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Basic EnVision Training

Getting you up to speed on the EnVision

Daniel Cardillo
Field Application Scientist

Training Cirriculum

Classroom

- Software Familiarization (classroom setting is preferred)
  - EnVision options overview and definition of what is on your system
  - Light source options
  - Filter, Beamsplitter, Dichroic, and Monochromator overview
  - Inventory tab review
  - Reagent technologies as a guide to why you would select certain options, light sources, filters, and mirrors
  - Protocol review (Measurement technology, Plate, and well selection/data analysis)
  - Preset protocol tab
  - Building protocols by using copy feature
  - Building your own protocols.
  - Basic Protocol optimization overview

Lab Training

- Hardware overview (in front of machine)
  - Proper power up sequence, and starting of software
  - Identify all of the key pieces of hardware
  - Demonstrate filter, mirror(top and bottom), and aperture changing
  - Show plate orientation, and identify the A1 location on plate holder
  - Using stackers (If applicable)
  - Dispenser Overview (If applicable)
- Basic programming of Protocols
- Optimization of 2-3 protocols User creates the protocol
- Demonstration of applying basic calculations and exporting data after assay has been run.
- Cover what is available in an Advanced Training session

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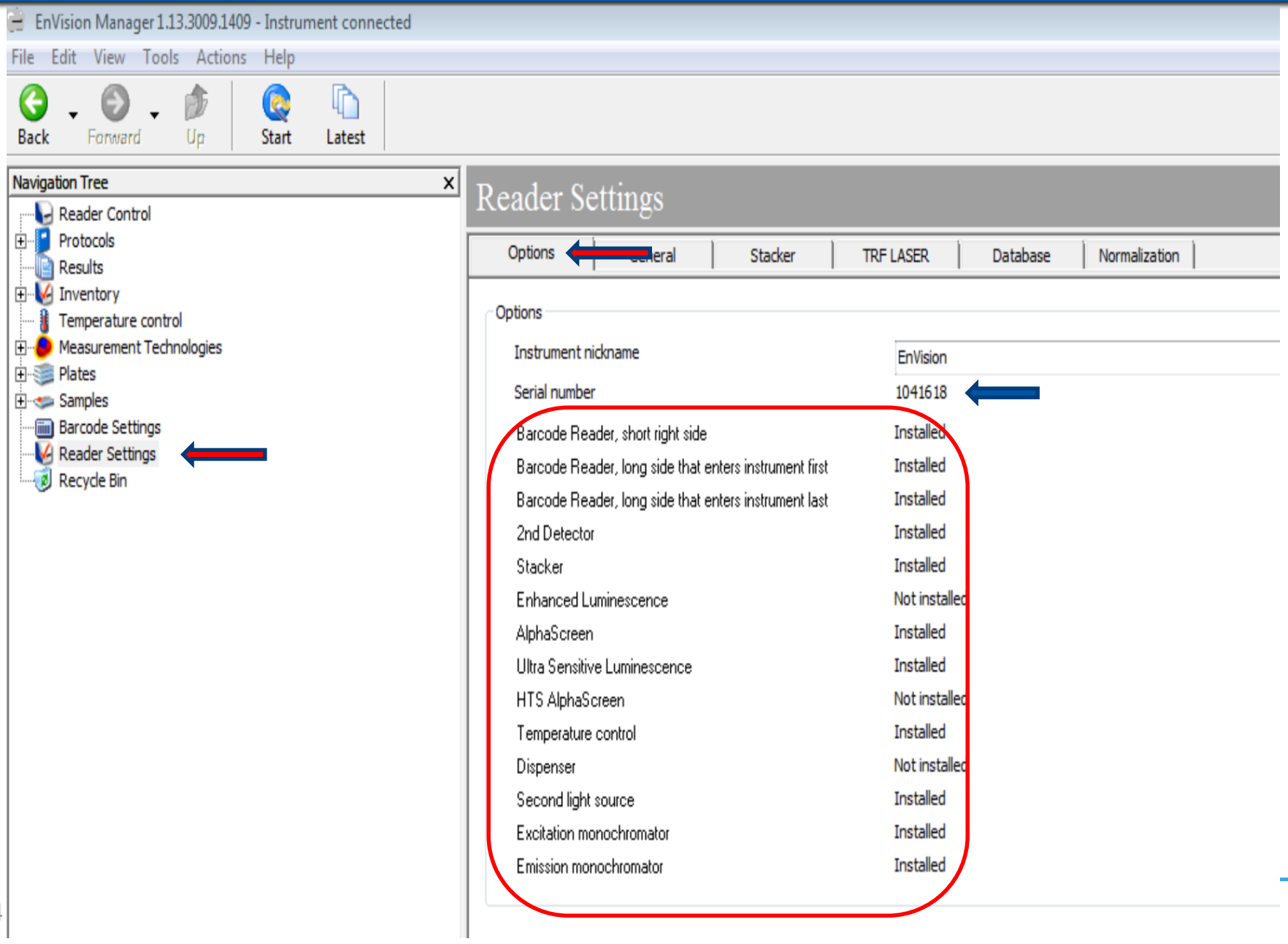
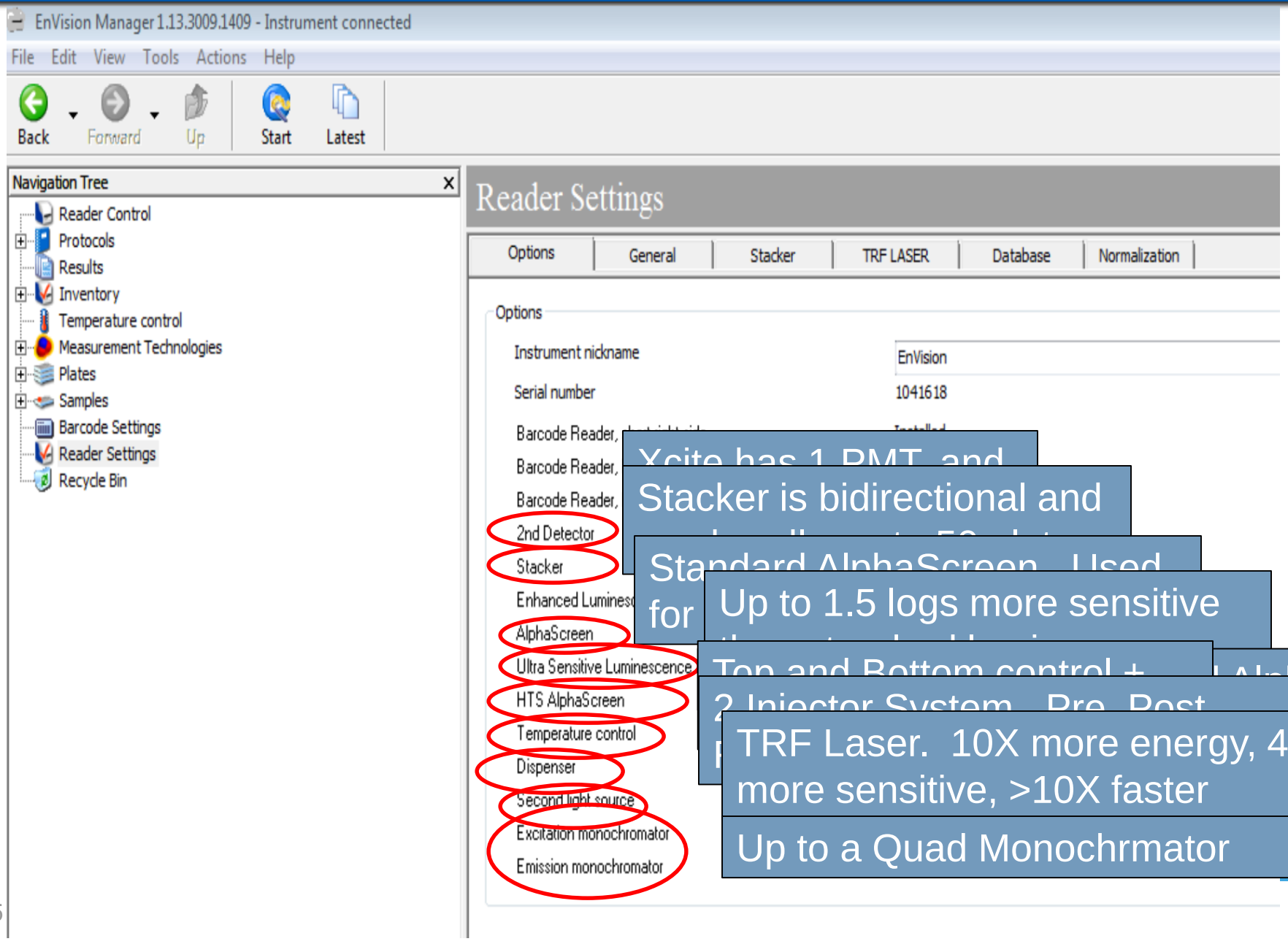
HUMAN HEALTH | ENVIRONMENTAL HEALTH

Top 3 reasons to pay attention to this course…

1) You will learn how to use your EnVision
2) Once I leave…you're the EnVision expert
3) The Basic refresher course is $3,000!

EnVision Options

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File Edit View Tools Actions Help
Back
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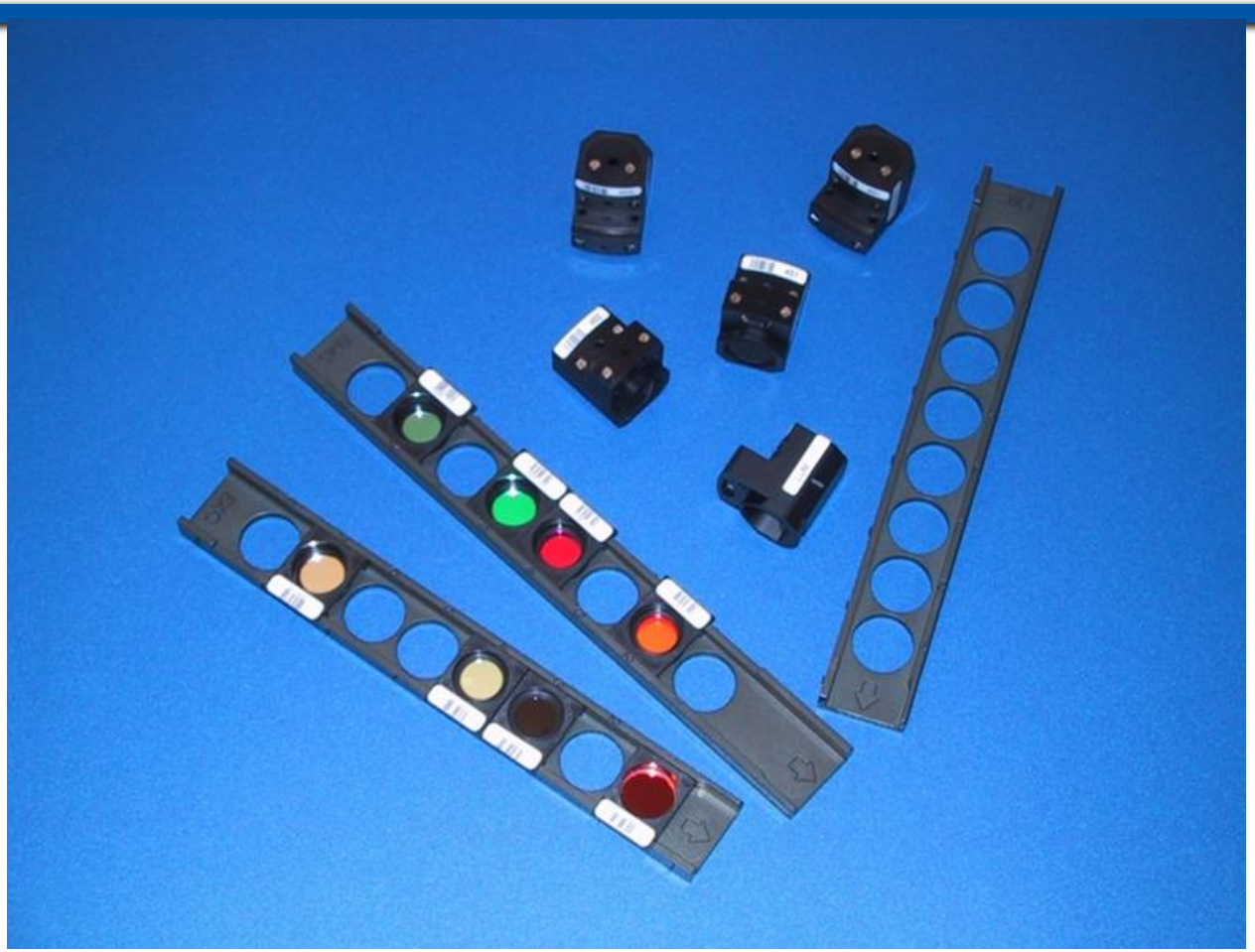
Start
Latest
Navigation Tree
Reader Control
Protocols
Results
Inventory
Temperature control
Measurement Technologies
Plates
Samples
Barcode Settings
Reader Settings
Recycle Bin
Reader Settings
Options
General
Stacker
TRF LASER
Database
Normalization
Options
Instrument nickname
EnVision
Serial number
1041618
Barcode Reader,
Barcode Reader,
Barcode Reader,
2nd Detector
Stacker
Enhanced Luminesc
AlphaScreen
Ultra Sensitive Luminescence
HTS AlphaScreen
Temperature control
Dispenser
Second light source
Excitation monochromator
Emission monochromator
Stacker is bidirectional and
for
Up to 1.5 logs more sensitive
TRF Laser. 10X more energy, 4X more sensitive, >10X faster
Up to a Quad Monochrmator

Light Sources

1. Xenon Flash Lamp
   - FI,
   - Abs,
   - FP,
   - FRET
   - TRF
   - TR-FRET
2. 337 Laser
   - TRF
   - TR-FRET
3. 680 Laser
   - AlphaScreen
   - AlphaLISA
4. Luminescent sample
   - Glow
   - Flash

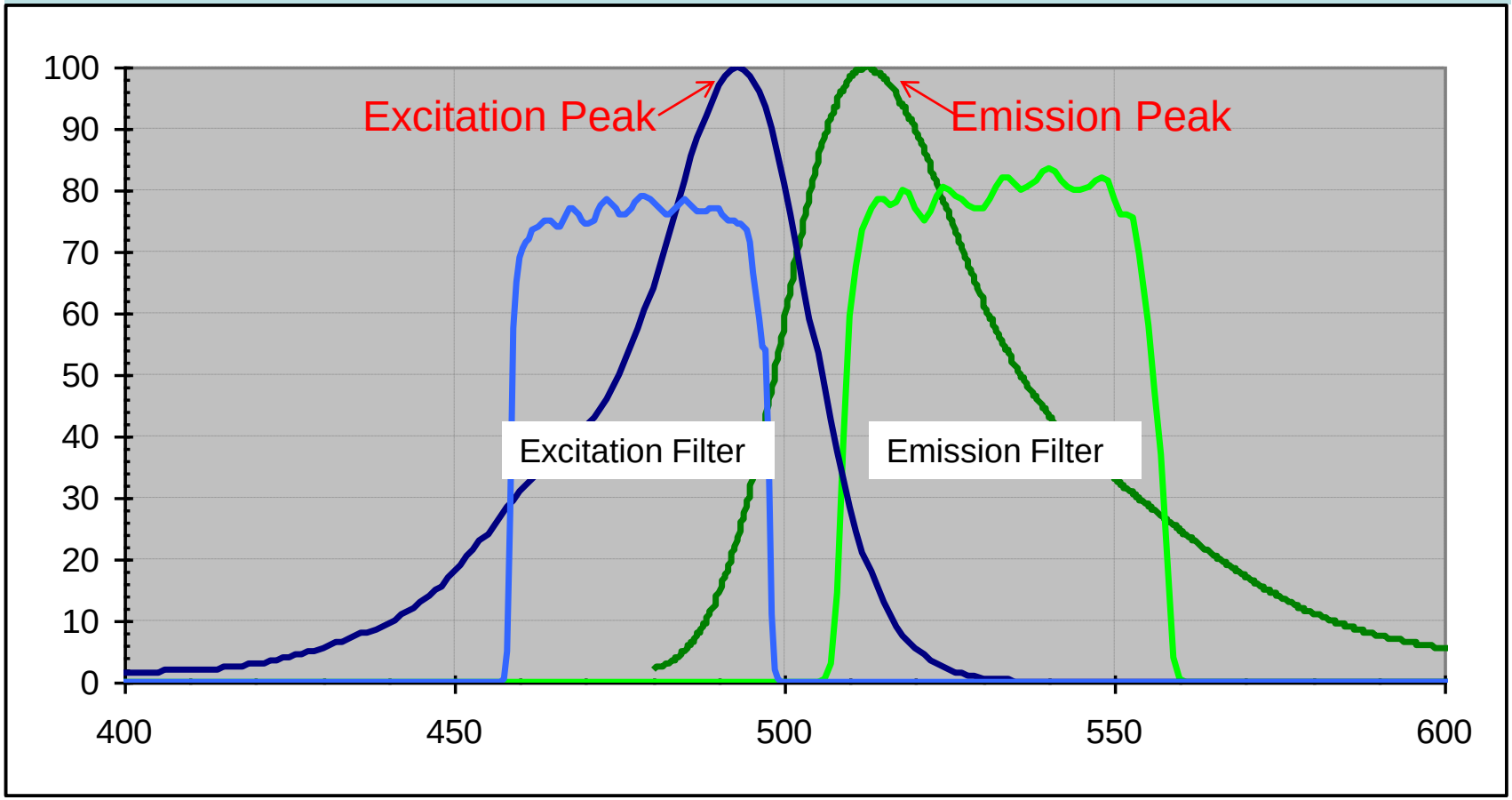
Filter/Mirror Review



- EnVision can have up to 16 filters and 5 mirrors in the system at any time.
- All Filters and Mirrors are Barcoded
- Additional Filter slides allow for easy swapping of filters

Wavelength selection

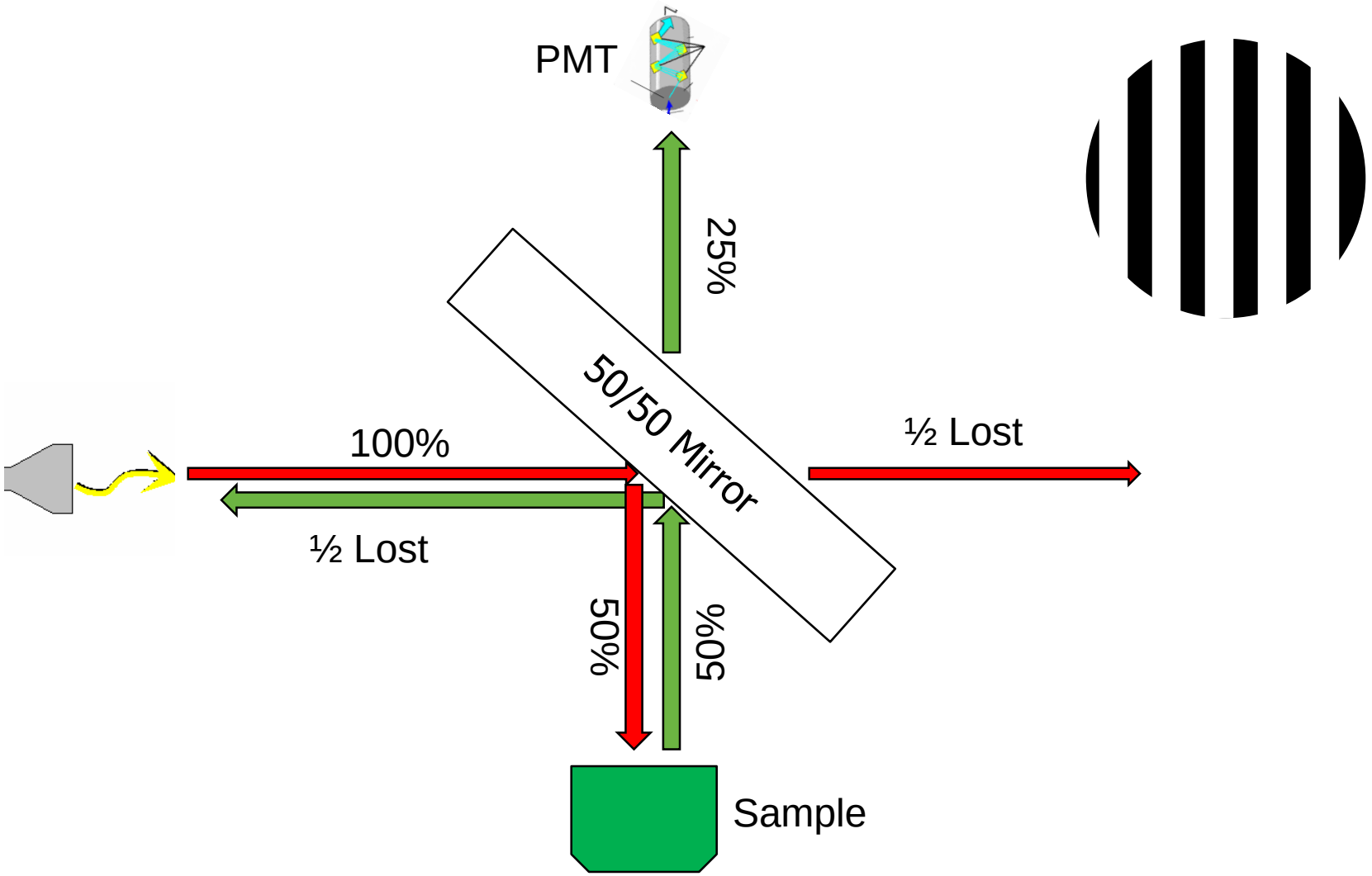
- EXCITATION LIGHT max 494 - EMISSION LIGHT max 517
- EXCITATION FILTER X485 - EMISSION FILTER M535



