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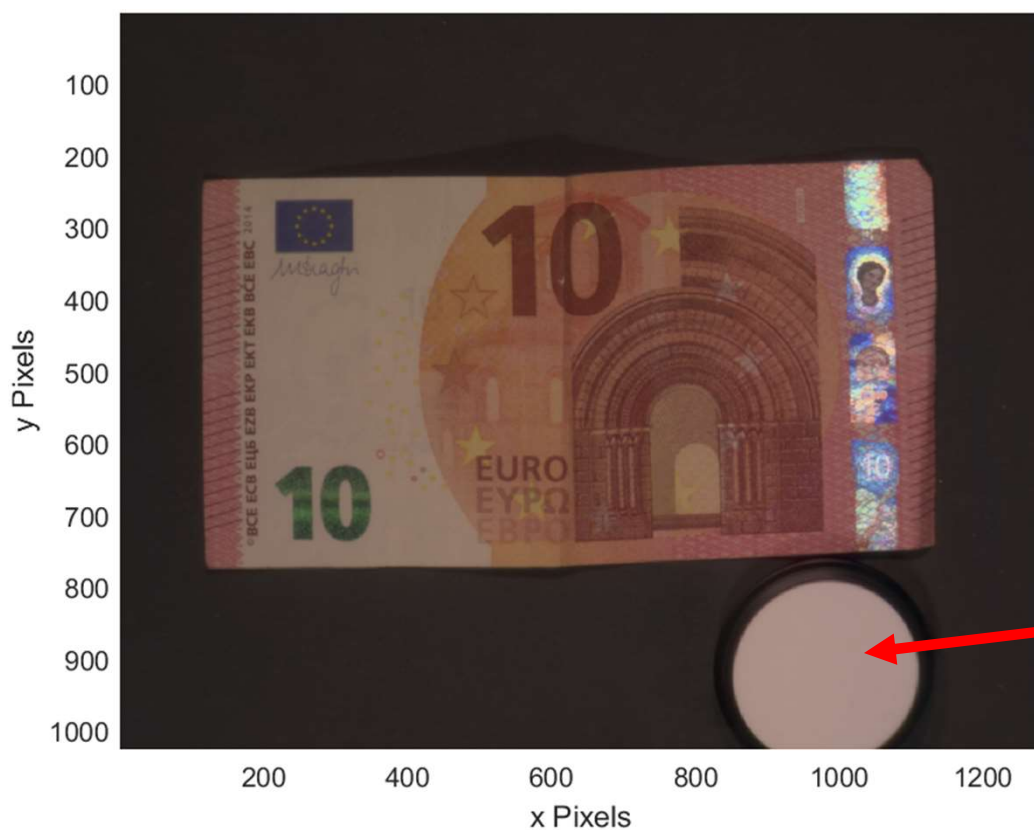
# HYPERSENSPECTRAL MEASUREMENTS WITH THE HERA IPERSPETTRALE

