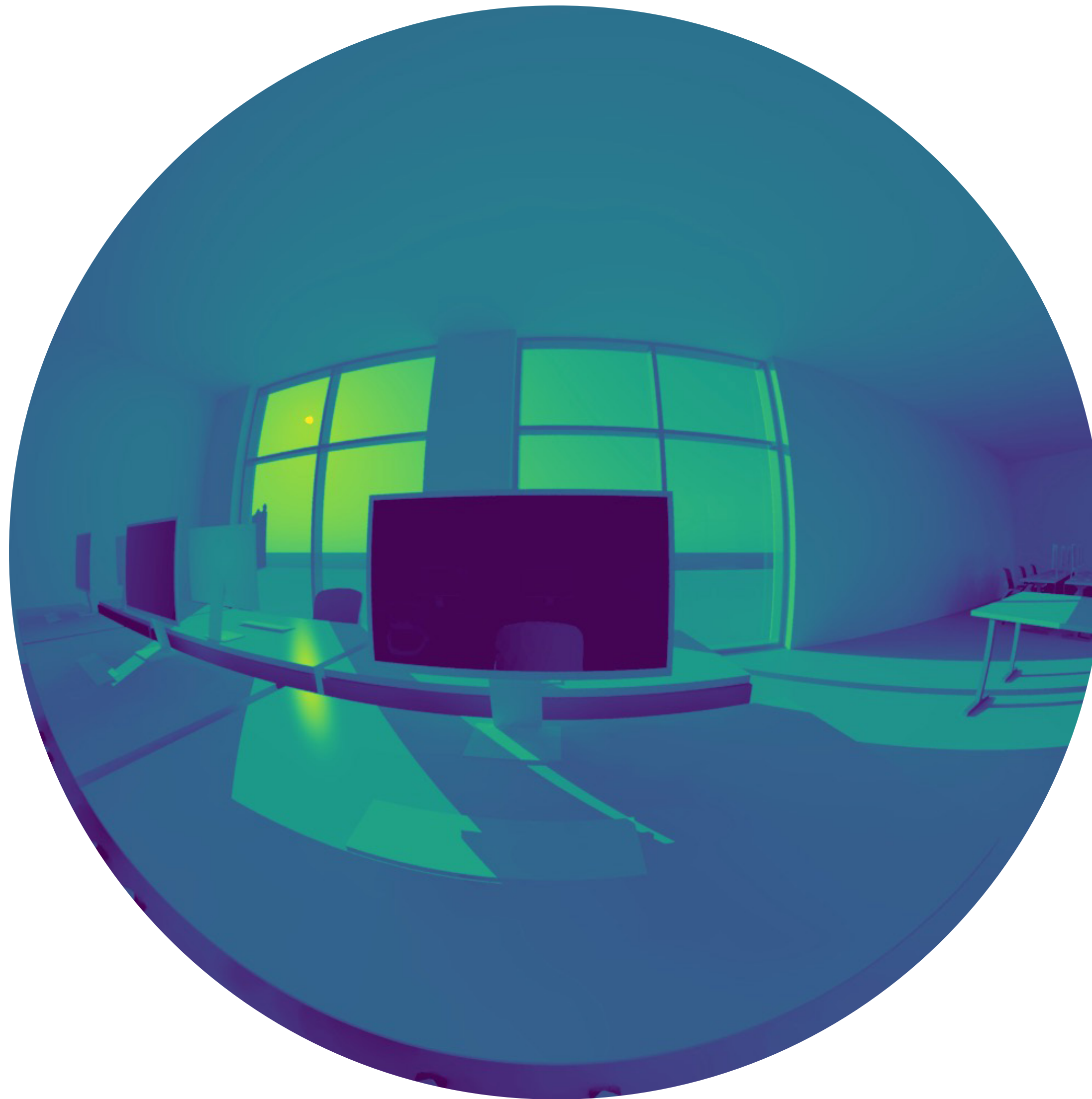


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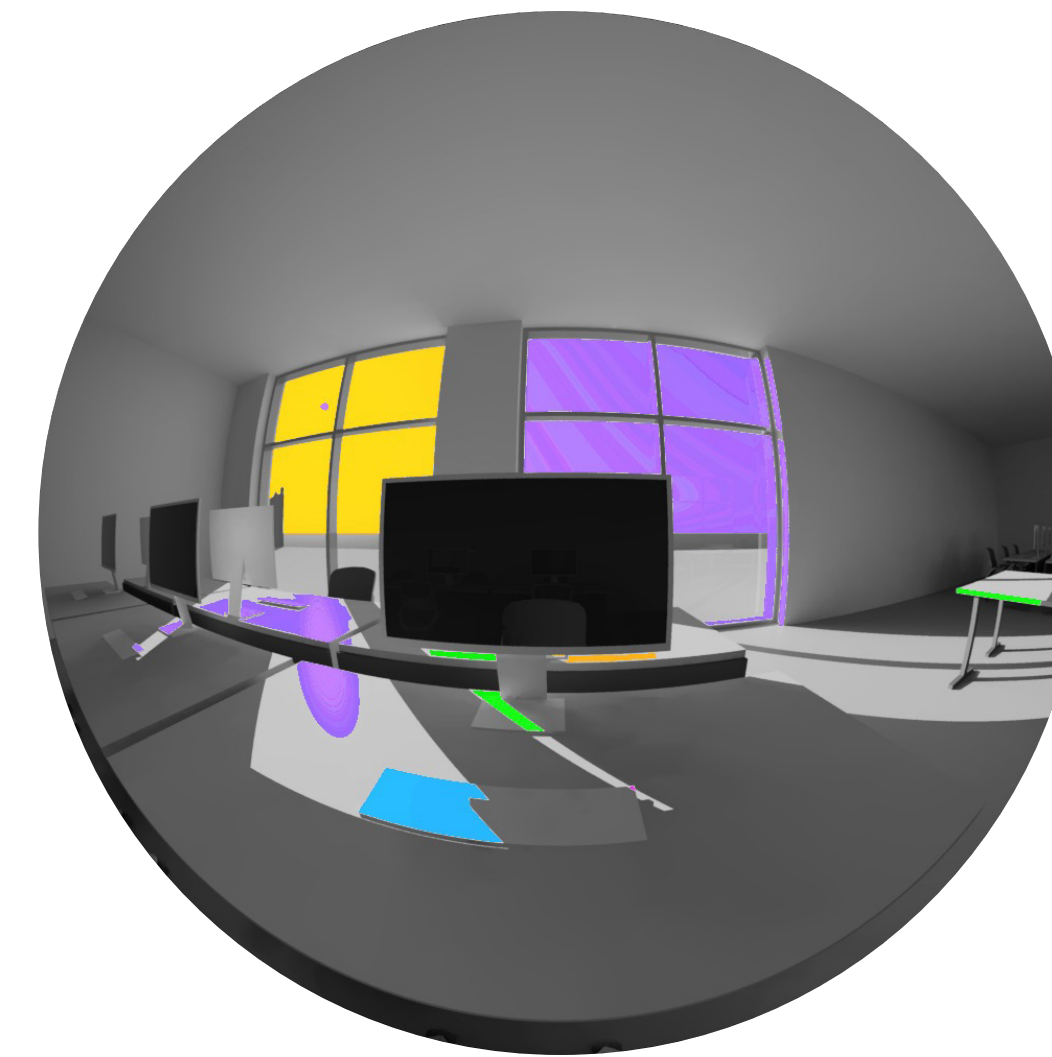
Traversing Time Dependent Light Fields for Daylight Glare Evaluation

Stephen Wasilewski





False Color Luminance Map



Source	Luminance	Solid Angle
1	5.7E+03	5.8E-02
2	1.7E+04	1.8E-01
3	2.5E+03	4.7E-02
4	2.7E+03	9.3E-03
5	3.8E+03	3.1E-01
6	2.1E+03	4.4E-03
7	2.3E+03	1.1E-04
8	3.1E+03	2.7E-03
9	9.6E+07	3.8E-04
background	3.8E+02	5.7E+00

**Avg Lum.
Ev**

**6,931 cd/m²
30,093 Lux**

■ CC: Gebäudehülle
Technik & Architektur

■ LIPID
Laboratory of Integrated
Performance in Design

Stephen Wittkopf PhD
project applicant
SNSF Grant: 179067

Marilyne Andersen PhD
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project member

