

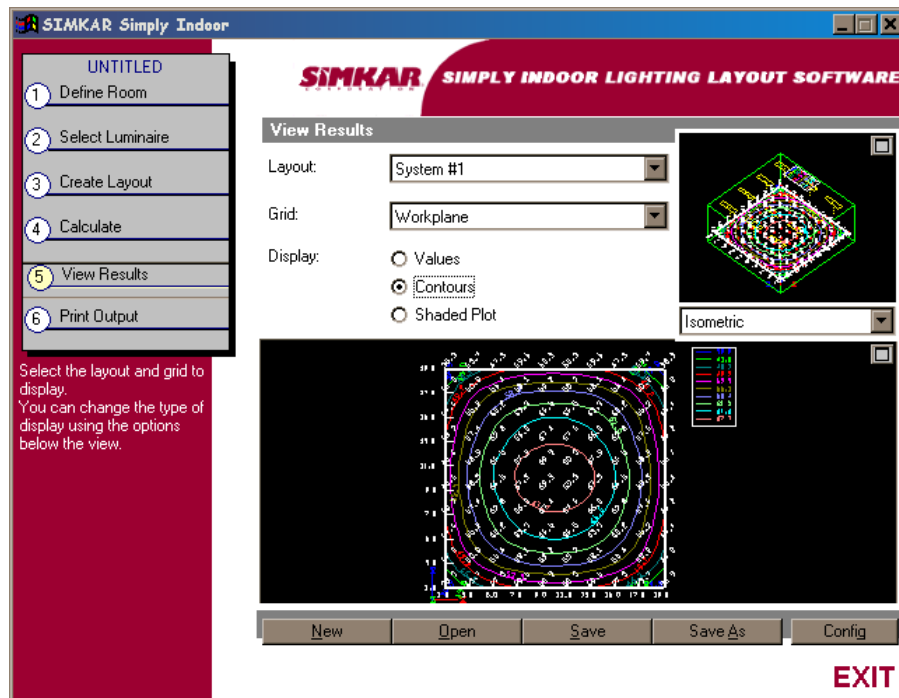
SIMKAR Simply Indoor Lighting Layout Software

Welcome!

Thank you for downloading SIMKAR Simply Indoor.

We hope that you will find this software easy-to-use, extremely helpful, and a little fun. SIMKAR Simply Indoor was designed from the beginning to be simple. As such, there is no 200-page manual or complex help system. Instead, we offer this simple user's guide to help you get started. You will find that it is all that you need to begin producing simple yet professional lighting layouts. So spend about ten minutes familiarizing yourself with this short guide and the program. Soon you will be simply lighting.

Enjoy! And good luck from the SIMKAR Corporation.



Step 1: Define Room

The first step in using SIMKAR Simply Indoor to create your lighting layout is to define your room. In this step, enter the following:

Required:

- **Room Size:** enter the dimensions of your room using the current units. X is width, Y is length, and Z is height. The program is laying out fixtures based on the area (X by Y).
- **Workplane Height:** enter the height at which calculations on the workplane for your lighting layout will be performed by default. This is typically the height of your desk or similar work area. Zero would assume the floor as the workplane.
- **Reflectances:** enter the reflectances for the room surfaces. The most common and frequently used reflectance values for office, store, and commercial applications are 80 for the ceiling, 50 for the walls, and 20 for the floor. For storage or shop areas recommended reflectance values would be 50 for the ceiling, 30 for the walls, 10 for the floor. For a more accurate layout refer to the Reflectance Chart in the IES Handbook.

Optional:

- **Target UPD:** if you are interested in meeting a target level for watts per square area level, enter that number here. SIMKAR Simply Indoor will monitor whether recommended layouts meet this criteria.
- **Ceiling Grid:** does your space have a suspended ceiling? If so, enter the dimensions of the ceiling tiles. SIMKAR Simply Indoor will align the luminaries with the ceiling grid.



You can change units by selecting the Config button located at the lower right.

