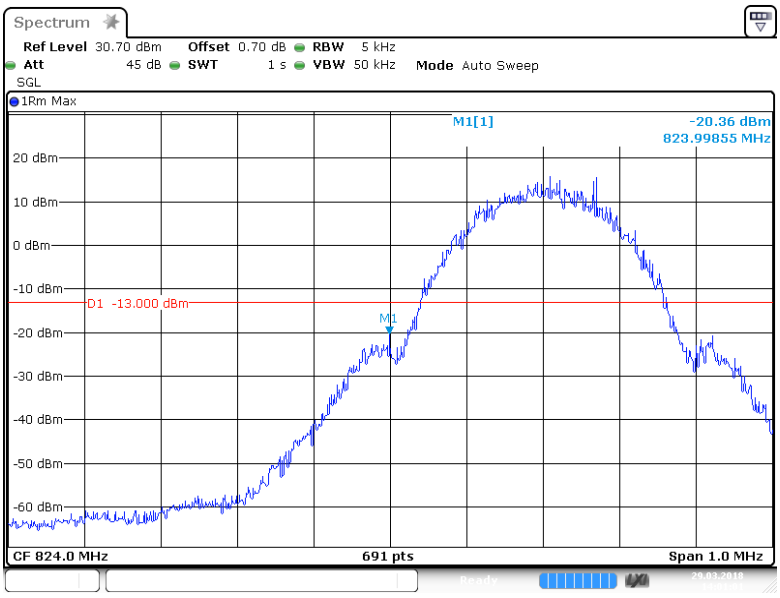
5. Band Edge

5.1. Test Result

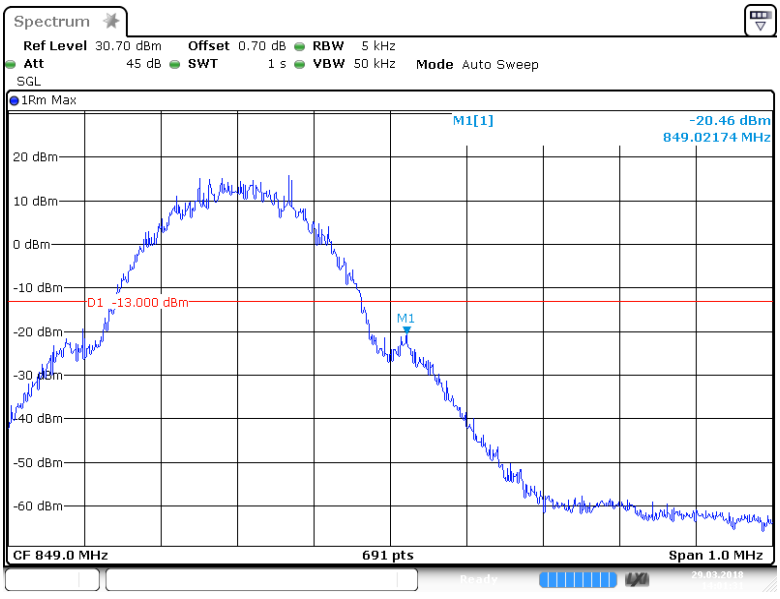
Band	Channel	Value(dBm)	Limit(dBm)	Verdict
GSM850	128	-20.36	-13	PASS
GSM850	251	-20.46	-13	PASS
GPRS850	128	-21.83	-13	PASS
GPRS850	251	-22.08	-13	PASS
EGPRS850	128	-27.63	-13	PASS
EGPRS850	251	-27.57	-13	PASS
GSM1900	512	-23.18	-13	PASS
GSM1900	810	-24.79	-13	PASS
GPRS1900	512	-24.47	-13	PASS
GPRS1900	810	-24.54	-13	PASS
EGPRS1900	512	-27.39	-13	PASS
EGPRS1900	810	-28.25	-13	PASS

5.2. Test Plots

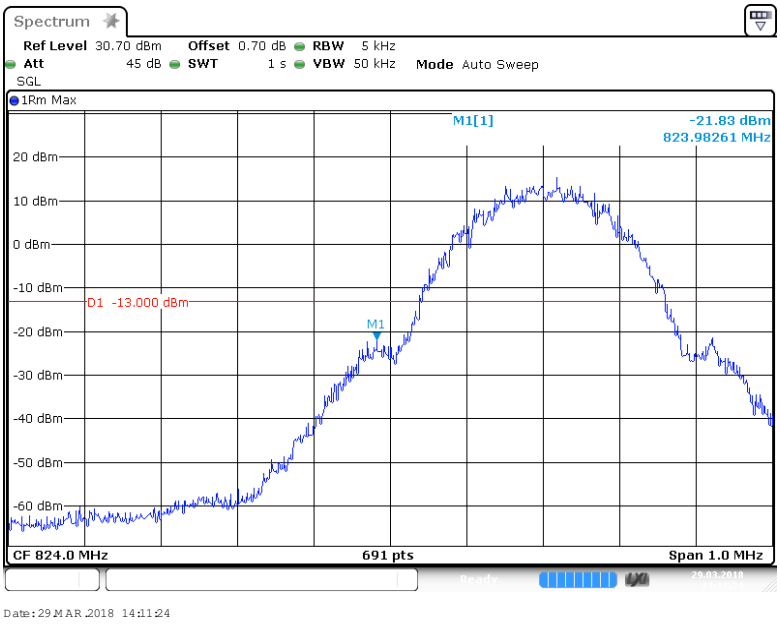
GSM850_128



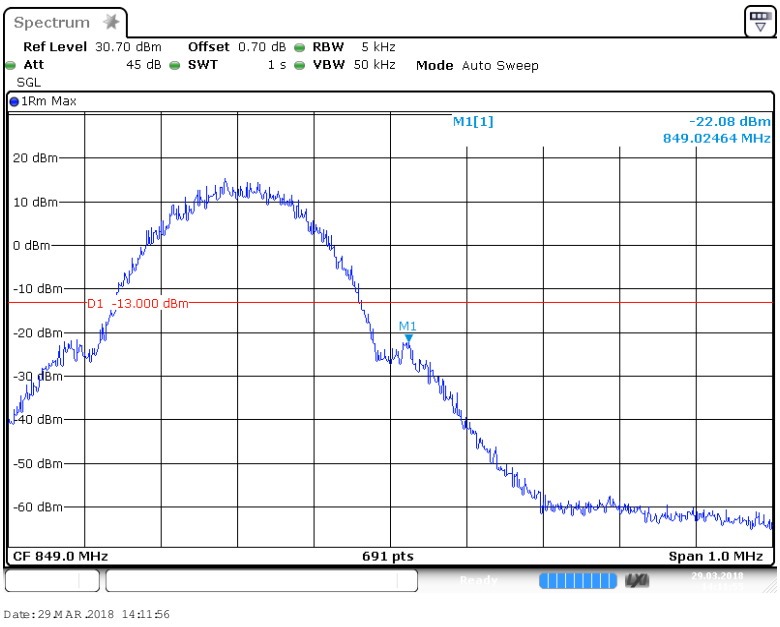
GSM850_251



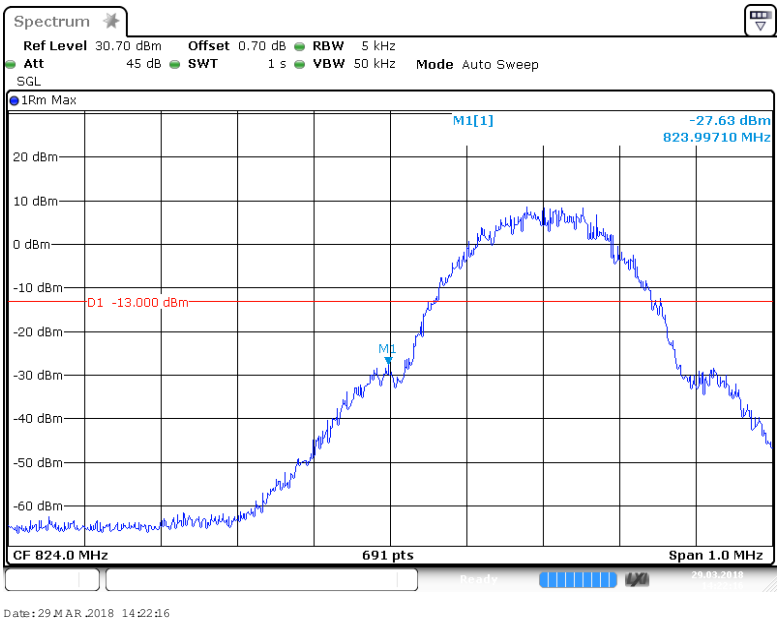
GPRS850_128



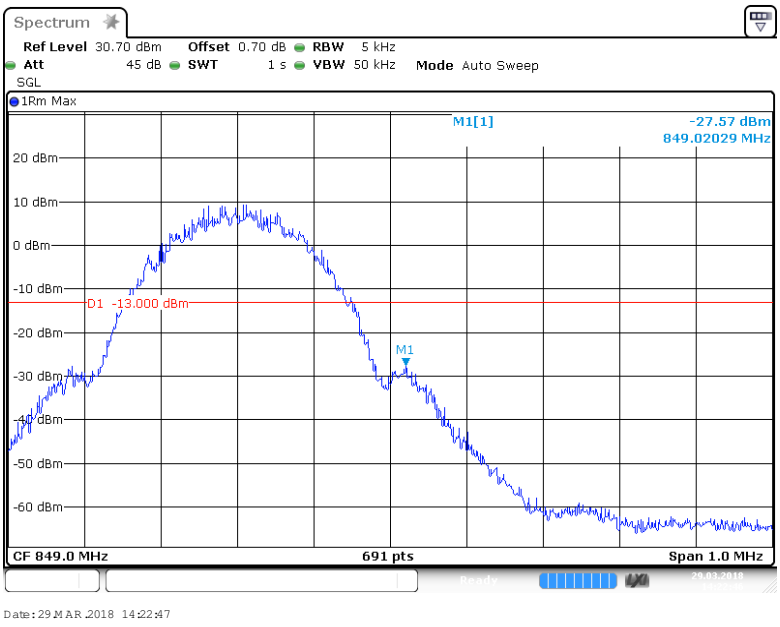
GPRS850_251



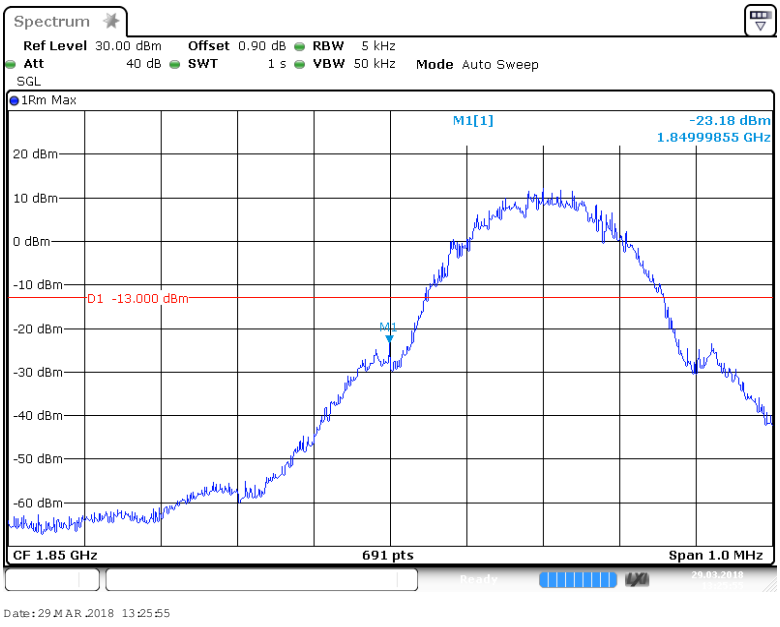
EGPRS850_128



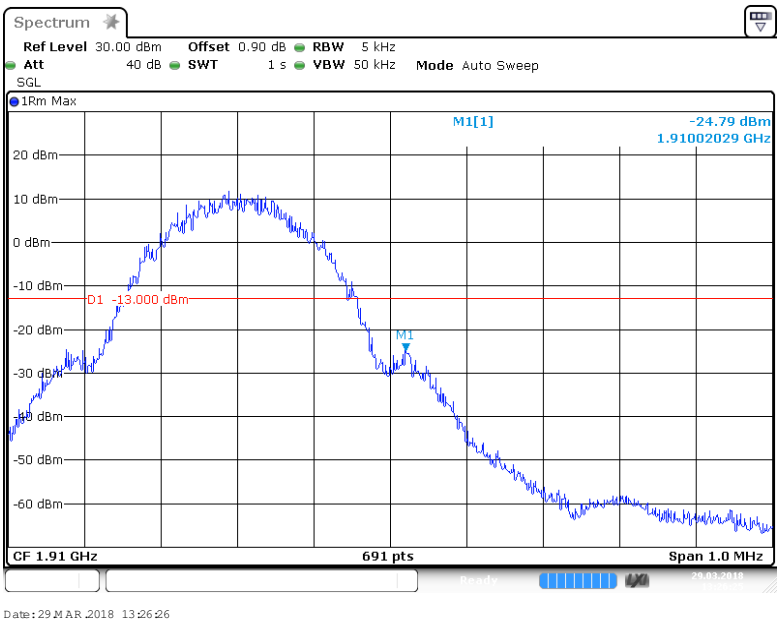
EGPRS850_251



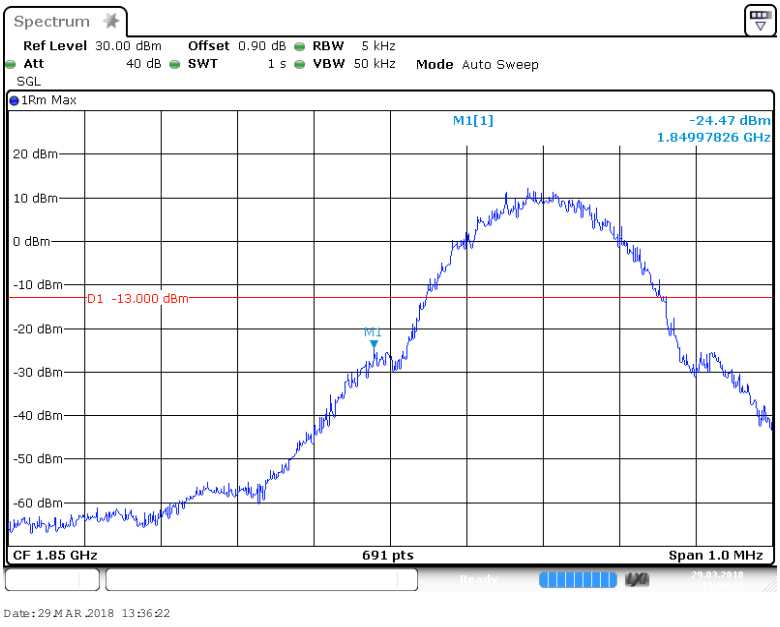
GSM1900_512



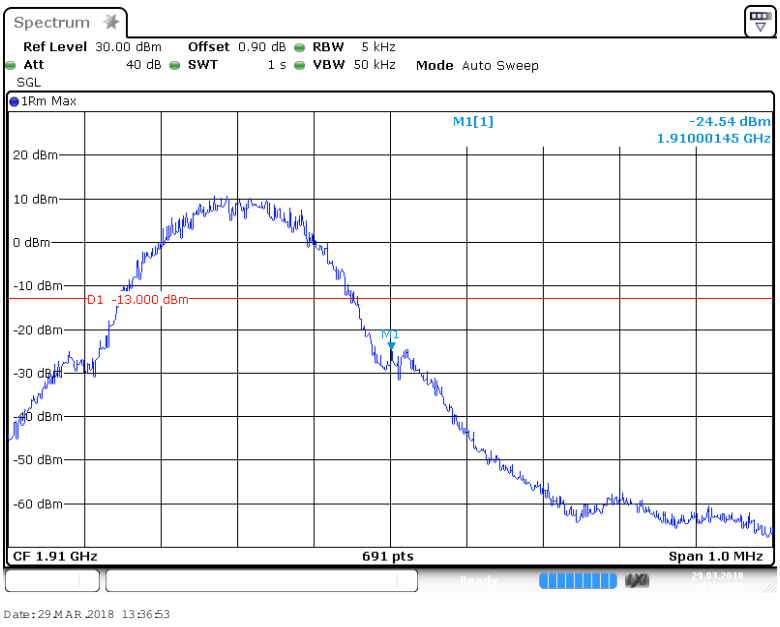
GSM1900_810



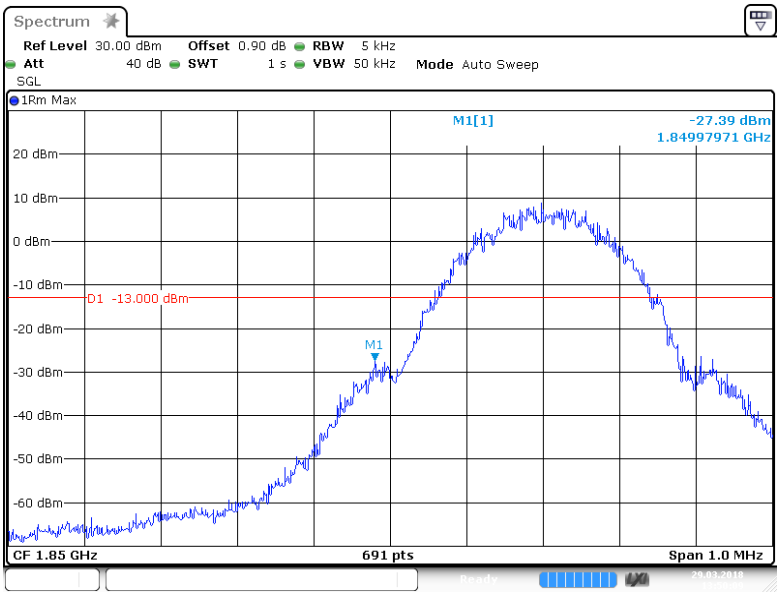
GPRS1900_512



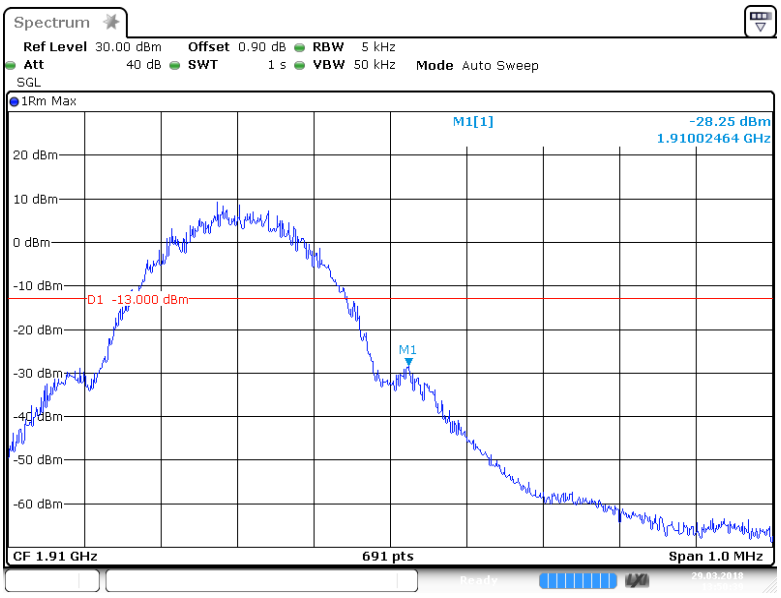
GPRS1900_810



EGPRS1900_512



EGPRS1900_810



6. Conducted Spurious Emission

6.1. Test Result

Band	Channel	Frequency Rang(Mhz)	Value(dBm)	Limit(dBm)	Verdict
GSM850	128	0.009~0.15	-58.30	-33	PASS
GSM850	128	0.15~30	-69.77	-23	PASS
GSM850	128	30~1000	-40.33	-13	PASS
GSM850	128	1000~9000	-38.16	-13	PASS
GSM850	190	0.009~0.15	-58.20	-33	PASS
GSM850	190	0.15~30	-69.89	-23	PASS
GSM850	190	30~1000	-40.13	-13	PASS
GSM850	190	1000~9000	-36.98	-13	PASS
GSM850	251	0.009~0.15	-57.73	-33	PASS
GSM850	251	0.15~30	-70.34	-23	PASS
GSM850	251	30~1000	-40.19	-13	PASS
GSM850	251	1000~9000	-35.88	-13	PASS
GPRS850	128	0.009~0.15	-58.09	-43	PASS
GPRS850	128	0.15~30	-70.45	-33	PASS
GPRS850	128	30~1000	-39.48	-13	PASS
GPRS850	128	1000~9000	-37.33	-13	PASS
GPRS850	190	0.009~0.15	-58.10	-43	PASS
GPRS850	190	0.15~30	-71.45	-33	PASS
GPRS850	190	30~1000	-40.60	-13	PASS
GPRS850	190	1000~9000	-38.29	-13	PASS
GPRS850	251	0.009~0.15	-57.48	-43	PASS
GPRS850	251	0.15~30	-69.41	-33	PASS
GPRS850	251	30~1000	-40.52	-13	PASS
GPRS850	251	1000~9000	-35.56	-13	PASS
EGPRS850	128	0.009~0.15	-67.57	-43	PASS
EGPRS850	128	0.15~30	-70.44	-33	PASS
EGPRS850	128	30~1000	-39.92	-13	PASS
EGPRS850	128	1000~9000	-37.99	-13	PASS
EGPRS850	190	0.009~0.15	-66.99	-43	PASS
EGPRS850	190	0.15~30	-69.85	-33	PASS
EGPRS850	190	30~1000	-40.95	-13	PASS
EGPRS850	190	1000~9000	-38.79	-13	PASS
EGPRS850	251	0.009~0.15	-67.00	-43	PASS
EGPRS850	251	0.15~30	-70.74	-33	PASS

EGPRS850	251	30~1000	-40.47	-13	PASS
EGPRS850	251	1000~9000	-38.52	-13	PASS
GSM1900	512	0.009~0.15	-60.47	-43	PASS
GSM1900	512	0.15~30	-59.44	-33	PASS
GSM1900	512	30~1000	-40.60	-13	PASS
GSM1900	512	1000~7000	-35.14	-13	PASS
GSM1900	512	7000~13600	-39.25	-13	PASS
GSM1900	512	13600~20000	-36.74	-13	PASS
GSM1900	661	0.009~0.15	-60.35	-43	PASS
GSM1900	661	0.15~30	-60.20	-33	PASS
GSM1900	661	30~1000	-40.93	-13	PASS
GSM1900	661	1000~7000	-35.60	-13	PASS
GSM1900	661	7000~13600	-39.49	-13	PASS
GSM1900	661	13600~20000	-36.23	-13	PASS
GSM1900	810	0.009~0.15	-60.23	-43	PASS
GSM1900	810	0.15~30	-60.77	-33	PASS
GSM1900	810	30~1000	-40.19	-13	PASS
GSM1900	810	1000~7000	-35.53	-13	PASS
GSM1900	810	7000~13600	-39.54	-13	PASS
GSM1900	810	13600~20000	-36.99	-13	PASS
GPRS1900	512	0.009~0.15	-60.76	-43	PASS
GPRS1900	512	0.15~30	-60.14	-33	PASS
GPRS1900	512	30~1000	-39.83	-13	PASS
GPRS1900	512	1000~7000	-35.52	-13	PASS
GPRS1900	512	7000~13600	-39.40	-13	PASS
GPRS1900	512	13600~20000	-36.96	-13	PASS
GPRS1900	661	0.009~0.15	-60.67	-43	PASS
GPRS1900	661	0.15~30	-60.89	-33	PASS
GPRS1900	661	30~1000	-39.37	-13	PASS
GPRS1900	661	1000~7000	-35.68	-13	PASS
GPRS1900	661	7000~13600	-39.78	-13	PASS
GPRS1900	661	13600~20000	-37.22	-13	PASS
GPRS1900	810	0.009~0.15	-60.55	-43	PASS
GPRS1900	810	0.15~30	-59.57	-33	PASS
GPRS1900	810	30~1000	-40.73	-13	PASS
GPRS1900	810	1000~7000	-34.70	-13	PASS
GPRS1900	810	7000~13600	-39.65	-13	PASS
GPRS1900	810	13600~20000	-36.89	-13	PASS
EGPRS1900	512	0.009~0.15	-60.61	-43	PASS
EGPRS1900	512	0.15~30	-60.56	-33	PASS

EGPRS1900	512	30~1000	-40.23	-13	PASS
EGPRS1900	512	1000~7000	-35.56	-13	PASS
EGPRS1900	512	7000~13600	-39.46	-13	PASS
EGPRS1900	512	13600~20000	-37.44	-13	PASS
EGPRS1900	661	0.009~0.15	-60.06	-43	PASS
EGPRS1900	661	0.15~30	-60.61	-33	PASS
EGPRS1900	661	30~1000	-40.98	-13	PASS
EGPRS1900	661	1000~7000	-35.02	-13	PASS
EGPRS1900	661	7000~13600	-39.55	-13	PASS
EGPRS1900	661	13600~20000	-35.61	-13	PASS
EGPRS1900	810	0.009~0.15	-59.76	-43	PASS
EGPRS1900	810	0.15~30	-59.91	-33	PASS
EGPRS1900	810	30~1000	-40.51	-13	PASS
EGPRS1900	810	1000~7000	-35.51	-13	PASS
EGPRS1900	810	7000~13600	-39.61	-13	PASS
EGPRS1900	810	13600~20000	-37.11	-13	PASS

6.2. Test Plots

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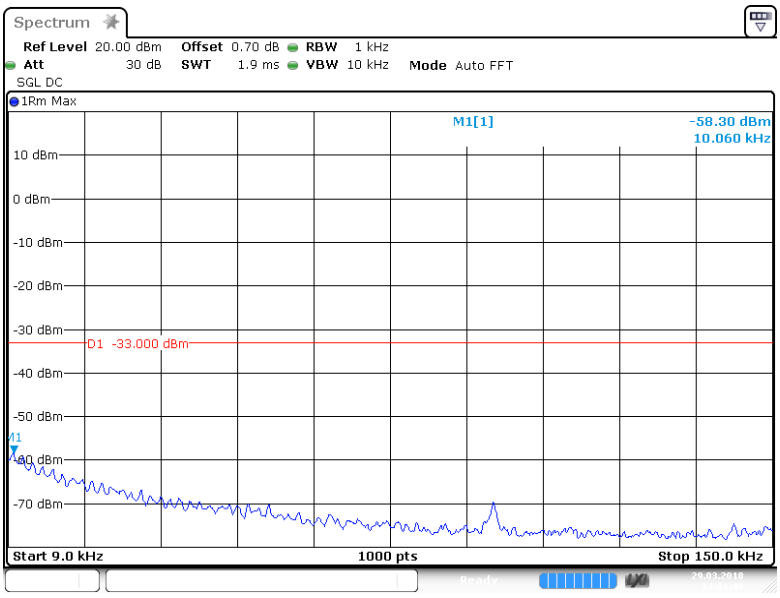

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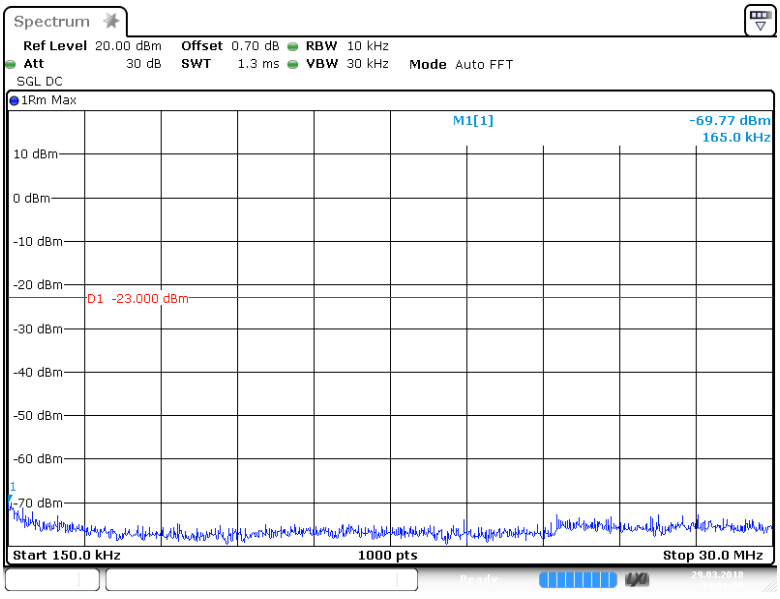

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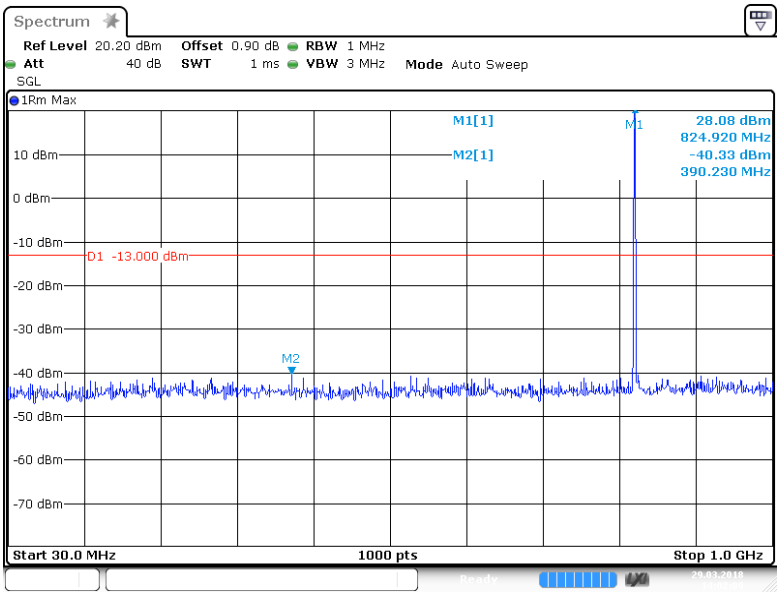

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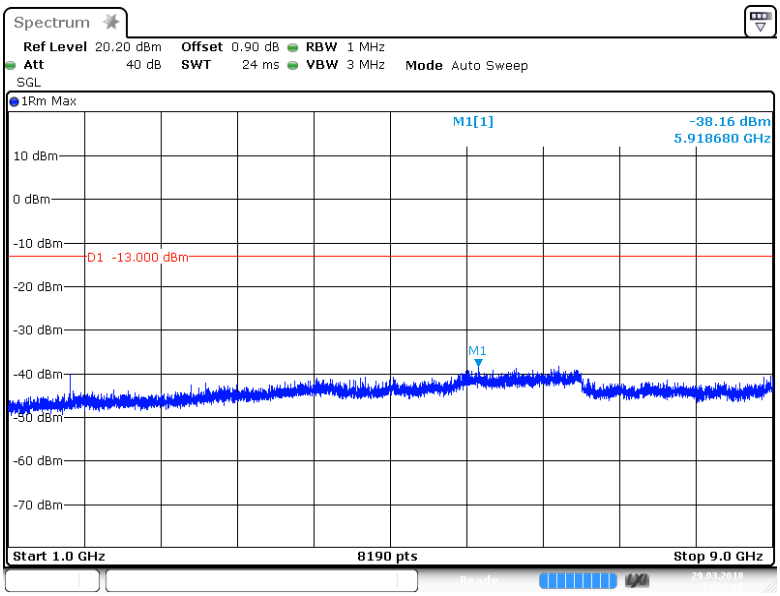

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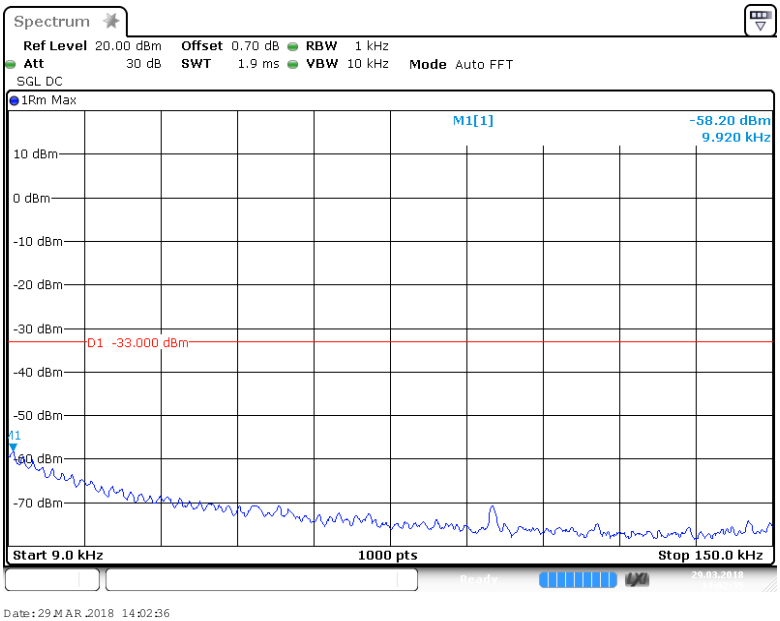

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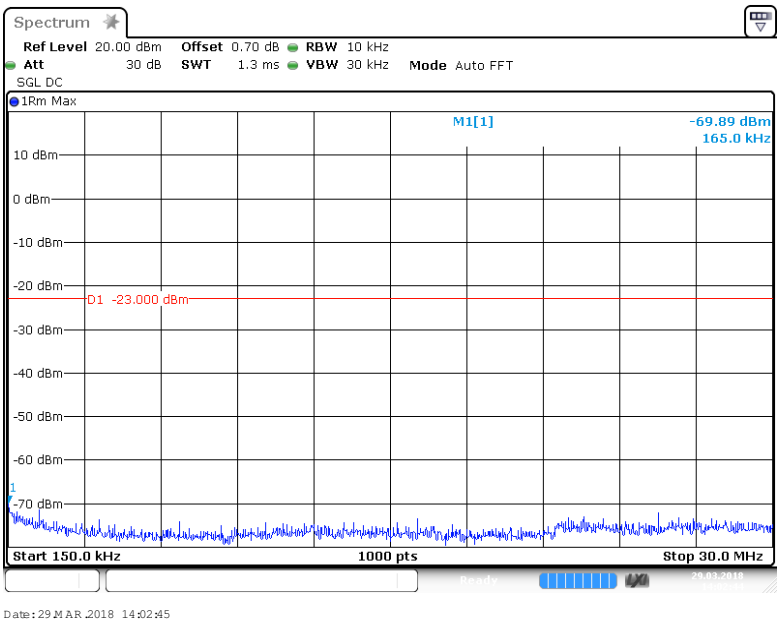

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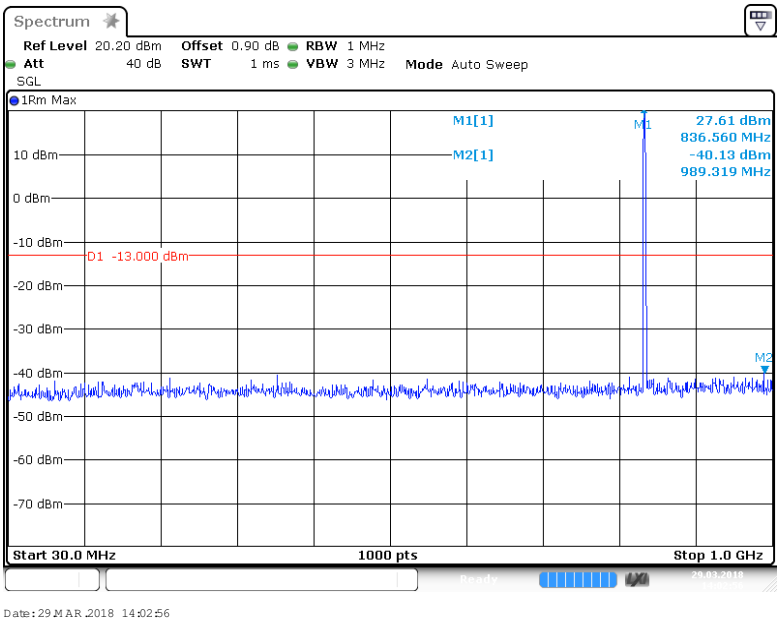

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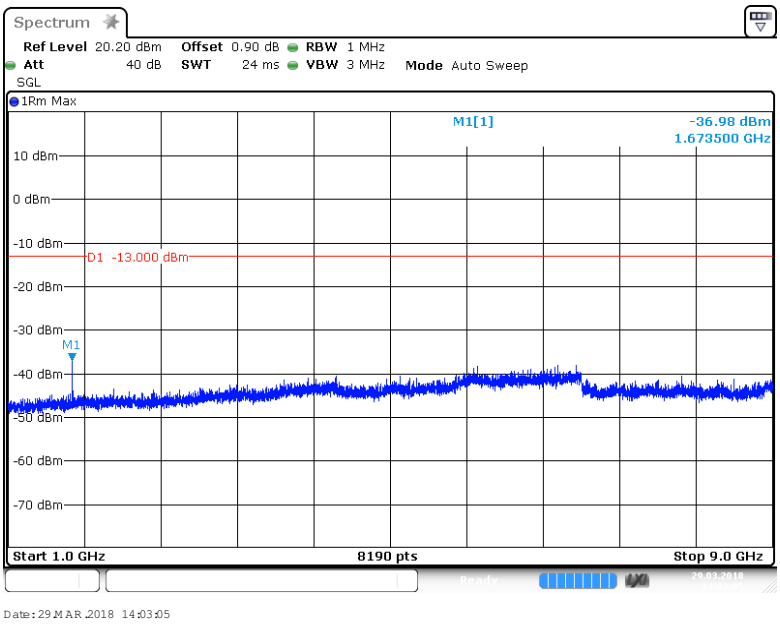

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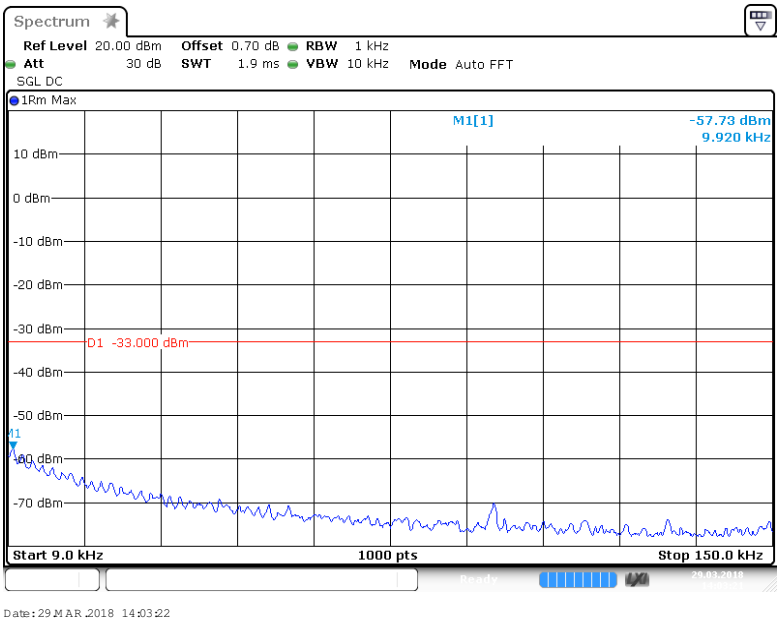

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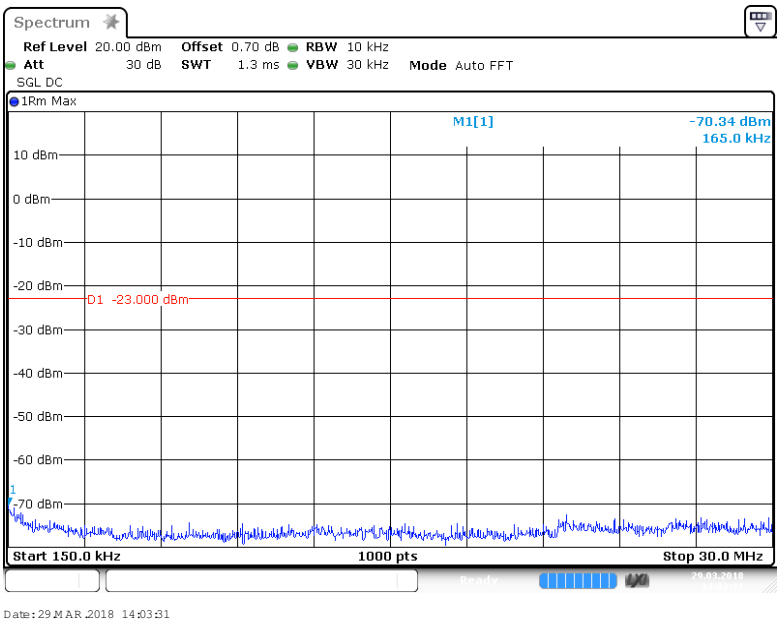

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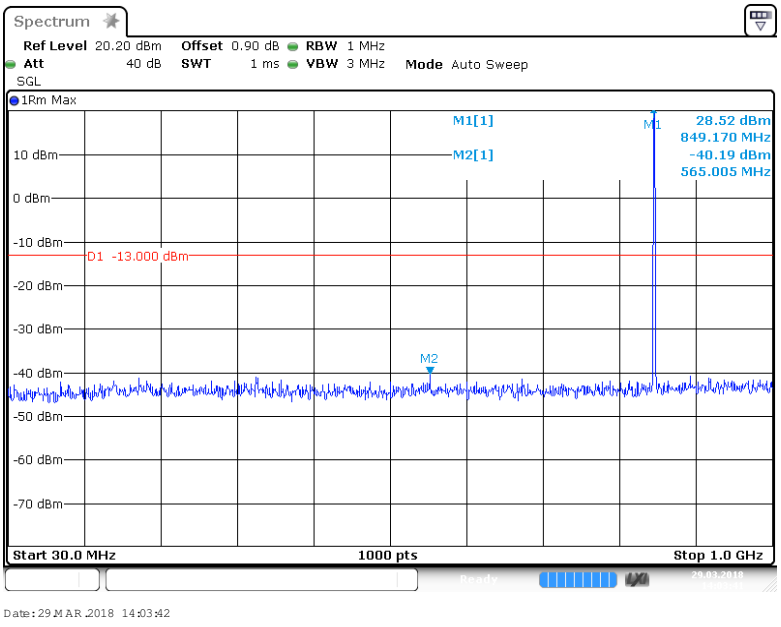

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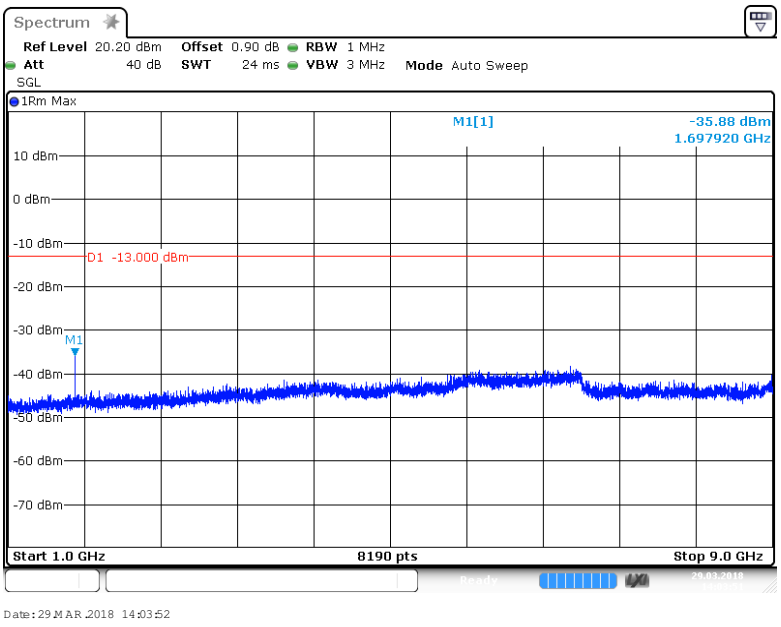

