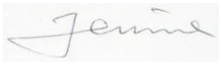
FCC/IC
MEASUREMENT AND TEST REPORT
For
ZXSDR R8882 S1700

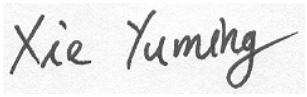
FCC ID：Q78-R8882S1700
IC ID: 5200A-R8882S1700

This Report Concerns: ☒Original Report	**Equipment Type:** Remote Radio Unit

Test Engineer: 

Report No: RF 2015203RP-1

Test Date: May 1 – May 8, 2015

Reviewed By: 

Issue Date： May 10, 2015

Note: The test report is specially limited to the above company and this particular sample only. It may not be duplicated without prior written consent of ZTE Corporation. This report must not be used by the client to claim product certification 、approval 、or endorsement by any agency of the US Government.

TABLE OF CONTENTS

1 GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The ZTE Corporation's product, model number: ZXSDR R8882 S1700 or the "EUT" as referred to in this report is a UMTS and LTE Remote Radio Unit.

Technical specification:
Size: 472 mm x 320 mm x 152 mm (HxWxD)
Input voltage: -37V~-57V
Frequency range: 2110MHz~2155 MHz
Max RF output power: 47.7dBm
Gain of the antenna: 15dBi
Modulation type of emission: LTE
Appearance of EUT:

FIGURE 1 APPEARANCE OF ZXSDR R8882 S1700

Objective

This Type approval report is prepared on behalf of ZTE Corporation in accordance with RSS-Gen Issue 4 and RSS-139 Issue 2 and FCC part 27.

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All tests and measurements indicated in this document were performed in accordance with rss gen and rss195. As well as the following parts:
Applicable Standards: TIA EIA 137-A, TIA EIA 97-D, TIA/EIA 603-C, Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.
All radiated and conducted measurement was performed at ZTE Corporation Reliability Testing Center. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

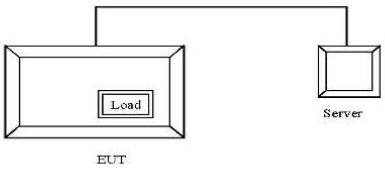
The Test site is ZTE Corporation to collect test data is located in the ZTETS, R&D1-1F, ZTE Industrial Park, Liuxian Av, Shenzhen, Guangdong, 518055, P.R.China, Tel: +86-755-26777735. Test site at ZTE Corporation has been fully described in reports submitted to the IC and the registration number is 5200A. The details of these reports have been found to be in compliance with the requirements of IC Rules. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

2 SYSTEM TEST CONFIGURATION

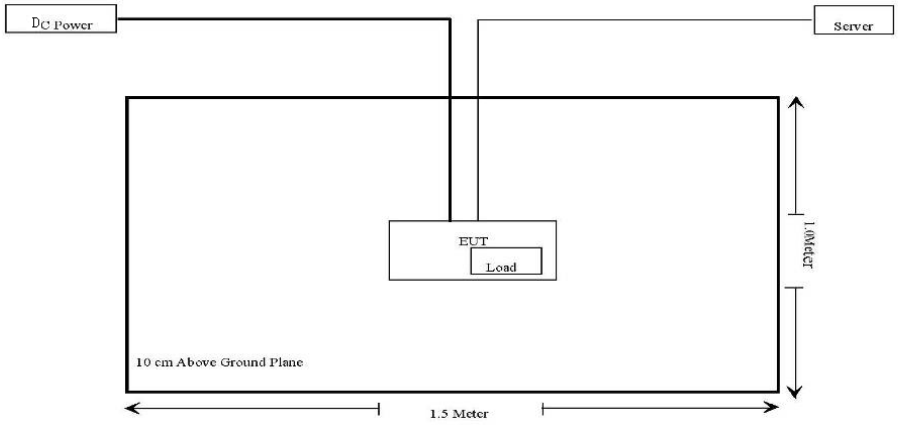
Description of Test Configuration

Justification
The EUT was configured for testing according to TIA/EIA-603C.
The final qualification test was performed with EUT operating at normal mode.
When EMC test, configure R8882 S1700 work at single carrier, 20MHz bandwidth and output at rated power, the antennas connected to loads.

Configuration of Test Setup



Block Diagram of Test Setup



3 SUMMARY OF TEST RESULTS

IC RULES	DESCRIPTION OF TEST	RESULT
RSS139§6.1	Frequency Plan	Compliant
RSS139§6.2	Types of Modulation	Compliant
RSS139§6.3	Frequency Stability	Compliant
RSSGEN§6.6	Occupied Bandwidth	Compliant
RSS139§6.4	Transmitter Output Power	Compliant
RSS139§6.5	Transmitter Unwanted Emissions	Compliant
RSS139§6.6	Receiver Spurious Emissions	Compliant

FCC RULES	DESCRIPTION OF TEST	RESULT
§ 2.1046 , ,§27.50	Transmitter output Power	Compliant
§ 2.1091 ,§1.1037	RF Exposure	Compliant
§ 2.1047 § 2.1053, §27.53	Modulation Characteristic Spurious Radiated Emissions	Compliant Compliant
§ 2.1051, §27.53	Spurious Emissions AT Antenna Terminals	Compliant
§ 2.1049,§27.53	Occupied Bandwidth	Compliant
§ 2.1051,§27.53	Band Edge	Compliant
§ 2.1055	Frequency stability	Compliant

4 FREQUENCY PLAN

ZXSDR R8882 S1700 will use frequency range：DL: 2110-2155MHz.UL:1710-1755MHz

5 TYPE OF MODULATION

Applicable Standard: RSS139 § 6.2

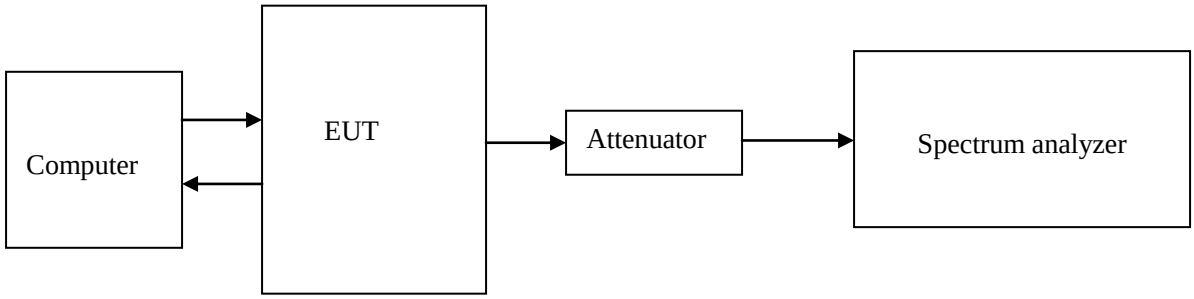
The modulation used shall be digital.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	PXA Series Spectrum Analyzer	N9030A	MY49431143	2014.09.16	2015.09.16
DTS	DTS 40dB Attenuator	DTS100-40-3-1	201312160104	2014.09.16	2015.09.16

***statement of traceability:** The Reliability Testing Center attests that all calibration has been performed per the NVLAP requirements, traceable to NIST.

Test Procedure



The EUT is connected to the input of the spectrum analyzer through sufficient attenuation. EUT send different modulation characteristic LTE signals and test by spectrum analyzer.

Environmental Conditions

Temperature:	20 °C
Relative Humidity:	53 %
ATM Pressure:	1009 mbar

Test Result: Pass

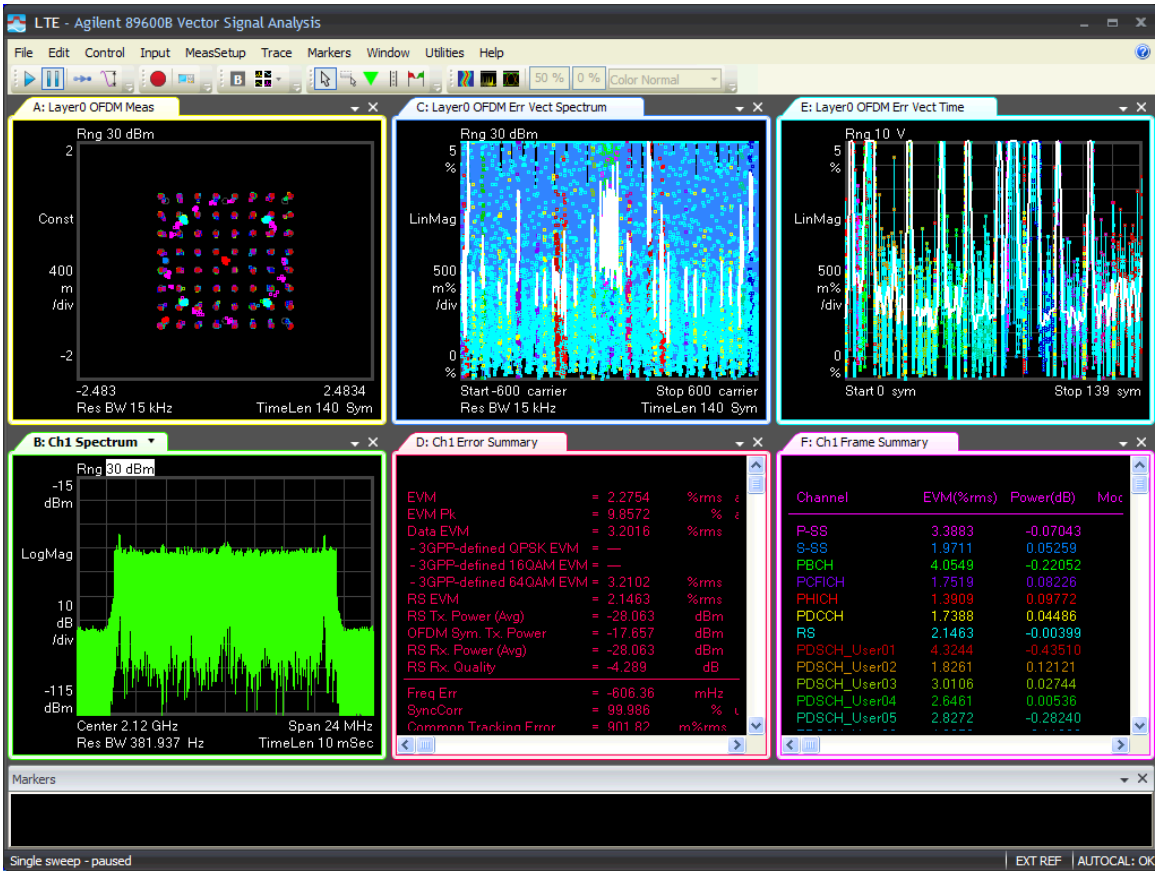
Test Mode: Transmitting LTE

Test Data:

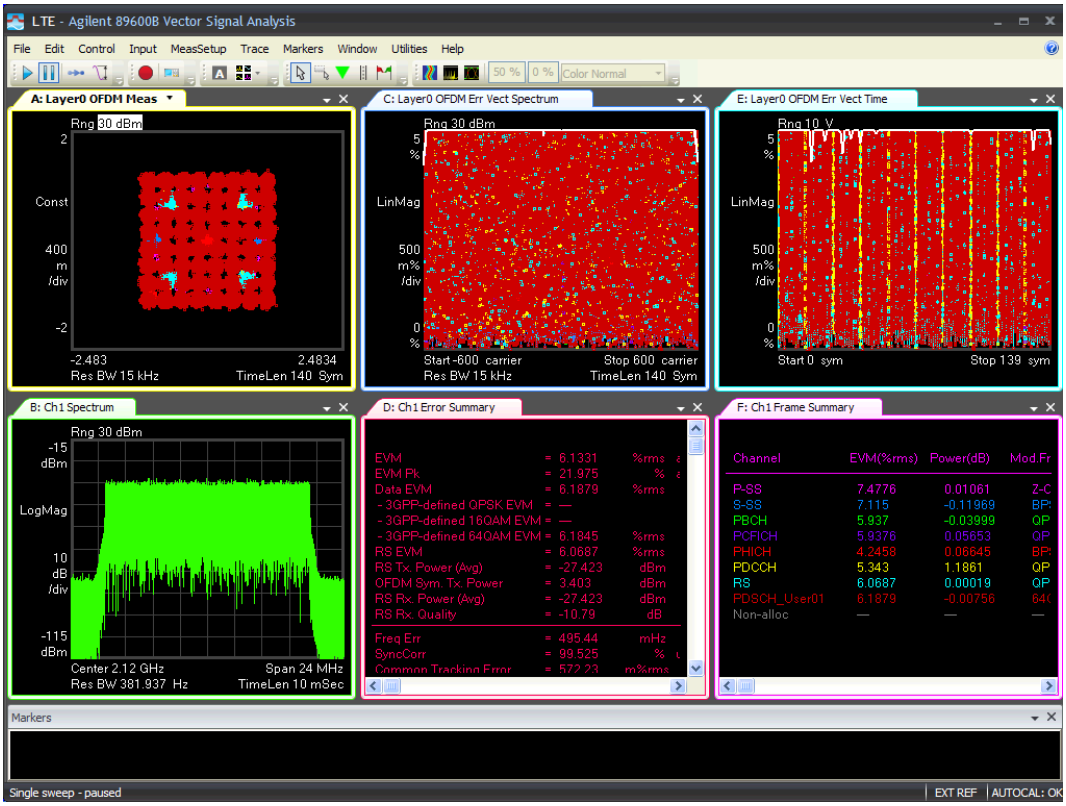
Channel Bandwidth :20M

Port	Frequency (MHz)	Test mode	EVM
1	2120	TM2.0	3.20
		TM3.1	6.18
		TM3.2	8.47
		TM3.3	12.13
	2132.5	TM2.0	3.88
		TM3.1	6.22
		TM3.2	8.67
		TM3.3	12.09
	2145	TM2.0	3.70
		TM3.1	6.22
		TM3.2	8.67
		TM3.3	12.29
2	2120	TM2.0	3.24
		TM3.1	6.19
		TM3.2	8.70
		TM3.3	12.19
	2132.5	TM2.0	2.80
		TM3.1	6.20
		TM3.2	8.69
		TM3.3	12.29
	2145	TM2.0	3.05
		TM3.1	6.22
		TM3.2	8.70
		TM3.3	12.26

20M-Port 1 -2120MHz-TM2.0



20M-Port 1 -2120MHz -TM3.1



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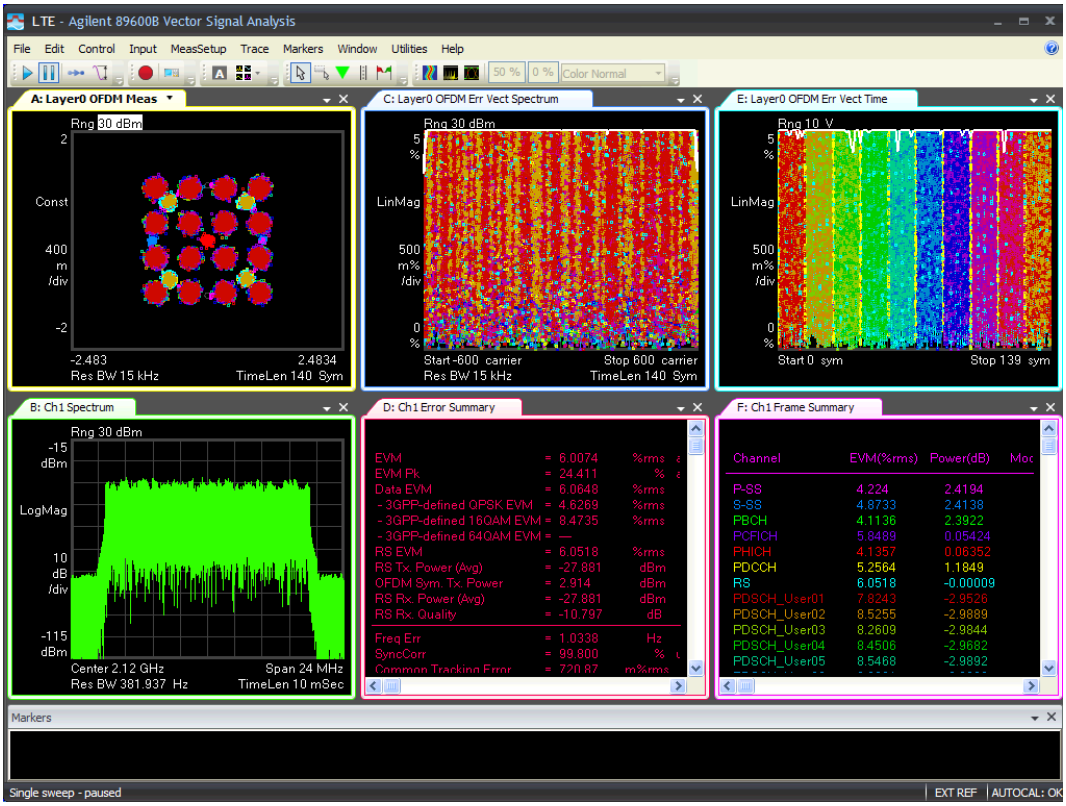
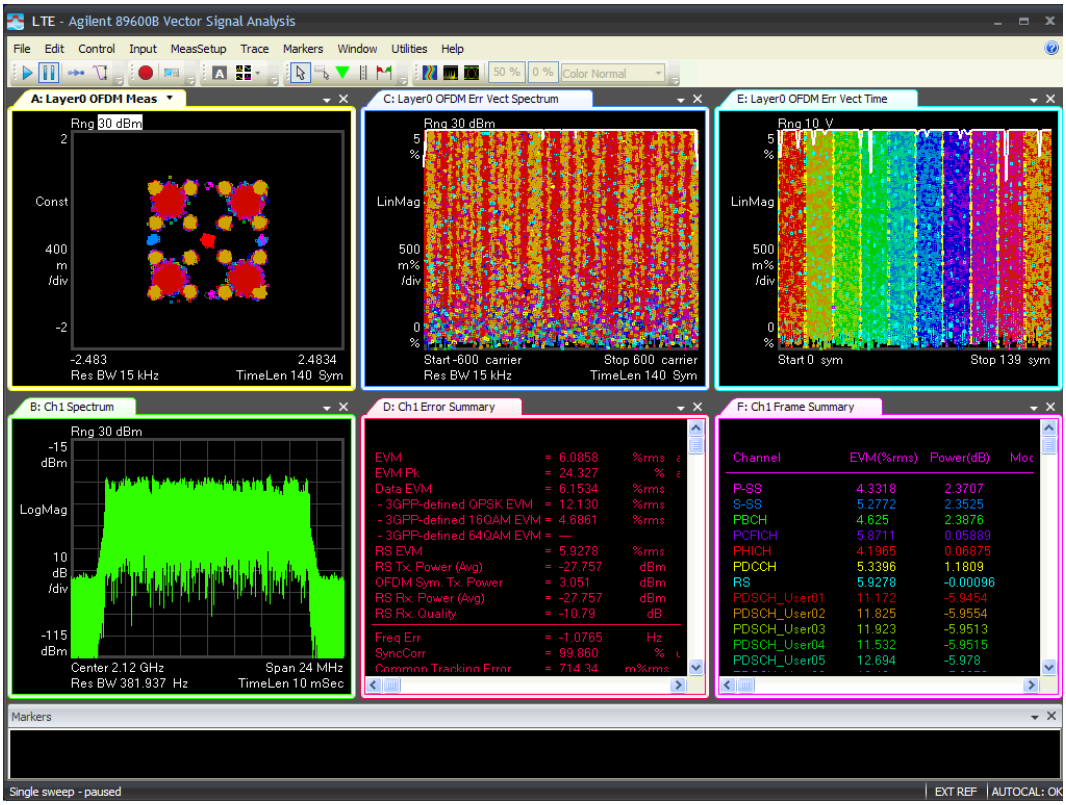
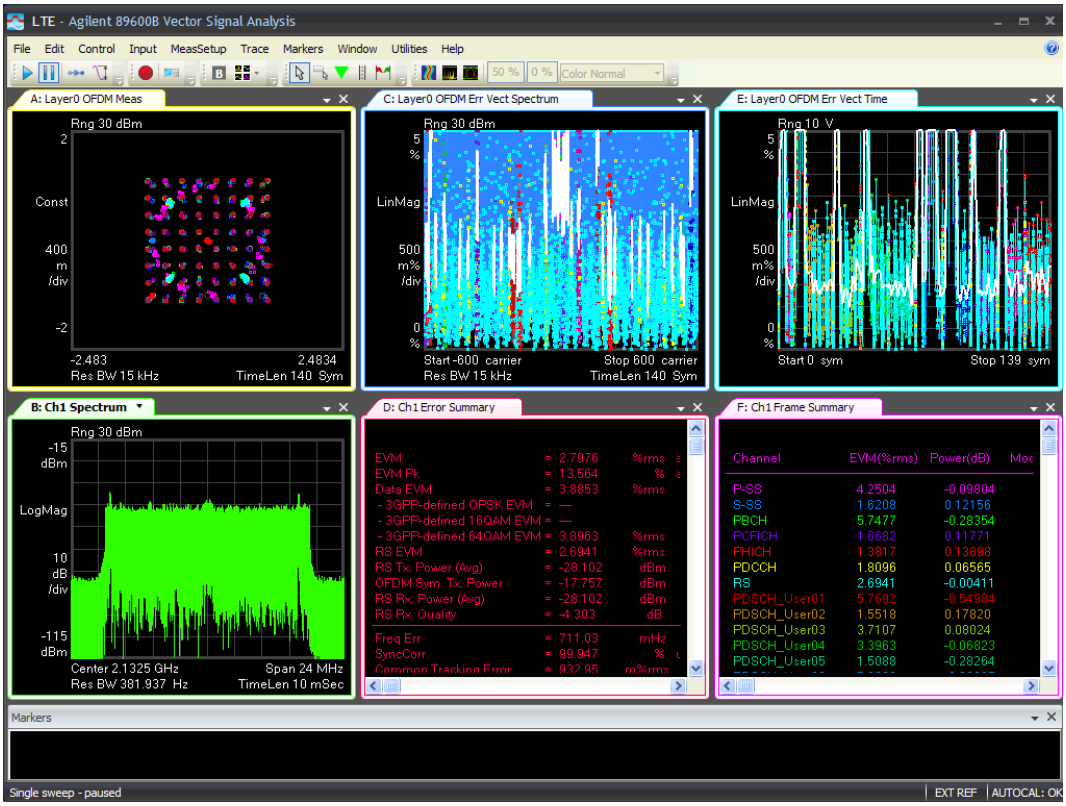


