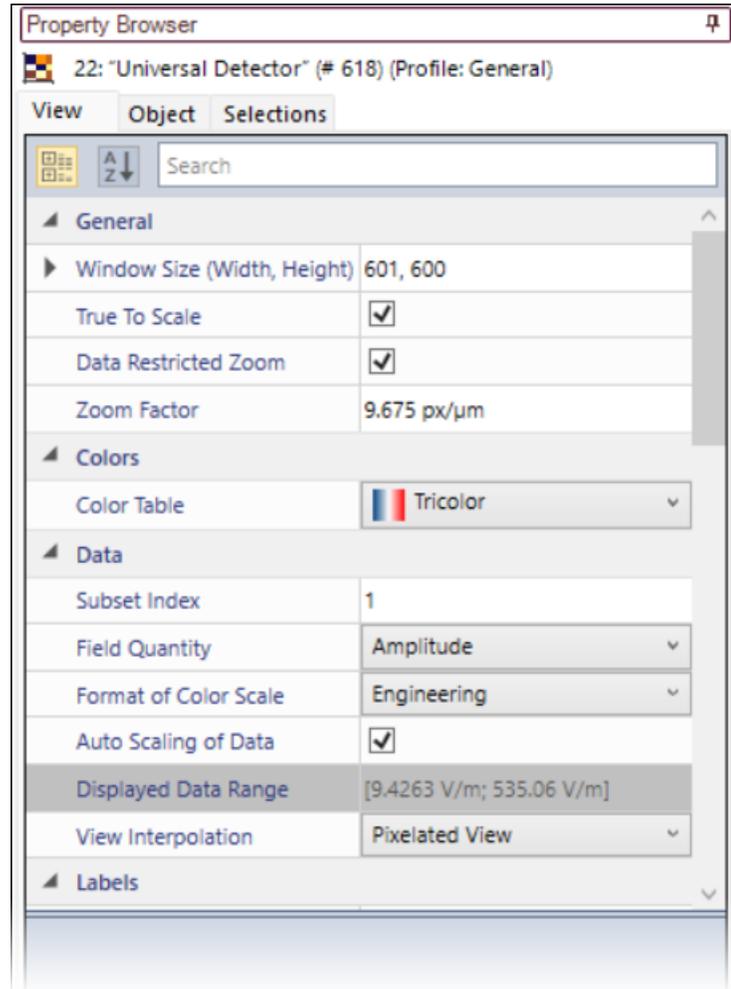


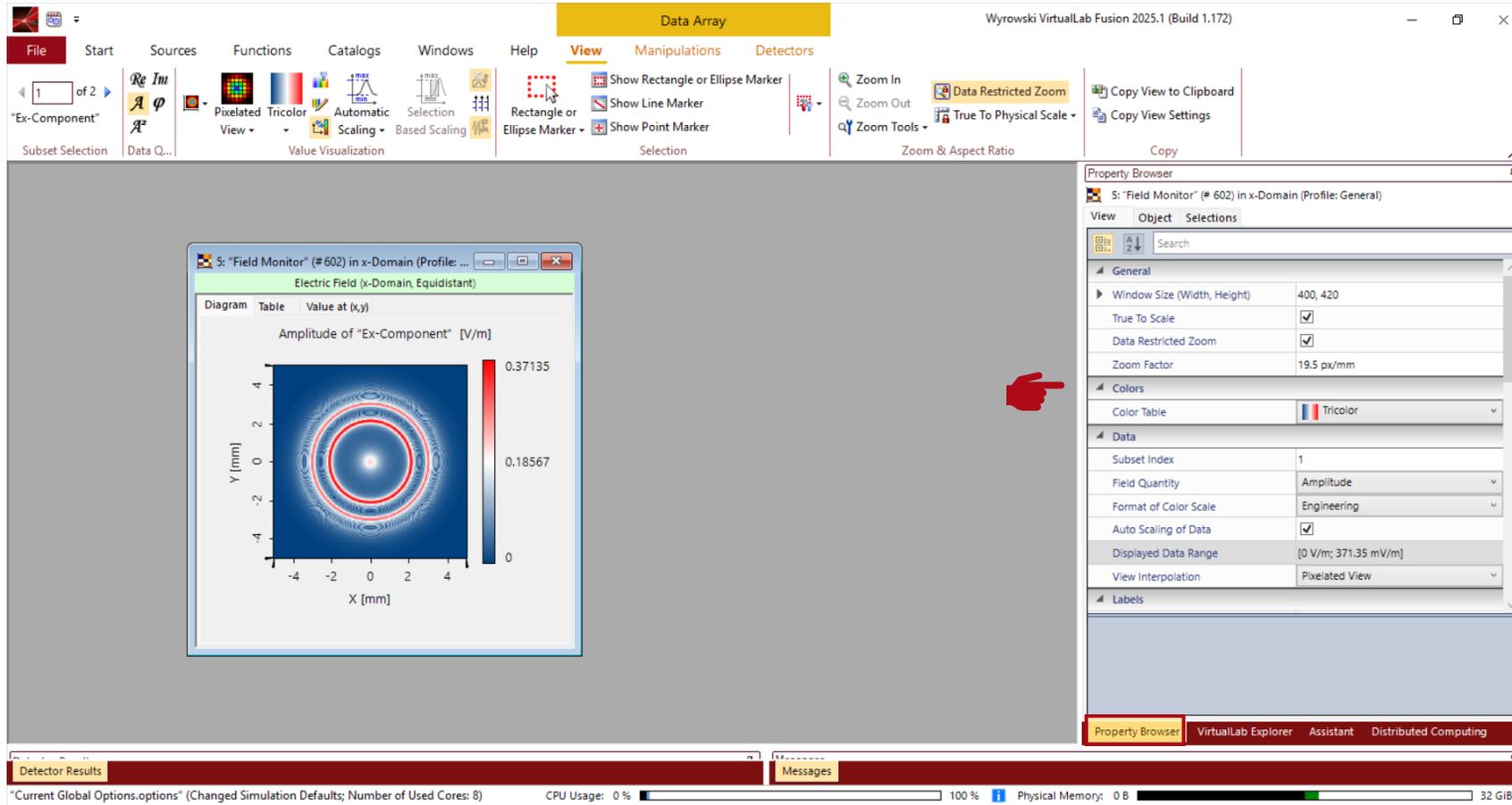
Working with the Property Browser

Abstract



When investigating any kind of result, a quick and easy access to all necessary information is key. For this purpose, VirtualLab Fusion uses the Property Browser to relay a complete summary of physical and numerical information about any selected object directly to the user.

