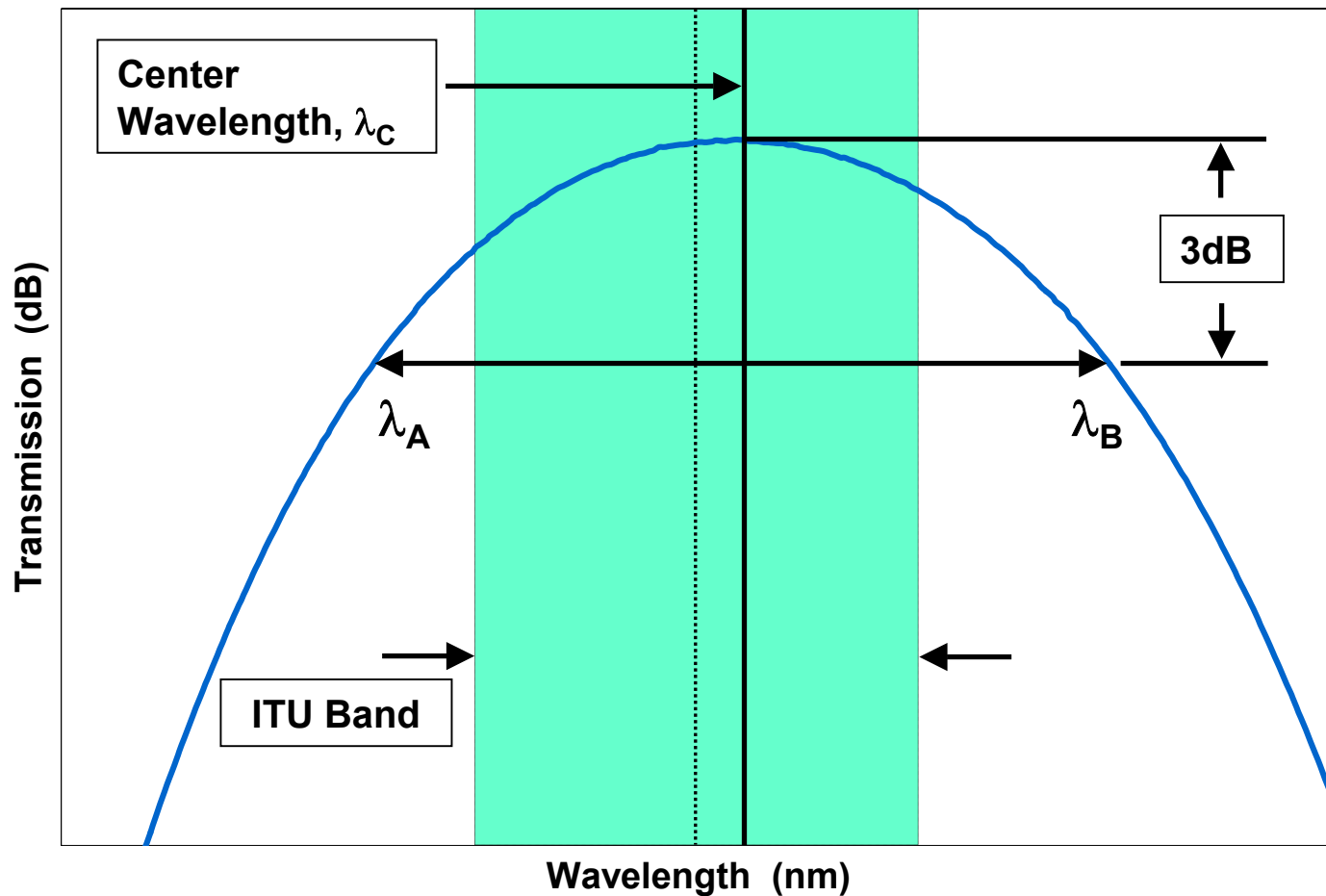


Center Wavelength, λ_c (f_c)

Defined as the center of the 3dB passband: $\lambda_c = (\lambda_A + \lambda_B)/2$

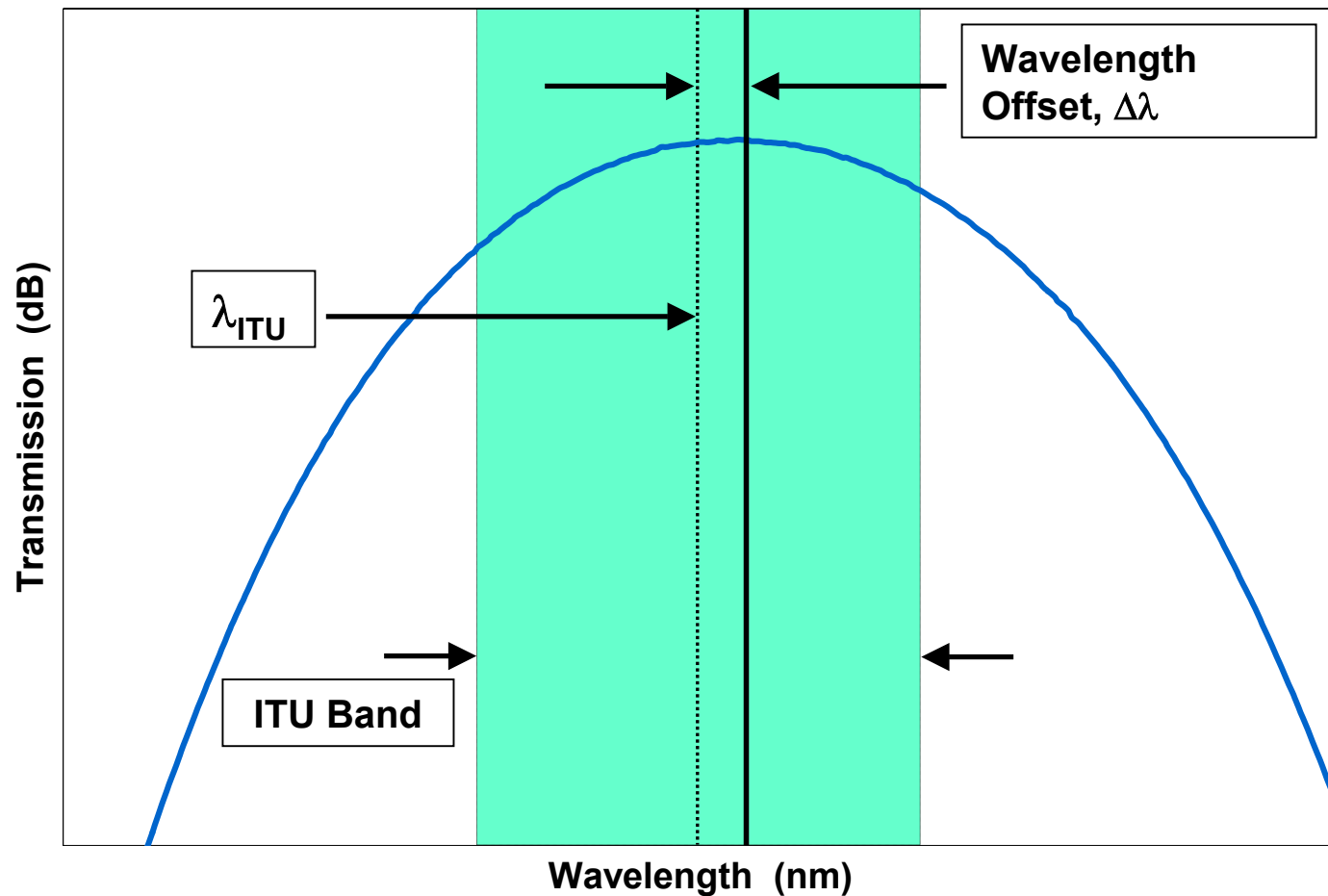
Can be expressed in nm (wavelength) or THz (frequency).



