

SR

VIAVI

Smart Reporter

Getting Started



Managing measurement results of

- **SmartClassFiber** devices
- **SmartPocket** devices

Manual Version	Date	Based on SR-Version	Comment
V. 0.7	2018-05-09	V. 2.70	Preliminary (Author: Reinhard Beneken)
V. 1.0	2018-05-25	V. 2.70	Initial version (same author)
V. 1.1	2018-05-25	V. 2.70	Layout issues (same author)
V. 1.2	2018-05-28	V. 2.70	Some debugging (same author)
V. 1.3	2018-08-21	V. 2.80	Downloads are now running interactively. Supports “devices” on USB pen drives.
V. 1.4	2018-08-27	V. 2.82	New: “Sync”. New: “RC”, “Sync”, “Screenshot” dialogs aren’t modal (“blocking”) any more.
V. 1.5	2018-10-05	V. 2.90	Supports “devices” anywhere on disk
V. 2.98	2018-12-20	V. 2.98	Supports MPOLP-85 (preliminary).
V. 3.00	2019-04-30	V. 3.00	Supports MPOLP-85



Fig. 2: SmartReporter splash screen

Functions of the VIAVI SmartReporter

Scope:

- Supports all VIAVI (formerly: JDSU) **SmartClassFiber** and **SmartPocket** devices.

Reporting measurement results:

- Lists all supported devices that are connected via USB cable or via USB pen drive.
- Downloads measurement results from any displayed application of any listed device.
- Supports browsing, sorting and filtering (but not: editing) the measurement results.
- Exports measurement results as CSV (“Comma Separated Values”) file (→ “Excel”).
- Stores meta information (about the customer etc.) to include in reports.
- Creates customized reports as PDF or HTML files.

Miscellaneous:

- Offers various screenshot functionalities ..
 - .. for classroom purposes.
 - .. for long-time logging of measurement results.
- Offers loss-less storing and recalling of all downloaded measurement results.
- Offers a RC window to enable a “SCPI communication” with the connected device.
- Offers to synchronize the connected device’s clock with the PC’s system clock.

Installing the VIAVI SmartReporter

including the necessary drivers



Before connecting any SmartClassFiber or SmartPocket device to your PC you have to make sure that all the necessary drivers are installed.

On Microsoft Windows, start the "SmartReporter_xx.yy_Setup.msi" installation file, and proceed according to the instructions of the SmartReporter Setup wizard.

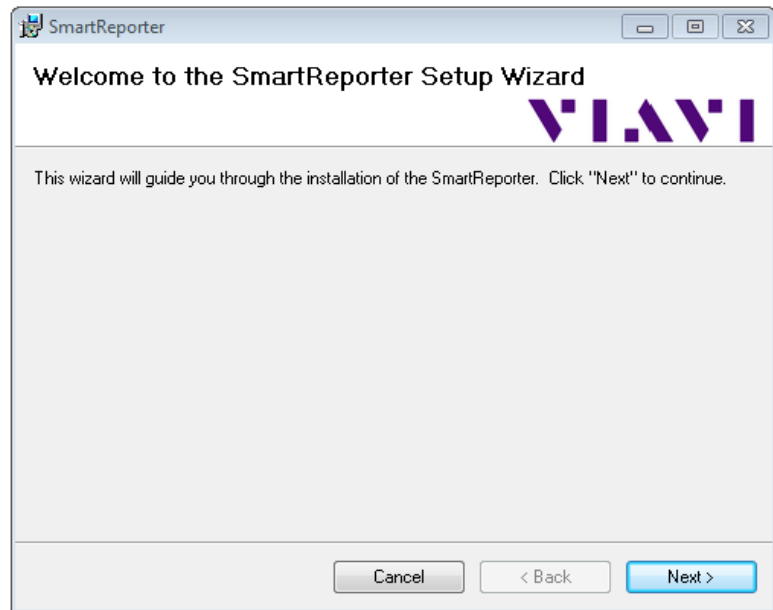


Fig. 3: SmartReporter Setup wizard



Fig. 4: Start menu entry



Fig. 5: Desktop shortcut

The installation setup software proposes

"C:\Program Files (x86)\ViaviSolutions\SmartReporter\" as installation directory and copies all necessary files into the selected directory.

It will also create a folder "SmartReporter" within the start menu and a shortcut on the desktop.

Finally, all drivers needed for

- OLx-3y (**SmartPocket** devices)
- OLx-5y (**SmartClass** devices)
- OLx-8y (**SmartClassFiber** devices)

will be installed.

Connecting devices

After completing the setup, connect any number of SmartClassFiber and / or SmartPocket device(s) to an available USB port of your computer, using a USB-A to Micro-USB-B cable for each device.

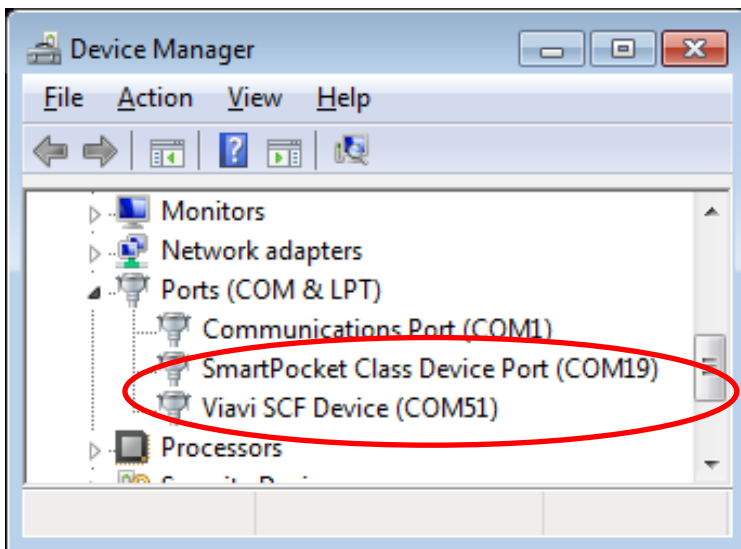
Make sure the devices have completed their boot process before connecting them.



Fig. 6: Connecting the device to a computer.

Note:

Connecting a device for the first time, your system will detect the new hardware and complete the driver installation. This may take several seconds or even minutes.



To be sure that the drivers are working properly, you may check the assigned COM-Port of the SmartPocket device or the SmartClass Fiber device within the Device Manager located inside the Control Panel of Microsoft Windows (e.g. "COM19" or "COM51") as shown.

The installation is completed now.

Fig. 7: Microsoft Windows device manager

First steps



After starting the SmartReporter and having waited for the splash screen to disappear the SmartReporter HomeScreen will show up.

For the moment, just ignore both rows of application buttons. They are needed to later recall any measurement results downloaded and stored before.

