

ELG3106 2020 Quiz # 5 (Local)

Student Name: _____

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A professor creates an exam question. He states that a uniform plane wave in air, incident on a dielectric filling the half-space $z \geq 0$, has an incident electric field phasor given by $\tilde{\mathbf{E}}_i = (\hat{\mathbf{x}}4.33 - \hat{\mathbf{z}}2.5)e^{-j(5x+10z)}$ V/m. Prove this statement to be true or false.

ANS: