

Generating Graticule for OptiPix

This document describes how to generate a transparent PNG image to be used with OptiPix graticule function. The graticule in this document is created with Corel Draw X6 software, however any other similar software can be used.

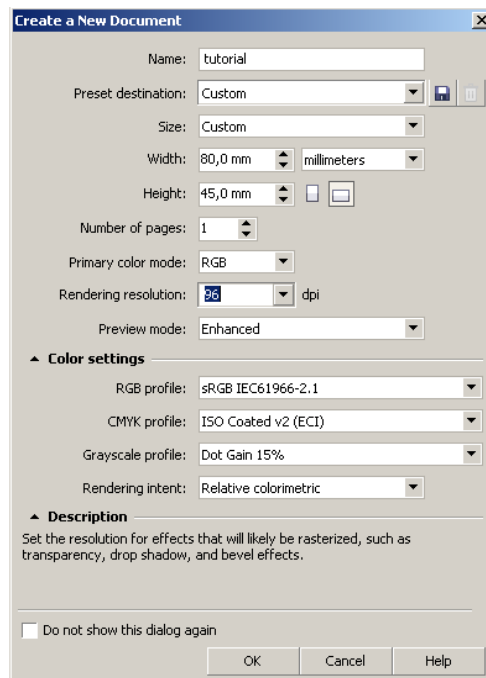
Defining the Field-of-View (FoV)

Before starting to draw the graticule it is important to define the field of view.

1. Setup the HD camera and target object.
2. Adjust the magnification as desired.
3. Place a ruler and measure the width and height, i.e. the field of view.

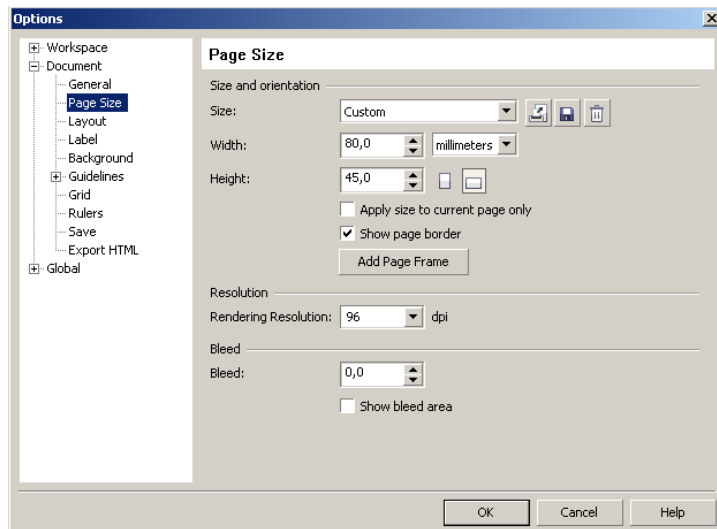
Creating a Graticule in Corel Draw.

1. Start Corel Draw and open a new page from *File->New*
2. Set the *Size* to custom and set the width and height in millimetre same as FoV.
3. Set the *Rendering Resolution* to 96 dpi
4. In this document an example graticule is generated for 80x45mm FoV.



Create new page

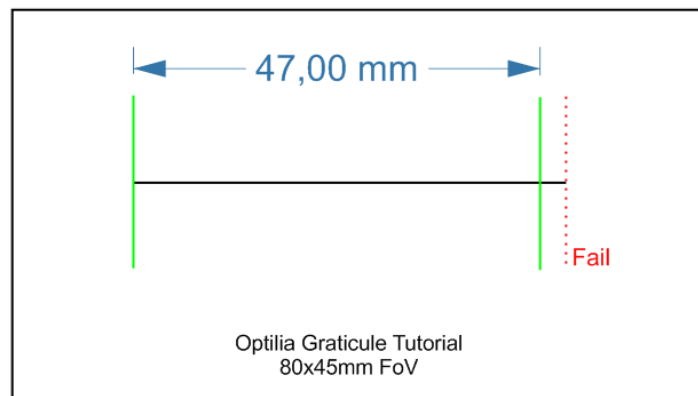
5. Click “Layout->Page Setup”



6. Select “Show Page Border” and click “Add Page Frame”.

Add border to page

7. Draw the graticule and add reference text if required with in the frame.
Alternatively a DXF file of a CAD drawing can be imported and edited. To import a DXF file click *File->Import*. Make sure the scale is 1:1 and same units are used as drawing.



