Reto F3001C

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Waveguide selector:

```
Selected waveguide:

   Size: 405x730

   Mode: 12
```

Waveguide Summary:

```
Waveguide: 405x405, mode: 12
```

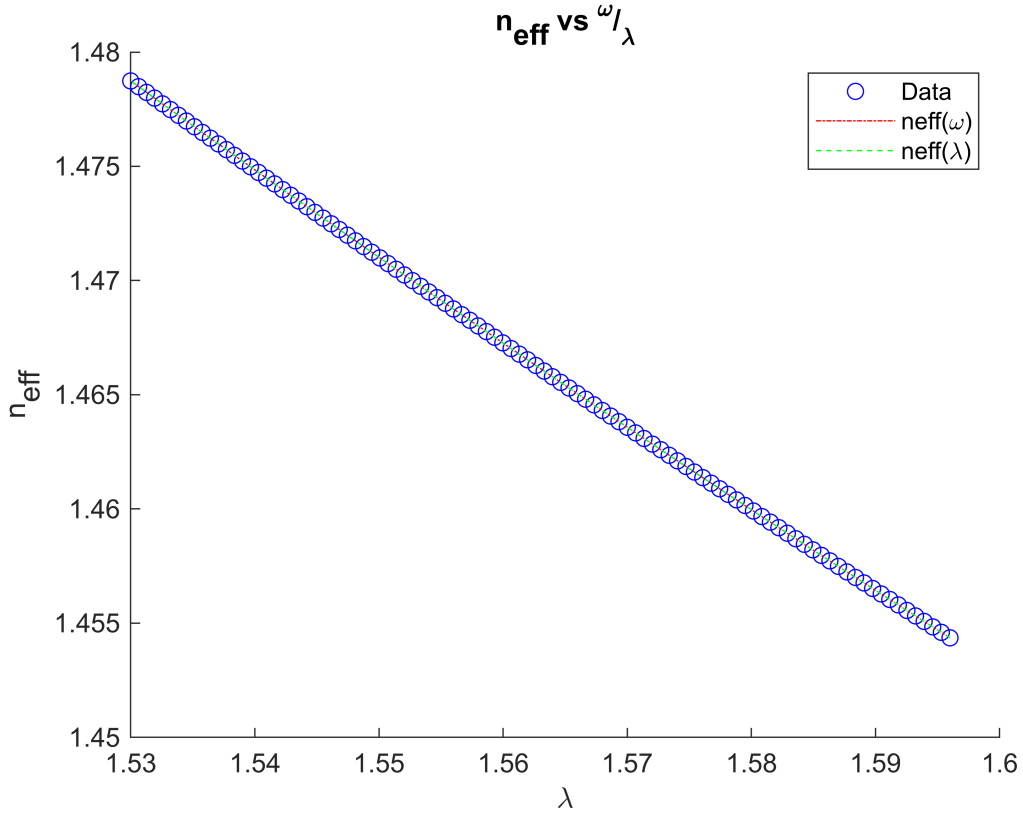
Fundamental Mode Data (1596nm):

Ranges:

```
Lambda Ranges: 1.53-1.596

Omega Ranges: 1181049869.7706-1231997119.0548
```

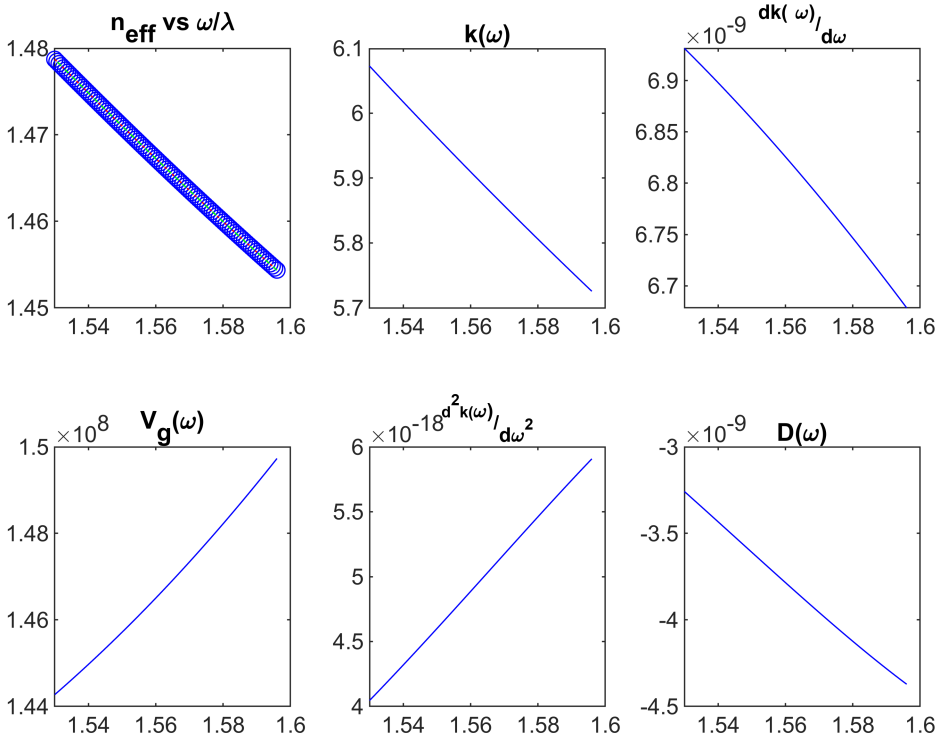
Neff vs ω/λ

```
Function neff(λ):

-0.000032618120069393180993251591*l.^30+0.00016018385044980201965293675 8*l.^29-0.000165516382843027400149221728*l.^2

Function neff(ω)

1.747346577041554230953220300498e-271*w.^30-7.662539294564936012074625087400e-262*w.^29+8.257018736675902781497804 71
```