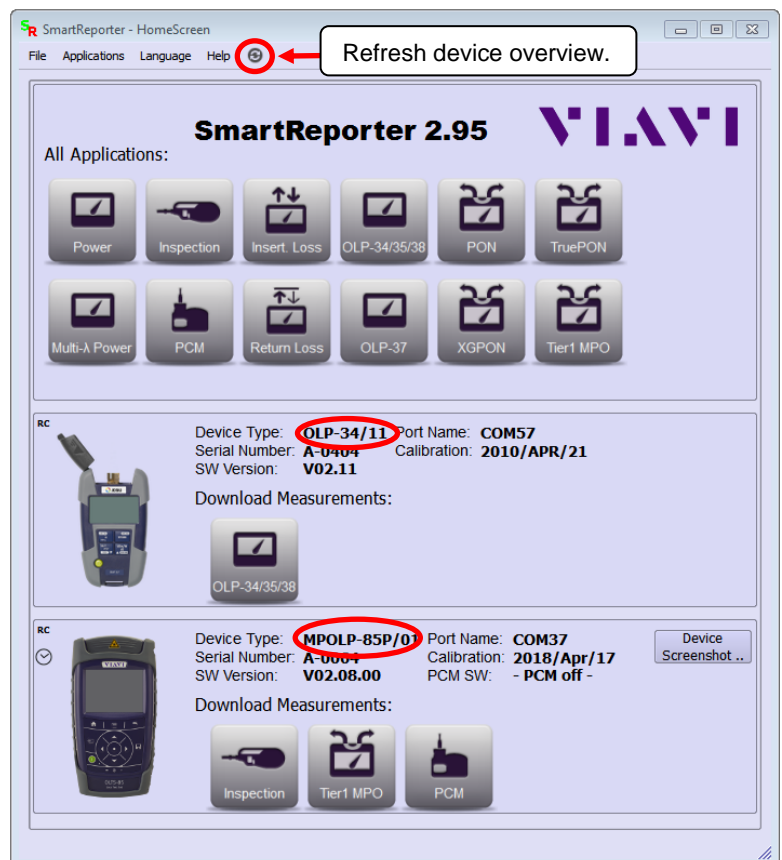
Fig. 8: HomeScreen (no devices connected)

If you haven't done it already, please connect one or more SmartPocket or SmartClassFiber devices via USB cable to your PC.

SmartReporter will automatically detect them and provide an interface area for each device.

Fig. 9: HomeScreen with 2 devices

- OLP-34
- MPOLP-85P connected to your PC.



The device interface area

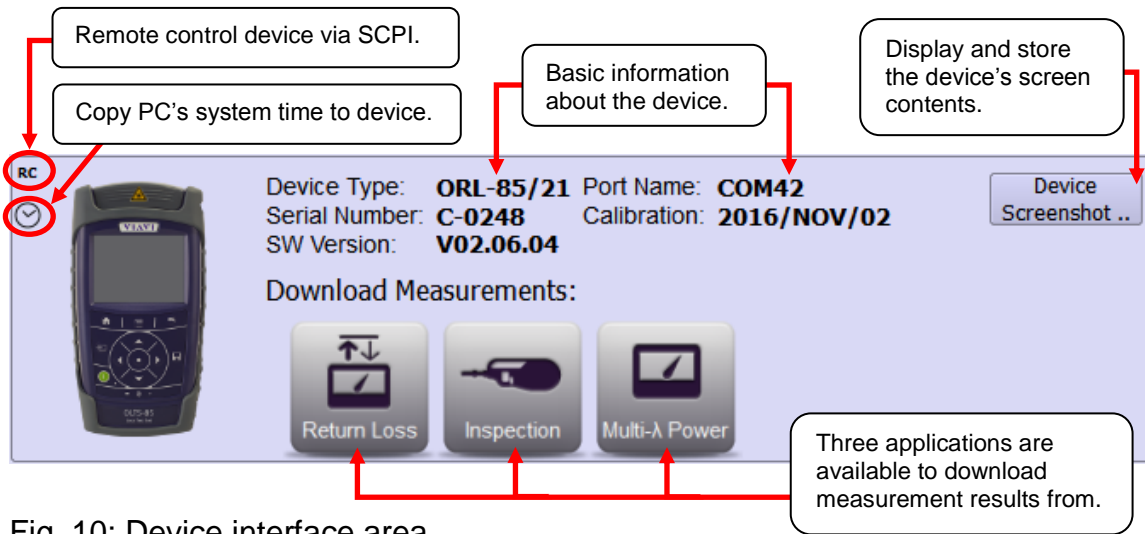


Fig. 10: Device interface area

The “**Device Screenshot**” feature *) moves a copy of the device’s current screen to your PC display (and maybe a beamer) to enable or improve

- classroom situations.
- logging tasks.
- long term monitoring.

Device screenshots can be

- displayed 100 / 200 / 300 % of its original size (“Zoom”).
- manually triggered (“Reload”) or saved as *.png (“Save”).
- automatically triggered (“Live”) or saved as *.png following user defined rules (“Options..”).

*) **Not supported by SmartPocket devices (“OLx-3y”)**

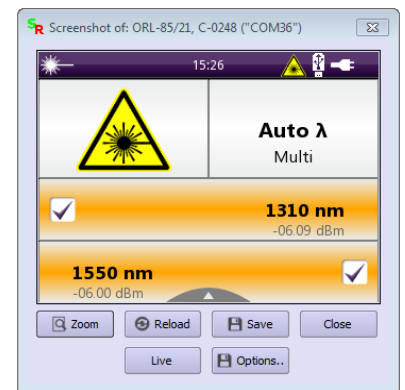


Fig. 11: Screenshot window

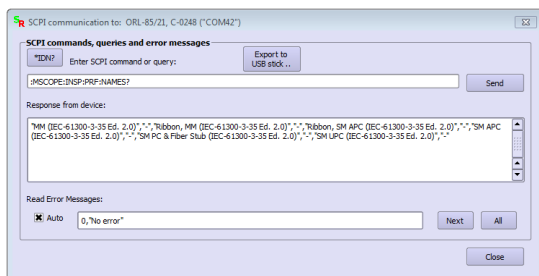


Fig. 12: Remote control (“RC”) window

The “**Remote Control**” feature (“RC”) establishes a SCPI session to talk with the connected device.

You might

- use the “*IDN?” button to check the connection.
- send any SCPI command or query and read any response from the device.
- monitor the device’s error queue.

Importing from USB pen drive or from disk



In some cases you might want to use an USB pen drive as an intermediate memory for downloading:

Fig. 13:
Downloading via USB pen drive

Reasons:

- Minimize the risk of data loss by regularly creating backups.
- Provide preliminary reports to your customer.
- Avoid carrying your SCF device(s) physically to the report creation site.
- Speed up downloading of huge amount of measurement results.

