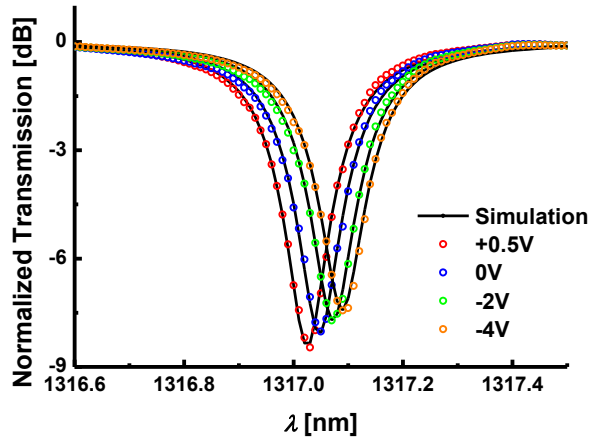


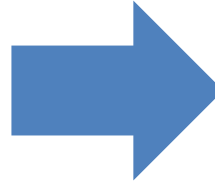
Parametric Optimization for Ring Modulator

<Measured Transmission Curve>

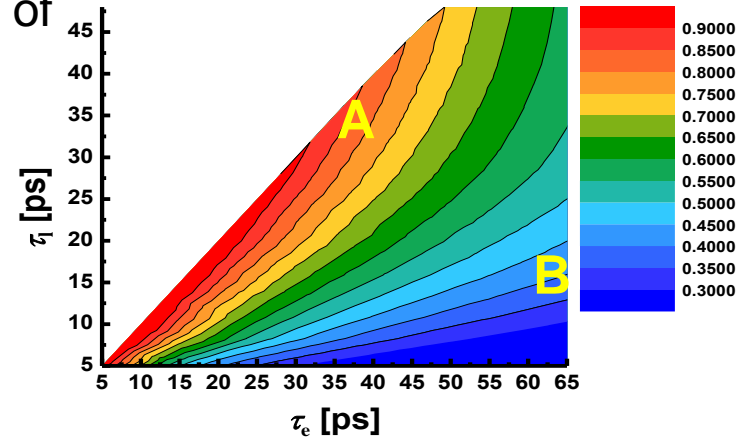


n_{eff}, τ_l, τ_e extracted

Small-signal model of ring modulator

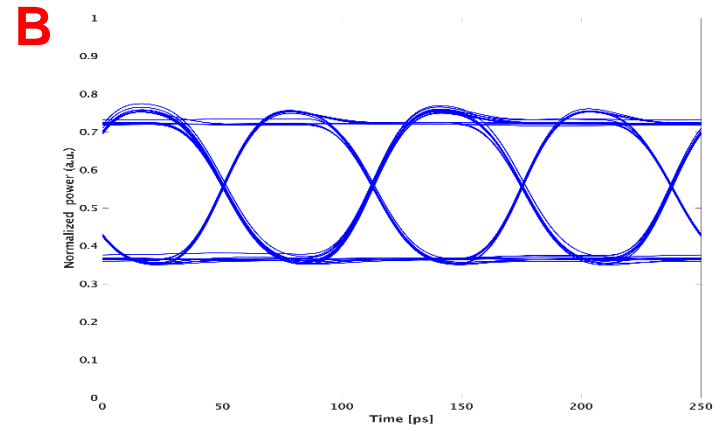
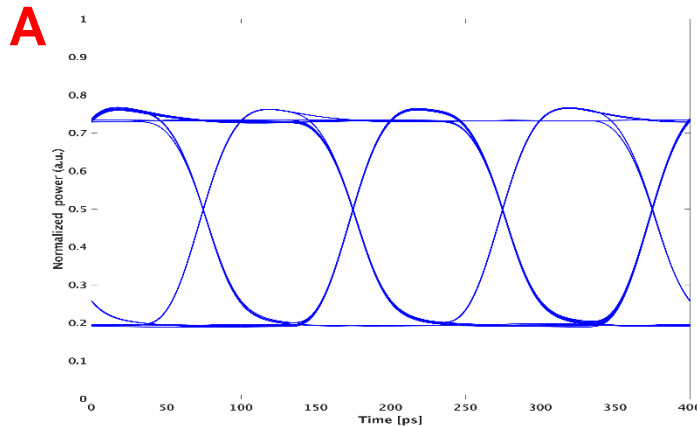


<Figure of Merit>



Bandwidth X Optical Modulation Amplitude

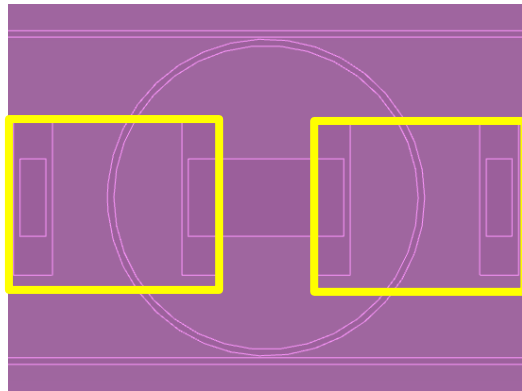
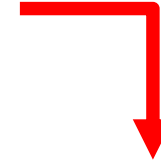
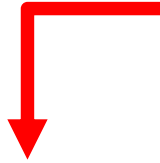
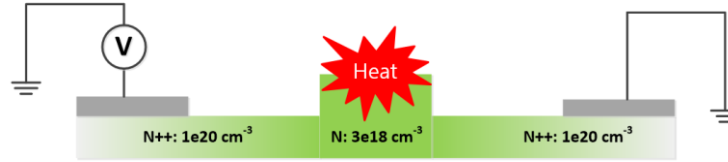
<Transient simulation – extracting eye diagram>



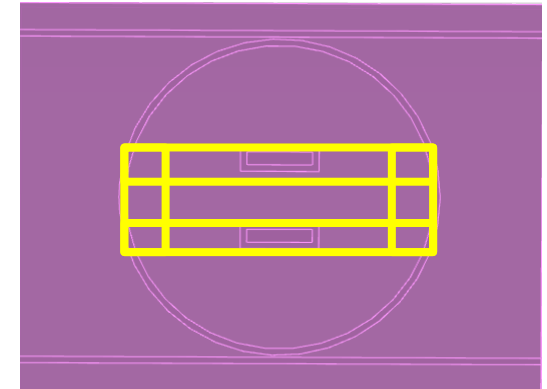
Will be verified by experiment

Heater Optimization for Ring Resonator

<Doping heater for ring resonator>



<Various structure of doping heater>



Simulation



Double heater for ring filter

Adiabatic heater for ring filter

	Double	Adiabatic	...
Efficiency			...
C°/mW			...
⋮			...
⋮			...