



# CellAdvisor™

## JD780A, JD780B, JD740B Series

### Release Notes for Version 3.065.404

Welcome to release 3.065.404 for CellAdvisor JD780A, JD780B, and JD740B series. This document provides version numbers, a description of new features, and a list of unresolved issues associated with this release, unless otherwise specified.

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## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

### Hardware Configuration

VIAVI Hardware		Version(s) Compatible with this Release 3.065.404		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.33	2.6.32.9.34	2.6.32.9.34
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000 4.000 (N) */ 2.000 (Y2)**
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.004 / 5.003 / 6.003 / 8.010	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.047 / 12.010	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.047 / 12.010
CPRI Module	CPLD	N/A	14/06/13	14/06/13
Option Board	CPRI	N/A	16/09/06	16/09/06
DSP Module	OBSAI	N/A	15/07/13	15/07/13

\* It denotes no hardware changes but a new calibration identifier to distinguish calibrations using a modified ATS program.

\*\* It denotes the revision of improved YRO board.

### Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.065.404
JDViewer	5.8
JDMapCreator	1.4
JDRemote	2.0

## What's New in Version 3.065.404

- Enhancement of RFoCPRI Measurement mode:

- RFoCPRI DL Signal Analyzer MIB/SIB decoding for Ericsson multi-carrier mode and compressed mode
- Added Sweep mode and Wideband mode to PIM Analysis of BBU emulation
  - The Sweep Mode in PIM Analyzer of BBU emulation is an optional feature that you can activate by installing a purchased license on your JD700B series;
    - RFoCPRI LTE-FDD Multiple Signal Generator (option 083)
    - RFoCPRI LTE-TDD Multiple Signal Generator (option 084)
 Without the Multiple Signal Generator option(s), your JD700B series support the Wideband Mode only (the Sweep Mode soft key is greyed out)
- Added Quad Spectrum mode to Interference Analyzer
- Added IQ Data Block Viewer mode
- Added Network Selection “GSM/EDGE” feature to Interference Analyzer
- Added Quad TX CPRI Source Selection
  - Support Waveform upload to CellAdvisor
  - CW Two tones on the either end of transmission band
- Supportability of Dual BBU emulation

## Installation Instructions

1. Visit the linked website below to find the latest firmware and compare it with your version. If your version is older than the latest firmware, download the newest one available.  
<http://www.viavisolutions.com/en/services-and-support/support/software-downloads-and-updates#Group-C>
2. Unzip the downloaded file and check that there are two files extracted: one firmware file in .fw file type and one firmware release note in .pdf.
3. Copy the firmware file (.fw) into the root directory of your USB memory stick with at least 150 Mbytes available, but its maximum capacity not greater than 32 GB for the FAT32 file system.
4. Plug in the USB memory stick to the USB Host port on the top side of your Cell Advisor, which is powered via the AC-DC adapter.
5. Press the **SYSTEM** hot key, and then select **More (1/2) > Upgrade > USB**.
6. Highlight the new firmware file (.fw) in the root directory of your USB memory stick, and then press the **Select** soft key.
7. In the confirmation dialog box, select **Yes**.  
 At the completion of the installation, the instrument reboots itself automatically.  
 For more information, refer to CellAdvisor JD780B Series Firmware Upgrade Guide.

## Fixed Problems

- Fixed an issue where the RRH was not disconnected when removing the optic link
- Additional improvement on the RRH reset function in order to solve the RRH connection issue

- Fixed an issue where the instrument was not able to retrieve the SFP information
- Fixed an issue where the instrument was down intermittently when attempting to change the modes
- Fixed an issue where the channel power RBW was automatically set to lower than the minimum setting range 1 KHz when entering the channel power menu after setting the RBW of Spectrum mode to 1KHz or lower
- Improved the compatibility between setup files created with firmware version after 3.055
- Changed the default Gain Level to -30 dBm in RFCPRI Source
- Changed the default reference level to -50 dBm in RFoCPRI Interference Analysis
  - Fixed the inconsistent reference level setting in Quad Spectrum display
- Put back the Power Level menu
- Fixed errors in Antenna Tilt value display
  - Fixed an issue where the antenna tilt angle was magnified 10 times on the screen
  - Added the antenna tilt degree unit to the display screen
- Fixed the below issues:
  - Fixed an issue where nothing was displayed when default range -50 to -100 dB was set
  - Fixed an issue trace line was not centered when pressing [Amp/Scale] > [Auto Scale]
  - Fixed an issue that the [Scale/Div] button did not achieve the desired effect
    - The trace line did not appear at the corresponding power levels after changing the scale

## Known Limitations

- There are intermittent issues that the Web remote menu of the Remote Interface mode does not function properly when turning it on or off, and the instrument is restarted
- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Previous Version History

This section provides history of previous firmware versions.

