

DAYLIGHT ACCESS ANALYSIS



Pirelli Tower

Architects: Gio Ponti

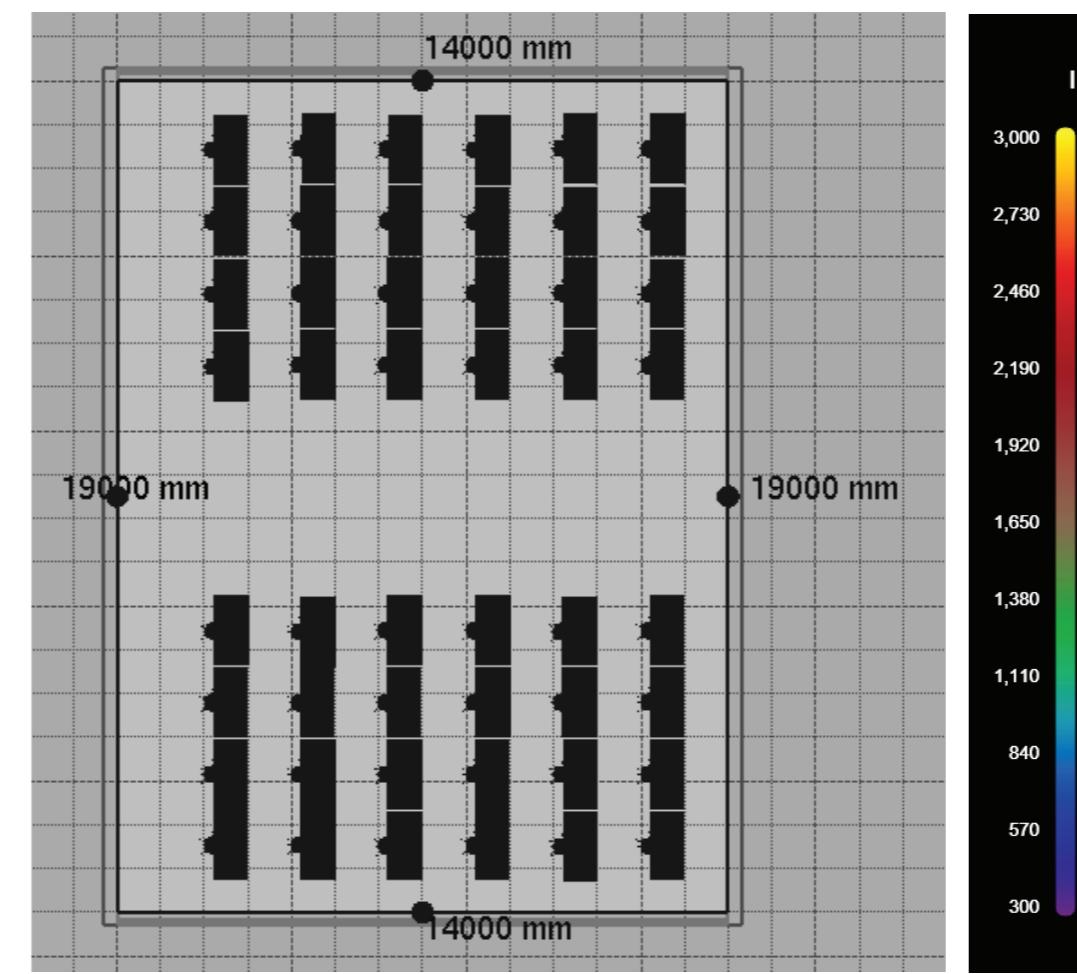
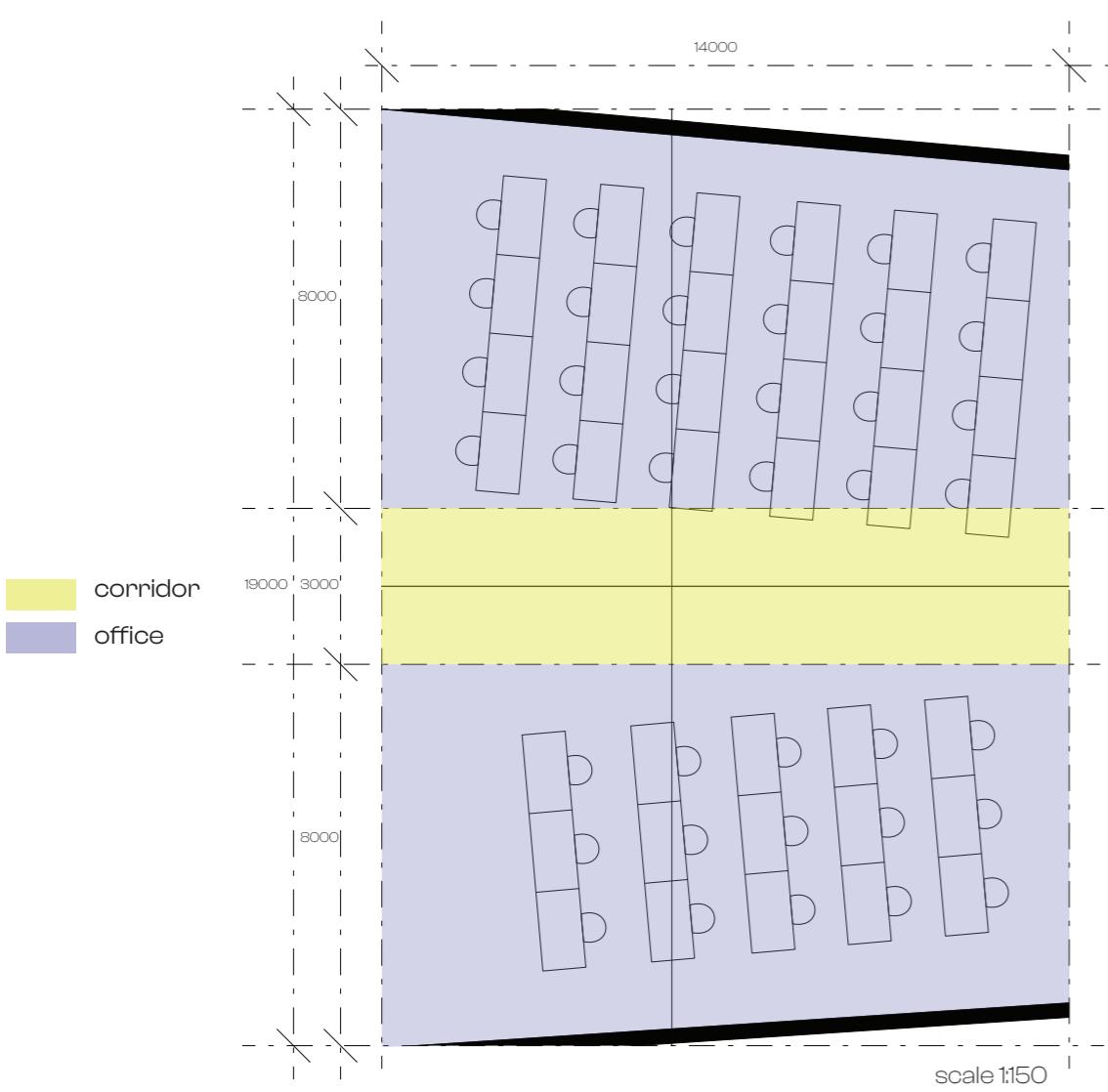
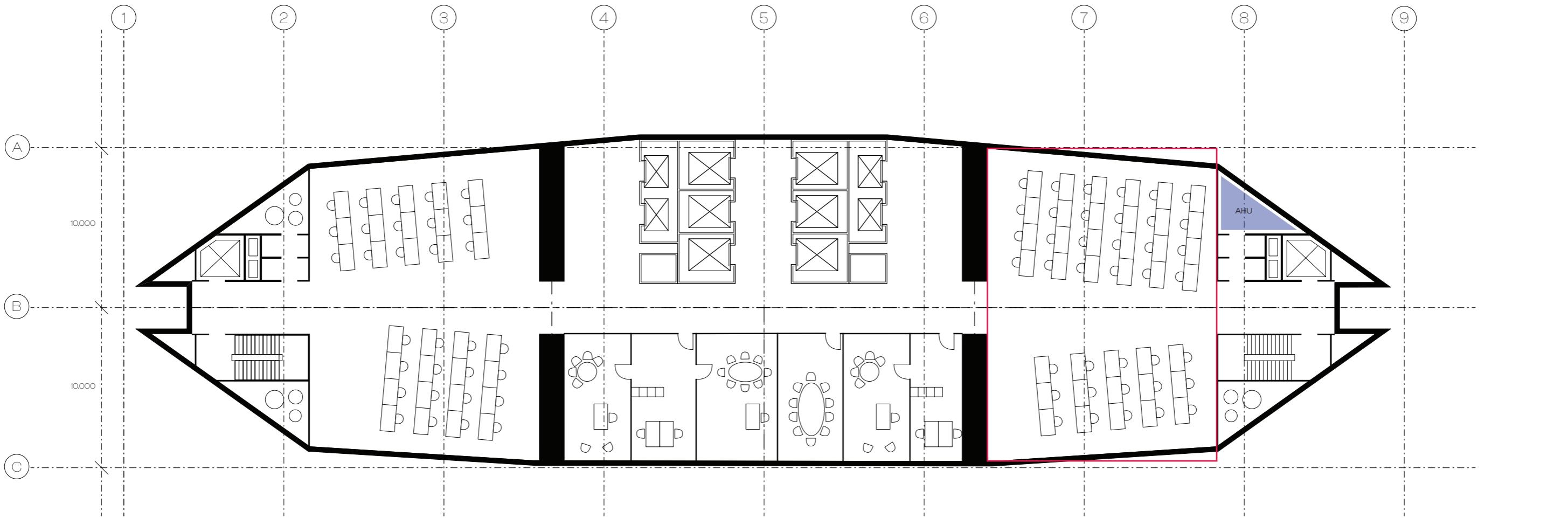
Structural Engineer: Pier Luigi Nervi

