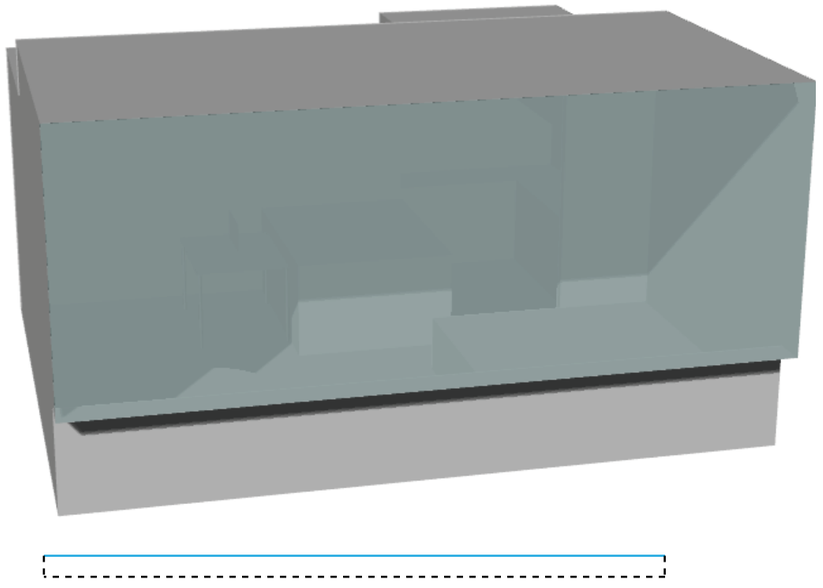
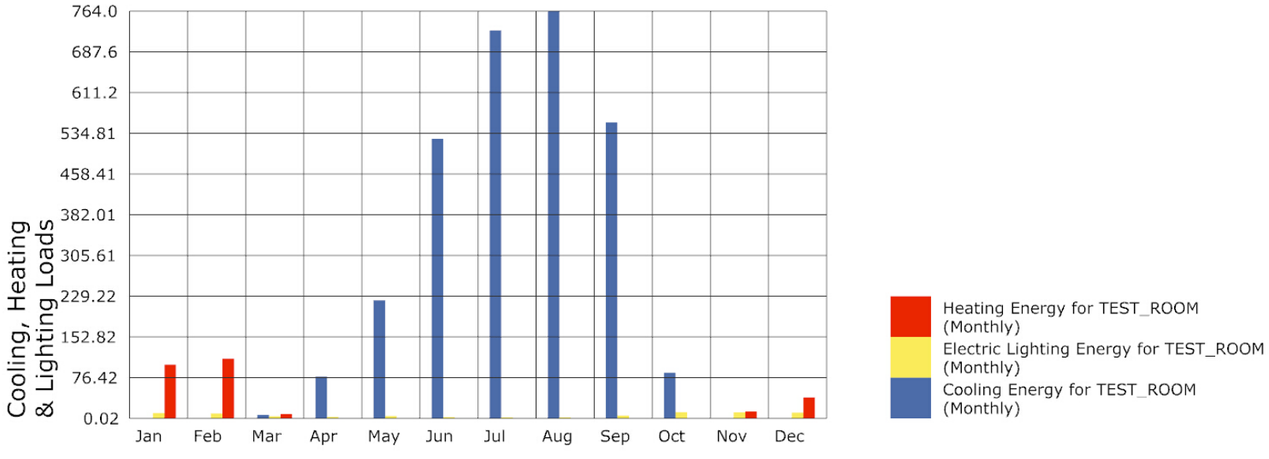
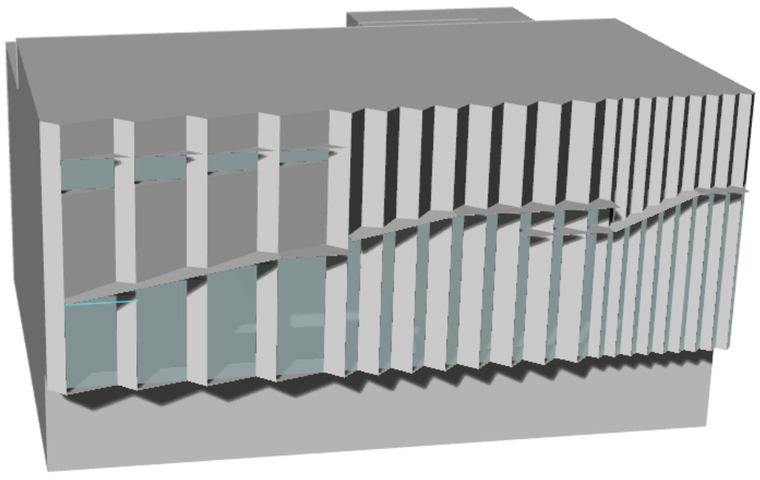
Agnes Xi Yao
Energy Simulation Results

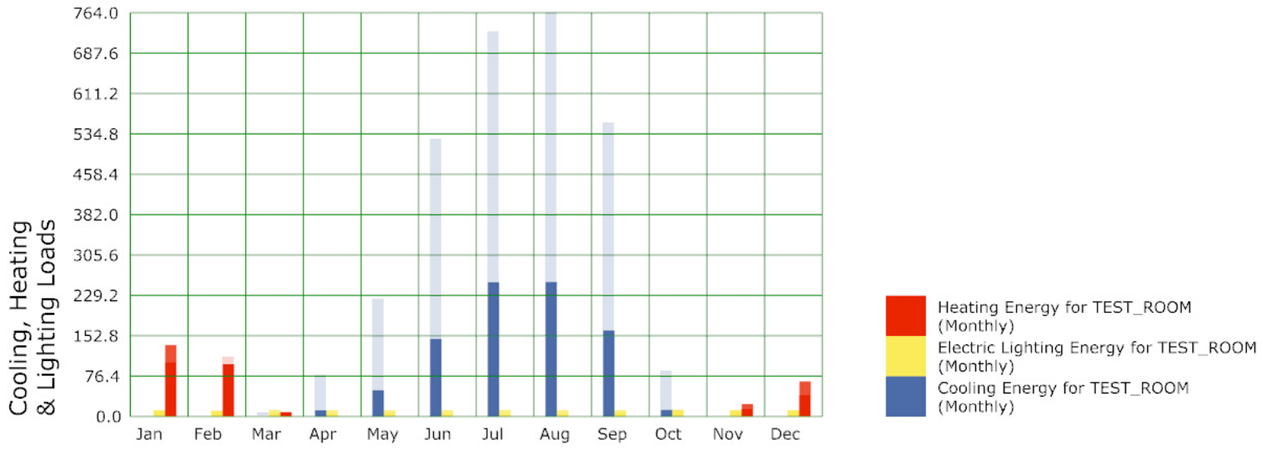




Philadelphia International Ap PA USA TMY3

Annual Cooling : 2965.76
Annual Heating : 275.74
Total : 3241.50



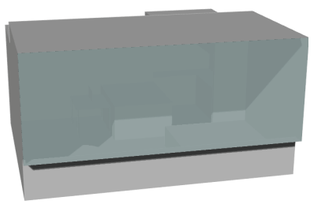


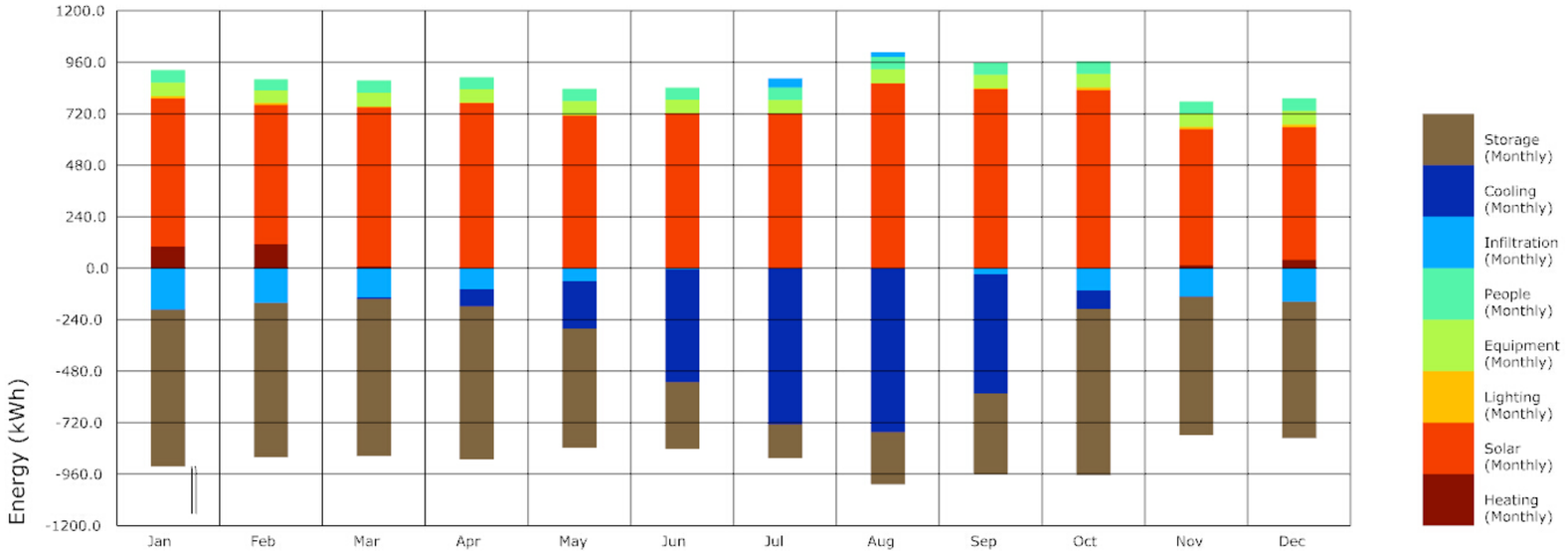
Philadelphia International Ap PA USA TMY3

Annual Cooling : 894.10
Annual Heating : 334.51
Total : 1228.61

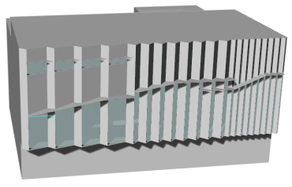
Agnes Xi Yao
Energy Simulation Results

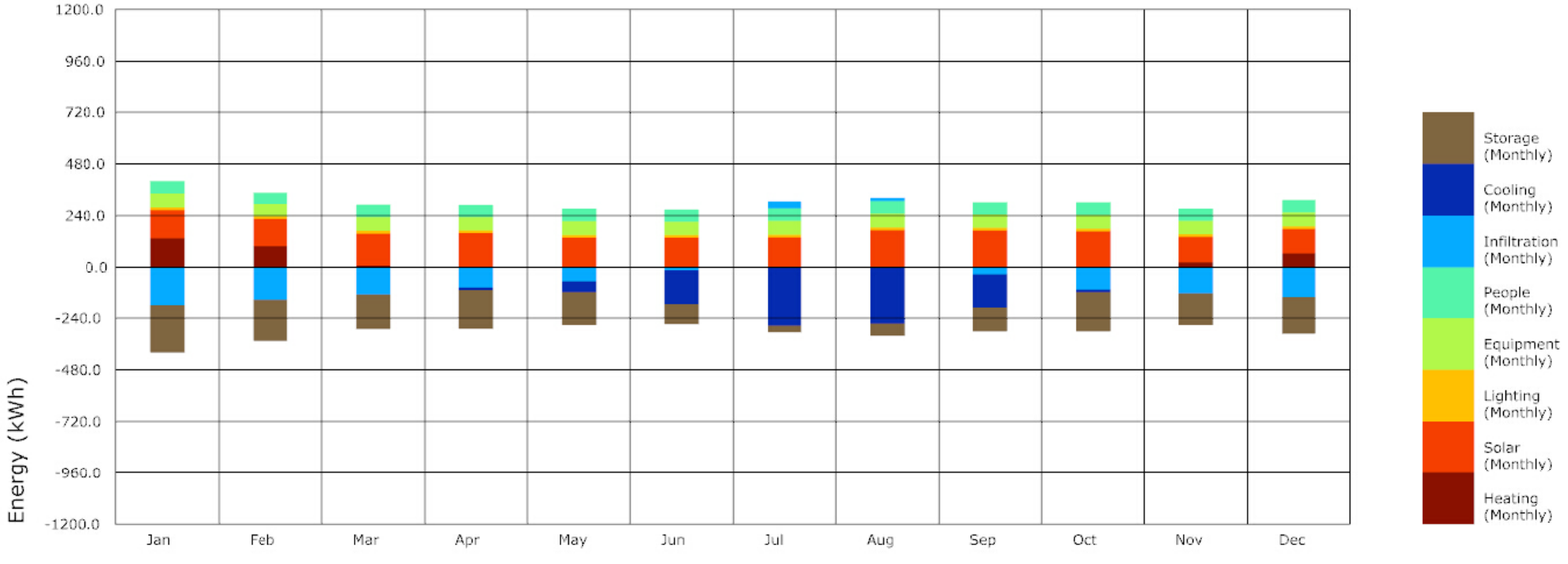
Energy Balance





Energy Balance

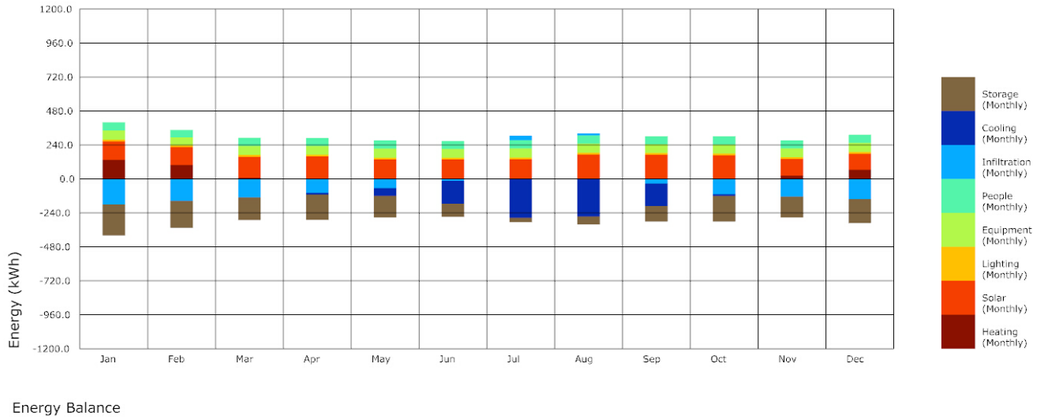




Energy Balance

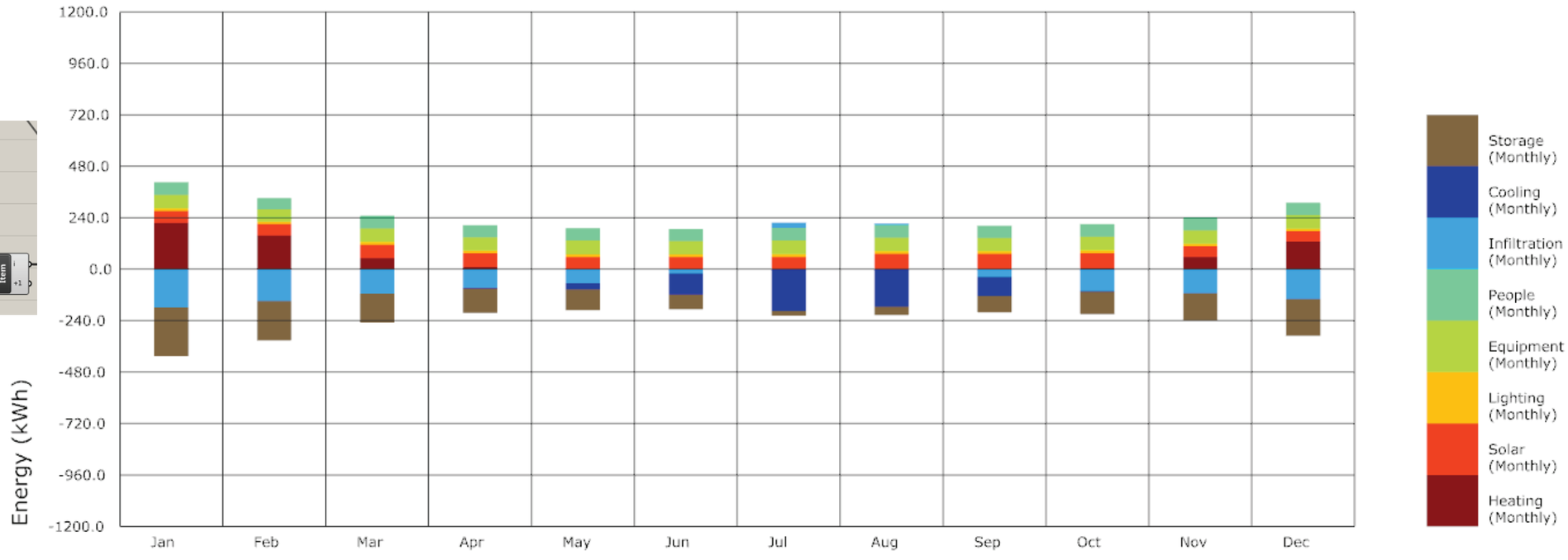
Glass Type

Annual Cooling : 894.10
Annual Heating : 334.51
Total : 1228.61



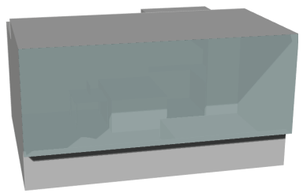
Energy Balance

Annual Cooling : 592.01
Annual Heating : 622.01
Total : 1214.05

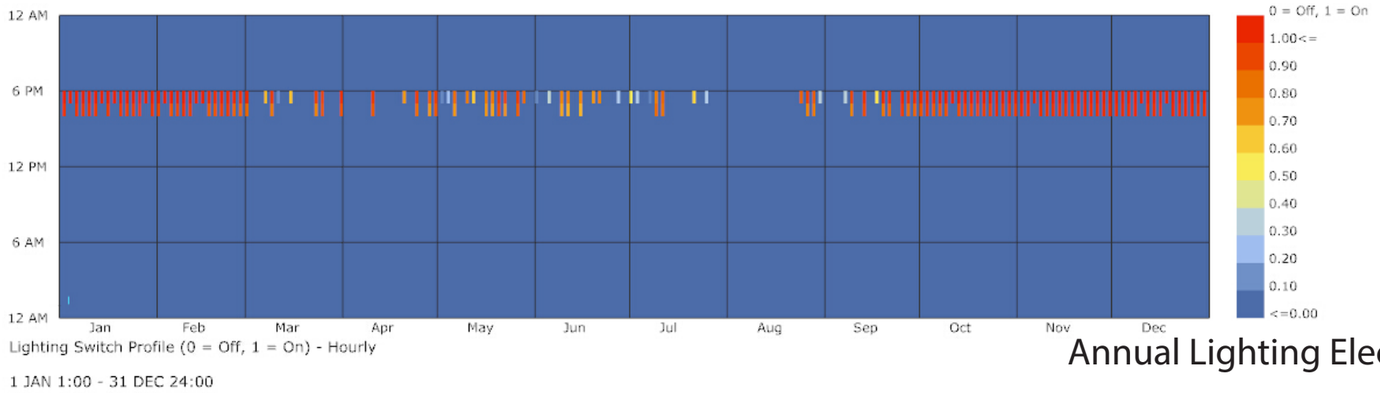


Energy Balance

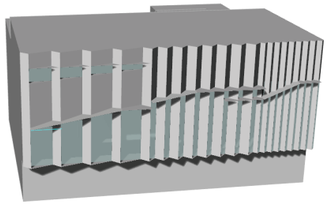
Decrease in Cooling load but increase in Heating Load. while the total load was not changed much. If natural ventilation could be applied during summer, the cooling load during summer is easier to be reduced



