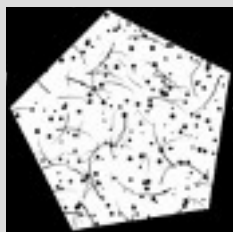


Camera Aperture



FFT



Power Spectrum

Dynamically Generated Noise
(optional, can be interactive)

Fraunhofer diffraction

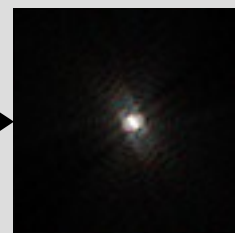
λ_R

λ_G

λ_B

Superposition
principle

Lens Flare

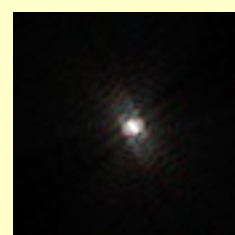


Blur

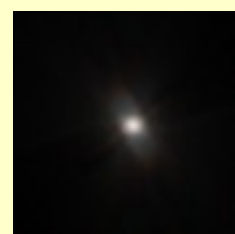
ONCE PER APERTURE

HDR Framebuffer

Light & occlusion information

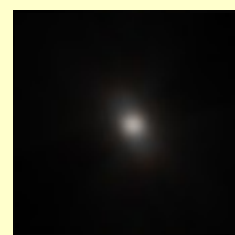


w_0



w_1

...



w_n

Superimpose lens flares
(weighted by occlusion)

Output with lens flares

Occluded light source: (no lens flare)
Almost fully occluded: $w_0 > w_1 > \dots > w_n$
Almost fully visible: $w_n > w_{n-1} > \dots > w_0$
Fully visible: $w_0 = w_1 = \dots = w_{n-1} = 0$

Weights and size scaled by light source dimensions.
Approximates a complete screen-space convolution!
(assuming each light source has a constant intensity)

ONCE PER FRAME