

Pandora Data Processing Center
NIRDA PSF Requirements Test Report

Package Versions:

- pandora_requirements: 0.1.2
 - pandorapsf: 0.7.0
 - pandorasat: 0.12.2
 - astropy: 6.0.1

Detector Characteristics:

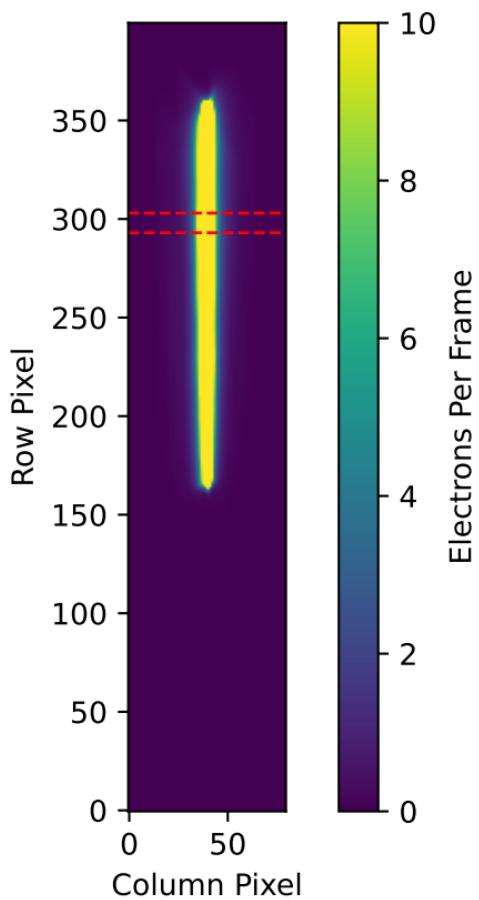
zodiacal_background_rate: 4.0 electron / (pix s)
stray_light_rate: 2.0 electron / (pix s)
thermal_background_rate: 10.0 electron / (pix s)
dark: 1.0 electron / (pix s)
readnoise: 12.727922061357855 electron / pix

Test Requirements:

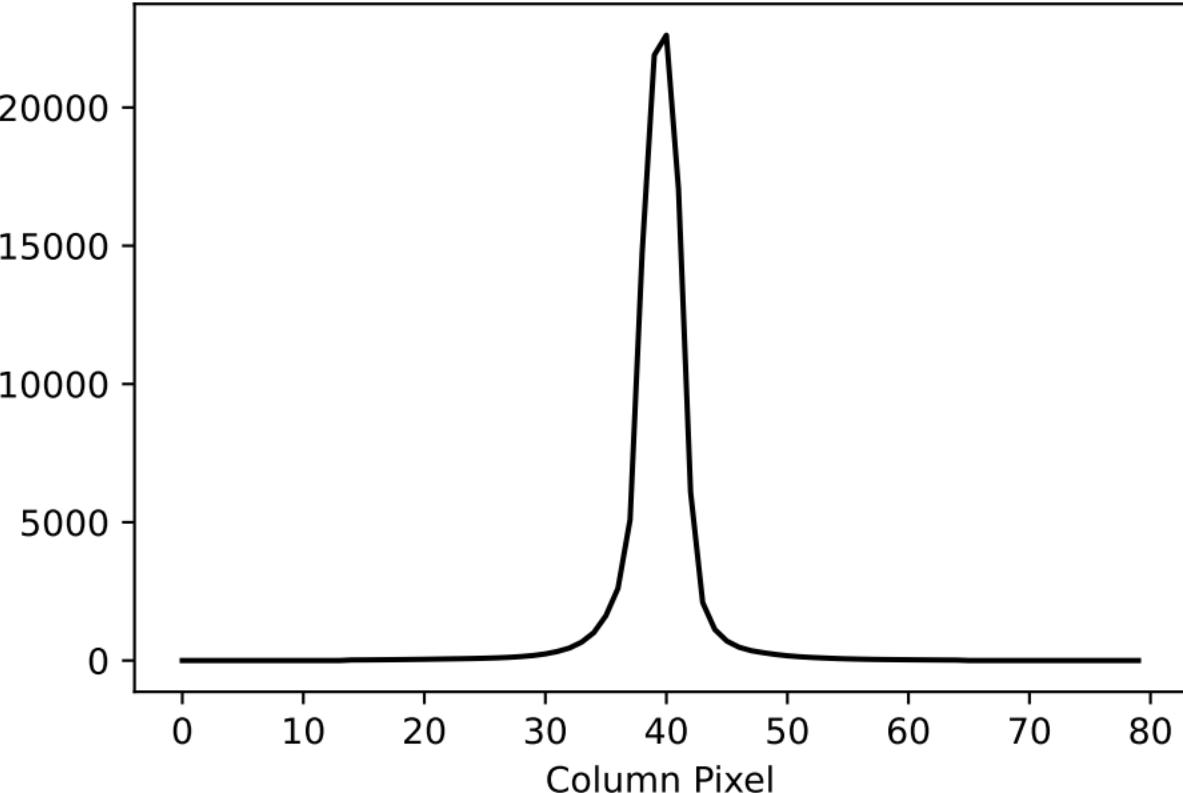
- Target Test j band Magnitude: 9.0
 - Target Test T_{eff} : 3500.0 K
- Required Number of Integrations: 900
 - Required SNR: 6000.0
- Required Wavelength: 1.3 micron micron
 - Required R: 30.0