### **Release 3.064.250**

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

## Hardware Configuration

VIAVI Hardware		Version(s) Compatible with this Release 3.064.250		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.33	2.6.32.9.34	2.6.32.9.34
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000 4.000 (N) */ 2.000 (Y2)**
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.004 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.047 / 12.010	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.047 / 12.010
CPRI Module	CPLD	N/A	14/06/13	14/06/13
Option Board	CPRI	N/A	16/08/09	16/08/09
DSP Module	OBSAI	N/A	15/07/13	15/07/13

\* It denotes no hardware changes but a new calibration identifier to distinguish calibrations using a modified ATS program.

\*\* It denotes the revision of improved YRO board.

## Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.064.250
JDViewer	5.8
JDMapCreator	1.4
JDRemote	2.0

## What's New in Version 3.064.250

- Enhancement of RFoCPRI LTE-FDD DL Signal Analyzer:
  - Ericsson compressed mode; 15 MHz (4 AxC) and 20 MHz (6 AxC) are added to Bandwidth option in RFoCPRI testing
- Addition of CPRI Map Profile DB feature in RFoCPRI testing
- Enhancement of Zoom-In feature:
  - Addition of Zoom In feature to Freq/Dist menu
  - Addition of Zoom In feature to RFoOBSAI testing
- Improvement in "Save Setup" feature:
  - Trace, marker, and limit line (Single/MSL) settings are now stored.
  - Limit setting is now export with SA Trace file.
- Addition of Interference radar chart including spectrum analysis with max. and min. traces
- FFT on RFoCPRI:
  - Sweep speed improvement

- Addition of Select Port 1, 2 option to measure setup menu in both RFoCPRI and RFoOBSAI testing

## Fixed Problems

- Updated the band list in the JD785B's CAA, the AWS 1700 down and AWS 1700 full band, and made the frequency range to 2155
- Fixed the problem where the display maintained a value of 100 KHz for default value of RBW and maintained an incorrect result for sweep speed when starting the instrument for the first time
- Fixed an error where the sweep speed was updated only after changing the RBW
- Fixed the following display errors in CAA-DTF menu:
  - The display maintained a value of -1 when changing the distance value using the rotary knob or the arrow keys
  - The distance value was not increased when changing the display unit to foot
- Made the following changes:
  - The "Detector" option is added to the Interference Spectrogram menu
  - The max/min settings for trace are maintained after changing the detector and frequency

## Known Issues

- Sometimes the Wi-Fi Scan list, USB storage and Ethernet are not properly working after entering specific mode (CPRI spectrum)

## Known Limitations

- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Release 3.063.000

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

### Hardware Configuration

VIAVI Hardware	Version(s) Compatible with this Release 3.063.000
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		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.33	2.6.32.9.34	2.6.32.9.34
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000 4.000 (N) */ 2.000 (Y2)**
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.004 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.031 / 12.010	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.031 / 12.010
CPRI Module	CPLD	N/A	14/06/13	14/06/13
Option Board	CPRI	N/A	16/05/06	16/05/06
DSP Module	OBSAI	N/A	15/07/13	15/07/13

\* It denotes no hardware changes but a new calibration identifier to distinguish calibrations using a modified ATS program.

\*\* It denotes the revision of improved YRO board.

## Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.063.000
JDViewer	5.8
JDMapCreator	1.4
JDRemote	2.0

## What's New in Version 3.063.000

- None

## Fixed Problems

- Fixed a problem where the AxC Group could not be set on the instrument without 072 RFoBSAI 3.1G Interference Analyzer option

## Known Issues

- None

## Known Limitations

- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Release 3.062.039

### Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

#### Hardware Configuration

VIAVI Hardware		Version(s) Compatible with this Release 3.062.039		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.33	2.6.32.9.34	2.6.32.9.34
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000 4.000 (N) * / 2.000 (Y2)**
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.004 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.031 / 12.010	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.031 / 12.010
CPRI Module	CPLD	N/A	14/06/13	14/06/13
Option Board	CPRI	N/A	16/05/06	16/05/06
DSP Module	OBSAI	N/A	15/07/13	15/07/13

\* It denotes no hardware changes but a new calibration identifier to distinguish calibrations using a modified ATS program.

\*\* It denotes the revision of improved YRO board.

#### Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.062.039
JDViewer	5.8
JDMapCreator	1.4
JDRemote	2.0

### What's New in Version 3.062.039

- Total Harmonic Distortion mode added to the Spectrum Analyzer mode.
- Supportability of Floating License feature.
- Addition of Help
  - User definable help

## Installation Instructions

8. Visit the linked website below to find the latest firmware and compare it with your version. If your version is older than the latest firmware, download the newest one available.  
<http://www.viavisolutions.com/en/services-and-support/support/software-downloads-and-updates#Group-C>
9. Unzip the downloaded file and check that there are two files extracted: one firmware file in .fw file type and one firmware release note in .pdf.
10. Copy the firmware file (.fw) into the root directory of your USB memory stick with at least 150 Mbytes available, but its maximum capacity not greater than 32 GB for the FAT32 file system.
11. Plug in the USB memory stick to the USB Host port on the top side of your Cell Advisor, which is powered via the AC-DC adapter.
12. Press the **SYSTEM** hot key, and then select **More (1/2) > Upgrade > USB**.
13. Highlight the new firmware file (.fw) in the root directory of your USB memory stick, and then press the **Select** soft key.
14. In the confirmation dialog box, select **Yes**.  
At the completion of the installation, the instrument reboots itself automatically.  
For more information, refer to CellAdvisor JD780B Series Firmware Upgrade Guide.

## Fixed Problems

- Fixed a problem that the trace for T4 did not appear on the display in the EMF Analyzer mode.

## Known Issues

- None

## Known Limitations

- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Release 3.061.343

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

## Hardware Configuration

VIAVI Hardware		Version(s) Compatible with this Release 3.061.343		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.33	2.6.32.9.34	2.6.32.9.34
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000 4.000 (N) * / 2.000 (Y2)**
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.004 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.031 / 12.010	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.031 / 12.010
CPRI Module	CPLD	N/A	14/06/13	14/06/13
Option Board	CPRI	N/A	16/05/06	16/05/06
DSP Module	OBSAI	N/A	15/07/13	15/07/13

\* It denotes no hardware changes but a new calibration identifier to distinguish calibrations using a modified ATS program.

\*\* It denotes the revision of improved YRO board.

## Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.061.343
JDViewer	5.8
JDMapCreator	1.4
JDRemote	2.0

## What's New in Version 3.061.343

- EMF Analyzer with isotropic Antenna
- EVM measurement for 256 QAM modulated signal.
- Enhancement for BBU Emulation Profile with Alcatel-Lucent

## Fixed Problems

- Fixed the issue with an incorrect frequency value being displayed for a marker after loading a setup file
- Fixed the issue that did not change the current mode to RFoOBSAI in CellAdvisor JD746B, JD748B, JD786B, and JD788B
- Fixed the error in the Spectrogram mode of the Inference Analyzer that pressing the Mode and then the Hold key caused the Interference Finder mode being pressed and changed the mode to the Interference Finder.

## Known Issues

- None

## Known Limitations

- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Release 3.060.305

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

### Hardware Configuration

VIAVI Hardware		Version(s) Compatible with this Release 3.060.305		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.33	2.6.32.9.34	2.6.32.9.34
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000 4.000 (N) */ 2.000 (Y2)**
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.004 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.031 / 12.010	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.031 / 12.010
CPRI Module	CPLD	N/A	14/06/13	14/06/13
Option Board	CPRI	N/A	15/11/18	15/11/18
DSP Module	OBSAI	N/A	15/07/13	15/07/13

\* It denotes no hardware changes but a new calibration identifier to distinguish calibrations using a modified ATS program.

\*\* It denotes the revision of improved YRO board.

### Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.060.305
JDViewer	5.8
JDMapCreator	1.4
JDRemote	2.0

## What's New in Version 3.060.305

- Addition of timestamp to CSV format in Save
  - RFoCPRI and OBSAI Spectrum & Spectrogram
  - Interference Analyzer Spectrum & Spectrogram
- BBU Port selection change in CPRI Network settings for BBU Emulation
- Supportability of Wi-Fi AP Connection in Korean
- Display of internal and external memory space information in Save, including usage, free, and total

## Fixed Problems

- Fixed the issue in Spectrum Analyzer that pressing the Preset button reset RBW and VBW settings to 3 MHz instead of 100 kHz
- Fixed the bug in Spectrum Analyzer that loading a saved setup file with offset settings in ACP did not recall the saved settings and reset to default settings
- Fixed the issue with FTP Server upgrade that entering a proxy server did not work
- Fixed the program in RFoOBSAI that caused a system shutdown during mode changes
- Fixed the error in LTE-TDD DL Signal Analysis that did not recognize the on/off period in accordance with sub frame change
- Fixed the issue in RFoCPRI testing that changing menus with enabled CPRI source caused the CPRI waveform abnormally displayed the Hold.

## Known Issues

- None

## Known Limitations

- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Release 3.060.105

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

## Hardware Configuration

VIAVI Hardware		Version(s) Compatible with this Release 3.060.105		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.33	2.6.32.9.34	2.6.32.9.34
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000 4.000 (N) *
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.004 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.031 / 12.010	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.031 / 12.010
CPRI Module	CPLD	N/A	14/06/13	14/06/13
Option Board	CPRI	N/A	15/11/18	15/11/18
DSP Module	OBSAI	N/A	15/07/13	15/07/13

\* It denotes no hardware changes but a new calibration identifier to distinguish calibrations using a modified ATS program.

## Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.060.105
JDViewer	5.8
JDMapCreator	1.4
JDRemote	2.0

## What's New in Version 3.060.105

- Enhancement of RFoFiber Testing
  - Capability of Alcatel-Lucent CPRI BBU Emulation
  - Capability of CPRI LTE-TDD Signal Generator
  - Capability of OBSAI LTE-FDD Signal Generator
  - Zoom In feature in Interference Analyzer to zoom into the spectrum
  - Dual Active Trace feature in Dual Spectrum to display of two active traces on one chart
  - Center Frequency for the current measurement updated automatically with uplink and downlink frequency information obtained from MIB & SIB testing
  - Made it possible to save MIB & SIB ½ information with numeric key "5" (Quick Save)
- Generation of consolidated report with multiple screenshots attached
- Enhancement of Save Result in Cable and Antenna Analyzer
  - Trace is now saved with a limit line if enabled
- Addition of information to the display of Wi-Fi connection, such as signal strength and frequency

## Fixed Problems

- Fixed the error in Interference Analyzer that did not provide correct GPS information of West when using the Get GPS Potion menu
- Fixed the problem with Auto Leveling that increased the External Offset value beyond the external offset limit (120 dB), if there was no input signal available in RFoCPRI and RFoOBSAI testing. Now it displays an error message of “No Rx signal detected”.
- Eliminated internally generated spurious signals at the low frequency 171.2 MHz by applying new frequency plan to avoid multiplying frequencies
- Fixed the problem in LTE-FDD and LTE-TDD OTA Control by adding Scale/Div menu to the Amp/Scale menu bar

## Known Issues

- It is very rare, but changing menus with CPRI source enabled in RFoCPRI testing can cause the CPRI waveform abnormally displayed.
- In Dual Spectrogram in RFoCPRI, the time cursor reading on the screen does not disappear even after turning off the Time Cursor or releasing the Hold.

## Known Limitations

- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Release 3.055.064

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

### Hardware Configuration

VIAVI Hardware	Version(s) Compatible with this Release 3.055.064		
	JD780A	JD780B	JD740B
Boot Loader	1.3.13	1.3.16B	1.3.16B
Kernel	2.6.32.9.33	2.6.32.9.33	2.6.32.9.33
Main Board	3.0	3.0	3.0
RF Module	1.000 / 1.000	4.000 / 1.000	4.000 / 2.000

VIAVI Hardware		Version(s) Compatible with this Release 3.055.064		
		JD780A	JD780B	JD740B
				4.000 (N) *
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.004 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.029 / 12.010	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.029 / 12.010
CPRI Module	CPLD	N/A	14/06/13	14/06/13
Option Board	CPRI	N/A	15/07/13	15/07/13
DSP Module	OBSAI	N/A	15/07/13	15/07/13

\* It denotes no hardware changes but a new calibration identifier to distinguish calibrations using a modified ATS program.

## Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.055.064
JDViewer	5.7
JDMapCreator	1.3
JDRemote	1.9

## What's New in Version 3.055.064

- Enhancement of RFoFiber Testing
  - Capability of LTE-TDD downlink signal analysis added to RFoCPRI testing
  - Capability of LTE-FDD downlink signal analysis added to RFoOBSAI testing
  - Auto Leveling feature in Interference Analyzer
  - Limit settings for Rx Optical Power
  - Decoding of MIB and SIB1/2 information
- RAN-PI GUI optimization in LTE-FDD/TDD Signal Analyzers
- TD-LTE Guard period and TD-LTE Holdover in LTE-TDD Signal Analyzer
- Frequency offset setting in Spectrum Analyzer
- Default setting for IQ Invert changed to “On” in RFoCPRI Signal Analyzer
- Improvement in “Save Setup” and “Load Setup”
  - RF Source settings is now stored and recalled.
  - Thru Mode On/Off setting in RFoFiber is now stored and recalled.

## Fixed Problems

- Corrected the Time Error display unit to “ $\mu$ s” in LTE-FDD/TDD DAS testing
- Fixed the error that caused a saved setup file for LTE-FDD signal analysis came back as TDD with no signal after loading the file

- Fixed the problem that the Thru Mode setting was reset to “Off” when a measurement mode was changed
- Fixed the error that caused the marker position set with the rotary knob was not stored with “Save Setup” and “Power On Last”
- Corrected incorrect UI texts and messages for AntennaAdvisor Handle

## Known Issues

- If there is no input signal available in RFoCPRI and RFoOBSAI testing, pressing the Auto Leveling menu increases the External Offset value beyond the external offset limit (120 Db).

## Known Limitations

- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Release 3.052.005

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

### Hardware Configuration

VIAVI Hardware		Version(s) Compatible with this Release 3.052.005		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.32	2.6.32.9.32	2.6.32.9.32
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000 4.000 (N) *
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.004 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.029 / 12.009	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.029 / 12.009
CPRI Module	CPLD	N/A	14/06/13	14/06/13
Option Board	CPRI	N/A	15/02/24	15/02/24
DSP Module	OBSAI	N/A	15/05/26	15/05/26

\* It denotes no hardware changes but a new calibration identifier to distinguish calibrations using a modified ATS program.

## Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.052.005
JDViewer	5.7
JDMapCreator	1.3
JDRemote	1.9

## What's New in Version 3.052.005

- None

## Fixed Problems

- Fixed the level deviance issue that was caused by incorrect level calibration data for the frequency range from 2500 MHz to 2550 MHz
- Eliminated internally generated spurious signals at the frequency 401 MHz by applying new frequency plan to avoid multiplying frequencies

## Known Issues

- None

## Known Limitations

The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Release 3.051.024

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

### Hardware Configuration

VIAVI Hardware	Version(s) Compatible with this Release 3.051.024		
	JD780A	JD780B	JD740B
Boot Loader	1.3.13	1.3.16B	1.3.16B

VIAVI Hardware		Version(s) Compatible with this Release 3.051.024		
		JD780A	JD780B	JD740B
Kernel		2.6.32.9.32	2.6.32.9.32	2.6.32.9.32
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000 4.000 (N) *
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.004 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.029 / 12.009	1.025 / 2.021 / 3.004 / 4.025 / 5.020 / 6.021 / 8.013 / 10.029 / 12.009
CPRI Module	CPLD	N/A	14/06/13	14/06/13
Option Board	CPRI	N/A	15/02/24	15/02/24
DSP Module	OBSAI	N/A	15/05/26	15/05/26

\* It denotes no hardware changes but a new calibration identifier to distinguish calibrations using a modified ATS program.

## Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.051.024
JDViewer	5.7
JDMapCreator	1.3
JDRemote	1.9

## What's New in Version 3.051.024

- Enhancement of GSM conformance testing
  - Added the 'Output RF Spectrum' that can measure power of the output RF modulation spectrum of the carrier at different frequency offsets in different measurement bandwidths
  - Added 'GPS' to the Trigger options and 'Time Slot' to Measure Setup in order to enable users to select a desired time slot number
  - Supportability of Chinese in the Auto Measure mode
  - Supportability of RUN time setting and different report generations for different data types in the GSM Auto Measure mode
- Supportability of Internet Protocol version 6 (Ipv6) in LAN configuration
- Usability improvement in Ipv4 configuration scheme

## Fixed Problems

- Fixed the gated sweep issue in the GSM switching for the GSM Signal Analyzer
- Fixed the following display errors:

- In the RFoBSAI mode, scale information was overlapped in Spectrogram and GPS information was cropped in Spectrum Replayer.
  - Soft key “Detectors” did not display selected detector mode information.
  - After performing Preset, unnecessary messages appeared occasionally.
  - In Save Logging Data, the message “Press ESC key to stop logging” disappeared intermittently.
- Fixed the bug that caused an error in loading saved CAA setup and calibration status properly

## Known Issues

- None

## Known Limitations

- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Release 3.050.040

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

### Hardware Configuration

VIAVI Hardware		Version(s) Compatible with this Release 3.050.040		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.32	2.6.32.9.32	2.6.32.9.32
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000 4.000 (N) *
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.003 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.021 / 5.020 / 6.021 / 8.013 / 10.029 / 12.009	1.025 / 2.021 / 3.004 / 4.021 / 5.020 / 6.021 / 8.013 / 10.029 / 12.009
CPRI Module	CPLD	N/A	14/06/13	14/06/13
Option Board	CPRI	N/A	15/02/24	15/02/24

VIAVI Hardware		Version(s) Compatible with this Release 3.050.040		
		JD780A	JD780B	JD740B
DSP Module	OBSAI		15/05/26	15/05/26

\* It denotes no hardware change but a new calibration identifier to distinguish calibrations using a modified ATS program.

## Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.050.040
JDViewer	5.6
JDMapCreator	1.2.02
JDRemote	1.8

## What's New in Version 3.050.040

- Capability of RFoOBSAI testing with installed RFoOBSAI Interference Analyzer options
- Radar Chart mode added to the Interference Analyzer mode
- Supportability of AntennaAdvisor Handle in Interference Finder and Radar Chart modes
- Default preset of output power in 2 Port Measurement changed from 0 dBm to -3- dBm to protect the instrument from any misuses
- Power On Last feature expanded to the Save function in order to maintain and display the lastly saved file location in a USB memory stick after rebooting the instrument, if the USB stick has not been removed and still connected

## Fixed Problems

- Fixed the error in the Spectrum Emission Mask mode that the channel power stayed unchanged although the measurement bandwidth was changed. Now it changes concurrently according to the change of the bandwidth.
- Fixed the error in JD780A and JD780B series that the output power level dropped if the output frequency in the RF Source was changed.
- Fixed the problem that the signal at the frequency of 1865 MHz viewed normally in the Spectrum Analyzer mode was not locked after changing the Mode to Signal Analyzer > WCDMA.

## Known Issues

- In the GSM Signal Analyzer, a gated sweep error exists in the GSM switch.
- There are following display errors:
  - In the RFoOBSAI mode, scale information overlaps in Spectrogram and GPS information is cropped in Spectrum Replayer.

- Soft key “Detectors” does not display selected detector mode information.
- After performing Preset, unnecessary messages appear occasionally.
- In Save Logging Data, the message “Press ESC key to stop logging” disappears intermittently.

