



Project: \_\_\_\_\_

Fixture Type: \_\_\_\_\_

Location: \_\_\_\_\_

Contact/Phone: \_\_\_\_\_

# 5" IC 1400 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC1420LEDG4 RECESSED HOUSING



## HYPERBOLIC TRIMS

### PRODUCT DESCRIPTION

Dedicated LED, Air-Loc® sealed new construction housing with integral light engine • Housing allows for fit in 2 x 8 construction • Can be completely covered with insulation • Fully sealed housing stops infiltration and exfiltration of air, reducing heating and air cooling costs without the use of additional gaskets • LED housing is designed to provide 50,000 hours of life and is compatible with many standard Juno trims • 5 year limited warranty on LED components.

### ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- No harmful ultraviolet or infrared wavelengths
- No lead or mercury
- Comparable light output to 120W PAR38, BR40 incandescent or 32W compact fluorescent

### PRODUCT SPECIFICATIONS

**LED Light Engine** LED array integrated to thermally conductive housing provides uninterrupted heat transfer to ensure long life of the LED

- Replaceable light engine mounts directly to housing and incorporates the latest generation, high lumen output LED array • LEDs are binned within a 3-step MacAdam Ellipse exceeding ENERGY STAR® requirements for superior fixture to fixture color uniformity • 2700K, 3000K, 3500K, or 4100K color temperatures available • 90 CRI minimum.

**Hyperbolic Optical System** Unique hyperbolic reflector shape optimized for small, directional LED source provides unique aperture appearance with reduced brightness • NMCT™ nano mixing chamber (provided with trim) with high reflectance white finish coupled with a high transmission diffusing lens conceals the LED and integrates with the hyperbolic trim to create a low glare, efficient system.

**Aesthetic Trim Selections** Hyperbolic reflector available in clear Alzak®, haze, wheat haze, black Alzak® and white • Shadow free, knife edge design blends seamlessly into ceiling • Installs with torsion springs.

**LED Driver** Choice of dedicated 120 volt driver or universal voltage driver that accommodates input voltages from 120-277 volts AC at 50/60Hz • Power factor > 0.9 at 120V input • 120 volt only driver is dimmable with the use of most incandescent, magnetic low voltage and electronic low voltage wall box dimmers • Universal voltage driver is dimmable with the use of most 0-10V wall box dimmers • For a list of compatible dimmers, see [JUNOICLED-DIM](#)

**Life** Rated for 50,000 hours at 70% lumen maintenance.

**Labels** ENERGY STAR® Qualified when used with select trims • Certified to the high efficacy requirements of California T24 with select trims • UL listed for U.S. and Canada, through-branch wiring and damp locations • Union made • UL and cUL.

**Testing** All reports are based on published industry procedures; field performance may differ from laboratory performance.

Product specifications subject to change without notice.

### HOUSING FEATURES

**Housing** Designed for use in IC (insulated ceiling) or non-IC construction • Aluminum housing sealed for Air-Loc® compliance • Housing is vertically adjustable to accommodate up to a 2" ceiling thickness.

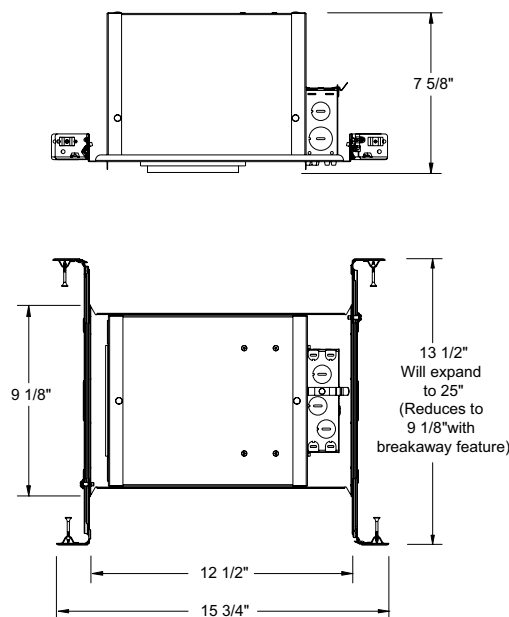
**Junction Box** Pre-wired junction box provided with (6) ½" and (1) ¾" knockouts, (4) knockouts for 12/2 or 14/2 NM cable and ground wire • UL listed and cUL listed for through-branch wiring, maximum 8 #12 branch circuit conductors • Junction box provided with removable access plates • Knockouts equipped with pryout slots • Quick connect electrical connectors supplied as standard for fast, secure installation.

