



Radiance Simulations

August 2007

Mount Kisco Library Radiance Simulations

Overview

Date: August 23, 2007

Name of Project:

Location of Project: Mount Kisco, NY, USA

Name of Architects:

Name of Daylighting Technology: Solera®

Names of Daylighted Spaces:

Advanced Glazings Ltd. Contact: Corrine Brewer

Advanced Glazings, Ltd. has performed the enclosed daylighting analyses for the Mount Kisco Library in Mount Kisco, NY,

Note

We work closely with architects and developers to maximize the design of spaces for daylighting purposes. Our group of specialists use project details such as CAD drawings, elevations, materials, orientation, and location of building to provide the most accurate representations and analysis possible. The team at Advanced Glazings, Ltd. has worked on over 100 projects throughout North America.

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Figure I

The Solera configuration used for the simulations. The same configuration was used for both the first and the second floor (second floor shown). Each simulation was run twice, once with the Solera configuration as shown and once using only vision glass. Note: VLT stands for visible light transmittance.

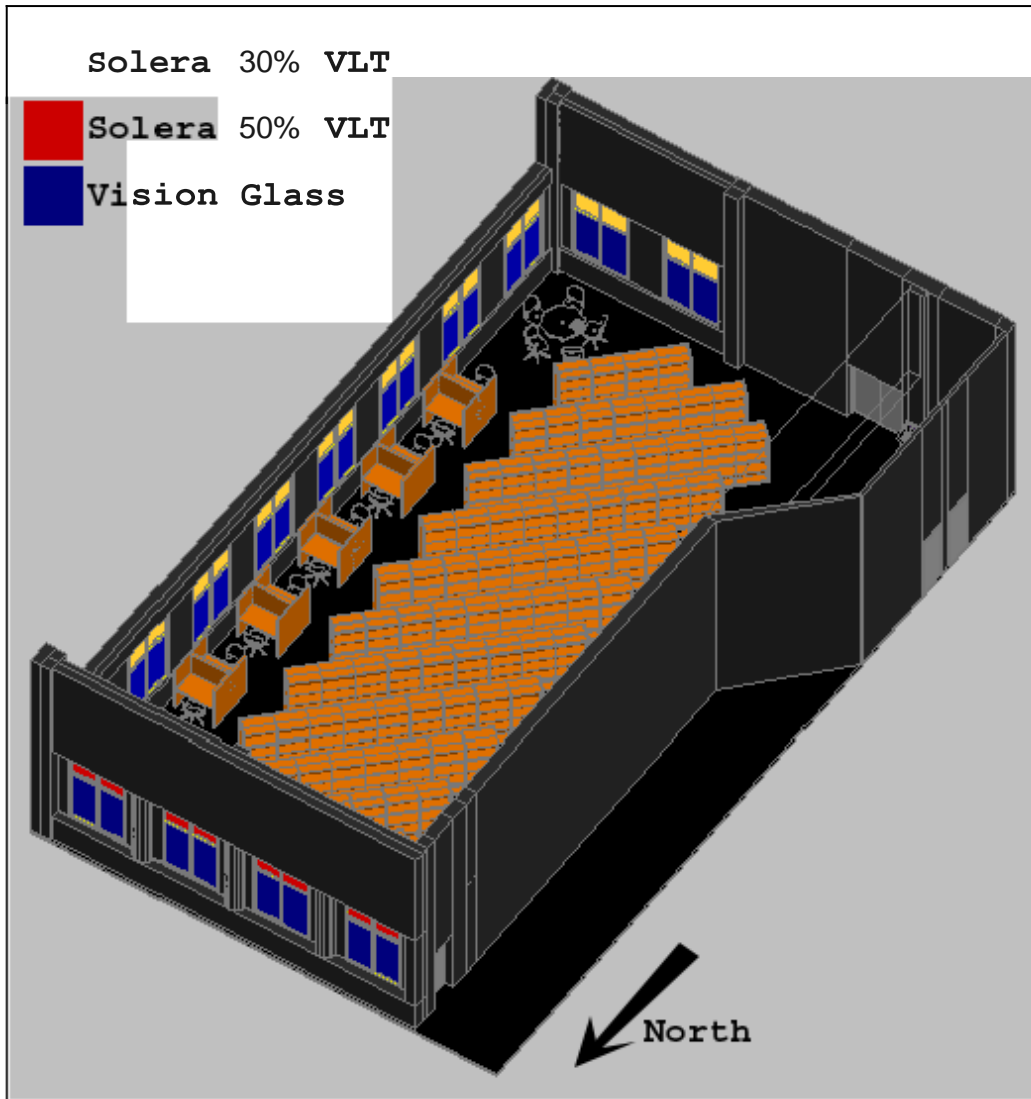


Figure 2

Two images of the first floor reading room rendered at 9am on June 21. The top image uses vision glass and the bottom image uses Solera as outlined in Figure 1.