Wavelength Offset, $\Delta\lambda$ (Δf)

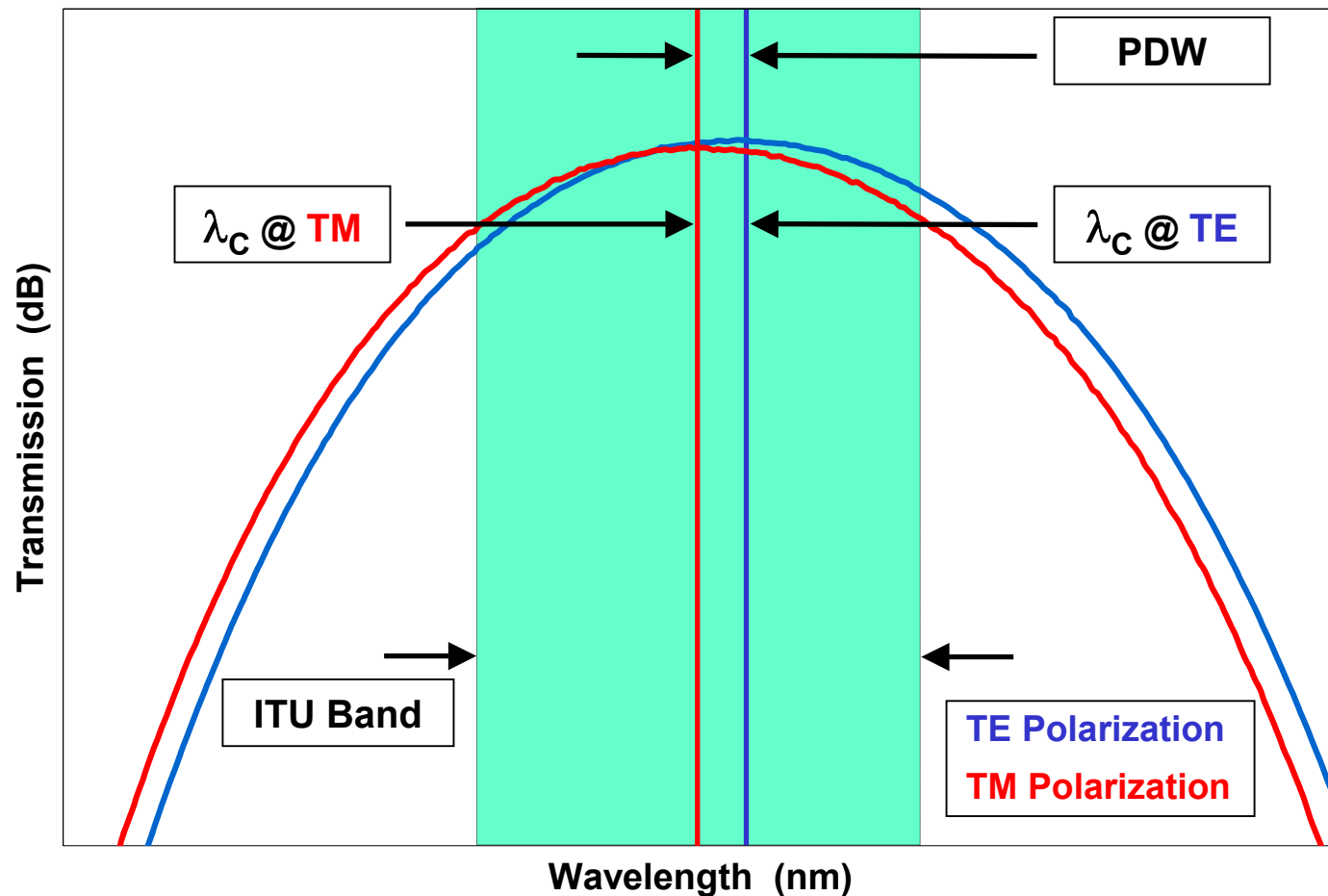
Defined as the difference between the ITU Wavelength, λ_{ITU} and the Center Wavelength, λ_C : $\Delta\lambda = \lambda_{ITU} - \lambda_C$

Can be expressed in nm (wavelength) or THz (frequency).



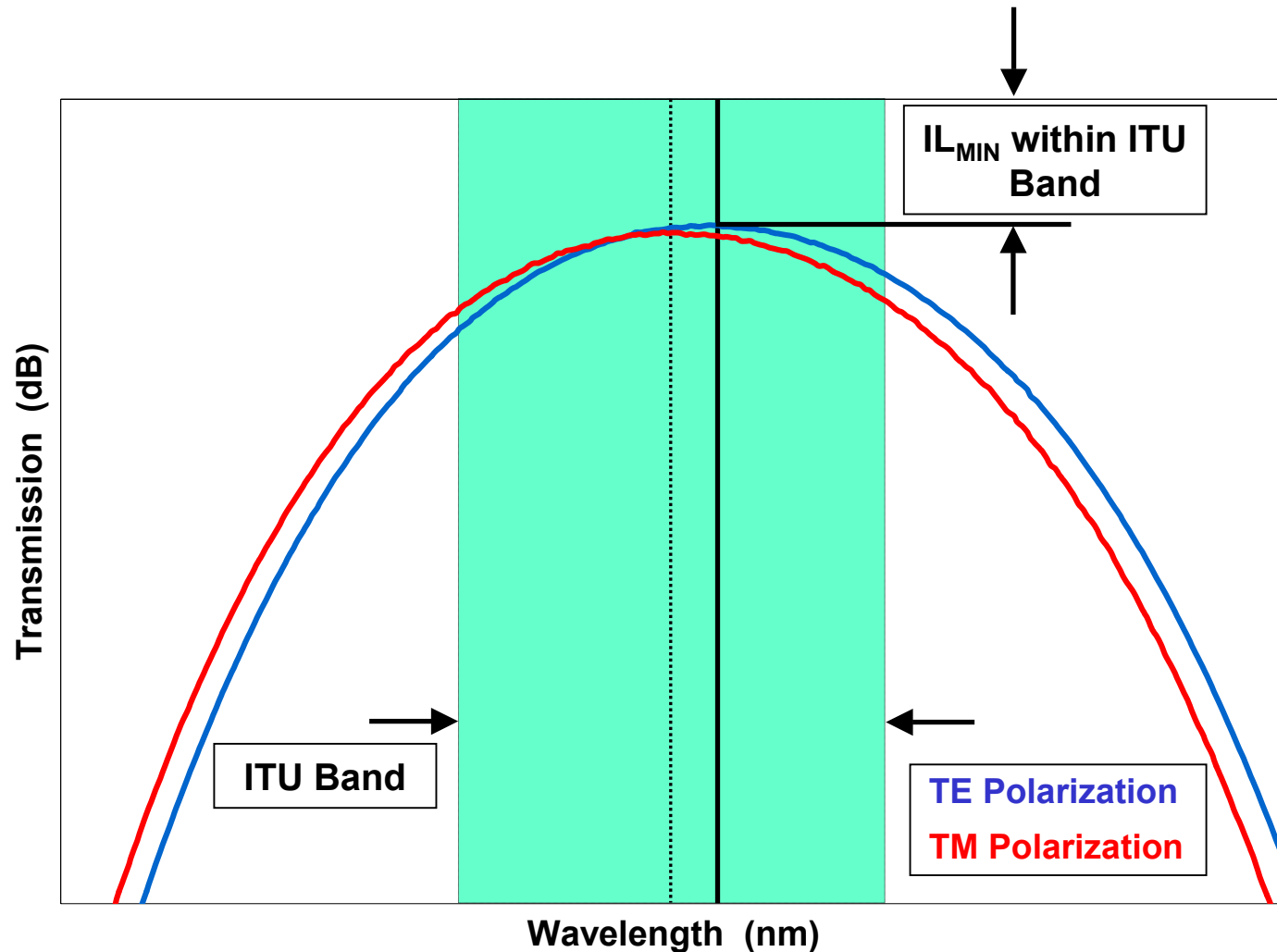
Polarization Dependent Wavelength, PDW

Defined as the difference between the center wavelengths for TE and TM polarizations: $PDW = |\lambda_C @ TE - \lambda_C @ TM|$



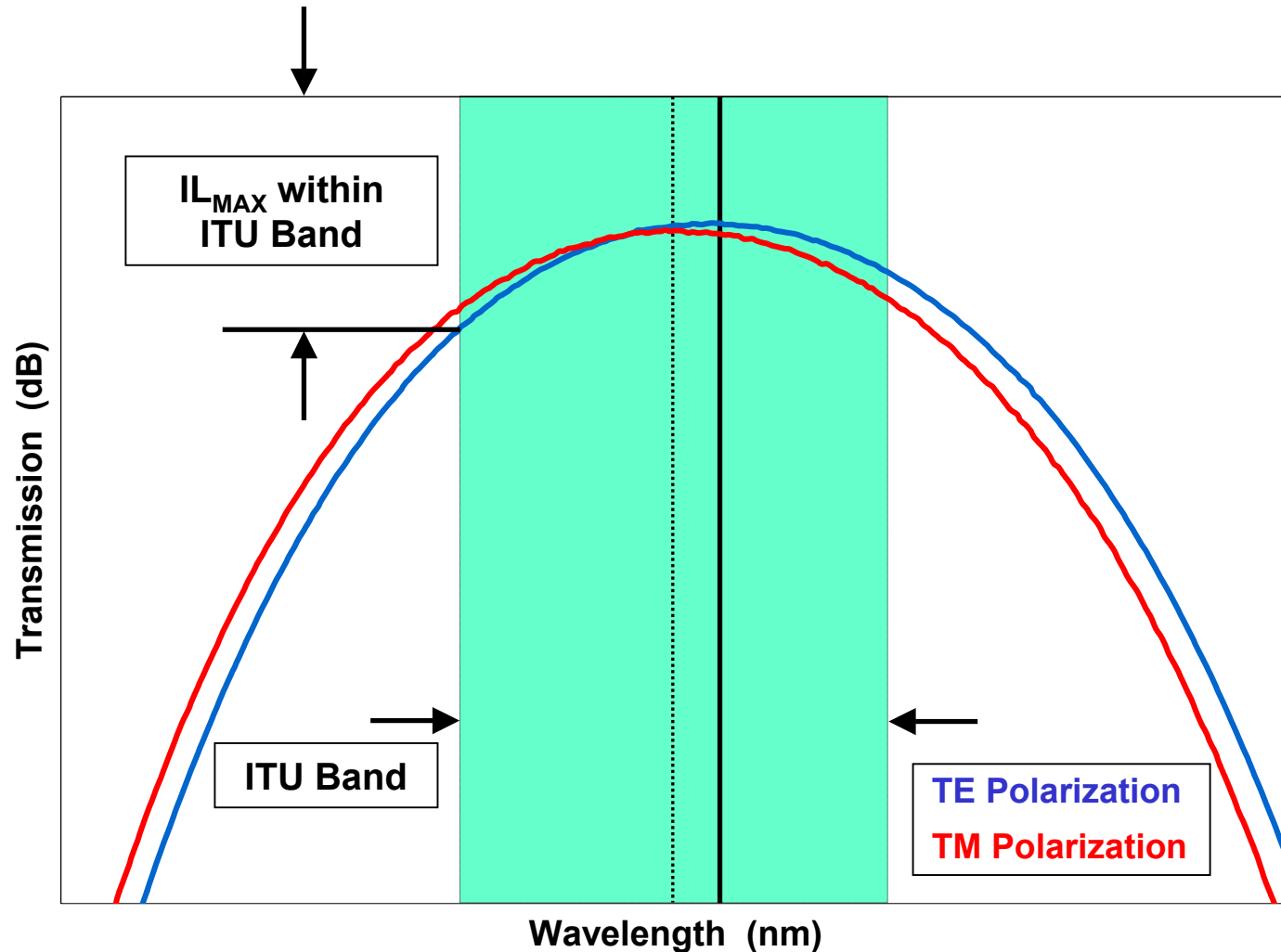
Insertion Loss, IL_{MIN}

Defined as the minimum loss (maximum transmission) within the ITU Passband over all polarizations states.