Location: Milan, Italy

Topics: Modernism

Area: 66,000 m² | 710,418 sq. ft.

Project Year: 1956 - 1960



Brightest zones, Perimeter areas (yellow-red, >2,500 lux): concentrated along the top and bottom edges – the window areas or zones nearest glazing.

Middle zone (purple-blue, <1,000 lux): shows significantly lower light levels, indicating limited daylight penetration toward the room center.

Product description

Vertical window system

Narrow window walling system

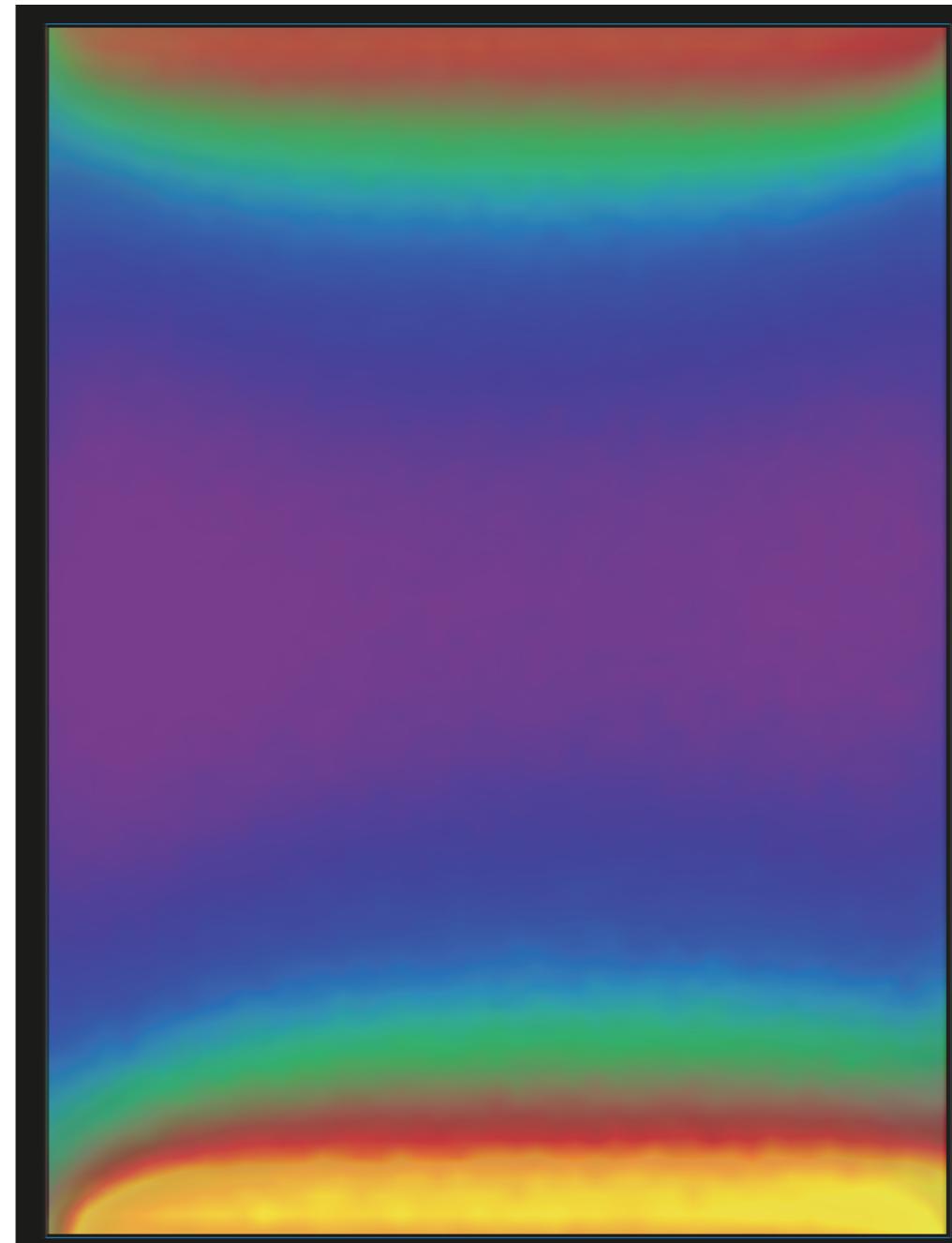
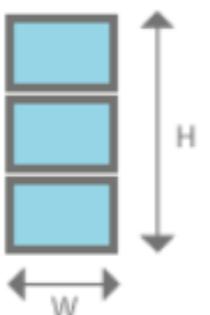
Operable or fixed
Element divided with transom



