

G4212A

Dark Current Test

Passed

DEBAF04035  
B.07.40[0003]  
1290 DAD

The test measures the dark current from the detector optic.

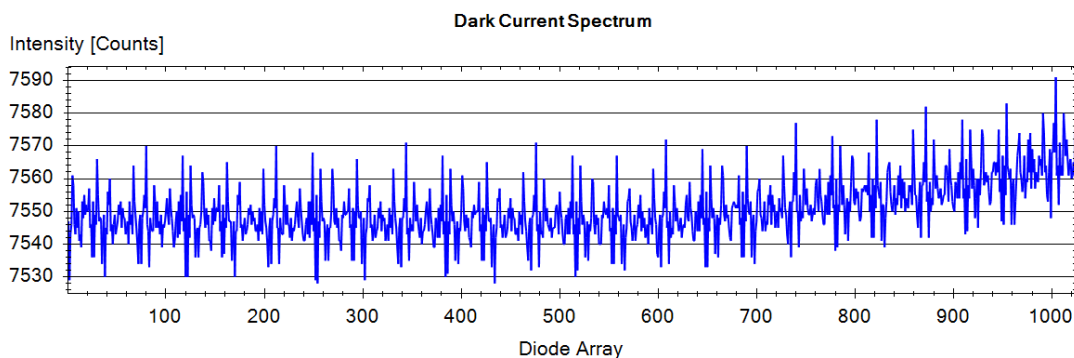
Started at 17.08.2025 17:11:24 by FIBRESTORE-8570\Benutzer1 on FIBRESTORE-8570 using Agilent Lab Advisor - Version 2.21.597 SR1 - Advanced

Results

Item	Value	Result
Cell Product Number	G4212-60011	Done
Cell Name	Max-Light Test Cell	Done
Cell Type	10 mm/0 µl	Done
Lamp Type	Automatic Mode	Done
Dark Current Minimum	7528 Counts	
<i>Dark Current Range</i>	1 ... 12000 Counts	Passed
Dark Current Average	7550 Counts	Done
Dark Current Maximum	7591 Counts	
<i>Dark Current Range</i>	1 ... 12000 Counts	Passed

Finished at 17.08.2025 17:12:15

Signals



Signature: .....

G4212A

Intensity Test

Passed

DEBAF04035  
B.07.40[0003]  
1290 DAD

The test scans the Intensity spectrum generated by the UV Lamp. Note: Optical components in a UV detector will, depending on age and usage, show degradation, which is caused by the powerful UV light. This is a normal process. Degraded optical components, such as lenses, windows etc. cannot be cleaned and need to be replaced. Replacing the UV lamp will very likely improve the intensity, but when optical degradation takes place, this might not always rectify the situation. At some point, also internal components, such as mirrors, gratings or the diode array need to be replaced. Usually this means replacing the optical unit, as these components are not considered to be service parts.

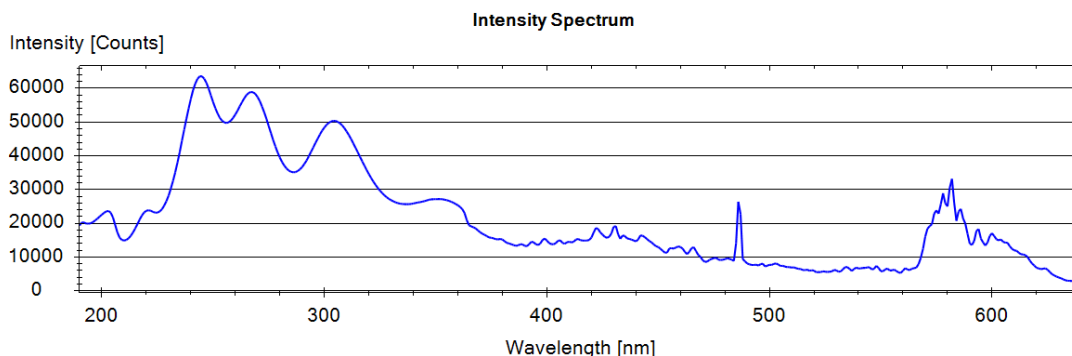
**Started at 17.08.2025 17:13:45 by FIBRESTORE-8570\Benutzer1 on FIBRESTORE-8570 using Agilent Lab Advisor - Version 2.21.597 SR1 - Advanced**

Results

Item	Value	Result
Accumulated UV Lamp On-Time	0,03 h	Done
UV Lamp On-Time	0,03 h	Done
Cell Product Number	G4212-60011	Done
Cell Serial Number	DE93001492	Done
Cell Name	Max-Light Test Cell	Done
Cell Type	10 mm/0 µl	Done
Lamp Product Number	5190-0917	Done
Lamp Serial Number	M96990	Done
Lamp Type	Automatic Mode	Done
Lowest Intensity in Range 190 - 220 nm	14888 Counts	
<i>Lowest Intensity in Range 190 - 220 nm</i>	<i>500 Counts</i>	Passed
Lowest Intensity in Range 221 - 350 nm	23169 Counts	
<i>Lowest Intensity in Range 221 - 350 nm</i>	<i>5000 Counts</i>	Passed
Lowest Intensity in Range 351 - 500 nm	7222 Counts	
<i>Lowest Intensity in Range 351 - 500 nm</i>	<i>2000 Counts</i>	Passed
Lowest Intensity in Range 501 - 640 nm	2473 Counts	
<i>Lowest Intensity in Range 501 - 640 nm</i>	<i>500 Counts</i>	Passed
Spectrum Integral	9602278	Done
UV Integral (190 - 349 nm)	5949121	Done

**Finished at 17.08.2025 17:14:36**

Signals



Signature: .....

