

SUPPORTING INFORMATION

Reconstitution of rhodopsin into polymerizable planar supported lipid bilayers: Influence of dienoyl monomer structure on photoactivation

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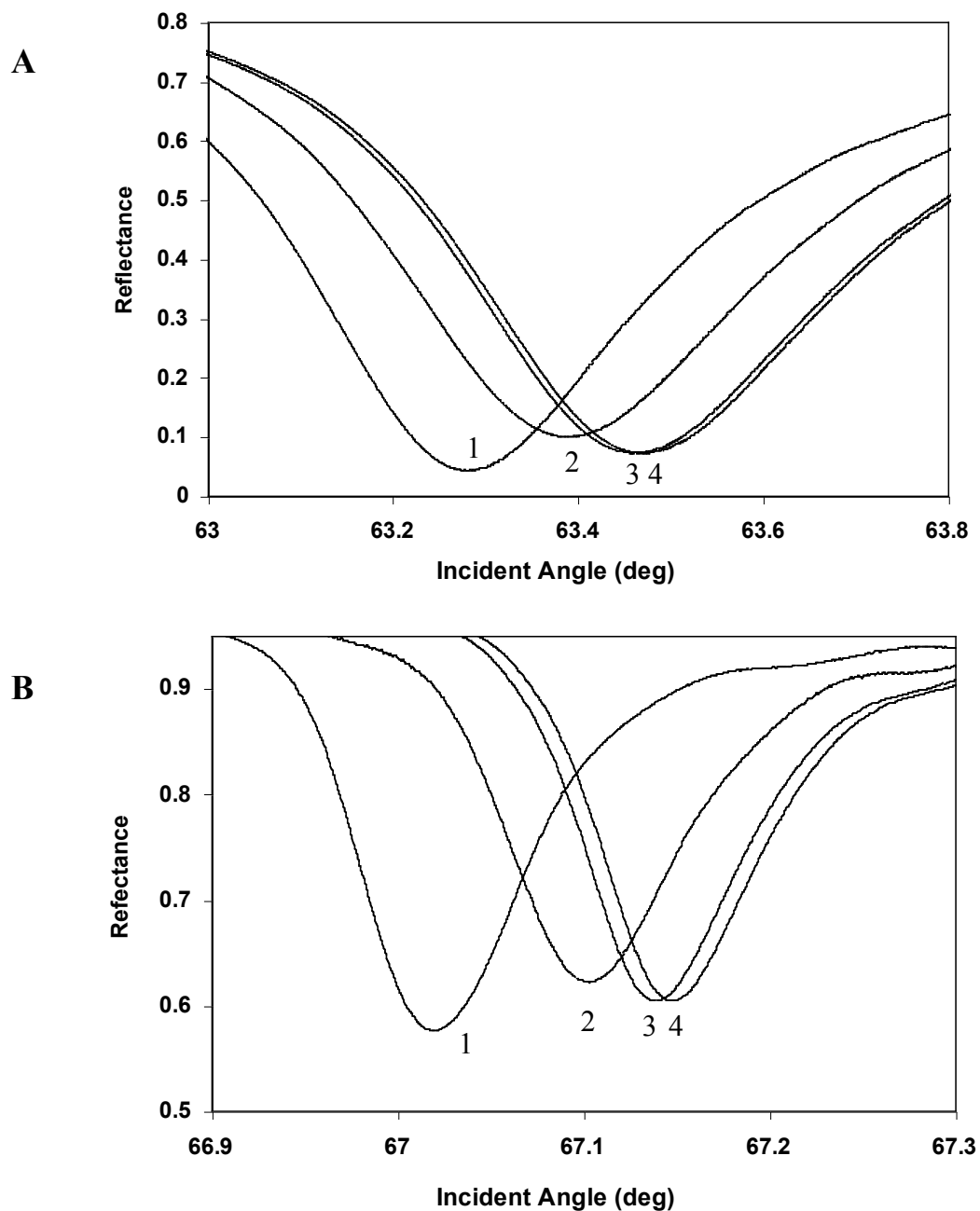


Figure S1. PWR curves (A, *p*-polarized; B, *s*-polarized) acquired at each stage of an experiment with an unpolymerized bilayer composed of bis-SorbPC:mono-SorbPC (1:1 (mol/mol)). Curve obtained with only buffer in the PWR cell (1), after PSLB formation (2), after Rho incorporation (3), and after yellow light activation of Rho at pH 5.5 and 25 ± 1 °C (4).

