

# JUNO®

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

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

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

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

## 4" IC 900 LUMEN LED DOWNLIGHT REMODEL

IC 1 RLED (G4 09LM) RECESSED HOUSING



## OPEN TRIMS

### PRODUCT DESCRIPTION

Dedicated LED, Air-Loc® remodel housing with integral light engine

- Shallow housing allows for fit in 2 x 6 construction
- IC remodel housing for remodel application where back side of ceiling is not accessible
- Installs through an opening in the ceiling from below
- Secured in place by factory installed remodel springs
- Can be completely covered with insulation
- 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 75W incandescent

### PRODUCT SPECIFICATIONS

**LED Light Engine** LED array attached to high purity aluminum, thermally conductive housing provides superior heat transfer to ensure long life of the LED

- Replaceable light engine mounts directly to 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.

**Optical System** Computer-optimized reflector design with high reflectance finish coupled with a high transmission diffusing lens conceals the LEDs and produces uniform aperture luminance

- Deep regression of lens produces a low glare, efficient system that can produce over 900 lumens with select trims (see page 2 for details) using less than 13W\*.

**Aesthetic Trim Selections** Compatible with wide selection of existing Juno trims

- Shadow free, knife edge design blends seamlessly into ceiling.

**LED Driver** Choice of dedicated 120 volt (120) driver or universal voltage (MVOLT) drivers that accommodate 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 drivers are dimmable with the use of most 0-10V wall box dimmers
- For a list of compatible dimmers, see [JUNOICLED-DIM](#)
- Mounted on the j-box for easy access and cool operation.

**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 JA8-2019 with select trims
- UL listed for U.S. and Canada damp locations
- Union made
- UL and cUL.

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

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
- Remodel springs accommodate up to 1 1/2" ceiling thickness.

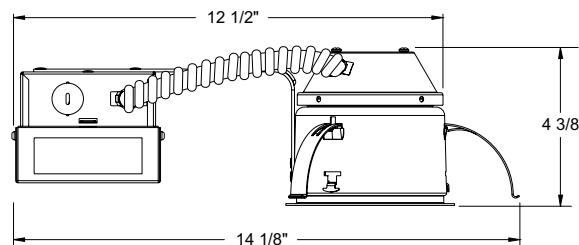
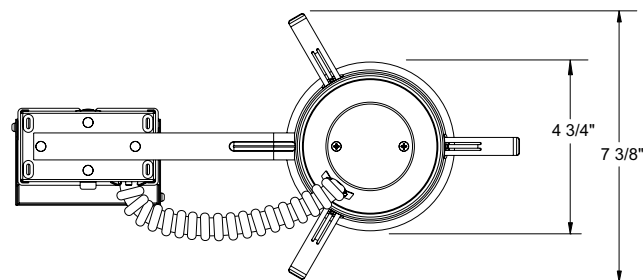
**Junction Box** Pre-wired junction box provided with (5) 1/2" knockouts, (4) knockouts for 12/2 or 14/2 NM cable and ground wire

- Knockouts equipped with pryout slots
- Quick connect electrical connectors supplied as standard for fast, secure installation.

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



### DIMENSIONS



4 3/8" CEILING CUTOUT

# 4" IC 900 LUMEN LED DOWNLIGHT REMODEL

## IC1 RLED (G4 09LM) RECESSED HOUSING OPEN TRIMS

### ELECTRICAL DATA

Dedicated 120V Only Driver Option (120 FRPC)

|                       | 120V   |
|-----------------------|--|
| Input Power           | 11.6W (+/-5%)                                    |
| Input Current         | 0.10A  |
| Frequency             | 50/60Hz  |
| EMI/RFI               | FCC Title 47 CFR, Part 15, Class B (residential) |
| Minimum starting temp | -25°C  |