# MEASUREMENT 1: REFLECTANCE GEOMETRY



## MEASUREMENT 1: REFLECTANCE

RGB reconstruction from hyperspectral data



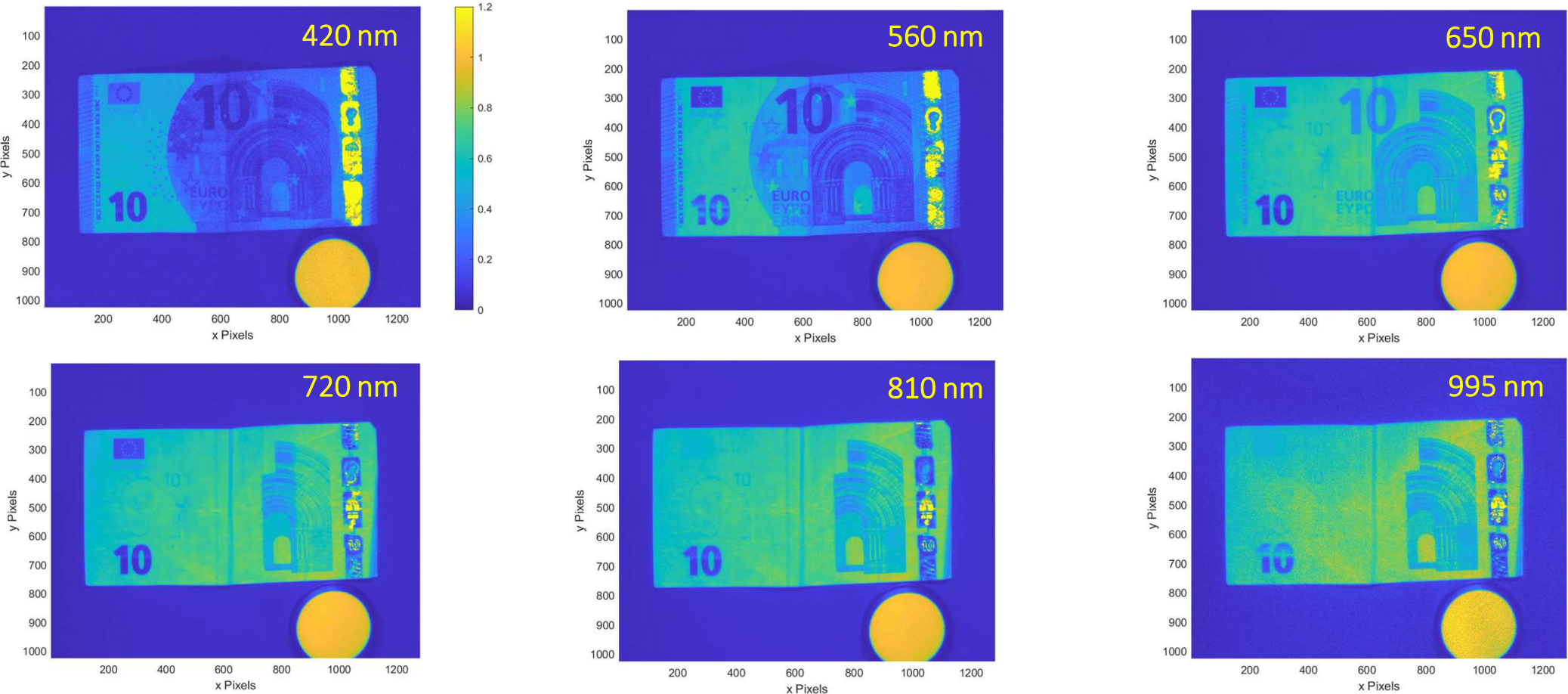
- Reflectance data
- Illumination: LED + halogen lamp
- Distance: 1.50 m

Reference for normalizing the image, and obtaining the reflectance data



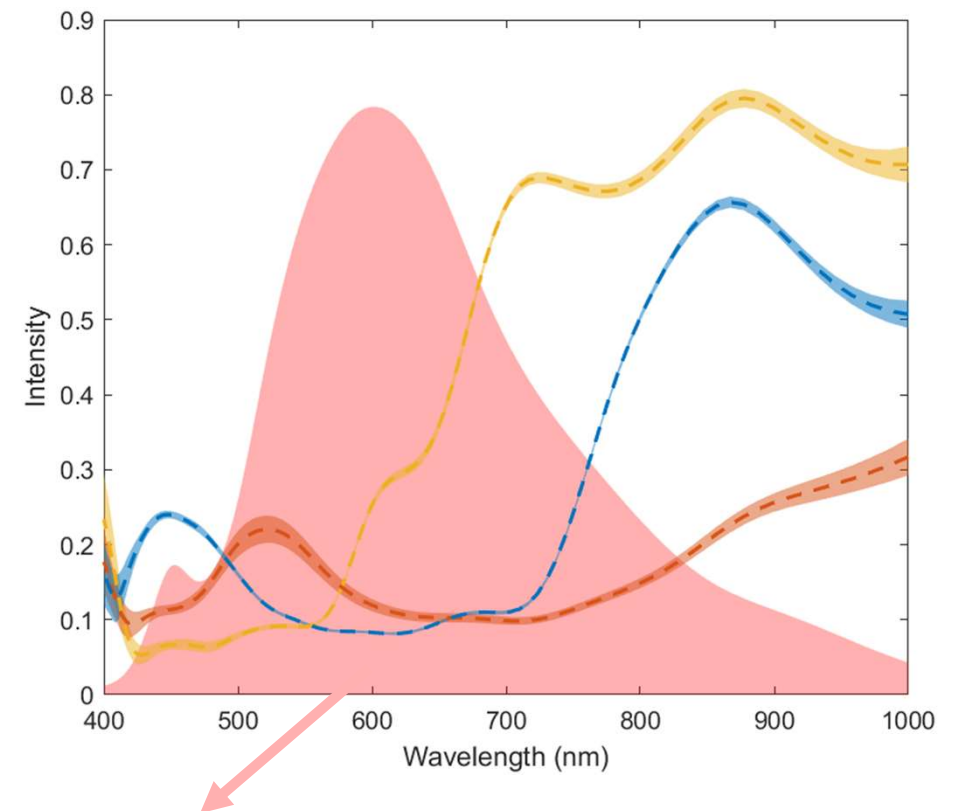
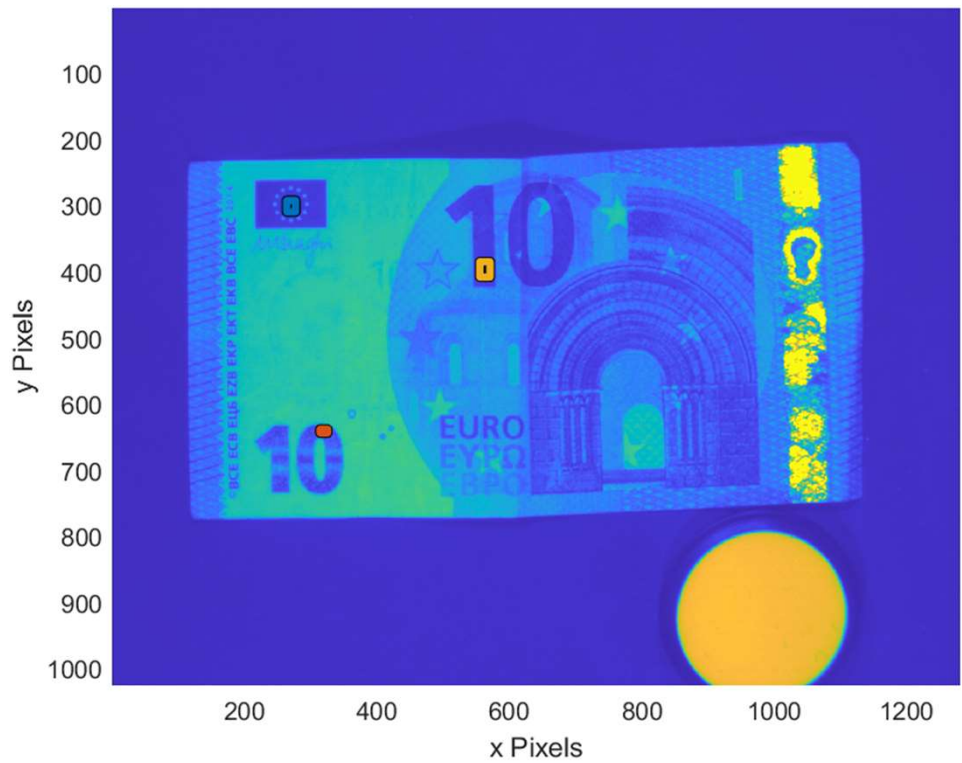
# MEASUREMENT 1: REFLECTANCE

Pseudo-color images at different wavelengths



# MEASUREMENT 1: REFLECTANCE

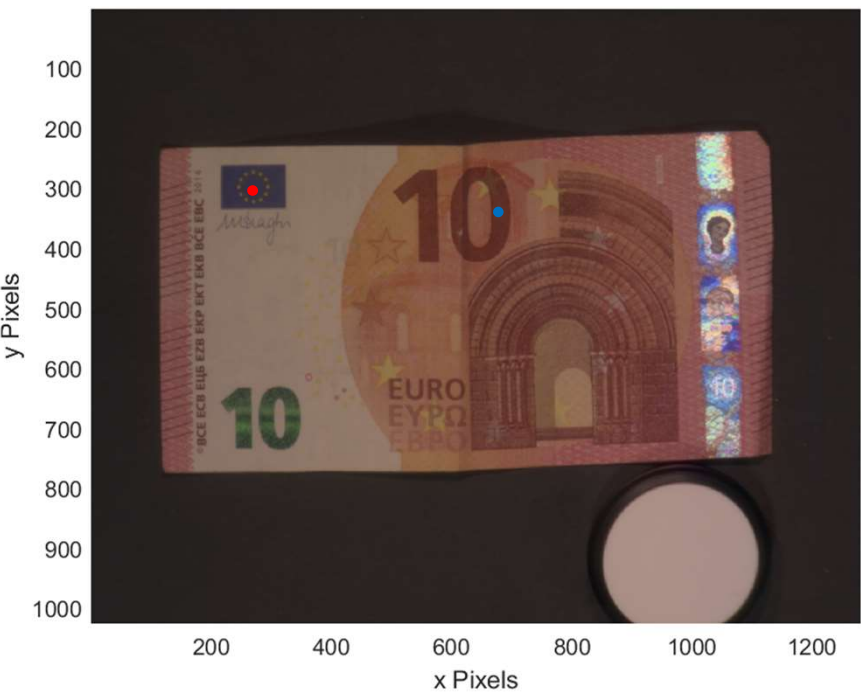
Reflectance spectra in different areas of the image



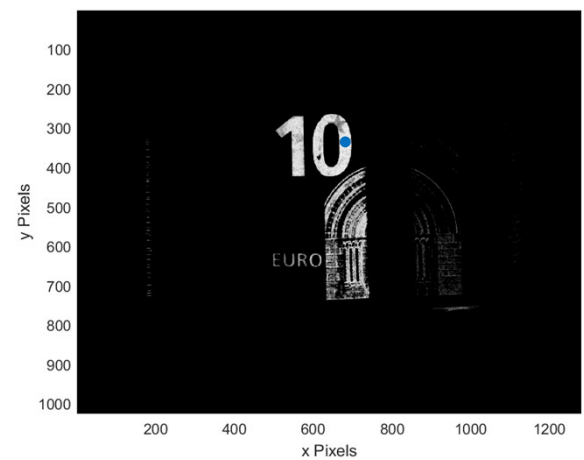
Spectrum of our illumination

# MEASUREMENT 1: REFLECTANCE

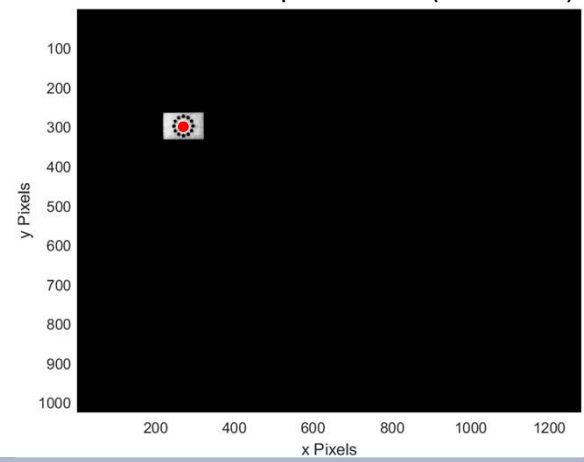
Spectral Angle Mapper (SAM): recognizes spectral similarities



Reference spectra 1 (blue dot)

