

Capacitação em Circuitos Fotônicos em Silício.

March Zender Interferometer

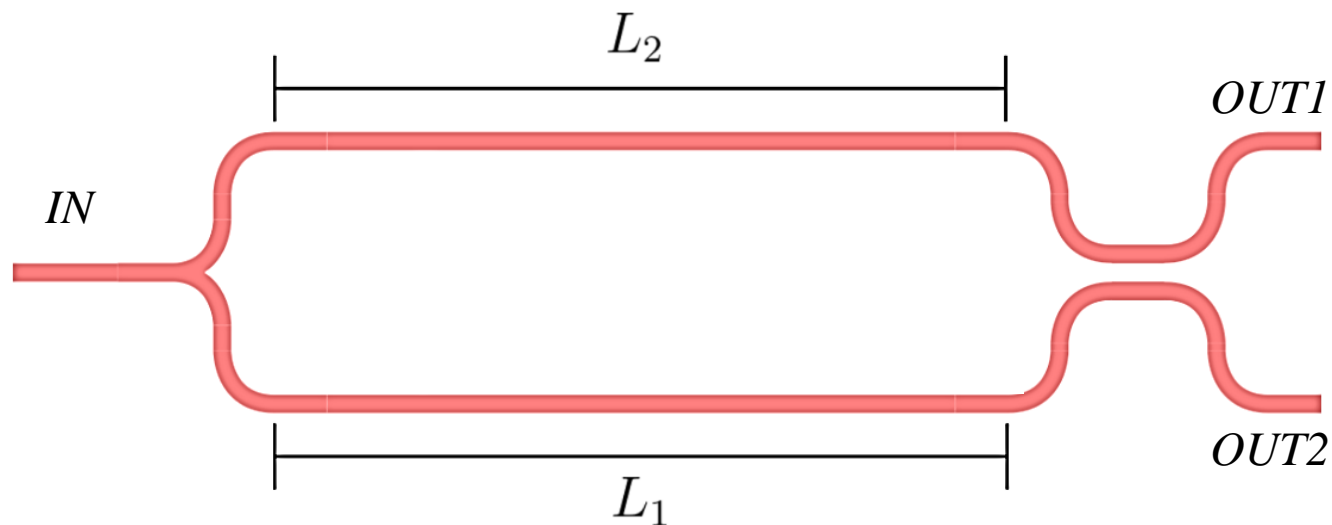


Centro de Competência Embrapii em
Hardware Inteligente para a Indústria

CURSOS, CAPACITAÇÃO E TREINAMENTOS



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Dimensão Importantes:

Altura = $0.22\mu\text{m}$

Largura = $0.45\mu\text{m}$

Raio de abertura = $5\mu\text{m}$

Comprimento do Acoplador = $11.05\mu\text{m}$

FSR = 1nm:

$\Delta L = 552.82\mu\text{m}$

Comprimento maior = $572.82\mu\text{m}$

Comprimento menor = $20.00\mu\text{m}$

FSR = 10nm:

$\Delta L = 55.28\mu\text{m}$

Comprimento maior = $75.28\mu\text{m}$

Comprimento menor = $20.00\mu\text{m}$

FSR = 20nm:

