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On lamps, walls, and eyes: the spectral radiance field and the evaluation of light pollution indoors

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Highlights

- Human photoreceptor inputs depend on the spectral radiance field
- The radiance field indoors is modulated by the spectral wall reflectances
- Effective filter functions are instrumental to quantify this effect
- Simple analytical models may be used to describe the walls modulating role
- Tailoring the wall reflectances allows to control the subject's light exposure

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