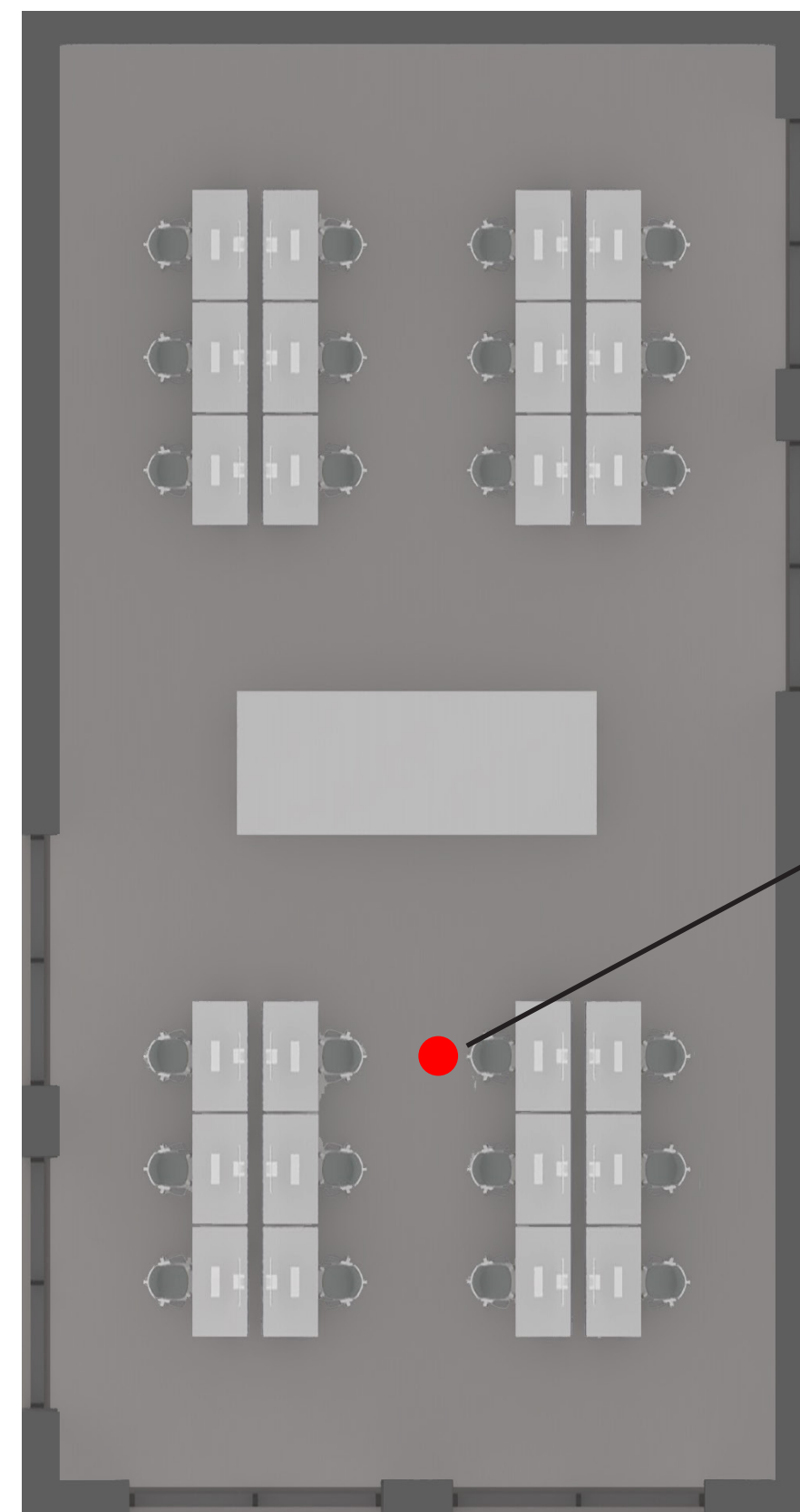
Lars Grobe
project manager

Stephen Wasilewski
doctoral student

Project:

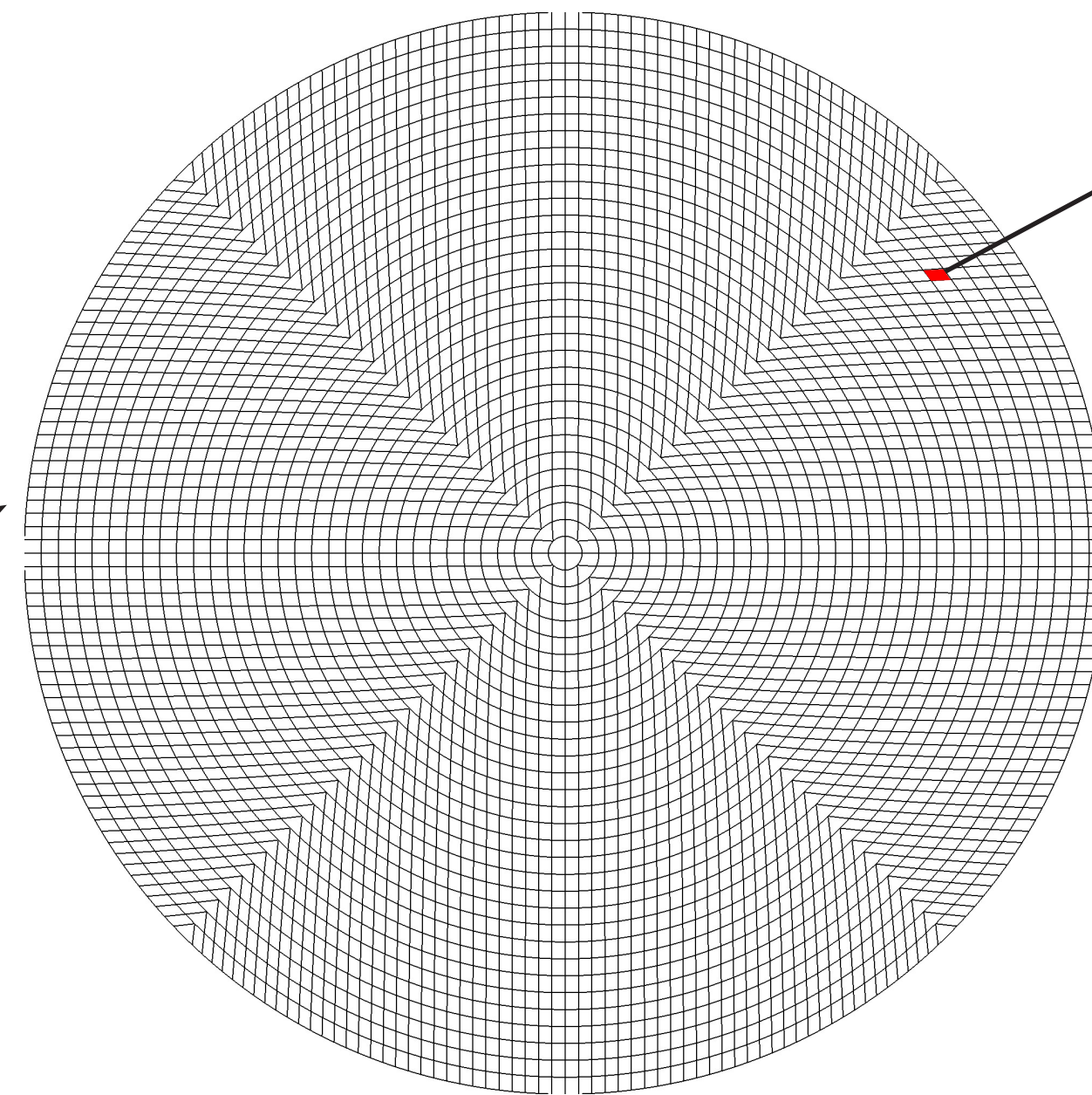
Light fields in climate-based daylight modeling for spatio-temporal glare assessment

