

04/27/15

Hamamatsu C4334-02S Streak Scope Head Image Uniformity Item: 01321

Test Conditions: Uniform illumination of photocathode across entire range of MCP gain settings.

Data Processing: Average of >100 images per data point.

Data Analysis: Referring to Figure 1, red line is average pixel value in the brightest 21x21 pixel square of the averaged images. Blue line is the average pixel value in the darkest 21x21 pixel square.

Conclusions: At the highest gain setting average pixel value in darkest area is 70% of the average pixel value in the brightest area. Average pixel value in the darkest area is comparable to that in the brightest area except for gain settings from D to A where average pixel value in the darkest area is much lower than that in the brightest area.

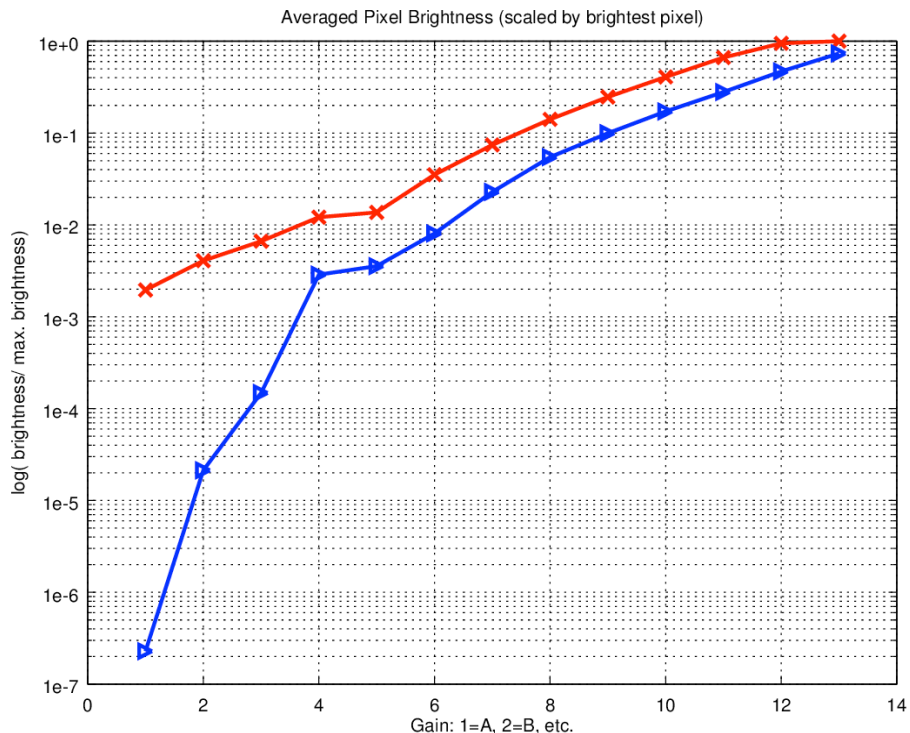


Figure 1: Average pixel value versus gain in brightest and darkest areas of image

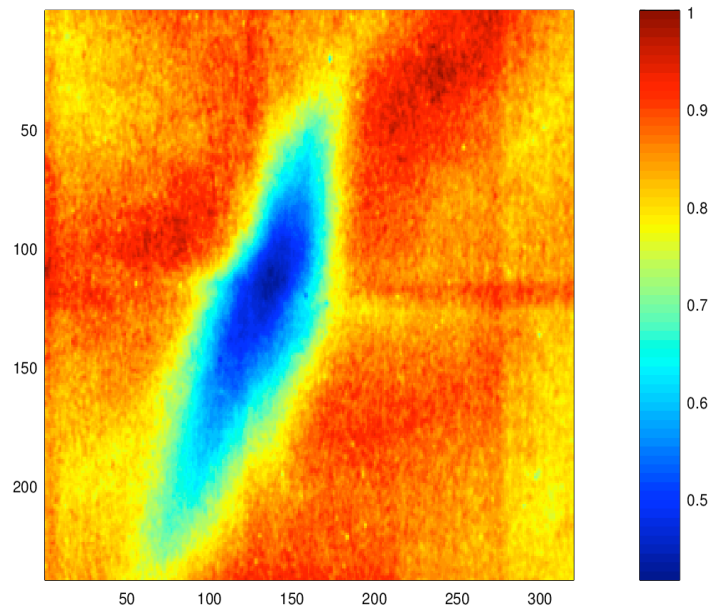


Figure 2: Typical image of uniform source showing dark area

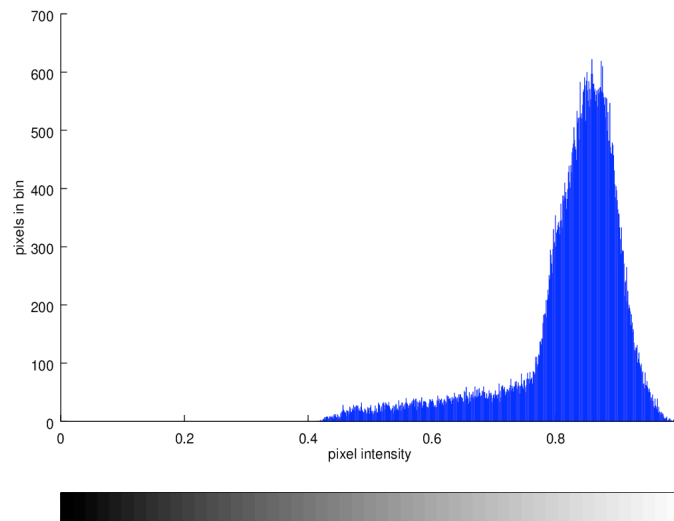


Figure 3: Distribution of pixel values in typical image