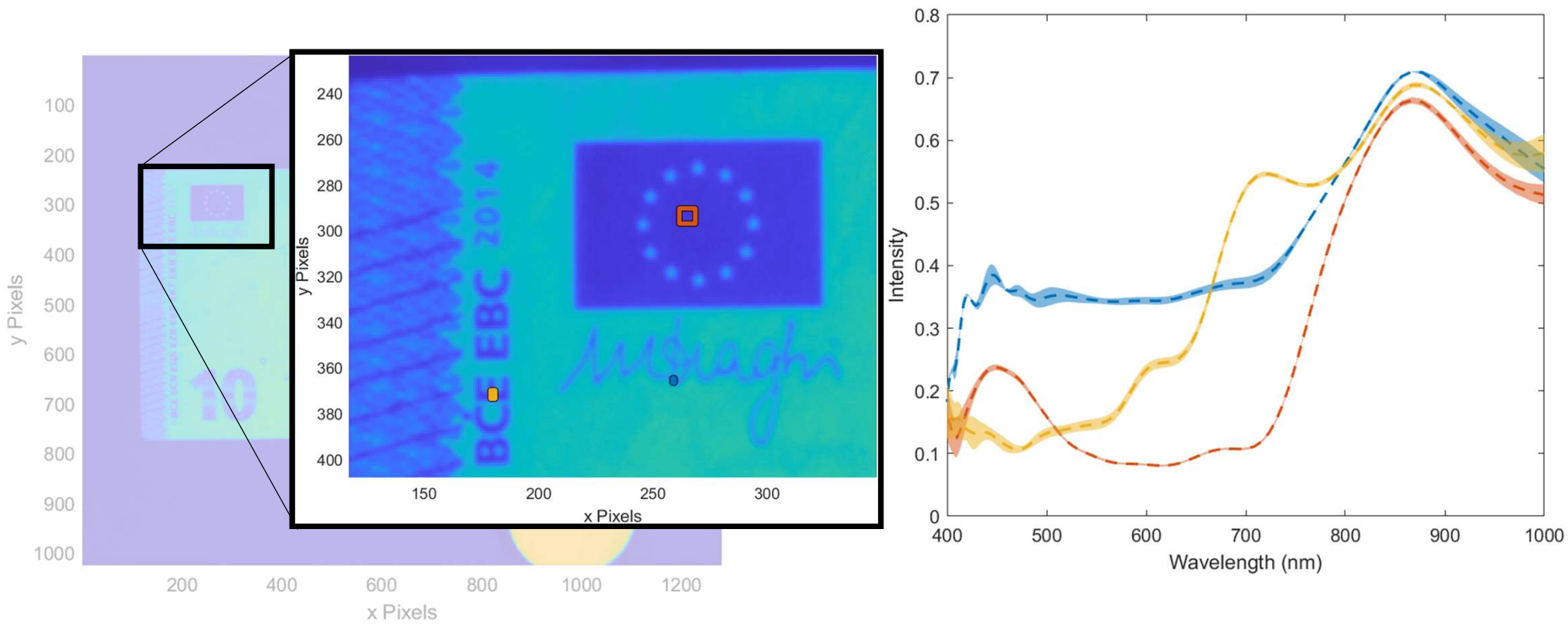


Reference spectra 2 (red dot)



