
```
% Linear calibration of ASUS259 - located in DDPI-mk2 room.
% NVIDIA parameters determined from colormeter measurements on
  Feb-25-2022
% Data collected by RL on June 25, 2021. Minolta CS 100 was placed
  ~1.2 m
% from monitor on a tripod.
% Monitor settings: Contrast 25, Brightness 0.
```

NVIDIA color corrections: RGB - 2.04, 2.17, 2.18; Contrast 0, Brightness 0.

```
pixel = [0:(255/6):255];
lum = [....
  0.04;... % 0
  3.69;... % 42.67
  6.59;... %85.33
  9.6833;... %128
  13;... % 170.67
  16.3333;... % 213.33
  19.7; ...255
];
red = [....
  0.0367;... % 0
  0.7567;... % 42.67
  1.3267;... %85.33
  1.8967;... %128
  2.5067;... % 170.67
  3.1833;... % 213.33
  3.8867; ...255
];
green = [....
  0.0367;... % 0
  2.8;... % 42.67
  4.9733;... %85.33
  7.2933;... %128
  9.8267;... % 170.67
  12.3;... % 213.33
  14.9; ...255
];
blue = [....
  0.0433;... % 0
  0.2833;... % 42.67
  0.4833;... %85.33
  0.7033;... %128
  0.95;... % 170.67
  1.1767;... % 213.33
  1.4; ...255
];
data = {lum, red, green, blue};
```

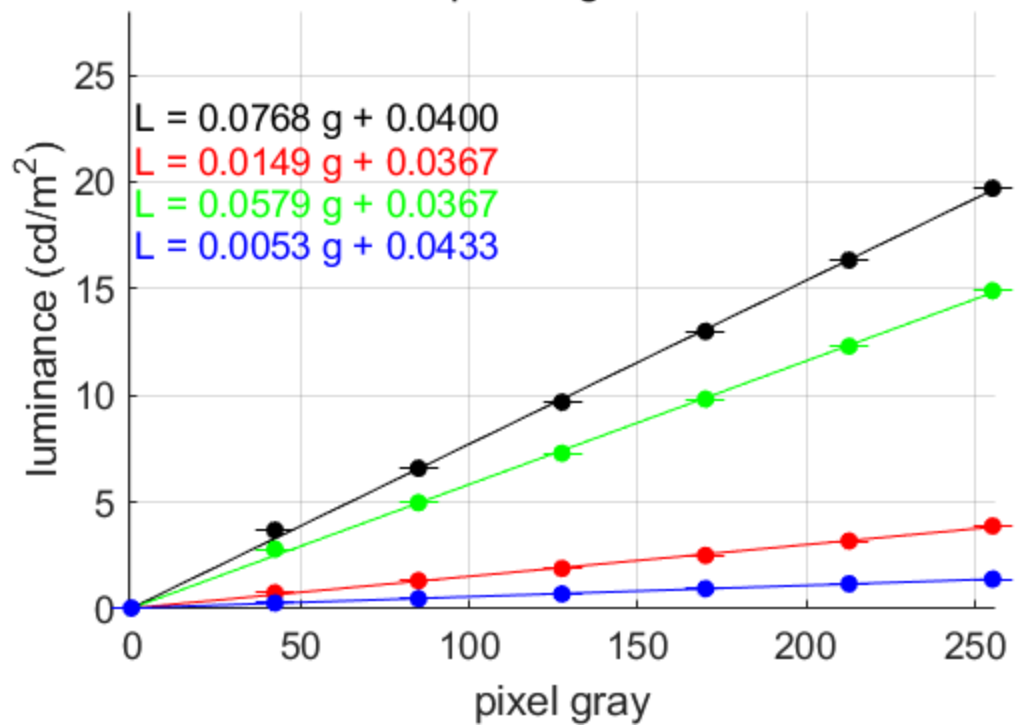
```

cols = 'krgb';
slopes = nan(size(data));
figure(1); clf; hold on;
for ii = 1:length(data)
    m = mean(data{ii}, 2);
    s = std(data{ii}, [], 2);
    % force intercept to go through our measured 0
    lm = fitlm(pixel, m - m(1), 'y~x1-1');
    slope = lm.Coefficients{1, 1};
    b = m(1);
    % free intercept parameter
    % lm = fitlm(pixel, m);
    % slope = lm.Coefficients{2, 1};
    % b = lm.Coefficients{1, 1};
    slopes(ii) = slope;
    plot(pixel, pixel * slope + b, '-', 'Color', cols(ii));
    errorbar(pixel, m, s, 'o', ...
        'Color', cols(ii), 'MarkerFaceColor', cols(ii), 'CapSize', 14);
    text(1, 25 - ii*2, sprintf('L = %1.4f g + %1.4f', slope, b), 'Color',
        cols(ii), ...
        'FontSize', 14);
end
xlim([-1, 256]);
ylim([0, 28]);
grid on;
title({'ASUS 259 (360 Hz), Feb 25, 2022 Measurements'}, {'separate
    gamma'});
xlabel('pixel gray');
ylabel('luminance (cd/m^2)');
set(gca, 'FontSize', 14);
hold off;
fprintf('R to B: %1.2f\n', slopes(2) / slopes(4));
fprintf('G to B: %1.2f\n', slopes(3) / slopes(4));

R to B: 2.80
G to B: 10.91

```

ASUS 259 (360 Hz), Feb 25, 2022 Measurements
separate gamma



Published with MATLAB® R2020b