

JUNO

2" IC 600 LUMENS LED ROUND DOWNLIGHT

2B and 2C Series

Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____



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) ½" 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 ½" to 1" • For thicker ceilings up to 1 ½", order 2-JCTA150 • New Construction mounting frame, 2-NCMF, is also available with Real Nail 3® telescoping bar hangers to position fixture and locate wiring prior to ceiling installation.

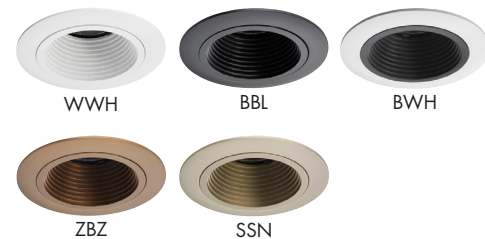
Product specifications subject to change without notice.

ENGINEERING DATA

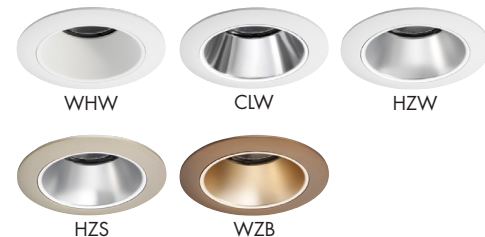
| | Dedicated 120V (-1) | Universal Voltage (-U) | |
|---------------|---------------------|------------------------|-----------|
| Voltage | 120 | 120 | 277 |
| Input Power | 10.1 (±5%) | 9.7 | 9.8 (±5%) |
| Input Current | .09 | .08 | .04 |
| Frequency | 50/60Hz | 50/60Hz | |
| Power Factor | .94 |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



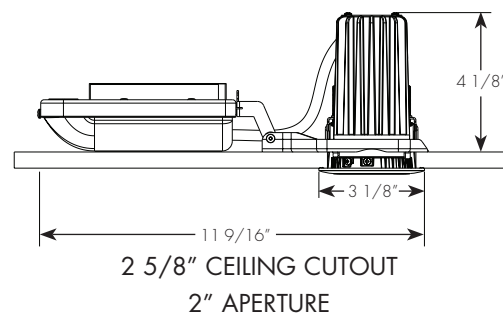
Downlight Baffle Finishes



Downlight Cone Finishes



DIMENSIONS



2" IC 600 LUMENS LED ROUND DOWNLIGHT

2B and 2C Series

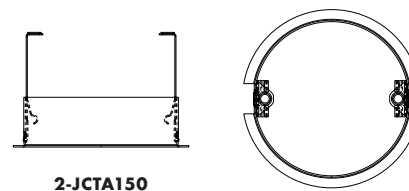
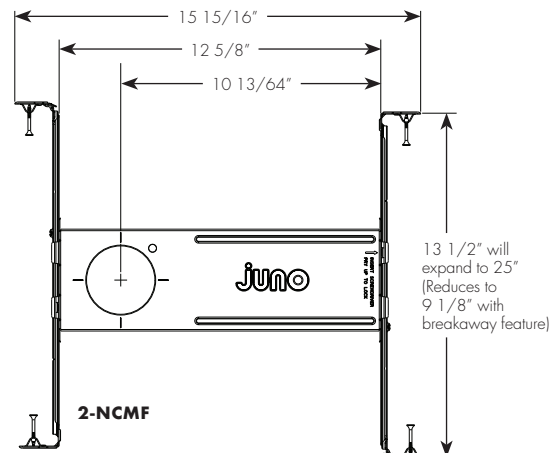
ORDERING INFORMATION:

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

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

ACCESSORIES

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

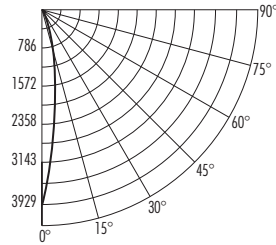


2" IC 600 LUMENS LED ROUND DOWNLIGHT

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 |

INITIAL FOOTCANDLES

(One Unit, 10.1W, 17° Beam)

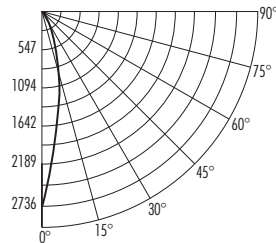
| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4' | 245.6 | 1.2 |
| 6' | 109.1 | 1.8 |
| 8' | 61.4 | 2.4 |
| 10' | 39.3 | 3.0 |
| 12' | 27.3 | 3.6 |

LUMINANCE (Average cd/m²)

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

PHOTOMETRIC REPORT

Test Report#: PT01142307R
Catalog No: 2B-835M1-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 |

INITIAL FOOTCANDLES

(One Unit, 10.1W, 23.3° Beam)

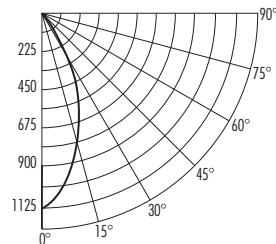
| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4' | 170.9 | 1.6 |
| 6' | 76.0 | 2.5 |
| 8' | 42.7 | 3.3 |
| 10' | 27.4 | 4.1 |
| 12' | 19.0 | 4.9 |

LUMINANCE (Average cd/m²)

| 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 |

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/m²)

| 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.

