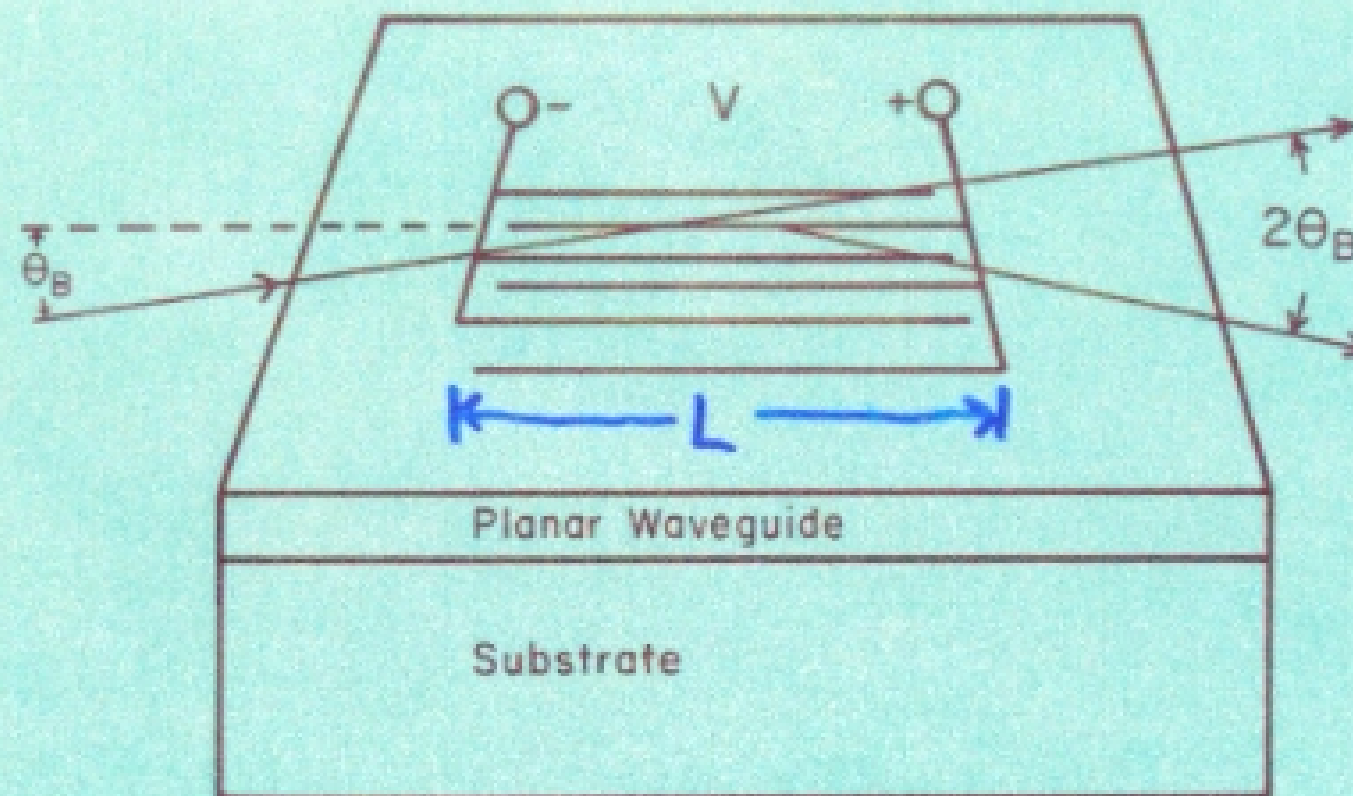


Bragg Electro-Optic Modulator



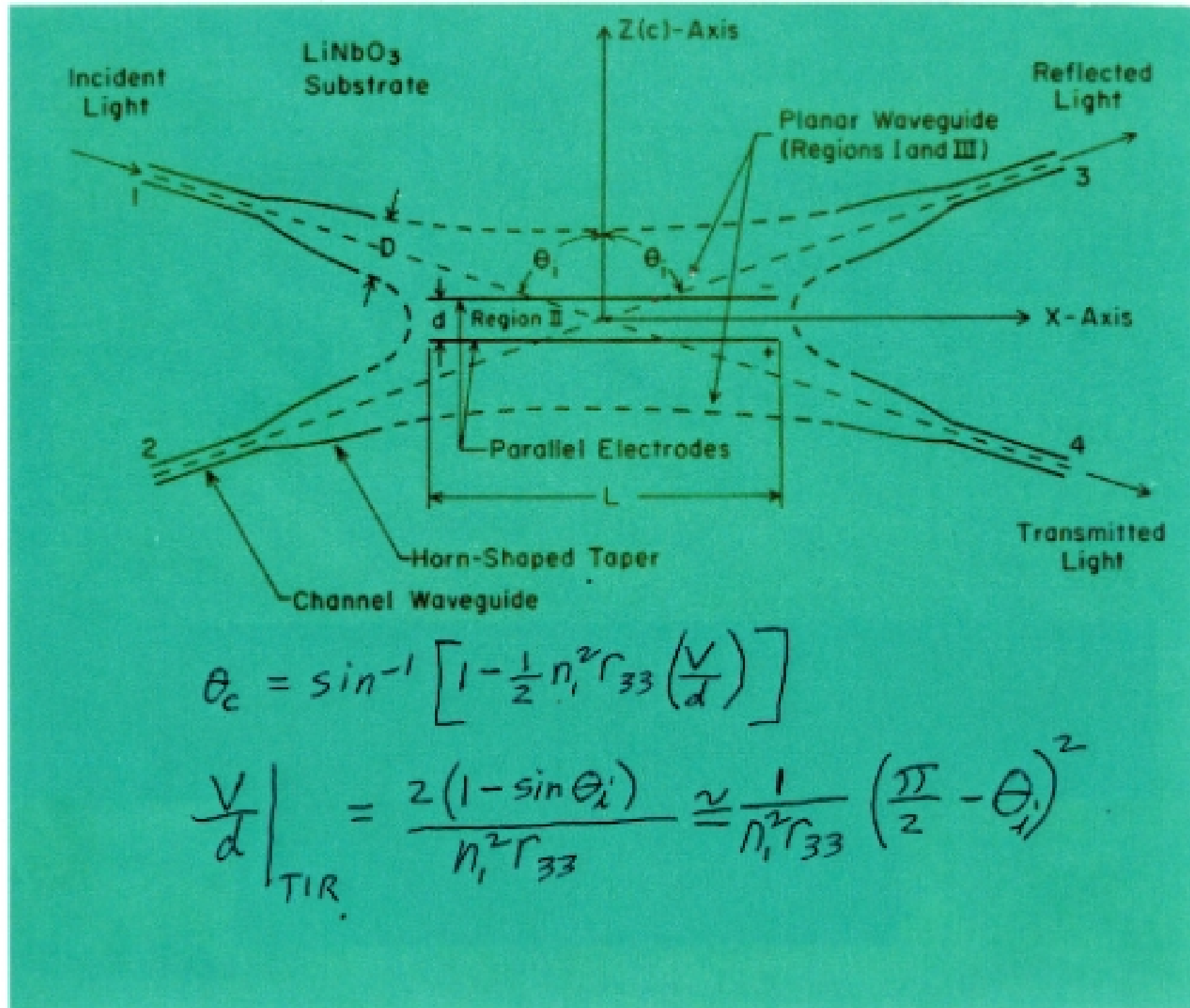
$$\sin \theta_B = \lambda_0 / 2\Lambda n_g$$

$$2\pi\lambda_0 L \gg \Lambda^2$$

$$\Delta\theta_B = 2\Lambda / L$$

$$I / I_0 = \sin^2 VB$$

TIR Electro-Optic Modulator



Modulator Power Consumption

$$P_{EO} = (\Delta f) W \quad (11)$$

$$W = \frac{1}{2} \int \epsilon E_a^2 dv \quad (12)$$

Assuming E_a is uniform over the modulator volume and confined to that volume

$$W = \frac{\epsilon W t L}{2} E_a^2 \quad (13)$$