G4212A

Wavelength Verification Test

Passed

DEBAF04035  
B.07.40[0003]  
1290 DAD

This procedure performs a wavelength verification.

**Started at 17.08.2025 17:15:39 by FIBRESTORE-8570\Benutzer1 on FIBRESTORE-8570 using Agilent Lab Advisor - Version 2.21.597 SR1 - Advanced**

Results

Item	Value	Result
Cell Product Number	G4212-60011	Done
Accumulated UV Lamp On-Time	0,17 h	Done
UV Lamp On-Time	0,17 h	
<i>Minimum Lamp On-Time</i>	<i>0,17 h</i>	Passed
D2 Alpha Line Deviation	0,232 nm	
<i>WL Calibration Limit for Alpha Line</i>	<i>-0,5 ... 0,5 nm</i>	Passed
D2 Beta Line Deviation	0,215 nm	
<i>WL Calibration Limit for Beta Line</i>	<i>-0,5 ... 0,5 nm</i>	Passed

**Finished at 17.08.2025 17:22:19**

Signature: .....

G4212A

Quick Noise Test

Passed

DEBAF04035  
B.07.40[0003]  
1290 DAD

The test performs a quick noise evaluation without reference.

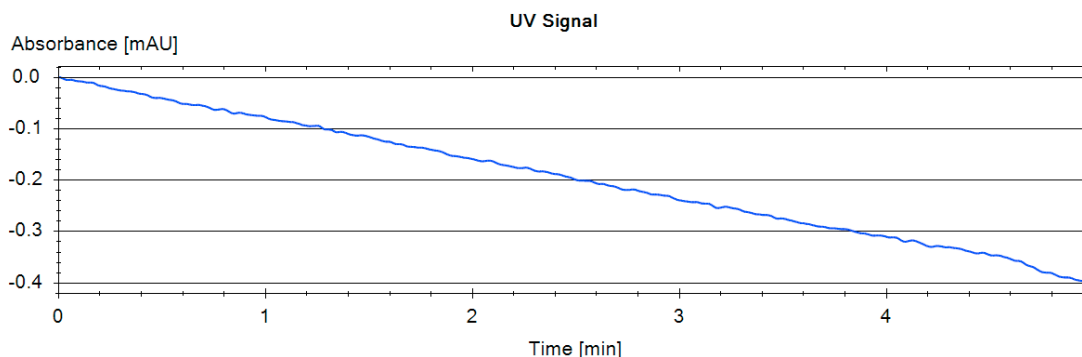
**Started at 17.08.2025 17:23:24 by FIBRESTORE-8570\Benutzer1 on FIBRESTORE-8570 using Agilent Lab Advisor - Version 2.21.597 SR1 - Advanced**

Results

Item	Value	Result
Cell Product Number	G4212-60011	Done
Cell Serial Number	DE93001492	Done
Cell Name	Max-Light Test Cell	Done
Cell Type	10 mm/0 µl	Done
Lamp Product Number	5190-0917	Done
Lamp Serial Number	M96990	Done
Lamp Type	Automatic Mode	Done
Accumulated UV Lamp On-Time	0,20 h	Done
UV Lamp On-Time	0,20 h	
<i>Minimum Lamp On-Time</i>	<i>0,17 h</i>	Passed
Signal Noise value at 254 nm (UV)	0,008 mAU	
<i>Maximum Allowed Noise</i>	<i>0 ... 0,025 mAU</i>	Passed

**Finished at 17.08.2025 17:28:43**

Signals



Signature: .....

G4212A

Self Test

Passed

DEBAF04035  
B.07.40[0003]  
1290 DAD

The DAD self-test runs a series of individual tests, and evaluates the results automatically.

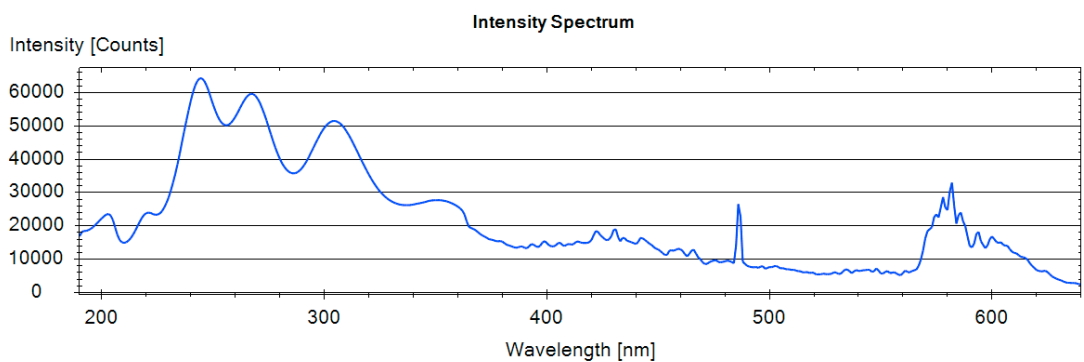
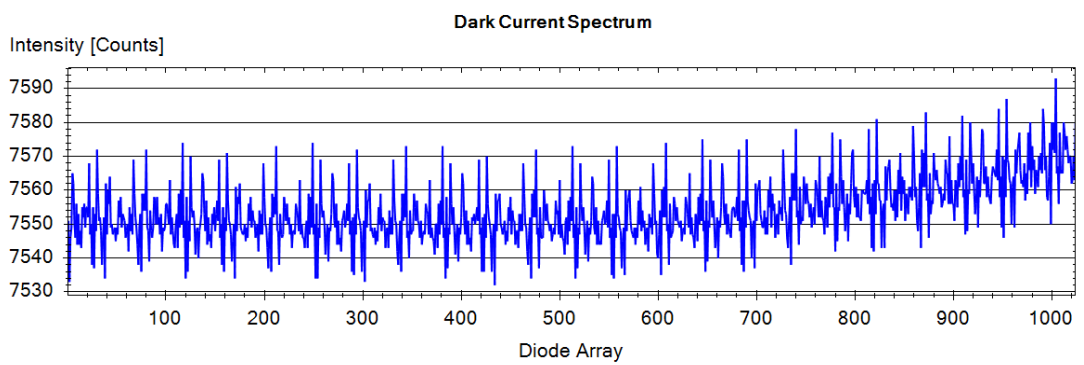
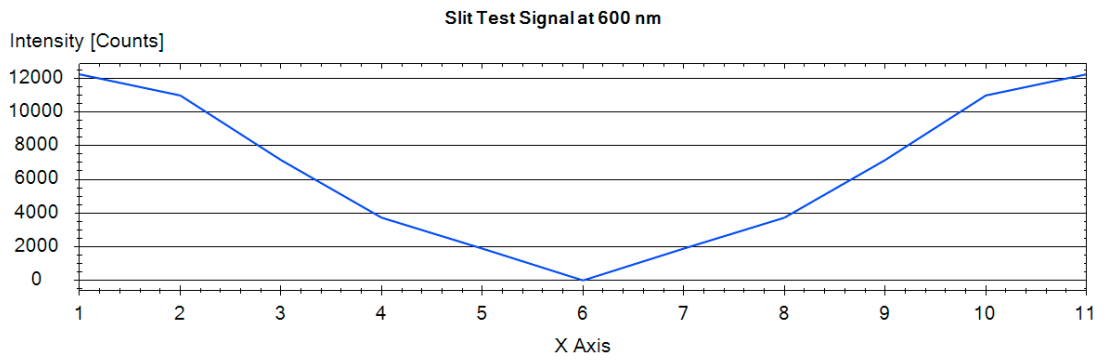
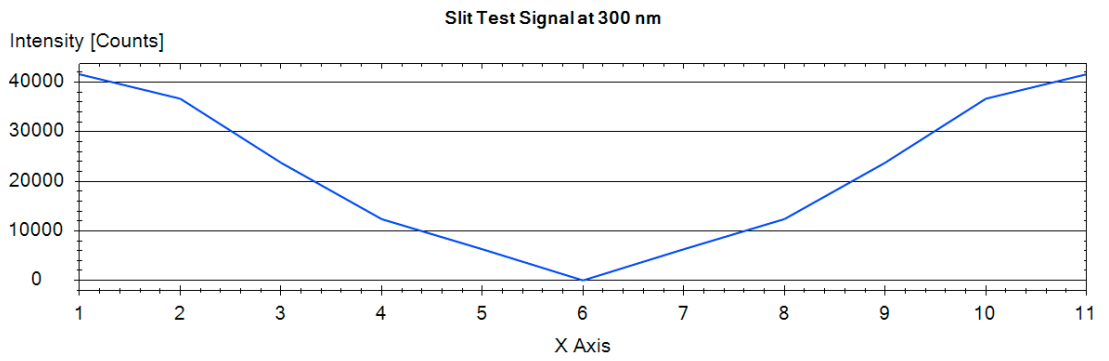
*Results*

