$$\tilde{E} = \tilde{E}_0 e^{i(\vec{\boldsymbol{k}}\cdot\vec{\boldsymbol{r}}-\omega t)}\hat{\boldsymbol{n}} \Rightarrow E = \mathrm{Re}(\tilde{E})\tilde{B} = \frac{\tilde{E}_0}{c} e^{i(\vec{\boldsymbol{k}}\cdot\vec{\boldsymbol{r}}-\omega t)}\vec{\boldsymbol{k}} \times \hat{\boldsymbol{n}} \Rightarrow B = \mathrm{Re}(\tilde{B})$$