

Wavevector: $\vec{k}_2 = v_2 \frac{\omega}{c} (\sin \theta_2 \, \hat{x} - \cos \theta_2 \, \hat{y} + 0 \, \hat{z})$ $k_2 = \left| \vec{k}_2 \right| = v_2 \frac{\omega}{c}$

Electric field: $\vec{E}^{(2)} = \vec{A} \exp \left(i\vec{k}_2 \cdot \vec{r}\right) = \vec{A} \exp \left(i\,k_2\left(x\sin\theta_2 - y\cos\theta_2\right)\right)$