Insertion Loss, IL_{MAX}

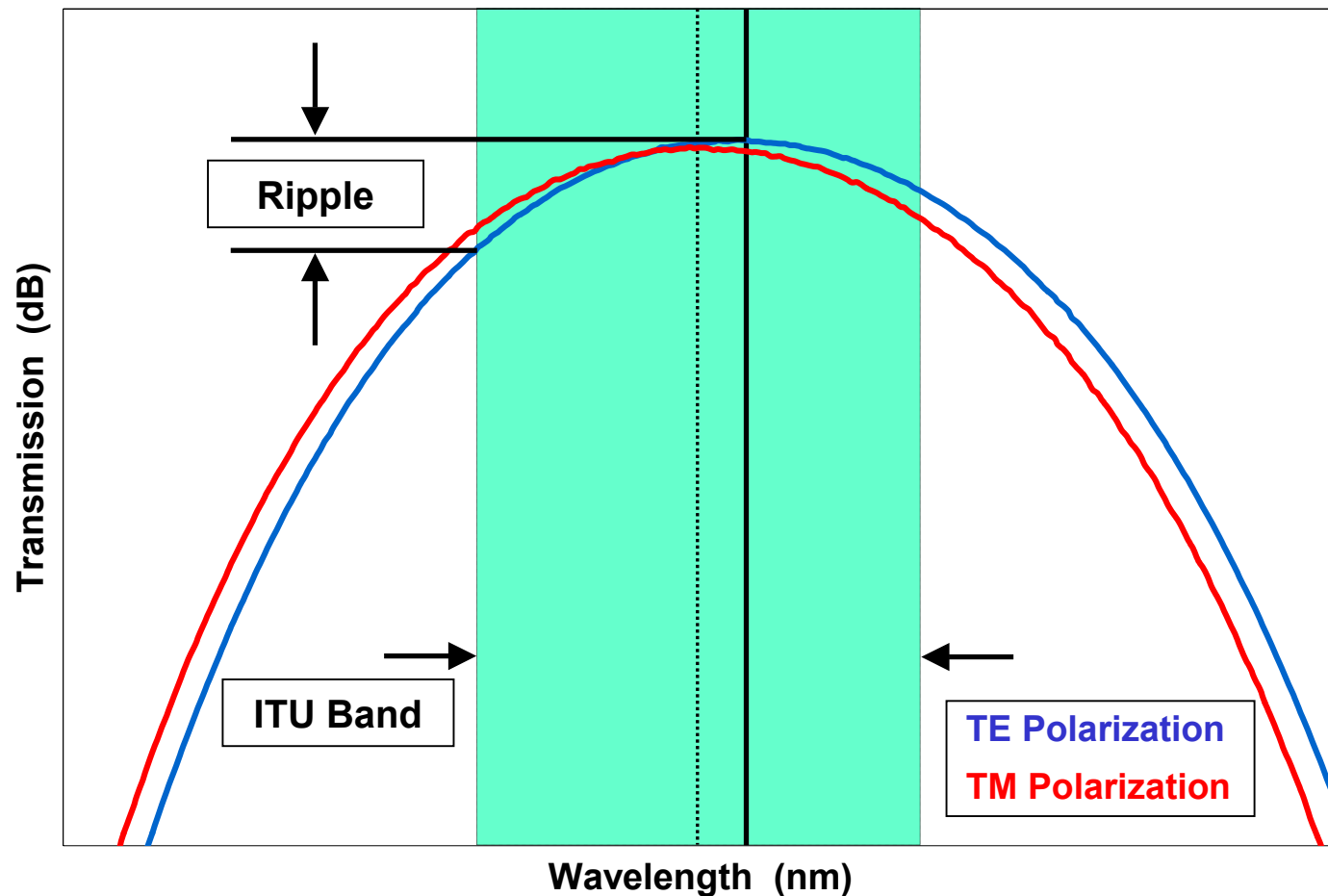
Defined as the maximum loss (minimum transmission) within the ITU Passband over all polarizations states.



Ripple, R

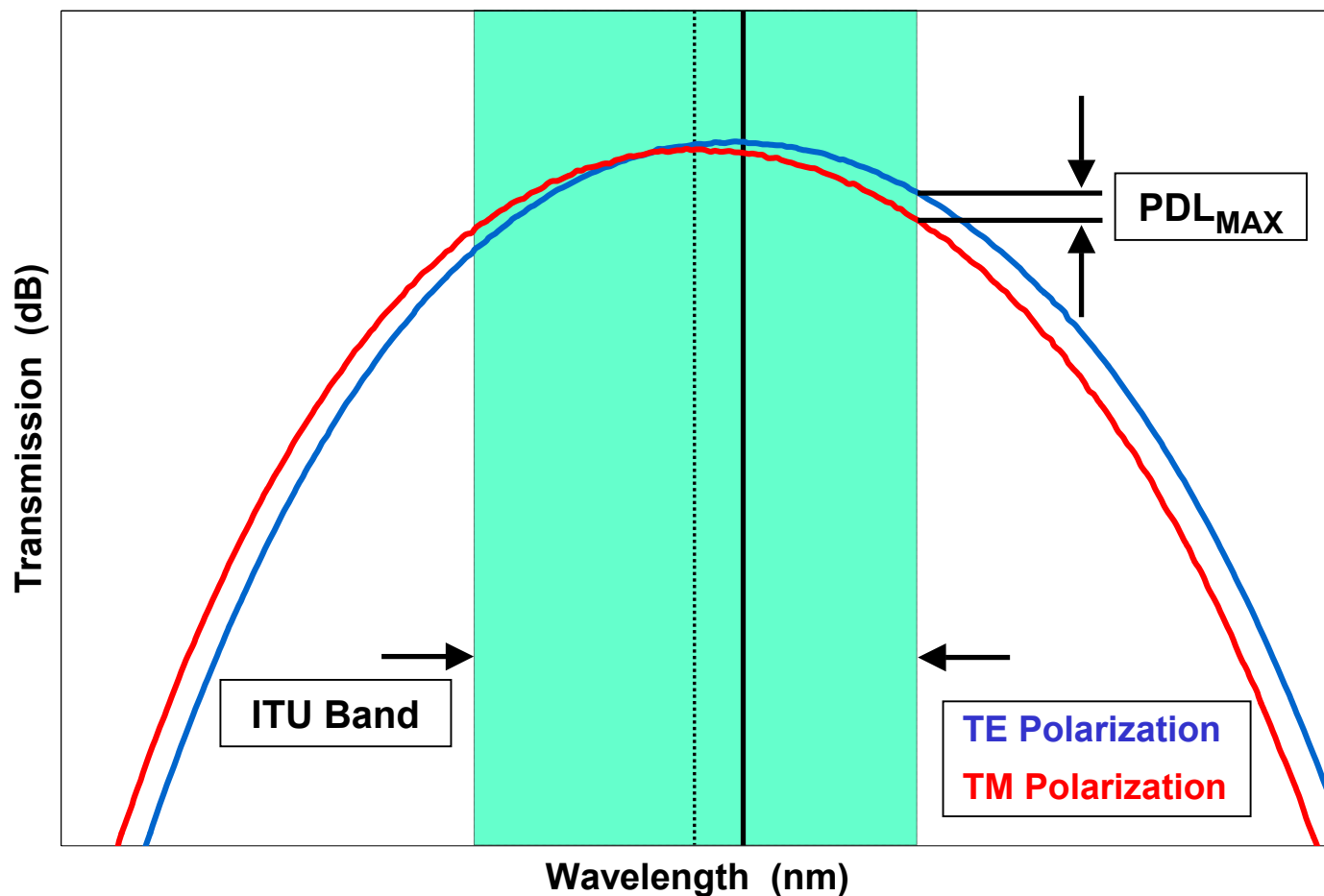
Defined as the difference between IL_{MAX} and IL_{MIN} within ITU Passband over all polarization states.