Import: How to read the backup:

- Connect the USB pen drive to your PC. The device interface area(s) appear(s).
or use “File” → “Open device..” to select a device directory from disk.
- In case of multiple backup timestamps, select one of them before downloading results.

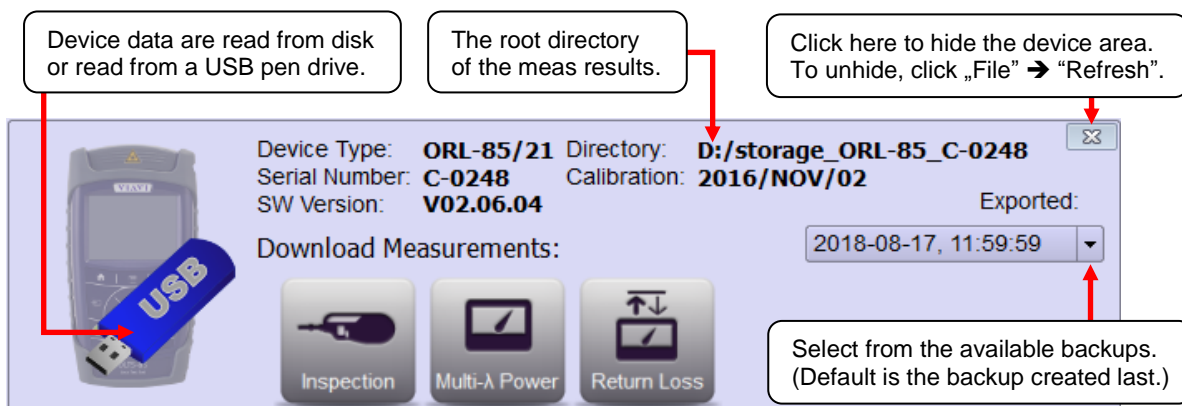


Fig. 14: Device interface area of an “imported” device

Performance: For huge amounts of data (like hundreds of PCM or MSCOPE results) the export plus import procedure is around 2 to 3 times faster than the direct download using a USB cable.

Flexibility: The Smart Reporter identifies the backups by device type, serial number and the date/time of creation. Therefore you can use a single USB pen drive to export any number of backups from any number of SCF devices.

Excursus: Creating a SCF backup (“export”)

Fig. 15:
The management home screen
of a SCF device



Export: How to create the SCF backup:

Step 1: Bring up the device’s management home screen.

Step 2: Insert any USB pen drive in either one of the device’s USB connectors.

Step 3: **SCF Software V02.06.x
and before:**

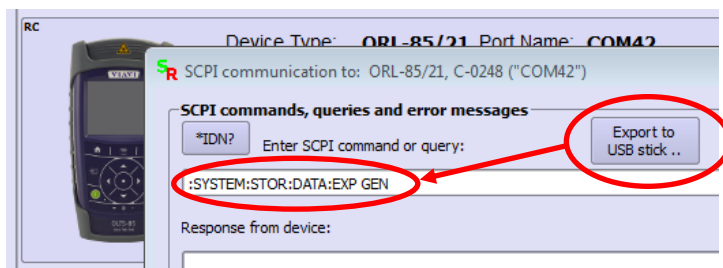


Fig. 16

Use the SmartReporter (or any other RC interface) to send “:SYSTEM:STOR:DATA:EXP GEN”

**SCF Software V02.08.x
and later:**

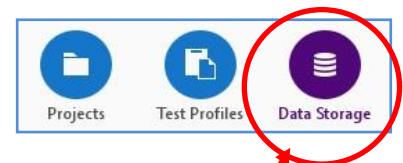


Fig. 17

Select “Data Storage”, then select
“Export Results to USB
CSV and Memory Image.”.

Step 4: A user message displayed in the SCF management home screen will reflect the begin and the end of the result export.

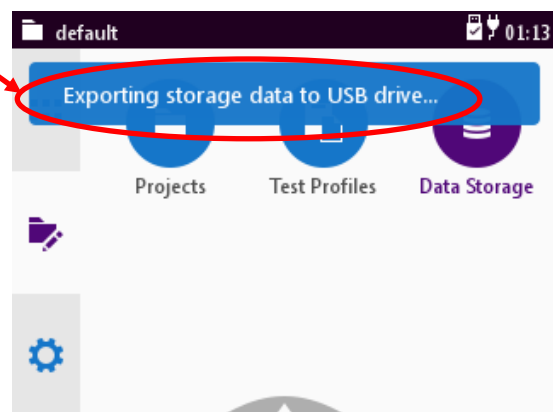


Fig. 18:
Result export in progress.

