

#### P1.2.8A

# LED RECESSED DOWNLIGHT

#### **PRODUCT DESCRIPTION**

Recessed downlight 13W LED luminaire with 3¼" downlight cone produces up to 700 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° 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, damp locations • Meets energy code Air Leakage requirements per ASTM E283 • ENERGY STAR<sup>®</sup> Qualified • 90CRI is certified to high efficacy requirements of California T24 with select trims • 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 ½" 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)  $\frac{1}{2}$ ", (1)  $\frac{3}{4}$ ", 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 +/- ½″ translation aids fixture alignment after installation, prior to drywall.

**Ceiling Thickness** 1/2" – 7/8" ceiling standard • For thicker ceilings, order CTA4N-125 (7/8"-1 1/4"), CTA4N-163 (1 1/4"-1 5/8") or CTA4N-200 (1 5/8"– 2") • CTA4N not required for wood, stone, or tile flush mount applications. 3-1/4" DOWNLIGHT CONE IC Rated, 700 LUMEN

IC43L-437N, IC943L-437N

Project:

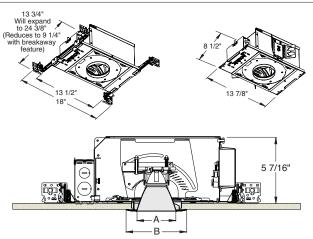
Fixture Type:

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



# P1.2.8A LED RECESSED DOWNLIGHT 3-1/4" DOWNLIGHT CONE IC Rated, 700 LUMEN

## IC43L-437N, IC943L-437N

#### Ordering Information Housing, trim and accessories each ordered separately Example: 437NC-WH Example: IC43L-830-N-1 CRI/Color Beam Housings Drivers Options Temperature Optics Trim/Description IC43L 827† 2700K, 85CRI 120V, СР Chicago 12° Spot S 1 Forward Plenum 24° Narrow Flood IC943L N & Reverse Phase 830† 3000K, 85CRI Dimming 35° Flood F 835†3500K, 120-277V, 0-10V Self Flanged<sup>2</sup> υ Trim Ring<sup>1</sup> Flush Mount<sup>3</sup> Description 85CRI 437NB-WH\* Black Cone, White Ring 437NB-SF\* 437NB-FM Dimming 437NB-ABZ\* Black Cone 840† 4000K, 437NB-SC\* **Black Cone** 85CRI 120-277V, L 437NC-WH 437NC-SF 437NC-FM Clear Cone Lutron Gold Cone 437NG-WH 437NG-SF 437NG-FM 930 3000K, 93CRI Hi-Lume 437NHZ-SC Haze Cone 3-wire 437NHZ-SF 437NHZ-FM Haze Cone, White Ring 437NHZ-WH Dimming, 437NWHZ-ABZ Wheat Haze Cone Ecosystem 437NWHZ-SF Wheat Haze Cone, White Ring 437NWHZ-WH 437NWHZ-FM Compatible <sup>1</sup>Trim Ring Finish: ABZ - Classic Aged Bronze, SC - Satin Chrome, WH - White. †Not T24 certified. 120V, D Lutron Hi-Lume <sup>2</sup>For self flanged reflector with optional white painted flange, replace "-SF" suffix with "-SFWH" 2-wire <sup>3</sup>Flush Mount trims must be used with Flush Mount Adapter, ordered separately. Dimming \*Not T24 or ENERGY STAR® Qualified.

Product specifications subject to change without notice.

#### **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	Hexcell Louver
T7401	Red Dichroic Lens		

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

To order, specify catalog number.

1300 S. Wolf Road • Des Plaines, IL 60018 • Phone (847) 827-9880 • Fax (847) 827-2925 Juno Licentre Group 220 Chrysler Drive • Brampton, Ontario • Canada L6S 6B6 • Phone (905) 792-7335 • Fax (905) 792-0064 by Schneider Electric Visit us at www.junolightinggroup.com Printed in U.S.A. ©2014 Juno Lighting, LLC.

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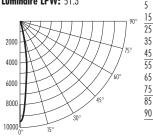
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IC43L-437N, IC943L-437N

#### PHOTOMETRIC REPORT

Test Report #: PT05121401 Catalog No: IC43L-830-S-1 with 437NC-WH Trim

Luminaire Spacing Criterion: 0.22 Luminaire LPW: 51.3



#### CANDLEPOWER DISTRIBUTION

Multiple Units (Square Array, 60'x60' room)

Spacing	RCR1	RCR3	RCR5
4.01	47	44	42
5.0´	30	28	27
6.0´	21	20	19
7.0´	17	16	15
8.01	13	13	12
9.0´	10	10	9
10.0 <sup>r</sup>	8	7	7

#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture	
0 - 30°	656	99.1	
0 - 40°	662	100.0	
0-60°	662	100.0	
0 - 90°	662	100.0	

#### **INITIAL FOOTCANDLES** (One Unit, 12.9W, 11.3° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
6	266.3	1.2′
8	149.8	1.6′
10	95.9	2.0′
12	66.6	2.4′

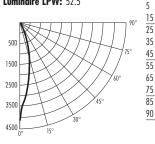
#### LUMINANCE (Average cd/m<sup>2</sup>)

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

#### PHOTOMETRIC REPORT

Test Report #: PT05121605 Catalog No: IC43L-830-N-1 with 437NC-WH Trim

Luminaire Spacing Criterion: 0.34 Lumingire LPW: 52.5



#### CANDLEPOWER **AVERAGE INITIAL FOOTCANDLES** DISTRIBUTION

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

Celling 80		J% FIOOr Z	.0%
Spacing	RCR1	RCR3	RCR5
4.01	48	44	41
5.0´	31	28	27
6.01	21	20	18
7.0′	17	16	15
8.01	14	13	12
9.01	10	10	9
10.01	8	7	7

#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture	
0 - 30°	668	98.6	
0 - 40°	677	100.0	
0-60°	677	100.0	
0 - 90°	677	100.0	

## **INITIAL FOOTCANDLES**

(One Unit, 12.9W, 21.0° Beam)

Footcandles Beam Center	Beam Diameter
120.5	2.2′
67.8	3.0′
43.4	3.7′
30.1	4.5′
	120.5 67.8

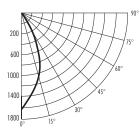
### LUMINANCE (Average cd/m<sup>2</sup>)

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

#### **PHOTOMETRIC REPORT**

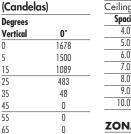
Test Report #: PT05121703 Catalog No: IC43L-830-F-1 with 437NC-WH Trim

Luminaire Spacing Criterion: 0.62 Luminaire LPW: 54.7



### CANDLEPOWER

DISTRIBUTION



0

0

0

## **AVERAGE INITIAL FOOTCANDLES**

Multiple Units (Square Array, 60'x60' room)

Ceiling 80	% Wall 50	J% Floor 2	0%
Spacing	RCR 1	RCR3	RCR5
4.0´	49	45	40
5.0´	32	29	26
6.0´	22	20	18
7.0´	18	16	14
8.0´	14	13	11
9.0´	11	10	9
10.0´	8	7	6

#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixture	
0 - 30°	675	95.7	
0 - 40°	706	100.0	
0 - 60°	706	100.0	
0 - 90°	706	100.0	

### **INITIAL FOOTCANDLES**

(One Unit, 12.9W, 37.7° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	46.6	4.1′
6	26.2	5.5′
8	16.8	6.8′
10	11.7	8.2′

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

Average	
Luminance	
0	
0	
0	
0	
0	
	Average Luminance

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. Multiplie

ers:	827 - 0.92 930 - 0.92
	835 - 1.01
	840 - 1.02

0

5

35

75

85

90

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Degrees Vertical ۸° 9586

42

9

0°

4339

3215

1067

126

15

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0

0

0

0

0

5425 419

#### 0 0 0 ٥ 0

90

(Candelas)

Degrees

Vertical

0

0

# **AVERAGE INITIAL FOOTCANDLES** (Candelas)