Winter 2012

220-240V LED Lighting Catalog

CREE®

LOOK TO CREE FOR

PROVEN INNOVATION & SUPERIOR VALUE

At Cree, customer-driven innovation is nothing new. It has been our constant focus for nearly a quarter century. In that time, we've revolutionized the lighting industry by making high-quality, sustainable LED lighting affordable and easily available.

We've also grown into a fully-integrated lighting company, with more than a million of our flagship LED downlights installed around the globe and a solid reputation for delivering top-performing LED fixtures.

Cree remains at the forefront today, developing new LED solutions that improve both our customers' spaces and their bottom lines. As our product lines grow, we not only build on our history of innovation, we also extend our record of delivering superior value with beautiful, energy-efficient lighting.

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A SOLUTION FOR EVERY NEED, EVERY SETTING

Cree is committed to delivering the best solutions on the market, inspired by the needs of our customers and perfected by the knowledge and expertise of our engineers. We recognize the importance of beautiful energy-efficient lighting and aspire to improve every business with uncompromising performance and payback.

We set the bar high, using only the best technologies and materials. With an uncompromising focus on the high-quality light that customer spaces deserve and the payback they demand, we have a solution for any project—whatever the application, whatever the budget.

LRP38-230V

LED DOWNLIGHTS

LED LAMPS

LED TROFFERS

DOWNLIGHT TRIMS


CR100™
CR24™
CR22™
CR150™

WHY CREE LED LIGHTING?

PROVEN, REVOLUTIONARY TECHNOLOGY

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We've also grown into a fully-integrated lighting company, with more than a million of our flagship LED downlights installed around the globe and a solid reputation for delivering top-performing LED fixtures.

Cree remains at the forefront today, developing new LED solutions that improve both our customers' spaces and their bottom lines. As our product lines grow, we not only build on our history of innovation, we also extend our record of delivering superior value with beautiful, energy-efficient lighting.

CREE®
TRUE WHITE
TECHNOLOGY

90 CRI under Cree LED lighting

80 CRI under fluorescent lighting

TRUE COLOR MATTERS

Color is a powerful element in every space. It establishes the tone and personality of our homes and businesses. It not only shapes our moods, it can influence our buying decisions and enhance our ability to learn and interact.

Consumers are naturally drawn to rich colors. Vibrant shades of fruit and produce reveal their freshness. Our own natural skin tones reveal our health and facilitate better human interaction. Colorful settings appeal to our senses, engaging students, shoppers, and employees alike.

In these ways, the color rendering property of light plays a critical role in creating spaces that appeal, inspire, and inform. With 90+ CRI, fixtures powered by Cree TrueWhite® Technology beautifully render the true colors of everything from fresh fruit to apparel, delivering value far beyond their energy savings.

LED DOWNLIGHTS

Cree downlights blend beauty and performance with the same superior light quality as traditional fixtures but at a fraction of the energy used. With a wide variety of configurations, Cree downlights are ideal for all recessed lighting applications—from new construction to retrofit and commercial to residential settings.

CR100 Family

p.08

· 630 lumens, 11.0W, Deep Recess
· 680 lumens, 11.0W, Shallow Recess
· 90 CRI at 3000K
· Dimmable to 5%

CR150

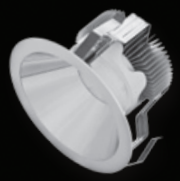
p.12

· 1000 lumens, 14W
· 650 lumens, 9.5W
· 90 CRI at 3000K or 4000K
· Dimmable to 5%

LR150-2000L

p.14

· 2000 lumens, 31W
· 90 CRI at 3000K or 4000K
· Dimmable to 5%



LR-200™ Family

p.16

· 2000 lumens, 27W
· 3000 lumens, 40W
· 90 CRI at 3000K or 4000K
· Dimmable to 5%

LR4-230V

p.18

· 540 lumens, 12W
· 90 CRI at 2700K or 3500K
· Dimmable to 20%

LR6-230V Family

p.20

· 650 lumens, 12W
· 1000 lumens, 12.5W
· Low-profile model available
· 90 CRI at 2700K, 3500K, or 4000K
· Dimmable to 20%

CR100-DR630L

100mm Deep Recess LED Downlight

Product Description

The CR100-DR630L deep recess LED downlight delivers 630 lumens of exceptional 90+ CRI light while achieving over 57 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology. The CR100-DR630L is available in a warm color temperature and features spec grade aesthetics with a polished lower reflector. It is designed to easily install in 85-100mm diameter ceiling openings, making the CR100-DR630L perfect for use as an MR16 replacement in both residential and commercial applications.

Performance Summary

- Utilizes Cree TrueWhite® Technology
- Active Color Management
- **Delivered Light Output**: 630 lumens
- **Input Power:** 11.0 watts
- **CRI:** 90
- **CCT**: 3000K
- **Input Voltage**: 220-240V
- 20° Shield Angle
- **Warranty**: 5 years
- **Lifetime:** Designed to last 50,000 hours
- **Dimming**: Dimmable with recommended Triac dimmers*

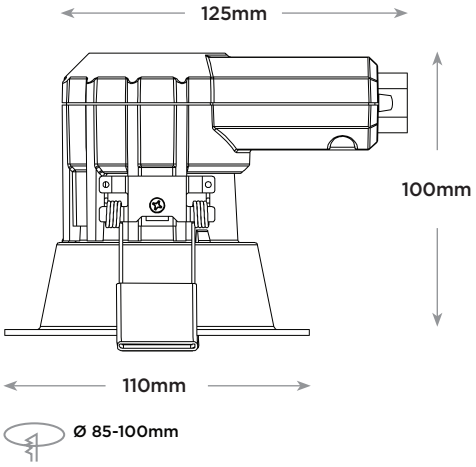
Ordering Information

Example: CR100-DR630L-30K-23

Product
CR100-DR630L-30K-23 CE/CB certified
CR100-DR630L-30K-23-CP CCC certified

* Reference CreeLighting.com/International for recommended dimmers.

CR100-DR630L



Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

CONSTRUCTION & MATERIALS

- Durable die-cast aluminum housing protects LEDs, driver and power supply. Spring clips resist heat while providing retention for flush ceiling fit.
- Thermal management system uses integral heat sink to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum when installed in non-insulated ceiling applications. Not for direct burial in insulation.
- One-piece polished aluminum lower reflector redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane.

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Deep set diffusing lens shields direct view of LEDs and provides more precise optical control with greater visual cut-off.

ELECTRICAL SYSTEM

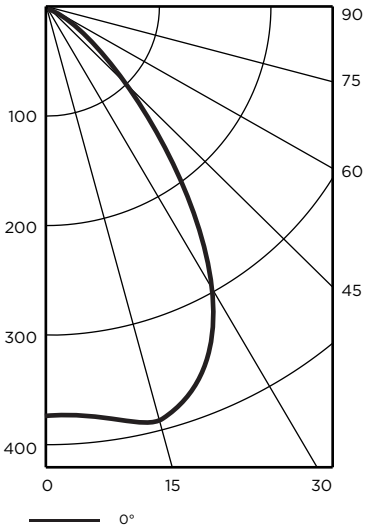
- Integral, high-efficiency driver and power supply.
- **Power Factor** > 0.9 nominal
- **Input Voltage**: 220-240V, 50Hz
- **Dimming**: Dimmable with recommended Triac dimmers. Reference CreeLighting.com/International for recommended dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE/CB certified.
- CCC certified.

Photometry

CR100-DR630L BASED ON LTL TEST #: 27697



Intensity (Candlepower) Summary

Angle	Mean CP
0°	370
5°	373
15°	389
25°	362
35°	255
45°	135
55°	52
65°	8
75°	0
85°	0
90°	0

Zonal Lumen Summary

Zone	Lumens	% Fix
0-30	311	49%
0-40	468	74%
0-60	621	99%
0-90	630	100%

Reference CreeLighting.com/International for detailed photometric data.

Installation

- CR100-DR630L is designed to easily install in 85-100mm diameter ceiling openings.
- Compatible with ceiling thickness ranging from 0.7-20mm.
- Spring clips engage with ceiling to hold luminaire in place.
- Internal terminal block enables easy connection to power.

  NOTE: Reference CreeLighting.com/International for detailed installation instructions.

Application Reference

Open Space					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2 x 1.2	630	11	57	7.33	475
1.8 x 1.8				3.42	220
2.4 x 2.4				1.83	120
3.0 x 3.0				1.22	80

Ceiling Height = 2.7m, 80/50/20 Reflectances, 0.75m workplane.
LLF: 1.0 Initial. Open Space: 15m x 12m

Corridor					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2m on Center	630	11	57	1.53	197
1.8m on Center				1.04	166
2.4m on Center				0.73	120
3.0m on Center				0.61	99

Ceiling Height = 2.7m, 80/50/20 Reflectances, light levels on ground.
LLF: 1.0 Initial. Corridor: 1.5m Wide x 30m Long

CR100-680L

100mm LED Downlight

Product Description

The CR100-680L LED downlight delivers 680 lumens of exceptional 90+ CRI light while achieving over 62 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology. The CR100-680L is available in a warm color temperature and features spec grade aesthetics with a polished lower reflector. It is designed to easily install in 80-95mm diameter ceiling openings, making the CR100-680L perfect for use as an MR16 replacement in both residential and commercial applications.

Performance Summary

- Utilizes Cree TrueWhite® Technology
- Active Color Management
- **Delivered Light Output**: 680 lumens
- **Input Power**: 11.0 watts
- **CRI**: 90
- **CCT**: 3000K
- **Input Voltage**: 220-240V
- 5° Shield Angle
- **Warranty**: 5 years
- **Lifetime**: Designed to last 50,000 hours
- **Dimming**: Dimmable with recommended Triac dimmers*

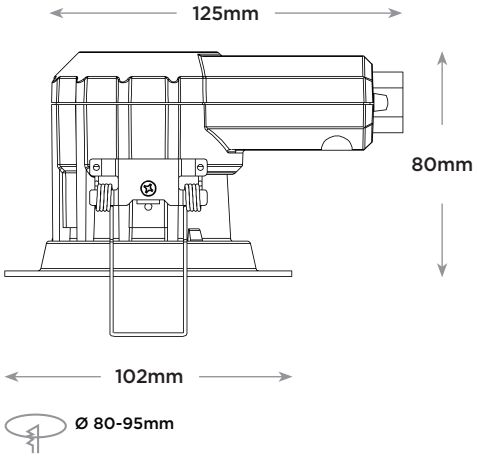
Ordering Information

Example: CR100-680L-30K-23

Product
CR100-680L-30K-23 CE/CB certified
CR100-680L-30K-23-CP CCC certified

* Reference CreeLighting.com/International for recommended dimmers.

CR100-680L



Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

CONSTRUCTION & MATERIALS

- Durable die-cast aluminum housing protects LEDs, driver and power supply. Spring clips resist heat while providing retention for flush ceiling fit.
- Thermal management system uses integral heat sink to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum when installed in non-insulated ceiling applications. Not for direct burial in insulation.
- One-piece polished aluminum lower reflector redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane.

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens shields direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high-angle appearance.