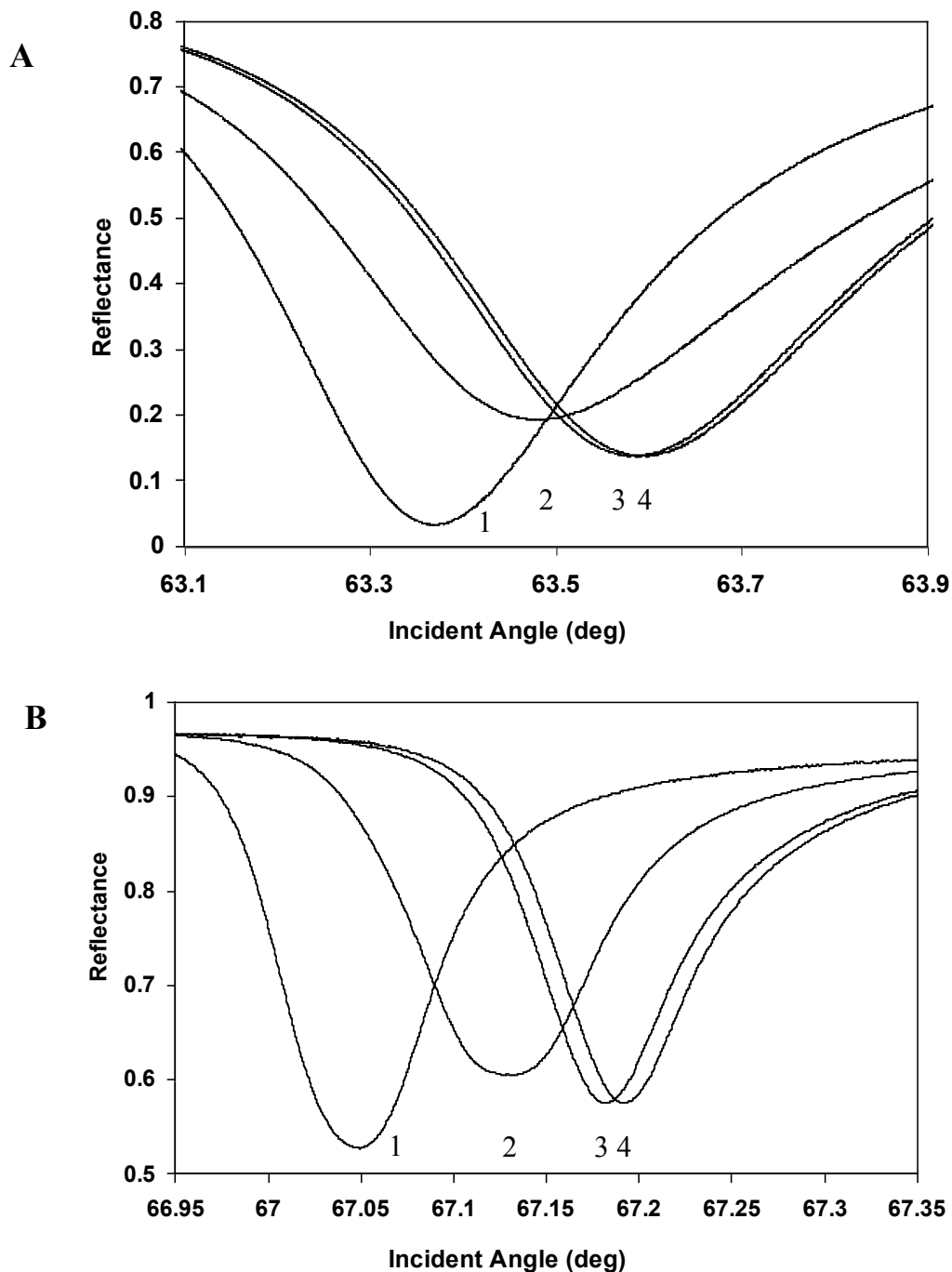


Figure S2. PWR curves (A, *p*-polarized; B, *s*-polarized) acquired at each stage of an experiment with an unpolymerized mono-SorbPC bilayer. Curve obtained with only buffer in the PWR cell (1), after PSLB formation (2), after Rho incorporation (3), and after yellow light activation of Rho at pH 5.5 and 25 ± 1 °C (4).

