

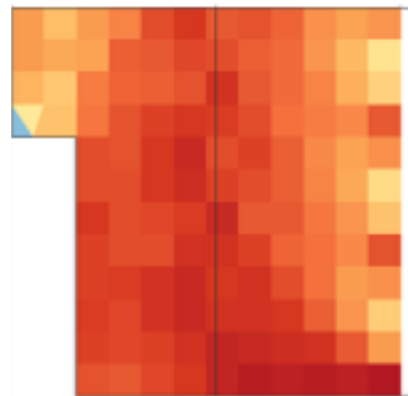
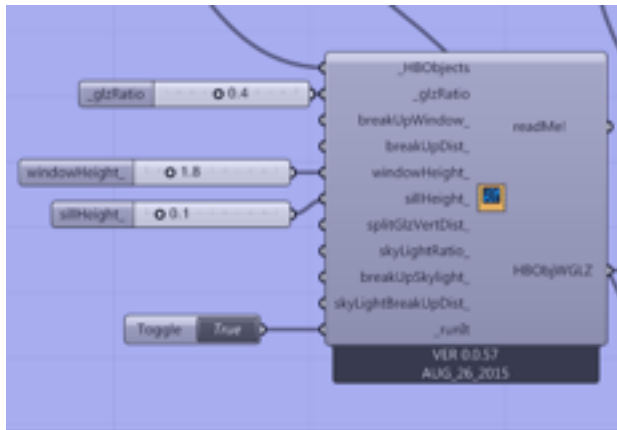
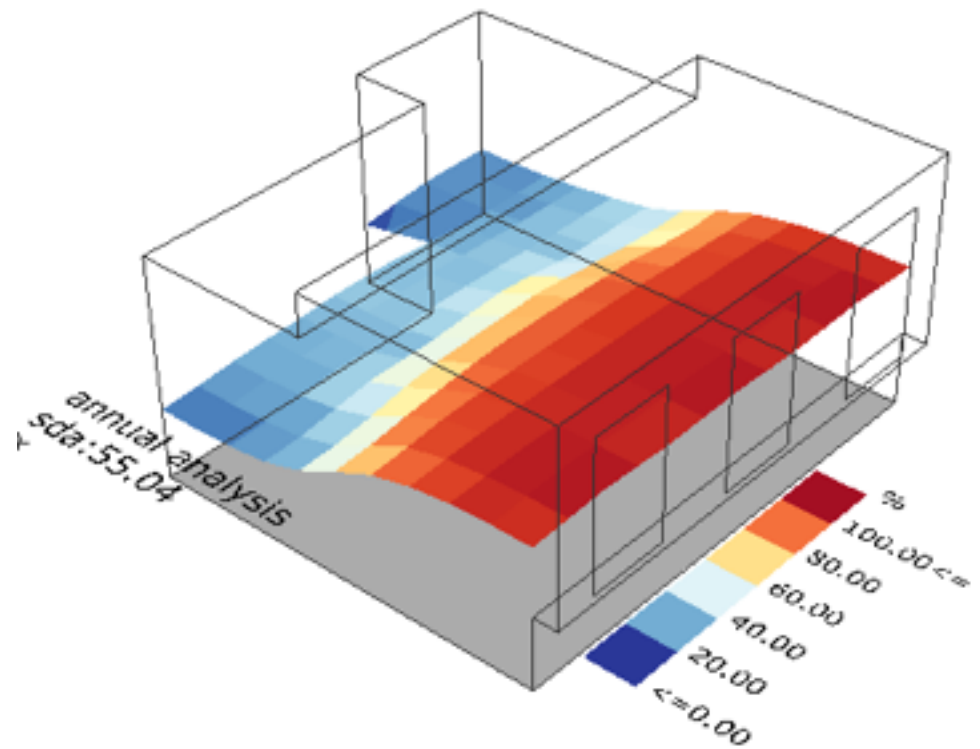
## 1) Daylighting

The first step is defining baseline glazing conditions to provide enough daylighting to the space.

Without shading, glazing conditions are

- ▶ 40% of glazing
- ▶ sill height 110 cm
- ▶ window height 180 cm

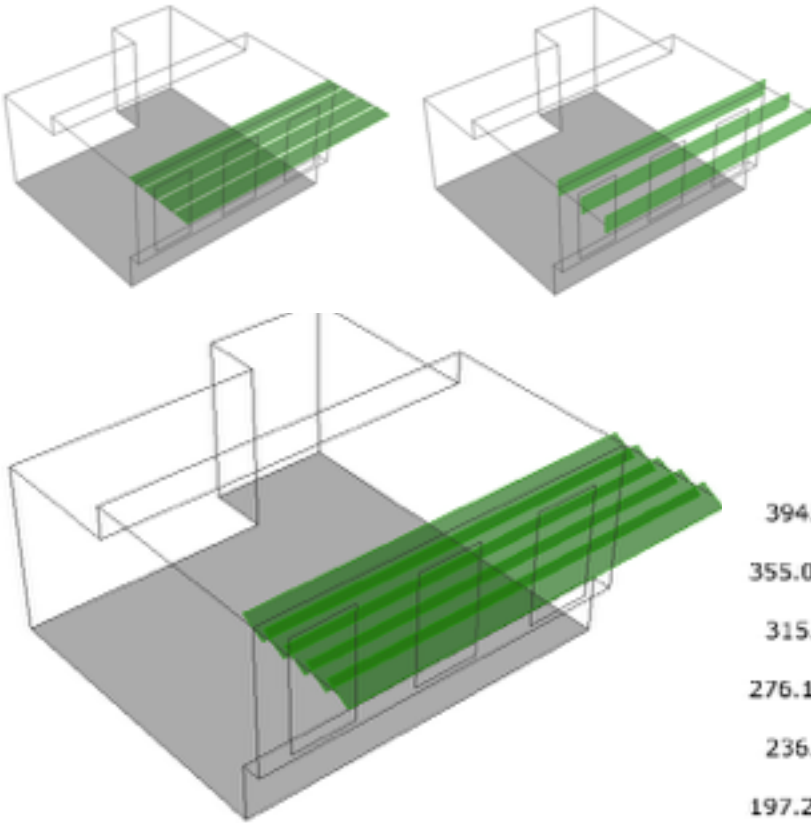
The annual daylight autonomy of the indoor space is 55.04