20M-Port 1 -2120MHz -TM3.3



20M-Port 1 -2132.5MHz-TM2.0



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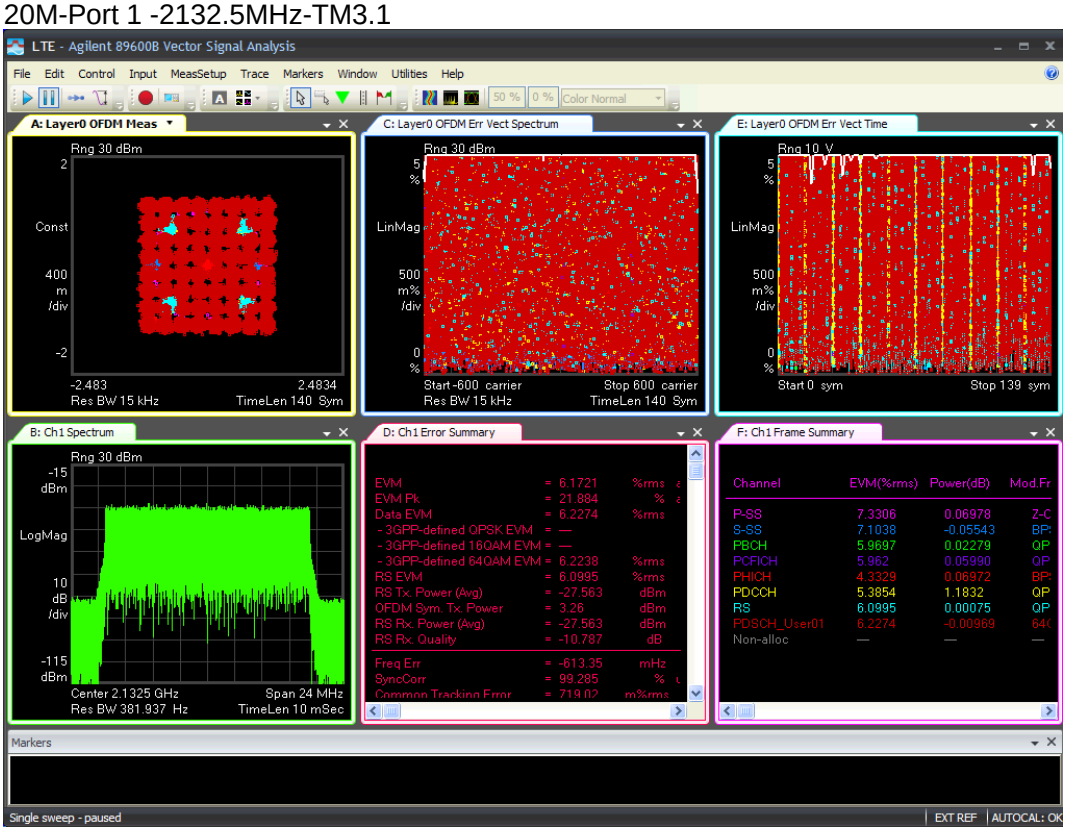

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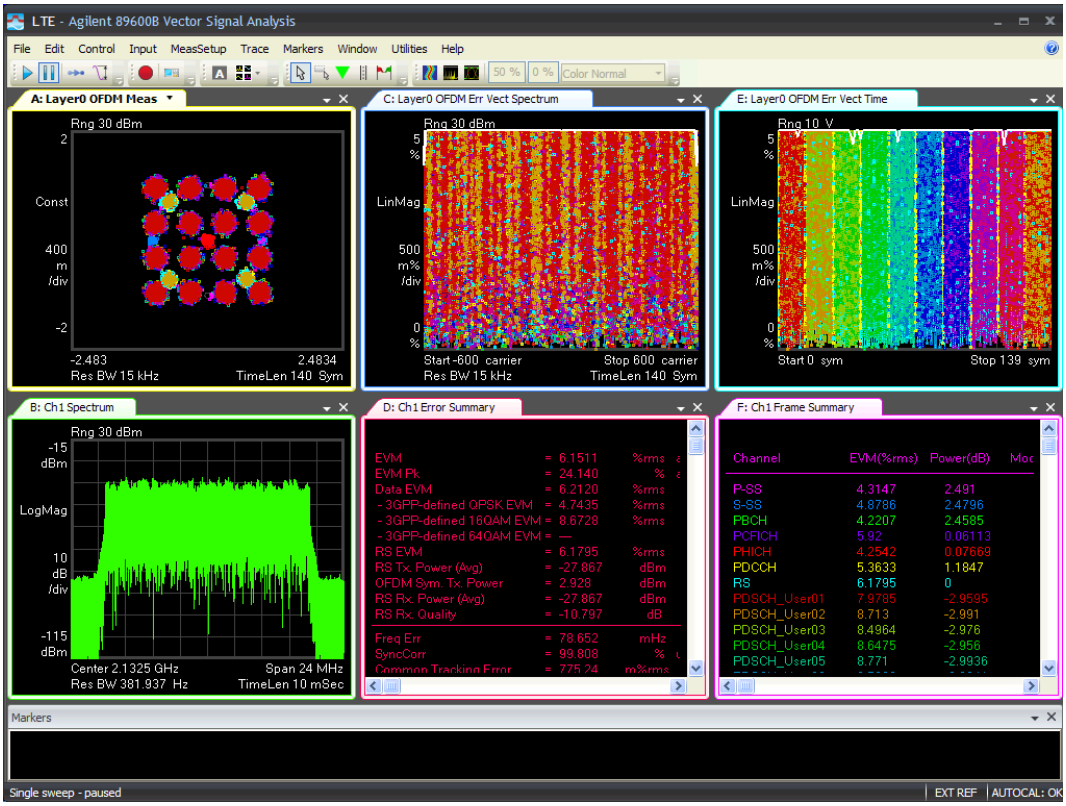

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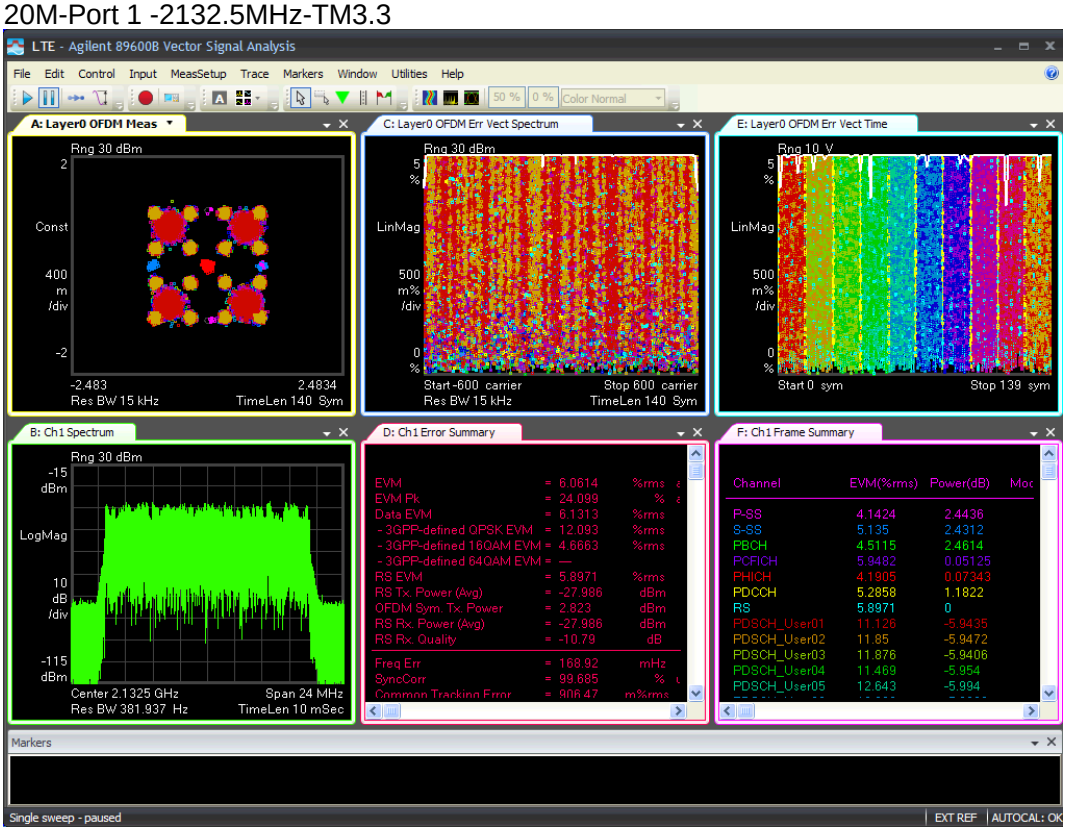

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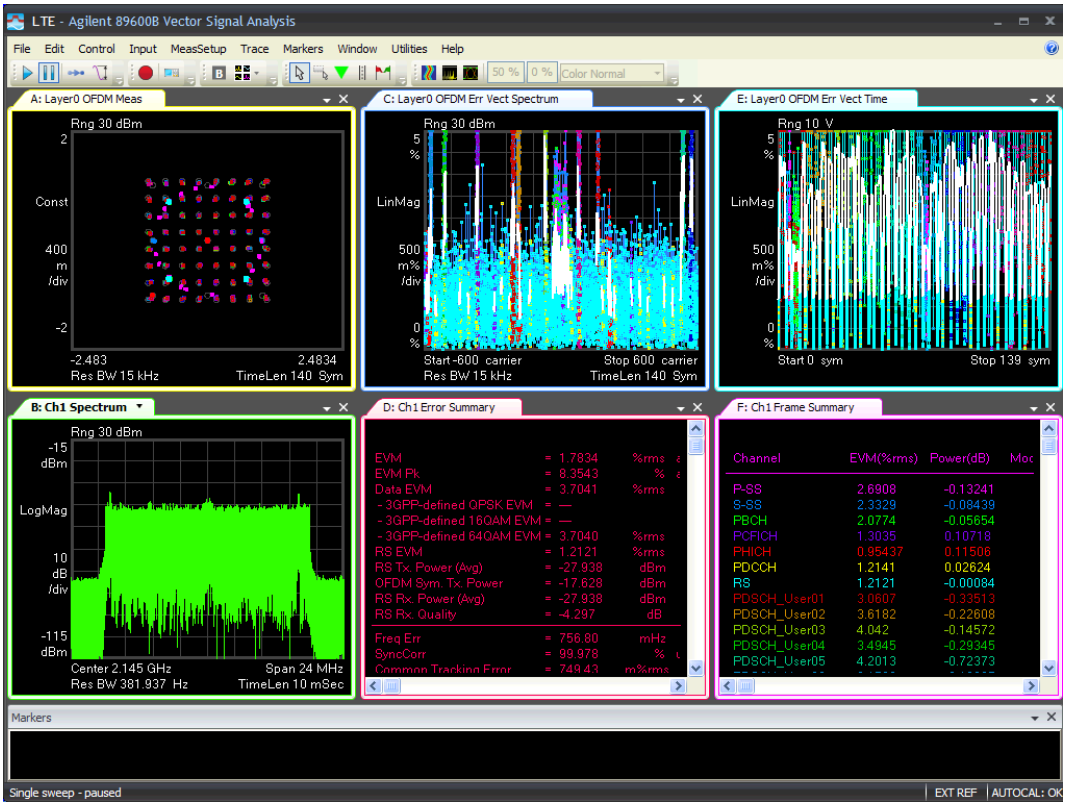

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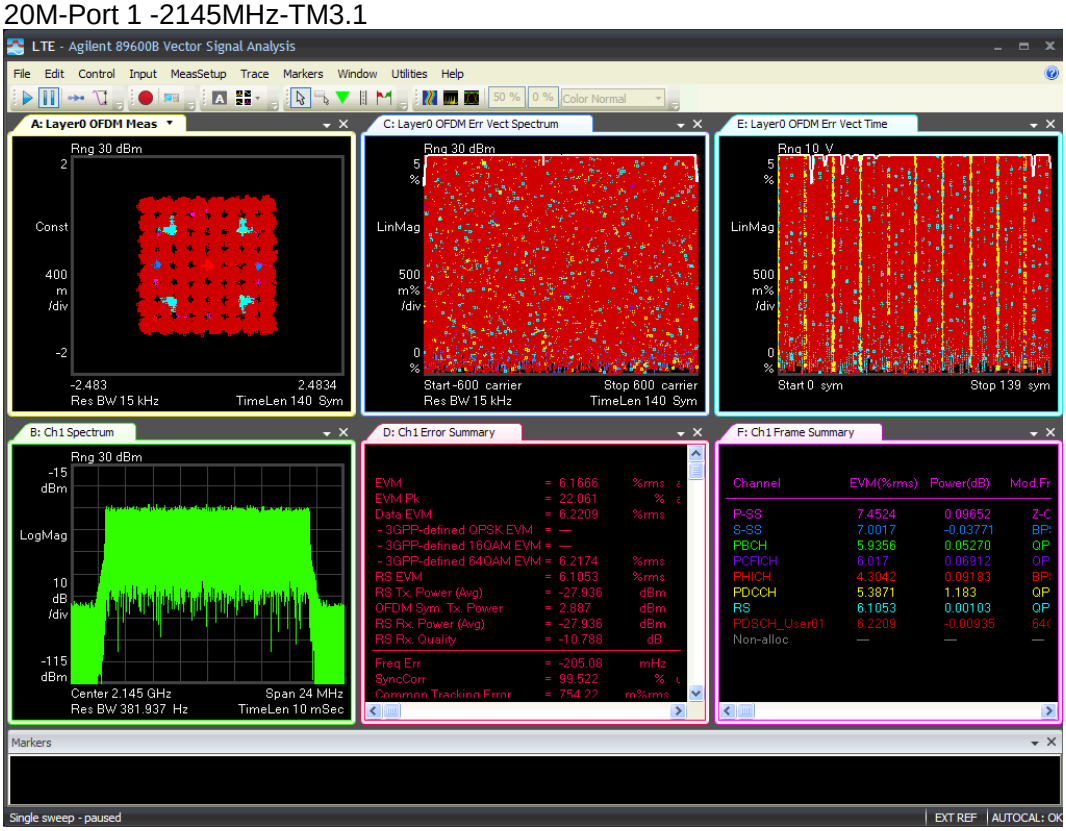

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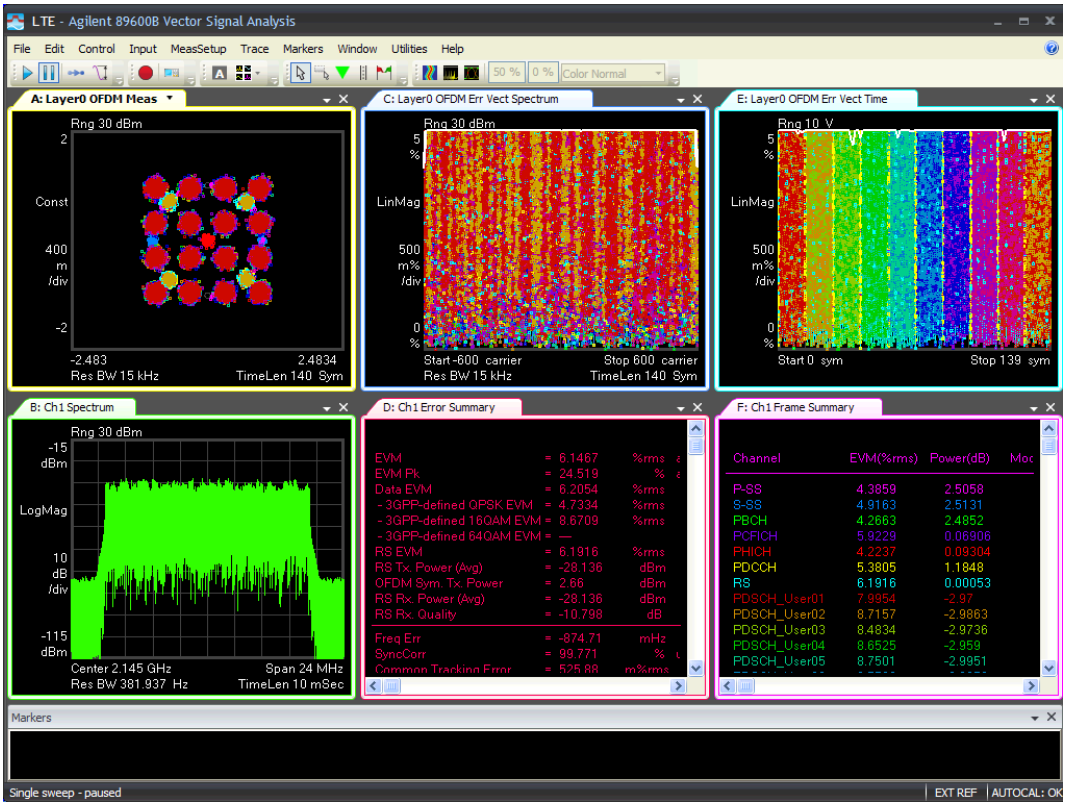

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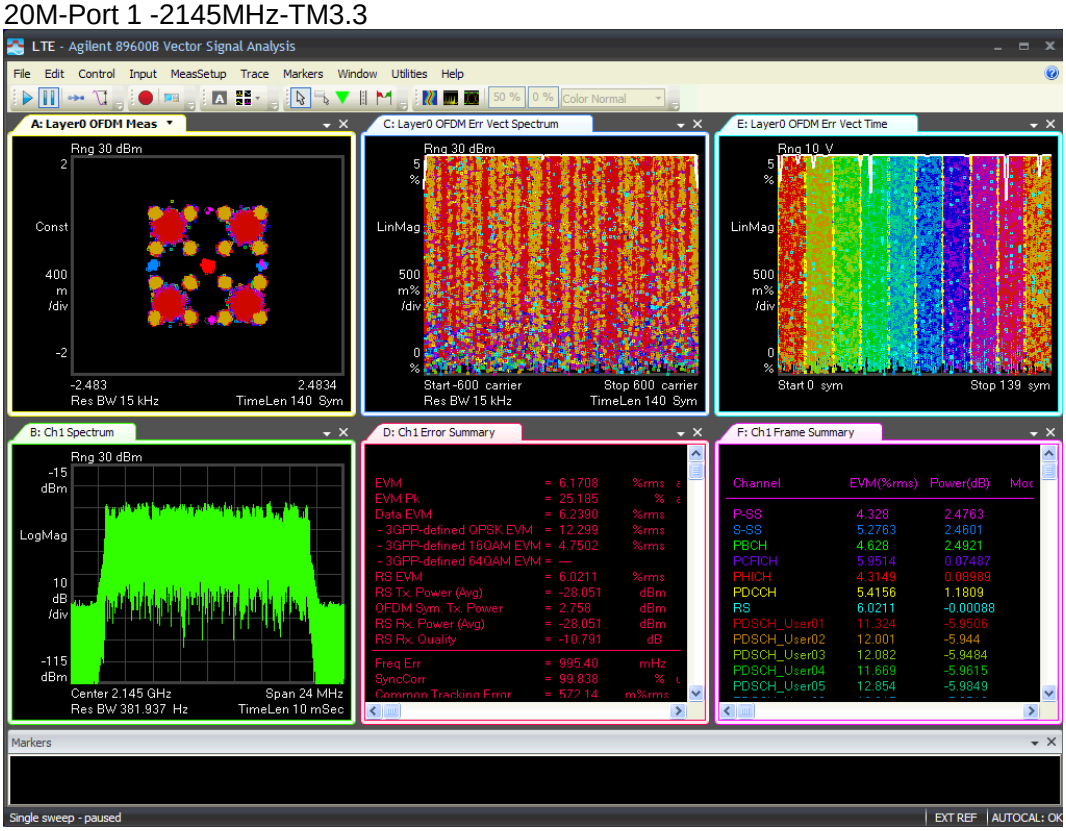