Subfunctions (k, dw, Vg, d2w, D)

```
Function k(ω):
w.*(1.747346577041554230953220300498e-271*w.^30-7.662539294564936012074625087400e-262*w.^29+8.257018736675902781497
Function dk(ω)/dω:
(1.747346577041554230953220300498e-271*w.^30*(31)-7.662539294564936012074625087400e-262*w.^29*(30)+8.25701873667590
Function Vg(ω):
(3*10^8)./(1.747346577041554230953220300498e-271*w.^30*(31)-7.662539294564936012074625087400e-262*w.^29*(30)+8.2570
Function d2k(ω)/dω:
(1.747346577041554230953220300498e-271*w.^29*(930)-7.662539294564936012074625087400e-262*w.^28*(870)+8.257018736675
Function D(ω):
-(w.^2/(2*pi*3*10^8)).*((1.747346577041554230953220300498e-271*w.^29*(930)-7.662539294564936012074625087400e-262*w.^
```



Superior Mode Data (530nm):

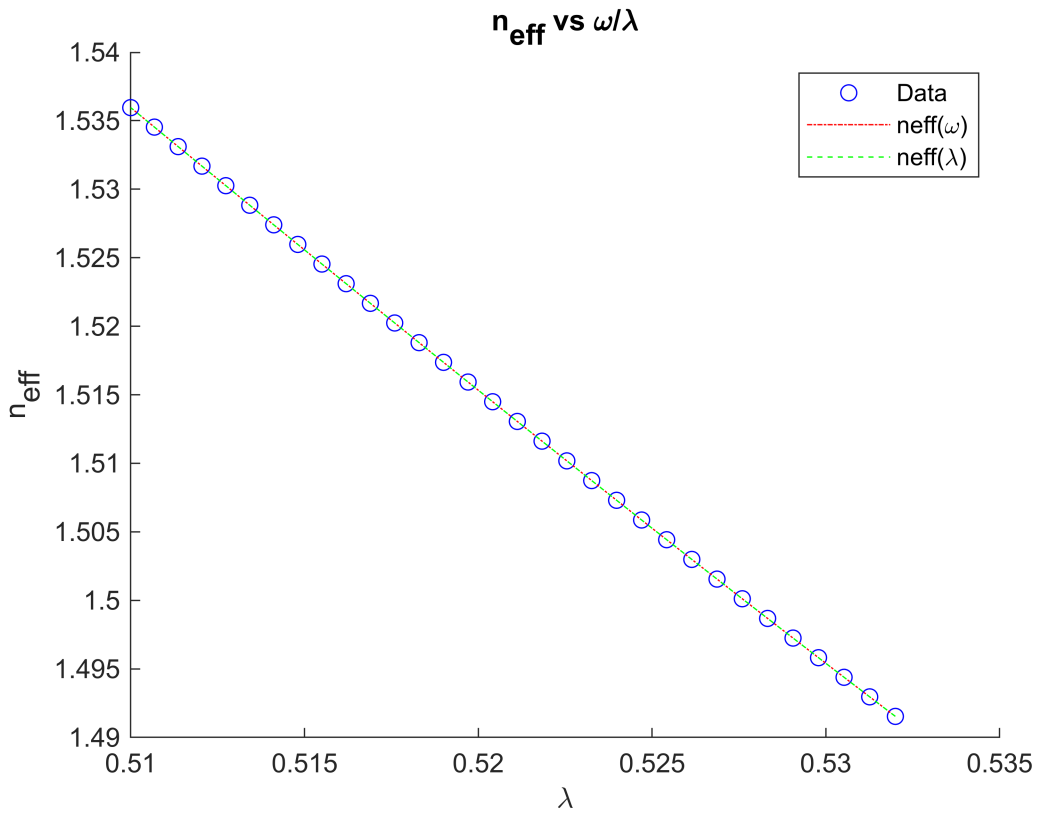
Ranges:

```
Lambda Ranges: 0.51-0.532
Omega Ranges: 3543149609.3118-3695991357.1645
```

