

# Design Anel de Ressonância

FSR = 25.6 nm; FWHM = 0.8 nm

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# Parâmetros Teóricos

$$n_{eff} = 1.91$$

$$n_g = 4.63$$

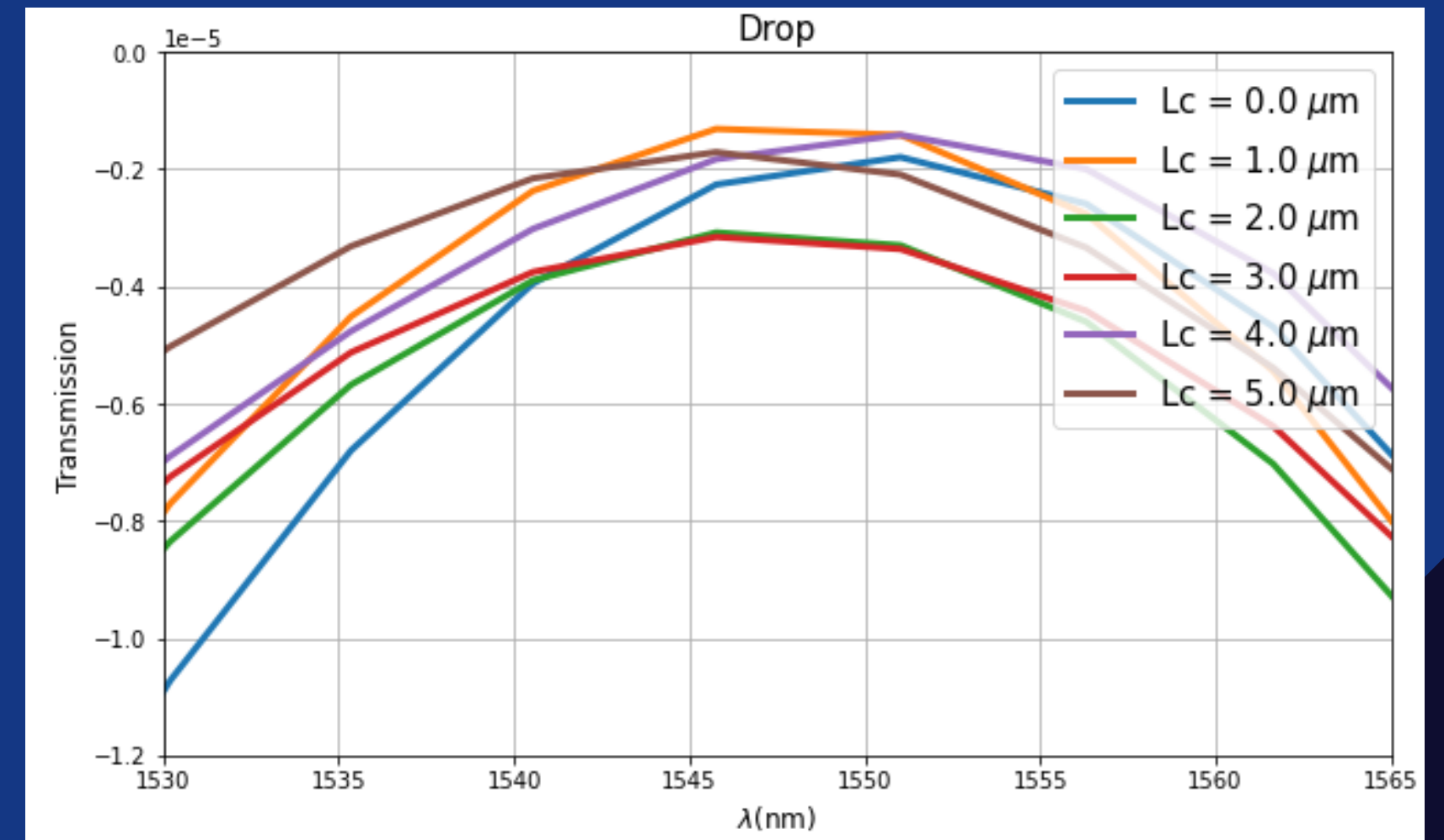
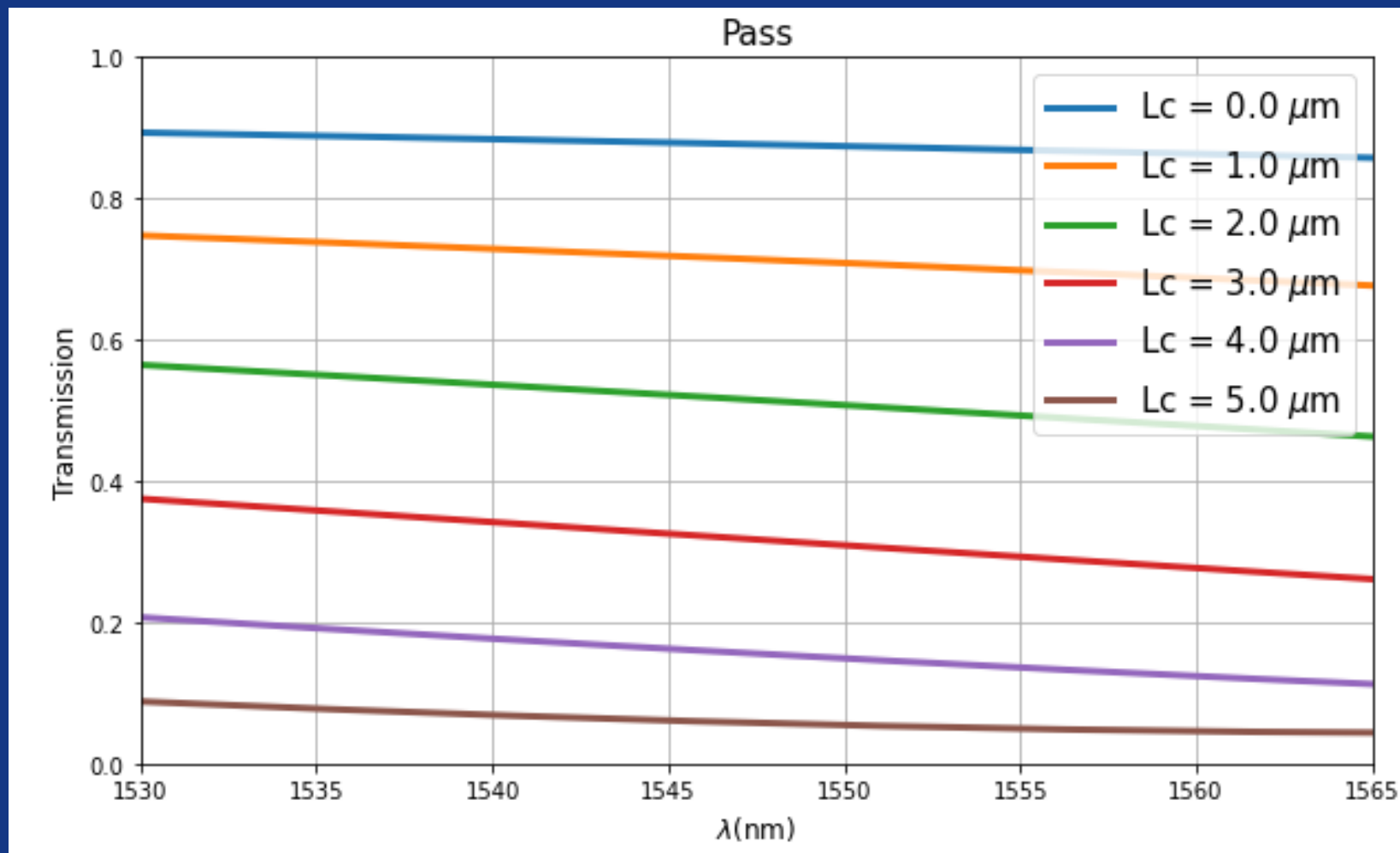
$$L = 20.2695 \mu m$$