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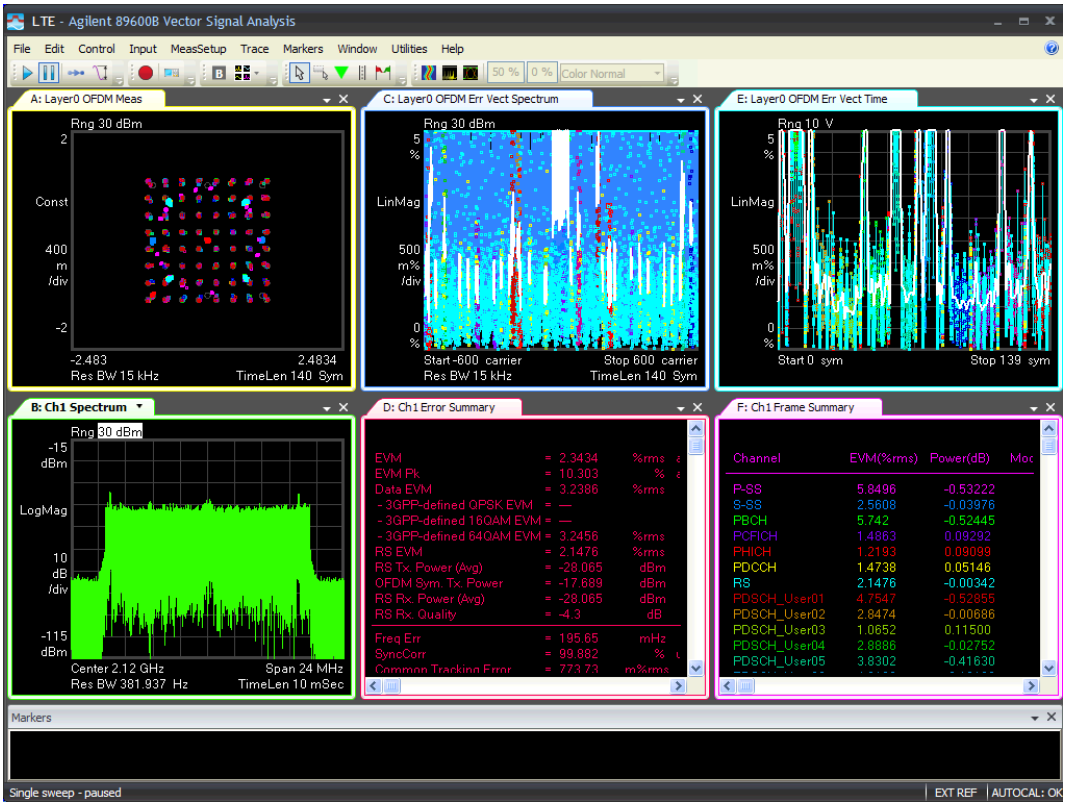
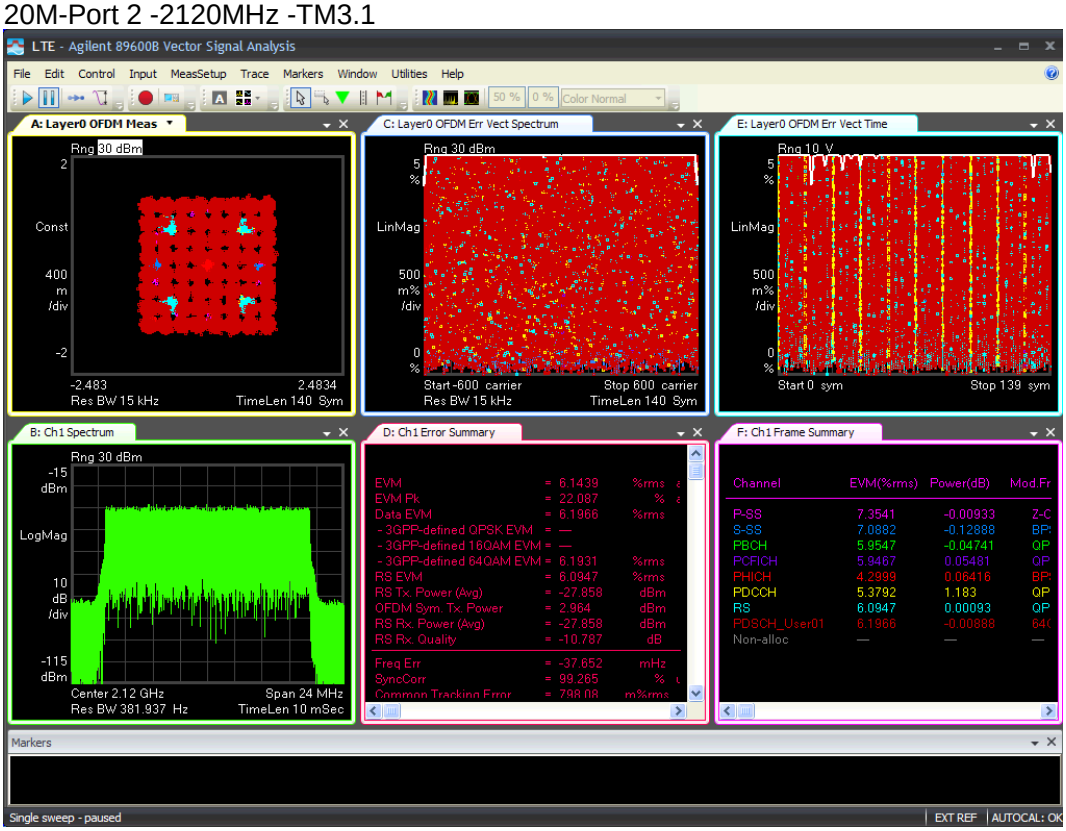


20M-Port 2 -2120MHz -TM3.1



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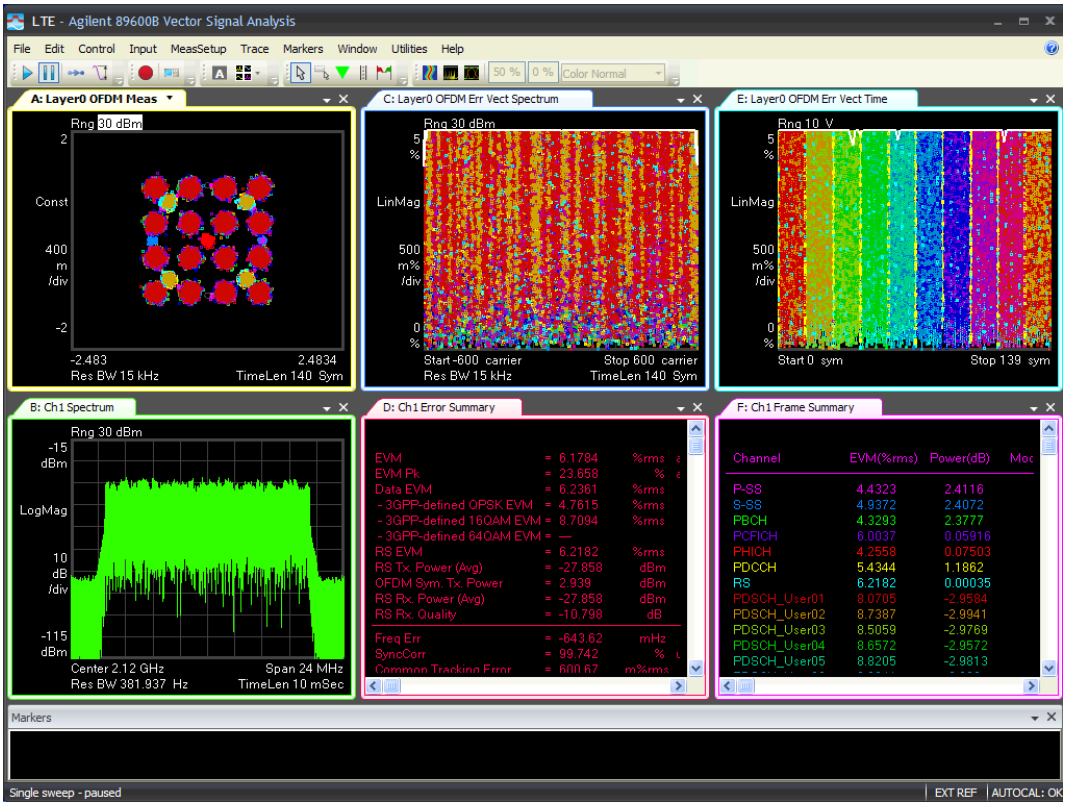

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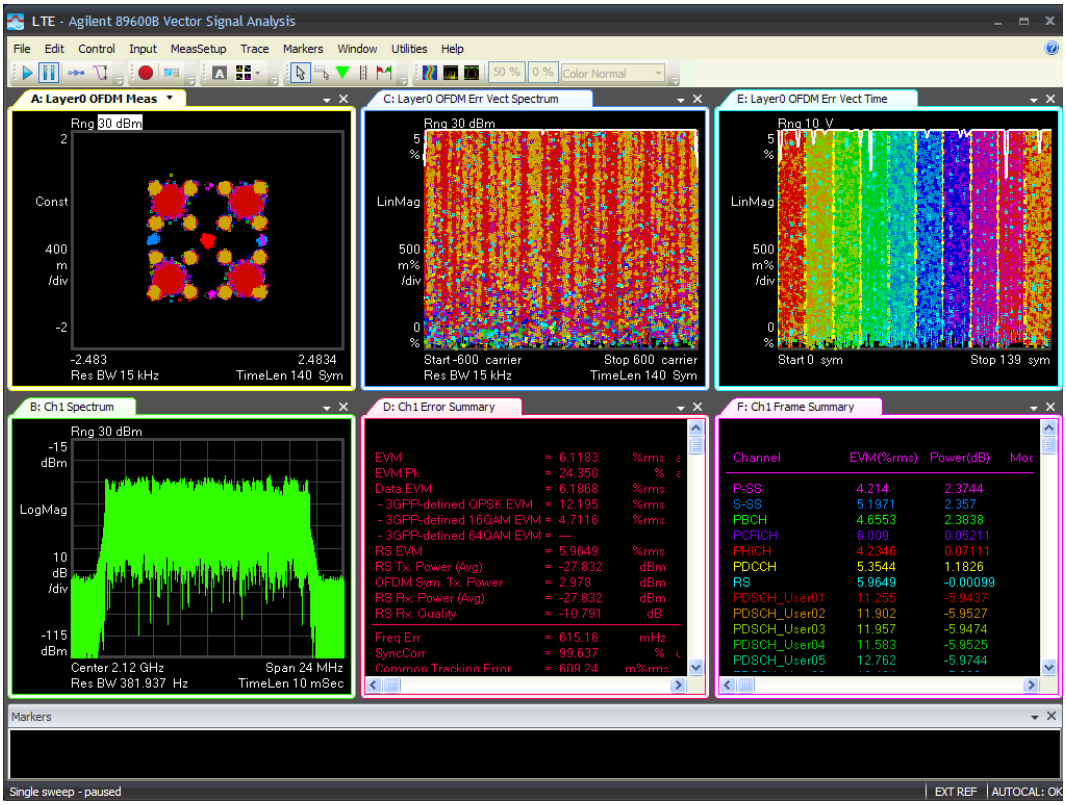
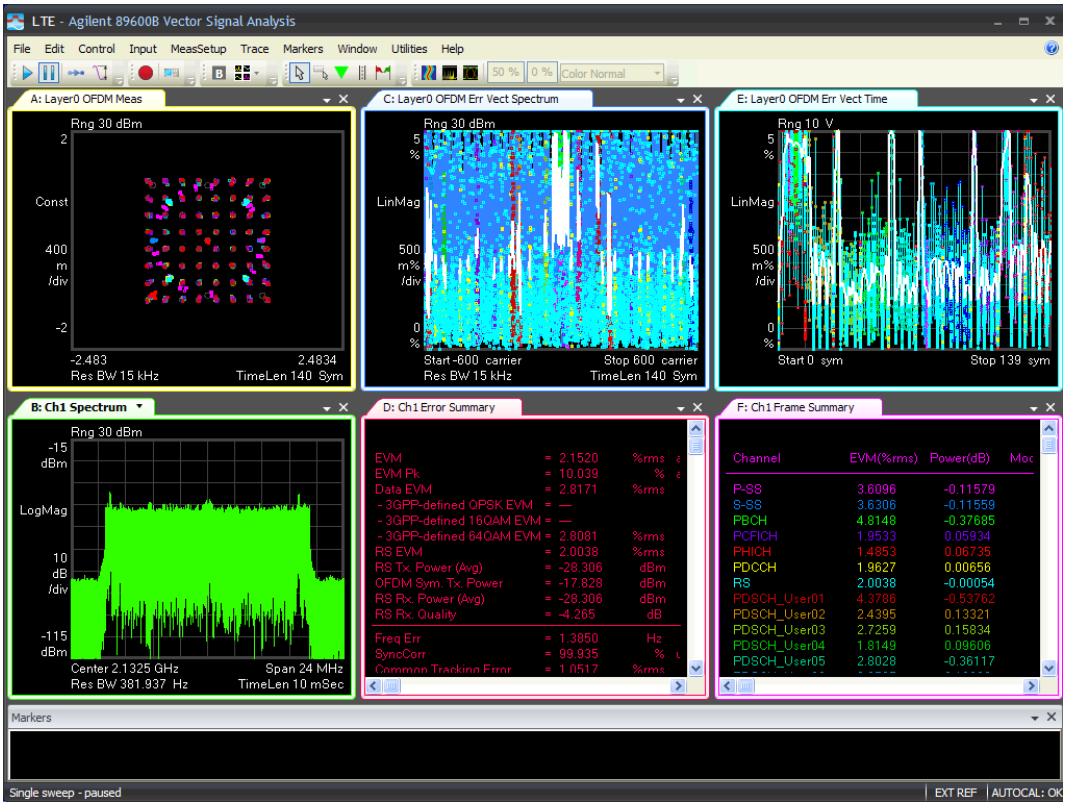


20M-Port 2 -2132.5MHz-TM2.0



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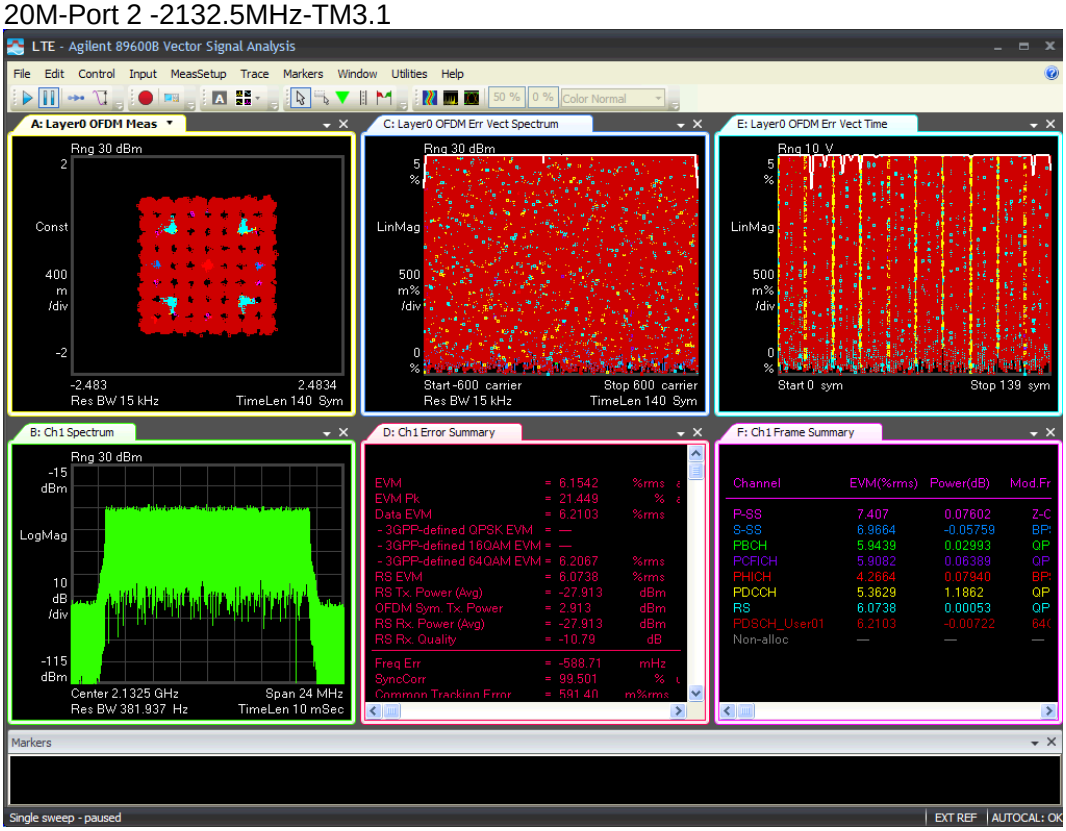