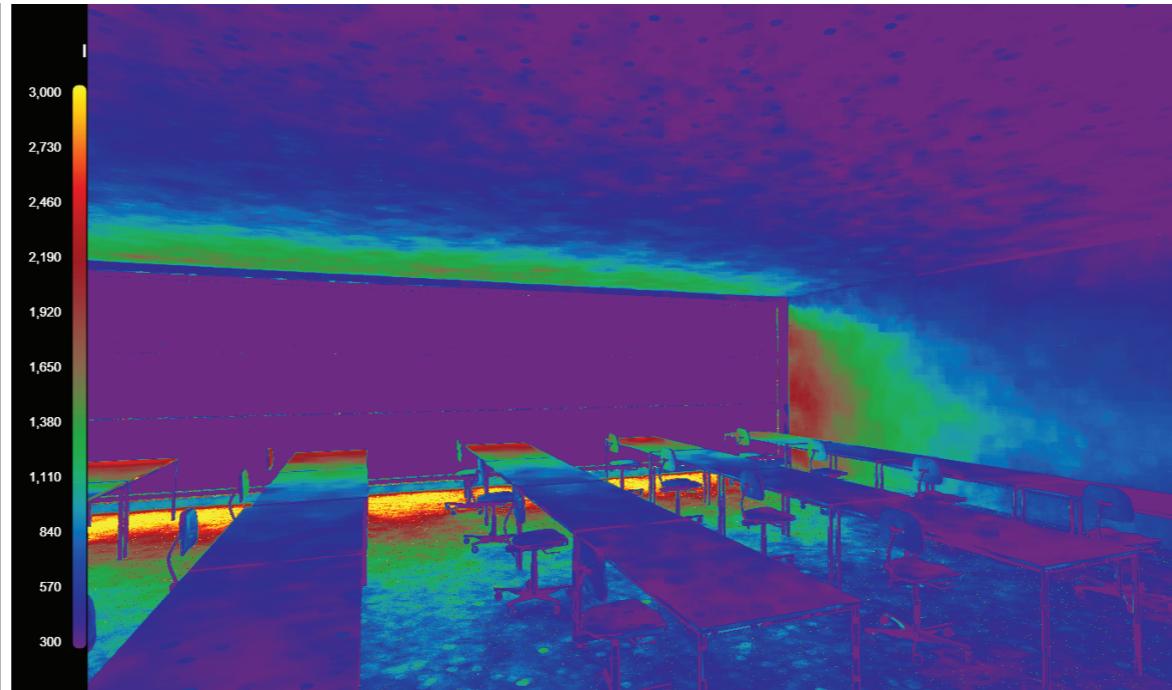
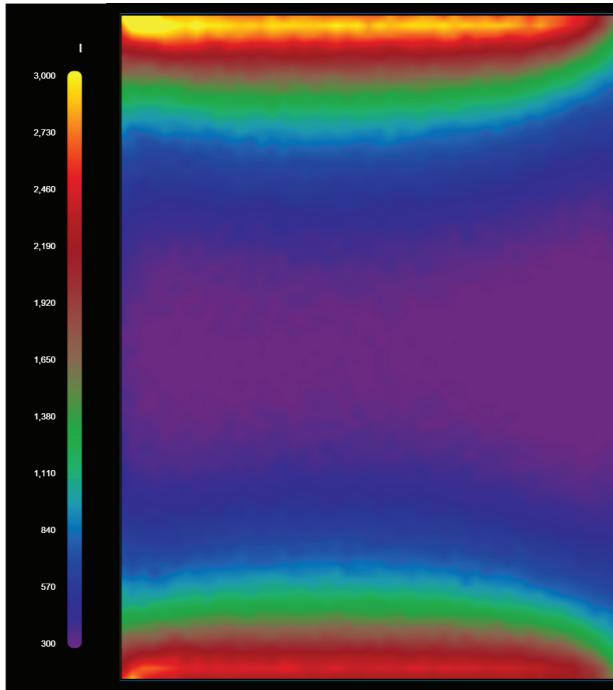
Choose window size

W (mm): 

H (mm): 



FACADE PRODUCT (BEFORE)

