



OpTest Software Manual

Introduction

OpTest allows easy downloading, displaying and reporting of optical power measurements using ODM's RP-460 and UPM-100 power meters.

ODM OpTest Operating System Compatibility

- Windows XP SP3
- Windows Vista
- Windows 7
- Windows 8

Installation Instructions

RP-460 and UPM-100 Windows Driver

To allow the Windows[®] operating system to install the USB port drivers, insert the RP-460 USB cable or UPM-100 into a USB port of the PC. Observe the installation progress provided by Windows; the installation may take a few minutes.

OpTest Software Installation

CD Installation

1. Insert the ODM OpTest CD into a PC running Windows XP SP3, Windows Vista, Windows 7 or Windows 8.
2. If the setup program does not start automatically, open folder ODM\OpTest on the CD containing setup.exe.
3. Double-click setup.exe and follow the software installation instructions below.

Web Installation

1. Go to <http://odm-inc.com/Downloads.html>
2. Click the button for ODM Complete Software Package.
3. After the download completes, click on UnZip.
4. After the ODM Installer opens, click on Install OpTest.
5. Click on Install. See Figure 1 below.

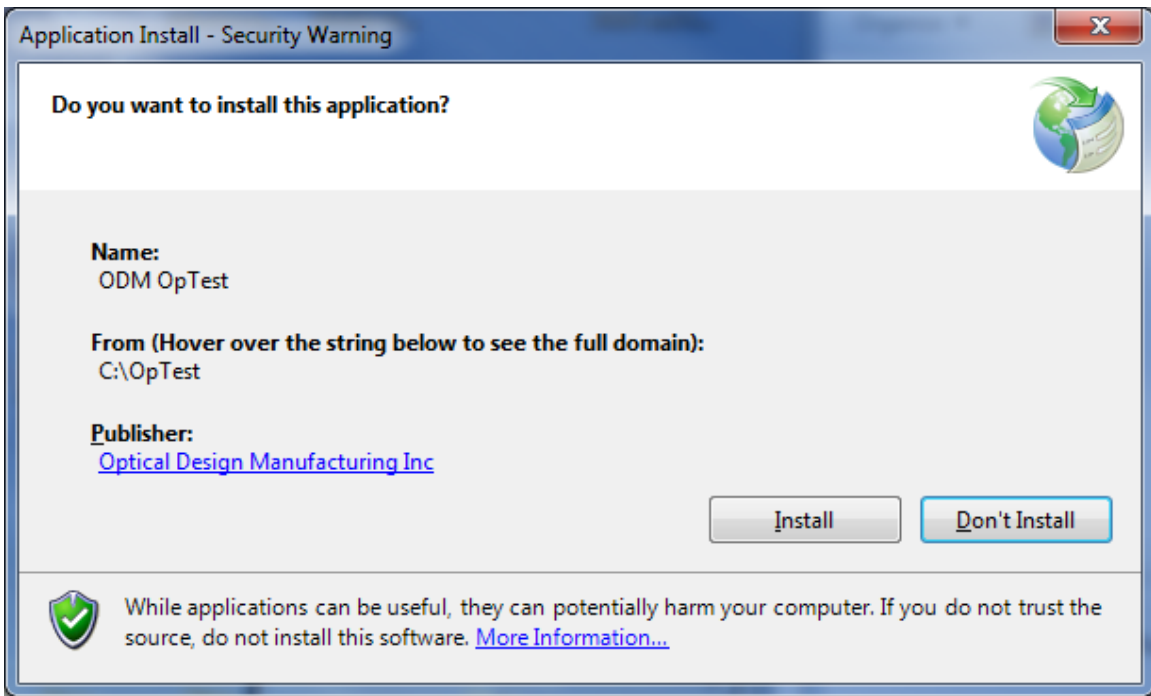


Figure 1: ODM OpTest Installation.

OpTest Tablet Support

OpTest is designed to be touch-friendly; it supports screen rotation to make it more convenient when used with tablets. Figure 2 illustrates the main screen in the landscape mode; Figure 3 illustrates the main screen in the portrait mode.

In this manual, all subsequent figures will be illustrated in the landscape mode but the operation of OpTest will be the same as in the portrait mode. Only the button sizes and locations are changed to accommodate the different orientation.