$$\text{Ripple} = R = IL_{MAX} - IL_{MIN}$$



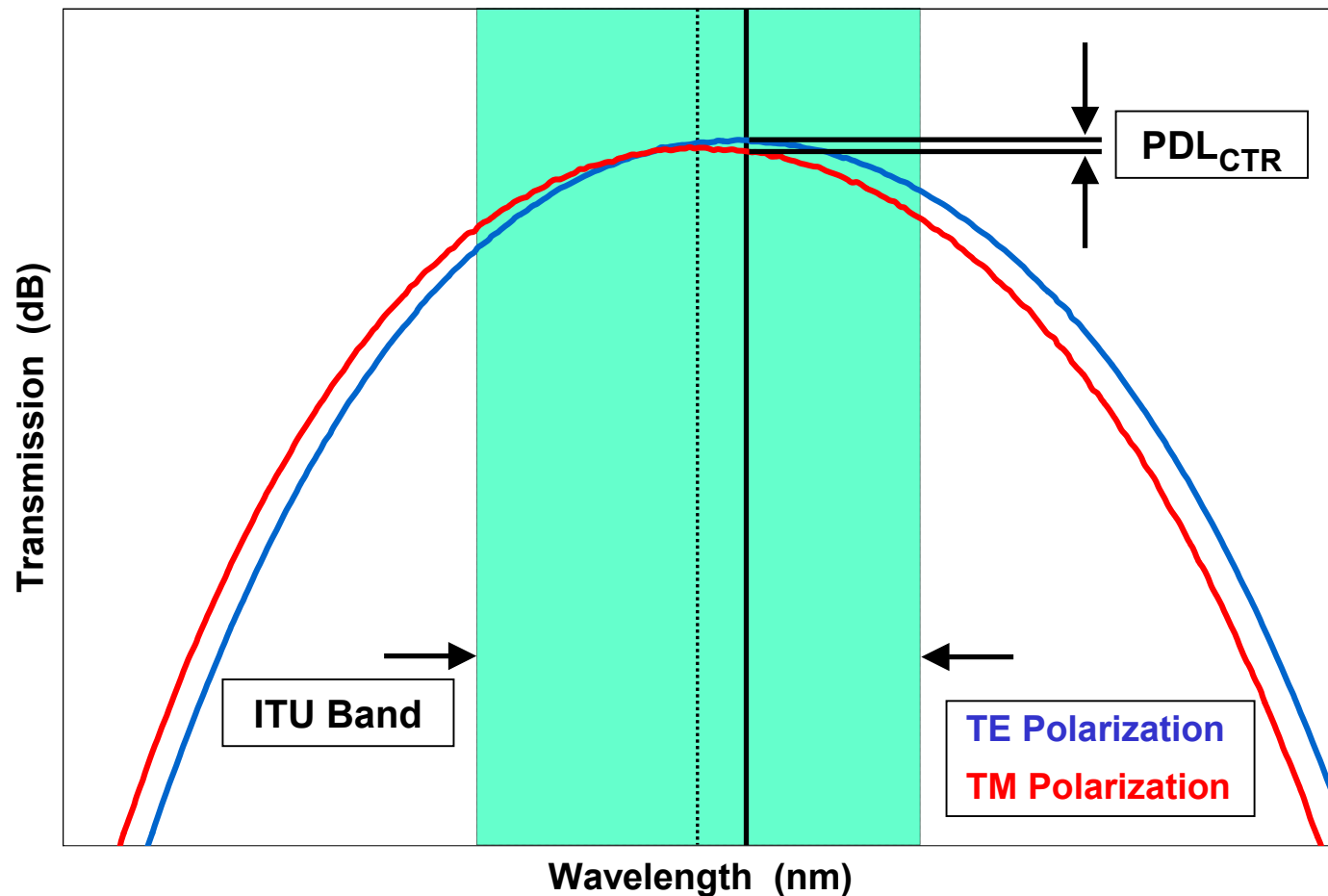
Polarization Dependent Loss, PDL_{MAX}

Defined as the maximum difference in IL between TE and TM polarization within the ITU Passband.