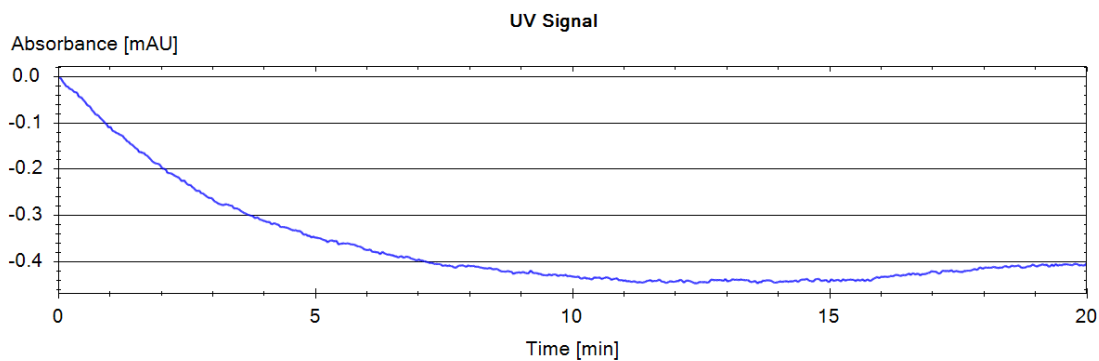
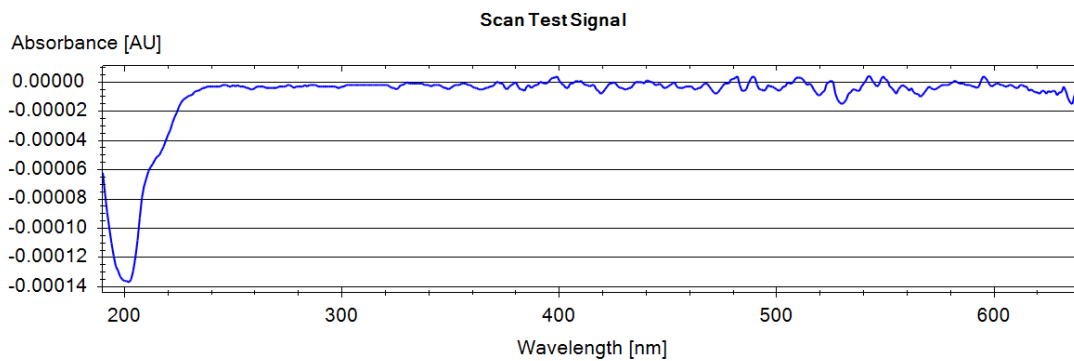
Started at 17.08.2025 17:30:10 by FIBRESTORE-8570\Benutzer1 on FIBRESTORE-8570 using Agilent Lab Advisor - Version 2.21.597 SR1 - Advanced

Item	Value	Result
Cell Product Number	G4212-60011	Done
Cell Serial Number	DE93001492	Done
Cell Name	Max-Light Test Cell	Done
Cell Type	10 mm/0 µl	Done
Lamp Product Number	5190-0917	Done
Lamp Serial Number	M96990	Done
Accumulated UV Lamp On-Time	0,31 h	Done
UV Lamp On-Time	0,31 h	
<i>Minimum Lamp On-Time</i>	<i>0,17 h</i>	Passed
Lamp Type	Automatic Mode	Done
Slit Test Result	0,91	
<i>Slit Test Limit</i>	<i>0,75 ... 1,25</i>	Passed
Dark Current Minimum	7532 Counts	
<i>Dark Current Range</i>	<i>1 ... 12000 Counts</i>	Passed
Dark Current Maximum	7593 Counts	
<i>Dark Current Range</i>	<i>1 ... 12000 Counts</i>	Passed
Lowest Intensity in Range 190 - 220 nm	14956 Counts	
<i>Lowest Intensity in Range 190 - 220 nm</i>	<i>500 Counts</i>	Passed
Lowest Intensity in Range 221 - 350 nm	23373 Counts	
<i>Lowest Intensity in Range 221 - 350 nm</i>	<i>5000 Counts</i>	Passed
Lowest Intensity in Range 351 - 500 nm	7169 Counts	
<i>Lowest Intensity in Range 351 - 500 nm</i>	<i>2000 Counts</i>	Passed
Lowest Intensity in Range 501 - 640 nm	2472 Counts	
<i>Lowest Intensity in Range 501 - 640 nm</i>	<i>500 Counts</i>	Passed
D2 Alpha Line Deviation	0,228 nm	
<i>WL Calibration Limit for Alpha Line</i>	<i>-0,5 ... 0,5 nm</i>	Passed
D2 Beta Line Deviation	0,211 nm	
<i>WL Calibration Limit for Beta Line</i>	<i>-0,5 ... 0,5 nm</i>	Passed
D2 Alpha Line	656,328 nm	Done
D2 Beta Line	486,211 nm	Done
Spectral Flatness	0,0001 AU	
<i>Spectral Flatness Test Limit</i>	<i>0,002 AU</i>	Passed
Signal Noise value at 254 nm (UV)	0,008 mAU	
<i>Maximum Allowed Noise</i>	<i>0,02 mAU</i>	Passed

Finished at 17.08.2025 17:52:05

Signals





Signature: .....

G4212A

Slit Test

Passed

DEBAF04035  
B.07.40[0003]  
1290 DAD

The slit test verifies correct operation of the micromechanical slit.

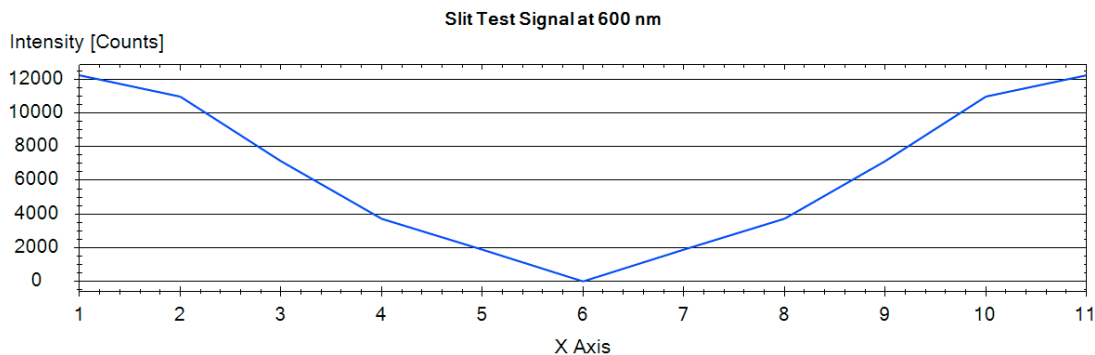
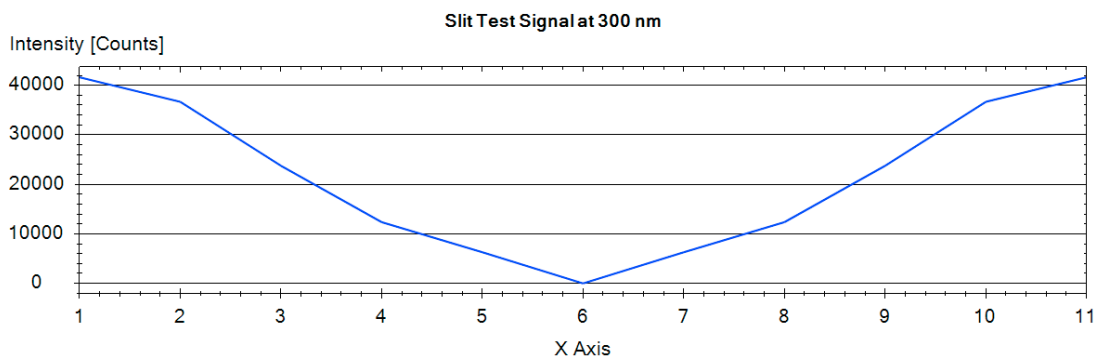
**Started at 17.08.2025 18:03:37 by FIBRESTORE-8570\Benutzer1 on FIBRESTORE-8570 using Agilent Lab Advisor - Version 2.21.597 SR1 - Advanced**

Results

Item	Value	Result
Cell Product Number	G4212-60011	Done
Cell Name	Max-Light Test Cell	Done
Cell Type	10 mm/0 µl	Done
Lamp Type	Automatic Mode	Done
Slit Test Result	0,91	
<i>Slit Test Limit</i>	<i>0,75 ... 1,25</i>	Passed

**Finished at 17.08.2025 18:04:06**

Signals



Signature: .....

G4212A

Wavelength Calibration

Done

DEBAF04035  
B.07.40[0003]  
1290 DAD

The wavelength calibration procedure enables you to check the calibration of the diode array in the detector.  
Calibration means adjusting the assignment of diodes to specific wavelengths, and is done using the two deuterium emission lines at 486.0 nm and 656.1 nm.

**Started at 17.08.2025 18:05:33 by FIBRESTORE-8570\Benutzer1 on FIBRESTORE-8570 using Agilent Lab Advisor - Version 2.21.597 SR1 - Advanced**

Results

Item	Value	Result
Cell Product Number	G4212-60011	Done
Accumulated UV Lamp On-Time	0,90 h	Done
UV Lamp On-Time	0,90 h	
<i>Minimum Lamp On-Time</i>	<i>0,17 h</i>	Passed
D2 Alpha Line Deviation	0,215 nm	Done
D2 Beta Line Deviation	0,199 nm	Done

**Finished at 17.08.2025 18:07:13**

Signature: .....

G4212A

ASTM Drift and Noise Test

Passed

DEBAF04035  
B.07.40[0003]  
1290 DAD

The test performs ASTM drift and noise evaluation without reference.

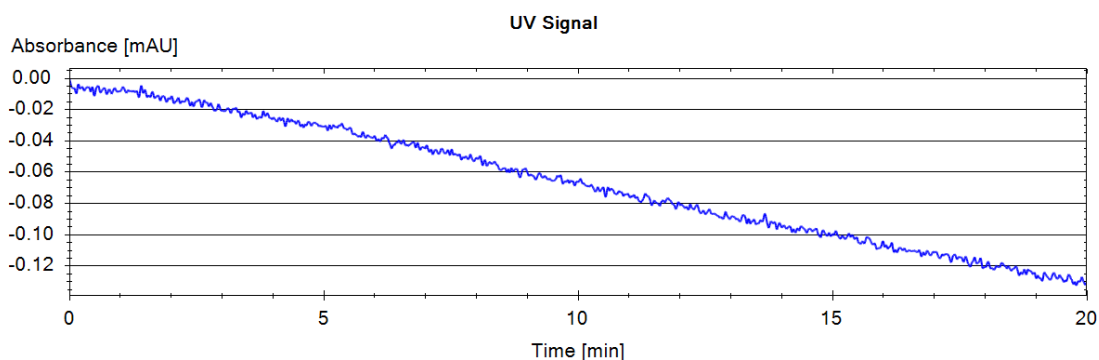
Started at 17.08.2025 18:19:21 by FIBRESTORE-8570\Benutzer1 on FIBRESTORE-8570 using Agilent Lab Advisor - Version 2.21.597 SR1 - Advanced

Results

Item	Value	Result
Cell Product Number	G4212-60011	Done
Cell Serial Number	DE93001492	Done
Cell Name	Max-Light Test Cell	Done
Cell Type	10 mm/0 µl	Done
Lamp Product Number	5190-0917	Done
Lamp Serial Number	M96990	Done
Lamp Type	Automatic Mode	Done
Accumulated UV Lamp On-Time	1,13 h	Done
UV Lamp On-Time	1,13 h	
<i>Minimum Lamp On-Time</i>	1 h	Passed
Signal Drift value at 254 nm (UV)	-0,399 mAU/h	
<i>Maximum Allowed Drift</i>	-1 ... 1 mAU/h	Passed
Signal Noise value at 254 nm (UV)	0,007 mAU	
<i>Maximum Allowed Noise</i>	0 ... 0,02 mAU	Passed

Finished at 17.08.2025 18:39:40

Signals



Signature: .....

