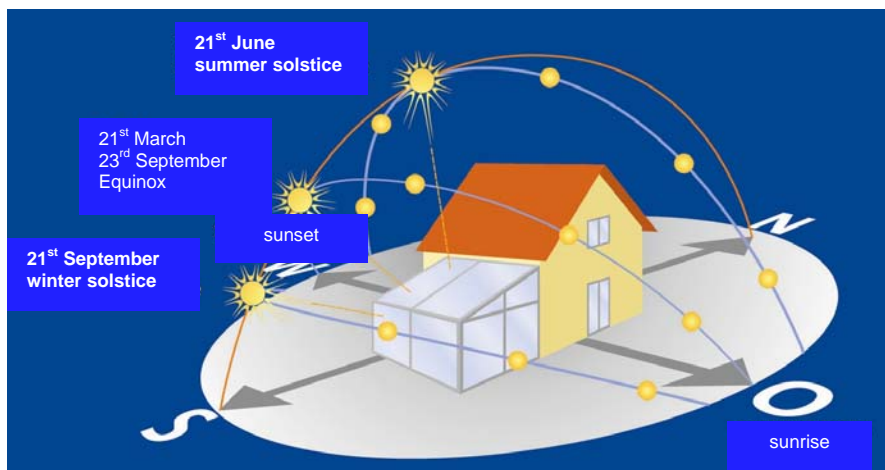


Solar Control

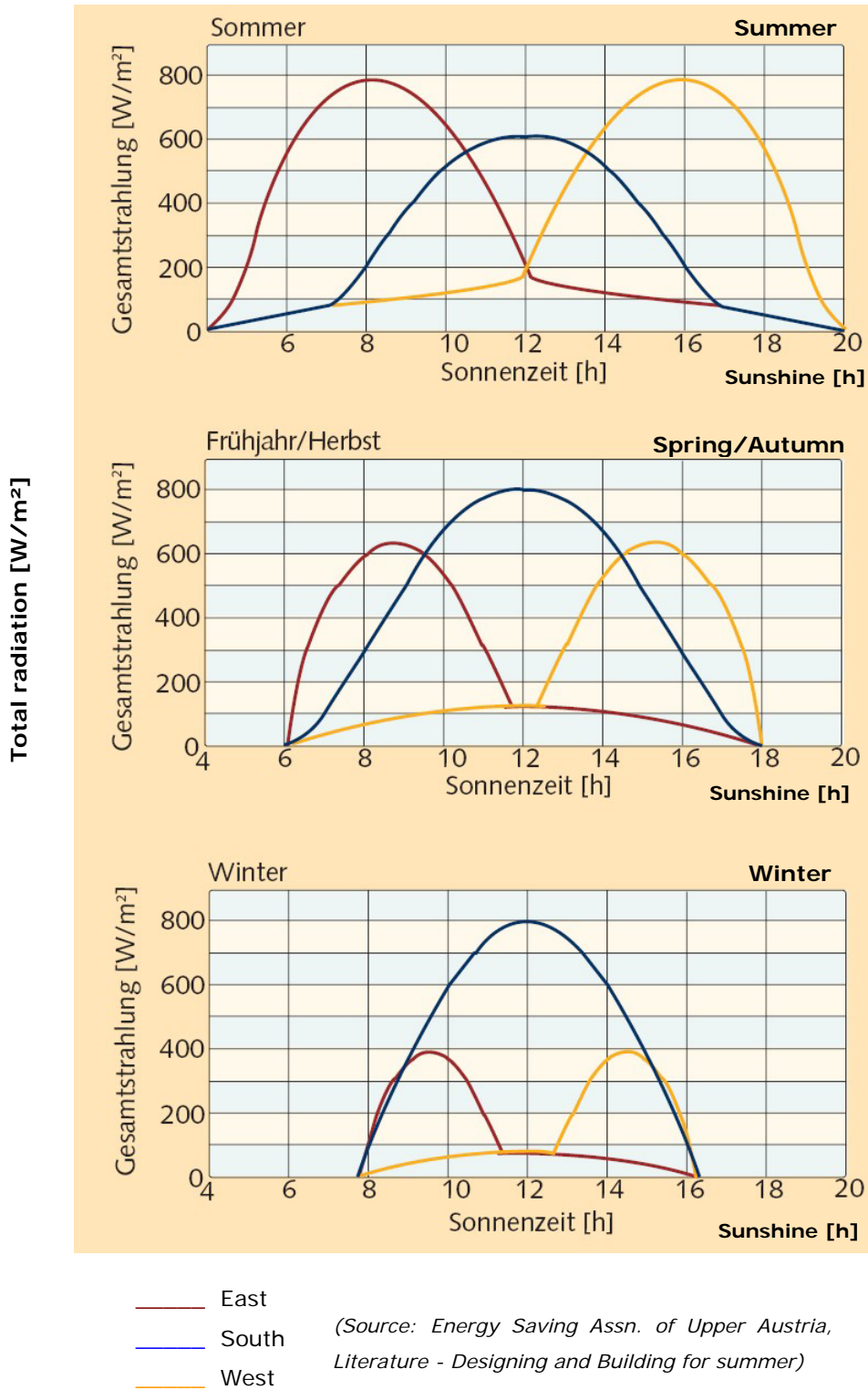
Typical Solar Control insulated glass units are measured and evaluated with vertical radiation in accordance with EN 410. Blind systems however, require a calorimetric method of measurement: the differing angles of the louvre blade and the changing angle of the sun as well as the building orientation result in differing energy gains depending on the time of the year.

