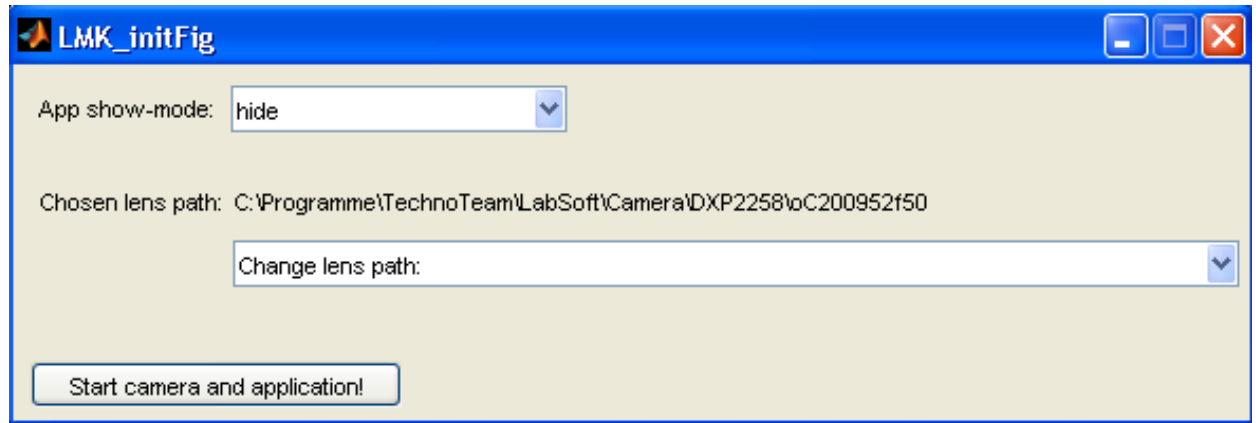


1. Start application

Run LMK\_gettingStarted.m inside MATLAB  