### ELECTRICAL DATA

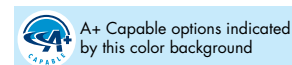
Universal Voltage

|                       | MVOLT EZ10 and EZ1                               |  | MVOLT ZT10 and ZT1                               |  |
|-----------------------|--|--|--|--|
|                       | 120V   | 277V   | 120V   | 277V   |
| Input Power           | 11.2W (+/-5%)                                    | 12.2W (+/-5%)                                    | 11.2W (+/-5%)                                    | 12.2W (+/-5%)                                    |
| Input Current         | 0.10A  | 0.05A  | 0.10A  | 0.05A  |
| Frequency             | 50/60Hz  | 50/60Hz  | 50/60Hz  | 50/60Hz  |
| EMI/RFI               | FCC Title 47 CFR, Part 15, Class B (residential) | FCC Title 47 CFR, Part 15, Class B (residential) | FCC Title 47 CFR, Part 15, Class B (residential) | FCC Title 47 CFR, Part 15, Class B (residential) |
| Minimum starting temp | -20°C  | -20°C  | -20°C  | -20°C  |














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

**Example:** IC1RLED G4 09LM 27K 90CRI 120 FRPC

| Series                              | Generation      | Lumens                  | Color Temperature | CRI           | Voltage/Driver  |
|-------------------------------------|-----------------|-------------------------|-------------------|---------------|---|
| IC1RLED 4" LED IC Remodel Downlight | G4 Generation 4 | 09LM 900 Nominal Lumens | 27K 2700K         | 90CRI 90+ CRI | 120 FRPC 120V Forward/Reverse Phase Cut, 5% dim         |
|                                     |                 |                         | 30K 3000K         |               | MVOLT ZT10 Multi-Volt (120-277), 0-10V, 10% dim         |
|                                     |                 |                         | 35K 3500K         |               | MVOLT ZT1 Multi-Volt (120-277), 0-10V, 1% dim           |
|                                     |                 |                         | 40K 4000K         |               | MVOLT EZ10 Multi-Volt (120-277), eLdoLED 0-10V, 10% dim |
|                                     |                 |                         |                   |               | MVOLT EZ1 Multi-Volt (120-277), eLdoLED 0-10V, 1% dim   |



### Trim/Description

|   |                            |   |
|---|----------------------------|---|
|  | <b>13 WH</b>               | 4" Pinhole with Integral Shield - White                         |
|  | <b>14 BBRZ<sup>1</sup></b> | 4" Downlight Baffle Trim - Black Baffle, Bronze Trim Ring       |
|  | <b>14 BBL<sup>1</sup></b>  | 4" Downlight Baffle Trim - Black Baffle, Black Trim Ring        |
|  | <b>14 BSC<sup>1</sup></b>  | 4" Downlight Baffle Trim - Black Baffle, Satin Chrome Trim Ring |
|  | <b>14 BWH<sup>1</sup></b>  | 4" Downlight Baffle Trim - Black Baffle, White Trim Ring        |
|  | <b>14 WWH</b>              | 4" Downlight Baffle Trim - White Baffle, White Trim Ring        |
|  | <b>17 BWH</b>              | 4" Downlight Cone Trim - Black Cone, White Trim Ring            |
|  | <b>17 CWH</b>              | 4" Downlight Cone Trim - Clear Alzak <sup>®</sup> Cone, White   |
|  | <b>17 HZWH</b>             | 4" Downlight Cone Trim - Haze Cone, White Trim                  |
|  | <b>17 PTSC</b>             | 4" Downlight Cone Trim - Pewter Cone, Satin Chrome Trim         |
|  | <b>17 WHZBRZ</b>           | 4" Downlight Cone Trim - Wheat Haze Cone, Bronze Trim Ring      |
|  | <b>17 WHZWH</b>            | 4" Downlight Cone Trim - Wheat Haze Cone, White Trim            |
|  | <b>17 WWH</b>              | 4" Downlight Cone Trim - White Cone, 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> Multi-Volt: T24 @ 30K, 35K, 40K only

# 4" IC 900 LUMEN LED DOWNLIGHT REMODEL

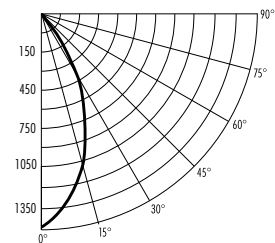
IC1 RLED (G4 09LM) RECESSED HOUSING  
OPEN TRIMS