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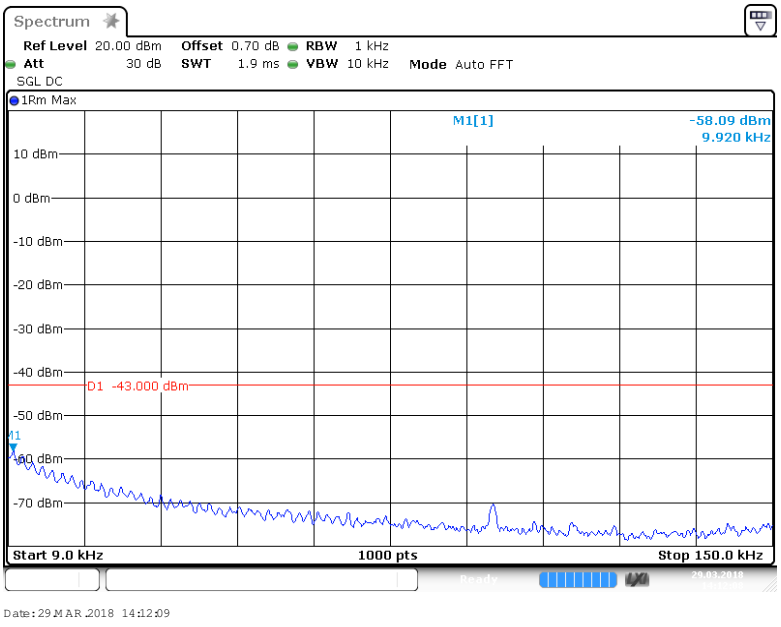

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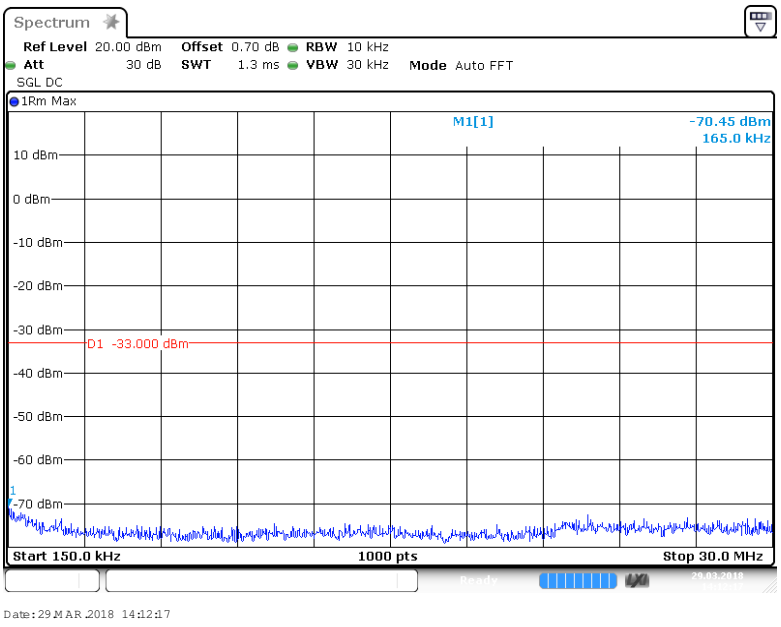

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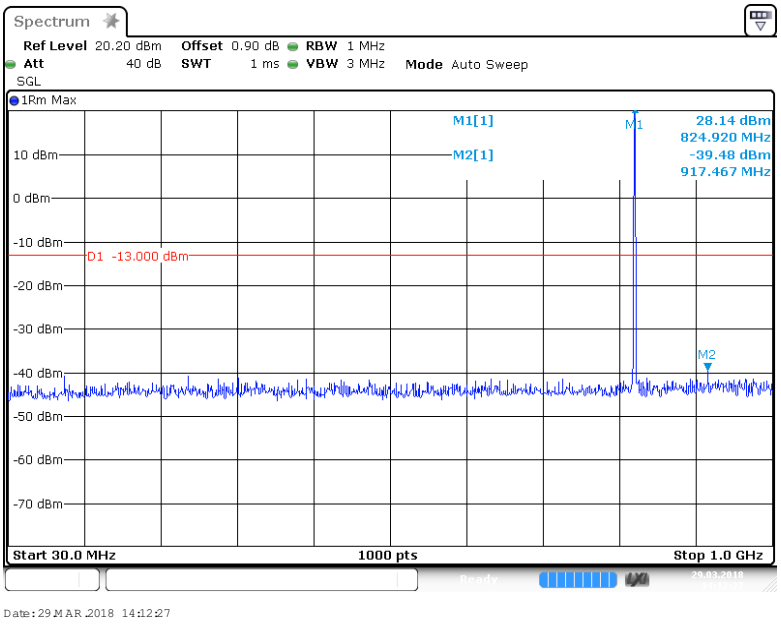

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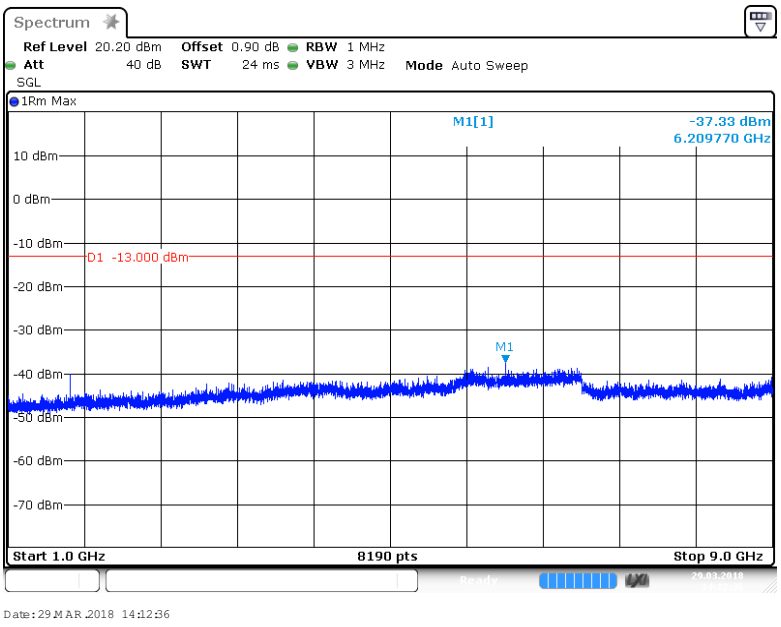

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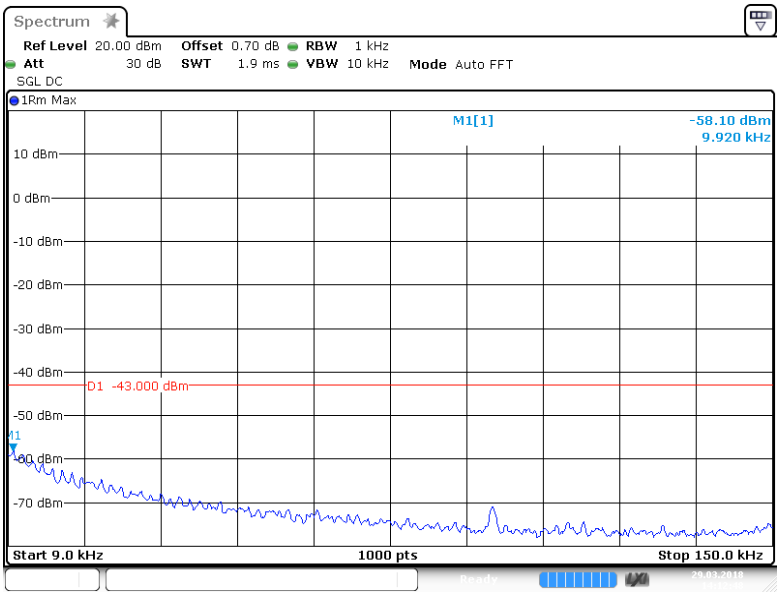

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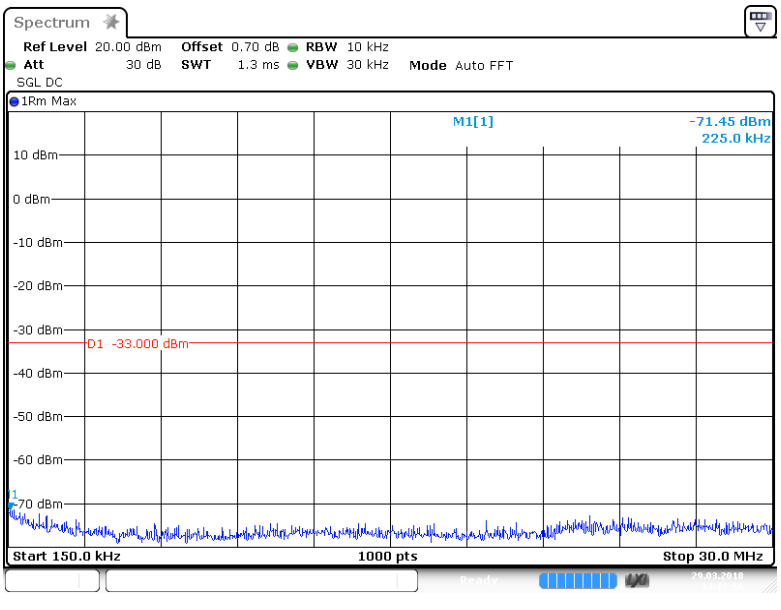

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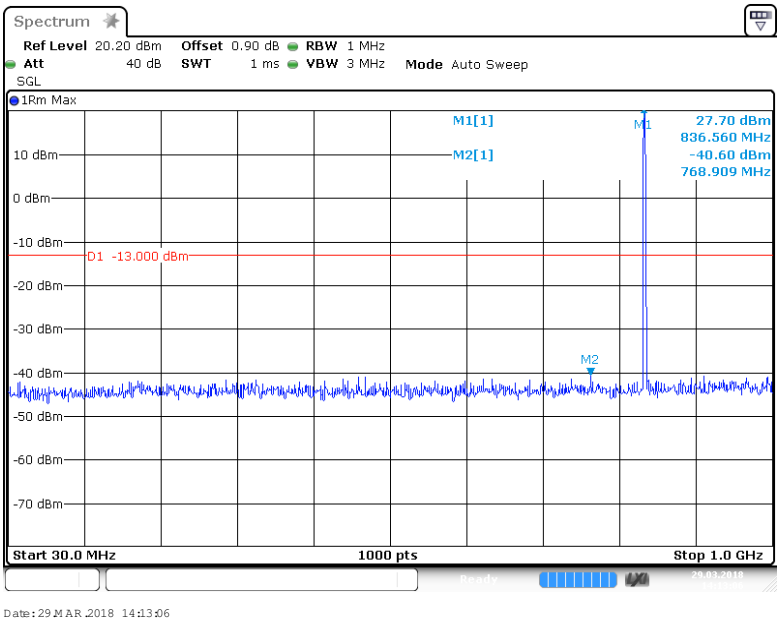

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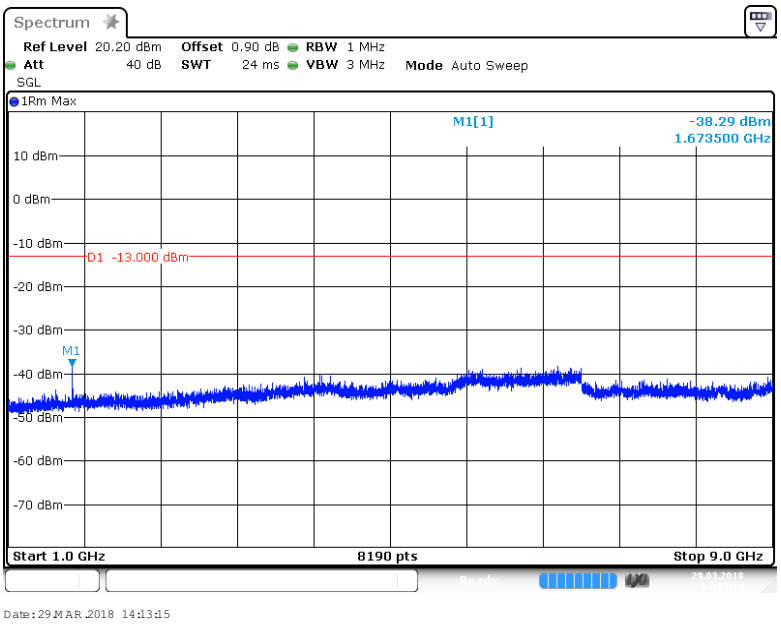

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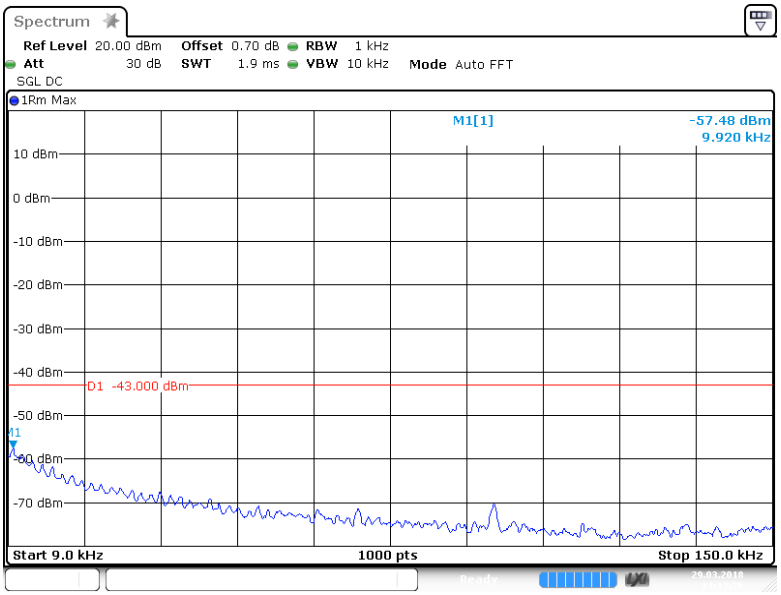

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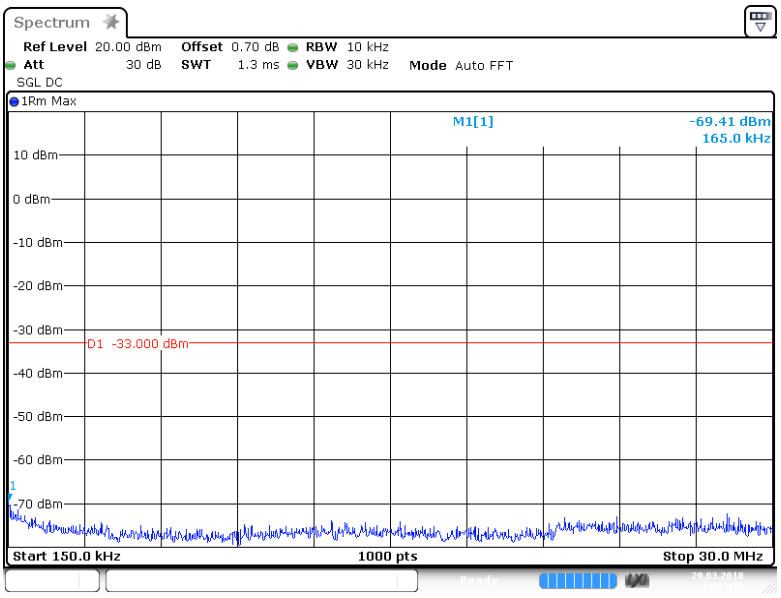

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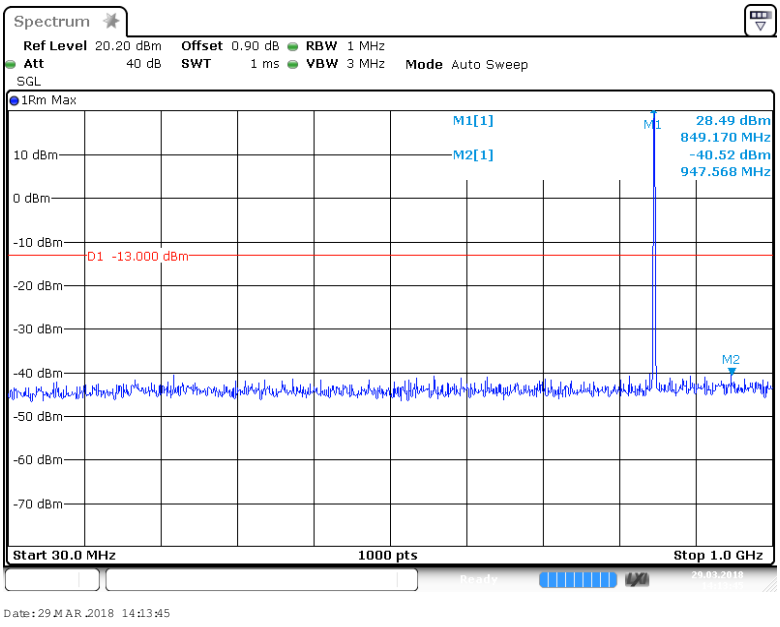

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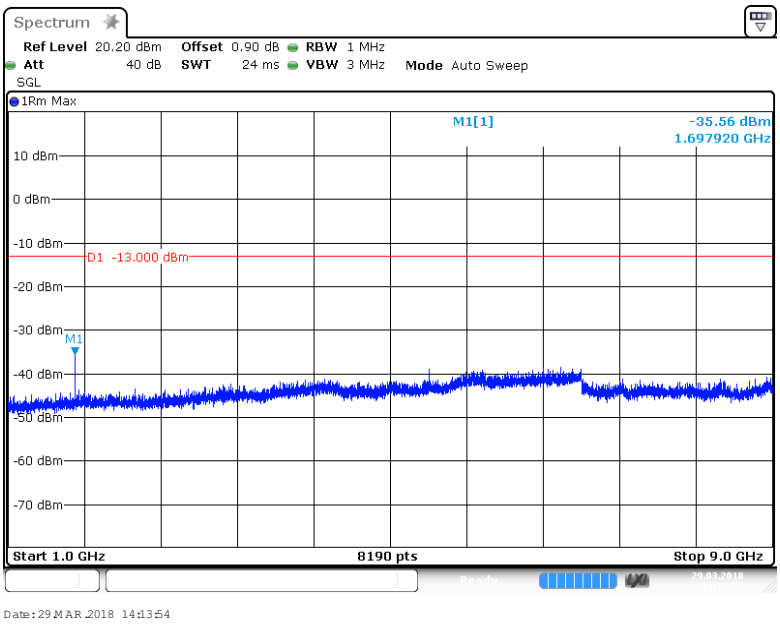

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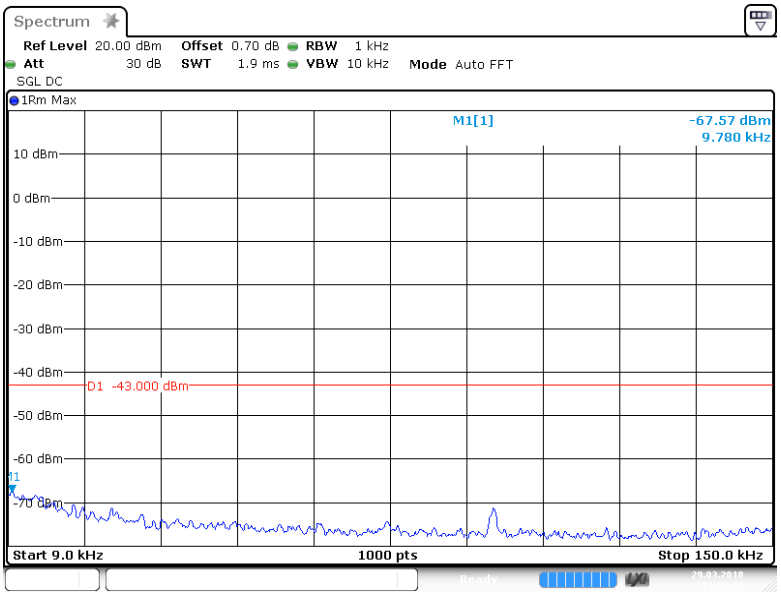

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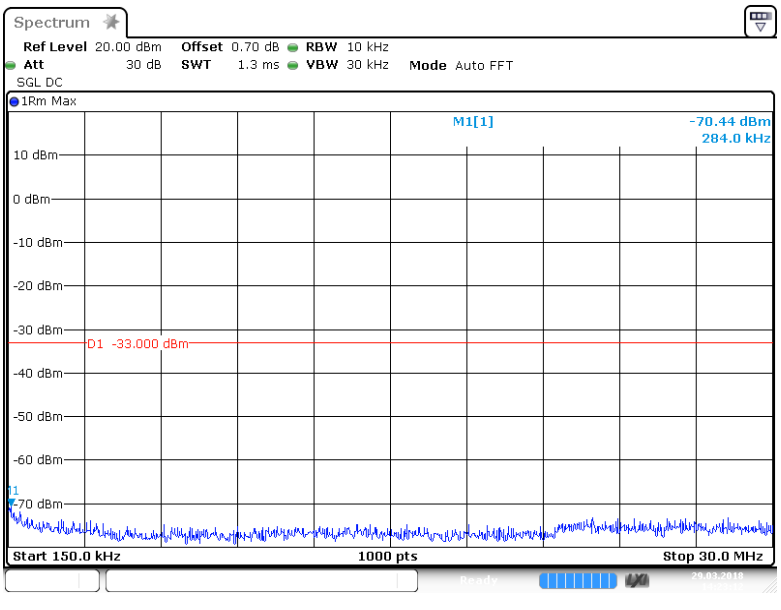

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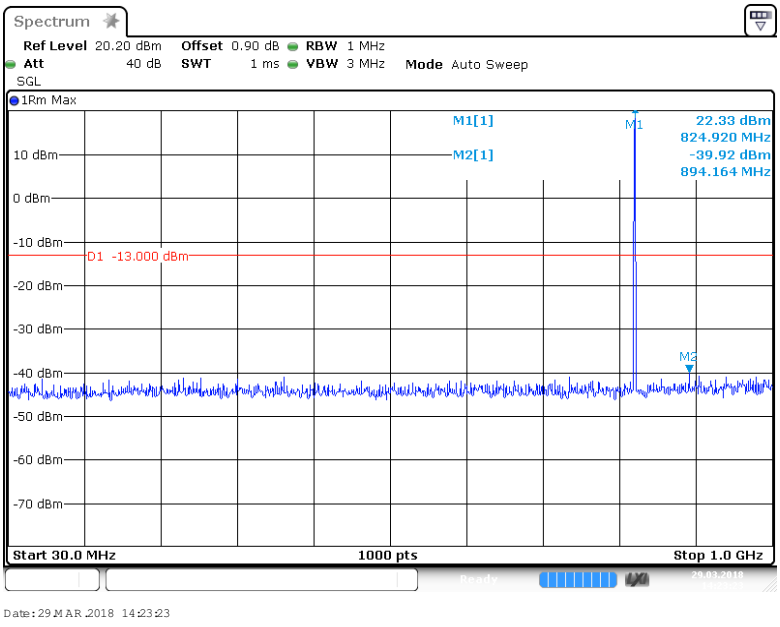

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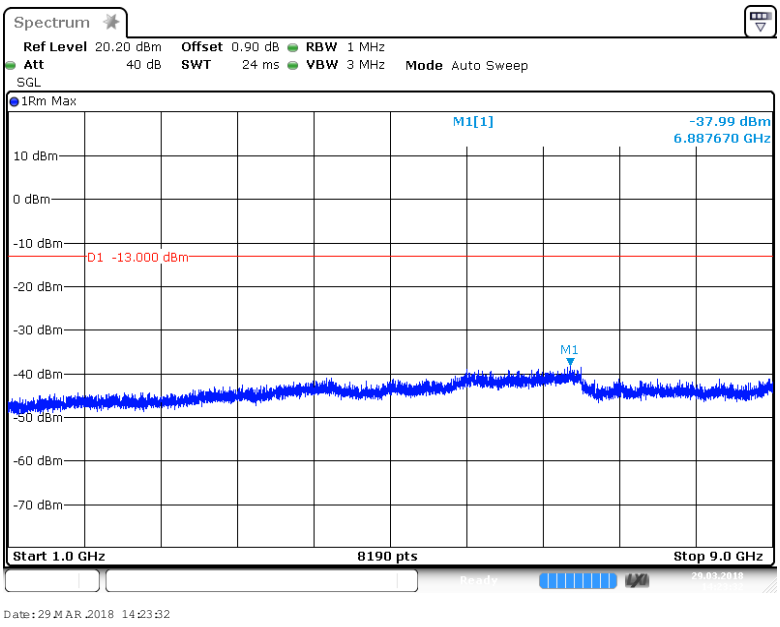

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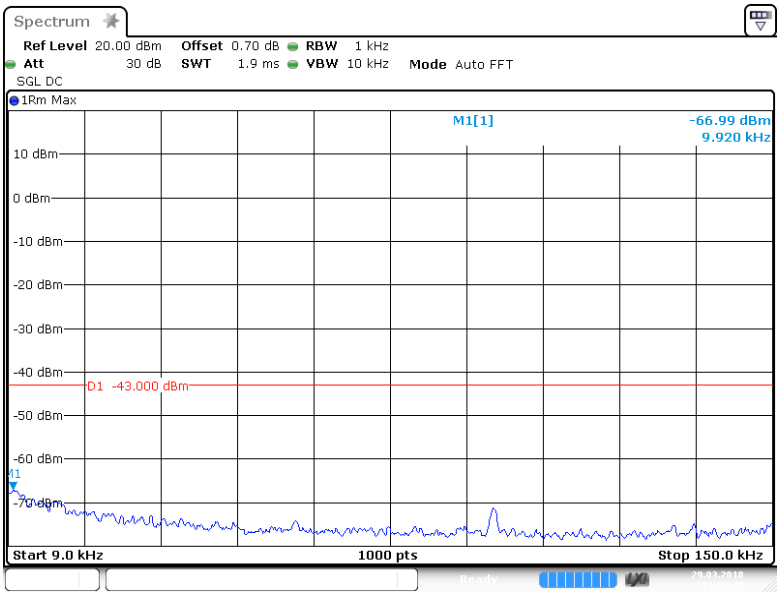

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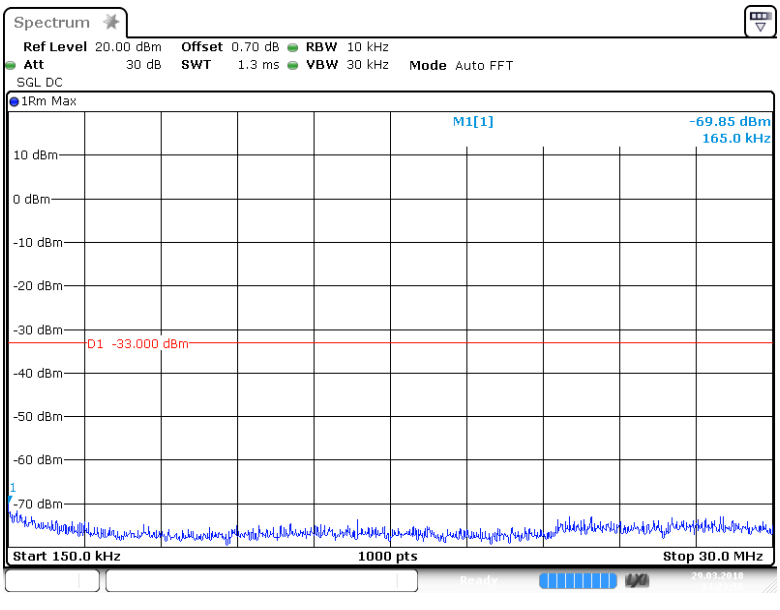

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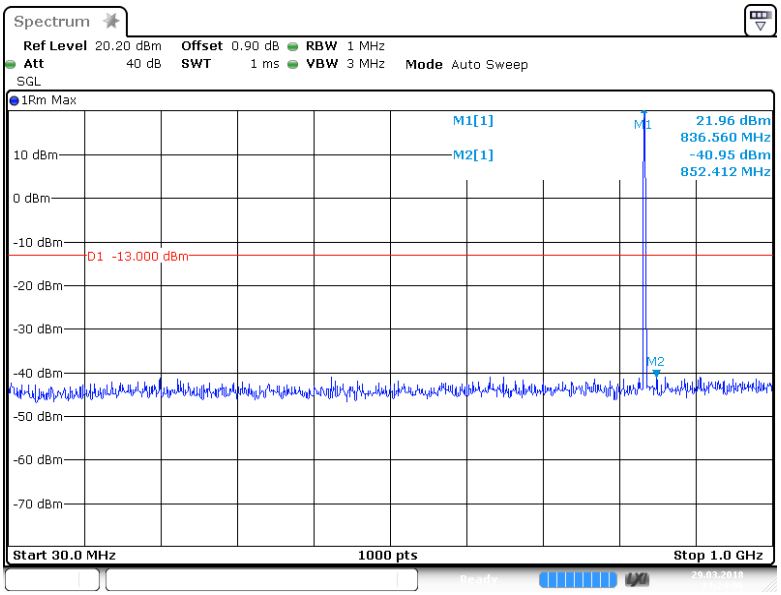

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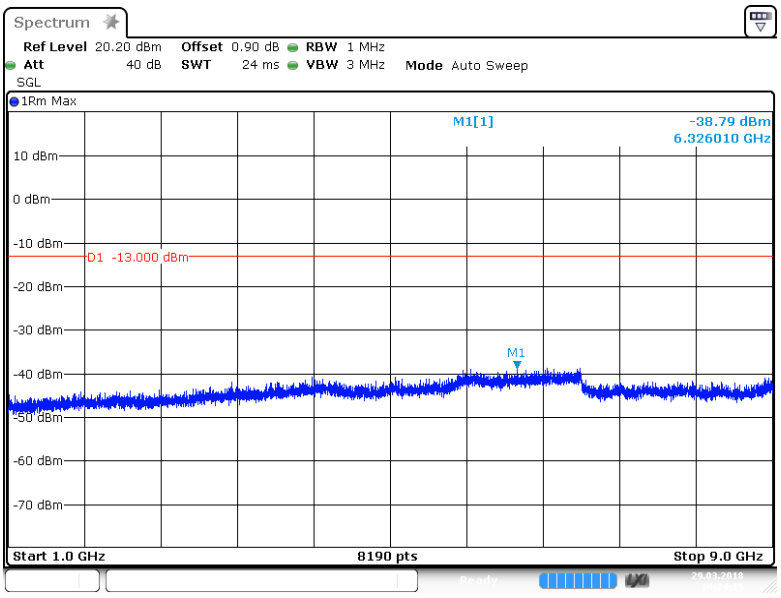

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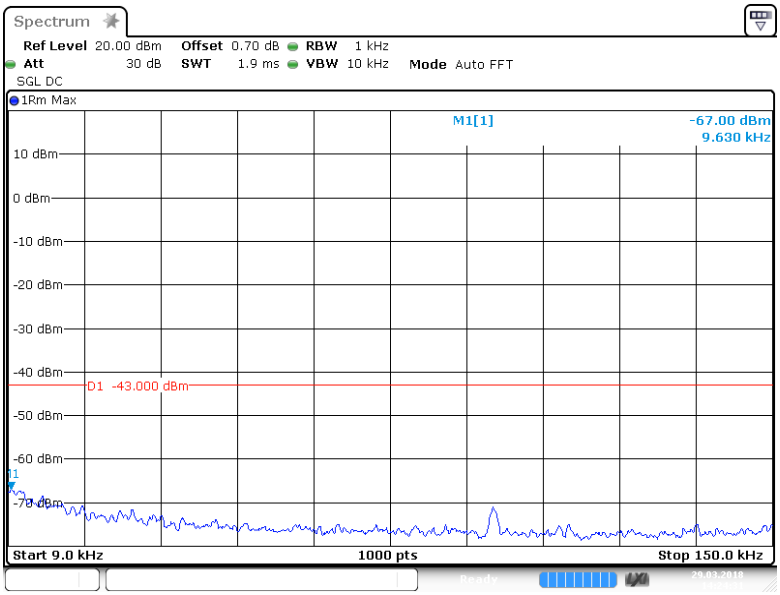

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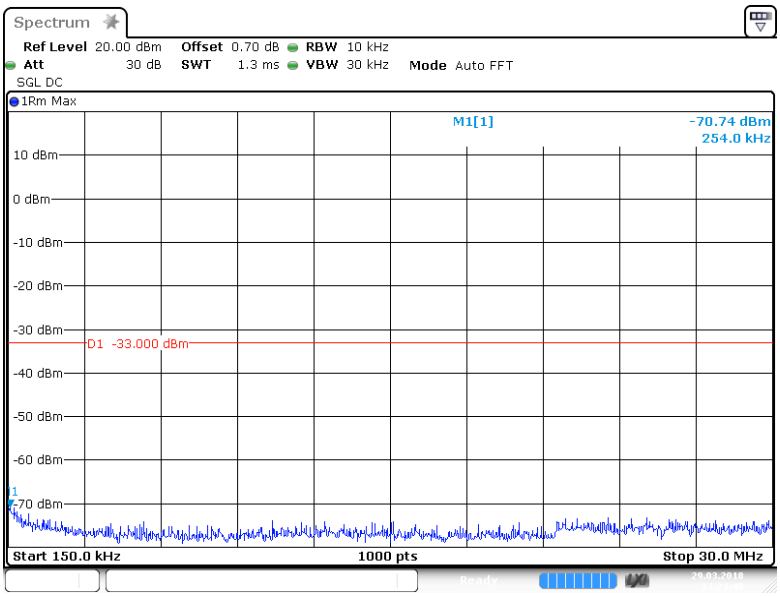

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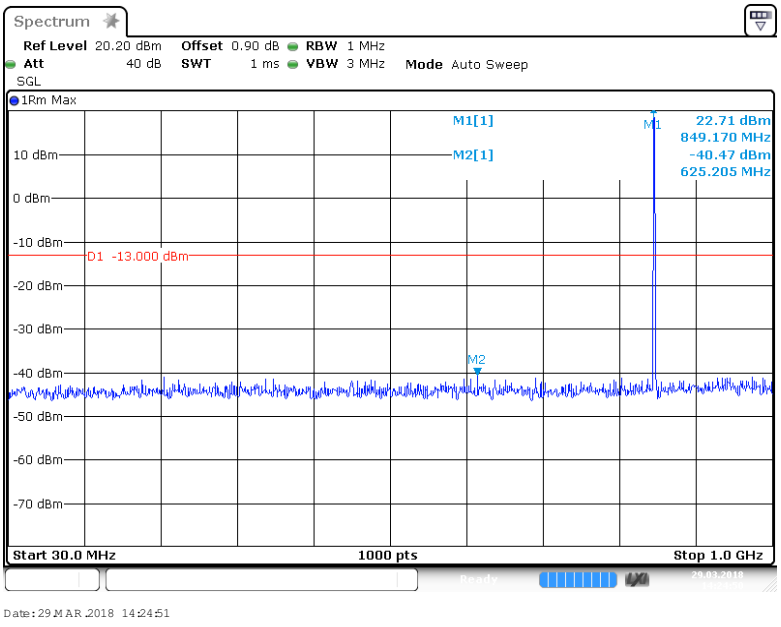

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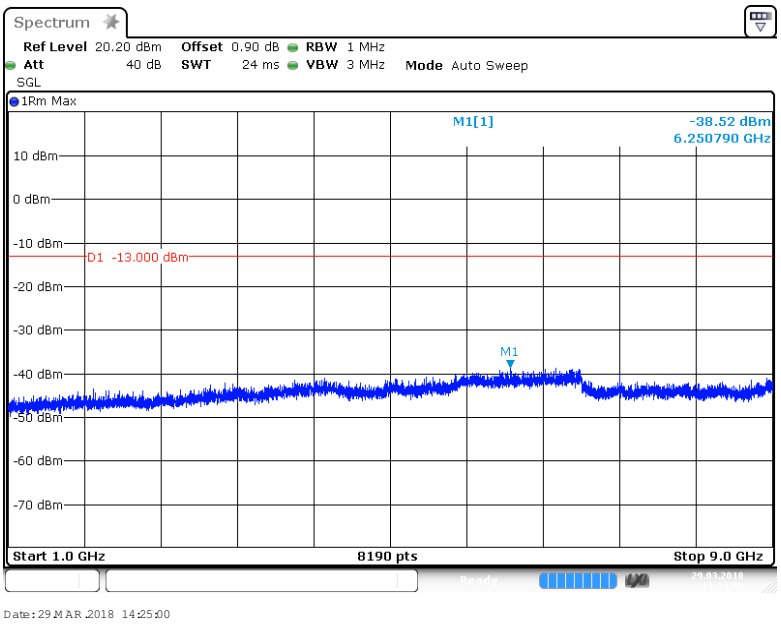

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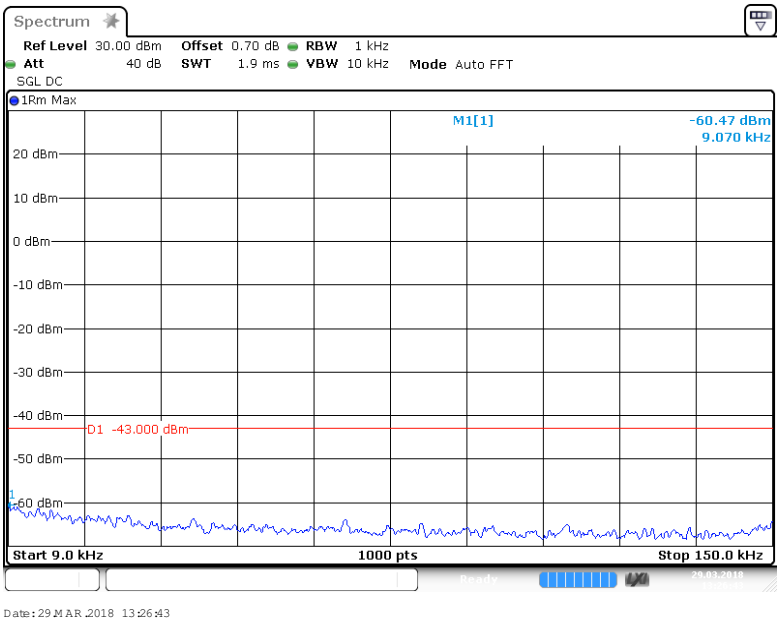

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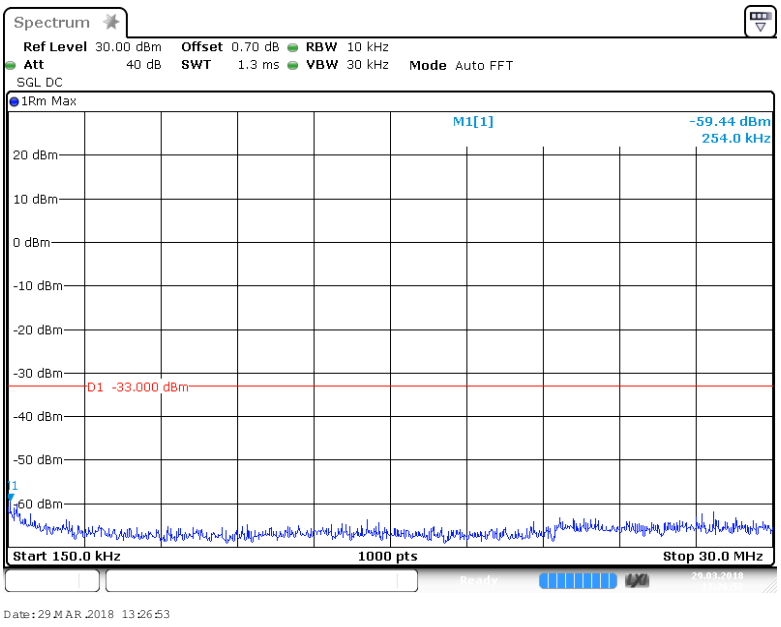

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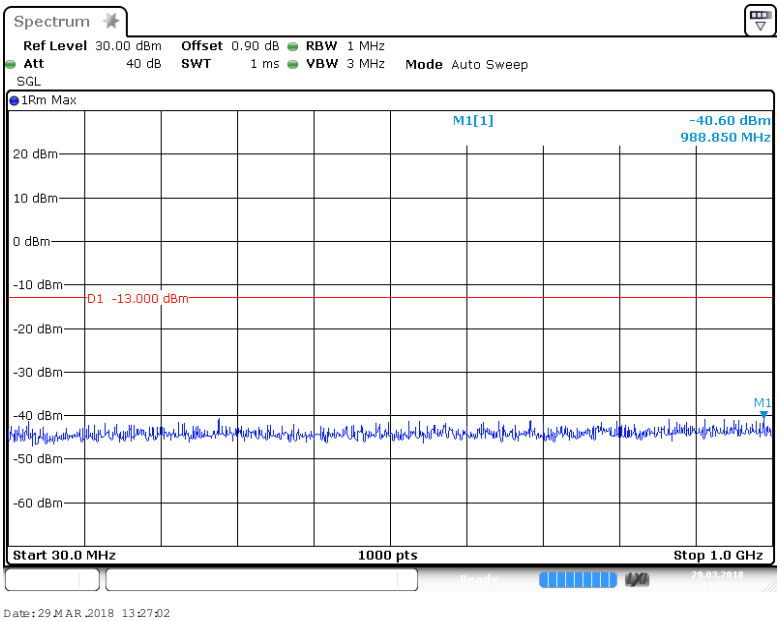

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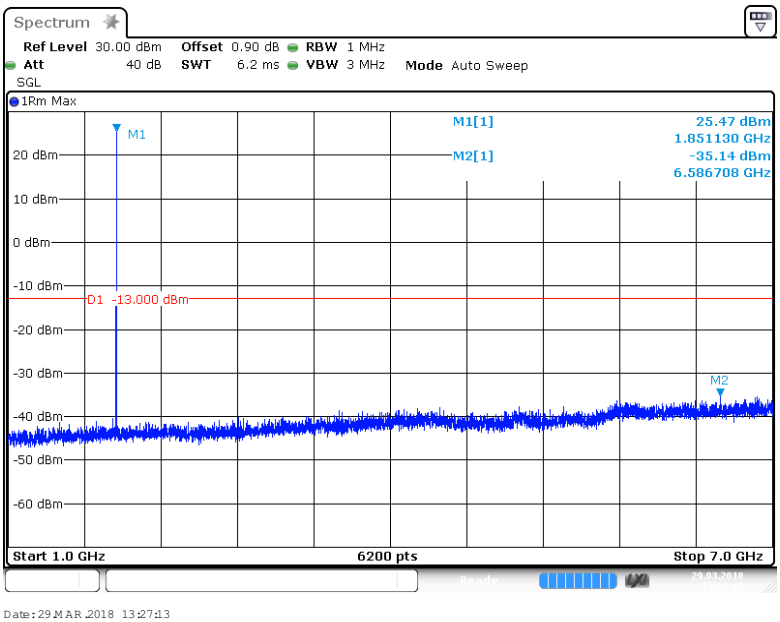

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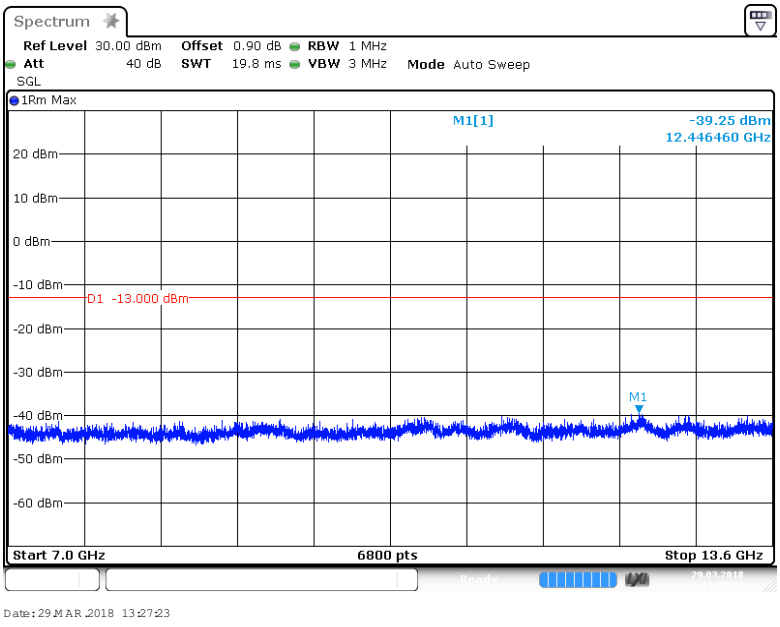

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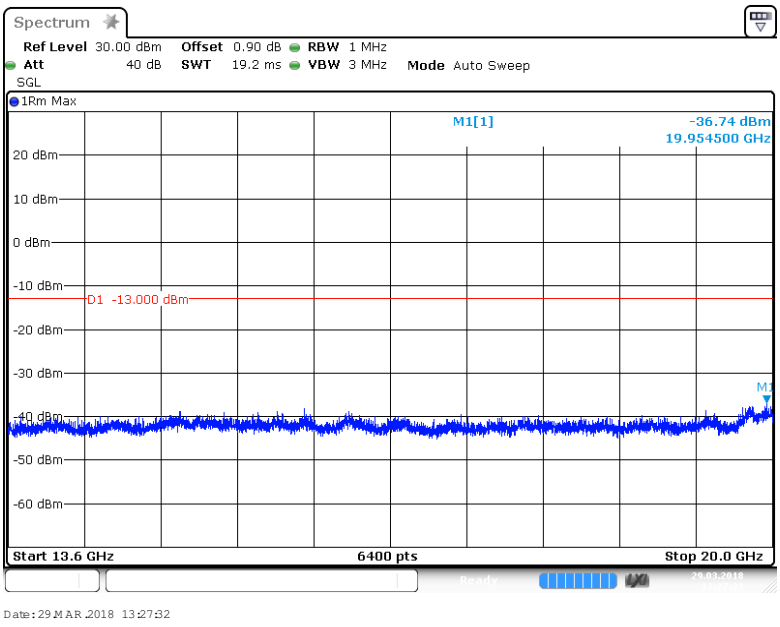

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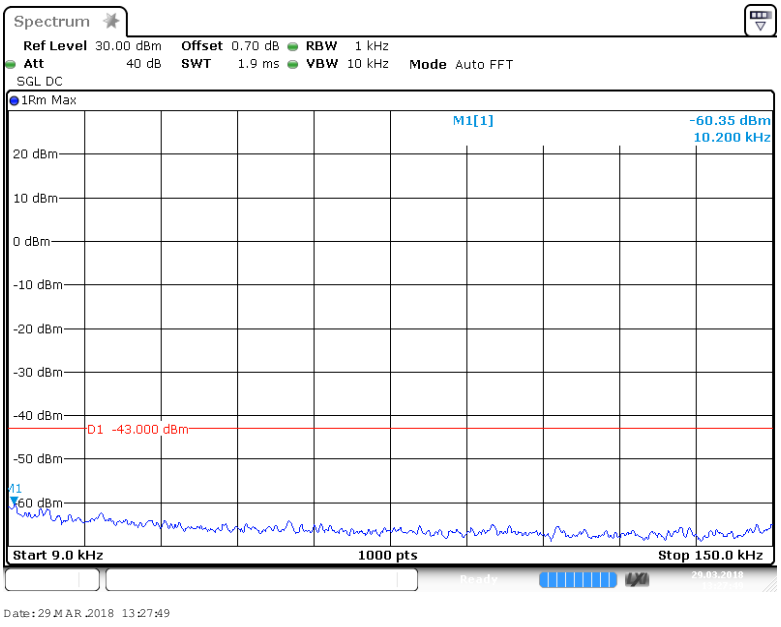

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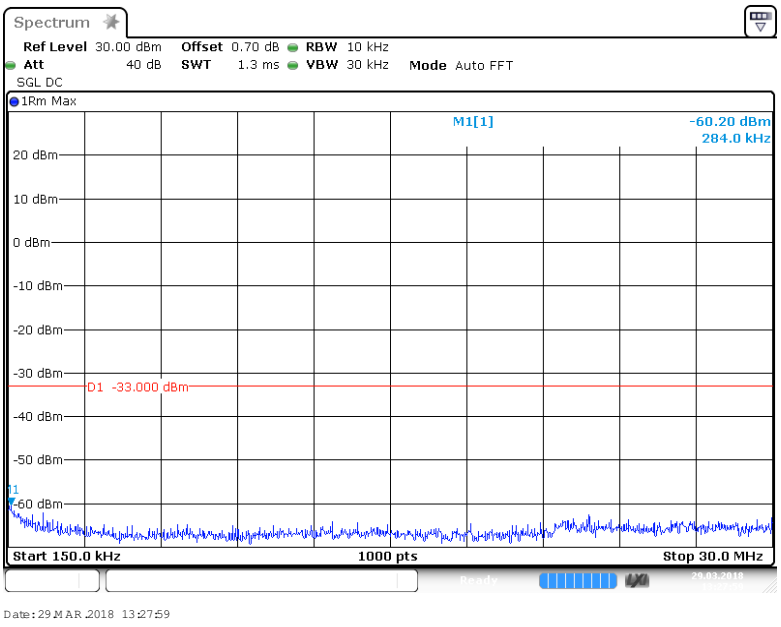

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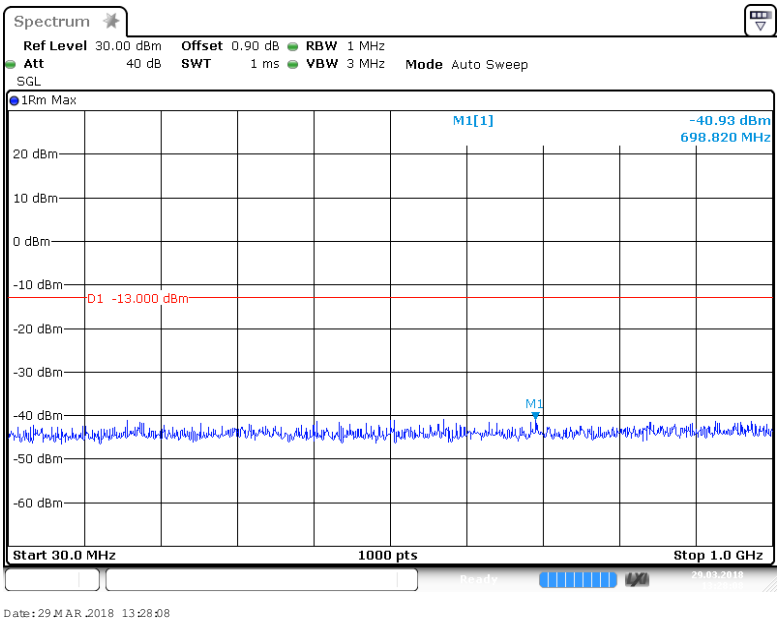

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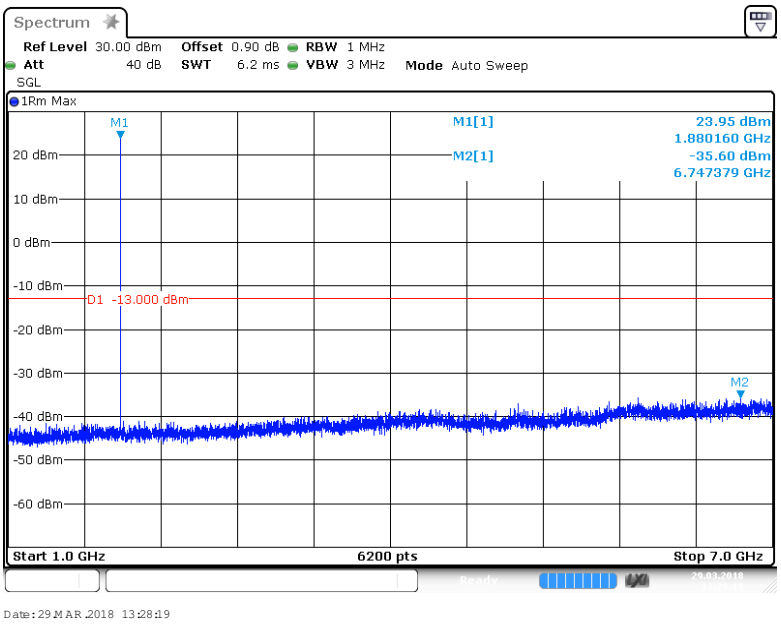

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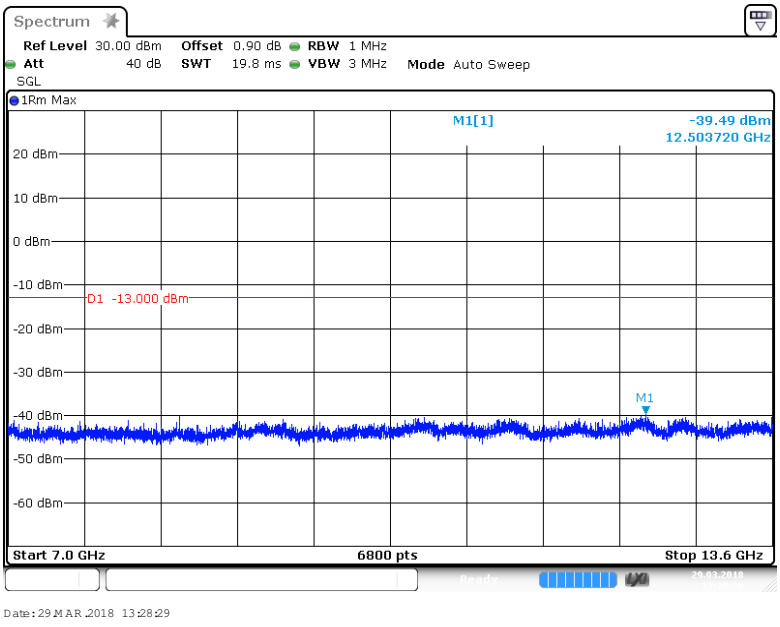

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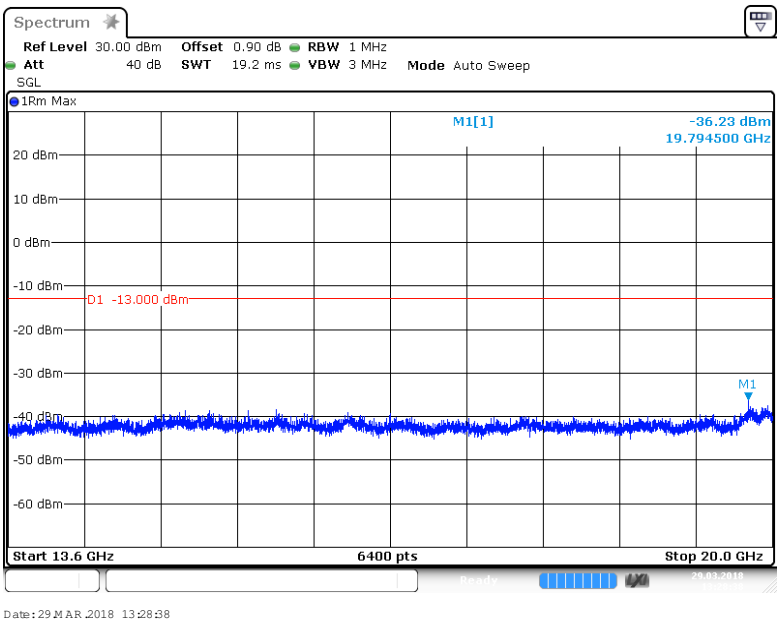

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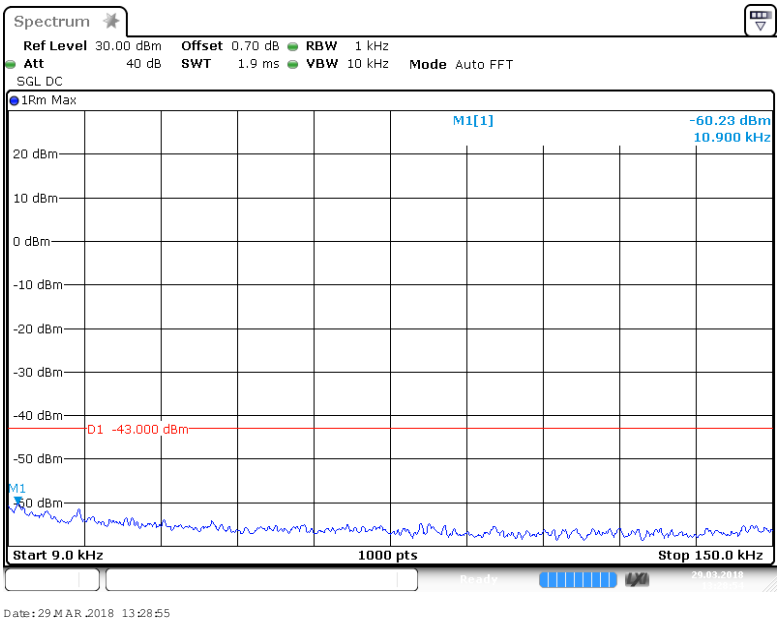

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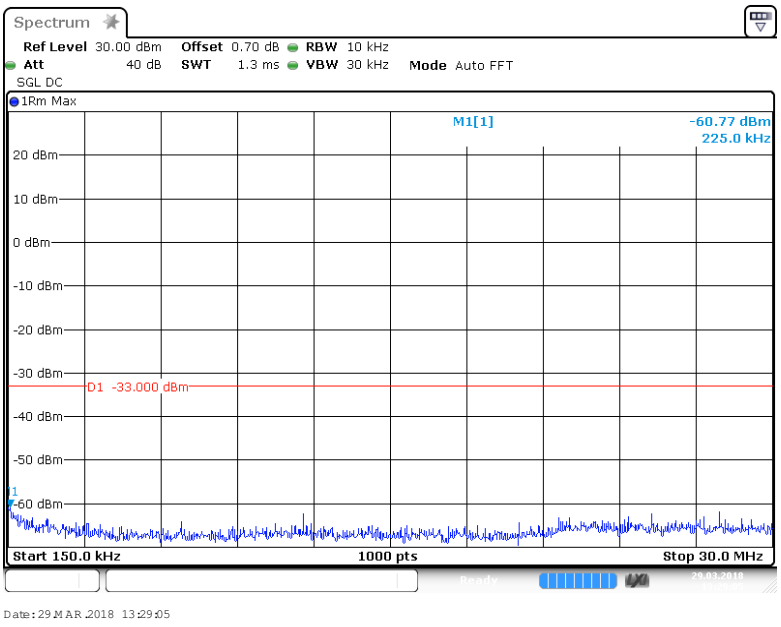

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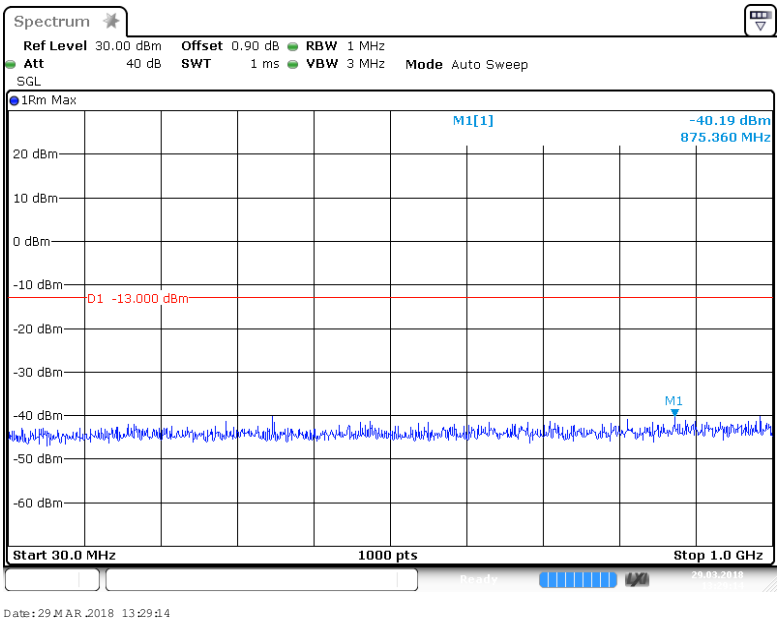

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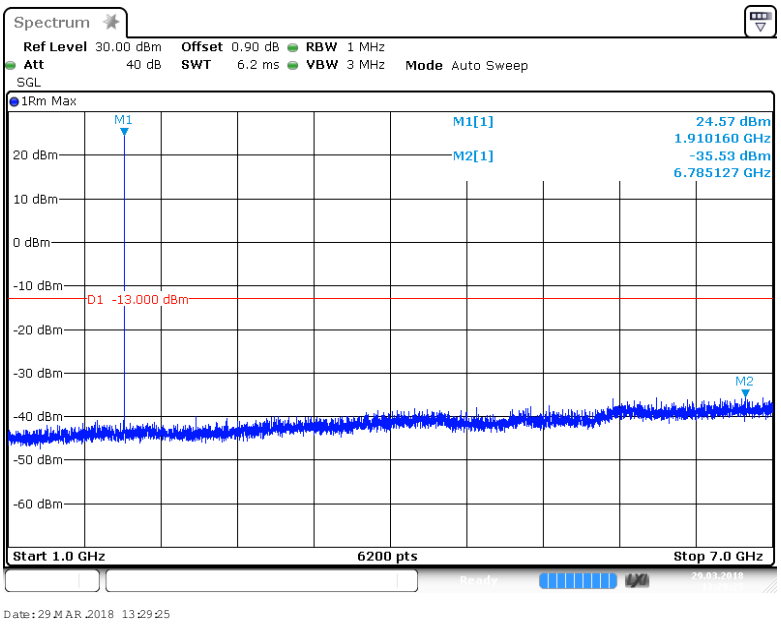

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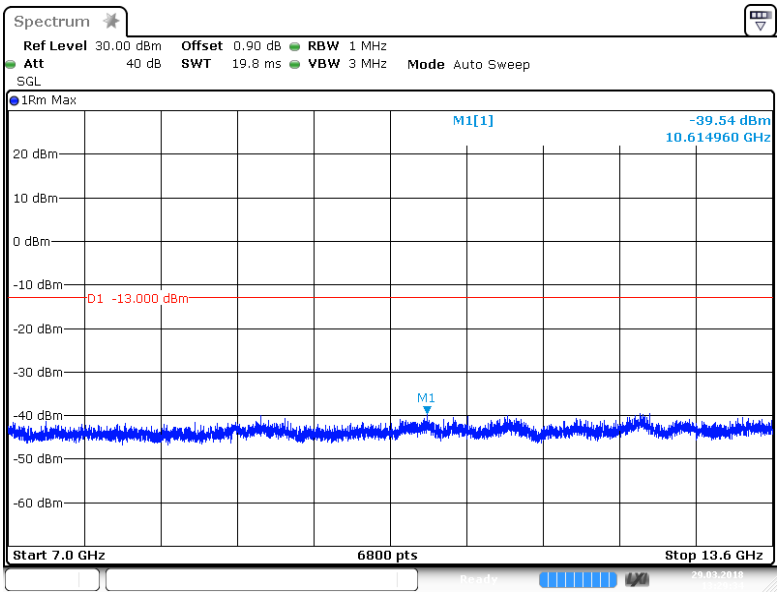
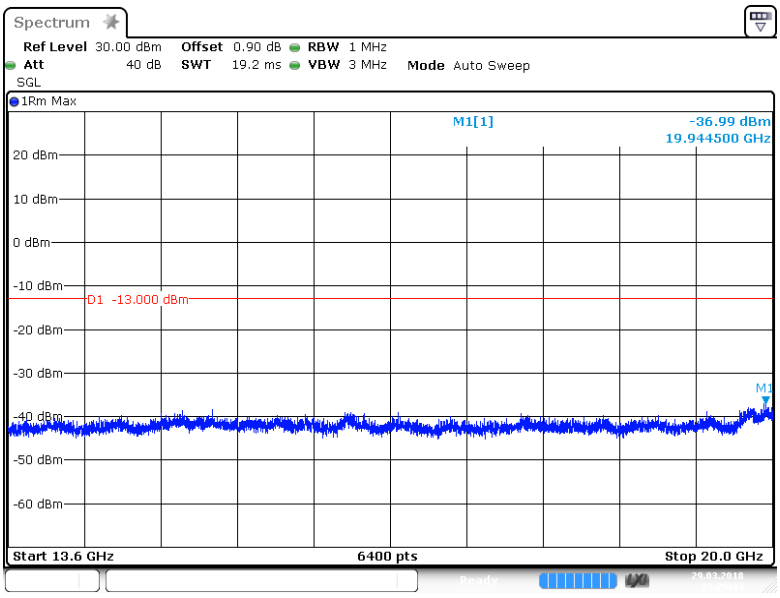


GSM1900_810



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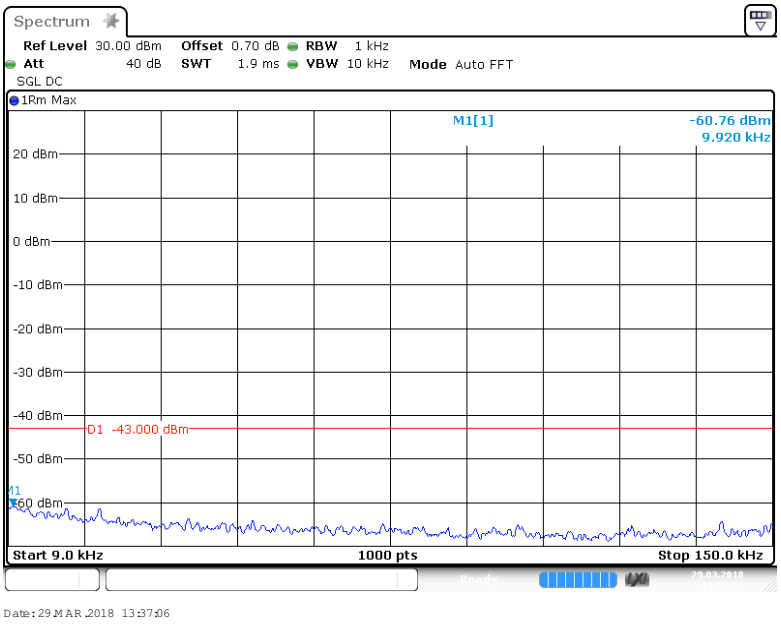

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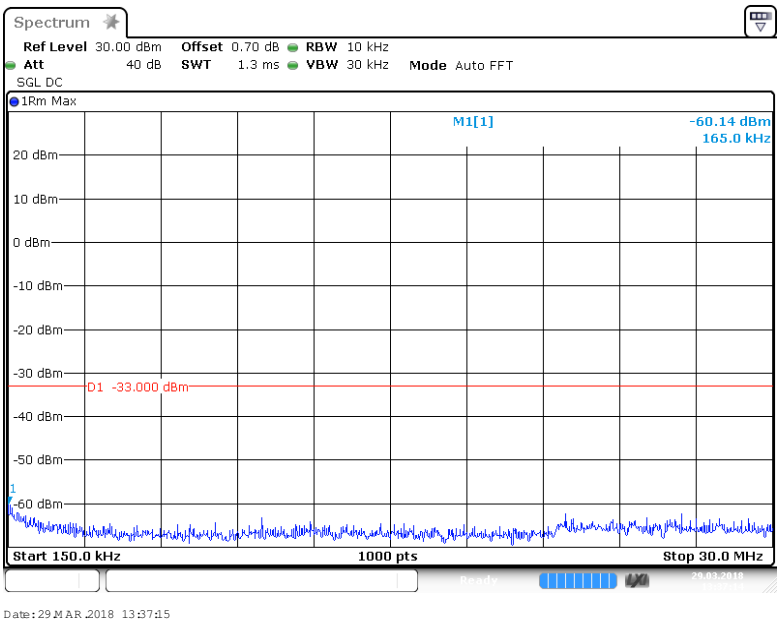

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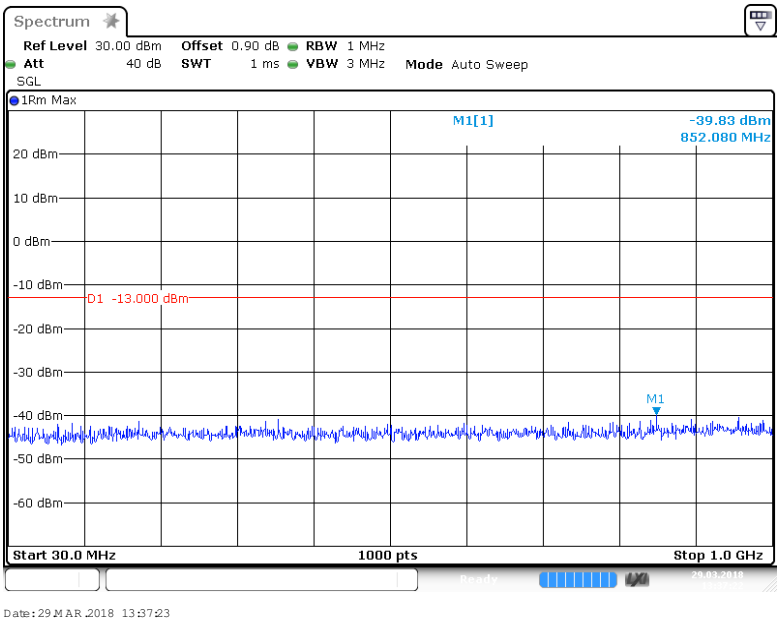

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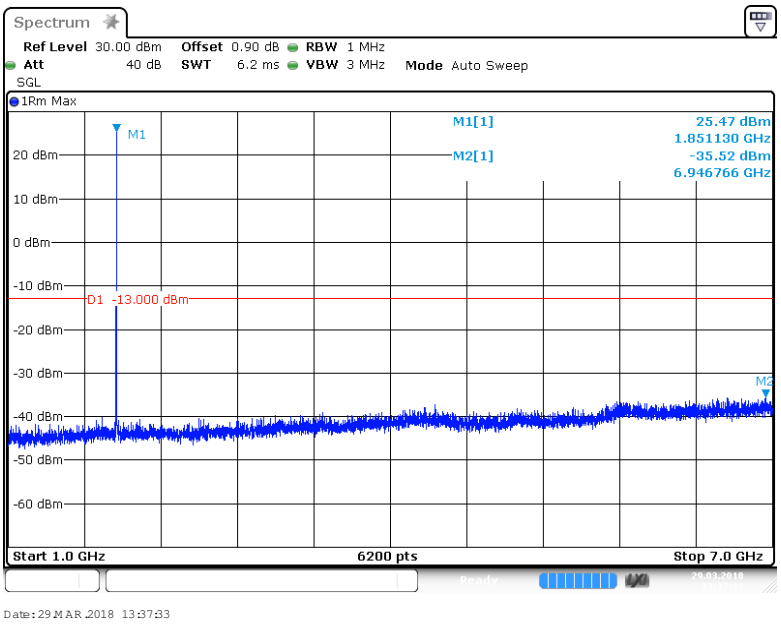

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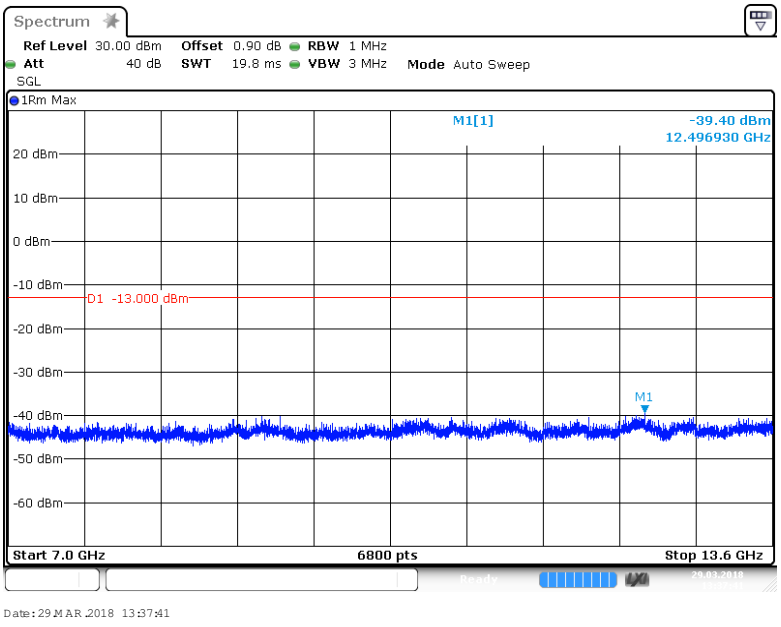

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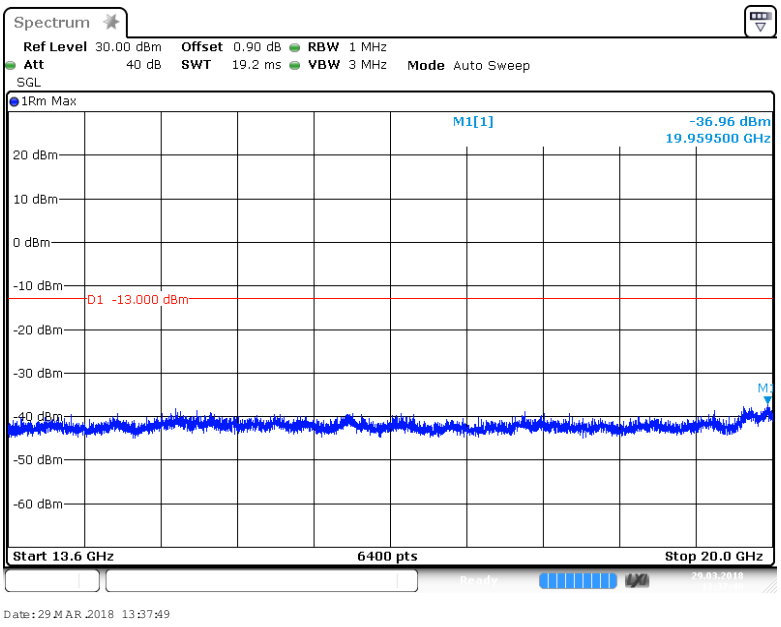

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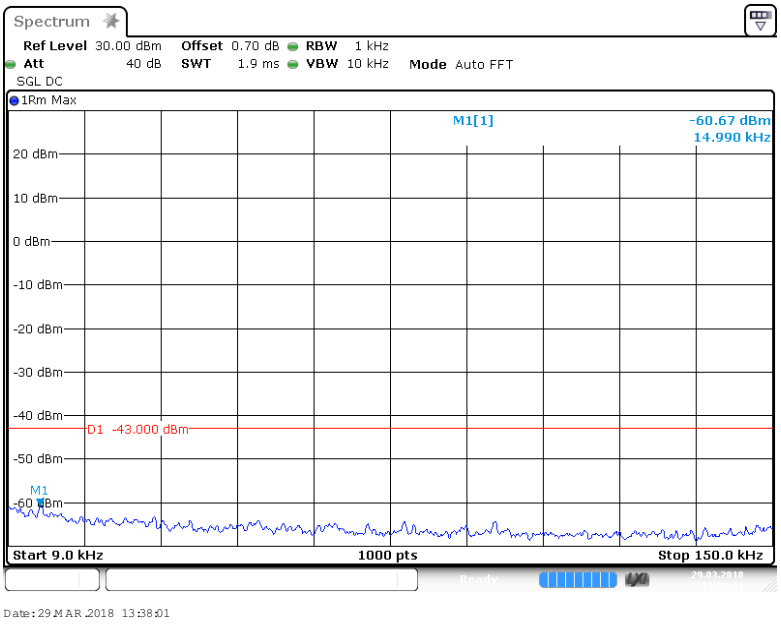

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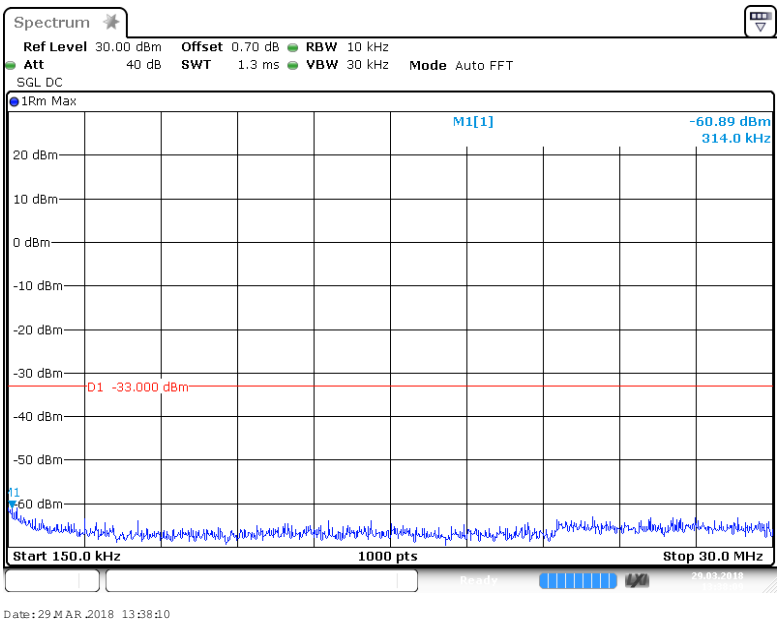

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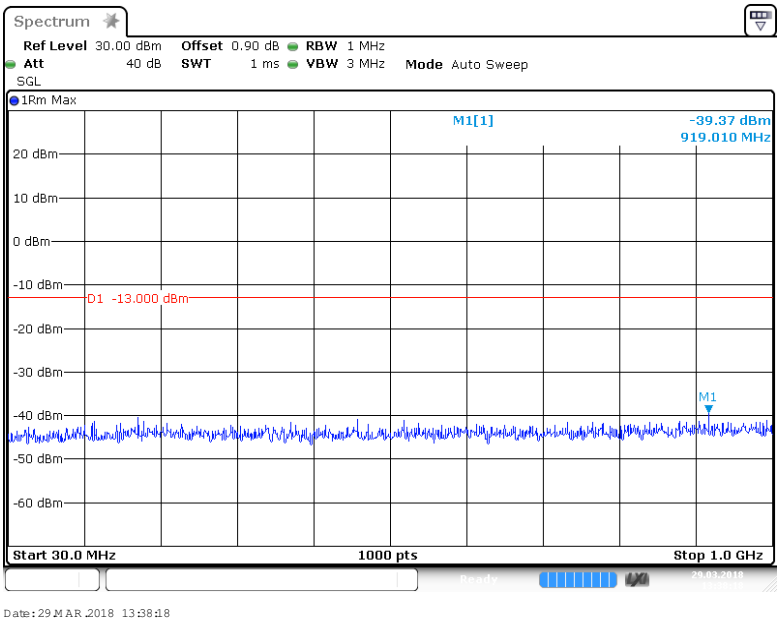

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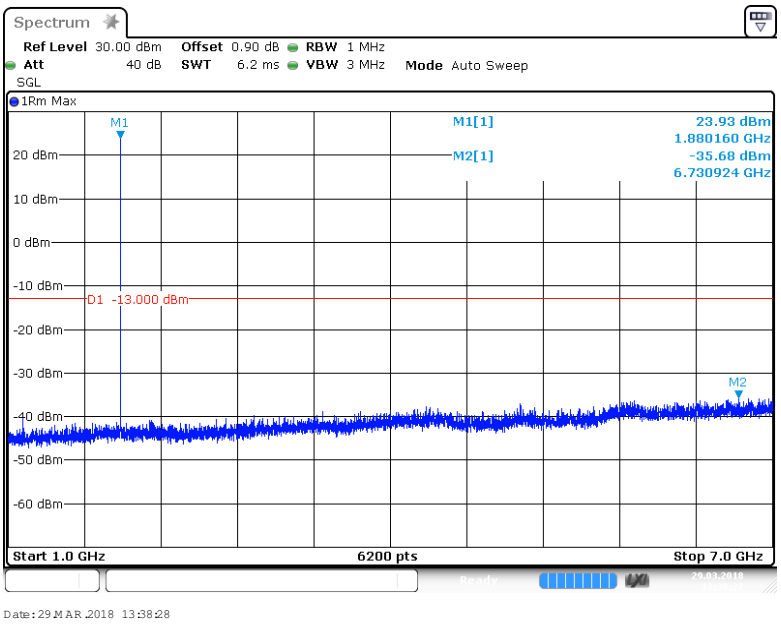

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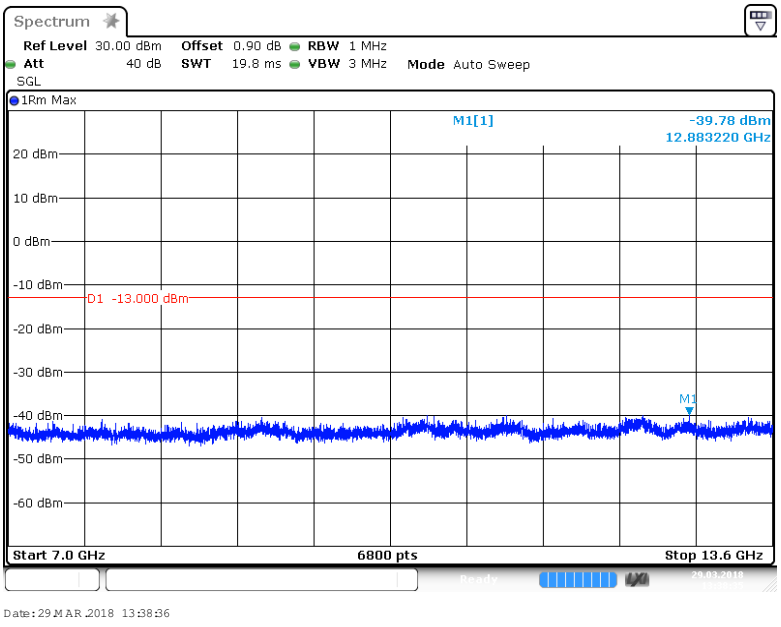

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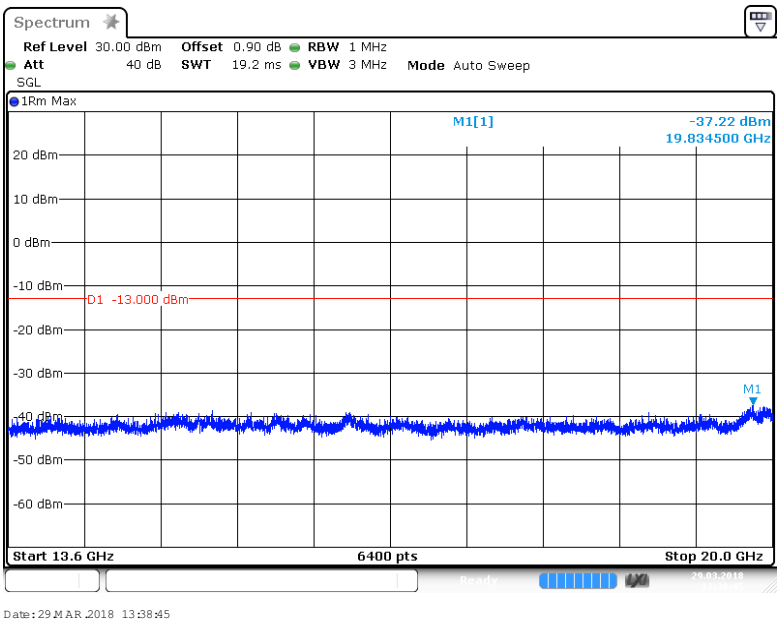

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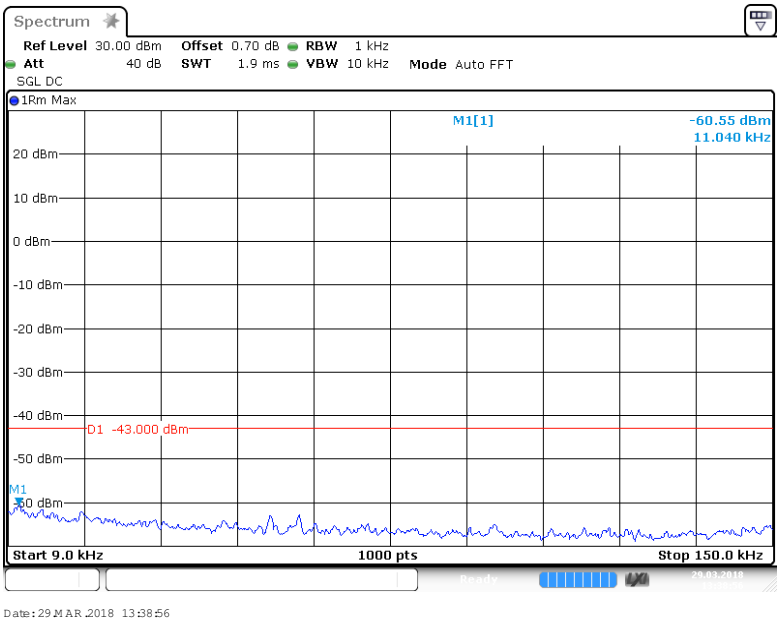

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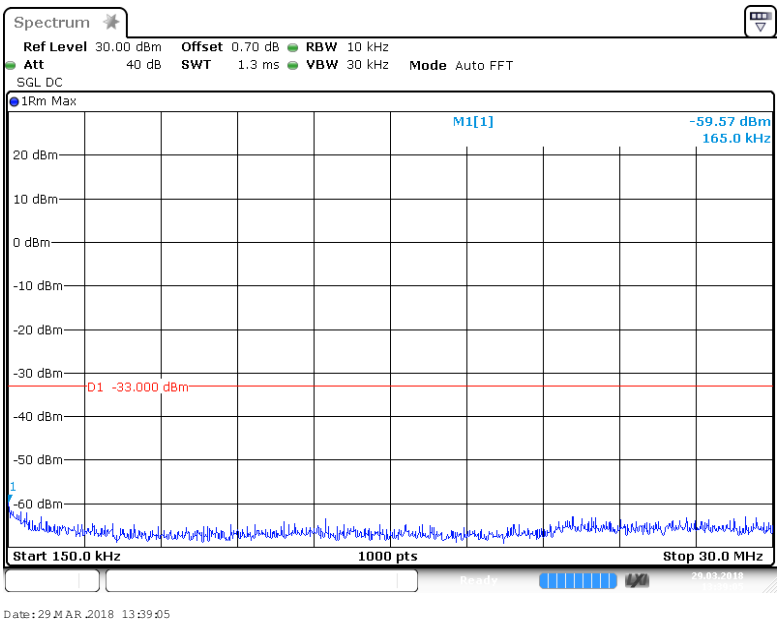