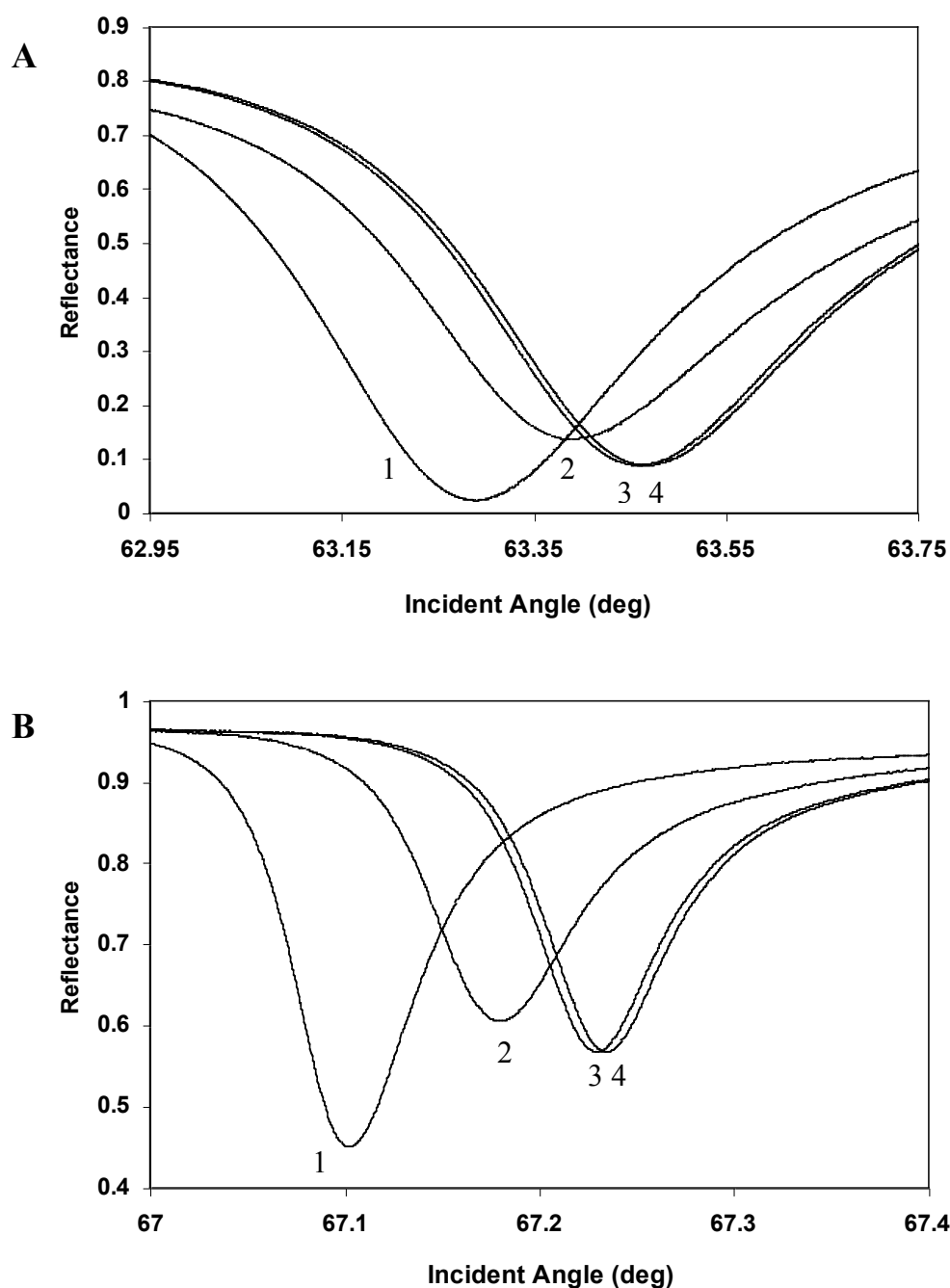


Figure S3. PWR curves (A, *p*-polarized; B, *s*-polarized) acquired at each stage of an experiment with an unpolymerized bis-DenPC bilayer. Curve obtained with only buffer in the PWR cell (1), after PSLB formation (2), after Rho incorporation (3), and after yellow light activation of Rho at pH 5.5 and 25 ± 1 °C (4).

