

Abstract Submitted
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An Apparatus for Verification of Absolute Calibration of Quantum Efficiency for Charge-Coupled Devices REBECCA COLES, None — The LBNL Microsystems Laboratory produces backside illuminated, high resistivity, p-channel, charge-coupled devices (CCDs). A system was developed to test the quantum efficiency (QE) of the CCDs; the percentage of electrons that are emitted from the CCD surface per amount of light that it's exposed to. The QE system was designed and constructed to test CCDs of a much smaller size than what is currently produced. To continue testing, I redesigned the QE apparatus to make room for the new, larger size, CCDs while still preserving measurement accuracy. I removed the photodiode that formally sat alongside the CCD in the Dewar, and installed it in a separate container. Instead of the CCD and the photodiode taking flux measurements simultaneously, the processes are now preformed separately. The error caused by the separation has remained less than 1.78%.

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None

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