



Link to the spreadsheet with the data : [IV Values](#)

$$\eta = \frac{\ln I_{D1} - \ln I_{D2}}{(V_{D2} - V_{D1}) \cdot V_T}$$

where $V_T = \frac{kT}{q}$. Taking $T = 30^\circ\text{C} = 303\text{K}$,

$$V_T = 26.1\text{ mV}$$

$$\eta_{\text{Green}} = 1.465$$

$$\eta_{\text{Red}} = 1.782$$

$$\eta_{4148} = 1.899$$

