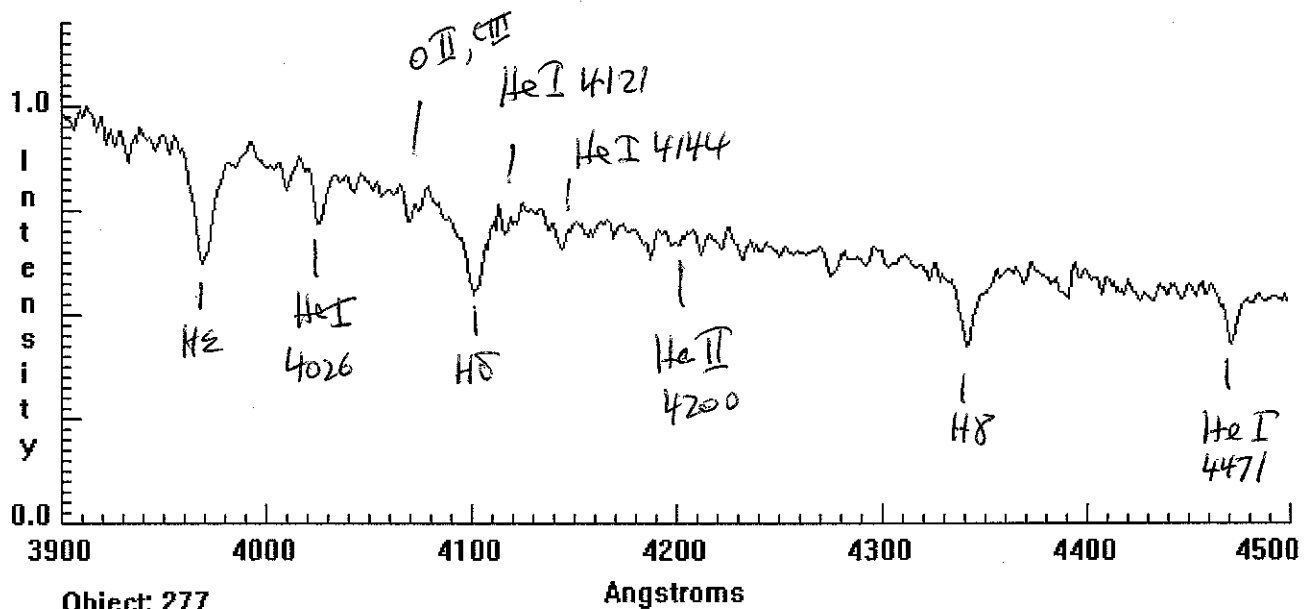




Object: 277

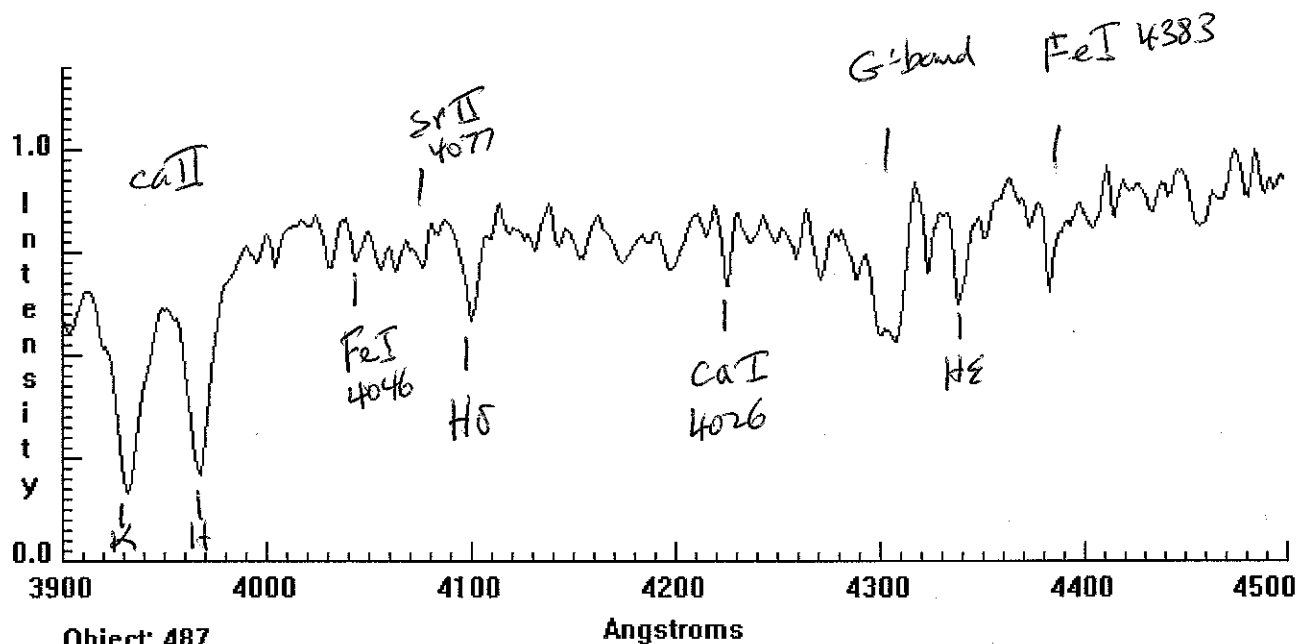
Apparent Magnitude: 6.39

Photon Count: 150626455, Per Pixel: 251044

Integration (Seconds): 39.2

Signal/Noise: 501.0

Strongest lines are Balmer H γ (4340), H δ (4101), and H ϵ (3970), but lines of He I (λ 4026, λ 4121, λ 4144) are also prominent. Weakness of H lines and strength of He I suggest an early B-type star. O-type is ruled out by lack of obvious He II (e.g. λ 4200), although there is a weak feature at 4200. Absorption lines near H δ (from O II, N II, C II) suggest a spectral type near B0. Lack of Mg II (λ 4481) next to He I λ 4471 also implies that this is a hot B star, best temperature class being B0. High luminosity stars at B0 usually have weak Balmer lines and O II strong, with a reversal of the He I λ 4121/ λ 4144 strengths, neither of which are seen in the spectrum. The star is therefore a dwarf. Final classification: **B0 V**



Object: 487

Apparent Magnitude: 4.86

Photon Count: 129321970, Per Pixel: 215537

Integration (Seconds): 7.6

Signal/Noise: 464.3

Strongest lines are Ca II H and K ($\lambda 3933$, $\lambda 3968$), with H γ ($\lambda 4340$) and H δ ($\lambda 4101$) and G-band ($\sim \lambda 4300$) being weaker, but present. The weakness of Fe I ($\lambda 4383$) relative to H γ ($\lambda 4340$) implies a spectral type near G0, or slightly earlier. Best spectral type around G0. Sr II ($\lambda 4077$) is as strong as Fe I ($\lambda 4046$), which, for spectral type G0, implies a giant star luminosity. The Ti II, Fe II blend at $\lambda 4172-8$ is also reasonably strong, which is the case for giants. Final classification:

G0 III