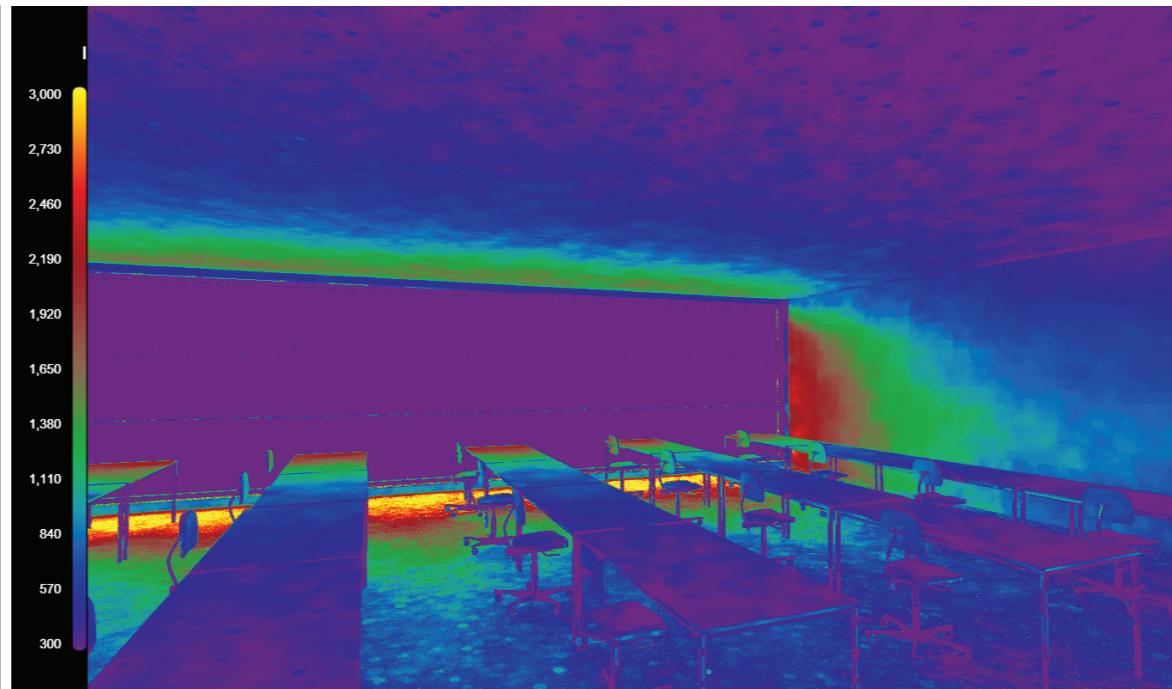
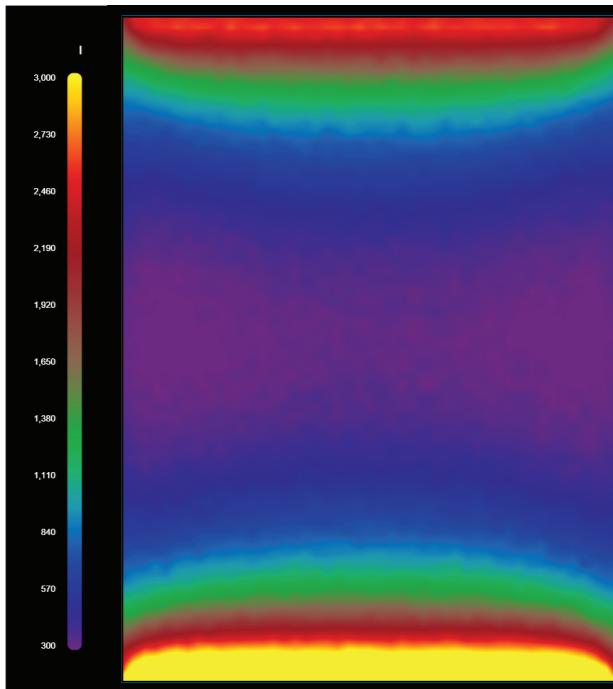


9 A.M.

Observation: Uneven daylight distribution, with high illuminance concentrated on the left side near the window.

Illuminance: Peaks over 3,000 lux near the window, but drops significantly deeper into the room.

Quality: Glare risk near the window; poor daylight penetration to the corridor

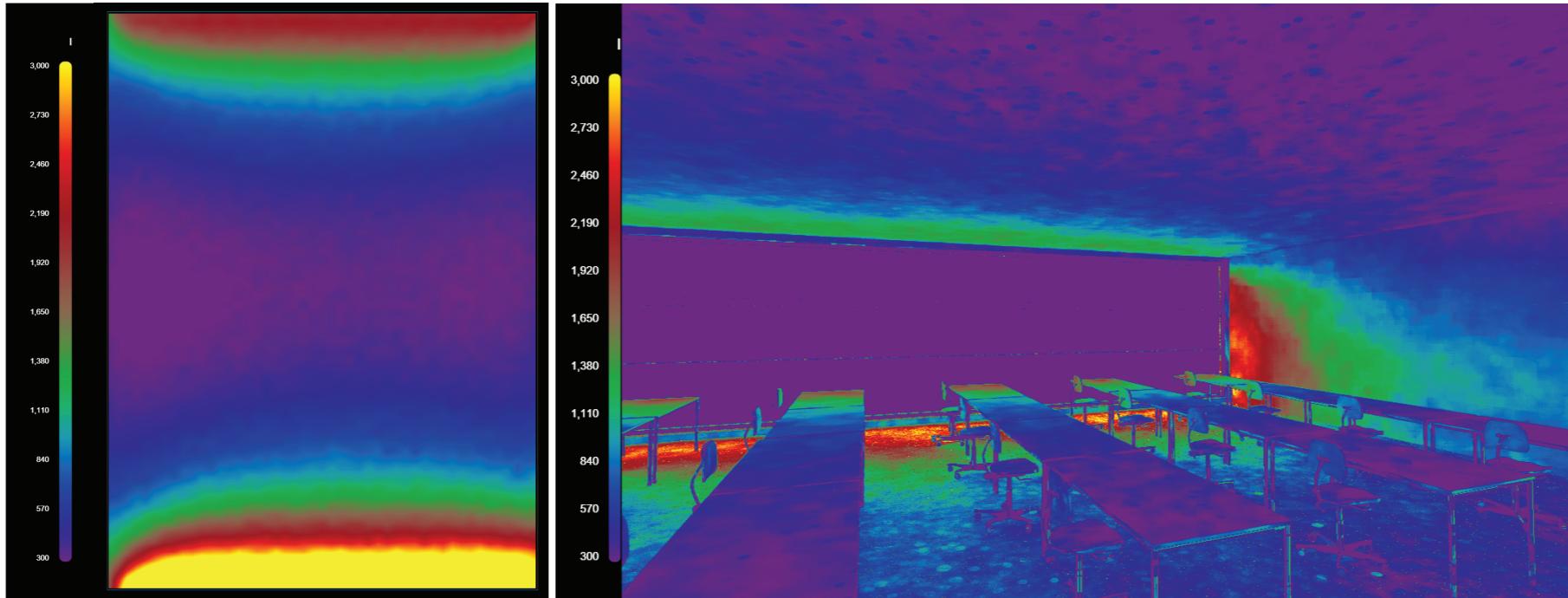


12 P.M.

Observation: Light spreads more evenly across the room compared to 9 A.M.

Illuminance: Consistent and relatively high in Perimeter areas, around 1,500–3,000 lux.

Quality: Good daylight quality overall – effective use of natural light with reduced contrast.

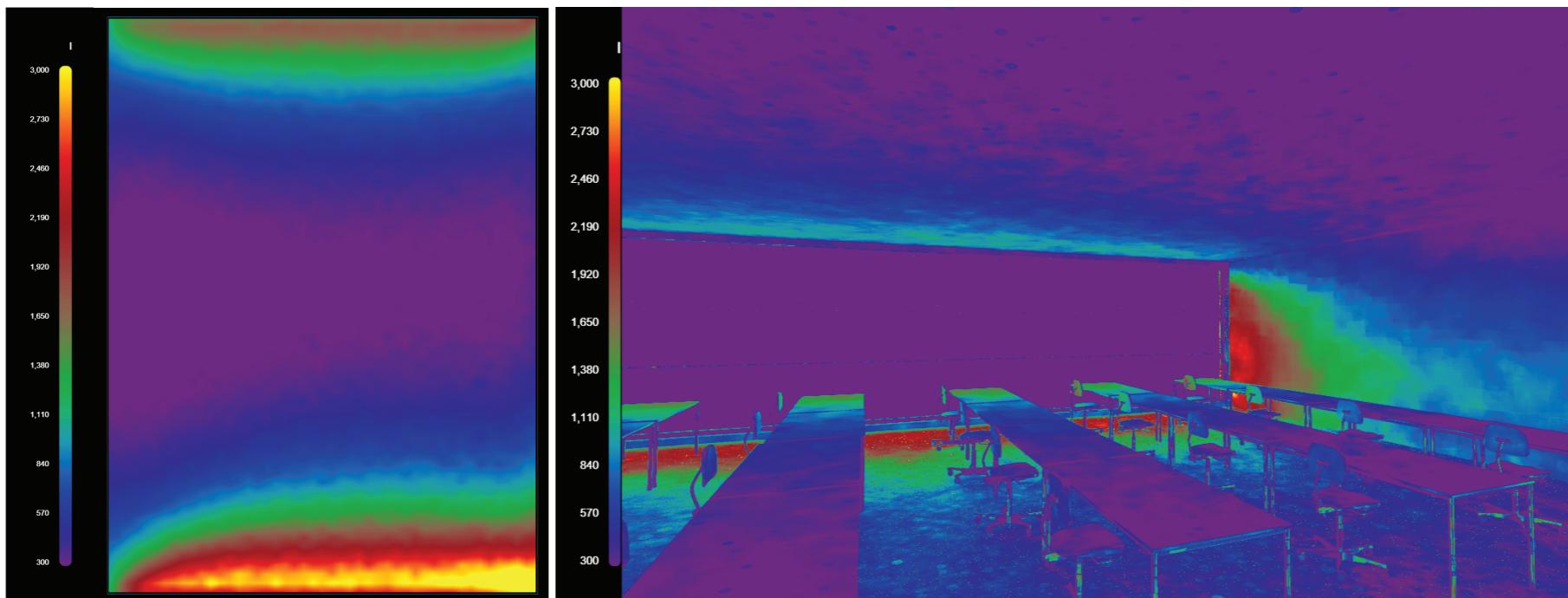


3 P.M.

Observation: Similar to 12 P.M. but with slightly lower light levels in some parts.

Illuminance: Still within a functional range, though more shading is visible near the window wall.

Quality: Acceptable, with slight drop in uniformity.



5 P.M.

Observation: Dimming daylight; illuminance levels decrease more significantly.

Illuminance: Mostly below 1,000 lux, especially toward the rear.

Quality: Poor for daylight-only use; supplemental artificial lighting likely needed.

Reuce height of the windoe

Product description

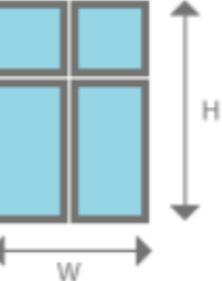
Facade window
Operable elements divided by mullion and transom

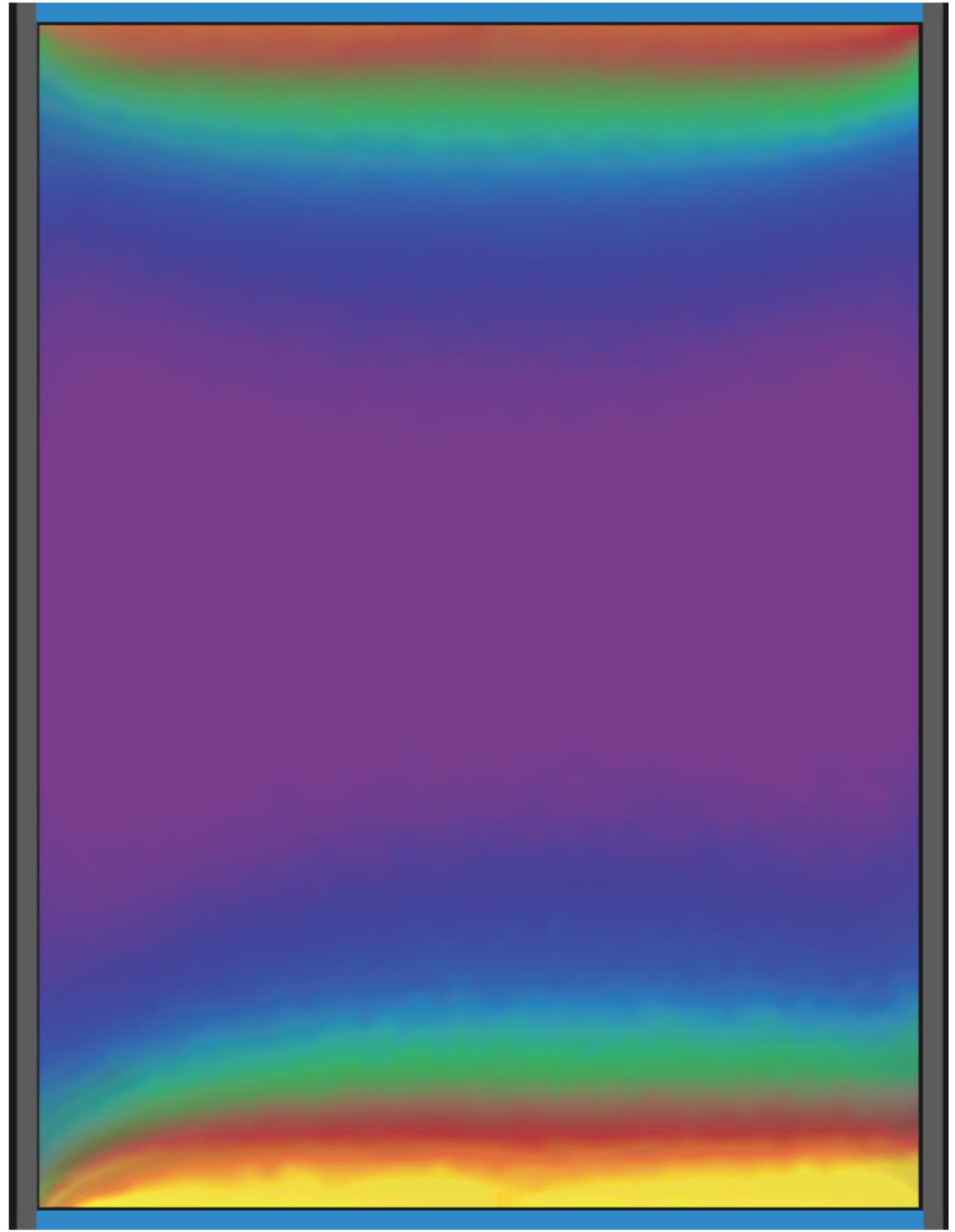


Choose window size

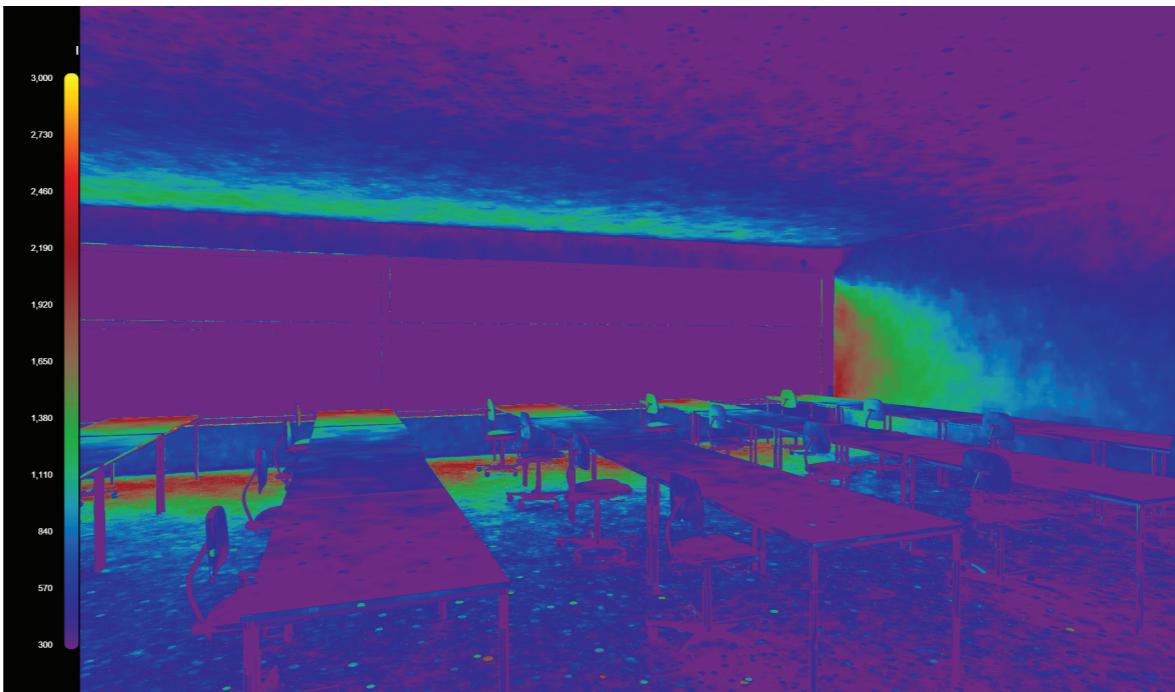
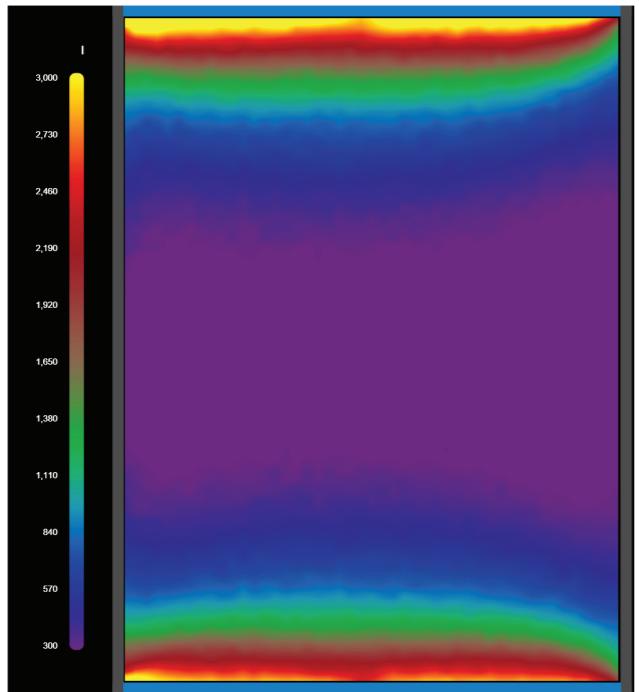
W (mm):

H (mm):





FACADE PRODUCT (AFTER)

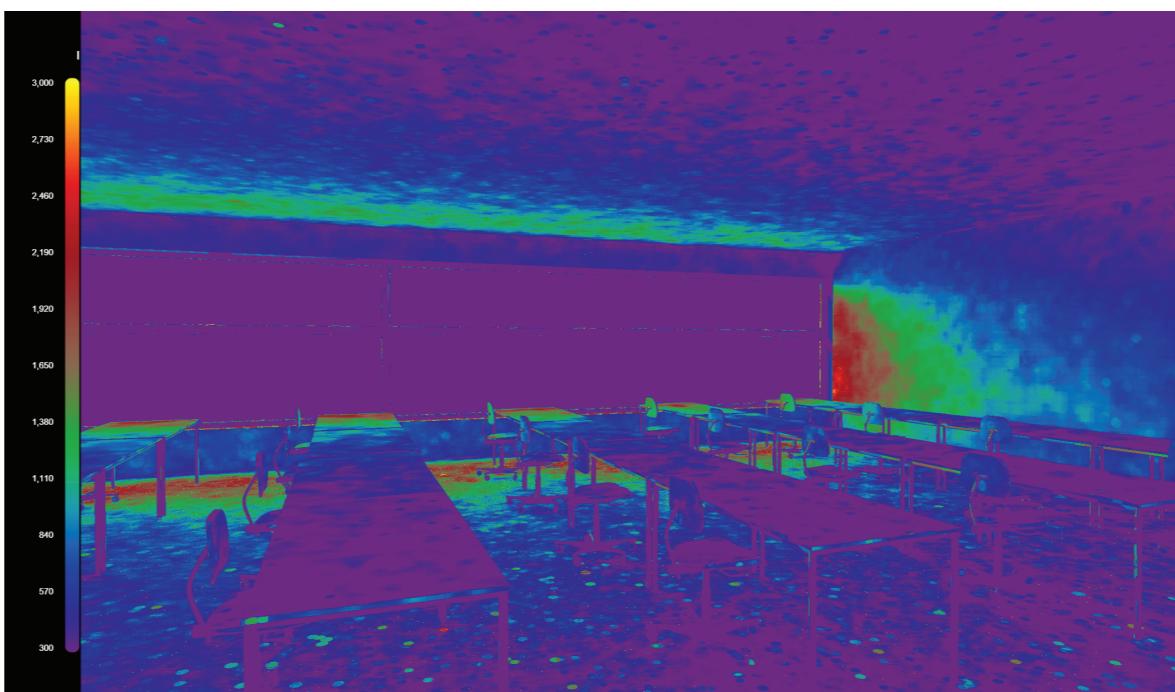
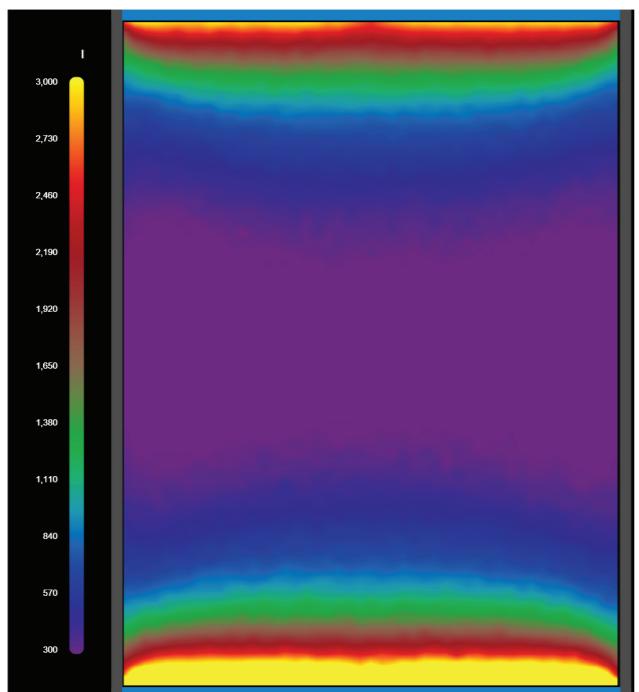


9 A.M.

Observation: Daylight is focused near the window zone, with minimal reach toward the back.

Illuminance: High (>2,500 lux) near the window; drops off sharply deeper inside.

Quality: Uneven lighting; localized brightness near windows but insufficient overall daylighting for tasks in the interior.

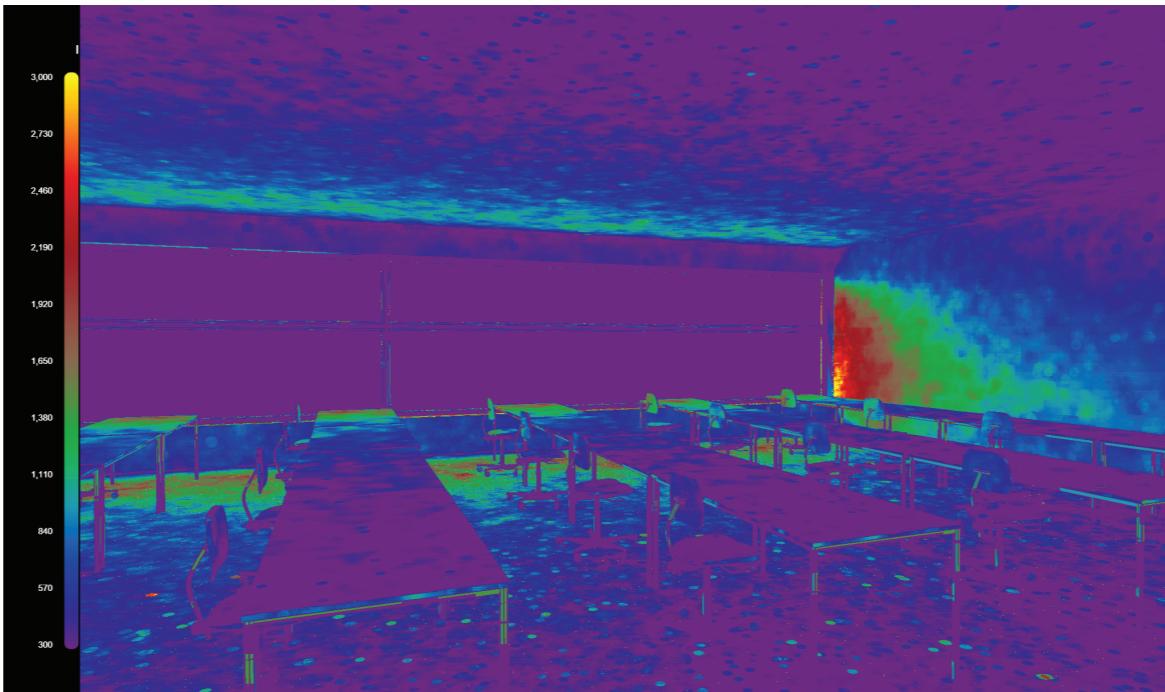
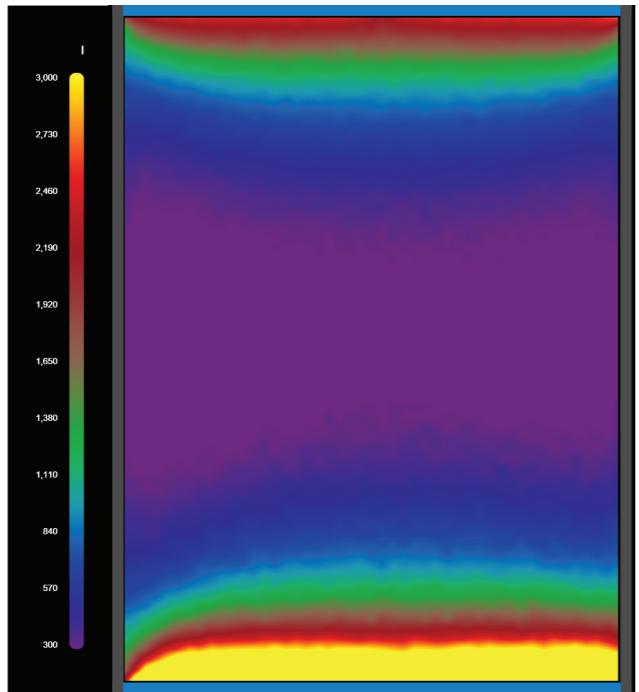