The screenshot shows the SIMKAR Simply Indoor software interface. The title bar reads "SIMKAR Simply Indoor". The main window has a red header with the text "SIMKAR SIMPLY INDOOR LIGHTING LAYOUT SOFTWARE". On the left, there is a vertical menu with the following options: "1 Define Room" (selected), "2 Select Luminaire", "Create Layout", "Calculate", "View Results", and "Print Output". Below the menu, there is a red box with white text: "Enter the Room Size and the Workplane Height. Modify surface Reflectances and enter a Target Unit Power Density (UPD) if desired." The main area is titled "Define Room" and contains the following input fields:

- Room Size: X: ft., Y: , Z:
- Workplane Height: ft.
- Reflectances: Ceiling: , Walls: , Floor:
- Target UPD W/ft²:
- Ceiling Grid:

On the right side of the "Define Room" section, there is a 3D isometric view of a room with a green wireframe floor and ceiling. Below the view is a dropdown menu set to "Isometric". At the bottom of the window, there is a toolbar with buttons for "New", "Open", "Save", "Save As", and "Config". In the bottom right corner, there is a red "EXIT" button.

Step 2: Select Luminaire

The second step to the process is selecting one or more luminaires for your layout. You can select up to four different types of luminaires that can be compared. You can also choose to create a combination layout, which will result in calculation using all of the layouts.

Fill out the information for the selected luminaire. Lamp Lumens, Efficiency, and Wattage will be brought in from the photometric files in the program. You will have to include the fixture cost and modify the Light Loss Factor. The Light Loss Factor equals the product of the ballast factor, dirt depreciation and lumen depreciation.

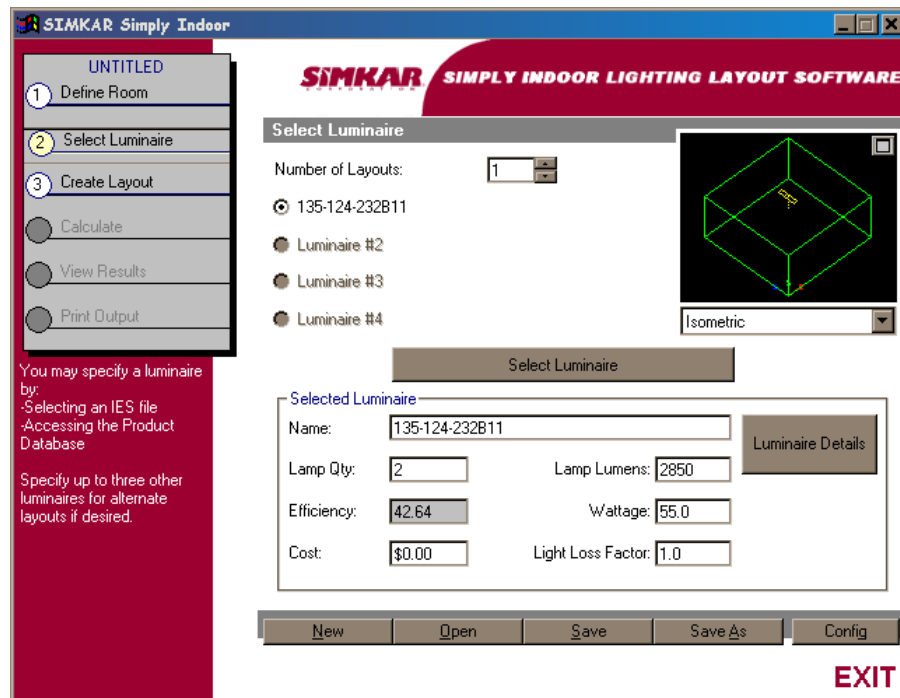
Light Loss Factor = Ballast Factor x Dirt Depreciation x Lumen Depreciation

Typical T12 ballast = $0.94 \times 0.80 \times 0.90 = 0.68$

Typical T8 ballast = $0.88 \times 0.80 \times 0.90 = 0.63$

For a more accurate layout results refer to specific ballast and lamp manufacturer catalogs for actual ballast factors and lumen depreciations, respectively.

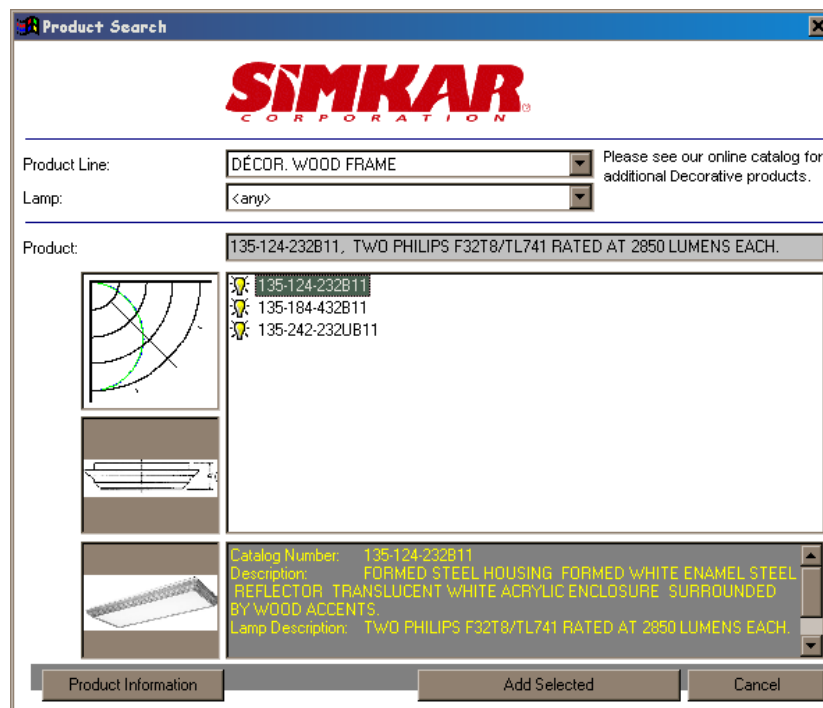
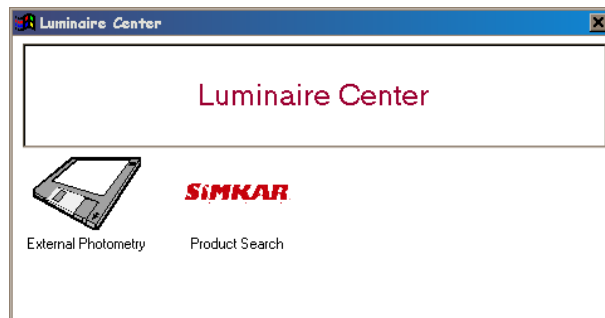
Select the number of layouts (luminaire types) you wish to include. Then, click on the Select Luminaire button with the appropriate layout number highlighted. To highlight a layout, click on the option box to the left of the layout's name.



Step 2: Select Luminaire ... continued

Select luminaires from the product database included with SIMKAR Simply Indoor, or by browsing for a photometric file stored on a drive.

When searching the SIMKAR Simply Indoor product database, you will see a screen like the one below. You can narrow the search to find the right luminaire for your needs by choosing a Product Line and/or Lamp, and then choose from list of luminaires.



Step 3: Create Layout

This is the most important step of the process - creating your lighting layout. First, you must enter the illuminance level you are trying to achieve in the space, or enter the number of luminaires you wish to use. Note: if you enter the illuminance level, SIMKAR Simply Indoor will automatically calculate the number of luminaires you will need.

The lighting layout for the currently selected luminaire will be shown in the Layout Specifications section. If you wish, you can modify the suspension length, luminaire spacing, and luminaire aiming.

If you modify the default layout, you can always go back to the initial layout by pressing the **Use Calculated Defaults** button. You can also center your user-defined layout by pressing the **Center Layout** button.



The current layout's average illuminance, unit power density, and total cost are also shown in the Statistics area of the Layout Specifications section.

Each room layout may be calculated using illuminance level, number of luminaires, or by specifying your own grid.

