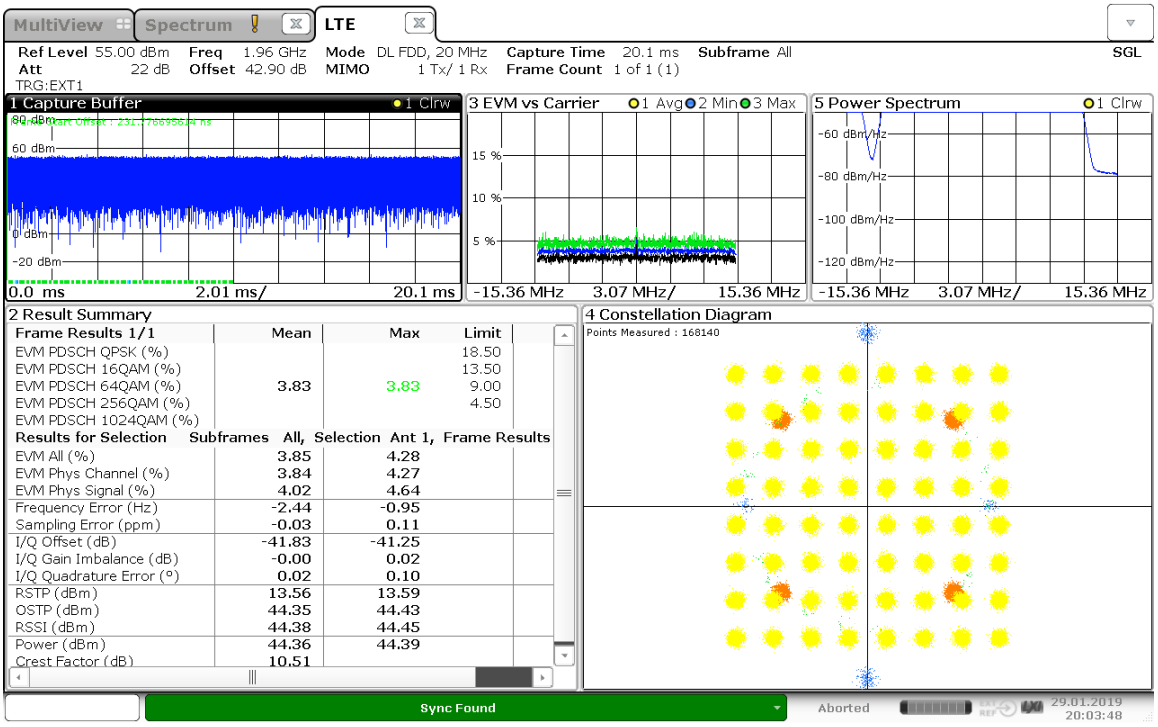
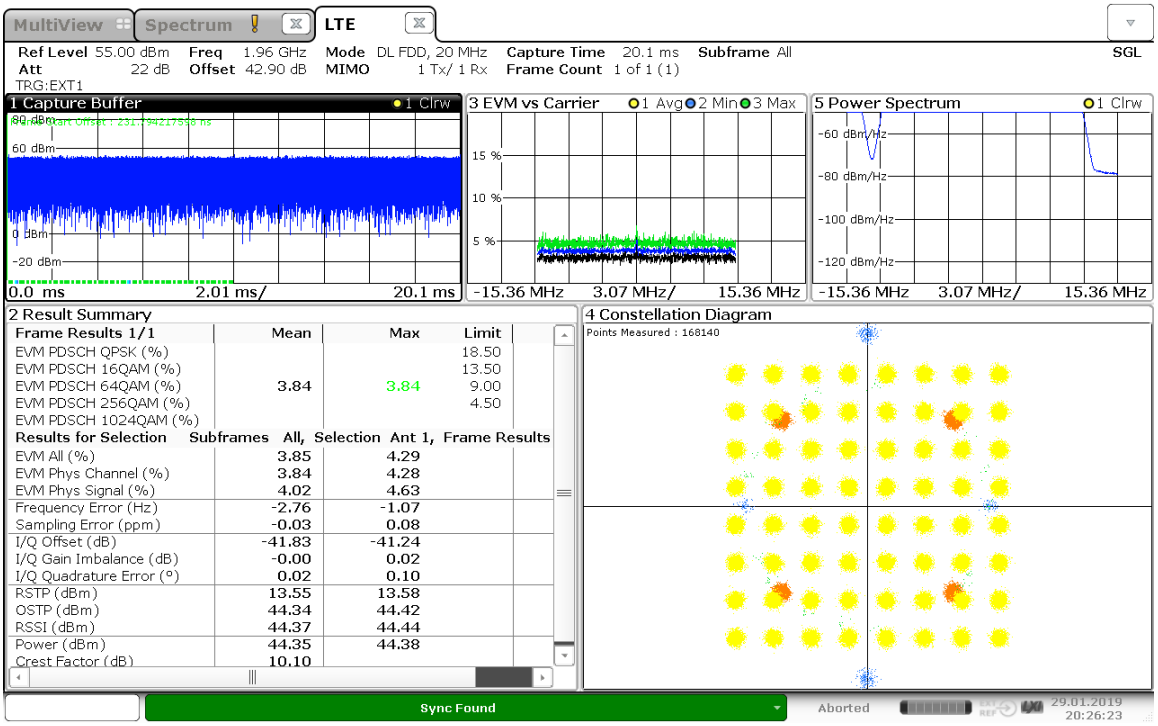
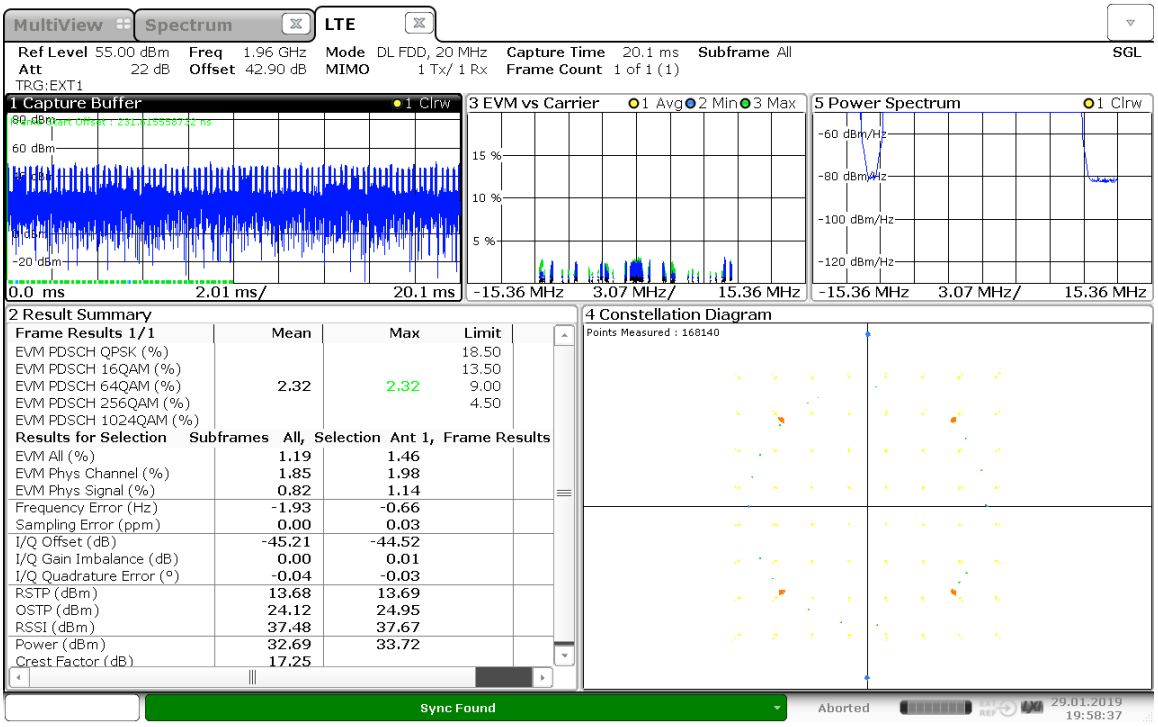


20:03:48 29.01.2019

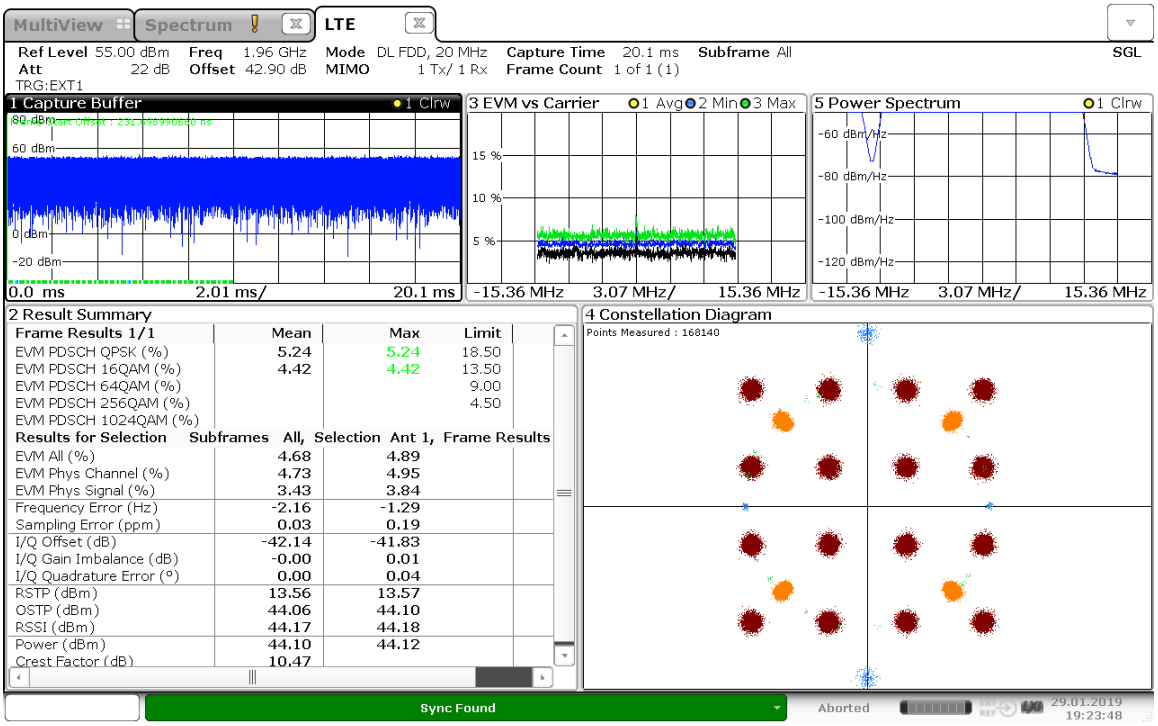


20:26:23 29.01.2019

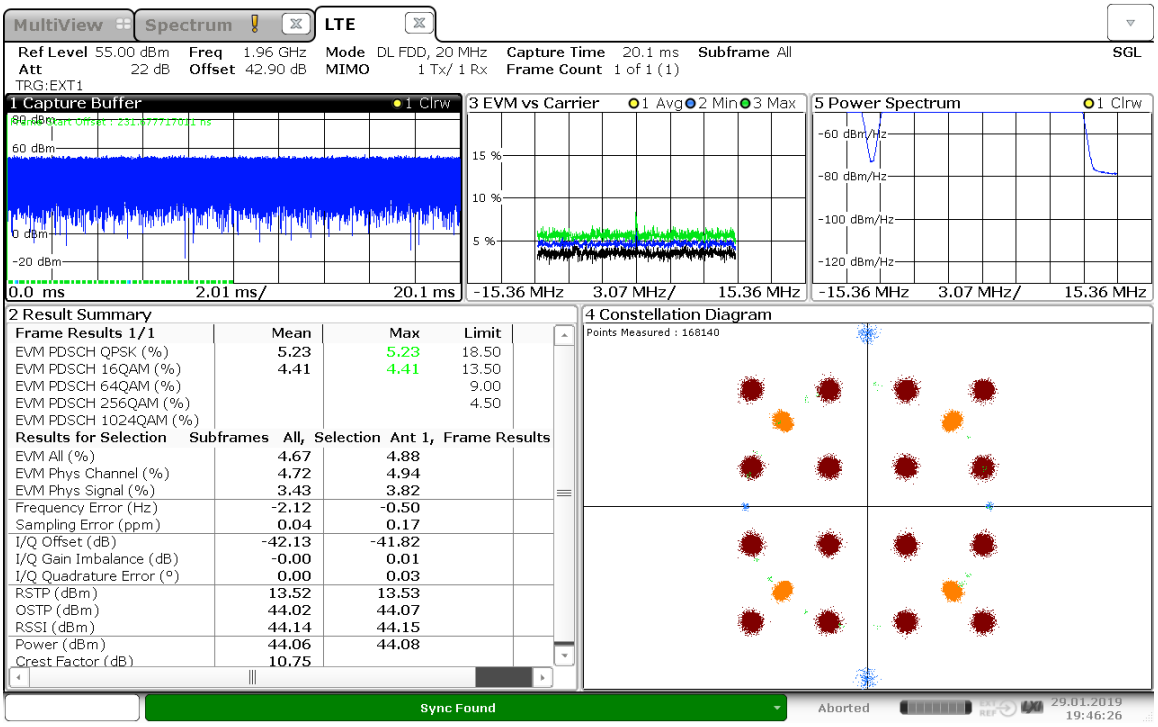


19:58:37 29.01.2019

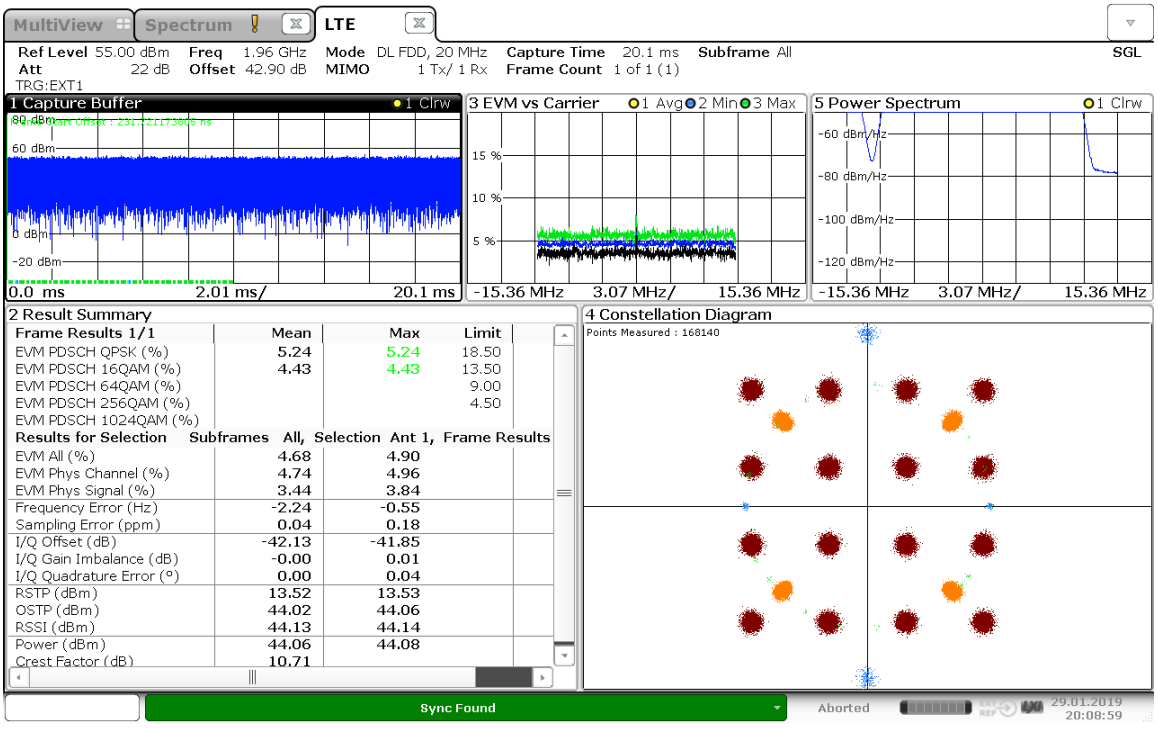
20M -1960MHz-TM3.2-Port 1 ~4:



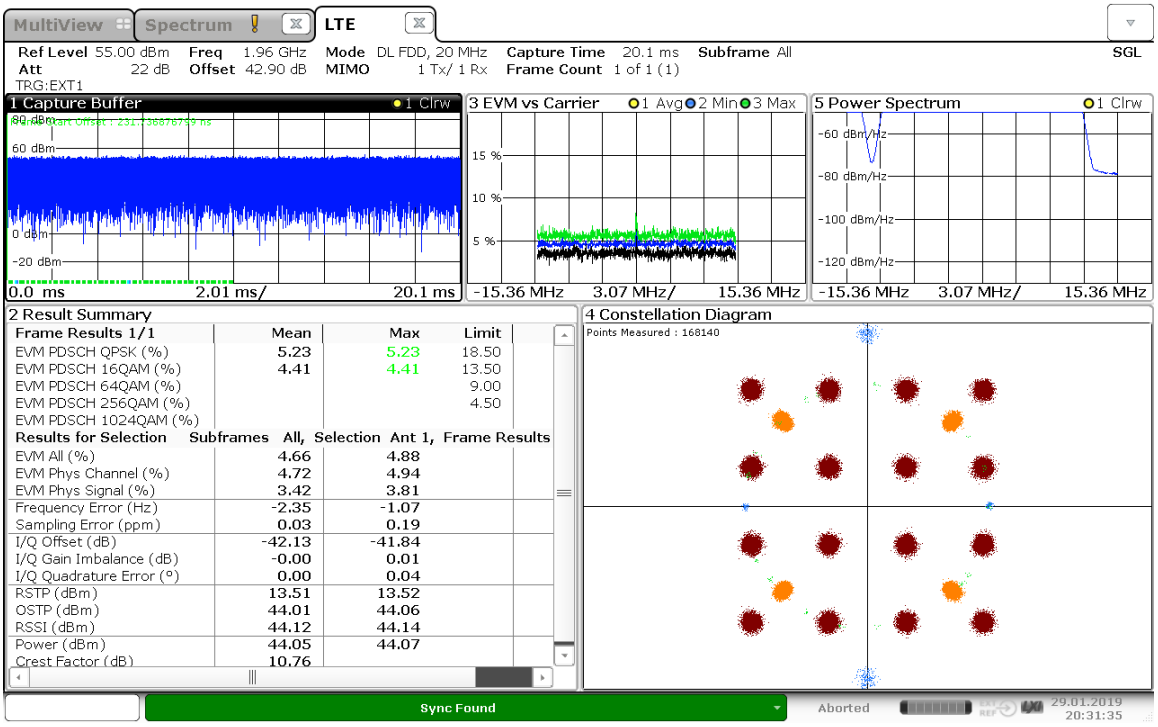
19:23:48 29.01.2019



19:46:26 29.01.2019

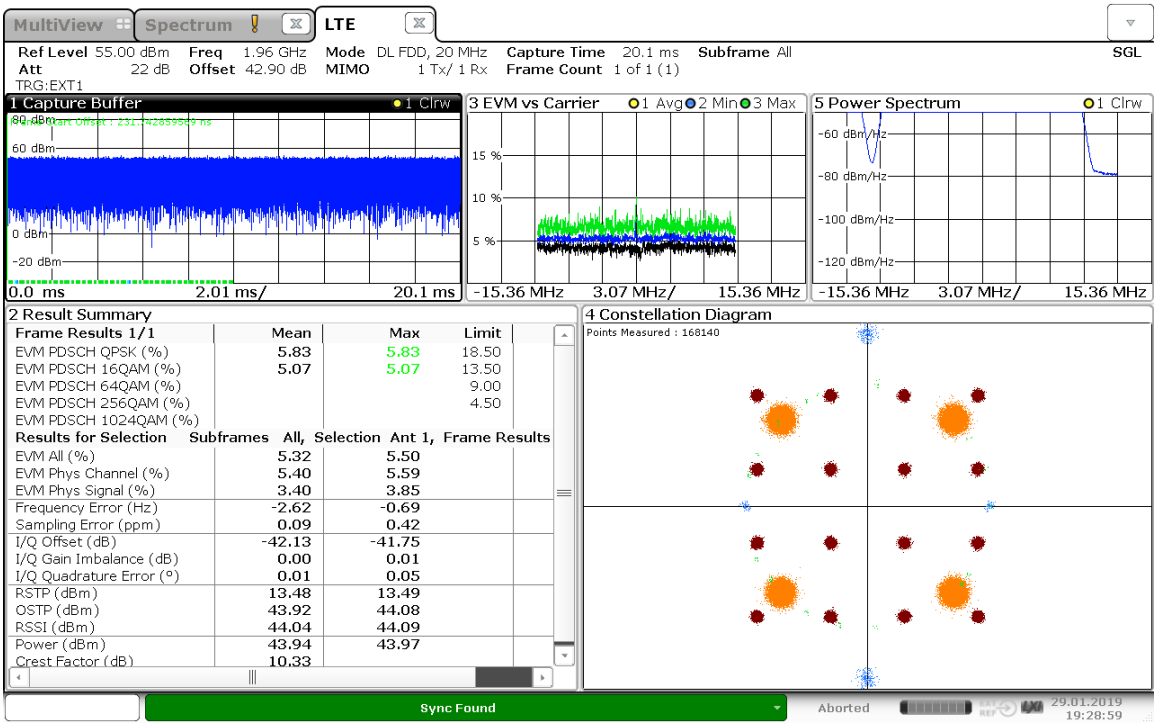


20:09:00 29.01.2019

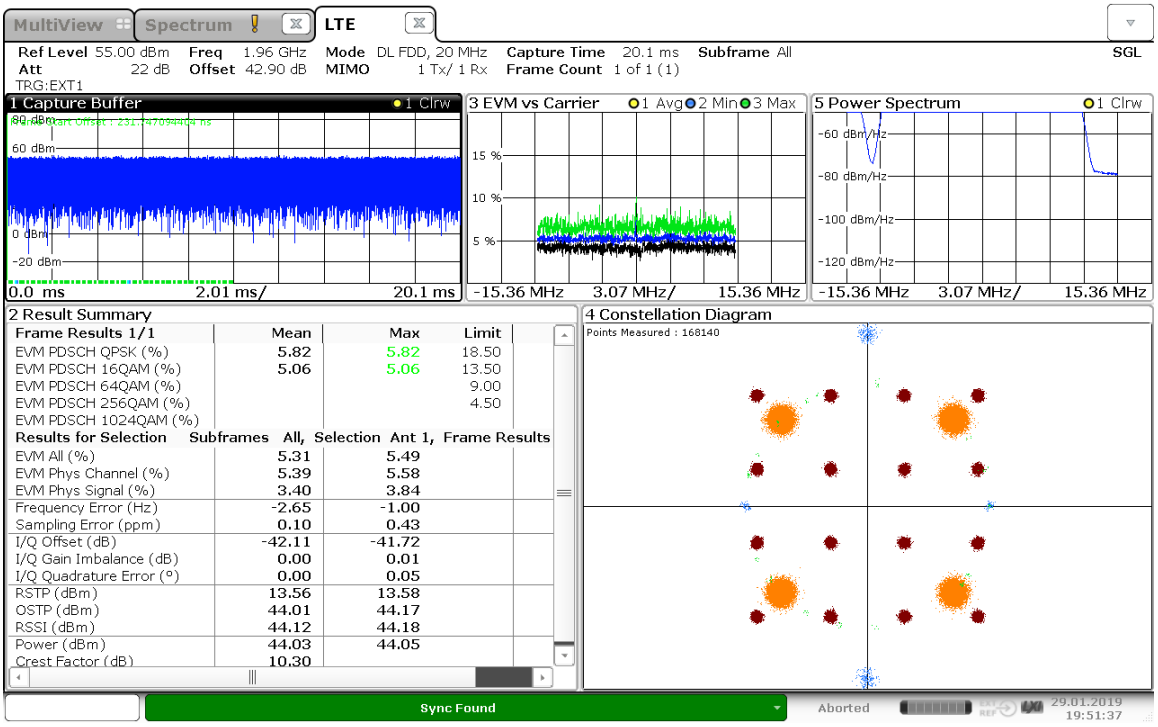


20:31:35 29.01.2019

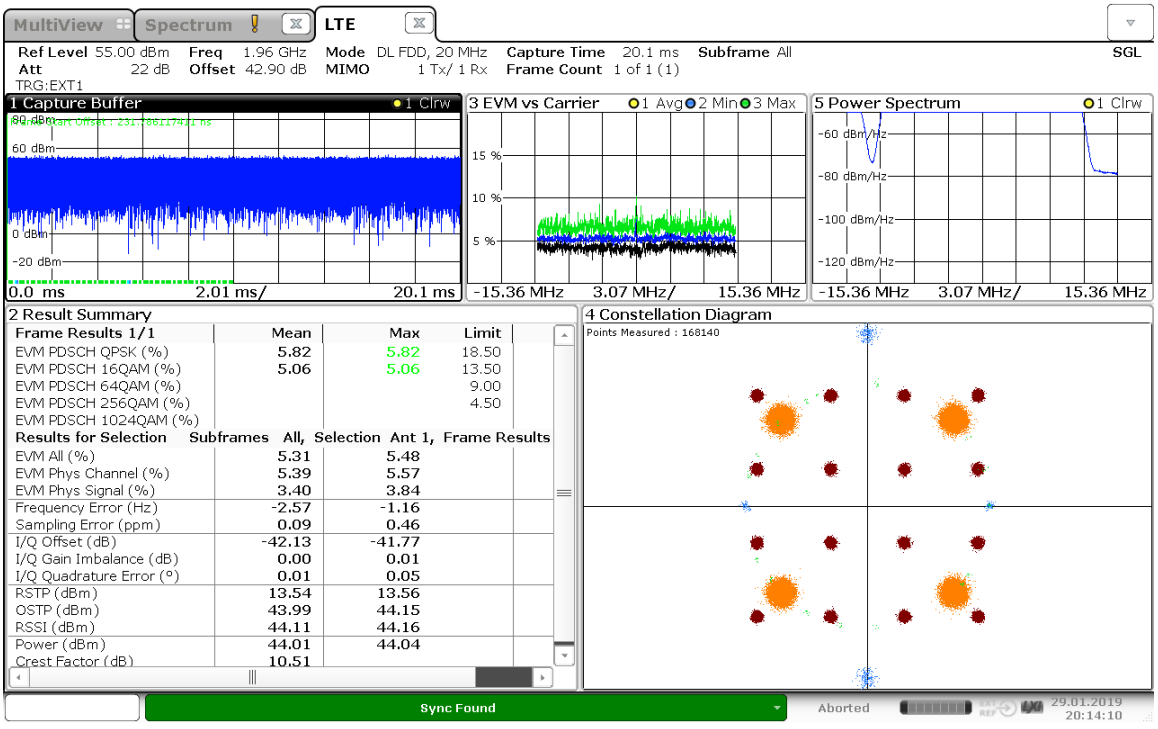
20M -1960MHz-TM3.3-Port 1 ~4:



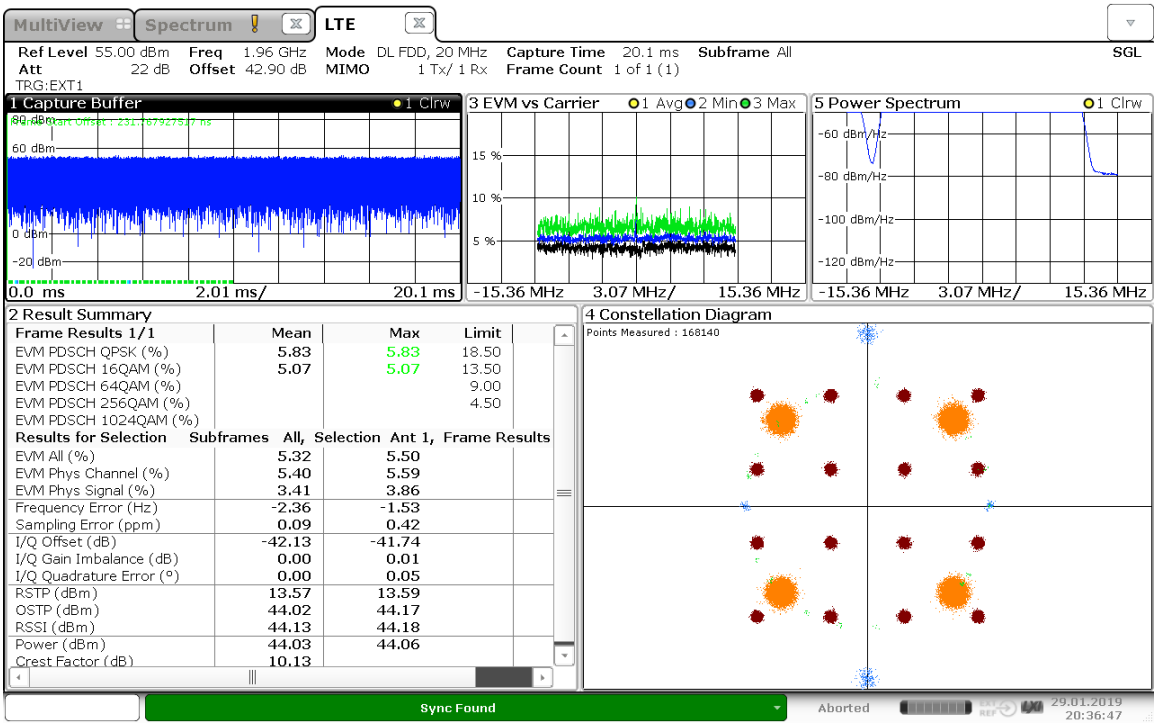
19:29:00 29.01.2019



19:51:37 29.01.2019

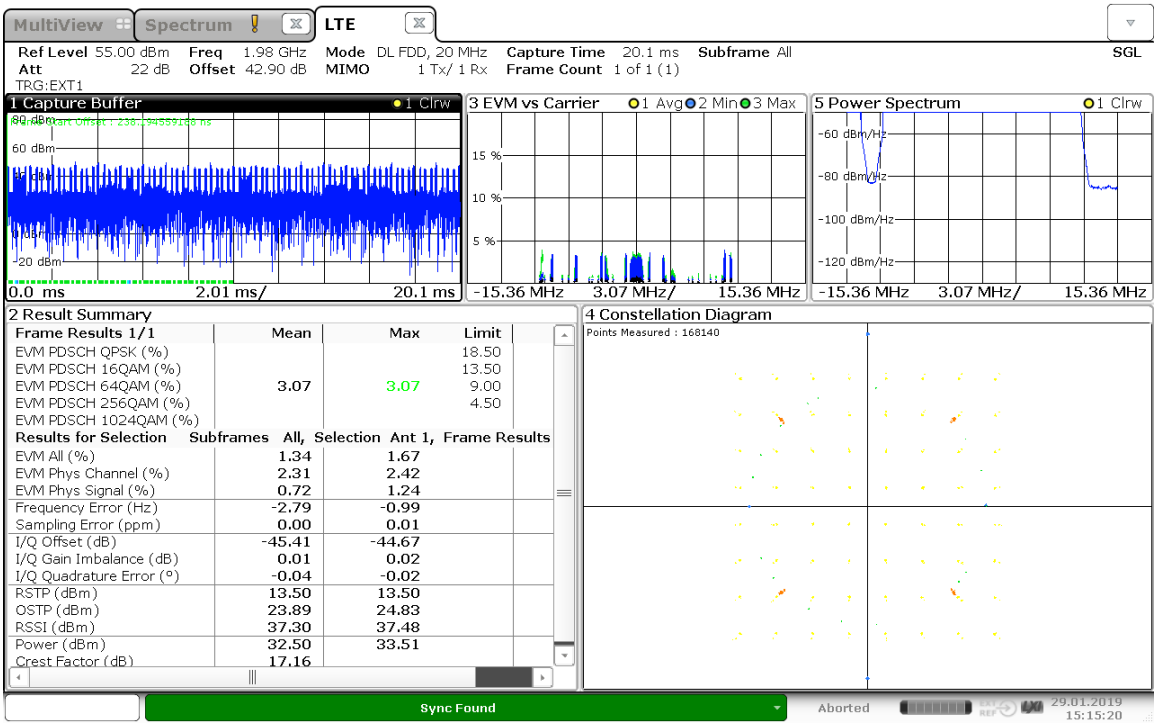


20:14:11 29.01.2019

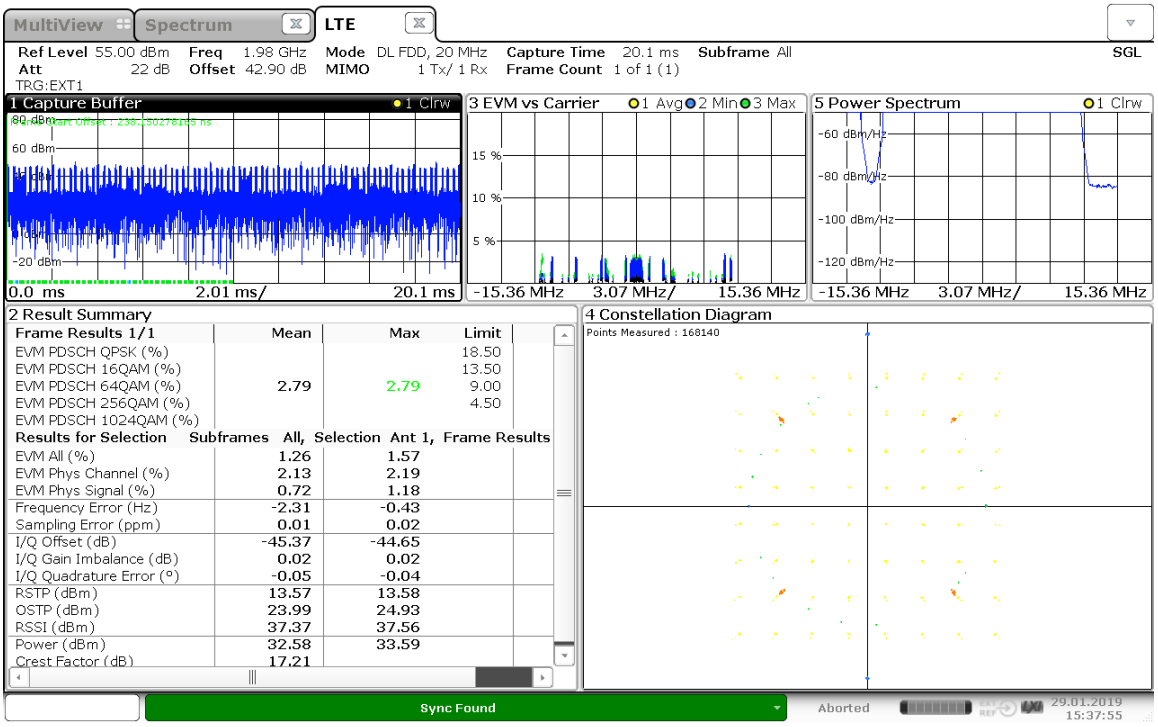


20:36:47 29.01.2019

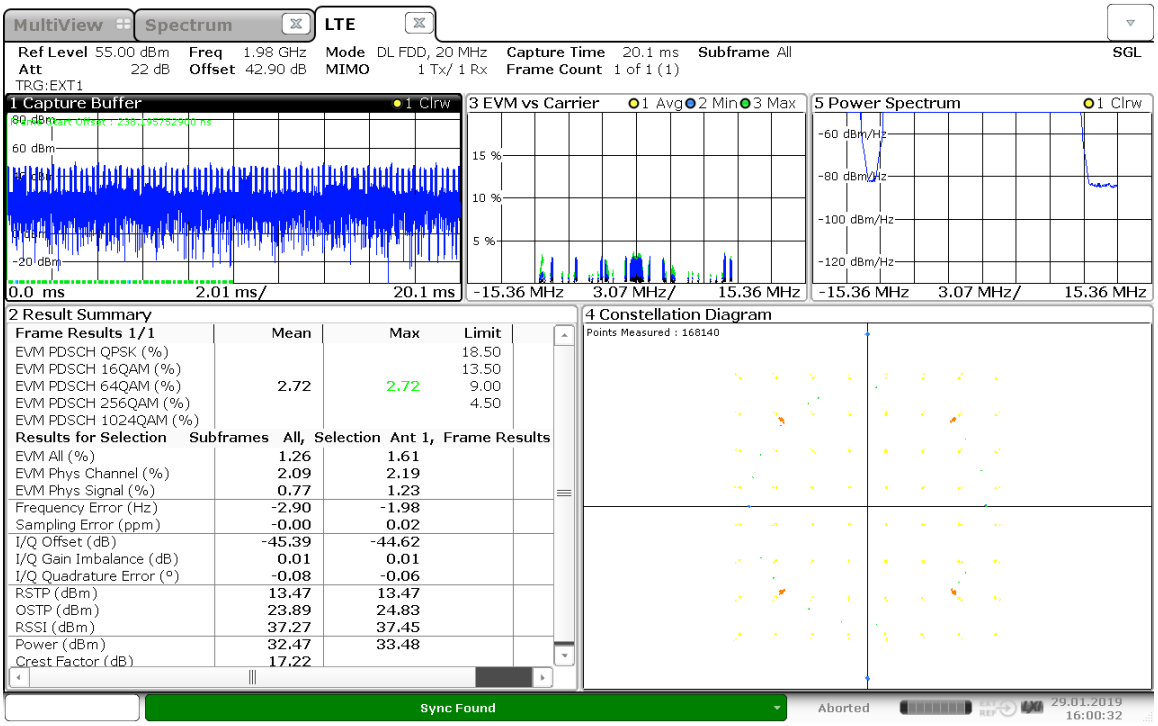
20M -1980MHz-TM2.0-Port 1 ~4:



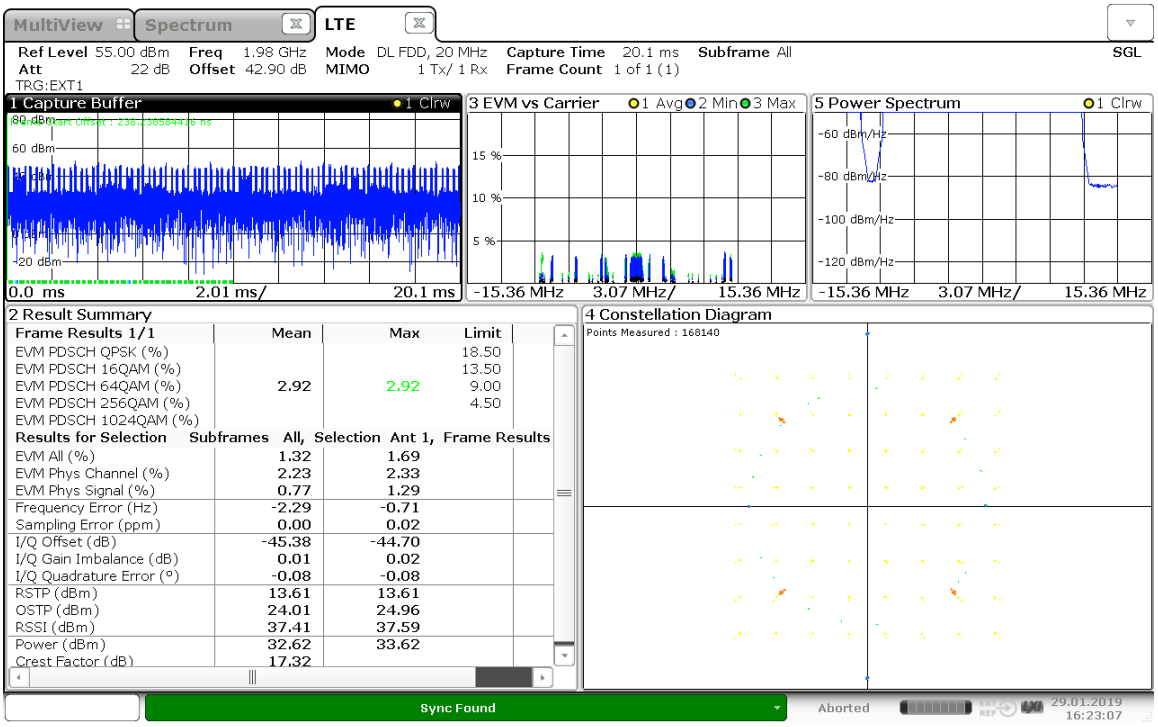
15:15:20 29.01.2019



15:37:56 29.01.2019

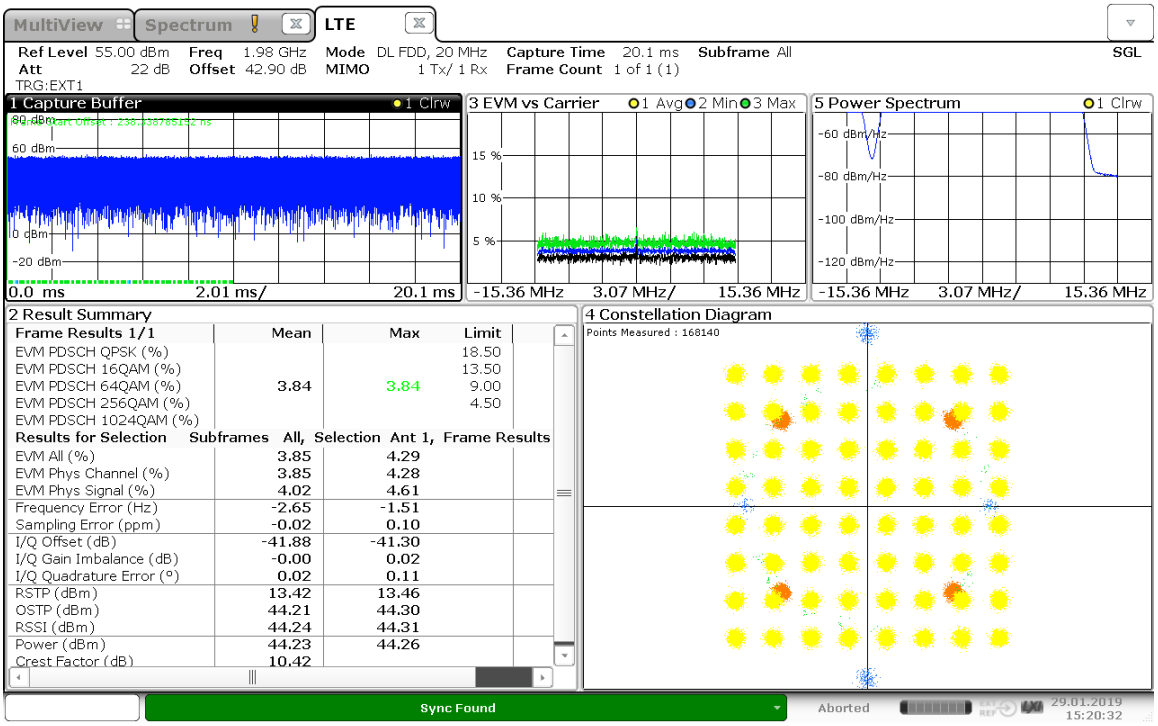


16:00:32 29.01.2019

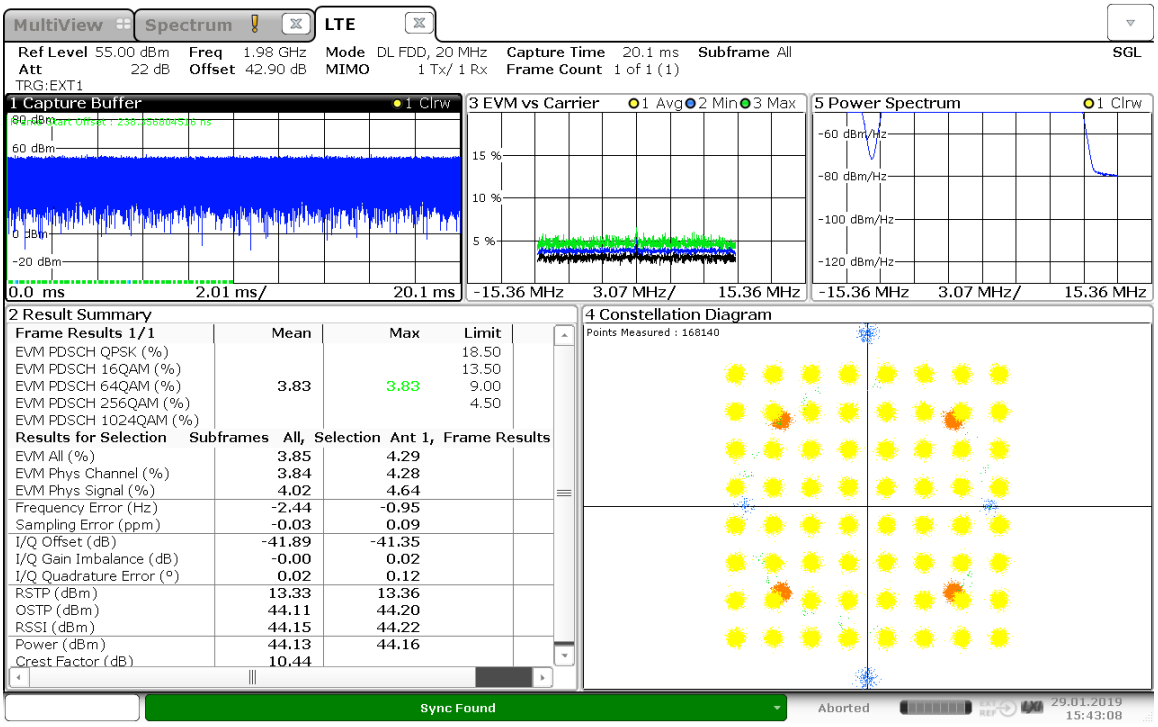


16:23:08 29.01.2019

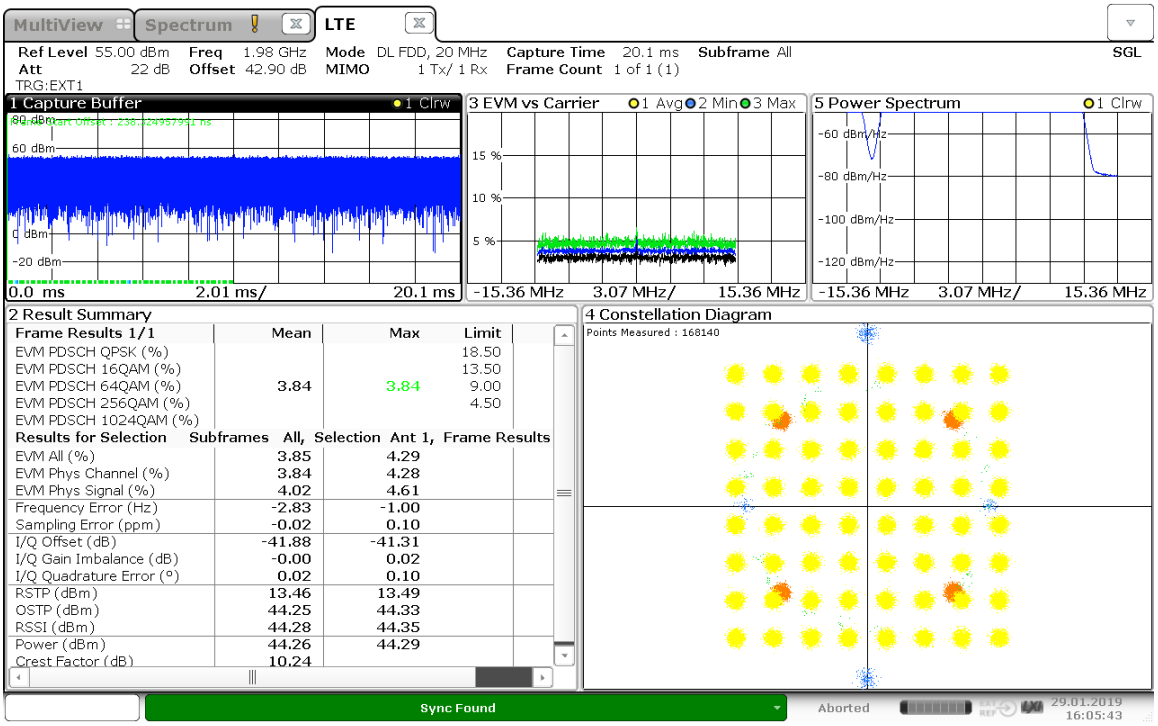
20M -1980MHz-TM3.1-Port 1 ~4:



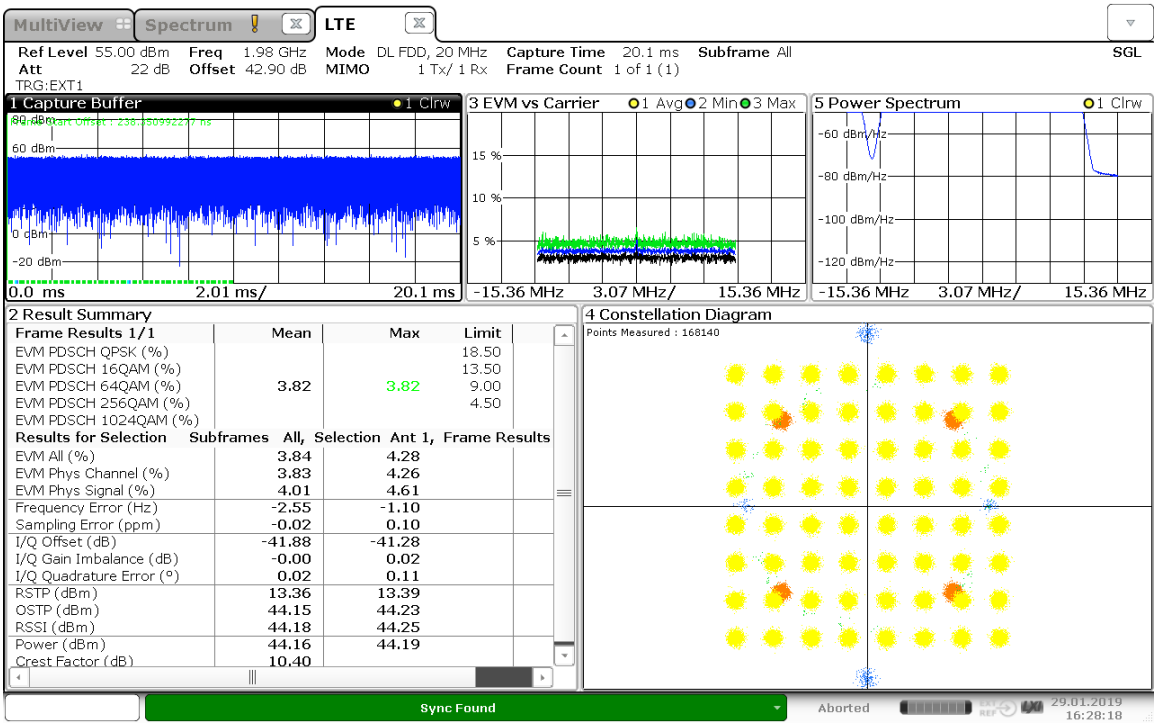
15:20:32 29.01.2019



15:43:08 29.01.2019

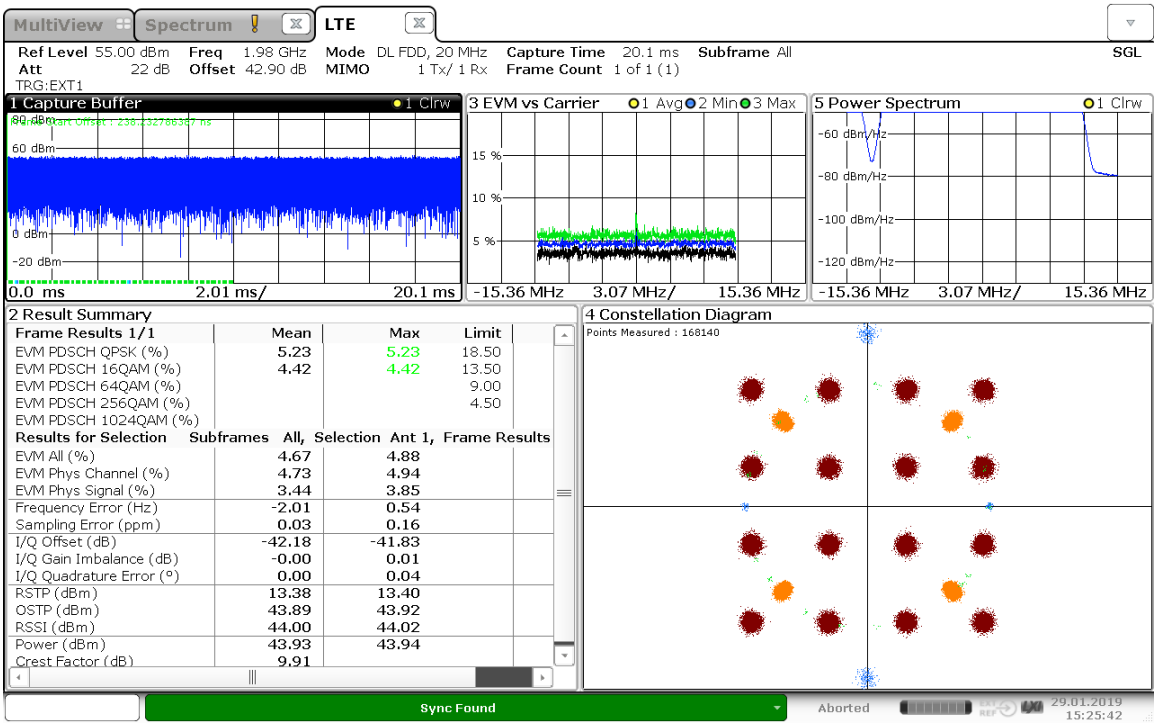


16:05:44 29.01.2019

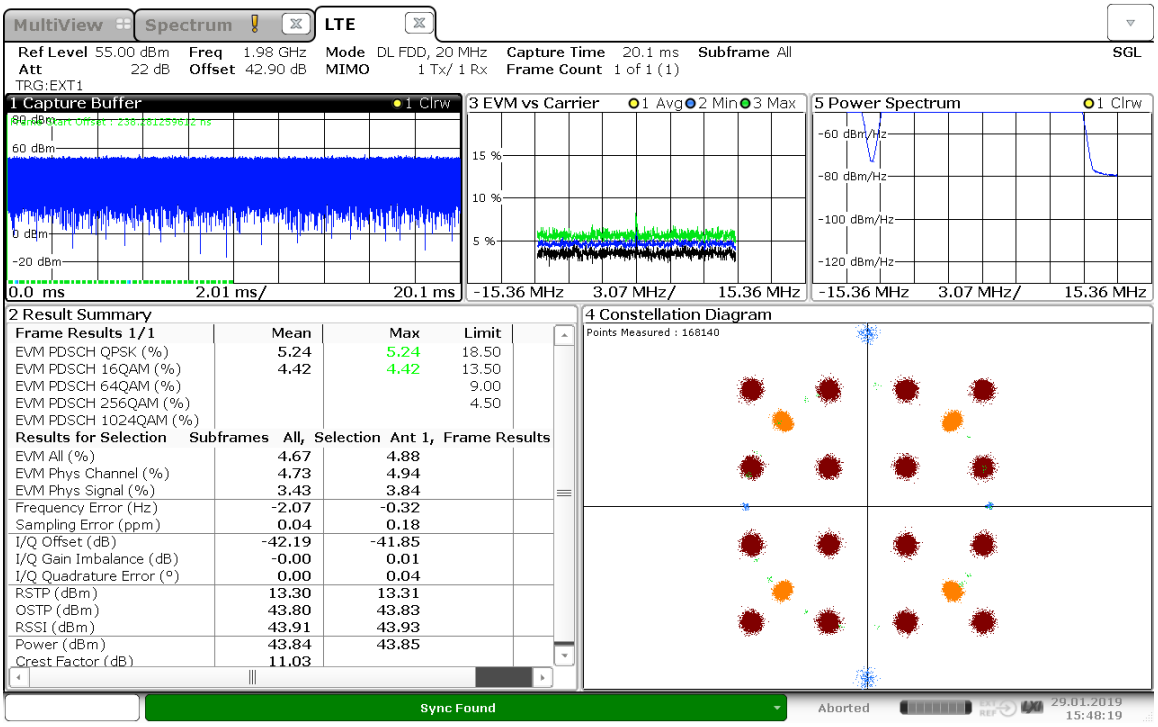


16:28:19 29.01.2019

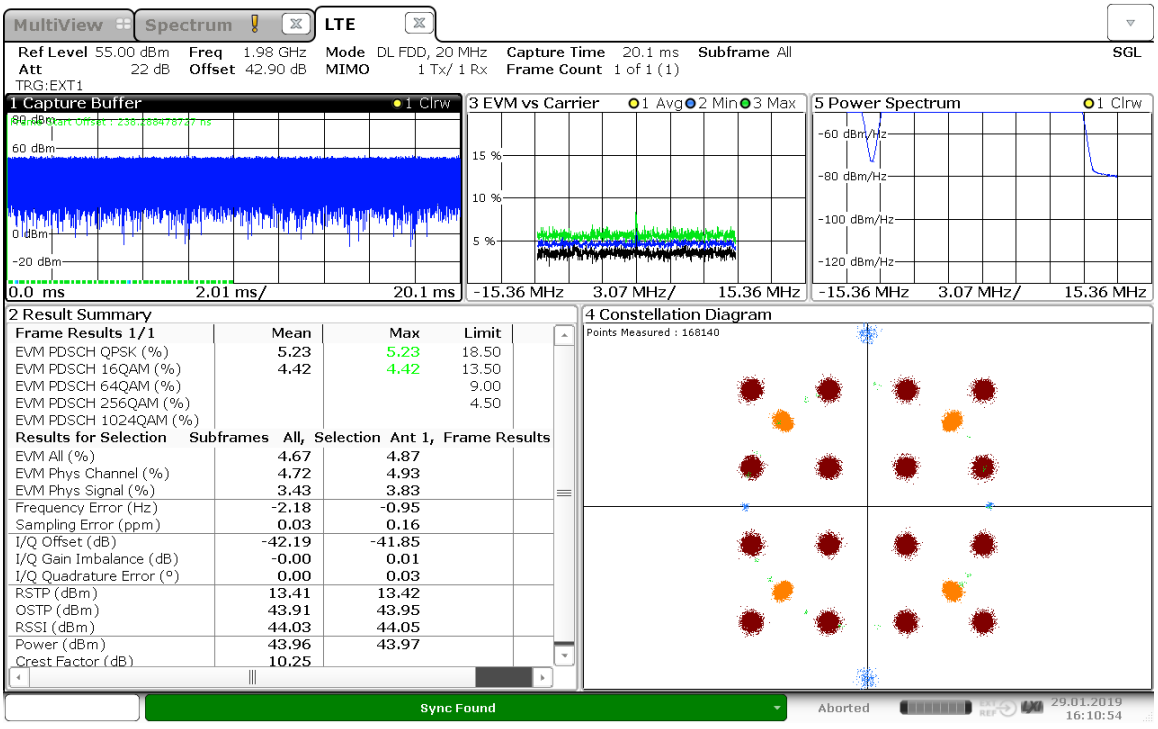
20M -1980MHz-TM3.2-Port 1 ~4:



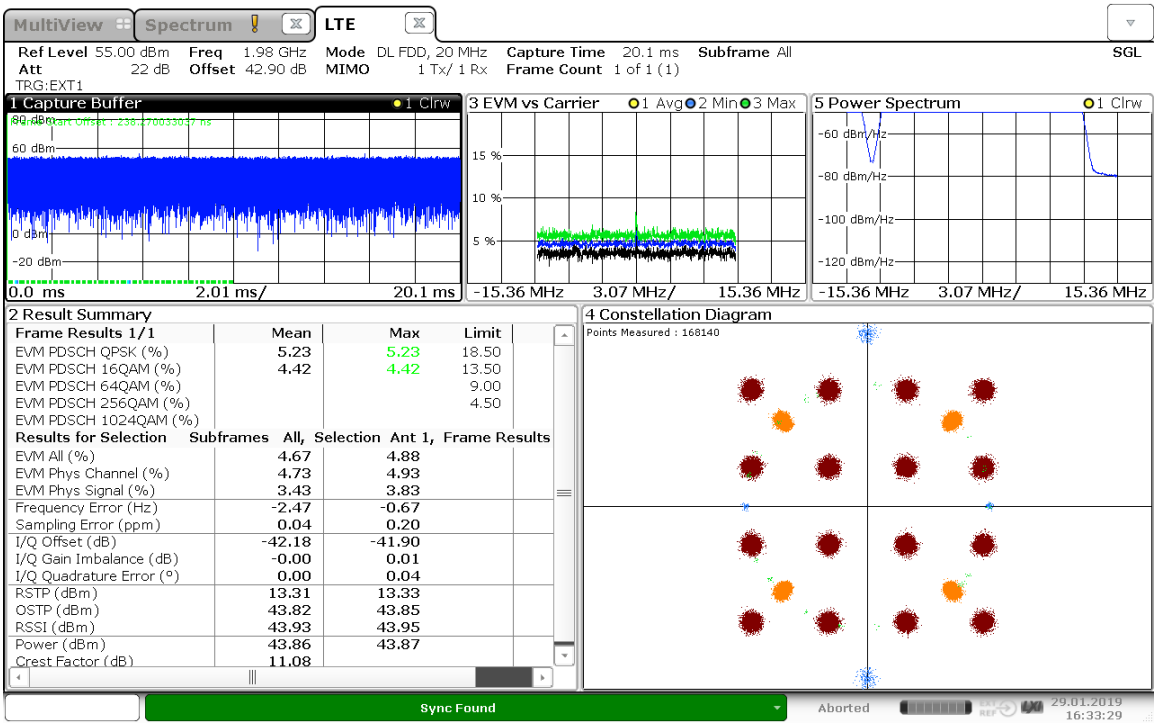
15:25:43 29.01.2019



15:48:20 29.01.2019

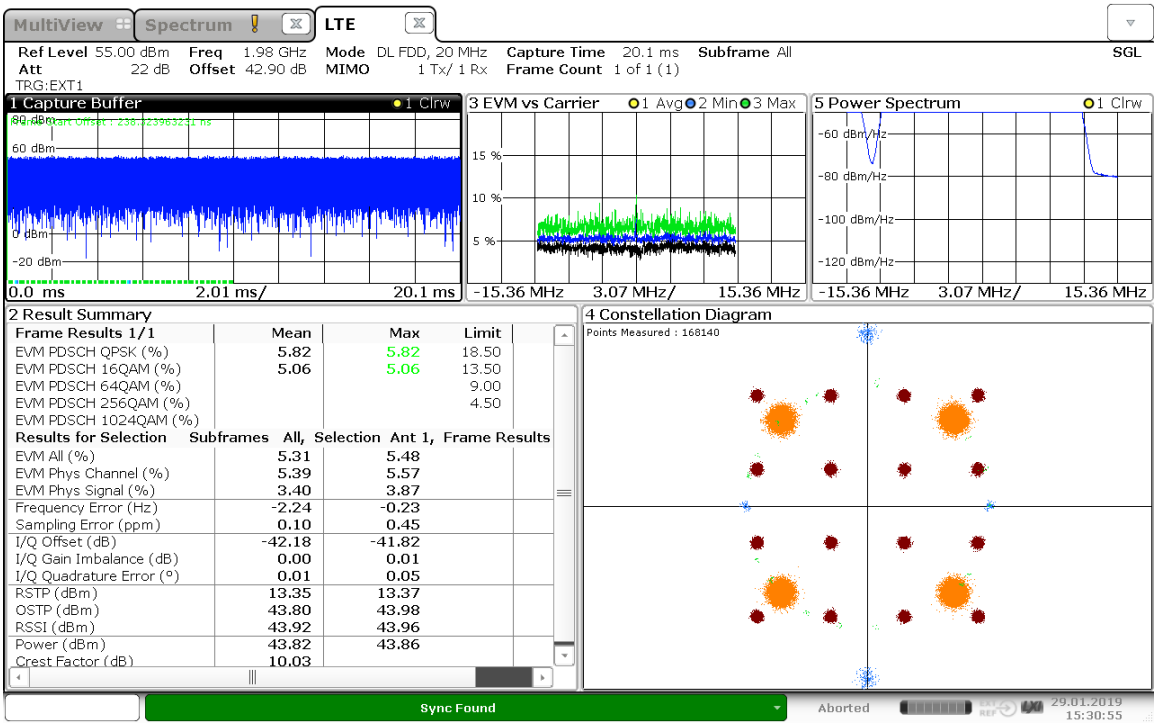


16:10:55 29.01.2019

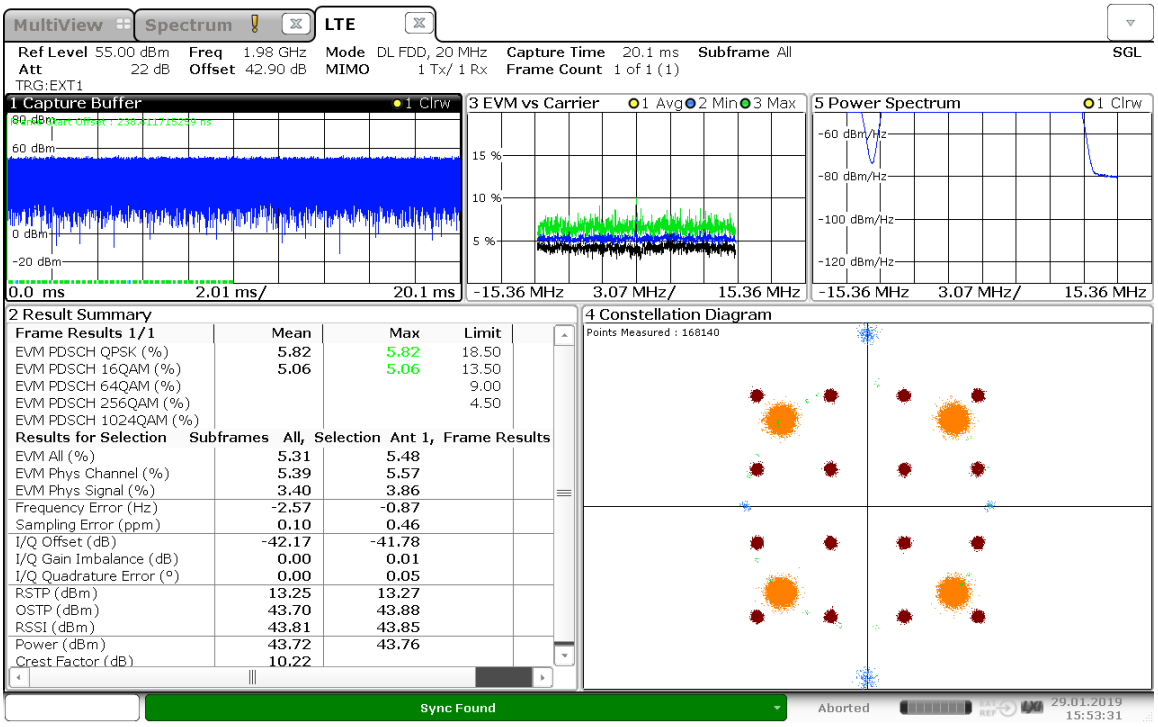


16:33:30 29.01.2019

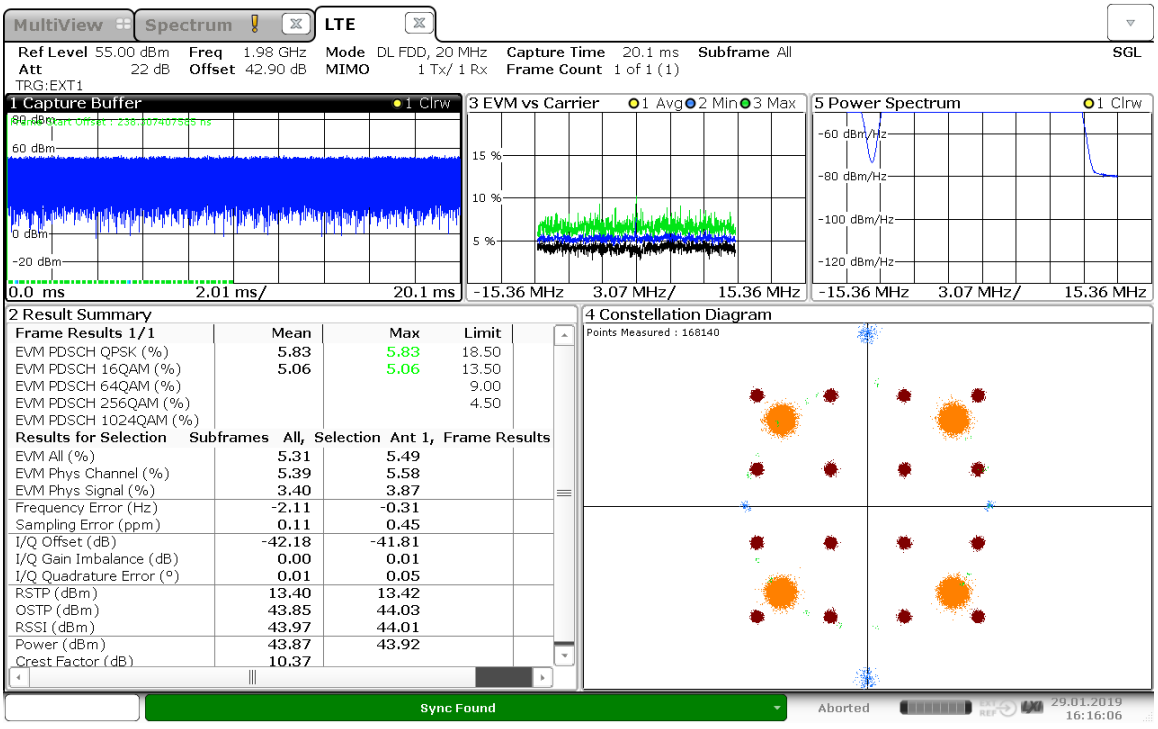
20M -1980MHz-TM3.3-Port 1 ~4:



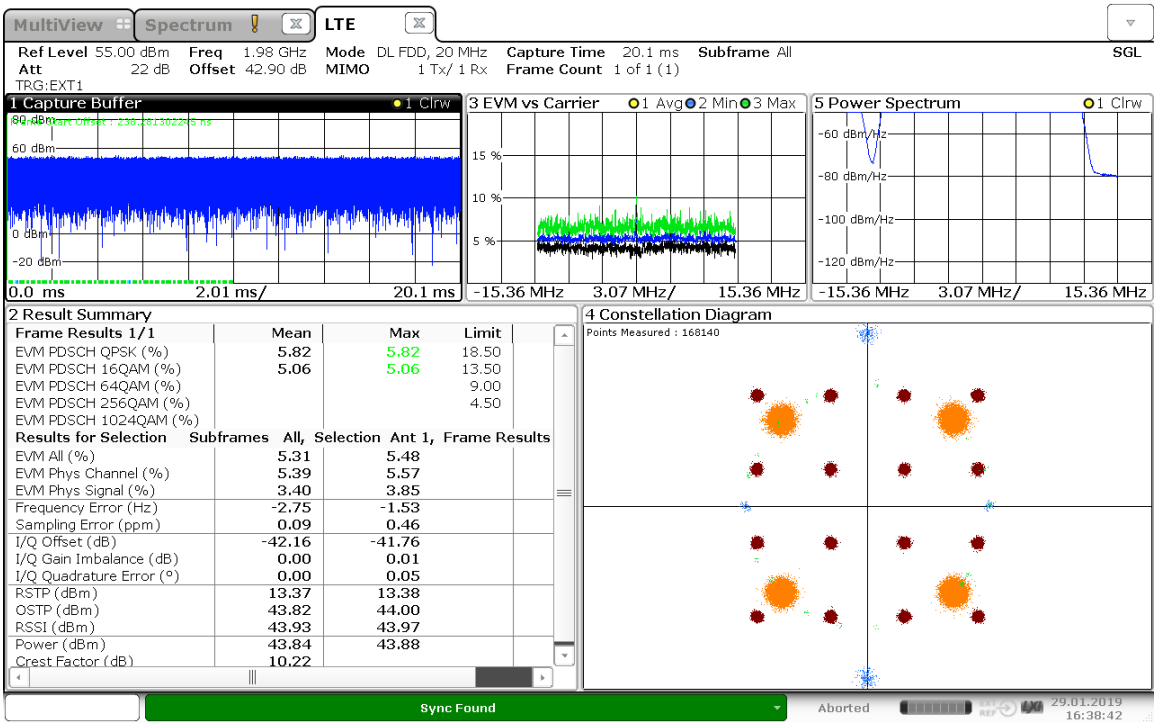
15:30:55 29.01.2019



15:53:31 29.01.2019



16:16:06 29.01.2019



16:38:42 29.01.2019

7. SPURIOUS RADIATED EMISSIONS

7.1.Applicable Standard：

FCC CFR 47 §2.1053 §24.238

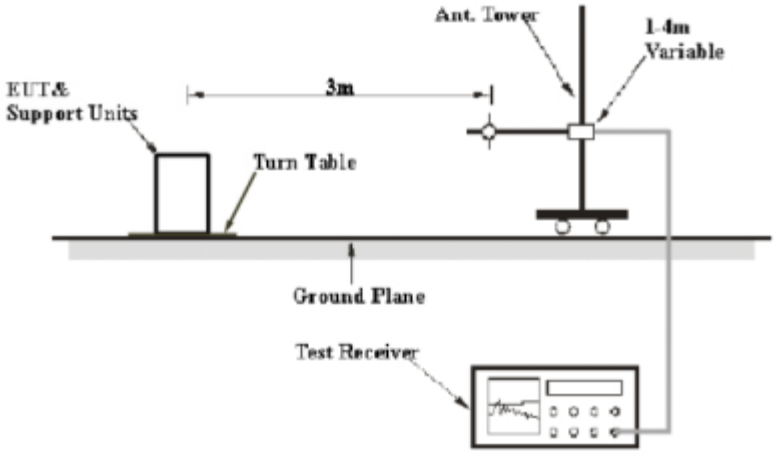
7.2.Test Equipment List and Details：

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESI26	SB3436	2018.11.19	2019.11.18
Albatross	anechoic chamber	3m Site	SB9555/01	2018.09.11	2019.09.10
Schwarzbeck	Trilog Broadband Antenna	VULB9163	SB3955	2018.06.12	2019.06.11
R&S	Horn Antenna	HF907	SB13958	2018.05.22	2019.05.21

*__statement of traceability:__ SMQ attests that all calibration has been performed per the A2LA requirements, traceable to NIM.

7.3.Test Procedure:

EUT Setup



The radiated emission tests were performed in the 3-meter Chamber, using the setup accordance with the FCC part 2.1053.The specification used was the FCC 2.1053 limits. (dB):0dB
The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load, which was also placed on the turntable.
The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.
The frequency range up to teeth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.
Spurious emissions in dB =10 1g (TX pwr in Watts/0.001)-the absolute level
Spurious attenuation limit in dB =43+10 Lg P (power out in Watts)
The resolution bandwidth of the spectrum analyzer was set at 1 percent as specified for 30MHz to 1GHz scaning, set at 1MHz for 1GHz to 20GHz scaning.

7.4. Environmental Conditions :

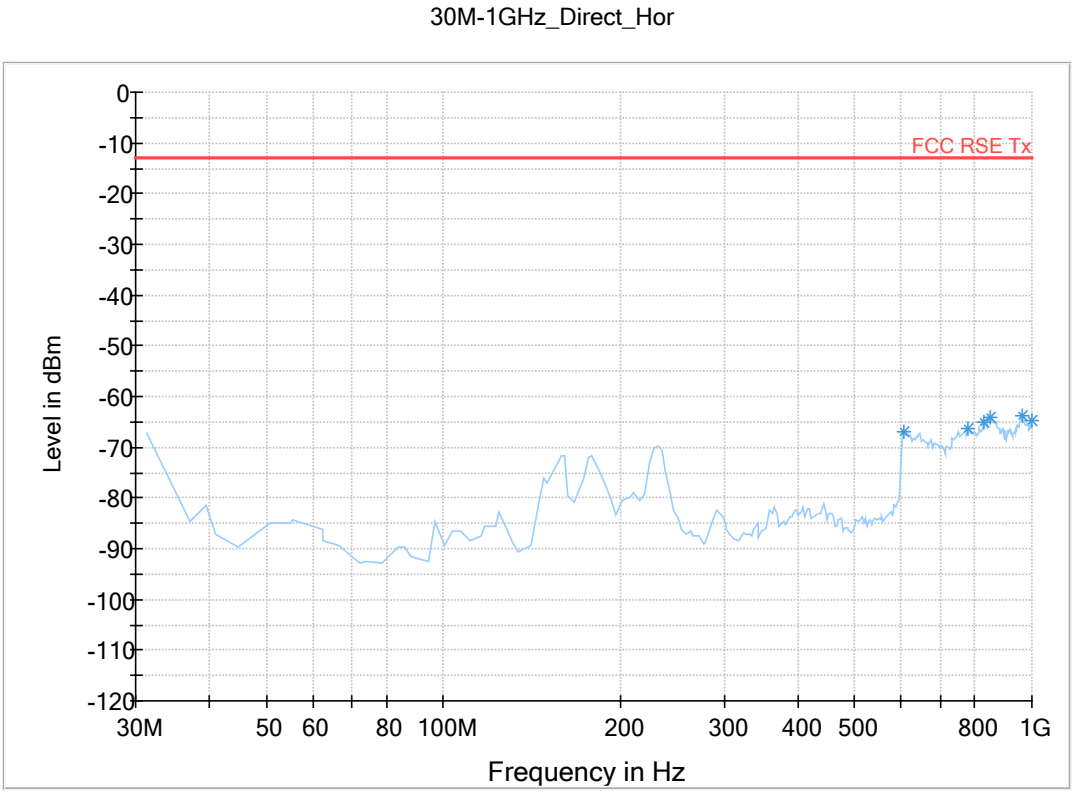
Temperature:	21°C
Relative Humidity:	40 %
ATM Pressure:	1012 mbar

7.5. Test Result: Pass

7.6. Test Mode: Transmitting LTE

7.7. Test Data:

30M-1GHz(Horizontal)

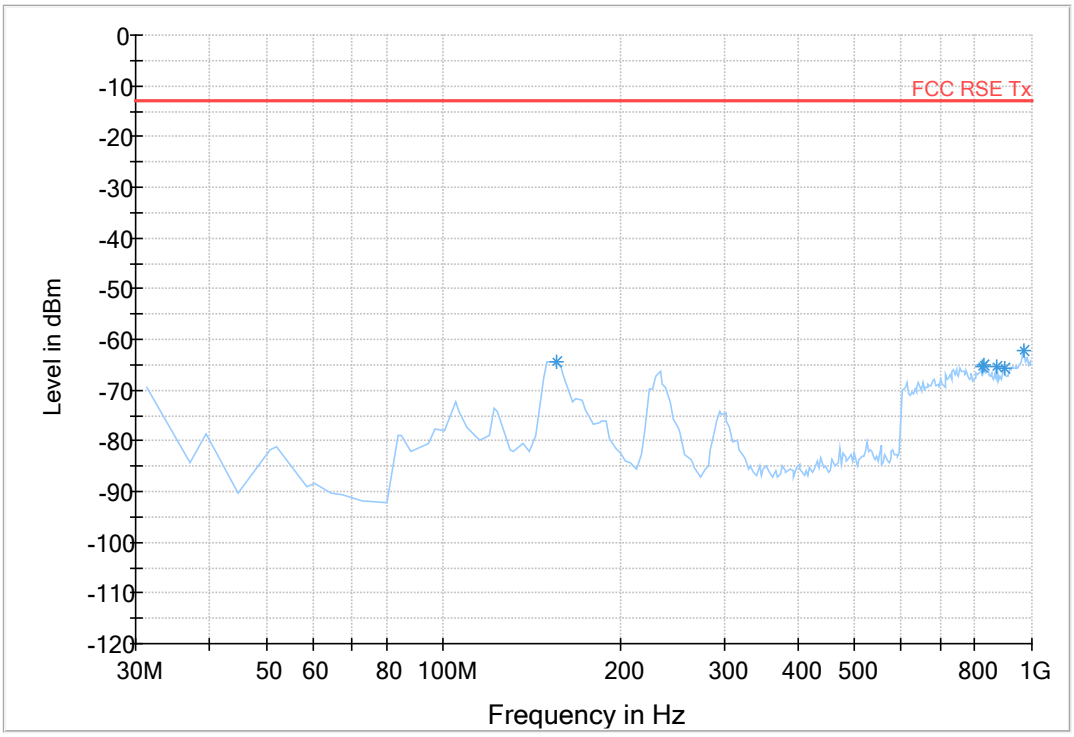


Data Reduction Result 1 [1]

Frequency (MHz)	MaxPeak-MaxHold (dBm)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
605.520000	-66.8	150.0	H	0.0	-114.6	53.8	-13.0
780.560000	-66.4	150.0	H	0.0	-114.2	53.4	-13.0
827.760000	-65.1	150.0	H	0.0	-113.7	52.1	-13.0
848.880000	-64.0	150.0	H	0.0	-111.2	51.0	-13.0
960.960000	-63.6	150.0	H	0.0	-111.8	50.6	-13.0
1000.00000	-64.6	150.0	H	0.0	-112.3	51.6	-13.0

30M-1GHz (Vertical)

30M-1GHz_Direct_Ver

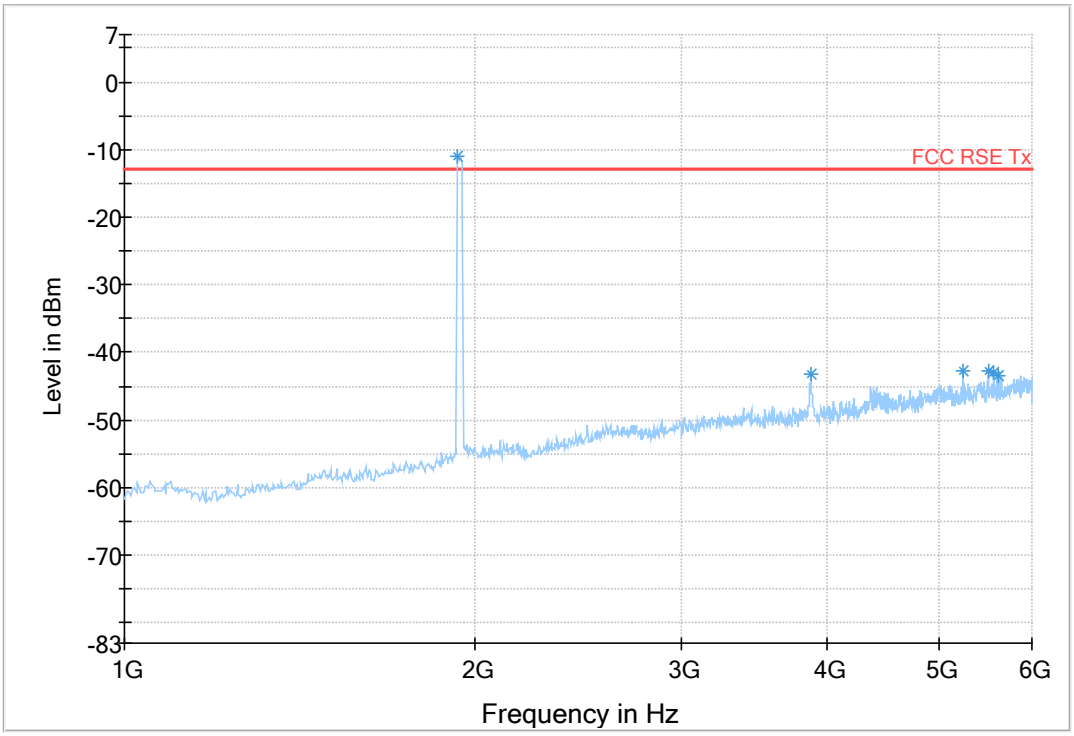


Data Reduction Result 1 [1]

Frequency (MHz)	MaxPeak-MaxHold (dBm)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
155.57000	-64.5	150.0	V	0.0	-129.2	51.5	-13.0
822.40000	-65.3	150.0	V	0.0	-114.4	52.3	-13.0
830.00000	-64.9	150.0	V	0.0	-114.5	51.9	-13.0
871.28000	-65.5	150.0	V	0.0	-114.8	52.5	-13.0
899.36000	-65.6	150.0	V	0.0	-114.3	52.6	-13.0
966.72000	-62.2	150.0	V	0.0	-110.2	49.2	-13.0

1-6GHz(Horizontal)

1GHz-6GHz HPF3.0

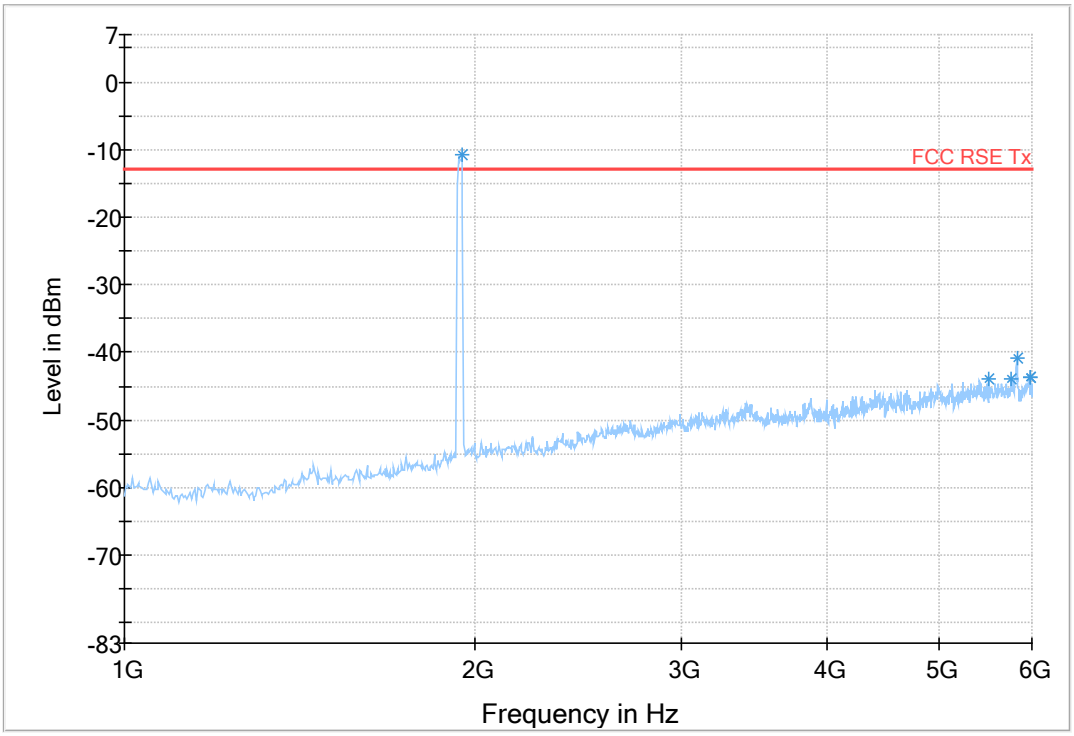


Data Reduction Result 1 [2]

Frequency (MHz)	MaxPeak-MaxHold (dBm)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1931.60000	-11.0	150.0	H	217.0	-104.1	-2.0	-13.0
3881.40000	-43.2	150.0	H	0.0	-97.3	30.2	-13.0
5235.75000	-42.7	150.0	H	0.0	-94.3	29.7	-13.0
5506.05000	-42.8	150.0	H	0.0	-93.4	29.8	-13.0
5570.25000	-43.1	150.0	H	0.0	-93.3	30.1	-13.0
5610.00000	-43.5	150.0	H	0.0	-93.2	30.5	-13.0

1-6GHz (Vertical)

1GHz-6GHz HPF3.0

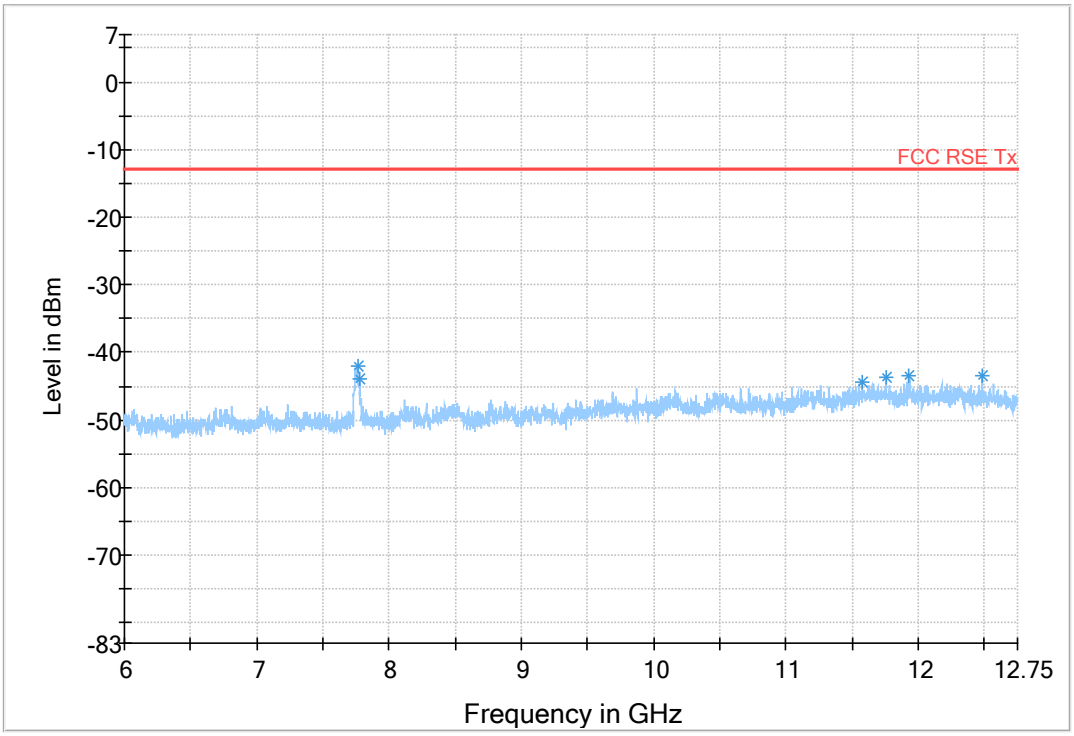


Data Reduction Result 1 [2]

Frequency (MHz)	MaxPeak-MaxHold (dBm)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1946.40000	-10.8	150.0	V	16.0	-104.3	-2.2	-13.0
5503.80000	-44.0	150.0	V	0.0	-93.3	31.0	-13.0
5757.45000	-44.0	150.0	V	0.0	-92.9	31.0	-13.0
5824.65000	-40.8	150.0	V	0.0	-92.8	27.8	-13.0
5977.50000	-43.6	150.0	V	0.0	-92.3	30.6	-13.0
5981.25000	-43.8	150.0	V	0.0	-92.3	30.8	-13.0

6-12.75GHz(Horizontal)

6GHz-18GHz HPF6.0

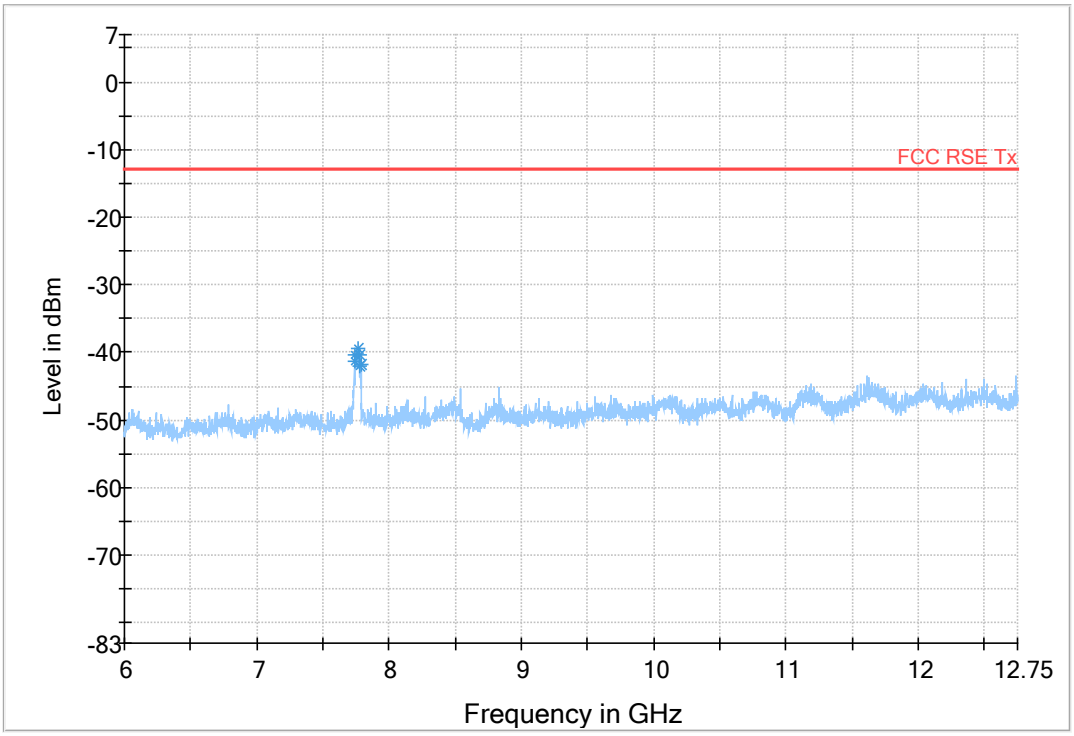


Data Reduction Result 1 [2]

Frequency (MHz)	MaxPeak-MaxHold (dBm)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
7763.775000	-42.0	150.0	H	217.0	-88.6	29.0	-13.0
7774.575000	-43.8	150.0	H	322.0	-88.6	30.8	-13.0
11576.40000	-44.3	150.0	H	0.0	-82.8	31.3	-13.0
11756.85000	-43.8	150.0	H	245.0	-82.7	30.8	-13.0
11924.02500	-43.4	150.0	H	104.0	-82.8	30.4	-13.0
12487.20000	-43.3	150.0	H	358.0	-82.4	30.3	-13.0

6-12.75GHz(Vertical)

6GHz-18GHz HPF6.0



Data Reduction Result 1 [2]

Frequency (MHz)	MaxPeak-MaxHold (dBm)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
7736.77500	-41.3	150.0	V	358.0	-88.0	28.3	-13.0
7746.67500	-40.3	150.0	V	243.0	-88.0	27.3	-13.0
7770.75000	-39.5	150.0	V	243.0	-87.9	26.5	-13.0
7778.85000	-40.3	150.0	V	0.0	-87.9	27.3	-13.0
7781.77500	-41.9	150.0	V	0.0	-87.9	28.9	-13.0
7786.27500	-41.9	150.0	V	0.0	-87.9	28.9	-13.0

8. SPURIOUS AND EMISSIONS AT ANTENNA TERMINALS

8.1. Applicable Standard :

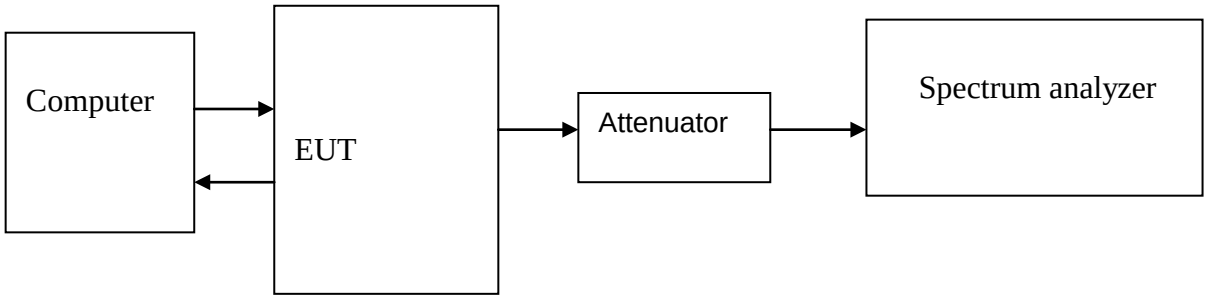
FCC§2.1051, §24.238
The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified.

