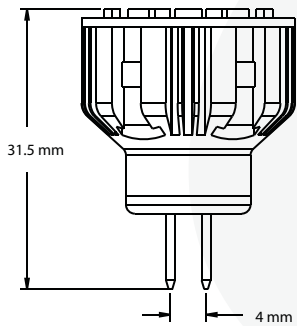
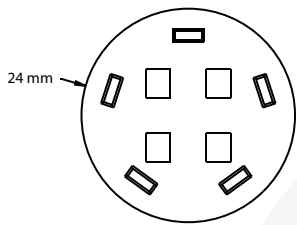


# Omnidirectional Miniature Lamp Specifications

With true 360° light output, Illumicare Group Limited's miniature LED lamps fit into thousands of existing landscape path and area lighting fixtures, which enables landscape contractors and designers to achieve immediate efficiencies in terms of reduced electrical consumption and maintenance without complicated lighting system upgrades or adjustments.

Illumicare's innovative new fully-stepped LED IC driver is a first for the landscape lighting industry. Our unique thermal control also ensures the lamp is safe to the touch and has a life expectancy of over 10 times that of most halogen equivalents.

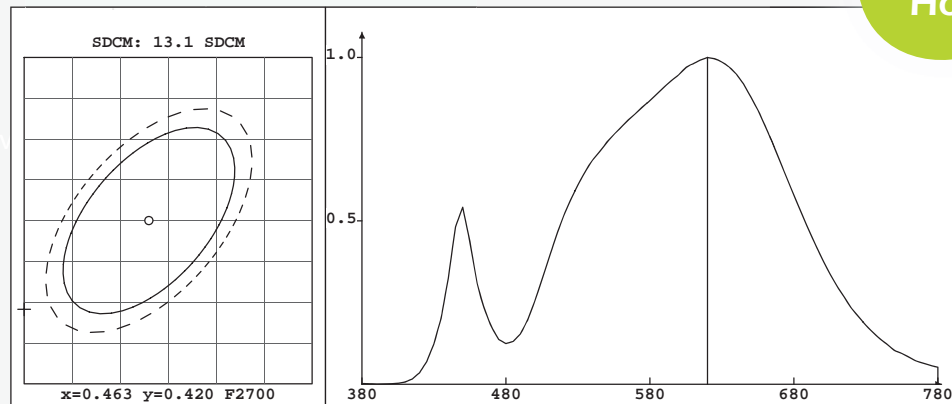
When you combine the IC driver and the unique heat sink, this lamp is capable of operating at temperatures well below the heat specifications of most leading LED chips, even when sealed inside weatherproof fixtures.



LED G4 Bi-Pin

Q10, Q15 & Q20 Replacement  
3000K  
140 Lumens  
2.16 Watts  
24mm x 31.5mm

Up to  
35,000  
Hours



- Solid aluminum heat sink – to dissipate the heat from the LED chips, allowing for longer lamp life, and for use in enclosed fixtures.
- Omnidirectional light – True 360° light output, great for use in path/area type fixtures
- Up to 35,000hr lamp life (IES LM-80 lumen maintenance test)
- Very high efficiency 60+ lumens per watt
- 3000K color temperature perfectly matched to our MR16 LED lamp
- Typical 85 CRI for true color representation
- 10-14V AC/DC operation

## Base & Lamp Types

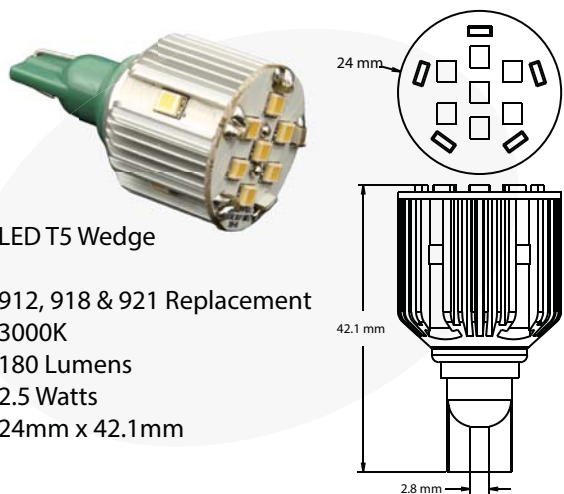
T5 Wedge - 912, 918 & 921  
S8 Wedge - 3155 & 3156  
G5.3 Bi-Pin - Q20 & Q35  
G4 Bi-Pin - Q10, Q15 & Q20  
SCB - 93, 1141 & 1156

Illumicare offers a 4-year warranty on all miniature lamps.