# Used	Illum.	Wattage	UPD W/ft	Cost	
1	12	53.6	660	1.7	\$0.00

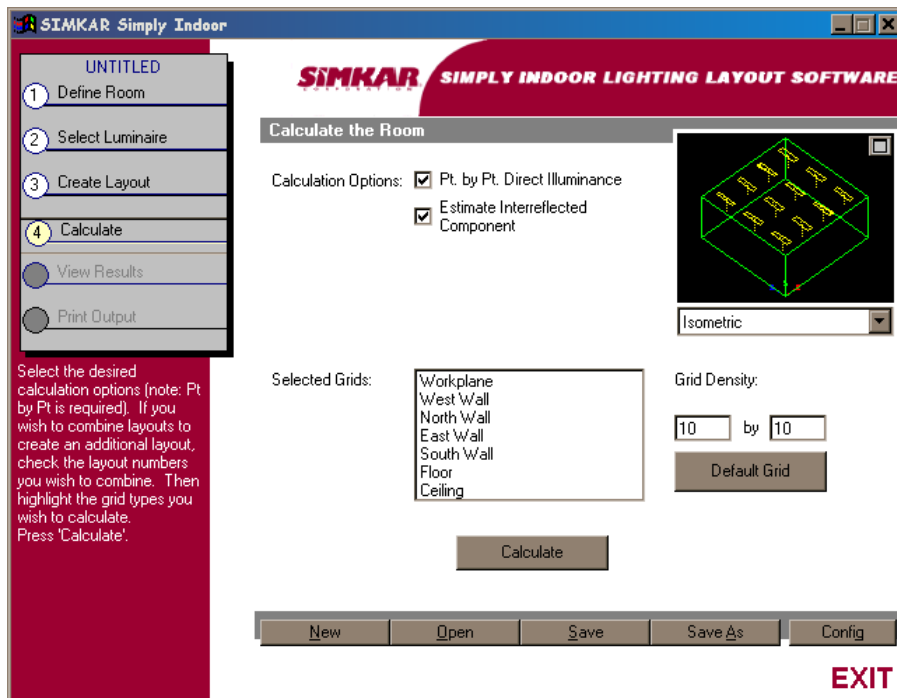
Step 4: Calculate Layout

In this step, you will produce point-by-point calculations of your lighting layout(s). First, select the types of calculations you wish to perform (Note you must always include direct point by point calculations). Next, select any number of grids you wish to calculate by clicking on the grid within the list box shown. Now, press the **Calculate** button. SIMKAR's Simply Indoor calculates your layout(s).

SIMKAR's Simply Indoor allows you to combine existing layouts to create an additional combination layout. This layout can be calculated and output just like any other layout. It allows you to have up to four luminaire layouts within the same room. To combine layouts, check the layout numbers you wish to combine.



It is very important to understand the limitations of SIMKAR's Simply Indoor. SIMKAR's Simply Indoor calculates direct illuminance. It does not calculate the exact illuminance generated by interreflections (light reflecting off surfaces in the space). It can estimate this component using the Lumen Method. If you need better accuracy, contact SIMKAR's in-house Engineering Department for personal assistance.



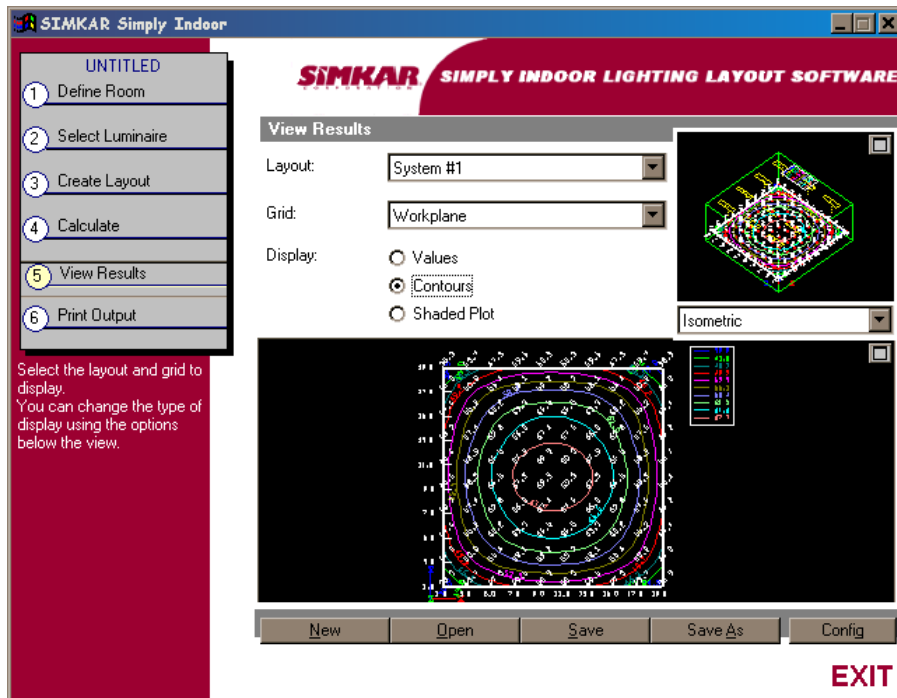
Step 5: View Results

In the fifth step gives you may view the illuminances you calculated in Step 4. First, select the layout you wish to view. Next, select the grid you wish to view from the drop down list of those grids you selected to calculate. Then, select how to display the results:

- **Values:** views the illuminance values in tabular format. This will also show you some simple statistics for the whole calculation grid.
- **Contours:** produces a contour map showing the different illuminance levels on the grid. Note: you can specify custom contour levels by pressing the configuration button.
- **Shaded Plot:** creates a gray-scale plot of the grid. This allows you to see the distribution pattern of the light.