Where to find the Property Browser?

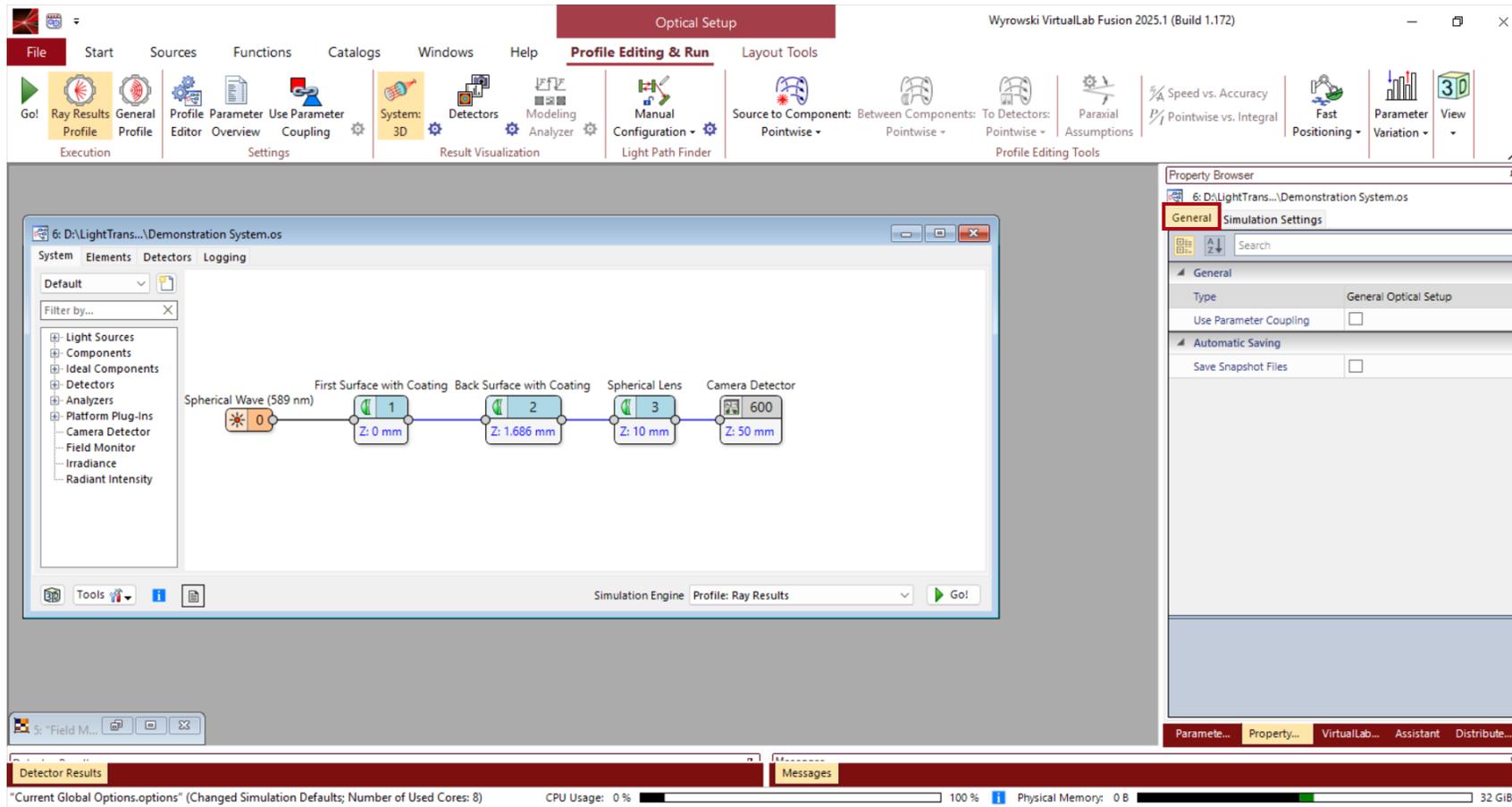


The *Property Browser* can be found at the right side of the main window. It shares the same panel with the *VirtualLab Explorer*, the *Assistant* and *Distributed Computing*.

The displayed options and properties are dependent on the type of active* document (e.g., data array, optical setup etc.).

*The active document is the last document the user have clicked on.

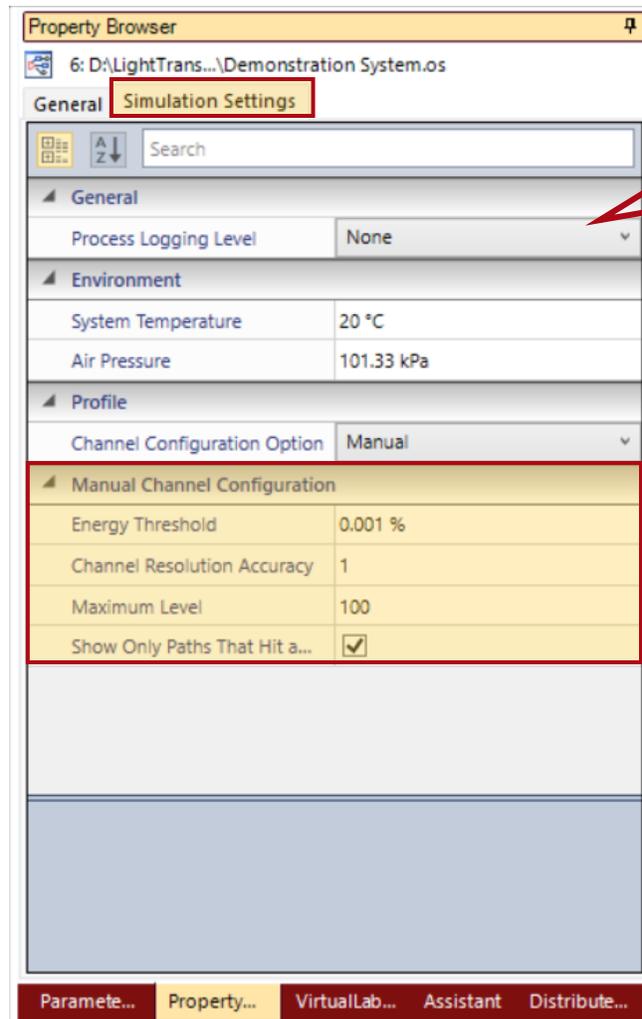
Property Browser for Optical Setups – General Tab



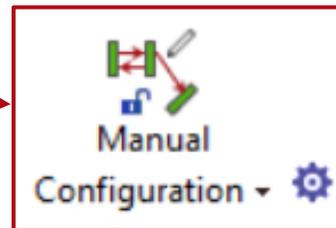
When an *Optical Setup* is the active document, the *Property Browser* contains two subsections, *General* and *Simulation Settings*.

