14 QC Tools

The QC Tools allow you to calculate the uniformity of an image. The result is two images, which you can then compare to check for uniformity. It uses static planar NM DICOM images as input.

NOTICE

Although the Application Palette appears as a Data Manager in the QC Tools application, it is empty. You cannot switch from the QC Tools to another application.

Using QC Tools

1. Click to highlight the patient dataset study you want to view.
2. Click on the **Analysis** icon's drop-down button.
3. Select the **QC Tools** icon from the Analysis applications.

   The QC Tools window appears.
4. Click on an image in the **Pictorial Index** (lower left).
5. The QC Tools application determines and displays the UFOV shape, however if you want to modify this, use the UFOV **Crop Type** drop-down.
6. Click **OK**.

   The loaded image, a smoothed version (bottom image), and its UFOV and CFOV results appear:

300006344181_A/881 * 2021-02-28

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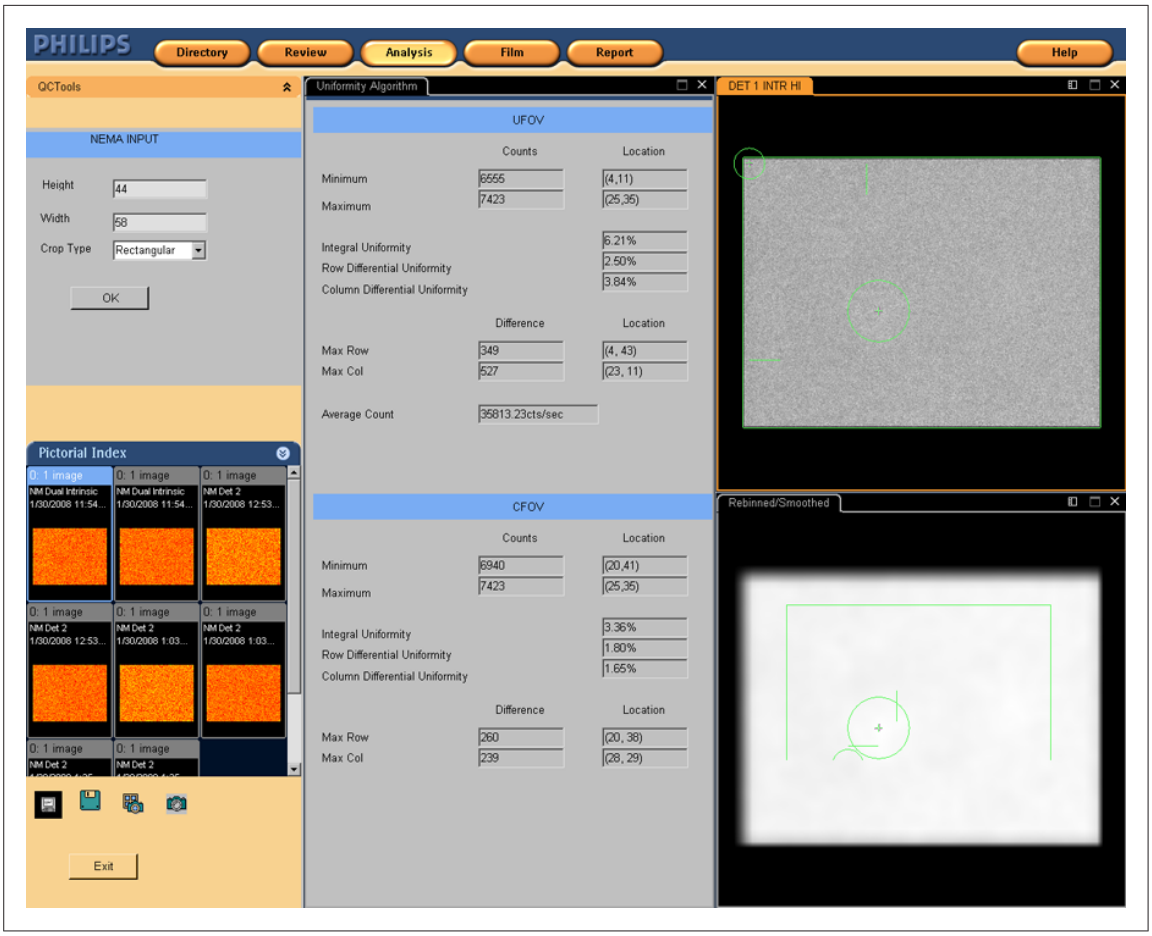

Fig. 48: QC Tools main window

UFOV and CFOV Results Tabs

After an image loads, the center section of the main QC Tools window displays the following UFOV and CFOV image results.

