

| Project:       |  |
|----------------|--|
| Fixture Type:  |  |
| Location:      |  |
| Contact/Phone: |  |

# **4" IC 600 LUMEN** LED DOWNLIGHT **NEW CONSTRUCTION**

IC1LED (G4 06LM) RECESSED HOUSING





## **HYPERBOLIC TRIMS**

#### **PRODUCT DESCRIPTION**

Dedicated LED, Air-Loc® sealed new construction housing with integral light engine • Double wall, shallow housing construction allows for fit in 2 x 6 construction • Can be completely covered with insulation • Fully sealed housing stops infiltration and extiltration 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, RoHS compliant
- Comparable light output to 65W incandescent

#### **PRODUCT SPECIFICATIONS**

LED Light Engine LED array attached to high purity aluminum, thermally conductive inner housing provides superior heat transfer to ensure long life of the LED ● Replaceable light engine mounts directly to inner housing assembly 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 4000K color temperatures available • 90 CRI minimum.

Hyperbolic Optical System Patent pending unique hyperbolic reflector shape optimized for small, directional LED source provides unique aperture appearance with reduced brightness • NMC™ 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 producing 600 lumens using less

**Aesthetic Trim Selections** Patent pending hyperbolic reflector available in clear Alzak®, haze, wheat haze, black Alzak® and white ● Shadow free, knife edge design blends seamlessly into ceiling • Installs with push-in springs.

LED Driver Choice of dedicated 120 volt (120) driver or universal voltage (MVOLT) 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 <u>JUNOICLED-DIM</u> • Mounted inside housing for easy access from below ceiling

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

Labels ENERGY STAR® Certified when used with select trims • Certified to the high efficacy requirements of California T24 JA8-2016 with select trims
•UL listed for U.S. and Canada through-branch wiring, 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 11/2" ceiling thickness.

Junction Box Pre-wired junction box provided with (6) 1/2" and (1) 3/4" Nockouts, (4) knockouts for 12/2 or 14/2 NM cable and ground wire

UL listed and cUL listed for through-branch wiring, maximum 6 #12 branch circuit conductors

Knockouts equipped with pryout slots

Quick connect electrical connectors supplied as standard for fast, secure installation.

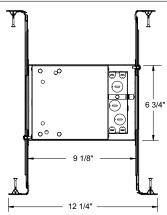
Mounting Frame 22-gauge die-formed galvanized steel mounting frame
• Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation.

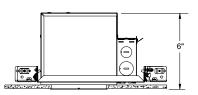
Real Nail 3 Bar Hangers Patented (US Patent D552,969) Real Nail® 3 bar hangers: telescoping system permits quick placement of housing anywhere within 24" O.C. joists or suspended ceilings • Includes removable nail for repositioning of fixture in wood joist construction • Integral T-bar notch and clip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

\*Nominal input wattage @ 120-volt operation with dedicated 120-volt driver under stable operating conditions.

# **DIMENSIONS**







4 1/2" CEILING CUTOUT

#### **ELECTRICAL DATA**

## **Dedicated 120V Only Driver Option**

|                       | 120V                       |  |
|-----------------------|----------------------------|--|
| Input Power           | 8.6W (+/-5%)               |  |
| Input Current         | 0.07A                      |  |
| Frequency             | 50/60Hz                    |  |
| EMI/RFI               | FCC Title 47 CFR, Part 15, |  |
|                       | Class B (residential)      |  |
| Minimum starting temp | -25°C                      |  |

#### **ELECTRICAL DATA**

#### **Universal Voltage**

|                       | 120V                       | 277V                       |
|-----------------------|----------------------------|----------------------------|
| Input Power           | 8.7W (+/-5%)               | 8.9W (+/-5%)               |
| Input Current         | 0.07A                      | 0.04A                      |
| Frequency             | 50/60Hz                    | 50/60Hz                    |
| EMI/RFI               | FCC Title 47 CFR, Part 15, | FCC Title 47 CFR, Part 15, |
|                       | Class A (non-consumer)     | Class A (non-consumer)     |
| Minimum starting temp | -40°C                      | -40°C                      |

# 4" IC 600 LUMEN LED DOWNLIGHT **NEW CONSTRUCTION**

IC1LED (G4 06LM) RECESSED HOUSING

# **HYPERBOLIC TRIMS**

ORDERING INFORMATION Housing and trim can be ordered together or separate, but will always ship separately.