In the *General* section, users can activate or de-activate the *Parameter Coupling* as well as the automatic save function.

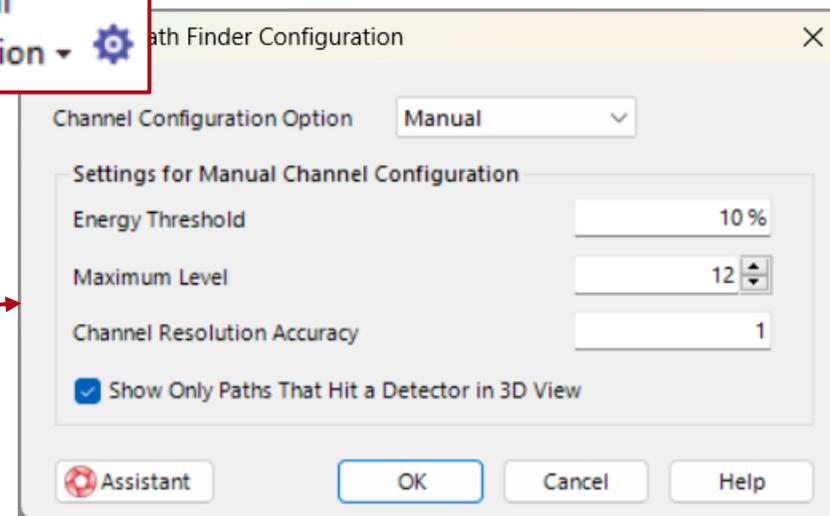
Property Browser for Optical Setups – Simulation Settings



For more information on *Logging Levels*, please see: [Logging in VirtualLab Fusion](#)

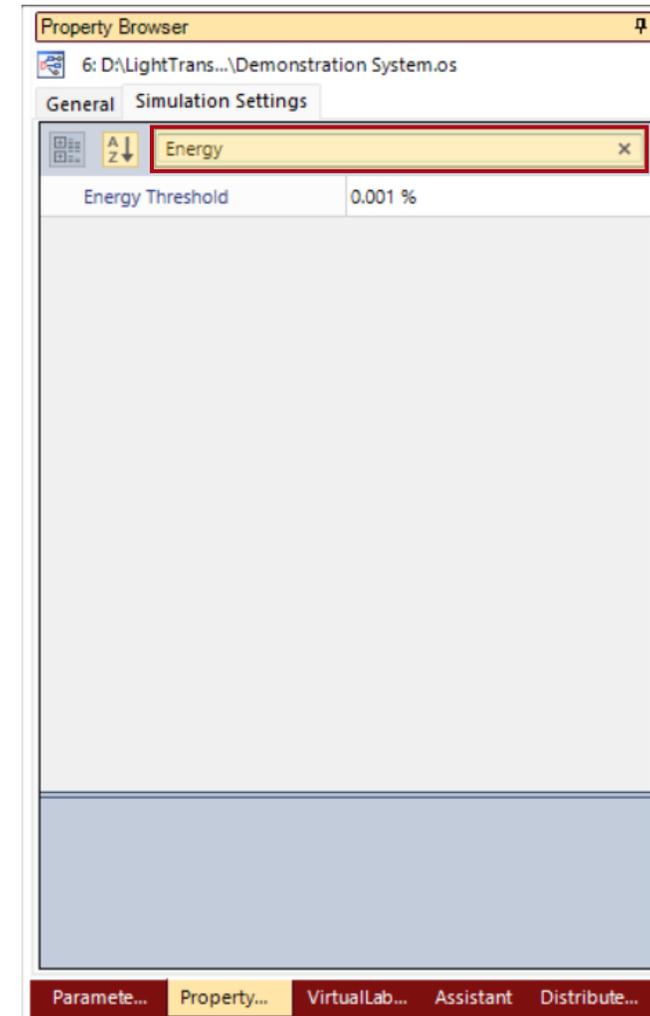
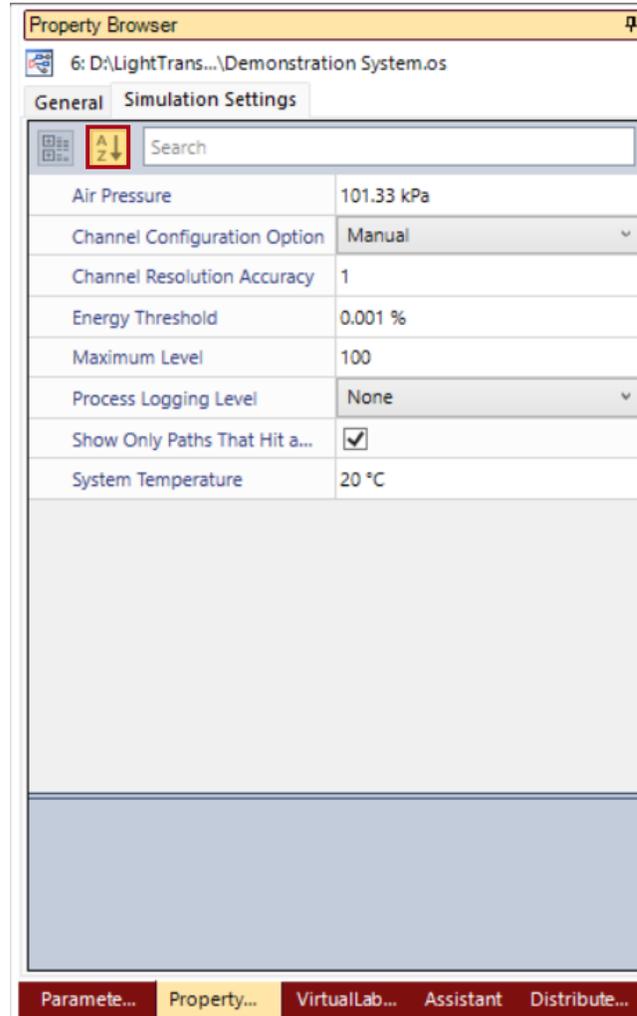


The *Simulation Settings* allow for control over the logging, environmental parameters and settings for non-sequential simulations. Though the latter will only appear if the parameter *Channel Configuration Option* is set to *Manual*.