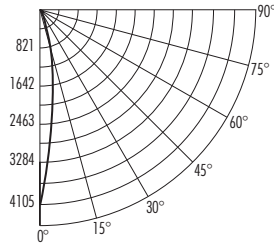
| Multiplier: | 80 CRI | 90 CRI |
|-------------|------------|-----------|
| | 827 = .94 | 927 = .83 |
| | 830 = .97 | 930 = .86 |
| | 835 = 1.00 | 935 = .88 |
| | 841 = 1.03 | 940 = .90 |



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



CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0° |
|------------------|------|
| 0 | 4105 |
| 5 | 3206 |
| 15 | 948 |
| 25 | 239 |
| 35 | 43 |
| 45 | 12 |
| 55 | 3 |
| 65 | 0 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

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

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

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4' | 49 | 44 | 41 |
| 5' | 31 | 28 | 26 |
| 6' | 22 | 20 | 18 |
| 7' | 17 | 16 | 15 |
| 8' | 14 | 13 | 12 |
| 9' | 11 | 10 | 9 |
| 10' | 8 | 7 | 7 |

INITIAL FOOTCANDLES (One Unit, 10W, 17.5° Beam)

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4' | 256.6 | 1.2 |
| 6' | 114.0 | 1.8 |
| 8' | 64.1 | 2.5 |
| 10' | 41.1 | 3.1 |
| 12' | 28.5 | 3.7 |

ZONAL LUMEN SUMMARY

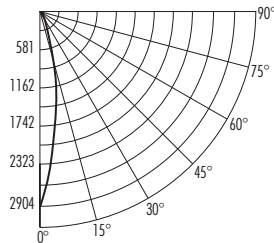
| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 641 | N/A | 93.4 |
| 0-40° | 674 | N/A | 98.2 |
| 0-60° | 686 | N/A | 100.0 |
| 0-90° | 687 | N/A | 100.0 |

LUMINANCE (Average cd/m²)

| Degrees | Average Luminance |
|---------|-------------------|
| 45° | 8040 |
| 55° | 2082 |
| 65° | 135 |
| 75° | 0 |
| 85° | 0 |

PHOTOMETRIC REPORT

Test Report#: PT01141702R
Catalog No: 2C-835N1-CLW
80 CRI, 3500K LED, Clear Cone
with Narrow Flood Optic
Luminaire Spacing Criteria: 0.40
Luminaire LPW: 66



CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0° |
|------------------|------|
| 0 | 2904 |
| 5 | 2539 |
| 15 | 961 |
| 25 | 260 |
| 35 | 46 |
| 45 | 10 |
| 55 | 3 |
| 65 | 0 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

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

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

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4' | 47 | 42 | 39 |
| 5' | 30 | 27 | 25 |
| 6' | 21 | 19 | 17 |
| 7' | 17 | 15 | 14 |
| 8' | 13 | 12 | 11 |
| 9' | 10 | 9 | 8 |
| 10' | 7 | 7 | 6 |

INITIAL FOOTCANDLES (One Unit, 10W, 23.5° Beam)

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4' | 181.5 | 1.7 |
| 6' | 80.7 | 2.5 |
| 8' | 45.4 | 3.3 |
| 10' | 29.0 | 4.2 |
| 12' | 20.2 | 5.0 |

ZONAL LUMEN SUMMARY

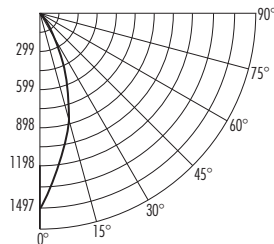
| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 614 | N/A | 93.0 |
| 0-40° | 649 | N/A | 98.3 |
| 0-60° | 660 | N/A | 100.0 |
| 0-90° | 661 | N/A | 100.0 |

LUMINANCE (Average cd/m²)

| Degrees | Average Luminance |
|---------|-------------------|
| 45° | 6673 |
| 55° | 2280 |
| 65° | 135 |
| 75° | 0 |
| 85° | 0 |

PHOTOMETRIC REPORT

Test Report#: PT01141706R
Catalog No: 2C-835F1-CLW
80 CRI, 3500K LED, Clear Cone
with Flood Optic
Luminaire Spacing Criteria: 0.54
Luminaire LPW: 65



CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0° |
|------------------|------|
| 0 | 1497 |
| 5 | 1335 |
| 15 | 831 |
| 25 | 418 |
| 35 | 130 |
| 45 | 20 |
| 55 | 3 |
| 65 | 0 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

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

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

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4' | 45 | 40 | 36 |
| 5' | 29 | 26 | 23 |
| 6' | 20 | 18 | 16 |
| 7' | 16 | 14 | 13 |
| 8' | 13 | 11 | 10 |
| 9' | 10 | 9 | 8 |
| 10' | 7 | 6 | 6 |

INITIAL FOOTCANDLES (One Unit, 10W, 33.9° Beam)

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4' | 93.6 | 2.4 |
| 6' | 41.6 | 3.7 |
| 8' | 23.4 | 4.9 |
| 10' | 15.0 | 6.1 |
| 12' | 10.4 | 7.3 |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 542 | N/A | 83.8 |
| 0-40° | 626 | N/A | 96.9 |
| 0-60° | 646 | N/A | 100.0 |
| 0-90° | 646 | N/A | 100.0 |

LUMINANCE (Average cd/m²)

| Degrees | Average Luminance |
|---------|-------------------|
| 45° | 13106 |
| 55° | 2379 |
| 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.

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



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