The average mass μ of a meteor atom is 3.8×10^{-23} g (Öpik, 1958). Therefore, at $v=32.2$ kms^{-1}, we obtain

$$\beta=0.010;\ \tau_e=5.6\times10^{-4}.$$

The errors in τ_p and I_p/q cause an uncertainty in β of a factor of 3. The values of τ_e and β deduced by Davis and Hall (1963) were based on Öpik's late evaluation of the luminous efficiency and are consequently about three times larger.

A preliminary result of a study in progress on the dependence on velocity of the ionizing efficiency suggests $\beta\sim v^4$. Accordingly, we have, in cgs,

$$\beta=9.5\cdot10^{-29}v^4.$$

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