Chapter 10 - Tools

Visual includes various tools to provide design aids, system setting control, and other functions.

10.1 Customize Dialog

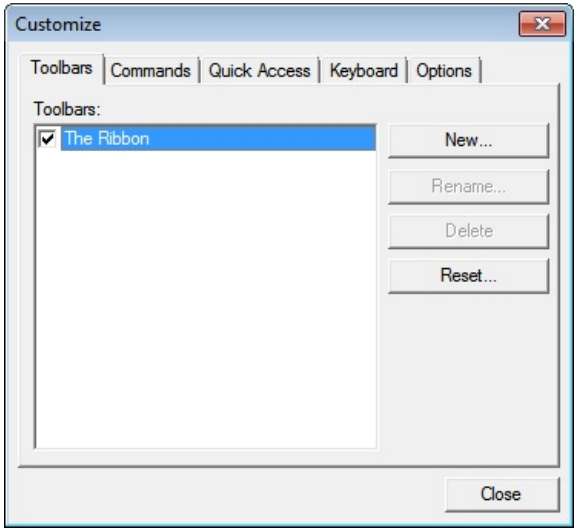
The **Customize** *dialog* allows advanced users to have control of some of the graphical user interface of Visual.

The **Toolbars** *tab* controls which commands are shown.

Clicking **New** will create a **Toolbar** below the **Ribbonbar**. A *dialog* box will be shown to name the new **Toolbar**.

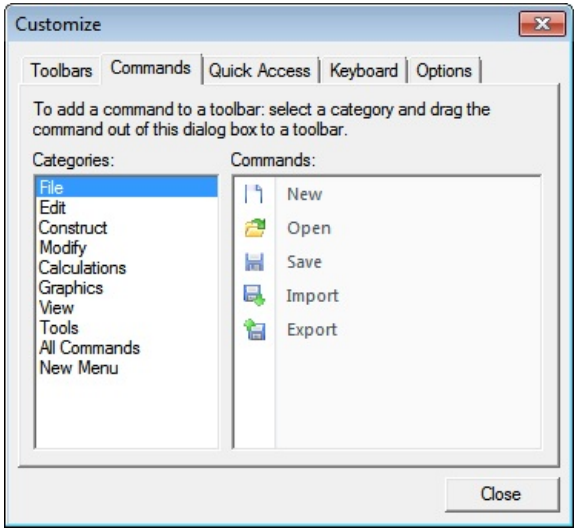
If additional **Toolbars** are present, they can be renamed and deleted using the appropriate buttons on this ***Tab***.

Command buttons can be placed on a user-defined **Toolbar** from the **Commands** *tab* or by left-click-dragging buttons from existing *tabs* of the **Ribbonbar**. Note that moving buttons from default **Ribbonbar** *tabs* will make it challenging for Visual Support to assist users.



The **Commands** *tab* allows individual commands from any *tab* to be placed on other *tabs* or on a **Custom Toolbar**.

Select a **Category** to find a command of interest. Left-click-drag a command from the listing on the right to a **Toolbar** or ***Tab***.



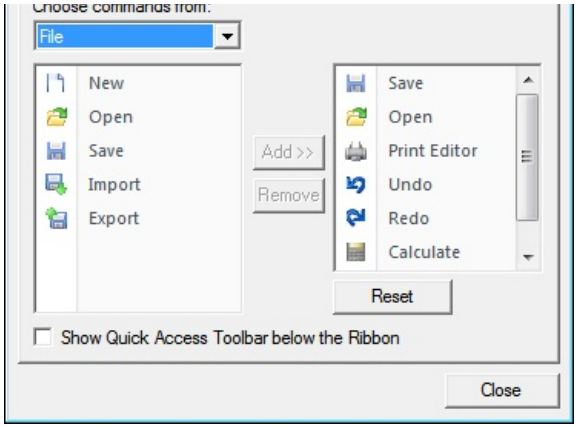
The **Quick Access** *tab* allows control of which commands are shown in the **Quick Access Toolbar**. Currently assigned commands are shown in the right pane.

Chose a menu **Category** from the drop-down and then left-click the desired

command in the left pane. Click the **Add** button to place the command on the **Quick Access Toolbar**. Conversely, click a command in the right pane and click **Remove** to delete a command from the **Quick Access Toolbar**.

Placing a check in the box will move the **Quick Access Toolbar** to a location below the **Ribbonbar**.

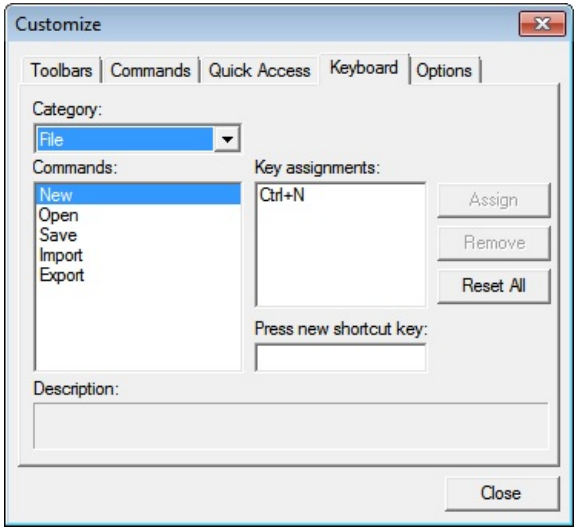
Clicking the **Reset** button will return the **Quick Access Toolbar** to the factory defaults.



The **Keyboard** *tab* controls *hotkey* assignment. Visual includes multiple hotkeys as outlined in Keyboard Commands. These can be expanded or changed.

Click a **Category** to find a command of interest. Click the command in the left pane. If a *hotkey* assignment has been made, it will be shown in the right pane.

To assign a new *hotkey*, left-click in the **Press new shortcut key** box and press the key combination to be assigned. Click the **Assign** button. If the selected *hotkey* is in use, Visual will alert to this situation. Choose to overwrite the current assignment or cancel the operation.



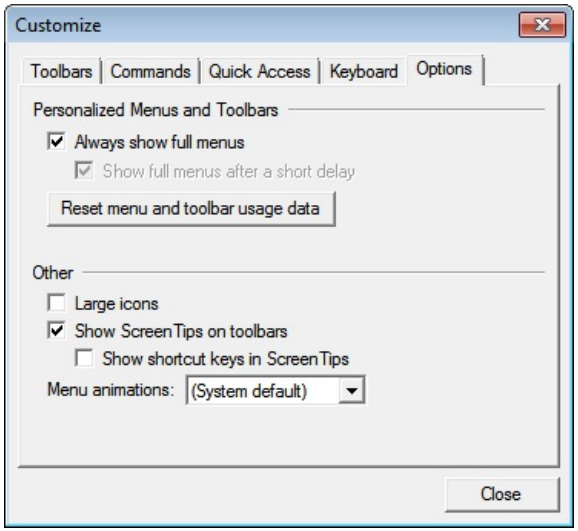
The **Options** *tab* controls menus and icons.

Clicking **Large Icons** displays larger icons in any user-defined **Toolbars**. This does not impact the **Ribbonbar**.

Screen Tips are shown when the mouse hovers over a button. Unchecking this box removes that feature. If **Screen Tips** are active, Visual can also show the *hotkey* combination (if assigned) in the **Screen Tip** in the format *Command* (*hotkey*); for example "Explode (Shift+E)". This is particularly useful for new users to learn hotkeys.

How menus appear can be modified by making a selection in the **Menu Animations** drop-down.

Note that *Personalized Menus and Toolbars* is not a valid selection for Visual. This section is displayed as part of the core tool used to write the computer code behind Visual and changes made in this *dialog* have no impact on program operation.



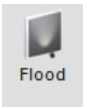
10.2 Design Tools

Design Tools can be found on the **Tools** *tab* of the **Ribbonbar**. These **Tools** are HTML-based and open in browser windows. Each tool has a tutorial and help information of its own.

Area - The tool is designed to allow users to quickly determine *pole* spacing from an *illuminance* criteria or *illuminance* levels from user specified spacing.

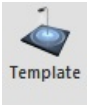
Interior - The tool is designed to perform *lumen method* calculations on a rectangular room. The *lumen method* determines average *illuminance* achieved on the *workplane* using a derived property of *luminaire photometrics* and room geometry called the coefficient of utilization.

Flood - The tool was developed to help specifiers select flood, sign, and wall lighting products. The tool only considers the direct illumination component's effect on the wall.



Roadway - The tool calculates the largest spacing between regularly spaced poles on a continuous straight and flat roadway using the calculation procedure defined in the IES RP-8-2000 *American National Standard Practice for Roadway Lighting*. This tool includes the changes to the calculation procedure in the 2007 errata.

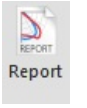
Template - The tool allows for simultaneous comparison of two *luminaire* templates. This is a great way to quickly and visually contrast the performance of outdoor fixtures.



Wallwash - The tool was developed to help specifiers select flood, sign, and wall lighting products. The tool only considers the direct illumination component's effect on the wall.

Economic - The tool is designed to provide users with an interface to perform basic life cycle cost analysis. This tool is based on the IES RP-31-1996 *Recommended Practice for the Economic Analysis of Lighting*.

Report - The tool provides a method of viewing, comparing, and printing, standard *photometric* report information.

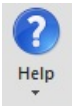


All **Design Tools** can alternately be accessed outside of Visual at http://www.visual-3d.com/tools/.

10.3 Help Tools

Help Tools provide varied information related to Visual.

The **Help** sub-menu is accessed from the **Options** *panel* on the **Tools** *tab* of the **Ribbonbar**.



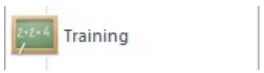
Contents opens the **Help** *dialog*.

Support links to the Support web *page* with contact information.

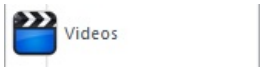
Hot Keys opens the PDF of shortcut keys current available on the Visual website.

Knowledgebase links to the Support Search web *page* to allow for research of commonly asked questions and answers.

Training opens a link to the Acuity Brands Center for Light and Space schedule *page* where Visual training opportunities can be found among other opportunities in a browser window.



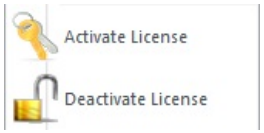
Videos links to a *page* containing all available videos on the Visual website in a browser window.



Website links to the home *page* of the Visual website in a browser window.

Activate License opens a *dialog* that allows for entry of an activation code after purchasing Visual.

Deactivate License opens a *dialog* that deactivates the license code on the current machine and returns it to the cloud to be used on another computer.



About Visual provides detailed information about: **Version Number**, **Serial Number**, **License Number**, and to whom the codes are registered and licensed.

10.4 Measurement Tools

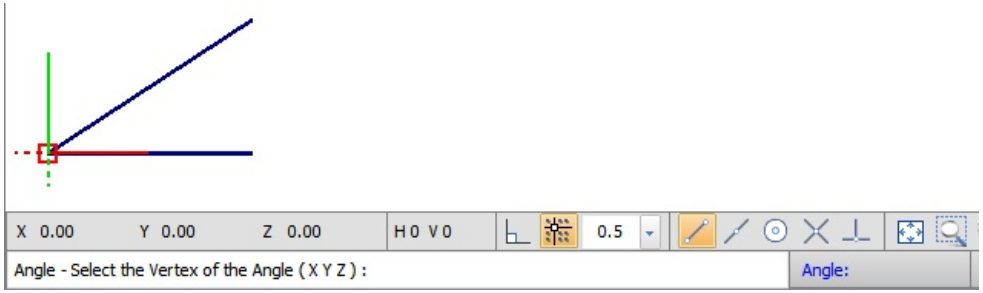
Tools are provided to measure basic properties of elements in Visual.

10.4.1 Angle Tool

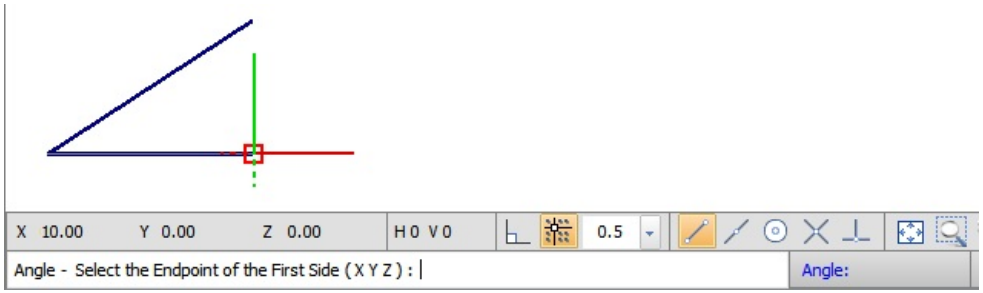
The **Angle Tool** is found in the **Measurement** *panel* on the **Tools** *tab* of the **Ribbonbar**.

The **Angle** command measures the **Angle** between objects based on a ***Vertex*** and two **Endpoints**. On-screen cues in the **Status Bar** aid in command entry.

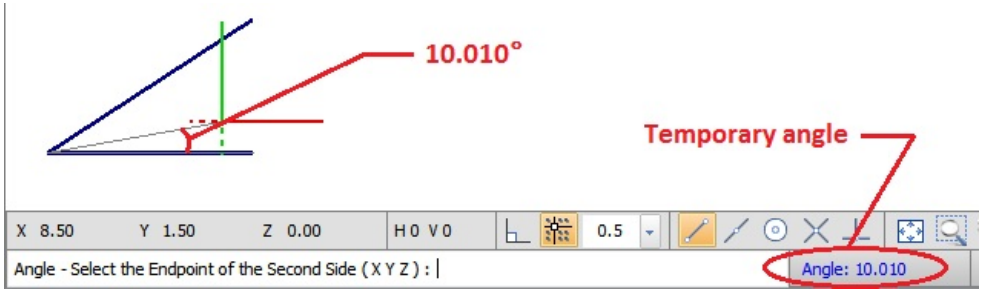
Select the ***Vertex*** of the **Angle** to be measured. it is not necessary to use **Object Snap** but it is convenient and accurate.



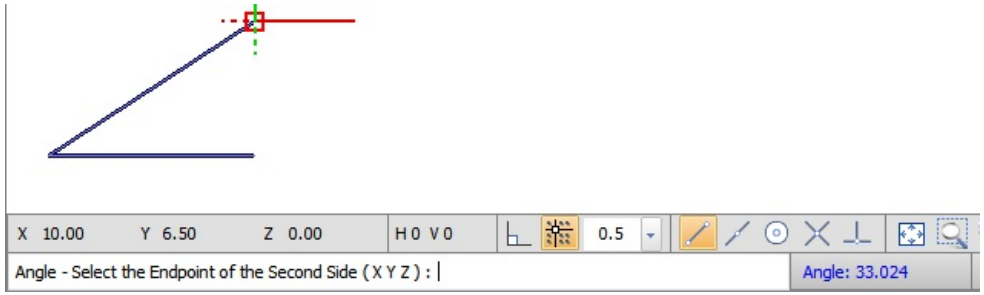
Select the **Endpoint** of the first edge of the **Angle**.



Visual displays the **Angle** from the first edge to the temporary second edge drawn from the selected ***Vertex*** to the cursor. Visual draws a thin black line illustrating this reference. This allows for multiple, quick, approximate measurements by moving the cursor to a location near desired points.

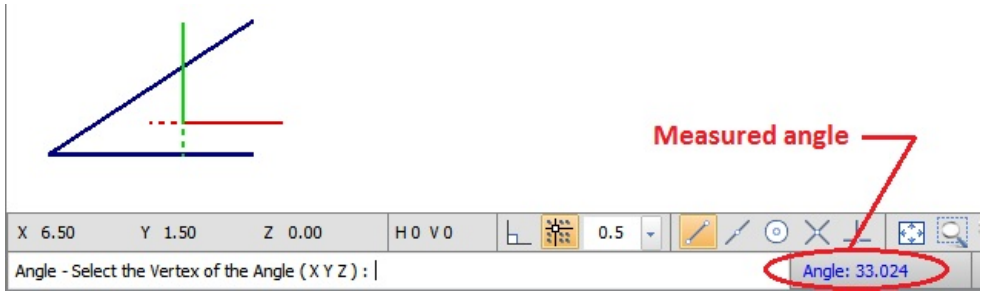


Select the **Endpoint** of the second edge of the **Angle**.



Visual will display the measured **Angle** in the **Status** bar. The **Angle** command is automatically restarted to measure additional **Angles** as can be seen from the command direction in the **Status Bar** that is the first step in this process.

To exit the command, right-click the mouse.



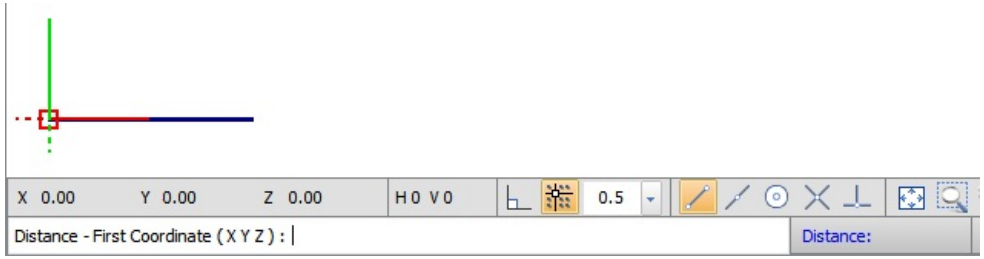
Lines do not need to be present for the command to provide a result. **Lines** are used here to more clearly illustrate the concept. The inputs may be based on real or imaginary lines, or **Solid Objects**.

10.4.2 Distance Tool

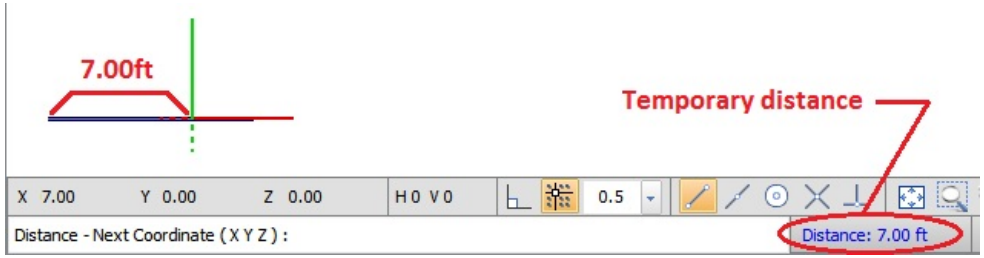
The **Distance Tool** is found in the **Measurement** *panel* on the **Tools** *tab* of the **Ribbonbar**.

The **Distance** command measures the **Distance** between two points as specified.

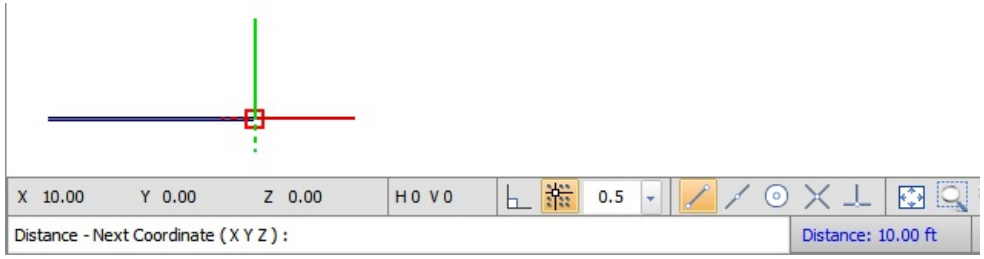
Select the first point.



Visual displays the **Distance** from the first point to the cursor. Visual draws a thin black line illustrating this reference; obscured at right. This allows for multiple, quick, approximate measurements by moving the cursor to a location near desired points.

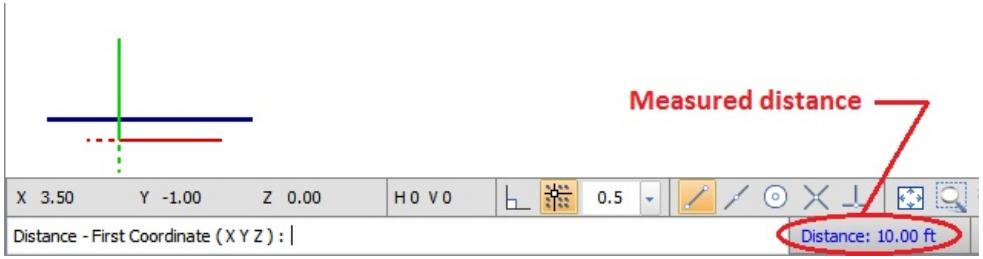


Select the second point.



Visual will display the **Distance** in the **Status** bar. The **Distance** command is automatically restarted to measure additional **Distances** as can be seen from the command direction in the **Status Bar** that is the first step in this process.

To exit the command, right-click the mouse



Lines do not need to be present for the command to provide a result. **Lines** are used here to more clearly illustrate the concept. The inputs may be based on real or imaginary lines, **Solid Objects** or ***Luminaires***.

10.4.3 Radius Tool

The ***Radius*** **Tool** is found in the **Measurement** *panel* on the **Tools** *tab* of the **Ribbonbar**.

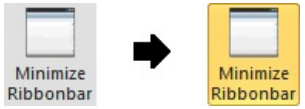
The ***Radius*** command measures the ***Radius*** of **Background** objects. The command does not operate on **Solids**.

After clicking a **Background** object, Visual displays the ***Radius*** in the **Status Bar**.

10.5 Minimize Ribbonbar

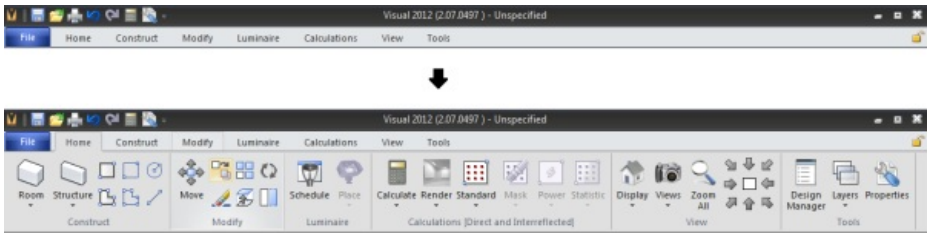
The **Minimize Ribbonbar** command is found in the **Options** *panel* of the **Tools** *tab* on the **Ribbonbar**.

The **Minimize Ribbonbar** command changes the behavior of the **Ribbonbar** to allow for a larger working space in the **Design Window**. When the function is active, the button will be highlighted in yellow.



Minimizing the **Ribbonbar** means that only the *tabs* will be shown until a *tab* is clicked. When a *tab* is clicked, Visual will "pull down" the **Ribbonbar** to allow for further command execution.

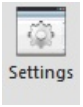
Clicking the active button will turn off the feature and maximize the **Ribbonbar**.



10.6 Settings Dialog

The **Settings** *dialog* is accessed in the **Options** *panel* of the **Tools** *tab*.

Clicking the **Settings** button initiates the **Settings** *dialog*.



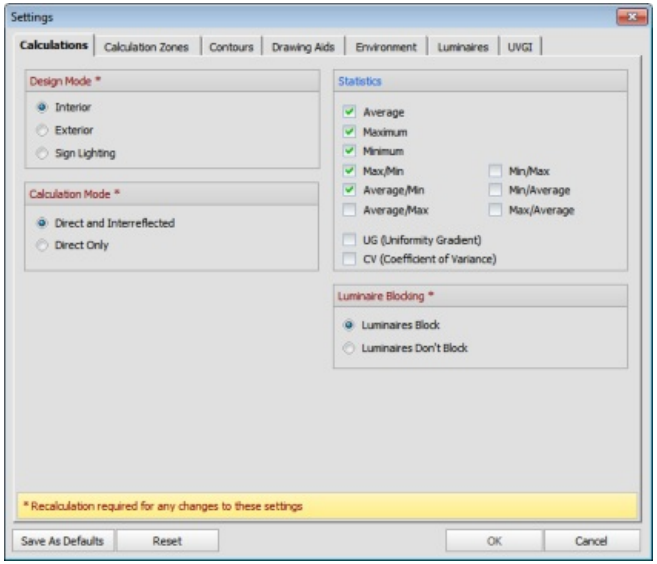
Seven *tabs* allow for advanced control of functionality and setting of defaults.

Make selections as desired and click **OK** to exit and save those choices. Click **Cancel** to exit without saving changes.

Click **Save As Defaults** to use the current choices every time Visual is opened. Choices can be made on multiple *tabs* and then **Save As Defaults** can be selected.

Click **Reset** to change all **Settings** back to the system defaults.

At the bottom of each *tab* in the *dialog*, Visual displays helpful tips about **Settings** and color-codes that to individual sections. At right, Visual indicates which **Settings** will require a recalculation to be put into affect.



10.6.1 Calculations Tab

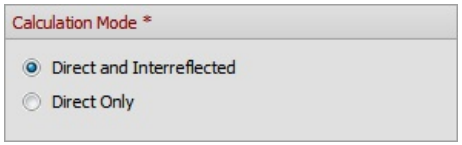
The **Calculations** *tab* is found in the **Settings** *dialog* accessed in the **Options** *panel* of the **Tools** *tab* on the **Ribbonbar**.

The **Design Mode** *panel* controls calculation engine parameters. Exhaustive testing has been done to remove the need for an overwhelming number of "sliders". Select the mode that is most applicable to the project type.

Interior Mode and **Exterior Mode** set a large number of parameters used in surface analysis, initial flux evaluation, radiative transfer analysis, and processing renderings specific to either case. Under normal circumstances, no difference in calculations will be seen.

Sign Lighting Mode expands analysis to provide proper modeling of shadows caused by sign lettering. This mode is much slower than the others and should be chosen judiciously.

The **Calculation Mode** *panel* controls whether or not Visual makes calculations of the *interreflected* component of radiative transfer. **Direct and *Interreflected*** calculates both components whereas **Direct Only** is the *direct component* only. **Direct Only** is assigned when a new **Exterior Project** is created from the **File** menu and is appropriate for area lighting, roadway, and sports projects.

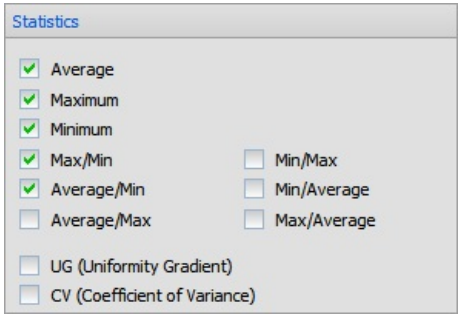


The **Statistics** *panel* controls which statistical calculations are performed and displayed in the **Statistics** *tab* of the **Sidebar**. See The Sidebar and Statistics for more information.

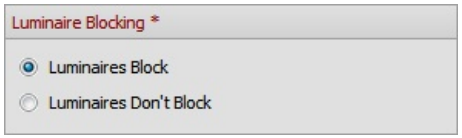
Selection of statistical quantities should be obvious except two used primarily in sports specifications:

Uniformity Gradient - This calculates the local change in lighting quantity (e.g. *illuminance*) between adjacent points in the grid. The reported value is the highest found in the calculation grid. In summary, the value quantifies how quickly lighting quantity changes and controls "bright and dark spots".

Coefficient of Variance - This is an advanced statistical calculation defined as the standard deviation divided by the mean (average) of all points. In brief, as applied to sports lighting, this is the average difference from the average, and thus measures the concept that one low *illuminance* should not overly impact the overall acceptability of a design, depending on how low that minimum may be.

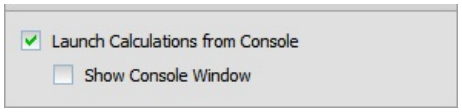


The ***Luminaire*** **Blocking** *panel* controls if Visual considers ***Luminaires*** to be light blockers or not. The implication of the two choices is as indicated in their titles. This option does not make the ***Luminaires*** *reflect* light in the radiative transfer system.

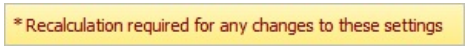


Console Mode tells Visual to open a Windows command-prompt window and

display the calculation process and minimal feedback information in a step-by-step process. This setting is for advanced users only.



Settings made in subgroups indicated with a "*" and shown in dark red will not take effect until a recalculation is performed.



Choices made apply to the current session. Click **Save As Defaults** to apply settings to other sessions. See The Calculation Engine for detailed information on how calculations are performed.

10.6.2 Calculation Zones Tab

The **Calculations Zones** *tab* is found in the **Settings** *dialog* accessed in the **Options** *panel* of the **Tools** *tab* on the **Ribbonbar**.

The **Calculation Zones** *panel* controls dimensional parameters used in Visual.

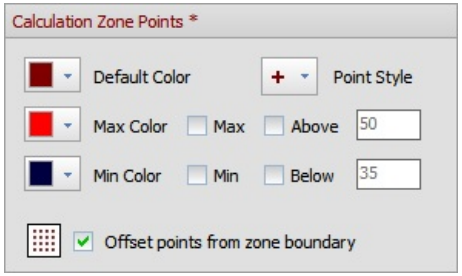
Decimal is the number of decimals displayed after the integer value. None, one, or two decimal values can be displayed. Only the options shown in the drop-down are valid.

Height (Distance) is the height offset from the selected *coordinates* that the *plane* will be placed. This may be above or below a **Surface** if **Calculation Zones Surface** is used to place the **Calculation Zone**, depending on the direction of the **Surface Normal**. A selection can be made from the choices in the pull-down or a value can be typed.

Row Spacing is the distance (in feet or meters) between points on the X-axis. A selection can be made form the choices in the pull-down or a value can be typed.

Column Spacing is the distance in (feet or meters) between points on the Y-Axis. A selection can be made from the choices in the pull-down or a value can be typed.

The **Calculation Zone Points** *panel* controls the formatting of points and values.



Default Color is the **Color** that will be assigned to newly created **Calculation Zones**.

Point Style allows for the selection of a default style for the calculation point marker.

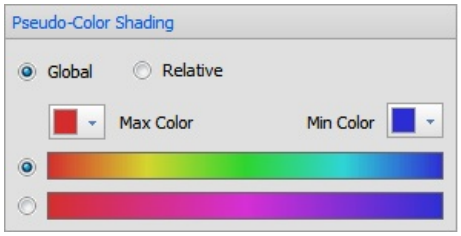
Max Color is that which is assigned to the maximum value in a zone. Unchecking the **Max** checkbox turns off highlighting. Selecting the **Above** checkbox means that values above the value in the textbox will be highlighted in the **Max Color** selection.

Min Color is that which is assigned to the minimum value in a zone. Unchecking the **Min** checkbox turns off highlighting. Selecting the **Below** checkbox means that values below the value in the textbox will be highlighted in the **Min Color** selection.

Offset points from zone boundary means Visual will offset points a certain amount depending on point spacing and **Calculation Zone** dimensions. This yields a grid of points centered in the selected area. Unchecking the box causes Visual to start placing points in the lower left corner of the selected area based on point spacing as specified in the **Calculation Zones** *panel*.

See Using the Color Dialog for more information on **Color** selection.

The **Pseudo-Color Shading** *panel* controls what is displayed in certain modes selected in the **Display** drop-down from the **Rendering** *panel* of the **Calculations** *tab* in the **Ribbonbar**.

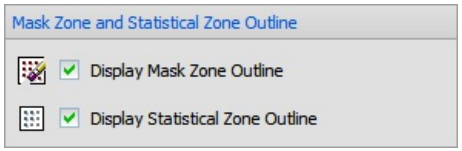


Relative will assign the **Max Color** and **Min Color** to the highest and lowest values in each **Calculation Zone**.

Global will assign the **Max Color** and **Min Color** to the highest and lowest values in all **Calculation Zones** in the *model*.

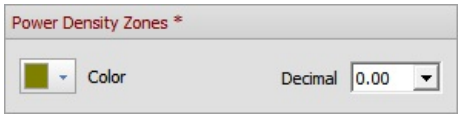
Selecting the upper **Color Preview Bar** assigns colors between **Max Color** and **Min Color** progressing clockwise around a color wheel. Selecting the lower **Color Preview Bar** progresses counterclockwise.

Selecting **Display Mask Zone Outline** will show a dashed line in the **Design Environment** that indicates where user-selected ***Masking*** has been done. This does not impact what is printed in the **Print Editor**.



Selecting **Display Statistical Zone Outline** will show a dashed line in the **Design Environment** that indicates the boundaries of **Statistical Zones** if present. This does not impact what is printed in the **Print Editor**.

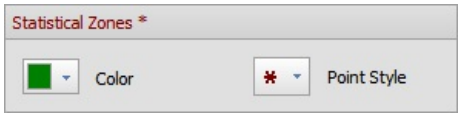
The **Power Density Zones** *panel* controls both the default color and displayed decimal accuracy of **Power Density Zones**. Valid decimal values are only those provided in the drop-down.



The **Statistical Zones** *panel* controls how Visual displays **Statistical Zones** in the **Design Environment**.

Default Color is assigned to both the **Calculation Points** and the associated text value and overrides the base selection of the **Calculation Zones.**

Point Style overrides the selection made in the base **Calculation Zones**.



Settings made in subgroups indicated with a "*" and shown in dark red will not change existing objects.

Choices made apply to the current session. Click **Save As Defaults** to apply settings to other sessions.

10.6.3 Contours Tab

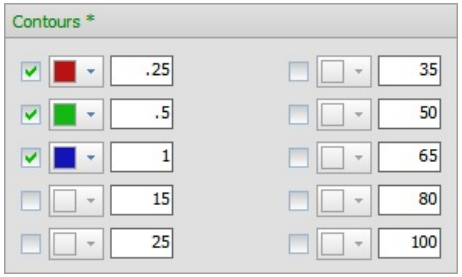
The **Settings Contours** *tab* is found in the **Settings** *dialog* accessed in the **Options** *panel* of the **Tools** *tab* on the **Ribbonbar**.

The **Contours** *panel* controls which **Contour Lines** are displayed and what **Color** is used for each line.

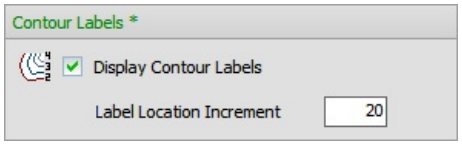
To activate a **Contour Line**, check the box next to the desired value. Once activated, a **Color** can be assigned. Values can be entered in any order. Any numerical value can be entered in the text boxes.

See Using the Color Dialog for more information on **Color** selection.

Making selections here does not turn on **Contours** . See Setting and Displaying Iso-Illuminance Contours for more information.



The **Contour Labels** *panel* controls the display of **Labels** on **Contour Lines**. Placing a check in the **Display Contour Labels** checkbox turns on labelling. The ***Label*** **Location Increment** is the (nominal) number of feet or meters between **Labels** on each **Contour Line**.



Settings made in subgroups indicated with a "*" and shown in green will have an effect on existing **Contour Lines**.

The settings on this *tab* can also be controlled in the **Design Environment** with the **Contours** drop-down in the **Calculate** *panel* found in the **Calculations** *tab* of the **Ribbonbar**.

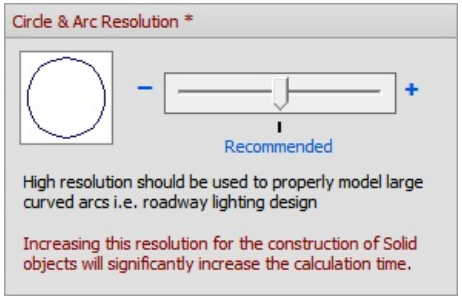
10.6.4 Drawing Aids

The **Settings** ***Drawing*** **Aids** *tab* is found in the **Settings** *dialog* accessed in the **Options** *panel* of the **Tools** *tab* on the **Ribbonbar**.

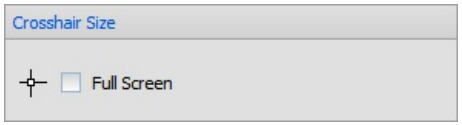
Circles and **Arcs** are drawn in Visual as multi-segment polygons and polylines. The resolution of **Circles** and **Arcs** can be changed to use a greater or lesser quantity of segments depending on the purpose and size of the **Circle** or **Arc**.

As is noted in the settings *panel*, large **Circles** and **Arcs** happen with large projects, and therefore increasing resolution would be appropriate.

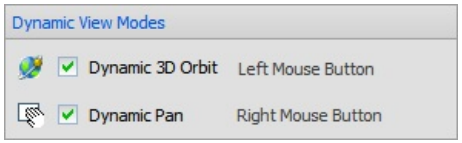
This setting applies to **Background** and **Solid** objects. As is noted in the *panel*, increasing resolution could greatly increase calculation time, but may in fact not increase accuracy in nay meaningful way. Again, this is dependent on the particular situation.



The **Crosshair Size** (the mouse cursor) can be changed from the default 150 pixel size (at full screen) to extend to the edges of the **Design Window** by placing a check in the checkbox.



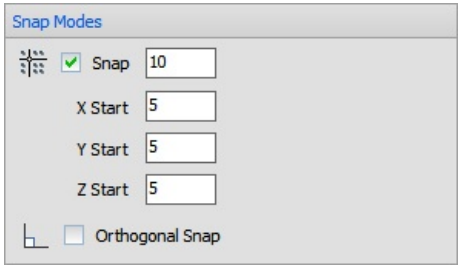
The **Dynamic Modes** *panel* allows control of whether or not the left and right mouse buttons activate the **3D Orbit** and **Pan** functions. If these checkboxes are unchecked, it is necessary to hold the *Ctrl* key to activate these modes. See Mouse Navigation for more information.



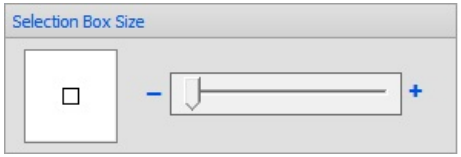
The **Snap Modes** *panel* allows control of default **Snap** settings. Similar control is available in the The Status Bar.

X, Y, and Z Start specifies an alternate **Origin** for the **Snap Increment** while leaving the *Cartesian* origin as (0,0,0). For example, entering the values at right would make the **Cursor Snap** at 5,15,25, etc.; **Snap** starts at 5 and moves in increments of 10.

Orthogonal Snap forces the cursor to move perpendicular (orthogonal) to the *Cartesian* axes. This on/off option is also provided in the **Status Bar**. See Incremental Snap for related information.



The size of the **Selection Box** used to select **Objects** can be changed from 11 pixels to 41 pixels to accommodate personal preference or need for detail. The two extremes are shown at right in actual size. See Selecting Objects for related information.



Settings made in subgroups indicated with a "*" and shown in dark red will not change existing objects.

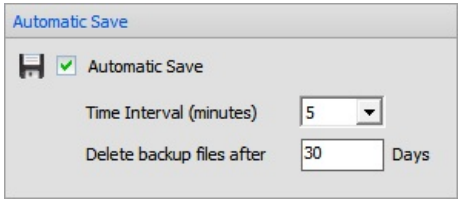
* Changes are NOT retroactive and will NOT change existing objects

10.6.5 Environment

The **Settings Environment** *tab* is found in the **Settings** *dialog* accessed in the **Options** *panel* of the **Tools** *tab* on the **Ribbonbar**.

Visual is set to **Automatic Save** a backup every 5 minutes and will retain those backup files for 30 days. Settings can be user-modified if necessary. See Automatic Recovery and File Backup for related information.

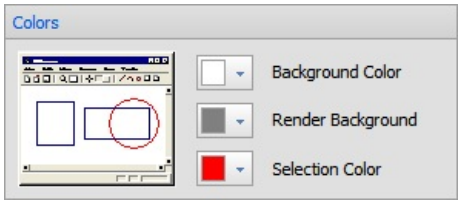
Backup files are located in the directory
[drive]:\Users*[username]*\AppData\Local\Visual 2012\Support



Background Color sets the color of the **Design Window** in most **Display Modes**.

Render Background is the color used for the **Design Window** when **Rendered Display Mode** is active. See Display Modes for related information.

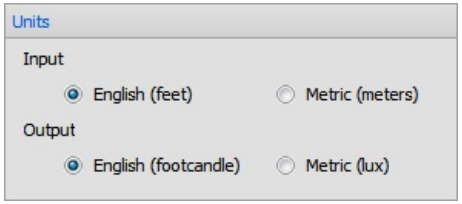
Selection Color is the color used to indicate an object is part of the **Selection Set**. See Selecting Objects for related information.



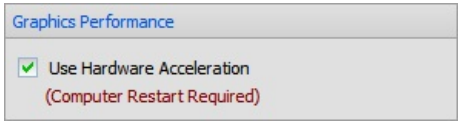
The **Units** *panel* allows choices for feet or meters and footcandles or *lux*. Changes in distance **Units** will not convert objects already drawn; i.e. a line of length "3" will change from 3 feet to 3 meters and therefore be 3.28 times longer.

Note that ***Luminance*** is calculated in cd/m^2 regardless of **Units** chosen.

It is strongly recommended that unit choices be made prior to starting a project. Conversion after objects have been created may yield non-obvious results.

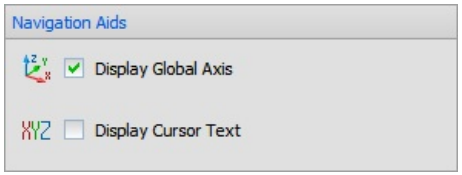


Hardware Acceleration can be turned off to remedy issues with certain graphics cards. There is no need to change this setting without the involvement of Visual Support.



A **Global Axis** *icon* can be shown in the lower left of the **Design Window**. See Cartesian Coordinates.

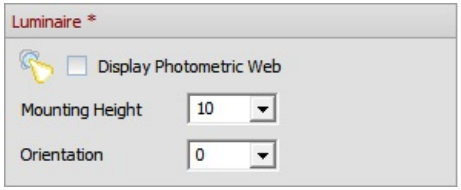
Absolute and **Relative** ***Coordinates*** can be shown near the mouse *crosshairs*. See Mouse Pointer Navigation.

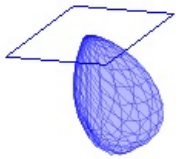


10.6.6 Luminaires

The **Settings** ***Luminaires*** *tab* is found in the **Settings** *dialog* accessed in the **Options** *panel* of the **Tools** *tab* on the **Ribbonbar**.

The ***Luminaire*** *panel* sets defaults for ***Luminaire*** placement in the **Design Environment**.



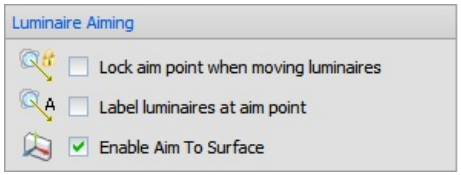


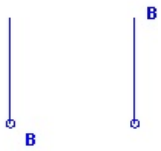
Display ***Photometric*** **Web** will show a scaled 3D mesh of the *candlepower* curve attached to the ***Symbol***.

Mounting Height is the default used when placing a ***Luminaire***, but the ***Mounting Height*** can be modified at placement.

Orientation is the default used when placing a ***Luminaire***, but the **Orientation Angle** can be modified at placement.

Luminaire **Aiming** *panel* settings are useful in *floodlighting* projects.



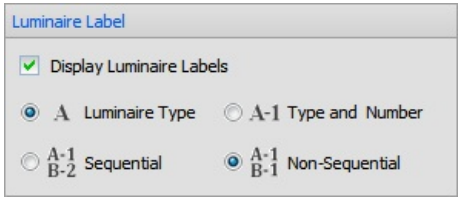


The first option will hold the **Aiming Point** *coordinates* constant when **Moving** a *luminaire*.

The second option moves the ***Luminaire Label*** from near the ***Luminaire*** to near the **Aiming Point**.

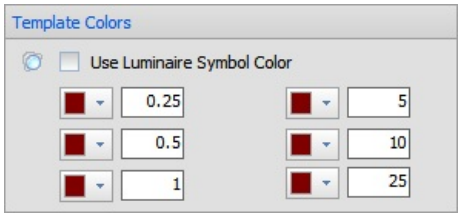
Enable Aim To Surface allows Visual to provide input and as to which surface a ***Luminaire*** is aimed. See Place and Aim Luminaires for more information.

The ***Luminaire Label*** *panel* controls default display of **Labels**. Checking the checkbox tells Visual to display **Labels** by default and activates the rest of the *panel*. Using the top radio buttons, the choice can be made to display just the type or the type and the number. If "Type and Number" is chosen, the lower radio buttons control the default method used to assign numbers.



See Luminaire Display Options for information on making modifications to change the defaults and more information on the topic.

Default ***Template*** **Colors** and magnitude can be set (not to be confused with **Contours**) to apply to new ***Luminaire*** **Types**.

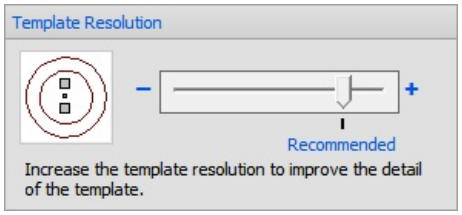


Selecting **Use** ***Luminaire Symbol*** **Color** will assign all ***Template*** lines to the **Color** of the ***Symbol*** and override any other selections.

Template **Resolution** can be changed to include a greater or lesser number of segments in the *polyline* components. The recommended value should be acceptable for a majority of situations.

In some cases, photometry is overly sparse and the user may want greater smoothing between data points. This may not correlate to the reality of *photometric* output so changes should be made with direct knowledge it is necessary and valid.

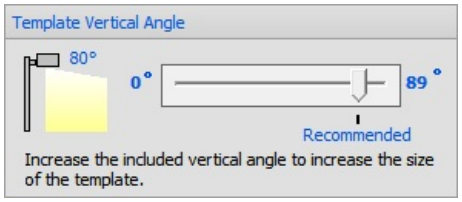
Increasing above the recommended value may cause graphic display lag depending on computer hardware configuration.



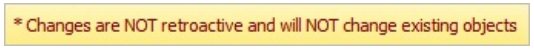
Visual includes only a portion of *photometric* output to speed ***Template*** display. Changing the ***Template*** **Vertical Angle** will include more or less *photometric* information. The graphic at the left of the *panel* displays the actual angle of inclusion and a dynamic graphic describing the inclusion angle visually. (The recommended angle is 80°.)

In a vast majority of cases, this setting should not need to be changed. If output is low or ***Template*** lines have very small *illuminance* values, truncation may be seen in the ***Template*** and adjusting the inclusion angle higher would be valid.

Increasing the angle may cause a noticeable lag in certain computer performance aspects depending on computer hardware configuration.



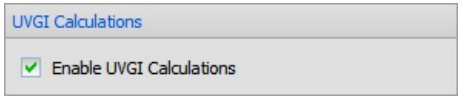
Settings made in subgroups indicated with a "*" and shown in dark red will not change existing objects.



10.6.7 UVGI

The **Settings UVGI** *tab* is found in the **Settings** *dialog* accessed in the **Options** *panel* of the **Tools** *tab* on the **Ribbonbar**.

Enabling **UVGI** Calculations allows Visual to calculate ultraviolet germicidal irradiation.



The **UVGI** *tab* will be added to the **Ribbonbar**.

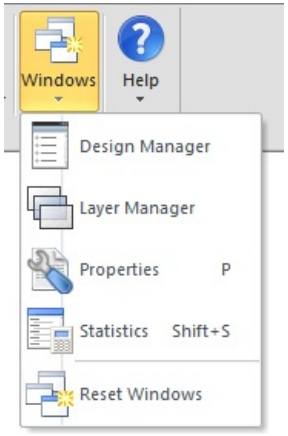
Using this function requires advanced knowledge and a different data set than "normal" lighting. See UVGI Calculations for more information.

10.7 Windows Tools

The **Windows Tools** are found in the **Windows** sub-menu of the **Options** *panel* on the **Tools** *tab* of the **Ribbonbar**.

The **Design Manager** is an always-on-top *dialog*.

These tools control the display of some **Windows** in the **Design Environment**. The base functions of the features are described in the relevant sections for **Layer Manager**, **Properties**, and **Statistics**. These features are shown in the **Sidebar**.



On occasion, Microsoft Windows and Visual don't communicate properly. This can result in the *tabs* at the bottom of the **Sidebar** disappearing. This command forces a reset of the background computer code and resolves the issue.