G4212A

Module Info

Done

DEBAF04035  
B.07.40[0003]  
1290 DAD

Collect diagnostic info from a LC or CE module and write to the result file.

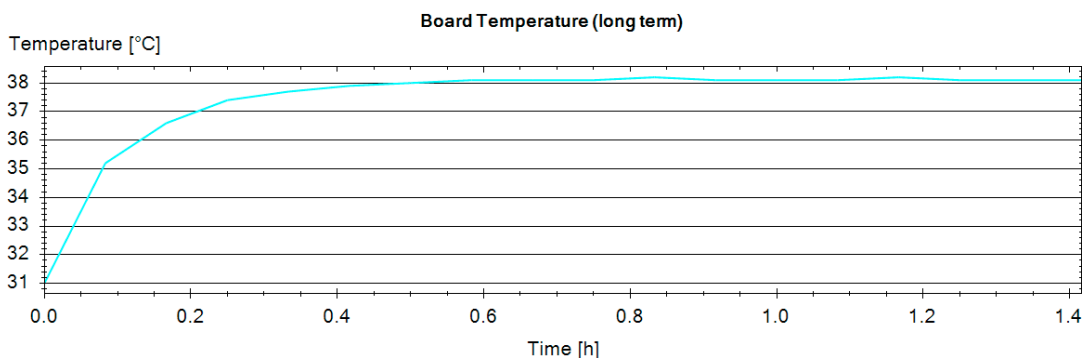
**Started at 17.08.2025 18:40:11 by FIBRESTORE-8570\Benutzer1 on FIBRESTORE-8570 using Agilent Lab Advisor - Version 2.21.597 SR1 - Advanced**

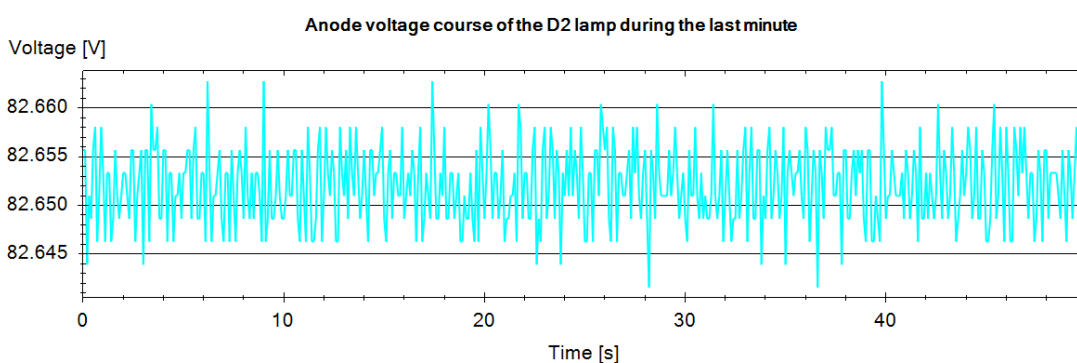
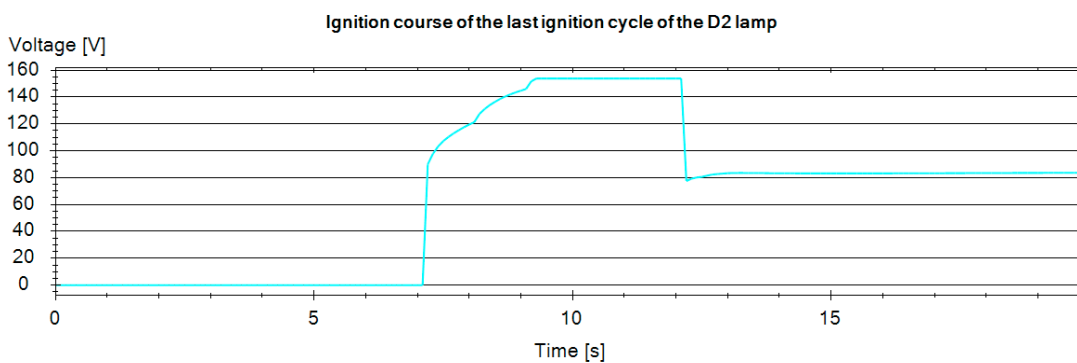
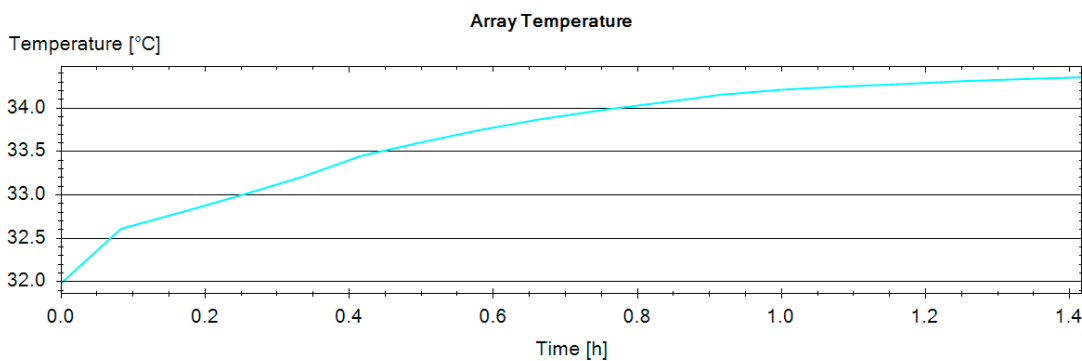
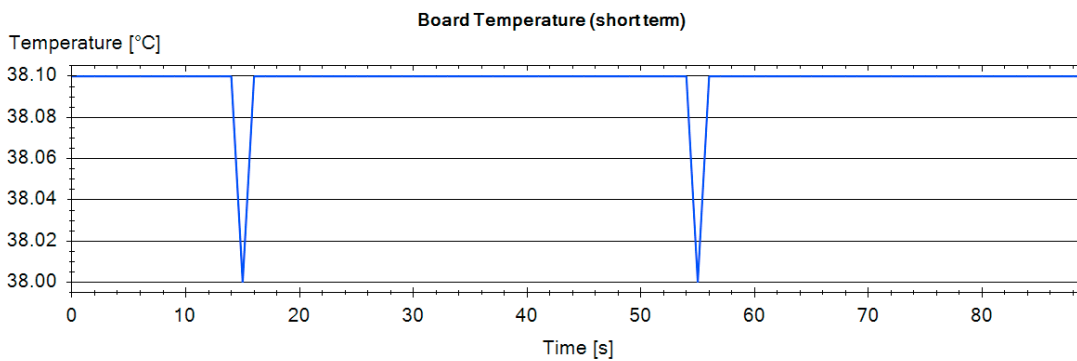
Results