$\Delta L = 27.64\mu\text{m}$

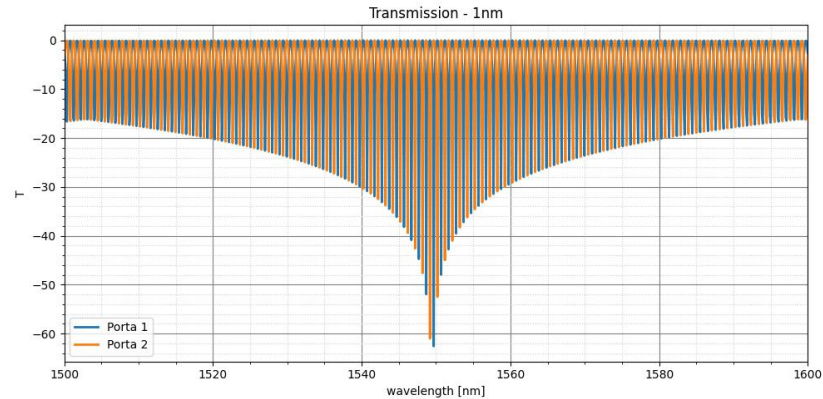
Comprimento maior = $47.64\mu\text{m}$

Comprimento menor = $20.00\mu\text{m}$

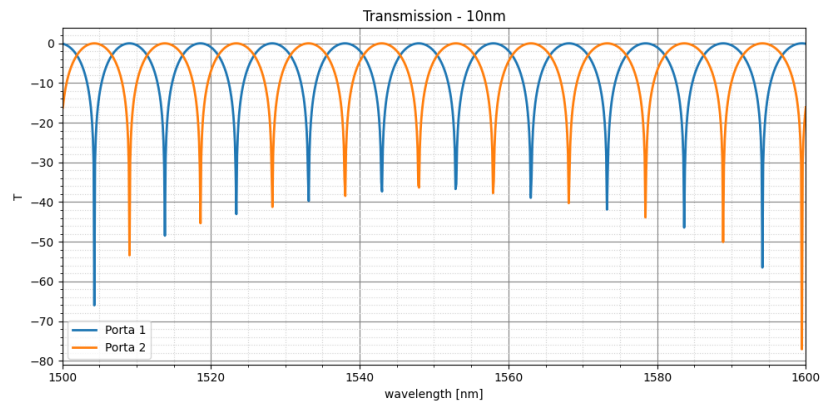
1. Transmissão



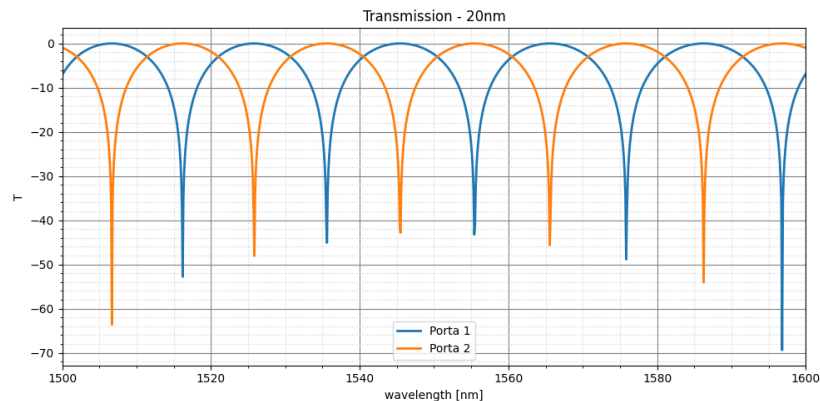
2.1 Transmissão x Comprimento de onda