ELECTRICAL SYSTEM

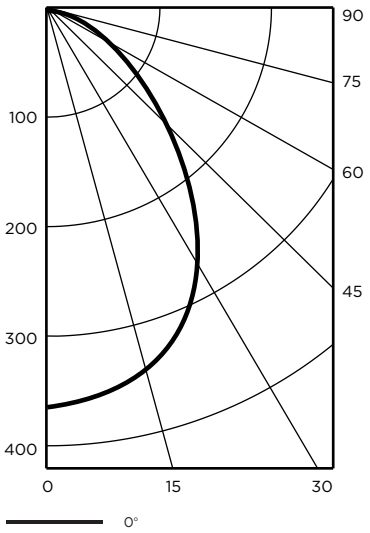
- Integral, high-efficiency driver and power supply.
- **Power Factor** > 0.9 nominal
- **Input Voltage**: 220-240V, 50Hz
- **Dimming**: Dimmable with recommended Triac dimmers. Reference CreeLighting.com/International for recommended dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE/CB certified.
- CCC certified.

Photometry

CR100-680L BASED ON LTL TEST #: 25972



Intensity (Candlepower) Summary

Angle	Mean CP
0°	367
5°	365
15°	342
25°	296
35°	230
45°	157
55°	95
65°	48
75°	16
85°	0
90°	0

Zonal Lumen Summary

Zone	Lumens	% Fix
0-30	266	39%
0-40	410	60%
0-60	617	91%
0-90	680	100%

Reference CreeLighting.com/International for detailed photometric data.

Installation

- CR100-680L is designed to easily install in 80-95mm diameter ceiling openings.
- Compatible with ceiling thickness ranging from 0.7-20mm.
- Spring clips engage with ceiling to hold luminaire in place.
- Internal terminal block enables easy connection to power.

NOTE: Reference CreeLighting.com/International for detailed installation instructions.

Application Reference

Open Space					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2 x 1.2	680	11	62	7.33	485
1.8 x 1.8				3.42	224
2.4 x 2.4				1.83	123
3.0 x 3.0				1.22	81

Ceiling Height = 2.7m, 80/50/20 Reflectances, 0.75m workplane.
LLF: 1.0 Initial. Open Space: 15m x 12m

Corridor					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2m on Center	680	11	62	1.53	186
1.8m on Center				1.04	156
2.4m on Center				0.73	112
3.0m on Center				0.61	93

Ceiling Height = 2.7m, 80/50/20 Reflectances, light levels on ground.
LLF: 1.0 Initial. Corridor: 1.5m Wide x 30m Long

CR150™
150mm LED Downlight

Product Description

The CR150™ LED downlight delivers up to 1000 lumens of exceptional 90+ CRI light while achieving over 68 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology. The CR150 is available in a warm and cool color temperatures and has a variety of trim options. It easily installs into 150-175mm diameter ceiling openings, making the CR150 perfect for use in both residential and commercial applications.

Performance Summary

- Utilizes Cree TrueWhite® Technology
- Active Color Management
- **Delivered Light Output**: 650, 1000 lumens
- **Input Power**: 9.5, 14 watts
- **CRI**: 90
- **CCT**: 3000K, 4000K
- **Input Voltage**: 220-240 VAC
- **Warranty**: 5 years
- **Lifetime**: Designed to last 50,000 hours
- **Dimming**: Dimmable to 5%*

Installation

- Designed to easily install in 150-175mm diameter ceiling openings.
- Spring clips engage with ceiling to hold luminaire in place.
- Remote gear box contains a conduit installation plate and a sheathed wire installation plate.

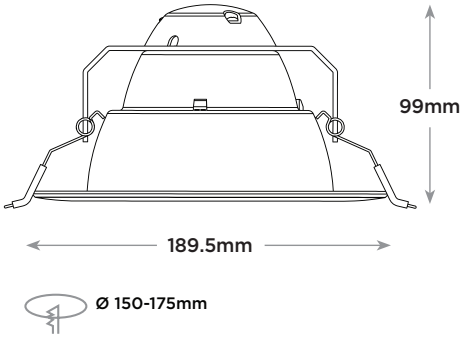
NOTE: Reference CreeLighting.com/International for detailed installation instructions.

Accessories

Reference Downlight Trims Section for more details.

Trims & Reflectors
CT6A Diffuse anodized finish reflector
CT6AW Wheat diffuse anodized finish reflector
CT6AB Black diffuse anodized finish reflector
CT6BB Flat black finish trim and reflector
Reference back page for Trim Finish Options

CR150



Ordering Information

Example: CR150-1000L-40K-23

CR150					
Product	Lumen Output	Color Temperature	Voltage	Control	Options
CR150	**650L** 9.5W 650 lumens **1000L** 14W 1000 lumens	**30K** 3000 Kelvin **40K** 4000 Kelvin	**23** 220-240 Volt	**BLANK** Triac Dimming to 5%*	**BLANK** CE/CB certified **CP** Pending CCC certification

* Reference CreeLighting.com/International for recommended dimmers.

Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

CONSTRUCTION & MATERIALS

- Durable die-cast aluminum housing protects LEDs, driver and power supply. Spring clips resist heat while providing retention for flush ceiling fit.
- Engineered polycarbonate remote gear box protects driver, power supply and terminal block.
- Thermal management system uses integral heat sink to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum when installed in non-insulated ceiling applications. Not for direct burial in insulation.
- One-piece aluminum lower reflector redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane and easily accommodates CT6 snap-in trims.

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens shields direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

ELECTRICAL SYSTEM

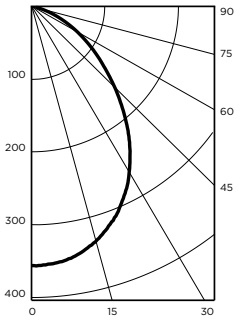
- Remote high-efficiency driver and power supply.
- **Power Factor** > 0.9
- **Input Voltage**: 220-240V, 50/60Hz
- **Dimming**: Dimmable to 5% with recommended dimmers. Reference CreeLighting.com/International for recommended dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE/CB certified.
- Pending CCC certification.

Photometry

CR150-650L-3000K BASED ON LTL REPORT #: 28506
CR150-1000L-3000K BASED ON LTL REPORT #: 28507

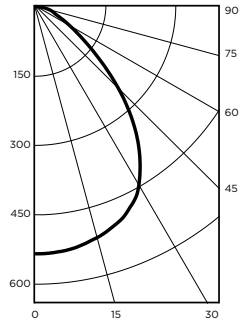


Zonal Lumen Summary

Zone	Lumens	% Lamp
0-30	268	41%
0-40	414	64%
0-60	587	90%
0-90	650	100%

Intensity (Candlepower) Summary

Angle	Mean CP
0°	353
5°	351
15°	337
25°	305
35°	234
45°	142
55°	70
65°	35
75°	20
85°	6
90°	0



Zonal Lumen Summary

Zone	Lumens	% Lamp
0-30	413	41%
0-40	637	64%
0-60	902	90%
0-90	1000	100%

Intensity (Candlepower) Summary

Angle	Mean CP
0°	543
5°	541
15°	519
25°	472
35°	361
45°	217
55°	107
65°	54
75°	33
85°	8
90°	0

Reference CreeLighting.com/International for detailed photometric data.

Application Reference

Open Space					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2 x 1.2	650	9.5	68	6.33	462
1.8 x 1.8		9.5	68	2.96	214
2.4 x 2.4		9.5	68	1.58	117
3.0 x 3.0		9.5	68	1.06	78
1.2 x 1.2	1000	14	71	9.33	733
1.8 x 1.8		14	71	4.36	340
2.4 x 2.4		14	71	2.33	186
3.0 x 3.0		14	71	1.56	123

Ceiling Height = 2.7m, 80/50/20 Reflectances, 0.75m workplane.
LLF: 1.0 Initial. Open Space: 15m x 12m

Corridor					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2m on Center	650	9.5	68	1.32	181
1.8m on Center		9.5	68	0.90	153
2.4m on Center		9.5	68	0.63	110
3.0m on Center		9.5	68	0.53	91
1.2m on Center	1000	14	71	1.94	287
1.8m on Center		14	71	1.32	242
2.4m on Center		14	71	0.93	175
3.0m on Center		14	71	0.78	144

Ceiling Height = 2.7m, 80/50/20 Reflectances, light levels on ground.
LLF: 1.0 Initial. Corridor: 1.5m Wide x 30m Long

CREE TRUE WHITE TECHNOLOGY

LR150-2000L

150mm High Output Architectural LED Downlight

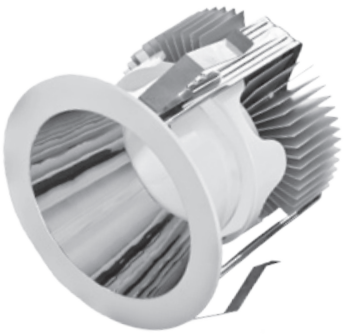
Product Description

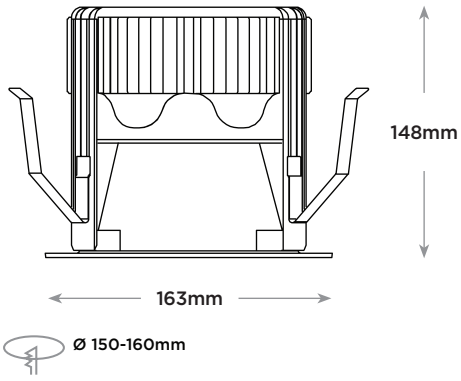
The LR150-2000L high output architectural LED downlight delivers 2000 lumens of exceptional 90+ CRI light while achieving over 64 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology. The LR150-2000L is available in warm and cool color temperatures and features spec grade aesthetics with a polished lower reflector. It is designed to easily install in 150-160mm diameter ceiling openings, making the LR150-2000L perfect for use as a CFL downlight replacement in commercial new construction or retrofit applications.

Performance Summary

- Utilizes Cree TrueWhite® Technology
- Active Color Management
- **Delivered Light Output**: 2000 lumens
- **Input Power**: 31 watts
- **CRI**: 90
- **CCT**: 3000K, 4000K
- **Input Voltage**: 220-240V
- **Warranty**: 5 years
- **Lifetime**: Designed to last 50,000 hours
- **Dimming**: Dimmable to 5% with DALI and Analog 1-10V dimmers

LR150-2000L





Ordering Information

Example: LR150-2000L-40K-23-ADIM

LR150-2000L					
Product	Lumen Output	Color Temperature	Voltage	Control	Options
LR150-2000L	**2000L** 31W 2000 lumens	**30K** 3000 Kelvin **40K** 4000 Kelvin	**23** 220-240 Volt	**ADIM** 1-10V Dimming **DALI** Dimmable to 5%*	**BLANK** CE/CB certified **CP** CCC certified

* Reference CreeLighting.com/International for recommended dimmers.

Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

CONSTRUCTION & MATERIALS

- Durable engineered polycarbonate housing and support cup protect LEDs and optical lens. Integral spring clips resist heat while providing retention for flush ceiling fit.
- Engineered polycarbonate remote gear box protects driver, power supply and terminal block.
- Thermal management system uses extruded aluminum heat sink to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum when installed in non-insulated ceiling applications. Not for direct burial in insulation.
- One-piece engineered polycarbonate lower reflector with vacuum metalized finish redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane.

