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## How to Determine the Proper Scanning Resolution for EDGE Printing

**Gerber FastFact #** 4260

**Supplied by:** Imaging Products

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**Summary:** This document provides a quick formula to help you determine the proper scanning resolution (DPI) for process color or black and white images. This method is useful for scanning images that will be printed on the GERBER EDGE.

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### Scanning Resolution = (LPI) x (2) x (Scale Factor)

where:

LPI = Output LPI

Scale Factor = The number of times the image is scaled up from original artwork size to the final output size.

This formula forces you to think through the entire scanning and printing production process before you even put the artwork on the scanner. This forethought is good!

For output LPI, see the above article for guidelines.

The scale factor deals with whether or not you are going to size the scanned artwork. How many times larger will you increase the size of the artwork? This is your scale factor multiplier.

*Lets try a quick example:*

Original Artwork Size = 3" x 5"

Intended Output Size = 12" X 15"

Therefore the Scale factor = 4

Output LPI = 45 LPI

From the LPI chart above, we see that the LPI should be 45 to 60 LPI, because the artwork is larger than 5.8 inches.

Scanning DPI = 360 dpi = (45 LPI) x (2) x (4)

Other Hints about scanning and GERBER EDGE output:

*For the best quality photo reproductions:*

- Use photos for original artwork
- Scan using millions of colors as a scanner setting
- More is not always necessarily better... You get less and less quality improvement if you increase resolution too high, plus the files can get very large, plus rendering times increase with higher resolution files
- Experiment! Find your own sweet spots of scanning and output LPI!