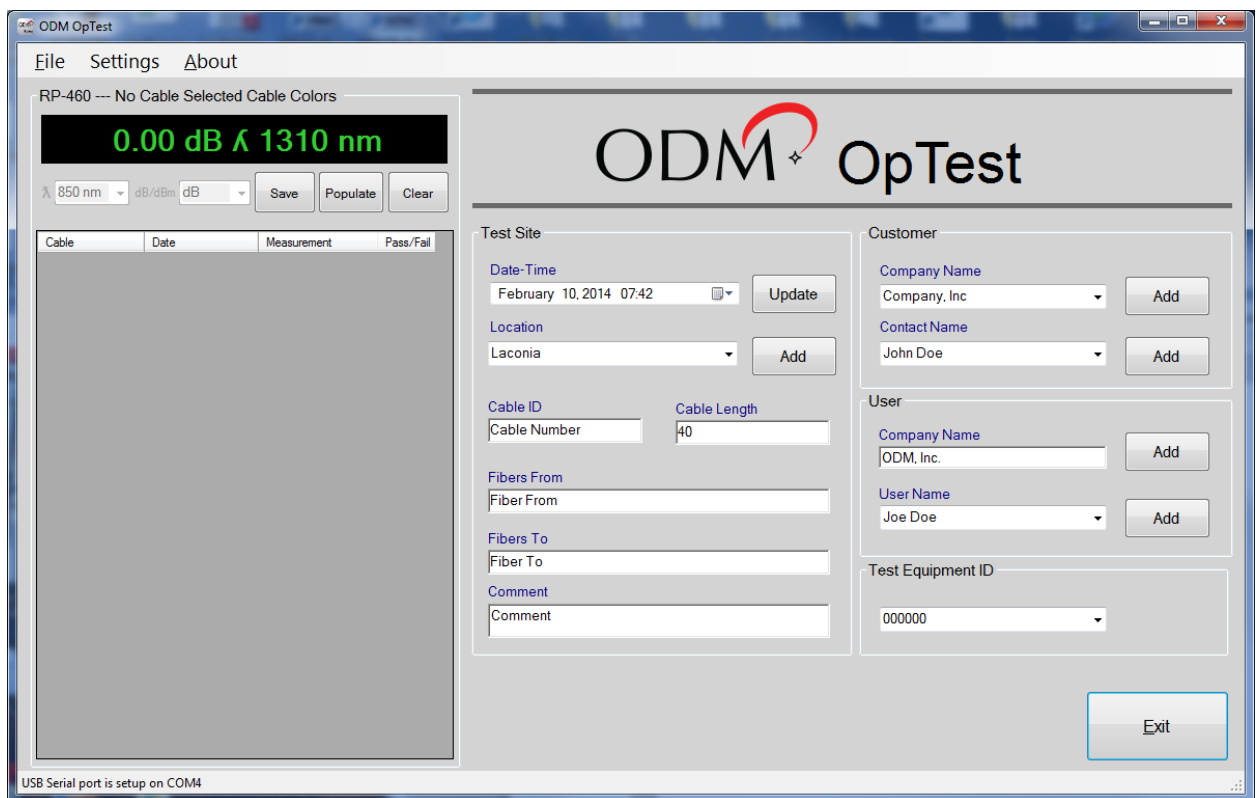


Figure 2: ODM OpTest Landscape Mode

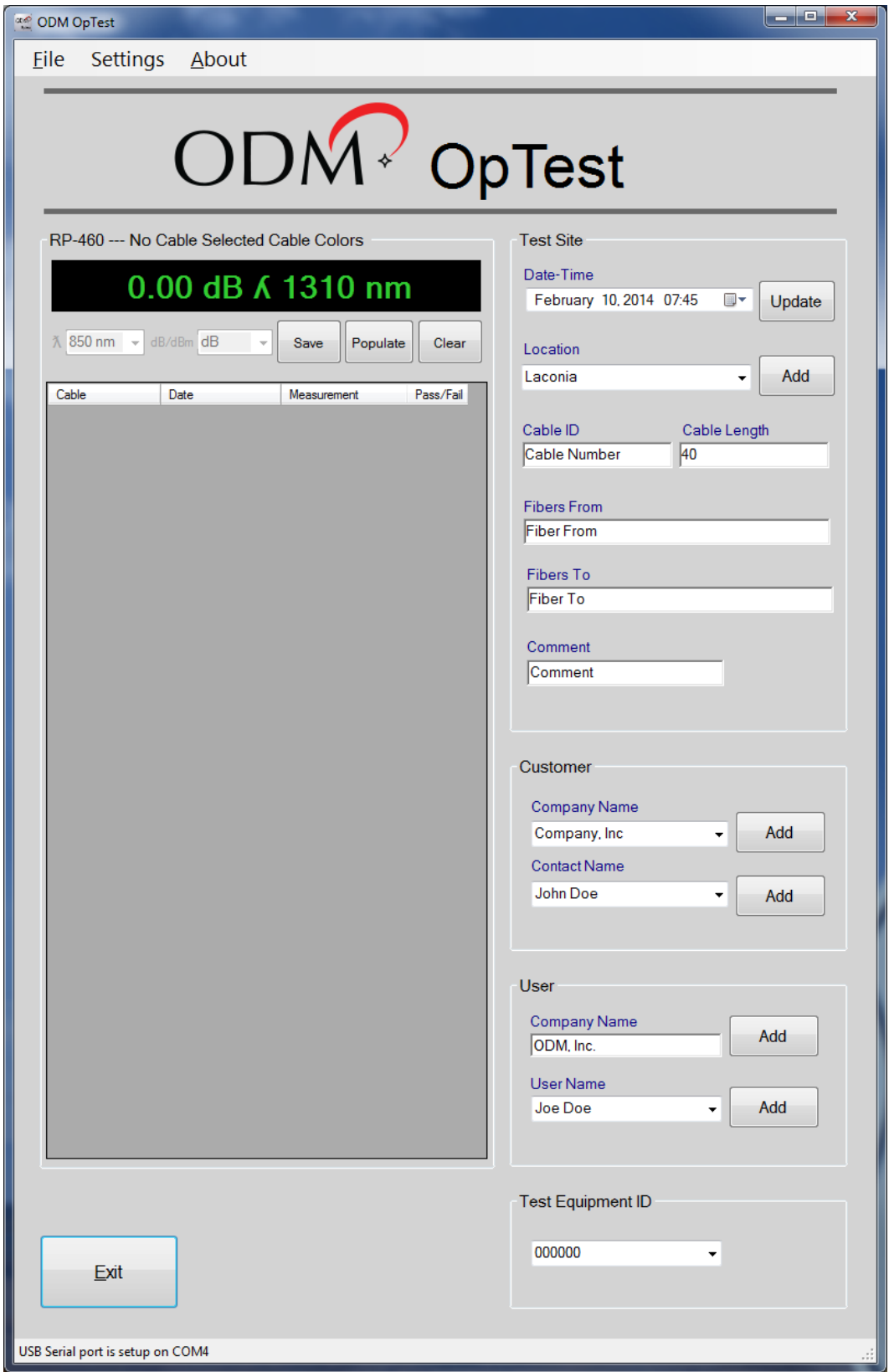


Figure 3: ODM OpTest Portrait Mode

Test Equipment

RP-460 Optical Power Meter (OPM)

The RP-460 optical power meter permits the technician to take loss measurements on a fiber circuit. Using the supplied USB cable plug the RP-460 into a USB port on the PC. Apply power to the device. See the RP-460 User Guide for proper operation of the RP-460.

UPM-100 Optical Power Meter (OPM)

The UPM-100 optical power meter permits the technician to take loss measurements on a fiber circuit. Plug the UPM-100 directly into your PC's USB port. The device powers up immediately. See the UPM-100 User Guide for proper operation of the UPM-100.

OpTest Overview

When a RP-460 or UPM-100 is connected to a PC's USB port, OpTest acquires optical power measurements from the power meter and displays the measurement. The technician can save readings based on carrier or build-specific guidelines. The results can be displayed in red or green to help testers easily identify acceptable and unacceptable dB loss measurements. OpTest also provides site-based reports.

In addition to live measurements, OpTest also accepts measurements that have been acquired and stored in the RP-460 memory. Stored test measurements can be dumped into OpTest and then site-based reports can be created.

Modes of Operation

OpTest supports two modes of operation, Active and Dump.

Active Mode

When in the active mode, OpTest displays the real-time measurement of the RP-460 or UPM-100. The active mode also permits the technician to select pre-configured cable colors to make measurements and reports easy. See Section [Active Mode Operation](#)

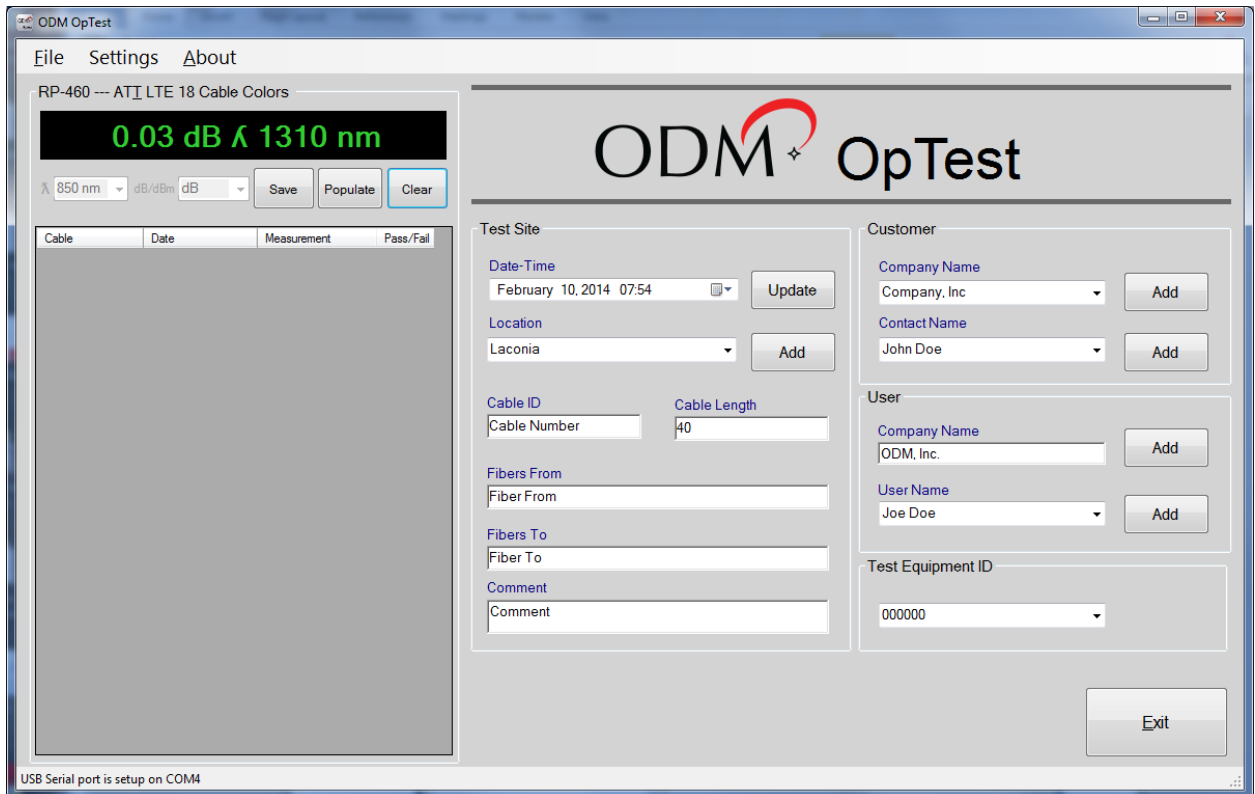


Figure 4: OpTest Active Mode Screen

Dump Mode

When in the dump mode, all the measurements saved in the RP-460's memory are dumped into OpTest when the technician presses the USB button on the RP-460. See Section [Dump Mode Operation](#)

ODM OpTest

File Settings About

OPM Unformatted Data

ODM OpTest

Test Site

Date-Time
February 10, 2014 07:54 Update

Location
Laconia Add

Cable ID **Cable Length**
Cable Number 40

Fibers From
Fiber From

Fibers To
Fiber To

Comment
Comment

Customer

Company Name
Company, Inc. Add

Contact Name
John Doe Add

User

Company Name
ODM, Inc. Add

User Name
Joe Doe Add

Test Equipment ID
000000

Clear Test Data Exit

USB Serial port is setup on COM4. Waiting to receive data. Please press the USB button on RP-460

Figure 5: OpTest Dump Mode Screen

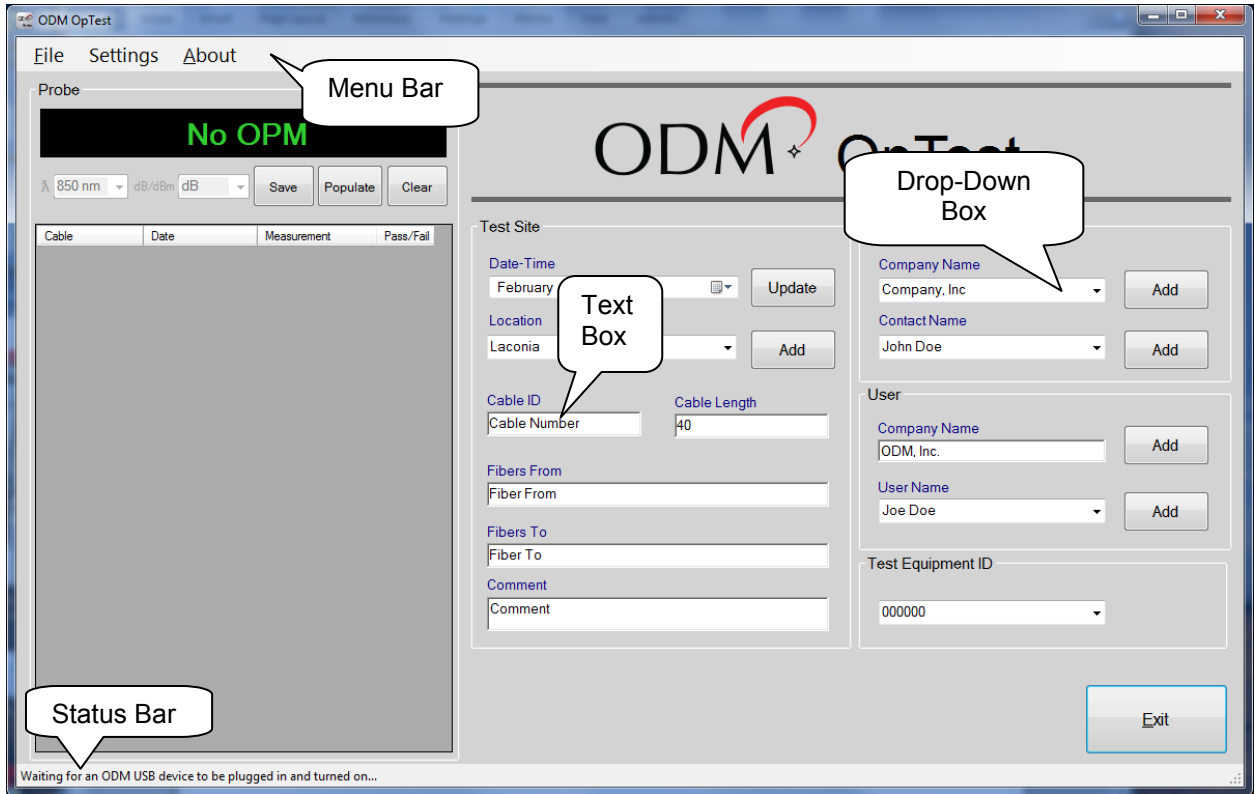


Figure 6: OpTest Dump Mode Screen

Microsoft Excel Software

When OpTest is used with an ODM RP-460 or UPM-100, test measurements can be exported and saved in Microsoft Excel 2007 (Version 12) or newer format, if loaded on your PC. If you do not have Excel and you need to save reports in Excel format, OpTest has an integrated report viewer that allows you to export test data in Excel format for archiving.

ODM OpTest Operating Instructions

Main Window Functions

To run ODM OpTest, click on the desktop shortcut



The status bar, at the bottom of Figure 6, indicates OpTest is waiting for the user to plug an ODM power meter into a USB port. When the power meter is plugged in and powered, OpTest will recognize it and will update the status bar as illustrated in Figure 7.

Information on the main screen can be changed. Text boxes labeled *Cable ID*, *Cable Length*, *Fibers From*, *Fibers To*, *Comment* and user *Company Name* can be updated to reflect your test location and company.

Drop-down boxes contain information that is likely to be repeated. Items can be added to the lists by clicking the *Add* button next to the item. These are labeled *Location*, customer *Company Name*, customer *Contact Name*, *User Name* and *Test Equipment ID*. To delete an item from a list, select the item and simultaneously press the “ALT” key and the “D” key on the keyboard.

The date and time can be updated by clicking the *Update* button next to the Date-Time text box.

Dump Mode Operation

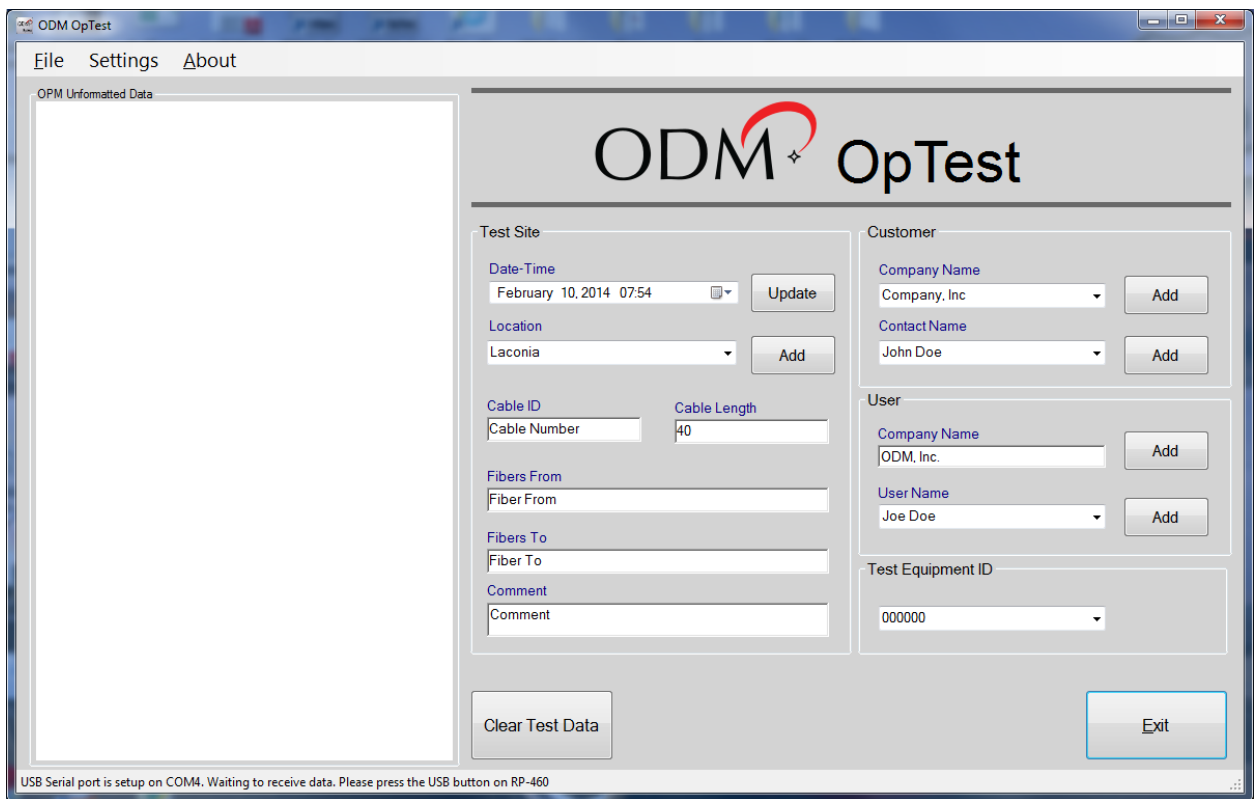


Figure 7: Waiting for user to Press USB Key on OPM

To upload, or dump, saved test data to OpTest, press the USB button on the RP-460 OPM as illustrated in Figure 8 below. Figure 9 shows Unformatted Data received from the OPM.



Figure 8: RP-460 USB Button

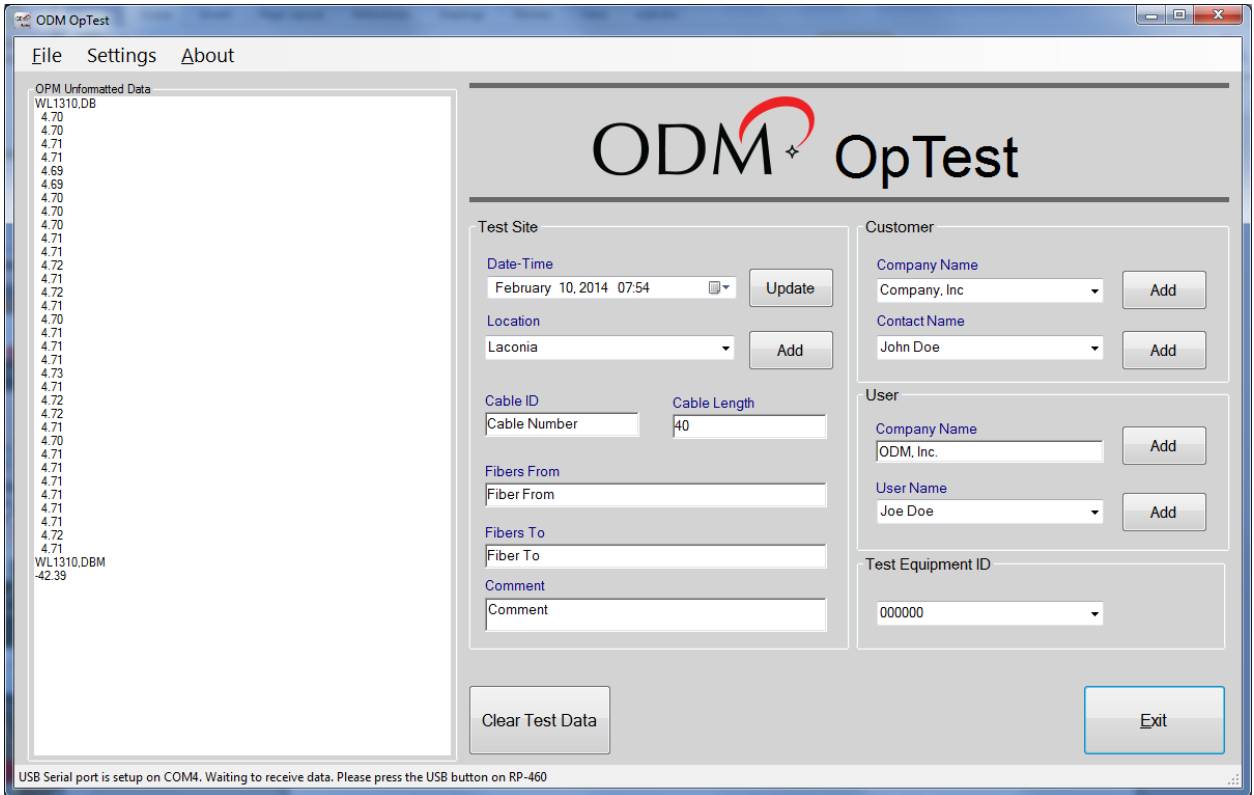


Figure 9: Data received from an OPM.