Moving Light

How do you get filtered light in and out of a well with something that is physically in the light path between the sample and the PMT

Principle of the Beam Splitter Mirror



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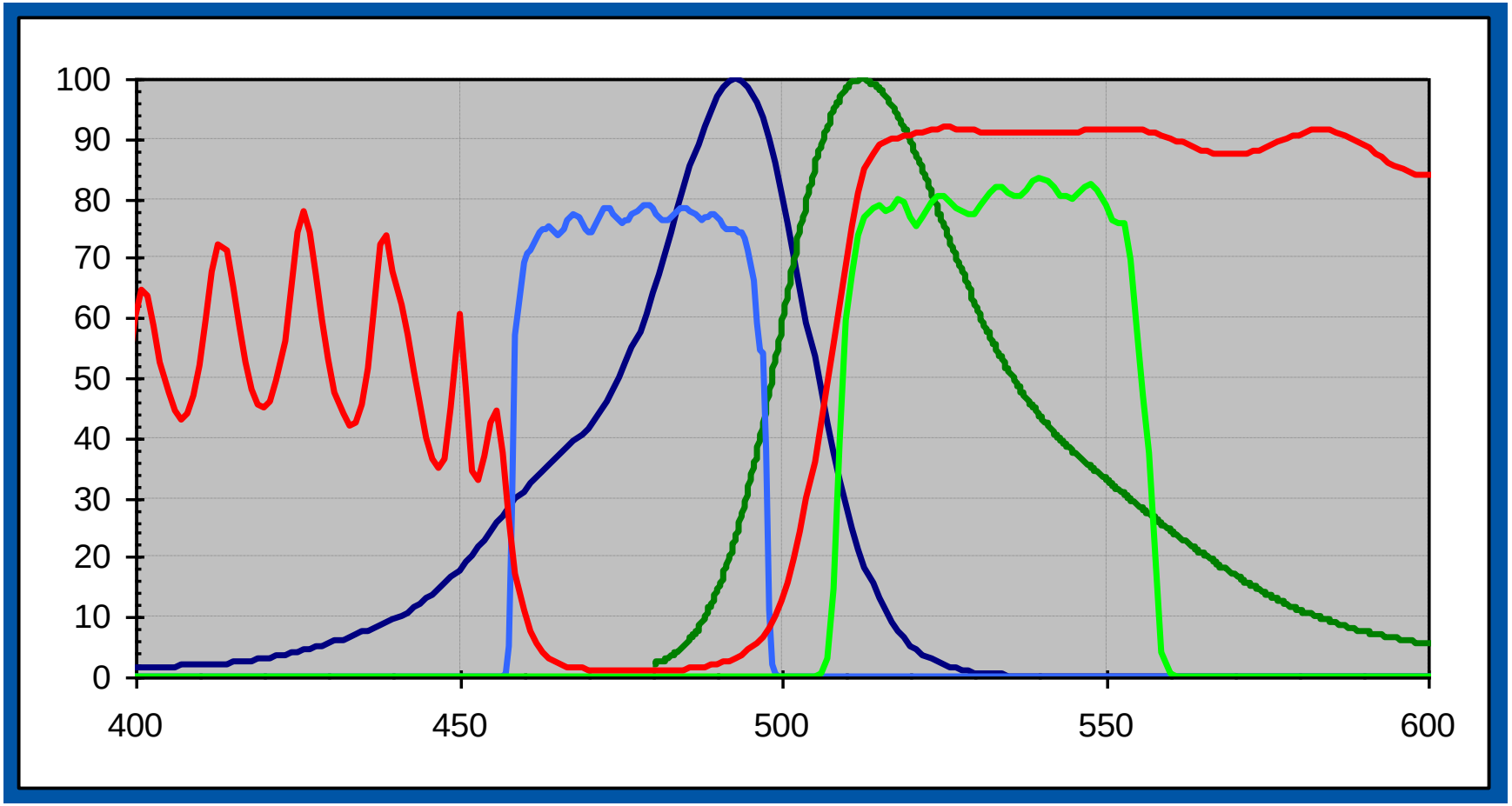
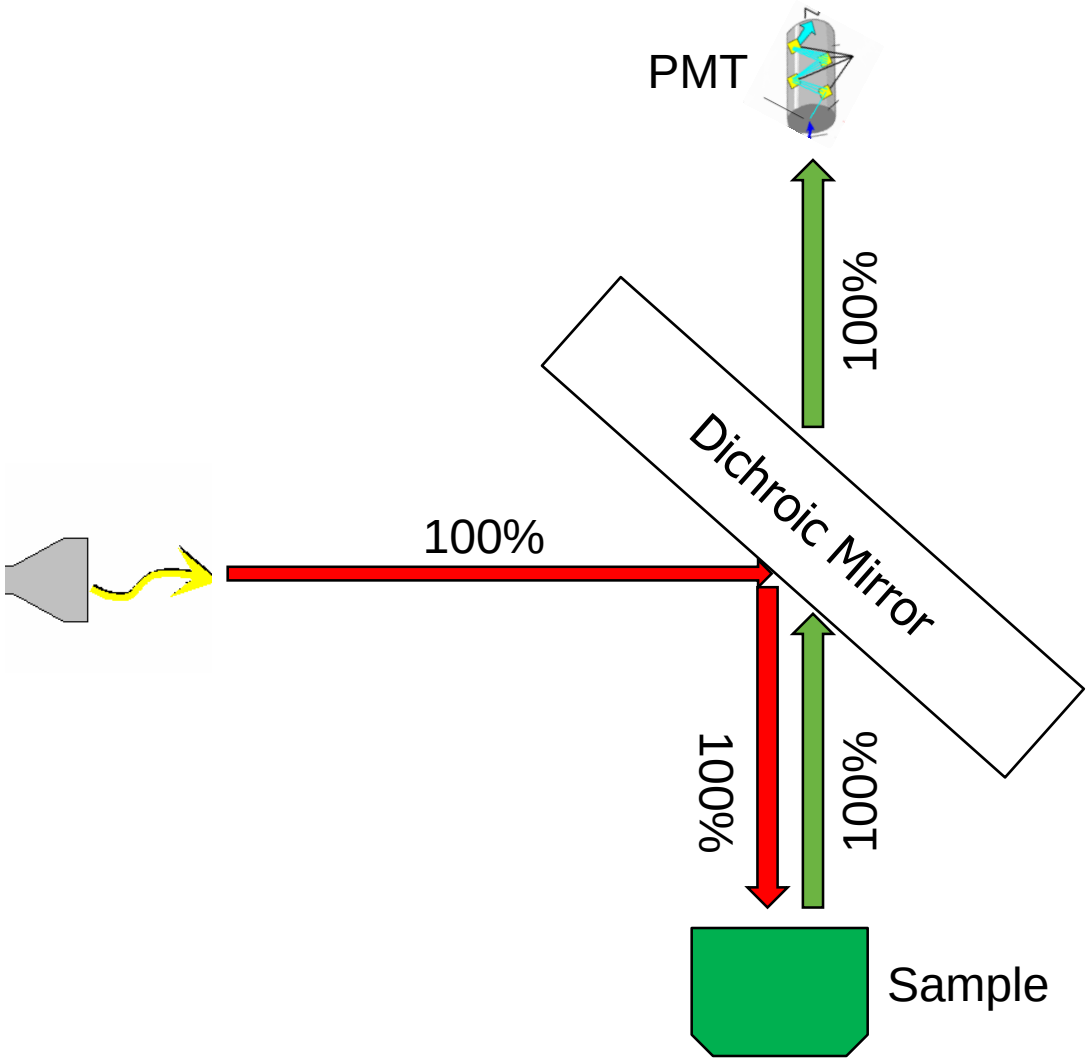
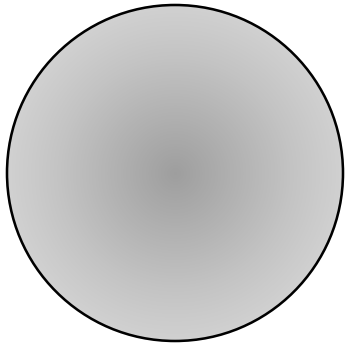
Wavelength selection

- EXCITATION FILTER X485 - DICHROIC MIRROR D505 - EMISSION FILTER M535



Principle of the Dichroic Mirror





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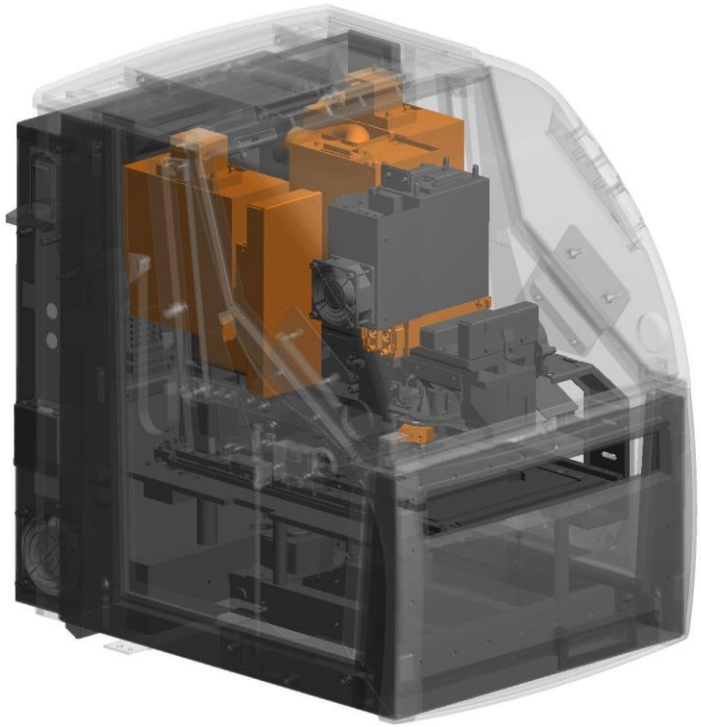
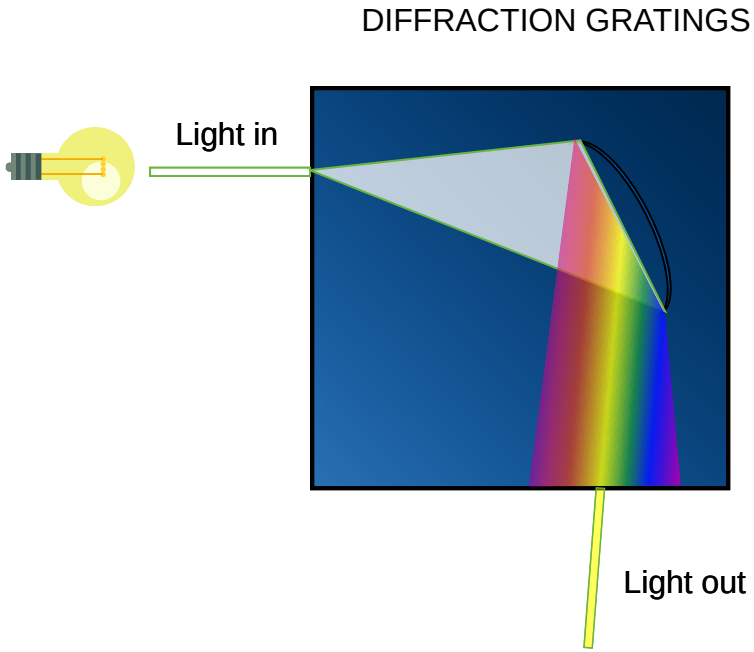
Monochromator

How does a Monochromator work?



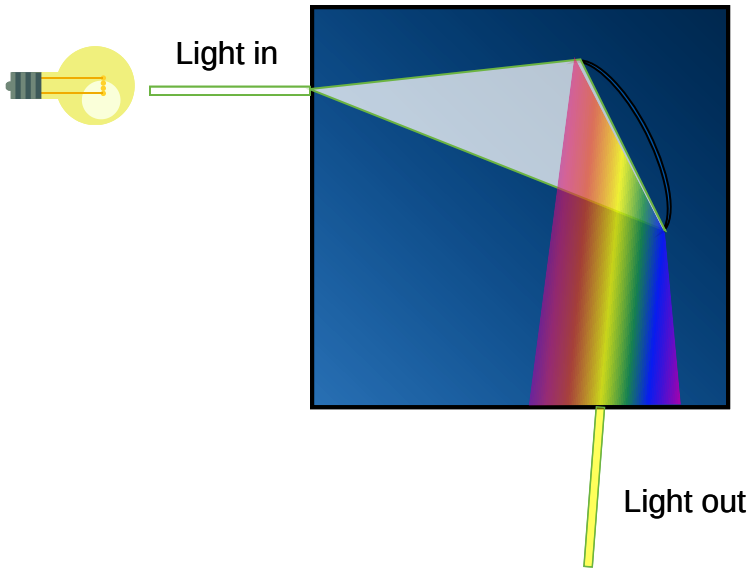


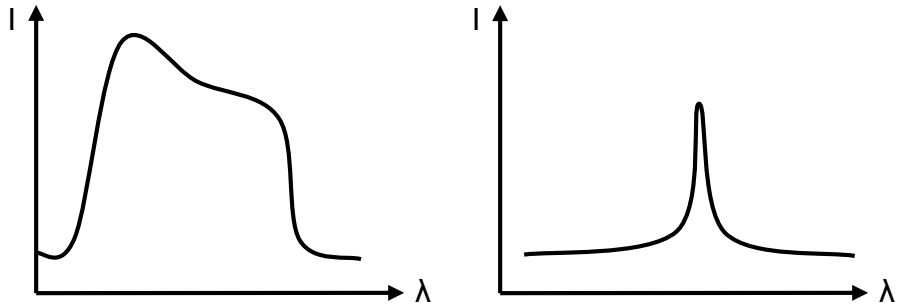
Monochromators - Overview

Monochromators is an optical module that splits the the incoming light into partial components

Monochromators grate is mounted to a motorized axis, allowing it to turn. The Spectrum then moves across a slit, which passes the desired wavelength light.

Single Monochromator





Dual Monochromators

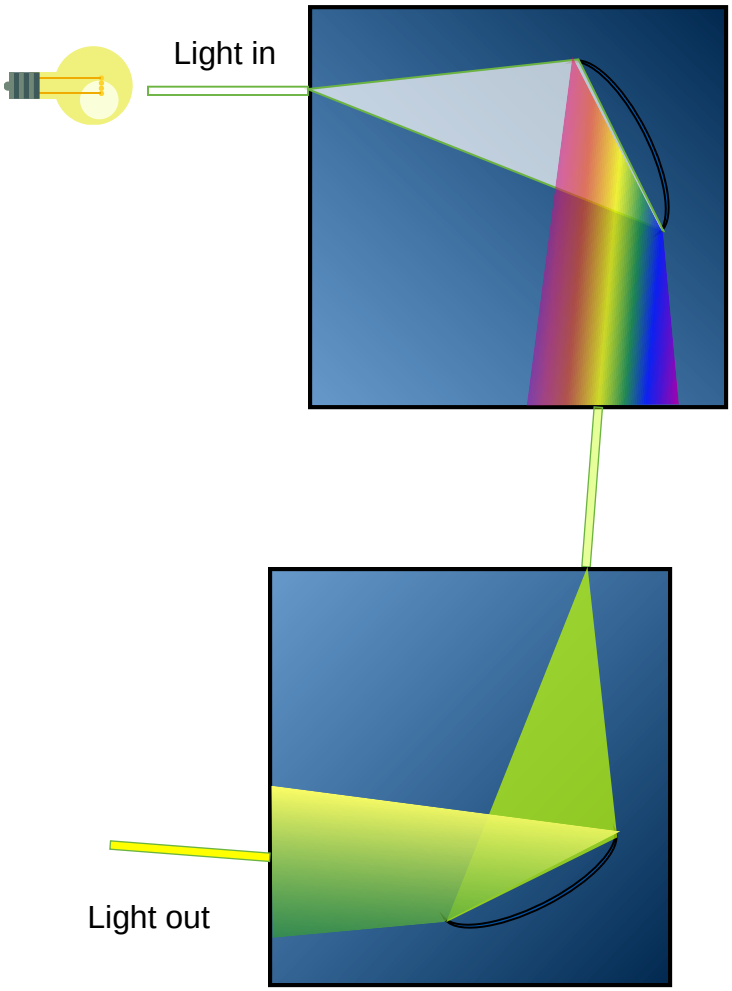
The filtering capacity of a monochromator is limited.

- To address this a multiple of monochromators are sequentially coupled (Dual).

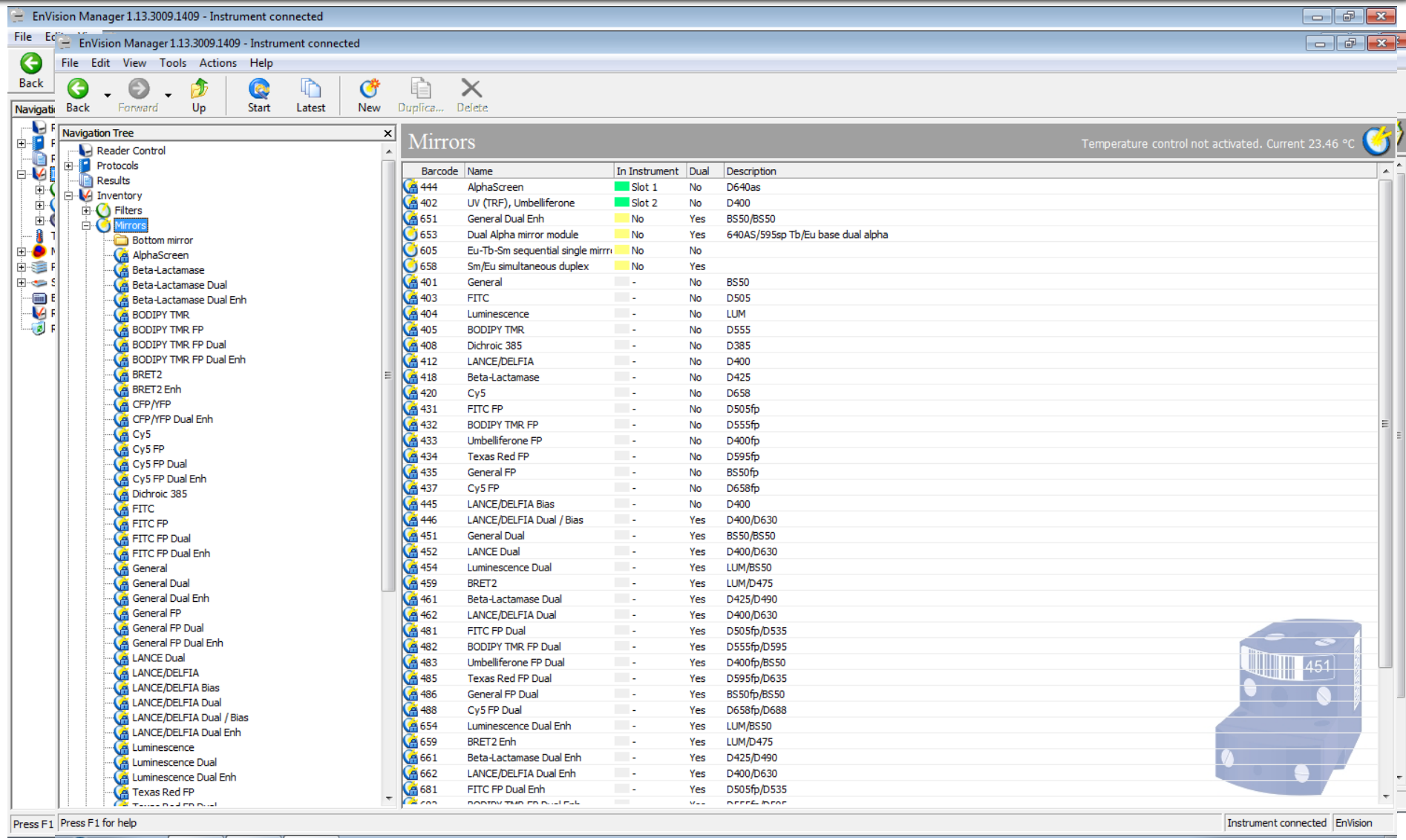
In a Dual Monochromator

- The wavelength is selected once, and after that another time in the sequentially connected second grate.
- The filtered light from the second monochromator is then clean.

