

For every luminosity, WDs are more likely to be missed if they are further away from us. From the luminosity density $N(L)$, we can come up with an uncorrected volume density (just divide the sample up to different regions, calculate $N(L)$ in those regions, divide by volume of each region). If we know $N(L)$ for these different regions, we can use the formula derived in part (i) of this problem to get $n(L)$, which is a better approximation to the true volume density of WDs than the uncorrected $N(L)$ in region over volume of region method.