**Mounting Frame** 22-gauge die-formed galvanized steel mounting frame • Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation.

**Real Nail 3 Bar Hangers** Patented (US Patent D552,969) Real Nail® 3 bar hangers: telescoping system permits quick placement of housing anywhere within 24" O.C. joists or suspended ceilings • Includes removable nail for repositioning of fixture in wood joist construction • Integral T-bar notch and clip for suspended ceilings.



### DIMENSIONS



5 5/8" CEILING CUTOUT

### ELECTRICAL DATA

#### Dedicated 120V Only Driver Option

| 120V                  |  |
|-----------------------|--|
| Input Power           | 20.3W (+/-5%)                                      |
| Input Current         | 0.17A  |
| Frequency             | 50/60Hz  |
| EMI/RFI               | FCC Title 47 CFR, Part 15<br>Class B (residential) |
| Minimum starting temp | -25°C  |

### ELECTRICAL DATA

#### Universal Voltage

|                       | 120V  | 277V  |
|-----------------------|---|---|
| Input Power           | 20.3W (+/-5%)                                     | 20.8W (+/-5%)                                     |
| Input Current         | 0.17A   | 0.08A   |
| Frequency             | 50/60Hz   | 50/60Hz   |
| EMI/RFI               | FCC Title 47 CFR, Part 15<br>Class A (commercial) | FCC Title 47 CFR, Part 15<br>Class A (commercial) |
| Minimum starting temp | -40°C   | -40°C   |

# 5" IC 1400 LUMEN LED DOWNLIGHT NEW CONSTRUCTION


## IC1420LEDG4 RECESSED HOUSING HYPERBOLIC TRIMS

**ORDERING INFORMATION:** Housing and trim each ordered separately.

Example: **IC1420LEDG4-3K-1**

| Housing            | Color Temperature   | Input Voltage   |
|--------------------|---|---|
| <b>IC1420LEDG4</b> | <b>27K</b> 2700K<br><b>3K</b> 3000K<br><b>35K</b> 3500K<br><b>41K</b> 4100K | <b>1</b> Dedicated<br>120V Only<br>(Forward Phase<br>+ ELV dimmable)<br><br><b>U</b> Universal Voltage,<br>120-277V<br>(0-10V dimmable) |

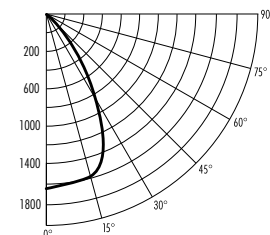
Example: **204HYP3-HZ-WH**

| Trim/Description  |                         |              |
|---|-------------------------|--------------|
|    | <b>204HYP3-C-WH</b>     | Clear Alzak® |
|   | <b>204HYP3-B-WH</b>     | Black Alzak® |
|   | <b>204HYP3-W-WH¹</b>    | White        |
|   | <b>204HYP3-HZ-WH²</b>   | Haze         |
|   | <b>204HYP3-WHZ-WH³</b>  | Wheat Haze   |
|   | <b>204HYP3-WHZ-ABZ³</b> | Wheat Haze   |
| Trim Size: 6 1/4" O.D.<br>Trim Finish: ABZ - Classic Aged Bronze, WH - White.<br>Alzak is a registered trademark of Alcoa Corp.<br>Note: In Canada when insulation is present, Type IC fixtures must be used. |                         |              |

### PHOTOMETRIC REPORT

Test Report #: PT10141706R  
Catalog No: IC1420LEDG4-35K  
with 204HYP3-C-WH Trim  
and standard nano mixing  
chamber