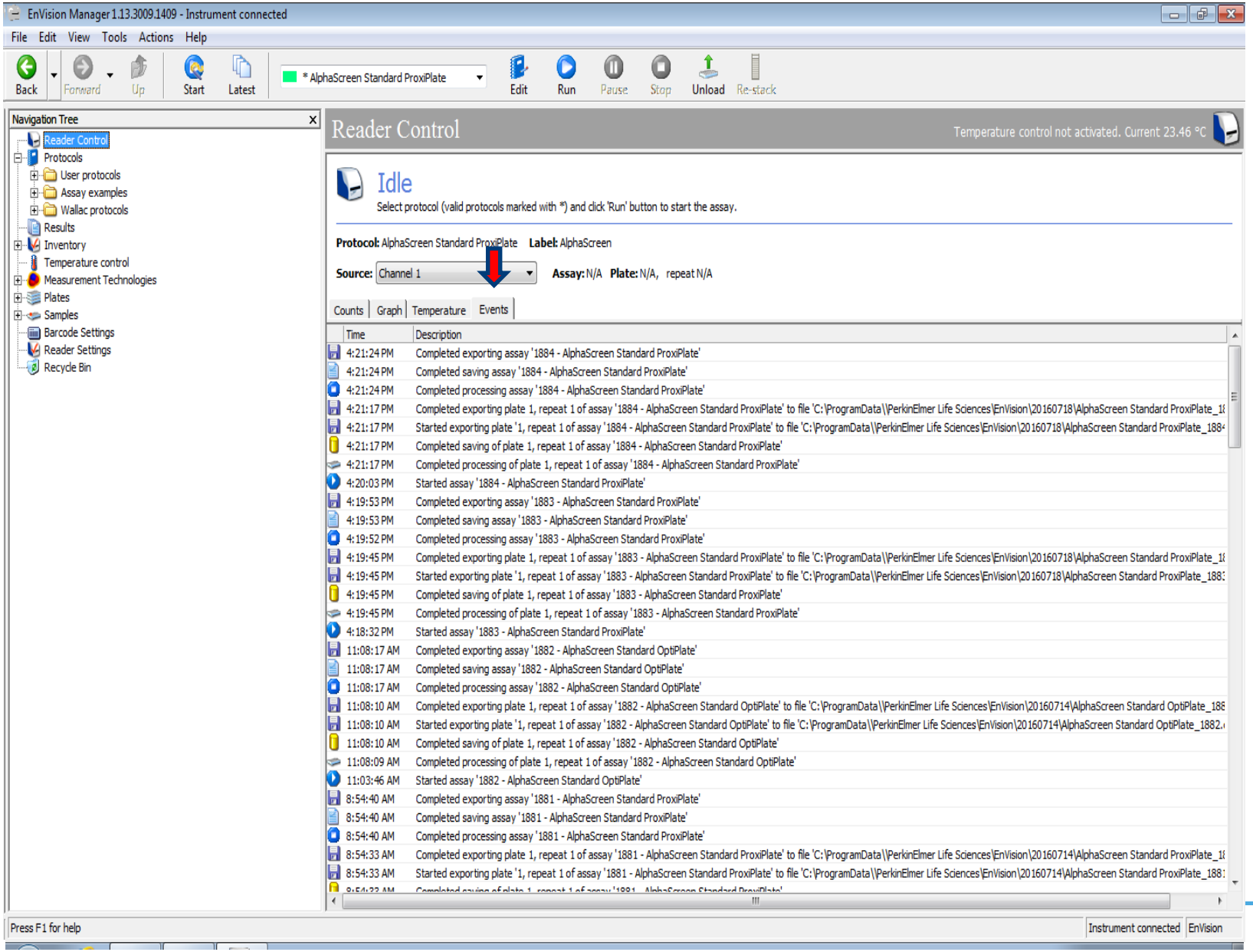
Dual Monochromator module



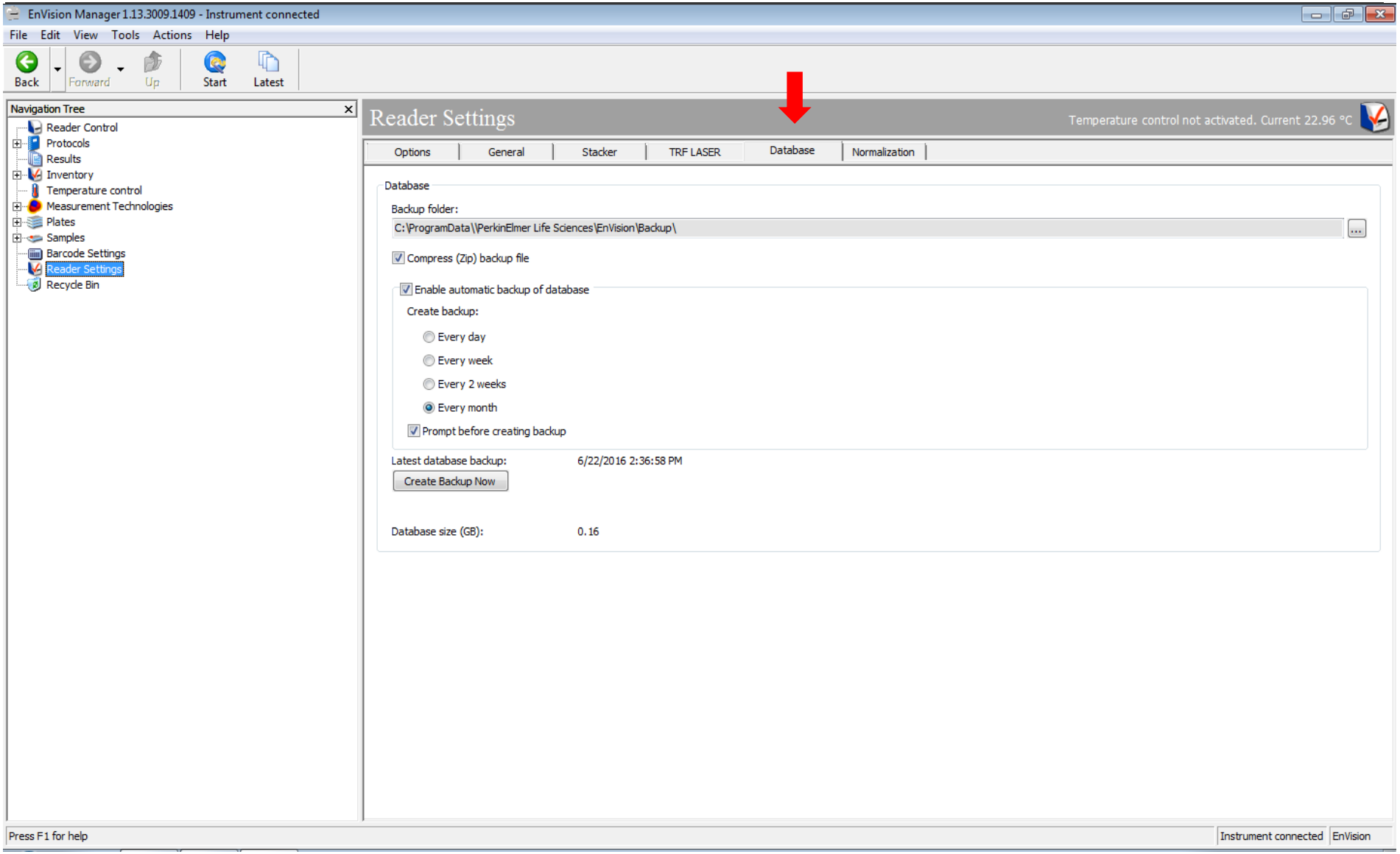
Inventory


EnVision Manager 1.13.3009.1409 - Instrument connected
File Edit View Tools Actions Help
Back Forward Up Start Latest New Duplica... Delete
Navigation Tree
Reader Control
Protocols
Results
Inventory
Filters
Mirrors
Bottom mirror
AlphaScreen
Beta-Lactamase
Beta-Lactamase Dual
Beta-Lactamase Dual Enh
BODIPY TMR
BODIPY TMR FP
BODIPY TMR FP Dual
BODIPY TMR FP Dual Enh
BRET2
BRET2 Enh
CFP/YFP
CFP/YFP Dual Enh
Cy5
Cy5 FP
Cy5 FP Dual
Cy5 FP Dual Enh
Dichroic 385
FITC
FITC FP
FITC FP Dual
FITC FP Dual Enh
General
General Dual
General Dual Enh
General FP
General FP Dual
General FP Dual Enh
LANCE Dual
LANCE/DELFIA
LANCE/DELFIA Bias
LANCE/DELFIA Dual
LANCE/DELFIA Dual / Bias
LANCE/DELFIA Dual Enh
Luminescence
Luminescence Dual
Luminescence Dual Enh
Texas Red FP
Mirrors
Temperature control not activated. Current 23.46 °C
Barcode Name In Instrument Dual Description
444 AlphaScreen Slot 1 No D640as
402 UV (TRF), Umbelliferone Slot 2 No D400
651 General Dual Enh No Yes BS50/BS50
653 Dual Alpha mirror module No Yes 640AS/595sp Tb/Eu base dual alpha
605 Eu-Tb-Sm sequential single mirr No No
658 Sm/Eu simultaneous duplex No Yes
401 General - No BS50
403 FITC - No D505
404 Luminescence - No LUM
405 BODIPY TMR - No D555
408 Dichroic 385 - No D385
412 LANCE/DELFIA - No D400
418 Beta-Lactamase - No D425
420 Cy5 - No D658
431 FITC FP - No D505fp
432 BODIPY TMR FP - No D555fp
433 Umbelliferone FP - No D400fp
434 Texas Red FP - No D595fp
435 General FP - No BS50fp
437 Cy5 FP - No D658fp
445 LANCE/DELFIA Bias - No D400
446 LANCE/DELFIA Dual / Bias - Yes D400/D630
451 General Dual - Yes BS50/BS50
452 LANCE Dual - Yes D400/D630
454 Luminescence Dual - Yes LUM/BS50
459 BRET2 - Yes LUM/D475
461 Beta-Lactamase Dual - Yes D425/D490
462 LANCE/DELFIA Dual - Yes D400/D630
481 FITC FP Dual - Yes D505fp/D535
482 BODIPY TMR FP Dual - Yes D555fp/D595
483 Umbelliferone FP Dual - Yes D400fp/BS50
485 Texas Red FP Dual - Yes D595fp/D635
486 General FP Dual - Yes BS50fp/BS50
488 Cy5 FP Dual - Yes D658fp/D688
654 Luminescence Dual Enh - Yes LUM/BS50
659 BRET2 Enh - Yes LUM/D475
661 Beta-Lactamase Dual Enh - Yes D425/D490
662 LANCE/DELFIA Dual Enh - Yes D400/D630
681 FITC FP Dual Enh - Yes D505fp/D535
451
Press F1
Press F1 for help
Instrument connected
EnVision

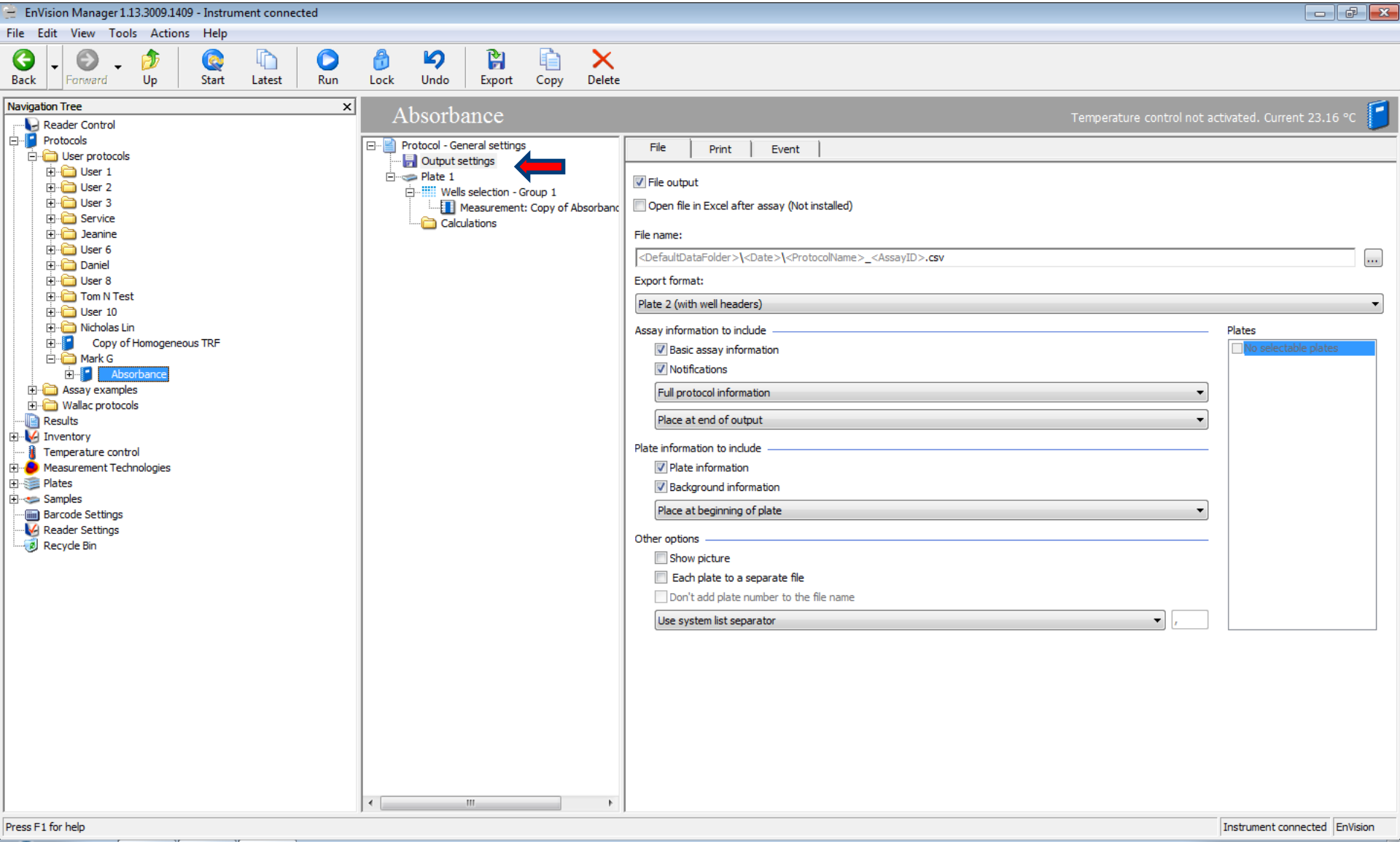
Reader Control



Reader Settings



Protocol General Settings



Plates General Tab

EnVision Manager 1.13.3009.1409 - Instrument connected

File Edit View Tools Actions Help

Back Forward Up Start Latest Lock New Duplica... Undo Delete

Navigation Tree

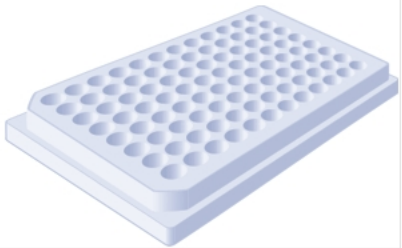
- Reader Control
- Protocols
- Results
- Inventory
- Temperature control
- Measurement Technologies
- Plates
  - 1536 AlphaPlate NEW
  - 1536 CulturPlate NEW
  - 1536 General
  - 1536 Greiner
  - 1536 Greiner Low Base
  - 1536 OptiPlate NEW
  - 1536 OptiPlate OLD
  - 1536 SpectraPlate NEW
  - 24 General
  - 24 VisiPlate
  - 384 Costar
  - 384 General
  - 384 Image FlashPlate
  - 384 Nunc
  - 384 OptiPlate
  - 384 ProxiPlate
  - 384 ViewPlate
  - 384 Wallac
  - 96 Costar Half Area Plate
  - 96 Costar UV Plate
  - 96 General
  - 96 Nunc DELFIA Strip plate
  - 96 OptiPlate
  - 96 ProxiPlate
  - 96 Thermo Electron CliniPlate
  - 96 Thermo Electron DELFIA Strip plate
  - 96 ViewPlate
  - 96 Wallac IsoPlate
  - Wallac Test Plate
  - <New plate> 1
  - 384 AlphaPlate
  - 384 OptiPlate White LANCE
  - 384 well Corning Low Volume Flat
  - Copy of 96 Nunc DELFIA Strip plate
  - Greiner 384 for BI
  - Service Test Plate_5mm
- Samples

384 General

Temperature control not activated. Current 23.16 °C

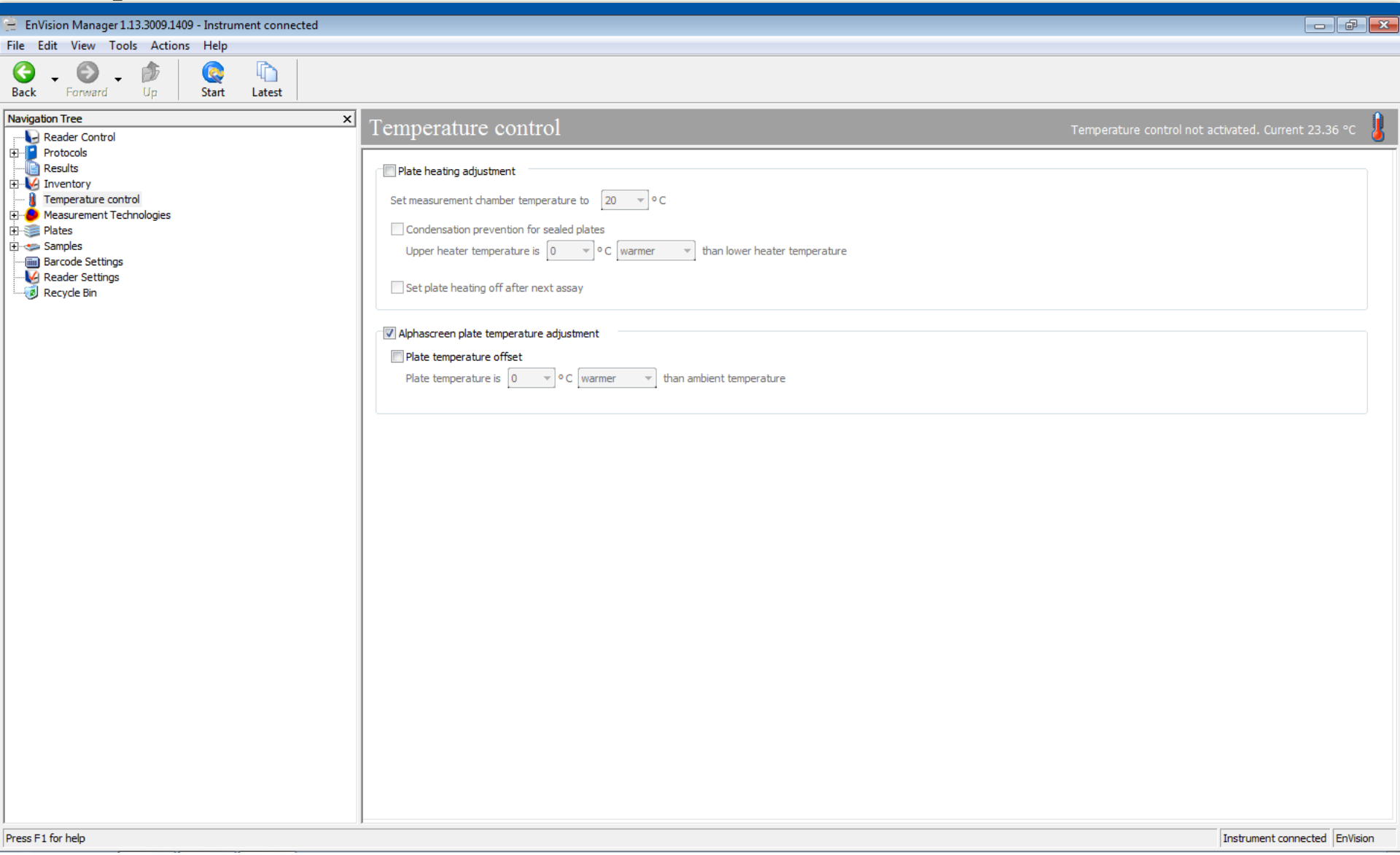
General | Optimizations

Name	384 General
Number of rows	16
Number of columns	24
Height (mm)	14.35
Well diameter (mm)	3.5
Well volume (µl)	100
Column coordinate of top left corner well (mm)	12.13
Row coordinate of top left corner well (mm)	8.99
Column coordinate of top right corner well (mm)	115.63
Row coordinate of top right corner well (mm)	8.99
Column coordinate of bottom left corner well (mm)	12.13
Row coordinate of bottom left corner well (mm)	76.49
Column coordinate of bottom right corner well (mm)	115.63
Row coordinate of bottom right corner well (mm)	76.49
Changed	6/27/2016 12:24:42 PM (Installation)

