



Welcome to release 3.090.033 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 Hardwar	e	Version(s) Compatible with this Release 3.090.033		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.37	2.6.32.9.37	2.6.32.9.37
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		1.013 / 2.003 / 3.003 /	1.037 / 2.021 / 3.004 /	1.037 / 2.021 / 3.004 /
		4.004 / 5.003 / 6.005 /	4.025 / 5.020 / 6.025 /	4.025 / 5.020 / 6.025 /
		8.010 / 13.042	8.013 / 10.053 / 12.010 /	8.013 / 10.053 / 12.010 /
			13.022	13.022
CPRI Module CPLD		N/A	14/06/13	14/06/13

VIAVI Hardware		Version(s) Compatible with this Release 3.090.033		
		JD780A	JD780B	JD740B
Option Board	CPRI	N/A	16/09/06	16/09/06
DSP Module	OBSAI	N/A	15/07/13	15/07/13

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

#### **Recommended Application Software**

VIAVI Software	Version(s) Compatible with this Release 3.090.033	
JDViewer	5.9	
JDMapCreator	1.6	
JDRemote	2.2	

# What's New in Version 3.090.033

Added a driver for supporting the legacy Antenna Advisor

## **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.
- 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.
- 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**

N/A

# **Known Limitations**

N/A

# **Previous Version History**

This section provides history of previous firmware versions.

## Release 3.090.032

# **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 3.090.032		
		JD780A	JD780B	JD740B
Boot Loader		1.3.13	1.3.16B	1.3.16B
Kernel		2.6.32.9.37	2.6.32.9.37	2.6.32.9.37
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		1.013 / 2.003 / 3.003 /	1.037 / 2.021 / 3.004 /	1.037 / 2.021 / 3.004 /
		4.004 / 5.003 / 6.005 /	4.025 / 5.020 / 6.025 /	4.025 / 5.020 / 6.025 /
		8.010 / 13.042	8.013 / 10.053 / 12.010 /	8.013 / 10.053 / 12.010 /
			13.022	13.022
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 3.090.032	
JDViewer	5.9	
JDMapCreator	1.6	
JDRemote	2.2	

# What's New in Version 3.090.032

- NB-IoT enhancement and UI change
  - NPDSCH -> NPDSCH/NPDCCH
- Added an EMF antenna
  - o added a 6 GHz Sysdyne EMF antenna.
- Added Hold on/off commands for the EagleEye project.
- Changed the FPGA version to v1037.
- Changed the IF overload alarm algorithm.
- The EMF measurement will stop when the user-definable measurement time is reached.

# **Fixed Problems**

• Fixed an error regarding the 28G downconverter zero span.

# **Known Limitations**

N/A

## Release 3.085.255

# **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 3.085.255		
	JD780A	JD780B	JD740B
Boot Loader	1.3.13	1.3.16B	1.3.16B
Kernel	2.6.32.9.37	2.6.32.9.37	2.6.32.9.37
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

VIAVI Hardware		Version(s) Compatible with this Release 3.085.255			
		JD780A	JD780B	JD740B	
DSP Module		1.013 / 2.003 / 3.003 /	1.029 / 2.021 / 3.004 /	1.029 / 2.021 / 3.004 /	
		4.004 / 5.003 / 6.005 /	4.025 / 5.020 / 6.025 /	4.025 / 5.020 / 6.025 /	
		8.010 / 13.042	8.013 / 10.053 / 12.010 /	8.013 / 10.053 / 12.010 /	
			13.022	13.022	
CPRI Module	CPLD	N/A	14/06/13	14/06/13	
<b>Option Board</b>	CPRI	N/A	16/09/06	16/09/06	
DSP Module	OBSAI	N/A	15/07/13	15/07/13	

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

#### **Recommended Application Software**

VIAVI Software	Version(s) Compatible with this Release 3.085.255	
JDViewer	5.9	
JDMapCreator	1.6	
JDRemote	2.1	

## What's New in Version 3.085.255

- LTE-LAA
  - Carrier Aggregation for LTE-TDD and LTE-FDD
    - Supportability for LAA mode (2.4 GHz and 5 GHz)
    - Added Trace/Display functions and Wi-Fi information when selecting the display mode to SA
    - Dual Spectrogram
    - Gate on LTE-LAA Signal
- SNMP Trap Alarm
  - Operable in EMF Spectrum mode
  - o Alarm transmission for ICNIRP Limit and MSL Upper Limit
- Alarm Sound Indicator
  - Added Sound Mode
    - Mode 1: Creating an alarm with a consistent tone
    - Mode 2: Applying the tone step from 1 to 20
    - Mode 3: Applying the tone step from 20 to 1
- ALU-BBU
  - Added the Single Port Sweep mode in PIM Analyzer
  - Added RRH MAC Address status.
    - Added CPRI & Active SW in Configuration Verification

