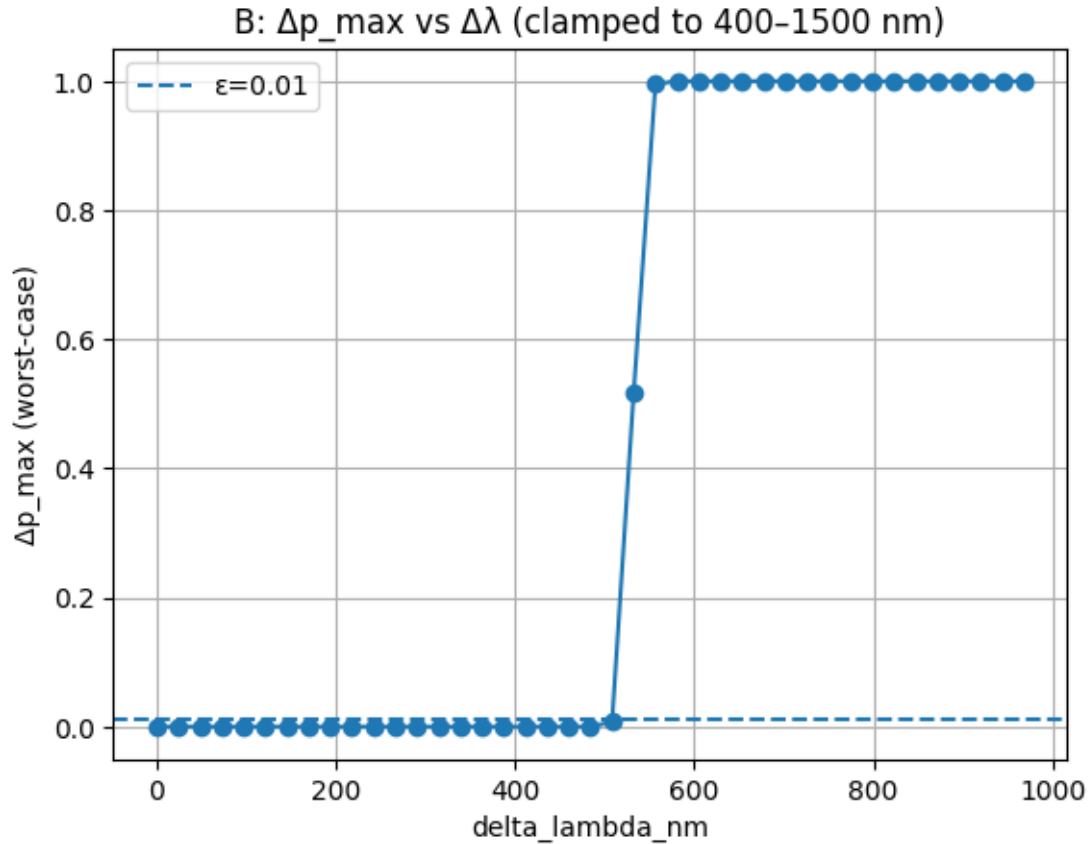
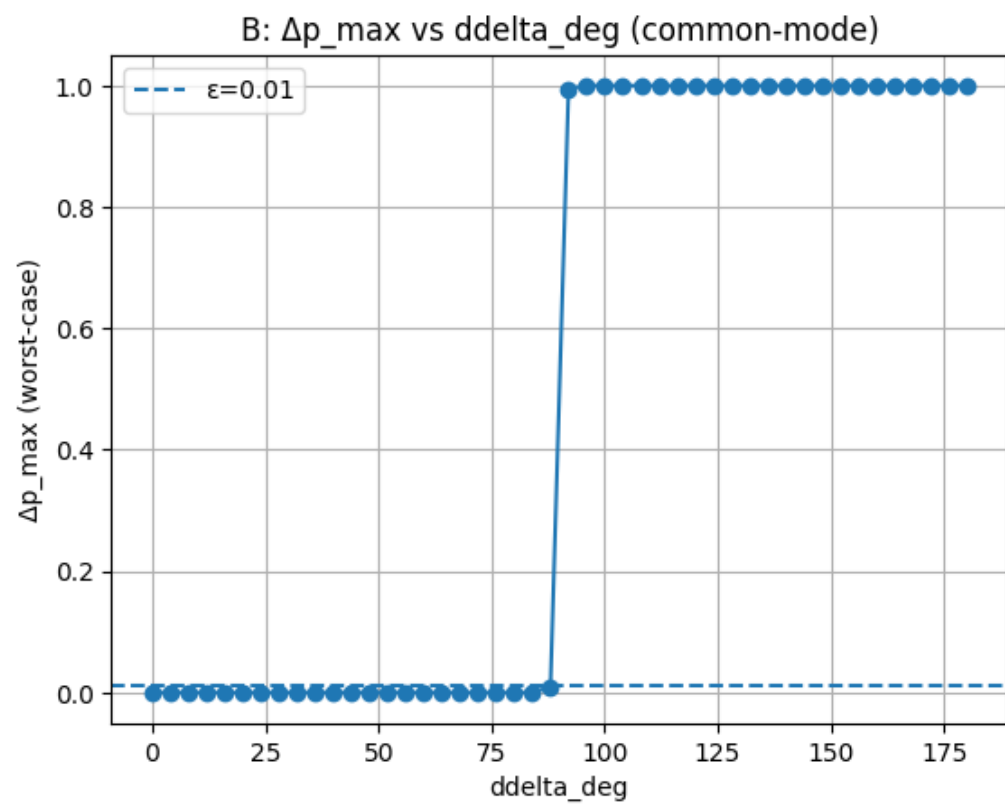
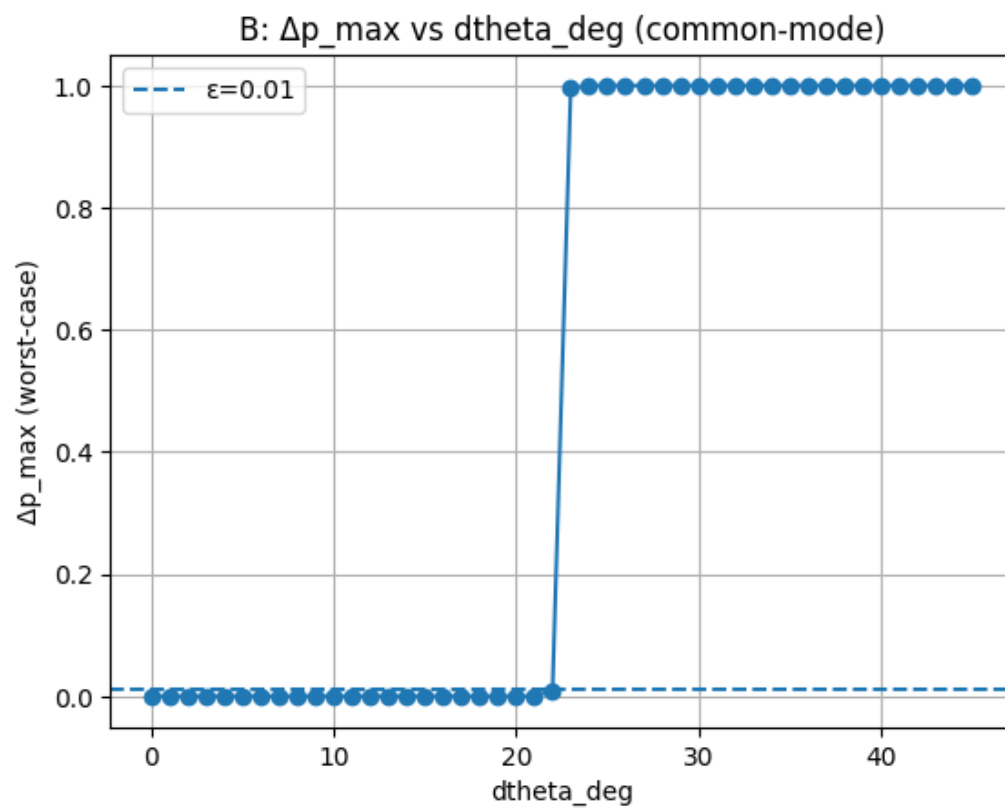
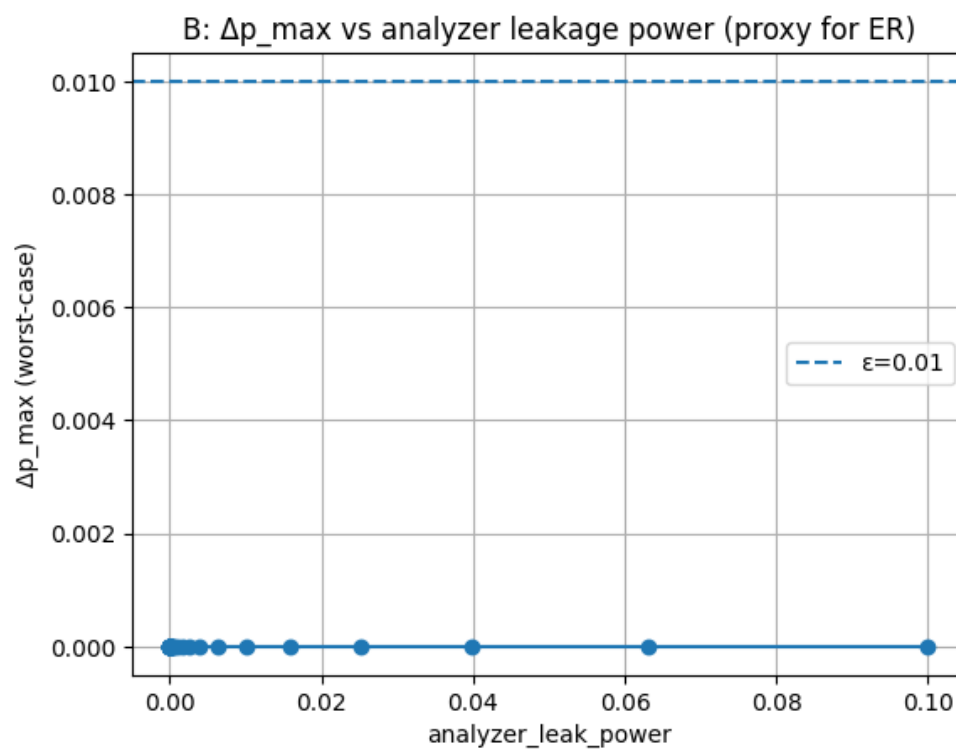
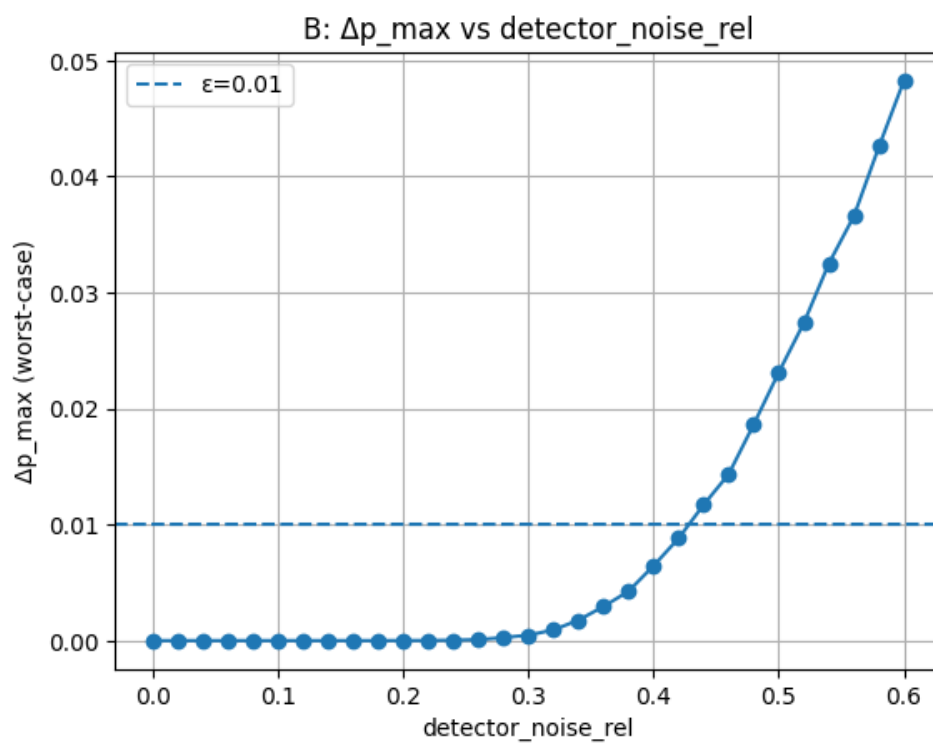


S3.1. Boundary analysis — Architecture B (Δp_{max} tolerance limits)

- Purpose: compute **limits of correct probability inversion** via worst-case Δp_{max} .
- Threshold: $\varepsilon = 1\%$.
- Outputs: tolerance table for $\Delta\lambda_{\text{max}}$ (within 400–1500 nm), $\Delta\theta_{\text{max}}$, $|\Delta\delta|_{\text{max}}$, noise_max, ER_min.
- Notes: λ is scanned via $\Delta\lambda = |\lambda - \lambda_0|$ with clamping to [400,1500] nm; ER_min is searched in the “worsening” direction (leakage power).







	eps	lambda0_nm	delta_lambda_max_nm	dtheta_max_deg	ddelta_max_deg	\
0	0.01	532.0	509.358008	22.008789	88.0625	
	noise_max	analyzer_ER_min_dB				
0	0.43125	None				