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AGI Flash Tool User Guide

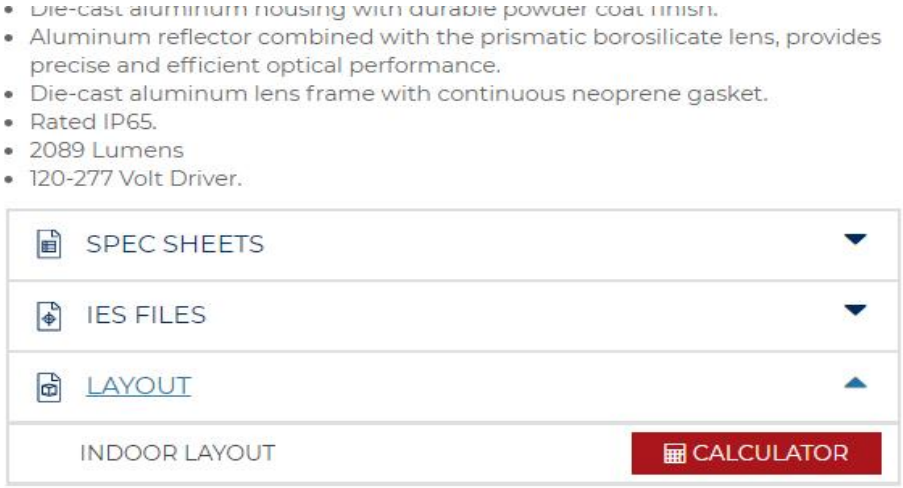
Indoor applications

June 2018

Overview

- The AGI Flash Indoor tool allows you to quickly estimate the light level (illuminance), number of luminaires, and lighting layout, for a simple room or building

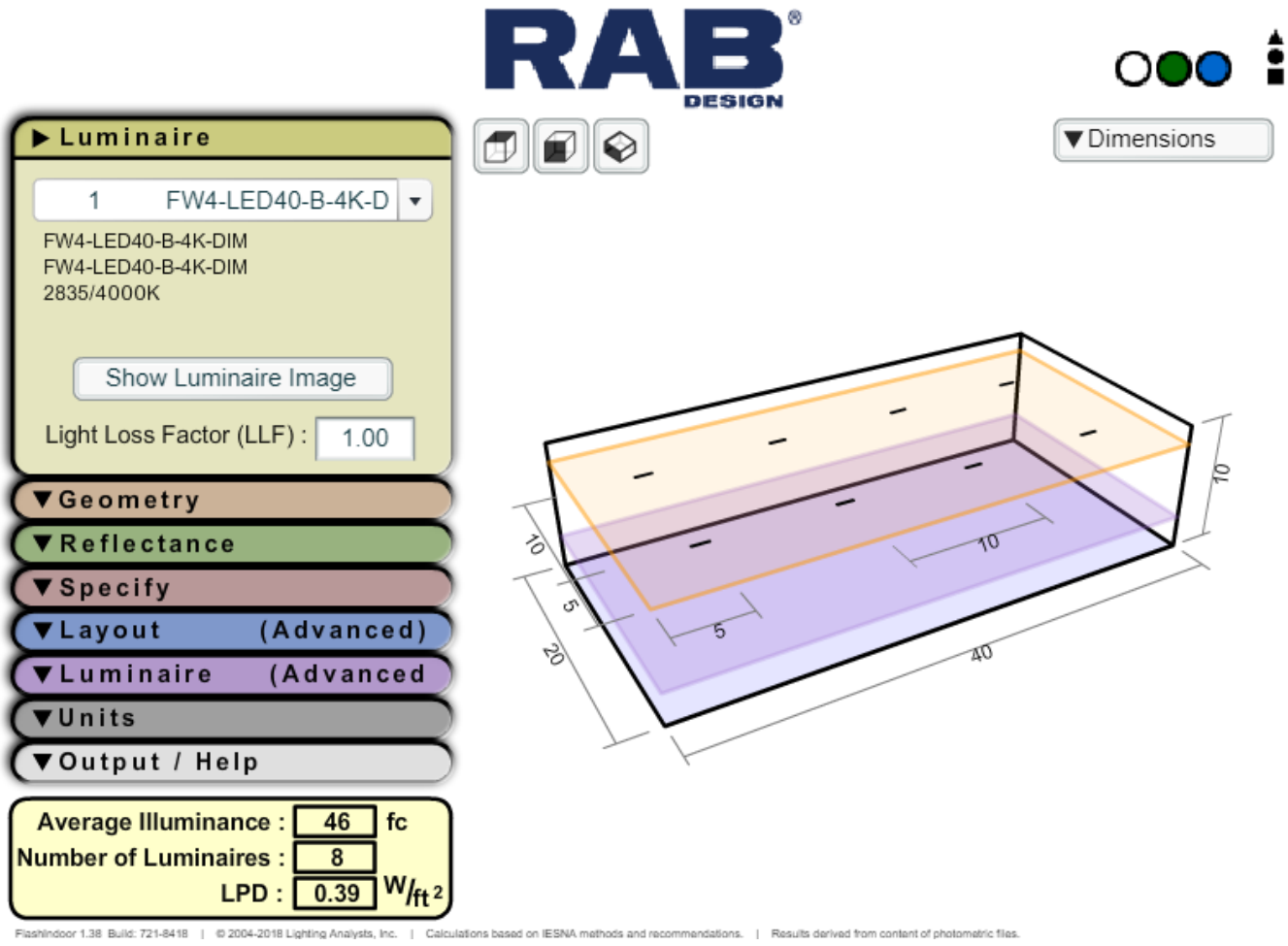
- It can be accessed by going to the layout menu on an applicable product page and clicking calculator