FSR = 1nm



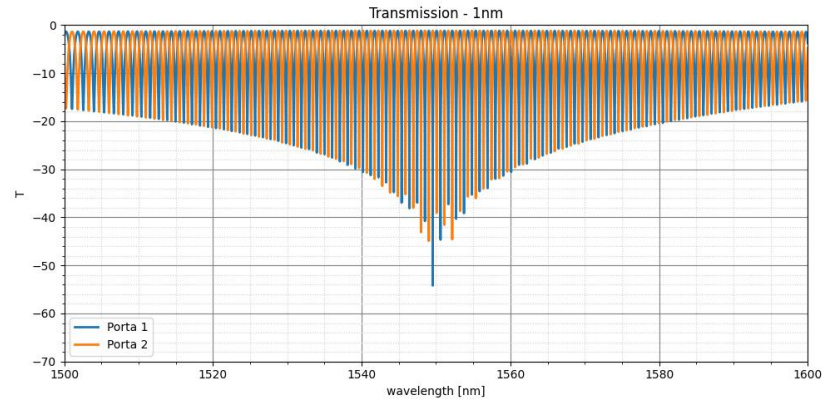
FSR = 10nm



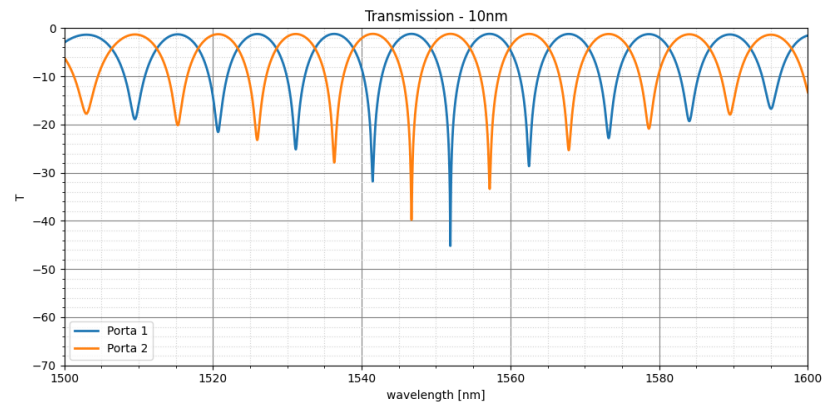
FSR = 20nm

Dispositivos
Ideais

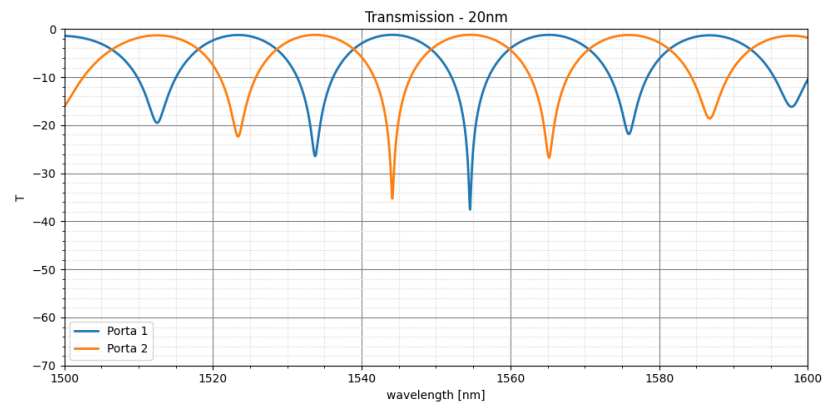
2.1 Transmissão x Comprimento de onda



FSR = 1nm



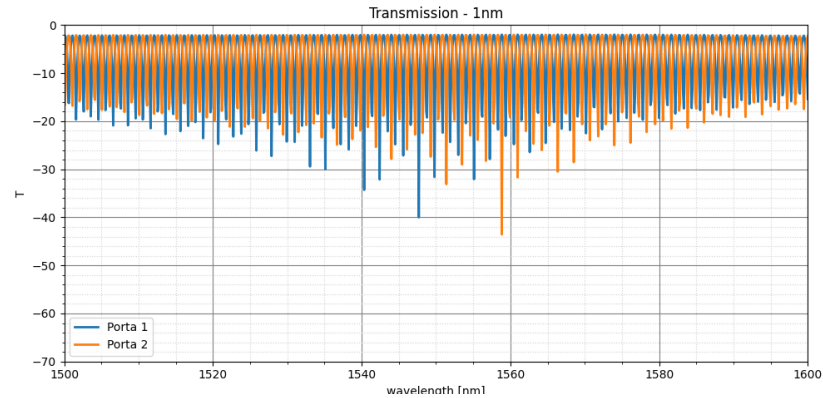
