

# LED RECESSED DOWNLIGHT

#### PRODUCT DESCRIPTION

Recessed downlight 13W LED luminaire with 3¼" lensed downlight aperture produces up to 650 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 clear, gold, black, haze, or wheat haze Alzak finish provides 50° lamp and lamp image cut-off.

Trims Style Trim Ring, Self Flanged and Flush Mount reflectors utilize torsion spring retention for tight, secure fit to ceiling • Trim ring features beveled knife edge for clean ceiling interface • Self Flanged reflectors with polished or optional white painted flange • For flush mount installations in drywall ceilings use the FMA4 flush mount adapter • For flush mount installations in wood, stone, or tile ceilings the FMA4-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 <u>ACLXLED-DIM</u> • 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 IC43L features Patented (US Patent 8,038,113)
Pro-VI™ 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.

IC943L is equipped with vertically adjustable mounting brackets that accept  $\frac{1}{2}$ " 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) ½", (1) ¾", 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 +/-½″ translation aids fixture alignment after installation, prior to drawall

**Ceiling Thickness** 1/2" – 7/8" ceiling standard • For thicker ceilings, order CTA4N-125 (7/8"-1 1/4"), CTA4N-163 (1 1/4"-15/8") or CTA4N-200 (1 5/8"-2") • CTA4N not required for wood, stone, or tile flush mount applications.

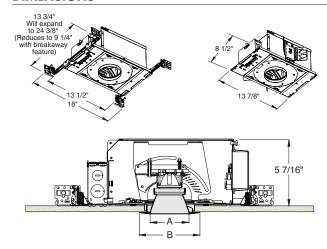
3-1/4" LENSED DOWNLIGHT CONE IC Rated, 700 LUMEN

# IC43L-432N, IC943L-432N

Project:	
Fixture Type:	
Location:	
Contact/Phone:	



### **DIMENSIONS**



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

	Α	В
Trim Ring	3 1/4"	5″
Self Flanged	3 3/8"	4 5/8"
Flush Mount	3 3/8"	3 7/8"

## **ELECTRICAL DATA**

Driver Option	Dedicated 120V (-1)	Universal Voltage (-U)	Lutron 3-wire (-L)	Lutron 2-wire (-D)
Voltage	120	120 277	120 277	120
Input Power	12.8	13.7 14.1	12.6 13.6	13.5
Input Current	0.10	0.11 0.05	0.10 0.05	0.11
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor	0.99	0.99 0.90	0.99 0.94	0.98



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Ordering Information Housing, trim and accessories each ordered separately

Example: IC43L-830-N-1					Example: 432NC	-WH						
Housings		I/Color perature		Beam Optics		Drivers		Options		Trim/D	escription	
IC43L IC943L	827 830	85CRI	N	12° Spot 24° Narrow Flood	1	120V, Forward & Reverse Phase Dimming	CF	Chicago Plenum				
	835	3500K, 85CRI	F	35° Flood	U	120-277V, 0-10V			Trim Ring <sup>1</sup> 432NB-WH	Self Flanged <sup>2</sup> 432NB-SF	Flush Mount <sup>3</sup>	<b>Description</b> Black Cone
	840	4000K, 85CRI			L	120-277V, Lutron	utron i-Lume wire imming, cosystem	432NC-WH 432NG-WH 432NHZ-SC	432NC-SF 432NG-SF	432NC-FM 432NG-FM -	Clear Cone Gold Cone Haze Cone	
	930	3000K, 93CRI				Hi-Lume 3-wire Dimming, Ecosystem Compatible			432NHZ-SF - 432NWHZ-SF BZ - Classic Aged Bro flector with optional w			
					D	120V, Lutron Hi-Lume 2-wire Dimming			with "- <u>SFWH</u> ". <sup>3</sup> Flush Mount trims r	must be used with Flus	sh Mount Adapter, c	

# **Flush Mount Adapters**

Cat. #	Description
FMA4	Drywall Ceiling Adapter
FMA4-SC087-WH	Wood, Stone, Tile, 1/2"-7/8" Thick Ceiling, Adapter, White
FMA4-SC087-BL	Wood, Stone, Tile, 1/2"-7/8" Thick Ceiling, Adapter, Black
FMA4-SC125-WH	Wood, Stone, Tile, 7/8"-1 1/4" Thick Ceiling, Adapter, White
FMA4-SC125-BL	Wood, Stone, Tile, 7/8"-1 1/4" Thick Ceiling, Adapter, Black
FMA4-SC163-WH	Wood, Stone, Tile, 1 1/4"-1 5/8" Thick Ceiling, Adapter, White
FMA4-SC163-BL	Wood, Stone, Tile, 1 1/4"-1 5/8" Thick Ceiling, Adapter, Black

### **Optical Accessories**

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

### Misc. Accessories

Cat. #	Description
CTA4N-125	1 1/4" Thick Ceiling Adapter
CTA4N-163	1 5/8" Thick Ceiling Adapter
CTA4N-200	2" Thick Ceiling Adapter
HB-1	(2) Real Nail 3 Bar Hangers
HB-26	(2) 26" C-Channel Bar Hangers
HB-50	(2) 50" C-Channel Bar Hangers
LB-27	(2) 27" Linear Bar Hangers
EMI-20	20W Emergency Lighting Inverter
To order, spec	cify catalog number.



