Test Report
SilverFast Multiexposure and Scanner Dynamic Range for Canon CanoScan 8600F

Image Engineering Dietmar Wueller,
Augustinusstr. 9D,
50226 Frechen,
Germany,
Phone +49 (2234) 912141
Fax +49 (2234) 912142
www.image-engineering.de

20.04.2007
Introduction

In Version 6.5 of the scan software SilverFast by LaserSoft Imaging® a feature called Multi Exposure was added to increase the dynamic range of scanners.

For scanners that offer different exposure times multiple images are scanned with at least one image at each exposure time. These images are combined to a high dynamic range image.

This study was made to evaluate the dynamic ranges achieved by using this technology and compare the result to a single scan. To determine the dynamic ranges the method described in ISO 21550 was used.
Evaluated Scanner
Canon CanoScan 8600F

The OECF and dynamic range achieved with a single scan.

The OECF and dynamic range achieved with a multi exposure scan.
Measured Dynamic ranges
If a scanner provides multiple exposure levels the Multi Exposure feature of SilverFast increases the dynamic range.

<table>
<thead>
<tr>
<th>Multi Exposure</th>
<th>without</th>
<th>with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canon CanoScan 8600F</td>
<td>2.89 D</td>
<td>3.62 D</td>
</tr>
</tbody>
</table>

Values in densities

Frechen 20th of April 2007
Image Engineering Dietmar Wueller