Active Mode Operation

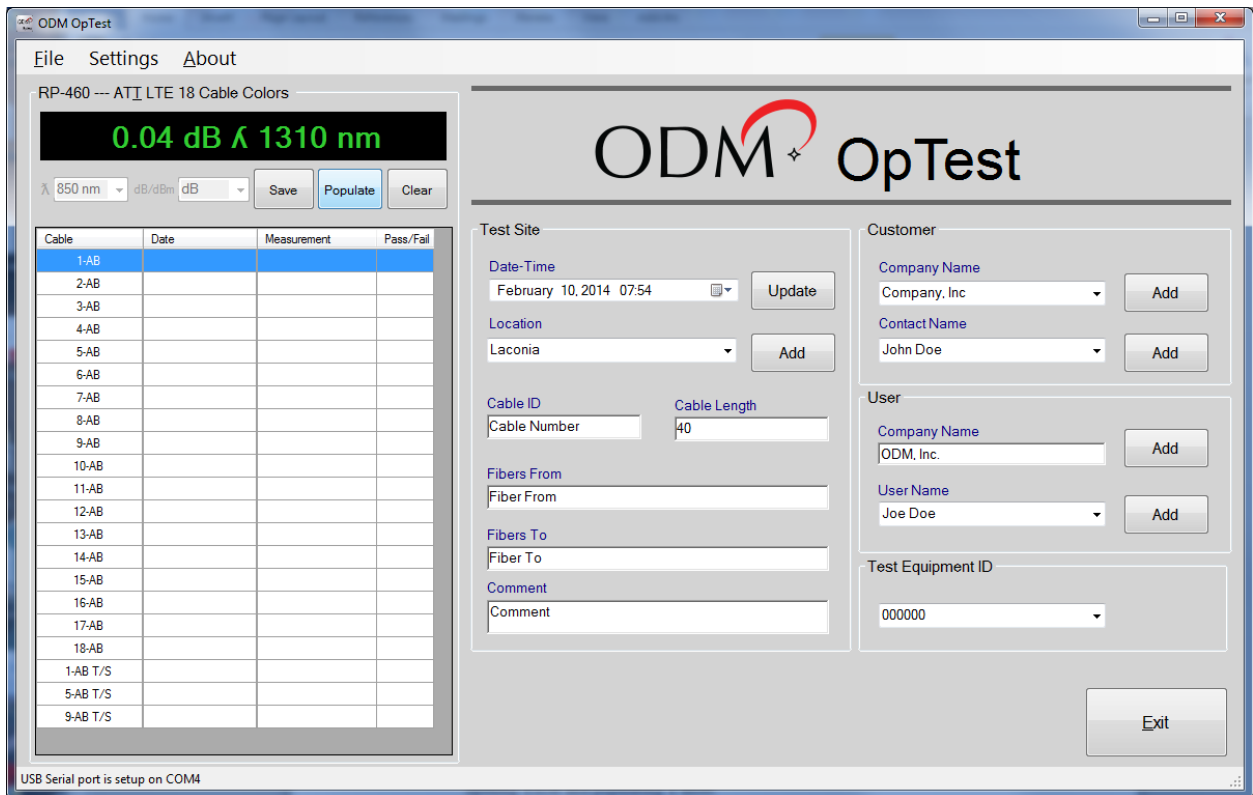


Figure 10: Active Mode.

- **Populate Button:** Populates the test results table with the cable color codes selected in the Settings/Report Settings on the menu bar. See Figure 10.
- **Save Button:** Saves the measurement displayed to the next location in the test results table.
- **Clear Button:** Clears all test measurements from the test results table.

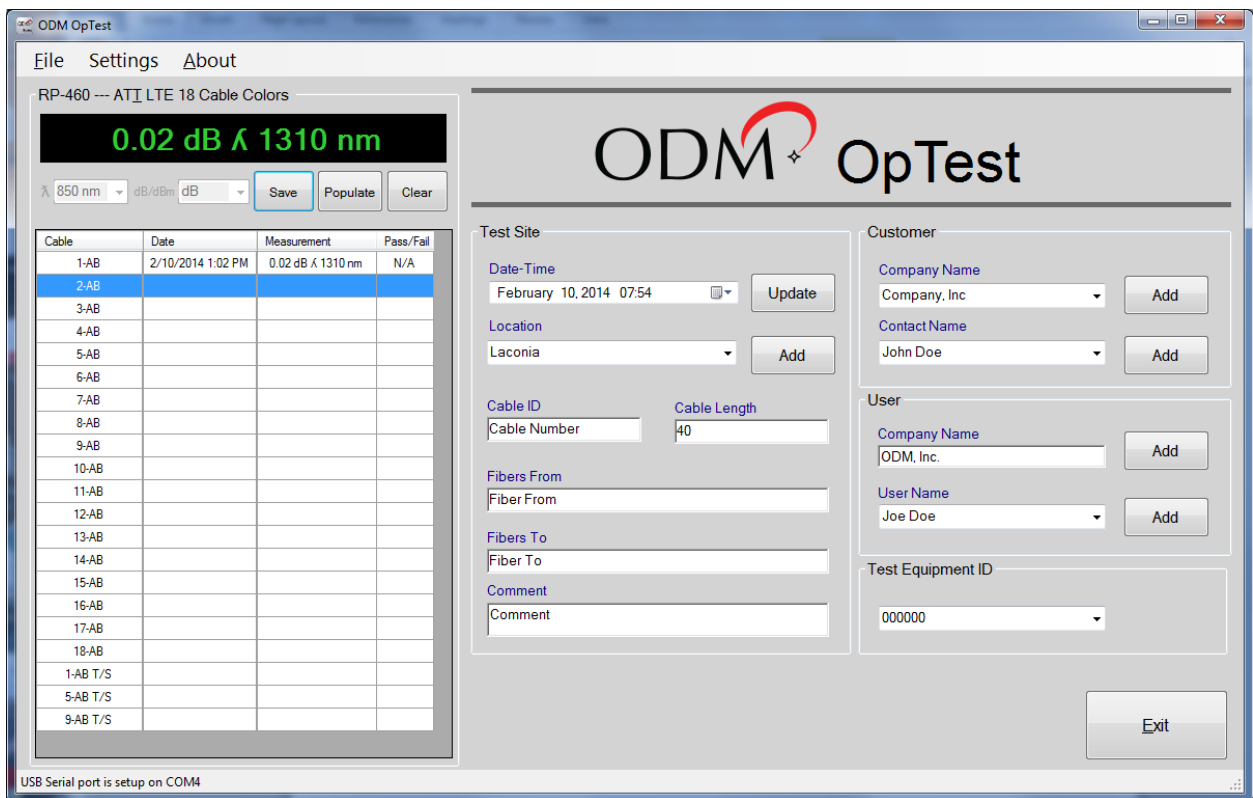


Figure 11: Active Mode – Save Measurement

Menu Bar Items

File

- **Clear Test Data:** Clears the contents of the data window.
- **Print:** Prints the contents of the Unformatted Data window.
- **View Report:** Displays a report of the test data in the Unformatted Data window.
- **Export to Excel:** Exports the contents of the data window to Microsoft Excel by opening Excel and populating a sheet.
- **Exit:** Exit the program

Settings

- **Settings:** Opens the Settings window to permit changing the pass/fail values and to enable or disable cable colors in the reports.
 - **Report Settings:** Permits selection of custom cable color code and pass/fail settings.
 - **Data Mode:** Permits the selection of either Active or Dump method of measurement acquisition.

About

- **ODM OpTest Manual:** Displays the OpTest Manual.
- **About OpTest:** Displays information about OpTest.