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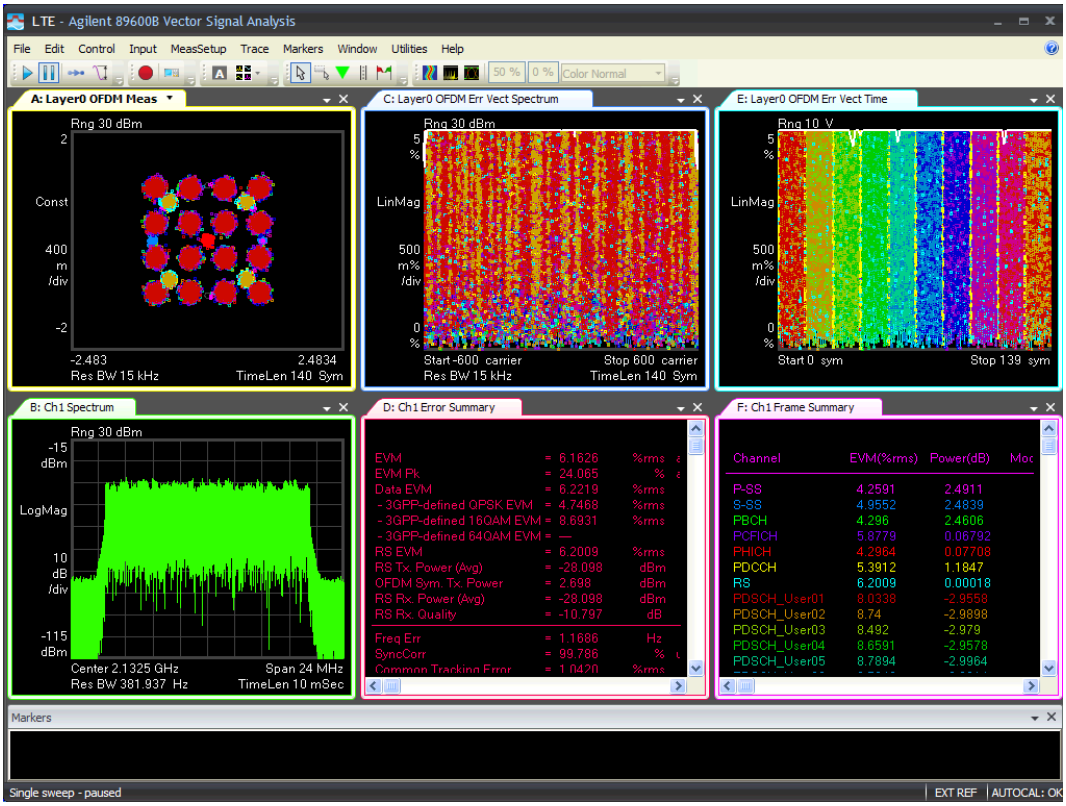
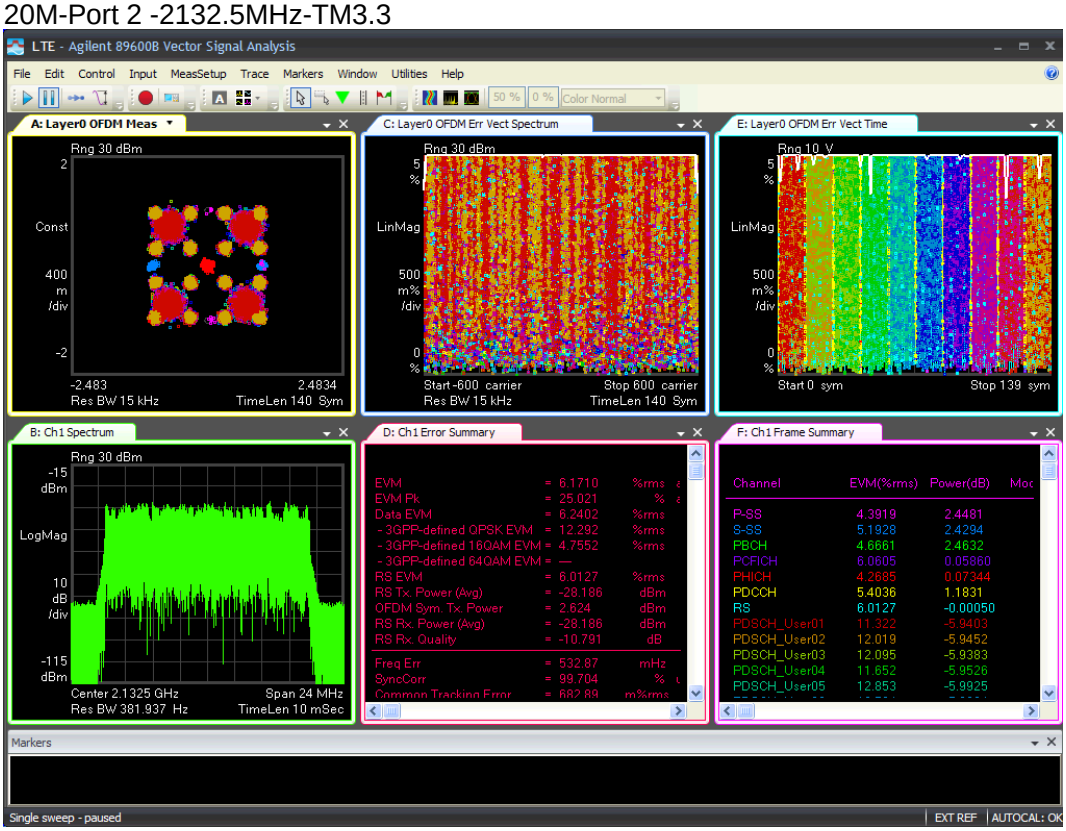


20M-Port 2 -2132.5MHz-TM3.3



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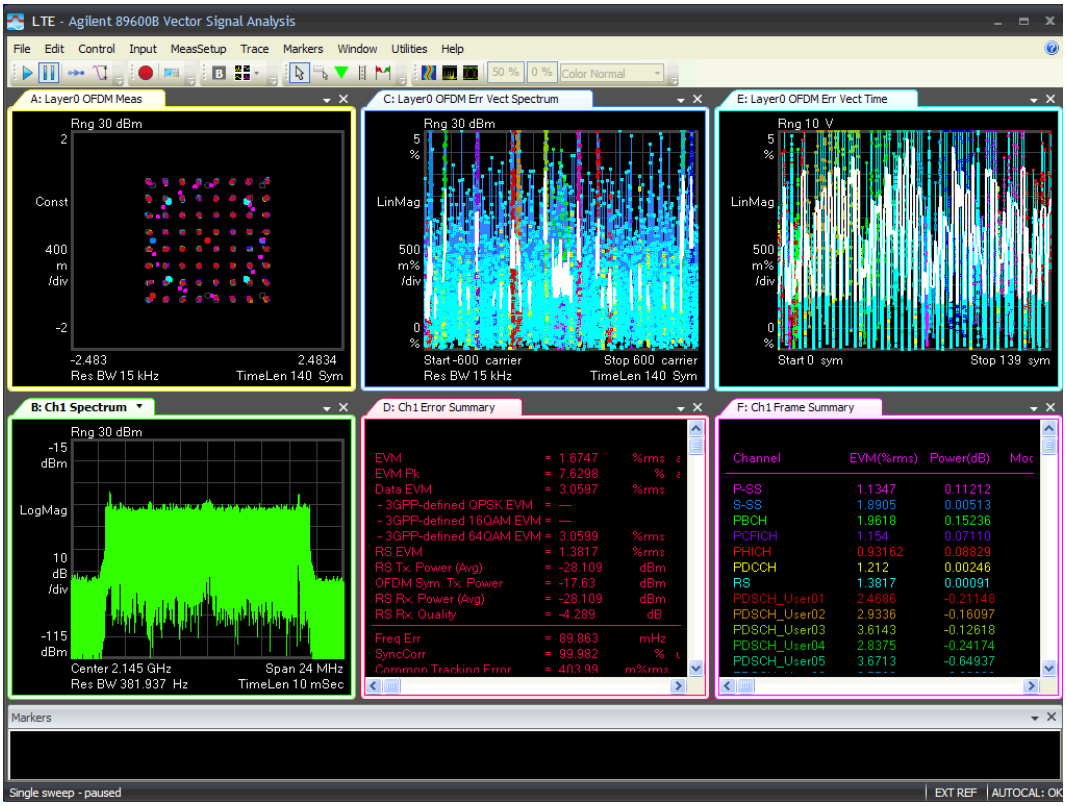

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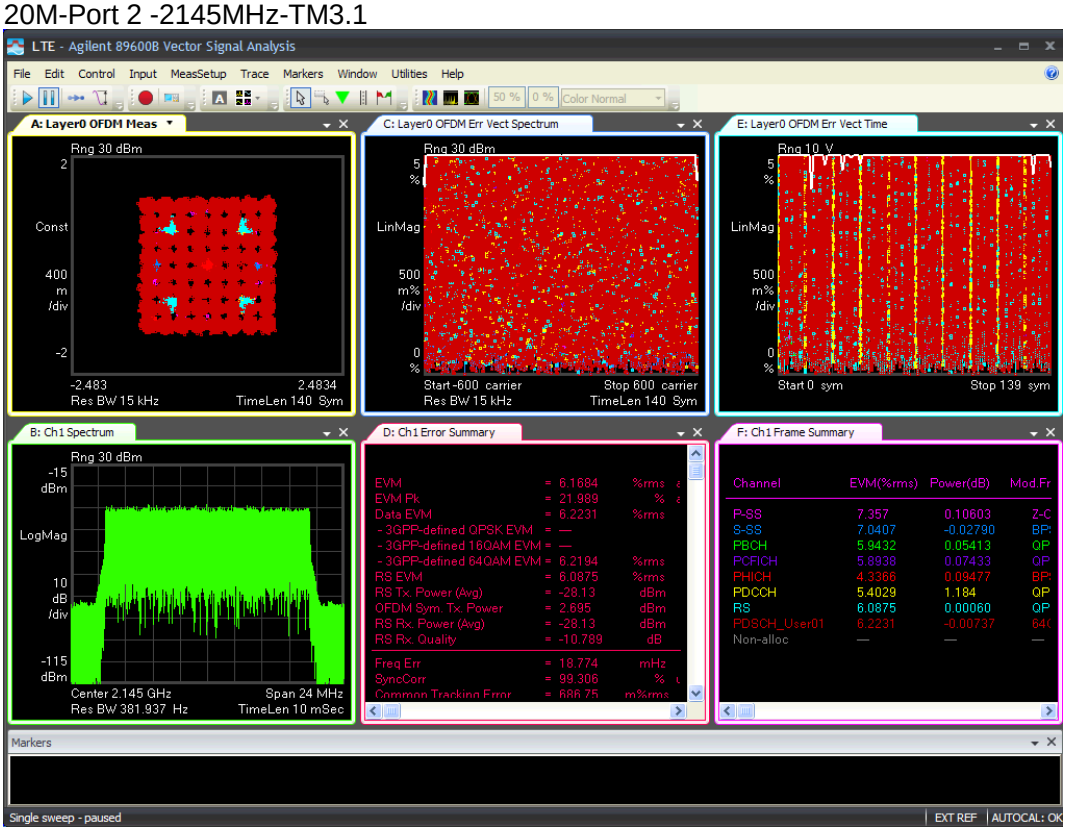
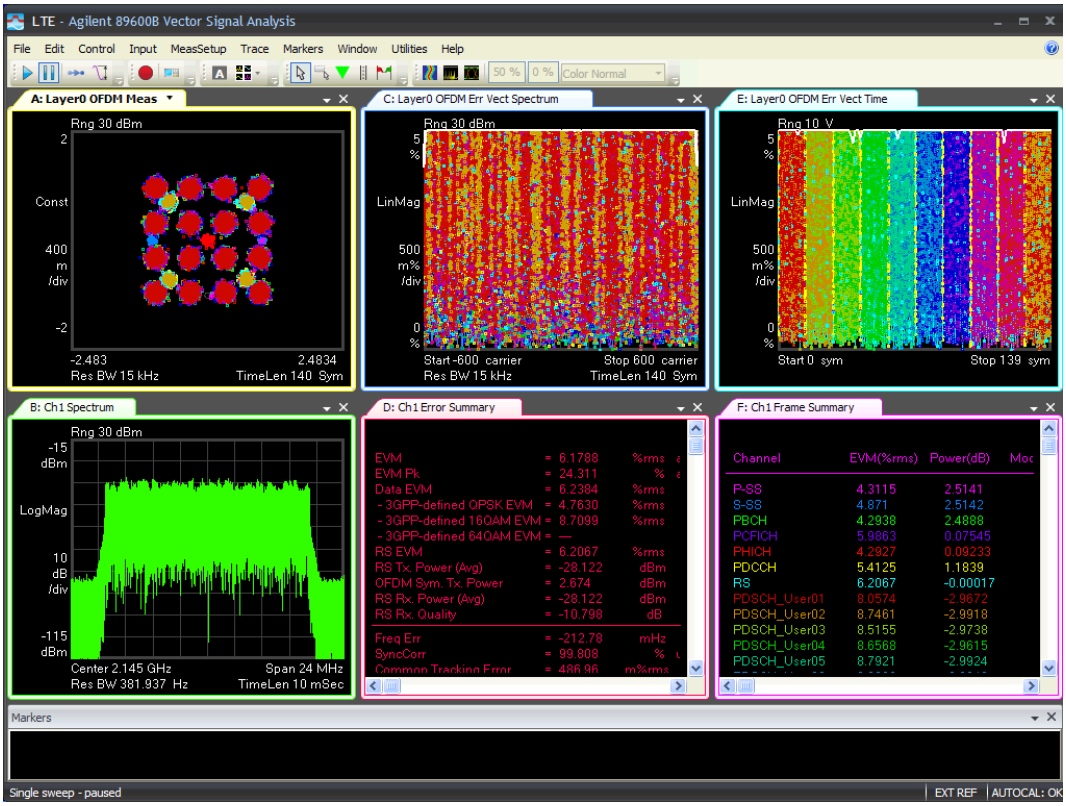
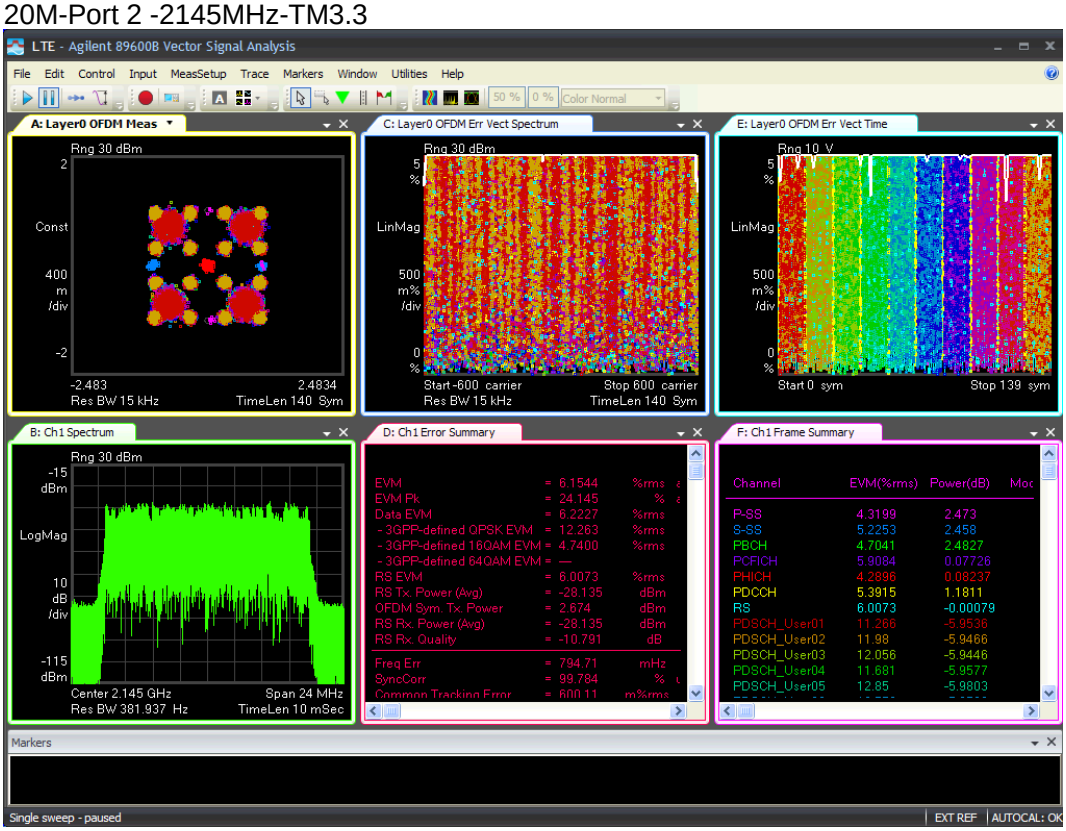


20M-Port 2 -2145MHz-TM3.2



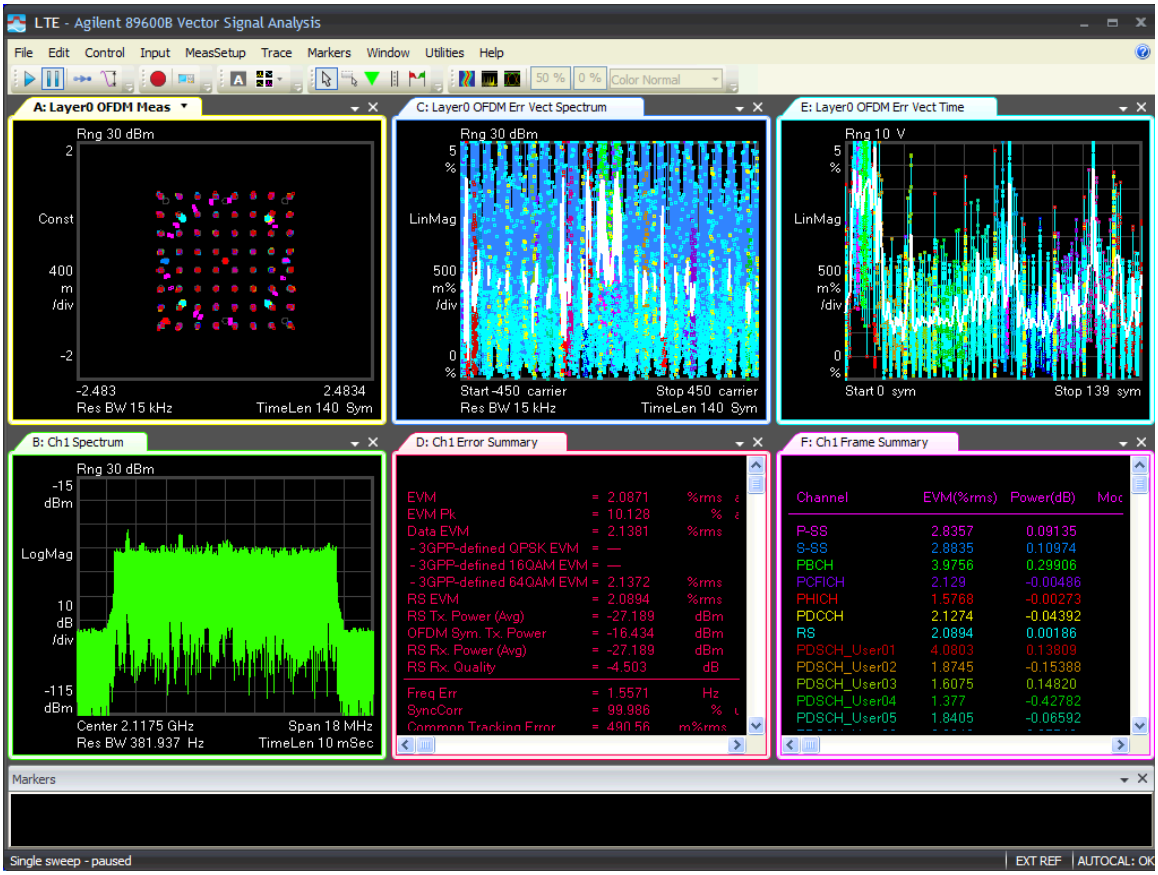
20M-Port 2 -2145MHz-TM3.3



Channel Bandwidth :15M

Port	Frequency (MHz)	Test mode	EVM
1	2117.5	TM2.0	2.13
		TM3.1	6.05
		TM3.2	8.47
		TM3.3	11.91
	2132.5	TM2.0	2.76
		TM3.1	6.05
		TM3.2	8.58
		TM3.3	12.07
	2147.5	TM2.0	2.22
		TM3.1	6.08
		TM3.2	8.57
		TM3.3	12.09
2	2117.5	TM2.0	1.52
		TM3.1	6.04
		TM3.2	8.59
		TM3.3	11.91
	2132.5	TM2.0	2.27
		TM3.1	6.08
		TM3.2	8.59
		TM3.3	12.07
	2147.5	TM2.0	2.18
		TM3.1	6.08
		TM3.2	8.59
		TM3.3	12.05

15M-Port 1 -2117.5MHz-TM2.0



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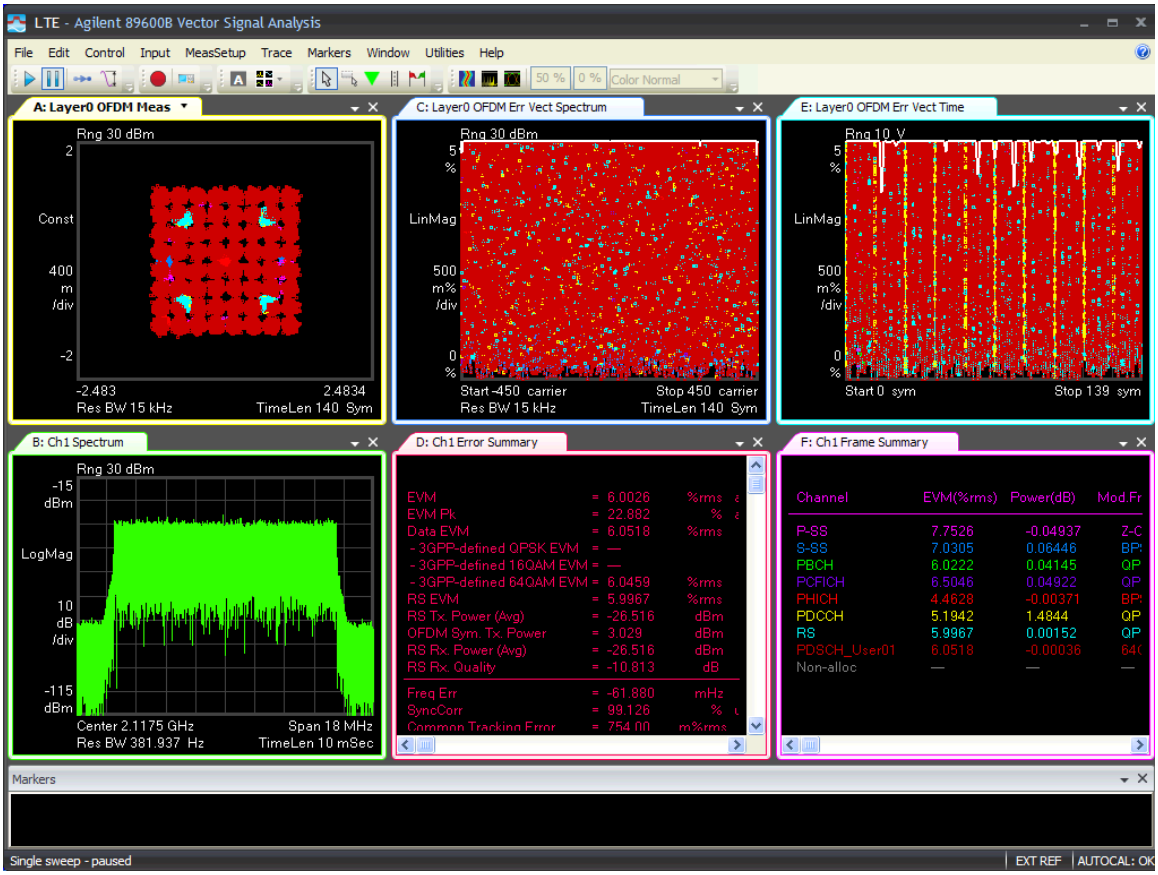

