

ColorPursuit™ 1.0

HANDS-ON TUTORIAL



2. DEVICE QUALITY ASSESSMENT

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This is a hands-on tutorial illustrating one of the numerous features and ways of using Alwan ColorPursuit.

Before reading this document, please do read **cp_introduction.pdf** available on our web site page <http://www.alwancolor.com/english/products/colorpursuit.html>

The purpose of this tutorial is to evaluate and compare **Device Quality** using Alwan ColorPursuit

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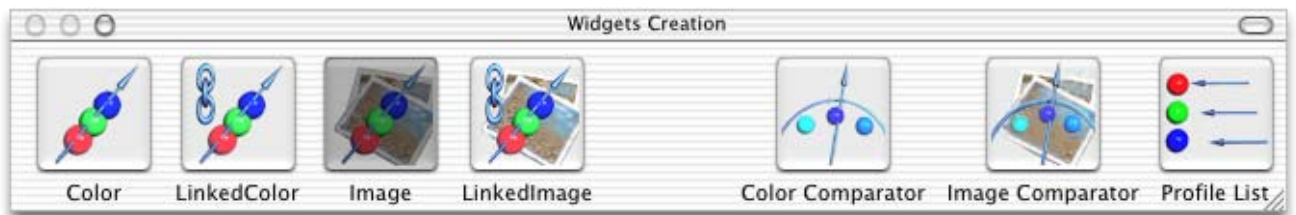
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1. Device Quality Evaluation

1.1 Device Quality

- To evaluate a device, you need first to create an Image Widget or a Linked Image Widget.

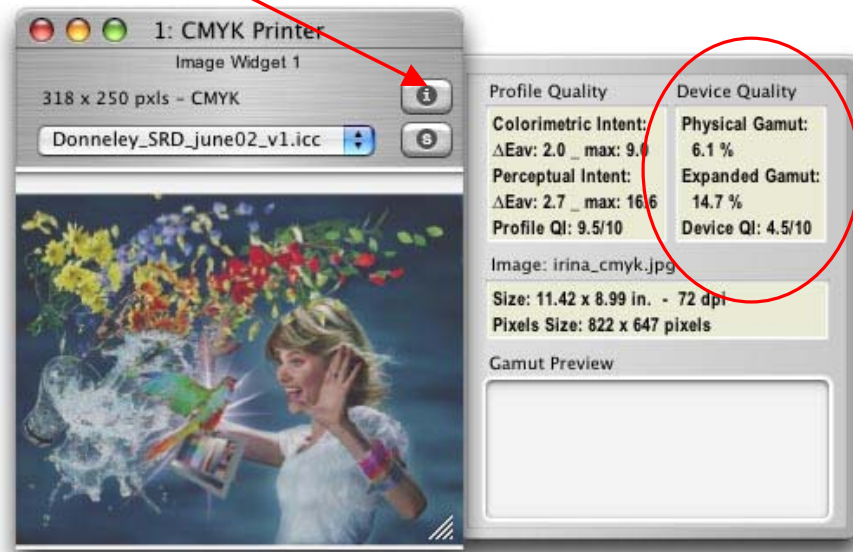
You can use either the **Widget menu** or the buttons from the **Widget Creation Toolbar** :



- Choose any desired color space or image. This has no effect on the device evaluation.



- Click on the i (information) button to display information on the right of the Widget



Physical Gamut

Physical Gamut corresponds to the device colorimetric gamut. This is the gamut calculated from the profile Colorimetric table which is based on actual measurements.

The indicated figure (9.9% for *Sheetfed PV glossy* profile) means that this is the percentage of visible colors that can be reproduced on the device within the calculated average error.

Expanded Gamut

Expanded Gamut corresponds to the device perceptual gamut. This is the gamut calculated from the profile Perceptual table which is totally dependant on the profile maker gamut expansion/compression algorithms.

The indicated figure (15.0% for *Sheetfed PV glossy* profile) means that this is the percentage of visible colors that can be mapped into the device color space within the calculated average error.

Device QI (Quality Index)

Device QI is indicated in the tab on a scale of 10.

The higher this **QI** is, the better is the device color gamut and performance.

ColorPursuit Device QI depends on both its Colorimetric and Perceptual gamuts.

1.2 Examples of Device Quality Index (QI)

A newspaper profile has a **Device QI** around 3

A press profile with uncoated paper has a **Device QI** around 4

A press profile with coated paper has a **Device QI** around 5

A digital printer profile has a **Device QI** around 6

A monitor profile has a **Device QI** around 7

A RGB space profile has a **Device QI** greater than 8

A device having the gamut of visible CIELAB colors would have a **Device QI** 10/10.

1.3 Example of bad profile



If Quality information is displayed in red like shown above, we recommend not to rely on the displayed Device Quality information and Index

2. Device QI comparison

You can easily compare the performance of two devices by creating an independent Image Widget for each device.



The two presses Quality Index can be easily compared.
In this example, the press named *Sheetfed PV glossy* has a better **Device QI** (hence better gamut) than the one named *SWOP-TROO1*.

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