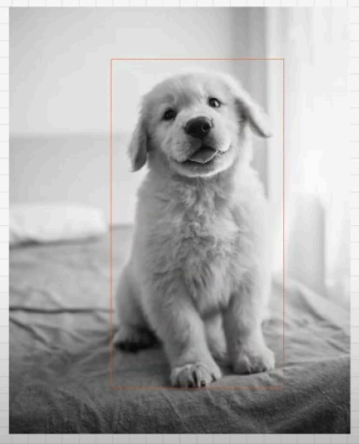Images in Lightburn

Image Masking
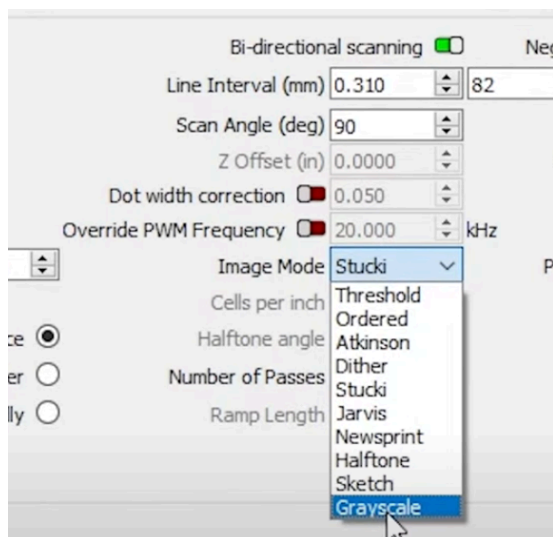
Draw a vector over the image to mask it.

Select both, right click, apply mask to image.
Both the mask and the image can be moved and scaled independently. When we want to keep them at their same settings, we should group them together. Now they can be moved together or scaled together.

Image Settings

Lightburn has two ways of doing images, dithered and grayscale.
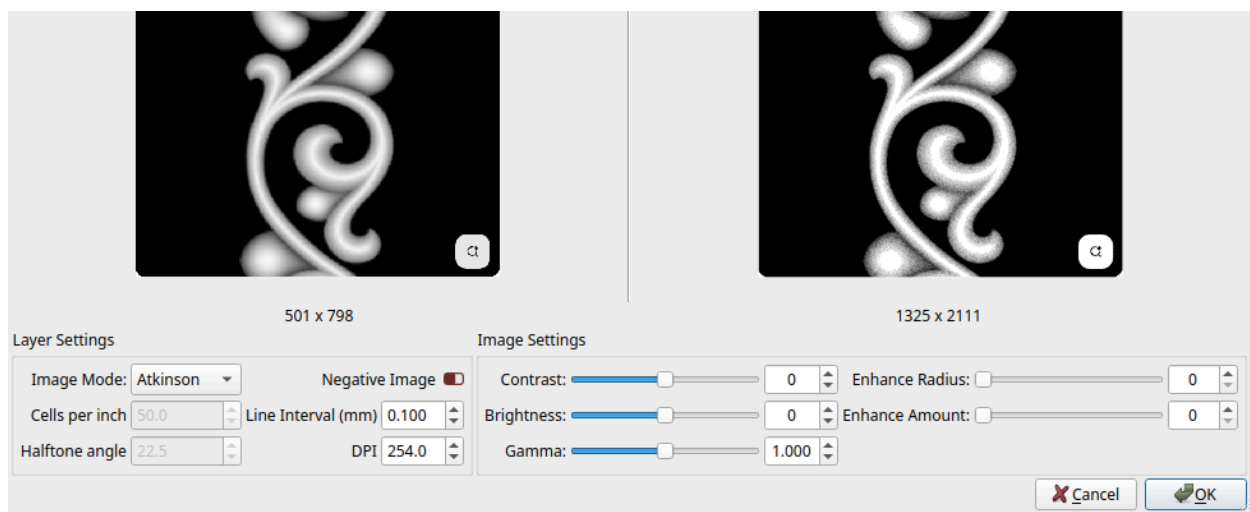

Types of dithered images, with grayscale option at the bottom.

A dithered image:

In Lightburn, only the max power property is used while doing dithered images. Min power is ignored, since the image is treated as black/white.

The best way to get a sense of the kinds of effects created by dithering is to use the "adjust image" feature that has an image mode selector.

501 x 798   1325 x 2111

Layer Settings		Image Settings		
Image Mode: Atkinson ▾	Negative Image ⬤	Contrast: 0	Enhance Radius: 0	
Cells per inch 50.0	Line Interval (mm) 0.100	Brightness: 0	Enhance Amount: 0	
Halftone angle 22.5	DPI 254.0	Gamma: 1.000		

✗ Cancel   ⏎ OK

Types of Dithering and their uses:

Clamped Dithering

Threshold - Graphics

Ordered - Cartoons

Smooth Shaded Dithering

This dithering attempts to create as smooth a transition as possible between light and dark areas by creating dot arrays that do not match recognizable patterns.

Stucki - General Purpose

Atkinson

Jarvis

Halftone Dithering

Halftone dithering has noticeable patterning that can be a pleasing effect. These intentionally try to recreate the effect of print.

Newsprint

Halftone

Sketch

Grayscale

Grayscale images can be more difficult to achieve on a high-power machine, simply because the higher intensity in dark areas tend to vaporize the layers and create depth. On high power machines grayscale is often used to create 3D reliefs rather than grayscale images.