$$L_e(x, y, z)$$



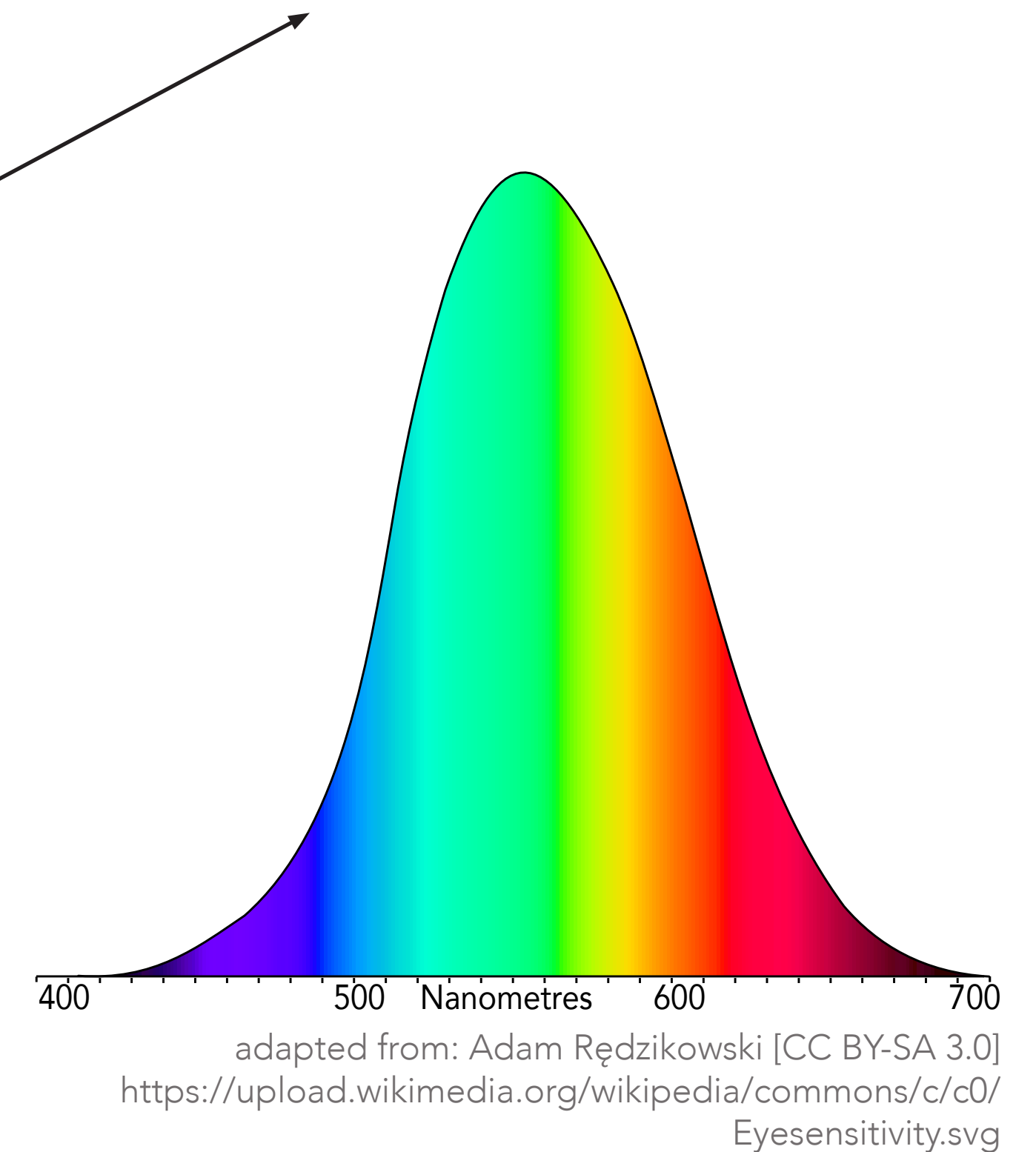
Plan of Simple Office Test Geometry

$$\theta \quad \varphi$$

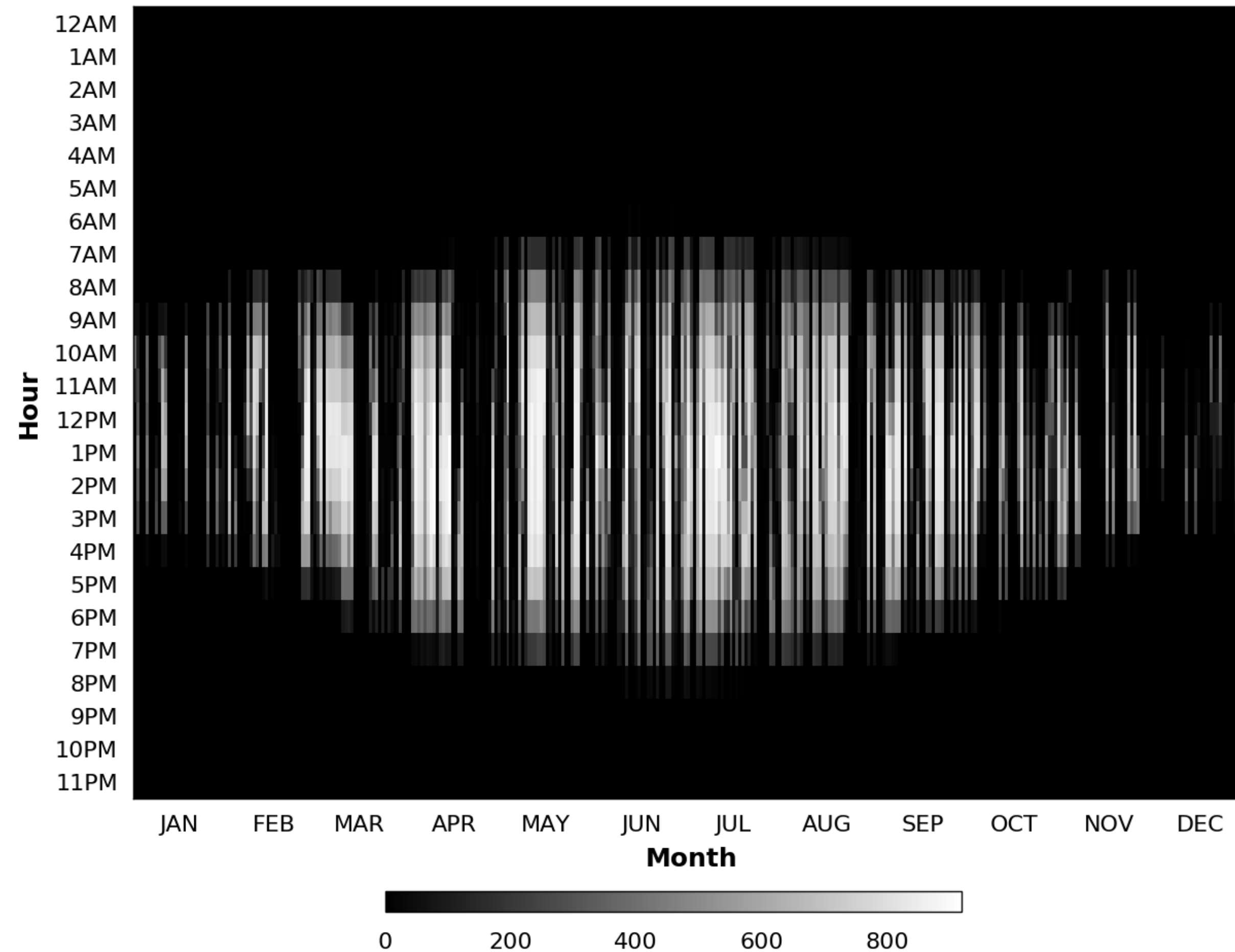


Angular Fish-eye projection showing equal area grid according to Shirley-Chiu concentric mapping