$$r^2 = 0.9065$$

$$k^2 = 0.0935$$

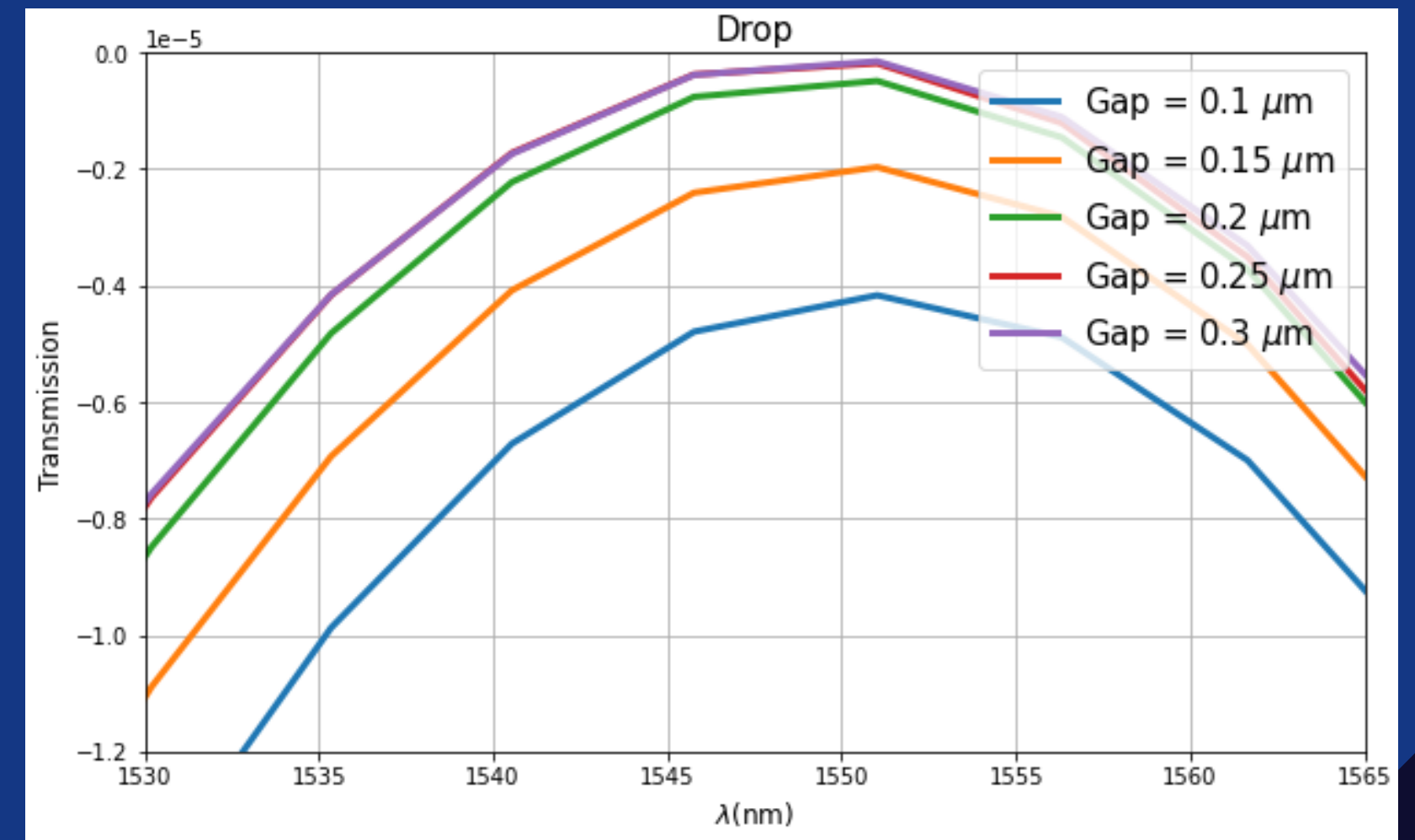
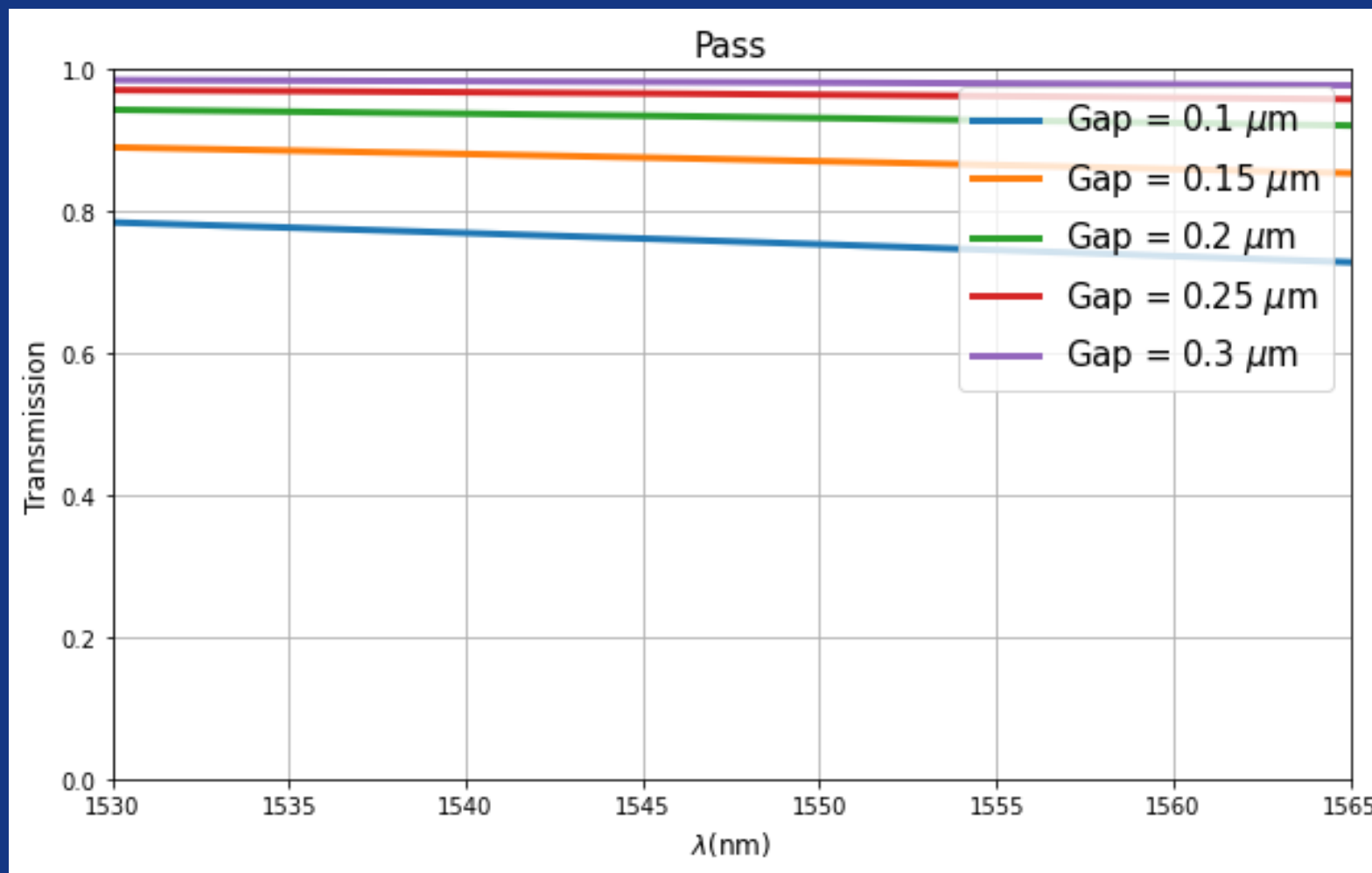
# Análise de Parâmetros