## Known Limitations

- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Release 3.040.075

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

### Hardware Configuration

VIAVI Hardware		Version(s) Compatible with this Release 3.040.075		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.31	2.6.32.9.31	2.6.32.9.31
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.003 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.021 / 5.020 / 6.021 / 8.013 / 10.028 / 12.009	1.025 / 2.021 / 3.004 / 4.021 / 5.020 / 6.021 / 8.013 / 10.028 / 12.009
CPRI	CPLD	N/A	14/06/13	14/06/13
	FPGA	N/A	14/07/21	14/07/21

### Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.040.075
JDViewer	5.6
JDMapCreator	1.2.02
JDRemote	1.8

## What's New in Version 3.040.075

- Capability of map control in the Route Map and Interference Finder modes, enabling zoom-in/out of sizable maps created in the upgraded version of JDMapCreator 1.2.02
- Wi-Fi connectivity using a USB LAN card
- Web-based remote control
- Sync-up of SCPI commands
- Enhancement of RFoCPRI testing
  - LTE-FDD downlink signal analysis
  - Capability of RFoCPRI signal generator
- Improvement in frequency settings
  - Frequency steps as small as 1 Hz
  - Span frequency automatically adjusted if a new center frequency setting does not allow the current span setting

## Fixed Problems

- Fixed the problem in the Custom Scanner mode of Channel Scanner that deleting Index 1 in the Freq/Dist setting turned the screen to black and then shut down the system.
- Fixed the problem that a file could be still saved in a deleted system default folders even though users could not find the folder and saved file anywhere in File Manager. Now a deleted default folder in the internal memory is created automatically when saving a file in the folder.
- Eliminated internally generated spurious signals at the frequency 1.8 GHz and 3.5 GHz by applying new frequency plan to avoid multiplying frequencies.

## Known Issues

- In the Spectrum Emission Mask mode, the channel power is changed too if the measurement bandwidth is changed.
- In the GSM Signal Analyzer, there is a gated sweep error in the GSM switch.

## Known Limitations

- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## **Release 3.033.002**

### **Version Numbers**

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

#### **Hardware Configuration**

VIAVI Hardware		Version(s) Compatible with this Release 3.033.002		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.29	2.6.32.9.29	2.6.32.9.29
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.003 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.021 / 5.020 / 6.021 / 8.013 / 1.0027 / 12.005	1.025 / 2.021 / 3.004 / 4.021 / 5.020 / 6.021 / 8.013 / 1.0027 / 12.005
CPRI	CPLD	N/A	14/06/13	14/06/13
	FPGA	N/A	14/07/21	14/07/21

#### **Recommended Application Software**

VIAVI Software	Version(s) Compatible with this Release 3.033.002
JDViewer	5.4
JDMapCreator	1.1
JDRemote	1.7

### **What's New in Version 3.033.002**

- Enhanced the interference rejection of CAA Mode

### **Fixed Problems**

- Fixed the problem that the instrument could not pair with the UD100 Bluetooth USB Adapter with its lot number "2014/05".
- Fixed the issue that the sweep speed was significantly dropped in the Cable and Antenna Analyzer mode when the battery pack was not installed.

- Fixed the error that the frequency counter did not work properly in a certain condition of FFT mode.
- Eliminated internally generated spurious signals at the frequency of 1875 MHz by applying new frequency plan to avoid multiplying frequencies.

## Known Limitations

- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Release 3.030.061

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

### Hardware Configuration

VIAVI Hardware		Version(s) Compatible with this Release 3.030.061		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.29	2.6.32.9.29	2.6.32.9.29
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	4.000 / 1.000	4.000 / 2.000
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.003 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.021 / 5.020 / 6.021 / 8.013 / 1.0027 / 12.005	1.025 / 2.021 / 3.004 / 4.021 / 5.020 / 6.021 / 8.013 / 1.0027 / 12.005
CPRI	CPLD	N/A	14/06/13	14/06/13
	FPGA	N/A	14/07/21	14/07/21

### Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 3.030.061
JDViewer	5.4
JDMapCreator	1.1
JDRemote	1.7

## What's New in Version 3.030.061

- New and enhanced features in RFoCPRI testing:
  - Dual spectrums/spectrograms that let users observe two spectrums or spectrograms for different map positions on the same link simultaneously.
  - Addition of LOS and LOF alarm monitoring in both spectrum and spectrogram view.
  - Addition of RF Source option to parameter settings that lets users calibrate the uplink gain of RRH and verify that current map positioning is correct.
- RAN performance testing in LTE-FDD and LTE-TDD that enables users to establish a Bluetooth connection to the RANAdvisor TrueSite app installed on a phone and conduct correlated uplink and downlink testing.
- Supportability of AriesoGEO's Raster map data, which can be loaded and displayed on the Route Map in Spectrum Analyzer and Signal Analyzer (WCDMA, LTE-FDD & LTE-TDD) modes and the Interference Finder in Interference Analyzer mode.
- Supportability of electronic calibration using an EZ-Cal kit in Cable and Antenna Analyzer mode
- Enhancement of measurement settings and user interface in Optical Power Measurement mode
- Addition of IQ imbalance value to the Subframe menu in LTE-FDD and LTE-TDD testing.
- Addition of UpPTS Power, DwPTS Power, and GP Power measurement values to the P vs. T Frame menu in LTE-TDD testing.
- Capability of quick save screen with using the Number 5 key.