Additional Information:

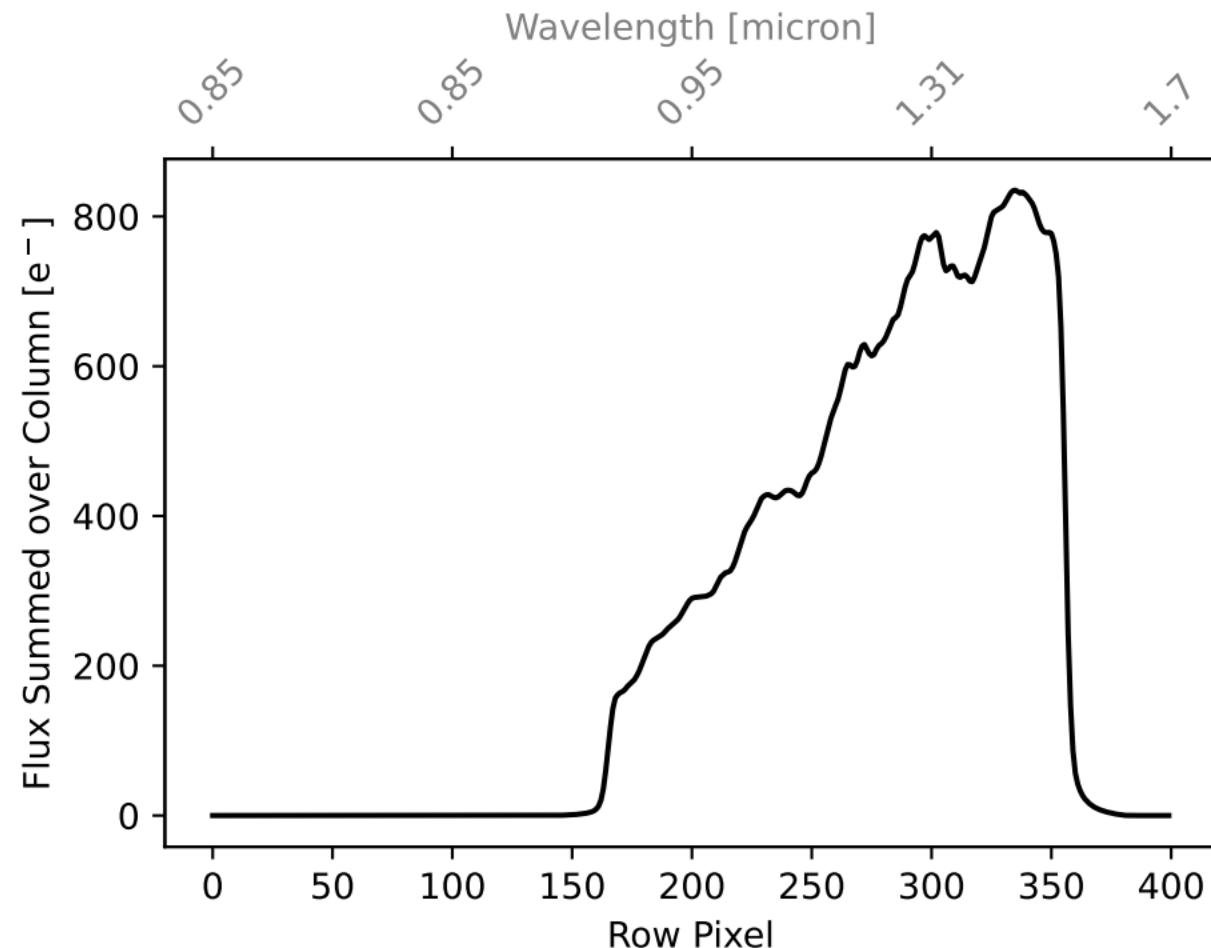
- This document contains test results for a target star on the NIRDA.
- Generated using automated tests and visualizations.
 - This test uses CBE for all Pandora parameters
 - This test assumes no jitter motion between frames.