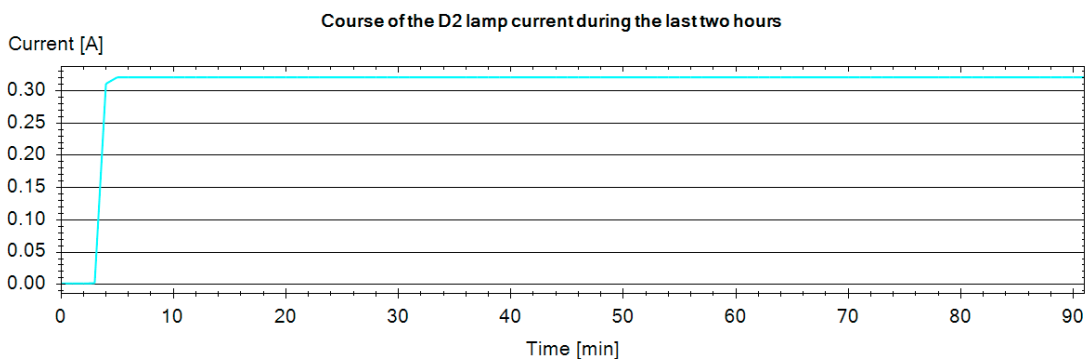
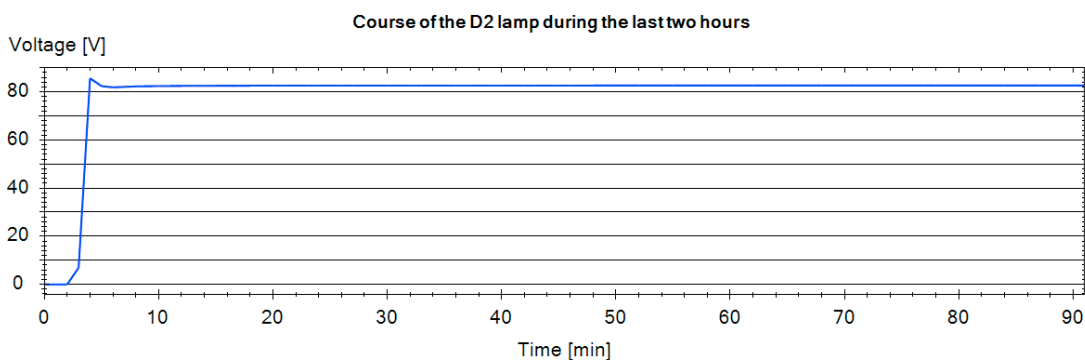
Item	Value	Result
Firmware Main System Revision	B.07.40	Done
Firmware Main System Revision Build Number	[0003]	Done
Firmware Resident System Revision	B.07.40	Done
Hardware Main Board Details	TYPE=G4212-65820, REV=CI, SER=MAC	Done
System Date and Time	Firmware Clock: 17.08.2025 18:40:06, Controller Clock: 17.08.2025 18:40:12	Done
Product Options	DAD	Done
Device Detail #1	Max-Light Test Cell	Done
Device Detail #2	Flow Cell (Product# G4212-60011, Serial# DE93001492, Path Length 10.00 mm, Volume 0.00 ul, Max Pressure 0 bar)	Done
Device Detail #3	UV Lamp (Product# 5190-0917, Serial# M96990)	Done
Device Detail #4	LAN Settings (IP: 192.168.0.130, SM: 255.255.255.0, GW: not specified, MAC: 0030D32B47F3, Init Mode: Using Stored)	Done
Device Detail #5	Current LAN Controller: 192.168.0.10 'fibrestore-8570P'	Done
Device Detail #6	Current Instrument Access Point	Done

