FCC TEST REPORT

For

Macro Radio Remote Unit

Model Number: ZXSDR R8854E S1900

FCC ID: Q78-R8854ES1900

Report Number : WT198001217

Test Laboratory	:	Shenzhen Academy of Metrology and Quality Inspection
Site Location	:	NETC Building, No.4 Tongfa Rd., Xili, Nanshan, Shenzhen, China
Tel	:	0086-755-86928965
Fax	:	0086-755-86009898-31396
Web	:	www.smq.com.cn
E-mail	:	emcrf@smq.com.cn

TEST REPORT DECLARATION

Applicant	:	ZTE Corporation
Address	:	ZTE Plaza, Hi-tech Park, Nanshan District, Shenzhen, Guangdong, China 518057
Manufacturer	:	ZTE Corporation
Address	:	ZTE Plaza, Hi-tech Park, Nanshan District, Shenzhen, Guangdong, China 518057
EUT Description	:	Macro Radio Remote Unit
Model No	:	ZXSDR R8854E S1900
Trade mark	:	ZTE
FCC ID	:	Q78-R8854ES1900

Test Standards:

FCC CFR 47 Part 24E

The EUT described above is tested by Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory to determine the maximum emissions from the EUT. Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory is assumed full responsibility for the accuracy of the test results. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.26 (2015) & KDB971168 and the energy emitted by the sample EUT tested as described in this report is in compliance with FCC Rules Part 24E.
The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

Project Engineer:	(Chen Silin 陈司林)	Date:	Apr.04, 2019
Checked by:	(Lin Yixiang 林奕翔)	Date:	Apr.04, 2019
Approved by:	(Lin Bin 林斌)	Date:	Apr.04, 2019

TABLE OF CONTENTS

1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

RULES	DESCRIPTION OF TEST	RESULT
§ 2.1046 , §24. 232	Transmitter output Power	Compliance
§ 2.1091 ,§1.1037	RF Exposure	Compliance
§ 2.1047	Modulation Characteristic	Compliance
§ 2.1053, §24.238	Spurious Radiated Emissions	Compliance
§ 2.1051, §24. 238	Spurious Emissions AT Antenna Terminals	Compliance
§ 2.1049,§24.238(b)	Occupied Bandwidth	Compliance
§ 2.1051,§24. 238	Band Edge	Compliance
§ 2.1055	Frequency stability	Compliance

Remark: “N/A” means “Not applicable.”
The tests documented in this report were performed in accordance with ANSI C63.26 (2015) & KDB971168, FCC CFR 47 Part 2, Part 24E.

2. GENERAL INFORMATION

2.1. Report information

This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that SMQ approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that SMQ in any way guarantees the later performance of the product/equipment.

The sample/s mentioned in this report is/are supplied by Applicant, SMQ therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through SMQ, unless the applicant has authorized SMQ in writing to do so.

2.2. Laboratory Accreditation and Relationship to Customer

The testing report were performed by the Shenzhen Academy of Metrology and quality Inspection EMC Laboratory (Guangdong EMC compliance testing center), in their facilities located at NETC Building, No.4 Tongfa Rd., Xili, Nanshan, Shenzhen, China. At the time of testing, Laboratory is accredited by the following organizations:

China National Accreditation Service for Conformity Assessment (CNAS) accredits the Laboratory for conformance to FCC standards, EMC international standards and EN standards. The Registration Number is CNAS L0579.

The Laboratory is Accredited Testing Laboratory of FCC with Designation number CN1165 and Site registration number 582918.

The Laboratory is registered to perform emission tests with Innovation, Science and Economic Development (ISED), and the registration number is 11177A.

2.3. Measurement Uncertainty

For a 95% confidence level (k = 2), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:
Radiated Emission
30MHz~1000MHz 4.5dB
1GHz~26.5GHz 4.6dB

26dB & Occupied Bandwidth: ±0.39%

Frequency Stability: ±0.42%

Peak to Average Ratio:0.45 dB

Conducted power :0.3 dB

Temperature: ±0.698

Supply voltages:±0.15%

3. PRODUCT DESCRIPTION

3.1. EUT Description

The ZTE Corporation's product, model number: ZXSDR R8854E S1900 or the "EUT" as referred to in this report is a Macro Radio Remote Unit.

Technical specification:
Size: 415 mm x 296 mm x 145 mm (HxWxD)
Input voltage: -37V~-57V
Frequency range: Tx: 1930 MHz - 1990 MHz；Rx: 1850 MHz - 1910 MHz
Max RF output power: 47.7dBm
Gain of the antenna: 17.5dBi
Appearance of EUT:

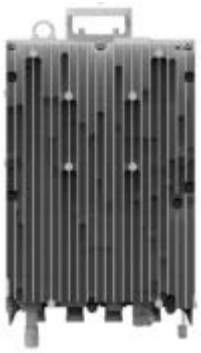


FIGURE 1 APPEARANCE OF ZXSDR R8854E S1900

3.2. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **Q78-R8854ES1900** filing to comply with FCC Part 24E Rules.

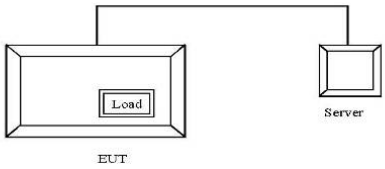
3.3. Operating Condition of EUT

Justification
The EUT was configured for testing according to ANSI C63.26 (2015).
The final qualification test was performed with EUT operating at normal mode.
Equipment Modifications
SMQ has not done any modification on the EUT.

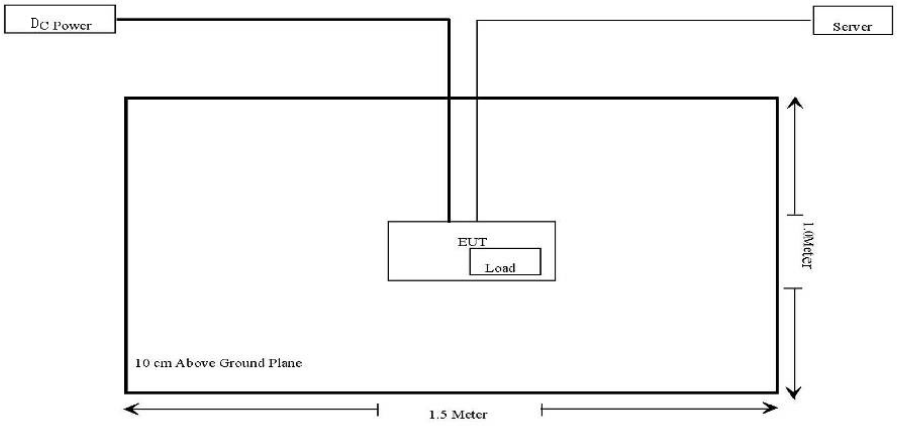
During all testing, EUT at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission (X plane).

Date of test：Jan.02, 2019 - Apr.03, 2019
Date of EUT Receive：Dec.30, 2018

Configuration of Test Setup



Block Diagram of Test Setup



3.4. Special Accessories

Not available for this EUT intended for grant.

3.5. Equipment Modifications

Not available for this EUT intended for grant.

4. TRANSMITTER OUTPUT POWER

4.1. Applicable Standard:

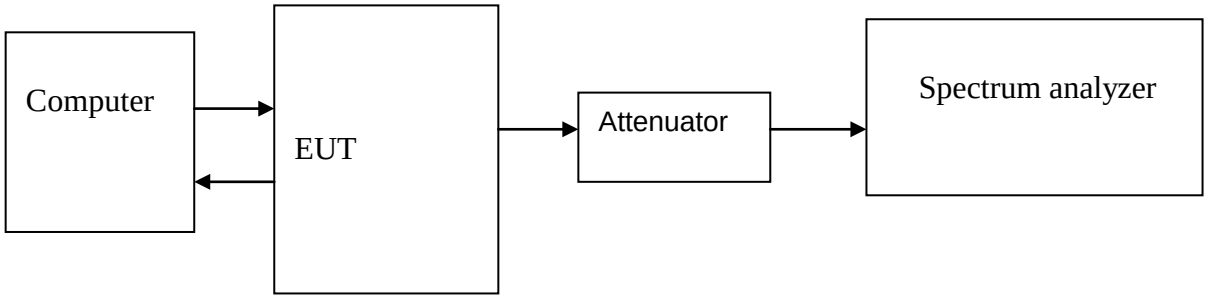
FCC §2.1046, §24.232
According to FCC §2.1046 &24.232, the ERP (equivalent radiated power) must not exceed 1640 Watts.
Note: ERP= Max output Power+ Antenna gain-Cable loss-2.15
The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

4.2. 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.

4.3. Test Procedure:



The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation. External attenuation Loss is 40dB, Cable Loss is about 2dB

4.4. Environmental Conditions:

Temperature:	21 °C
Relative Humidity:	45 %
ATM Pressure:	1021 mbar

4.5. Test Result: Pass

4.6. Test Mode: Transmitting LTE

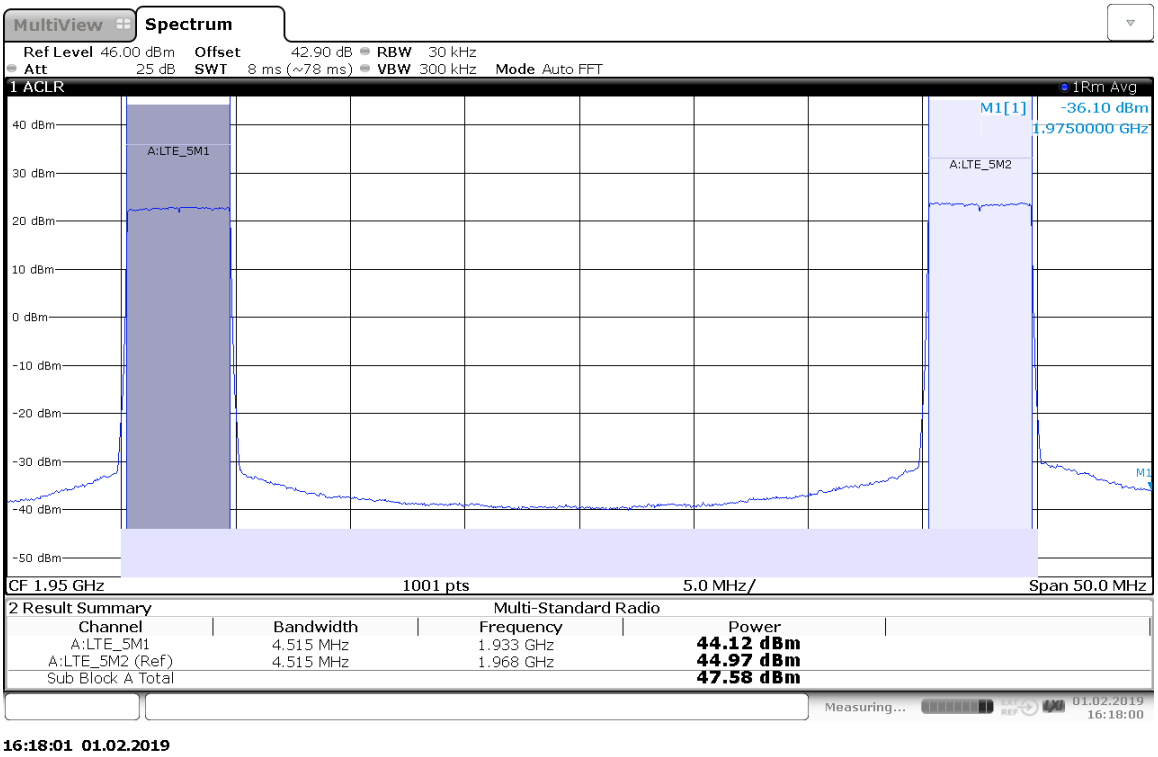
4.7. Test Data

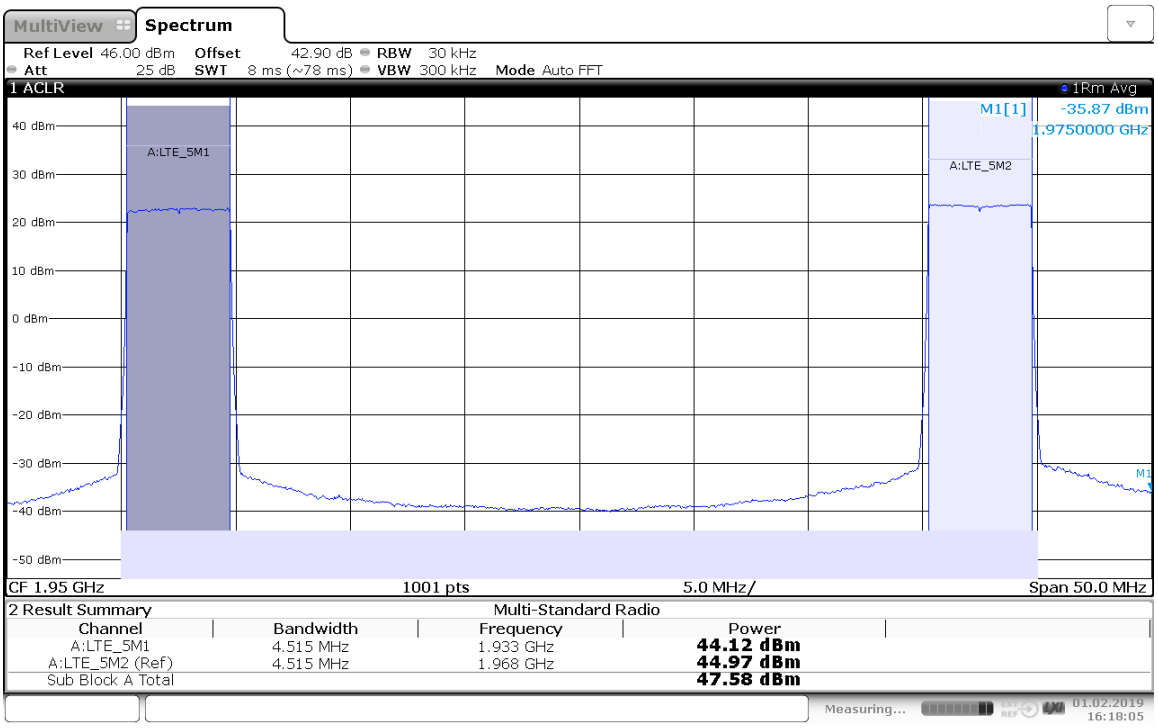
Dual Carrier_ERP:

Channel Bandwidth :5M+5M 1932.5MHz & 1967.5MHz)

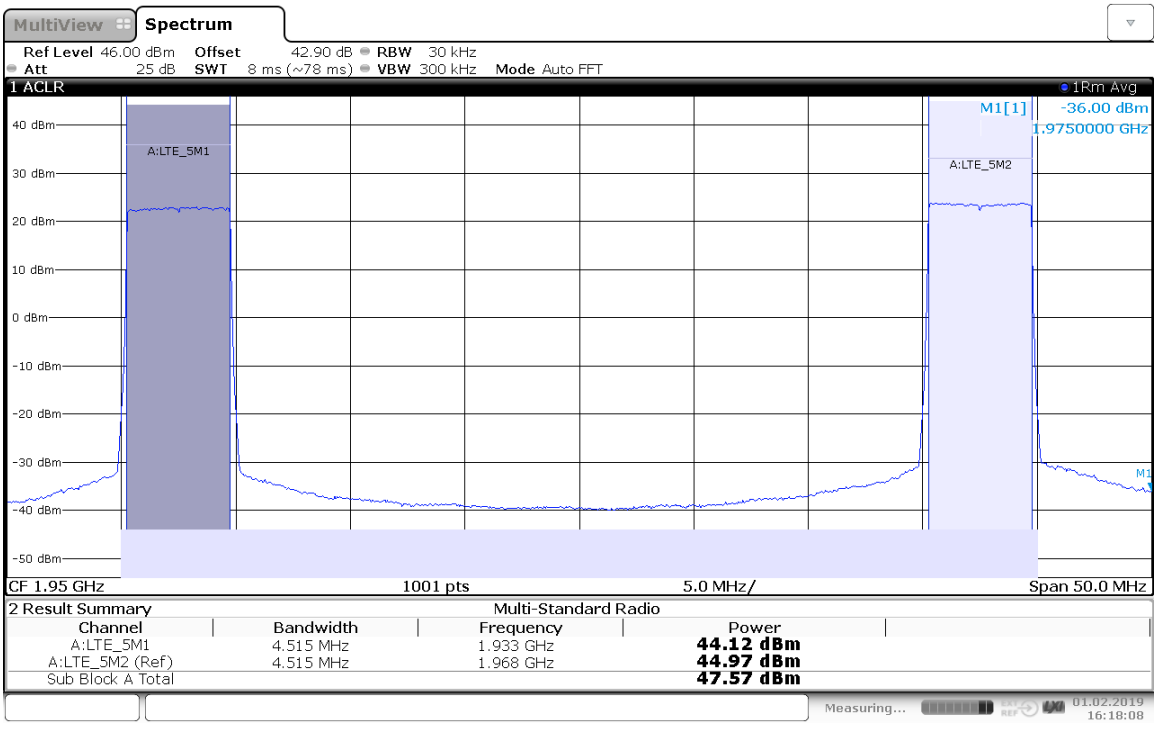
Port	Carrier1 Center Freq. (MHz)	Carrier1 Max output Power in dBm	Carrier2 Center Freq. (MHz)	Carrier2 Max output Power in dBm	Antenna gain dBi	Cable Loss dB	Dipole Antenna	Total Power in W Of single antenna
1	1932.5	44.12	1967.5	44.97	17.5	2	2.15	1237.67
2		44.12		44.97	17.5	2	2.15	1237.67
3		44.12		44.97	17.5	2	2.15	1237.67
4		44.12		44.97	17.5	2	2.15	1237.67

5M+5M -1932.5MHz&1967.5MHz-Port 1~4:

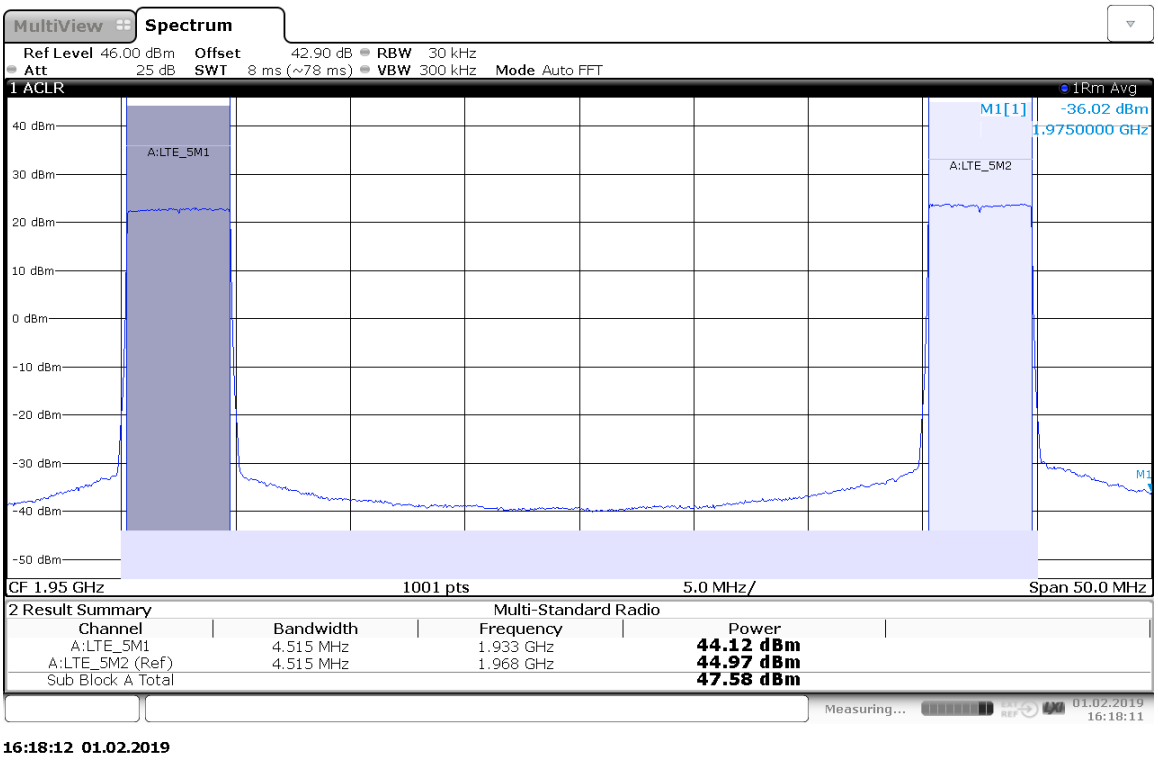




16:18:05 01.02.2019



16:18:09 01.02.2019

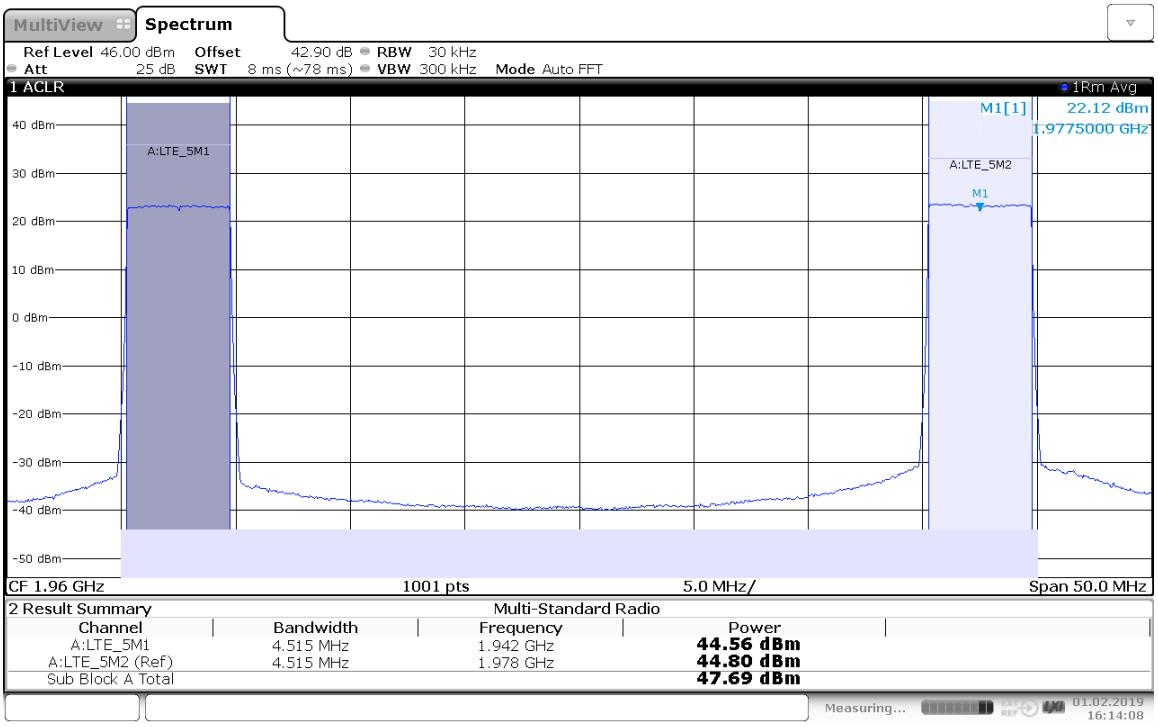


16:18:12 01.02.2019

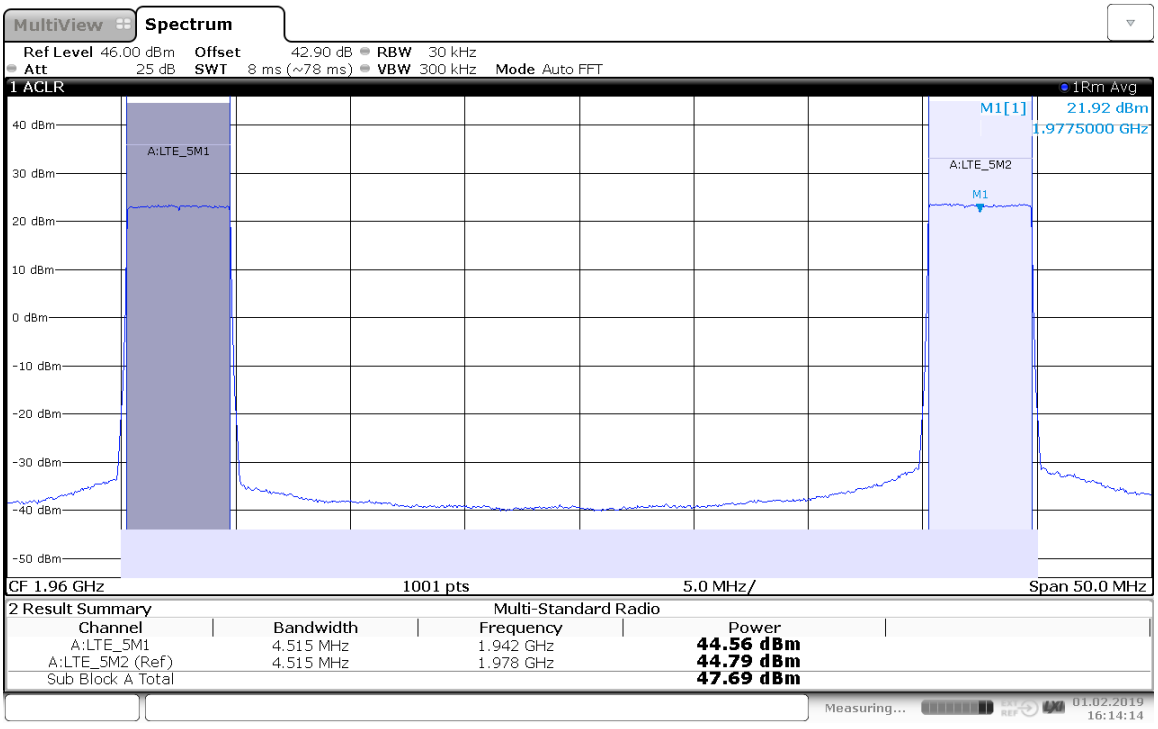
Channel Bandwidth :5M+5M(1942.5MHz & 1977.5MHz)

Port	Carrier1 Center Freq. (MHz)	Carrier1 Max output Power in dBm	Carrier2 Center Freq. (MHz)	Carrier2 Max output Power in dBm	Antenna gain dBi	Cable Loss dB	Dipole Antenna	Total Power in W Of single antenna
1	1942.5	44.56	1977.5	44.80	17.5	2	2.15	1271.15
2		44.56		44.79	17.5	2	2.15	1269.64
3		44.57		44.80	17.5	2	2.15	1272.57
4		44.55		44.79	17.5	2	2.15	1268.22

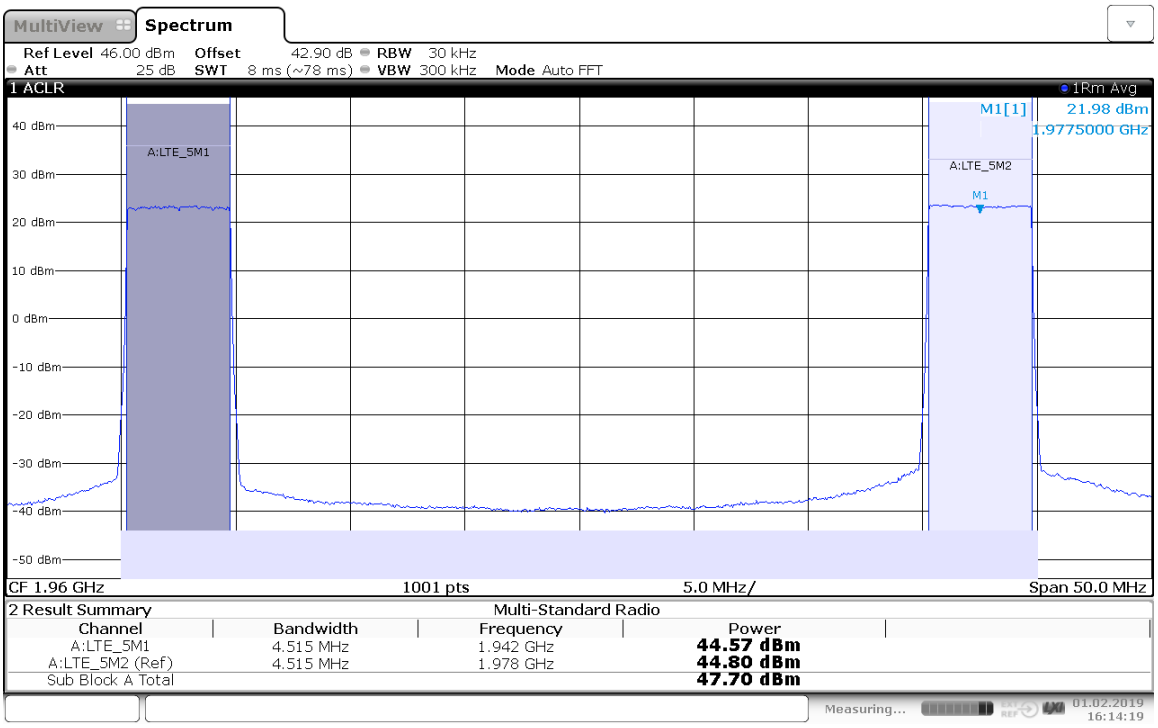
5M+5M -1942.5MHz&1977.5MHz-Port 1~4:



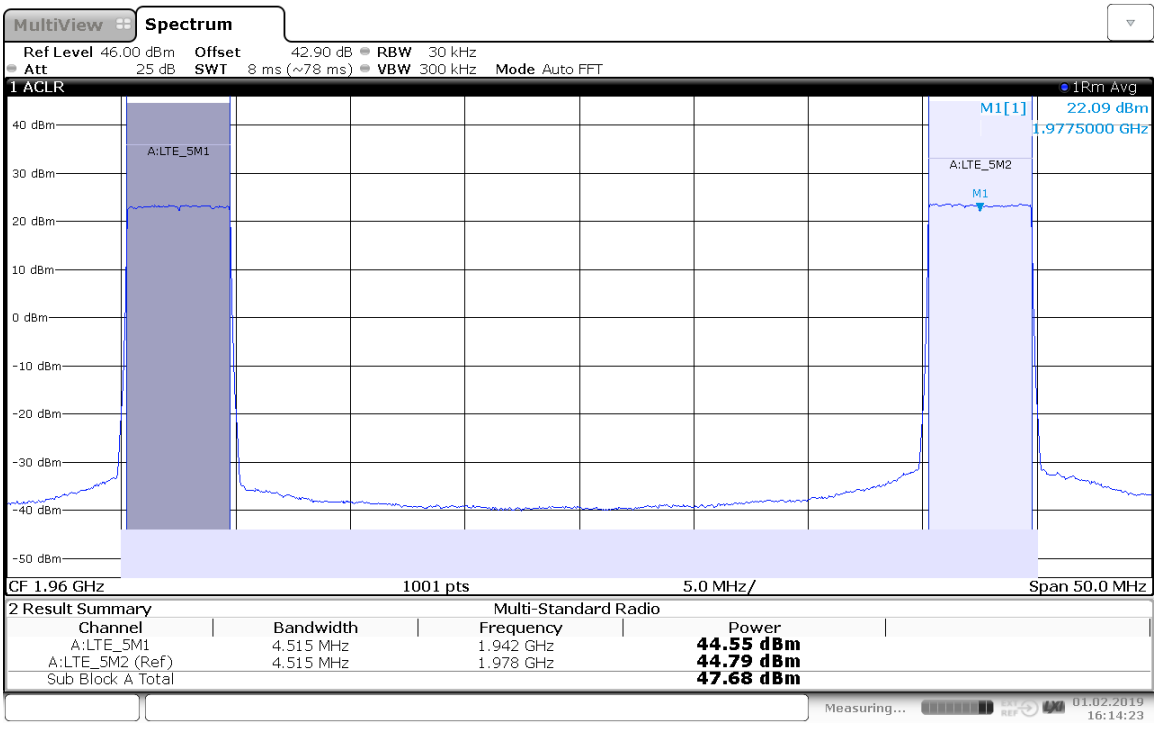
16:14:08 01.02.2019



16:14:14 01.02.2019



16:14:19 01.02.2019

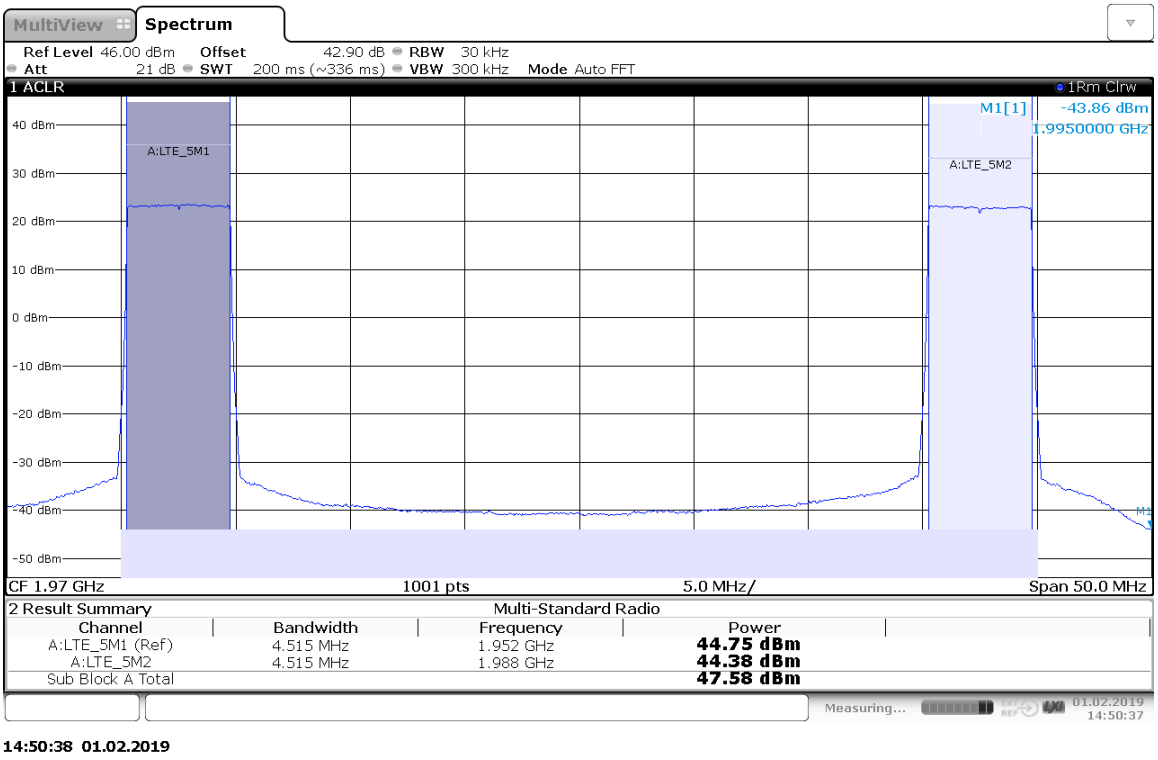


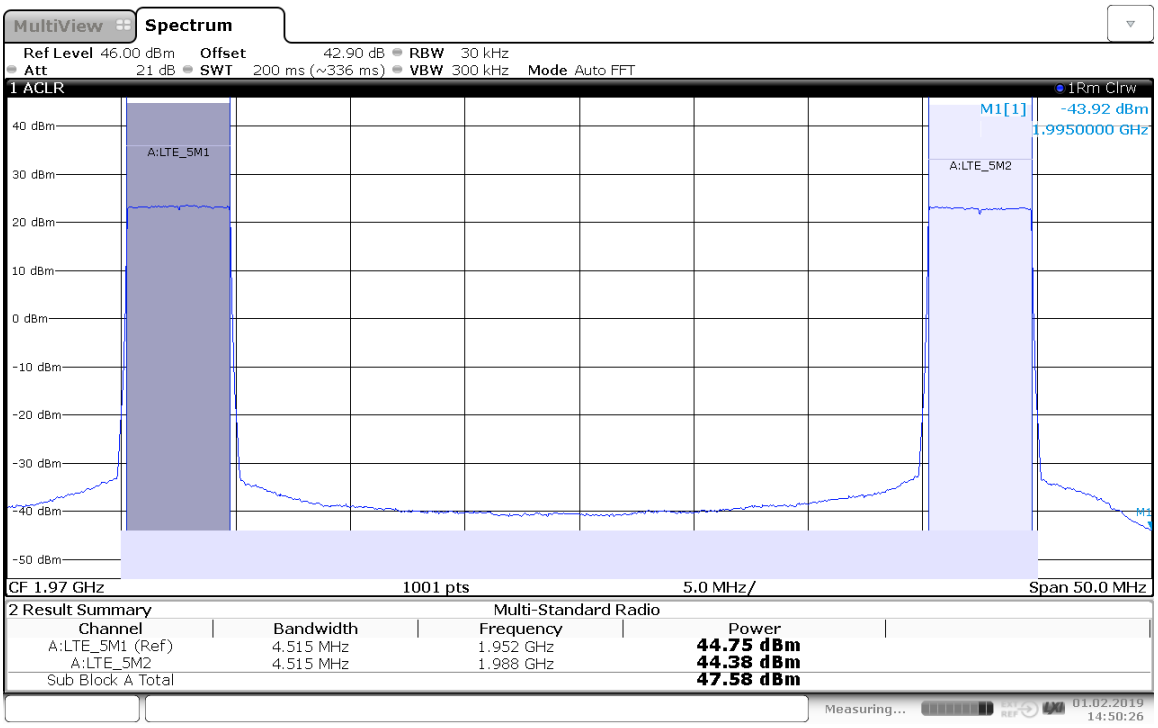
16:14:23 01.02.2019

Channel Bandwidth :5M+5M(1952.5MHz & 1987.5MHz)

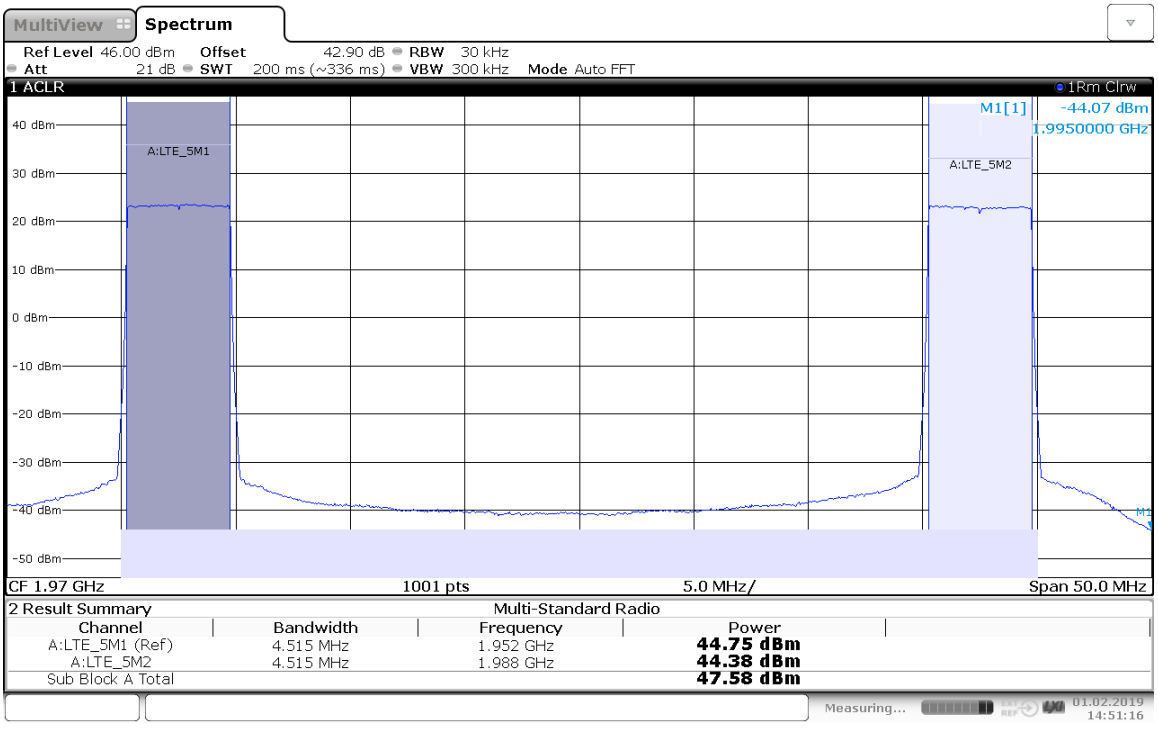
Port	Carrier1 Center Freq. (MHz)	Carrier1 Max output Power in dBm	Carrier2 Center Freq. (MHz)	Carrier2 Max output Power in dBm	Antenna gain dBi	Cable Loss dB	Dipole Antenna	Total Power in W Of single antenna
1	1952.5	44.75	1987.5	44.38	17.5	2	2.15	1238.58
2		44.75		44.38	17.5	2	2.15	1238.58
3		44.74		44.38	17.5	2	2.15	1237.09
4		44.75		44.38	17.5	2	2.15	1238.58

5M+5M -1952.5MHz&1987.5MHz-Port 1~4:

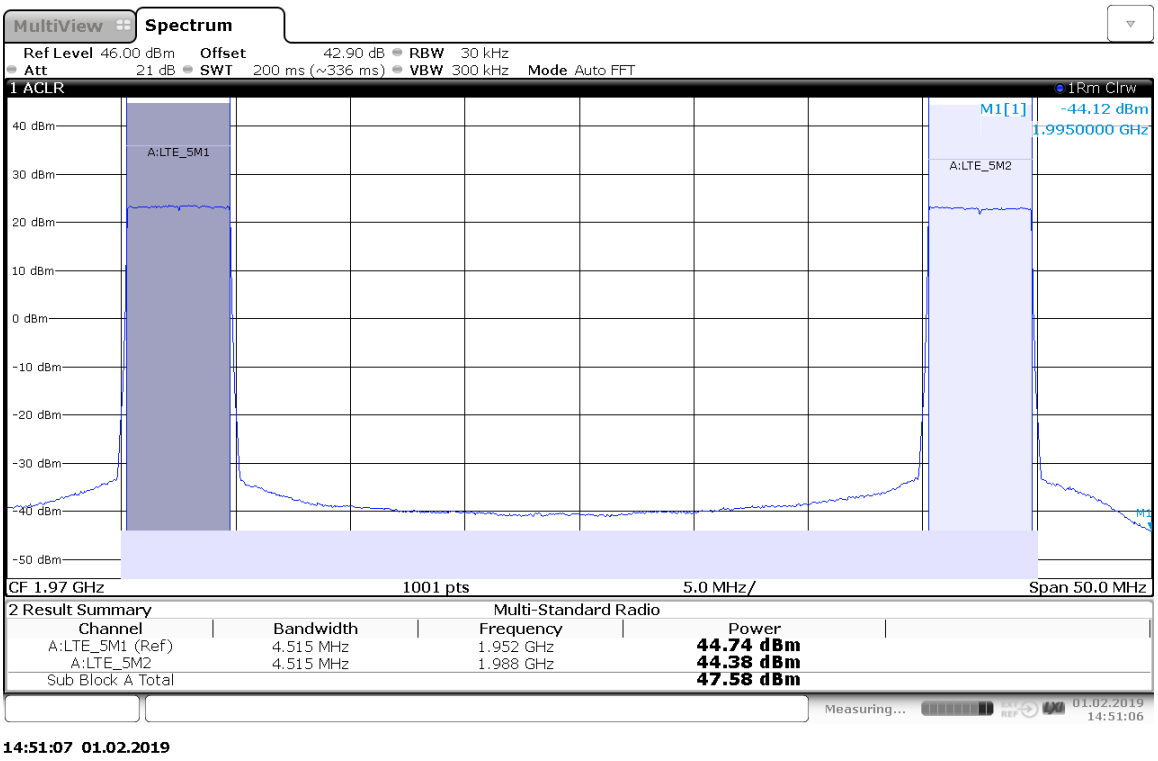




14:50:26 01.02.2019



14:51:16 01.02.2019

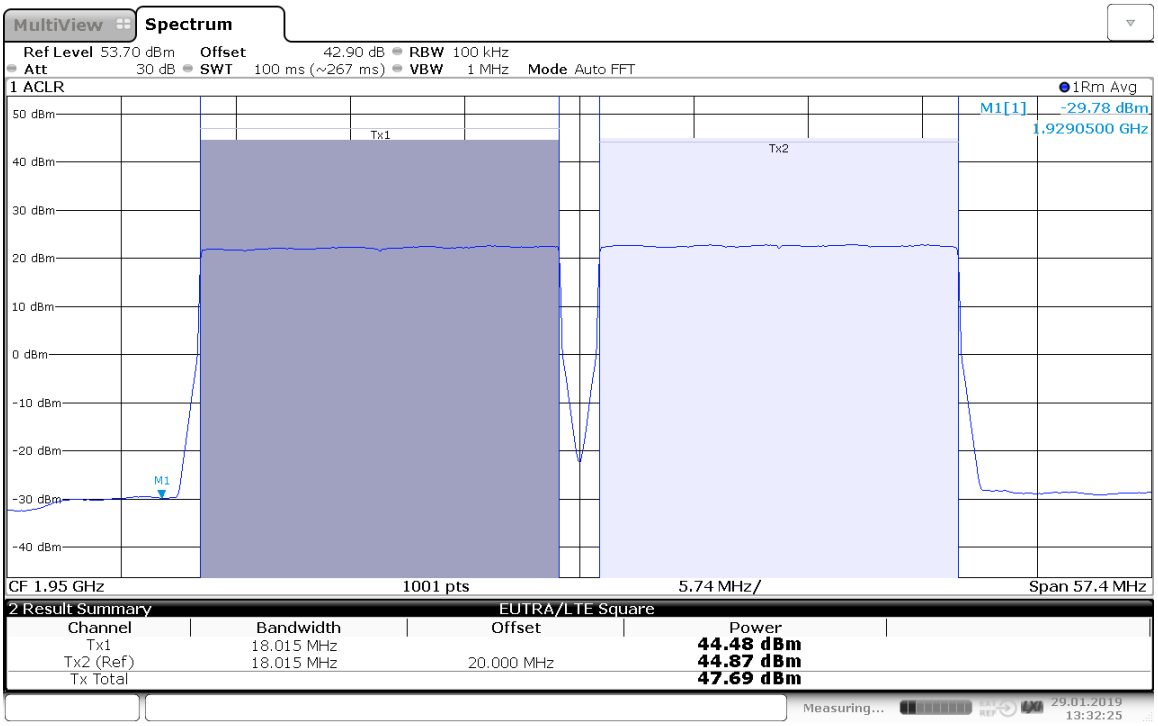


14:51:07 01.02.2019

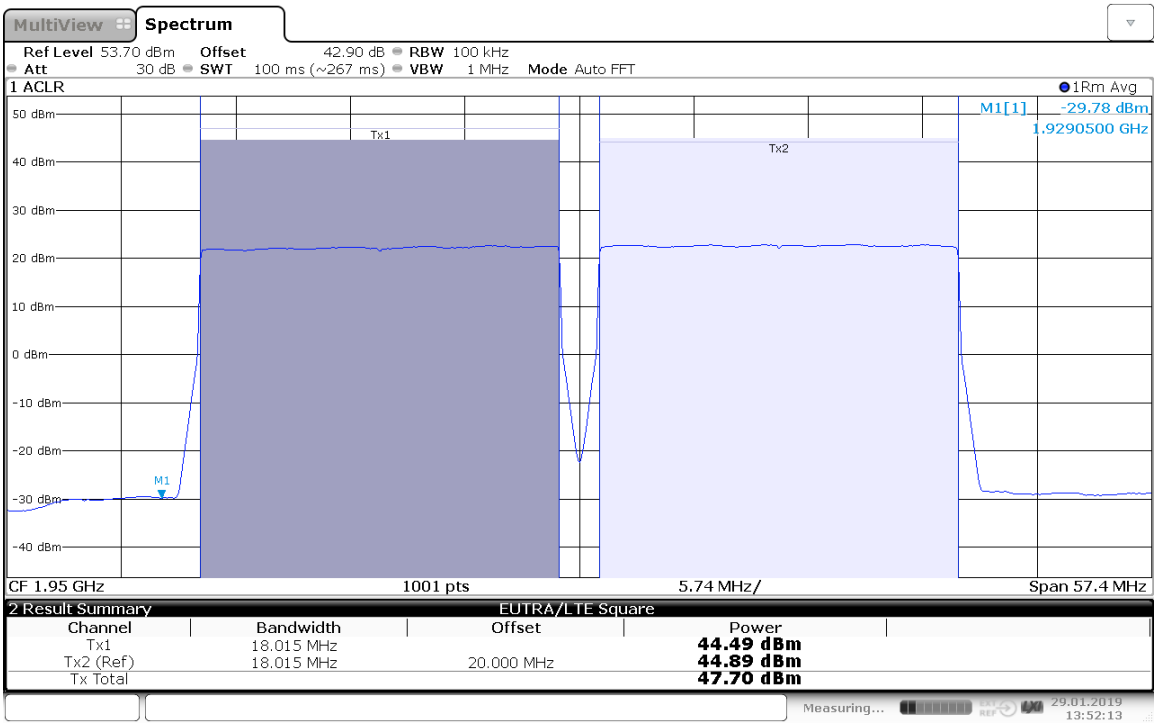
Channel Bandwidth :20M+20M(1940MHz &1960MHz)

Port	Carrier1 Center Freq. (MHz)	Carrier1 Max output Power in dBm	Carrier2 Center Freq. (MHz)	Carrier2 Max output Power in dBm	Antenna gain dBi	Cable Loss dB	Dipole Antenna	Total Power in W Of single antenna
1	1940	44.48	1960	44.87	17.5	2	2.15	1270.48
2		44.49		44.89	17.5	2	2.15	1274.94
3		44.47		44.88	17.5	2	2.15	1270.61
4		44.45		44.85	17.5	2	2.15	1263.25

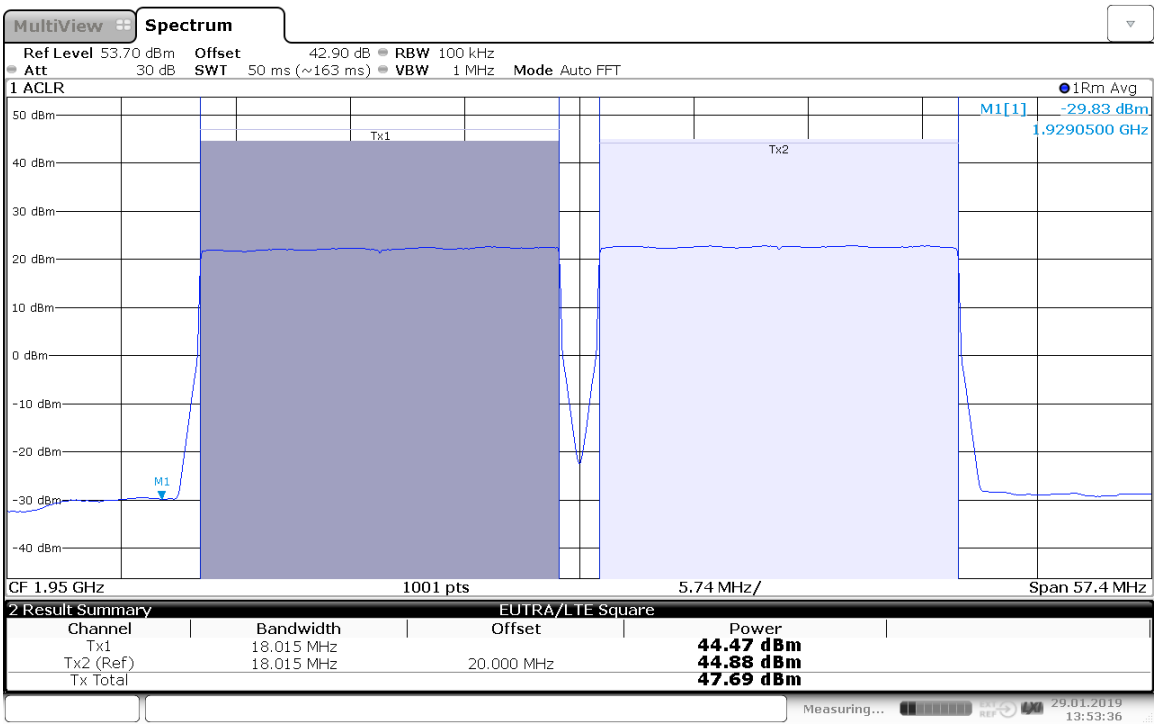
20M+20M -1940MHz&1960MHz-Port 1~4:



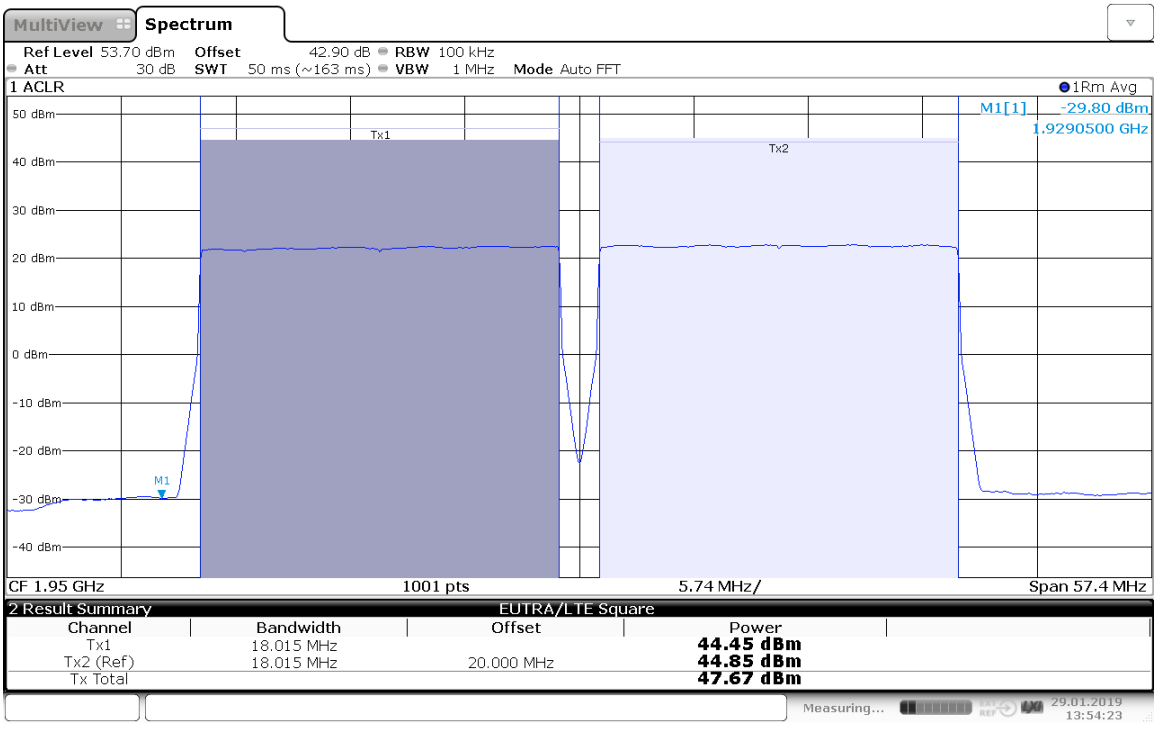
13:32:26 29.01.2019



13:52:13 29.01.2019



13:53:36 29.01.2019

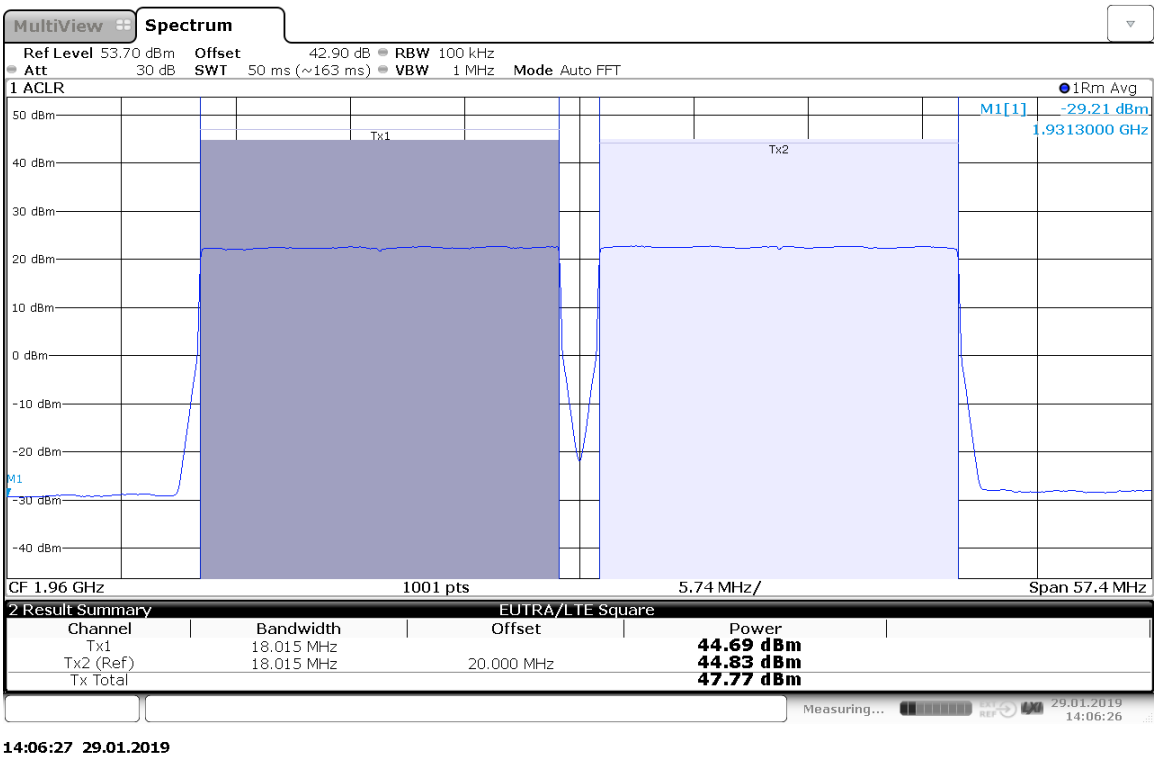


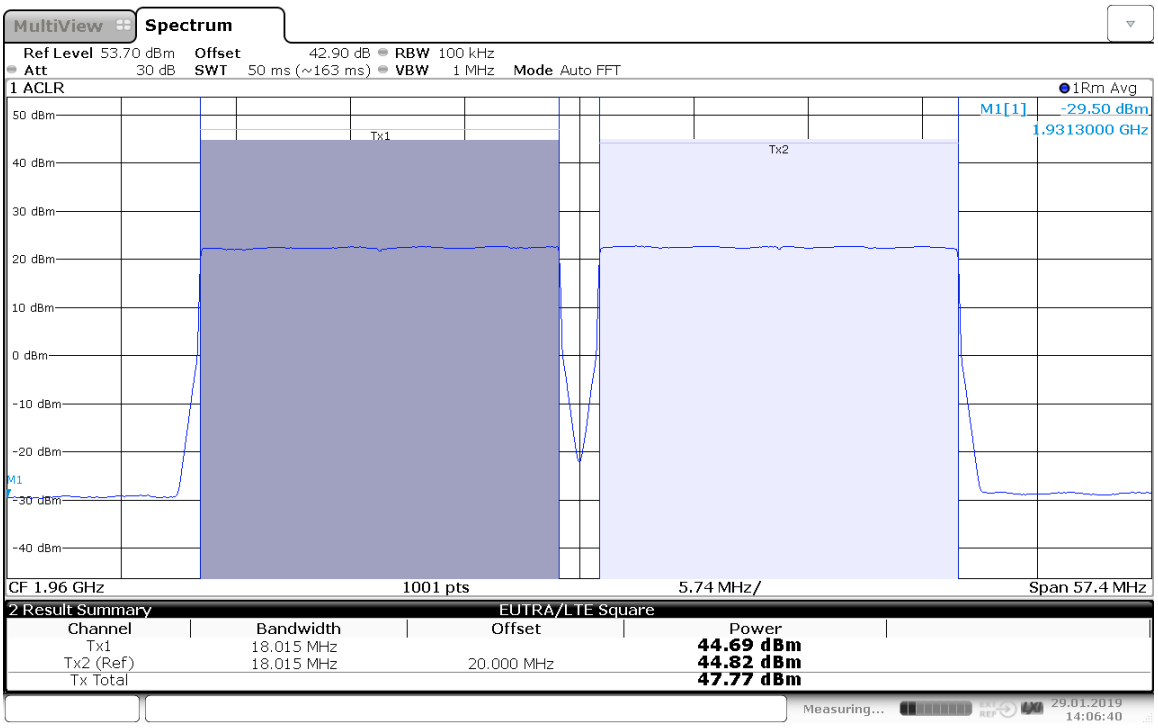
13:54:24 29.01.2019

Channel Bandwidth :20M+20M(1950MHz & 1970MHz)

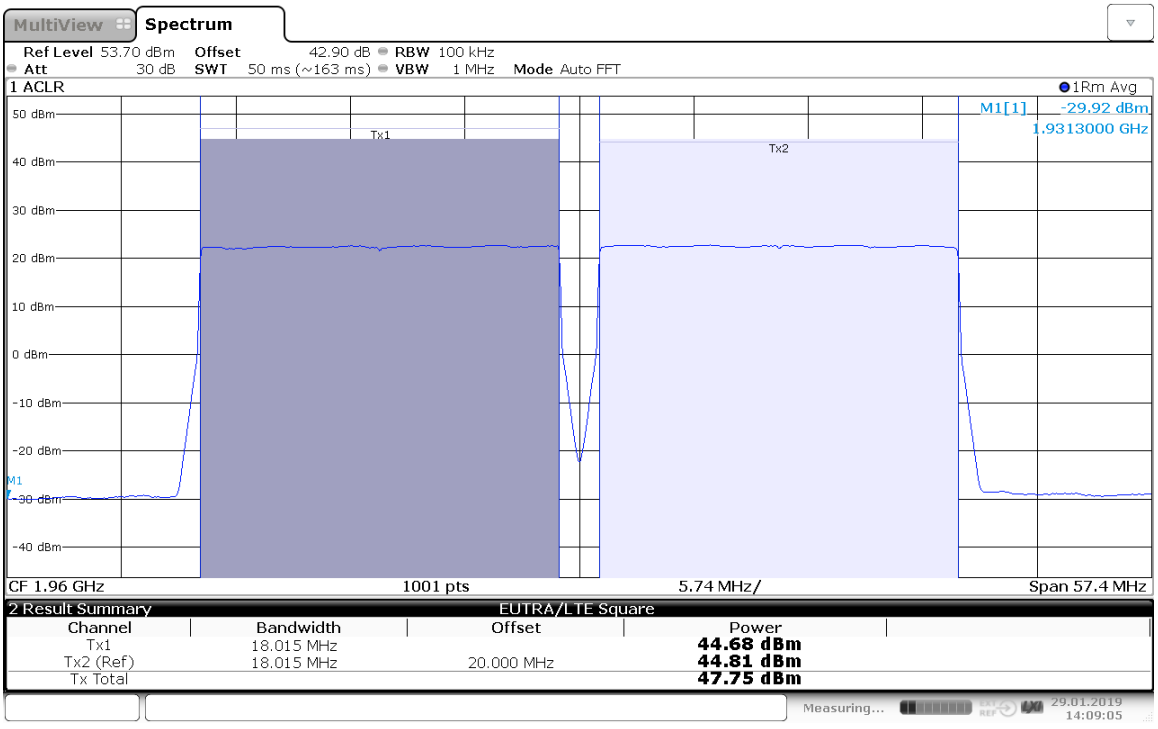
Port	Carrier1 Center Freq. (MHz)	Carrier1 Max output Power in dBm	Carrier2 Center Freq. (MHz)	Carrier2 Max output Power in dBm	Antenna gain dBi	Cable Loss dB	Dipole Antenna	Total Power in W Of single antenna
1	1950	44.69	1970	44.83	17.5	2	2.15	1294.45
2		44.69		44.82	17.5	2	2.15	1292.95
3		44.68		44.81	17.5	2	2.15	1289.97
4		44.68		44.81	17.5	2	2.15	1289.97