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens shields direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

ELECTRICAL SYSTEM

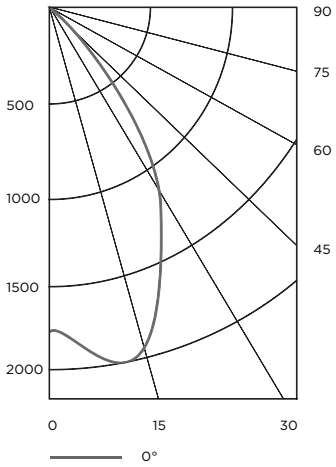
- Remote, high-efficiency driver and power supply.
- **Power Factor** > 0.9 nominal
- **Input Voltage**: 220-240V, 50/60Hz
- **Dimming**: Dimmable to 5% with DALI and Analog 1-10V dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE/CB certified.
- CCC certified.

Photometry

LR150-2000L BASED ON LTL TEST # 22897



Intensity (Candlepower) Summary

Angle	Mean CP
0°	1749
5°	1867
15°	1922
25°	1407
35°	738
45°	209
55°	15
65°	0
75°	0
85°	0
90°	0

Zonal Lumen Summary

Zone	Lumens	% Fix
0-30	1351	68%
0-40	1809	90%
0-60	2000	100%
0-90	2000	100%

Reference CreeLighting.com/International for detailed photometric data.

Installation

- Designed to easily install in 150-160mm diameter ceiling opening.
- Integral spring clips engage with ceiling to hold luminaire in place.
- Remote gear box contains a conduit installation plate and a sheathed wire installation plate.

NOTE: Reference CreeLighting.com/International for detailed installation instructions.

Application Reference

Open Space					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2 x 1.2	2000	31	64	20.67	1324
1.8 x 1.8				9.64	613
2.4 x 2.4				5.17	337
3.0 x 3.0				3.44	247

Ceiling Height = 4.5m, 80/50/20 Reflectances, 0.75m workplane.
LLF: 1.0 Initial. Open Space: 15m x 12m

Corridor					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2m on Center	2000	31	64	17.22	447
1.8m on Center				11.71	302
2.4m on Center				8.27	218
3.0m on Center				6.89	180

Ceiling Height = 4.5m, 80/50/20 Reflectances, light levels on ground.
LLF: 1.0 Initial. Corridor: 1.5m Wide x 30m Long

LR200™

200mm High Output Architectural LED Downlight

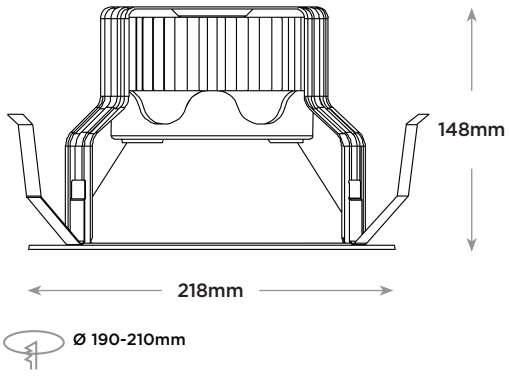
Product Description

The LR200™ high output architectural LED downlight delivers up to 3000 lumens of exceptional 90+ CRI light while achieving over 74 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology. The LR200 is available in warm and cool color temperatures and features spec grade aesthetics with a polished lower reflector. It is designed to easily install in 190-210mm diameter ceiling openings, making the LR200 perfect for use as a CFL and metal halide downlight replacement in commercial new construction or retrofit applications.

Performance Summary

- Utilizes Cree TrueWhite® Technology
- Active Color Management
- **Delivered Light Output**: 2000, 3000* lumens
- **Input Power**: 27, 40 watts
- **CRI**: 90
- **CCT**: 3000K, 4000K
- **Input Voltage**: 220-240V
- **Warranty**: 5 years
- **Lifetime**: Designed to last 50,000 hours
- **Dimming**: Dimmable to 5% with DALI and Analog 1-10V dimmers

LR200



Ordering Information

Example: LR200-2000L-40K-23-ADIM

LR200					
Product	Lumen Output	Color Temperature	Voltage	Control	Options
LR200	**2000L** 27W 2000 lumens - 74 LPW **3000L** 40W 3000 lumens - 75 LPW*	**30K** 3000 Kelvin **40K** 4000 Kelvin	**23** 220-240 Volt	**ADIM** 1-10V Dimming **DALI** Dimmable to 5%	**BLANK** CE/CB certified **CP** CCC certified

*Pending CCC certification.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

CONSTRUCTION & MATERIALS

- Durable engineered polycarbonate housing and support cup protect LEDs and optical lens. Integral spring clips resist heat while providing retention for flush ceiling fit.
- Engineered polycarbonate remote gear box protects driver, power supply and terminal block.
- Thermal management system uses extruded aluminum heat sink to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum when installed in non-insulated ceiling applications. Not for direct burial in insulation.
- One-piece engineered polycarbonate lower reflector with vacuum metalized finish redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane.

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens shields direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

ELECTRICAL SYSTEM

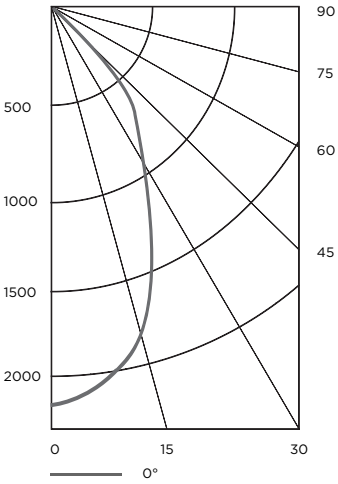
- Remote high-efficiency driver and power supply.
- **Power Factor** > 0.9 nominal
- **Input Voltage**: 220-240V, 50/60Hz
- **Dimming**: Dimmable to 5% with DALI and Analog 1-10V dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE/CB certified.
- CCC certified.

Photometry

LR200-2000L BASED ON LTL TEST #: 22891



Intensity (Candlepower) Summary

Angle	Mean CP
0°	2177
5°	2126
15°	1866
25°	1129
35°	733
45°	328
55°	55
65°	0
75°	0
85°	0
90°	0

Zonal Lumen Summary

Zone	Lumens	% Fix
0-30	1237	62.0%
0-40	1689	84.0%
0-60	1999	99.0%
0-90	2000	100%

Reference CreeLighting.com/International for detailed photometric data.

Installation

- Designed to easily install in 190-210mm diameter ceiling openings.
- Integral spring clips engage with ceiling to hold luminaire in place.
- Remote gear box contains a conduit installation plate and a sheathed wire installation plate.

NOTE: Reference CreeLighting.com/International for detailed installation instructions.

Application Reference

Open Space					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2 x 1.2	2000	27	74	18.00	1298
1.8 x 1.8				8.40	602
2.4 x 2.4				4.50	331
3.0 x 3.0				3.00	241

Ceiling Height = 4.5m, 80/50/20 Reflectances, 0.75m workplane.
LLF: 1.0 Initial. Open Space: 15m x 12m

Corridor					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2m on Center	2000	27	74	15.00	439
1.8m on Center				10.20	297
2.4m on Center				7.20	215
3.0m on Center				6.00	177

Ceiling Height = 4.5m, 80/50/20 Reflectances, light levels on ground.
LLF: 1.0 Initial. Corridor: 1.5m Wide x 30m Long

LR4-230V

145mm Architectural LED Downlight

Product Description

The LR4-230V architectural LED downlight delivers 540 lumens of exceptional 90+ CRI light while achieving 45 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology. The LR4-230V is available in warm or neutral color temperatures and has a variety of trim options. It is designed to easily install in 145-160mm diameter ceiling openings, making the LR4-230V perfect for use as a CFL replacement in both residential and commercial applications.

Performance Summary

- Utilizes Cree TrueWhite® Technology
- Active Color Management
- **Delivered Light Output**: 540 lumens
- **Input Power**: 12 watts
- **CRI**: 90
- **CCT**: 2700K, 3500K
- **Input Voltage**: 220-240V
- **Warranty**: 5 years
- **Lifetime**: Designed to last 50,000 hours
- **Dimming**: Dimmable to 20%*

Ordering Information

Example: LR4E-15-230V + LT4-15A

Fully assembled luminaire is composed of two components that must be ordered separately:

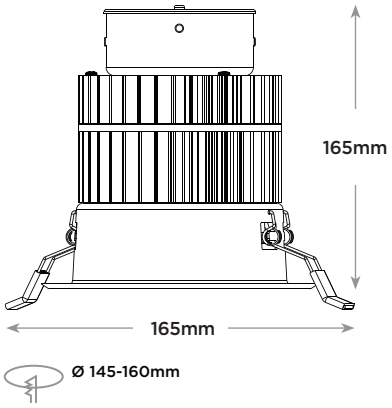
LR4-15-230V: Light engine **LT4-15: Snap-in architectural trim**

Light Engines
LR4E-15-230V 2700K
LR4E-15C-230V 3500K

Trims
LT4-15A Diffuse anodized finish trim
LT4-15AW Wheat diffuse anodized finish trim
LT4-15AP Pewter diffuse anodized finish trim
LT4-15AB Black anodized finish trim
LT4-15WH Smooth white trim
LT4-15BB Flat black finish
Reference back page for Trim Finish Options

* Reference CreeLighting.com/International for recommended dimmers.

LR4-230V



Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

CONSTRUCTION & MATERIALS

- Durable cold-rolled steel housing protects LEDs, driver and power supply. Adjustable flip clips resist heat while providing retention for flush ceiling fit.
- Thermal management system uses extruded aluminum heat sink to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum when installed in non-insulated ceiling applications. Not for direct burial in insulation.
- Snap-in trim (sold separately) integrates reflector and flange to redirect light while creating a comfortable visual transition from the lens to the ceiling plane.

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens shields direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

ELECTRICAL SYSTEM

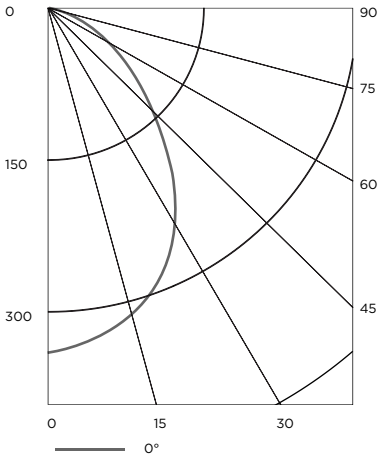
- Integral, high-efficiency driver and power supply.
- **Power Factor** > 0.9 nominal
- **Input Voltage**: 220-240V, 50Hz
- **Dimming**: Dimmable to 20% with most incandescent and electronic dimmers. Reference CreeLighting.com/International for recommended dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE certified.
- CCC certified.

Photometry

LR4E-15 LT4-15A BASED ON ITL TEST #: 59866



Intensity (Candlepower) Summary

Angle	Mean CP
0°	328
5°	326
15°	311
25°	278
35°	211
45°	125
55°	61
65°	30
75°	18
85°	4
90°	0

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fix
0-30	259	47.9%	47.9%
0-40	383	70.9%	70.9%
0-60	518	96%	96%
0-90	540	100%	100%

Reference CreeLighting.com/International for detailed photometric data.

