



Welcome to release 3.055.064 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.

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
				4.000 (N) *
Keypad Module	5	1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 /	1.025 / 2.021 / 3.004 /	1.025 / 2.021 / 3.004 /
		4.004 / 5.003 / 6.003 /	4.025 / 5.020 / 6.021 /	4.025 / 5.020 / 6.021 /
		8.009	8.013 / 10.029 / 12.010	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

#### Hardware Configuration

\* 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.

# **Installation Instructions**

- 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. <u>http://www.viavisolutions.com/en/services-and-support/software-downloads-and-updates#Group-C</u>
- 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.
- 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.
- 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**

- Corrected the Time Error display unit to "μs" 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.

## **Previous Version History**

This section provides history of previous firmware versions.

### 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
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VIAVI Hardwar	e	Version(s) Compatible with this Release 3.052.005		ase 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	ē	1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 /	1.025 / 2.021 / 3.004 /	1.025 / 2.021 / 3.004 /
		4.004 / 5.003 / 6.003 /	4.025 / 5.020 / 6.021 /	4.025 / 5.020 / 6.021 /
		8.009	8.013 / 10.029 / 12.009	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
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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
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 /	1.025 / 2.021 / 3.004 /	1.025 / 2.021 / 3.004 /
	4.004 / 5.003 / 6.003 /	4.025 / 5.020 / 6.021 /	4.025 / 5.020 / 6.021 /

VIAVI Hardware		Version(s) Compatible with this Release 3.051.024		
		JD780A	JD780B	JD740B
		8.009	8.013 / 10.029 / 12.009	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 RFoOBSAI mode, scale information got 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.

### <u>Release 3.050.040</u>

### **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.

VIAVI Hardwar	е	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	5	1.0	1.0	1.0
DSP Module		1.010 / 2.003 / 3.003 /	1.025 / 2.021 / 3.004 /	1.025 / 2.021 / 3.004 /
		4.003 / 5.003 / 6.003 /	4.021 / 5.020 / 6.021 /	4.021 / 5.020 / 6.021 /
		8.009	8.013 / 10.029 / 12.009	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		15/05/26	15/05/26

#### Hardware Configuration

\* 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.

VIAVI Hardware		Version(s) Compatible with this Release 3.040.075		
		JD780A	JD780B	JD740B
Boot Loa	der	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 Modu	ıle	1.000 / 1.000	4.000 / 1.000	4.000 / 2.000
Keypad N	Module	1.0	1.0	1.0
DSP Mod	dule	1.010 / 2.003 / 3.003 /	1.025 / 2.021 / 3.004 /	1.025 / 2.021 / 3.004 /
		4.003 / 5.003 / 6.003 /	4.021 / 5.020 / 6.021 /	4.021 / 5.020 / 6.021 /
		8.009	8.013 / 10.028 / 12.009	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

#### Hardware Configuration

#### **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 zoomin/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.

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

#### Hardware Configuration

VIAVI Hardware		Version(s) Compatible with this Release 3.033.002		
		JD780A	JD780B	JD740B
DSP Module		1.010 / 2.003 / 3.003 /	1.025 / 2.021 / 3.004 /	1.025 / 2.021 / 3.004 /
		4.003 / 5.003 / 6.003 /	4.021 / 5.020 / 6.021 /	4.021 / 5.020 / 6.021 /
		8.009	8.013 / 1.0027 / 12.005	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.

VIAVI Hardware		Version(s) Compatible with this Release 3.030.061		
		JD780A	JD780B	JD740B
Boot Loa	der	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 Boa	ard	3.0	3.0	3.0
RF Modu	ıle	1.000 / 1.000	4.000 / 1.000	4.000 / 2.000
Keypad N	Module	1.0	1.0	1.0
DSP Mod	dule	1.010 / 2.003 / 3.003 /	1.025 / 2.021 / 3.004 /	1.025 / 2.021 / 3.004 /
		4.003 / 5.003 / 6.003 /	4.021 / 5.020 / 6.021 /	4.021 / 5.020 / 6.021 /
		8.009	8.013 / 1.0027 / 12.005	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

#### Hardware Configuration

#### **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.

### <u>Release 3.020.030</u>

# **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.

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

#### Hardware Configuration

VIAVI Hardware		Version(s) Compatible with this Release 3.020.030		
		JD780A	JD780B	JD740B
RF Module		1.000 / 1.000	1.000	4.000 / 2.000
Keypad Module		1.0	1.0	1.0
DSP Mod	dule	1.010 / 2.003 / 3.003 /	1.025 / 2.021 / 3.004 /	1.025 / 2.021 / 3.004 /
		4.003 / 5.003 / 6.003 /	4.021 / 5.020 / 6.021 /	4.021 / 5.020 / 6.021 /
		8.009	8.013 / 1.0027	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



Viavi Solutions www.viavisolutions.com