FSR = 10nm



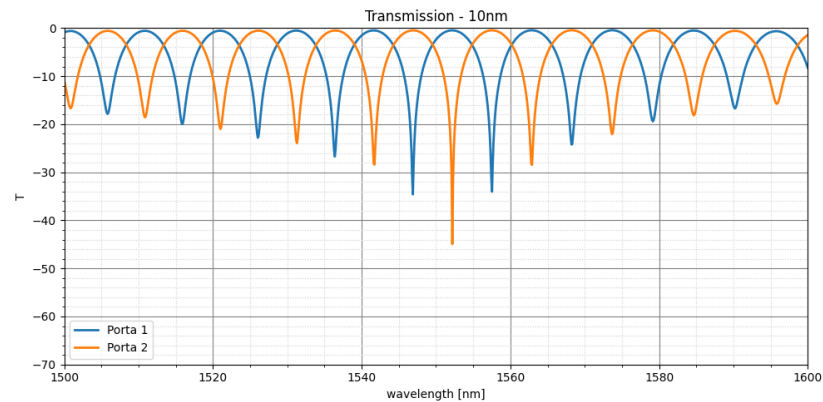
FSR = 20nm

Dispositivos
Reais

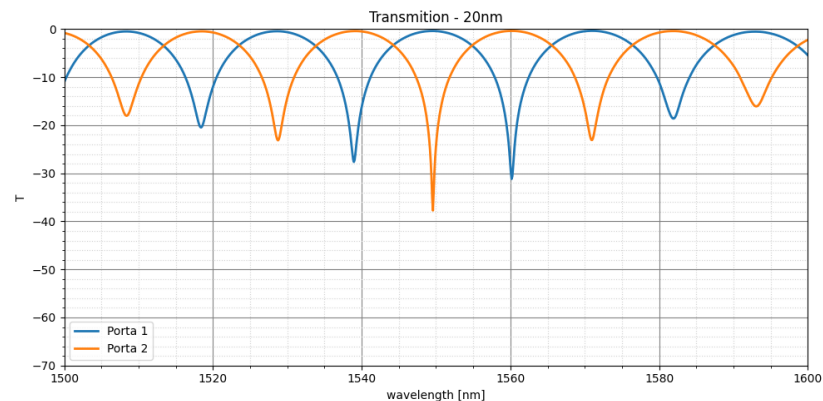
2.1 Transmissão x Comprimento de onda



FSR = 1nm



FSR = 10nm



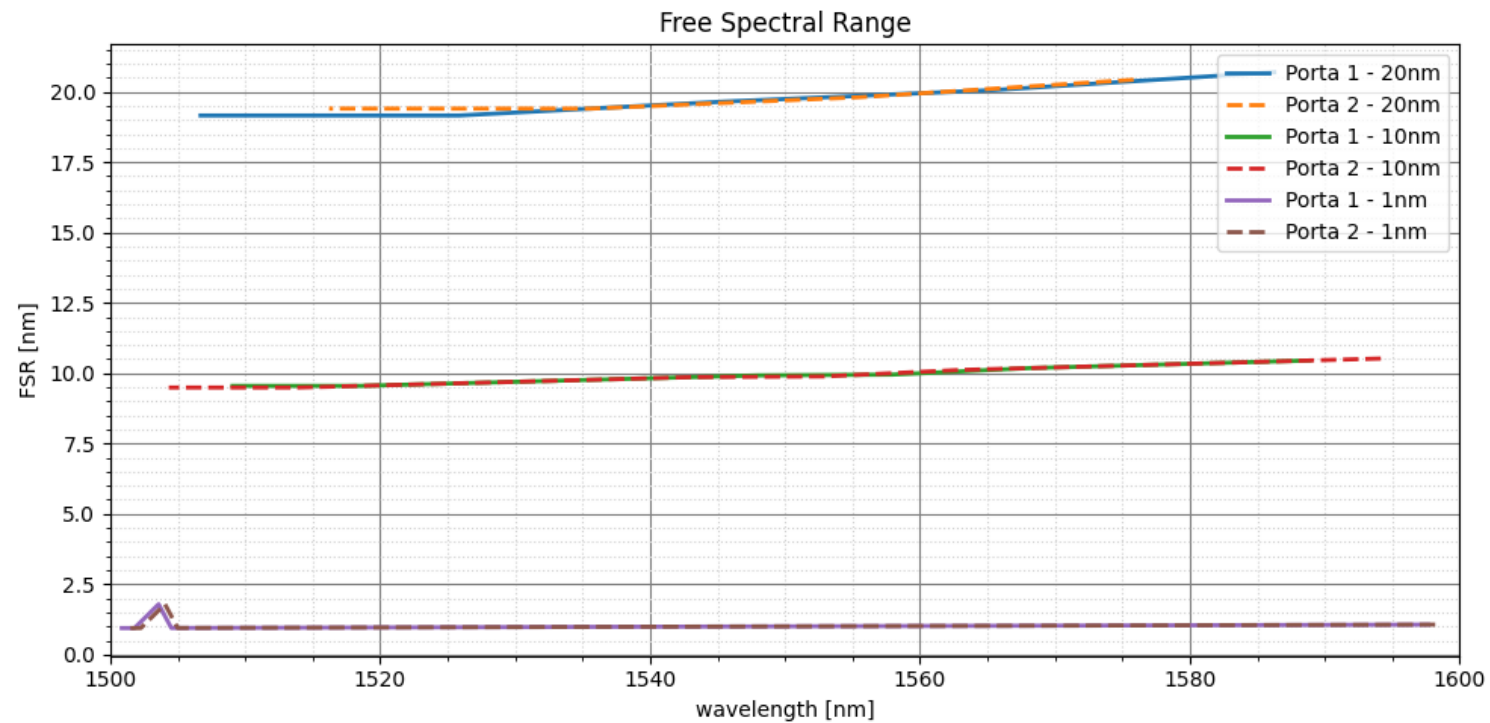
FSR = 20nm

Dispositivos