20M+20M - 1950MHz&1970MHz-Port 1~4:

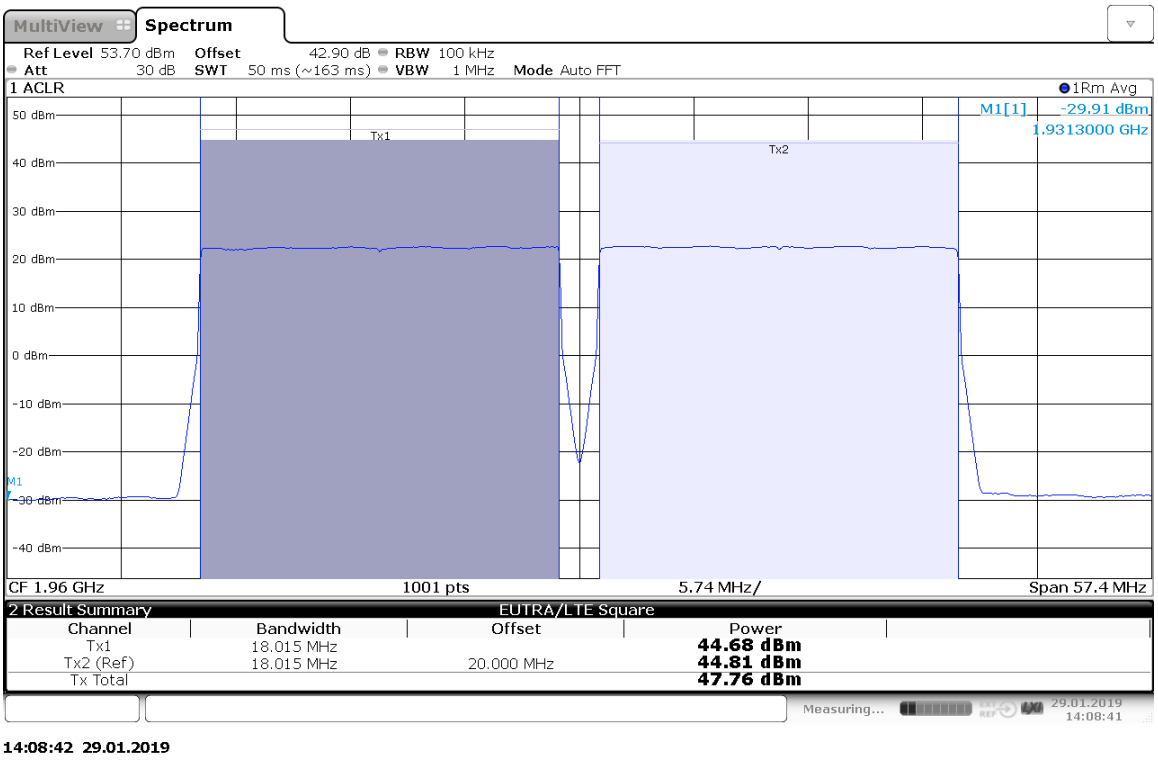




14:06:41 29.01.2019



14:09:06 29.01.2019

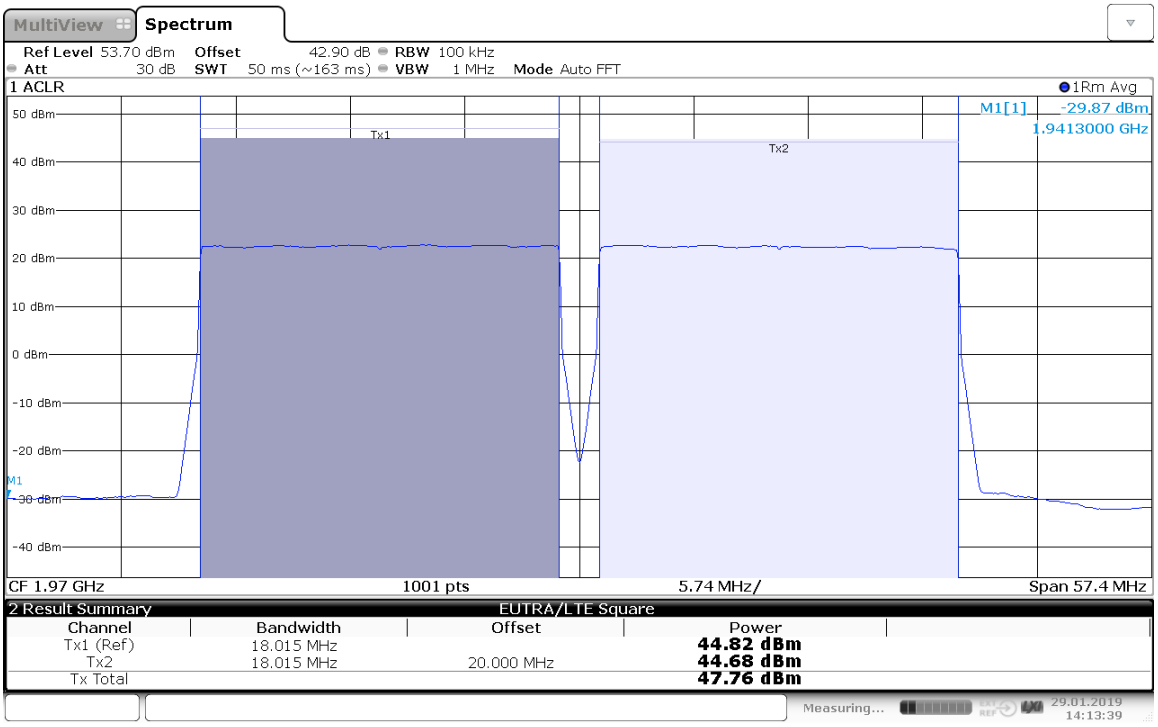


14:08:42 29.01.2019

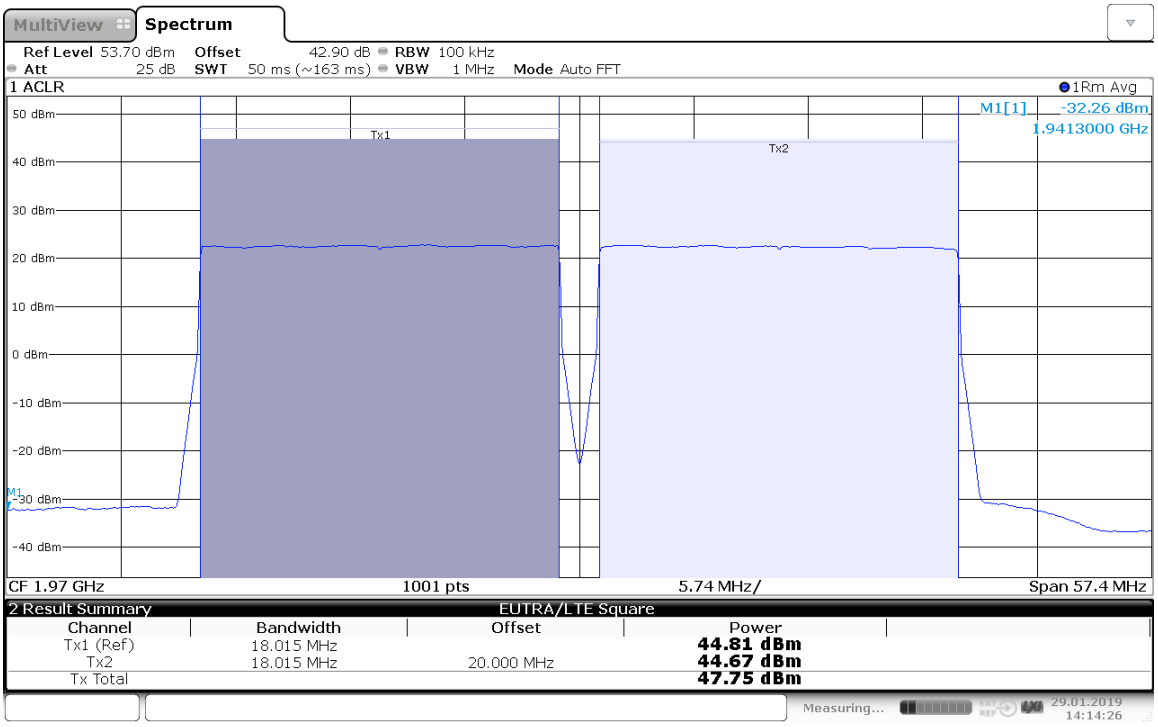
Channel Bandwidth :20M+20M(1960MHz & 1980MHz)

Port	Carrier1 Center Freq. (MHz)	Carrier1 Max output Power in dBm	Carrier2 Center Freq. (MHz)	Carrier2 Max output Power in dBm	Antenna gain dBi	Cable Loss dB	Dipole Antenna	Total Power in W Of single antenna
1	1960	44.82	1980	44.68	17.5	2	2.15	1291.48
2		44.81		44.67	17.5	2	2.15	1288.51
3		44.79		44.66	17.5	2	2.15	1284.04
4		44.79		44.65	17.5	2	2.15	1282.59

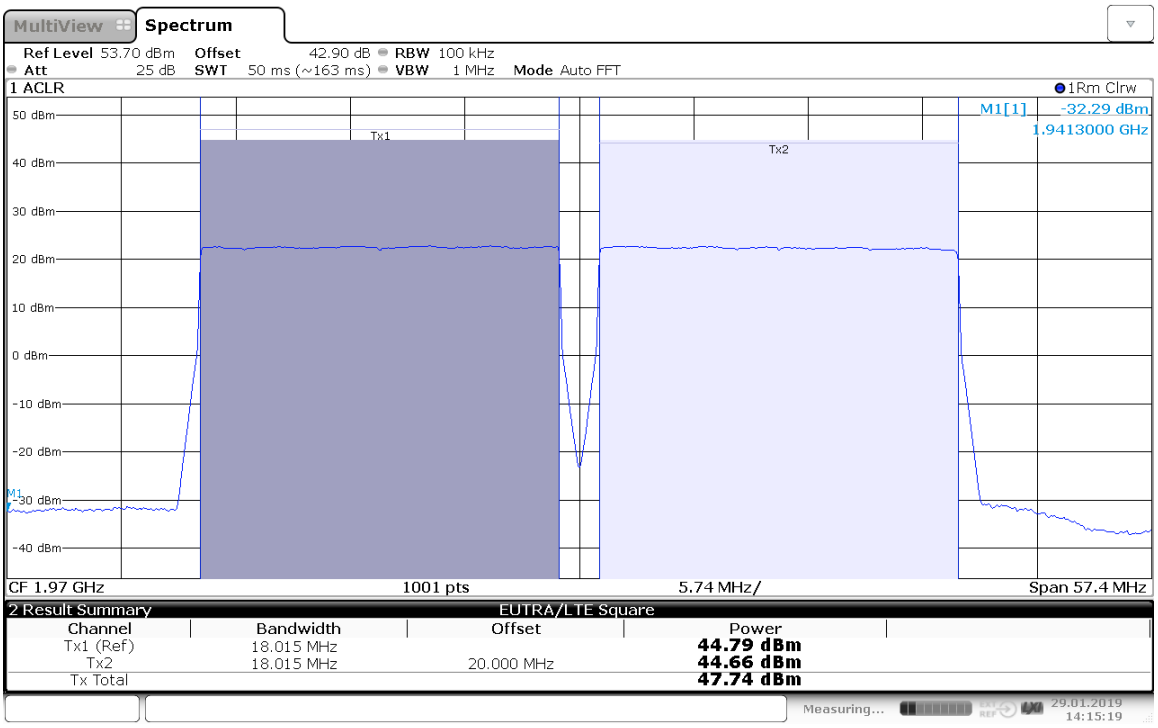
20M+20M - 1960MHz&1980MHz-Port 1~4:



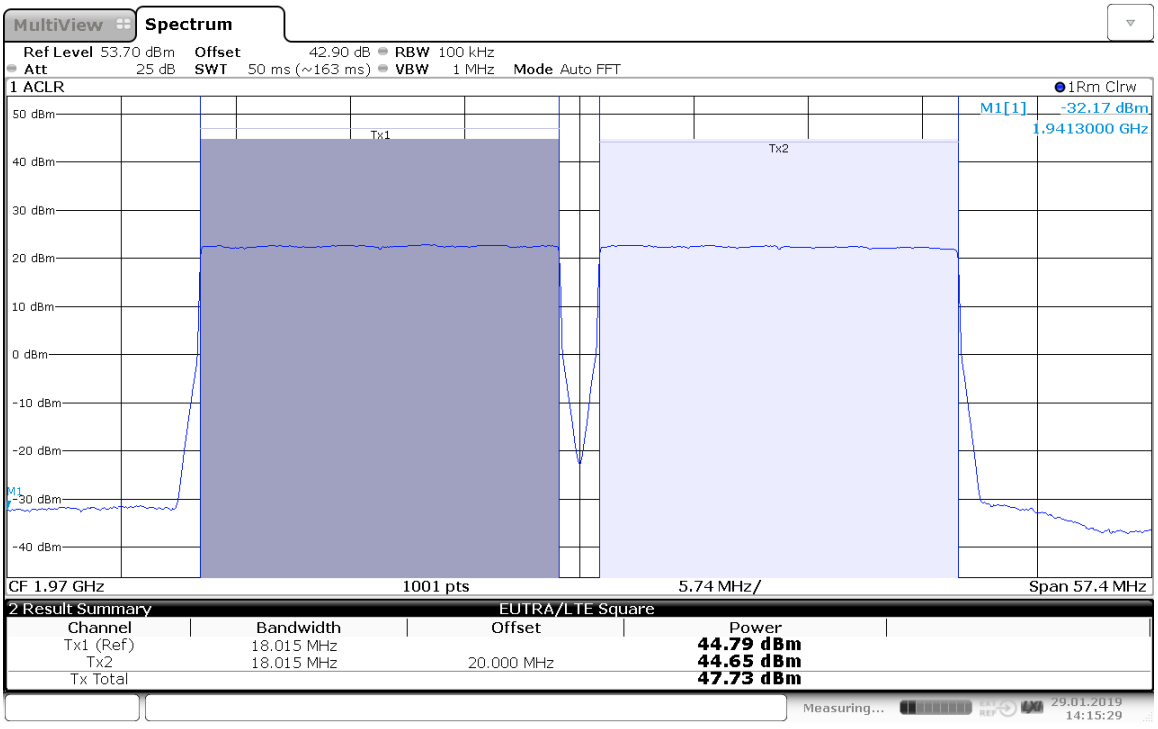
14:13:40 29.01.2019



14:14:26 29.01.2019



14:15:19 29.01.2019



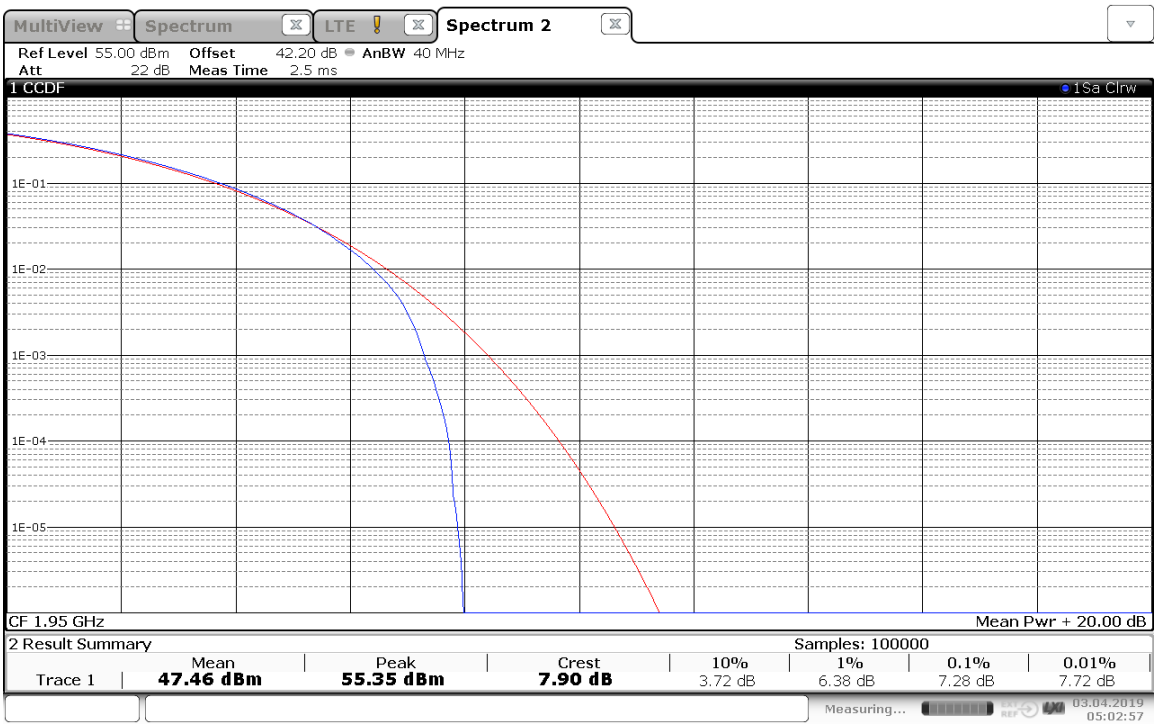
14:15:29 29.01.2019

Dual Carrier_PAR:

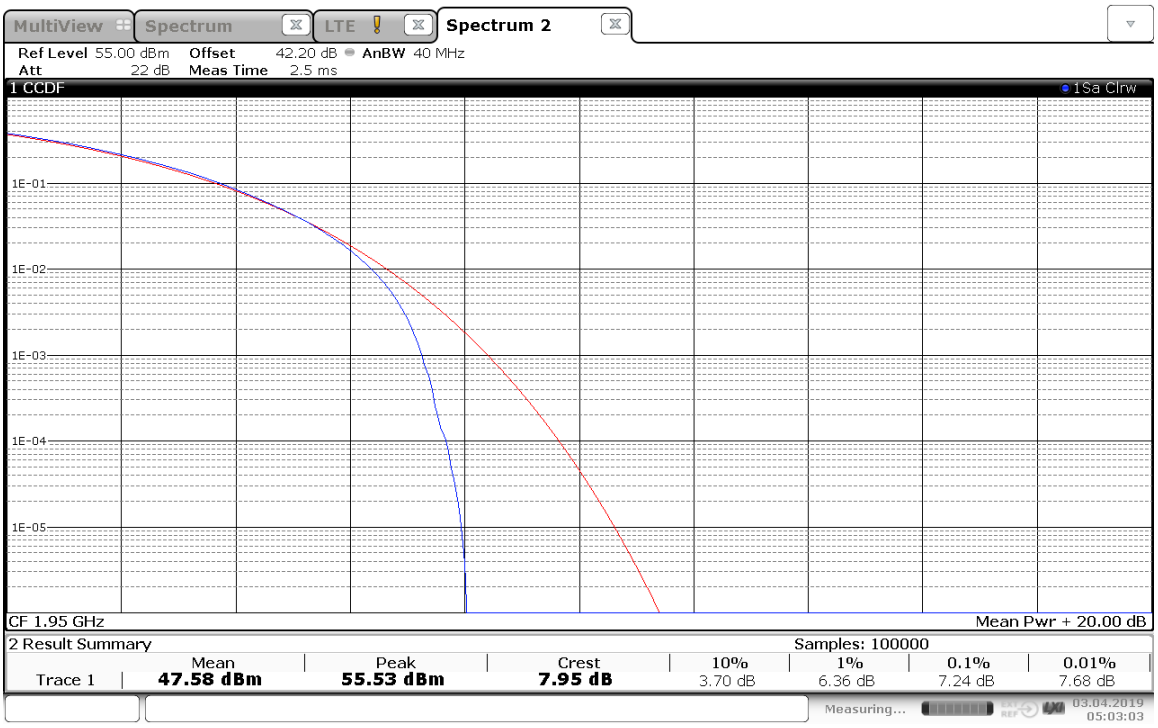
Channel Bandwidth :5M+5M 1932.5MHz & 1967.5MHz)

Port	Center Freq. (MHz)	PAR in dB
1	1932.5MHz & 1967.5MHz	7.90
2		7.95
3		7.81
4		7.96

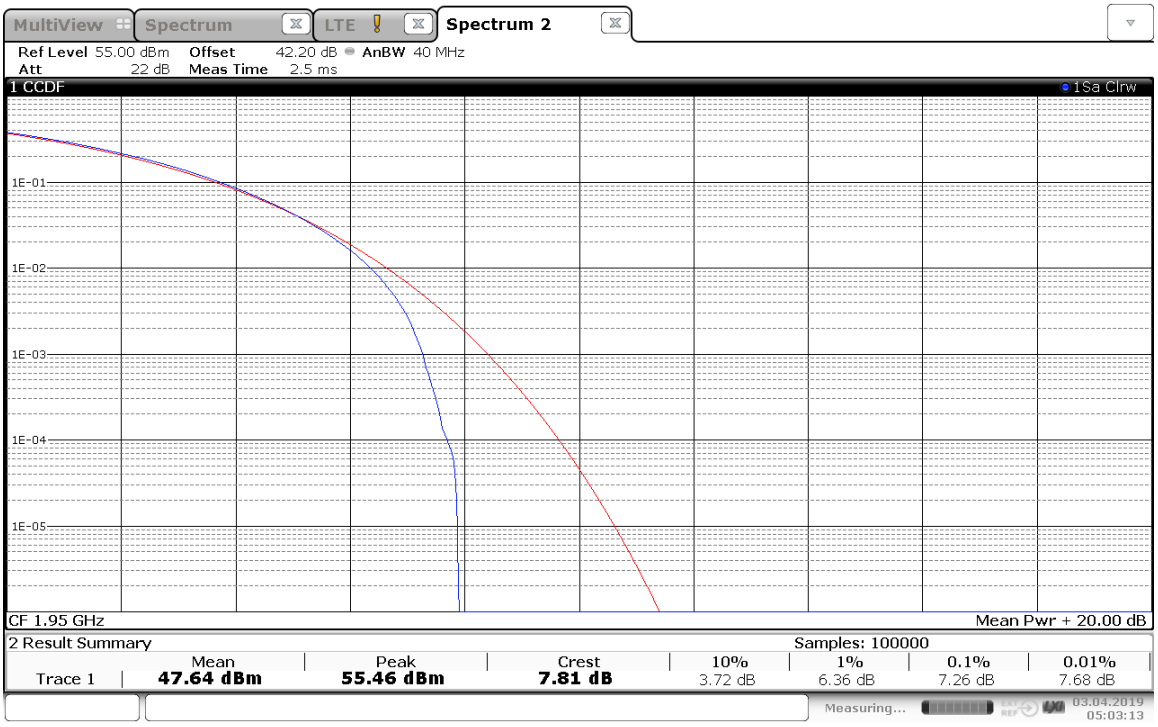
5M+5M -1932.5MHz&1967.5MHz-Port 1~4:



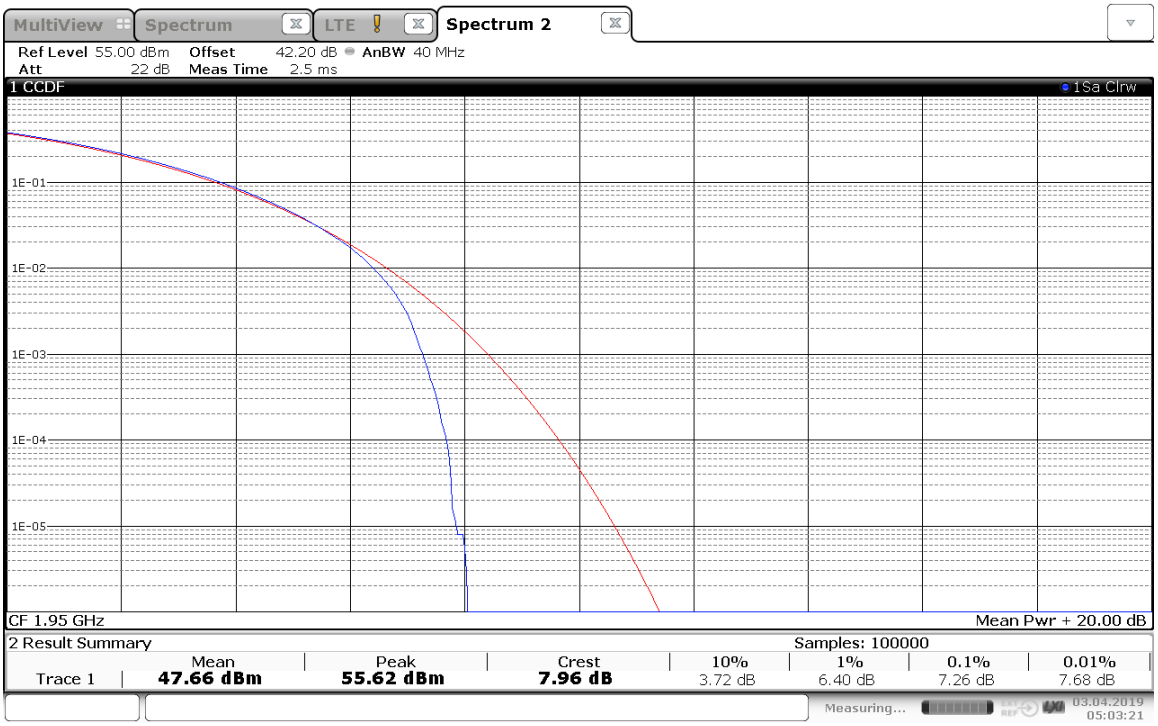
05:02:57 03.04.2019



05:03:04 03.04.2019



05:03:14 03.04.2019

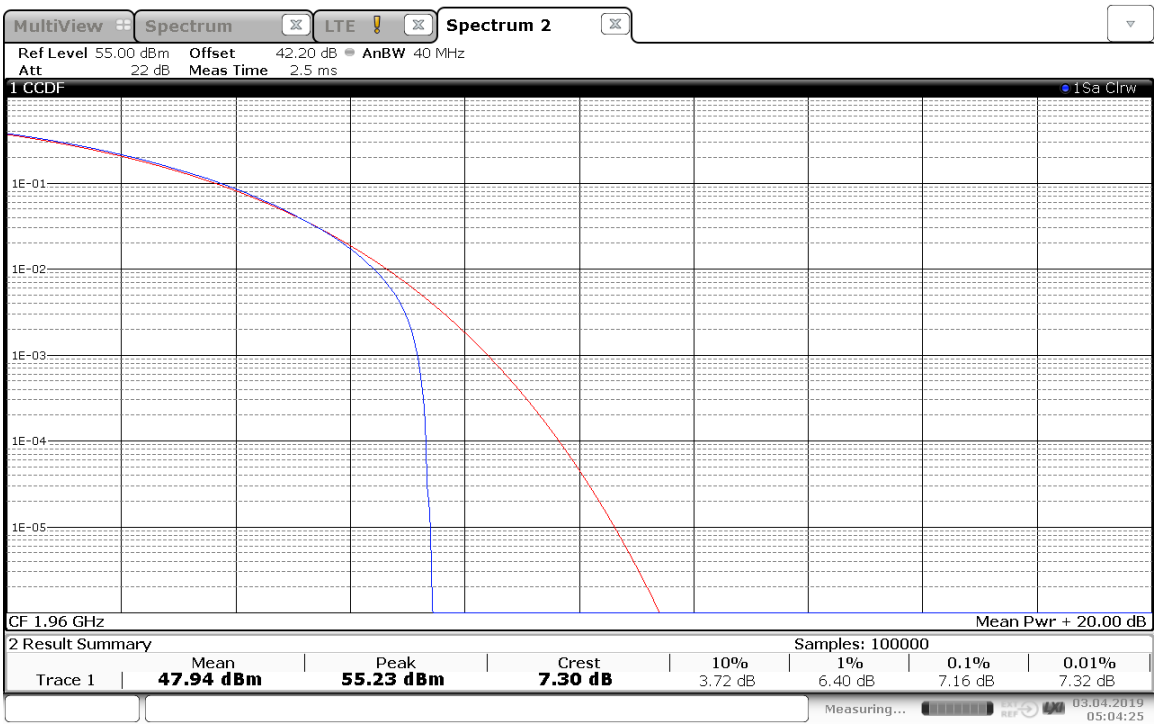


05:03:21 03.04.2019

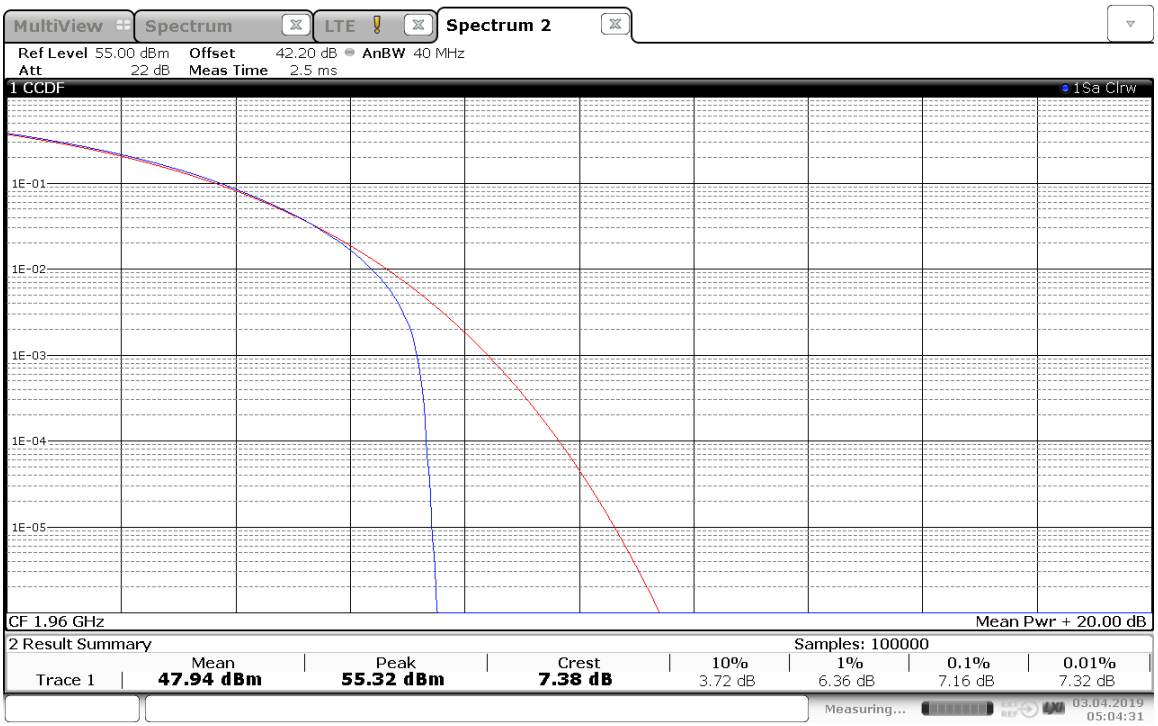
Channel Bandwidth :5M+5M(1942.5MHz & 1977.5MHz)

Port	Center Freq. (MHz)	PAR in dB
1	1942.5MHz&1977.5MHz	7.30
2		7.38
3		7.41
4		7.35

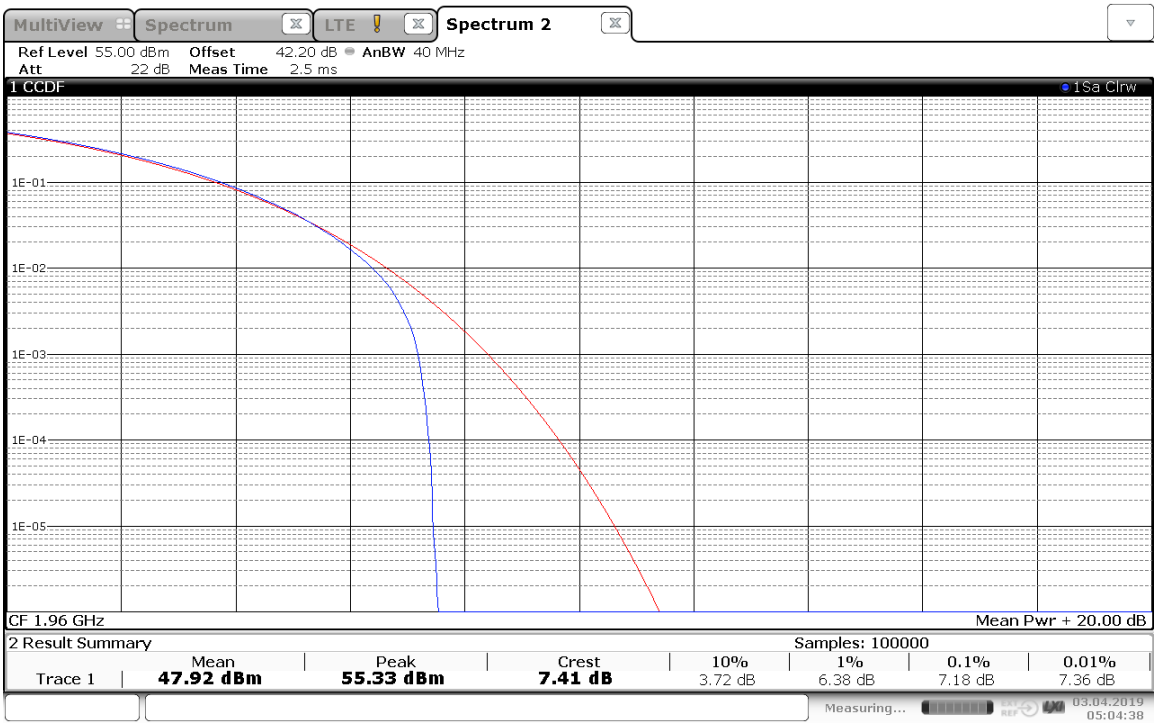
5M+5M -1942.5MHz&1977.5MHz-Port 1~4:



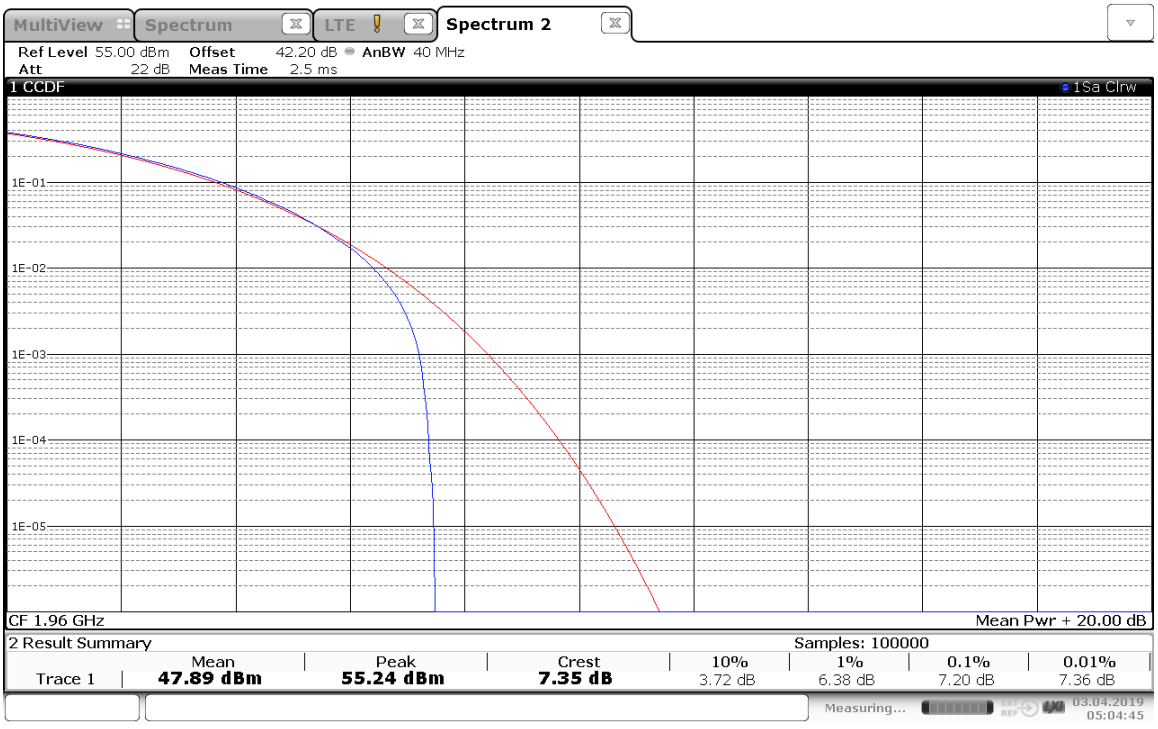
05:04:25 03.04.2019



05:04:32 03.04.2019



05:04:39 03.04.2019

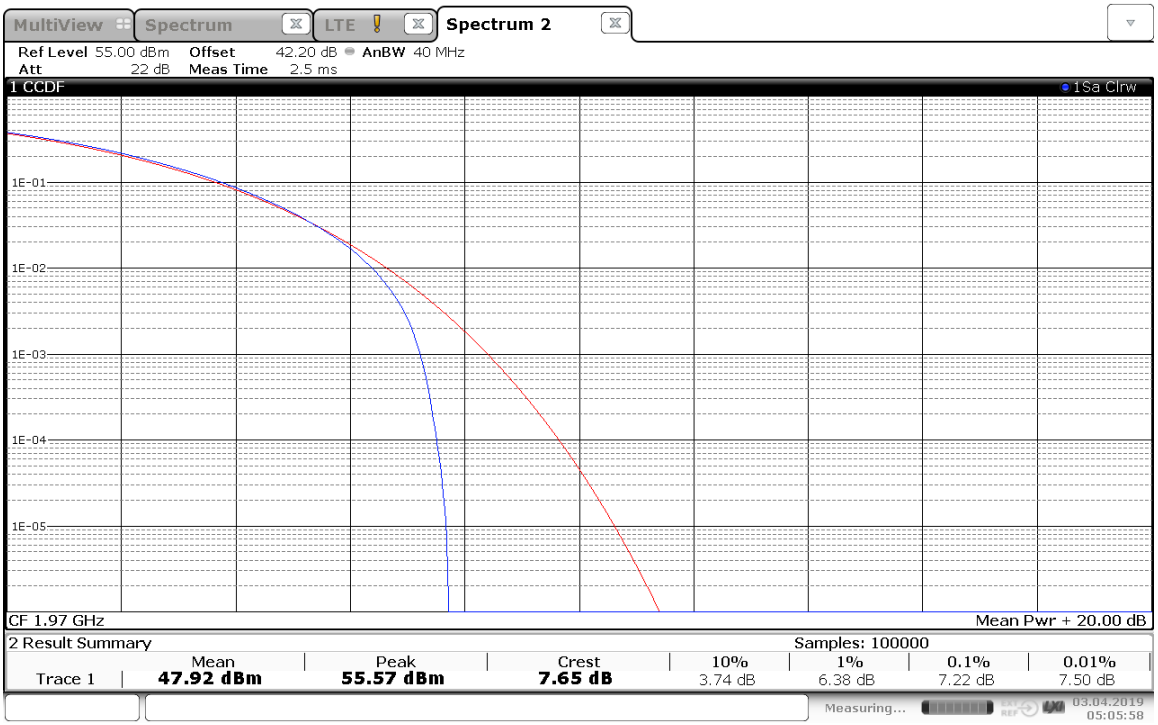


05:04:46 03.04.2019

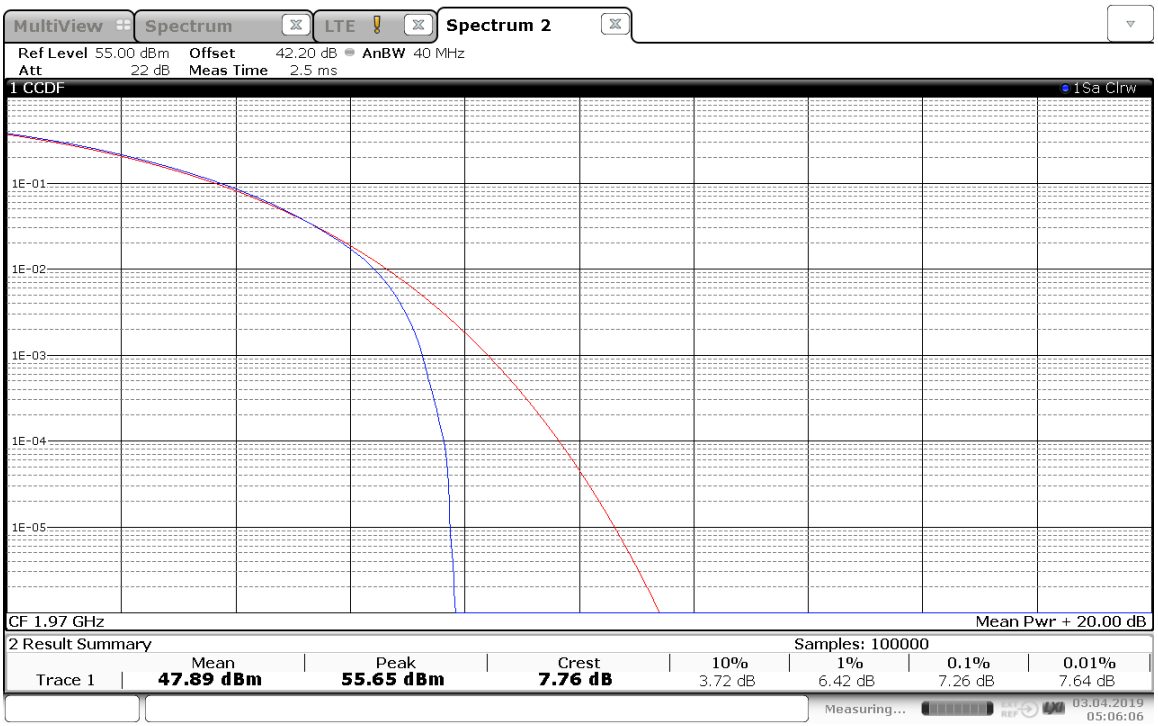
Channel Bandwidth :5M+5M(1952.5MHz & 1987.5MHz)

Port	Center Freq. (MHz)	PAR in dB
1	1952.5MHz&1987.5MHz	7.65
2		7.76
3		7.66
4		7.70

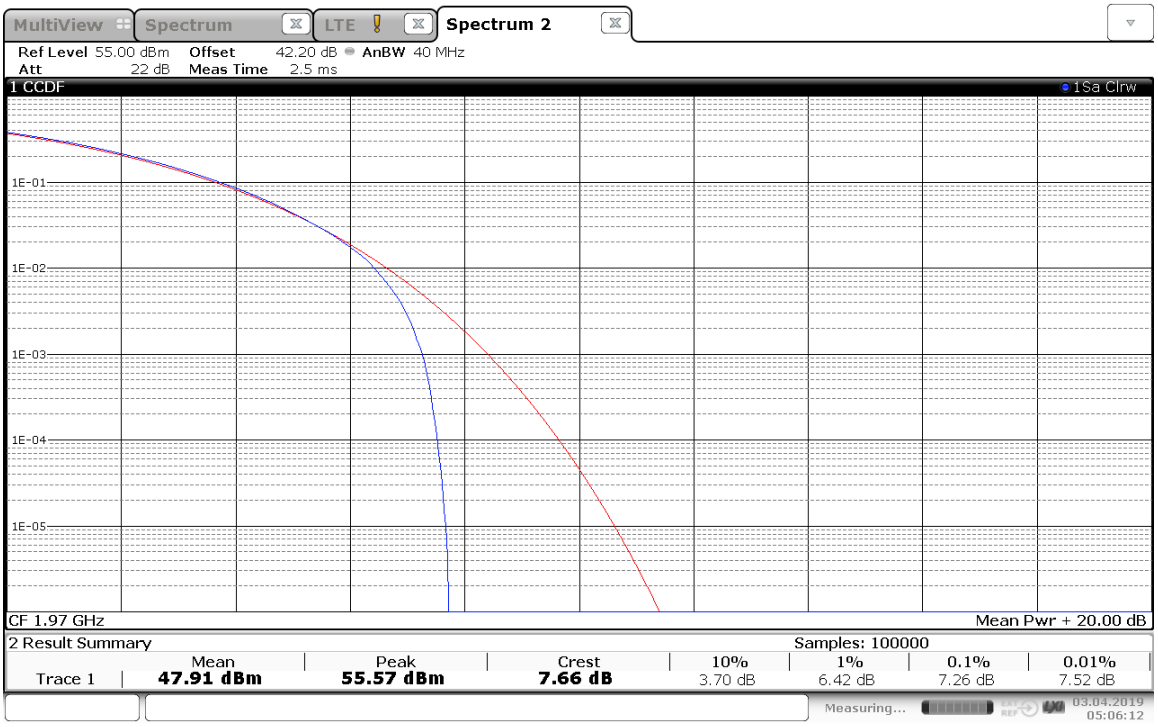
5M+5M -1952.5MHz&1987.5MHz-Port 1~4:



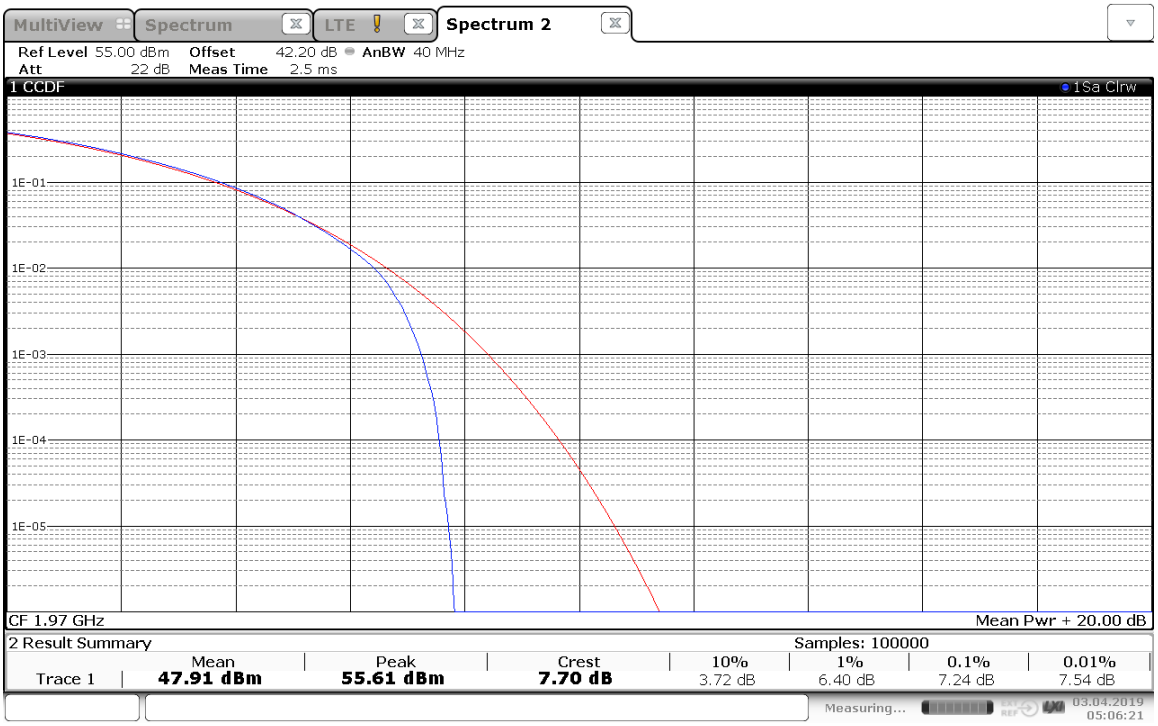
05:05:59 03.04.2019



05:06:06 03.04.2019



05:06:12 03.04.2019

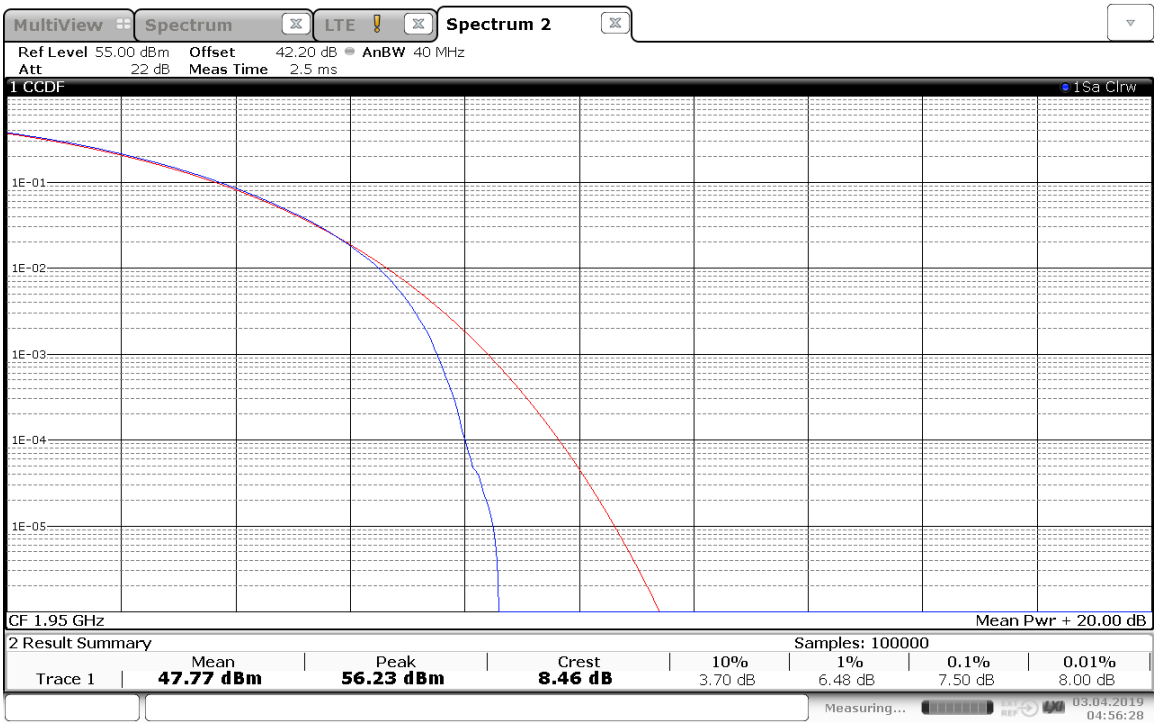


05:06:22 03.04.2019

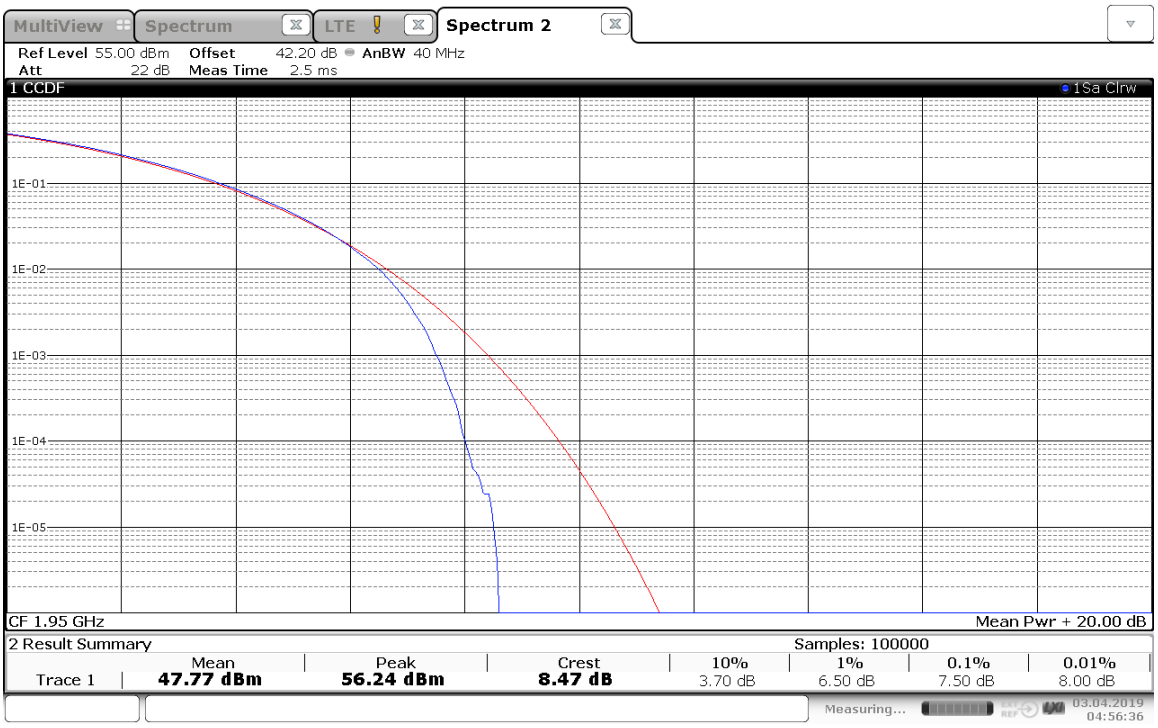
Channel Bandwidth :20M+20M(1940MHz &1960MHz)

Port	Center Freq. (MHz)	PAR in dB
1	1940MHz &1960MHz	8.46
2		8.47
3		8.62
4		8.21

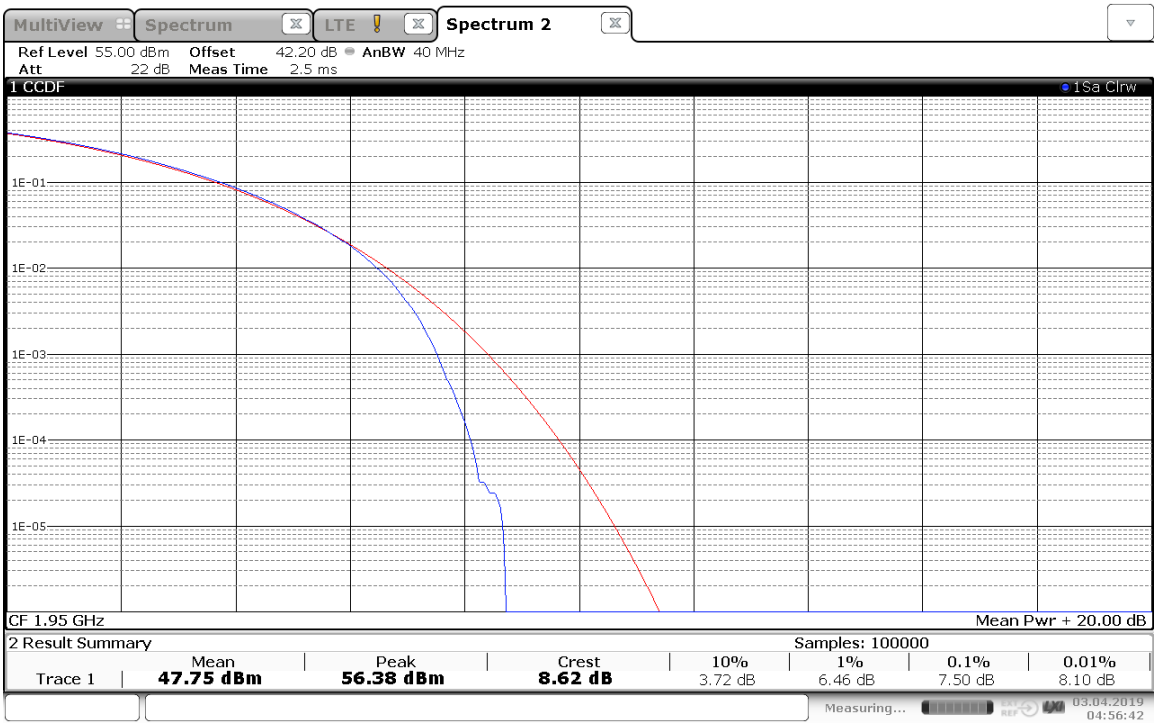
20M+20M -1940MHz&1960MHz-Port 1~4:



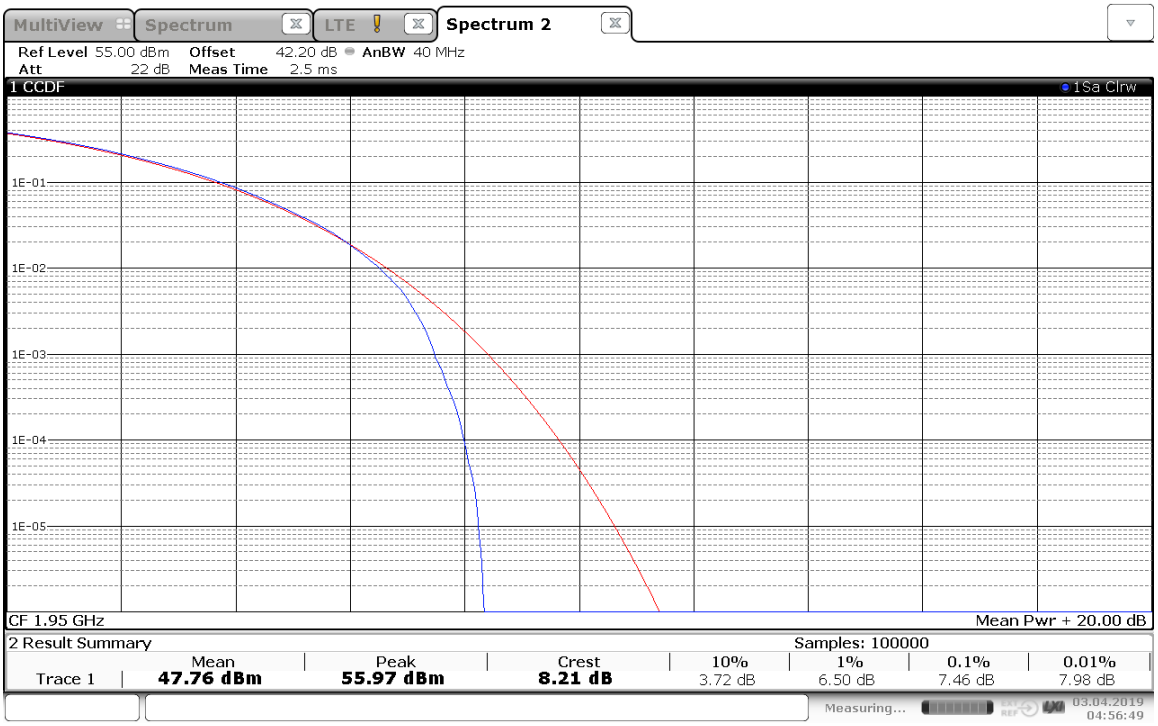
04:56:28 03.04.2019



04:56:36 03.04.2019



04:56:42 03.04.2019

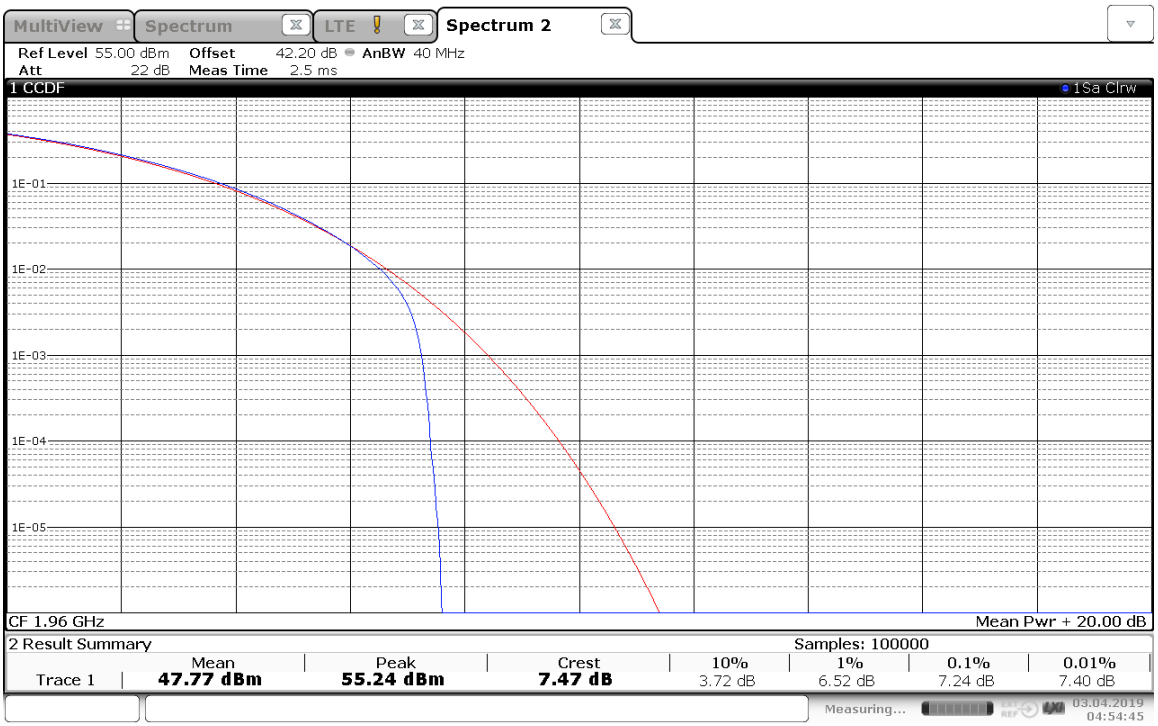


04:56:49 03.04.2019

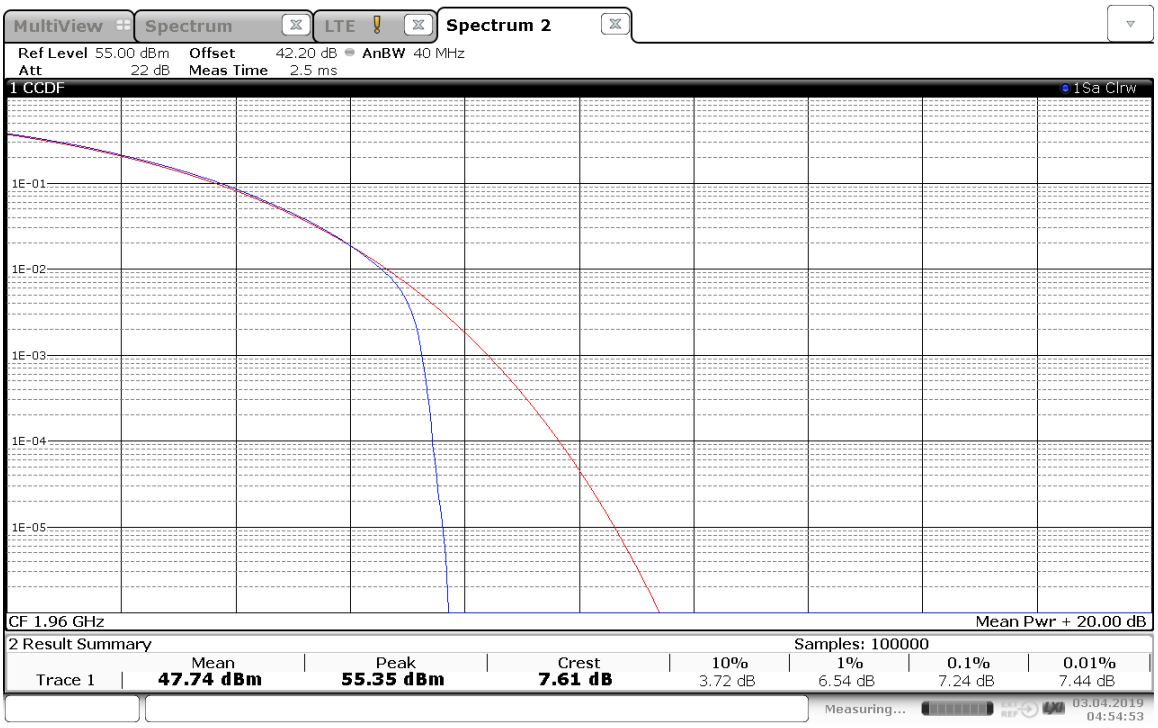
Channel Bandwidth :20M+20M(1950MHz & 1970MHz)