LC Sweep - Solver: FDTD



# Análise de Parâmetros

Gap Sweep - Solver: FDTD

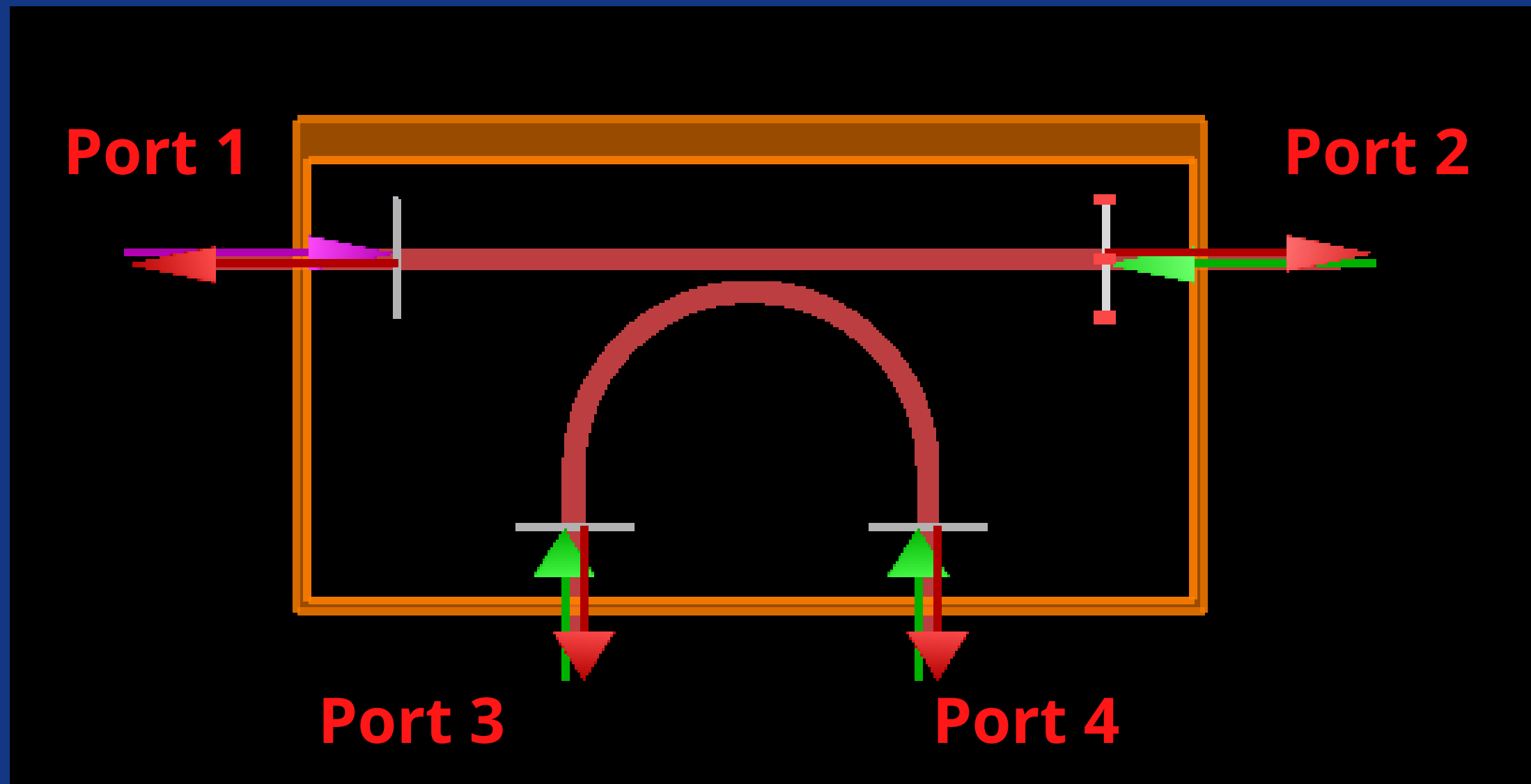


Escolhidos:

LC = 0

Gap = 150 nm

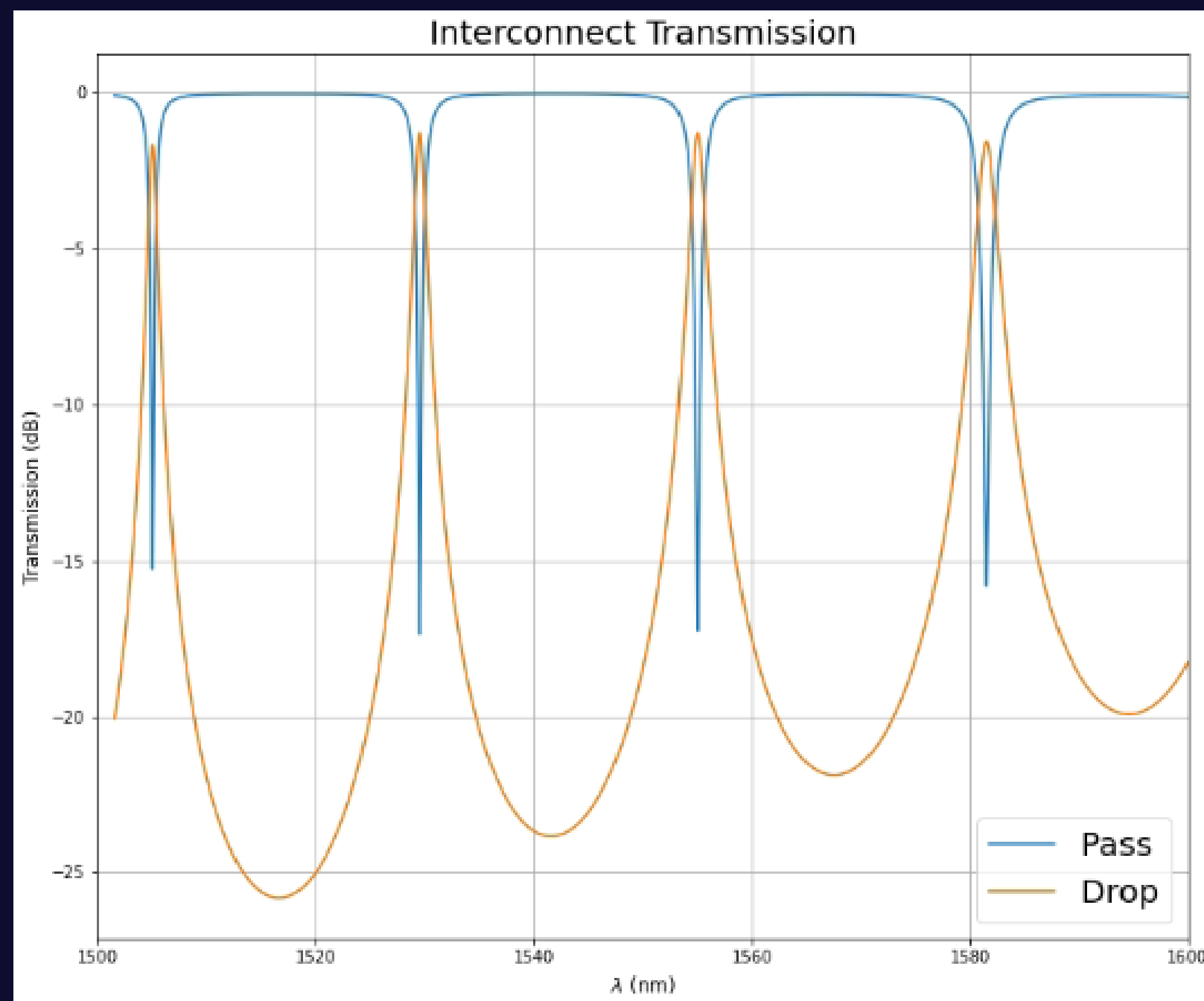
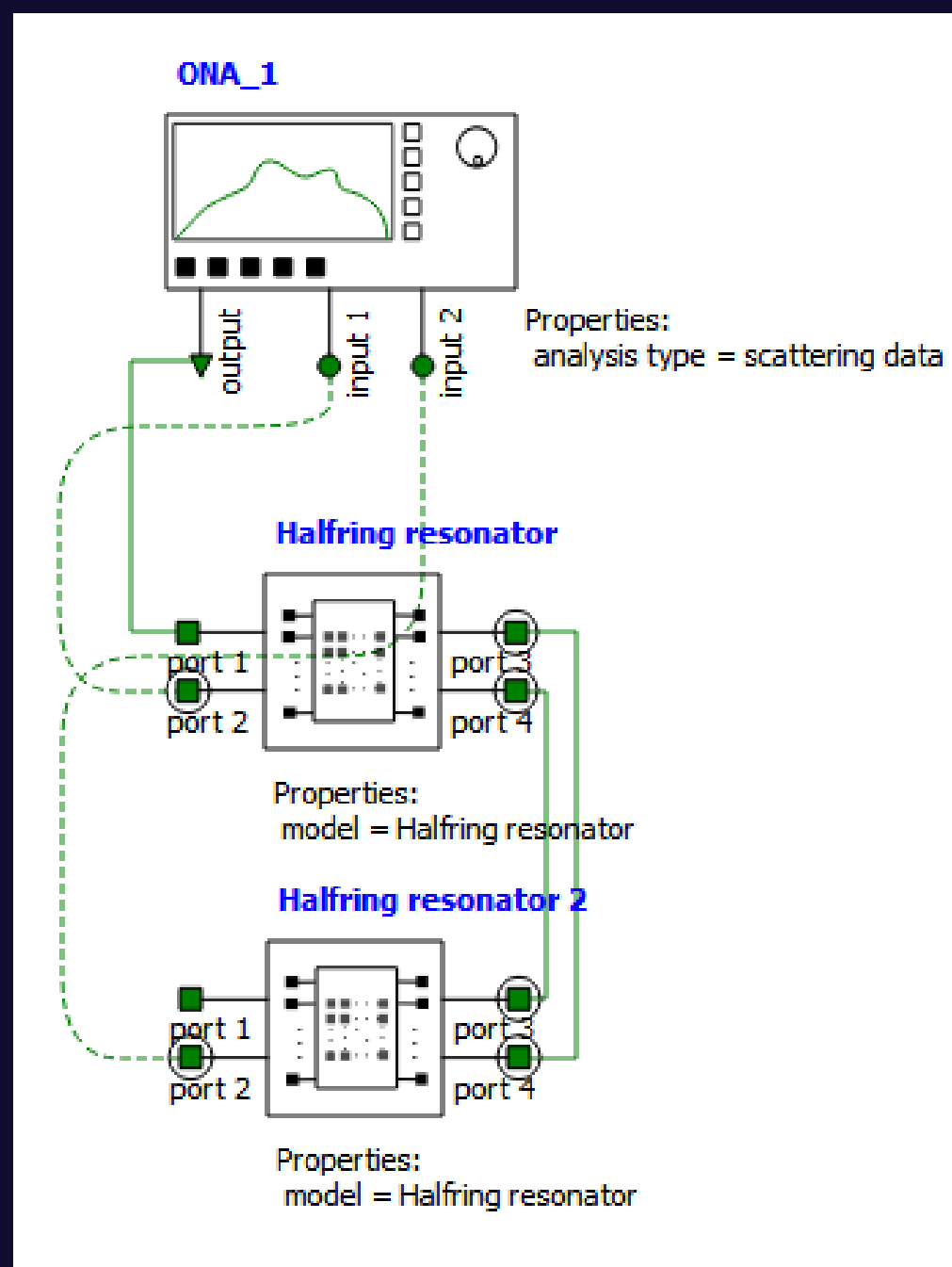
# Design final do anel