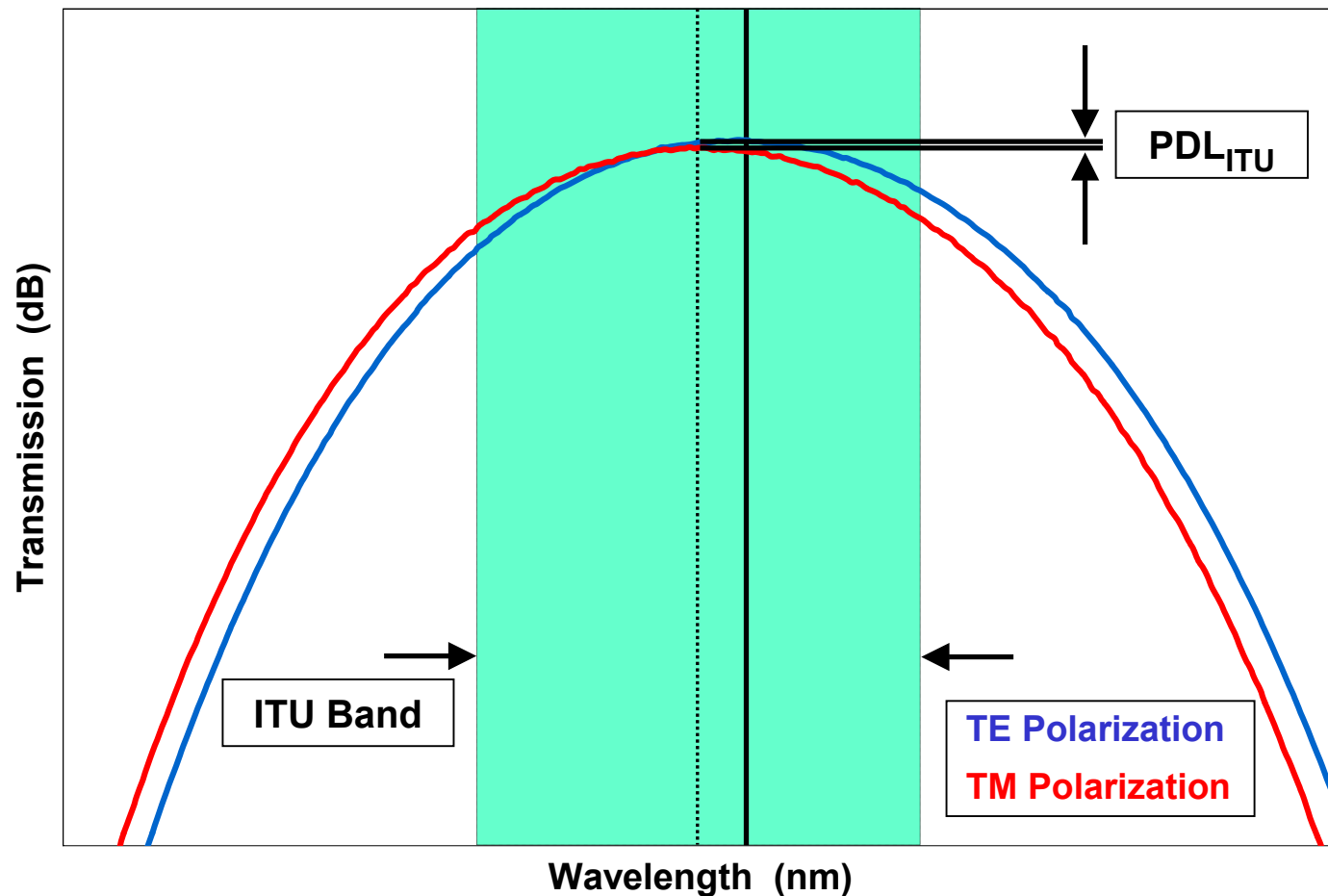
Polarization Dependent Loss, PDL_{CTR}

Defined as the difference in IL between TE and TM polarization at the center wavelength.



Polarization Dependent Loss, PDL_{ITU}

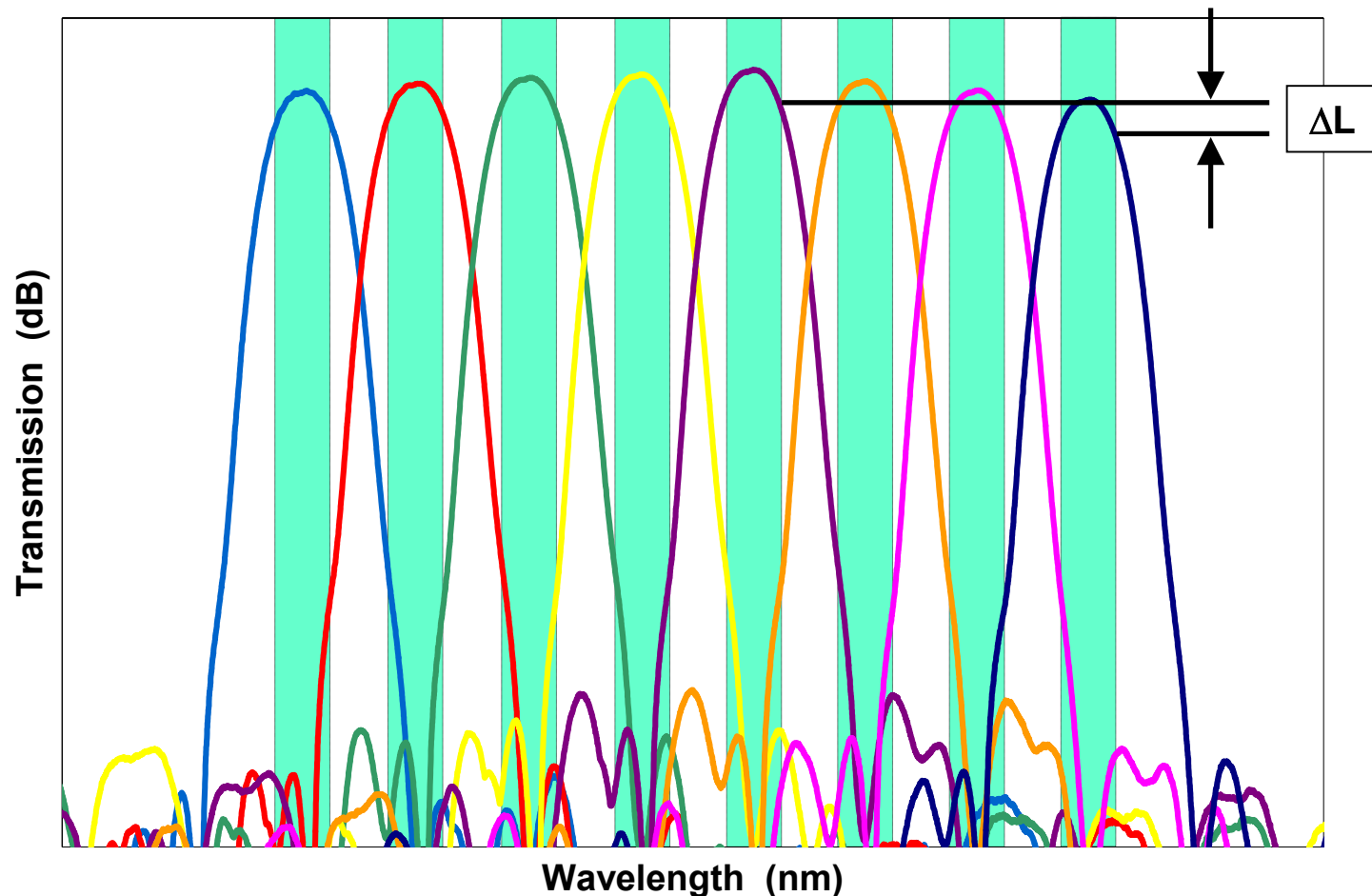
Defined as the difference in IL between TE and TM polarization at the ITU frequency.