Application windows: Common properties

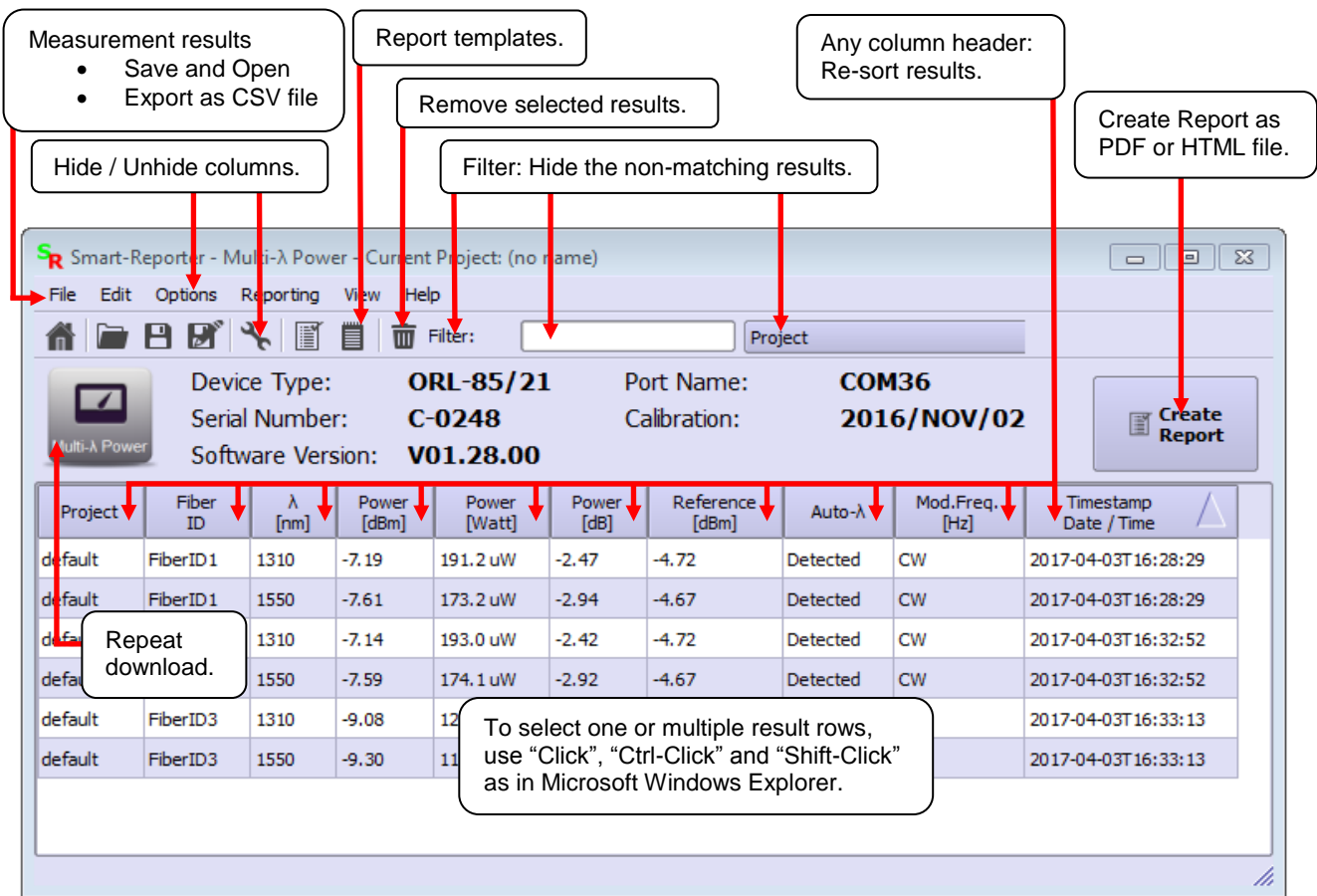


Fig. 19: The application window for the “Multi-λ-Power” application

After downloading start, an application window will pop up automatically displaying the application’s measurement results in a table.

As indicated in figure 19, you can now ..

- .. re-sort the results according to any column’s contents.
- .. hide any non-relevant column.
- .. filter out any non-matching measurement result.
- .. delete any non-relevant measurement result.

As soon as the table fits your needs, you can ..

- .. create a copy of the current table for spread sheet use (like Microsoft Excel).
- .. create a copy of all download data for database storage.
- .. create a report for your customer.

Application windows: Context menu

Project	Fiber ID	λ [nm]	Power [dBm]	Power [Watt]	Power [dB]	Reference [dBm]	Auto- λ	Mod.Fr [Hz]
default	FiberID1	1310	-7.19	191.2 uW	-2.47	-4.72	Detected	CW
default	FiberID1	1550	-7.61	173.2 uW	-2.04	-4.67	Detected	CW
default	FiberID2	1310	-9.08	123.5 uW	-4.36	-4.72	Detected	CW
default	FiberID2	1550	-9.30	117.5 uW	-4.63	-4.67	Detected	CW
default	FiberID3	1310	-9.08	123.5 uW	-4.36	-4.72	Detected	CW
default	FiberID3	1550	-9.30	117.5 uW	-4.63	-4.67	Detected	CW

Fig. 20:
Right-click anywhere into the measurement result table to open the context menu.

Edit Fiber IDs:

The entries in the “Fiber ID” column can be edited by the user. To edit multiple Fiber IDs in a single step use the “Find and replace” mechanism.

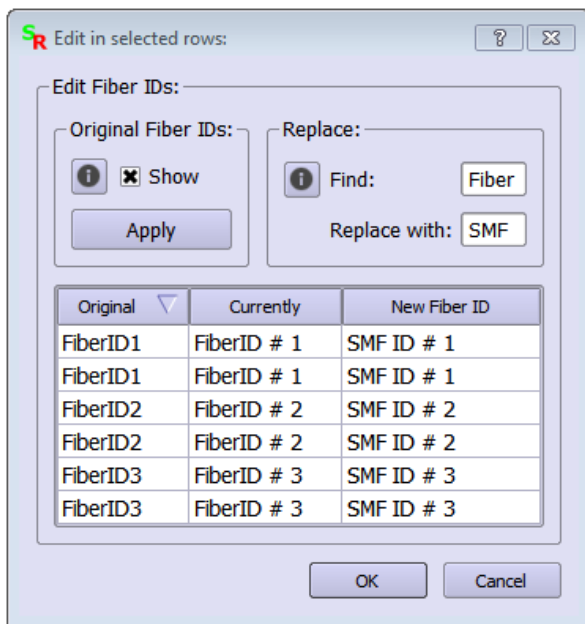
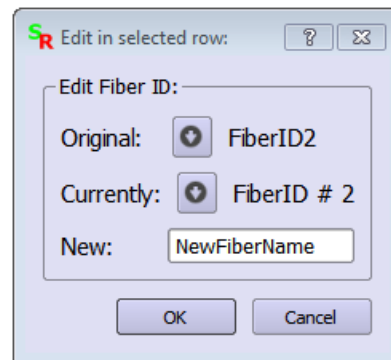


Fig. 21: Edit all selected Fiber IDs.

Fig. 22: Edit a single Fiber ID.



Note: The original Fiber IDs as read from the instrument are always kept available to provide a fallback position and to discourage from misuse.

Show/Hide consecutive numbers:

Consecutive numbers are fixed numbers automatically assigned by the SCF instrument to distinguish between measurement results that are given identical Fiber IDs by the user.

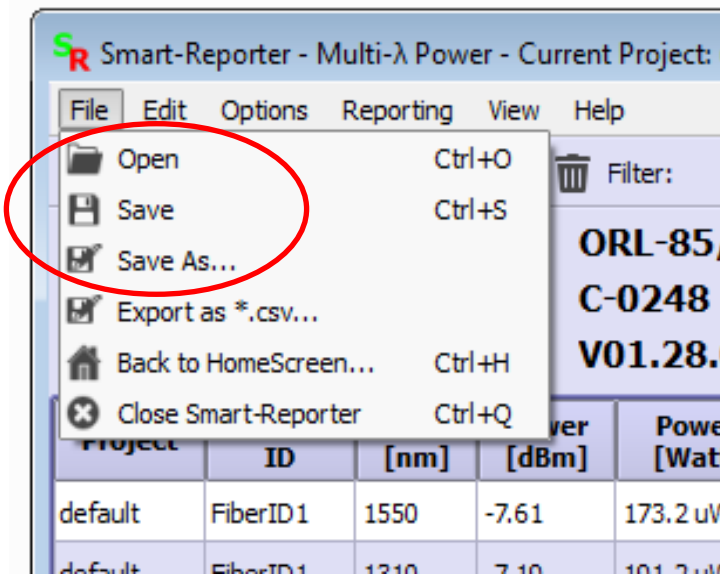
Project	Fiber ID	λ [nm]
default	FiberID1 (1)	1310
default	FiberID1 (2)	1550
default	FiberID1 (1)	1310
default	FiberID1 (2)	1550
default	FiberID3 (1)	1310
default	FiberID3 (2)	1550

Fig. 23
Consecutive numbers shown.