$r = 3 \mu\text{m}$   
 $w = 0.4 \mu\text{m}$   
 $h = 0.18 \mu\text{m}$

# Resultados e simulações

## Circuito final Interconnect

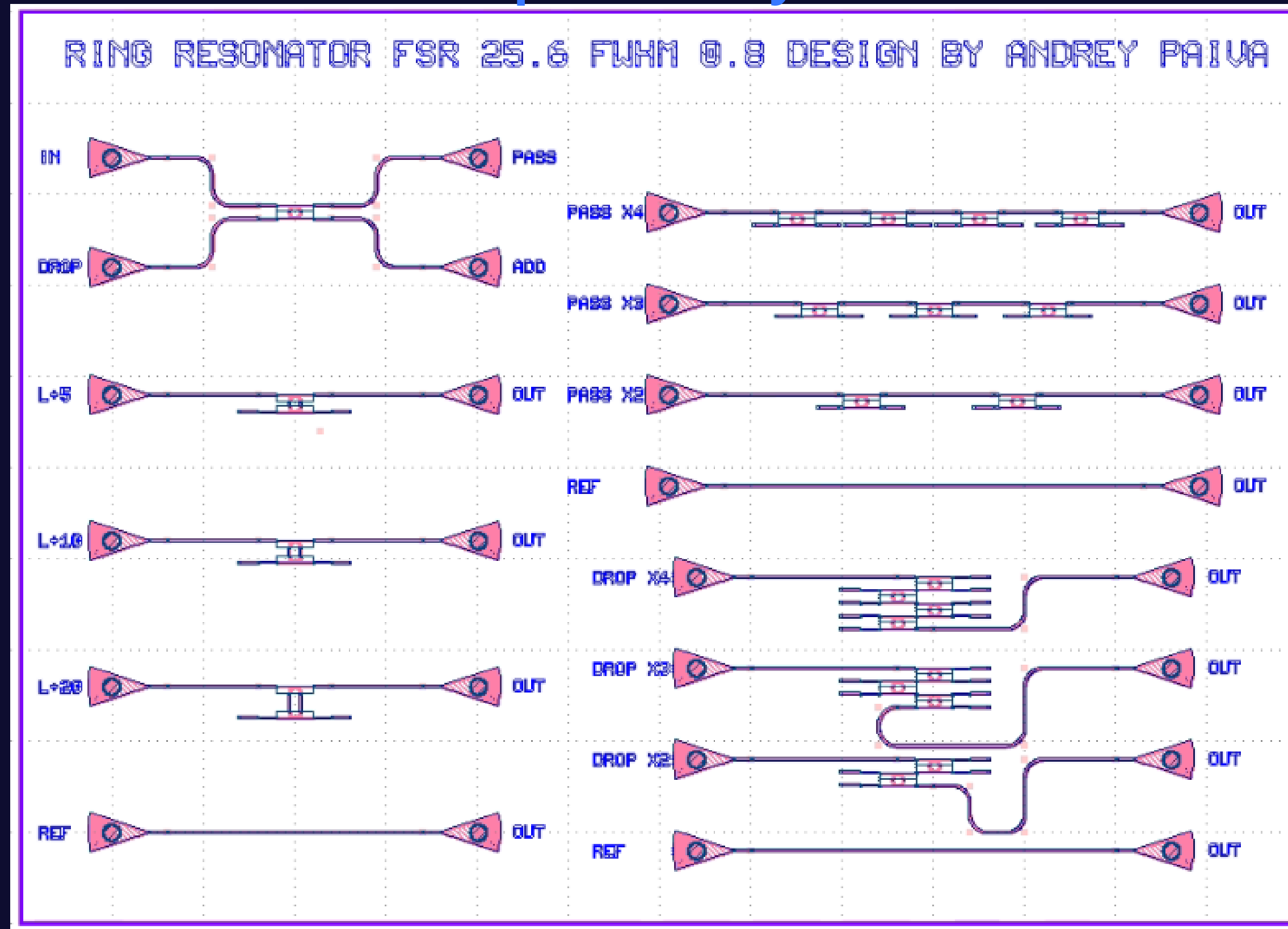


**FSR medido = 26.5 nm**

**FWHM medido = 0.96 nm**

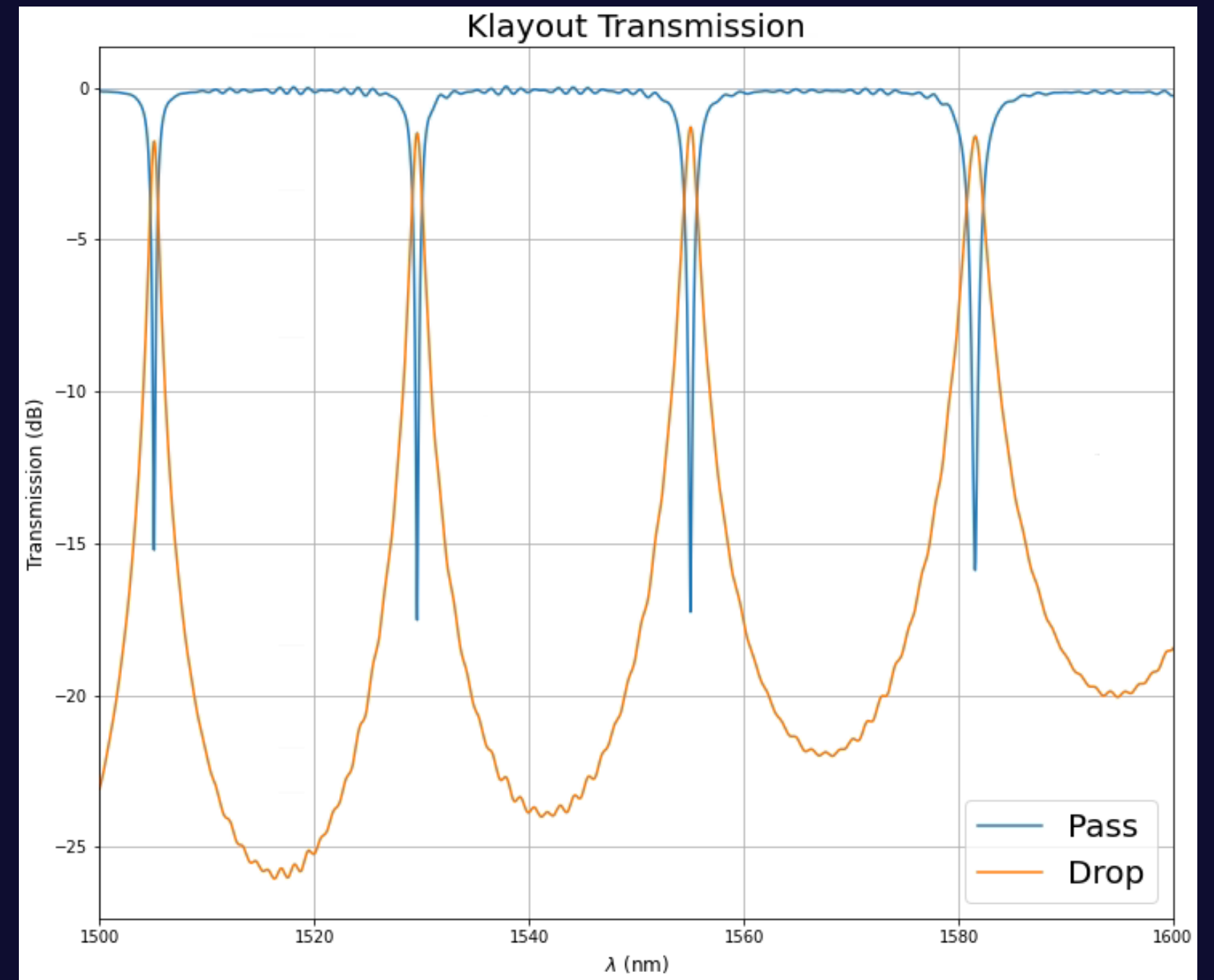
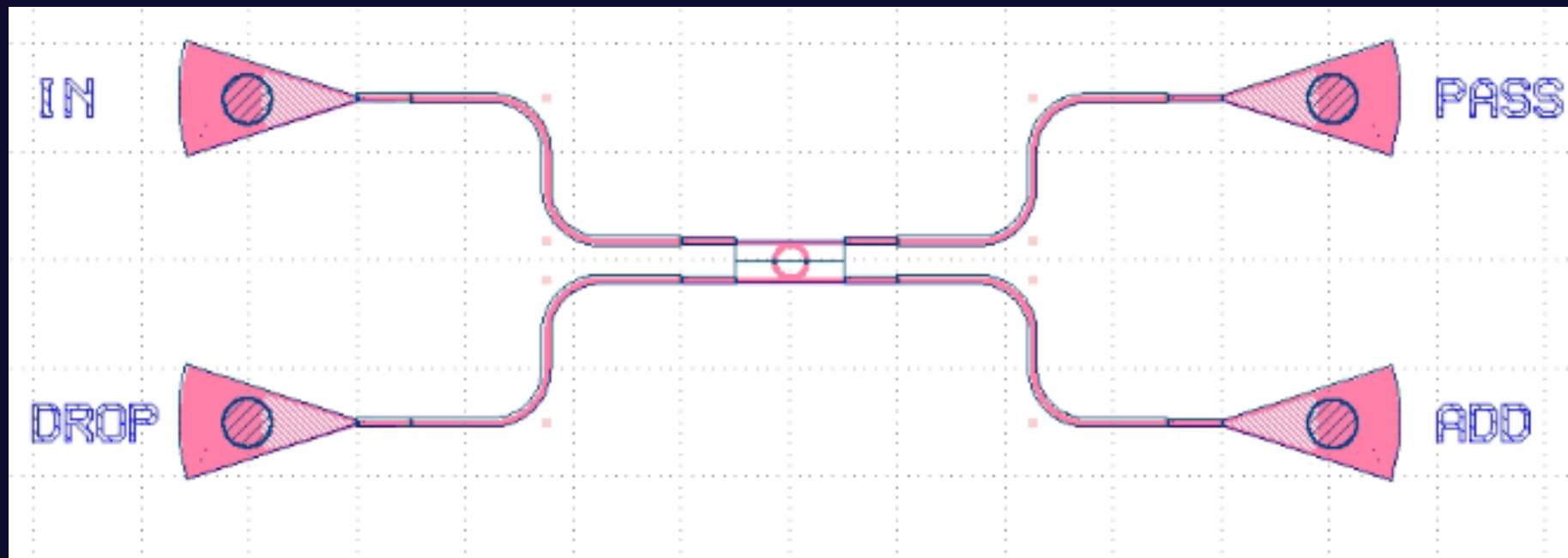
# Resultados e simulações