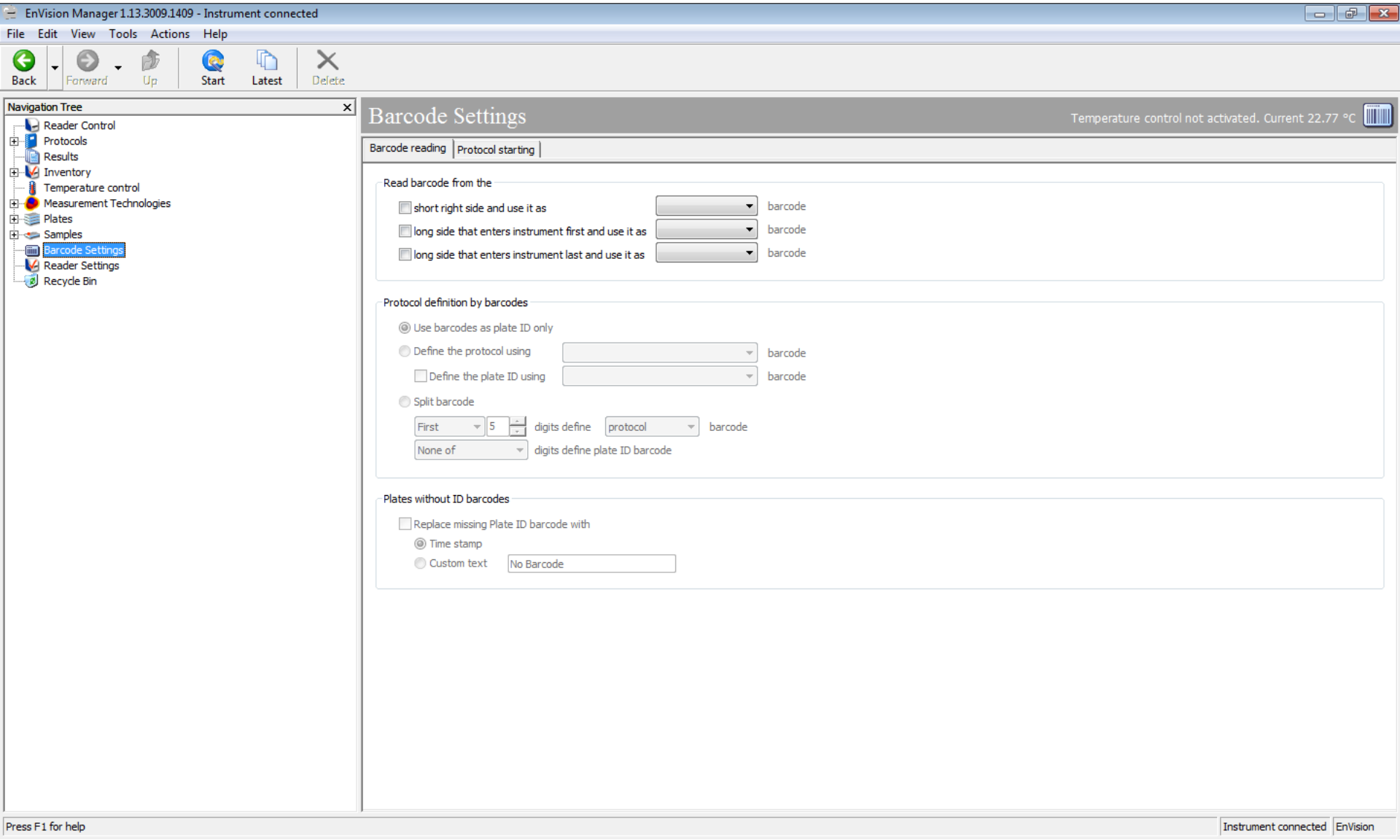


Press F1 for help | Instrument connected | EnVision

Temperature Control



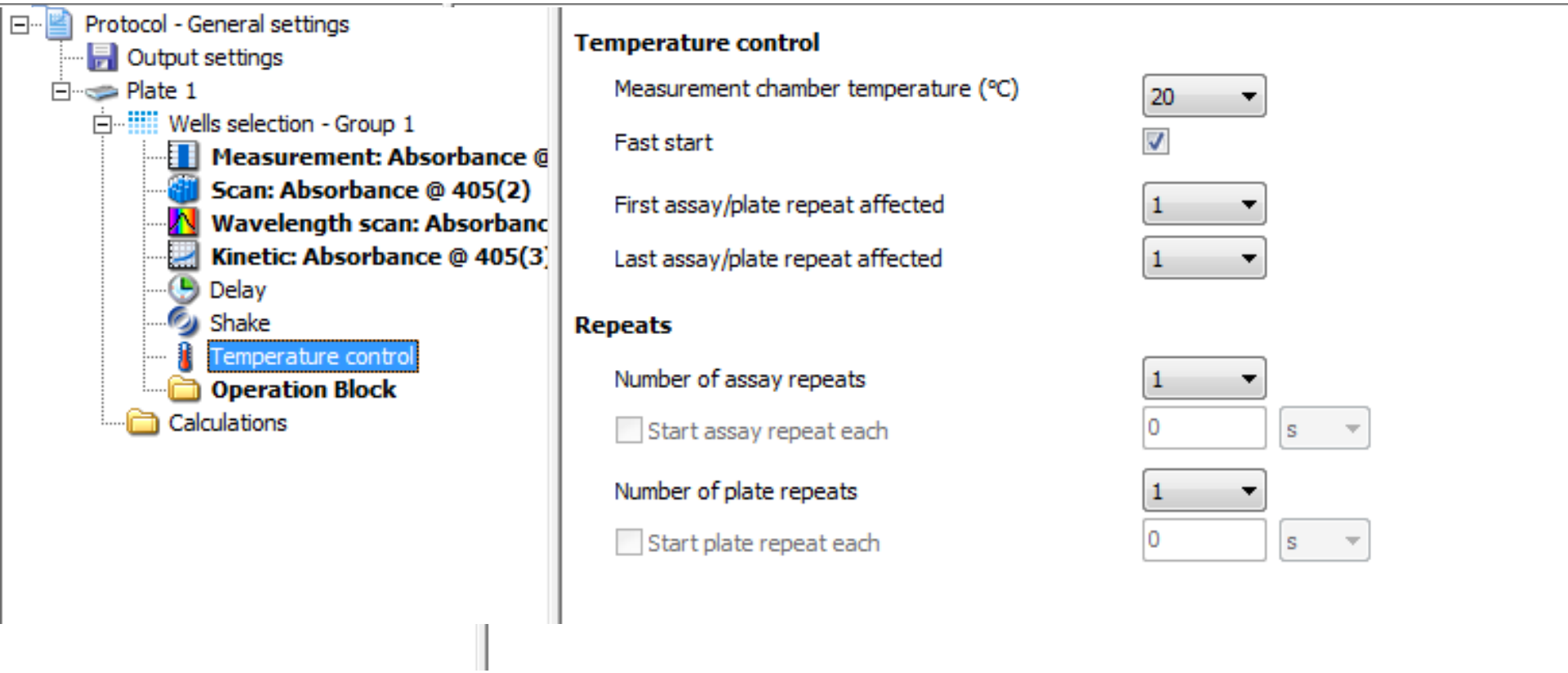
Barcode Reader



Reagent Technologies

	Absorbance	Fluorescence	Luminescence	FP	DELFIA	LANCE	ALPHASCREEN
LIGHT SOURCE	Ex Xenon Flash + Filter/Mono	Ex Xenon Flash + Filter/mono	Reagent is light source	Ex Xenon Flash + Filter	Ex Xenon Flash + Filter or TRF Laser	Ex Xenon Flash + Filter or TRF Laser	Alpha Laser
MIRROR REQUIRED		Dichroic Mirror or Beamsplitter	Std Lum requires a Lumi mirror block	Dichroic Mirror or Beamsplitter w/polarizer	Dichroic Mirror	Dichroic Mirror	Std Alpha uses Alpha mirror block
Emission Wavelength Selection	Reagent is Em filter	Em Filter/Mono	-Std Lum uses single or dual Filter -US Lum uses Aperture	Em Filters with S and P polarizers	Em Filter(s)	Em Filter(s)	Std Alpha uses single or dual Em Filters HTS uses Aperture
DETECTION DEVICE(s)	Read on Photodiode	Read on Single or dual PMT with filters Read on Dedicated PMT with Mono	-Std Lum uses single or dual PMT -US Lum uses Dedicated PMT	Single or dual PMTs	Single or dual PMTs	Single or dual PMTs	Std Alpha uses single or dual PMT HTS Alpha uses Aperture and dedicated PMT

So many reagents…with a variety of conditions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Output settings
Plate 1
Wells selection - Group 1
Measurement: Absorbance @
Scan: Absorbance @ 405(2)
Wavelength scan: Absorbanc
Kinetic: Absorbance @ 405(3
Delay
Shake
Temperature control
Operation Block
Calculations
Temperature control
Measurement chamber temperature (°C)
20
Fast start
First assay/plate repeat affected
1
Last assay/plate repeat affected
1
Repeats
Number of assay repeats
1
Start assay repeat each
0
s
Number of plate repeats
1
Start plate repeat each
0
s

Absorbance Assays

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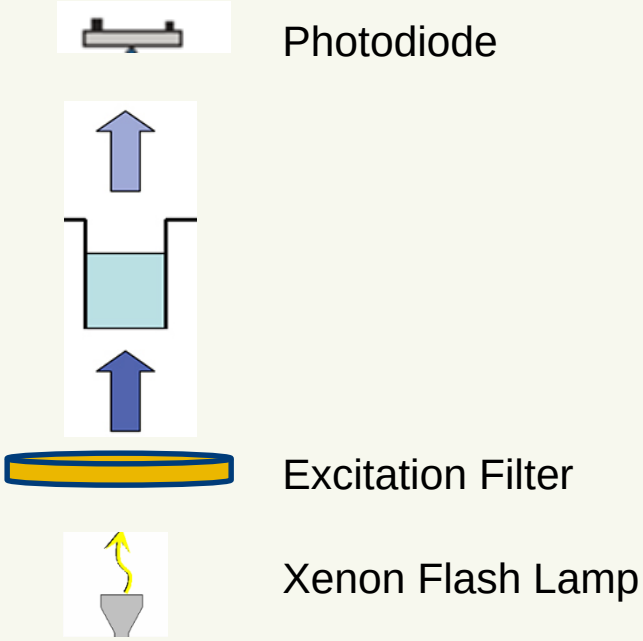
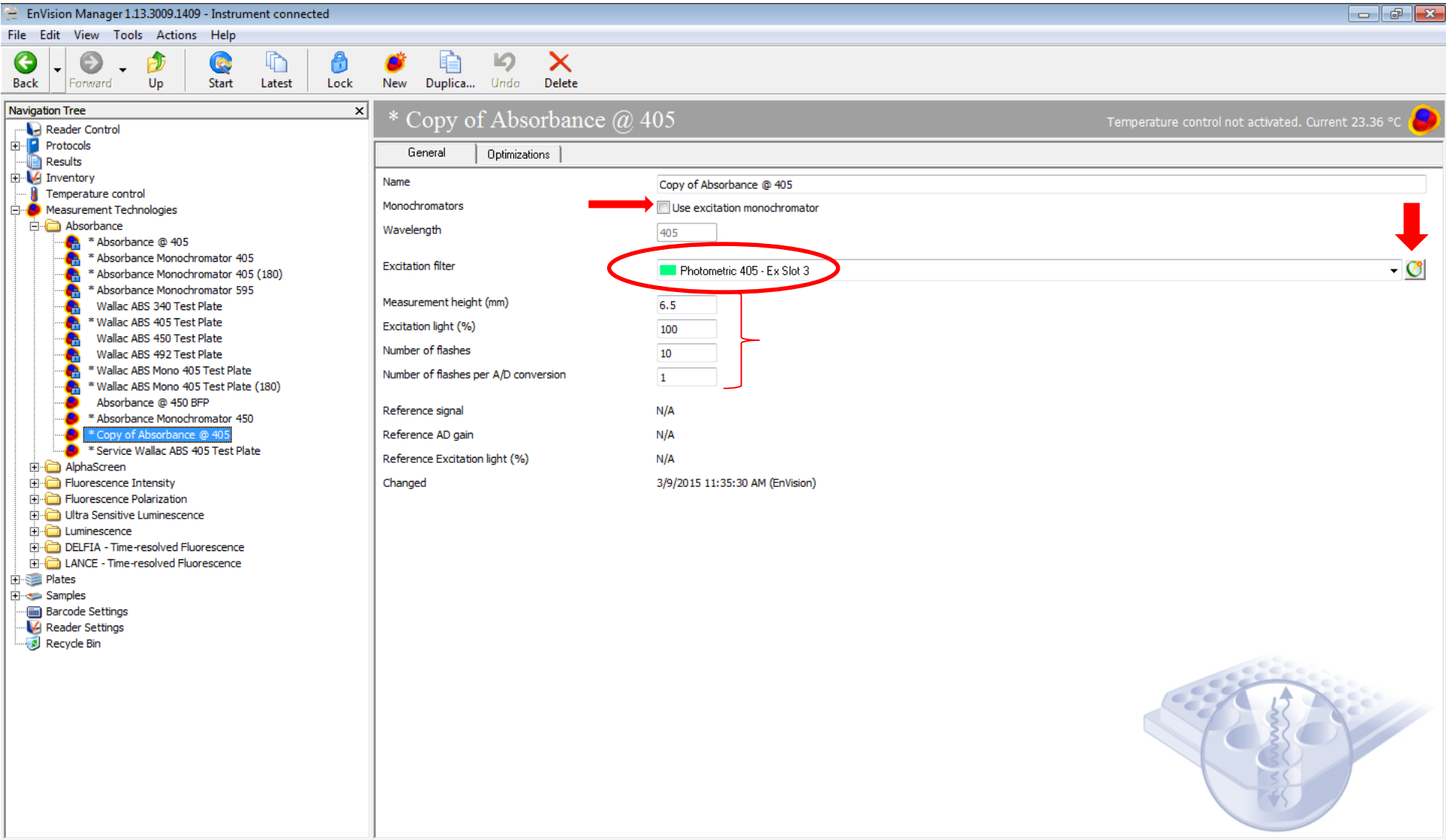
- Inexpensive
- Easy to build
- Large # of commercial kits
- Wash Assay
- Limited Window



Absorbance Principle

Absorbance Protocol



Fluorescence Assays

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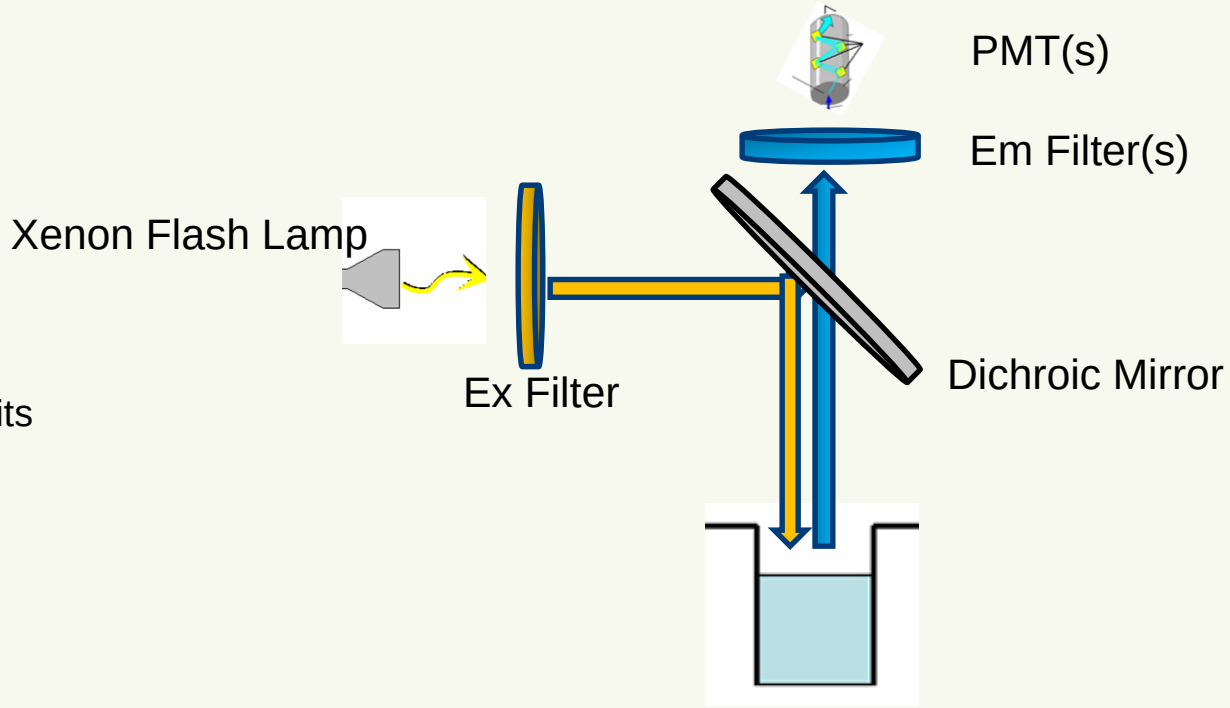
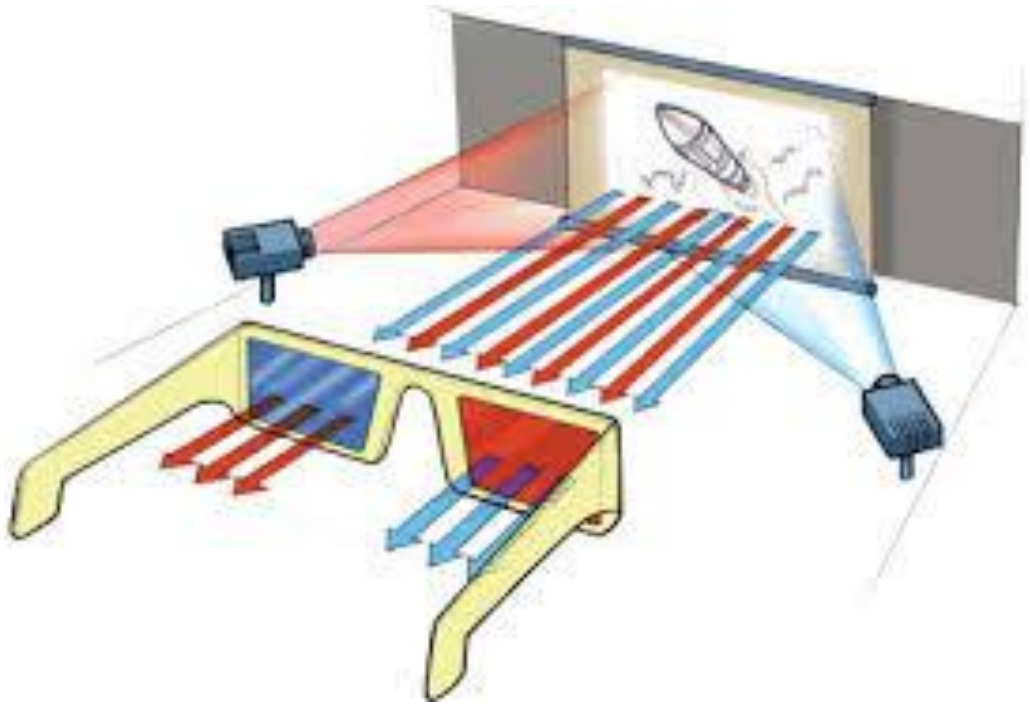
- Inexpensive
- Easy to Build
- Large # of Commercial Kits
- Wash and Homogeneous Assay
- Limited Window
- High Background
- Compound Interference