- BBU-E Profile Enhancement
  - Added options to choose between 2xMIMO and 4xMIMO

# **Fixed Problems**

- GSM Auto Trigger
  - Trigger only works for RF Burst or Internal FB.
  - Operating between RF Burst and Internal FB in turn automatically when there is no signal.
- Signal Performance for LTE-FDD
  - Fixed an error regarding not to measure MIMO 2x2 and 4x4 on the 15 MHz bandwidth.
- Zero Span
  - Fixed an error that the sweep once is not properly operated.
  - Fixed a trace update method from spectrum to oscilloscope.
- Changed the channel standard default to LTE Band Global.

# **Known Limitations**

N/A

#### <u>Release 3.080.098</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 3.080.098		
	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	1.013 / 2.003 / 3.003 /	1.029 / 2.021 / 3.004 /	1.029 / 2.021 / 3.004 /
	4.004 / 5.003 / 6.005 /	4.025 / 5.020 / 6.025 /	4.025 / 5.020 / 6.025 /
	8.010 / 13.042		

VIAVI Hardware		Version(s) Compatible with this Release 3.080.098		
		JD780A	JD780B	JD740B
			8.013 / 10.053 / 12	.010 / 8.013 / 10.053 / 12.010 /
			13.022	13.022
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 the revision of improved YRO board.

#### **Recommended Application Software**

VIAVI Software	Version(s) Compatible with this Release 3.080.098
JDViewer	5.9
JDMapCreator	1.6
JDRemote	2.0

# What's New in Version 3.080.098

Supportability for JD780B28GDC (28 GHz downconverter for JD780A/B and JD740B series)

# **Fixed Problems**

- Fixed an error regarding Interference Analyzer RSSI measurement.
  - The RSSI measurement result graph is reset when changing the attenuation setting value and/or marker frequency.
- Fixed an error that the USBTMC setting changes to App SW after upgrading a firmware.
- Fixed an error regarding frequency deviation when operating 10 MHz Ref Oscillator calibration using GPS.

# **Known Limitations**

N/A

## Release 3.075.220

# **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 3.075.220		
		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	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 / 6.005 /	4.025 / 5.020 / 6.025 /	4.025 / 5.020 / 6.025 /
		8.010 / 13.042	8.013 / 10.053 / 12.010 /	8.013 / 10.053 / 12.010 /
			13.022	13.022
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

#### **Hardware Configuration**

\* 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 3.075.220
JDViewer	5.8
JDMapCreator	1.6
JDRemote	2.0

## What's New in Version 3.075.220

• To support the ECO for JD780A productivity

# **Fixed Problems**

N/A

## **Known Limitations**

N/A

# Release 3.075.205

# **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	e	Version(s) Compatible with this Release 3.075.205		
		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	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 / 6.005 /	4.025 / 5.020 / 6.025 /	4.025 / 5.020 / 6.025 /
		8.010 / 13.042	8.013 / 10.053 / 12.010 /	8.013 / 10.053 / 12.010 /
			13.022	13.022
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

#### Hardware Configuration

\* 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 3.075.205
JDViewer	5.8
JDMapCreator	1.6
JDRemote	2.0

# What's New in Version 3.075.205

■ N/A

## **Fixed Problems**

Improved level accuracy for CW signals around 10MHz centre frequency

# **Known Limitations**

N/A

## Release 3.075.195

# **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 3.075.195		
		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	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 / 6.005 /	4.025 / 5.020 / 6.025 /	4.025 / 5.020 / 6.025 /
		8.010 / 13.042	8.013 / 10.053 / 12.010 /	8.013 / 10.053 / 12.010 /
			13.022	13.022
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 3.075.195
JDViewer	5.8
JDMapCreator	1.6
JDRemote	2.0

# What's New in Version 3.075.195

NB-IoT In Band / Guard Band / Standalone

- Wi-Fi SSID Display
- VZW Map Profile

# **Fixed Problems**

- Fixed an issue where CPRI Time Alignment Error is not measured.
- Added a feature to delete a license.
- Changed a display screen for MIB/SIB Cell-ID Binary to MIB/SIB Cell-ID Decimal.
- Changed a display screen for RFoCPRI Layer 2 BERT Pattern Sync and Bit Error.
  - When starting RFoCPRI Layer 2 BERT, in cases where Pattern Sync is failed, it is displayed as Unavailable.
  - When the Pattern Sync changes from Success to Fail during test, the original Bit Error and Bit Error Rate values are displayed instead of Unavailable.
  - When the setup changes or Clear History menu is selected in the case above, the display screen is shown as Unavailable.
  - Displayed Live Pattern as Unavailable because it does not check Pattern Sync.
- Fixed an error regarding RET ALD sub and terminology change on information screen.