- Over Current Protection
- Reversed Polarity Protection
- Full Solid State Components

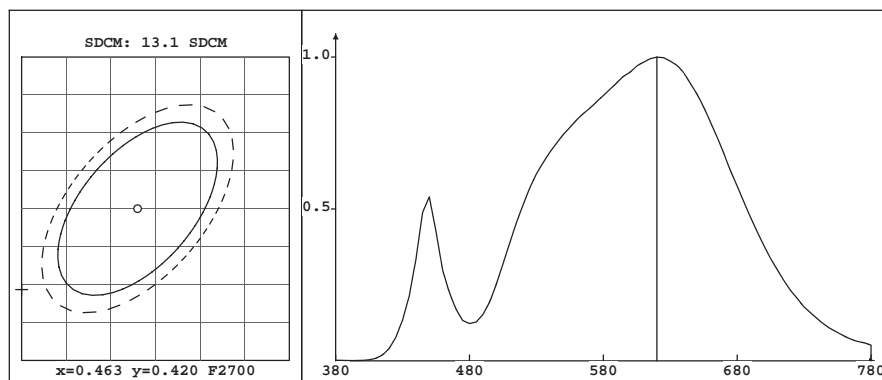
## Performance Data

Input Voltage	Output Power	Operating Temperature	Operating Environment	L70
9 - 15V AC/DC	2.16 - 3W	35 - 40°C (95 - 104°F)	-20 to 40°C (-4 - 95°F)	35,000 Hours
Base	Luminous Flux	Color Temperature (CCT)	Illumination	CRI
G5.3, G4, SCB, T5, S8	140lm - 220lm	3000K (Halogen)	Omnidirectional	80 - 85%



LED T5 Wedge

912, 918 & 921 Replacement  
3000K  
180 Lumens  
2.5 Watts  
24mm x 42.1mm

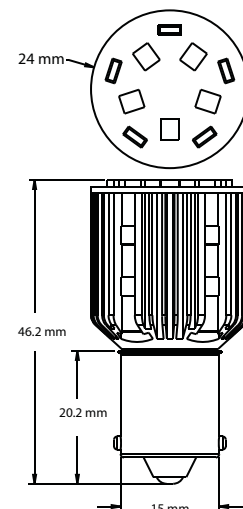
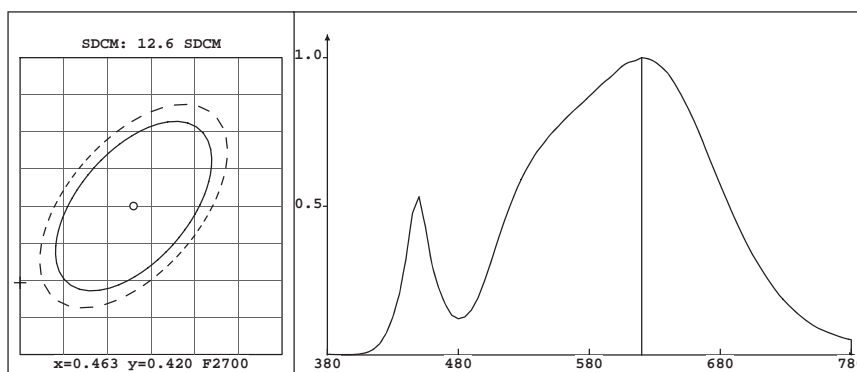