Fig. 24:
Consecutive numbers hidden.

Project	Fiber ID	λ [nm]
default	FiberID1	1310
default	FiberID1	1550
default	FiberID2	1310
default	FiberID2	1550
default	FiberID3	1310
default	FiberID3	1550

Storing and recalling the measurement results



As usual,

- “Save”,
- “Save As..” and
- “Open”

is used for storing downloaded measurement results and recalling them within the SmartReporter.

Fig. 25:
“Open / Save / Save As...”

Notes:

- Any “Save” or “Save As ..” will create a *.project file containing some device information and also a project directory of the same name:

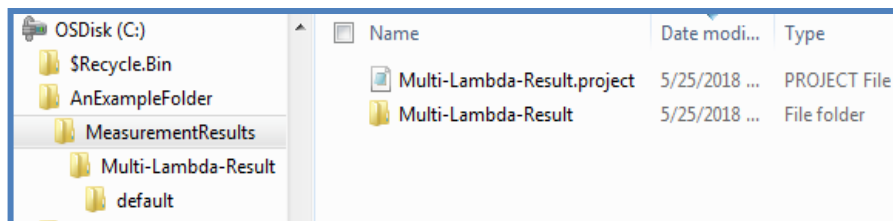


Fig. 26:
Clip from
Windows
Explorer

The subdirectories (like “default”) of the project directory are filled with files containing the single measurement results.

- The images related to the “Inspection” and “PCM” application are stored as VGA (640 x 480 pixel) sized *.jpg files.

Recalling:

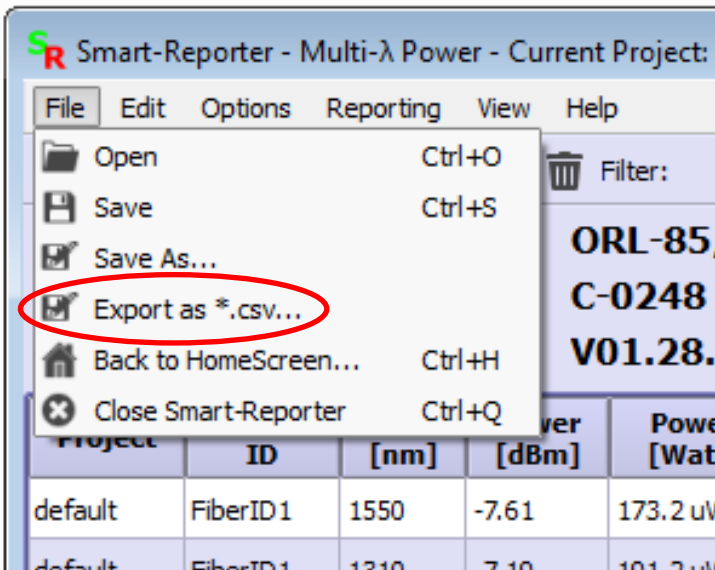
To recall the results, select “File” → “Open” from the application window, then select and open the *.project file.

If no device is connected to the SmartReporter, you can open any of the applications windows by tapping the respective button on the home screen.



Fig. 27: HomeScreen application buttons

Exporting the measurement results



Select

“File” → “Export as *.csv ...”

if you want to export the measurement results as a “comma separated values” file.

There are two reasons you might want to create a *.csv file:

Fig. 28: “Export as *.csv...”

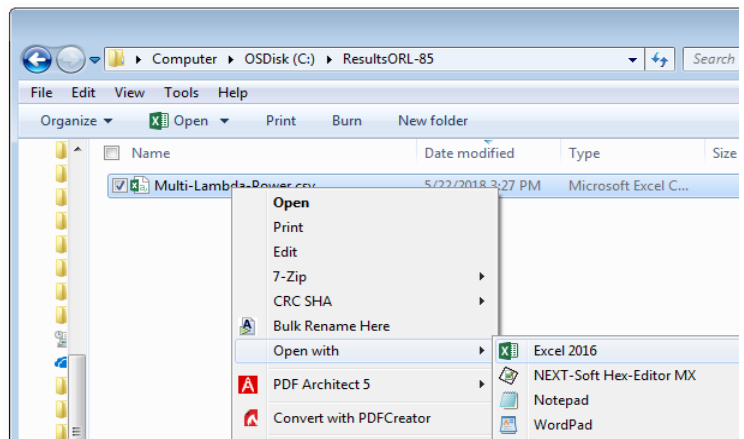
Reason 1: “Copy of current table”:


You want to create a copy of the current table for spread sheet use (like Microsoft Excel).

Only the rows and columns presently displayed are transferred.

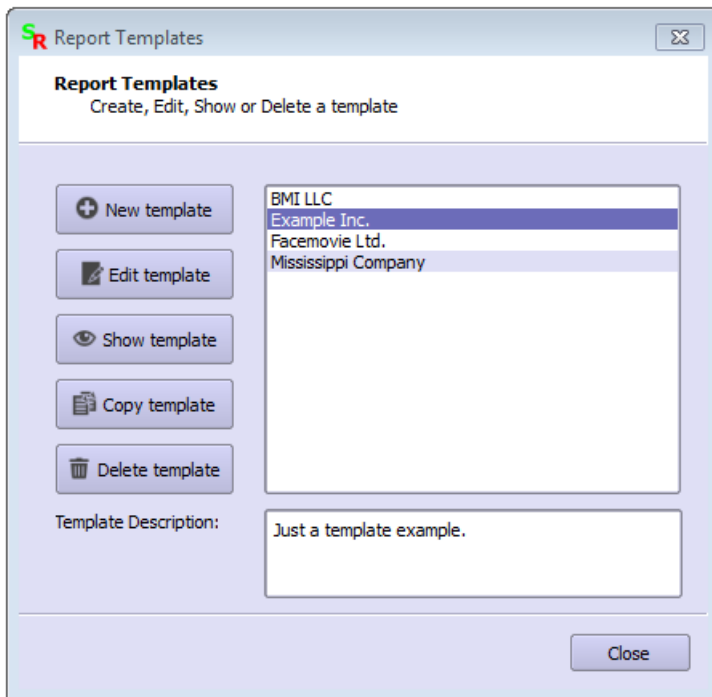
Fig. 29:

You can open the *.csv file directly with Microsoft Excel.