## Chip final Klayout



# Resultados e simulações

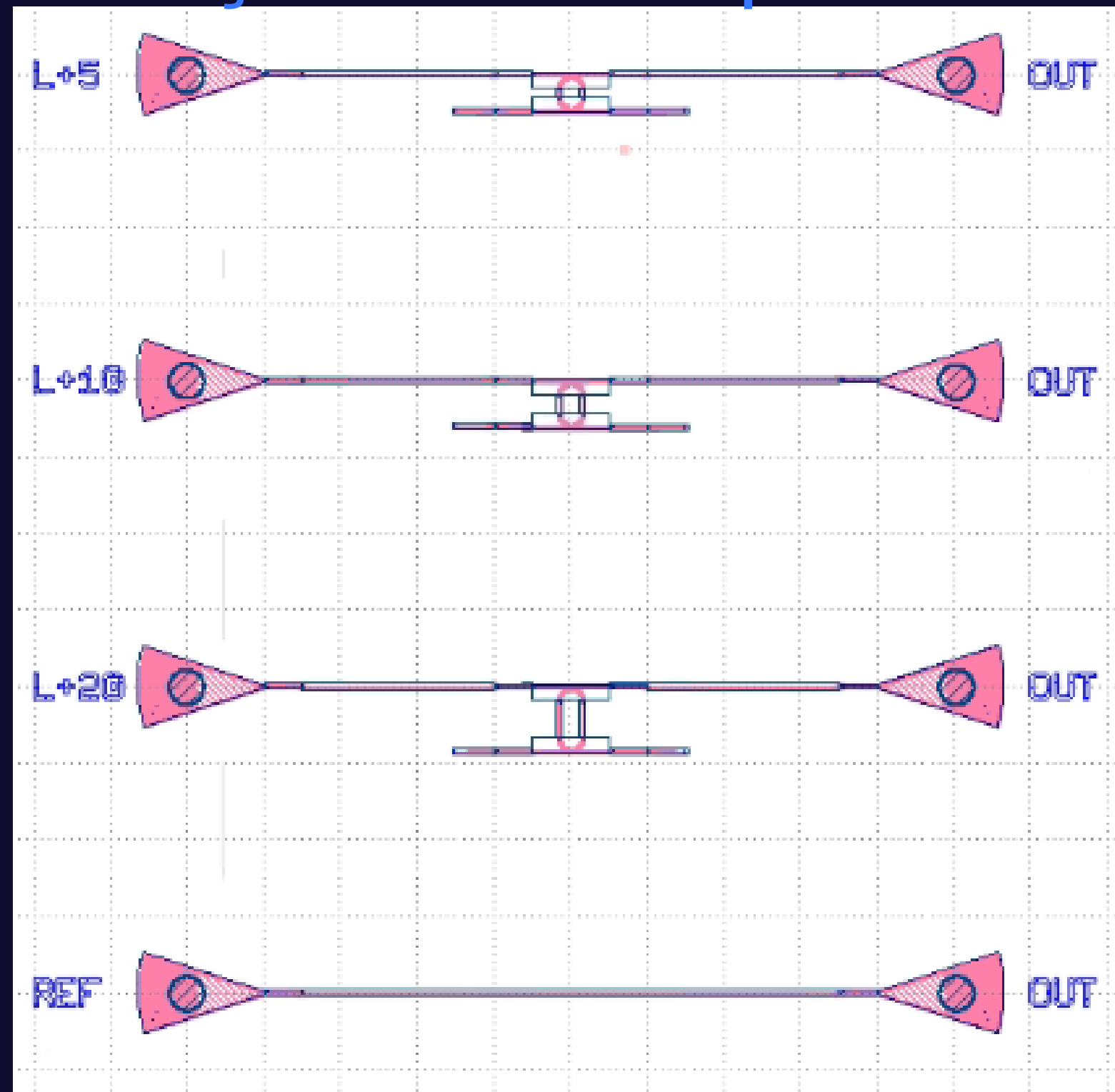
## Anel Base





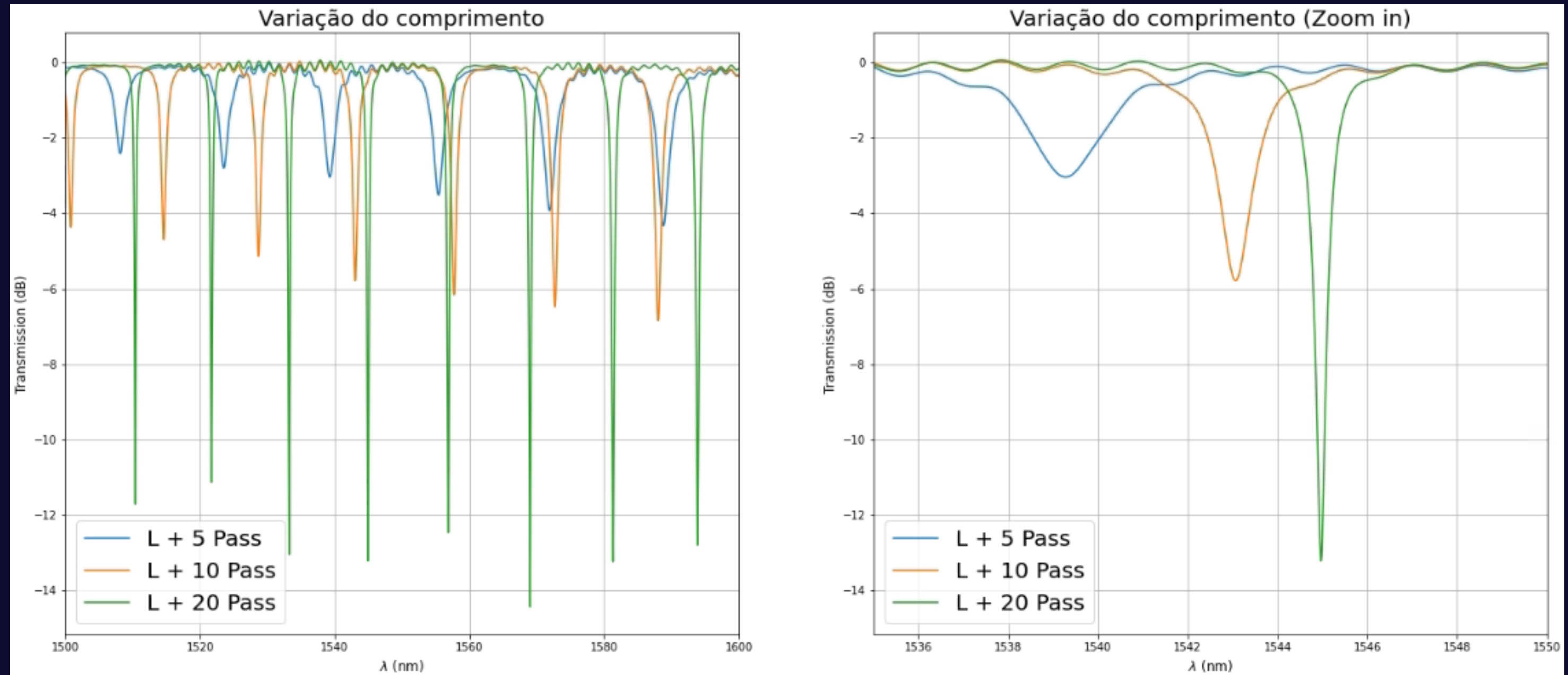
# Resultados e simulações

## Variação de comprimento



