

Pandora Data Processing Center
NIRDA PSF Requirements Test Report

Package Versions:

- pandora_requirements: 0.1.0
- pandorapsf: 0.4.1
- pandorasat: 0.8.3
- astropy: 5.3.4

Detector Characteristics:

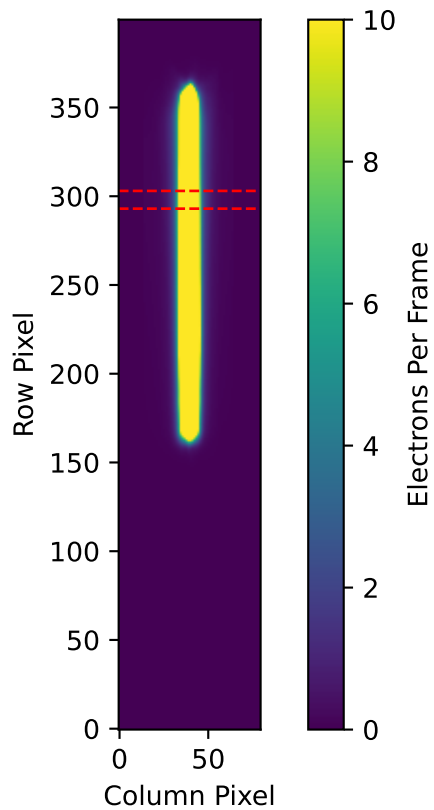
zodiacal_background_rate: 4.0 electron / (pix s)
stray_light_rate: 2.0 electron / (pix s)
thermal_background_rate: 10.0 electron / (pix s)
dark_rate: 1.0 electron / (pix s)
read_noise: 12.727922061357855 electron / pix

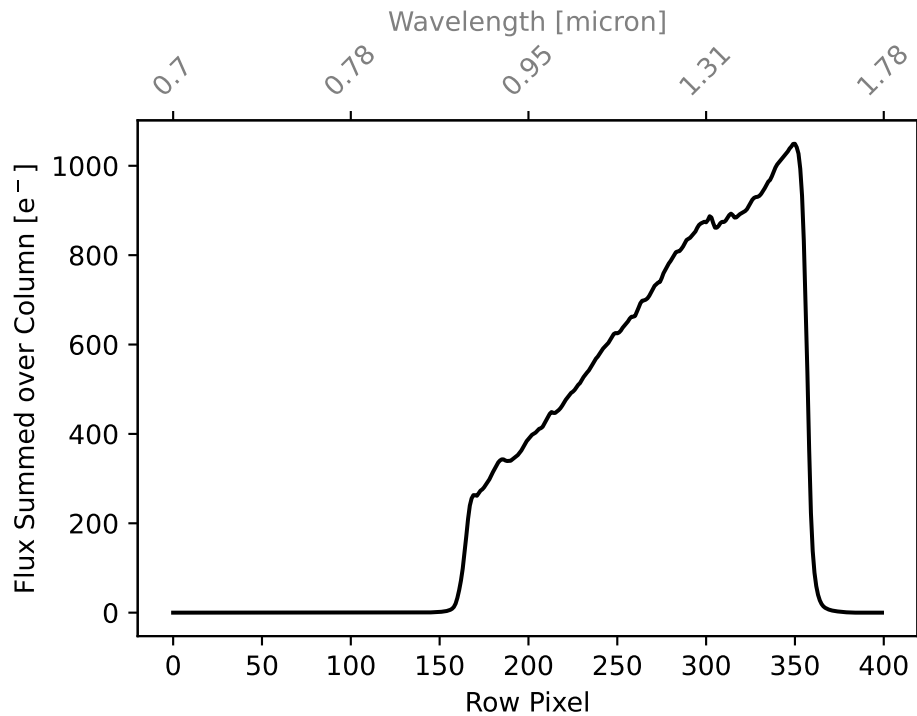
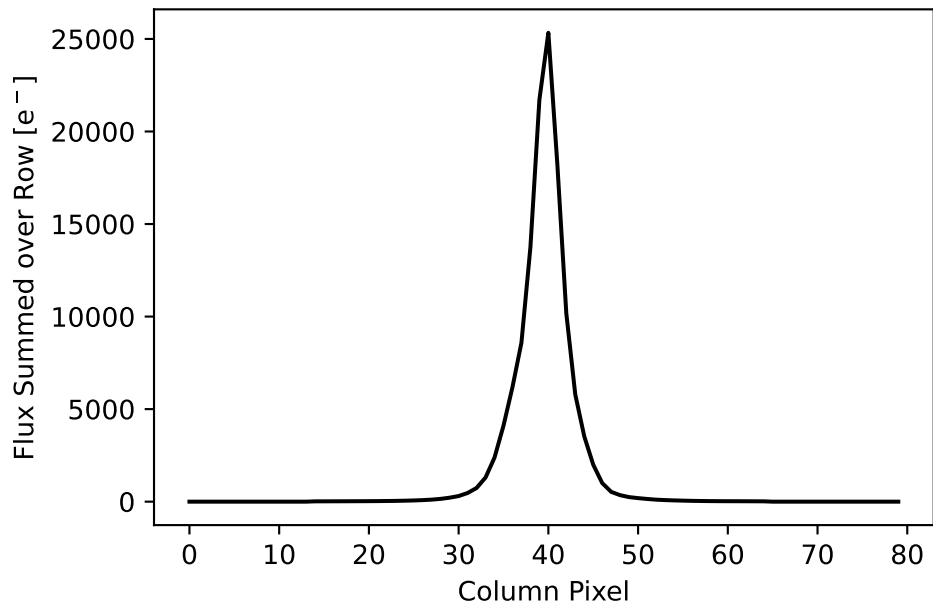
Test Requirements:

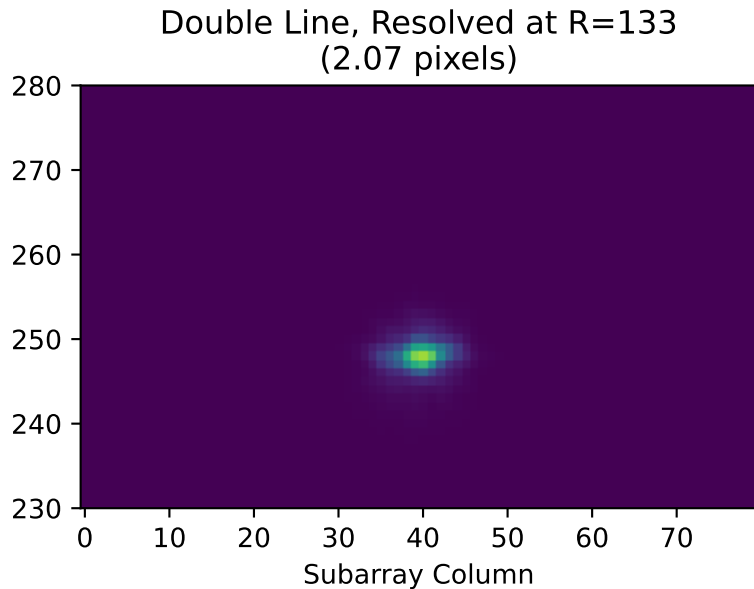
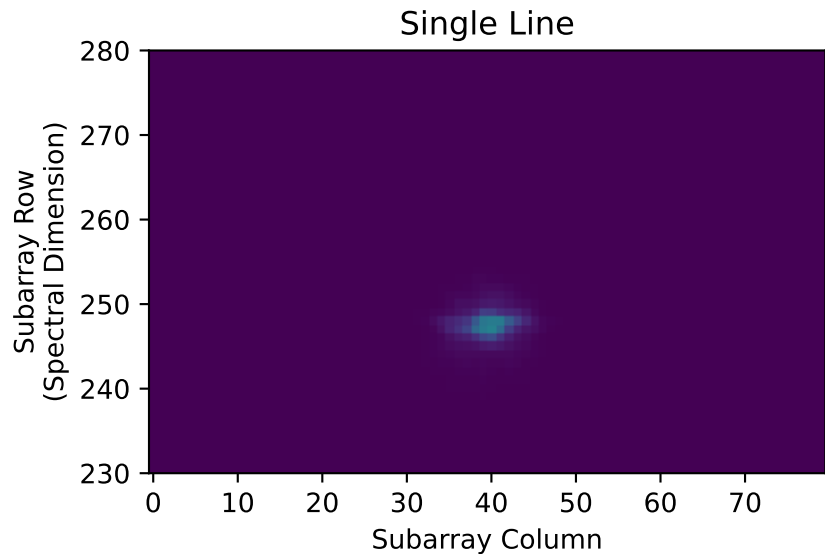
- Target Test j band Magnitude: 9.0
- Target Test T_{eff} : 3500.0 K
- Required Number of Integrations: 900
- Required SNR: 6000.0
- Required Wavelength: 1.3 micron μm
- Required R: 30.0