 <p>Fig. 30: A database symbol</p>	<h2>Reason 2: “Copy of download data”:</h2> <p>You want to store all downloaded measurement results into a *.csv file to feed a database designed to meet your own requirements.</p> <table border="0"> <tr> <td style="vertical-align: top;"> <p>Included:</p> <ul style="list-style-type: none"> • Hidden columns • Results filtered out </td> <td style="vertical-align: top;"> <p>Not included:</p> <ul style="list-style-type: none"> • Results deleted </td> </tr> </table> <p>Notes:</p> <ul style="list-style-type: none"> • Each value has an associated description placed before. • From within SCF instruments select “Data Storage” → “Export Results to USB” to create *.csv files using the same format. • If present, images can be stored optionally. 	<p>Included:</p> <ul style="list-style-type: none"> • Hidden columns • Results filtered out 	<p>Not included:</p> <ul style="list-style-type: none"> • Results deleted
<p>Included:</p> <ul style="list-style-type: none"> • Hidden columns • Results filtered out 	<p>Not included:</p> <ul style="list-style-type: none"> • Results deleted 		

Creating a template (a report header) and a report



Templates contain information about the technician, the contractor and / or the customer associated with a report.

To create a new template or edit an existing one, select

“Reporting” → “Report Templates” from the application window.

Note: Unused (empty) fields will not be inserted into the report.

Fig. 31: “Report Templates” dialog

To finally create a Report, first click on the “Create Report” button to open a dialog for customizing the report:

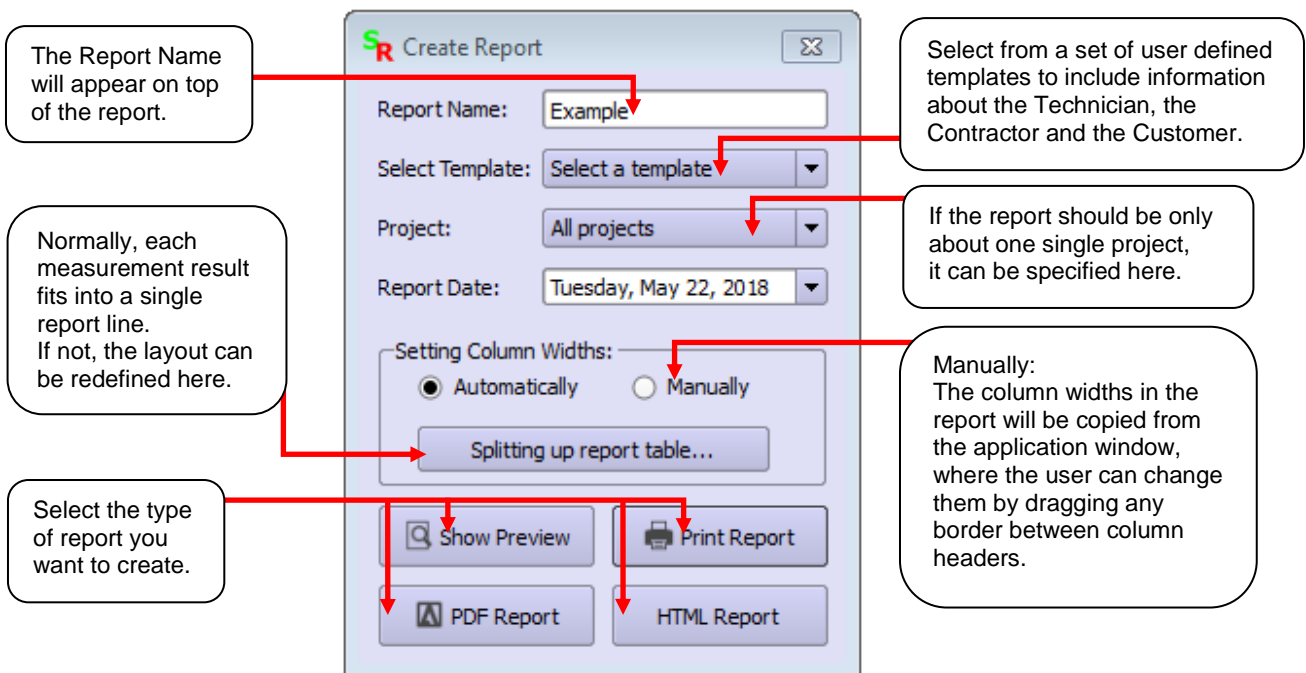


Fig. 32: “Create Report” dialog

Multi-λ Power Report - Example

Technician Information

Company Name: Technician AG
 Technician Name: Mr. Technican
 Address: Techniciansstreet 12
 Postal Code: 72770
 City: Reutlingen
 State: Baden-Württemberg
 Country: Germany
 Phone: 0163438574
 Email: technician@office.com



Contractor Information

Company Name: Contractor AG
 Contact Person: Mr. Contractor
 Address: Contractorstreet 10
 Postal Code: 66638
 City: Reutlingen
 State: Baden-Württemberg
 Country: Germany
 Phone: 9388847776
 Email: contractor@office.de



Customer Information

Company Name: Customer AG
 Contact Person: Mr. Customer
 Address: Customerstreet 32
 Postal Code: 98327
 City: Reutlingen
 State: Baden-Württemberg
 Country: Germany
 Phone: 928387363
 Email: customer@office.de



	Device Type:	ORL-85/21	Calibration Date:	2016/NOV/02
	Serial Number:	C-0248	Software Version:	V01.28.00

Measurement results

Fiber ID	λ [nm]	Power [dBm]	Power [Watt]	Power [dB]	Project: default			
					Reference [dBm]	Auto-λ	Mod.Freq. [Hz]	Timestamp Date / Time
FiberID1	1550	-7.61	173.2 uW	-2.94	-4.67	Detected	CW	2017-04-03T16:28:29
FiberID1	1310	-7.19	191.2 uW	-2.92	-4.72	Detected	CW	2017-04-03T16:28:29
FiberID2	1550	-7.59	174.1 uW	-2.42	-4.67	Detected	CW	2017-04-03T16:32:52
FiberID2	1310	-7.14	193.0 uW	-2.42	-4.67	Detected	CW	2017-04-03T16:32:52
FiberID3	1550	-9.30	117.5 uW	-4.63	-4.72	Detected	CW	2017-04-03T16:33:13
FiberID3	1310	-9.08	123.5 uW	-4.36	-4.72	Detected	CW	2017-04-03T16:33:13

Fig. 33: Printed Report "Example"

Inspection / PCM: Additional features

Smart-Reporter - Inspection - Current Project (no name)

File Edit Options Reporting View Help

Filter: [] Project []

Device Type: **ORL-85/21** Port Name: **COM37**
 Serial Number: **C-0248** Calibration: **2016/NOV/02**
 Software Version: **V01.28.00**

