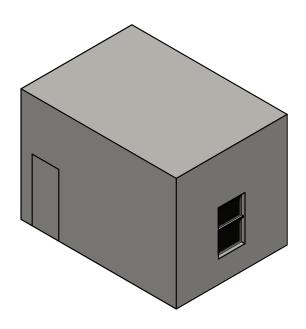
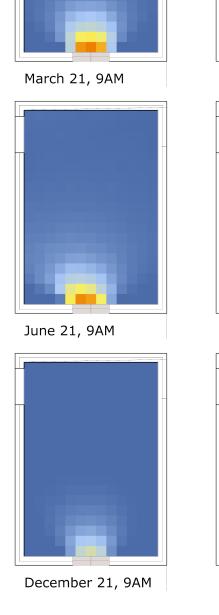
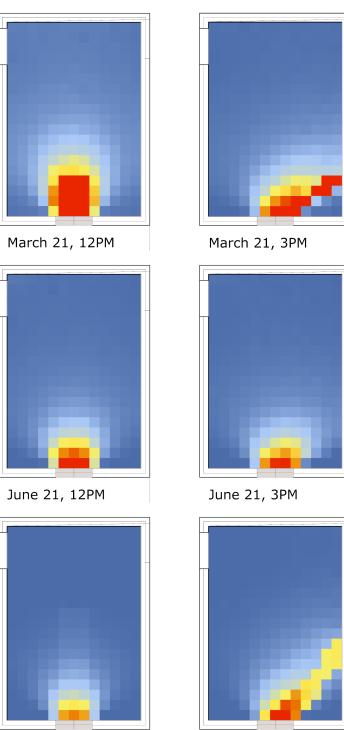
Original Daylighting



While the window in this room is large, it is insufficient to provide light deeply into the room. However, the dimensions of the room are such that a light shelf could be highly beneficial. In particular the high ceiling provides the space in which the light could mix and permeate further into the room.

Lux
3000.00<
2710.00
2420.00
2130.00
1840.00
1550.00
1260.00
970.00
680.00
390.00
<100.00



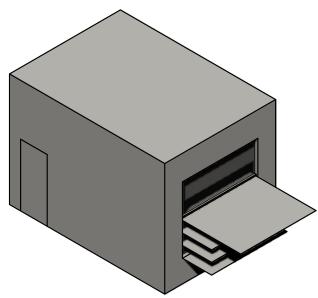


December 21, 3PM

December 21, 12PM

Testing Lighting By Expanding both the width and the height of the window light is able to reach further into the room. However, the increased glazing also allows for increased opportunities for glare. June 21, 12PM December 21, 9AM Lux 3000.00< 2710.00 This study looked at an 2420.00 oversized light shelf to 2130.00 reduce some of the glazing 1840.00 in the front of the room 1550.00 while introducing more 1260.00 deeper into the room. 970.00 680.00 390.00 <100.00 December 21, 9AM June 21, 12PM By introducing a second reflective shelf below the glazing of the window, light which would be lost is bounced into the room increasing the overall light in the room in the winter. December 21, 9AM June 21, 12PM

Proposed Strategy



To achieve a more even lighting level throughout the year a design was developed using both a light shelf and horizontal shading below. By the all of the shading devices being reflective, light is moved further in to the space while reducing the glare and direct sunlight in the summer.

