

SOLAR GLARE ASSESSMENT

Analysis of the Solar Glare potential of solar power plants and other glass surfaces.



OUR SERVICES

- Analysis of the Solar Glare Potential
- Assessment report
- Support in the permitting process



Zehndorfer
Engineering Consulting



APPLICATIONS

- ⚙ Solar Power Plants
- ⚙ Glass- and metal surfaces
- ⚙ Shining roof tiles and roof structures

ADVANTAGES

- ⚙ Risk reduction for investor and contractor
- ⚙ Assurance for authorities
- ⚙ Conformity with norms and regulations
- ⚙ Reduction of re-planning costs
- ⚙ Prevention of late changes
- ⚙ Economical Glare Reduction

REFLECTIONS

Surfaces like glass- and metal-facades as well as solar power plants have the potential to reflect light towards persons, who are working or steering vehicles. Changes of construction plans after construction start can be expensive - a solar glare assessment helps to avoid these costs.

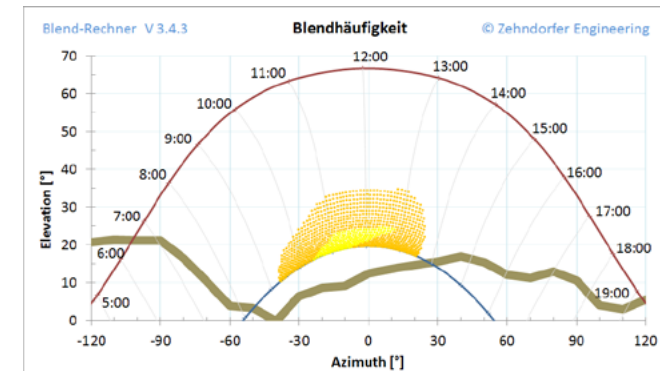
ASSESSMENT REPORT

The Solar Glare Assessment helps to correctly rank the dangers coming from a planned installation. The glare calculation allows the quantification of the reflection and thus helps to defuse dangers as well as soothe unsubstantiated fears of glaring in the permitting process.

WHY ARE WE LEADING IN GLARE ASSESSMENT?

Our proprietary software allows the complete simulation and optimization of your construction project.

- Detailed and reliable calculation
- Conformity with norms and regulations
- Support in the permitting process



DETAILED CALCULATION

- Calculation of glare-time, -duration and -angles
- Travel time calculation
- 3D diagrams
- Minute fine resolution

CONFORMITY WITH REGULATIONS

- OVE R11-3
- LAI-2012
- FAA Interim Policy
- EASA CS-ADR-DSN

GLARE-REDUCING MEASURES

- Variations of plant setup
- Optimization of shades
- Proof of effectivity of these measures



REFERENCE PROJECTS

Vienna Airport / Austria

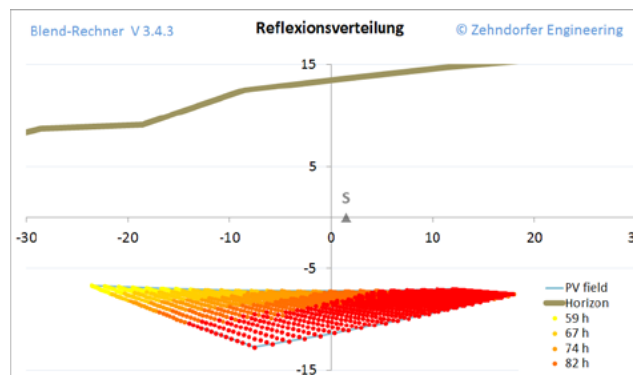
The glare calculation showed, that a re-alignment of PV panles was necessary, to avoid dazzling of the air traffic control tower. With these measures glaring could be avoided completely during the planning phase of the project.

Seesen / Germany

At the existing PV-plant the glare disguised the light signal of the adjacent Deutsche Bahn railroad. A glaring survey was executed, which helped to find and implement the most cost-efficient and effective glare-reducing provisions.

The Shard London / UK

Train conductors had been complaining about solar glare from the huge glass surfaces of Great Britains largest building. The glare assessment helped to quantify the strength and duration of the glare.



CONSULTATION

- ⚙ Don't leave the dazzling effect of your construction project to chance!
- ⚙ Save construction costs by professional planning of reflections of your installation!

I will be happy to assist you!

Jakob Zehndorfer

Jakob Zehndorfer is certified advisor to the Austrian Court of Law, with many years of experience in electrical engineering and photovoltaics.



Zehndorfer Engineering has completed several Solar Glare Assessments in Austria, Germany and the UK for reflections from Solar Power Plants as well as Glass Facades. These have helped to mitigate and avoid glaring on roads, railroads and for air traffic.

Business- Zehndorfer Engineering

Electrical Engineering

- Technical Due Diligence
- Electrical Verification
- Training



Photovoltaics

- Detailed planning, project submission
- Expert Survey
- Site supervision, Comissioning



Business Consulting

- Cost Calculation
- Project management
- Contracting



Zehndorfer Engineering Consulting e.U.
Stift-Viktring Str. 21/6
9073 Klagenfurt
Austria

Tel: +43 (680) 244 3310
www.zehndorfer.at
email: office@zehndorfer.at