PDK SiePic

2. Free Spectral Range

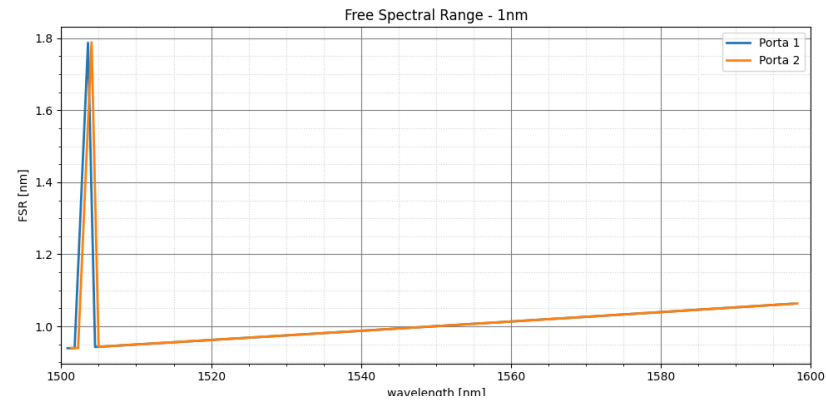


2.1 FSR x Comprimento de onda

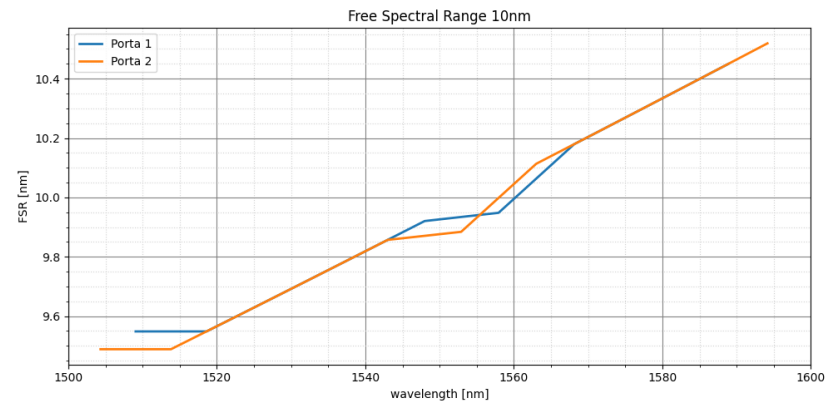


Dispositivos
Ideais

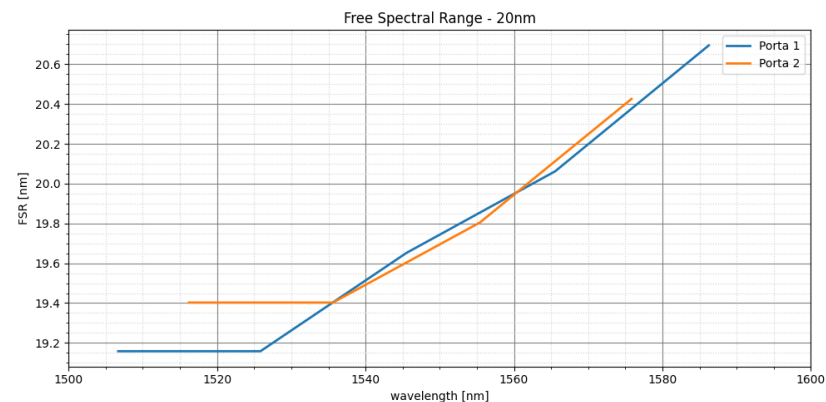
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FSR = 1nm



