

Figure 1: *Monochromatic on $-$ axis PSF in log irradiance, normalized to the peak irradiance value.*

Monochromatic Normalized Irradiance (Radial Average)

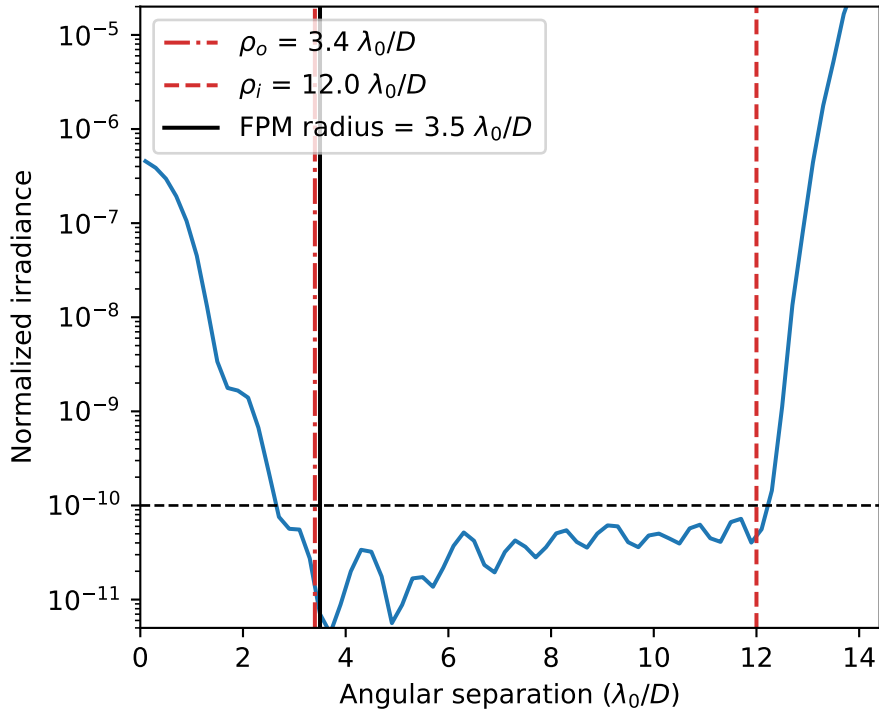
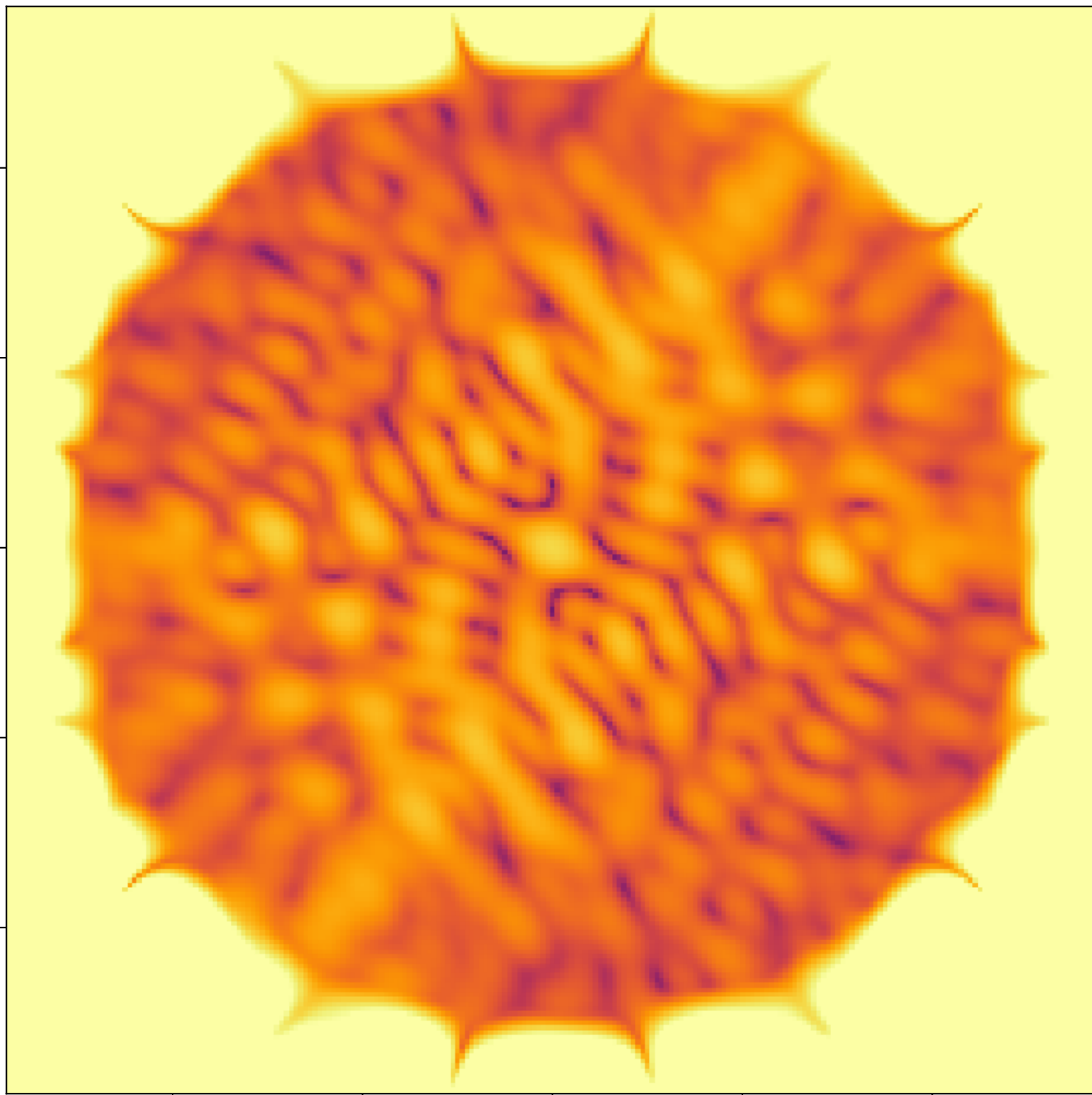


Figure 2: Monochromatic on-axis PSF azimuthally averaged over angular separations 0.1-20.300000000000004 λ/D , normalized to the peak irradiance. The vertical solid black line at separation 3.5 λ/D marks the radius of the FPM occulting spot. The vertical, red lines at 3.4 and 12.0 λ/D respectively indicate the radii of the inner and outermost constraints applied during the apodizer optimization.



APLC Analysis Summary

APLC design	1.5848931924611136%
nPup	1000 x 1000 pixels
Gap padding (multiplicative)	1
Oversampling (grey levels)	4
Telescope	LUV0IR
Lyot stop inner diameter (% of inscribed circle)	0.12
Lyot stop outer diameter (% of inscribed circle)	0.982
Bandpass	1.5848931924611136%
# wavelengths	5
FPM radius (grayscale)	$3.5 \lambda/D$
nFPM	150 pixels
IWA — OWA	$3.4\text{--}12.0 \lambda/D$

Optimizer called with the following parameters:

- ▷ Pupil file: LUV0IR/TelAp_LUV0IR_gap_pad01_bw_ovsmp04_N1000.fits
- ▷ Lyot stop file: LUV0IR/LS_LUV0IR_ID0120_OD0982_no_struts_gy_ovsmp4_N1000.fits

Analysis Summary

Apodizer &
Telescope Aperture



Image plane

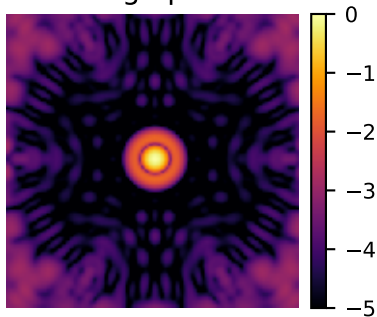
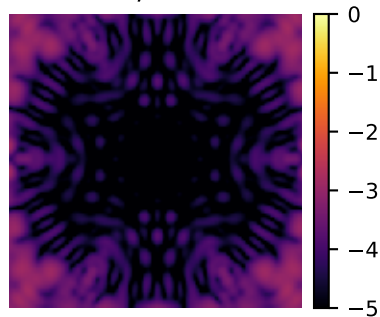
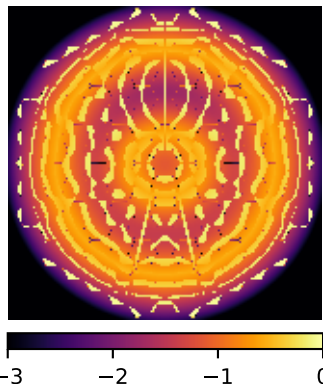


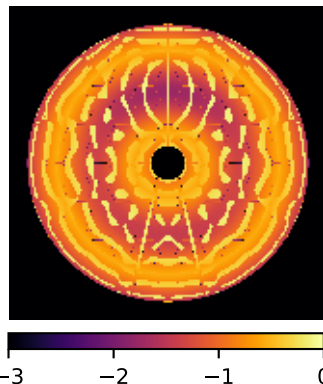
Image plane
w/FPM



Lyot plane



Lyot plane
w/lyot stop



Final image plane

