

# 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

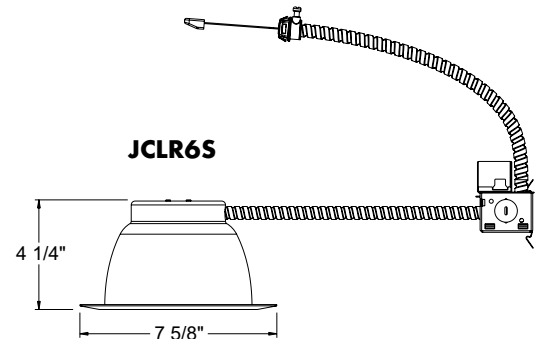
### JCLR6L & JCLR6S



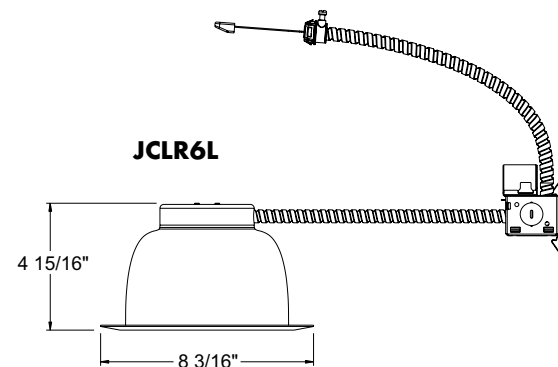
White Trim

Haze Trim

## DIMENSIONS



JCLR6S



JCLR6L

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

<b>Portfolio® Housings:</b>	HD6, LD6A
<b>Lightolier® Housings:</b>	S6132BU, C639MH, C670MH, B600
<b>Hubbell® Housings:</b>	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")

<b>Juno® Housings:</b>	CV6, CH6, M6, M6-E, MX6, MX6-E, TC906, TC906H, TC920
<b>Indy™ Housings:</b>	C6V, C6H, M6, A6, P6
<b>Lithonia® Housings:</b>	CCR62, 6VF, 6HF, 6VH, 6VI, LF6, LP6H, LP6F, LP6
<b>Gotham® Housings:</b>	6": AFV, AF, AH, A (GRS 6), LG
<b>Halo® Housings:</b>	PD6 Series
<b>Lightolier® Housings:</b>	1100FTUES, 1101F18U, 1101F2642U, 1101HID-ED, 1101HDP, 1102P1
<b>Capri/Omega® Housings:</b>	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
<b>JCLR6L</b> 6" Commercial LED Retrofit	<b>15LM</b> 1500 Nominal Lumens <b>18LM</b> 1800 Nominal Lumens	<b>27K</b> 2700K <b>30K</b> 3000K	<b>80CRI<sup>1</sup></b> 80+ CRI <b>90CRI<sup>2</sup></b> 90+ CRI
<b>JCLR6S</b> 6" Commercial LED Retrofit	<b>20LM</b> 2000 Nominal Lumens <b>24LM</b> 2400 Nominal Lumens	<b>35K</b> 3500K <b>40K</b> 4000K	

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

## Notes:

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

#### ENGINEERING DATA

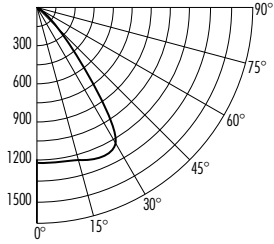
	Dedicated 120V (1)		Universal Voltage (U)		Dedicated 347V (3)	
Lumens	1500L/1800L	2000L/2400L	1500L/1800L	2000L/2400L	1500L/1800L	2000L/2400L
Input Voltage	120V	120V	120-277V	120-277V	347V	347V
Input Power	20.3W (±5%)	27.5W (±5%)	19.9W (±5%)	27.3W (±5%)	21.8W (±5%)	27.9W (±5%)
Input Current	500mA	650mA	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)

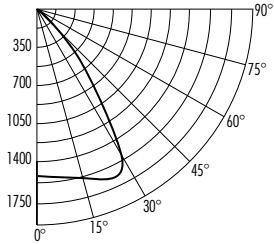
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	76.6	5.9
6'	34.1	8.8
8'	19.2	11.8
10'	12.3	14.7

### 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)

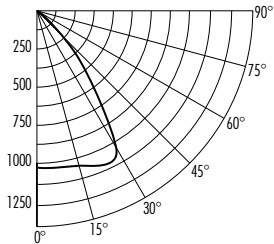
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	97.3	5.9
6'	43.3	8.8
8'	24.3	11.8
10'	15.6	14.7

### 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)

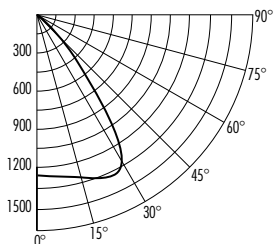
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	63.3	5.9
6'	28.1	8.8
8'	15.8	11.8
10'	10.1	14.7

### 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