Daylight Modeling with ElumTools

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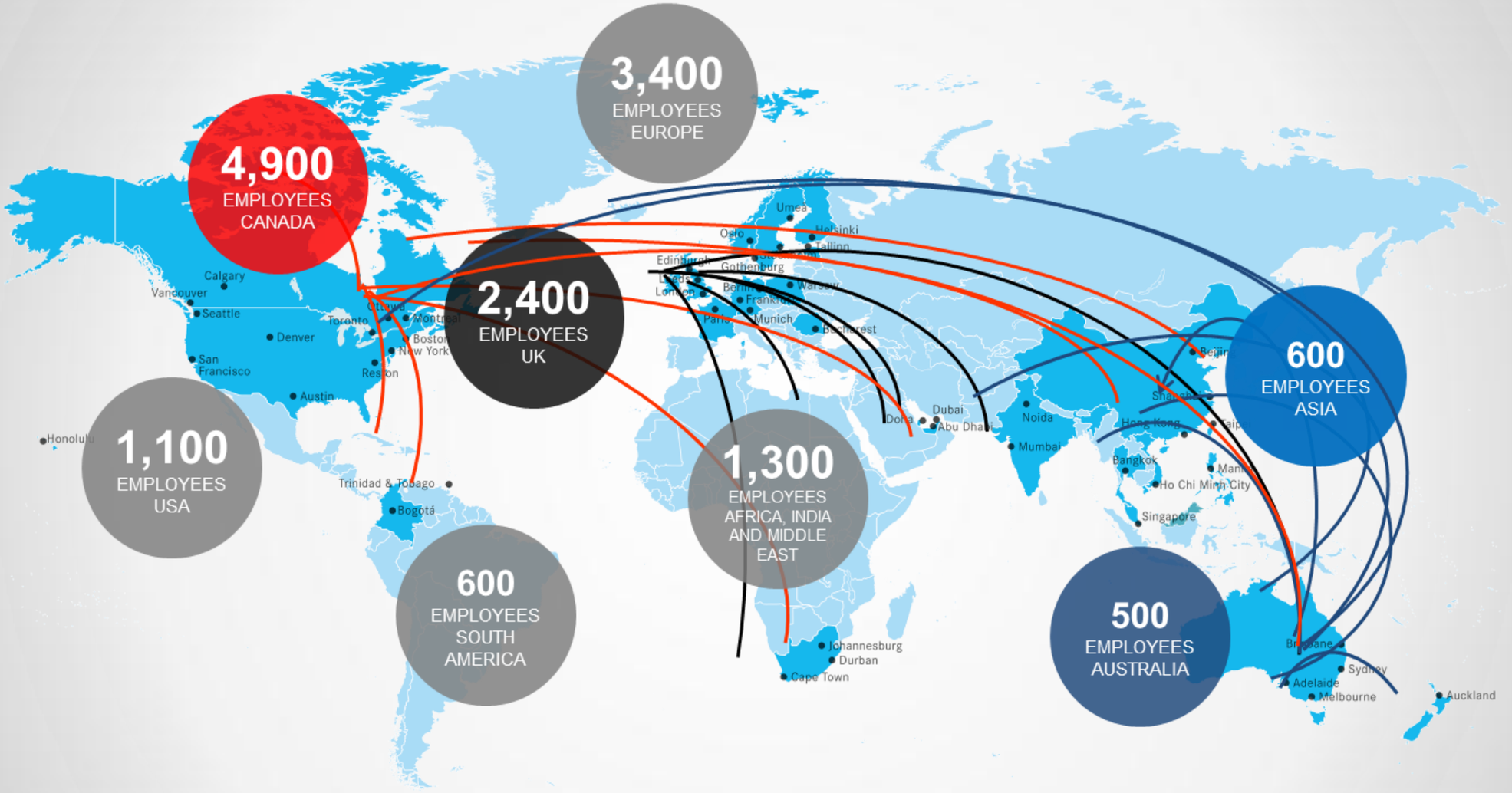
WSP GLOBAL CONNECTIVITY



WSP EXPERTISE

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  - Electrical
  - Hydraulics / Plumbing
  - Fire Protection
  - Green Star / LEED / Green Mark
- **Specialist Teams**
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  - ICT & Technology
  - Fire Safety
  - Vertical Transportation
  - Security
  - Façade
  - Acoustic
- **Specialist Brands**
  - WSP Built Ecology (ESD)
  - WSP Vision Design (Specialist Lighting)
- **Digital**
  - Online and mobile computing based systems
- **Environmental**
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  - Project & Development Management
  - Planning
  - Sustainability & Energy
  - Due Diligence and Compliance Auditing
  - Land Contamination Assessment and Remediation
  - Geotechnical Studies
  - Hazardous Materials Audits'
  - Flora and Fauna
  - Risk Consultancy

Class summary

This workshop will demonstrate how to use ElumTools (an add-on for Revit software from the makers of AGi32) in Revit software to achieve daylight modeling with point-by-point calculation by utilizing the architectural model and lighting families.