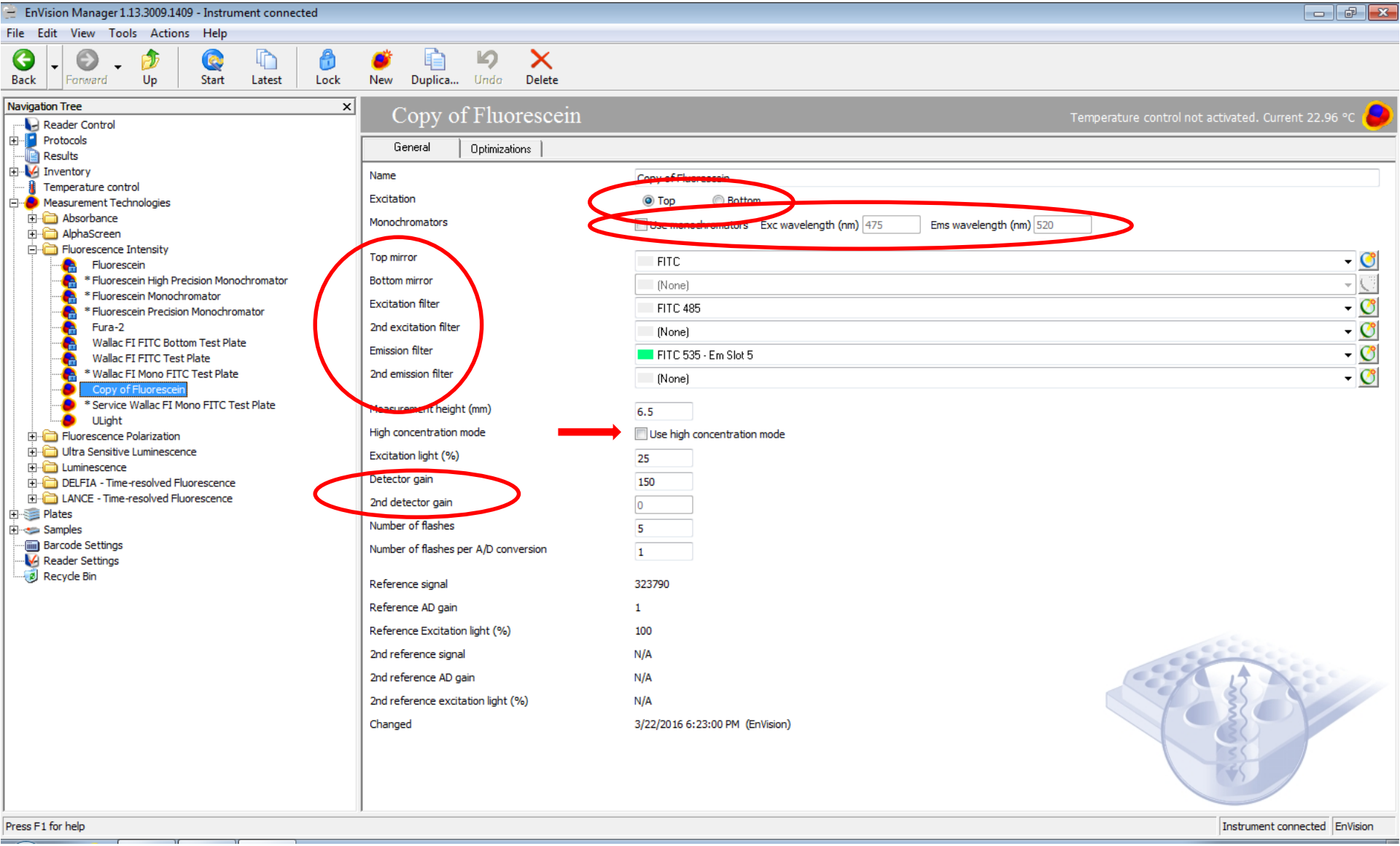


Fluorescence Principle



Filtered Light In- Filtered Light Read

Fluorescence Protocol



Luminescence Assays

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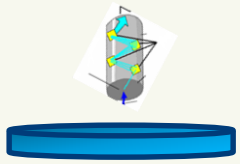
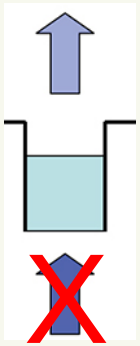


PMT(s)

Emission Filter(s)

Mirror Block

- Low background
- Variety of kits and reagents available
- Good assay window
- Can be inject and read
- Signal Diminishes over time



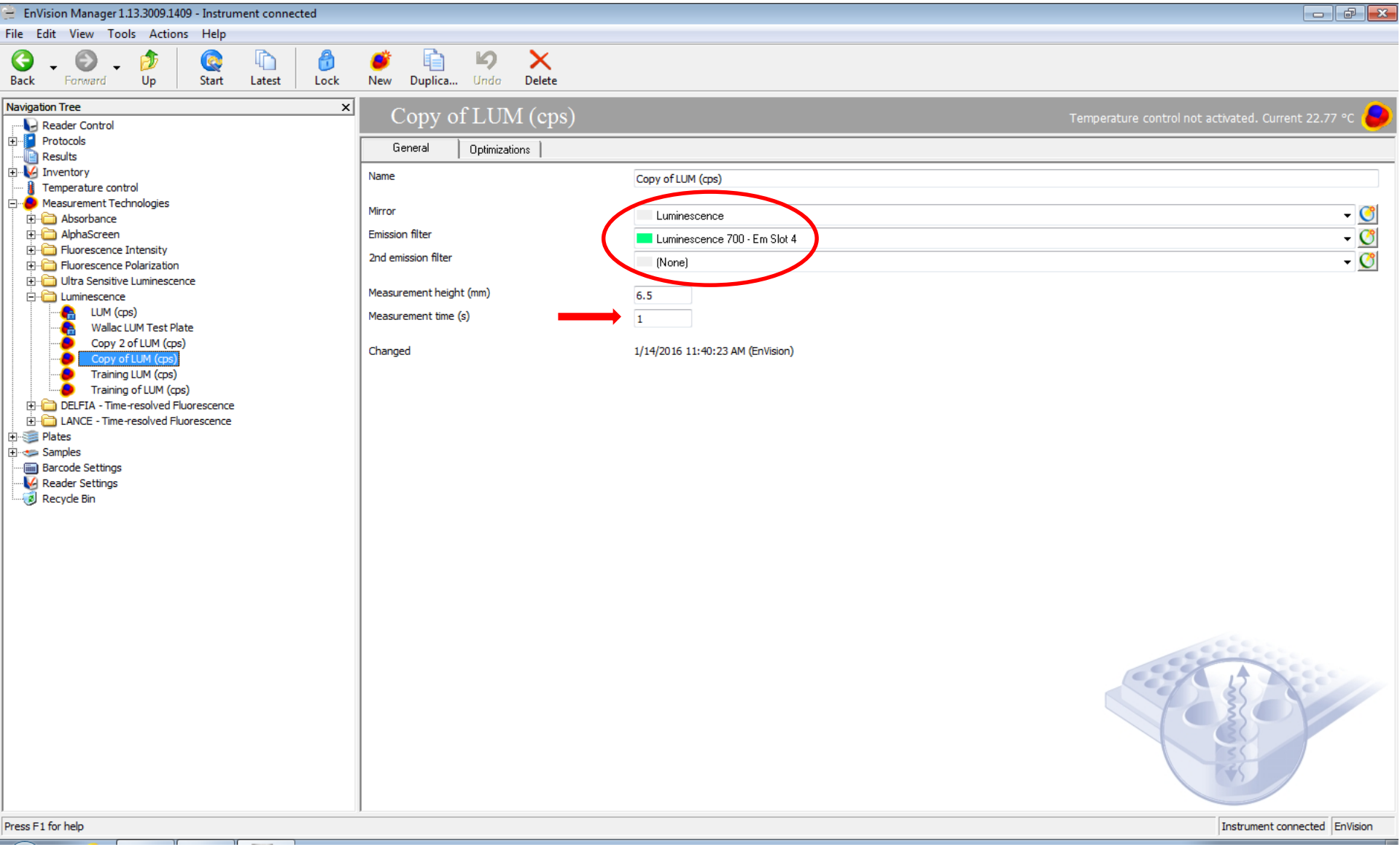
Luminescence Principle

LUMINESCENCE ASSAY SYSTEMS AND INSTRUMENTS

	AequoScreen AequoZen PhotoScreen	britelite plus	steadylite plus	neolite	ATPlite 1step	ATPlite
Applications	• Calcium Flux • GPCR • Ion Channels	• Reporter Gene Assay • GPCR	• Reporter Gene Assay • GPCR	• Reporter Gene Assay • GPCR	• Cytotoxicity • Cell Proliferation Assay	• Cytotoxicity • Cell Proliferation Assay
Half-life (hours)	Flash	0.5	4 to 5	2.5	0.5	5
Sensitivity	High	Very High	Moderate	High	As few as 5 cells/well	As few as 5 cells/well
Plate Format (wells)	96 384 1536	96 384 1536	96 384 1536	96 384 1536	96 384 1536	96 384 1536
Instrumentation	— MicroBeta² LumiJET EnVision VICTOR *X* VICTOR *X* Light —	TopCount MicroBeta² EnSpire EnVision VICTOR *X* VICTOR *X* Light ViewLux	TopCount MicroBeta² EnSpire EnVision VICTOR *X* VICTOR *X* Light ViewLux	TopCount MicroBeta² EnSpire EnVision VICTOR *X* VICTOR *X* Light ViewLux	TopCount MicroBeta² EnSpire EnVision VICTOR *X* VICTOR *X* Light ViewLux	TopCount MicroBeta² EnSpire EnVision VICTOR *X* VICTOR *X* Light ViewLux

Sample Generated Light- Filtered Light Read

Standard Luminescence



Ultra Sensitive Luminescence Assays

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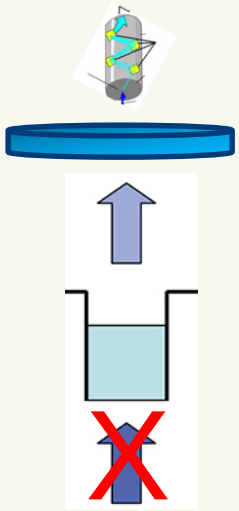


PMT(s)

Aperture

Ultra Sensitive Luminescence

EnVision Manager 1.13.3009.1409 - Instrument connected

File Edit View Tools Actions Help

Back Forward Up Start Latest Lock New Duplica... Undo Delete

Navigation Tree

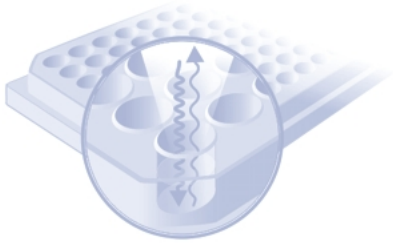
- Reader Control
- Protocols
- Results
- Inventory
- Temperature control
- Measurement Technologies
  - Absorbance
  - AlphaScreen
  - Fluorescence Intensity
  - Fluorescence Polarization
  - Ultra Sensitive Luminescence
    - US LUM 1536 (cps)
    - US LUM 384 (cps)
    - US LUM 96 (cps)
    - Wallac US LUM Test Plate
    - BMS US LUM 96 (cps)
    - Copy of US LUM 384 (cps)
    - Service US LUM 384 (cps)
    - Training US LUM 384 (cps)
  - Luminescence
  - DELFIA - Time-resolved Fluorescence
  - LANCE - Time-resolved Fluorescence
- Plates
- Samples
- Barcode Settings
- Reader Settings
- Recycle Bin

Copy of US LUM 384 (cps)

Temperature control not activated. Current 22.77 °C

General | Optimizations

Name	Copy of US LUM 384 (cps)
Aperture	384 Plate US Luminescence aperture
Distance between plate and detector (mm)	0
Measurement time (s)	0.5
Glow (CT2) correction factor (%)	0
Changed	7/10/2015 10:59:54 AM (EnVision)



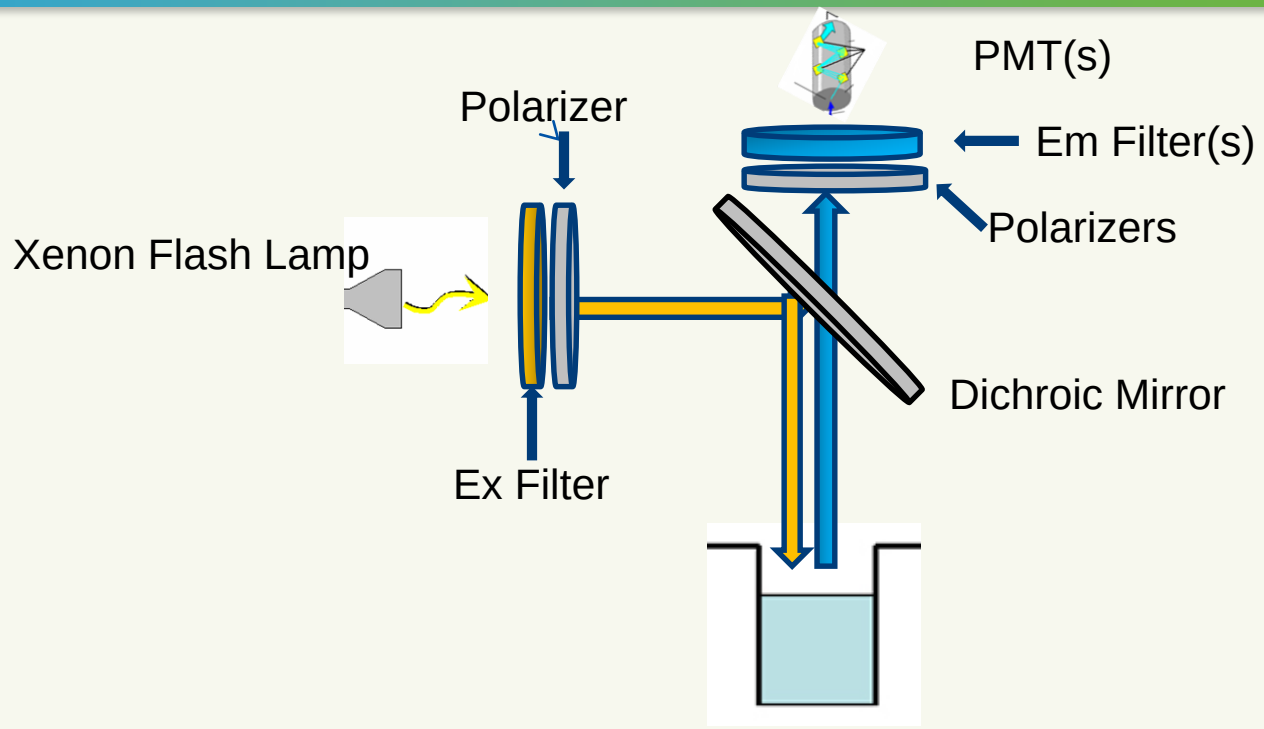
Press F1 for help | Instrument connected | EnVision

Fluorescence Polarization

PerkinElmer
For the Better

HUMAN HEALTH | ENVIRONMENTAL HEALTH

- Inexpensive
- Easy to Build
- Homogeneous Assay
- Single Binding Assay
- Sensitive to Detergents
- Limited Window
- High Background
- Compound Interference
- Difficult to optimize assay conditions



Fluorescence Polarization Principle

Without Polarizer

With Polarizer

Filtered + Polarized Light In- Filtered + Polarized Light Read

Fluorescence Polarization

EnVision Manager 1.13.3009.1409 - Instrument connected

File Edit View Tools Actions Help

Back Forward Up Start Latest Lock New Duplica... Undo Delete

Navigation Tree

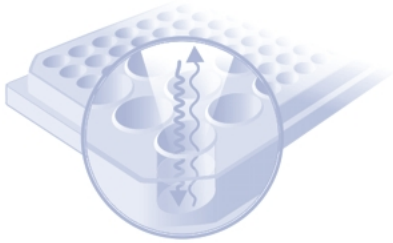
- Reader Control
- Protocols
- Results
- Inventory
- Temperature control
- Measurement Technologies
  - Absorbance
  - AlphaScreen
  - Fluorescence Intensity
  - Fluorescence Polarization
    - FP Fluorescein Dual
    - FP Fluorescein Dual 681
    - Wallac FP FITC Test Plate HTS
    - Wallac FP FITC Test Plate HTS 681
    - Copy of Copy of FP Fluorescein single
    - Copy of FP Fluorescein single
  - Ultra Sensitive Luminescence
  - Luminescence
  - DELFIA - Time-resolved Fluorescence
  - LANCE - Time-resolved Fluorescence
- Plates
- Samples
- Barcode Settings
- Reader Settings
- Recycle Bin

Copy of Copy of FP Fluorescein single

Temperature control not activated. Current 22.86 °C

General | Optimizations

Name	Copy of Copy of FP Fluorescein single
Mirror	FITC FP Dual Enh
Excitation filter	FITC FP 480
Emission filter	FITC FP P-pol 535
2nd emission filter	FITC FP S-pol 535
Measurement height (mm)	6.5
High concentration mode	Use high concentration mode
Excitation light (%)	100
G - factor	1
Detector gain	500
2nd detector gain	700
Number of flashes	30
Number of flashes per A/D conversion	1
Reference signal	N/A
Reference AD gain	N/A
Reference Excitation light (%)	N/A
Changed	6/22/2016 3:44:00 PM (EnVision)



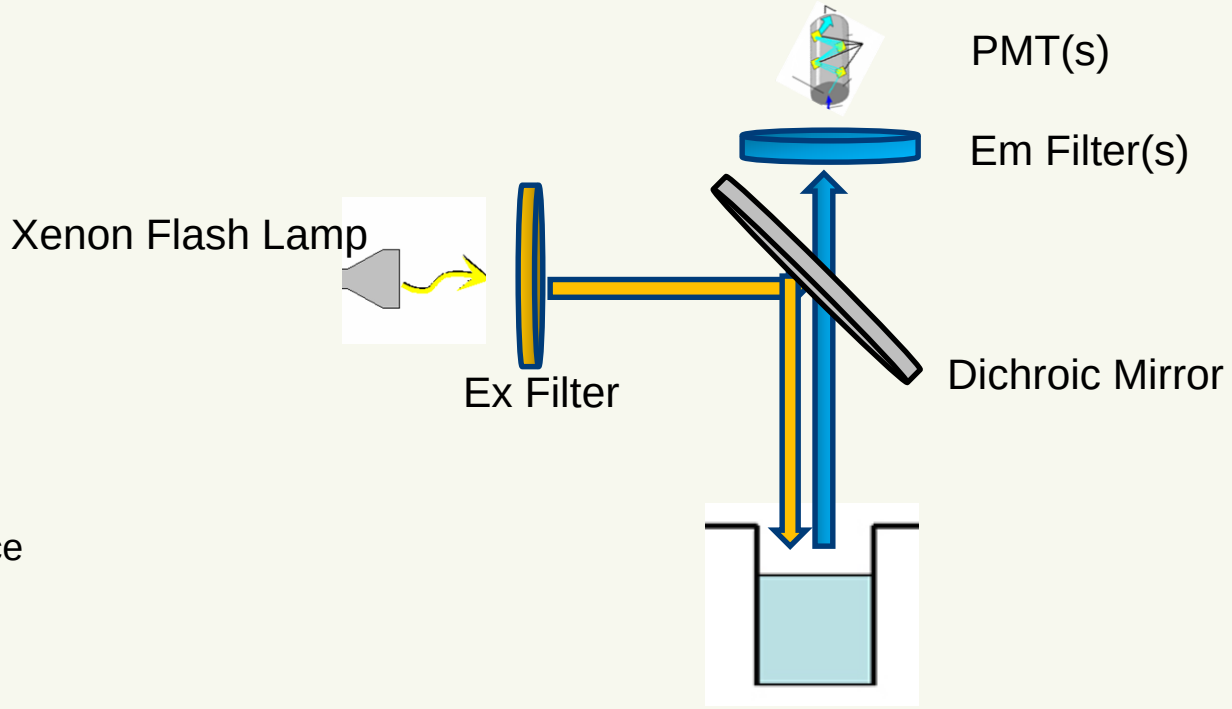
Press F1 for help | Instrument connected | EnVision

DELFIA (TRF)

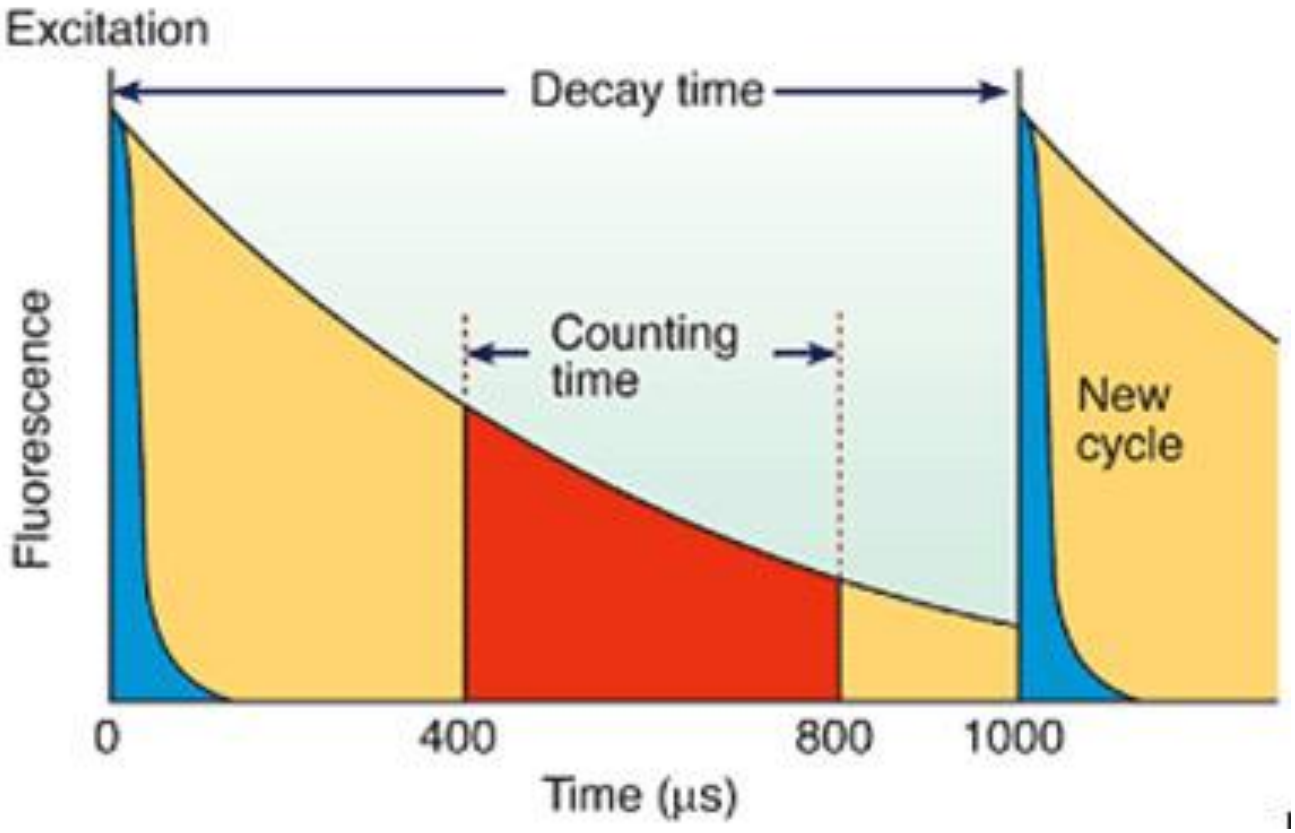
PerkinElmer
For the Better

HUMAN HEALTH | ENVIRONMENTAL HEALTH

- Wide Dynamic Range
- Easy to Build
- Bright signal
- Low background
- Low Background
- No Compound Interference
- Wash Assay