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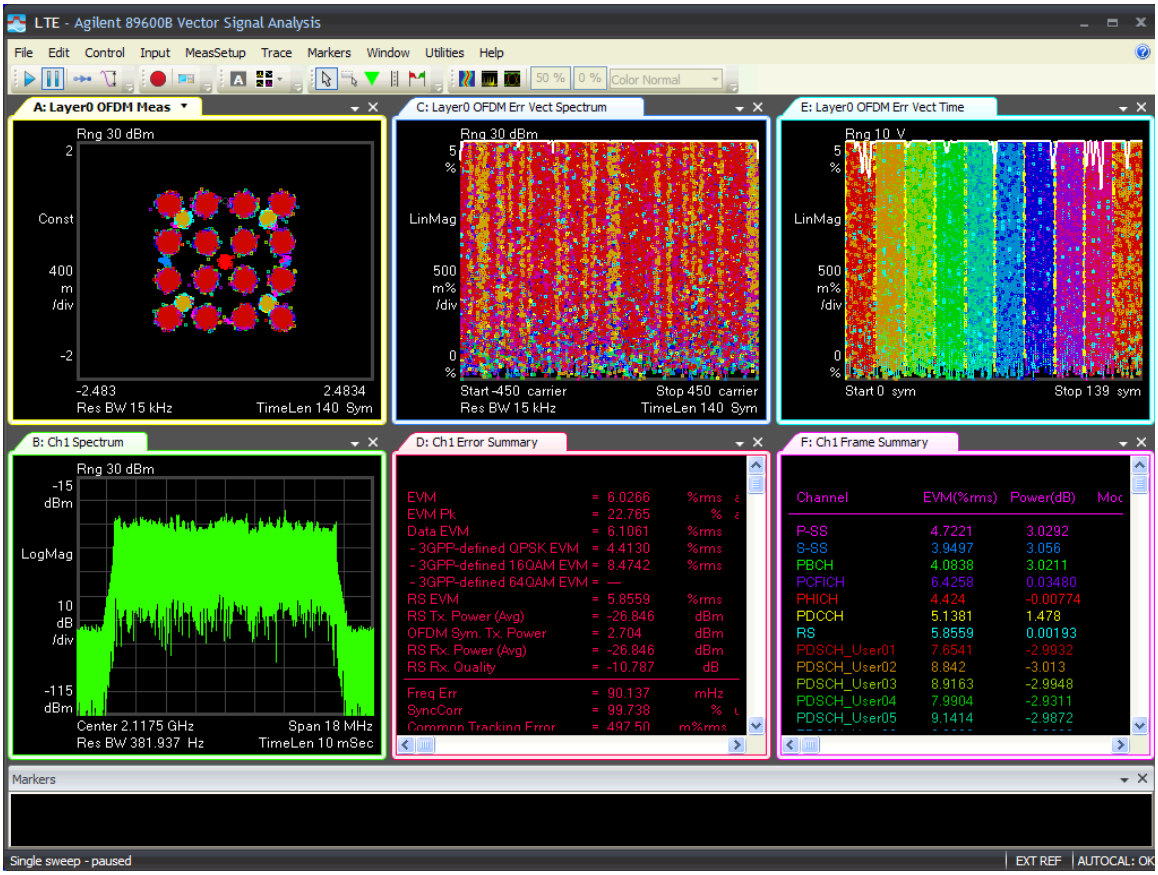

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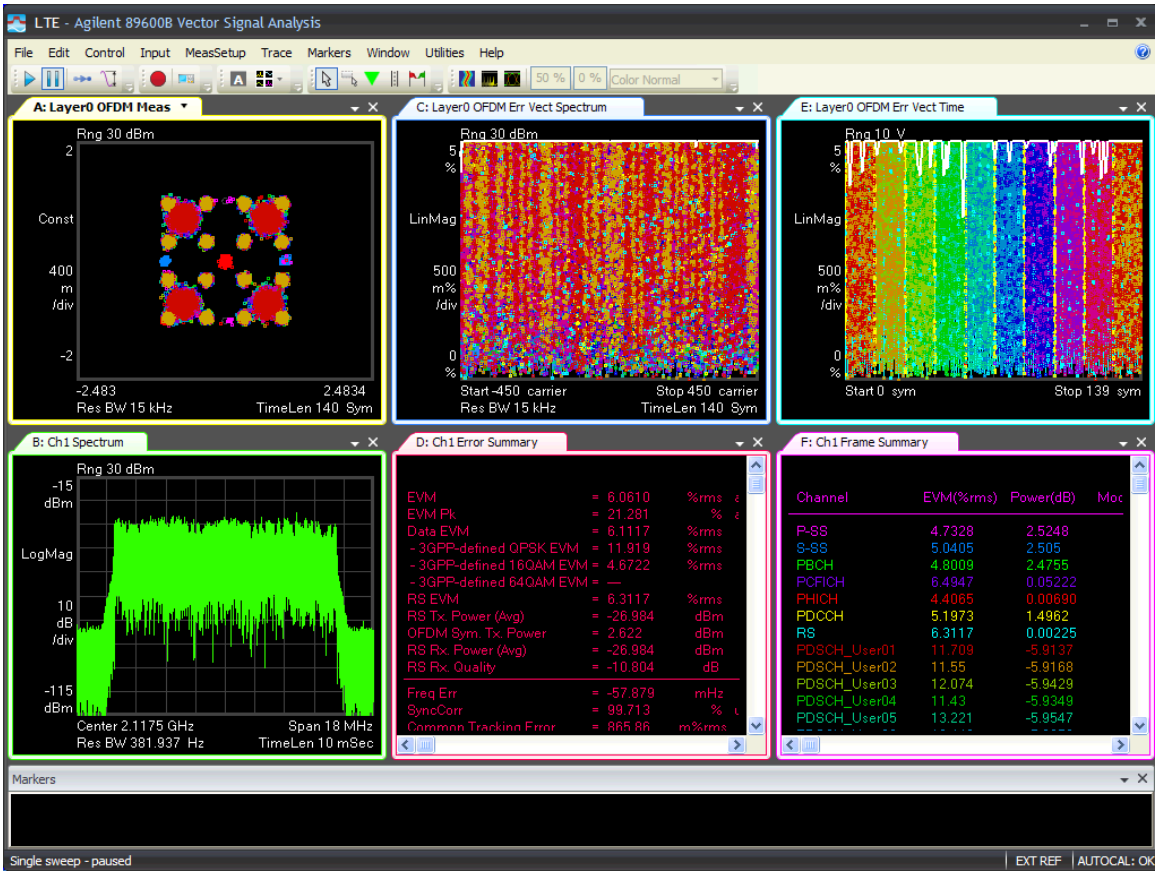
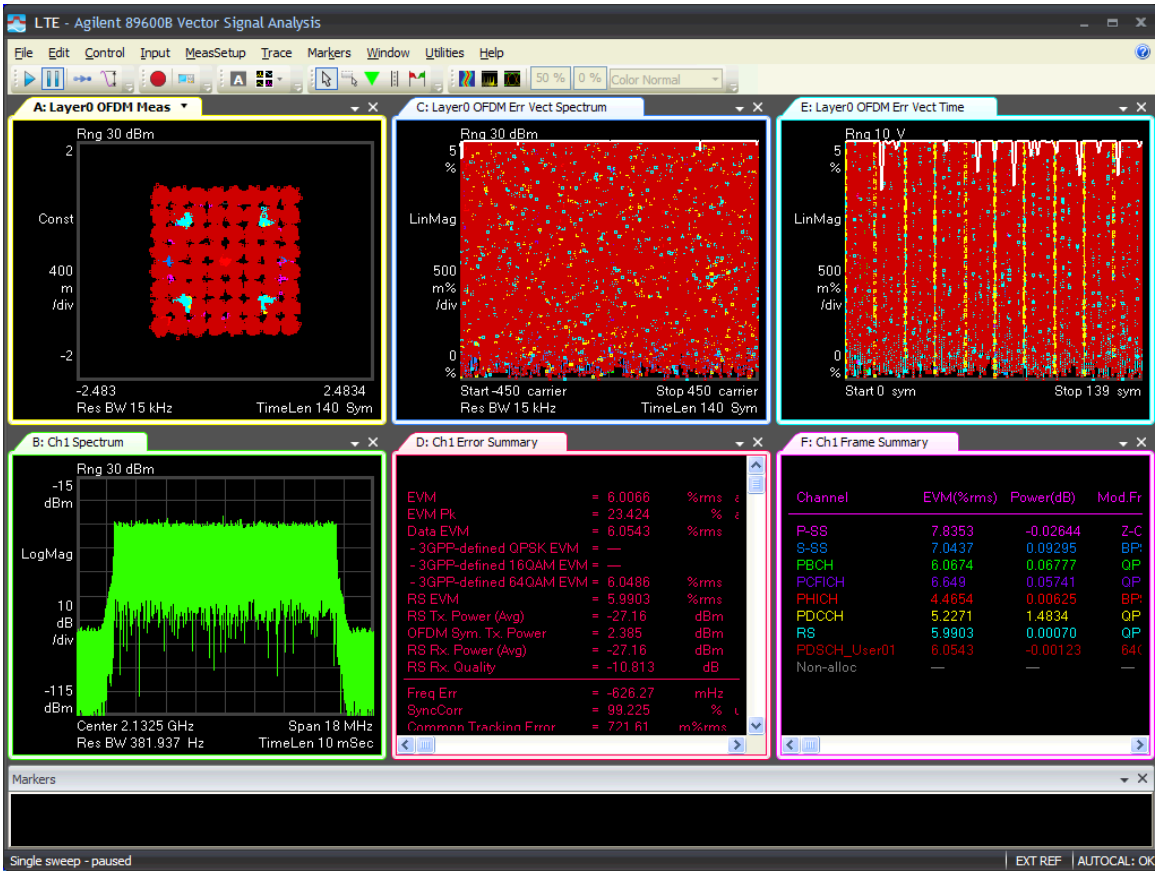


15M-Port 1 -2132.5MHz-TM2.0

15M-Port 1 -2132.5MHz-TM3.1



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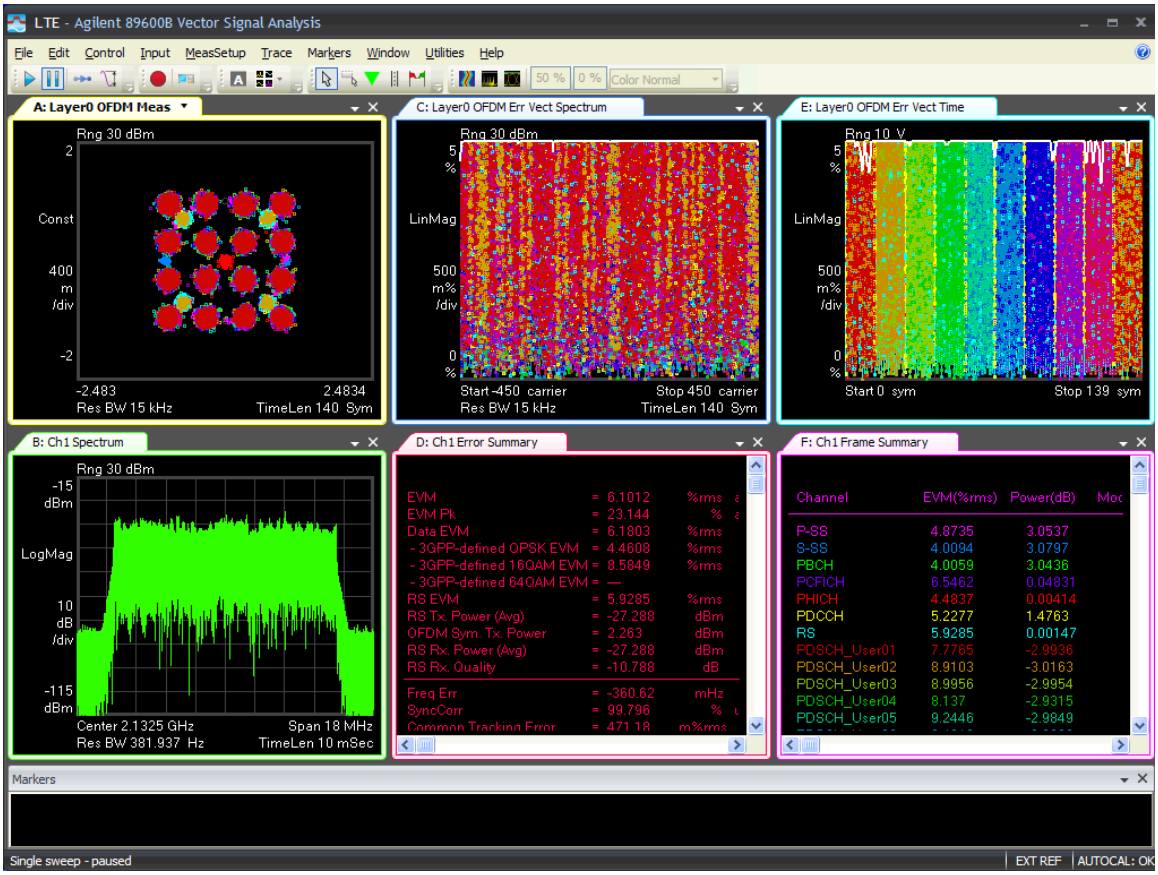

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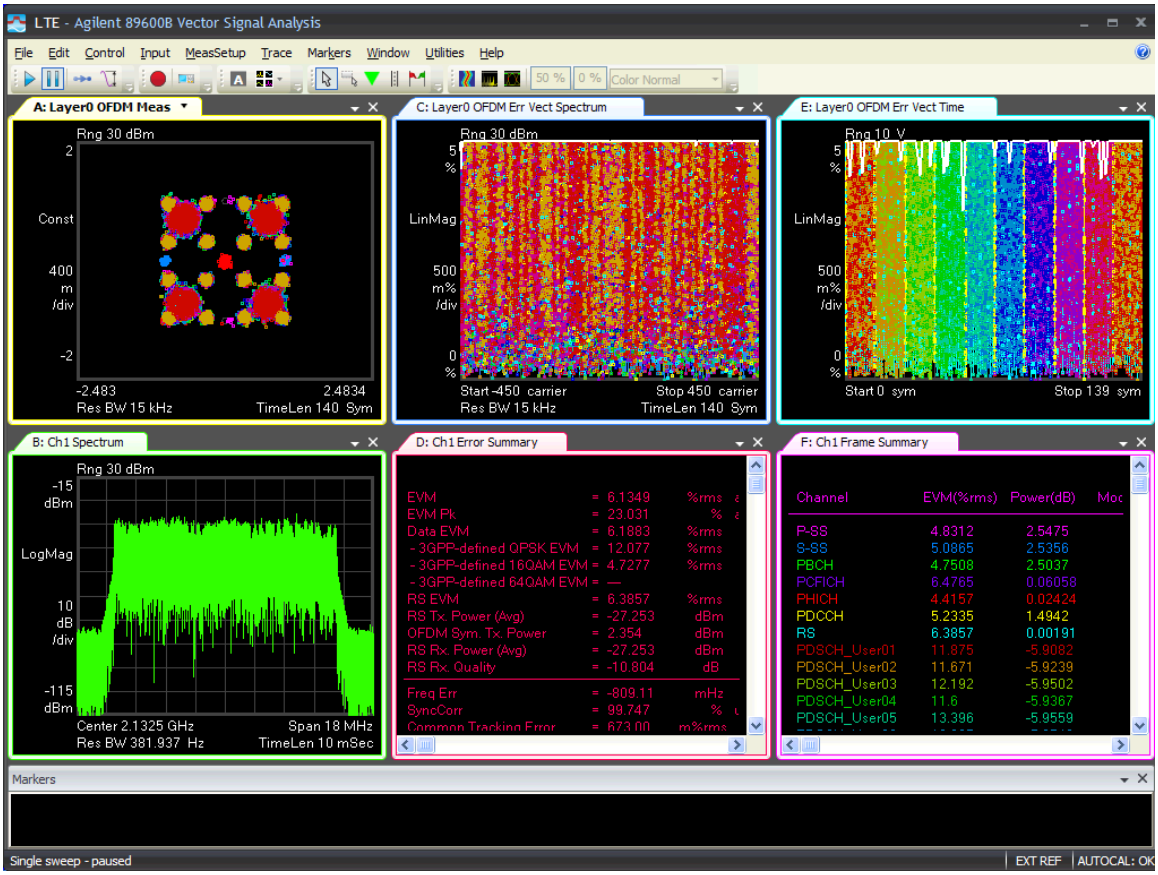
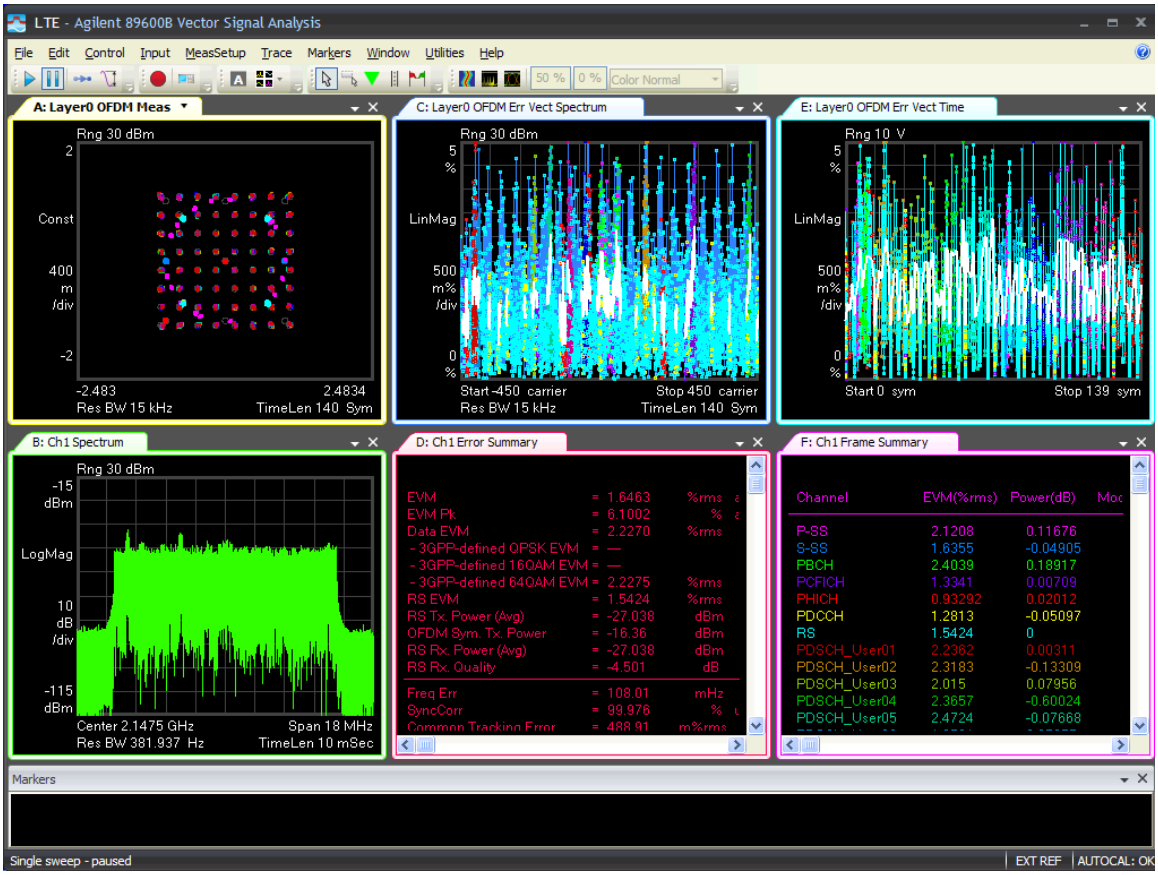
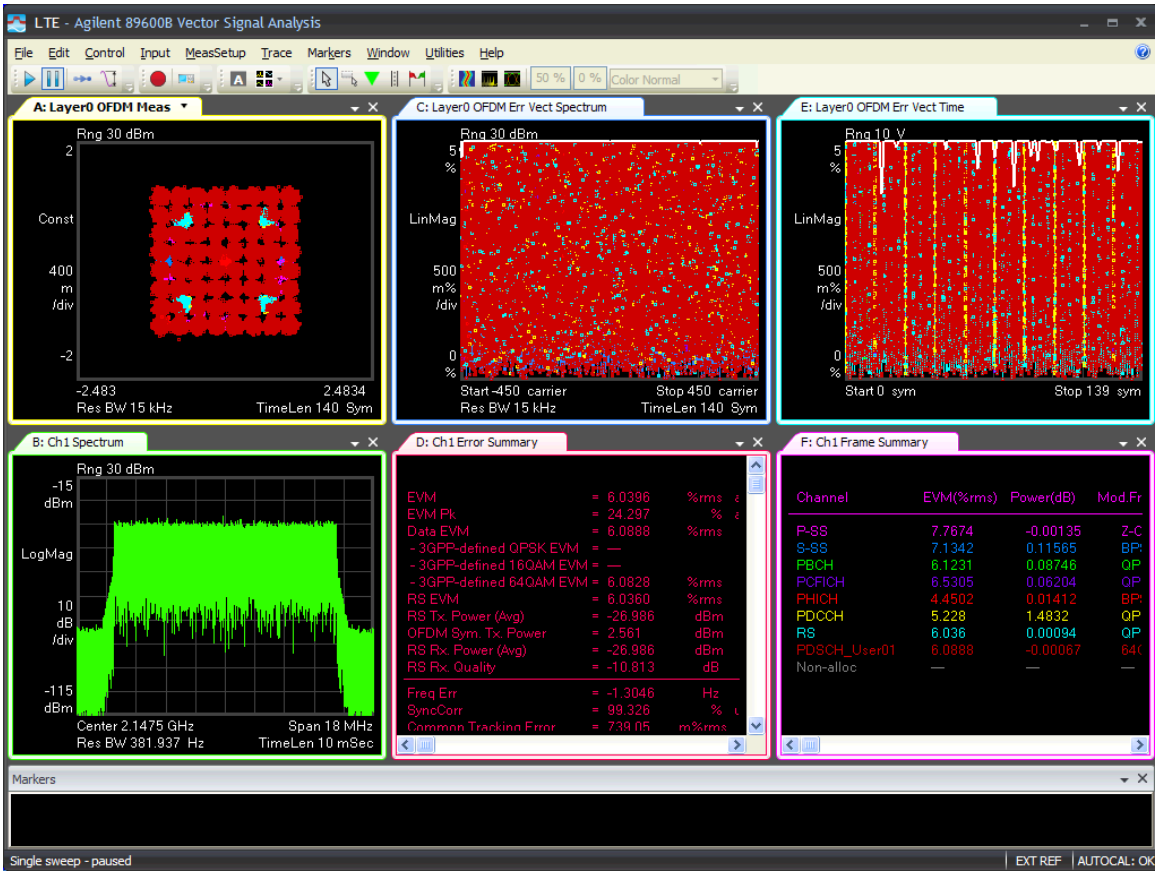