Luminaire Spacing Criterion: 0.92  
Luminaire LPW: 73



### CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical       | 0°   |
|------------------------|------|
| 0                      | 1658 |
| 5                      | 1634 |
| 15                     | 1496 |
| 25                     | 1074 |
| 35                     | 522  |
| 45                     | 127  |
| 55                     | 0    |
| 65                     | 0    |
| 75                     | 0    |
| 85                     | 0    |
| 90                     | 0    |
| Multiplier: 27K - 0.93 |      |
| 3K - 0.99              |      |
| 41K - 1.01             |      |

### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60'x60' room)  
Ceiling 80% Wall 50% Floor 20%

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4.0'    | 104  | 90   | 78   |
| 5.0'    | 66   | 57   | 50   |
| 6.0'    | 46   | 40   | 35   |
| 7.0'    | 37   | 32   | 28   |
| 8.0'    | 29   | 25   | 22   |
| 9.0'    | 23   | 19   | 17   |
| 10.0'   | 17   | 14   | 13   |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 1060   | N/A   | 71.1     |
| 0-40° | 1388   | N/A   | 93.0     |
| 0-60° | 1492   | N/A   | 100.0    |
| 0-90° | 1492   | N/A   | 100.0    |

### INITIAL FOOTCANDLES (One Unit, 20.3W, 59.9° Beam)

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4                                    | 103.6                   | 4.6'          |
| 6                                    | 46.1                    | 6.9'          |
| 8                                    | 25.9                    | 9.2'          |
| 10                                   | 16.6                    | 11.5'         |

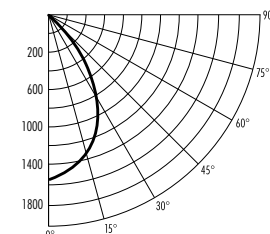
### LUMINANCE (Average cd/m²)

| Degrees | Average 0° Luminance |
|---------|----------------------|
| 45      | 16972                |
| 55      | 0                    |
| 65      | 0                    |
| 75      | 0                    |
| 85      | 0                    |

### PHOTOMETRIC REPORT

Test Report #: PT10141704R  
Catalog No: IC1420LEDG4-35K  
with 204HYP3-HZ-WH Trim  
and standard nano mixing  
chamber

Luminaire Spacing Criterion: 0.90  
Luminaire LPW: 69



### CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical       | 0°   |
|------------------------|------|
| 0                      | 1571 |
| 5                      | 1532 |
| 15                     | 1298 |
| 25                     | 1008 |
| 35                     | 534  |
| 45                     | 124  |
| 55                     | 2    |
| 65                     | 0    |
| 75                     | 0    |
| 85                     | 0    |
| 90                     | 0    |
| Multiplier: 27K - 0.93 |      |
| 3K - 0.99              |      |
| 41K - 1.01             |      |

### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60'x60' room)  
Ceiling 80% Wall 50% Floor 20%

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4.0'    | 98   | 85   | 74   |
| 5.0'    | 63   | 54   | 47   |
| 6.0'    | 43   | 38   | 33   |
| 7.0'    | 35   | 30   | 27   |
| 8.0'    | 28   | 24   | 21   |
| 9.0'    | 21   | 18   | 16   |
| 10.0'   | 16   | 14   | 12   |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 967    | N/A   | 68.6     |
| 0-40° | 1299   | N/A   | 92.2     |
| 0-60° | 1409   | N/A   | 100.0    |
| 0-90° | 1409   | N/A   | 100.0    |

### INITIAL FOOTCANDLES (One Unit, 20.3W, 61.3° Beam)

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4                                    | 98.2                    | 4.7'          |
| 6                                    | 43.6                    | 7.1'          |
| 8                                    | 24.5                    | 9.5'          |
| 10                                   | 15.7                    | 11.9'         |

### LUMINANCE (Average cd/m²)

| Degrees | Average 0° Luminance |
|---------|----------------------|
| 45      | 16666                |
| 55      | 361                  |
| 65      | 0                    |
| 75      | 0                    |
| 85      | 0                    |

Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit represents a baseline of performance for the fixture. Results may vary in the field.



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