## **Known Limitations**

N/A

## <u>Release 3.072.000</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 3.072.000		
	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

VIAVI Hardware		Version(s) Compatible with this Release 3.072.000		
		JD780A	JD780B	JD740B
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 /
		8.010	8.013 / 10.053 / 12.010	8.013 / 10.053 / 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 the revision of improved YRO board.

#### **Recommended Application Software**

VIAVI Software	Version(s) Compatible with this Release 3.072.000
JDViewer	5.8
JDMapCreator	1.6
JDRemote	2.0

# What's New in Version 3.072.000

N/A

## **Fixed Problems**

- Fixed minor issues
  - Fixed mode change issues (AM/FM Audio Demod)
  - Fixed an issue to display incorrect values in some cases when loading a setup file.
- Changed frequency plan

# **Known Limitations**

This firmware does not support NB-IoT Analyzer

# **Previous Version History**

This section provides history of previous firmware versions.

# <u>Release 3.071.030</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 Hardwar	e	Version(s) Compatible with this Release 3.071.030		
		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	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 /
		8.010	8.013 / 10.053 / 12.010	8.013 / 10.053 / 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

#### Hardware Configuration

\* 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 3.071.030
JDViewer	5.8
JDMapCreator	1.6
JDRemote	2.0

## What's New in Version 3.071.030

- Preamp auto off
  - Preamp is automatically turned off if there is a high input signal.
  - Preamp is automatically turned off when using power statistics CCDF (WCDMA, LTE, CDMA, EV-DO, Mobile WiMAX).
- Create a separate log file with messages regarding preamp auto off and power overload when saving system logging file.

# **Fixed Problems**

N/A

# **Known Limitations**

• This firmware does not support NB-IoT Analyzer

# **Previous Version History**

This section provides history of previous firmware versions.

## Release 3.070.240

# **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 3.070.240		
		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	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 /
		8.010	8.013 / 10.053 / 12.010	8.013 / 10.053 / 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

#### **Hardware Configuration**

\* 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.

VIAVI Software	Version(s) Compatible with this Release 3.070.240
JDViewer	5.8
JDMapCreator	1.6
JDRemote	2.0

#### **Recommended Application Software**

## What's New in Version 3.070.240

- RFoCPRI Layer-2 BERT
- Enhancement of RET Information
- RFoCPRI Gated sweep for LTE-TDD
- RFoCPRI IQ Data Block Viewer enhancement
- RFoFiber Auto Link rate detecting by Auto Negotiation
- RFoCPRI enhancement: MIB/SIB decoding/Cell-ID
- Wi-Fi Clearing (only for 780A and 780B)
- Add RF input warning message and log file information
  - Add RF input warning message for LOTTE rent-a-car
  - Add IF overload and adjusting attenuation message
- Miscellaneous
  - o Rename File Manager
  - Add new LTE band (LTE FDD band 65 ~ 70, LTE TDD band 45, 46)
  - Add peak value information on EMF
- Support EagleEye (software version 1.2.5) USB communication

## **Fixed Problems**

- Fixed an error where GPS information is displayed even when there is no GPS license.
- Fixed an error regarding calculation of spectral density.
- LTE OTA ID Scanner
  - Fixed an error regarding descending order of RSRP
  - Fixed an error of RSRP, PSS Power measurement values
- SW Refactoring
  - Fixed issues regarding a device recognition error and an operational error such as slowing down and freezing.
- Fixed an error regarding 731B power sensor measurement value
- Fixed an error regarding Pass or Fail decision in the limit line feature from Cable and Antenna Analyzer menu.
- Fixed an error regarding load screen file closed without displaying a load screen file pop-up list when opening load screen files and closing by pressing the Esc key.

- Fixed an error 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.
- Fixed an error that EagleEye temporary License cannot be read from CellAdvisor.