Installation

- Designed to easily install in 145-160mm diameter ceiling opening.
- Integral spring clips engage with ceiling to hold luminaire in place.

NOTE: Reference CreeLighting.com/International for detailed installation instructions.

Application Reference

Open Space					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2 x 1.2	540	12	45	8.00	377
1.8 x 1.8				3.73	175
2.4 x 2.4				2.00	96
3.0 x 3.0				1.33	65

Ceiling Height = 2.7m, 80/50/20 Reflectances, 0.75m workplane.
LLF: 1.0 Initial. Open Space: 15m x 12m

Corridor					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2m on Center	540	12	45	6.67	156
1.8m on Center				4.53	107
2.4m on Center				3.20	77
3.0m on Center				2.67	64

Ceiling Height = 2.7m, 80/50/20 Reflectances, light levels on ground.
LLF: 1.0 Initial. Corridor: 1.5m Wide x 30m Long

LR6-230V

165mm LED Downlight

Product Description

The LR6-230V LED downlight delivers 650 lumens of exceptional 90+ CRI light while achieving over 54 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology. The LR6-230V is available in warm or neutral color temperatures and has a variety of trim options. It is designed to easily install in 165-175mm diameter ceiling openings, making the LR6-230V perfect for use as a CFL downlight replacement in commercial new construction or retrofit applications.

Performance Summary

- Utilizes Cree TrueWhite® Technology
- Active Color Management
- **Delivered Light Output**: 650 lumens
- **Input Power**: 12 watts
- **CRI**: 90
- **CCT**: 2700K, 3500K
- **Input Voltage**: 220-240V
- **Warranty**: 5 years
- **Lifetime**: Designed to last 50,000 hours
- **Dimming**: Dimmable to 20%*

Ordering Information

Example: LR6-230V

Product
LR6-230V 2700K
LR6C-230V 3500K
LR6-230V-CP 2700K, CCC certified
LR6C-230V-CP 3500K, CCC certified

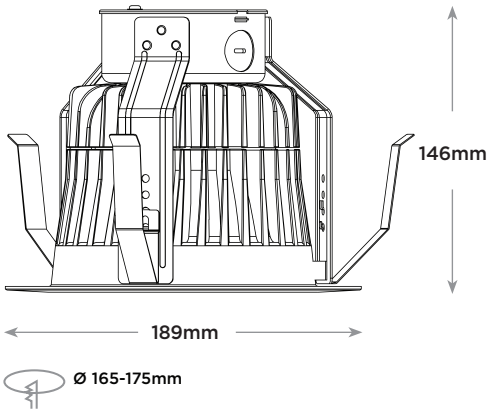
Accessories

Reference Downlight Trims Section for more details.

Trims
LT6A Diffuse anodized finish
LT6AW Wheat diffuse anodized finish
LT6AP Pewter diffuse anodized finish
LT6AB Black anodized finish
LT6WH Smooth white
LT6BB Flat black finish
Reference back page for Trim Finish Options

* Reference CreeLighting.com/International for recommended dimmers.

LR6-230V



Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

CONSTRUCTION & MATERIALS

- Durable die-cast aluminum housing protects LEDs, driver and power supply. Integral spring clips resist heat while providing retention for flush ceiling fit.
- Thermal management system uses integral heat sink to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum when installed in non-insulated ceiling applications. Not for direct burial in insulation.
- One-piece aluminum lower reflector redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane and easily accommodates LT6 snap-in trims.

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens shields direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

ELECTRICAL SYSTEM

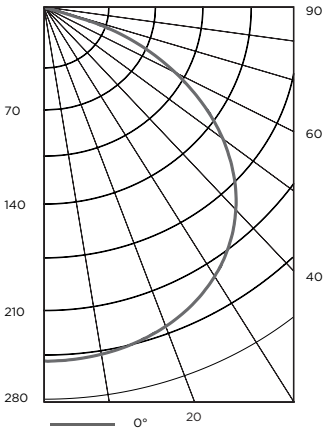
- Integral, high-efficiency driver and power supply.
- **Power Factor**: 0.9 nominal
- **Input Voltage**: 220-240V, 50Hz
- **Dimming**: Compatible with most incandescent and electronic dimmers. Reference CreeLighting.com/International for recommended dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE certified. Complies to EN60598.
- CCC certified.

Photometry

LR6-230V, INCANDESCENT COLOR (2700K)
LIGHTING SCIENCES INC. CERTIFIED TEST #: 22226



Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fix
0-30	197	30.39%	30.39%
0-40	325	49.94%	49.94%
0-60	556	85.35%	85.35%
0-90	650	100%	100%

Intensity (Candlepower) Summary

Angle	Mean CP
0°	249
5°	248
15°	242
25°	228
35°	203
45°	165
55°	115
65°	62
75°	24
85°	6
90°	0

Reference CreeLighting.com/International for detailed photometric data.

Installation

- Designed to easily install in 165-175mm diameter ceiling opening.
- Integral spring clips engage with ceiling to hold luminaire in place.

NOTE: Reference CreeLighting.com/International for detailed installation instructions.

Application Reference

Open Space					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2 x 1.2	650	12	54	8.00	432
1.8 x 1.8				3.73	200
2.4 x 2.4				2.00	110
3.0 x 3.0				1.33	73

Ceiling Height = 2.7m, 80/50/20 Reflectances, 0.75m workplane.
LLF: 1.0 Initial. Open Space: 15m x 12m

Corridor					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2m on Center	650	12	54	6.67	152
1.8m on Center				4.53	104
2.4m on				3.20	75
3.0m on				2.67	62

Ceiling Height = 2.7m, 80/50/20 Reflectances, light levels on ground.
LLF: 1.0 Initial. Corridor: 1.5m Wide x 30m Long

LR6-1000-230V

165mm LED Downlight

Product Description

The LR6-1000-230V LED downlight delivers 1000 lumens of exceptional 90+ CRI light while achieving 80 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology. The LR6-1000-230V is available in warm, neutral, or cool color temperatures and has a variety of trim options. It is designed to easily install in 165-175mm diameter ceiling openings, making the LR6-1000-230V perfect for use as a CFL downlight replacement in commercial new construction or retrofit applications.

Performance Summary

- Utilizes Cree TrueWhite® Technology
- Active Color Management
- **Delivered Light Output**: 1000 lumens
- **Input Power**: 12.5 watts
- **CRI**: 90
- **CCT**: 2700K, 3500K, 4000K
- **Input Voltage**: 220-240V
- **Warranty**: 5 years
- **Lifetime**: Designed to last 50,000 hours
- **Dimming**: Dimmable to 20%*

Ordering Information

Example: LR6-1000-230V

Product
LR6-1000-230V 2700K
LR6C-1000-230V 3500K
LR6D-1000-230V 4000K
LR6C-1000-230V CCC 3500K, CCC certified
LR6D-1000-230V CCC 4000K, CCC certified

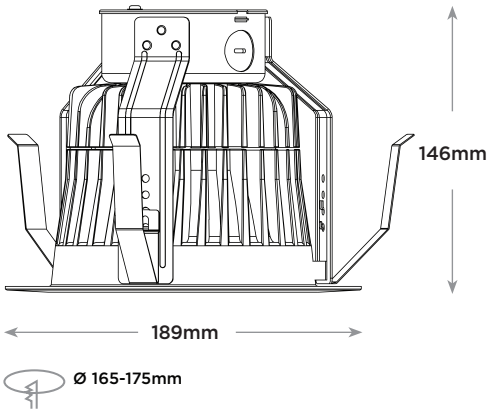
Accessories

Reference Downlight Trims Section for more details.

Trims
LT6A Diffuse anodized finish
LT6AW Wheat diffuse anodized finish
LT6AP Pewter diffuse anodized finish
LT6AB Black anodized finish
LT6WH Smooth white
LT6BB Flat black finish
Reference back page for Trim Finish Options

* Reference CreeLighting.com/International for recommended dimmers.

LR6-1000-230V



Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

CONSTRUCTION & MATERIALS

- Durable die-cast aluminum housing protects LEDs, driver and power supply. Integral spring clips resist heat while providing retention for flush ceiling fit.
- Thermal management system uses integral heat sink to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum when installed in non-insulated ceiling applications. Not for direct burial in insulation.
- One-piece aluminum lower reflector redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane and easily accommodates LT6 snap-in trims.

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens shields direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

ELECTRICAL SYSTEM

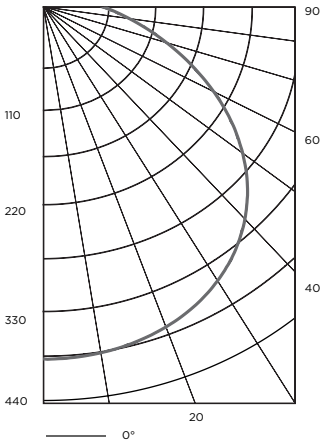
- Integral, high-efficiency driver and power supply.
- **Power Factor**: 0.9 nominal
- **Input Voltage**: 220-240V, 50Hz
- **Dimming**: Compatible with most incandescent and electronic dimmers. Reference CreeLighting.com/International for recommended dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE certified. Complies to EN60598.
- CCC certified.

Photometry

LR6-1000-230V, INCANDESCENT COLOR (2700K)
LIGHTING SCIENCES INC. CERTIFIED TEST #: 22226



Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fix
0-30	303	30.39%	30.39%
0-40	500	49.94%	49.94%
0-60	855	85.35%	85.35%
0-90	1000	100%	100%

Intensity (Candlepower) Summary

Angle	Mean CP
0°	383
5°	382
15°	372
25°	351
35°	312
45°	254
55°	177
65°	95
75°	37
85°	9
90°	0

Reference CreeLighting.com/International for detailed photometric data.

Installation

- Designed to easily install in 165mm diameter ceiling opening.
- Integral spring clips engage with ceiling to hold luminaire in place.

NOTE: Reference CreeLighting.com/International for detailed installation instructions.

Application Reference

Open Space					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2 x 1.2	1000	12.5	80	8.33	665
1.8 x 1.8				3.89	308
2.4 x 2.4				2.08	169
3.0 x 3.0				1.39	113

Ceiling Height = 2.7m, 80/50/20 Reflectances, 0.75m workplane.
LLF: 1.0 Initial. Open Space: 15m x 12m

Corridor					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2m on Center	1000	12.5	80	6.94	234
1.8m on Center				4.72	161
2.4m on Center				3.33	116
3.0m on Center				2.78	96

Ceiling Height = 2.7m, 80/50/20 Reflectances, light levels on ground.
LLF: 1.0 Initial. Corridor: 1.5m Wide x 30m Long

LR6-LP1000-230V

165mm LED Downlight

Product Description

The LR6-LP1000-230V LED downlight delivers 1000 lumens of exceptional 90+ CRI light while achieving 80 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology. The LR6-LP1000-230V is available in warm or cool color temperatures and has a variety of trim options. It is designed to easily install in 165-185mm diameter ceiling openings, making the LR6-LP1000-230V perfect for use as a CFL downlight replacement in commercial new construction or retrofit applications.