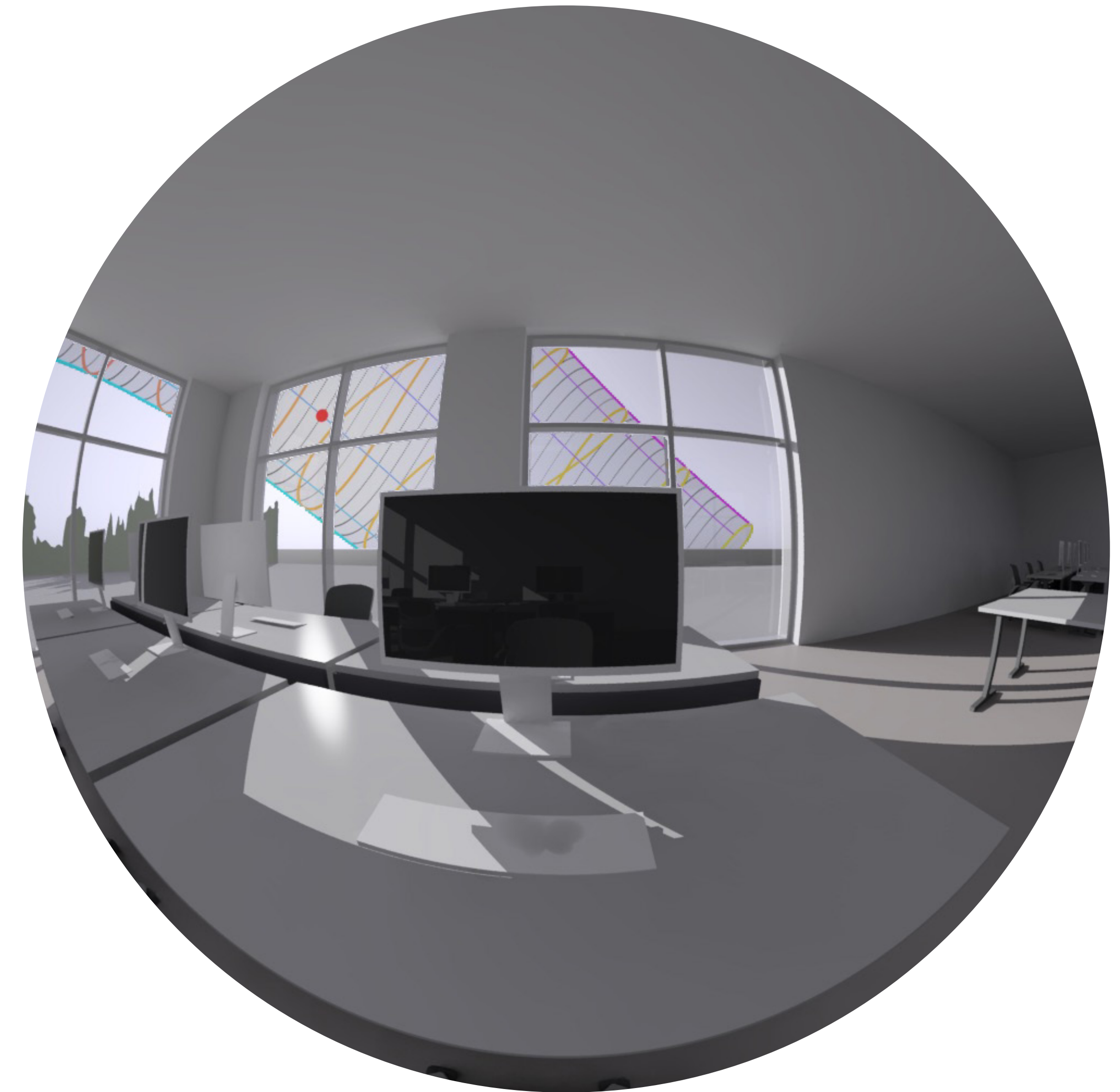
$$\lambda$$



Human Eye Photopic Response Curve