# MEASUREMENT 1: REFLECTANCE

Zoom inside the image, showing the very high spatial resolution



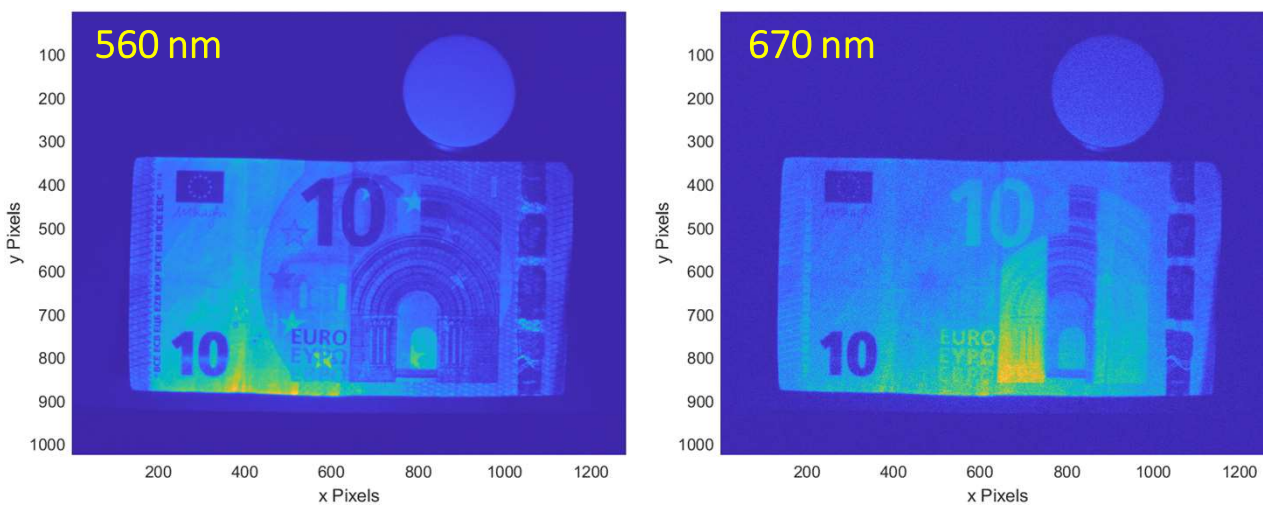
MEASUREMENT 1:  
FLUORESCENCE GEOMETRY





## MEASUREMENT 2: FLUORESCENCE HYPERSPECTRAL IMAGE

Pseudo-color images at different wavelengths

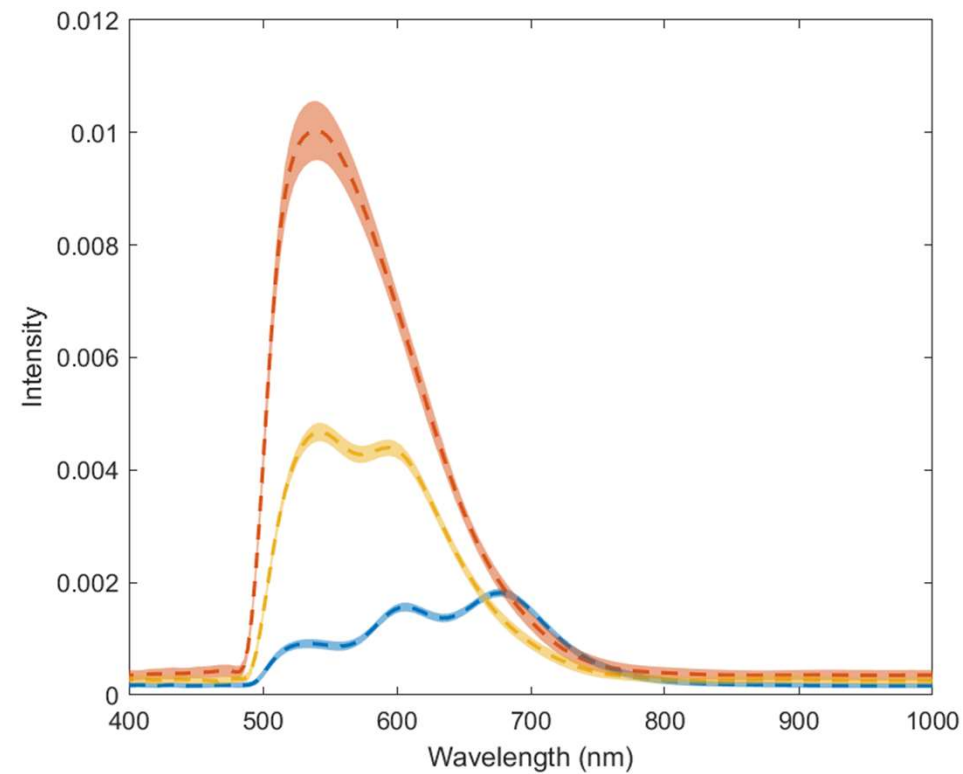
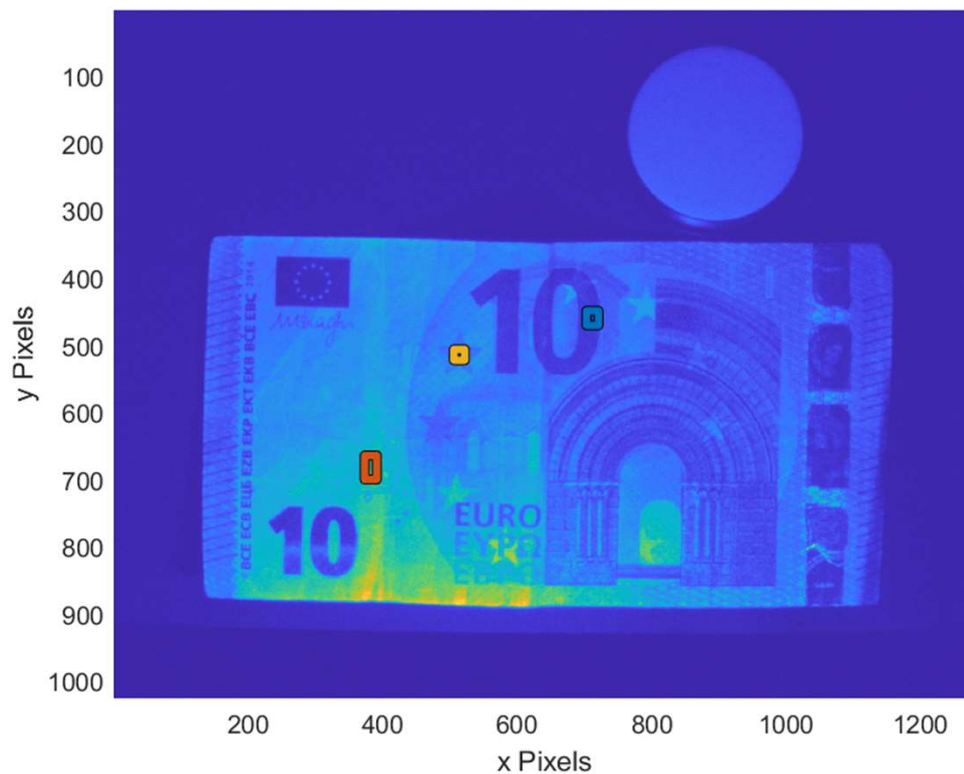