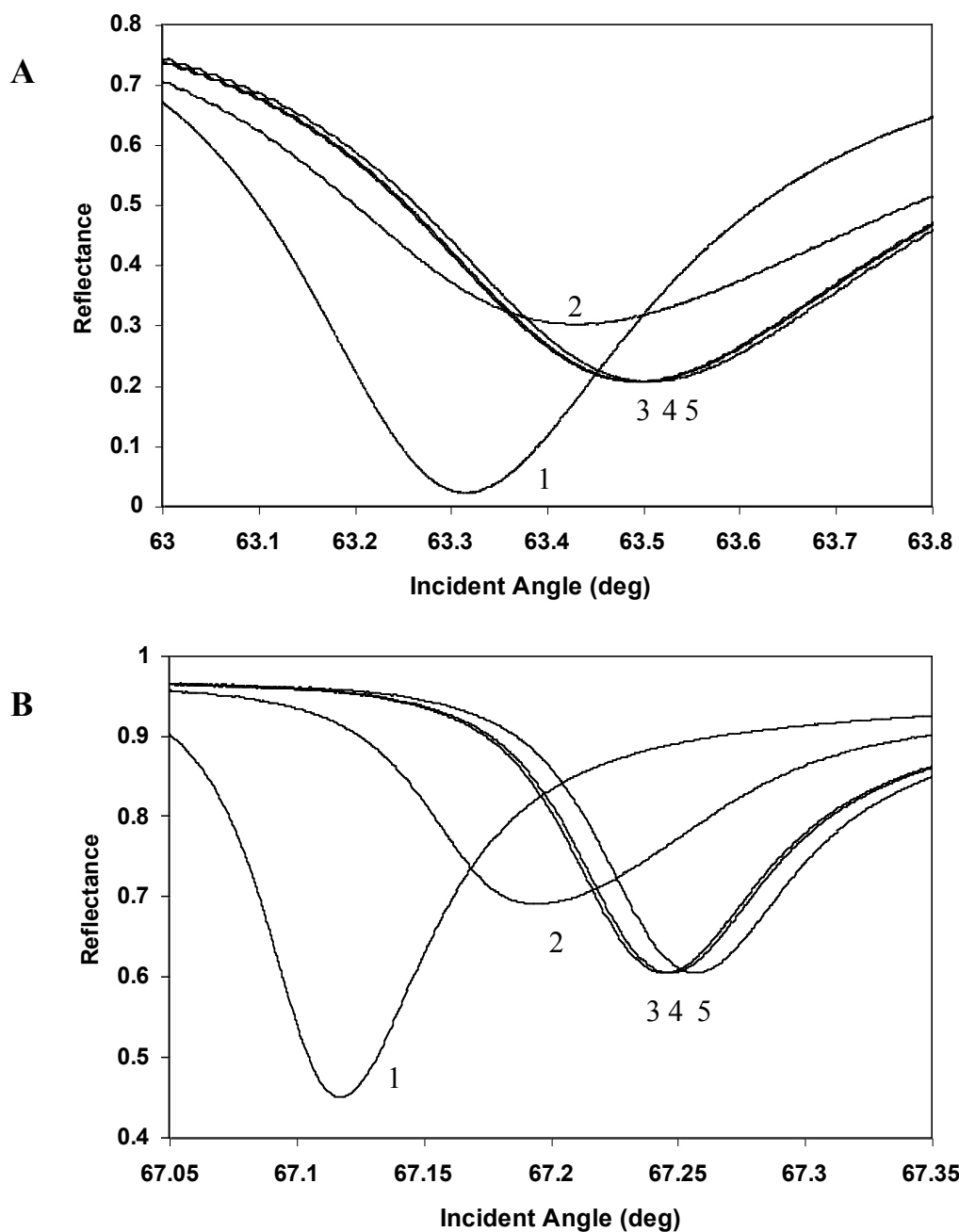


Figure S4. PWR curves (A, *p*-polarized; B, *s*-polarized) acquired at each stage of an experiment with a poly(mono-SorbPC) bilayer. Curve obtained with only buffer in the PWR cell (1), after PSLB formation (2), after Rho incorporation (3), after UV polymerization (4), and after yellow light activation of Rho at pH 5.5 and 25 ± 1 °C (5).