Create Report

Fiber ID	Mode	Profile Name	Inspection Tip	PASS FAIL	A	B	C	D	Tim Dat
FiberID1	Snapshot	MM (IEC-61300...	Standard Tips ...	--	--	--	--	--	2017-
FiberID1	Test	SM PC & Fiber S...	Standard Tips ...	✓	✓	✓	✓	✓	2018-
FiberID2	Snapshot	SM PC & Fiber S...	Standard Tips ...	--	--	--	--	--	2018-
FiberID2	Test	SM PC & Fiber S...	Standard Tips ...	✗	✗	✓	✓	✓	2018-
FiberID3	Test	SM PC & Fiber S...	Standard Tips ...	✓	✓	✓	✓	✓	2018-

Measurement Information

Project: default
 FiberID: FiberID2
 Mode: Test
 Profile name: ub (IEC-61300-3-35 Ed. 2
 Inspection tip: Standard Tips (with BAP1
 Timestamp: 2018-05-23T17:04:42
 Note: **

Inspection Pass/Fail

PASS/FAIL: ✗
 Zone A: ✗
 Zone B: ✓
 Zone C: ✓
 Zone D: ✓
 Zone E: --
 Zone F: --

Low Magnification Low Magnification (overlay)
 High Magnification High Magnification (overlay)

Each Inspection or PCM result contains up to 4 images.

Show details of the selected result (larger images etc.) in a special window.

The „Create Report“ dialog offers several options about how to include the images into the report.

All details of the selected result, even if the matching columns in the table are hidden.

Fig. 34: Application window “Inspection”

TruePON (OLP-88): Additional features

Smart-Reporter - TruePON - Current Project: (no name)

File Edit Options Reporting Thresholds View Help

Device Type: **OLP-88/36** Port Name: **COM36**
 Serial Number: **A-0056** Calibration: **2016/Mar/10**
 Software Version: **V02.03.00.8761**

Project	Fiber ID	PASS FAIL	Timestamp Date / Time	ODN Class	Location	U/S 1310 nm Power [dBm]	U/S Graphics	D/S 1490 nm Power [dBm]	Gr
default	FiberID1 (2)	FAIL	2016-03-16T09:30:44	B+	ONU	-54.52		-25.20	
default	FiberID1 (3)	PASS	2016-03-16T09:31:09	B+	ONU	2.66		-25.21	
default	FiberID1 (4)	FAIL	2016-03-16T09:31:18	B+	ONU	-37.91		-25.20	
default	FiberID1 (5)	FAIL	2016-03-16T09:31:30	B+	OLT	2.59		-25.21	
default	FiberID1 (6)	FAIL	2016-03-16T09:31:40	N/A (Auto)	OLT	2.63		-25.20	
default	FiberID1 (7)	FAIL	2016-03-16T09:31:47	C	OLT	2.63		-25.20	
default	FiberID1 (8)	PASS	2016-03-16T09:32:26	C	ONU	2.62		-25.20	

default
 First meas: 2016-03-16 09:30:44 Duration:
 Last meas: 2016-03-16 09:32:26 0:01:42
 PASS: 2 FAIL: 5 else: 0 Sum: 7

FiberID1 (4)
General:
 Date / Time: 2016-03-16 09:31:18 **FAIL**
 Location: ONU ODN Class: B+

Contributing to PASS / FAIL:
 U/S 1310 nm OLT Type
 D/S 1490 nm IL 1490 nm ONU Type
 Video 1550 nm ONU State

Power / IL:

	U/S 1310 nm	D/S 1490 nm	Video 1550 nm	ODN IL 1490 nm
Upper Thrsh.	5.0	-8.0	5.0	28.0
Margin	42.91	17.20	19.05	--
Pow. / IL	-37.91	-25.20	-14.05	--
Margin	-38.41	1.80	-6.05	--
Lower Thrsh.	0.5	-27.0	-8.0	13.0

OLT:
 OLT Type: G-PON
 PON-ID: --
 TX Opt. Level: -- dBm
 TX Type: --
 ODN Class (det.): --

ONU / ONT:
 ONU State: G-PON
 ONU Type: --
 ONU Ser. Num.: 41 4C 43 4C F8 A8 0D AD
 ONU ID: --
 Activation Type: --

<< previous 3 / 7 next >>

Annotations:

- Almost 50 columns: Hide / Show them individually or in groups or select from one of the predefined patterns.
- Project "Pass / Fail" overview relating to the selected result.
- The position within the passing range is also shown graphically to enable a fast visible check (not included in the final report).
- As shown on the OLP-88 screen: All details of the selected result, even if the matching columns in the table are hidden.
- All values are colored red, green or neutral depending on how they contribute to the overall result.

Fig. 35: Application window "TruePON"

Tier1 MPO (MPOLP-85): Additional features (1)

Note: Column selection is disabled.

Project "Pass / Fail" overview relating to the selected result.

After an optional preview, send report to printer or create a PDF or HTML file.

SmartReporter - Tier1 MPO - Current Project: TestData_MPOLP-85

File Edit Options Reporting Thresholds View Help

Filter: Project

Device Type: **MPOLP-85P/01** Port Name: **COM37**
 Serial Number: **A-0064** Calibration:
 Software Version: **V02.08.00**

Table:

Project	Fiber ID	PASS FAIL	Timestamp Date / Time	Polarity	Length Limit	Length	Length Margin	Limit Name
default-2	SMPolB1 (1)	FAIL	2018-08-07T14:12:33	B	10000 m	4.10 m	9995.90 m	Link Valid
default-2	SMPolC3cord1 (1)	FAIL	2018-08-07T14:26:27	C	10000 m	4.00 m	9996.00 m	Link Valid
default	FiberID1 (1)	FAIL	2018-12-19T13:51:24	B	37.6 ft	-- ft	-- ft	Link Valid
default	FiberID1 (5)	PASS	2018-06-29T14:44:57	A	10000 m	0.00 m	10000.00 m	Link Valid
default	FiberID2 (1)	PASS	2018-10-31T10:03:44	A	10000.1 m	0.10 m	10000.00 m	Link Valid
default	polA1 (1)	PASS	2018-08-06T14:28:59	A	0 m	0.00 m	0.00 m	Link Valid
default	polC1 (1)	FAIL	2018-08-06T14:24:29	C	0 m	0.00 m	0.00 m	Link Valid

Info: First meas: 2018-06-29 14:44:57 Duration: 173 days
 Last meas: 2018-12-19 13:51:24
 PASS: 3 FAIL: 2 else: 0 Sum: 5

FiberID1 (1)

Info: Date / Time: 2018-12-19 13:51:24 **FAIL**
 Source: MPOLP-85P A-0072 V02.07.00.9452 2018/Jun/05

Test Configuration: RB Test Pol C 1-cord
 Description: Created on 11/07/2018
 Fiber Type: Single-Mode (SMF) Test Reference Method: 1-cord
 Pass/Fail Fiber Selection: 1,2,3,4,5,6,7,8,9,10,11,-

