



What is the power/m² striking the boundary wall?

- A) Still $\langle S \rangle$ **B) $\langle S \rangle \cos\theta_1$** C) $\langle S \rangle / \cos\theta_1$
 D) Something else! ($\sin\theta_1$ or $\cos^2\theta_1$ or $\cos\theta_2$, or ...)

We have a traveling wave solution satisfies $\vec{E}(\vec{r}, t) = \vec{E}_0 e^{i(\tilde{k} z - \omega t)}$

where the (complex) wave vector

$$\tilde{k}^2 = \omega^2 \mu \epsilon + i(\omega \mu \sigma)$$

True (A) or False (B): This traveling wave is “transverse”.

(Or C) I have no good idea what that means)