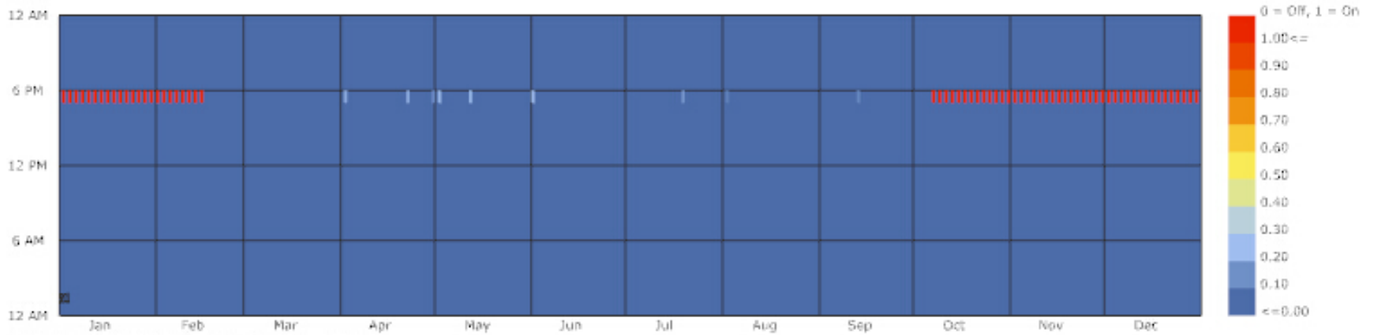
Base Line



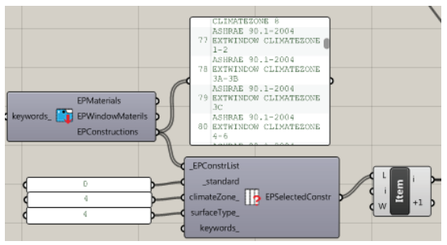
Annual Lighting Electricity: 76



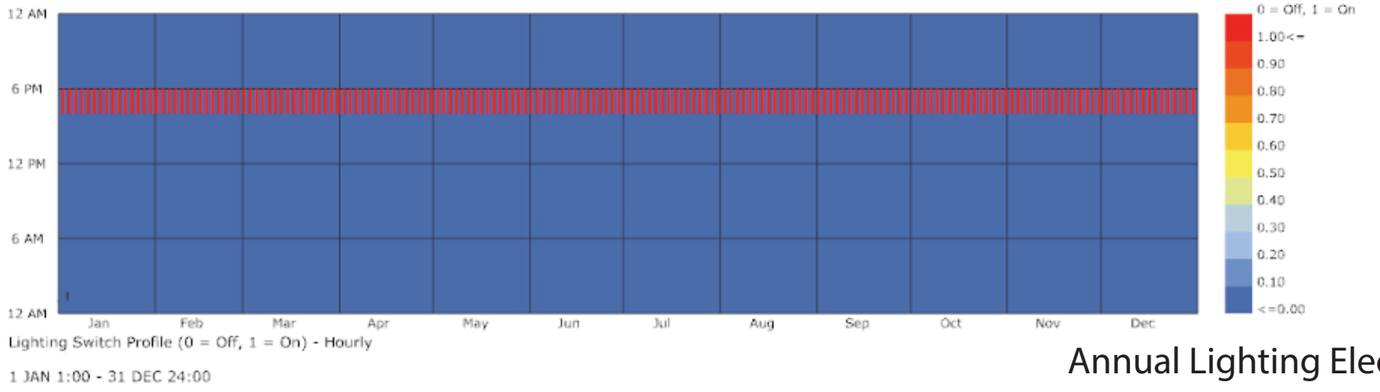
Shaded



Annual Lighting Electricity: 126.9



Reconstructed Glass



Annual Lighting Electricity: 145

The daylighting during summer afternoon was sacrificed when the glass type was changed.