## SilverFast®

## 6x7 cm Resolution Target (USAF 1951)

## **Quick Manual for Determining the highest actually usable Resolution**

Using our SilverFast scanner software in combination with our Resolution Targets (USAF 1951) you can determine right away, which resolution you can actually use with your scanner for reflective as well as for transparency scans. Please follow these 5 simple steps:

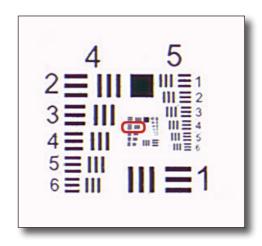
- Place your 6x7 cm Resolution Target in the center of your scanner's flatbed. To measure the
  maximum resolution for transparency scans, please start SilverFast and switch to Transparency mode. Choose Reflective mode to measure the maximum resolution for reflective
  scans. Please remember to cover the transparency unit for reflective scan as suitable for
  your scanner.
- Perform a RAW scan (48bit HDR RAW) using the maximum optical resolution. Therefore
  please choose the next to last step of the resolution slider. (The last step chooses an interpolated resolution, which is inappropriate for this task.) The SilverFast features iSRD and
  Multi-Exposure have to be deactivated.
- 3. Save your scan as a TIFF file and open it in your Imaging software (e.g. SilverFast HDR Studio). In order to not tamper the results, it is important to do no image manipulation such as rotation, etc.
- 4. Set the zoom factor to 100% (original view) and search for that element, where you can just differentiate two adjacent bars with your eyes, that means where you can just still recognize the white gaps between the bars.

**Note:** Many scanners have different resolutions in vertical and horizontal direction. For measuring those independently, the Resolution Target features horizontally and vertically oriented bars.

5. Look for the identified element's number and group affiliation number and determine the usable resolution of your scanner with this element and group numbers at the table on page 2.

**Example:** The 3rd element of group 6 is marked in the sample picture (inner groups of a scanned Resolution Target), since the black bars of the 4th element cannot be differentiated against the white background.

From the table we can determine a resolution of approximately 4096 ppi for the scanner used.

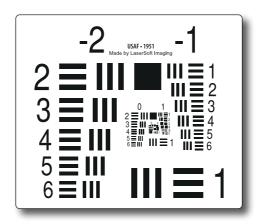


The following table provides the actually usable resolution capability of your scanner in ppi. Therefore, please do a scan with your SilverFast Resolution Target as described on page 1 and use the achieved element and group numbers for consulting the table below.

**Table:** SilverFast 6x7 cm Resolution Target (USAF 1951)

	Group -2	Group -1	Group <b>0</b>	Group <b>1</b>	Group <b>2</b>	Group <b>3</b>	Group <b>4</b>	Group <b>5</b>	Group <b>6</b>	Group <b>7</b>
Element 1	13	25	51	102	203	406	813	1626	3251	6502
Element 2	14	29	57	114	228	456	912	1825	3649	7299
Element 3	16	32	64	128	256	512	1024	2048	4096	8193
Element 4	18	36	72	144	287	575	1149	2299	4598	9196
Element 5	20	40	81	161	323	645	1290	2580	5161	10322
Element 6	23	45	91	181	362	724	1448	2896	5793	11586

More information on our SilverFast Resolution Targets (USAF 1951), in-depth instructions as well as additional application and background can be found here: www.SilverFast.com/Resolution-Target



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