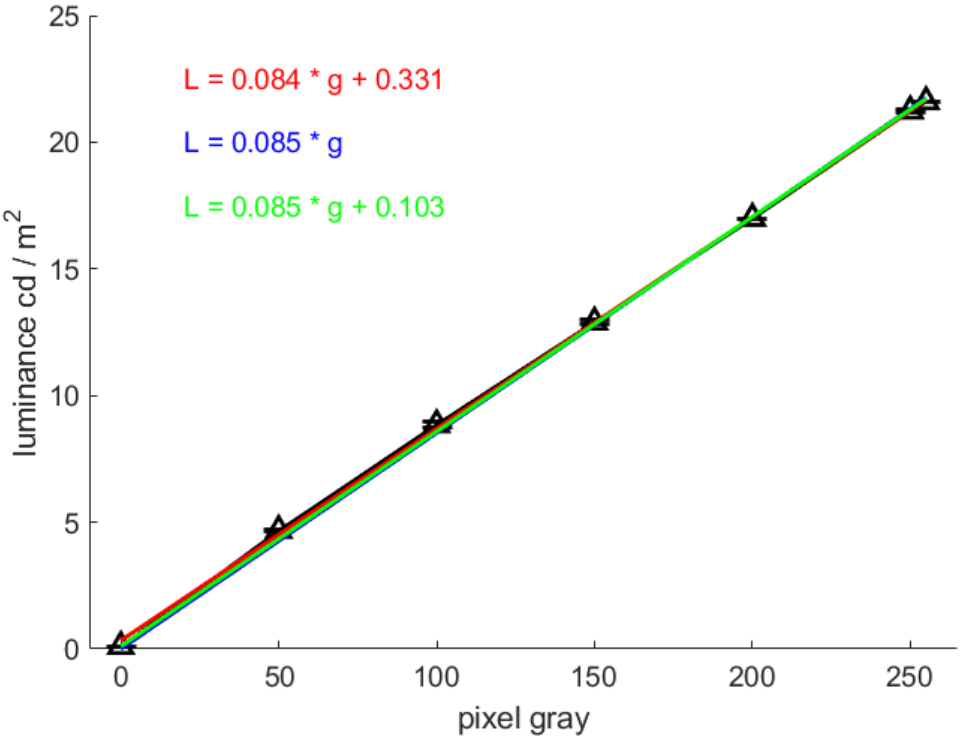
```
% Linear calibration of ASUS258 FACE - located in DDPI room as of
% recording. NVIDIA parameters determined from previous calibration on
 same
% model in DPI room.
% Data collected by JI on July 26, 2018. Minolta CS 100 was placed 7
 inches
% from monitor on tripod. D:/Janis/TestPhotocell script was run to
 present
% gray levels on display. Contrast 0, Brightness 0.
% NVIDIA color corrections: RGB - 2.10, 2.17, 2.58

gray = [0:50:250, 255];

lum = [0.11, 0.10, 0.10;...
    4.68, 4.67, 4.69;...
    8.78, 8.98, 8.80;...
    13.0 12.9 12.8;...
    17.0 17.0 17.0;...
    21.2 21.2 21.3;...
    21.6 21.6 21.6];

ml = mean(lum, 2);
sd = std(lum, [], 2);

% three types of linear regression
sl1 = gray(:) \ ml(:); % regression through (0, 0)
sl2 = [gray(:), ones(length(gray), 1)] \ ml(:); % regression with
 intercept
sl1fix = gray(:) \ (ml(:) - ml(1)); % regression through  (0, L0)

figure(1); clf; hold on;
errorbar(gray, ml, sd, 'k^-',...
    'linewidth', 2, 'markersize', 10, 'capsize', 15);
plot(gray, sl2(1) * gray + sl2(2), 'r-', 'linewidth', 2);
plot(gray, sl1 * gray, 'b-', 'linewidth', 2);
plot(gray, sl1fix * gray + ml(1), 'g-', 'linewidth', 2);
yl = ylim;
xlabel('pixel gray', 'FontSize', 14);
ylabel('luminance cd / m^2', 'FontSize', 14);
text(20, .9*yl(2), sprintf('L = %1.3f * g + %1.3f', sl2(1),
 sl2(2)),...
    'FontSize', 14, 'Color', 'r');
text(20, .8*yl(2), sprintf('L = %1.3f * g', sl1(1)),...
    'FontSize', 14, 'Color', 'b');
text(20, .7*yl(2), sprintf('L = %1.3f * g + %1.3f', sl1fix, ml(1)),...
    'FontSize', 14, 'Color', 'g');
set(gca, 'FontSize', 14);
xlim([-10, 265]);
```



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