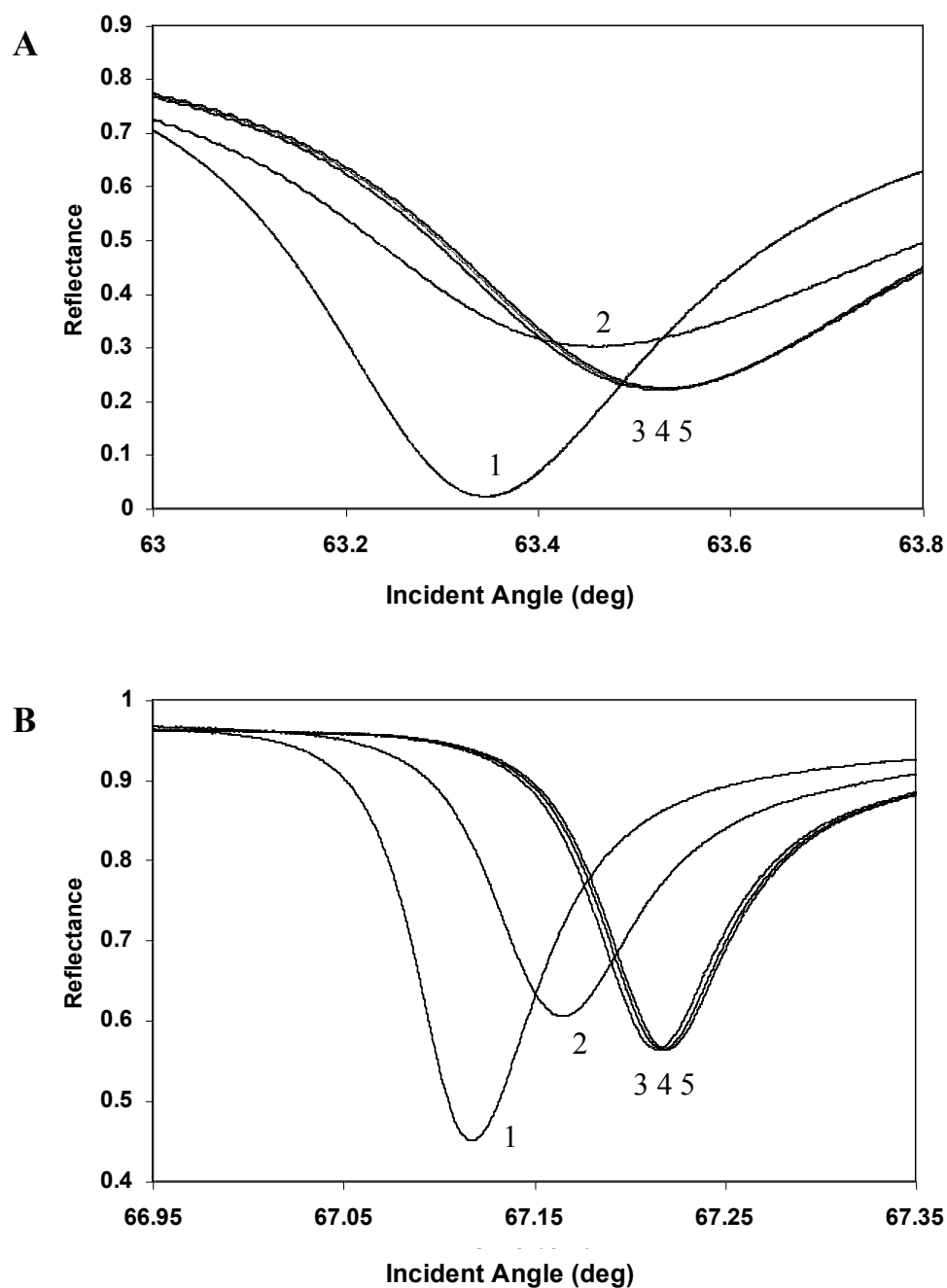
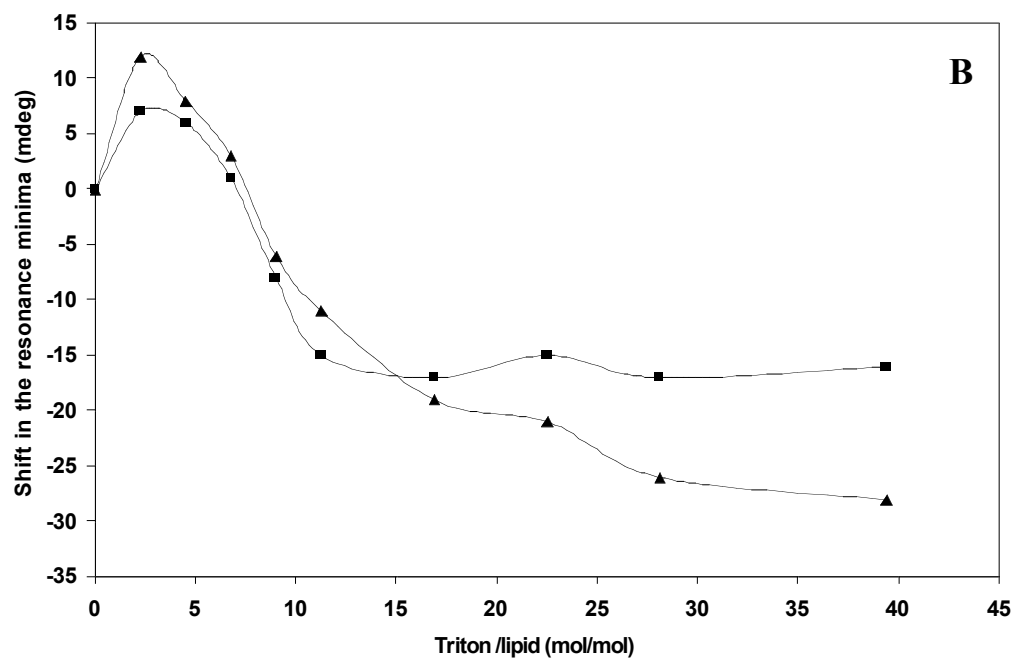