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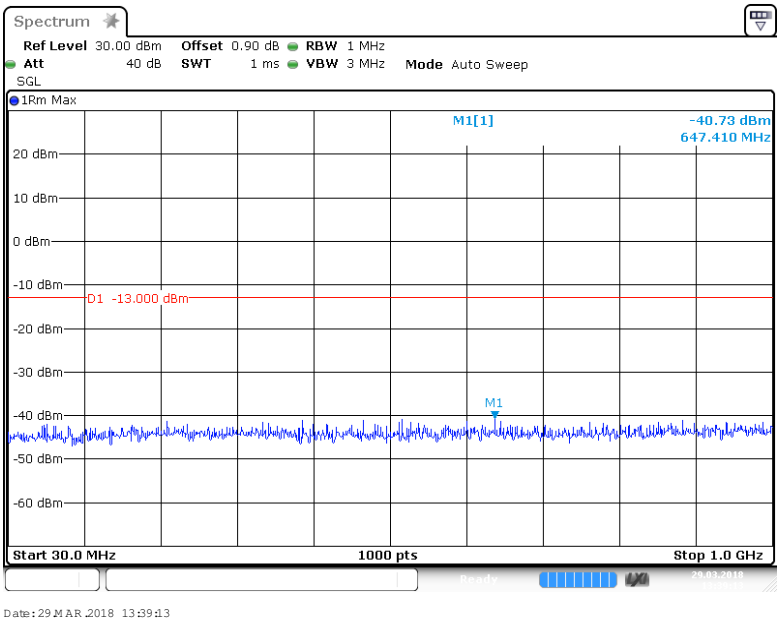

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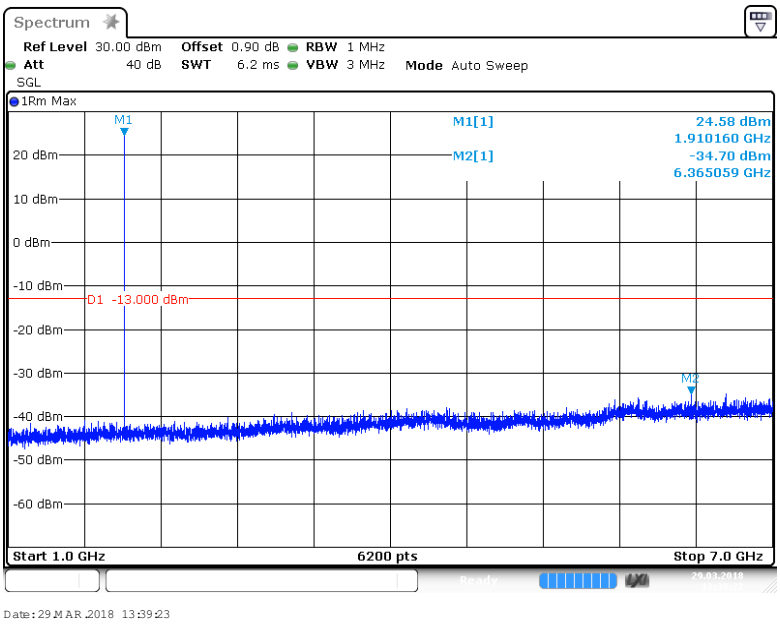

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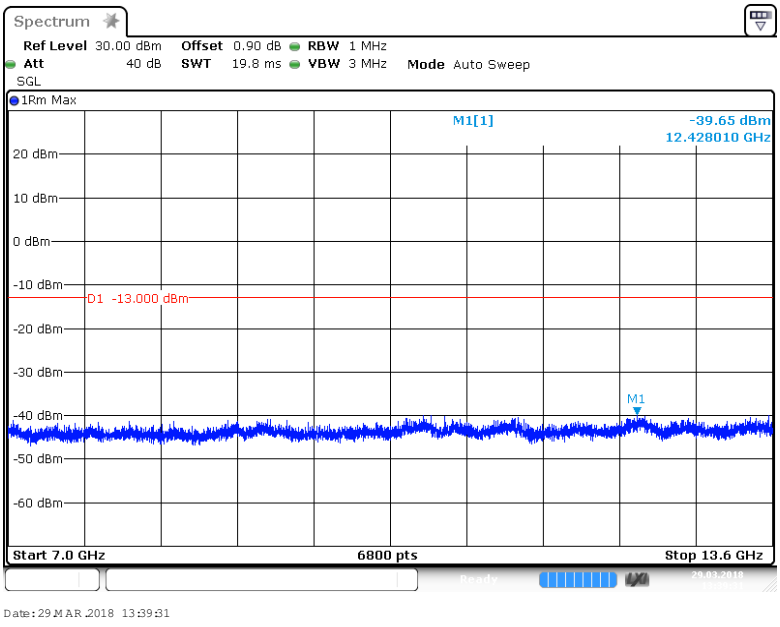

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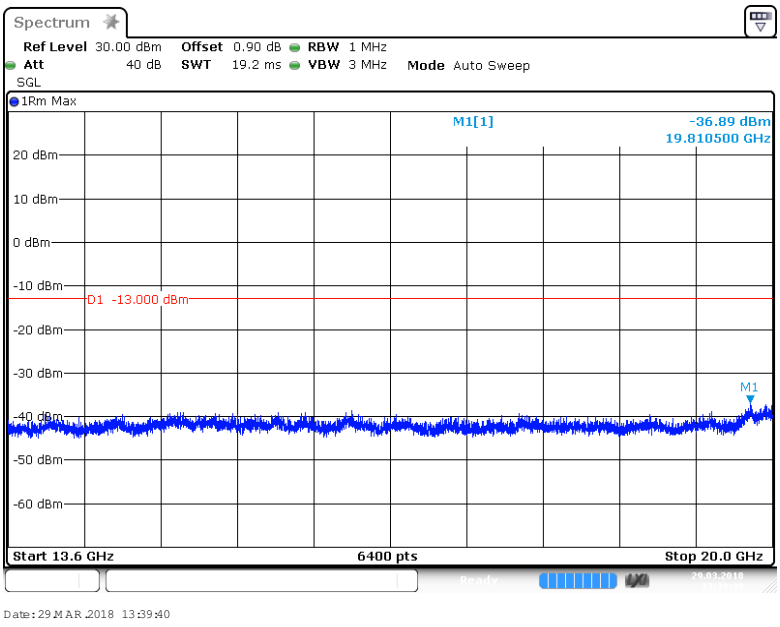

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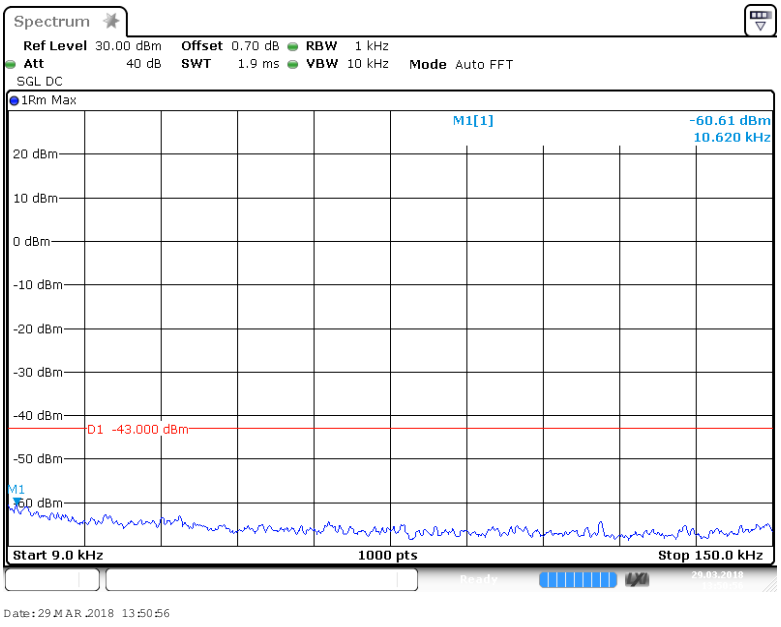

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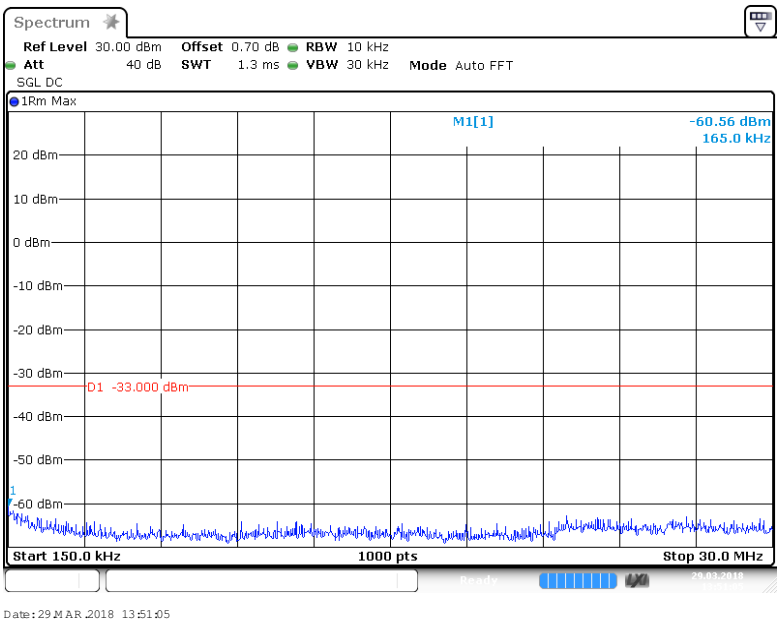

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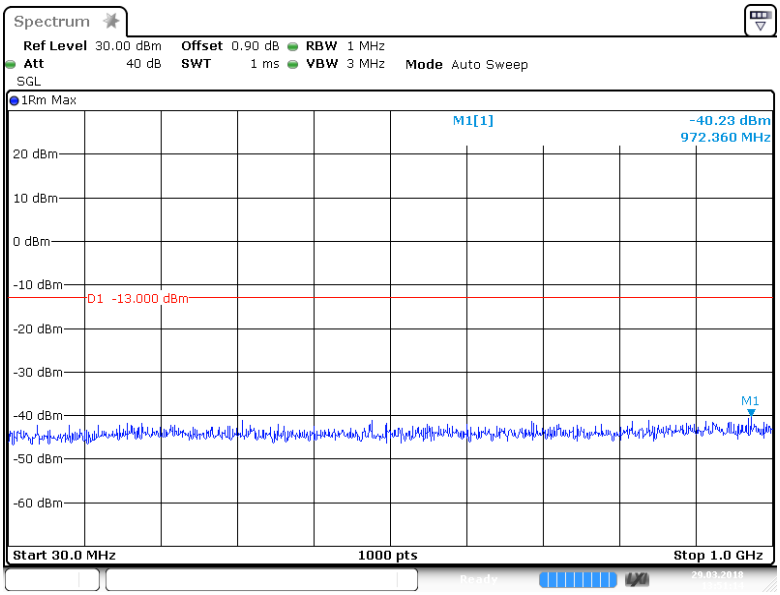

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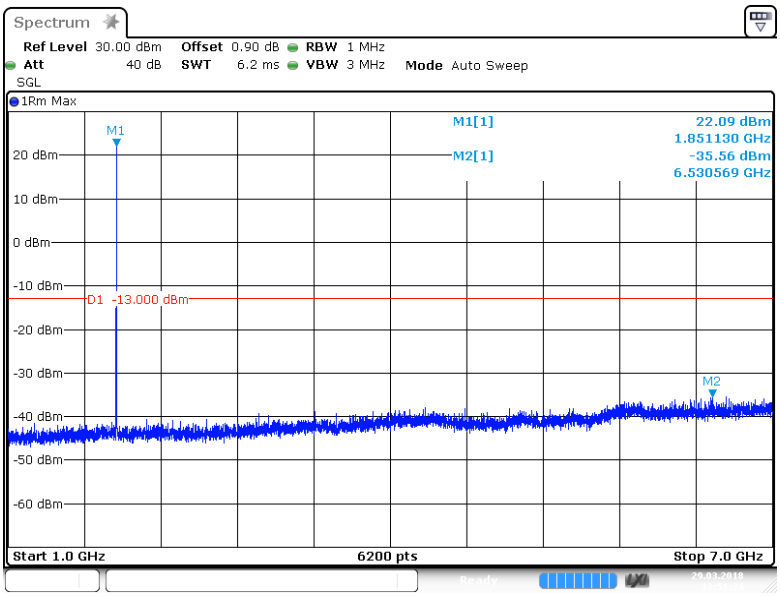

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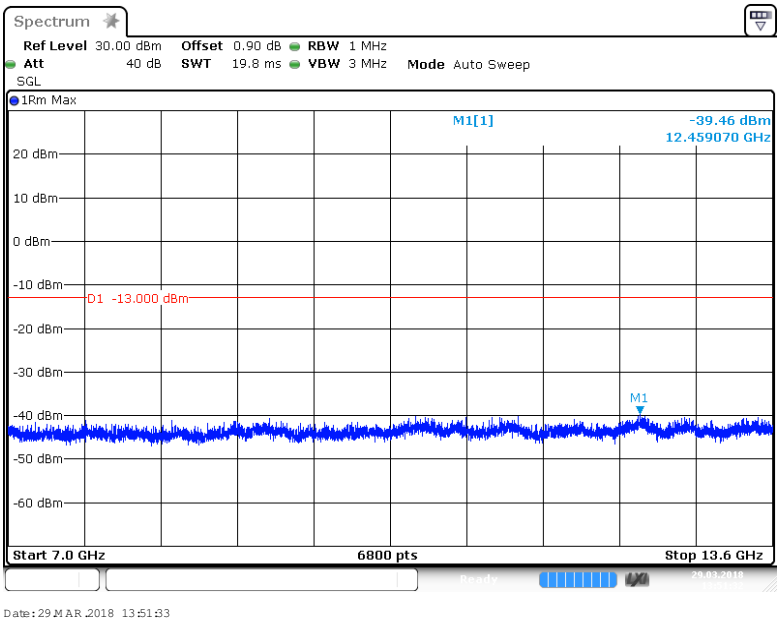

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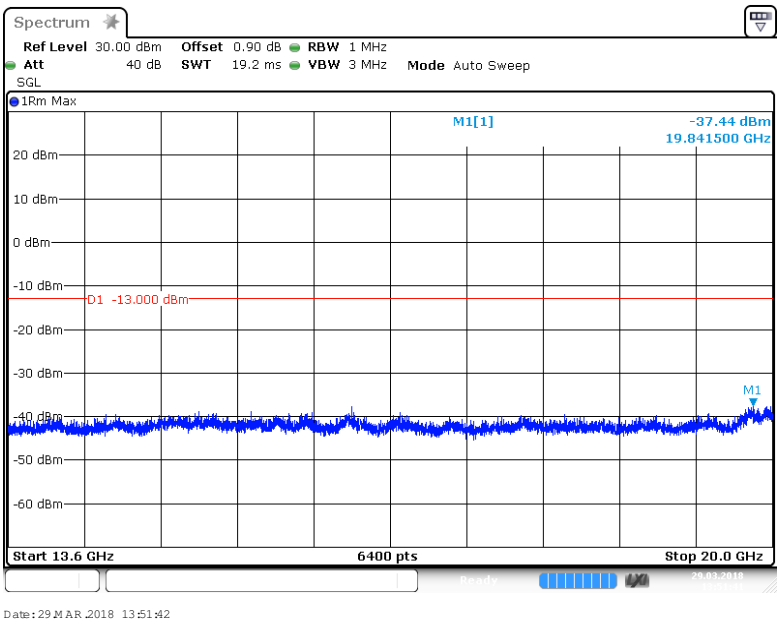

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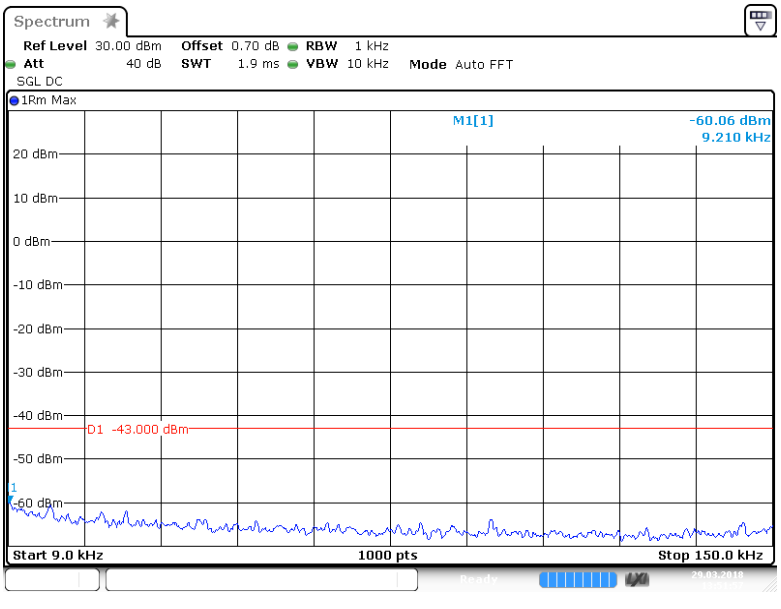

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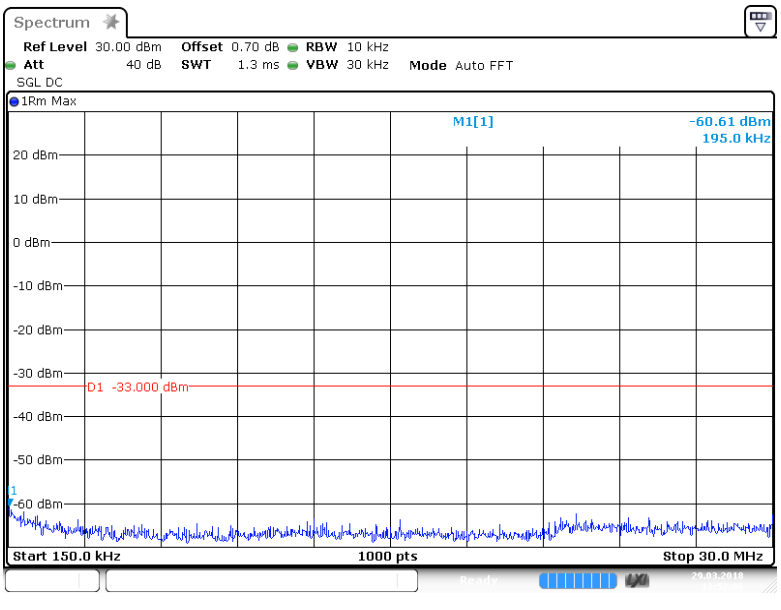

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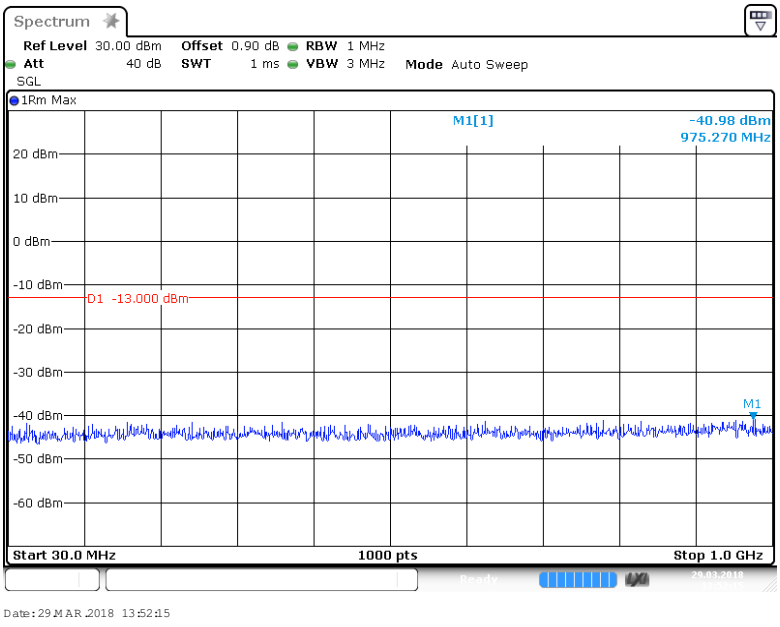

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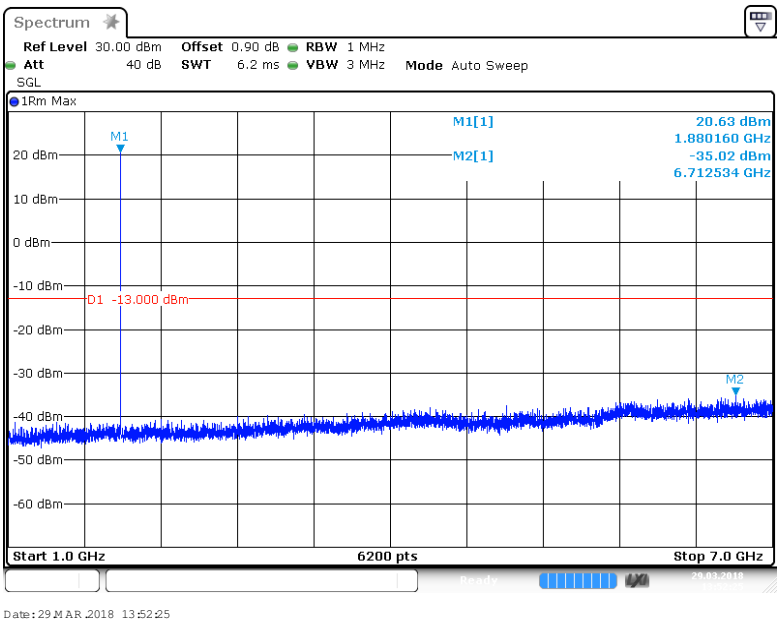

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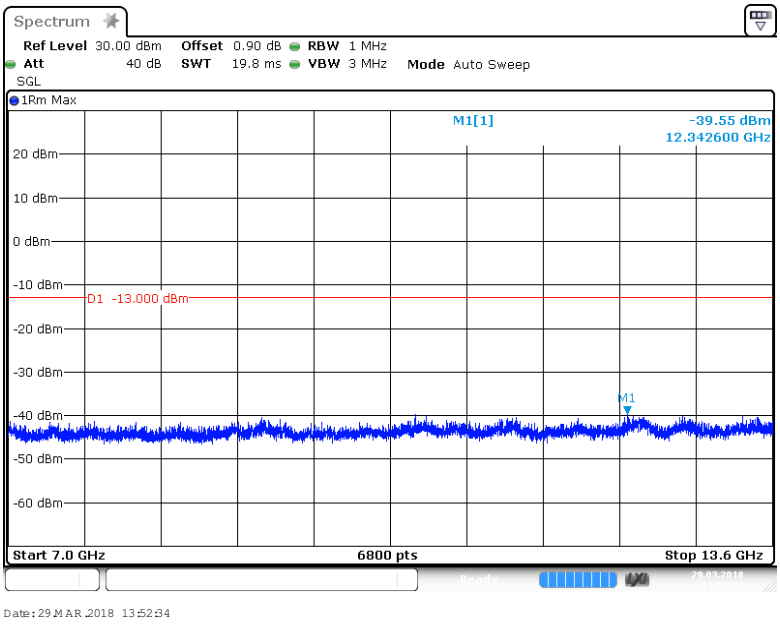

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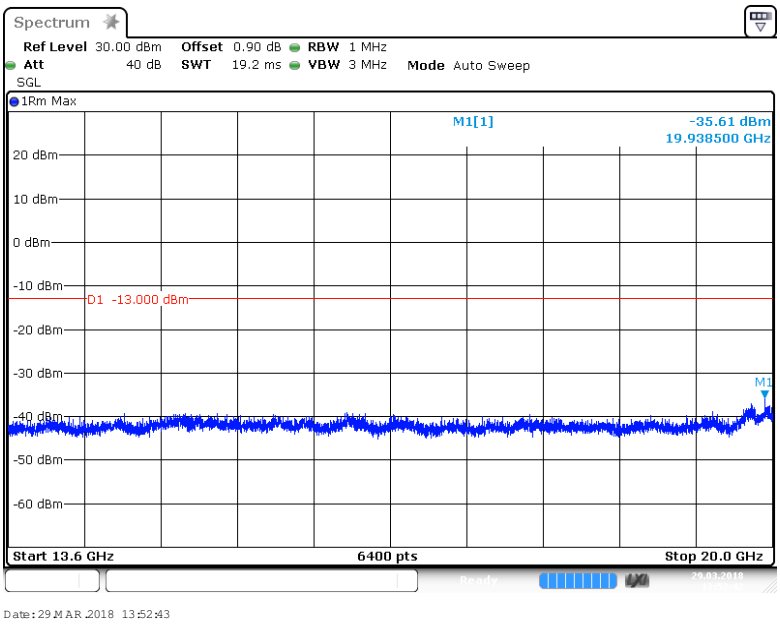

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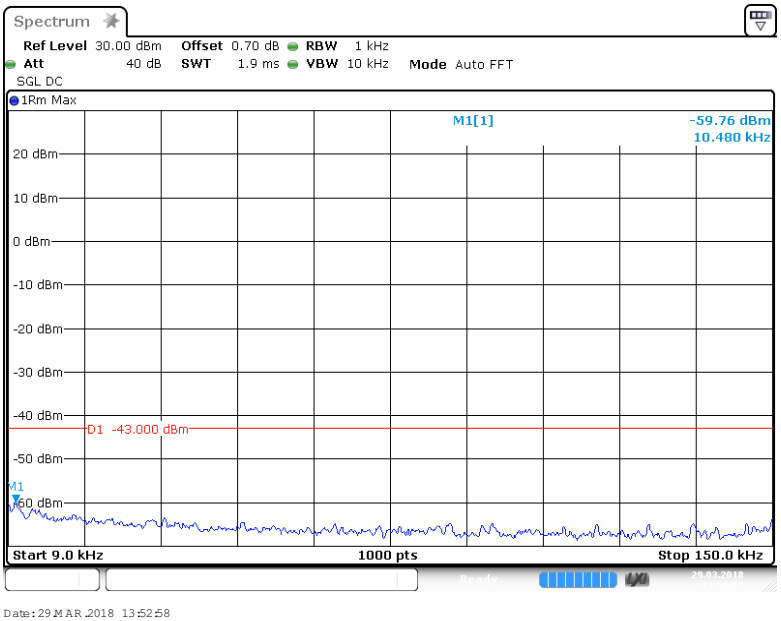

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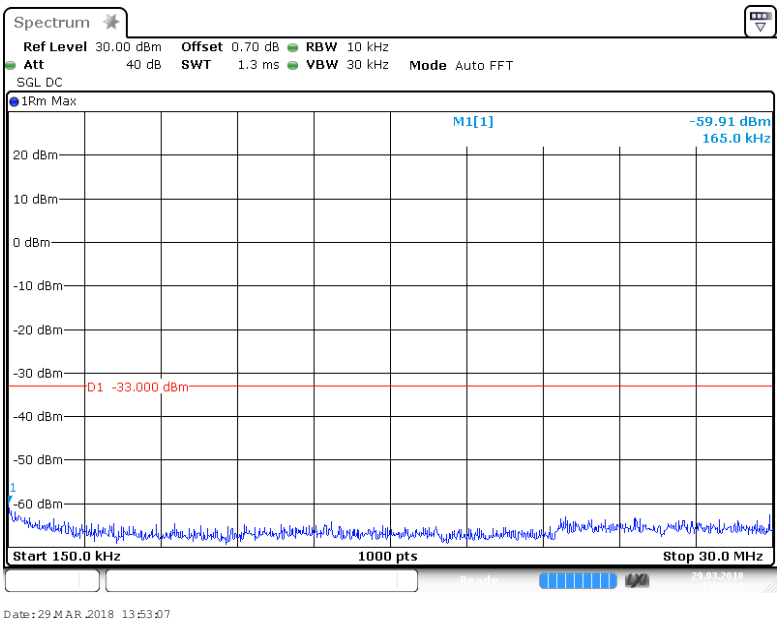

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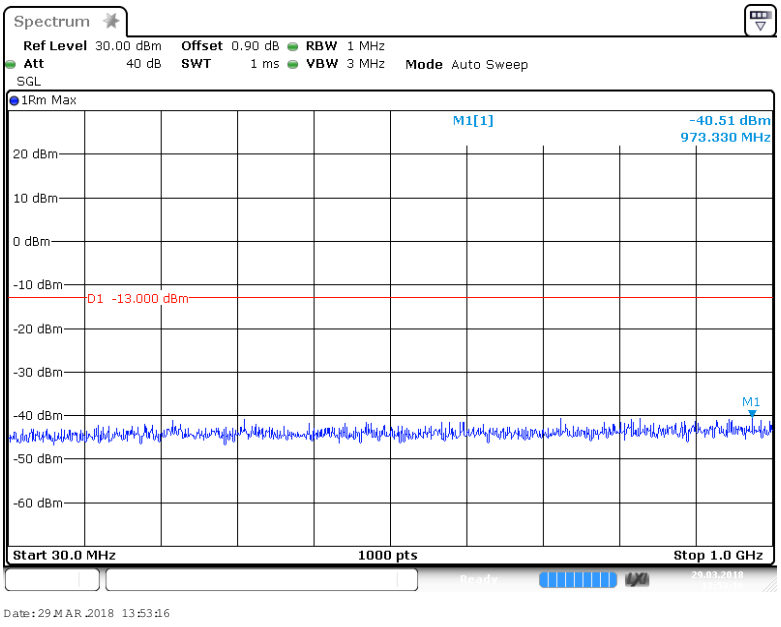

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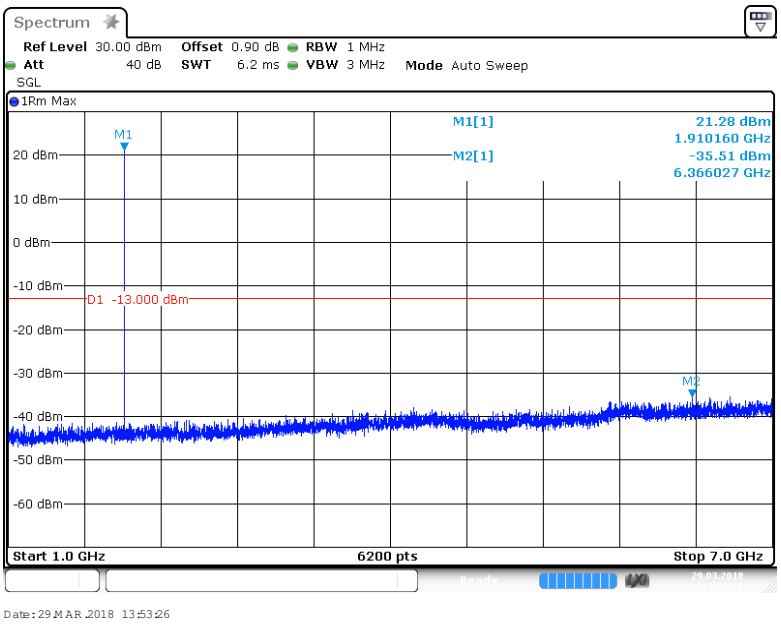

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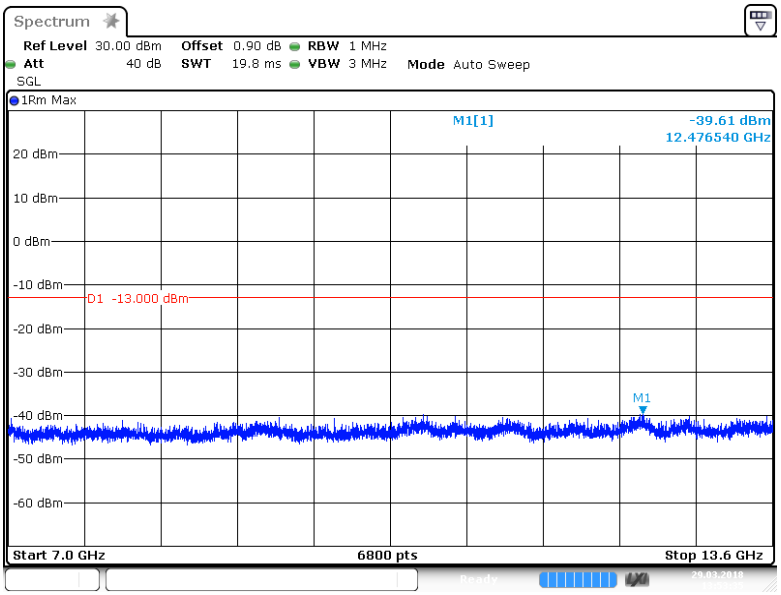

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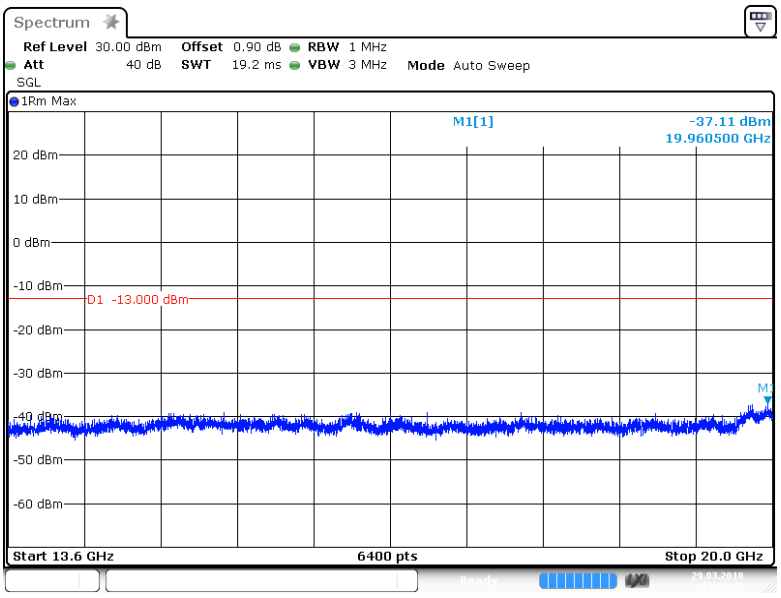

7. Field Strength of Spurious Radiation

7.1. Test Band = GSM 1900

7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
64.850000	-74.33	-13.00	61.33	Vertical
104.350000	-57.87	-13.00	44.87	Vertical
200.000000	-67.39	-13.00	54.39	Vertical
1276.340000	-50.23	-13.00	37.23	Vertical
3494.250000	-52.28	-13.00	39.28	Vertical
5550.750000	-49.30	-13.00	36.30	Vertical
60.550000	-69.57	-13.00	56.57	Horizontal
104.300000	-57.61	-13.00	44.61	Horizontal
200.000000	-64.83	-13.00	51.83	Horizontal
2115.960000	-43.84	-13.00	30.84	Horizontal
4309.875000	-50.35	-13.00	37.35	Horizontal
5550.000000	-47.17	-13.00	34.17	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
59.900000	-74.59	-13.00	61.59	Vertical
104.300000	-57.51	-13.00	44.51	Vertical
200.000000	-66.31	-13.00	53.31	Vertical
1262.400000	-51.23	-13.00	38.23	Vertical
5726.250000	-42.04	-13.00	29.04	Vertical
7888.000000	-47.71	-13.00	34.71	Vertical
61.850000	-69.18	-13.00	56.18	Horizontal
104.300000	-60.13	-13.00	47.13	Horizontal
200.000000	-64.68	-13.00	51.68	Horizontal
1622.380000	-49.54	-13.00	36.54	Horizontal
3673.875000	-51.68	-13.00	38.68	Horizontal

5640.000000	-47.74	-13.00	34.74	Horizontal

7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
104.300000	-56.08	-13.00	43.08	Vertical
200.000000	-67.02	-13.00	54.02	Vertical
300.000000	-69.36	-13.00	56.36	Vertical
2766.800000	-41.95	-13.00	28.95	Vertical
3820.500000	-51.28	-13.00	38.28	Vertical
5729.250000	-48.71	-13.00	35.71	Vertical
61.200000	-69.07	-13.00	56.07	Horizontal
104.300000	-61.36	-13.00	48.36	Horizontal
200.000000	-65.17	-13.00	52.17	Horizontal
2229.380000	-44.33	-13.00	31.33	Horizontal
3575.250000	-51.74	-13.00	38.74	Horizontal
5729.250000	-48.80	-13.00	35.80	Horizontal

7.2. Test Band = GSM 850

7.2.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
72.050000	-70.81	-13.00	57.81	Vertical
125.000000	-79.11	-13.00	66.11	Vertical
664.640000	-52.70	-13.00	39.70	Vertical
1648.125000	-44.67	-13.00	31.67	Vertical
2472.187500	-27.21	-13.00	14.21	Vertical
4121.250000	-40.98	-13.00	27.98	Vertical
60.200000	-67.53	-13.00	54.53	Horizontal
1202.500000	-52.13	-13.00	39.13	Horizontal
1647.750000	-38.62	-13.00	25.62	Horizontal
2473.125000	-39.04	-13.00	26.04	Horizontal
4121.250000	-38.23	-13.00	25.23	Horizontal
7987.500000	-47.27	-13.00	34.27	Horizontal

7.2.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
65.150000	-75.29	-13.00	62.29	Vertical
125.000000	-79.47	-13.00	66.47	Vertical
1195.833333	-50.79	-13.00	37.79	Vertical
3346.500000	-51.51	-13.00	38.51	Vertical
3777.375000	-51.04	-13.00	38.04	Vertical
5595.000000	-46.28	-13.00	33.28	Vertical
60.900000	-70.74	-13.00	57.74	Horizontal
1673.812500	-43.95	-13.00	30.95	Horizontal
2509.125000	-41.42	-13.00	28.42	Horizontal
4287.000000	-49.83	-13.00	36.83	Horizontal
5418.000000	-50.14	-13.00	37.14	Horizontal
7951.500000	-48.06	-13.00	35.06	Horizontal

7.2.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
62.500000	-73.45	-13.00	60.45	Vertical
125.000000	-79.12	-13.00	66.12	Vertical
262.500000	-77.17	-13.00	64.17	Vertical
1813.312500	-41.58	-13.00	28.58	Vertical
2546.062500	-39.41	-13.00	26.41	Vertical
3395.250000	-50.01	-13.00	37.01	Vertical
61.550000	-68.76	-13.00	55.76	Horizontal
104.300000	-83.25	-13.00	70.25	Horizontal
423.150000	-50.60	-13.00	37.60	Horizontal
1698.187500	-44.10	-13.00	31.10	Horizontal
2546.625000	-38.12	-13.00	25.12	Horizontal
3394.500000	-50.52	-13.00	37.52	Horizontal

NOTE:

1) All modes were tested, but the data presented above is the worst case.the disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

2) We have tested all modulation, 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 (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	VL	TN	14.11	0.017118	2.5	PASS
		VN	TN	11.85	0.014376	2.5	PASS
		VH	TN	13.62	0.016531	2.5	PASS
	190	VL	TN	14.66	0.017521	2.5	PASS
		VN	TN	12.24	0.014626	2.5	PASS
		VH	TN	13.59	0.016247	2.5	PASS
	251	VL	TN	16.01	0.018866	2.5	PASS
		VN	TN	15.17	0.017877	2.5	PASS
		VH	TN	14.01	0.016508	2.5	PASS
GSM1900	512	VL	TN	35.51	0.019195	2.5	PASS
		VN	TN	37.94	0.020504	2.5	PASS
		VH	TN	38.42	0.020765	2.5	PASS
	661	VL	TN	37.10	0.019732	2.5	PASS
		VN	TN	39.03	0.020763	2.5	PASS
		VH	TN	37.48	0.019938	2.5	PASS
	810	VL	TN	37.10	0.019424	2.5	PASS
		VN	TN	35.71	0.018697	2.5	PASS
		VH	TN	30.96	0.016212	2.5	PASS

8.2. Frequency Error Vs Temperature

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	VN	-30	9.98	0.012104	2.5	PASS
			-20	12.01	0.014572	2.5	PASS
			-10	11.49	0.013945	2.5	PASS
			0	10.17	0.012339	2.5	PASS
			10	9.94	0.012065	2.5	PASS
			20	10.85	0.013162	2.5	PASS
			30	10.62	0.012888	2.5	PASS
			40	10.94	0.013279	2.5	PASS
			50	11.01	0.013358	2.5	PASS
	190	VN	-30	13.85	0.016556	2.5	PASS
			-20	13.14	0.015707	2.5	PASS
			-10	12.01	0.014356	2.5	PASS
			0	16.56	0.019798	2.5	PASS
			10	16.72	0.019991	2.5	PASS
			20	12.75	0.015244	2.5	PASS

			30	13.37	0.015977	2.5	PASS
			40	12.72	0.015205	2.5	PASS
			50	17.08	0.020415	2.5	PASS
	251	VN	-30	14.37	0.016926	2.5	PASS
			-20	13.69	0.016128	2.5	PASS
			-10	13.33	0.015709	2.5	PASS
			0	15.08	0.017763	2.5	PASS
			10	12.49	0.014720	2.5	PASS
			20	16.24	0.019133	2.5	PASS
			30	14.98	0.017649	2.5	PASS
			40	13.82	0.016280	2.5	PASS
			50	15.53	0.018296	2.5	PASS
GSM1900	512	VN	-30	36.58	0.019771	2.5	PASS
			-20	31.48	0.017014	2.5	PASS
			-10	33.55	0.018130	2.5	PASS
			0	34.90	0.018863	2.5	PASS
			10	37.06	0.020033	2.5	PASS
			20	38.78	0.020957	2.5	PASS
			30	31.96	0.017275	2.5	PASS
			40	38.58	0.020853	2.5	PASS
			50	33.45	0.018078	2.5	PASS
	661	VN	-30	35.64	0.018959	2.5	PASS
			-20	37.71	0.020058	2.5	PASS
			-10	36.64	0.019492	2.5	PASS
			0	35.58	0.018925	2.5	PASS
			10	42.33	0.022514	2.5	PASS
			20	40.49	0.021535	2.5	PASS
			30	41.16	0.021896	2.5	PASS
			40	27.38	0.014563	2.5	PASS
			50	33.77	0.017963	2.5	PASS
	810		-30	35.42	0.018545	2.5	PASS
			-20	35.97	0.018833	2.5	PASS
			-10	37.68	0.019729	2.5	PASS
			0	33.64	0.017615	2.5	PASS
			10	34.45	0.018038	2.5	PASS
			20	33.38	0.017480	2.5	PASS
			30	42.62	0.022315	2.5	PASS
			40	30.83	0.016145	2.5	PASS
			50	29.86	0.015637	2.5	PASS

The End