Alphabetical Order & Search Function

For better navigation, VirtualLab Fusion offers an alphabetically order function and a search function.



Property Browser for Data Arrays

The screenshot displays the Wyrwski VirtualLab Fusion 2025.1 (Build 1.172) interface. The main window shows a "Field Monitor" (#602) in the x-Domain (Profile: General) with a diagram of an electric field distribution. The diagram is a 2D plot of the "Amplitude of 'Ex-Component' [V/m]" in the x-y plane, showing concentric rings of varying intensity. The x and y axes range from -4 to 4 mm. A color scale on the right indicates values from 0 to 0.37135 V/m.

The "Property Browser" is open on the right side of the interface, showing the "General" section. The "General" section contains the following settings:

Property	Value
Window Size (Width, Height)	400, 420
True To Scale	<input checked="" type="checkbox"/>
Data Restricted Zoom	<input checked="" type="checkbox"/>
Zoom Factor	19.5 px/mm
Color Table	Tricolor
Subset Index	1
Field Quantity	Amplitude
Format of Color Scale	Engineering
Auto Scaling of Data	<input checked="" type="checkbox"/>
Displayed Data Range	[0 V/m; 371.35 mV/m]
View Interpolation	Pixelated View

The "Property Browser" also shows the "Simulation Settings" section, which is currently empty. The interface includes a menu bar (File, Start, Sources, Functions, Catalogs, Windows, Help, View, Manipulations, Detectors) and a toolbar with various tools for data manipulation and visualization. The status bar at the bottom shows system information such as CPU Usage (0%), Physical Memory (0 B), and 32 GiB of available memory.

When an *Optical Setup* is the active document, the *Property Browser* contains two subsections, *General* and *Simulation Settings*.

In the *General* section, users can activate or de-activate the *Parameter Coupling* as well as the automatic save function.

Window Size

Property Browser

5: "Field Monitor" (# 602) in x-Domain (Profile: General)

View Object Selections

Search

General

Window Size (Width, Height) 600, 600

True To Scale

Data Restricted Zoom

Zoom Factor 38.7 px/mm

Colors

Color Table Tricolor

Data

Subset Index 1

Field Quantity Amplitude

Format of Color Scale Engineering

Auto Scaling of Data

Displayed Data Range [0 V/m; 371.35 mV/m]

View Interpolation Pixelated View

Labels

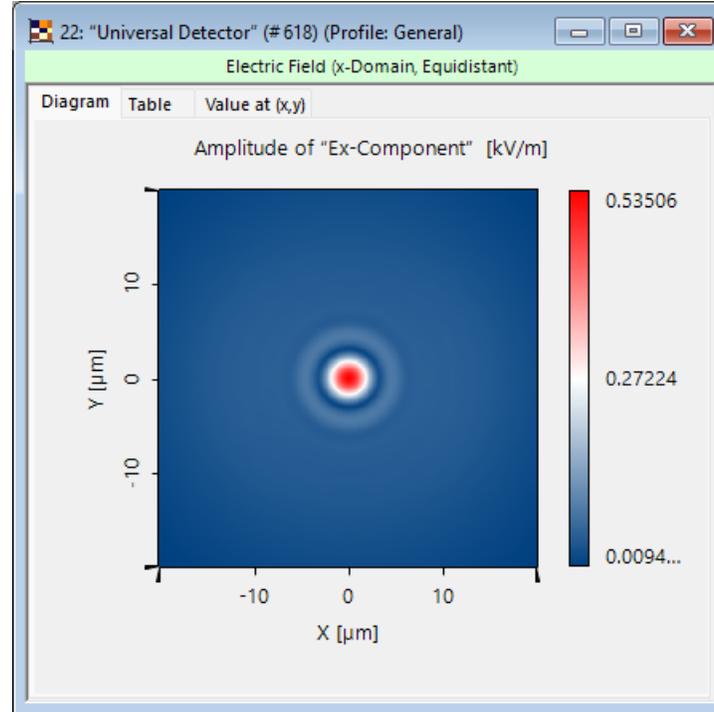
Font Size of Axis Labels 10

Font Size of Title 10

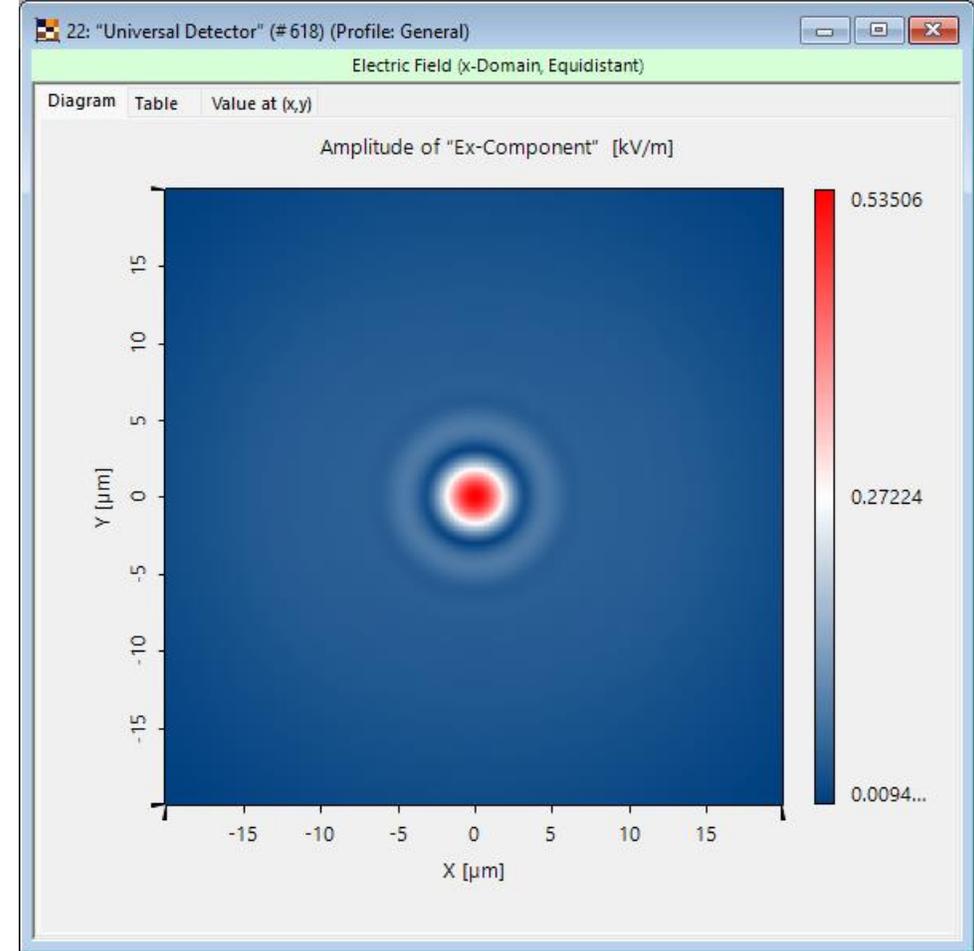
Selection (General)

Selection Mode Rectangle or Ellipse

Property Brow... VirtualLab Expl... Assistant Distributed Co...