Figure 3

Two images of the first floor book shelving units rendered at 9am on June 21. The top image uses vision glass for all glazings and the bottom image replaces the top portion of the glazings with Solera as outlined in Figure 1.



Figure 4

Two images of the second floor space rendered at 9am on June 21. The top image uses only vision glass and the bottom image uses Solera as outlined in Figure 1. The camera for these images was placed on the table in south east corner of the room.



Figure 5

Two images of the computer systems along the west wall of the second floor rendered at 9am on June 21. The top image uses only vision glass and the bottom image uses Solera as outlined in Figure 1.



Figure 6

The two images from Figure 2 rendered using false colors to show illuminance values. The scale to convert from colors values to illuminance values (Lux) may be found on the lower left hand corner of each image. The scale used for these images has a maximum value of 2000 Lux.

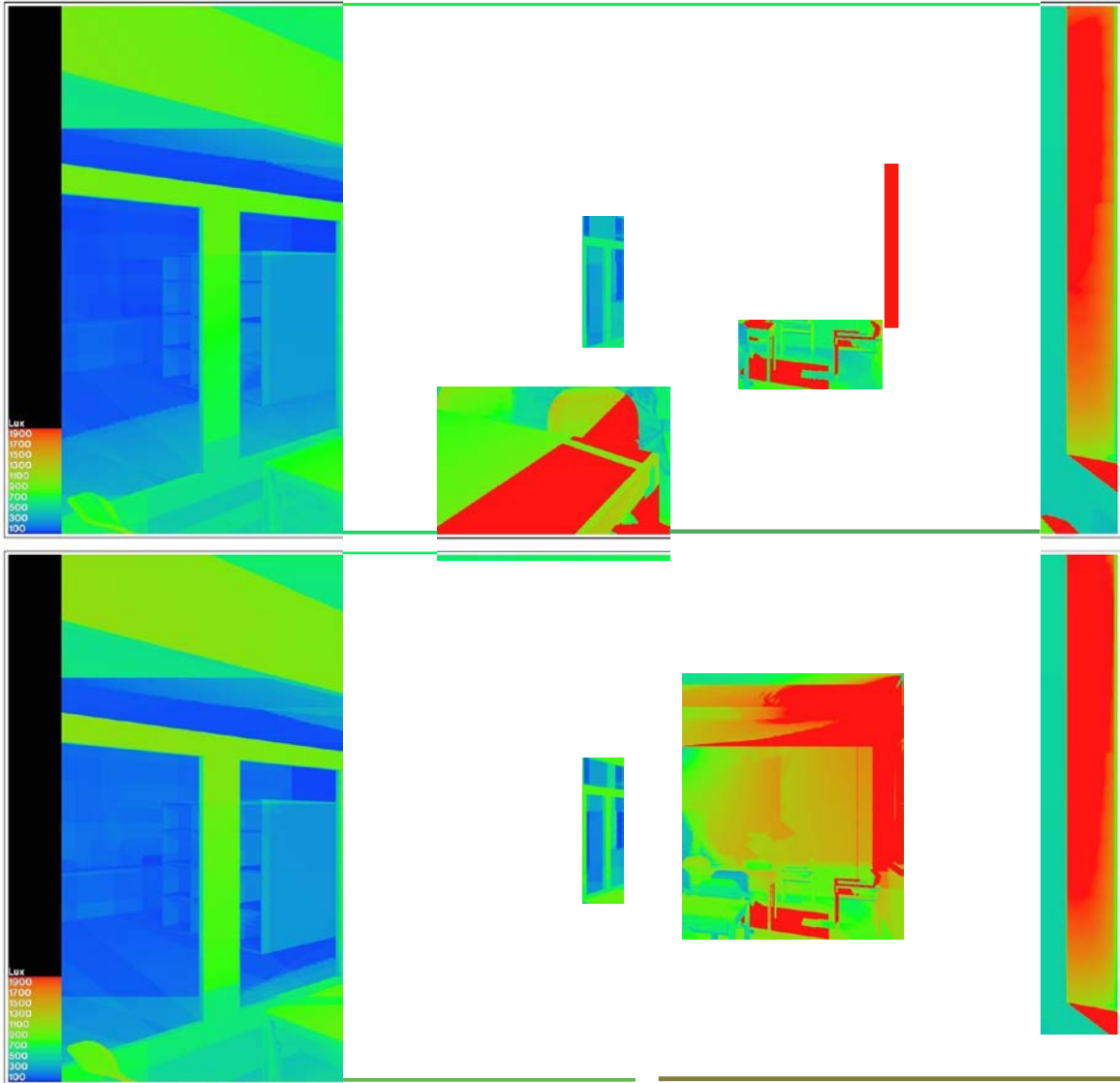


Figure 7

The two images from Figure 5 rendered using false colors to show illuminance values. The scale to convert from colors values to illuminance values (Lux) may be found on the lower left hand corner of each image. The scale used for these images has a maximum value of 1000 Lux.

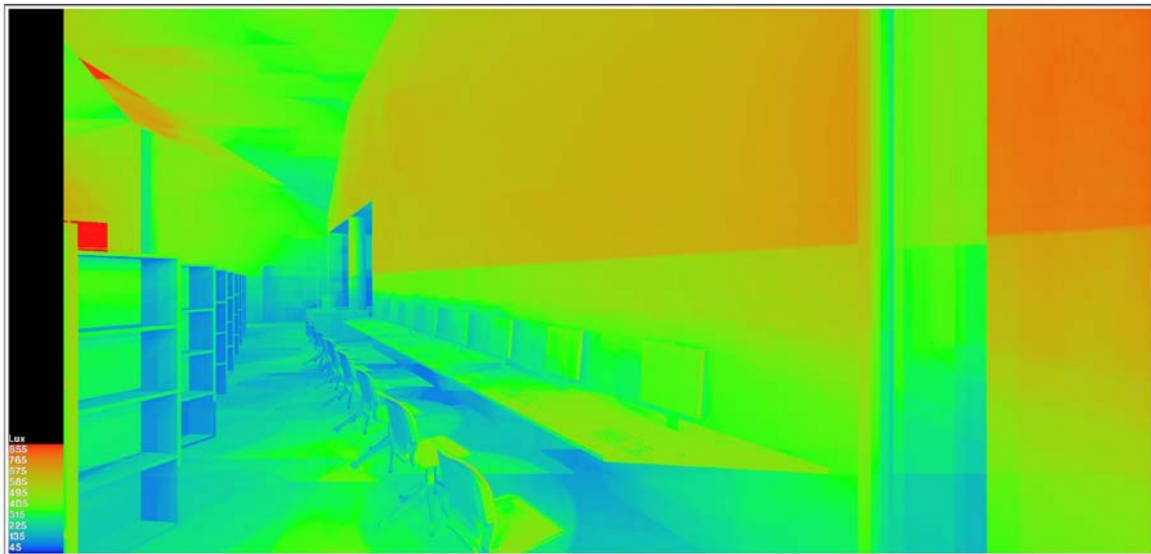
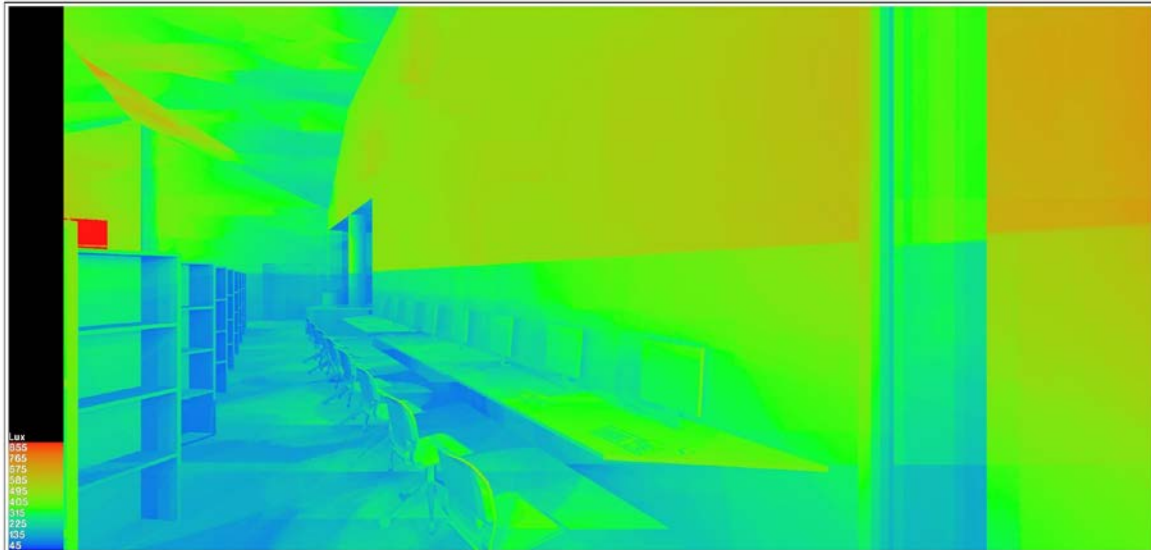


Figure 8

Two top down images of the first floor rendered using false colors to show illuminance values. The scale to convert from colors values to illuminance values (Lux) may be found on the lower left hand corner of each image. The scale used for these images has a maximum value of 500 Lux.

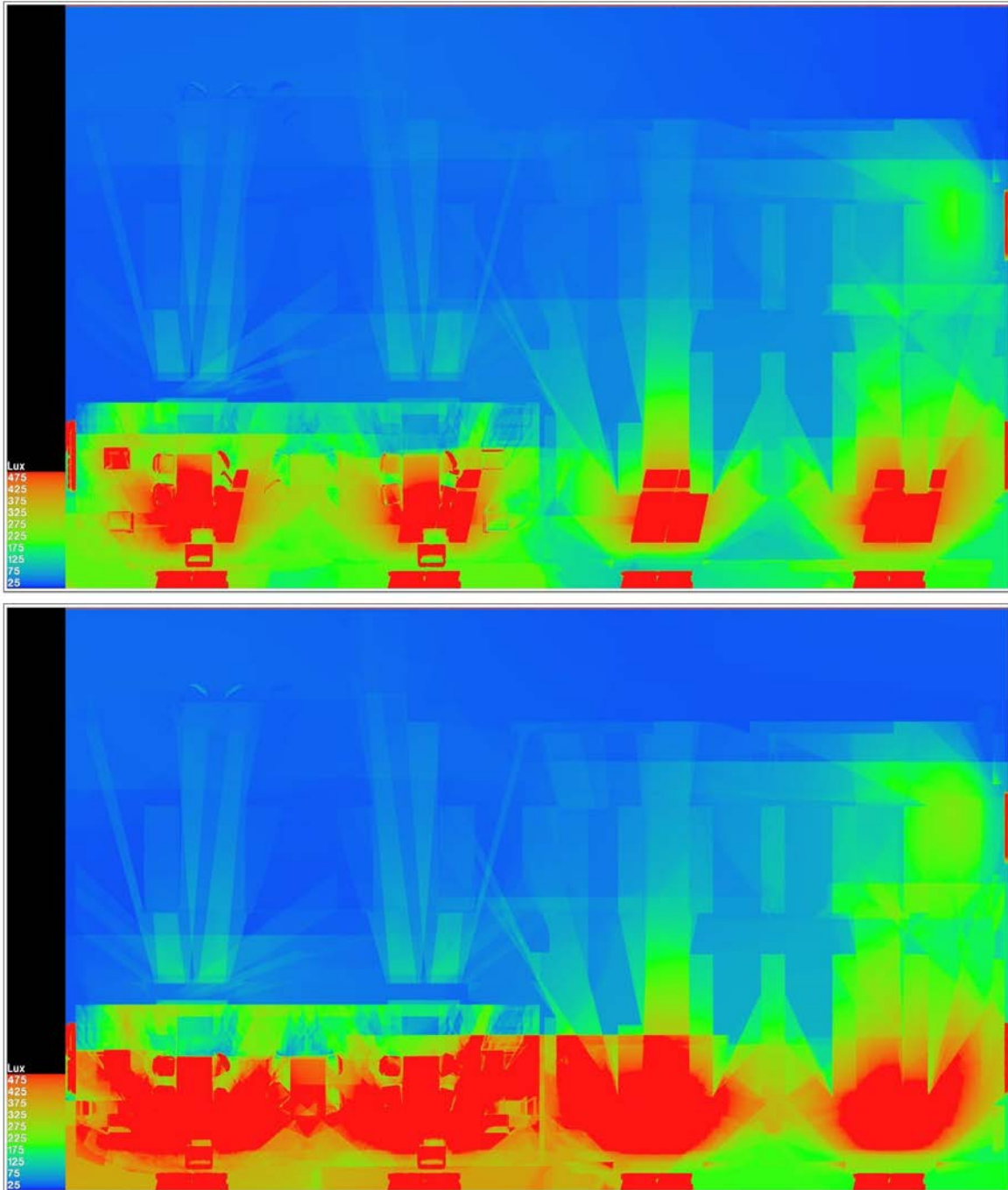


