



# LED RECESSED DOWNLIGHT

1-3/4" SQUARE LENSED  
REGRESSED PINHOLE APERTURE



IC Rated, 700 LUMEN

**IC43LSQ-4302SQ, IC943LSQ-4302SQ**

## PRODUCT DESCRIPTION

Recessed downlight 13W LED luminaire with 1-3/4" square lensed regressed pinhole produces up to 600 fixture lumens and approximates the performance of a 50W MR16 lamp. Fixture has 50° visual cutoff and features precision geared hot-aiming. Sealed Air-Loc® housing ensures maximum energy savings and controls plenum sound transmission. Low profile IC rated housing for use in insulated or non-insulated areas.

## PRODUCT SPECIFICATIONS

**LED Light Engine** Consistent fixture to fixture color consistency within 3-step MacAdam ellipse • 2700K, 3000K, 3500K, or 4000K color temperatures are available with 85 CRI typical • 3000K also available with 93 CRI typical and R9 >80.

**Modular Optics** Available with 12° Spot, 24° Narrow Flood, or 35° Flood field interchangeable optics • 50° distribution is available when AF3-50DEG accessory lens is used with 12° Spot optic • Patent pending auto-adjusting optic holder maximizes luminaire efficiency by maintaining optimal LED optic position • Accommodates up to three (3) additional beam control lenses and/or filters.

**Reflector** .040" aluminum parabolic reflector in black Alzak finish shields housing interior.

**Trims Style** Die cast Self Flanged and Flush Mount trims utilize precision wound double torsion springs for tight, secure fit to ceiling • Flush Mount trim creates a truly trimless aperture • Feature solite glass lens on aperture • For flush mount installations in drywall ceilings use the FMSQ4 flush mount adapter • For flush mount installations in wood, stone, or tile ceilings the FMSQ4-SC\*\*\* must be used (specify ceiling thickness and adapter finish).

**LED Driver** Choice of four drivers to accommodate voltages from 120-277 volts AC • Dedicated 120V (-1) driver is dimmable with most incandescent, magnetic low voltage, and electronic low voltage dimmers • Universal Voltage (-U) driver is dimmable with most 0-10V protocol dimmers • Lutron Hi-Lume® A Series 3-wire (-L) driver is dimmable with 3-wire fluorescent controls and compatible with EcoSystem® • Lutron Hi-Lume® A Series 2-wire (-D) driver is dimmable with 2-wire forward phase dimmers containing a neutral wire • For a list of compatible dimmers, refer to **ACLXLED-DIM** • Power Factor > 0.9 • Field replaceable from below or above ceiling.

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

**Warranty** 5 years from date of purchase on LED components • Standard Juno Lighting Group product guarantee terms and conditions apply.

**Codes/Labels** UL and cUL listed for through branch wiring, wet locations • Meets energy code Air Leakage requirements per ASTM E283 • Union made.

**Mounting** IC43LSQ features Patented (US Patent 8,038,113) Pro-V™ Bar Hanger System with locking set screws, permitting quick placement of housing within 24" O.C. joists or suspended ceilings • Robust bar eliminates flexing regardless of fixture position • Integral T-bar notch with locking tabs secures housing to suspended ceiling grid • Captive bugle-headed ring shank nail for quick one-step installation • Bar Hanger foot aligns to bottom of construction joist and breaks away for use in suspended ceilings.

IC943LSQ is equipped with vertically adjustable mounting brackets that accept 1/2" conduit, "C" channels (HB-26 or HB-50), linear flat bars (LB-27) or 26" telescoping Real Nail bar hangers (HB-1).

**Junction Box** Rated for 4 No. 12 AWG 90° C through branch circuit conductors and includes (6) 1/2", (1) 3/4", and (4) Non-metallic sheathed cable knock-outs • Push-in electrical connectors for field connections.

**Housing/Mounting Frame** Black steel plaster frame and housing painted for visually dark interior • V-Notch in plaster frame and Patented (US Patent 8,277,090) Tru-Line™ Platform featuring +/- 1/2" translation and +/- 45° aperture rotation aids fixture alignment during installation.

**Ceiling Thickness** 1/2" - 7/8" ceiling standard • For thicker ceilings, order CTA4SQ-125 (7/8"-1 1/4"), CTA4SQ-163 (1 1/4"-1 5/8") or CTA4SQ-200 (1 5/8" - 2") • CTA4SQ not required for wood, stone, or tile flush mount applications.

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

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

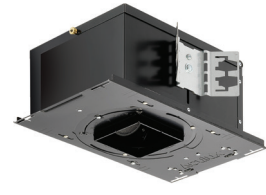
Location: \_\_\_\_\_

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

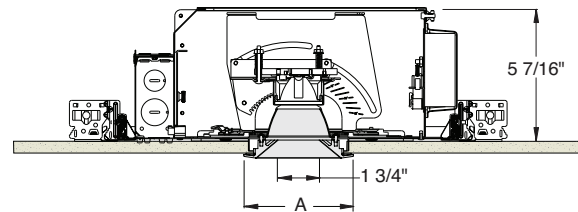
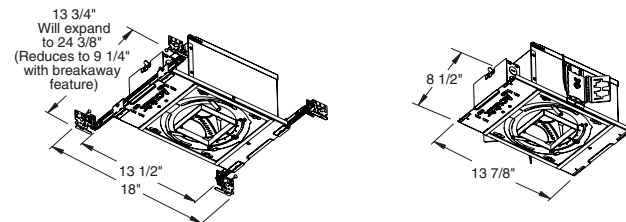
IC43LSQ



IC943LSQ



## DIMENSIONS



4 1/8" CEILING CUTOUT  
(REFER TO INSTRUCTION SHEET FOR  
FLUSH MOUNT CEILING CUTOUT)

|              | A      |
|--------------|--------|
| Self Flanged | 4 1/2" |
| Flush Mount  | 3 5/8" |

## ELECTRICAL DATA

| Driver Option | Dedicated 120V (-1) | Universal Voltage (-U) |      | Lutron 3-wire (-L) | Lutron 2-wire (-D) |
|---------------|---------------------|------------------------|------|--------------------|--------------------|
| Voltage       | 120                 | 120                    | 277  | 120                | 277                |
| Input Power   | 12.8                | 13.7                   | 14.1 | 12.6               | 13.6               |
| Input Current | 0.10                | 0.11                   | 0.05 | 0.10               | 0.05               |
| Frequency     | 50/60Hz             | 50/60Hz                |      | 50/60Hz            | 50/60Hz            |
| Power Factor  | 0.99                | 0.99                   | 0.90 | 0.99               | 0.94               |

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1-3/4" SQUARE LENSED REGRESSED PINHOLE APERTURE  
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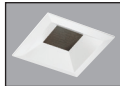

**IC43LSQ-4302SQ, IC943LSQ-4302SQ**

**Ordering Information** Housing, trim and accessories each ordered separately

Example: **IC43LSQ-835-F-1**

| Housings        | CRI/Color Temperature   | Beam Optics               | Drivers  | Options                  |
|-----------------|-------------------------|---------------------------|--|--------------------------|
| <b>IC43LSQ</b>  | <b>827</b> 2700K, 85CRI | <b>S</b> 12° Spot         | <b>I</b> 120V, Forward & Reverse Phase Dimming                         | <b>CP</b> Chicago Plenum |
| <b>IC943LSQ</b> | <b>830</b> 3000K, 85CRI | <b>N</b> 24° Narrow Flood |  |                          |
|                 | <b>835</b> 3500K, 85CRI | <b>F</b> 35° Flood        | <b>U</b> 120-277V, 0-10V Dimming                                       |                          |
|                 | <b>840</b> 4000K, 85CRI |                           | <b>L</b> 120-277V, Lutron Hi-Lume 3-wire Dimming, Ecosystem Compatible |                          |
|                 | <b>930</b> 3000K, 93CRI |                           | <b>D</b> 120V, Lutron Hi-Lume 2-wire Dimming                           |                          |

Example: **4302SQ-WH**

| Trim/Description  |  |                    |
|---|--|--------------------|
|  |  |                    |
| <b>Self Flanged</b>   | <b>Flush Mount<sup>1</sup></b>   | <b>Description</b> |
| <b>4302SQ-WH</b>  | <b>4302SQ-WH-FM</b>  | White Trim         |
| <b>4302SQ-BL</b>  | <b>4302SQ-BL-FM</b>  | Black Trim         |

<sup>1</sup>Flush Mount trims must be used with Flush Mount Adapter, ordered separately.  
Product specifications subject to change without notice.

**Flush Mount Adapters**

| Cat. #                 | Description  |
|------------------------|--|
| <b>FMASQ4</b>          | Drywall Ceiling Adapter  |
| <b>FMASQ4-SC100-WH</b> | Wood, Stone, Tile, 1/2"-1" Thick Ceiling, Adapter, White       |
| <b>FMASQ4-SC100-BL</b> | Wood, Stone, Tile, 1/2"-1" Thick Ceiling, Adapter, Black       |
| <b>FMASQ4-SC138-WH</b> | Wood, Stone, Tile, 1"-1 3/8" Thick Ceiling, Adapter, White     |
| <b>FMASQ4-SC138-BL</b> | Wood, Stone, Tile, 1"-1 3/8" Thick Ceiling, Adapter, Black     |
| <b>FMASQ4-SC175-WH</b> | Wood, Stone, Tile, 1 3/8"-1 3/4" Thick Ceiling, Adapter, White |
| <b>FMASQ4-SC175-BL</b> | Wood, Stone, Tile, 1 3/8"-1 3/4" Thick Ceiling, Adapter, Black |

**Optical Accessories**

| Cat. #           | Description                            | Cat. #         | Description                   |
|------------------|--|----------------|-------------------------------|
| <b>TIR-1-5P</b>  | 12° Spot Optic                         | <b>T7403</b>   | Med. Green Dichroic Lens      |
| <b>TIR-1-NFL</b> | 24° Narrow Flood Optic                 | <b>T7404</b>   | Med. Blue Dichroic Lens       |
| <b>TIR-1-FL</b>  | 35° Flood Optic                        | <b>T7405</b>   | Yellow Dichroic Lens          |
| <b>AF3-50DEG</b> | 50° Optic Film<br>(Use with 12° Optic) | <b>T7406</b>   | Magenta Dichroic Lens         |
| <b>T741</b>      | Med. Pink Color Filter                 | <b>T7411</b>   | Blue Green Dichroic Lens      |
| <b>T742</b>      | Warm Red Color Filter                  | <b>T7416</b>   | Daylight Blue Correction Lens |
| <b>T743</b>      | Daylight Blue Color Filter             | <b>T7420</b>   | Diffuse Spread Lens           |
| <b>T744</b>      | Med. Blue Color Filter                 | <b>T7422</b>   | UV Filter Lens                |
| <b>T745</b>      | Med. Amber Color Filter                | <b>T7477</b>   | Prismatic Lens                |
| <b>T746</b>      | Med. Green Color Filter                | <b>T7478</b>   | Linear Spread Lens            |
| <b>T7401</b>     | Red Dichroic Lens                      | <b>T7459BL</b> | Hexcell Louver                |

**Misc. Accessories**

| Cat. #            | Description                     |
|-------------------|---------------------------------|
| <b>CTA45Q-125</b> | 1 1/4" Thick Ceiling Adapter    |
| <b>CTA45Q-163</b> | 1 5/8" Thick Ceiling Adapter    |
| <b>CTA45Q-200</b> | 2" Thick Ceiling Adapter        |
| <b>HB-1</b>       | (2) Real Nail 3 Bar Hangers     |
| <b>HB-26</b>      | (2) 26" C-Channel Bar Hangers   |
| <b>HB-50</b>      | (2) 50" C-Channel Bar Hangers   |
| <b>LB-27</b>      | (2) 27" Linear Bar Hangers      |
| <b>EMI-20</b>     | 20W Emergency Lighting Inverter |

To order, specify catalog number.



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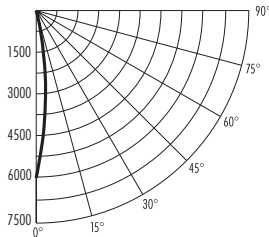
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**IC43LSQ-4302SQ, IC943LSQ-4302SQ**

**PHOTOMETRIC REPORT**

Test Report #: PT05122403  
 Catalog No: IC43LSQ-830-S-1  
 with 4302SQ-WH Trim  
 Luminaire Spacing Criterion: 0.28  
 Luminaire LPW: 47.3



**CANDLEPOWER DISTRIBUTION (Candelas)**

| Degrees Vertical | 0°   |
|------------------|--|
| 0                | 6018   |
| 5                | 4142   |
| 15               | 627  |
| 25               | 61   |
| 35               | 8  |
| 45               | 0  |
| 55               | 0  |
| 65               | 0  |
| 75               | 0  |
| 85               | 0  |
| 90               | 0  |
| Multipliers:     | 827 - 0.92<br>930 - 0.92<br>835 - 1.01<br>840 - 1.02 |

**AVERAGE INITIAL FOOTCANDLES**

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

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4.0'    | 43   | 40   | 38   |
| 5.0'    | 28   | 26   | 24   |
| 6.0'    | 19   | 18   | 17   |
| 7.0'    | 16   | 14   | 14   |
| 8.0'    | 12   | 11   | 11   |
| 9.0'    | 9    | 9    | 8    |
| 10.0'   | 7    | 6    | 6    |

**INITIAL FOOTCANDLES (One Unit, 12.8W, 14.4° Beam)**

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 6                                    | 167.2                   | 1.5'          |
| 8                                    | 94.0                    | 2.0'          |
| 10                                   | 60.2                    | 2.5'          |
| 12                                   | 41.8                    | 3.0'          |

**ZONAL LUMEN SUMMARY**

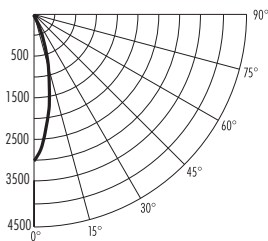
| Zone  | Lumens | %Fixture |
|-------|--------|----------|
| 0-30° | 601    | 99.1     |
| 0-40° | 606    | 100.0    |
| 0-60° | 606    | 100.0    |
| 0-90° | 606    | 100.0    |

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

| Degrees | Average Luminance |
|---------|-------------------|
| 45      | 0                 |
| 55      | 0                 |
| 65      | 0                 |
| 75      | 0                 |
| 85      | 0                 |

**PHOTOMETRIC REPORT**

Test Report #: PT05122408  
 Catalog No: IC43LSQ-830-N-1  
 with 4302SQ-WH Trim  
 Luminaire Spacing Criterion: 0.41  
 Luminaire LPW: 47.3



**CANDLEPOWER DISTRIBUTION (Candelas)**

| Degrees Vertical | 0°   |
|------------------|--|
| 0                | 2972   |
| 5                | 2619   |
| 15               | 987  |
| 25               | 144  |
| 35               | 20   |
| 45               | 3  |
| 55               | 0  |
| 65               | 0  |
| 75               | 0  |
| 85               | 0  |
| 90               | 0  |
| Multipliers:     | 827 - 0.92<br>930 - 0.92<br>835 - 1.01<br>840 - 1.02 |

**AVERAGE INITIAL FOOTCANDLES**

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

| Spacing | RCR1 | RCR3 | RCR5 |
|---------|------|------|------|
| 4.0'    | 43   | 40   | 37   |
| 5.0'    | 28   | 25   | 24   |
| 6.0'    | 19   | 18   | 16   |
| 7.0'    | 16   | 14   | 13   |
| 8.0'    | 12   | 11   | 11   |
| 9.0'    | 9    | 9    | 8    |
| 10.0'   | 7    | 6    | 6    |

**INITIAL FOOTCANDLES (One Unit, 12.9W, 24.0° Beam)**

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 6                                    | 82.5                    | 2.6'          |
| 8                                    | 46.4                    | 3.4'          |
| 10                                   | 29.7                    | 4.3'          |
| 12                                   | 20.6                    | 5.1'          |

**ZONAL LUMEN SUMMARY**

| Zone  | Lumens | %Fixture |
|-------|--------|----------|
| 0-30° | 597    | 97.6     |
| 0-40° | 609    | 99.6     |
| 0-60° | 611    | 100.0    |
| 0-90° | 611    | 100.0    |

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

| Degrees | Average Luminance |
|---------|-------------------|
| 45      | 518               |
| 55      | 0                 |
| 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.