- Fluorescence data
- Illumination: LED at 400 nm
- Detection: 500 nm Long Pass Filter
- Distance: 1.50 m



## MEASUREMENT 2: FLUORESCENCE HYPERSPECTRAL IMAGE

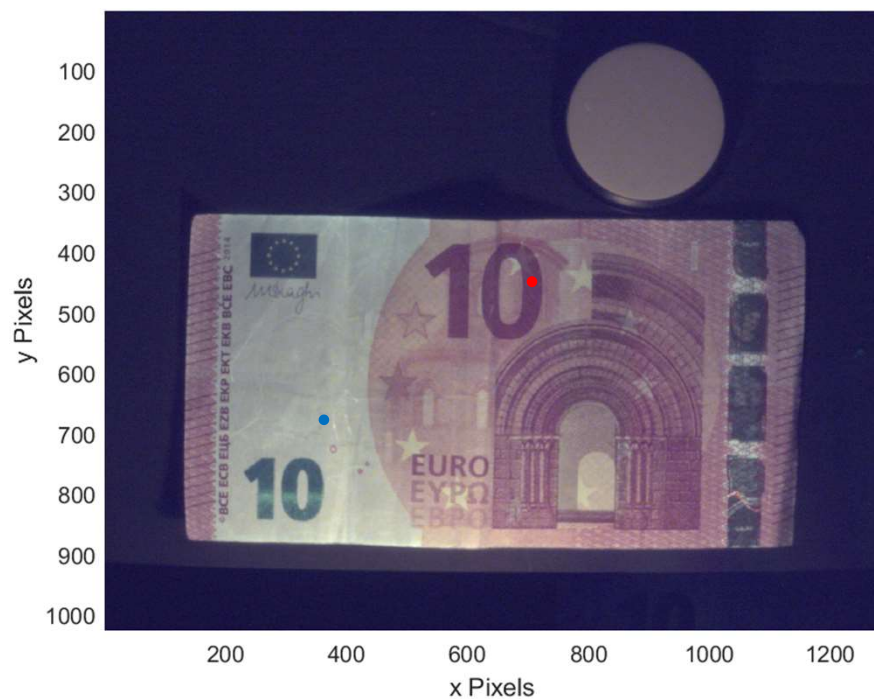
Fluorescence spectra in different areas of the image



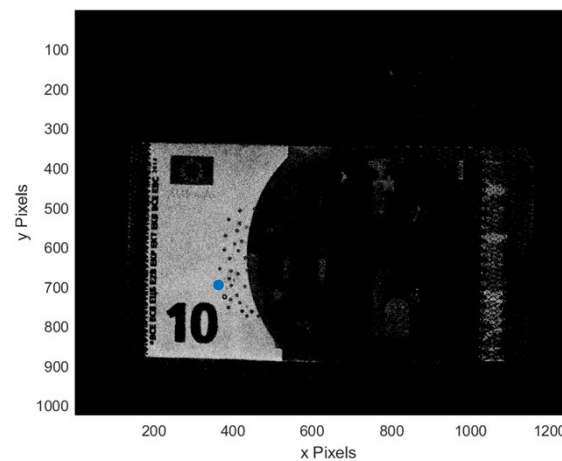


## MEASUREMENT 2: FLUORESCENCE HYPERSPPECTRAL IMAGE

Spectral Angle Mapper (SAM): recognizes spectral similarities



Reference spectra 1 (blue dot)



Reference spectra 2 (red dot)