Port	Center Freq. (MHz)	PAR in dB
1	1950MHz & 1970MHz	7.47
2		7.61
3		7.63
4		7.49

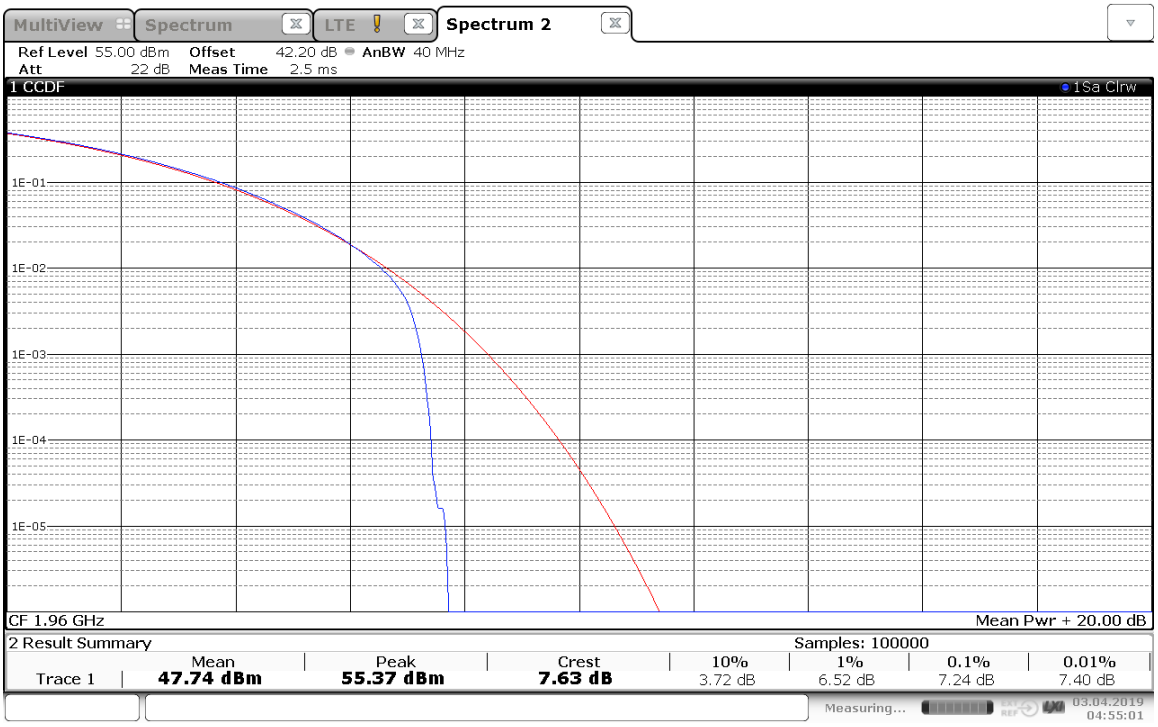
20M+20M - 1950MHz&1970MHz-Port 1~4:



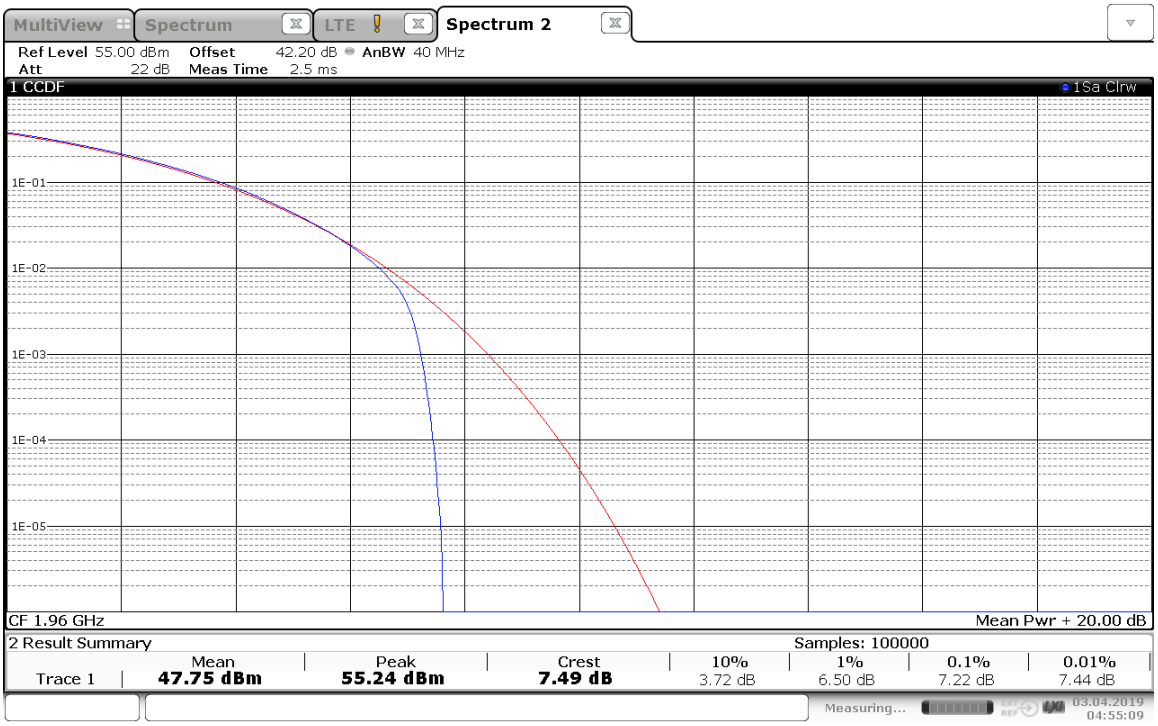
04:54:46 03.04.2019



04:54:53 03.04.2019



04:55:02 03.04.2019

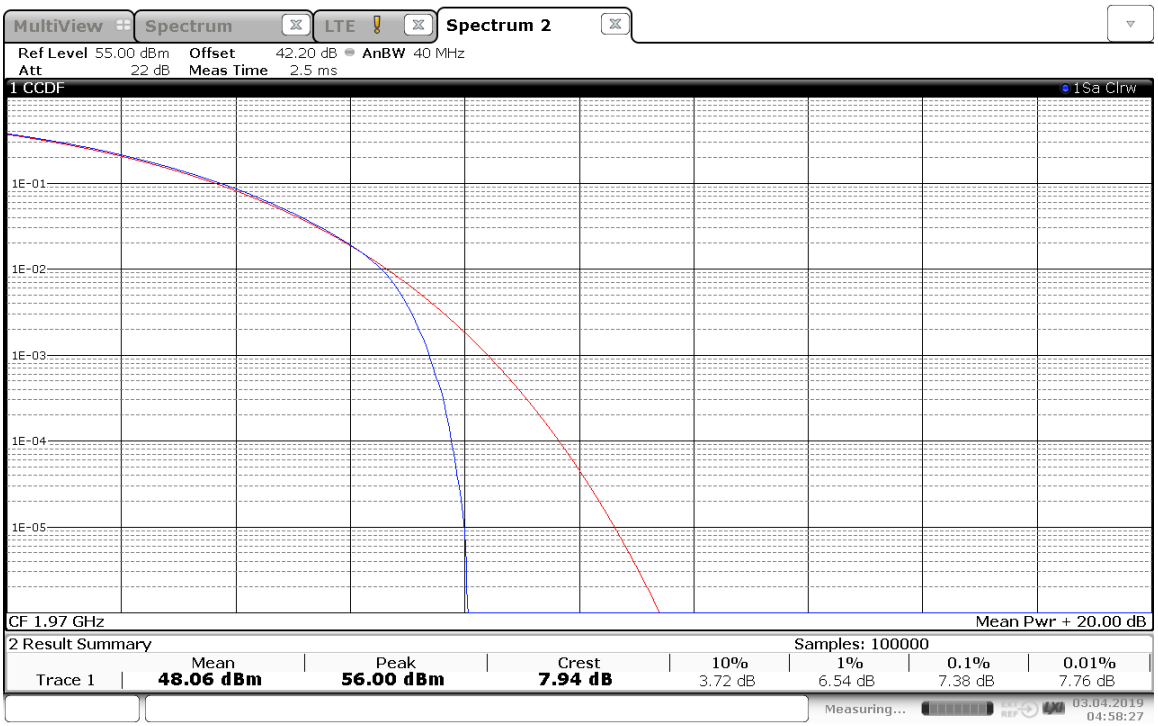


04:55:10 03.04.2019

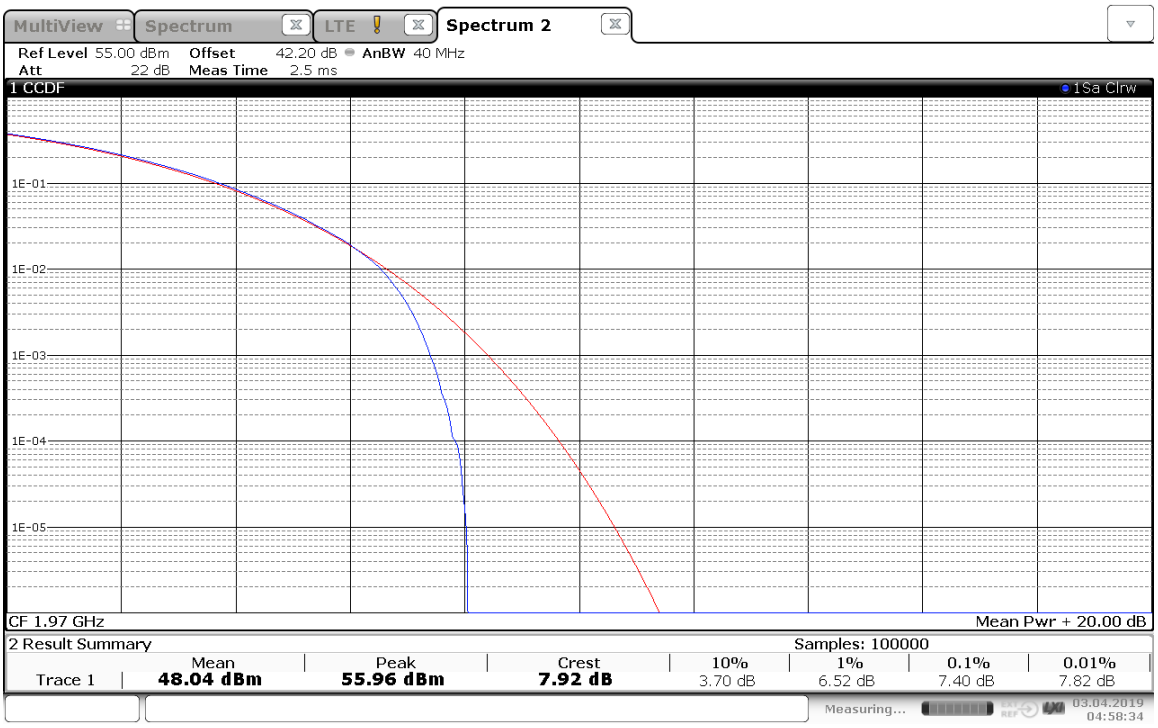
Channel Bandwidth :20M+20M(1960MHz & 1980MHz)

Port	Center Freq. (MHz)	PAR in dB
1	1960MHz & 1980MHz	7.94
2		7.92
3		8.26
4		8.13

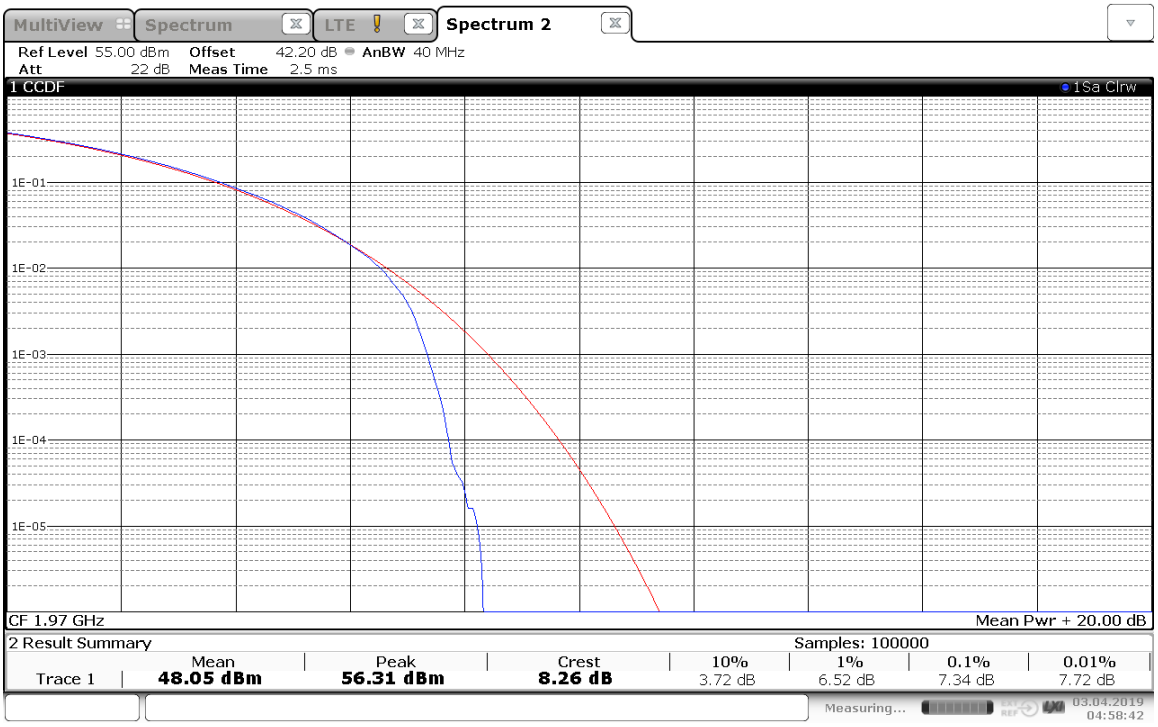
20M+20M - 1960MHz&1980MHz-Port 1~4:



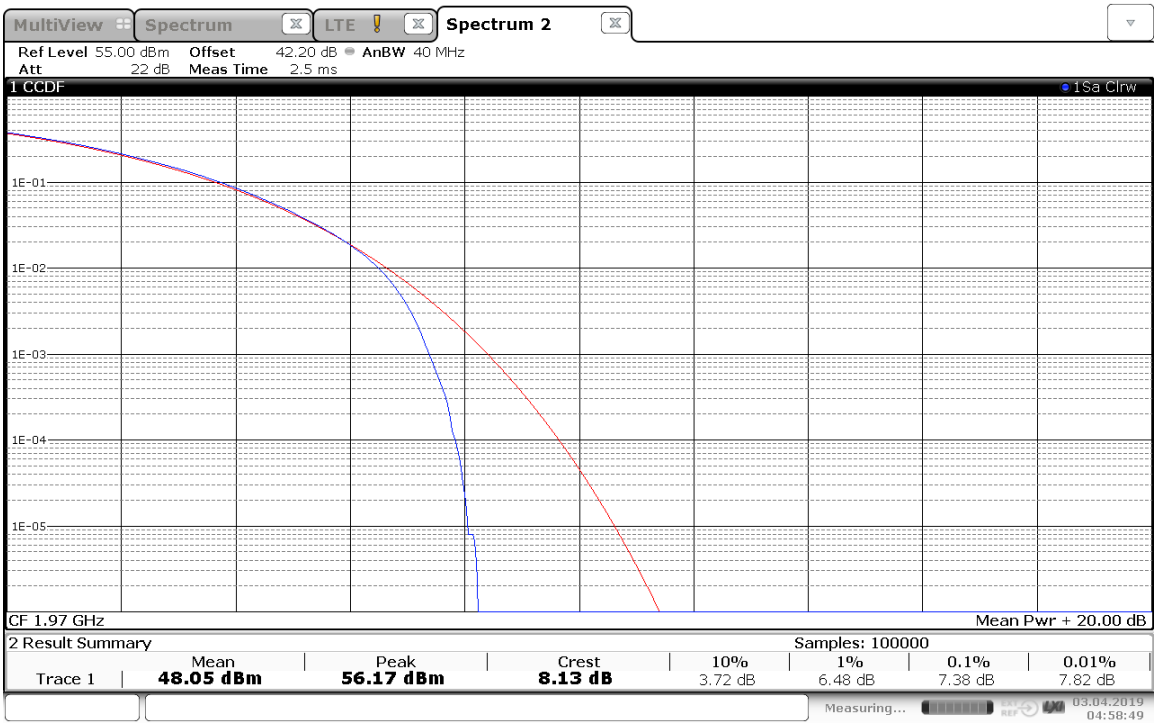
04:58:28 03.04.2019



04:58:34 03.04.2019



04:58:43 03.04.2019



04:58:50 03.04.2019

5. RF EXPOSURE

5.1. Applicable Standard :

FCC §2.1091 §1.1037

5.2. Limit

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.
According to §1.1310 and §2.1091 RF exposure is calculated. Limits for Maximum Permissible Exposure (MPE)

(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

5.3. Test Data:

Predication of MPE limit at a given distance
Equation from page 18 of OET Bulletin 65, Edition 97-01
$S = EIRP/ 4\pi R^2$
Where: S = power density
EIRP= equivalent isotropically radiated power=ERP+2.15dB
R = distance to the center of radiation of the antenna= [(ERP+2.15dB)/4лS]1/2

According to §24.232, the effective radiated power (ERP) of base transmitters and cellular repeaters must not exceed 1640 Watts.
Frequency 2690MHz is between 1500MHz and 100,000MHz, and the Maximum S=1mW/cm2
R=4.55m.
This equipment should be installed and operated with minimum distance 4.55m between the radiator & your body.

5.4. Test Result: Pass

6. MODULATION CHARACTERISTIC

6.1. Applicable Standard :

FCC §2.1047

6.2. 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.

6.3. Test Procedure:

LTE digital mode is used by EUT.

6.4. Environmental Conditions :

Temperature:	21 °C
Relative Humidity:	45 %
ATM Pressure:	1021 mbar

6.5. Test Result: Pass

6.6. Test Mode: Transmitting LTE

6.7. Test Data:

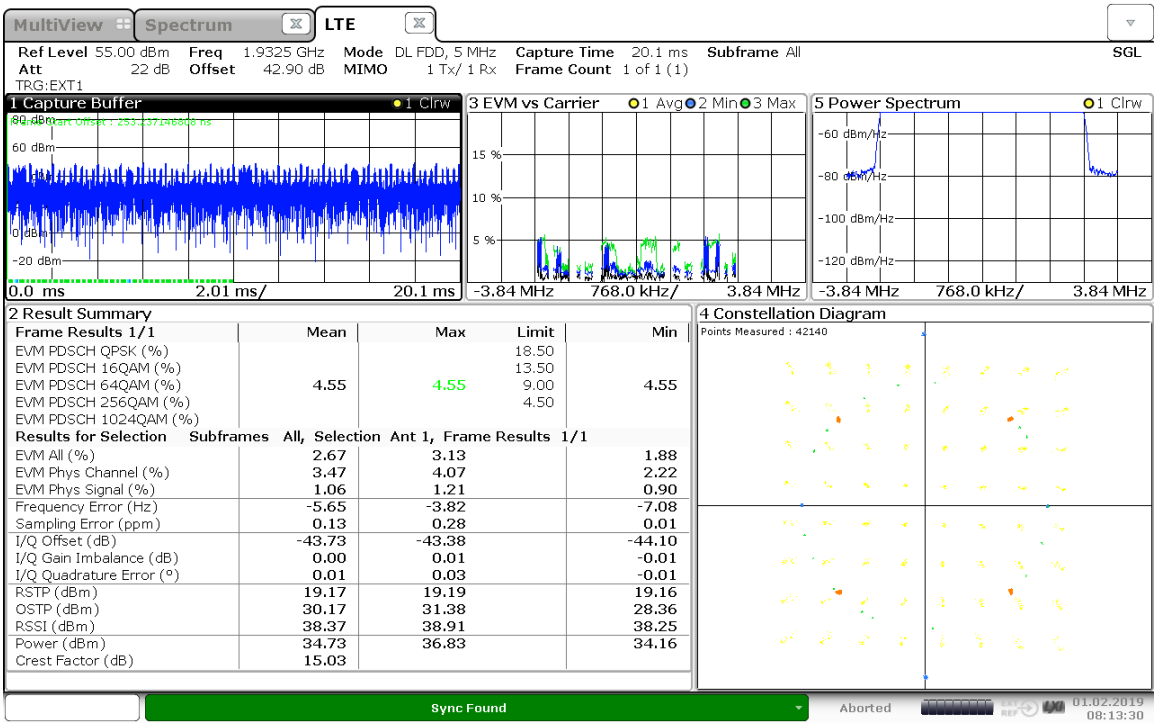
Dual Carrier:

Channel Bandwidth :5M+5M(1932.5MHz+1967.5MHz)

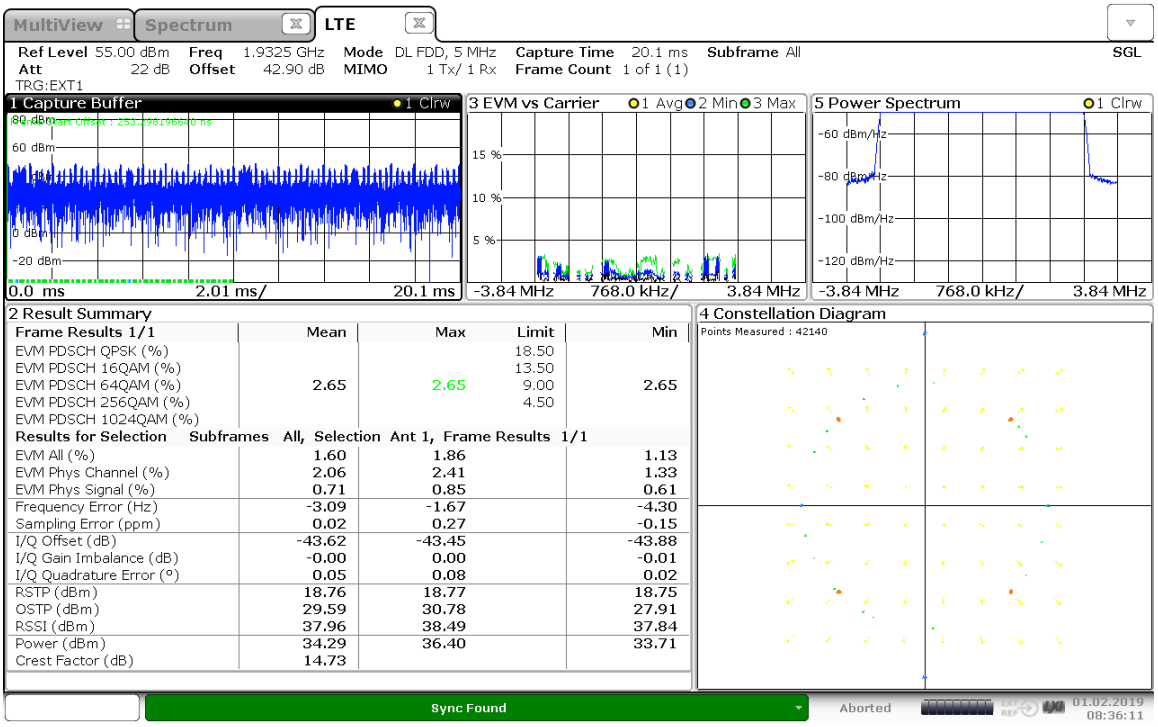
Frequency (MHz)	Test mode	Port	EVM(%)
1932.5	TM2.0	1	4.55
		2	2.65
		3	2.25
		4	2.06
	TM3.1	1	5.15
		2	5.16
		3	5.15
		4	5.16

	TM3.2	1	5.91
		2	5.94
		3	5.93
		4	5.91
	TM3.3	1	12.14
		2	12.17
		3	12.16
		4	12.16
1967.5	TM2.0	1	4.21
		2	2.59
		3	2.16
		4	2.10
	TM3.1	1	5.12
		2	5.15
		3	5.15
		4	5.14
	TM3.2	1	5.92
		2	5.94
		3	5.94
		4	5.91
	TM3.3	1	12.19
		2	12.23
		3	12.23
		4	12.23

5M -1932.5MHz-TM2.0-Port 1 ~4:

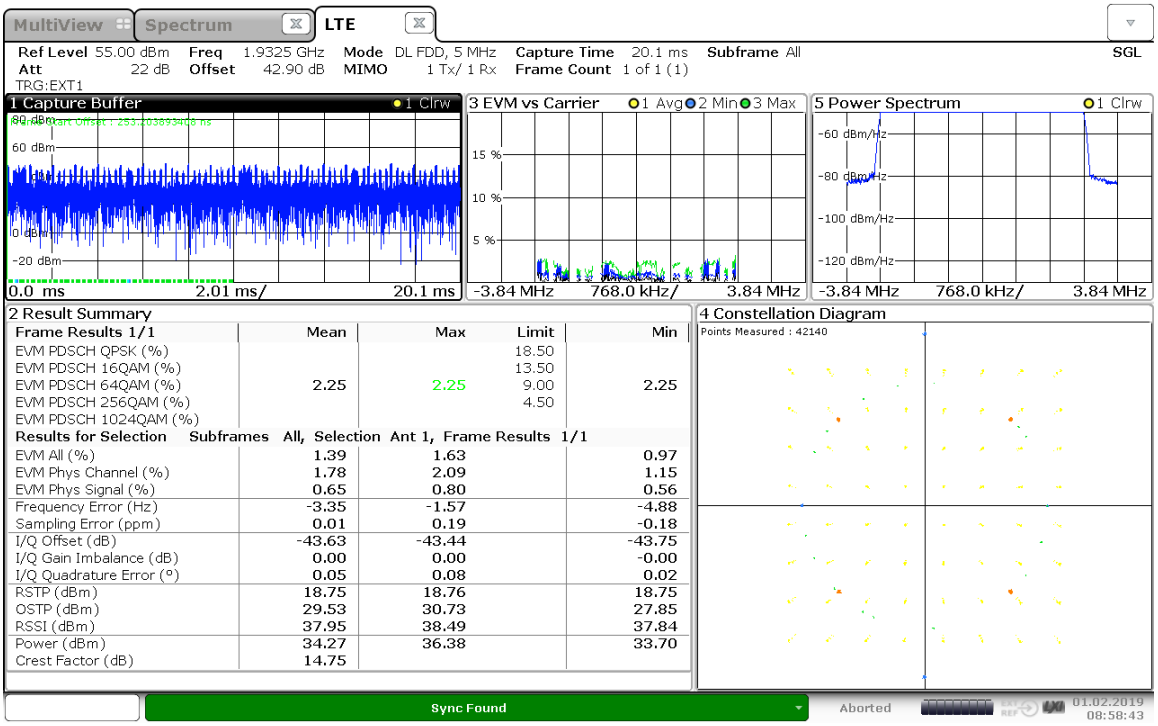


08:13:30 01.02.2019



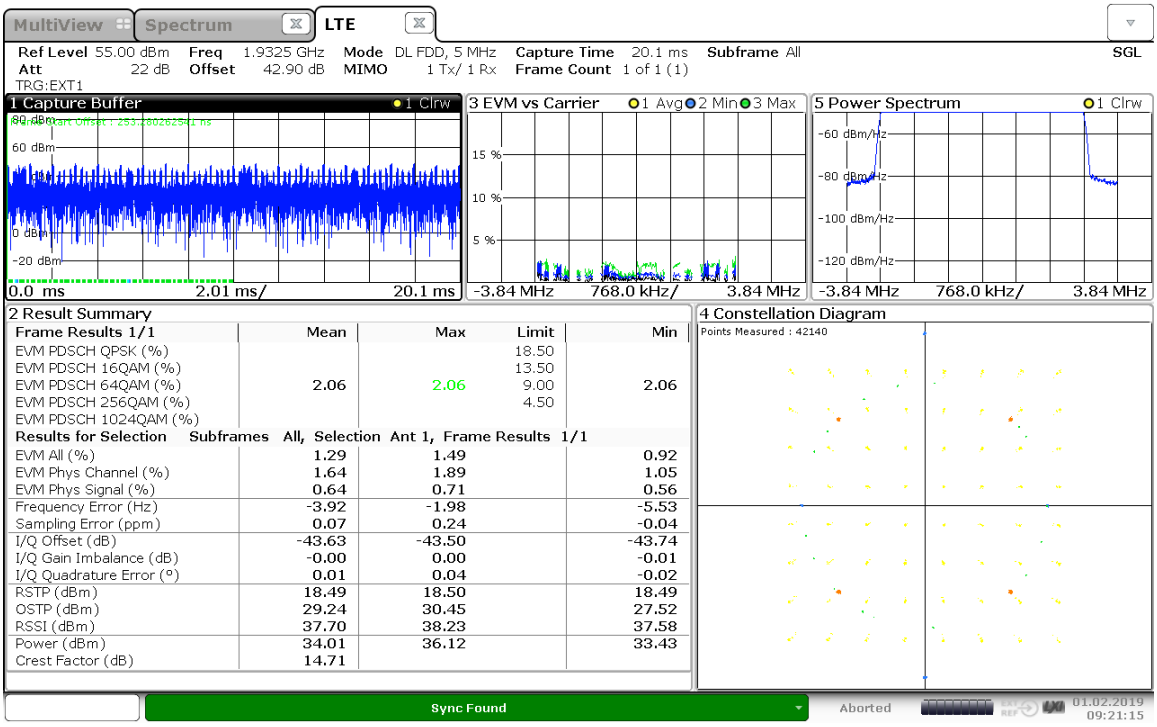
Frame Results 1/1	Mean	Max	Limit	Min
EVM PDSCH QPSK (%)			18.50	
EVM PDSCH 16QAM (%)			13.50	
EVM PDSCH 64QAM (%)	2.65	2.65	9.00	2.65
EVM PDSCH 256QAM (%)			4.50	
EVM PDSCH 1024QAM (%)				
Results for Selection	**Subframes All, Selection Ant 1, Frame Results 1/1**			
EVM All (%)	1.60	1.86		1.13
EVM Phys Channel (%)	2.06	2.41		1.33
EVM Phys Signal (%)	0.71	0.85		0.61
Frequency Error (Hz)	-3.09	-1.67		-4.30
Sampling Error (ppm)	0.02	0.27		-0.15
I/Q Offset (dB)	-43.62	-43.45		-43.88
I/Q Gain Imbalance (dB)	-0.00	0.00		-0.01
I/Q Quadrature Error (°)	0.05	0.08		0.02
RSTP (dBm)	18.76	18.77		18.75
OSTP (dBm)	29.59	30.78		27.91
RSSI (dBm)	37.96	38.49		37.84
Power (dBm)	34.29	36.40		33.71
Crest Factor (dB)	14.73			