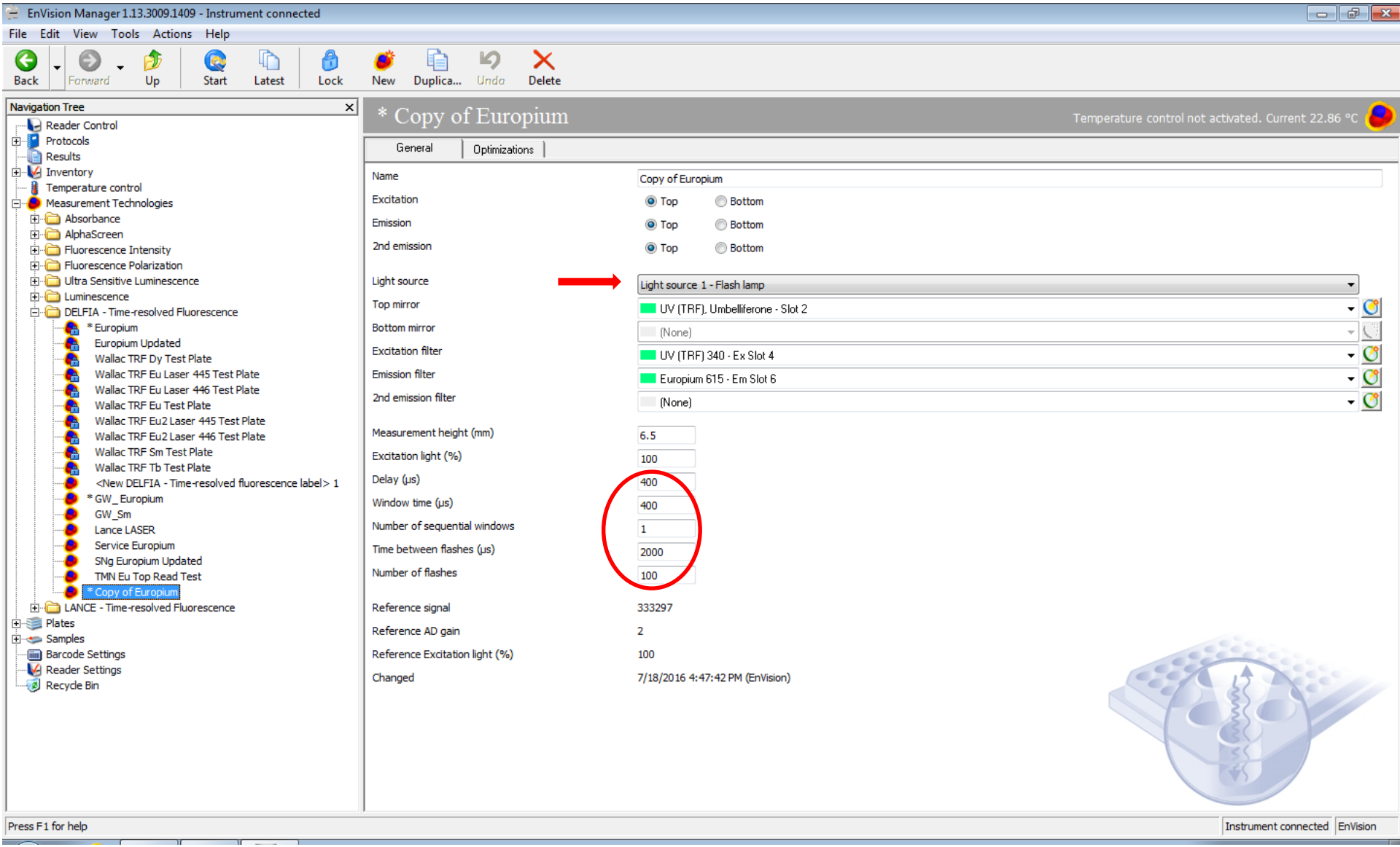


DELFIA Principle

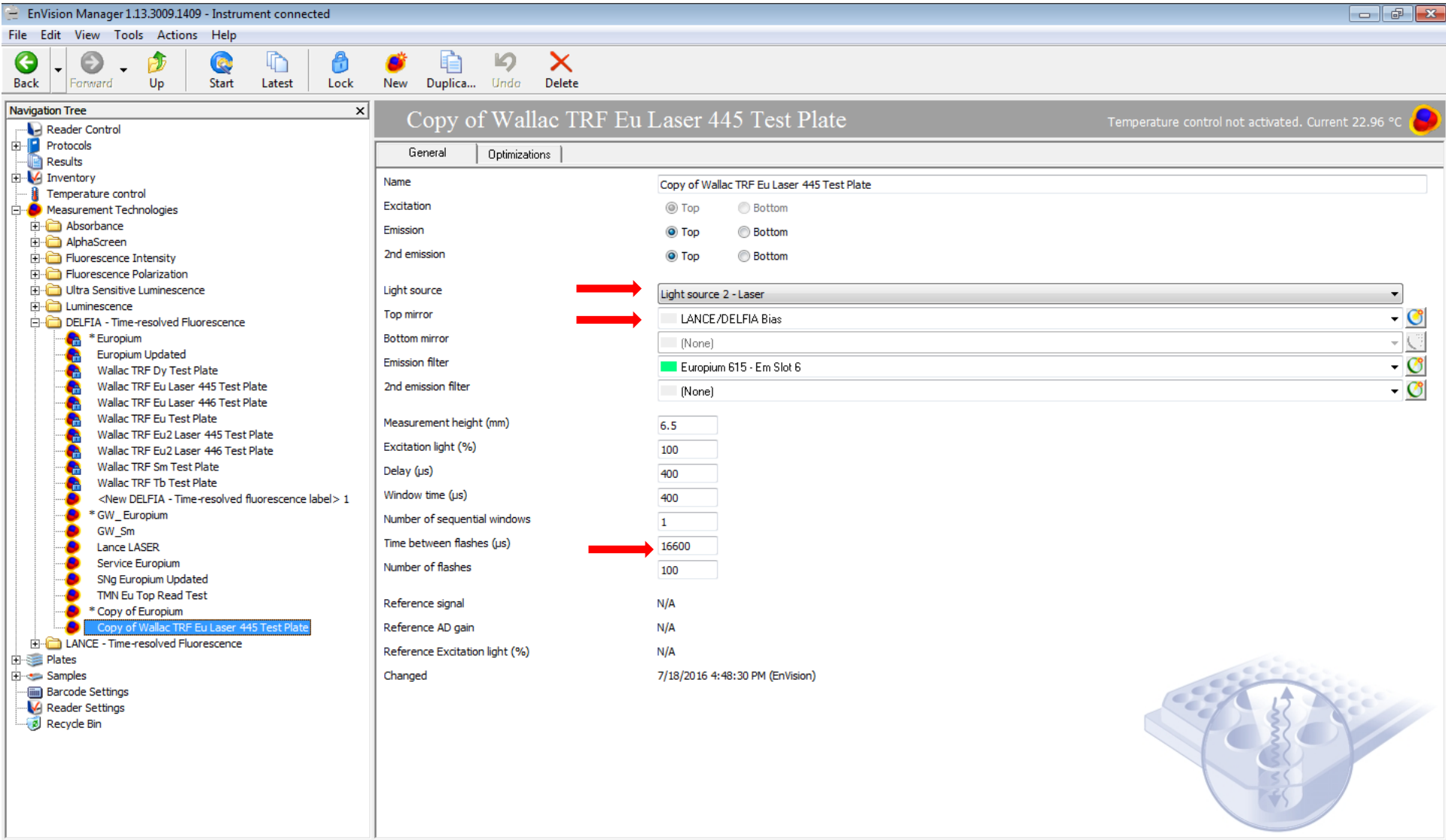


Filtered Light In - Time resolve - Filtered Light Read

DELFIA Flash Lamp



DELFIA TRF Laser

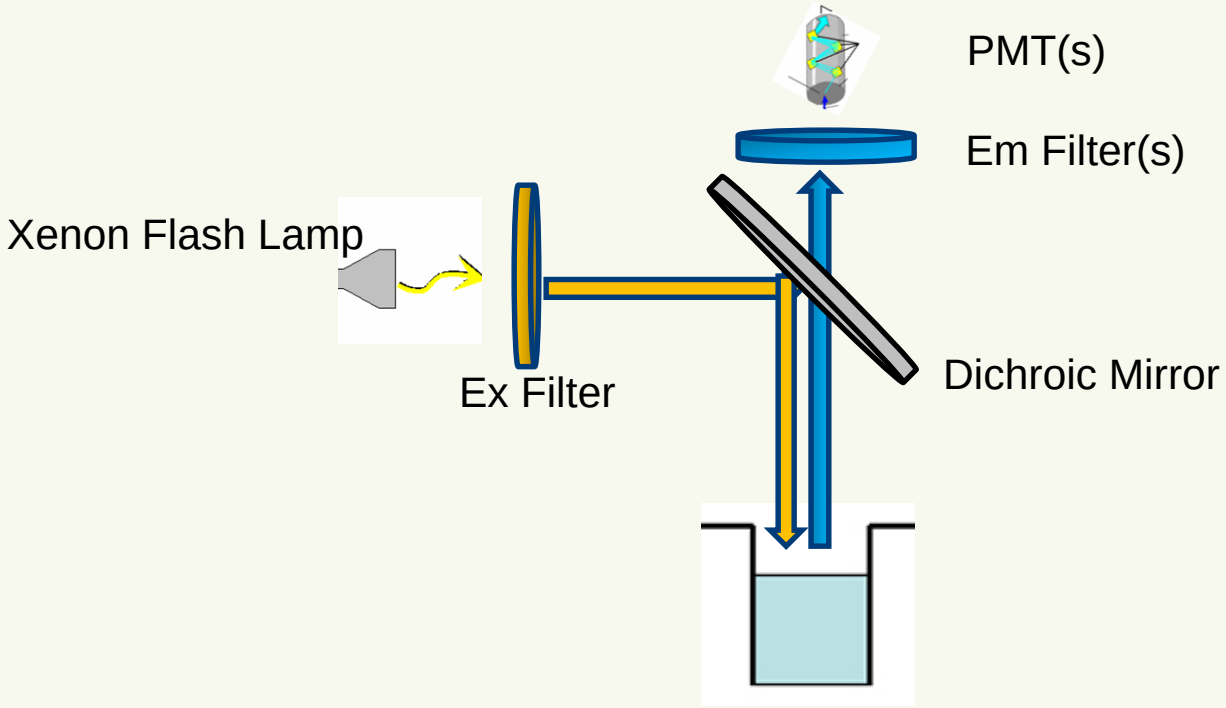


LANCE (TR-FRET)

PerkinElmer
For the Better

HUMAN HEALTH | ENVIRONMENTAL HEALTH

- Wide Dynamic Range
- Easy to Build
- Large Variety of Kits
- Ratiometric Signal
- Low Background
- Mix and Read Assay
- Can't tolerate large complexes



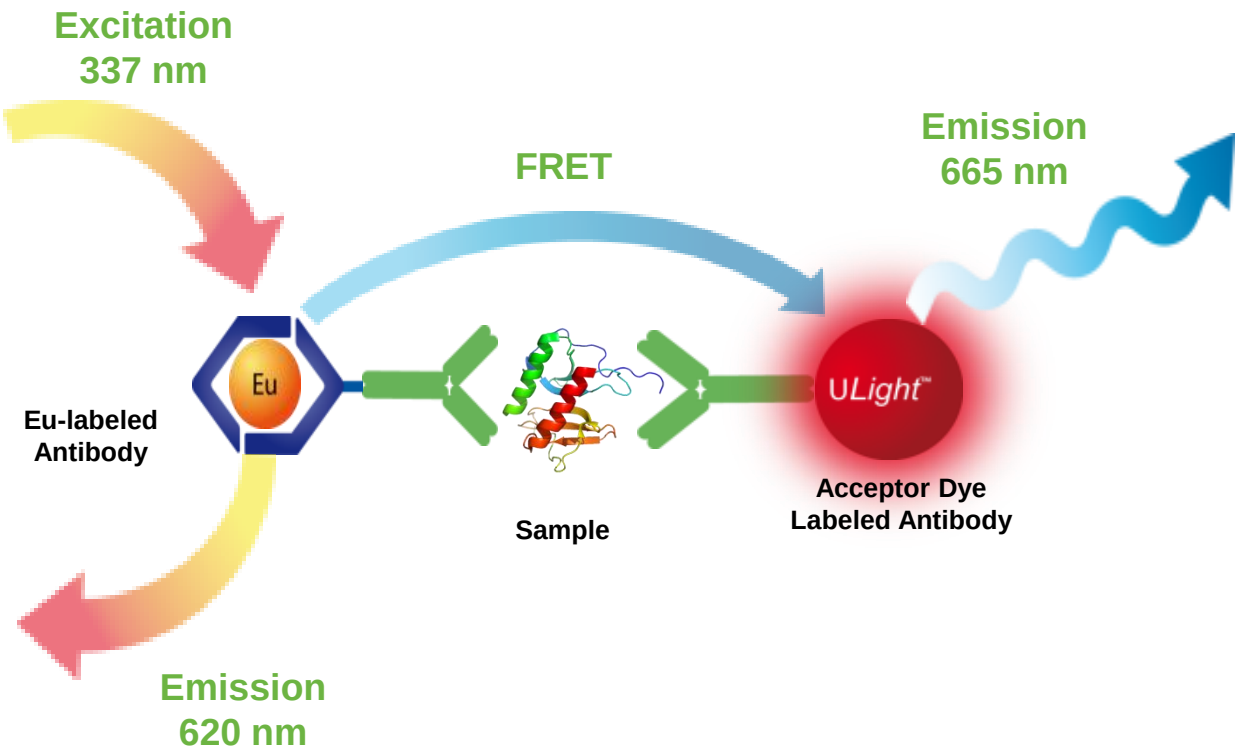
LANCE Principle

Add Sample

Eu-Labeled Antibody and Ulight Labeled Antibody

Incubate (1hr)

Read



Filtered Light In - Time resolve - Filtered Light Read

LANCE/ TR-FRET Flash Lamp

EnVision Manager 1.13.3009.1409 - Instrument connected

File Edit View Tools Actions Help

Back | Forward | Up | Start | Latest | Lock | New | Duplica... | Undo | Delete

Navigation Tree

- Reader Control
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- Results
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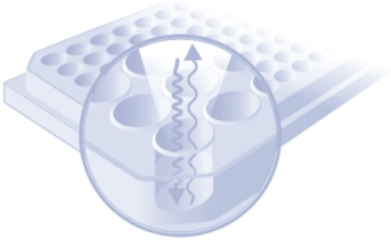
- Temperature control
- Measurement Technologies
  - Absorbance
  - AlphaScreen
  - Fluorescence Intensity
  - Fluorescence Polarization
  - Ultra Sensitive Luminescence
  - Luminescence
  - DELFIA - Time-resolved Fluorescence
  - LANCE - Time-resolved Fluorescence
    - Homogeneous TRF
    - Homogeneous TRF Laser
    - Homogeneous TRF Laser Precision
    - LANCE Dual Laser
    - LANCE Dual Laser 50/200
    - LANCE Eu/APC Dual
    - LANCE Eu/APC Dual 662
    - LANCE Eu/APC Dual Updated
    - TruPoint 615
    - Wallac LANCE Test Plate HTS
    - Wallac LANCE Test Plate HTS 662
    - <New LANCE - Time-resolved fluorescence label> 1
    - <New LANCE - Time-resolved fluorescence label> 2
    - Copy of Homogeneous TRF
    - Copy of LANCE Dual Laser
    - Service lance TRF Laser_Hopkinton
    - SNg LANCE Eu/APC Dual Updated
    - Copy of LANCE Eu/APC Dual
- Plates
- Samples
- Barcode Settings
- Reader Settings
- Recycle Bin

Copy of LANCE Eu/APC Dual

Temperature control not activated. Current 22.57 °C

General | Optimizations

Name	Copy of LANCE Eu/APC Dual
Excitation	Top / Bottom
Emission	Top / Bottom
2nd emission	Top / Bottom
Light source	Light source 1 - Flash lamp
Top mirror	LANCE Dual
Bottom mirror	(None)
Excitation filter	UV2 (TRF) 320 - Ex Slot 5
Emission filter	APC 665 - Em Slot 8
2nd emission filter	Europium 615 - Em Slot 6
Measurement height (mm)	6.5
Excitation light (%)	100
Delay (µs)	60
Window time (µs)	100
Number of sequential windows	1
Time between flashes (µs)	2000
Number of flashes	100
Number of flashes for 2nd detector	20
Reference signal	N/A
Reference AD gain	N/A
Reference Excitation light (%)	N/A
Changed	7/18/2016 4:50:18 PM (EnVision)



Press F1 for help | Instrument connected | EnVision

LANCE/ TR-FRET TRF Laser

EnVision Manager 1.13.3009.1409 - Instrument connected

File Edit View Tools Actions Help

Back | Forward | Up | Start | Latest | Lock | New | Duplica... | Undo | Delete

Navigation Tree

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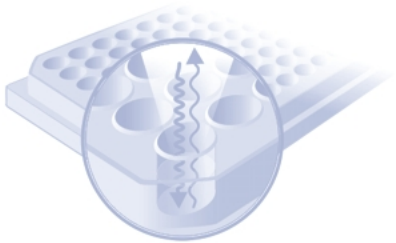
  - Absorbance
  - AlphaScreen
  - Fluorescence Intensity
  - Fluorescence Polarization
  - Ultra Sensitive Luminescence
  - Luminescence
  - DELFIA - Time-resolved Fluorescence
  - LANCE - Time-resolved Fluorescence
    - Homogeneous TRF
    - Homogeneous TRF Laser
    - Homogeneous TRF Laser Precision
    - LANCE Dual Laser
    - LANCE Dual Laser 50/200
    - LANCE Eu/APC Dual
    - LANCE Eu/APC Dual 662
    - LANCE Eu/APC Dual Updated
    - TruPoint 615
    - Wallac LANCE Test Plate HTS
    - Wallac LANCE Test Plate HTS 662
    - <New LANCE - Time-resolved fluorescence label> 1
    - <New LANCE - Time-resolved fluorescence label> 2
    - Copy of Homogeneous TRF
    - Copy of LANCE Dual Laser
    - Service lance TRF Laser_Hopkinton
    - SNg LANCE Eu/APC Dual Updated
    - Copy of LANCE Eu/APC Dual
- Plates
- Samples
- Barcode Settings
- Reader Settings
- Recycle Bin

