

# LR4

## 4" Recessed Architectural Downlight

### Product Description

The LR4 is a recessed architectural downlight designed for use in commercial and residential applications. Available with a moderate or deep recess angle offering flexibility to meet diverse lighting design requirements. It is suitable for use in insulated and non-insulated ceilings. The LR4 generates white light with LED's in a new way that enables an unprecedented combination of light output, efficacy, beautiful color, and affordability. U.S. Patent # 7,213,940 issued. Numerous patents pending.

### Performance Summary

Utilizes Cree TrueWhite™ Technology

#### LR4E-15 – Moderate recess

- 540 delivered lumens
- Nominal Input Power of 10.5W
- CCT = 2700K or 3500K
- CRI = 94 (2700K) or 91 (3500K)

#### LR4E-30 – Deep recess

- 515 delivered lumens
- Nominal Input Power of 11.1W
- CCT = 2700K or 3500K
- CRI = 94 (2700K) or 91 (3500K)

### Ordering Information Example: H4 LR4E-15 LT4-15A

Luminaire is ordered as three components which ship separately (housing, light engine, and reflector)

#### Housing Light Engine

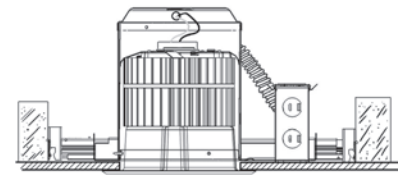
- H4**
- LR4E-15** -120V, Moderate recess, 2700K
  - LR4E-15C** -120V, Moderate recess, 3500K
  - LR4E-30** -120V, Deep recess, 2700K
  - LR4E-30C** -120V, Deep recess, 3500K

#### Reflector

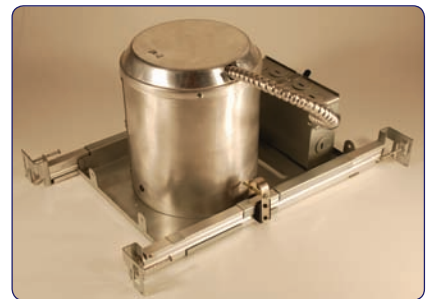
- LT4-15A** - Moderate recess diffuse anodized
- LT4-30A** - Deep recess diffuse anodized

Standard Color Options (Inner reflector color with white painted flange) - Add letters from below to end of description for colors. (LT4-15AP) For WH remove the "A" (LT4-30WH)

- W - Wheat    G - Graphite  
P - Pewter    WH - White Paint  
B - Black



LR4



H4



LR4E-30 and LR4E-15



LT4-30A and LT4-15A

# LR4

## 4" Recessed Architectural Downlight

### Product Information

#### Cree TrueWhite™ Technology

- A better way to generate white light that utilizes a patented mixture of unsaturated yellow and saturated red LEDs.
- Tuned to optimal color point before shipment.
- Color management system maintains color consistency over time and temperature.
- Designed to last 50,000 hours and maintain at least 70% of initial lumen output

### Construction

- Ships in three cartons:
  1. Recessed architectural housing with rugged, integral extruded aluminum bar hangers.
  2. Light engine with retention mechanism.
  3. Architectural reflector.
- Durable cold rolled steel housing and extruded aluminum heat sink suitable for insulated or non-insulated ceilings
- Integrated thermal management system conducts heat away from LED and transfers it to the surrounding environment. LED junction temperatures stay below specified maximums even when installed in attic insulation with temperatures exceeding 60 degrees Celsius.

### Optical System

- Proprietary optical system utilizes a unique combination of reflective and refractive optical components to achieve a uniform, comfortable appearance. Pixelation and direct view of unshielded LEDs is eliminated.
- Lower reflector with 4.5" aperture. Smooth, non-distracting aperture appearance with lamp visible before lamp image.

### Electrical System

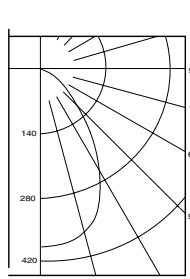
- Integral, high efficiency driver and power supply. Power factor >0.9 Input voltage = 120V, 60Hz
- Dimmable to 20% with most incandescent and electronic dimmers (reference [www.CreeLEDLighting.com](http://www.CreeLEDLighting.com) for recommended dimmers)

### Regulatory and Voluntary Qualifications

- Tested and certified to UL standards. Suitable for damp locations.
- Exceeds California Title-24 high efficacy luminaire requirements
- Suitable for insulated or non-insulated ceilings
- Airtight rated – tested in accordance with ASTM E283
- ENERGY STAR® qualified Solid-State Lighting Luminaire.

### Photometry

H4 LR4E-30 LT4-30A  
ITL Test #59866



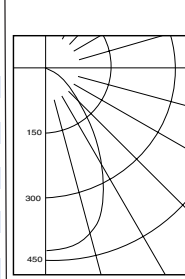
#### Intensity (Candlepower) Summary

ANGLE	MEAN CP
0°	391
5°	387
15°	364
25°	298
35°	193
45°	102
55°	38
65°	5
75°	1
85°	0
90°	0

#### Zonal Lumen Summary

ZONE	LUMENS	%LAMP	%FIX
0° - 30°	275	53.5	47.9
0° - 40°	397	76.9	70.9
0° - 60°	509	98.8	96.0
0° - 90°	515	100.00	100.00

H4 LR4E-15 LT4-15A  
ITL Test #59865



#### Intensity (Candlepower) Summary

ANGLE	MEAN CP
0°	378
5°	373
15°	340
25°	278
35°	200
45°	114
55°	52
65°	19
75°	1
85°	0
90°	0

#### Zonal Lumen Summary

ZONE	LUMENS	%LAMP	%FIX
0° - 30°	259	47.9	53.5
0° - 40°	383	70.9	76.9
0° - 60°	518	96	98.8
0° - 90°	540	100.00	100.00

### Installation

- Recessed housing with integral nailer and ceiling grid attachment detail. Integral bar-hangers accommodate spans from 10-1/4" to 24-3/4" without sag.
- Adjustable bar hanger brake prevents hangers from sliding during installation and holds position once installed.
- Integral t-bar attachment clip engages with suspended ceiling to support fixture
- Dimensions: h = 7", w = 8-3/4", L = 14"
- Accommodates ceiling thickness from 1/4" to 4"



Adjustable bar hanger brake

### Application Comparison

#### Room

	6' x 6' Spacing		5' x 5' Spacing		4' x 4' Spacing	
	Workplane Illuminance	Wall Illuminance	Workplane Illuminance	Wall Illuminance	Workplane Illuminance	Wall Illuminance
H4 LR4E-15 LT4-15A	14.1	5.6	18.8	10.7	26.3	11
65W BR30 White Baffle	14.0	6.3	18.7	8.6	26.1	12.6
26W CFL 4" Anodized	16.2	5.4	21.9	7.5	31.3	11.7
50W PAR20 5" White Baffle	13.6	3.7	19.6	5.0	29.0	7.5

#### Notes:

Average initial illuminance in footcandles, reflectances = 80/50/30, workplane height = 2.5', ceiling height = 9', Nine lights per room. Room sizes = 18'x18', 15'x15', 12'x12'

#### Hallway

	6' Spacing		8' Spacing		10' Spacing	
	Workplane Illuminance	Wall Illuminance	Workplane Illuminance	Wall Illuminance	Workplane Illuminance	Wall Illuminance
H4 LR4E-15 LT4-15A	12.3	4.6	9.3	3.4	7.5	2.8
65W BR30 White Baffle	12.0	5.3	9.1	4.0	7.2	3.2
26W CFL 4" Anodized	14.1	4.5	10.9	3.4	8.8	2.8
50W PAR20 5" White Baffle	13.1	2.7	9.7	2.1	8.0	1.5

#### Notes:

Average initial illuminance in footcandles, reflectances = 80/50/30, workplane height = 2.5', ceiling height = 9', Six lights per hall, width = 6'



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