Cable & Connectors:
 Cable Name: OS2 Refractive Index: 1.493
 Manufacturer: Generic MPO SMF Connector Type: MTP/MPO-12

Polarity / Length / Reference:
 Polarity: B Expected: C
 Length: -- ft Limit: 37.6 ft

Reference: 2018-12-19 13:46:54

1310 nm max. Loss: 1.9 dB 1550 nm max. Loss: 1.9 dB

Fiber	Loss [dB]	Margin [dB]	Refer. [dBm]	Fiber	Loss [dB]	Margin [dB]	Refer. [dBm]
1	0.00	1.90	-14.14	1	0.02	2.08	-12.68
2	0.01	1.89	-13.52	2	0.03	2.07	-12.18
3	0.00	1.90	-13.19	3	0.12	1.98	-12.71
4	0.07	1.83	-13.20	4	0.05	2.05	-12.71
5	0.00	1.90	-13.67	5	0.00	2.10	-13.03
6	0.00	1.90	-13.58	6	-0.59	2.69	-13.09
7	0.00	1.90	-13.78	7	0.00	2.10	-12.82
8	7.86	-5.96	-13.29	8	6.46	-4.36	-12.12
9	0.31	1.59	-13.02	9	0.08	2.02	-12.19
10	0.32	1.58	-13.29	10	0.00	2.10	-12.77
11	0.30	1.60	-13.58	11	0.29	1.81	-12.37
12	0.10	1.80	-13.65	12	0.47	1.63	-12.77

All values are colored red, green or neutral depending on how they contribute to the overall result.

Display the details of the corresponding reference measurement (Fig. 32).

Position the cursor to read the icon's meaning.

The position within the passing range is also shown graphically to enable a fast visible check. Hint: Touching the left edge means "too dark".

As shown on the MPOLP-85 screen: All details of the selected result. Click on "Details .." button for details of the matching reference values.

Fig. 36: Application window "Tier1 MPO"

Tier1 MPO (MPOLP-85): Additional features (2)

Dock / undock this window.
If undocked, it can be moved and resized.

Reference details

FiberID1 (1)

Date: **2018-12-19** Time: **13:46:54**

Method: **1-cord** Source Ser. Num.: **A-0072**

Polarity: **B** Delay: **2698 ns**

TRC-1 connector front faces:

MPOLP

1 2 3 4 5 6 7 8 9 10 11 12

TRC-1 connector front face at MPOLP side

Max. allowed difference: **1.00 dB** to **maximal** power.

1310 nm				1550 nm			
Max. Power: -13.02 dBm				Max. Power: -12.12 dBm			
	Fiber	Diff. [dB]	Power [dBm]		Fiber	Diff. [dB]	Power [dBm]
1	1	1.13	-14.14	1	1	0.56	-12.68
2	2	0.51	-13.52	2	2	0.06	-12.18
3	3	0.18	-13.19	3	3	0.59	-12.71
4	4	0.19	-13.20	4	4	0.59	-12.71
5	5	0.66	-13.67	5	5	0.91	-13.03
6	6	0.56	-13.58	6	6	0.97	-13.09
7	7	0.76	-13.78	7	7	0.70	-12.82
8	8	0.28	-13.29	8	8	0.00	-12.12
9	9	0.00	-13.02	9	9	0.07	-12.19
10	10	0.28	-13.29	10	10	0.05	-12.17
11	11	0.56	-13.58	11	11	0.25	-12.37
12	12	0.64	-13.65	12	12	0.66	-12.77

See the reference results mapped to either one of the connector front faces (Identical only on Polarity "A").

All values are colored **green, yellow** or **neutral** depending on how they contribute to the overall result.

Description of the passing range.

The position within the passing range is also shown graphically to enable a fast visible check.
Hint: Touching the left edge means "too dark".

Fig. 37: Corresponding reference measurement details of selected result.

Tier1 MPO (MPOLP-85): Additional features (3)

FAIL

Tier 1 Fiber Certification Report

Project: Microsoft SM
Cable Label: FiberID1 (1)
Cable Name: OS2
Manufacturer: Generic MPO SMF

Date/Time: 2018-12-19T13:51:24
Limit: Link Validation
Cable Type: Single-Mode (SMF)
Operator Name: John Smith, Data Corp.
Calibration Date: 2018/Apr/17
Remote Calibration Date: 2018/Jun/05

MPOLP Ser. No.: A-0064
MPOLS Ser. No.: A-0072
Device Name: MPOLP-85P/01
Device Software: V02.08.00
Connector Name: MTP/MPO-12

Length:	-- ft	Polarity:	B
Length Limit:	37.6 ft	Expected Polarity:	C
Propagation Delay:	-- ns	Polarity Result:	FAIL
Refraction Index:	1.493		
Reference Scheme:	1-cord		

Wavelength:	1310 nm
Limit (dB):	1.9 dB

Fiber#	Fiber 1	Fiber 2	Fiber 3	Fiber 4	Fiber 5	Fiber 6	Fiber 7	Fiber 8	Fiber 9	Fiber 10	Fiber 11	Fiber 12
Considered for PIF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Result	PASS	PASS	PASS	PASS	PASS	PASS	PASS	FAIL	PASS	PASS	PASS	×
Loss (dB)	0.00	0.01	0.00	0.07	0.00	0.00	0.00	7.86	0.31	0.32	0.30	0.10
Margin (dB)	1.90	1.89	1.90	1.83	1.90	1.90	1.90	-5.96	1.59	1.58	1.60	1.80
Reference (dBm)	-14.14	-13.52	-13.19	-13.20	-13.67	-13.58	-13.78	-13.29	-13.02	-13.29	-13.58	-13.65

Wavelength:	1550 nm
Limit (dB):	2.1 dB

Fiber#	Fiber 1	Fiber 2	Fiber 3	Fiber 4	Fiber 5	Fiber 6	Fiber 7	Fiber 8	Fiber 9	Fiber 10	Fiber 11	Fiber 12
Considered for PIF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Result	PASS	PASS	PASS	PASS	PASS	FAIL	PASS	FAIL	PASS	PASS	PASS	×
Loss (dB)	0.02	0.03	0.12	0.05	0.00	-0.59	0.00	6.46	0.08	0.00	0.29	0.47
Margin (dB)	2.08	2.07	1.98	2.05	2.10	2.69	2.10	-4.36	2.02	2.10	1.81	1.63
Reference (dBm)	-12.68	-12.18	-12.71	-12.71	-13.03	-13.09	-12.82	-12.12	-12.19	-12.17	-12.37	-12.77

Printed: 3/1/2019 01:33:55 PM
Reporting Software: SmartReporter, V. 2.993

Signature _____

Fig. 38: Printed MPO Report (one page per measurement result).



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