Copy of LANCE Dual Laser

Temperature control not activated. Current 22.96 °C

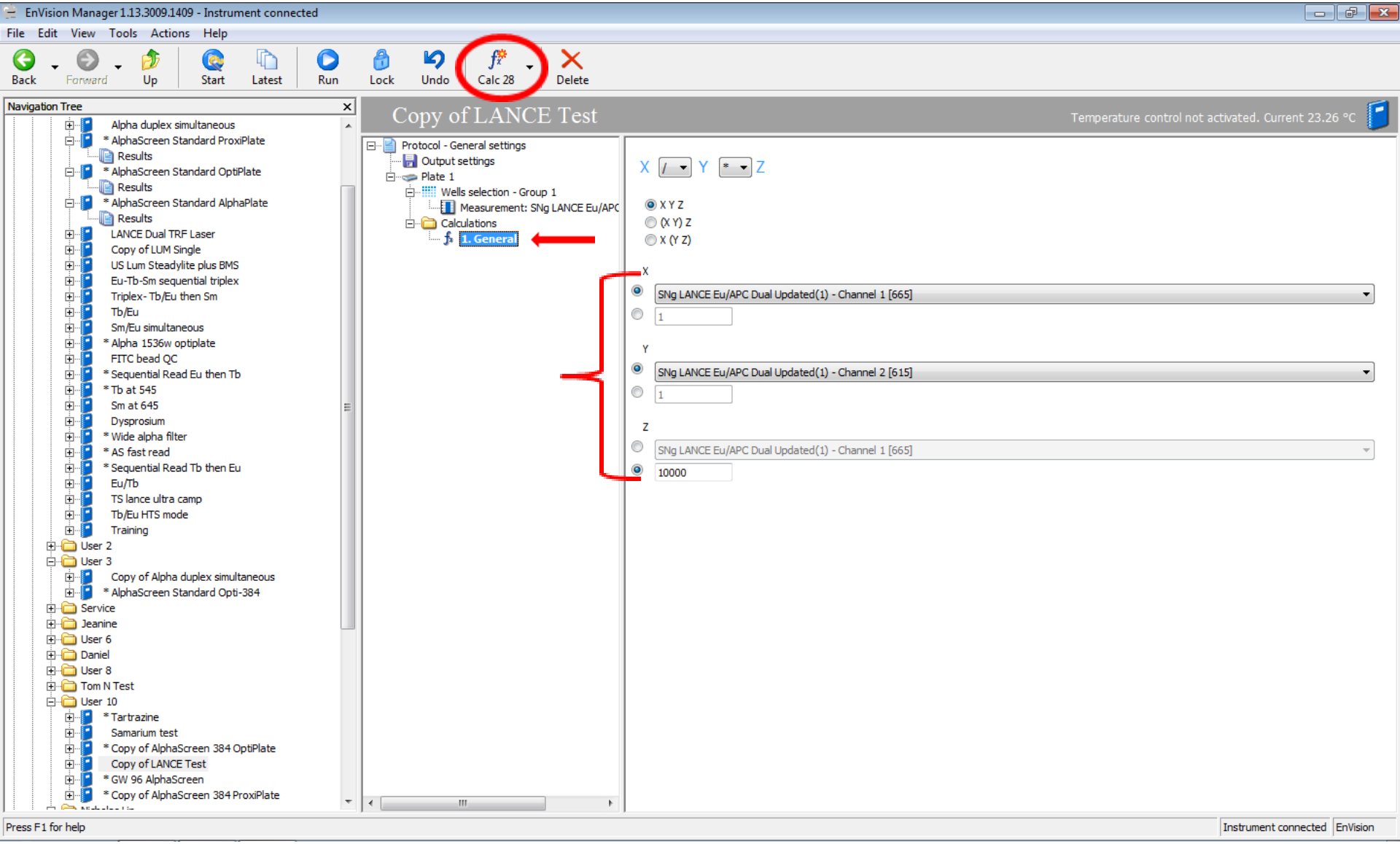
General | Optimizations

Name	Copy of LANCE Dual Laser
Excitation	Top / Bottom
Emission	Top / Bottom
2nd emission	Top / Bottom
Light source	Light source 2 - Laser
Top mirror	LANCE/DELFIA Dual / Bias
Bottom mirror	(None)
Emission filter	APC 665 - Em Slot 8
2nd emission filter	Europium 615 - Em Slot 6
Measurement height (mm)	6.5
Delay (µs)	20
Window time (µs)	200
Number of sequential windows	1
Time between flashes (µs)	16600
Number of flashes	20
Number of flashes for 2nd detector	5
Reference signal	283766
Reference AD gain	2
Changed	7/7/2015 2:29:24 PM (EnVision)



Press F1 for help | Instrument connected | EnVision

Applying a Ratio Calculation to TR-FRET assays



AlphaScreen

(AlphaLISA, AlphaPLEX, Surefire)

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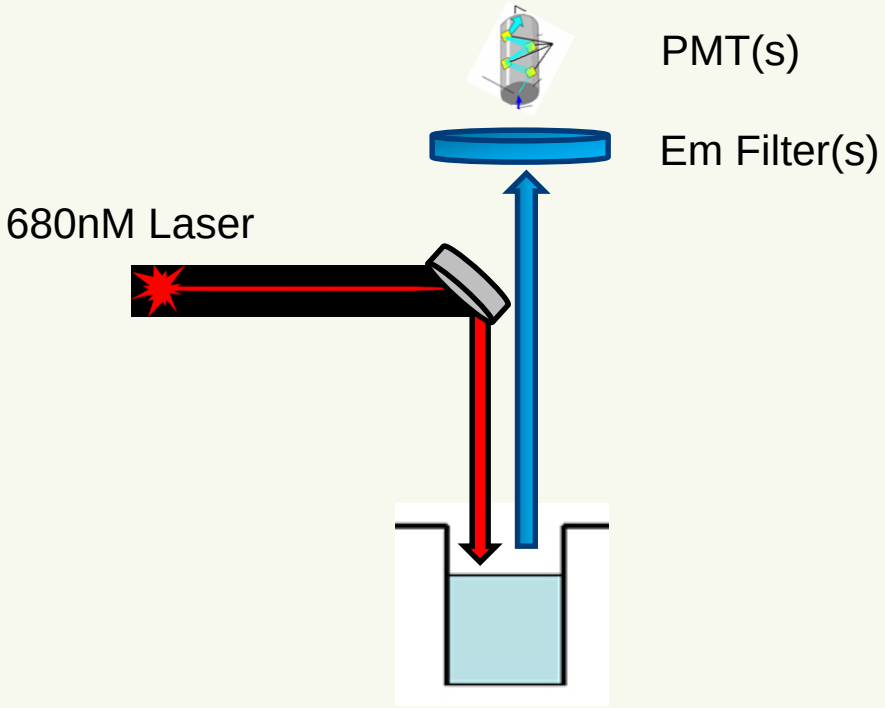
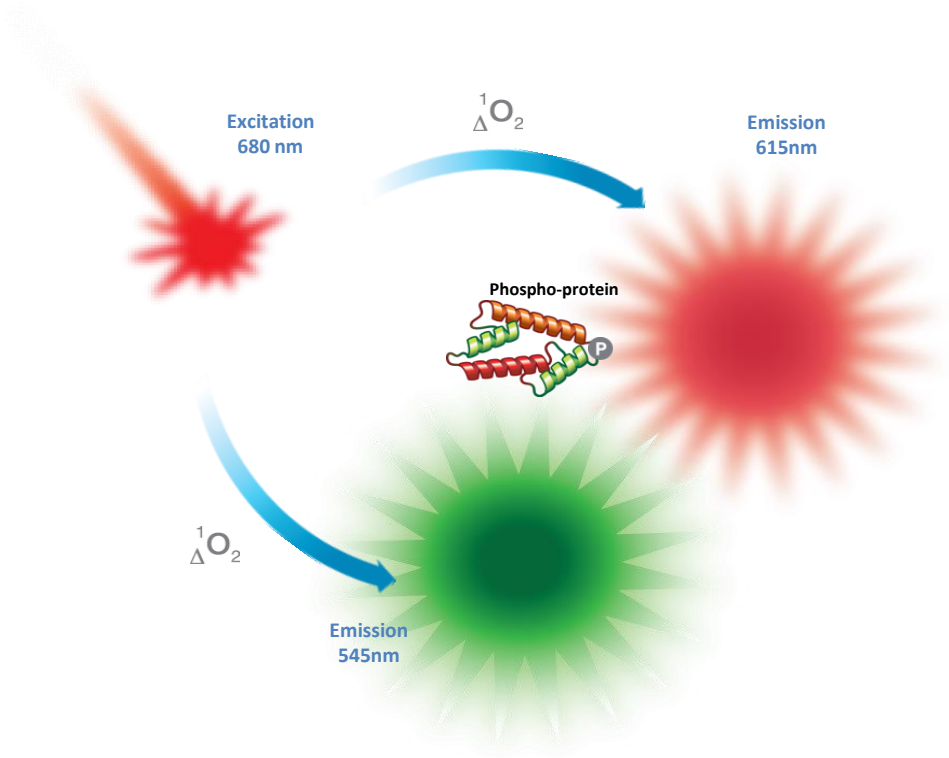
- Wide Dynamic Range
- Easy to Build
- Can be Multiplexed
- Low Background
- Can Handle Large Complexes
- Works with Low Affinity Binders
- Mix and Read Assay
- Cant work with viscous material

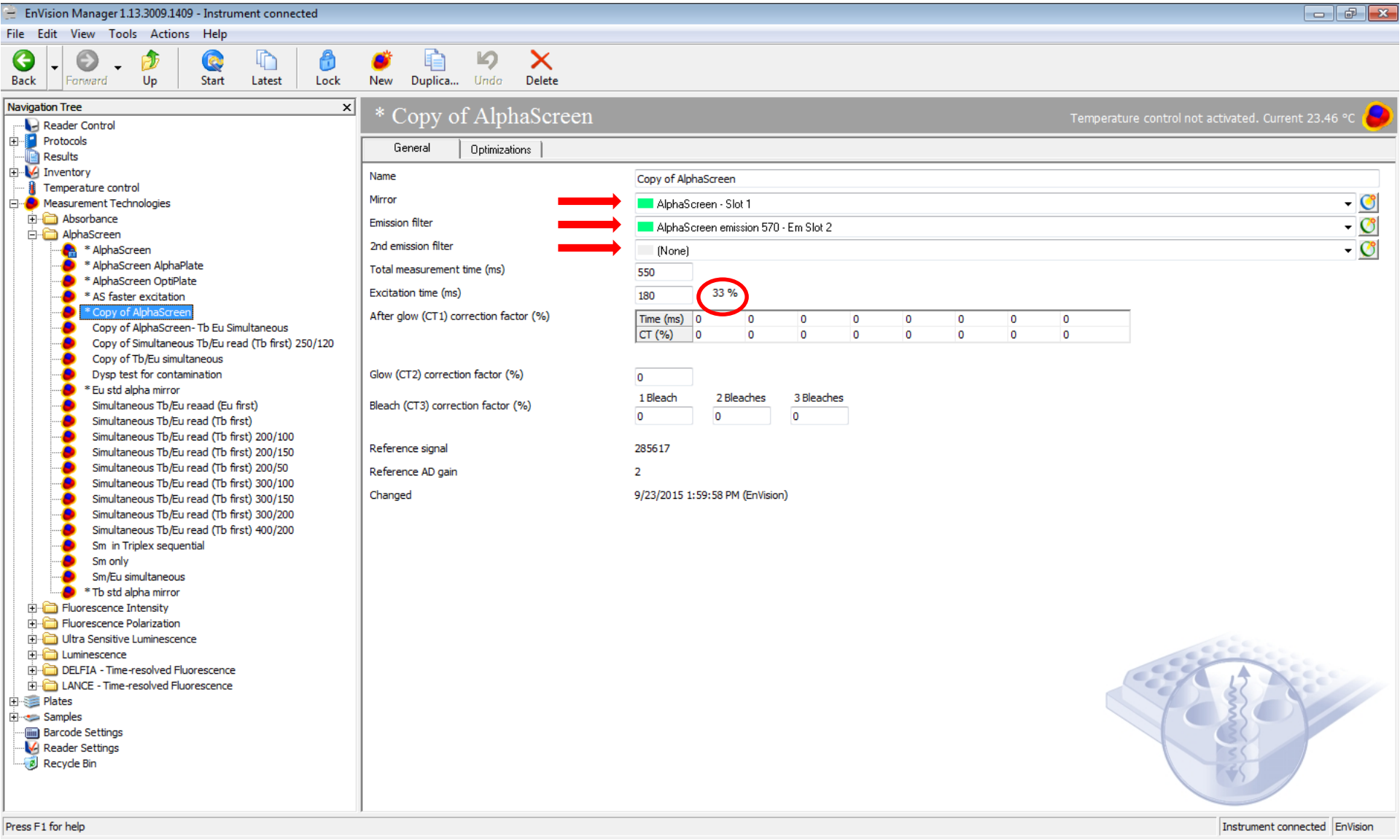


Alpha *SureFire Ultra* Multiplex

- Alpha *SureFire Ultra* Multiplex, dual-targets kits:
  - Phospho-ERK (Eu) + total-ERK (Tb): MPSU-PTERK-K500/10K/50K/HV
  - Phospho-AKT1/2/3 (Eu) + total-AKT1 (Tb): MPSU-PTAKT-K500/10K/50K/HV



AlphaScreen/AlphaLISA/AlphaPLEX



Creating your Protocol

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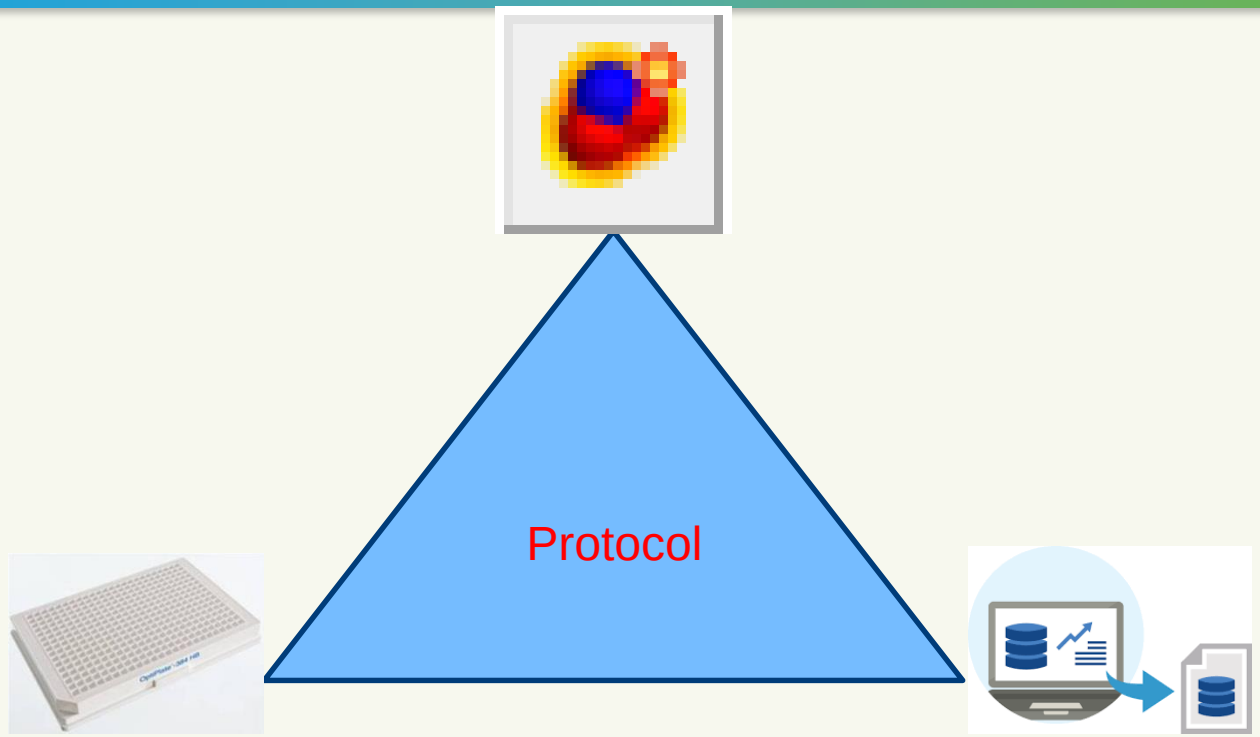
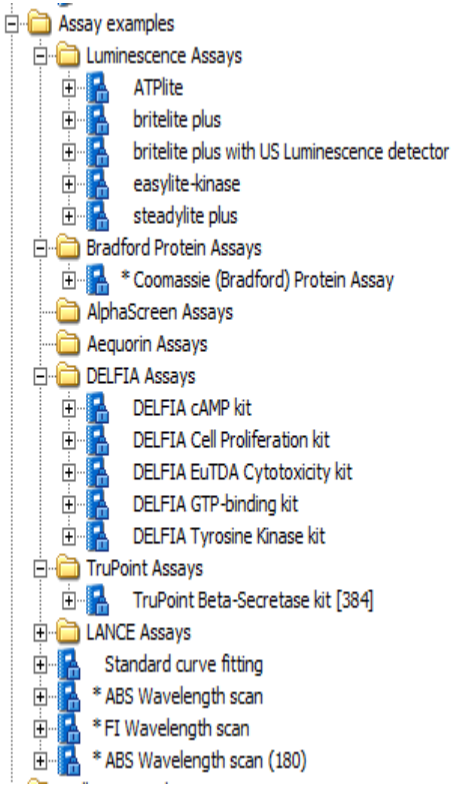
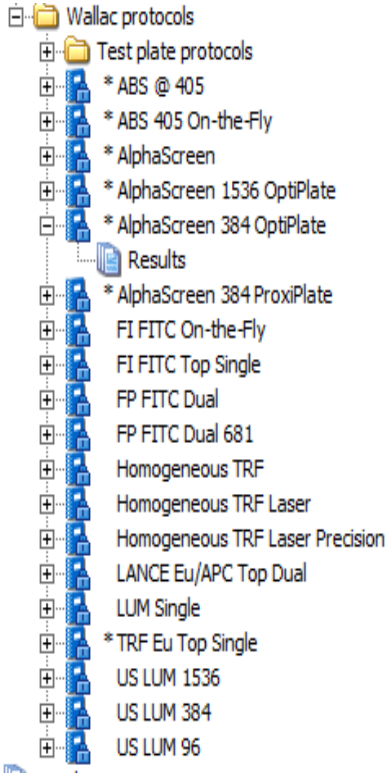
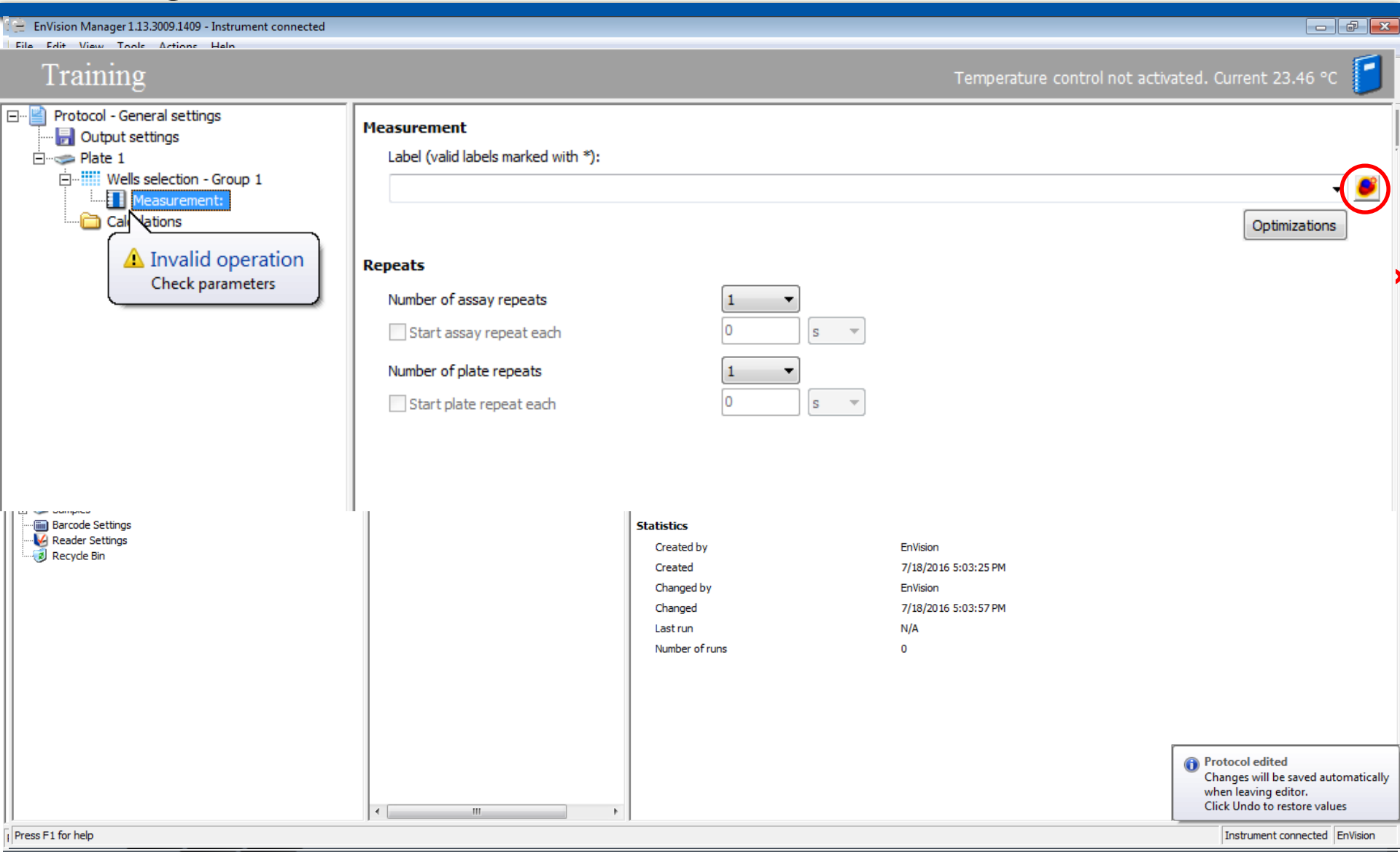


