

JUNO®

Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

PRODUCT DESCRIPTION

Energy efficient LED retrofit module fits into installed 6" non-IC commercial recessed incandescent, CFL or H.I.D. rough-in sections • If installed where insulation is present, the insulation must be pulled back 3" from all sides of the retrofit installation • Replaces CFL lamps totaling 42W or greater, producing up to 2400 lumens typical at 27.5W • Dimmable • LED retrofit module is designed to provide 50,000 hours of life • 5 year warranty.

PRODUCT SPECIFICATIONS

LED Downlight Retrofit Trim Spun aluminum reflector and separate non-metallic trim ring with shadow free, knife edge design • All-in-one design where LED light engine is mounted directly to trim • Quick disconnect in-box allows for easy wiring of retrofit conduit whip assembly without reflector interference • Provided with conduit whip and connector to mount to 1/2" trade size knockout in junction box for ease of installation into existing rough-in sections • Provided with spring steel friction clips for mounting.

LED Light Engine Replaceable light engine is mounted directly to aluminum trim providing superior thermal management to ensure long life • 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 LED color temperatures • 80 or 90 CRI minimum.

LED Driver Choice of dedicated 120 volt driver, universal voltage driver that accommodates input voltages from 120-277 volts AC at 50/60Hz or 347V driver • Power factor > 0.9 at 120V input • 120 volt only dimmable with the use of most incandescent, magnetic low voltage and electronic low voltage wall box dimmers • Universal voltage and 347V driver is dimmable with the use of most 0-10V wall dimmers • For a list of compatible dimmers, see [JUNO/JCLR-DIM](#).

Electrical Connections Trim includes conduit whip and connector to attach directly to 1/2" trade size knockout in junction box • All electrical connectors and hardware provided for easy installation after fluorescent socket and ballast are removed from rough-in sections.

Trim Spun aluminum trim with white or haze finish • Deeply regressed diffusing lens conceals the LEDs from direct view.

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

Labels ENERGY STAR® Certified • UL and cUL classified for use with most standard UL listed 6" non-IC commercial rough-in sections; see below for specific compatibility requirements • Damp location (not for outdoor use).

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

Specifications subject to change without notice.

INSTALLATION

The JCLR6L & JCLR6S retrofit trim is provided with spring steel friction clips allowing for installation in a variety of 6" commercial recessed open frame rough-in sections with a ceiling thickness ranging from 1/2" to 1 1/8". Rough-in section inside diameter compatibility range:

JCLR6S: 6" – 6 1/2", **JCLR6L:** 6 5/8" – 7 1/8".

6" LED RETROFIT TRIM

DOWNLIGHT RETROFIT FOR 6" COMMERCIAL ROUGH-IN SECTIONS

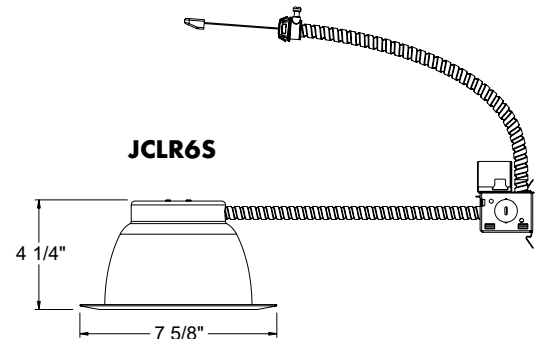
JCLR6L & JCLR6S



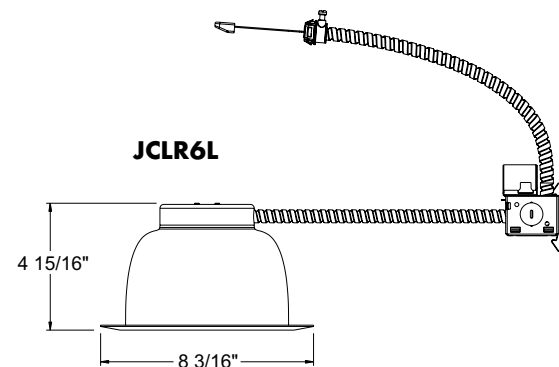
White Trim

Haze Trim

DIMENSIONS



JCLR6S



JCLR6L

COMPATIBLE HOUSINGS FOR JCLR6S INCLUDE, BUT NOT LIMITED TO (Compatibility Range: 6" - 6 1/2")