Performance Summary

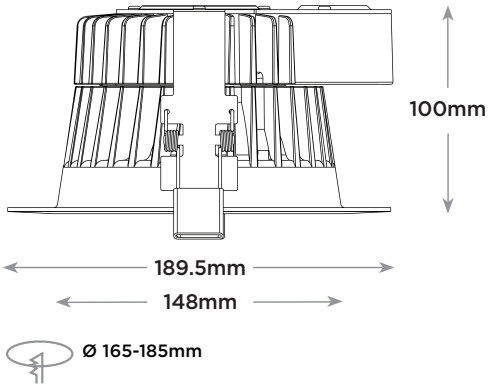
- Utilizes Cree TrueWhite® Technology
- Active Color Management
- **Delivered Light Output**: 1000 lumens
- **Input Power**: 12.5 watts
- **CRI**: 90
- **CCT**: 2700K, 4000K
- **Input Voltage**: 220-240V
- **Warranty**: 5 years
- **Lifetime**: Designed to last 50,000 hours
- **Dimming**: Dimmable to 20%*

Accessories

Reference Downlight Trims Section for more details.

Trims
LT6A Diffuse anodized finish
LT6AW Wheat diffuse anodized finish
LT6AP Pewter diffuse anodized finish
LT6AB Black anodized finish
LT6WH Smooth white
LT6BB Flat black finish
Reference back page for Trim Finish Options

LR6-LP1000-230V



Ordering Information

Example: LR6-LP1000-230V

LR6					
Product	Lumen Output	Color Temperature	Voltage	Control	Options
LR6	**LP1000** 12.5W 1000 lumens - 80 LPW	**27K** 2700 Kelvin **40K** 4000 Kelvin	**230V** 220-240 Volt	**BLANK** Dimmable to 20%*	**BLANK** CE/CB certified **CP** CCC cerification

* Reference CreeLighting.com/International for recommended dimmers.

Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

CONSTRUCTION & MATERIALS

- Durable die-cast aluminum housing protects LEDs, driver and power supply. Spring clips resist heat while providing retention for flush ceiling fit.
- Thermal management system uses integral heat sink to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum when installed in non-insulated ceiling applications. Not for direct burial in insulation.
- One-piece aluminum lower reflector redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane and easily accommodates LT6 snap-in trims.

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens shields direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

ELECTRICAL SYSTEM

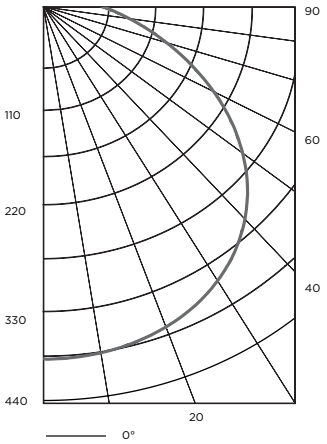
- Integral, high-efficiency driver and power supply.
- **Power Factor**: 0.9 nominal
- **Input Voltage**: 220-240V, 50Hz
- **Dimming**: Compatible with most incandescent and electronic dimmers. Reference CreeLighting.com/International for recommended dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE certified. Complies to EN60598.
- CCC certified.

Photometry

LR6-1000-230V, INCANDESCENT COLOR (2700K)
LIGHTING SCIENCES INC. CERTIFIED TEST #: 22226



Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fix
0-30	303	30.39%	30.39%
0-40	500	49.94%	49.94%
0-60	855	85.35%	85.35%
0-90	1000	100%	100%

Intensity (Candlepower) Summary

Angle	Mean CP
0°	383
5°	382
15°	372
25°	351
35°	312
45°	254
55°	177
65°	95
75°	37
85°	9
90°	0

Reference CreeLighting.com/International for detailed photometric data.

Installation

- Designed to easily install in 165-185mm diameter ceiling opening.
- Spring clips engage with ceiling to hold luminaire in place.

NOTE: Reference CreeLighting.com/International for detailed installation instructions.

Application Reference

Open Space					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2 x 1.2	1000	12.5	80	8.33	665
1.8 x 1.8				3.89	308
2.4 x 2.4				2.08	169
3.0 x 3.0				1.39	113

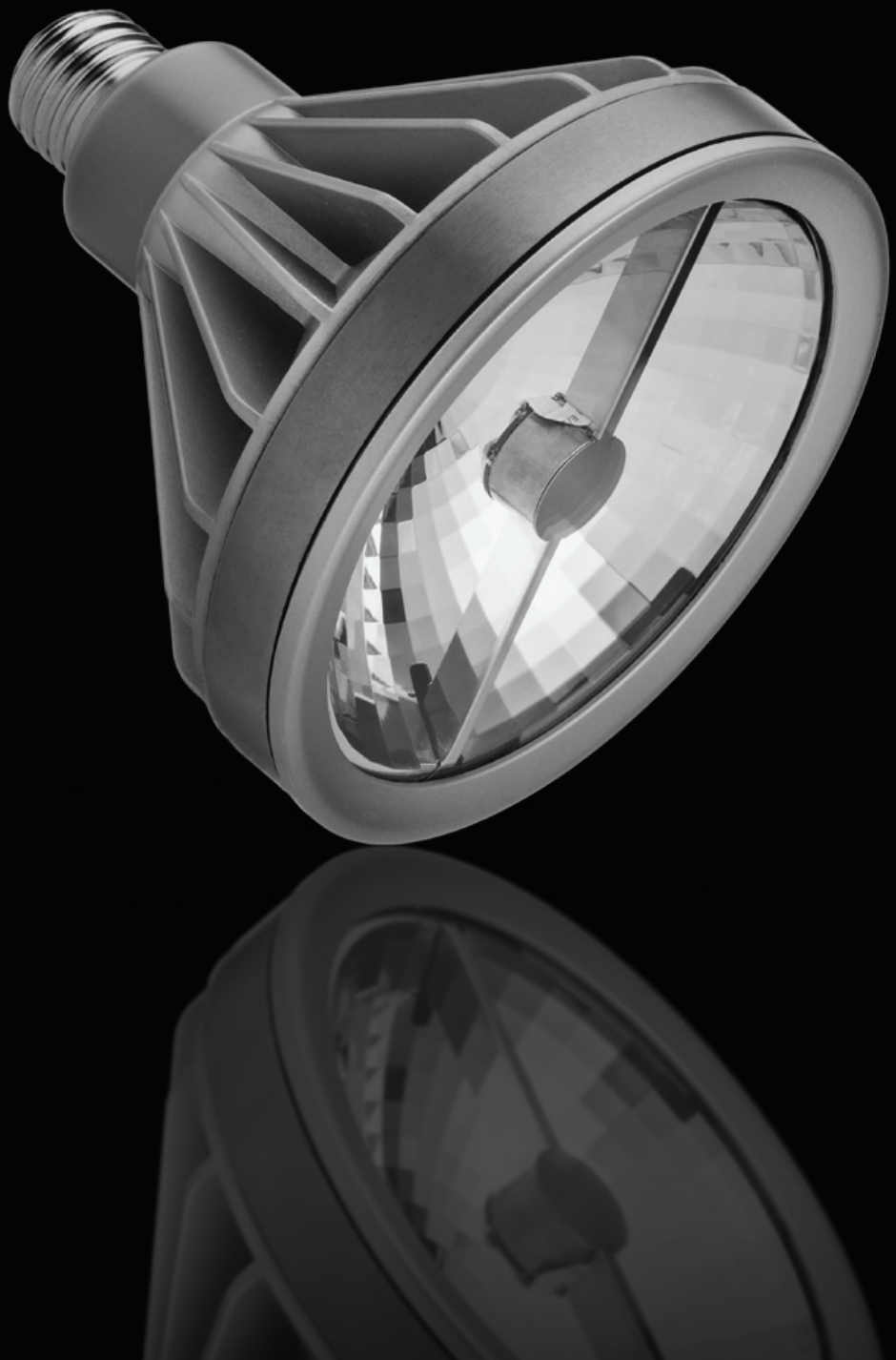
Ceiling Height = 2.7m, 80/50/20 Reflectances, 0.75m workplane.
LLF: 1.0 Initial. Open Space: 15m x 12m

Corridor					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Average Lux**
1.2m on Center	1000	12.5	80	6.94	234
1.8m on Center				4.72	161
2.4m on Center				3.33	116
3.0m on Center				2.78	96

Ceiling Height = 2.7m, 80/50/20 Reflectances, light levels on ground.
LLF: 1.0 Initial. Corridor: 1.5m Wide x 30m Long

LED LAMPS

Powered by Cree TrueWhite® Technology, Cree lamps deliver an unrivaled combination of 94 CRI and 50 lumens per watt efficacy. The superior color accuracy of each lamp draws out the naturally vibrant colors of food and merchandise to enhance their appeal, while their high efficacy and longevity significantly reduce both energy and maintenance costs.



LRP38-230V

p.28

· 600 lumens, 12W
· 94 CRI at 2700K
· 20° beam angle
· CBCP: 4800
· Dimmable to 20%

LRP38-230V

LED PAR38 Lamp

Product Description

The LRP38-230V LED PAR38 lamp delivers 600 lumens of exceptional 94 CRI light while achieving 50 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology. The LRP38-230V is available in a warm color temperature and has a 20-degree beam angle. Available in an E27 base, the LRP38-230V is a spec grade solution perfect for down lighting, track, and accent lighting use in both commercial and retail applications.

Performance Summary

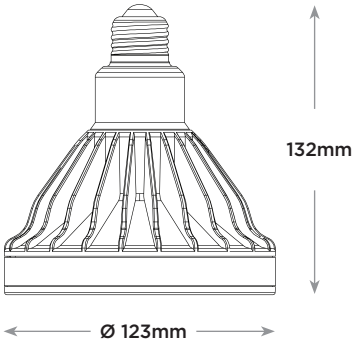
- Utilizes Cree TrueWhite® Technology
- Active Color Management
- **Delivered Light Output**: 600 lumens
- **Input Power**: 12 watts
- **CRI**: 94
- **CCT**: 2700K
- **Beam Angle**: 20°
- **CBCP**: 4800
- **Input Voltage**: 220-240V
- **Warranty**: 3 years
- **Lifetime**: Designed to last 50,000 hours in open fixtures
- **non-IC Lifetime**: Designed to last 35,000 hours in non-IC recessed downlights
- **Dimming**: Dimmable to 20% with ELV dimmers

Ordering Information

Example: LRP38A92-20D45-230V

Product
LRP38A92-20D45-230V 2700K, E27 Base

LRP38-230V



Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

CONSTRUCTION & MATERIALS

- Durable die-cast aluminum housing with lens protects LEDs and optical system.
- Thermal management system uses a combination of heat pipe technology and integral heat sink to conduct heat away from LEDs and transfer it to the surrounding environment for optimal performance.
- Housing conforms to ANSI standards for PAR38 lamp envelopes.

  NOTE: To ensure compatibility, verify fit in fixtures that utilize the lamp face for mechanical attachment. Color filters, baffles, or other shielding media may affect color consistency and lifetime.