12 P.M.

Observation: Light spreads further into the space, more balanced across the room.

Illuminance: Moderate to high (1,100–2,500 lux); daylight reaches central zones.

Quality: Improved uniformity; suitable for most visual tasks with minimal glare risk.

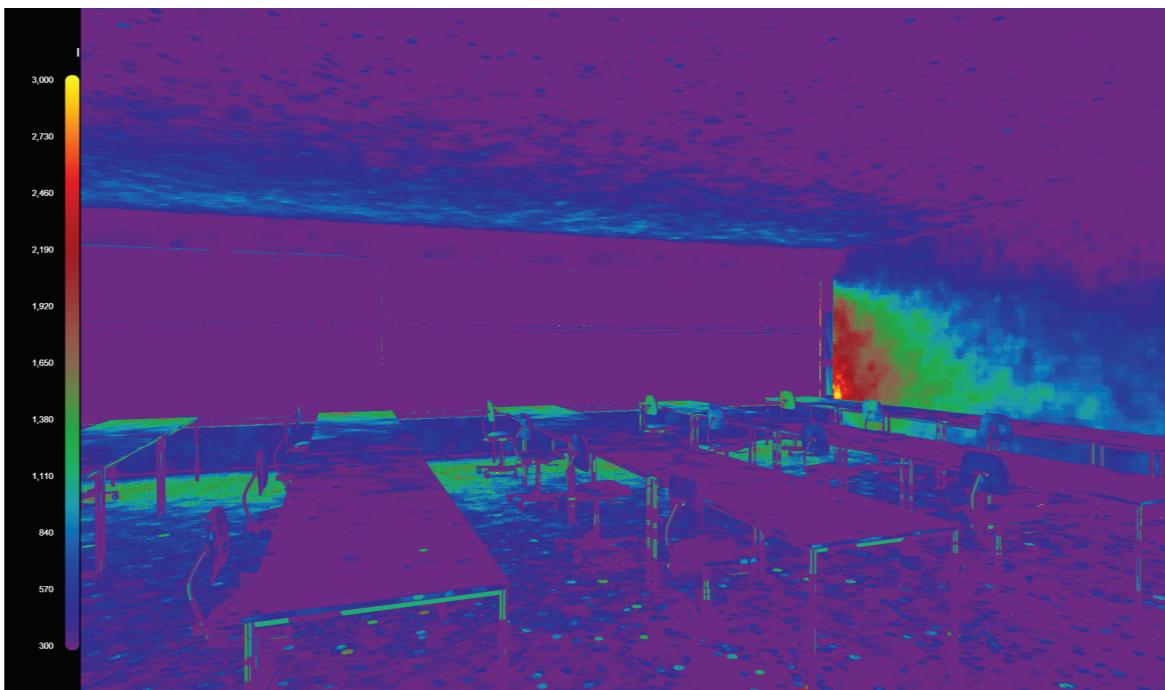
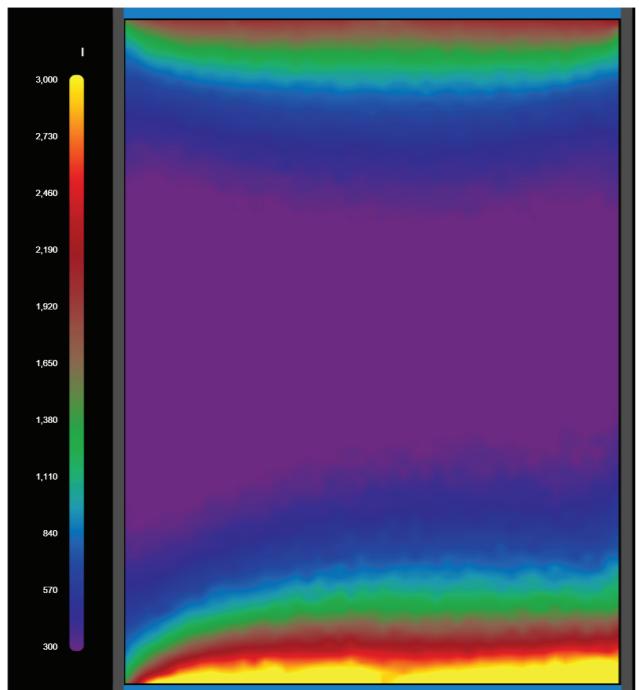


3 P.M.

Observation: Similar to 12 P.M., but daylight intensity is starting to decline.

Illuminance: Moderate (~800–1,800 lux); still functional across work zones.

Quality: Acceptable daylight quality; slightly dimmer but still usable without artificial lighting.



5 P.M.

Observation: Daylight is confined mostly to the perimeter near the window.

Illuminance: Low (<800 lux); majority of the room is underlit.

Quality: Poor for daylight-only use; artificial lighting needed for visual comfort and task performance.