(400,400)



(600,600)

Label Size

Property Browser

5: "Field Monitor" (# 602) in x-Domain (Profile: General)

View Object Selections

Search

General

Window Size (Width, Height) 600, 600

True To Scale

Data Restricted Zoom

Zoom Factor 38.7 px/mm

Colors

Color Table Tricolor

Data

Subset Index 1

Field Quantity Amplitude

Format of Color Scale Engineering

Auto Scaling of Data

Displayed Data Range [0 V/m; 371.35 mV/m]

View Interpolation Pixelated View

Labels

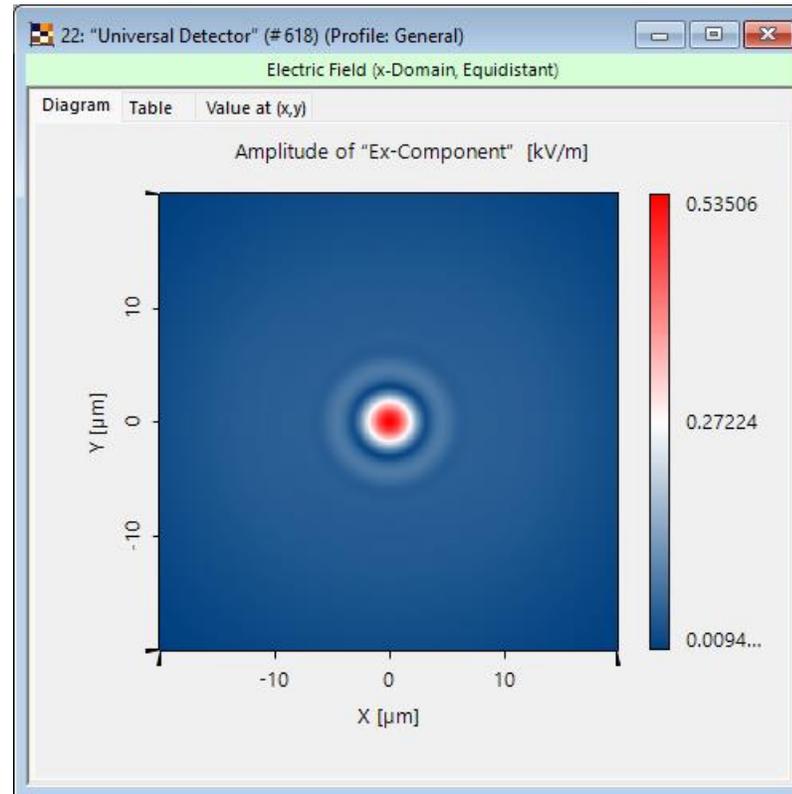
Font Size of Axis Labels 10

Font Size of Title 10

Selection (General)

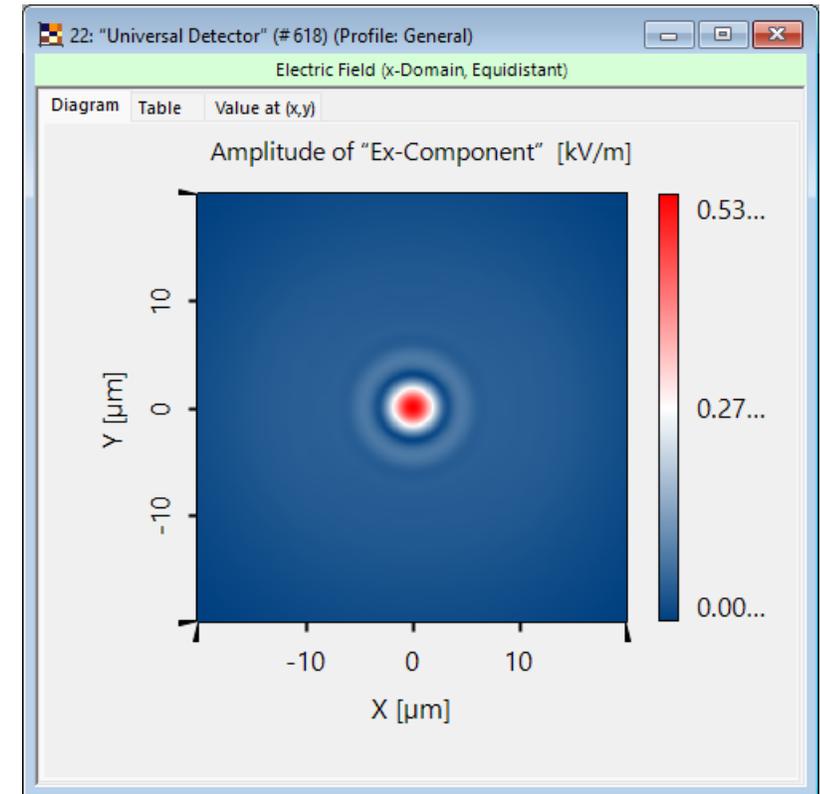
Selection Mode Rectangle or Ellipse

Property Brow... VirtualLab Expl... Assistant Distributed Co...



Labels

Font Size of Axis Labels	10
Font Size of Title	10



Labels

Font Size of Axis Labels	13
Font Size of Title	13

Axis Descriptions

Selection (Line) Display Line Marker

Selection (Point) Display Point Marker

Selection (Region) Show Rectangle or Ellipse...

View Mode 3D Mode

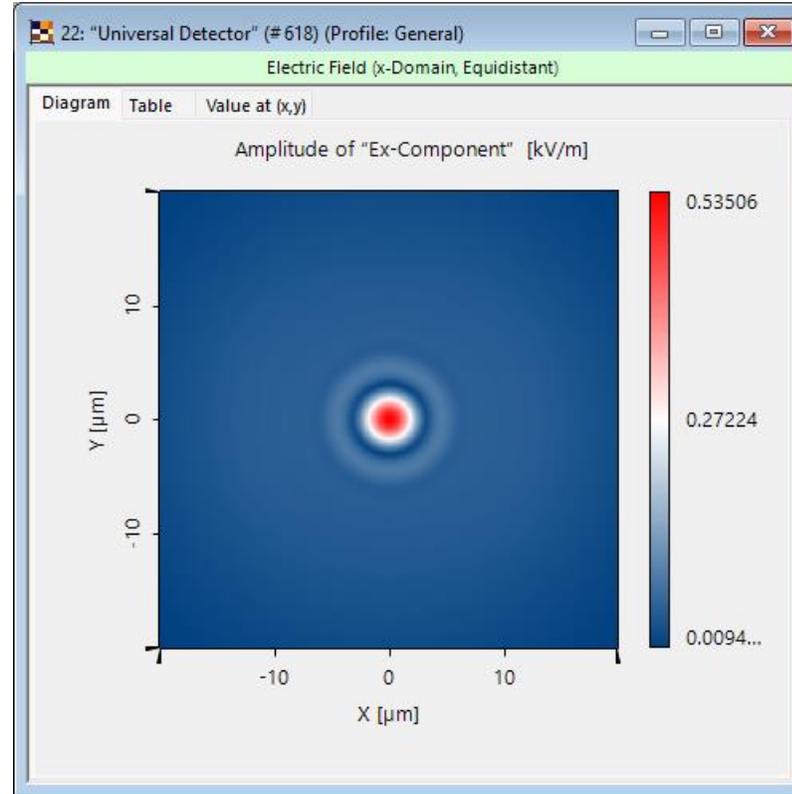
X-Axis

Description	X
x-Axis Range	[-5 mm; 5 mm]
Minimum Number of Ticks	2
Format of x-Axis	Engineering

Y-Axis

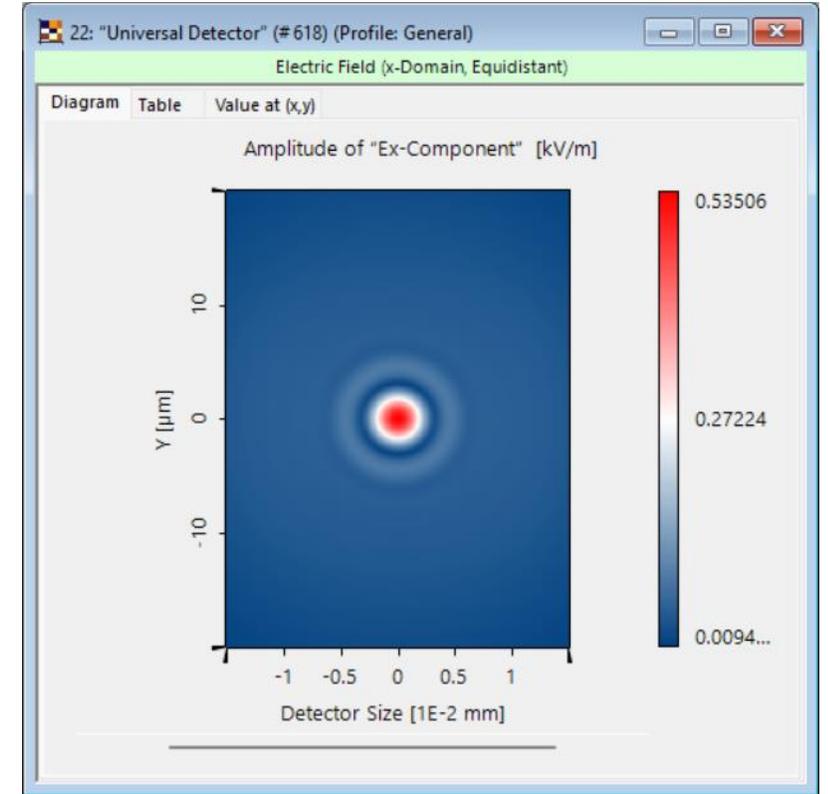
Description	Y
y-Axis Range	[-5 mm; 5 mm]
Minimum Number of Ticks	2
Format of y-Axis	Engineering

Property Brow... VirtualLab Expl... Assistant Distributed Co...



X-Axis

Description	X
x-Axis Range	[-20.054 μm ; 19.946 μm]
Minimum Number of Ticks	2
Format of x-Axis	Engineering

