Design Master Photometrics User Manual

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Design Master Photometrics

You are reading the user manual for Design Master Photometrics 1.2.

You can download a PDF version of the user manual for printing and offline documentation purposes.

Technical Support

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Overview

Design Master Photometrics is an add-in for AutoCAD and BricsCAD that calculates outdoor illuminance levels. It allows civil engineers and landscape architects to perform their own outdoor site lighting calculations.

Illuminance Levels: Calculate point-by-point illuminance levels on your site plan and have them displayed directly on your drawing.

AutoCAD or BricsCAD Based: Work in the familiar AutoCAD or BricsCAD interface, rather than learning an unfamiliar new program.

Uniformity Ratios: Calculate the uniformity ratios required by your local jurisdiction.

Isolines: Display isolines on your drawing to highlight critical illuminance levels.

Light Fixture Manufacturer Independent: Import IES files from any lighting manufacturer.

Design Changes: Make changes to the design and get immediate feedback on your lighting calculations without waiting for your lighting rep or another consultant.

Light Fixture Schedule: Display a schedule on the drawing of all of the fixtures used in the project.

Buildings, Overhangs, Slopes, and Trees: Model obstructions and different ground elevations to accurately calculate lighting levels.

Training Videos

<u>Photometrics Overview</u>

Command Reference

This section describes all of the commands available in Design Master Photometrics. It is a direct listing of all of the commands and what they do. More complete discussions about how to apply the commands are found in the <u>Concepts and Procedures</u> section.

The commands in this section are in the same order as the Design Master Photometrics pulldown menu:

	Calculate	
?	Query	
♀ **I **1 **1	Insert Light Fixture Edit Multiple Light Fixtures Array Light Fixtures (2 Point) Array Light Fixtures (Distance / Angle) Aim Light Fixture Light Fixture Notes	>
₽ 1 20 20 20 20 20 20 20 20 20 20	Light Fixture Project Schedule Insert Light Fixture Project Schedule Light Fixture Master Schedule	
	Insert Calculation Area Insert Sloped Calculation Area Insert Calculation Line Insert Sloped Calculation Line Insert Mask Calculation Area Groups Calculation Schedules	>
	Insert Solid: Shape Insert Solid: Rectangle Insert Solid: Line Insert Vertex in Area or Solid	
	Remove Vertex from Area or Solid Turn Construction Layers On Turn Construction Layers Off	
	Utilities Help Customization	> > >
	Start New Photometrics Project	

Calculate

The Calculate command is used to calculate the illuminance levels on the drawing based upon the light fixtures and solids that have been inserted.

To run photometric calculations, go to

Ribbon: DM Photometrics->Calculate-> 🔲 Calculate

Pulldown Menu: DM Photometrics->Calculate

Calculate Photometrics Dialog Box

Calculate Phot	tometrics				×
Contours				Display	
	Illuminance	Layer or Color		Show Illuminance Levels and Contours	
Contour 1:	5	BYLAYER	Set Color	O Show Illuminance Levels Only	
Contour 2:	2	BYLAYER	Set Color	O Show Contours Only	
Contour 2:	1		Set Color	Decimal Places on Drawing: 1	
Contour 5.		BILATER	Set Color	Decimal Places in Schedule: 2	
Contour 4:	0	BYLAYER	Set Color	Distance Unit: Inch	\sim
Contour 5:	0	BYLAYER	Set Color	Illuminance Unit: Foot-candle	~
Contour 6:	0	BYLAYER	Set Color	Reflections: None	~
Contour 7:	0	BYLAYER	Set Color	Boundary Areas	
Contour 8:	0	BYLAYER	Set Color	Edit Title, Column Labels, and Column Order	
Contour 9:	0	BYLAYER	Set Color	Boundary Lines	
C 1 10			C. C. L.	Edit Title, Column Labels, and Column Order	
Contour TU:	0	BYLAYER	Set Color	Zoom to Schedule After Insertion	
			OK Ca	ncel	
			Ca		

Contour Level 1 - 10: Enter the illuminance level at which to draw contours. You can have up to 10 contours. Contours set to 0 will not be drawn.

Layer or Color: Enter the layer or color of the contour. If the layer specified does not exist on the drawing, it will be created. Press the Set Color button to open the standard CAD Select Color dialog box.

Show Illuminance Levels and Contours: Select this option to show illuminance levels and contours on the drawing. The illuminance levels and contours will be displayed in the calculation area after the calculation is finished.

Show Illuminance Levels Only: Select this option to show illuminance levels on the drawing. The illuminance

levels will be displayed in the calculation area after the calculation is finished.

Show Contours Only: Select this option to show contours on the drawing. The contours will be displayed in the calculation area after the calculation is finished.

Decimal Places on Drawing: The number of decimal places to include in the illuminance levels on the drawing.

Decimal Places in Schedule: The number of decimal places to include in the illuminance levels on the schedule. If the *Decimal Places on Drawing* is less than the *Decimal Places in Schedule*, the smaller *Decimal Places on Drawing* will be used for the *Maximum Illuminance* and the *Minimum Illuminance* values in the schedule.

Distance Unit: The base unit for your drawing. See the <u>Base Units and Photometrics Calculations</u> article in the knowledge base for more information about determining the correct *Distance Unit* setting for your drawing.

- Inch: One unit on the drawing corresponds to one inch. The standard base unit for US architectural drawings.
- Foot: One unit on the drawing corresponds to one foot. The standard base unit for US civil drawings.
- Millimeter: One unit on the drawing corresponds to one millimeter.
- Centimeter: One unit on the drawing corresponds to one centimeter.
- Meter: One unit on the drawing corresponds to one meter.

Illuminance Unit: Whether the illuminance levels are displayed in foot-candles or lux.

Reflections: Whether the calculation includes reflections from walls.

- No Reflection: No reflections are included in the calculation. This option is faster, though the calculated values will be slightly lower than reality for inside calculations and near walls outside.
- Single Reflection: Light is reflected once during the calculations. This option takes longer, but results in higher values near solids. The light is reflected off of one surface to the ground. Light that hits a second surface is not reflected. For example, light that goes from the light to a wall to the ground is included. Light that goes from the light to the floor to a wall, then back to the floor, is not included.

Edit Title, Column Labels, and Column Order: Press these buttons to modify the layout of the photometric schedule for general calculation areas and general calculation lines on the drawing. See the Edit Calculation Schedule Layout section and Edit Calculation Line Schedule Layout section for more information.

Zoom to Schedule After Insertion: Whether the display will be moved to the schedule associated with the calculation area.

Calculating Photometrics

After all of the information has been entered, press the **OK** button.

If there is only one calculation area in the drawing, the illuminance levels in the area will be calculated.

If there is more than one calculation area in the drawing, you will be prompted to specify which area to calculate.

Select calculation area to calculate / <Calculate all boundaries>:

Select calculation area: Select a point inside an area to calculate the illuminance levels in just that area.

Calculate all boundaries: Press ENTER to calculate the illuminance levels in all areas on the drawing.

The illuminance levels and contours in the area that is calculated will be updated. The values in the corresponding photometric calculation schedule will also be updated.

Related Options

Schedule title justification: Sets the justification for the schedule title.

<u>Schedule column label justification:</u> Sets the justification for column headings.

Schedule title continued label: Sets the label added to the schedule title for continued sections.

There are several options that set the default values for this dialog box. See the <u>Photometric Calculations</u> <u>Options</u> section for more information.

Edit Calculation Area Schedule Layout

The **Calculation Schedule Label Display and Order** dialog box is used to configure the appearance of the photometric calculation area schedule on the drawing.

To change the appearance for the current project, use the Calculate command and press the **Boundary Areas:** Edit Title, Column Labels, and Column Order button. Changes made this way will affect the current project.

To change the appearance in the master database, use the **Edit Calculation Area Schedule Standards List** command. Changes made this way will affect newly created projects.

General Photometric Schedule Label Display and Order Dialog Box

			Move Up	1ove Down
		140.141	1	D: 1
Key Sahadala Tala		Width	Justification	Display
Schedule little			Laft	
Average illuminance			Left	
Maximum Illuminance			Left	
Minimum Illuminance			Left	
Minimum to Maximum Illuminance Ratio			Left	
Maximum to Minimum Illuminance Ratio	MAXIMUM IO MINIMUM FC RATIO		Left	
Average to Minimum Illuminance Ratio	AVERAGE TO MINIMUM FC RATIO		Left	
Label Column Width	Label Column Width	2	Left	
Value Column Width	Value Column Width	2	Left	
Average to Maximum Illuminance Ratio	AVERAGE TO MAXIMUM FC RATIO		Left	
Maximum to Average Illuminance Ratio	MAXIMUM TO AVERAGE FC RATIO		Left	
Minimum to Average Illuminance Ratio	MINIMUM TO AVERAGE FC RATIO		Left	
Average Vertical Illuminance	AVERAGE VERTICAL ILLUMINANCE		Left	
Maximum Vertical Illuminance	MAXIMUM VERTICAL ILLUMINANCE		Left	
Minimum Vertical Illuminance	MINIMUM VERTICAL ILLUMINANCE		Left	
Minimum to Maximum Vertical Illuminance Ratio	MINIMUM TO MAXIMUM VERTICAL ILLUMINANCE RATIO		Left	
Average to Maximum Vertical Illuminance Ratio	AVERAGE TO MAXIMUM VERTICAL ILLUMINANCE RATIO		Left	
Maximum to Minimum Vertical Illuminance Ratio	MAXIMUM TO MINIMUM VERTICAL ILLUMINANCE RATIO		Left	
Average to Minimum Vertical Illuminance Ratio	AVERAGE TO MINIMUM VERTICAL ILLUMINANCE RATIO		Left	
Maximum to Average Vertical Illuminance Ratio	MAXIMUM TO AVERAGE VERTICAL ILLUMINANCE RATIO		Left	
Minimum to Average Vertical Illuminance Ratio	MINIMUM TO AVERAGE VERTICAL ILLUMINANCE RATIO		Left	

Grid Columns

Key: The identifier for the column, describing what value it will display. The value in this column is fixed and cannot be changed.

Label: The name that will be displayed for the row.

Width: The width in inches on the printed drawing.

Justification: The justification of the text values in the column. The justification of the title for the schedule and of the column headers are set using the *Schedule title justification* options and the *Schedule column label justification* option in the <u>Options</u> command.

- Left: The text is left-justified.
- Center: The text is center-justified.
- **Right:** The text is right-justified.

Display: Whether the row is shown on the schedule. If this is not checked, the value will not be displayed.

Grid Rows

Each row in the list corresponds to a row in the schedule. The rows in the schedule will be ordered as they are ordered in this dialog box.

Move Up: Move the selected row up in the list.

Move Down: Move the selected row down in the list.

Schedule Title: The title of the schedule. This row is always listed first and cannot be moved up or down. The *Label* of this key is the title of the schedule. The *Width* and *Display* values of this key are ignored. The width of the title is based upon the width of the columns in the schedule. The title is always displayed with the schedule.

Average Illuminance: The average illuminance value in the photometric calculation area.

Average to Maximum Illuminance Ratio: The Average Illuminance divided by the Maximum Illuminance.

Average to Maximum Vertical Illuminance Ratio: The *Average Vertical Illuminance* divided by the *Maximum Vertical Illuminance*.

Average to Minimum Illuminance Ratio: The Average Illuminance divided by the Minimum Illuminance.

Average to Minimum Vertical Illuminance Ratio: The *Average Vertical Illuminance* divided by the *Minimum Vertical Illuminance*.

Average Vertical Illuminance: The average vertical illuminance value in the photometric calculation area.

Label Column Width: The width of the label column in the schedule.

Maximum Illuminance: The maximum illuminance value in the photometric calculation area.

Maximum to Average Illuminance Ratio: The Maximum Illuminance divided by the Average Illuminance.

Maximum to Average Vertical Illuminance Ratio: The *Maximum Vertical Illuminance* divided by the *Average Vertical Illuminance*.

Maximum to Minimum Illuminance Ratio: The Maximum Illuminance divided by the Minimum Illuminance.

Maximum to Minimum Vertical Illuminance Ratio: The *Maximum Vertical Illuminance* divided by the *Minimum Vertical Illuminance*.

Maximum Vertical Illuminance: The maximum vertical illuminance value in the photometric calculation area.

Minimum Illuminance: The minimum illuminance value in the photometric calculation area.

Minimum to Average Illuminance Ratio: The Minimum Illuminance divided by the Average Illuminance.

Minimum to Average Vertical Illuminance Ratio: The *Minimum Vertical Illuminance* divided by the *Average Vertical Illuminance*.

Minimum to Maximum Illuminance Ratio: The Minimum Illuminance divided by the Maximum Illuminance.

Minimum to Maximum Vertical Illuminance Ratio: The *Minimum Vertical Illuminance* divided by the *Maximum Vertical Illuminance*.

Minimum Vertical Illuminance: The minimum vertical illuminance value in the photometric calculation area.

Value Column Width: The width of the value column in the schedule.

Edit Calculation Line Schedule Layout

The **Calculation Schedule Label Display and Order** dialog box is used to configure the appearance of the photometric calculation line schedule on the drawing.

To change the appearance for the current project, use the Calculate command and press the **Boundary Lines:** Edit Title, Column Labels, and Column Order button. Changes made this way will affect the current project.

To change the appearance in the master database, use the <u>Edit Calculation Line Schedule Standards List</u> command. Changes made this way will affect newly created projects.

General Photometric Line Schedule Label Display and Order Dialog Box

General Photometric Line Schedule Label Display and Order				×	
				Move Up	Move Down
Кеу	Label	Width	Justification	Display	
Schedule Title	GENERAL PHOTOMETRIC SCHEDULE			✓	
Average Illuminance	AVERAGE FOOT-CANDLES		Left	✓	
Maximum Illuminance	MAXIMUM FOOT-CANDLES		Left	✓	
Minimum Illuminance	MINIMUM FOOT-CANDLES		Left	✓	
Minimum to Maximum Illuminance Ratio	MINIMUM TO MAXIMUM FC RATIO		Left	✓	
Maximum to Minimum Illuminance Ratio	MAXIMUM TO MINIMUM FC RATIO		Left	✓	
Average to Minimum Illuminance Ratio	AVERAGE TO MINIMUM FC RATIO		Left	✓	
Label Column Width	Label Column Width	2	Left	✓	
Value Column Width	Value Column Width	2	Left	✓	
Average to Maximum Illuminance Ratio	AVERAGE TO MAXIMUM FC RATIO		Left		
Maximum to Average Illuminance Ratio	MAXIMUM TO AVERAGE FC RATIO		Left		
Minimum to Average Illuminance Ratio	MINIMUM TO AVERAGE FC RATIO		Left		
	OK Can	el			

Grid Columns

Key: The identifier for the column, describing what value it will display. The value in this column is fixed and cannot be changed.

Label: The name that will be displayed for the row.

Width: The width in inches on the printed drawing.

Justification: The justification of the text values in the column. The justification of the title for the schedule and of the column headers are set using the *Schedule title justification* options and the *Schedule column label justification* option in the <u>Options</u> command.

- Left: The text is left-justified.
- Center: The text is center-justified.
- **Right:** The text is right-justified.

Display: Whether the row is shown on the schedule. If this is not checked, the value will not be displayed.

Grid Rows

Each row in the list corresponds to a row in the schedule. The rows in the schedule will be ordered as they are ordered in this dialog box.

Move Up: Move the selected row up in the list.

Move Down: Move the selected row down in the list.

Schedule Title: The title of the schedule. This row is always listed first and cannot be moved up or down. The *Label* of this key is the title of the schedule. The *Width* and *Display* values of this key are ignored. The width of the title is based upon the width of the columns in the schedule. The title is always displayed with the schedule.

Average Illuminance: The average illuminance value along the photometric calculation line, including vertical illuminance levels if they are enabled.

Average to Maximum Illuminance Ratio: The Average Illuminance divided by the Maximum Illuminance.

Average to Minimum Illuminance Ratio: The Average Illuminance divided by the Minimum Illuminance.

Label Column Width: The width of the label column in the schedule.

Maximum Illuminance: The maximum illuminance value along the photometric calculation line, including vertical illuminance levels if they are enabled.

Maximum to Average Illuminance Ratio: The Maximum Illuminance divided by the Average Illuminance.

Maximum to Minimum Illuminance Ratio: The Maximum Illuminance divided by the Minimum Illuminance.

Minimum Illuminance: The minimum illuminance value along the photometric calculation line, including vertical illuminance levels if they are enabled.

Minimum to Average Illuminance Ratio: The Minimum Illuminance divided by the Average Illuminance.

Minimum to Maximum Illuminance Ratio: The Minimum Illuminance divided by the Maximum Illuminance.

Value Column Width: The width of the value column in the schedule.

Query

The Query command is used to view and edit the information associated with Design Master Photometrics items inserted on the drawing. You can query light fixtures, calculation areas, and solid objects.

To view and edit an item that is inserted on the drawing, go to

Ribbon: DM Photometrics->Query-> 🛄 Query

Pulldown Menu: DM Photometrics->Query

You will be prompted to select an item.

Select photometric item to query:

After you select an item, a dialog box will appear with information about that item. The dialog box that appears depends upon the type of item selected:

- Query Light Fixture
- Query Calculation Area or Line
- Query Solid

Query Light Fixture

When you select a light fixture using the Query command, the Query Light Fixture dialog box will appear.

Query Light Fixture Dialog Box

Query Light Fixture	×
Callout A B	2x2 Recessed drugtes
	Number of Lamps: 1
	Lumens / Lamp: 4600
	Lamp Depreciation: 1
	Arm Length: 0'
	Total Lumens (Schedule): 4600
	Total Lumens (IES): No IES File Selected
	Mounting Height (ft-in): 0
	Tilt: 0
Edit	Layer System: New ~
IES File: None Selected	
	OK Cancel

Changes can be made to the light fixture in the same way as when it was inserted. See the **Insert Light Fixture** section for more information.

Number of Lamps: Set using the Number of Lamps field in the Light Fixture Product Schedule command.

Lumens / Lamp: Set using the Lumens / Lamp field in the Light Fixture Product Schedule command.

Lamp Depreciation: Set using the Lamp Depreciation field in the Light Fixture Product Schedule command.

Arm Length: Set using the Arm Length field in the Light Fixture Product Schedule command.

Total Lumens (Schedule): The product of the *Lumens / Lamp* and *Number of Lamps* fields set in the Light Fixture Product Schedule command.

Total Lumens (IES): The total lumens set in the IES file for the fixture.

If a number is displayed, the light output from the IES file will be scaled based upon the ratio of the *Total Lumens* (*Schedule*) value and the *Total Lumens* (*IES*) value.

If **Absolute** is displayed, the IES file uses absolute photometry. The total lumens for the IES file are not provided. The light output for the fixture will not be scaled based upon the *Total Lumens (Schedule)* value.

Query Calculation Area or Line

When you select a calculation area or line using the Query command, one of the following dialog boxes will appear, depending upon the entity you select.

Query Calculation Area / Sloped Calculation Area Dialog Box

Query Calculation Area	×
Override Schedule Title	
Schedule Title: GENERAL PHOTOMETRIC SCHEDULE	
Horizontal Calculations	
Grid Spacing (ft-in): 10	
Calculation Elevation (ft-in): 0	
Set Grid Origin <	
Set Grid Angle <	
Vertical Calculations	
Calculate Vertical Illuminance Levels At Area Boundary	
Vertical Calculation Spacing (ft-in): 2	
Vertical Display Spacing (ft-in): 5	
Ending Vertical Calculation Elevation (ft-in): 8	
Recalculate Illuminance Levels	
OK Cancel	

Query Sloped Calculation Area	×
Override Schedule Title	
Schedule Title: GENERAL PHOTOMETRIC SCHEDULE	
Horizontal Calculations	
Grid Spacing (ft-in): 10	
Top Elevation (ft-in): 0	
Bottom Elevation (ft-in): 0	
Set Grid Origin <	
Set Grid Angle <	
Vertical Calculations	
Calculate Vertical Illuminance Levels At Area Boundary	
Vertical Calculation Spacing (ft-in): 2	
Vertical Display Spacing (ft-in): 5	
Ending Vertical Calculation Elevation Above Slope (ft-in):	
Recalculate Illuminance Levels	
OK Cancel	

Changes can be made to the calculation area boundary in the same way as when it was inserted. See the <u>Insert</u> <u>Calculation Area</u> and <u>Insert Sloped Calculation Area</u> sections for information about the values in these dialog boxes.

Set Grid Origin: Press this button to change the point from which illuminance values are calculated for the selected calculation area. The dialog box will close and you will be prompted to specify a point on the drawing.

Specify illuminance grid origin for calculation area:

Set Grid Angle: Press this button to change the angle at which illuminance values are calculated for the selected calculation area. The dialog box will close and you will be prompted to specify an angle on the drawing.

Specify illuminance grid angle for calculation area / <0>:

Specify two points on the drawing, enter an angle value, or press ENTER to set an angle of 0.

Recalculate Illuminance Levels: Whether the queried calculation area will be recalculated when you press the **OK** button.

Edit Calculation Line / Sloped Calculation Line Dialog Box

Edit Calculation Line	×
Override Schedule Title	
Schedule Title: GENERAL PHOTOMETRIC SCHEDULE	
Horizontal Calculations	
Illuminance Level Spacing (ft-in): 10	
Calculation Elevation (ft-in): 0	
Vertical Calculations	
Calculate Vertical Illuminance Levels	
Vertical Calculation Spacing (ft-in): 2	
Vertical Display Spacing (ft-in): 5	
Ending Vertical Calculation Elevation (ft-in): 8	
Recalculate Illuminance Levels	
OK Cancel	
Edit Sloped Calculation Line	×
Override Schedule Title	
Schedule Title: GENERAL PHOTOMETRIC SCHEDULE	
Horizontal Calculations	
Illuminance Level Spacing (ft-in): 10	
Top Elevation (ft-in): 0	
Bottom Elevation (ft-in): 0	
Vertical Calculations	
Calculate Vertical Illuminance Levels	
Vertical Calculation Spacing (ft-in): 2	
Vertical Display Spacing (ft-in): 5	
Ending Vertical Calculation Elevation Above Slope (ft-in):	
Recalculate Illuminance Levels	
OK Cancel	

Changes can be made to the calculation line in the same way as when it was inserted. See the <u>Insert Calculation</u> <u>Line</u> and <u>Insert Sloped Calculation Line</u> sections for information about the values in these dialog boxes.

Recalculate Illuminance Levels: Whether the queried calculation line will be recalculated when you press the **OK** button.

Query Solid

When you select a solid using the Query command, the Query Calculation Area dialog box will appear.

Query Solid Dialog Box

Query Solid X	
Starting Elevation (ft-in):	
Ending Elevation (ft-in): 20	
Reflectance: 0.5	
OK	

See the Common Solids Information section for more information about the values in this dialog box.

Light Fixtures

This section describes how to use light fixtures.

Insert Light Fixture

To insert a light fixture on a drawing, go to

Ribbon: DM Photometrics->Light Fixtures-> 💡 Insert

 $Pulldown \ Menu: \ \texttt{DM Photometrics->Insert Light Fixture}$

Insert Light Fixture Dialog Box

Insert Light Fixture	×
Callout A B	2x2 Recessed
	Number of Lamps: 1 Lumens / Lamp: 4600 Lamp Depreciation: 1 Arm Length: 0' Total Lumens (Schedule): 4600 Total Lumens (IES): No IES File Selected Mounting Height (ft-in): 0
Edit	Tilt: 0 Layer System: New ~
IES File: None Selected	DK Cancel

Callout: The type of light fixture to be inserted. The list of light fixtures available is defined using the **Light <u>Fixture Project Schedule</u>** command.

Mounting Height: The height at which the light fixture is located.

Tilt: The angle in degrees at which the light fixture is tilted. The rotation is in the direction of the insertion angle of the light fixture.

Layer System: The layer system controls the layers that are used when the light fixture is inserted on the drawing. Layer systems can be created using the **Layers** command. See the **Layers** section for more information.

To change the layer of a light fixture, change the layer system. Do not change the layer directly in your CAD program. If you do, it will likely be changed back at some point in the future.

Inserting a Light Fixture

To insert a light fixture on the drawing, press the **OK** button. The settings specified in the dialog box will be used for the inserted light fixture. You will be prompted to identify where on the drawing the light fixture is to be inserted.

Specify insertion point:

You will then be prompted for the rotation angle. If the light fixture block is not able to be rotated, this prompt will be skipped.

Specify rotation angle:

You will then be prompted to insert another light fixture of the same type. Continue to insert light fixtures, or press **ENTER** to finish the command.

Related Options

Insert callout as part of each light fixture: Sets whether the *Callout* is automatically inserted along with the fixture.

Display light fixture overlay: Sets whether the light fixture overlay is displayed when inserting light fixtures on the drawing.

Edit Multiple Light Fixtures

To edit multiple light fixtures, go to

Ribbon: DM Photometrics->Light Fixtures-> 😵 Edit Multiple

 $Pulldown \ Menu: \ \texttt{DM Photometrics}{\ }{\ } \texttt{Edit Multiple Light Fixtures}$

You will be prompted to select the light fixtures that you want to edit.

Select lights to edit:

The Edit Multiple Light Fixtures dialog box will appear.

Edit Multiple Light Fixtures Dialog Box

Edit Multiple Light Fixtures		×
<varies> A B</varies>		
	Number of Lamps:	
	Lumens / Lamp:	
	Lamp Depreciation:	
	Arm Length:	
	Total Lumens (Schedule):	
	Total Lumens (IES):	
	Mounting Height (ft-in): 0	
	Tilt: 0	
Edit	Layer System: New	\sim
IES File:		
	Cancel	

Changes can be made to the light fixtures in the same way as when they were inserted. See the **Insert Light Fixture** section for more information.

Press the **OK** button to apply the changes to the selected light fixtures.

Array Light Fixtures (2 Point)

The Array Light Fixture (2 Point) command is used to array light fixtures on the drawing in a straight line from the first light fixture to a second point.

Use this command instead of the standard CAD ARRAY command.

To array light fixtures using the 2-point method, go to

Ribbon: DM Photometrics->Light Fixtures-> H Array (2 Point)

Pulldown Menu: DM Photometrics->Array Light Fixtures (2 Point)

You will be prompted to select the light fixtures to array.

Select light fixtures to array:

You will then be prompted to specify a second point for the array.

End point of array:

Specify a point on the drawing. The distance between the specified point and the first light fixture will be divided evenly among the light fixtures in the array.

You will be prompted to specify the number of light fixtures in the array, including the selected light fixture.

Number of light fixtures in array (including selected light fixture):

The light fixtures in the array will be generated in the space between the selected light fixture and the end point.

Array Light Fixtures (Distance / Angle)

The Array Light Fixture (Distance/Angle) command is used to array light fixtures on the drawing in a straight line from the first light fixture in a set direction with a set distance between each light fixture.

Use this command instead of the standard CAD ARRAY command.

To array a light fixture using the distance/angle method, go to

Ribbon: DM Photometrics->Light Fixtures->

Pulldown Menu: DM Photometrics->Array Light Fixtures (Distance/Angle)

You will be prompted to select the light fixtures to array.

Select light fixtures to array:

You will then be prompted to set an offset distance and angle.

Offset distance and angle:

Specify a point on the drawing. The distance between each light fixture in the array is based upon the distance from the first light fixture to the specified point.

You will be prompted to specify the number of light fixtures in the array, including the selected light fixture.

Number of light fixtures in array (including selected light fixture):

The light fixtures in the array will be generated in the direction of the specified point from the selected light fixture.

Aim Light Fixture

The Aim Light Fixture command is used to aim a light fixture at a specific point on the ground.

To aim a light fixture, go to

Ribbon: DM Photometrics->Light Fixtures-> 💊 Aim

Pulldown Menu: DM Photometrics->Aim Light Fixture

Select the light fixture to be aimed.

Select light fixture:

You will then be prompted to specify the location on the ground where the light fixture will be aimed.

Select point to aim light fixture towards:

The light fixture will be rotated on the drawing to point toward the specified point.

The Tilt will be adjusted based upon the light fixture elevation to point toward the specified point.

See the **Insert Light Fixture** section for more information about the *Tilt* setting.

Light Fixture Notes

This section describes how to use light fixture notes.

Insert Light Fixture Callout

The Insert Light Fixture Callout command is used to insert a single light fixture callout label on the drawing.

The callout label is linked to the light fixture that it is inserted on. Changing the callout of the light fixture in the database will change the callout label on the drawing. Erasing the light fixture from the drawing will erase the callout label.

The callout label is not moved with the light fixture. If the light fixture is moved to a new location, the callout label must be moved separately.

Light fixture callout labels can also be inserted with each light fixture that is inserted on the drawing. See the *Insert Callout as Part of Each Light Fixture* option in the Light Fixtures options section for more information.

To insert a light fixture callout, go to

Ribbon: DM Photometrics->Light Fixtures-> 🎦 Callout

Pulldown Menu: DM Photometrics->Light Fixture Notes->Insert Light Fixture Callout

You will be prompted to select the light fixture to be labeled.

Select light fixture:

You will then be prompted to specify where the callout will be inserted on the drawing.

Specify insertion point:

The light fixture callout will be inserted in the selected location.

Related Options

LF callout block: Sets the blocks used for the light fixture callout.

This option can be further customized with the LF callout short label width option.

Insert Note

To insert a light fixture note, go to



 $Pulldown \ Menu: \ \texttt{DM Photometrics->Light Fixture Notes->Insert Note}$

You will be prompted to specify the light fixture to which the note will be added.

Select light fixture to add note to:

Insert Light Fixture Note Dialog Box

Insert Light Fixture Note	×
Note :	Edit
OK	Cancel

Type the note into the Note field and press the OK button.

If the note is longer than one line, press the Edit button and type in the entire note.

You will be prompted to specify where the note will be inserted on the drawing.

Right-click or press space to toggle the leader on or off, press enter to place the note.

When inserting the note, a leader will automatically be inserted if the note is moved far enough away from the light fixture. When the note is too close the the light fixture, the leader will be removed.

Right-click or press **SPACE** to toggle the leader on or off.

Related Options

You can customize the block used for the leader arrow and its length. See the <u>Leaders Options</u> section for more information.

Edit Note

To edit a light fixture note, go to

Ribbon: DM Photometrics->Light Fixture Notes-> 🍄 Edit
Pulldown Menu: DM Photometrics->Light Fixture Notes->Edit Note

You will be prompted to specify the note to be edited.

Select light fixture note to edit:

Edit Light Fixture Note Dialog Box

Edit Light Fixture Note			\times
Note :			Edit
0	К	Cancel	

Enter the revised note into the *Note* field and press the **OK** button.

If the revised note is longer than one line, press the Edit button and enter in the entire note.

The revised note will be displayed on the drawing in the same location.

Move Note

To move a light fixture note, go to

Ribbon: DM Photometrics->Light Fixture Notes->

Pulldown Menu: DM Photometrics->Light Fixture Notes->Move Note

You will be prompted to specify the note to be moved.

Select light fixture note to move:

You will then be prompted to specify a new location for the note.

Right-click or press space to toggle the leader on or off, press enter to place the note.

When inserting the note, a leader will automatically be inserted if the note is moved far enough away from the light fixture. When the note is too close the the light fixture, the leader will be removed.

Right-click or press SPACE to toggle the leader on or off.

Related Options

You can customize the block used for the leader arrow and its length. See the <u>Leaders Options</u> section for more information.

Rotate Note

To rotate a light fixture note, go to

Ribbon: DM Photometrics->Light Fixture Notes->

Pulldown Menu: DM Photometrics->Light Fixture Notes->Rotate Note

You will be prompted to specify the note to be rotated.

Select light fixture note to rotate:

You will then be prompted to specify the rotation angle.

Specify rotation angle / <Reset to 0>:

Specify a rotation angle, or press ENTER to reset the note to the default rotation angle of 0.

Erase Note

To erase a light fixture note, go to

Ribbon: DM Photometrics->Light Fixture Notes-> 🔩 Erase

Pulldown Menu: DM Photometrics->Light Fixture Notes->Erase Note

You will be prompted to specify the note to be erased.

Select light fixture note to erase:

The note and associated leader will be erased.

Insert Elevation Label

The Insert Elevation Label command is used to insert a label on a light fixture that displays the elevation of the device.

To insert an elevation label on a light fixture, go to

Ribbon: DM Photometrics->Light Fixture Notes->

Pulldown Menu: DM Photometrics->Light Fixture Notes->Insert Elevation Label

You will be prompted to specify the light fixture to which the label will be added.

Select light fixture to add elevation label to:

You will be prompted to specify where the elevation label will be inserted on the drawing.

Right-click or space to toggle the leader on or off.

When inserting the label, a leader will automatically be inserted if the label is moved far enough away from the light fixture. When the label is too close the the light fixture, the leader will be removed.

Right-click or press **SPACE** to toggle the leader on or off.

Related Options

Block: Sets the block used for the elevation label.

Label: Sets how the elevation is displayed on the label.

You can customize the block used for the leader arrow and its length. See the <u>Leaders Options</u> section for more information.

Match Note Values and Locations

The Match Note Values and Locations command is used to copy the location and values of notes from one light fixture to another. Arrange notes on one light fixture using standard CAD commands and the <u>Move Note</u> and <u>Rotate Note</u> commands, then use this command to easily copy the values and locations to other light fixtures.

This command will change the values of the notes on the other light fixtures to match the first light fixture you select.

To copy note values and locations to other light fixtures, go to

Ribbon: DM Photometrics->Light Fixture Notes->

Pulldown Menu: DM Photometrics->Light Fixture Notes->Match Note Values and Locations

You will be prompted to specify the light fixture with the note arrangement you want to copy.

Select light fixture to use as source:

You will then be prompted to specify the light fixtures to which the notes will be added in the same relative location.

Select objects:

The notes will be arranged to match the first light fixture you selected.

Light Fixture Schedule

This section describes how to use light fixture schedules.

Light Fixture Project Schedule

The light fixture project schedule contains the light fixtures used in the current project. To create and modify light fixture types, go to

Ribbon: DM Photometrics->Schedule-> 🎦 Project Schedule

Pulldown Menu: DM Photometrics->Light Fixture Project Schedule

Light Fixture Project Schedule Dialog Box

Light Fixture Project Schedule					×
Callout: S		R	ename	Find.	
< Previous ,			. Next>		
Photometric Calculation Information Number of Heads: One Number of Lamps: 1 Lumens / Lamps: 40000 Lamp Depreciation: 1 Arm Length (ft-in): 0 Default Mounting Height (ft-in): Schedule Information ☑ Include in Schedule	IES File IES File: C:nk Sa IES Rotation (Degn Scale Factor: 1	Indbox'parking-lot-light ies ees CCW): 0 Select IES File Load IES File Information Detach IES File	Block Description: Si Block Name: [o ngle Pole Mounted DM_PHOTO-LF51 Select Block	
Fixture Description: OUTDOOR ROADWAY ARCHITECTURA	LREFL: SPECULAR SEGME	NT ALUM ENCL: CLEAR, FLAT GLASS			Edit
Lamp Description: 400 W PS MH ED 28, MS400/H75/ED28P	S				
Watts / Lamp: 0 Model 1: SPAULDING LIGHTING, CR1-P40-H5P Model 2:	Volts: 120V 1P Edit Note 1:	2W Edit to Change> !- saved from url=(0179)http	Image: Constraint of the second se	st: ELECTRONIC est: ELECTRONIC nting: CEILING nting. CEILING	~
New Import from Another Database,	Сору	Save Import from Ligh	nt Fixture Master Sc	Delete hedule	
		Exit			

Callout: The name of the light fixture type.

Rename: Press this button to rename the displayed light fixture in the schedule. Any labels on the drawing will be updated.

Find: Press this button to select a light fixture from a list of all of the light fixtures in the schedule. The light fixture you select will be displayed in the dialog box, allowing you to view and modify it.

Next: Press this button to select and display the next light fixture in the schedule. The next light fixture is determined by sorting the entries in the schedule alphabetically. If you press this button when viewing the last light fixture, it will wrap back to the beginning and display the first light fixture.

Previous: Press this button to select and display the previous light fixture in the schedule. The previous light fixture is determined by sorting the entries in the schedule alphabetically. If you press this button when viewing the first light fixture, it will wrap to the end and display the last light fixture.

New: Press this button to create a new light fixture in the schedule.

Copy: Press this button to copy the displayed light fixture in the schedule. The new light fixture will be created with the same information as the displayed light fixture.

Save: Press this button to save any changes made to the displayed light fixture in the schedule. If you make changes and do not press this button, you will be prompted to save your changes before selecting a new light fixture or closing the schedule dialog box.

Delete: Press this button to delete the displayed light fixture type from the schedule. If there are any light fixtures inserted on a drawing in the project that use the light fixture type, you will not be able to delete it. You must first delete all of the light fixtures from the drawings before you can delete the light fixture type.

Photometric Calculation Information

The information in the **Photometric Calculation Information** section is used during the illuminance level calculations. All of this information must be provided and be correct for the calculation to be correct.

Number of Heads: The number of heads on the fixture.

- **One:** Light is distributed once in the direction of the insertion angle of the light fixture.
- Two, 90 degree offset: Light is distributed in the direction of the insertion angle of the light fixture and at 90 degrees counterclockwise.
- Two, 180 degree offset: Light is distributed in the direction of the insertion angle of the light fixture and at 180 degrees.
- Three: Light is distributed in the direction of the insertion angle of the light fixture, at 90 degrees clockwise, and at 90 degrees counterclockwise.
- Four: Light is distributed in the direction of the insertion angle of the light fixture, at 90 degrees clockwise, at 180 degrees, and at 90 degrees counterclockwise.

Number of Lamps: The number of lamps in the light fixture.

Lumens/Lamp: The number of initial lumens per lamp.

Lamp Depreciation: The depreciation value of each lamp (Lumens / lamp x lamp depreciation = actual lumens). It should be less than or equal to 1. Lamp depreciation may include fixture dirt or lens depreciation.

Arm Length: The length of the arm of the fixture. When calculating illuminance levels, the light source is moved this distance from the insertion point of the light fixture block.

Default Mounting Height: The default mounting height when this light fixture type is inserted on the drawing. The mounting height can be modified for individual light fixtures during and after insertion.

IES File: The IES file that is associated with the light fixture callout. IES files are provided by light fixture manufacturers and contain photometric information about the fixture. They are necessary in order to calculate the foot candle levels in your project.

IES Rotation: The counterclockwise rotation of the IES file relative to the fixture in degrees. Use this value to rotate the IES file if it does not point in the same direction as your light fixture block.

Scale Factor: Multiplies the light output by the number specified. For use with IES files for LED light fixtures.

Select IES File: Press this button to select the IES file for the light fixture. The Select IES File dialog box will

appear.

A Select IES Fil	e			×
Look in:	Tutorial	~	G 🦻 📂 🛄 -	
Quick access Desktop Libraries	Name DMBackup HVAC Photometri	۰ د	Date modified 8/22/2018 8:06 AM 8/21/2018 4:05 PM 8/8/2018 1:28 PM 8/7/2018 6:25 AM	Type File folder File folder IES File
Network	< File name: Files of type:	400watt.ies IES Files (*.IES)	~	> Open Cancel

Select the IES file for this light fixture and press the **Open** button. The IES file will be attached to this light fixture and you will be asked if the information is to be added to the project schedule.

Design M	laster Photometrics	\times
?	Load information from IES file? Existing information will be overwritten.	
	Yes No	

Press the **Yes** button to add the information to the project schedule. The information contained in the IES file varies depending upon what the manufacturer provides. You will need to review the information that is loaded to confirm it is loaded into the correct field and that it contains useful text.

Press the **No** button to only add the information from the IES file used for lighting calculations. The other information in the light fixture schedule will not be filled in based upon the information in the IES file.

Once an IES file is attached to a light fixture, the file path is displayed in the IES File field of the dialog box.

Load IES File Information: Press this button to load the IES file information into the project schedule. The

information contained in the IES file varies depending upon what the manufacturer provides. You will need to review the information that is loaded to confirm it is loaded into the correct field and that it contains useful text.

You will be asked if the information is to be added to the project schedule.

Design Mast	ter Photometrics	\times
? La	oad information from IES file? kisting information will be overwritten.	
	Yes No	

Press the Yes button.

All of the information from the IES file will be loaded into the project schedule.

Detach IES File: Press this button to detach the IES file from the light fixture. The light fixture will have no IES file associated with it after pressing this button.

Block

The block used to represent the light fixture on the drawing is shown here. The list of blocks can be modified using the Light Fixture Blocks->Edit Project List command.

Select Block: This button opens the **Select Light Fixture Block** dialog box. This dialog box allows you to choose the block used to represent the light fixture on the drawing.

Select Light Fixture Block			×
Light Fixture Description Single Pole Mounted Round Wall Mounted (Large) Square Wall Mounted (Large) Square Wall Mounted Round (Tiny) Round (Medium) Round (Large) Square (Tiny) Square (Tiny) Square (Small) 2x Wall Mounted Fluorescent 3x Wall Mounted Fluorescent tax Wall Mounted Fluorescent track or Wall Wash (Small) Track or Wall Wash (Medium) Track or Wall Wash (Large) Ceiling Mounted Exit Emergency		Light Fixture Description: Single Pole Mtd Jight Fixture Block: DM_PHOTO-LF51	
	Cancel		

Schedule Information

The information in the **Schedule Information** section is displayed in the light fixture project schedule on the drawing. It is informational only and not used in the calculations. You can provide it to include a more complete description of the light fixture in the schedule, but it is not necessary. All of the fields in this section can be left blank and the calculations will be correct.

Include in Schedule: Whether the light fixture type is displayed in the light fixture schedule that is inserted on the drawing. Most light fixture types will have this box checked. It is most commonly unchecked for existing light fixture types.

Fixture Description: A description of the type of light fixture. This description will appear on the light fixture schedule on the drawing.

Lamp Description: Description of the lamp.

Watts/Lamp: The wattage of each lamp.

Model 1, **Model 2**, **Model 3**: A description of the model for the light fixture. In the light fixture schedule, the three models can be shown in a single column or in three separate columns. See the <u>Edit Light Fixture Schedule List</u> section for more information.

Volts: The voltage of the light fixture.

Note 1, Note 2, Note 3: These notes can be used as generic note fields that are displayed in the schedule on the drawing.

They can also be used to include information for which the software does not include a specific location. In the column labels, you can change the label on the column for that note to designate it for that information. When the schedule is printed, you will have a new field that includes the custom information.

Ballast: The type of ballast on the light fixture. Default ballasts are available in the list. To specify a ballast that is not included in the list, select **Custom** and enter the value in the field below.

Mounting: How the light fixtures is mounted. Default mounting types are available in the list. To specify a mounting that is not included in the list, select **Custom** and enter the value in the field below.

Importing Light Fixtures

See the <u>Importing Light Fixtures</u> section for more information about the Import from Another Database and Import from Light Fixture Master Schedule buttons.

Related Options

Copy IES files to project folder: Sets whether loaded IES files are copied to the project folder.

Importing Light Fixtures

The Import from Another Database and Import from Light Fixture Master Schedule buttons are used to import light fixtures to the current project.

Import from Another Database

Press the **Import from Another Database** button to import light fixtures from a schedule in another project to the current project. This button can be used to copy an entire schedule or a single light fixture. This button allows you to reuse light fixture schedules in new projects.

The **Select Database to Import From** dialog box will appear and prompt you to select the project to import the light fixtures from.

A Select Datab	ase to Import From	١		×
Look in:	13 Final Outpu	t ~	3 🌶 🖻 🖽	
Quick access	Name DMBackup dm_elec.dm	^	Date modified 9/13/2018 8:12 AM 9/13/2018 9:30 AM	Type File folder DM File
Desktop				
Libraries				
This PC				
S	<	[>
Network	File name:		L	Open
	Files of type:	DM Files (*.dm) Open as read-only	~	Cancel

Select the database from which to import. You must select a Design Master Photometrics database. The database must be updated to the most current version. If it is not, you will be prompted to open a drawing in the project to convert the database. After it is updated you will then be able to import from it.

After you select the database, the **Import Record from Another Project** dialog box will appear and prompt you to select the light fixtures to import.

Import Record from Another Project			
Current Group:General	Select Group		
2 HEAD POLE E HEAD S W			
Create New Record in Schedule			
O Update Current Record in Schedule			
ОК Са	ancel		

Current Group: The group in the other project schedule from which the light fixtures will be imported.

Select Group: Press this button to select a new group from which to import light fixtures.

Import Entire Group: Press this button to import all of the light fixtures from the Current Group to the project.

New light fixtures will be created in the project for each light fixture being imported. If a light fixture with the same name already exists in the current schedule, a new light fixture will be created with (**Copy**) appended to the light fixture callout. The existing light fixture will not be modified.

You will be prompted if you want to delete existing light fixtures in the project schedule. If you delete the existing light fixtures, any light fixtures currently being used will not be deleted.

Record List: The list of light fixtures in the *Current Group*. Select the light fixtures to import from this list. You can select multiple light fixtures using the **SHIFT** and **CTRL** keys.

Create New Record in Schedule: Select this option to create a new light fixture in the project schedule for each record being imported. The light fixture will be created with the same name as the light fixture in the other project. If a light fixture with the same name already exists in the current schedule, a new light fixture will be created with **(Copy)** appended to the callout. The existing light fixture will not be modified.

Update Current Record in Schedule: Select this option to update the current light fixture in the project schedule

with the information from the imported light fixture. All of the information in the project schedule will be overwritten.

Import from Light Fixture Master Schedule

Press the **Import from Light Fixture Master Schedule** button to import light fixtures from the master schedule to the project schedule after the project has been started. The button allows you to import an entire group or individual light fixtures.

When you press the button, the Import Master Record dialog box will appear.

Import Master Record	×
Current Group:General	Select Group
Import Entire	Group
S	
Create New Record in Schedu	le
O Update Current Record in Scho	edule
ОК	Cancel

Current Group: The group in the master schedule that the light fixtures will be imported from.

Select Group: Press this button to select a new group from which to import light fixtures.

Import Entire Group: Press this button to import all of the light fixtures from the Current Group to the project.

New light fixtures will be created in the project for each light fixture being imported. If a light fixture with the same name already exists in the current database, a new light fixture will be created with (Copy) appended to the light fixture callout. The existing light fixture will not be modified.
You will be prompted if you want to delete existing light fixtures in the project schedule. If you delete the existing light fixtures, any light fixtures currently being used will not be deleted.

Record List: The list of light fixtures in the master group. Select the light fixture to import from this list. You can select multiple light fixtures using the **SHIFT** and **CTRL** keys.

Create New Record in Schedule: Select this option to create a new light fixture in the project schedule for each record being imported. The light fixture will be created with the same name as the light fixture in the master schedule. If a light fixture with the same name already exists in the current schedule, a new light fixture will be created with **(Copy)** appended to the callout. The existing light fixture will not be modified.

Update Current Record in Schedule: Select this option to update the current light fixture in the project schedule with the information from the imported light fixture. All of the information in the project schedule will be overwritten.

Insert Light Fixture Project Schedule

A light fixture schedule that lists all of the light fixtures used in the current project can be inserted on the drawing.

To insert this schedule onto the drawing, go to

```
Ribbon: DM Photometrics->Schedule-> 🛅 Insert
```

```
Pulldown Menu: DM Photometrics->Light Fixture Schedule->Insert Light Fixture Project Schedule
```

Insert Light Fixture Project Schedule Dialog Box

Insert Light Fixture Project Schedule	×
Schedule Notes:	Edit
Maximum Schedule Height: Speci	ify On Drawing <
Zoom to Schedule After Insertion	
Show Unused Light Fixtures	
Edit Title, Column Labels, and Column Orde	er
OK Cancel	

Schedule Notes: A note that will appear below the schedule when inserted on the drawing.

Maximum Schedule Height: Whether the schedule has a maximum height. This height is inches on the printed page.

If this is not checked, the schedule will be in a single schedule.

If this is checked, you can specify the maximum height of the schedule. When the schedule exceeds this height, it will be continued in a second schedule next to the first. The label of the second schedule will have the *Schedule Title Continued Label* option added to it to indicate that it is a continuation of the first schedule. See the

<u>Schedules</u> options section for more information.

Specify on Drawing: Press this button to specify the *Maximum Schedule Height* on the drawing. The dialog box will be closed and you will be prompted to specify the height.

Specify maximum schedule height:

The distance you enter on the drawing will be used as the maximum height. It is simplest to draw a line straight down to where the bottom of the schedule should be located.

Zoom to Schedule After Insertion: Whether the display will be moved to the schedule location after it has been inserted or updated.

Show Unused Light Fixtures: Whether light fixtures in the schedule that have not been inserted on a drawing will be displayed in the schedule.

Edit Title, Column Labels, and Column Order: Press this button to modify the layout of the light fixture schedule on the drawing. See the Edit Light Fixture Schedule Layout section for more information.

Inserting or Updating the Schedule on the Drawing

To insert or update the schedule, press the **OK** button.

Inserting the Schedule the First Time

If the light fixture schedule is not currently inserted on the drawing, you will be prompted for the insertion location of the schedule.

Specify insertion point for the light fixture schedule:

The location you specify will be used as the top-left corner for the light fixture schedule.

Updating the Schedule Already on the Drawing

If the light fixture schedule is already inserted on the drawing, it will be updated in its current location.

You must update the schedule on the drawing when changes are made to the project schedule. The schedule will not update automatically.

If additional graphics, such as revision clouds, have been inserted over the schedule graphic, be sure to check their location after updating the schedule.

Related Options

Schedule title justification: Sets the justification for the schedule title.

<u>Schedule column label justification:</u> Sets the justification for column headings.

Schedule title continued label: Sets the label added to the schedule title for continued sections.

Edit Light Fixture Schedule Layout

The Light Fixture Schedule Label Display and Order dialog box is used to configure the appearance of the light fixture schedule on the drawing.

To change the appearance for the current project, use the <u>Insert Light Fixture Project Schedule</u> command and press the **Edit Title, Column Labels, and Column Order** button. Changes made this way will affect the current project.

To change the appearance in the master database, use the **Edit Light Fixture Schedule Master Settings** command. Changes made this way will affect newly created projects.

Light Fixture Schedule Label Display and Order Dialog Box

🕺 Light Fixture Schedule Label Display and Order				×	
			Ν	Nove Up Move Down	
Key	Label	Width	Justification	Display	
Schedule Title	LUMINAIRE SCHEDULE			V	
Callout	CALLOUT	1	Left	✓	
Symbol	SYMBOL	1.5	Left	✓	
Lamp	LAMP	2	Left	v	
Description	DESCRIPTION	3.5	Left	v	
Ballast	BALLAST	1.5	Left	~	
Mounting	MOUNTING	1.5	Left	~	
Model	MODEL	2	Left	~	
Model 1	MODEL 1	2	Left		
Model 2	MODEL 2	2	Left		
Model 3	MODEL 3	2	Left		
Volts	VOLTS	1.25	Left	~	
Note 1	NOTE 1	2	Left	~	
Note 2	NOTE 2	2	Left	~	
Note 3	NOTE 3	2	Left	~	
Quantity	QUANTITY	1	Left	~	
Volts Only	VOLTS	1	Left		
Default Elevation	DEFAULT ELEVATION	1	Left		
Lumens / Lamp	LUMENS / LAMP	1	Left		
Total Lumens	TOTAL LUMENS	1	Left		
Lamp Depreciation	LAMP DEPRECIATION	1	Left		
IES File Name	IES FILE	2	Left		
IES File Name and Path	IES PATH	3	Left		
Arm Length	ARM LENGTH	1	Left		
Short Voltage	VOLTS	1	Left		
Number of Heads	NUM OF HEADS	1	Left		
	ОК	Cano	el		

Grid Columns

Key: The identifier for the column describing what value it will display. The value in this column is fixed and cannot be changed.

Label: The name that will be displayed for the column.

You can define a second header for a column by separating the two headers with a | character. The first header will be merged across multiple columns with the same first header. See the <u>Column Subheadings in Schedules</u> article in the knowledge base for more information.

Width: The width of the column in inches on the printed drawing.

Justification: The justification of the text values in the column. The justification of the title for the schedule and of the column headers are set using the *Schedule title justification* options and the *Schedule column label justification* option in the <u>Options</u> command.

- Left: The text is left-justified.
- Center: The text is center-justified.
- **Right:** The text is right-justified.

Display: Whether the column is shown on the schedule. If this is not checked, the value will not be displayed.

Grid Rows

Each row in the grid corresponds to a column in the light fixture schedule. The top column in the grid is the leftmost column in the schedule.

Move Up: Press this button to move the selected row up in the list. This moves the corresponding column to the left in the schedule.

Move Down: Press this button to move the selected row down in the list. This moves the corresponding column to the right in the schedule.

Schedule Title: The title of the schedule. This row is always listed first and cannot be moved up or down. The *Label* of this key is the title of the schedule. The *Width* and *Display* values of this key are ignored. The width of the title is based upon the width of the columns in the schedule. The title is always displayed with the schedule.

The other values in the Key column are listed alphabetically below.

Arm Length: The arm length taken from the schedule.

Ballast: The ballast taken from the schedule. Each of the *Ballast* values from the schedule will be listed on a separate line.

Callout: The name of the light fixture as defined in the light fixture schedule.

Default Elevation: The default mounting height taken from the schedule.

Description: The description taken from the schedule.

IES File Name: The name of the IES file for the light fixture.

IES File Name and Path: The file path for the IES file for the light fixture.

Lamp: The number of lamps, watts per lamp, and description taken from the schedule.

Lamp Depreciation: The lamp depreciation taken from the schedule. Each of the *Lamp Depreciation* values from the schedule will be listed on a separate line.

Lumens / Lamp: The lumens per lamp for the fixture. Each of the Lumens / Lamp values from the schedule will be listed on a separate line.

Model: All three models taken from the schedule. Each model will be listed on a separate line.

Model 1: The model taken from the schedule. Each model is listed in a separate column.

Model 2: The model taken from the schedule. Each model is listed in a separate column.

Model 3: The model taken from the schedule. Each model is listed in a separate column.

Mounting: The mounting taken from the schedule.

Note 1: Note taken from the schedule.

Note 2: Note taken from the schedule.

Note 3: Note taken from the schedule.

Number of Heads: The number of heads taken from the schedule.

Quantity: The number of light fixtures inserted in the project. If a light fixture type is not inserted, "NOT USED" will be displayed.

Short Voltage: The voltage value and poles of the light fixture. If *Volts* is set to Universal, all of the voltages that the light fixture type is connected to will be listed.

Examples: 120V 1P, 208V 2P

Symbol: The block used to represent the light fixture. The block is rotated and scaled so that it will fit into the schedule.

Total Lumens: The total lumens for the fixture.

Volts: The full voltage value of the light fixture. The volts, poles, and wires will be displayed. If *Volts* is set to **Universal**, all of the voltages that the light fixture type is connected to will be listed.

Examples: 120V 1P 2W, 208V 2P 2W

Volts Only: The voltage value of the light fixture. Only the volts will be displayed. The poles and wires will not be displayed. If *Volts* is set to **Universal**, all of the voltages that the light fixture type is connected to will be listed.

Examples: 120V, 208V

Light Fixture Master Schedule

The light fixture master schedule contains all of the light fixture callouts that might be used on a project. See the **Master and Standards Databases** section for more information about using master databases.

To create and modify callouts in the master schedule, go to

Ribbon: DM Photometrics->Schedule-> 🖾 Light Fixture Master Schedule

Pulldown Menu: DM Photometrics->Light Fixture Schedule->Light Fixture Master Schedule

Light Fixture Master Schedule Dialog Box

Light Fixture Master Schedule					×
Current Group: General Move to Another Group		C	Sele Copy to Another Group.	ct Group	
Callout: S			Rename	Find	
< Previous ,			. Next>		
Photometric Calculation Information Number of Heads: One Number of Lamps: 1 Lumens / Lamp: [40000	IES File IES File: C:nk Sandbox IES Rotation (Degrees CC Scale Factor: 1	parking-lot-light.ies W): 0	Block	o-[_]	
Lamp Depreciation: 1	Se	lect IES File			
Am Length (ft-in): 0	Load I	ES File Information			
Default Mounting Height (ft-in):	D	etach IES File	Block Name: D	ngle Pole Mounted M PHOTO-LF51	
				Select Block	
Schedule Information ✓ Include in Schedule Fixture Description: OUTDOOR ROADWAY ARCHITECTURALREFL: Lamp Description: 400 W PS MH ED 28, MS400/H75/ED28PS	SPECULAR SEGMENT AL	UM ENCL: CLEAR, FLAT GLASS			Edit
Watts / Lamp: 0	Volts: 120V 1P 2W		✓ Ballas	st: ELECTRONIC	~
Model 1: SPAULDING LIGHTING, CR1-P40-H5P Edit	Note 1:		Edit Balla:		
Model 2: Edit	Note 2:		Edit Moun	ting: CEILING	~
Model 3: Edit	Note 3: <press edit="" td="" to<=""><td>Change> ! saved from url=(0179)h</td><td>ttp Edit Mour</td><td>nting: CEILING</td><td></td></press>	Change> ! saved from url=(0179)h	ttp Edit Mour	nting: CEILING	
New Co	рру	Save		Delete	
	Import from Light Fixture	Project Schedule			
	Exit				

The Light Fixture Master Schedule dialog box works almost exactly the same as the Light Fixture Project Schedule dialog box. See the Light Fixture Project Schedule section for more information. The places where it works differently are described below.

Current Group: The active light fixture group is listed here. All of the light fixture types that are created and modified will be associated with this group.

Select Group: Press this button to open the Light Fixture Master Schedule Groups dialog box. The group selected will become the current group.

You can also create and modify the groups available in the master schedule. See the <u>Light Fixture Master</u> <u>Schedule Groups</u> section for more information.

Move to Another Group: Press this button to move the displayed light fixture to a different master schedule group. A dialog box will appear that will prompt you to select the other group. The *Current Group* will be changed to the selected group. This button is disabled if only one group exists.

Copy to Another Group: Press this button to copy the displayed light fixture to a different master schedule group. A dialog box will appear that will prompt you to select the other group. A copy of the displayed light fixture will be created in the other group. This button is disabled if only one group exists.

Import from Light Fixture Project Schedule: Press this button to import light fixtures from a project schedule to the master schedule. This button can be used to copy an entire project schedule or a single light fixture. This button allows you to create your master schedule from a project schedule.

🛕 Select Datab	ase to Import Fro	m		×
Look in:	📙 13 Final Outp	ut ~	G 🤌 📂 🛄 🗸	
Quick access	Name DMBackup dm_elec.dm	1	Date modified 9/13/2018 8:12 AM 9/13/2018 9:30 AM	Type File folder DM File
Desktop				
Libraries				
 This PC				
A	<			>
Network	Files of type:	DM Files (*.dm)	~	Cancel

When you press this button, the **Select Database to Import From** dialog box will appear and prompt you to select the project from which the light fixtures will be imported.

Select the database from which to import. You must select a Design Master Photometrics database. The database must be updated to the most current version. If it is not, you will be prompted to open a drawing in the project to convert the database. After it is updated you will then be able to import from it.

After you select the database, the **Import Record from Another Project** dialog box will appear and prompt you to select the light fixtures to import.

Import Record from Another Proj	ect X	
Current Group: General	Select Group	
Import Entire Gro	up	
2 HEAD POLE E HEAD S W		
Create New Record in Schedule		
◯ Update Current Record in Schedule		
ОК Са	ancel	

Current Group: The group in the project schedule from which the light fixtures will be imported.

Select Group: Press this button to select a new group from which to import light fixtures.

Import Entire Group: Press this button to import all of the light fixtures from the *Current Group* to the master schedule.

New light fixtures will be created in the master schedule for each light fixture being imported. If a light fixture with the same name already exists in the master schedule, a new light fixture will be created with (**Copy**) appended to the light fixture callout. The existing light fixture will not be modified.

You will be prompted if you want to delete existing light fixtures in the master schedule.

Record List: The list of light fixtures in the *Current Group*. Select the light fixtures to import from this list. You can select multiple light fixtures using the **SHIFT** and **CTRL** keys.

Create New Record in Schedule: Select this option to create a new light fixture in the master schedule for each record being imported. The light fixture will be created with the same name as the light fixture in the project schedule. If a light fixture with the same name already exists in the master schedule, a new light fixture will be created with (**Copy**) appended to the light fixture callout. The existing light fixture will not be modified.

Update Current Record in Schedule: Select this option to update the current light fixture in the master

schedule with the information from the imported light fixture. All of the information in the master schedule will be overwritten.

Light Fixture Master Schedule Groups

The Select Group button on the Light Fixture Master Schedule dialog box opens the Light Fixture Master Schedule Groups dialog box. This dialog box is used to create and modify light fixture groups in the master database.

Groups allow you to organize the light fixtures in your project and master schedules.

When you start a project, all of the light fixtures from a single group can be copied to the project. Copying a group is helpful when you have a common type of project with similar schedules. You can set up the schedule once in the master as a group, then reuse it in new projects.

While working on a project, you can import light fixtures from a group into the project. You can create multiple groups for different types of light fixtures or different manufacturers. The organization of the groups makes it easier to find the light fixture you want to import.

Light Fixture Master Schedule Groups Dialog Box

Light Fixture Master Schedule G	×
General	
Rename	
New Copy Delet	e
OK Cancel	

Rename: Press this button to rename the selected group.

New: Press this button to create a new group. The group that is created will be empty and have no light fixtures in it.

Copy: Press this button to copy the selected group. The group that is created will be empty and have no light fixtures in it.

Delete: Press this button to delete the selected group. You cannot delete a group that still has light fixtures in it.

Press the **OK** button to set the selected group to the *Current Group* in the **Light Fixture Master Schedule** dialog box.

Calculation Areas

This section describes how to use calculation areas.

Calculation areas determine where illuminance levels will be calculated on the drawing. The illuminance levels are based upon the light fixtures and solids inserted on the drawing.

Insert Calculation Area

The Insert Calculation Area command is used to insert a flat area on the drawing where illuminance levels are to be calculated.

To insert a calculation area on the drawing, go to

```
Ribbon: DM Photometrics->Calculation Areas->
```

Insert Calculation Area Dialog Box

Insert Calculation Area	Х
Override Schedule Title	
Schedule Title: GENERAL PHOTOMETRIC SCHEDULE	
Horizontal Calculations	
Grid Spacing (ft-in): 10	
Calculation Elevation (ft-in): 0	
Vertical Calculations	
Calculate Vertical Illuminance Levels At Area Boundary	
Vertical Calculation Spacing (ft-in): 2	
Vertical Display Spacing (ft-in): 5	
Ending Vertical Calculation Elevation (ft-in): 8	
OK Cancel	

Override Schedule Title: Whether the schedule title for the current calculation area is to be changed from the default calculation schedule title.

Schedule Title: The title to be used in the calculation schedule for the calculation area. This field is enabled if the *Override Schedule Title* box is checked.

Grid / Illuminance Level Spacing: The distance between points where illuminance levels will be calculated.

Calculation Elevation: The elevation at which the calculation will be performed.

Calculate Vertical Illuminance Levels At Area Boundary: Whether vertical illuminance levels are to be calculated at the edges of the calculation area.

Vertical Calculation Spacing: The distance between points where vertical illuminance levels will be calculated.

Vertical Display Spacing: The distance between vertical calculation points as they are displayed on the drawing.

Ending Vertical Calculation Elevation: The maximum height at which vertical illuminance levels will be calculated.

Inserting the Calculation Area on the Drawing

To insert the calculation area on the drawing, press the **OK** button. The settings you specified in the dialog box will be used for the area.

You will be prompted to draw the calculation area on the drawing.

Specify first point of calculation area or [<Select existing boundary>]:

First point of calculation area: Specify a point on the drawing.Continue entering points on the drawing until the calculation area is complete. Press **ENTER** to finish drawing the calculation area.

Select existing boundary: Press **ENTER** to draw the calculation area by tracing a polyline on the drawing. Specify the polyline on the drawing to be traced. You will be asked whether to erase the polyline after the calculation area is inserted.

You will then be prompted to insert the calculation schedule, group the calculation area with another area, or press **ENTER** to finish the command.

Specify insertion point for calculation schedule or point inside boundary to group with:

Insert a Calculation Schedule: To insert a calculation schedule, select a point on the drawing that is not inside of another calculation area. A calculation schedule will be inserted at the point specified.

Group the Area with Another Group: To group the area with another group, select a point on the drawing that is inside of another calculation area. The two calculation areas will be grouped. If the selected calculation area already has a calculation schedule on the drawing, it will be used as the calculation schedule for the group. If it does not have a calculation schedule, no calculation schedule will be used for the group.

Finish the Command: Press **ENTER** to finish the command without inserting a calculation schedule or grouping the calculation area with another group. No calculation schedule will be inserted and the calculation area will be in its own separate group.

Related Options

<u>Schedule title justification:</u> Sets the justification for the schedule title.

<u>Schedule column label justification:</u> Sets the justification for column headings.

Schedule title continued label: Sets the label added to the schedule title for continued sections.

Default grid spacing: Sets the default value for the *Grid Spacing* setting.

Insert Sloped Calculation Area

The Insert Sloped Calculation Area command is used to insert a sloped area on the drawing where illuminance levels are to be calculated.

To insert a sloped calculation area on the drawing, go to

```
Ribbon: DM Photometrics->Calculation Areas-> 🞑 Insert Sloped Area
```

```
Pulldown Menu: DM Photometrics->Insert Sloped Calculation Area
```

Insert Sloped Calculation Area Dialog Box

Insert Sloped Calculation Area	
Override Schedule Title	
Schedule Title: GENERAL PHOTOMETRIC SCHEDULE]
Horizontal Calculations	
Grid Spacing (ft-in): 10	
Top Elevation (ft-in): 0	
Bottom Elevation (ft-in): 0	
Vertical Calculations	
Calculate Vertical Illuminance Levels At Area Boundary	
Vertical Calculation Spacing (ft-in): 2	
Vertical Display Spacing (ft-in): 5	
Ending Vertical Calculation Elevation Above Slope (ft-in): 8	
OK	1

Override Schedule Title: Whether the schedule title for the current calculation area is to be changed from the default calculation schedule title.

Schedule Title: The title to be used in the calculation schedule for the calculation area. This field is enabled if the *Override Schedule Title* box is checked.

Grid / Illuminance Level Spacing: The distance between points where illuminance levels will be calculated.

Top Elevation: The elevation at the top of the slope.

Bottom Elevation: The elevation at the bottom of the slope.

Calculate Vertical Illuminance Levels At Area Boundary: Whether vertical illuminance levels are to be calculated at the edges of the calculation area.

Vertical Calculation Spacing: The distance between points where vertical illuminance levels will be calculated.

Vertical Display Spacing: The distance between vertical calculation points as they are displayed on the drawing.

Ending Vertical Calculation Elevation Above Slope: The maximum vertical distance at which vertical illuminance levels will be calculated along each point on the slope. For example, an area with a *Top Elevation* of 30 and an *Ending Vertical Calculation Elevation Above Slope* of 10 will calculate illuminance levels from 30' to 40' at the top of the slope.

Inserting the Sloped Calculation Area on the Drawing

To insert the calculation area on the drawing, press the **OK** button. The settings you specified in the dialog box will be used for the area.

You will be prompted to draw the calculation area on the drawing. The area will be inserted as a rectangle. The top elevation will be on one side of the rectangle and the bottom elevation will be on the opposite side of the rectangle. The two connecting sides will slope from the top side to the bottom side.

You will draw two lines to define the area. The first line should start at the top elevation of the slope and end at the bottom elevation of the slope. The top and bottom edges of the boundary will be drawn perpendicular to this line. The sides of the boundary will be drawn parallel to this line.

The second line you draw should start at one side of the slope and end at the opposite side. The locations of the sides of the rectangle will be determined by the start and end points of this line.

You will first be prompted to specify a point on the slope that is at the top elevation.

Specify top of calculation area:

You will then be prompted to specify a point on the slope that is at the bottom elevation.

Specify bottom of calculation area:

You will then be prompted to specify a point on one side of the slope.

Specify point on edge of calculation area:

You will then be prompted to specify a point on the opposite side of the slope.

Specify point on opposite edge of calculation area:

A rectangular boundary will be inserted on the drawing enclosing the specified points. The outline of the boundary will be thicker at the higher elevation to help you visualize how it slopes.

You will then be prompted to insert the calculation schedule, group the calculation area with another area, or press **ENTER** to finish the command.

Specify insertion point for calculation schedule or point inside boundary to group with:

Insert a Calculation Schedule: To insert a calculation schedule, select a point on the drawing that is not inside of another calculation area. A calculation schedule will be inserted at the point specified.

Group the Area with Another Group: To group the area with another group, select a point on the drawing that is inside of another calculation area. The two calculation areas will be grouped. If the selected calculation area already has a calculation schedule on the drawing, it will be used as the calculation schedule for the group. If it does not have a calculation schedule, no calculation schedule will be used for the group.

Finish the Command: Press **ENTER** to finish the command without inserting a calculation schedule or grouping the calculation area with another group. No calculation schedule will be inserted and the calculation area will be in its own separate group.

Related Options

Schedule title justification: Sets the justification for the schedule title.

Schedule column label justification: Sets the justification for column headings.

<u>Schedule title continued label:</u> Sets the label added to the schedule title for continued sections.

Default grid spacing: Sets the default value for the *Grid Spacing* setting.

Insert Calculation Line

The Insert Calculation Line command is used to insert a line on the drawing where illuminance levels are to be calculated.

To insert a calculation line on the drawing, go to

Ribbon: DM Photometrics->Calculation Areas-> 📥 Insert Line

Pulldown Menu: DM Photometrics->Insert Calculation Line

Insert Calculation Line Dialog Box

Insert Calculation Line	×
Override Schedule Title	
Schedule Title: GENERAL PHOTOMETRIC SCHEDULE	
Horizontal Calculations	
Illuminance Level Spacing (ft-in): 10	
Calculation Elevation (ft-in): 0	
Vertical Calculations	
Calculate Vertical Illuminance Levels	
Vertical Calculation Spacing (ft-in): 2	
Vertical Display Spacing (ft-in): 5	
Ending Vertical Calculation Elevation (ft-in):	
OK	

Override Schedule Title: Whether the schedule title for the current calculation area is to be changed from the default calculation schedule title.

Schedule Title: The title to be used in the calculation schedule for the calculation area. This field is enabled if the *Override Schedule Title* box is checked.

Grid / Illuminance Level Spacing: The distance between points where illuminance levels will be calculated.

Calculation Elevation: The elevation at which the calculation will be performed.

Calculate Vertical Illuminance Levels At Area Boundary: Whether vertical illuminance levels are to be calculated along the line.

Vertical Calculation Spacing: The distance between points where vertical illuminance levels will be calculated.

Vertical Display Spacing: The distance between vertical calculation points as they are displayed on the drawing.

Ending Vertical Calculation Elevation: The maximum height at which vertical illuminance levels will be calculated.

Inserting the Calculation Line on the Drawing

You will be prompted to draw the calculation line on the drawing.

Specify first point of calculation line or [<Select existing line>]:

First point of calculation area: Specify a point on the drawing.Continue entering points on the drawing until the calculation line is complete. Press **ENTER** to finish drawing the calculation line.

Select existing line: Press ENTER to draw the calculation line by tracing a polyline on the drawing. Specify the polyline on the drawing to be traced. You will be asked whether to erase the polyline after the calculation

line is inserted.

If you checked *Calculate Vertical Illuminance Levels*, you will then be prompted to specify on which side of the line the vertical illuminance levels will be displayed.

Specify side to place vertical illuminance values:

You will then be prompted to insert the calculation schedule, group the calculation line with an area, or press **ENTER** to finish the command.

Specify insertion point for calculation schedule or point inside boundary to group with:

Insert a Calculation Schedule: To insert a calculation schedule, select a point on the drawing that is not inside of a calculation area. A calculation schedule will be inserted at the point specified.

Group with an Area: To group the line with an area, select a point on the drawing that is inside of a calculation area. The two will be grouped. If the selected calculation area already has a calculation schedule on the drawing, it will be used as the calculation schedule for the group. If it does not have a calculation schedule, no calculation schedule will be used for the group.

Finish the Command: Press **ENTER** to finish the command without inserting a calculation schedule or grouping the calculation line with an area. No calculation schedule will be inserted and the calculation line will be in its own separate group.

Related Options

Schedule title justification: Sets the justification for the schedule title.

Schedule column label justification: Sets the justification for column headings.

Schedule title continued label: Sets the label added to the schedule title for continued sections.

Default grid spacing: Sets the default value for the Illuminance Level Spacing setting.

Insert Sloped Calculation Line

The Insert Sloped Calculation Line command is used to insert a sloped line on the drawing where illuminance levels are to be calculated.

To insert a sloped calculation line on the drawing, go to

Ribbon: DM Photometrics->Calculation Areas-> 🔽 Insert Sloped Line

 $Pulldown \ Menu: \ {\tt DM \ Photometrics->Insert \ Sloped \ Calculation \ Line}$

Insert Sloped Calculation Line Dialog Box

Insert Sloped Calculation Line	<
Override Schedule Title	
Schedule Title: GENERAL PHOTOMETRIC SCHEDULE	
Horizontal Calculations	
Illuminance Level Spacing (ft-in): 10	
Top Elevation (ft-in): 10	
Bottom Elevation (ft-in): 0	
Vertical Calculations	
Calculate Vertical Illuminance Levels	
Vertical Calculation Spacing (ft-in): 2	
Vertical Display Spacing (ft-in): 5	
Ending Vertical Calculation Elevation Above Slope (ft-in): 8	
OK Cancel	

Override Schedule Title: Whether the schedule title for the current calculation area is to be changed from the default calculation schedule title.

Schedule Title: The title to be used in the calculation schedule for the calculation area. This field is enabled if the *Override Schedule Title* box is checked.

Grid / Illuminance Level Spacing: The distance between points where illuminance levels will be calculated.

Top Elevation: The elevation at the top of the slope.

Bottom Elevation: The elevation at the bottom of the slope.

Calculate Vertical Illuminance Levels At Area Boundary: Whether vertical illuminance levels are to be calculated along the line.

Vertical Calculation Spacing: The distance between points where vertical illuminance levels will be calculated.

Vertical Display Spacing: The distance between vertical calculation points as they are displayed on the drawing.

Ending Vertical Calculation Elevation Above Slope: The maximum vertical distance at which vertical illuminance levels will be calculated along each point on the slope. For example, a line with a *Top Elevation* of 30 and an *Ending Vertical Calculation Elevation Above Slope* of 10 will calculate illuminance levels from 30' to 40' at the top of the slope.

Inserting the Sloped Calculation Line on the Drawing

To insert the calculation line on the drawing, press the **OK** button. The settings you specified in the dialog box will be used for the line.

You will be prompted to specify a point that is at the top elevation.

Specify top of calculation line:

You will then be prompted to specify a point that is at the bottom elevation.

Specify bottom of calculation line:

The line will be thicker at the higher elevation to help you visualize how it slopes.

If you checked *Calculate Vertical Illuminance Levels*, you will then be prompted to specify on which side of the line the vertical illuminance levels will be displayed.

Specify side to place vertical illuminance values:

You will then be prompted to insert the calculation schedule, group the calculation line with an area, or press **ENTER** to finish the command.

Specify insertion point for calculation schedule or point inside boundary to group with:

Insert a Calculation Schedule: To insert a calculation schedule, select a point on the drawing that is not inside of a calculation area. A calculation schedule will be inserted at the point specified.

Group with an Area: To group the line with an area, select a point on the drawing that is inside of a calculation area. The two will be grouped. If the selected calculation area already has a calculation schedule on the drawing, it will be used as the calculation schedule for the group. If it does not have a calculation schedule, no calculation schedule will be used for the group.

Finish the Command: Press **ENTER** to finish the command without inserting a calculation schedule or grouping the calculation line with an area. No calculation schedule will be inserted and the calculation line will be in its own separate group.

Related Options

Schedule title justification: Sets the justification for the schedule title.

Schedule column label justification: Sets the justification for column headings.

Schedule title continued label: Sets the label added to the schedule title for continued sections.

Default grid spacing: Sets the default value for the *Illuminance Level Spacing* setting.

Insert Mask

The Insert Mask command is used to define an area in a calculation area where the illuminance values should not be calculated.

To insert a mask on the drawing, go to

Ribbon: DM Photometrics->Calculation Areas-> 🔳 Mask

Pulldown Menu: DM Photometrics->Insert Mask

You will be prompted to specify the starting point of the mask.

Specify points for mask: Specify start point:

You will then be prompted to specify the next point of the mask.

Specify next point:

You can specify additional points or press **ENTER** to complete the mask. The mask will be displayed on the drawing. The illuminance levels inside the area will not be calculated or displayed.

Calculation Area Groups

Multiple calculation areas can be joined together in a single calculation area group. Grouped areas share a common calculation schedule. The calculated values in the schedule will include the illuminance values in all of the areas in the group.

Add Calculation Area to Group

The Add Calculation Area to Group command is used to group multiple calculation areas together. Calculations areas in a group share a common calculation schedule.

To add a calculation area to a calculation area group, go to



You will be prompted to identify a calculation area in the group to which you want to add another calculation area.

Select calculation boundary:

You will then be prompted to identify a calculation area to be added to the group.

Select boundary to group with the first boundary:

The second calculation area will be added to the same group as the first calculation area. If the second calculation area was in another group, it will be removed from the group but all of the other areas in the group will remain. If the second area had a calculation schedule inserted on the drawing, it will be erased. The calculation schedule for the group will include the illuminance values from the second area.

Remove Calculation Area from Group

The Remove Calculation Area from Group command is used to remove a calculation area from a calculation area group.

To remove a calculation area from a calculation area group, go to

Ribbon: DM Photometrics->Calculation Areas-> 🖳 Remove from Group

 $\label{eq:pulldown Menu: DM Photometrics->Calculation Area Groups->Remove Calculation Area from Group$

You will be prompted to identify which calculation area is to be removed from a calculation area group.

Select calculation boundary:

The calculation area will be removed from the group.

You will then be prompted for the insertion point for the calculation schedule for the selected area.

Specify insertion point for calculation schedule:

Specify an insertion point to insert the calculation schedule at that point, or press ENTER to finish the command.

Highlight Calculation Area Group

The Highlight Calculation Area Group command is used to highlight all of the calculation areas in a calculation area group.

To highlight grouped calculation areas on the drawing, go to

```
Ribbon: DM Photometrics->Calculation Areas->
```

```
Pulldown Menu: DM Photometrics->Calculation Area Groups->Highlight Calculation Area Group
```

You will be prompted to identify a grouped calculation area to highlight.

Select calculation boundary:

All of the calculation areas that are grouped with the selected calculation area will be highlighted on the drawing.

To remove the highlights, use the standard CAD REGEN command.

Calculation Schedules

Each calculation area or calculation area group can have a calculation schedule associated with it. This schedule displays the illuminance levels and uniformity ratios for the area or group.

Add Calculation Schedule

To add a calculation schedule to a calculation area, go to

Ribbon: DM Photometrics->Calculation Areas-> 🖺 Add Calculation Schedule

Pulldown Menu: DM Photometrics->Calculation Schedules->Add Calculation Schedule

You will be prompted to identify the calculation area to which you want to add a photometric calculation schedule.

Select boundary to add schedule to:

You will then be prompted for the insertion location of the photometric calculation schedule.

Specify insertion point for calculation schedule:

The location you specify will be used as the top-left corner for the photometric calculation schedule.

If a calculation schedule for the area already exists on the drawing, it will be moved to the new location specified.

See the <u>Edit Calculation Schedule Layout</u> section for more information about editing the calculation schedule layout.

Related Options

Schedule title justification: Sets the justification for the schedule title.

<u>Schedule column label justification:</u> Sets the justification for column headings.

Schedule title continued label: Sets the label added to the schedule title for continued sections.

Delete Calculation Schedule

To delete a photometric calculation schedule from the drawing, go to

Ribbon: DM Photometrics->Calculation Areas-> 🏙 Delete Calculation Schedule

```
\begin{tabular}{ll} \textbf{Pulldown Menu:} DM \ \end{tabular} DM \ \end{tabular} Photometrics -> Calculation \ \end{tabular} Schedules -> Delete \ \end{tabular} Photometric \ \end{tabular} Calculation \ \end{tabular} Schedule \ \end{tabular}
```

You will be prompted to identify which photometric calculation schedule is to be deleted.

Select schedule to delete:

The photometric calculation schedule will be removed from the drawing.

Edit Calculation Schedule Note

To edit a calculation schedule note, go to

Ribbon: DM Photometrics->Calculation Areas-> 👪 Edit Calculation Schedule Note

 $Pulldown \ Menu: \ {\tt DM} \ {\tt Photometrics->Calculation} \ {\tt Schedules->Edit} \ {\tt Calculation} \ {\tt Schedule} \ {\tt Note}$

You will be prompted to specify the calculation area or schedule for which the schedule note is to be edited.

Select boundary or schedule to add note to:

The Edit Photometric Schedule Note dialog box will appear.

Edit Photometric Schedule Note Dialog Box

Edit Photometr	ic Schedule Note	×
Schedule Note:	OK Can	Edit

Schedule Note: This note is displayed below the photometric schedule on the drawing.

Press the **OK** button to close the dialog box. The note at the bottom of the calculation schedule will be updated.

Solids

This section describes how to use solids. Solids represent items on the drawing that will block light, such as buildings.

Common Solids Information

The values that can be specified for a solid are listed below.

Starting Elevation: The starting elevation of the solid.

If this is 0 and the object is a closed area, no values inside the object will be calculated or displayed.

If this is greater than 0, the light levels underneath the object will be calculated. This setting can be used to model overhangs.

Ending Elevation: The ending elevation of the solid.

If this elevation is lower than the elevation of a light fixture, some light will pass over the object.

Reflectance: The percentage of light reflected by the solid. It is only used if reflections are enabled in the <u>Calculate</u> dialog box.

Insert Solid: Shape

The Insert Solid: Shape command is used to insert solids that are closed but not rectangular. If the *Starting Elevation* is **0**, any illuminance levels inside the shape will not be printed. Most solid objects will be inserted using this command, as most buildings and other objects on your plans will require a non-rectangular shape.

To define a solid shape, go to

Ribbon: DM Photometrics->Solids-> 🛡 Shape

Pulldown Menu: DM Photometrics->Insert Solid: Shape

Insert Solid: Shape Dialog Box

Insert Solid: Shape	×
Starting Elevation (ft-in):	0
Ending Elevation (ft-in):	20
Reflectance:	0.5
ОК	ancel

See the Common Solids Information section for more information about the values in this dialog box.

Enter the relevant information into the dialog box and press the **OK** button. You will be prompted to draw the solid shape on the drawing.

Specify first point of solid shape:

You will then be prompted to specify the next point of the solid.

Specify next point:

You can specify additional points or press **ENTER** to complete the shape. The solid shape will be displayed on the drawing and included in the photometric calculations.

Insert Solid: Rectangle

The Insert Solid: Rectangle command is used to insert solid objects that are rectangular. These objects are closed. If the *Starting Elevation* is **0**, any illuminance levels inside the rectangle will not be printed.

To define a solid rectangle, go to

Ribbon: DM Photometrics->Solids->

Pulldown Menu: DM Photometrics->Insert Solid: Rectangle

Insert Solid: Rectangle Dialog Box

Insert Solid: Rectangle	×
Starting Elevation (ft-in): 0	
Ending Elevation (ft-in): 20	
Reflectance: 0.5	
OK Cancel	

See the Common Solids Information section for more information about the values in this dialog box.

Enter the relevant information into the dialog box and press the **OK** button. You will be prompted to specify the first corner of the solid rectangle on the drawing.

Specify first corner of solid rectangle:

You will then be prompted to specify the second corner of the solid rectangle.

Specify second corner of solid rectangle:

The solid rectangle will be displayed on the drawing and included in the photometric calculations.

Insert Solid: Line

The Insert Solid: Line command is used to insert solid objects that are shaped like a line. These objects are not closed.

To define a solid line, go to

Ribbon: DM Photometrics->Solids-> / Line

Pulldown Menu: DM Photometrics->Insert Solid: Line

Insert Solid: Line Dialog Box

Insert Solid: Line	×	
Starting Elevation (ft-in): 0		
Ending Elevation (ft-in): 20		
Reflectance: 0.5		
OK		

See the Common Solids Information section for more information about the values in this dialog box.

Enter the relevant information into the dialog box and press the **OK** button. You will be prompted to specify the starting point of the solid line.

Specify first point of line:

You will then be prompted to specify the ending point of the solid line.

Specify next point:

You can specify additional line points or press **ENTER** to end the line. The solid line will be displayed on the drawing and included in the photometric calculations.

Insert Vertex in Area or Solid

The Insert Vertex in Area or Solid command is used to insert a vertex in a calculation area boundary, solid, or mask on the drawing.

To insert a vertex, go to

Ribbon: DM Photometrics->Solids->

Pulldown Menu: DM Photometrics->Insert Vertex in Area or Solid

You will be prompted to identify the location on the area boundary, solid, or mask where you want a vertex to be added.

Select break point on photometric area, solid, or mask:

A new vertex will be inserted. The appearance of the object will not change, but you will have a new grip that you can use to drag the object into the correct shape.

Remove Vertex from Area or Solid

The Remove Vertex from Area or Solid command is used to remove a vertex from a calculation area boundary, solid, or mask on the drawing.

To remove a vertex, go to

Ribbon: DM Photometrics->Solids->

Pulldown Menu: DM Photometrics->Remove Vertex from Area or Solid

You will be prompted to identify the vertex to be removed.

Select point to remove on photometric area, solid, or mask:

The vertex will be removed.

Layer Management

This section describes the commands available to help you manage your layers. The commands will turn on and off the construction layers that are typically set to not plot. Turning the layers off will allow you to view the drawing as it will appear when plotted. Turning the layers on will allow you to continue to work on your design.

The following items will have their layers modified by these commands:

- Calculation Areas
- Masks
- Solids
- Light Fixture Overlays
- Alignment Points

All of the layers created and used are standard CAD layers and can be managed using standard CAD commands. These commands are included for your convenience, but are not necessary. Everything you can do with these commands can be done with standard CAD commands.

These command specifically change the *On* setting for the layers, toggling them between **On** and **Off**. The *Freeze* setting for the layers is not changed.

If you run these commands while in a paper space viewport, the *VP Freeze* setting will be changed also. You can use this feature to freeze these construction lines in the viewport you will use for plotting, then thaw the layers in model space.

Turn Construction Layers On

To turn your construction layers on, go to

Ribbon: DM Photometrics->Calculation Areas-> 🗟 On

Pulldown Menu: DM Photometrics->Turn Construction Layers On

The construction layers will be turned on and visible on the drawing.

Turn Construction Layers Off

To turn your construction layers off, go to

Ribbon: DM Photometrics->Calculation Areas->

Pulldown Menu: DM Photometrics->Turn Construction Layers Off

The construction layers will be turned off and no longer visible on the drawing.

Utilities

This section describes the utility commands that are available to assist in maintaining the integrity of your project database and drawings.

Coordinate Drawings and Database

The Coordinate Drawings and Database command is used to compare the project database with one or more drawings and confirm that the information matches.

To coordinate a set of selected drawings with the database, go to

Ribbon: DM Photometrics->Utilities-> ->Coordinate Drawings and Database

Pulldown Menu: DM Photometrics->Utilities->Coordinate Drawings and Database

Select Drawings Dialog Box

Select Drawings	\times
Press CTRL or SHIFT to Select Multiple Drawings E-SITE.DWG XR-SITE.DWG	
Select Currently Open Drawing	
OK Cancel	

Drawing List: Select the drawings you want to coordinate with the database. The current drawing is selected when the command is first run. Use the **SHIFT** and **CTRL** keys to select multiple drawings in the list. All of the selected drawings will be coordinated with the database.

Select Currently Open Drawing: Press this button to select the current drawing.

Press the **OK** button to coordinate the selected drawings with the database.

The following actions will be performed:

- Devices on the drawing will be added to the database.
- Devices in the database will be added to the drawing. If the command causes a device to be inserted directly on top of another device, the new device will be inserted at the edge of the drawing. Any devices inserted from the database will have a line drawn to them. Review the newly inserted devices and move, delete, or otherwise modify them as appropriate. Once they are on the drawing, you can treat them like standard devices.
- Devices in both the drawing and the database will be reviewed to ensure their locations and settings

match.

• Any changes to scheduled devices, such as new graphics for a device type, will be made on the drawing.

When this command is finished, the drawing and the database will match. All devices on the drawing will accurately reflect the information stored in the database.

Devices reinserted on the drawing from the database will be highlighted with lines from the origin to their insertion point. Review these devices to determine whether they should be kept. Use the standard CAD **ERASE** command to remove excess devices from the drawing.

The coordination lines can be removed either by using the standard CAD **ERASE** command and selecting the coordination lines, or by using the **Frase Coordination Lines** command.

When to Use the Coordinate Drawings and Database Command

When you make changes to a drawing, these changes are immediately recorded in the database. Changes are not recorded on the drawing until it is saved. If your CAD program crashes before the drawing is saved, the database will have newer and better information than the drawing. Use the Coordinate Drawings and Database command to match the drawing and database, and you can often recover information that was lost.

Changes to customization settings are not immediately reflected on the drawings. If you change your customization settings in the middle of a project, use the Coordinate Drawings and Database command to update the drawings.

There are other times when this command can fix errors in your project. A backup of the current drawing and database is made before the command is run in case something unexpected happens during the command.

Erase Coordination Lines

To erase coordination lines generated when using the Coordinate Drawings and Database command, go to

Ribbon: DM Photometrics->Utilities-> ->Erase Coordination Lines

Pulldown Menu: DM Photometrics->Utilities->Erase Coordination Lines

The coordination lines will be erased from the current drawing.

Coordination lines may also be erased using the standard CAD ERASE command.

Check for Drawings to Update

The Check for Drawings to Update command is used to check for and update any drawings that need to have changes made to them. Certain changes made on one drawing in a project will require changes to be made to other drawings in the project. Typically, these changes happen automatically.

This command will check for any drawings that need to have changes made and give you a chance to update them all.

To check if any drawings in the current project need to be updated, go to

Ribbon: DM Photometrics->Utilities-> ->Check for Drawings to Update

Pulldown Menu: DM Photometrics->Utilities->Check for Drawings to Update

The drawings that need to be updated will be identified. You will be given a chance to update them automatically if there are any.

Project Explorer

The Project Explorer command lists all of the light fixtures included in the current project, organized by light fixture type and by drawing.

To view a list of all light fixtures included in the current project, or to find a specific light fixture, go to

```
Ribbon: DM Photometrics->Utilities-> 🗟 Project Explorer
```

Pulldown Menu: DM Photometrics->Utilities->Project Explorer

Project Explorer Dialog Box

💮 Project Ex	plorer			×
Sort Order:	Sort by callout, then drawing	\checkmark	Find <	Query
ID				
📮 Light Fixt	tures			
- General				_
- A1	1 (1ST FLOOP LICUTING) DWG			
= ∧2	T (TST FLOOK LIGHTING).DWG	,		
	1 (1ST ELOOR LIGHTING) DWG			
= A3	1 (1911 2001 2101 111 10),0110	,		
- N	one on drawing			_
= S	-			
	1 (OUTDOOR PHOTOMETRICS).DWG		
	C	Exit		

Sort Order: How the list is sorted.

- Sort by callout, then drawing: All of the light fixture callouts are listed. Under each callout, all of the drawings containing light fixtures using that callout are listed. Callouts that do not have light fixtures inserted on a drawing are listed, but no drawings are listed under them.
- Sort by drawing, then callout: All of the drawings containing light fixtures are listed. Under each drawing, all of the callouts on that drawing are listed. Callouts that do not have light fixtures inserted on a drawing are not listed.

ID: A number is displayed for each light fixture. This number is the unique internal identifier used in the project database for the light fixture. The specific value does not have any meaning other than the fact that it is different for each light fixture. In general, light fixtures inserted later in the project will have values higher than light fixtures that are inserted earlier.

Finding a Light Fixture Using the Project Explorer Dialog Box

Find: Press this button to display the selected light fixture on the drawing. If the light fixture is located on another drawing, the other drawing will be opened and the light fixture highlighted. A line will be displayed between the cursor and the light fixture on the drawing to help you locate it.

If a drawing or callout is highlighted in the dialog box when the **Find** button is pressed, nothing will happen.

You will be prompted at the command line regarding what to do next.

[Query device/Next device/Previous device/<Return to dialog>]:

Query device: The light fixture is queried as if the Query command had been used on it. See the **Query** section for more information.

Next device: Locate the next light fixture of the current type.

Previous device: Locate the previous light fixture of the current type.

Return to dialog: Return to the Project Explorer dialog box.

Querying a Light Fixture Using the Project Explorer Dialog Box

Query: Press this button to query a light fixture callout or individual light fixture.

Individual light fixtures are queried as if the Query command had been used. See the <u>Query</u> section for more information.

Light fixture callouts are queried as if the Light Fixture Project Schedule command had been used. See the Light Fixture Project Schedule section for more information.

Delete Extra Devices from Database

The Delete Extra Devices From Database command is used to delete devices from the database that are on drawings that no longer exist in the project.

Normally, you would use the standard CAD **ERASE** command to erase devices. They will be erased from the drawing and database.

If a drawing is moved or deleted before all of the devices are erased, the records still exist in the database. You cannot erase the device from the drawing because it no longer exists. Using this command, these devices can be deleted from the database.

To delete any devices that exist in the database that either do not have an associated drawing or are on a drawing that no longer exists, go to

Ribbon: DM Photometrics->Utilities-> ->Delete Extra Devices From Database

Pulldown Menu: DM Photometrics->Utilities->Delete Extra Devices From Database

The drawing that each device is on will be compared with the list of drawings in the project. If a drawing in the database does not exist, the **Delete devices**? dialog box will appear.

Delete devices?	Х		
Devices were found in the database on drawing E-2.1,2 (1ST AND This drawing does not appear to exist anymore.			
Would you like to permanently delete these devices from the database?			
Yes Yes to All No No to All			

Yes: Press this button to delete the devices from the listed drawing.

Yes to All: Press this button to delete the devices from all of the drawings that are not found.

No: Press this button to not delete the devices from the listed drawing. Use this button if the drawing should exist and you plan to recreate it.

No to All: Press this button to not delete the devices from all of the drawings that are not found.

Rename Database

The Rename Database command is used to change the name of the database file associated with the current drawing. It will change the suffix of the file when viewed in Windows Explorer. Nothing else in the project will be changed.

To rename the database, go to

Ribbon: DM Photometrics->Utilities-> ->Rename Database

Pulldown Menu: DM Photometrics->Utilities->Rename Database

Rename Photometrics Database Dialog Box

Rename Photometrics Database	\times
Project Name:	
Leave field empty to use default.	
OK Cancel	

Project Name: The new name of the database.

Enter the new *Project Name* and press the **OK** button. The suffix of the database file associated with the current drawing will be changed. No other changes will be made in the project.

Delete DM Backups Over 30 Days Old

The Delete DM Backups Over 30 Days Old command is used to delete files from the DMBackup folder. Backups are made on a regular basis for projects and when certain utility commands are run. When a project is opened, any backups over 30 days old are automatically deleted. However, if a project is not opened, backups over 30 days old will not be deleted. This command will erase all of the backups that it finds in any subfolders of the selected folder. If you have a folder that contains all your projects, you can select the main folder and have all backups from all projects deleted.

Backups less than 30 days old will not be deleted. You must use Windows Explorer to delete these folders.

To delete backup files that are over 30 days old, go to

Ribbon: DM Photometrics->Utilities-> ->Delete DM Backups Over 30 Days Old

Pulldown Menu: DM Photometrics->Utilities->Delete DM Backups Over 30 Days Old

Select Folder Dialog Box

A Select Folder				
Look in:	13 Final Output V	G 🌶 📂 🛄 -		
Quick access Desktop Libraries	Name	Date modified 2/27/2019 2:15 PM	Type File folder	
Network	< Folder name: C:\Users\Kane\Desktop\Tutorial\Photom	etric\13 Final Out 🗸	OK Cancel	

Select the folder to delete backups from. All backups over 30 days old will be deleted.

Find Lost Toolbars

The Find Lost Toolbars command is used to move all of the toolbars to a visible location on the screen. If your CAD program moves the toolbars to a location that cannot be seen, the toolbars are made unusable. Moving all of the toolbars is the simplest solution to this problem.

To find lost toolbars, go to

Ribbon: DM Photometrics->Utilities-> ->Find Lost Toolbars

Pulldown Menu: DM Photometrics->Utilities->Find Lost Toolbars

Once this command is entered, all of the toolbars will be displayed. Move any toolbars you want visible to the correct location. Close any toolbars that you do not use.

Reload Ribbons

The Reload Ribbons command is used to reload the Design Master Photometrics ribbon tabs. Use this command if the tabs have disappeared from your ribbon.

To reload the ribbon tabs, go to

Pulldown Menu: DM Photometrics->Utilities->Reload Ribbons

Once this command is run, the ribbon tabs should be reloaded and visible on your ribbon.

Delete Drawing

The Delete Drawing command is used to delete a drawing that contains Design Master Photometrics devices and remove all of the associated information from the database.

If you delete a drawing using Windows Explorer, the database will not be updated. Any devices that existed on the drawing will still exist in the database. It is possible to delete these devices using the <u>Delete Extra Devices</u> <u>from Database</u> command, but this method can easily create larger problems.

Deleting the drawing using this command will make sure that the necessary changes to the database are made.

You do not need to use this command if the drawing does not contain Design Master Photometrics devices, though there is no harm if you do.

To delete a drawing, go to

Ribbon: DM Photometrics->Utilities-> ->Delete Drawing

Pulldown Menu: DM Photometrics->Utilities->Delete Drawing

Select Drawing to Delete Dialog Box

A Select Drawing To Delete ×				
Look in:	13 Final Outp	ut ~	G 🤌 📂 🛄 -	
Quick access Desktop Libraries	Name DMBackup e-site.dwg	^	Date modified 2/27/2019 2:15 PM 8/27/2018 2:36 PM 8/7/2018 6:26 AM	Type File folder AutoCAD AutoCAD
Network	< File name: Files of type:	DWG Files (*.dwg)	~	> Open Cancel

Select the drawing to delete and press the **Open** button.

The drawing will be deleted. All of the devices on the drawing will be deleted from the database.

A backup of the drawing and the database will be made before the command is run in case a drawing is deleted accidentally.

Rename Drawing

The Rename Drawing command is used to rename the current drawing. The database will be updated so that any devices associated with the drawing will have their drawing location information changed.

If you rename a drawing using Windows Explorer or the standard CAD **SAVEAS** command, the database does not know if you intend to copy or rename the drawing. It is very easy to create significant errors in your drawings and database if you choose the wrong option.

Renaming the drawing using this command will prevent these errors from happening.

To rename the current drawing, go to

Ribbon: DM Photometrics->Utilities-> ->Rename Drawing

Pulldown Menu: DM Photometrics->Utilities->Rename Drawing

Rename Drawing Dialog Box
Rename Drawing	×
New Drawing Name:	
ОК	Cancel

New Drawing Name: The name of the new drawing.

Enter the *New Drawing Name* into the dialog box and press the **OK** button. The name of the current drawing will be changed.

Copy Drawing

The Copy Drawing command is used to copy the current drawing. Copies of all of the devices on the drawing will be created in the database.

If you copy a drawing using Windows Explorer or the standard CAD **SAVEAS** command, the database does not know if you intend to copy or rename the drawing. It is very easy to create significant errors in your drawings and database if you choose the wrong option.

Copying the drawing using this command will prevent these errors from happening.

To copy the current drawing, go to

Ribbon: DM Photometrics->Utilities-> ->Copy Drawing

Pulldown Menu: DM Photometrics->Utilities->Copy Drawing

Copy Drawing Dialog Box

Copy Drawing			\times
New Drawing Name:			
C	ОК	Cancel	

New Drawing Name: The name of the new drawing.

Enter the *New Drawing Name* into the dialog box and press the **OK** button. A copy of the current drawing will be made using the new name.

Copy Drawing and Remove Links to Database

The Copy Drawing and Remove Links to Database command is used to make a copy of a drawing and remove all of the links between the Design Master Photometrics entities on the drawing and the database. The appearance of the drawing will not change. All entities on the drawing will remain. However, they will be

converted to standard CAD entities and their connection to the database will be removed.

To copy a drawing and remove all of the links to the database, go to

Ribbon: DM Photometrics->Utilities-> ->Copy Drawing and Remove Links to Database Pulldown Menu: DM Photometrics->Utilities->Copy Drawing and Remove Links to Database

Save Drawing as Dialog Box

A Save drawing as					
Save in:	13 Final Outpu	t ~	G 🤌 📂 🛄 -		
Quick access Desktop Libraries This PC	Name DMBackup e-site.dwg	^	Date modified 9/13/2018 8:12 AM 8/27/2018 2:36 PM 8/7/2018 6:26 AM	Type File folder AutoCAD AutoCAD	
Network	<			>	
	File name:		~	Save	
	Save as type:	DWG Files (*.dwg)	~	Cancel	

Select a location for the copy, enter a file name, and press the **OK** button. A copy of the current drawing will be made using the new name. All of the Design Master Photometrics links to the project database will be removed.

The project database will not be modified during this command.

Copy Drawing and Remove All DM Entities

The Copy Drawing and Remove All DM Entities command is used to make a copy of a drawing with all of the Design Master Photometrics entities on it erased.

This command is useful when you want to create a new drawing with the same settings as an existing drawing in the project. Using other methods, the copied drawing will copy the Design Master Photometrics entities. Cleaning up these extra devices can cause problems if not done correctly. This command will remove all of the devices for you, leaving you with a new drawing that you can immediately start using.

To copy a drawing and remove all of the Design Master Photometrics entities, go to

```
Ribbon: DM Photometrics->Utilities-> ->Copy Drawing and Remove All DM Entities
Pulldown Menu: DM Photometrics->Utilities->Copy Drawing and Remove All DM Entities
```

Save Drawing as Dialog Box

A Save drawing as					
Save in:	13 Final Output	~	3 🌶 🖻 🛄		
Quick access Desktop Libraries This PC	Name DMBackup e-site.dwg	^	Date modified 9/13/2018 8:12 AM 8/27/2018 2:36 PM 8/7/2018 6:26 AM	Type File folder AutoCAD AutoCAD	
Network	<			>	
	File name:		L	Save	
	Save as type: DW	/G Files (*.dwg)	~	Cancel	

Select a location for the copy, enter a file name, and press the **OK** button. A copy of the current drawing will be made using the new name. All of the Design Master Photometrics entities on the new drawing will be erased.

The project database will not be modified during this command.

Disconnect Photometrics Database from Drawing

The Disconnect Photometrics Database from Drawing command is used to remove all of the links between the Design Master Photometrics entities on the drawing and the database. The appearance of the drawing will not change. All entities on the drawing will remain. However, they will be converted to standard CAD entities and their connection to the database will be removed.

To disconnect the database from the drawing, go to

Ribbon: DM Photometrics->Utilities-> ->Disconnect Photometrics Database from Drawing

Pulldown Menu: DM Photometrics->Utilities->Disconnect Photometrics Database from Drawing

The project database will not be modified during this command.

Copy or Back Up Project

The Copy or Back Up Project command is used to make a complete copy or backup of the current project. When you copy or back up a project, it is important to copy all of the drawings and the Design Master database files. This command will copy all of the necessary files. Use this command if you want to make a backup of the current state of the project or if you want to make a copy to try a different design approach.

To copy or back up a project, go to

Ribbon: DM Photometrics->Utilities-> ->Copy or Back Up Project

Pulldown Menu: DM Photometrics->Utilities->Copy or Back Up Project

Select Folder to Copy or Back Up Project To Dialog Box

Select Folder to Copy or Back Up Project To			
Look in:	13 Final Output 🗸	G 🤌 📂 🖽 🗸	
Quick access Desktop Libraries This PC	Name DMBackup	Date modified 1/3/2022 1:31 PM	Type File fo
Network	¢		>
	Folder name:	~	OK
			Cancel

Select the folder to copy or back up the project to and press the **OK** button. All files associated with the project will be copied and saved to the folder.

Check In Floating License

The Check In Floating License command is used with floating licenses to immediately check in the license so that another person can use the software. Floating licenses are checked out in 10-minute intervals. If no commands are run for 10 minutes, the license is automatically released and another person can use the software.

If another person attempts to use the software before the license is released, a warning message will be displayed for the new user, stating that no license is available. The new user can choose to ignore the warning and immediately start using the software. However, a license overuse exception will be recorded on the license server. If there are too many overuse exceptions, you will need to purchase another license.

Using this command, the original user can check in the floating license when they are done with it. The new user can then use the software immediately without causing a license overuse exception to be recorded.

To check in the floating license, go to

Ribbon: DM Photometrics->Utilities-> ->Check In Floating License

 $Pulldown \; Menu: \; \text{DM Photometrics->Utilities->Check In Floating License}$

The floating license will be checked in and will be available for another person to use.

Help

This section describes the commands available for obtaining support, maintaining current licenses, and installing software updates.

Common Help Information

You are prompted to provide the following information when sending us a support request. We use this information to respond to your support request.

Name: Your name.

Email Address: Your email address. If possible, we will respond to your support request by email.

Phone Number: Your phone number. If we need additional information beyond what we can gather by email, we will call you.

Additional Information: A description of the problem you are having. The more information you can provide about your problem, the more likely we will be able to solve it for you. For example, specific devices that exhibit the problem you are having.

Your Design Master Photometrics version, CAD program version, and Windows version will be sent automatically with the support request. You do not need to include that information here.

User Manual

To open the Design Master Photometrics User Manual (which you are currently viewing), go to

Ribbon: DM Photometrics->Utilities-> ->User Manual

Pulldown Menu: DM Photometrics->Help->User Manual

The user manual will be opened in your web browser.

Tutorial

To open the Design Master Photometrics Tutorial, go to

```
Ribbon: DM Photometrics->Utilities-> ->Tutorial
```

 $Pulldown \ Menu: \ {\tt DM} \ {\tt Photometrics->Help->Tutorial}$

The tutorial will be opened in your web browser. The tutorial provides instructions for and examples of common tasks that can be performed using our software.

Remote Support

The Remote Support command allows us to connect to your computer over the internet. We will be able to see your screen and perform actions on your computer.

To allow us to connect to your computer, go to

Ribbon: DM Photometrics->Utilities-> ->Remote Support

Pulldown Menu: DM Photometrics->Help->Remote Support

The remote support program will run and allow us to connect to your computer.

An ID number will be displayed, which you will need to read aloud to us.

We use TeamViewer for our remote support. You can visit their website at <u>http://www.teamviewer.com</u>. Information about security is available at <u>http://www.teamviewer.com/en/products/security.aspx</u>.

Send Project to Design Master Support

The Send Project to Design Master Support command is used to send us the current drawing and the associated Design Master Photometrics database. Providing us with your project helps us recreate the problem you are having and find a solution to it. It is our preferred way for you to report a problem or ask a question. Many problems are specific to a project and having that immediately helps us assist you.

To send a copy of your project's current drawing and database to us, go to

Ribbon: DM Photometrics->Utilities-> ->Send Project to Design Master Support

Pulldown Menu: DM Photometrics->Help->Send Project to Design Master Support

Send Project to Design Master Support Dialog Box

🕺 Send Project to Design Master Support 🛛 🗙 🗙				
To: Design Master Support (support@designmaster.biz)				
From: Name:]			
Email Address (required):]			
Phone Number: Additional Information:]			
~				
Attachments (3 files)				
Save to desktop (check if sending fails or crashes)				

See the <u>Common Help Information</u> section for more information about the *Name*, *Email Address*, *Phone Number* and *Additional Information* fields.

Attachments: Press this button to change the files that will be sent with the support request.

The Design Master Attachments dialog box will appear.

Design Master Attachments	×
C: \Users\Kane\Desktop\Tutorial\400watt.ies C: \Users\Kane\Desktop\Tutorial\dm_elec.dm C: \Users\Kane\Desktop\Tutorial\E-2.1,2 (1ST AND 2ND FLOOR POWER).DW	
	Add
	Remove
< > >	
OK Cancel	

By default, the current drawing and associated Design Master Photometrics database will be included in the list of files to send.

Add: Press this button to select additional files to send.

Remove: Press this button to remove the selected file from the list to send.

Save to desktop: Whether the support request is sent directly to us or saved to your desktop for you to email.

By default, this box is not checked. Support requests are automatically sent with no further input from you.

Some companies block outgoing messages from programs other than your email client. When this happens, you will be given a chance to save a ZIP file to your desktop that you can send to us manually. Detecting this configuration can take a long time.

When this box is checked, the attempt to send the message directly is skipped and you are immediately prompted to save a ZIP file to your desktop. Skipping the attempt to send saves time.

Go to Design Master Support Website

To open the Design Master Support Website, go to

Ribbon: DM Photometrics->Utilities-> ->Go to Design Master Support Website

 $Pulldown \ Menu: \ {\tt DM \ Photometrics -> Help -> Go \ to \ Design \ Master \ Support \ Website$

The support page will be opened in your web browser. This page has useful links and information to help you when you have trouble with our software.

Send Email to Design Master Support

To send an email to us, go to

Ribbon: DM Photometrics->Utilities-> ->Send Email to Design Master Support

Pulldown Menu: DM Photometrics->Help->Send Email to Design Master Support

A draft email addressed to <u>support@designmaster.biz</u> will be opened in your preferred email client. Enter your message and send the email.

Send Master and Standards Databases to Design Master Support

The Send Master and Standards Databases to Design Master Support command is used to send us your master and standards customization database files. We will occasionally ask for these files when helping you solve problems related to your customization.

To send a copy of your master and standards databases to us, go to

Ribbon: DM Photometrics->Utilities-> ->Send Master and Standards Databases to Design Master Support

 $\label{eq:pulldown Menu: DM Photometrics->Help->Send Master and Standards Databases to Design Master Support$

Send Master and Standards Databases to Design Master Support Dialog Box

😥 Send Master and Standards Databases to Design Master Support	×			
To: Design Master Support (support@designmaster.biz)				
From:	_			
Name:				
Email Address (required):				
Re-enter Email Address:				
Phone Number:				
	~			
Attachments (2 files)				
Save to desktop (check if sending fails or crashes)				
OK Cancel				

See the <u>Common Help Information</u> section for more information about the *Name, Email Address, Phone Number* and *Additional Information* fields.

Your master database and all of your standards databases will be sent.

Save to desk top: Whether the support request is sent directly to us or saved to your desktop for you to email.

By default, this box is not checked. Support requests are automatically sent with no further input from you.

Some companies block outgoing messages from programs other than your email client. When this happens, you will be given a chance to save a ZIP file to your desktop that you can send to us manually. Detecting this configuration can take a long time.

When this box is checked, the attempt to send the message directly is skipped and you are immediately prompted to save a ZIP file to your desktop. Skipping the attempt to send saves time.

Set Email Address

The Set Email Address command is used to set your default email address and other contact information used when sending support cases to us.

To set your default contact information, go to

Ribbon: DM Photometrics->Utilities-> ->Set Email Address

Pulldown Menu: DM Photometrics->Help->Set Email Address

Update Contact Information Dialog Box

Update Contact Information	×
Name:	
Email Address:	
Phone Number:	
OK Cancel	

See the <u>Common Help Information</u> section for more information about the *Name*, *Email Address* and *Phone Number* fields.

Installation Settings

The Installation Settings command is used to display the current installation settings. It can be used to verify the installation settings are correct, and modify them if necessary.

To view and modify the installation settings, go to

Ribbon: DM Photometrics->Utilities-> ->Installation Settings

Pulldown Menu: DM Photometrics->Help->Installation Settings

There are three different installation types.

Local

A local install should be used when there is only one person using Design Master Photometrics in your office. All program and customization files are stored directly on the computer. This install type should be used even if the one person is installing the software on a laptop.

See the Local Install section for more information about this install type.

Network

A network install should be used when there are multiple people using Design Master Photometrics in your office. The program files are stored on the computer and are automatically updated from the network. The customization files are stored on the network and are shared between users.

See the **Network Install** section for more information about this install type.

Network Laptop

A network laptop install should be used if the computer is a laptop and multiple people are using Design Master Photometrics in your office. The program files are stored on the laptop and are automatically updated from the network. The customization files are stored on both the network and the laptop. The network customization files will be used when the laptop is connected to the network. The local customization files will be used when the laptop is away from the office and disconnected from the network.

See the Network Laptop Install section for more information about this install type.

The local customization will automatically be updated with any changes to the network customization once a day. Use the Update Laptop Customization command to manually update the customization stored on the computer. See the Update Laptop Customization section for more information.

Local Install

This section describes configuring Design Master Photometrics for a local install. A local install should be used when there is only one person using Design Master Photometrics in your office. All program and customization files are stored directly on the computer. This install type should be used even if the person is installing the software on a laptop.

If you have floating licenses, this install type should not be used.

Configuring an Installation on a Local Computer

Design Master Photometrics Install Configuration			×
Install Type			
Local	◯ Network		O Network Laptop
Folder Locations			
Install Folder:			Open
Customization Folder:		Solast Customization Folder	Prost Oren
Customization Folder.		Select Customization Folder	Nesei Open
Alert me when updates are available			
	OK Cancel	I	

Install Type: The type of installation. The dialog box will change depending upon the type selected.

- Local: The installation type described in this section.
- Network: See the Network Install section for more information about this install type.
- Network Laptop: See the Network Laptop Install section for more information about this install type.

Install Folder: The folder where Design Master Photometrics is installed. This folder is forced to be located in your Application Data folder.

Customization Folder: The folder where the customization files are stored.

Select Customization Folder: Press this button to select a new location for the customization folder.

Reset: Press this button to reset the customization to the default location, located in your Application Data folder.

Open: There are two **Open** buttons in the dialog box. Press this button to open Windows Explorer to one of the folders listed in the dialog box. The first button opens the install folder. The second button opens the customization folder.

Alert me when updates are available: Whether updates are checked for automatically. If this is checked, an update check will occur the first time you run a command each day. An alert will appear if an update is available.

Network Install

This section describes configuring Design Master Photometrics for a network install. A network install should be used when there are multiple people using Design Master Photometrics in your office. The program files are stored on the computer and are automatically updated from the network. The customization files are stored on the network and are shared between users.

Configuring an Installation on a Network

Design Master Photometrics Install Configuration X					
Install Type					
⊖ Local	 Network 		O Network Laptop		
Folder Locations					
Local Install Folder:			Open		
Network Install Folder:		Select Network Install Folder	Open		
Customization Folder:		Select Customization Folder	Open		
✓ Alert me when updates are available					
	OK	Cancel			

Install Type: The type of installation. The dialog box will change depending upon the type selected.

- Local: See the Local Install section for more information about this install type.
- Network: The installation type described in this section.
- Network Laptop: See the Network Laptop Install section for more information about this install type.

Local Install Folder: The folder on the local computer where Design Master Photometrics is installed. This folder is forced to be located in your Application Data folder.

Network Install Folder: The folder on the network where Design Master Photometrics is installed. This folder should be on the network. All computers in your office should use the same network install folder.

Updates should be installed to this folder. Updates to this folder will automatically be copied to the local install folder.

Customization Folder: The folder where the customization files are stored. This folder should be on the network. All computers in your office should use the same customization folder.

Select Customization Folder: Press this button to select a new location for the customization folder.

Open: There are three **Open** buttons in the dialog box. Press this button to open Windows Explorer to one of the folders listed in the dialog box. The first button opens the local install folder. The second button opens the local install folder. The third button opens the customization folder.

Alert me when updates are available: Whether updates are checked for automatically. If this is checked, an update check will occur the first time you run a command each day. An alert will appear if an update is available.

Laptop Install

This section describes configuring Design Master Photometrics for a network laptop install. A network laptop install should be used if the computer is a laptop and multiple people are using Design Master Photometrics in your office. The program files are stored on the laptop and are automatically updated from the network. The customization files are stored on both the network and the laptop. The network customization files will be used when the laptop is connected to the network. The local customization files will be used when the laptop is away from the office and disconnected from the network.

Configuring an Installation on a Laptop

Design Master Photometrics Install Configuration		×
Install Type		
◯ Local	○ Network	Network Laptop
Folder Locations		
Local Install Folder:		Open
Network Install Folder:	Select Network Install Folder	Open
Local Customization Folder	Select Local Customization Folder Reset	Open
	Select Local Customization Folder	Open
Network Customization Folder:	Select Network Customization Folder	Open
Alert me when updates are available		
	OK Cancel	

Install Type: The type of installation. The dialog box will change depending upon the type selected.

• Local: See the Local Install section for more information about this install type.

- Network: See the Network Install section for more information about this install type.
- Network Laptop: The installation type described in this section.

Local Install Folder: The folder on the local computer where Design Master Photometrics is installed. This folder is forced to be located in your Application Data folder.

Network Install Folder: The folder on the network where Design Master Photometrics is installed. This folder should be on the network. All computers in your office should use the same network install folder.

Updates should be installed to this folder. Updates to this folder will automatically be copied to the local install folder.

Local Customization Folder: The folder where the local customization files are stored. This customization folder is used if a network connection is not available.

Select Local Customization Folder: Press this button to select a new location for the customization folder.

Reset: Press this button to reset the customization to the default location, located in your Application Data folder.

Network Customization Folder: The folder where the customization files are stored. This folder should be on the network. All computers in your office should use the same customization folder.

This folder is used when the computer is connected to the network. The files in this folder are copied to the local customization folder once each day.

Select Network Customization Folder: Press this button to select a new location for the customization folder.

Open: There are four **Open** buttons in the dialog box. Press this button to open Windows Explorer to one of the folders listed in the dialog box. The first button opens the local install folder. The second button opens the local install folder. The third button opens the local customization folder. The fourth button opens the network customization folder.

Alert me when updates are available: Whether updates are checked for automatically. If this is checked, an update check will occur the first time you run a command each day. An alert will appear if an update is available.

Update Local Install from Network

The Update Local Install from Network command is used to update the program files on your computer from the program files on the network if you have a <u>network install</u> or <u>network laptop install</u>.

This process should take place automatically. Only use this command if there is a problem.

To update the local install from the network, go to

Ribbon: DM Photometrics->Utilities-> ->Update Local Install from Network

Pulldown Menu: DM Photometrics->Help->Update Local Install from Network

The program files on your computer will be updated.

Check for Updates

The Check for Updates command compares the version of Design Master Photometrics you have installed with the latest version that is available on our website. You will be given instructions for installing a newer version if one is available.

To check for updates, go to

Ribbon: DM Photometrics->Utilities-> ->Check for Updates

Pulldown Menu: DM Photometrics->Help->Check for Updates

The dialog box that appears depends upon whether an update is available from our website.

Update Not Available

If an update is not available on our website, the following dialog box will appear.

Design Master Photometrics X
You are using the most current version of Design Master Photometrics. Current Version: ABC (DEF)
ОК
Alert me when updates are available

Current Version: The current version of the software. ABC will be replaced with the release number. DEF will be replaced with the build number.

Alert me when updates are available: Whether updates are checked for automatically. If this is checked, an update check will occur the first time you run a command each day. An alert will appear if an update is available.

Update Available

If the versions are different, you will be prompted to install the latest version.

Design Master Photometrics	×
A newer version of Design Master Photometrics is available.	
New Version: JKL (MNO) P/Q/R Current Version: ABC (DEF), released G/H/I	
Go to update web page.	
Remind me again in a week. Remind me tomorrow. Don't remind me about this update aga	in.
Alert me when updates are available	

New Version: The new version of the software available from our website. JKL will be replaced with the new release number. MNO will be replaced with the new build number. P/Q/R is the date the new version was released.

Current Version: The current version of the software. **ABC** will be replaced with the currently installed release number. **DEF** will be replaced with the currently installed build number. **G/H/I** is the date the currently installed version was released.

Go to update web page: Press this button to go to a page on our website about the new release. The page will include a list of new features, install instructions, and a download link.

Remind me again in a week: Press this button to close the dialog box. You will be reminded about the new version again in one week.

Remind me tomorrow: Press this button to close the dialog box. You will be reminded about the new version again tomorrow.

Don't remind me about this update again: Press this button to close the dialog box. You will not be reminded about the new version again.

Alert me when updates are available: Whether updates are checked for automatically. If this is checked, an update check will occur the first time you run a command each day. An alert will appear if an update is available.

Install Patch

The Install Patch command is used to install patches we send to you. These patches will be ZIP files sent in response to crash reports or support requests. We send patches to specific users to solve problems they are currently having. They are not posted to our website.

We regularly release updated versions of Design Master Photometrics that include all of the patches we sent to customers. These updates are available from our website. You do not need to use this command to install these updates.

Once you have installed a patch, you will not need to install it again. All future patches or updates you receive will include the patch.

To install a software patch, go to

Ribbon: DM Photometrics->Utilities-> ->Install Patch

Pulldown Menu: DM Photometrics->Help->Install Patch

Select Patch File Dialog Box

A Select Patch	File			×
Look in:	E Desktop	~	G 🌶 🖻 🛄 -	
Quick access	Name	^	Date modified	Туре
Desktop				
Libraries				
This PC				
	<			>
Network	File name:			Open
	Files of type:	ZIP Files (*.zip)	~	Cancel

Select the patch ZIP file and press the **Open** button. The patch will be installed on your computer. If you have a <u>network install</u>, it will also be installed on the network. Installing it to the network will update all of the other computers in your office.

The patch file will be erased after it is installed. It is erased to discourage you from installing it again in the future.

Restart your CAD program after installing the patch. The error you were seeing should now be resolved.

Install License

The Install License command is used to activate the license for Design Master Photometrics.

To activate a license, go to

Ribbon: DM Photometrics->Utilities-> ->Install License

Pulldown Menu: DM Photometrics->Help->Install License

Install Design Master Photometrics License Dialog Box

😥 Install Design Master Photometrics License	×
License expires on Enter your license ID in the box below and press the "Activate" button. Name:	
Email Address:	
License ID:	
Activation Password (Leave blank if you do not have one):	
Activate Cancel	

Enter your Name, Email Address, License ID, and Activation Password in the fields provided. If you did not receive a password, leave the Activation Password field blank.

Press the Activate button to activate your license.

Buy Now

If you are currently using the Design Master Photometrics trial and want to purchase the software, go to

```
Ribbon: DM Photometrics->Utilities-> ① ->Buy Now
```

Pulldown Menu: DM Photometrics->Help->Buy Now

The **Design Master Photometrics purchase page** on our website will open in your preferred browser.

See the **<u>Purchasing</u>** section for more information about the purchase options available.

About

To view general information about the Design Master Photometrics software, go to

```
Ribbon: DM Photometrics->Utilities-> ->About
```

Pulldown Menu: DM Photometrics->Help->About

A dialog box will appear that includes the version of software you are running and your current license status.

Customization

Enter topic text here. This section describes the commands available to customize the software. A wide variety of customization options are included to allow you to match the drawings that are created to your existing company standards.

General Customization Commands

Most of the customization sections include four commands:

- Edit Project List
- ${\ensuremath{\,^\circ}}$ Edit Master List $or\, {\ensuremath{\mathsf{Edit}}}$ Standards List
- ${\ensuremath{^\circ}}$ Copy Project List to Master $or\, {\ensuremath{\mathsf{Copy}}}$ Project List to Standards
- $\ensuremath{^\circ}$ Copy Master List to Project $or\, \ensuremath{\mathsf{Copy}}$ Standards List to Project

The command name and how it functions varies slightly depending upon whether the default settings are stored in the master database or a standards database.

This section describes these general commands and how they work for the customization commands.

Edit Project List

The Edit Project List command is the first command listed in each customization section. It is used to modify the customization settings in the current project database. It allows you to make changes to a specific project without affecting other projects.

Edit Master List

The Edit Master List command is one of the commands that may be listed second in each customization section. It is used to modify the customization settings in the master database. These settings will be used when you start a new project. Changes here do not affect any projects already created.

Edit Standards List

The Edit Standards List command is one of the commands that may be listed second in each customization section. It is used to modify the customization settings in a standards database. These settings can be used when you start a new project. Changes here do not affect any projects already created.

If only one standards database exists, the command will immediately start editing that database using the appropriate dialog box.

If more than one standards database exists, you will be prompted to select the standards database to edit. After you select the standards database to edit, the appropriate dialog box will appear with the settings from that standards database displayed.

Copy Project List to Master

The Copy Project List to Master command will copy the settings from the project database to the master database. Often, it is simplest to start your first project and customize it as you go. When you are finished, you can use this command to copy the settings for use with future projects.

The Copy Project to Master dialog box will appear.

Copy Project to Master	×
Do you want to copy the light fixture blocks from this project to the master database? Type MASTER in the box below and press OK to continue.	
OK Cancel	

To copy the settings, type **MASTER** and press the **OK** button. This step helps prevent you from accidentally overwriting the settings in your master database.

Copy Project List to Standards

The Copy Project List to Standards command will copy the settings from the project database to a standards database. Often, it is simplest to start your first project and customize it as you go. When you are finished, you can use this command to copy the settings for use with future projects.

If only one standards database exists, the settings will be copied to that standards database. The **Copy Project to Standards** dialog box will appear immediately.

If more than one standards database exists, you will be prompted to select a standards database to which the settings will be copied. After you make your selection, the **Copy Project to Standards** dialog box will appear.

Copy Project to Standards	Х
Do you want to copy the options from this project to the standard database? Type STANDARD in the box below and press OK to continue.	
OK Cancel	

To copy the settings, type **STANDARD** and press the **OK** button. This step helps prevent you from accidentally overwriting the settings in your standards database.

Copy Master List to Project

The Copy Master List to Project command will copy the settings from the master database to the project database. You can use this to update projects you have already started with new settings you have set in your master database.

Copy Standards List to Project

The Copy Standards List to Project command will copy the settings from a standards database to the project database. You can use this to update projects you have already started with new settings you have set in your standards database.

If only one standards database exists, the settings will be copied from that standards database.

If more than one standards database exists, you will be prompted to select the standards database from which the settings will be copied.

User Options

The User Options command allows you to customize settings that are specific to you. These settings are stored on your computer. They are not stored in the project, master, or standards database. Some of these settings are shared with other Design Master programs you have installed on your computer.

To update your user settings, go to

```
Ribbon: DM Photo: Customization->User Customization-> 🗳 User Options
Pulldown Menu: DM Photometrics->Customization->User Options
```

Design Master User Settings Dialog Box

😥 Design Master User Settings	×
Name	Value
User Support Information	
Name	
Email	
Phone	
Save support emails to the desktop (set to "Yes" if sending fails or crashes)	No
Drawing Options	
Zoom to schedule after insertion	No
Automatically open drawings that need to be updated	No
Photometrics	
Alert me when updates are available	Yes
Recalculate illuminance levels after query	Yes
OK Cancel	

The **Design Master User Settings** dialog box contains a list of all of the user options and their current settings. The options are arranged in groups in the list. The groups are described in the sections below:

- User Support Information
- Drawing Options
- **Photometrics**

Editing a Setting

To edit an option setting, select the Value in the list and enter a new value.

Press the **OK** button to save your changes.

User Support Information

This section describes the options available in the User Support Information group in the Design Master User Settings dialog box.

😥 Design Master User Settings	×
Name	Value
User Support Information	
Name	
Email	
Phone	
Save support emails to the desktop (set to "Yes" if sending fails or crashes)	No
Drawing Options	
Photometrics	
OK Cancel	

Name: Your name.

Email: Your email address. This is the email address we will use when replying to support requests from you.

Phone: Your phone number. This phone number will be sent with any support requests you send. It is not a required field, but having it in the support requests helps us call you if we need additional information.

Save support emails to the desktop (set to "Yes" if sending fails or crashes): Support requests and bug reports can be emailed directly from Design Master Photometrics. Some company's networks disable this ability, causing the send to fail or crash. When this happens, the information is saved to a file on your desktop that you can email to us manually.

- Yes: Design Master Photometrics does not attempt to send the email directly to us. Instead, it saves it to the desktop. Choose this setting if you consistently have trouble sending us support emails through our software. Determining that the send step will fail can take time. When you know it will fail, skipping it will save you time.
- No: Design Master Photometrics will attempt to send the email directly to us. When possible, this is the setting you should use.

Drawing Options

This section describes the options available in the **Drawing Options** group in the **Design Master User Settings** dialog box.

🕺 Design Master User Settings	×
Name	Value
User Support Information	
Drawing Options	
Zoom to schedule after insertion	No
Automatically open drawings that need to be updated	No
Photometrics	
OK Cancel	

Zoom to schedule after insertion: After you insert a schedule on the drawing, you can specify whether the drawing should zoom to the schedule or remain at the same location.

- Yes: The drawing will zoom to the schedule after it has been inserted.
- No: The drawing will remain at the same location after a schedule is inserted.

Automatically open drawings that need to be updated: Design Master Photometrics projects can span multiple drawings. Changes in one drawing can require that changes be made in another drawing. In order to make the changes in the other drawing, it must be opened.

- Yes: When a change in another drawing is required, the other drawing will be opened. This will take a moment, but when it is finished, the current drawing will remain active. If the other drawing is already open, nothing will happen.
- No: When a change in another drawing is required, you will be alerted at the command line, but it will not automatically be opened. The alert will continue to appear at the command line until you manually open the drawing and it is updated.

Photometrics

This section describes the options available in the **Photometrics** group in the **Design Master User Settings** dialog box.

😥 Design Master User Settings	×
Name	Value
User Support Information	
Drawing Options Photometrics	
Alert me when updates are available	Yes
Recalculate illuminance levels after query	Yes
OK Cancel	

Alert me when updates are available: Whether updates are checked for automatically. If this is checked, an update check will occur the first time you run a command each day. An alert will appear if an update is available.

Recalculate illuminance levels after query: Whether a calculation area or line modified using the <u>Query</u> command will be recalculated when you press the **OK** button.

Options

The Options commands allow you to customize a variety of settings that affect the calculations in your project and appearance of your drawings.

See the <u>General Customization Commands</u> section for more information about how the Edit Project List, Edit Standards List, Copy Project List to Standards, and Copy Standards List to Project commands work.

To edit the options project list, go to

Ribbon: DM Photo: Customization->Project Customization-> 🛅 Options

Pulldown Menu: DM Photometrics->Customization->Options->Edit Project List

To edit the options standards list, go to

Ribbon: DM Photo: Customization->Master & Standards Customization-> 🚳 Options

 $Pulldown \ Menu: \ \texttt{DM Photometrics->Customization->Options->Edit \ \texttt{Standards List}$

Design Master Photometrics Options Dialog Box

	Value
y IES Eiler	Value
Conv IES files to project folder	Vec
Units	
Project is metric	No
Distance unit	Inch
Illuminance unit	Foot-candle
Light Fixtures	
Insert callout as part of each light fixture	Yes
LF callout block (long lamp label)	DM_ELEC-LTG-CALLOUT-NOLAMPS
LF callout block (short lamp label)	DM_ELEC-LTG-CALLOUT-NOLAMPS
LF callout short label width	0.23
Display light fixture overlay	During insertion
Light Fixture Elevation Labels	
Block	dm_elec-elevationLabel-device
Label	\$ELEV
Schedules	
Schedule title justification	Left
Schedule column label justification	Center
Schedule title continued label	(CONT.)
Calculations	
Show illuminance (fc) levels	Yes
Show contours	Yes
Decimal places on drawing	1
Decimal places in schedule	2
Reflections	No reflection
Calculation Areas	
Default grid spacing (ft-in)	10-0
Default vertical grid spacing (ft-in)	2-0
Default vertical display spacing (ft-in)	0-0
Contour 1 illuminance (fc)	5
Contour 2 illuminance (fc)	2
Contour 2 illuminance (fc)	1
Contour 4 illuminance (fc)	0
Contour 5 illuminance (fc)	0
Contour 6 illuminance (fc)	0
Contour 7 illuminance (fc)	0
Contour 8 illuminance (fc)	0
Contour 9 illuminance (fc)	0
Contour 10 illuminance (fc)	0
Contour 1 layer or color	BYLAYER
Contour 2 layer or color	BYLAYER
Contour 3 layer or color	BYLAYER
Contour 4 layer or color	BYLAYER
Contour 5 layer or color	BYLAYER
Contour 6 layer or color	BYLAYER
Contour 7 layer or color	BYLAYER
Contour 8 layer or color	BYLAYER
Contour 9 layer or color	BYLAYER
Contour 10 layer or color	BYLAYER
Leaders	
Leader arrow block	DM_ELEC-ARROWHEAD
	0.135

The **Design Master Photometrics Options** dialog box contains a list of all of the options and their current settings. The options are arranged in groups in the list.

Editing a Setting

To edit an option setting, select the Value in the list and enter a new value.

Press the **OK** button to save your changes.

If the change you made to the options does not immediately appear on the drawing, run the <u>Coordinate Drawings</u> <u>and Database</u> command. This command will update the drawing to use the new settings you have specified.

IES Files

This section describes the options available in the IES Files group in the Design Master Photometrics Options dialog box.

Design Master Photometrics Options	×
Key	Value
IES Files	
Copy IES files to project folder	Yes
Units	
Light Fixtures	
Light Fixture Elevation Labels	
Schedules	
Calculations	
Calculation Areas	
Contours	
+ Leaders	
	OK Cancel

Copy IES files to project folder: Whether IES files loaded into the **Light Fixture Project Schedule** are copied to the project folder.

Units

This section describes the options available in the **Photometric Calculations** group in the **Design Master Photometrics Options** dialog box.

😥 Design Master Photometrics Options	×	(
Кеу	Value	
IES Files		
Project is metric	No	
Distance unit	Inch	
Illuminance unit	Foot-candle	
E Light Fixtures		
Light Fixture Elevation Labels		
Schedules		
Calculations		
Calculation Areas		
Contours		
Leaders		
	OK Cancel	

Most of these options set the default values when running the photometrics calculations. See the <u>Calculate</u> section for more information about these settings.

Project is metric: Whether some distances and elevations are measured and displayed using meters or feet and inches. See the <u>Metric Units in DM Photometrics</u> article in the knowledge base for more information.

Light Fixtures

This section describes the options available in the Light Fixtures group in the Design Master Photometrics Options dialog box.

😥 Design Master Photometrics Options	×
Key	Value
ES Files	
E Units	
Light Fixtures	
Insert callout as part of each light fixture	Yes
LF callout block (long lamp label)	DM_ELEC-LTG-CALLOUT-NOLAMPS
LF callout block (short lamp label)	DM_ELEC-LTG-CALLOUT-NOLAMPS
 LF callout short label width 	0.23
Display light fixture overlay	During insertion
Light Fixture Elevation Labels	
E Schedules	
Calculations	
Calculation Areas	
E Contours	
Leaders	
	OK Cancel

Insert callout as part of each light fixture: Whether a light fixture callout note is automatically inserted as part of each light fixture on the drawing.

LF callout block (long lamp label): The block used when you insert a light fixture callout. It is used when the lamp label is wider than the value specified in *LF callout short lamp label width*.

LF callout block (short lamp label): The block used when you insert a light fixture callout. It is used when the lamp label is smaller than the value specified in *LF callout long lamp label width*.

LF callout short label width: This width is used to determine which LF callout is inserted for a light fixture.

Display light fixture overlay: This specifies when a light fixture overlay will be displayed on non-plotting layers.

- Never: Light fixture overlays will never be inserted.
- **During Insertion:** The overlay will be displayed only when the light fixture is inserted. Once the light fixture is inserted, the overlay is no longer displayed. To view the overlay again, you must insert a new fixture.
- Always: The light fixture overlay will always be displayed.

Light Fixture Elevation Labels

This section describes the options available in the Light Fixture Elevation Labels group in the Design Master Photometrics Options dialog box.

😥 Design Master Photometrics Options	×	
Кеу	Value	
IES Files		
🖬 Units		
Light Fixtures		
Light Fixture Elevation Labels		
Block	dm_elec-elevationLabel-device	
	SELEV	
Colculations		
E Calculation Areas		
	OK Cancel	

Block: The block used for the elevation label when the Insert Elevation Label command is used.

Label: The text that is used to display the elevation in the label. **SELEV** is replaced with the elevation.

Schedules

This section describes the options available in the Schedules group in the Design Master Photometrics Options dialog box.

😥 Design Master Photometrics Options	×
Кеу	Value
IES Files	
Units	
Light Fixtures	
Light Fixture Elevation Labels	
Schedules	
Schedule title justification	Left
Schedule column label justification	Center
Schedule title continued label	(CONT.)
Calculations	
Calculation Areas	
Contours	
Leaders	
	OK Cancel

Schedule title justification: Specifics whether the text in the title is left- or center-justified.

Schedule column label justification: Specifies whether the text in the column label is left- or center-justified.

Schedule title continued label: The text in this option is added to the schedule title when the schedule is broken into multiple sections.

When inserting schedules, there is an option to set a maximum height for the schedule. If the schedule exceeds this height, the schedule is continued in a second section next to the first. The title of the second and following sections is the schedule title plus the text in the *Schedule title continued label* option.

Calculations

This section describes the options available in the **Photometric Calculations** group in the **Design Master Photometrics Options** dialog box.

😥 Design Master Photometrics Options	>
Kev	Value
IES Files	
🖬 Units	
Light Fixtures	
Light Fixture Elevation Labels	
Schedules	
Show illuminance (fc) levels	Vec
Show contours	Ves
Decimal places on drawing	1
Decimal places in schedule	2
Reflections	No reflection
Calculation Areas	
Contours	
Leaders	
	OK Cancel
	Caller

These options set the default values when running the photometrics calculations. See the <u>Calculate</u> section for more information about these settings.

Calculation Areas

This section describes the options available in the Photometric Calculations group in the Design Master Photometrics Options dialog box.

Design Master Photometrics Options	
Key	Value
IES Files	
Units	
Light Fixtures	
Light Fixture Elevation Labels	
Schedules	
Calculations	
Calculation Areas	
Default grid spacing (ft-in)	10-0
Default vertical grid spacing (ft-in)	2-0
Default vertical display spacing (ft-in)	5-0
Leaders	
	OK Cancel

These options set the default values when creating a new photometric calculation area or line. See the <u>Calculation Areas</u> section for more information about these settings.

Contours

This section describes the options available in the Photometric Calculations group in the Design Master Photometrics Options dialog box.

😥 Design Master Photometrics Options	×
Key	Value
IFS Files	
Light Fixtures	
Light Fixture Elevation Labels	
Schedules	
Calculations	
Calculation Areas	
Contours	
Contour 1 illuminance (fc)	5
Contour 2 illuminance (fc)	2
Contour 3 illuminance (fc)	1
Contour 4 illuminance (fc)	0
Contour 5 illuminance (fc)	0
Contour 6 illuminance (fc)	0
Contour 7 illuminance (fc)	0
Contour 8 illuminance (fc)	0
Contour 9 illuminance (fc)	0
Contour 10 illuminance (fc)	0
Contour 1 layer or color	BYLAYER
Contour 2 layer or color	BYLAYER
Contour 3 layer or color	BYLAYER
Contour 4 layer or color	BYLAYER
Contour 5 layer or color	BYLAYER
Contour 6 layer or color	BYLAYER
Contour 7 layer or color	BYLAYER
 Contour 8 layer or color 	BYLAYER
Contour 9 layer or color	BYLAYER
Contour 10 layer or color	BYLAYER
	OK Cancel

Most of these options set the default values for contours when running the photometrics calculations. See the <u>Calculate</u> section for more information about these settings.

Leaders

This section describes the options available in the Leaders group in the Design Master Photometrics Options dialog box.

😥 Design Master Photometrics Options	×	
Key	Value	
E IES Files		
Units		
Light Fixtures		
Schedules	Light fixture deviation labels	
Calculations		
Calculation Areas		
Contours		
Leaders		
Leader arrow block	DM_ELEC-ARROWHEAD	
	OK Cancel	

Leader Arrow Block: The block used for leader arrowheads.

Leader Arrow Length: The length of the leader arrowhead.

Block Creation

This section describes the commands used to create custom light fixture blocks.

Create Plan View Block from Entities

The Create Plan View Block from Entities command is used to create a block that can be used in your plans to represent a light fixture. Specific entities on the current drawing are used to create the block. The entities selected will be removed from the drawing during this process.

To create the block, go to

```
Ribbon: DM Photo: Customization->Block Creation-> The Create Plan View Block from Entities
```

Pulldown Menu: DM Photometrics->Customization->Block Creation->Create Plan View Block from Entities

Create Plan View Block Dialog Box

Create Plan View Block	×
Block Name:	
Folder: C:\dmsupport_customization	Set Folder
Block Settings	Slide Settings
Move entities to layer 0 (if unsure, leave this checked)	Create slide
Block has a highlight (used to display multiple colors)	Block Color: 7
Block can rotate	Select Block Color
Block is "To Scale"	
Check "To Scale" for light fixtures and devices that are inserted at actual size.	Highlight Color: 3
Do not check "To Scale" for receptacles and devices that are symbolic.	Select Highlight Color
Connect leaders to	
Specific points	
◯ Edge of a circle	
O Edge of a rectangle	
Database Settings	
Create records in database	
Any master or project value left blank will use the "Block Name" value from above	9.
Master Schedule Records	
Create record in master block list:	
Create record in master schedule:	
Master Schedule Group:	~
Project Schedule Records	
Create record in project block list:	
Create record in project schedule:	
OK Cancel	

Block Name: The name of the block. This will be the name of the block on the drawing and the name of the drawing file saved to your computer.

Folder: The folder where the block will be saved. The default location is your customization folder.

Set Folder: Press this button to change the folder where the block will be saved.

Block Settings

Move entities to layer 0: Whether the entities you select for the block are moved to layer 0 or left on the layer they are currently on. If you are not sure what this means, leave this box checked.
See the help for your CAD program for more information about setting layers in blocks.

Block has a highlight: Whether the block has a highlight associated with it. Highlights are used to include a second layer and color in blocks. The highlight block is inserted on a separate layer from the main device block. The two layers can have different colors and other properties set on them.

Block can rotate: Whether the block can be rotated. See the Can Rotate section for more information.

Block is "To Scale": Whether the block is to scale. See the <u>To Scale</u> section for more information.

Connect leaders to: Where leaders are connected to the block.

- Specific points: The leaders are connected to specific points on the block. Choose this option for blocks that are not circles or rectangles.
- Edge of a circle: The leaders are connected to the edge of a circle. Choose this option if the block has a circle in it that you want the leaders to connect to.
- Edge of a rectangle: The leaders are connected to the edge of a rectangle. Choose this option if the block has a rectangle in it that you want the leaders to connect to.

Slide Settings

Create slide: Whether a slide for the block will be created automatically. The slide is used in the light fixture dialog boxes to display the graphics.

If you do not create a slide for a block, an "X" will be shown in the dialog boxes. The block will still display properly on the drawing.

You can manually create the slide later using the Create Slide command.

Block Color: The color to use for the block in the slide.

Select Block Color: Press this button to set Block Color using the standard CAD Select Color dialog box.

Highlight Color: The color to use for the highlight block in the slide.

Select Highlight Color: Press this button to set *Highlight Color* using the standard CAD Select Color dialog box.

Database Settings

Create records in database: Whether records will be created in the master and/or project databases.

Master Schedule Records

Create record in master block list: Whether the block is added to the master block list. If this box is checked, you can specify a label for the block in the master list. If you leave the label field blank, the block name is used as the label in the master list.

Create record in master schedule: Whether a record using the block is created in the master schedule. If this box is checked, you can specify a name for the entry in the master schedule. If you leave the name field blank, the block name is used as the name of the entry in the master schedule.

Master Schedule Group: The group with which the record will be associated in the master schedule.

Project Schedule Records

Create record in project block list: Whether the block is added to the project block list. If this box is checked, you can specify a label for the block in the project list. If you leave the label field blank, the block name is used as the label in the project list.

Create record in project schedule: Whether a record using the block is created in the project schedule. If this box is checked, you can specify a name for the entry in the project schedule. If you leave the name field blank, the block name is used as the name of the entry in the project schedule.

Enter the information needed to create the plan view block and press the **OK** button.

You will be prompted to select entities on the drawing to include in the block.

Select entities to use in the block:

If the block has a highlight, you will then be prompted to specify entities for the highlight block.

Select entities to use in the highlight block:

You will then prompted to specify the insertion point for the block.

Specify insertion base point:

You will then be prompted to specify where leaders will connect to the block. The prompts depend upon the option you chose in the dialog box.

• Specific points: Specify the points where leaders can connect to the block. You may specify as many points as you need.

Specify connection point:

• Edge of a circle: Specify two points on opposite sides of the circle to connect the leaders to.

Specify point on one side of circle: Specify point on opposite side of circle:

• Edge of a rectangle: Specify two corners of the rectangle to connect the loops and leaders to.

Specify first corner of rectangle: Specify opposite corner of rectangle:

The block, slide, and database records will be created for you. The entities selected for the block will be removed from the drawing.

If a slide is created, the screen will flash during the creation process. When it is finished, you should return to your original view of the drawing.

Create Plan View Block from This Drawing

The Create Plan View Block from This Drawing command is used to configure your current drawing to work as a custom photometrics block.

You can manually create a slide for the block using the Create Slide command.

To configure the current drawing, go to

```
Ribbon: DM Photo: Customization->Block Creation-> {f W} Create Plan View Block from This Drawing
```

Pulldown Menu: DM Photometrics->Customization->Block Creation->Create Plan View Block from This Drawing

You will be prompted to specify the insertion point for the block.

Specify insertion base point:

The Design Master Photometrics dialog box shown below will appear.

Design Master Photometrics X						
Where do you want loops to connect to this device?						
To Edge of Circle	To Edge of Rectangle	To Points				

Press the **To Edge of Circle** button to connect loops to the edges of a circle on this block. Press the **To Edge of Rectangle** button to connect loops to the edges of a rectangle on this block. Press the **To Points** button to connect loops to points on this block.

Connecting Loops to the Edge of a Circle

If the **To Edge of Circle** button is pressed, you will be prompted to specify a point on one side of the circle.

Specify a point on one side of circle:

You will then be prompted to identify a point on the opposite side of the circle.

Specify a point on opposite side of circle:

Connecting Loops to the Edge of a Rectangle

If the **To Edge of Rectangle** button is pressed, you will be prompted to identify the location of the first corner of the rectangle.

Specify first corner of rectangle.

You will then be prompted to identify the location of the opposite corner.

Specify opposite corner of rectangle.

Connecting Loops to Points on the Device

If the **To Points** button is pressed, you will be prompted to identify the location where the loop is to connect to the device.

Specify connection point:

Specify as many connection points as desired for the block. Press ENTER to finish the command.

Create Slide

The Create Slide command is used to create a slide using an area of your drawing. A slide is an image file that is displayed in dialog boxes to represent the block that is selected.

The slide file must have the same name as the block that it represents. If a block is selected that does not have a corresponding slide, an "X" will be shown in the dialog box instead. The block will still insert properly if a corresponding slide does not exist.

To create a slide, go to

Ribbon: DM Photo: Customization->Block Creation-> 🗔 Create Slide

Pulldown Menu: DM Photometrics->Customization->Block Creation->Create Slide

Save Slide As Dialog Box

🛕 Save Slide As	5			2	×
Save in:	Electrical	~	G 🌶 🖻 🛄 -		
_	Name	^	Date modified	Туре	^
	dm_elec-lf1	sld	7/11/2018 10:20 AM	AutoC.	
Quick access	dm_elec-lf2	sld	7/11/2018 10:20 AM	AutoC.	
	dm_elec-lf3	sld	7/11/2018 10:20 AM	AutoC.	
	dm_elec-lf4	.sld	7/11/2018 10:20 AM	AutoC.	
Desktop	dm_elec-lf5	.sld	7/11/2018 10:20 AM	AutoC.	
-	dm_elec-lf6	.sld	7/11/2018 10:20 AM	AutoC.	
•	dm_elec-lf7	.sld	7/11/2018 10:20 AM	AutoC.	
Libraries	dm_elec-lf8	.sld	7/11/2018 10:20 AM	AutoC.	
	dm_elec-lf9	.sld	7/11/2018 10:20 AM	AutoC.	
	dm_elec-lf1	0.sld	7/11/2018 10:20 AM	AutoC.	
This PC	dm_elec-lf1	1.sld	7/11/2018 10:20 AM	AutoC.	
	dm_elec-lf1	2.sld	7/11/2018 10:20 AM	AutoC.	
	dm elec-lf1	3.sld	7/11/2018 10:20 AM	AutoC.	×
Network	•				
	File name:		~	Save	
	Save as type:	SLD Files (*.sld)	~	Cancel	

Specify the name of the slide file to create, then press the **Save** button to create the slide.

You will be prompted to draw a box on your drawing. A snapshot of everything inside the box will be saved in the slide.

Specify first corner of slide:

You will then be asked to specify the opposite corner of the box.

Specify second corner:

The screen will flash while the slide is being created.

Insert Non-Rotating Text

The Insert Non-Rotating Text command is used to create text that can be included in a custom block that will not rotate when the block is rotated.

Normal CAD text rotates when a block is rotated. If a block is rotated 180 degrees, the text will appear upsidedown.

Text created using this command will always be displayed at angle 0. When the block is rotated, the text is rotated back to 0.

To insert non-rotating text on the current drawing, go to

Ribbon: DM Photo: Customization->Block Creation-> 🔟 Insert Non-Rotating Text

Pulldown Menu: DM Photometrics->Customization->Block Creation->Insert Non-Rotating Text

You will be prompted to identify where the non-rotating text is to be inserted on the drawing.

Insertion point for non-rotating text:

The point specified will be the center point for the inserted text. You will then be prompted to enter the text itself.

Text value:

You will then be prompted to specify the height of the text.

Text height:

The text will be inserted on the drawing.

Once the text is inserted, you can modify it using standard CAD commands.

Make sure you select the text when choosing entities to create a block.

Open Block from Drawing

The Open Block from Drawing command is used to select a block on the drawing and open it in your CAD program. This command is useful when making changes to your customization. To make a change to a block that appears on your drawing, you can select it using this command.

To open a block from the current drawing, go to

Ribbon: DM Photo: Customization->Block Creation->Open Block from Drawing

Pulldown Menu: DM Photometrics->Customization->Block Creation->Open Block from Drawing

You will be prompted to select the block to be opened.

Select block to open:

The drawing that the selected block is based upon will be opened. Use standard CAD commands to make changes to the block.

After changes are made to the block, use the <u>Redefine Block in this Drawing</u> command to update the block definition on the current drawing. Otherwise, none of the changes you made will appear on your drawing.

Redefine Block in this Drawing

The Redefine Block in this Drawing command is used to update a block definition on a drawing after changes have been made to the drawing the block is based upon.

When a block is inserted on the drawing, the definition for that block is stored on the drawing. If the drawing that the block is based upon is later changed, the definition on the drawings where it has been inserted is not updated.

You must update the block definition manually. It is possible to do this using the standard CAD **INSERT** command, but the Redefine Block in this Drawing command simplifies the process.

To update a block on you drawing, go to

Ribbon: DM Photo: Customization->Block Creation->Redefine Block in this Drawing

Pulldown Menu: DM Photometrics->Customization->Block Creation->Redefine Block in this Drawing

You will be prompted to select the block to be updated.

Select block to redefine:

The definition for the selected block will be updated to match the drawing that it is based upon.

Light Fixture Blocks

The Light Fixture Blocks commands allow you to customize the list of blocks available to be used for light fixtures in the project and master schedules.

See the **Block Creation** section for more information about creating new blocks.

See the <u>General Customization Commands</u> section for more information about how the Edit Project List, Edit Master List, Copy Project List to Master, and Copy Master List to Project commands work.

To edit the light fixture blocks project list, go to

Ribbon: DM Photo: Customization->Project Customization-> 💹 Light Fixture Blocks

Pulldown Menu: DM Photometrics->Customization->Light Fixture Blocks->Edit Project List

To edit the light fixture blocks master list, go to

Ribbon: DM Photo: Customization->Master & Standards Customization-> 🕅 Light Fixture Blocks

Pulldown Menu: DM Photometrics->Customization->Light Fixture Blocks->Edit Master List

Light Fixture Blocks Dialog Box

🕺 Light Fixture Blocks				×
Sort	Move Up	Move Do	New Delete	2
Description	Block Name	To Scale	Can Rotate	^
Single Pole Mounted	DM_PHOTO-LF51		✓	
Round Wall Mounted (Small)	DM_PHOTO-LF41		V	
Round Wall Mounted (Large)	DM_PHOTO-LF15		V	
Square Wall Mounted	DM_PHOTO-LF14		V	
Round (Tiny)	DM_PHOTO-LF32			
Round (Small)	DM_PHOTO-LF23			
Round (Medium)	DM_PHOTO-LF24			
Round (Large)	DM_PHOTO-LF25			
Square (Tiny)	DM_PHOTO-LF33		✓	
Square (Small)	DM_PHOTO-LF29		V	
2x Wall Mounted Fluorescent	DM PHOTO-LF13			¥
	ОК	Cancel		

Sort: Press this button to sort the list of blocks alphabetically by the Description column.

Move Up: Press this button to move the selected block up in the list of blocks.

Move Down: Press this button to move the selected block down in the list of blocks.

New: Press this button to create a new block.

Delete: Press this button to delete the selected block. If the block is currently used by a record in the schedule, you will be asked if you want to replace the block in the schedule with another block.

Description: The name of the block that is displayed when you select the block in the light fixture schedule dialog box.

Block Name: The file name of the block displayed on the plan.

To Scale: Whether the block is to scale.

Blocks that are to scale are inserted on the drawing at their actual size. The scale factor for the block will be 1. Changing **DIMSCALE** will not change the size of the block. Light fixtures are commonly inserted to scale.

Blocks that are not to scale will vary in size depending upon the scale of the drawing. The scale factor of the block will be equal to the **DIMSCALE** setting of the drawing. Changing **DIMSCALE** will change the size of the light fixture.

Can Rotate: Whether the block can be rotated.

When a block that can be rotated is inserted, you are prompted to specify the rotation angle. They can be rotated using the standard CAD **ROTATE** command.

When a block that cannot be rotated is inserted, you are not prompted to specify the rotation angle. The block is inserted with a rotation angle of 0. If you attempt to rotate the block, the rotation angle will be reset to 0.

Print Blocks

The Print Blocks command is used to print all of the light fixture blocks in your database on the drawing. You can use this command to review all of the blocks that are defined in your database

To insert a table of all available blocks on your drawing, go to

Ribbon: DM Photo: Customization->Block Creation->Print Blocks

Pulldown Menu: DM Photometrics->Customization->Light Fixture Blocks->Print Blocks

Design Master Photometrics Dialog Box

Design Master Photometrics							
Print blocks from master database or project database?							
	Master	Project	Cancel				

Master: Press this button to print light fixture blocks from the master database.

Project: Press this button to print light fixture blocks from the project database.

Cancel: Press this button to exit the command.

After you select which database to print light fixture blocks from, you will be prompted to select an insertion point for the table.

Insertion point:

A table of blocks will be inserted on the drawing. The appearance of this table cannot be customized. It is intended for internal review purposes and not to be published in your final plans.

a"x48" Pendont or Surface	1'x4" Pendant or Surface	1%8' Pendont or Surface	2%2' Pendant or Surface	2°x4' Pendant or Surface	1'x2' Pendont or Surface Strip	1'x3' Pendant ar Surface Strip	1°x4' Pendant or Surface Strip	156' Pendant or Surface Strip	158 Pendont or Surfosi Strip	8"x48" Recessed
	0	©	0	0	ющ	ющ	ю—	H	юі	
DW_ELEC-LF1	DN_ELEC-LF3	DN_ELEC-LF27	DMLELEC-LF#	DW_ELEC-LF7	DW_ELEC-LF26	DW_ELEC-LF34	DN_ELEC-LF9	DMLELEC-LE35	DW_ELEC-LF10	DW_ELEC-LF2
1'x4" Receased	2'x2' Received	2'x4" Renational	1"x4" Recessed Nichtlicht	2"x2' Recessed Nightlight	2'x4' Receased Nightlight	1'x2' Received Strip	1'x3' Received Strip	1'x4' Recessed Strip	1'x8' Recessed Strip	1'x8' Received Strip
								ı	i	·
DW_ELEC-LF4	DN_ELEC-LF5	DN_ELEC-LF8	DM_ELEC-LF44	DW_FLEC-LF42	DM_ELEC-LF43	DW_ELEC-UF36	DN_ELEC-LF37	DM_ELEC-LFI1	DW_ELEC-LF12	DM_ELEC-LF36
8" Round Celling Dewn	12" Round Calling Down	15" Round Ceiling Down	24" Round Celling Down	6" Square Celling Down	12" Square Celling Down	Round Wall Hounted (Small)	Round Wall Hoursted (Large)	Square Wall Nounted	2x Wall Mounted Fluorescent	3x Weil Nounted Fluorsecant
0	0	\bigcirc	\bigcirc			ю	ю	н	H	H
DW_ELEC-UF32	DN_ELEC-LF23	DN_ELEC-LF24	DMLELEC-LF25	DM-ELEC-LF33	DW_ELEC-LF20	DN_ELEC-LF41	DN_ELEC-UF15	DMLELEC-LF14	DW_ELEC-LF13	DW_ELEC-LF22
4x Wall Nounted Fluorescent	Track or Wall Wash (Small)	Track or Wall Wosh (Nesfum)	Trask or Wall Wash (Large)	Eye Ball Almed at Wall	2' Trade Section	3 ¹ Track Section	4 ¹ Track Section	6' Track Section	3' Trock Section	Celling Nounted Exit
	4	4	4	(1)	е <u></u>			~	•	\otimes
DH_ELEC-LF21	DN_ELEC-LF30	DN_ELEC-UF30	DMLELEC-LF26	DM_ELEC-LF40	DM_ELEC-LF40	DN_ELEC-LF48	DN_ELEC-LF47	DMLELEC-LF48	DM_ELEC-LF45	DM_ELEC-LF16
Wall Mounted Exit	Emergency	Single Pole Nounted	Dual Pole Nounted	Dat	test-If					
⊦⊗	R.	<u>⊶</u> □		3	$ \land$					
DM_BLED-UFI7	DN_ELEC-LF10	DH_ELEC-LF51	DM_FLED-LESS	dm_elec-ifDat	tent-If					

Layers

The Layers command is used to customize the layers used when inserting items on the drawing.

See the <u>General Customization Commands</u> section for more information about how the Edit Project List, Edit Standards List, Copy Project List to Standards, and Copy Standards List to Project commands work.

To edit the layers project list, go to



Layers Dialog Box

😥 Layers									×
	Μ	ove Up Move Down					[Undo Layer I	Key Changes
New System	Edit Svs	tem Delete System	Layer Ke	v			Layer Nam	e	^
			ALIGNM	ENT POI	NT		DM DM-A	LIGNMENTP	OINT
Import Layers from Excel	Ex	port Layers to Excel	CIRCUIT	SPINE			E-CIRCUIT	SPINE	
			COORDI	NATION I	DIFFUSERS		E-LITE-CO	RD	
Layer System			DEFAULT	ſ			E		
General			EGRESS E	BOUNDA	RY		E-LITE-PH	TO-BDRY	
New			EGRESS	CONTOU	R		E-LITE-PH	TO-CNTR	
Existing			EGRESS	TEXT			E-LITE-PH	TO-ANNO	
			LIGHTIN	G GROUP	LABEL		E-LTGGRO	JP-ANNO	
			LIGHTIN	G GROUP	LEADER		E-LTGGRO	JP-LEADER	
			LIGHTIN	G GROUP	OUTLINE		E-LTGGRO	JP	
			PANEL S	CHEDULE			E-SCHEDU	LE	
			PHOTON	AETRIC B	OUNDARY		E-LITE-PH	TO-BDRY	
			DUIOTON		ONITOUR			TO CALTR	¥
Delate All the could account			1 -				Delated		cl
Delete All Unused Layers					New La	iyer	Delete Laye		ayer Changes
Layer Name	Color	Linetype		Plot	Lineweight	Plot	Style		^
DM_DM-ALIGNMENTPOINT	2	CONTINUOUS			Default				
E	4	CONTINUOUS			Default				
E-CIRCUIT SPINE	6	DM_DM-UNDERGROU	ND		Default				
EE-CABLE TRAY1-2D	7	CONTINUOUS		I	Default				
EE-CABLE TRAY1-2D-HIDE	7	DM_DM-HIDDEN		I	Default				
EE-CABLE TRAY1-3D	7	CONTINUOUS			Default				
EE-CABLE TRAY1-AROW	1	CONTINUOUS			Default				
EE-CABLE TRAY1-CENTERLINE	6	CONTINUOUS			Default				
EE-CABLE TRAY1-NOTE	1	CONTINUOUS		✓	Default				
EE-CONDUIT1-2D	7	CONTINUOUS			Default				
EE-CONDUIT1-2D-HIDE	7	DM_DM-HIDDEN			Default				
EE-CONDUIT1-3D	7	CONTINUOUS			Default				
EE-CONDUIT1-AROW	1	CONTINUOUS			Default				
EE-CONDUIT1-CENTERLINE	3	CONTINUOUS			Default				
EE-CONDUIT1-NOTE	1	CONTINUOUS		✓	Default				
EE-LITE	1	CONTINUOUS		✓	Default				
	1	CONTINUOUS			Default				~
		OK		Cancel					

Layer Systems

Move Up: Press this button to move the selected row up in the Layer System list.

Move Down: Press this button to move the selected row down in the Layer System list.

New System: Press this button to create a new layer system.

Edit System: Press this button to open the Layer System Options dialog box for the selected layer system.

Layer System: The name of the layer system.

Delete System: Press this button to delete the selected layer system.

Layer System: The list of layer systems currently defined.

General: This layer system is used to store all of the layers not associated with devices, such as photometrics and schedules. Light fixtures cannot be assigned to this layer system. It cannot be deleted or moved.

Layer Keys

Undo Layer Key Changes: Press this button to revert the layer key settings to their values when the dialog box was opened.

Layer Key: This column lists all of the different items that can be inserted using the software. The names in this column are fixed. Each layer key can be mapped to a layer that will be used when that type of item is inserted on the drawing. Multiple layer keys can use the same layer. See the <u>General Layer Keys</u> and <u>Other Layer Keys</u> sections for more information about which entities on the drawing use which layer key.

Layer Name: This column lists the layer that will be used when inserting items of the corresponding *Layer Key* type on the drawing. The layers you can choose from are defined in the lower section of the dialog box.

Layers

The layer list displays all of the layers that can be assigned to layer keys. The settings for each layer can be set in the list.

Layer Name: The name of the layer.

Color: The color number of the layer.

Linetype: The linetype of the layer.

Plot: Whether the layer will be plotted.

Lineweight: The lineweight of the layer. Only used when plotting using STB's.

Plot Style: The plot style of the layer. Only used when plotting using STB's.

Managing Layers

The following buttons in the Layers dialog box can be used to manage the layers in the dialog box.

Delete All Unused Layers: Press this button to delete all layers that are not associated with a layer key.

New Layer: Press this button to add a new layer.

Delete Layer: Press this button to delete the selected layer.

Undo Layer Changes: Press this button to revert the layer settings to their values when the dialog box was opened.

Using Excel to Modify Layer Settings

The **Import Layers from Excel** and **Export Layers to Excel** buttons are used to import and export the layer settings to Excel. Using Excel is recommended when modifying large numbers of layer settings.

Import Layers from Excel: Press this button to load the layer setting information entered in Excel into the dialog box. The layer settings will be applied to the selected layer system.

Export Layers to Excel: Press this button to export the layer settings to a CSV file that can be opened in Excel. The **Save Layer File As** dialog box will appear.



The selected layer system will be saved to the file you specify. The file will be opened for immediate editing. When modifying the file, do not change the header rows, the first column, or the last column. Restrict your changes to the *Layer Name*, *Color*, *Linetype*, *Plot*, *Lineweight*, and *Plot Style* columns.

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1	DM ELEC	Version 1	General La	ayer Syster	n							
2	Don't mod	ify anythi	ng above tl	his								
3	Layer Key	Layer Nam	Color	Linetype	Plot	Lineweigh	Plot Style	DO NOT E	DIT			
4	DEFAULT	E	4	CONTINU	Yes	Default		DEFAULT				
5	PHOTOME	E-LITE-PH	7	CONTINU	No	Default		PHOTOME	TRIC BO	UNDARY		
6	PHOTOME	E-LITE-PH	7	CONTINU	Yes	Default		PHOTOME	TRIC CO	NTOUR		
7	PHOTOME	E-LITE-PH	252	CONTINU	No	Default		PHOTOME	TRIC LIG	HTING OV	ERLAY	
8	PHOTOME	E-LITE-PH	6	CONTINU	No	Default		PHOTOME	TRIC MA	SK		
9	PHOTOME	E-LITE-PH	6	CONTINU	No	Default		PHOTOME	TRIC SO	LID		
10	PHOTOME	E-LITE-PH	4	CONTINU	Yes	Default		PHOTOME	TRIC TEX	т		
11	SCHEDULE	E-SCHEDU	2	CONTINU	Yes	Default		SCHEDULE	-HEAVY			
12	SCHEDULE	E-SCHEDU	1	CONTINU	Yes	Default		SCHEDULE	-LIGHT			
13	SCHEDULE	E-SCHEDU	4	CONTINU	Yes	Default		SCHEDULE	-TEXT			
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General Layer Keys

The **General** layer keys are used for entities that are always inserted on the same layer. Each layer key and its corresponding entities are listed below.

DEFAULT: The default layer used for entities when a layer key is missing or otherwise cannot be found.

PHOTOMETRIC BOUNDARY: Used for calculation area boundaries.

PHOTOMETRIC CONTOUR: Used for contours inserted during the calculation.

PHOTOMETRIC LIGHTING OVERLAY: Used for light fixture illuminance overlays.

PHOTOMETRIC MASK: Used for masks.

PHOTOMETRIC SOLID: Used for solids.

PHOTOMETRIC TEXT: Used for the illuminance levels in the calculation area.

SCHEDULE-HEAVY: A heavy layer used in schedules. Used for the outside border, the title border, and the column label borders.

SCHEDULE-LIGHT: A light layer used in schedules. Used for the inside borders.

SCHEDULE-TEXT: Used for the text in schedules.

Other Layer Keys

The other layer keys are used when inserting light fixtures on the drawing. Each light fixture is assigned a layer system. Each layer system has the following layer keys associated with it. To change the layer of a light fixture, change the layer system. Do not change the layer directly in your CAD program. If you do, it will likely be changed back at some point in the future.

LIGHT FIXTURES: Used for the light fixture block.

LIGHT FIXTURES-CALLOUT: Used for the light fixture callout block.

LIGHT FIXTURES-HIGHLIGHT: Used for the light fixture highlight block, if one exists.

LIGHT FIXTURES-LEADER: Used for the leader from notes.

LIGHT FIXTURES-TEXT: Used for notes on the light fixture.

Update Drawing Layers to Match Project List

The Update Drawing Layers to Match Project List command is used to update the layer definitions on the drawing. Once a layer is created on a drawing, it is not modified. Changes you make to the color, lineweight, or other attributes are not overwritten. This command is the only way to modify layers that already exist.

To update existing layers on a drawing to match new definitions in the project list, go to

```
Ribbon: DM Photo: Customization->Project Customization-> 🚭 Update Drawing Layers to Match Project List
```

Pulldown Menu: DM Photometrics->Customization->Layers->Update Drawing Layers to Match Project List

The layer definitions on the drawing will be updated to match the definitions in the project list.

Schedules

This section describes how to customize the layout of the light fixture schedule and calculation area schedule in the master and standards databases. Changing the values in these locations will allow them to be used in newly created projects.

Edit Light Fixture Schedule Master Settings

The Edit Light Fixture Schedule Master Settings command is used to change the appearance of the light fixture schedule in the master database. Changes made this way will affect newly created projects.

To edit the light fixture schedule master settings, go to

Ribbon: DM Photo: Customization->Master & Standards Customization-> 🛍 Light Fixture Schedule Master Settings

Pulldown Menu: DM Photometrics->Customization->Schedules->Edit Light Fixture Schedule Master Settings

See the Edit Light Fixture Schedule Layout section for more information.

Edit Calculation Area Schedule Standards List

The Edit Calculation Area Schedule Standards List command is used to change the appearance of the photometric calculation area schedule in the standards database. Changes made this way will affect newly created projects.

To edit the photometric calculation area schedule standards settings, go to

```
Ribbon: DM Photo: Customization->Master & Standards Customization-> 🗈 Calculation Area Schedule Label Group
```

Pulldown Menu: DM Photometrics->Customization->Schedules->Edit Calculation Area Schedule Standards List

See the Edit Calculation Area Schedule Layout section for more information.

Edit Calculation Line Schedule Standards List

The Edit Calculation Line Schedule Standards List command is used to change the appearance of the photometric calculation line schedule in the standards database. Changes made this way will affect newly created projects.

To edit the photometric calculation line schedule standards settings, go to

Ribbon: DM Photo: Customization->Master & Standards Customization-> 🌆 Calculation Line Schedule Label Group

Pulldown Menu: DM Photometrics->Customization->Schedules->Edit Calculation Line Schedule Standards List

See the Edit Calculation Line Schedule Layout section for more information.

Text Styles

The Text Styles commands allow you to customize the text heights and fonts used for labels and schedules.

See the <u>General Customization Commands</u> section for more information about how the Edit Project List, Edit Standards List, Copy Project List to Standards, and Copy Standards List to Project commands work.

To customize text styles in the current project, go to

Ribbon: DM Photo: Customization->Project Customization->

Pulldown Menu: DM Photometrics->Customization->Text Styles->Edit Project List

To customize standard text styles, go to

Ribbon: DM Photo: Customization->Master & Standards Customization-> 觉 Text Styles

Pulldown Menu: DM Photometrics->Customization->Text Styles->Edit Standard List

Text Styles Dialog Box

Text Style Key	Text Style	Height	Scale Factor
DEFAULT	SIMPLEX	0.1	0.8
LIGHT FIXTURE CALLOUT			
LIGHT FIXTURE NOTES			
LIGHTING GROUP LABEL			
PHOTOMETRIC			
SCHEDULE CELL			
SCHEDULE COLUMN HEADER	ITALIC		
SCHEDULE HEADER	ITALIC	0.2	

Text Style Key: This list indicates where the text style is used. These values cannot be edited.

Text Style: Sets the text style in your CAD program to be associated with the corresponding *Text Style Key*. The **Default** key must have a text style defined. The text style in other keys may be left blank. Blank keys will use the

text style defined for the **Default** key.

If the text style currently exists in the drawing, it will be used as defined.

If the text style does not exist, it will be created using an SHX file of the same name. If an SHX file cannot be found, the **Standard** text style will be used.

To use a TrueType font, create the text style and associate it with the desired font.

Height: Sets the text height for the key. The **Default** key must have a height defined. The height in other keys may be left blank. Blank keys will use the height defined for the **Default** key.

The units for the height are inches on the printed page. To set 1/10'' text for the drawing, use the value 0.1. To set 1/8'' text, use 0.125. When text is inserted, this value will be multiplied by **DIMSCALE** to determine the height of the text on the drawing.

Scale Factor: Sets the character spacing for the text. This value is not currently used.

Recreate Missing Customization

To recreate customization that is missing in the project or standards database, go to

```
\label{eq:rescaled} \begin{array}{c} \textbf{Ribbon:} \ \text{DM Photo: Customization->Customization Utilities->Recreate Missing Customization} \end{array}
```

 $Pulldown \ Menu: \ \texttt{DM Photometrics->Customization->Recreate Missing Customization}$

Design Master Photometrics	×
Select the database to recreate the customization in. You can select either a project database or a standards database.	
ОК	

Press the OK button. The Select Standards or Project Database dialog box will open.

🛕 Select Standa	ards or Project Dat	tabase		×
Look in:	13 Final Outp	ut ~	G 🌶 🖻 🛄 -	
Quick access	Name DMBackup dm_elec.dm	•	Date modified 2/27/2019 2:15 PM 2/27/2019 3:14 PM	Type File folder DM File
Desktop				
Libraries				
This PC				
4	<			>
Network	Files of type:	DM Files (*.dm)	~	Cancel

Select the standards or project database and press the **Open** button. Any missing customization records will be added to the database. It will not change any existing customization values.

The **Select Standards or Project Database** dialog box will open the current project folder by default. To update your standards database, you must browse to your customization folder.

The default location for the customization folder is C:\Users\<User Name>\AppData\Roaming\Design Master Software\Photometrics Customization where <User Name> is the name you use to log in to your computer.

Update Laptop Customization

The Update Laptop Customization command is used to update the local customization on a laptop to match the customization stored on the network. The local customization is automatically updated once a day when you open your CAD program. This command is used to manually update the local customization. It is only necessary to use this command if the customization on your network has changed during the day.

To update the local customization on a laptop, go to

Ribbon: DM Photo: Customization->Customization Utilities->Update Laptop Customization

Pulldown Menu: DM Photometrics->Customization->Update Laptop Customization

The customization will be copied from the network to the local drive.

See the Installation Settings section for more information about configuring your computer as a laptop.

Manage Standards Databases

The Manage Standards Databases command is used to create, modify, and delete standards databases. Each standards database has its own set of customization settings. Multiple standards databases are used when more than one set of standards is used in a company.

To manage your standards databases, go to

```
\label{eq:result} \textbf{Ribbon:} \text{ DM Photo: Customization->Customization Utilities->Manage Standards Databases}
```

```
Pulldown Menu: DM Photometrics->Customization->Manage Standards Databases
```

If only one standards database exists, you will be prompted to create a new one. If you do not create another database, the command will end. If you do create another database, the **Select Standards Database** dialog box will then appear.

If more than one standards database exists, the Select Standards Database dialog box will appear.

Select Standards Database Dialog Box

Select Standards Database	\times						
Imperial Foot Base Unit Imperial Inch Base Unit Metric Centimeter Base Unit Metric Meter Base Unit							
Rename <							
Set Default	Set Default						
New < Copy < Delete							

Each standards database is a separate file stored in your customization folder. The file name will be "dm_elec-standards<Name>.dm", where <Name> is the name of the standards database as displayed in the dialog box. If a standards database is named "dm_elec-standards.dm", it will display as "Default".

The default location for the customization folder is C:\Users\<User Name>\AppData\Roaming\Design Master Software\Photometrics Customization where <User Name> is the name you use to log in to your computer.

Rename: Press this button to rename the selected standards database. The name that is displayed and the name of the file will be changed.

Rename: Press this button to set the selected standards database as the default when starting a new project.

New: Press this button to create a new standards database. A new standards database file will be created in the customization folder.

Copy: Press this button to copy the selected standards database. A new standards database file with the same settings will be created in the customization folder.

Delete: Press this button to delete the selected standards database.

Start New Photometrics Project

This section describes how to start a new project.

When you start a new project, a database file will be created in the same folder as the current drawing. The file name will be "dm_elec<Name>.dm", where <Name> is the name of the project. This is the database file where all of the information about your project is stored.

To create a new database file, go to

```
Ribbon: DM Photometrics->Utilities-> NEW PROJ Start New Photometrics Project
```

Pulldown Menu: DM Photometrics->Start New Photometrics Project

Start New Photometrics Project Dialog Box

Start New Photomet	rics Project		×			
Project Name (Optional): Project Directory: C:\Users\Kane\Desktop\Tutorial\Photometric\13 Final Output\						
Standards Database:	Default		~			
Light Fixture Sched	ule Group:	General	\sim			
	ОК	Cancel				

Project Name (Optional): The project name that is added to the end of the file name. This name is only used on the file name. It is not used anywhere else in the project. If you leave this field blank, the project database name will be "dm_elec.dm".

Project Directory: The folder in which the database will be created. The folder displayed and used is the folder that contains the current drawing.

Standards Database: The standards database from which to copy project options and settings. See the <u>Master</u> and <u>Standards Databases</u> section for more information about the standards database and which settings are stored in it.

Light Fixture Schedule Group: Check this box to import a complete light fixture group from the master database to the new project. See the <u>Light Fixture Master Schedule Groups</u> section for more information about light fixture groups.

Concepts and Procedures

This sections describes concepts and procedures you will use with Design Master Photometrics. It describes how to apply the commands in the <u>Command Reference</u> section to create your photometrics project.

Project Drawing and Database Management

When you create a new project, a database file will be created in the same folder as the current drawing. The file name will be "dm_elec<Name>.dm", where <Name> is the name of the project. This is the database file where all of the information about your project is stored. Your project drawings are now connected to this database file, and the information contained in the drawings and the database must match.

You must consider how changes to your drawings will affect the database. Recommendations for common scenarios when working on a Design Master Photometrics project are listed below. You can also visit the <u>Project</u> and Database Management Webinar in the knowledge base.

Project Folders

Each project needs to be in a separate folder that contains one dm_elec.dm database file. All of the drawing files for the project need to be in the same folder as the database. You should not copy drawings from one project to another.

Saving Your Changes

Always save your changes to a drawing with Design Master Photometrics devices in it. Never close a drawing without saving your changes.

Any changes you make to the drawing are saved to the database immediately. If you close the drawing without saving, the database and drawing will no longer match. This can result in missing or extra devices, incorrect calculations, and other problems.

If you close a drawing without saving, or your CAD program crashes, use the <u>Coordinate Drawings and Database</u> command to make the drawing and database match again.

Creating a Backup

To back up your project, you must copy both the drawings and the database file. Copying just the drawings is not enough.

The two simplest methods are copying the entire folder to a new location, or using the **Copy or Backup Project** command.

Alternative Designs

To try an alternative design in your project, do not copy drawings inside the same project folder. This will result in duplicate devices and inaccurate calculations. Instead, make a copy of the project in its own folder. Treat the alternative design as a separate project. Copy the entire folder to a new location, or use the **Copy or Backup Project** command.

Copying a Drawing

To copy a drawing that contains Design Master devices, use the <u>Copy Drawing</u> command. This will create an exact copy of the drawing in the project folder. Copies of all of the devices on the drawing will be created in the database.

(You can use Windows Explorer or the standard CAD **SAVEAS** command to copy a drawing, but these methods add some complications so we do not recommend them.)

Renaming a Drawing

To rename a drawing that contains Design Master devices, use the <u>Rename Drawing</u> command. This will rename the drawing. The original drawing will no longer exist.

(You can use Windows Explorer or the standard CAD **SAVEAS** command to rename a drawing, but these methods add some complications so we do not recommend them.)

CAD Program Crashes

CAD program crashes can leave your drawing and your database in an inconsistent state. This is a special situation that needs to be handled carefully to prevent your database from being corrupted.

Your CAD Program Created a Recover Drawing

If your CAD program created a recovery drawing, try to open that file. If it opens, compare it with the original drawing file. Decide which you want to use. If you want to use the recovery drawing, rename the original drawing something different using Windows Explorer, then rename the recovery drawing to the original drawing name using Windows Explorer. Run the <u>Coordinate Drawings and Database</u> command on the drawing to make the drawing and database match, then continue working.

If you choose to work in the original drawing, delete any recovery drawings that were created. Run the <u>Coordinate Drawings and Database</u> command on the original drawing to make the drawing and database match, then continue working.

Your CAD Program Did Not Create a Recover Drawing

If your CAD program did not create a recover drawing, then you must open your original drawing. Run the <u>Coordinate Drawings and Database</u> command on the drawing to make the drawing and database match, then continue working.

Master and Standards Databases

The master and standards databases are used to store default settings for new projects. You can make changes to the customization settings, store them in these files, and reuse them.

These databases are stored in your photometrics customization folder. For companies with more than one user, we recommend that the photometrics customization folder be on your network. This allows you to share the customization between all of your users. Otherwise, synchronizing the customization on all of the different

computers is complicated.

When you create a project, the settings from the master and standards databases are copied to its project database. Once it is created, the project database is no longer associated with the master or standards database. Changes to the project database will not affect the master or standards database, and changes to the master and standards databases will not affect the project database.

Master Database

There is only one master database. All of the blocks are stored in the master, as well as the various schedules.

When a project is created, all of the block records are copied from the master to the project database. You can choose to copy a specific group from each of the master schedules to the project database.

The master database stores the following information:

- Light Fixture Blocks
- Light Fixture Master Schedule

Standards Databases

Multiple standards databases can be created. Each standards database has its own set of customization settings.

When a project is created, the customization settings are copied from a selected standards database. Everything from the standards database is copied to the project and used as the default settings.

The standards database stores the following information:

- Layer systems
- Layer definitions
- Options settings
- Text styles

Calculation Basis

Multiple Areas

Multiple calculation areas can be defined on a single drawing.

Reflections

Reflections from buildings and walls can be included in the calculation. Each wall has a reflectance value that is used to calculate the amount of light that it reflects. For outdoor photometrics, this reflection results in slightly higher values near buildings.

IES Files

The illuminance level at each point within a defined boundary is calculated using the IES file for each light fixture.

Technical Support

Technical support is available by phone, email, or live chat on our website. We are available Monday through Friday, 9am to 5pm Eastern time.

Limited support by email is available evenings, weekends, and holidays.

Email: <u>support@designmaster.biz</u>

Phone: 1-866-516-9497 x2

Live Chat: http://www.designmaster.biz/chat/

System Requirements

To run Design Master Photometrics, you need AutoCAD 2007 or later or BricsCAD within the last 3 years, and a computer capable of running your specific version of AutoCAD or BricsCAD.

Complete system requirements are available on our website.

Purchasing

Pricing information and purchase links are available on our website.