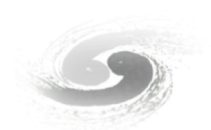

TID study

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Dose rate calculation for the Northwest Institution equipment

$$\text{Dose} = \frac{Fen}{Tn \times Ds}$$

- Wafer Thickness: $Tn = 35 \mu m = 50 \times 10^{-5} cm$;
Silicon density : $Ds = 2328.3 kg/m^3 = 2.328 \times 10^{-3} kg/cm^3$
- Dose : Gy, $1 Gy = 1 J/kg$
- r pulse width: 35 ns
- Energy Fluence : $Fen = 6 J/cm^2$
- For silicon wafer:

$$\text{Dose rate} = 7.36 \times 10^6 J/kg = 7.36 \text{ MGy}$$

Conclusion

- Finished IV and CV test (data processing)
- Contact the company for the software of the MultRad160 (no response yet)
- Contact the Northwest Institute (Agree to cooperate , details need to be discuss : running period ? Low dose rate ?)



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- **Thank you !**