Example: IC1LED G4 O6LM 27K 90CRI 120 FRPC

| Series |                                      | Gener | ation        | Lumens |                    | Color | Temperature | CRI   |         | Voltage |            | Driver |                           |
|--------|--------------------------------------|-------|--------------|--------|--------------------|-------|-------------|-------|---------|---------|------------|--------|---------------------------|
| IC1LED | 4" LED IC New Construction Downlight | G4    | Generation 4 | 06LM   | 600 Nominal Lumens | 27K   | 2700K       | 90CRI | 90+ CRI | 120     | 120V       | FRPC   | Forward/Reverse Phase Cut |
|        |                                      |       |              |        |                    | 30K   | 3000K       |       |         | MVOLT   | Multi-Volt | ZT     | 0-10V Dimming Driver      |
|        |                                      |       |              |        |                    | 35K   | 3500K       |       |         |         | (120-277V) |        |                           |
|        |                                      |       |              |        |                    | 40K   | 4000K       |       |         |         |            |        |                           |

Notes: Order 120 with FRPC only, Order MVOLT with ZT only.

#### Trim/Description



17HYP2 BWH1 17HYP2 CWH 17HYP2 HZWH 17HYP2 WHZABZ1 17HYP2 WHZWH1

17HYP2 WWH2

4" Hyperbolic Cone Trim - Black Cone, White Trim Ring 4" Hyperbolic Cone Trim - Clear Alzak® Cone, White Trim Ring 4" Hyperbolic Cone Trim - Haze Cone, White Trim Ring

4" Hyperbolic Cone Trim - Wheat Haze Cone, Classic Aged Bronze Trim Ring

4" Hyperbolic Cone Trim - Wheat Haze, White Trim Ring 4" Hyperbolic Cone Trim - White, White Trim Ring

Trim Size: 5" O.D.

Alzak is a registered trademark of Alcoa Corp. Note: In Canada when insulation is present, Type IC fixtures must be used.

<sup>1</sup> Not ENERGY STAR® Certified or T24 certified

<sup>&</sup>lt;sup>2</sup> ENERGY STAR® Certified and T24 certified @ 30K with 120 driver and @ 35K, 40K with all drivers

# 4" IC 600 LUMEN LED DOWNLIGHT **NEW CONSTRUCTION**

IC1LED (G4 06LM) RECESSED HOUSING

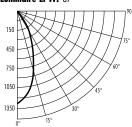
### **HYPERBOLIC TRIMS**

#### **PHOTOMETRICS**

#### PHOTOMETRIC REPORT

Test Report #: PT06140404 Catalog No: IC1LED G4 06LM 35K 90CRI 120 with 17HYP2 HZWH Trim and standard nano mixing chamber

Luminaire Spacing Criterion: 0.62 Luminaire LPW: 67



#### **CANDLEPOWER DISTRIBUTION**

#### (Candelas)

| •              | •        |
|----------------|----------|
| Degrees        |          |
| Vertical       | 0°       |
| 0              | 1329     |
| 5              | 1233     |
| 15             | 826      |
| 25             | 442      |
| 35             | 44       |
| 45             | 3        |
| 55             | 0        |
| 65             | 0        |
| 75             | 0        |
| 85             | 0        |
| 90             | 0        |
| Multiplier: 27 |          |
| 30             | K - 0.94 |

#### **AVERAGE INITIAL FOOTCANDLES**

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

| coming oo | /0 1 T GII O | 270 1 1001 Z | 0 / 0 |
|-----------|--------------|--------------|-------|
| Spacing   | RCR1         | RCR3         | RCR5  |
| 4.0′      | 40           | 36           | 33    |
| 5.0′      | 26           | 23           | 21    |
| 6.0′      | 18           | 16           | 15    |
| 7.0′      | 14           | 13           | 12    |
| 8.0′      | 11           | 10           | 9     |
| 9.0′      | 9            | 8            | 7     |
| 10.0′     | 6            | 6            | 5     |
|           |              |              |       |