8.2. Test Equipment List and Details :

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Signal & Spectrum Analyzer	FSW26	SB12724/01	2018.06.06	2019.06.05
DTS	DTS 40dB Attenuator	DTS100-40-3-1	09112005	2018.07.19	2019.07.19
Radiall	RF Cable	1807188	---	---	---

*__statement of traceability:__ SMQ attests that all calibration has been performed per the A2LA requirements, traceable to NIM.

8.3. Test Procedure:



REMARKS: Attenuator loss (dB)=40dB, Cable Loss (dB)=1.5dB.

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed. Sufficient scans were taken to show any out of band emissions up to 10th harmonic.

8.4. Environmental Conditions :

Temperature:	21 °C
Relative Humidity:	45 %
ATM Pressure:	1017 mbar

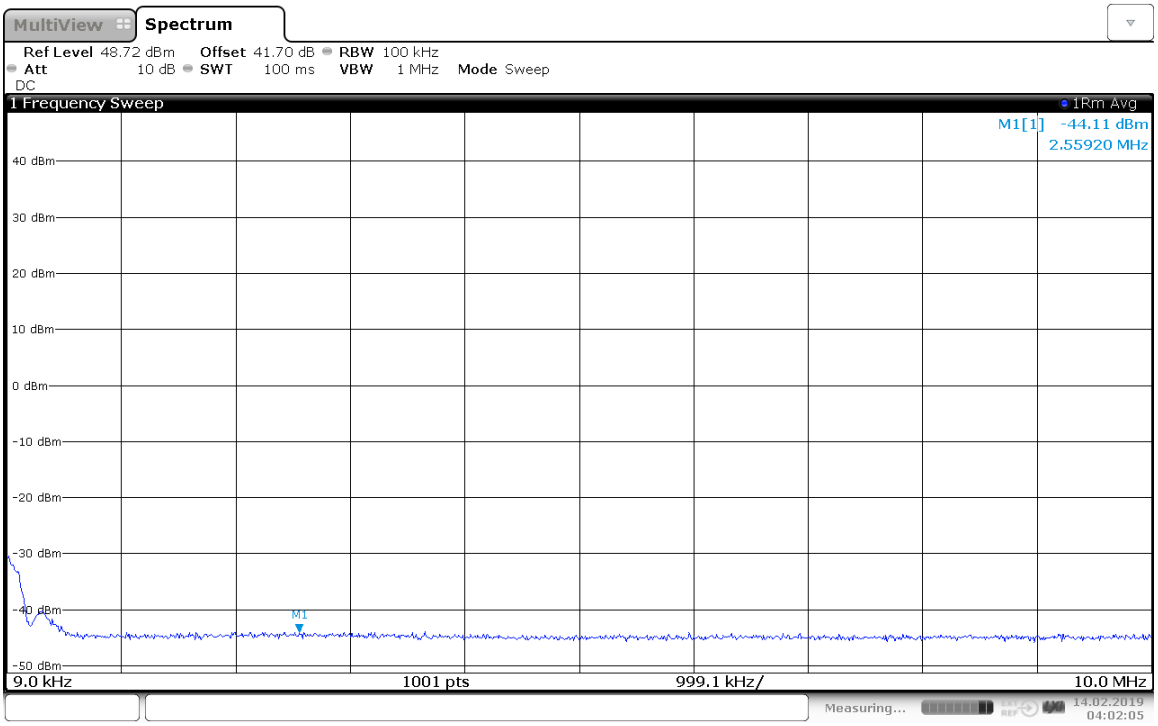
8.5. Test Result: Pass

8.6. Test Mode: Transmitting LTE

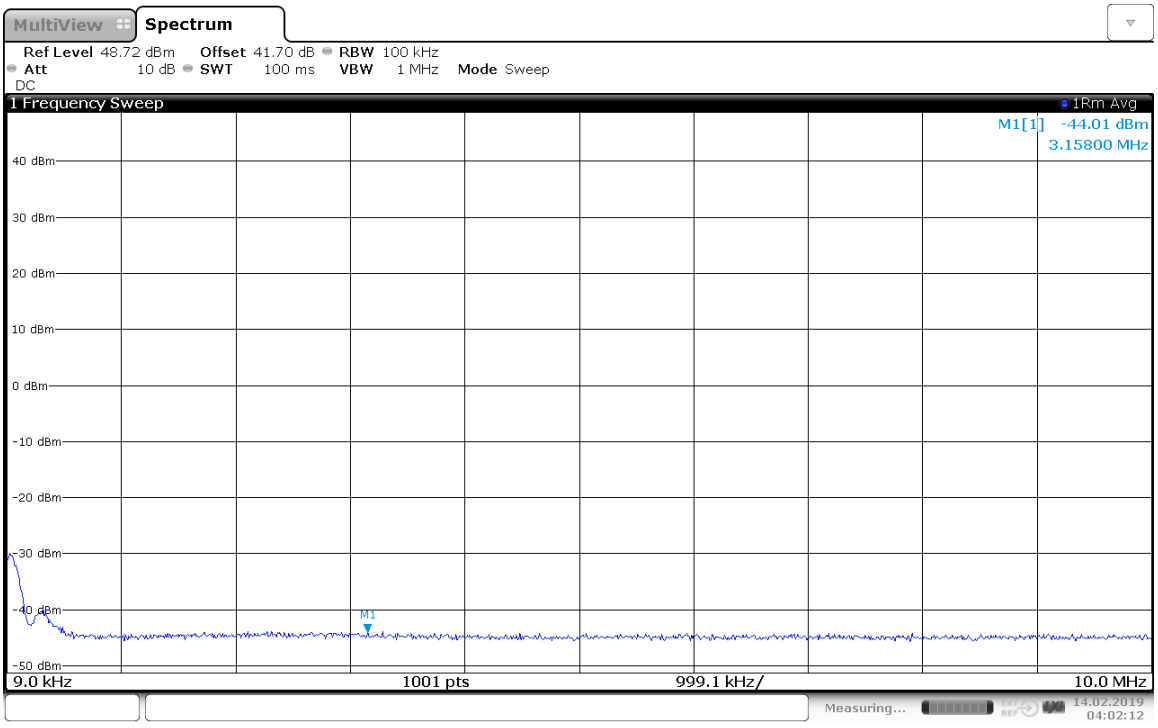
8.7. Test Data:

Dual Carrier:

5M+5M-1950MHz-Port1~4:



04:02:06 14.02.2019



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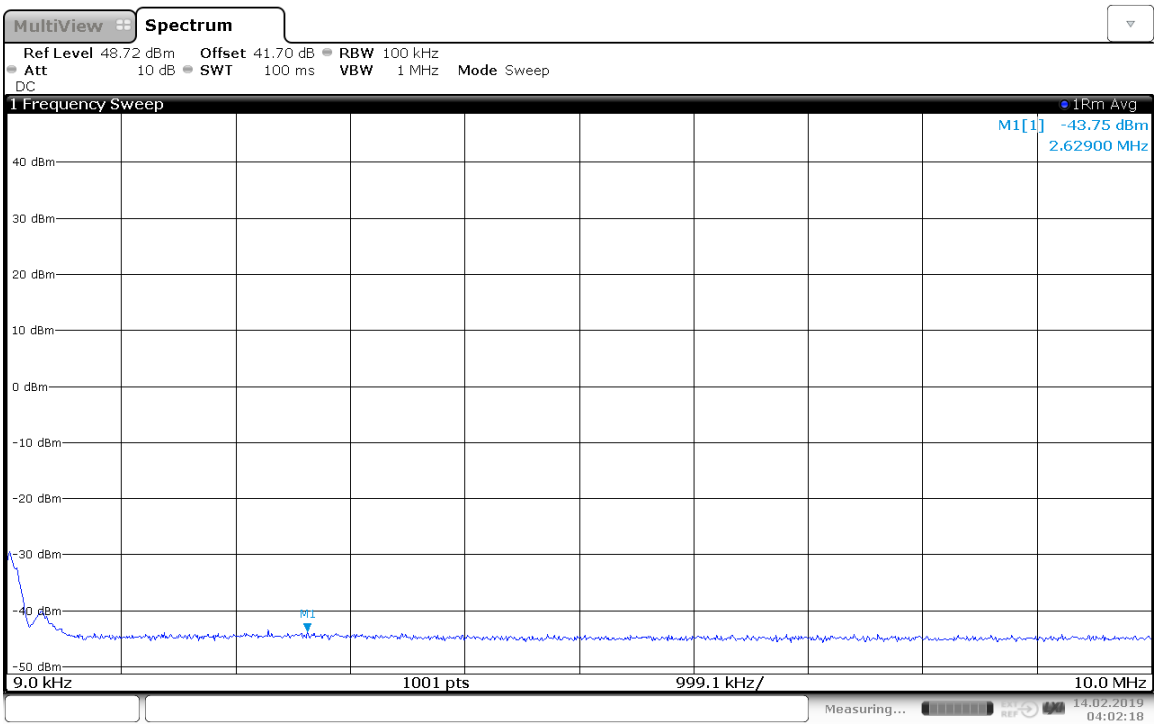
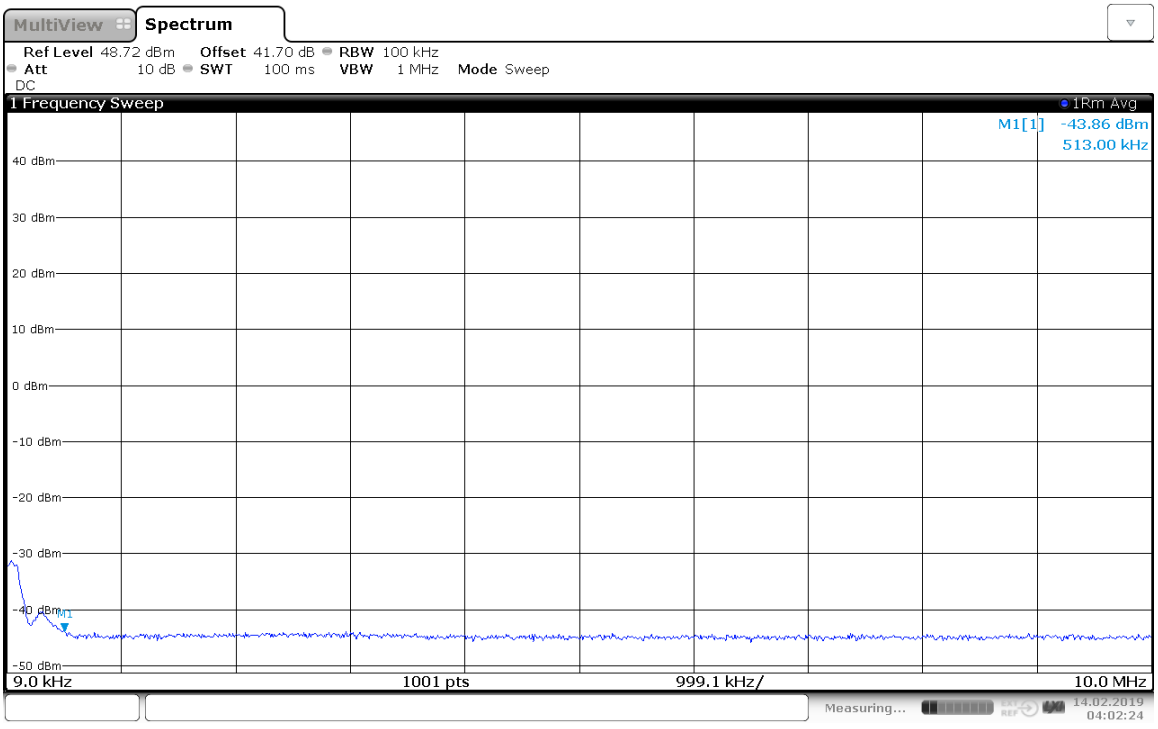
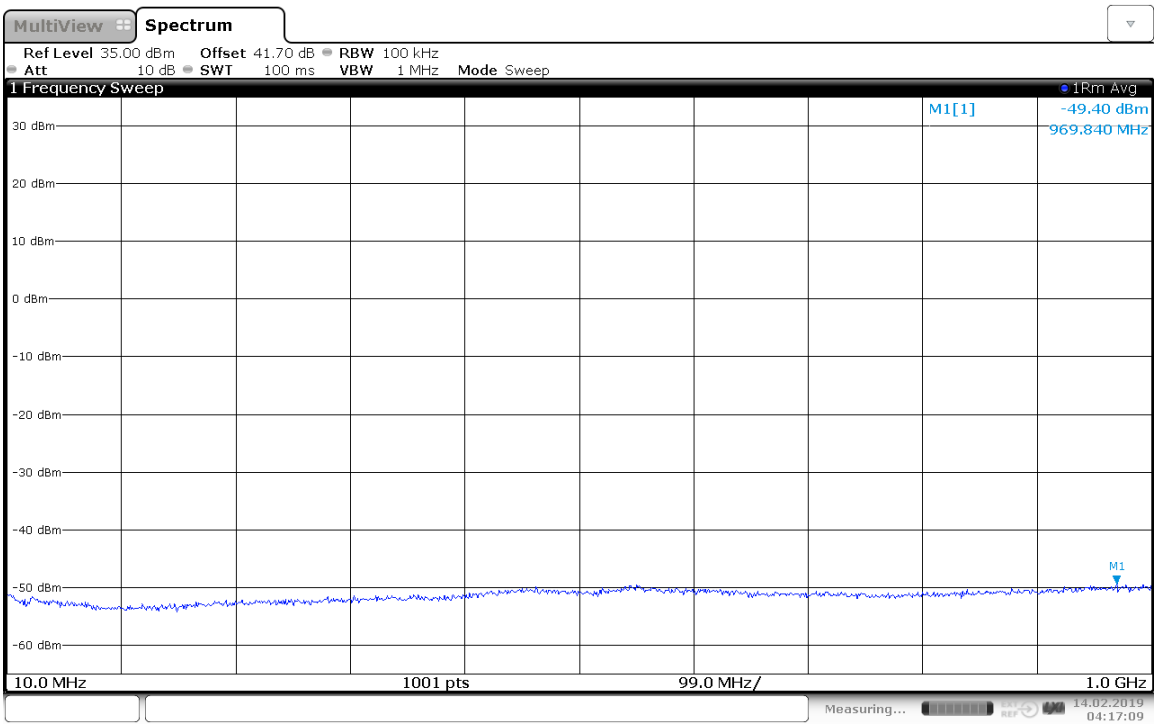


04:02:18 14.02.2019



04:02:24 14.02.2019



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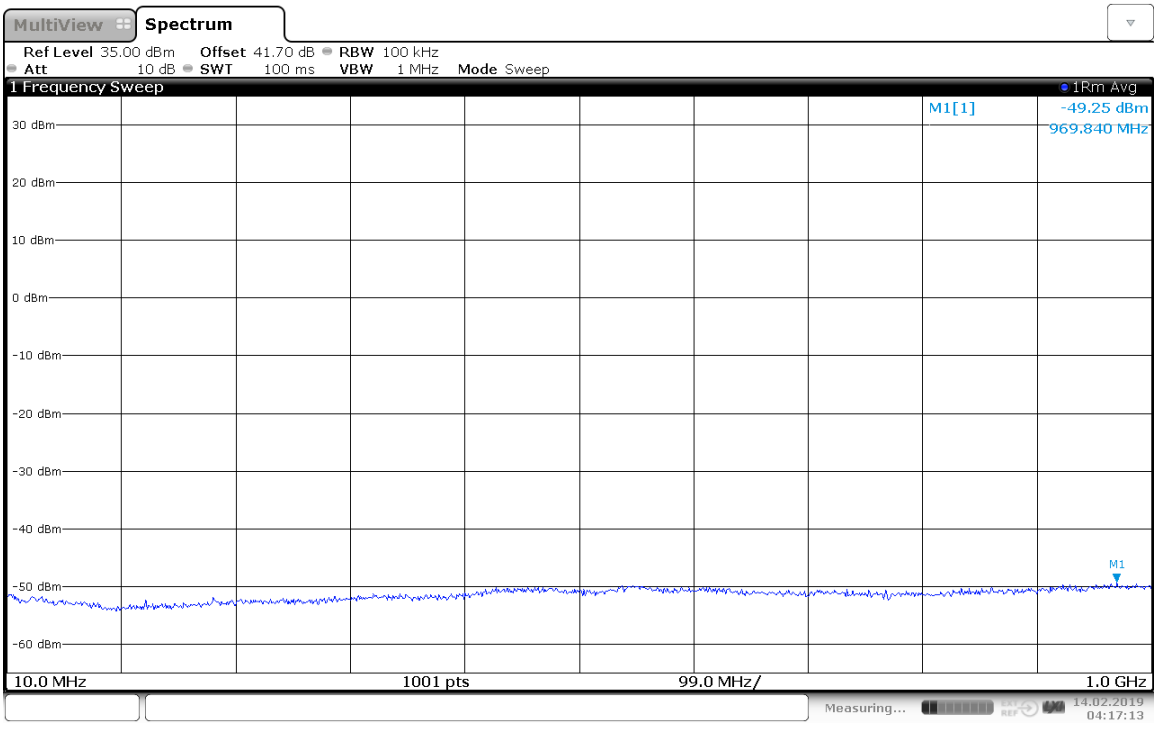

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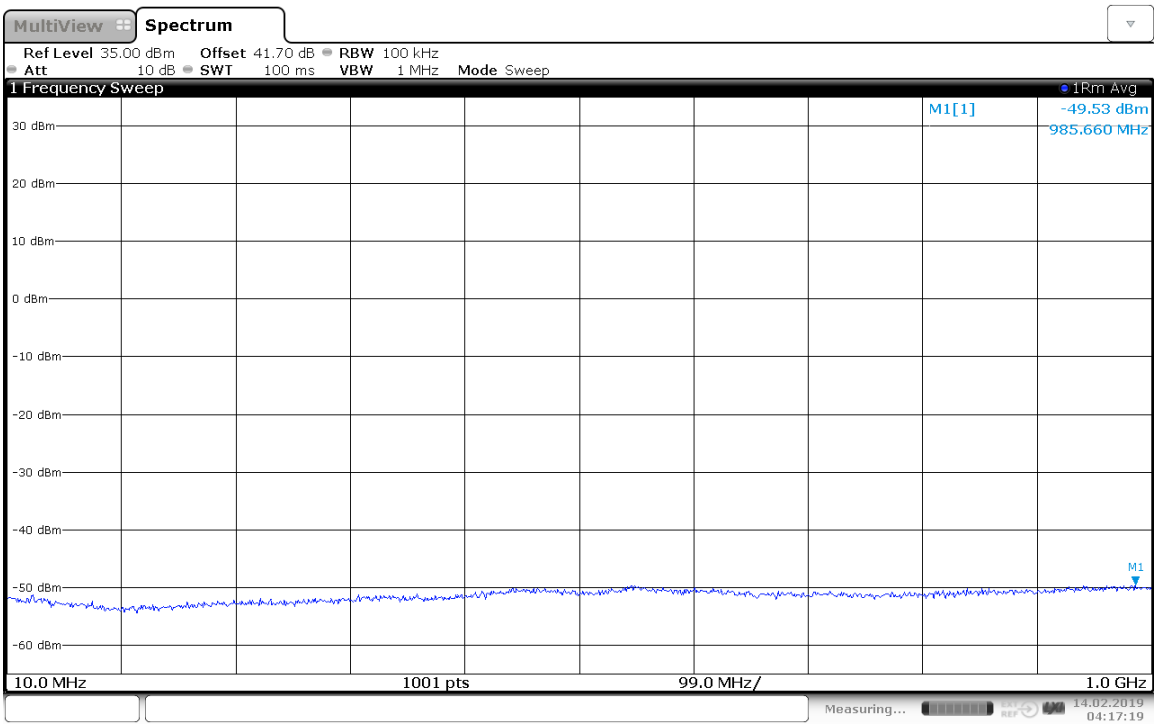

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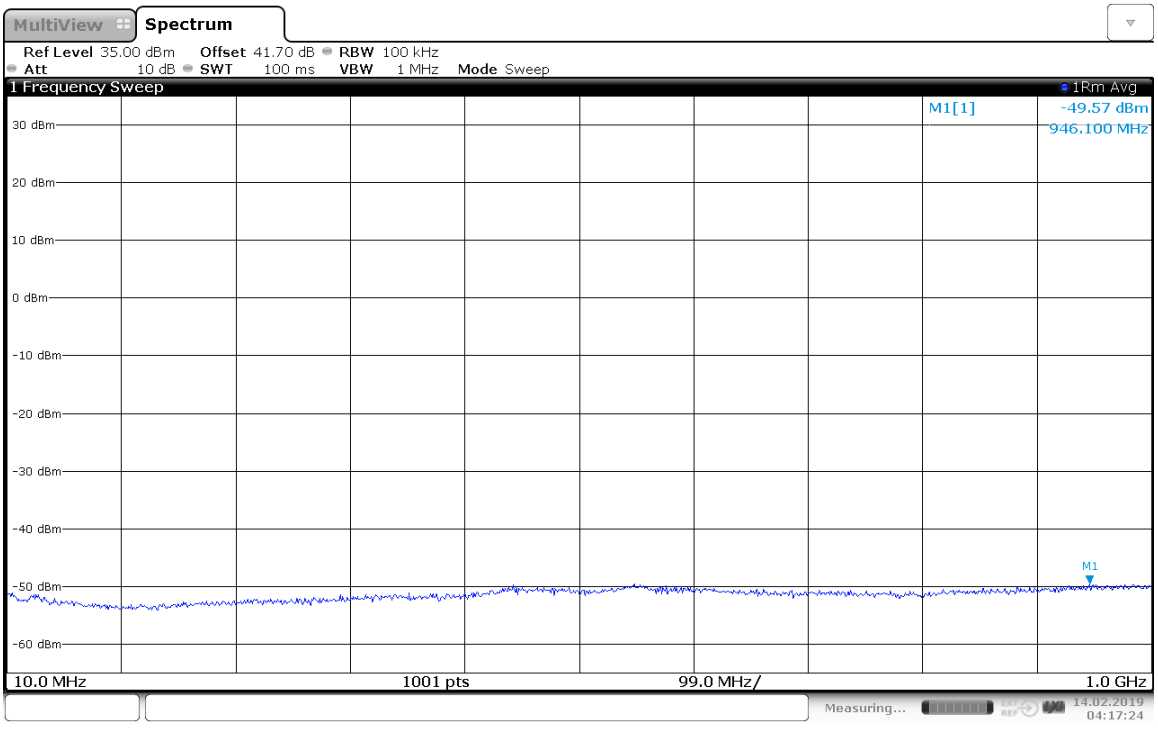

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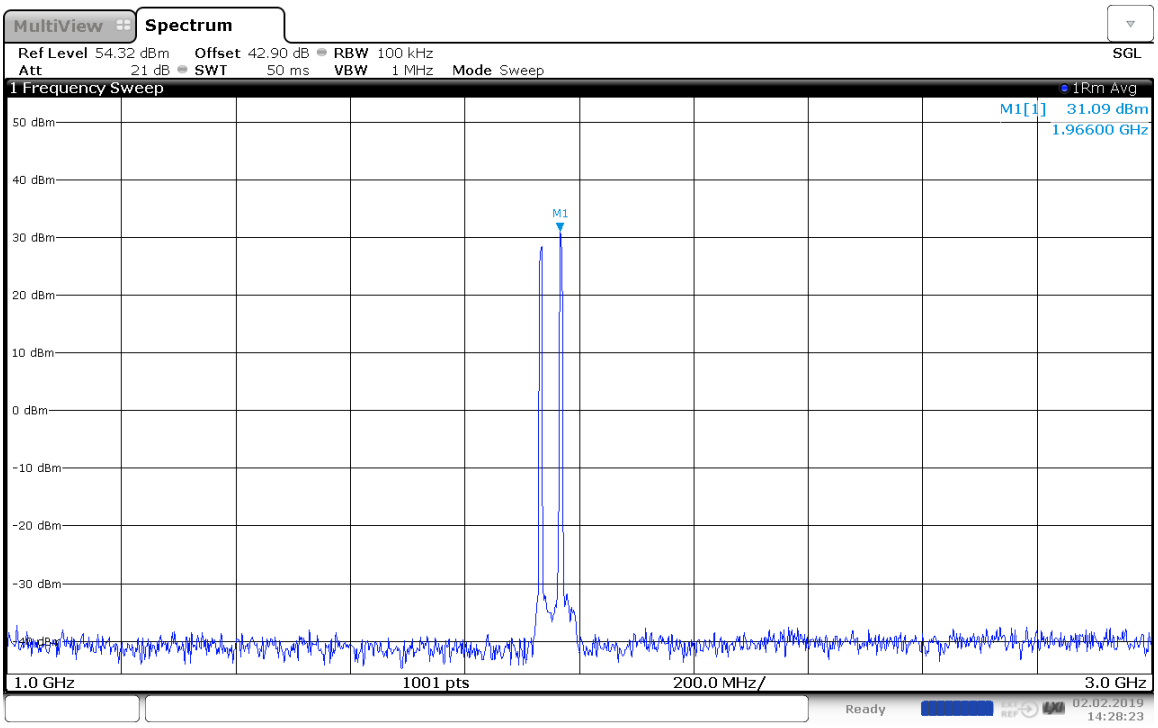

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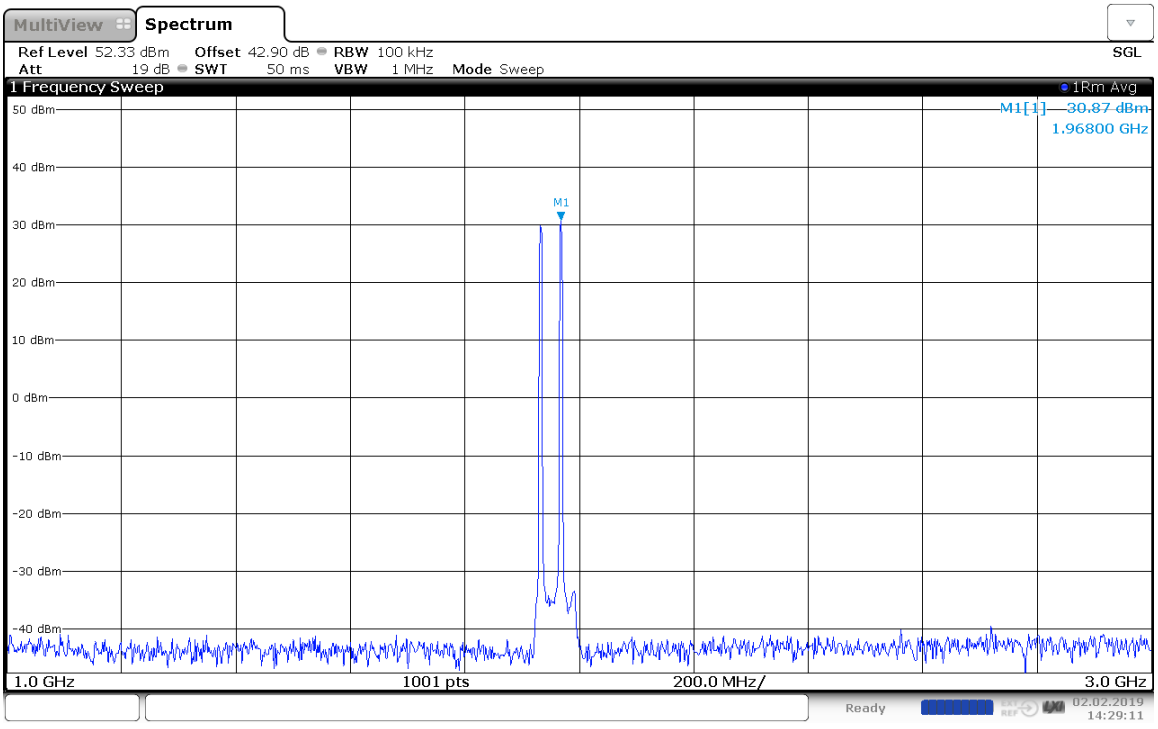

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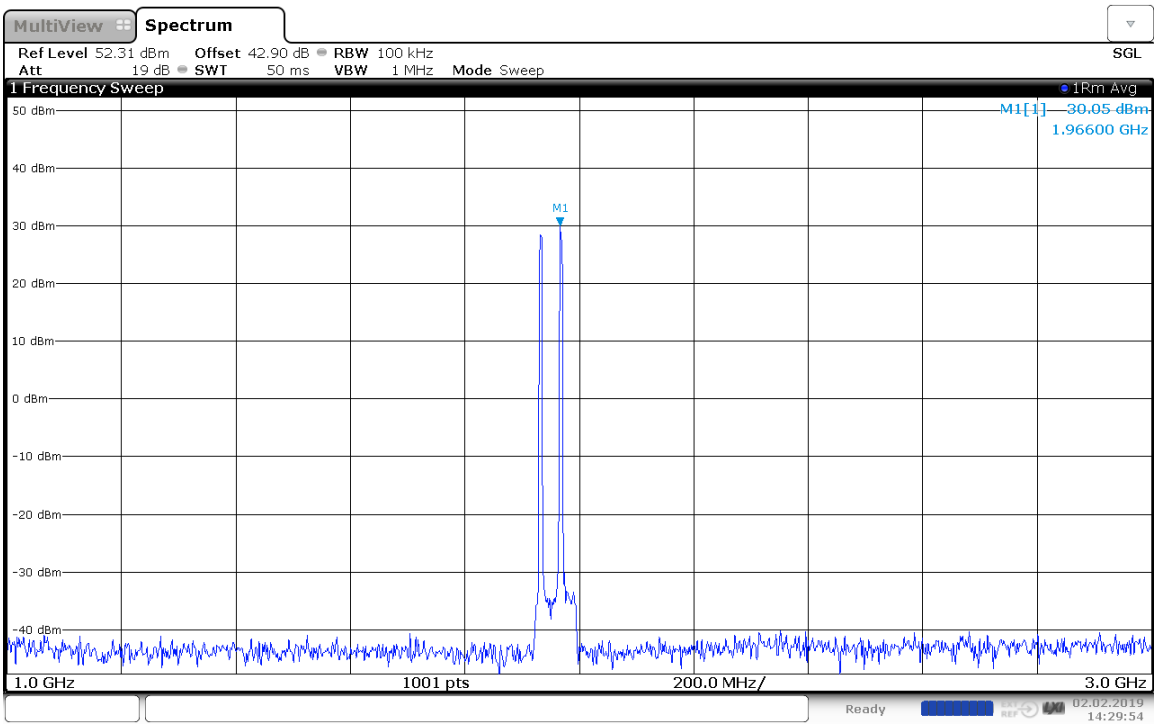

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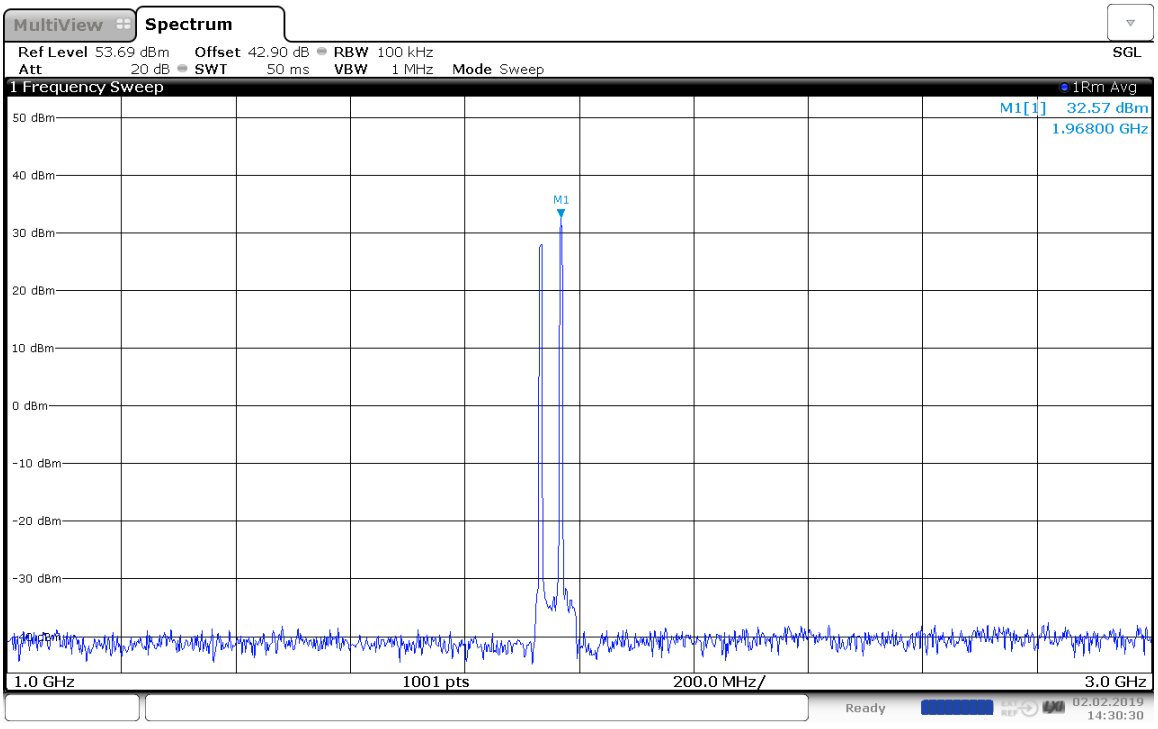

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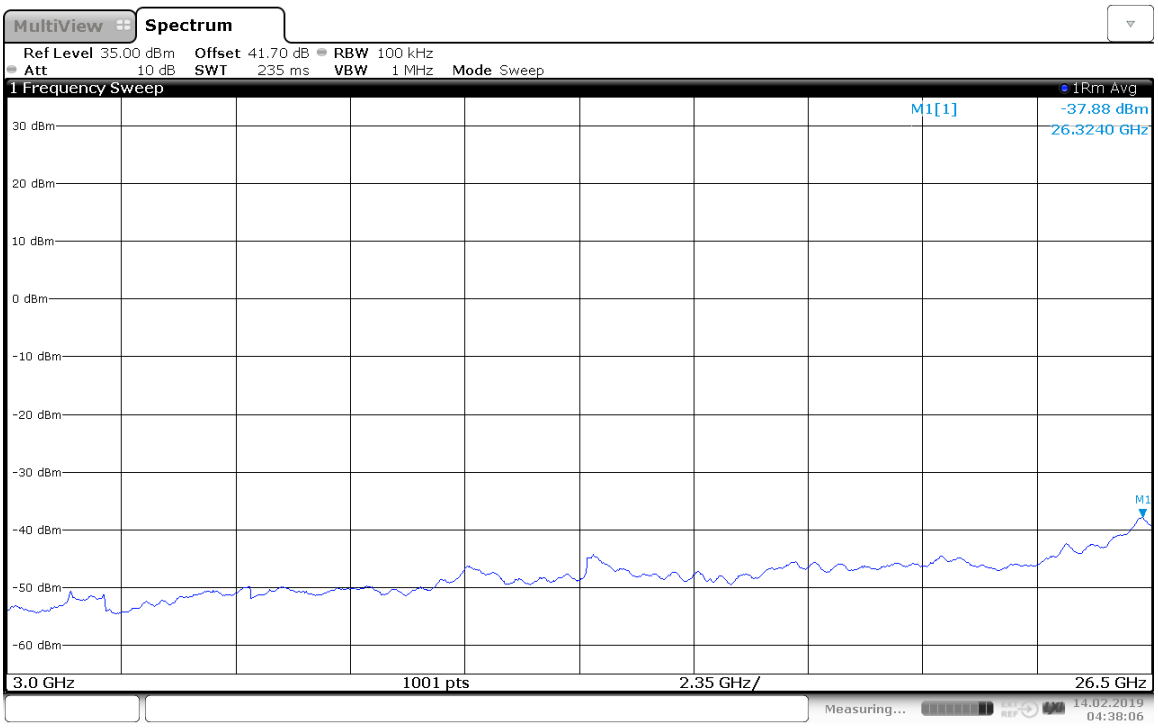

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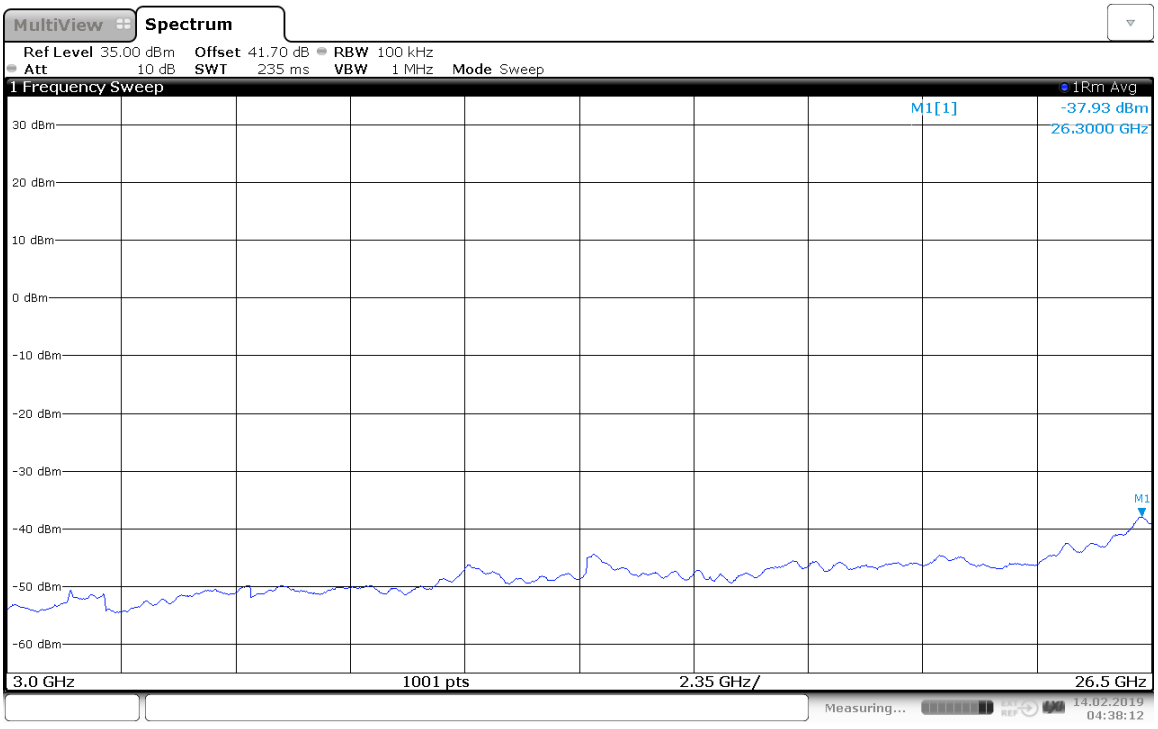

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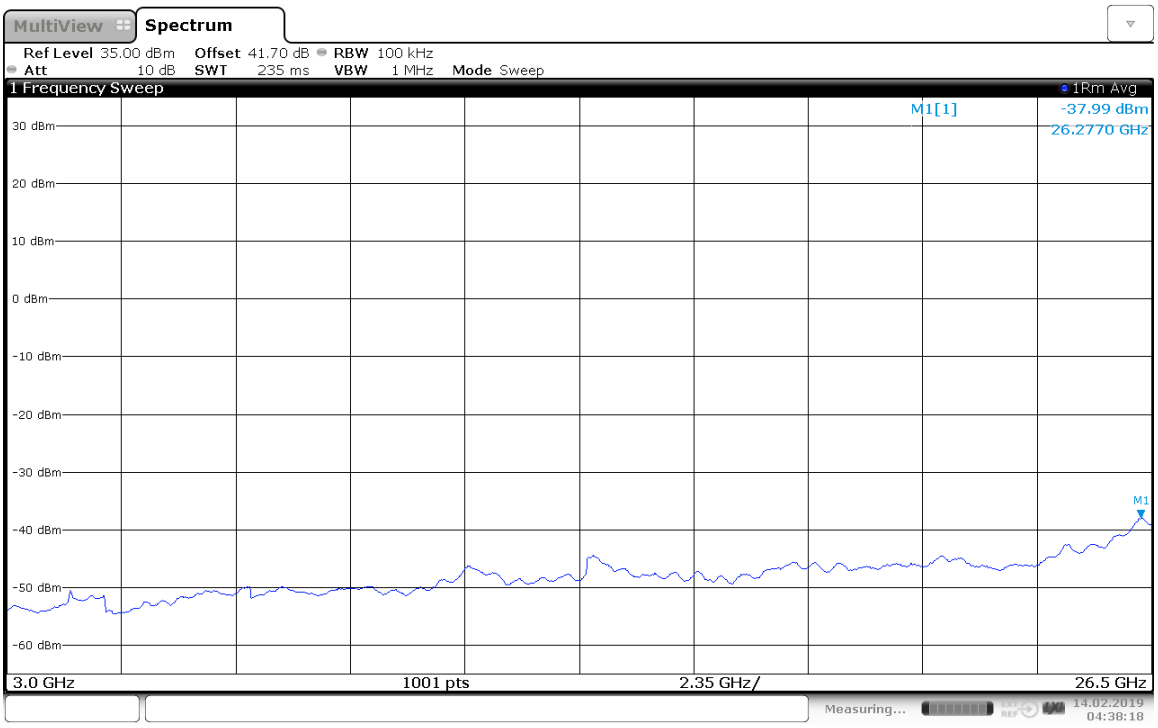

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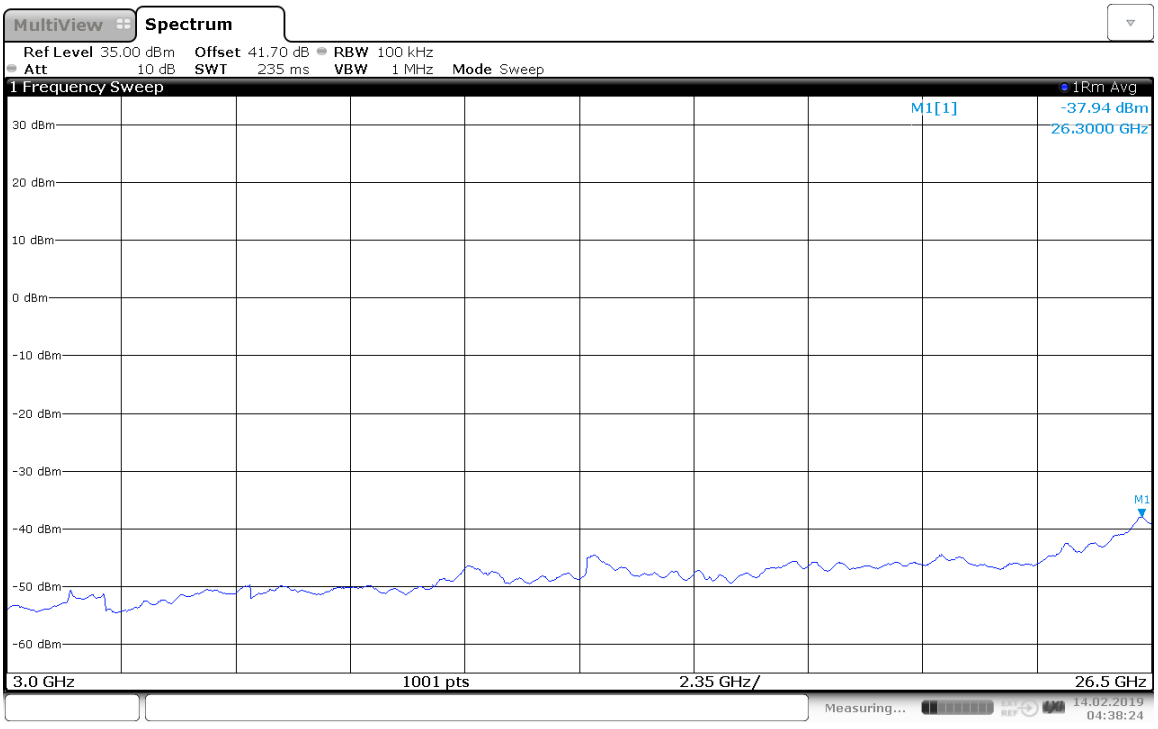

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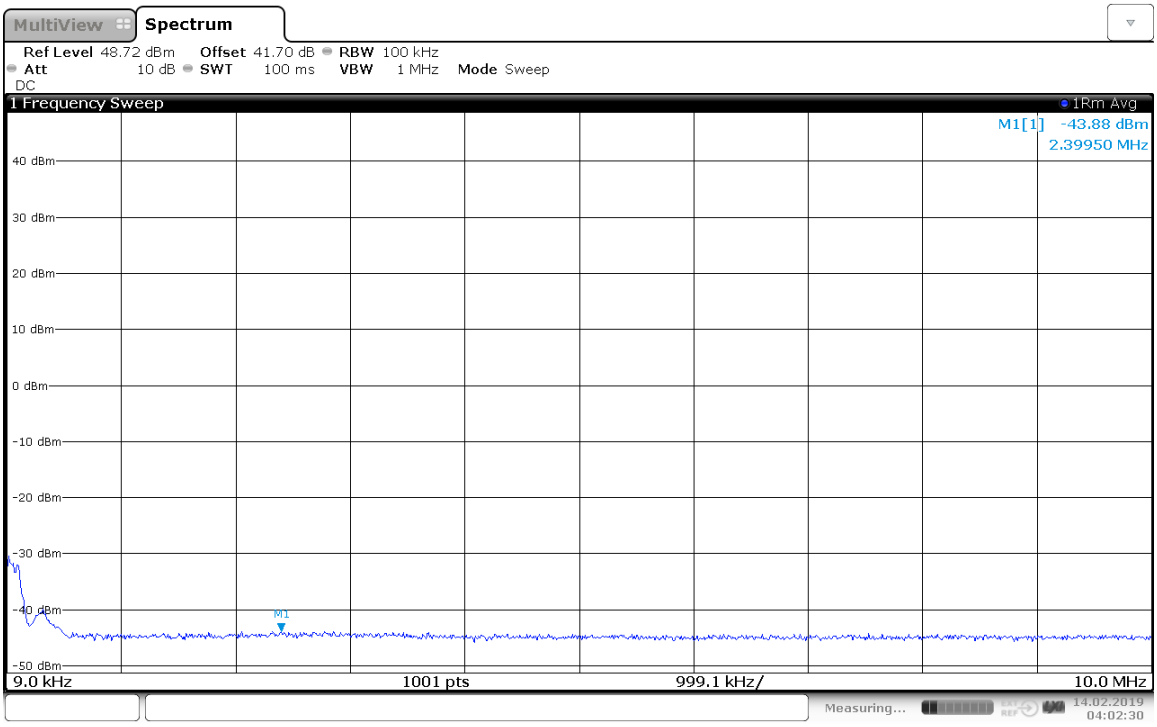
5M+5M-1960MHz-Port1~4:



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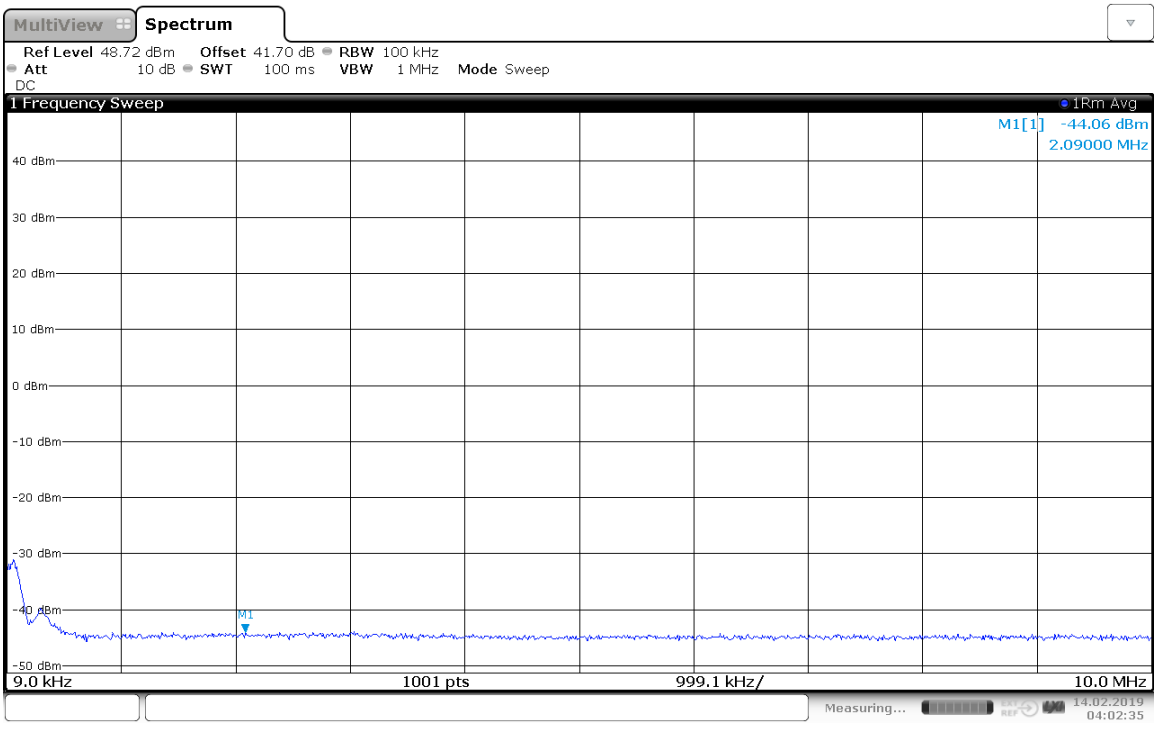

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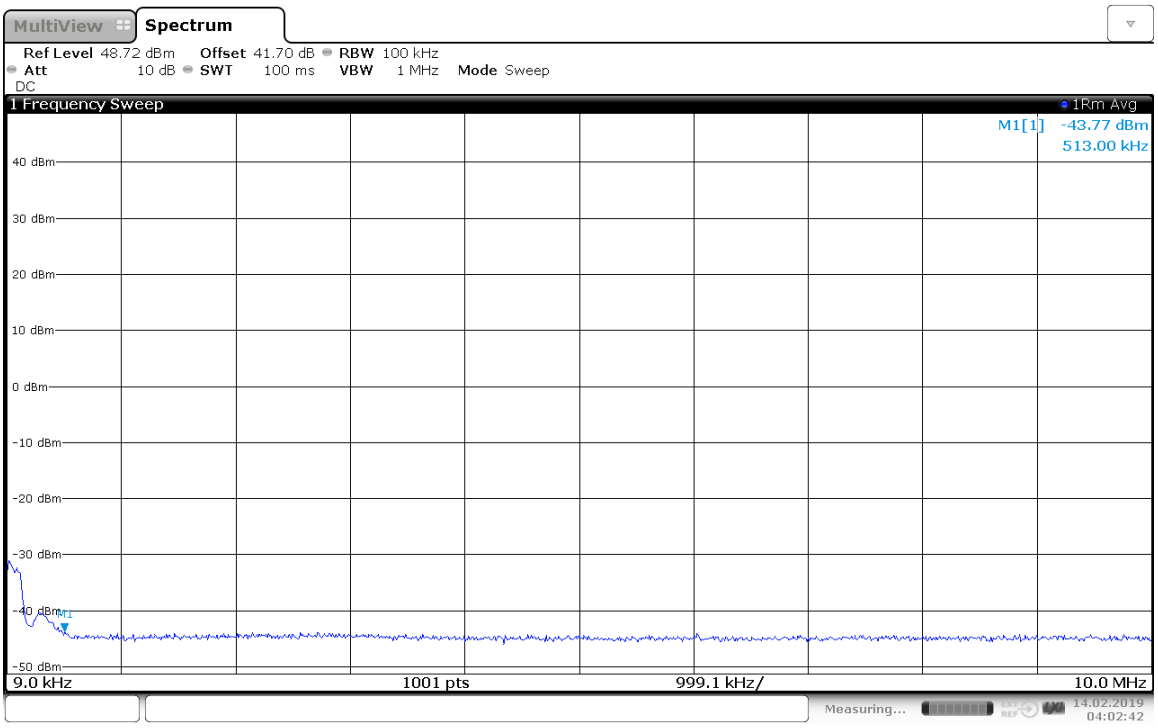

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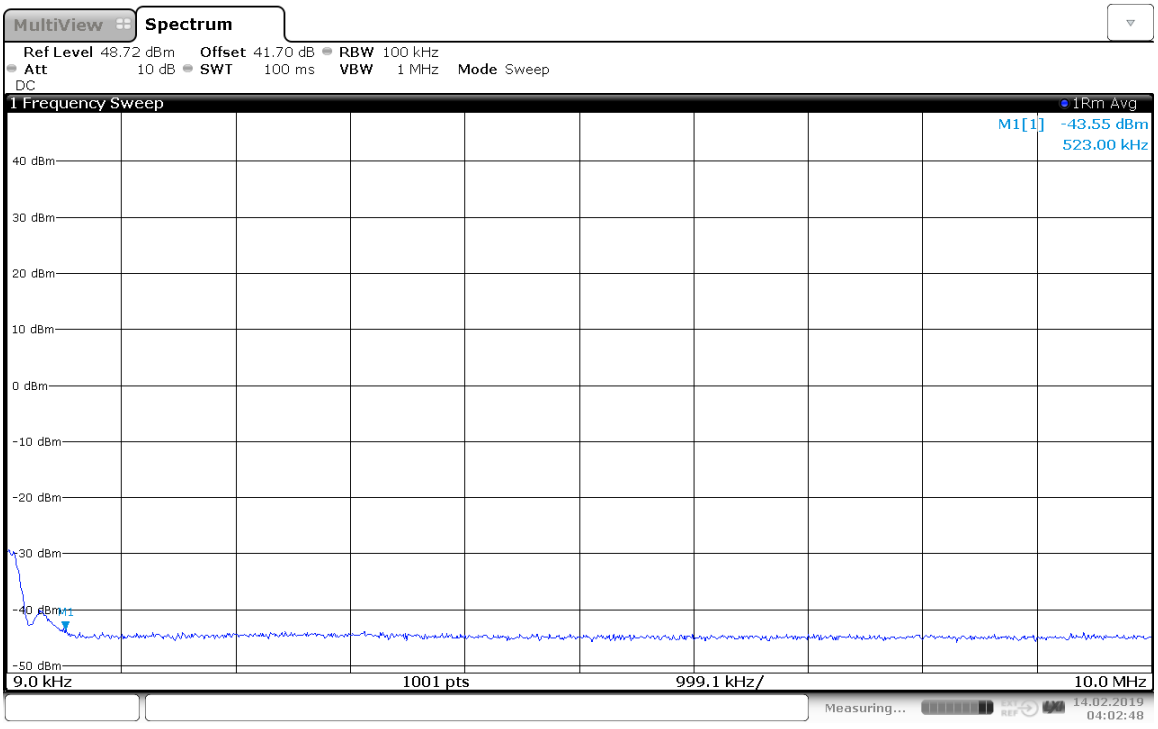

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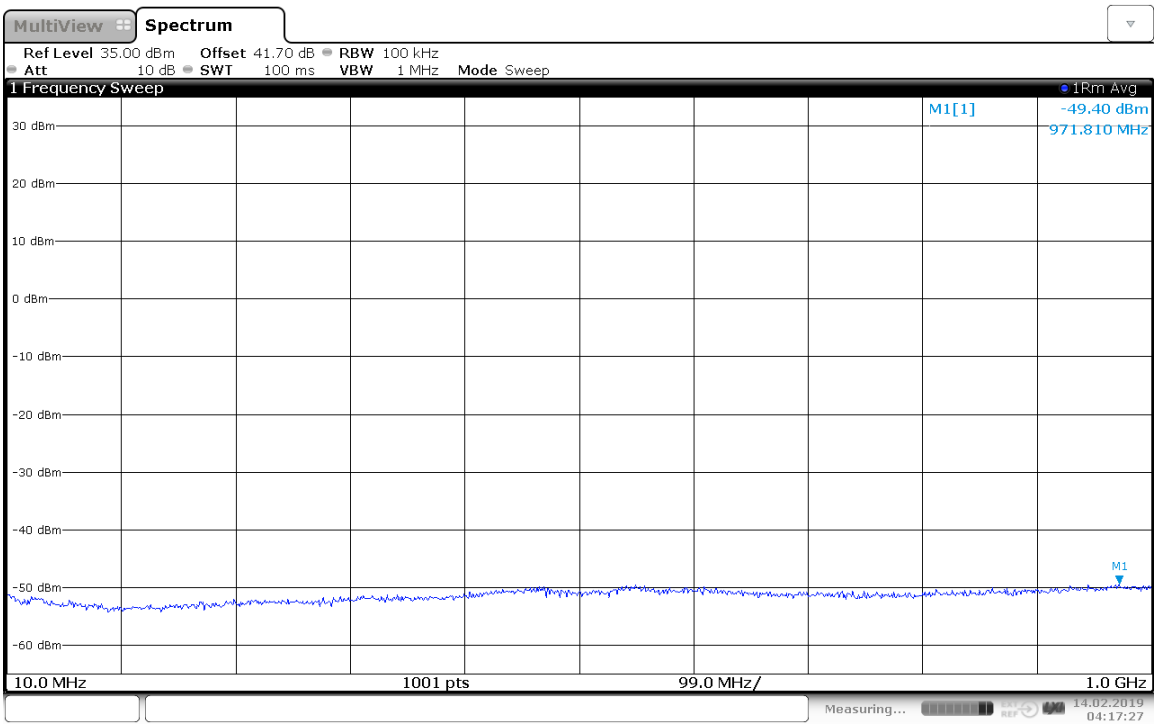

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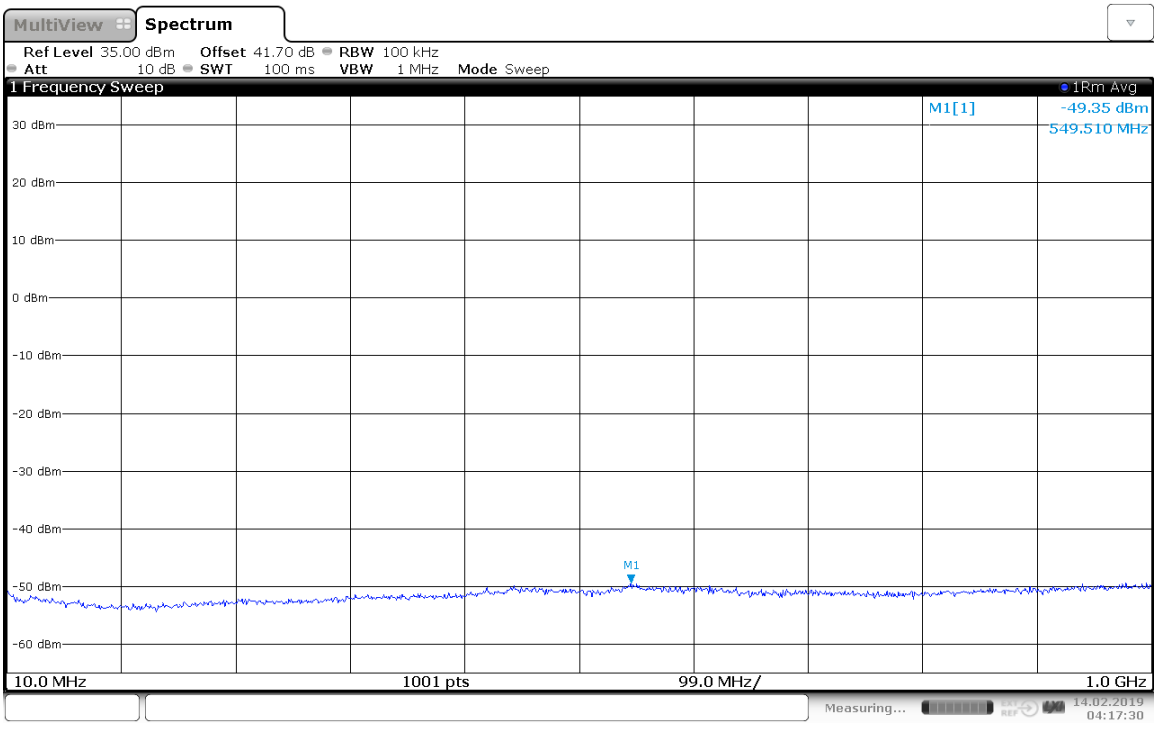