or LMK\_gettingStarted.exe outside MATLAB.

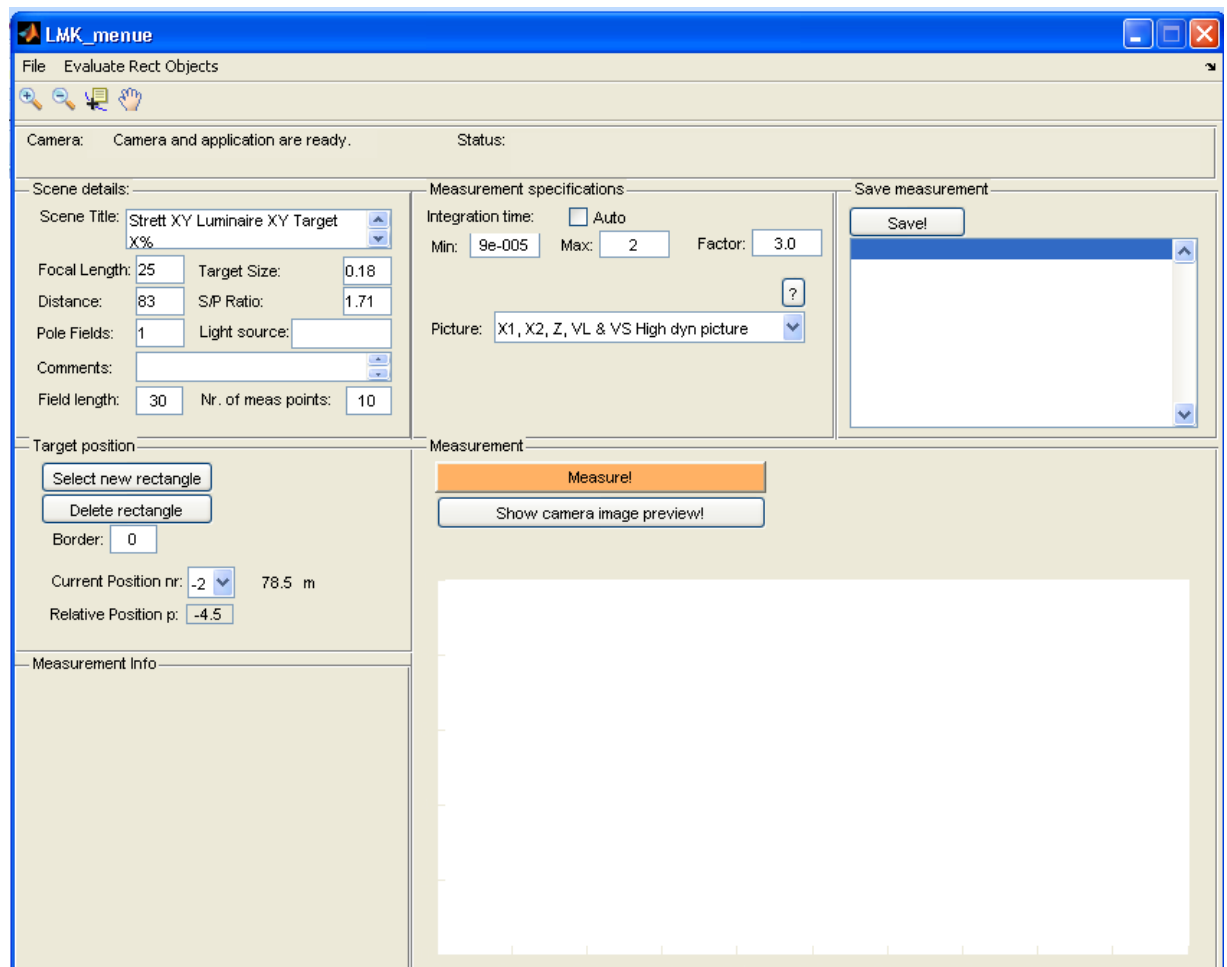
Figure LMK\_initFig opens:



2. Chose lens path

Check path to lens of the camera via Figure, than push Button „Start camera and application!“

Figure LMK\_menuue opens:



### 3. Type in scene details

LMK\_menu

File Evaluate Rect Objects

Camera: Camera and application are ready. Status:

**Scene details:**

Scene Title: Strett XY Luminaire XY Target X%

Focal Length: 25 Target Size: 0.18

Distance: 83 S/P Ratio: 1.71

Pole Fields: 1 Light source:

Comments:

Field length: 30 Nr. of meas points: 10

**Measurement specifications:**

Integration time: ☐ Auto

Min: 9e-005 Max: 2 Factor: 3.0

Picture: X1, X2, Z, VL & VS High dyn picture

**Save measurement:**

Save!

**Target position:**

Select new rectangle

Delete rectangle

Border: 0

Current Position nr: -2 78.5 m

Relative Position p: -4.5

**Measurement:**

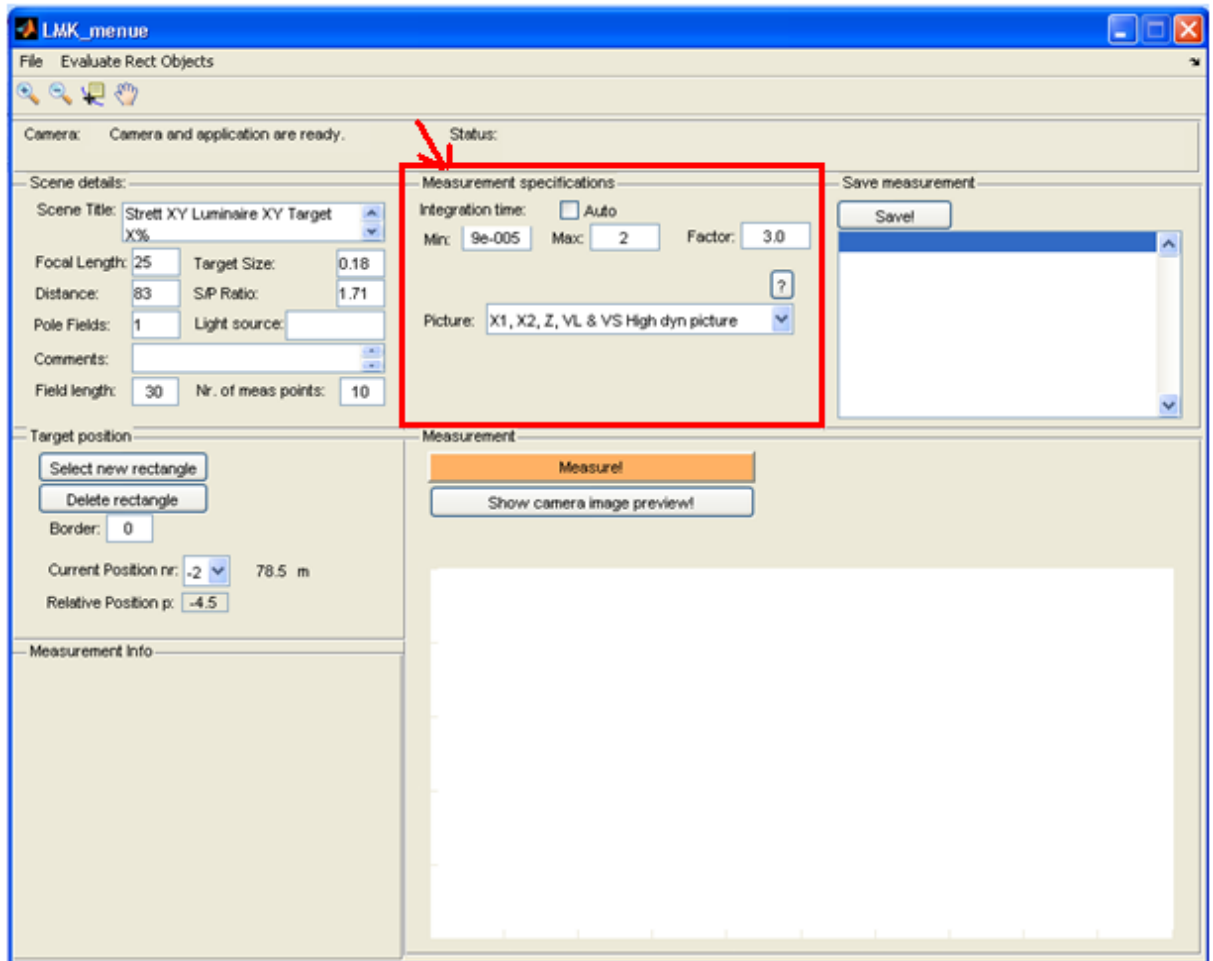
Measure!

Show camera image preview!