It must be noted that half-opened blinds let through more energy than closed ones. The orientation of the units when installed is also a significant influence on performance.

With Calorimetric measurements on blind systems, the angle of the sun and the louvre positions are changed and the actual conditions are made relative. The Solar radiation protection (g-value) therefore results from the angle of the sun and louvre position. This variability discerns louvred systems from insulated units without integrated elements.



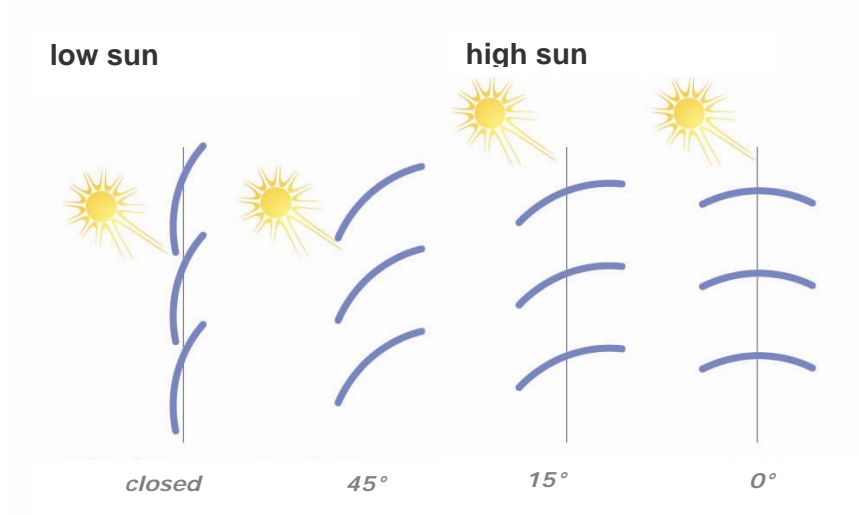
Introduction Solar- and Glare control



Introduction Solar- and Glare control

Angle possibilities of louvre

The angle of the louvres to the sun regulates the effects of shading, glare and vision.

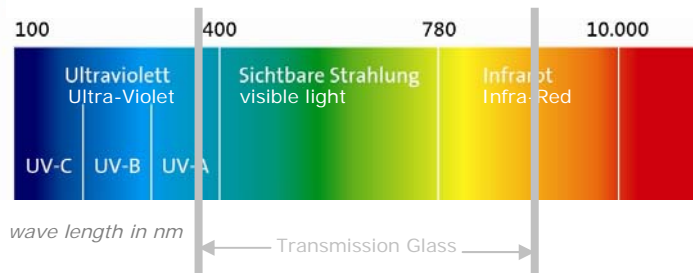


Many factors of the blind influence the effects of the sun, such as louvre shape, degree of surface reflection and the geometry of the blind. That is why we have standardised the types of ECKLITE and defined their energy performance.

Dark louvres make the glass absorb a lot of energy and are therefore not suitable for solar control purposes - such application should use very light colours. Interior wall elements, where no solar control is necessary allow colour to be used.

Introduction Solar- and Glare control

radiation spectrum



Approx. 50 % of total energy transmittance is transported by visible light.

Glare protection

Visible daylight is also radiation: it should be used to its full potential, but should also not be too strong that it causes blinding. Conventional solar control glass types are typically not effective at controlling glare.

Louvres offer the only possibility to provide real protection from glare and allow individual adjustment for lighting conditions.

For work places - particularly where monitors are used – requirements are clearly regulated:

- No direct blinding
- No reflections on the Monitor
- Sufficient contrast
- Adjustability

Important note: Labour Regulations require a visual connection to the outside environment. With louvres this is achieved without any problem.