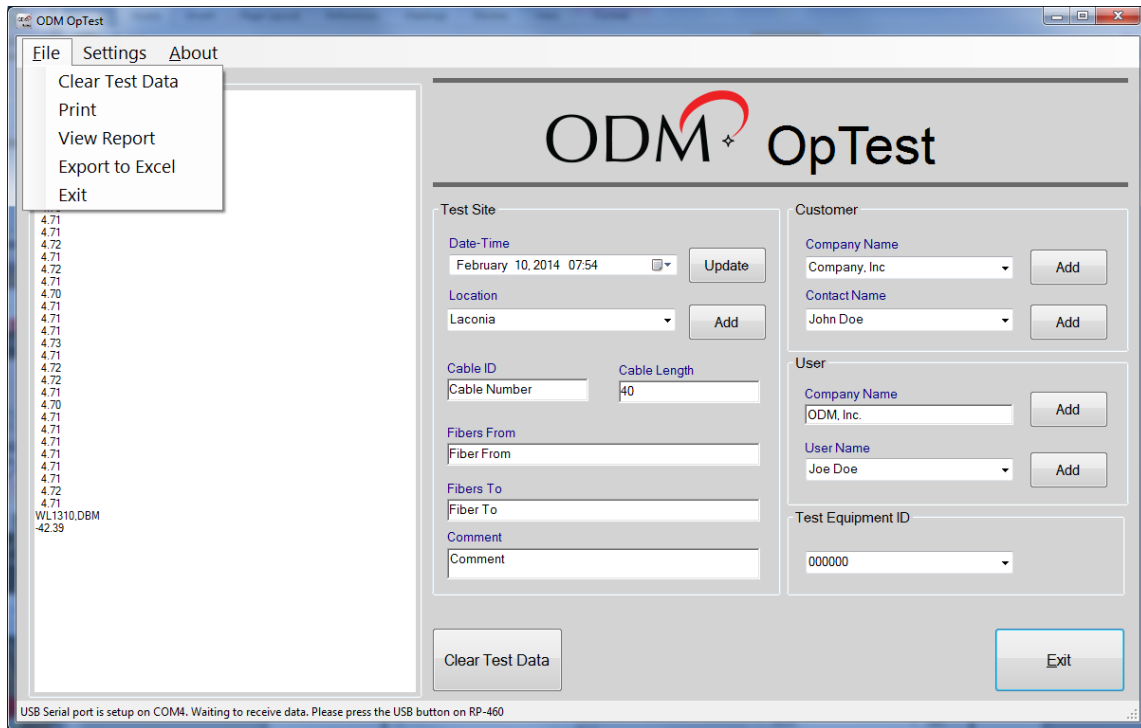


Figure 12: File Menu

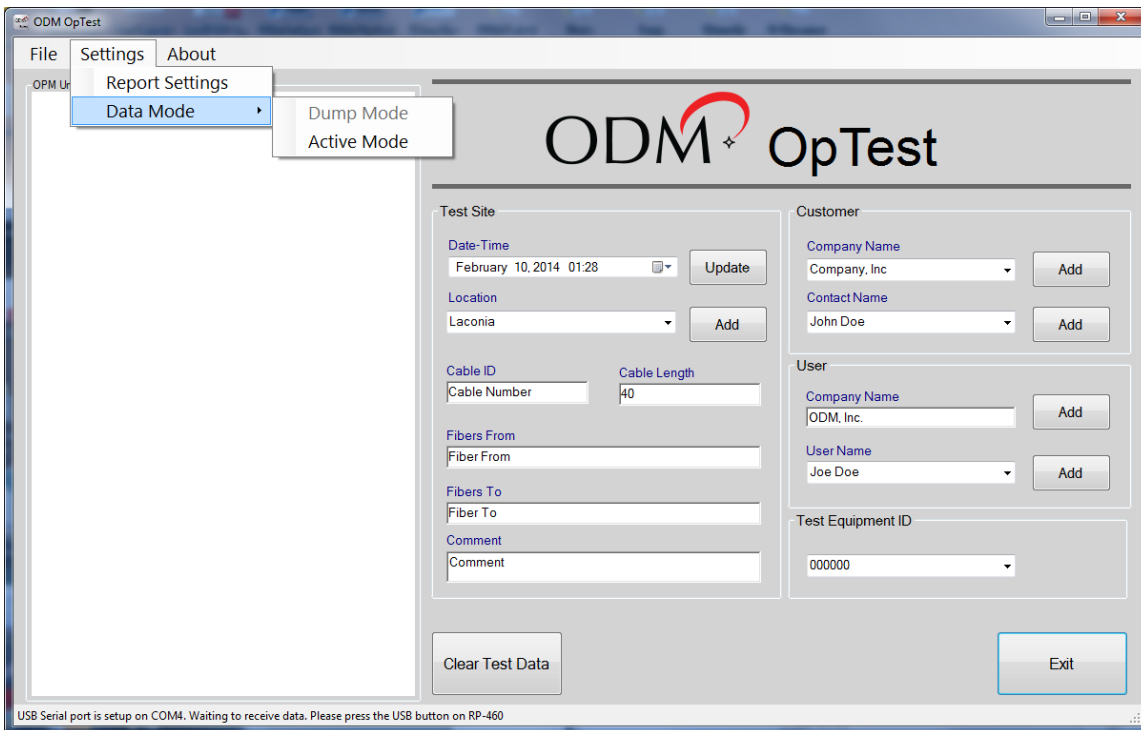


Figure 13: Settings Menu

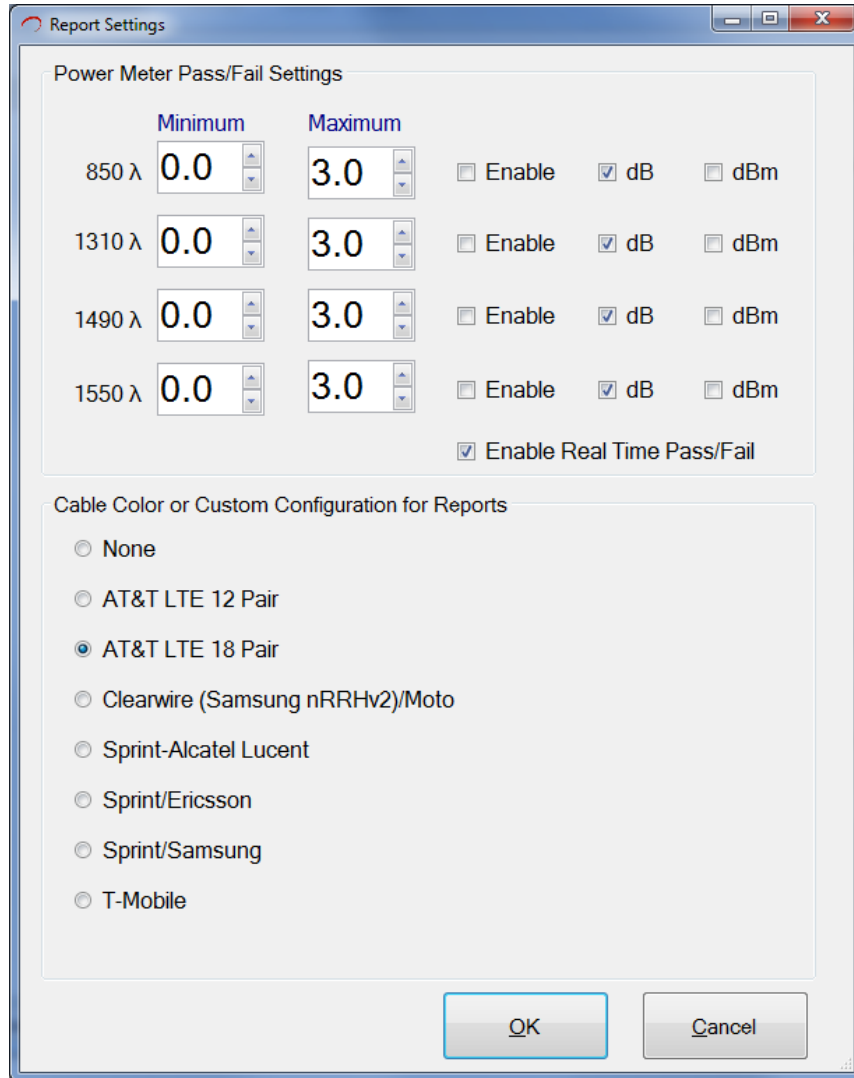


Figure 14: Settings Window

The Settings menu section permits you set pass-fail limits and enable or disable those limits. You can also set custom hybrid cable color codes (Sprint Network Vision/Samsung). If enabled, cable colors are printed in the Comment column of the reports. See Figure 16.

Reports

Reports can be created using Excel. If you don't have Excel, you can use the Report Viewer feature.

Excel

To export test data to Microsoft Excel, click File/Export to Excel. Excel will open with the test data displayed.

