ISP Homework 3 Report

Raw Image Conversion

Below are my following multipliers

Scaling with Darkness : 0
Saturation: 16383
black = 0
red = 1.628906
blue = 1.386719
green = 1.0

Python Initials:
Width: 640 Pixels
Height: 480 Pixels
Bits Per Pixel 8
Conveted Image dtype: float644

Correct Baylor Pattern

The baylor pattern that I recognized was **RGGB**

White Balancing Methods.

Upon testing the white balancing methods which is represented in 1.1.white_balancing.png I realized that while they were relatively similar I found that the original image and the white world white balanced look the best. If I had to pick one it would be the original image. The scaled white balance and gray world white balanced look off color

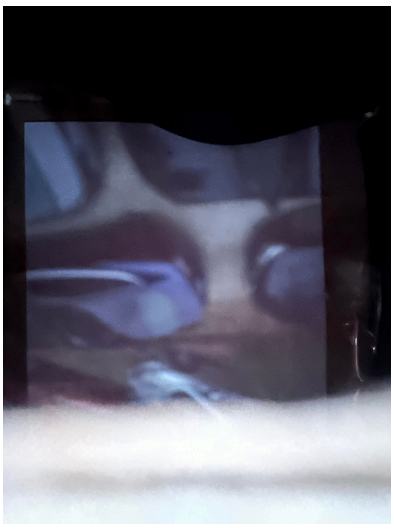
Demosaicing:
This is displayed in 1.1Demosaicing.

I had difficulty creating the color correcting and gamer parts of the proejct

Part 2
While building the pinhole I had to make a couple decisions to the limitations of the supplies on hand. The box I had was relatively small and it had a more rectangular shape. Due to this I

decided to use the width of the box rather than the length of it to create my images. Below are pictures of the pinhole camera.  

The 3 lengths I used were .1mm, 1mm, and 5mm. Below are the pictures in a grid pattern

While there were some differences between each row such as brightness and sharpness. Due to my phone camera being slightly broken and low light outside it was difficult to get quality pictures.