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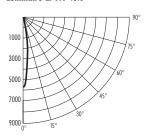
IC Rated, 700 LUMEN

# IC43L-432N, IC943L-432N

#### PHOTOMETRIC REPORT

Test Report #: PT05121604 **Catalog No:** IC43L-830-S-1 with 432NC-WH Trim

**Luminaire Spacing Criterion:** 0.29 Luminaire LPW: 48.0



#### **CANDLEPOWER DISTRIBUTION** (Candelas)

,		
Degrees		
Vertical	0°	
0	5828	
5	4012	
15	684	
25	80	
35	16	
45	0	
55	0	
65	0	
75	0	
85	0	
90	0	

## **AVERAGE INITIAL FOOTCANDLES**

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

Spacing	RCR1	RCR3	RCR5
4.0′	44	41	38
5.0°	28	26	25
6.0′	19	18	17
7.0′	16	15	14
8.0′	12	12	11
9.0′	10	9	8
10.0′	7	7	6

### **70NALILIMEN SUMMARY**

ZONAL LOMEN SOMMAKI					
Zone	Lumens	%Fixture			
0 - 30°	603	98.2			
0 - 40°	614	100.0			
0 - 60°	614	100.0			
0.900	61/	100.0			

## **INITIAL FOOTCANDLES**

(One Unit, 12.8W, 14.5° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
6	161.9	1.5′
8	91.1	2.0'
10	58.3	2.5'
12	40.5	3.1'

### LUMINANCE (Average cd/m²)

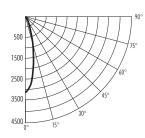
	Average Degrees Luminance				
Degrees	Luminance				
45	0				
55	0				
65	0				
75	0				
85	0				

### PHOTOMETRIC REPORT

**Test Report #:** PT05121702 Catalog No: IC43L-830-N-1

with 432NC-WH Trim

**Luminaire Spacing Criterion: 0.39** Lumingire LPW: 50.4



# **CANDLEPOWER DISTRIBUTION**

(Candelas)

Degrees		
Vertical	0°	
0	3280	
5	2679	
15	1019	
25	191	
35	28	
45	2	
55	0	
65	0	
75	0	
85	0	
90	0	

# **AVERAGE INITIAL FOOTCANDLES**

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

Spacing	RCR1	RCR3	RCR5
4.0′	46	42	39
5.0´	29	27	25
6.0′	20	19	17
7.0′	17	15	14
8.0′	13	12	11
9.0′	10	9	8
10.0′	7	7	6

### **ZONAL LUMEN SUMMARY**

7	one.	Lumens	%Fixture	
0	-30°	626	96.2	
0	- 40°	648	99.7	
0	- 60°	650	100.0	
0	- 90°	650	100.0	

# **INITIAL FOOTCANDLES**

(One Unit, 12.9W, 23.1° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
6	91.1	2.4'
8	51.3	3.3'
10	32.8	4.1′
12	22.8	4.9'

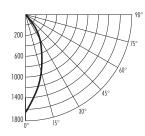
# **LUMINANCE** (Average cd/m²)

	Average	
Degrees	Luminance	
45	477	
55	0	
65	0	
75	0	
85	0	

#### PHOTOMETRIC REPORT

Test Report #: PT05121704 Catalog No: IC43L830F-1 with 432NC-WH Trim

**Luminaire Spacing Criterion: 0.57** Luminaire LPW: 51.9



### **CANDLEPOWER DISTRIBUTION**

(Candelas)

Degrees	
Vertical	0°
0	1622
5	1397
15	954
25	421
35	89
45	12
55	0
65	0
75	0
85	0
90	0

# **AVERAGE INITIAL FOOTCANDLES**

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

	Spacing	RCR1	RCR3	RCR5
	4.0′	46	42	37
Ī	5.0′	30	27	24
	6.0′	21	18	17
	7.0′	17	15	13
	8.0′	13	12	11
Ī	9.0′	10	9	8
	10.0′	7	7	6

# **ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixture	
0-30°	588	88.5	
0 - 40°	654	98.4	
0-60°	664	100.0	
0 - 90°	664	100.0	

## **INITIAL FOOTCANDLES**

(One Unit, 12.8W, 35.1° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	45.1	3.8′
6	25.3	5.1′
8	16.2	6.3'
10	11.3	7.6'

## LUMINANCE (Average cd/m²)

Average		
Degrees	Luminance	
45	2623	
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.

827 - 0.92

930 - 0.92 835 - 1.01

840 - 1.02

