

# **VAESTRO RESULTS VIEWER**



The Vaestro Viewer application provides a convenient way to quickly view the images and data generated by Vaestro software. It is free and does not require a license for distribution.

### **OPEN VAESTRO VIEWER**

Click *View Results* button from within Vaestro or double-click on *View Results.exe* file from within the provided output folder.

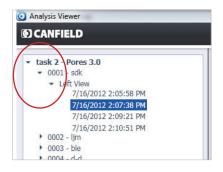


The output folder and all its' contents need to remain intact for proper operation of the application and display of analysis results.



#### **VIEWING AN IMAGE**

Click on arrows in the Navigation pane (left side) to expand the options within each category.



Double-click on a timepoint and select *display on left* or *display on right* to display the analyzed image in the Image Viewing pane.

You can also drag-drop the timepoint into the Image Viewing pane.





To zoom in or zoom out, use the slide bar above the thumbnail at the bottom left of the screen or use the scroll wheel on the mouse.

#### **IMAGE VIEWING OPTIONS**

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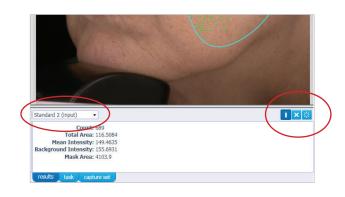
Images can be shown with or without the mask and feature detection overlay.

Click ( 1 ) to display the mask overlay on a selected image.

Click ( ) to hide the mask overlay on a selected image.

Click ( 🔀 ) to show the mask blinking on and off on a selected image.

Use the drop-down list under each image to select the lighting modality of the displayed image, where applicable.



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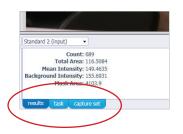
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#### **DATA DISPLAY OPTIONS**

Information generated by Vaestro analysis, as well as details of the task performed and the capture settings for a given image are shown in a window underneath the displayed image. There are three tabs which will show various details of analysis.

Click the *Results tab* to show measurements generated by the image analysis module. Float the mouse over each measurement to view description.

Click the *Task tab* to show analysis module details, including input image and mask used. This tab displays the detection threshold and parameters used for analysis.



Click the *Capture Set tab* to show information from the image capture software (Mirror or Canfield Capture). This tab displays the subject, image view and session information, as well as the camera and capture device used, with corresponding serial numbers.

## **MEASUREMENT DEFINITIONS**

Count	The number of individual features detected within the region of interest (ROI) mask area.
Mean Intensity	The cumulative mean intensity of detected features within the masked region of interest (ROI), measured against the input image. Intensity is defined as sum of mean Red, mean Green, mean Blue, divided by 3. The value ranges from 0 (black) to 255 (white).
Mean Contrast Intensity	The mean intensity of detected features, measured against the contrast image. Intensity is defined as sum of mean Red, mean Green, mean Blue, divided by 3.
Background Intensity	The mean intensity within the masked region of interest (ROI), excluding detected features, measured against the input image. Intensity is defined as sum of mean Red, mean Green, mean Blue, divided by 3. The value ranges from 0 (black) to 255 (white).
Total Area	The total area (in square millimeters) of detected features within the masked region of interest (ROI). This represents cumulative measurement value.
Mask Area	The total area (in square millimeters) of the masked region of interest (ROI). In the case of multiple ROIs, this represents the cumulative total areas of all masked regions.
Total Length	The total length (in millimeters) of major axis of the detected features within the masked region of interest (ROI). This represents cumulative measurement value.
Mean Length	The mean length (in millimeters) of major axis of the detected features within the masked region of interest (ROI). This represents cumulative measurement value divided by feature count.
Mean Thickness	The mean widths (in millimeters) of the detected features within the masked region of interest (ROI).  This represents cumulative measurement value divided by feature count.
Weighted Mean Thickness	The sum (in millimeters) of the products of mean thickness and length of the feature, divided by the total length. This represents mean feature thickness weighed by its length.
Mean Red or Brown Intensity	The cumulative mean intensity of detected features within the masked region of interest (ROI), measured against the inverted RBX grayscale image. The value ranges from 0 (white) to 255 (black). This represents how brown (pigmentation) or red (hemoglobin) the detected features are.
Global Intensity	The cumulative mean intensity within the masked region of interest (ROI), measured against the inverted RBX grayscale image. The value ranges from 0 (white) to 255 (black). This represents how brown (pigmentation) or red (hemoglobin) the masked ROI is.



If you experience any technical issues or have any questions, please contact Canfield Imaging Systems at 973-276-0300.

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