

Finger Lakes Instrumentation Quality Assurance Test Summary  
FLI Library Version: Software Development Library for Windows 1.98  
FLITest\_SCX Version: 3.29 SCX, Tester SN: 2

Serial Number: PL0394113  
Model: PROLINE PL4240  
Sensor designation: CCD42-40-1-368 12281-06-09  
Sensor Type: Single Channel  
Lab ambient temp: 23.0  
CCD Test Temp: -30

Basic Functions

CCD temp sensor: OK.  
Base temp sensor: OK.

CCD Chamber

Desiccant installed: OK.  
Purged: OK.  
Noble Gas Back-fill: OK.  
Window clean on both surfaces: OK.  
CCD free of dust: Yes

Performance

Cooler can achieve dT greater than: -45.0C (measured -57.6)  
Cooler is rate limited: Yes (-5.00 C/min)  
Cooler test time: 932.58  
Cooler Tests: Pass  
Noise distribution is random: Yes  
Bias frame histogram is Gaussian: Yes  
Standard test target appearance OK: Yes

Specific Tests

Amplifier Glow Test: Pass  
Amplifier Glow Auxiliary Test: Pass  
Power Supply voltage: 11.8  
AUX Connector Pin 4 voltage: -0.0  
Camera Current: 951.1 mA (Pass)  
Cooler Current: 3610.1 mA (Pass)  
External Trigger: Working  
AUX Pin 1: Working OK.  
AUX Pin 2: Working OK.  
AUX Pin 3: Working OK.

Gain and Noise Measurement

2.0 MHz Main

Conversion factor (gain): 1.34  
Bias: 981.5  
Readout noise: 14.0 (e-)  
Saturation: 86501.0 (e-)  
Horizontal Binning Test: Pass  
Bias Drift Test: Pass  
100s Dark Current Growth: 25.5 ADU (Pass) @ -30.0 C  
Maximum Linearity Error: 0.047 (%) (Pass)

500KHz Main

Conversion factor (gain): 1.35  
Bias: 999.0  
Readout noise: 8.8 (e-)  
Saturation: 87123.6 (e-)  
Horizontal Binning Test: Pass  
Bias Drift Test: Pass  
100s Dark Current Growth: 25.1 ADU (Pass) @ -30.0 C  
Maximum Linearity Error: 0.033 (%) (Pass)

Camera Passed.