## Fixed Problems

- Fixed the problem that caused the occasional disconnection from the JDRemote application.
- Fixed the error that intermittently displayed a question mark (?) on the battery indicator or incorrect remaining battery.
- Eliminated internally generated spurious signals at the frequency 2160 MHz by applying new frequency plan to avoid multiplying frequencies.
- Fixed the error that displayed the trace in the LTE-TDD P vs. T measurement slightly off the grids of the subframes.

## Known Limitations

- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## **Release 3.020.030**

### **Version Numbers**

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CellAdvisor JD780A, JD780B, and JD740B series analyzers.

#### **Hardware Configuration**

VIAVI Hardware		Version(s) Compatible with this Release 3.020.030		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.28	2.6.32.9.28	2.6.32.9.28
Main Board		3.0	3.0	3.0
RF Module		1.000 / 1.000	1.000	4.000 / 2.000
Keypad Module		1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 / 4.003 / 5.003 / 6.003 / 8.009	1.025 / 2.021 / 3.004 / 4.021 / 5.020 / 6.021 / 8.013 / 1.0027	1.025 / 2.021 / 3.004 / 4.021 / 5.020 / 6.021 / 8.013 / 1.0027
CPRI	CPLD	N/A	14/06/13	14/06/13
	FPGA	N/A	14/07/21	14/07/21

#### **Recommended Application Software**

VIAVI Software	Version(s) Compatible with this Release 3.020.030
JDViewer	5.3.04
JDMapCreator	1.1
JDRemote	1.7

### **What's New in Version 3.020.030**

- Supportability of new JD740B Series with RFoCPRI, fiber inspection, and StrataSync features

### **Fixed Problems**

- Resolved the "POODLE" vulnerability by upgrading the SSL 3.0 Protocol from OpenSSL 1.0.1.g to OpenSSL 1.0.1.j
- Added the save setup to the marker position of the spectrum menu.
- Fixed the bug that changing the Scale/Div setting in the Spectrogram view caused misalignment of the labels between the color legend and the chart table.

- Fixed the bug that opening a trace file with a Delta marker in JDViewer displaced the Delta marker to an incorrect position.
- Fixed the errors in the CPRI Layer 2 Term mode:
  - Incorrect display of the selected HDLC Rate if the Start-up Sequence key was toggled between Bypass and Normal.
  - Absence of the screen menu bar title for HDLC Rate.
  - Display of old Link Rate information on the left-hand side of the screen even after changing the Link Rate setting to another.
  - Incorrect display of Start Time and Elapsed Time if the connected SFP+ transceiver was removed and plugged back in.

## Known Issues

- The instrument may display battery indicators abnormally regardless of actual battery status, such as indicating 'no battery pack' with the battery warning and returning to the normal indicator but with increased percentage.

## Known Limitations

- Current version of JDViewer Release 5.3 is not fully compatible with JD740B and JD780B series.
- The spectrum logging has time constraints, limiting spectrum logging for maximum 20 hours or so. The minimum capacity of storage needed is 512 Mbytes.

## Technical Assistance

For assistance related to the use of your product, call or e-mail VIAVI Technical Assistance Center (TAC) in your region. For a current listing of TAC phone numbers and e-mail addresses, go to:

<http://www.viavisolutions.com/en/services-and-support/support/technical-assistance>

## Document History

Revision	Date	Reason for revision
22072690 rev 011	May 31, 2016	3.061 Firmware Release
22072690 rev 012	June 29, 2016	3.062 Firmware Release
22072690 rev 013	August 25, 2016	3.064 Firmware Release
22072690 rev 014	October 18, 2016	3.065 Firmware Release



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