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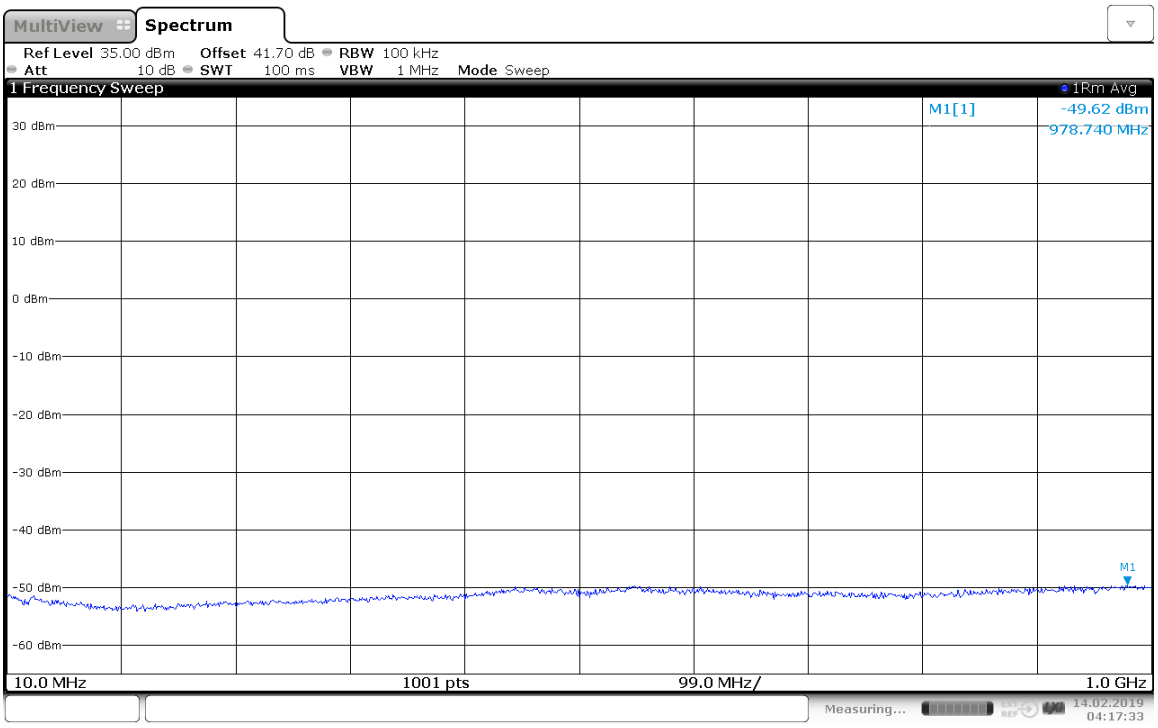

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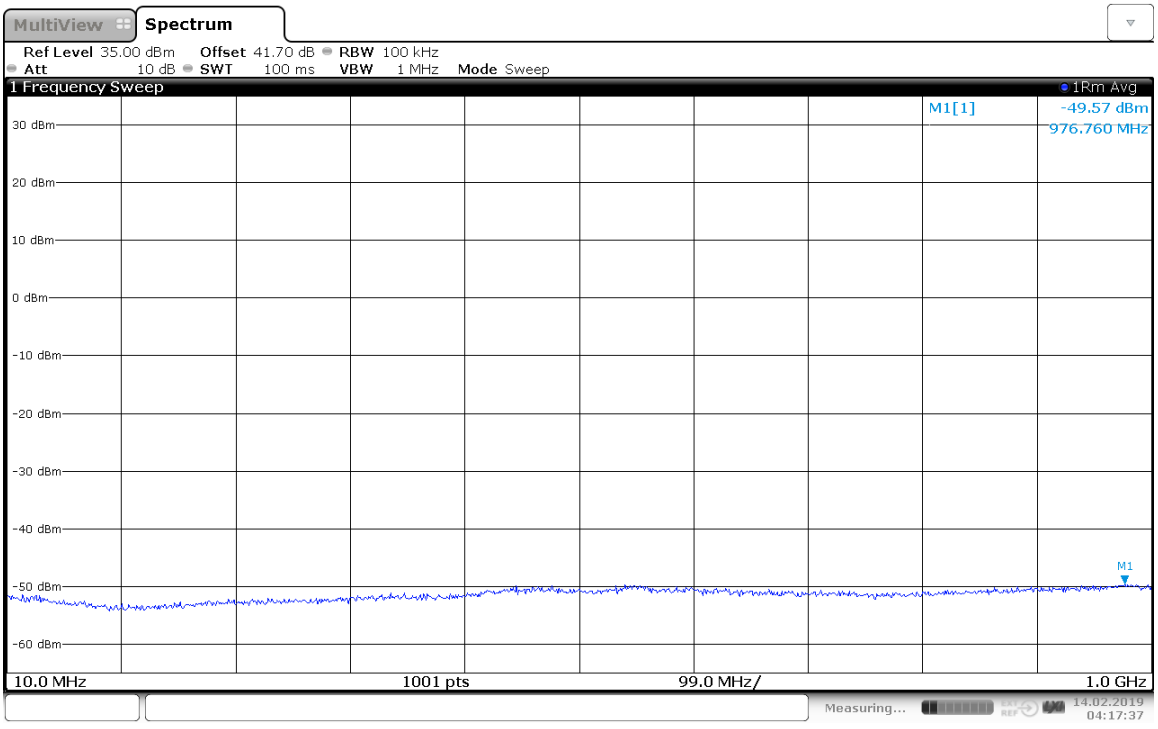

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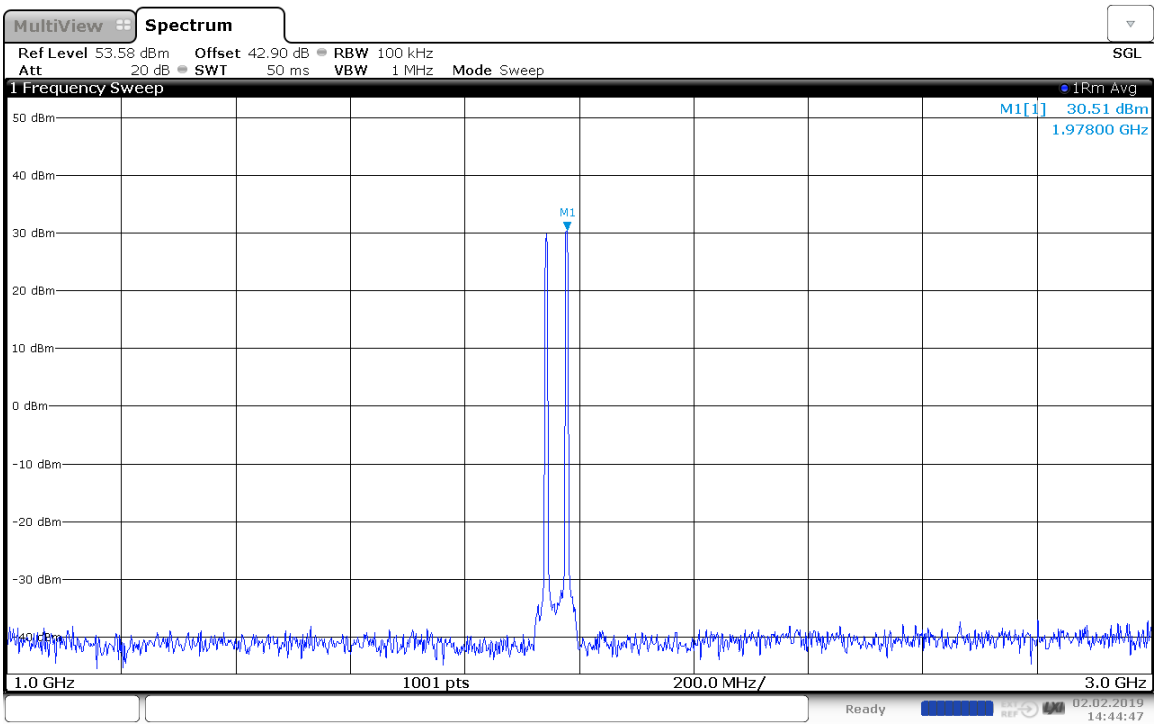

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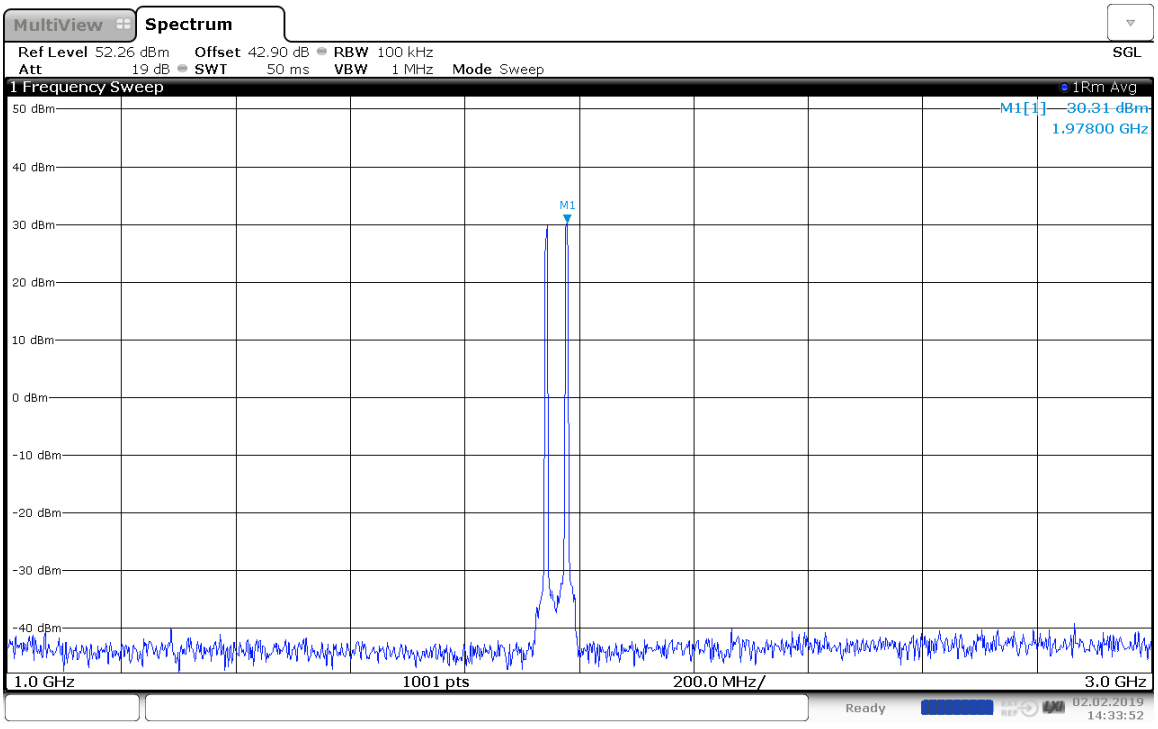

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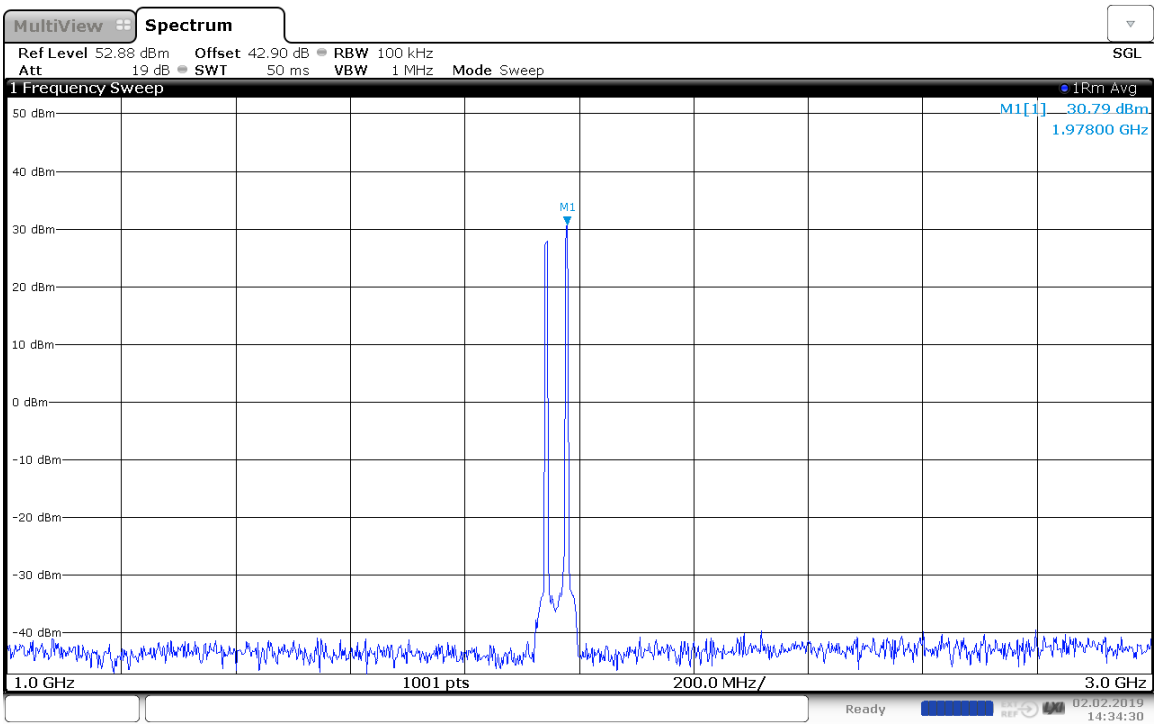

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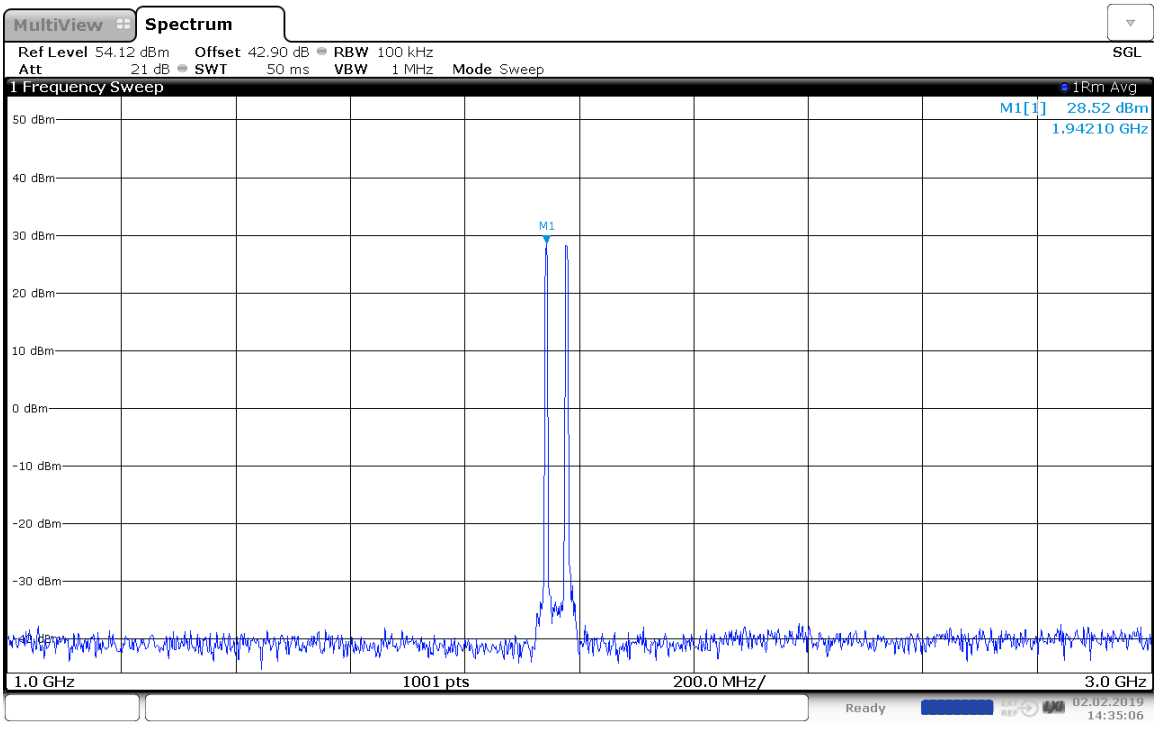

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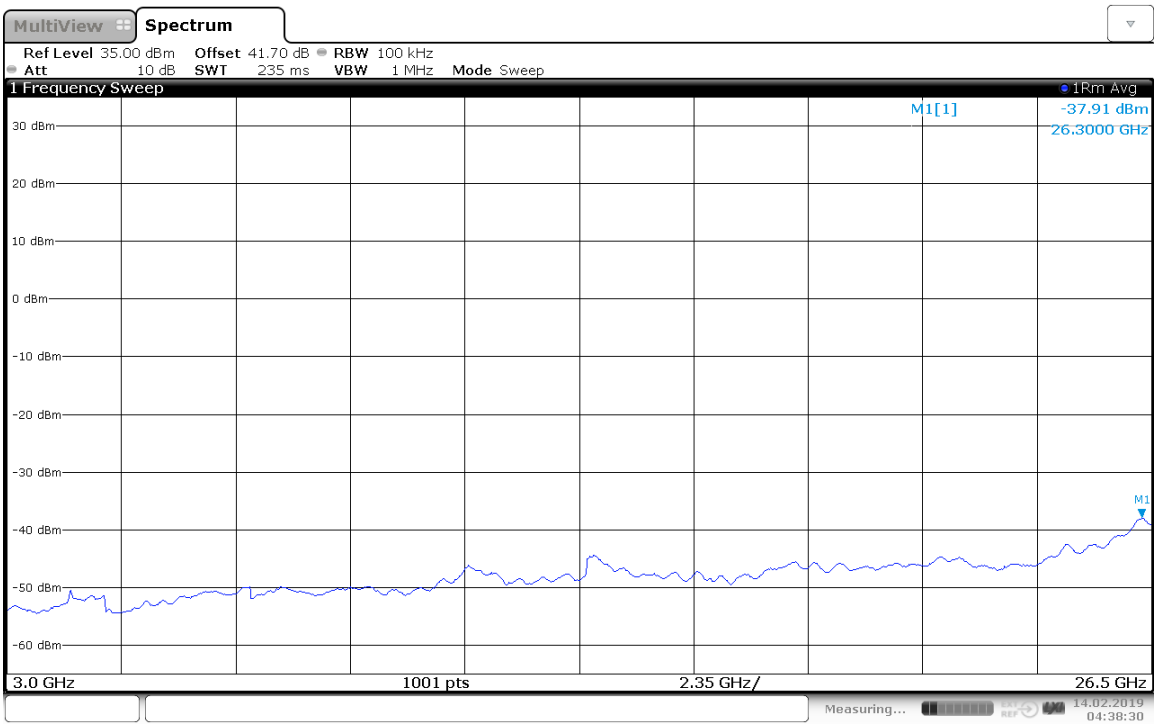

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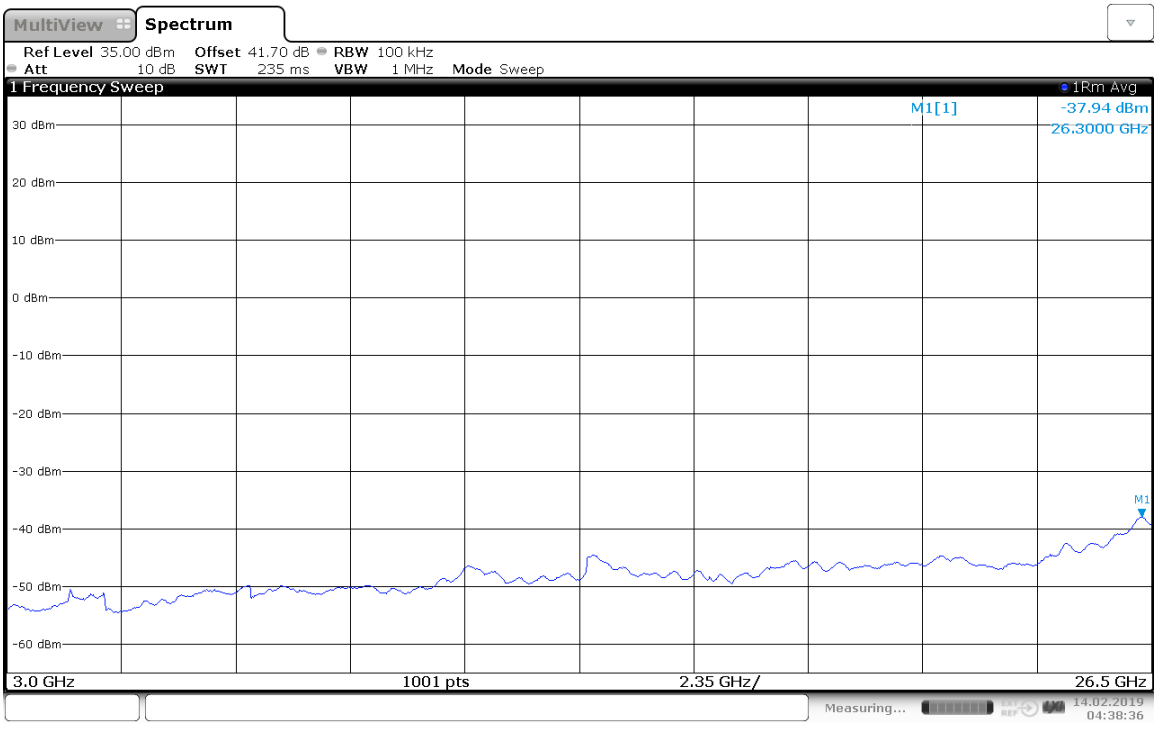

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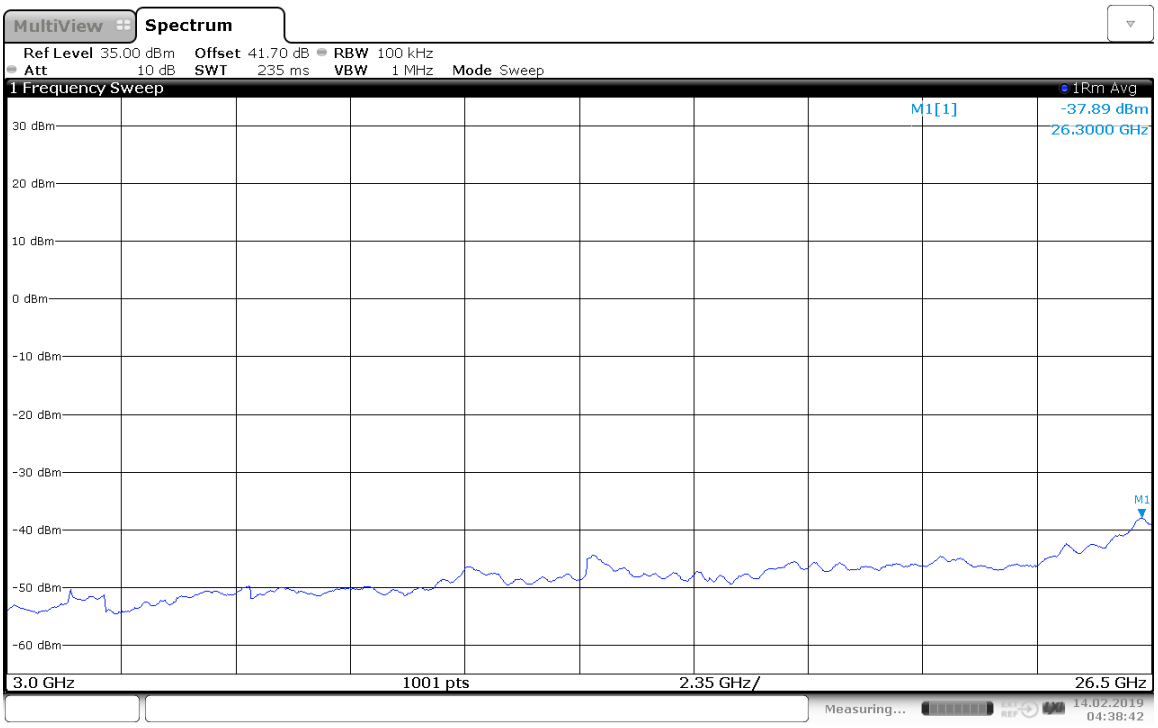

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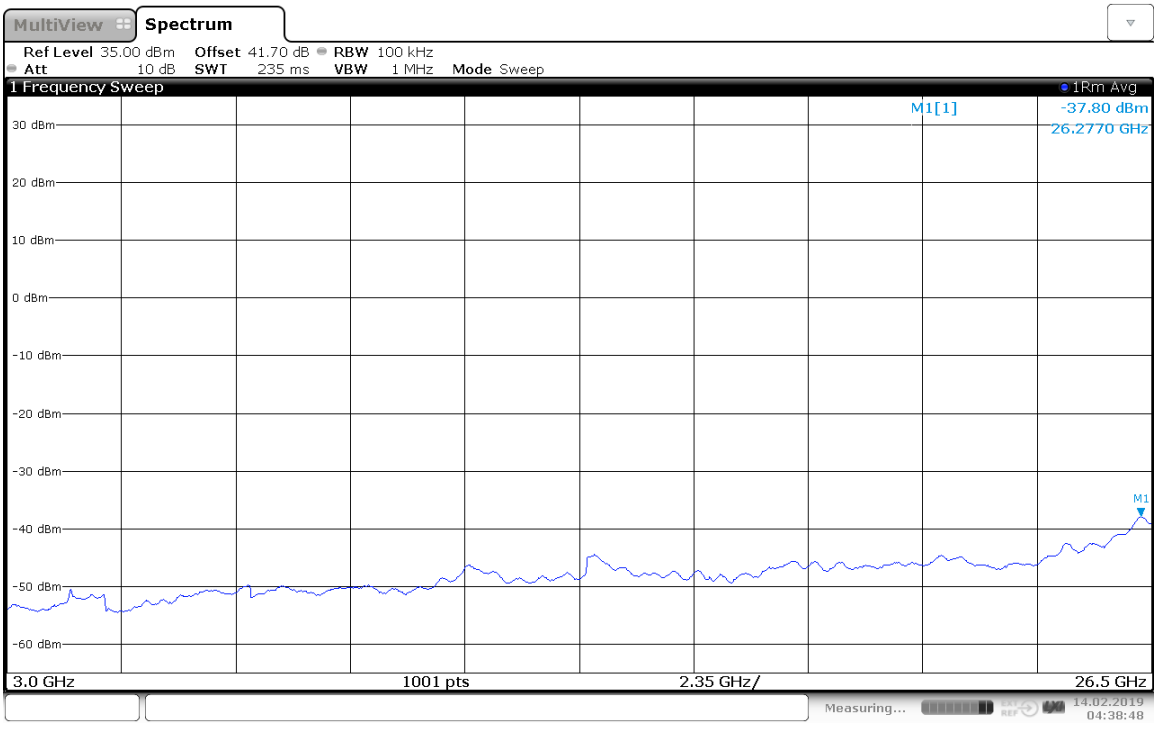

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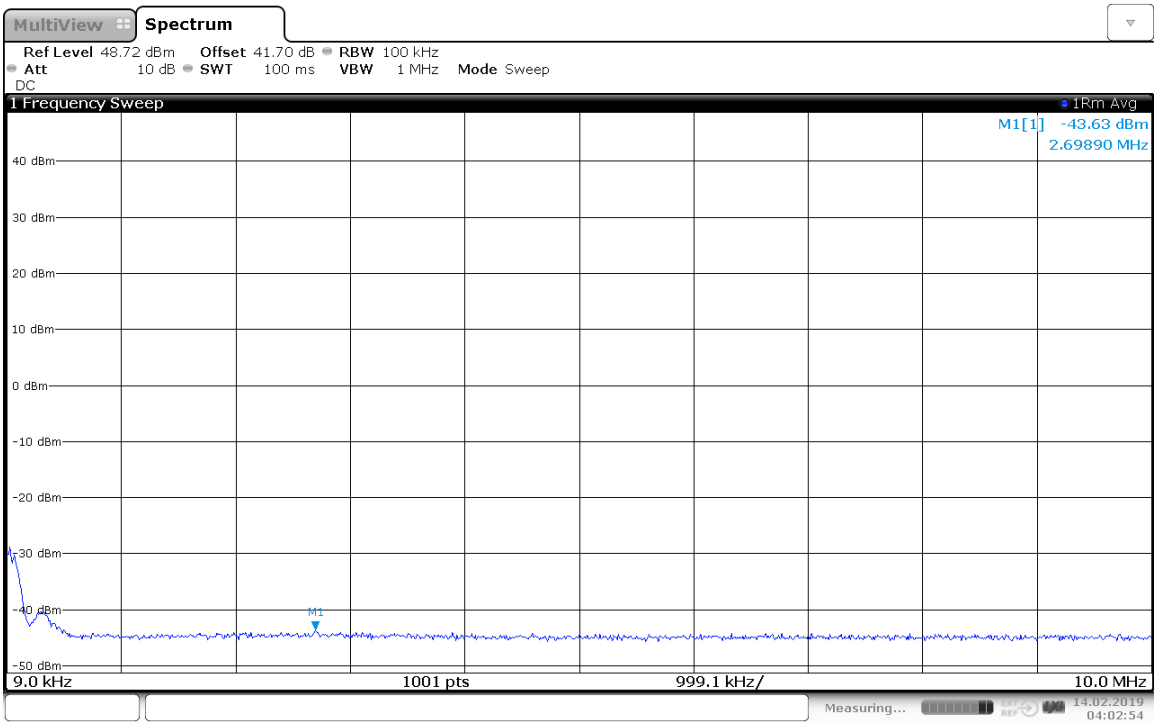
5M+5M-1970MHz-Port1~4:



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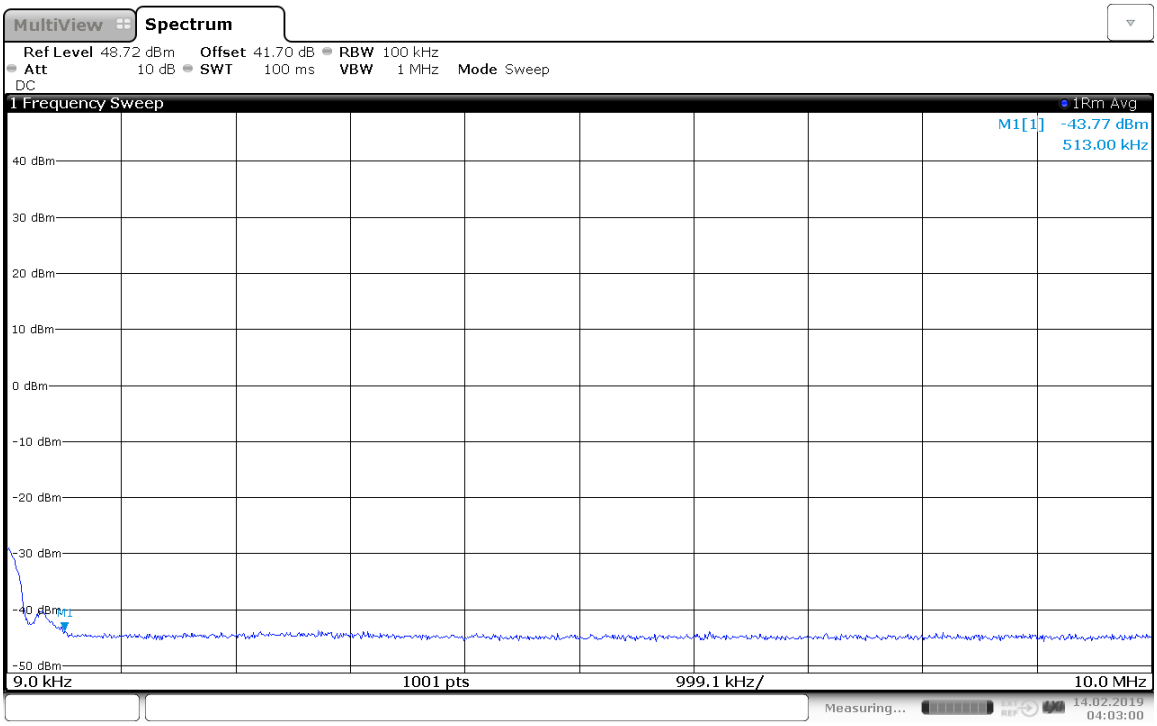
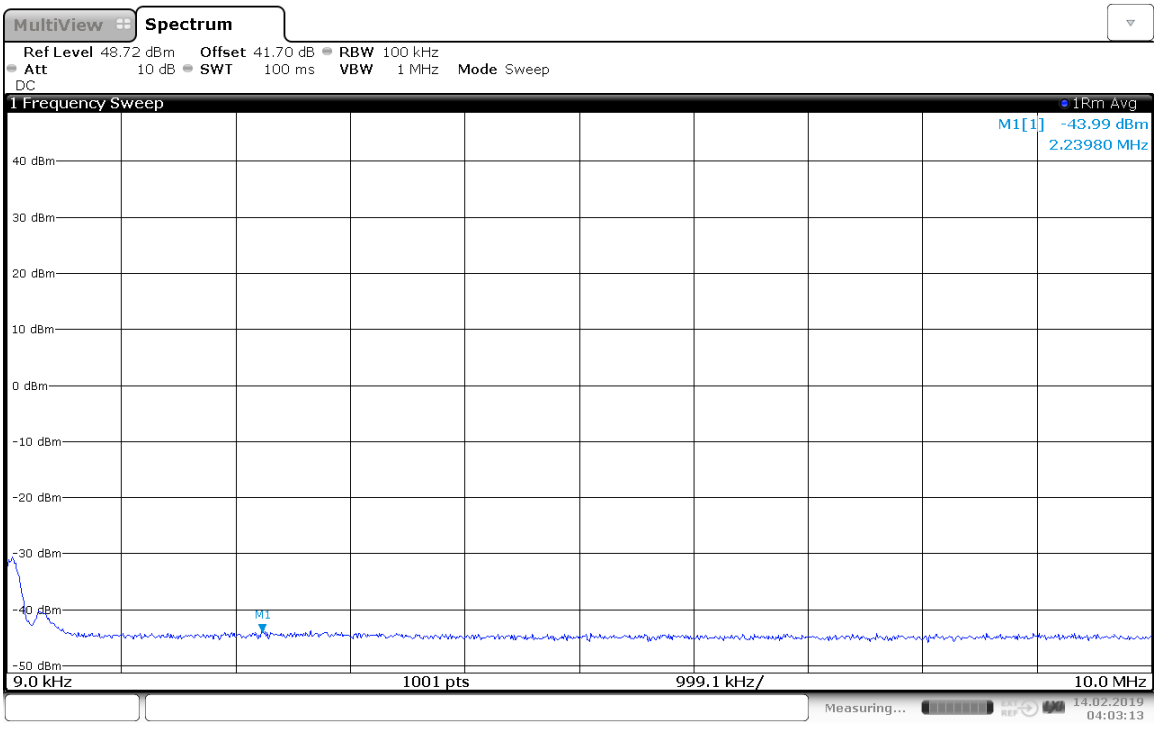


04:03:01 14.02.2019

04:03:07 14.02.2019



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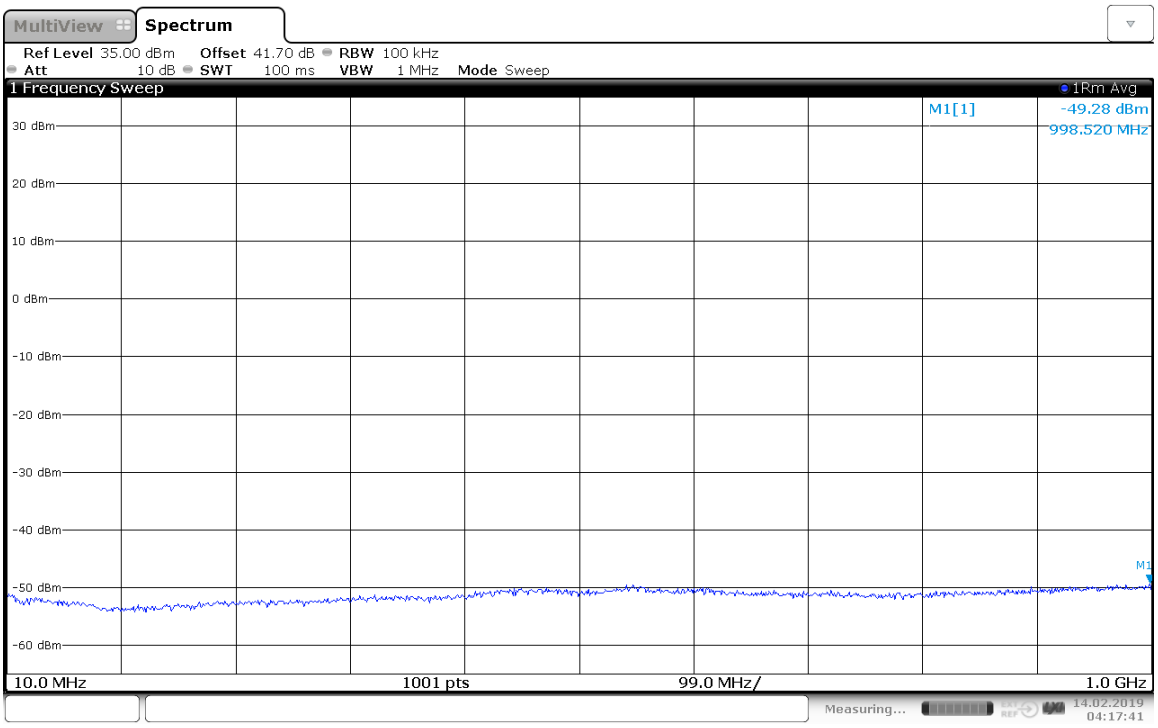

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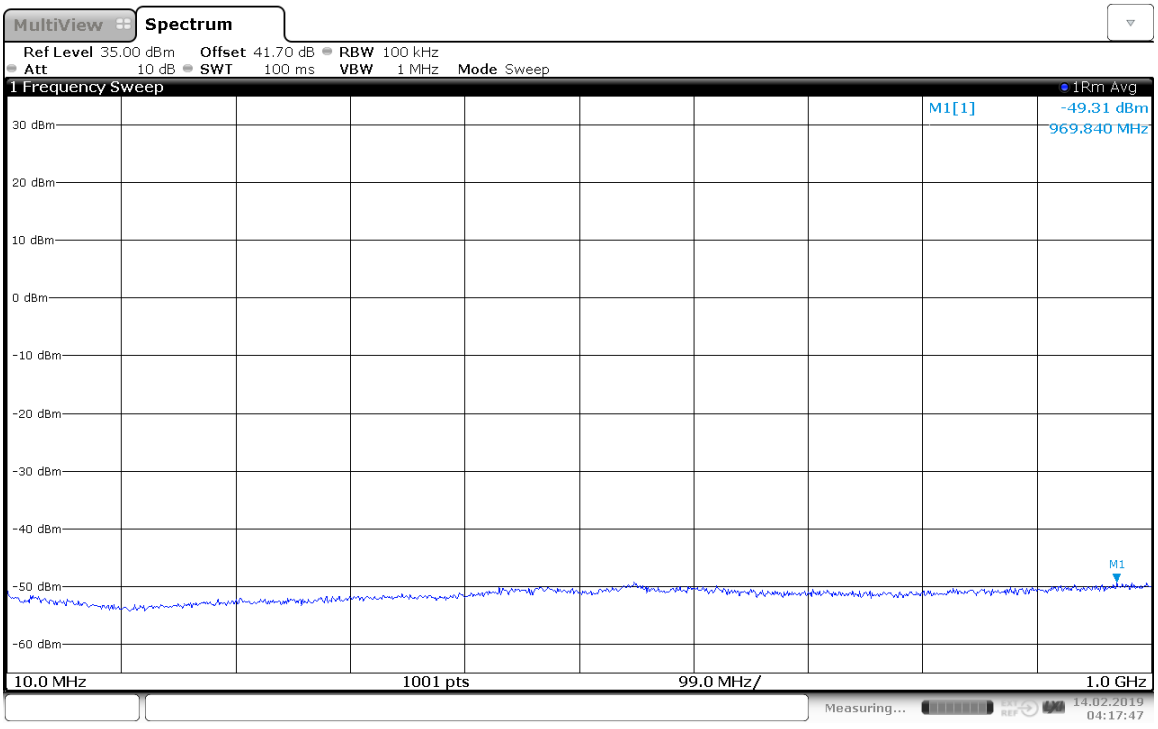

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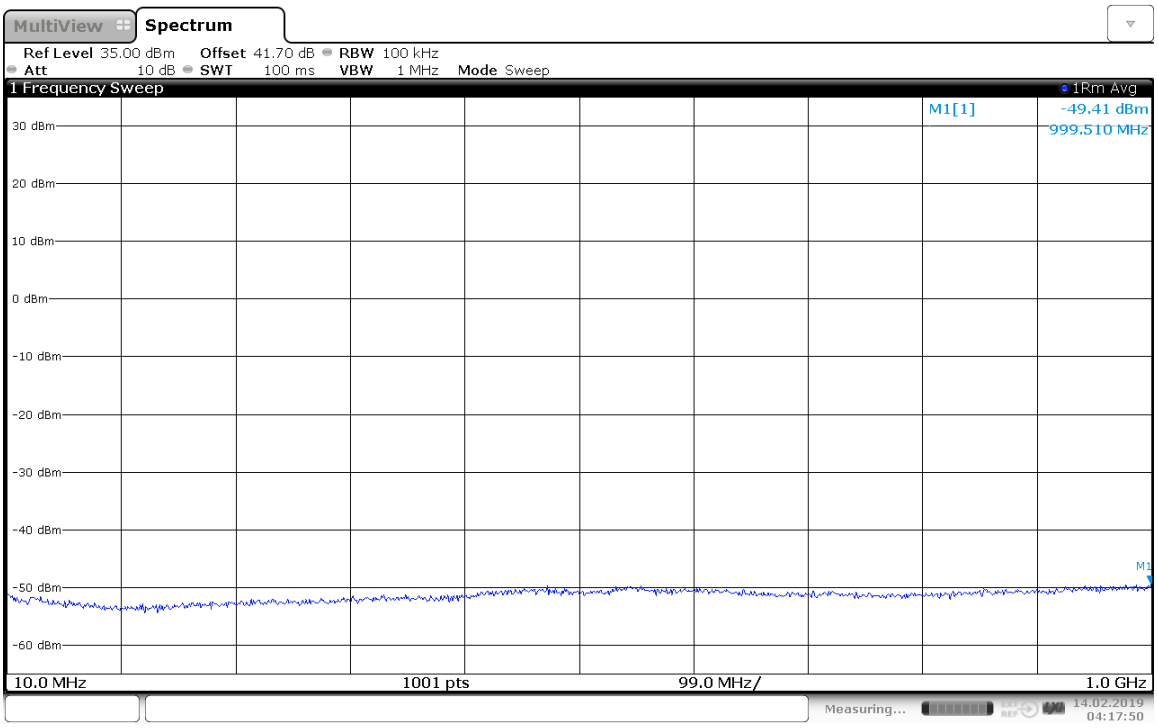

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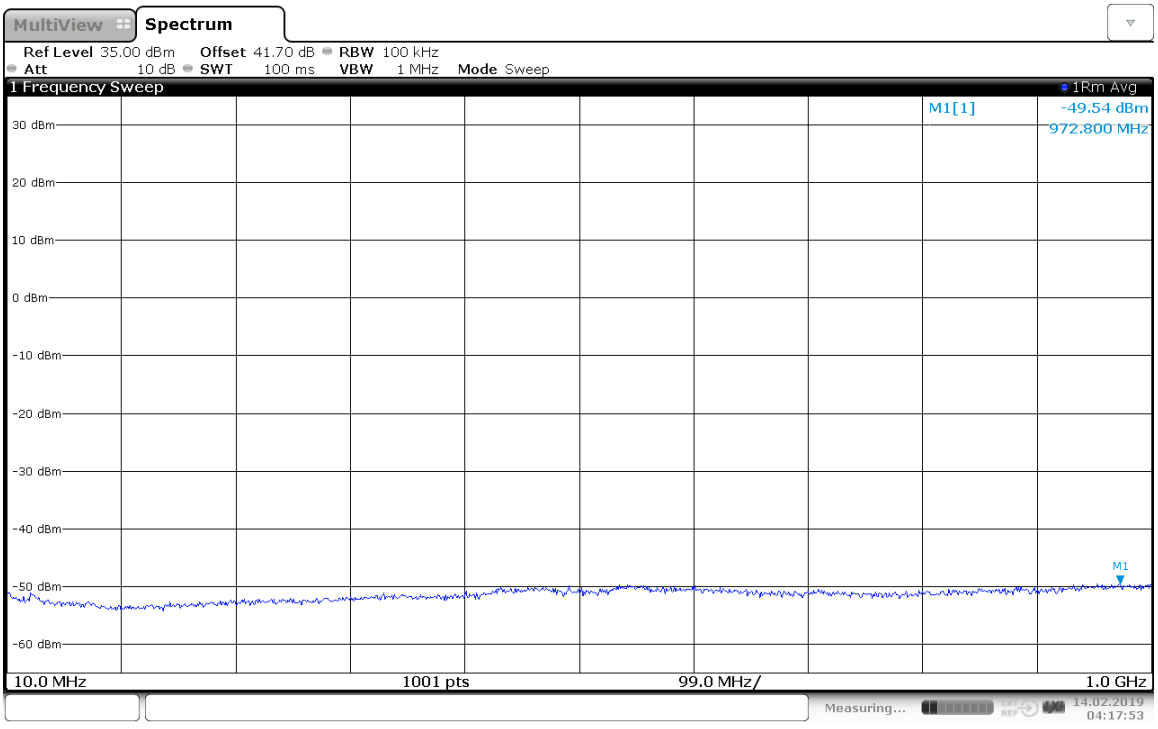

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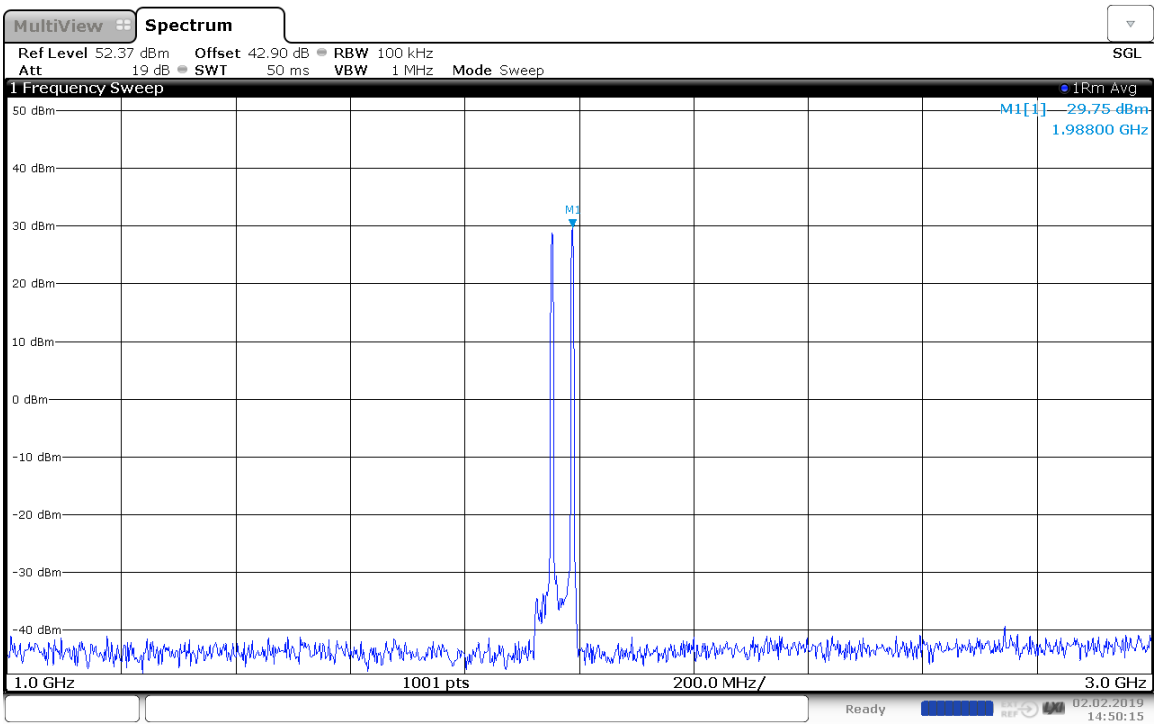

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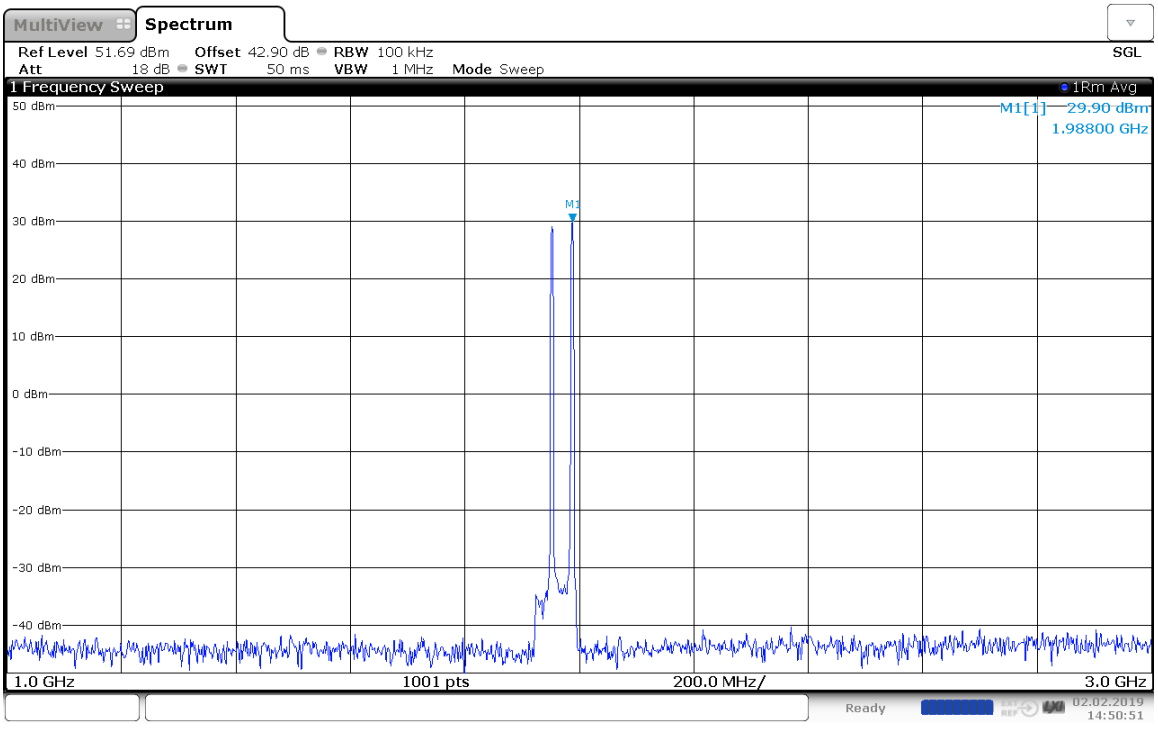

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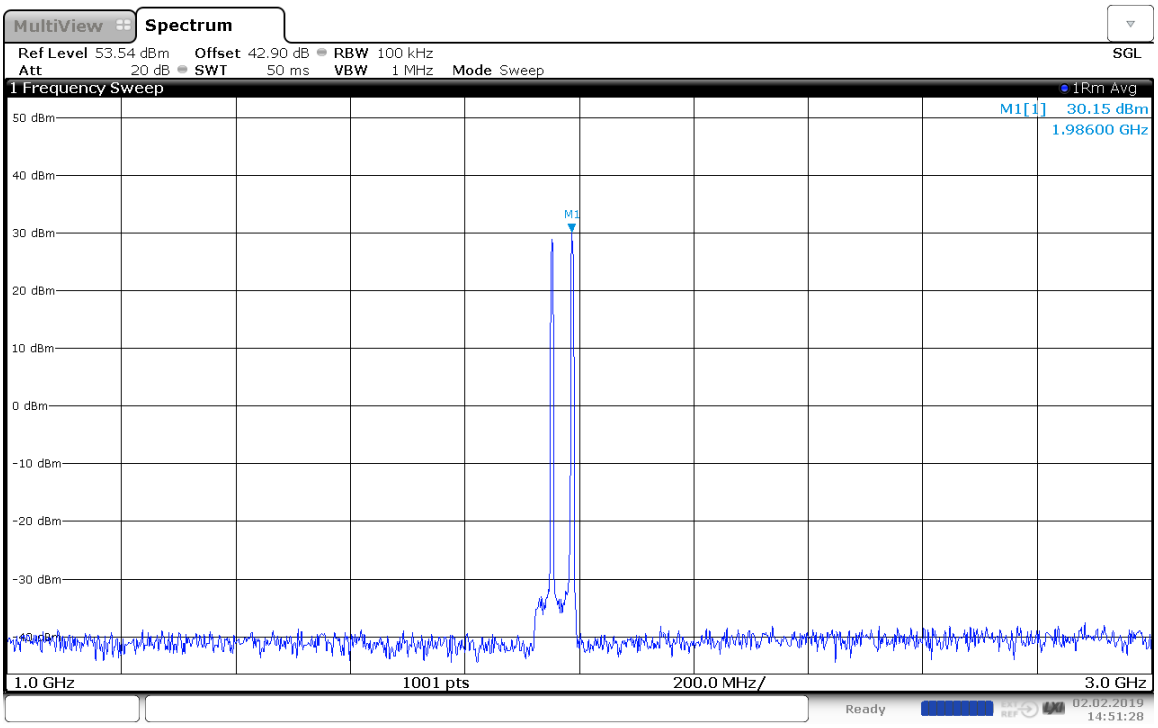

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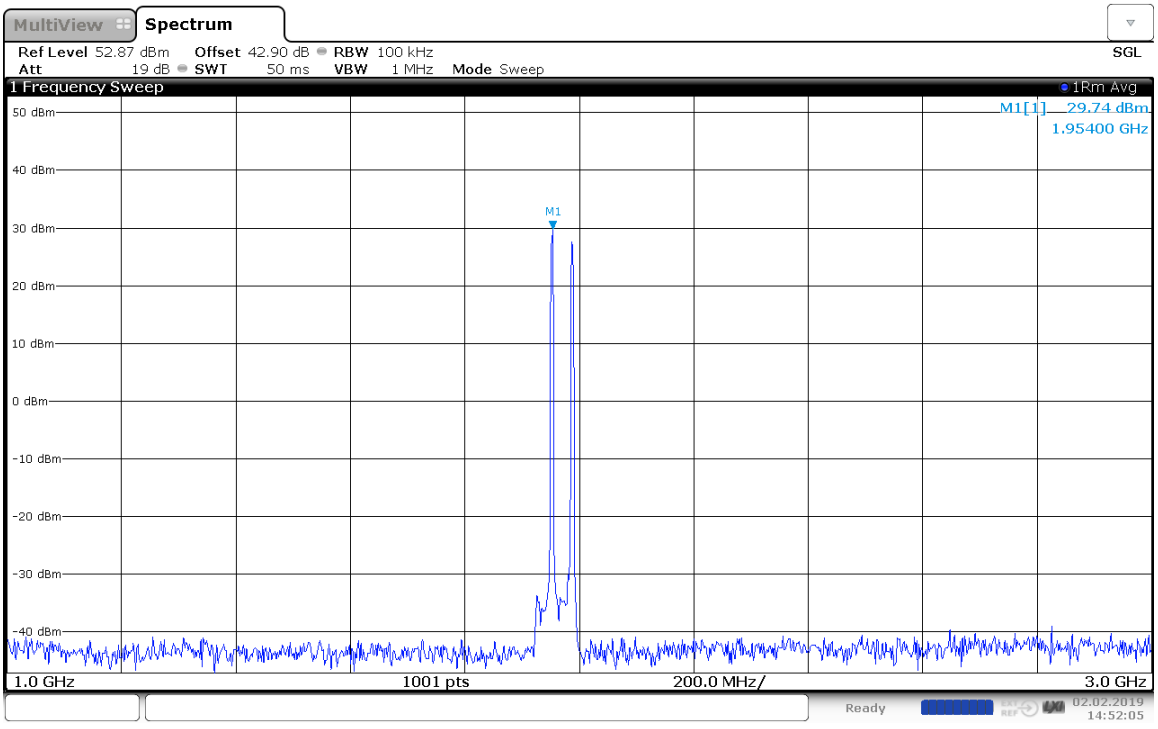

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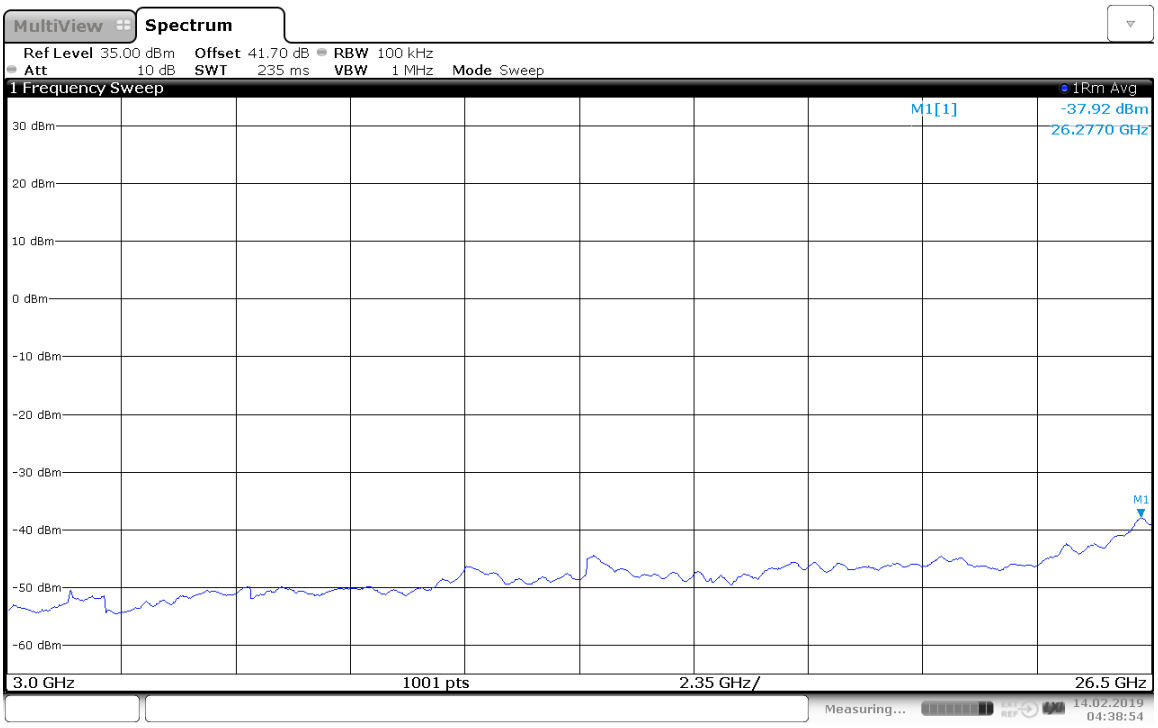

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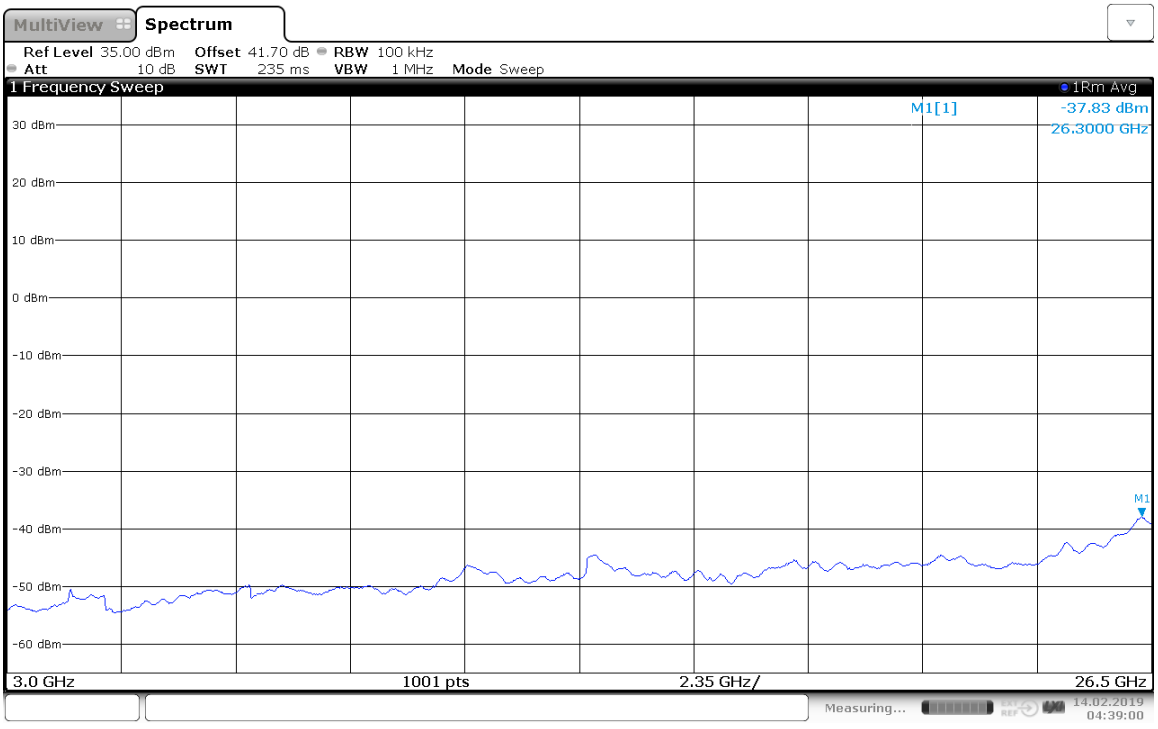