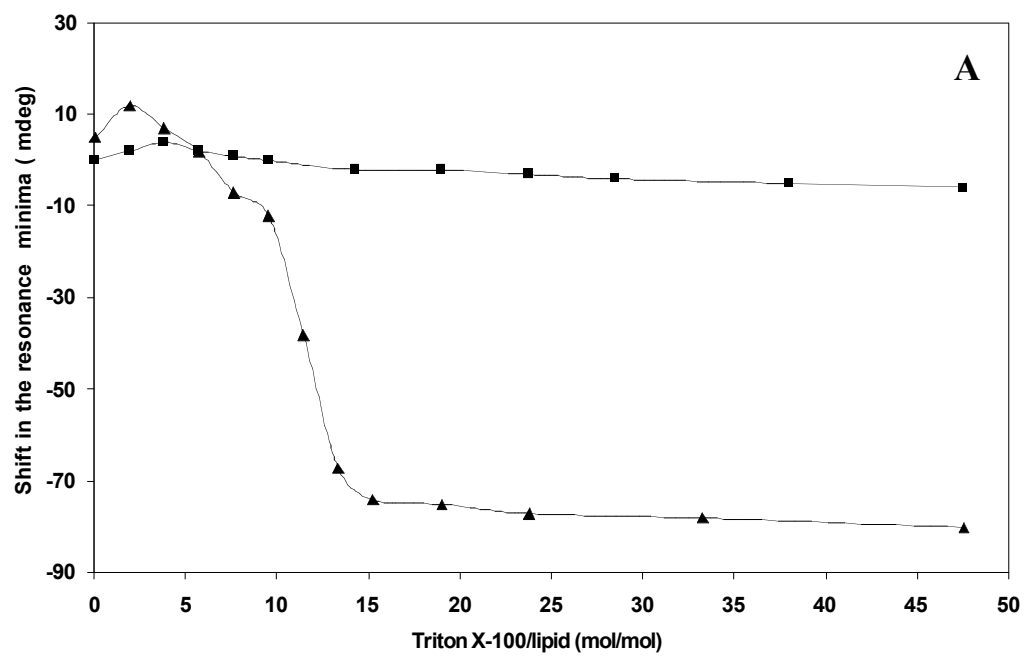