Flux Summed over Row [e^-]



Column Pixel



Flux Summed over Column [e^-]

Wavelength [micron]

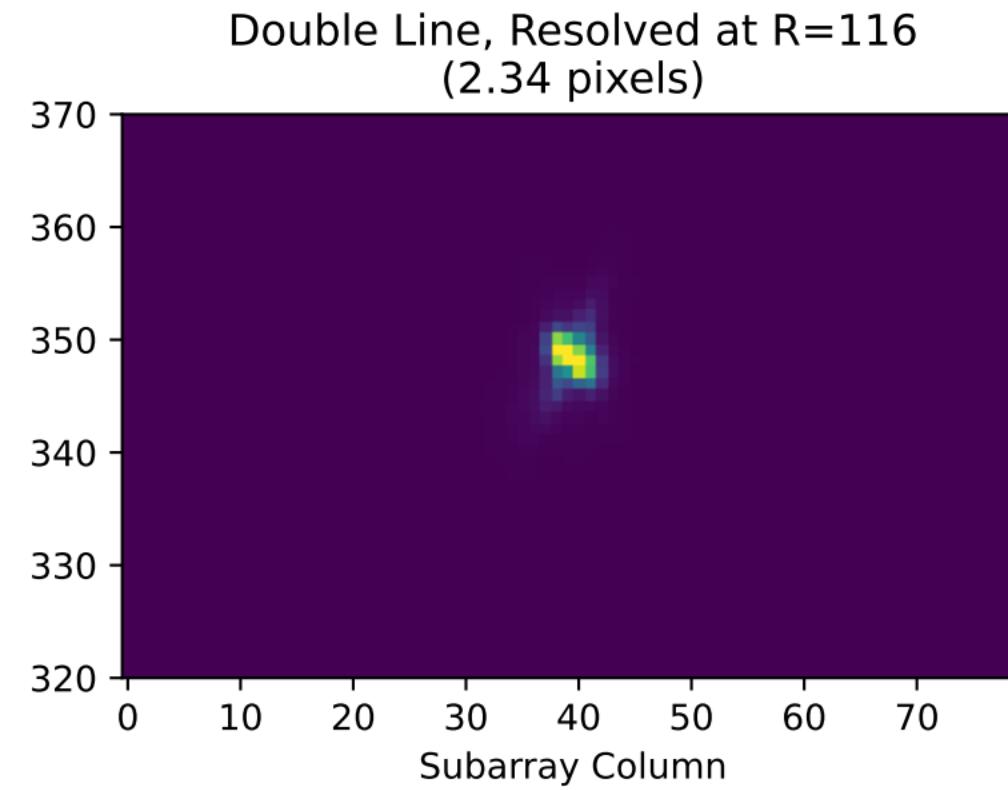
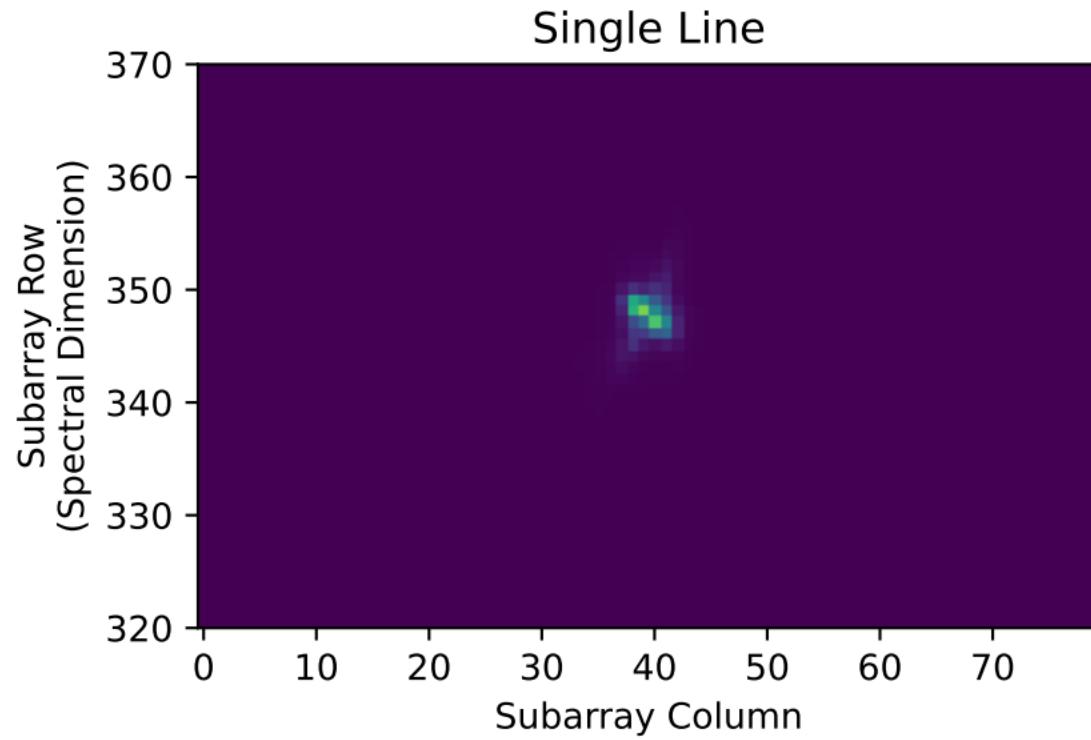
0.85

