

Pandora Data Processing Center
NIRDA PSF Requirements Test Report

Package Versions:

- pandora_requirements: 0.1.1
- pandorapsf: 0.5.0
- pandorasat: 0.8.3
- astropy: 5.3.4

Detector Characteristics:

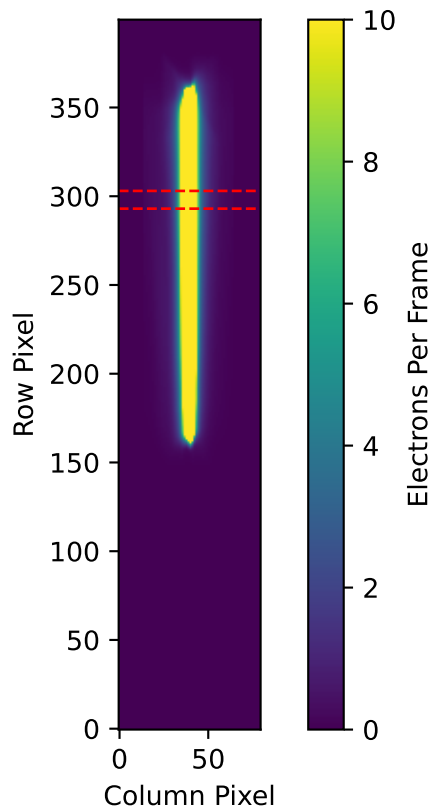
zodiacal_background_rate: 4.0 electron / (pix s)
stray_light_rate: 2.0 electron / (pix s)
thermal_background_rate: 10.0 electron / (pix s)
dark_rate: 1.0 electron / (pix s)
read_noise: 12.727922061357855 electron / pix

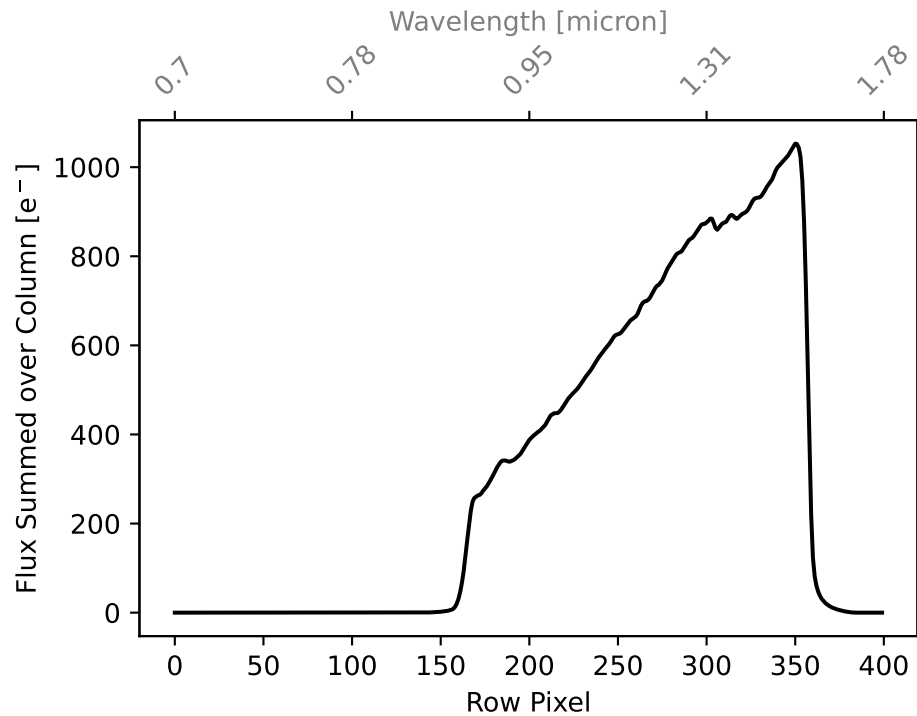
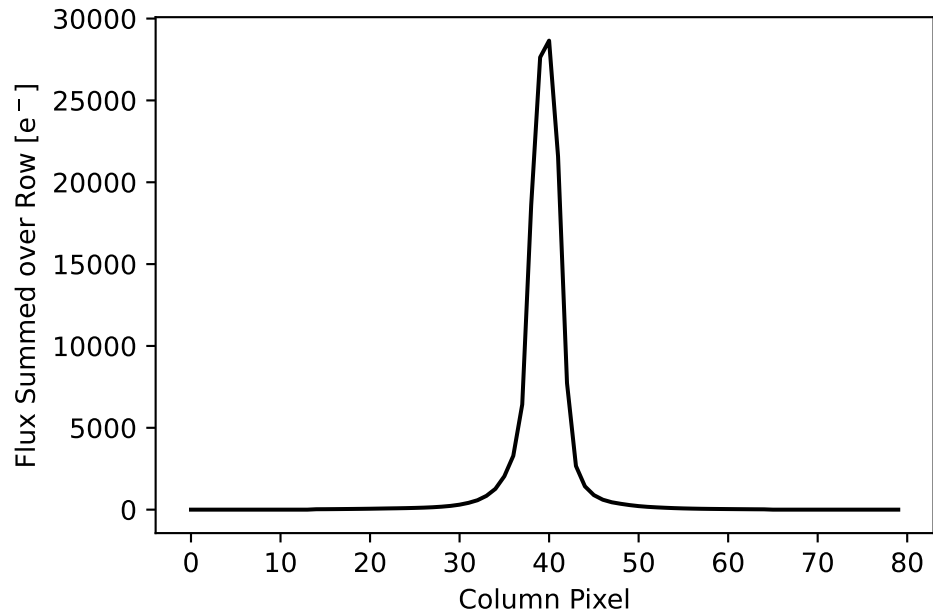
Test Requiriements:

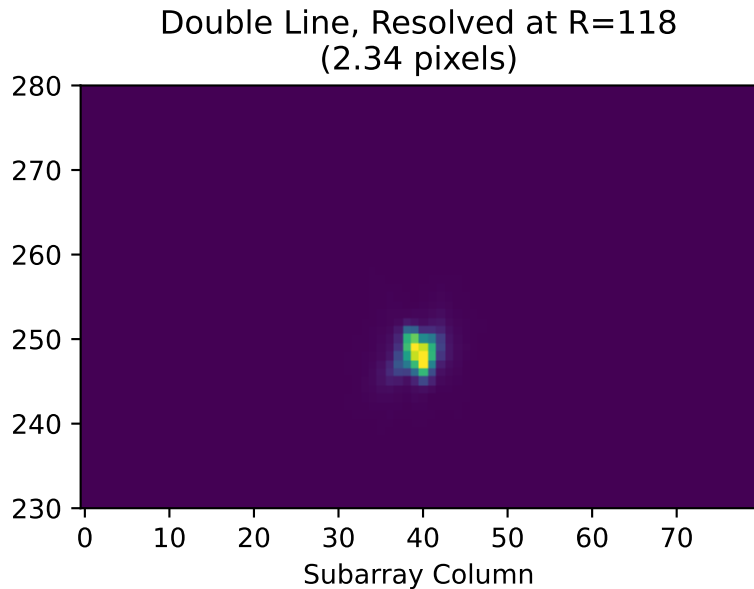
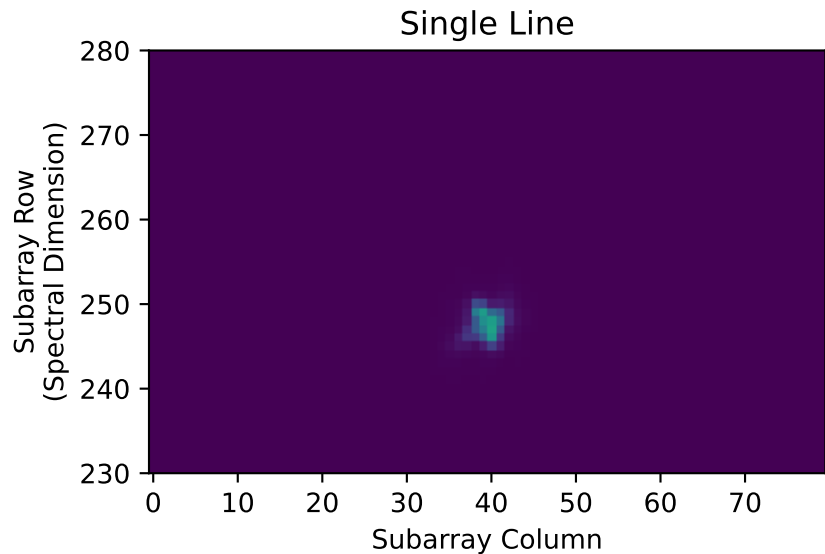
- Target Test j band Magnitude: 9.0
- Target Test T_{eff} : 3500.0 K
- Required Number of Integrations: 900
- Required SNR: 6000.0
- Required Wavelength: 1.3 micron
- Required R: 30.0

Additional Information:

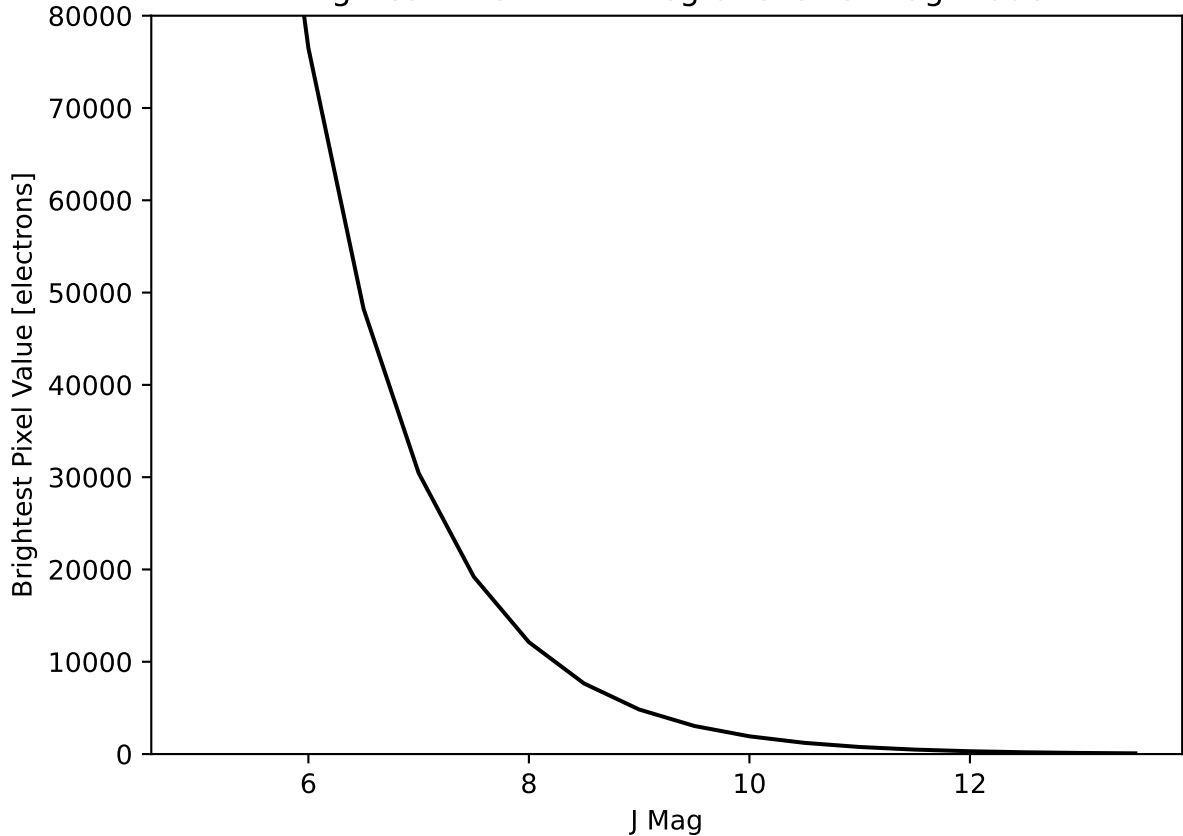
- This document contains test results for a target star on the NIRDA.
- Generated using automated tests and visualizations.
- This test uses CBE for all Pandora parameters
- This test assumes no jitter motion between frames.