**Measurement Info:**

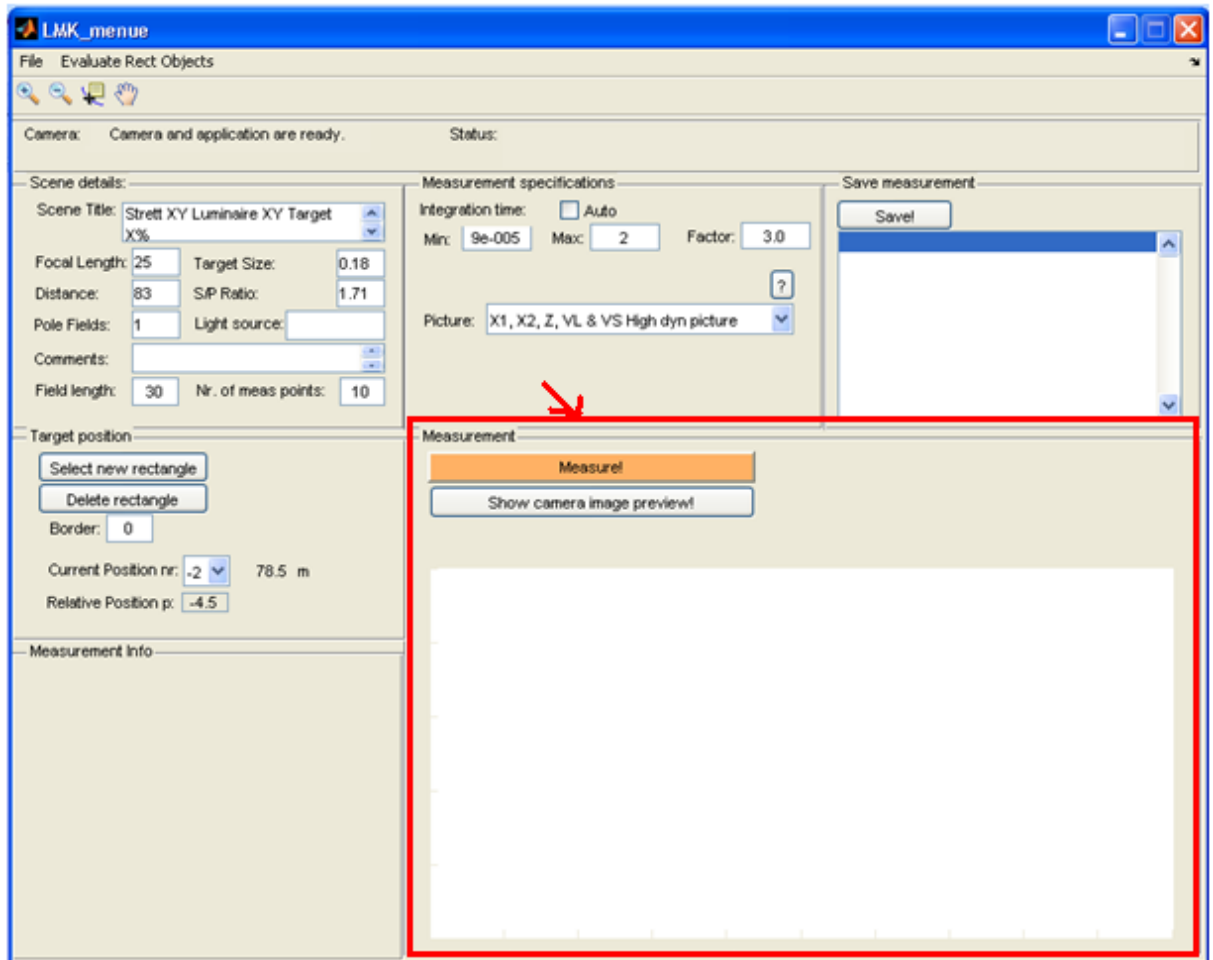
Scene Title:	e.g. name of the street
Focal Length:	focal length of the camera's lens in mm
Target Size:	length of one side of the target in m
Distance:	distance of camera to the measurement field in m
S/P Ratio:	scotopic to photopic luminance ratio
Pole Fields:	number of pole fields in measurement field
Light source:	lamp type, e.g. NAV, HQL
Comments:	additional details
Field length:	length of the measurement field in m
Nr. of meas points:	number of measurement points (usually 10 inside, 2 before, 2 after field)

#### 4. Type in measurement specifications



Integration time: set Auto or  
 Min: smallest integration time (proposal 0.0)  
 Max: largest integration time  
 Factor: factor between two times (proposal 3.0)  
 Picture: chose filter wheels, only high dyn capture algorithm available  
 VL high dyn picture: capturing with  $V(\lambda)$  filter wheel  
 (photopic luminance picture will be available after measurement)  
 VL & VS high dyn picture: capturing with  $V(\lambda)$  &  $V'(\lambda)$  filter wheel  
 (photopic & scotopic luminance pictures will be available after measurement)  
 X1, X2, Z, VL % VS high dyn picture:  
 (all features will be available after measurement)