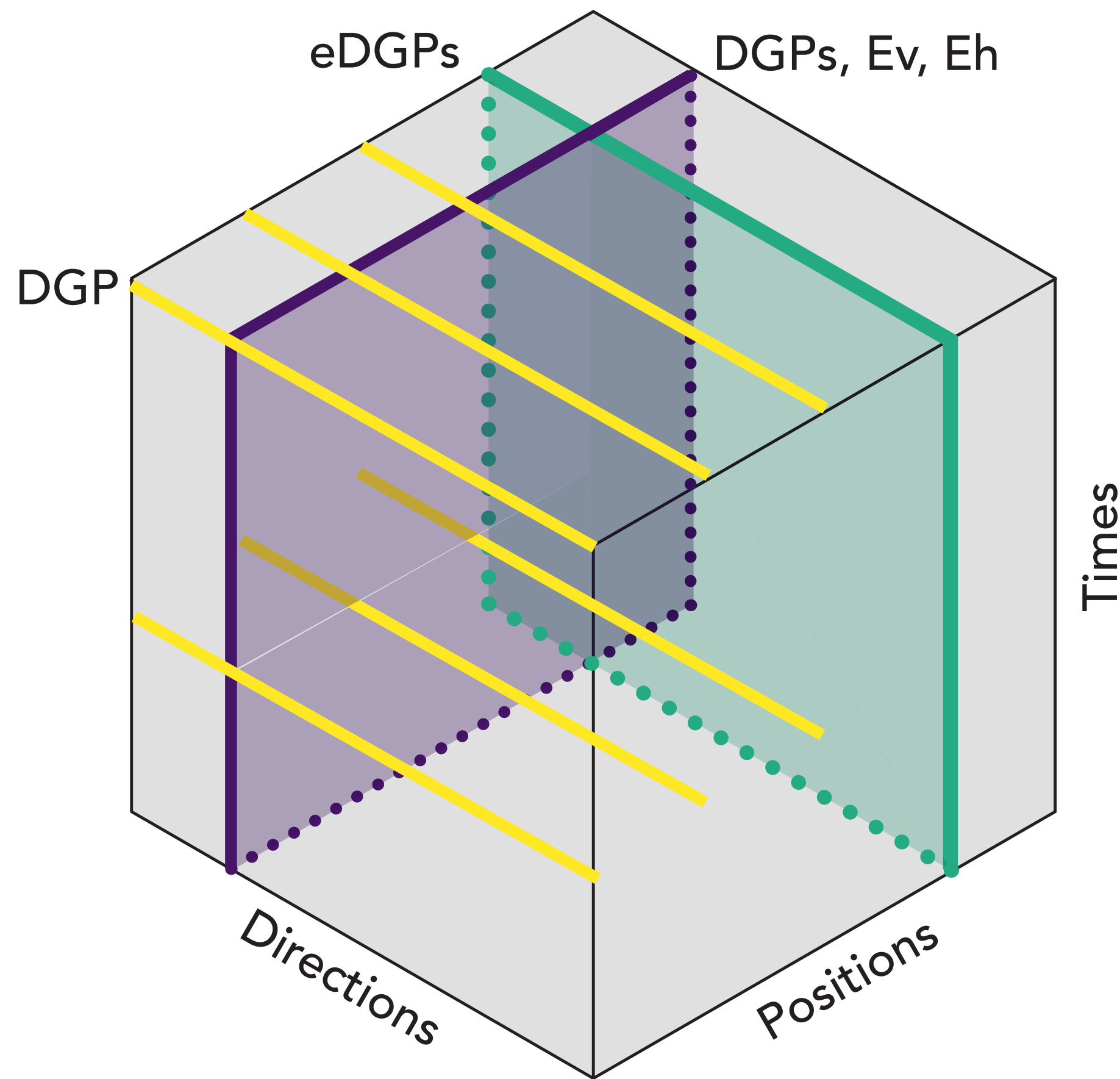


Geneva Typical Annual Hourly Direct Normal Irradiance (W/m^2)

