# Drawing template

Place your acrylic electron template face up on the table. Measure two principal axis and record the number. This will be used to compare in Raystation later.

A ruler and a glass with lines on it

Description automatically generated

Place your clear plastic sheet on top and trace cutout. Note where -x and -y are

A person drawing a line on a transparent board

Description automatically generated

A person holding a needle and thread

Description automatically generated

Place the traced plastic *face down* on the scanner, with -X and -Y in the same direction as shown in the image below.

A clear plastic board with a circle drawn on it

Description automatically generated

Cover it with a piece of white paper

A hand holding a piece of paper

Description automatically generated

## Scan the image

Preview the scan to make sure it looks okay

## Set resolution

A computer screen with a red circle

Description automatically generated

**Make sure to set resolution to 72 DPI**

## Save the image

Save the file as a .jpg image, uploading it to

[\\vscifs1\physicsQAdata\UNC\_ElectronCutout\\*marker](file:///\\vscifs1\physicsQAdata\UNC_ElectronCutout\*marker) color\*

After uploading, a mask file will automatically be generated, review it now!

## Review image

A jpeg file called ‘mask’ will be generated, make sure it looks acceptable.

Delete all but the most recently created ‘RS\_MRN\*.dcm’ files!

A screenshot of a computer

Description automatically generated

# Raystation Importing

Open Electron phantom

## Open the Template Plan

A black screen with a white arrow

Description automatically generated

## Copy Plan

Make a copy of this plan by going to Plan design -> Copy plan

Name plan with First\_Last\_MM.DD.YYYY format

A screenshot of a computer program

Description automatically generated

## Set Beam SSD

Beam SSD To Surface should be set to 95.5. This means that aperture is almost exactly on the surface of the phantom

A screen shot of a computer

Description automatically generated

## Clear previous ROI of ‘New’

Select ‘Patient modeling’ -> ‘New’ Target and Delete Geometry

A screenshot of a computer

Description automatically generated

## Import generated structure from scanner

Once the .jpg file has been made, it will automatically create a structure file.

Click the blue button in the upper left corner -> Import -> Import to current patient

Select ‘File’ and paste

[\\vscifs1\PhysicsQAdata\UNC\_ElectronCutout](file:///\\vscifs1\PhysicsQAdata\UNC_ElectronCutout)

A screenshot of a computer

Description automatically generated

## Measure comparison

Localize ‘New’ and use the measure tool to evaluate the dimensions of the structure.

A screen shot of a map

Description automatically generated

A screen shot of a map

Description automatically generated

# Create cutout from structure

Go to Plan Design -> Electron beam design -> Cutout

A screenshot of a computer

Description automatically generated

## Verify beam SSD!

Beam SSD should still be 95.5!

## Set Applicator

Applicator defaults to be 25x25, set it to the desired size

## Conform Cutout

Select conform cutout, cutout should conform to the ‘New’ structure

## Change SSD

Change the SSD to the desired SSD for treatment