For the graphic displays, click on “Expand” to enlarge the view. You can also zoom in on the view by windowing (with your mouse) the area you wish to zoom. Right click to refresh the view.



Step 6: Print Output

The final step is printing your lighting layout. Begin by clicking on the layouts you wish to print. Only those grids calculated will be available.

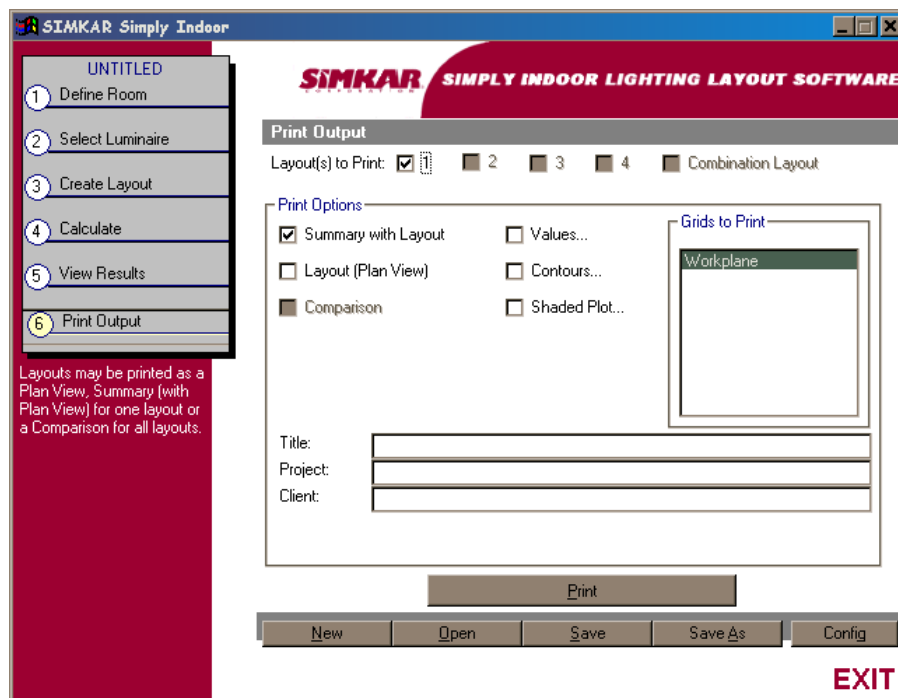
Select the types of output you wish to print:

- **Layout (Plan View):** this option prints a scaled plan view of your layout(s).
- **Summary with Layout:** includes the aforementioned scaled drawing plus additional input summaries, statistical summaries, and luminaire descriptions.
- **Comparison:** if you've selected more than one layout, you can print a concise sheet comparing each of the layouts.
- **Values/Contours/Shaded Plots:** you can also print out the calculation results in any of the three formats. Choose the grids you wish to print from the list box to the right.

You can also add some project-specific text to your printouts: Title, Project, and Client. These are shown on all printouts. You may want to print this layout and fax it to SIMKAR to provide a quote on the various fixtures contained within.



Note: the footer includes your company information. To edit this information, go to the configuration screen and click on Company.



Technical Support

Technical Support for SIMKAR Simply Indoor is available via phone, fax or email.

Technical Support hours are:
Monday through Friday, 8 a.m. to 5 p.m. (MST)

Phone: (877) 826-6553
Fax: (215) 831-7764
E-mail: engineering@simkar.com

When you email, fax, or call, be sure to have a detailed description of your issue.

Simkar has corporate offices and manufacturing facilities in Philadelphia, Pa., and warehouses nationwide. For nearly fifty years, professionals have relied on Simkar for complete and on-time deliveries of high quality lighting fixtures at reasonable prices. Simkar's most popular brands include VANDGARD®, Tradesman's Choice®, Ultratensity® H.I.D., Vision Saver(tm), and ParaSpec® deep-cell, glare-reducing parabolics. Simkar's in-house engineering department excels at lighting layouts and is available to help with "design-build" projects. Products can be customized and shipped directly to job sites. To request a lighting catalogue from SIMKAR, contact us by phone at 1-800-523-3602, by fax at 215-831-7703, or email lighting@simkar.com.