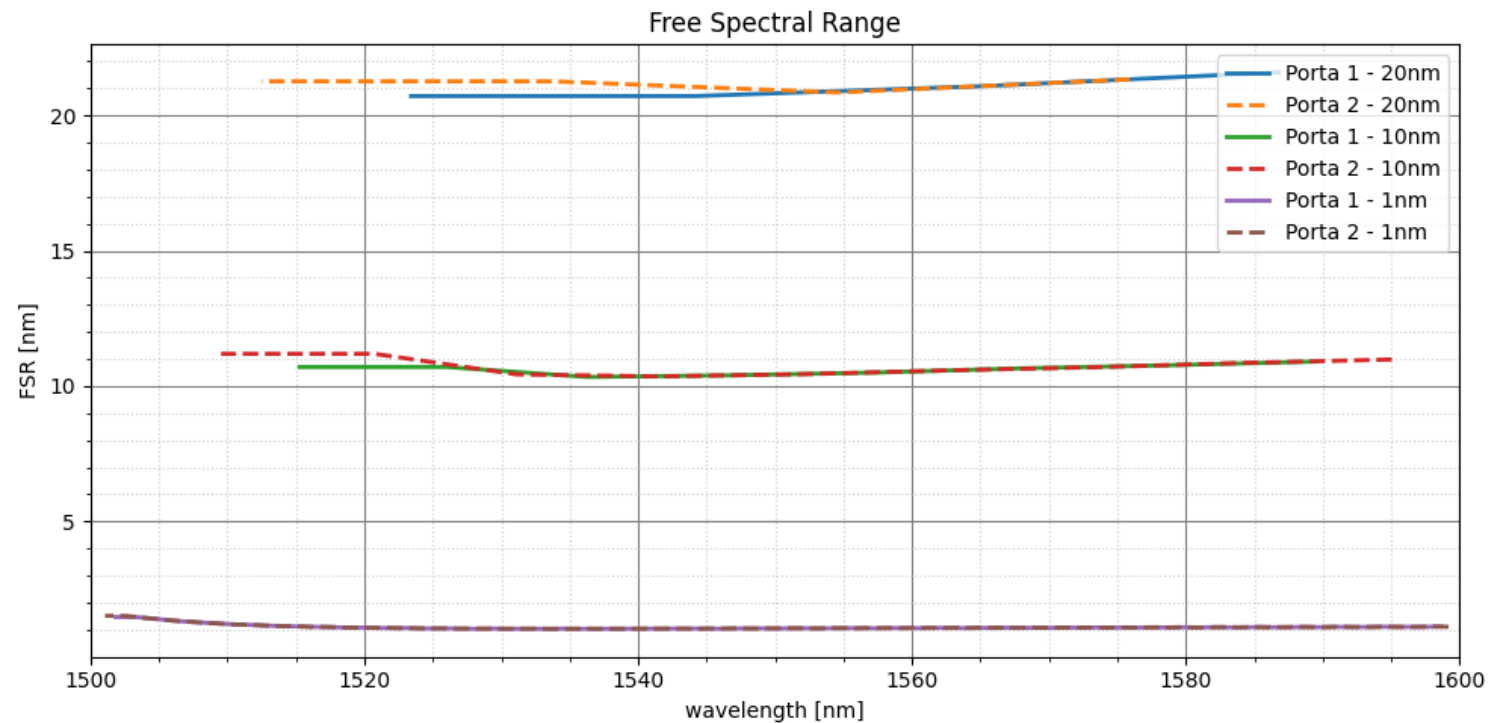
FSR = 10nm



FSR = 20nm

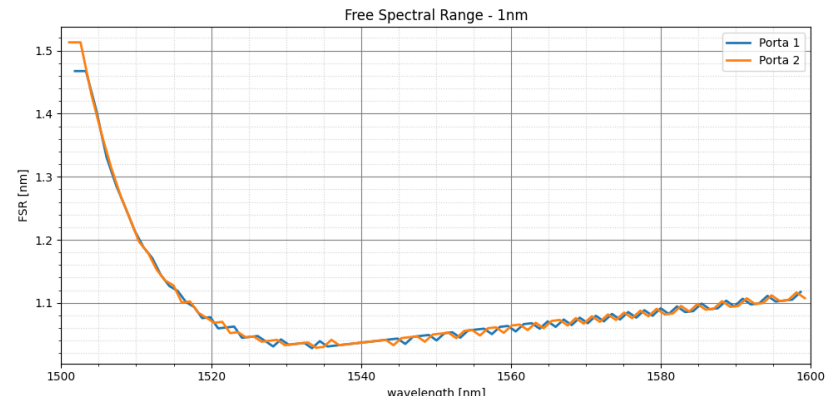
Dispositivos
Ideais

2.1 FSR x Comprimento de onda

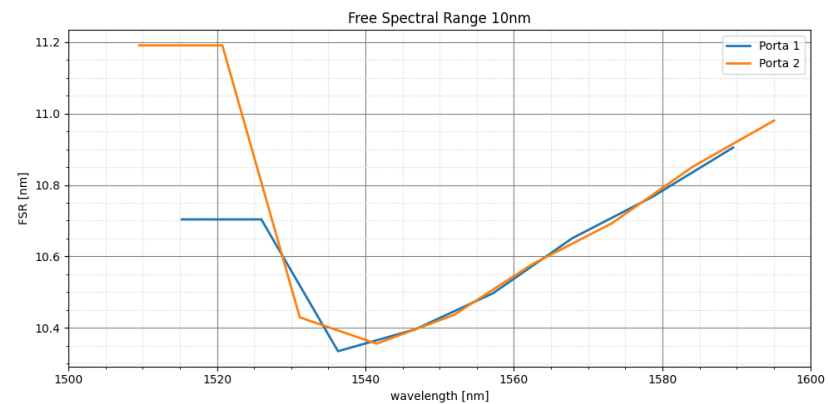


Dispositivos
Reais

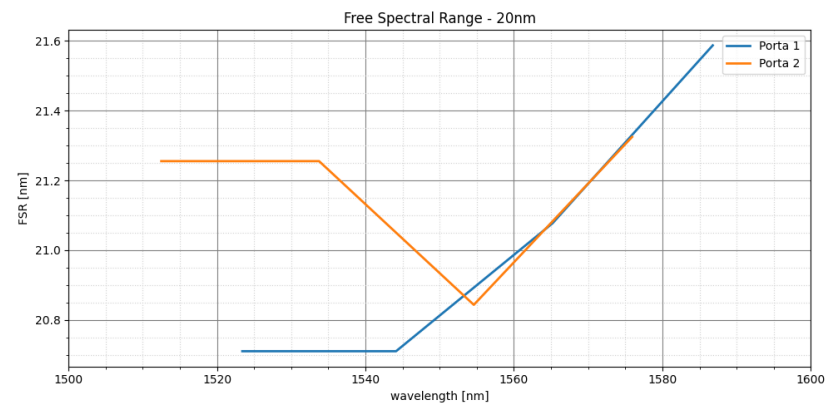