0.85

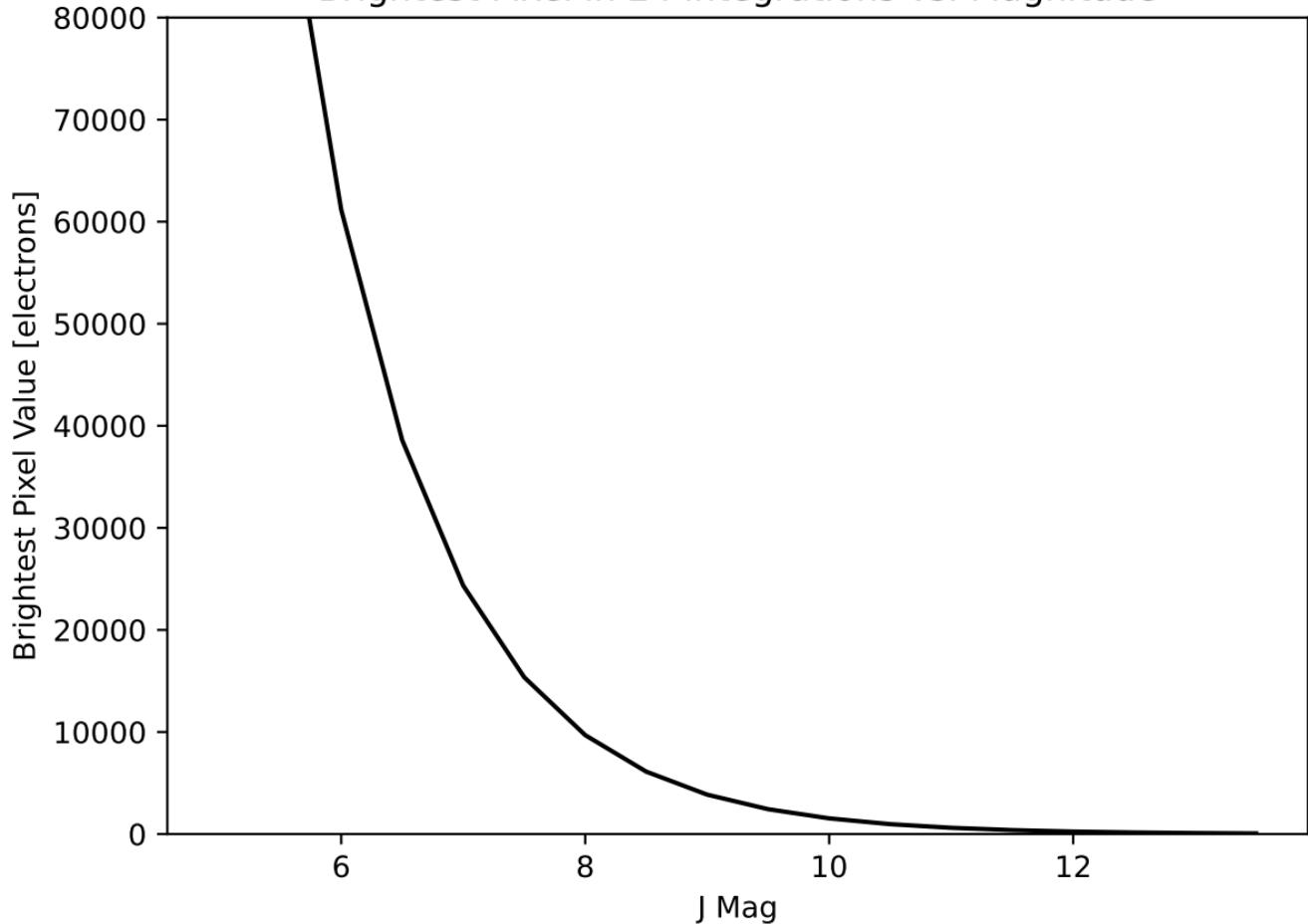
0.95

1.31

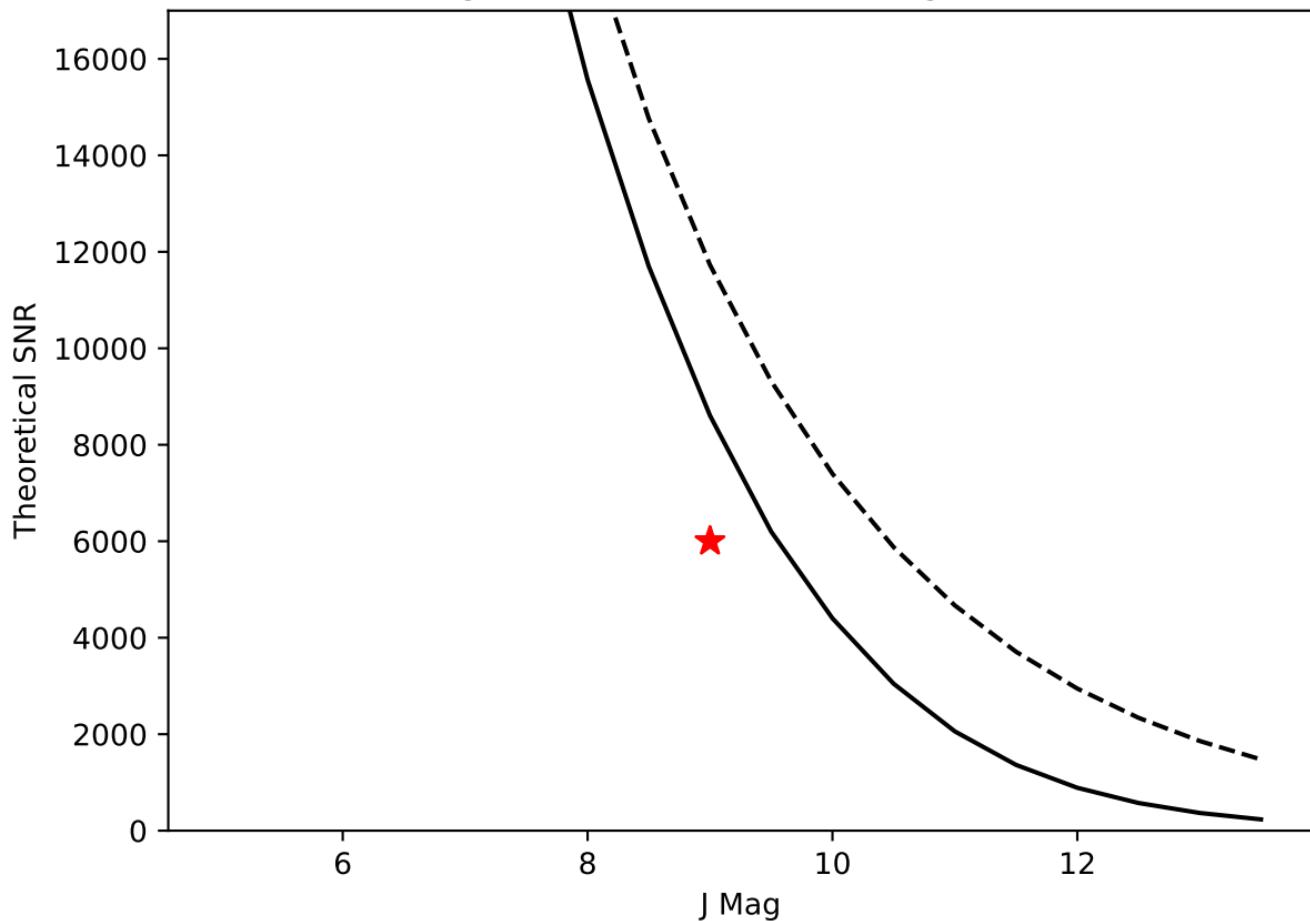