## PHOTOMETRICS

### PHOTOMETRIC REPORT

Test Report #: PT02141303R  
Catalog No: IC1 RLED G4 09LM 35K  
90CRI 120 with 14 WWH Trim

Luminaire Spacing Criterion: 0.72  
Luminaire LPW: 81



### CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0°   |
|------------------|------|
| 0                | 1491 |
| 5                | 1449 |
| 15               | 1118 |
| 25               | 600  |
| 35               | 206  |
| 45               | 54   |
| 55               | 22   |
| 65               | 10   |
| 75               | 6    |
| 85               | 1    |
| 90               | 0    |

Multiplier: 27K - 0.89  
30K - 0.94  
40K - 1.03

### AVERAGE INITIAL FOOTCANDLES

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

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4.0'    | 65   | 57   | 50   |
| 5.0'    | 42   | 36   | 32   |
| 6.0'    | 29   | 25   | 22   |
| 7.0'    | 23   | 20   | 18   |
| 8.0'    | 18   | 16   | 14   |
| 9.0'    | 14   | 12   | 11   |
| 10.0'   | 10   | 9    | 8    |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 717    | N/A   | 76.5     |
| 0-40° | 852    | N/A   | 91.0     |
| 0-60° | 917    | N/A   | 98.0     |
| 0-90° | 936    | N/A   | 100.0    |

### INITIAL FOOTCANDLES (One Unit, 11.6W, 44.2° Beam)

| Distance to Illuminated Plane (feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4                                    | 93.2                    | 3.2'          |
| 6                                    | 41.4                    | 4.9'          |
| 8                                    | 23.3                    | 6.5'          |
| 10                                   | 14.9                    | 8.1'          |

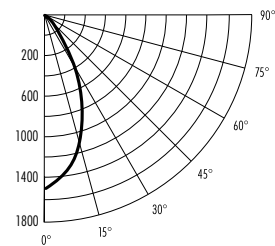
### LUMINANCE (Average cd/m<sup>2</sup>)

| Degrees | Average Luminance |
|---------|-------------------|
| 45      | 12517             |
| 55      | 6382              |
| 65      | 4034              |
| 75      | 4069              |
| 85      | 2014              |

### PHOTOMETRIC REPORT

Test Report #: LTL26327R  
Catalog No: IC1 RLED G4 09LM 35K  
90CRI 120 with 17 CWH Trim

Luminaire Spacing Criterion: 0.70  
Luminaire LPW: 85



### CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0°   |
|------------------|------|
| 0                | 1508 |
| 5                | 1482 |
| 15               | 1104 |
| 25               | 620  |
| 35               | 254  |
| 45               | 82   |
| 55               | 26   |
| 65               | 3    |
| 75               | 0    |
| 85               | 0    |
| 90               | 0    |

Multiplier: 27K - 0.89  
30K - 0.94  
40K - 1.03

### AVERAGE INITIAL FOOTCANDLES

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

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4.0'    | 68   | 59   | 52   |
| 5.0'    | 44   | 38   | 33   |
| 6.0'    | 30   | 26   | 23   |
| 7.0'    | 25   | 21   | 19   |
| 8.0'    | 19   | 17   | 15   |
| 9.0'    | 15   | 13   | 11   |
| 10.0'   | 11   | 10   | 8    |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 725    | N/A   | 73.9     |
| 0-40° | 887    | N/A   | 90.5     |
| 0-60° | 977    | N/A   | 99.6     |
| 0-90° | 981    | N/A   | 100.0    |

### INITIAL FOOTCANDLES (One Unit, 11.6W, 43.9° Beam)

| Distance to Illuminated Plane (feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4                                    | 94.3                    | 3.2'          |
| 6                                    | 41.9                    | 4.8'          |
| 8                                    | 23.6                    | 6.4'          |
| 10                                   | 15.1                    | 8.1'          |

### LUMINANCE (Average cd/m<sup>2</sup>)

| Degrees | Average Luminance |
|---------|-------------------|
| 45      | 18733             |
| 55      | 7144              |
| 65      | 1077              |
| 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.