Annual Analysis UDLI 100-2000 Lux

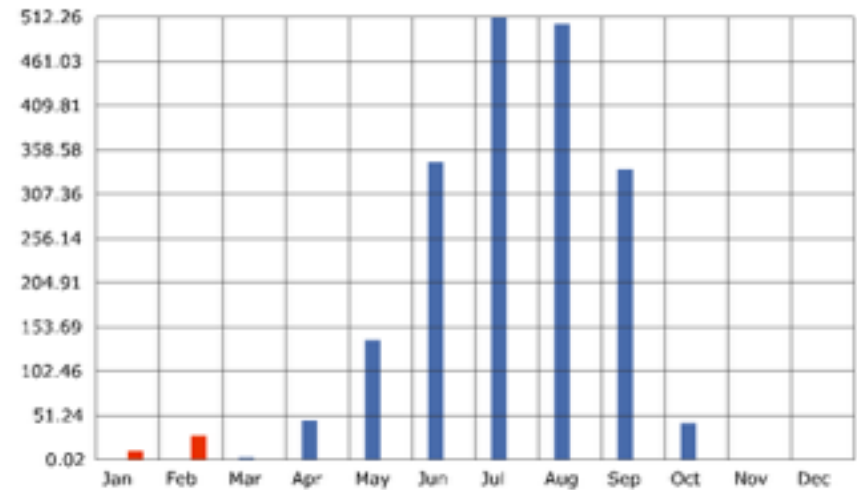


Annual Analysis UDLI > 2000 Lux

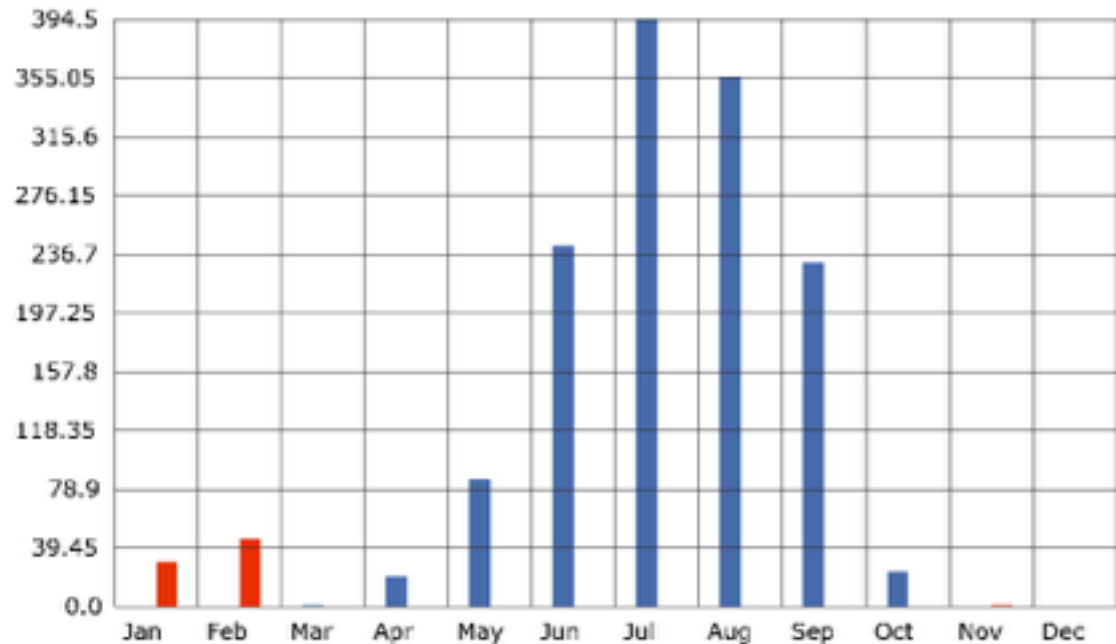


## 2) Parametric Louvers and Energy Simulation

The designed GH definition allows to manage the settings of the shading devices ( number of fins, angle, width ) to find the best shading performance obtaining immediate energy simulation results.



Baseline condition



Total cooling: 1351 kWh

Total Heating: 76 kWh

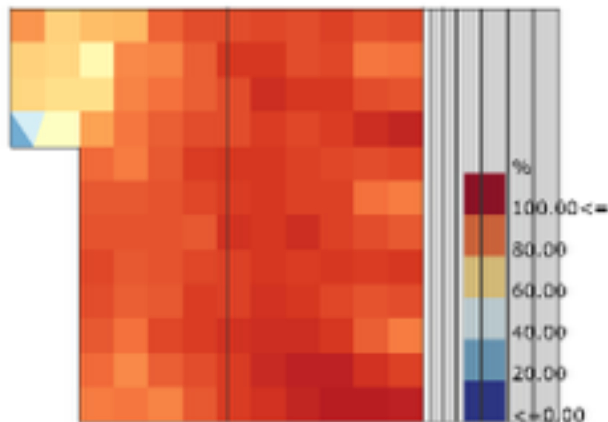
Total: 1427 kWh

### 3) Radiation Analysis

For testing purposes, I run the radiation analysis on the shaded facade to verify which parts of the windows are most affected by the designed shading device and its actual effectiveness.

### 4) Daylighting Check

As last step, I double checked the daylighting of the space after the addition of the shading device.



annual analysis  
sda:41.09