Figure S5. PWR curves (A, *p*-polarized; B, *s*-polarized) acquired at each stage of an experiment with a poly(bis-DenPC) bilayer. Curve obtained with only buffer in the PWR cell (1), after PSLB formation (2), after Rho incorporation (3), after UV polymerization (4), and after yellow light activation of Rho at pH 5.5 and 25 ± 1 °C (5).



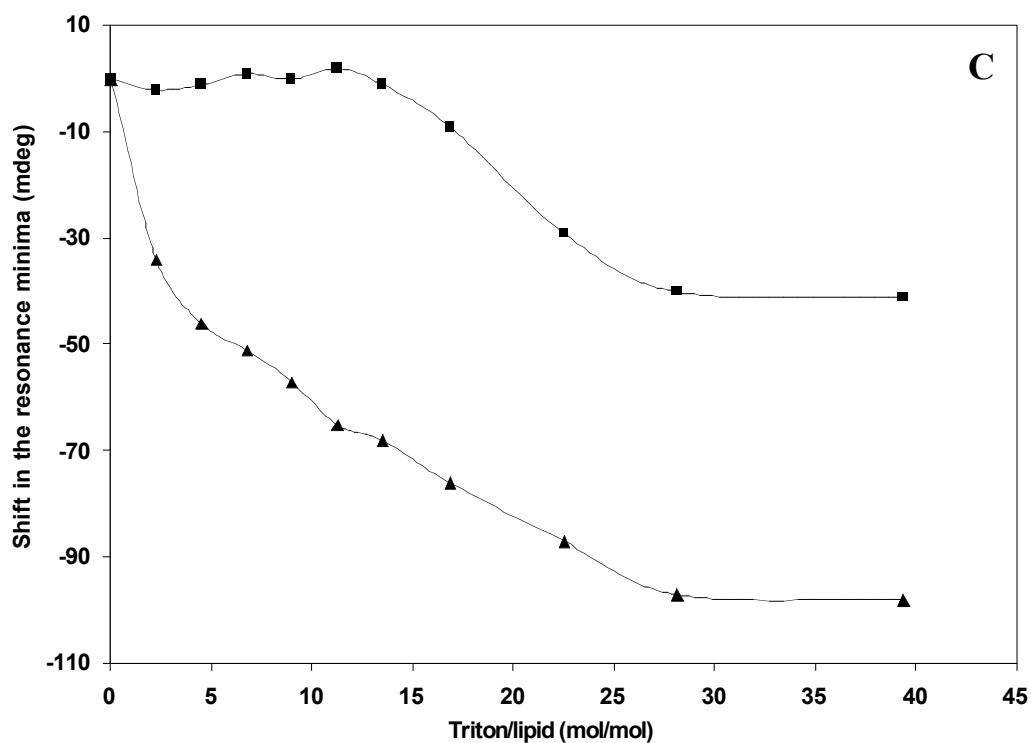


Figure S6. Shifts in *p*-polarized PWR resonance minima for unpolymerized (triangles) and polymerized (squares) PSLBs measured as a function of added molar equivalents of Triton X-100: (A) bis-SorbPC:mono-SorbPC (1:1 (mol/mol)); (B) bis-DenPC; (C) bis-SorbPC:mono-SorbPE (1:1 (mol/mol)). Shifts are relative to the resonance minimum before Triton X-100 addition, which was assigned a value of zero.