Using a Factory Set Program





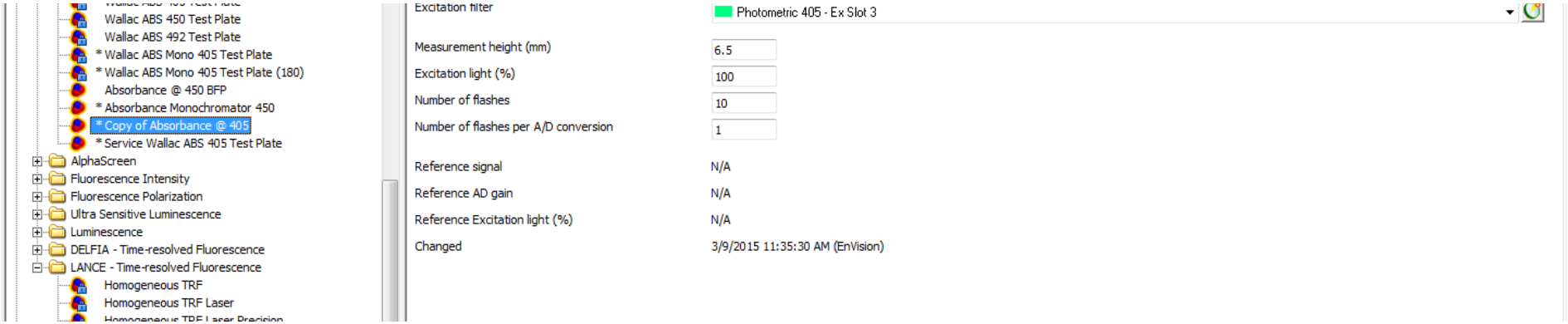
Creating a Protocol



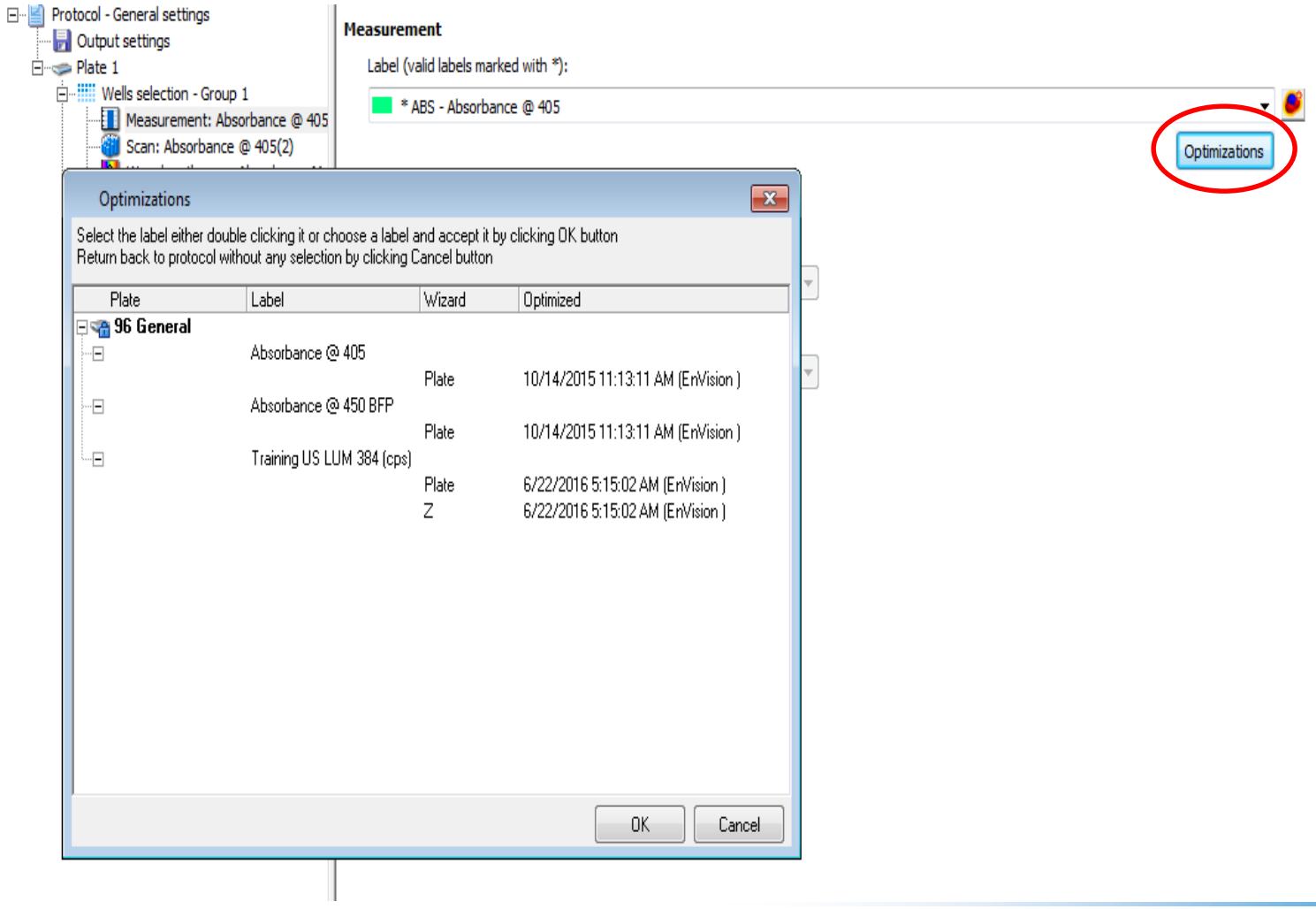
Creating a Measurement technology/Label

General | Optimizations

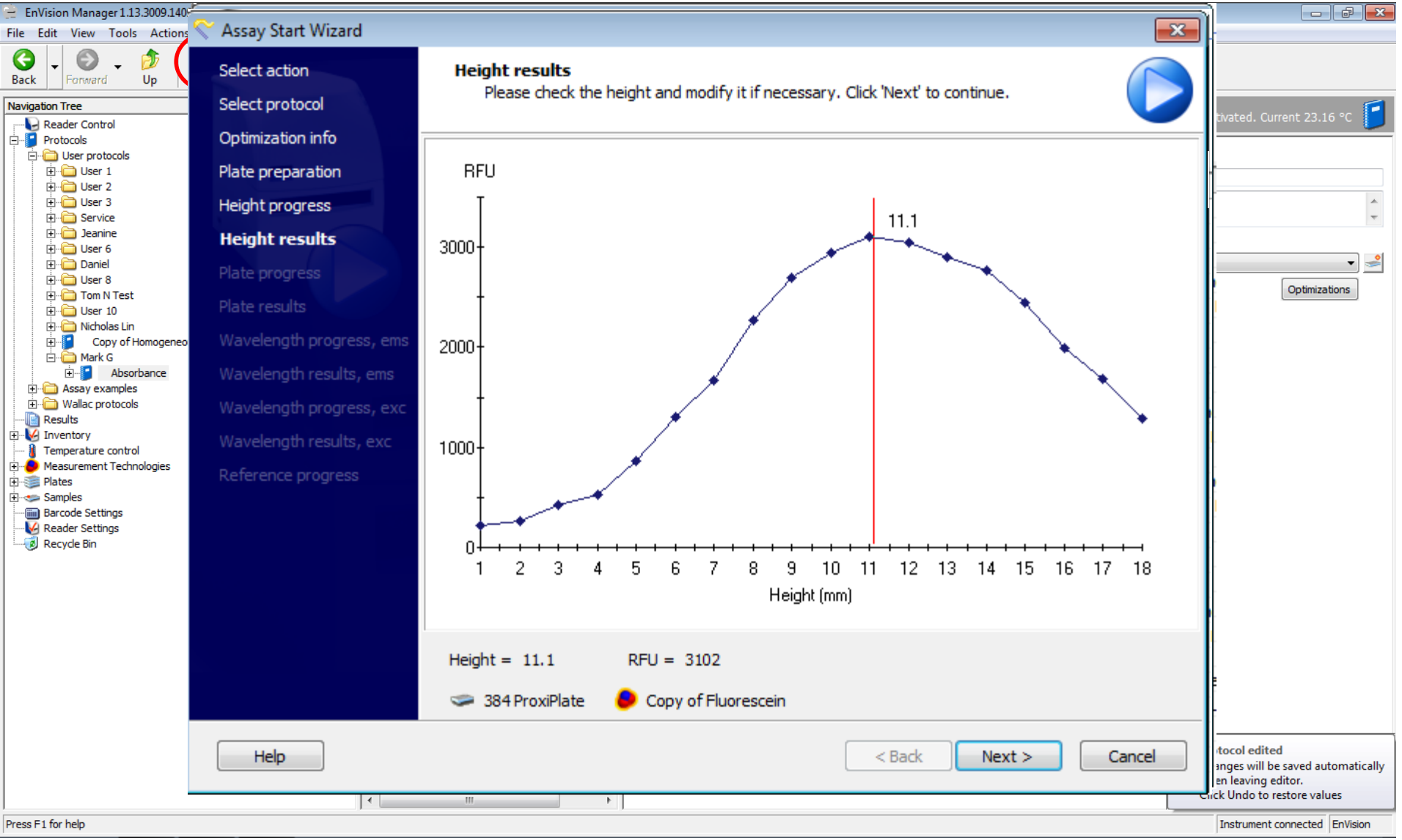
Plate	Meas Height	Height Optimized	Delay	Window time	TRF Optimized	Flashes	Z' Optimized	Flatfield Optimized
384 OptiPlate	N/A	N/A	30	300	4/29/2015 3:3	N/A	N/A	N/A
384 AlphaPlate	N/A	N/A	30	300	4/29/2015 3:3	N/A	N/A	N/A
384 OptiPlate White	N/A	N/A	30	300	4/29/2015 3:3	N/A	N/A	N/A
Greiner 384 for BI	N/A	N/A	30	300	4/29/2015 3:3	N/A	N/A	N/A
384 well Corning Lo	N/A	N/A	30	300	4/29/2015 3:3	N/A	N/A	N/A



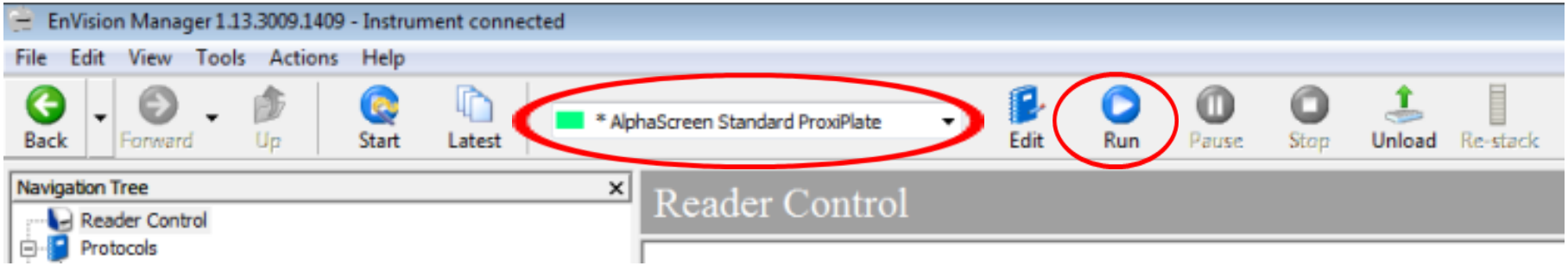
Existing Optimizations



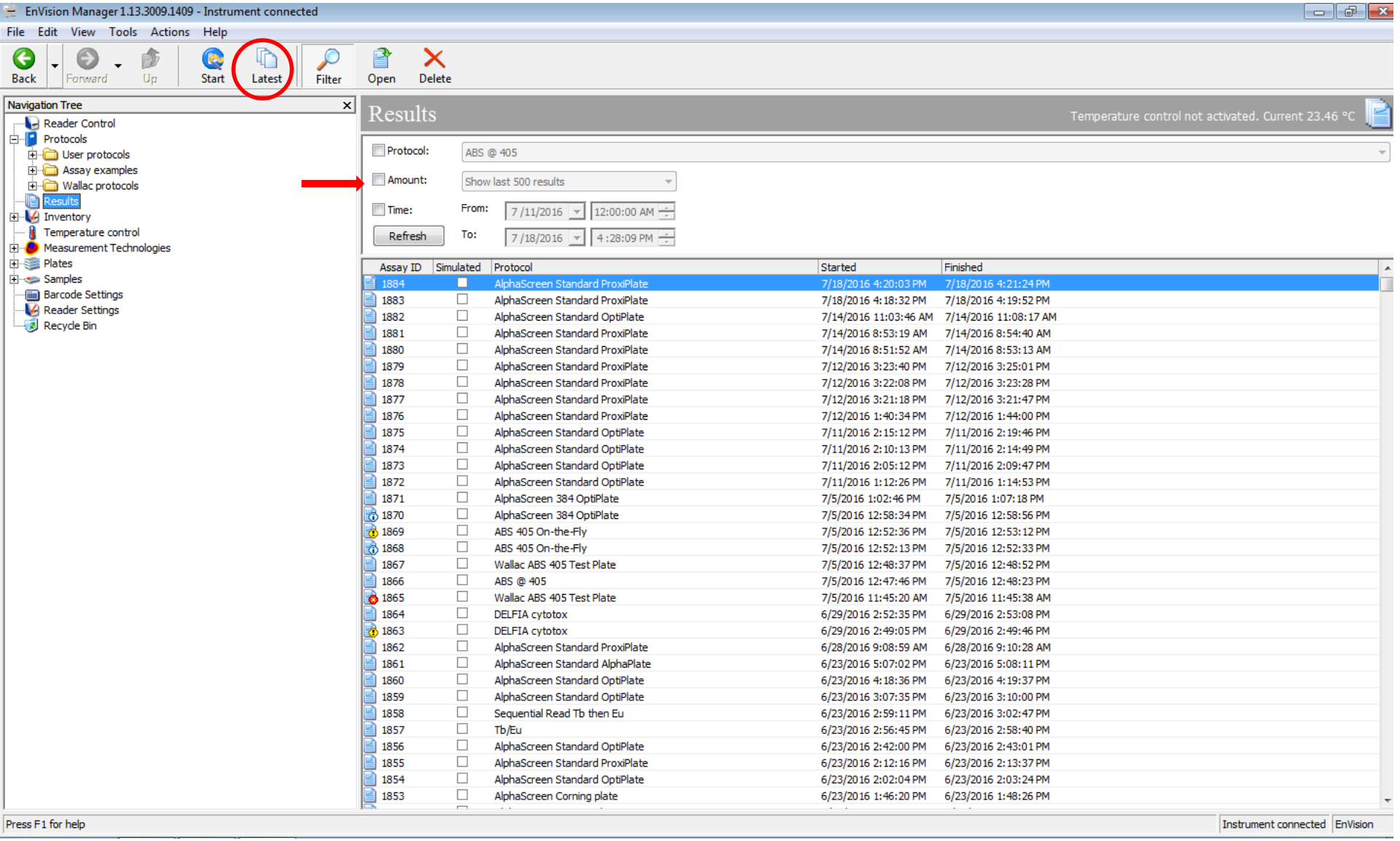
Optimizing an Absorbance Protocol



Starting your Protocol



Results


EnVision Manager 1.13.3009.1409 - Instrument connected
File Edit View Tools Actions Help
Back Forward Up Start Latest Filter Open Delete
Navigation Tree
Reader Control
Protocols
User protocols
Assay examples
Wallac protocols
Results
Inventory
Temperature control
Measurement Technologies
Plates
Samples
Barcode Settings
Reader Settings
Recycle Bin
Results
Temperature control not activated. Current 23.46 °C
Protocol: ABS @ 405
Amount: Show last 500 results
Time: From: 7/11/2016 12:00:00 AM
Refresh To: 7/18/2016 4:28:09 PM
Assay ID | Simulated | Protocol | Started | Finished
1884 AlphaScreen Standard ProxiPlate 7/18/2016 4:20:03 PM 7/18/2016 4:21:24 PM
1883 AlphaScreen Standard ProxiPlate 7/18/2016 4:18:32 PM 7/18/2016 4:19:52 PM
1882 AlphaScreen Standard OptiPlate 7/14/2016 11:03:46 AM 7/14/2016 11:08:17 AM
1881 AlphaScreen Standard ProxiPlate 7/14/2016 8:53:19 AM 7/14/2016 8:54:40 AM
1880 AlphaScreen Standard ProxiPlate 7/14/2016 8:51:52 AM 7/14/2016 8:53:13 AM
1879 AlphaScreen Standard ProxiPlate 7/12/2016 3:23:40 PM 7/12/2016 3:25:01 PM
1878 AlphaScreen Standard ProxiPlate 7/12/2016 3:22:08 PM 7/12/2016 3:23:28 PM
1877 AlphaScreen Standard ProxiPlate 7/12/2016 3:21:18 PM 7/12/2016 3:21:47 PM
1876 AlphaScreen Standard ProxiPlate 7/12/2016 1:40:34 PM 7/12/2016 1:44:00 PM
1875 AlphaScreen Standard OptiPlate 7/11/2016 2:15:12 PM 7/11/2016 2:19:46 PM
1874 AlphaScreen Standard OptiPlate 7/11/2016 2:10:13 PM 7/11/2016 2:14:49 PM
1873 AlphaScreen Standard OptiPlate 7/11/2016 2:05:12 PM 7/11/2016 2:09:47 PM
1872 AlphaScreen Standard OptiPlate 7/11/2016 1:12:26 PM 7/11/2016 1:14:53 PM
1871 AlphaScreen 384 OptiPlate 7/5/2016 1:02:46 PM 7/5/2016 1:07:18 PM
1870 AlphaScreen 384 OptiPlate 7/5/2016 12:58:34 PM 7/5/2016 12:58:56 PM
1869 ABS 405 On-the-Fly 7/5/2016 12:52:36 PM 7/5/2016 12:53:12 PM
1868 ABS 405 On-the-Fly 7/5/2016 12:52:13 PM 7/5/2016 12:52:33 PM
1867 Wallac ABS 405 Test Plate 7/5/2016 12:48:37 PM 7/5/2016 12:48:52 PM
1866 ABS @ 405 7/5/2016 12:47:46 PM 7/5/2016 12:48:23 PM
1865 Wallac ABS 405 Test Plate 7/5/2016 11:45:20 AM 7/5/2016 11:45:38 AM
1864 DELFIA cytotox 6/29/2016 2:52:35 PM 6/29/2016 2:53:08 PM
1863 DELFIA cytotox 6/29/2016 2:49:05 PM 6/29/2016 2:49:46 PM
1862 AlphaScreen Standard ProxiPlate 6/28/2016 9:08:59 AM 6/28/2016 9:10:28 AM
1861 AlphaScreen Standard AlphaPlate 6/23/2016 5:07:02 PM 6/23/2016 5:08:11 PM
1860 AlphaScreen Standard OptiPlate 6/23/2016 4:18:36 PM 6/23/2016 4:19:37 PM
1859 AlphaScreen Standard OptiPlate 6/23/2016 3:07:35 PM 6/23/2016 3:10:00 PM
1858 Sequential Read Tb then Eu 6/23/2016 2:59:11 PM 6/23/2016 3:02:47 PM
1857 Tb/Eu 6/23/2016 2:56:45 PM 6/23/2016 2:58:40 PM
1856 AlphaScreen Standard OptiPlate 6/23/2016 2:42:00 PM 6/23/2016 2:43:01 PM
1855 AlphaScreen Standard ProxiPlate 6/23/2016 2:12:16 PM 6/23/2016 2:13:37 PM
1854 AlphaScreen Standard OptiPlate 6/23/2016 2:02:04 PM 6/23/2016 2:03:24 PM
1853 AlphaScreen Corning plate 6/23/2016 1:46:20 PM 6/23/2016 1:48:26 PM
Press F1 for help
Instrument connected
EnVision

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Advanced Training Course

Advanced Training Curriculum

Advanced topics for assay optimization

- Techniques for getting maximum sensitivity
- Techniques for getting maximum speed
- Optimizing assays with high energy or saturating levels of energy
- Advanced topics using the Optimization Wizard
- Cover advanced topics for each Measurement technology

Advanced topics for optics

- Filter and mirror training
- Understanding the light path
- PMT concepts

Trouble shooting concepts

- Concepts to determine if an error/plate pattern is caused by the EnVision or not
- Common user errors, and how to remedy
- Techniques for isolating optimization and system issues
- Removing passwords from locked protocols and labels

Advanced concepts in real-time Data Analysis

- Options with sample maps
- How to generate standard curve and apply it to data
- Blank corrected assay data
- General calculations
- Using advanced calculations

Concepts and programming for Liquid Dispenser

Hands on assay optimization

- Optimizing a problematic assays in FI, FP, and TR-FRET
- Create a new protocol for each technology to illustrate how all of the settings are used
- Create protocols that use the TRF Laser vs standard Xenon to illustrate why and when you would select the appropriate light source (If TRF Laser option is available)
- Create a inject and read assay (If dispenser is available)

Advanced User Certification

PerkinElmer
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Hands on Training

Lab Training Curriculum

- Hardware overview (in front of machine)
  - Proper power up sequence, and starting of software
  - Identify all of the key pieces of hardware
  - Demonstrate filter, mirror(top and bottom), and aperture changing
  - Show plate orientation, and identify the A1 location on plate holder
  - Using stackers (If applicable)
  - Dispenser Overview (If applicable)
- Basic programming of Protocols
- Optimization of 2-3 protocols User creates the protocol
- Demonstration of applying basic calculations and exporting data after assay has been run.
- Cover what is available in an Advanced Training session