08:36:11 01.02.2019



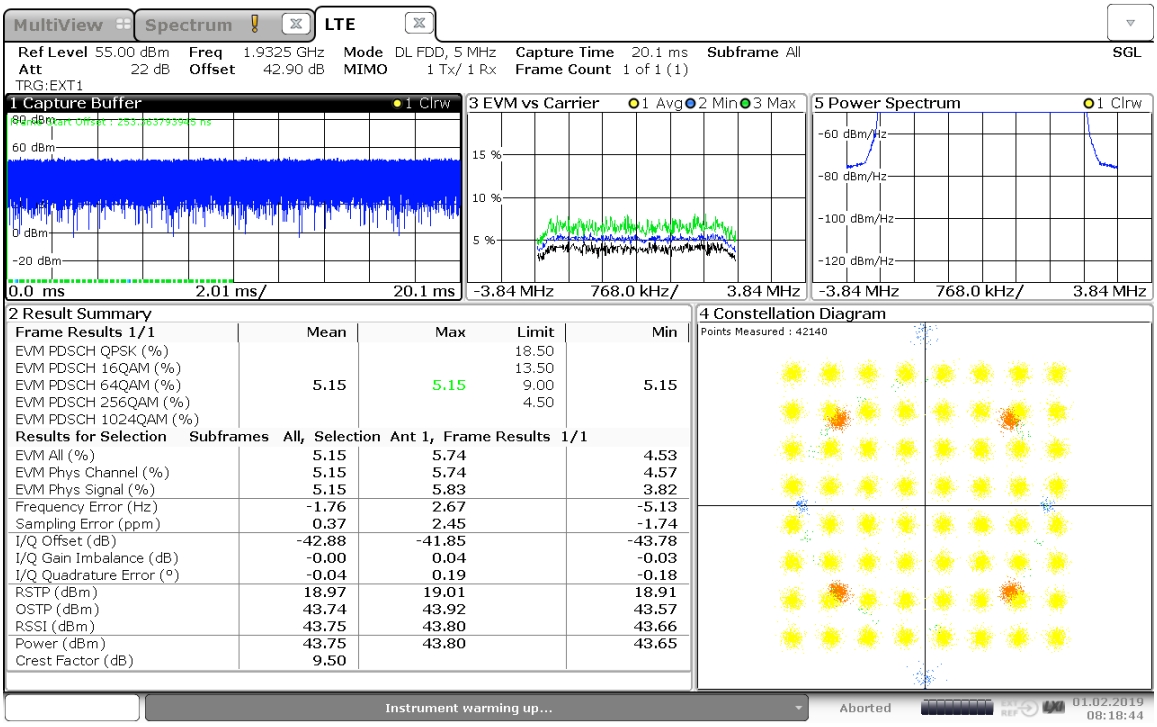
Frame Results 1/1	Mean	Max	Limit	Min
EVM PDSCH QPSK (%)			18.50	
EVM PDSCH 16QAM (%)			13.50	
EVM PDSCH 64QAM (%)	2.25	2.25	9.00	2.25
EVM PDSCH 256QAM (%)			4.50	
EVM PDSCH 1024QAM (%)				
Results for Selection	**Subframes All, Selection Ant 1, Frame Results 1/1**			
EVM All (%)	1.39	1.63		0.97
EVM Phys Channel (%)	1.78	2.09		1.15
EVM Phys Signal (%)	0.65	0.80		0.56
Frequency Error (Hz)	-3.35	-1.57		-4.88
Sampling Error (ppm)	0.01	0.19		-0.18
I/Q Offset (dB)	-43.63	-43.44		-43.75
I/Q Gain Imbalance (dB)	0.00	0.00		-0.00
I/Q Quadrature Error (°)	0.05	0.08		0.02
RSTP (dBm)	18.75	18.76		18.75
OSTP (dBm)	29.53	30.73		27.85
RSSI (dBm)	37.95	38.49		37.84
Power (dBm)	34.27	36.38		33.70
Crest Factor (dB)	14.75			

08:58:44 01.02.2019

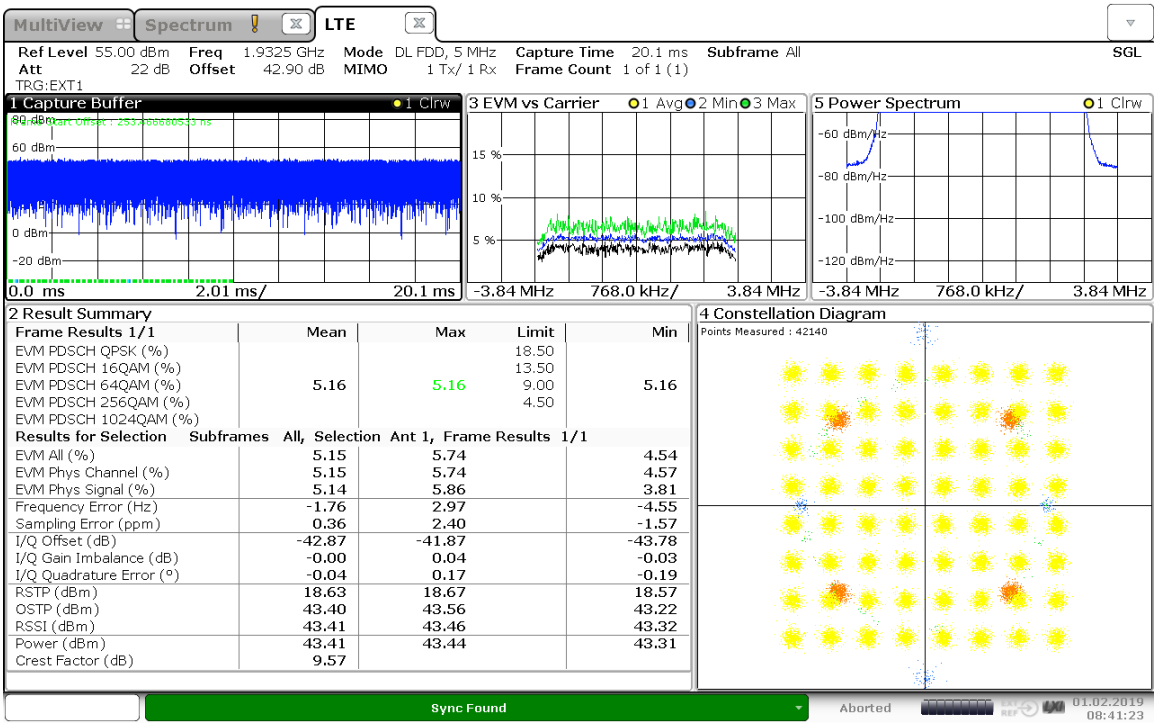


09:21:16 01.02.2019

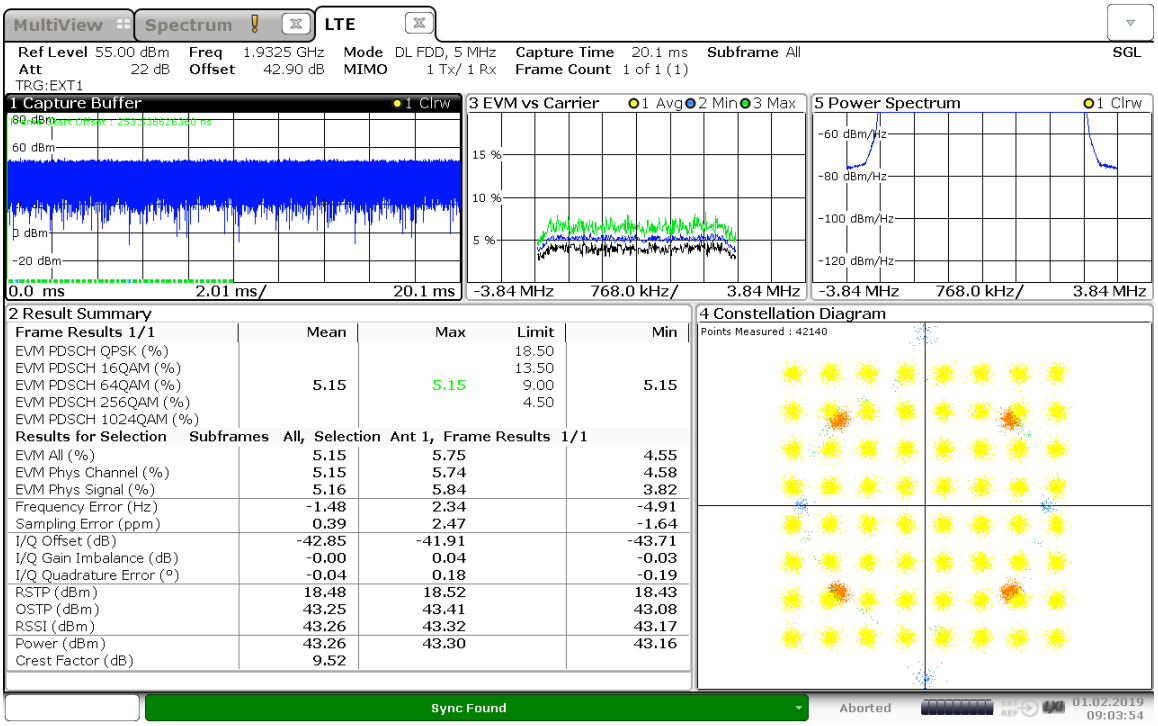
5M -1932.5MHz-TM3.1-Port 1 ~4:



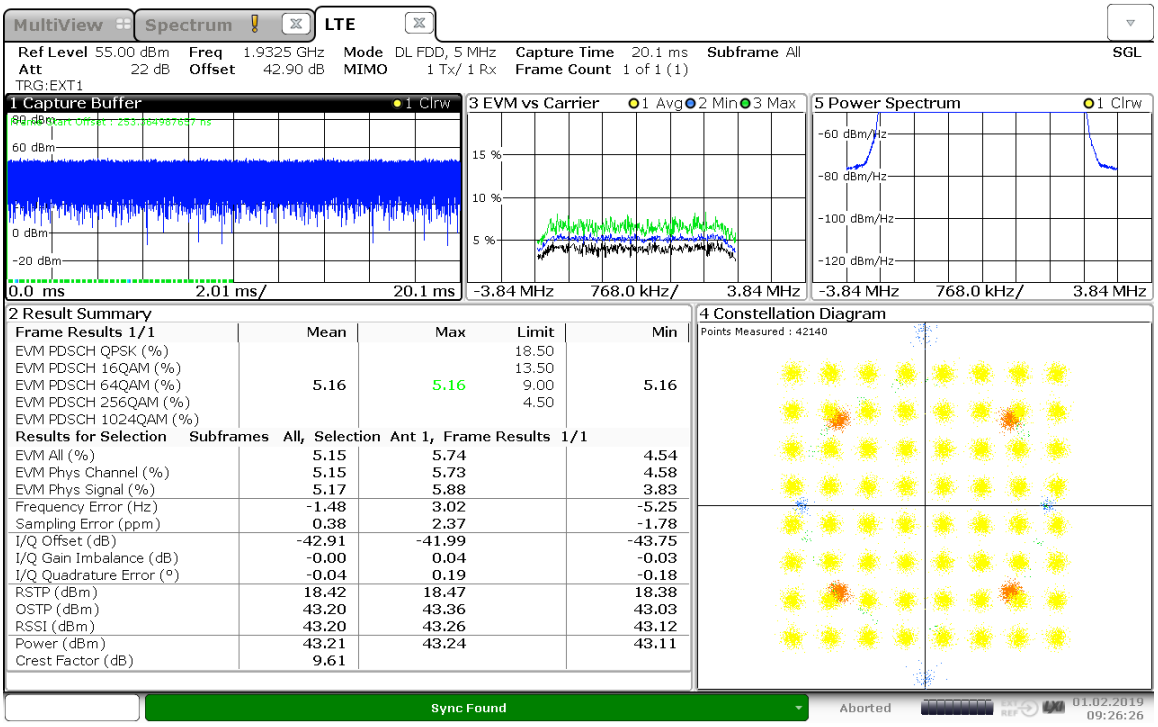
08:18:45 01.02.2019



08:41:23 01.02.2019

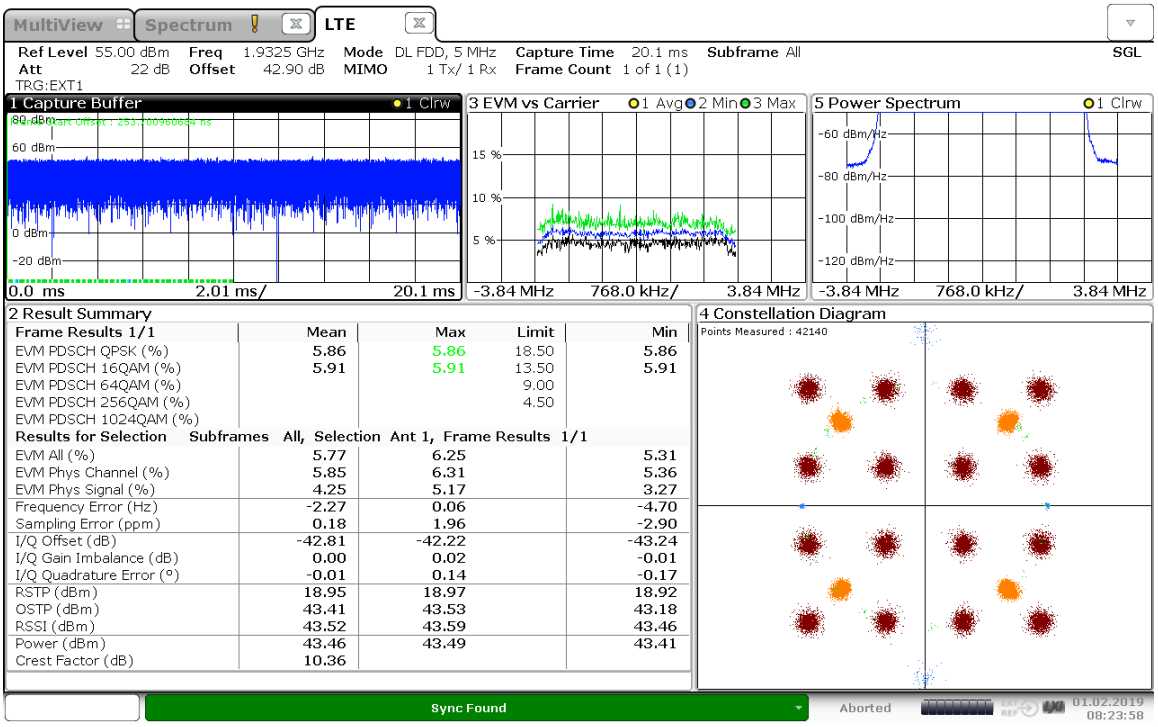


09:03:54 01.02.2019

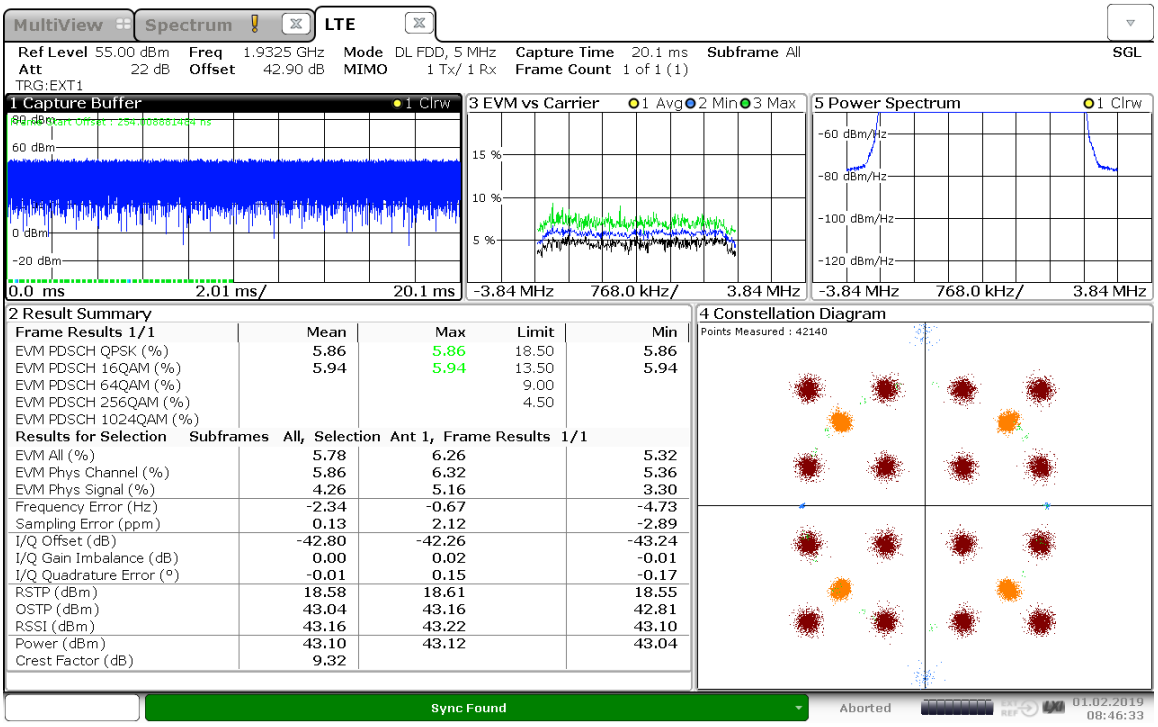


09:26:27 01.02.2019

5M -1932.5MHz-TM3.2-Port 1 ~4:

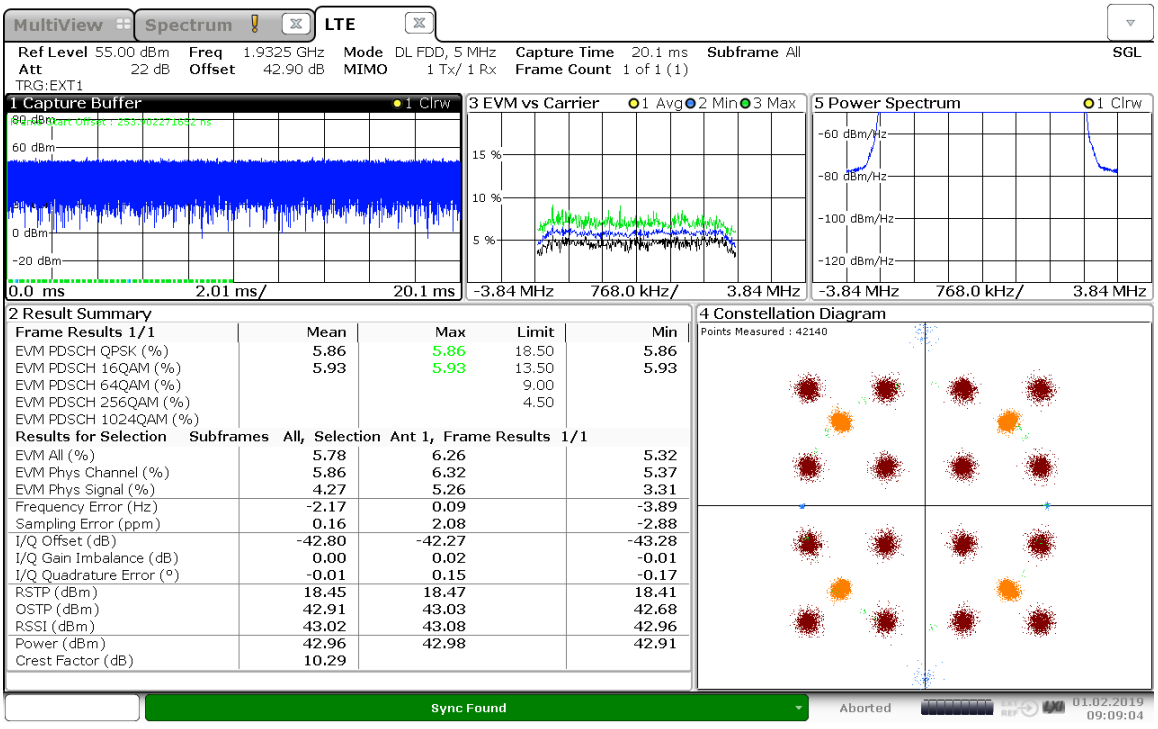


08:23:58 01.02.2019



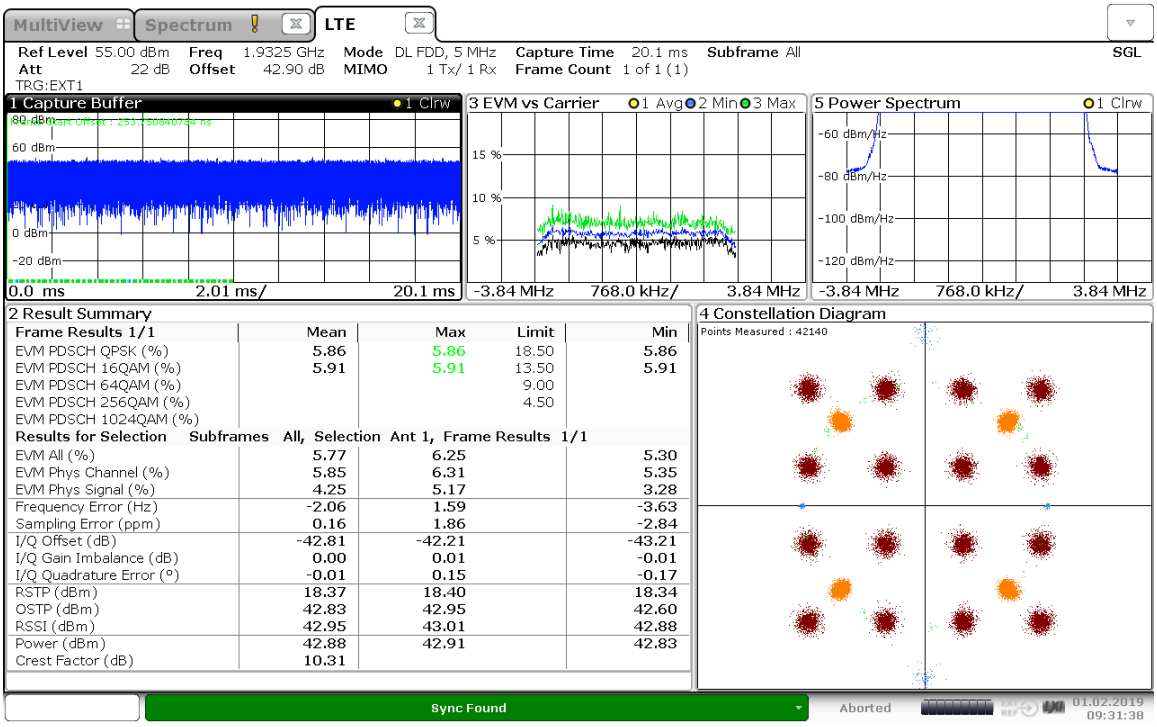
Frame Results 1/1	Mean	Max	Limit	Min
EVM PDSCH QPSK (%)	5.86	5.86	18.50	5.86
EVM PDSCH 16QAM (%)	5.94	5.94	13.50	5.94
EVM PDSCH 64QAM (%)			9.00	
EVM PDSCH 256QAM (%)			4.50	
EVM PDSCH 1024QAM (%)				
Results for Selection	**Subframes All, Selection Ant 1, Frame Results 1/1**			
EVM All (%)	5.78	6.26		5.32
EVM Phys Channel (%)	5.86	6.32		5.36
EVM Phys Signal (%)	4.26	5.16		3.30
Frequency Error (Hz)	-2.34	-0.67		-4.73
Sampling Error (ppm)	0.13	2.12		-2.89
I/Q Offset (dB)	-42.80	-42.26		-43.24
I/Q Gain Imbalance (dB)	0.00	0.02		-0.01
I/Q Quadrature Error (°)	-0.01	0.15		-0.17
RSTP (dBm)	18.58	18.61		18.55
OSTP (dBm)	43.04	43.16		42.81
RSSI (dBm)	43.16	43.22		43.10
Power (dBm)	43.10	43.12		43.04
Crest Factor (dB)	9.32			

08:46:34 01.02.2019



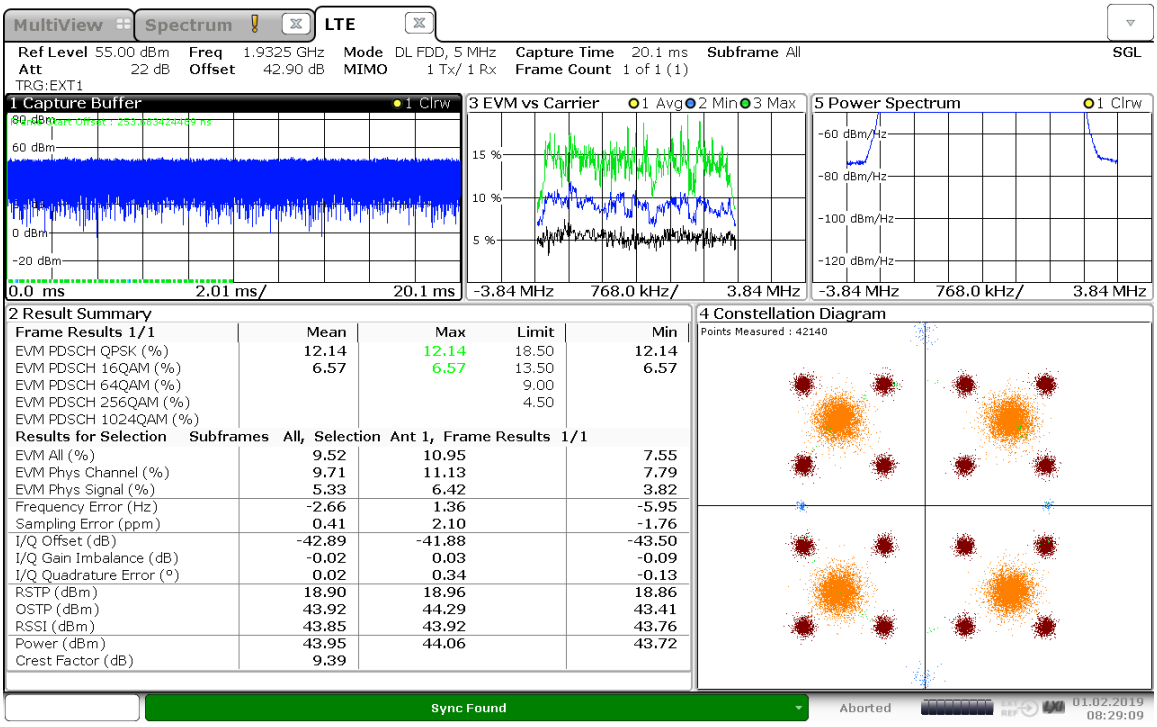
Frame Results 1/1	Mean	Max	Limit	Min
EVM PDSCH QPSK (%)	5.86	5.86	18.50	5.86
EVM PDSCH 16QAM (%)	5.93	5.93	13.50	5.93
EVM PDSCH 64QAM (%)			9.00	
EVM PDSCH 256QAM (%)			4.50	
EVM PDSCH 1024QAM (%)				
Results for Selection	**Subframes All, Selection Ant 1, Frame Results 1/1**			
EVM All (%)	5.78	6.26		5.32
EVM Phys Channel (%)	5.86	6.32		5.37
EVM Phys Signal (%)	4.27	5.26		3.31
Frequency Error (Hz)	-2.17	0.09		-3.89
Sampling Error (ppm)	0.16	2.08		-2.88
I/Q Offset (dB)	-42.80	-42.27		-43.28
I/Q Gain Imbalance (dB)	0.00	0.02		-0.01
I/Q Quadrature Error (°)	-0.01	0.15		-0.17
RSTP (dBm)	18.45	18.47		18.41
OSTP (dBm)	42.91	43.03		42.68
RSSI (dBm)	43.02	43.08		42.96
Power (dBm)	42.96	42.98		42.91
Crest Factor (dB)	10.29			