## 5. Do measurement



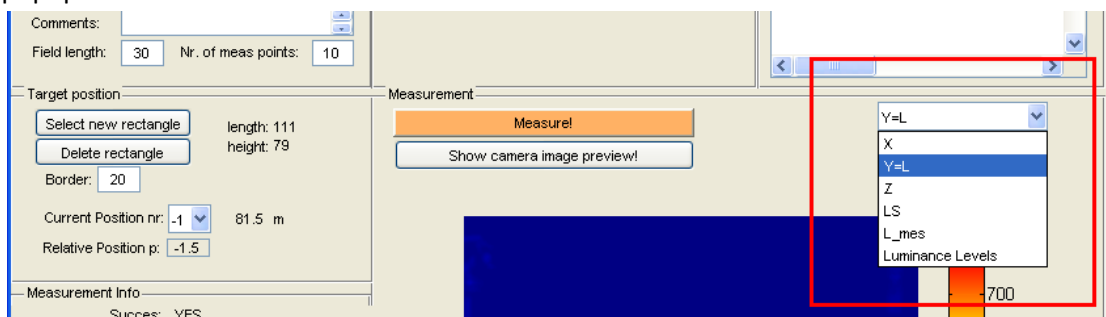
Push „Measure!“ button.

Wait... (The status of the software is shown in „Status“ above.)

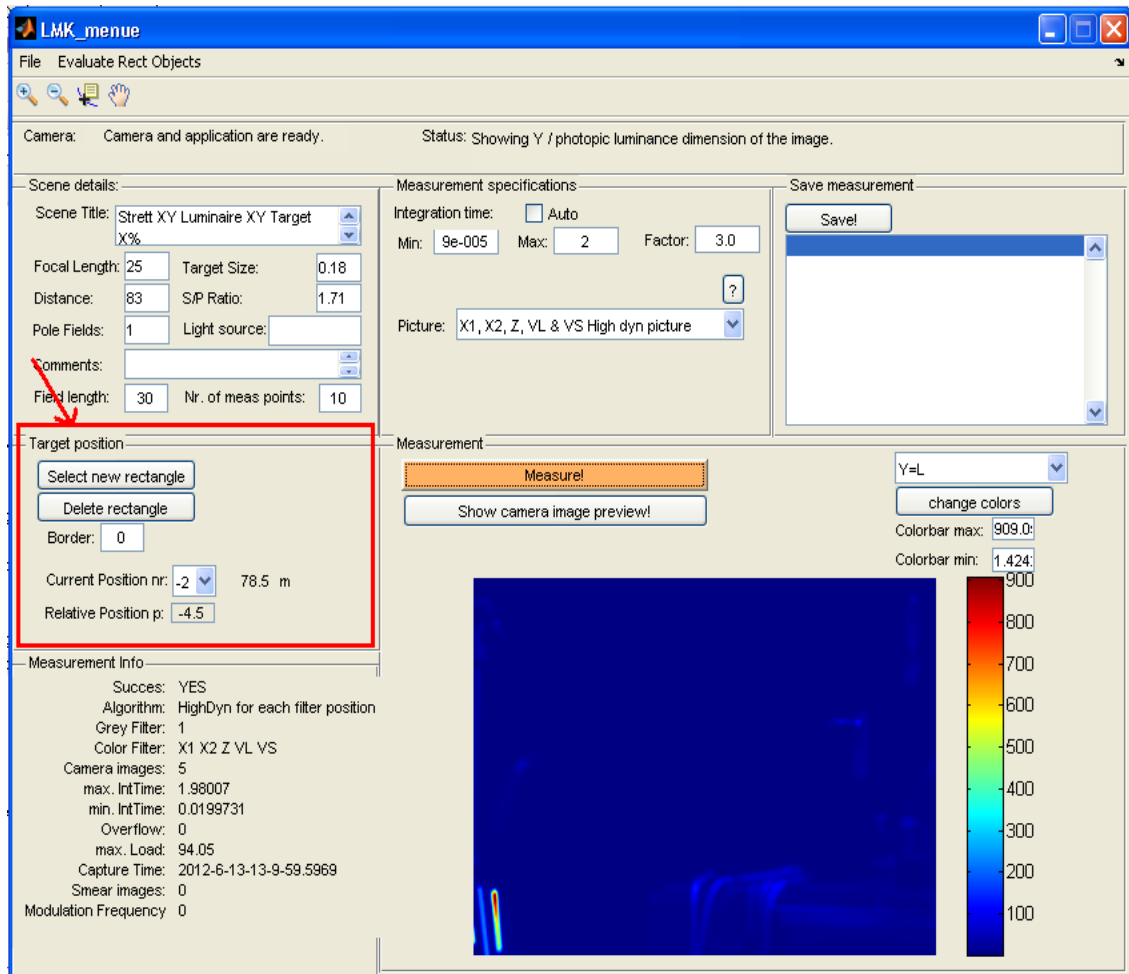
A camera picture will be shown shortly.