- **Minimum** (Counts and Location)
- **Maximum** (Counts and Location)
- **Integral Uniformity** (Percentage)
- **Row Differential Uniformity** (Percentage)
- **Column Differential Uniformity** (Percentage)
- **Max Row** (Difference and Location)
- **Max Column** (Difference and Location)

Using the QC Tools Toolbar

Each UFOV and CFOV viewer features a toolbar to customize your image.

3000063441 81_A/881 * 2021-02-28

To use the tools in the toolbar, click on the toolbar icon (#1 below). A toolbar appears on the left with the controls described below.

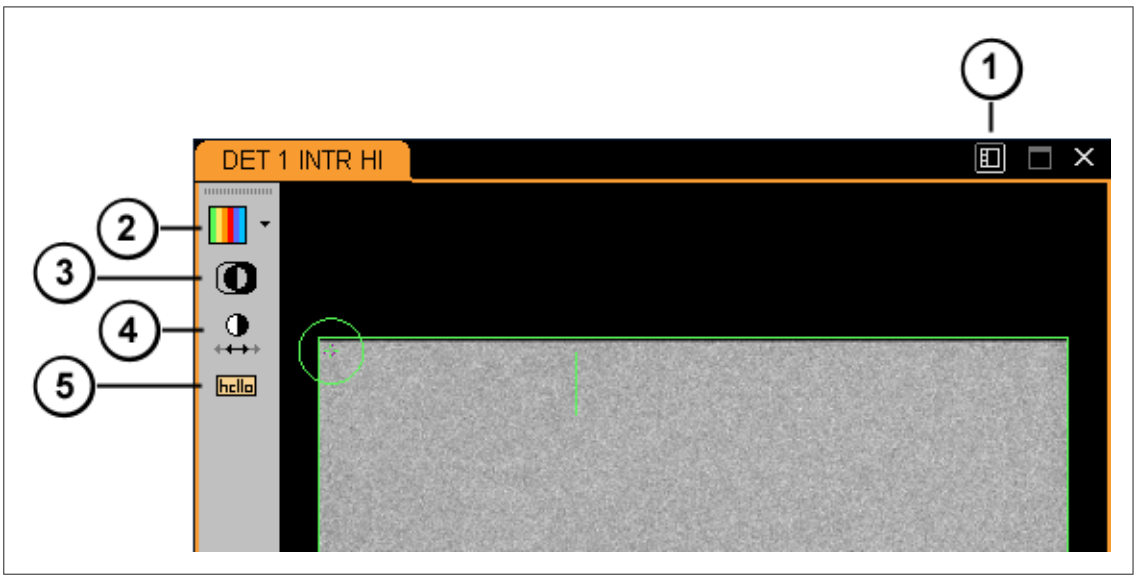

Fig. 49: Viewer window with toolbar (left column)

1	Toolbar
2	**Select Color Map**: Use the drop-down menu to select a color map.
3	**Invert Gray Level**: Click to invert the image's pixel values.
4	**Contrast Stretch**: This sets the minimum and maximum pixel values to 0 and 255, adjusting the other values accordingly.
5	**Text Box**: Use this icon to add text to your image. Click where you want the text box to appear, and then type in your text. Click outside the text box to save it.

Saving Results

Using the controls below, you can save results to text files, and you can save the display as a secondary capture or save it to film.

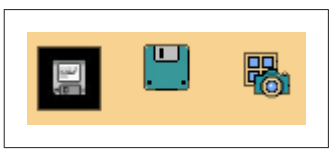

Fig. 50: Save Text File (left), **Save current display** (middle) and **Film Display** (right)

Saving to a Text File

Use **Save** to save the results to a text file. This displays the **Enter Details** dialog.

1. Some fields in the **Results** section are filled in by default; edit them if necessary:

3000063441 81_A/881 * 2021-02-28

- Collimator
- Camera
- Test Conductor
- Date
- Pixel Size
- Detectors

2. Use the **Store Results** section to specify locations for the **Summary Results** and **Additional Results**.
3. To save the additional results, check **Save Additional Results**.
4. Type any other information into the **Comments** section.
5. Click **Save Results**.

Saving as Secondary Capture

Use **Save current display** to save a multi-frame secondary capture of your QC Tools results. This displays the **Save Secondary Capture Dialog**.

1. Use the **Save As** pull-down menu to select an image format.
   - Single-Frame Secondary Capture
   - JPEG
2. Type a **Description** and choose the appropriate settings.
3. Check **RGB** to save color images, or **Grayscale** for grayscale images.
4. Click Save to save the images to the IntelliSpace Portal Patient Directory.

Saving to Film

Use **Film Display** (see previous figure) to capture multi-image (full study window) captures. This creates an image that includes both the results viewer and all image viewers.

NOTICE

You can view and print the image using the IntelliSpace Portal Film feature. Refer to your IntelliSpace Portal Instructions for Use for details.

300006344181_A/881 * 2021-02-28

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