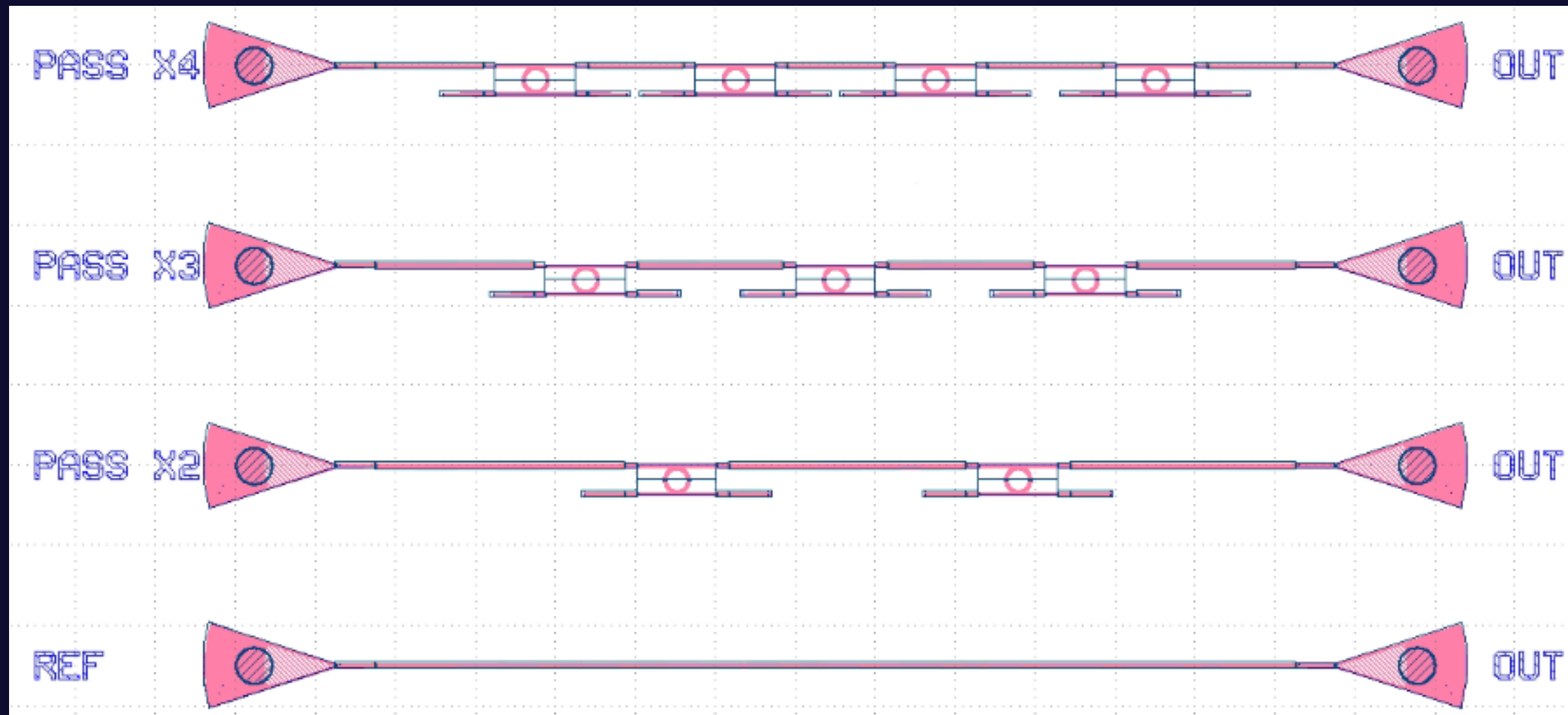
# Resultados e simulações

## Variação de comprimento



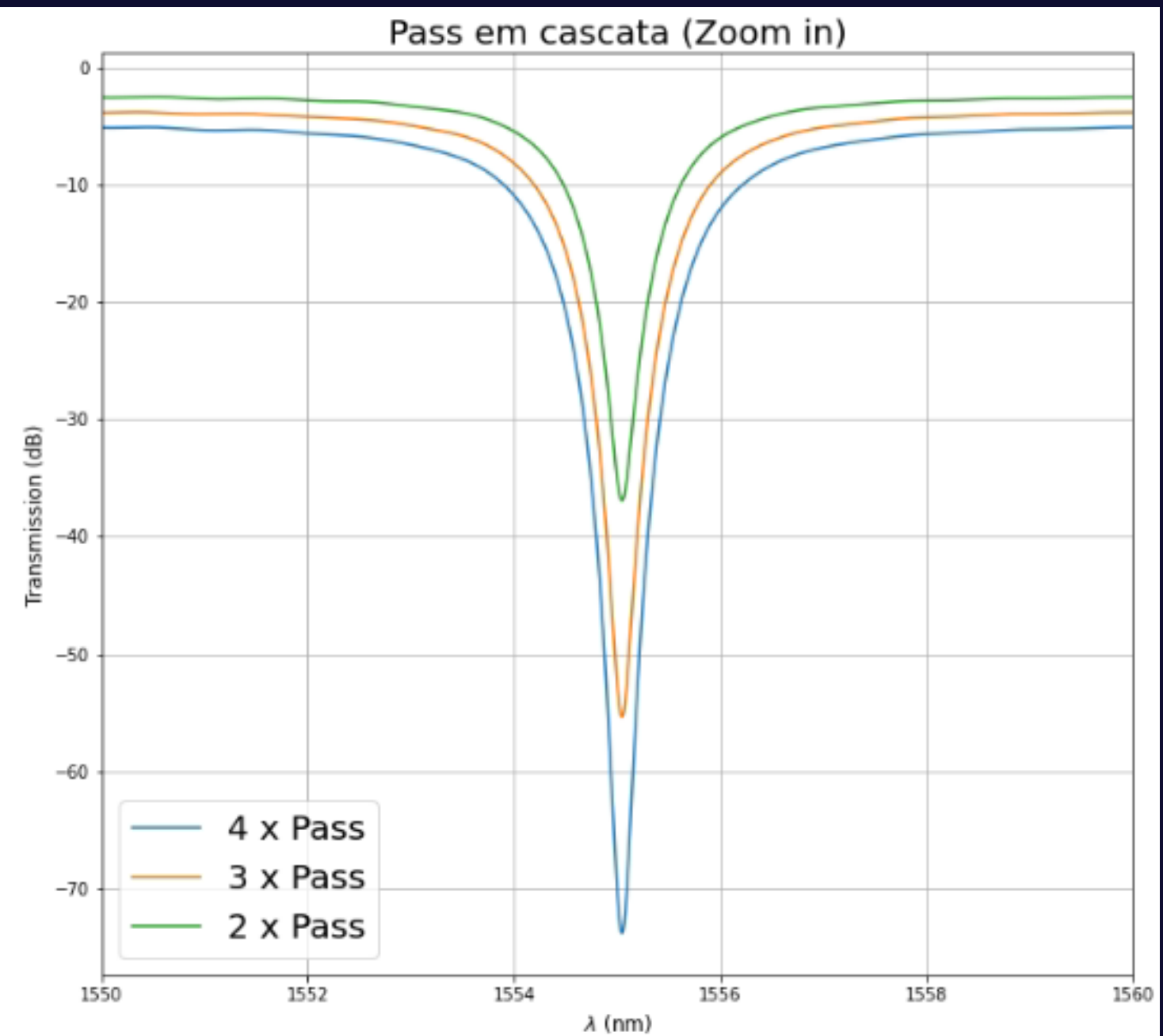
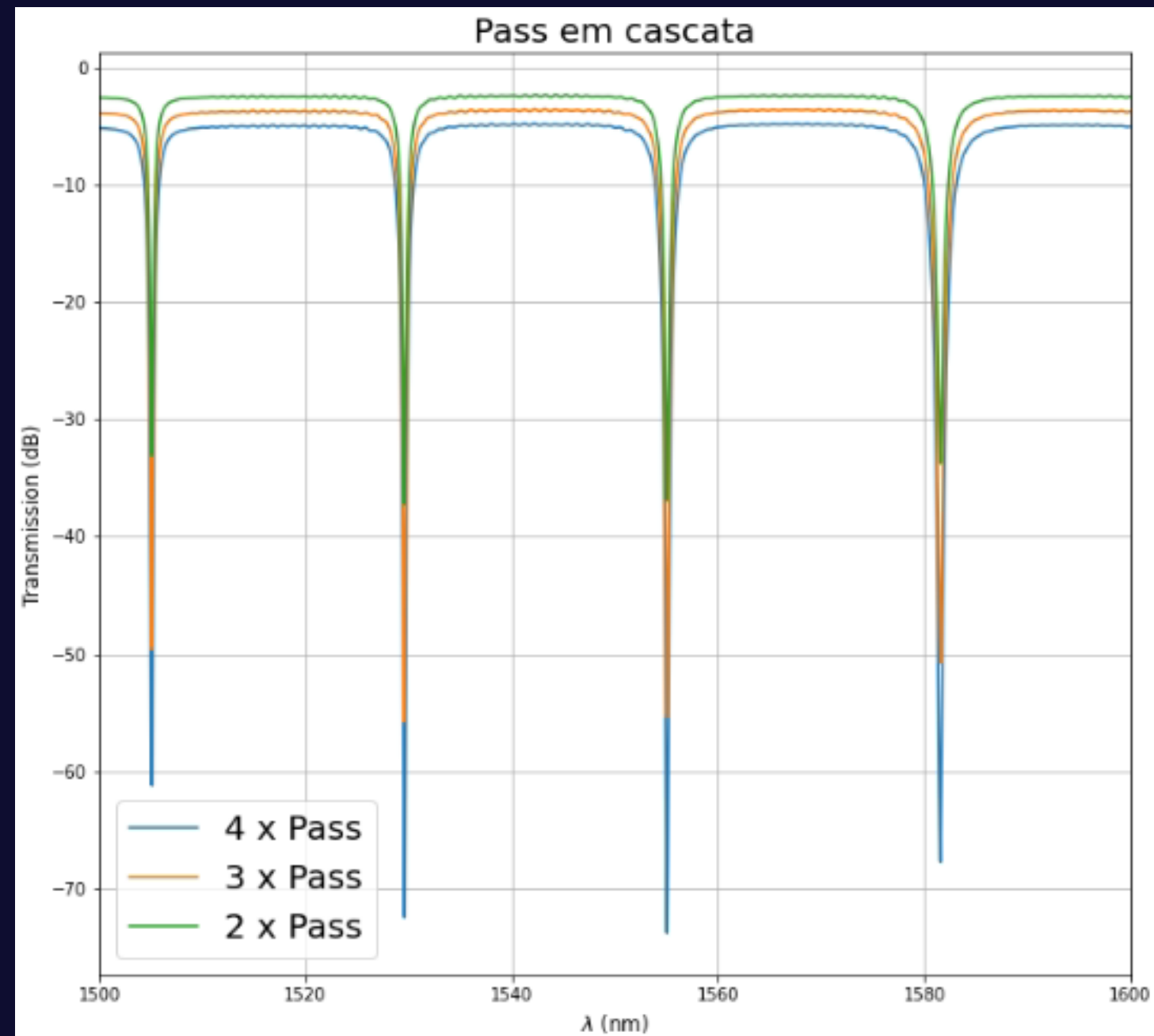
# Resultados e simulações

## Pass em cascata



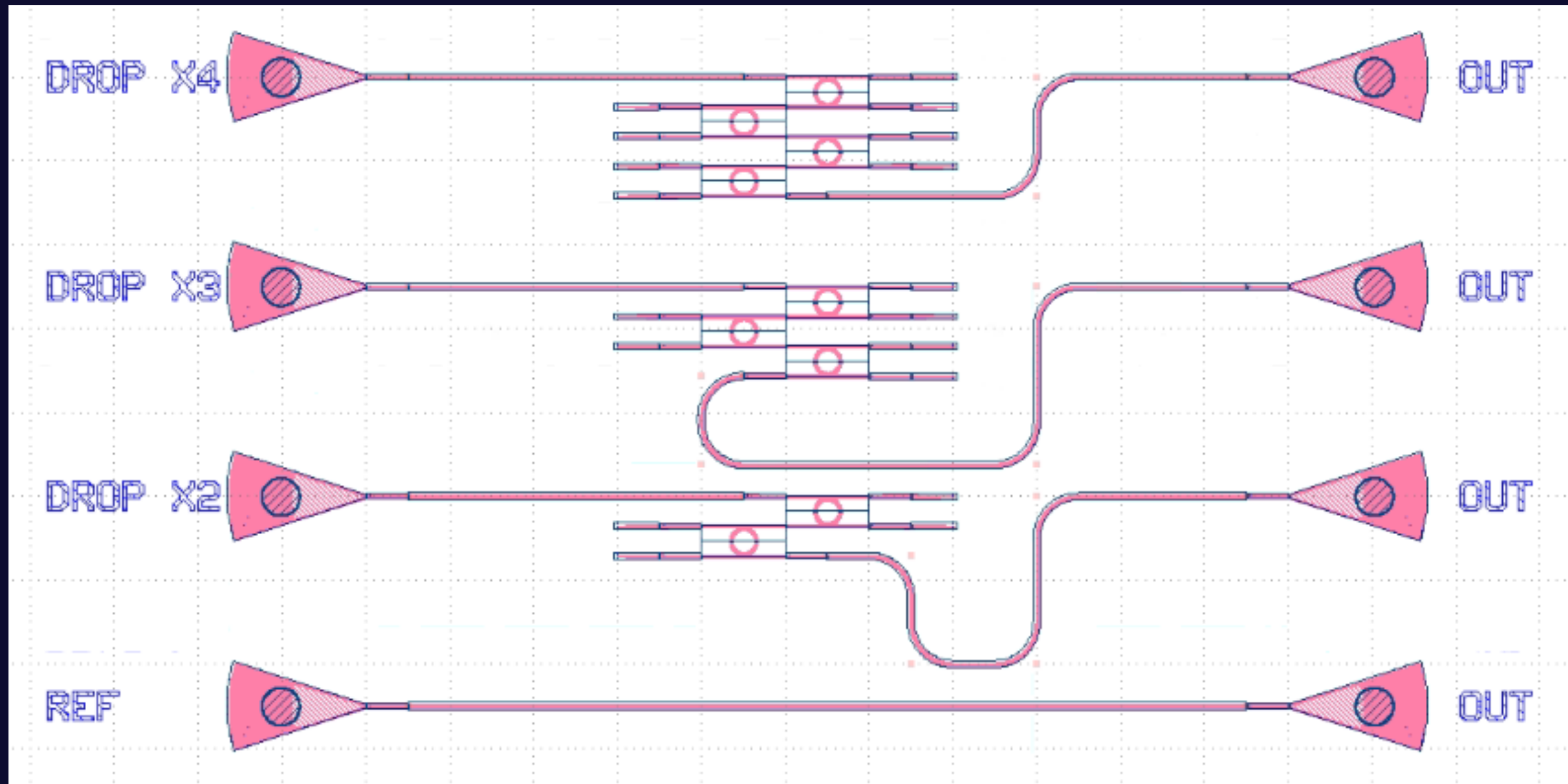
# Resultados e simulações

## Pass em cascata



# Resultados e simulações

## Drop em cascata



# Resultados e simulações

## Drop em cascata