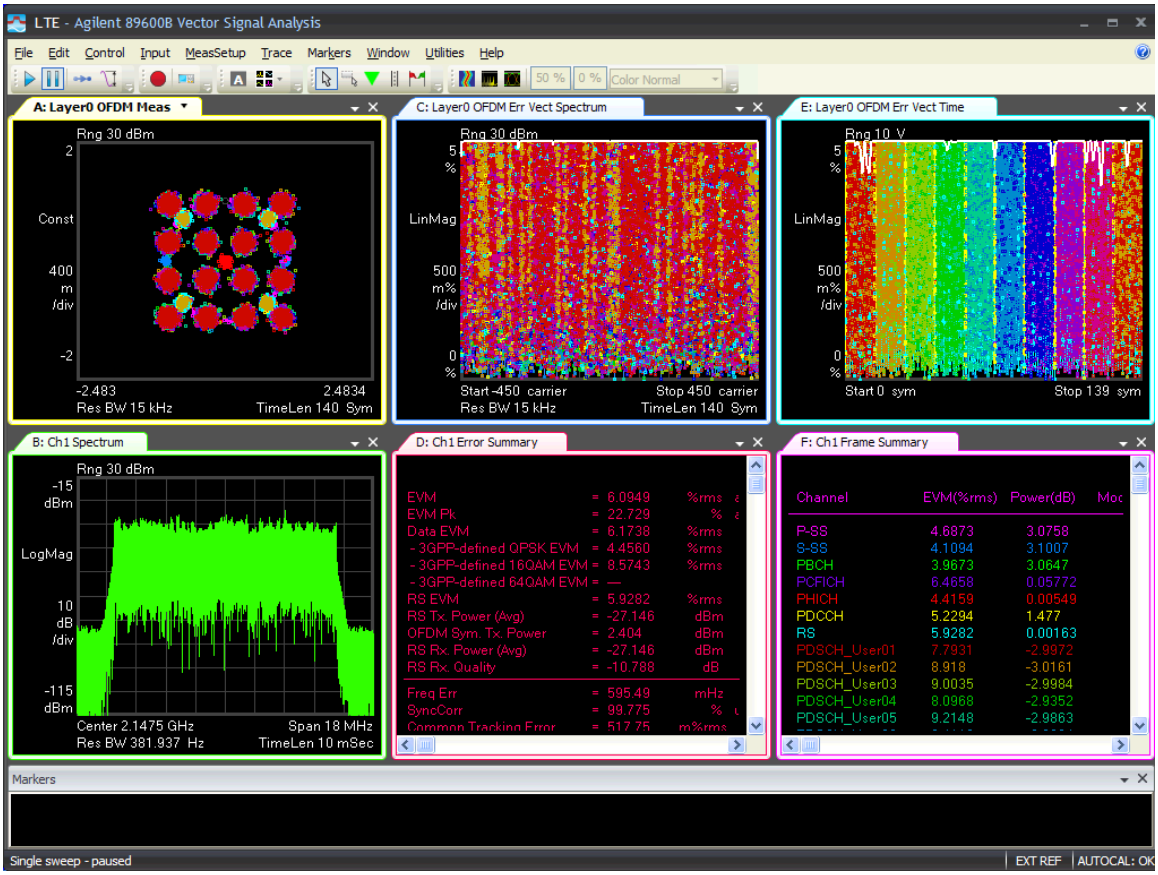
15M-Port 1 -2147.5MHz-TM2.0



15M-Port 1 -2147.5MHz-TM3.1



15M-Port 1 -2147.5MHz-TM3.2



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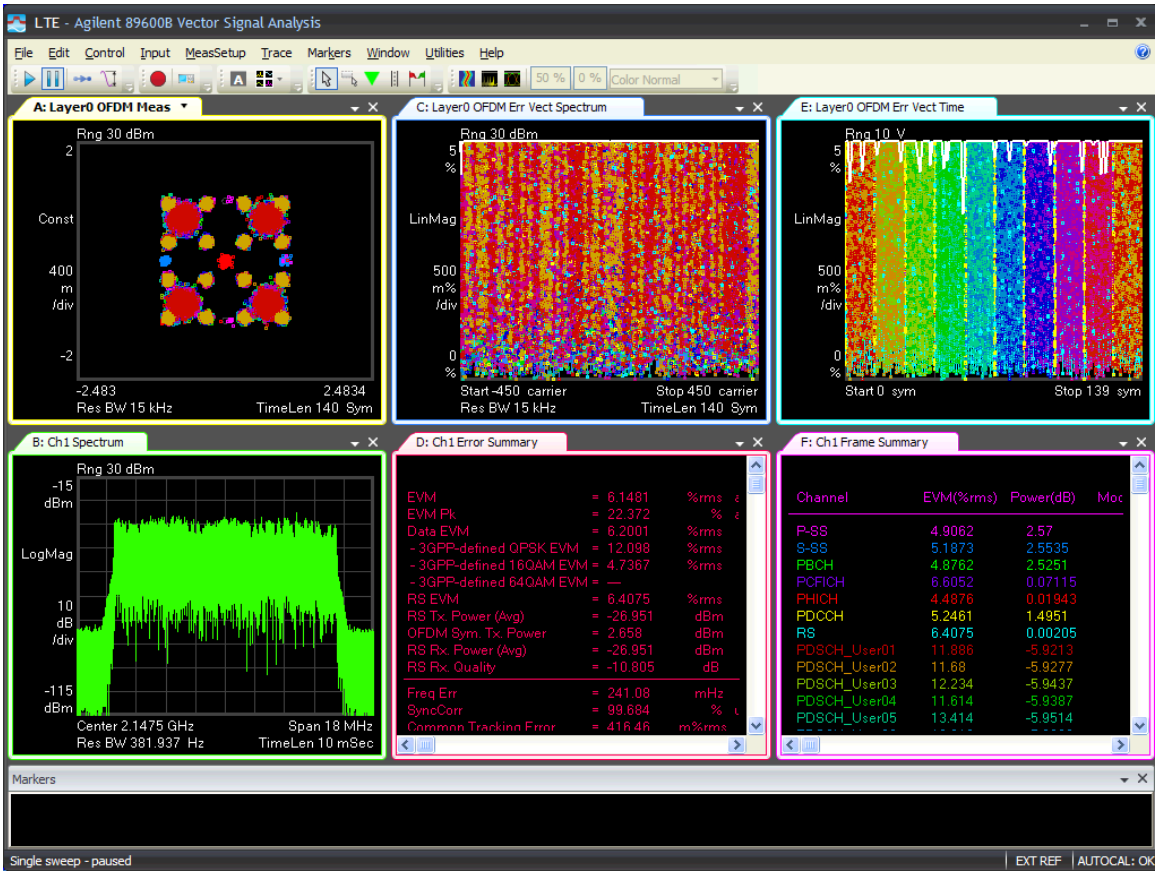

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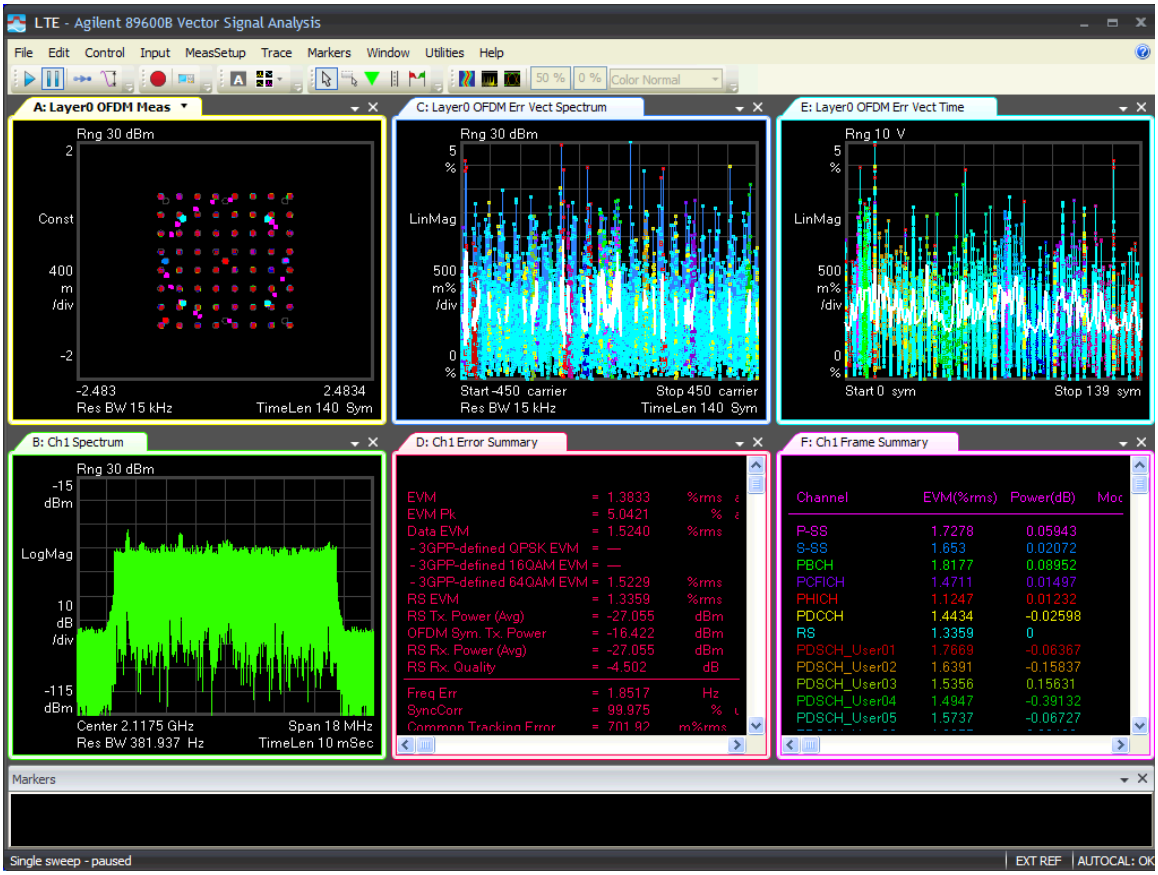

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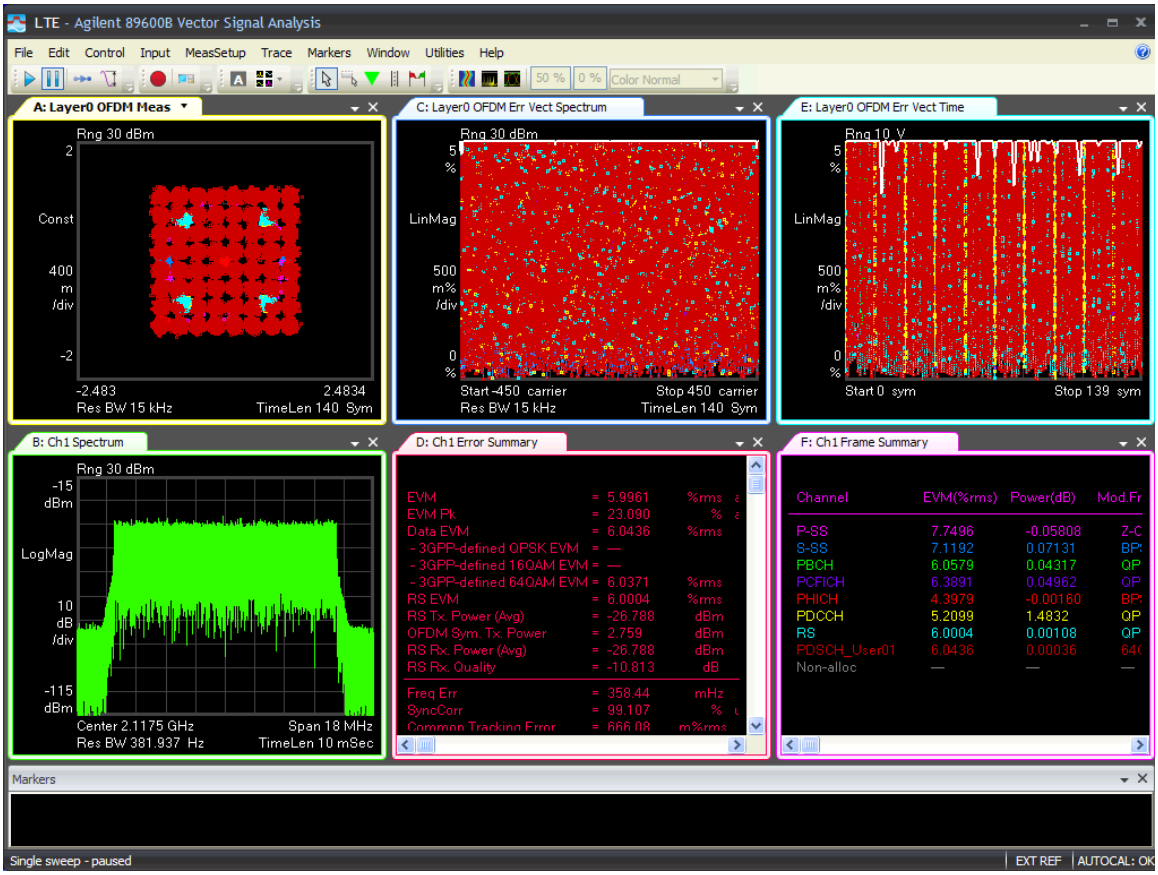
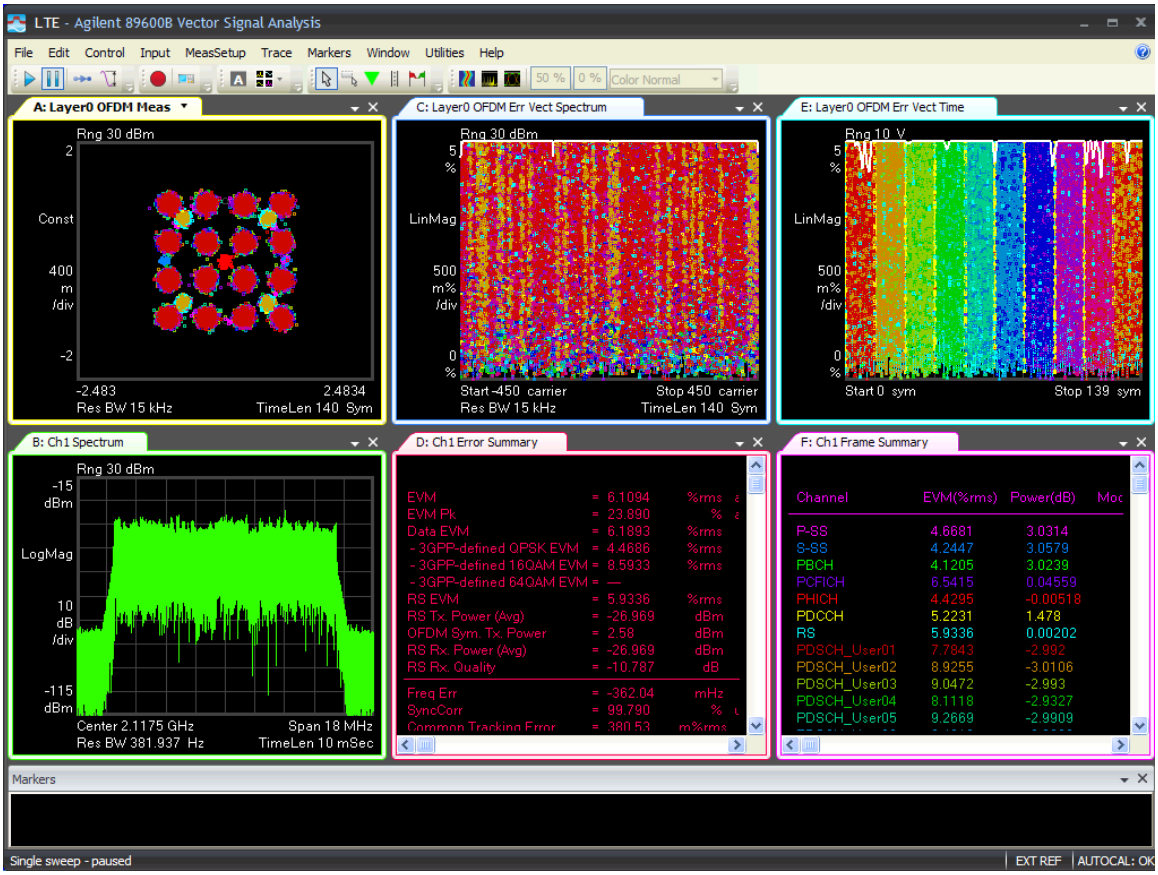
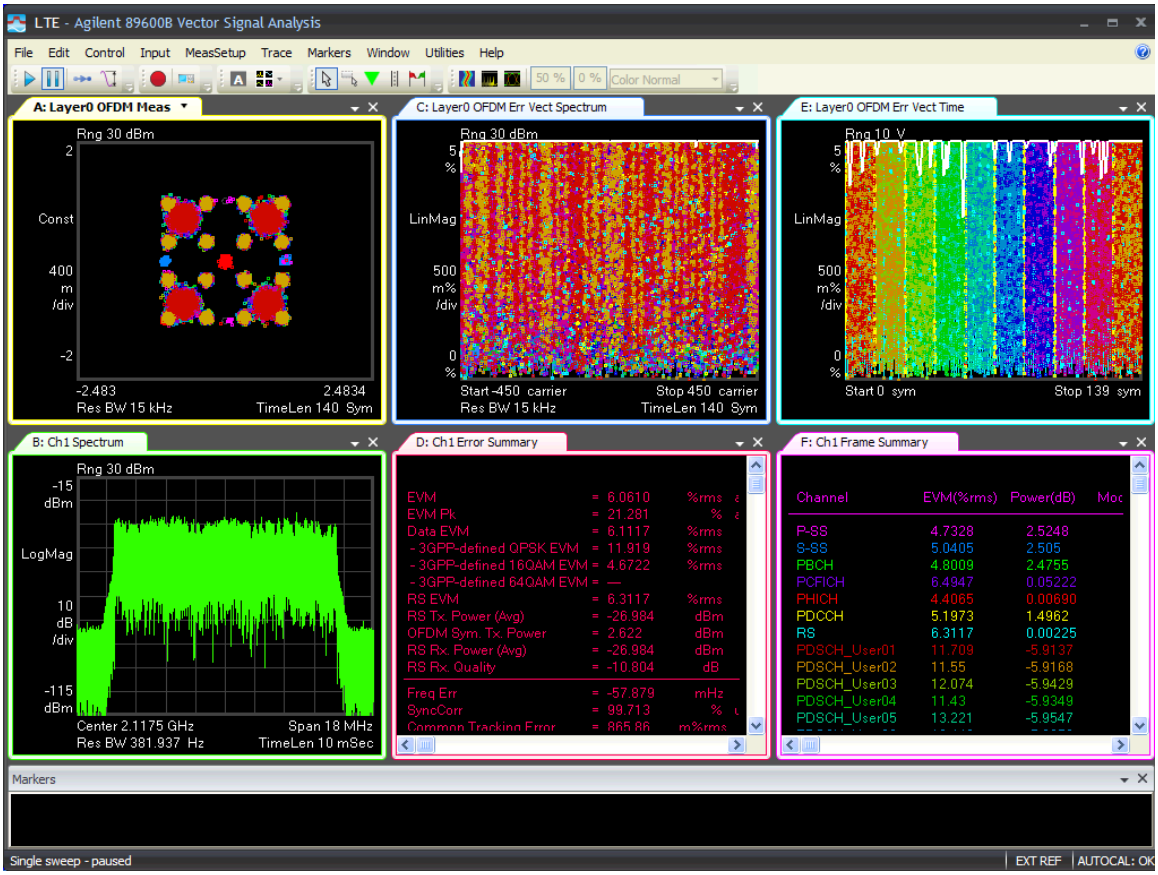