2.1 FSR x Comprimento de onda



FSR = 1nm



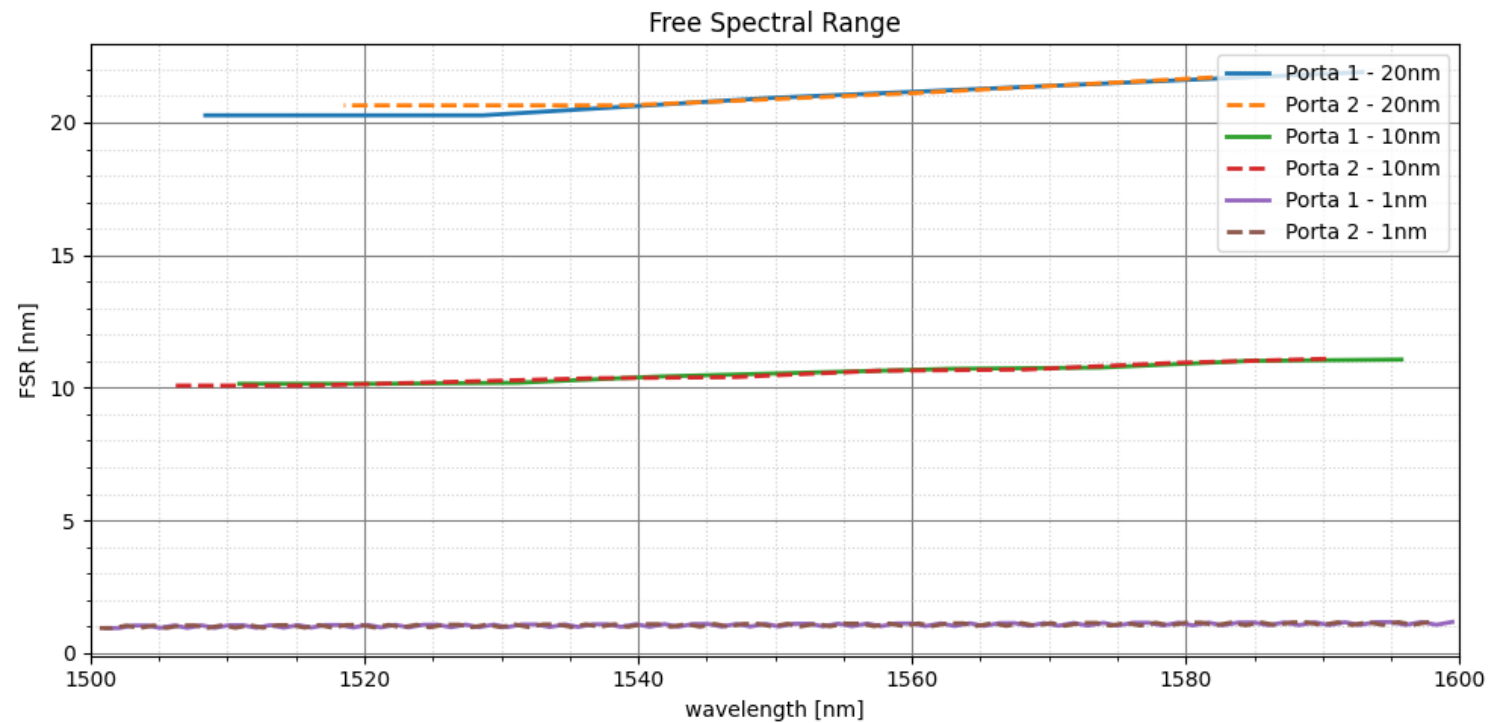
FSR = 10nm



FSR = 20nm

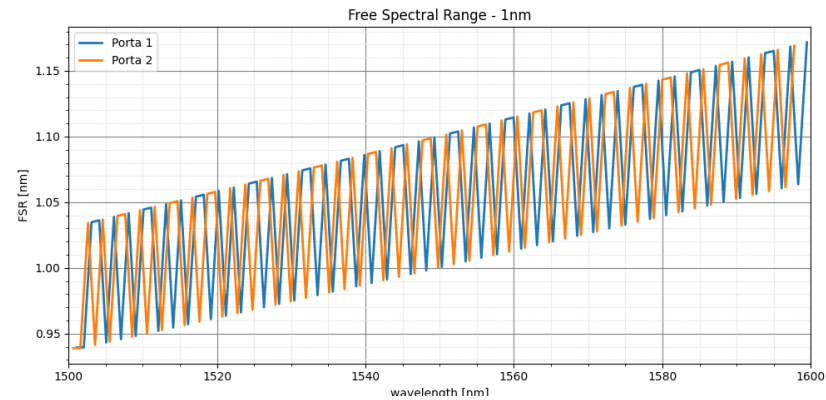
Dispositivos
Reais

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