### (One Unit, 8.6W, 38.3° Beam)

**INITIAL FOOTCANDLES** 

| Distance to Illuminated Plane<br>(Feet) | Footcandles<br>Beam Center | Beam<br>Diameter |
|---|----------------------------|------------------|
| 4                                       | 83.1                       | 2.8′             |
| 6                                       | 36.9                       | 4.2'             |
| 8                                       | 20.8                       | 5.6′             |
| 10                                      | 13.3                       | 6.9'             |

#### TONIAL LUMENI CUMMA ADV

| ZONAL LUMEN JUMMAK I |        |       |          |  |  |
|----------------------|--------|-------|----------|--|--|
| Zone                 | Lumens | %Lamp | %Fixture |  |  |
| 0-30°                | 533    | N/A   | 92.8     |  |  |
| 0 - 40°              | 571    | N/A   | 99.4     |  |  |
| 0-60°                | 574    | N/A   | 100.0    |  |  |
| 0 - 90°              | 574    | N/A   | 100.0    |  |  |

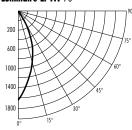
#### LUMINANCE (Average cd/m²)

|         | Average   |  |
|---------|-----------|--|
| Degrees | Luminance |  |
| 45      | 691       |  |
| 55      | 33        |  |
| 65      | 0         |  |
| 75      | 0         |  |
| 85      | 0         |  |

#### PHOTOMETRIC REPORT

Test Report #: PT06140402 Catalog No: IC1LED G4 06LM 35K 90CRI 120 with 17HYP2 CWH Trim and standard nano mixing chamber

**Luminaire Spacing Criterion:** 0.56 Luminaire LPW: 70



#### **CANDLEPOWER DISTRIBUTION**

(Candelas)

| Degrees  |                                     |
|----------|-------------------------------------|
| Vertical | 0°                                  |
| 0        | 1627                                |
| 5        | 1457                                |
| 15       | 918                                 |
| 25       | 438                                 |
| 35       | 26                                  |
| 45       | 1                                   |
| 55       | 0                                   |
| 65       | 0                                   |
| 75       | 0                                   |
| 85       | 0                                   |
| 90       | 0                                   |
|          | 7K - 0.89<br>DK - 0.94<br>DK - 1.03 |

#### **AVERAGE INITIAL FOOTCANDLES**

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

| Celling 00% | o vvali o | 0 /6 1 1001 2 | 0 /0 |
|-------------|-----------|---------------|------|
| Spacing     | RCR1      | RCR3          | RCR5 |
| 4.0′        | 42        | 38            | 35   |
| 5.0′        | 27        | 24            | 22   |
| 6.0′        | 19        | 17            | 15   |
| 7.0′        | 15        | 14            | 13   |
| 8.0′        | 12        | 11            | 10   |
| 9.0′        | 9         | 8             | 8    |
| 10.0′       | 7         | 6             | 6    |

**INITIAL FOOTCANDLES** 

(One Unit, 8.6W, 34.2° Beam)

Distance to Illuminated Plane | Footcandles

| (Feet) | Beam Center | Diameter |   |
|--------|-------------|----------|---|
| 4      | 101.7       | 2.5'     |   |
| 6      | 45.2        | 3.7'     |   |
| 8      | 25.4        | 4.9'     | _ |
| 10     | 16.3        | 6.2'     |   |
|        |             |          | _ |

#### **ZONAL LUMEN SUMMARY**

| Zone    | Lumens | %Lamp | %Fixture |
|---------|--------|-------|----------|
| 0 - 30° | 575    | N/A   | 95.0     |
| 0 - 40° | 604    | N/A   | 99.9     |
| 0 - 60° | 605    | N/A   | 100.0    |
| 0 - 90° | 605    | N/A   | 100.0    |

#### LUMINANCE (Average cd/m²)

| Average |           |  |  |  |
|---------|-----------|--|--|--|
| Degrees | Luminance |  |  |  |
| 45      | 212       |  |  |  |
| 55      | 0         |  |  |  |
| 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.