In dark areas of the image, the laser will fire closer to your max power, and in light areas it will fire closer to your min power.

Depending on the range of power you set, you'll get a wider or tighter range of intensities.
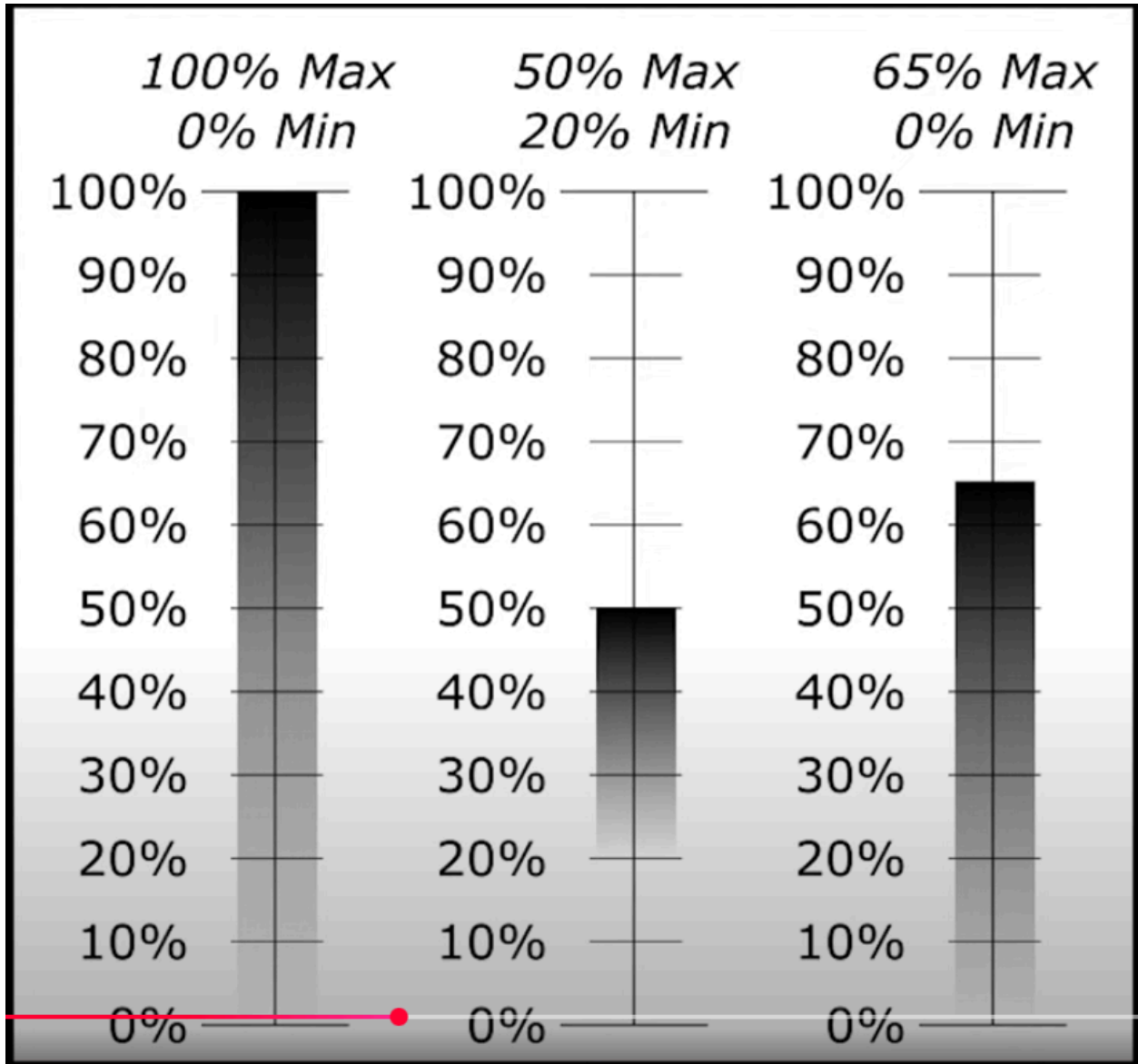
Where things get interesting is that few images have pure black and pure white in them. But Lightburn will set your max against pure black and your min against pure white!

Therefore, you may find that your range of grey is more restricted than you might expect based on what we see with our eyes.
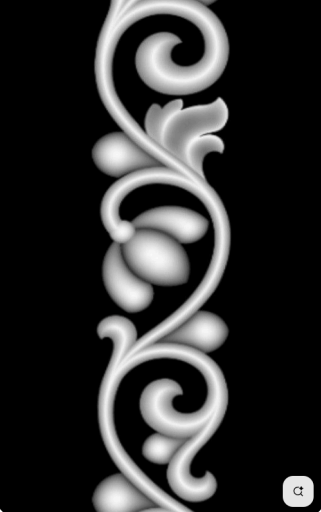
3D Reliefs

Many of these images claimed to be depth-maps actually are not. Can you spot them?

Some are just black and white images, some are shaded images, very few are actually depth maps.

This is a true depth map:

It does not have shading cast from one side or the other. The dark areas simply inform where the laser should burn deeper, and the lighter areas indicate less power.