09:09:04 01.02.2019

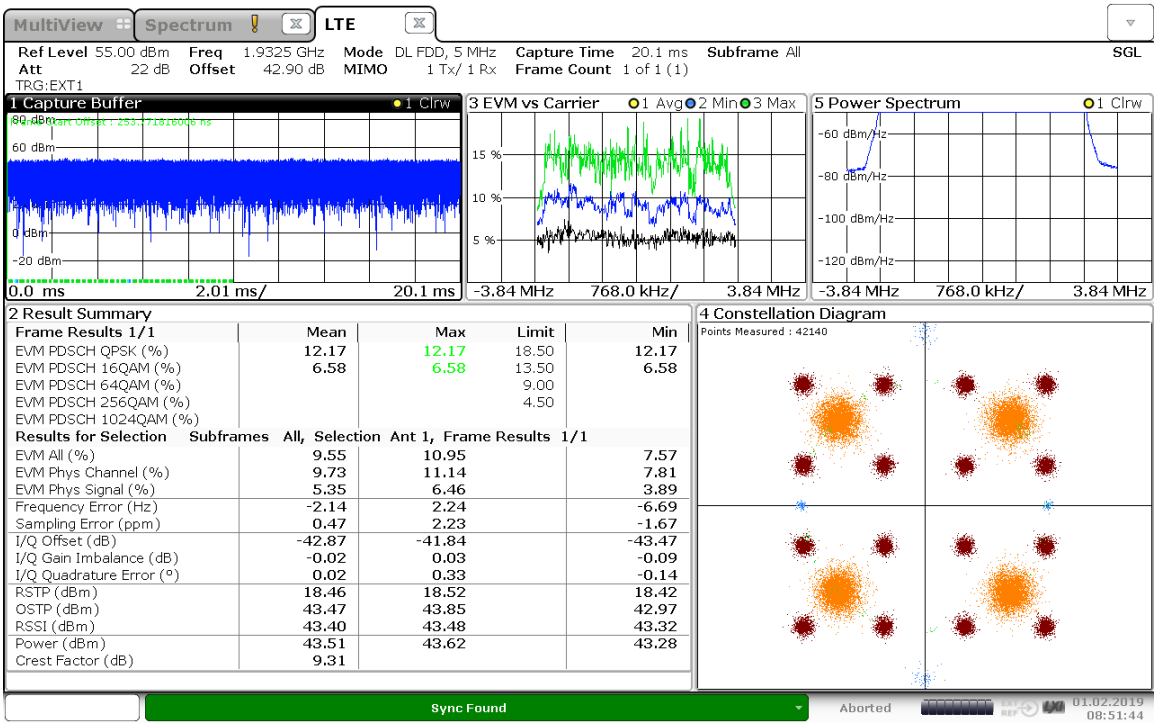


09:31:39 01.02.2019

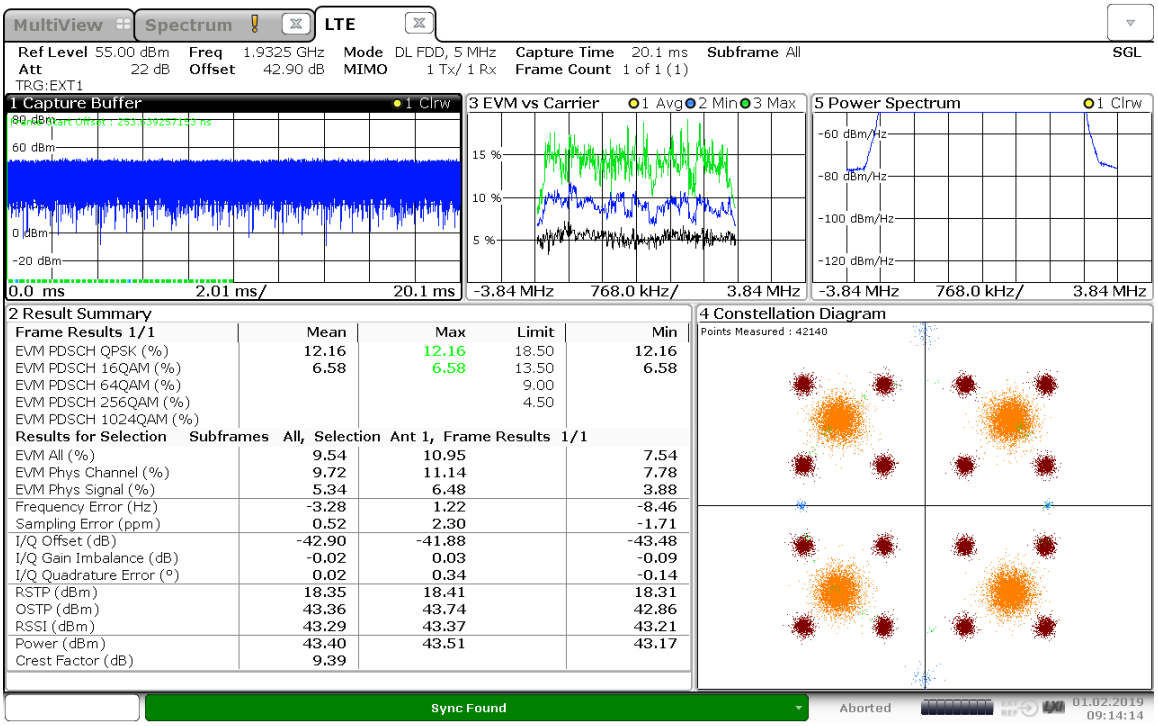
5M -1932.5MHz-TM3.3-Port 1 ~4:



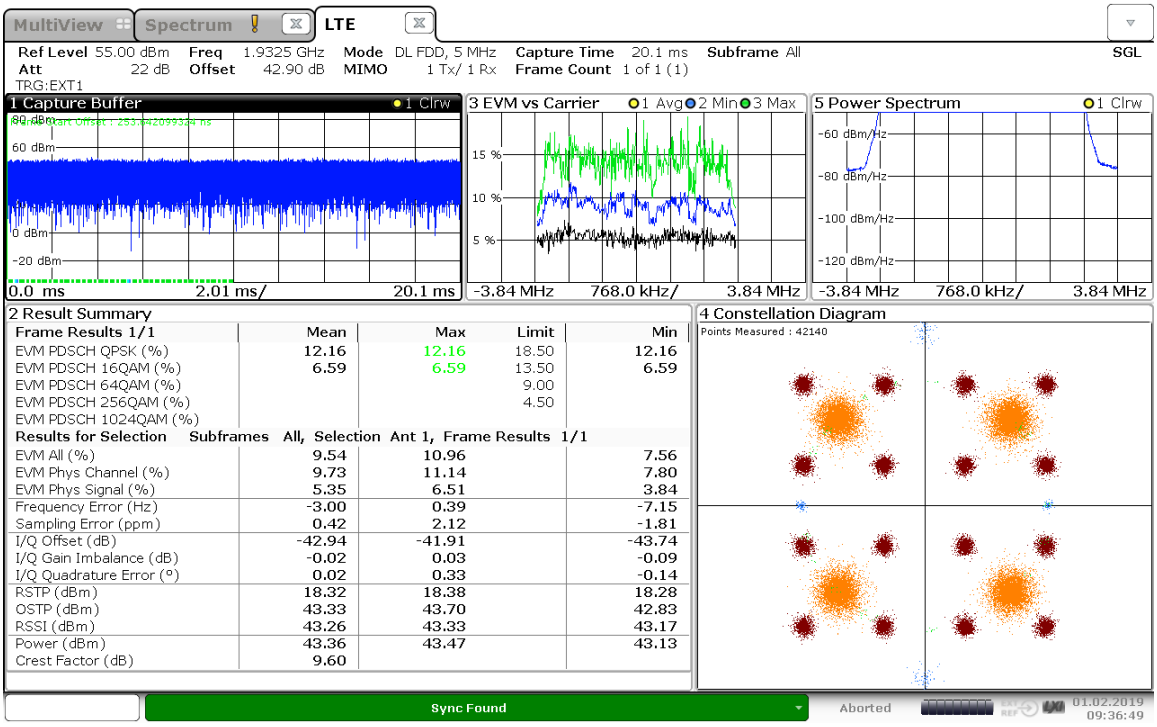
08:29:09 01.02.2019



08:51:44 01.02.2019

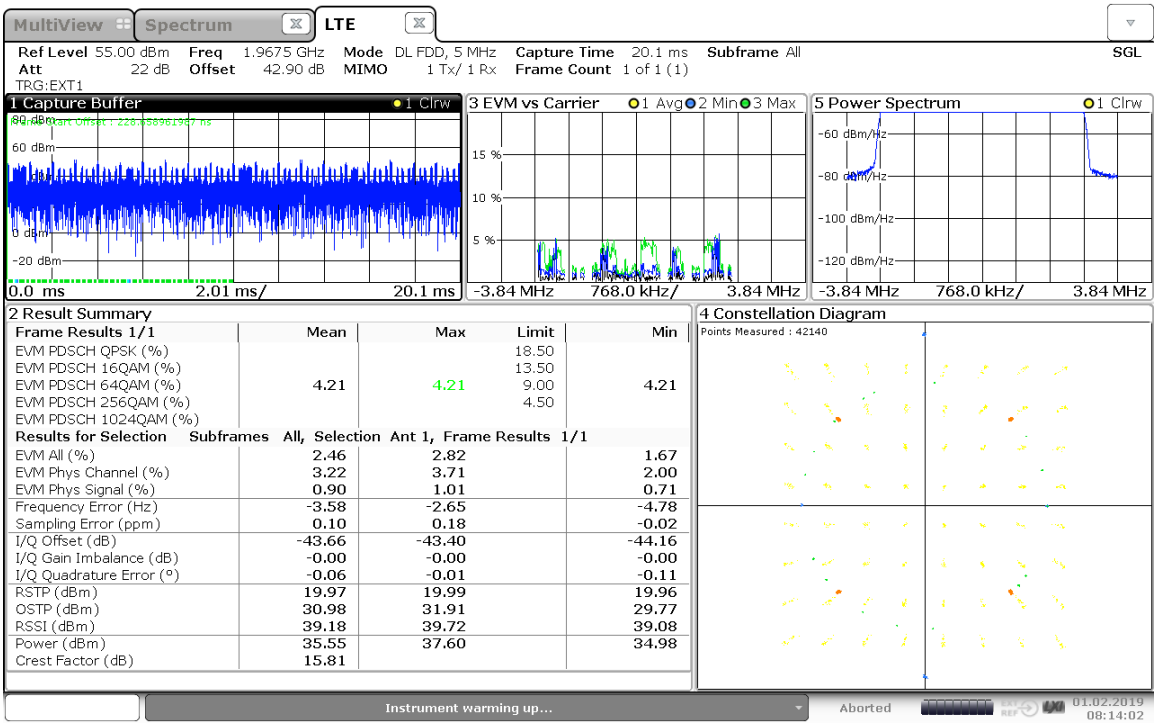


09:14:15 01.02.2019

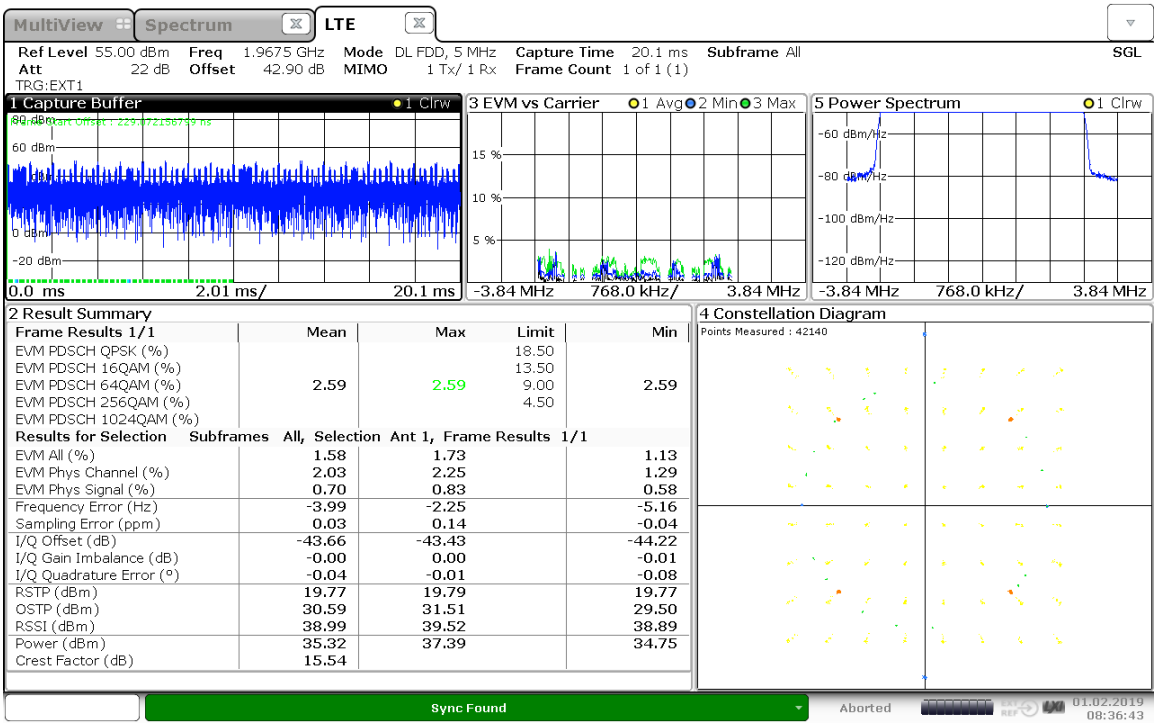


09:36:49 01.02.2019

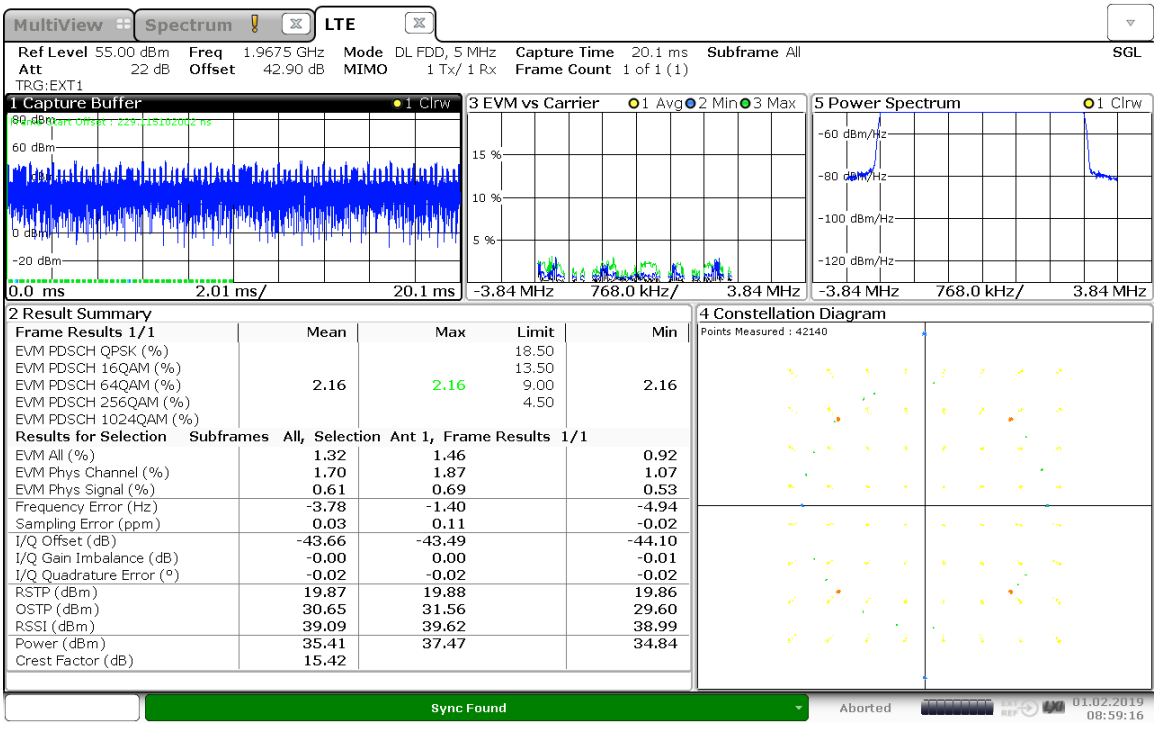
5M -1967.5MHz-TM2.0-Port 1 ~4:



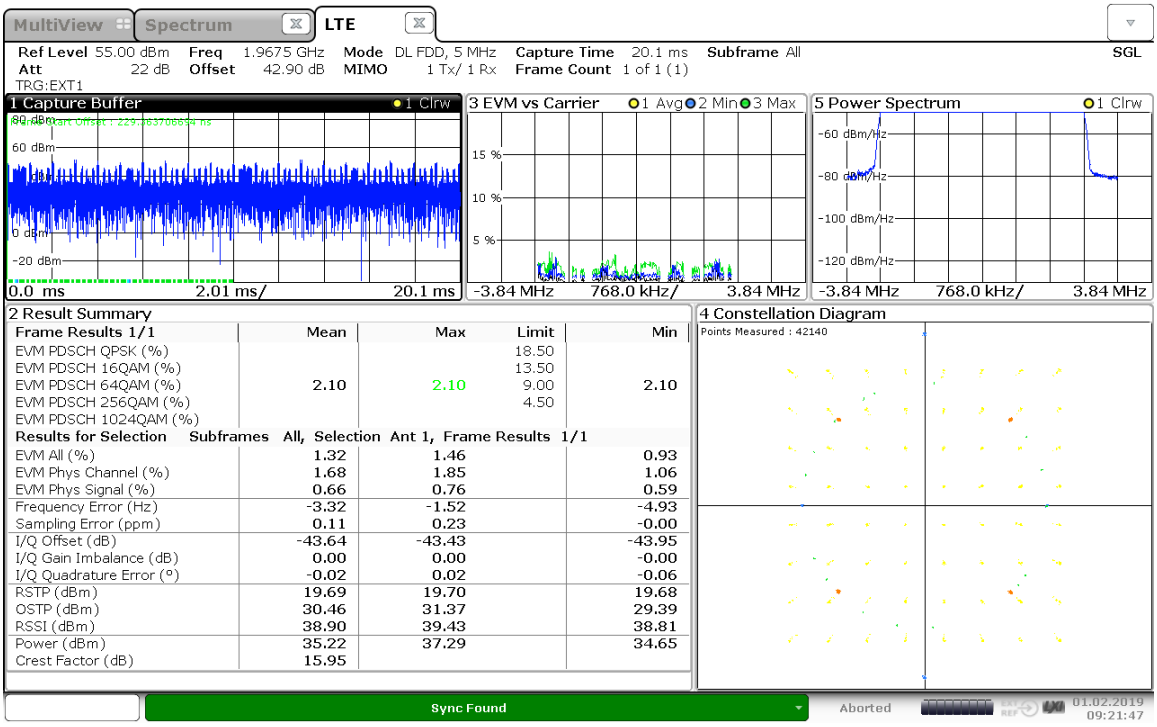
08:14:03 01.02.2019



08:36:44 01.02.2019

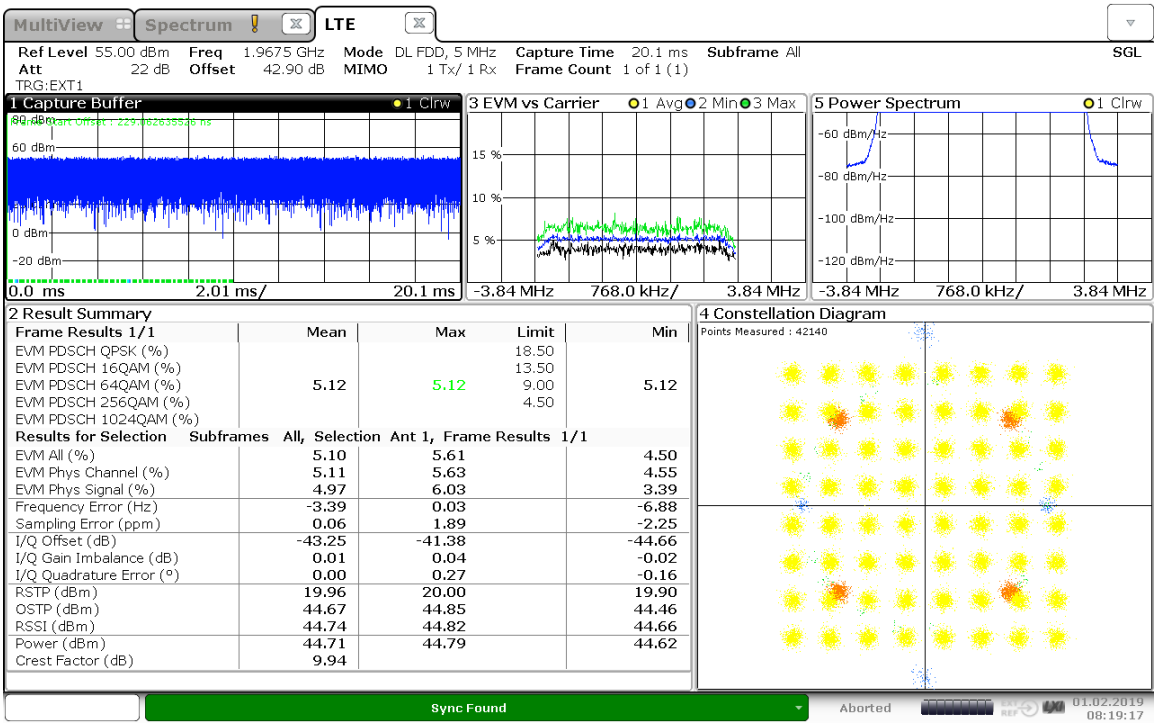


08:59:16 01.02.2019

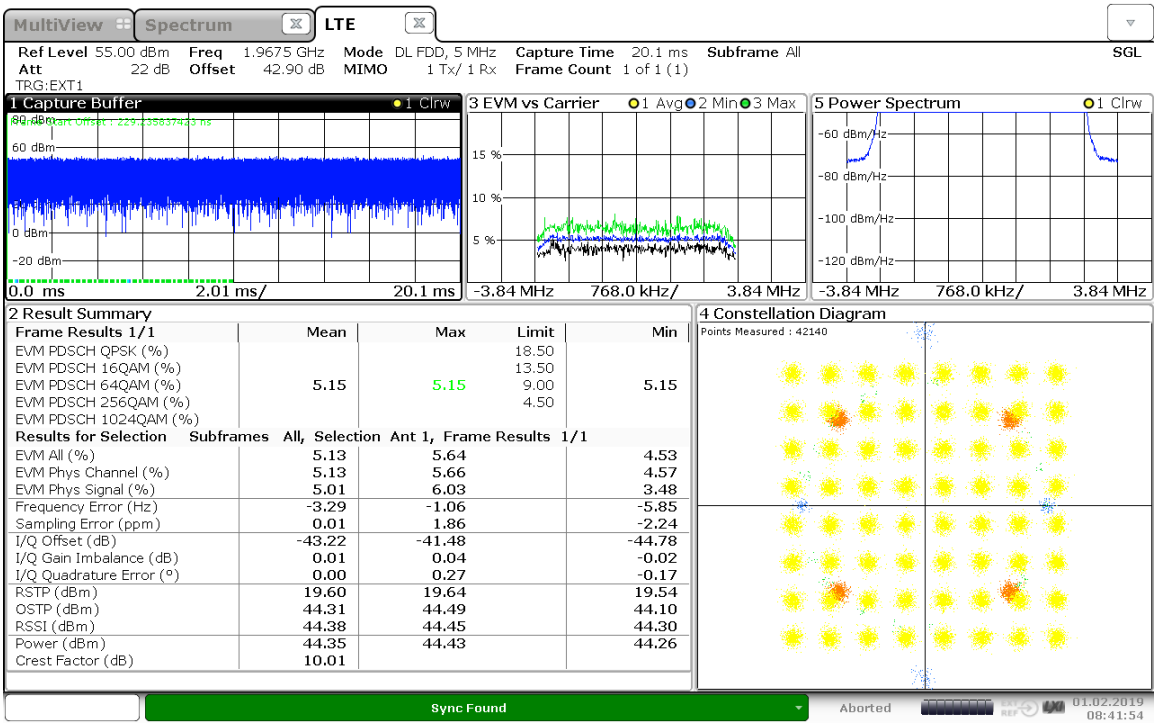


09:21:48 01.02.2019

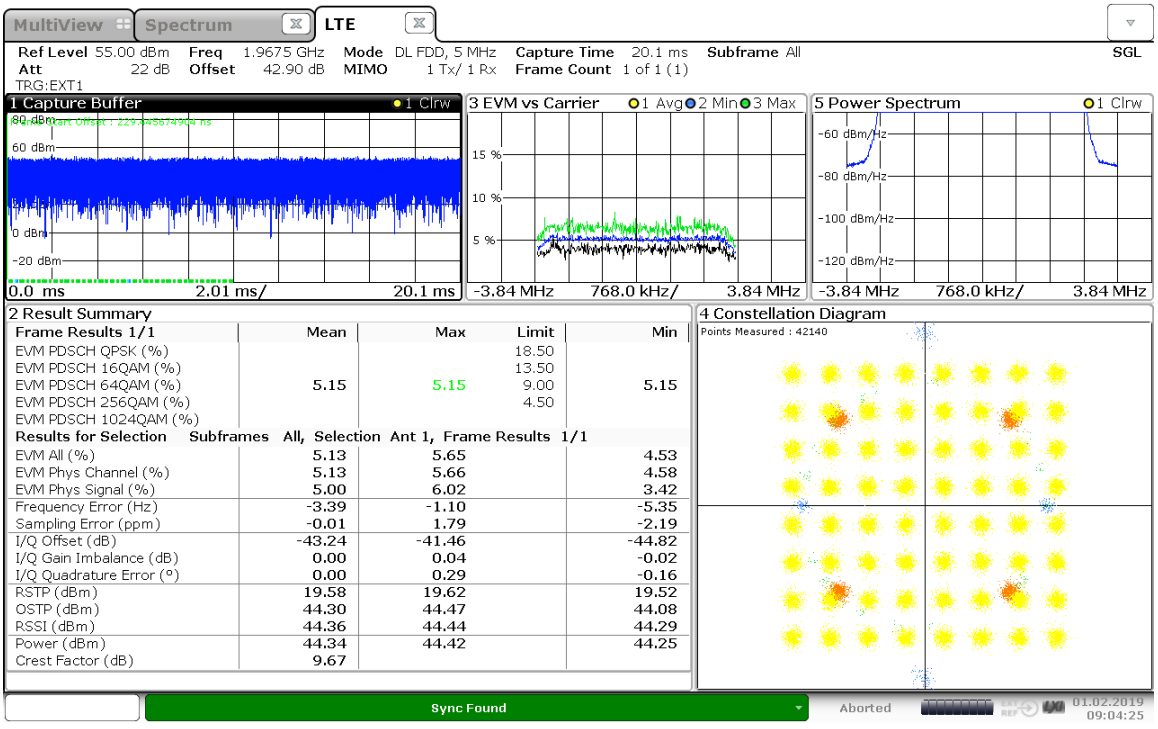
5M -1967.5MHz-TM3.1-Port 1 ~4:



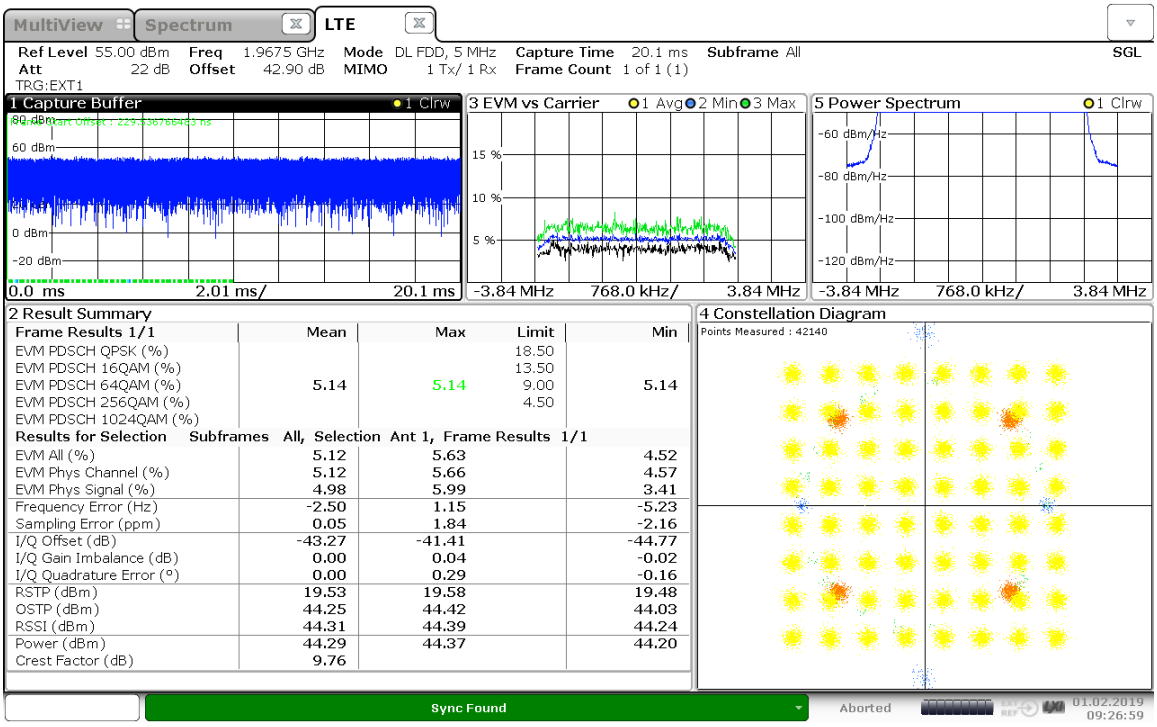
08:19:17 01.02.2019



08:41:55 01.02.2019

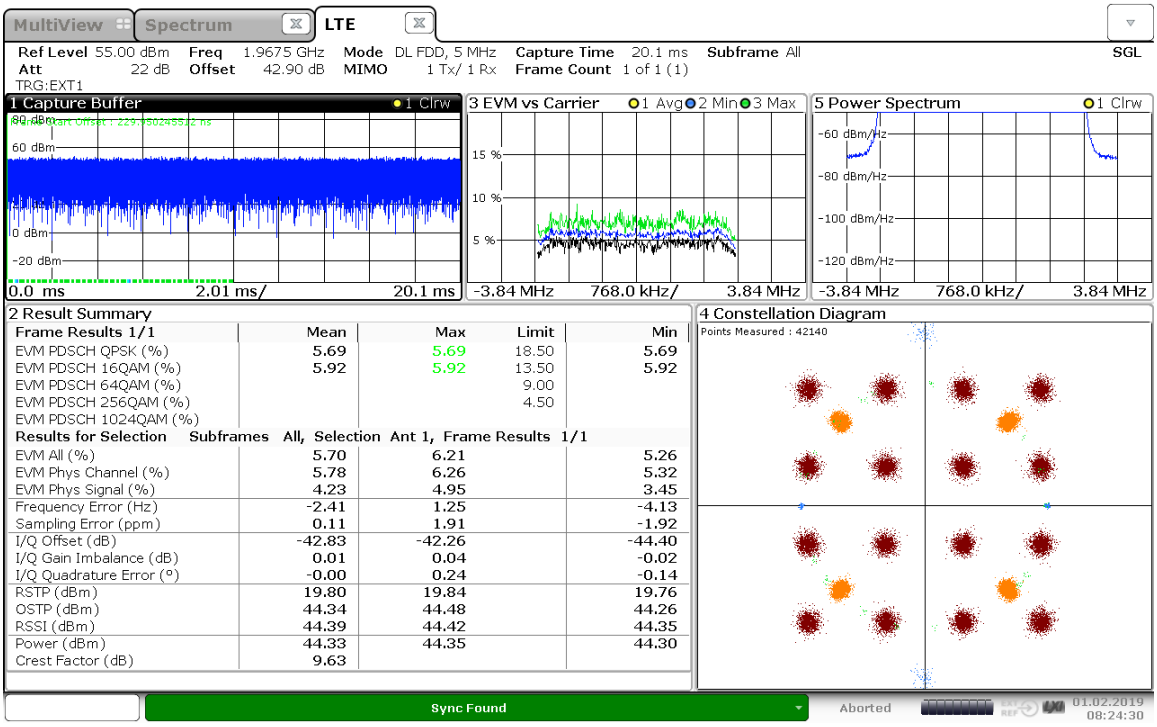


09:04:26 01.02.2019

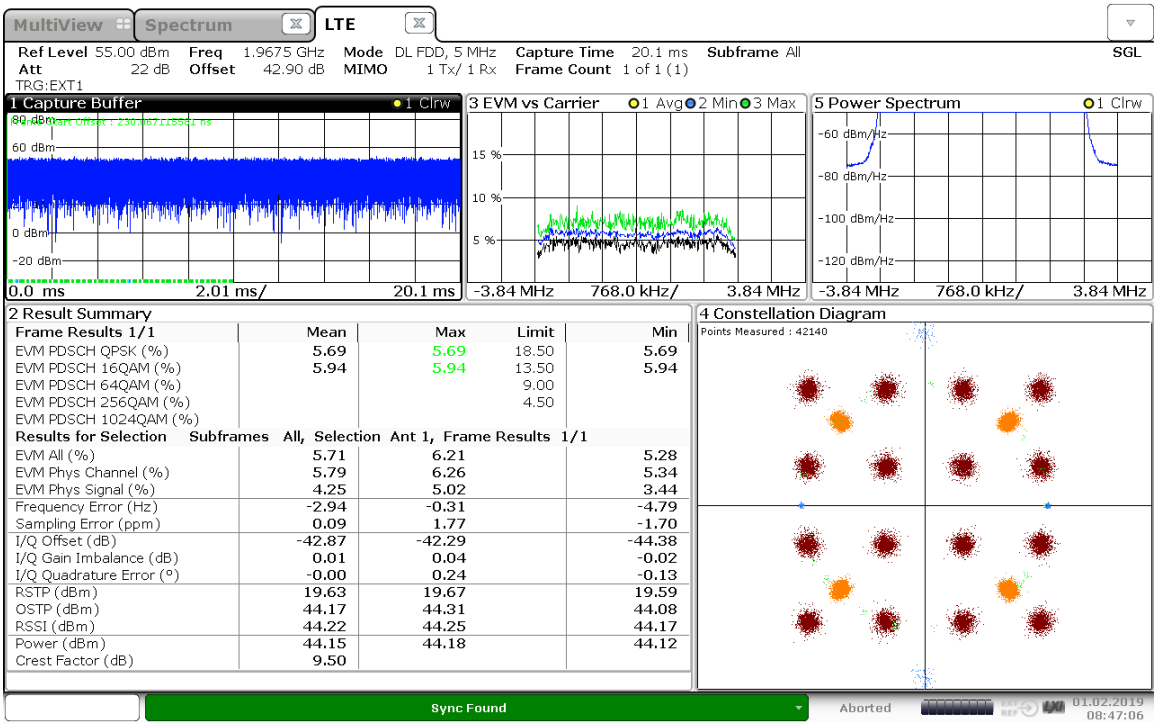


09:26:59 01.02.2019

5M -1967.5MHz-TM3.2-Port 1 ~4:

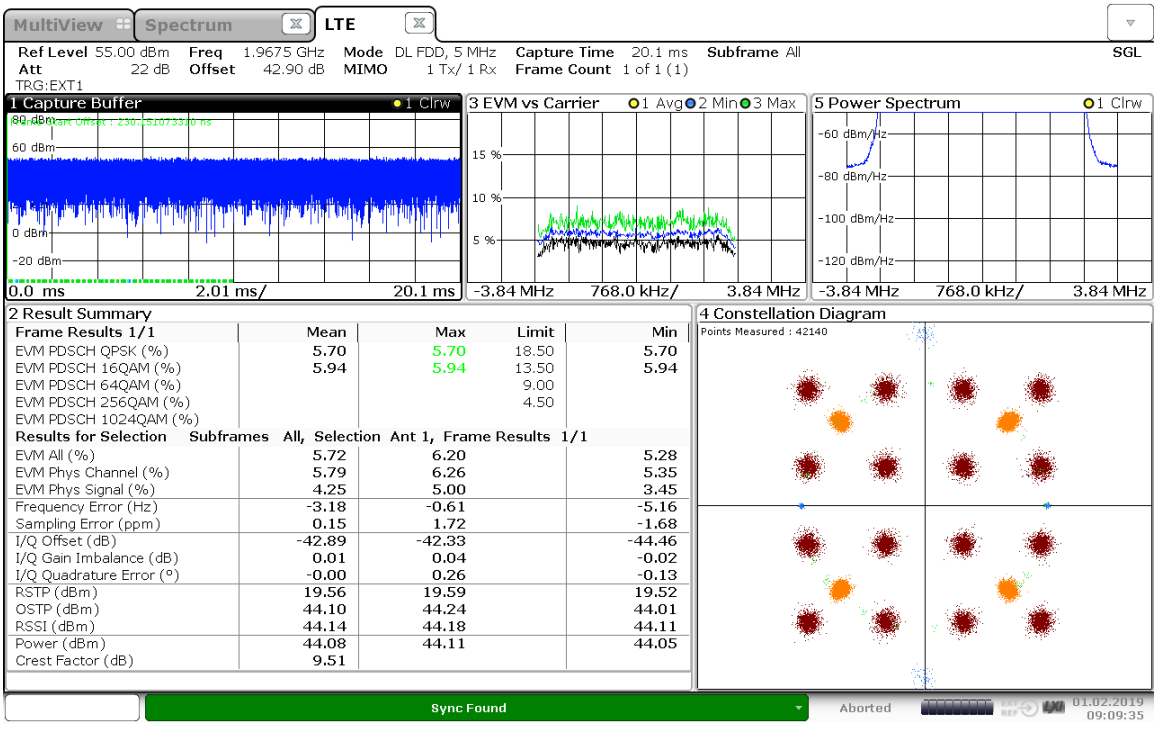


08:24:30 01.02.2019



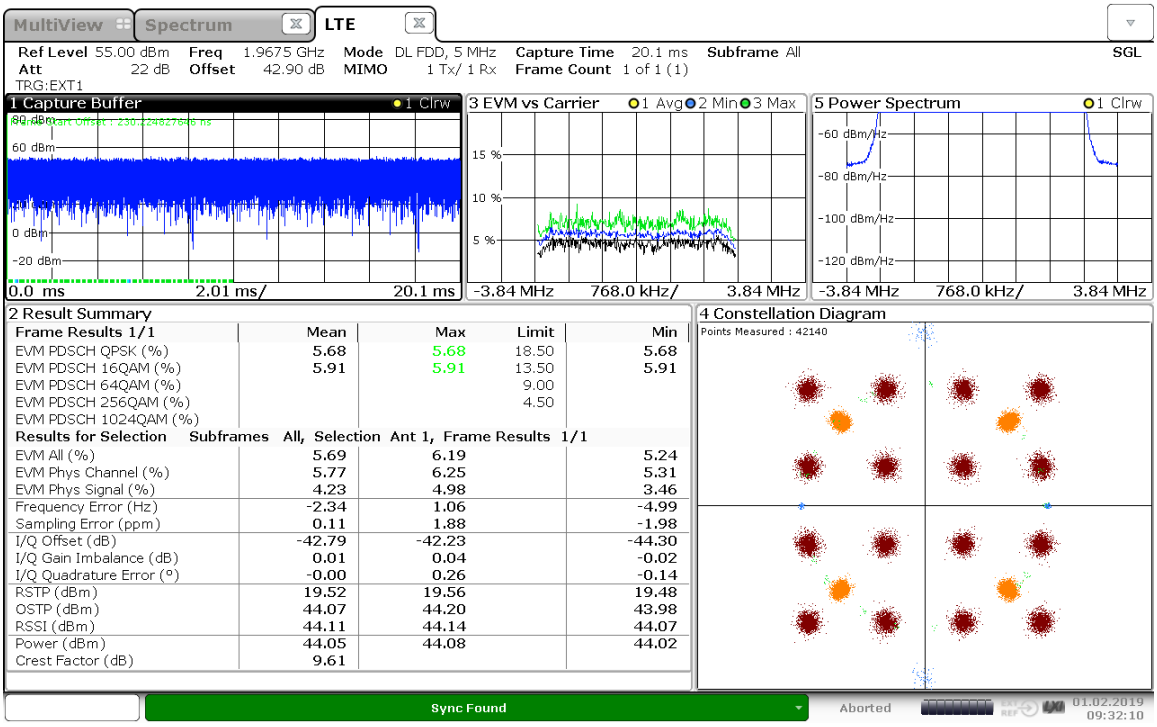
Frame Results 1/1	Mean	Max	Limit	Min
EVM PDSCH QPSK (%)	5.69	5.69	18.50	5.69
EVM PDSCH 16QAM (%)	5.94	5.94	13.50	5.94
EVM PDSCH 64QAM (%)			9.00	
EVM PDSCH 256QAM (%)			4.50	
EVM PDSCH 1024QAM (%)				
Results for Selection	**Subframes All, Selection Ant 1, Frame Results 1/1**			
EVM All (%)	5.71	6.21		5.28
EVM Phys Channel (%)	5.79	6.26		5.34
EVM Phys Signal (%)	4.25	5.02		3.44
Frequency Error (Hz)	-2.94	-0.31		-4.79
Sampling Error (ppm)	0.09	1.77		-1.70
I/Q Offset (dB)	-42.87	-42.29		-44.38
I/Q Gain Imbalance (dB)	0.01	0.04		-0.02
I/Q Quadrature Error (°)	-0.00	0.24		-0.13
RSTP (dBm)	19.63	19.67		19.59
OSTP (dBm)	44.17	44.31		44.08
RSSI (dBm)	44.22	44.25		44.17
Power (dBm)	44.15	44.18		44.12
Crest Factor (dB)	9.50			

08:47:06 01.02.2019



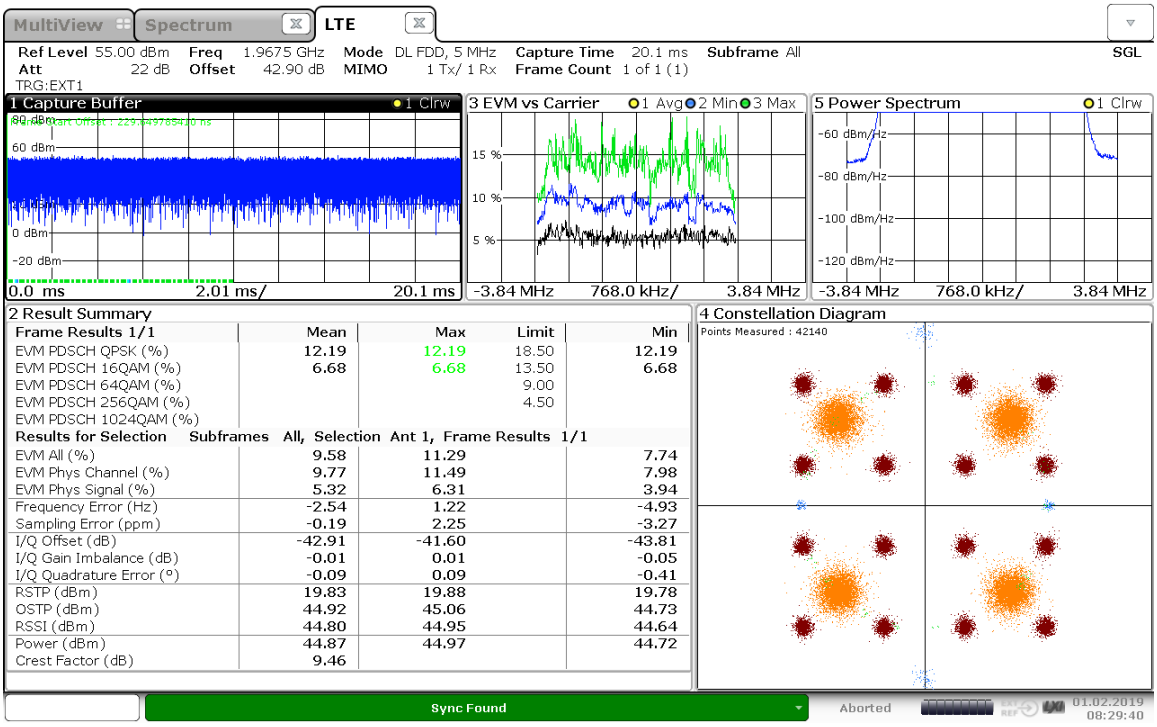
Frame Results 1/1	Mean	Max	Limit	Min
EVM PDSCH QPSK (%)	5.70	5.70	18.50	5.70
EVM PDSCH 16QAM (%)	5.94	5.94	13.50	5.94
EVM PDSCH 64QAM (%)			9.00	
EVM PDSCH 256QAM (%)			4.50	
EVM PDSCH 1024QAM (%)				
Results for Selection	**Subframes All, Selection Ant 1, Frame Results 1/1**			
EVM All (%)	5.72	6.20		5.28
EVM Phys Channel (%)	5.79	6.26		5.35
EVM Phys Signal (%)	4.25	5.00		3.45
Frequency Error (Hz)	-3.18	-0.61		-5.16
Sampling Error (ppm)	0.15	1.72		-1.68
I/Q Offset (dB)	-42.89	-42.33		-44.46
I/Q Gain Imbalance (dB)	0.01	0.04		-0.02
I/Q Quadrature Error (°)	-0.00	0.26		-0.13
RSTP (dBm)	19.56	19.59		19.52
OSTP (dBm)	44.10	44.24		44.01
RSSI (dBm)	44.14	44.18		44.11
Power (dBm)	44.08	44.11		44.05
Crest Factor (dB)	9.51			

09:09:36 01.02.2019

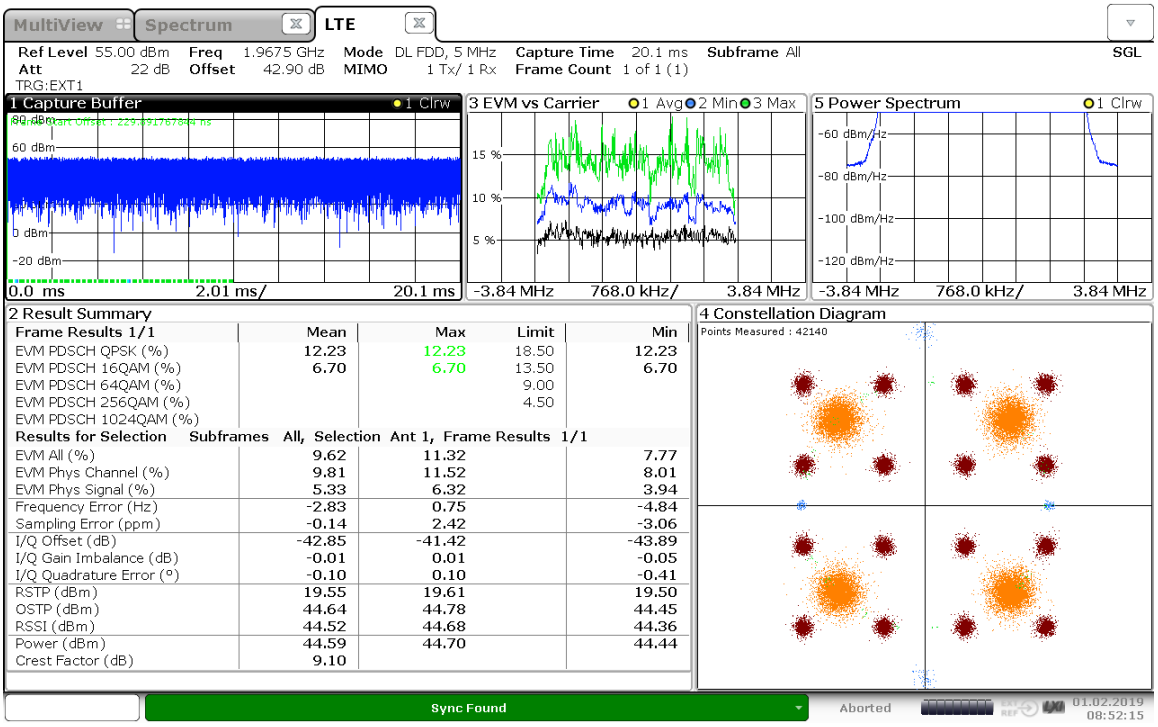


09:32:11 01.02.2019

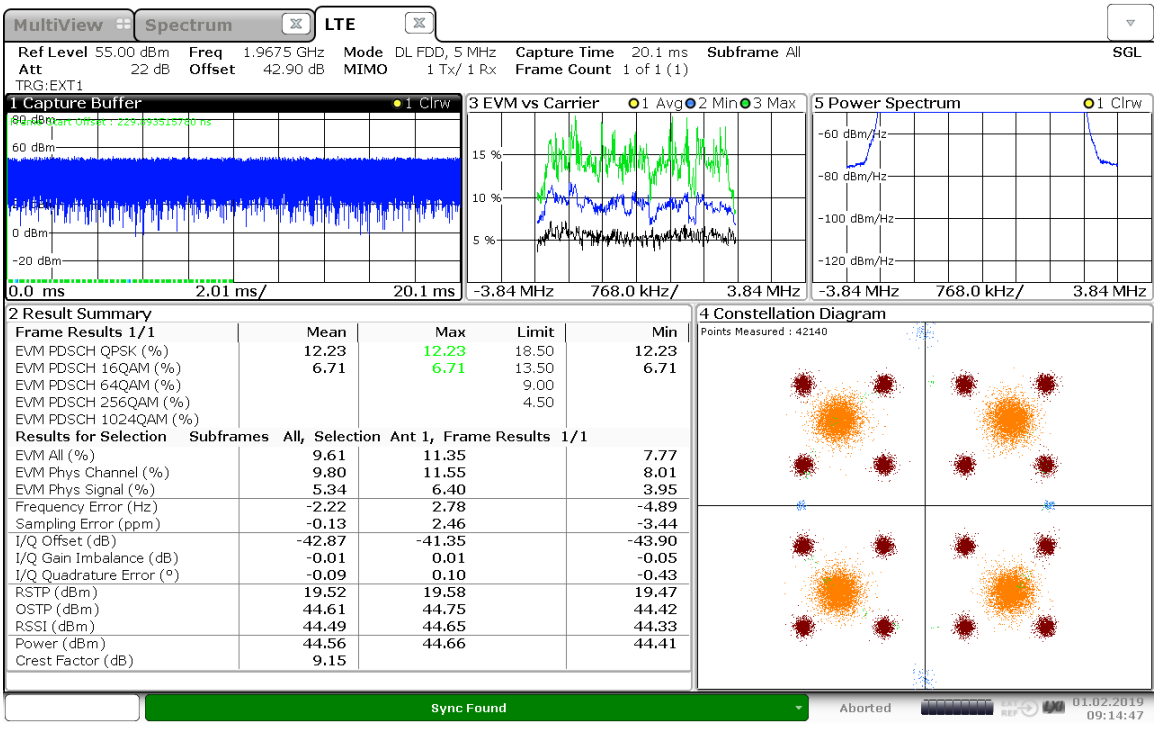
5M -1967.5MHz-TM3.3-Port 1 ~4:



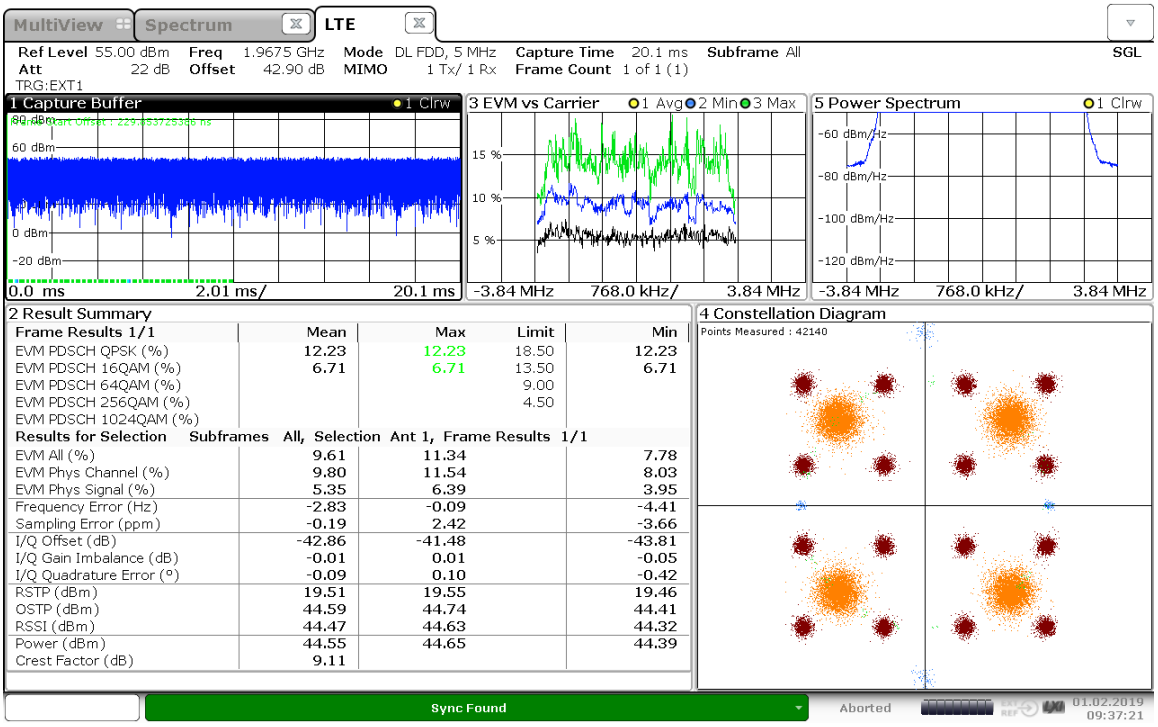
08:29:41 01.02.2019



08:52:16 01.02.2019



09:14:47 01.02.2019



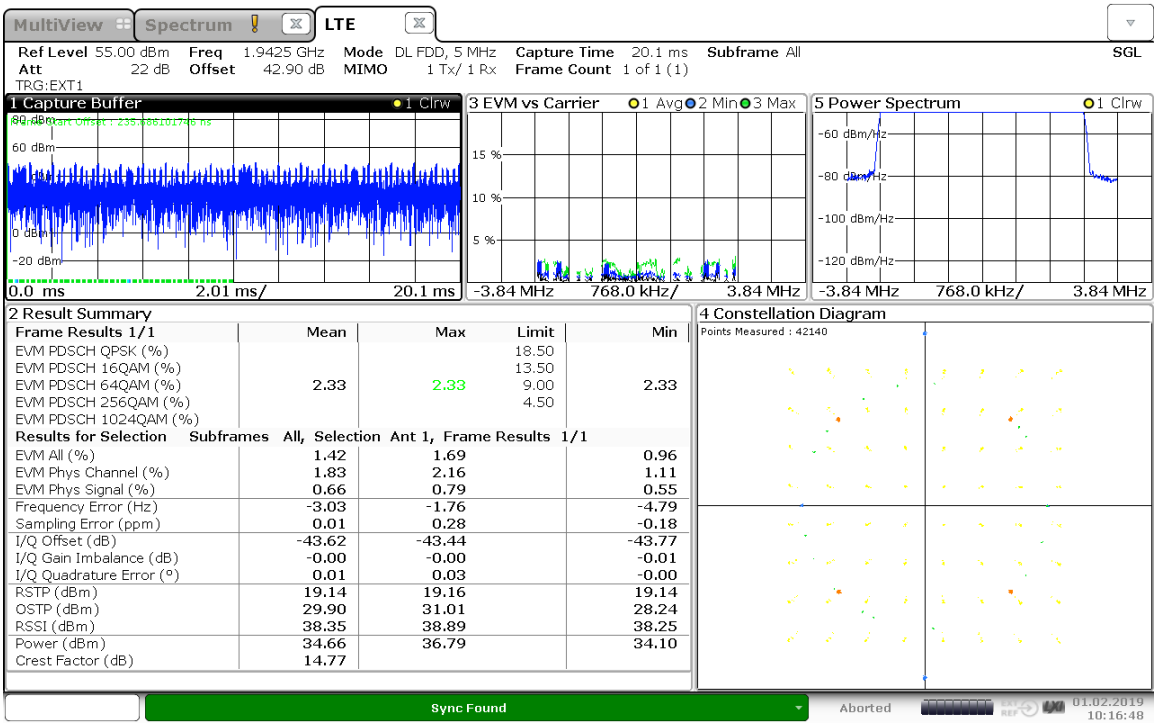
09:37:21 01.02.2019

Channel Bandwidth :5M+5M(1942.5MHz+1977.5MHz)

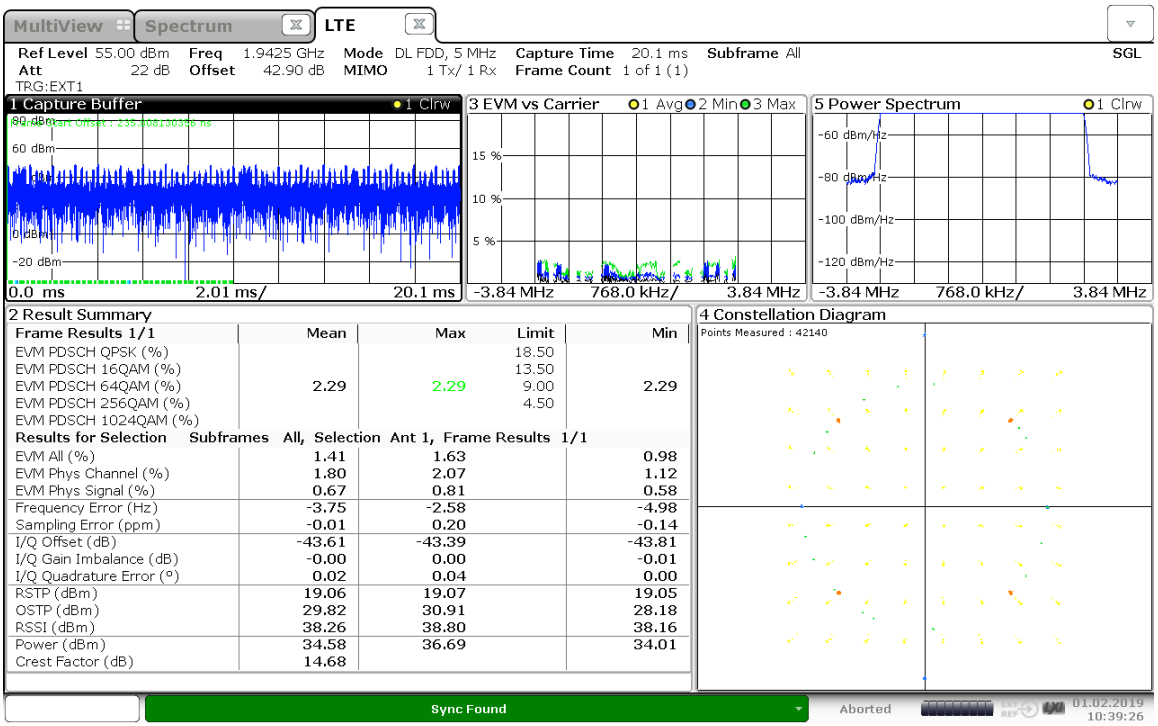
Frequency (MHz)	Test mode	Port	EVM(%)
1942.5	TM2.0	1	2.33
		2	2.29
		3	2.20
		4	2.19
	TM3.1	1	5.13
		2	5.15
		3	5.15
		4	5.14
	TM3.2	1	5.90
		2	5.91
		3	5.91
		4	5.90
	TM3.3	1	12.16
		2	12.15
		3	12.15
		4	12.18
1977.5	TM2.0	1	2.31
		2	2.23
		3	2.10
		4	2.15
	TM3.1	1	5.14
		2	5.15
		3	5.13
		4	5.13
	TM3.2	1	5.91

		2	5.91
		3	5.92
		4	5.91
	TM3.3	1	12.23
		2	12.20
		3	12.22
		4	12.25

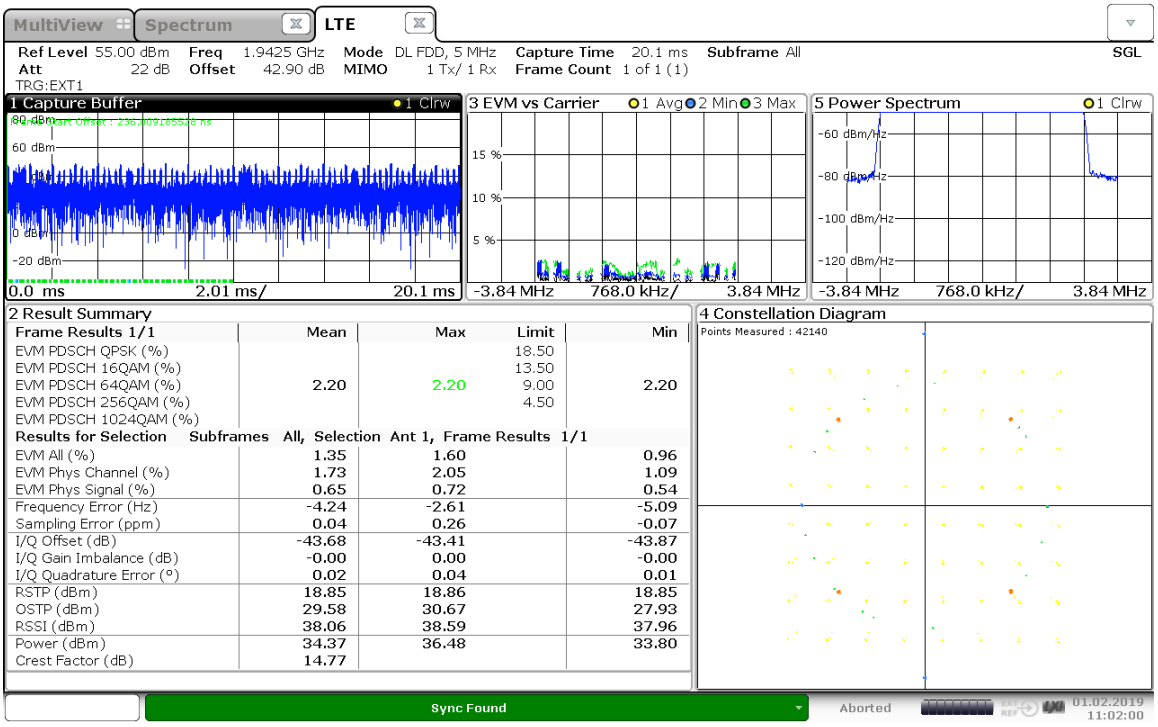
5M -1942.5MHz-TM2.0-Port 1 ~4:



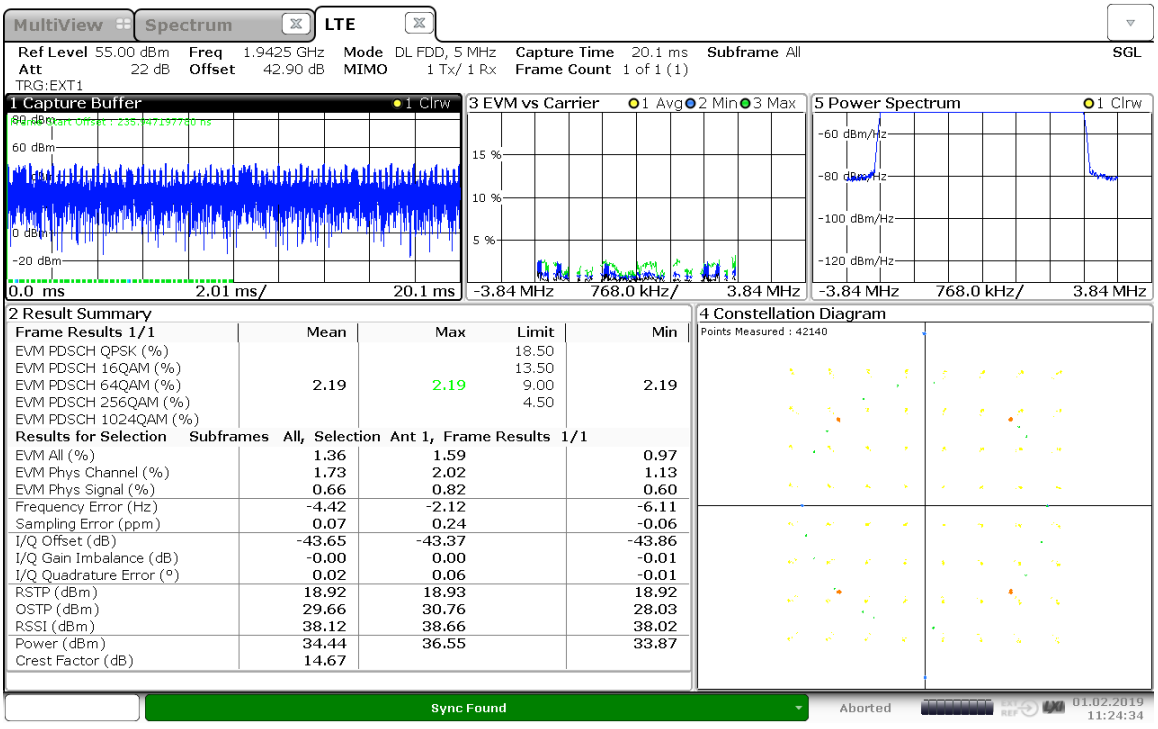
10:16:49 01.02.2019



10:39:26 01.02.2019



11:02:00 01.02.2019



11:24:34 01.02.2019