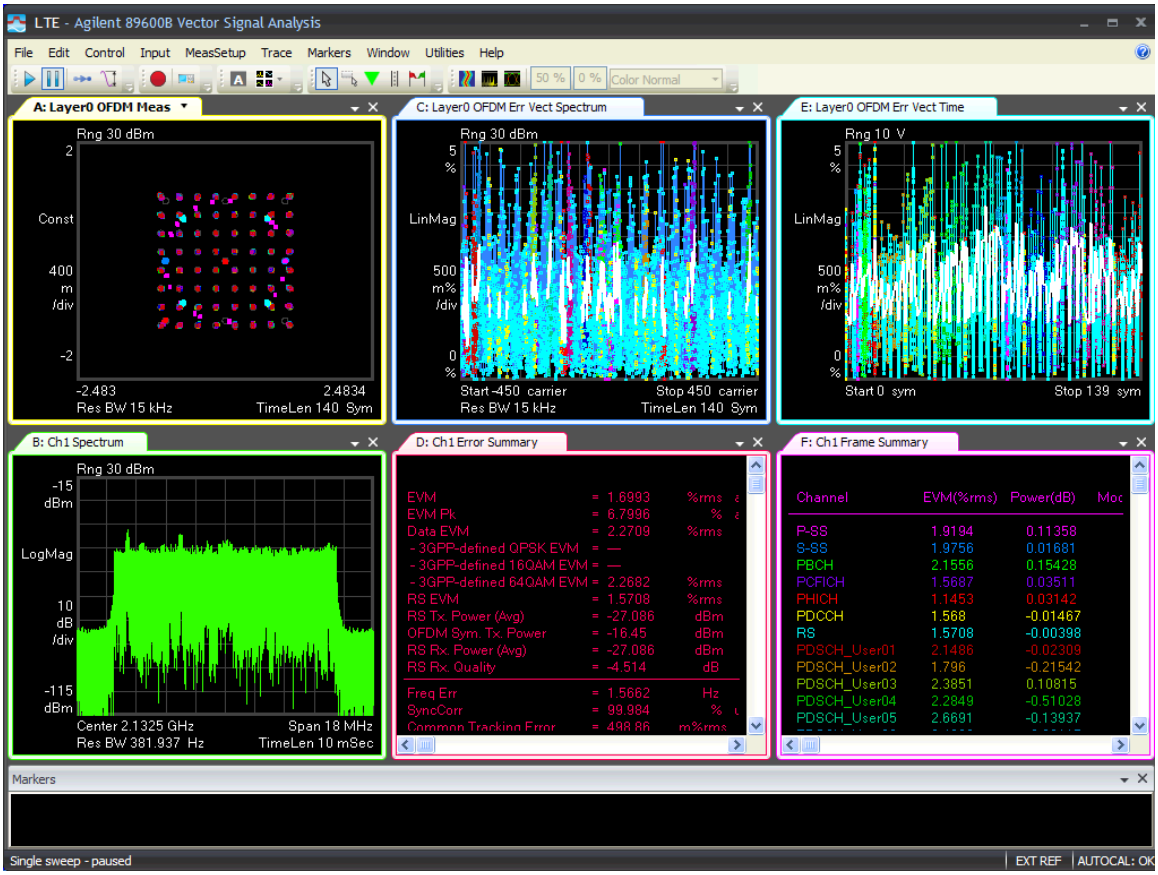
15M-Port 2 -2117.5MHz-TM3.2



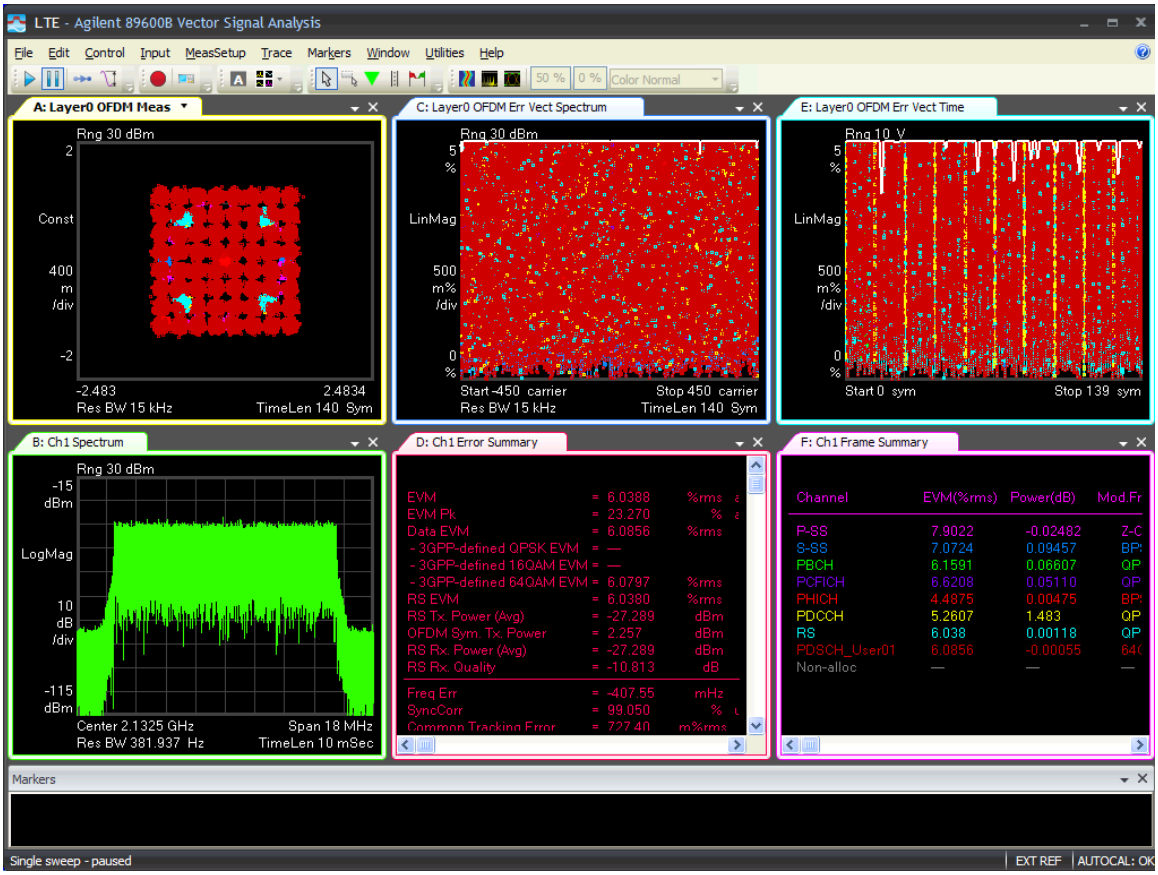
15M-Port 2 -2117.5MHz-TM3.3



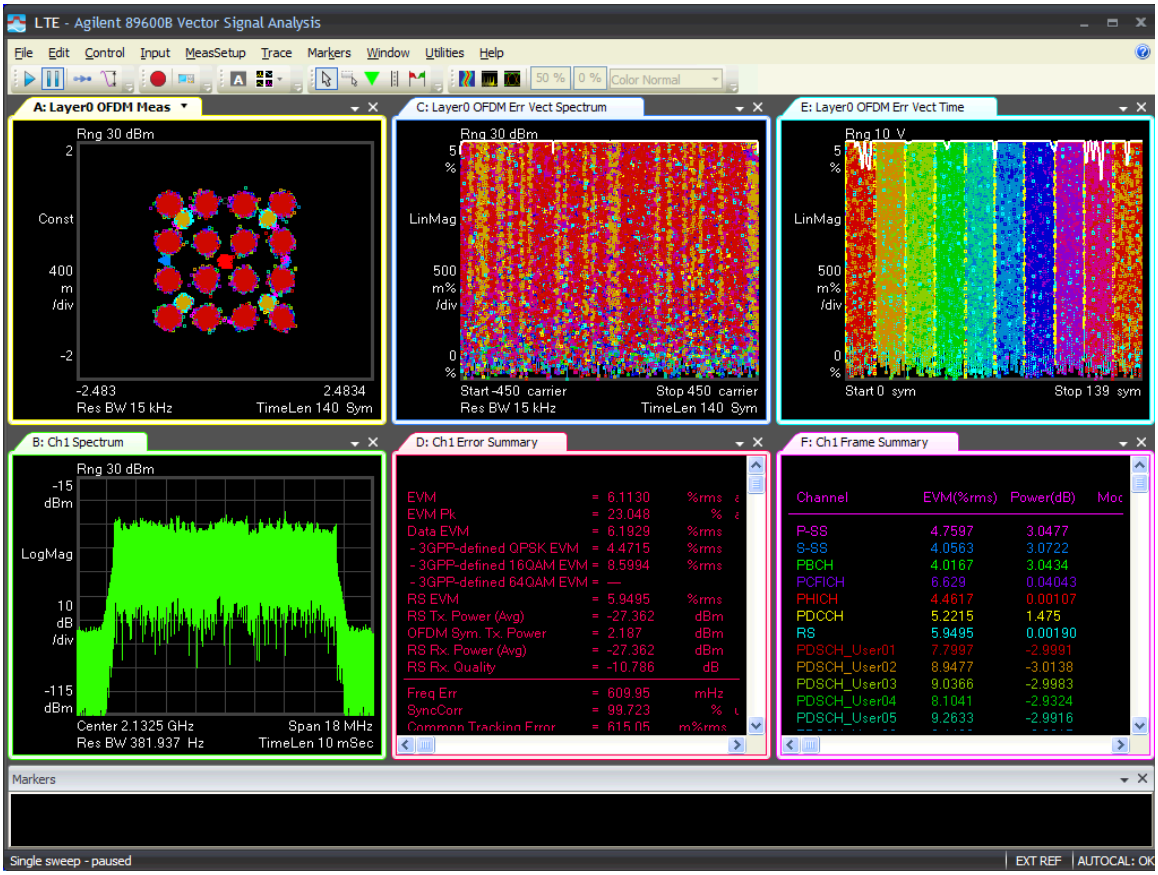
15M-Port 2 -2132.5MHz-TM2.0



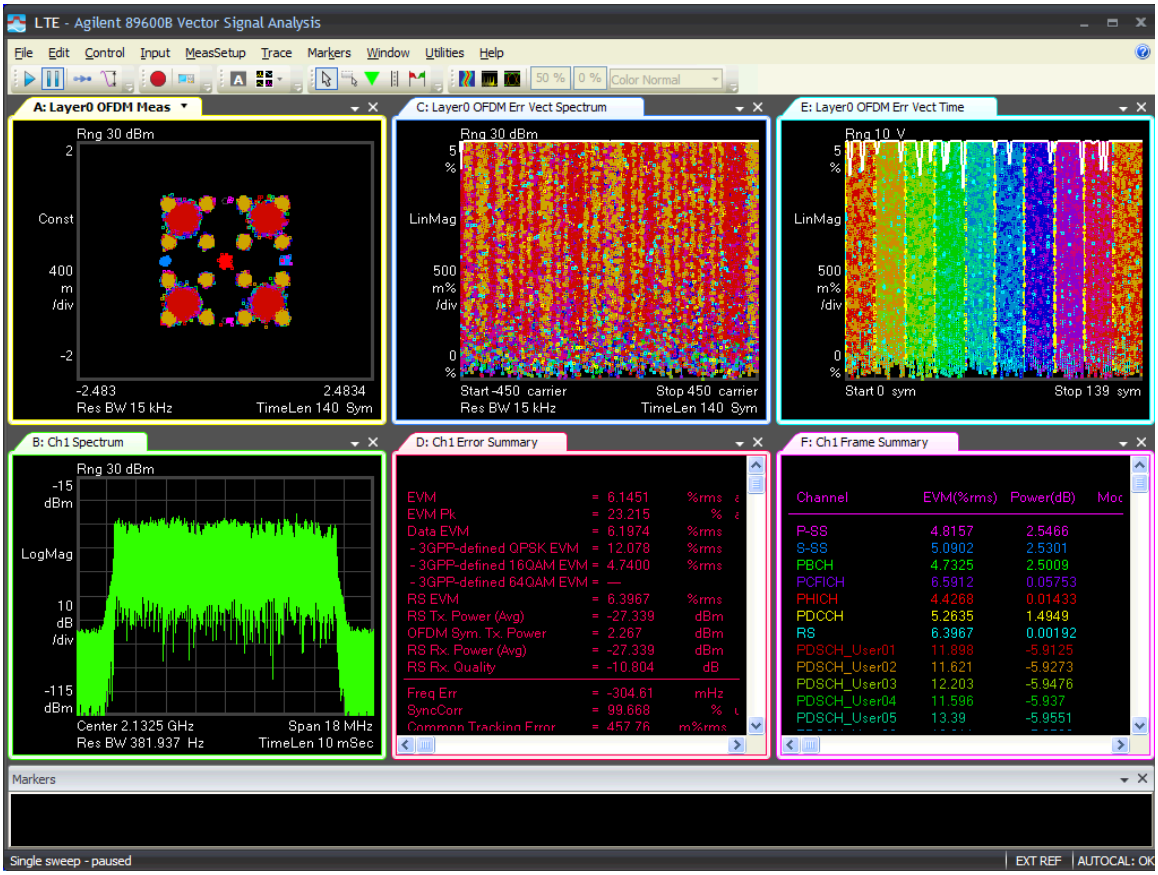
15M-Port 2 -2132.5MHz-TM3.1



15M-Port 2 -2132.5MHz-TM3.2

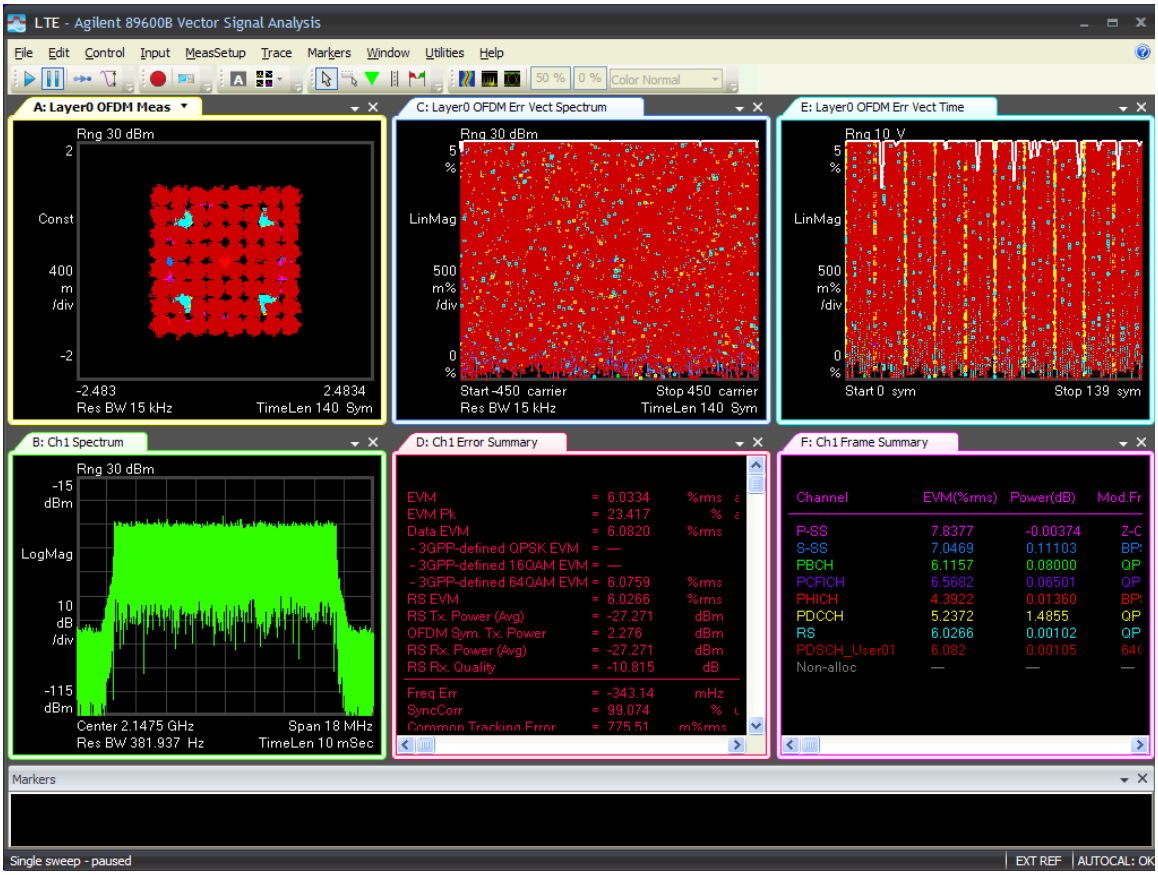


15M-Port 2-2132.5MHz-TM3.3

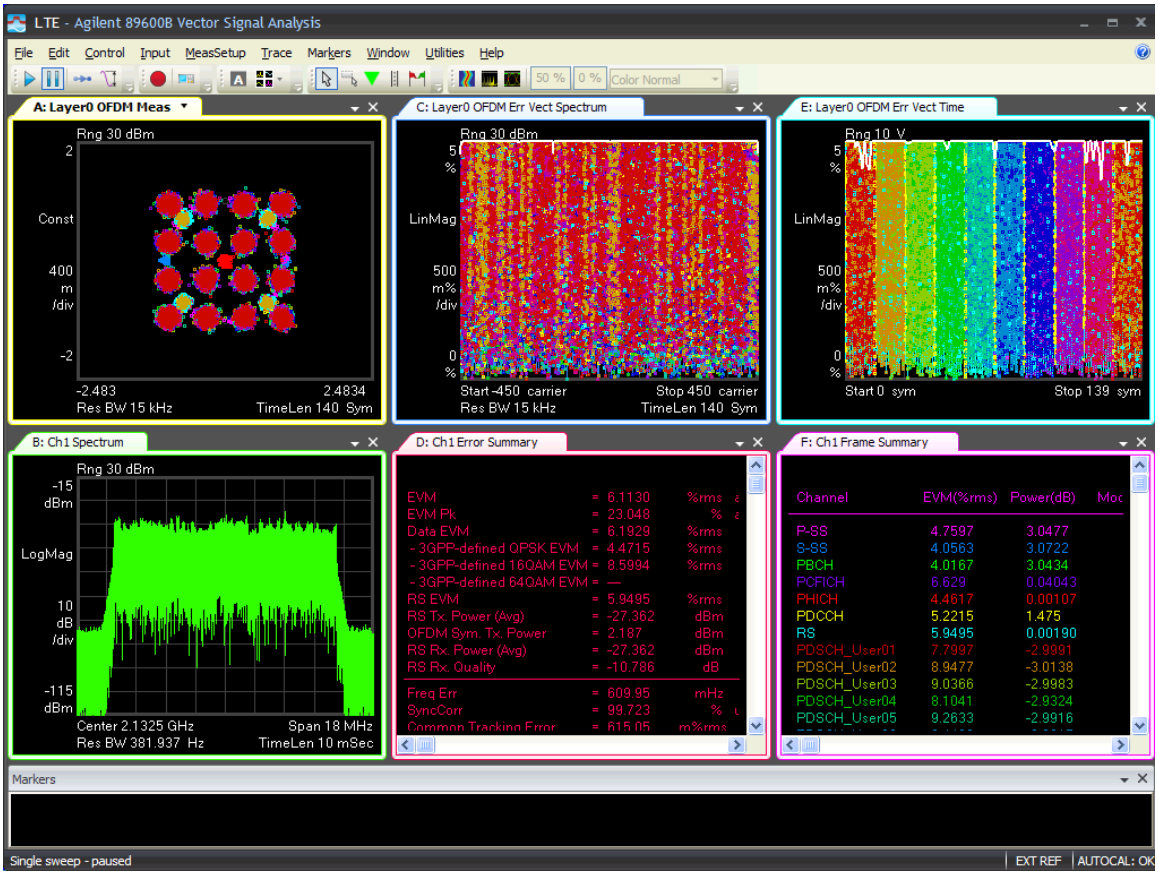


15M-Port 2 -2147.5MHz-TM2.0

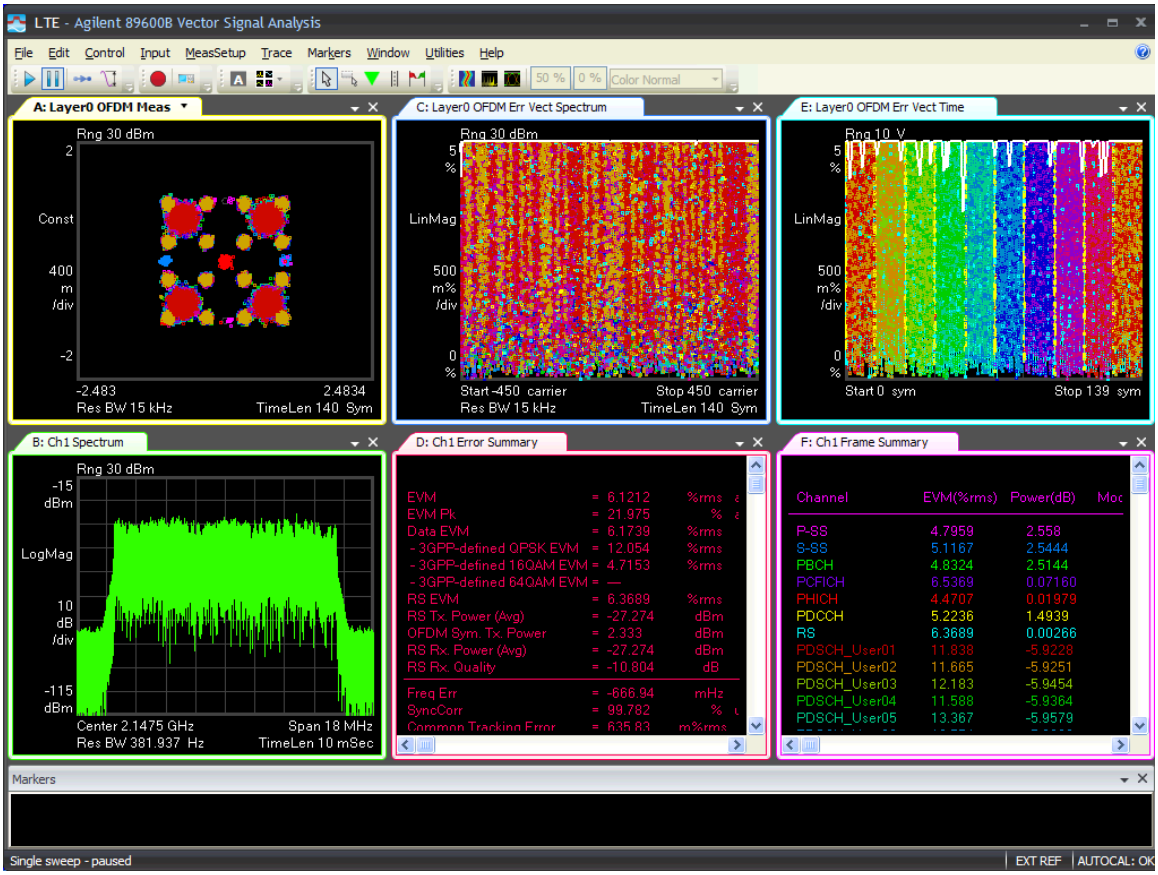
15M-Port 2 -2147.5MHz-TM3.1



15M-Port 2 -2147.5MHz-TM3.2



15M-Port 2 -2147.5MHz-TM3.3

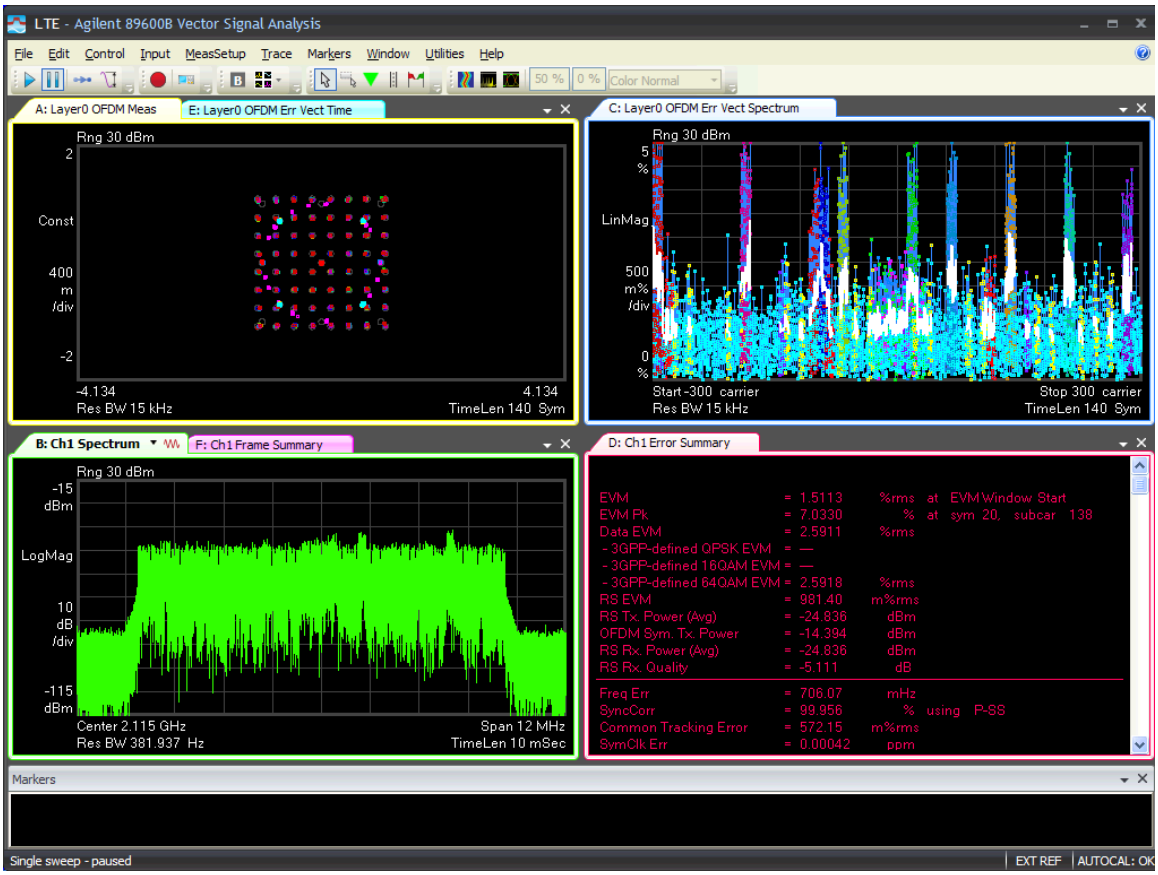


Channel Bandwidth :10M