### T5 WEDGE 3000K CIE Color Specification:

- > Chromaticity coordinates:  $x=0.4401$   $y=0.4093$  /  $u=0.2503$   $v=0.3493$
- > Correlated color temperature:  $T_c = 2991K$
- > Dominant Wavelength:  $\lambda_d = 583.3nm$ , Purity: 55.0%
- > Peak Wavelength:  $\lambda_p = 620nm$ , Semibreadth:  $\Delta\lambda_p = 168.4nm$
- > Colorimetric:  $R=24.7\%$   $G=73.6\%$   $B=1.6\%$
- > Color Rendering Index:  $R_a=84.8$
- >  $R_1 = 85$   $R_2 = 88$   $R_3 = 88$   $R_4 = 85$   $R_5 = 83$   $R_6 = 81$   $R_7 = 91$   $R_8 = 78$
- >  $R_9 = 45$   $R_{10} = 69$   $R_{11} = 83$   $R_{12} = 60$   $R_{13} = 85$   $R_{14} = 92$   $R_{15} = 83$
- > Luminous Flux: 163.3 lm
- > Light Efficiency: 65.3 lm/W

### SCB 3000K CIE Color Specification:

- > Chromaticity coordinates:  $x=0.4410$   $y=0.4097$  /  $u=0.2508$   $v=0.3494$
- > Correlated color temperature:  $T_c = 2978K$
- > Dominant Wavelength:  $\lambda_d = 583.3nm$ , Purity: 55.4%
- > Peak Wavelength:  $\lambda_p = 620nm$ , Semibreadth:  $\Delta\lambda_p = 167.7nm$
- > Colorimetric:  $R=24.8\%$   $G=73.5\%$   $B=1.6\%$
- > Color Rendering Index:  $R_a=84.8$
- >  $R_1 = 85$   $R_2 = 88$   $R_3 = 88$   $R_4 = 85$   $R_5 = 83$   $R_6 = 81$   $R_7 = 91$   $R_8 = 78$
- >  $R_9 = 45$   $R_{10} = 69$   $R_{11} = 83$   $R_{12} = 60$   $R_{13} = 85$   $R_{14} = 92$   $R_{15} = 83$
- > Luminous Flux: 180.2 lm
- > Light Efficiency: 60.1 lm/W



LED SCB

93, 1141 & 1156 Replacement  
3000K  
220 Lumens  
3 Watts  
24mm x 46.2mm



### Typical Applications

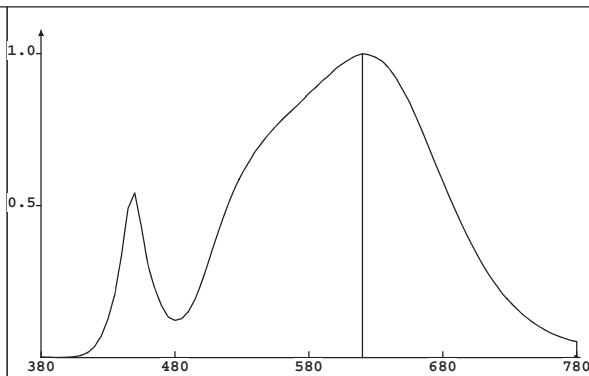
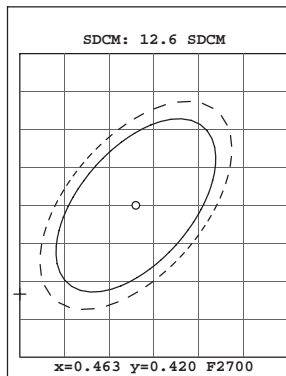
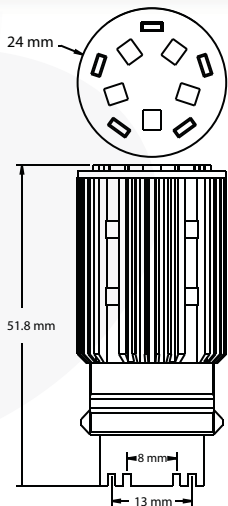
- > Landscape Lighting
- > Architectural Lighting
- > General Interior Lighting
- > Commercial Applications
- > Retail Displays (less heat than halogen)
- > Highlighting Artwork (no damaging UV)

# Omnidirectional Miniature LED Lamp Specifications



LED S8 Wedge

3155 & 3156 Replacement  
3000K  
220 Lumens  
3 Watts  
24mm x 58.1mm

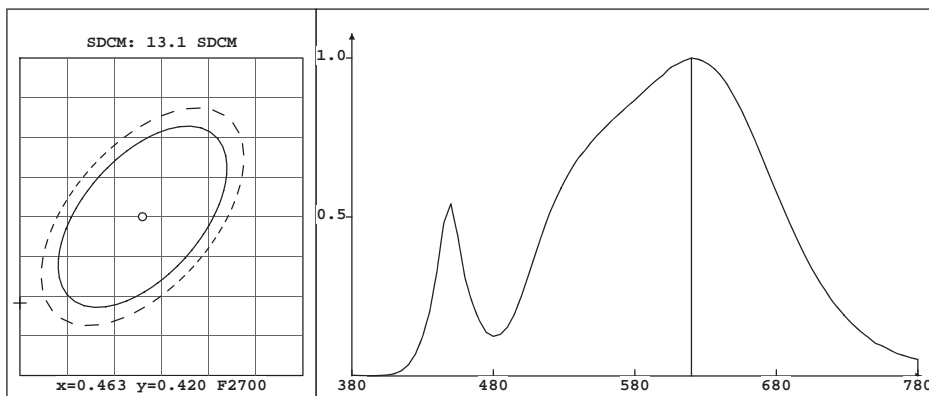


## S8 WEDGE 3000K CIE Color Specification:

- > Chromaticity coordinates:  $x=0.4407$   $y=0.4083$  /  $u=0.2511$   $v=0.3491$
- > Correlated color temperature:  $T_c = 2973K$
- > Dominant Wavelength:  $\lambda_d = 583.5nm$ , Purity: 54.8%
- > Peak Wavelength:  $\lambda_p = 620nm$ , Semibreadth:  $\Delta\lambda_p = 168.5nm$
- > Colorimetric:  $R=24.9\%$   $G=73.4\%$   $B=1.6\%$
- > Color Rendering Index:  $R_a=85.1$
- >  $R_1 = 85$   $R_2 = 88$   $R_3 = 88$   $R_4 = 86$   $R_5 = 83$   $R_6 = 82$   $R_7 = 91$   $R_8 = 78$
- >  $R_9 = 46$   $R_{10} = 70$   $R_{11} = 83$   $R_{12} = 60$   $R_{13} = 85$   $R_{14} = 92$   $R_{15} = 83$
- > Luminous Flux: 184.8 lm
- > Light Efficiency: 63.3 lm/W

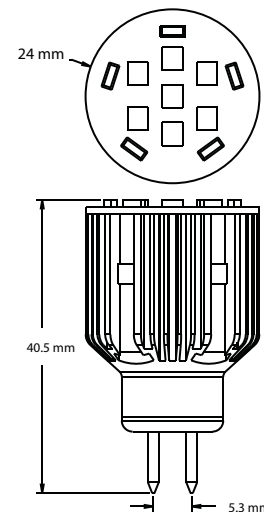
## G5.3 BIPIN 3000K CIE Color Specification:

- > Chromaticity coordinates:  $x=0.4401$   $y=0.4091$  /  $u=0.2504$   $v=0.3492$
- > Correlated color temperature:  $T_c = 2989K$
- > Dominant Wavelength:  $\lambda_d = 583.3nm$ , Purity: 54.9%
- > Peak Wavelength:  $\lambda_p = 620nm$ , Semibreadth:  $\Delta\lambda_p = 168.8nm$
- > Colorimetric:  $R=24.8\%$   $G=73.5\%$   $B=1.7\%$
- > Color Rendering Index:  $R_a=85.2$
- >  $R_1 = 85$   $R_2 = 88$   $R_3 = 88$   $R_4 = 86$   $R_5 = 83$   $R_6 = 82$   $R_7 = 91$   $R_8 = 78$
- >  $R_9 = 46$   $R_{10} = 70$   $R_{11} = 83$   $R_{12} = 60$   $R_{13} = 85$   $R_{14} = 92$   $R_{15} = 83$
- > Luminous Flux: 180.2 lm
- > Light Efficiency: 64.7 lm/W



LED G5.3 Bi-Pin

Q20 & Q35 Replacement  
3000K  
180 Lumens  
2.5 Watts  
24mm x 40.5mm



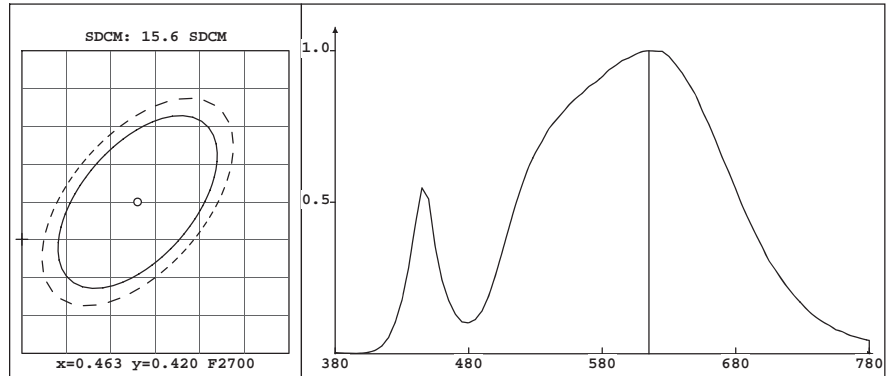
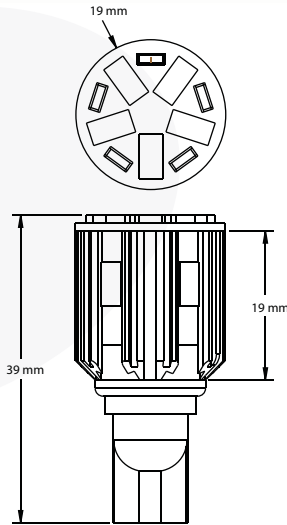
Not for use with electronic LV transformers.  
This product may cause interference with other devices.  
If interference occurs, change the location of the products involved.

# Omnidirectional Miniature LED Lamp Specifications



LED 19MM T5 Wedge

912, 918 & 921 Replacement  
3000K  
200 Lumens  
1.8 Watts  
19mm x 39mm

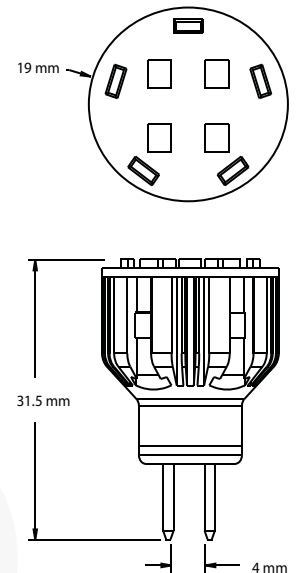
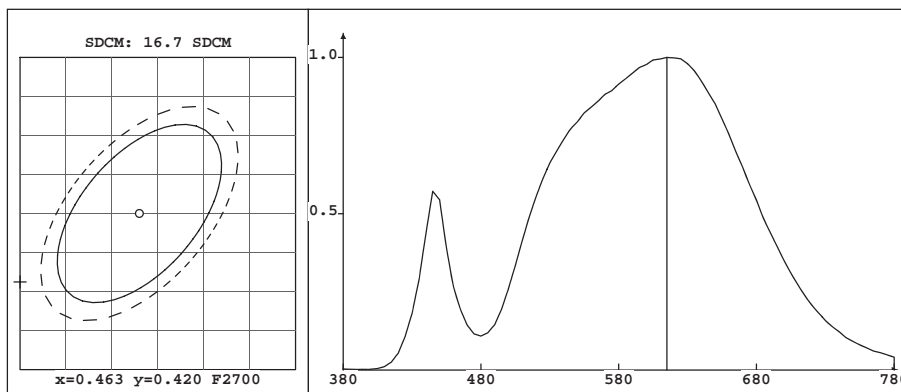


## 19MM T5 Wedge 3000K CIE Color Specification:

- > Chromaticity coordinates:  $x=0.4407$   $y=0.4184$  /  $u=0.5275$   $v=5.099$
- > Correlated color temperature:  $T_c = 3051K$
- > Dominant Wavelength:  $\lambda_d = 581.0nm$ , Purity: 57.90%
- > Peak Wavelength:  $\lambda_p = 605.5nm$ , Semibreadth:  $\Delta\lambda_p = 143.6nm$
- > Colorimetric:  $R=23.8\%$   $G=74.2\%$   $B=2.0\%$
- > Color Rendering Index:  $R_a=82.5$
- >  $R_1 = 80$   $R_2 = 87$   $R_3 = 95$   $R_4 = 82$   $R_5 = 79$   $R_6 = 84$   $R_7 = 87$   $R_8 = 64$
- >  $R_9 = 14$   $R_{10} = 72$   $R_{11} = 80$   $R_{12} = 67$   $R_{13} = 81$   $R_{14} = 97$   $R_{15} = 73$
- > Luminous Flux: 201.3 lm
- > Light Efficiency: 94.08 lm/W

## 19MM G4 BIPIN 3000K CIE Color Specification:

- > Chromaticity coordinates:  $x=0.4349$   $y=0.4112$  /  $u=0.2462$   $v=0.3492$
- > Correlated color temperature:  $T_c = 3093K$
- > Dominant Wavelength:  $\lambda_d = 582.4nm$ , Purity: 54.0%
- > Peak Wavelength:  $\lambda_p = 615nm$
- > Colorimetric:  $R=23.7\%$   $G=74.7\%$   $B=0.015\%$
- > Color Rendering Index:  $R_a=82.5$
- >  $R_1 = 82$   $R_2 = 85$   $R_3 = 86$   $R_4 = 84$   $R_5 = 80$   $R_6 = 78$   $R_7 = 89$   $R_8 = 75$
- >  $R_9 = 37$   $R_{10} = 64$   $R_{11} = 81$   $R_{12} = 55$   $R_{13} = 82$   $R_{14} = 91$   $R_{15} = 80$
- > Luminous Flux: 168.6 lm
- > Light Efficiency: 82.7 lm/W



LED 19MM G4 BIPIN

Q10, Q15 & Q20 Replacement  
3000K  
140 Lumens  
2.16 Watts  
19mm x 31.5mm

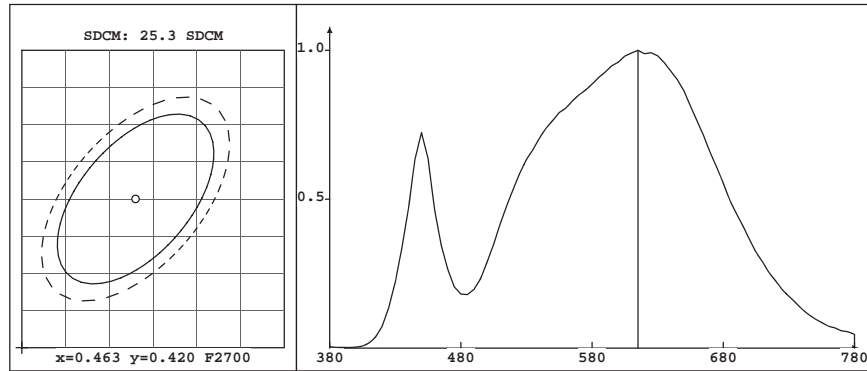
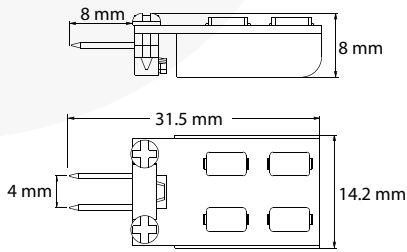
# Unidirectional Miniature LED Lamp Specifications

Pin Base Rotates Up to 45°



## LED G4 BIPIN SIDE

Q10, Q15 & Q20 Replacement  
3000K  
125 Lumens  
2.0 Watts  
24mm x 31.5mm

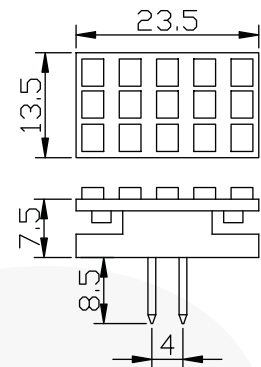
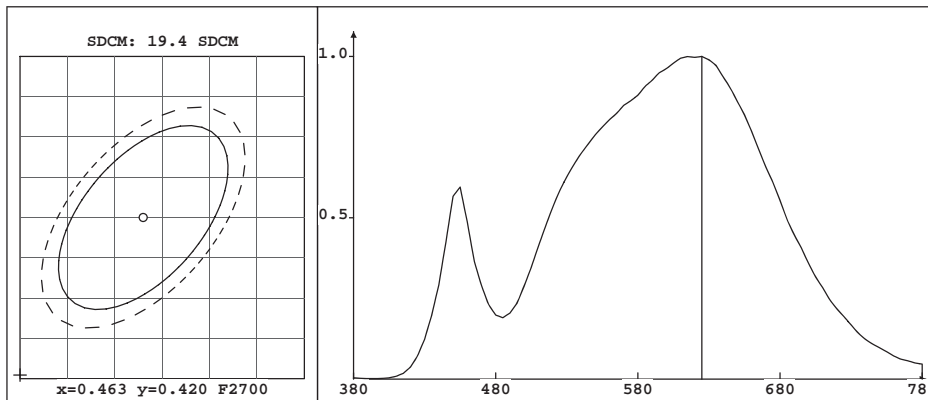


## G4 Bipin REAR 3000K CIE Color Specification:

- > Chromaticity coordinates:  $x=0.4286$   $y=0.4004$  /  $u=0.2467$   $v=0.3458$
- > Correlated color temperature:  $T_c = 3116K$
- > Dominant Wavelength:  $\lambda_d = 583.4nm$ , Purity: 48.8%
- > Peak Wavelength:  $\lambda_p = 625nm$ , Semibreadth:  $\Delta\lambda_p = 167.2nm$
- > Colorimetric:  $R=24.3\%$   $G=73.5\%$   $B=02.2\%$
- > Color Rendering Index:  $R_a=87.0$
- >  $R_1 = 87$   $R_2 = 90$   $R_3 = 91$   $R_4 = 86$   $R_5 = 85$   $R_6 = 85$   $R_7 = 91$   $R_8 = 79$
- >  $R_9 = 49$   $R_{10} = 75$   $R_{11} = 83$   $R_{12} = 65$   $R_{13} = 87$   $R_{14} = 94$   $R_{15} = 85$
- > Luminous Flux: 115 lm
- > Light Efficiency: 60.2 lm/W

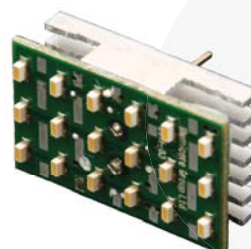
## G4 Bipin SIDE 3000K CIE Color Specification:

- > Chromaticity coordinates:  $x=0.4408$   $y=0.4173$  /  $u=0.2474$   $v=0.5270$
- > Correlated color temperature:  $T_c = 3041K$
- > Dominant Wavelength:  $\lambda_d = 581.0nm$ , Purity: 57.60%
- > Peak Wavelength:  $\lambda_p = 602.9nm$ , Semibreadth:  $\Delta\lambda_p = 141.5nm$
- > Colorimetric:  $R=23.9\%$   $G=73.7\%$   $B=02.2\%$
- > Color Rendering Index:  $R_a=85.0$
- >  $R_1 = 79$   $R_2 = 87$   $R_3 = 96$   $R_4 = 81$   $R_5 = 79$   $R_6 = 84$   $R_7 = 87$   $R_8 = 64$
- >  $R_9 = 13$   $R_{10} = 71$   $R_{11} = 79$   $R_{12} = 66$   $R_{13} = 81$   $R_{14} = 97$   $R_{15} = 73$
- > Luminous Flux: 124.1 lm
- > Light Efficiency: 72.29 lm/W