# **Known Limitations**

- This firmware does not support NB-IoT Analyzer.
- When you select the File Manager and do multi-touch, the touch-screen and key operation do not function properly. If you enter the menu again or touch other sections, it works fine.
- There is an issue where the saved files are unable to load after setting DHCP IP during EMF logging file.
- There is an issue where the Raster map file is unable to load.
- 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 3.066.053</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 3.066.053		
		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	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 / 6.005 /	4.025 / 5.020 / 6.025 /	4.025 / 5.020 / 6.025 /
		8.010	8.013 / 10.047 / 12.010	8.013 / 10.047 / 12.010
			13.020	13.020
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 the revision of improved YRO board.

# VIAVI SoftwareVersion(s) Compatible with this Release 3.066.053JDViewer5.8JDMapCreator1.4JDRemote2.0

#### **Recommended Application Software**

## What's New in Version 3.066.053

- NB-IoT Signal Analysis (In-band operation mode).
- SCPI Command for EMF

# **Fixed Problems**

• Fixed a problem where the frequency of TE-FDD Channel Standard Band 11 and 12 does not match with the channel number.

# **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.

## Release 3.065.404

# **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 Rele	ase 3.065.404
	JD780A	JD780B	JD740B
Boot Loader	1.3.13	1.3.16B	1.3.16B

VIAVI Hardware		Version(s) Compatible with this Release 3.065.404		
		JD780A	JD780B	JD740B
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	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 /
		8.010	8.013 / 10.047 / 12.010	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 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
  - o 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
- o 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

# **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.

# <u>Release 3.064.250</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 3.064.250		
		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	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 / 10.047 / 12.010	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

#### Hardware Configuration

\* 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.

## <u>Release 3.063.000</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 3.063.000		
		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	e	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 / 10.031 / 12.010	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

#### Hardware Configuration

\* 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 RFoOBSAI
 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.

## <u>Release 3.062.039</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 3.062.039			
		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	e	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 / 10.031 / 12.010	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
  - o User definable help

# **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.

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 /	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 / 10.031 / 12.010	8.013 / 10.031 / 12.010

VIAVI Hardwar	e	Version(s	) Compatible with this Rele	ease 3.061.343
		JD780A	JD780B	JD740B
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 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.

## <u>Release 3.060.305</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 Rele	ease 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	9	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 / 10.031 / 12.010	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

#### Hardware Configuration

\* 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.

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

VIAVI Hardwar	e	Version(s) Compatible with this Release 3.060.105		
		JD780A	JD780B	JD740B
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 / 10.031 / 12.010	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

#### **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 n 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.

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	1.0	1.0	1.0

VIAVI Hardware		Version(s) Compatible with this Release 3.055.064		
		JD780A	JD780B	JD740B
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

#### **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
  - o 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 "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.

### 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	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 / 12.009	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.

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

#### **Recommended Application Software**

# 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.

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	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 / 12.009	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

#### **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 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.

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 /	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

VIAVI Hardware		Version(s)	Compatible with this Release 3.050.040		
		JD780A	JD780B	JD740B	
Option Board	CPRI	N/A	15/02/24	15/02/24	
DSP Module	OBSAI		15/05/26	15/05/26	

#### **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 Ha	rdware	Version(s) C	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 /	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 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 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

#### Hardware Configuration

#### **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 Ha	rdware	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 Moc	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	
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 /	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	

#### Hardware Configuration

#### **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: <a href="http://www.viavisolutions.com/en/services-and-support/support/technical-assistance">http://www.viavisolutions.com/en/services-and-support/support/support/technical-assistance</a>

# **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
22072690 rev 015	April 14, 2017	3.066 Firmware Release
22072690 rev 016	April 21, 2017	3.070 Firmware Release
22072690 rev 017	June 21, 2017	3.071 Firmware Release
22072690 rev 018	June 29, 2017	3.072 Firmware Release
22072690 rev 019	August 18, 2017	3.075 Firmware Release
22072690 rev 020	September 29, 2017	3.075 Firmware Release
22072690 rev 021	October 17, 2017	3.075 Release note revision
22072690 rev 022	November 7, 2017	3.075 Firmware Release
22072690 rev 023	December 6, 2017	3.080 Firmware Release
22072690 rev 024	January 24, 2018	3.085 Firmware Release
22072690 rev 025	April 2, 2018	3.090.032 Firmware Release
22072690 rev 026	April 11, 2018	3.090.033 Firmware Release