Customer Name	Contact Name	Testing Company	Tester's Name							
Company, Inc	John Doe	ODM, Inc.	Joe Doe							
Test Location	Date/Time									
Laconia	Tuesday June 26, 2012 03:40:03									
Cable ID	Cable Length	Fibers From	Fibers To							
Cable Number	40	Fiber From	Fiber To							
Comments	Pass/Fail									
Comment	850 Min/Max: 0dB /3.0dB Enabled									
	1310 Min/Max: 0dB /3.0dB Enabled									
	1490 Min/Max: 0dB /3.0dB Enabled									
	1550 Min/Max: 0dB /3.0dB Enabled									
Test Equipment Model	Test Equipment ID									
RP-460-02	000000									
RP 460 Test Data										
Loc#	Comment	Pass/Fail	850 nm	Unit	1310 nm	Unit	1490 nm	Unit	1550 nm	Unit
25	1 Tower 123	PASS							1.99	dB
26	2	PASS							2.03	dB
27	3	PASS							2.12	dB
28	4	PASS							2.06	dB
29	5	PASS							2.17	dB
30	6	PASS							2.26	dB
31	7	PASS							2.20	dB

Figure 15: Excel Report

In Figure 15, the test data that was in the Unformatted Data window has been exported to Excel. Comments can be added to the Comment column to further note parameters of each test if needed.

If desired, you can print and save the Excel data. To save, choose File/Save As on the Excel menu, then change the name of the file and assign file extension from ‘.xls’.

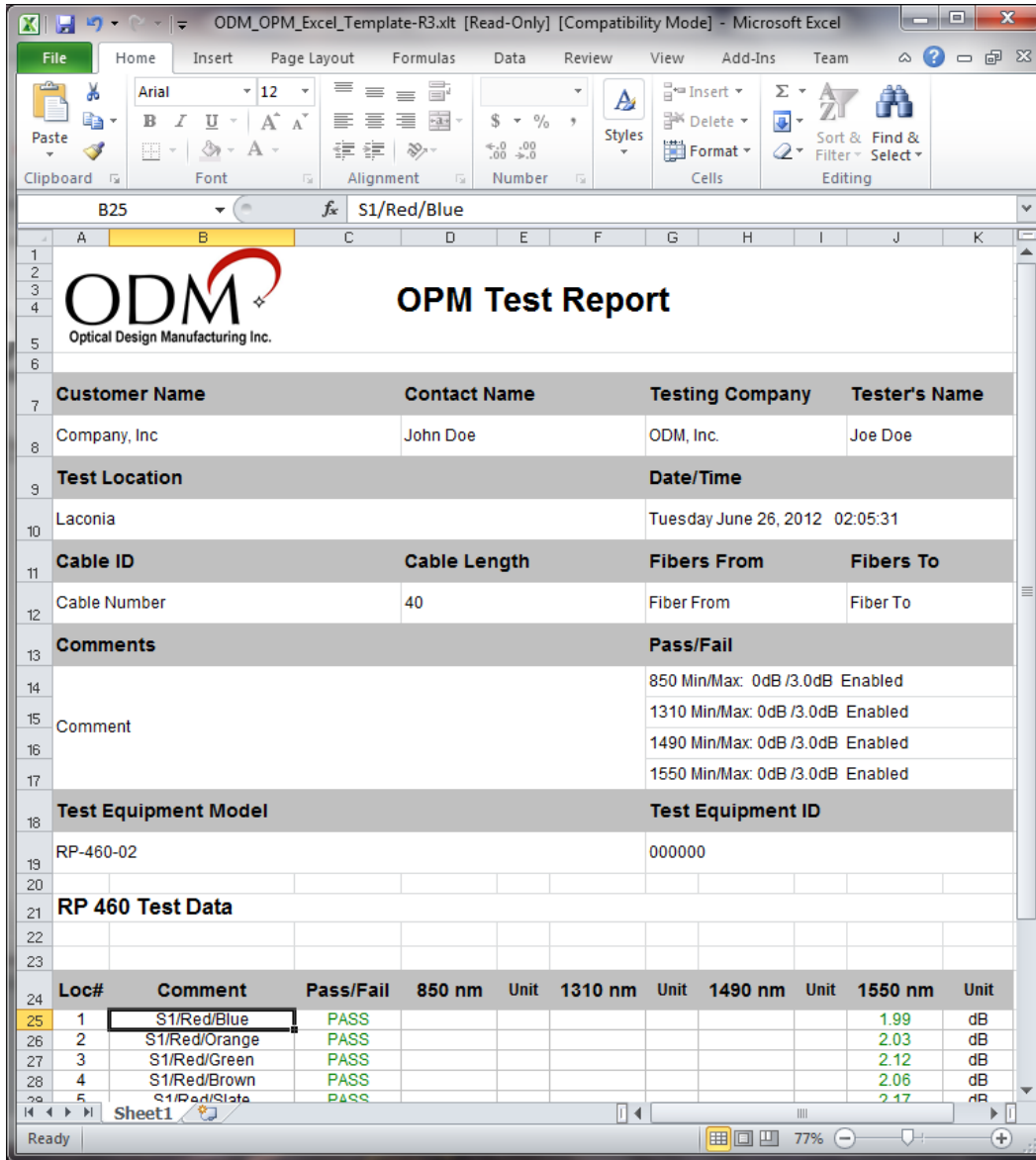


Figure 16: Excel Report with Cable Colors Enabled in Settings Window



OPM Test Report

Customer Name	Contact Name	Testing Company	Tester's Name
Company, Inc	John Doe	ODM, Inc.	Joe Doe
Test Location		Date/Time	
Laconia		Thursday June 28, 2012 09:54:42	
Cable ID	Cable Length	Fibers From	Fibers To
Cable Number	40	Fiber From	Fiber To
Comments		Pass/Fail	
Comment		850 Min/Max: 0dB /3.0dB Enabled	
		1310 Min/Max: 0dB /3.0dB Enabled	
		1490 Min/Max: 0dB /3.0dB Enabled	
		1550 Min/Max: 0dB /3.0dB Enabled	
Test Equipment Model		Test Equipment ID	
RP-460-02		000000	

RP 460 Test Data

Loc#	Comment	Pass/Fail	850 nm	Unit	1310 nm	Unit	1490 nm	Unit	1550 nm	Unit
1	S1/Red Bundle/Blue	PASS							1.99	dB
2	S1/Red Bundle/Orange	PASS							2.03	dB
3	S1/Red Bundle/Green	PASS							2.12	dB
4	S1/Red Bundle/Brown	PASS							2.06	dB
5	S1/Red Bundle/Slate	PASS							2.17	dB
6	S1/Black Bundle/Blue	PASS							2.26	dB
7	S1/Black Bundle/Orange	PASS							2.29	dB
8	S1/Black Bundle/Green	PASS							2.30	dB
9	S1/Black Bundle/Brown	PASS							2.38	dB
10	S1/Black Bundle/Slate	PASS							1.85	dB
11	S1/Blue Bundle/Blue	PASS							1.53	dB
12	S1/Blue Bundle/Orange	PASS							1.68	dB

Figure 17: Excel Printed Report

Report Viewer

Selecting View Report on the File Menu will generate a report using the data in the Unformatted Data window. From the Report Viewer, data can be printed or exported to Excel, PDF or Word.