1.7



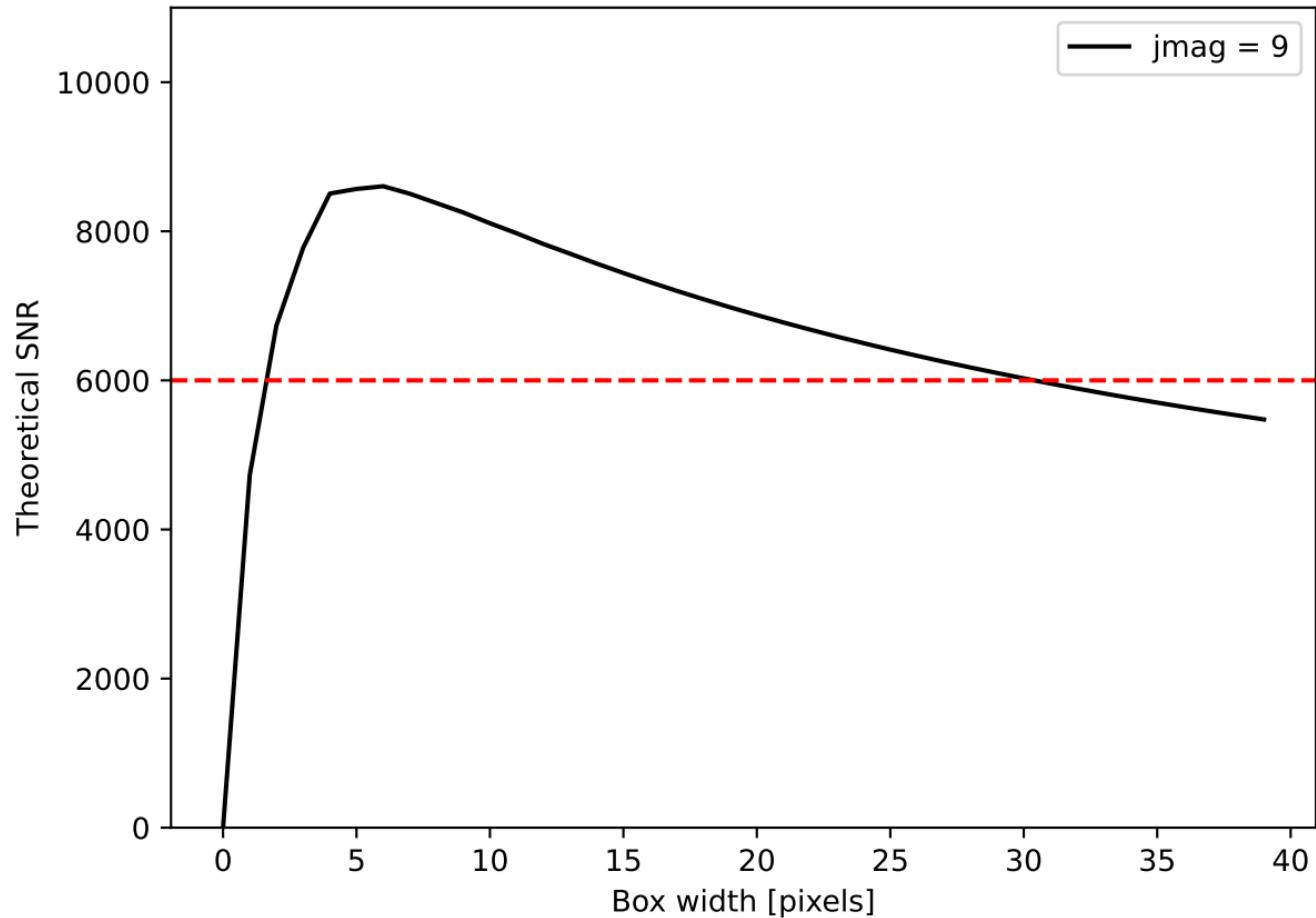
Brightest Pixel in 24 integrations vs. Magnitude



Signal to Noise Ratio vs. Magnitude



Signal to Noise Ratio vs. Aperture Size



NIRDA Spectral Resolution