Figure 9

The same images from Figure 8, but using a scale that has a maximum value of 1000 Lux.

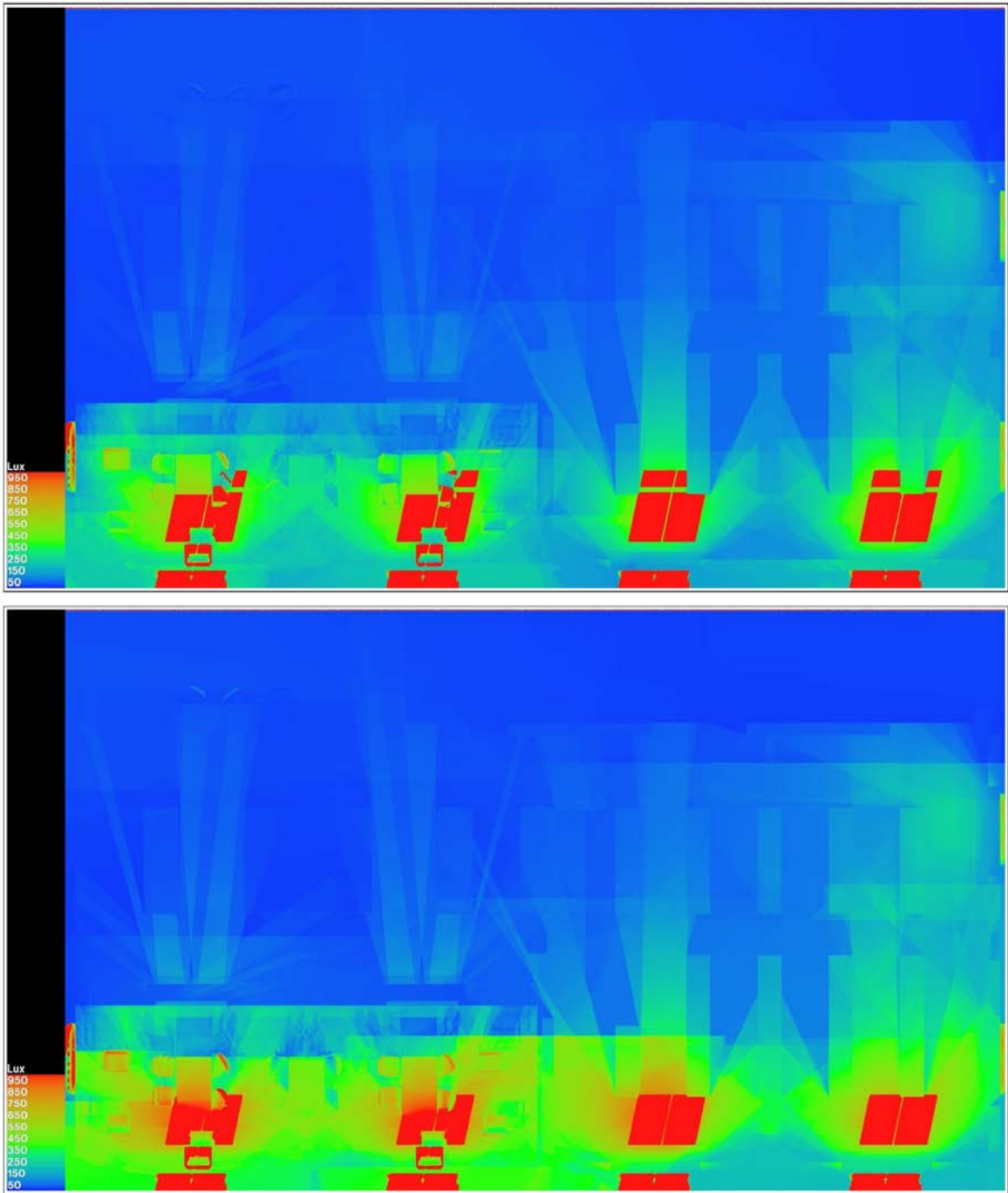


Figure 10

Two top down images of the second floor rendered using false colors to show illuminance values. The scale used for these images has a maximum value of 500 Lux.