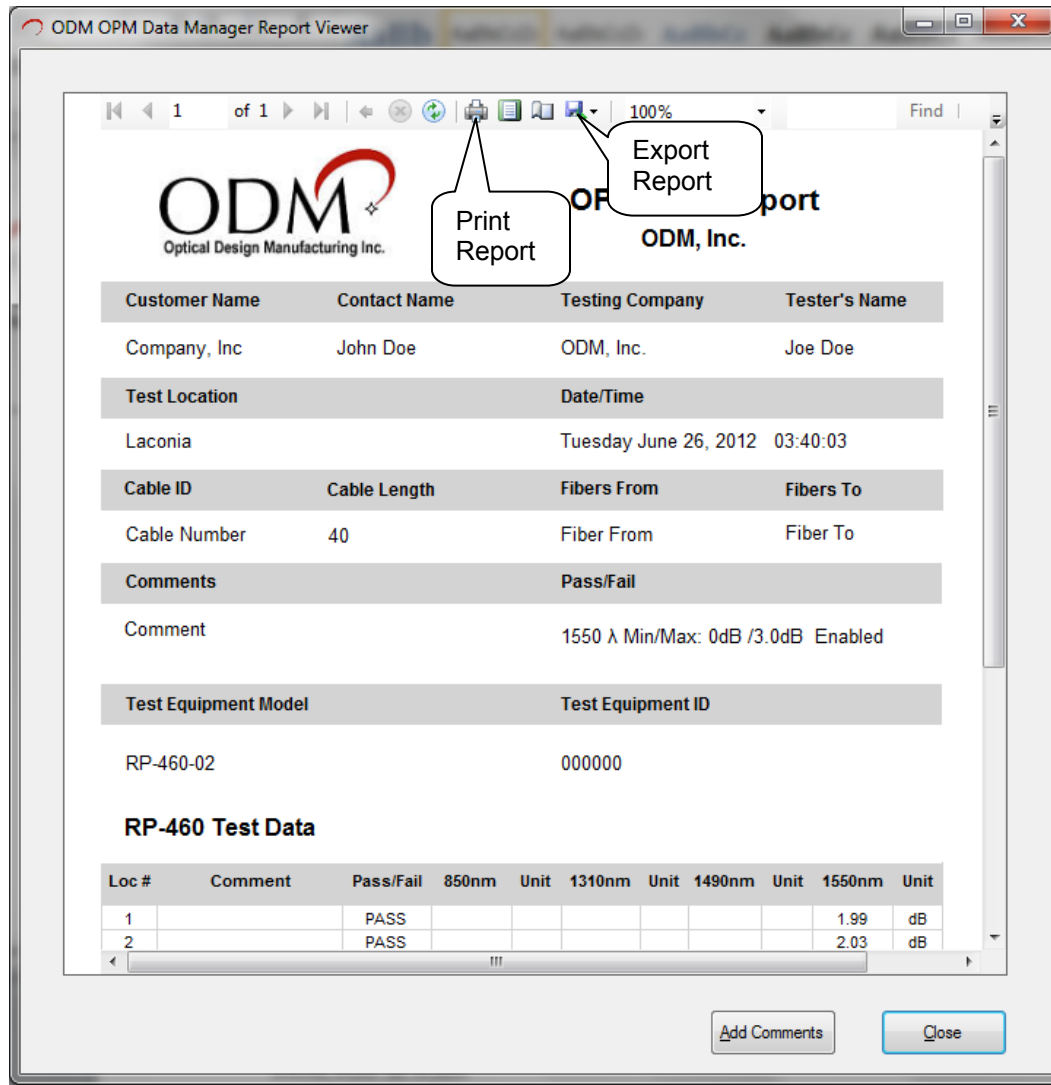


Figure 18: ODM OPM Report Viewer

In the Report Viewer test comments can be added to the report by clicking on the Add Comments button. A comment can be added to each test location to further identify the test data. See Figure 19 below.

ODM Report Viewer Add Comments

OPM Test Data

	TestEquipmentModel	TestEquipmentID	LocationNumber	TestComment	PassFailResults
/	RP-460-02	000000	1	Tower 123	PASS
	RP-460-02	000000	2		PASS
	RP-460-02	000000	3		PASS
	RP-460-02	000000	4		PASS
	RP-460-02	000000	5		PASS
	RP-460-02	000000	6		PASS
	RP-460-02	000000	7		PASS
	RP-460-02	000000	8		PASS
	RP-460-02	000000	9		PASS
	RP-460-02	000000	10		PASS
	RP-460-02	000000	11		PASS
	RP-460-02	000000	12		PASS

Save Close

Figure 19: ODM OPM Report Viewer Add Comments



OPM Test Report

ODM, Inc.

Customer Name	Contact Name	Testing Company	Tester's Name
Company, Inc	John Doe	ODM, Inc.	Joe Doe
Test Location		Date/Time	
Laconia		Thursday June 28, 2012 09:51:30	
Cable ID	Cable Length	Fibers From	Fibers To
Cable Number	40	Fiber From	Fiber To
Comments	Pass/Fail		
Comment	1550 λ Min/Max: 0dB /3.0dB Enabled		
Test Equipment Model	Test Equipment ID		
RP-460-02	000000		

RP-460 Test Data

Loc #	Comment	Pass/Fail	850nm	Unit	1310nm	Unit	1490nm	Unit	1550nm	Unit
1	S1/Red Bundle/Blue	PASS							1.99	dB
2	S1/Red Bundle/Orange	PASS							2.03	dB
3	S1/Red Bundle/Green	PASS							2.12	dB
4	S1/Red Bundle/Brown	PASS							2.06	dB
5	S1/Red Bundle/State	PASS							2.17	dB
6	S1/Black Bundle/Blue	PASS							2.26	dB
7	S1/Black Bundle/Orange	PASS							2.29	dB
8	S1/Black Bundle/Green	PASS							2.30	dB
9	S1/Black Bundle/Brown	PASS							2.38	dB
10	S1/Black Bundle/State	PASS							1.85	dB
11	S1/Blue Bundle/Blue	PASS							1.53	dB
12	S1/Blue Bundle/Orange	PASS							1.68	dB

Figure 20: Report Viewer Printed Report

Windows USB Port Drivers for the ODM RP-460

When the ODM RP-460 is plugged into the PC's USB port for the first time, Windows should locate the correct drivers. If Windows cannot find the correct USB port drivers, you can run the setup program located in folder FTDICHIP on the CD that shipped with your RP-460. If you don't have a CD you can download the driver setup program from <http://www.ftdichip.com/Drivers/VCP.htm>. See Figure 21 below.

Currently Supported VCP Drivers:

Operating System	Release Date	Processor Architecture							Comments
		x86 (32-bit)	x64 (64-bit)	PPC	ARM	MIPSII	MIPSIV	SH4	
Windows 8.1	2013-10-21	2.08.30 8.1	2.08.30 8.1	-	-	-	-	-	2.08.30 WHQL Certified for Win 8.1 Available as setup executable Release Notes
Windows*	2013-08-01	2.08.30	2.08.30	-	-	-	-	-	2.08.30 WHQL Certified Available as setup executable Release Notes
Linux	2009-05-14	1.5.0	1.5.0	-	-	-	-	-	All FTDI devices now supported in Ubuntu 11.10, kernel 3.0.0-19 Refer to TN-101 if you need a custom VCP VID/PID in Linux
Mac OS X	2012-08-10	2.2.18	2.2.18	2.2.18	-	-	-	-	Refer to TN-105 if you need a custom VCP VID/PID in MAC OS
Windows CE 4.2-5.2**	2012-01-06	1.1.0.10	-	-	1.1.0.14	1.1.0.10	1.1.0.10	1.1.0.10	
Windows CE 6.0	2012-01-06	1.1.0.10	-	-	1.1.0.14	1.1.0.10	1.1.0.10	1.1.0.10	

Figure 21: RP-460 FTDI Chip Driver Download

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