



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

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

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

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



# 2" IC 600 LUMENS LED ROUND DOWNLIGHT

## 2B and 2C Series

### PRODUCT DESCRIPTION

2 inch aperture recessed downlight is IC rated for insulated or non-insulated applications • Luminaire produces up to 600 lumens and is available with optical distributions approximating that of 50W MR16 halogen lamps • Low profile form factor allows luminaire to fit in 2 x 6 construction • Designed to provide 50,000 hours of life • 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 a 50W MR16 halogen lamp

### PRODUCT SPECIFICATIONS

**LED Light Engine** Exceptional fixture to fixture color consistency within a 3-step MacAdam ellipse • 2700K, 3000K, 3500K, and 4100K color temperatures are available with 80 CRI or 90 CRI minimum.

**Modular Optics** Available with field interchangeable optics in 18° Spot, 24° Narrow Flood, or 40° Flood distributions.

**Aesthetic Trim** Trim features die cast beveled knife edge trim ring or frame for clean ceiling interface available in white, black, satin nickel, or brushed bronze • Die cast baffles are available in white, black, satin nickel, or brushed bronze • Spun aluminum reflectors are available in clear, haze, wheat haze, and white finishes.

**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 • Dedicated 120 volt driver (-1) is dimmable with the use of most incandescent, magnetic low voltage and electronic low voltage dimmers • Universal voltage driver (-U) is dimmable with the use of most 0-10V protocol dimmers • For a list of compatible dimmers, see [JUNO2INCH-DIM](#).

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

**Labels** ENERGY STAR® Qualified • 90CRI fixtures are certified to the high efficacy requirements of California T24 • Meets energy code Air Leakage requirements per ASTM E283 • UL and cUL listed for wet locations.

**Junction Box** Includes (2) 1/2" knock-outs equipped with pryout slots • Push-in electrical connectors for field connections.

**Mounting** Remodel style plaster frame installs from below the ceiling and accommodates ceiling thicknesses from 1/2" to 1" • For thicker ceilings up to 1 1/2", order 2-JCTA150 • New Construction mounting frame, 2-NCMF, is also available with Patented (US Patent D552,969) Real Nail 3® telescoping bar hangers to position fixture and locate wiring prior to ceiling installation • Recommend a minimum of 5.5" cavity depth to install properly • Flexible supply is recommended and non-flexible supply requires top access.

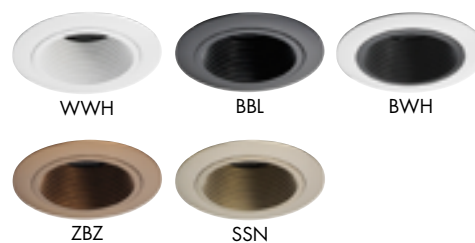
Product specifications subject to change without notice.

### ENGINEERING DATA

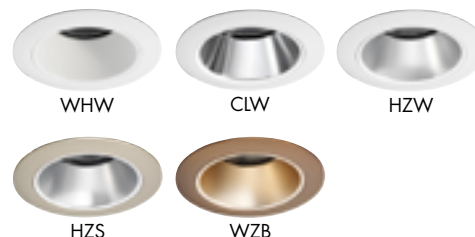
|               | Dedicated 120V<br>(-1) | Universal Voltage<br>(-U) |
|---------------|------------------------|---------------------------|
| Voltage       | 120                    | 120 277                   |
| Input Power   | 10.1 (±5%)             | 9.7 9.8 (±5%)             |
| Input Current | .09                    | .08 .04                   |
| Frequency     | 50/60Hz                | 50/60Hz                   |
| Power Factor  | .94                    | .98 .98                   |



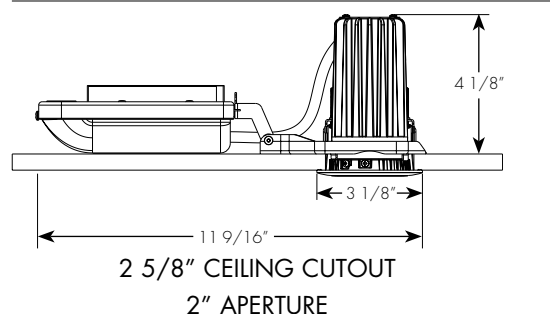
### Downlight Baffle Finishes



### Downlight Cone Finishes



### DIMENSIONS



# 2" IC 600 LUMENS LED ROUND DOWNLIGHT

## 2B and 2C Series

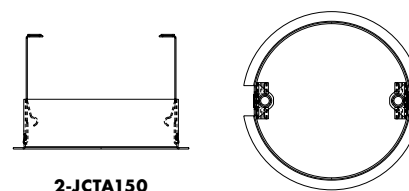
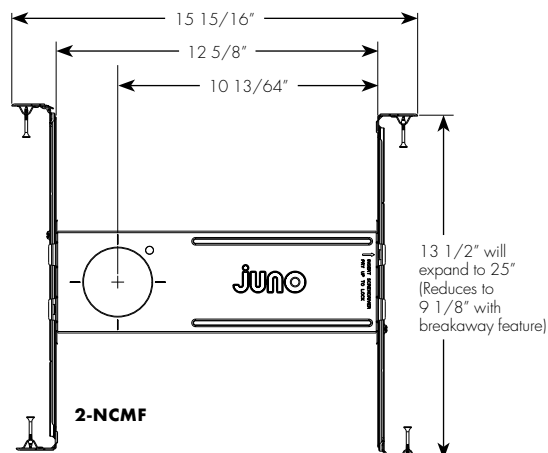
### ORDERING INFORMATION:

Example: **2B-927N1-WWH**

| Series                     | CRI/Color Temperature   |                         | Beam Optics       |                                                 | Drivers                                                     | Finish                                       |                                        |
|----------------------------|-------------------------|-------------------------|-------------------|-------------------------------------------------|-------------------------------------------------------------|----------------------------------------------|----------------------------------------|
|                            |                         |                         |                   |                                                 |                                                             |                                              |                                        |
| <b>2B</b> Downlight Baffle | <b>827</b> 2700K, 80CRI | <b>927</b> 2700K, 90CRI | <b>S</b> 18° Spot | <b>N</b> 24° Narrow Flood<br><b>F</b> 40° Flood | <b>I</b> Dedicated 120V Only (Forward Phase + ELV Dimmable) | <b>Downlight Baffle</b>                      | <b>Downlight Cone</b>                  |
| <b>2C</b> Downlight Cone   | <b>830</b> 3000K, 80CRI | <b>930</b> 3000K, 90CRI |                   |                                                 | <b>U</b> Universal Voltage 120-277V (0-10V Dimmable)        | <b>WWH</b> White Baffle, White Trim Ring     | <b>WHW</b> White Cone, White Trim Ring |
|                            | <b>835</b> 3500K, 80CRI | <b>935</b> 3500K, 90CRI |                   |                                                 |                                                             | <b>BBL</b> Black Baffle, Black Trim Ring     | <b>CLW</b> Clear Cone, White Trim Ring |
|                            | <b>841</b> 4100K, 80CRI | <b>941</b> 4100K, 90CRI |                   | <b>BWH</b> Black Baffle, White Trim Ring        |                                                             | <b>HZW</b> Haze Cone, White Trim Ring        |                                        |
|                            |                         |                         |                   |                                                 | <b>ZBZ</b> Bronze Baffle, Bronze Trim Ring                  | <b>HZS</b> Haze Cone, Satin Nickel Trim Ring |                                        |
|                            |                         |                         |                   |                                                 | <b>SSN</b> Satin Nickel Baffle, Satin Nickel Trim Ring      | <b>WZB</b> Wheat Haze Cone, Bronze Trim Ring |                                        |

### ACCESSORIES

| Catalog No.        | Description                                                   |
|--------------------|---------------------------------------------------------------|
| <b>2-NCMF</b>      | New Construction Mounting Frame with Real Nail® 3 bar hangers |
| <b>2-JCTA150</b>   | Thick Ceiling adapter for 1" - 1½" thick ceiling              |
| <b>LEDOPTIC2-S</b> | 18° Spot Optic                                                |
| <b>LEDOPTIC2-N</b> | 24° Narrow Flood Optic                                        |
| <b>LEDOPTIC2-F</b> | 40° Flood Optic                                               |



# 2" IC 600 LUMENS LED ROUND DOWNLIGHT

## 2B and 2C Series

### PHOTOMETRIC REPORT

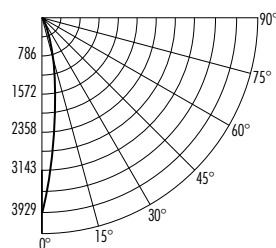
Test Report#: PT01142303R

Catalog No: 2B-835S1-WWH

80 CRI, 3500K LED, White Baffle  
with Spot Optic

Luminaire Spacing Criteria: 0.30

Luminaire LPW: 65



### CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0°   |
|------------------|------|
| 0                | 3929 |
| 5                | 3055 |
| 15               | 917  |
| 25               | 222  |
| 35               | 38   |
| 45               | 12   |
| 55               | 8    |
| 65               | 5    |
| 75               | 3    |
| 85               | 1    |
| 90               | 0    |

### AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Reflectances: Ceiling 80%, Wall 50%, Floor 20%

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4'      | 46   | 42   | 38   |
| 5'      | 29   | 27   | 25   |
| 6'      | 20   | 19   | 17   |
| 7'      | 17   | 15   | 14   |
| 8'      | 13   | 12   | 11   |
| 9'      | 10   | 9    | 8    |
| 10'     | 7    | 7    | 6    |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 603    | N/A   | 92.1     |
| 0-40° | 628    | N/A   | 96.0     |
| 0-60° | 646    | N/A   | 98.7     |
| 0-90° | 655    | N/A   | 100.0    |

### INITIAL FOOTCANDLES

(One Unit, 10.1W, 17° Beam)

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4'                                   | 245.6                   | 1.2           |
| 6'                                   | 109.1                   | 1.8           |
| 8'                                   | 61.4                    | 2.4           |
| 10'                                  | 39.3                    | 3.0           |
| 12'                                  | 27.3                    | 3.6           |