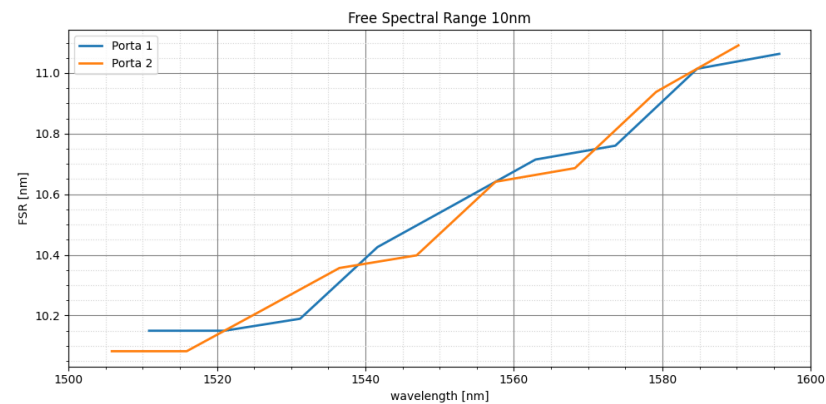


Dispositivos
PDK SiePic

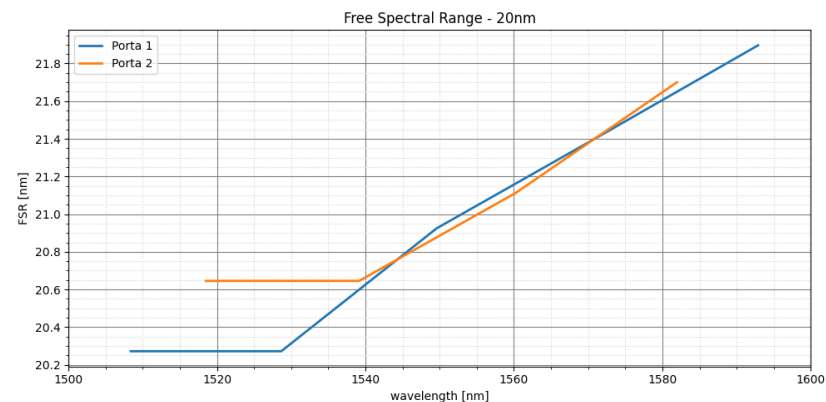
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FSR = 20nm

Dispositivos
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