| | |
|------------------------------|--|
| Portfolio® Housings: | HD6, LD6A |
| Lightolier® Housings: | S6132BU, C639MH, C670MH, B600 |
| Hubbell® Housings: | LF6CF, LF6CFH, LF6MH, LF6INC, CFT6, CFQ6, CFT632, CFR6, RHD6, INC600 79X |

COMPATIBLE HOUSINGS FOR JCLR6L INCLUDE, BUT NOT LIMITED TO (Compatibility Range: 6 5/8" - 7 1/8")

| | |
|-------------------------------|--|
| Juno® Housings: | CV6, CH6, M6, M6-E, MX6, MX6-E, TC906, TC906H, TC920 |
| Indy™ Housings: | C6V, C6H, M6, A6, P6 |
| Lithonia® Housings: | CCR62, 6VF, 6HF, 6VH, 6VI, LF6, LP6H, LP6F, LP6 |
| Gotham® Housings: | 6": AFV, AF, AH, A (GRS 6), LG |
| Halo® Housings: | PD6 Series |
| Lightolier® Housings: | 1100FTUES, 1101F18U, 1101F2642U, 1101HID-ED, 1101HDP, 1102P1 |
| Capri/Omega® Housings: | CM6-FV26/32/42, OM6 Series |

6" LED RETROFIT TRIM

DOWNLIGHT RETROFIT FOR 6" COMMERCIAL ROUGH-IN SECTIONS

JCLR6L & JCLR6S

ORDERING INFORMATION

Ordering Example: JCLR6S 15LM 27K 90CRI 120 FRPC HZWH

| Series | Lumens | Color Temperature | Color Rendering Index |
|--|--|--------------------------------------|--|
| JCLR6L 6" Commercial LED Retrofit | 15LM 1500 Nominal Lumens 18LM 1800 Nominal Lumens | 27K 2700K 30K 3000K | 80CRI¹ 80+ CRI 90CRI² 90+ CRI |
| JCLR6S 6" Commercial LED Retrofit | 20LM 2000 Nominal Lumens 24LM 2400 Nominal Lumens | 35K 3500K 40K 4000K | |

| Voltage | Driver | Trim Finish |
|-------------------------|-----------------------------------|-----------------------------------|
| 120 120V | FRPC Forward/Reverse Phase | HZWH Haze, White Trim Ring |
| 347 347V | ZT 0-10V Dimmable Driver | WWH White, White |
| MVOLT Multi-Volt | | |

Notes:

- 1 18LM and 24LM must be ordered with 80CRI
- 2 15LM and 20LM must be ordered with 90CRI

ENGINEERING DATA

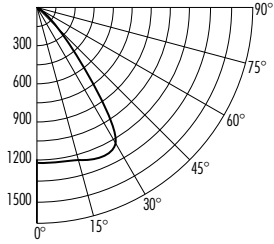
| | Dedicated 120V (1) | | Universal Voltage (U) | | Dedicated 347V (3) | |
|---------------|----------------------------|-------------|----------------------------|-------------|----------------------------|-------------|
| Lumens | 1500L/1800L | 2000L/2400L | 1500L/1800L | 2000L/2400L | 1500L/1800L | 2000L/2400L |
| Input Voltage | 120V | 120V | 120-277V | 120-277V | 347V | 347V |
| Input Power | 20.3W (±5%) | 27.5W (±5%) | 19.9W (±5%) | 27.3W (±5%) | 21.8W (±5%) | 27.9W (±5%) |
| Input Current | 500mA | 650mA | 470mA | 650mA | 500mA | 650mA |
| Frequency | 50/60Hz | | 50/60Hz | | 50/60Hz | |
| Power Factor | >.90 | | >.90 | | >.90 | |
| CRI | 80/90CRI | | 80/90CRI | | 80/90CRI | |
| CCT | 2700K, 3000K, 3500K, 4000K | | 2700K, 3000K, 3500K, 4000K | | 2700K, 3000K, 3500K, 4000K | |