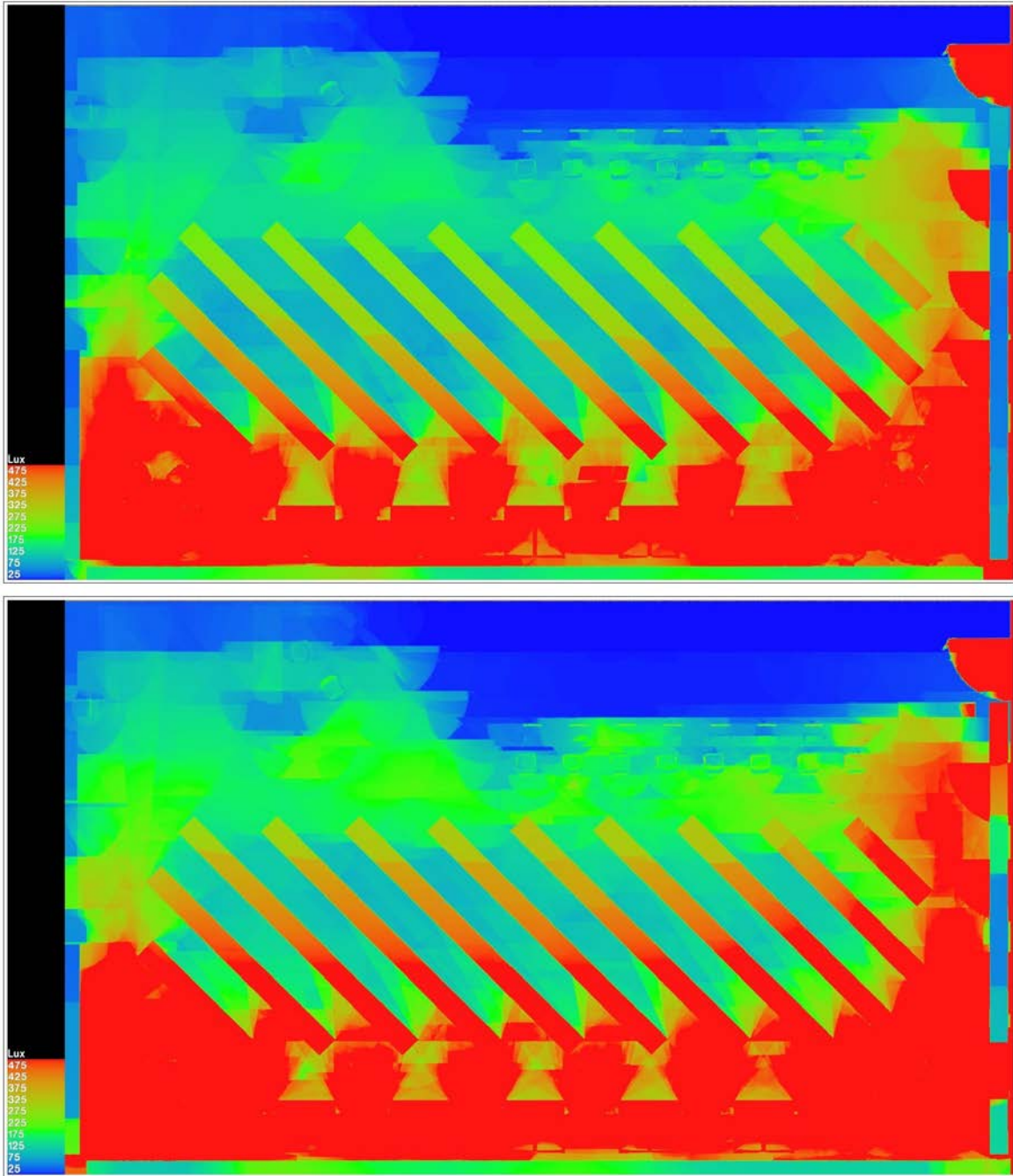


Figure 11

The same images from Figure 10, but using a scale that has a maximum value of 1000 Lux.