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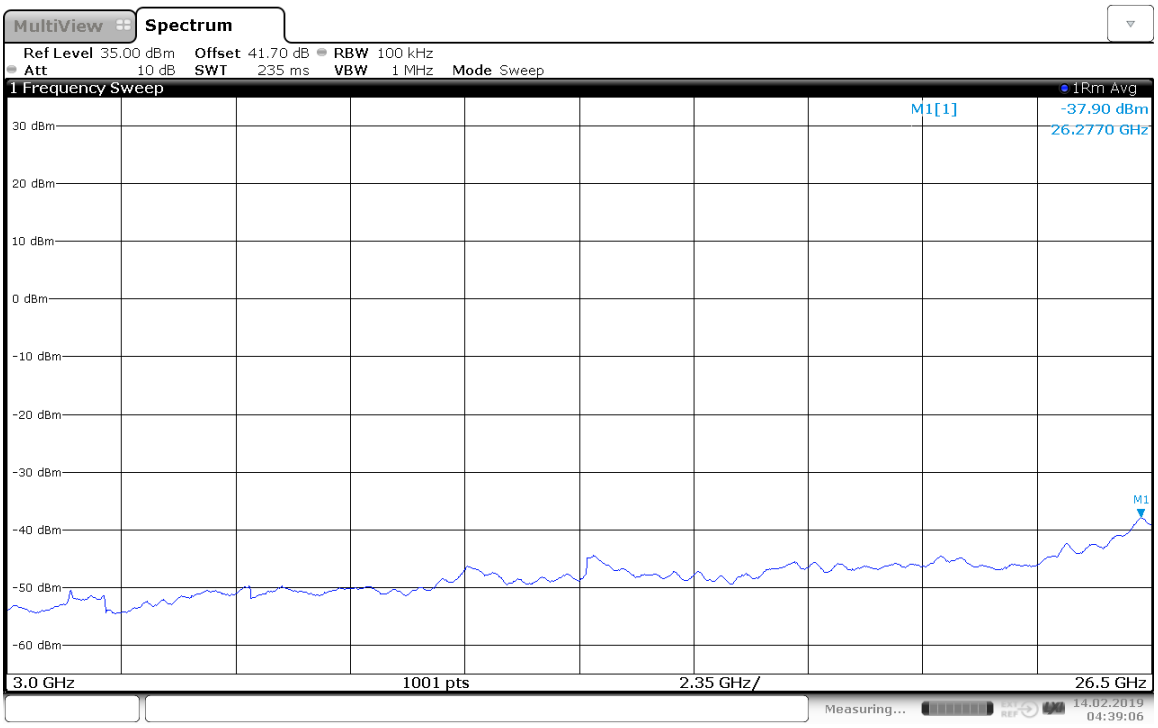

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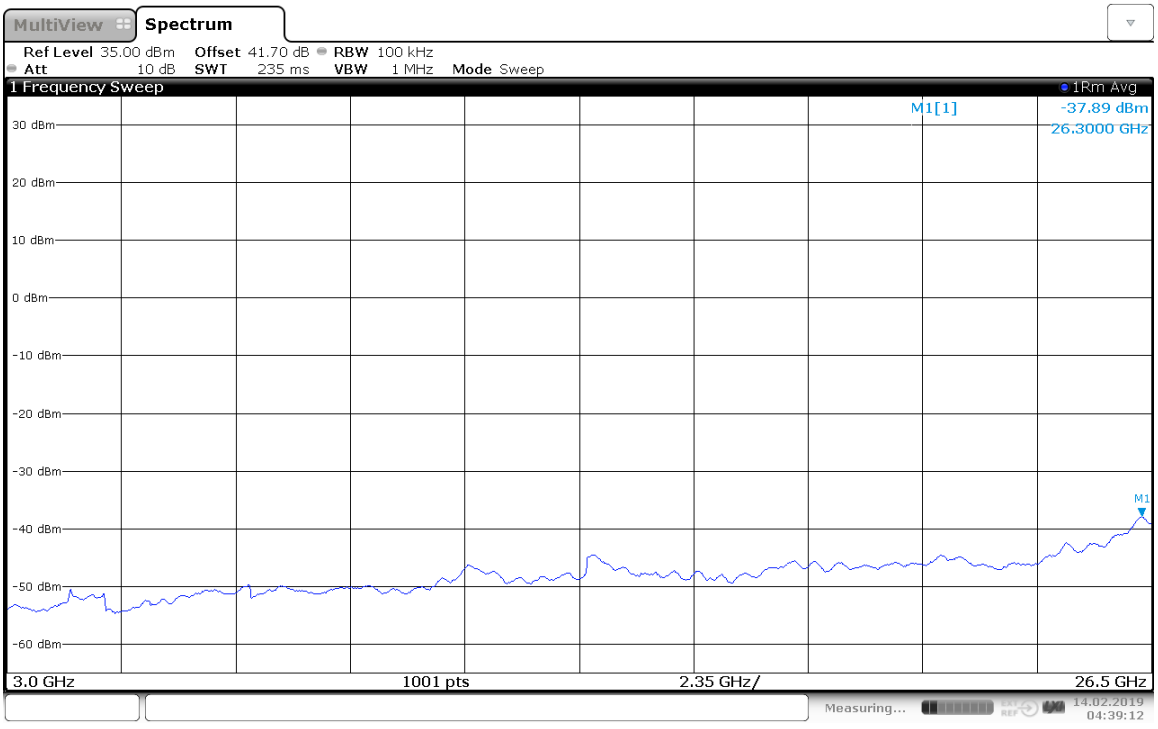

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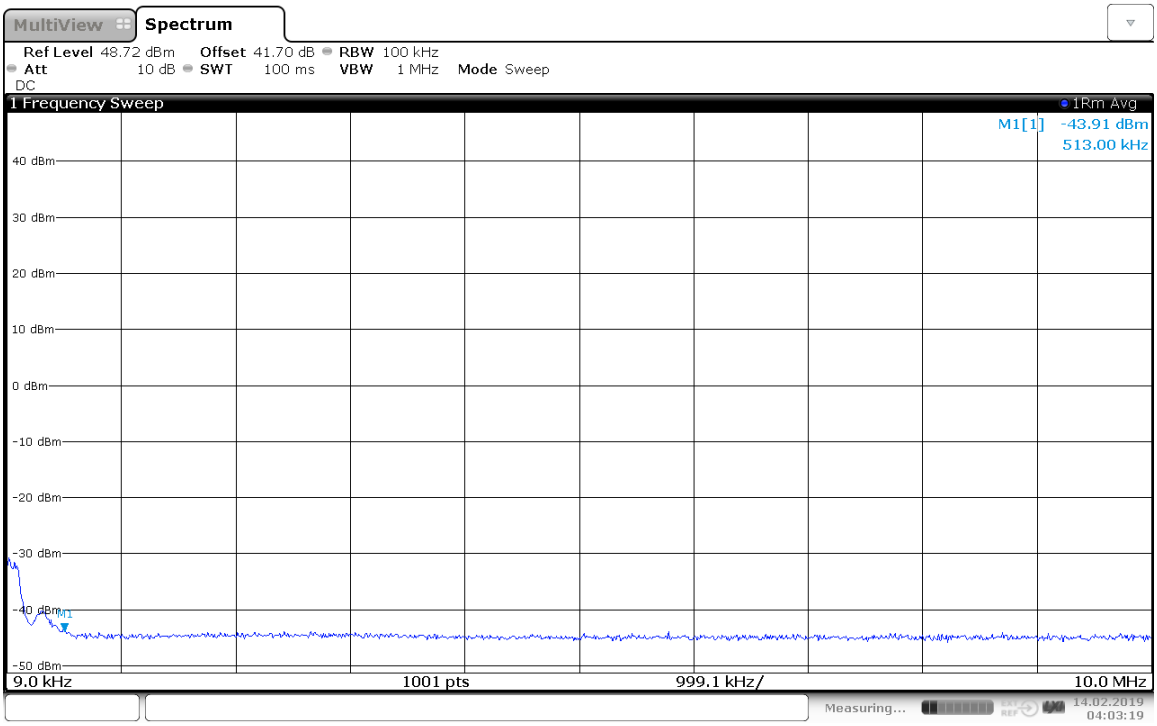
20M+20M-1950MHz-Port1~4:



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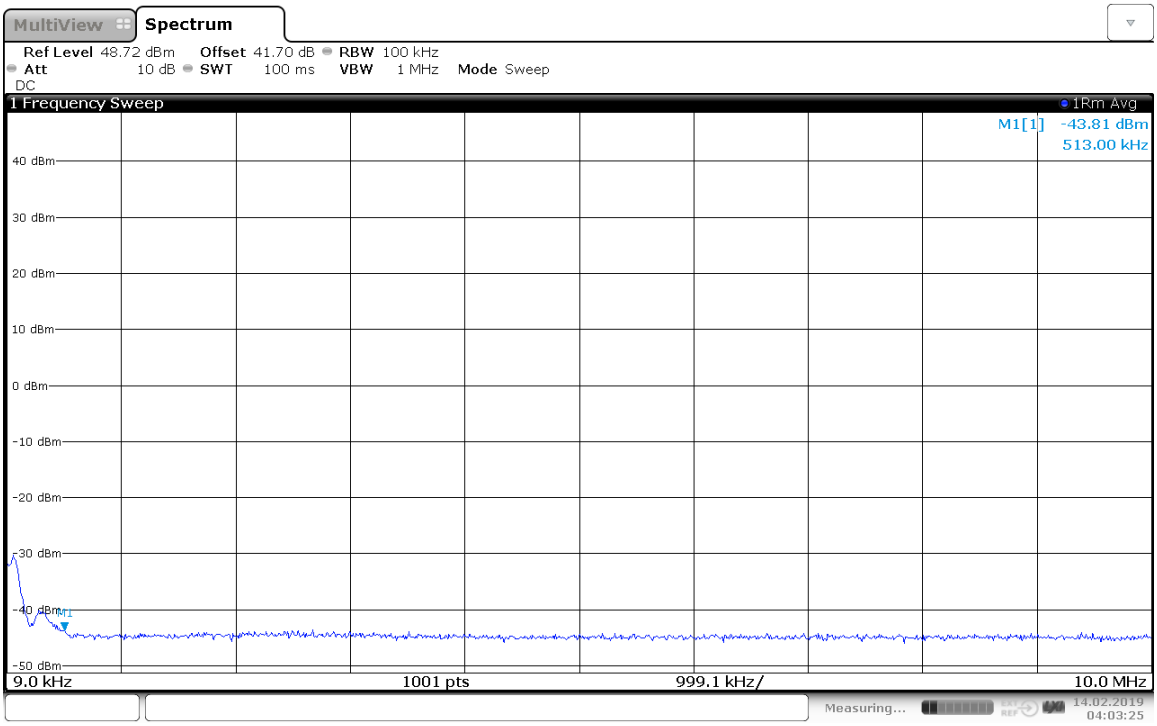

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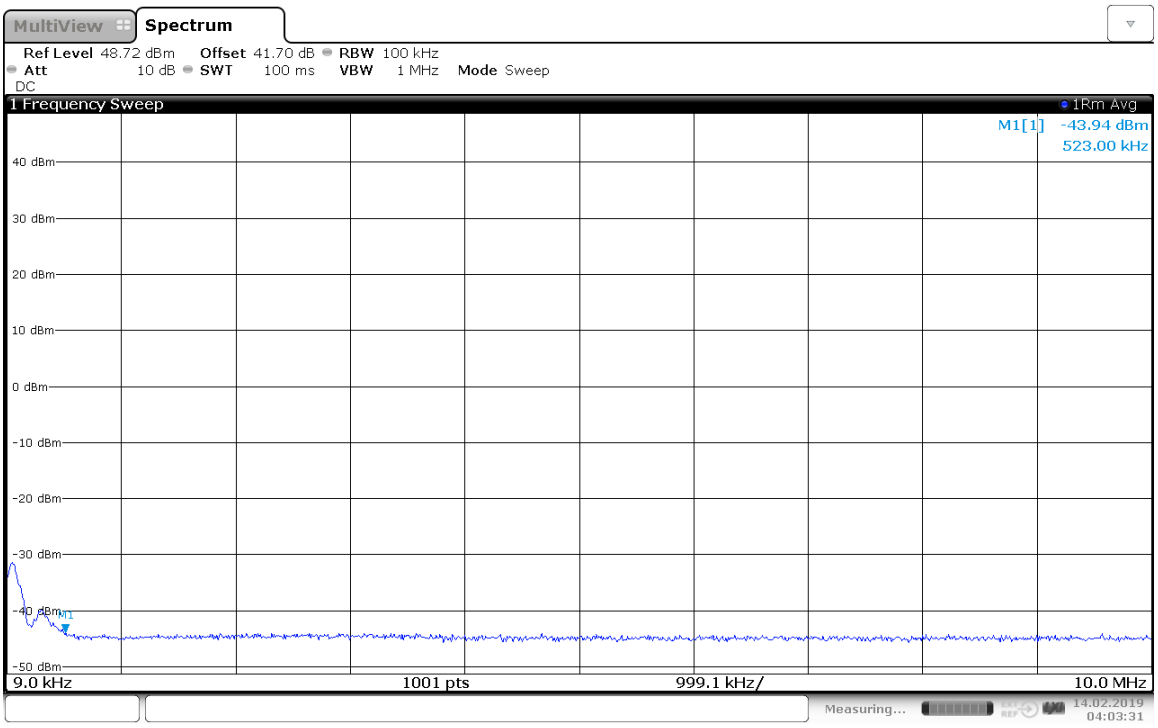

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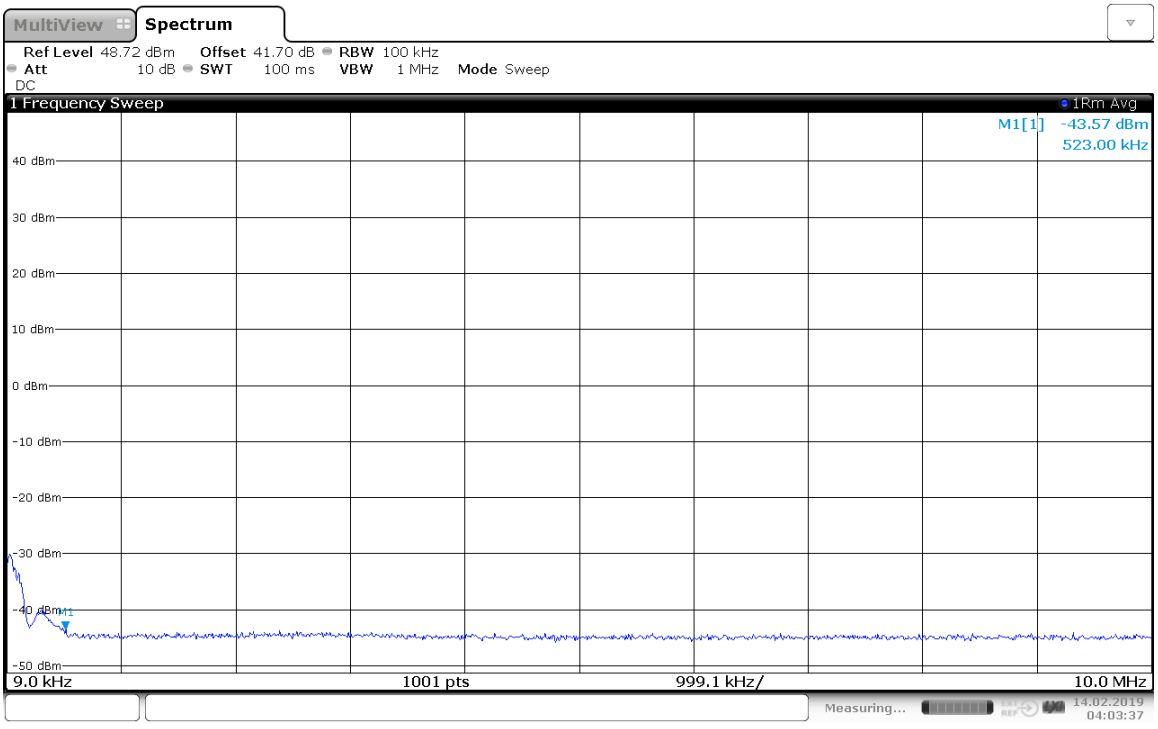

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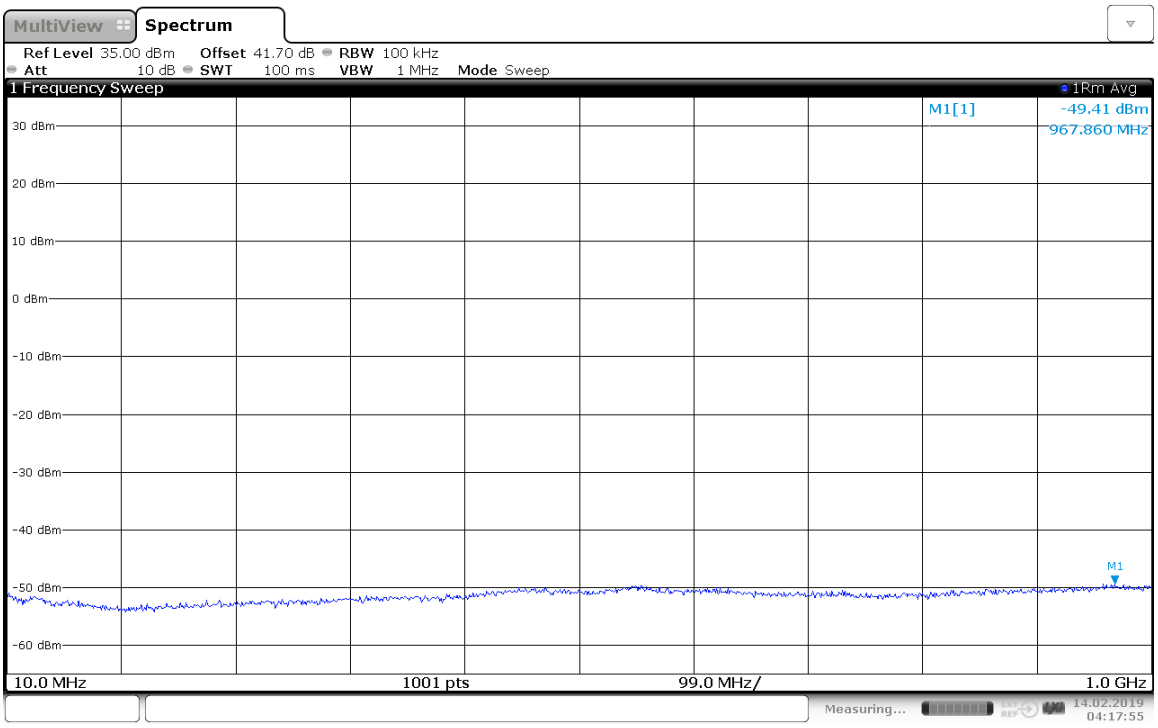

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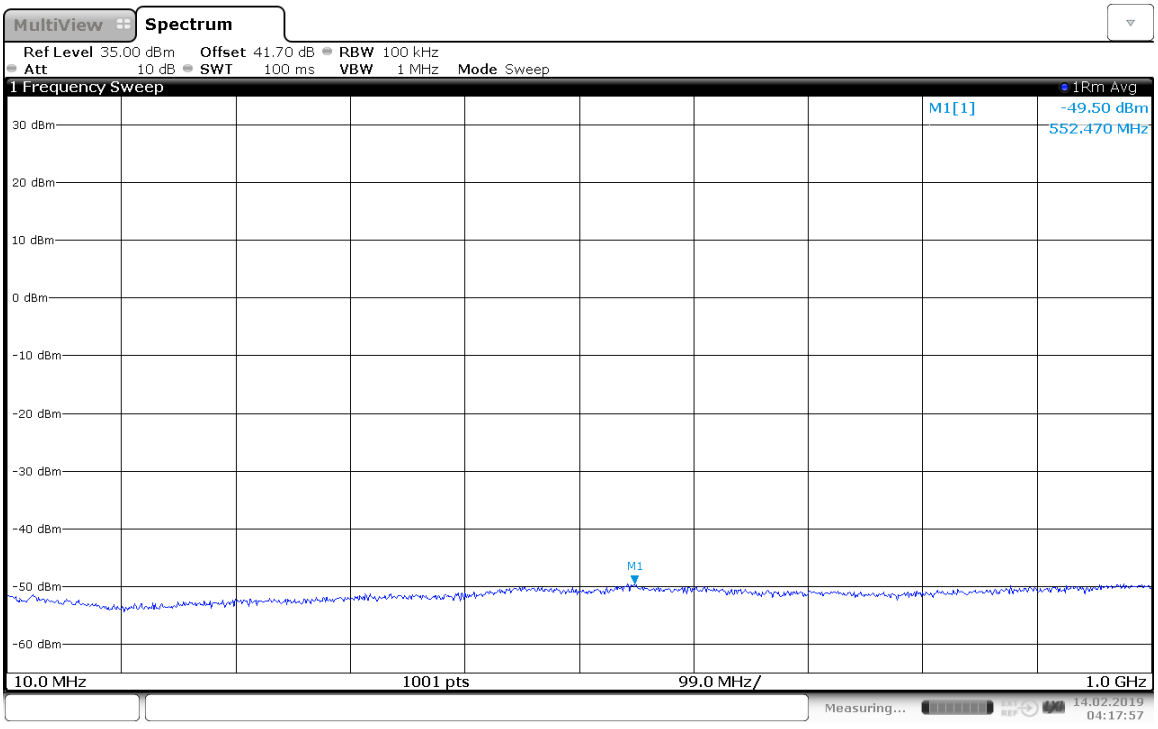

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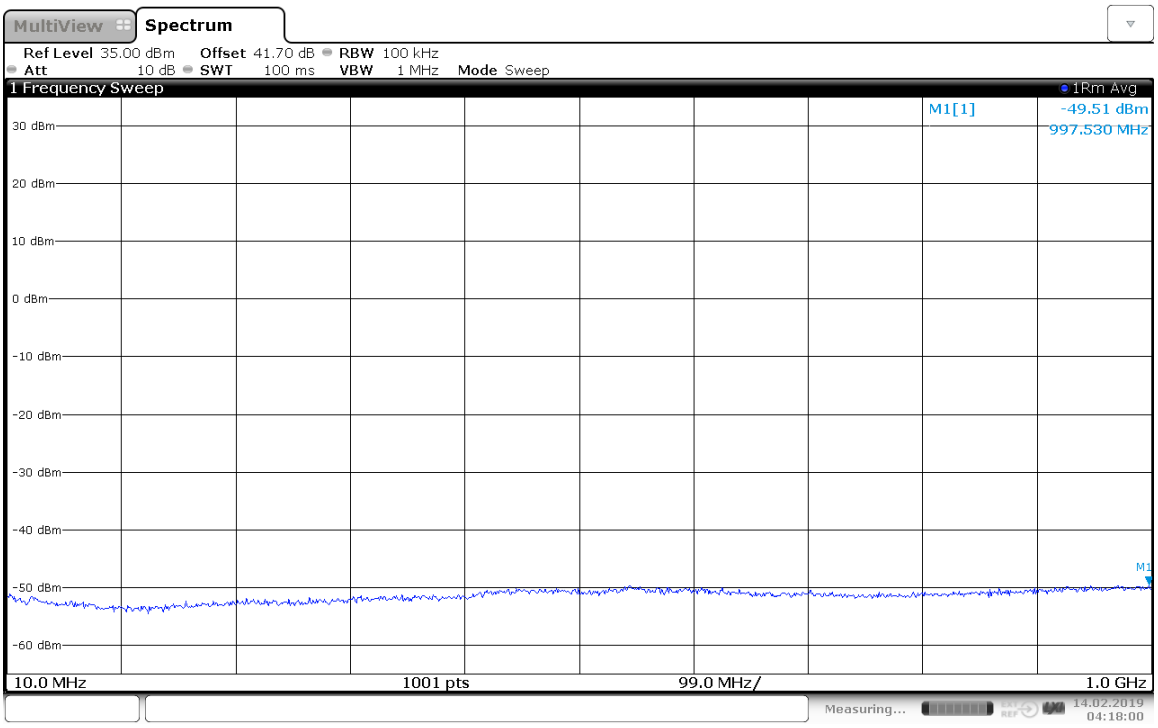

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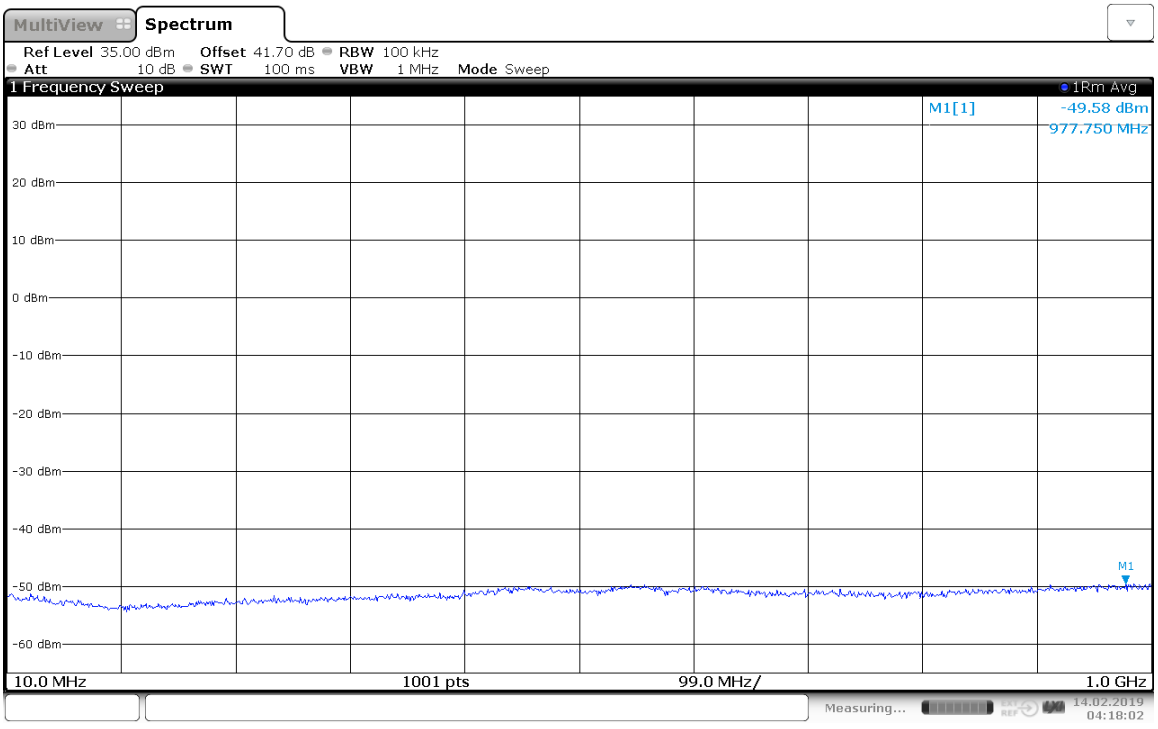

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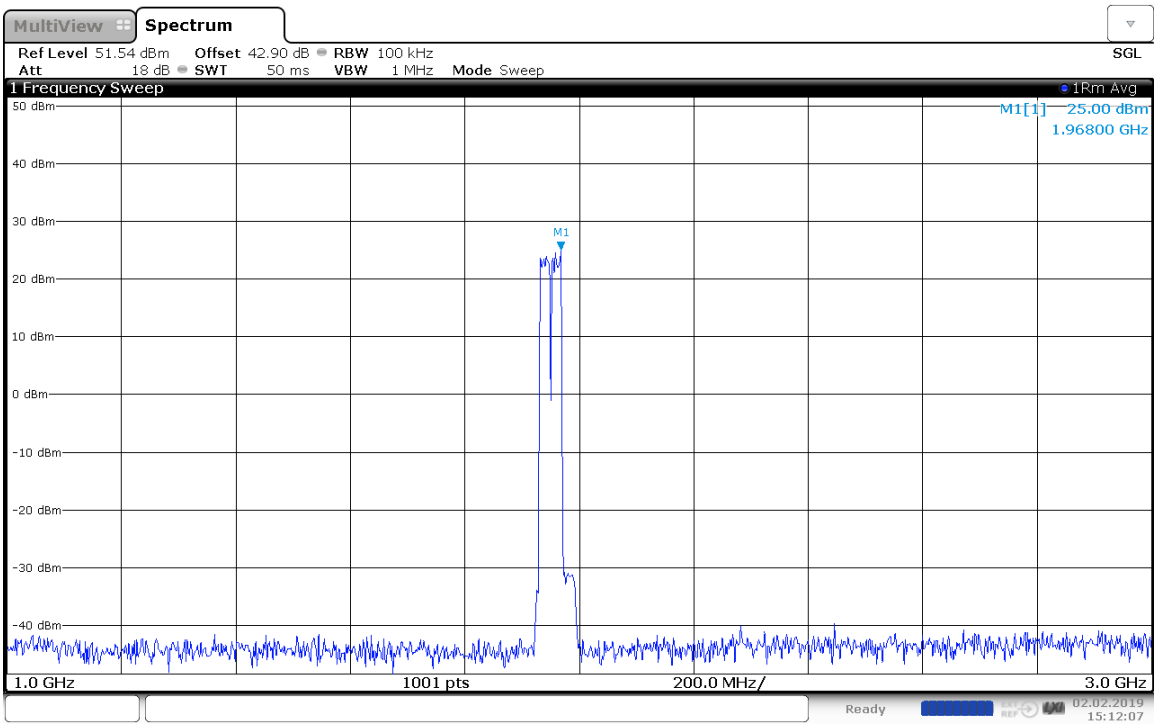

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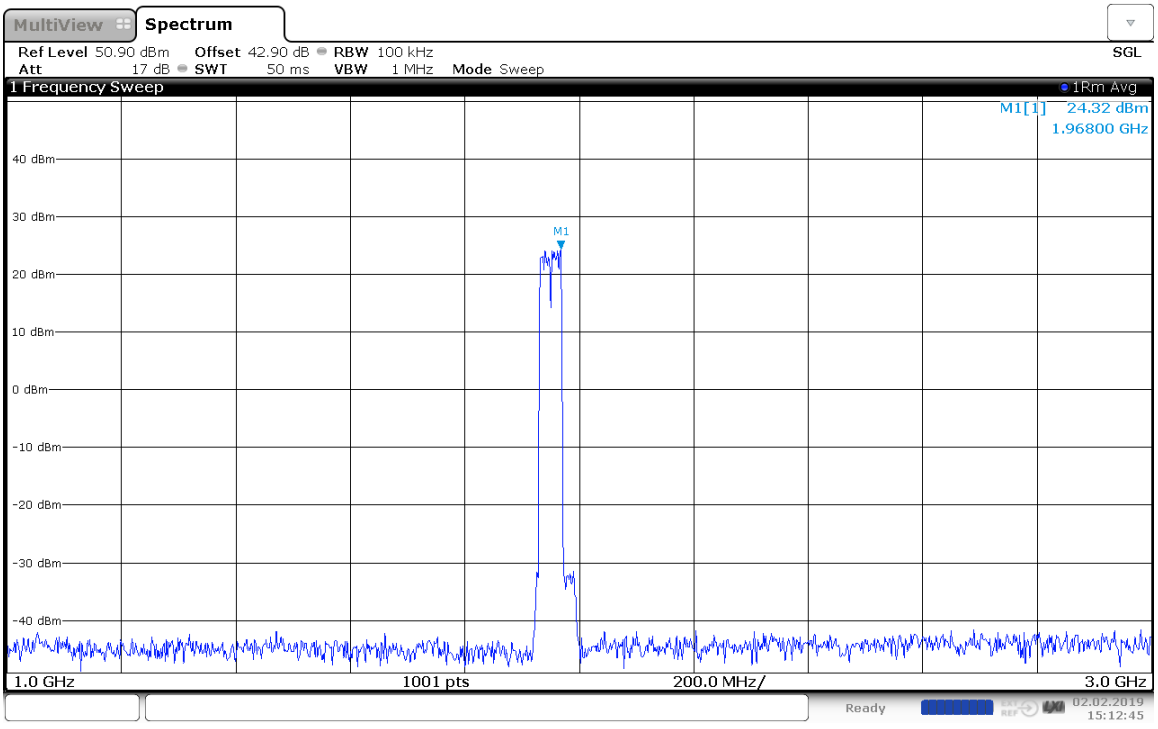

15:12:45 02.02.2019