Supplementary Information

Model-based prediction of optogenetic sound encoding in the human cochlea by future optical cochlear implants

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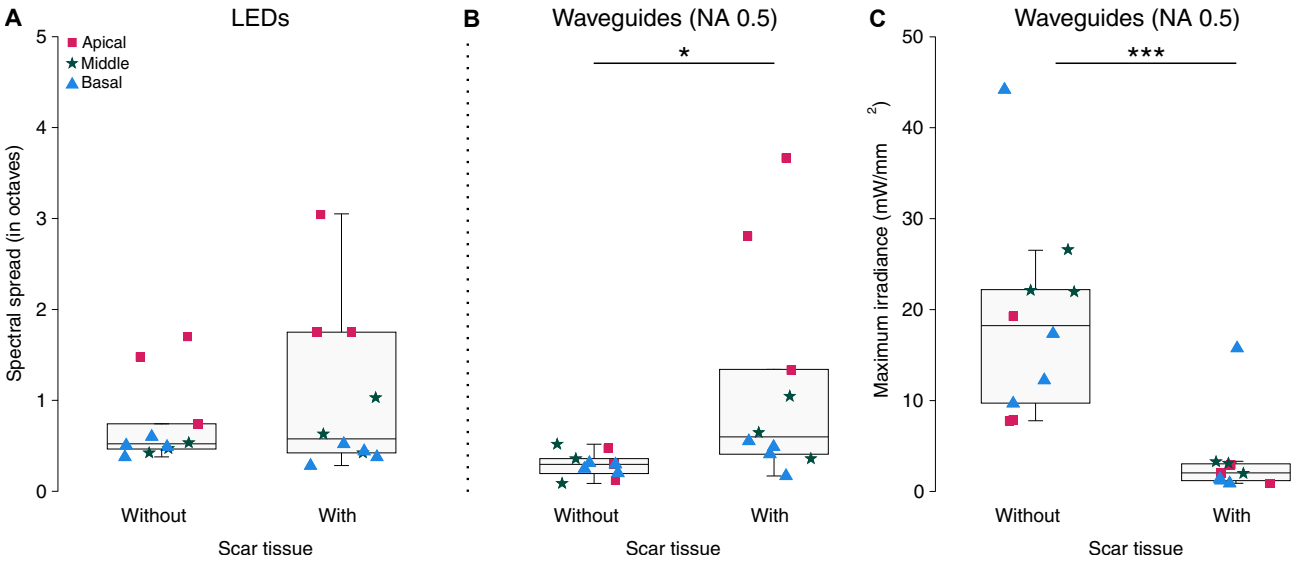

Figure S1: Effect of fibrosis on irradiance and spectral spread. (**A**) Impact of scar tissue on spectral spread for LED emitters when the model was simulated with scala filled with scar tissue. The whiskers extend to the maximum and minimum data points not considered outliers. (**B**) Impact of scar tissue on spectral spread for the waveguide emitters. (**C**) Decrease of maximum irradiance values for waveguide emitters (NA 0.5) when the model was simulated with scala filled with scar tissue. Box plots indicate median (center line), as well as 25th percentile and 75th percentile as the bottom and top edges. The asterisks represent statistical significance (* indicates $p<0.05$, ** indicates $p<0.01$, and *** indicates $p<0.0001$).