Key learning objectives

At the end of this class, you will be able to:

- Gain a good understanding of the ElumTools add-on.
- Learn how to produce point-by-point daylight calculations inside a BIM model
- Gain a good understanding of how link models and project coordinates work
- Gain an expert understanding of lighting families and how they work with photometric files in Revit software

Background Information

Benefits of Using Elumtools

- Point by Point calculations directly in the model
- Accurate lighting calculation due to specific reflectance values and accurate services/furniture layouts.
- Ability to render directly in Revit for presentation purposes
- No need to build a 3D model in AGI32 or DIALux.
- Multi-core processor support

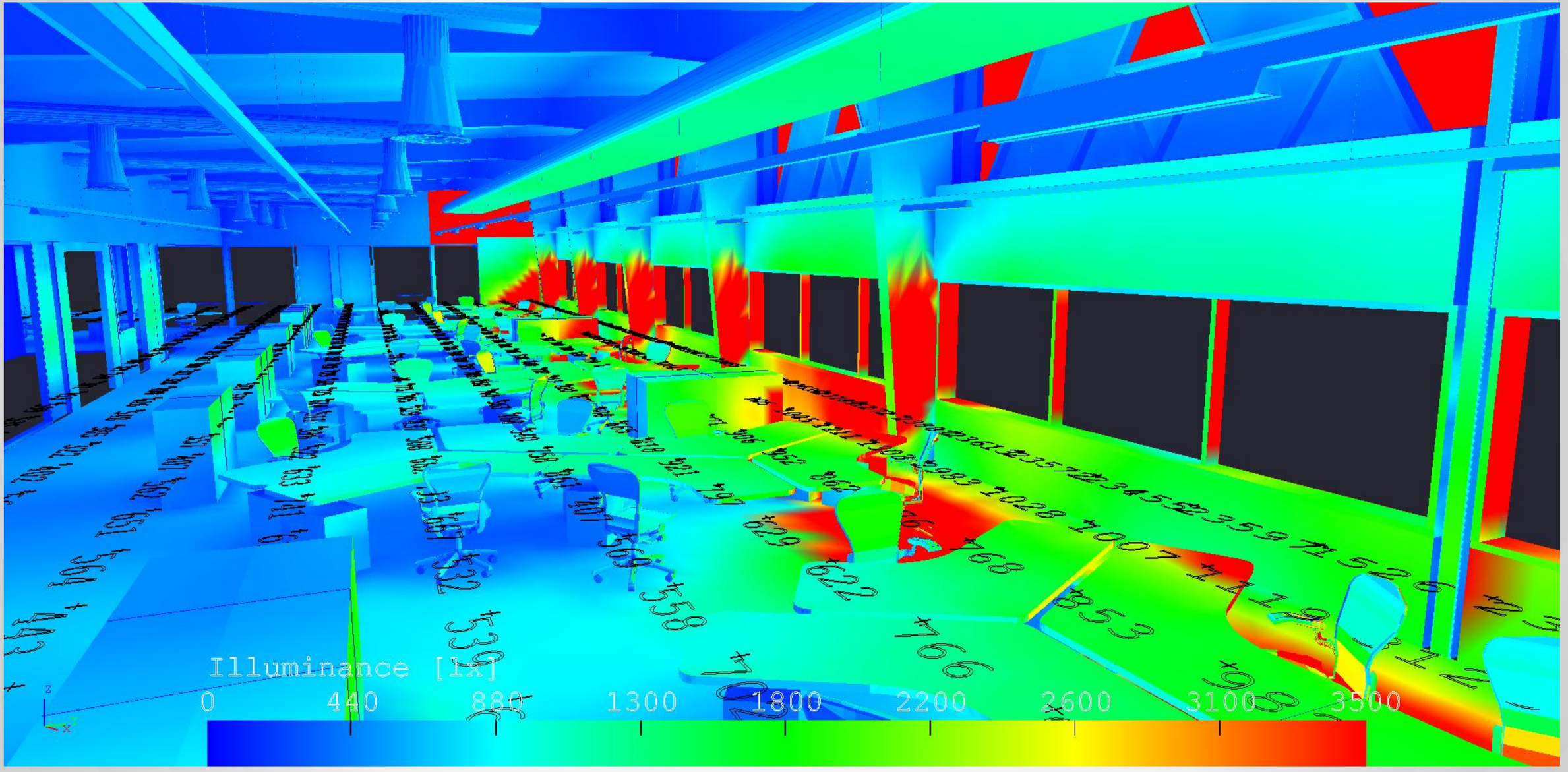
Why can’t we use the lighting calculation built into Revit instead?

The current lighting calculation built into Revit does not calculate daylight entering the space or any other contribution from external lighting.

Are the calculated results using ElumTools the same as with AGi32?

Yes, if all things are equal. However, there are several considerations that may result in different calculated values, such as:

- Differences in Materials properties and reflectances
- Wall thickness and shape of room.
- Revit families and details not available in AGI32 which will obviously alter the calculations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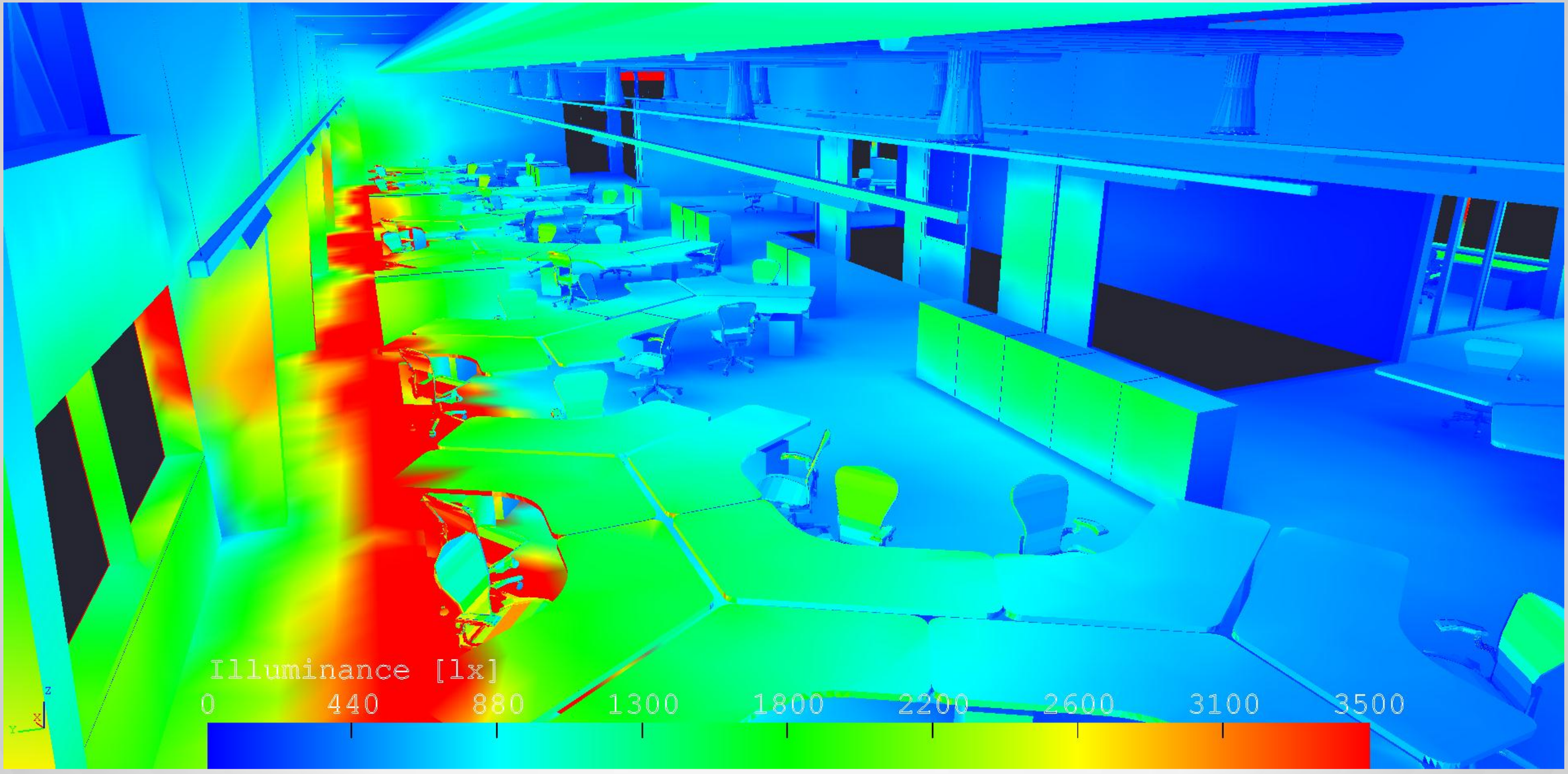
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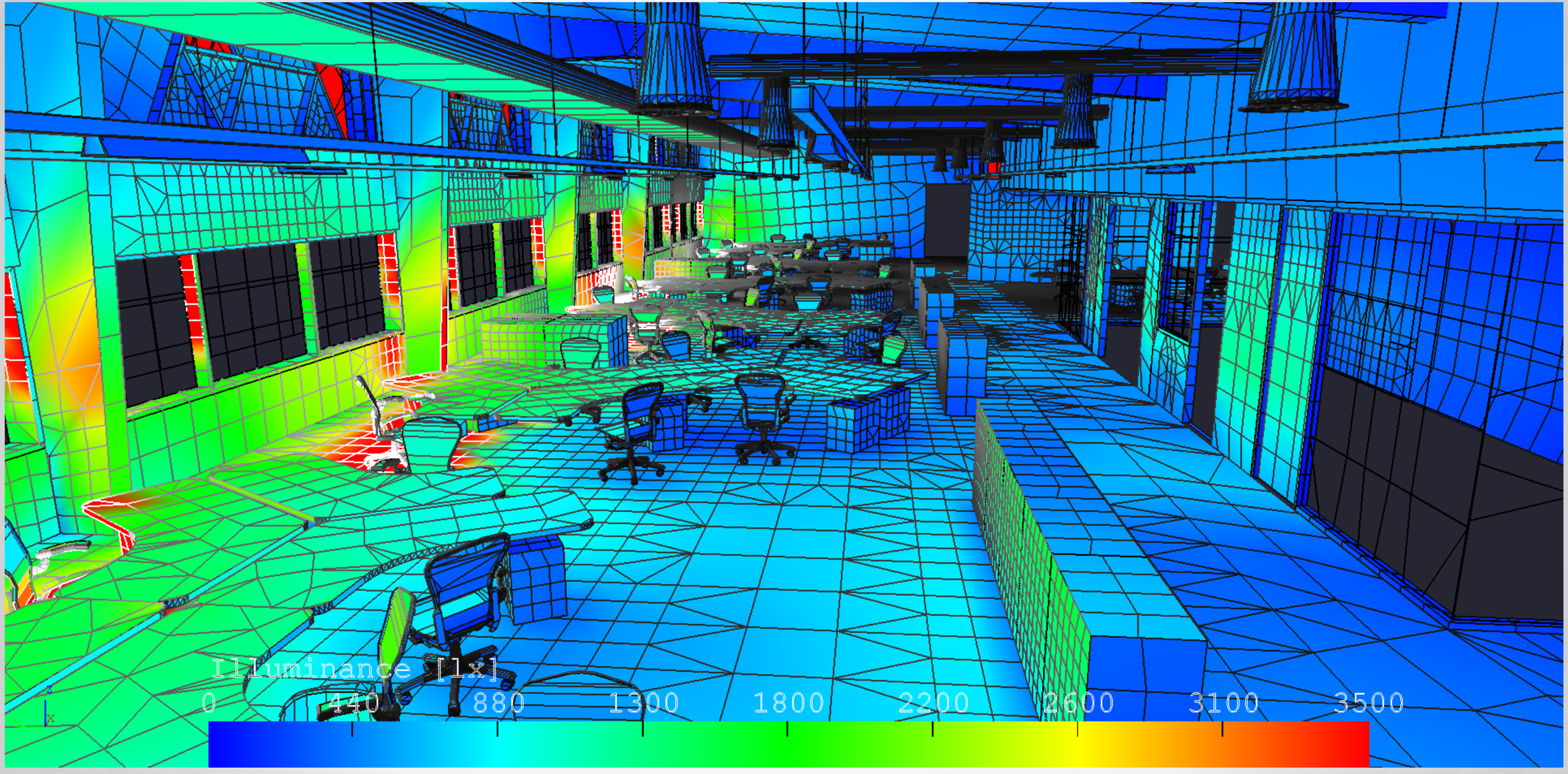
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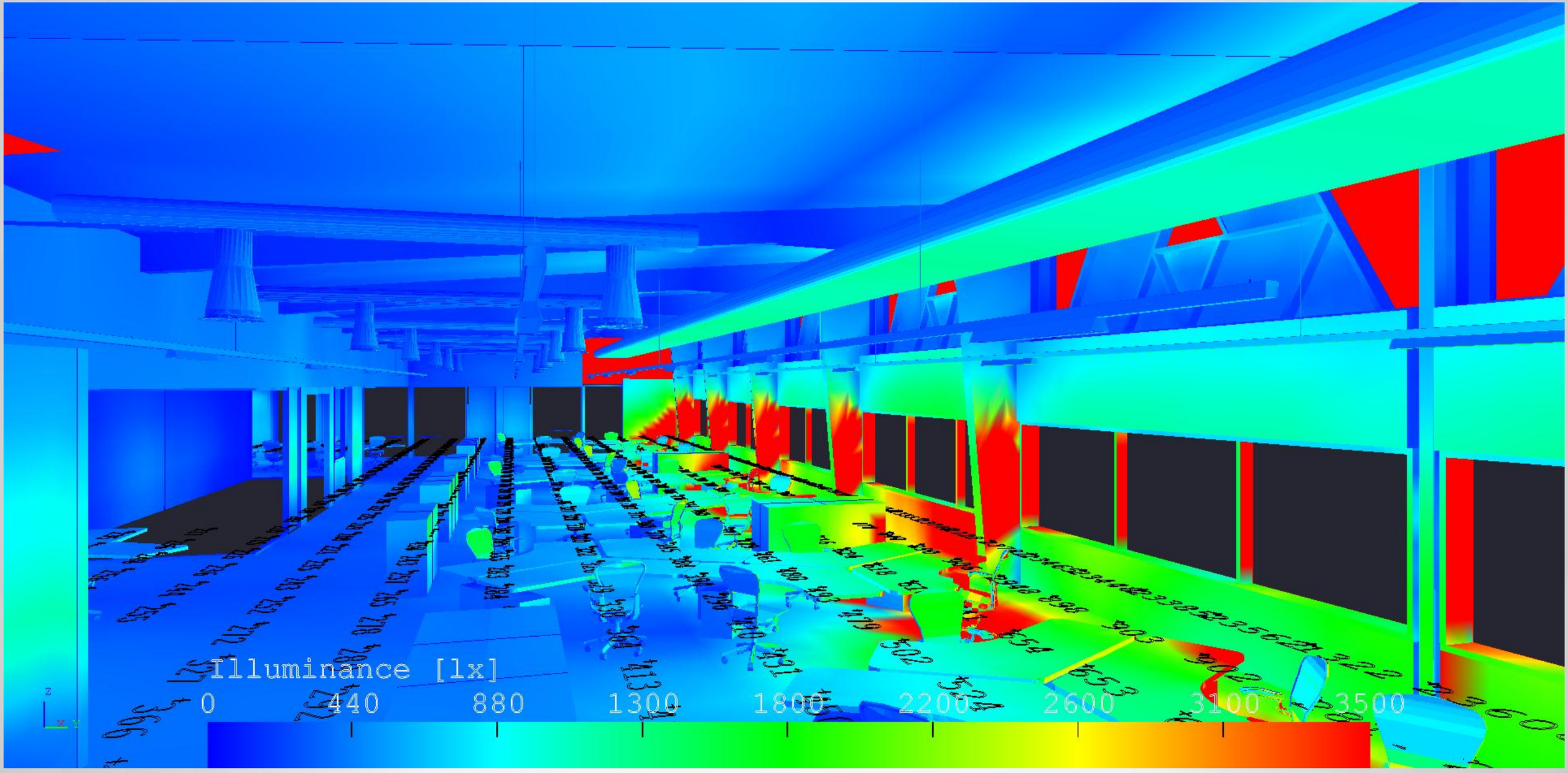
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