Additional Information:

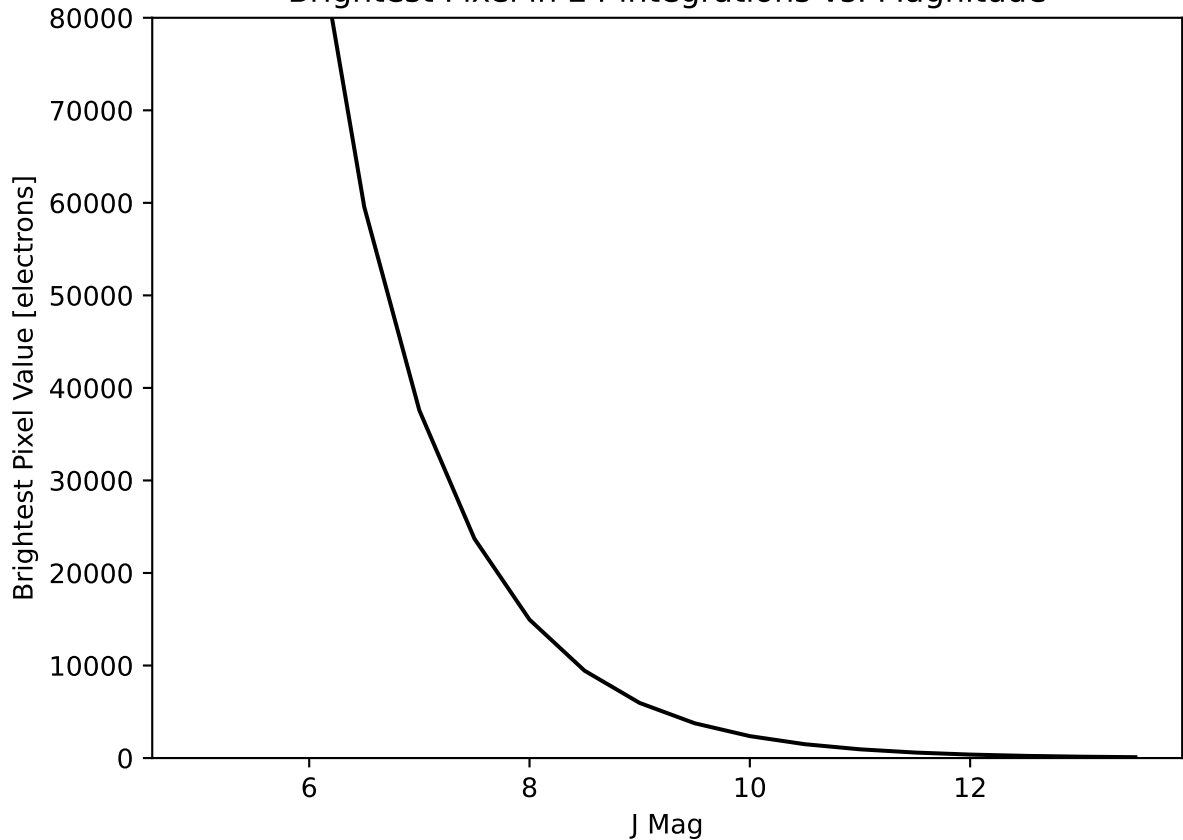
- This document contains test results for a target star on the NIRDA.
 - Generated using automated tests and visualizations.
 - This test uses CBE for all Pandora parameters
 - This test assumes no jitter motion between frames.



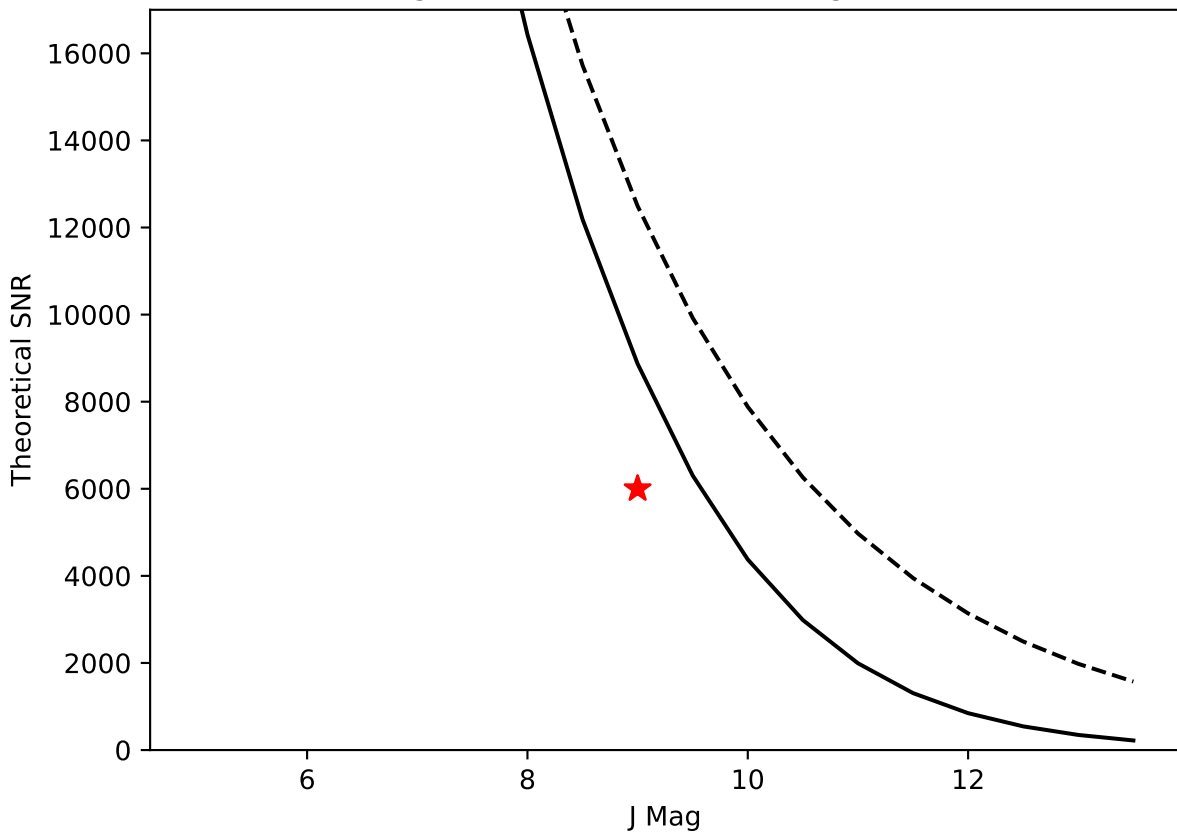




Brightest Pixel in 24 integrations vs. Magnitude



Signal to Noise Ratio vs. Magnitude



Signal to Noise Ratio vs. Aperture Size