After measurement the photopic luminance picture will be shown.

You can see – depending on capture algorithm – different luminance levels with the poppupmenu:



## 6. Select target position

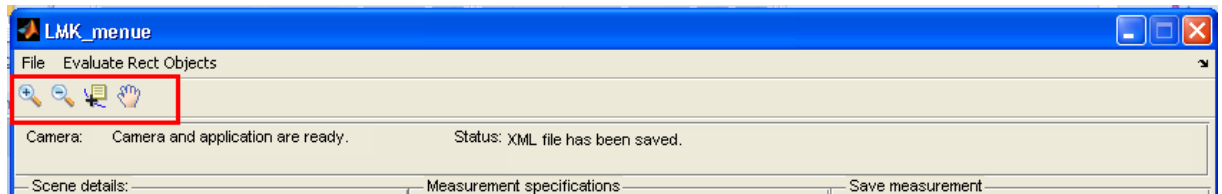


Push button „Select new rectangle“.

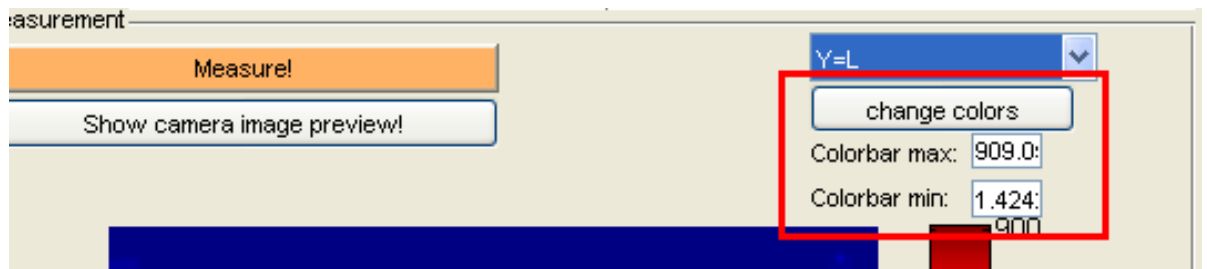
Drag and drop with the cursor:



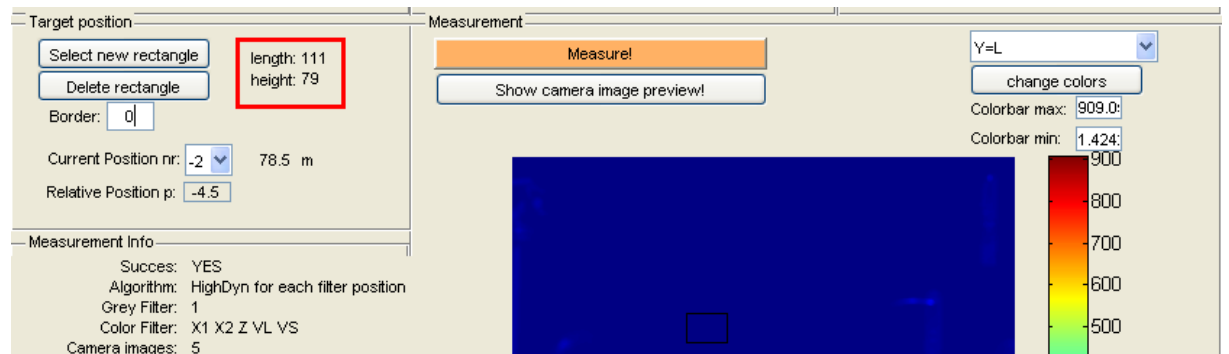
Help yourself with the toolbar, e.g. to zoom and unzoom:



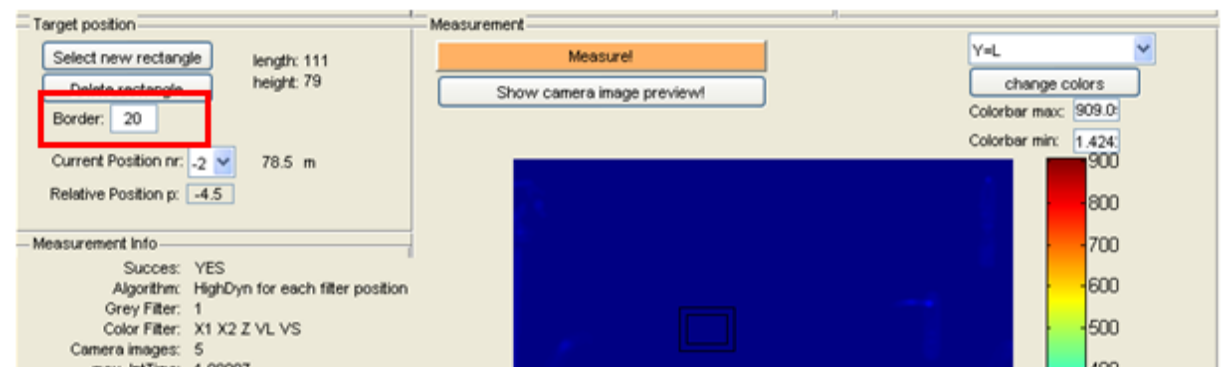
To change the colors or change the colorbar press “change colors” button or edit colorbar maximum / minimum (press enter after editing):



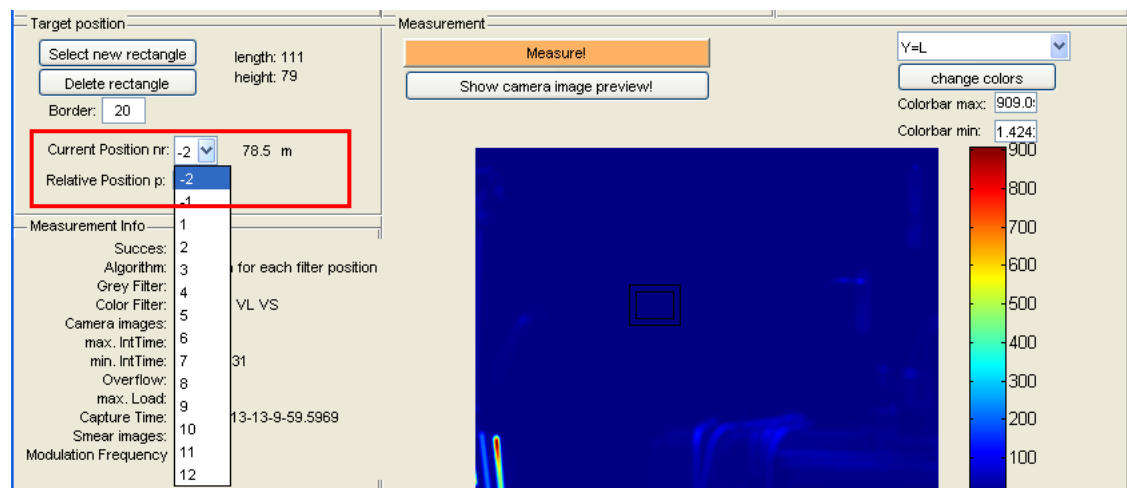
Double click inside the rectangle to fix it. Length & height of the rectangle are shown in the GUI:



Type in a pixel border if necessary and press enter:



Choose if necessary the current position of the target. The distance to the viewer position is shown:



Additionally the relative position of the target (= distance to beginning of measurement field) is shown and can be edited in special cases (press enter after editing):

## 7. Save measurement

If measurement is done and rectangle is chosen, press “Save!” button.

Figure LMK\_saveFig opens:

If necessary change edit path and filename and choose whether to save the LabSoft .ttcs protocol.

Press “Save!” button.

All relevant data are saved (.mat, .ttcs., .xml, .dtd) for evaluation.

The current position popup menu steps to the next position number & the text field informs you what was saved: