POINTLIGHT Command — GstarCAD 2027

3733 kbadmin September 25, 2026 Command Reference 0 14

POINTLIGHT Command

Commands > P Command > POINTLIGHT

Function Description:

This command is used to create a light source that can emit light from the source location to all directions.
Note: If the LIGHTINGUNITS system variable is set to 1 or 2, the Attenuation option has no effect on the light source. This option is kept to maintain compatibility.

Command Access:

Menu: View > Render > Light > New Point Light
Ribbon: /
Toolbar: Light > New Point Light
Command: POINTLIGHT
Alias: /

Command Prompts:

Specify source location <0,0,0>:
Enter an option to change [Name/Intensity
factor/Status/Photometry/shadoW/Attenuation/filterColor/eXit]
<eXit>:

Specify source location

Specifies a location in the drawing for the light.

Name

Specifies the name of the
light, users can use uppercase and lowercase letters, numbers, spaces, hyphens(-) and underscores(_) in the name. The maximum number of character is 256.

Intensity factor

Specifies the intensity or brightness of
the light. The intensity ranges from 0.00 to the maximum value that is supported
by your system.

Status

Turns on and turns off the light. If no light applied in the current drawing,
this setting has no effect.

Photometry

Photometry refers to the measurement of the luminous intensities of visible light sources.
When the LIGHTINGUNITS system variable is set to 1 or 2, the photometry is available.
The luminous intensity refers to the perceived power emitted from a specified direction of a light source. The luminous flux refers to the perceived power per unit of solid angle. The total luminous flux is the perceived power emitted in all directions. The luminance refers to total luminous flux on
a surface per unit area.

- **Intensity:** Enters an intensity value in candelas or perceived power that expressed by flux value or total incidence illumination on the surface. User can use Candelas (cd) to express the luminous intensity in SI units; the unit is Cd/Sr. User can use Lux (lx) to express the illumination in SI units; the unit is Lm/m2. Users can use Foot candles (fc) to express the illumination in US units; the unit is Lm/ft2. Users can choose Lux or Foot candles to specify the illumination value. Enter "d" to specify a distance of illuminance.
- **Color:**Specifies the light color based on the color name and Kelvin temperature. Users can enter "?" to display a list of color names. Users can use wild card characters to enter a text string in order to display a partial color name list. Enter"*" to display available choices. Enter "k" to specify a light color based on Kelvin temperature.
- **eXit:**
  Exits the Photometry option.

ShadoW

Creates shadows from the light source.

- **Off/On:** Turns off and turns on the display and calculation of shadows for the light. Turning shadows off increases performance.
- **Sharp:** Displays shadow with sharp edges. This option can increase performance.

- **soFtmapped:** Displays realistic shadows with soft edges.
- **Softsampled:** Displays realistic shadows with softer shadows that based on extended light sources (half shadow). Enter "S" to specify a shape of shadow, and then specify the size of shape(for example, radius of sphere or length and width of rectangle); enter "A" to specify the sample size; enter "V" to specify the visibility of shadow shape.

Attenuation

Controls how light diminishes over distance. The farther away an object is from a point light, the darker the object appears.

- **Attenuation Type:** Specifies how the light is attenuated.
- **None:** Specifies no attenuation. The objects will be the same bright no matter the distance.
- **Inverse linear:** Specifies attenuation inverse linear to the distance from the light. For example, if the object is 2 units from the light, the intensity will be half; if the object is 4 units from the light, the intensity will be quarter. The default value is half the maximum intensity.
- **inverse Squared :** Specifies attenuation inverse squared to the distance from the light. For example, if the object is 2 units from the light, the intensity will be quarter; if the object is 4 units from the light, the intensity will be one-sixteenth.
- **Use limits:** Specifies whether to use limits.
- **attenuation start Limit:** Specifies the point where light starts as an offset from the center of the light. The default value is 0.
- **attenuation End limit:** Specifies the point where light ends as an offset from the center of the light. No light projected beyond this point. Specifying the attenuation End limit increases computer performance.

filterColor

Controls the light color.

- **True color:** Specifies a True Color. Enter in R,G,B format.
- **Index color:**
  Specifies an ACI color.
- **Hsl:** Specifies an HSL color.
- **ColorBook:**
  Specifies a color from a color book.

eXit

Exits the command.

Related References

- Commands about Creating Lights

Other versions with matching text

2023 · 2024 · 2025 · 2026