JCLR6L & JCLR6S

PHOTOMETRICS

PHOTOMETRIC REPORT

Test Report#: PT07162701R
 Catalog No: JCLR6S 18LM 35K 80CRI MVOLT ZT HZWH
 Luminaire Spacing Criteria: 1.34
 Luminaire LPW: 97



CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0° |
|------------------|------|
| 0 | 1226 |
| 5 | 1227 |
| 15 | 1278 |
| 25 | 1344 |
| 35 | 919 |
| 45 | 247 |
| 55 | 54 |
| 65 | 11 |
| 75 | 3 |
| 85 | 0 |
| 90 | 0 |

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

Ceiling 80%, Walls 50%, Floors 20%

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4' | 132 | 112 | 95 |
| 5' | 85 | 72 | 61 |
| 6' | 59 | 50 | 42 |
| 7' | 48 | 40 | 34 |
| 8' | 38 | 32 | 27 |
| 9' | 29 | 24 | 21 |
| 10' | 21 | 18 | 15 |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 1094 | N/A | 56.9 |
| 0-40° | 1651 | N/A | 85.8 |
| 0-60° | 1908 | N/A | 99.2 |
| 0-90° | 1924 | N/A | 100.0 |

INITIAL FOOTCANDLES (One Unit: 19.9W, 72.6° Beam)

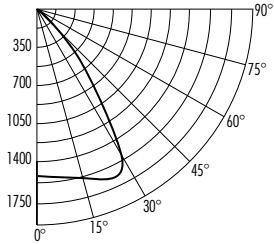
| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4' | 76.6 | 5.9 |
| 6' | 34.1 | 8.8 |
| 8' | 19.2 | 11.8 |
| 10' | 12.3 | 14.7 |

LUMINANCE (Average cd/m²)

| Angle in Degrees | Average 0-90° |
|------------------|---------------|
| 45° | 19107 |
| 55° | 5163 |
| 65° | 1455 |
| 75° | 567 |
| 85° | 0 |

PHOTOMETRIC REPORT

Test Report#: PT07162702R
 Catalog No: JCLR6S 24LM 35K 80CRI MVOLT ZT HZWH
 Luminaire Spacing Criteria: 1.34
 Luminaire LPW: 90



CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0° |
|------------------|------|
| 0 | 1557 |
| 5 | 1558 |
| 15 | 1625 |
| 25 | 1709 |
| 35 | 1174 |
| 45 | 323 |
| 55 | 72 |
| 65 | 15 |
| 75 | 4 |
| 85 | 0 |
| 90 | 0 |

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

Ceiling 80%, Walls 50%, Floors 20%

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4' | 169 | 143 | 122 |
| 5' | 108 | 92 | 78 |
| 6' | 75 | 64 | 54 |
| 7' | 61 | 51 | 44 |
| 8' | 48 | 41 | 35 |
| 9' | 37 | 31 | 26 |
| 10' | 27 | 23 | 19 |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 1391 | N/A | 56.5 |
| 0-40° | 2103 | N/A | 85.5 |
| 0-60° | 2440 | N/A | 99.1 |
| 0-90° | 2461 | N/A | 100.0 |

INITIAL FOOTCANDLES (One Unit: 27.4W, 72.8° Beam)

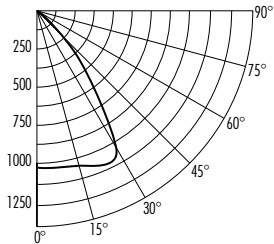
| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4' | 97.3 | 5.9 |
| 6' | 43.3 | 8.8 |
| 8' | 24.3 | 11.8 |
| 10' | 15.6 | 14.7 |