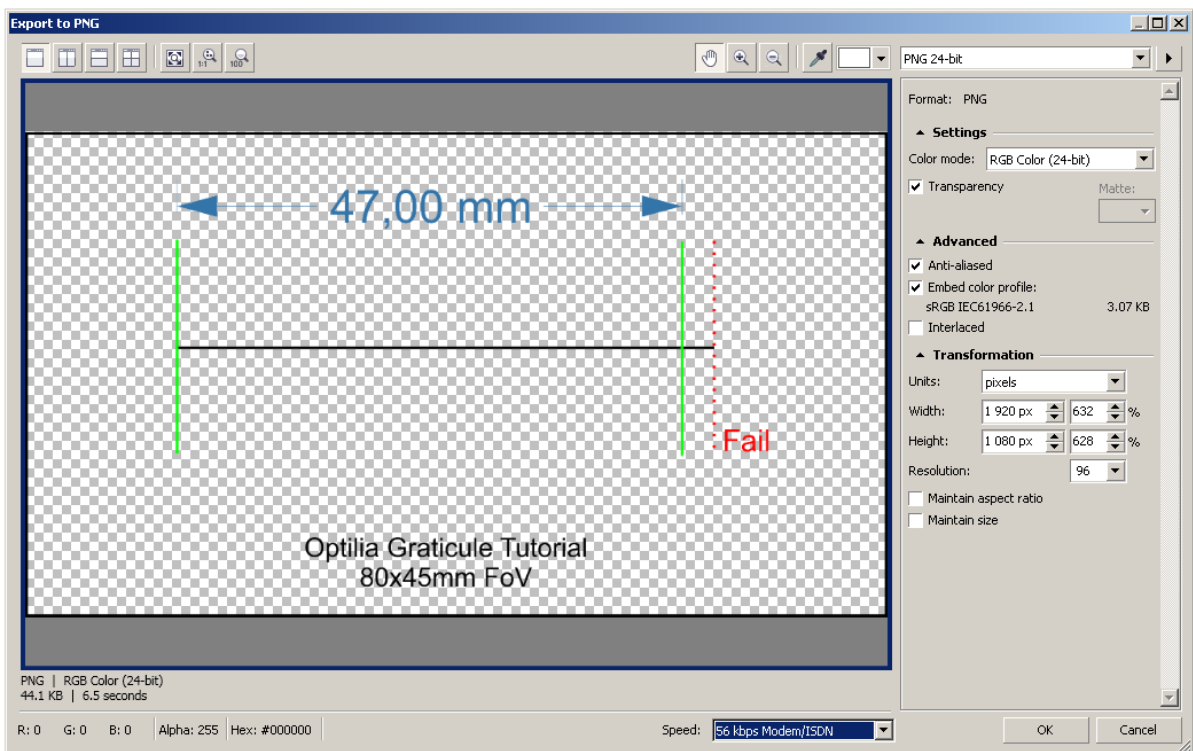
Example graticule

8. When it is done with the drawing, save the graticule and follow the next steps to export to transparent PNG file.

Exporting Graticule to PNG

It is very important to export PNG image with transparent background and the final image size should be 1920x1080 or 1280x720 depending on the resolution of the HD camera.

1. Click *File->Export*
2. Set the desired name and destination folder. Set *Save type: PNG*. Click *Export*.
Export to PNG window will be displayed.
3. Set the transparency and format of the PNG file in the *Export to PNG* window as follows:



Export to PNG Window

4. Set PNG settings as:
 - a. *Transparency* is selected.
 - b. *Transformation Units: pixels*
 - c. Width and height is same with resolution of the HD Camera
 - d. *Resolution* is set to 96dpi.
5. Click OK. The exported PNG graticule is ready to be used in OptiPix