**Finished at 17.08.2025 18:40:19**

Signals







Tables

**Maintenance History**

Date	Maintenance Description
12/07/2017 14:15:48	Standard PM done. See PM Report.
12/05/2016 13:35:15	Standard PM done. See PM Checklist.
12/07/2015 12:13:55	Standard PM done. See PM checklist.

**Firmware Revision**

Date	Revision
08/17/2025 17:03:59	B.07.40 [0003]
12/04/2014 07:14:38	B.06.72 [0002]
01/01/1970 00:00:08	B.06.57 [012]

**WL Calibration History**

Date	Deviation of D2-alpha line ( in nm)	Deviation of D2- beta line (in nm)
08/17/2025 18:07:07	0.326	0.301
12/07/2015 12:04:37	0.111	0.103
12/05/2014 06:10:03	0	0
12/04/2014 14:40:32	-0.326	-0.301
12/04/2014 07:21:35	-0.286	-0.264

Signature: .....

Contact Information

Name fibreStore  
 Phone +496419805945  
 Email info@fibrestore.de  
 Company  
 Comments

Software Information

Lab Advisor Version 2.21.597  
 Installed Lab Advisor Add-ons Agilent LC/CE 1.0.9109.2351  
 0

System Configuration

Instrument Name	Type	Address	Data last updated on
fibrestore	Agilent LC	192.168.0.130	17.08.2025 18:40:20

	Firmware	Status	Details
<b>G4212A</b> DEBAF04035 1290 DAD	B.07.40 [0003]	Idle	- Max-Light Test Cell - Flow Cell (Product# G4212-60011, Serial# DE93001492, Path Length 10.00 mm, Volume 0.00 ul, Max Pressure 0 bar) - UV Lamp (Product# 5190-0917, Serial# M96990) - LAN Settings (IP: 192.168.0.130, SM: 255.255.255.0, GW: not specified, MAC: 0030D32B47F3, Init Mode: Using Stored) - Current LAN Controller: 192.168.0.10 'fibrestore-8570P' - Current Instrument Access Point
<b>G4208A</b> MY18505533 1200 Instant Pilot	B.02.25 [0001]	Idle	

Test and Calibration Procedure Results

	Description	Date
<b>G4212A</b>	Module Info - Done	17.08.2025 18:40:05
DEBAF04035	ASTM Drift and Noise Test - Passed	17.08.2025 18:19:15
1290 DAD	Wavelength Calibration - Done	17.08.2025 18:05:27
	Slit Test - Passed	17.08.2025 18:03:31
	Self Test - Passed	17.08.2025 17:30:04
	Quick Noise Test - Passed	17.08.2025 17:23:18
	Wavelength Verification Test - Passed	17.08.2025 17:15:33
	Intensity Test - Passed	17.08.2025 17:13:39
	Dark Current Test - Passed	17.08.2025 17:11:18
	Module Info - Done	17.08.2025 17:04:59

## Associated Logs

	Description	Date
<b>G4212A</b>	B.07.40 [0003]	17.08.2025 17:03:59
DEBAF04035	Shutdown(EE 63,0)	17.05.2022 11:15:32
1290 DAD	Leak detected(EE 64,0)	06.05.2021 10:27:49
	Leak sensor open(EE 83,0)	06.05.2021 10:27:49
	Shutdown(EE 63,0)	09.10.2020 08:02:34
	Shutdown(EE 63,0)	14.11.2019 13:18:13
	Module gone during analysis(EE 71,0)	19.07.2019 13:30:41
	Shutdown(EE 63,0)	21.05.2019 06:01:57
	Shutdown(EE 63,0)	31.07.2018 12:27:13
	Shutdown(EE 63,0)	05.06.2018 18:27:51
	Leak detected(EE 64,0)	14.03.2018 12:04:07
	Leak detected(EE 64,0)	14.03.2018 11:17:05
	Leak detected(EE 64,0)	09.03.2018 11:15:30
	Leak detected(EE 64,0)	16.01.2018 10:04:50
	Leak sensor open(EE 83,0)	16.01.2018 10:04:50
	Standard PM done. See PM Report.	07.12.2017 14:15:48
	Shutdown(EE 63,0)	24.10.2017 10:49:45
	Standard PM done. See PM Checklist.	05.12.2016 13:35:15
	Standard PM done. See PM checklist.	07.12.2015 12:13:55
	B.06.72 [0002]	04.12.2014 07:14:38
	B.06.57 [012]	01.01.1970 00:00:08

fibreStore

Early Maintenance Feedback Counters

	Description	Value	Unit	Limit
<b>G4212A</b>	Accumulated UV Lamp On-Time	0	h	0
DEBAF04035	Number of UV Lamp Ignitions	0	Count	0
1290 DAD				