OPTICAL SYSTEM

- Specular reflector redirects light from an upward-facing LED to achieve a uniform, comfortable appearance that eliminates pixelation and direct view of unshielded LED. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Specular reflector is precisely formed for exceptional optical control, enabling 20° beam angle with almost no light wasted outside of the beam. This ensures low brightness appearance when viewed from off-axis and outside of the beam.

ELECTRICAL SYSTEM

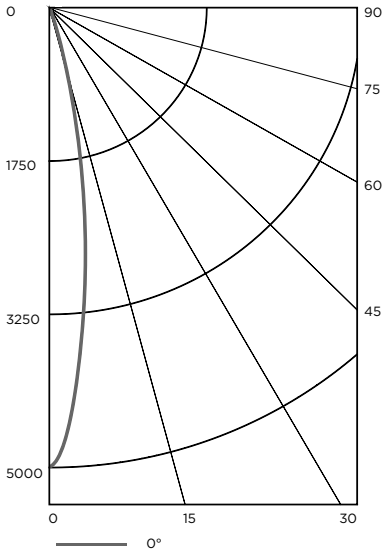
- Integral, high-efficiency driver and power supply.
- **Power Factor** > 0.9 nominal
- **Input Voltage**: 220-240V, 50Hz
- **Dimming:** Dimmable to 20% with ELV dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE certified.

Photometry

LRP38A92-20D45-230V BASED ON ONSPEX #: 30014165



Intensity (Candlepower) Summary

Angle	Mean CP
0°	4800
5°	3955
15°	679
25°	85
35°	10
45°	8
55°	8
65°	9
75°	1
85°	0
90°	0

Zonal Lumen Summary

Zone	Lumens	% Lamp
0-30	572	95.26%
0-40	579	96.43%
0-60	591	98.52%
0-90	600	100%

Reference CreeLighting.com/International for detailed photometric data.

LED TROFFERS

Cree architectural troffers demonstrate technical ingenuity at its finest, delivering a superior mix of performance and payback, proving that energy-efficient, high quality lighting doesn't have to come at a premium. And with unmatched longevity and color consistency, all backed by an industry-best fixture warranty, they deliver a true no-compromise solution.

CR24™

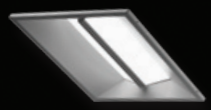
p.32

· 2200, 4000, or 5000 lumens
· 22W-50W (90-110LPW)
· 90 CRI at 3000K or 4000K
· 1-10V or DALI dimming to 5%
· 220-240V driver

CR14™

p.34

· 2200, 4000, or 5000 lumens
· 22W-50W (90-110LPW)
· 90 CRI at 3000K or 4000K
· 1-10V or DALI dimming to 5%
· 220-240V driver



CR22™

p.36

· 2000 lumens, 22W
· 3200 lumens, 35W
· 90 CRI at 3000K or 4000K
· 1-10V or DALI dimming to 5%
· 220-240V driver

LE14

p.38

· 2200, 4000, or 5000 lumens
· 22W-50W (90-110LPW)
· 90 CRI at 3000K or 4000K
· 1-10V or DALI dimming to 5%
· 220-240V driver

LE12

p.38

· 2000 lumens, 22W
· 3200 lumens, 35W
· 90 CRI at 3000K or 4000K
· 1-10V or DALI dimming to 5%
· 220-240V driver

CR24™

595mm x 1195mm Architectural LED Troffer

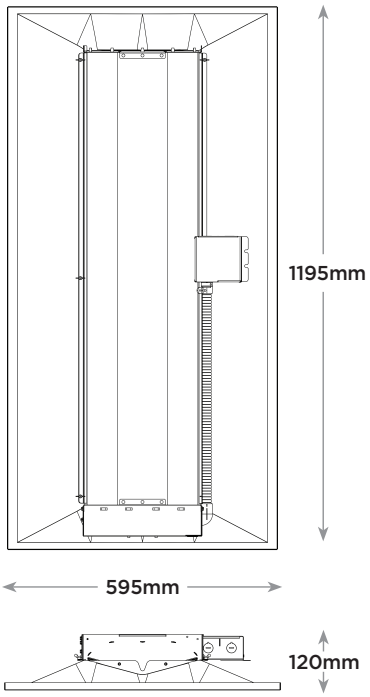
Product Description

The CR24™ architectural LED troffer delivers up to 5000 lumens of exceptional 90+ CRI light while achieving 90-110 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology with a unique thermal management approach. The CR24 is available in warm or cool color temperatures and has both 1-10V and DALI dimming options. Its compact, lightweight design easily accommodates recessed, surface mount, or suspended installations, making the CR24 perfect for use in commercial new construction or retrofit applications.

Performance Summary

- Utilizes Cree TrueWhite® Technology
- Active Color Management
- Room-Side Heat Sink
- **Efficacy**: 90-110 LPW
- **Delivered Light Output**: 2200, 4000, 5000 lumens
- **Input Power**: 22-50 watts
- **CRI**: 90
- **CCT**: 3000K, 4000K
- **Input Voltage**: 220-240 VAC
- **Warranty**: 5 years standard or 7 years with High Efficacy (HE) option
- **Lifetime**: Designed to last 50,000 hours standard or 75,000 hours with HE option
- **Dimming**: 1-10V or DALI Dimming to 5%†
- **Mounting**: Recessed
- **Dimensions**: L 1195mm x W 595mm x H 120mm
- **Weight**: max 10Kg

CR24



Ordering Information

Example: CR24-40L-40K-23

CR24					
Product	Lumen Output	Color Temperature	Voltage	Control	Options
CR24	**22L*** 22W 2200 lumens - 100 LPW **40L** 44W 4000 lumens - 90 LPW **40L HE**** 36W 4000 lumens - 110 LPW (30K)* 38W 4000 lumens - 105 LPW (40K)* **50L*** 50W 5000 lumens - 100 LPW	**30K** 3000 Kelvin **40K** 4000 Kelvin	**230V** 220-240 Volt	**Blank** Non-dimming **ADIM** 1-10V Dimming to 5% **DALI*** DALI Dimming to 5%	**BLANK** CE/CB certified **CP** CCC cerification

*Target Availability Mid 2012. **3000K HE model is 36W (110 LPW), 4000K HE model is 38W (105 LPW).
† Reference CreeLighting.com/International for recommended dimming control options.

Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY
A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

ROOM-SIDE HEAT SINK
An innovative thermal management system designed to maximize cooling effectiveness by integrating a unique room-side heat sink into the diffusing lens. This breakthrough design creates a pleasing architectural aesthetic while conducting heat away from LEDs in a temperature-controlled environment. This enables the LEDs to consistently run cooler, providing significant boosts to lifetime, efficacy, and color consistency.

LUMEN MAINTENANCE FACTORS
- Reference CreeLighting.com/International for detailed lumen maintenance factors.

CONSTRUCTION & MATERIALS
- Durable 20-gauge steel housing with standard troffer access plate for electrical installation.
- Field replaceable light engine integrates LEDs, driver, power supply, thermal management, and optical mixing components.
- One-piece lower reflector finished with a textured high reflectance white polyester powder coating creates a comfortable visual transition from the lens to the ceiling plane.
- Provided t-bar clips and holes for mounting support wires enable recessed or suspended installation.
- Individual fixtures may be mounted end to end for a continuous row of illumination.

  NOTE: Reference CreeLighting.com/International for detailed instructions on field replacement of the light engine.

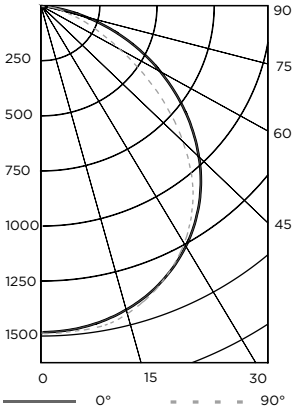
OPTICAL SYSTEM
- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens integrated with upward-facing LED strip eliminates direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

ELECTRICAL SYSTEM
- Integral, high-efficiency driver and power supply.
- **Power Factor** = 0.9 nominal
- **Input Power**: Stays constant over life.
- **Input Voltage**: 220-240V, 50/60Hz
- **Dimming**: Dimmable to 5% with Analog 1-10V or DALI control protocols. Reference CreeLighting.com/International for recommended dimming controls.
- **Temperature Rating**: Designed to operate in temperatures 35 C and below room side and plenum side.
- **Total Harmonic Distortion**: < 20%

REGULATORY & VOLUNTARY QUALIFICATIONS
- CE certified.
- CCC certified.
- IP20

Photometry

CR24-4000L BASED ON LTL REPORT TEST #: 22421
Fixture photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.



Coefficients Of Utilization

RCC %:	80			
RW %:	70	50	30	0
RCR: 0	1.19	1.19	1.19	1.19
1	1.09	1.05	1.01	0.97
2	1	0.92	0.85	0.79
3	0.91	0.8	0.72	0.66
4	0.83	0.71	0.63	0.56
5	0.76	0.64	0.55	0.48
6	0.71	0.57	0.48	0.42
7	0.65	0.52	0.43	0.37
8	0.61	0.47	0.39	0.33
9	0.57	0.43	0.35	0.3
10	0.53	0.4	0.32	0.27

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m2)

Vertical Angle \ Horizontal Angle	0°	45°	90°
0°	2174	2174	2174
45°	1976	2116	2152
55°	1807	2018	2074
65°	1553	1889	1879
75°	1149	1501	1119
85°	424	62	62

Zonal Lumen Summary

Zone	Lumens	% Lamp	Luminaire
0-30	1115	27.9%	27.9%
0-40	1835	45.9%	45.9%
0-60	3245	81.1%	81.1%
0-90	4000	100%	100%

Reference CreeLighting.com/International for detailed photometric data.

Application Reference

Open Space					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Actual Lux**
2.4 x 2.4	2200L	22W	100	3.76	330
	4000L	44W	90	7.42	600
	4000L	36W	110	6.02	600
	5000L	50W	100	8.39	750
2.4 x 3.0	2200L	22W	100	3.01	275
	4000L	44W	90	5.91	500
	4000L	36W	110	4.84	500
	5000L	50W	100	6.67	635
3.0 x 3.0	2200L	22W	100	2.37	230
	4000L	44W	90	4.73	425
	4000L	36W	110	3.87	425
	5000L	50W	100	5.38	535
3.0 x 3.6	2200L	22W	100	2.04	185
	4000L	44W	90	3.98	340
	4000L	36W	110	3.23	340
	5000L	50W	100	4.52	425

3m ceiling: 80/50/20 reflectances; 0.75m workplane, open room. LLF: 1.0 Initial. Open Space: 15m x 12m x 3m

CR14™

295mm x 1195mm Architectural LED Troffer

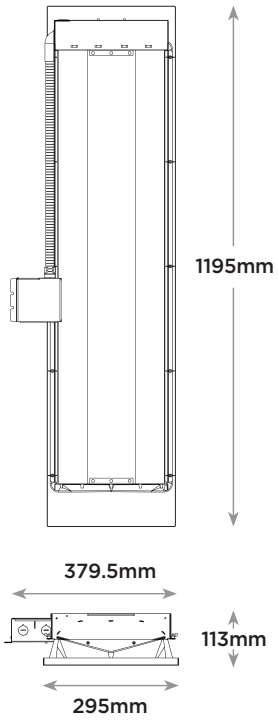
Product Description

The CR14™ architectural LED troffer delivers up to 5000 lumens of exceptional 90+ CRI light while achieving 90-110 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology with a unique thermal management approach. The CR14 is available in warm or cool color temperatures and has both 1-10V and DALI dimming options. Its compact, lightweight design easily accommodates recessed, surface mount, or suspended installations, making the CR14 perfect for use in commercial new construction or retrofit applications.

Performance Summary

- Utilizes Cree TrueWhite® Technology
- Active Color Management
- Room-Side Heat Sink
- **Efficacy**: 90-110 LPW
- **Delivered Light Output**: 2200, 4000, 5000 lumens
- **Input Power**: 22-50 watts
- **CRI**: 90
- **CCT**: 3000K, 4000K
- **Input Voltage**: 220-240 VAC
- **Warranty**: 5 years standard or 7 years with High Efficacy (HE) option
- **Lifetime**: Designed to last 50,000 hours standard or 75,000 hours with HE option
- **Dimming**: 1-10V or DALI Dimming to 5%†
- **Mounting**: Recessed
- **Dimensions**: L 1195mm x W 295mm x H 113mm
- **Weight:** max 10Kg

CR14



Ordering Information

Example: CR14-40L-40K-23

CR14					
Product	Lumen Output	Color Temperature	Voltage	Control	Options
CR14	**22L*** 22W 2200 lumens - 100 LPW **40L** 44W 4000 lumens - 90 LPW **40L HE**** 36W 4000 lumens - 110 LPW (30K)* 38W 4000 lumens - 105 LPW (40K)* **50L*** 50W 5000 lumens - 100 LPW	**30K** 3000 Kelvin **40K** 4000 Kelvin	**230V** 220-240 Volt	**Blank** Non-dimming **ADIM** 1-10V Dimming to 5% **DALI*** DALI Dimming to 5%	**BLANK** CE/CB certified **CP** CCC cerification

*Target Availability Mid 2012. **3000K HE model is 36W (110 LPW), 4000K HE model is 38W (105 LPW).
† Reference CreeLighting.com/International for recommended dimming control options.

Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY
A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

ROOM-SIDE HEAT SINK
An innovative thermal management system designed to maximize cooling effectiveness by integrating a unique room-side heat sink into the diffusing lens. This breakthrough design creates a pleasing architectural aesthetic while conducting heat away from LEDs in a temperature-controlled environment. This enables the LEDs to consistently run cooler, providing significant boosts to lifetime, efficacy, and color consistency.

LUMEN MAINTENANCE FACTORS
- Reference CreeLighting.com/International for detailed lumen maintenance factors.

CONSTRUCTION & MATERIALS
- Durable 20-gauge steel housing with standard troffer access plate for electrical installation.
- Field replaceable light engine integrates LEDs, driver, power supply, thermal management, and optical mixing components.
- One-piece lower reflector finished with a textured high reflectance white polyester powder coating creates a comfortable visual transition from the lens to the ceiling plane.
- Provided t-bar clips and holes for mounting support wires enable recessed or suspended installation.
- Individual fixtures may be mounted end to end for a continuous row of illumination.

  NOTE: Reference CreeLighting.com/International for detailed instructions on field replacement of the light engine.

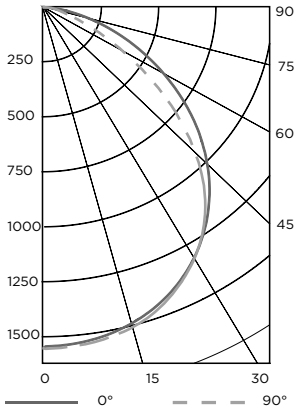
OPTICAL SYSTEM
- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens integrated with upward-facing LED strip eliminates direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

ELECTRICAL SYSTEM
- Integral, high-efficiency driver and power supply.
- **Power Factor** = 0.9 nominal
- **Input Power**: Stays constant over life.
- **Input Voltage**: 220-240V, 50/60Hz
- **Dimming**: Dimmable to 5% with Analog 1-10V or DALI control protocols. Reference CreeLighting.com/International for recommended dimming controls.
- **Temperature Rating**: Designed to operate in temperatures 35 C and below room side and plenum side.
- **Total Harmonic Distortion**: < 20%

REGULATORY & VOLUNTARY QUALIFICATIONS
- CE certified.
- CCC certified.
- IP20

Photometry

CR14-4000L BASED ON LTL REPORT TEST #: 24294
Fixture photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.



Coefficients Of Utilization

RCC %:	80			
RW %:	70	50	30	0
RCR: 0	4713	4713	4713	4713
1	4352	4182	4029	3892
2	3988	3688	3440	3231
3	3656	3266	2965	2725
4	3359	2911	2583	2332
5	3097	2612	2273	2023
6	2865	2359	2019	1775
7	2660	2143	1809	1574
8	2478	1959	1632	1408
9	2316	1800	1483	1270
10	2172	1662	1356	1153

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m2)

Vertical Angle \ Horizontal Angle	0°	45°	90°
0°	5407	5407	5407
45°	5015	5002	4673
55°	4589	4315	3572
65°	3933	3122	2247
75°	3039	1690	1282
85°	1727	1249	1321

Zonal Lumen Summary

Zone	Lumens	% Lamp	Luminaire
0-30	1220	N/A	30.8%
0-40	1995	N/A	50.4%
0-60	3385	N/A	85.5%
0-90	3959	N/A	100%

Reference CreeLighting.com/International for detailed photometric data.

Application Reference

Open Space					
Spacing (m)	**Lumens**	**Wattage**	**LPW**	**w/m²**	**Actual Lux**
2.4 x 2.4	2200L	22W	100	3.76	330
	4000L	44W	90	7.42	590
	4000L	36W	110	6.02	590
	5000L	50W	100	8.39	740
2.4 x 3.0	2200L	22W	100	3.01	270
	4000L	44W	90	5.91	490
	4000L	36W	110	4.84	490
	5000L	50W	100	6.67	620
3.0 x 3.0	2200L	22W	100	2.37	230
	4000L	44W	90	4.73	415
	4000L	36W	110	3.87	415
	5000L	50W	100	5.38	525
3.0 x 3.6	2200L	22W	100	2.04	185
	4000L	44W	90	3.98	330
	4000L	36W	110	3.23	330
	5000L	50W	100	4.52	415

3m ceiling: 80/50/20 reflectances; 0.75m workplane, open room. LLF: 1.0 Initial. Open Space: 15m x 12m x 3m

CR22™

595mm x 595mm Architectural LED Troffer

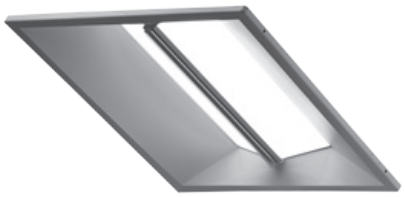
Product Description

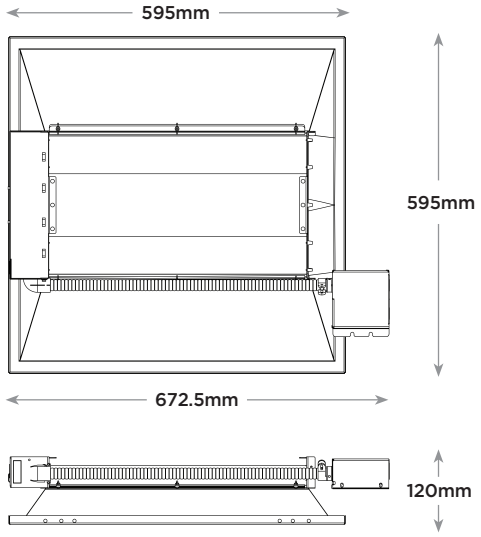
The CR22™ architectural LED troffer delivers up to 3200 lumens of exceptional 90+ CRI light while achieving 90 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology with a unique thermal management approach. The CR22 is available in warm or cool color temperatures and has both 1-10V and DALI dimming options. Its compact, lightweight design easily accommodates recessed, surface mount, or suspended installations, making the CR22 perfect for use in commercial new construction or retrofit applications.

Performance Summary

- Utilizes Cree TrueWhite® Technology
- Active Color Management
- Room-Side Heat Sink
- **Efficacy**: 90 LPW
- **Delivered Light Output**: 2000, 3200 lumens
- **Input Power**: 22, 35 watts
- **CRI**: 90
- **CCT**: 3000K, 4000K
- **Input Voltage**: 220-240 VAC
- **Warranty**: 5 Years
- **Lifetime**: Designed to last 50,000 hours
- **Dimming**: 1-10V or DALI Dimming to 5%†
- **Mounting**: Recessed
- **Dimensions**: L 595mm x W 595mm x H 120mm
- **Weight**: 7 Kg

CR22





Ordering Information

Example: CR22-20L-40K-23

CR22					
Product	Lumen Output	Color Temperature	Voltage	Control	Options
CR22	**20L*** 22W 2000 lumens - 100 LPW **32L** 35W 3200 lumens - 90 LPW	**30K** 3000 Kelvin **40K** 4000 Kelvin	**230V** 220-240 Volt	**Blank** Non-dimming **ADIM** 1-10V Dimming to 5% **DALI*** DALI Dimming to 5%	**BLANK** CE/CB certified **CP** CCC cerification

*Target Availability Mid 2012. † Reference CreeLighting.com/International for recommended dimming control options.

Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY
A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

ROOM-SIDE HEAT SINK
An innovative thermal management system designed to maximize cooling effectiveness by integrating a unique room-side heat sink into the diffusing lens. This breakthrough design creates a pleasing architectural aesthetic while conducting heat away from LEDs in a temperature-controlled environment. This enables the LEDs to consistently run cooler, providing significant boosts to lifetime, efficacy, and color consistency.

LUMEN MAINTENANCE FACTORS
- Reference CreeLighting.com/International for detailed lumen maintenance factors.

CONSTRUCTION & MATERIALS
- Durable 20-gauge steel housing with standard troffer access plate for electrical installation.
- Field replaceable light engine integrates LEDs, driver, power supply, thermal management, and optical mixing components.
- One-piece lower reflector finished with a textured high reflectance white polyester powder coating creates a comfortable visual transition from the lens to the ceiling plane.
- Provided t-bar clips and holes for mounting support wires enable recessed or suspended installation.
- Individual fixtures may be mounted end to end for a continuous row of illumination.

  NOTE: Reference CreeLighting.com/International for detailed instructions on field replacement of the light engine.

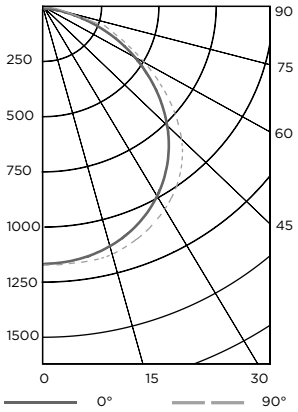
OPTICAL SYSTEM
- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens integrated with upward-facing LED strip eliminates direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

ELECTRICAL SYSTEM
- Integral, high-efficiency driver and power supply.
- **Power Factor** = 0.9 nominal
- **Input Power**: Stays constant over life.
- **Input Voltage**: 220-240V, 50/60Hz
- **Dimming**: Dimmable to 5% with Analog 1-10V or DALI control protocols. Reference CreeLighting.com/International for recommended dimming controls.
- **Temperature Rating**: Designed to operate in temperatures 35 C and below room side and plenum side.
- **Total Harmonic Distortion**: < 20%

REGULATORY & VOLUNTARY QUALIFICATIONS
- CE certified.
- CCC certified.
- IP20

Photometry

CR22 BASED ON LTL REPORT TEST #: 24292
Fixture photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.