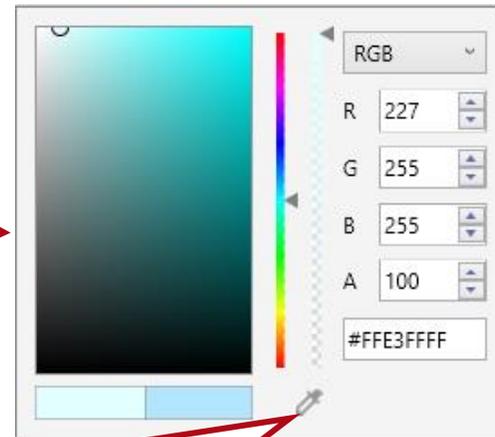
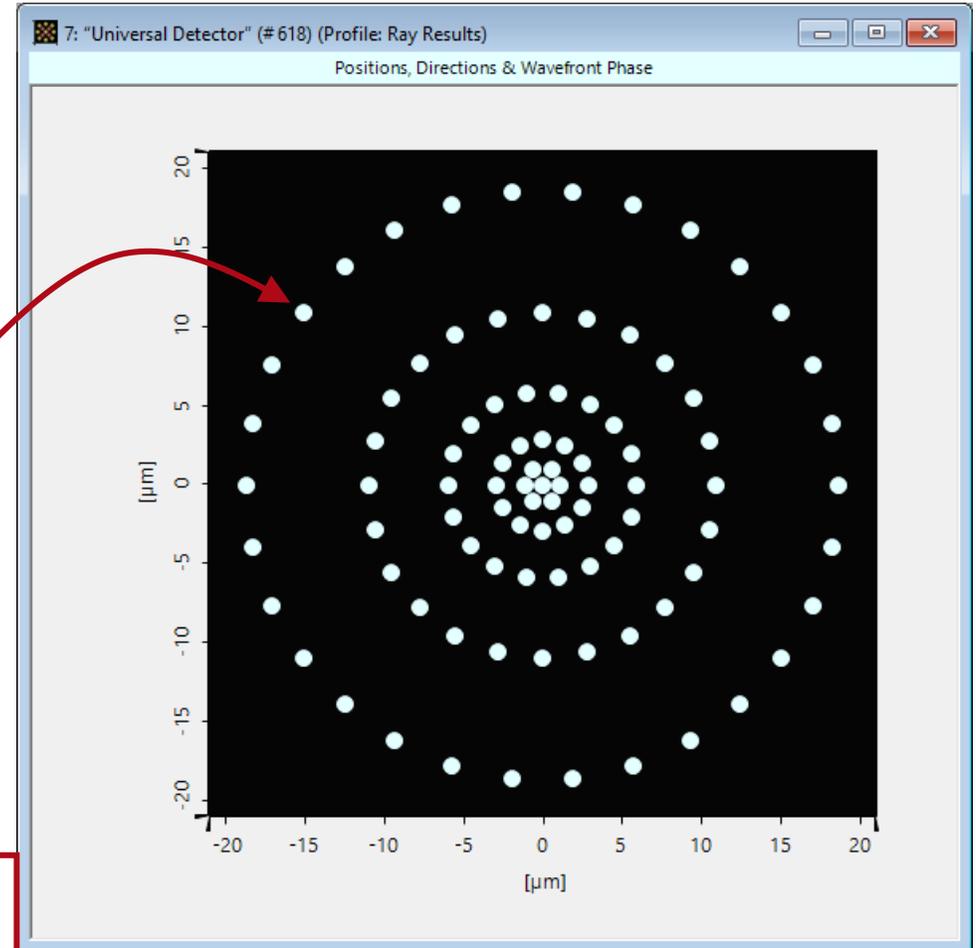
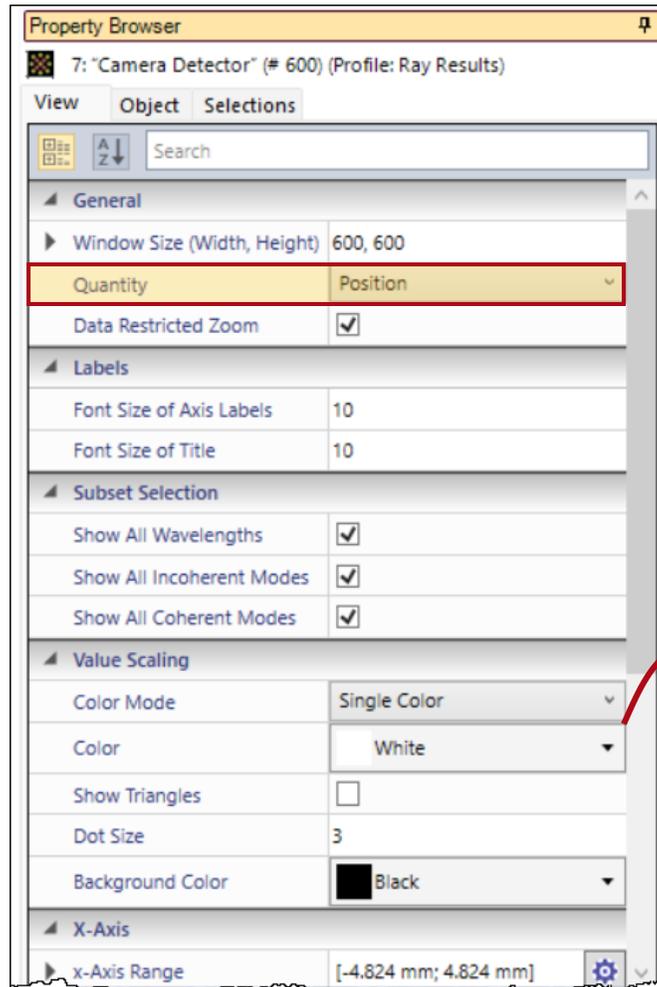


X-Axis

Description	Detector Size
x-Axis Range	[-15 μm ; 15 μm]
Minimum Number of Ticks	6
Format of x-Axis	Scientific

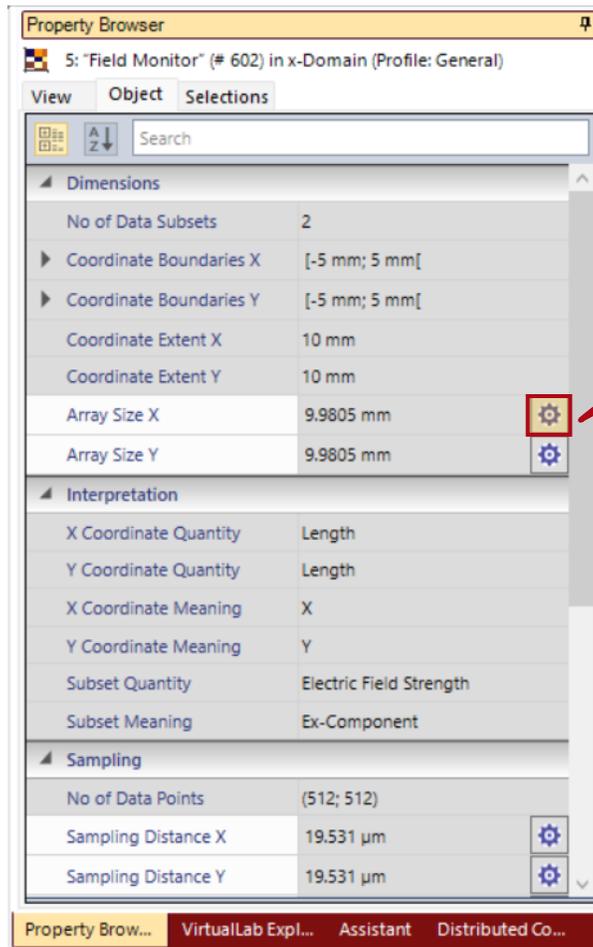
Ray & Background Color

For *Position, Directions & Wavefront Phase* documents the color of the spots and background can be adjusted.

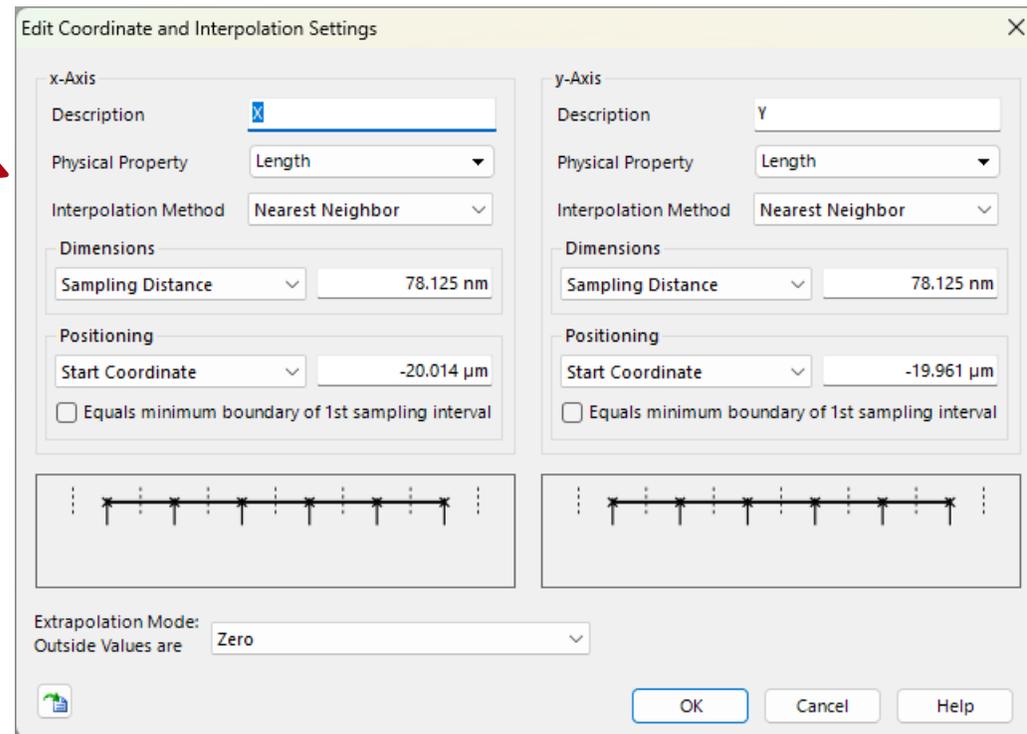


Use the pipette to pick a specific color from elsewhere on the screen!

Object - Tab



The *Object* tab of the *Property Browser* contains various numerical and sampling related information about the data array, including array sizes, axis units and number of sampling points.



A click on the  button allows the user to directly change the corresponding parameter. The resulting window is the same as using the *Coordinate and Interpolation Settings* manipulation tool.



Selection - Tab

Property Browser

5: "Field Monitor" (# 602) in x-Domain (Profile: General)

View Object Selections

Selection (General)

Selection Mode Line

Coordinate Snapping Selection

Selection (Line)

Display Line Marker

Start Coordinates (-4.0723 mm, -3.3887 mm)

End Coordinates (4.248 mm, 3.6816 mm)

Length 10.919 mm

Start Indices (47; 82)

End Indices (473; 444)

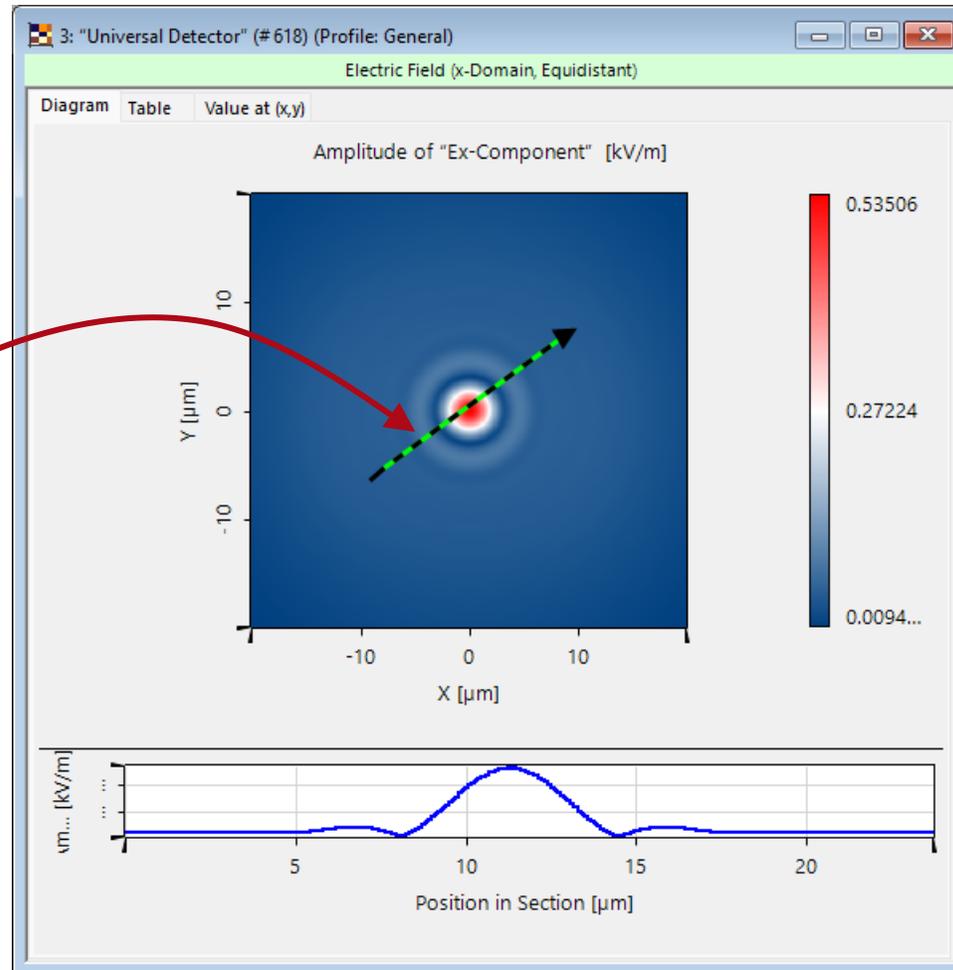
Selection (Point)

Display Point Marker

Selection (Region)

Show Rectangle or Ellipse...

Property Brow... VirtualLab Expl... Assistant Distributed Co...



The *Object* tab of the *Property Browser* contains various numerical and sampling related information about the data array, including array sizes, axis units and number of sampling points.

Document Information

Title	Property Browser
Document code	TUT.0366
Publication date	08.07.2025
Required packages	-
Software version	-
Category	Tutorial
Further reading	- Logging in VirtualLab Fusion