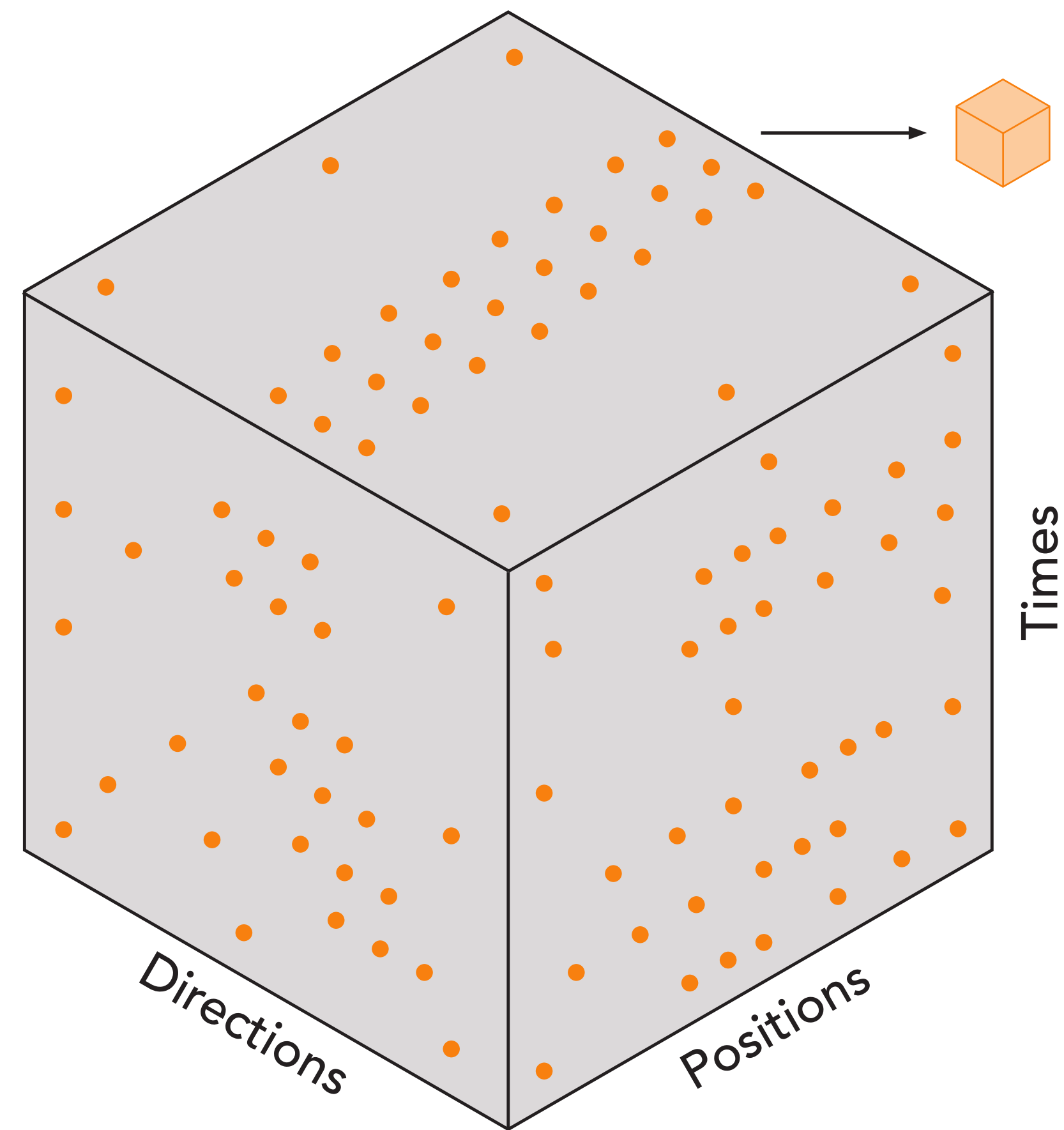


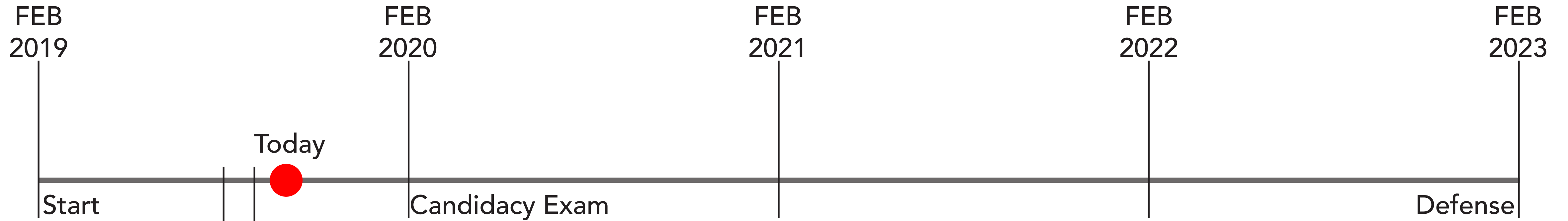
Angular Fish-eye Simulate View (tone-mapped) with Sun Path overlay

Existing Methods:

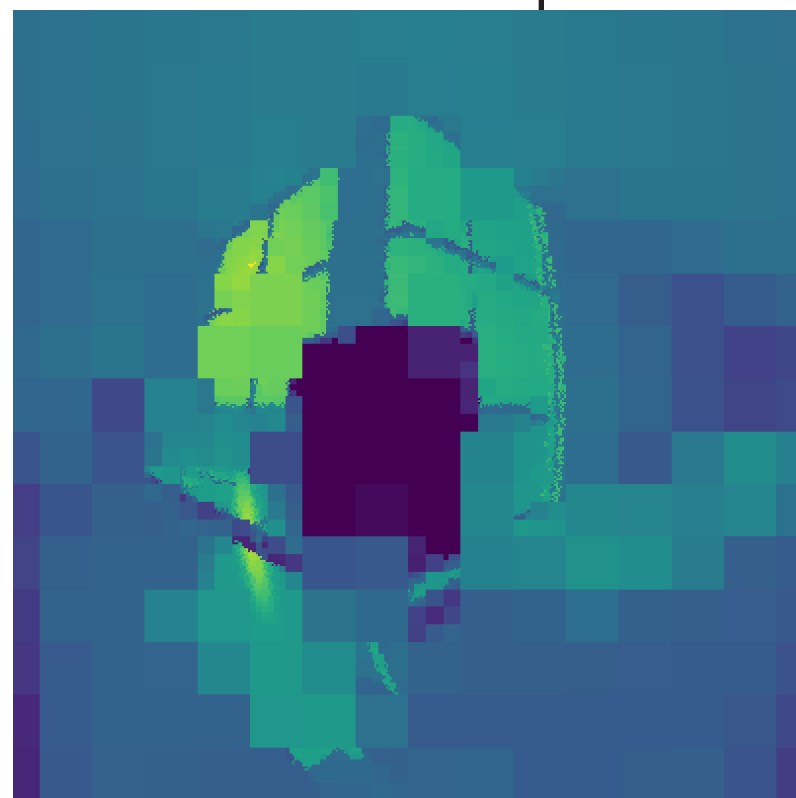


Goal:





A Critical Literature Review
of Spatio-Temporal Simulation
Methods for Daylight Glare
Assessment (accepted)



Radiance Workshop
Adaptive Directional
Sampling

How to develop / validate sampling strategies independently for direction, position and sky when the methods for one are dependent on the other?

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Acknowledgments



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project manager

Roland Schregle PhD
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<http://p3.snf.ch/project-179067>