## LED G4 BIPIN REAR

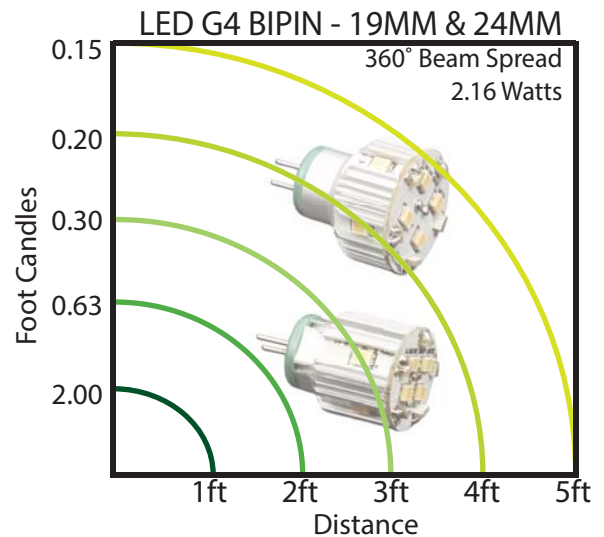
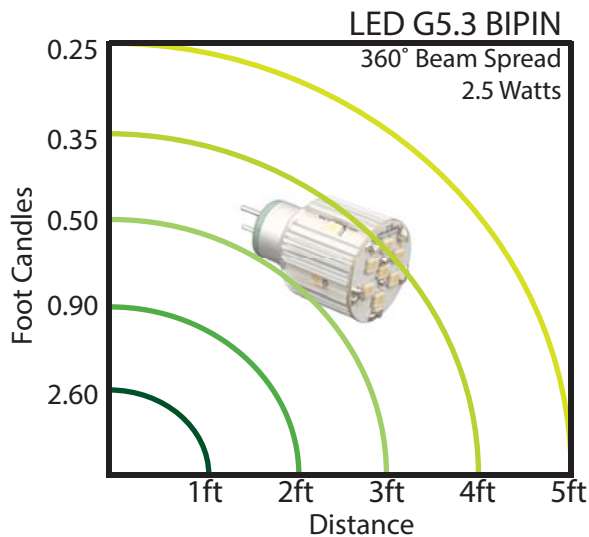
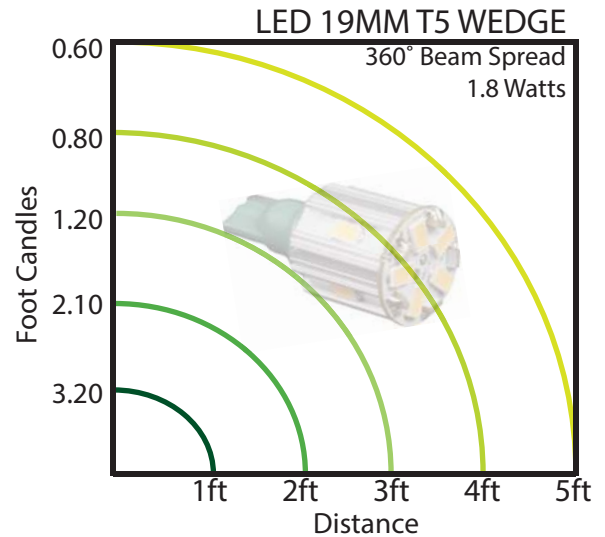
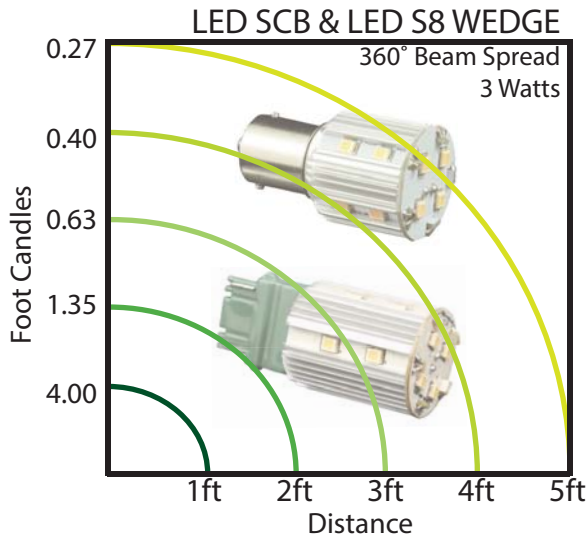
Q10, Q15 & Q20 Replacement  
3000K  
115 Lumens  
1.44 Watts  
13.5mm x 23.5mm



Not for use with electronic LV transformers.  
This product may cause interference with other devices.  
If interference occurs, change the location of the products involved.

# Omnidirectional Miniature LED Lamp Photometrics

Base down mounting position at a height of 1 foot.\*



\*Testing conducted in open air with no reflector. Results will vary based on fixture selection.

## Why Illumicare?

Illumicare Group Limited is a privately held LED research and development firm. For over 15 years, Illumicare's lighting professionals have specialized in developing and supplying high-efficiency lighting for commercial and outdoor use.

As a manufacturer of innovative LED products, our focus is eliminating the barriers involved in engineering superior LED lighting technologies and adapting to environmental demands to produce an innovative, energy-efficient lamp for both new and retrofit lighting installations.