Overview

How to use:

- Go through all of the menus on the left and fill in applicable information
- Your results are shown at the bottom and are calculated automatically



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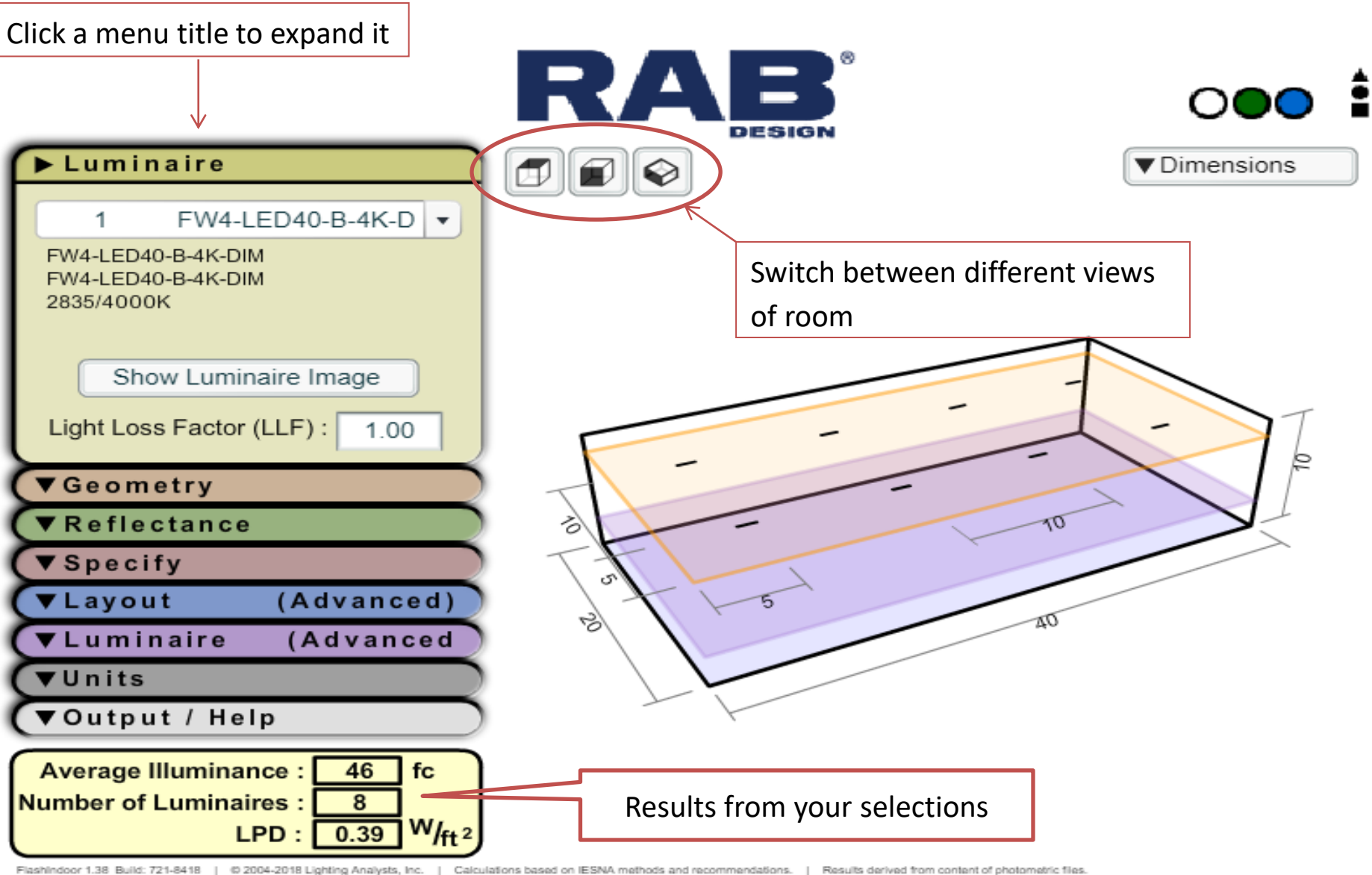
Navigation

Click a menu title to expand it



Menu Features

Overview of each menu's features and options:

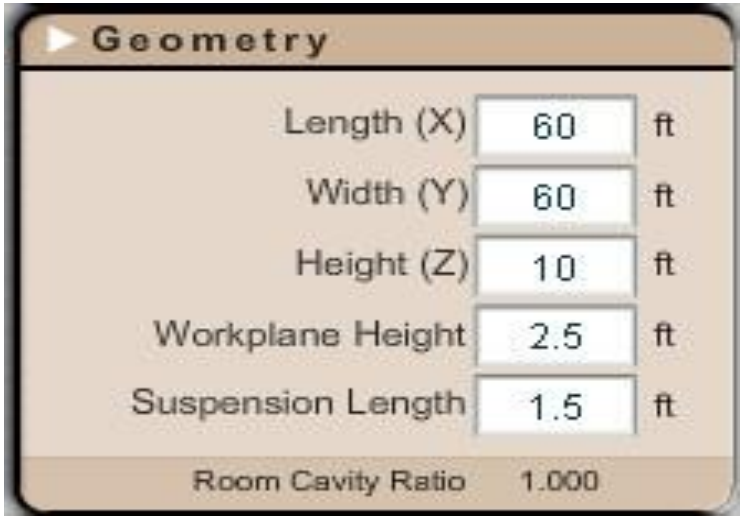
1. Luminaire

- Select the fixture you wish to use from the drop down menu (all fixtures from specific product family page will be listed)
- Light loss factor: resulting from dirt on fixture, lumen depreciation (0.9 recommended)

Menu Features

2. Geometry

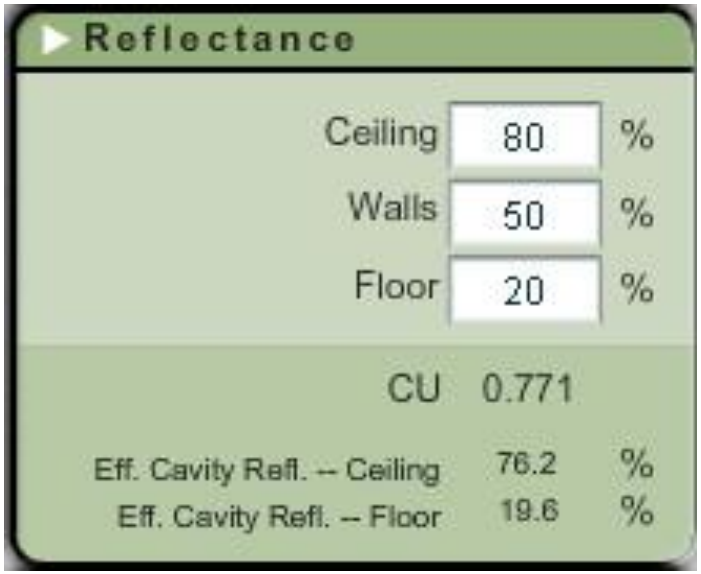
- Input the dimensions of the room you wish to illuminate (x,y,z)
- Workplane height refers to how high off the ground workstations (desks or other equipment) are in the room
- Suspension length refers to height the fixtures will be suspended from the ceiling



Menu Features

3. Reflectance

- Refers to the colouring of the room. Lighter surfaces have a higher reflectance.
- The Coefficient of Utilization (CU) and effective cavity reflectances are calculated and displayed below



Menu Features

4. Specify

- The Specify menu is used to set the target Illuminance level for the calculation (in foot candles)
- Options also include the ability to compute based on a set number of luminaires, or for a target power density
- The calculation can be further constrained by using the buttons below to control your tolerance for the desired illuminance level (minimum, target, or maximum

Menu Features

5. Layout (Advanced)

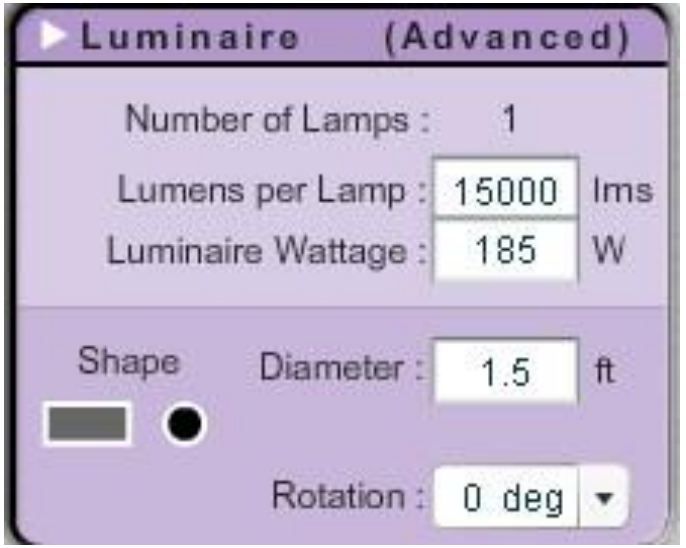
- Using this section, you can control the positioning of the luminaires by:
  - Layout (rows and columns)
  - Spacing between
  - Spacing from wall
  - Ceiling grid
  - Continuous rows or columns

  Select the box next to an option to activate the specific constraint and be able to change numbers

Menu Features

6. Luminaire (Advanced)

- The Advanced Luminaire section allows some simple prorating for the calculations based on Lamp Lumens and Luminaire Wattage.



7. Units

- Set the preferred units for the calculations

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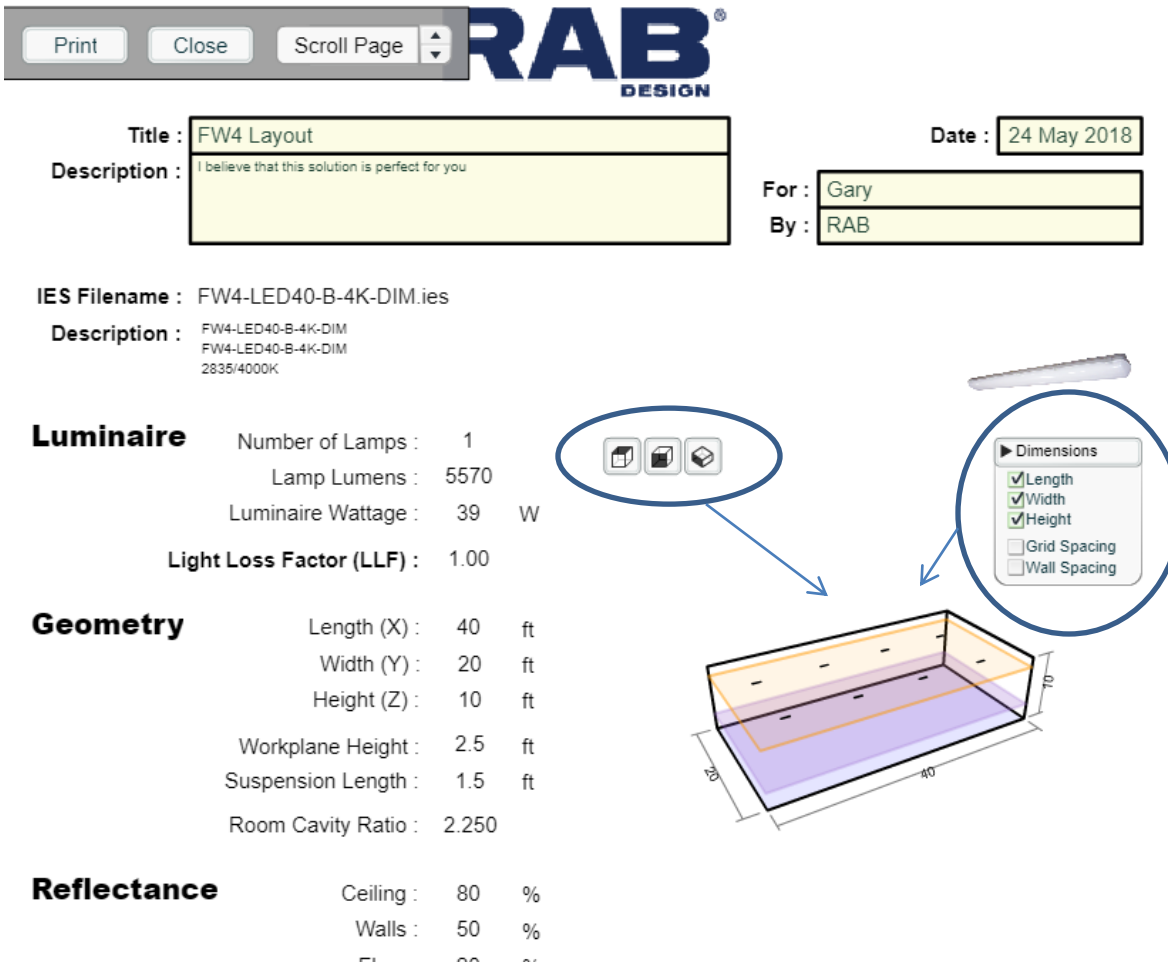
Menu Features

8. Output/Help

- Select print preview to create a customizable printout of your calculations
- Customize the yellow sections at the top of the page with text
- Use the dimensions menu on the right side and the layout buttons beside it to modify the appearance of the model below it
- Click the print button at the top to proceed



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Limitations of the tool

- Doesn’t take into account windows, pillars, or any other obstructions when you give room dimensions
- Can only do a single level, no sloped floors or ceilings
- Only accounts for one bounce of light