Neff vs ω/λ

```
Function neff(λ):
-5742622197979.337890625000000000000000000000*l.^30+171800007180023.595703125000000000000000000000*l.^29-198176298711
Function neff(ω):
```

8.372027009427822824801653302857e-283*w.^30-8.775337957019159296477410024564e-273*w.^29+2.733287150569474210475034



Subfunctions (k, dw, Vg, d2w, D)

Function k(ω):

w.*(8.372027009427822824801653302857e-283*w.^30-8.775337957019159296477410024564e-273*w.^29+2.7332871505694742104750

Function dk(ω)/dω:

(8.372027009427822824801653302857e-283*w.^30*(31)-8.775337957019159296477410024564e-273*w.^29*(30)+2.733287150569474

Function Vg(ω):

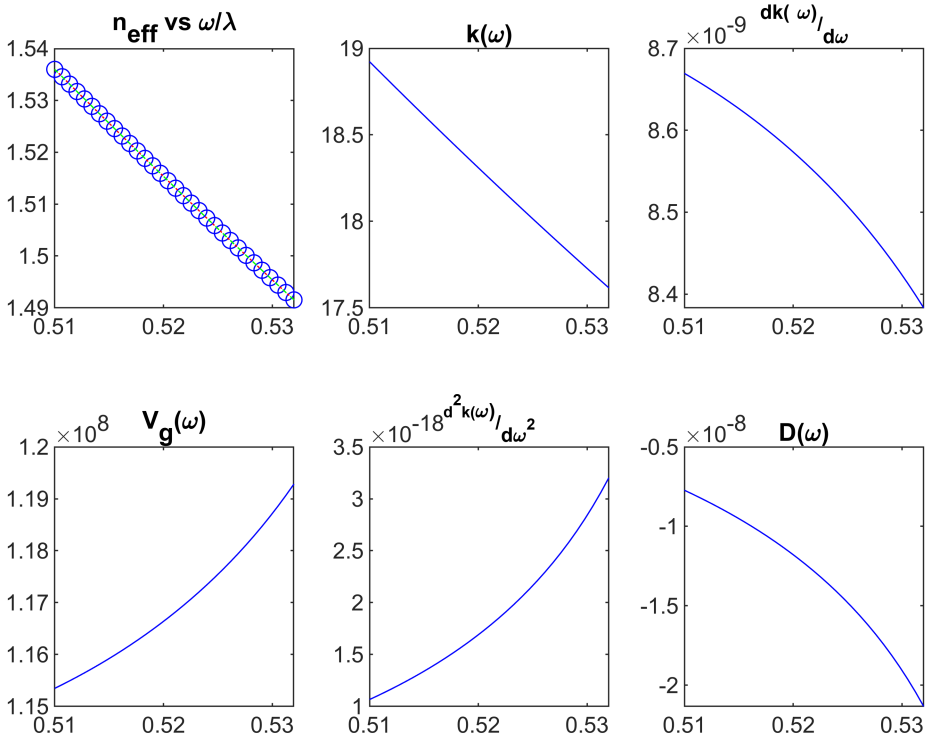
(3*10^8)./(8.372027009427822824801653302857e-283*w.^30*(31)-8.775337957019159296477410024564e-273*w.^29*(30)+2.73328

Function d2k(ω)/dω2:

(8.372027009427822824801653302857e-283*w.^29*(930)-8.775337957019159296477410024564e-273*w.^28*(870)+2.733287150569

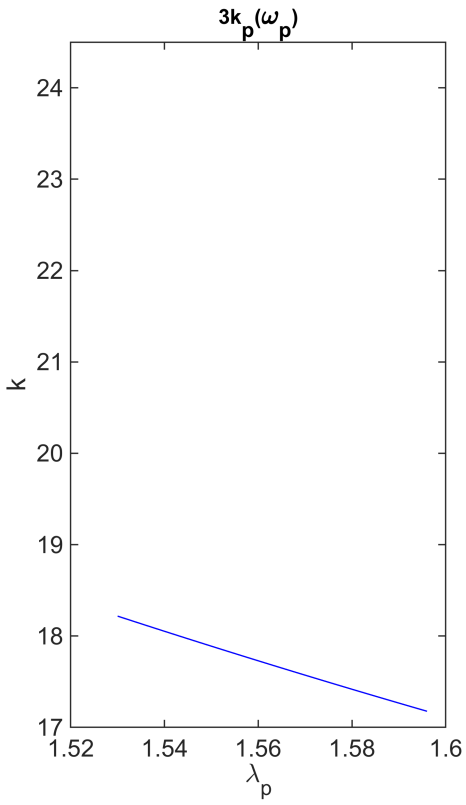
Function D(ω):