Uniformity, ΔL

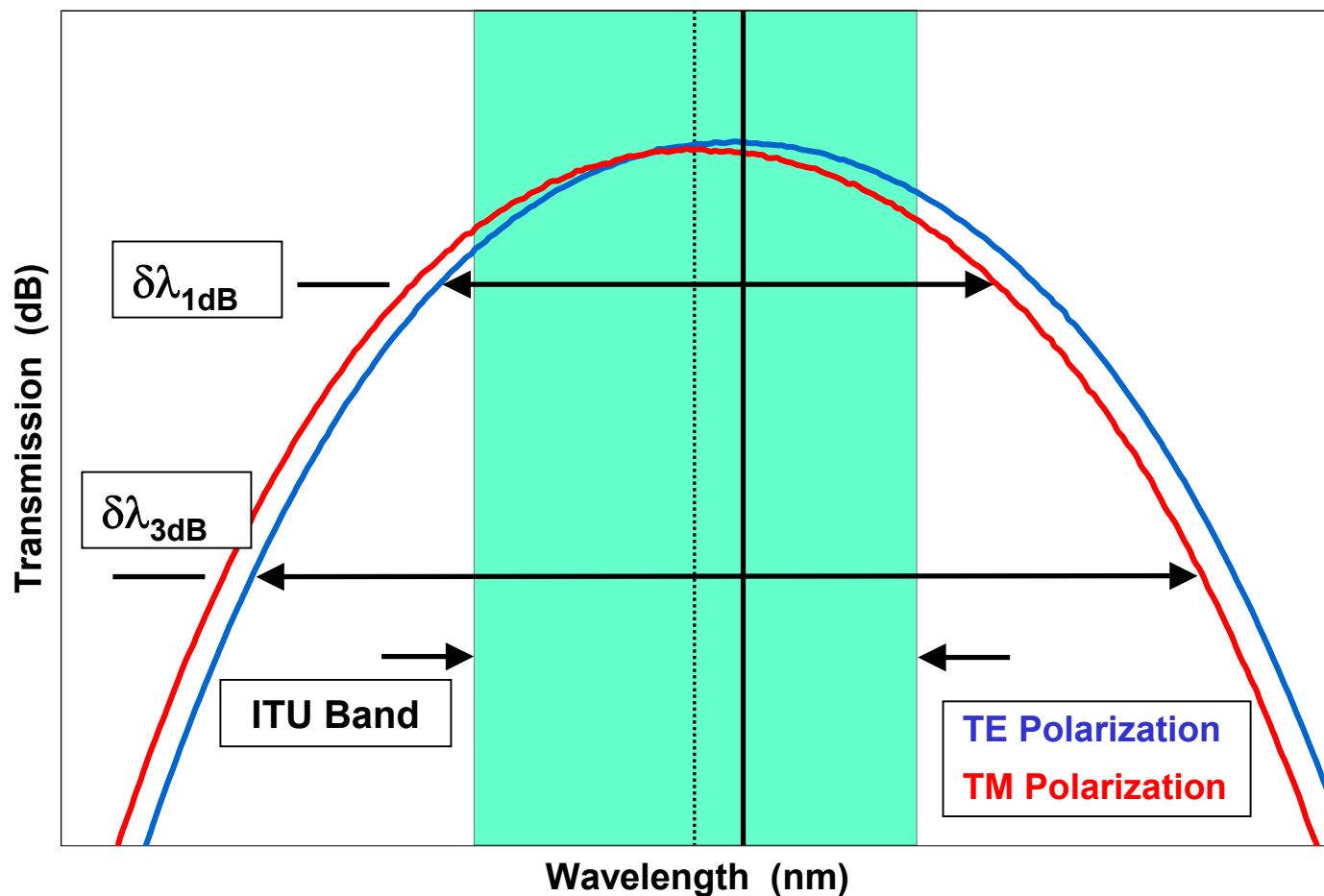
Defined as the maximum difference between IL_{MAX} across all channels.

$$\Delta L = \text{Max}(IL_{MAX}) - \text{Min}(IL_{MAX})$$



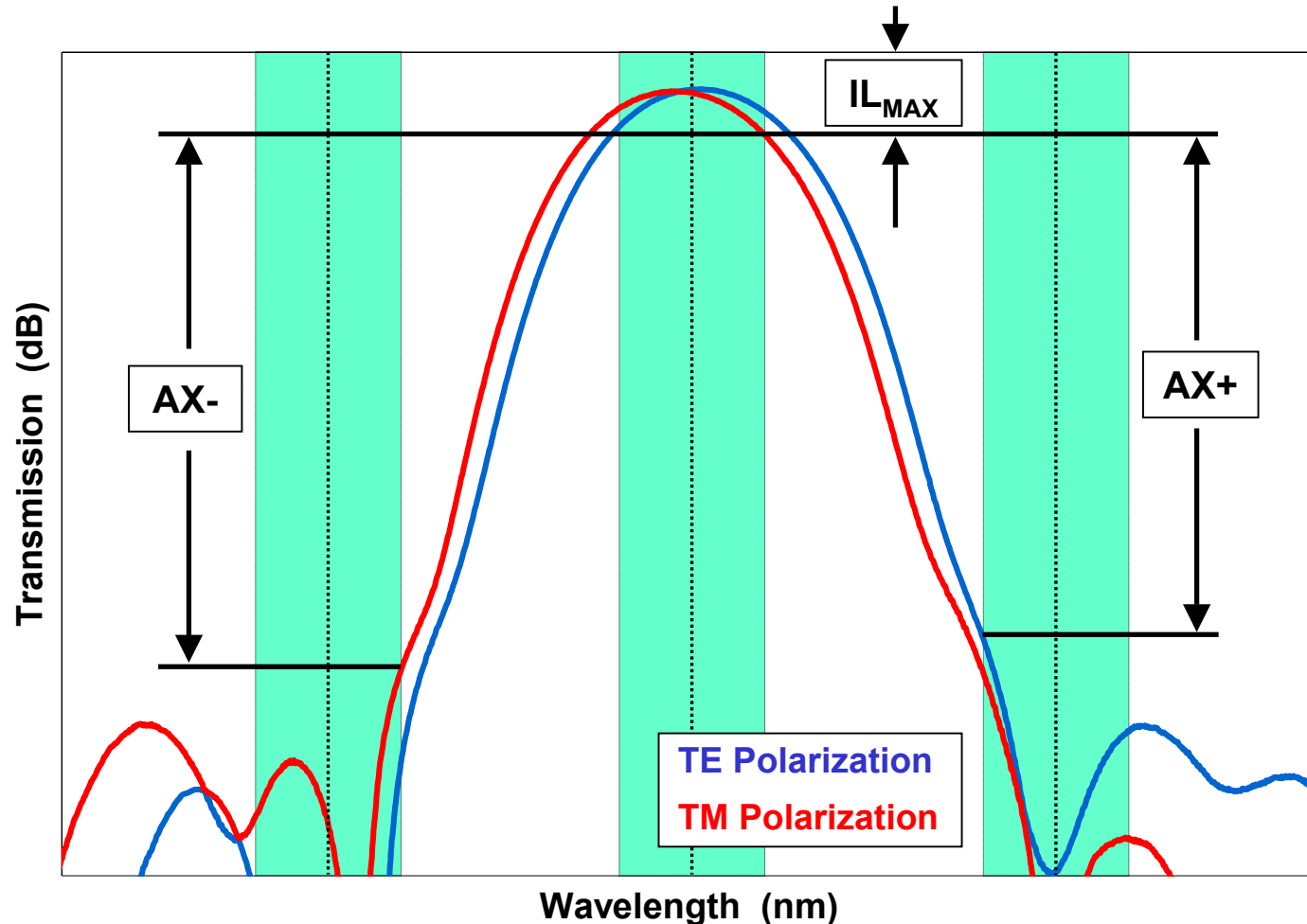
Passband, $\delta\lambda_{1\text{dB}}$, $\delta\lambda_{3\text{dB}}$

Defined as the minimum effective bandwidth 1dB (3dB) down from peak transmission (i.e. taking into account the PDW).



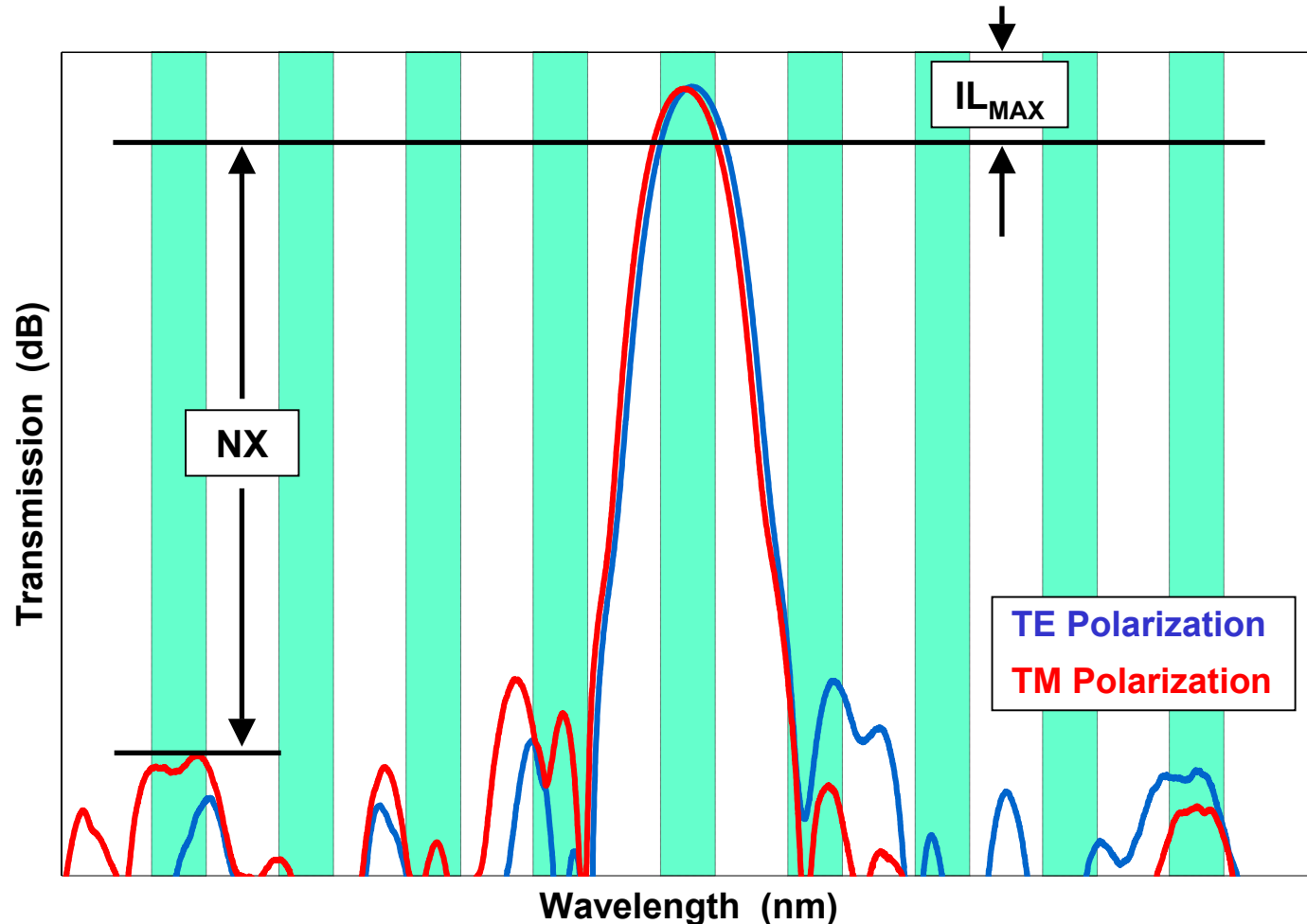
Adjacent Channel Crosstalk, AX-, AX+

Defined as the difference between maximum loss in passband and maximum transmission in adjacent channel passbands (AX- and AX+).



Non-Adjacent Channel Crosstalk, NX

Defined as the difference between maximum loss in passband and worst-case maximum transmission in all non-adjacent channel passbands.



Total Channel Crosstalk, TX

Defined as the cumulative sum of all adjacent channel and non-adjacent channel crosstalk values, at worst case polarization. Expressed in dB.

$$TX = 10 \cdot \log(\sum 10^{(X_{Ti}/10)}) \text{ [dB]}$$

