

5 Annual Daylighting

Annual daylight performance of the concept and optimal buildings were assessed using Useful Daylight Illuminance (UDI). The reports below show the annual occurrence of illuminance across the working plane that are within the range of 200-2000 lux during daytime hours (7h-20h). Inadequate natural daylight or excessively high direct sunlight (glare) is excluded. The single UDI metric summarises the overall daylight performance of the different scenarios below. The UDI metric will inform the selection of the most appropriate Visual Light Transmittance (VLT) for the glazing of the building.

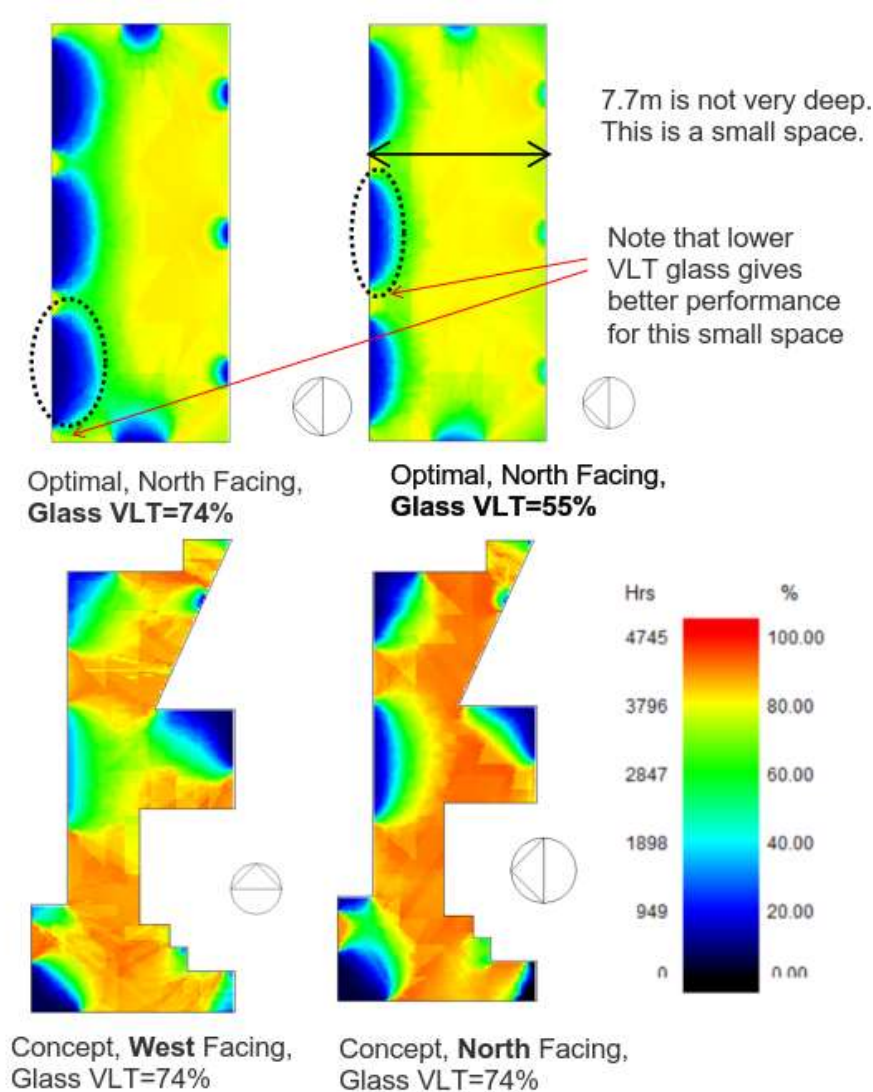


Figure 19: UDI plots for different scenarios.

Observation made:

- For this small space with high glazing ratios a lower VLT glass is preferred because it maintains a comfortable UDI range over a larger area.
- Orientation greatly affected the UDI of the concept design. UDI simulations should be repeated for the final design to guide final glazing layout.