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

| Degrees | Average Luminance |
|---------|-------------------|
| 45°     | 7799              |
| 55°     | 6245              |
| 65°     | 5650              |
| 75°     | 5052              |
| 85°     | 3914              |

### PHOTOMETRIC REPORT

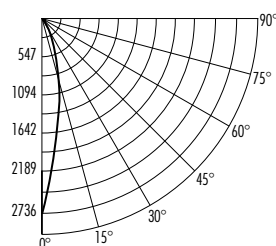
Test Report#: PT01142307R

Catalog No: 2B-835N1-WWH

80 CRI, 3500K LED, White Baffle  
with Narrow Flood Optic

Luminaire Spacing Criteria: 0.40

Luminaire LPW: 62



### CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0°   |
|------------------|------|
| 0                | 2736 |
| 5                | 2376 |
| 15               | 910  |
| 25               | 245  |
| 35               | 37   |
| 45               | 12   |
| 55               | 8    |
| 65               | 5    |
| 75               | 3    |
| 85               | 1    |
| 90               | 0    |

### AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Reflectances: Ceiling 80%, Wall 50%, Floor 20%

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4'      | 44   | 39   | 36   |
| 5'      | 28   | 25   | 23   |
| 6'      | 19   | 18   | 16   |
| 7'      | 16   | 14   | 13   |
| 8'      | 12   | 11   | 10   |
| 9'      | 10   | 9    | 8    |
| 10'     | 7    | 6    | 6    |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 572    | N/A   | 91.7     |
| 0-40° | 599    | N/A   | 96.0     |
| 0-60° | 615    | N/A   | 98.6     |
| 0-90° | 624    | N/A   | 100.0    |

### INITIAL FOOTCANDLES

(One Unit, 10.1W, 23.3° Beam)

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4'                                   | 170.9                   | 1.6           |
| 6'                                   | 76.0                    | 2.5           |
| 8'                                   | 42.7                    | 3.3           |
| 10'                                  | 27.4                    | 4.1           |
| 12'                                  | 19.0                    | 4.9           |

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

| Degrees | Average Luminance |
|---------|-------------------|
| 45°     | 7799              |
| 55°     | 6245              |
| 65°     | 5650              |
| 75°     | 5052              |
| 85°     | 3914              |

### PHOTOMETRIC REPORT

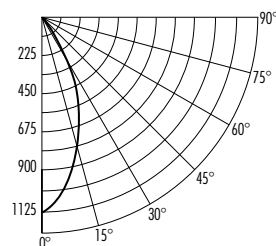
Test Report#: PT01142303R

Catalog No: 2B-835F1-WWH

80 CRI, 3500K LED, White Baffle  
3500K LED with Flood Optic

Luminaire Spacing Criteria: 0.68

Luminaire LPW: 61



### CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0°   |
|------------------|------|
| 0                | 1125 |
| 5                | 1072 |
| 15               | 786  |
| 25               | 412  |
| 35               | 111  |
| 45               | 24   |
| 55               | 9    |
| 65               | 6    |
| 75               | 4    |
| 85               | 1    |
| 90               | 0    |

### AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Reflectances: Ceiling 80%, Wall 50%, Floor 20%

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4'      | 43   | 38   | 33   |
| 5'      | 27   | 24   | 21   |
| 6'      | 19   | 17   | 15   |
| 7'      | 15   | 14   | 12   |
| 8'      | 12   | 11   | 10   |
| 9'      | 9    | 8    | 7    |
| 10'     | 7    | 6    | 5    |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 502    | N/A   | 81.6     |
| 0-40° | 575    | N/A   | 93.4     |
| 0-60° | 604    | N/A   | 98.1     |
| 0-90° | 616    | N/A   | 100.0    |

### INITIAL FOOTCANDLES

(One Unit, 10.1W, 42.2° Beam)

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4'                                   | 70.3                    | 3.1           |
| 6'                                   | 31.3                    | 4.6           |
| 8'                                   | 17.6                    | 6.2           |
| 10'                                  | 11.3                    | 7.7           |
| 12'                                  | 7.8                     | 9.3           |

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

| Degrees | Average Luminance |
|---------|-------------------|
| 45°     | 16402             |
| 55°     | 7137              |
| 65°     | 7264              |
| 75°     | 7029              |
| 85°     | 5871              |

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.

| Multiplier: | 80 CRI     | 90 CRI    |
|-------------|------------|-----------|
|             | 827 = .94  | 927 = .83 |
|             | 830 = .97  | 930 = .86 |
|             | 835 = 1.00 | 935 = .88 |
|             | 841 = 1.03 | 940 = .90 |

# 2" IC 600 LUMENS LED ROUND DOWNLIGHT

## 2B and 2C Series

### PHOTOMETRIC REPORT

Test Report#: PT01141602R

Catalog No: 2C-835S1-CLW

80 CRI, 3500K LED, Clear Cone  
with Spot Optic

Luminaire Spacing Criteria: 0.30

Luminaire LPW: 69