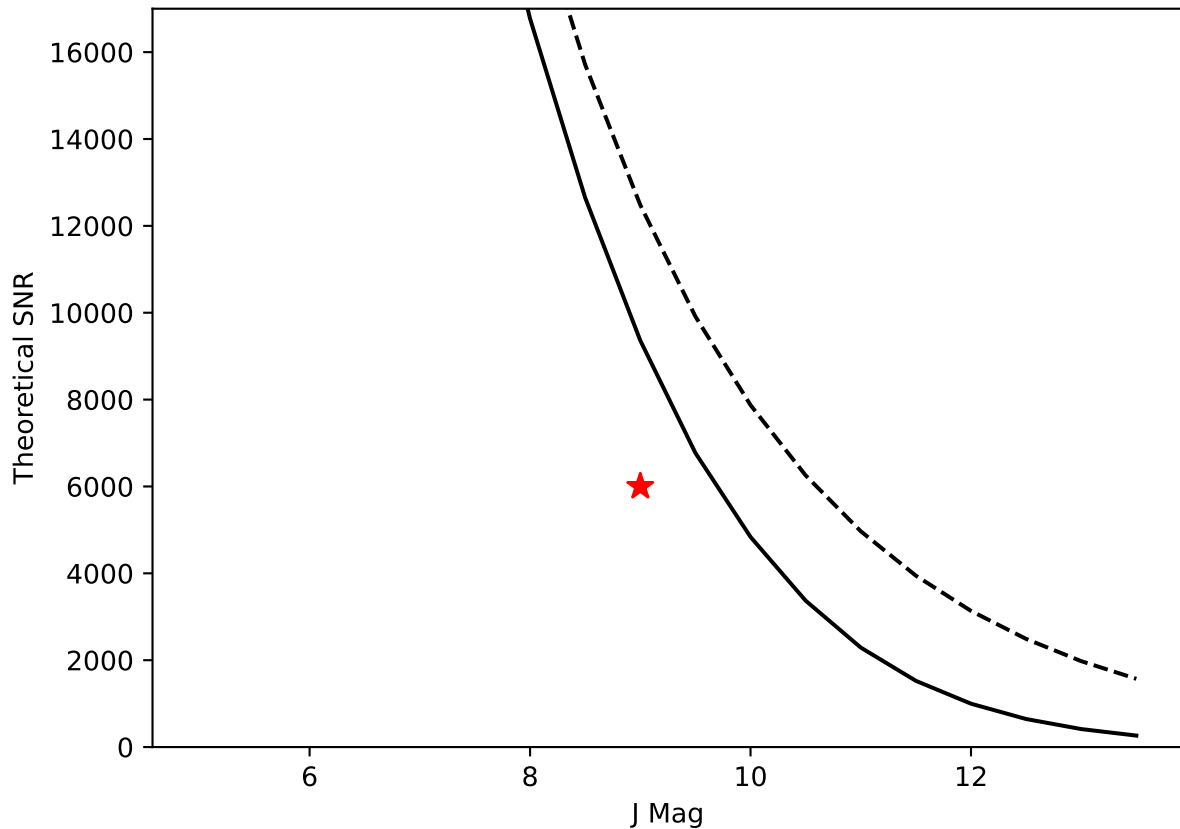




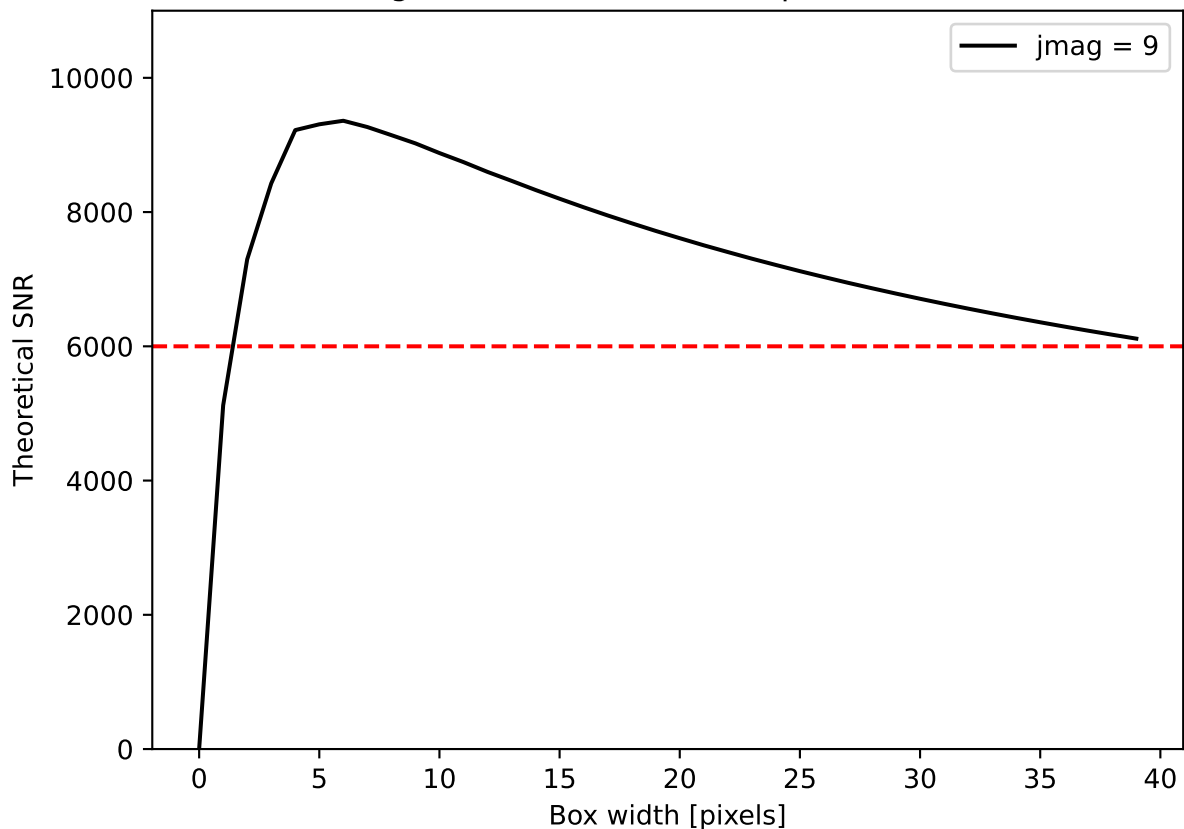
Brightest Pixel in 24 integrations vs. Magnitude



Signal to Noise Ratio vs. Magnitude



Signal to Noise Ratio vs. Aperture Size



NIRDA Spectral Resolution