Coefficients Of Utilization

RCC %:	80			
RW %:	70	50	30	10
RCR: 0	3904	3904	3904	3904
1	3593	3447	3316	3199
2	3276	3018	2804	2624
3	2990	2655	2396	2189
4	2739	2354	2072	1857
5	2518	2103	1813	1599
6	2325	1893	1603	1395
7	2154	1715	1430	1231
8	2004	1564	1287	1097
9	1871	1434	1166	986
10	1754	1322	1064	892

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m2)

Vertical Angle \ Horizontal Angle	0°	45°	90°
0°	3864	3864	3864
45°	3575	3864	3972
55°	3164	3656	3758
65°	2498	3133	3347
75°	1620	2348	2051
85°	366	252	168

Zonal Lumen Summary

Zone	Lumens	% Lamp	Luminaire
0-30	923	N/A	28.1%
0-40	1527	N/A	46.5%
0-60	2704	N/A	82.5%
0-90	3280	N/A	100%

Reference CreeLighting.com/International for detailed photometric data.

Application Reference

Open Space					
Spacing (m)	Lumens	Wattage	LPW	w/m²	Actual Lux
2.4 x 2.4	2000L	22W	90	3.76	305
	3200L	35W	90	5.91	480
2.4 x 3.0	2000L	22W	90	3.01	250
	3200L	35W	90	4.73	405
3.0 x 3.0	2000L	22W	90	2.37	435
	3200L	35W	90	3.76	340
3.0 x 3.6	2000L	22W	90	2.04	175
	3200L	35W	90	3.12	275

3m ceiling: 80/50/20 reflectances; 0.75m workplane, open room. LLF: 1.0 Initial. Open Space: 15m x 12m x 3m

LE14 & LE12

CR Series Light Engine

Product Description

The LE14 and LE12 light engines deliver up to 5000 lumens of exceptional 90+ CRI light while achieving 90-110 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology with a unique thermal management approach. The LE14 and LE12 are available in warm or cool color temperatures and have both 1-10V and DALI dimming options. They're compact, lightweight design easily accommodate surface mount or suspended installations, making the LE14 and LE12 perfect for use in commercial new construction or retrofit applications.

LE14

LE12

Performance Summary

- Utilizes Cree TrueWhite® Technology
- Active Color Management
- Room-Side Heat Sink
- **Efficacy**: 90-110 LPW
- **Delivered Light Output**: 2000, 2200, 3200, 4000, 5000 lumens
- **Input Power**: 22-50 watts
- **CRI**: 90
- **CCT**: 3000K, 4000K
- **Input Voltage**: 220-240 VAC
- **Warranty**: 5 years standard or 7 years with High Efficacy (HE) option
- **Lifetime**: Designed to last 50,000 hours standard or 75,000 hours with HE option
- **Dimming**: 1-10V or DALI Dimming to 5%†
- **LE14 Dimensions**: L 1083mm x W 270mm x H 109mm
- **LE12 Dimensions**: L 543mm x W 270mm x H 109mm
- **Weight**: max 7 Kg

Ordering Information

Example: LE12-32L-40K-23

Product	Lumen Output	Color Temperature	Control	Voltage
LE12 543mm x 270mm	**20L*** 22W 2000 lumens - 100 LPW **32L** 35W 3200 lumens - 90 LPW	**30K** 3000 Kelvin **40K** 4000 Kelvin	**Blank** Non-dimming **ADIM** 1-10V Dimming to 5% **DALI*** DALI Dimming to 5%	**23** 220-240 Volt (Standard)
LE14 1083mm x 270mm	**22L*** 22W 2200 lumens - 100 LPW **40L** 44W 4000 lumens - 90 LPW **40L HE*** 36W 4000 lumens - 110 LPW (30K)* 38W 4000 lumens - 105 LPW (40K)* **50L*** 50W 5000 lumens - 100 LPW	**30K** 3000 Kelvin **40K** 4000 Kelvin	**Blank** Non-dimming **ADIM** 1-10V Dimming to 5% **DALI*** DALI Dimming to 5%	**23** 220-240 Volt (Standard)

*Target Availability Mid 2012. † Reference CreeLighting.com/International for recommended dimming control options.

Stated performance values are nominal. The information in this document is subject to change without notice.

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

ROOM-SIDE HEAT SINK

An innovative thermal management system designed to maximize cooling effectiveness by integrating a unique room-side heat sink into the diffusing lens. This breakthrough design creates a pleasing architectural aesthetic while conducting heat away from LEDs in a temperature-controlled environment. This enables the LEDs to consistently run cooler, providing significant boosts to lifetime, efficacy, and color consistency.

LUMEN MAINTENANCE FACTORS

- Reference CreeLighting.com/International for detailed lumen maintenance factors.

CONSTRUCTION & MATERIALS

- Light engine integrates LEDs, driver, power supply, thermal management, and optical mixing components.
- Hanging tabs enable suspended installation.

  NOTE: Reference CreeLighting.com/International for detailed instructions on field replacement of the light engine.

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens integrated with upward-facing LED strip eliminates direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

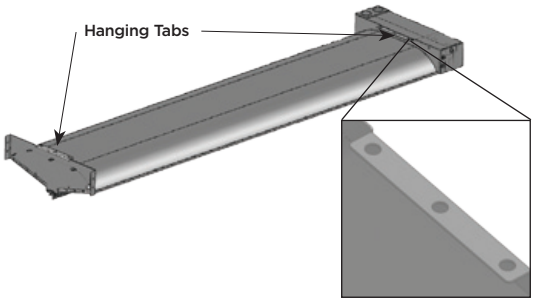
ELECTRICAL SYSTEM

- Integral, high-efficiency driver and power supply.
- **Power Factor** = 0.9 nominal
- **Input Power**: Stays constant over life.
- **Input Voltage**: 220-240V, 50/60Hz
- **Dimming**: Dimmable to 5% with Analog 1-10V or DALI control protocols. Reference CreeLighting.com/International for recommended dimming controls.
- **Temperature Rating**: Designed to operate in temperatures 35 C and below room side and plenum side.
- **Total Harmonic Distortion**: < 20%

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE certified.
- IP20

Installation



NOTE: Hanging materials not included. Must be purchased separately.

DOWNLIGHT TRIMS

Cree downlight trims are designed for easy snap-in attachment and are available in a variety of color and texture finishes to enhance the aesthetics without compromising the light output of the fixture.

CT6

p.42

· 150mm Trim and Reflector
· Compatible with CR150™
· Multiple Finishes

LT4

p.43

· 145mm Trim and Reflector
· Compatible with LR4-230V
· Multiple Finishes

LT6

p.44

· 165mm Trim and Reflector
· Compatible with LR6-230V family
· Multiple Finishes

CT6
CR150 Trim Accessory

Product Description

CT6 trim accessories are designed for easy snap-in attachment to CR150 downlights, providing a clean aperture appearance that decreases high angle brightness with minimal effect on lumen output. With a variety of colored finishes to choose from, the CT6 is a spec grade solution that compliments a variety of interior designs.

Product Specifications

CONSTRUCTION & MATERIALS

Lightweight injection molded trim designed for easy snap-in available in a variety of finishes. Reference back page for finish options.

Models A, AW, and AB feature a diffuse anodized reflector (no flange).

BB model is made of a specialized ABS thermoplastic material with flat black reflector and flange.

Ordering Information

Example: CT6A

Product
CT6A Diffuse anodized finish reflector
CT6AW Wheat diffuse anodized finish reflector
CT6AB Black diffuse anodized finish reflector
CT6BB Flat black reflector and trim
Reference back page for Trim Finish Options

CT6 Installed

CT6A

CT6-BB

Installation

- Guide trim's retaining ring onto tabs on CR150 downlight lens.
- Rotate clockwise until tight fit is achieved.

Stated performance values are nominal. The information in this document is subject to change without notice.

LT6

LR6-230V Family Trim Accessory

Product Description

LT6 trim accessories are designed for easy snap-in attachment to the LR6-230V family of downlights, providing a clean aperture appearance that decreases high angle brightness with minimal effect on lumen output. With a variety of colored finishes to choose from, the LT6 is a spec grade solution that compliments a variety of interior designs.

Product Specifications

CONSTRUCTION & MATERIALS

Lightweight anodized aluminum trim designed for easy snap-in available in a variety of finishes. Reference back page for finish options.

Models A, AW, AP, and AB feature a diffuse anodized reflector with painted white flange.

WH model features a smooth white painted reflector and flange.

BB model is made of a specialized ABS thermoplastic material with flat black reflector and flange.

Ordering Information

Example: LT6A

Product
LT6A Diffuse anodized finish trim
LT6AW Wheat diffuse anodized finish trim
LT6AP Pewter diffuse anodized finish trim
LT6AB Black anodized finish trim
LT6WH Smooth white trim
LT6BB Flat black reflector and trim
Reference back page for Trim Finish Options

LT6 Installed

LT6

LT6-BB

Installation

- Guide trim's retaining ring onto tabs on LR6-230V downlight lens.
- Rotate clockwise until tight fit is achieved.

LT4

LR4-230V Trim Accessory

Product Description

LT4 trim accessories are designed for easy snap-in attachment to LR4-230V light engines, providing a clean aperture appearance that decreases high angle brightness with minimal effect on lumen output. With a variety of colored finishes to choose from, the LT4 is a spec grade solution that compliments a variety of interior designs.

LT4-15A Installed

Product Specifications

CONSTRUCTION & MATERIALS

Lightweight spun aluminum trim designed for easy snap-in available in a variety of finishes. Reference back page for finish options.

Models A, AW, AP, and AB feature a diffuse anodized reflector with painted white flange.

WH model features a smooth white painted reflector and flange.

BB model is made of a specialized ABS thermoplastic material with flat black reflector and flange.

Ordering Information

Example: LT4-15A

Product
LT4-15A Diffuse anodized finish trim
LT4-15AW Wheat diffuse anodized finish trim
LT4-15AP Pewter diffuse anodized finish trim
LT4-15AB Black anodized finish trim
LT4-15WH Smooth white trim
LT4-15BB Flat black reflector and trim
Reference back page for Trim Finish Options

Installation

- Guide trim's retaining ring onto tabs on LR4-230V downlight lens.
- Rotate clockwise until tight fit is achieved.

Stated performance values are nominal. The information in this document is subject to change without notice.

LT TRIM & REFLECTOR FINISH OPTIONS

LT6 and LT4 trim and reflector options feature a colorized aluminum finish and a painted white flange. The WH and BB finishes cover both the reflector and flange with either white or flat black paint.

CT TRIM & REFLECTOR FINISH OPTIONS



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