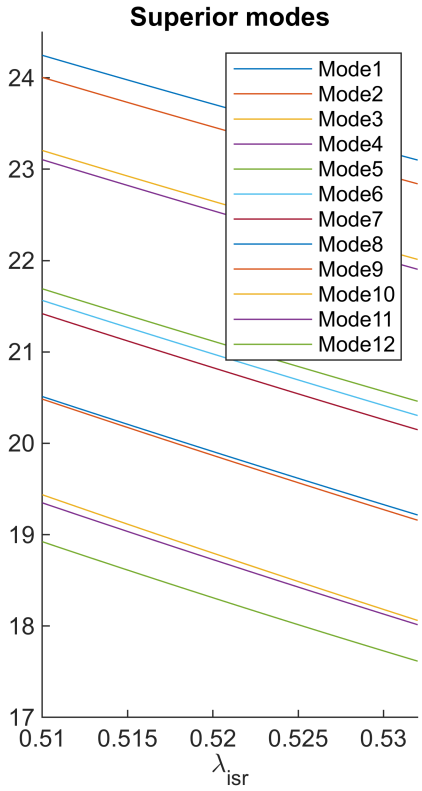
-(w.^2/(2*pi*3*10^8)).*((8.372027009427822824801653302857e-283*w.^29*(930)-8.775337957019159296477410024564e-273*w.^



Load Waveguide Simple:

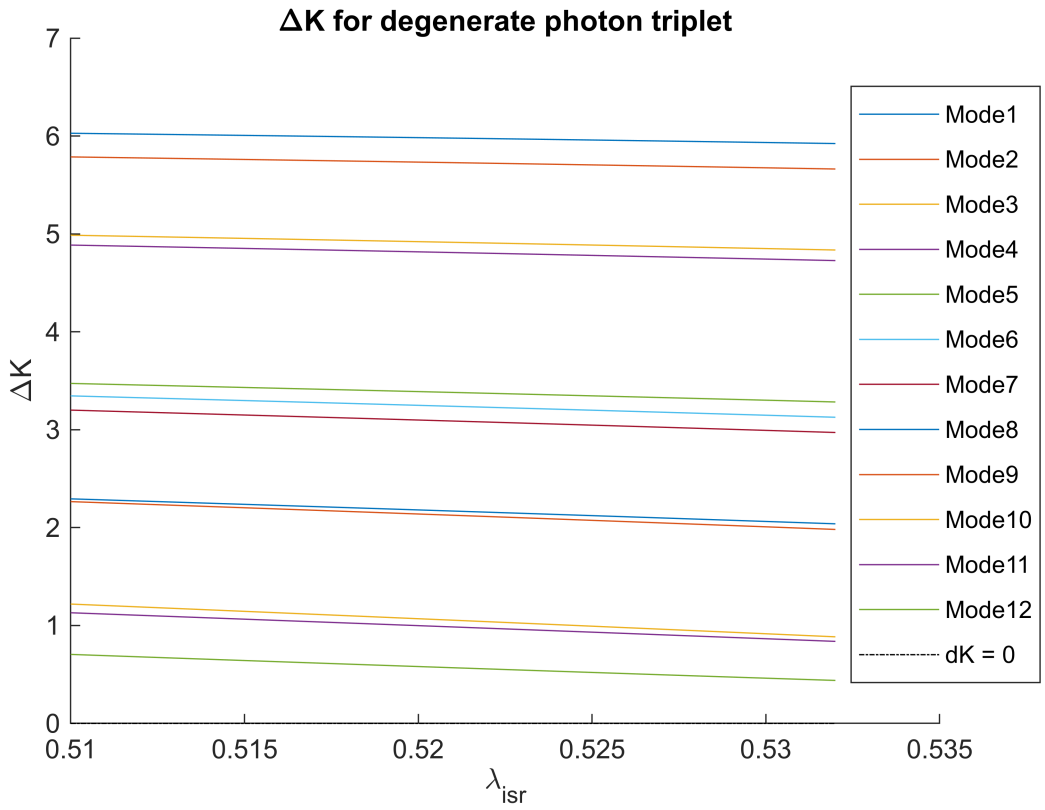
K's comparing





Find degenerate photon that allow momentum and energy conservation

```
Ningun modo con dK=0
```



Phase Matching

Pump wavelength: 0.51-0.532

Photon wavelength: 1.53-1.596

Waveguide 405x730 with λ_i = 1.53