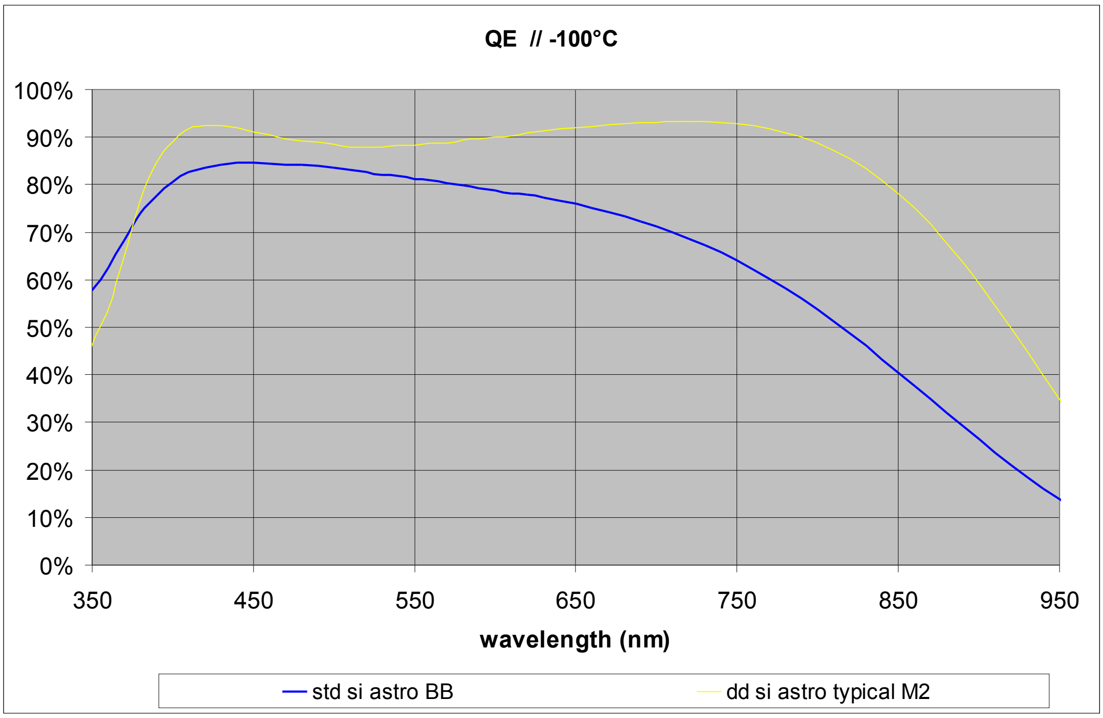
QE for FIES



2 QE plots shown-

Device-1. Standard silicon astro broadband

Device-2. Deep depletion silicon, multi-2 AR

Multi-2 AR has high QE across 350 to 850 nm band; almost as good as a graded coating)

Fringe predictions (based on model of AR coating; relative amplitudes only)

Device-2 has 10 to 20 times lower fringe amplitude in the 800-850 nm range than device-1. ~ 1% reflectivity (device-2) cf 20% for device-1.

eg 4% (device-2) cf 60% (device-1) fringe amplitude in 1 nm bandwidth at 825 nm

Adding the e2v fringe suppression process should reduce fringes by a further factor two on the above estimates.