LUMINANCE (Average cd/m²)

| Angle in Degrees | Average 0-90° |
|------------------|---------------|
| 45° | 25011 |
| 55° | 6835 |
| 65° | 1935 |
| 75° | 785 |
| 85° | 0 |

PHOTOMETRIC REPORT

Test Report#: PT07162701R
 Catalog No: JCLR6S 15LM 35K 90CRI MVOLT ZT HZWH
 Luminaire Spacing Criteria: 1.34
 Luminaire LPW: 80



CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0° |
|------------------|------|
| 0 | 1012 |
| 5 | 1013 |
| 15 | 1055 |
| 25 | 1109 |
| 35 | 758 |
| 45 | 204 |
| 55 | 45 |
| 65 | 9 |
| 75 | 2 |
| 85 | 0 |
| 90 | 0 |

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

Ceiling 80%, Walls 50%, Floors 20%

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4' | 109 | 92 | 78 |
| 5' | 70 | 59 | 50 |
| 6' | 49 | 41 | 35 |
| 7' | 39 | 33 | 28 |
| 8' | 31 | 26 | 22 |
| 9' | 24 | 20 | 17 |
| 10' | 17 | 15 | 13 |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 903 | N/A | 56.9 |
| 0-40° | 1362 | N/A | 85.8 |
| 0-60° | 1575 | N/A | 99.2 |
| 0-90° | 1588 | N/A | 100.0 |

INITIAL FOOTCANDLES (One Unit: 19.9W, 72.6° Beam)

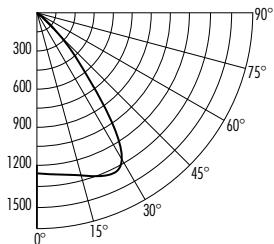
| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4' | 63.3 | 5.9 |
| 6' | 28.1 | 8.8 |
| 8' | 15.8 | 11.8 |
| 10' | 10.1 | 14.7 |

LUMINANCE (Average cd/m²)

| Angle in Degrees | Average 0-90° |
|------------------|---------------|
| 45° | 15768 |
| 55° | 4261 |
| 65° | 1201 |
| 75° | 468 |
| 85° | 0 |

PHOTOMETRIC REPORT

Test Report#: PT07162702R
 Catalog No: JCLR6S 20LM 35K 90CRI MVOLT ZT HZWH
 Luminaire Spacing Criteria: 1.34
 Luminaire LPW: 74



CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0° |
|------------------|------|
| 0 | 1285 |
| 5 | 1286 |
| 15 | 1341 |
| 25 | 1410 |
| 35 | 969 |
| 45 | 266 |
| 55 | 59 |
| 65 | 12 |
| 75 | 3 |
| 85 | 0 |
| 90 | 0 |

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

Ceiling 80%, Walls 50%, Floors 20%

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4' | 140 | 118 | 100 |
| 5' | 89 | 76 | 64 |
| 6' | 62 | 52 | 45 |
| 7' | 50 | 42 | 36 |
| 8' | 40 | 34 | 29 |
| 9' | 30 | 26 | 22 |
| 10' | 22 | 19 | 16 |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 1148 | N/A | 56.5 |
| 0-40° | 1735 | N/A | 85.5 |
| 0-60° | 2014 | N/A | 99.1 |
| 0-90° | 2031 | N/A | 100.0 |

INITIAL FOOTCANDLES (One Unit: 27.4W, 72.8° Beam)

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4' | 80.3 | 5.9 |
| 6' | 35.7 | 8.8 |
| 8' | 20.1 | 11.8 |
| 10' | 12.9 | 14.7 |

LUMINANCE (Average cd/m²)

| Angle in Degrees | Average 0-90° |
|------------------|---------------|
| 45° | 20640 |
| 55° | 5641 |
| 65° | 1597 |
| 75° | 648 |
| 85° | 0 |