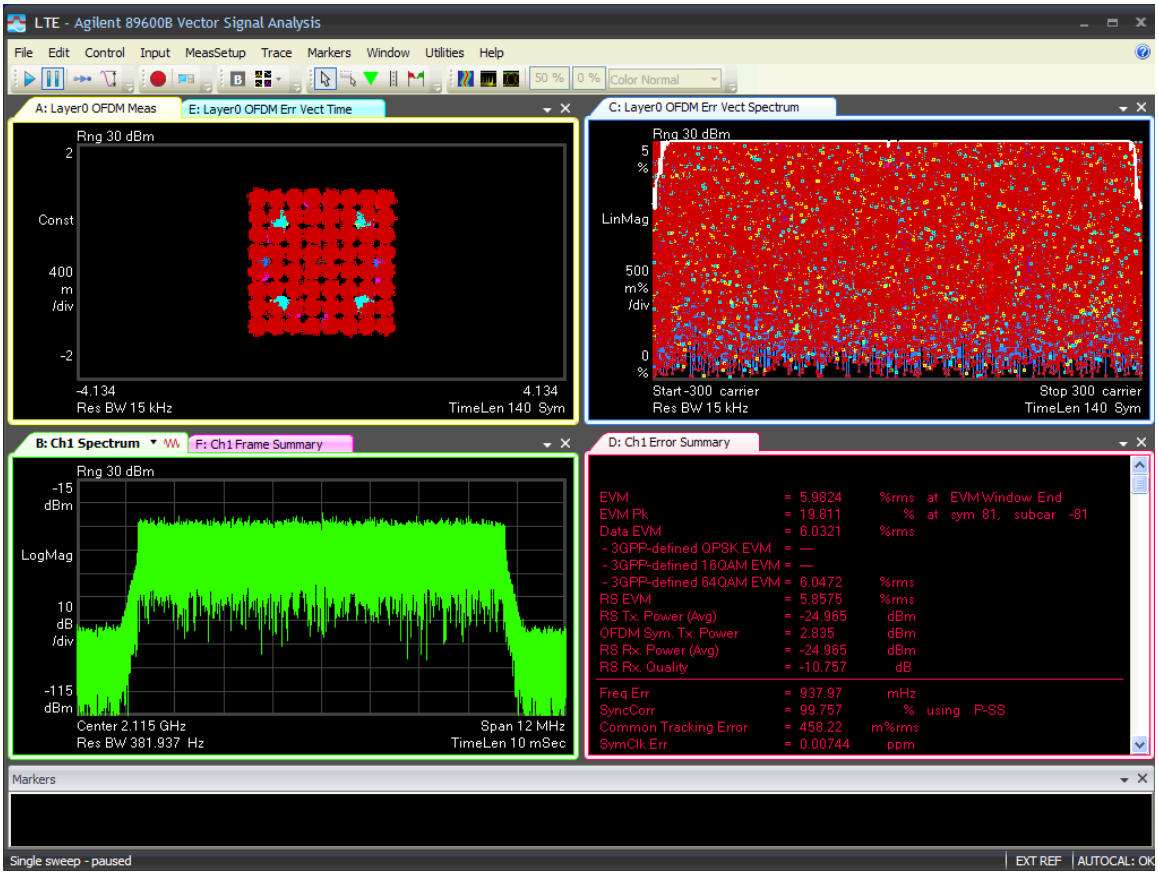
Port	Frequency (MHz)	Test mode	EVM
1	2115	TM2.0	2.59
		TM3.1	6.03
		TM3.2	9.15
		TM3.3	12.20
	2132.5	TM2.0	2.17
		TM3.1	6.10
		TM3.2	9.10
		TM3.3	12.28
	2150	TM2.0	2.15
		TM3.1	6.12
		TM3.2	9.16
		TM3.3	12.27
2	2115	TM2.0	2.30
		TM3.1	6.14
		TM3.2	9.13
		TM3.3	12.27
	2132.5	TM2.0	2.06
		TM3.1	6.17
		TM3.2	9.16
		TM3.3	12.27
	2150	TM2.0	1.97
		TM3.1	6.19

		TM3.2	9.14
		TM3.3	12.27

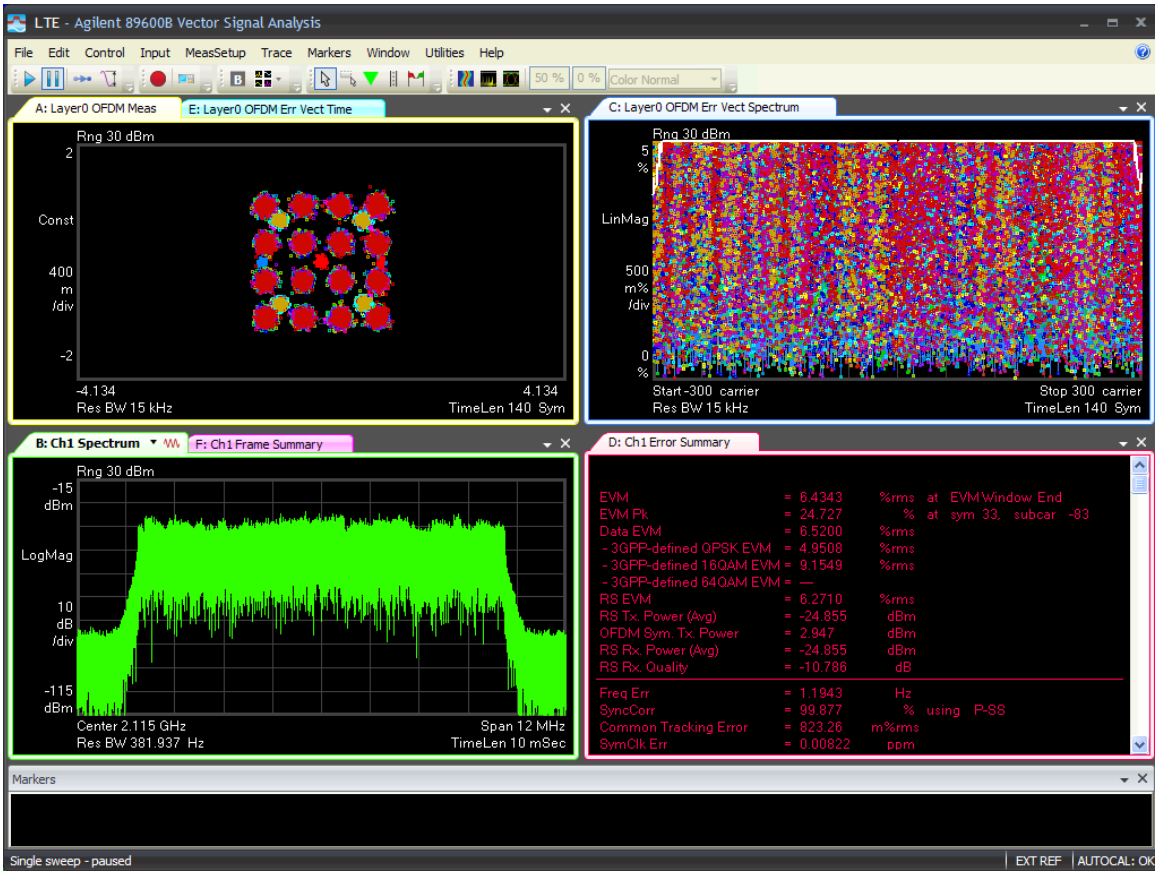
10M-Port 1 -2115MHz-TM2.0



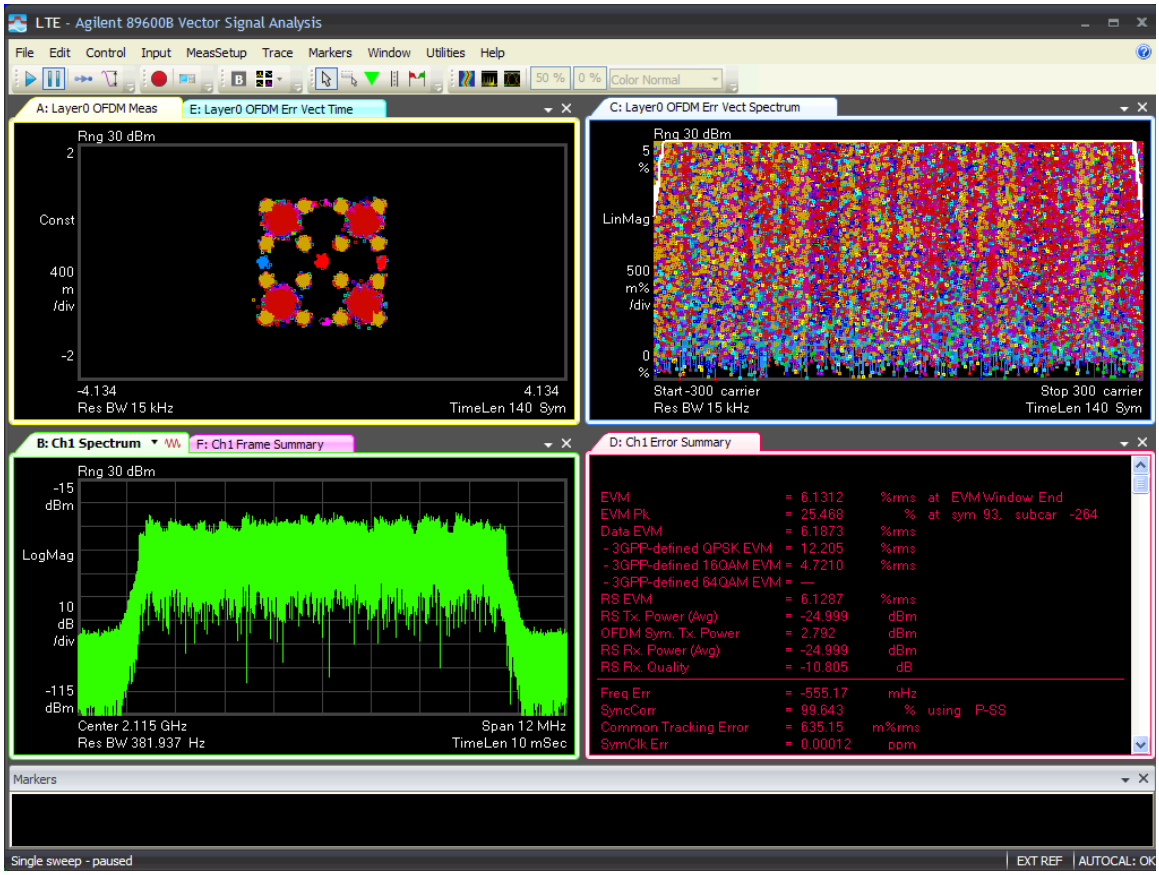
10M-Port 1 -2115MHz-TM3.1



10M-Port 1 -2115MHz-TM3.2



10M-Port 1 -2115MHz-TM3.3



10M-Port 1 -2132.5MHz-TM2.0